



Full wwPDB EM Validation Report ⓘ

Jan 24, 2023 – 07:39 PM EST

PDB ID : 4V6U
EMDB ID : EMD-2009
Title : Promiscuous behavior of proteins in archaeal ribosomes revealed by cryo-EM: implications for evolution of eukaryotic ribosomes
Authors : Armache, J.-P.; Anger, A.M.; Marquez, V.; Frankenberg, S.; Froehlich, T.; Villa, E.; Berninghausen, O.; Thomm, M.; Arnold, G.J.; Beckmann, R.; Wilson, D.N.
Deposited on : 2012-08-09
Resolution : 6.60 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

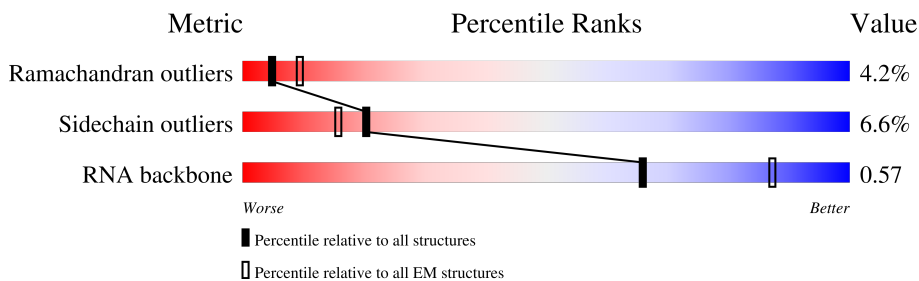
EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 6.60 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



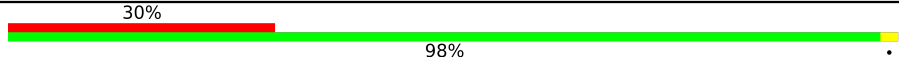

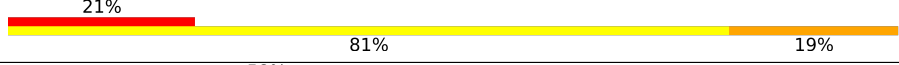
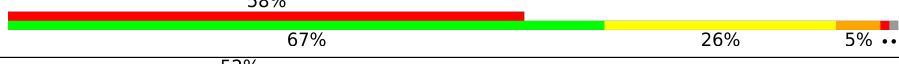

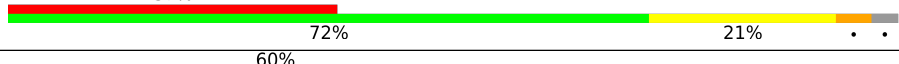






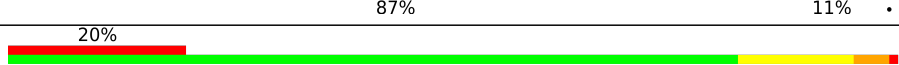
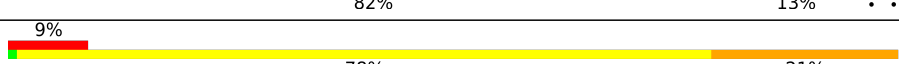
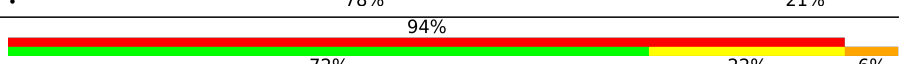

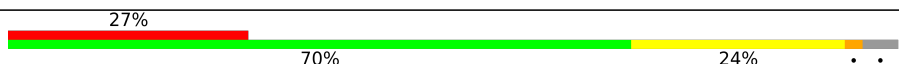



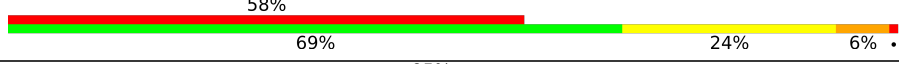
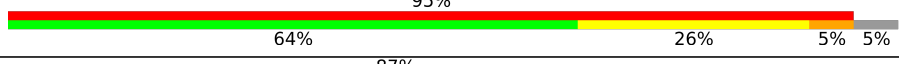
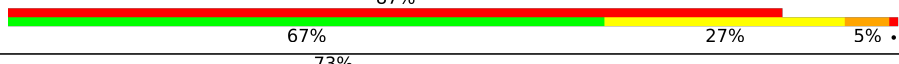


Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AQ	158	32% (Upper red bar) 72% (Green) 25% (Yellow)
2	AK	135	79% (Green) 72% (Green) 23% (Yellow) 5% (Orange)
3	AI	130	42% (Upper red bar) 82% (Green) 15% (Yellow)
4	AG	125	50% (Upper red bar) 63% (Green) 24% (Yellow) 10% (Orange)
5	AW	63	27% (Upper red bar) 76% (Green) 21% (Yellow)
6	AC	210	46% (Upper red bar) 68% (Green) 17% (Yellow) 11% (Grey)
7	AB	202	45% (Upper red bar) 70% (Green) 25% (Yellow)
8	AR	113	44% (Upper red bar) 69% (Green) 29% (Yellow)

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Mol	Chain	Length	Quality of chain
9	A9	57	
10	AD	180	
11	A1	77	
12	AN	147	
13	AX	71	
14	AM	137	
15	AE	243	
16	AJ	127	
17	AO	148	
18	AF	236	
19	AS	67	
20	A3	123	
20	B4	123	
20	BG	123	
21	A2	1495	
22	AY	50	
23	AT	132	
24	AA	198	
25	AH	215	
26	AP	56	
27	A0	76	
28	AV	99	
28	B6	99	
29	AL	102	
30	AU	150	

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Mol	Chain	Length	Quality of chain
31	BY	155	42% 68% 23% 8% .
32	BO	203	39% 65% 25% 7% .
33	BC	365	45% 70% 23% . .
34	B5	83	24% 65% 27% 5% . .
34	BK	83	35% 69% 25% . . .
35	BL	147	54% 73% 16% 7% .
36	Bf	51	67% 49% 25% 18% 8%
37	BU	121	44% 70% 27% .
38	Bb	130	48% 62% 25% 10% . .
39	Be	62	68% 55% 29% 16%
40	BE	186	40% 80% 15% 5% .
41	Ba	95	29% 62% 22% 9% . 5%
42	BT	86	34% 73% 21% . .
43	Bk	339	53% 48% 11% . . 37%
44	BW	72	18% 69% 26% .
45	Bi	83	31% 80% 8% 5% . 6%
46	BA	216	81% 73% 23% .
47	BI	142	41% 74% 24% .
48	BR	97	53% 66% 25% 7% .
49	BQ	150	42% 67% 26% 7%
50	BV	66	42% 70% 27% .
51	Bj	94	52% 47% 29% 15% 10%
52	BB	239	41% 75% 18% 7%
53	BD	255	46% 70% 25% . .
54	BF	184	20% 73% 23% . .

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Mol	Chain	Length	Quality of chain
55	Bh	24	
56	BH	164	
57	BZ	99	
58	BP	120	
59	BM	194	
60	BS	155	
61	Bd	89	
62	BN	181	
63	Bg	51	
64	Bc	87	
65	BJ	141	
66	Bl	77	
67	B1	3049	
68	B3	126	

2 Entry composition [i](#)

There are 68 unique types of molecules in this entry. The entry contains 173979 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called 30S ribosomal protein S15P/S13e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	AQ	158	1310	834	250	221	5	0	0

- Molecule 2 is a protein called 30S ribosomal protein S9P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	AK	135	1072	671	205	190	6	0	0

- Molecule 3 is a protein called 30S ribosomal protein S8P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AI	129	1028	668	178	180	2	0	0

- Molecule 4 is a protein called 30S ribosomal protein S6e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AG	125	984	623	180	179	2	0	0

- Molecule 5 is a protein called 30S ribosomal protein S27e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AW	63	478	306	85	81	6	0	0

- Molecule 6 is a protein called 30S ribosomal protein S3P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AC	186	1459	933	271	251	4	0	0

- Molecule 7 is a protein called 30S ribosomal protein S2P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	AB	202	1623	1046	282	290	5	0	0

- Molecule 8 is a protein called 30S ribosomal protein S17P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AR	113	934	592	177	160	5	0	0

- Molecule 9 is a protein called unknown 30S ribosomal protein SX.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
9	A9	57	286	171	57	58	0	0

- Molecule 10 is a protein called 30S ribosomal protein S4P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	AD	172	1434	902	273	255	4	0	0

- Molecule 11 is a RNA chain called E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
11	A1	77	1649	734	303	535	77	0	0

- Molecule 12 is a protein called 30S ribosomal protein S12P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	AN	145	1140	722	222	193	3	0	0

- Molecule 13 is a protein called 30S ribosomal protein S28e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	AX	71	568	345	115	107	1	0	0

- Molecule 14 is a protein called 30S ribosomal protein S11P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	AM	133	1004	623	200	179	2	0	0

- Molecule 15 is a protein called 30S ribosomal protein S4e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	AE	241	1976	1277	355	339	5	0	0

- Molecule 16 is a protein called 30S ribosomal protein S8e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	AJ	127	1004	622	207	174	1	0	0

- Molecule 17 is a protein called 30S ribosomal protein S13P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	AO	148	1189	746	237	200	6	0	0

- Molecule 18 is a protein called 30S ribosomal protein S5P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	AF	217	1716	1084	319	305	8	0	0

- Molecule 19 is a protein called 30S ribosomal protein S17e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	AS	67	556	353	105	95	3	0	0

- Molecule 20 is a protein called 50S ribosomal protein L7Ae.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	A3	123	939	599	155	181	4	0	0
20	BG	123	939	599	155	181	4	0	0
20	B4	123	939	599	155	181	4	0	0

- Molecule 21 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
21	A2	1495	32135	14297	5954	10389	1495	0	0

- Molecule 22 is a protein called 30S ribosomal protein S27ae.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	AY	50	409	262	75	66	6	0	0

- Molecule 23 is a protein called 30S ribosomal protein S19P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	AT	111	923	594	173	150	6	0	0

- Molecule 24 is a protein called 30S ribosomal protein S3Ae.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
24	AA	190	1559	1007	273	274	5	0	0

- Molecule 25 is a protein called 30S ribosomal protein S7P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
25	AH	215	1736	1100	326	302	8	0	0

- Molecule 26 is a protein called 30S ribosomal protein S14P type Z.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
26	AP	56	462	292	95	69	6	0	0

- Molecule 27 is a RNA chain called P-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
27	A0	76	1625	722	291	536	76	0	0

- Molecule 28 is a protein called 30S ribosomal protein S24e.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	AV	99	Total	C	N	O	S	0	0
			823	532	134	154	3		
28	B6	94	Total	C	N	O	S	0	0
			782	508	127	144	3		

- Molecule 29 is a protein called 30S ribosomal protein S10P.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	AL	102	Total	C	N	O	S	0	0
			822	507	159	152	4		

- Molecule 30 is a protein called SSU ribosomal protein S19E.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	AU	144	Total	C	N	O	S	0	0
			1175	758	212	204	1		

- Molecule 31 is a protein called 50S ribosomal protein L30P.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	BY	155	Total	C	N	O	S	0	0
			1243	788	235	213	7		

- Molecule 32 is a protein called 50S ribosomal protein L18P.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	BO	197	Total	C	N	O	S	0	0
			1597	1021	299	274	3		

- Molecule 33 is a protein called 50S ribosomal protein L3P.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	BC	365	Total	C	N	O	S	0	0
			2912	1870	527	500	15		

- Molecule 34 is a protein called 50S ribosomal protein L14e.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	B5	81	Total	C	N	O	S	0	0
			614	386	119	108	1		
34	BK	81	Total	C	N	O	S	0	0
			614	386	119	108	1		

- Molecule 35 is a protein called 50S ribosomal protein L15P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	BL	147	Total	C	N	O	S	0	0
			1154	727	227	195	5		

- Molecule 36 is a protein called 50S ribosomal protein L39e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
36	Bf	51	Total	C	N	O	S	0	0
			445	284	98	62	1		

- Molecule 37 is a protein called 50S ribosomal protein L24P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
37	BU	121	Total	C	N	O	S	0	0
			1008	637	195	172	4		

- Molecule 38 is a protein called 50S ribosomal protein L32e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
38	Bb	127	Total	C	N	O	S	0	0
			1074	689	217	167	1		

- Molecule 39 is a protein called 50S ribosomal protein L37e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
39	Be	62	Total	C	N	O	S	0	0
			506	312	111	78	5		

- Molecule 40 is a protein called 50S ribosomal protein L5P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
40	BE	186	Total	C	N	O	S	0	0
			1489	937	278	265	9		

- Molecule 41 is a protein called 50S ribosomal protein L31e.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
41	Ba	90	Total	C	N	O	0	0
			746	483	138	125		

- Molecule 42 is a protein called 50S ribosomal protein L23P.

Mol	Chain	Residues	Atoms				AltConf	Trace
42	BT	84	Total	C	N	O		
			680	440	118	122	0	0

- Molecule 43 is a protein called Acidic ribosomal protein P0 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Bk	212	Total	C	N	O	S		
			1632	1051	272	303	6	0	0

- Molecule 44 is a protein called 50S ribosomal protein L29P.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	BW	72	Total	C	N	O	S		
			594	369	115	106	4	0	0

- Molecule 45 is a protein called 50S ribosomal protein L37Ae.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	Bi	78	Total	C	N	O	S		
			590	368	122	95	5	0	0

- Molecule 46 is a protein called 50S ribosomal protein L1P.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	BA	216	Total	C	N	O	S		
			1677	1068	300	304	5	0	0

- Molecule 47 is a protein called 50S ribosomal protein L13P.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	BI	142	Total	C	N	O	S		
			1150	737	215	195	3	0	0

- Molecule 48 is a protein called 50S ribosomal protein L21e.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	BR	95	Total	C	N	O	S		
			787	501	160	125	1	0	0

- Molecule 49 is a protein called 50S ribosomal protein L19e.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	BQ	150	Total	C	N	O	S	0	0
			1256	794	255	202	5		

- Molecule 50 is a protein called 50S ribosomal protein L24e.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	BV	66	Total	C	N	O	S	0	0
			555	351	106	91	7		

- Molecule 51 is a protein called 50S ribosomal protein L44E.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	Bj	94	Total	C	N	O	S	0	0
			787	499	161	122	5		

- Molecule 52 is a protein called 50S ribosomal protein L2P.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	BB	239	Total	C	N	O	S	0	0
			1838	1169	347	317	5		

- Molecule 53 is a protein called 50S ribosomal protein L4P.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	BD	255	Total	C	N	O	S	0	0
			2026	1288	391	342	5		

- Molecule 54 is a protein called 50S ribosomal protein L6P.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	BF	184	Total	C	N	O	S	0	0
			1476	956	252	266	2		

- Molecule 55 is a protein called 50S ribosomal protein L41e.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	Bh	24	Total	C	N	O	S	0	0
			230	147	54	28	1		

- Molecule 56 is a protein called 50S ribosomal protein L11P.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	BH	134	Total	C	N	O	S	0	0
			988	635	164	183	6		

- Molecule 57 is a protein called 50S ribosomal protein L30e.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	BZ	99	Total	C	N	O	S	0	0
			754	489	121	142	2		

- Molecule 58 is a protein called 50S ribosomal protein L18e.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	BP	120	Total	C	N	O	S	0	0
			966	606	186	171	3		

- Molecule 59 is a protein called 50S ribosomal protein L15e.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	BM	194	Total	C	N	O	S	0	0
			1595	1020	316	253	6		

- Molecule 60 is a protein called 50S ribosomal protein L22P.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	BS	150	Total	C	N	O	S	0	0
			1200	764	230	202	4		

- Molecule 61 is a protein called 50S ribosomal protein L34e.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	Bd	89	Total	C	N	O	S	0	0
			740	463	158	108	11		

- Molecule 62 is a protein called 50S ribosomal protein L10e.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	BN	168	Total	C	N	O	S	0	0
			1378	872	268	232	6		

- Molecule 63 is a protein called 50S ribosomal protein L40e.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
63	Bg	45	371	236	76	55	4	0	0

- Molecule 64 is a protein called 50S ribosomal protein L35Ae.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
64	Bc	87	685	434	132	117	2	0	0

- Molecule 65 is a protein called 50S ribosomal protein L14P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
65	BJ	132	1014	631	204	176	3	0	0

- Molecule 66 is a protein called 50S ribosomal protein LX.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
66	Bl	77	659	425	118	115	1	0	0

- Molecule 67 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
67	B1	3049	65577	29172	12191	21165	3049	0	0

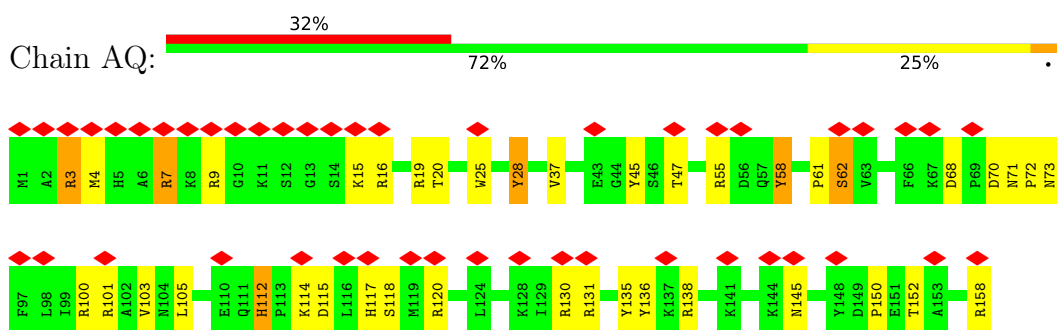
- Molecule 68 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
68	B3	126	2694	1199	492	877	126	0	0

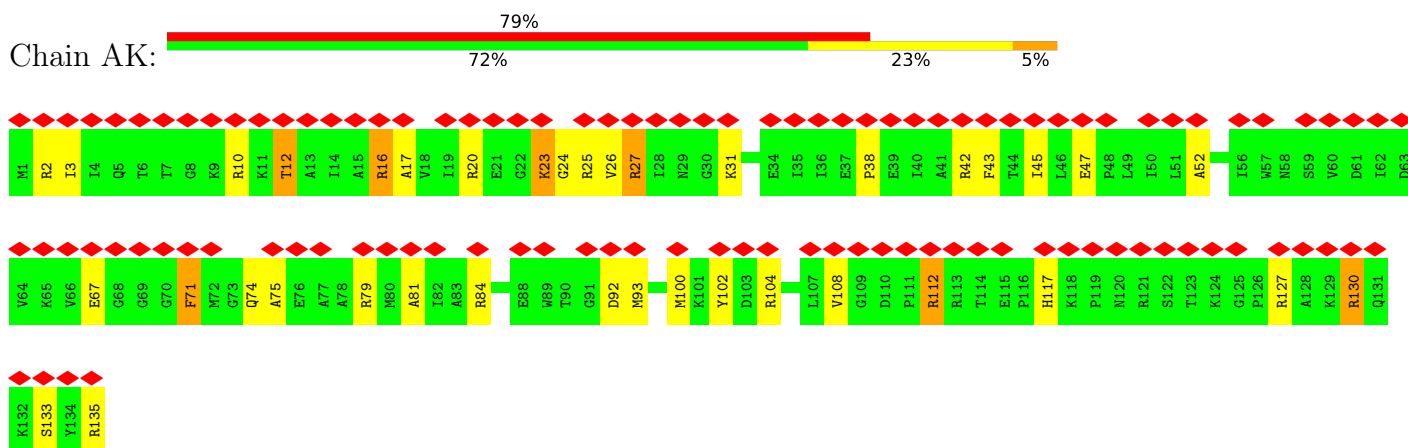
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

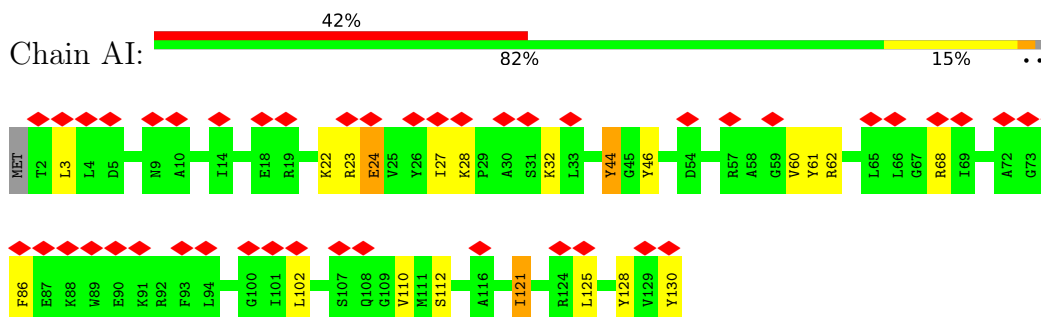
- Molecule 1: 30S ribosomal protein S15P/S13e



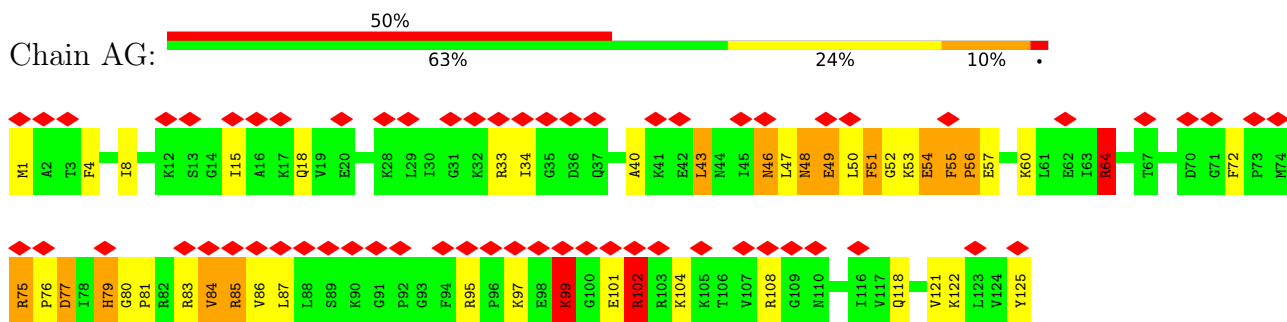
- Molecule 2: 30S ribosomal protein S9P



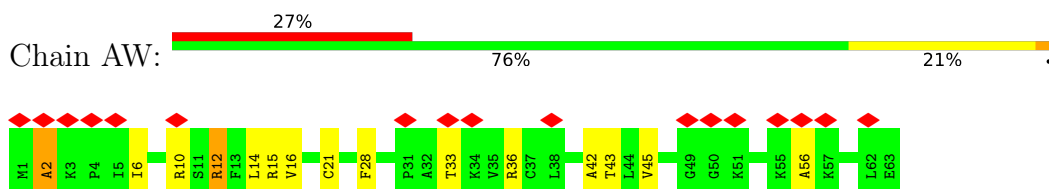
- Molecule 3: 30S ribosomal protein S8P



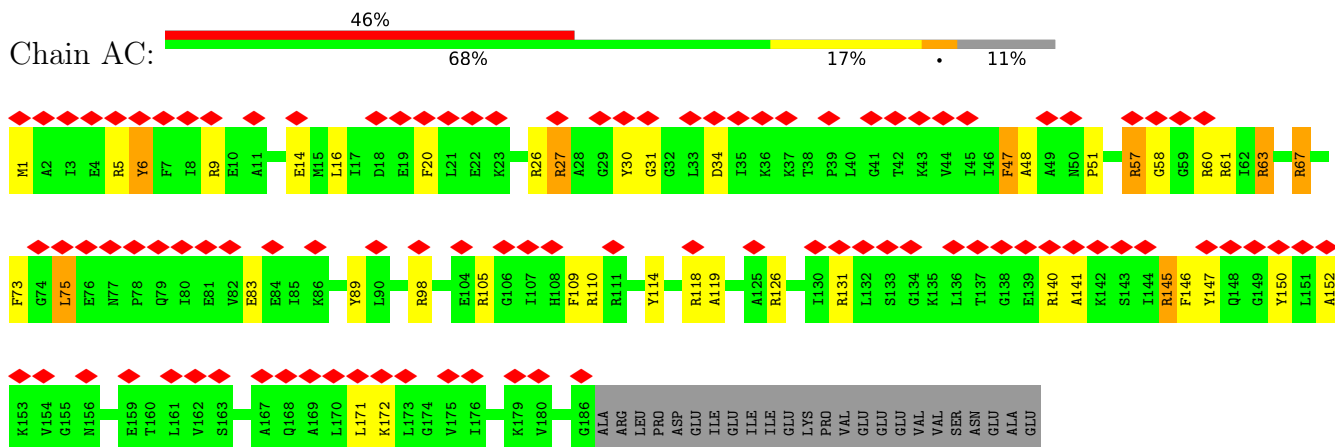
• Molecule 4: 30S ribosomal protein S6e



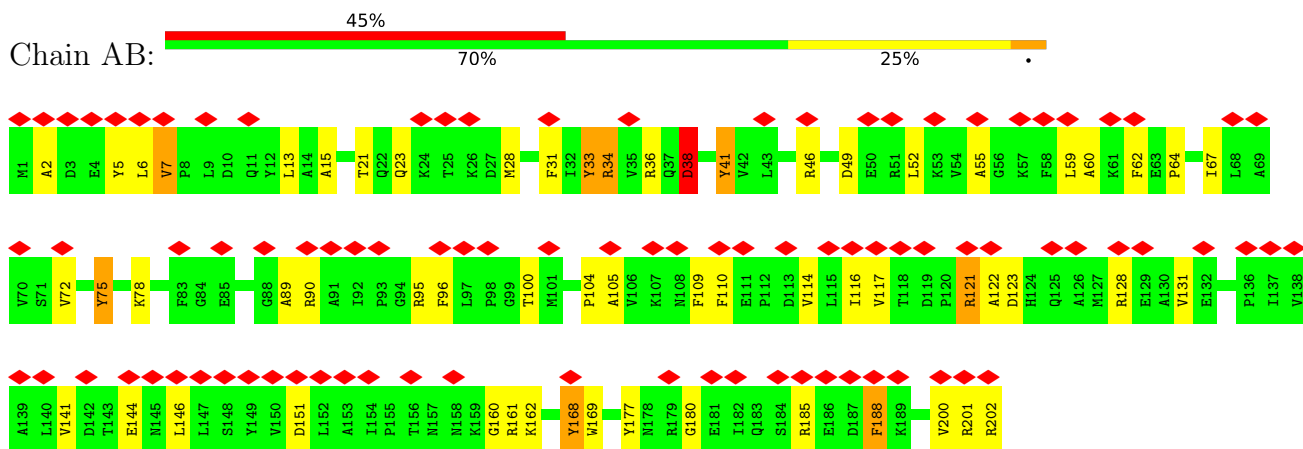
• Molecule 5: 30S ribosomal protein S27e



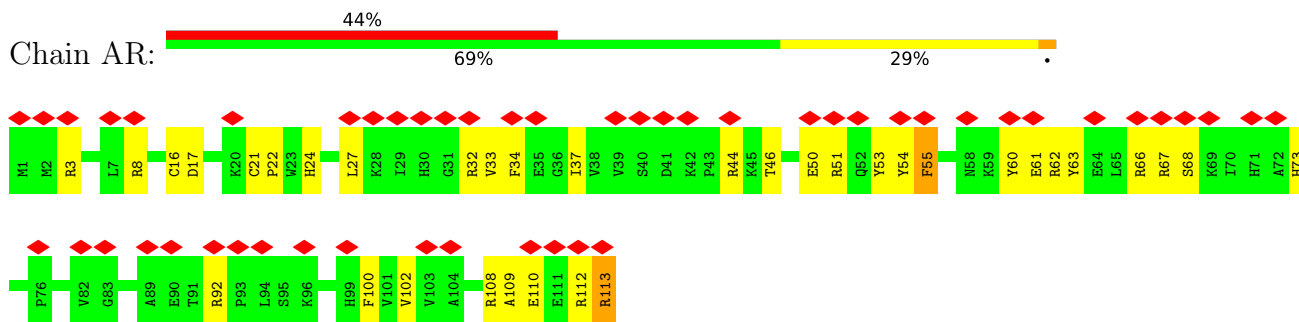
• Molecule 6: 30S ribosomal protein S3P



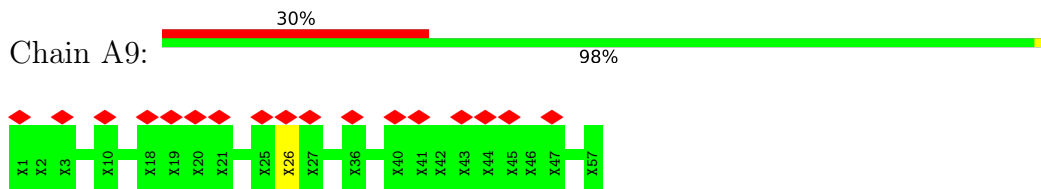
• Molecule 7: 30S ribosomal protein S2P



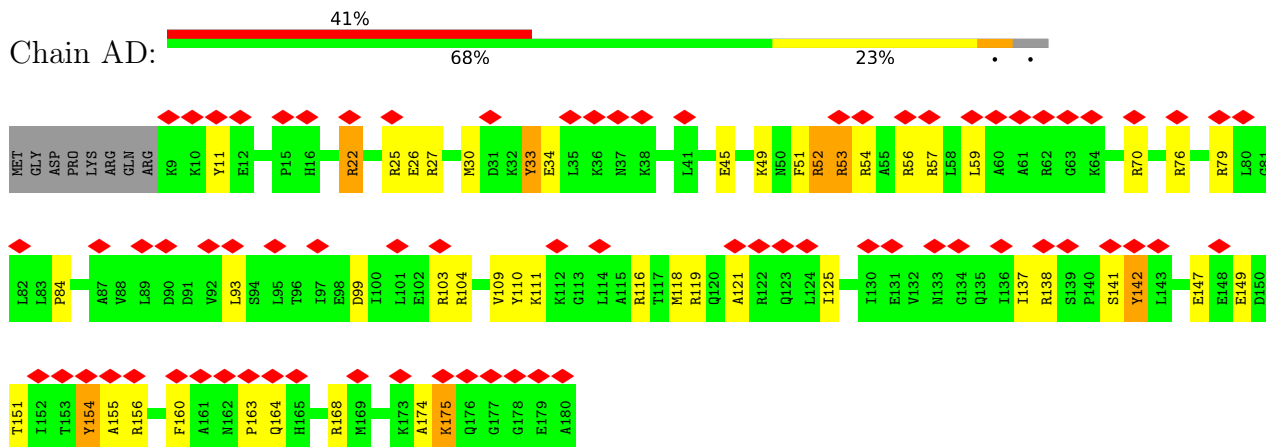
• Molecule 8: 30S ribosomal protein S17P



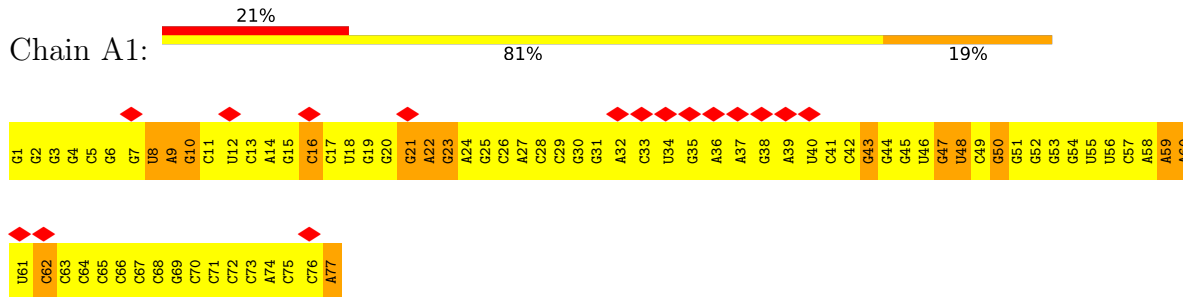
• Molecule 9: unknown 30S ribosomal protein SX



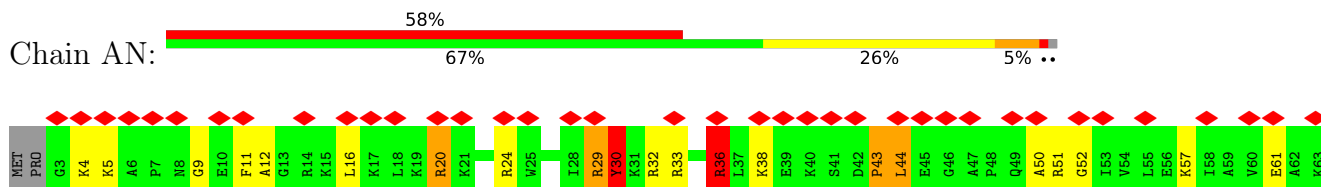
• Molecule 10: 30S ribosomal protein S4P

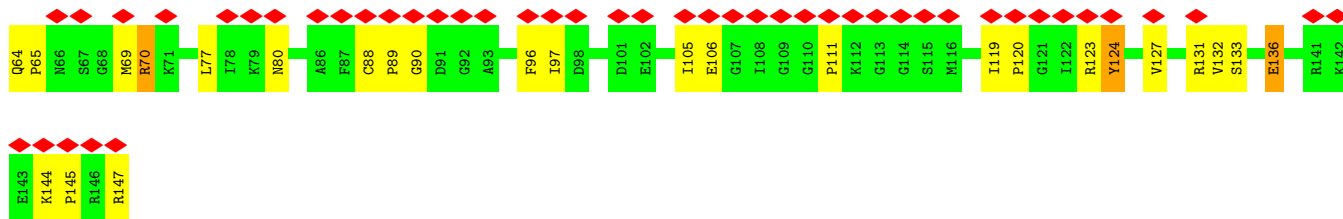


• Molecule 11: E-tRNA

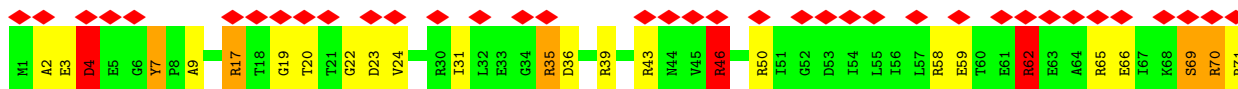


• Molecule 12: 30S ribosomal protein S12P

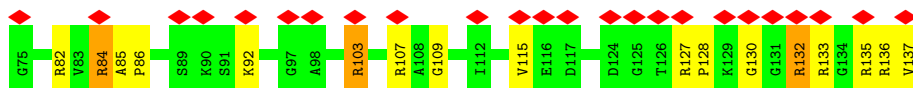
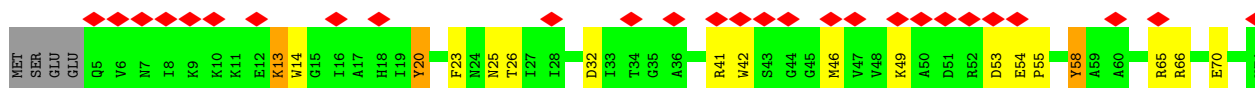
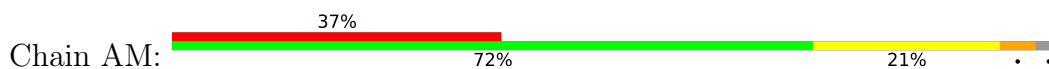




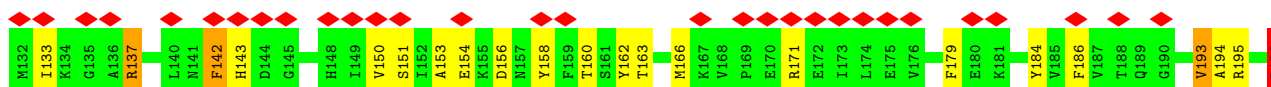
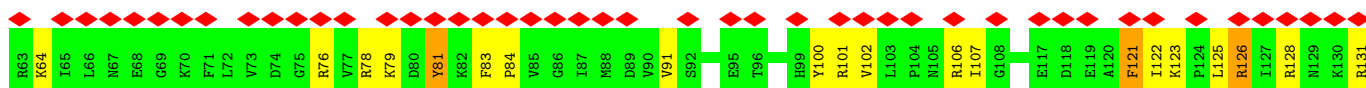
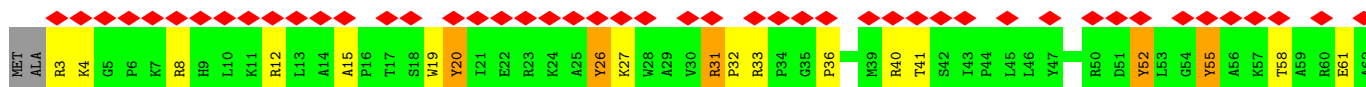
• Molecule 13: 30S ribosomal protein S28e



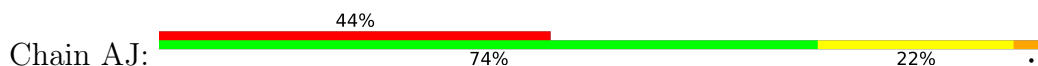
• Molecule 14: 30S ribosomal protein S11P

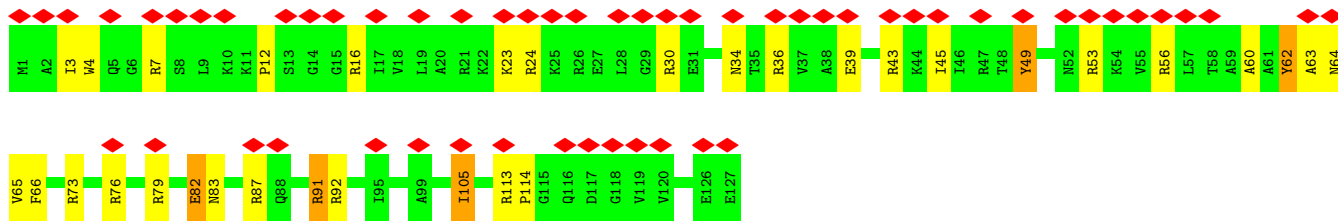


• Molecule 15: 30S ribosomal protein S4e

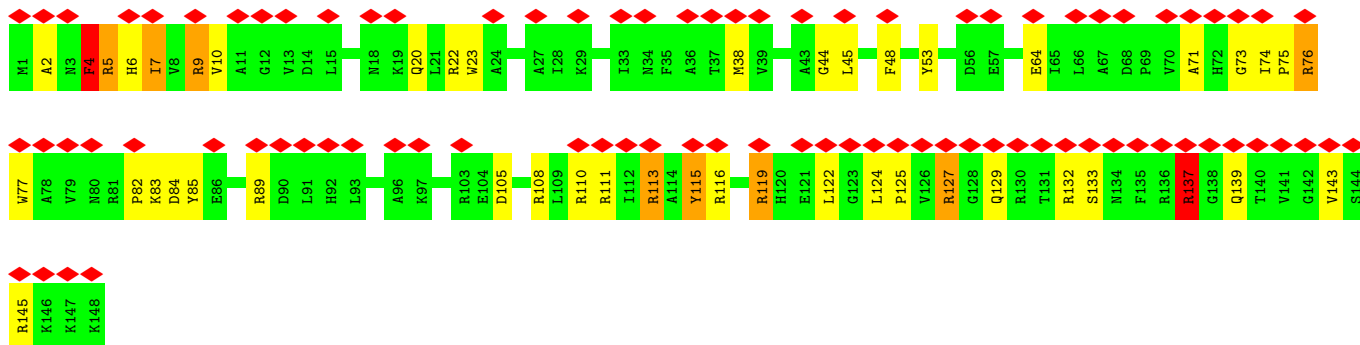


• Molecule 16: 30S ribosomal protein S8e

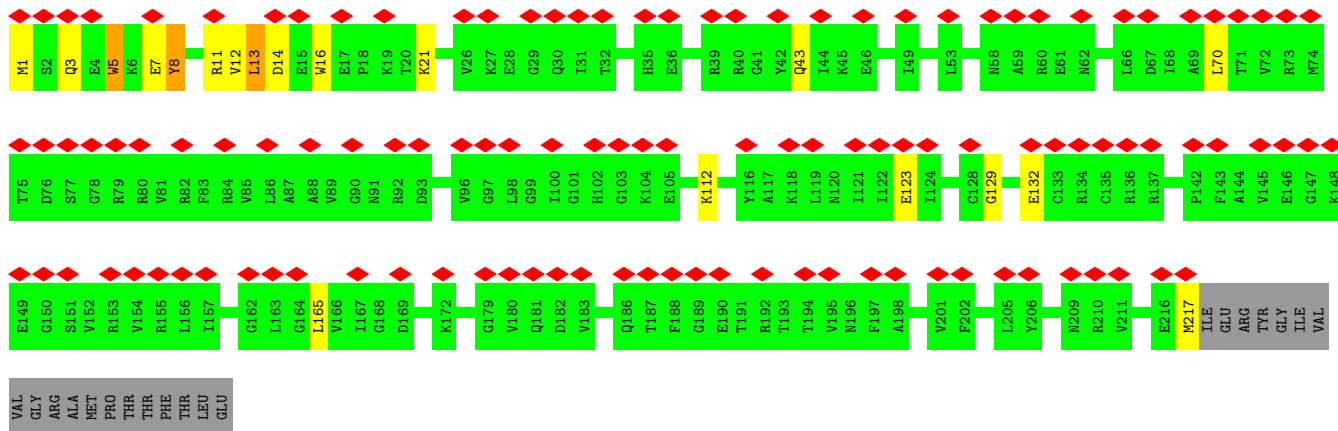
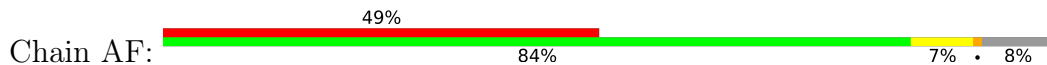




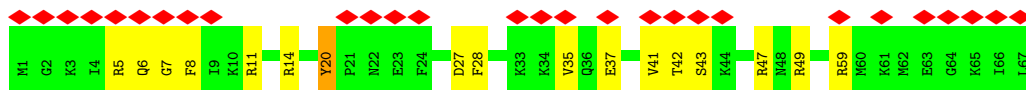
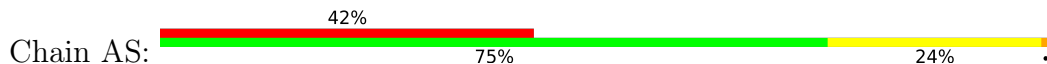
• Molecule 17: 30S ribosomal protein S13P



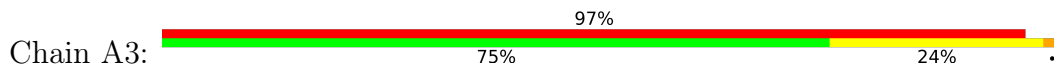
• Molecule 18: 30S ribosomal protein S5P



• Molecule 19: 30S ribosomal protein S17e

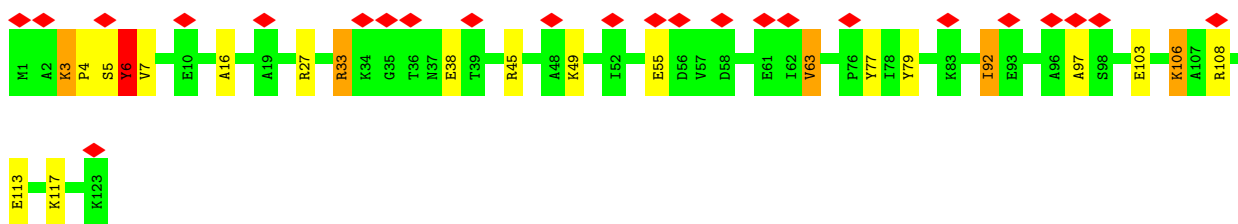
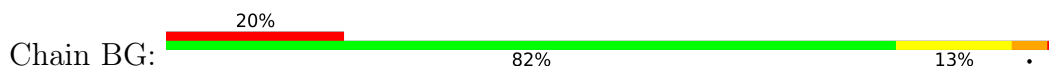


• Molecule 20: 50S ribosomal protein L7Ae

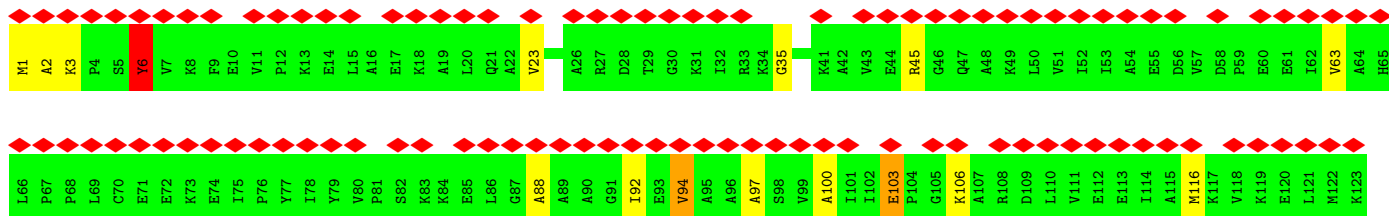
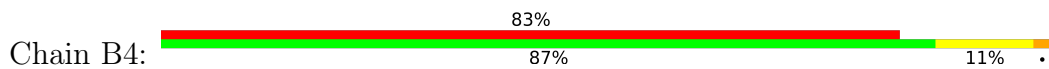




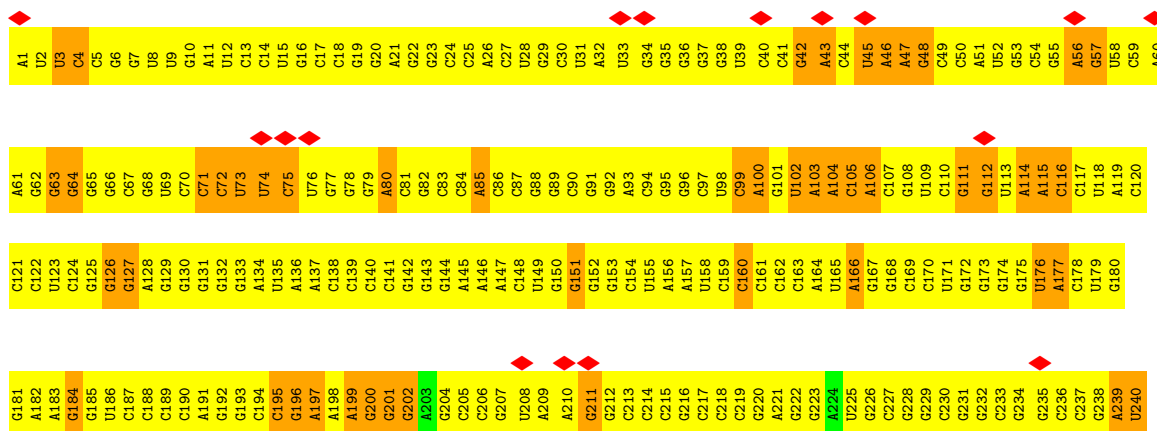
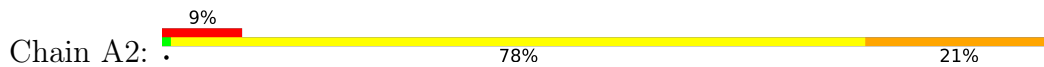
• Molecule 20: 50S ribosomal protein L7Ae



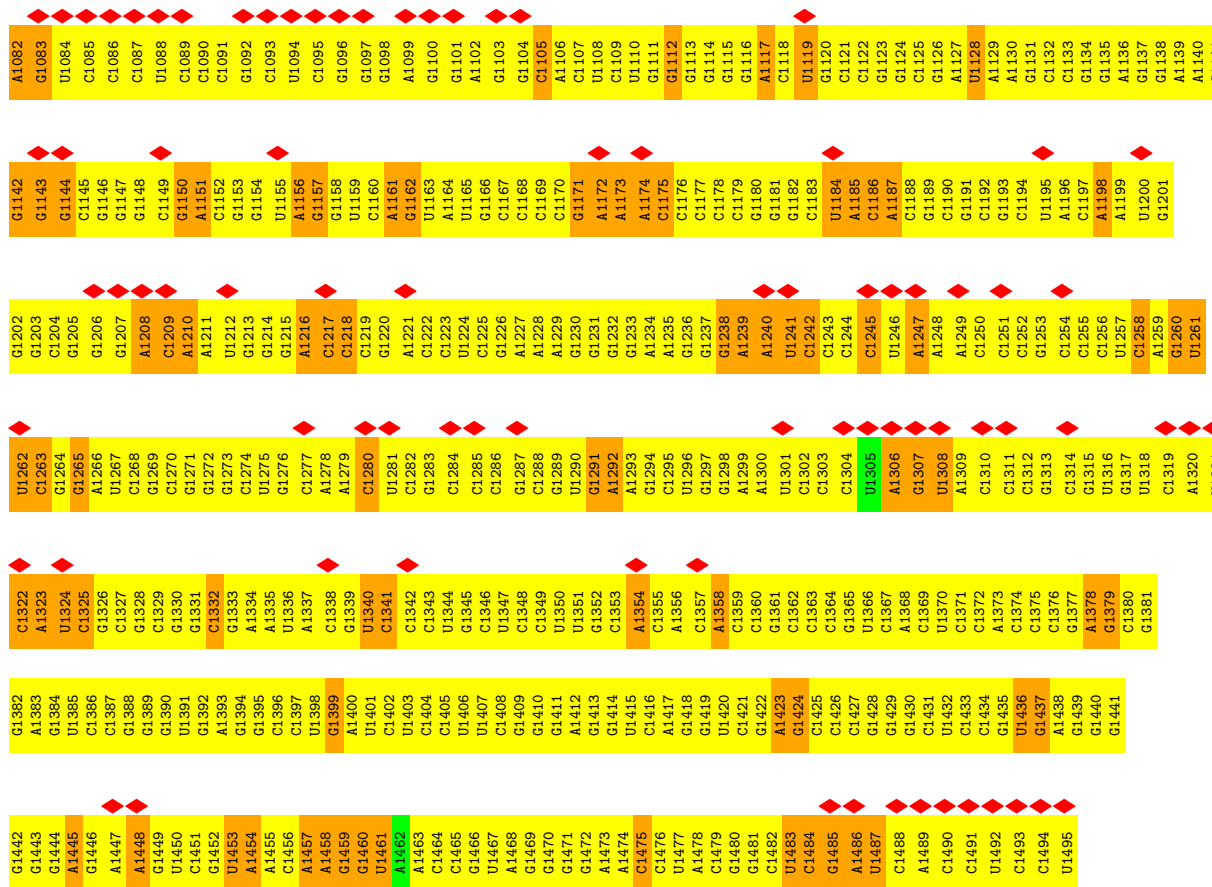
• Molecule 20: 50S ribosomal protein L7Ae



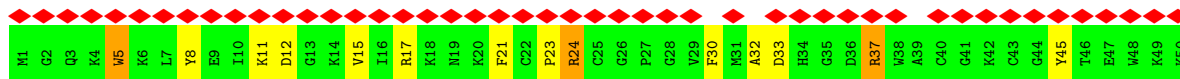
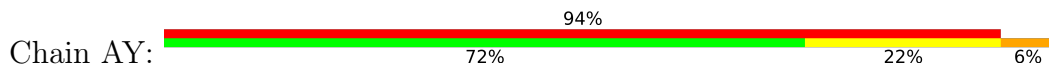
• Molecule 21: 16S rRNA



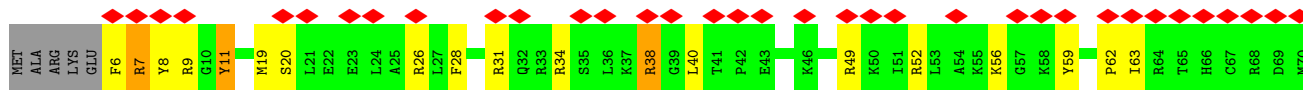
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U241	A242	G243	G244	U245	A246	G247	U248	U249	G250	G251	G252	U253	G254	G255	G256	G257	G258	A259	C260	G261	G262	C264	C265	A266	C267	C268	A269	A270	G271	C272	C273	G274	A275	A276	G277	A278	U279	C280	G281	G282	U283	A284	C285	G286	G287	G288	C289	C290	G291	U292	G293	A294	G295	A296	G297	C298	G299	G300		
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A361	C362	C363	U364	C365	C366	G367	C368	A369	A370	U371	G372	C373	G374	G375	G376	A377	A378	A379	C380	C381	G382	C383	G384	A385	C386	G387	G388	G389	U390	G391	C392	A393	C394	C395	C396	C397	C398	A399	G400	U401	G402	C403	C404	G405	U406	G407	C408	C409	U410	C411	U412	G413	G414	C415	A416	G417	G418	C419	G420	
U421	U422	U423	U424	C425	G426	G427	G428	A429	G430	U431	G432	U433	A434	A435	A436	A437	A438	G439	U440	U441	C442	C443	G444	G445	G446	A447	A448	U449	U450	A451	G452	G453	G454	C455	U456	G457	G458	G459	C460	A461	A462	G463	G464	C465	C466	G467	U468	U469	G470	C471	U472	A473	G474	C475	A476	G477	C478	C479	G480	
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G601	G602	G603	C604	G605	U606	U607	G608	G609	G610	A611	C612	C613	G614	G615	G616	A617	G618	A619	G620	G621	C622	U623	G624	G625	G626	G627	G628	U629	A630	C631	G632	C633	C634	C635	C636	G637	G638	G639	U640	A641	G642	G643	G644	G645	U646	G647	A648	U649	A650	U651	C652	C653	U654	A655	U656	A657	A658	U659	C660	
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G962	A963	G964	G965	G966	C967	C968	A969	G970	G971	C972	U973	G974	A975	A976	G977	G978	U979	C980	U981	U982	C983	C984	C985	G986	G987	U988	C989	G990	C991	G992	C993	C994	G995	A996	G997	A998	G999	U1000	A1001	U1002	G1003	U1004	C1005	C1006	A1007	U1008	G1009	G1010	C1011	C1012	G1013	C1014	C1015	C1016	U1017	U1018	U1019	G1020	C1021	



• Molecule 22: 30S ribosomal protein S27ae

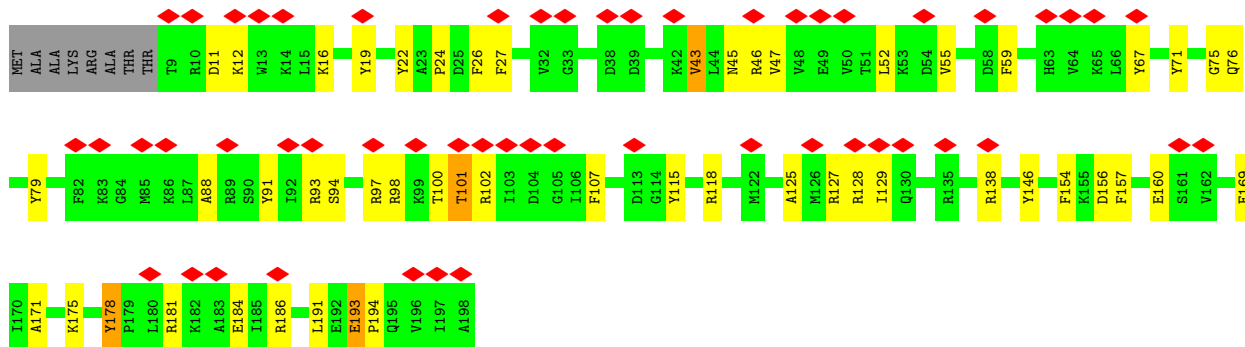


• Molecule 23: 30S ribosomal protein S19P

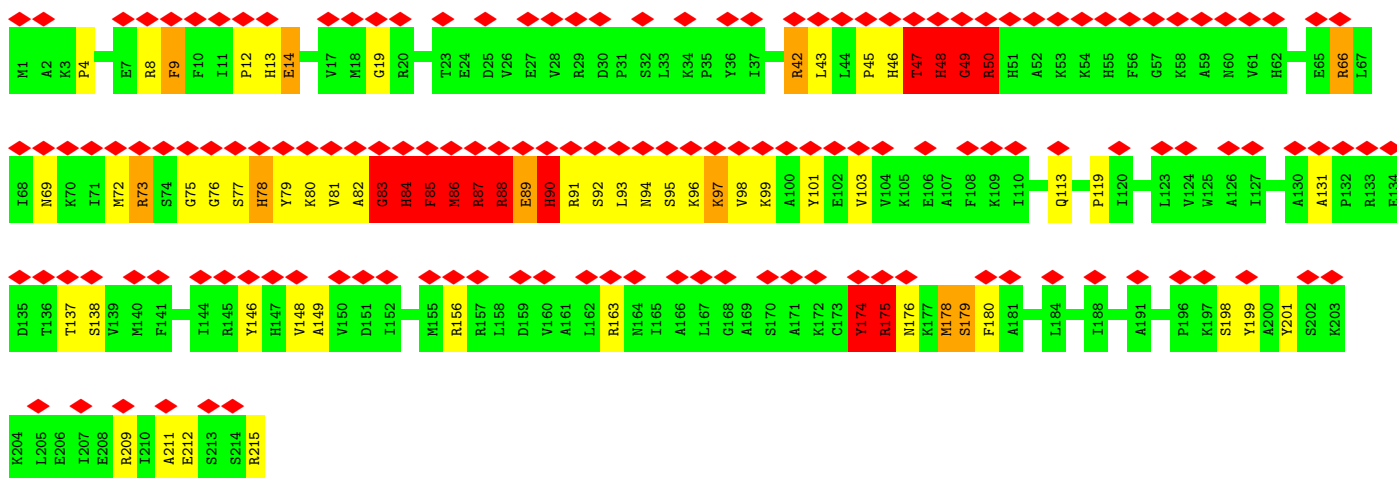


• Molecule 24: 30S ribosomal protein S3Ae

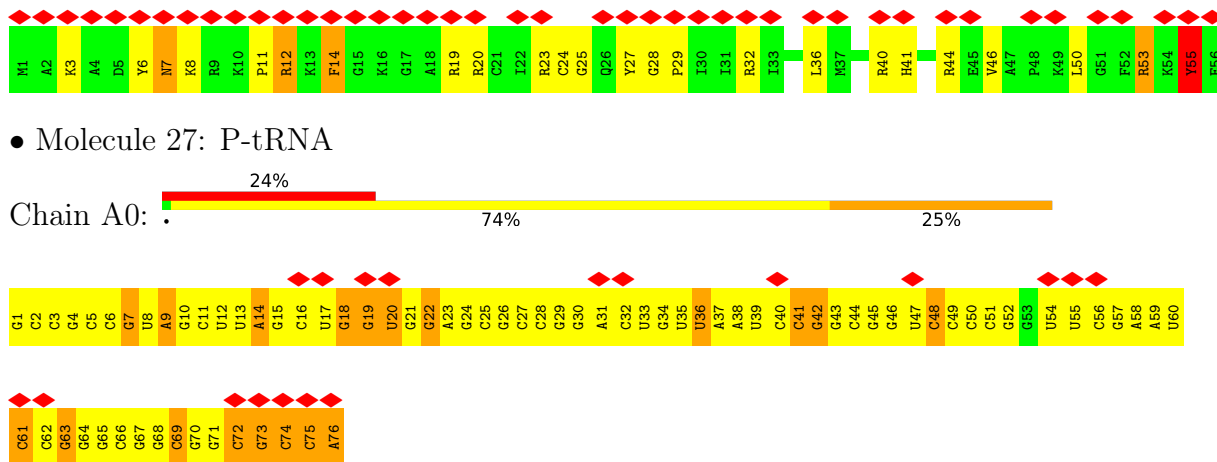
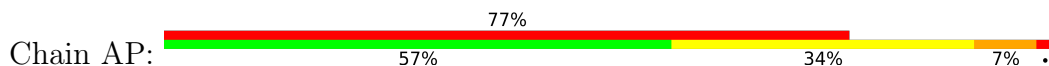




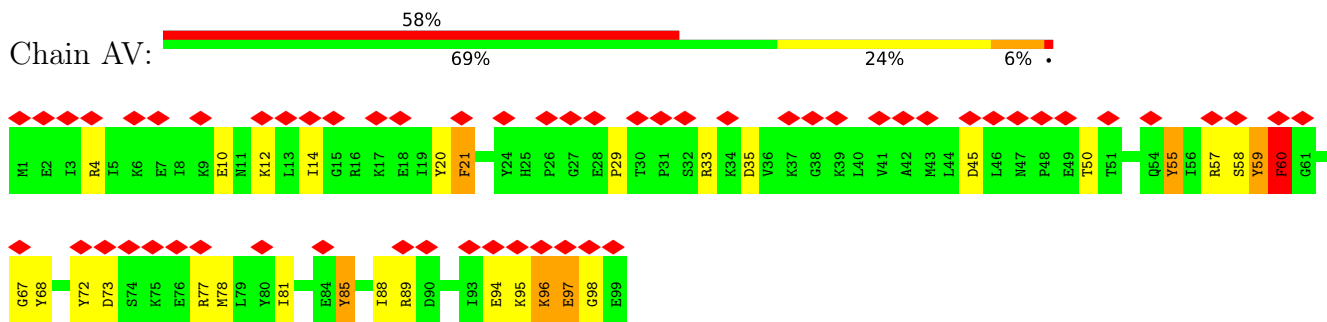
• Molecule 25: 30S ribosomal protein S7P



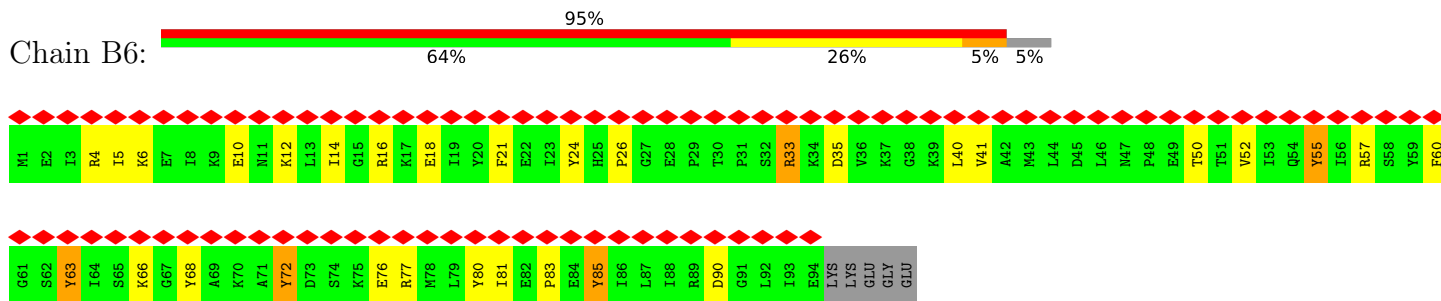
• Molecule 26: 30S ribosomal protein S14P type Z



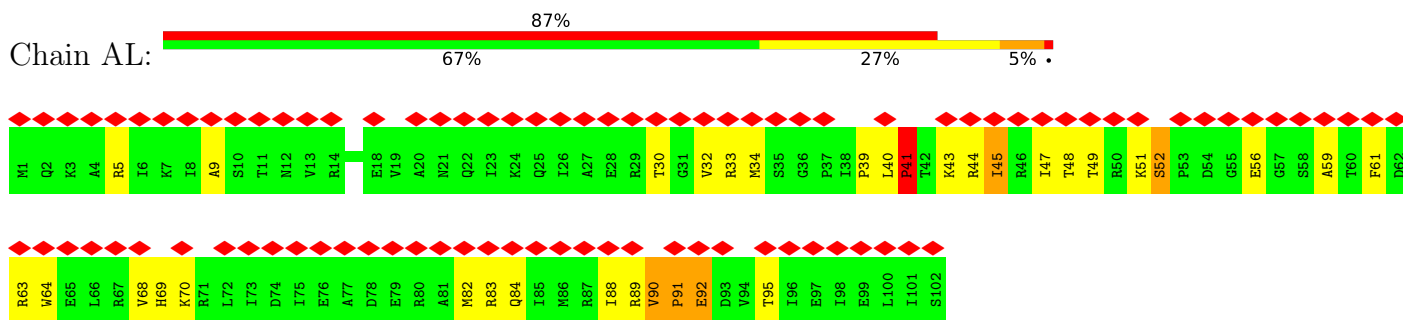
• Molecule 28: 30S ribosomal protein S24e



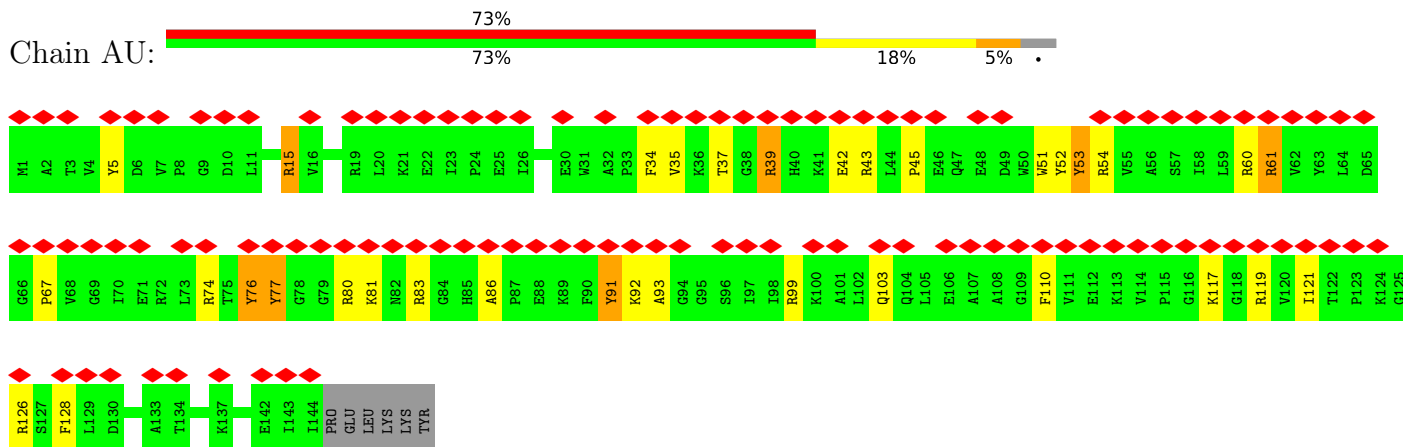
• Molecule 28: 30S ribosomal protein S24e



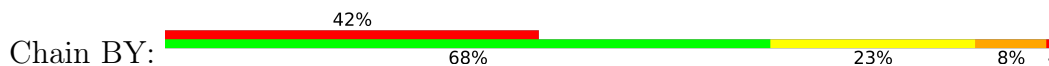
• Molecule 29: 30S ribosomal protein S10P

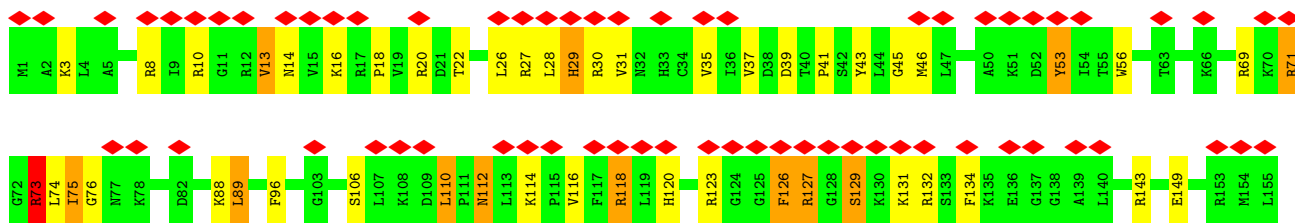


• Molecule 30: SSU ribosomal protein S19E

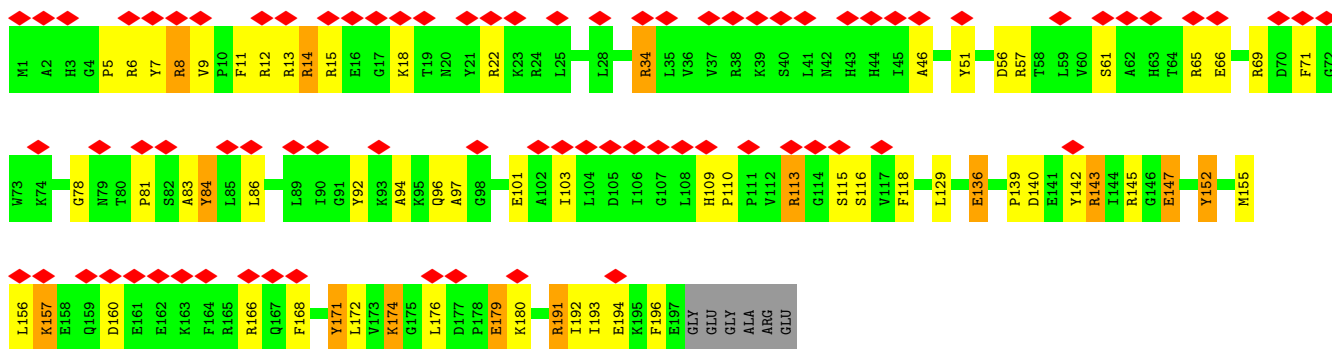
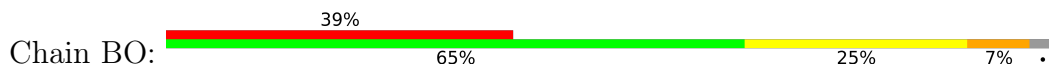


• Molecule 31: 50S ribosomal protein L30P

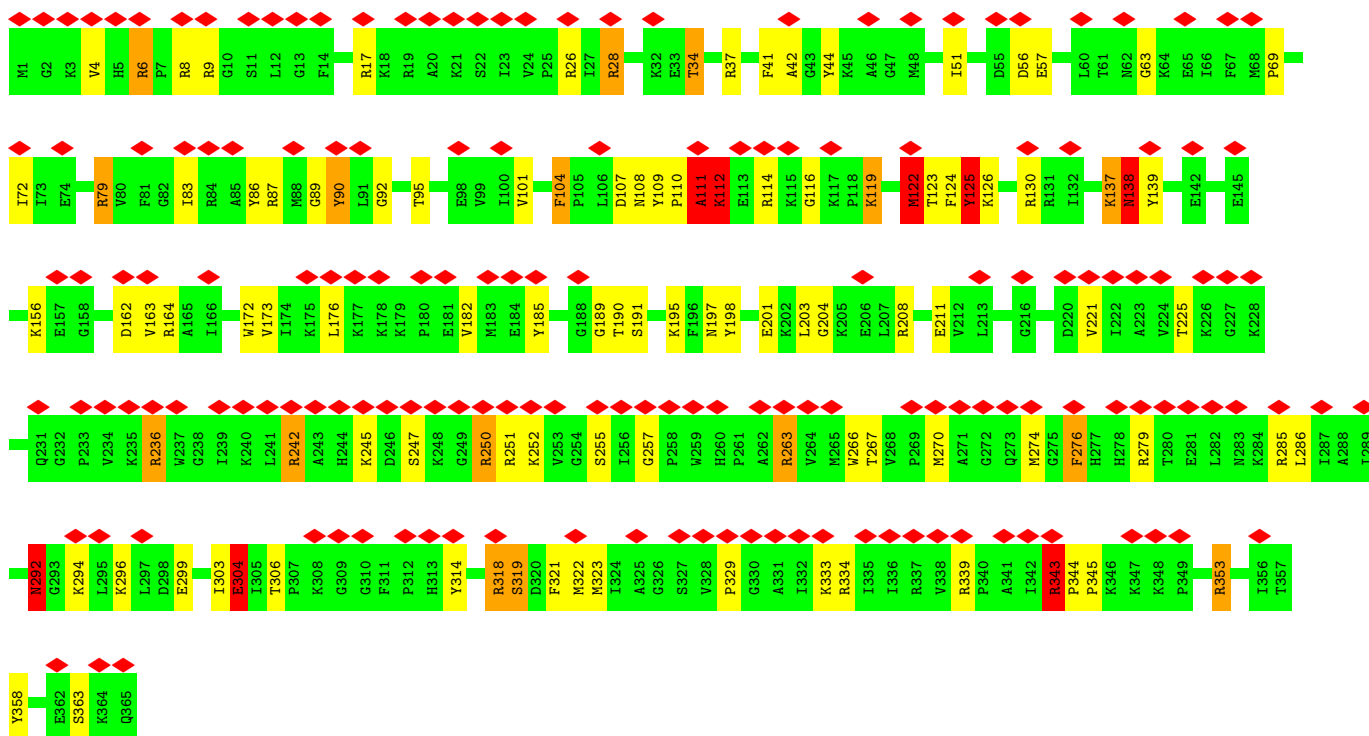
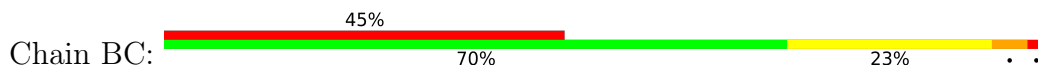




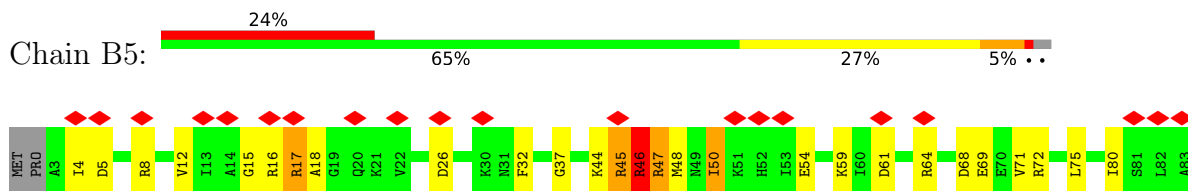
• Molecule 32: 50S ribosomal protein L18P



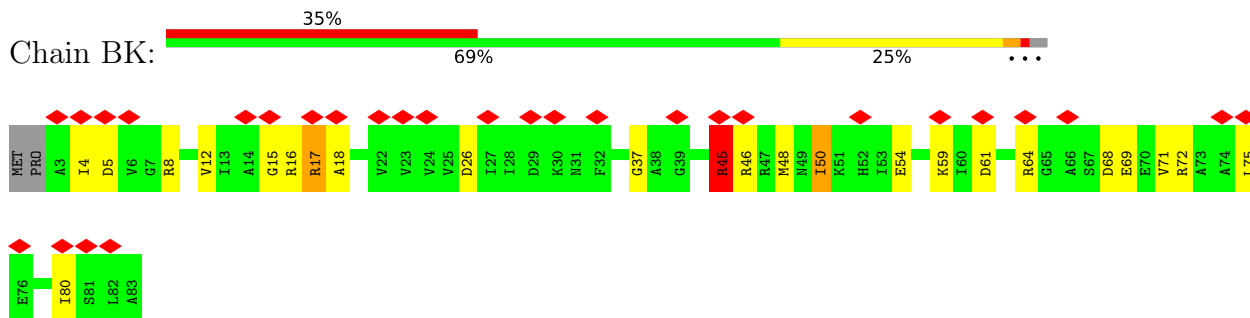
• Molecule 33: 50S ribosomal protein L3P



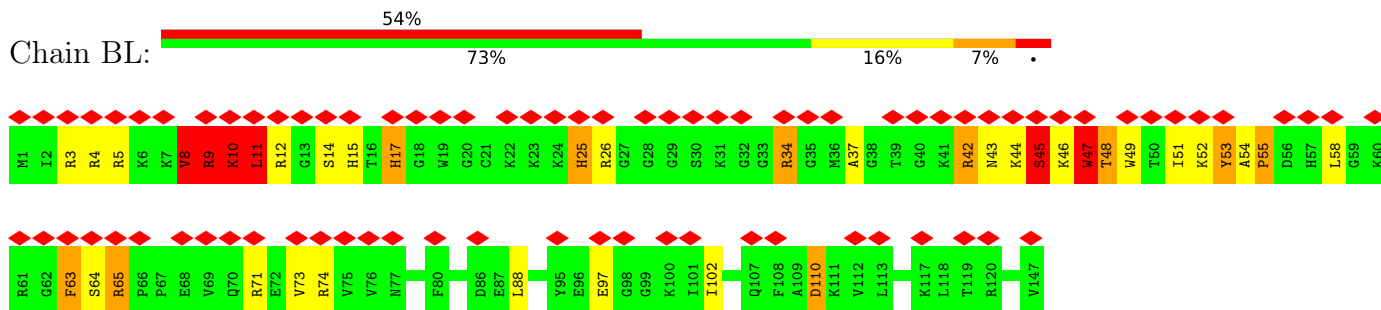
• Molecule 34: 50S ribosomal protein L14e



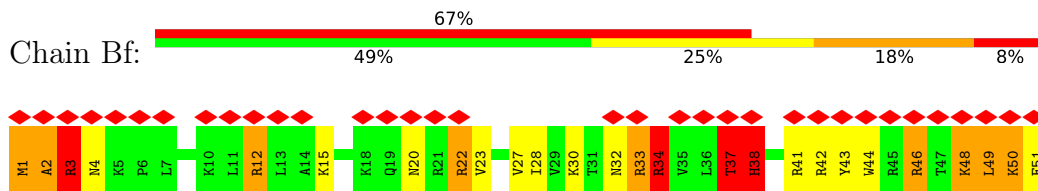
• Molecule 34: 50S ribosomal protein L14e



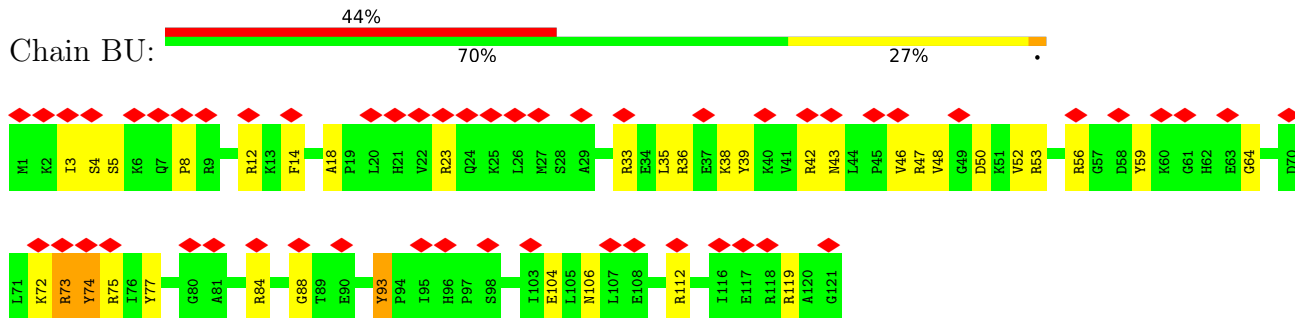
• Molecule 35: 50S ribosomal protein L15P



• Molecule 36: 50S ribosomal protein L39e

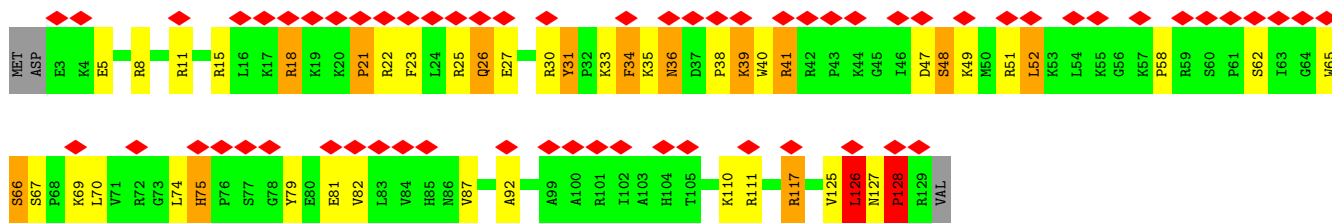


• Molecule 37: 50S ribosomal protein L24P

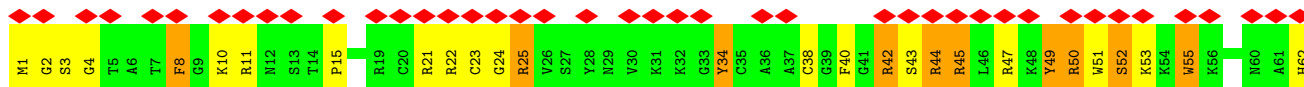


• Molecule 38: 50S ribosomal protein L32e

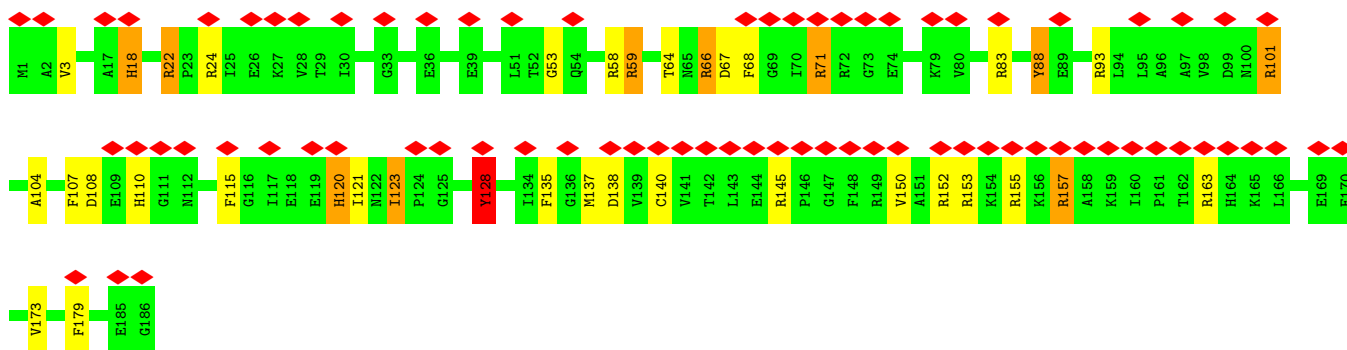
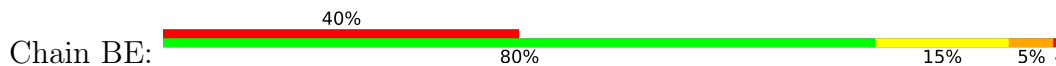




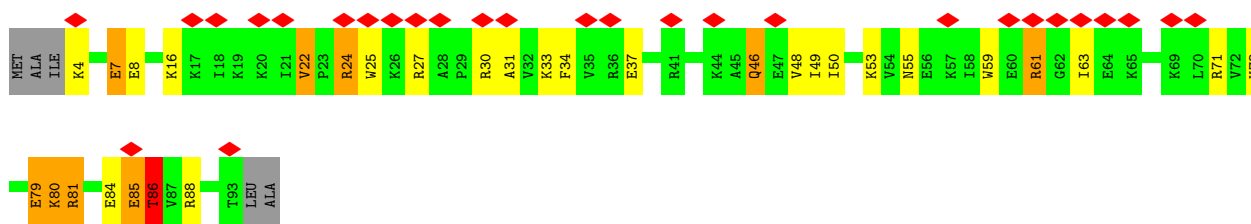
• Molecule 39: 50S ribosomal protein L37e



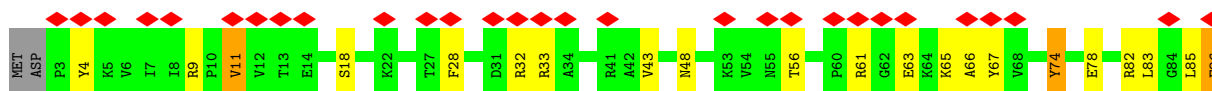
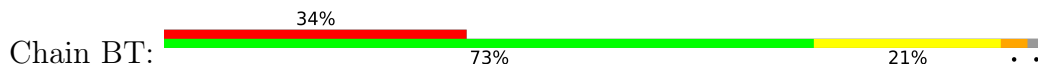
• Molecule 40: 50S ribosomal protein L5P



• Molecule 41: 50S ribosomal protein L31e



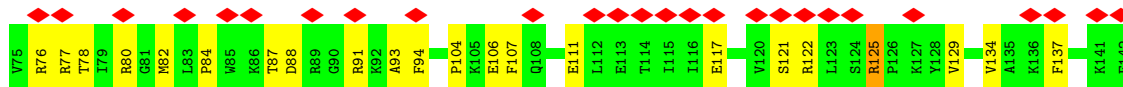
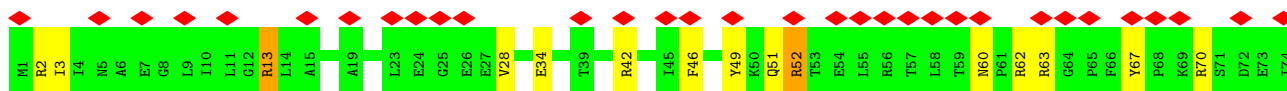
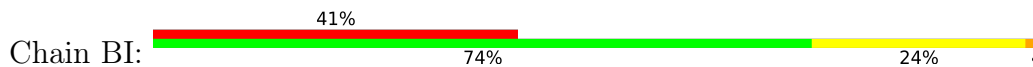
• Molecule 42: 50S ribosomal protein L23P



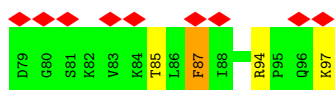
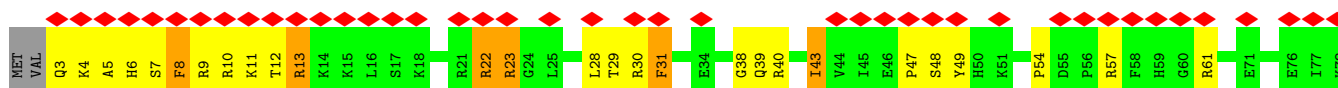
• Molecule 43: Acidic ribosomal protein P0 homolog



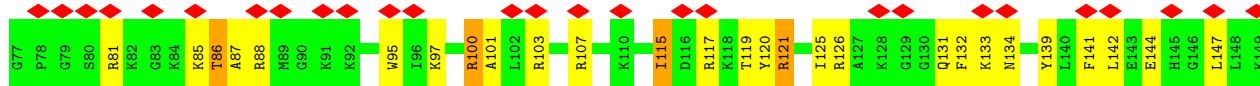
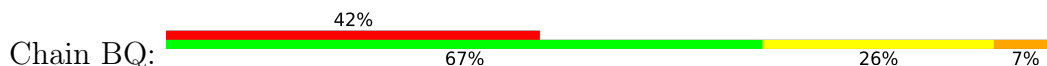
• Molecule 47: 50S ribosomal protein L13P



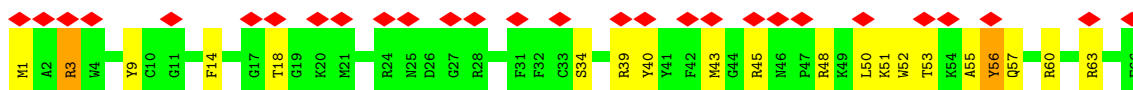
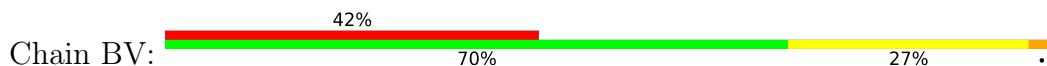
• Molecule 48: 50S ribosomal protein L21e



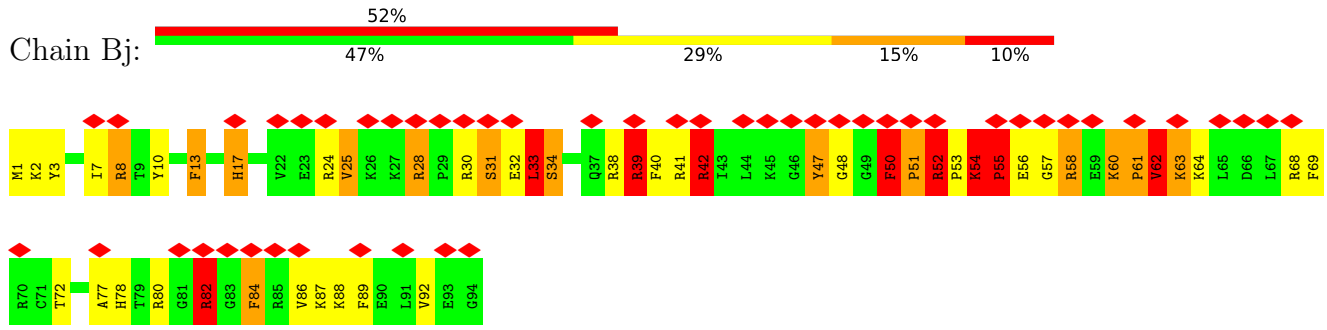
• Molecule 49: 50S ribosomal protein L19e



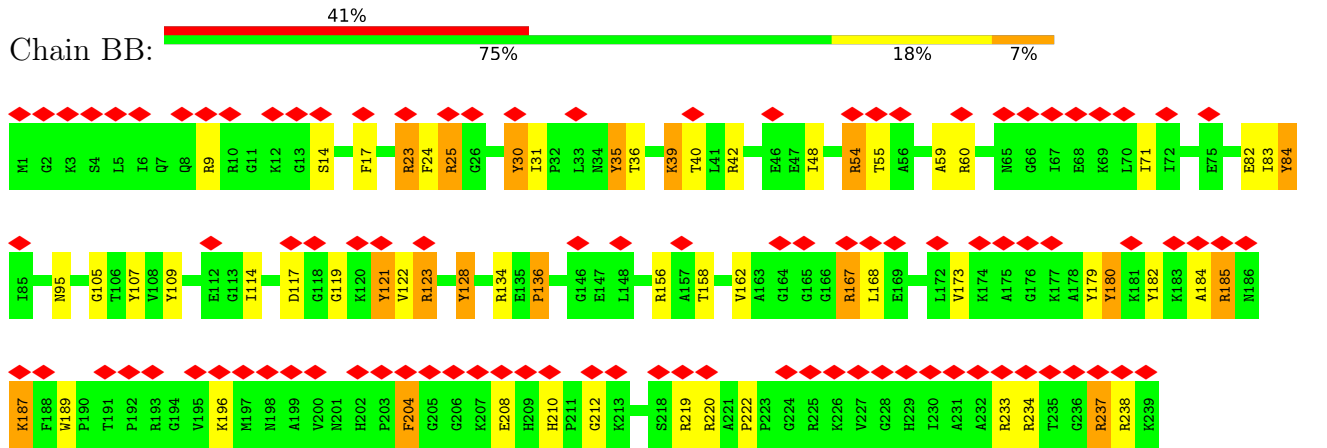
• Molecule 50: 50S ribosomal protein L24e



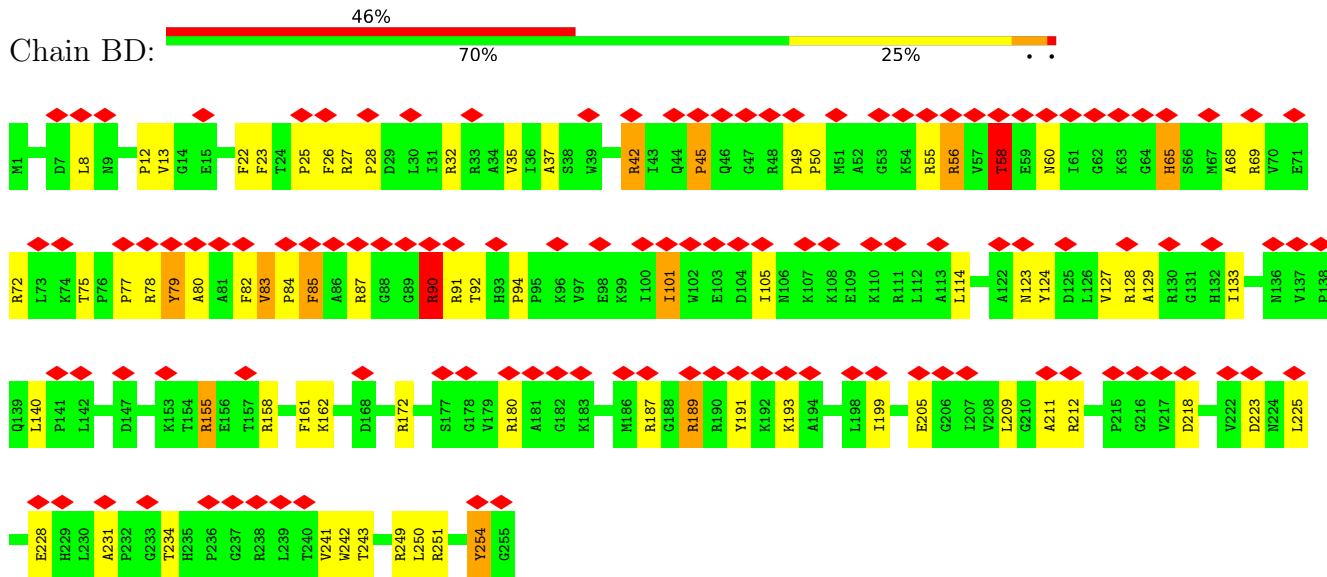
• Molecule 51: 50S ribosomal protein L44E



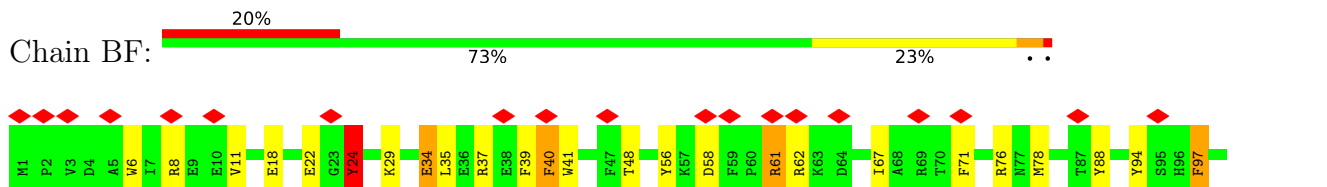
• Molecule 52: 50S ribosomal protein L2P



• Molecule 53: 50S ribosomal protein L4P

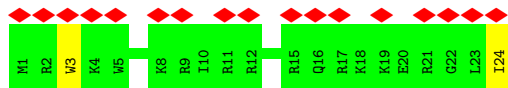
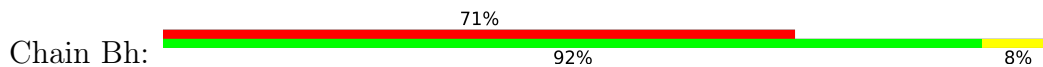


• Molecule 54: 50S ribosomal protein L6P

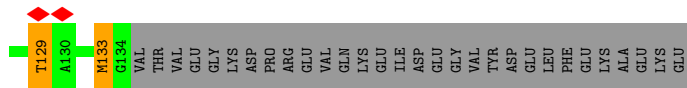
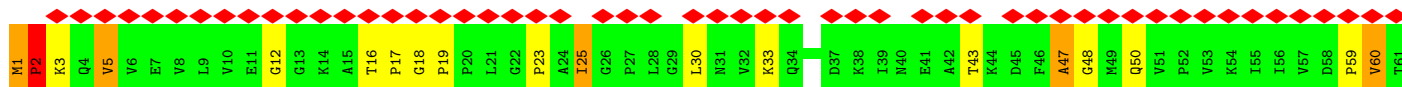




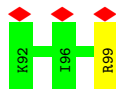
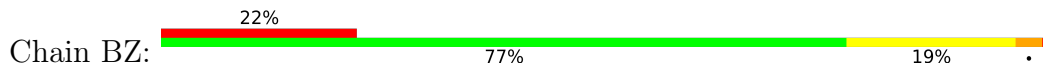
• Molecule 55: 50S ribosomal protein L41e



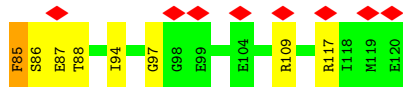
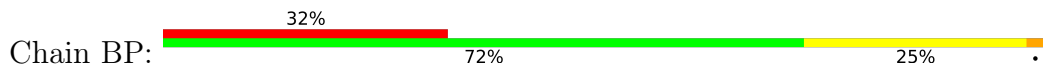
• Molecule 56: 50S ribosomal protein L11P



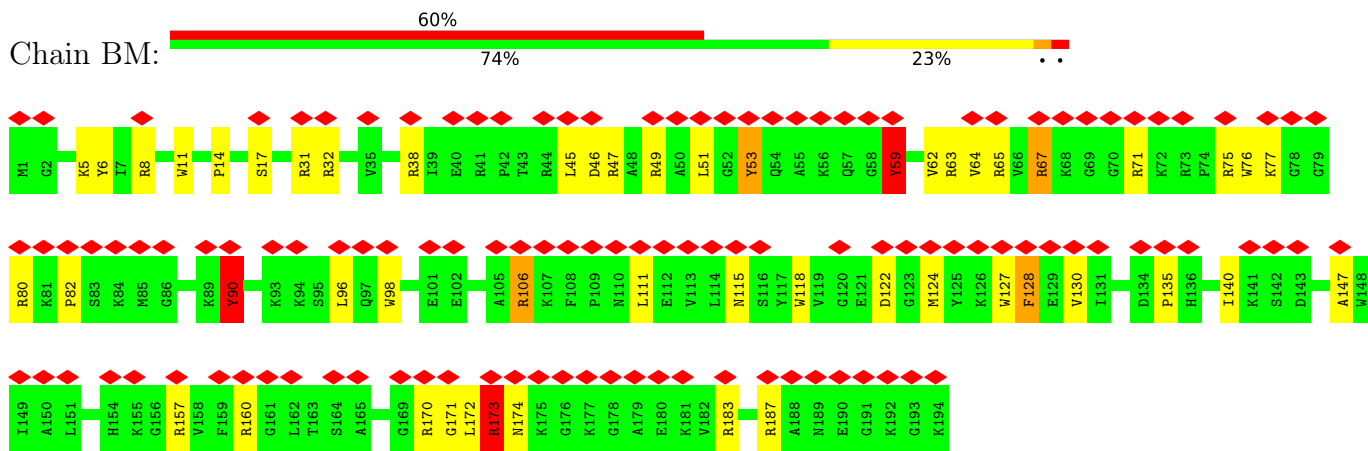
• Molecule 57: 50S ribosomal protein L30e



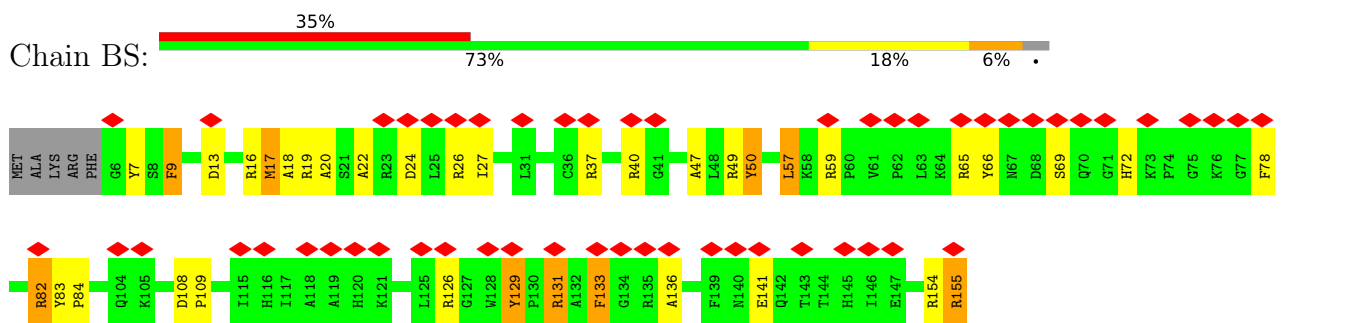
• Molecule 58: 50S ribosomal protein L18e



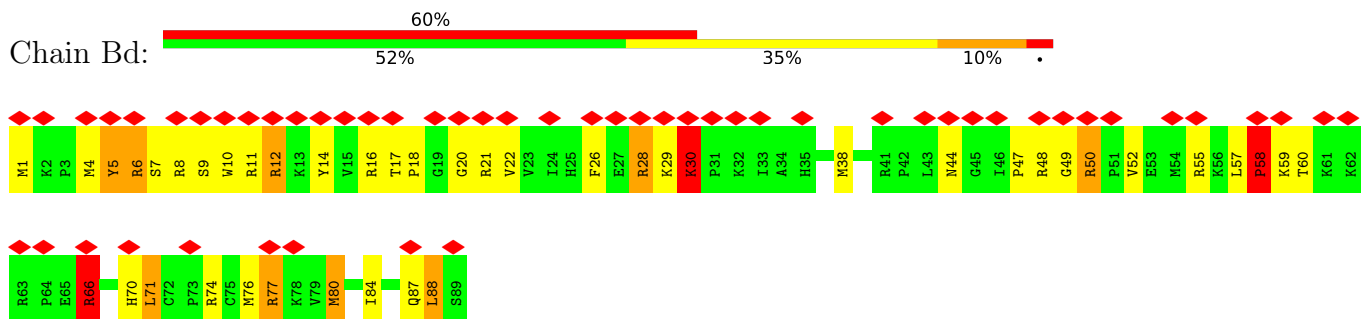
• Molecule 59: 50S ribosomal protein L15e



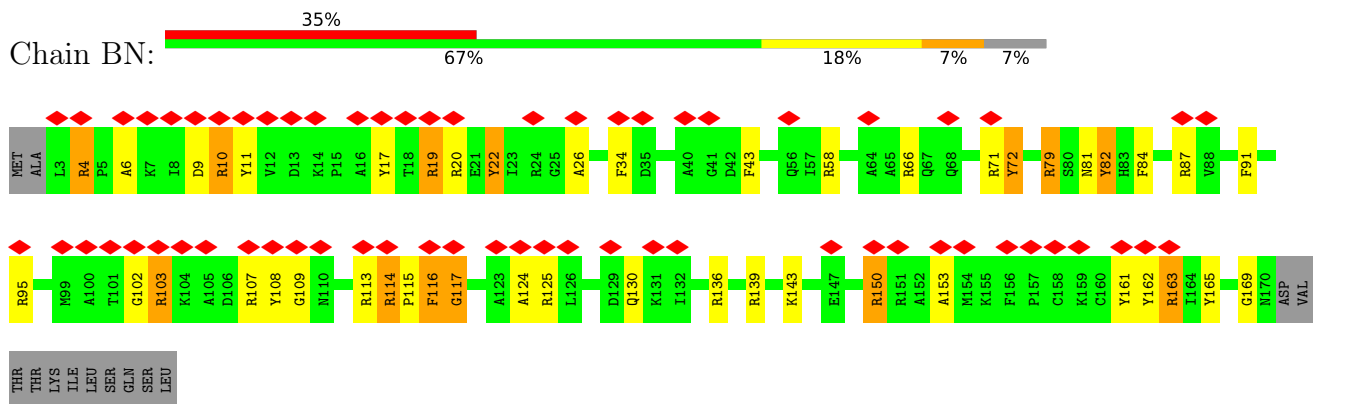
• Molecule 60: 50S ribosomal protein L22P



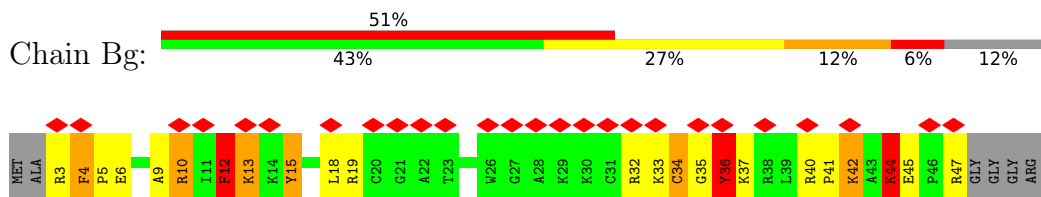
• Molecule 61: 50S ribosomal protein L34e



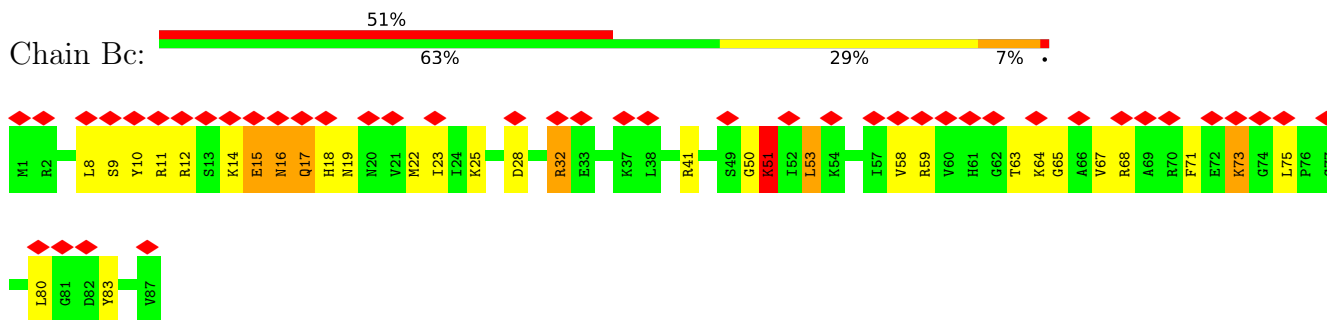
• Molecule 62: 50S ribosomal protein L10e



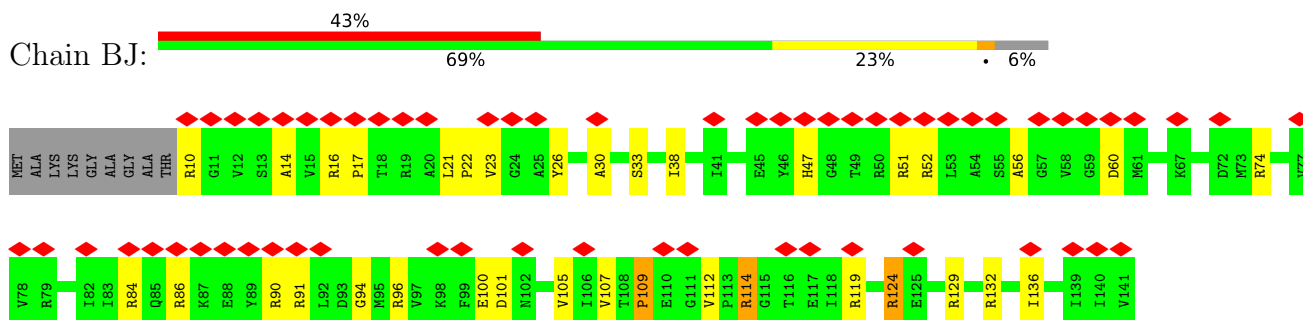
• Molecule 63: 50S ribosomal protein L40e



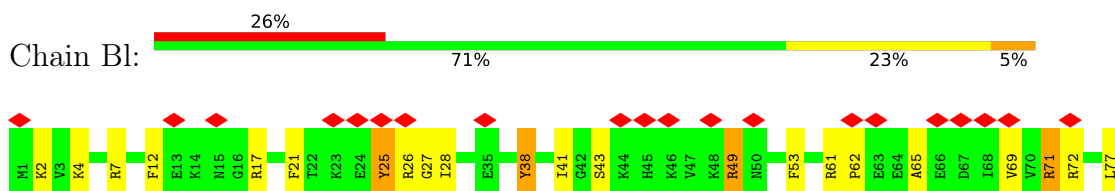
• Molecule 64: 50S ribosomal protein L35Ae



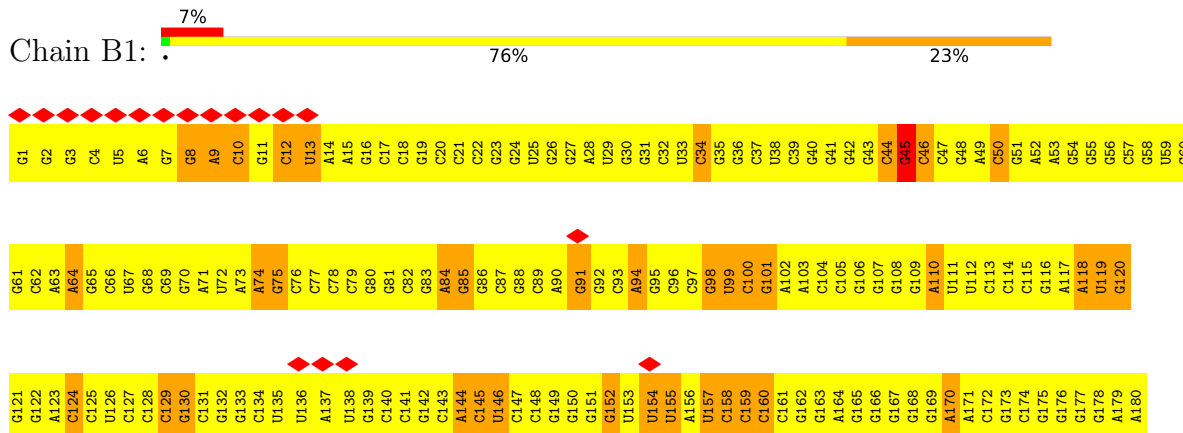
• Molecule 65: 50S ribosomal protein L14P



• Molecule 66: 50S ribosomal protein LX



• Molecule 67: 23S rRNA



C961	C962	C963	C964	A965	G966	C967	A968	A969	G970	G971	C972	C973	C974	C975	C976	C977	C978	G979	G980	A981	G982	G983	A984	A985	A986	G987	C988	C989	G990	U991	G992	G993	G994	A995	G996	A997	G998	A999	G1000	C1001	A1002	C1003	U1004	G1005	U1006	U1007	C948	C949	G1010	G1011	G1012	G1013	U1014	G1015	C1016	A1017	G1018	G1019	G1020
U181	U182	G183	A184	A185	A186	C187	A188	U189	C190	U191	U192	A193	G194	U195	U196	C197	C198	C199	G200	C201	A202	G203	G204	A205	A206	A207	A208	G209	A210	A211	A212	G213	C214	A215	A216	A217	A218	G219	C220	A221	A222	U223	G224	C225	C226	G227	U228	G229	A230	G231	U232	A233	G234	G235	G236	G237	C238	G239	A240
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G1501	C1502	C1503	C1504	C1505	U1506	A1507	A1508	C1509	U1510	C1511	G1512	G1513	C1514	G1515	C1516	U1517	G1518	U1519	C1520	G1521	A1522	A1523	A1524	G1525	G1526	G1527	A1528	U1529	A1530	C1531	G1532	G1533	G1534	U1535	U1536	U1537	A1538	U1539	A1540	U1541	U1542	C1543	C1544	C1545	G1546	U1547	A1548	C1549	C1550	G1551	C1552	G1553	G1554	G1555	G1556	G1557	U1558	A1559	G1560	
G1441	G1442	G1443	A1444	G1445	G1446	G1447	G1448	G1449	A1450	A1451	G1452	G1453	G1454	U1455	U1456	U1457	G1458	C1459	A1460	G1461	G1462	G1463	A1464	A1465	U1466	G1467	G1468	U1469	C1470	G1471	U1472	C1473	A1474	C1475	C1476	G1477	U1478	U1479	G1480	G1481	G1482	U1483	U1484	A1485	G1486	U1487	C1488	G1489	G1490	U1491	C1492	G1493	U1494	A1495	A1496	C1497	U1498	C1499	C1500	
C1381	C1382	C1383	C1384	C1385	C1386	C1387	U1388	U1389	C1390	C1391	G1392	C1393	G1394	G1395	A1396	U1397	C1398	C1399	C1400	U1401	G1402	C1403	G1404	G1405	A1406	U1407	U1408	C1409	C1410	G1411	A1412	C1413	A1414	C1415	G1416	U1417	U1418	A1419	U1420	G1421	G1422	G1423	G1424	U1425	U1426	G1427	U1428	A1429	U1430	U1431	C1432	C1433	G1434	U1435	U1436	C1437	U1438	U1439	C1440	
C1321	G1322	U1323	C1324	A1325	U1326	C1327	G1328	U1329	U1330	U1331	A1332	G1333	G1334	C1335	U1336	U1337	G1338	C1339	G1340	U1341	G1342	C1343	C1344	G1345	G1346	U1347	G1348	C1349	C1350	G1351	U1352	A1353	G1354	A1355	A1356	G1357	C1358	C1359	G1360	G1361	G1362	C1363	C1364	G1365	U1366	A1367	G1368	U1369	G1370	U1371	C1372	C1373	G1374	C1375	U1376	G1377	A1378	A1379	C1380	
C1261	C1262	C1263	G1264	A1265	C1266	A1267	A1268	U1269	G1270	G1271	A1272	C1273	G1274	U1275	G1276	G1277	C1278	U1279	C1280	A1281	A1282	G1283	C1284	G1285	G1286	G1287	C1288	C1289	G1290	C1291	U1292	G1293	A1294	G1295	A1296	C1297	C1298	C1299	C1300	G1301	G1302	C1303	G1304	C1305	A1306	C1307	G1308	G1309	A1310	C1311	C1312	C1313	A1314	C1315	U1316	G1317	C1318	U1319	C1320	
G1201	G1202	C1203	U1204	U1205	A1206	G1207	A1208	U1209	G1210	C1211	A1212	G1213	C1214	A1215	U1216	U1217	C1218	C1219	U1220	U1221	A1222	A1223	U1224	A1225	G1226	A1227	G1228	U1229	G1230	C1231	G1232	U1233	A1234	A1235	G1236	A1237	U1238	C1239	U1240	C1241	A1242	C1243	C1244	G1245	G1246	U1247	C1248	A1249	A1250	G1251	C1252	U1253	C1254	C1255	G1256	G1257	U1258	G1259	C1260	
C1141	A1142	A1143	A1144	U1145	U1146	G1147	C1148	C1149	G1150	G1151	U1152	A1153	A1154	A1155	U1156	U1157	U1158	U1159	U1160	A1161	C1162	U1163	C1164	C1165	A1166	A1167	A1168	G1169	G1170	A1171	U1172	G1173	U1174	C1175	C1176	C1177	G1178	G1179	G1180	C1181	C1182	U1183	U1184	A1185	G1186	A1187	C1188	A1189	G1190	C1191	U1192	C1193	U1194	U1195	G1196	A1197	U1198	G1199	C1200	
U1081	A1082	G1083	G1084	U1085	U1086	G1087	U1088	U1089	C1090	G1091	U1092	G1093	U1094	A1095	U1096	A1097	C1098	C1099	U1100	U1101	C1102	U1103	A1104	C1105	C1106	U1107	A1108	G1109	A1110	G1111	U1112	G1113	C1055	A1056	C1057	A1058	C1059	A1118	A1119	C1120	C1121	C1122	G1064	A1123	U1124	A1125	C1126	C1127	G1070	A1071	U1072	G1073	G1074	U1075	G1076	G1077	A1078	C1138	C1139	C1140
G1021	G1022	C1023	G1024	A1025	A1026	A1027	G1028	C1029	C1030	C1031	C1032	G1033	G1034	G1035	C1036	C1037	U1038	C1039	C1040	U1041	G1042	U1043	C1044	A1045	A1046	A1047	C1048	U1049	C1050	C1051	G1052	A1053	A1054	C1055	C1056	C1057	A1058	C1059	A1118	G1060	G1061	C1062	C1063	G1064	A1123	C1066	G1067	U1068	A1069	G1070	A1071	U1072	G1073	G1074	U1075	G1076	G1077	A1078	G1080	

C2582	C2583	A2584	C2585	A2586	C2587	C2588	C2589	A2591	U2592	A2593	U2594	C2595	A2596	A2597	C2598	C2599	C2600	C2601	G2602	A2603	G2604	C2605	U2606	U2607	U2608	C2609	C2610	U2611	A2612	C2613	C2614	U2615	C2616	C2617	C2618	U2619	G2620	U2621	C2622	G2623	G2624	C2625	U2626	C2627	U2628	U2629	C2630	C2631	C2632	A2633	U2634	C2635	C2636	U2637	G2638	G2639	C2640	C2641		
C2642	U2643	C2644	C2645	A2646	C2647	C2648	A2649	G2650	G2651	G2652	G2653	C2654	C2655	A2656	A2657	G2658	G2659	G2660	U2661	G2662	G2663	G2664	G2665	G2666	U2667	U2668	U2669	U2670	C2671	A2672	C2673	C2674	C2675	A2676	U2677	U2678	A2679	A2680	G2681	G2682	G2683	G2684	G2685	A2686	A2687	C2688	G2689	U2690	G2691	A2692	G2693	C2694	U2695	G2696	G2697	G2698	U2699	U2700	U2701	
A2702	G2703	A2704	C2705	C2706	C2707	U2708	C2709	A2710	U2711	G2712	A2713	C2714	A2715	A2716	A2717	U2718	G2719	U2720	C2721	G2722	G2723	A2724	G2725	G2726	U2727	U2728	A2729	U2730	C2731	U2732	A2733	C2734	C2735	C2736	G2737	C2738	G2739	U2740	U2741	G2742	U2743	U2744	G2745	G2746	C2747	C2748	G2749	C2750	C2751	U2752	A2753	G2754	G2755	U2756	G2757	G2758	A2759	A2760	G2761	
G2762	U2763	G2764	C2765	C2766	C2767	C2768	U2769	A2770	G2771	U2772	A2773	C2774	G2775	A2776	G2777	A2778	G2779	G2780	A2781	U2782	C2783	A2784	G2785	G2786	G2787	U2788	G2789	C2790	C2791	G2792	C2793	G2794	G2795	C2796	C2797	U2798	C2799	U2800	G2801	U2802	U2803	G2804	U2805	A2806	C2807	C2808	G2809	G2810	U2811	U2812	U2813	U2814	C2815	G2816	U2817	C2818	C2819	C2820	G2821	
G2822	G2823	C2824	A2825	U2826	C2827	G2828	C2829	C2830	G2831	G2832	G2833	C2834	A2835	G2836	C2837	U2838	A2839	C2840	G2841	C2842	C2843	G2844	C2845	A2846	G2847	C2848	C2849	G2850	A2851	U2852	A2853	A2854	G2855	G2856	C2857	C2858	U2859	G2860	A2861	A2862	A2863	G2864	C2865	A2866	U2867	C2868	U2869	A2870	A2871	G2872	C2873	C2874	C2875	G2876	A2877	A2878	G2879	C2880	G2881	
G2882	C2883	C2884	C2885	C2886	C2887	C2888	A2889	U2890	A2891	A2892	U2893	A2894	G2895	G2896	C2897	G2898	G2899	C2900	C2901	G2902	U2903	U2904	C2905	C2906	C2907	U2908	G2909	G2910	A2911	C2912	A2913	U2914	U2915	G2916	G2917	C2918	C2919	C2920	U2921	G2922	C2923	G2924	C2925	G2926	A2927	C2928	C2929	C2930	G2931	C2932	C2933	C2934	A2935	U2936	U2937	G2938	C2939	C2940	A2941	
G2942	G2943	G2944	A2945	C2946	G2947	A2948	G2949	C3010	A2950	G2951	C2952	U2953	A2954	G2955	G2956	G2957	U2958	A2959	C2960	A2961	C2962	G2963	A2964	C2965	G2966	C2967	G2968	G2969	U2970	U2971	G2972	A2973	U2974	A2975	G2976	G2977	G2978	C2979	U2980	G2981	G2982	C2983	A2984	U2985	G2986	U2987	A2988	A2989	G2990	C2991	G2992	G2993	G2994	A2995	U2996	G2997	G2998	G2999	U3000	C3001
A3002	C3003	C3004	C3005	G3006	A3007	C3008	C3009	C3010	G3011	C3012	U3013	U3014	A3015	G3016	U3017	C3018	C3019	G3020	C3021	C3022	G3023	C3024	C3025	C3026	C3027	U3028	A3029	A3030	U3031	C3032	G3033	C3034	C3035	C3036	G3037	A3038	G3039	G3040	U3041	C3042	C3043	U3044	G3045	C3046	C3047	C3048	C3049													

• Molecule 68: 5S rRNA



C1	G2	G3	C4	G5	G6	C7	C8	A9	U10	A11	G12	C13	G14	G15	G16	G17	G18	G19	G20	C21	C22	C23	C24	A25	C26	C27	C28	G29	G30	U31	C32	U33	C34	A35	U36	U37	U38	C39	G40	A41	A42	C43	C44	C45	G46	G47	A48	A49	G50	U51	U52	A53	G14	A54	C15	G55	C56	G17	C57	C58	C59	C19	C120
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A121	C122	U123	A124	U125	C126
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4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	10000	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Wiener Filter	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	25	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	3600	Depositor
Magnification	75000	Depositor
Image detector	TVIPS TEMCAM-F416 (4k x 4k)	Depositor
Maximum map value	0.745	Depositor
Minimum map value	-0.497	Depositor
Average map value	0.004	Depositor
Map value standard deviation	0.040	Depositor
Recommended contour level	0.13	Depositor
Map size (\AA)	455.4, 455.4, 455.4	wwPDB
Map dimensions	368, 368, 368	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.2375, 1.2375, 1.2375	Depositor

5 Model quality i

5.1 Standard geometry i

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	AQ	1.71	11/1338 (0.8%)	1.93	30/1797 (1.7%)
2	AK	1.74	12/1088 (1.1%)	2.01	32/1455 (2.2%)
3	AI	1.54	5/1049 (0.5%)	1.70	9/1408 (0.6%)
4	AG	1.48	3/999 (0.3%)	1.97	31/1337 (2.3%)
5	AW	1.76	3/485 (0.6%)	1.86	11/651 (1.7%)
6	AC	1.81	19/1480 (1.3%)	1.99	34/1985 (1.7%)
7	AB	1.79	18/1654 (1.1%)	2.06	51/2233 (2.3%)
8	AR	1.83	14/956 (1.5%)	2.07	35/1287 (2.7%)
10	AD	1.73	15/1457 (1.0%)	1.93	36/1953 (1.8%)
11	A1	3.43	155/1843 (8.4%)	2.59	167/2873 (5.8%)
12	AN	1.58	12/1156 (1.0%)	1.95	31/1535 (2.0%)
13	AX	1.92	9/570 (1.6%)	2.14	19/760 (2.5%)
14	AM	1.71	11/1022 (1.1%)	1.98	27/1375 (2.0%)
15	AE	1.80	28/2025 (1.4%)	2.16	66/2732 (2.4%)
16	AJ	1.85	16/1013 (1.6%)	2.04	20/1349 (1.5%)
17	AO	1.88	16/1208 (1.3%)	2.11	39/1619 (2.4%)
18	AF	1.23	5/1745 (0.3%)	1.38	18/2350 (0.8%)
19	AS	1.71	8/562 (1.4%)	1.86	14/744 (1.9%)
20	A3	1.67	7/951 (0.7%)	1.95	24/1281 (1.9%)
20	B4	1.41	2/951 (0.2%)	1.64	11/1281 (0.9%)
20	BG	1.34	0/951	1.79	21/1281 (1.6%)
21	A2	3.29	2781/35966 (7.7%)	2.59	3540/56138 (6.3%)
22	AY	1.72	4/421 (1.0%)	1.85	8/558 (1.4%)
23	AT	1.81	7/942 (0.7%)	1.95	24/1257 (1.9%)
24	AA	1.71	13/1585 (0.8%)	2.12	53/2124 (2.5%)
25	AH	1.62	20/1773 (1.1%)	2.11	75/2381 (3.1%)
26	AP	1.87	6/471 (1.3%)	2.06	15/620 (2.4%)
27	A0	3.33	158/1814 (8.7%)	2.51	182/2828 (6.4%)
28	AV	1.57	7/839 (0.8%)	1.75	17/1122 (1.5%)
28	B6	1.73	9/798 (1.1%)	2.09	32/1071 (3.0%)
29	AL	1.52	3/830 (0.4%)	2.03	28/1113 (2.5%)
30	AU	1.79	14/1203 (1.2%)	2.05	29/1621 (1.8%)
31	BY	1.73	13/1262 (1.0%)	2.04	31/1687 (1.8%)
32	BO	1.85	29/1635 (1.8%)	1.96	37/2196 (1.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
33	BC	1.72	27/2978 (0.9%)	2.06	96/4003 (2.4%)
34	B5	1.76	7/618 (1.1%)	2.12	24/829 (2.9%)
34	BK	1.80	8/618 (1.3%)	1.98	19/829 (2.3%)
35	BL	1.71	13/1175 (1.1%)	2.07	46/1563 (2.9%)
36	Bf	1.94	13/453 (2.9%)	2.75	38/603 (6.3%)
37	BU	1.77	16/1024 (1.6%)	2.05	29/1365 (2.1%)
38	Bb	1.77	12/1099 (1.1%)	2.14	36/1466 (2.5%)
39	Be	1.82	10/517 (1.9%)	2.11	19/681 (2.8%)
40	BE	1.72	12/1513 (0.8%)	1.99	39/2026 (1.9%)
41	Ba	1.61	1/760 (0.1%)	2.04	30/1019 (2.9%)
42	BT	1.66	5/689 (0.7%)	1.97	19/924 (2.1%)
43	Bk	1.48	8/1659 (0.5%)	1.82	44/2253 (2.0%)
44	BW	1.85	13/595 (2.2%)	2.02	19/784 (2.4%)
45	Bi	1.57	0/599	1.85	16/798 (2.0%)
46	BA	1.73	23/1702 (1.4%)	1.98	46/2293 (2.0%)
47	BI	1.80	18/1168 (1.5%)	1.96	30/1561 (1.9%)
48	BR	1.65	4/808 (0.5%)	1.92	22/1080 (2.0%)
49	BQ	1.69	15/1272 (1.2%)	2.17	43/1676 (2.6%)
50	BV	1.67	3/570 (0.5%)	2.07	23/758 (3.0%)
51	Bj	1.75	6/805 (0.7%)	2.36	51/1064 (4.8%)
52	BB	1.77	19/1883 (1.0%)	2.08	56/2540 (2.2%)
53	BD	1.81	25/2068 (1.2%)	1.99	57/2787 (2.0%)
54	BF	1.74	13/1507 (0.9%)	2.01	44/2033 (2.2%)
55	Bh	1.34	2/233 (0.9%)	1.11	3/301 (1.0%)
56	BH	1.46	5/1001 (0.5%)	1.88	31/1351 (2.3%)
57	BZ	1.69	6/764 (0.8%)	1.99	20/1028 (1.9%)
58	BP	1.89	12/980 (1.2%)	1.97	24/1313 (1.8%)
59	BM	1.84	23/1634 (1.4%)	1.97	35/2179 (1.6%)
60	BS	1.76	7/1226 (0.6%)	2.16	38/1649 (2.3%)
61	Bd	1.60	5/758 (0.7%)	2.22	41/1007 (4.1%)
62	BN	1.86	16/1409 (1.1%)	2.09	51/1890 (2.7%)
63	Bg	1.58	2/380 (0.5%)	2.02	17/504 (3.4%)
64	Bc	1.67	6/694 (0.9%)	2.12	30/926 (3.2%)
65	BJ	1.88	14/1027 (1.4%)	1.95	24/1385 (1.7%)
66	Bl	1.81	7/669 (1.0%)	1.92	15/884 (1.7%)
67	B1	3.31	5858/73410 (8.0%)	2.59	7158/114595 (6.2%)
68	B3	3.47	234/3010 (7.8%)	2.74	322/4693 (6.9%)
All	All	2.81	9901/187317 (5.3%)	2.41	13452/276642 (4.9%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AQ	0	7
2	AK	0	4
3	AI	0	5
4	AG	1	9
5	AW	0	2
6	AC	0	11
7	AB	0	6
8	AR	0	3
9	A9	0	1
10	AD	0	6
12	AN	0	10
13	AX	0	7
14	AM	0	2
15	AE	0	11
16	AJ	0	4
17	AO	0	11
18	AF	0	1
19	AS	0	1
20	B4	0	1
20	BG	0	3
21	A2	1	7
22	AY	0	4
23	AT	0	5
24	AA	0	2
25	AH	4	21
26	AP	0	6
28	AV	0	10
28	B6	0	2
29	AL	1	5
30	AU	0	6
31	BY	0	7
32	BO	0	11
33	BC	0	18
34	B5	1	3
34	BK	1	1
35	BL	3	12
36	Bf	0	13
37	BU	0	3
38	Bb	0	10
39	Be	1	12
40	BE	0	6
41	Ba	0	7
42	BT	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
43	Bk	0	10
44	BW	0	2
45	Bi	0	4
46	BA	0	4
47	BI	0	3
48	BR	0	6
49	BQ	3	10
50	BV	1	4
51	Bj	1	18
52	BB	0	16
53	BD	0	8
54	BF	0	8
56	BH	1	9
57	BZ	0	1
58	BP	0	2
59	BM	0	7
60	BS	0	7
61	Bd	1	7
62	BN	0	8
63	Bg	1	4
64	Bc	1	7
65	BJ	0	3
66	Bl	0	3
67	B1	0	12
All	All	22	442

All (9901) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1565	G	O4'-C1'	51.72	2.08	1.41
67	B1	2507	C	O4'-C1'	37.95	1.91	1.41
67	B1	1570	C	O4'-C1'	37.84	1.90	1.41
67	B1	1642	G	C2'-C1'	35.02	1.91	1.53
21	A2	85	A	C2'-C1'	34.42	1.91	1.53
21	A2	434	A	C2'-C1'	33.74	1.90	1.53
67	B1	1440	C	C2'-C1'	-33.42	1.16	1.53
67	B1	1567	C	O4'-C1'	33.29	1.84	1.41
21	A2	440	C	O4'-C1'	33.15	1.84	1.41
67	B1	1566	G	O4'-C1'	32.91	1.84	1.41
21	A2	367	G	C2'-C1'	-32.62	1.17	1.53
67	B1	1045	A	C2'-C1'	32.47	1.89	1.53
67	B1	2926	G	C2'-C1'	-31.85	1.18	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A1	51	G	C2'-C1'	-31.08	1.19	1.53
67	B1	2587	G	C2'-C1'	-30.80	1.19	1.53
21	A2	63	G	C2'-C1'	-30.77	1.19	1.53
21	A2	1177	C	C2'-C1'	-30.34	1.20	1.53
67	B1	934	G	C2'-C1'	-30.09	1.20	1.53
21	A2	1154	G	C2'-C1'	-30.08	1.20	1.53
67	B1	2304	C	C2'-C1'	-29.98	1.20	1.53
67	B1	2735	C	C2'-C1'	-29.72	1.20	1.53
67	B1	1158	G	C2'-C1'	-29.71	1.20	1.53
67	B1	1592	U	C2'-C1'	-29.44	1.21	1.53
67	B1	2304	C	O4'-C1'	29.32	1.79	1.41
67	B1	2516	G	C2'-C1'	-29.25	1.21	1.53
67	B1	3027	C	C2'-C1'	-29.04	1.21	1.53
21	A2	88	G	O4'-C1'	28.83	1.79	1.41
67	B1	1570	C	P-O5'	28.76	1.88	1.59
67	B1	424	U	C2'-C1'	-28.69	1.21	1.53
67	B1	1	G	P-OP2	-28.58	1.00	1.49
27	A0	1	G	P-OP2	-28.55	1.00	1.49
27	A0	1	G	P-OP1	-28.55	1.00	1.49
21	A2	1	A	P-OP2	-28.54	1.00	1.49
68	B3	1	C	P-OP1	-28.52	1.00	1.49
11	A1	1	G	P-OP2	-28.52	1.00	1.49
21	A2	1	A	P-OP1	-28.52	1.00	1.49
11	A1	1	G	P-OP1	-28.52	1.00	1.49
68	B3	1	C	P-OP2	-28.51	1.00	1.49
67	B1	1	G	P-OP1	-28.50	1.00	1.49
67	B1	2088	G	O4'-C1'	28.39	1.78	1.41
67	B1	366	G	C2'-C1'	-28.28	1.22	1.53
67	B1	1411	G	C2'-C1'	-28.04	1.22	1.53
67	B1	1707	A	C2'-C1'	28.04	1.84	1.53
67	B1	537	U	C2'-C1'	-27.99	1.22	1.53
21	A2	255	G	C2'-C1'	-27.90	1.22	1.53
67	B1	2990	G	C2'-C1'	-27.88	1.22	1.53
67	B1	715	G	O4'-C1'	27.57	1.77	1.41
67	B1	435	G	C2'-C1'	-27.53	1.23	1.53
67	B1	2892	A	C2'-C1'	-27.52	1.23	1.53
21	A2	541	G	C2'-C1'	-27.21	1.23	1.53
21	A2	1490	C	C2'-C1'	-26.98	1.23	1.53
21	A2	1200	U	C2'-C1'	26.91	1.82	1.53
67	B1	474	G	C2'-C1'	-26.85	1.23	1.53
67	B1	1673	C	O4'-C1'	26.61	1.76	1.41
67	B1	1201	G	C2'-C1'	-26.46	1.24	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	455	C	C2'-C1'	-26.28	1.24	1.53
21	A2	367	G	O4'-C1'	26.21	1.75	1.41
21	A2	1290	U	C2'-C1'	-26.15	1.24	1.53
67	B1	2507	C	C2'-C1'	26.14	1.82	1.53
67	B1	2134	G	C2'-C1'	-26.11	1.24	1.53
67	B1	409	C	C2'-C1'	-26.09	1.24	1.53
68	B3	26	C	C2'-C1'	-25.95	1.24	1.53
67	B1	565	A	C2'-C1'	25.91	1.81	1.53
21	A2	832	G	C2'-C1'	-25.90	1.24	1.53
67	B1	318	G	C2'-C1'	-25.87	1.24	1.53
21	A2	581	G	C2'-C1'	-25.83	1.25	1.53
21	A2	1190	C	C2'-C1'	-25.69	1.25	1.53
21	A2	439	G	C2'-C1'	-25.54	1.25	1.53
21	A2	562	A	C2'-C1'	25.46	1.81	1.53
67	B1	956	U	C2'-C1'	25.42	1.81	1.53
21	A2	583	G	C2'-C1'	-25.36	1.25	1.53
21	A2	806	G	O4'-C1'	25.22	1.74	1.41
21	A2	689	C	O4'-C1'	25.12	1.74	1.41
67	B1	2897	C	O4'-C1'	25.03	1.74	1.41
67	B1	412	G	O4'-C1'	24.99	1.74	1.41
67	B1	745	C	C2'-C1'	-24.92	1.25	1.53
67	B1	1037	C	C2'-C1'	24.85	1.80	1.53
21	A2	553	C	O4'-C1'	24.73	1.73	1.41
67	B1	2510	A	C2'-C1'	-24.71	1.26	1.53
21	A2	1329	C	O4'-C1'	24.66	1.73	1.41
67	B1	42	G	C2'-C1'	-24.66	1.26	1.53
67	B1	2920	C	O4'-C1'	24.60	1.73	1.41
21	A2	531	G	C2'-C1'	-24.59	1.26	1.53
21	A2	1322	C	O4'-C1'	24.59	1.73	1.41
67	B1	2115	U	C2'-C1'	24.54	1.80	1.53
67	B1	1230	G	C2'-C1'	-24.45	1.26	1.53
67	B1	1134	A	C2'-C1'	-24.38	1.26	1.53
27	A0	11	C	O4'-C1'	24.36	1.73	1.41
67	B1	795	G	C2'-C1'	-24.34	1.26	1.53
67	B1	147	C	O4'-C1'	24.32	1.73	1.41
67	B1	325	G	O4'-C1'	24.32	1.73	1.41
67	B1	2407	G	C2'-C1'	-24.29	1.26	1.53
21	A2	978	G	C2'-C1'	-24.22	1.26	1.53
67	B1	434	G	C2'-C1'	-24.21	1.26	1.53
67	B1	2587	G	O4'-C1'	24.16	1.73	1.41
67	B1	851	G	C2'-C1'	-24.15	1.26	1.53
67	B1	2544	C	O4'-C1'	24.12	1.73	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2636	C	O4 ² -C1'	24.05	1.73	1.41
21	A2	1157	G	C2 ² -C1'	-24.01	1.26	1.53
67	B1	1405	G	C2 ² -C1'	-23.97	1.26	1.53
67	B1	1322	G	C2 ² -C1'	-23.95	1.27	1.53
67	B1	1473	C	O4 ² -C1'	23.93	1.72	1.41
67	B1	1029	C	O4 ² -C1'	23.87	1.72	1.41
21	A2	8	U	C2 ² -C1'	23.84	1.79	1.53
67	B1	1751	G	C2 ² -C1'	-23.81	1.27	1.53
67	B1	1891	C	C2 ² -C1'	-23.73	1.27	1.53
67	B1	2554	A	C2 ² -C1'	23.72	1.79	1.53
67	B1	1179	G	C2 ² -C1'	23.69	1.79	1.53
67	B1	2319	C	O4 ² -C1'	23.65	1.72	1.41
67	B1	1290	G	C2 ² -C1'	-23.61	1.27	1.53
67	B1	1600	G	C2 ² -C1'	23.61	1.79	1.53
67	B1	1124	G	C2 ² -C1'	-23.60	1.27	1.53
21	A2	1253	G	C2 ² -C1'	-23.58	1.27	1.53
21	A2	88	G	C2 ² -C1'	-23.47	1.27	1.53
21	A2	857	C	O4 ² -C1'	23.42	1.72	1.41
67	B1	2520	C	C2 ² -C1'	-23.37	1.27	1.53
67	B1	937	A	C2 ² -C1'	-23.36	1.27	1.53
67	B1	1082	A	C2 ² -C1'	-23.36	1.27	1.53
67	B1	116	G	C2 ² -C1'	-23.35	1.27	1.53
67	B1	185	A	C2 ² -C1'	-23.25	1.27	1.53
67	B1	1035	G	C2 ² -C1'	-23.23	1.27	1.53
67	B1	337	G	C2 ² -C1'	-23.19	1.27	1.53
67	B1	2021	G	C2 ² -C1'	-23.15	1.27	1.53
67	B1	979	G	C2 ² -C1'	-23.12	1.27	1.53
67	B1	719	C	O4 ² -C1'	23.11	1.71	1.41
67	B1	426	G	C2 ² -C1'	-23.11	1.27	1.53
21	A2	1424	G	C2 ² -C1'	-23.04	1.28	1.53
67	B1	2833	G	C2 ² -C1'	-23.04	1.28	1.53
67	B1	1567	C	C5 ² -C4'	23.04	1.78	1.51
21	A2	205	C	C2 ² -C1'	-22.99	1.28	1.53
21	A2	806	G	C2 ² -C1'	-22.99	1.28	1.53
68	B3	120	C	C2 ² -C1'	-22.99	1.28	1.53
67	B1	366	G	O4 ² -C1'	22.98	1.71	1.41
67	B1	1787	U	C2 ² -C1'	-22.97	1.28	1.53
21	A2	615	G	C2 ² -C1'	-22.96	1.28	1.53
21	A2	1072	C	C2 ² -C1'	-22.95	1.28	1.53
21	A2	212	G	C2 ² -C1'	-22.94	1.28	1.53
21	A2	1144	G	O4 ² -C1'	22.93	1.71	1.41
21	A2	798	U	C2 ² -C1'	22.93	1.78	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A0	11	C	C2'-C1'	-22.92	1.28	1.53
21	A2	152	G	C2'-C1'	-22.91	1.28	1.53
21	A2	1053	A	O4'-C1'	22.91	1.71	1.41
67	B1	1036	C	O4'-C1'	22.77	1.71	1.41
21	A2	965	G	O4'-C1'	22.73	1.71	1.41
21	A2	382	G	C2'-C1'	22.72	1.78	1.53
21	A2	440	C	C2'-C1'	-22.68	1.28	1.53
21	A2	805	C	C2'-C1'	-22.68	1.28	1.53
68	B3	35	A	C2'-C1'	22.67	1.78	1.53
67	B1	2671	C	O4'-C1'	22.65	1.71	1.41
21	A2	100	A	C2'-C1'	-22.64	1.28	1.53
67	B1	237	G	C2'-C1'	22.64	1.78	1.53
67	B1	614	G	O4'-C1'	22.60	1.71	1.41
67	B1	2858	C	O4'-C1'	22.58	1.71	1.41
67	B1	1222	U	C2'-C1'	-22.56	1.28	1.53
21	A2	992	G	C2'-C1'	-22.53	1.28	1.53
67	B1	1982	C	O4'-C1'	22.52	1.71	1.41
21	A2	1352	G	C2'-C1'	-22.43	1.28	1.53
21	A2	1282	C	O4'-C1'	22.42	1.70	1.41
68	B3	55	G	C2'-C1'	-22.41	1.28	1.53
67	B1	2837	C	C2'-C1'	-22.39	1.28	1.53
11	A1	54	G	C2'-C1'	-22.39	1.28	1.53
67	B1	370	A	O4'-C1'	22.37	1.70	1.41
67	B1	2636	C	C2'-C1'	-22.34	1.28	1.53
67	B1	1653	U	C2'-C1'	-22.26	1.28	1.53
21	A2	357	C	O4'-C1'	22.22	1.70	1.41
21	A2	1490	C	O4'-C1'	22.17	1.70	1.41
67	B1	2877	A	C2'-C1'	-22.16	1.28	1.53
67	B1	118	A	C2'-C1'	-22.13	1.29	1.53
67	B1	1566	G	P-O5'	22.10	1.81	1.59
21	A2	260	C	O4'-C1'	22.10	1.70	1.41
67	B1	44	C	O4'-C1'	22.05	1.70	1.41
67	B1	738	C	C2'-C1'	-22.01	1.29	1.53
67	B1	1655	G	C2'-C1'	-21.98	1.29	1.53
67	B1	350	A	C2'-C1'	21.97	1.77	1.53
21	A2	1255	C	C2'-C1'	-21.94	1.29	1.53
67	B1	297	G	O4'-C1'	21.93	1.70	1.41
67	B1	2476	A	O4'-C1'	21.89	1.70	1.41
67	B1	2489	C	C2'-C1'	-21.89	1.29	1.53
67	B1	2382	A	C2'-C1'	21.85	1.77	1.53
21	A2	1100	G	C2'-C1'	-21.84	1.29	1.53
67	B1	1501	G	C2'-C1'	-21.84	1.29	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2489	C	O4 ² -C1'	21.83	1.70	1.41
68	B3	43	C	O4 ² -C1'	21.81	1.70	1.41
67	B1	2735	C	O4 ² -C1'	21.81	1.70	1.41
67	B1	2884	C	O4 ² -C1'	21.79	1.70	1.41
67	B1	2844	G	C2 ² -C1'	-21.77	1.29	1.53
67	B1	1960	U	C2 ² -C1'	-21.77	1.29	1.53
21	A2	356	G	C2 ² -C1'	-21.76	1.29	1.53
67	B1	2218	C	C2 ² -C1'	-21.72	1.29	1.53
67	B1	775	C	O4 ² -C1'	21.69	1.69	1.41
67	B1	241	C	C2 ² -C1'	-21.68	1.29	1.53
67	B1	1470	C	C2 ² -C1'	-21.66	1.29	1.53
68	B3	57	C	C2 ² -C1'	-21.59	1.29	1.53
21	A2	573	C	O4 ² -C1'	21.55	1.69	1.41
67	B1	2086	C	C2 ² -C1'	-21.55	1.29	1.53
67	B1	161	C	C2 ² -C1'	-21.49	1.29	1.53
67	B1	409	C	O4 ² -C1'	21.49	1.69	1.41
67	B1	884	C	O4 ² -C1'	21.46	1.69	1.41
67	B1	2702	A	C2 ² -C1'	21.43	1.76	1.53
67	B1	768	C	C2 ² -C1'	-21.43	1.29	1.53
21	A2	1151	A	C2 ² -C1'	-21.42	1.29	1.53
21	A2	181	G	C2 ² -C1'	-21.40	1.29	1.53
67	B1	1504	C	O4 ² -C1'	21.37	1.69	1.41
67	B1	3036	C	C2 ² -C1'	-21.33	1.29	1.53
21	A2	369	A	C2 ² -C1'	-21.32	1.29	1.53
67	B1	1969	C	C2 ² -C1'	-21.31	1.29	1.53
21	A2	605	C	C2 ² -C1'	-21.31	1.29	1.53
67	B1	1678	A	C2 ² -C1'	21.29	1.76	1.53
21	A2	72	C	O4 ² -C1'	21.28	1.69	1.41
67	B1	1439	G	C2 ² -C1'	-21.25	1.29	1.53
67	B1	1243	C	C2 ² -C1'	-21.25	1.29	1.53
67	B1	1619	C	C2 ² -C1'	-21.23	1.29	1.53
67	B1	915	G	C2 ² -C1'	-21.20	1.30	1.53
67	B1	559	G	C2 ² -C1'	-21.19	1.30	1.53
68	B3	65	G	C2 ² -C1'	-21.17	1.30	1.53
21	A2	757	G	C2 ² -C1'	-21.16	1.30	1.53
67	B1	1289	C	C2 ² -C1'	-21.16	1.30	1.53
67	B1	744	G	C2 ² -C1'	-21.15	1.30	1.53
67	B1	2318	G	C2 ² -C1'	-21.15	1.30	1.53
67	B1	2890	A	O4 ² -C1'	21.14	1.69	1.41
67	B1	1568	A	C2 ² -O2'	21.13	1.69	1.41
21	A2	64	G	O4 ² -C1'	21.11	1.69	1.41
67	B1	2969	G	C2 ² -C1'	-21.10	1.30	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1754	A	C2'-C1'	21.10	1.76	1.53
21	A2	1074	C	C2'-C1'	-21.08	1.30	1.53
21	A2	1003	G	C2'-C1'	-21.08	1.30	1.53
67	B1	1394	G	O4'-C1'	21.07	1.69	1.41
67	B1	1243	C	O4'-C1'	21.05	1.69	1.41
21	A2	570	G	C2'-C1'	-21.01	1.30	1.53
67	B1	165	G	C2'-C1'	-21.00	1.30	1.53
67	B1	2427	C	C2'-C1'	-20.97	1.30	1.53
11	A1	41	C	C2'-C1'	-20.94	1.30	1.53
67	B1	1180	G	C2'-C1'	-20.92	1.30	1.53
21	A2	1401	U	C2'-C1'	-20.91	1.30	1.53
21	A2	1298	G	C2'-C1'	-20.91	1.30	1.53
67	B1	2169	C	O4'-C1'	20.91	1.68	1.41
67	B1	610	C	O4'-C1'	20.90	1.68	1.41
21	A2	807	C	O4'-C1'	20.86	1.68	1.41
67	B1	1298	C	O4'-C1'	20.86	1.68	1.41
67	B1	1152	C	C2'-C1'	-20.85	1.30	1.53
21	A2	726	A	C2'-C1'	-20.83	1.30	1.53
21	A2	1179	C	O4'-C1'	20.81	1.68	1.41
67	B1	1575	G	C2'-C1'	20.78	1.76	1.53
67	B1	2493	A	C2'-C1'	-20.77	1.30	1.53
21	A2	1242	C	C2'-C1'	-20.76	1.30	1.53
67	B1	248	C	O4'-C1'	20.76	1.68	1.41
67	B1	404	G	C2'-C1'	20.74	1.76	1.53
67	B1	880	U	C2'-C1'	-20.66	1.30	1.53
67	B1	817	G	O4'-C1'	20.65	1.68	1.41
67	B1	2422	G	C2'-C1'	-20.65	1.30	1.53
67	B1	1048	C	C2'-C1'	-20.62	1.30	1.53
67	B1	2189	C	O4'-C1'	20.56	1.68	1.41
67	B1	876	C	O4'-C1'	20.55	1.68	1.41
21	A2	423	U	C2'-C1'	20.54	1.75	1.53
21	A2	439	G	O4'-C1'	20.53	1.68	1.41
67	B1	1628	C	C2'-C1'	-20.52	1.30	1.53
67	B1	1245	C	O4'-C1'	20.52	1.68	1.41
67	B1	158	C	O4'-C1'	20.50	1.68	1.41
67	B1	1039	C	O4'-C1'	20.50	1.68	1.41
67	B1	1521	G	C2'-C1'	-20.48	1.30	1.53
67	B1	1152	C	O4'-C1'	20.46	1.68	1.41
67	B1	1348	G	O4'-C1'	-20.42	1.15	1.41
21	A2	1101	G	O4'-C1'	-20.41	1.15	1.41
21	A2	804	U	C2'-C1'	20.41	1.75	1.53
67	B1	2895	G	C2'-C1'	-20.40	1.30	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	347	G	C2'-C1'	-20.38	1.30	1.53
21	A2	1272	G	C2'-C1'	-20.37	1.30	1.53
67	B1	1140	C	C2'-C1'	-20.37	1.30	1.53
67	B1	2850	G	C2'-C1'	-20.37	1.30	1.53
67	B1	905	G	C2'-C1'	-20.36	1.30	1.53
67	B1	685	G	O4'-C1'	20.36	1.68	1.41
21	A2	424	U	C2'-C1'	-20.33	1.30	1.53
67	B1	2189	C	C2'-C1'	-20.32	1.30	1.53
67	B1	1568	A	P-O5'	20.32	1.80	1.59
68	B3	110	C	O4'-C1'	20.30	1.68	1.41
67	B1	1920	A	O4'-C1'	20.29	1.68	1.41
67	B1	2151	C	C2'-C1'	-20.28	1.31	1.53
21	A2	374	G	C2'-C1'	-20.25	1.31	1.53
67	B1	2959	A	C2'-C1'	-20.25	1.31	1.53
67	B1	2284	C	O4'-C1'	20.24	1.68	1.41
67	B1	1976	C	O4'-C1'	20.20	1.68	1.41
67	B1	2337	G	O4'-C1'	20.18	1.67	1.41
21	A2	605	C	O4'-C1'	20.15	1.67	1.41
21	A2	966	G	C2'-C1'	20.09	1.75	1.53
67	B1	1636	C	C2'-C1'	-20.09	1.31	1.53
67	B1	14	A	O4'-C1'	20.07	1.67	1.41
21	A2	1353	C	O4'-C1'	20.07	1.67	1.41
67	B1	2178	A	C2'-C1'	-20.07	1.31	1.53
21	A2	1221	A	C2'-C1'	-20.07	1.31	1.53
21	A2	407	G	C2'-C1'	-20.06	1.31	1.53
67	B1	1278	C	O4'-C1'	20.05	1.67	1.41
21	A2	1354	A	O4'-C1'	20.05	1.67	1.41
67	B1	898	G	O4'-C1'	20.03	1.67	1.41
67	B1	817	G	C2'-C1'	-20.03	1.31	1.53
67	B1	2514	C	C2'-C1'	-20.02	1.31	1.53
11	A1	25	G	O4'-C1'	20.01	1.67	1.41
67	B1	186	A	O4'-C1'	20.00	1.67	1.41
67	B1	1610	C	O4'-C1'	19.99	1.67	1.41
67	B1	1745	U	O4'-C1'	19.99	1.67	1.41
21	A2	556	G	C2'-C1'	-19.98	1.31	1.53
21	A2	357	C	C2'-C1'	-19.98	1.31	1.53
67	B1	1117	C	C2'-C1'	-19.96	1.31	1.53
21	A2	1082	A	O4'-C1'	19.95	1.67	1.41
21	A2	1106	A	O4'-C1'	19.94	1.67	1.41
67	B1	162	G	C2'-C1'	-19.94	1.31	1.53
67	B1	2144	U	C2'-C1'	19.91	1.75	1.53
67	B1	2426	U	C2'-C1'	-19.91	1.31	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	874	U	O4 ² -C1'	19.90	1.67	1.41
67	B1	1234	A	O4 ² -C1'	19.89	1.67	1.41
67	B1	837	G	C2 ² -C1'	-19.88	1.31	1.53
67	B1	1392	G	C2 ² -C1'	-19.85	1.31	1.53
21	A2	387	G	C2 ² -C1'	-19.84	1.31	1.53
21	A2	326	C	O4 ² -C1'	19.81	1.67	1.41
21	A2	321	A	C2 ² -C1'	-19.81	1.31	1.53
67	B1	1402	C	C2 ² -C1'	-19.77	1.31	1.53
21	A2	467	G	C2 ² -C1'	-19.75	1.31	1.53
67	B1	2311	C	C2 ² -C1'	-19.74	1.31	1.53
21	A2	941	C	O4 ² -C1'	19.73	1.67	1.41
21	A2	1155	U	O4 ² -C1'	19.72	1.67	1.41
67	B1	1574	A	O4 ² -C1'	19.72	1.67	1.41
21	A2	1217	C	O4 ² -C1'	19.71	1.67	1.41
67	B1	3031	U	C2 ² -C1'	-19.68	1.31	1.53
67	B1	2430	C	C2 ² -C1'	-19.68	1.31	1.53
21	A2	1259	A	O4 ² -C1'	19.67	1.67	1.41
67	B1	1178	G	C2 ² -C1'	-19.67	1.31	1.53
67	B1	1085	G	C2 ² -C1'	-19.66	1.31	1.53
67	B1	898	G	C2 ² -C1'	-19.63	1.31	1.53
11	A1	37	A	C2 ² -C1'	-19.62	1.31	1.53
67	B1	2727	C	C2 ² -C1'	-19.61	1.31	1.53
67	B1	1767	C	C2 ² -C1'	-19.60	1.31	1.53
21	A2	1371	C	O4 ² -C1'	19.53	1.67	1.41
21	A2	1458	A	C2 ² -C1'	19.53	1.74	1.53
21	A2	1339	G	C2 ² -C1'	-19.51	1.31	1.53
67	B1	2836	G	C2 ² -C1'	-19.50	1.31	1.53
21	A2	172	G	C2 ² -C1'	-19.49	1.31	1.53
21	A2	1240	A	C2 ² -C1'	-19.48	1.31	1.53
67	B1	2028	G	C2 ² -C1'	-19.46	1.31	1.53
67	B1	2842	C	C2 ² -C1'	-19.46	1.31	1.53
67	B1	1406	G	C2 ² -C1'	-19.46	1.31	1.53
67	B1	2427	C	O4 ² -C1'	19.44	1.67	1.41
67	B1	1328	G	C2 ² -C1'	-19.42	1.31	1.53
21	A2	802	G	C2 ² -C1'	-19.42	1.31	1.53
67	B1	1817	C	C2 ² -C1'	-19.41	1.31	1.53
68	B3	73	U	C2 ² -C1'	-19.41	1.31	1.53
67	B1	355	G	C2 ² -C1'	-19.40	1.32	1.53
68	B3	57	C	O4 ² -C1'	19.40	1.66	1.41
21	A2	205	C	O4 ² -C1'	19.40	1.66	1.41
21	A2	218	C	C2 ² -C1'	-19.39	1.32	1.53
21	A2	340	A	C2 ² -C1'	19.39	1.74	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	666	A	C2'-C1'	-19.39	1.32	1.53
21	A2	17	C	O4'-C1'	19.37	1.66	1.41
67	B1	1794	C	O4'-C1'	19.34	1.66	1.41
21	A2	30	C	O4'-C1'	19.33	1.66	1.41
27	A0	41	C	O4'-C1'	19.32	1.66	1.41
21	A2	1037	U	C2'-C1'	-19.32	1.32	1.53
67	B1	2053	G	O4'-C1'	-19.32	1.16	1.41
67	B1	2260	C	O4'-C1'	19.32	1.66	1.41
67	B1	2227	G	C2'-C1'	-19.31	1.32	1.53
67	B1	92	G	C2'-C1'	-19.30	1.32	1.53
67	B1	614	G	C2'-C1'	-19.30	1.32	1.53
67	B1	2754	A	C2'-C1'	-19.30	1.32	1.53
67	B1	1453	G	C2'-C1'	-19.27	1.32	1.53
21	A2	218	C	O4'-C1'	19.26	1.66	1.41
67	B1	1566	G	C5'-C4'	19.25	1.74	1.51
21	A2	402	G	C2'-C1'	-19.24	1.32	1.53
67	B1	1504	C	C2'-C1'	-19.23	1.32	1.53
21	A2	633	C	O4'-C1'	19.23	1.66	1.41
67	B1	2590	C	C2'-C1'	-19.22	1.32	1.53
21	A2	64	G	C2'-C1'	-19.22	1.32	1.53
11	A1	52	G	C2'-C1'	-19.21	1.32	1.53
21	A2	1346	C	C2'-C1'	-19.20	1.32	1.53
21	A2	803	C	O4'-C1'	19.19	1.66	1.41
67	B1	274	C	O4'-C1'	19.19	1.66	1.41
67	B1	1000	G	C2'-C1'	-19.18	1.32	1.53
67	B1	1324	G	C2'-C1'	19.17	1.74	1.53
67	B1	1336	G	C2'-C1'	19.15	1.74	1.53
67	B1	976	C	O4'-C1'	19.14	1.66	1.41
67	B1	1569	A	C2'-O2'	19.13	1.66	1.41
67	B1	135	U	O4'-C1'	19.13	1.66	1.41
21	A2	1079	G	C2'-C1'	19.12	1.74	1.53
67	B1	2209	U	C2'-C1'	19.11	1.74	1.53
21	A2	161	C	O4'-C1'	19.10	1.66	1.41
21	A2	483	G	O4'-C1'	-19.09	1.16	1.41
67	B1	636	G	C2'-C1'	-19.08	1.32	1.53
68	B3	119	C	O4'-C1'	19.08	1.66	1.41
21	A2	575	A	C2'-C1'	19.07	1.74	1.53
21	A2	554	C	C2'-C1'	-19.07	1.32	1.53
67	B1	249	G	C2'-C1'	-19.06	1.32	1.53
21	A2	304	C	C2'-C1'	-19.03	1.32	1.53
67	B1	2598	C	O4'-C1'	19.01	1.66	1.41
67	B1	2869	U	O4'-C1'	18.99	1.66	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2819	C	O4 ² -C1'	18.99	1.66	1.41
67	B1	2335	G	C2 ² -C1'	-18.98	1.32	1.53
67	B1	2077	A	C2 ² -C1'	18.97	1.74	1.53
67	B1	2511	C	O4 ² -C1'	18.96	1.66	1.41
67	B1	1301	G	C2 ² -C1'	-18.96	1.32	1.53
21	A2	1282	C	C2 ² -C1'	-18.95	1.32	1.53
21	A2	1469	G	C2 ² -C1'	-18.95	1.32	1.53
67	B1	1395	G	O4 ² -C1'	18.95	1.66	1.41
67	B1	374	C	O4 ² -C1'	18.94	1.66	1.41
67	B1	745	C	O4 ² -C1'	18.93	1.66	1.41
21	A2	1059	C	C2 ² -C1'	-18.92	1.32	1.53
67	B1	685	G	C2 ² -C1'	-18.91	1.32	1.53
67	B1	1340	G	C2 ² -C1'	-18.90	1.32	1.53
21	A2	705	C	C2 ² -C1'	-18.90	1.32	1.53
21	A2	974	G	O4 ² -C1'	18.89	1.66	1.41
67	B1	2859	U	C2 ² -C1'	-18.88	1.32	1.53
21	A2	146	A	O4 ² -C1'	18.88	1.66	1.41
21	A2	686	C	O4 ² -C1'	18.87	1.66	1.41
21	A2	1120	G	C2 ² -C1'	-18.87	1.32	1.53
67	B1	1450	C	O4 ² -C1'	18.84	1.66	1.41
68	B3	56	C	C2 ² -C1'	-18.83	1.32	1.53
68	B3	49	A	C2 ² -C1'	18.82	1.74	1.53
67	B1	2146	C	O4 ² -C1'	18.82	1.66	1.41
67	B1	2630	C	C2 ² -C1'	-18.79	1.32	1.53
67	B1	2600	C	C2 ² -C1'	-18.79	1.32	1.53
67	B1	2492	G	C2 ² -C1'	18.79	1.74	1.53
21	A2	746	A	C2 ² -C1'	18.77	1.74	1.53
67	B1	147	C	C2 ² -C1'	-18.77	1.32	1.53
67	B1	621	G	C2 ² -C1'	-18.77	1.32	1.53
21	A2	1043	U	C2 ² -C1'	18.76	1.74	1.53
67	B1	2069	G	C2 ² -C1'	-18.75	1.32	1.53
67	B1	2047	U	O4 ² -C1'	18.75	1.66	1.41
27	A0	6	C	C2 ² -C1'	-18.73	1.32	1.53
67	B1	2231	G	O4 ² -C1'	18.73	1.66	1.41
67	B1	2855	G	C2 ² -C1'	-18.73	1.32	1.53
67	B1	921	C	C2 ² -C1'	-18.71	1.32	1.53
67	B1	1643	A	C2 ² -C1'	-18.70	1.32	1.53
67	B1	2448	A	C2 ² -C1'	18.70	1.74	1.53
67	B1	70	G	C2 ² -C1'	-18.70	1.32	1.53
21	A2	1080	C	O4 ² -C1'	18.69	1.66	1.41
67	B1	1619	C	O4 ² -C1'	18.69	1.66	1.41
21	A2	1020	G	C2 ² -C1'	-18.68	1.32	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1111	G	C2'-C1'	18.67	1.73	1.53
67	B1	2916	G	C2'-C1'	18.67	1.73	1.53
21	A2	1173	A	C2'-C1'	-18.66	1.32	1.53
67	B1	2287	C	O4'-C1'	-18.66	1.17	1.41
21	A2	1449	G	C2'-C1'	-18.66	1.32	1.53
67	B1	2620	G	C2'-C1'	-18.64	1.32	1.53
21	A2	232	G	C2'-C1'	-18.64	1.32	1.53
67	B1	1086	U	C2'-C1'	-18.64	1.32	1.53
67	B1	878	G	C2'-C1'	-18.62	1.32	1.53
21	A2	475	C	C2'-C1'	-18.62	1.32	1.53
67	B1	470	A	C2'-C1'	18.59	1.73	1.53
21	A2	1378	A	C2'-C1'	18.59	1.73	1.53
21	A2	1426	C	C2'-C1'	-18.57	1.32	1.53
67	B1	700	A	C2'-C1'	18.57	1.73	1.53
67	B1	1364	C	C2'-C1'	-18.57	1.32	1.53
67	B1	58	G	C2'-C1'	-18.57	1.32	1.53
21	A2	1255	C	O4'-C1'	18.56	1.65	1.41
21	A2	421	U	C2'-C1'	-18.55	1.32	1.53
67	B1	2098	C	O4'-C1'	18.54	1.65	1.41
21	A2	34	G	C2'-C1'	18.53	1.73	1.53
67	B1	2439	G	C2'-C1'	-18.53	1.32	1.53
67	B1	2506	G	O3'-P	18.52	1.83	1.61
21	A2	136	A	C2'-C1'	-18.52	1.32	1.53
67	B1	2272	G	C2'-C1'	-18.52	1.32	1.53
21	A2	855	C	C2'-C1'	-18.51	1.32	1.53
68	B3	120	C	O4'-C1'	18.49	1.65	1.41
21	A2	807	C	C2'-C1'	-18.46	1.33	1.53
68	B3	115	C	O4'-C1'	18.46	1.65	1.41
67	B1	2586	A	C2'-C1'	18.46	1.73	1.53
67	B1	1118	A	C2'-C1'	-18.45	1.33	1.53
67	B1	3027	C	O4'-C1'	18.45	1.65	1.41
67	B1	1787	U	O4'-C1'	18.44	1.65	1.41
21	A2	175	G	O4'-C1'	-18.40	1.17	1.41
67	B1	2618	C	C2'-C1'	18.39	1.73	1.53
67	B1	2826	U	C2'-C1'	18.39	1.73	1.53
21	A2	153	G	C2'-C1'	-18.39	1.33	1.53
21	A2	475	C	O4'-C1'	18.37	1.65	1.41
67	B1	2807	C	O4'-C1'	18.37	1.65	1.41
21	A2	651	U	C2'-C1'	-18.36	1.33	1.53
21	A2	797	U	O4'-C1'	18.36	1.65	1.41
67	B1	1098	C	O4'-C1'	18.35	1.65	1.41
67	B1	2402	A	O4'-C1'	18.35	1.65	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1162	C	O4 ² -C1'	18.34	1.65	1.41
67	B1	2575	U	C2 ² -C1'	-18.34	1.33	1.53
21	A2	687	G	C2 ² -C1'	-18.33	1.33	1.53
21	A2	547	U	C2 ² -C1'	-18.33	1.33	1.53
67	B1	2019	C	O4 ² -C1'	18.32	1.65	1.41
11	A1	44	G	C2 ² -C1'	-18.32	1.33	1.53
67	B1	1814	A	C2 ² -C1'	-18.32	1.33	1.53
21	A2	1273	G	C2 ² -C1'	-18.31	1.33	1.53
21	A2	1073	C	C2 ² -C1'	-18.30	1.33	1.53
67	B1	362	A	C2 ² -C1'	18.28	1.73	1.53
67	B1	143	C	O4 ¹ -C1'	18.28	1.65	1.41
67	B1	2122	G	O4 ² -C1'	18.27	1.65	1.41
67	B1	1567	C	C3 ² -C2'	18.27	1.73	1.52
67	B1	1989	G	C2 ² -C1'	-18.26	1.33	1.53
21	A2	1072	C	O4 ¹ -C1'	18.23	1.65	1.41
21	A2	91	G	C2 ² -C1'	-18.23	1.33	1.53
21	A2	396	C	C2 ² -C1'	-18.23	1.33	1.53
67	B1	1726	A	C2 ² -C1'	18.23	1.73	1.53
21	A2	463	G	C2 ² -C1'	-18.22	1.33	1.53
21	A2	1372	C	C2 ² -C1'	-18.21	1.33	1.53
21	A2	1455	A	C2 ² -C1'	-18.18	1.33	1.53
21	A2	509	C	C2 ² -C1'	-18.17	1.33	1.53
67	B1	622	A	C2 ² -C1'	-18.16	1.33	1.53
21	A2	1254	C	O4 ² -C1'	18.16	1.65	1.41
67	B1	2596	G	C2 ² -C1'	-18.16	1.33	1.53
21	A2	199	A	O4 ¹ -C1'	18.16	1.65	1.41
21	A2	250	G	C2 ² -C1'	-18.15	1.33	1.53
67	B1	3024	C	O4 ¹ -C1'	18.14	1.65	1.41
21	A2	718	G	C2 ² -C1'	-18.13	1.33	1.53
21	A2	842	U	C2 ² -C1'	18.13	1.73	1.53
67	B1	2651	G	C2 ² -C1'	-18.13	1.33	1.53
67	B1	2642	C	O4 ¹ -C1'	18.09	1.65	1.41
67	B1	1688	C	O4 ² -C1'	18.09	1.65	1.41
21	A2	1149	C	O4 ¹ -C1'	18.08	1.65	1.41
21	A2	814	C	C2 ² -C1'	-18.08	1.33	1.53
68	B3	41	A	O4 ¹ -C1'	18.08	1.65	1.41
67	B1	1586	G	O4 ² -C1'	18.07	1.65	1.41
67	B1	2545	A	O4 ² -C1'	18.06	1.65	1.41
67	B1	1107	G	C2 ² -C1'	-18.04	1.33	1.53
21	A2	670	C	C2 ² -C1'	-18.03	1.33	1.53
11	A1	61	U	O4 ² -C1'	18.02	1.65	1.41
67	B1	2865	C	C2 ² -C1'	-18.02	1.33	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	30	C	C2'-C1'	-18.02	1.33	1.53
21	A2	1457	A	C2'-C1'	-18.01	1.33	1.53
21	A2	751	C	O4'-C1'	17.99	1.65	1.41
67	B1	325	G	C2'-C1'	-17.99	1.33	1.53
67	B1	2869	U	C2'-C1'	-17.99	1.33	1.53
68	B3	27	C	O4'-C1'	17.98	1.65	1.41
67	B1	1411	G	O4'-C1'	17.96	1.65	1.41
67	B1	1440	C	O4'-C1'	17.96	1.65	1.41
21	A2	336	C	C2'-C1'	-17.96	1.33	1.53
67	B1	1163	U	C2'-C1'	17.94	1.73	1.53
21	A2	419	G	C2'-C1'	-17.93	1.33	1.53
67	B1	1567	C	C2'-C1'	-17.93	1.33	1.53
67	B1	719	C	C2'-C1'	-17.90	1.33	1.53
67	B1	1525	G	C2'-C1'	-17.89	1.33	1.53
67	B1	1435	G	C2'-C1'	-17.89	1.33	1.53
67	B1	92	G	O4'-C1'	17.88	1.64	1.41
67	B1	835	G	C2'-C1'	-17.88	1.33	1.53
67	B1	2433	U	O4'-C1'	17.88	1.64	1.41
21	A2	691	G	C2'-C1'	-17.87	1.33	1.53
67	B1	863	C	C2'-C1'	-17.87	1.33	1.53
67	B1	2020	G	C2'-C1'	-17.86	1.33	1.53
67	B1	1984	G	C2'-C1'	-17.85	1.33	1.53
67	B1	665	C	O4'-C1'	17.85	1.64	1.41
21	A2	1342	C	C2'-C1'	-17.84	1.33	1.53
67	B1	3004	C	C2'-C1'	-17.84	1.33	1.53
67	B1	2201	C	O4'-C1'	17.83	1.64	1.41
53	BD	91	ARG	C-N	-17.83	0.93	1.34
21	A2	415	C	O4'-C1'	17.82	1.64	1.41
21	A2	1101	G	C2'-C1'	17.80	1.73	1.53
67	B1	769	G	C2'-C1'	-17.78	1.33	1.53
21	A2	400	G	C2'-C1'	17.76	1.72	1.53
67	B1	1090	G	C2'-C1'	-17.76	1.33	1.53
67	B1	486	A	O4'-C1'	-17.75	1.18	1.41
67	B1	2907	C	C2'-C1'	-17.74	1.33	1.53
67	B1	1393	C	O4'-C1'	-17.74	1.18	1.41
67	B1	750	C	C2'-C1'	-17.74	1.33	1.53
67	B1	1909	C	O4'-C1'	17.73	1.64	1.41
67	B1	3042	C	O4'-C1'	17.73	1.64	1.41
67	B1	2849	C	C2'-C1'	-17.73	1.33	1.53
21	A2	491	G	C2'-C1'	-17.71	1.33	1.53
67	B1	704	G	O4'-C1'	-17.71	1.18	1.41
21	A2	1190	C	O4'-C1'	17.70	1.64	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	438	A	C2'-C1'	-17.70	1.33	1.53
67	B1	2706	C	O4'-C1'	17.70	1.64	1.41
67	B1	177	G	C2'-C1'	-17.70	1.33	1.53
67	B1	585	G	C2'-C1'	-17.69	1.33	1.53
27	A0	62	C	O4'-C1'	17.69	1.64	1.41
21	A2	343	G	C2'-C1'	17.67	1.72	1.53
67	B1	927	G	O4'-C1'	17.67	1.64	1.41
21	A2	788	C	O4'-C1'	17.66	1.64	1.41
67	B1	244	A	C2'-C1'	-17.66	1.33	1.53
67	B1	1570	C	C4'-C3'	17.66	1.72	1.53
67	B1	688	G	O4'-C1'	17.64	1.64	1.41
21	A2	788	C	C2'-C1'	-17.64	1.33	1.53
67	B1	1394	G	C2'-C1'	-17.63	1.33	1.53
67	B1	307	C	C2'-C1'	-17.63	1.33	1.53
67	B1	920	G	C2'-C1'	-17.63	1.33	1.53
21	A2	1209	C	C2'-C1'	-17.61	1.33	1.53
67	B1	2884	C	C2'-C1'	-17.61	1.33	1.53
67	B1	1147	G	C2'-C1'	-17.61	1.33	1.53
67	B1	2594	U	C2'-C1'	-17.60	1.33	1.53
67	B1	858	G	C2'-C1'	-17.58	1.34	1.53
21	A2	754	G	C2'-C1'	-17.58	1.34	1.53
21	A2	1064	C	C2'-C1'	-17.52	1.34	1.53
67	B1	2265	C	O4'-C1'	17.52	1.64	1.41
21	A2	1265	G	C2'-C1'	-17.52	1.34	1.53
67	B1	990	G	C2'-C1'	-17.51	1.34	1.53
11	A1	26	C	O4'-C1'	17.50	1.64	1.41
67	B1	2647	G	O4'-C1'	17.49	1.64	1.41
21	A2	392	G	C2'-C1'	-17.48	1.34	1.53
21	A2	768	A	C2'-C1'	17.48	1.72	1.53
67	B1	2377	C	C2'-C1'	-17.48	1.34	1.53
67	B1	1137	G	C2'-C1'	-17.47	1.34	1.53
67	B1	2238	G	C2'-C1'	17.46	1.72	1.53
67	B1	849	C	O4'-C1'	17.46	1.64	1.41
67	B1	2313	G	O4'-C1'	17.45	1.64	1.41
21	A2	1125	C	O4'-C1'	17.45	1.64	1.41
21	A2	62	G	C2'-C1'	-17.44	1.34	1.53
67	B1	50	C	C2'-C1'	17.44	1.72	1.53
67	B1	883	G	O4'-C1'	17.43	1.64	1.41
21	A2	94	C	C2'-C1'	-17.43	1.34	1.53
21	A2	797	U	C2'-C1'	-17.40	1.34	1.53
67	B1	168	G	C2'-C1'	-17.40	1.34	1.53
68	B3	58	C	C2'-C1'	-17.39	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1185	A	O4 ² -C1'	17.37	1.64	1.41
67	B1	2225	C	O4 ² -C1'	17.37	1.64	1.41
67	B1	392	G	O4 ² -C1'	17.36	1.64	1.41
67	B1	2761	G	C2 ² -C1'	17.36	1.72	1.53
21	A2	455	C	O4 ² -C1'	17.36	1.64	1.41
21	A2	138	C	O4 ² -C1'	17.35	1.64	1.41
27	A0	22	G	C2 ² -C1'	-17.35	1.34	1.53
67	B1	864	C	C2 ² -C1'	-17.34	1.34	1.53
67	B1	1031	C	C2 ² -C1'	-17.34	1.34	1.53
21	A2	362	C	O4 ² -C1'	17.33	1.64	1.41
67	B1	1214	C	O4 ² -C1'	17.33	1.64	1.41
67	B1	2195	G	C2 ² -C1'	-17.32	1.34	1.53
67	B1	2535	C	C2 ² -C1'	-17.32	1.34	1.53
21	A2	1122	C	O4 ² -C1'	17.31	1.64	1.41
21	A2	945	G	C2 ² -C1'	-17.30	1.34	1.53
67	B1	1934	C	O4 ² -C1'	17.29	1.64	1.41
68	B3	94	G	C2 ² -C1'	-17.29	1.34	1.53
21	A2	309	A	C2 ² -C1'	17.28	1.72	1.53
21	A2	1121	C	C2 ² -C1'	-17.28	1.34	1.53
67	B1	1569	A	P-OP2	17.27	1.78	1.49
67	B1	2937	U	C2 ² -C1'	17.27	1.72	1.53
11	A1	49	C	O4 ² -C1'	-17.25	1.19	1.41
21	A2	1194	C	C2 ² -C1'	-17.24	1.34	1.53
21	A2	1053	A	C2 ² -C1'	-17.23	1.34	1.53
67	B1	1296	A	C2 ² -C1'	-17.23	1.34	1.53
67	B1	77	C	C2 ² -C1'	-17.23	1.34	1.53
67	B1	857	U	C2 ² -C1'	-17.22	1.34	1.53
67	B1	2590	C	O4 ² -C1'	17.20	1.64	1.41
67	B1	2434	A	C2 ² -C1'	-17.19	1.34	1.53
67	B1	441	A	C2 ² -C1'	-17.18	1.34	1.53
21	A2	1167	C	O4 ² -C1'	17.18	1.64	1.41
67	B1	1988	U	O4 ² -C1'	17.17	1.64	1.41
67	B1	1566	G	C4 ² -C3'	17.17	1.72	1.53
21	A2	705	C	O4 ² -C1'	17.17	1.64	1.41
21	A2	1360	C	O4 ² -C1'	17.16	1.64	1.41
67	B1	1554	G	C2 ² -C1'	-17.16	1.34	1.53
68	B3	39	C	C2 ² -C1'	-17.15	1.34	1.53
67	B1	140	C	O4 ² -C1'	17.15	1.64	1.41
67	B1	405	G	C2 ² -C1'	-17.14	1.34	1.53
67	B1	935	A	C2 ² -C1'	17.14	1.72	1.53
21	A2	60	A	O4 ² -C1'	-17.13	1.19	1.41
67	B1	318	G	O4 ² -C1'	17.11	1.63	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	787	G	C2'-C1'	-17.11	1.34	1.53
11	A1	57	C	O4'-C1'	17.11	1.63	1.41
67	B1	78	C	C2'-C1'	-17.09	1.34	1.53
67	B1	1102	C	C2'-C1'	-17.09	1.34	1.53
67	B1	785	C	O4'-C1'	17.09	1.63	1.41
67	B1	2498	G	C2'-C1'	-17.09	1.34	1.53
21	A2	409	C	O4'-C1'	17.09	1.63	1.41
67	B1	2599	C	C2'-C1'	-17.09	1.34	1.53
21	A2	647	G	C2'-C1'	-17.08	1.34	1.53
67	B1	266	A	C2'-C1'	-17.08	1.34	1.53
67	B1	1609	G	C2'-C1'	-17.08	1.34	1.53
67	B1	2134	G	O4'-C1'	17.08	1.63	1.41
67	B1	1186	G	O4'-C1'	17.07	1.63	1.41
21	A2	626	G	C2'-C1'	17.07	1.72	1.53
67	B1	1051	C	C2'-C1'	-17.06	1.34	1.53
67	B1	1614	U	C2'-C1'	-17.05	1.34	1.53
11	A1	51	G	O4'-C1'	17.04	1.63	1.41
67	B1	1229	U	O4'-C1'	17.04	1.63	1.41
21	A2	381	C	C2'-C1'	-17.03	1.34	1.53
68	B3	19	G	C2'-C1'	-17.03	1.34	1.53
67	B1	1229	U	C2'-C1'	-17.03	1.34	1.53
67	B1	1273	C	O4'-C1'	17.03	1.63	1.41
67	B1	1592	U	O4'-C1'	17.03	1.63	1.41
67	B1	1618	G	C2'-C1'	-17.02	1.34	1.53
21	A2	1038	C	O4'-C1'	17.02	1.63	1.41
67	B1	2671	C	C2'-C1'	-17.01	1.34	1.53
67	B1	1565	G	C4'-C3'	17.01	1.71	1.53
67	B1	1186	G	C2'-C1'	-17.01	1.34	1.53
67	B1	701	G	C2'-C1'	-16.97	1.34	1.53
67	B1	1559	A	O4'-C1'	16.97	1.63	1.41
67	B1	1406	G	O4'-C1'	16.95	1.63	1.41
21	A2	523	C	O4'-C1'	16.95	1.63	1.41
67	B1	2617	G	O4'-C1'	16.94	1.63	1.41
67	B1	2170	C	C2'-C1'	-16.94	1.34	1.53
21	A2	295	G	O4'-C1'	16.93	1.63	1.41
67	B1	1363	C	O4'-C1'	16.92	1.63	1.41
21	A2	1372	C	O4'-C1'	16.90	1.63	1.41
21	A2	710	G	C2'-C1'	-16.89	1.34	1.53
67	B1	121	G	C2'-C1'	-16.89	1.34	1.53
67	B1	1779	C	C2'-C1'	-16.89	1.34	1.53
21	A2	1018	C	O4'-C1'	16.88	1.63	1.41
67	B1	1161	A	O4'-C1'	16.86	1.63	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	68	G	C2'-C1'	-16.86	1.34	1.53
67	B1	110	A	C2'-C1'	16.86	1.71	1.53
67	B1	822	A	C2'-C1'	-16.85	1.34	1.53
67	B1	2520	C	O4'-C1'	16.84	1.63	1.41
67	B1	778	A	C2'-C1'	-16.83	1.34	1.53
21	A2	1303	C	C2'-C1'	-16.82	1.34	1.53
67	B1	751	U	C2'-C1'	16.82	1.71	1.53
21	A2	724	C	C2'-C1'	-16.81	1.34	1.53
21	A2	1336	U	C2'-C1'	16.79	1.71	1.53
68	B3	92	G	C2'-C1'	-16.78	1.34	1.53
67	B1	957	C	O4'-C1'	16.77	1.63	1.41
67	B1	2076	A	C2'-C1'	-16.77	1.34	1.53
21	A2	184	G	O4'-C1'	-16.75	1.19	1.41
68	B3	27	C	C2'-C1'	-16.73	1.34	1.53
21	A2	980	C	C2'-C1'	-16.72	1.34	1.53
27	A0	43	G	O4'-C1'	16.70	1.63	1.41
21	A2	1040	A	C2'-C1'	-16.70	1.34	1.53
67	B1	2334	G	C2'-C1'	-16.69	1.34	1.53
21	A2	217	C	C2'-C1'	-16.68	1.34	1.53
67	B1	1449	C	O4'-C1'	16.68	1.63	1.41
21	A2	566	C	O4'-C1'	16.68	1.63	1.41
21	A2	470	G	O4'-C1'	-16.67	1.20	1.41
21	A2	1213	G	C2'-C1'	-16.67	1.35	1.53
67	B1	2952	C	C2'-C1'	-16.66	1.35	1.53
67	B1	872	G	C2'-C1'	-16.65	1.35	1.53
21	A2	1198	A	O4'-C1'	16.62	1.63	1.41
67	B1	2208	C	O4'-C1'	16.61	1.63	1.41
67	B1	3009	C	O4'-C1'	16.61	1.63	1.41
67	B1	2925	C	C2'-C1'	-16.61	1.35	1.53
21	A2	1321	U	C2'-C1'	16.60	1.71	1.53
67	B1	1081	U	O4'-C1'	16.60	1.63	1.41
67	B1	2734	C	O4'-C1'	16.60	1.63	1.41
21	A2	723	G	C2'-C1'	-16.58	1.35	1.53
67	B1	858	G	O4'-C1'	16.58	1.63	1.41
67	B1	2326	C	O4'-C1'	16.58	1.63	1.41
67	B1	1950	G	C2'-C1'	16.55	1.71	1.53
67	B1	380	A	C2'-C1'	-16.55	1.35	1.53
21	A2	620	G	O4'-C1'	16.55	1.63	1.41
21	A2	1037	U	O4'-C1'	16.54	1.63	1.41
67	B1	2206	G	C2'-C1'	-16.54	1.35	1.53
67	B1	2178	A	O4'-C1'	16.54	1.63	1.41
67	B1	1117	C	O4'-C1'	16.53	1.63	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1692	A	C2'-C1'	-16.53	1.35	1.53
67	B1	1767	C	O4'-C1'	16.52	1.63	1.41
21	A2	1009	G	C2'-C1'	-16.51	1.35	1.53
67	B1	466	C	O4'-C1'	16.51	1.63	1.41
67	B1	558	C	C2'-C1'	-16.51	1.35	1.53
21	A2	952	A	O4'-C1'	16.50	1.63	1.41
67	B1	821	U	C2'-C1'	16.50	1.71	1.53
68	B3	1	C	O4'-C1'	16.50	1.63	1.41
67	B1	2103	C	O4'-C1'	16.49	1.63	1.41
21	A2	183	A	C2'-C1'	-16.49	1.35	1.53
67	B1	1157	U	C2'-C1'	16.48	1.71	1.53
21	A2	162	C	C2'-C1'	-16.48	1.35	1.53
67	B1	2173	U	O4'-C1'	16.47	1.63	1.41
67	B1	988	C	C2'-C1'	-16.46	1.35	1.53
21	A2	1155	U	C2'-C1'	-16.44	1.35	1.53
67	B1	2815	C	O4'-C1'	16.43	1.63	1.41
21	A2	1273	G	O4'-C1'	16.43	1.63	1.41
21	A2	1335	A	O4'-C1'	16.43	1.63	1.41
67	B1	2217	C	C2'-C1'	-16.42	1.35	1.53
67	B1	2883	C	O4'-C1'	16.42	1.62	1.41
21	A2	156	A	O4'-C1'	16.41	1.62	1.41
67	B1	1943	C	O4'-C1'	16.41	1.62	1.41
67	B1	239	G	C2'-C1'	-16.41	1.35	1.53
21	A2	936	A	C2'-C1'	-16.41	1.35	1.53
67	B1	2767	C	C2'-C1'	-16.41	1.35	1.53
21	A2	1327	C	O4'-C1'	16.40	1.62	1.41
67	B1	2238	G	O4'-C1'	-16.39	1.20	1.41
67	B1	129	C	C2'-C1'	16.37	1.71	1.53
67	B1	476	C	C2'-C1'	-16.37	1.35	1.53
67	B1	1717	C	O4'-C1'	16.37	1.62	1.41
67	B1	513	C	C2'-C1'	-16.36	1.35	1.53
67	B1	1549	C	C2'-C1'	-16.36	1.35	1.53
67	B1	2003	C	O4'-C1'	16.36	1.62	1.41
67	B1	182	U	C2'-C1'	-16.35	1.35	1.53
67	B1	2157	U	O4'-C1'	16.35	1.62	1.41
21	A2	1444	G	C2'-C1'	-16.35	1.35	1.53
67	B1	1141	C	O4'-C1'	16.34	1.62	1.41
67	B1	1562	U	O4'-C1'	16.32	1.62	1.41
67	B1	447	G	C2'-C1'	-16.31	1.35	1.53
67	B1	2129	G	C2'-C1'	-16.31	1.35	1.53
67	B1	1699	U	C2'-C1'	-16.31	1.35	1.53
21	A2	117	C	C2'-C1'	-16.30	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1511	C	O4 ² -C1'	16.30	1.62	1.41
21	A2	117	C	O4 ² -C1'	16.30	1.62	1.41
67	B1	636	G	O4 ² -C1'	16.30	1.62	1.41
21	A2	217	C	O4 ² -C1'	16.30	1.62	1.41
27	A0	58	A	C2 ² -C1'	16.30	1.71	1.53
67	B1	888	U	C2 ² -C1'	-16.29	1.35	1.53
21	A2	930	G	C2 ² -C1'	-16.28	1.35	1.53
67	B1	1694	G	C2 ² -C1'	-16.28	1.35	1.53
67	B1	2654	C	O4 ² -C1'	16.27	1.62	1.41
21	A2	593	G	C2 ² -C1'	-16.27	1.35	1.53
21	A2	941	C	C2 ² -C1'	-16.27	1.35	1.53
67	B1	880	U	O4 ² -C1'	16.26	1.62	1.41
21	A2	926	C	O4 ² -C1'	16.24	1.62	1.41
67	B1	800	G	C2 ² -C1'	-16.24	1.35	1.53
67	B1	2881	G	C2 ² -C1'	-16.24	1.35	1.53
21	A2	978	G	O4 ² -C1'	16.24	1.62	1.41
21	A2	552	C	O4 ² -C1'	16.24	1.62	1.41
67	B1	371	U	O4 ² -C1'	16.23	1.62	1.41
67	B1	1465	A	O4 ² -C1'	-16.23	1.20	1.41
67	B1	324	C	C2 ² -C1'	16.21	1.71	1.53
21	A2	1437	G	C2 ² -C1'	-16.20	1.35	1.53
67	B1	187	C	C2 ² -C1'	-16.19	1.35	1.53
21	A2	1298	G	O4 ² -C1'	16.18	1.62	1.41
68	B3	41	A	C2 ² -C1'	-16.18	1.35	1.53
67	B1	1270	G	O4 ² -C1'	16.18	1.62	1.41
67	B1	2967	C	C2 ² -C1'	-16.17	1.35	1.53
67	B1	2283	C	O4 ² -C1'	16.17	1.62	1.41
21	A2	265	C	C2 ² -C1'	-16.17	1.35	1.53
67	B1	1460	C	C2 ² -C1'	-16.16	1.35	1.53
67	B1	2969	G	O4 ² -C1'	16.15	1.62	1.41
21	A2	694	U	C2 ² -C1'	16.14	1.71	1.53
21	A2	981	U	O4 ² -C1'	16.14	1.62	1.41
67	B1	2523	C	O4 ² -C1'	16.14	1.62	1.41
21	A2	492	G	C2 ² -C1'	-16.14	1.35	1.53
68	B3	90	A	O4 ² -C1'	16.13	1.62	1.41
67	B1	2622	C	O4 ² -C1'	16.11	1.62	1.41
21	A2	1164	A	C2 ² -C1'	-16.10	1.35	1.53
67	B1	2482	G	C2 ² -C1'	-16.10	1.35	1.53
67	B1	1259	G	C2 ² -C1'	-16.09	1.35	1.53
67	B1	2753	G	C2 ² -C1'	16.09	1.71	1.53
21	A2	1132	C	O4 ² -C1'	16.09	1.62	1.41
67	B1	1029	C	C2 ² -C1'	-16.08	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	847	A	C2'-C1'	16.08	1.71	1.53
21	A2	1133	C	O4'-C1'	16.07	1.62	1.41
67	B1	2513	C	O4'-C1'	16.07	1.62	1.41
11	A1	2	G	C2'-C1'	-16.07	1.35	1.53
21	A2	1153	G	C2'-C1'	-16.06	1.35	1.53
67	B1	1624	U	O4'-C1'	-16.06	1.20	1.41
67	B1	1179	G	O4'-C1'	-16.06	1.20	1.41
67	B1	215	A	C2'-C1'	16.05	1.71	1.53
21	A2	418	G	C2'-C1'	16.04	1.71	1.53
21	A2	87	C	C2'-C1'	-16.03	1.35	1.53
21	A2	693	C	C2'-C1'	-16.03	1.35	1.53
67	B1	1499	C	C2'-C1'	-16.03	1.35	1.53
67	B1	2006	C	C2'-C1'	-16.03	1.35	1.53
67	B1	3013	U	C2'-C1'	-16.02	1.35	1.53
21	A2	314	G	C2'-C1'	-16.02	1.35	1.53
67	B1	1165	C	O4'-C1'	16.01	1.62	1.41
67	B1	1404	G	C2'-C1'	-16.01	1.35	1.53
21	A2	384	G	O4'-C1'	16.01	1.62	1.41
67	B1	1758	U	O4'-C1'	16.00	1.62	1.41
67	B1	116	G	O4'-C1'	16.00	1.62	1.41
67	B1	2068	U	O4'-C1'	16.00	1.62	1.41
67	B1	963	G	C2'-C1'	-15.99	1.35	1.53
67	B1	1439	G	O4'-C1'	15.98	1.62	1.41
21	A2	263	C	O4'-C1'	15.98	1.62	1.41
67	B1	1080	G	C2'-C1'	15.98	1.71	1.53
67	B1	2364	G	C2'-C1'	-15.97	1.35	1.53
68	B3	22	C	O4'-C1'	15.97	1.62	1.41
67	B1	1054	A	C2'-C1'	-15.97	1.35	1.53
21	A2	485	A	C2'-C1'	15.95	1.70	1.53
67	B1	115	C	C2'-C1'	-15.96	1.35	1.53
67	B1	1700	U	C2'-C1'	15.95	1.70	1.53
67	B1	1339	C	C2'-C1'	-15.95	1.35	1.53
27	A0	43	G	C2'-C1'	-15.92	1.35	1.53
21	A2	1437	G	O4'-C1'	15.92	1.62	1.41
67	B1	1783	U	C2'-C1'	-15.91	1.35	1.53
21	A2	329	G	C2'-C1'	-15.90	1.35	1.53
67	B1	947	C	O4'-C1'	15.90	1.62	1.41
67	B1	473	C	O4'-C1'	15.89	1.62	1.41
67	B1	610	C	C2'-C1'	-15.88	1.35	1.53
67	B1	640	C	O4'-C1'	15.88	1.62	1.41
21	A2	366	C	C2'-C1'	-15.88	1.35	1.53
67	B1	306	G	O4'-C1'	15.87	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	973	C	C2'-C1'	-15.87	1.35	1.53
67	B1	887	U	C2'-C1'	15.87	1.70	1.53
67	B1	1470	C	O4'-C1'	15.87	1.62	1.41
67	B1	684	G	C2'-C1'	-15.86	1.35	1.53
67	B1	1139	C	O4'-C1'	15.86	1.62	1.41
21	A2	497	C	O4'-C1'	15.86	1.62	1.41
21	A2	13	C	C2'-C1'	-15.85	1.35	1.53
67	B1	1098	C	C2'-C1'	-15.85	1.35	1.53
21	A2	703	U	C2'-C1'	15.85	1.70	1.53
21	A2	1242	C	O4'-C1'	15.85	1.62	1.41
21	A2	666	G	C2'-C1'	-15.85	1.35	1.53
67	B1	2260	C	C2'-C1'	-15.85	1.35	1.53
21	A2	304	C	O4'-C1'	15.84	1.62	1.41
67	B1	436	C	O4'-C1'	15.84	1.62	1.41
67	B1	2308	C	O4'-C1'	15.84	1.62	1.41
21	A2	1047	U	C2'-C1'	-15.84	1.35	1.53
21	A2	749	C	O4'-C1'	15.83	1.62	1.41
67	B1	1607	C	O4'-C1'	15.83	1.62	1.41
67	B1	486	A	C2'-C1'	15.83	1.70	1.53
67	B1	1369	G	C2'-C1'	-15.82	1.35	1.53
67	B1	2645	C	O4'-C1'	15.82	1.62	1.41
67	B1	558	C	O4'-C1'	15.80	1.62	1.41
21	A2	551	U	O4'-C1'	15.80	1.62	1.41
67	B1	2236	C	O4'-C1'	15.80	1.62	1.41
21	A2	1396	C	O4'-C1'	15.79	1.62	1.41
67	B1	1050	C	O4'-C1'	15.79	1.62	1.41
67	B1	2089	C	C2'-C1'	-15.79	1.35	1.53
21	A2	792	C	O4'-C1'	15.79	1.62	1.41
67	B1	1297	C	C2'-C1'	-15.79	1.35	1.53
67	B1	528	G	C2'-C1'	-15.78	1.35	1.53
67	B1	2009	G	C2'-C1'	-15.78	1.35	1.53
27	A0	9	A	O4'-C1'	-15.78	1.21	1.41
67	B1	889	C	O4'-C1'	15.78	1.62	1.41
67	B1	1457	C	O4'-C1'	15.78	1.62	1.41
67	B1	2176	G	C2'-C1'	-15.77	1.36	1.53
21	A2	699	C	C2'-C1'	-15.76	1.36	1.53
21	A2	1439	G	C2'-C1'	15.76	1.70	1.53
67	B1	48	G	C2'-C1'	15.75	1.70	1.53
67	B1	216	A	C2'-C1'	15.75	1.70	1.53
67	B1	1709	C	O4'-C1'	15.75	1.62	1.41
67	B1	2858	C	C2'-C1'	-15.75	1.36	1.53
67	B1	2880	C	O4'-C1'	15.75	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1698	G	C2'-C1'	-15.75	1.36	1.53
67	B1	1586	G	C2'-C1'	-15.75	1.36	1.53
67	B1	1294	A	O4'-C1'	15.74	1.62	1.41
67	B1	2766	C	C2'-C1'	-15.74	1.36	1.53
67	B1	1187	A	C2'-C1'	-15.73	1.36	1.53
67	B1	1377	G	O4'-C1'	15.73	1.62	1.41
67	B1	1473	C	C2'-C1'	-15.72	1.36	1.53
67	B1	1570	C	C5'-C4'	15.72	1.70	1.51
21	A2	1169	C	O4'-C1'	15.71	1.62	1.41
67	B1	1509	C	O4'-C1'	15.71	1.62	1.41
67	B1	1646	G	C2'-C1'	15.70	1.70	1.53
21	A2	926	C	C2'-C1'	-15.70	1.36	1.53
21	A2	279	U	O4'-C1'	15.69	1.62	1.41
21	A2	1121	C	O4'-C1'	15.69	1.62	1.41
21	A2	168	G	C2'-C1'	-15.68	1.36	1.53
67	B1	1424	G	C2'-C1'	-15.68	1.36	1.53
21	A2	1328	G	C2'-C1'	-15.68	1.36	1.53
67	B1	1200	A	C2'-C1'	15.68	1.70	1.53
67	B1	2006	C	O4'-C1'	15.68	1.62	1.41
21	A2	1259	A	C2'-C1'	-15.68	1.36	1.53
21	A2	354	G	C2'-C1'	-15.66	1.36	1.53
67	B1	2482	G	O4'-C1'	15.66	1.62	1.41
21	A2	1223	C	C2'-C1'	-15.66	1.36	1.53
67	B1	671	G	C2'-C1'	-15.66	1.36	1.53
67	B1	1867	C	O4'-C1'	15.65	1.62	1.41
67	B1	568	A	O4'-C1'	15.65	1.61	1.41
67	B1	1384	C	O4'-C1'	15.63	1.61	1.41
21	A2	473	A	C2'-C1'	-15.62	1.36	1.53
67	B1	603	G	C2'-C1'	-15.62	1.36	1.53
67	B1	1191	C	O4'-C1'	15.62	1.61	1.41
21	A2	135	U	C2'-C1'	-15.62	1.36	1.53
67	B1	1681	G	C2'-C1'	-15.61	1.36	1.53
67	B1	923	A	C2'-C1'	15.60	1.70	1.53
67	B1	2331	A	O4'-C1'	15.60	1.61	1.41
21	A2	787	U	C2'-C1'	-15.60	1.36	1.53
67	B1	2840	C	O4'-C1'	15.60	1.61	1.41
21	A2	373	C	O4'-C1'	15.59	1.61	1.41
67	B1	66	C	O4'-C1'	15.59	1.61	1.41
67	B1	1673	C	C2'-C1'	-15.59	1.36	1.53
68	B3	47	G	C2'-C1'	-15.58	1.36	1.53
21	A2	11	A	O4'-C1'	15.57	1.61	1.41
21	A2	435	A	O4'-C1'	15.56	1.61	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2638	G	C2'-C1'	-15.55	1.36	1.53
21	A2	1199	A	O4'-C1'	-15.55	1.21	1.41
21	A2	1136	A	O4'-C1'	15.54	1.61	1.41
67	B1	1567	C	P-O5'	15.54	1.75	1.59
67	B1	729	A	C2'-C1'	-15.53	1.36	1.53
67	B1	1370	G	C2'-C1'	-15.53	1.36	1.53
21	A2	1250	C	O4'-C1'	15.53	1.61	1.41
68	B3	8	C	C2'-C1'	15.52	1.70	1.53
21	A2	1234	A	C2'-C1'	-15.52	1.36	1.53
67	B1	727	A	C2'-C1'	-15.52	1.36	1.53
67	B1	2490	C	C2'-C1'	-15.52	1.36	1.53
21	A2	698	A	C2'-C1'	-15.51	1.36	1.53
21	A2	616	G	C2'-C1'	-15.49	1.36	1.53
21	A2	1448	A	C2'-C1'	15.49	1.70	1.53
67	B1	1910	C	O4'-C1'	15.48	1.61	1.41
21	A2	1117	A	C2'-C1'	-15.48	1.36	1.53
67	B1	2818	C	O4'-C1'	15.47	1.61	1.41
27	A0	25	C	O4'-C1'	15.47	1.61	1.41
21	A2	492	G	O4'-C1'	15.46	1.61	1.41
67	B1	1576	C	C2'-C1'	-15.46	1.36	1.53
21	A2	1115	G	C2'-C1'	-15.46	1.36	1.53
67	B1	2722	G	C2'-C1'	-15.45	1.36	1.53
67	B1	1495	A	C2'-C1'	-15.45	1.36	1.53
67	B1	1530	A	O4'-C1'	-15.44	1.21	1.41
67	B1	2848	C	C2'-C1'	-15.45	1.36	1.53
21	A2	754	G	O4'-C1'	15.44	1.61	1.41
67	B1	462	A	O4'-C1'	15.44	1.61	1.41
21	A2	1421	C	O4'-C1'	15.43	1.61	1.41
67	B1	2196	C	O4'-C1'	15.43	1.61	1.41
67	B1	131	C	O4'-C1'	15.43	1.61	1.41
67	B1	924	A	C2'-C1'	15.43	1.70	1.53
21	A2	651	U	O4'-C1'	15.42	1.61	1.41
67	B1	2296	A	C2'-C1'	-15.41	1.36	1.53
67	B1	932	C	O4'-C1'	15.40	1.61	1.41
68	B3	56	C	O4'-C1'	15.40	1.61	1.41
67	B1	204	G	C2'-C1'	15.39	1.70	1.53
67	B1	3049	C	O4'-C1'	15.39	1.61	1.41
27	A0	6	C	O4'-C1'	15.39	1.61	1.41
68	B3	81	C	O4'-C1'	15.39	1.61	1.41
11	A1	69	G	C2'-C1'	-15.38	1.36	1.53
21	A2	841	C	C2'-C1'	-15.38	1.36	1.53
21	A2	1406	U	C2'-C1'	15.38	1.70	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	456	G	C2'-C1'	-15.38	1.36	1.53
67	B1	592	C	O4'-C1'	15.37	1.61	1.41
67	B1	2635	C	O4'-C1'	15.36	1.61	1.41
67	B1	1042	G	C2'-C1'	15.36	1.70	1.53
67	B1	1383	G	C2'-C1'	-15.35	1.36	1.53
21	A2	1086	C	O4'-C1'	15.35	1.61	1.41
67	B1	2421	A	C2'-C1'	-15.34	1.36	1.53
67	B1	220	C	O4'-C1'	15.34	1.61	1.41
67	B1	128	C	O4'-C1'	15.33	1.61	1.41
67	B1	1651	A	C2'-C1'	-15.33	1.36	1.53
67	B1	764	G	C2'-C1'	15.32	1.70	1.53
67	B1	1571	G	C2'-C1'	-15.31	1.36	1.53
67	B1	2104	G	O4'-C1'	15.31	1.61	1.41
67	B1	130	G	O4'-C1'	15.30	1.61	1.41
21	A2	1239	A	C2'-C1'	-15.28	1.36	1.53
67	B1	369	G	O4'-C1'	15.28	1.61	1.41
67	B1	1288	C	O4'-C1'	15.28	1.61	1.41
67	B1	1072	U	C2'-C1'	15.28	1.70	1.53
67	B1	1515	G	C2'-C1'	-15.28	1.36	1.53
67	B1	2808	C	C2'-C1'	-15.27	1.36	1.53
67	B1	2187	C	O4'-C1'	15.26	1.61	1.41
21	A2	1363	C	O4'-C1'	15.26	1.61	1.41
21	A2	92	G	O4'-C1'	-15.25	1.21	1.41
21	A2	700	G	C2'-C1'	-15.24	1.36	1.53
21	A2	175	G	C2'-C1'	15.24	1.70	1.53
67	B1	473	C	C2'-C1'	-15.24	1.36	1.53
67	B1	2625	C	O4'-C1'	15.24	1.61	1.41
67	B1	1084	G	C2'-C1'	-15.23	1.36	1.53
67	B1	1056	C	O4'-C1'	15.23	1.61	1.41
21	A2	362	C	C2'-C1'	-15.22	1.36	1.53
27	A0	38	A	C2'-C1'	-15.22	1.36	1.53
67	B1	1514	C	O4'-C1'	15.21	1.61	1.41
67	B1	1852	U	O4'-C1'	15.21	1.61	1.41
67	B1	2099	G	C2'-C1'	-15.20	1.36	1.53
67	B1	1308	G	C2'-C1'	-15.19	1.36	1.53
67	B1	1840	G	O4'-C1'	15.20	1.61	1.41
67	B1	2622	C	C2'-C1'	-15.19	1.36	1.53
21	A2	636	G	C2'-C1'	-15.19	1.36	1.53
21	A2	1365	G	C2'-C1'	-15.19	1.36	1.53
67	B1	2776	A	C2'-C1'	-15.18	1.36	1.53
21	A2	383	C	C2'-C1'	-15.18	1.36	1.53
67	B1	124	C	O4'-C1'	15.18	1.61	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1219	C	O4 ² -C1'	15.18	1.61	1.41
67	B1	2537	G	C2 ² -C1'	-15.18	1.36	1.53
67	B1	1741	C	O4 ² -C1'	15.17	1.61	1.41
67	B1	1887	A	O4 ² -C1'	15.17	1.61	1.41
21	A2	34	G	O4 ² -C1'	-15.16	1.22	1.41
67	B1	1497	C	O4 ² -C1'	15.15	1.61	1.41
67	B1	790	U	C2 ² -C1'	-15.15	1.36	1.53
67	B1	708	A	C2 ² -C1'	-15.15	1.36	1.53
21	A2	660	C	O4 ² -C1'	15.14	1.61	1.41
67	B1	493	A	C2 ² -C1'	-15.13	1.36	1.53
67	B1	2505	A	O4 ² -C1'	15.13	1.61	1.41
21	A2	138	C	C2 ² -C1'	-15.12	1.36	1.53
67	B1	226	C	O4 ² -C1'	15.12	1.61	1.41
67	B1	2434	A	O4 ² -C1'	15.12	1.61	1.41
67	B1	160	C	C2 ² -C1'	-15.12	1.36	1.53
67	B1	2358	U	O4 ² -C1'	15.11	1.61	1.41
67	B1	2131	C	O4 ² -C1'	15.08	1.61	1.41
68	B3	16	G	C2 ² -C1'	-15.08	1.36	1.53
21	A2	120	C	O4 ² -C1'	15.08	1.61	1.41
67	B1	934	G	O4 ² -C1'	15.08	1.61	1.41
67	B1	2468	C	O4 ² -C1'	15.07	1.61	1.41
67	B1	1134	A	O4 ² -C1'	15.07	1.61	1.41
67	B1	1577	C	O4 ² -C1'	15.06	1.61	1.41
67	B1	775	C	C2 ² -C1'	-15.06	1.36	1.53
67	B1	2032	G	C2 ² -C1'	-15.06	1.36	1.53
67	B1	2508	G	O4 ² -C1'	15.05	1.61	1.41
67	B1	467	U	O4 ² -C1'	15.04	1.61	1.41
67	B1	1860	A	C2 ² -C1'	15.04	1.69	1.53
67	B1	2215	U	C2 ² -C1'	-15.04	1.36	1.53
67	B1	1139	C	C2 ² -C1'	-15.03	1.36	1.53
67	B1	1477	C	O4 ² -C1'	15.03	1.61	1.41
68	B3	38	U	C2 ² -C1'	-15.03	1.36	1.53
67	B1	418	C	C2 ² -C1'	-15.01	1.36	1.53
67	B1	2990	G	O4 ² -C1'	15.01	1.61	1.41
21	A2	1047	U	O4 ² -C1'	15.00	1.61	1.41
68	B3	50	G	O4 ² -C1'	15.00	1.61	1.41
67	B1	716	U	O4 ² -C1'	14.99	1.61	1.41
21	A2	267	C	O4 ² -C1'	14.99	1.61	1.41
21	A2	409	C	C2 ² -C1'	-14.99	1.36	1.53
67	B1	121	G	O4 ² -C1'	14.98	1.61	1.41
21	A2	1394	G	O4 ² -C1'	14.96	1.61	1.41
67	B1	492	A	C2 ² -C1'	14.96	1.69	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1252	C	O4 ³ -C1'	14.96	1.61	1.41
67	B1	2395	C	C2 ³ -C1'	-14.95	1.36	1.53
68	B3	53	A	C2 ³ -C1'	-14.94	1.36	1.53
67	B1	2088	G	C2 ³ -C1'	-14.94	1.36	1.53
67	B1	2133	G	C2 ³ -C1'	-14.92	1.36	1.53
67	B1	2958	U	C2 ³ -C1'	14.91	1.69	1.53
21	A2	456	U	C2 ³ -C1'	-14.91	1.36	1.53
67	B1	2122	G	C2 ³ -C1'	-14.91	1.36	1.53
21	A2	81	C	O4 ³ -C1'	14.90	1.61	1.41
67	B1	1928	A	C2 ³ -C1'	-14.89	1.36	1.53
67	B1	268	C	O4 ³ -C1'	14.89	1.61	1.41
67	B1	1188	C	C2 ³ -C1'	-14.88	1.36	1.53
67	B1	2859	U	O4 ³ -C1'	14.88	1.60	1.41
67	B1	1303	C	O4 ³ -C1'	14.88	1.60	1.41
67	B1	2926	G	O4 ³ -C1'	14.88	1.60	1.41
21	A2	660	C	C2 ³ -C1'	-14.87	1.36	1.53
21	A2	147	A	O4 ³ -C1'	14.87	1.60	1.41
21	A2	529	C	O4 ³ -C1'	14.87	1.60	1.41
67	B1	2647	G	C2 ³ -C1'	-14.87	1.36	1.53
67	B1	2808	C	O4 ³ -C1'	14.87	1.60	1.41
67	B1	866	G	C2 ³ -C1'	-14.86	1.37	1.53
67	B1	2136	G	C2 ³ -C1'	-14.86	1.37	1.53
21	A2	96	G	C2 ³ -C1'	-14.86	1.37	1.53
67	B1	1963	G	C2 ³ -C1'	-14.85	1.37	1.53
67	B1	537	U	O4 ³ -C1'	14.85	1.60	1.41
67	B1	1934	C	C2 ³ -C1'	-14.85	1.37	1.53
11	A1	74	A	C2 ³ -C1'	-14.85	1.37	1.53
67	B1	900	C	O4 ³ -C1'	14.84	1.60	1.41
67	B1	160	C	O4 ³ -C1'	14.84	1.60	1.41
21	A2	1162	G	C2 ³ -C1'	-14.84	1.37	1.53
67	B1	181	U	C2 ³ -C1'	14.84	1.69	1.53
67	B1	634	G	C2 ³ -C1'	14.84	1.69	1.53
67	B1	1701	C	O4 ³ -C1'	14.84	1.60	1.41
67	B1	2288	C	C2 ³ -C1'	-14.83	1.37	1.53
67	B1	2326	C	C2 ³ -C1'	-14.83	1.37	1.53
67	B1	1711	C	C2 ³ -C1'	14.83	1.69	1.53
67	B1	1752	C	O4 ³ -C1'	14.82	1.60	1.41
67	B1	2010	G	C2 ³ -C1'	-14.82	1.37	1.53
67	B1	190	C	O4 ³ -C1'	14.81	1.60	1.41
21	A2	1081	C	C2 ³ -C1'	14.80	1.69	1.53
67	B1	1475	G	C2 ³ -C1'	-14.80	1.37	1.53
67	B1	2886	C	O4 ³ -C1'	14.80	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1105	C	O4 ² -C1'	14.80	1.60	1.41
67	B1	2739	G	C2 ² -C1'	-14.80	1.37	1.53
67	B1	593	C	O4 ² -C1'	14.80	1.60	1.41
67	B1	2684	G	C2 ² -C1'	-14.79	1.37	1.53
67	B1	1438	C	O4 ² -C1'	14.78	1.60	1.41
67	B1	2380	A	C2 ² -C1'	-14.78	1.37	1.53
68	B3	13	C	C2 ² -C1'	-14.78	1.37	1.53
21	A2	363	C	C2 ² -C1'	14.78	1.69	1.53
67	B1	901	C	O4 ² -C1'	14.78	1.60	1.41
67	B1	85	G	C2 ² -C1'	-14.78	1.37	1.53
67	B1	2594	U	O4 ² -C1'	14.77	1.60	1.41
67	B1	2871	A	C2 ² -C1'	14.77	1.69	1.53
67	B1	2266	C	O4 ² -C1'	14.76	1.60	1.41
21	A2	273	C	O4 ² -C1'	14.75	1.60	1.41
67	B1	1059	C	C2 ² -C1'	-14.75	1.37	1.53
67	B1	1747	C	C2 ² -C1'	-14.74	1.37	1.53
67	B1	2086	C	O4 ² -C1'	14.73	1.60	1.41
67	B1	2753	G	O4 ² -C1'	-14.72	1.22	1.41
67	B1	2836	G	O4 ² -C1'	14.71	1.60	1.41
21	A2	1147	G	C2 ² -C1'	-14.70	1.37	1.53
11	A1	47	G	C2 ² -C1'	14.70	1.69	1.53
67	B1	274	C	C2 ² -C1'	-14.69	1.37	1.53
67	B1	2430	C	O4 ² -C1'	14.69	1.60	1.41
67	B1	258	C	O4 ² -C1'	14.68	1.60	1.41
21	A2	337	C	C2 ² -C1'	-14.68	1.37	1.53
67	B1	1143	A	O4 ² -C1'	14.68	1.60	1.41
67	B1	2213	G	C2 ² -C1'	-14.67	1.37	1.53
67	B1	712	C	O4 ² -C1'	14.67	1.60	1.41
21	A2	724	C	O4 ² -C1'	14.67	1.60	1.41
67	B1	2632	C	C2 ² -C1'	14.67	1.69	1.53
67	B1	1296	A	O4 ² -C1'	14.66	1.60	1.41
67	B1	661	G	C2 ² -C1'	-14.65	1.37	1.53
67	B1	2033	G	O4 ² -C1'	14.65	1.60	1.41
21	A2	321	A	O4 ² -C1'	14.64	1.60	1.41
21	A2	1066	C	C2 ² -C1'	-14.64	1.37	1.53
67	B1	822	A	O4 ² -C1'	14.64	1.60	1.41
67	B1	178	G	C2 ² -C1'	-14.63	1.37	1.53
21	A2	1026	A	C2 ² -C1'	-14.63	1.37	1.53
21	A2	1436	U	C2 ² -C1'	14.63	1.69	1.53
67	B1	1484	U	C2 ² -C1'	-14.63	1.37	1.53
67	B1	1568	A	O5 ² -C5'	14.62	1.67	1.44
67	B1	1640	G	C2 ² -C1'	-14.61	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	166	A	C2'-C1'	-14.61	1.37	1.53
67	B1	921	C	O4'-C1'	14.60	1.60	1.41
67	B1	122	G	C2'-C1'	-14.60	1.37	1.53
67	B1	1773	C	O4'-C1'	14.60	1.60	1.41
67	B1	2182	A	C2'-C1'	14.59	1.69	1.53
27	A0	75	C	O4'-C1'	14.59	1.60	1.41
67	B1	2068	U	C2'-C1'	14.58	1.69	1.53
21	A2	366	C	O4'-C1'	14.57	1.60	1.41
67	B1	154	U	C2'-C1'	14.57	1.69	1.53
27	A0	14	A	O4'-C1'	14.57	1.60	1.41
67	B1	3048	C	O4'-C1'	14.56	1.60	1.41
21	A2	1204	C	O4'-C1'	14.56	1.60	1.41
21	A2	760	C	O4'-C1'	14.56	1.60	1.41
21	A2	867	A	C2'-C1'	14.55	1.69	1.53
67	B1	1746	C	O4'-C1'	14.55	1.60	1.41
67	B1	1907	G	C2'-C1'	-14.55	1.37	1.53
67	B1	1576	C	O4'-C1'	14.54	1.60	1.41
21	A2	971	G	C2'-C1'	-14.54	1.37	1.53
68	B3	68	C	C2'-C1'	-14.54	1.37	1.53
21	A2	833	C	C2'-C1'	-14.54	1.37	1.53
67	B1	1218	C	O4'-C1'	14.52	1.60	1.41
21	A2	880	G	C2'-C1'	-14.52	1.37	1.53
67	B1	2764	G	C2'-C1'	-14.52	1.37	1.53
21	A2	1004	U	O4'-C1'	14.52	1.60	1.41
67	B1	1272	A	C2'-C1'	14.51	1.69	1.53
21	A2	1194	C	O4'-C1'	14.50	1.60	1.41
67	B1	210	A	O4'-C1'	14.50	1.60	1.41
21	A2	1494	C	O4'-C1'	14.49	1.60	1.41
67	B1	652	G	O4'-C1'	14.49	1.60	1.41
67	B1	32	C	C2'-C1'	-14.49	1.37	1.53
21	A2	774	U	O4'-C1'	14.49	1.60	1.41
67	B1	463	A	C2'-C1'	-14.49	1.37	1.53
67	B1	521	C	O4'-C1'	14.49	1.60	1.41
21	A2	472	C	C2'-C1'	-14.48	1.37	1.53
67	B1	452	A	C2'-C1'	-14.48	1.37	1.53
67	B1	2424	A	O4'-C1'	14.48	1.60	1.41
21	A2	45	U	C2'-C1'	14.48	1.69	1.53
67	B1	1289	C	O4'-C1'	14.48	1.60	1.41
67	B1	1251	G	O4'-C1'	14.47	1.60	1.41
67	B1	1040	C	O4'-C1'	14.47	1.60	1.41
67	B1	1939	C	O4'-C1'	14.47	1.60	1.41
67	B1	1794	C	C2'-C1'	-14.46	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	392	G	C2'-C1'	-14.45	1.37	1.53
67	B1	1231	C	O4'-C1'	14.45	1.60	1.41
67	B1	778	A	O4'-C1'	14.44	1.60	1.41
67	B1	2887	C	O4'-C1'	14.44	1.60	1.41
67	B1	571	G	C2'-C1'	-14.43	1.37	1.53
67	B1	152	G	C2'-C1'	14.43	1.69	1.53
67	B1	2989	A	C2'-C1'	-14.43	1.37	1.53
67	B1	44	C	C2'-C1'	-14.43	1.37	1.53
67	B1	493	A	O4'-C1'	14.42	1.60	1.41
21	A2	280	C	C2'-C1'	-14.42	1.37	1.53
21	A2	1185	A	C2'-C1'	-14.41	1.37	1.53
67	B1	1763	A	C2'-C1'	-14.41	1.37	1.53
21	A2	60	A	C2'-C1'	14.41	1.69	1.53
21	A2	1076	G	C2'-C1'	-14.41	1.37	1.53
67	B1	2674	C	O4'-C1'	14.40	1.60	1.41
67	B1	1511	C	C2'-C1'	-14.40	1.37	1.53
67	B1	2849	C	O4'-C1'	14.40	1.60	1.41
67	B1	603	G	O4'-C1'	14.39	1.60	1.41
21	A2	1348	C	C2'-C1'	-14.39	1.37	1.53
11	A1	28	C	O4'-C1'	14.38	1.60	1.41
21	A2	464	G	C2'-C1'	-14.38	1.37	1.53
21	A2	1024	G	C2'-C1'	-14.38	1.37	1.53
67	B1	1106	C	C2'-C1'	-14.37	1.37	1.53
67	B1	1395	G	C2'-C1'	-14.37	1.37	1.53
67	B1	1603	G	C2'-C1'	-14.37	1.37	1.53
67	B1	1838	C	C2'-C1'	-14.37	1.37	1.53
67	B1	2556	C	C2'-C1'	-14.37	1.37	1.53
21	A2	381	C	O4'-C1'	14.37	1.60	1.41
21	A2	1035	C	C2'-C1'	-14.37	1.37	1.53
67	B1	2951	G	C2'-C1'	-14.37	1.37	1.53
67	B1	3013	U	O4'-C1'	14.37	1.60	1.41
21	A2	1470	G	C2'-C1'	-14.36	1.37	1.53
27	A0	50	C	C2'-C1'	-14.36	1.37	1.53
67	B1	2824	C	C2'-C1'	-14.36	1.37	1.53
21	A2	474	G	C2'-C1'	-14.36	1.37	1.53
67	B1	1960	U	O4'-C1'	14.36	1.60	1.41
67	B1	1441	C	O4'-C1'	14.36	1.60	1.41
68	B3	94	G	O4'-C1'	14.36	1.60	1.41
21	A2	878	U	C2'-C1'	-14.35	1.37	1.53
67	B1	2713	A	C2'-C1'	14.35	1.69	1.53
11	A1	71	C	C2'-C1'	-14.35	1.37	1.53
11	A1	73	C	O4'-C1'	14.35	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2170	C	O4 ² -C1'	14.35	1.60	1.41
67	B1	2381	A	C5 ² -C4'	14.34	1.68	1.51
67	B1	1953	U	C2 ² -C1'	-14.34	1.37	1.53
21	A2	294	A	C2 ² -C1'	-14.33	1.37	1.53
21	A2	652	C	C2 ² -C1'	-14.33	1.37	1.53
27	A0	68	G	C2 ² -C1'	-14.33	1.37	1.53
67	B1	359	C	C2 ² -C1'	-14.32	1.37	1.53
67	B1	2905	C	O4 ² -C1'	14.32	1.60	1.41
21	A2	627	G	C2 ² -C1'	-14.32	1.37	1.53
67	B1	2913	C	O4 ² -C1'	14.31	1.60	1.41
67	B1	1811	G	O4 ² -C1'	-14.31	1.23	1.41
67	B1	1047	A	O4 ² -C1'	14.30	1.60	1.41
67	B1	2073	G	C2 ² -C1'	-14.30	1.37	1.53
21	A2	933	G	C2 ² -C1'	-14.30	1.37	1.53
67	B1	644	G	O4 ² -C1'	14.29	1.60	1.41
67	B1	956	U	O4 ² -C1'	14.29	1.60	1.41
67	B1	344	G	C2 ² -C1'	-14.29	1.37	1.53
21	A2	1472	G	C2 ² -C1'	-14.29	1.37	1.53
67	B1	1790	G	O4 ² -C1'	14.28	1.60	1.41
21	A2	248	U	O4 ² -C1'	14.27	1.60	1.41
21	A2	457	G	O4 ² -C1'	14.27	1.60	1.41
67	B1	2288	C	O4 ² -C1'	14.27	1.60	1.41
67	B1	1407	A	O4 ² -C1'	14.27	1.60	1.41
67	B1	293	G	C2 ² -C1'	14.26	1.69	1.53
67	B1	2029	C	O4 ² -C1'	14.26	1.60	1.41
68	B3	26	C	O4 ² -C1'	14.26	1.60	1.41
21	A2	715	C	O4 ² -C1'	14.25	1.60	1.41
67	B1	2607	U	C2 ² -C1'	14.25	1.69	1.53
11	A1	54	G	O4 ² -C1'	14.24	1.60	1.41
21	A2	393	A	O4 ² -C1'	-14.24	1.23	1.41
67	B1	466	C	C2 ² -C1'	-14.24	1.37	1.53
21	A2	681	G	C2 ² -C1'	14.24	1.69	1.53
67	B1	737	G	C2 ² -C1'	-14.24	1.37	1.53
67	B1	1651	A	O4 ² -C1'	14.23	1.60	1.41
67	B1	2094	A	C2 ² -C1'	-14.23	1.37	1.53
68	B3	68	C	O4 ² -C1'	14.23	1.60	1.41
67	B1	1391	C	O4 ² -C1'	14.23	1.60	1.41
67	B1	2822	G	C2 ² -C1'	-14.23	1.37	1.53
67	B1	844	C	O4 ² -C1'	14.22	1.60	1.41
21	A2	715	C	C2 ² -C1'	-14.22	1.37	1.53
21	A2	847	A	C2 ² -C1'	-14.22	1.37	1.53
21	A2	42	G	C2 ² -C1'	-14.20	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	796	C	O4 ² -C1'	14.20	1.60	1.41
67	B1	2066	C	O4 ² -C1'	14.20	1.60	1.41
67	B1	1141	C	C2 ² -C1'	-14.19	1.37	1.53
21	A2	279	U	C2 ² -C1'	-14.19	1.37	1.53
67	B1	3036	C	O4 ² -C1'	14.19	1.60	1.41
11	A1	62	C	O4 ² -C1'	14.18	1.60	1.41
68	B3	5	G	C2 ² -C1'	-14.17	1.37	1.53
21	A2	613	C	O4 ² -C1'	14.17	1.60	1.41
67	B1	2683	G	C2 ² -C1'	-14.17	1.37	1.53
67	B1	936	G	C2 ² -C1'	-14.16	1.37	1.53
67	B1	2012	G	O4 ² -C1'	-14.16	1.23	1.41
67	B1	2039	U	O4 ² -C1'	14.16	1.60	1.41
67	B1	173	G	C2 ² -C1'	-14.16	1.37	1.53
67	B1	2750	C	O4 ² -C1'	14.16	1.60	1.41
21	A2	229	G	C2 ² -C1'	-14.15	1.37	1.53
67	B1	1756	C	O4 ² -C1'	14.14	1.60	1.41
67	B1	2498	G	O4 ² -C1'	14.13	1.60	1.41
67	B1	1820	C	C2 ² -C1'	-14.13	1.37	1.53
67	B1	2319	C	C2 ² -C1'	-14.13	1.37	1.53
21	A2	6	G	C2 ² -C1'	-14.13	1.37	1.53
67	B1	408	C	C2 ² -C1'	-14.13	1.37	1.53
67	B1	605	A	O4 ² -C1'	14.13	1.60	1.41
67	B1	2529	G	C2 ² -C1'	-14.12	1.37	1.53
67	B1	1628	C	O4 ² -C1'	14.12	1.60	1.41
67	B1	119	U	O4 ² -C1'	14.12	1.60	1.41
67	B1	2475	G	C2 ² -C1'	-14.11	1.37	1.53
67	B1	2945	A	C2 ² -C1'	-14.11	1.37	1.53
67	B1	1377	G	C2 ² -C1'	-14.10	1.37	1.53
21	A2	792	C	C2 ² -C1'	-14.10	1.37	1.53
21	A2	44	C	O4 ² -C1'	14.09	1.59	1.41
67	B1	2877	A	O4 ² -C1'	14.09	1.59	1.41
67	B1	1571	G	O4 ² -C1'	14.08	1.59	1.41
67	B1	297	G	C2 ² -C1'	-14.08	1.37	1.53
21	A2	373	C	C2 ² -C1'	-14.08	1.37	1.53
67	B1	1048	C	O4 ² -C1'	14.07	1.59	1.41
67	B1	905	G	O4 ² -C1'	14.07	1.59	1.41
67	B1	1799	G	C2 ² -C1'	-14.07	1.37	1.53
21	A2	437	A	C2 ² -C1'	-14.06	1.37	1.53
67	B1	2727	C	O4 ² -C1'	14.06	1.59	1.41
21	A2	4	C	C2 ² -C1'	14.06	1.68	1.53
67	B1	2043	A	O4 ² -C1'	14.06	1.59	1.41
68	B3	79	U	C2 ² -C1'	14.06	1.68	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1051	C	O4 ² -C1'	14.05	1.59	1.41
67	B1	1086	U	O4 ² -C1'	14.05	1.59	1.41
67	B1	2648	C	O4 ² -C1'	14.04	1.59	1.41
67	B1	1472	U	C2 ² -C1'	-14.04	1.38	1.53
67	B1	454	C	O4 ² -C1'	14.04	1.59	1.41
67	B1	2306	C	C2 ² -C1'	-14.04	1.38	1.53
21	A2	268	C	O4 ² -C1'	14.03	1.59	1.41
67	B1	1271	G	O4 ² -C1'	14.02	1.59	1.41
67	B1	2151	C	O4 ² -C1'	14.02	1.59	1.41
11	A1	76	C	O4 ² -C1'	14.02	1.59	1.41
21	A2	548	A	C2 ² -C1'	-14.01	1.38	1.53
21	A2	426	C	O4 ² -C1'	14.01	1.59	1.41
67	B1	502	G	O4 ² -C1'	-14.00	1.23	1.41
67	B1	2629	U	C2 ² -C1'	-14.00	1.38	1.53
67	B1	1547	U	C2 ² -C1'	14.00	1.68	1.53
67	B1	2503	C	O4 ² -C1'	13.99	1.59	1.41
67	B1	2474	A	C2 ² -C1'	-13.99	1.38	1.53
21	A2	75	C	C2 ² -C1'	13.99	1.68	1.53
67	B1	2759	A	C2 ² -C1'	-13.99	1.38	1.53
67	B1	1403	C	O4 ² -C1'	13.98	1.59	1.41
67	B1	2642	C	C2 ² -C1'	-13.98	1.38	1.53
21	A2	1178	C	O4 ² -C1'	13.98	1.59	1.41
67	B1	2559	G	C2 ² -C1'	-13.98	1.38	1.53
67	B1	2410	U	O4 ² -C1'	13.98	1.59	1.41
68	B3	65	G	O4 ² -C1'	13.97	1.59	1.41
67	B1	1941	A	C2 ² -C1'	-13.97	1.38	1.53
21	A2	1271	G	O4 ² -C1'	13.97	1.59	1.41
21	A2	554	C	O4 ² -C1'	13.96	1.59	1.41
21	A2	344	G	O4 ² -C1'	13.95	1.59	1.41
21	A2	1286	C	O4 ² -C1'	13.94	1.59	1.41
67	B1	136	U	O4 ² -C1'	13.94	1.59	1.41
67	B1	1429	A	C2 ² -C1'	13.94	1.68	1.53
67	B1	1747	C	O4 ² -C1'	13.94	1.59	1.41
67	B1	2234	C	O4 ² -C1'	13.94	1.59	1.41
21	A2	375	G	O4 ² -C1'	13.93	1.59	1.41
67	B1	1071	A	O4 ² -C1'	13.92	1.59	1.41
67	B1	1675	C	C2 ² -C1'	-13.92	1.38	1.53
67	B1	2562	G	O4 ² -C1'	13.92	1.59	1.41
67	B1	1979	G	C2 ² -C1'	-13.91	1.38	1.53
67	B1	1548	A	C2 ² -C1'	13.91	1.68	1.53
67	B1	1924	A	C2 ² -C1'	-13.91	1.38	1.53
67	B1	2273	U	C2 ² -C1'	-13.91	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1411	G	O4 ² -C1'	13.90	1.59	1.41
67	B1	977	C	O4 ² -C1'	13.90	1.59	1.41
68	B3	29	G	C2 ² -C1'	-13.89	1.38	1.53
67	B1	725	G	C2 ² -C1'	-13.88	1.38	1.53
67	B1	208	A	O4 ² -C1'	13.88	1.59	1.41
67	B1	512	G	C2 ² -C1'	-13.88	1.38	1.53
21	A2	23	G	O4 ² -C1'	13.88	1.59	1.41
67	B1	2829	C	O4 ² -C1'	13.87	1.59	1.41
67	B1	2145	G	C2 ² -C1'	13.87	1.68	1.53
67	B1	3011	G	C2 ² -C1'	-13.86	1.38	1.53
67	B1	2439	G	O4 ² -C1'	13.86	1.59	1.41
21	A2	1357	C	C2 ² -C1'	13.85	1.68	1.53
67	B1	2641	C	C2 ² -C1'	-13.84	1.38	1.53
67	B1	1471	G	C2 ² -C1'	-13.84	1.38	1.53
67	B1	1390	U	O4 ² -C1'	-13.83	1.23	1.41
21	A2	162	C	O4 ² -C1'	13.82	1.59	1.41
21	A2	746	A	O4 ² -C1'	-13.82	1.23	1.41
21	A2	1347	U	C2 ² -C1'	-13.82	1.38	1.53
21	A2	420	C	O4 ² -C1'	13.82	1.59	1.41
67	B1	691	G	C2 ² -C1'	-13.82	1.38	1.53
21	A2	1124	G	C2 ² -C1'	-13.81	1.38	1.53
67	B1	2403	G	C2 ² -C1'	-13.81	1.38	1.53
67	B1	2254	U	O4 ² -C1'	13.81	1.59	1.41
67	B1	3001	C	O4 ² -C1'	13.81	1.59	1.41
21	A2	1067	G	C2 ² -C1'	13.81	1.68	1.53
21	A2	583	G	O4 ² -C1'	13.81	1.59	1.41
27	A0	63	G	C2 ² -C1'	-13.80	1.38	1.53
67	B1	2466	C	C2 ² -C1'	-13.80	1.38	1.53
67	B1	2790	C	O4 ² -C1'	13.80	1.59	1.41
67	B1	1432	C	O4 ² -C1'	13.79	1.59	1.41
67	B1	1955	U	C2 ² -C1'	13.79	1.68	1.53
21	A2	20	G	C2 ² -C1'	-13.78	1.38	1.53
67	B1	1500	C	O4 ² -C1'	13.78	1.59	1.41
21	A2	781	U	C2 ² -C1'	-13.78	1.38	1.53
21	A2	542	G	C2 ² -C1'	-13.78	1.38	1.53
67	B1	161	C	O4 ² -C1'	13.78	1.59	1.41
67	B1	2276	G	C2 ² -C1'	13.78	1.68	1.53
67	B1	575	G	C2 ² -C1'	-13.77	1.38	1.53
67	B1	594	U	C2 ² -C1'	13.77	1.68	1.53
67	B1	1552	C	O4 ² -C1'	13.77	1.59	1.41
67	B1	2303	A	O4 ² -C1'	13.77	1.59	1.41
21	A2	108	G	C2 ² -C1'	-13.76	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	116	C	C2'-C1'	-13.75	1.38	1.53
67	B1	640	C	C2'-C1'	-13.75	1.38	1.53
67	B1	2927	A	O4'-C1'	13.75	1.59	1.41
21	A2	1442	G	C2'-C1'	-13.74	1.38	1.53
67	B1	2081	C	O4'-C1'	13.74	1.59	1.41
67	B1	2375	C	O4'-C1'	13.73	1.59	1.41
27	A0	61	C	O4'-C1'	13.73	1.59	1.41
67	B1	1721	U	C2'-C1'	-13.73	1.38	1.53
21	A2	215	C	C2'-C1'	-13.73	1.38	1.53
67	B1	1834	C	C2'-C1'	-13.72	1.38	1.53
21	A2	736	A	C2'-C1'	13.72	1.68	1.53
67	B1	2484	C	C2'-C1'	-13.72	1.38	1.53
67	B1	1228	G	C2'-C1'	13.72	1.68	1.53
21	A2	132	G	P-O5'	-13.71	1.46	1.59
67	B1	2535	C	O4'-C1'	13.71	1.59	1.41
67	B1	1222	U	O4'-C1'	13.71	1.59	1.41
67	B1	2900	C	O4'-C1'	13.71	1.59	1.41
67	B1	777	A	C2'-C1'	13.71	1.68	1.53
67	B1	1164	C	O4'-C1'	13.71	1.59	1.41
21	A2	278	A	C2'-C1'	13.70	1.68	1.53
67	B1	474	G	O4'-C1'	13.70	1.59	1.41
21	A2	1219	C	O4'-C1'	13.69	1.59	1.41
67	B1	472	A	C2'-C1'	-13.69	1.38	1.53
67	B1	598	C	O4'-C1'	13.69	1.59	1.41
21	A2	1200	U	O4'-C1'	-13.69	1.23	1.41
67	B1	428	A	C2'-C1'	13.69	1.68	1.53
67	B1	336	C	O4'-C1'	13.68	1.59	1.41
67	B1	117	A	O4'-C1'	13.67	1.59	1.41
67	B1	1468	G	O4'-C1'	13.67	1.59	1.41
67	B1	1309	G	C2'-C1'	-13.67	1.38	1.53
67	B1	190	C	C2'-C1'	-13.66	1.38	1.53
21	A2	121	C	C2'-C1'	-13.66	1.38	1.53
21	A2	1195	U	C2'-C1'	-13.66	1.38	1.53
21	A2	263	C	C2'-C1'	-13.65	1.38	1.53
21	A2	628	G	C2'-C1'	-13.64	1.38	1.53
21	A2	633	C	C2'-C1'	-13.64	1.38	1.53
67	B1	2337	G	C2'-C1'	-13.64	1.38	1.53
67	B1	1364	C	O4'-C1'	13.63	1.59	1.41
67	B1	2486	A	O4'-C1'	13.63	1.59	1.41
21	A2	552	C	C2'-C1'	-13.63	1.38	1.53
67	B1	2666	G	C2'-C1'	-13.63	1.38	1.53
21	A2	1409	G	C2'-C1'	13.62	1.68	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	928	A	O4 ² -C1'	13.62	1.59	1.41
67	B1	2215	U	O4 ² -C1'	13.62	1.59	1.41
21	A2	613	C	C2 ² -C1'	-13.62	1.38	1.53
21	A2	565	C	O4 ² -C1'	13.61	1.59	1.41
21	A2	1021	C	O4 ² -C1'	13.60	1.59	1.41
67	B1	2295	C	O4 ² -C1'	13.60	1.59	1.41
21	A2	184	G	C2 ² -C1'	13.60	1.68	1.53
68	B3	6	G	C2 ² -C1'	-13.59	1.38	1.53
67	B1	1488	C	C2 ² -C1'	-13.59	1.38	1.53
11	A1	35	G	O4 ² -C1'	13.59	1.59	1.41
21	A2	943	C	O4 ² -C1'	13.59	1.59	1.41
67	B1	2338	A	O4 ² -C1'	13.59	1.59	1.41
67	B1	2721	C	O4 ² -C1'	13.59	1.59	1.41
67	B1	1916	U	O4 ² -C1'	13.58	1.59	1.41
21	A2	1100	G	O4 ² -C1'	13.57	1.59	1.41
21	A2	643	G	C2 ² -C1'	-13.56	1.38	1.53
67	B1	2715	A	C2 ² -C1'	-13.56	1.38	1.53
67	B1	2774	C	C2 ² -C1'	-13.55	1.38	1.53
21	A2	967	C	O4 ² -C1'	13.55	1.59	1.41
67	B1	1544	C	C2 ² -C1'	-13.55	1.38	1.53
67	B1	1724	A	O4 ² -C1'	13.54	1.59	1.41
67	B1	2353	C	C2 ² -C1'	-13.55	1.38	1.53
67	B1	2688	C	O4 ² -C1'	13.54	1.59	1.41
67	B1	3048	C	C2 ² -C1'	-13.54	1.38	1.53
67	B1	2158	G	C2 ² -C1'	-13.54	1.38	1.53
11	A1	3	G	C2 ² -C1'	13.54	1.68	1.53
67	B1	172	C	C2 ² -C1'	-13.53	1.38	1.53
68	B3	13	C	O4 ² -C1'	13.53	1.59	1.41
21	A2	738	C	O4 ² -C1'	13.52	1.59	1.41
67	B1	2300	C	O4 ² -C1'	13.52	1.59	1.41
67	B1	1454	G	O4 ² -C1'	-13.52	1.24	1.41
67	B1	1569	A	O5 ² -C5'	13.52	1.66	1.44
67	B1	2251	G	C2 ² -C1'	-13.52	1.38	1.53
21	A2	1329	C	C2 ² -C1'	-13.51	1.38	1.53
67	B1	2069	G	O4 ² -C1'	13.51	1.59	1.41
67	B1	2555	C	O4 ² -C1'	13.51	1.59	1.41
21	A2	1057	A	C2 ² -C1'	13.51	1.68	1.53
67	B1	823	G	C2 ² -C1'	-13.51	1.38	1.53
67	B1	2292	A	O4 ² -C1'	13.51	1.59	1.41
67	B1	2314	U	O4 ² -C1'	13.51	1.59	1.41
67	B1	544	A	O4 ² -C1'	13.50	1.59	1.41
21	A2	1211	A	C2 ² -C1'	13.50	1.68	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2750	C	C2'-C1'	-13.50	1.38	1.53
21	A2	425	C	O4'-C1'	13.49	1.59	1.41
27	A0	48	C	O4'-C1'	13.49	1.59	1.41
67	B1	743	A	C2'-C1'	-13.49	1.38	1.53
67	B1	2529	G	O4'-C1'	13.49	1.59	1.41
67	B1	1011	A	O4'-C1'	13.49	1.59	1.41
67	B1	2515	U	C2'-C1'	-13.49	1.38	1.53
21	A2	1196	A	O4'-C1'	13.49	1.59	1.41
21	A2	1424	G	O4'-C1'	13.49	1.59	1.41
67	B1	1478	G	C2'-C1'	-13.49	1.38	1.53
21	A2	512	U	C2'-C1'	-13.48	1.38	1.53
67	B1	2207	C	O4'-C1'	13.48	1.59	1.41
67	B1	681	C	C2'-C1'	-13.48	1.38	1.53
21	A2	674	C	O4'-C1'	13.47	1.59	1.41
21	A2	733	C	O4'-C1'	13.47	1.59	1.41
67	B1	1307	C	O4'-C1'	13.47	1.59	1.41
67	B1	2774	C	O4'-C1'	13.47	1.59	1.41
67	B1	1905	G	C2'-C1'	13.47	1.68	1.53
21	A2	750	C	O4'-C1'	13.46	1.59	1.41
21	A2	1237	G	C2'-C1'	-13.46	1.38	1.53
67	B1	396	G	C2'-C1'	-13.46	1.38	1.53
67	B1	766	G	C2'-C1'	-13.46	1.38	1.53
21	A2	967	C	C2'-C1'	-13.46	1.38	1.53
21	A2	1386	C	O4'-C1'	13.46	1.59	1.41
67	B1	1276	G	C2'-C1'	-13.45	1.38	1.53
67	B1	2283	C	C2'-C1'	-13.46	1.38	1.53
67	B1	138	U	O4'-C1'	13.45	1.59	1.41
67	B1	53	A	C2'-C1'	13.44	1.68	1.53
21	A2	72	C	C2'-C1'	-13.44	1.38	1.53
67	B1	39	C	O4'-C1'	13.44	1.59	1.41
67	B1	184	A	C2'-C1'	13.44	1.68	1.53
67	B1	1313	G	O4'-C1'	-13.44	1.24	1.41
21	A2	1263	C	O4'-C1'	13.43	1.59	1.41
21	A2	50	C	O4'-C1'	13.43	1.59	1.41
67	B1	2801	G	C2'-C1'	-13.43	1.38	1.53
67	B1	1070	G	O4'-C1'	13.42	1.59	1.41
67	B1	2801	G	O4'-C1'	13.42	1.59	1.41
67	B1	2101	A	O4'-C1'	13.41	1.59	1.41
67	B1	1835	A	O4'-C1'	13.41	1.59	1.41
67	B1	2662	G	C2'-C1'	-13.41	1.38	1.53
21	A2	292	U	C2'-C1'	-13.40	1.38	1.53
67	B1	81	G	C2'-C1'	-13.40	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	70	C	O4 ² -C1'	13.39	1.59	1.41
21	A2	355	C	C2 ² -C1'	-13.39	1.38	1.53
67	B1	1331	U	C2 ² -C1'	-13.39	1.38	1.53
21	A2	291	G	C2 ² -C1'	-13.38	1.38	1.53
21	A2	919	U	C2 ² -C1'	-13.38	1.38	1.53
21	A2	165	U	O4 ² -C1'	13.37	1.59	1.41
67	B1	120	G	C2 ² -C1'	-13.37	1.38	1.53
67	B1	1355	A	O4 ² -C1'	13.37	1.59	1.41
67	B1	557	G	C2 ² -C1'	-13.36	1.38	1.53
67	B1	2048	C	O4 ² -C1'	13.36	1.59	1.41
67	B1	202	A	C2 ² -C1'	13.36	1.68	1.53
67	B1	2834	C	O4 ² -C1'	13.36	1.59	1.41
67	B1	1225	A	C2 ² -C1'	-13.36	1.38	1.53
67	B1	1261	C	O4 ² -C1'	13.36	1.59	1.41
21	A2	564	C	O4 ² -C1'	13.35	1.59	1.41
21	A2	803	C	C2 ² -C1'	-13.35	1.38	1.53
67	B1	2317	G	C2 ² -C1'	-13.35	1.38	1.53
21	A2	163	C	C2 ² -C1'	-13.34	1.38	1.53
67	B1	1164	C	C2 ² -C1'	-13.34	1.38	1.53
67	B1	1131	G	C2 ² -C1'	-13.34	1.38	1.53
67	B1	720	C	C2 ² -C1'	-13.33	1.38	1.53
67	B1	2627	C	O4 ² -C1'	13.32	1.58	1.41
21	A2	59	C	O4 ² -C1'	13.32	1.58	1.41
67	B1	1095	A	C2 ² -C1'	-13.32	1.38	1.53
67	B1	2699	U	C2 ² -C1'	-13.32	1.38	1.53
21	A2	230	C	C2 ² -C1'	-13.32	1.38	1.53
21	A2	980	C	O4 ² -C1'	13.31	1.58	1.41
67	B1	2353	C	O4 ² -C1'	13.31	1.58	1.41
67	B1	937	A	O4 ² -C1'	13.31	1.58	1.41
67	B1	2796	C	O4 ² -C1'	13.30	1.58	1.41
67	B1	901	C	C2 ² -C1'	-13.30	1.38	1.53
67	B1	930	G	C2 ² -C1'	-13.30	1.38	1.53
67	B1	1462	G	C2 ² -C1'	-13.29	1.38	1.53
67	B1	2710	G	C2 ² -C1'	13.29	1.68	1.53
21	A2	262	G	O4 ² -C1'	13.29	1.58	1.41
21	A2	372	G	C2 ² -C1'	-13.29	1.38	1.53
21	A2	1170	C	O4 ² -C1'	13.29	1.58	1.41
67	B1	517	A	C2 ² -C1'	13.28	1.68	1.53
21	A2	236	C	O4 ² -C1'	13.27	1.58	1.41
67	B1	928	A	C2 ² -C1'	-13.27	1.38	1.53
67	B1	1270	G	C2 ² -C1'	-13.27	1.38	1.53
67	B1	2447	A	O4 ² -C1'	13.26	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2824	C	O4 ² -C1'	13.26	1.58	1.41
67	B1	1321	C	C2 ² -C1'	-13.26	1.38	1.53
68	B3	43	C	C2 ² -C1'	-13.26	1.38	1.53
21	A2	144	G	O4 ² -C1'	13.26	1.58	1.41
21	A2	1054	A	O4 ² -C1'	13.26	1.58	1.41
21	A2	1086	C	C2 ² -C1'	-13.26	1.38	1.53
67	B1	61	G	C2 ² -C1'	-13.26	1.38	1.53
21	A2	468	G	C2 ² -C1'	-13.25	1.38	1.53
67	B1	1545	C	C2 ² -C1'	-13.24	1.38	1.53
67	B1	2604	G	C2 ² -C1'	-13.24	1.38	1.53
67	B1	115	C	O4 ² -C1'	13.24	1.58	1.41
67	B1	32	C	O4 ² -C1'	13.24	1.58	1.41
67	B1	351	C	O4 ² -C1'	13.23	1.58	1.41
67	B1	1856	G	C2 ² -C1'	-13.23	1.38	1.53
67	B1	1906	G	O4 ² -C1'	-13.23	1.24	1.41
67	B1	740	C	O4 ² -C1'	13.23	1.58	1.41
67	B1	1158	G	O4 ² -C1'	13.23	1.58	1.41
67	B1	2772	U	O4 ² -C1'	13.22	1.58	1.41
67	B1	2091	U	O4 ² -C1'	13.22	1.58	1.41
67	B1	1388	U	O4 ² -C1'	13.22	1.58	1.41
21	A2	104	A	O4 ² -C1'	13.21	1.58	1.41
67	B1	1760	C	O4 ² -C1'	13.21	1.58	1.41
67	B1	2268	C	C2 ² -C1'	13.21	1.67	1.53
21	A2	189	C	O4 ² -C1'	13.20	1.58	1.41
67	B1	1913	C	O4 ² -C1'	13.20	1.58	1.41
67	B1	2791	C	O4 ² -C1'	13.19	1.58	1.41
67	B1	1115	A	O4 ² -C1'	13.19	1.58	1.41
67	B1	1023	C	O4 ² -C1'	13.19	1.58	1.41
21	A2	26	A	O4 ² -C1'	13.18	1.58	1.41
21	A2	1400	A	O4 ² -C1'	13.18	1.58	1.41
67	B1	2994	G	C2 ² -C1'	-13.18	1.38	1.53
67	B1	2311	C	O4 ² -C1'	13.17	1.58	1.41
21	A2	112	G	O4 ² -C1'	13.17	1.58	1.41
21	A2	1059	C	O4 ² -C1'	13.17	1.58	1.41
67	B1	1402	C	O4 ² -C1'	13.17	1.58	1.41
21	A2	271	G	C2 ² -C1'	-13.16	1.38	1.53
67	B1	2112	C	O4 ² -C1'	13.16	1.58	1.41
21	A2	481	C	O4 ² -C1'	13.16	1.58	1.41
67	B1	2198	U	C2 ² -C1'	-13.16	1.38	1.53
67	B1	2914	U	O4 ² -C1'	13.16	1.58	1.41
67	B1	953	G	C2 ² -C1'	13.15	1.67	1.53
67	B1	927	G	C2 ² -C1'	-13.15	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1637	C	O4 ² -C1'	13.15	1.58	1.41
67	B1	1328	G	O4 ² -C1'	13.15	1.58	1.41
67	B1	1735	G	C2 ² -C1'	13.15	1.67	1.53
21	A2	1039	C	C2 ² -C1'	-13.14	1.38	1.53
67	B1	731	C	O4 ² -C1'	13.14	1.58	1.41
21	A2	1388	G	C2 ² -C1'	-13.14	1.38	1.53
67	B1	1287	G	O4 ² -C1'	13.13	1.58	1.41
67	B1	439	G	O4 ² -C1'	13.13	1.58	1.41
67	B1	676	G	C2 ² -C1'	-13.12	1.39	1.53
67	B1	2833	G	O4 ² -C1'	13.12	1.58	1.41
67	B1	1259	G	O4 ² -C1'	13.12	1.58	1.41
21	A2	558	C	C2 ² -C1'	-13.12	1.39	1.53
67	B1	884	C	C2 ² -C1'	-13.12	1.39	1.53
67	B1	2214	U	O4 ² -C1'	13.11	1.58	1.41
67	B1	1100	G	C2 ² -C1'	-13.11	1.39	1.53
21	A2	943	C	C2 ² -C1'	-13.11	1.39	1.53
67	B1	647	G	C2 ² -C1'	-13.11	1.39	1.53
67	B1	513	C	O4 ² -C1'	13.11	1.58	1.41
67	B1	694	A	C2 ² -C1'	13.11	1.67	1.53
67	B1	1649	G	C2 ² -C1'	-13.11	1.39	1.53
68	B3	40	G	O4 ² -C1'	13.11	1.58	1.41
21	A2	1020	G	O4 ² -C1'	13.10	1.58	1.41
67	B1	2502	C	O4 ² -C1'	13.10	1.58	1.41
27	A0	47	U	O4 ² -C1'	-13.10	1.24	1.41
67	B1	1559	A	C2 ² -C1'	-13.10	1.39	1.53
67	B1	1909	C	C2 ² -C1'	-13.09	1.39	1.53
67	B1	1271	G	C2 ² -C1'	-13.09	1.39	1.53
21	A2	862	C	O4 ² -C1'	13.09	1.58	1.41
67	B1	2015	G	O4 ² -C1'	13.08	1.58	1.41
67	B1	1338	G	C2 ² -C1'	-13.07	1.39	1.53
21	A2	56	A	C4 ² -C3'	13.07	1.67	1.53
21	A2	204	G	C2 ² -C1'	-13.07	1.39	1.53
67	B1	729	A	O4 ² -C1'	13.06	1.58	1.41
21	A2	96	G	O4 ² -C1'	13.06	1.58	1.41
21	A2	299	G	O4 ² -C1'	-13.06	1.24	1.41
67	B1	494	C	O4 ² -C1'	13.06	1.58	1.41
67	B1	2599	C	O4 ² -C1'	13.06	1.58	1.41
67	B1	1233	U	C2 ² -C1'	13.06	1.67	1.53
67	B1	732	G	C2 ² -C1'	-13.05	1.39	1.53
67	B1	1736	G	C2 ² -C1'	-13.05	1.39	1.53
21	A2	516	A	C2 ² -C1'	-13.05	1.39	1.53
21	A2	1308	U	O4 ² -C1'	13.05	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1121	C	C2'-C1'	-13.05	1.39	1.53
67	B1	2541	U	O4'-C1'	13.05	1.58	1.41
67	B1	125	C	C2'-C1'	-13.04	1.39	1.53
21	A2	324	C	O4'-C1'	-13.04	1.24	1.41
67	B1	826	C	C2'-C1'	-13.04	1.39	1.53
67	B1	103	A	C2'-C1'	-13.03	1.39	1.53
67	B1	449	G	O4'-C1'	13.03	1.58	1.41
21	A2	1336	U	O4'-C1'	-13.03	1.24	1.41
67	B1	2556	C	O4'-C1'	13.03	1.58	1.41
67	B1	359	C	O4'-C1'	13.02	1.58	1.41
21	A2	1440	G	C2'-C1'	13.02	1.67	1.53
27	A0	9	A	C2'-C1'	13.02	1.67	1.53
21	A2	1029	G	C2'-C1'	13.01	1.67	1.53
67	B1	2211	C	O4'-C1'	13.01	1.58	1.41
21	A2	48	G	C2'-C1'	-13.00	1.39	1.53
67	B1	2659	G	C2'-C1'	-13.00	1.39	1.53
11	A1	17	C	O4'-C1'	13.00	1.58	1.41
21	A2	83	C	O4'-C1'	13.00	1.58	1.41
67	B1	1523	A	C2'-C1'	13.00	1.67	1.53
67	B1	806	C	C2'-C1'	-12.99	1.39	1.53
67	B1	2081	C	C2'-C1'	-12.99	1.39	1.53
67	B1	1278	C	C2'-C1'	-12.99	1.39	1.53
67	B1	957	C	C2'-C1'	-12.99	1.39	1.53
11	A1	22	A	C2'-C1'	-12.98	1.39	1.53
67	B1	568	A	C2'-C1'	-12.98	1.39	1.53
21	A2	548	A	O4'-C1'	12.98	1.58	1.41
67	B1	1795	C	O4'-C1'	12.98	1.58	1.41
67	B1	2197	U	O4'-C1'	12.98	1.58	1.41
67	B1	2967	C	O4'-C1'	12.98	1.58	1.41
67	B1	2371	A	C2'-C1'	-12.97	1.39	1.53
21	A2	1353	C	C2'-C1'	-12.96	1.39	1.53
21	A2	163	C	O4'-C1'	12.96	1.58	1.41
67	B1	2327	C	O4'-C1'	12.96	1.58	1.41
67	B1	1500	C	C2'-C1'	-12.96	1.39	1.53
67	B1	1674	G	O4'-C1'	-12.96	1.24	1.41
67	B1	301	G	O4'-C1'	12.95	1.58	1.41
21	A2	831	A	O4'-C1'	12.95	1.58	1.41
21	A2	982	U	C2'-C1'	-12.94	1.39	1.53
21	A2	1410	G	C2'-C1'	-12.94	1.39	1.53
21	A2	260	C	C2'-C1'	-12.94	1.39	1.53
67	B1	1374	G	C2'-C1'	-12.94	1.39	1.53
67	B1	2167	C	O4'-C1'	12.94	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2920	C	C2'-C1'	-12.93	1.39	1.53
67	B1	2613	C	O4'-C1'	12.93	1.58	1.41
67	B1	1732	C	O4'-C1'	12.93	1.58	1.41
21	A2	1394	G	C2'-C1'	-12.93	1.39	1.53
67	B1	2065	C	O4'-C1'	12.93	1.58	1.41
21	A2	160	C	C2'-C1'	-12.92	1.39	1.53
67	B1	2257	A	O4'-C1'	-12.92	1.24	1.41
67	B1	1525	G	O4'-C1'	12.91	1.58	1.41
11	A1	61	U	C2'-C1'	-12.91	1.39	1.53
67	B1	2978	G	C2'-C1'	-12.91	1.39	1.53
21	A2	168	G	O4'-C1'	12.90	1.58	1.41
67	B1	844	C	C2'-C1'	-12.90	1.39	1.53
21	A2	46	A	O4'-C1'	-12.90	1.24	1.41
67	B1	849	C	C2'-C1'	-12.89	1.39	1.53
67	B1	2610	C	O4'-C1'	12.89	1.58	1.41
67	B1	2938	G	C2'-C1'	-12.88	1.39	1.53
67	B1	431	U	O4'-C1'	12.88	1.58	1.41
11	A1	41	C	O4'-C1'	12.88	1.58	1.41
21	A2	762	G	C2'-C1'	12.87	1.67	1.53
21	A2	1202	G	C2'-C1'	-12.87	1.39	1.53
21	A2	302	A	C2'-C1'	12.87	1.67	1.53
68	B3	111	G	C2'-C1'	-12.87	1.39	1.53
21	A2	375	G	C2'-C1'	-12.87	1.39	1.53
67	B1	2924	G	C2'-C1'	12.87	1.67	1.53
21	A2	1431	C	O4'-C1'	12.87	1.58	1.41
67	B1	2940	C	O4'-C1'	12.86	1.58	1.41
67	B1	1235	A	C2'-C1'	12.86	1.67	1.53
67	B1	281	G	C2'-C1'	-12.84	1.39	1.53
67	B1	952	C	O4'-C1'	12.84	1.58	1.41
67	B1	707	U	C2'-C1'	-12.84	1.39	1.53
68	B3	58	C	O4'-C1'	12.84	1.58	1.41
21	A2	1369	C	O4'-C1'	12.83	1.58	1.41
67	B1	2409	C	O4'-C1'	12.82	1.58	1.41
67	B1	1754	A	O4'-C1'	-12.82	1.25	1.41
21	A2	672	G	C2'-C1'	-12.81	1.39	1.53
21	A2	902	U	C2'-C1'	-12.81	1.39	1.53
67	B1	1344	C	O4'-C1'	12.81	1.58	1.41
67	B1	1297	C	O4'-C1'	12.80	1.58	1.41
21	A2	200	G	C2'-C1'	12.80	1.67	1.53
67	B1	660	U	C2'-C1'	-12.80	1.39	1.53
67	B1	753	A	C2'-C1'	12.80	1.67	1.53
67	B1	1303	C	C2'-C1'	-12.80	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	78	C	O4 ² -C1'	12.80	1.58	1.41
21	A2	830	A	C2 ² -C1'	-12.80	1.39	1.53
21	A2	1465	C	O4 ² -C1'	12.79	1.58	1.41
21	A2	329	G	O4 ² -C1'	12.79	1.58	1.41
67	B1	1192	G	C2 ² -C1'	-12.79	1.39	1.53
67	B1	811	C	C2 ² -C1'	-12.78	1.39	1.53
68	B3	22	C	C2 ² -C1'	12.78	1.67	1.53
21	A2	958	G	C2 ² -C1'	12.78	1.67	1.53
67	B1	2071	C	C2 ² -C1'	-12.78	1.39	1.53
21	A2	473	A	O4 ² -C1'	12.77	1.58	1.41
67	B1	2651	G	O4 ² -C1'	12.77	1.58	1.41
67	B1	955	A	C2 ² -C1'	12.77	1.67	1.53
67	B1	2853	A	C2 ² -C1'	-12.77	1.39	1.53
67	B1	51	G	O4 ² -C1'	12.76	1.58	1.41
21	A2	394	C	P-O5'	-12.76	1.47	1.59
67	B1	2875	C	C2 ² -C1'	-12.75	1.39	1.53
67	B1	89	C	O4 ² -C1'	12.75	1.58	1.41
27	A0	40	C	O4 ² -C1'	12.75	1.58	1.41
67	B1	1864	G	O4 ² -C1'	-12.75	1.25	1.41
68	B3	69	C	O4 ² -C1'	12.75	1.58	1.41
67	B1	1760	C	C2 ² -C1'	-12.74	1.39	1.53
67	B1	2219	A	C2 ² -C1'	-12.74	1.39	1.53
21	A2	1258	C	C2 ² -C1'	12.74	1.67	1.53
67	B1	1669	A	C2 ² -C1'	-12.74	1.39	1.53
21	A2	821	G	C2 ² -C1'	12.73	1.67	1.53
27	A0	7	G	C2 ² -C1'	-12.73	1.39	1.53
21	A2	1410	G	O4 ² -C1'	12.72	1.58	1.41
67	B1	1201	G	O4 ² -C1'	12.72	1.58	1.41
67	B1	2159	C	O4 ² -C1'	12.72	1.58	1.41
67	B1	2516	G	O4 ² -C1'	12.72	1.58	1.41
21	A2	631	C	O4 ² -C1'	12.71	1.58	1.41
67	B1	1492	C	O4 ² -C1'	12.71	1.58	1.41
27	A0	2	C	O4 ² -C1'	12.71	1.58	1.41
67	B1	415	U	C2 ² -C1'	12.70	1.67	1.53
21	A2	895	C	O4 ² -C1'	12.69	1.58	1.41
67	B1	254	A	O4 ² -C1'	12.69	1.58	1.41
67	B1	1855	G	C2 ² -C1'	-12.69	1.39	1.53
67	B1	498	U	C2 ² -C1'	-12.69	1.39	1.53
67	B1	2545	A	C2 ² -C1'	-12.69	1.39	1.53
67	B1	1059	C	O4 ² -C1'	12.68	1.58	1.41
67	B1	710	G	C2 ² -C1'	-12.68	1.39	1.53
67	B1	90	A	O4 ² -C1'	12.67	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1298	C	C2'-C1'	-12.67	1.39	1.53
21	A2	1402	C	O4'-C1'	12.67	1.58	1.41
67	B1	2395	C	O4'-C1'	12.67	1.58	1.41
67	B1	2612	A	C2'-C1'	12.67	1.67	1.53
67	B1	750	C	O4'-C1'	12.66	1.58	1.41
67	B1	1082	A	O4'-C1'	12.66	1.58	1.41
67	B1	1084	G	O4'-C1'	12.66	1.58	1.41
67	B1	273	G	C2'-C1'	-12.66	1.39	1.53
11	A1	67	C	O4'-C1'	12.66	1.58	1.41
67	B1	903	C	O4'-C1'	12.66	1.58	1.41
67	B1	2263	G	C2'-C1'	12.66	1.67	1.53
21	A2	1125	C	C2'-C1'	-12.65	1.39	1.53
67	B1	980	G	C2'-C1'	-12.65	1.39	1.53
67	B1	1172	U	O4'-C1'	12.65	1.58	1.41
68	B3	69	C	C2'-C1'	-12.65	1.39	1.53
67	B1	2216	G	C2'-C1'	12.64	1.67	1.53
67	B1	2818	C	C2'-C1'	-12.64	1.39	1.53
21	A2	699	C	O4'-C1'	12.64	1.58	1.41
21	A2	1491	C	C2'-C1'	-12.63	1.39	1.53
67	B1	1984	G	O4'-C1'	12.63	1.58	1.41
67	B1	82	C	C2'-C1'	-12.63	1.39	1.53
67	B1	128	C	C2'-C1'	-12.63	1.39	1.53
67	B1	824	C	O4'-C1'	12.63	1.58	1.41
67	B1	993	G	C2'-C1'	-12.62	1.39	1.53
21	A2	1017	U	O4'-C1'	12.61	1.58	1.41
67	B1	741	G	C2'-C1'	-12.61	1.39	1.53
68	B3	40	G	C2'-C1'	-12.61	1.39	1.53
67	B1	1102	C	O4'-C1'	12.61	1.58	1.41
67	B1	1386	G	C2'-C1'	-12.60	1.39	1.53
67	B1	125	C	O4'-C1'	12.60	1.58	1.41
67	B1	2765	C	C2'-C1'	-12.60	1.39	1.53
21	A2	326	C	C2'-C1'	-12.58	1.39	1.53
21	A2	875	G	C2'-C1'	-12.58	1.39	1.53
67	B1	112	U	C2'-C1'	-12.58	1.39	1.53
67	B1	867	C	C2'-C1'	12.58	1.67	1.53
21	A2	689	C	C2'-C1'	-12.57	1.39	1.53
67	B1	222	A	C2'-C1'	-12.57	1.39	1.53
67	B1	2866	A	C2'-C1'	-12.57	1.39	1.53
67	B1	2972	G	C2'-C1'	-12.57	1.39	1.53
21	A2	1314	C	C2'-C1'	-12.56	1.39	1.53
67	B1	207	A	O4'-C1'	12.56	1.57	1.41
67	B1	826	C	O4'-C1'	12.56	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	74	U	O4 ² -C1'	12.56	1.57	1.41
67	B1	1057	C	O4 ² -C1'	12.56	1.57	1.41
67	B1	2837	C	O4 ² -C1'	12.56	1.57	1.41
67	B1	1138	C	O4 ² -C1'	12.55	1.57	1.41
67	B1	1704	C	C2 ² -C1'	-12.56	1.39	1.53
67	B1	374	C	C2 ² -C1'	-12.55	1.39	1.53
67	B1	2293	G	C2 ² -C1'	12.55	1.67	1.53
67	B1	1390	U	C2 ² -C1'	12.54	1.67	1.53
67	B1	523	C	C2 ² -C1'	-12.54	1.39	1.53
67	B1	349	A	C2 ² -C1'	12.54	1.67	1.53
67	B1	1676	G	C2 ² -C1'	-12.54	1.39	1.53
21	A2	648	A	C2 ² -C1'	-12.53	1.39	1.53
21	A2	976	A	C2 ² -C1'	12.53	1.67	1.53
27	A0	39	U	O4 ² -C1'	12.53	1.57	1.41
67	B1	1223	A	O4 ² -C1'	12.53	1.57	1.41
67	B1	2342	C	O4 ² -C1'	12.53	1.57	1.41
67	B1	2279	G	C2 ² -C1'	-12.52	1.39	1.53
21	A2	619	A	C2 ² -C1'	12.52	1.67	1.53
21	A2	771	G	C2 ² -C1'	-12.52	1.39	1.53
67	B1	2054	G	C2 ² -C1'	-12.52	1.39	1.53
67	B1	2630	C	O4 ² -C1'	12.52	1.57	1.41
21	A2	610	G	C2 ² -C1'	-12.52	1.39	1.53
21	A2	1197	C	C2 ² -C1'	-12.51	1.39	1.53
21	A2	1463	A	O4 ² -C1'	12.51	1.57	1.41
67	B1	1472	U	O4 ² -C1'	12.51	1.57	1.41
67	B1	210	A	C2 ² -C1'	-12.50	1.39	1.53
67	B1	367	G	O4 ² -C1'	-12.50	1.25	1.41
21	A2	696	G	C2 ² -C1'	-12.50	1.39	1.53
67	B1	12	C	O4 ² -C1'	12.50	1.57	1.41
67	B1	768	C	O4 ² -C1'	12.49	1.57	1.41
67	B1	2987	U	C2 ² -C1'	-12.49	1.39	1.53
21	A2	981	U	C2 ² -C1'	-12.49	1.39	1.53
27	A0	76	A	C2 ² -C1'	12.49	1.67	1.53
67	B1	74	A	C2 ² -C1'	-12.49	1.39	1.53
67	B1	936	G	O4 ² -C1'	12.48	1.57	1.41
67	B1	1616	A	O4 ² -C1'	-12.48	1.25	1.41
67	B1	1820	C	O4 ² -C1'	12.48	1.57	1.41
67	B1	2299	G	C2 ² -C1'	-12.48	1.39	1.53
67	B1	1011	A	C2 ² -C1'	-12.48	1.39	1.53
67	B1	767	G	C2 ² -C1'	-12.47	1.39	1.53
67	B1	1089	C	O4 ² -C1'	12.47	1.57	1.41
67	B1	2907	C	O4 ² -C1'	12.47	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	459	C	O4 ² -C1'	12.47	1.57	1.41
67	B1	2694	C	C2 ² -C1'	-12.46	1.39	1.53
67	B1	1817	C	O4 ² -C1'	12.46	1.57	1.41
67	B1	1931	G	C2 ² -C1'	-12.46	1.39	1.53
21	A2	1340	U	O4 ² -C1'	12.46	1.57	1.41
67	B1	2322	A	O4 ² -C1'	12.46	1.57	1.41
67	B1	1913	C	C2 ² -C1'	-12.45	1.39	1.53
67	B1	906	G	C2 ² -C1'	-12.44	1.39	1.53
67	B1	1758	U	C2 ² -C1'	-12.44	1.39	1.53
67	B1	2392	A	O4 ² -C1'	12.44	1.57	1.41
21	A2	365	C	O4 ² -C1'	12.44	1.57	1.41
21	A2	69	U	C2 ² -C1'	-12.44	1.39	1.53
67	B1	1407	A	C2 ² -C1'	12.44	1.67	1.53
67	B1	119	U	C2 ² -C1'	-12.43	1.39	1.53
67	B1	2246	G	C2 ² -C1'	-12.43	1.39	1.53
67	B1	347	G	C2 ² -C1'	-12.42	1.39	1.53
67	B1	2363	G	C2 ² -C1'	12.42	1.67	1.53
21	A2	110	C	O4 ² -C1'	12.42	1.57	1.41
21	A2	801	A	O4 ² -C1'	-12.40	1.25	1.41
21	A2	1449	G	O4 ² -C1'	12.40	1.57	1.41
21	A2	1451	C	O4 ² -C1'	12.40	1.57	1.41
21	A2	130	G	C2 ² -C1'	12.40	1.67	1.53
21	A2	563	U	O4 ² -C1'	12.40	1.57	1.41
21	A2	1303	C	O4 ² -C1'	12.39	1.57	1.41
67	B1	670	G	C2 ² -C1'	-12.39	1.39	1.53
67	B1	2052	A	O4 ² -C1'	-12.39	1.25	1.41
21	A2	393	A	C2 ² -C1'	12.39	1.67	1.53
67	B1	434	G	O4 ² -C1'	12.39	1.57	1.41
21	A2	497	C	C2 ² -C1'	-12.39	1.39	1.53
67	B1	2448	A	O4 ² -C1'	-12.39	1.25	1.41
67	B1	2923	G	C2 ² -C1'	12.39	1.67	1.53
67	B1	1520	G	C2 ² -C1'	-12.38	1.39	1.53
67	B1	1494	U	C2 ² -C1'	12.38	1.67	1.53
67	B1	1428	G	C2 ² -C1'	-12.38	1.39	1.53
67	B1	1908	C	O4 ² -C1'	12.36	1.57	1.41
67	B1	1250	A	C2 ² -C1'	12.36	1.67	1.53
21	A2	505	U	C2 ² -C1'	12.35	1.67	1.53
67	B1	2579	G	C2 ² -C1'	12.35	1.67	1.53
21	A2	71	C	O4 ² -C1'	12.35	1.57	1.41
21	A2	1044	A	O4 ² -C1'	12.35	1.57	1.41
67	B1	451	C	O4 ² -C1'	12.34	1.57	1.41
67	B1	2800	U	C2 ² -C1'	12.33	1.67	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	127	G	O4 ² -C1'	12.33	1.57	1.41
67	B1	1481	G	O4 ² -C1'	12.33	1.57	1.41
21	A2	759	C	O4 ² -C1'	12.33	1.57	1.41
21	A2	759	C	C2 ² -C1'	-12.32	1.39	1.53
67	B1	1305	C	O4 ² -C1'	12.31	1.57	1.41
67	B1	1231	C	C2 ² -C1'	-12.31	1.39	1.53
67	B1	1933	U	C2 ² -C1'	-12.31	1.39	1.53
67	B1	1593	C	C2 ² -C1'	-12.30	1.39	1.53
21	A2	764	C	C2 ² -C1'	-12.30	1.39	1.53
21	A2	1152	C	O4 ² -C1'	12.30	1.57	1.41
67	B1	1666	G	C2 ² -C1'	-12.30	1.39	1.53
67	B1	975	C	O4 ² -C1'	12.30	1.57	1.41
67	B1	852	A	C2 ² -C1'	-12.29	1.39	1.53
67	B1	2514	C	O4 ² -C1'	12.29	1.57	1.41
67	B1	666	A	O4 ² -C1'	12.29	1.57	1.41
67	B1	2776	A	O4 ² -C1'	12.29	1.57	1.41
21	A2	335	G	C2 ² -C1'	-12.28	1.39	1.53
21	A2	670	C	O4 ² -C1'	12.28	1.57	1.41
67	B1	2675	C	C2 ² -C1'	-12.28	1.39	1.53
67	B1	211	A	O4 ² -C1'	12.28	1.57	1.41
67	B1	94	A	C2 ² -C1'	12.27	1.66	1.53
67	B1	597	C	O4 ² -C1'	12.27	1.57	1.41
67	B1	1193	G	O4 ² -C1'	12.27	1.57	1.41
21	A2	1136	A	C2 ² -C1'	-12.27	1.39	1.53
67	B1	855	G	O4 ² -C1'	-12.27	1.25	1.41
67	B1	1502	C	O4 ² -C1'	12.27	1.57	1.41
67	B1	1127	C	O4 ² -C1'	12.26	1.57	1.41
21	A2	1317	G	C2 ² -C1'	-12.26	1.39	1.53
67	B1	2103	C	C2 ² -C1'	-12.26	1.39	1.53
67	B1	2598	C	C2 ² -C1'	-12.26	1.39	1.53
21	A2	526	A	C2 ² -C1'	-12.25	1.39	1.53
67	B1	1982	C	C2 ² -C1'	-12.25	1.39	1.53
67	B1	1656	C	O4 ² -C1'	12.25	1.57	1.41
67	B1	1945	C	O4 ² -C1'	12.25	1.57	1.41
67	B1	370	A	C2 ² -C1'	-12.25	1.39	1.53
67	B1	2454	G	C2 ² -C1'	-12.25	1.39	1.53
67	B1	922	C	O4 ² -C1'	12.24	1.57	1.41
67	B1	2118	C	C2 ² -C1'	12.24	1.66	1.53
67	B1	2085	C	O4 ² -C1'	12.24	1.57	1.41
67	B1	300	U	O4 ² -C1'	12.24	1.57	1.41
67	B1	2004	A	C2 ² -C1'	-12.23	1.39	1.53
67	B1	1896	U	C2 ² -C1'	12.23	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2838	U	C2'-C1'	-12.23	1.39	1.53
67	B1	1030	C	O4'-C1'	12.22	1.57	1.41
67	B1	1348	G	C2'-C1'	12.22	1.66	1.53
67	B1	2895	G	O4'-C1'	12.22	1.57	1.41
67	B1	2962	A	C2'-C1'	-12.22	1.40	1.53
21	A2	1392	G	C2'-C1'	-12.22	1.40	1.53
21	A2	1310	C	O4'-C1'	12.22	1.57	1.41
21	A2	31	U	O4'-C1'	12.21	1.57	1.41
67	B1	1263	C	C2'-C1'	-12.20	1.40	1.53
21	A2	1227	A	C2'-C1'	-12.20	1.40	1.53
67	B1	1522	A	C2'-C1'	12.20	1.66	1.53
21	A2	1295	C	O4'-C1'	12.20	1.57	1.41
67	B1	2868	C	O4'-C1'	12.20	1.57	1.41
21	A2	511	C	O4'-C1'	12.20	1.57	1.41
21	A2	751	C	C2'-C1'	-12.20	1.40	1.53
67	B1	1335	C	O4'-C1'	12.19	1.57	1.41
21	A2	533	C	C2'-C1'	-12.19	1.40	1.53
67	B1	2192	G	C2'-C1'	-12.19	1.40	1.53
67	B1	1738	A	C2'-C1'	12.19	1.66	1.53
21	A2	645	G	C2'-C1'	12.18	1.66	1.53
21	A2	181	G	O4'-C1'	12.18	1.57	1.41
67	B1	2677	U	O4'-C1'	12.18	1.57	1.41
67	B1	1584	G	C2'-C1'	-12.17	1.40	1.53
67	B1	2842	C	O4'-C1'	12.16	1.57	1.41
21	A2	350	G	C2'-C1'	-12.16	1.40	1.53
67	B1	2792	G	C2'-C1'	-12.16	1.40	1.53
67	B1	123	A	C2'-C1'	-12.16	1.40	1.53
21	A2	1367	C	O4'-C1'	12.16	1.57	1.41
67	B1	798	G	C2'-C1'	-12.16	1.40	1.53
67	B1	1156	G	O4'-C1'	12.16	1.57	1.41
67	B1	1967	G	C2'-C1'	-12.15	1.40	1.53
68	B3	99	G	C2'-C1'	-12.15	1.40	1.53
67	B1	2722	G	O4'-C1'	12.15	1.57	1.41
21	A2	830	A	O4'-C1'	12.14	1.57	1.41
67	B1	2707	G	C2'-C1'	-12.14	1.40	1.53
67	B1	1948	A	O4'-C1'	12.14	1.57	1.41
67	B1	1121	C	O4'-C1'	12.14	1.57	1.41
21	A2	532	C	O4'-C1'	12.13	1.57	1.41
67	B1	1244	C	C2'-C1'	12.13	1.66	1.53
21	A2	342	G	C2'-C1'	-12.13	1.40	1.53
21	A2	953	C	O4'-C1'	12.13	1.57	1.41
67	B1	1545	C	O4'-C1'	12.12	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	857	C	C2'-C1'	-12.12	1.40	1.53
67	B1	2879	G	O4'-C1'	12.12	1.57	1.41
67	B1	2431	C	O4'-C1'	12.11	1.57	1.41
68	B3	76	U	C2'-C1'	12.10	1.66	1.53
11	A1	26	C	C2'-C1'	-12.10	1.40	1.53
21	A2	292	U	O4'-C1'	12.10	1.57	1.41
67	B1	730	C	O4'-C1'	12.09	1.57	1.41
68	B3	28	C	C2'-C1'	-12.09	1.40	1.53
67	B1	797	C	O4'-C1'	12.09	1.57	1.41
21	A2	369	A	O4'-C1'	12.08	1.57	1.41
21	A2	794	A	C2'-C1'	-12.08	1.40	1.53
67	B1	961	C	O4'-C1'	12.08	1.57	1.41
67	B1	1550	C	O4'-C1'	12.08	1.57	1.41
18	AF	217	MET	C-O	-12.08	1.00	1.23
67	B1	84	A	C2'-C1'	-12.07	1.40	1.53
67	B1	1445	G	C2'-C1'	-12.06	1.40	1.53
67	B1	2544	C	C2'-C1'	-12.06	1.40	1.53
21	A2	167	G	O4'-C1'	12.06	1.57	1.41
55	Bh	24	ILE	C-O	-12.06	1.00	1.23
67	B1	1593	C	O4'-C1'	12.06	1.57	1.41
67	B1	1736	G	O4'-C1'	12.06	1.57	1.41
67	B1	1474	A	C2'-C1'	-12.06	1.40	1.53
67	B1	2223	G	O4'-C1'	-12.05	1.25	1.41
67	B1	2436	A	C2'-C1'	-12.05	1.40	1.53
68	B3	31	U	O4'-C1'	12.05	1.57	1.41
67	B1	1566	G	C3'-C2'	12.05	1.66	1.52
67	B1	66	C	C2'-C1'	-12.04	1.40	1.53
67	B1	500	C	C2'-C1'	-12.04	1.40	1.53
21	A2	819	G	C2'-C1'	-12.04	1.40	1.53
67	B1	2446	C	C2'-C1'	-12.04	1.40	1.53
67	B1	2433	U	C2'-C1'	-12.04	1.40	1.53
67	B1	2783	C	O4'-C1'	12.04	1.57	1.41
21	A2	1028	C	C2'-C1'	-12.03	1.40	1.53
55	Bh	24	ILE	C-OXT	-12.03	1.00	1.23
67	B1	882	U	C2'-C1'	-12.03	1.40	1.53
21	A2	1188	C	C2'-C1'	-12.03	1.40	1.53
67	B1	1379	A	C2'-C1'	12.03	1.66	1.53
67	B1	2816	C	O4'-C1'	12.02	1.57	1.41
67	B1	827	G	C2'-C1'	-12.02	1.40	1.53
67	B1	484	C	O4'-C1'	12.02	1.57	1.41
21	A2	332	C	C2'-C1'	-12.01	1.40	1.53
67	B1	2191	U	C2'-C1'	-12.01	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2867	U	O4 ² -C1'	12.00	1.57	1.41
67	B1	546	C	O4 ² -C1'	11.99	1.57	1.41
21	A2	709	G	C2 ² -C1'	11.99	1.66	1.53
21	A2	634	C	O4 ² -C1'	11.99	1.57	1.41
67	B1	1184	U	O4 ² -C1'	-11.98	1.26	1.41
21	A2	387	G	O4 ² -C1'	11.98	1.57	1.41
67	B1	112	U	O4 ² -C1'	11.97	1.57	1.41
67	B1	257	G	C2 ² -C1'	-11.96	1.40	1.53
67	B1	1902	G	O4 ² -C1'	11.96	1.57	1.41
21	A2	1435	G	C2 ² -C1'	-11.96	1.40	1.53
67	B1	2044	C	O4 ² -C1'	11.96	1.57	1.41
21	A2	834	C	O4 ² -C1'	11.96	1.57	1.41
67	B1	2218	C	O4 ² -C1'	11.96	1.57	1.41
21	A2	632	C	O4 ² -C1'	11.95	1.57	1.41
67	B1	2143	C	C2 ² -C1'	-11.94	1.40	1.53
21	A2	109	U	C2 ² -C1'	-11.94	1.40	1.53
21	A2	673	C	C2 ² -C1'	-11.94	1.40	1.53
67	B1	460	C	C2 ² -C1'	-11.94	1.40	1.53
67	B1	1441	C	C2 ² -C1'	-11.93	1.40	1.53
21	A2	264	C	O4 ² -C1'	11.93	1.57	1.41
67	B1	2078	A	C2 ² -C1'	11.93	1.66	1.53
67	B1	2249	A	C2 ² -C1'	11.92	1.66	1.53
67	B1	2474	A	O4 ² -C1'	11.92	1.57	1.41
67	B1	1829	C	C2 ² -C1'	-11.92	1.40	1.53
67	B1	676	G	O4 ² -C1'	11.91	1.57	1.41
21	A2	1069	G	C2 ² -C1'	-11.91	1.40	1.53
21	A2	698	A	O4 ² -C1'	11.91	1.57	1.41
67	B1	2777	G	C2 ² -C1'	-11.91	1.40	1.53
67	B1	2523	C	C2 ² -C1'	-11.90	1.40	1.53
21	A2	1367	C	C2 ² -C1'	-11.90	1.40	1.53
67	B1	2098	C	C2 ² -C1'	-11.90	1.40	1.53
67	B1	2889	A	C2 ² -C1'	-11.89	1.40	1.53
68	B3	3	G	O4 ² -C1'	11.89	1.57	1.41
68	B3	67	U	C2 ² -C1'	11.89	1.66	1.53
67	B1	346	U	C2 ² -C1'	-11.88	1.40	1.53
67	B1	2405	U	C2 ² -C1'	-11.88	1.40	1.53
67	B1	980	G	O4 ² -C1'	11.88	1.57	1.41
67	B1	1428	G	O4 ² -C1'	11.88	1.57	1.41
67	B1	575	G	O4 ² -C1'	11.88	1.57	1.41
21	A2	1131	G	C2 ² -C1'	-11.87	1.40	1.53
21	A2	1176	C	C2 ² -C1'	-11.87	1.40	1.53
67	B1	1800	G	C2 ² -C1'	-11.87	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1902	G	C2'-C1'	-11.87	1.40	1.53
21	A2	1214	G	C2'-C1'	-11.86	1.40	1.53
67	B1	30	G	C2'-C1'	-11.86	1.40	1.53
67	B1	830	G	C2'-C1'	-11.86	1.40	1.53
67	B1	2152	G	C2'-C1'	11.86	1.66	1.53
21	A2	1207	G	O4'-C1'	-11.86	1.26	1.41
11	A1	56	U	C2'-C1'	-11.86	1.40	1.53
21	A2	1404	C	C2'-C1'	-11.86	1.40	1.53
67	B1	362	A	O4'-C1'	-11.86	1.26	1.41
67	B1	2370	C	C2'-C1'	11.86	1.66	1.53
67	B1	2687	A	C2'-C1'	11.86	1.66	1.53
67	B1	104	C	O4'-C1'	11.86	1.57	1.41
67	B1	2391	G	C2'-C1'	-11.86	1.40	1.53
67	B1	1110	A	C2'-C1'	-11.85	1.40	1.53
67	B1	2906	C	O4'-C1'	11.85	1.57	1.41
67	B1	225	C	O4'-C1'	11.85	1.57	1.41
67	B1	578	C	O4'-C1'	11.85	1.57	1.41
21	A2	1192	C	O4'-C1'	11.85	1.57	1.41
67	B1	2219	A	O4'-C1'	11.85	1.57	1.41
67	B1	2865	C	O4'-C1'	11.84	1.57	1.41
67	B1	1327	C	O4'-C1'	11.84	1.57	1.41
67	B1	2658	G	O4'-C1'	11.84	1.57	1.41
21	A2	1333	G	C2'-C1'	11.84	1.66	1.53
67	B1	1537	U	C2'-C1'	-11.83	1.40	1.53
67	B1	2461	C	O4'-C1'	11.82	1.57	1.41
21	A2	627	G	O4'-C1'	11.82	1.57	1.41
67	B1	269	C	O4'-C1'	11.81	1.57	1.41
67	B1	484	C	C2'-C1'	-11.81	1.40	1.53
67	B1	306	G	C2'-C1'	-11.81	1.40	1.53
67	B1	457	C	C2'-C1'	-11.81	1.40	1.53
67	B1	2582	C	O4'-C1'	11.81	1.57	1.41
67	B1	2425	A	O4'-C1'	11.81	1.57	1.41
67	B1	2568	A	P-O5'	-11.81	1.48	1.59
21	A2	913	G	C2'-C1'	-11.81	1.40	1.53
68	B3	44	C	O4'-C1'	11.80	1.56	1.41
21	A2	94	C	O4'-C1'	11.80	1.56	1.41
67	B1	2843	C	O4'-C1'	11.79	1.56	1.41
67	B1	407	A	O4'-C1'	11.79	1.56	1.41
11	A1	12	U	O4'-C1'	11.79	1.56	1.41
67	B1	2490	C	O4'-C1'	11.79	1.56	1.41
67	B1	686	C	O4'-C1'	11.79	1.56	1.41
67	B1	1526	G	O4'-C1'	11.79	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2201	C	C2'-C1'	-11.78	1.40	1.53
21	A2	145	A	O4'-C1'	11.77	1.56	1.41
67	B1	369	G	C2'-C1'	-11.77	1.40	1.53
67	B1	2696	G	C2'-C1'	11.77	1.66	1.53
67	B1	2399	C	O4'-C1'	11.77	1.56	1.41
67	B1	2679	A	C2'-C1'	-11.77	1.40	1.53
21	A2	1066	C	O4'-C1'	11.76	1.56	1.41
67	B1	2377	C	O4'-C1'	11.76	1.56	1.41
21	A2	116	C	O4'-C1'	11.75	1.56	1.41
67	B1	2310	G	C2'-C1'	11.75	1.66	1.53
21	A2	82	G	C2'-C1'	-11.74	1.40	1.53
67	B1	2670	U	C2'-C1'	11.74	1.66	1.53
67	B1	393	C	O4'-C1'	11.73	1.56	1.41
21	A2	671	C	O4'-C1'	11.73	1.56	1.41
68	B3	112	C	C2'-C1'	-11.73	1.40	1.53
21	A2	66	G	C2'-C1'	-11.73	1.40	1.53
21	A2	282	G	C2'-C1'	-11.73	1.40	1.53
21	A2	841	C	O4'-C1'	11.72	1.56	1.41
21	A2	1177	C	O4'-C1'	11.71	1.56	1.41
21	A2	829	U	C2'-C1'	11.71	1.66	1.53
21	A2	638	G	C2'-C1'	-11.71	1.40	1.53
67	B1	1204	U	O4'-C1'	11.71	1.56	1.41
21	A2	755	U	O4'-C1'	11.70	1.56	1.41
67	B1	582	A	O4'-C1'	11.70	1.56	1.41
21	A2	420	C	C2'-C1'	-11.69	1.40	1.53
67	B1	617	G	C2'-C1'	11.69	1.66	1.53
67	B1	166	G	O4'-C1'	-11.69	1.26	1.41
67	B1	307	C	O4'-C1'	11.69	1.56	1.41
67	B1	2521	U	C2'-C1'	-11.68	1.40	1.53
67	B1	2557	C	O4'-C1'	11.68	1.56	1.41
67	B1	2696	G	O4'-C1'	-11.68	1.26	1.41
21	A2	1231	G	O4'-C1'	11.67	1.56	1.41
67	B1	1779	C	O4'-C1'	11.67	1.56	1.41
21	A2	760	C	C2'-C1'	-11.67	1.40	1.53
67	B1	1589	G	O4'-C1'	11.67	1.56	1.41
67	B1	1096	A	C2'-C1'	-11.66	1.40	1.53
67	B1	941	C	O4'-C1'	11.66	1.56	1.41
21	A2	422	U	C2'-C1'	11.66	1.66	1.53
67	B1	194	G	C2'-C1'	11.66	1.66	1.53
67	B1	624	U	O4'-C1'	11.66	1.56	1.41
67	B1	1898	A	C2'-C1'	11.65	1.66	1.53
21	A2	382	G	O4'-C1'	-11.65	1.26	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	697	U	C2'-C1'	11.65	1.66	1.53
21	A2	1281	U	C2'-C1'	-11.65	1.40	1.53
21	A2	1068	C	O4'-C1'	11.65	1.56	1.41
67	B1	2892	A	O4'-C1'	11.64	1.56	1.41
67	B1	710	G	O4'-C1'	11.64	1.56	1.41
11	A1	77	A	O4'-C1'	-11.64	1.26	1.41
67	B1	2100	U	O4'-C1'	11.63	1.56	1.41
67	B1	2650	G	C2'-C1'	-11.63	1.40	1.53
67	B1	1433	C	O4'-C1'	11.63	1.56	1.41
67	B1	2085	C	C2'-C1'	-11.62	1.40	1.53
67	B1	1124	G	O4'-C1'	11.62	1.56	1.41
21	A2	410	U	C2'-C1'	-11.62	1.40	1.53
21	A2	1417	A	O4'-C1'	11.62	1.56	1.41
67	B1	2231	G	P-O5'	-11.62	1.48	1.59
67	B1	102	A	C2'-C1'	-11.62	1.40	1.53
67	B1	2441	A	O4'-C1'	11.62	1.56	1.41
21	A2	733	C	C2'-C1'	-11.61	1.40	1.53
68	B3	20	G	C2'-C1'	-11.61	1.40	1.53
67	B1	2432	G	C2'-C1'	11.61	1.66	1.53
67	B1	2970	U	C2'-C1'	11.61	1.66	1.53
67	B1	714	C	O3'-P	-11.60	1.47	1.61
67	B1	962	C	O4'-C1'	11.60	1.56	1.41
21	A2	1104	G	C2'-C1'	11.60	1.66	1.53
27	A0	17	U	O4'-C1'	11.60	1.56	1.41
67	B1	2092	G	C2'-C1'	-11.60	1.40	1.53
67	B1	2918	G	C2'-C1'	-11.60	1.40	1.53
67	B1	450	G	C2'-C1'	-11.60	1.40	1.53
67	B1	1512	G	C2'-C1'	-11.60	1.40	1.53
21	A2	1476	C	O4'-C1'	11.59	1.56	1.41
67	B1	2848	C	O4'-C1'	11.59	1.56	1.41
67	B1	2935	A	O4'-C1'	11.59	1.56	1.41
67	B1	305	G	C5'-C4'	11.58	1.65	1.51
67	B1	2406	C	O4'-C1'	11.57	1.56	1.41
21	A2	42	G	O4'-C1'	11.57	1.56	1.41
67	B1	2491	C	O4'-C1'	11.57	1.56	1.41
21	A2	1399	G	O4'-C1'	11.57	1.56	1.41
21	A2	630	A	C2'-C1'	-11.57	1.40	1.53
67	B1	1042	G	O4'-C1'	11.56	1.56	1.41
67	B1	816	C	C2'-C1'	-11.56	1.40	1.53
67	B1	2239	C	O4'-C1'	11.56	1.56	1.41
21	A2	749	C	C2'-C1'	-11.56	1.40	1.53
67	B1	2649	A	C2'-C1'	-11.55	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1019	A	O4 ² -C1'	11.55	1.56	1.41
21	A2	1308	U	C2 ² -C1'	-11.55	1.40	1.53
21	A2	1158	G	C2 ² -C1'	11.55	1.66	1.53
67	B1	2467	C	O4 ² -C1'	11.54	1.56	1.41
21	A2	932	C	O4 ² -C1'	11.54	1.56	1.41
21	A2	836	G	C2 ² -C1'	-11.54	1.40	1.53
21	A2	1142	G	O4 ² -C1'	11.53	1.56	1.41
21	A2	1179	C	C2 ² -C1'	-11.53	1.40	1.53
21	A2	305	C	O4 ² -C1'	11.52	1.56	1.41
67	B1	891	C	O4 ² -C1'	11.52	1.56	1.41
67	B1	2119	C	O4 ² -C1'	11.52	1.56	1.41
67	B1	2269	C	C2 ² -C1'	11.52	1.66	1.53
21	A2	1422	G	C2 ² -C1'	11.51	1.66	1.53
67	B1	54	G	O4 ² -C1'	11.51	1.56	1.41
67	B1	1828	A	C2 ² -C1'	-11.51	1.40	1.53
67	B1	2035	U	C2 ² -C1'	-11.51	1.40	1.53
67	B1	2717	A	C2 ² -C1'	11.51	1.66	1.53
21	A2	1359	C	C5 ² -C4'	11.51	1.65	1.51
67	B1	2314	U	C2 ² -C1'	11.51	1.66	1.53
67	B1	2241	U	C2 ² -C1'	11.50	1.66	1.53
21	A2	1256	C	O4 ² -C1'	11.50	1.56	1.41
67	B1	1846	G	C2 ² -C1'	-11.49	1.40	1.53
21	A2	1183	C	O4 ² -C1'	11.49	1.56	1.41
67	B1	2398	C	C2 ² -C1'	-11.49	1.40	1.53
67	B1	899	A	C2 ² -C1'	11.49	1.66	1.53
21	A2	1235	A	C2 ² -C1'	-11.48	1.40	1.53
67	B1	673	A	C2 ² -C1'	-11.48	1.40	1.53
67	B1	643	G	C2 ² -C1'	-11.48	1.40	1.53
67	B1	1993	A	C2 ² -C1'	11.48	1.66	1.53
21	A2	955	G	C2 ² -C1'	-11.47	1.40	1.53
67	B1	358	C	C2 ² -C1'	-11.47	1.40	1.53
67	B1	2928	C	C2 ² -C1'	11.47	1.66	1.53
67	B1	1603	G	O4 ² -C1'	11.46	1.56	1.41
21	A2	1364	C	O4 ² -C1'	11.46	1.56	1.41
67	B1	2694	C	O4 ² -C1'	11.46	1.56	1.41
67	B1	2543	A	C2 ² -C1'	11.46	1.66	1.53
21	A2	838	C	O4 ² -C1'	11.45	1.56	1.41
67	B1	2131	C	C2 ² -C1'	-11.45	1.40	1.53
21	A2	780	C	O4 ² -C1'	11.45	1.56	1.41
67	B1	615	A	C2 ² -C1'	11.44	1.66	1.53
67	B1	871	G	C2 ² -C1'	-11.44	1.40	1.53
67	B1	1085	G	O4 ² -C1'	11.44	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1848	A	O4 ² -C1'	11.43	1.56	1.41
67	B1	2470	U	C2 ² -C1'	11.43	1.66	1.53
67	B1	2635	C	P-O5'	-11.43	1.48	1.59
68	B3	97	G	O4 ² -C1'	-11.43	1.26	1.41
27	A0	12	U	O4 ² -C1'	11.42	1.56	1.41
67	B1	314	A	C2 ² -C1'	11.42	1.66	1.53
67	B1	2117	U	C2 ² -C1'	-11.42	1.40	1.53
67	B1	431	U	C2 ² -C1'	-11.41	1.40	1.53
67	B1	3004	C	O4 ² -C1'	11.41	1.56	1.41
67	B1	1264	G	C2 ² -C1'	-11.41	1.40	1.53
21	A2	635	C	O4 ² -C1'	11.41	1.56	1.41
67	B1	418	C	O4 ² -C1'	11.41	1.56	1.41
21	A2	815	C	O4 ² -C1'	11.40	1.56	1.41
67	B1	2882	G	C2 ² -C1'	11.40	1.65	1.53
67	B1	1845	C	O4 ² -C1'	11.40	1.56	1.41
67	B1	207	A	C2 ² -C1'	-11.39	1.40	1.53
67	B1	214	C	O4 ² -C1'	11.39	1.56	1.41
67	B1	234	G	O4 ² -C1'	-11.39	1.26	1.41
68	B3	71	G	C2 ² -C1'	-11.39	1.40	1.53
67	B1	345	C	O4 ² -C1'	11.39	1.56	1.41
67	B1	2284	C	C2 ² -C1'	-11.39	1.40	1.53
11	A1	7	G	O4 ² -C1'	-11.38	1.26	1.41
21	A2	1414	G	O4 ² -C1'	11.38	1.56	1.41
67	B1	1412	C	C2 ² -C1'	-11.38	1.40	1.53
67	B1	1801	C	O4 ² -C1'	11.38	1.56	1.41
21	A2	5	C	C4 ² -C3'	11.38	1.65	1.53
67	B1	182	U	O4 ² -C1'	11.38	1.56	1.41
67	B1	2174	G	C2 ² -C1'	11.38	1.65	1.53
21	A2	102	U	O4 ² -C1'	11.37	1.56	1.41
67	B1	421	C	O4 ² -C1'	11.37	1.56	1.41
67	B1	2889	A	O4 ² -C1'	11.37	1.56	1.41
67	B1	358	C	O4 ² -C1'	11.37	1.56	1.41
67	B1	1177	C	C2 ² -C1'	-11.37	1.40	1.53
67	B1	2700	U	O4 ² -C1'	11.37	1.56	1.41
21	A2	466	C	C2 ² -C1'	-11.37	1.40	1.53
21	A2	1007	A	C2 ² -C1'	11.37	1.65	1.53
67	B1	2908	U	C2 ² -C1'	11.37	1.65	1.53
21	A2	1286	C	C2 ² -C1'	-11.36	1.40	1.53
27	A0	20	U	O4 ² -C1'	11.36	1.56	1.41
21	A2	1285	C	C2 ² -C1'	-11.35	1.40	1.53
67	B1	2592	U	C2 ² -C1'	-11.35	1.40	1.53
67	B1	1772	A	O4 ² -C1'	11.35	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	3005	C	O4 ² -C1'	11.35	1.56	1.41
21	A2	40	C	C2 ² -C1'	-11.35	1.40	1.53
67	B1	1414	G	O4 ² -C1'	11.35	1.56	1.41
21	A2	264	C	C2 ² -C1'	-11.34	1.40	1.53
67	B1	1206	A	O4 ² -C1'	11.34	1.56	1.41
67	B1	1757	G	C2 ² -C1'	-11.34	1.40	1.53
21	A2	903	G	C2 ² -C1'	-11.34	1.40	1.53
67	B1	1752	C	C2 ² -C1'	-11.34	1.40	1.53
67	B1	606	A	C2 ² -C1'	-11.33	1.40	1.53
21	A2	424	U	C5 ² -C4'	11.32	1.65	1.51
21	A2	1000	G	C2 ² -C1'	-11.32	1.40	1.53
67	B1	833	G	C2 ² -C1'	-11.32	1.40	1.53
21	A2	882	C	O4 ¹ -C1'	11.32	1.56	1.41
67	B1	950	G	O4 ² -C1'	11.32	1.56	1.41
67	B1	606	A	O4 ¹ -C1'	11.32	1.56	1.41
67	B1	402	G	C2 ² -C1'	-11.31	1.41	1.53
21	A2	1174	A	O4 ¹ -C1'	11.30	1.56	1.41
67	B1	1865	U	C2 ² -C1'	11.31	1.65	1.53
21	A2	855	C	O4 ² -C1'	11.30	1.56	1.41
21	A2	1264	G	C2 ² -C1'	-11.30	1.41	1.53
21	A2	861	G	O4 ² -C1'	11.30	1.56	1.41
67	B1	2586	A	O4 ² -C1'	-11.30	1.26	1.41
67	B1	784	C	O4 ² -C1'	11.29	1.56	1.41
67	B1	1537	U	O4 ² -C1'	11.29	1.56	1.41
67	B1	1713	G	C2 ² -C1'	-11.28	1.41	1.53
21	A2	526	A	O4 ¹ -C1'	11.28	1.56	1.41
21	A2	1440	G	O4 ² -C1'	-11.28	1.26	1.41
67	B1	2076	A	O4 ¹ -C1'	11.28	1.56	1.41
21	A2	157	A	O4 ² -C1'	11.28	1.56	1.41
21	A2	104	A	C2 ² -C1'	-11.27	1.41	1.53
67	B1	1165	C	C2 ² -C1'	11.27	1.65	1.53
21	A2	358	G	O4 ¹ -C1'	-11.27	1.26	1.41
67	B1	1497	C	C2 ² -C1'	-11.27	1.41	1.53
21	A2	209	A	O4 ¹ -C1'	11.26	1.56	1.41
21	A2	697	A	O4 ² -C1'	-11.26	1.27	1.41
67	B1	2070	U	C2 ² -C1'	-11.25	1.41	1.53
21	A2	13	C	O4 ² -C1'	11.25	1.56	1.41
67	B1	537	U	P-O5'	11.25	1.71	1.59
67	B1	2354	A	O4 ² -C1'	11.25	1.56	1.41
67	B1	2174	G	O4 ² -C1'	-11.25	1.27	1.41
21	A2	139	C	O4 ² -C1'	11.24	1.56	1.41
67	B1	1356	A	O4 ² -C1'	11.24	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2488	C	O4 ² -C1'	11.24	1.56	1.41
21	A2	1174	A	C2 ² -C1'	-11.23	1.41	1.53
21	A2	573	C	C2 ² -C1'	-11.23	1.41	1.53
67	B1	306	G	P-O5'	-11.23	1.48	1.59
68	B3	53	A	O4 ² -C1'	11.23	1.56	1.41
21	A2	577	C	O4 ² -C1'	11.23	1.56	1.41
67	B1	2330	A	O4 ² -C1'	11.23	1.56	1.41
21	A2	423	U	O4 ² -C1'	-11.23	1.27	1.41
11	A1	66	C	O4 ² -C1'	11.21	1.56	1.41
21	A2	352	A	C2 ² -C1'	11.21	1.65	1.53
67	B1	2096	G	C2 ² -C1'	-11.20	1.41	1.53
67	B1	2342	C	C2 ² -C1'	-11.20	1.41	1.53
67	B1	1036	C	C2 ² -C1'	-11.20	1.41	1.53
67	B1	2309	C	O4 ² -C1'	11.20	1.56	1.41
21	A2	766	G	C2 ² -C1'	-11.19	1.41	1.53
68	B3	24	C	O4 ² -C1'	11.19	1.56	1.41
21	A2	144	G	P-O5'	-11.18	1.48	1.59
21	A2	676	G	O4 ² -C1'	11.18	1.56	1.41
67	B1	1682	C	O4 ² -C1'	11.17	1.56	1.41
21	A2	1021	C	C2 ² -C1'	-11.17	1.41	1.53
67	B1	1684	C	O4 ² -C1'	11.16	1.56	1.41
67	B1	907	C	O4 ² -C1'	11.16	1.56	1.41
21	A2	1010	G	O4 ² -C1'	11.16	1.56	1.41
67	B1	740	C	C2 ² -C1'	-11.16	1.41	1.53
21	A2	736	A	O4 ² -C1'	-11.15	1.27	1.41
67	B1	911	G	C2 ² -C1'	-11.15	1.41	1.53
67	B1	2984	A	O4 ² -C1'	11.15	1.56	1.41
67	B1	478	C	O4 ² -C1'	11.14	1.56	1.41
67	B1	1873	G	C2 ² -C1'	-11.14	1.41	1.53
21	A2	313	G	C2 ² -C1'	-11.13	1.41	1.53
68	B3	25	A	O4 ² -C1'	11.13	1.56	1.41
67	B1	1526	G	C2 ² -C1'	-11.12	1.41	1.53
21	A2	202	G	C2 ² -C1'	11.12	1.65	1.53
67	B1	277	A	O4 ² -C1'	11.12	1.56	1.41
27	A0	66	C	O4 ² -C1'	11.12	1.56	1.41
67	B1	2298	C	O4 ² -C1'	11.12	1.56	1.41
21	A2	90	C	C2 ² -C1'	-11.11	1.41	1.53
21	A2	473	A	C3 ² -C2'	11.11	1.65	1.52
67	B1	140	C	C2 ² -C1'	-11.11	1.41	1.53
21	A2	1494	C	C2 ² -C1'	-11.11	1.41	1.53
67	B1	674	G	C2 ² -C1'	-11.11	1.41	1.53
67	B1	855	G	C2 ² -C1'	11.11	1.65	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	886	G	O4'-C1'	-11.10	1.27	1.41
67	B1	2172	G	O4'-C1'	-11.10	1.27	1.41
67	B1	3031	U	O4'-C1'	11.10	1.56	1.41
67	B1	2959	A	O4'-C1'	11.10	1.56	1.41
67	B1	780	G	P-O5'	-11.10	1.48	1.59
67	B1	2758	G	O4'-C1'	-11.10	1.27	1.41
68	B3	93	G	C2'-C1'	-11.09	1.41	1.53
67	B1	465	C	O4'-C1'	11.09	1.56	1.41
67	B1	2378	C	C2'-C1'	-11.09	1.41	1.53
67	B1	2819	C	C2'-C1'	-11.09	1.41	1.53
21	A2	550	G	C2'-C1'	-11.09	1.41	1.53
67	B1	63	A	O4'-C1'	11.08	1.56	1.41
67	B1	2102	A	C2'-C1'	-11.08	1.41	1.53
67	B1	179	A	C2'-C1'	-11.08	1.41	1.53
21	A2	271	G	O4'-C1'	11.08	1.56	1.41
21	A2	520	G	C2'-C1'	11.08	1.65	1.53
21	A2	670	C	C4'-C3'	11.08	1.65	1.53
67	B1	644	G	C2'-C1'	-11.07	1.41	1.53
67	B1	2440	C	O4'-C1'	11.07	1.56	1.41
21	A2	1171	G	C2'-C1'	11.06	1.65	1.53
67	B1	1568	A	P-OP2	11.06	1.67	1.49
67	B1	2111	C	C2'-C1'	-11.06	1.41	1.53
11	A1	11	C	C2'-C1'	-11.06	1.41	1.53
67	B1	318	G	C4'-C3'	11.06	1.65	1.53
21	A2	49	C	C2'-C1'	-11.05	1.41	1.53
21	A2	1088	U	C2'-C1'	-11.05	1.41	1.53
21	A2	1116	G	C2'-C1'	-11.05	1.41	1.53
67	B1	171	A	O4'-C1'	11.05	1.56	1.41
21	A2	1412	A	O4'-C1'	11.05	1.56	1.41
67	B1	2577	U	C2'-C1'	-11.05	1.41	1.53
67	B1	576	G	C2'-C1'	-11.04	1.41	1.53
67	B1	631	G	C2'-C1'	-11.04	1.41	1.53
67	B1	950	G	C2'-C1'	-11.04	1.41	1.53
67	B1	3014	U	O4'-C1'	-11.04	1.27	1.41
67	B1	2574	G	O4'-C1'	11.04	1.55	1.41
21	A2	1313	G	C2'-C1'	-11.03	1.41	1.53
67	B1	835	G	O4'-C1'	11.03	1.55	1.41
67	B1	2588	C	O4'-C1'	11.03	1.55	1.41
67	B1	1742	C	O4'-C1'	11.03	1.55	1.41
67	B1	2511	C	C2'-C1'	-11.02	1.41	1.53
67	B1	320	C	O4'-C1'	11.02	1.55	1.41
67	B1	438	G	C2'-C1'	-11.01	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1139	A	C2'-C1'	-11.01	1.41	1.53
67	B1	2806	A	C2'-C1'	-11.01	1.41	1.53
67	B1	2963	G	C2'-C1'	11.01	1.65	1.53
67	B1	895	C	O4'-C1'	11.01	1.55	1.41
67	B1	1357	G	C2'-C1'	11.01	1.65	1.53
67	B1	1502	C	C2'-C1'	-11.00	1.41	1.53
21	A2	1488	C	O4'-C1'	11.00	1.55	1.41
21	A2	1387	C	C2'-C1'	-11.00	1.41	1.53
67	B1	743	A	O4'-C1'	11.00	1.55	1.41
67	B1	1003	C	O4'-C1'	10.99	1.55	1.41
67	B1	1020	G	C2'-C1'	-10.99	1.41	1.53
68	B3	96	C	O4'-C1'	10.99	1.55	1.41
21	A2	600	C	O4'-C1'	10.99	1.55	1.41
21	A2	139	C	C2'-C1'	-10.99	1.41	1.53
67	B1	1136	G	O4'-C1'	-10.99	1.27	1.41
67	B1	2614	C	O4'-C1'	10.99	1.55	1.41
27	A0	72	C	O4'-C1'	10.99	1.55	1.41
21	A2	1071	C	C2'-C1'	-10.99	1.41	1.53
67	B1	465	C	C2'-C1'	-10.99	1.41	1.53
21	A2	408	C	O4'-C1'	10.98	1.55	1.41
67	B1	1052	G	C2'-C1'	-10.98	1.41	1.53
21	A2	1376	C	O4'-C1'	10.97	1.55	1.41
21	A2	93	A	C2'-C1'	-10.97	1.41	1.53
21	A2	1345	G	O4'-C1'	-10.96	1.27	1.41
21	A2	908	G	C2'-C1'	-10.96	1.41	1.53
67	B1	1047	A	C2'-C1'	10.96	1.65	1.53
21	A2	977	G	C2'-C1'	-10.96	1.41	1.53
67	B1	1422	G	C2'-C1'	-10.96	1.41	1.53
67	B1	2160	C	O4'-C1'	10.96	1.55	1.41
21	A2	538	C	O4'-C1'	10.96	1.55	1.41
21	A2	796	C	O4'-C1'	10.96	1.55	1.41
67	B1	2181	G	C2'-C1'	-10.95	1.41	1.53
68	B3	25	A	C2'-C1'	-10.95	1.41	1.53
21	A2	1180	G	O4'-C1'	10.95	1.55	1.41
67	B1	1274	G	C2'-C1'	-10.95	1.41	1.53
21	A2	1484	C	O4'-C1'	-10.95	1.27	1.41
67	B1	1196	A	C2'-C1'	10.94	1.65	1.53
67	B1	1432	C	C2'-C1'	-10.94	1.41	1.53
67	B1	1670	A	C5'-C4'	10.94	1.64	1.51
67	B1	1261	C	C2'-C1'	-10.94	1.41	1.53
68	B3	107	G	O4'-C1'	-10.94	1.27	1.41
67	B1	1067	G	C2'-C1'	-10.93	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2726	G	C2'-C1'	-10.93	1.41	1.53
67	B1	1445	G	C5'-C4'	10.93	1.64	1.51
67	B1	2029	C	C2'-C1'	-10.93	1.41	1.53
21	A2	1191	G	C2'-C1'	-10.93	1.41	1.53
67	B1	2492	G	O4'-C1'	-10.93	1.27	1.41
68	B3	45	C	C2'-C1'	10.93	1.65	1.53
67	B1	1695	G	O4'-C1'	10.93	1.55	1.41
67	B1	2522	C	C2'-C1'	10.93	1.65	1.53
67	B1	2591	A	O4'-C1'	10.93	1.55	1.41
67	B1	141	C	O4'-C1'	10.92	1.55	1.41
11	A1	46	U	C2'-C1'	10.91	1.65	1.53
21	A2	584	C	C2'-C1'	-10.91	1.41	1.53
21	A2	490	C	O4'-C1'	10.90	1.55	1.41
67	B1	2517	U	C2'-C1'	-10.90	1.41	1.53
21	A2	18	C	C2'-C1'	-10.90	1.41	1.53
21	A2	1126	G	C2'-C1'	-10.89	1.41	1.53
67	B1	2421	A	O4'-C1'	10.89	1.55	1.41
67	B1	2125	C	C2'-C1'	-10.89	1.41	1.53
67	B1	955	A	O4'-C1'	-10.88	1.27	1.41
67	B1	1624	U	C4'-C3'	10.88	1.65	1.53
21	A2	1332	C	O4'-C1'	10.88	1.55	1.41
67	B1	555	G	C2'-C1'	-10.88	1.41	1.53
67	B1	1118	A	O4'-C1'	10.88	1.55	1.41
67	B1	945	U	C2'-C1'	-10.88	1.41	1.53
67	B1	2445	G	C2'-C1'	-10.87	1.41	1.53
67	B1	1140	C	O4'-C1'	10.87	1.55	1.41
67	B1	519	A	O4'-C1'	10.87	1.55	1.41
21	A2	1230	G	C2'-C1'	-10.87	1.41	1.53
67	B1	1111	G	O4'-C1'	10.87	1.55	1.41
21	A2	614	G	C2'-C1'	-10.86	1.41	1.53
67	B1	2220	C	O4'-C1'	10.86	1.55	1.41
67	B1	2765	C	O4'-C1'	10.86	1.55	1.41
21	A2	1188	C	O4'-C1'	10.86	1.55	1.41
67	B1	2866	A	O4'-C1'	10.86	1.55	1.41
21	A2	62	G	O4'-C1'	10.85	1.55	1.41
67	B1	924	A	O4'-C1'	-10.85	1.27	1.41
67	B1	728	A	C2'-C1'	-10.85	1.41	1.53
21	A2	219	C	C2'-C1'	-10.85	1.41	1.53
67	B1	1148	C	O4'-C1'	10.84	1.55	1.41
21	A2	441	U	O4'-C1'	10.84	1.55	1.41
67	B1	2812	U	C2'-C1'	-10.83	1.41	1.53
21	A2	1476	C	C2'-C1'	-10.83	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2146	C	C2'-C1'	-10.83	1.41	1.53
67	B1	395	G	C2'-C1'	-10.83	1.41	1.53
21	A2	1232	G	C2'-C1'	-10.83	1.41	1.53
67	B1	1713	G	O4'-C1'	10.83	1.55	1.41
21	A2	241	U	O4'-C1'	10.82	1.55	1.41
67	B1	1510	U	C2'-C1'	10.82	1.65	1.53
67	B1	836	U	C2'-C1'	-10.82	1.41	1.53
67	B1	33	U	O4'-C1'	10.82	1.55	1.41
67	B1	446	G	O4'-C1'	10.82	1.55	1.41
67	B1	1509	C	C2'-C1'	-10.82	1.41	1.53
67	B1	2795	G	C2'-C1'	-10.82	1.41	1.53
67	B1	2356	U	C2'-C1'	10.80	1.65	1.53
67	B1	2960	G	C2'-C1'	-10.80	1.41	1.53
21	A2	594	A	O4'-C1'	10.79	1.55	1.41
67	B1	612	G	O4'-C1'	-10.79	1.27	1.41
21	A2	509	C	O4'-C1'	10.79	1.55	1.41
67	B1	1925	A	C2'-C1'	-10.79	1.41	1.53
67	B1	1699	U	O4'-C1'	10.79	1.55	1.41
67	B1	998	G	C2'-C1'	10.79	1.65	1.53
68	B3	66	A	C2'-C1'	-10.79	1.41	1.53
67	B1	1961	G	C2'-C1'	10.78	1.65	1.53
21	A2	1352	G	O4'-C1'	10.78	1.55	1.41
67	B1	341	U	O4'-C1'	10.77	1.55	1.41
67	B1	1534	G	C2'-C1'	-10.77	1.41	1.53
67	B1	1975	C	C2'-C1'	10.77	1.65	1.53
67	B1	2790	C	C2'-C1'	-10.77	1.41	1.53
21	A2	325	A	C4'-C3'	10.77	1.65	1.53
21	A2	725	C	O4'-C1'	10.77	1.55	1.41
21	A2	1417	A	C2'-C1'	-10.77	1.41	1.53
67	B1	2465	A	O4'-C1'	10.77	1.55	1.41
67	B1	1464	A	O4'-C1'	10.76	1.55	1.41
67	B1	2435	G	O4'-C1'	-10.76	1.27	1.41
67	B1	1126	C	O4'-C1'	10.76	1.55	1.41
21	A2	54	C	O4'-C1'	10.76	1.55	1.41
67	B1	1926	A	O4'-C1'	10.76	1.55	1.41
67	B1	2227	G	P-O5'	-10.76	1.49	1.59
67	B1	1480	G	O4'-C1'	10.76	1.55	1.41
21	A2	789	G	C2'-C1'	10.75	1.65	1.53
67	B1	2059	G	O4'-C1'	10.75	1.55	1.41
67	B1	2202	U	O4'-C1'	10.75	1.55	1.41
21	A2	336	C	O4'-C1'	10.74	1.55	1.41
67	B1	663	A	P-O5'	-10.74	1.49	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	820	G	C2'-C1'	-10.73	1.41	1.53
21	A2	873	A	O4'-C1'	10.73	1.55	1.41
67	B1	744	G	O4'-C1'	10.73	1.55	1.41
67	B1	2028	G	O4'-C1'	10.73	1.55	1.41
21	A2	1374	C	O4'-C1'	10.73	1.55	1.41
67	B1	2246	G	P-O5'	-10.73	1.49	1.59
21	A2	389	G	C2'-C1'	-10.73	1.41	1.53
21	A2	904	G	C2'-C1'	10.73	1.65	1.53
21	A2	1295	C	O3'-P	-10.73	1.48	1.61
67	B1	114	C	O4'-C1'	10.73	1.55	1.41
67	B1	2952	C	O4'-C1'	10.73	1.55	1.41
67	B1	1654	G	O3'-P	-10.72	1.48	1.61
67	B1	1870	G	C2'-C1'	-10.72	1.41	1.53
67	B1	2617	G	C2'-C1'	-10.72	1.41	1.53
21	A2	1088	U	O4'-C1'	10.71	1.55	1.41
67	B1	2007	C	C2'-C1'	-10.71	1.41	1.53
67	B1	1997	C	C2'-C1'	-10.71	1.41	1.53
21	A2	1093	C	C2'-C1'	10.70	1.65	1.53
67	B1	1181	C	O4'-C1'	10.70	1.55	1.41
67	B1	2915	U	O4'-C1'	10.71	1.55	1.41
67	B1	789	G	C2'-C1'	-10.70	1.41	1.53
67	B1	2719	G	O4'-C1'	10.70	1.55	1.41
67	B1	2392	A	C2'-C1'	-10.70	1.41	1.53
67	B1	2797	C	O4'-C1'	-10.70	1.27	1.41
67	B1	3046	C	O4'-C1'	10.70	1.55	1.41
21	A2	38	G	C2'-C1'	-10.70	1.41	1.53
67	B1	789	G	C5'-C4'	10.69	1.64	1.51
67	B1	2870	A	O4'-C1'	10.70	1.55	1.41
67	B1	2891	A	O4'-C1'	10.70	1.55	1.41
67	B1	1671	A	C2'-C1'	10.69	1.65	1.53
21	A2	283	U	C2'-C1'	-10.69	1.41	1.53
21	A2	32	A	O4'-C1'	-10.69	1.27	1.41
21	A2	1426	C	O4'-C1'	10.69	1.55	1.41
67	B1	408	C	O4'-C1'	10.69	1.55	1.41
67	B1	1668	G	C2'-C1'	-10.69	1.41	1.53
21	A2	1110	U	O4'-C1'	10.69	1.55	1.41
21	A2	103	A	C2'-C1'	10.68	1.65	1.53
21	A2	1107	C	O4'-C1'	10.67	1.55	1.41
67	B1	1587	A	C2'-C1'	-10.67	1.41	1.53
67	B1	2297	C	O4'-C1'	10.67	1.55	1.41
67	B1	391	C	O4'-C1'	10.67	1.55	1.41
21	A2	14	C	O4'-C1'	10.67	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	835	C	O4 ² -C1'	10.67	1.55	1.41
67	B1	700	A	P-O5'	-10.67	1.49	1.59
67	B1	1638	C	O4 ² -C1'	10.67	1.55	1.41
67	B1	782	G	O4 ² -C1'	10.66	1.55	1.41
67	B1	203	G	O4 ² -C1'	10.66	1.55	1.41
67	B1	476	C	O4 ² -C1'	10.66	1.55	1.41
67	B1	2571	G	C2 ² -C1'	10.66	1.65	1.53
67	B1	2708	U	O4 ² -C1'	10.66	1.55	1.41
67	B1	1852	U	C2 ² -C1'	-10.66	1.41	1.53
67	B1	2463	G	C2 ² -C1'	-10.66	1.41	1.53
21	A2	828	U	C4 ¹ -C3'	10.66	1.64	1.53
67	B1	583	A	C2 ² -C1'	10.66	1.65	1.53
21	A2	157	A	C2 ² -C1'	10.65	1.65	1.53
21	A2	298	C	P-O5'	-10.65	1.49	1.59
67	B1	1295	G	O4 ² -C1'	10.65	1.55	1.41
67	B1	1330	G	C2 ² -C1'	-10.65	1.41	1.53
67	B1	1647	C	C2 ² -C1'	-10.65	1.41	1.53
67	B1	2500	G	C2 ² -C1'	10.65	1.65	1.53
67	B1	1871	C	O4 ² -C1'	10.64	1.55	1.41
21	A2	47	A	O4 ² -C1'	10.64	1.55	1.41
67	B1	3009	C	C2 ² -C1'	-10.64	1.41	1.53
67	B1	1341	U	O4 ² -C1'	10.64	1.55	1.41
67	B1	33	U	C2 ² -C1'	-10.63	1.41	1.53
67	B1	679	U	C4 ¹ -C3'	10.63	1.64	1.53
67	B1	373	G	O4 ² -C1'	10.63	1.55	1.41
21	A2	1074	C	O4 ² -C1'	10.62	1.55	1.41
21	A2	1359	C	O4 ² -C1'	10.62	1.55	1.41
67	B1	2591	A	C2 ² -C1'	-10.62	1.41	1.53
67	B1	746	C	O4 ² -C1'	10.62	1.55	1.41
67	B1	443	C	O4 ² -C1'	10.62	1.55	1.41
67	B1	1033	C	C2 ² -C1'	10.62	1.65	1.53
21	A2	1156	A	C2 ² -C1'	10.62	1.65	1.53
21	A2	1478	A	C2 ² -C1'	-10.62	1.41	1.53
67	B1	1822	G	O4 ² -C1'	-10.61	1.27	1.41
67	B1	3017	U	O4 ² -C1'	10.61	1.55	1.41
67	B1	881	G	C5 ² -C4'	10.61	1.64	1.51
67	B1	1684	C	C2 ² -C1'	-10.61	1.41	1.53
67	B1	2851	A	O4 ² -C1'	-10.61	1.27	1.41
21	A2	207	G	C2 ² -C1'	10.60	1.65	1.53
21	A2	938	C	O4 ² -C1'	10.60	1.55	1.41
21	A2	1322	C	C2 ² -C1'	-10.60	1.41	1.53
21	A2	1480	G	O4 ² -C1'	-10.60	1.27	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1435	G	O4'-C1'	10.59	1.55	1.41
67	B1	2245	C	C2'-C1'	-10.59	1.41	1.53
21	A2	897	A	O4'-C1'	10.59	1.55	1.41
67	B1	2615	U	C2'-C1'	-10.58	1.41	1.53
21	A2	17	C	C2'-C1'	-10.57	1.41	1.53
67	B1	495	U	O4'-C1'	10.57	1.55	1.41
67	B1	1106	C	O4'-C1'	10.57	1.55	1.41
67	B1	1947	A	C2'-C1'	-10.57	1.41	1.53
67	B1	2037	A	C2'-C1'	10.57	1.65	1.53
21	A2	1161	A	C2'-C1'	-10.57	1.41	1.53
21	A2	877	A	O4'-C1'	10.56	1.55	1.41
67	B1	2090	A	O4'-C1'	10.56	1.55	1.41
21	A2	89	G	C2'-C1'	-10.56	1.41	1.53
21	A2	617	A	C2'-C1'	10.56	1.65	1.53
21	A2	348	C	O4'-C1'	10.56	1.55	1.41
67	B1	2120	C	O4'-C1'	10.55	1.55	1.41
21	A2	1316	U	O4'-C1'	10.55	1.55	1.41
21	A2	1323	A	C2'-C1'	-10.55	1.41	1.53
67	B1	2669	U	C5'-C4'	10.54	1.64	1.51
21	A2	566	C	C2'-C1'	-10.54	1.41	1.53
67	B1	739	C	C2'-C1'	-10.54	1.41	1.53
68	B3	18	G	C2'-C1'	-10.54	1.41	1.53
67	B1	977	C	C2'-C1'	-10.54	1.41	1.53
67	B1	686	C	C2'-C1'	-10.54	1.41	1.53
21	A2	242	A	C2'-C1'	10.53	1.65	1.53
21	A2	723	G	O4'-C1'	10.53	1.55	1.41
27	A0	55	U	C2'-C1'	10.53	1.65	1.53
67	B1	682	G	O4'-C1'	-10.53	1.27	1.41
67	B1	521	C	C2'-C1'	-10.53	1.41	1.53
67	B1	1483	U	O4'-C1'	10.53	1.55	1.41
67	B1	2767	C	O4'-C1'	10.53	1.55	1.41
21	A2	518	U	O4'-C1'	10.52	1.55	1.41
21	A2	1448	A	O4'-C1'	-10.52	1.27	1.41
68	B3	32	C	O4'-C1'	10.52	1.55	1.41
67	B1	812	C	C2'-C1'	-10.52	1.41	1.53
67	B1	2354	A	C2'-C1'	-10.52	1.41	1.53
67	B1	371	U	O3'-P	-10.52	1.48	1.61
67	B1	2059	G	C2'-C1'	-10.52	1.41	1.53
67	B1	2770	A	C2'-C1'	-10.52	1.41	1.53
68	B3	6	G	O4'-C1'	10.51	1.55	1.41
67	B1	1230	G	O4'-C1'	10.51	1.55	1.41
21	A2	318	C	O4'-C1'	10.51	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1055	C	O4'-C1'	10.51	1.55	1.41
67	B1	632	G	C2'-C1'	-10.51	1.41	1.53
21	A2	167	G	C2'-C1'	-10.51	1.41	1.53
67	B1	946	U	C2'-C1'	-10.51	1.41	1.53
21	A2	470	G	C2'-C1'	10.50	1.65	1.53
67	B1	742	C	O4'-C1'	10.50	1.55	1.41
21	A2	919	U	O4'-C1'	10.50	1.55	1.41
21	A2	1458	A	O4'-C1'	10.50	1.55	1.41
67	B1	672	C	O4'-C1'	10.50	1.55	1.41
11	A1	47	G	O4'-C1'	-10.49	1.28	1.41
67	B1	1665	G	O4'-C1'	10.49	1.55	1.41
67	B1	2914	U	C2'-C1'	10.49	1.64	1.53
21	A2	227	C	O4'-C1'	10.49	1.55	1.41
67	B1	1797	A	O4'-C1'	10.49	1.55	1.41
67	B1	946	U	O4'-C1'	10.48	1.55	1.41
67	B1	2904	U	C2'-C1'	-10.48	1.41	1.53
67	B1	2966	C	C2'-C1'	-10.48	1.41	1.53
21	A2	81	C	C2'-C1'	-10.48	1.41	1.53
21	A2	383	C	O4'-C1'	10.48	1.55	1.41
21	A2	1202	G	O4'-C1'	10.47	1.55	1.41
67	B1	1965	C	C2'-C1'	-10.47	1.41	1.53
67	B1	2850	G	O4'-C1'	10.47	1.55	1.41
67	B1	3037	G	C2'-C1'	10.47	1.64	1.53
21	A2	487	U	C5'-C4'	10.47	1.64	1.51
21	A2	272	C	C2'-C1'	-10.47	1.41	1.53
21	A2	1270	C	C2'-C1'	10.47	1.64	1.53
27	A0	50	C	O4'-C1'	10.46	1.55	1.41
67	B1	151	G	O4'-C1'	10.46	1.55	1.41
67	B1	515	G	C2'-C1'	10.46	1.64	1.53
21	A2	1054	A	C2'-C1'	-10.46	1.41	1.53
67	B1	766	G	O4'-C1'	10.46	1.55	1.41
67	B1	226	C	C2'-C1'	-10.46	1.41	1.53
67	B1	148	C	C2'-C1'	-10.45	1.41	1.53
67	B1	354	G	O4'-C1'	-10.45	1.28	1.41
67	B1	988	C	O4'-C1'	10.45	1.55	1.41
67	B1	2652	G	O4'-C1'	-10.45	1.28	1.41
21	A2	1143	G	C2'-C1'	10.45	1.64	1.53
67	B1	2707	G	O4'-C1'	10.45	1.55	1.41
21	A2	1432	U	O4'-C1'	10.45	1.55	1.41
67	B1	1938	G	C4'-C3'	10.45	1.64	1.53
21	A2	849	U	O4'-C1'	10.44	1.55	1.41
11	A1	11	C	O4'-C1'	10.44	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	651	C	O4'-C1'	10.43	1.55	1.41
67	B1	1573	A	C5'-C4'	10.43	1.63	1.51
21	A2	215	C	O4'-C1'	10.43	1.55	1.41
21	A2	1142	G	C2'-C1'	-10.43	1.41	1.53
67	B1	21	C	O4'-C1'	10.43	1.55	1.41
67	B1	235	G	C2'-C1'	-10.43	1.41	1.53
67	B1	2135	C	C2'-C1'	-10.43	1.41	1.53
21	A2	1089	C	O4'-C1'	10.42	1.55	1.41
67	B1	1844	C	O4'-C1'	10.42	1.55	1.41
67	B1	497	G	C2'-C1'	-10.42	1.41	1.53
21	A2	826	C	O4'-C1'	10.42	1.55	1.41
21	A2	1175	C	O4'-C1'	10.41	1.55	1.41
67	B1	1378	G	C5'-C4'	10.40	1.63	1.51
67	B1	1865	U	O4'-C1'	-10.40	1.28	1.41
67	B1	693	G	O4'-C1'	-10.40	1.28	1.41
67	B1	2991	C	O4'-C1'	10.40	1.55	1.41
67	B1	922	C	C2'-C1'	-10.39	1.42	1.53
67	B1	485	G	C4'-C3'	-10.39	1.41	1.53
21	A2	188	C	O4'-C1'	10.39	1.55	1.41
67	B1	275	C	O4'-C1'	10.39	1.55	1.41
67	B1	1519	G	C2'-C1'	10.38	1.64	1.53
67	B1	1549	C	O4'-C1'	10.38	1.55	1.41
67	B1	1477	C	C2'-C1'	-10.38	1.42	1.53
67	B1	2464	G	C2'-C1'	10.38	1.64	1.53
21	A2	489	C	O4'-C1'	10.38	1.55	1.41
27	A0	27	C	O4'-C1'	10.38	1.55	1.41
67	B1	669	G	C2'-C1'	-10.38	1.42	1.53
67	B1	2080	G	C2'-C1'	-10.38	1.42	1.53
21	A2	592	G	C2'-C1'	10.38	1.64	1.53
67	B1	1553	G	O4'-C1'	-10.37	1.28	1.41
11	A1	49	C	C2'-C1'	10.37	1.64	1.53
67	B1	1311	C	C2'-C1'	-10.37	1.42	1.53
67	B1	1865	U	C5'-C4'	10.37	1.63	1.51
67	B1	2229	G	O4'-C1'	10.37	1.55	1.41
67	B1	1539	U	C2'-C1'	10.36	1.64	1.53
67	B1	2565	A	O4'-C1'	10.36	1.55	1.41
67	B1	1103	C	O4'-C1'	10.36	1.55	1.41
67	B1	2844	G	O4'-C1'	10.36	1.55	1.41
21	A2	1376	C	C2'-C1'	-10.35	1.42	1.53
67	B1	2277	G	P-O5'	-10.35	1.49	1.59
67	B1	2792	G	O4'-C1'	10.35	1.55	1.41
21	A2	1358	A	C2'-C1'	10.35	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	809	C	O4 ² -C1'	10.34	1.55	1.41
21	A2	623	C	C2 ² -C1'	-10.34	1.42	1.53
67	B1	742	C	C2 ² -C1'	-10.34	1.42	1.53
21	A2	466	C	O4 ² -C1'	10.34	1.55	1.41
21	A2	693	C	O4 ² -C1'	10.33	1.55	1.41
67	B1	183	G	C2 ² -C1'	-10.33	1.42	1.53
67	B1	485	G	O4 ² -C1'	10.33	1.55	1.41
67	B1	1743	G	C2 ² -C1'	10.33	1.64	1.53
67	B1	3040	G	O4 ² -C1'	10.33	1.55	1.41
67	B1	1149	C	O4 ² -C1'	10.33	1.55	1.41
67	B1	991	U	O4 ² -C1'	10.32	1.55	1.41
67	B1	2932	C	O4 ² -C1'	10.32	1.55	1.41
21	A2	1269	G	O4 ² -C1'	10.32	1.55	1.41
21	A2	702	G	C2 ² -C1'	-10.31	1.42	1.53
21	A2	1022	U	C2 ² -C1'	10.31	1.64	1.53
27	A0	27	C	C2 ² -C1'	-10.31	1.42	1.53
17	AO	145	ARG	NE-CZ	10.31	1.46	1.33
67	B1	2655	C	C2 ² -C1'	-10.31	1.42	1.53
67	B1	268	C	C2 ² -C1'	-10.31	1.42	1.53
67	B1	2898	G	C2 ² -C1'	-10.31	1.42	1.53
21	A2	1418	G	O4 ² -C1'	10.31	1.55	1.41
21	A2	1416	C	C2 ² -C1'	10.30	1.64	1.53
21	A2	1478	A	O4 ² -C1'	10.30	1.55	1.41
21	A2	637	G	C2 ² -C1'	-10.30	1.42	1.53
67	B1	561	C	O4 ² -C1'	10.30	1.55	1.41
67	B1	2292	A	C2 ² -C1'	-10.30	1.42	1.53
27	A0	69	C	C2 ² -C1'	-10.30	1.42	1.53
21	A2	242	A	O4 ² -C1'	-10.29	1.28	1.41
67	B1	2925	C	O4 ² -C1'	10.29	1.55	1.41
67	B1	3007	A	C2 ² -C1'	10.29	1.64	1.53
21	A2	1102	A	C2 ² -C1'	-10.29	1.42	1.53
21	A2	474	G	O4 ² -C1'	10.28	1.55	1.41
21	A2	582	G	O4 ² -C1'	10.28	1.55	1.41
21	A2	1209	C	O4 ² -C1'	10.28	1.55	1.41
67	B1	2635	C	C2 ² -C1'	-10.28	1.42	1.53
21	A2	472	C	O4 ² -C1'	10.27	1.55	1.41
67	B1	1218	C	C2 ² -C1'	-10.27	1.42	1.53
67	B1	2390	G	C2 ² -C1'	10.27	1.64	1.53
27	A0	29	G	C2 ² -C1'	-10.27	1.42	1.53
67	B1	1262	C	O4 ² -C1'	10.27	1.54	1.41
67	B1	42	G	O4 ² -C1'	10.26	1.54	1.41
67	B1	2762	G	O4 ² -C1'	10.26	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2042	A	O4 ² -C1'	-10.26	1.28	1.41
11	A1	35	G	C2 ² -C1'	-10.26	1.42	1.53
67	B1	1325	A	O4 ² -C1'	10.26	1.54	1.41
21	A2	477	G	O4 ² -C1'	10.25	1.54	1.41
67	B1	86	G	C2 ² -C1'	-10.25	1.42	1.53
67	B1	1180	G	O4 ² -C1'	10.24	1.54	1.41
21	A2	543	C	O4 ² -C1'	10.24	1.54	1.41
21	A2	747	U	C2 ² -C1'	10.24	1.64	1.53
21	A2	808	C	O4 ² -C1'	10.23	1.54	1.41
67	B1	687	C	O4 ² -C1'	10.23	1.54	1.41
67	B1	2549	A	O4 ² -C1'	10.23	1.54	1.41
67	B1	1632	U	C2 ² -C1'	10.23	1.64	1.53
67	B1	2431	C	C2 ² -C1'	-10.23	1.42	1.53
67	B1	885	A	O4 ² -C1'	10.23	1.54	1.41
67	B1	1483	U	C5 ² -C4'	10.23	1.63	1.51
67	B1	2781	A	O4 ² -C1'	10.23	1.54	1.41
67	B1	308	C	O4 ² -C1'	10.22	1.54	1.41
21	A2	1090	C	C2 ² -C1'	-10.22	1.42	1.53
67	B1	806	C	O4 ² -C1'	10.22	1.54	1.41
67	B1	1829	C	O4 ² -C1'	10.22	1.54	1.41
67	B1	809	A	O4 ² -C1'	-10.21	1.28	1.41
67	B1	2104	G	C2 ² -C1'	-10.21	1.42	1.53
21	A2	711	U	O4 ² -C1'	10.21	1.54	1.41
67	B1	1211	C	C2 ² -C1'	10.21	1.64	1.53
68	B3	8	C	O4 ² -C1'	10.21	1.54	1.41
21	A2	1338	C	O4 ² -C1'	10.21	1.54	1.41
67	B1	2145	G	O4 ² -C1'	-10.20	1.28	1.41
67	B1	2560	G	C4 ² -C3'	10.21	1.64	1.53
21	A2	210	A	C2 ² -C1'	-10.20	1.42	1.53
21	A2	1223	C	O4 ² -C1'	10.20	1.54	1.41
21	A2	939	C	O4 ² -C1'	10.20	1.54	1.41
21	A2	794	A	O4 ² -C1'	10.20	1.54	1.41
67	B1	933	G	C2 ² -C1'	-10.20	1.42	1.53
21	A2	852	G	C2 ² -C1'	-10.20	1.42	1.53
67	B1	2512	C	O4 ² -C1'	10.20	1.54	1.41
67	B1	913	G	C2 ² -C1'	-10.19	1.42	1.53
21	A2	403	C	C2 ² -C1'	-10.19	1.42	1.53
67	B1	3014	U	C2 ² -C1'	10.19	1.64	1.53
67	B1	270	C	O4 ² -C1'	10.19	1.54	1.41
67	B1	437	G	C2 ² -C1'	10.18	1.64	1.53
67	B1	799	C	O4 ² -C1'	10.18	1.54	1.41
21	A2	280	C	O4 ² -C1'	10.18	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1691	U	C2'-C1'	-10.18	1.42	1.53
67	B1	1841	G	C5'-C4'	10.18	1.63	1.51
67	B1	389	C	O4'-C1'	10.17	1.54	1.41
67	B1	1580	G	C2'-C1'	-10.17	1.42	1.53
21	A2	965	G	C2'-C1'	-10.17	1.42	1.53
67	B1	1343	C	C2'-C1'	-10.17	1.42	1.53
67	B1	907	C	C2'-C1'	-10.17	1.42	1.53
21	A2	765	U	C2'-C1'	10.17	1.64	1.53
21	A2	1354	A	C2'-C1'	-10.17	1.42	1.53
21	A2	1445	A	C2'-C1'	-10.16	1.42	1.53
67	B1	1241	C	O4'-C1'	10.16	1.54	1.41
68	B3	21	C	O4'-C1'	10.16	1.54	1.41
11	A1	5	C	P-O5'	-10.16	1.49	1.59
21	A2	258	A	C2'-C1'	-10.16	1.42	1.53
21	A2	1311	C	O4'-C1'	10.16	1.54	1.41
21	A2	239	A	C2'-C1'	-10.15	1.42	1.53
21	A2	779	G	C2'-C1'	-10.15	1.42	1.53
67	B1	351	C	C2'-C1'	10.15	1.64	1.53
21	A2	1077	U	O4'-C1'	10.15	1.54	1.41
67	B1	1329	G	O4'-C1'	10.14	1.54	1.41
67	B1	94	A	O4'-C1'	10.14	1.54	1.41
67	B1	206	A	O4'-C1'	10.14	1.54	1.41
67	B1	3040	G	C2'-C1'	-10.14	1.42	1.53
67	B1	2005	A	C2'-C1'	-10.14	1.42	1.53
21	A2	903	G	O4'-C1'	10.14	1.54	1.41
67	B1	3012	C	C2'-C1'	-10.13	1.42	1.53
11	A1	1	G	C2'-C1'	-10.13	1.42	1.53
67	B1	2569	G	O4'-C1'	10.13	1.54	1.41
21	A2	1225	C	O4'-C1'	10.13	1.54	1.41
21	A2	1266	A	C2'-C1'	-10.13	1.42	1.53
67	B1	1448	G	C2'-C1'	-10.13	1.42	1.53
67	B1	1488	C	O4'-C1'	10.13	1.54	1.41
67	B1	2547	A	C4'-C3'	-10.13	1.42	1.53
67	B1	2989	A	O4'-C1'	10.13	1.54	1.41
67	B1	449	G	O3'-P	-10.12	1.49	1.61
67	B1	2116	G	O4'-C1'	10.12	1.54	1.41
67	B1	2672	A	C4'-C3'	10.12	1.64	1.53
67	B1	365	G	O4'-C1'	-10.12	1.28	1.41
21	A2	668	G	C2'-C1'	-10.12	1.42	1.53
67	B1	2583	G	O4'-C1'	-10.12	1.28	1.41
67	B1	3006	G	O4'-C1'	10.12	1.54	1.41
21	A2	165	U	C2'-C1'	-10.11	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1035	G	P-O5'	-10.11	1.49	1.59
21	A2	523	C	P-O5'	-10.11	1.49	1.59
67	B1	43	G	C2'-C1'	10.11	1.64	1.53
67	B1	554	C	O4'-C1'	10.11	1.54	1.41
67	B1	1839	U	C2'-C1'	10.11	1.64	1.53
67	B1	2517	U	O4'-C1'	10.11	1.54	1.41
67	B1	407	A	C2'-C1'	-10.10	1.42	1.53
67	B1	1206	A	C2'-C1'	-10.10	1.42	1.53
67	B1	2341	G	O3'-P	-10.10	1.49	1.61
21	A2	11	A	C2'-C1'	-10.10	1.42	1.53
67	B1	802	G	O4'-C1'	10.10	1.54	1.41
67	B1	2675	C	O4'-C1'	10.10	1.54	1.41
67	B1	1396	A	C2'-C1'	10.09	1.64	1.53
67	B1	2548	A	C2'-C1'	10.09	1.64	1.53
21	A2	814	C	O4'-C1'	10.09	1.54	1.41
67	B1	137	A	O4'-C1'	10.09	1.54	1.41
21	A2	1492	U	C2'-C1'	-10.08	1.42	1.53
67	B1	967	G	C2'-C1'	-10.08	1.42	1.53
67	B1	1474	A	O3'-P	-10.08	1.49	1.61
21	A2	1218	C	C2'-C1'	-10.08	1.42	1.53
67	B1	205	A	O4'-C1'	10.08	1.54	1.41
67	B1	2846	A	C2'-C1'	-10.08	1.42	1.53
67	B1	1622	G	C2'-C1'	10.08	1.64	1.53
67	B1	2345	U	O4'-C1'	10.08	1.54	1.41
67	B1	3012	C	O4'-C1'	10.07	1.54	1.41
21	A2	272	C	O4'-C1'	10.07	1.54	1.41
67	B1	1484	U	O4'-C1'	10.07	1.54	1.41
67	B1	192	U	C2'-C1'	-10.07	1.42	1.53
67	B1	1800	G	O4'-C1'	10.07	1.54	1.41
67	B1	1770	A	O4'-C1'	10.06	1.54	1.41
67	B1	1953	U	O4'-C1'	10.06	1.54	1.41
67	B1	2110	C	O4'-C1'	10.06	1.54	1.41
67	B1	3035	C	O3'-P	-10.06	1.49	1.61
67	B1	738	C	O4'-C1'	10.06	1.54	1.41
67	B1	397	G	O4'-C1'	-10.06	1.28	1.41
67	B1	2361	C	C2'-C1'	-10.06	1.42	1.53
67	B1	2540	A	C2'-C1'	-10.06	1.42	1.53
21	A2	232	G	O4'-C1'	10.05	1.54	1.41
21	A2	872	A	C2'-C1'	-10.05	1.42	1.53
67	B1	2306	C	O4'-C1'	10.05	1.54	1.41
67	B1	796	C	C2'-C1'	-10.05	1.42	1.53
67	B1	1339	C	O4'-C1'	10.05	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2566	A	C2'-C1'	10.04	1.64	1.53
67	B1	93	C	O4'-C1'	10.04	1.54	1.41
67	B1	2601	C	O4'-C1'	10.04	1.54	1.41
68	B3	11	A	C2'-C1'	-10.04	1.42	1.53
67	B1	2891	A	C2'-C1'	-10.04	1.42	1.53
21	A2	748	A	C2'-C1'	-10.03	1.42	1.53
67	B1	2655	C	O3'-P	-10.03	1.49	1.61
21	A2	1039	C	O4'-C1'	10.02	1.54	1.41
21	A2	1310	C	C2'-C1'	-10.02	1.42	1.53
21	A2	516	A	O4'-C1'	10.02	1.54	1.41
21	A2	1087	C	O4'-C1'	10.02	1.54	1.41
67	B1	709	A	C2'-C1'	-10.02	1.42	1.53
67	B1	800	G	O4'-C1'	10.02	1.54	1.41
67	B1	2222	C	O4'-C1'	10.02	1.54	1.41
67	B1	2367	C	O4'-C1'	10.02	1.54	1.41
21	A2	1030	U	C2'-C1'	-10.01	1.42	1.53
67	B1	476	C	C5'-C4'	10.01	1.63	1.51
67	B1	2262	C	O4'-C1'	10.01	1.54	1.41
67	B1	2840	C	C2'-C1'	-10.01	1.42	1.53
21	A2	1097	G	C2'-C1'	-10.01	1.42	1.53
67	B1	2235	G	O4'-C1'	10.01	1.54	1.41
67	B1	2919	C	C2'-C1'	-10.01	1.42	1.53
21	A2	1035	C	O4'-C1'	10.00	1.54	1.41
67	B1	1936	C	O4'-C1'	10.00	1.54	1.41
67	B1	997	A	O4'-C1'	10.00	1.54	1.41
21	A2	312	U	O4'-C1'	10.00	1.54	1.41
67	B1	2629	U	O4'-C1'	10.00	1.54	1.41
67	B1	1544	C	O4'-C1'	9.99	1.54	1.41
67	B1	2301	C	O4'-C1'	9.99	1.54	1.41
67	B1	3022	C	O4'-C1'	9.99	1.54	1.41
67	B1	2237	A	C2'-C1'	-9.99	1.42	1.53
67	B1	2463	G	O4'-C1'	9.99	1.54	1.41
67	B1	2510	A	O4'-C1'	9.99	1.54	1.41
21	A2	1221	A	O4'-C1'	9.99	1.54	1.41
67	B1	82	C	O4'-C1'	9.99	1.54	1.41
67	B1	573	G	C2'-C1'	-9.99	1.42	1.53
67	B1	1710	C	O4'-C1'	9.98	1.54	1.41
11	A1	46	U	O4'-C1'	-9.98	1.28	1.41
67	B1	1937	A	C2'-C1'	9.98	1.64	1.53
67	B1	1653	U	O4'-C1'	9.98	1.54	1.41
67	B1	2977	G	C2'-C1'	-9.97	1.42	1.53
67	B1	198	C	O4'-C1'	9.97	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	258	C	C2'-C1'	-9.97	1.42	1.53
67	B1	285	C	O4'-C1'	9.97	1.54	1.41
67	B1	2774	C	C5'-C4'	9.97	1.63	1.51
67	B1	1554	G	O4'-C1'	9.97	1.54	1.41
21	A2	1280	C	O4'-C1'	9.96	1.54	1.41
67	B1	1194	G	C2'-C1'	-9.96	1.42	1.53
67	B1	2230	G	C2'-C1'	9.96	1.64	1.53
67	B1	629	G	C2'-C1'	9.95	1.64	1.53
67	B1	1534	G	O3'-P	-9.95	1.49	1.61
67	B1	601	A	C2'-C1'	9.95	1.64	1.53
21	A2	190	C	O4'-C1'	9.95	1.54	1.41
27	A0	28	C	O4'-C1'	9.94	1.54	1.41
67	B1	2991	C	C2'-C1'	-9.94	1.42	1.53
67	B1	769	G	O4'-C1'	9.94	1.54	1.41
67	B1	801	A	C2'-C1'	9.94	1.64	1.53
67	B1	1675	C	O4'-C1'	9.93	1.54	1.41
67	B1	1408	G	C2'-C1'	-9.93	1.42	1.53
67	B1	2928	C	O4'-C1'	9.93	1.54	1.41
67	B1	356	C	C2'-C1'	-9.93	1.42	1.53
67	B1	37	C	O4'-C1'	9.92	1.54	1.41
67	B1	833	G	O4'-C1'	9.92	1.54	1.41
67	B1	65	G	C2'-C1'	-9.92	1.42	1.53
67	B1	2828	G	C2'-C1'	-9.91	1.42	1.53
67	B1	1182	C	C2'-C1'	-9.91	1.42	1.53
67	B1	1415	C	O4'-C1'	9.91	1.54	1.41
21	A2	673	C	O4'-C1'	9.91	1.54	1.41
67	B1	688	G	C2'-C1'	-9.91	1.42	1.53
21	A2	1225	C	C2'-C1'	-9.90	1.42	1.53
67	B1	1511	C	P-O5'	9.90	1.69	1.59
67	B1	2385	G	C2'-C1'	-9.90	1.42	1.53
67	B1	1541	U	O4'-C1'	-9.90	1.28	1.41
67	B1	1143	A	C2'-C1'	-9.89	1.42	1.53
67	B1	1341	U	C2'-C1'	-9.89	1.42	1.53
11	A1	23	G	C2'-C1'	9.89	1.64	1.53
21	A2	191	A	C2'-C1'	-9.89	1.42	1.53
67	B1	278	C	O4'-C1'	-9.89	1.28	1.41
67	B1	758	C	C3'-C2'	9.89	1.63	1.52
67	B1	1217	U	C2'-C1'	-9.88	1.42	1.53
67	B1	2838	U	O4'-C1'	9.89	1.54	1.41
67	B1	2074	U	C2'-C1'	-9.88	1.42	1.53
21	A2	70	C	O4'-C1'	9.88	1.54	1.41
67	B1	418	C	P-O5'	-9.88	1.49	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	983	G	C2'-C1'	-9.88	1.42	1.53
21	A2	43	A	C2'-C1'	-9.88	1.42	1.53
21	A2	740	G	O4'-C1'	9.88	1.54	1.41
21	A2	360	A	O4'-C1'	9.87	1.54	1.41
67	B1	761	U	O3'-P	-9.87	1.49	1.61
67	B1	1905	G	P-O5'	-9.87	1.49	1.59
67	B1	2711	U	O4'-C1'	9.87	1.54	1.41
21	A2	536	A	C2'-C1'	-9.87	1.42	1.53
21	A2	702	G	O4'-C1'	9.86	1.54	1.41
21	A2	971	G	O4'-C1'	9.86	1.54	1.41
67	B1	162	G	O4'-C1'	9.86	1.54	1.41
67	B1	1474	A	O4'-C1'	9.86	1.54	1.41
67	B1	1093	G	O4'-C1'	-9.86	1.28	1.41
67	B1	1717	C	C2'-C1'	-9.86	1.42	1.53
67	B1	2673	C	O4'-C1'	9.86	1.54	1.41
21	A2	219	C	O4'-C1'	9.86	1.54	1.41
67	B1	1570	C	C2'-C1'	-9.86	1.42	1.53
67	B1	2659	G	O4'-C1'	9.86	1.54	1.41
21	A2	972	C	O4'-C1'	9.85	1.54	1.41
67	B1	363	G	C2'-C1'	9.85	1.64	1.53
67	B1	940	G	C4'-C3'	9.85	1.64	1.53
67	B1	1473	C	P-O5'	-9.85	1.49	1.59
67	B1	2162	G	C2'-C1'	-9.85	1.42	1.53
67	B1	2369	G	C2'-C1'	-9.85	1.42	1.53
21	A2	679	G	O4'-C1'	9.84	1.54	1.41
67	B1	1195	G	C2'-C1'	9.84	1.64	1.53
27	A0	14	A	C2'-C1'	9.84	1.64	1.53
11	A1	28	C	C2'-C1'	-9.84	1.42	1.53
21	A2	338	C	C2'-C1'	9.84	1.64	1.53
67	B1	902	C	O4'-C1'	9.83	1.54	1.41
68	B3	30	G	C2'-C1'	9.83	1.64	1.53
67	B1	2018	C	O4'-C1'	9.83	1.54	1.41
67	B1	87	C	O4'-C1'	9.82	1.54	1.41
21	A2	368	C	C2'-C1'	-9.82	1.42	1.53
21	A2	692	G	C2'-C1'	-9.82	1.42	1.53
67	B1	2867	U	P-O5'	-9.82	1.50	1.59
67	B1	1217	U	O4'-C1'	9.81	1.54	1.41
67	B1	1346	G	C2'-C1'	-9.81	1.42	1.53
67	B1	1977	C	O4'-C1'	9.81	1.54	1.41
21	A2	210	A	O4'-C1'	9.81	1.54	1.41
21	A2	1144	G	C2'-C1'	-9.81	1.42	1.53
67	B1	1738	A	O3'-P	-9.81	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2235	G	C2'-C1'	-9.81	1.42	1.53
67	B1	2893	U	C2'-C1'	-9.81	1.42	1.53
67	B1	1686	C	C2'-C1'	-9.81	1.42	1.53
21	A2	1105	C	C2'-C1'	9.80	1.64	1.53
68	B3	99	G	O4'-C1'	9.80	1.54	1.41
67	B1	1567	C	P-OP2	9.80	1.65	1.49
21	A2	1312	C	O4'-C1'	9.80	1.54	1.41
67	B1	2349	U	C2'-C1'	-9.80	1.42	1.53
67	B1	2807	C	C2'-C1'	-9.79	1.42	1.53
21	A2	255	G	O4'-C1'	9.79	1.54	1.41
67	B1	269	C	C2'-C1'	-9.79	1.42	1.53
67	B1	2899	G	C2'-C1'	-9.79	1.42	1.53
67	B1	2691	G	C2'-C1'	-9.79	1.42	1.53
67	B1	2733	A	O4'-C1'	9.79	1.54	1.41
21	A2	786	G	C2'-C1'	-9.79	1.42	1.53
21	A2	1233	G	O4'-C1'	-9.79	1.28	1.41
67	B1	609	G	C2'-C1'	-9.79	1.42	1.53
67	B1	1314	A	O4'-C1'	-9.79	1.28	1.41
21	A2	578	G	C2'-C1'	-9.78	1.42	1.53
67	B1	2882	G	O4'-C1'	-9.78	1.28	1.41
21	A2	1346	C	O4'-C1'	9.78	1.54	1.41
67	B1	130	G	C2'-C1'	-9.78	1.42	1.53
67	B1	505	A	C2'-C1'	9.77	1.64	1.53
67	B1	2470	U	O4'-C1'	9.77	1.54	1.41
21	A2	1243	C	O4'-C1'	9.77	1.54	1.41
27	A0	26	G	C2'-C1'	9.77	1.64	1.53
67	B1	865	C	O4'-C1'	9.77	1.54	1.41
67	B1	18	C	C2'-C1'	9.77	1.64	1.53
67	B1	1543	C	C2'-C1'	-9.76	1.42	1.53
67	B1	2788	U	C2'-C1'	-9.76	1.42	1.53
21	A2	5	C	C2'-C1'	-9.76	1.42	1.53
21	A2	80	A	P-O5'	-9.76	1.50	1.59
21	A2	300	G	O4'-C1'	-9.76	1.28	1.41
67	B1	3005	C	C2'-C1'	-9.75	1.42	1.53
11	A1	38	G	O4'-C1'	9.75	1.54	1.41
21	A2	361	A	O4'-C1'	9.75	1.54	1.41
67	B1	621	G	O4'-C1'	9.75	1.54	1.41
21	A2	861	G	C2'-C1'	-9.74	1.42	1.53
67	B1	2569	G	C2'-C1'	-9.74	1.42	1.53
11	A1	27	A	O4'-C1'	9.74	1.54	1.41
67	B1	911	G	O4'-C1'	9.74	1.54	1.41
67	B1	2915	U	C2'-C1'	-9.73	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	170	A	C2'-C1'	9.73	1.64	1.53
67	B1	723	A	O4'-C1'	9.73	1.54	1.41
67	B1	1615	G	O4'-C1'	-9.73	1.28	1.41
67	B1	2799	C	O4'-C1'	9.73	1.54	1.41
21	A2	464	G	O4'-C1'	9.73	1.54	1.41
67	B1	548	U	O4'-C1'	9.73	1.54	1.41
67	B1	805	C	O4'-C1'	9.73	1.54	1.41
67	B1	824	C	C3'-C2'	9.73	1.63	1.52
67	B1	1564	C	O4'-C1'	9.73	1.54	1.41
67	B1	2059	G	O3'-P	-9.73	1.49	1.61
68	B3	2	G	C2'-C1'	9.73	1.64	1.53
67	B1	2834	C	C2'-C1'	-9.72	1.42	1.53
21	A2	1385	U	O4'-C1'	9.72	1.54	1.41
67	B1	2794	G	O4'-C1'	-9.72	1.29	1.41
67	B1	2934	C	C2'-C1'	-9.72	1.42	1.53
67	B1	1068	U	O4'-C1'	9.72	1.54	1.41
21	A2	1241	U	C2'-C1'	9.71	1.64	1.53
27	A0	60	U	C2'-C1'	-9.71	1.42	1.53
67	B1	998	G	O4'-C1'	-9.71	1.29	1.41
68	B3	36	U	C5'-C4'	9.71	1.62	1.51
21	A2	1433	C	O4'-C1'	9.70	1.54	1.41
67	B1	847	A	O4'-C1'	9.70	1.54	1.41
67	B1	509	A	O4'-C1'	9.70	1.54	1.41
67	B1	634	G	O4'-C1'	-9.70	1.29	1.41
67	B1	1572	C	O4'-C1'	9.70	1.54	1.41
67	B1	1621	G	C2'-C1'	-9.70	1.42	1.53
21	A2	1073	C	O4'-C1'	9.70	1.54	1.41
67	B1	483	C	C2'-C1'	-9.70	1.42	1.53
67	B1	1568	A	C5'-C4'	9.69	1.62	1.51
67	B1	1899	C	O4'-C1'	9.69	1.54	1.41
21	A2	1272	G	O4'-C1'	9.69	1.54	1.41
67	B1	197	C	O4'-C1'	9.69	1.54	1.41
67	B1	1170	G	C2'-C1'	9.69	1.64	1.53
67	B1	1843	C	O4'-C1'	9.69	1.54	1.41
67	B1	2121	C	O4'-C1'	9.69	1.54	1.41
67	B1	1405	G	O4'-C1'	9.69	1.54	1.41
67	B1	2420	C	O4'-C1'	9.68	1.54	1.41
67	B1	2843	C	C2'-C1'	-9.68	1.42	1.53
67	B1	1023	C	C2'-C1'	-9.68	1.42	1.53
67	B1	2351	G	O4'-C1'	-9.68	1.29	1.41
21	A2	124	C	O4'-C1'	9.68	1.54	1.41
67	B1	124	C	C2'-C1'	-9.68	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2147	C	O4'-C1'	9.68	1.54	1.41
21	A2	1040	A	O4'-C1'	9.67	1.54	1.41
21	A2	1162	G	O4'-C1'	9.67	1.54	1.41
21	A2	1232	G	P-O5'	9.67	1.69	1.59
67	B1	1300	C	C2'-C1'	-9.67	1.42	1.53
67	B1	1093	G	C2'-C1'	9.66	1.64	1.53
21	A2	1465	C	C2'-C1'	-9.66	1.42	1.53
21	A2	1193	G	C2'-C1'	-9.66	1.42	1.53
67	B1	2972	G	O4'-C1'	9.66	1.54	1.41
67	B1	2684	G	O4'-C1'	9.66	1.54	1.41
67	B1	2695	U	C2'-C1'	-9.66	1.42	1.53
21	A2	1081	C	C3'-O3'	9.65	1.55	1.42
21	A2	1432	U	C2'-C1'	-9.65	1.42	1.53
67	B1	1644	G	C2'-C1'	9.65	1.64	1.53
67	B1	2749	G	C3'-C2'	9.65	1.63	1.52
21	A2	1048	G	C2'-C1'	-9.65	1.42	1.53
67	B1	2198	U	O4'-C1'	9.65	1.54	1.41
67	B1	1689	G	O4'-C1'	9.65	1.54	1.41
68	B3	20	G	O4'-C1'	9.64	1.54	1.41
21	A2	584	C	O4'-C1'	9.64	1.54	1.41
67	B1	1097	G	C2'-C1'	-9.64	1.42	1.53
67	B1	2065	C	C2'-C1'	-9.64	1.42	1.53
67	B1	2697	G	O4'-C1'	9.64	1.54	1.41
68	B3	91	G	C2'-C1'	-9.63	1.42	1.53
21	A2	811	G	C2'-C1'	9.63	1.64	1.53
21	A2	1093	C	O4'-C1'	9.63	1.54	1.41
67	B1	1751	G	O4'-C1'	9.63	1.54	1.41
21	A2	553	C	C2'-C1'	-9.62	1.42	1.53
67	B1	1637	C	C2'-C1'	-9.62	1.42	1.53
21	A2	1297	G	O4'-C1'	9.62	1.54	1.41
67	B1	1796	U	O4'-C1'	-9.62	1.29	1.41
67	B1	2968	G	C2'-C1'	-9.62	1.42	1.53
21	A2	496	C	C2'-C1'	-9.62	1.42	1.53
67	B1	1747	C	O3'-P	-9.62	1.49	1.61
21	A2	1012	C	O4'-C1'	9.61	1.54	1.41
67	B1	2721	C	C2'-C1'	-9.61	1.42	1.53
21	A2	337	C	O4'-C1'	9.61	1.54	1.41
21	A2	1008	U	O4'-C1'	9.61	1.54	1.41
67	B1	1481	G	C2'-C1'	-9.61	1.42	1.53
11	A1	30	G	C2'-C1'	-9.60	1.42	1.53
21	A2	755	U	C2'-C1'	-9.60	1.42	1.53
21	A2	1318	U	O4'-C1'	9.60	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2817	U	O4'-C1'	9.60	1.54	1.41
67	B1	334	G	C5'-C4'	9.60	1.62	1.51
67	B1	1302	G	C2'-C1'	-9.60	1.42	1.53
67	B1	1451	A	O4'-C1'	9.60	1.54	1.41
67	B1	2857	C	O4'-C1'	9.60	1.54	1.41
67	B1	142	G	C2'-C1'	9.59	1.64	1.53
67	B1	618	C	C2'-C1'	-9.59	1.42	1.53
67	B1	815	U	C2'-C1'	9.59	1.64	1.53
67	B1	1676	G	O4'-C1'	9.59	1.54	1.41
67	B1	2205	A	O4'-C1'	9.59	1.54	1.41
67	B1	2452	C	P-O5'	-9.59	1.50	1.59
67	B1	884	C	P-O5'	-9.59	1.50	1.59
21	A2	27	C	O4'-C1'	9.59	1.54	1.41
27	A0	33	U	P-O5'	-9.58	1.50	1.59
67	B1	2640	C	C2'-C1'	-9.58	1.42	1.53
67	B1	475	U	O4'-C1'	9.58	1.54	1.41
67	B1	485	G	C2'-C1'	-9.58	1.42	1.53
67	B1	2998	G	O4'-C1'	-9.58	1.29	1.41
21	A2	930	G	O4'-C1'	9.58	1.54	1.41
21	A2	815	C	C2'-C1'	-9.58	1.42	1.53
21	A2	1103	G	C2'-C1'	-9.58	1.42	1.53
27	A0	15	G	C3'-C2'	-9.57	1.42	1.52
21	A2	1431	C	C2'-C1'	-9.57	1.42	1.53
67	B1	868	U	O4'-C1'	9.57	1.54	1.41
67	B1	980	G	C3'-C2'	9.57	1.63	1.52
21	A2	1154	G	O4'-C1'	9.57	1.54	1.41
67	B1	2309	C	C2'-C1'	-9.57	1.42	1.53
21	A2	491	G	O4'-C1'	9.56	1.54	1.41
67	B1	730	C	C2'-C1'	-9.56	1.42	1.53
67	B1	2394	G	C2'-C1'	-9.56	1.42	1.53
21	A2	263	C	C5'-C4'	9.56	1.62	1.51
67	B1	186	A	O3'-P	-9.56	1.49	1.61
67	B1	2835	A	O4'-C1'	9.56	1.54	1.41
67	B1	2907	C	C3'-O3'	9.56	1.55	1.42
21	A2	1380	C	C2'-C1'	-9.56	1.42	1.53
21	A2	518	U	C2'-C1'	-9.56	1.42	1.53
67	B1	906	G	O4'-C1'	-9.55	1.29	1.41
67	B1	931	C	O4'-C1'	9.56	1.54	1.41
67	B1	1513	G	O4'-C1'	-9.55	1.29	1.41
67	B1	2313	G	C2'-C1'	-9.55	1.42	1.53
67	B1	1239	C	O4'-C1'	9.55	1.54	1.41
67	B1	1921	U	C2'-C1'	-9.55	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1112	G	C2'-C1'	-9.54	1.42	1.53
67	B1	1087	G	O4'-C1'	-9.54	1.29	1.41
21	A2	136	A	O4'-C1'	9.54	1.54	1.41
67	B1	963	G	O4'-C1'	9.54	1.54	1.41
67	B1	1148	C	C2'-C1'	-9.54	1.42	1.53
67	B1	1823	A	O4'-C1'	9.54	1.54	1.41
67	B1	1253	U	O4'-C1'	9.53	1.54	1.41
67	B1	1682	C	C2'-C1'	-9.53	1.42	1.53
68	B3	42	A	C2'-C1'	-9.53	1.42	1.53
21	A2	589	U	C2'-C1'	9.53	1.63	1.53
21	A2	146	A	C4'-C3'	9.52	1.63	1.53
21	A2	1090	C	O4'-C1'	9.52	1.54	1.41
67	B1	2322	A	C2'-C1'	-9.52	1.42	1.53
67	B1	2437	G	C2'-C1'	-9.52	1.42	1.53
67	B1	1388	U	C2'-C1'	-9.52	1.42	1.53
67	B1	84	A	O4'-C1'	9.51	1.54	1.41
67	B1	1755	C	O4'-C1'	9.51	1.54	1.41
21	A2	1325	C	O4'-C1'	9.51	1.54	1.41
21	A2	154	C	C2'-C1'	9.51	1.63	1.53
67	B1	2555	C	C2'-C1'	-9.51	1.42	1.53
67	B1	2712	G	O4'-C1'	9.51	1.54	1.41
67	B1	875	G	O4'-C1'	9.51	1.54	1.41
67	B1	2231	G	C2'-C1'	-9.50	1.42	1.53
67	B1	2563	A	C2'-C1'	9.50	1.63	1.53
21	A2	830	A	C4'-C3'	9.50	1.63	1.53
21	A2	674	C	C5'-C4'	9.49	1.62	1.51
21	A2	409	C	C5'-C4'	9.49	1.62	1.51
21	A2	1198	A	C5'-C4'	9.49	1.62	1.51
67	B1	2393	G	O4'-C1'	-9.49	1.29	1.41
67	B1	2870	A	P-O5'	-9.49	1.50	1.59
21	A2	957	A	C2'-C1'	9.48	1.63	1.53
67	B1	545	G	O4'-C1'	-9.48	1.29	1.41
67	B1	892	U	C2'-C1'	-9.48	1.43	1.53
67	B1	1430	A	C2'-C1'	9.48	1.63	1.53
21	A2	1109	C	C2'-C1'	-9.48	1.43	1.53
67	B1	1470	C	C5'-C4'	9.48	1.62	1.51
67	B1	2188	C	O4'-C1'	9.48	1.53	1.41
21	A2	927	A	C2'-C1'	-9.47	1.43	1.53
27	A0	68	G	C5'-C4'	9.47	1.62	1.51
21	A2	738	C	C2'-C1'	-9.47	1.43	1.53
67	B1	1566	G	C2'-C1'	-9.46	1.43	1.53
67	B1	1604	G	C2'-C1'	-9.46	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2407	G	O4'-C1'	9.46	1.53	1.41
67	B1	926	C	O4'-C1'	9.46	1.53	1.41
67	B1	1099	C	O4'-C1'	9.46	1.53	1.41
67	B1	1723	A	O4'-C1'	9.45	1.53	1.41
21	A2	338	C	O4'-C1'	9.45	1.53	1.41
67	B1	1168	A	O4'-C1'	9.45	1.53	1.41
67	B1	2389	C	O4'-C1'	9.45	1.53	1.41
67	B1	335	C	C2'-C1'	-9.44	1.43	1.53
67	B1	730	C	P-O5'	-9.44	1.50	1.59
21	A2	488	A	C2'-C1'	-9.44	1.43	1.53
68	B3	89	G	C2'-C1'	-9.44	1.43	1.53
21	A2	1455	A	O4'-C1'	9.44	1.53	1.41
21	A2	401	U	C2'-C1'	9.44	1.63	1.53
67	B1	424	U	O4'-C1'	9.43	1.53	1.41
21	A2	638	G	O4'-C1'	9.43	1.53	1.41
21	A2	1050	G	O4'-C1'	-9.43	1.29	1.41
67	B1	3032	C	O4'-C1'	9.43	1.53	1.41
11	A1	22	A	P-O5'	-9.43	1.50	1.59
21	A2	71	C	C2'-C1'	-9.42	1.43	1.53
67	B1	872	G	O4'-C1'	9.42	1.53	1.41
67	B1	1294	A	C5'-C4'	9.42	1.62	1.51
67	B1	1480	G	C2'-C1'	9.42	1.63	1.53
67	B1	148	C	O4'-C1'	9.41	1.53	1.41
67	B1	1333	G	C2'-C1'	-9.41	1.43	1.53
67	B1	1573	A	O4'-C1'	-9.41	1.29	1.41
67	B1	1882	C	O4'-C1'	9.41	1.53	1.41
67	B1	2246	G	O4'-C1'	9.41	1.53	1.41
21	A2	1276	G	O4'-C1'	9.41	1.53	1.41
67	B1	1948	A	C2'-C1'	-9.41	1.43	1.53
67	B1	2155	C	C5'-C4'	9.41	1.62	1.51
67	B1	811	C	O4'-C1'	9.41	1.53	1.41
67	B1	1162	C	C2'-C1'	-9.40	1.43	1.53
67	B1	2381	A	C2'-C1'	-9.40	1.43	1.53
67	B1	1368	A	C2'-C1'	9.40	1.63	1.53
67	B1	2514	C	P-O5'	-9.40	1.50	1.59
67	B1	1848	A	C3'-C2'	-9.40	1.42	1.52
21	A2	5	C	O4'-C1'	9.39	1.53	1.41
67	B1	2243	G	O4'-C1'	-9.39	1.29	1.41
67	B1	226	C	P-O5'	-9.39	1.50	1.59
67	B1	356	C	P-O5'	9.39	1.69	1.59
27	A0	74	C	O4'-C1'	9.38	1.53	1.41
67	B1	596	C	C2'-C1'	-9.38	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	233	A	C2'-C1'	-9.38	1.43	1.53
21	A2	334	G	O4'-C1'	-9.37	1.29	1.41
67	B1	141	C	C2'-C1'	-9.37	1.43	1.53
21	A2	438	A	O4'-C1'	9.37	1.53	1.41
21	A2	580	G	O4'-C1'	-9.37	1.29	1.41
67	B1	68	G	O4'-C1'	9.37	1.53	1.41
67	B1	37	C	C2'-C1'	-9.37	1.43	1.53
21	A2	284	A	C2'-C1'	9.36	1.63	1.53
67	B1	242	C	O4'-C1'	9.36	1.53	1.41
67	B1	762	G	C5'-C4'	9.36	1.62	1.51
67	B1	791	C	O4'-C1'	9.36	1.53	1.41
68	B3	126	C	O4'-C1'	9.36	1.53	1.41
21	A2	822	A	O4'-C1'	9.36	1.53	1.41
67	B1	661	G	O4'-C1'	9.36	1.53	1.41
21	A2	261	G	C4'-C3'	-9.35	1.42	1.53
21	A2	495	G	C2'-C1'	-9.35	1.43	1.53
21	A2	1360	C	C5'-C4'	9.35	1.62	1.51
67	B1	2206	G	O4'-C1'	9.35	1.53	1.41
21	A2	1111	G	P-O5'	-9.35	1.50	1.59
67	B1	655	C	O4'-C1'	9.35	1.53	1.41
67	B1	2214	U	C2'-C1'	-9.35	1.43	1.53
21	A2	1022	U	O4'-C1'	9.35	1.53	1.41
67	B1	79	C	O4'-C1'	9.35	1.53	1.41
67	B1	551	A	C2'-C1'	-9.35	1.43	1.53
67	B1	1615	G	C2'-C1'	9.35	1.63	1.53
21	A2	933	G	O4'-C1'	9.34	1.53	1.41
11	A1	60	A	O4'-C1'	9.34	1.53	1.41
21	A2	944	C	O4'-C1'	9.34	1.53	1.41
67	B1	843	C	C2'-C1'	-9.34	1.43	1.53
67	B1	1542	U	C2'-C1'	9.34	1.63	1.53
67	B1	2693	G	P-O5'	-9.33	1.50	1.59
11	A1	2	G	O4'-C1'	9.33	1.53	1.41
67	B1	175	G	O4'-C1'	-9.33	1.29	1.41
67	B1	2639	G	C2'-C1'	-9.33	1.43	1.53
21	A2	188	C	C2'-C1'	-9.33	1.43	1.53
67	B1	1908	C	C2'-C1'	-9.33	1.43	1.53
67	B1	261	A	O4'-C1'	9.33	1.53	1.41
67	B1	352	G	C2'-C1'	-9.32	1.43	1.53
67	B1	2957	G	O4'-C1'	9.32	1.53	1.41
21	A2	1434	C	O4'-C1'	9.32	1.53	1.41
67	B1	2856	G	C2'-C1'	-9.32	1.43	1.53
67	B1	1711	C	P-O5'	-9.32	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A1	8	U	C4'-O4'	9.32	1.57	1.45
67	B1	1596	G	C2'-C1'	9.32	1.63	1.53
67	B1	1780	C	O4'-C1'	9.32	1.53	1.41
67	B1	2110	C	C2'-C1'	-9.32	1.43	1.53
68	B3	102	G	C5'-C4'	9.32	1.62	1.51
21	A2	1129	A	O4'-C1'	9.31	1.53	1.41
67	B1	827	G	O4'-C1'	-9.31	1.29	1.41
67	B1	249	G	O4'-C1'	9.31	1.53	1.41
67	B1	2130	C	C2'-C1'	-9.31	1.43	1.53
67	B1	2494	A	O4'-C1'	9.31	1.53	1.41
21	A2	265	C	O4'-C1'	9.31	1.53	1.41
21	A2	444	G	C2'-C1'	-9.30	1.43	1.53
67	B1	2631	C	O4'-C1'	9.30	1.53	1.41
67	B1	448	A	C2'-C1'	9.30	1.63	1.53
21	A2	12	U	C2'-C1'	-9.30	1.43	1.53
21	A2	1197	C	O4'-C1'	9.30	1.53	1.41
67	B1	34	C	C2'-C1'	9.30	1.63	1.53
67	B1	266	A	O4'-C1'	9.30	1.53	1.41
67	B1	1317	G	C2'-C1'	-9.30	1.43	1.53
67	B1	1891	C	O4'-C1'	9.29	1.53	1.41
21	A2	1238	G	O4'-C1'	-9.29	1.29	1.41
21	A2	1315	G	C2'-C1'	-9.29	1.43	1.53
67	B1	345	C	C2'-C1'	-9.29	1.43	1.53
67	B1	1133	U	C5'-C4'	9.29	1.62	1.51
67	B1	699	A	C2'-C1'	-9.29	1.43	1.53
67	B1	3001	C	C2'-C1'	-9.29	1.43	1.53
68	B3	97	G	C2'-C1'	9.29	1.63	1.53
67	B1	1993	A	O4'-C1'	-9.28	1.29	1.41
67	B1	2312	U	C2'-C1'	9.28	1.63	1.53
67	B1	630	G	C2'-C1'	9.28	1.63	1.53
67	B1	2135	C	P-O5'	-9.28	1.50	1.59
67	B1	1192	G	O4'-C1'	9.28	1.53	1.41
67	B1	3038	A	P-O5'	-9.28	1.50	1.59
67	B1	234	G	C5'-C4'	9.27	1.62	1.51
67	B1	2777	G	C5'-C4'	9.27	1.62	1.51
67	B1	2272	G	O4'-C1'	9.27	1.53	1.41
21	A2	1263	C	C2'-C1'	-9.27	1.43	1.53
67	B1	830	G	O4'-C1'	9.27	1.53	1.41
21	A2	632	C	C2'-C1'	-9.26	1.43	1.53
67	B1	1729	C	O4'-C1'	9.26	1.53	1.41
27	A0	35	U	O4'-C1'	9.26	1.53	1.41
21	A2	442	C	O4'-C1'	9.26	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	499	G	C2'-C1'	-9.26	1.43	1.53
67	B1	804	C	O4'-C1'	9.26	1.53	1.41
21	A2	1159	U	O4'-C1'	9.25	1.53	1.41
67	B1	1173	G	C2'-C1'	-9.25	1.43	1.53
21	A2	17	C	O3'-P	-9.25	1.50	1.61
67	B1	188	A	C2'-C1'	9.24	1.63	1.53
67	B1	61	G	O4'-C1'	9.24	1.53	1.41
67	B1	664	A	O4'-C1'	9.24	1.53	1.41
67	B1	1602	C	O3'-P	-9.24	1.50	1.61
67	B1	2157	U	C2'-C1'	-9.24	1.43	1.53
67	B1	1031	C	O4'-C1'	9.23	1.53	1.41
67	B1	2547	A	O4'-C1'	9.23	1.53	1.41
67	B1	2875	C	O4'-C1'	9.23	1.53	1.41
21	A2	654	U	C2'-C1'	9.23	1.63	1.53
67	B1	1033	C	O4'-C1'	9.23	1.53	1.41
67	B1	2874	C	O4'-C1'	9.23	1.53	1.41
21	A2	931	C	O4'-C1'	9.23	1.53	1.41
67	B1	845	U	O4'-C1'	9.23	1.53	1.41
67	B1	865	C	C2'-C1'	-9.22	1.43	1.53
67	B1	3047	C	O4'-C1'	9.22	1.53	1.41
67	B1	2124	C	O4'-C1'	9.22	1.53	1.41
21	A2	868	C	O4'-C1'	9.21	1.53	1.41
21	A2	704	C	C2'-C1'	9.21	1.63	1.53
67	B1	423	G	C2'-C1'	-9.21	1.43	1.53
68	B3	36	U	C2'-C1'	-9.21	1.43	1.53
21	A2	262	G	C2'-C1'	-9.21	1.43	1.53
67	B1	291	A	C2'-C1'	-9.21	1.43	1.53
67	B1	1087	G	C2'-C1'	9.20	1.63	1.53
67	B1	2965	C	O4'-C1'	9.21	1.53	1.41
67	B1	996	U	C2'-C1'	9.20	1.63	1.53
21	A2	1486	A	C2'-C1'	9.20	1.63	1.53
67	B1	850	C	C2'-C1'	-9.20	1.43	1.53
67	B1	2534	C	O4'-C1'	9.20	1.53	1.41
67	B1	190	C	C4'-C3'	9.19	1.63	1.53
67	B1	441	A	O4'-C1'	9.19	1.53	1.41
67	B1	3029	A	C2'-C1'	9.19	1.63	1.53
67	B1	1778	G	O4'-C1'	9.19	1.53	1.41
21	A2	1250	C	C2'-C1'	-9.19	1.43	1.53
67	B1	926	C	C5'-C4'	9.19	1.62	1.51
67	B1	1216	A	C2'-C1'	-9.19	1.43	1.53
67	B1	2159	C	C2'-C1'	-9.19	1.43	1.53
21	A2	1203	G	C2'-C1'	-9.18	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	562	G	O4'-C1'	-9.18	1.29	1.41
67	B1	943	G	C4'-C3'	9.18	1.63	1.53
67	B1	1067	G	O3'-P	-9.18	1.50	1.61
67	B1	1926	A	C2'-C1'	-9.18	1.43	1.53
67	B1	3026	C	O4'-C1'	-9.18	1.29	1.41
67	B1	2744	U	C2'-C1'	-9.18	1.43	1.53
21	A2	516	A	O3'-P	-9.17	1.50	1.61
67	B1	770	G	O4'-C1'	-9.17	1.29	1.41
67	B1	1052	G	C5'-C4'	9.17	1.62	1.51
67	B1	2830	C	C2'-C1'	9.17	1.63	1.53
21	A2	1234	A	O4'-C1'	9.17	1.53	1.41
67	B1	848	A	O3'-P	-9.17	1.50	1.61
21	A2	501	G	C2'-C1'	-9.17	1.43	1.53
67	B1	2686	A	C2'-C1'	-9.17	1.43	1.53
21	A2	187	C	O4'-C1'	9.16	1.53	1.41
21	A2	1377	G	O4'-C1'	-9.16	1.29	1.41
67	B1	174	C	O4'-C1'	9.16	1.53	1.41
67	B1	569	G	O4'-C1'	9.16	1.53	1.41
67	B1	1381	C	C2'-C1'	-9.16	1.43	1.53
67	B1	1753	G	O4'-C1'	9.16	1.53	1.41
67	B1	2766	C	O4'-C1'	9.16	1.53	1.41
21	A2	1108	U	P-O5'	-9.16	1.50	1.59
21	A2	1159	U	C2'-C1'	9.16	1.63	1.53
67	B1	1810	G	O4'-C1'	9.16	1.53	1.41
21	A2	902	U	O4'-C1'	9.15	1.53	1.41
21	A2	131	G	C2'-C1'	-9.15	1.43	1.53
21	A2	264	C	P-O5'	-9.15	1.50	1.59
21	A2	1061	A	O4'-C1'	9.15	1.53	1.41
67	B1	654	C	C2'-C1'	-9.15	1.43	1.53
67	B1	1998	G	C4'-O4'	9.15	1.57	1.45
67	B1	113	C	O4'-C1'	9.15	1.53	1.41
58	BP	39	ARG	CZ-NH1	9.15	1.45	1.33
67	B1	602	G	C2'-C1'	-9.15	1.43	1.53
67	B1	851	G	O4'-C1'	9.15	1.53	1.41
67	B1	2162	G	O4'-C1'	9.15	1.53	1.41
68	B3	72	G	C2'-C1'	-9.15	1.43	1.53
21	A2	211	G	O4'-C1'	9.14	1.53	1.41
67	B1	2223	G	C2'-C1'	-9.14	1.43	1.53
67	B1	1312	C	O4'-C1'	9.14	1.53	1.41
67	B1	1682	C	C4'-C3'	-9.14	1.43	1.53
67	B1	1637	C	C5'-C4'	9.14	1.62	1.51
67	B1	100	C	O4'-C1'	9.14	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1890	U	C2'-C1'	-9.13	1.43	1.53
67	B1	2376	U	O4'-C1'	9.13	1.53	1.41
67	B1	77	C	O4'-C1'	9.13	1.53	1.41
67	B1	935	A	O4'-C1'	-9.13	1.29	1.41
67	B1	1381	C	O4'-C1'	9.13	1.53	1.41
67	B1	2394	G	O4'-C1'	9.13	1.53	1.41
21	A2	197	A	C5'-C4'	9.12	1.62	1.51
27	A0	69	C	O4'-C1'	9.13	1.53	1.41
67	B1	939	A	O4'-C1'	9.13	1.53	1.41
67	B1	173	G	O4'-C1'	9.12	1.53	1.41
67	B1	1397	U	O3'-P	-9.12	1.50	1.61
67	B1	1215	C	O4'-C1'	9.12	1.53	1.41
67	B1	2652	G	C2'-C1'	9.12	1.63	1.53
67	B1	1295	G	C2'-C1'	-9.12	1.43	1.53
67	B1	2623	G	O4'-C1'	-9.12	1.29	1.41
21	A2	73	U	C2'-C1'	-9.12	1.43	1.53
21	A2	1351	U	C2'-C1'	-9.12	1.43	1.53
67	B1	2951	G	C3'-C2'	-9.12	1.42	1.52
67	B1	970	G	O4'-C1'	-9.11	1.29	1.41
67	B1	17	C	O4'-C1'	9.11	1.53	1.41
67	B1	1421	C	O4'-C1'	9.11	1.53	1.41
67	B1	2003	C	C2'-C1'	-9.11	1.43	1.53
67	B1	1841	G	C2'-C1'	-9.11	1.43	1.53
21	A2	1025	U	O4'-C1'	9.11	1.53	1.41
67	B1	1728	C	O4'-C1'	9.11	1.53	1.41
67	B1	2931	G	C2'-C1'	-9.11	1.43	1.53
67	B1	462	A	C2'-C1'	-9.10	1.43	1.53
67	B1	2155	C	C2'-C1'	9.10	1.63	1.53
67	B1	2179	G	C2'-C1'	9.10	1.63	1.53
67	B1	2885	C	O4'-C1'	9.10	1.53	1.41
67	B1	1449	C	C2'-C1'	-9.10	1.43	1.53
67	B1	1034	G	O4'-C1'	-9.10	1.29	1.41
67	B1	1069	A	O4'-C1'	-9.10	1.29	1.41
67	B1	694	A	O4'-C1'	-9.10	1.29	1.41
67	B1	1105	C	C2'-C1'	-9.10	1.43	1.53
67	B1	1828	A	O4'-C1'	9.10	1.53	1.41
21	A2	1208	A	O4'-C1'	9.09	1.53	1.41
21	A2	1474	A	C2'-C1'	9.09	1.63	1.53
67	B1	917	A	C2'-C1'	9.09	1.63	1.53
67	B1	1185	A	O3'-P	-9.09	1.50	1.61
67	B1	1597	G	C2'-C1'	9.09	1.63	1.53
67	B1	1854	G	O4'-C1'	-9.09	1.29	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A0	47	U	C2'-C1'	9.08	1.63	1.53
67	B1	357	G	O4'-C1'	-9.07	1.29	1.41
67	B1	1312	C	C2'-C1'	-9.07	1.43	1.53
67	B1	2731	C	C2'-C1'	9.07	1.63	1.53
67	B1	2937	U	O4'-C1'	9.07	1.53	1.41
67	B1	871	G	O4'-C1'	9.07	1.53	1.41
21	A2	625	G	C2'-C1'	-9.06	1.43	1.53
67	B1	1080	G	O4'-C1'	-9.06	1.29	1.41
67	B1	1623	C	O4'-C1'	9.06	1.53	1.41
21	A2	1007	A	O4'-C1'	9.06	1.53	1.41
67	B1	837	G	O4'-C1'	9.06	1.53	1.41
67	B1	2500	G	O4'-C1'	-9.06	1.29	1.41
67	B1	783	C	O4'-C1'	9.06	1.53	1.41
67	B1	2036	A	O4'-C1'	-9.06	1.29	1.41
67	B1	1307	C	C2'-C1'	-9.06	1.43	1.53
21	A2	465	C	O4'-C1'	9.06	1.53	1.41
21	A2	481	C	C5'-C4'	9.05	1.62	1.51
67	B1	1842	C	O4'-C1'	9.05	1.53	1.41
67	B1	2894	A	C2'-C1'	-9.05	1.43	1.53
21	A2	287	G	C2'-C1'	-9.05	1.43	1.53
67	B1	79	C	C2'-C1'	-9.05	1.43	1.53
67	B1	731	C	C2'-C1'	-9.05	1.43	1.53
27	A0	2	C	C2'-C1'	-9.05	1.43	1.53
21	A2	99	C	O4'-C1'	9.04	1.53	1.41
67	B1	1614	U	C4'-C3'	9.04	1.63	1.53
67	B1	1138	C	C2'-C1'	-9.04	1.43	1.53
68	B3	107	G	C5'-C4'	9.04	1.62	1.51
21	A2	503	G	O4'-C1'	-9.04	1.29	1.41
67	B1	1868	C	O4'-C1'	9.04	1.53	1.41
21	A2	180	G	O4'-C1'	9.03	1.53	1.41
67	B1	2546	G	O4'-C1'	9.03	1.53	1.41
67	B1	2609	G	C2'-C1'	-9.03	1.43	1.53
67	B1	496	A	C2'-C1'	9.03	1.63	1.53
67	B1	2302	C	O4'-C1'	9.03	1.53	1.41
67	B1	460	C	O4'-C1'	9.03	1.53	1.41
21	A2	506	G	C2'-C1'	-9.03	1.43	1.53
21	A2	700	G	O4'-C1'	9.03	1.53	1.41
21	A2	1303	C	P-O5'	-9.03	1.50	1.59
67	B1	229	G	C2'-C1'	-9.03	1.43	1.53
67	B1	464	C	C2'-C1'	9.03	1.63	1.53
67	B1	1030	C	C2'-C1'	-9.03	1.43	1.53
11	A1	36	A	C2'-C1'	9.02	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	457	G	C2'-C1'	-9.02	1.43	1.53
67	B1	759	G	C2'-C1'	-9.02	1.43	1.53
21	A2	569	G	C2'-C1'	-9.01	1.43	1.53
67	B1	1299	C	O4'-C1'	9.01	1.53	1.41
67	B1	1460	C	O4'-C1'	9.01	1.53	1.41
67	B1	658	C	C2'-C1'	9.01	1.63	1.53
67	B1	923	A	O4'-C1'	-9.01	1.29	1.41
67	B1	1194	G	O4'-C1'	9.01	1.53	1.41
21	A2	653	C	O4'-C1'	9.01	1.53	1.41
59	BM	75	ARG	NE-CZ	9.01	1.44	1.33
67	B1	285	C	C2'-C1'	-9.01	1.43	1.53
11	A1	44	G	O4'-C1'	9.00	1.53	1.41
67	B1	943	G	O4'-C1'	9.00	1.53	1.41
67	B1	617	G	O4'-C1'	9.00	1.53	1.41
21	A2	1391	U	C2'-C1'	9.00	1.63	1.53
67	B1	2097	G	O4'-C1'	9.00	1.53	1.41
21	A2	1378	A	C4'-C3'	9.00	1.63	1.53
67	B1	1436	A	C2'-C1'	-9.00	1.43	1.53
21	A2	969	A	O4'-C1'	8.99	1.53	1.41
21	A2	1160	C	O4'-C1'	8.99	1.53	1.41
67	B1	988	C	C5'-C4'	8.99	1.62	1.51
21	A2	239	A	O4'-C1'	8.99	1.53	1.41
67	B1	2046	C	O4'-C1'	8.99	1.53	1.41
67	B1	535	G	C2'-C1'	8.99	1.63	1.53
68	B3	54	A	C2'-C1'	8.99	1.63	1.53
21	A2	880	G	O4'-C1'	8.98	1.53	1.41
21	A2	1408	C	O4'-C1'	8.98	1.53	1.41
67	B1	2545	A	C5'-C4'	8.98	1.62	1.51
67	B1	646	U	C2'-C1'	8.98	1.63	1.53
68	B3	35	A	O4'-C1'	8.98	1.53	1.41
67	B1	1150	G	O4'-C1'	8.98	1.53	1.41
67	B1	539	A	O4'-C1'	8.98	1.53	1.41
21	A2	355	C	O4'-C1'	8.97	1.53	1.41
21	A2	397	C	O4'-C1'	8.97	1.53	1.41
67	B1	721	G	O4'-C1'	8.97	1.53	1.41
67	B1	2113	G	C2'-C1'	-8.97	1.43	1.53
67	B1	2674	C	C2'-C1'	-8.97	1.43	1.53
67	B1	2091	U	C2'-C1'	-8.97	1.43	1.53
21	A2	185	G	C2'-C1'	-8.97	1.43	1.53
21	A2	359	A	C2'-C1'	-8.96	1.43	1.53
27	A0	4	G	O4'-C1'	8.96	1.53	1.41
67	B1	88	G	C2'-C1'	-8.96	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	707	U	O4'-C1'	8.96	1.53	1.41
67	B1	199	C	O4'-C1'	8.96	1.53	1.41
21	A2	47	A	C2'-C1'	-8.96	1.43	1.53
21	A2	950	C	O4'-C1'	8.95	1.53	1.41
11	A1	29	C	O4'-C1'	8.95	1.53	1.41
67	B1	1061	G	C2'-C1'	-8.95	1.43	1.53
67	B1	1485	A	O4'-C1'	8.95	1.53	1.41
67	B1	1710	C	C2'-C1'	-8.95	1.43	1.53
67	B1	2484	C	O4'-C1'	8.95	1.53	1.41
67	B1	2752	U	O4'-C1'	8.95	1.53	1.41
67	B1	635	G	C2'-C1'	-8.95	1.43	1.53
67	B1	1641	G	C2'-C1'	-8.95	1.43	1.53
67	B1	1735	G	O4'-C1'	8.95	1.53	1.41
67	B1	2378	C	O4'-C1'	8.95	1.53	1.41
21	A2	208	U	O4'-C1'	8.94	1.53	1.41
67	B1	961	C	C2'-C1'	-8.94	1.43	1.53
67	B1	1062	C	C2'-C1'	-8.94	1.43	1.53
21	A2	386	C	C3'-C2'	8.94	1.62	1.52
21	A2	1240	A	O4'-C1'	8.94	1.53	1.41
21	A2	1337	A	C2'-C1'	8.94	1.63	1.53
67	B1	2597	A	O4'-C1'	8.94	1.53	1.41
21	A2	237	C	O4'-C1'	8.93	1.53	1.41
21	A2	324	C	C4'-O4'	-8.93	1.33	1.45
46	BA	120	TYR	CD2-CE2	8.93	1.52	1.39
67	B1	650	C	O4'-C1'	8.93	1.53	1.41
67	B1	2874	C	C2'-C1'	-8.93	1.43	1.53
67	B1	251	C	O4'-C1'	8.92	1.53	1.41
67	B1	2699	U	O4'-C1'	8.92	1.53	1.41
68	B3	52	U	C2'-C1'	-8.92	1.43	1.53
21	A2	285	C	O4'-C1'	8.92	1.53	1.41
21	A2	114	A	C2'-C1'	-8.92	1.43	1.53
21	A2	737	C	O4'-C1'	8.92	1.53	1.41
21	A2	278	A	O4'-C1'	8.92	1.53	1.41
67	B1	2813	G	C5'-C4'	8.92	1.62	1.51
67	B1	1502	C	P-O5'	-8.91	1.50	1.59
67	B1	1920	A	C2'-C1'	-8.91	1.43	1.53
68	B3	34	C	C2'-C1'	-8.91	1.43	1.53
19	AS	7	GLY	N-CA	-8.91	1.32	1.46
21	A2	1033	G	C2'-C1'	8.91	1.63	1.53
67	B1	349	A	O4'-C1'	8.91	1.53	1.41
67	B1	1083	G	C2'-C1'	-8.91	1.43	1.53
21	A2	1058	G	C2'-C1'	-8.90	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	18	C	O4 ² -C1'	8.90	1.53	1.41
67	B1	57	C	C2 ² -C1'	-8.90	1.43	1.53
68	B3	108	G	O4 ² -C1'	-8.90	1.30	1.41
67	B1	1188	C	O4 ² -C1'	8.89	1.53	1.41
21	A2	970	G	C2 ² -C1'	-8.89	1.43	1.53
67	B1	1791	A	C2 ² -C1'	8.89	1.63	1.53
67	B1	2946	C	O4 ² -C1'	8.89	1.53	1.41
67	B1	1624	U	C2 ² -C1'	8.88	1.63	1.53
67	B1	2287	C	C2 ² -C1'	8.88	1.63	1.53
67	B1	2158	G	O4 ² -C1'	8.88	1.53	1.41
67	B1	2698	G	O4 ² -C1'	-8.88	1.30	1.41
67	B1	402	G	C5 ² -C4'	8.88	1.62	1.51
67	B1	2903	U	C2 ² -C1'	-8.87	1.43	1.53
67	B1	748	G	O4 ² -C1'	-8.87	1.30	1.41
67	B1	1307	C	C5 ² -C4'	8.87	1.61	1.51
21	A2	816	G	C2 ² -C1'	-8.87	1.43	1.53
68	B3	36	U	O4 ² -C1'	8.87	1.53	1.41
67	B1	1623	C	C2 ² -C1'	-8.87	1.43	1.53
67	B1	2255	C	O4 ² -C1'	8.87	1.53	1.41
67	B1	2899	G	O4 ² -C1'	8.87	1.53	1.41
21	A2	825	C	C2 ² -C1'	-8.87	1.43	1.53
21	A2	1248	A	O4 ² -C1'	8.87	1.53	1.41
67	B1	832	A	C2 ² -C1'	-8.86	1.43	1.53
67	B1	2449	A	O4 ² -C1'	8.86	1.53	1.41
67	B1	1382	C	O4 ² -C1'	8.86	1.53	1.41
67	B1	48	G	O4 ² -C1'	-8.85	1.30	1.41
67	B1	499	A	C2 ² -C1'	-8.85	1.43	1.53
67	B1	3025	C	C2 ² -C1'	-8.85	1.43	1.53
21	A2	328	G	C2 ² -C1'	-8.85	1.43	1.53
21	A2	929	C	O4 ² -C1'	8.85	1.53	1.41
67	B1	2032	G	O4 ² -C1'	8.85	1.53	1.41
67	B1	2906	C	C3 ² -C2'	-8.85	1.43	1.52
67	B1	313	U	O4 ² -C1'	8.85	1.53	1.41
67	B1	1557	G	C2 ² -C1'	8.85	1.63	1.53
67	B1	294	U	C2 ² -C1'	-8.85	1.43	1.53
67	B1	2867	U	C2 ² -C1'	-8.85	1.43	1.53
67	B1	2286	U	C4 ² -C3'	8.84	1.62	1.53
67	B1	449	G	C2 ² -C1'	-8.84	1.43	1.53
67	B1	1193	G	C2 ² -C1'	-8.84	1.43	1.53
67	B1	2916	G	O4 ² -C1'	-8.84	1.30	1.41
21	A2	551	U	C2 ² -C1'	-8.84	1.43	1.53
67	B1	607	C	O4 ² -C1'	8.84	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	171	A	C2'-C1'	-8.84	1.43	1.53
21	A2	1205	G	O4'-C1'	-8.84	1.30	1.41
27	A0	44	C	O4'-C1'	8.84	1.53	1.41
67	B1	2412	A	C2'-C1'	-8.84	1.43	1.53
67	B1	224	G	C2'-C1'	-8.84	1.43	1.53
67	B1	1991	G	C2'-C1'	8.83	1.63	1.53
67	B1	2714	G	O4'-C1'	8.83	1.53	1.41
67	B1	427	G	O4'-C1'	8.83	1.53	1.41
67	B1	1320	C	O4'-C1'	8.83	1.53	1.41
67	B1	1613	A	O4'-C1'	-8.83	1.30	1.41
67	B1	2153	C	O4'-C1'	8.83	1.53	1.41
67	B1	2716	C	C2'-C1'	8.82	1.63	1.53
67	B1	2784	A	C2'-C1'	-8.82	1.43	1.53
67	B1	2949	G	C2'-C1'	8.81	1.63	1.53
67	B1	174	C	P-O5'	-8.81	1.50	1.59
67	B1	1332	A	C2'-C1'	-8.81	1.43	1.53
67	B1	1568	A	C4'-O4'	-8.81	1.34	1.45
67	B1	2345	U	C2'-C1'	-8.81	1.43	1.53
67	B1	2487	G	C2'-C1'	-8.81	1.43	1.53
67	B1	2148	U	C5'-C4'	8.81	1.61	1.51
21	A2	1222	C	O4'-C1'	8.81	1.53	1.41
67	B1	1648	C	O4'-C1'	8.81	1.53	1.41
67	B1	2372	C	C2'-C1'	8.81	1.63	1.53
67	B1	1942	G	C2'-C1'	-8.80	1.43	1.53
67	B1	1988	U	P-O5'	-8.80	1.50	1.59
21	A2	1062	G	C2'-C1'	-8.80	1.43	1.53
67	B1	2109	C	O4'-C1'	8.80	1.53	1.41
11	A1	42	C	O4'-C1'	8.79	1.53	1.41
67	B1	1939	C	C2'-C1'	-8.79	1.43	1.53
67	B1	2219	A	C4'-O4'	-8.80	1.34	1.45
67	B1	2259	G	O4'-C1'	8.79	1.53	1.41
67	B1	2297	C	C2'-C1'	-8.79	1.43	1.53
67	B1	2344	G	C3'-C2'	-8.79	1.43	1.52
67	B1	104	C	C2'-C1'	-8.79	1.43	1.53
68	B3	121	A	C2'-C1'	-8.79	1.43	1.53
21	A2	54	C	C5'-C4'	8.79	1.61	1.51
67	B1	733	A	O3'-P	-8.79	1.50	1.61
21	A2	1208	A	C4'-O4'	-8.78	1.34	1.45
67	B1	230	A	C4'-C3'	8.78	1.62	1.53
67	B1	1962	G	C2'-C1'	-8.78	1.43	1.53
21	A2	1475	C	O4'-C1'	8.78	1.53	1.41
67	B1	1796	U	C2'-C1'	8.78	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2660	G	C2'-C1'	-8.78	1.43	1.53
67	B1	2897	C	C2'-C1'	-8.78	1.43	1.53
67	B1	1888	G	P-O5'	8.77	1.68	1.59
67	B1	1743	G	O4'-C1'	-8.77	1.30	1.41
67	B1	1911	G	C2'-C1'	8.77	1.62	1.53
68	B3	59	C	C2'-C1'	-8.77	1.43	1.53
67	B1	1969	C	O4'-C1'	8.77	1.53	1.41
67	B1	2585	G	O4'-C1'	-8.77	1.30	1.41
67	B1	1380	G	O4'-C1'	8.77	1.53	1.41
67	B1	1956	G	O3'-P	-8.77	1.50	1.61
67	B1	411	U	C2'-C1'	8.77	1.62	1.53
67	B1	487	U	C2'-C1'	8.77	1.62	1.53
68	B3	122	C	O4'-C1'	-8.77	1.30	1.41
67	B1	2213	G	O4'-C1'	8.76	1.53	1.41
67	B1	1769	G	C2'-C1'	-8.76	1.43	1.53
21	A2	313	G	O4'-C1'	8.76	1.53	1.41
21	A2	1253	G	O4'-C1'	8.76	1.53	1.41
11	A1	41	C	C4'-C3'	-8.75	1.43	1.53
21	A2	229	G	O4'-C1'	8.75	1.53	1.41
21	A2	341	C	O4'-C1'	8.75	1.53	1.41
21	A2	362	C	C4'-C3'	8.75	1.62	1.53
67	B1	620	G	C2'-C1'	-8.75	1.43	1.53
68	B3	112	C	C4'-C3'	8.75	1.62	1.53
67	B1	1120	C	O4'-C1'	8.74	1.53	1.41
67	B1	1600	G	O4'-C1'	8.74	1.53	1.41
67	B1	302	U	O4'-C1'	-8.74	1.30	1.41
67	B1	2016	C	P-O5'	8.74	1.68	1.59
67	B1	1226	G	C2'-C1'	8.74	1.62	1.53
21	A2	240	U	C2'-C1'	8.73	1.62	1.53
21	A2	824	G	O4'-C1'	8.73	1.53	1.41
67	B1	479	G	C2'-C1'	-8.73	1.43	1.53
27	A0	59	A	C2'-C1'	8.73	1.62	1.53
21	A2	775	G	O4'-C1'	8.73	1.52	1.41
67	B1	1737	A	O4'-C1'	8.73	1.52	1.41
68	B3	9	A	C2'-C1'	8.73	1.62	1.53
21	A2	1342	C	O4'-C1'	8.72	1.52	1.41
67	B1	1132	U	C2'-C1'	-8.72	1.43	1.53
67	B1	1569	A	C3'-C2'	-8.72	1.43	1.52
67	B1	2416	G	C2'-C1'	8.72	1.62	1.53
67	B1	2664	G	O4'-C1'	8.72	1.52	1.41
68	B3	119	C	C2'-C1'	-8.72	1.43	1.53
67	B1	2106	G	C4'-C3'	-8.72	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1478	A	P-O5'	-8.72	1.51	1.59
67	B1	241	C	O4'-C1'	8.71	1.52	1.41
21	A2	100	A	O4'-C1'	8.71	1.52	1.41
67	B1	1679	U	O4'-C1'	8.71	1.52	1.41
67	B1	2809	G	C2'-C1'	-8.71	1.43	1.53
21	A2	144	G	C2'-C1'	-8.71	1.43	1.53
67	B1	572	U	O4'-C1'	8.71	1.52	1.41
67	B1	1833	G	C2'-C1'	-8.71	1.43	1.53
21	A2	1127	A	C2'-C1'	-8.70	1.43	1.53
67	B1	580	G	O4'-C1'	8.71	1.52	1.41
67	B1	873	G	O4'-C1'	8.71	1.52	1.41
67	B1	1498	C	O4'-C1'	8.71	1.52	1.41
67	B1	2383	A	O4'-C1'	8.70	1.52	1.41
67	B1	2475	G	O4'-C1'	8.71	1.52	1.41
67	B1	1345	G	C2'-C1'	-8.70	1.43	1.53
21	A2	1023	C	C2'-C1'	-8.70	1.43	1.53
67	B1	1028	G	O4'-C1'	8.70	1.52	1.41
67	B1	1971	C	O4'-C1'	8.70	1.52	1.41
67	B1	2026	C	O4'-C1'	8.70	1.52	1.41
21	A2	214	C	C2'-C1'	-8.69	1.43	1.53
67	B1	2066	C	C2'-C1'	-8.69	1.43	1.53
67	B1	1476	C	O4'-C1'	8.69	1.52	1.41
67	B1	4	C	C2'-C1'	-8.69	1.43	1.53
67	B1	469	A	P-O5'	-8.69	1.51	1.59
67	B1	2485	C	C2'-C1'	8.69	1.62	1.53
68	B3	107	G	O3'-P	-8.69	1.50	1.61
21	A2	90	C	O4'-C1'	8.68	1.52	1.41
27	A0	57	G	C2'-C1'	-8.68	1.43	1.53
67	B1	232	U	C5'-C4'	8.68	1.61	1.51
67	B1	2074	U	O4'-C1'	8.68	1.52	1.41
67	B1	1182	C	O4'-C1'	8.67	1.52	1.41
21	A2	148	C	O4'-C1'	8.67	1.52	1.41
21	A2	177	A	C2'-C1'	8.67	1.62	1.53
21	A2	386	C	O4'-C1'	8.67	1.52	1.41
21	A2	798	U	C5'-C4'	8.67	1.61	1.51
67	B1	715	G	C2'-C1'	8.67	1.62	1.53
67	B1	1576	C	O3'-P	-8.67	1.50	1.61
21	A2	645	G	O4'-C1'	-8.66	1.30	1.41
67	B1	1991	G	O4'-C1'	-8.66	1.30	1.41
67	B1	1305	C	C2'-C1'	-8.66	1.43	1.53
21	A2	269	A	C2'-C1'	-8.66	1.43	1.53
67	B1	804	C	C2'-C1'	-8.66	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1300	C	O4'-C1'	8.66	1.52	1.41
67	B1	1358	C	O4'-C1'	8.66	1.52	1.41
27	A0	47	U	O3'-P	-8.65	1.50	1.61
11	A1	62	C	C2'-C1'	-8.65	1.43	1.53
21	A2	209	A	C2'-C1'	-8.65	1.43	1.53
67	B1	983	G	O4'-C1'	8.65	1.52	1.41
21	A2	68	G	O4'-C1'	8.65	1.52	1.41
67	B1	2662	G	C3'-C2'	8.65	1.62	1.52
21	A2	227	C	P-O5'	-8.65	1.51	1.59
27	A0	16	C	O4'-C1'	8.65	1.52	1.41
67	B1	1705	C	O4'-C1'	8.65	1.52	1.41
67	B1	2868	C	C2'-C1'	-8.65	1.43	1.53
67	B1	2174	G	C4'-O4'	-8.64	1.34	1.45
21	A2	949	G	O4'-C1'	-8.64	1.30	1.41
67	B1	1147	G	P-O5'	-8.64	1.51	1.59
67	B1	2954	C	O4'-C1'	8.64	1.52	1.41
67	B1	760	G	C2'-C1'	-8.64	1.43	1.53
67	B1	1567	C	C3'-O3'	-8.64	1.30	1.42
67	B1	1833	G	O4'-C1'	8.64	1.52	1.41
67	B1	2030	G	C5'-C4'	8.64	1.61	1.51
67	B1	127	C	O4'-C1'	8.63	1.52	1.41
67	B1	311	C	O4'-C1'	8.63	1.52	1.41
67	B1	1115	A	C2'-C1'	-8.63	1.43	1.53
21	A2	948	G	C2'-C1'	8.63	1.62	1.53
21	A2	150	G	O4'-C1'	-8.63	1.30	1.41
67	B1	809	A	C2'-C1'	8.63	1.62	1.53
67	B1	1162	C	C3'-C2'	8.62	1.62	1.52
67	B1	2919	C	O4'-C1'	8.62	1.52	1.41
67	B1	2992	G	P-O5'	-8.62	1.51	1.59
67	B1	1734	G	C2'-C1'	8.62	1.62	1.53
67	B1	2034	G	C2'-C1'	-8.62	1.43	1.53
21	A2	284	A	O4'-C1'	8.62	1.52	1.41
67	B1	218	A	C4'-C3'	8.62	1.62	1.53
21	A2	505	U	O4'-C1'	-8.61	1.30	1.41
67	B1	1414	G	C2'-C1'	-8.61	1.43	1.53
67	B1	1555	G	P-O5'	-8.61	1.51	1.59
67	B1	2712	G	C2'-C1'	-8.61	1.43	1.53
11	A1	53	G	C2'-C1'	-8.61	1.43	1.53
21	A2	615	G	P-O5'	-8.61	1.51	1.59
67	B1	348	G	C2'-C1'	-8.61	1.43	1.53
67	B1	2048	C	C2'-C1'	-8.61	1.43	1.53
67	B1	2464	G	O4'-C1'	-8.61	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	44	C	C2'-C1'	8.61	1.62	1.53
67	B1	1540	A	C4'-C3'	-8.60	1.43	1.53
67	B1	696	G	C4'-C3'	-8.60	1.43	1.53
7	AB	33	TYR	CG-CD1	8.60	1.50	1.39
21	A2	657	A	C2'-C1'	8.60	1.62	1.53
21	A2	1489	A	C2'-C1'	-8.60	1.43	1.53
21	A2	498	C	C5'-C4'	8.60	1.61	1.51
21	A2	519	G	C3'-C2'	-8.60	1.43	1.52
21	A2	1137	G	O4'-C1'	8.60	1.52	1.41
67	B1	2927	A	C4'-C3'	8.60	1.62	1.53
21	A2	1375	C	O4'-C1'	8.60	1.52	1.41
21	A2	368	C	P-O5'	-8.59	1.51	1.59
67	B1	428	A	O4'-C1'	8.59	1.52	1.41
67	B1	3010	C	C2'-C1'	-8.59	1.44	1.53
67	B1	960	C	O4'-C1'	8.59	1.52	1.41
67	B1	1499	C	O4'-C1'	8.59	1.52	1.41
67	B1	1436	A	O4'-C1'	8.58	1.52	1.41
21	A2	86	C	C2'-C1'	8.58	1.62	1.53
67	B1	1899	C	O3'-P	-8.58	1.50	1.61
67	B1	1220	U	O4'-C1'	8.58	1.52	1.41
67	B1	2131	C	C4'-C3'	8.58	1.62	1.53
21	A2	1219	C	C2'-C1'	-8.57	1.44	1.53
67	B1	1900	U	O4'-C1'	8.57	1.52	1.41
67	B1	2423	G	C2'-C1'	-8.57	1.44	1.53
21	A2	36	G	O4'-C1'	-8.57	1.30	1.41
67	B1	2449	A	C2'-C1'	-8.57	1.44	1.53
67	B1	472	A	O4'-C1'	8.57	1.52	1.41
21	A2	1000	G	C3'-C2'	-8.57	1.43	1.52
67	B1	1843	C	C2'-C1'	-8.57	1.44	1.53
67	B1	2999	G	O4'-C1'	8.57	1.52	1.41
67	B1	2072	G	C2'-C1'	-8.57	1.44	1.53
21	A2	710	G	C4'-C3'	8.56	1.62	1.53
67	B1	118	A	O4'-C1'	8.56	1.52	1.41
67	B1	758	C	C2'-C1'	8.56	1.62	1.53
67	B1	2656	A	C5'-C4'	8.56	1.61	1.51
67	B1	553	C	O4'-C1'	8.56	1.52	1.41
67	B1	1329	G	C5'-C4'	8.56	1.61	1.51
21	A2	622	C	C5'-C4'	8.56	1.61	1.51
67	B1	233	A	O4'-C1'	8.56	1.52	1.41
21	A2	123	U	O4'-C1'	8.56	1.52	1.41
67	B1	2595	C	O4'-C1'	8.55	1.52	1.41
21	A2	107	C	C2'-C1'	-8.55	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	578	C	C2'-C1'	-8.55	1.44	1.53
67	B1	2210	G	O4'-C1'	-8.55	1.30	1.41
68	B3	125	U	O4'-C1'	8.55	1.52	1.41
67	B1	1484	U	P-O5'	-8.55	1.51	1.59
21	A2	311	A	C2'-C1'	8.55	1.62	1.53
21	A2	426	C	C2'-C1'	-8.55	1.44	1.53
21	A2	521	G	C2'-C1'	-8.55	1.44	1.53
67	B1	2239	C	C2'-C1'	-8.54	1.44	1.53
67	B1	2446	C	O4'-C1'	8.54	1.52	1.41
67	B1	436	C	C2'-C1'	-8.54	1.44	1.53
67	B1	2020	G	O4'-C1'	8.54	1.52	1.41
67	B1	1863	G	C3'-O3'	8.54	1.54	1.42
21	A2	1481	G	O4'-C1'	8.54	1.52	1.41
11	A1	8	U	O4'-C1'	8.54	1.52	1.41
21	A2	305	C	C2'-C1'	-8.53	1.44	1.53
67	B1	681	C	O4'-C1'	8.53	1.52	1.41
67	B1	2245	C	O4'-C1'	8.53	1.52	1.41
67	B1	29	U	O4'-C1'	8.53	1.52	1.41
67	B1	1991	G	O3'-P	-8.53	1.50	1.61
67	B1	246	A	C2'-C1'	8.53	1.62	1.53
21	A2	1460	G	O4'-C1'	8.53	1.52	1.41
21	A2	634	C	C2'-C1'	-8.52	1.44	1.53
67	B1	345	C	C5'-C4'	8.52	1.61	1.51
67	B1	2540	A	O4'-C1'	8.52	1.52	1.41
68	B3	123	U	C2'-C1'	8.52	1.62	1.53
67	B1	1583	G	C3'-C2'	-8.52	1.43	1.52
67	B1	2531	G	O4'-C1'	8.52	1.52	1.41
21	A2	2	U	C2'-C1'	-8.52	1.44	1.53
67	B1	788	A	O3'-P	-8.52	1.50	1.61
67	B1	2901	C	C4'-C3'	-8.52	1.43	1.53
21	A2	510	A	C2'-C1'	8.52	1.62	1.53
21	A2	802	G	P-O5'	-8.51	1.51	1.59
67	B1	1785	G	C2'-C1'	-8.51	1.44	1.53
21	A2	877	A	C2'-C1'	-8.51	1.44	1.53
67	B1	890	G	C2'-C1'	-8.51	1.44	1.53
67	B1	1180	G	O3'-P	-8.51	1.50	1.61
67	B1	794	G	C2'-C1'	-8.50	1.44	1.53
67	B1	2005	A	P-O5'	-8.50	1.51	1.59
67	B1	882	U	O4'-C1'	8.50	1.52	1.41
67	B1	1351	G	C2'-C1'	-8.50	1.44	1.53
67	B1	2791	C	C4'-C3'	8.50	1.62	1.53
67	B1	1242	A	O4'-C1'	8.50	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2460	A	O4'-C1'	8.50	1.52	1.41
21	A2	213	C	C2'-C1'	-8.49	1.44	1.53
21	A2	1418	G	C2'-C1'	-8.49	1.44	1.53
67	B1	177	G	P-O5'	-8.49	1.51	1.59
67	B1	445	G	C5'-C4'	8.49	1.61	1.51
67	B1	2730	U	O4'-C1'	8.49	1.52	1.41
67	B1	426	G	P-O5'	-8.49	1.51	1.59
21	A2	649	A	C2'-C1'	-8.49	1.44	1.53
67	B1	2169	C	C2'-C1'	-8.49	1.44	1.53
21	A2	764	C	O4'-C1'	8.49	1.52	1.41
67	B1	2804	C	O4'-C1'	8.49	1.52	1.41
67	B1	2258	A	O4'-C1'	8.48	1.52	1.41
67	B1	389	C	O3'-P	-8.48	1.50	1.61
67	B1	1983	C	O4'-C1'	8.48	1.52	1.41
21	A2	302	A	O4'-C1'	8.48	1.52	1.41
67	B1	1436	A	C4'-C3'	8.48	1.62	1.53
21	A2	1023	C	O4'-C1'	8.47	1.52	1.41
67	B1	770	G	C2'-C1'	8.47	1.62	1.53
21	A2	306	C	P-O5'	-8.47	1.51	1.59
21	A2	1243	C	C4'-C3'	8.47	1.62	1.53
67	B1	1923	A	C2'-C1'	8.47	1.62	1.53
67	B1	863	C	O4'-C1'	8.47	1.52	1.41
68	B3	115	C	C2'-C1'	-8.47	1.44	1.53
67	B1	1263	C	O4'-C1'	8.47	1.52	1.41
21	A2	391	G	O4'-C1'	-8.47	1.30	1.41
67	B1	2410	U	C2'-C1'	-8.47	1.44	1.53
67	B1	10	C	C2'-C1'	8.46	1.62	1.53
67	B1	839	A	O4'-C1'	8.46	1.52	1.41
67	B1	491	G	C4'-C3'	8.46	1.62	1.53
67	B1	530	A	P-O5'	-8.46	1.51	1.59
67	B1	918	A	P-O5'	-8.46	1.51	1.59
21	A2	938	C	C2'-C1'	-8.46	1.44	1.53
67	B1	1268	A	C2'-C1'	8.46	1.62	1.53
21	A2	1387	C	C5'-C4'	8.45	1.61	1.51
21	A2	1454	A	O4'-C1'	8.45	1.52	1.41
67	B1	779	A	C5'-C4'	8.45	1.61	1.51
67	B1	1398	C	C2'-C1'	-8.44	1.44	1.53
67	B1	2390	G	O4'-C1'	-8.44	1.30	1.41
67	B1	2106	G	C2'-C1'	-8.44	1.44	1.53
67	B1	1055	C	O4'-C1'	8.43	1.52	1.41
67	B1	1569	A	O4'-C1'	8.43	1.52	1.41
21	A2	1491	C	C3'-C2'	8.43	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2042	A	C3'-C2'	8.43	1.62	1.52
21	A2	454	G	C2'-C1'	-8.43	1.44	1.53
67	B1	926	C	C2'-C1'	8.43	1.62	1.53
67	B1	1450	C	C2'-C1'	-8.43	1.44	1.53
67	B1	1901	A	C2'-C1'	8.43	1.62	1.53
21	A2	722	G	C2'-C1'	-8.42	1.44	1.53
67	B1	1280	C	O4'-C1'	8.42	1.52	1.41
67	B1	2385	G	O4'-C1'	8.42	1.52	1.41
21	A2	1349	C	C2'-C1'	-8.42	1.44	1.53
67	B1	2711	U	C2'-C1'	-8.42	1.44	1.53
67	B1	281	G	O4'-C1'	8.42	1.52	1.41
21	A2	1387	C	O4'-C1'	8.42	1.52	1.41
67	B1	1396	A	O4'-C1'	8.41	1.52	1.41
68	B3	98	G	C2'-C1'	8.41	1.62	1.53
67	B1	2272	G	C4'-C3'	8.41	1.62	1.53
67	B1	951	C	C2'-C1'	-8.41	1.44	1.53
67	B1	1565	G	C3'-O3'	-8.41	1.30	1.42
67	B1	1597	G	O4'-C1'	8.41	1.52	1.41
67	B1	372	A	C2'-C1'	8.41	1.62	1.53
67	B1	538	G	C2'-C1'	-8.41	1.44	1.53
67	B1	1491	U	O4'-C1'	-8.41	1.30	1.41
67	B1	2111	C	O4'-C1'	8.41	1.52	1.41
21	A2	680	C	O4'-C1'	8.40	1.52	1.41
21	A2	1362	C	O4'-C1'	8.40	1.52	1.41
48	BR	9	ARG	CZ-NH2	8.40	1.44	1.33
67	B1	326	C	O4'-C1'	8.40	1.52	1.41
67	B1	1285	C	C2'-C1'	-8.40	1.44	1.53
67	B1	1846	G	O4'-C1'	8.40	1.52	1.41
67	B1	2320	U	C2'-C1'	8.40	1.62	1.53
67	B1	2348	G	C2'-C1'	8.40	1.62	1.53
67	B1	1788	G	O4'-C1'	-8.40	1.30	1.41
67	B1	2380	A	O4'-C1'	8.40	1.52	1.41
21	A2	972	C	C2'-C1'	-8.40	1.44	1.53
21	A2	1350	U	C2'-C1'	-8.39	1.44	1.53
21	A2	1151	A	O4'-C1'	8.39	1.52	1.41
21	A2	332	C	O4'-C1'	8.39	1.52	1.41
67	B1	412	G	C2'-C1'	-8.39	1.44	1.53
67	B1	1447	G	O4'-C1'	8.39	1.52	1.41
21	A2	1070	C	C2'-C1'	-8.39	1.44	1.53
67	B1	1889	G	O4'-C1'	-8.39	1.30	1.41
21	A2	290	C	O4'-C1'	8.38	1.52	1.41
21	A2	885	G	O4'-C1'	-8.38	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1691	U	O4'-C1'	8.38	1.52	1.41
67	B1	1614	U	O4'-C1'	8.38	1.52	1.41
21	A2	348	C	C2'-C1'	-8.38	1.44	1.53
67	B1	2075	U	C3'-C2'	-8.37	1.43	1.52
67	B1	1643	A	C5'-C4'	8.37	1.61	1.51
67	B1	2071	C	O4'-C1'	8.37	1.52	1.41
15	AE	32	PRO	N-CD	-8.37	1.36	1.47
21	A2	1146	G	C4'-C3'	8.37	1.62	1.53
67	B1	90	A	C2'-C1'	-8.37	1.44	1.53
21	A2	1199	A	C2'-C1'	8.37	1.62	1.53
21	A2	1327	C	C2'-C1'	-8.37	1.44	1.53
62	BN	71	ARG	CZ-NH1	8.37	1.44	1.33
67	B1	22	C	O4'-C1'	8.37	1.52	1.41
67	B1	1986	U	C2'-C1'	-8.37	1.44	1.53
67	B1	2339	C	O4'-C1'	8.37	1.52	1.41
21	A2	763	G	O3'-P	-8.36	1.51	1.61
67	B1	678	G	O4'-C1'	8.37	1.52	1.41
21	A2	351	C	C2'-C1'	-8.36	1.44	1.53
67	B1	1858	G	C2'-C1'	-8.36	1.44	1.53
21	A2	965	G	C5'-C4'	8.36	1.61	1.51
21	A2	1080	C	C4'-O4'	8.36	1.56	1.45
21	A2	1393	A	C2'-C1'	8.36	1.62	1.53
67	B1	187	C	O4'-C1'	8.36	1.52	1.41
67	B1	1675	C	C5'-C4'	8.36	1.61	1.51
67	B1	2931	G	O4'-C1'	8.36	1.52	1.41
67	B1	2269	C	O4'-C1'	8.36	1.52	1.41
67	B1	2483	U	O4'-C1'	8.36	1.52	1.41
67	B1	189	U	C2'-C1'	-8.35	1.44	1.53
67	B1	2663	G	O4'-C1'	8.35	1.52	1.41
11	A1	5	C	C2'-C1'	8.35	1.62	1.53
67	B1	3019	C	O4'-C1'	8.35	1.52	1.41
21	A2	281	G	C2'-C1'	-8.34	1.44	1.53
67	B1	953	G	O3'-P	-8.34	1.51	1.61
67	B1	1107	G	O4'-C1'	8.34	1.52	1.41
67	B1	1201	G	P-O5'	-8.34	1.51	1.59
67	B1	458	U	O4'-C1'	8.34	1.52	1.41
21	A2	1167	C	C2'-C1'	-8.34	1.44	1.53
67	B1	712	C	C2'-C1'	-8.34	1.44	1.53
67	B1	2294	A	O4'-C1'	8.34	1.52	1.41
21	A2	549	A	C4'-C3'	8.33	1.62	1.53
21	A2	1046	G	O4'-C1'	-8.33	1.30	1.41
67	B1	1205	U	C2'-C1'	8.33	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1334	A	O4'-C1'	8.33	1.52	1.41
67	B1	626	C	O3'-P	-8.33	1.51	1.61
67	B1	1081	U	C2'-C1'	-8.32	1.44	1.53
67	B1	1975	C	P-O5'	-8.32	1.51	1.59
67	B1	2878	A	C2'-C1'	-8.32	1.44	1.53
67	B1	1611	C	P-O5'	-8.32	1.51	1.59
21	A2	1088	U	C4'-C3'	8.32	1.62	1.53
67	B1	2321	A	O4'-C1'	-8.32	1.30	1.41
21	A2	85	A	O4'-C1'	8.32	1.52	1.41
67	B1	715	G	C5'-C4'	8.32	1.61	1.51
67	B1	861	G	O4'-C1'	-8.32	1.30	1.41
67	B1	1821	C	C2'-C1'	-8.32	1.44	1.53
67	B1	2856	G	C5'-C4'	8.32	1.61	1.51
21	A2	576	C	C2'-C1'	-8.31	1.44	1.53
67	B1	1048	C	O3'-P	-8.31	1.51	1.61
67	B1	253	G	C2'-C1'	-8.31	1.44	1.53
67	B1	626	C	C5'-C4'	8.31	1.61	1.51
67	B1	1764	G	C2'-C1'	-8.31	1.44	1.53
67	B1	1771	C	O4'-C1'	8.31	1.52	1.41
67	B1	2275	G	C4'-C3'	8.30	1.62	1.53
67	B1	2957	G	C2'-C1'	-8.31	1.44	1.53
21	A2	1220	G	C3'-C2'	-8.30	1.43	1.52
21	A2	838	C	C2'-C1'	-8.30	1.44	1.53
67	B1	2716	C	O4'-C1'	8.30	1.52	1.41
67	B1	1389	A	C2'-C1'	8.30	1.62	1.53
67	B1	395	G	O4'-C1'	8.29	1.52	1.41
68	B3	14	G	O4'-C1'	-8.29	1.30	1.41
21	A2	849	U	C2'-C1'	-8.29	1.44	1.53
67	B1	501	C	O4'-C1'	8.29	1.52	1.41
67	B1	896	G	C4'-C3'	-8.29	1.44	1.53
67	B1	1174	U	P-O5'	-8.29	1.51	1.59
67	B1	1465	A	P-O5'	-8.29	1.51	1.59
67	B1	111	U	C2'-C1'	8.29	1.62	1.53
21	A2	1443	G	O4'-C1'	-8.29	1.30	1.41
67	B1	2655	C	O4'-C1'	8.29	1.52	1.41
21	A2	562	A	O3'-P	-8.28	1.51	1.61
27	A0	26	G	O4'-C1'	8.28	1.52	1.41
67	B1	2163	G	C4'-C3'	8.28	1.62	1.53
67	B1	2771	G	O4'-C1'	-8.28	1.30	1.41
67	B1	973	C	C5'-C4'	8.28	1.61	1.51
21	A2	885	G	C4'-C3'	8.28	1.62	1.53
67	B1	40	G	C2'-C1'	-8.28	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2708	U	C2'-C1'	-8.28	1.44	1.53
67	B1	2514	C	C3'-O3'	8.28	1.53	1.42
21	A2	101	G	O4'-C1'	-8.27	1.30	1.41
67	B1	461	C	O4'-C1'	8.27	1.52	1.41
21	A2	565	C	C2'-C1'	-8.27	1.44	1.53
67	B1	1561	G	P-O5'	8.27	1.68	1.59
67	B1	1866	G	C2'-C1'	-8.27	1.44	1.53
67	B1	559	G	O4'-C1'	8.26	1.52	1.41
67	B1	628	A	O4'-C1'	8.26	1.52	1.41
67	B1	2493	A	C3'-O3'	8.26	1.53	1.42
67	B1	2347	G	C2'-C1'	-8.26	1.44	1.53
33	BC	9	ARG	CD-NE	8.26	1.60	1.46
67	B1	273	G	O4'-C1'	8.26	1.52	1.41
67	B1	324	C	P-O5'	-8.26	1.51	1.59
67	B1	390	C	O4'-C1'	8.26	1.52	1.41
67	B1	2830	C	O4'-C1'	8.26	1.52	1.41
67	B1	544	A	C2'-C1'	-8.25	1.44	1.53
67	B1	2116	G	C2'-C1'	-8.25	1.44	1.53
21	A2	121	C	O4'-C1'	8.25	1.52	1.41
21	A2	779	G	P-O5'	-8.25	1.51	1.59
21	A2	1138	G	C2'-C1'	8.25	1.62	1.53
21	A2	105	C	C2'-C1'	-8.25	1.44	1.53
68	B3	118	G	C5'-C4'	8.25	1.61	1.51
21	A2	494	G	O4'-C1'	-8.25	1.30	1.41
21	A2	1453	U	O3'-P	-8.25	1.51	1.61
67	B1	193	A	C2'-C1'	-8.24	1.44	1.53
67	B1	1367	A	C2'-C1'	-8.24	1.44	1.53
67	B1	944	G	C2'-C1'	-8.24	1.44	1.53
21	A2	1470	G	O4'-C1'	8.24	1.52	1.41
67	B1	1949	A	C3'-C2'	-8.23	1.43	1.52
67	B1	2456	C	O4'-C1'	8.23	1.52	1.41
21	A2	126	G	O4'-C1'	-8.23	1.30	1.41
67	B1	1516	C	O4'-C1'	8.23	1.52	1.41
21	A2	925	U	C2'-C1'	-8.22	1.44	1.53
21	A2	1148	G	P-O5'	-8.22	1.51	1.59
67	B1	941	C	C2'-C1'	-8.22	1.44	1.53
21	A2	1118	C	C5'-C4'	8.22	1.61	1.51
67	B1	1241	C	C5'-C4'	8.22	1.61	1.51
67	B1	2061	A	O4'-C1'	8.22	1.52	1.41
67	B1	3041	U	O4'-C1'	8.22	1.52	1.41
67	B1	2866	A	C4'-O4'	8.22	1.56	1.45
68	B3	95	G	C4'-C3'	8.22	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2827	C	C4'-O4'	-8.22	1.34	1.45
67	B1	783	C	C2'-C1'	-8.21	1.44	1.53
67	B1	267	C	O4'-C1'	8.21	1.52	1.41
67	B1	2333	G	O4'-C1'	8.21	1.52	1.41
67	B1	2414	G	O4'-C1'	-8.21	1.30	1.41
21	A2	18	C	O4'-C1'	8.21	1.52	1.41
27	A0	8	U	C5'-C4'	8.21	1.61	1.51
67	B1	1938	G	O4'-C1'	-8.21	1.30	1.41
67	B1	2386	U	O4'-C1'	8.21	1.52	1.41
67	B1	1169	G	C2'-C1'	-8.21	1.44	1.53
67	B1	2634	U	C2'-C1'	-8.21	1.44	1.53
21	A2	380	C	C2'-C1'	-8.20	1.44	1.53
36	Bf	2	ALA	N-CA	-8.20	1.29	1.46
67	B1	1286	G	C2'-C1'	-8.20	1.44	1.53
67	B1	1947	A	O4'-C1'	8.20	1.52	1.41
21	A2	719	G	O4'-C1'	8.20	1.52	1.41
21	A2	1078	U	C2'-C1'	-8.20	1.44	1.53
21	A2	1098	G	C4'-C3'	8.20	1.62	1.53
67	B1	1242	A	O3'-P	-8.20	1.51	1.61
21	A2	622	C	O4'-C1'	8.19	1.52	1.41
67	B1	490	C	C2'-C1'	-8.20	1.44	1.53
67	B1	2465	A	C2'-C1'	-8.19	1.44	1.53
67	B1	2800	U	C5'-C4'	8.19	1.61	1.51
21	A2	149	U	O4'-C1'	-8.19	1.31	1.41
67	B1	1469	U	C2'-C1'	-8.19	1.44	1.53
67	B1	1838	C	O4'-C1'	8.19	1.52	1.41
67	B1	509	A	O3'-P	-8.19	1.51	1.61
67	B1	2135	C	O4'-C1'	8.19	1.52	1.41
21	A2	1275	U	C2'-C1'	-8.19	1.44	1.53
21	A2	1398	U	C2'-C1'	8.19	1.62	1.53
27	A0	75	C	C2'-C1'	-8.19	1.44	1.53
21	A2	315	A	C5'-C4'	8.18	1.61	1.51
21	A2	8	U	O4'-C1'	-8.18	1.31	1.41
67	B1	2497	G	C2'-C1'	-8.18	1.44	1.53
21	A2	275	A	O4'-C1'	-8.18	1.31	1.41
21	A2	1425	C	O4'-C1'	8.18	1.52	1.41
67	B1	2293	G	C5'-C4'	8.18	1.61	1.51
67	B1	1190	G	C2'-C1'	-8.18	1.44	1.53
67	B1	511	A	C2'-C1'	8.17	1.62	1.53
67	B1	2919	C	C4'-C3'	8.17	1.62	1.53
21	A2	307	G	C2'-C1'	-8.16	1.44	1.53
21	A2	1173	A	O4'-C1'	8.16	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	820	C	O4'-C1'	8.16	1.52	1.41
67	B1	1410	A	P-O5'	-8.16	1.51	1.59
67	B1	668	G	C2'-C1'	-8.16	1.44	1.53
21	A2	1166	G	C2'-C1'	-8.16	1.44	1.53
67	B1	864	C	O4'-C1'	8.16	1.52	1.41
67	B1	1320	C	P-O5'	-8.16	1.51	1.59
27	A0	61	C	C2'-C1'	-8.16	1.44	1.53
67	B1	2532	G	O4'-C1'	8.15	1.52	1.41
67	B1	1224	A	C2'-C1'	8.15	1.62	1.53
67	B1	2129	G	O4'-C1'	8.15	1.52	1.41
67	B1	2903	U	C4'-C3'	8.15	1.62	1.53
67	B1	2188	C	C5'-C4'	8.15	1.61	1.51
67	B1	2382	A	P-O5'	-8.15	1.51	1.59
67	B1	2450	A	C3'-C2'	-8.15	1.43	1.52
21	A2	1371	C	C2'-C1'	-8.15	1.44	1.53
67	B1	97	C	O4'-C1'	8.15	1.52	1.41
67	B1	1313	G	C5'-C4'	8.15	1.61	1.51
67	B1	1746	C	C2'-C1'	-8.15	1.44	1.53
67	B1	3023	G	C2'-C1'	-8.15	1.44	1.53
67	B1	2633	A	C2'-C1'	-8.15	1.44	1.53
21	A2	839	G	C2'-C1'	-8.14	1.44	1.53
67	B1	2871	A	P-O5'	-8.14	1.51	1.59
67	B1	1063	C	O4'-C1'	8.14	1.52	1.41
21	A2	436	A	C2'-C1'	-8.14	1.44	1.53
67	B1	1252	G	O4'-C1'	8.14	1.52	1.41
67	B1	2036	A	C2'-C1'	8.14	1.62	1.53
67	B1	3015	A	O4'-C1'	8.14	1.52	1.41
21	A2	429	A	O4'-C1'	8.13	1.52	1.41
21	A2	850	A	O4'-C1'	8.13	1.52	1.41
44	BW	29	ARG	CZ-NH2	8.13	1.43	1.33
67	B1	1249	G	C2'-C1'	-8.13	1.44	1.53
67	B1	2642	C	P-O5'	-8.13	1.51	1.59
21	A2	956	C	C2'-C1'	-8.13	1.44	1.53
67	B1	2871	A	O4'-C1'	-8.13	1.31	1.41
67	B1	2118	C	O4'-C1'	8.13	1.52	1.41
67	B1	2384	G	C2'-C1'	-8.13	1.44	1.53
11	A1	12	U	C2'-C1'	-8.13	1.44	1.53
21	A2	922	G	C2'-C1'	-8.13	1.44	1.53
21	A2	1089	C	C2'-C1'	-8.13	1.44	1.53
67	B1	1166	A	O4'-C1'	8.13	1.52	1.41
68	B3	19	G	O3'-P	-8.13	1.51	1.61
67	B1	2644	G	C2'-C1'	-8.12	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	672	G	O4'-C1'	8.12	1.52	1.41
21	A2	79	G	C2'-C1'	8.12	1.62	1.53
21	A2	441	U	C2'-C1'	-8.12	1.44	1.53
67	B1	2207	C	C2'-C1'	-8.12	1.44	1.53
46	BA	89	GLU	CG-CD	8.12	1.64	1.51
67	B1	3017	U	C2'-C1'	-8.11	1.44	1.53
21	A2	385	A	P-O5'	-8.11	1.51	1.59
67	B1	2336	G	C2'-C1'	-8.11	1.44	1.53
67	B1	1032	C	O3'-P	8.11	1.70	1.61
21	A2	1482	C	O4'-C1'	8.11	1.52	1.41
67	B1	577	C	O4'-C1'	8.11	1.52	1.41
67	B1	1465	A	C2'-C1'	8.11	1.62	1.53
21	A2	727	G	C2'-C1'	8.11	1.62	1.53
67	B1	2362	U	C2'-C1'	8.10	1.62	1.53
67	B1	2436	A	O4'-C1'	8.10	1.52	1.41
21	A2	467	G	C5'-C4'	8.10	1.61	1.51
21	A2	374	G	O4'-C1'	8.10	1.52	1.41
67	B1	611	G	C2'-C1'	-8.10	1.44	1.53
67	B1	2625	C	C2'-C1'	-8.10	1.44	1.53
67	B1	1282	A	O4'-C1'	8.10	1.52	1.41
67	B1	1446	G	C2'-C1'	8.10	1.62	1.53
67	B1	2182	A	O4'-C1'	-8.10	1.31	1.41
21	A2	825	C	O4'-C1'	8.09	1.52	1.41
67	B1	1038	U	C2'-C1'	8.09	1.62	1.53
67	B1	1076	G	P-O5'	-8.09	1.51	1.59
21	A2	597	C	O4'-C1'	8.09	1.52	1.41
21	A2	784	G	C2'-C1'	8.09	1.62	1.53
67	B1	1242	A	C2'-C1'	-8.09	1.44	1.53
67	B1	2562	G	C4'-O4'	-8.09	1.35	1.45
67	B1	2841	G	O4'-C1'	8.09	1.52	1.41
27	A0	55	U	C3'-C2'	-8.09	1.43	1.52
67	B1	439	G	C2'-C1'	-8.08	1.44	1.53
67	B1	572	U	C2'-C1'	-8.08	1.44	1.53
21	A2	620	G	C2'-C1'	-8.08	1.44	1.53
67	B1	2980	G	P-O5'	-8.08	1.51	1.59
21	A2	576	C	O4'-C1'	8.08	1.52	1.41
21	A2	1016	G	C2'-C1'	-8.08	1.44	1.53
21	A2	1058	G	O4'-C1'	8.08	1.52	1.41
67	B1	288	G	C2'-C1'	-8.08	1.44	1.53
67	B1	1283	G	C2'-C1'	8.07	1.62	1.53
67	B1	1663	C	O4'-C1'	8.07	1.52	1.41
67	B1	1095	A	O4'-C1'	8.07	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1646	G	C3'-O3'	8.07	1.53	1.42
67	B1	2332	G	C2'-C1'	-8.06	1.44	1.53
21	A2	1408	C	C2'-C1'	-8.06	1.44	1.53
67	B1	2030	G	O4'-C1'	8.06	1.52	1.41
67	B1	252	A	O4'-C1'	8.06	1.52	1.41
67	B1	380	A	O4'-C1'	8.06	1.52	1.41
67	B1	2820	C	C2'-C1'	-8.06	1.44	1.53
67	B1	502	G	C2'-C1'	8.06	1.62	1.53
21	A2	813	G	C2'-C1'	-8.05	1.44	1.53
67	B1	457	C	O4'-C1'	8.05	1.52	1.41
67	B1	592	C	C2'-C1'	-8.05	1.44	1.53
67	B1	1471	G	O4'-C1'	8.05	1.52	1.41
67	B1	1882	C	C2'-C1'	-8.05	1.44	1.53
67	B1	2637	U	C2'-C1'	-8.05	1.44	1.53
68	B3	84	U	C2'-C1'	8.05	1.62	1.53
21	A2	990	G	C2'-C1'	8.05	1.62	1.53
67	B1	807	G	O4'-C1'	-8.05	1.31	1.41
67	B1	1665	G	C5'-C4'	8.05	1.61	1.51
67	B1	1912	A	P-O5'	-8.05	1.51	1.59
67	B1	2781	A	C2'-C1'	-8.05	1.44	1.53
67	B1	564	U	O3'-P	-8.04	1.51	1.61
67	B1	633	A	C2'-C1'	8.04	1.62	1.53
67	B1	825	C	O4'-C1'	8.04	1.52	1.41
67	B1	574	C	O4'-C1'	8.04	1.52	1.41
67	B1	1313	G	C2'-C1'	8.04	1.62	1.53
21	A2	276	A	C2'-C1'	-8.04	1.44	1.53
21	A2	1176	C	P-O5'	-8.04	1.51	1.59
67	B1	1174	U	C2'-C1'	-8.04	1.44	1.53
67	B1	2966	C	O4'-C1'	8.04	1.52	1.41
21	A2	129	G	O4'-C1'	8.04	1.52	1.41
21	A2	658	A	O4'-C1'	8.04	1.52	1.41
68	B3	95	G	C2'-C1'	-8.04	1.44	1.53
67	B1	2081	C	O3'-P	-8.03	1.51	1.61
67	B1	442	G	C2'-C1'	8.03	1.62	1.53
67	B1	2186	C	C4'-C3'	8.03	1.61	1.53
67	B1	1569	A	C4'-O4'	-8.03	1.35	1.45
21	A2	644	G	C2'-C1'	-8.03	1.44	1.53
67	B1	2425	A	C2'-C1'	-8.03	1.44	1.53
21	A2	999	G	O4'-C1'	8.03	1.52	1.41
21	A2	1018	C	C5'-C4'	8.03	1.60	1.51
67	B1	2217	C	O4'-C1'	8.03	1.52	1.41
67	B1	2782	A	O4'-C1'	8.03	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	920	G	O4'-C1'	8.02	1.52	1.41
21	A2	270	A	C2'-C1'	8.02	1.62	1.53
67	B1	184	A	C4'-C3'	8.02	1.61	1.53
67	B1	2559	G	O4'-C1'	8.02	1.52	1.41
67	B1	2019	C	C2'-C1'	-8.02	1.44	1.53
67	B1	2062	A	C3'-C2'	8.01	1.61	1.52
67	B1	2645	C	C2'-C1'	-8.01	1.44	1.53
11	A1	37	A	O4'-C1'	8.01	1.52	1.41
67	B1	1001	C	C2'-C1'	8.01	1.62	1.53
21	A2	350	G	O4'-C1'	8.01	1.52	1.41
67	B1	292	U	C2'-C1'	8.00	1.62	1.53
67	B1	1937	A	C2'-O2'	-8.00	1.31	1.41
67	B1	2873	G	O4'-C1'	-8.00	1.31	1.41
21	A2	994	C	O4'-C1'	8.00	1.52	1.41
67	B1	1489	G	C5'-C4'	7.99	1.60	1.51
67	B1	1690	U	C3'-C2'	-7.99	1.44	1.52
21	A2	478	C	C2'-C1'	-7.99	1.44	1.53
67	B1	776	G	O4'-C1'	7.99	1.52	1.41
21	A2	742	U	C2'-C1'	-7.99	1.44	1.53
67	B1	1265	A	O4'-C1'	7.99	1.52	1.41
67	B1	629	G	C4'-C3'	7.98	1.61	1.53
21	A2	1184	U	C5'-C4'	7.98	1.60	1.51
67	B1	296	G	C2'-C1'	-7.98	1.44	1.53
67	B1	653	U	O4'-C1'	7.98	1.52	1.41
67	B1	810	A	C2'-C1'	-7.98	1.44	1.53
67	B1	1999	G	C2'-C1'	7.98	1.62	1.53
21	A2	50	C	C2'-C1'	-7.98	1.44	1.53
67	B1	1273	C	C2'-C1'	-7.98	1.44	1.53
67	B1	2380	A	P-O5'	-7.98	1.51	1.59
21	A2	277	G	C2'-C1'	-7.97	1.44	1.53
21	A2	1460	G	C2'-C1'	7.97	1.62	1.53
67	B1	714	C	O4'-C1'	7.97	1.52	1.41
67	B1	1268	A	P-O5'	-7.97	1.51	1.59
67	B1	1774	A	C2'-C1'	7.97	1.62	1.53
67	B1	866	G	O3'-P	-7.97	1.51	1.61
67	B1	2063	U	P-O5'	-7.97	1.51	1.59
67	B1	2452	C	O4'-C1'	7.97	1.52	1.41
67	B1	1397	U	C4'-C3'	7.97	1.61	1.53
33	BC	185	TYR	CD1-CE1	7.97	1.51	1.39
67	B1	97	C	C2'-C1'	-7.97	1.44	1.53
67	B1	1412	C	O4'-C1'	7.97	1.52	1.41
67	B1	1766	A	C2'-C1'	-7.97	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2905	C	C2'-C1'	-7.96	1.44	1.53
67	B1	1567	C	C4'-C3'	7.96	1.61	1.53
67	B1	2692	A	P-O5'	-7.96	1.51	1.59
21	A2	146	A	C2'-C1'	-7.95	1.44	1.53
67	B1	231	G	O4'-C1'	-7.95	1.31	1.41
67	B1	2389	C	O3'-P	-7.95	1.51	1.61
67	B1	1431	U	P-O5'	7.95	1.67	1.59
67	B1	2451	G	C2'-C1'	-7.95	1.44	1.53
67	B1	2927	A	C2'-C1'	-7.95	1.44	1.53
67	B1	607	C	C2'-C1'	-7.95	1.44	1.53
67	B1	808	A	P-O5'	-7.94	1.51	1.59
67	B1	2578	C	O4'-C1'	7.94	1.51	1.41
21	A2	540	G	C2'-C1'	7.94	1.62	1.53
67	B1	893	C	O4'-C1'	7.94	1.51	1.41
58	BP	13	ARG	CD-NE	7.94	1.59	1.46
67	B1	323	U	O4'-C1'	7.94	1.51	1.41
67	B1	1570	C	C3'-C2'	7.94	1.61	1.52
21	A2	320	G	C5'-C4'	7.94	1.60	1.51
67	B1	516	A	C2'-C1'	-7.94	1.44	1.53
21	A2	50	C	P-O5'	-7.93	1.51	1.59
67	B1	3006	G	C5'-C4'	7.93	1.60	1.51
67	B1	733	A	C2'-C1'	7.93	1.62	1.53
67	B1	2237	A	O4'-C1'	7.93	1.51	1.41
21	A2	395	C	O4'-C1'	7.93	1.51	1.41
67	B1	660	U	O4'-C1'	7.93	1.51	1.41
11	A1	26	C	O3'-P	-7.93	1.51	1.61
67	B1	2996	A	O4'-C1'	7.93	1.51	1.41
21	A2	1424	G	O3'-P	-7.92	1.51	1.61
67	B1	1854	G	C4'-C3'	7.92	1.61	1.53
21	A2	952	A	C2'-C1'	-7.92	1.44	1.53
21	A2	1302	C	C5'-C4'	7.92	1.60	1.51
67	B1	697	U	O4'-C1'	7.92	1.51	1.41
21	A2	1481	G	C2'-C1'	-7.92	1.44	1.53
21	A2	758	U	O4'-C1'	7.92	1.51	1.41
67	B1	403	G	C3'-C2'	7.92	1.61	1.52
67	B1	2112	C	O3'-P	-7.92	1.51	1.61
21	A2	1316	U	C5'-C4'	7.92	1.60	1.51
67	B1	1154	A	O4'-C1'	-7.92	1.31	1.41
67	B1	1574	A	C2'-C1'	7.92	1.62	1.53
67	B1	2419	U	C5'-C4'	7.92	1.60	1.51
68	B3	87	G	O4'-C1'	7.92	1.51	1.41
67	B1	31	G	O4'-C1'	-7.91	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	91	G	O4'-C1'	7.91	1.51	1.41
67	B1	840	G	C4'-C3'	7.91	1.61	1.53
67	B1	1629	G	P-O5'	-7.91	1.51	1.59
21	A2	917	A	O4'-C1'	7.91	1.51	1.41
11	A1	56	U	O4'-C1'	7.91	1.51	1.41
21	A2	647	G	C3'-C2'	-7.91	1.44	1.52
67	B1	262	C	O4'-C1'	7.91	1.51	1.41
67	B1	1888	G	C4'-C3'	7.91	1.61	1.53
67	B1	2971	U	C3'-O3'	7.91	1.53	1.42
67	B1	1568	A	O3'-P	-7.90	1.51	1.61
21	A2	723	G	P-O5'	-7.90	1.51	1.59
67	B1	302	U	P-O5'	-7.90	1.51	1.59
68	B3	114	G	P-O5'	-7.90	1.51	1.59
21	A2	530	G	C2'-C1'	-7.89	1.44	1.53
11	A1	19	G	O4'-C1'	-7.89	1.31	1.41
21	A2	1405	C	O4'-C1'	7.89	1.51	1.41
67	B1	550	A	P-O5'	-7.89	1.51	1.59
67	B1	2711	U	C3'-C2'	7.89	1.61	1.52
67	B1	2473	C	O4'-C1'	7.89	1.51	1.41
67	B1	789	G	O4'-C1'	7.89	1.51	1.41
67	B1	2609	G	C4'-C3'	-7.89	1.44	1.53
67	B1	2863	A	C2'-C1'	-7.89	1.44	1.53
21	A2	27	C	P-O5'	-7.89	1.51	1.59
21	A2	118	U	C2'-C1'	-7.89	1.44	1.53
21	A2	254	G	C2'-C1'	7.89	1.62	1.53
21	A2	1380	C	O4'-C1'	7.89	1.51	1.41
67	B1	92	G	P-O5'	-7.89	1.51	1.59
67	B1	193	A	C4'-C3'	7.89	1.61	1.53
67	B1	303	A	O4'-C1'	7.89	1.51	1.41
67	B1	653	U	C2'-C1'	-7.89	1.44	1.53
67	B1	2606	C	C3'-C2'	-7.88	1.44	1.52
68	B3	2	G	C5'-C4'	7.88	1.60	1.51
67	B1	1210	G	C2'-C1'	-7.88	1.44	1.53
67	B1	2359	G	C4'-C3'	-7.88	1.44	1.53
67	B1	1578	C	C4'-C3'	-7.88	1.44	1.53
67	B1	1824	G	O4'-C1'	7.88	1.51	1.41
67	B1	1987	A	O4'-C1'	7.88	1.51	1.41
67	B1	801	A	O4'-C1'	-7.88	1.31	1.41
67	B1	1409	U	C2'-C1'	-7.88	1.44	1.53
67	B1	2983	G	C2'-C1'	-7.88	1.44	1.53
68	B3	23	A	C2'-C1'	-7.88	1.44	1.53
21	A2	1389	G	O4'-C1'	-7.88	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	536	G	C4'-C3'	7.87	1.61	1.53
67	B1	739	C	O4'-C1'	7.87	1.51	1.41
67	B1	1702	C	O4'-C1'	7.87	1.51	1.41
21	A2	1019	A	C2'-C1'	-7.87	1.44	1.53
21	A2	192	G	C2'-C1'	-7.87	1.44	1.53
67	B1	2547	A	C2'-C1'	-7.87	1.44	1.53
68	B3	26	C	C5'-C4'	7.87	1.60	1.51
67	B1	560	G	O4'-C1'	-7.87	1.31	1.41
67	B1	583	A	P-O5'	-7.87	1.51	1.59
67	B1	1250	A	O4'-C1'	-7.87	1.31	1.41
67	B1	2579	G	P-O5'	-7.86	1.51	1.59
67	B1	972	C	P-O5'	-7.86	1.51	1.59
67	B1	1925	A	C4'-C3'	7.86	1.61	1.53
21	A2	214	C	O4'-C1'	7.86	1.51	1.41
68	B3	80	G	O4'-C1'	7.86	1.51	1.41
67	B1	2126	G	P-O5'	-7.86	1.51	1.59
21	A2	653	C	C2'-C1'	-7.86	1.44	1.53
21	A2	907	C	O4'-C1'	7.86	1.51	1.41
21	A2	1219	C	C4'-C3'	7.86	1.61	1.53
67	B1	1698	G	C4'-O4'	-7.86	1.35	1.45
67	B1	1011	A	P-O5'	-7.85	1.51	1.59
68	B3	73	U	O4'-C1'	7.85	1.51	1.41
21	A2	968	C	O4'-C1'	7.85	1.51	1.41
21	A2	1351	U	P-O5'	-7.85	1.51	1.59
21	A2	992	G	O4'-C1'	7.84	1.51	1.41
67	B1	1299	C	C3'-C2'	-7.84	1.44	1.52
44	BW	67	LYS	C-N	7.84	1.47	1.33
67	B1	64	A	C2'-C1'	7.84	1.61	1.53
35	BL	45	SER	N-CA	-7.84	1.30	1.46
67	B1	20	C	C4'-C3'	7.84	1.61	1.53
67	B1	1044	C	O4'-C1'	7.84	1.51	1.41
21	A2	196	G	C4'-C3'	7.84	1.61	1.53
21	A2	1191	G	O4'-C1'	7.84	1.51	1.41
67	B1	1841	G	O4'-C1'	7.84	1.51	1.41
67	B1	670	G	O4'-C1'	7.83	1.51	1.41
21	A2	1041	C	C4'-C3'	7.83	1.61	1.53
67	B1	180	A	O4'-C1'	7.83	1.51	1.41
67	B1	1949	A	O4'-C1'	7.83	1.51	1.41
21	A2	1170	C	C2'-C1'	-7.83	1.44	1.53
67	B1	1100	G	O3'-P	-7.83	1.51	1.61
67	B1	215	A	O4'-C1'	-7.83	1.31	1.41
67	B1	2872	G	P-O5'	-7.83	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	379	A	C2'-C1'	7.82	1.61	1.53
21	A2	784	G	O3'-P	-7.82	1.51	1.61
67	B1	2466	C	O4'-C1'	7.82	1.51	1.41
21	A2	196	G	C5'-C4'	7.82	1.60	1.51
67	B1	1199	U	O4'-C1'	7.82	1.51	1.41
21	A2	1345	G	C3'-C2'	7.82	1.61	1.52
67	B1	2955	G	O4'-C1'	7.81	1.51	1.41
21	A2	1302	C	O4'-C1'	7.81	1.51	1.41
67	B1	1552	C	O3'-P	-7.81	1.51	1.61
67	B1	1766	A	O4'-C1'	7.81	1.51	1.41
67	B1	2785	G	C2'-C1'	-7.81	1.44	1.53
67	B1	545	G	C2'-C1'	7.81	1.61	1.53
67	B1	803	A	C2'-C1'	-7.81	1.44	1.53
67	B1	1050	C	C2'-C1'	-7.81	1.44	1.53
35	BL	9	ARG	N-CA	-7.81	1.30	1.46
67	B1	2080	G	O4'-C1'	7.81	1.51	1.41
67	B1	1351	G	O4'-C1'	7.81	1.51	1.41
21	A2	293	G	C2'-C1'	-7.80	1.44	1.53
27	A0	23	A	O4'-C1'	7.80	1.51	1.41
67	B1	1133	U	O4'-C1'	7.80	1.51	1.41
67	B1	2355	G	O4'-C1'	7.80	1.51	1.41
21	A2	1172	A	C2'-C1'	7.80	1.61	1.53
67	B1	2114	C	C2'-C1'	-7.80	1.44	1.53
67	B1	634	G	O3'-P	-7.80	1.51	1.61
67	B1	1477	C	P-O5'	-7.80	1.51	1.59
67	B1	951	C	O4'-C1'	7.80	1.51	1.41
21	A2	38	G	C5'-C4'	7.80	1.60	1.51
21	A2	1248	A	C2'-C1'	7.80	1.61	1.53
36	Bf	3	ARG	CD-NE	7.80	1.59	1.46
67	B1	849	C	C5'-C4'	7.80	1.60	1.51
67	B1	2869	U	C5'-C4'	7.79	1.60	1.51
21	A2	479	C	C4'-C3'	7.79	1.61	1.53
21	A2	1459	G	C2'-C1'	-7.79	1.44	1.53
67	B1	2172	G	O3'-P	-7.79	1.51	1.61
21	A2	231	G	O4'-C1'	-7.79	1.31	1.41
21	A2	504	G	O4'-C1'	7.79	1.51	1.41
67	B1	1421	C	C2'-C1'	-7.79	1.44	1.53
27	A0	27	C	C5'-C4'	7.79	1.60	1.51
21	A2	140	C	C2'-C1'	-7.79	1.44	1.53
27	A0	72	C	C2'-C1'	-7.79	1.44	1.53
67	B1	2779	G	C3'-C2'	7.79	1.61	1.52
15	AE	8	ARG	CZ-NH2	7.78	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2500	G	C5'-C4'	7.78	1.60	1.51
67	B1	2700	U	P-O5'	-7.78	1.51	1.59
68	B3	8	C	C4'-O4'	-7.78	1.35	1.45
67	B1	106	G	C2'-C1'	-7.78	1.44	1.53
21	A2	643	G	O4'-C1'	7.78	1.51	1.41
21	A2	1030	U	P-O5'	7.78	1.67	1.59
67	B1	176	G	O3'-P	-7.78	1.51	1.61
67	B1	762	G	O4'-C1'	7.78	1.51	1.41
21	A2	664	G	C2'-C1'	-7.78	1.44	1.53
67	B1	114	C	C2'-C1'	-7.78	1.44	1.53
67	B1	2241	U	O4'-C1'	-7.77	1.31	1.41
67	B1	760	G	O4'-C1'	7.77	1.51	1.41
21	A2	243	G	O4'-C1'	-7.77	1.31	1.41
21	A2	1377	G	C2'-C1'	-7.77	1.44	1.53
67	B1	477	C	C2'-C1'	-7.77	1.44	1.53
67	B1	623	G	C2'-C1'	-7.76	1.44	1.53
21	A2	185	G	O4'-C1'	7.76	1.51	1.41
67	B1	2180	C	C2'-C1'	-7.76	1.44	1.53
67	B1	2212	C	O4'-C1'	7.76	1.51	1.41
21	A2	201	G	C2'-C1'	7.76	1.61	1.53
67	B1	34	C	O3'-P	-7.76	1.51	1.61
67	B1	678	G	C2'-C1'	-7.76	1.44	1.53
67	B1	2524	C	O4'-C1'	7.76	1.51	1.41
67	B1	972	C	O4'-C1'	7.75	1.51	1.41
21	A2	742	U	O4'-C1'	7.75	1.51	1.41
36	Bf	3	ARG	NE-CZ	7.75	1.43	1.33
47	BI	49	TYR	CZ-OH	7.75	1.51	1.37
67	B1	343	C	C2'-C1'	-7.75	1.44	1.53
67	B1	2384	G	O4'-C1'	7.75	1.51	1.41
21	A2	142	G	C2'-C1'	-7.75	1.44	1.53
21	A2	321	A	P-O5'	-7.75	1.52	1.59
67	B1	1980	U	C2'-C1'	-7.75	1.44	1.53
67	B1	1987	A	C2'-C1'	-7.75	1.44	1.53
27	A0	62	C	C4'-C3'	-7.75	1.44	1.53
67	B1	2043	A	C2'-C1'	7.75	1.61	1.53
67	B1	842	C	P-O5'	-7.75	1.52	1.59
67	B1	2390	G	C3'-C2'	-7.75	1.44	1.52
67	B1	547	C	O4'-C1'	7.74	1.51	1.41
21	A2	36	G	C5'-C4'	7.74	1.60	1.51
67	B1	1568	A	O4'-C1'	-7.74	1.31	1.41
67	B1	2495	A	O3'-P	-7.74	1.51	1.61
32	BO	71	PHE	CG-CD1	7.74	1.50	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A1	1	G	O4'-C1'	7.74	1.51	1.41
67	B1	1728	C	C2'-C1'	-7.74	1.44	1.53
67	B1	2670	U	C5'-C4'	7.74	1.60	1.51
67	B1	428	A	C3'-O3'	7.73	1.52	1.42
67	B1	1432	C	C5'-C4'	-7.73	1.42	1.51
11	A1	13	C	C2'-C1'	-7.73	1.44	1.53
67	B1	1515	G	O4'-C1'	7.73	1.51	1.41
21	A2	1118	C	P-O5'	-7.73	1.52	1.59
67	B1	824	C	C2'-C1'	-7.73	1.44	1.53
27	A0	33	U	O4'-C1'	7.72	1.51	1.41
67	B1	2830	C	P-O5'	-7.72	1.52	1.59
27	A0	5	C	C2'-C1'	-7.72	1.44	1.53
67	B1	1471	G	O3'-P	-7.72	1.51	1.61
67	B1	2175	G	C5'-C4'	7.72	1.60	1.51
67	B1	733	A	O4'-C1'	-7.72	1.31	1.41
67	B1	2445	G	O4'-C1'	7.72	1.51	1.41
21	A2	428	G	C2'-C1'	-7.72	1.44	1.53
21	A2	701	G	C2'-C1'	7.72	1.61	1.53
21	A2	765	U	O4'-C1'	7.72	1.51	1.41
67	B1	891	C	C2'-C1'	-7.72	1.44	1.53
21	A2	1292	A	O4'-C1'	7.72	1.51	1.41
67	B1	2579	G	O4'-C1'	-7.72	1.31	1.41
21	A2	1341	C	C2'-C1'	-7.71	1.44	1.53
67	B1	1208	A	O4'-C1'	-7.71	1.31	1.41
67	B1	1436	A	P-O5'	-7.71	1.52	1.59
67	B1	1935	C	O4'-C1'	7.71	1.51	1.41
21	A2	373	C	C5'-C4'	7.71	1.60	1.51
67	B1	2241	U	C5'-C4'	7.71	1.60	1.51
21	A2	1206	G	C2'-C1'	-7.71	1.44	1.53
67	B1	1795	C	C2'-C1'	-7.71	1.44	1.53
67	B1	2709	C	P-O5'	-7.71	1.52	1.59
21	A2	884	G	C2'-C1'	-7.71	1.44	1.53
29	AL	5	ARG	NE-CZ	7.71	1.43	1.33
67	B1	695	G	O4'-C1'	7.71	1.51	1.41
67	B1	1492	C	C5'-C4'	7.71	1.60	1.51
56	BH	18	GLY	C-N	-7.70	1.19	1.34
21	A2	911	C	O4'-C1'	7.70	1.51	1.41
21	A2	948	G	O4'-C1'	-7.70	1.31	1.41
67	B1	1003	C	C2'-C1'	-7.70	1.44	1.53
67	B1	2914	U	C5'-C4'	7.70	1.60	1.51
21	A2	384	G	C2'-C1'	-7.70	1.44	1.53
21	A2	581	G	C5'-C4'	7.70	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2796	C	C2'-C1'	-7.70	1.44	1.53
67	B1	857	U	O4'-C1'	7.70	1.51	1.41
67	B1	941	C	O3'-P	-7.70	1.51	1.61
68	B3	105	G	C5'-C4'	7.70	1.60	1.51
67	B1	1921	U	C3'-O3'	7.69	1.52	1.42
67	B1	1886	C	C2'-C1'	-7.69	1.44	1.53
21	A2	983	G	C2'-C1'	-7.69	1.44	1.53
67	B1	1595	G	C2'-C1'	7.69	1.61	1.53
67	B1	2109	C	C5'-C4'	7.69	1.60	1.51
21	A2	225	U	C2'-C1'	7.69	1.61	1.53
21	A2	1030	U	O4'-C1'	7.69	1.51	1.41
67	B1	1333	G	O4'-C1'	7.69	1.51	1.41
21	A2	582	G	C2'-C1'	-7.69	1.44	1.53
67	B1	2469	G	C5'-C4'	7.69	1.60	1.51
11	A1	65	C	O4'-C1'	7.68	1.51	1.41
21	A2	334	G	C2'-C1'	7.68	1.61	1.53
21	A2	1102	A	P-O5'	7.68	1.67	1.59
67	B1	1813	A	C2'-C1'	7.68	1.61	1.53
67	B1	688	G	P-O5'	-7.68	1.52	1.59
21	A2	192	G	O4'-C1'	-7.68	1.31	1.41
67	B1	1827	A	C2'-C1'	7.68	1.61	1.53
21	A2	1319	C	C2'-C1'	-7.68	1.45	1.53
27	A0	32	C	O4'-C1'	7.68	1.51	1.41
67	B1	165	G	O4'-C1'	7.67	1.51	1.41
67	B1	848	A	O4'-C1'	7.67	1.51	1.41
67	B1	1805	U	O4'-C1'	7.67	1.51	1.41
21	A2	425	C	C2'-C1'	-7.67	1.45	1.53
27	A0	5	C	O4'-C1'	7.67	1.51	1.41
67	B1	231	G	C2'-C1'	7.67	1.61	1.53
67	B1	1856	G	O4'-C1'	7.67	1.51	1.41
68	B3	90	A	C2'-C1'	-7.67	1.45	1.53
67	B1	194	G	C5'-C4'	7.67	1.60	1.51
67	B1	1073	G	C2'-C1'	-7.67	1.45	1.53
67	B1	2171	G	C2'-C1'	-7.67	1.45	1.53
21	A2	755	U	O3'-P	-7.67	1.51	1.61
21	A2	1146	G	C2'-C1'	7.67	1.61	1.53
67	B1	2618	C	O4'-C1'	7.67	1.51	1.41
67	B1	2641	C	O4'-C1'	7.67	1.51	1.41
68	B3	83	C	C2'-C1'	7.67	1.61	1.53
67	B1	2755	G	C5'-C4'	7.67	1.60	1.51
67	B1	1930	A	O3'-P	-7.66	1.51	1.61
21	A2	142	G	O4'-C1'	-7.66	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	673	A	O4'-C1'	7.66	1.51	1.41
67	B1	1424	G	C4'-O4'	-7.66	1.35	1.45
67	B1	2202	U	O3'-P	7.66	1.70	1.61
21	A2	40	C	O4'-C1'	7.66	1.51	1.41
21	A2	836	G	O4'-C1'	7.66	1.51	1.41
67	B1	1900	U	C4'-C3'	7.66	1.61	1.53
21	A2	497	C	O3'-P	-7.66	1.51	1.61
21	A2	837	C	O4'-C1'	7.65	1.51	1.41
21	A2	377	A	C4'-C3'	7.65	1.61	1.53
27	A0	3	C	C2'-C1'	-7.65	1.45	1.53
67	B1	2049	U	O4'-C1'	7.65	1.51	1.41
67	B1	1177	C	O4'-C1'	7.64	1.51	1.41
67	B1	2250	G	C2'-C1'	-7.64	1.45	1.53
27	A0	49	C	O4'-C1'	7.64	1.51	1.41
67	B1	1244	C	O4'-C1'	7.64	1.51	1.41
67	B1	843	C	C5'-C4'	7.64	1.60	1.51
11	A1	34	U	O4'-C1'	7.64	1.51	1.41
21	A2	521	G	O4'-C1'	7.64	1.51	1.41
67	B1	1746	C	O3'-P	-7.64	1.51	1.61
67	B1	2338	A	C2'-C1'	-7.64	1.45	1.53
67	B1	547	C	C3'-C2'	-7.63	1.44	1.52
67	B1	659	U	O4'-C1'	7.63	1.51	1.41
67	B1	1962	G	C4'-C3'	7.63	1.61	1.53
67	B1	2979	C	O4'-C1'	7.63	1.51	1.41
59	BM	17	SER	CA-CB	7.63	1.64	1.52
67	B1	741	G	O4'-C1'	7.63	1.51	1.41
67	B1	342	C	C3'-O3'	7.63	1.52	1.42
21	A2	41	C	C3'-C2'	-7.63	1.44	1.52
67	B1	199	C	C5'-C4'	7.63	1.60	1.51
67	B1	321	C	O4'-C1'	7.63	1.51	1.41
67	B1	1513	G	C2'-C1'	-7.63	1.45	1.53
67	B1	1981	G	O4'-C1'	-7.63	1.31	1.41
68	B3	103	C	C4'-C3'	7.63	1.61	1.53
67	B1	725	G	P-O5'	-7.62	1.52	1.59
21	A2	24	C	C2'-C1'	-7.62	1.45	1.53
21	A2	252	U	P-O5'	-7.62	1.52	1.59
67	B1	363	G	O4'-C1'	-7.62	1.31	1.41
67	B1	2144	U	C4'-C3'	-7.62	1.44	1.53
67	B1	1032	C	O4'-C1'	7.62	1.51	1.41
67	B1	1342	G	O4'-C1'	7.62	1.51	1.41
21	A2	833	C	O4'-C1'	7.62	1.51	1.41
21	A2	1359	C	C2'-C1'	-7.62	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1401	U	O4'-C1'	7.62	1.51	1.41
67	B1	798	G	C4'-O4'	7.62	1.55	1.45
21	A2	954	G	C5'-C4'	7.62	1.60	1.51
21	A2	322	G	C2'-C1'	-7.61	1.45	1.53
49	BQ	100	ARG	NE-CZ	7.61	1.43	1.33
67	B1	2876	G	P-O5'	-7.61	1.52	1.59
67	B1	1131	G	O4'-C1'	7.61	1.51	1.41
21	A2	508	C	C2'-C1'	-7.61	1.45	1.53
67	B1	2022	U	C5'-C4'	7.61	1.60	1.51
67	B1	303	A	C2'-C1'	7.61	1.61	1.53
67	B1	599	G	O4'-C1'	7.61	1.51	1.41
67	B1	1344	C	C2'-C1'	-7.61	1.45	1.53
67	B1	1816	C	C2'-C1'	-7.61	1.45	1.53
21	A2	668	G	C5'-C4'	7.61	1.60	1.51
21	A2	700	G	C5'-C4'	7.61	1.60	1.51
27	A0	64	G	C5'-C4'	7.61	1.60	1.51
67	B1	1809	G	C2'-C1'	7.61	1.61	1.53
67	B1	2021	G	O4'-C1'	7.61	1.51	1.41
67	B1	2337	G	C3'-C2'	-7.61	1.44	1.52
67	B1	704	G	C4'-C3'	-7.60	1.44	1.53
67	B1	1149	C	C2'-C1'	-7.60	1.45	1.53
67	B1	1321	C	O4'-C1'	7.60	1.51	1.41
21	A2	854	C	C2'-C1'	-7.60	1.45	1.53
21	A2	1122	C	C2'-C1'	-7.60	1.45	1.53
67	B1	92	G	O3'-P	-7.60	1.52	1.61
21	A2	1457	A	O4'-C1'	7.60	1.51	1.41
67	B1	312	G	C2'-C1'	-7.60	1.45	1.53
67	B1	433	C	P-O5'	-7.60	1.52	1.59
67	B1	403	G	C5'-C4'	7.59	1.60	1.51
67	B1	959	U	C2'-C1'	-7.59	1.45	1.53
67	B1	2604	G	O4'-C1'	7.59	1.51	1.41
68	B3	37	U	C2'-C1'	7.59	1.61	1.53
67	B1	75	G	C2'-C1'	-7.59	1.45	1.53
27	A0	41	C	C2'-C1'	-7.59	1.45	1.53
67	B1	2095	U	O4'-C1'	-7.59	1.31	1.41
67	B1	3022	C	O3'-P	-7.58	1.52	1.61
21	A2	351	C	O4'-C1'	7.58	1.51	1.41
21	A2	1411	G	C2'-C1'	-7.58	1.45	1.53
67	B1	1606	C	O4'-C1'	7.58	1.51	1.41
21	A2	610	G	O4'-C1'	7.58	1.51	1.41
21	A2	865	A	C2'-C1'	7.58	1.61	1.53
21	A2	1126	G	O4'-C1'	7.58	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	734	G	C5'-C4'	7.58	1.60	1.51
21	A2	810	G	O3'-P	-7.58	1.52	1.61
67	B1	1503	C	O4'-C1'	7.58	1.51	1.41
67	B1	1735	G	O3'-P	-7.58	1.52	1.61
67	B1	2310	G	O4'-C1'	-7.58	1.31	1.41
21	A2	461	A	O4'-C1'	7.57	1.51	1.41
64	Bc	12	ARG	CZ-NH2	7.57	1.42	1.33
67	B1	828	G	P-O5'	-7.57	1.52	1.59
25	AH	94	ASN	C-N	7.57	1.51	1.34
67	B1	854	G	C3'-C2'	7.57	1.61	1.52
67	B1	1670	A	O4'-C1'	-7.57	1.31	1.41
67	B1	2307	C	O4'-C1'	7.57	1.51	1.41
27	A0	65	G	O4'-C1'	7.57	1.51	1.41
67	B1	814	G	C5'-C4'	7.57	1.60	1.51
67	B1	2114	C	O4'-C1'	7.57	1.51	1.41
67	B1	2728	U	C2'-C1'	-7.57	1.45	1.53
67	B1	360	G	O3'-P	-7.57	1.52	1.61
67	B1	779	A	C2'-C1'	7.57	1.61	1.53
21	A2	300	G	P-O5'	-7.56	1.52	1.59
67	B1	2102	A	C5'-C4'	7.56	1.60	1.51
21	A2	103	A	C3'-C2'	7.56	1.61	1.52
67	B1	1444	A	P-O5'	-7.56	1.52	1.59
21	A2	412	U	C4'-C3'	7.56	1.61	1.53
67	B1	2982	G	O4'-C1'	7.56	1.51	1.41
67	B1	453	U	O3'-P	-7.56	1.52	1.61
67	B1	2887	C	C2'-C1'	-7.56	1.45	1.53
21	A2	589	U	C5'-C4'	7.56	1.60	1.51
21	A2	1265	G	C3'-C2'	7.56	1.61	1.52
21	A2	363	C	P-O5'	-7.55	1.52	1.59
21	A2	398	C	C2'-C1'	-7.55	1.45	1.53
67	B1	954	A	O4'-C1'	7.55	1.51	1.41
67	B1	1304	G	C2'-C1'	-7.55	1.45	1.53
67	B1	1375	G	P-O5'	7.55	1.67	1.59
67	B1	2647	G	P-O5'	-7.55	1.52	1.59
21	A2	478	C	O4'-C1'	7.55	1.51	1.41
67	B1	787	G	O4'-C1'	7.55	1.51	1.41
67	B1	1618	G	O4'-C1'	7.55	1.51	1.41
67	B1	1938	G	C2'-C1'	7.55	1.61	1.53
67	B1	2932	C	C5'-C4'	7.55	1.60	1.51
21	A2	339	U	O4'-C1'	7.55	1.51	1.41
21	A2	1117	A	O4'-C1'	7.55	1.51	1.41
67	B1	1784	G	O4'-C1'	7.55	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	200	G	C5'-C4'	7.55	1.60	1.51
21	A2	1077	U	C5'-C4'	7.55	1.60	1.51
67	B1	1892	G	C2'-C1'	7.55	1.61	1.53
67	B1	2055	U	O4'-C1'	7.55	1.51	1.41
21	A2	1028	C	O4'-C1'	7.54	1.51	1.41
6	AC	57	ARG	CZ-NH2	7.54	1.42	1.33
10	AD	168	ARG	CD-NE	7.54	1.59	1.46
11	A1	73	C	C2'-C1'	-7.54	1.45	1.53
21	A2	732	G	O4'-C1'	7.54	1.51	1.41
67	B1	868	U	C3'-C2'	-7.54	1.44	1.52
67	B1	962	C	C2'-C1'	-7.54	1.45	1.53
11	A1	69	G	O4'-C1'	7.54	1.51	1.41
67	B1	1372	C	O4'-C1'	7.54	1.51	1.41
67	B1	3007	A	P-O5'	-7.54	1.52	1.59
67	B1	1653	U	C4'-C3'	-7.54	1.44	1.53
21	A2	237	C	O3'-P	-7.54	1.52	1.61
67	B1	932	C	C2'-C1'	-7.54	1.45	1.53
67	B1	3009	C	P-O5'	-7.54	1.52	1.59
21	A2	956	C	O3'-P	-7.53	1.52	1.61
27	A0	15	G	C2'-C1'	-7.53	1.45	1.53
67	B1	1397	U	C2'-C1'	-7.53	1.45	1.53
21	A2	1471	G	C3'-C2'	7.53	1.61	1.52
67	B1	500	C	O4'-C1'	7.53	1.51	1.41
21	A2	776	C	P-O5'	-7.53	1.52	1.59
21	A2	837	C	C2'-C1'	7.53	1.61	1.53
21	A2	1485	G	C2'-C1'	-7.53	1.45	1.53
67	B1	899	A	O4'-C1'	-7.53	1.31	1.41
67	B1	2117	U	C4'-C3'	7.53	1.61	1.53
21	A2	622	C	C2'-C1'	7.52	1.61	1.53
21	A2	889	G	P-O5'	-7.52	1.52	1.59
21	A2	369	A	P-O5'	-7.52	1.52	1.59
21	A2	498	C	C2'-C1'	-7.52	1.45	1.53
67	B1	2679	A	O4'-C1'	7.52	1.51	1.41
67	B1	1254	C	O4'-C1'	7.52	1.51	1.41
51	Bj	8	ARG	CZ-NH2	7.52	1.42	1.33
67	B1	2513	C	C2'-C1'	-7.52	1.45	1.53
68	B3	104	C	O4'-C1'	7.52	1.51	1.41
67	B1	875	G	C2'-C1'	-7.52	1.45	1.53
67	B1	1672	G	C2'-C1'	-7.52	1.45	1.53
67	B1	2355	G	C2'-C1'	-7.52	1.45	1.53
67	B1	1080	G	C4'-C3'	7.51	1.61	1.53
21	A2	1137	G	C4'-C3'	7.51	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	447	G	P-O5'	-7.51	1.52	1.59
24	AA	138	ARG	CZ-NH1	7.51	1.42	1.33
67	B1	361	G	C4'-C3'	7.51	1.61	1.53
67	B1	1038	U	O4'-C1'	7.51	1.51	1.41
67	B1	1862	G	C2'-C1'	-7.51	1.45	1.53
21	A2	210	A	C4'-O4'	7.51	1.55	1.45
67	B1	765	G	O4'-C1'	7.51	1.51	1.41
67	B1	3016	G	C2'-C1'	-7.51	1.45	1.53
21	A2	72	C	C3'-C2'	7.50	1.61	1.52
21	A2	1290	U	O4'-C1'	7.50	1.51	1.41
67	B1	261	A	C2'-C1'	-7.50	1.45	1.53
67	B1	1292	C	C2'-C1'	-7.50	1.45	1.53
67	B1	2294	A	P-O5'	-7.50	1.52	1.59
21	A2	1063	A	O4'-C1'	7.50	1.51	1.41
21	A2	1346	C	P-O5'	-7.50	1.52	1.59
67	B1	179	A	O4'-C1'	7.50	1.51	1.41
21	A2	545	C	O4'-C1'	7.50	1.51	1.41
67	B1	1150	G	C2'-C1'	-7.50	1.45	1.53
67	B1	2620	G	P-O5'	7.50	1.67	1.59
21	A2	173	G	C3'-C2'	-7.50	1.44	1.52
21	A2	415	C	P-O5'	-7.50	1.52	1.59
27	A0	36	U	P-O5'	7.50	1.67	1.59
34	B5	45	ARG	CZ-NH2	7.50	1.42	1.33
67	B1	2173	U	C3'-C2'	-7.50	1.44	1.52
68	B3	111	G	C4'-C3'	7.50	1.61	1.53
67	B1	2718	G	C2'-C1'	-7.50	1.45	1.53
67	B1	1044	C	C2'-C1'	-7.49	1.45	1.53
67	B1	2702	A	O3'-P	-7.49	1.52	1.61
21	A2	1395	G	C2'-C1'	-7.49	1.45	1.53
21	A2	1239	A	C5'-C4'	7.49	1.60	1.51
67	B1	526	C	C4'-C3'	7.49	1.61	1.53
67	B1	2665	G	C2'-C1'	7.49	1.61	1.53
67	B1	1968	A	C2'-C1'	7.49	1.61	1.53
67	B1	720	C	C4'-C3'	7.49	1.61	1.53
67	B1	2769	U	C2'-C1'	-7.49	1.45	1.53
67	B1	2789	G	C2'-C1'	-7.49	1.45	1.53
67	B1	716	U	C3'-C2'	7.49	1.61	1.52
67	B1	110	A	C4'-C3'	7.48	1.61	1.53
67	B1	1072	U	O4'-C1'	7.48	1.51	1.41
67	B1	3003	A	C2'-C1'	7.48	1.61	1.53
67	B1	2296	A	C4'-C3'	7.48	1.61	1.53
21	A2	73	U	O4'-C1'	7.48	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	542	G	O4'-C1'	7.48	1.51	1.41
67	B1	543	G	C2'-C1'	7.48	1.61	1.53
21	A2	670	C	C5'-C4'	7.48	1.60	1.51
21	A2	1118	C	O4'-C1'	-7.48	1.31	1.41
47	BI	91	ARG	CD-NE	7.48	1.59	1.46
67	B1	800	G	C3'-C2'	-7.48	1.44	1.52
68	B3	13	C	C5'-C4'	7.48	1.60	1.51
21	A2	691	G	O4'-C1'	7.48	1.51	1.41
21	A2	230	C	O4'-C1'	7.47	1.51	1.41
21	A2	388	G	C2'-C1'	-7.47	1.45	1.53
53	BD	56	ARG	CZ-NH1	7.47	1.42	1.33
67	B1	626	C	O4'-C1'	7.47	1.51	1.41
11	A1	14	A	O4'-C1'	7.47	1.51	1.41
67	B1	289	G	C2'-C1'	-7.47	1.45	1.53
67	B1	2700	U	C2'-C1'	-7.47	1.45	1.53
21	A2	554	C	P-O5'	-7.47	1.52	1.59
67	B1	2600	C	P-O5'	-7.47	1.52	1.59
67	B1	214	C	C2'-C1'	7.47	1.61	1.53
67	B1	622	A	O4'-C1'	7.47	1.51	1.41
67	B1	3023	G	O4'-C1'	7.47	1.51	1.41
67	B1	1944	C	C2'-C1'	7.47	1.61	1.53
67	B1	680	U	O4'-C1'	7.46	1.51	1.41
67	B1	1536	U	O3'-P	-7.46	1.52	1.61
67	B1	1582	G	C2'-C1'	-7.46	1.45	1.53
21	A2	151	G	P-O5'	7.46	1.67	1.59
21	A2	712	G	P-O5'	7.46	1.67	1.59
67	B1	669	G	C5'-C4'	7.46	1.60	1.51
67	B1	819	U	O4'-C1'	7.46	1.51	1.41
67	B1	885	A	C3'-C2'	-7.46	1.44	1.52
67	B1	942	U	C4'-C3'	7.46	1.61	1.53
67	B1	2142	U	O3'-P	-7.46	1.52	1.61
67	B1	2692	A	C2'-C1'	-7.46	1.45	1.53
67	B1	716	U	C4'-C3'	7.46	1.61	1.53
67	B1	1569	A	C2'-C1'	7.45	1.61	1.53
21	A2	640	U	C5'-C4'	7.45	1.60	1.51
67	B1	2756	G	C2'-C1'	-7.45	1.45	1.53
21	A2	278	A	C5'-C4'	7.45	1.60	1.51
67	B1	514	U	O3'-P	-7.45	1.52	1.61
67	B1	1619	C	C3'-C2'	7.45	1.61	1.52
67	B1	2986	G	C3'-O3'	7.45	1.52	1.42
67	B1	2399	C	C2'-C1'	-7.45	1.45	1.53
21	A2	1279	A	O4'-C1'	7.45	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1176	C	O4'-C1'	7.45	1.51	1.41
67	B1	1216	A	O4'-C1'	7.45	1.51	1.41
67	B1	1854	G	C2'-C1'	7.45	1.61	1.53
67	B1	1041	U	O3'-P	-7.44	1.52	1.61
67	B1	1712	U	C2'-C1'	-7.44	1.45	1.53
21	A2	921	G	C2'-C1'	-7.44	1.45	1.53
67	B1	1524	A	C2'-C1'	7.44	1.61	1.53
67	B1	2167	C	C2'-C1'	-7.44	1.45	1.53
67	B1	2471	A	C5'-C4'	7.44	1.60	1.51
67	B1	989	G	C2'-C1'	-7.44	1.45	1.53
21	A2	194	C	O4'-C1'	7.44	1.51	1.41
21	A2	414	G	O4'-C1'	7.44	1.51	1.41
67	B1	574	C	C2'-C1'	-7.44	1.45	1.53
67	B1	1340	G	C5'-C4'	7.44	1.60	1.51
67	B1	1789	A	O4'-C1'	7.44	1.51	1.41
67	B1	2672	A	O4'-C1'	7.44	1.51	1.41
21	A2	533	C	O4'-C1'	7.44	1.51	1.41
67	B1	2697	G	C5'-C4'	7.44	1.60	1.51
21	A2	683	A	P-O5'	-7.43	1.52	1.59
21	A2	347	G	O4'-C1'	7.43	1.51	1.41
67	B1	2602	G	C2'-O2'	-7.43	1.31	1.41
21	A2	768	A	O4'-C1'	-7.43	1.31	1.41
21	A2	1046	G	C2'-C1'	7.43	1.61	1.53
67	B1	27	G	C4'-C3'	7.43	1.61	1.53
67	B1	1207	G	C2'-C1'	7.43	1.61	1.53
21	A2	221	A	C3'-C2'	7.42	1.61	1.52
67	B1	561	C	C5'-C4'	7.42	1.60	1.51
67	B1	675	G	C2'-C1'	-7.42	1.45	1.53
67	B1	1706	G	C2'-C1'	7.42	1.61	1.53
67	B1	1790	G	C2'-C1'	-7.42	1.45	1.53
67	B1	1904	G	C2'-C1'	7.42	1.61	1.53
67	B1	470	A	O4'-C1'	-7.42	1.32	1.41
67	B1	713	C	O4'-C1'	7.42	1.51	1.41
21	A2	196	G	O4'-C1'	7.42	1.51	1.41
21	A2	528	G	C2'-C1'	-7.42	1.45	1.53
21	A2	630	A	C4'-C3'	7.42	1.61	1.53
67	B1	1981	G	P-O5'	-7.42	1.52	1.59
21	A2	1441	G	O3'-P	-7.42	1.52	1.61
32	BO	13	ARG	NE-CZ	7.42	1.42	1.33
67	B1	1146	U	C2'-C1'	7.42	1.61	1.53
67	B1	1765	A	C2'-C1'	-7.42	1.45	1.53
21	A2	763	G	O4'-C1'	-7.41	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1299	A	C4'-C3'	7.41	1.61	1.53
67	B1	2552	C	O4'-C1'	7.41	1.51	1.41
67	B1	1476	C	C2'-C1'	7.41	1.61	1.53
67	B1	2525	C	C5'-C4'	7.41	1.60	1.51
67	B1	1753	G	C4'-C3'	7.41	1.61	1.53
23	AT	9	ARG	CD-NE	7.41	1.59	1.46
67	B1	420	U	C5'-C4'	7.41	1.60	1.51
67	B1	1130	G	O4'-C1'	7.41	1.51	1.41
21	A2	1392	G	O4'-C1'	7.41	1.51	1.41
67	B1	1596	G	C5'-C4'	7.41	1.60	1.51
21	A2	1427	C	O3'-P	-7.40	1.52	1.61
27	A0	24	G	C4'-C3'	7.40	1.61	1.53
67	B1	2942	G	P-O5'	7.40	1.67	1.59
67	B1	1309	G	O4'-C1'	7.40	1.51	1.41
67	B1	1360	G	C4'-C3'	7.40	1.61	1.53
21	A2	862	C	C2'-C1'	-7.40	1.45	1.53
67	B1	2413	G	C4'-C3'	7.40	1.61	1.53
67	B1	411	U	P-O5'	-7.39	1.52	1.59
67	B1	109	G	C2'-C1'	7.39	1.61	1.53
21	A2	399	A	C5'-C4'	7.39	1.60	1.51
21	A2	318	C	C2'-C1'	-7.39	1.45	1.53
67	B1	443	C	C2'-C1'	-7.39	1.45	1.53
67	B1	3041	U	C5'-C4'	7.39	1.60	1.51
67	B1	2697	G	C2'-C1'	7.39	1.61	1.53
21	A2	443	C	O4'-C1'	7.38	1.51	1.41
67	B1	937	A	O3'-P	-7.38	1.52	1.61
67	B1	2018	C	C4'-C3'	7.38	1.61	1.53
21	A2	463	G	O4'-C1'	7.38	1.51	1.41
67	B1	577	C	P-O5'	-7.38	1.52	1.59
67	B1	3035	C	O4'-C1'	7.38	1.51	1.41
21	A2	1077	U	C3'-O3'	7.38	1.52	1.42
53	BD	158	ARG	CD-NE	7.38	1.58	1.46
67	B1	220	C	C4'-C3'	-7.38	1.45	1.53
67	B1	2089	C	C5'-C4'	7.38	1.60	1.51
21	A2	1006	C	C2'-C1'	7.38	1.61	1.53
67	B1	1458	C	C5'-C4'	7.38	1.60	1.51
67	B1	431	U	O3'-P	-7.38	1.52	1.61
67	B1	3026	C	C2'-C1'	7.38	1.61	1.53
67	B1	28	A	C3'-C2'	7.38	1.61	1.52
67	B1	2880	C	C2'-C1'	-7.37	1.45	1.53
21	A2	50	C	C5'-C4'	7.37	1.60	1.51
67	B1	1020	G	C5'-C4'	7.37	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	3045	G	C2'-C1'	7.37	1.61	1.53
67	B1	720	C	O4'-C1'	7.37	1.51	1.41
67	B1	1568	A	C2'-C1'	7.37	1.61	1.53
21	A2	317	A	C2'-C1'	-7.37	1.45	1.53
67	B1	1096	A	C4'-C3'	7.37	1.61	1.53
67	B1	2294	A	C2'-C1'	7.37	1.61	1.53
67	B1	1702	C	C5'-C4'	7.36	1.60	1.51
2	AK	67	GLU	CB-CG	7.36	1.66	1.52
21	A2	640	U	O3'-P	-7.36	1.52	1.61
67	B1	1851	U	O3'-P	-7.36	1.52	1.61
67	B1	2363	G	O3'-P	-7.36	1.52	1.61
21	A2	816	G	C5'-C4'	7.36	1.60	1.51
26	AP	20	ARG	CZ-NH2	7.36	1.42	1.33
67	B1	454	C	C5'-C4'	7.36	1.60	1.51
21	A2	1278	A	O4'-C1'	7.36	1.51	1.41
21	A2	547	U	O4'-C1'	7.35	1.51	1.41
67	B1	2334	G	O4'-C1'	7.35	1.51	1.41
67	B1	2602	G	P-O5'	-7.35	1.52	1.59
67	B1	1851	U	C2'-C1'	7.35	1.61	1.53
67	B1	2186	C	P-O5'	7.35	1.67	1.59
21	A2	1176	C	O4'-C1'	7.35	1.51	1.41
67	B1	305	G	C2'-C1'	7.35	1.61	1.53
67	B1	2580	G	C2'-C1'	-7.35	1.45	1.53
21	A2	611	A	C2'-C1'	7.35	1.61	1.53
59	BM	14	PRO	N-CD	-7.35	1.37	1.47
67	B1	2155	C	C3'-O3'	7.35	1.52	1.42
67	B1	2435	G	P-O5'	7.35	1.67	1.59
67	B1	2655	C	C5'-C4'	7.35	1.60	1.51
67	B1	1510	U	P-O5'	-7.35	1.52	1.59
11	A1	10	G	O4'-C1'	7.34	1.51	1.41
21	A2	457	G	P-O5'	-7.34	1.52	1.59
67	B1	917	A	O4'-C1'	-7.34	1.32	1.41
21	A2	137	A	O4'-C1'	7.34	1.51	1.41
2	AK	25	ARG	CD-NE	7.34	1.58	1.46
21	A2	1118	C	O3'-P	-7.34	1.52	1.61
21	A2	78	G	C2'-C1'	-7.33	1.45	1.53
21	A2	1285	C	C5'-C4'	7.33	1.60	1.51
67	B1	1111	G	C2'-C1'	-7.33	1.45	1.53
67	B1	737	G	O4'-C1'	7.33	1.51	1.41
67	B1	909	A	P-O5'	-7.33	1.52	1.59
67	B1	2934	C	O4'-C1'	7.33	1.51	1.41
67	B1	2183	A	C4'-O4'	7.33	1.55	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2573	C	C4'-C3'	-7.33	1.45	1.53
67	B1	2941	A	C2'-C1'	7.33	1.61	1.53
21	A2	758	U	C2'-C1'	-7.32	1.45	1.53
21	A2	1196	A	C2'-C1'	-7.32	1.45	1.53
67	B1	2214	U	O3'-P	-7.32	1.52	1.61
13	AX	39	ARG	CZ-NH1	7.32	1.42	1.33
67	B1	1643	A	C3'-C2'	7.32	1.61	1.52
67	B1	1626	A	C4'-C3'	7.32	1.61	1.53
21	A2	767	U	C2'-C1'	7.32	1.61	1.53
67	B1	1399	C	O3'-P	-7.32	1.52	1.61
67	B1	1684	C	C5'-C4'	7.31	1.60	1.51
67	B1	2903	U	O4'-C1'	7.31	1.51	1.41
67	B1	1002	A	O4'-C1'	7.31	1.51	1.41
24	AA	138	ARG	CD-NE	7.31	1.58	1.46
67	B1	2978	G	O4'-C1'	7.31	1.51	1.41
21	A2	1289	G	C2'-C1'	7.31	1.61	1.53
21	A2	1465	C	O3'-P	-7.31	1.52	1.61
53	BD	249	ARG	CD-NE	7.30	1.58	1.46
67	B1	1613	A	C2'-C1'	7.30	1.61	1.53
67	B1	2275	G	C5'-C4'	7.30	1.60	1.51
67	B1	2586	A	P-O5'	-7.30	1.52	1.59
21	A2	256	G	C2'-C1'	-7.30	1.45	1.53
21	A2	738	C	O3'-P	-7.30	1.52	1.61
67	B1	1871	C	C2'-C1'	-7.30	1.45	1.53
67	B1	2045	C	O4'-C1'	7.30	1.51	1.41
27	A0	38	A	O4'-C1'	7.30	1.51	1.41
38	Bb	8	ARG	NE-CZ	7.30	1.42	1.33
67	B1	1656	C	C5'-C4'	7.30	1.60	1.51
67	B1	1807	G	C2'-C1'	7.30	1.61	1.53
67	B1	1894	A	C2'-C1'	7.30	1.61	1.53
67	B1	2003	C	C3'-O3'	7.30	1.52	1.42
67	B1	1831	C	C5'-C4'	7.30	1.60	1.51
21	A2	1441	G	O4'-C1'	7.30	1.51	1.41
67	B1	174	C	O3'-P	-7.30	1.52	1.61
67	B1	2120	C	C2'-C1'	-7.30	1.45	1.53
67	B1	2607	U	O4'-C1'	-7.30	1.32	1.41
27	A0	60	U	C4'-C3'	7.29	1.61	1.53
21	A2	1436	U	O4'-C1'	-7.29	1.32	1.41
67	B1	563	A	C2'-C1'	-7.29	1.45	1.53
67	B1	1287	G	P-O5'	-7.29	1.52	1.59
67	B1	1509	C	O3'-P	-7.29	1.52	1.61
67	B1	2443	G	C2'-C1'	-7.29	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2558	U	O4'-C1'	7.29	1.51	1.41
67	B1	2573	C	O4'-C1'	7.29	1.51	1.41
21	A2	512	U	C5'-C4'	7.29	1.60	1.51
21	A2	939	C	C2'-C1'	-7.29	1.45	1.53
67	B1	1083	G	C3'-O3'	7.29	1.52	1.42
21	A2	285	C	C2'-C1'	-7.29	1.45	1.53
21	A2	1094	U	O4'-C1'	7.29	1.51	1.41
67	B1	2241	U	P-O5'	-7.29	1.52	1.59
21	A2	186	U	O4'-C1'	7.28	1.51	1.41
21	A2	225	U	O4'-C1'	7.28	1.51	1.41
21	A2	817	U	C5'-C4'	7.28	1.60	1.51
67	B1	2567	C	O4'-C1'	7.28	1.51	1.41
67	B1	2644	G	O4'-C1'	7.28	1.51	1.41
67	B1	1214	C	C3'-C2'	7.28	1.60	1.52
67	B1	1989	G	O4'-C1'	7.28	1.51	1.41
67	B1	2441	A	C5'-C4'	7.28	1.60	1.51
67	B1	1933	U	O4'-C1'	7.28	1.51	1.41
67	B1	640	C	C5'-C4'	7.28	1.60	1.51
67	B1	2950	G	C2'-C1'	7.28	1.61	1.53
67	B1	2293	G	C4'-C3'	7.28	1.61	1.53
67	B1	14	A	C2'-C1'	-7.27	1.45	1.53
67	B1	2786	G	C5'-C4'	7.27	1.60	1.51
21	A2	69	U	O4'-C1'	7.27	1.51	1.41
67	B1	580	G	C2'-C1'	-7.27	1.45	1.53
67	B1	1173	G	O4'-C1'	7.27	1.51	1.41
67	B1	2095	U	O3'-P	-7.27	1.52	1.61
67	B1	1341	U	O3'-P	-7.27	1.52	1.61
21	A2	79	G	C5'-C4'	7.27	1.60	1.51
21	A2	714	G	C2'-C1'	7.27	1.61	1.53
21	A2	982	U	O4'-C1'	7.27	1.51	1.41
67	B1	488	A	O4'-C1'	7.27	1.51	1.41
67	B1	1761	C	C2'-C1'	-7.27	1.45	1.53
68	B3	18	G	O4'-C1'	-7.27	1.32	1.41
21	A2	377	A	O4'-C1'	7.27	1.51	1.41
67	B1	2573	C	C2'-C1'	7.27	1.61	1.53
67	B1	2105	A	O4'-C1'	7.27	1.51	1.41
21	A2	1396	C	C2'-C1'	-7.26	1.45	1.53
67	B1	339	A	P-O5'	-7.26	1.52	1.59
67	B1	541	A	C5'-C4'	7.26	1.60	1.51
67	B1	2536	A	C2'-C1'	-7.26	1.45	1.53
21	A2	1405	C	C3'-C2'	7.26	1.60	1.52
67	B1	149	G	C3'-C2'	-7.26	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	385	U	O4'-C1'	-7.26	1.32	1.41
21	A2	1032	A	P-O5'	-7.26	1.52	1.59
67	B1	105	C	O4'-C1'	7.26	1.51	1.41
67	B1	258	C	C5'-C4'	7.26	1.60	1.51
67	B1	495	U	O3'-P	-7.26	1.52	1.61
67	B1	877	U	C4'-O4'	7.26	1.54	1.45
21	A2	993	C	O4'-C1'	7.26	1.51	1.41
67	B1	1075	G	O4'-C1'	-7.26	1.32	1.41
68	B3	79	U	C5'-C4'	7.26	1.60	1.51
21	A2	82	G	C4'-O4'	7.26	1.54	1.45
67	B1	1308	G	O4'-C1'	7.26	1.51	1.41
67	B1	1941	A	O3'-P	-7.26	1.52	1.61
67	B1	2027	G	C2'-C1'	-7.26	1.45	1.53
21	A2	700	G	P-O5'	-7.25	1.52	1.59
67	B1	2152	G	P-O5'	7.25	1.67	1.59
21	A2	236	C	C2'-C1'	7.25	1.61	1.53
21	A2	10	G	C2'-C1'	-7.25	1.45	1.53
21	A2	823	A	O4'-C1'	7.25	1.51	1.41
67	B1	2527	G	C5'-C4'	7.25	1.60	1.51
21	A2	1302	C	C2'-C1'	7.25	1.61	1.53
67	B1	139	G	O4'-C1'	-7.25	1.32	1.41
67	B1	675	G	P-O5'	-7.25	1.52	1.59
67	B1	1783	U	O3'-P	-7.25	1.52	1.61
67	B1	1998	G	C2'-C1'	7.25	1.61	1.53
67	B1	1449	C	P-O5'	-7.25	1.52	1.59
67	B1	1255	C	O4'-C1'	7.24	1.51	1.41
67	B1	808	A	C2'-C1'	7.24	1.61	1.53
67	B1	819	U	C2'-C1'	7.24	1.61	1.53
67	B1	1989	G	C5'-C4'	7.24	1.60	1.51
67	B1	2793	C	O3'-P	-7.24	1.52	1.61
21	A2	855	C	C4'-C3'	-7.24	1.45	1.53
67	B1	1258	G	C5'-C4'	7.24	1.60	1.51
67	B1	405	G	O4'-C1'	7.24	1.51	1.41
21	A2	1032	A	C2'-C1'	7.24	1.61	1.53
21	A2	1038	C	C2'-C1'	-7.24	1.45	1.53
67	B1	1511	C	C5'-C4'	7.24	1.60	1.51
67	B1	2457	C	O4'-C1'	7.24	1.51	1.41
67	B1	2855	G	C4'-C3'	7.24	1.61	1.53
21	A2	39	U	O4'-C1'	7.23	1.51	1.41
21	A2	63	G	O3'-P	-7.23	1.52	1.61
67	B1	1874	G	C2'-C1'	-7.23	1.45	1.53
67	B1	1552	C	P-O5'	7.23	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2672	A	C2'-C1'	7.23	1.61	1.53
21	A2	422	U	O4'-C1'	-7.23	1.32	1.41
21	A2	602	G	C2'-C1'	7.23	1.61	1.53
21	A2	732	G	C2'-C1'	-7.23	1.45	1.53
67	B1	687	C	C2'-C1'	-7.23	1.45	1.53
67	B1	2998	G	O3'-P	-7.23	1.52	1.61
67	B1	1587	A	O4'-C1'	7.23	1.51	1.41
21	A2	107	C	O3'-P	-7.23	1.52	1.61
21	A2	796	C	C2'-C1'	-7.23	1.45	1.53
21	A2	1296	U	C5'-C4'	7.23	1.60	1.51
67	B1	353	C	O4'-C1'	7.23	1.51	1.41
67	B1	2305	U	C3'-C2'	7.23	1.60	1.52
21	A2	1036	G	O4'-C1'	-7.22	1.32	1.41
21	A2	1146	G	O4'-C1'	7.22	1.51	1.41
67	B1	96	C	O4'-C1'	7.22	1.51	1.41
67	B1	2600	C	O4'-C1'	7.22	1.51	1.41
21	A2	1001	A	O4'-C1'	7.22	1.51	1.41
21	A2	1464	C	O4'-C1'	7.22	1.51	1.41
46	BA	173	SER	CA-CB	7.22	1.63	1.52
67	B1	2650	G	C4'-C3'	-7.22	1.45	1.53
67	B1	625	A	C3'-C2'	7.21	1.60	1.52
67	B1	1802	G	O4'-C1'	7.21	1.51	1.41
11	A1	62	C	C3'-C2'	7.21	1.60	1.52
67	B1	1884	C	O4'-C1'	7.21	1.51	1.41
67	B1	2995	A	C5'-C4'	7.21	1.60	1.51
11	A1	76	C	C2'-C1'	7.21	1.61	1.53
67	B1	232	U	C2'-C1'	7.21	1.61	1.53
67	B1	1625	A	C2'-C1'	-7.21	1.45	1.53
21	A2	924	U	O4'-C1'	7.21	1.51	1.41
67	B1	154	U	C3'-O3'	-7.21	1.32	1.42
67	B1	404	G	C5'-C4'	7.21	1.59	1.51
21	A2	409	C	O3'-P	-7.21	1.52	1.61
67	B1	2280	G	C2'-C1'	7.21	1.61	1.53
21	A2	93	A	C4'-C3'	7.20	1.61	1.53
67	B1	776	G	C5'-C4'	7.20	1.59	1.51
67	B1	1512	G	P-O5'	7.20	1.67	1.59
21	A2	89	G	O4'-C1'	7.20	1.51	1.41
21	A2	1401	U	C4'-O4'	7.20	1.54	1.45
27	A0	18	G	C2'-C1'	7.20	1.61	1.53
67	B1	800	G	C5'-C4'	7.20	1.59	1.51
67	B1	2231	G	C4'-O4'	-7.20	1.36	1.45
67	B1	2494	A	C3'-C2'	-7.20	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	778	G	P-O5'	-7.20	1.52	1.59
67	B1	718	G	C5'-C4'	7.20	1.59	1.51
21	A2	676	G	O3'-P	-7.20	1.52	1.61
53	BD	55	ARG	CD-NE	7.20	1.58	1.46
67	B1	215	A	O3'-P	-7.19	1.52	1.61
67	B1	755	G	C2'-C1'	7.19	1.61	1.53
67	B1	1832	G	C2'-C1'	-7.19	1.45	1.53
67	B1	1834	C	O4'-C1'	7.19	1.51	1.41
67	B1	2377	C	P-O5'	-7.19	1.52	1.59
21	A2	77	G	C4'-O4'	7.19	1.54	1.45
67	B1	1567	C	C4'-O4'	-7.19	1.36	1.45
67	B1	2544	C	P-O5'	-7.19	1.52	1.59
32	BO	191	ARG	CD-NE	7.19	1.58	1.46
67	B1	2022	U	C2'-C1'	7.19	1.61	1.53
21	A2	647	G	O4'-C1'	7.19	1.50	1.41
21	A2	1114	G	O4'-C1'	-7.19	1.32	1.41
67	B1	2013	A	C2'-C1'	7.18	1.61	1.53
1	AQ	80	ARG	CZ-NH2	7.18	1.42	1.33
67	B1	2480	G	O4'-C1'	7.18	1.50	1.41
21	A2	185	G	C5'-C4'	7.18	1.59	1.51
21	A2	315	A	C2'-C1'	7.18	1.61	1.53
67	B1	2481	G	O3'-P	-7.18	1.52	1.61
67	B1	2511	C	O3'-P	-7.18	1.52	1.61
43	Bk	148	ARG	CZ-NH2	7.18	1.42	1.33
67	B1	477	C	O4'-C1'	7.18	1.50	1.41
67	B1	2245	C	C4'-O4'	-7.18	1.36	1.45
67	B1	467	U	C2'-O2'	7.18	1.50	1.41
67	B1	1818	G	C2'-C1'	-7.17	1.45	1.53
67	B1	112	U	C5'-C4'	7.17	1.59	1.51
67	B1	964	C	O4'-C1'	7.17	1.50	1.41
67	B1	2259	G	C5'-C4'	7.17	1.59	1.51
67	B1	2845	C	C3'-O3'	7.17	1.52	1.42
21	A2	623	C	O4'-C1'	7.17	1.50	1.41
46	BA	95	ARG	CZ-NH1	7.17	1.42	1.33
21	A2	790	G	C4'-O4'	7.17	1.54	1.45
21	A2	1488	C	C2'-C1'	-7.17	1.45	1.53
67	B1	2743	U	C2'-C1'	7.17	1.61	1.53
21	A2	704	C	C5'-C4'	7.17	1.59	1.51
21	A2	896	A	O3'-P	-7.17	1.52	1.61
21	A2	503	G	O3'-P	-7.17	1.52	1.61
67	B1	96	C	C2'-C1'	-7.17	1.45	1.53
21	A2	1348	C	O4'-C1'	7.16	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A0	10	G	C4'-C3'	7.16	1.61	1.53
46	BA	45	ARG	NE-CZ	7.16	1.42	1.33
21	A2	233	C	P-O5'	7.16	1.67	1.59
27	A0	49	C	C4'-C3'	7.16	1.61	1.53
46	BA	56	ARG	NE-CZ	7.16	1.42	1.33
21	A2	1477	U	C4'-C3'	-7.16	1.45	1.53
67	B1	139	G	C4'-C3'	7.16	1.61	1.53
67	B1	696	G	O4'-C1'	-7.16	1.32	1.41
67	B1	2883	C	O3'-P	-7.16	1.52	1.61
67	B1	2917	G	P-O5'	-7.16	1.52	1.59
67	B1	2996	A	C2'-C1'	-7.16	1.45	1.53
21	A2	832	G	O4'-C1'	7.15	1.50	1.41
27	A0	21	G	O4'-C1'	7.15	1.50	1.41
67	B1	360	G	C3'-C2'	-7.15	1.44	1.52
67	B1	992	G	C3'-C2'	-7.15	1.44	1.52
67	B1	2408	G	C2'-C1'	-7.15	1.45	1.53
67	B1	546	C	C4'-O4'	7.14	1.54	1.45
21	A2	900	G	C2'-C1'	-7.14	1.45	1.53
67	B1	27	G	C3'-C2'	-7.14	1.44	1.52
27	A0	34	G	C3'-O3'	7.14	1.52	1.42
27	A0	52	G	O4'-C1'	7.14	1.50	1.41
67	B1	539	A	O3'-P	-7.14	1.52	1.61
67	B1	657	U	P-O5'	-7.14	1.52	1.59
67	B1	876	C	P-O5'	-7.14	1.52	1.59
67	B1	52	A	C2'-C1'	-7.14	1.45	1.53
67	B1	1417	U	C3'-C2'	7.14	1.60	1.52
67	B1	2262	C	C2'-C1'	-7.14	1.45	1.53
68	B3	116	C	P-O5'	-7.14	1.52	1.59
18	AF	5	TRP	CA-CB	7.13	1.69	1.53
67	B1	3	G	P-O5'	-7.13	1.52	1.59
67	B1	1840	G	O3'-P	-7.13	1.52	1.61
67	B1	2885	C	C2'-C1'	-7.13	1.45	1.53
67	B1	1783	U	O4'-C1'	7.13	1.50	1.41
67	B1	1842	C	C2'-C1'	-7.13	1.45	1.53
21	A2	887	G	C2'-C1'	-7.13	1.45	1.53
67	B1	2961	A	C2'-C1'	7.13	1.61	1.53
67	B1	429	U	C2'-O2'	-7.13	1.32	1.41
67	B1	1118	A	C4'-C3'	7.13	1.60	1.53
21	A2	1033	G	O3'-P	-7.13	1.52	1.61
67	B1	539	A	P-O5'	-7.13	1.52	1.59
67	B1	1735	G	P-O5'	-7.13	1.52	1.59
67	B1	1904	G	P-O5'	-7.13	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	766	G	C4'-C3'	7.13	1.60	1.53
67	B1	2346	A	P-O5'	7.13	1.66	1.59
67	B1	2401	A	C5'-C4'	7.13	1.59	1.51
67	B1	1732	C	O3'-P	-7.12	1.52	1.61
21	A2	1277	C	C2'-C1'	-7.12	1.45	1.53
67	B1	1843	C	C5'-C4'	7.12	1.59	1.51
67	B1	1921	U	P-O5'	-7.12	1.52	1.59
67	B1	38	U	C2'-C1'	-7.12	1.45	1.53
67	B1	1151	G	C2'-C1'	-7.12	1.45	1.53
67	B1	2909	G	P-O5'	7.12	1.66	1.59
21	A2	567	A	O4'-C1'	7.12	1.50	1.41
67	B1	1175	C	O4'-C1'	7.12	1.50	1.41
67	B1	895	C	C4'-C3'	-7.12	1.45	1.53
67	B1	1288	C	C2'-C1'	-7.12	1.45	1.53
67	B1	856	A	O4'-C1'	7.12	1.50	1.41
67	B1	2705	C	O3'-P	-7.12	1.52	1.61
67	B1	892	U	O4'-C1'	7.12	1.50	1.41
67	B1	2614	C	C3'-C2'	-7.12	1.45	1.52
68	B3	46	G	O3'-P	-7.12	1.52	1.61
67	B1	419	G	C4'-C3'	7.11	1.60	1.53
67	B1	3016	G	C3'-C2'	7.11	1.60	1.52
25	AH	76	GLY	CA-C	-7.11	1.40	1.51
67	B1	902	C	C5'-C4'	7.11	1.59	1.51
67	B1	2994	G	O4'-C1'	7.11	1.50	1.41
67	B1	495	U	C2'-C1'	-7.11	1.45	1.53
21	A2	853	G	C2'-C1'	-7.11	1.45	1.53
21	A2	854	C	O4'-C1'	7.11	1.50	1.41
67	B1	693	G	C2'-C1'	7.11	1.61	1.53
67	B1	2836	G	O3'-P	-7.11	1.52	1.61
67	B1	417	C	O4'-C1'	7.10	1.50	1.41
67	B1	1076	G	O4'-C1'	-7.10	1.32	1.41
67	B1	199	C	C2'-C1'	-7.10	1.45	1.53
67	B1	613	C	O4'-C1'	-7.10	1.32	1.41
67	B1	1423	G	C5'-C4'	7.10	1.59	1.51
11	A1	34	U	C2'-C1'	7.10	1.61	1.53
21	A2	612	C	O3'-P	-7.10	1.52	1.61
21	A2	760	C	C4'-O4'	7.10	1.54	1.45
67	B1	2781	A	C4'-C3'	-7.10	1.45	1.53
21	A2	404	C	C2'-C1'	-7.10	1.45	1.53
21	A2	1249	A	C4'-O4'	7.10	1.54	1.45
21	A2	1277	C	O4'-C1'	7.10	1.50	1.41
27	A0	56	C	P-O5'	-7.10	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1357	G	C4'-C3'	-7.10	1.45	1.53
68	B3	17	G	C4'-O4'	-7.10	1.36	1.45
11	A1	38	G	C5'-C4'	7.10	1.59	1.51
21	A2	105	C	O4'-C1'	7.10	1.50	1.41
67	B1	1744	A	O4'-C1'	-7.10	1.32	1.41
67	B1	631	G	O4'-C1'	7.09	1.50	1.41
21	A2	367	G	C5'-C4'	7.09	1.59	1.51
21	A2	53	G	O4'-C1'	7.09	1.50	1.41
21	A2	513	A	C3'-C2'	7.09	1.60	1.52
21	A2	648	A	O4'-C1'	7.09	1.50	1.41
21	A2	727	G	P-O5'	-7.09	1.52	1.59
21	A2	1428	G	O3'-P	-7.09	1.52	1.61
21	A2	1393	A	O4'-C1'	7.09	1.50	1.41
15	AE	19	TRP	CE3-CZ3	7.09	1.50	1.38
34	BK	45	ARG	NE-CZ	7.08	1.42	1.33
67	B1	2549	A	C5'-C4'	7.08	1.59	1.51
21	A2	501	G	C4'-C3'	7.08	1.60	1.53
67	B1	530	A	C2'-C1'	7.08	1.61	1.53
67	B1	1507	A	C2'-C1'	-7.08	1.45	1.53
67	B1	1685	C	O4'-C1'	7.08	1.50	1.41
21	A2	1237	G	C5'-C4'	7.08	1.59	1.51
62	BN	136	ARG	NE-CZ	7.08	1.42	1.33
21	A2	38	G	O4'-C1'	7.08	1.50	1.41
67	B1	1655	G	O3'-P	-7.08	1.52	1.61
67	B1	2000	G	O4'-C1'	7.08	1.50	1.41
67	B1	3019	C	O3'-P	-7.08	1.52	1.61
21	A2	1206	G	C4'-C3'	-7.08	1.45	1.53
67	B1	2793	C	O4'-C1'	7.08	1.50	1.41
21	A2	165	U	C3'-O3'	7.08	1.52	1.42
67	B1	2617	G	O3'-P	-7.08	1.52	1.61
21	A2	1138	G	O4'-C1'	7.07	1.50	1.41
67	B1	326	C	P-O5'	-7.07	1.52	1.59
67	B1	1831	C	C2'-C1'	-7.07	1.45	1.53
67	B1	949	C	O4'-C1'	7.07	1.50	1.41
67	B1	1147	G	O4'-C1'	7.07	1.50	1.41
21	A2	525	A	C2'-C1'	7.07	1.61	1.53
31	BY	129	SER	CA-CB	7.07	1.63	1.52
68	B3	7	C	O4'-C1'	7.07	1.50	1.41
21	A2	238	G	O3'-P	-7.07	1.52	1.61
21	A2	363	C	C4'-C3'	7.07	1.60	1.53
67	B1	667	C	O4'-C1'	7.07	1.50	1.41
67	B1	2011	U	C2'-C1'	7.07	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1481	G	O3'-P	-7.06	1.52	1.61
67	B1	2628	U	C4'-O4'	7.06	1.54	1.45
8	AR	62	ARG	CZ-NH2	7.06	1.42	1.33
67	B1	2922	G	C5'-C4'	7.06	1.59	1.51
67	B1	1610	C	C2'-C1'	-7.06	1.45	1.53
67	B1	2934	C	C3'-O3'	7.06	1.52	1.42
21	A2	62	G	C4'-C3'	-7.06	1.45	1.53
21	A2	1064	C	P-O5'	-7.06	1.52	1.59
27	A0	51	C	O4'-C1'	7.06	1.50	1.41
21	A2	1040	A	C3'-O3'	7.05	1.52	1.42
67	B1	2519	C	P-O5'	-7.05	1.52	1.59
21	A2	504	G	C2'-C1'	-7.05	1.45	1.53
21	A2	815	C	O3'-P	-7.05	1.52	1.61
21	A2	1150	G	O3'-P	-7.05	1.52	1.61
27	A0	41	C	C4'-O4'	-7.05	1.36	1.45
67	B1	840	G	O3'-P	-7.05	1.52	1.61
67	B1	1272	A	O3'-P	-7.05	1.52	1.61
11	A1	32	A	O4'-C1'	7.05	1.50	1.41
21	A2	152	G	O3'-P	-7.05	1.52	1.61
21	A2	261	G	C2'-C1'	-7.05	1.45	1.53
67	B1	1358	C	C2'-C1'	-7.05	1.45	1.53
67	B1	200	G	O4'-C1'	7.05	1.50	1.41
67	B1	1120	C	C2'-C1'	-7.05	1.45	1.53
68	B3	21	C	C2'-C1'	-7.05	1.45	1.53
21	A2	178	C	C2'-C1'	7.04	1.61	1.53
21	A2	1152	C	C2'-C1'	-7.04	1.45	1.53
21	A2	1187	A	C2'-C1'	-7.04	1.45	1.53
67	B1	1695	G	C2'-C1'	-7.04	1.45	1.53
67	B1	2986	G	O3'-P	-7.04	1.52	1.61
21	A2	195	C	C4'-C3'	7.04	1.60	1.53
67	B1	672	C	C2'-C1'	-7.04	1.45	1.53
67	B1	800	G	P-O5'	-7.04	1.52	1.59
67	B1	1286	G	O4'-C1'	7.04	1.50	1.41
67	B1	2138	A	C2'-C1'	-7.04	1.45	1.53
68	B3	71	G	O4'-C1'	-7.04	1.32	1.41
67	B1	1583	G	O3'-P	-7.04	1.52	1.61
67	B1	167	G	C2'-C1'	-7.04	1.45	1.53
67	B1	1602	C	O4'-C1'	7.04	1.50	1.41
67	B1	1259	G	P-O5'	-7.04	1.52	1.59
67	B1	1596	G	O4'-C1'	7.04	1.50	1.41
67	B1	2317	G	O4'-C1'	-7.04	1.32	1.41
21	A2	384	G	C5'-C4'	7.03	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	914	U	C2'-C1'	-7.03	1.45	1.53
67	B1	1566	G	C4'-O4'	-7.03	1.36	1.45
67	B1	2178	A	C5'-C4'	7.03	1.59	1.51
6	AC	83	GLU	CD-OE1	7.03	1.33	1.25
21	A2	1141	G	C2'-C1'	-7.03	1.45	1.53
21	A2	1324	U	C3'-C2'	7.03	1.60	1.52
67	B1	705	G	C2'-C1'	-7.03	1.45	1.53
21	A2	995	G	C2'-C1'	-7.03	1.45	1.53
67	B1	784	C	C5'-C4'	7.03	1.59	1.51
68	B3	117	G	O4'-C1'	7.03	1.50	1.41
35	BL	12	ARG	C-N	7.02	1.45	1.33
67	B1	2577	U	O4'-C1'	7.02	1.50	1.41
67	B1	797	C	C2'-C1'	7.02	1.61	1.53
67	B1	1462	G	O3'-P	-7.02	1.52	1.61
67	B1	2415	C	O4'-C1'	7.02	1.50	1.41
68	B3	69	C	P-O5'	7.02	1.66	1.59
67	B1	1279	U	C2'-C1'	7.02	1.61	1.53
67	B1	1517	G	C2'-C1'	7.02	1.61	1.53
21	A2	401	U	O4'-C1'	7.02	1.50	1.41
67	B1	2252	C	O4'-C1'	7.02	1.50	1.41
11	A1	14	A	C3'-C2'	7.01	1.60	1.52
21	A2	424	U	P-O5'	7.01	1.66	1.59
67	B1	1634	A	C5'-C4'	7.01	1.59	1.51
21	A2	741	A	C5'-C4'	7.01	1.59	1.51
22	AY	30	PHE	CG-CD1	7.01	1.49	1.38
67	B1	2174	G	O3'-P	-7.01	1.52	1.61
67	B1	172	C	O4'-C1'	7.01	1.50	1.41
67	B1	570	G	C2'-C1'	-7.01	1.45	1.53
67	B1	2361	C	O4'-C1'	7.01	1.50	1.41
67	B1	2754	A	O4'-C1'	7.00	1.50	1.41
68	B3	49	A	O4'-C1'	7.00	1.50	1.41
21	A2	26	A	C2'-C1'	-7.00	1.45	1.53
21	A2	686	C	C2'-C1'	-7.00	1.45	1.53
21	A2	1326	G	O4'-C1'	-7.00	1.32	1.41
67	B1	1853	C	P-O5'	-7.00	1.52	1.59
21	A2	1062	G	O4'-C1'	7.00	1.50	1.41
67	B1	1644	G	O4'-C1'	7.00	1.50	1.41
21	A2	141	C	C5'-C4'	7.00	1.59	1.51
67	B1	722	C	C5'-C4'	7.00	1.59	1.51
67	B1	788	A	C2'-O2'	7.00	1.50	1.41
67	B1	2957	G	P-O5'	-7.00	1.52	1.59
21	A2	796	C	C4'-C3'	7.00	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	898	G	O3'-P	-7.00	1.52	1.61
67	B1	2583	G	C5'-C4'	7.00	1.59	1.51
21	A2	1029	G	C4'-C3'	7.00	1.60	1.53
11	A1	20	G	C2'-C1'	6.99	1.61	1.53
21	A2	168	G	P-O5'	-6.99	1.52	1.59
21	A2	968	C	C2'-C1'	-6.99	1.45	1.53
67	B1	2282	G	O4'-C1'	-6.99	1.32	1.41
68	B3	55	G	O4'-C1'	6.99	1.50	1.41
21	A2	45	U	C5'-C4'	6.99	1.59	1.51
21	A2	1476	C	C3'-C2'	-6.99	1.45	1.52
67	B1	131	C	O3'-P	-6.99	1.52	1.61
21	A2	1235	A	O4'-C1'	6.99	1.50	1.41
67	B1	356	C	O4'-C1'	6.99	1.50	1.41
67	B1	566	G	P-O5'	6.99	1.66	1.59
67	B1	2092	G	O4'-C1'	6.99	1.50	1.41
8	AR	21	CYS	CB-SG	6.99	1.94	1.82
21	A2	577	C	C2'-C1'	-6.99	1.45	1.53
67	B1	984	U	C2'-C1'	-6.99	1.45	1.53
67	B1	1909	C	C5'-C4'	6.99	1.59	1.51
67	B1	3025	C	O4'-C1'	6.99	1.50	1.41
21	A2	624	G	C2'-C1'	-6.98	1.45	1.53
67	B1	2743	U	O4'-C1'	6.98	1.50	1.41
21	A2	367	G	C4'-C3'	-6.98	1.45	1.53
67	B1	2500	G	C3'-C2'	6.98	1.60	1.52
67	B1	26	G	C2'-C1'	-6.98	1.45	1.53
67	B1	2033	G	C2'-C1'	6.98	1.61	1.53
52	BB	82	GLU	CG-CD	6.98	1.62	1.51
67	B1	1343	C	C5'-C4'	6.98	1.59	1.51
67	B1	1949	A	C3'-O3'	6.98	1.51	1.42
67	B1	703	G	C3'-O3'	6.98	1.51	1.42
21	A2	692	G	O3'-P	-6.97	1.52	1.61
21	A2	1421	C	P-O5'	6.97	1.66	1.59
27	A0	1	G	O3'-P	-6.97	1.52	1.61
67	B1	927	G	O3'-P	-6.97	1.52	1.61
21	A2	1222	C	C5'-C4'	6.97	1.59	1.51
21	A2	838	C	O3'-P	-6.97	1.52	1.61
27	A0	73	G	O4'-C1'	-6.97	1.32	1.41
67	B1	1628	C	C5'-C4'	6.97	1.59	1.51
66	B1	7	ARG	CD-NE	6.97	1.58	1.46
67	B1	2534	C	C2'-O2'	-6.97	1.32	1.41
67	B1	3006	G	C4'-C3'	6.97	1.60	1.53
21	A2	386	C	C2'-C1'	-6.97	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A1	45	G	C3'-O3'	6.96	1.51	1.42
21	A2	335	G	O3'-P	-6.96	1.52	1.61
67	B1	1450	C	P-O5'	6.96	1.66	1.59
67	B1	2950	G	C5'-C4'	-6.96	1.43	1.51
21	A2	206	C	P-O5'	-6.96	1.52	1.59
67	B1	1041	U	P-O5'	-6.96	1.52	1.59
67	B1	1761	C	O4'-C1'	6.96	1.50	1.41
67	B1	2576	C	P-O5'	-6.96	1.52	1.59
67	B1	222	A	O4'-C1'	6.96	1.50	1.41
21	A2	1391	U	O4'-C1'	6.96	1.50	1.41
67	B1	1558	U	C2'-C1'	6.96	1.61	1.53
67	B1	705	G	O4'-C1'	6.96	1.50	1.41
67	B1	1553	G	C2'-C1'	6.96	1.61	1.53
67	B1	1836	A	C5'-C4'	6.96	1.59	1.51
67	B1	2285	G	C2'-C1'	6.96	1.61	1.53
67	B1	1367	A	P-O5'	-6.95	1.52	1.59
21	A2	1370	U	C2'-C1'	6.95	1.60	1.53
33	BC	92	GLY	CA-C	-6.95	1.40	1.51
67	B1	475	U	C4'-O4'	-6.95	1.36	1.45
67	B1	1990	U	O3'-P	-6.95	1.52	1.61
21	A2	306	C	C2'-C1'	6.95	1.60	1.53
67	B1	1707	A	C3'-O3'	6.95	1.51	1.42
21	A2	268	C	C5'-C4'	6.94	1.59	1.51
21	A2	621	G	O4'-C1'	6.94	1.50	1.41
68	B3	63	G	C2'-C1'	-6.94	1.45	1.53
21	A2	742	U	P-O5'	-6.94	1.52	1.59
67	B1	347	G	P-O5'	6.94	1.66	1.59
67	B1	497	G	O4'-C1'	6.94	1.50	1.41
67	B1	2015	G	P-O5'	-6.94	1.52	1.59
67	B1	2773	A	C5'-C4'	6.94	1.59	1.51
67	B1	1837	A	C3'-C2'	6.94	1.60	1.52
21	A2	603	G	C2'-C1'	-6.94	1.45	1.53
5	AW	10	ARG	CD-NE	6.94	1.58	1.46
21	A2	12	U	O4'-C1'	6.94	1.50	1.41
67	B1	1530	A	C2'-C1'	6.94	1.60	1.53
67	B1	2565	A	C2'-C1'	-6.93	1.45	1.53
21	A2	1186	C	C2'-C1'	-6.93	1.45	1.53
21	A2	1444	G	P-O5'	-6.93	1.52	1.59
67	B1	970	G	C5'-C4'	6.93	1.59	1.51
67	B1	3012	C	O3'-P	-6.93	1.52	1.61
21	A2	1088	U	C3'-O3'	6.93	1.51	1.42
67	B1	248	C	O3'-P	-6.93	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	501	C	C4'-C3'	6.93	1.60	1.53
67	B1	768	C	C4'-O4'	-6.93	1.36	1.45
67	B1	1323	U	O4'-C1'	6.93	1.50	1.41
67	B1	41	G	C5'-C4'	6.93	1.59	1.51
67	B1	848	A	C2'-C1'	6.93	1.60	1.53
67	B1	1753	G	C2'-C1'	6.93	1.60	1.53
68	B3	15	G	C2'-C1'	-6.93	1.45	1.53
67	B1	1034	G	C4'-C3'	-6.92	1.45	1.53
67	B1	390	C	C2'-C1'	-6.92	1.45	1.53
67	B1	1585	U	P-O5'	-6.92	1.52	1.59
21	A2	799	C	C2'-C1'	-6.92	1.45	1.53
67	B1	1610	C	C3'-O3'	6.92	1.51	1.42
21	A2	1274	C	O4'-C1'	6.92	1.50	1.41
58	BP	86	SER	CA-CB	6.92	1.63	1.52
67	B1	449	G	C4'-C3'	-6.92	1.45	1.53
67	B1	1514	C	C2'-C1'	-6.92	1.45	1.53
67	B1	1599	A	P-O5'	-6.92	1.52	1.59
21	A2	932	C	C2'-C1'	-6.91	1.45	1.53
67	B1	1741	C	C2'-C1'	-6.91	1.45	1.53
67	B1	2481	G	C2'-C1'	6.91	1.60	1.53
21	A2	1233	G	C5'-C4'	6.91	1.59	1.51
67	B1	662	A	O4'-C1'	6.91	1.50	1.41
8	AR	67	ARG	CD-NE	6.91	1.58	1.46
67	B1	408	C	P-O5'	6.91	1.66	1.59
67	B1	1533	G	O4'-C1'	-6.91	1.32	1.41
21	A2	473	A	C5'-C4'	6.91	1.59	1.51
64	Bc	32	ARG	NE-CZ	6.91	1.42	1.33
67	B1	2835	A	C4'-C3'	6.91	1.60	1.53
67	B1	2577	U	C4'-C3'	-6.90	1.45	1.53
67	B1	2756	G	P-O5'	-6.90	1.52	1.59
67	B1	667	C	C2'-C1'	-6.90	1.45	1.53
67	B1	1893	C	C2'-C1'	-6.90	1.45	1.53
67	B1	2198	U	C5'-C4'	6.90	1.59	1.51
21	A2	325	A	C2'-C1'	-6.90	1.45	1.53
67	B1	2844	G	C5'-C4'	6.90	1.59	1.51
67	B1	386	A	C2'-C1'	-6.90	1.45	1.53
21	A2	1168	C	O4'-C1'	6.90	1.50	1.41
67	B1	1823	A	C5'-C4'	6.90	1.59	1.51
21	A2	979	U	O4'-C1'	6.89	1.50	1.41
21	A2	1425	C	C2'-C1'	-6.89	1.45	1.53
67	B1	1173	G	C5'-C4'	6.89	1.59	1.51
21	A2	292	U	P-O5'	-6.89	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1311	C	C2'-C1'	6.89	1.60	1.53
15	AE	142	PHE	CA-CB	6.89	1.69	1.53
67	B1	1227	A	C2'-C1'	6.89	1.60	1.53
21	A2	1110	U	C4'-C3'	6.89	1.60	1.53
30	AU	60	ARG	CZ-NH2	6.89	1.42	1.33
67	B1	1566	G	C3'-O3'	-6.89	1.32	1.42
21	A2	25	C	C2'-C1'	-6.89	1.45	1.53
21	A2	728	G	O4'-C1'	-6.89	1.32	1.41
67	B1	386	A	O4'-C1'	6.89	1.50	1.41
67	B1	2103	C	C3'-O3'	6.89	1.51	1.42
67	B1	2456	C	P-O5'	-6.89	1.52	1.59
21	A2	1262	U	C4'-C3'	6.88	1.60	1.53
59	BM	90	TYR	CG-CD1	6.88	1.48	1.39
67	B1	1709	C	C2'-C1'	-6.88	1.45	1.53
67	B1	2825	A	O4'-C1'	6.88	1.50	1.41
11	A1	54	G	P-O5'	-6.88	1.52	1.59
21	A2	230	C	C5'-C4'	6.88	1.59	1.51
21	A2	723	G	C4'-O4'	-6.88	1.36	1.45
67	B1	1227	A	O4'-C1'	-6.88	1.32	1.41
67	B1	1467	G	C2'-C1'	-6.88	1.45	1.53
67	B1	1972	C	C2'-C1'	-6.88	1.45	1.53
67	B1	254	A	C2'-C1'	-6.88	1.45	1.53
67	B1	2761	G	C5'-C4'	6.88	1.59	1.51
1	AQ	19	ARG	CZ-NH1	6.88	1.42	1.33
67	B1	689	U	P-O5'	-6.88	1.52	1.59
67	B1	1031	C	C4'-C3'	-6.88	1.45	1.53
67	B1	1615	G	C3'-C2'	6.88	1.60	1.52
21	A2	810	G	C2'-C1'	-6.87	1.45	1.53
21	A2	1078	U	O4'-C1'	6.87	1.50	1.41
67	B1	1867	C	P-O5'	-6.87	1.52	1.59
67	B1	1967	G	C4'-C3'	6.87	1.60	1.53
21	A2	1355	C	C2'-C1'	-6.87	1.45	1.53
21	A2	94	C	O3'-P	6.87	1.69	1.61
21	A2	186	U	C4'-C3'	6.87	1.60	1.53
67	B1	1921	U	O3'-P	-6.87	1.52	1.61
21	A2	1251	C	O3'-P	-6.87	1.52	1.61
67	B1	811	C	C5'-C4'	6.87	1.59	1.51
67	B1	2337	G	C5'-C4'	6.87	1.59	1.51
11	A1	50	G	C2'-C1'	6.86	1.60	1.53
67	B1	73	A	C3'-O3'	6.86	1.51	1.42
67	B1	2816	C	C2'-C1'	6.86	1.60	1.53
21	A2	590	G	C4'-C3'	6.86	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	463	A	C3'-C2'	-6.86	1.45	1.52
67	B1	2869	U	C4'-C3'	6.86	1.60	1.53
67	B1	3008	C	O4'-C1'	6.86	1.50	1.41
21	A2	646	U	C3'-O3'	6.86	1.51	1.42
67	B1	250	G	P-O5'	-6.86	1.52	1.59
21	A2	331	C	C2'-C1'	6.86	1.60	1.53
21	A2	1098	G	C2'-C1'	-6.86	1.45	1.53
21	A2	1477	U	O3'-P	6.86	1.69	1.61
67	B1	1962	G	O3'-P	-6.86	1.52	1.61
17	AO	111	ARG	CZ-NH1	6.85	1.42	1.33
67	B1	2816	C	C4'-C3'	6.85	1.60	1.53
21	A2	1275	U	O4'-C1'	6.85	1.50	1.41
67	B1	1323	U	C3'-O3'	6.85	1.51	1.42
67	B1	2584	A	C3'-C2'	-6.85	1.45	1.52
67	B1	1904	G	O4'-C1'	-6.85	1.32	1.41
21	A2	68	G	C4'-O4'	6.85	1.54	1.45
21	A2	159	C	O4'-C1'	6.85	1.50	1.41
67	B1	830	G	C5'-C4'	6.85	1.59	1.51
67	B1	1156	G	C2'-C1'	-6.85	1.45	1.53
67	B1	1763	A	O4'-C1'	6.85	1.50	1.41
21	A2	1071	C	P-O5'	-6.85	1.52	1.59
21	A2	1451	C	C2'-C1'	-6.85	1.45	1.53
67	B1	1116	A	C2'-C1'	-6.85	1.45	1.53
67	B1	1510	U	O3'-P	-6.85	1.52	1.61
67	B1	2751	C	C2'-C1'	-6.85	1.45	1.53
21	A2	1052	U	C5'-C4'	6.85	1.59	1.51
67	B1	1066	C	C2'-C1'	6.84	1.60	1.53
21	A2	197	A	O4'-C1'	6.84	1.50	1.41
67	B1	393	C	P-O5'	-6.84	1.52	1.59
68	B3	103	C	P-O5'	-6.84	1.52	1.59
21	A2	1169	C	C4'-C3'	6.84	1.60	1.53
67	B1	1612	G	P-O5'	-6.84	1.52	1.59
67	B1	2398	C	C3'-C2'	-6.84	1.45	1.52
67	B1	2860	G	O4'-C1'	-6.83	1.32	1.41
21	A2	613	C	C5'-C4'	6.83	1.59	1.51
67	B1	2	G	C2'-C1'	-6.83	1.45	1.53
67	B1	1361	G	C2'-C1'	-6.83	1.45	1.53
67	B1	2281	A	C5'-C4'	6.83	1.59	1.51
27	A0	24	G	C2'-C1'	-6.83	1.45	1.53
67	B1	750	C	O3'-P	-6.83	1.52	1.61
67	B1	759	G	C4'-O4'	6.83	1.54	1.45
67	B1	2010	G	P-O5'	-6.83	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1461	U	P-O5'	6.83	1.66	1.59
67	B1	2264	G	O4'-C1'	-6.83	1.32	1.41
67	B1	2436	A	C3'-C2'	6.83	1.60	1.52
21	A2	1004	U	C2'-C1'	-6.83	1.45	1.53
27	A0	76	A	C4'-C3'	6.83	1.60	1.53
67	B1	909	A	O4'-C1'	-6.83	1.32	1.41
21	A2	599	G	C2'-C1'	-6.83	1.45	1.53
53	BD	42	ARG	NE-CZ	6.83	1.42	1.33
21	A2	407	G	O4'-C1'	6.83	1.50	1.41
21	A2	1066	C	O3'-P	-6.83	1.52	1.61
67	B1	36	G	C5'-C4'	6.83	1.59	1.51
67	B1	408	C	O3'-P	-6.83	1.52	1.61
67	B1	2209	U	O4'-C1'	-6.83	1.32	1.41
67	B1	2367	C	C4'-C3'	-6.83	1.45	1.53
21	A2	571	C	O4'-C1'	6.82	1.50	1.41
27	A0	18	G	C3'-O3'	6.82	1.51	1.42
67	B1	1089	C	C2'-C1'	-6.82	1.45	1.53
67	B1	1171	G	C3'-C2'	6.82	1.60	1.52
21	A2	124	C	C4'-C3'	6.82	1.60	1.53
67	B1	2151	C	C4'-O4'	6.82	1.54	1.45
25	AH	92	SER	CA-CB	6.81	1.63	1.52
67	B1	111	U	C5'-C4'	6.81	1.59	1.51
21	A2	428	G	C3'-C2'	6.81	1.60	1.52
67	B1	1221	U	C3'-C2'	6.81	1.60	1.52
67	B1	1567	C	O3'-P	-6.81	1.52	1.61
21	A2	1139	A	C4'-C3'	6.81	1.60	1.53
27	A0	21	G	C2'-C1'	-6.81	1.45	1.53
1	AQ	135	TYR	CD1-CE1	6.81	1.49	1.39
27	A0	45	G	P-O5'	-6.81	1.52	1.59
67	B1	563	A	O4'-C1'	6.81	1.50	1.41
67	B1	900	C	C4'-C3'	6.81	1.60	1.53
67	B1	1045	A	O4'-C1'	6.81	1.50	1.41
67	B1	1733	C	O4'-C1'	6.81	1.50	1.41
67	B1	2578	C	P-O5'	-6.81	1.52	1.59
67	B1	490	C	O4'-C1'	6.81	1.50	1.41
21	A2	607	U	P-O5'	-6.80	1.52	1.59
53	BD	249	ARG	CZ-NH1	6.80	1.41	1.33
67	B1	2041	U	O4'-C1'	6.80	1.50	1.41
67	B1	2914	U	C4'-C3'	6.80	1.60	1.53
68	B3	107	G	C2'-C1'	6.80	1.60	1.53
67	B1	2375	C	C4'-C3'	6.80	1.60	1.53
21	A2	234	G	C3'-C2'	-6.80	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	806	G	C3'-C2'	6.80	1.60	1.52
67	B1	58	G	C5'-C4'	-6.80	1.43	1.51
67	B1	1452	G	C4'-C3'	6.80	1.60	1.53
21	A2	1021	C	C4'-C3'	-6.80	1.45	1.53
21	A2	1097	G	O4'-C1'	6.80	1.50	1.41
21	A2	1361	G	O4'-C1'	6.80	1.50	1.41
67	B1	2825	A	O3'-P	-6.80	1.52	1.61
21	A2	1384	G	C4'-C3'	6.79	1.60	1.53
64	Bc	15	GLU	CA-C	6.79	1.70	1.52
67	B1	2749	G	C2'-C1'	-6.79	1.45	1.53
21	A2	123	U	C2'-C1'	-6.79	1.45	1.53
35	BL	10	LYS	N-CA	-6.79	1.32	1.46
44	BW	7	ARG	NE-CZ	6.79	1.41	1.33
67	B1	2716	C	C3'-C2'	-6.79	1.45	1.52
67	B1	463	A	O4'-C1'	6.79	1.50	1.41
67	B1	2114	C	C4'-C3'	6.79	1.60	1.53
21	A2	1034	G	O3'-P	-6.79	1.53	1.61
21	A2	1092	G	O4'-C1'	6.79	1.50	1.41
67	B1	529	G	O4'-C1'	-6.79	1.32	1.41
11	A1	76	C	O3'-P	6.79	1.69	1.61
20	A3	27	ARG	NE-CZ	6.79	1.41	1.33
67	B1	2506	G	C4'-C3'	6.79	1.60	1.53
67	B1	1495	A	O3'-P	-6.78	1.53	1.61
67	B1	2067	U	C2'-C1'	6.78	1.60	1.53
21	A2	787	U	O4'-C1'	6.78	1.50	1.41
67	B1	1981	G	C2'-C1'	6.78	1.60	1.53
67	B1	2090	A	C4'-C3'	6.78	1.60	1.53
27	A0	67	G	C4'-C3'	6.78	1.60	1.53
67	B1	599	G	C2'-C1'	-6.78	1.45	1.53
67	B1	1513	G	C3'-C2'	6.78	1.60	1.52
67	B1	2145	G	C4'-O4'	6.78	1.54	1.45
68	B3	38	U	O4'-C1'	6.78	1.50	1.41
7	AB	144	GLU	CD-OE2	6.78	1.33	1.25
67	B1	2933	C	C2'-C1'	6.78	1.60	1.53
21	A2	555	U	C2'-C1'	-6.78	1.45	1.53
67	B1	1113	G	C2'-C1'	-6.78	1.45	1.53
67	B1	1486	G	C3'-C2'	6.78	1.60	1.52
15	AE	12	ARG	CZ-NH2	6.77	1.41	1.33
21	A2	278	A	C4'-C3'	6.77	1.60	1.53
67	B1	218	A	C3'-C2'	6.77	1.60	1.52
21	A2	558	C	P-O5'	-6.77	1.52	1.59
67	B1	2333	G	P-O5'	-6.77	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1371	U	O4'-C1'	6.77	1.50	1.41
3	AI	68	ARG	NE-CZ	6.77	1.41	1.33
67	B1	1337	G	O4'-C1'	6.77	1.50	1.41
21	A2	297	G	C2'-C1'	6.77	1.60	1.53
17	AO	22	ARG	CD-NE	6.76	1.57	1.46
21	A2	840	C	C2'-C1'	-6.76	1.46	1.53
67	B1	859	G	O3'-P	-6.76	1.53	1.61
67	B1	1405	G	O5'-C5'	6.76	1.55	1.44
68	B3	70	C	C2'-C1'	-6.76	1.46	1.53
21	A2	59	C	C5'-C4'	6.76	1.59	1.51
21	A2	694	U	C3'-C2'	6.76	1.60	1.52
67	B1	948	C	O4'-C1'	6.76	1.50	1.41
67	B1	1265	A	C4'-O4'	-6.76	1.36	1.45
67	B1	1779	C	C4'-C3'	6.76	1.60	1.53
67	B1	2650	G	O4'-C1'	-6.76	1.32	1.41
21	A2	713	A	C4'-O4'	6.76	1.54	1.45
21	A2	970	G	O4'-C1'	6.76	1.50	1.41
21	A2	1051	G	O4'-C1'	-6.76	1.32	1.41
67	B1	304	G	C2'-C1'	6.76	1.60	1.53
67	B1	2195	G	O3'-P	-6.76	1.53	1.61
67	B1	2621	U	C2'-C1'	6.76	1.60	1.53
11	A1	16	C	C2'-C1'	-6.76	1.46	1.53
17	AO	137	ARG	NE-CZ	6.76	1.41	1.33
21	A2	413	G	C2'-C1'	-6.76	1.46	1.53
21	A2	710	G	O4'-C1'	6.76	1.50	1.41
67	B1	52	A	O4'-C1'	6.76	1.50	1.41
67	B1	1837	A	C2'-C1'	-6.76	1.46	1.53
67	B1	2346	A	O4'-C1'	6.76	1.50	1.41
67	B1	2859	U	O3'-P	-6.76	1.53	1.61
21	A2	748	A	O3'-P	-6.75	1.53	1.61
37	BU	64	GLY	CA-C	-6.75	1.41	1.51
67	B1	419	G	C2'-C1'	-6.75	1.46	1.53
67	B1	1201	G	C4'-O4'	-6.75	1.36	1.45
67	B1	2062	A	O3'-P	-6.75	1.53	1.61
21	A2	4	C	C5'-C4'	6.75	1.59	1.51
67	B1	1104	A	C2'-C1'	-6.75	1.46	1.53
21	A2	311	A	P-O5'	6.75	1.66	1.59
21	A2	661	C	O4'-C1'	6.75	1.50	1.41
67	B1	35	G	C2'-C1'	-6.75	1.46	1.53
67	B1	1172	U	C5'-C4'	6.75	1.59	1.51
67	B1	2515	U	O4'-C1'	6.75	1.50	1.41
67	B1	3034	C	P-O5'	-6.75	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	266	A	C3'-C2'	-6.74	1.45	1.52
67	B1	420	U	C2'-C1'	6.74	1.60	1.53
67	B1	69	C	O4'-C1'	6.74	1.50	1.41
67	B1	1077	G	O4'-C1'	-6.74	1.32	1.41
67	B1	1730	C	C2'-C1'	-6.74	1.46	1.53
11	A1	43	G	O4'-C1'	-6.74	1.32	1.41
21	A2	228	G	C5'-C4'	6.74	1.59	1.51
21	A2	999	G	C2'-C1'	-6.74	1.46	1.53
67	B1	1750	C	C4'-O4'	6.74	1.54	1.45
67	B1	1946	G	O4'-C1'	-6.74	1.32	1.41
21	A2	706	G	O4'-C1'	6.74	1.50	1.41
27	A0	34	G	C2'-C1'	-6.74	1.46	1.53
67	B1	933	G	O4'-C1'	6.74	1.50	1.41
67	B1	1817	C	C4'-O4'	6.74	1.54	1.45
67	B1	287	G	C2'-C1'	-6.74	1.46	1.53
67	B1	904	G	C5'-C4'	6.74	1.59	1.51
67	B1	991	U	C2'-C1'	-6.74	1.46	1.53
67	B1	1473	C	C4'-C3'	6.74	1.60	1.53
67	B1	2745	G	O4'-C1'	-6.74	1.32	1.41
67	B1	1072	U	C5'-C4'	6.73	1.59	1.51
21	A2	534	G	C3'-C2'	6.73	1.60	1.52
40	BE	88	TYR	CG-CD1	6.73	1.48	1.39
67	B1	2370	C	C3'-C2'	6.73	1.60	1.52
21	A2	308	G	O4'-C1'	6.73	1.50	1.41
67	B1	1249	G	O4'-C1'	6.73	1.50	1.41
67	B1	1323	U	C2'-C1'	6.73	1.60	1.53
67	B1	1619	C	C4'-O4'	6.73	1.54	1.45
67	B1	666	A	P-O5'	-6.73	1.53	1.59
67	B1	1270	G	C3'-C2'	-6.73	1.45	1.52
67	B1	2548	A	O4'-C1'	-6.73	1.32	1.41
67	B1	1180	G	C4'-C3'	6.73	1.60	1.53
21	A2	419	G	O4'-C1'	6.72	1.50	1.41
21	A2	1134	G	C5'-C4'	6.72	1.59	1.51
67	B1	368	U	C2'-C1'	-6.72	1.46	1.53
67	B1	973	C	O4'-C1'	6.72	1.50	1.41
67	B1	1442	G	C4'-C3'	6.72	1.60	1.53
67	B1	1560	G	C4'-C3'	6.72	1.60	1.53
21	A2	1315	G	P-O5'	-6.72	1.53	1.59
67	B1	1227	A	P-O5'	-6.72	1.53	1.59
21	A2	330	U	C4'-C3'	6.72	1.60	1.53
67	B1	2281	A	O4'-C1'	6.72	1.50	1.41
67	B1	30	G	C3'-C2'	-6.72	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	640	C	C4'-C3'	6.72	1.60	1.53
67	B1	1001	C	C5'-C4'	6.72	1.59	1.51
67	B1	2982	G	O3'-P	6.72	1.69	1.61
21	A2	1311	C	C3'-O3'	6.71	1.51	1.42
67	B1	342	C	C2'-C1'	-6.71	1.46	1.53
67	B1	2713	A	C5'-C4'	6.71	1.59	1.51
67	B1	2997	G	O4'-C1'	6.71	1.50	1.41
6	AC	47	PHE	CG-CD2	6.71	1.48	1.38
21	A2	1208	A	C2'-C1'	6.71	1.60	1.53
67	B1	1667	U	P-O5'	-6.71	1.53	1.59
67	B1	2453	C	O4'-C1'	6.71	1.50	1.41
21	A2	349	A	C3'-C2'	6.71	1.60	1.52
21	A2	1057	A	C4'-C3'	6.71	1.60	1.53
67	B1	914	U	C4'-C3'	6.71	1.60	1.53
67	B1	1458	C	C3'-C2'	6.71	1.60	1.52
67	B1	569	G	C4'-C3'	-6.71	1.45	1.53
67	B1	2656	A	C4'-O4'	-6.71	1.36	1.45
21	A2	1383	A	O4'-C1'	6.71	1.50	1.41
67	B1	108	G	C2'-C1'	-6.71	1.46	1.53
21	A2	776	C	C3'-O3'	6.71	1.51	1.42
21	A2	403	C	O4'-C1'	6.70	1.50	1.41
67	B1	518	A	P-O5'	-6.70	1.53	1.59
67	B1	792	A	P-O5'	-6.70	1.53	1.59
67	B1	1401	G	C2'-C1'	-6.70	1.46	1.53
67	B1	1555	G	C2'-C1'	-6.70	1.46	1.53
67	B1	1806	C	C3'-C2'	-6.70	1.45	1.52
67	B1	2718	G	C3'-O3'	6.70	1.51	1.42
67	B1	557	G	O4'-C1'	6.70	1.50	1.41
67	B1	876	C	C4'-C3'	6.70	1.60	1.53
67	B1	1941	A	P-O5'	-6.70	1.53	1.59
67	B1	2152	G	C5'-C4'	6.70	1.59	1.51
67	B1	2762	G	C4'-O4'	6.70	1.54	1.45
21	A2	104	A	O3'-P	6.70	1.69	1.61
21	A2	468	G	O4'-C1'	6.70	1.50	1.41
21	A2	1353	C	C4'-C3'	-6.70	1.45	1.53
21	A2	480	G	O4'-C1'	6.69	1.50	1.41
21	A2	1006	C	O4'-C1'	6.69	1.50	1.41
21	A2	201	G	O3'-P	-6.69	1.53	1.61
32	BO	84	TYR	CE1-CZ	6.69	1.47	1.38
67	B1	1340	G	C4'-C3'	-6.69	1.45	1.53
21	A2	656	U	C4'-C3'	6.69	1.60	1.53
21	A2	1288	C	O4'-C1'	6.69	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1466	G	O4'-C1'	6.69	1.50	1.41
32	BO	145	ARG	CZ-NH2	6.69	1.41	1.33
67	B1	1999	G	O4'-C1'	-6.69	1.32	1.41
67	B1	2097	G	C5'-C4'	6.69	1.59	1.51
67	B1	2963	G	O4'-C1'	-6.69	1.32	1.41
67	B1	76	C	C2'-C1'	6.69	1.60	1.53
67	B1	2870	A	C2'-C1'	-6.69	1.46	1.53
67	B1	1471	G	C3'-C2'	-6.69	1.45	1.52
67	B1	2602	G	C2'-C1'	6.69	1.60	1.53
67	B1	3047	C	C2'-C1'	-6.69	1.46	1.53
21	A2	700	G	C3'-O3'	6.68	1.51	1.42
21	A2	864	G	C2'-C1'	6.68	1.60	1.53
67	B1	200	G	C5'-C4'	6.68	1.59	1.51
67	B1	2434	A	C4'-C3'	-6.68	1.45	1.53
21	A2	907	C	C2'-C1'	-6.68	1.46	1.53
21	A2	1089	C	C4'-C3'	6.68	1.60	1.53
67	B1	2217	C	C4'-C3'	6.68	1.60	1.53
67	B1	91	G	C3'-O3'	6.68	1.51	1.42
67	B1	398	U	P-O5'	-6.68	1.53	1.59
67	B1	1452	G	O4'-C1'	-6.68	1.32	1.41
67	B1	1772	A	O3'-P	-6.68	1.53	1.61
67	B1	1835	A	P-O5'	-6.68	1.53	1.59
67	B1	2480	G	O3'-P	-6.68	1.53	1.61
16	AJ	76	ARG	NE-CZ	6.68	1.41	1.33
67	B1	451	C	C4'-C3'	-6.68	1.45	1.53
11	A1	21	G	O4'-C1'	6.68	1.50	1.41
21	A2	145	A	P-O5'	-6.68	1.53	1.59
21	A2	343	G	O4'-C1'	6.68	1.50	1.41
21	A2	785	U	O4'-C1'	6.68	1.50	1.41
21	A2	1276	G	C2'-C1'	6.68	1.60	1.53
27	A0	3	C	O4'-C1'	6.68	1.50	1.41
67	B1	123	A	C5'-C4'	6.68	1.59	1.51
67	B1	1077	G	C2'-C1'	-6.68	1.46	1.53
67	B1	1417	U	C2'-C1'	-6.68	1.46	1.53
67	B1	1590	C	O4'-C1'	6.68	1.50	1.41
67	B1	1746	C	C5'-C4'	6.68	1.59	1.51
67	B1	2299	G	C5'-C4'	6.68	1.59	1.51
67	B1	2956	G	O4'-C1'	6.68	1.50	1.41
21	A2	1075	A	C2'-C1'	6.67	1.60	1.53
67	B1	454	C	C2'-C1'	-6.67	1.46	1.53
21	A2	129	G	C2'-C1'	-6.67	1.46	1.53
21	A2	496	C	O4'-C1'	6.67	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	763	A	C3'-O3'	6.67	1.51	1.42
67	B1	854	G	C2'-C1'	-6.67	1.46	1.53
67	B1	868	U	C5'-C4'	6.67	1.59	1.51
67	B1	1039	C	C5'-C4'	6.67	1.59	1.51
67	B1	1089	C	C3'-C2'	6.67	1.60	1.52
21	A2	163	C	P-O5'	6.67	1.66	1.59
21	A2	619	A	P-O5'	6.67	1.66	1.59
67	B1	1827	A	O4'-C1'	6.67	1.50	1.41
67	B1	1837	A	O4'-C1'	6.67	1.50	1.41
21	A2	1161	A	O4'-C1'	6.67	1.50	1.41
67	B1	1327	C	C4'-O4'	6.67	1.54	1.45
67	B1	1944	C	C4'-C3'	-6.67	1.45	1.53
24	AA	181	ARG	NE-CZ	6.66	1.41	1.33
67	B1	2479	C	O4'-C1'	6.66	1.50	1.41
67	B1	1550	C	C2'-C1'	-6.66	1.46	1.53
67	B1	2199	U	C2'-C1'	-6.66	1.46	1.53
38	Bb	18	ARG	CZ-NH1	6.66	1.41	1.33
67	B1	1174	U	O4'-C1'	6.66	1.50	1.41
21	A2	464	G	P-O5'	-6.66	1.53	1.59
26	AP	6	TYR	CG-CD2	6.66	1.47	1.39
67	B1	360	G	O4'-C1'	6.66	1.50	1.41
67	B1	1641	G	C5'-C4'	6.66	1.59	1.51
17	AO	133	SER	CA-CB	6.66	1.62	1.52
21	A2	300	G	O3'-P	-6.66	1.53	1.61
67	B1	1932	G	C2'-C1'	6.66	1.60	1.53
68	B3	106	G	O3'-P	-6.66	1.53	1.61
21	A2	1284	C	C2'-C1'	-6.65	1.46	1.53
21	A2	172	G	O4'-C1'	6.65	1.50	1.41
21	A2	180	G	C5'-C4'	6.65	1.59	1.51
21	A2	990	G	C5'-C4'	6.65	1.59	1.51
27	A0	46	G	C2'-C1'	6.65	1.60	1.53
28	AV	10	GLU	CD-OE2	6.65	1.32	1.25
54	BF	61	ARG	CZ-NH2	6.65	1.41	1.33
67	B1	1966	C	O4'-C1'	6.65	1.50	1.41
67	B1	2457	C	C2'-C1'	-6.65	1.46	1.53
21	A2	642	G	C2'-C1'	-6.65	1.46	1.53
67	B1	1853	C	C3'-C2'	6.65	1.60	1.52
67	B1	208	A	C3'-C2'	6.65	1.60	1.52
67	B1	1677	A	C2'-C1'	-6.65	1.46	1.53
67	B1	2669	U	C2'-C1'	6.65	1.60	1.53
21	A2	84	C	C2'-C1'	-6.65	1.46	1.53
67	B1	1354	G	O3'-P	-6.65	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1373	A	C2'-C1'	-6.64	1.46	1.53
30	AU	83	ARG	CZ-NH2	6.64	1.41	1.33
67	B1	531	G	C3'-C2'	-6.64	1.45	1.52
67	B1	973	C	C4'-O4'	6.64	1.54	1.45
67	B1	1482	G	C5'-C4'	6.64	1.59	1.51
67	B1	1795	C	C5'-C4'	6.64	1.59	1.51
21	A2	1285	C	P-O5'	-6.64	1.53	1.59
21	A2	1412	A	C2'-C1'	-6.64	1.46	1.53
67	B1	943	G	C2'-O2'	6.64	1.50	1.41
67	B1	2749	G	C4'-O4'	6.64	1.54	1.45
21	A2	1495	U	C2'-C1'	6.64	1.60	1.53
67	B1	940	G	O4'-C1'	6.64	1.50	1.41
67	B1	1327	C	C5'-C4'	6.64	1.59	1.51
21	A2	7	G	O4'-C1'	6.64	1.50	1.41
21	A2	408	C	C3'-C2'	6.64	1.60	1.52
67	B1	909	A	C4'-C3'	6.64	1.60	1.53
67	B1	1994	G	O4'-C1'	6.64	1.50	1.41
67	B1	2977	G	O4'-C1'	6.64	1.50	1.41
67	B1	363	G	P-O5'	-6.63	1.53	1.59
67	B1	2308	C	C2'-C1'	-6.63	1.46	1.53
68	B3	52	U	C4'-C3'	6.63	1.60	1.53
25	AH	12	PRO	N-CD	-6.63	1.38	1.47
67	B1	645	U	C2'-C1'	6.63	1.60	1.53
11	A1	53	G	C4'-C3'	6.63	1.60	1.53
67	B1	1533	G	P-O5'	-6.63	1.53	1.59
67	B1	2950	G	O4'-C1'	-6.63	1.33	1.41
67	B1	1711	C	C4'-C3'	6.63	1.60	1.53
21	A2	865	A	P-O5'	6.63	1.66	1.59
67	B1	137	A	C4'-O4'	6.63	1.54	1.45
67	B1	348	G	C5'-C4'	6.63	1.59	1.51
67	B1	1580	G	P-O5'	6.63	1.66	1.59
67	B1	1585	U	C2'-C1'	-6.63	1.46	1.53
67	B1	2958	U	O4'-C1'	-6.63	1.33	1.41
68	B3	74	U	C3'-C2'	6.63	1.60	1.52
21	A2	97	C	C3'-O3'	6.62	1.51	1.42
21	A2	318	C	P-O5'	-6.62	1.53	1.59
21	A2	104	A	C4'-C3'	6.62	1.60	1.53
21	A2	794	A	P-O5'	-6.62	1.53	1.59
21	A2	823	A	C4'-C3'	6.62	1.60	1.53
67	B1	2593	A	P-O5'	-6.62	1.53	1.59
27	A0	19	G	P-O5'	-6.62	1.53	1.59
53	BD	128	ARG	CD-NE	6.62	1.57	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1652	A	C2'-C1'	6.62	1.60	1.53
21	A2	358	G	P-O5'	-6.62	1.53	1.59
67	B1	785	C	C2'-C1'	-6.62	1.46	1.53
21	A2	1149	C	C5'-C4'	6.62	1.59	1.51
21	A2	1311	C	C4'-C3'	6.62	1.60	1.53
27	A0	49	C	C2'-C1'	-6.62	1.46	1.53
67	B1	702	G	O4'-C1'	-6.62	1.33	1.41
67	B1	1248	C	O4'-C1'	-6.62	1.33	1.41
67	B1	2913	C	C3'-C2'	6.62	1.60	1.52
27	A0	18	G	P-O5'	-6.61	1.53	1.59
67	B1	60	G	P-O5'	-6.61	1.53	1.59
27	A0	28	C	C2'-C1'	-6.61	1.46	1.53
7	AB	41	TYR	CG-CD2	6.61	1.47	1.39
21	A2	805	C	O4'-C1'	6.61	1.50	1.41
67	B1	516	A	C3'-C2'	-6.61	1.45	1.52
67	B1	835	G	C4'-C3'	-6.61	1.45	1.53
67	B1	305	G	C3'-C2'	-6.61	1.45	1.52
57	BZ	25	ARG	CD-NE	6.61	1.57	1.46
67	B1	752	U	C4'-O4'	6.60	1.54	1.45
21	A2	1307	G	C2'-C1'	-6.60	1.46	1.53
34	B5	8	ARG	CZ-NH2	6.60	1.41	1.33
67	B1	919	G	O4'-C1'	6.60	1.50	1.41
67	B1	1286	G	P-O5'	-6.60	1.53	1.59
67	B1	2215	U	C5'-C4'	6.60	1.59	1.51
67	B1	2803	U	C3'-O3'	6.60	1.51	1.42
67	B1	216	A	O4'-C1'	-6.60	1.33	1.41
67	B1	645	U	O4'-C1'	-6.60	1.33	1.41
67	B1	1225	A	O4'-C1'	6.60	1.50	1.41
21	A2	1203	G	C5'-C4'	6.60	1.59	1.51
21	A2	1435	G	C5'-C4'	6.60	1.59	1.51
67	B1	2297	C	C3'-C2'	6.60	1.60	1.52
67	B1	2939	C	C5'-C4'	6.60	1.59	1.51
67	B1	1	G	C5'-C4'	6.59	1.59	1.51
67	B1	1444	A	C2'-C1'	-6.59	1.46	1.53
34	BK	8	ARG	CZ-NH2	6.59	1.41	1.33
67	B1	1157	U	C4'-O4'	6.59	1.54	1.45
67	B1	1257	G	C2'-C1'	-6.59	1.46	1.53
53	BD	242	TRP	NE1-CE2	6.59	1.46	1.37
25	AH	209	ARG	CZ-NH2	6.59	1.41	1.33
67	B1	314	A	C5'-C4'	6.59	1.59	1.51
67	B1	1482	G	C2'-C1'	-6.59	1.46	1.53
67	B1	2376	U	O3'-P	-6.59	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2634	U	O4'-C1'	6.59	1.50	1.41
67	B1	2863	A	O4'-C1'	6.59	1.50	1.41
11	A1	38	G	P-O5'	-6.58	1.53	1.59
18	AF	7	GLU	CD-OE1	6.58	1.32	1.25
60	BS	126	ARG	CD-NE	6.58	1.57	1.46
21	A2	161	C	C2'-C1'	-6.58	1.46	1.53
67	B1	736	U	O4'-C1'	6.58	1.50	1.41
67	B1	1440	C	C3'-C2'	-6.58	1.45	1.52
67	B1	1925	A	O4'-C1'	6.58	1.50	1.41
67	B1	1931	G	O4'-C1'	6.58	1.50	1.41
67	B1	2094	A	C5'-C4'	6.58	1.59	1.51
21	A2	852	G	C3'-O3'	6.58	1.51	1.42
21	A2	396	C	O4'-C1'	6.58	1.50	1.41
21	A2	664	G	O4'-C1'	-6.58	1.33	1.41
67	B1	2632	C	O3'-P	-6.58	1.53	1.61
67	B1	478	C	C2'-C1'	-6.58	1.46	1.53
67	B1	1531	C	C2'-C1'	-6.58	1.46	1.53
21	A2	487	U	C2'-C1'	6.58	1.60	1.53
27	A0	2	C	C5'-C4'	6.58	1.59	1.51
47	BI	76	ARG	CZ-NH2	6.58	1.41	1.33
68	B3	36	U	P-O5'	-6.58	1.53	1.59
21	A2	771	G	O4'-C1'	6.57	1.50	1.41
67	B1	793	C	O4'-C1'	6.57	1.50	1.41
67	B1	2095	U	C2'-C1'	6.57	1.60	1.53
21	A2	750	C	C2'-C1'	-6.57	1.46	1.53
21	A2	1413	G	O4'-C1'	-6.57	1.33	1.41
27	A0	23	A	P-O5'	-6.57	1.53	1.59
47	BI	63	ARG	CZ-NH1	6.57	1.41	1.33
67	B1	1966	C	C3'-O3'	6.57	1.51	1.42
21	A2	585	U	C2'-C1'	6.57	1.60	1.53
21	A2	646	U	O3'-P	-6.57	1.53	1.61
67	B1	2621	U	C4'-C3'	6.57	1.60	1.53
21	A2	330	U	O4'-C1'	6.57	1.50	1.41
21	A2	482	G	O4'-C1'	6.57	1.50	1.41
60	BS	155	ARG	CD-NE	6.57	1.57	1.46
17	AO	9	ARG	CZ-NH1	6.56	1.41	1.33
67	B1	2261	C	C5'-C4'	6.56	1.59	1.51
21	A2	385	A	C2'-C1'	-6.56	1.46	1.53
21	A2	1464	C	C2'-C1'	-6.56	1.46	1.53
67	B1	2416	G	O3'-P	-6.56	1.53	1.61
21	A2	1104	G	O4'-C1'	-6.56	1.33	1.41
35	BL	71	ARG	NE-CZ	6.56	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2429	G	C2'-C1'	-6.56	1.46	1.53
67	B1	209	G	C3'-C2'	6.56	1.60	1.52
67	B1	1245	C	C2'-C1'	6.56	1.60	1.53
67	B1	2469	G	C3'-O3'	6.56	1.51	1.42
21	A2	488	A	P-O5'	6.56	1.66	1.59
21	A2	606	U	C2'-C1'	-6.56	1.46	1.53
67	B1	223	U	C2'-C1'	-6.56	1.46	1.53
21	A2	365	C	P-O5'	-6.56	1.53	1.59
21	A2	686	C	C3'-C2'	-6.56	1.45	1.52
21	A2	1319	C	O4'-C1'	6.56	1.50	1.41
67	B1	407	A	P-O5'	6.56	1.66	1.59
21	A2	289	C	O4'-C1'	6.55	1.50	1.41
67	B1	1769	G	P-O5'	-6.55	1.53	1.59
67	B1	2704	A	C4'-C3'	-6.55	1.46	1.53
21	A2	1128	U	O4'-C1'	-6.55	1.33	1.41
67	B1	877	U	P-O5'	-6.55	1.53	1.59
67	B1	1253	U	C2'-C1'	6.55	1.60	1.53
67	B1	2556	C	C4'-C3'	6.55	1.60	1.53
11	A1	70	C	O4'-C1'	6.55	1.50	1.41
21	A2	782	A	C2'-C1'	-6.55	1.46	1.53
21	A2	1271	G	C2'-C1'	-6.55	1.46	1.53
67	B1	1814	A	O4'-C1'	6.55	1.50	1.41
67	B1	2285	G	O4'-C1'	-6.55	1.33	1.41
67	B1	94	A	C4'-O4'	-6.55	1.37	1.45
67	B1	624	U	C2'-C1'	-6.55	1.46	1.53
67	B1	2335	G	O4'-C1'	6.55	1.50	1.41
68	B3	72	G	O3'-P	-6.55	1.53	1.61
21	A2	281	G	P-O5'	-6.55	1.53	1.59
21	A2	954	G	C2'-C1'	-6.55	1.46	1.53
67	B1	2193	G	C3'-C2'	-6.54	1.45	1.52
21	A2	190	C	C4'-O4'	-6.54	1.37	1.45
21	A2	342	G	C5'-C4'	6.54	1.59	1.51
67	B1	1463	C	O4'-C1'	6.54	1.50	1.41
67	B1	1728	C	O3'-P	-6.54	1.53	1.61
67	B1	1806	C	C2'-C1'	-6.54	1.46	1.53
14	AM	133	ARG	CZ-NH2	6.54	1.41	1.33
21	A2	200	G	C3'-C2'	-6.54	1.45	1.52
21	A2	850	A	C5'-C4'	6.54	1.59	1.51
67	B1	64	A	C3'-C2'	-6.54	1.45	1.52
67	B1	2797	C	P-O5'	6.54	1.66	1.59
21	A2	812	U	C2'-C1'	-6.54	1.46	1.53
32	BO	14	ARG	CD-NE	6.54	1.57	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	929	G	O4'-C1'	6.54	1.50	1.41
67	B1	2685	G	O4'-C1'	6.54	1.50	1.41
67	B1	1256	G	C4'-C3'	6.54	1.60	1.53
67	B1	2208	C	C2'-C1'	-6.54	1.46	1.53
21	A2	254	G	O4'-C1'	-6.54	1.33	1.41
21	A2	594	A	C2'-C1'	-6.54	1.46	1.53
67	B1	1269	U	O4'-C1'	6.54	1.50	1.41
67	B1	1664	G	O4'-C1'	6.54	1.50	1.41
67	B1	1786	G	C4'-O4'	6.54	1.54	1.45
23	AT	110	ARG	CZ-NH2	6.53	1.41	1.33
67	B1	1277	G	P-O5'	-6.53	1.53	1.59
67	B1	2531	G	P-O5'	-6.53	1.53	1.59
62	BN	113	ARG	CD-NE	6.53	1.57	1.46
67	B1	1425	U	C3'-C2'	6.53	1.60	1.52
21	A2	57	G	O4'-C1'	-6.53	1.33	1.41
21	A2	1320	A	O4'-C1'	-6.53	1.33	1.41
67	B1	1580	G	O4'-C1'	-6.53	1.33	1.41
67	B1	276	G	C3'-C2'	-6.53	1.45	1.52
67	B1	1942	G	O4'-C1'	-6.53	1.33	1.41
21	A2	956	C	O4'-C1'	6.53	1.50	1.41
21	A2	1295	C	C2'-C1'	-6.53	1.46	1.53
21	A2	876	A	O4'-C1'	6.52	1.50	1.41
67	B1	706	U	C2'-C1'	6.52	1.60	1.53
67	B1	1568	A	C4'-C3'	-6.52	1.46	1.53
67	B1	2196	C	P-O5'	-6.52	1.53	1.59
67	B1	3040	G	C4'-C3'	6.52	1.60	1.53
21	A2	1373	A	C5'-C4'	6.52	1.59	1.51
67	B1	2763	U	C4'-C3'	6.52	1.60	1.53
6	AC	27	ARG	CZ-NH2	6.52	1.41	1.33
2	AK	42	ARG	NE-CZ	6.52	1.41	1.33
67	B1	21	C	C4'-C3'	-6.52	1.46	1.53
67	B1	870	G	P-O5'	6.52	1.66	1.59
67	B1	2564	U	C2'-C1'	-6.52	1.46	1.53
21	A2	1240	A	C4'-C3'	6.52	1.60	1.53
21	A2	1492	U	P-O5'	-6.51	1.53	1.59
67	B1	73	A	C2'-C1'	6.51	1.60	1.53
33	BC	334	ARG	CZ-NH1	6.51	1.41	1.33
67	B1	1403	C	C4'-C3'	6.51	1.60	1.53
67	B1	2854	A	C5'-C4'	6.51	1.59	1.51
67	B1	2919	C	P-O5'	-6.51	1.53	1.59
21	A2	25	C	O4'-C1'	6.51	1.50	1.41
21	A2	327	G	C2'-C1'	-6.51	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1407	A	P-O5'	-6.51	1.53	1.59
21	A2	168	G	C3'-C2'	6.51	1.60	1.52
21	A2	229	G	C4'-O4'	-6.51	1.37	1.45
21	A2	679	G	C2'-C1'	6.51	1.60	1.53
67	B1	309	C	O4'-C1'	6.51	1.50	1.41
67	B1	1683	C	O4'-C1'	6.51	1.50	1.41
67	B1	1936	C	O3'-P	-6.51	1.53	1.61
21	A2	500	A	C4'-O4'	-6.51	1.37	1.45
67	B1	571	G	O3'-P	-6.51	1.53	1.61
67	B1	1489	G	C3'-O3'	6.51	1.51	1.42
21	A2	597	C	C4'-C3'	6.50	1.60	1.53
67	B1	65	G	P-O5'	-6.50	1.53	1.59
67	B1	108	G	C4'-O4'	6.50	1.54	1.45
21	A2	856	G	C2'-C1'	-6.50	1.46	1.53
67	B1	881	G	P-O5'	6.50	1.66	1.59
67	B1	2995	A	C4'-C3'	6.50	1.60	1.53
67	B1	713	C	P-O5'	-6.50	1.53	1.59
67	B1	1877	C	O4'-C1'	6.50	1.50	1.41
67	B1	978	C	C2'-C1'	-6.50	1.46	1.53
31	BY	143	ARG	CZ-NH2	6.49	1.41	1.33
67	B1	2886	C	C2'-C1'	-6.49	1.46	1.53
68	B3	77	A	C2'-C1'	6.49	1.60	1.53
67	B1	1796	U	P-O5'	-6.49	1.53	1.59
21	A2	390	G	O4'-C1'	-6.49	1.33	1.41
68	B3	108	G	C3'-C2'	-6.49	1.45	1.52
21	A2	368	C	C4'-C3'	6.49	1.60	1.53
21	A2	1399	G	C2'-C1'	-6.49	1.46	1.53
67	B1	85	G	P-O5'	-6.49	1.53	1.59
67	B1	862	G	P-O5'	-6.49	1.53	1.59
67	B1	2538	G	O4'-C1'	6.49	1.50	1.41
67	B1	2891	A	C3'-C2'	-6.49	1.45	1.52
39	Be	25	ARG	CZ-NH1	6.49	1.41	1.33
64	Bc	11	ARG	CD-NE	6.49	1.57	1.46
21	A2	207	G	O3'-P	-6.49	1.53	1.61
21	A2	1326	G	C3'-C2'	6.49	1.60	1.52
21	A2	750	C	C4'-O4'	6.48	1.53	1.45
67	B1	234	G	P-O5'	-6.48	1.53	1.59
67	B1	2854	A	O4'-C1'	-6.48	1.33	1.41
21	A2	167	G	O3'-P	6.48	1.69	1.61
21	A2	1489	A	O4'-C1'	6.48	1.50	1.41
67	B1	1369	G	O4'-C1'	6.48	1.50	1.41
67	B1	1570	C	C2'-O2'	-6.48	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A1	33	C	O4'-C1'	6.48	1.50	1.41
67	B1	1041	U	C3'-O3'	6.48	1.51	1.42
67	B1	1955	U	O4'-C1'	-6.48	1.33	1.41
21	A2	1427	C	O4'-C1'	6.48	1.50	1.41
21	A2	746	A	C5'-C4'	6.48	1.59	1.51
24	AA	184	GLU	CD-OE2	6.47	1.32	1.25
21	A2	1320	A	C2'-O2'	-6.47	1.33	1.41
59	BM	106	ARG	CD-NE	6.47	1.57	1.46
67	B1	1159	U	O4'-C1'	6.47	1.50	1.41
67	B1	1781	C	O4'-C1'	6.47	1.50	1.41
67	B1	1956	G	C2'-C1'	-6.47	1.46	1.53
67	B1	2276	G	O4'-C1'	-6.47	1.33	1.41
68	B3	16	G	O4'-C1'	6.47	1.50	1.41
21	A2	111	G	C2'-C1'	-6.47	1.46	1.53
21	A2	511	C	P-O5'	-6.47	1.53	1.59
67	B1	1722	G	C5'-C4'	6.47	1.59	1.51
21	A2	74	U	O3'-P	-6.47	1.53	1.61
33	BC	89	GLY	CA-C	-6.47	1.41	1.51
54	BF	24	TYR	CG-CD2	6.47	1.47	1.39
67	B1	515	G	O4'-C1'	-6.47	1.33	1.41
67	B1	2212	C	C2'-C1'	-6.47	1.46	1.53
67	B1	1277	G	O4'-C1'	-6.47	1.33	1.41
67	B1	2428	C	C3'-C2'	6.47	1.60	1.52
67	B1	2058	C	C4'-C3'	-6.46	1.46	1.53
67	B1	2686	A	O3'-P	-6.46	1.53	1.61
12	AN	52	GLY	CA-C	-6.46	1.41	1.51
67	B1	760	G	C2'-O2'	6.46	1.50	1.41
6	AC	9	ARG	CZ-NH1	6.46	1.41	1.33
21	A2	115	A	C4'-C3'	6.46	1.60	1.53
27	A0	43	G	C4'-C3'	6.46	1.60	1.53
67	B1	1503	C	O3'-P	-6.46	1.53	1.61
67	B1	2120	C	C5'-C4'	6.46	1.59	1.51
67	B1	2487	G	C4'-C3'	6.46	1.60	1.53
67	B1	2488	C	C2'-C1'	-6.46	1.46	1.53
68	B3	11	A	C5'-C4'	6.46	1.59	1.51
21	A2	1132	C	C2'-C1'	-6.46	1.46	1.53
21	A2	1409	G	P-O5'	-6.46	1.53	1.59
67	B1	2216	G	P-O5'	-6.46	1.53	1.59
67	B1	2704	A	C2'-C1'	6.46	1.60	1.53
21	A2	780	C	C5'-C4'	6.46	1.59	1.51
27	A0	11	C	P-O5'	-6.46	1.53	1.59
57	BZ	39	LYS	CD-CE	6.46	1.67	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	850	C	O4'-C1'	6.46	1.50	1.41
67	B1	2781	A	P-O5'	-6.46	1.53	1.59
67	B1	2887	C	C4'-C3'	6.46	1.60	1.53
67	B1	2902	G	P-O5'	-6.46	1.53	1.59
21	A2	608	G	C3'-C2'	6.46	1.60	1.52
67	B1	2841	G	P-O5'	-6.46	1.53	1.59
21	A2	481	C	C4'-C3'	6.45	1.60	1.53
21	A2	1026	A	C4'-C3'	-6.45	1.46	1.53
36	Bf	3	ARG	CB-CG	6.45	1.70	1.52
67	B1	3003	A	O4'-C1'	6.45	1.50	1.41
12	AN	33	ARG	CZ-NH2	6.45	1.41	1.33
21	A2	1060	G	O3'-P	-6.45	1.53	1.61
21	A2	1159	U	C4'-C3'	6.45	1.60	1.53
67	B1	1655	G	C5'-C4'	6.45	1.59	1.51
67	B1	743	A	C3'-O3'	6.45	1.51	1.42
67	B1	2101	A	C3'-C2'	-6.45	1.45	1.52
67	B1	2235	G	C3'-O3'	-6.45	1.33	1.42
67	B1	2293	G	O3'-P	-6.45	1.53	1.61
67	B1	1348	G	C4'-C3'	6.45	1.60	1.53
21	A2	541	G	C4'-C3'	-6.45	1.46	1.53
21	A2	1339	G	C4'-C3'	-6.45	1.46	1.53
21	A2	176	U	C3'-O3'	6.45	1.51	1.42
21	A2	1297	G	C4'-C3'	6.45	1.60	1.53
67	B1	623	G	C4'-C3'	6.45	1.60	1.53
67	B1	1058	A	C3'-O3'	6.45	1.51	1.42
67	B1	1391	C	C2'-C1'	-6.45	1.46	1.53
67	B1	1819	G	C4'-C3'	6.45	1.60	1.53
67	B1	1039	C	C2'-C1'	-6.44	1.46	1.53
67	B1	1125	A	C2'-C1'	-6.44	1.46	1.53
10	AD	53	ARG	CZ-NH2	6.44	1.41	1.33
27	A0	16	C	O3'-P	-6.44	1.53	1.61
67	B1	2135	C	O3'-P	-6.44	1.53	1.61
2	AK	2	ARG	NE-CZ	6.44	1.41	1.33
67	B1	155	U	C2'-C1'	6.44	1.60	1.53
67	B1	1208	A	C2'-C1'	6.44	1.60	1.53
21	A2	242	A	C4'-C3'	6.44	1.60	1.53
67	B1	398	U	C4'-O4'	6.44	1.53	1.45
67	B1	1370	G	O3'-P	-6.44	1.53	1.61
67	B1	1416	G	C4'-C3'	6.44	1.60	1.53
21	A2	412	U	C5'-C4'	6.44	1.59	1.51
21	A2	822	A	C5'-C4'	6.44	1.59	1.51
21	A2	1070	C	C3'-C2'	6.44	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1650	U	C4'-C3'	-6.44	1.46	1.53
67	B1	2687	A	C4'-O4'	-6.44	1.37	1.45
67	B1	1835	A	C2'-O2'	-6.44	1.33	1.41
67	B1	2097	G	C2'-C1'	-6.44	1.46	1.53
67	B1	1409	U	C3'-C2'	-6.43	1.45	1.52
6	AC	57	ARG	NE-CZ	6.43	1.41	1.33
65	BJ	96	ARG	NE-CZ	6.43	1.41	1.33
67	B1	159	C	C5'-C4'	6.43	1.59	1.51
21	A2	1144	G	P-O5'	-6.43	1.53	1.59
19	AS	43	SER	CA-CB	6.43	1.62	1.52
21	A2	160	C	O4'-C1'	6.43	1.50	1.41
27	A0	58	A	C3'-O3'	6.43	1.51	1.42
67	B1	2598	C	C5'-C4'	6.43	1.59	1.51
21	A2	394	C	C3'-O3'	6.42	1.51	1.42
21	A2	674	C	C4'-C3'	-6.42	1.46	1.53
21	A2	1119	U	O4'-C1'	6.42	1.50	1.41
67	B1	393	C	C3'-O3'	6.42	1.51	1.42
21	A2	1202	G	O3'-P	-6.42	1.53	1.61
67	B1	1802	G	C2'-C1'	6.42	1.60	1.53
67	B1	1456	U	C2'-C1'	-6.42	1.46	1.53
67	B1	2026	C	C2'-C1'	-6.42	1.46	1.53
67	B1	2073	G	O4'-C1'	6.42	1.50	1.41
67	B1	2343	G	P-O5'	-6.42	1.53	1.59
65	BJ	114	ARG	CZ-NH1	6.42	1.41	1.33
67	B1	2017	A	P-O5'	-6.42	1.53	1.59
21	A2	833	C	C5'-C4'	6.42	1.59	1.51
21	A2	876	A	C2'-O2'	6.42	1.50	1.41
21	A2	942	A	C2'-C1'	-6.42	1.46	1.53
59	BM	63	ARG	NE-CZ	6.42	1.41	1.33
67	B1	903	C	C2'-C1'	-6.42	1.46	1.53
67	B1	2054	G	C3'-C2'	-6.42	1.45	1.52
68	B3	87	G	C5'-C4'	6.42	1.59	1.51
67	B1	651	C	C3'-C2'	-6.42	1.45	1.52
67	B1	2910	G	C5'-C4'	6.42	1.59	1.51
67	B1	2927	A	P-O5'	6.42	1.66	1.59
21	A2	427	G	C2'-C1'	-6.42	1.46	1.53
67	B1	994	G	C2'-C1'	6.42	1.60	1.53
67	B1	1789	A	C4'-C3'	6.42	1.60	1.53
67	B1	1932	G	O4'-C1'	6.42	1.50	1.41
32	BO	13	ARG	CZ-NH2	6.41	1.41	1.33
67	B1	461	C	C4'-O4'	6.41	1.53	1.45
67	B1	904	G	C4'-C3'	-6.41	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2240	G	O3'-P	-6.41	1.53	1.61
21	A2	148	C	P-O5'	-6.41	1.53	1.59
67	B1	172	C	C4'-C3'	-6.41	1.46	1.53
62	BN	165	TYR	CG-CD1	6.41	1.47	1.39
67	B1	1371	U	C4'-C3'	-6.41	1.46	1.53
67	B1	2766	C	P-O5'	-6.41	1.53	1.59
60	BS	59	ARG	CD-NE	6.41	1.57	1.46
67	B1	2053	G	C2'-C1'	6.41	1.60	1.53
67	B1	489	G	P-O5'	-6.41	1.53	1.59
67	B1	24	G	O4'-C1'	6.41	1.50	1.41
67	B1	177	G	O4'-C1'	6.41	1.50	1.41
67	B1	555	G	O4'-C1'	-6.41	1.33	1.41
67	B1	1634	A	P-O5'	-6.41	1.53	1.59
67	B1	1802	G	O3'-P	-6.41	1.53	1.61
67	B1	1641	G	O4'-C1'	6.40	1.50	1.41
21	A2	1200	U	C5'-C4'	6.40	1.59	1.51
27	A0	30	G	O4'-C1'	6.40	1.50	1.41
67	B1	935	A	O3'-P	-6.40	1.53	1.61
67	B1	2775	G	O3'-P	-6.40	1.53	1.61
67	B1	965	A	C5'-C4'	6.40	1.59	1.51
67	B1	1898	A	O4'-C1'	6.40	1.50	1.41
67	B1	2519	C	C3'-C2'	6.40	1.59	1.52
12	AN	29	ARG	CZ-NH2	6.40	1.41	1.33
21	A2	1153	G	O4'-C1'	6.40	1.50	1.41
21	A2	1218	C	P-O5'	-6.40	1.53	1.59
21	A2	1222	C	C2'-C1'	-6.40	1.46	1.53
67	B1	275	C	C2'-C1'	-6.40	1.46	1.53
21	A2	678	G	C2'-C1'	-6.39	1.46	1.53
21	A2	1151	A	C3'-C2'	-6.39	1.45	1.52
21	A2	1261	U	O4'-C1'	6.39	1.50	1.41
67	B1	40	G	O3'-P	-6.39	1.53	1.61
67	B1	1378	G	P-O5'	-6.39	1.53	1.59
67	B1	2435	G	C3'-C2'	6.39	1.59	1.52
11	A1	49	C	O3'-P	-6.39	1.53	1.61
21	A2	173	G	C5'-C4'	6.39	1.59	1.51
21	A2	285	C	C5'-C4'	6.39	1.59	1.51
67	B1	620	G	C3'-O3'	6.39	1.51	1.42
67	B1	1739	U	C2'-C1'	-6.39	1.46	1.53
67	B1	2823	G	C3'-C2'	-6.39	1.45	1.52
67	B1	1591	C	O4'-C1'	6.39	1.50	1.41
21	A2	191	A	P-O5'	-6.39	1.53	1.59
21	A2	627	G	O3'-P	-6.39	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	720	A	C2'-C1'	6.39	1.60	1.53
21	A2	778	G	C4'-C3'	6.39	1.60	1.53
67	B1	1281	A	C5'-C4'	6.39	1.59	1.51
21	A2	377	A	C3'-O3'	6.39	1.51	1.42
21	A2	767	U	O3'-P	-6.39	1.53	1.61
43	Bk	42	ARG	CG-CD	6.39	1.68	1.51
53	BD	212	ARG	CZ-NH2	6.39	1.41	1.33
67	B1	1443	G	C3'-C2'	6.39	1.59	1.52
67	B1	2230	G	O4'-C1'	-6.39	1.33	1.41
11	A1	27	A	C2'-C1'	-6.38	1.46	1.53
21	A2	666	G	O3'-P	-6.38	1.53	1.61
67	B1	3015	A	C2'-C1'	-6.38	1.46	1.53
67	B1	2860	G	C2'-C1'	6.38	1.60	1.53
67	B1	2950	G	O3'-P	-6.38	1.53	1.61
67	B1	110	A	O4'-C1'	6.38	1.50	1.41
67	B1	1320	C	C2'-C1'	-6.38	1.46	1.53
67	B1	1577	C	C5'-C4'	6.38	1.59	1.51
67	B1	818	A	O3'-P	-6.38	1.53	1.61
67	B1	1996	C	P-O5'	-6.38	1.53	1.59
21	A2	734	G	C3'-C2'	6.38	1.59	1.52
21	A2	1407	U	C2'-C1'	-6.38	1.46	1.53
32	BO	69	ARG	CZ-NH1	6.38	1.41	1.33
67	B1	2951	G	C3'-O3'	-6.38	1.33	1.42
21	A2	322	G	C3'-O3'	6.38	1.51	1.42
67	B1	1154	A	C5'-C4'	6.38	1.58	1.51
67	B1	1843	C	O3'-P	-6.38	1.53	1.61
67	B1	290	G	O4'-C1'	6.37	1.50	1.41
67	B1	792	A	C2'-C1'	-6.37	1.46	1.53
67	B1	2253	G	P-O5'	-6.37	1.53	1.59
67	B1	2668	G	O4'-C1'	6.37	1.50	1.41
21	A2	708	C	C5'-C4'	6.37	1.58	1.51
21	A2	795	G	O4'-C1'	6.37	1.50	1.41
21	A2	1331	G	C2'-C1'	-6.37	1.46	1.53
67	B1	237	G	O3'-P	-6.37	1.53	1.61
67	B1	1253	U	P-O5'	6.37	1.66	1.59
67	B1	1315	U	C2'-C1'	6.37	1.60	1.53
67	B1	1685	C	C4'-O4'	6.37	1.53	1.45
67	B1	2127	G	C5'-C4'	6.37	1.58	1.51
67	B1	2872	G	C2'-O2'	-6.37	1.33	1.41
32	BO	15	ARG	CD-NE	6.37	1.57	1.46
61	Bd	49	GLY	CA-C	-6.37	1.41	1.51
67	B1	2168	C	O4'-C1'	6.37	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1035	G	C4'-C3'	6.37	1.60	1.53
67	B1	1292	C	O4'-C1'	6.37	1.50	1.41
15	AE	78	ARG	CZ-NH1	6.37	1.41	1.33
21	A2	590	G	O3'-P	-6.37	1.53	1.61
21	A2	744	A	C5'-C4'	-6.37	1.43	1.51
67	B1	1509	C	C4'-C3'	6.37	1.60	1.53
67	B1	1960	U	P-O5'	-6.37	1.53	1.59
11	A1	70	C	C4'-C3'	-6.36	1.46	1.53
24	AA	128	ARG	CZ-NH2	6.36	1.41	1.33
67	B1	1423	G	P-O5'	-6.36	1.53	1.59
67	B1	230	A	C2'-C1'	-6.36	1.46	1.53
21	A2	736	A	P-O5'	-6.36	1.53	1.59
67	B1	468	A	O4'-C1'	6.36	1.50	1.41
67	B1	2351	G	C2'-C1'	6.36	1.60	1.53
21	A2	1047	U	C3'-O3'	6.36	1.51	1.42
67	B1	2469	G	O4'-C1'	-6.36	1.33	1.41
67	B1	522	A	O4'-C1'	6.36	1.50	1.41
67	B1	815	U	C5'-C4'	6.36	1.58	1.51
67	B1	2369	G	O4'-C1'	6.36	1.50	1.41
21	A2	1000	G	C4'-C3'	6.36	1.60	1.53
67	B1	364	A	C2'-C1'	6.36	1.60	1.53
67	B1	648	C	O4'-C1'	6.36	1.50	1.41
68	B3	32	C	C2'-C1'	-6.35	1.46	1.53
21	A2	1409	G	O4'-C1'	-6.35	1.33	1.41
21	A2	1077	U	C4'-C3'	-6.35	1.46	1.53
67	B1	1236	C	O4'-C1'	6.35	1.50	1.41
67	B1	3006	G	C2'-C1'	-6.35	1.46	1.53
62	BN	79	ARG	CZ-NH2	6.35	1.41	1.33
67	B1	1624	U	P-O5'	-6.35	1.53	1.59
67	B1	2826	U	O4'-C1'	6.35	1.50	1.41
67	B1	1102	C	C4'-O4'	-6.35	1.37	1.45
67	B1	1769	G	O4'-C1'	6.35	1.49	1.41
67	B1	2725	U	O3'-P	-6.35	1.53	1.61
21	A2	233	C	C2'-C1'	6.34	1.60	1.53
21	A2	265	C	C5'-C4'	6.34	1.58	1.51
47	BI	13	ARG	CD-NE	6.34	1.57	1.46
67	B1	1755	C	P-O5'	-6.34	1.53	1.59
21	A2	654	U	P-O5'	-6.34	1.53	1.59
21	A2	672	G	O3'-P	-6.34	1.53	1.61
21	A2	1088	U	C5'-C4'	6.34	1.58	1.51
25	AH	86	MET	N-CA	6.34	1.59	1.46
67	B1	279	G	C2'-C1'	-6.34	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2067	U	C4'-C3'	6.34	1.60	1.53
21	A2	84	C	O4'-C1'	6.34	1.49	1.41
67	B1	704	G	C2'-C1'	6.34	1.60	1.53
67	B1	2988	A	O4'-C1'	-6.34	1.33	1.41
21	A2	452	G	O4'-C1'	6.34	1.49	1.41
21	A2	1328	G	O4'-C1'	-6.34	1.33	1.41
67	B1	134	C	C5'-C4'	6.34	1.58	1.51
67	B1	1474	A	C3'-C2'	-6.34	1.45	1.52
67	B1	2336	G	P-O5'	-6.34	1.53	1.59
67	B1	2797	C	C2'-C1'	6.34	1.60	1.53
67	B1	2437	G	C4'-C3'	-6.34	1.46	1.53
10	AD	25	ARG	CZ-NH2	6.33	1.41	1.33
67	B1	1109	G	C4'-O4'	-6.33	1.37	1.45
67	B1	2226	G	P-O5'	-6.33	1.53	1.59
67	B1	294	U	O4'-C1'	6.33	1.49	1.41
1	AQ	158	ARG	CZ-NH1	6.33	1.41	1.33
21	A2	206	C	O4'-C1'	6.33	1.49	1.41
67	B1	132	G	C2'-C1'	-6.33	1.46	1.53
67	B1	173	G	C5'-C4'	6.33	1.58	1.51
67	B1	874	U	P-O5'	-6.33	1.53	1.59
67	B1	1901	A	C5'-C4'	6.33	1.58	1.51
67	B1	2119	C	C3'-C2'	-6.33	1.45	1.52
67	B1	2698	G	C3'-O3'	6.33	1.51	1.42
21	A2	267	C	C5'-C4'	6.33	1.58	1.51
67	B1	1438	C	C2'-C1'	-6.33	1.46	1.53
67	B1	2779	G	O4'-C1'	-6.33	1.33	1.41
11	A1	59	A	O4'-C1'	-6.33	1.33	1.41
13	AX	43	ARG	CD-NE	6.33	1.57	1.46
21	A2	739	G	C4'-O4'	-6.33	1.37	1.45
21	A2	874	G	C5'-C4'	6.33	1.58	1.51
67	B1	2018	C	P-O5'	-6.33	1.53	1.59
21	A2	14	C	C2'-C1'	-6.32	1.46	1.53
21	A2	799	C	O3'-P	-6.32	1.53	1.61
21	A2	864	G	C4'-O4'	-6.32	1.37	1.45
28	B6	76	GLU	CB-CG	6.32	1.64	1.52
60	BS	49	ARG	NE-CZ	6.32	1.41	1.33
67	B1	650	C	C2'-C1'	-6.32	1.46	1.53
67	B1	2739	G	C4'-O4'	6.32	1.53	1.45
67	B1	2221	A	O4'-C1'	6.32	1.49	1.41
67	B1	111	U	O4'-C1'	-6.32	1.33	1.41
67	B1	983	G	C4'-C3'	6.32	1.60	1.53
67	B1	2432	G	P-O5'	6.32	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	32	C	C4'-O4'	-6.32	1.37	1.45
21	A2	273	C	C2'-C1'	-6.32	1.46	1.53
67	B1	1870	G	P-O5'	-6.32	1.53	1.59
21	A2	252	U	C2'-C1'	6.32	1.60	1.53
67	B1	766	G	C4'-O4'	6.32	1.53	1.45
67	B1	916	A	C5'-C4'	6.32	1.58	1.51
67	B1	959	U	C5'-C4'	6.32	1.58	1.51
67	B1	2734	C	C5'-C4'	6.32	1.58	1.51
67	B1	2810	G	O4'-C1'	-6.32	1.33	1.41
67	B1	1578	C	O4'-C1'	6.31	1.49	1.41
21	A2	1291	G	O4'-C1'	-6.31	1.33	1.41
11	A1	61	U	C3'-O3'	6.31	1.50	1.42
21	A2	1150	G	C2'-C1'	-6.31	1.46	1.53
67	B1	322	C	O4'-C1'	6.31	1.49	1.41
67	B1	758	C	P-O5'	-6.31	1.53	1.59
11	A1	16	C	O4'-C1'	6.31	1.49	1.41
21	A2	627	G	P-O5'	-6.31	1.53	1.59
21	A2	1032	A	C3'-O3'	6.31	1.50	1.42
21	A2	1168	C	P-O5'	-6.31	1.53	1.59
62	BN	163	ARG	CZ-NH2	6.31	1.41	1.33
67	B1	1704	C	O4'-C1'	6.31	1.49	1.41
67	B1	2303	A	C2'-C1'	-6.31	1.46	1.53
67	B1	2690	U	O4'-C1'	6.31	1.49	1.41
67	B1	25	U	O3'-P	-6.31	1.53	1.61
11	A1	57	C	C2'-C1'	-6.30	1.46	1.53
21	A2	171	U	C3'-C2'	-6.30	1.45	1.52
67	B1	2042	A	C5'-C4'	-6.30	1.43	1.51
21	A2	74	U	O4'-C1'	6.30	1.49	1.41
21	A2	981	U	C5'-C4'	6.30	1.58	1.51
67	B1	1973	U	C3'-O3'	-6.30	1.33	1.42
21	A2	31	U	P-O5'	-6.30	1.53	1.59
67	B1	20	C	O4'-C1'	6.30	1.49	1.41
67	B1	154	U	O4'-C1'	-6.30	1.33	1.41
67	B1	2417	G	C4'-C3'	6.30	1.60	1.53
21	A2	1243	C	C2'-C1'	-6.30	1.46	1.53
67	B1	2270	G	O4'-C1'	-6.30	1.33	1.41
21	A2	658	A	C2'-C1'	6.30	1.60	1.53
21	A2	1055	C	C5'-C4'	6.30	1.58	1.51
67	B1	19	G	C2'-C1'	6.30	1.60	1.53
21	A2	113	U	C2'-C1'	6.29	1.60	1.53
21	A2	1215	G	C5'-C4'	6.29	1.58	1.51
67	B1	83	G	O3'-P	-6.29	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2213	G	C5'-C4'	6.29	1.58	1.51
21	A2	361	A	C3'-C2'	6.29	1.59	1.52
67	B1	2452	C	C3'-O3'	6.29	1.50	1.42
12	AN	123	ARG	CZ-NH1	6.29	1.41	1.33
46	BA	194	ARG	CZ-NH2	6.29	1.41	1.33
67	B1	155	U	C3'-C2'	6.29	1.59	1.52
67	B1	244	A	O4'-C1'	6.29	1.49	1.41
67	B1	722	C	O4'-C1'	6.29	1.49	1.41
21	A2	1254	C	C2'-C1'	-6.29	1.46	1.53
67	B1	2217	C	O3'-P	-6.29	1.53	1.61
67	B1	2298	C	P-O5'	-6.29	1.53	1.59
67	B1	2634	U	C4'-C3'	6.29	1.60	1.53
67	B1	3000	U	C5'-C4'	6.29	1.58	1.51
21	A2	823	A	C2'-C1'	-6.29	1.46	1.53
21	A2	1141	G	O4'-C1'	-6.29	1.33	1.41
67	B1	1062	C	O4'-C1'	6.29	1.49	1.41
67	B1	2018	C	C3'-O3'	6.29	1.50	1.42
67	B1	2696	G	P-O5'	-6.29	1.53	1.59
67	B1	2842	C	C5'-C4'	6.28	1.58	1.51
21	A2	391	G	O3'-P	-6.28	1.53	1.61
67	B1	2659	G	P-O5'	6.28	1.66	1.59
21	A2	1119	U	C2'-C1'	-6.28	1.46	1.53
32	BO	14	ARG	CZ-NH2	6.28	1.41	1.33
67	B1	1027	A	P-O5'	-6.28	1.53	1.59
11	A1	46	U	P-O5'	-6.28	1.53	1.59
30	AU	51	TRP	CD2-CE3	-6.28	1.30	1.40
67	B1	859	G	O4'-C1'	-6.28	1.33	1.41
67	B1	1284	C	C5'-C4'	6.28	1.58	1.51
67	B1	980	G	C5'-C4'	6.27	1.58	1.51
67	B1	1025	A	C4'-C3'	6.27	1.60	1.53
58	BP	44	ARG	CZ-NH2	6.27	1.41	1.33
67	B1	910	G	C2'-C1'	-6.27	1.46	1.53
21	A2	678	G	P-O5'	-6.27	1.53	1.59
67	B1	2430	C	C4'-C3'	6.27	1.60	1.53
67	B1	2988	A	C2'-C1'	6.27	1.60	1.53
67	B1	197	C	C2'-C1'	-6.27	1.46	1.53
67	B1	725	G	O3'-P	-6.27	1.53	1.61
67	B1	1565	G	P-OP2	6.27	1.59	1.49
2	AK	16	ARG	NE-CZ	6.26	1.41	1.33
21	A2	409	C	C3'-O3'	6.26	1.50	1.42
21	A2	1309	A	C2'-O2'	-6.26	1.33	1.41
21	A2	1464	C	C5'-C4'	6.26	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	Bb	81	GLU	CD-OE2	6.26	1.32	1.25
67	B1	127	C	C5'-C4'	6.26	1.58	1.51
67	B1	224	G	O4'-C1'	6.26	1.49	1.41
67	B1	1737	A	C2'-C1'	-6.26	1.46	1.53
21	A2	406	U	O4'-C1'	6.26	1.49	1.41
21	A2	756	A	O4'-C1'	6.26	1.49	1.41
67	B1	1634	A	C2'-C1'	-6.26	1.46	1.53
21	A2	297	G	O4'-C1'	-6.26	1.33	1.41
21	A2	483	G	C2'-C1'	6.26	1.60	1.53
67	B1	1585	U	C4'-O4'	6.26	1.53	1.45
21	A2	201	G	C5'-C4'	6.26	1.58	1.51
21	A2	416	A	O3'-P	6.26	1.68	1.61
21	A2	484	U	O4'-C1'	6.26	1.49	1.41
67	B1	794	G	C4'-C3'	6.26	1.60	1.53
21	A2	821	G	P-O5'	-6.26	1.53	1.59
67	B1	1260	C	O4'-C1'	6.26	1.49	1.41
67	B1	2368	G	O5'-C5'	-6.26	1.32	1.42
67	B1	2710	G	C4'-O4'	-6.26	1.37	1.45
67	B1	2902	G	O4'-C1'	-6.26	1.33	1.41
21	A2	105	C	C2'-O2'	-6.25	1.33	1.41
26	AP	25	GLY	N-CA	-6.25	1.36	1.46
67	B1	1790	G	C4'-C3'	6.25	1.60	1.53
67	B1	2050	U	C2'-C1'	-6.25	1.46	1.53
21	A2	137	A	C5'-C4'	6.25	1.58	1.51
21	A2	779	G	O4'-C1'	6.25	1.49	1.41
67	B1	424	U	C4'-C3'	-6.25	1.46	1.53
67	B1	546	C	P-O5'	-6.25	1.53	1.59
28	AV	4	ARG	NE-CZ	6.25	1.41	1.33
67	B1	2060	A	C3'-O3'	6.25	1.50	1.42
67	B1	1980	U	C5'-C4'	6.25	1.58	1.51
67	B1	2383	A	P-O5'	-6.25	1.53	1.59
21	A2	281	G	O4'-C1'	6.25	1.49	1.41
21	A2	335	G	C3'-C2'	-6.25	1.45	1.52
21	A2	1149	C	C2'-C1'	-6.25	1.46	1.53
67	B1	1703	G	C4'-C3'	6.25	1.60	1.53
67	B1	1887	A	P-O5'	-6.25	1.53	1.59
21	A2	456	U	C5'-C4'	6.24	1.58	1.51
21	A2	687	G	O4'-C1'	6.24	1.49	1.41
67	B1	2657	A	C3'-C2'	-6.24	1.45	1.52
53	BD	78	ARG	NE-CZ	6.24	1.41	1.33
67	B1	2732	U	C5'-C4'	6.24	1.58	1.51
21	A2	840	C	O4'-C1'	6.24	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	982	U	P-O5'	-6.24	1.53	1.59
21	A2	1239	A	C4'-C3'	6.24	1.60	1.53
21	A2	1394	G	C5'-C4'	6.24	1.58	1.51
67	B1	1694	G	O4'-C1'	6.24	1.49	1.41
21	A2	307	G	C3'-C2'	-6.24	1.45	1.52
67	B1	28	A	C2'-C1'	6.24	1.60	1.53
67	B1	1509	C	C5'-C4'	6.24	1.58	1.51
67	B1	1539	U	O4'-C1'	-6.24	1.33	1.41
67	B1	2474	A	P-O5'	6.24	1.66	1.59
67	B1	2524	C	C2'-C1'	6.24	1.60	1.53
21	A2	7	G	O3'-P	-6.24	1.53	1.61
21	A2	106	A	O4'-C1'	6.24	1.49	1.41
21	A2	610	G	C3'-C2'	-6.24	1.45	1.52
52	BB	237	ARG	NE-CZ	6.24	1.41	1.33
67	B1	1232	G	C2'-C1'	-6.24	1.46	1.53
67	B1	1830	U	C4'-C3'	-6.24	1.46	1.53
67	B1	2310	G	C5'-C4'	6.24	1.58	1.51
21	A2	1103	G	O4'-C1'	6.23	1.49	1.41
40	BE	155	ARG	NE-CZ	6.23	1.41	1.33
67	B1	606	A	C3'-C2'	6.23	1.59	1.52
67	B1	2232	U	O4'-C1'	-6.23	1.33	1.41
67	B1	2538	G	C5'-C4'	6.23	1.58	1.51
68	B3	80	G	C2'-C1'	-6.23	1.46	1.53
21	A2	468	G	C5'-C4'	6.23	1.58	1.51
21	A2	1008	U	P-O5'	-6.23	1.53	1.59
21	A2	1194	C	C4'-C3'	6.23	1.60	1.53
67	B1	155	U	C5'-C4'	6.23	1.58	1.51
67	B1	2603	A	O4'-C1'	6.23	1.49	1.41
67	B1	1823	A	C2'-C1'	-6.23	1.46	1.53
67	B1	2862	A	C4'-C3'	-6.23	1.46	1.53
27	A0	34	G	O3'-P	-6.23	1.53	1.61
67	B1	2757	G	O3'-P	-6.23	1.53	1.61
21	A2	1058	G	C4'-O4'	6.23	1.53	1.45
67	B1	1498	C	O3'-P	-6.22	1.53	1.61
67	B1	1895	G	C3'-C2'	-6.22	1.46	1.52
21	A2	476	C	C2'-C1'	-6.22	1.46	1.53
21	A2	1237	G	P-O5'	-6.22	1.53	1.59
51	Bj	48	GLY	N-CA	-6.22	1.36	1.46
67	B1	1773	C	C4'-O4'	6.22	1.53	1.45
67	B1	2795	G	C4'-C3'	6.22	1.59	1.53
37	BU	12	ARG	NE-CZ	6.22	1.41	1.33
67	B1	513	C	C5'-C4'	6.22	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	135	U	O4'-C1'	6.22	1.49	1.41
21	A2	149	U	C2'-C1'	6.22	1.60	1.53
21	A2	851	C	C2'-C1'	-6.22	1.46	1.53
67	B1	2679	A	C5'-C4'	6.22	1.58	1.51
21	A2	153	G	O4'-C1'	6.22	1.49	1.41
44	BW	7	ARG	CZ-NH1	6.22	1.41	1.33
67	B1	2277	G	C2'-C1'	6.22	1.60	1.53
67	B1	2656	A	P-O5'	-6.22	1.53	1.59
21	A2	221	A	O4'-C1'	6.22	1.49	1.41
21	A2	1345	G	C2'-C1'	-6.22	1.46	1.53
67	B1	531	G	C5'-C4'	6.22	1.58	1.51
67	B1	981	A	C2'-C1'	6.22	1.60	1.53
67	B1	1049	U	O4'-C1'	-6.22	1.33	1.41
67	B1	1636	C	O4'-C1'	6.22	1.49	1.41
21	A2	519	G	C2'-C1'	6.21	1.60	1.53
67	B1	1077	G	C3'-C2'	6.21	1.59	1.52
67	B1	1121	C	O3'-P	-6.21	1.53	1.61
67	B1	2543	A	O4'-C1'	-6.21	1.33	1.41
67	B1	2988	A	C3'-C2'	6.21	1.59	1.52
68	B3	58	C	O3'-P	-6.21	1.53	1.61
67	B1	518	A	C2'-C1'	-6.21	1.46	1.53
67	B1	1095	A	C2'-O2'	-6.21	1.33	1.41
67	B1	1946	G	C2'-C1'	6.21	1.60	1.53
67	B1	2004	A	P-O5'	6.21	1.66	1.59
67	B1	1536	U	C5'-C4'	6.21	1.58	1.51
67	B1	2963	G	P-O5'	6.21	1.66	1.59
67	B1	2075	U	O3'-P	-6.21	1.53	1.61
21	A2	620	G	C3'-C2'	-6.21	1.46	1.52
25	AH	156	ARG	NE-CZ	6.21	1.41	1.33
36	Bf	3	ARG	CG-CD	6.21	1.67	1.51
54	BF	159	ARG	CZ-NH1	6.21	1.41	1.33
67	B1	1181	C	C2'-O2'	6.21	1.49	1.41
21	A2	1199	A	C4'-O4'	-6.21	1.37	1.45
67	B1	1228	G	P-O5'	6.21	1.66	1.59
67	B1	1355	A	O3'-P	-6.21	1.53	1.61
67	B1	1365	G	C4'-C3'	6.21	1.59	1.53
27	A0	45	G	C2'-C1'	-6.20	1.46	1.53
60	BS	37	ARG	CZ-NH1	6.20	1.41	1.33
67	B1	371	U	C2'-C1'	-6.20	1.46	1.53
21	A2	129	G	C3'-O3'	6.20	1.50	1.42
67	B1	2403	G	O4'-C1'	6.20	1.49	1.41
21	A2	682	A	C5'-C4'	6.20	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	698	A	C3'-C2'	-6.20	1.46	1.52
67	B1	475	U	C2'-C1'	6.20	1.60	1.53
67	B1	1756	C	C2'-C1'	-6.20	1.46	1.53
21	A2	1391	U	O3'-P	-6.20	1.53	1.61
67	B1	1359	C	C5'-C4'	6.20	1.58	1.51
67	B1	2552	C	C2'-C1'	-6.20	1.46	1.53
49	BQ	144	GLU	CD-OE2	6.20	1.32	1.25
67	B1	86	G	O4'-C1'	6.20	1.49	1.41
67	B1	135	U	O3'-P	-6.20	1.53	1.61
67	B1	165	G	C4'-O4'	-6.20	1.37	1.45
67	B1	1723	A	C2'-C1'	-6.20	1.46	1.53
67	B1	1894	A	C3'-O3'	6.20	1.50	1.42
67	B1	2234	C	P-O5'	-6.20	1.53	1.59
67	B1	2320	U	O3'-P	-6.19	1.53	1.61
67	B1	2482	G	C4'-C3'	6.19	1.59	1.53
21	A2	320	G	C2'-C1'	-6.19	1.46	1.53
24	AA	127	ARG	NE-CZ	6.19	1.41	1.33
67	B1	2243	G	C2'-C1'	6.19	1.60	1.53
21	A2	1010	G	C2'-C1'	-6.19	1.46	1.53
67	B1	548	U	C2'-C1'	-6.19	1.46	1.53
67	B1	2689	G	C3'-C2'	-6.19	1.46	1.52
21	A2	407	G	P-O5'	-6.19	1.53	1.59
21	A2	866	A	C2'-C1'	6.19	1.60	1.53
21	A2	1163	U	C2'-C1'	-6.19	1.46	1.53
67	B1	1497	C	P-O5'	-6.19	1.53	1.59
67	B1	1693	G	O4'-C1'	6.19	1.49	1.41
68	B3	19	G	O4'-C1'	6.19	1.49	1.41
19	AS	11	ARG	NE-CZ	6.18	1.41	1.33
21	A2	316	C	O4'-C1'	6.18	1.49	1.41
67	B1	362	A	C3'-O3'	6.18	1.50	1.42
67	B1	757	C	O4'-C1'	6.18	1.49	1.41
67	B1	1944	C	C5'-C4'	6.18	1.58	1.51
21	A2	1097	G	C3'-O3'	6.18	1.50	1.42
67	B1	74	A	O3'-P	-6.18	1.53	1.61
67	B1	1740	U	C5'-C4'	6.18	1.58	1.51
21	A2	1426	C	C5'-C4'	-6.18	1.44	1.51
67	B1	891	C	C3'-C2'	6.18	1.59	1.52
67	B1	1178	G	C4'-O4'	6.18	1.53	1.45
7	AB	161	ARG	NE-CZ	6.18	1.41	1.33
67	B1	1498	C	C3'-O3'	6.18	1.50	1.42
67	B1	2247	G	C2'-C1'	-6.18	1.46	1.53
21	A2	1189	G	O4'-C1'	6.18	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A0	1	G	C2'-C1'	-6.18	1.46	1.53
67	B1	556	G	P-O5'	-6.18	1.53	1.59
67	B1	894	C	O3'-P	-6.18	1.53	1.61
67	B1	1201	G	C3'-C2'	-6.18	1.46	1.52
67	B1	1749	C	O4'-C1'	6.18	1.49	1.41
67	B1	2291	G	O4'-C1'	6.18	1.49	1.41
21	A2	323	A	C2'-C1'	6.17	1.60	1.53
67	B1	303	A	O3'-P	-6.17	1.53	1.61
67	B1	2366	G	C2'-C1'	-6.17	1.46	1.53
67	B1	2935	A	P-O5'	-6.17	1.53	1.59
21	A2	1068	C	C5'-C4'	6.17	1.58	1.51
67	B1	1306	A	O4'-C1'	6.17	1.49	1.41
21	A2	81	C	O3'-P	6.17	1.68	1.61
67	B1	62	C	O4'-C1'	6.17	1.49	1.41
67	B1	1023	C	C5'-C4'	6.17	1.58	1.51
67	B1	2558	U	C2'-O2'	-6.17	1.33	1.41
67	B1	2627	C	C4'-C3'	6.17	1.59	1.53
21	A2	830	A	C3'-C2'	6.17	1.59	1.52
21	A2	911	C	C2'-C1'	-6.17	1.46	1.53
67	B1	1367	A	C3'-C2'	-6.17	1.46	1.52
67	B1	2796	C	C5'-C4'	6.17	1.58	1.51
21	A2	479	C	P-O5'	-6.17	1.53	1.59
53	BD	231	ALA	CA-CB	6.17	1.65	1.52
67	B1	487	U	C3'-C2'	6.17	1.59	1.52
67	B1	2879	G	C5'-C4'	6.17	1.58	1.51
16	AJ	53	ARG	CZ-NH1	6.17	1.41	1.33
21	A2	146	A	C3'-C2'	-6.17	1.46	1.52
21	A2	487	U	C4'-C3'	-6.17	1.46	1.53
67	B1	2579	G	C3'-C2'	6.17	1.59	1.52
67	B1	2775	G	C2'-C1'	-6.17	1.46	1.53
21	A2	667	G	C4'-O4'	6.17	1.53	1.45
67	B1	1732	C	C5'-C4'	6.16	1.58	1.51
21	A2	522	C	C2'-C1'	-6.16	1.46	1.53
67	B1	1726	A	C4'-O4'	6.16	1.53	1.45
67	B1	2102	A	O4'-C1'	6.16	1.49	1.41
67	B1	2126	G	O4'-C1'	-6.16	1.33	1.41
21	A2	202	G	C3'-C2'	-6.16	1.46	1.52
67	B1	326	C	C2'-C1'	-6.16	1.46	1.53
67	B1	890	G	C4'-C3'	6.16	1.59	1.53
67	B1	2407	G	C5'-C4'	6.16	1.58	1.51
68	B3	8	C	C5'-C4'	6.16	1.58	1.51
10	AD	52	ARG	CD-NE	6.16	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	826	C	P-O5'	-6.16	1.53	1.59
67	B1	1326	U	C2'-C1'	6.16	1.60	1.53
67	B1	2163	G	C3'-C2'	-6.16	1.46	1.52
67	B1	559	G	C4'-C3'	-6.16	1.46	1.53
67	B1	1487	U	C5'-C4'	6.16	1.58	1.51
67	B1	2614	C	C2'-C1'	-6.16	1.46	1.53
67	B1	3011	G	O4'-C1'	6.16	1.49	1.41
21	A2	36	G	C4'-C3'	-6.15	1.46	1.53
21	A2	1257	U	C5'-C4'	6.15	1.58	1.51
21	A2	1460	G	P-O5'	-6.15	1.53	1.59
67	B1	786	G	O4'-C1'	6.15	1.49	1.41
37	BU	73	ARG	CZ-NH2	6.15	1.41	1.33
54	BF	116	GLU	CD-OE1	6.15	1.32	1.25
67	B1	1444	A	C5'-C4'	6.15	1.58	1.51
67	B1	1528	A	C2'-C1'	-6.15	1.46	1.53
67	B1	1591	C	C5'-C4'	6.15	1.58	1.51
67	B1	1709	C	C5'-C4'	6.15	1.58	1.51
67	B1	2970	U	O3'-P	-6.15	1.53	1.61
11	A1	18	U	C4'-O4'	6.15	1.53	1.45
11	A1	44	G	P-O5'	6.15	1.66	1.59
21	A2	249	U	O4'-C1'	6.15	1.49	1.41
21	A2	567	A	C2'-C1'	-6.15	1.46	1.53
67	B1	321	C	C5'-C4'	6.15	1.58	1.51
67	B1	1047	A	P-O5'	6.15	1.65	1.59
67	B1	1226	G	O3'-P	-6.15	1.53	1.61
67	B1	2381	A	P-O5'	-6.15	1.53	1.59
67	B1	2663	G	O3'-P	-6.15	1.53	1.61
27	A0	60	U	O4'-C1'	6.15	1.49	1.41
35	BL	49	TRP	CA-CB	6.15	1.67	1.53
67	B1	1857	A	O4'-C1'	-6.15	1.33	1.41
67	B1	2050	U	C5'-C4'	6.15	1.58	1.51
67	B1	162	G	C4'-C3'	-6.15	1.46	1.53
67	B1	607	C	C5'-C4'	6.15	1.58	1.51
67	B1	1393	C	C5'-C4'	6.15	1.58	1.51
67	B1	1944	C	P-O5'	-6.15	1.53	1.59
67	B1	2808	C	C3'-C2'	-6.15	1.46	1.52
67	B1	2973	A	O4'-C1'	-6.15	1.33	1.41
21	A2	1348	C	O3'-P	-6.15	1.53	1.61
67	B1	2563	A	C4'-C3'	6.15	1.59	1.53
67	B1	909	A	C2'-C1'	6.14	1.60	1.53
67	B1	1284	C	O4'-C1'	6.14	1.49	1.41
67	B1	1397	U	C5'-C4'	6.14	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1479	U	O4'-C1'	6.14	1.49	1.41
67	B1	996	U	C4'-O4'	-6.14	1.37	1.45
67	B1	2350	G	C4'-O4'	-6.14	1.37	1.45
11	A1	6	G	O4'-C1'	6.14	1.49	1.41
67	B1	29	U	C2'-C1'	-6.14	1.46	1.53
67	B1	2897	C	C3'-O3'	6.14	1.50	1.42
21	A2	223	G	C2'-C1'	-6.14	1.46	1.53
67	B1	203	G	C2'-C1'	-6.14	1.46	1.53
67	B1	217	A	C3'-C2'	-6.14	1.46	1.52
67	B1	2379	G	P-O5'	-6.14	1.53	1.59
21	A2	118	U	O4'-C1'	6.13	1.49	1.41
21	A2	198	A	O4'-C1'	-6.13	1.33	1.41
67	B1	1825	G	C2'-C1'	6.13	1.60	1.53
67	B1	2372	C	C5'-C4'	-6.13	1.44	1.51
11	A1	10	G	C2'-C1'	-6.13	1.46	1.53
21	A2	109	U	O4'-C1'	6.13	1.49	1.41
21	A2	860	G	O4'-C1'	-6.13	1.33	1.41
67	B1	2413	G	C2'-C1'	-6.13	1.46	1.53
67	B1	2846	A	O4'-C1'	-6.13	1.33	1.41
68	B3	44	C	C3'-C2'	-6.13	1.46	1.52
12	AN	106	GLU	CG-CD	6.13	1.61	1.51
21	A2	1035	C	C5'-C4'	6.13	1.58	1.51
7	AB	64	PRO	N-CD	-6.13	1.39	1.47
21	A2	29	G	C3'-C2'	-6.13	1.46	1.52
21	A2	1050	G	C2'-C1'	-6.13	1.46	1.53
22	AY	8	TYR	CZ-OH	6.13	1.48	1.37
67	B1	1888	G	O4'-C1'	6.13	1.49	1.41
33	BC	37	ARG	CD-NE	6.13	1.56	1.46
67	B1	561	C	P-O5'	6.13	1.65	1.59
67	B1	788	A	C4'-O4'	-6.13	1.37	1.45
67	B1	1869	U	O4'-C1'	6.13	1.49	1.41
67	B1	796	C	C5'-C4'	6.12	1.58	1.51
67	B1	1621	G	O4'-C1'	6.12	1.49	1.41
57	BZ	8	ARG	NE-CZ	6.12	1.41	1.33
67	B1	124	C	C3'-O3'	6.12	1.50	1.42
67	B1	180	A	C4'-O4'	6.12	1.53	1.45
67	B1	1078	G	C2'-C1'	6.12	1.60	1.53
67	B1	1136	G	C5'-C4'	6.12	1.58	1.51
67	B1	2142	U	O4'-C1'	6.12	1.49	1.41
67	B1	821	U	O3'-P	-6.12	1.53	1.61
67	B1	1626	A	C2'-C1'	-6.12	1.46	1.53
32	BO	6	ARG	CD-NE	6.12	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	660	U	O3'-P	-6.12	1.53	1.61
21	A2	218	C	P-O5'	-6.12	1.53	1.59
21	A2	1093	C	O3'-P	-6.12	1.53	1.61
67	B1	647	G	O4'-C1'	6.12	1.49	1.41
21	A2	1335	A	P-O5'	6.12	1.65	1.59
67	B1	324	C	O4'-C1'	6.12	1.49	1.41
67	B1	960	C	O3'-P	-6.12	1.53	1.61
21	A2	1052	U	C2'-C1'	6.11	1.60	1.53
67	B1	2374	C	C4'-C3'	6.11	1.59	1.53
67	B1	2730	U	C2'-C1'	6.11	1.60	1.53
21	A2	220	G	O3'-P	-6.11	1.53	1.61
67	B1	1492	C	C2'-C1'	-6.11	1.46	1.53
67	B1	2331	A	O3'-P	-6.11	1.53	1.61
67	B1	412	G	O3'-P	-6.11	1.53	1.61
67	B1	2254	U	C2'-C1'	-6.11	1.46	1.53
67	B1	2946	C	C2'-C1'	-6.11	1.46	1.53
21	A2	1126	G	C5'-C4'	6.11	1.58	1.51
28	B6	55	TYR	CZ-OH	6.11	1.48	1.37
21	A2	1367	C	C5'-C4'	6.11	1.58	1.51
35	BL	10	LYS	CA-C	6.11	1.68	1.52
67	B1	642	G	O4'-C1'	-6.11	1.33	1.41
67	B1	939	A	P-O5'	-6.11	1.53	1.59
67	B1	1036	C	C3'-C2'	6.11	1.59	1.52
67	B1	1831	C	O4'-C1'	6.11	1.49	1.41
68	B3	39	C	C5'-C4'	6.11	1.58	1.51
67	B1	2205	A	C2'-C1'	-6.10	1.46	1.53
67	B1	2497	G	C5'-C4'	6.10	1.58	1.51
21	A2	266	A	C2'-C1'	-6.10	1.46	1.53
21	A2	345	G	O3'-P	-6.10	1.53	1.61
21	A2	878	U	O4'-C1'	6.10	1.49	1.41
67	B1	813	G	P-O5'	-6.10	1.53	1.59
67	B1	2619	U	P-O5'	-6.10	1.53	1.59
21	A2	1308	U	C4'-C3'	6.10	1.59	1.53
67	B1	2948	A	O4'-C1'	6.10	1.49	1.41
21	A2	884	G	O3'-P	-6.10	1.53	1.61
27	A0	8	U	O4'-C1'	6.10	1.49	1.41
40	BE	153	ARG	NE-CZ	6.10	1.41	1.33
67	B1	567	G	O3'-P	-6.10	1.53	1.61
67	B1	1676	G	P-O5'	6.10	1.65	1.59
67	B1	2089	C	O4'-C1'	6.10	1.49	1.41
67	B1	2240	G	C2'-C1'	-6.10	1.46	1.53
13	AX	59	GLU	CB-CG	6.10	1.63	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1128	U	C3'-C2'	6.10	1.59	1.52
67	B1	527	G	P-O5'	-6.10	1.53	1.59
67	B1	1063	C	C2'-C1'	-6.10	1.46	1.53
68	B3	106	G	C2'-C1'	6.10	1.60	1.53
67	B1	591	G	O4'-C1'	6.09	1.49	1.41
67	B1	1779	C	P-O5'	-6.09	1.53	1.59
68	B3	12	G	O4'-C1'	6.09	1.49	1.41
21	A2	1160	C	C5'-C4'	6.09	1.58	1.51
52	BB	9	ARG	NE-CZ	6.09	1.41	1.33
67	B1	1157	U	O4'-C1'	6.09	1.49	1.41
67	B1	1225	A	O3'-P	-6.09	1.53	1.61
11	A1	6	G	C2'-C1'	6.09	1.60	1.53
67	B1	1808	G	C2'-C1'	-6.09	1.46	1.53
67	B1	1972	C	O4'-C1'	6.09	1.49	1.41
67	B1	2033	G	O3'-P	-6.09	1.53	1.61
67	B1	2499	U	O4'-C1'	6.09	1.49	1.41
67	B1	2724	A	O4'-C1'	6.09	1.49	1.41
21	A2	826	C	C4'-O4'	6.09	1.53	1.45
21	A2	1017	U	O3'-P	-6.09	1.53	1.61
67	B1	1541	U	C4'-C3'	-6.09	1.46	1.53
67	B1	338	A	O4'-C1'	6.09	1.49	1.41
32	BO	147	GLU	CD-OE2	6.09	1.32	1.25
65	BJ	129	ARG	CD-NE	6.09	1.56	1.46
67	B1	1774	A	O4'-C1'	-6.09	1.33	1.41
67	B1	2721	C	P-O5'	-6.09	1.53	1.59
67	B1	1334	G	O4'-C1'	6.08	1.49	1.41
2	AK	10	ARG	CZ-NH2	6.08	1.41	1.33
12	AN	147	ARG	CZ-NH2	6.08	1.41	1.33
21	A2	519	G	O4'-C1'	6.08	1.49	1.41
32	BO	118	PHE	CG-CD2	6.08	1.47	1.38
21	A2	243	G	C4'-C3'	-6.08	1.46	1.53
21	A2	315	A	C2'-O2'	-6.08	1.33	1.41
53	BD	251	ARG	CZ-NH1	6.08	1.41	1.33
67	B1	484	C	C4'-O4'	-6.08	1.37	1.45
21	A2	514	U	C2'-C1'	-6.08	1.46	1.53
67	B1	1021	G	C5'-C4'	6.08	1.58	1.51
67	B1	1928	A	O4'-C1'	6.08	1.49	1.41
21	A2	90	C	P-O5'	-6.08	1.53	1.59
67	B1	1959	C	P-O5'	-6.08	1.53	1.59
67	B1	2902	G	O3'-P	-6.08	1.53	1.61
67	B1	2921	U	C4'-O4'	-6.08	1.37	1.45
21	A2	864	G	C2'-O2'	-6.08	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	112	C	O4'-C1'	6.08	1.49	1.41
11	A1	2	G	C3'-O3'	6.08	1.50	1.42
21	A2	572	U	P-O5'	6.08	1.65	1.59
21	A2	1316	U	C2'-C1'	-6.08	1.46	1.53
67	B1	569	G	C2'-C1'	-6.08	1.46	1.53
67	B1	2163	G	C2'-C1'	6.08	1.60	1.53
67	B1	2985	U	C4'-C3'	6.08	1.59	1.53
21	A2	177	A	C3'-C2'	6.07	1.59	1.52
47	BI	70	ARG	CZ-NH2	6.07	1.41	1.33
21	A2	529	C	C5'-C4'	6.07	1.58	1.51
21	A2	944	C	C2'-C1'	-6.07	1.46	1.53
67	B1	702	G	C4'-O4'	-6.07	1.37	1.45
67	B1	252	A	P-O5'	-6.07	1.53	1.59
67	B1	1644	G	C3'-C2'	6.07	1.59	1.52
67	B1	2688	C	C2'-C1'	-6.07	1.46	1.53
67	B1	645	U	C4'-C3'	6.07	1.59	1.53
67	B1	1845	C	C4'-O4'	6.07	1.53	1.45
67	B1	2230	G	C5'-C4'	6.07	1.58	1.51
37	BU	39	TYR	CE1-CZ	6.07	1.46	1.38
67	B1	2535	C	O3'-P	-6.07	1.53	1.61
67	B1	2644	G	C2'-O2'	6.07	1.49	1.41
67	B1	2702	A	P-O5'	-6.07	1.53	1.59
21	A2	1415	U	C2'-C1'	-6.07	1.46	1.53
31	BY	45	GLY	N-CA	-6.07	1.36	1.46
32	BO	110	PRO	N-CD	-6.07	1.39	1.47
67	B1	723	A	C5'-C4'	6.07	1.58	1.51
67	B1	1146	U	C5'-C4'	6.07	1.58	1.51
67	B1	2685	G	P-O5'	6.06	1.65	1.59
67	B1	826	C	C4'-C3'	-6.06	1.46	1.53
67	B1	2190	A	C5'-C4'	6.06	1.58	1.51
67	B1	2295	C	P-O5'	-6.06	1.53	1.59
67	B1	2638	G	C4'-O4'	-6.06	1.37	1.45
68	B3	109	A	C2'-C1'	6.06	1.60	1.53
21	A2	348	C	C3'-C2'	-6.06	1.46	1.52
21	A2	762	G	C5'-C4'	6.06	1.58	1.51
20	A3	77	TYR	CG-CD2	6.06	1.47	1.39
21	A2	377	A	C2'-C1'	-6.06	1.46	1.53
21	A2	463	G	P-O5'	-6.06	1.53	1.59
67	B1	829	G	C5'-C4'	6.06	1.58	1.51
67	B1	1109	G	C5'-C4'	6.06	1.58	1.51
21	A2	140	C	O3'-P	-6.06	1.53	1.61
21	A2	781	U	C4'-O4'	6.06	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	885	G	C3'-C2'	-6.06	1.46	1.52
67	B1	523	C	C3'-C2'	6.06	1.59	1.52
67	B1	959	U	P-O5'	-6.06	1.53	1.59
67	B1	1354	G	O4'-C1'	6.06	1.49	1.41
21	A2	952	A	O3'-P	-6.06	1.53	1.61
67	B1	2327	C	C4'-C3'	6.06	1.59	1.53
21	A2	58	U	O4'-C1'	6.05	1.49	1.41
21	A2	208	U	C5'-C4'	6.05	1.58	1.51
21	A2	1027	C	C3'-C2'	6.05	1.59	1.52
67	B1	711	C	C4'-O4'	-6.05	1.37	1.45
68	B3	78	C	P-O5'	-6.05	1.53	1.59
6	AC	89	TYR	CG-CD1	6.05	1.47	1.39
67	B1	381	G	C4'-O4'	6.05	1.53	1.45
15	AE	81	TYR	CB-CG	6.05	1.60	1.51
67	B1	1276	G	O3'-P	-6.05	1.53	1.61
67	B1	2347	G	C5'-C4'	6.05	1.58	1.51
67	B1	3030	A	C2'-C1'	6.05	1.60	1.53
21	A2	735	A	P-O5'	-6.05	1.53	1.59
65	BJ	129	ARG	NE-CZ	6.05	1.41	1.33
67	B1	2187	C	P-O5'	-6.05	1.53	1.59
67	B1	1188	C	C4'-O4'	6.05	1.53	1.45
67	B1	1310	A	C5'-C4'	6.05	1.58	1.51
11	A1	40	U	O4'-C1'	6.05	1.49	1.41
21	A2	158	U	O4'-C1'	6.05	1.49	1.41
21	A2	1187	A	O4'-C1'	6.05	1.49	1.41
67	B1	625	A	O3'-P	-6.05	1.53	1.61
67	B1	1507	A	C3'-C2'	-6.05	1.46	1.52
67	B1	2873	G	C2'-C1'	6.05	1.60	1.53
38	Bb	11	ARG	CD-NE	6.04	1.56	1.46
67	B1	243	G	C5'-C4'	6.04	1.58	1.51
21	A2	1377	G	C5'-C4'	6.04	1.58	1.51
21	A2	792	C	C5'-C4'	6.04	1.58	1.51
32	BO	136	GLU	CD-OE1	6.04	1.32	1.25
67	B1	325	G	C5'-C4'	6.04	1.58	1.51
21	A2	386	C	P-O5'	-6.04	1.53	1.59
21	A2	539	C	O3'-P	-6.04	1.53	1.61
67	B1	704	G	P-O5'	-6.04	1.53	1.59
67	B1	2864	G	O4'-C1'	6.04	1.49	1.41
68	B3	10	U	C4'-C3'	-6.04	1.46	1.53
67	B1	1305	C	C4'-C3'	6.04	1.59	1.53
28	B6	18	GLU	CD-OE1	-6.04	1.19	1.25
67	B1	409	C	C4'-O4'	6.04	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2817	U	C4'-O4'	6.04	1.53	1.45
21	A2	785	U	C3'-C2'	-6.03	1.46	1.52
67	B1	2755	G	C2'-C1'	-6.03	1.46	1.53
67	B1	2930	G	C2'-C1'	6.03	1.59	1.53
68	B3	28	C	O4'-C1'	6.03	1.49	1.41
67	B1	829	G	C2'-C1'	-6.03	1.46	1.53
67	B1	1618	G	C5'-C4'	6.03	1.58	1.51
30	AU	42	GLU	CD-OE1	6.03	1.32	1.25
67	B1	209	G	O4'-C1'	6.03	1.49	1.41
67	B1	1565	G	O3'-P	6.03	1.68	1.61
21	A2	420	C	O3'-P	-6.03	1.53	1.61
67	B1	181	U	O4'-C1'	-6.03	1.33	1.41
27	A0	10	G	C4'-O4'	-6.03	1.37	1.45
62	BN	109	GLY	CA-C	-6.03	1.42	1.51
67	B1	862	G	C2'-C1'	6.03	1.59	1.53
67	B1	1215	C	C2'-C1'	-6.03	1.46	1.53
67	B1	2937	U	C4'-C3'	6.03	1.59	1.53
15	AE	84	PRO	N-CA	-6.03	1.37	1.47
67	B1	777	A	C2'-O2'	-6.03	1.33	1.41
67	B1	1182	C	C5'-C4'	6.03	1.58	1.51
67	B1	1563	G	O3'-P	-6.03	1.53	1.61
67	B1	2575	U	O4'-C1'	6.03	1.49	1.41
67	B1	2681	A	C3'-C2'	6.02	1.59	1.52
67	B1	3034	C	O3'-P	-6.02	1.53	1.61
21	A2	318	C	C3'-C2'	6.02	1.59	1.52
21	A2	641	A	C2'-C1'	-6.02	1.46	1.53
21	A2	1088	U	C4'-O4'	6.02	1.53	1.45
67	B1	561	C	O3'-P	-6.02	1.53	1.61
67	B1	708	A	O4'-C1'	6.02	1.49	1.41
67	B1	2417	G	C2'-C1'	6.02	1.59	1.53
67	B1	1373	C	O4'-C1'	6.02	1.49	1.41
10	AD	147	GLU	CB-CG	6.02	1.63	1.52
11	A1	21	G	C3'-C2'	-6.02	1.46	1.52
21	A2	1216	A	O3'-P	-6.02	1.53	1.61
30	AU	128	PHE	CG-CD1	6.02	1.47	1.38
67	B1	312	G	O4'-C1'	6.02	1.49	1.41
67	B1	1488	C	C4'-C3'	6.02	1.59	1.53
21	A2	332	C	C3'-C2'	6.02	1.59	1.52
21	A2	420	C	C5'-C4'	6.02	1.58	1.51
67	B1	2027	G	C5'-C4'	6.02	1.58	1.51
67	B1	2199	U	C4'-C3'	6.02	1.59	1.53
21	A2	1053	A	O3'-P	-6.02	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1687	C	O4'-C1'	6.02	1.49	1.41
67	B1	1916	U	C5'-C4'	6.02	1.58	1.51
67	B1	2922	G	P-O5'	-6.02	1.53	1.59
3	AI	24	GLU	CD-OE2	6.01	1.32	1.25
67	B1	180	A	O3'-P	-6.01	1.53	1.61
67	B1	1497	C	C5'-C4'	6.01	1.58	1.51
25	AH	85	PHE	CA-C	6.01	1.68	1.52
27	A0	23	A	O3'-P	-6.01	1.53	1.61
58	BP	30	TRP	CD1-NE1	6.01	1.48	1.38
67	B1	1098	C	P-O5'	-6.01	1.53	1.59
67	B1	1749	C	C5'-C4'	6.01	1.58	1.51
67	B1	2383	A	C3'-C2'	-6.01	1.46	1.52
35	BL	11	LEU	CA-CB	6.01	1.67	1.53
67	B1	526	C	P-O5'	6.01	1.65	1.59
67	B1	1685	C	O3'-P	-6.01	1.53	1.61
67	B1	1170	G	O4'-C1'	-6.01	1.33	1.41
67	B1	2044	C	O3'-P	-6.01	1.53	1.61
67	B1	302	U	C4'-C3'	6.01	1.59	1.53
21	A2	163	C	C4'-C3'	6.00	1.59	1.53
21	A2	693	C	P-O5'	-6.00	1.53	1.59
21	A2	1472	G	C4'-C3'	-6.00	1.46	1.53
11	A1	68	C	P-O5'	-6.00	1.53	1.59
67	B1	582	A	P-O5'	-6.00	1.53	1.59
67	B1	2936	U	C5'-C4'	6.00	1.58	1.51
24	AA	128	ARG	CZ-NH1	6.00	1.40	1.33
54	BF	11	VAL	CA-CB	-6.00	1.42	1.54
67	B1	35	G	C4'-C3'	6.00	1.59	1.53
48	BR	23	ARG	CZ-NH2	6.00	1.40	1.33
67	B1	250	G	C5'-C4'	-6.00	1.44	1.51
67	B1	1104	A	C5'-C4'	6.00	1.58	1.51
67	B1	301	G	C2'-C1'	6.00	1.59	1.53
68	B3	75	G	C2'-C1'	6.00	1.59	1.53
21	A2	374	G	P-O5'	-6.00	1.53	1.59
41	Ba	61	ARG	CZ-NH2	6.00	1.40	1.33
67	B1	1287	G	C2'-O2'	-6.00	1.33	1.41
68	B3	40	G	P-O5'	-6.00	1.53	1.59
21	A2	348	C	P-O5'	-5.99	1.53	1.59
21	A2	1450	U	O3'-P	-5.99	1.53	1.61
25	AH	50	ARG	NE-CZ	5.99	1.40	1.33
67	B1	306	G	C5'-C4'	5.99	1.58	1.51
67	B1	1920	A	O5'-C5'	5.99	1.54	1.44
67	B1	2518	G	O4'-C1'	-5.99	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1264	G	O3'-P	-5.99	1.53	1.61
58	BP	17	TYR	CG-CD1	5.99	1.47	1.39
67	B1	392	G	C3'-C2'	-5.99	1.46	1.52
67	B1	566	G	O3'-P	-5.99	1.53	1.61
67	B1	1525	G	P-O5'	-5.99	1.53	1.59
67	B1	2479	C	C3'-C2'	-5.99	1.46	1.52
67	B1	2693	G	O4'-C1'	5.99	1.49	1.41
21	A2	469	U	C2'-C1'	-5.99	1.46	1.53
21	A2	606	U	O4'-C1'	5.99	1.49	1.41
21	A2	1011	C	P-O5'	-5.99	1.53	1.59
21	A2	1474	A	P-O5'	-5.99	1.53	1.59
67	B1	34	C	C3'-C2'	5.99	1.59	1.52
67	B1	1672	G	C3'-O3'	5.99	1.50	1.42
67	B1	2273	U	O4'-C1'	5.99	1.49	1.41
67	B1	2374	C	C2'-C1'	-5.99	1.46	1.53
67	B1	2599	C	P-O5'	-5.99	1.53	1.59
67	B1	31	G	C2'-C1'	-5.98	1.46	1.53
67	B1	459	C	C4'-C3'	5.98	1.59	1.53
67	B1	527	G	C2'-C1'	-5.98	1.46	1.53
67	B1	1527	G	C5'-C4'	5.98	1.58	1.51
21	A2	959	G	O3'-P	-5.98	1.53	1.61
21	A2	1294	G	O4'-C1'	5.98	1.49	1.41
23	AT	38	ARG	NE-CZ	5.98	1.40	1.33
67	B1	791	C	C4'-C3'	-5.98	1.46	1.52
67	B1	1619	C	C5'-C4'	5.98	1.58	1.51
67	B1	1749	C	O3'-P	-5.98	1.53	1.61
67	B1	1942	G	P-O5'	-5.98	1.53	1.59
67	B1	2836	G	C4'-C3'	5.98	1.59	1.53
67	B1	180	A	C3'-C2'	-5.98	1.46	1.52
67	B1	259	A	P-O5'	-5.98	1.53	1.59
68	B3	108	G	C2'-C1'	-5.98	1.46	1.53
67	B1	723	A	C2'-C1'	-5.98	1.46	1.53
67	B1	737	G	C4'-C3'	-5.98	1.46	1.52
67	B1	1821	C	O4'-C1'	5.98	1.49	1.41
67	B1	2794	G	C5'-C4'	5.97	1.58	1.51
67	B1	869	A	C4'-O4'	-5.97	1.37	1.45
67	B1	1255	C	C2'-C1'	5.97	1.59	1.53
67	B1	1514	C	C5'-C4'	5.97	1.58	1.51
67	B1	1771	C	O3'-P	-5.97	1.53	1.61
16	AJ	92	ARG	CZ-NH1	5.97	1.40	1.33
21	A2	272	C	O3'-P	-5.97	1.53	1.61
21	A2	765	U	P-O5'	-5.97	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	BO	92	TYR	CB-CG	-5.97	1.42	1.51
54	BF	132	VAL	CB-CG1	5.97	1.65	1.52
67	B1	604	A	O3'-P	-5.97	1.53	1.61
67	B1	2226	G	O4'-C1'	5.97	1.49	1.41
21	A2	1323	A	C5'-C4'	5.97	1.58	1.51
67	B1	482	A	C4'-O4'	5.97	1.53	1.45
21	A2	441	U	P-O5'	-5.97	1.53	1.59
21	A2	610	G	O3'-P	5.97	1.68	1.61
67	B1	2691	G	O4'-C1'	5.97	1.49	1.41
11	A1	32	A	P-O5'	5.96	1.65	1.59
11	A1	47	G	C4'-C3'	5.96	1.59	1.53
21	A2	363	C	C3'-C2'	5.96	1.59	1.52
21	A2	1272	G	C4'-O4'	5.96	1.53	1.45
67	B1	1233	U	O3'-P	-5.96	1.53	1.61
21	A2	39	U	C3'-C2'	-5.96	1.46	1.52
21	A2	245	U	C2'-C1'	5.96	1.59	1.53
67	B1	1581	A	C4'-O4'	5.96	1.53	1.45
11	A1	48	U	C4'-O4'	5.96	1.53	1.45
27	A0	44	C	O3'-P	-5.96	1.53	1.61
67	B1	191	U	O4'-C1'	5.96	1.49	1.41
67	B1	1356	A	C4'-C3'	5.96	1.59	1.53
67	B1	1830	U	C5'-C4'	5.96	1.58	1.51
67	B1	2770	A	C5'-C4'	5.96	1.58	1.51
67	B1	2012	G	C4'-O4'	5.96	1.53	1.45
67	B1	2506	G	C2'-C1'	5.96	1.59	1.53
21	A2	458	G	C2-N3	5.96	1.37	1.32
32	BO	179	GLU	CD-OE2	5.96	1.32	1.25
67	B1	1531	C	O4'-C1'	5.96	1.49	1.41
67	B1	1849	A	C4'-C3'	5.96	1.59	1.53
67	B1	2252	C	C4'-C3'	5.96	1.59	1.53
67	B1	2754	A	P-O5'	-5.96	1.53	1.59
68	B3	45	C	O4'-C1'	5.96	1.49	1.41
68	B3	116	C	C2'-C1'	-5.96	1.46	1.53
67	B1	1599	A	O4'-C1'	-5.96	1.33	1.41
67	B1	2239	C	P-O5'	-5.96	1.53	1.59
67	B1	939	A	C5'-C4'	5.96	1.58	1.51
67	B1	1771	C	C4'-O4'	-5.96	1.37	1.45
21	A2	54	C	C2'-C1'	-5.95	1.46	1.53
64	Bc	41	ARG	CZ-NH1	5.95	1.40	1.33
67	B1	1410	A	O3'-P	-5.95	1.54	1.61
21	A2	721	A	C2'-C1'	5.95	1.59	1.53
21	A2	1018	C	C2'-C1'	-5.95	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1157	G	P-O5'	-5.95	1.53	1.59
67	B1	1516	C	C3'-C2'	-5.95	1.46	1.52
67	B1	2857	C	O3'-P	-5.95	1.54	1.61
21	A2	535	U	C5'-C4'	5.95	1.58	1.51
21	A2	888	A	C2'-C1'	-5.95	1.46	1.53
67	B1	1185	A	C5'-C4'	5.95	1.58	1.51
67	B1	2995	A	C2'-C1'	5.95	1.59	1.53
21	A2	76	U	O4'-C1'	5.95	1.49	1.41
21	A2	35	G	C2'-C1'	-5.95	1.46	1.53
21	A2	1070	C	C4'-O4'	-5.95	1.37	1.45
27	A0	23	A	C2'-C1'	-5.95	1.46	1.53
46	BA	24	PHE	CB-CG	5.95	1.61	1.51
67	B1	1702	C	C4'-C3'	5.95	1.59	1.53
67	B1	2075	U	C2'-C1'	5.95	1.59	1.53
67	B1	2845	C	C2'-C1'	-5.95	1.46	1.53
21	A2	937	A	C2'-C1'	-5.94	1.46	1.53
21	A2	1423	A	O3'-P	-5.94	1.54	1.61
27	A0	31	A	P-O5'	-5.94	1.53	1.59
67	B1	1434	C	O4'-C1'	5.94	1.49	1.41
67	B1	1845	C	C3'-C2'	5.94	1.59	1.52
21	A2	1064	C	O4'-C1'	5.94	1.49	1.41
21	A2	1157	G	C3'-C2'	-5.94	1.46	1.52
21	A2	1328	G	C4'-O4'	-5.94	1.37	1.45
25	AH	12	PRO	CA-C	-5.94	1.41	1.52
67	B1	532	G	P-O5'	-5.94	1.53	1.59
67	B1	2949	G	C3'-C2'	-5.94	1.46	1.52
15	AE	8	ARG	CZ-NH1	5.94	1.40	1.33
19	AS	5	ARG	CD-NE	5.94	1.56	1.46
67	B1	192	U	O4'-C1'	5.94	1.49	1.41
67	B1	236	G	C2'-C1'	-5.94	1.46	1.53
67	B1	1524	A	O4'-C1'	-5.94	1.33	1.41
21	A2	1228	A	P-O5'	5.94	1.65	1.59
67	B1	468	A	C4'-C3'	-5.94	1.46	1.52
67	B1	468	A	P-O5'	-5.94	1.53	1.59
67	B1	1170	G	C5'-C4'	5.94	1.58	1.51
67	B1	2257	A	C5'-C4'	5.94	1.58	1.51
67	B1	2955	G	C2'-C1'	-5.94	1.46	1.53
21	A2	489	C	C2'-C1'	-5.93	1.46	1.53
67	B1	773	U	C3'-O3'	5.93	1.50	1.42
67	B1	1305	C	O3'-P	-5.93	1.54	1.61
67	B1	2013	A	O3'-P	-5.93	1.54	1.61
67	B1	2124	C	C4'-O4'	-5.93	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2483	U	C4'-C3'	5.93	1.59	1.53
21	A2	518	U	P-O5'	5.93	1.65	1.59
27	A0	20	U	P-O5'	-5.93	1.53	1.59
67	B1	1517	G	O4'-C1'	-5.93	1.33	1.41
67	B1	2971	U	C2'-C1'	-5.93	1.46	1.53
16	AJ	7	ARG	CZ-NH2	5.93	1.40	1.33
67	B1	218	A	C2'-C1'	5.93	1.59	1.53
27	A0	7	G	P-O5'	-5.93	1.53	1.59
58	BP	41	ARG	CZ-NH1	5.93	1.40	1.33
67	B1	939	A	C3'-C2'	5.93	1.59	1.52
67	B1	2783	C	C2'-C1'	-5.93	1.46	1.53
67	B1	2031	G	C2'-C1'	5.93	1.59	1.53
21	A2	198	A	P-O5'	-5.93	1.53	1.59
21	A2	707	A	P-O5'	5.93	1.65	1.59
44	BW	45	ARG	NE-CZ	5.93	1.40	1.33
58	BP	3	ARG	CZ-NH2	5.93	1.40	1.33
67	B1	1285	C	O4'-C1'	5.93	1.49	1.41
67	B1	1501	G	C5'-C4'	5.93	1.58	1.51
67	B1	227	G	P-O5'	5.92	1.65	1.59
67	B1	595	C	O4'-C1'	5.92	1.49	1.41
67	B1	2460	A	P-O5'	-5.92	1.53	1.59
40	BE	157	ARG	CD-NE	5.92	1.56	1.46
67	B1	583	A	O3'-P	-5.92	1.54	1.61
67	B1	2040	A	C2'-C1'	5.92	1.59	1.53
67	B1	2706	C	C2'-C1'	-5.92	1.46	1.53
67	B1	74	A	O4'-C1'	5.92	1.49	1.41
67	B1	1527	G	O4'-C1'	5.92	1.49	1.41
28	AV	60	PHE	CG-CD1	5.92	1.47	1.38
67	B1	2437	G	O4'-C1'	5.92	1.49	1.41
21	A2	1108	U	C2'-C1'	-5.92	1.46	1.53
67	B1	1296	A	O3'-P	5.92	1.68	1.61
38	Bb	117	ARG	NE-CZ	5.92	1.40	1.33
67	B1	806	C	C3'-C2'	5.92	1.59	1.52
67	B1	1921	U	O4'-C1'	5.92	1.49	1.41
67	B1	2528	U	C5'-C4'	5.92	1.58	1.51
21	A2	1029	G	C3'-O3'	5.92	1.50	1.42
21	A2	289	C	C2'-C1'	-5.91	1.46	1.53
67	B1	1165	C	O3'-P	-5.91	1.54	1.61
67	B1	2569	G	C2'-O2'	-5.91	1.33	1.41
67	B1	2730	U	C4'-O4'	-5.91	1.37	1.45
67	B1	2944	G	C3'-O3'	5.91	1.50	1.42
67	B1	53	A	O4'-C1'	-5.91	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	446	G	O3'-P	-5.91	1.54	1.61
67	B1	2244	G	C2'-C1'	-5.91	1.46	1.53
21	A2	662	C	P-O5'	-5.91	1.53	1.59
67	B1	675	G	C4'-C3'	5.91	1.59	1.53
68	B3	56	C	O3'-P	-5.91	1.54	1.61
14	AM	84	ARG	CZ-NH2	5.91	1.40	1.33
21	A2	508	C	O4'-C1'	5.91	1.49	1.41
67	B1	1296	A	P-O5'	-5.91	1.53	1.59
59	BM	32	ARG	CZ-NH2	5.91	1.40	1.33
62	BN	20	ARG	CZ-NH2	5.91	1.40	1.33
67	B1	2570	A	O3'-P	-5.91	1.54	1.61
21	A2	526	A	P-O5'	-5.90	1.53	1.59
43	Bk	43	ARG	CD-NE	5.90	1.56	1.46
21	A2	13	C	C3'-O3'	5.90	1.50	1.42
67	B1	1048	C	C3'-O3'	5.90	1.50	1.42
67	B1	1730	C	O4'-C1'	5.90	1.49	1.41
67	B1	2853	A	O3'-P	-5.90	1.54	1.61
67	B1	2920	C	P-O5'	-5.90	1.53	1.59
54	BF	34	GLU	CG-CD	5.90	1.60	1.51
67	B1	1999	G	P-O5'	-5.90	1.53	1.59
67	B1	2099	G	O4'-C1'	-5.90	1.33	1.41
67	B1	2315	G	C3'-C2'	-5.90	1.46	1.52
67	B1	2545	A	C4'-C3'	5.90	1.59	1.53
6	AC	105	ARG	NE-CZ	5.90	1.40	1.33
21	A2	230	C	O3'-P	-5.90	1.54	1.61
21	A2	301	G	O4'-C1'	5.90	1.49	1.41
21	A2	608	G	C2'-C1'	-5.90	1.46	1.53
21	A2	1466	G	P-O5'	-5.90	1.53	1.59
67	B1	718	G	C2'-C1'	-5.90	1.46	1.53
21	A2	303	G	C2'-C1'	-5.90	1.46	1.53
67	B1	80	G	C2'-C1'	-5.90	1.46	1.53
67	B1	280	A	O4'-C1'	5.90	1.49	1.41
67	B1	1714	G	C2'-C1'	-5.90	1.46	1.53
16	AJ	16	ARG	CZ-NH2	5.89	1.40	1.33
67	B1	976	C	C4'-O4'	5.89	1.53	1.45
67	B1	1038	U	C3'-C2'	5.89	1.59	1.52
67	B1	1697	G	O3'-P	-5.89	1.54	1.61
67	B1	2256	G	C5'-C4'	5.89	1.58	1.51
67	B1	2628	U	C5'-C4'	5.89	1.58	1.51
21	A2	725	C	C2'-C1'	-5.89	1.46	1.53
21	A2	877	A	P-O5'	5.89	1.65	1.59
21	A2	1117	A	C3'-C2'	5.89	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	189	U	O4'-C1'	5.89	1.49	1.41
67	B1	465	C	P-O5'	-5.89	1.53	1.59
67	B1	774	G	C2'-C1'	-5.89	1.46	1.53
67	B1	2296	A	O4'-C1'	5.89	1.49	1.41
67	B1	2480	G	C4'-C3'	5.89	1.59	1.53
67	B1	2507	C	O3'-P	-5.89	1.54	1.61
67	B1	2515	U	P-O5'	-5.89	1.53	1.59
21	A2	360	A	O3'-P	-5.89	1.54	1.61
21	A2	502	U	O3'-P	-5.89	1.54	1.61
21	A2	595	U	O4'-C1'	5.89	1.49	1.41
21	A2	849	U	C4'-C3'	5.89	1.59	1.53
67	B1	201	C	C2'-C1'	-5.89	1.46	1.53
67	B1	2493	A	P-O5'	-5.89	1.53	1.59
67	B1	2760	A	O4'-C1'	5.89	1.49	1.41
13	AX	62	ARG	CD-NE	5.89	1.56	1.46
21	A2	1433	C	C2'-C1'	-5.89	1.46	1.53
36	Bf	12	ARG	CD-NE	-5.89	1.36	1.46
67	B1	727	A	O4'-C1'	5.89	1.49	1.41
67	B1	832	A	O4'-C1'	5.89	1.49	1.41
67	B1	2161	A	O3'-P	-5.89	1.54	1.61
67	B1	895	C	P-O5'	-5.89	1.53	1.59
67	B1	1630	U	O4'-C1'	5.89	1.49	1.41
68	B3	105	G	C4'-O4'	5.89	1.53	1.45
21	A2	375	G	O3'-P	-5.88	1.54	1.61
67	B1	813	G	C2'-C1'	5.88	1.59	1.53
67	B1	1831	C	C3'-O3'	5.88	1.50	1.42
21	A2	666	G	C5'-C4'	-5.88	1.44	1.51
44	BW	22	ARG	CZ-NH2	5.88	1.40	1.33
68	B3	3	G	C4'-C3'	5.88	1.59	1.53
21	A2	665	G	O4'-C1'	-5.88	1.34	1.41
21	A2	887	G	C5'-C4'	5.88	1.58	1.51
21	A2	1374	C	O3'-P	5.88	1.68	1.61
30	AU	5	TYR	CG-CD1	5.88	1.46	1.39
49	BQ	43	ARG	CD-NE	5.88	1.56	1.46
67	B1	768	C	C3'-C2'	-5.88	1.46	1.52
67	B1	1038	U	P-O5'	-5.88	1.53	1.59
67	B1	1836	A	C3'-C2'	-5.88	1.46	1.52
67	B1	2047	U	C2'-C1'	5.88	1.59	1.53
57	BZ	8	ARG	CZ-NH1	5.88	1.40	1.33
27	A0	22	G	C4'-C3'	5.88	1.59	1.53
44	BW	8	GLU	CG-CD	5.88	1.60	1.51
67	B1	242	C	P-O5'	-5.88	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	497	G	C3'-O3'	5.88	1.50	1.42
21	A2	710	G	C3'-O3'	5.88	1.50	1.42
11	A1	13	C	O4'-C1'	5.87	1.49	1.41
21	A2	301	G	C2'-C1'	-5.87	1.46	1.53
21	A2	591	G	O4'-C1'	-5.87	1.34	1.41
21	A2	935	G	O4'-C1'	5.87	1.49	1.41
33	BC	130	ARG	NE-CZ	5.87	1.40	1.33
37	BU	47	ARG	CD-NE	5.87	1.56	1.46
60	BS	126	ARG	CZ-NH2	5.87	1.40	1.33
67	B1	1478	G	C3'-O3'	5.87	1.50	1.42
67	B1	2362	U	C3'-C2'	-5.87	1.46	1.52
67	B1	2274	C	C2'-C1'	5.87	1.59	1.53
21	A2	18	C	C5'-C4'	5.87	1.58	1.51
67	B1	251	C	C2'-C1'	-5.87	1.46	1.53
67	B1	818	A	C3'-C2'	5.87	1.59	1.52
67	B1	1393	C	C2'-O2'	-5.87	1.34	1.41
67	B1	2007	C	C4'-C3'	5.87	1.59	1.53
67	B1	2459	G	C2'-C1'	5.87	1.59	1.53
12	AN	30	TYR	CE2-CZ	5.86	1.46	1.38
21	A2	241	U	C2'-C1'	5.86	1.59	1.53
21	A2	428	G	C4'-O4'	5.86	1.53	1.45
67	B1	419	G	O4'-C1'	5.86	1.49	1.41
67	B1	2272	G	C3'-O3'	5.86	1.50	1.42
21	A2	730	G	C4'-C3'	5.86	1.59	1.53
67	B1	831	C	C3'-C2'	-5.86	1.46	1.52
67	B1	2809	G	C4'-C3'	5.86	1.59	1.53
21	A2	273	C	C5'-C4'	5.86	1.58	1.51
21	A2	1288	C	O3'-P	-5.86	1.54	1.61
21	A2	1291	G	O3'-P	-5.86	1.54	1.61
67	B1	1985	G	C2'-C1'	-5.86	1.47	1.53
67	B1	2834	C	C5'-C4'	5.86	1.58	1.51
21	A2	275	A	C2'-C1'	5.86	1.59	1.53
21	A2	598	U	P-O5'	-5.86	1.53	1.59
67	B1	1498	C	P-O5'	-5.86	1.53	1.59
21	A2	381	C	O3'-P	5.86	1.68	1.61
67	B1	2194	A	O4'-C1'	5.86	1.49	1.41
68	B3	4	C	O4'-C1'	5.86	1.49	1.41
6	AC	26	ARG	CZ-NH1	5.86	1.40	1.33
21	A2	26	A	P-O5'	-5.86	1.53	1.59
21	A2	300	G	C2'-C1'	5.86	1.59	1.53
67	B1	727	A	C3'-C2'	-5.86	1.46	1.52
67	B1	1318	G	C2'-C1'	-5.86	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2542	G	C2'-C1'	5.86	1.59	1.53
67	B1	17	C	P-O5'	-5.85	1.53	1.59
21	A2	1041	C	C2'-C1'	-5.85	1.47	1.53
53	BD	83	VAL	C-N	5.85	1.45	1.34
67	B1	1283	G	O4'-C1'	-5.85	1.34	1.41
67	B1	2082	C	C2'-C1'	5.85	1.59	1.53
67	B1	2434	A	O3'-P	-5.85	1.54	1.61
67	B1	2557	C	P-O5'	-5.85	1.53	1.59
21	A2	40	C	O3'-P	-5.85	1.54	1.61
21	A2	106	A	C4'-C3'	-5.85	1.46	1.52
21	A2	166	A	C4'-C3'	5.85	1.59	1.53
21	A2	255	G	C5'-C4'	5.85	1.58	1.51
21	A2	1192	C	C2'-C1'	5.85	1.59	1.53
21	A2	1407	U	C5'-C4'	5.85	1.58	1.51
67	B1	242	C	C2'-C1'	-5.85	1.47	1.53
67	B1	683	C	O4'-C1'	5.85	1.49	1.41
67	B1	2267	U	C4'-O4'	5.85	1.53	1.45
67	B1	2568	A	O3'-P	-5.85	1.54	1.61
67	B1	1281	A	O4'-C1'	-5.85	1.34	1.41
67	B1	2464	G	C5'-C4'	5.85	1.58	1.51
67	B1	391	C	C5'-C4'	5.85	1.58	1.51
67	B1	1301	G	C4'-C3'	-5.85	1.46	1.52
67	B1	1708	U	C5'-C4'	5.85	1.58	1.51
21	A2	310	G	C2'-C1'	-5.84	1.47	1.53
21	A2	1450	U	O4'-C1'	5.84	1.49	1.41
30	AU	15	ARG	CD-NE	5.84	1.56	1.46
67	B1	2261	C	O4'-C1'	5.84	1.49	1.41
67	B1	2472	A	P-O5'	5.84	1.65	1.59
59	BM	38	ARG	NE-CZ	5.84	1.40	1.33
67	B1	194	G	C3'-O3'	5.84	1.50	1.42
67	B1	2971	U	O3'-P	-5.84	1.54	1.61
28	AV	20	TYR	CZ-OH	5.84	1.47	1.37
65	BJ	10	ARG	CZ-NH1	5.84	1.40	1.33
67	B1	1221	U	C4'-O4'	-5.84	1.38	1.45
67	B1	1961	G	P-O5'	-5.84	1.53	1.59
21	A2	829	U	C3'-C2'	5.84	1.59	1.52
67	B1	925	U	C5'-C4'	5.84	1.58	1.51
67	B1	1645	U	O4'-C1'	5.84	1.49	1.41
67	B1	2530	G	O4'-C1'	-5.84	1.34	1.41
21	A2	1301	U	C2'-C1'	-5.84	1.47	1.53
67	B1	1985	G	C3'-C2'	-5.84	1.46	1.52
21	A2	556	G	C4'-C3'	-5.84	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	629	U	O4'-C1'	5.84	1.49	1.41
21	A2	992	G	O3'-P	-5.84	1.54	1.61
67	B1	562	G	C3'-O3'	5.84	1.50	1.42
67	B1	1682	C	P-O5'	-5.84	1.53	1.59
67	B1	2250	G	P-O5'	5.84	1.65	1.59
21	A2	803	C	C3'-C2'	5.83	1.59	1.52
67	B1	151	G	C2'-C1'	-5.83	1.47	1.53
67	B1	248	C	C3'-O3'	5.83	1.50	1.42
67	B1	888	U	C4'-O4'	-5.83	1.38	1.45
67	B1	1306	A	C5'-C4'	5.83	1.58	1.51
67	B1	2535	C	P-O5'	-5.83	1.53	1.59
67	B1	2607	U	P-O5'	-5.83	1.53	1.59
21	A2	640	U	O4'-C1'	5.83	1.49	1.41
21	A2	818	A	C5'-C4'	5.83	1.58	1.51
21	A2	1137	G	C5'-C4'	5.83	1.58	1.51
21	A2	1381	G	C2'-C1'	5.83	1.59	1.53
67	B1	2496	G	P-O5'	-5.83	1.53	1.59
67	B1	2064	U	C3'-C2'	5.83	1.59	1.52
68	B3	59	C	O4'-C1'	5.83	1.49	1.41
21	A2	1408	C	P-O5'	-5.83	1.53	1.59
27	A0	48	C	C2'-C1'	-5.83	1.47	1.53
67	B1	498	U	P-O5'	-5.83	1.53	1.59
67	B1	2621	U	O4'-C1'	5.83	1.49	1.41
67	B1	2965	C	C3'-O3'	5.83	1.50	1.42
68	B3	46	G	C3'-O3'	-5.83	1.33	1.42
10	AD	45	GLU	CD-OE2	5.83	1.32	1.25
67	B1	232	U	C4'-C3'	-5.83	1.46	1.52
11	A1	15	G	C2'-C1'	5.83	1.59	1.53
19	AS	37	GLU	CG-CD	5.83	1.60	1.51
21	A2	399	A	C2'-C1'	-5.83	1.47	1.53
67	B1	1497	C	C3'-C2'	5.83	1.59	1.52
67	B1	1548	A	C5'-C4'	5.83	1.58	1.51
67	B1	2086	C	C4'-O4'	-5.83	1.38	1.45
67	B1	2450	A	C5'-C4'	5.83	1.58	1.51
67	B1	2886	C	C3'-C2'	5.83	1.59	1.52
21	A2	444	G	O4'-C1'	5.82	1.49	1.41
21	A2	1006	C	C5'-C4'	5.82	1.58	1.51
50	BV	34	SER	CA-CB	5.82	1.61	1.52
67	B1	1922	A	P-O5'	-5.82	1.53	1.59
67	B1	2343	G	C2'-C1'	-5.82	1.47	1.53
67	B1	2810	G	P-O5'	-5.82	1.53	1.59
47	BI	63	ARG	CD-NE	5.82	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	B6	6	LYS	N-CA	-5.82	1.34	1.46
67	B1	28	A	O3'-P	-5.82	1.54	1.61
67	B1	756	C	C4'-C3'	-5.82	1.46	1.52
21	A2	145	A	O3'-P	-5.82	1.54	1.61
67	B1	765	G	C4'-C3'	5.82	1.59	1.53
68	B3	2	G	O3'-P	-5.82	1.54	1.61
20	A3	108	ARG	NE-CZ	5.82	1.40	1.33
67	B1	1912	A	O4'-C1'	5.82	1.49	1.41
67	B1	2653	G	O3'-P	-5.82	1.54	1.61
21	A2	55	G	C4'-C3'	5.82	1.59	1.53
67	B1	1227	A	C4'-O4'	5.82	1.53	1.45
68	B3	3	G	C3'-C2'	-5.82	1.46	1.52
16	AJ	53	ARG	CD-NE	5.81	1.56	1.46
67	B1	304	G	O4'-C1'	-5.81	1.34	1.41
67	B1	2182	A	C4'-O4'	-5.81	1.38	1.45
17	AO	64	GLU	CD-OE2	5.81	1.32	1.25
21	A2	122	C	C2'-C1'	-5.81	1.47	1.53
21	A2	1123	G	C2'-C1'	-5.81	1.47	1.53
67	B1	1686	C	O4'-C1'	5.81	1.49	1.41
67	B1	2648	C	C2'-O2'	5.81	1.49	1.41
21	A2	453	G	C5'-C4'	5.81	1.58	1.51
67	B1	1956	G	C3'-O3'	-5.81	1.34	1.42
67	B1	2976	G	P-O5'	-5.81	1.53	1.59
21	A2	162	C	P-O5'	-5.81	1.53	1.59
21	A2	246	A	C2'-C1'	5.81	1.59	1.53
21	A2	1141	G	P-O5'	-5.81	1.53	1.59
40	BE	66	ARG	NE-CZ	5.81	1.40	1.33
67	B1	327	G	O4'-C1'	-5.81	1.34	1.41
67	B1	1627	G	C5'-C4'	5.81	1.58	1.51
67	B1	2022	U	P-O5'	-5.81	1.53	1.59
67	B1	2620	G	C3'-C2'	5.81	1.59	1.52
67	B1	1163	U	C2'-O2'	-5.81	1.34	1.41
67	B1	1850	C	C2'-C1'	5.81	1.59	1.53
67	B1	2147	C	C3'-O3'	5.81	1.50	1.42
67	B1	2585	G	C2'-C1'	-5.81	1.47	1.53
68	B3	30	G	P-O5'	-5.81	1.53	1.59
67	B1	955	A	P-O5'	5.81	1.65	1.59
21	A2	19	G	O4'-C1'	-5.80	1.34	1.41
67	B1	1089	C	C5'-C4'	5.80	1.58	1.51
67	B1	615	A	O4'-C1'	-5.80	1.34	1.41
21	A2	490	C	C3'-C2'	5.80	1.59	1.52
21	A2	946	G	O4'-C1'	-5.80	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1477	U	P-O5'	-5.80	1.53	1.59
67	B1	191	U	O3'-P	-5.80	1.54	1.61
67	B1	1901	A	C4'-O4'	5.80	1.53	1.45
21	A2	49	C	O4'-C1'	5.80	1.49	1.41
67	B1	912	G	O4'-C1'	5.80	1.49	1.41
67	B1	1407	A	O5'-C5'	-5.80	1.33	1.42
67	B1	2838	U	C3'-C2'	5.80	1.59	1.52
21	A2	393	A	C3'-O3'	5.80	1.50	1.42
67	B1	109	G	P-O5'	-5.80	1.53	1.59
67	B1	2316	U	C5'-C4'	5.80	1.58	1.51
21	A2	311	A	O3'-P	5.80	1.68	1.61
21	A2	561	A	P-O5'	5.80	1.65	1.59
67	B1	630	G	C4'-O4'	5.80	1.53	1.45
67	B1	1868	C	C2'-O2'	5.80	1.49	1.41
67	B1	2418	G	O4'-C1'	5.80	1.49	1.41
67	B1	2431	C	O3'-P	-5.80	1.54	1.61
67	B1	2654	C	C5'-C4'	5.80	1.58	1.51
67	B1	753	A	O4'-C1'	-5.79	1.34	1.41
20	A3	122	MET	CA-C	-5.79	1.37	1.52
27	A0	67	G	O4'-C1'	-5.79	1.34	1.41
67	B1	163	G	P-O5'	5.79	1.65	1.59
67	B1	522	A	C5'-C4'	5.79	1.58	1.51
67	B1	709	A	O4'-C1'	5.79	1.49	1.41
67	B1	1410	A	C2'-C1'	-5.79	1.47	1.53
67	B1	1952	G	O4'-C1'	5.79	1.49	1.41
68	B3	1	C	C2'-C1'	-5.79	1.47	1.53
16	AJ	39	GLU	CB-CG	5.79	1.63	1.52
21	A2	1110	U	O3'-P	-5.79	1.54	1.61
62	BN	17	TYR	CE1-CZ	5.79	1.46	1.38
67	B1	2039	U	C2'-C1'	-5.79	1.47	1.53
67	B1	2704	A	O4'-C1'	5.79	1.49	1.41
67	B1	2387	A	C2'-C1'	-5.79	1.47	1.53
21	A2	90	C	O3'-P	-5.79	1.54	1.61
27	A0	33	U	C2'-C1'	5.79	1.59	1.53
67	B1	972	C	C5'-C4'	5.79	1.58	1.51
67	B1	1476	C	C4'-C3'	5.79	1.59	1.53
67	B1	2018	C	C5'-C4'	5.79	1.58	1.51
67	B1	2839	A	C5'-C4'	5.79	1.58	1.51
32	BO	78	GLY	N-CA	-5.79	1.37	1.46
21	A2	182	A	C2'-C1'	-5.79	1.47	1.53
67	B1	414	G	C2'-C1'	5.79	1.59	1.53
67	B1	438	G	P-O5'	-5.79	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	585	G	O4'-C1'	5.79	1.49	1.41
67	B1	620	G	O4'-C1'	-5.79	1.34	1.41
67	B1	894	C	C3'-C2'	-5.79	1.46	1.52
67	B1	958	A	C2'-C1'	-5.79	1.47	1.53
67	B1	1932	G	C4'-C3'	-5.79	1.46	1.52
21	A2	5	C	P-O5'	-5.78	1.53	1.59
21	A2	1324	U	C5'-C4'	5.78	1.58	1.51
21	A2	1332	C	P-O5'	-5.78	1.53	1.59
52	BB	234	ARG	CZ-NH2	5.78	1.40	1.33
67	B1	1264	G	O4'-C1'	5.78	1.49	1.41
67	B1	1496	A	O4'-C1'	-5.78	1.34	1.41
67	B1	1696	G	O4'-C1'	5.78	1.49	1.41
67	B1	1843	C	C4'-O4'	5.78	1.53	1.45
67	B1	2412	A	C4'-O4'	5.78	1.53	1.45
21	A2	593	G	O4'-C1'	5.78	1.49	1.41
67	B1	1078	G	O4'-C1'	5.78	1.49	1.41
67	B1	1868	C	P-O5'	-5.78	1.53	1.59
21	A2	349	A	C4'-O4'	5.78	1.53	1.45
21	A2	1252	C	P-O5'	-5.78	1.53	1.59
67	B1	21	C	C5'-C4'	5.78	1.58	1.51
67	B1	1496	A	C5'-C4'	5.78	1.58	1.51
67	B1	1860	A	C2'-O2'	-5.78	1.34	1.41
67	B1	1903	G	C2'-C1'	5.78	1.59	1.53
67	B1	1299	C	C4'-O4'	5.78	1.53	1.45
67	B1	35	G	O4'-C1'	5.78	1.49	1.41
67	B1	1540	A	P-O5'	5.78	1.65	1.59
67	B1	2305	U	C5'-C4'	5.78	1.58	1.51
12	AN	24	ARG	CZ-NH2	5.78	1.40	1.33
21	A2	251	G	O4'-C1'	-5.78	1.34	1.41
21	A2	1256	C	C4'-C3'	5.78	1.59	1.53
52	BB	208	GLU	CG-CD	5.78	1.60	1.51
67	B1	1507	A	O4'-C1'	5.78	1.49	1.41
21	A2	23	G	C2'-C1'	-5.77	1.47	1.53
21	A2	729	G	C4'-O4'	-5.77	1.38	1.45
64	Bc	59	ARG	CD-NE	5.77	1.56	1.46
67	B1	877	U	C2'-C1'	-5.77	1.47	1.53
67	B1	1342	G	C3'-C2'	5.77	1.59	1.52
67	B1	2209	U	C5'-C4'	5.77	1.58	1.51
21	A2	251	G	C4'-O4'	-5.77	1.38	1.45
21	A2	576	C	C3'-C2'	-5.77	1.46	1.52
67	B1	666	A	O3'-P	-5.77	1.54	1.61
67	B1	686	C	C4'-C3'	-5.77	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1370	G	C4'-C3'	5.77	1.59	1.53
67	B1	1451	A	C5'-C4'	5.77	1.58	1.51
67	B1	1911	G	O3'-P	-5.77	1.54	1.61
67	B1	2414	G	C3'-O3'	5.77	1.50	1.42
67	B1	105	C	C2'-C1'	-5.77	1.47	1.53
67	B1	196	A	C2'-C1'	-5.77	1.47	1.53
67	B1	2523	C	C5'-C4'	5.77	1.58	1.51
67	B1	2616	C	C2'-C1'	5.77	1.59	1.53
14	AM	130	GLY	C-N	5.77	1.43	1.33
21	A2	636	G	C3'-O3'	5.77	1.50	1.42
67	B1	307	C	C5'-C4'	5.77	1.58	1.51
67	B1	1224	A	O4'-C1'	-5.77	1.34	1.41
67	B1	2180	C	O4'-C1'	5.77	1.49	1.41
67	B1	2807	C	C4'-C3'	-5.77	1.46	1.52
21	A2	296	A	O4'-C1'	5.77	1.49	1.41
67	B1	403	G	C3'-O3'	5.77	1.50	1.42
67	B1	1703	G	C3'-C2'	-5.77	1.46	1.52
21	A2	238	G	C2'-C1'	5.76	1.59	1.53
21	A2	634	C	C5'-C4'	5.76	1.58	1.51
21	A2	827	G	C3'-C2'	-5.76	1.46	1.52
67	B1	1197	G	C5'-C4'	5.76	1.58	1.51
21	A2	1092	G	C4'-C3'	5.76	1.59	1.53
21	A2	1397	C	C3'-O3'	5.76	1.50	1.42
27	A0	73	G	C3'-C2'	5.76	1.59	1.52
67	B1	513	C	C4'-O4'	-5.76	1.38	1.45
67	B1	1466	U	O4'-C1'	5.76	1.49	1.41
68	B3	46	G	P-O5'	-5.76	1.53	1.59
11	A1	11	C	C5'-C4'	5.76	1.58	1.51
21	A2	150	G	C2'-C1'	5.76	1.59	1.53
21	A2	918	A	C2'-C1'	5.76	1.59	1.53
37	BU	53	ARG	CD-NE	5.76	1.56	1.46
54	BF	37	ARG	CZ-NH2	5.76	1.40	1.33
67	B1	2615	U	C4'-C3'	-5.76	1.46	1.52
67	B1	1437	C	C2'-C1'	-5.76	1.47	1.53
21	A2	1122	C	P-O5'	-5.76	1.53	1.59
21	A2	1191	G	C3'-C2'	5.76	1.59	1.52
67	B1	314	A	O4'-C1'	-5.76	1.34	1.41
67	B1	691	G	P-O5'	-5.76	1.53	1.59
67	B1	1532	G	C2'-C1'	-5.76	1.47	1.53
67	B1	1611	C	C2'-C1'	-5.76	1.47	1.53
67	B1	1827	A	O3'-P	-5.76	1.54	1.61
67	B1	2196	C	C4'-C3'	5.76	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2678	U	O4'-C1'	-5.76	1.34	1.41
13	AX	58	ARG	NE-CZ	5.75	1.40	1.33
21	A2	812	U	O4'-C1'	5.75	1.49	1.41
67	B1	200	G	C2'-C1'	-5.75	1.47	1.53
67	B1	1498	C	C2'-C1'	-5.75	1.47	1.53
67	B1	2979	C	C5'-C4'	5.75	1.58	1.51
21	A2	406	U	C4'-C3'	5.75	1.59	1.53
21	A2	1478	A	O3'-P	-5.75	1.54	1.61
67	B1	1364	C	C5'-C4'	5.75	1.58	1.51
21	A2	414	G	C4'-O4'	-5.75	1.38	1.45
67	B1	592	C	P-O5'	-5.75	1.54	1.59
67	B1	609	G	C5'-C4'	5.75	1.58	1.51
15	AE	137	ARG	CD-NE	5.75	1.56	1.46
30	AU	76	TYR	CG-CD2	5.75	1.46	1.39
67	B1	1066	C	C3'-C2'	-5.75	1.46	1.52
67	B1	1590	C	C2'-C1'	-5.75	1.47	1.53
67	B1	2223	G	C4'-C3'	-5.75	1.46	1.52
12	AN	77	LEU	CA-CB	-5.74	1.40	1.53
21	A2	1250	C	C4'-C3'	-5.74	1.46	1.52
67	B1	613	C	C3'-O3'	5.74	1.50	1.42
67	B1	905	G	P-O5'	-5.74	1.54	1.59
67	B1	1408	G	O4'-C1'	5.74	1.49	1.41
67	B1	1950	G	O4'-C1'	-5.74	1.34	1.41
67	B1	2679	A	C4'-C3'	5.74	1.59	1.53
21	A2	1158	G	O4'-C1'	-5.74	1.34	1.41
21	A2	1169	C	C3'-C2'	-5.74	1.46	1.52
67	B1	1446	G	O3'-P	-5.74	1.54	1.61
67	B1	1461	G	P-O5'	-5.74	1.54	1.59
67	B1	2928	C	C4'-C3'	-5.74	1.46	1.52
18	AF	8	TYR	CG-CD1	5.74	1.46	1.39
21	A2	601	G	O3'-P	-5.74	1.54	1.61
21	A2	621	G	O3'-P	-5.74	1.54	1.61
33	BC	26	ARG	NE-CZ	5.74	1.40	1.33
37	BU	74	TYR	CB-CG	-5.74	1.43	1.51
67	B1	795	G	C3'-O3'	5.74	1.50	1.42
67	B1	1717	C	C5'-C4'	5.74	1.58	1.51
67	B1	2655	C	P-O5'	-5.74	1.54	1.59
67	B1	2680	A	P-O5'	-5.74	1.54	1.59
21	A2	1206	G	O3'-P	-5.74	1.54	1.61
67	B1	840	G	C3'-O3'	5.74	1.50	1.42
67	B1	1295	G	C4'-C3'	5.74	1.59	1.53
37	BU	112	ARG	NE-CZ	5.74	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	BD	27	ARG	NE-CZ	5.74	1.40	1.33
67	B1	1964	G	O4'-C1'	-5.74	1.34	1.41
21	A2	1142	G	C3'-C2'	5.74	1.59	1.52
25	AH	198	SER	CA-CB	5.74	1.61	1.52
67	B1	1273	C	C5'-C4'	5.74	1.58	1.51
67	B1	2720	U	C2'-C1'	5.73	1.59	1.53
21	A2	741	A	C2'-C1'	-5.73	1.47	1.53
50	BV	40	TYR	CG-CD2	5.73	1.46	1.39
67	B1	215	A	C4'-O4'	5.73	1.53	1.45
67	B1	835	G	O3'-P	-5.73	1.54	1.61
21	A2	515	U	O3'-P	-5.73	1.54	1.61
21	A2	893	U	P-O5'	-5.73	1.54	1.59
21	A2	992	G	C4'-O4'	5.73	1.53	1.45
21	A2	1080	C	C2'-C1'	-5.73	1.47	1.53
67	B1	380	A	C5'-C4'	5.73	1.58	1.51
67	B1	2301	C	P-O5'	-5.73	1.54	1.59
11	A1	3	G	C3'-O3'	5.73	1.50	1.42
21	A2	591	G	C4'-C3'	5.73	1.59	1.53
21	A2	1135	G	C5'-C4'	5.73	1.58	1.51
46	BA	215	GLU	CD-OE2	5.73	1.31	1.25
65	BJ	119	ARG	CZ-NH2	5.73	1.40	1.33
67	B1	1815	C	C3'-C2'	5.73	1.59	1.52
8	AR	51	ARG	CZ-NH2	5.73	1.40	1.33
46	BA	118	GLY	N-CA	-5.73	1.37	1.46
66	B1	49	ARG	CZ-NH1	5.73	1.40	1.33
67	B1	2382	A	C4'-O4'	5.73	1.52	1.45
67	B1	2410	U	C4'-C3'	5.73	1.59	1.53
11	A1	3	G	C5'-C4'	5.73	1.58	1.51
21	A2	568	C	C4'-C3'	5.73	1.59	1.53
21	A2	834	C	C3'-C2'	-5.73	1.46	1.52
21	A2	1123	G	C3'-C2'	-5.73	1.46	1.52
11	A1	66	C	C4'-C3'	-5.72	1.46	1.52
21	A2	1114	G	P-O5'	5.72	1.65	1.59
21	A2	1165	U	P-O5'	-5.72	1.54	1.59
21	A2	1293	A	C3'-C2'	5.72	1.59	1.52
43	Bk	148	ARG	CD-NE	5.72	1.56	1.46
67	B1	1626	A	O4'-C1'	5.72	1.49	1.41
21	A2	689	C	P-O5'	-5.72	1.54	1.59
21	A2	1357	C	O4'-C1'	-5.72	1.34	1.41
67	B1	544	A	C3'-C2'	-5.72	1.46	1.52
67	B1	2428	C	O4'-C1'	5.72	1.49	1.41
21	A2	774	U	C4'-C3'	-5.72	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	837	C	O3'-P	-5.72	1.54	1.61
21	A2	948	G	C5'-C4'	5.72	1.58	1.51
67	B1	1405	G	P-OP2	-5.72	1.39	1.49
5	AW	15	ARG	CD-NE	5.72	1.56	1.46
21	A2	170	C	C4'-O4'	5.72	1.52	1.45
67	B1	2882	G	C3'-C2'	-5.72	1.46	1.52
68	B3	105	G	P-O5'	-5.72	1.54	1.59
21	A2	366	C	C5'-C4'	5.72	1.58	1.51
21	A2	436	A	O4'-C1'	5.72	1.49	1.41
21	A2	1480	G	C3'-C2'	-5.72	1.46	1.52
67	B1	1744	A	C4'-C3'	5.72	1.59	1.53
67	B1	1792	A	C3'-C2'	-5.72	1.46	1.52
67	B1	2236	C	C2'-C1'	-5.72	1.47	1.53
7	AB	160	GLY	CA-C	-5.71	1.42	1.51
21	A2	101	G	C4'-C3'	5.71	1.59	1.53
67	B1	225	C	O3'-P	-5.71	1.54	1.61
67	B1	668	G	C4'-C3'	5.71	1.59	1.53
67	B1	1900	U	C2'-C1'	-5.71	1.47	1.53
21	A2	604	C	O4'-C1'	5.71	1.49	1.41
43	Bk	75	GLU	CG-CD	5.71	1.60	1.51
67	B1	2293	G	P-O5'	5.71	1.65	1.59
67	B1	3000	U	C2'-C1'	-5.71	1.47	1.53
21	A2	857	C	C4'-C3'	5.71	1.59	1.53
21	A2	1386	C	C2'-C1'	-5.71	1.47	1.53
67	B1	17	C	C4'-C3'	5.71	1.59	1.53
67	B1	608	C	C2'-C1'	-5.71	1.47	1.53
67	B1	1537	U	C4'-O4'	-5.71	1.38	1.45
67	B1	2077	A	C3'-C2'	5.71	1.59	1.52
21	A2	705	C	C5'-C4'	5.71	1.58	1.51
21	A2	1266	A	P-O5'	-5.71	1.54	1.59
67	B1	391	C	C4'-C3'	-5.71	1.46	1.52
68	B3	46	G	C2'-C1'	-5.71	1.47	1.53
7	AB	34	ARG	CZ-NH2	5.71	1.40	1.33
67	B1	785	C	O3'-P	-5.71	1.54	1.61
67	B1	1954	U	C2'-C1'	5.71	1.59	1.53
67	B1	2781	A	C5'-C4'	5.71	1.58	1.51
14	AM	66	ARG	NE-CZ	5.71	1.40	1.33
21	A2	1470	G	C5'-C4'	5.71	1.58	1.51
27	A0	35	U	C2'-C1'	-5.71	1.47	1.53
67	B1	1767	C	C4'-C3'	-5.71	1.46	1.52
67	B1	2756	G	O4'-C1'	5.71	1.49	1.41
46	BA	46	PHE	CG-CD2	5.71	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2034	G	O3'-P	-5.71	1.54	1.61
21	A2	776	C	C3'-C2'	-5.70	1.46	1.52
34	B5	72	ARG	CD-NE	5.70	1.56	1.46
67	B1	656	G	C2'-C1'	-5.70	1.47	1.53
67	B1	1493	C	O4'-C1'	5.70	1.49	1.41
67	B1	1594	G	C2'-C1'	-5.70	1.47	1.53
67	B1	2348	G	P-O5'	-5.70	1.54	1.59
67	B1	2626	U	O4'-C1'	5.70	1.49	1.41
21	A2	107	C	C5'-C4'	5.70	1.58	1.51
21	A2	959	G	C2'-C1'	5.70	1.59	1.53
21	A2	1299	A	P-O5'	-5.70	1.54	1.59
27	A0	37	A	C2'-C1'	5.70	1.59	1.53
34	BK	45	ARG	CZ-NH1	5.70	1.40	1.33
61	Bd	66	ARG	NE-CZ	5.70	1.40	1.33
67	B1	1650	U	C5'-C4'	5.70	1.58	1.51
68	B3	28	C	O3'-P	-5.70	1.54	1.61
21	A2	896	A	O4'-C1'	-5.70	1.34	1.41
67	B1	763	A	O3'-P	-5.70	1.54	1.61
67	B1	810	A	O4'-C1'	5.70	1.49	1.41
67	B1	912	G	C2'-C1'	-5.70	1.47	1.53
67	B1	1313	G	P-O5'	5.70	1.65	1.59
67	B1	2935	A	O3'-P	-5.70	1.54	1.61
67	B1	158	C	C3'-C2'	5.70	1.59	1.52
67	B1	2496	G	C5'-C4'	5.70	1.58	1.51
67	B1	981	A	C5'-C4'	5.70	1.58	1.51
67	B1	3045	G	O3'-P	5.70	1.68	1.61
67	B1	641	G	O3'-P	-5.69	1.54	1.61
21	A2	333	A	C2'-C1'	5.69	1.59	1.53
21	A2	724	C	C5'-C4'	5.69	1.58	1.51
67	B1	1391	C	O3'-P	-5.69	1.54	1.61
67	B1	1984	G	C5'-C4'	-5.69	1.44	1.51
10	AD	103	ARG	CD-NE	5.69	1.56	1.46
67	B1	486	A	C3'-O3'	5.69	1.50	1.42
67	B1	971	G	C2'-C1'	-5.69	1.47	1.53
21	A2	498	C	O4'-C1'	5.69	1.49	1.41
53	BD	90	ARG	NE-CZ	5.69	1.40	1.33
67	B1	1022	G	O4'-C1'	-5.69	1.34	1.41
67	B1	1131	G	P-O5'	-5.69	1.54	1.59
67	B1	1449	C	C4'-C3'	-5.69	1.46	1.52
67	B1	1603	G	C5'-C4'	5.69	1.58	1.51
67	B1	1648	C	C2'-C1'	-5.69	1.47	1.53
21	A2	851	C	O4'-C1'	5.69	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1153	U	C3'-O3'	5.69	1.50	1.42
46	BA	119	ARG	CZ-NH2	5.68	1.40	1.33
67	B1	698	U	O4'-C1'	5.68	1.49	1.41
67	B1	1856	G	C5'-C4'	5.68	1.58	1.51
67	B1	2202	U	C2'-C1'	-5.68	1.47	1.53
21	A2	1018	C	C4'-C3'	5.68	1.59	1.53
34	BK	72	ARG	CD-NE	5.68	1.56	1.46
67	B1	415	U	C4'-C3'	5.68	1.59	1.53
67	B1	635	G	C5'-C4'	5.68	1.58	1.51
67	B1	1347	U	O3'-P	-5.68	1.54	1.61
67	B1	1565	G	C2'-C1'	-5.68	1.47	1.53
67	B1	2288	C	P-O5'	-5.68	1.54	1.59
67	B1	2634	U	O3'-P	-5.68	1.54	1.61
21	A2	433	U	C4'-C3'	-5.68	1.46	1.52
21	A2	529	C	C3'-O3'	-5.68	1.34	1.42
67	B1	1586	G	C3'-C2'	5.68	1.59	1.52
67	B1	1706	G	O4'-C1'	-5.68	1.34	1.41
67	B1	2350	G	O4'-C1'	5.68	1.49	1.41
21	A2	1002	G	P-O5'	5.68	1.65	1.59
21	A2	1288	C	P-O5'	-5.68	1.54	1.59
58	BP	87	GLU	CB-CG	5.68	1.62	1.52
67	B1	15	A	C2'-C1'	5.68	1.59	1.53
67	B1	161	C	C3'-C2'	5.68	1.59	1.52
67	B1	594	U	P-O5'	-5.68	1.54	1.59
67	B1	1963	G	C5'-C4'	5.68	1.58	1.51
21	A2	356	G	O4'-C1'	5.68	1.49	1.41
21	A2	542	G	P-O5'	-5.68	1.54	1.59
21	A2	723	G	O5'-C5'	5.68	1.53	1.44
21	A2	889	G	C5'-C4'	5.68	1.58	1.51
21	A2	1227	A	O4'-C1'	5.68	1.49	1.41
68	B3	125	U	C2'-C1'	5.68	1.59	1.53
21	A2	956	C	C3'-C2'	-5.68	1.46	1.52
21	A2	1010	G	O3'-P	-5.68	1.54	1.61
67	B1	499	A	O4'-C1'	5.68	1.49	1.41
67	B1	1153	U	C3'-C2'	5.68	1.59	1.52
67	B1	1643	A	O4'-C1'	5.68	1.49	1.41
67	B1	2602	G	O3'-P	-5.68	1.54	1.61
21	A2	858	A	C2'-C1'	-5.67	1.47	1.53
21	A2	1408	C	O3'-P	-5.67	1.54	1.61
67	B1	1203	C	O4'-C1'	5.67	1.49	1.41
67	B1	1249	G	P-O5'	5.67	1.65	1.59
67	B1	2229	G	P-O5'	-5.67	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	727	G	O4'-C1'	-5.67	1.34	1.41
67	B1	1642	G	C5'-C4'	5.67	1.58	1.51
67	B1	2888	G	P-O5'	5.67	1.65	1.59
68	B3	86	C	C2'-C1'	5.67	1.59	1.53
21	A2	180	G	P-O5'	-5.67	1.54	1.59
21	A2	614	G	O4'-C1'	5.67	1.49	1.41
21	A2	1479	C	O4'-C1'	5.67	1.49	1.41
67	B1	1183	U	O4'-C1'	5.67	1.49	1.41
67	B1	1464	A	C3'-C2'	-5.67	1.46	1.52
67	B1	661	G	O3'-P	-5.67	1.54	1.61
67	B1	971	G	C3'-C2'	-5.67	1.46	1.52
43	Bk	38	LEU	N-CA	-5.67	1.35	1.46
67	B1	1159	U	C5'-C4'	5.67	1.58	1.51
67	B1	1891	C	P-O5'	-5.67	1.54	1.59
21	A2	98	U	C2'-C1'	-5.67	1.47	1.53
21	A2	723	G	C3'-C2'	5.67	1.59	1.52
21	A2	741	A	O4'-C1'	5.67	1.49	1.41
21	A2	1376	C	C4'-C3'	5.67	1.59	1.53
32	BO	113	ARG	NE-CZ	5.67	1.40	1.33
40	BE	71	ARG	CD-NE	5.67	1.56	1.46
67	B1	697	U	C3'-C2'	-5.67	1.46	1.52
67	B1	880	U	C5'-C4'	5.67	1.58	1.51
67	B1	1054	A	P-O5'	-5.67	1.54	1.59
67	B1	1635	G	O4'-C1'	5.67	1.49	1.41
67	B1	2802	G	C5'-C4'	5.67	1.58	1.51
15	AE	151	SER	CA-CB	5.67	1.61	1.52
67	B1	1244	C	C5'-C4'	5.67	1.58	1.51
67	B1	2890	A	C2'-C1'	5.67	1.59	1.53
21	A2	1093	C	C4'-O4'	5.66	1.52	1.45
67	B1	1373	C	P-O5'	5.66	1.65	1.59
67	B1	2090	A	C2'-C1'	-5.66	1.47	1.53
67	B1	2181	G	O4'-C1'	5.66	1.49	1.41
67	B1	2823	G	C2'-O2'	5.66	1.49	1.41
67	B1	2974	U	C2'-C1'	-5.66	1.47	1.53
14	AM	103	ARG	CD-NE	5.66	1.56	1.46
67	B1	2722	G	P-O5'	5.66	1.65	1.59
8	AR	63	TYR	CG-CD2	5.66	1.46	1.39
49	BQ	8	ARG	CZ-NH1	5.66	1.40	1.33
67	B1	1927	C	O4'-C1'	5.66	1.49	1.41
3	AI	128	TYR	CZ-OH	5.66	1.47	1.37
58	BP	42	ARG	CZ-NH1	5.66	1.40	1.33
67	B1	1207	G	C3'-O3'	5.66	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2258	A	P-O5'	-5.66	1.54	1.59
67	B1	1503	C	C4'-C3'	5.66	1.59	1.53
67	B1	2058	C	C5'-C4'	5.66	1.58	1.51
14	AM	65	ARG	NE-CZ	5.66	1.40	1.33
21	A2	1075	A	C3'-C2'	5.66	1.59	1.52
67	B1	413	A	O3'-P	-5.66	1.54	1.61
67	B1	615	A	C5'-C4'	5.66	1.58	1.51
21	A2	1300	A	C2'-O2'	-5.65	1.34	1.41
20	B4	103	GLU	CG-CD	5.65	1.60	1.51
67	B1	1683	C	C4'-C3'	5.65	1.59	1.53
67	B1	1914	U	C5'-C4'	-5.65	1.44	1.51
15	AE	8	ARG	CD-NE	5.65	1.56	1.46
21	A2	590	G	C4'-O4'	5.65	1.52	1.45
21	A2	1325	C	C2'-C1'	-5.65	1.47	1.53
67	B1	2182	A	C2'-O2'	-5.65	1.34	1.41
67	B1	2383	A	C2'-C1'	-5.65	1.47	1.53
21	A2	470	G	C4'-O4'	-5.65	1.38	1.45
21	A2	668	G	P-O5'	-5.65	1.54	1.59
29	AL	89	ARG	NE-CZ	5.65	1.40	1.33
67	B1	1323	U	P-O5'	-5.65	1.54	1.59
67	B1	1344	C	P-O5'	-5.65	1.54	1.59
67	B1	1629	G	O4'-C1'	-5.65	1.34	1.41
2	AK	42	ARG	CZ-NH2	5.65	1.40	1.33
21	A2	1252	C	C3'-C2'	-5.65	1.46	1.52
25	AH	215	ARG	CZ-NH2	5.65	1.40	1.33
21	A2	324	C	C4'-C3'	5.65	1.59	1.53
21	A2	1132	C	C5'-C4'	5.65	1.58	1.51
67	B1	2191	U	O4'-C1'	5.65	1.49	1.41
67	B1	2418	G	C5'-C4'	5.65	1.58	1.51
68	B3	64	C	P-O5'	-5.65	1.54	1.59
21	A2	26	A	O5'-C5'	-5.65	1.33	1.42
21	A2	377	A	P-O5'	5.65	1.65	1.59
67	B1	2339	C	C4'-C3'	-5.65	1.47	1.52
21	A2	549	A	C2'-C1'	5.64	1.59	1.53
21	A2	931	C	C2'-C1'	-5.64	1.47	1.53
65	BJ	51	ARG	NE-CZ	5.64	1.40	1.33
67	B1	650	C	P-O5'	-5.64	1.54	1.59
67	B1	1726	A	O4'-C1'	-5.64	1.34	1.41
67	B1	444	U	P-O5'	-5.64	1.54	1.59
67	B1	911	G	O3'-P	-5.64	1.54	1.61
6	AC	118	ARG	NE-CZ	5.64	1.40	1.33
21	A2	174	G	C4'-C3'	5.64	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	295	G	C2'-C1'	-5.64	1.47	1.53
67	B1	152	G	O3'-P	-5.64	1.54	1.61
67	B1	1544	C	C5'-C4'	5.64	1.58	1.51
67	B1	1996	C	C4'-C3'	5.64	1.59	1.53
67	B1	2993	G	C4'-C3'	5.64	1.59	1.53
21	A2	83	C	P-O5'	-5.64	1.54	1.59
28	AV	29	PRO	CA-C	-5.64	1.41	1.52
65	BJ	124	ARG	CZ-NH2	5.64	1.40	1.33
67	B1	335	C	O3'-P	-5.64	1.54	1.61
67	B1	1857	A	C4'-C3'	5.64	1.59	1.53
21	A2	546	G	C2'-C1'	-5.64	1.47	1.53
21	A2	546	G	O4'-C1'	5.64	1.49	1.41
21	A2	848	G	O3'-P	-5.64	1.54	1.61
67	B1	962	C	C5'-C4'	5.64	1.58	1.51
67	B1	1399	C	C5'-C4'	5.64	1.58	1.51
68	B3	68	C	C4'-C3'	5.64	1.59	1.53
21	A2	246	A	O4'-C1'	5.64	1.49	1.41
21	A2	356	G	O3'-P	-5.64	1.54	1.61
67	B1	992	G	C2'-C1'	-5.64	1.47	1.53
67	B1	2300	C	C2'-C1'	-5.64	1.47	1.53
21	A2	1392	G	C3'-O3'	-5.63	1.34	1.42
44	BW	65	ARG	CZ-NH2	5.63	1.40	1.33
66	B1	61	ARG	CZ-NH2	5.63	1.40	1.33
67	B1	481	G	C2'-C1'	5.63	1.59	1.53
67	B1	1289	C	C4'-C3'	5.63	1.59	1.53
21	A2	1390	G	P-O5'	-5.63	1.54	1.59
67	B1	1500	C	P-O5'	-5.63	1.54	1.59
67	B1	2468	C	C5'-C4'	5.63	1.58	1.51
17	AO	132	ARG	CZ-NH2	5.63	1.40	1.33
67	B1	1055	C	C5'-C4'	5.63	1.58	1.51
67	B1	508	G	C5'-C4'	5.63	1.58	1.51
67	B1	676	G	C5'-C4'	5.63	1.58	1.51
21	A2	1399	G	C5'-C4'	5.63	1.58	1.51
21	A2	1483	U	C2'-C1'	5.63	1.59	1.53
32	BO	115	SER	CA-CB	5.63	1.61	1.52
59	BM	31	ARG	CZ-NH1	5.63	1.40	1.33
67	B1	53	A	P-O5'	5.63	1.65	1.59
67	B1	1650	U	C3'-O3'	5.63	1.50	1.42
67	B1	1756	C	P-O5'	-5.63	1.54	1.59
67	B1	2352	G	O3'-P	-5.63	1.54	1.61
24	AA	169	GLU	CB-CG	5.62	1.62	1.52
36	Bf	50	LYS	N-CA	-5.62	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	688	G	C5'-C4'	5.62	1.58	1.51
67	B1	2698	G	C2'-C1'	5.62	1.59	1.53
21	A2	708	C	O4'-C1'	-5.62	1.34	1.41
21	A2	1182	G	P-O5'	5.62	1.65	1.59
25	AH	174	TYR	CA-CB	5.62	1.66	1.53
67	B1	1354	G	C2'-C1'	5.62	1.59	1.53
67	B1	1360	G	C3'-C2'	-5.62	1.46	1.52
67	B1	1630	U	C2'-C1'	5.62	1.59	1.53
21	A2	772	G	C3'-C2'	-5.62	1.46	1.52
26	AP	55	TYR	CE1-CZ	5.62	1.45	1.38
67	B1	1375	G	C4'-C3'	5.62	1.59	1.53
67	B1	1697	G	O4'-C1'	-5.62	1.34	1.41
21	A2	869	U	C5'-C4'	5.62	1.58	1.51
67	B1	1081	U	C3'-C2'	-5.62	1.46	1.52
67	B1	1302	G	C5'-C4'	5.62	1.58	1.51
67	B1	1761	C	C4'-C3'	5.62	1.59	1.53
67	B1	2726	G	O4'-C1'	5.62	1.49	1.41
67	B1	922	C	C5'-C4'	5.62	1.58	1.51
67	B1	1621	G	O3'-P	-5.62	1.54	1.61
67	B1	2194	A	P-O5'	5.62	1.65	1.59
21	A2	307	G	O4'-C1'	-5.62	1.34	1.41
21	A2	687	G	C2'-O2'	5.62	1.49	1.41
21	A2	852	G	P-O5'	-5.62	1.54	1.59
67	B1	424	U	C4'-O4'	5.62	1.52	1.45
67	B1	2690	U	C3'-C2'	5.62	1.59	1.52
11	A1	15	G	C3'-C2'	-5.61	1.46	1.52
11	A1	59	A	C2'-C1'	5.61	1.59	1.53
23	AT	11	TYR	CE2-CZ	5.61	1.45	1.38
28	B6	4	ARG	CZ-NH1	5.61	1.40	1.33
67	B1	282	G	C2'-C1'	-5.61	1.47	1.53
67	B1	1413	A	P-O5'	-5.61	1.54	1.59
67	B1	2917	G	C4'-C3'	5.61	1.59	1.53
14	AM	135	ARG	CZ-NH2	5.61	1.40	1.33
21	A2	467	G	O4'-C1'	5.61	1.49	1.41
21	A2	620	G	C4'-C3'	5.61	1.59	1.53
21	A2	973	U	O4'-C1'	5.61	1.49	1.41
21	A2	1091	C	C5'-C4'	5.61	1.58	1.51
67	B1	1136	G	C2'-C1'	-5.61	1.47	1.53
67	B1	1897	G	O4'-C1'	-5.61	1.34	1.41
67	B1	2636	C	C4'-O4'	5.61	1.52	1.45
67	B1	626	C	C2'-C1'	5.61	1.59	1.53
67	B1	2587	G	O3'-P	-5.61	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2817	U	C2'-C1'	-5.61	1.47	1.53
20	A3	79	TYR	CD2-CE2	5.61	1.47	1.39
21	A2	249	U	C2'-C1'	-5.61	1.47	1.53
67	B1	630	G	C3'-C2'	-5.61	1.46	1.52
67	B1	1595	G	O4'-C1'	-5.61	1.34	1.41
67	B1	2825	A	C2'-C1'	5.61	1.59	1.53
21	A2	149	U	C4'-C3'	-5.61	1.47	1.52
21	A2	323	A	O4'-C1'	-5.61	1.34	1.41
21	A2	364	U	C2'-C1'	5.61	1.59	1.53
21	A2	568	C	C5'-C4'	5.61	1.58	1.51
21	A2	846	G	C5'-C4'	5.61	1.58	1.51
67	B1	225	C	P-O5'	-5.61	1.54	1.59
67	B1	555	G	C4'-O4'	5.61	1.52	1.45
67	B1	919	G	C4'-C3'	5.61	1.59	1.53
67	B1	1043	U	C3'-C2'	-5.61	1.46	1.52
67	B1	2804	C	C2'-C1'	5.61	1.59	1.53
68	B3	88	A	O4'-C1'	5.61	1.49	1.41
67	B1	1310	A	C2'-C1'	-5.60	1.47	1.53
67	B1	1514	C	P-O5'	-5.60	1.54	1.59
67	B1	2526	G	C2'-C1'	5.60	1.59	1.53
10	AD	110	TYR	CE1-CZ	5.60	1.45	1.38
21	A2	102	U	C3'-O3'	5.60	1.50	1.42
21	A2	1323	A	C4'-C3'	5.60	1.59	1.53
67	B1	1434	C	C2'-C1'	-5.60	1.47	1.53
67	B1	2005	A	C4'-O4'	-5.60	1.38	1.45
33	BC	6	ARG	CZ-NH1	5.60	1.40	1.33
67	B1	219	G	C5'-C4'	5.60	1.58	1.51
21	A2	364	U	O3'-P	-5.60	1.54	1.61
21	A2	1131	G	C5'-C4'	5.60	1.58	1.51
67	B1	1478	G	P-O5'	-5.60	1.54	1.59
21	A2	228	G	C2'-C1'	5.60	1.59	1.53
65	BJ	94	GLY	CA-C	5.60	1.60	1.51
67	B1	1382	C	C5'-C4'	5.60	1.58	1.51
67	B1	1951	G	O4'-C1'	5.60	1.49	1.41
17	AO	44	GLY	N-CA	-5.59	1.37	1.46
21	A2	535	U	C4'-O4'	-5.59	1.38	1.45
21	A2	1263	C	C4'-O4'	-5.59	1.38	1.45
21	A2	1310	C	C3'-C2'	5.59	1.59	1.52
33	BC	125	TYR	CD2-CE2	5.59	1.47	1.39
67	B1	249	G	C4'-O4'	-5.59	1.38	1.45
67	B1	1429	A	O4'-C1'	-5.59	1.34	1.41
67	B1	2802	G	C2'-C1'	5.59	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1385	C	O4'-C1'	5.59	1.49	1.41
19	AS	8	PHE	CG-CD1	5.59	1.47	1.38
67	B1	122	G	O4'-C1'	5.59	1.49	1.41
67	B1	155	U	O3'-P	-5.59	1.54	1.61
21	A2	361	A	C2'-C1'	-5.59	1.47	1.53
21	A2	814	C	O3'-P	-5.59	1.54	1.61
61	Bd	58	PRO	N-CD	5.59	1.55	1.47
67	B1	967	G	P-O5'	5.59	1.65	1.59
67	B1	1445	G	O4'-C1'	5.59	1.49	1.41
67	B1	2157	U	O3'-P	-5.59	1.54	1.61
35	BL	11	LEU	CA-C	-5.59	1.38	1.52
68	B3	122	C	O3'-P	-5.59	1.54	1.61
6	AC	140	ARG	CZ-NH2	5.58	1.40	1.33
52	BB	24	PHE	CE1-CZ	5.58	1.48	1.37
67	B1	242	C	C4'-C3'	5.58	1.59	1.53
67	B1	642	G	P-O5'	5.58	1.65	1.59
67	B1	1234	A	C4'-C3'	5.58	1.59	1.53
67	B1	1872	G	C2'-C1'	-5.58	1.47	1.53
21	A2	887	G	O4'-C1'	-5.58	1.34	1.41
40	BE	24	ARG	CD-NE	5.58	1.55	1.46
67	B1	51	G	P-O5'	-5.58	1.54	1.59
67	B1	1836	A	C2'-C1'	5.58	1.59	1.53
4	AG	85	ARG	CD-NE	5.58	1.55	1.46
21	A2	486	A	C2'-C1'	-5.58	1.47	1.53
21	A2	1072	C	C3'-O3'	5.58	1.50	1.42
21	A2	1094	U	C4'-O4'	5.58	1.52	1.45
21	A2	879	U	C2'-C1'	5.58	1.59	1.53
6	AC	147	TYR	CZ-OH	5.58	1.47	1.37
11	A1	77	A	P-O5'	-5.58	1.54	1.59
21	A2	805	C	C3'-O3'	5.58	1.50	1.42
67	B1	49	A	O4'-C1'	5.58	1.49	1.41
67	B1	1765	A	O4'-C1'	5.58	1.49	1.41
68	B3	47	G	O3'-P	-5.58	1.54	1.61
15	AE	171	ARG	CD-NE	5.58	1.55	1.46
67	B1	2032	G	C3'-C2'	5.58	1.59	1.52
67	B1	2289	A	P-O5'	5.58	1.65	1.59
21	A2	803	C	C4'-C3'	5.58	1.59	1.53
4	AG	75	ARG	CZ-NH2	5.57	1.40	1.33
21	A2	601	G	O4'-C1'	-5.57	1.34	1.41
21	A2	616	G	O3'-P	-5.57	1.54	1.61
21	A2	1156	A	O4'-C1'	-5.57	1.34	1.41
67	B1	466	C	P-O5'	-5.57	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1758	U	C4'-C3'	5.57	1.59	1.53
31	BY	53	TYR	CE1-CZ	5.57	1.45	1.38
67	B1	540	A	O4'-C1'	5.57	1.48	1.41
67	B1	577	C	C3'-C2'	-5.57	1.46	1.52
67	B1	803	A	O4'-C1'	5.57	1.48	1.41
21	A2	60	A	C5'-C4'	5.57	1.58	1.51
21	A2	682	A	C4'-O4'	-5.57	1.38	1.45
21	A2	1089	C	C4'-O4'	5.57	1.52	1.45
21	A2	1491	C	P-O5'	-5.57	1.54	1.59
67	B1	2196	C	C4'-O4'	5.57	1.52	1.45
1	AQ	100	ARG	CZ-NH1	5.57	1.40	1.33
67	B1	425	U	C4'-C3'	5.57	1.59	1.53
67	B1	491	G	P-O5'	-5.57	1.54	1.59
67	B1	1261	C	P-O5'	-5.57	1.54	1.59
21	A2	1163	U	P-O5'	-5.57	1.54	1.59
67	B1	636	G	C5'-C4'	5.57	1.58	1.51
67	B1	859	G	C4'-C3'	5.57	1.59	1.53
67	B1	1677	A	O4'-C1'	5.57	1.48	1.41
68	B3	74	U	C2'-O2'	-5.57	1.34	1.41
67	B1	2379	G	O4'-C1'	-5.56	1.34	1.41
67	B1	2404	G	C2'-C1'	-5.56	1.47	1.53
67	B1	1241	C	C3'-O3'	5.56	1.50	1.42
21	A2	886	G	C2'-C1'	-5.56	1.47	1.53
21	A2	1145	C	C2'-C1'	-5.56	1.47	1.53
52	BB	156	ARG	NE-CZ	5.56	1.40	1.33
67	B1	1707	A	C3'-C2'	-5.56	1.46	1.52
14	AM	54	GLU	CG-CD	5.56	1.60	1.51
21	A2	346	C	O4'-C1'	5.56	1.48	1.41
21	A2	917	A	C2'-C1'	-5.56	1.47	1.53
47	BI	3	ILE	N-CA	-5.56	1.35	1.46
54	BF	166	ARG	CD-NE	5.56	1.55	1.46
67	B1	1034	G	C5'-C4'	5.56	1.58	1.51
13	AX	50	ARG	CZ-NH2	5.56	1.40	1.33
67	B1	703	G	C4'-O4'	5.56	1.52	1.45
21	A2	1258	C	O4'-C1'	5.56	1.48	1.41
67	B1	3012	C	P-O5'	-5.56	1.54	1.59
21	A2	1033	G	O4'-C1'	5.55	1.48	1.41
63	Bg	40	ARG	CD-NE	5.55	1.55	1.46
67	B1	1958	A	C3'-C2'	5.55	1.59	1.52
67	B1	2239	C	O5'-C5'	5.55	1.53	1.44
68	B3	56	C	C3'-C2'	5.55	1.59	1.52
21	A2	594	A	P-O5'	-5.55	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1320	A	C5'-C4'	5.55	1.58	1.51
53	BD	55	ARG	CZ-NH1	5.55	1.40	1.33
67	B1	309	C	C5'-C4'	5.55	1.58	1.51
67	B1	713	C	C4'-C3'	5.55	1.59	1.53
67	B1	1204	U	P-O5'	-5.55	1.54	1.59
21	A2	644	G	O4'-C1'	5.55	1.48	1.41
51	Bj	39	ARG	NE-CZ	5.55	1.40	1.33
67	B1	48	G	C4'-C3'	-5.55	1.47	1.52
67	B1	525	C	C2'-C1'	-5.55	1.47	1.53
67	B1	1597	G	C4'-O4'	5.55	1.52	1.45
21	A2	306	C	C5'-C4'	5.55	1.58	1.51
21	A2	484	U	C5'-C4'	5.55	1.58	1.51
67	B1	60	G	C2'-C1'	-5.55	1.47	1.53
67	B1	565	A	O4'-C1'	-5.55	1.34	1.41
67	B1	1859	A	C2'-C1'	-5.55	1.47	1.53
67	B1	2723	G	C5'-C4'	5.55	1.58	1.51
67	B1	405	G	C4'-O4'	-5.55	1.38	1.45
67	B1	2194	A	O3'-P	-5.55	1.54	1.61
67	B1	2435	G	C2'-O2'	-5.55	1.34	1.41
67	B1	1688	C	P-O5'	-5.55	1.54	1.59
67	B1	2264	G	C2'-C1'	5.55	1.59	1.53
67	B1	2770	A	O3'-P	-5.55	1.54	1.61
67	B1	2891	A	P-O5'	-5.55	1.54	1.59
21	A2	103	A	C5'-C4'	5.54	1.58	1.51
52	BB	35	TYR	CE1-CZ	5.54	1.45	1.38
67	B1	2494	A	C5'-C4'	5.54	1.58	1.51
21	A2	341	C	C4'-O4'	5.54	1.52	1.45
67	B1	1984	G	C4'-C3'	-5.54	1.47	1.52
21	A2	766	G	C5'-C4'	5.54	1.58	1.51
21	A2	910	G	C2'-C1'	-5.54	1.47	1.53
21	A2	1440	G	C5'-C4'	5.54	1.57	1.51
67	B1	142	G	O4'-C1'	-5.54	1.34	1.41
67	B1	456	G	O4'-C1'	-5.54	1.34	1.41
67	B1	405	G	P-O5'	-5.54	1.54	1.59
67	B1	1407	A	C4'-O4'	5.54	1.52	1.45
67	B1	2001	U	O4'-C1'	5.54	1.48	1.41
8	AR	108	ARG	NE-CZ	5.54	1.40	1.33
21	A2	28	U	O3'-P	-5.54	1.54	1.61
21	A2	462	A	O3'-P	-5.54	1.54	1.61
53	BD	228	GLU	CB-CG	5.54	1.62	1.52
67	B1	2093	A	C5'-C4'	-5.54	1.44	1.51
67	B1	432	C	C4'-O4'	-5.54	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1725	A	O4'-C1'	5.54	1.48	1.41
67	B1	2366	G	O4'-C1'	5.54	1.48	1.41
67	B1	2552	C	C4'-C3'	-5.54	1.47	1.52
67	B1	2659	G	C4'-C3'	-5.54	1.47	1.52
67	B1	3002	A	C3'-O3'	5.54	1.49	1.42
11	A1	20	G	O4'-C1'	5.53	1.48	1.41
21	A2	1114	G	C4'-C3'	5.53	1.59	1.53
21	A2	1364	C	C3'-C2'	-5.53	1.46	1.52
21	A2	1375	C	C3'-O3'	5.53	1.49	1.42
21	A2	1479	C	C4'-C3'	-5.53	1.47	1.52
53	BD	72	ARG	NE-CZ	5.53	1.40	1.33
67	B1	2552	C	C5'-C4'	5.53	1.57	1.51
21	A2	316	C	C4'-O4'	5.53	1.52	1.45
21	A2	1268	C	C2'-C1'	-5.53	1.47	1.53
67	B1	2700	U	C3'-C2'	-5.53	1.46	1.52
21	A2	734	G	P-O5'	-5.53	1.54	1.59
21	A2	1249	A	O3'-P	-5.53	1.54	1.61
21	A2	1418	G	C3'-C2'	-5.53	1.46	1.52
23	AT	111	LYS	CA-C	-5.53	1.38	1.52
25	AH	19	GLY	CA-C	-5.53	1.43	1.51
67	B1	618	C	O4'-C1'	5.53	1.48	1.41
67	B1	907	C	O3'-P	-5.53	1.54	1.61
67	B1	2079	U	C2'-C1'	-5.53	1.47	1.53
67	B1	2626	U	C2'-C1'	-5.53	1.47	1.53
67	B1	357	G	P-O5'	5.53	1.65	1.59
21	A2	863	U	O4'-C1'	5.53	1.48	1.41
21	A2	888	A	C3'-O3'	5.53	1.49	1.42
21	A2	1436	U	O3'-P	-5.53	1.54	1.61
31	BY	118	ARG	CD-NE	5.53	1.55	1.46
39	Be	34	TYR	CE2-CZ	5.53	1.45	1.38
62	BN	139	ARG	CZ-NH2	5.53	1.40	1.33
67	B1	1986	U	C4'-C3'	5.53	1.59	1.53
67	B1	2640	C	C4'-O4'	5.53	1.52	1.45
17	AO	9	ARG	NE-CZ	5.53	1.40	1.33
21	A2	4	C	O4'-C1'	5.53	1.48	1.41
23	AT	9	ARG	NE-CZ	5.53	1.40	1.33
33	BC	353	ARG	CZ-NH1	5.53	1.40	1.33
46	BA	18	ARG	NE-CZ	5.53	1.40	1.33
67	B1	1555	G	O4'-C1'	5.53	1.48	1.41
38	Bb	40	TRP	NE1-CE2	5.52	1.44	1.37
67	B1	2236	C	C5'-C4'	5.52	1.57	1.51
49	BQ	72	LYS	C-N	5.52	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1027	A	O3'-P	-5.52	1.54	1.61
67	B1	1156	G	C3'-O3'	5.52	1.49	1.42
67	B1	1690	U	C2'-C1'	-5.52	1.47	1.53
67	B1	1847	U	C4'-O4'	-5.52	1.38	1.45
67	B1	2532	G	O5'-C5'	5.52	1.53	1.44
30	AU	43	ARG	CD-NE	5.52	1.55	1.46
67	B1	1054	A	C3'-O3'	5.52	1.49	1.42
21	A2	969	A	P-O5'	-5.52	1.54	1.59
21	A2	1234	A	C5'-C4'	5.52	1.57	1.51
53	BD	45	PRO	CA-C	-5.52	1.41	1.52
67	B1	320	C	C5'-C4'	5.52	1.57	1.51
67	B1	560	G	C5'-C4'	5.52	1.57	1.51
67	B1	2629	U	P-O5'	-5.52	1.54	1.59
21	A2	222	G	O4'-C1'	5.52	1.48	1.41
21	A2	382	G	C4'-C3'	5.52	1.59	1.53
21	A2	1039	C	C4'-C3'	-5.52	1.47	1.52
27	A0	33	U	C4'-O4'	5.52	1.52	1.45
47	BI	62	ARG	CZ-NH2	5.52	1.40	1.33
67	B1	93	C	C2'-C1'	-5.52	1.47	1.53
67	B1	166	G	C3'-C2'	5.52	1.59	1.52
67	B1	499	A	C3'-C2'	-5.52	1.46	1.52
67	B1	1641	G	P-O5'	5.52	1.65	1.59
67	B1	1645	U	C2'-C1'	5.52	1.59	1.53
21	A2	477	G	C2'-C1'	-5.52	1.47	1.53
67	B1	1378	G	O4'-C1'	-5.52	1.34	1.41
67	B1	2795	G	O4'-C1'	5.52	1.48	1.41
21	A2	190	C	C2'-C1'	-5.51	1.47	1.53
67	B1	2254	U	C4'-C3'	5.51	1.59	1.53
67	B1	2738	G	O4'-C1'	5.51	1.48	1.41
67	B1	2940	C	C5'-C4'	5.51	1.57	1.51
67	B1	1282	A	C2'-C1'	-5.51	1.47	1.53
67	B1	1331	U	P-O5'	-5.51	1.54	1.59
67	B1	1365	G	C5'-C4'	5.51	1.57	1.51
67	B1	455	G	O4'-C1'	5.51	1.48	1.41
67	B1	461	C	C5'-C4'	5.51	1.57	1.51
67	B1	1744	A	O3'-P	-5.51	1.54	1.61
34	B5	37	GLY	CA-C	-5.51	1.43	1.51
67	B1	2053	G	O3'-P	-5.51	1.54	1.61
67	B1	2314	U	C4'-O4'	5.51	1.52	1.45
21	A2	296	A	C4'-C3'	5.51	1.59	1.53
21	A2	1108	U	O4'-C1'	5.51	1.48	1.41
67	B1	613	C	C4'-C3'	-5.51	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	765	G	C2'-C1'	-5.51	1.47	1.53
67	B1	2199	U	C5'-C4'	5.51	1.57	1.51
15	AE	40	ARG	NE-CZ	5.50	1.40	1.33
67	B1	598	C	P-O5'	-5.50	1.54	1.59
21	A2	697	A	P-O5'	-5.50	1.54	1.59
21	A2	1265	G	O3'-P	-5.50	1.54	1.61
27	A0	39	U	C3'-C2'	5.50	1.59	1.52
44	BW	48	ARG	CZ-NH1	5.50	1.40	1.33
49	BQ	126	ARG	CZ-NH1	5.50	1.40	1.33
67	B1	388	G	O4'-C1'	5.50	1.48	1.41
21	A2	491	G	C3'-C2'	5.50	1.59	1.52
21	A2	651	U	C5'-C4'	5.50	1.57	1.51
67	B1	1790	G	O3'-P	5.50	1.67	1.61
67	B1	1859	A	P-O5'	-5.50	1.54	1.59
67	B1	1958	A	C4'-C3'	-5.50	1.47	1.52
67	B1	2461	C	C4'-C3'	5.50	1.59	1.53
67	B1	2987	U	C4'-O4'	-5.50	1.38	1.45
67	B1	3003	A	C5'-C4'	5.50	1.57	1.51
10	AD	25	ARG	CZ-NH1	5.50	1.40	1.33
21	A2	297	G	C5'-C4'	5.50	1.57	1.51
27	A0	27	C	P-O5'	-5.50	1.54	1.59
67	B1	69	C	O3'-P	-5.50	1.54	1.61
67	B1	896	G	O3'-P	5.50	1.67	1.61
67	B1	1366	U	O3'-P	-5.50	1.54	1.61
21	A2	895	C	C4'-C3'	-5.50	1.47	1.52
21	A2	1283	G	C4'-C3'	-5.50	1.47	1.52
34	BK	37	GLY	CA-C	-5.50	1.43	1.51
67	B1	1161	A	O3'-P	-5.50	1.54	1.61
67	B1	2935	A	C3'-C2'	5.50	1.58	1.52
68	B3	52	U	C3'-C2'	5.50	1.58	1.52
21	A2	584	C	O3'-P	5.50	1.67	1.61
52	BB	30	TYR	CD2-CE2	5.50	1.47	1.39
21	A2	119	A	O4'-C1'	5.49	1.48	1.41
21	A2	1301	U	C4'-O4'	-5.49	1.38	1.45
46	BA	119	ARG	CZ-NH1	5.49	1.40	1.33
67	B1	369	G	C4'-C3'	-5.49	1.47	1.52
67	B1	1826	G	C4'-O4'	5.49	1.52	1.45
67	B1	2084	A	C5'-C4'	5.49	1.57	1.51
67	B1	2104	G	O3'-P	-5.49	1.54	1.61
21	A2	858	A	C3'-O3'	5.49	1.49	1.42
67	B1	247	A	C3'-C2'	5.49	1.58	1.52
67	B1	259	A	O4'-C1'	5.49	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1024	G	O4'-C1'	-5.49	1.34	1.41
67	B1	1457	C	C2'-C1'	-5.49	1.47	1.53
67	B1	2125	C	O4'-C1'	5.49	1.48	1.41
67	B1	2880	C	C4'-O4'	-5.49	1.38	1.45
11	A1	30	G	C4'-C3'	5.49	1.59	1.53
21	A2	946	G	C2'-C1'	-5.49	1.47	1.53
57	BZ	33	LYS	CD-CE	5.49	1.65	1.51
67	B1	1481	G	C4'-C3'	5.49	1.59	1.53
67	B1	1782	C	C3'-O3'	5.49	1.49	1.42
67	B1	2040	A	O4'-C1'	5.49	1.48	1.41
67	B1	2426	U	C5'-C4'	5.49	1.57	1.51
67	B1	611	G	O4'-C1'	5.49	1.48	1.41
67	B1	820	C	C2'-C1'	-5.49	1.47	1.53
67	B1	1214	C	C4'-C3'	-5.49	1.47	1.52
67	B1	2912	G	O3'-P	-5.49	1.54	1.61
67	B1	686	C	P-O5'	-5.49	1.54	1.59
67	B1	2760	A	C3'-C2'	5.49	1.58	1.52
67	B1	489	G	O3'-P	-5.48	1.54	1.61
67	B1	1346	G	C4'-O4'	5.48	1.52	1.45
67	B1	1841	G	P-O5'	-5.48	1.54	1.59
67	B1	2087	U	C4'-C3'	-5.48	1.47	1.52
67	B1	2504	U	P-O5'	-5.48	1.54	1.59
21	A2	590	G	P-O5'	-5.48	1.54	1.59
67	B1	61	G	C5'-C4'	5.48	1.57	1.51
67	B1	490	C	O3'-P	-5.48	1.54	1.61
67	B1	739	C	C4'-C3'	5.48	1.59	1.53
67	B1	2458	U	O4'-C1'	5.48	1.48	1.41
67	B1	2758	G	P-O5'	-5.48	1.54	1.59
68	B3	39	C	O3'-P	-5.48	1.54	1.61
7	AB	131	VAL	CA-CB	-5.48	1.43	1.54
21	A2	517	U	O3'-P	-5.48	1.54	1.61
21	A2	869	U	O4'-C1'	5.48	1.48	1.41
33	BC	251	ARG	CZ-NH1	5.48	1.40	1.33
11	A1	11	C	C3'-C2'	-5.48	1.46	1.52
15	AE	106	ARG	CA-CB	5.48	1.66	1.53
21	A2	78	G	C5'-C4'	5.48	1.57	1.51
21	A2	578	G	C5'-C4'	5.48	1.57	1.51
27	A0	59	A	C4'-O4'	-5.48	1.38	1.45
67	B1	676	G	P-O5'	5.48	1.65	1.59
67	B1	1317	G	C4'-C3'	-5.48	1.47	1.52
67	B1	1938	G	C3'-O3'	5.48	1.49	1.42
67	B1	1976	C	O3'-P	-5.48	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1175	C	O3'-P	-5.48	1.54	1.61
21	A2	195	C	C4'-O4'	5.47	1.52	1.45
21	A2	473	A	P-O5'	-5.47	1.54	1.59
67	B1	16	G	C4'-C3'	5.47	1.59	1.53
67	B1	926	C	O3'-P	-5.47	1.54	1.61
67	B1	2630	C	C3'-O3'	5.47	1.49	1.42
21	A2	717	C	O4'-C1'	5.47	1.48	1.41
21	A2	1023	C	C4'-C3'	-5.47	1.47	1.52
67	B1	701	G	P-O5'	-5.47	1.54	1.59
67	B1	1147	G	C3'-O3'	5.47	1.49	1.42
67	B1	1225	A	C3'-C2'	-5.47	1.46	1.52
67	B1	2551	G	C2'-C1'	-5.47	1.47	1.53
67	B1	693	G	C5'-C4'	5.47	1.57	1.51
67	B1	1944	C	O4'-C1'	5.47	1.48	1.41
47	BI	51	GLN	CG-CD	5.47	1.63	1.51
67	B1	1851	U	O5'-C5'	5.47	1.53	1.44
67	B1	2340	A	P-O5'	5.47	1.65	1.59
67	B1	2889	A	C3'-C2'	-5.47	1.46	1.52
67	B1	2912	G	C2'-C1'	5.47	1.59	1.53
67	B1	135	U	C5'-C4'	5.47	1.57	1.51
8	AR	8	ARG	CD-NE	5.47	1.55	1.46
21	A2	218	C	C4'-C3'	5.47	1.59	1.53
21	A2	642	G	C4'-C3'	5.47	1.59	1.53
54	BF	41	TRP	CE2-CZ2	5.47	1.49	1.39
67	B1	427	G	C2'-C1'	-5.47	1.47	1.53
67	B1	692	C	O4'-C1'	5.47	1.48	1.41
67	B1	2959	A	P-O5'	5.47	1.65	1.59
67	B1	1145	G	P-O5'	-5.46	1.54	1.59
11	A1	10	G	C5'-C4'	5.46	1.57	1.51
21	A2	782	A	O4'-C1'	5.46	1.48	1.41
36	Bf	22	ARG	CD-NE	5.46	1.55	1.46
67	B1	155	U	O4'-C1'	-5.46	1.34	1.41
67	B1	532	G	C4'-C3'	-5.46	1.47	1.52
67	B1	954	A	C4'-C3'	-5.46	1.47	1.52
67	B1	1107	G	C5'-C4'	5.46	1.57	1.51
67	B1	1540	A	C5'-C4'	5.46	1.57	1.51
67	B1	1684	C	C4'-C3'	-5.46	1.47	1.52
67	B1	2282	G	C5'-C4'	5.46	1.57	1.51
11	A1	30	G	P-O5'	5.46	1.65	1.59
67	B1	2272	G	O3'-P	5.46	1.67	1.61
16	AJ	24	ARG	NE-CZ	5.46	1.40	1.33
21	A2	831	A	C4'-O4'	-5.46	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	BQ	121	ARG	NE-CZ	5.46	1.40	1.33
67	B1	970	G	C2'-C1'	-5.46	1.47	1.53
67	B1	1350	C	O4'-C1'	5.46	1.48	1.41
67	B1	1536	U	C3'-O3'	5.46	1.49	1.42
67	B1	1596	G	C4'-O4'	5.46	1.52	1.45
67	B1	1725	A	C3'-C2'	-5.46	1.46	1.52
11	A1	64	C	O4'-C1'	5.46	1.48	1.41
21	A2	314	G	C5'-C4'	-5.46	1.44	1.51
21	A2	1427	C	P-O5'	-5.46	1.54	1.59
67	B1	196	A	O4'-C1'	5.46	1.48	1.41
67	B1	947	C	C4'-C3'	-5.46	1.47	1.52
60	BS	83	TYR	CB-CG	-5.46	1.43	1.51
67	B1	1543	C	O4'-C1'	5.46	1.48	1.41
21	A2	1048	G	O3'-P	5.45	1.67	1.61
67	B1	1245	C	C3'-O3'	5.45	1.49	1.42
67	B1	2490	C	C4'-O4'	5.45	1.52	1.45
67	B1	2989	A	C4'-C3'	5.45	1.59	1.53
68	B3	55	G	P-O5'	-5.45	1.54	1.59
21	A2	1281	U	C3'-C2'	-5.45	1.46	1.52
67	B1	1092	U	C2'-C1'	-5.45	1.47	1.53
67	B1	1699	U	C3'-O3'	5.45	1.49	1.42
21	A2	1470	G	C3'-C2'	-5.45	1.46	1.52
67	B1	14	A	O3'-P	-5.45	1.54	1.61
67	B1	734	C	O4'-C1'	5.45	1.48	1.41
67	B1	1056	C	C4'-C3'	5.45	1.59	1.53
67	B1	2969	G	C3'-C2'	5.45	1.58	1.52
67	B1	2997	G	C2'-C1'	-5.45	1.47	1.53
21	A2	1476	C	P-O5'	-5.45	1.54	1.59
67	B1	305	G	O3'-P	5.45	1.67	1.61
67	B1	321	C	C3'-O3'	5.45	1.49	1.42
67	B1	915	G	O4'-C1'	5.45	1.48	1.41
67	B1	1162	C	O3'-P	-5.45	1.54	1.61
67	B1	2656	A	C2'-C1'	-5.45	1.47	1.53
67	B1	2778	A	O4'-C1'	5.45	1.48	1.41
68	B3	123	U	C3'-C2'	5.45	1.58	1.52
15	AE	31	ARG	NE-CZ	5.45	1.40	1.33
21	A2	312	U	C4'-O4'	-5.45	1.38	1.45
21	A2	1394	G	O3'-P	-5.45	1.54	1.61
33	BC	201	GLU	CB-CG	5.45	1.62	1.52
67	B1	696	G	C2'-C1'	5.45	1.59	1.53
67	B1	2662	G	C4'-C3'	5.45	1.59	1.53
67	B1	2667	U	O4'-C1'	5.45	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	1164	A	O3'-P	-5.44	1.54	1.61
67	B1	236	G	O4'-C1'	-5.44	1.34	1.41
68	B3	113	C	C2'-C1'	-5.44	1.47	1.53
67	B1	1487	U	C4'-O4'	-5.44	1.38	1.45
67	B1	1689	G	P-O5'	-5.44	1.54	1.59
67	B1	2536	A	O4'-C1'	5.44	1.48	1.41
68	B3	114	G	C4'-O4'	5.44	1.52	1.45
8	AR	68	SER	CA-CB	5.44	1.61	1.52
21	A2	204	G	O4'-C1'	5.44	1.48	1.41
21	A2	344	G	P-O5'	-5.44	1.54	1.59
67	B1	597	C	C5'-C4'	-5.44	1.44	1.51
67	B1	1670	A	C4'-C3'	5.44	1.59	1.53
67	B1	2730	U	P-O5'	-5.44	1.54	1.59
49	BQ	27	GLU	CG-CD	5.44	1.60	1.51
67	B1	2335	G	C5'-C4'	5.44	1.57	1.51
49	BQ	76	ARG	NE-CZ	5.44	1.40	1.33
67	B1	397	G	C5'-C4'	-5.44	1.44	1.51
67	B1	618	C	O3'-P	-5.44	1.54	1.61
67	B1	813	G	O3'-P	-5.44	1.54	1.61
67	B1	989	G	O4'-C1'	5.44	1.48	1.41
67	B1	1650	U	O4'-C1'	5.44	1.48	1.41
67	B1	2550	A	P-O5'	-5.44	1.54	1.59
21	A2	492	G	C5'-C4'	5.44	1.57	1.51
52	BB	119	GLY	CA-C	-5.44	1.43	1.51
66	B1	53	PHE	CG-CD2	5.44	1.47	1.38
67	B1	1676	G	C2'-O2'	-5.44	1.34	1.41
67	B1	2011	U	O4'-C1'	5.44	1.48	1.41
15	AE	131	ARG	CZ-NH1	5.43	1.40	1.33
21	A2	611	A	O3'-P	-5.43	1.54	1.61
21	A2	1120	G	P-O5'	-5.43	1.54	1.59
36	Bf	42	ARG	NE-CZ	5.43	1.40	1.33
56	BH	23	PRO	N-CA	-5.43	1.38	1.47
21	A2	240	U	P-O5'	-5.43	1.54	1.59
21	A2	839	G	C4'-O4'	5.43	1.52	1.45
21	A2	1215	G	C2'-C1'	-5.43	1.47	1.53
27	A0	72	C	P-O5'	5.43	1.65	1.59
67	B1	174	C	C5'-C4'	5.43	1.57	1.51
67	B1	411	U	C5'-C4'	5.43	1.57	1.51
67	B1	679	U	C5'-C4'	-5.43	1.44	1.51
67	B1	814	G	C4'-C3'	5.43	1.59	1.53
67	B1	1304	G	C4'-C3'	-5.43	1.47	1.52
7	AB	90	ARG	NE-CZ	5.43	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	503	G	C4'-C3'	-5.43	1.47	1.52
67	B1	2665	G	C5'-C4'	5.43	1.57	1.51
16	AJ	91	ARG	CZ-NH1	5.43	1.40	1.33
21	A2	1360	C	C4'-C3'	5.43	1.59	1.53
59	BM	157	ARG	CZ-NH2	5.43	1.40	1.33
67	B1	1510	U	C5'-C4'	5.43	1.57	1.51
67	B1	1735	G	C3'-O3'	5.43	1.49	1.42
7	AB	168	TYR	CE1-CZ	5.43	1.45	1.38
67	B1	322	C	C4'-C3'	-5.43	1.47	1.52
67	B1	2823	G	C2'-C1'	-5.43	1.47	1.53
32	BO	145	ARG	N-CA	-5.43	1.35	1.46
67	B1	116	G	C5'-C4'	5.43	1.57	1.51
67	B1	836	U	P-O5'	-5.43	1.54	1.59
67	B1	2720	U	O4'-C1'	5.43	1.48	1.41
21	A2	635	C	C2'-C1'	-5.42	1.47	1.53
21	A2	682	A	C3'-O3'	5.42	1.49	1.42
21	A2	1157	G	C2'-O2'	5.42	1.48	1.41
67	B1	59	U	O4'-C1'	5.42	1.48	1.41
67	B1	790	U	O4'-C1'	5.42	1.48	1.41
67	B1	1590	C	C5'-C4'	5.42	1.57	1.51
67	B1	1759	A	P-O5'	-5.42	1.54	1.59
67	B1	1792	A	C4'-O4'	5.42	1.52	1.45
67	B1	1864	G	C3'-C2'	-5.42	1.46	1.52
67	B1	1892	G	O5'-C5'	5.42	1.53	1.44
67	B1	2262	C	P-O5'	-5.42	1.54	1.59
67	B1	2928	C	P-O5'	5.42	1.65	1.59
67	B1	2964	A	P-O5'	-5.42	1.54	1.59
21	A2	27	C	C2'-C1'	-5.42	1.47	1.53
21	A2	1466	G	C3'-C2'	5.42	1.58	1.52
36	Bf	3	ARG	CA-CB	5.42	1.65	1.53
67	B1	1260	C	O3'-P	-5.42	1.54	1.61
67	B1	1791	A	C5'-C4'	-5.42	1.44	1.51
67	B1	2550	A	O4'-C1'	5.42	1.48	1.41
21	A2	1272	G	C3'-C2'	5.42	1.58	1.52
24	AA	71	TYR	CG-CD2	5.42	1.46	1.39
67	B1	1737	A	C4'-O4'	5.42	1.52	1.45
67	B1	2316	U	C3'-C2'	5.42	1.58	1.52
67	B1	2370	C	C5'-C4'	5.42	1.57	1.51
7	AB	116	ILE	N-CA	-5.42	1.35	1.46
21	A2	530	G	C4'-C3'	5.42	1.59	1.53
31	BY	132	ARG	CZ-NH1	5.42	1.40	1.33
67	B1	1297	C	C4'-C3'	5.42	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2502	C	C3'-C2'	-5.42	1.46	1.52
22	AY	37	ARG	CZ-NH1	5.42	1.40	1.33
67	B1	1501	G	O4'-C1'	5.42	1.48	1.41
21	A2	475	C	P-O5'	-5.42	1.54	1.59
21	A2	1247	A	O3'-P	-5.42	1.54	1.61
32	BO	92	TYR	CD1-CE1	5.42	1.47	1.39
67	B1	2305	U	O3'-P	-5.42	1.54	1.61
67	B1	2512	C	C2'-C1'	-5.42	1.47	1.53
67	B1	2952	C	P-O5'	5.42	1.65	1.59
67	B1	27	G	C2'-C1'	5.41	1.59	1.53
67	B1	471	U	C5'-C4'	5.41	1.57	1.51
67	B1	825	C	C3'-O3'	5.41	1.49	1.42
67	B1	867	C	C3'-O3'	5.41	1.49	1.42
67	B1	930	G	O3'-P	-5.41	1.54	1.61
67	B1	1888	G	O3'-P	-5.41	1.54	1.61
67	B1	2348	G	O4'-C1'	-5.41	1.34	1.41
67	B1	2900	C	C2'-C1'	-5.41	1.47	1.53
59	BM	11	TRP	CE3-CZ3	5.41	1.47	1.38
67	B1	600	A	C4'-C3'	-5.41	1.47	1.52
67	B1	604	A	O4'-C1'	5.41	1.48	1.41
67	B1	1952	G	O3'-P	-5.41	1.54	1.61
67	B1	2307	C	P-O5'	5.41	1.65	1.59
32	BO	166	ARG	CZ-NH2	5.41	1.40	1.33
46	BA	24	PHE	CG-CD2	5.41	1.46	1.38
67	B1	945	U	O4'-C1'	5.41	1.48	1.41
67	B1	995	G	C4'-C3'	-5.41	1.47	1.52
67	B1	2827	C	C5'-C4'	5.41	1.57	1.51
21	A2	306	C	O4'-C1'	5.41	1.48	1.41
25	AH	179	SER	CA-CB	5.41	1.61	1.52
67	B1	52	A	P-O5'	-5.41	1.54	1.59
67	B1	1092	U	C5'-C4'	5.41	1.57	1.51
11	A1	59	A	C5'-C4'	-5.41	1.44	1.51
21	A2	1248	A	C3'-O3'	5.41	1.49	1.42
28	AV	67	GLY	CA-C	-5.41	1.43	1.51
67	B1	806	C	O3'-P	-5.41	1.54	1.61
67	B1	1688	C	C2'-C1'	-5.41	1.47	1.53
67	B1	2960	G	O4'-C1'	5.41	1.48	1.41
16	AJ	43	ARG	CD-NE	5.41	1.55	1.46
21	A2	458	G	N7-C5	-5.41	1.36	1.39
21	A2	758	U	O3'-P	-5.41	1.54	1.61
30	AU	99	ARG	NE-CZ	5.41	1.40	1.33
48	BR	48	SER	CA-CB	5.41	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	703	G	O4'-C1'	5.41	1.48	1.41
67	B1	2250	G	O3'-P	-5.41	1.54	1.61
67	B1	2382	A	C4'-C3'	5.41	1.59	1.53
67	B1	1154	A	C3'-O3'	5.40	1.49	1.42
21	A2	1152	C	C4'-O4'	-5.40	1.38	1.45
21	A2	1172	A	C5'-C4'	5.40	1.57	1.51
21	A2	1285	C	C4'-C3'	-5.40	1.47	1.52
21	A2	1338	C	C4'-O4'	-5.40	1.38	1.45
51	Bj	3	TYR	CG-CD1	-5.40	1.32	1.39
67	B1	2231	G	O3'-P	-5.40	1.54	1.61
21	A2	809	C	C2'-C1'	5.40	1.59	1.53
21	A2	1151	A	O3'-P	-5.40	1.54	1.61
67	B1	545	G	C4'-O4'	-5.40	1.38	1.45
67	B1	1823	A	C4'-O4'	5.40	1.52	1.45
67	B1	2443	G	O3'-P	-5.40	1.54	1.61
67	B1	2875	C	C4'-O4'	5.40	1.52	1.45
21	A2	66	G	C5'-C4'	5.40	1.57	1.51
67	B1	1782	C	O3'-P	-5.40	1.54	1.61
38	Bb	33	LYS	CA-C	-5.40	1.39	1.52
46	BA	68	GLY	CA-C	5.40	1.60	1.51
6	AC	30	TYR	CB-CG	-5.39	1.43	1.51
11	A1	10	G	C3'-O3'	5.39	1.49	1.42
11	A1	29	C	O3'-P	-5.39	1.54	1.61
21	A2	486	A	O4'-C1'	5.39	1.48	1.41
67	B1	559	G	C4'-O4'	5.39	1.52	1.45
67	B1	575	G	C5'-C4'	5.39	1.57	1.51
67	B1	1092	U	C3'-O3'	5.39	1.49	1.42
67	B1	1933	U	O3'-P	-5.39	1.54	1.61
67	B1	2266	C	C4'-C3'	5.39	1.59	1.53
67	B1	2406	C	C5'-C4'	5.39	1.57	1.51
67	B1	2844	G	O3'-P	-5.39	1.54	1.61
67	B1	3034	C	C4'-C3'	-5.39	1.47	1.52
21	A2	231	G	C2'-C1'	5.39	1.59	1.53
21	A2	488	A	O3'-P	-5.39	1.54	1.61
21	A2	520	G	P-O5'	5.39	1.65	1.59
21	A2	1247	A	C2'-C1'	-5.39	1.47	1.53
24	AA	154	PHE	CG-CD2	5.39	1.46	1.38
67	B1	2206	G	P-O5'	5.39	1.65	1.59
21	A2	476	C	P-O5'	-5.39	1.54	1.59
67	B1	2025	A	C3'-O3'	5.39	1.49	1.42
67	B1	2401	A	C2'-C1'	-5.39	1.47	1.53
7	AB	33	TYR	CE1-CZ	5.39	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	AF	3	GLN	CG-CD	5.39	1.63	1.51
21	A2	259	A	C2'-C1'	5.39	1.59	1.53
21	A2	326	C	P-O5'	-5.39	1.54	1.59
21	A2	1091	C	O4'-C1'	5.39	1.48	1.41
67	B1	1783	U	C5'-C4'	5.39	1.57	1.51
67	B1	2060	A	C4'-C3'	5.39	1.59	1.53
21	A2	23	G	P-O5'	-5.39	1.54	1.59
21	A2	422	U	C5'-C4'	5.39	1.57	1.51
33	BC	358	TYR	CE2-CZ	5.39	1.45	1.38
38	Bb	66	SER	CA-CB	5.39	1.61	1.52
67	B1	662	A	C2'-C1'	-5.39	1.47	1.53
67	B1	711	C	O4'-C1'	5.39	1.48	1.41
21	A2	818	A	C2'-C1'	-5.39	1.47	1.53
21	A2	1232	G	O4'-C1'	5.39	1.48	1.41
67	B1	1291	C	P-O5'	-5.39	1.54	1.59
21	A2	260	C	O3'-P	-5.38	1.54	1.61
21	A2	897	A	C4'-O4'	-5.38	1.38	1.45
67	B1	527	G	C3'-C2'	5.38	1.58	1.52
67	B1	1256	G	O4'-C1'	-5.38	1.34	1.41
67	B1	1409	U	C3'-O3'	5.38	1.49	1.42
67	B1	1784	G	C2'-C1'	-5.38	1.47	1.53
67	B1	3031	U	O3'-P	-5.38	1.54	1.61
21	A2	199	A	C4'-O4'	5.38	1.52	1.45
21	A2	200	G	C4'-O4'	-5.38	1.38	1.45
67	B1	2207	C	C5'-C4'	5.38	1.57	1.51
67	B1	2288	C	C4'-C3'	-5.38	1.47	1.52
15	AE	126	ARG	CZ-NH1	5.38	1.40	1.33
21	A2	472	C	C3'-C2'	5.38	1.58	1.52
67	B1	2309	C	P-O5'	-5.38	1.54	1.59
21	A2	718	G	C3'-O3'	5.38	1.49	1.42
42	BT	86	PHE	CE2-CZ	5.38	1.47	1.37
67	B1	882	U	O5'-C5'	5.38	1.53	1.44
67	B1	1464	A	C4'-C3'	-5.38	1.47	1.52
14	AM	70	GLU	CB-CG	5.38	1.62	1.52
15	AE	198	ARG	CZ-NH1	5.38	1.40	1.33
21	A2	1467	U	C2'-C1'	-5.38	1.47	1.53
47	BI	111	GLU	CA-CB	5.38	1.65	1.53
67	B1	571	G	O4'-C1'	5.38	1.48	1.41
67	B1	1285	C	P-O5'	-5.38	1.54	1.59
67	B1	2654	C	C2'-C1'	-5.38	1.47	1.53
67	B1	2701	U	O4'-C1'	5.38	1.48	1.41
67	B1	2922	G	O4'-C1'	5.38	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	398	C	O4'-C1'	5.38	1.48	1.41
21	A2	994	C	C4'-C3'	-5.38	1.47	1.52
21	A2	1056	G	O4'-C1'	-5.38	1.34	1.41
21	A2	1143	G	C4'-C3'	5.38	1.59	1.53
27	A0	21	G	C3'-C2'	5.38	1.58	1.52
53	BD	254	TYR	CE1-CZ	5.38	1.45	1.38
67	B1	428	A	C4'-C3'	5.38	1.59	1.53
67	B1	734	C	C2'-O2'	-5.38	1.34	1.41
67	B1	2658	G	C2'-C1'	-5.38	1.47	1.53
21	A2	1121	C	P-O5'	-5.38	1.54	1.59
25	AH	85	PHE	CA-CB	5.38	1.65	1.53
53	BD	155	ARG	CZ-NH1	5.37	1.40	1.33
67	B1	393	C	C2'-C1'	-5.37	1.47	1.53
67	B1	655	C	C4'-O4'	-5.37	1.38	1.45
67	B1	1700	U	O4'-C1'	-5.37	1.34	1.41
21	A2	871	A	C5'-C4'	5.37	1.57	1.51
21	A2	889	G	C4'-O4'	5.37	1.52	1.45
67	B1	754	U	C2'-C1'	5.37	1.59	1.53
67	B1	1128	G	C3'-O3'	5.37	1.49	1.42
67	B1	2191	U	O3'-P	-5.37	1.54	1.61
67	B1	2346	A	C2'-O2'	-5.37	1.34	1.41
67	B1	2680	A	C2'-C1'	5.37	1.59	1.53
21	A2	619	A	C4'-C3'	-5.37	1.47	1.52
67	B1	15	A	O3'-P	-5.37	1.54	1.61
67	B1	309	C	C4'-C3'	5.37	1.59	1.53
67	B1	913	G	C5'-C4'	5.37	1.57	1.51
67	B1	1314	A	C2'-C1'	5.37	1.59	1.53
21	A2	257	U	C2'-C1'	-5.37	1.47	1.53
21	A2	1184	U	P-O5'	-5.37	1.54	1.59
21	A2	1226	G	O4'-C1'	5.37	1.48	1.41
27	A0	56	C	O3'-P	-5.37	1.54	1.61
67	B1	343	C	O4'-C1'	5.37	1.48	1.41
67	B1	1332	A	O4'-C1'	5.37	1.48	1.41
67	B1	1726	A	C5'-C4'	5.37	1.57	1.51
67	B1	1889	G	C3'-C2'	5.37	1.58	1.52
67	B1	2636	C	O3'-P	-5.37	1.54	1.61
21	A2	1075	A	C4'-C3'	5.37	1.59	1.53
21	A2	1249	A	C5'-C4'	5.37	1.57	1.51
21	A2	256	G	P-O5'	-5.37	1.54	1.59
21	A2	781	U	C4'-C3'	5.36	1.59	1.53
27	A0	56	C	C4'-O4'	-5.36	1.38	1.45
67	B1	483	C	C5'-C4'	5.36	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	627	G	O3'-P	-5.36	1.54	1.61
67	B1	2967	C	O3'-P	-5.36	1.54	1.61
21	A2	881	G	C3'-C2'	-5.36	1.46	1.52
44	BW	37	SER	N-CA	-5.36	1.35	1.46
67	B1	1002	A	P-O5'	-5.36	1.54	1.59
67	B1	2094	A	O4'-C1'	5.36	1.48	1.41
67	B1	2944	G	O3'-P	5.36	1.67	1.61
38	Bb	48	SER	CA-CB	5.36	1.60	1.52
59	BM	75	ARG	CD-NE	5.36	1.55	1.46
67	B1	452	A	O3'-P	-5.36	1.54	1.61
21	A2	976	A	C5'-C4'	5.36	1.57	1.51
37	BU	74	TYR	CG-CD2	5.36	1.46	1.39
67	B1	310	C	O3'-P	-5.36	1.54	1.61
67	B1	1183	U	C2'-C1'	5.36	1.59	1.53
67	B1	1290	G	C4'-C3'	-5.36	1.47	1.52
21	A2	1447	A	O4'-C1'	5.36	1.48	1.41
62	BN	136	ARG	CA-CB	5.36	1.65	1.53
67	B1	1158	G	C3'-O3'	5.36	1.49	1.42
67	B1	1400	U	C4'-C3'	5.36	1.59	1.53
67	B1	1557	G	O3'-P	-5.36	1.54	1.61
67	B1	2177	A	P-O5'	-5.36	1.54	1.59
10	AD	142	TYR	CE1-CZ	5.35	1.45	1.38
67	B1	1437	C	O3'-P	-5.35	1.54	1.61
7	AB	128	ARG	CZ-NH2	5.35	1.40	1.33
67	B1	1296	A	C3'-C2'	5.35	1.58	1.52
21	A2	1056	G	O3'-P	-5.35	1.54	1.61
67	B1	606	A	O3'-P	-5.35	1.54	1.61
67	B1	1159	U	C2'-C1'	-5.35	1.47	1.53
67	B1	1398	C	C5'-C4'	5.35	1.57	1.51
67	B1	1700	U	C5'-C4'	5.35	1.57	1.51
67	B1	1816	C	O4'-C1'	5.35	1.48	1.41
67	B1	2821	G	C4'-C3'	-5.35	1.47	1.52
67	B1	2849	C	C3'-O3'	-5.35	1.34	1.42
67	B1	2886	C	C4'-O4'	5.35	1.52	1.45
21	A2	299	G	P-O5'	-5.35	1.54	1.59
21	A2	440	C	C5'-C4'	5.35	1.57	1.51
22	AY	8	TYR	CG-CD2	5.35	1.46	1.39
35	BL	49	TRP	CG-CD1	5.35	1.44	1.36
46	BA	182	GLU	CD-OE2	5.35	1.31	1.25
67	B1	1155	A	O4'-C1'	-5.35	1.34	1.41
67	B1	2287	C	C5'-C4'	5.35	1.57	1.51
67	B1	2626	U	O3'-P	-5.35	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	40	G	C5'-C4'	5.35	1.57	1.51
67	B1	410	C	O4'-C1'	5.35	1.48	1.41
67	B1	870	G	C2'-C1'	-5.35	1.47	1.53
67	B1	961	C	O3'-P	-5.35	1.54	1.61
67	B1	1360	G	C4'-O4'	-5.34	1.38	1.45
67	B1	1514	C	O5'-C5'	5.34	1.53	1.44
67	B1	1572	C	O3'-P	-5.34	1.54	1.61
67	B1	1825	G	C4'-C3'	5.34	1.59	1.53
67	B1	2363	G	O4'-C1'	-5.34	1.34	1.41
21	A2	810	G	C3'-C2'	-5.34	1.46	1.52
67	B1	1388	U	P-O5'	-5.34	1.54	1.59
67	B1	1520	G	O4'-C1'	5.34	1.48	1.41
67	B1	2300	C	P-O5'	-5.34	1.54	1.59
11	A1	31	G	C2'-C1'	-5.34	1.47	1.53
21	A2	112	G	C2'-C1'	5.34	1.59	1.53
67	B1	2214	U	C5'-C4'	5.34	1.57	1.51
13	AX	46	ARG	CZ-NH1	5.34	1.40	1.33
21	A2	59	C	C2'-C1'	-5.34	1.47	1.53
21	A2	612	C	C2'-O2'	-5.34	1.34	1.41
21	A2	738	C	C5'-C4'	5.34	1.57	1.51
67	B1	178	G	C4'-C3'	5.34	1.59	1.53
67	B1	2133	G	C5'-C4'	5.34	1.57	1.51
67	B1	2221	A	C5'-C4'	5.34	1.57	1.51
67	B1	2673	C	P-O5'	5.34	1.65	1.59
67	B1	2732	U	O3'-P	-5.34	1.54	1.61
67	B1	42	G	C4'-C3'	5.34	1.59	1.53
67	B1	91	G	O3'-P	-5.34	1.54	1.61
67	B1	1716	G	C4'-C3'	-5.34	1.47	1.52
21	A2	532	C	C5'-C4'	5.34	1.57	1.51
21	A2	991	C	C2'-C1'	5.34	1.59	1.53
24	AA	107	PHE	CG-CD2	5.34	1.46	1.38
59	BM	90	TYR	CG-CD2	5.34	1.46	1.39
67	B1	1807	G	C3'-C2'	-5.34	1.46	1.52
67	B1	1841	G	C2'-O2'	5.34	1.48	1.41
67	B1	2197	U	C4'-C3'	-5.34	1.47	1.52
67	B1	2326	C	C4'-C3'	5.34	1.59	1.53
68	B3	39	C	O4'-C1'	5.34	1.48	1.41
68	B3	53	A	C5'-C4'	5.34	1.57	1.51
21	A2	293	G	O3'-P	-5.33	1.54	1.61
67	B1	1199	U	O3'-P	-5.33	1.54	1.61
67	B1	1300	C	C4'-O4'	5.33	1.52	1.45
67	B1	2197	U	C5'-C4'	5.33	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2489	C	P-O5'	-5.33	1.54	1.59
53	BD	94	PRO	N-CD	-5.33	1.40	1.47
66	B1	38	TYR	CB-CG	5.33	1.59	1.51
67	B1	103	A	O4'-C1'	5.33	1.48	1.41
67	B1	305	G	C4'-O4'	-5.33	1.38	1.45
67	B1	465	C	C4'-C3'	5.33	1.59	1.53
67	B1	1197	G	C4'-O4'	5.33	1.52	1.45
68	B3	124	A	C5'-C4'	5.33	1.57	1.51
1	AQ	16	ARG	CZ-NH1	5.33	1.40	1.33
1	AQ	120	ARG	CZ-NH2	5.33	1.40	1.33
21	A2	354	G	C3'-O3'	5.33	1.49	1.42
67	B1	1164	C	C3'-O3'	5.33	1.49	1.42
67	B1	1939	C	C3'-O3'	5.33	1.49	1.42
67	B1	2023	A	C2'-C1'	5.33	1.59	1.53
67	B1	2666	G	O3'-P	-5.33	1.54	1.61
21	A2	277	G	C3'-C2'	5.33	1.58	1.52
67	B1	248	C	C4'-C3'	5.33	1.59	1.53
67	B1	2319	C	C3'-C2'	-5.33	1.46	1.52
67	B1	2874	C	O3'-P	-5.33	1.54	1.61
21	A2	284	A	C5'-C4'	5.33	1.57	1.51
21	A2	610	G	P-O5'	-5.33	1.54	1.59
36	Bf	33	ARG	NE-CZ	5.33	1.40	1.33
67	B1	701	G	O4'-C1'	5.33	1.48	1.41
54	BF	155	GLU	CD-OE1	5.33	1.31	1.25
17	AO	77	TRP	CB-CG	5.33	1.59	1.50
21	A2	325	A	O4'-C1'	5.33	1.48	1.41
21	A2	345	G	C2'-O2'	-5.33	1.34	1.41
21	A2	655	A	C4'-C3'	-5.33	1.47	1.52
21	A2	707	A	O4'-C1'	5.33	1.48	1.41
21	A2	1407	U	P-O5'	-5.33	1.54	1.59
27	A0	51	C	C2'-C1'	-5.33	1.47	1.53
67	B1	914	U	C5'-C4'	-5.33	1.45	1.51
67	B1	1349	G	C2'-C1'	5.33	1.59	1.53
21	A2	93	A	C5'-C4'	5.32	1.57	1.51
21	A2	1193	G	C4'-C3'	5.32	1.59	1.53
67	B1	230	A	C4'-O4'	-5.32	1.38	1.45
67	B1	365	G	C2'-C1'	5.32	1.59	1.53
67	B1	1413	A	O4'-C1'	5.32	1.48	1.41
67	B1	2328	G	C2'-C1'	5.32	1.59	1.53
67	B1	2814	U	O4'-C1'	-5.32	1.34	1.41
21	A2	138	C	C5'-C4'	5.32	1.57	1.51
27	A0	33	U	C3'-O3'	5.32	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BU	84	ARG	NE-CZ	5.32	1.40	1.33
40	BE	71	ARG	NE-CZ	5.32	1.40	1.33
67	B1	216	A	C5'-C4'	5.32	1.57	1.51
67	B1	710	G	C3'-C2'	5.32	1.58	1.52
67	B1	1135	A	C2'-C1'	-5.32	1.47	1.53
67	B1	3016	G	C5'-C4'	5.32	1.57	1.51
21	A2	307	G	C3'-O3'	5.32	1.49	1.42
12	AN	70	ARG	CZ-NH1	5.32	1.40	1.33
21	A2	75	C	O4'-C1'	5.32	1.48	1.41
21	A2	832	G	C3'-O3'	5.32	1.49	1.42
67	B1	202	A	O3'-P	-5.32	1.54	1.61
67	B1	277	A	C2'-O2'	5.32	1.48	1.41
67	B1	1512	G	O4'-C1'	5.32	1.48	1.41
67	B1	1616	A	C5'-C4'	5.32	1.57	1.51
67	B1	2665	G	O4'-C1'	-5.32	1.34	1.41
20	A3	27	ARG	CZ-NH2	5.32	1.40	1.33
67	B1	310	C	O4'-C1'	5.32	1.48	1.41
67	B1	2231	G	C5'-C4'	5.32	1.57	1.51
67	B1	2008	G	C3'-O3'	5.31	1.49	1.42
67	B1	2275	G	C4'-O4'	5.31	1.52	1.45
21	A2	183	A	O4'-C1'	5.31	1.48	1.41
21	A2	855	C	P-O5'	-5.31	1.54	1.59
23	AT	34	ARG	CD-NE	5.31	1.55	1.46
67	B1	120	G	O3'-P	-5.31	1.54	1.61
67	B1	191	U	C2'-C1'	-5.31	1.47	1.53
67	B1	1199	U	C4'-C3'	5.31	1.58	1.53
21	A2	233	C	C4'-O4'	5.31	1.52	1.45
59	BM	59	TYR	CG-CD1	5.31	1.46	1.39
67	B1	2294	A	C4'-C3'	5.31	1.58	1.53
1	AQ	55	ARG	NE-CZ	5.31	1.40	1.33
21	A2	785	U	C2'-C1'	5.31	1.59	1.53
33	BC	274	MET	N-CA	-5.31	1.35	1.46
67	B1	53	A	C5'-C4'	-5.31	1.45	1.51
67	B1	1058	A	C2'-C1'	5.31	1.59	1.53
21	A2	177	A	O4'-C1'	-5.31	1.34	1.41
31	BY	134	PHE	CA-CB	5.31	1.65	1.53
67	B1	1378	G	O3'-P	5.31	1.67	1.61
67	B1	1845	C	C2'-C1'	5.31	1.59	1.53
67	B1	2409	C	C2'-C1'	-5.31	1.47	1.53
51	Bj	80	ARG	CZ-NH2	5.31	1.40	1.33
11	A1	66	C	C5'-C4'	-5.30	1.45	1.51
15	AE	121	PHE	CG-CD1	5.30	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	AE	154	GLU	CB-CG	5.30	1.62	1.52
21	A2	615	G	C4'-C3'	-5.30	1.47	1.52
37	BU	18	ALA	N-CA	5.30	1.56	1.46
67	B1	490	C	C3'-C2'	5.30	1.58	1.52
67	B1	1761	C	P-O5'	-5.30	1.54	1.59
67	B1	950	G	O3'-P	-5.30	1.54	1.61
67	B1	2426	U	O4'-C1'	5.30	1.48	1.41
21	A2	606	U	C4'-C3'	5.30	1.58	1.53
21	A2	1078	U	P-O5'	-5.30	1.54	1.59
21	A2	1182	G	O3'-P	-5.30	1.54	1.61
27	A0	19	G	C2'-C1'	5.30	1.59	1.53
39	Be	42	ARG	NE-CZ	5.30	1.40	1.33
47	BI	77	ARG	NE-CZ	5.30	1.40	1.33
58	BP	97	GLY	N-CA	-5.30	1.38	1.46
67	B1	435	G	O4'-C1'	5.30	1.48	1.41
67	B1	1240	U	C2'-C1'	-5.30	1.47	1.53
67	B1	2721	C	C4'-O4'	-5.30	1.38	1.45
21	A2	1270	C	O4'-C1'	5.30	1.48	1.41
21	A2	1287	G	C4'-C3'	5.30	1.58	1.53
67	B1	1273	C	O3'-P	-5.30	1.54	1.61
67	B1	1665	G	C2'-C1'	5.30	1.59	1.53
67	B1	671	G	P-O5'	-5.30	1.54	1.59
67	B1	2128	G	C2'-C1'	-5.30	1.47	1.53
67	B1	2244	G	O4'-C1'	5.30	1.48	1.41
67	B1	2874	C	P-O5'	-5.30	1.54	1.59
67	B1	2905	C	C5'-C4'	5.30	1.57	1.51
10	AD	138	ARG	CZ-NH2	5.30	1.40	1.33
21	A2	368	C	O4'-C1'	5.30	1.48	1.41
21	A2	396	C	C4'-O4'	5.30	1.52	1.45
21	A2	544	C	O4'-C1'	5.30	1.48	1.41
21	A2	589	U	O4'-C1'	-5.30	1.34	1.41
67	B1	34	C	O4'-C1'	5.30	1.48	1.41
67	B1	196	A	C5'-C4'	5.30	1.57	1.51
67	B1	666	A	C3'-O3'	5.30	1.49	1.42
67	B1	1792	A	O4'-C1'	5.30	1.48	1.41
67	B1	1816	C	C3'-O3'	5.30	1.49	1.42
67	B1	2077	A	C5'-C4'	5.30	1.57	1.51
67	B1	2561	G	O3'-P	-5.30	1.54	1.61
3	AI	23	ARG	NE-CZ	5.29	1.40	1.33
16	AJ	23	LYS	CD-CE	5.29	1.64	1.51
21	A2	479	C	C3'-C2'	5.29	1.58	1.52
54	BF	166	ARG	CZ-NH1	5.29	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	217	A	C5'-C4'	5.29	1.57	1.51
67	B1	2729	A	C2'-O2'	-5.29	1.34	1.41
67	B1	3044	U	C4'-O4'	5.29	1.52	1.45
8	AR	32	ARG	CZ-NH1	5.29	1.40	1.33
15	AE	107	ILE	C-N	5.29	1.42	1.33
21	A2	1227	A	C4'-C3'	-5.29	1.47	1.52
47	BI	42	ARG	CD-NE	5.29	1.55	1.46
67	B1	1108	A	C5'-C4'	5.29	1.57	1.51
6	AC	145	ARG	NE-CZ	5.29	1.40	1.33
11	A1	72	C	O3'-P	-5.29	1.54	1.61
21	A2	310	G	O4'-C1'	5.29	1.48	1.41
44	BW	22	ARG	CD-NE	5.29	1.55	1.46
67	B1	209	G	C4'-O4'	-5.29	1.38	1.45
67	B1	1079	A	O4'-C1'	-5.29	1.34	1.41
67	B1	1128	G	C5'-C4'	5.29	1.57	1.51
67	B1	1505	G	C2'-C1'	-5.29	1.47	1.53
67	B1	1727	G	C3'-O3'	5.29	1.49	1.42
67	B1	1756	C	C5'-C4'	5.29	1.57	1.51
21	A2	322	G	P-O5'	5.29	1.65	1.59
28	AV	33	ARG	CD-NE	5.29	1.55	1.46
38	Bb	49	LYS	N-CA	-5.29	1.35	1.46
21	A2	517	U	C4'-C3'	5.29	1.58	1.53
21	A2	783	G	P-O5'	-5.29	1.54	1.59
21	A2	1223	C	O3'-P	-5.29	1.54	1.61
28	B6	60	PHE	CG-CD1	5.29	1.46	1.38
67	B1	2390	G	O3'-P	-5.29	1.54	1.61
67	B1	2533	G	C5'-C4'	5.29	1.57	1.51
21	A2	360	A	C4'-C3'	5.29	1.58	1.53
21	A2	1190	C	C5'-C4'	5.29	1.57	1.51
56	BH	19	PRO	CA-CB	-5.29	1.43	1.53
67	B1	1582	G	O4'-C1'	5.29	1.48	1.41
21	A2	551	U	C5'-C4'	-5.29	1.45	1.51
67	B1	2798	U	O3'-P	-5.29	1.54	1.61
11	A1	73	C	C4'-C3'	5.28	1.58	1.53
15	AE	209	TRP	NE1-CE2	-5.28	1.30	1.37
21	A2	239	A	C3'-C2'	5.28	1.58	1.52
21	A2	643	G	C2'-O2'	-5.28	1.34	1.41
67	B1	152	G	C4'-C3'	5.28	1.58	1.53
67	B1	1813	A	C5'-C4'	5.28	1.57	1.51
67	B1	2101	A	C5'-C4'	5.28	1.57	1.51
67	B1	2113	G	O4'-C1'	-5.28	1.34	1.41
67	B1	2397	C	C2'-C1'	-5.28	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2400	U	O3'-P	-5.28	1.54	1.61
67	B1	2432	G	O4'-C1'	-5.28	1.34	1.41
21	A2	717	C	C2'-C1'	-5.28	1.47	1.53
21	A2	793	G	O4'-C1'	5.28	1.48	1.41
67	B1	2155	C	O4'-C1'	-5.28	1.34	1.41
67	B1	2220	C	C5'-C4'	5.28	1.57	1.51
67	B1	2615	U	O4'-C1'	5.28	1.48	1.41
67	B1	2683	G	C5'-C4'	5.28	1.57	1.51
67	B1	2885	C	P-O5'	-5.28	1.54	1.59
67	B1	1561	G	C4'-C3'	5.28	1.58	1.53
67	B1	2012	G	C3'-C2'	5.28	1.58	1.52
6	AC	63	ARG	CZ-NH2	5.28	1.40	1.33
21	A2	716	G	C2'-C1'	-5.28	1.47	1.53
67	B1	361	G	O3'-P	-5.28	1.54	1.61
67	B1	1705	C	C2'-C1'	-5.28	1.47	1.53
67	B1	2686	A	C4'-C3'	-5.28	1.47	1.52
67	B1	3045	G	P-O5'	-5.28	1.54	1.59
21	A2	83	C	C5'-C4'	5.28	1.57	1.51
21	A2	227	C	C4'-C3'	5.28	1.58	1.53
21	A2	389	G	O4'-C1'	5.28	1.48	1.41
27	A0	76	A	P-O5'	-5.28	1.54	1.59
35	BL	74	ARG	CZ-NH1	5.28	1.40	1.33
52	BB	84	TYR	CD2-CE2	5.28	1.47	1.39
67	B1	584	G	C2'-C1'	-5.28	1.47	1.53
67	B1	1567	C	P-OP1	-5.28	1.40	1.49
67	B1	1585	U	C4'-C3'	5.28	1.58	1.53
67	B1	1819	G	C2'-C1'	-5.28	1.47	1.53
67	B1	2191	U	C5'-C4'	5.28	1.57	1.51
21	A2	229	G	C3'-O3'	-5.28	1.34	1.42
21	A2	1152	C	P-O5'	-5.28	1.54	1.59
27	A0	17	U	O3'-P	-5.28	1.54	1.61
27	A0	24	G	P-O5'	-5.28	1.54	1.59
67	B1	70	G	O3'-P	-5.28	1.54	1.61
67	B1	827	G	C5'-C4'	5.27	1.57	1.51
67	B1	2350	G	C2'-C1'	5.27	1.59	1.53
67	B1	504	G	C5'-C4'	5.27	1.57	1.51
67	B1	2301	C	C2'-C1'	-5.27	1.47	1.53
21	A2	197	A	C4'-C3'	5.27	1.58	1.53
67	B1	1975	C	C5'-C4'	5.27	1.57	1.51
21	A2	607	U	O3'-P	-5.27	1.54	1.61
67	B1	2888	G	C4'-C3'	-5.27	1.47	1.52
67	B1	2958	U	C4'-O4'	-5.27	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	499	G	C3'-C2'	5.27	1.58	1.52
33	BC	26	ARG	CD-NE	5.27	1.55	1.46
67	B1	43	G	O4'-C1'	-5.27	1.34	1.41
67	B1	514	U	C3'-C2'	5.27	1.58	1.52
67	B1	983	G	P-O5'	-5.27	1.54	1.59
67	B1	2319	C	C5'-C4'	5.27	1.57	1.51
21	A2	12	U	P-O5'	-5.27	1.54	1.59
67	B1	1812	A	P-O5'	-5.26	1.54	1.59
67	B1	2075	U	C5'-C4'	5.26	1.57	1.51
67	B1	2200	A	O4'-C1'	5.26	1.48	1.41
67	B1	1747	C	C4'-C3'	5.26	1.58	1.53
21	A2	178	C	O4'-C1'	5.26	1.48	1.41
67	B1	1318	G	C4'-C3'	5.26	1.58	1.53
67	B1	1671	A	C2'-O2'	5.26	1.48	1.41
67	B1	3014	U	O3'-P	-5.26	1.54	1.61
6	AC	6	TYR	CD2-CE2	5.26	1.47	1.39
21	A2	957	A	C3'-C2'	-5.26	1.47	1.52
21	A2	1186	C	C4'-O4'	5.26	1.52	1.45
34	B5	15	GLY	N-CA	-5.26	1.38	1.46
67	B1	751	U	O3'-P	-5.26	1.54	1.61
67	B1	1048	C	C5'-C4'	5.26	1.57	1.51
67	B1	2601	C	C5'-C4'	5.26	1.57	1.51
67	B1	2637	U	C3'-O3'	5.26	1.49	1.42
68	B3	101	A	O3'-P	5.26	1.67	1.61
15	AE	204	ARG	CD-NE	5.26	1.55	1.46
21	A2	888	A	C4'-C3'	-5.26	1.47	1.52
54	BF	171	GLY	N-CA	-5.26	1.38	1.46
67	B1	662	A	O3'-P	-5.26	1.54	1.61
1	AQ	93	GLU	CG-CD	5.26	1.59	1.51
11	A1	17	C	C5'-C4'	5.26	1.57	1.51
21	A2	691	G	C5'-C4'	5.26	1.57	1.51
21	A2	1255	C	P-O5'	-5.26	1.54	1.59
21	A2	1274	C	P-O5'	5.26	1.65	1.59
63	Bg	47	ARG	CZ-NH1	5.26	1.39	1.33
67	B1	490	C	C5'-C4'	-5.26	1.45	1.51
67	B1	544	A	C3'-O3'	5.26	1.49	1.42
67	B1	2057	G	O4'-C1'	5.26	1.48	1.41
67	B1	2930	G	C5'-C4'	5.26	1.57	1.51
21	A2	109	U	O3'-P	-5.25	1.54	1.61
21	A2	419	G	C3'-C2'	5.25	1.58	1.52
21	A2	1340	U	C2'-O2'	-5.25	1.34	1.41
25	AH	209	ARG	CZ-NH1	5.25	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	BC	257	GLY	CA-C	-5.25	1.43	1.51
42	BT	74	TYR	CZ-OH	5.25	1.46	1.37
67	B1	71	A	C2'-C1'	5.25	1.59	1.53
11	A1	68	C	C3'-O3'	5.25	1.49	1.42
21	A2	544	C	C2'-C1'	-5.25	1.47	1.53
21	A2	733	C	P-O5'	-5.25	1.54	1.59
21	A2	806	G	O3'-P	5.25	1.67	1.61
34	BK	15	GLY	N-CA	-5.25	1.38	1.46
67	B1	1171	G	P-O5'	-5.25	1.54	1.59
12	AN	51	ARG	CZ-NH1	5.25	1.39	1.33
21	A2	15	U	O4'-C1'	5.25	1.48	1.41
21	A2	183	A	C4'-C3'	5.25	1.58	1.53
51	Bj	33	LEU	CA-CB	5.25	1.65	1.53
67	B1	1613	A	O3'-P	-5.25	1.54	1.61
67	B1	1916	U	C3'-C2'	5.25	1.58	1.52
21	A2	160	C	P-O5'	-5.25	1.54	1.59
67	B1	1365	G	O4'-C1'	-5.25	1.34	1.41
21	A2	15	U	C2'-C1'	-5.25	1.47	1.53
21	A2	519	G	C3'-O3'	5.25	1.49	1.42
21	A2	753	G	C5'-C4'	5.25	1.57	1.51
44	BW	20	GLU	CD-OE1	5.25	1.31	1.25
67	B1	988	C	C3'-C2'	5.25	1.58	1.52
67	B1	2193	G	C4'-C3'	5.25	1.58	1.53
11	A1	64	C	C3'-O3'	5.25	1.49	1.42
19	AS	11	ARG	CD-NE	5.25	1.55	1.46
21	A2	196	G	C2'-C1'	-5.25	1.47	1.53
67	B1	1523	A	O4'-C1'	-5.25	1.34	1.41
67	B1	1906	G	C3'-C2'	5.25	1.58	1.52
67	B1	2512	C	P-O5'	5.25	1.65	1.59
21	A2	1356	A	C5'-C4'	5.25	1.57	1.51
28	B6	4	ARG	CZ-NH2	5.25	1.39	1.33
15	AE	52	TYR	CE2-CZ	5.24	1.45	1.38
21	A2	199	A	C2'-C1'	-5.24	1.47	1.53
21	A2	1082	A	C2'-C1'	-5.24	1.47	1.53
49	BQ	74	ARG	NE-CZ	5.24	1.39	1.33
67	B1	466	C	C4'-O4'	5.24	1.52	1.45
67	B1	1175	C	P-O5'	-5.24	1.54	1.59
67	B1	1617	G	C4'-C3'	5.24	1.58	1.53
67	B1	2190	A	O5'-C5'	5.24	1.52	1.44
21	A2	1259	A	P-O5'	-5.24	1.54	1.59
21	A2	879	U	C4'-O4'	5.24	1.52	1.45
31	BY	53	TYR	CB-CG	-5.24	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1929	C	O4'-C1'	5.24	1.48	1.41
21	A2	947	G	O4'-C1'	5.24	1.48	1.41
21	A2	1402	C	C3'-C2'	5.24	1.58	1.52
62	BN	114	ARG	NE-CZ	5.24	1.39	1.33
67	B1	21	C	C2'-C1'	-5.24	1.47	1.53
67	B1	816	C	O4'-C1'	5.24	1.48	1.41
67	B1	1335	C	P-O5'	-5.24	1.54	1.59
67	B1	2002	A	P-O5'	5.24	1.65	1.59
67	B1	2725	U	O4'-C1'	5.24	1.48	1.41
67	B1	2737	G	C3'-C2'	-5.24	1.47	1.52
67	B1	2918	G	C4'-C3'	5.24	1.58	1.53
15	AE	26	TYR	CE1-CZ	5.24	1.45	1.38
67	B1	2620	G	O3'-P	-5.24	1.54	1.61
67	B1	2857	C	P-O5'	5.24	1.65	1.59
7	AB	169	TRP	CD1-NE1	5.24	1.46	1.38
67	B1	1101	U	C3'-O3'	5.24	1.49	1.42
67	B1	2713	A	C3'-O3'	5.24	1.49	1.42
68	B3	42	A	C5'-C4'	5.24	1.57	1.51
21	A2	772	G	C2'-C1'	-5.23	1.47	1.53
21	A2	877	A	C4'-C3'	5.23	1.58	1.53
46	BA	154	ARG	CD-NE	5.23	1.55	1.46
67	B1	1572	C	C5'-C4'	5.23	1.57	1.51
67	B1	2280	G	C3'-C2'	5.23	1.58	1.52
21	A2	227	C	C3'-C2'	5.23	1.58	1.52
21	A2	1243	C	C4'-O4'	-5.23	1.38	1.45
67	B1	117	A	P-O5'	-5.23	1.54	1.59
67	B1	1281	A	C2'-C1'	5.23	1.59	1.53
67	B1	1384	C	C2'-C1'	-5.23	1.47	1.53
67	B1	1848	A	C2'-C1'	-5.23	1.47	1.53
67	B1	2481	G	C3'-C2'	5.23	1.58	1.52
67	B1	2716	C	C5'-C4'	-5.23	1.45	1.51
68	B3	16	G	C4'-O4'	-5.23	1.38	1.45
21	A2	1230	G	O4'-C1'	5.23	1.48	1.41
67	B1	286	G	C2'-C1'	5.23	1.59	1.53
2	AK	24	GLY	CA-C	-5.23	1.43	1.51
21	A2	811	G	O4'-C1'	5.23	1.48	1.41
21	A2	1345	G	C3'-O3'	5.23	1.49	1.42
59	BM	160	ARG	CZ-NH1	5.23	1.39	1.33
67	B1	510	A	C2'-C1'	5.23	1.59	1.53
67	B1	788	A	C3'-O3'	5.23	1.49	1.42
67	B1	1205	U	C4'-C3'	5.23	1.58	1.53
13	AX	7	TYR	CG-CD1	5.23	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	194	G	O3'-P	-5.23	1.54	1.61
67	B1	1428	G	C4'-C3'	5.23	1.58	1.53
67	B1	3000	U	O4'-C1'	-5.23	1.34	1.41
33	BC	236	ARG	NE-CZ	5.22	1.39	1.33
43	Bk	53	ARG	CZ-NH1	5.22	1.39	1.33
52	BB	23	ARG	CZ-NH2	5.22	1.39	1.33
67	B1	653	U	C5'-C4'	5.22	1.57	1.51
67	B1	1557	G	C5'-C4'	5.22	1.57	1.51
67	B1	1981	G	C5'-C4'	5.22	1.57	1.51
67	B1	2180	C	C3'-C2'	-5.22	1.47	1.52
67	B1	2420	C	C2'-C1'	5.22	1.59	1.53
42	BT	63	GLU	CB-CG	5.22	1.62	1.52
48	BR	9	ARG	NE-CZ	5.22	1.39	1.33
67	B1	196	A	C3'-C2'	-5.22	1.47	1.52
67	B1	1325	A	C5'-C4'	5.22	1.57	1.51
67	B1	1554	G	C4'-C3'	5.22	1.58	1.53
67	B1	1751	G	O3'-P	-5.22	1.54	1.61
67	B1	2598	C	P-O5'	-5.22	1.54	1.59
67	B1	2820	C	O4'-C1'	5.22	1.48	1.41
67	B1	1207	G	C4'-O4'	-5.22	1.38	1.45
16	AJ	87	ARG	CZ-NH1	5.22	1.39	1.33
21	A2	1148	G	O4'-C1'	5.22	1.48	1.41
44	BW	66	GLU	CA-CB	5.22	1.65	1.53
47	BI	2	ARG	CD-NE	5.22	1.55	1.46
67	B1	1607	C	C2'-C1'	-5.22	1.47	1.53
67	B1	1615	G	C4'-C3'	-5.22	1.47	1.52
67	B1	2707	G	C4'-C3'	5.22	1.58	1.53
21	A2	855	C	C5'-C4'	5.22	1.57	1.51
46	BA	107	PHE	CG-CD1	5.22	1.46	1.38
49	BQ	47	GLU	CD-OE1	5.22	1.31	1.25
8	AR	108	ARG	CZ-NH1	5.22	1.39	1.33
21	A2	109	U	P-O5'	-5.22	1.54	1.59
21	A2	759	C	P-O5'	-5.22	1.54	1.59
21	A2	847	A	C5'-C4'	5.22	1.57	1.51
36	Bf	46	ARG	NE-CZ	5.22	1.39	1.33
39	Be	23	CYS	CB-SG	5.22	1.91	1.82
47	BI	134	VAL	N-CA	-5.22	1.35	1.46
65	BJ	30	ALA	CA-CB	5.22	1.63	1.52
67	B1	255	G	C2'-C1'	-5.22	1.47	1.53
67	B1	842	C	C5'-C4'	5.22	1.57	1.51
67	B1	870	G	O4'-C1'	5.22	1.48	1.41
67	B1	1824	G	P-O5'	-5.22	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2045	C	P-O5'	-5.22	1.54	1.59
21	A2	174	G	P-O5'	-5.21	1.54	1.59
21	A2	371	U	O4'-C1'	5.21	1.48	1.41
21	A2	1002	G	O4'-C1'	-5.21	1.34	1.41
21	A2	1447	A	C2'-C1'	-5.21	1.47	1.53
67	B1	406	G	C2'-C1'	5.21	1.59	1.53
67	B1	422	G	C2'-C1'	-5.21	1.47	1.53
67	B1	593	C	O3'-P	-5.21	1.54	1.61
67	B1	1408	G	P-O5'	-5.21	1.54	1.59
67	B1	2356	U	P-O5'	5.21	1.65	1.59
67	B1	2688	C	O3'-P	-5.21	1.54	1.61
21	A2	418	G	O4'-C1'	-5.21	1.34	1.41
21	A2	1415	U	C3'-C2'	-5.21	1.47	1.52
30	AU	52	TYR	CD2-CE2	5.21	1.47	1.39
67	B1	140	C	C4'-C3'	5.21	1.58	1.53
67	B1	858	G	C2'-O2'	5.21	1.48	1.41
67	B1	2235	G	C4'-O4'	5.21	1.52	1.45
11	A1	51	G	C5'-C4'	5.21	1.57	1.51
21	A2	1257	U	P-O5'	-5.21	1.54	1.59
27	A0	40	C	P-O5'	-5.21	1.54	1.59
21	A2	925	U	O4'-C1'	5.21	1.48	1.41
37	BU	93	TYR	CZ-OH	5.21	1.46	1.37
57	BZ	99	ARG	CA-CB	5.21	1.65	1.53
67	B1	1521	G	C4'-O4'	5.21	1.52	1.45
67	B1	2856	G	C3'-C2'	-5.21	1.47	1.52
7	AB	180	GLY	CA-C	-5.21	1.43	1.51
11	A1	53	G	C2'-O2'	5.21	1.48	1.41
21	A2	513	A	O4'-C1'	5.21	1.48	1.41
21	A2	674	C	P-O5'	-5.21	1.54	1.59
21	A2	770	A	O4'-C1'	5.21	1.48	1.41
67	B1	629	G	C5'-C4'	5.21	1.57	1.51
21	A2	658	A	C5'-C4'	5.21	1.57	1.51
67	B1	102	A	O4'-C1'	5.21	1.48	1.41
2	AK	47	GLU	CG-CD	5.20	1.59	1.51
21	A2	1270	C	P-O5'	5.20	1.65	1.59
27	A0	50	C	P-O5'	-5.20	1.54	1.59
46	BA	45	ARG	CZ-NH2	5.20	1.39	1.33
67	B1	143	C	C3'-O3'	5.20	1.49	1.42
67	B1	1386	G	C4'-C3'	5.20	1.58	1.53
67	B1	2112	C	C2'-C1'	-5.20	1.47	1.53
67	B1	2113	G	O3'-P	-5.20	1.54	1.61
67	B1	2286	U	P-O5'	5.20	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
68	B3	70	C	C3'-C2'	-5.20	1.47	1.52
16	AJ	56	ARG	CD-NE	5.20	1.55	1.46
21	A2	1330	G	O3'-P	-5.20	1.54	1.61
67	B1	577	C	C5'-C4'	5.20	1.57	1.51
67	B1	1277	G	C4'-O4'	-5.20	1.38	1.45
21	A2	852	G	O4'-C1'	-5.20	1.34	1.41
21	A2	937	A	O4'-C1'	5.20	1.48	1.41
39	Be	55	TRP	CA-CB	5.20	1.65	1.53
49	BQ	61	TYR	CE1-CZ	5.20	1.45	1.38
67	B1	1266	A	C3'-O3'	5.20	1.49	1.42
67	B1	1533	G	C3'-C2'	-5.20	1.47	1.52
68	B3	99	G	P-O5'	-5.20	1.54	1.59
7	AB	151	ASP	N-CA	-5.20	1.35	1.46
16	AJ	92	ARG	CD-NE	5.20	1.55	1.46
21	A2	228	G	C3'-C2'	-5.20	1.47	1.52
21	A2	611	A	C4'-C3'	-5.20	1.47	1.52
67	B1	3004	C	C4'-C3'	5.20	1.58	1.53
68	B3	82	C	C4'-O4'	5.20	1.52	1.45
5	AW	21	CYS	CB-SG	5.20	1.91	1.82
8	AR	53	TYR	CD1-CE1	5.20	1.47	1.39
10	AD	79	ARG	CZ-NH1	5.20	1.39	1.33
31	BY	10	ARG	NE-CZ	5.20	1.39	1.33
21	A2	1057	A	C3'-O3'	5.20	1.49	1.42
21	A2	1185	A	C5'-C4'	5.20	1.57	1.51
21	A2	1195	U	O4'-C1'	5.20	1.48	1.41
37	BU	59	TYR	CZ-OH	5.20	1.46	1.37
37	BU	104	GLU	CB-CG	5.20	1.62	1.52
67	B1	710	G	C5'-C4'	5.20	1.57	1.51
67	B1	2407	G	P-O5'	5.20	1.65	1.59
67	B1	2848	C	P-O5'	5.20	1.65	1.59
21	A2	1181	G	C4'-O4'	-5.19	1.38	1.45
67	B1	2143	C	O3'-P	-5.19	1.54	1.61
21	A2	64	G	P-O5'	-5.19	1.54	1.59
62	BN	117	GLY	N-CA	-5.19	1.38	1.46
67	B1	148	C	C4'-C3'	-5.19	1.47	1.52
67	B1	1371	U	P-O5'	-5.19	1.54	1.59
67	B1	1814	A	P-O5'	-5.19	1.54	1.59
67	B1	2600	C	C4'-O4'	-5.19	1.38	1.45
67	B1	2651	G	C3'-O3'	5.19	1.49	1.42
2	AK	84	ARG	NE-CZ	5.19	1.39	1.33
21	A2	96	G	O3'-P	-5.19	1.54	1.61
62	BN	125	ARG	CZ-NH1	5.19	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	544	A	C4'-C3'	5.19	1.58	1.53
67	B1	994	G	O4'-C1'	-5.19	1.34	1.41
67	B1	2400	U	C5'-C4'	5.19	1.57	1.51
3	AI	62	ARG	NE-CZ	5.19	1.39	1.33
21	A2	179	U	C2'-C1'	5.19	1.59	1.53
21	A2	240	U	P-OP2	-5.19	1.40	1.49
21	A2	252	U	O4'-C1'	5.19	1.48	1.41
21	A2	749	C	C3'-C2'	5.19	1.58	1.52
49	BQ	43	ARG	NE-CZ	5.19	1.39	1.33
67	B1	111	U	P-O5'	-5.19	1.54	1.59
67	B1	191	U	C4'-O4'	-5.19	1.38	1.45
67	B1	660	U	P-O5'	-5.19	1.54	1.59
67	B1	968	A	O3'-P	-5.19	1.54	1.61
67	B1	1437	C	C4'-C3'	5.19	1.58	1.53
67	B1	2943	G	C2'-C1'	5.19	1.59	1.53
67	B1	40	G	C3'-O3'	5.19	1.49	1.42
67	B1	560	G	P-O5'	-5.19	1.54	1.59
67	B1	888	U	O4'-C1'	5.19	1.48	1.41
67	B1	1160	U	C5'-C4'	5.19	1.57	1.51
30	AU	119	ARG	CZ-NH2	5.18	1.39	1.33
33	BC	79	ARG	CD-NE	5.18	1.55	1.46
67	B1	118	A	C5'-C4'	5.18	1.57	1.51
67	B1	1832	G	O4'-C1'	5.18	1.48	1.41
67	B1	1836	A	O4'-C1'	5.18	1.48	1.41
21	A2	991	C	O4'-C1'	5.18	1.48	1.41
21	A2	1211	A	C5'-C4'	5.18	1.57	1.51
27	A0	54	U	C4'-C3'	-5.18	1.47	1.52
67	B1	21	C	C3'-O3'	-5.18	1.34	1.42
67	B1	2155	C	C4'-O4'	-5.18	1.38	1.45
52	BB	105	GLY	N-CA	-5.18	1.38	1.46
67	B1	765	G	P-O5'	5.18	1.65	1.59
67	B1	1534	G	C5'-C4'	-5.18	1.45	1.51
67	B1	2991	C	C3'-C2'	5.18	1.58	1.52
11	A1	48	U	C5'-C4'	5.18	1.57	1.51
21	A2	98	U	C3'-O3'	5.18	1.49	1.42
21	A2	936	A	O4'-C1'	5.18	1.48	1.41
67	B1	2663	G	P-O5'	5.18	1.65	1.59
21	A2	889	G	C3'-C2'	-5.18	1.47	1.52
21	A2	1278	A	C2'-C1'	5.18	1.59	1.53
67	B1	143	C	P-O5'	-5.18	1.54	1.59
67	B1	1185	A	C4'-O4'	-5.18	1.38	1.45
67	B1	2232	U	P-O5'	-5.18	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2246	G	O3'-P	5.18	1.67	1.61
67	B1	2809	G	C4'-O4'	5.18	1.52	1.45
67	B1	2994	G	C3'-O3'	5.18	1.49	1.42
21	A2	581	G	O4'-C1'	5.18	1.48	1.41
21	A2	650	A	P-O5'	5.18	1.65	1.59
21	A2	774	U	P-O5'	-5.18	1.54	1.59
61	Bd	20	GLY	CA-C	-5.18	1.43	1.51
67	B1	156	A	C2'-C1'	-5.18	1.47	1.53
67	B1	1780	C	O3'-P	-5.18	1.54	1.61
21	A2	255	G	C4'-O4'	5.17	1.52	1.45
21	A2	994	C	C2'-C1'	5.17	1.59	1.53
65	BJ	129	ARG	CZ-NH2	5.17	1.39	1.33
67	B1	429	U	C4'-O4'	5.17	1.52	1.45
67	B1	2708	U	C3'-O3'	5.17	1.49	1.42
21	A2	1131	G	O3'-P	-5.17	1.54	1.61
21	A2	1331	G	O4'-C1'	5.17	1.48	1.41
67	B1	1904	G	C4'-O4'	5.17	1.52	1.45
11	A1	3	G	P-O5'	-5.17	1.54	1.59
21	A2	1433	C	C5'-C4'	5.17	1.57	1.51
67	B1	241	C	C4'-C3'	-5.17	1.47	1.52
67	B1	716	U	P-O5'	-5.17	1.54	1.59
67	B1	778	A	P-O5'	-5.17	1.54	1.59
67	B1	2471	A	O4'-C1'	5.17	1.48	1.41
52	BB	234	ARG	CZ-NH1	5.17	1.39	1.33
53	BD	85	PHE	CG-CD2	5.17	1.46	1.38
28	B6	33	ARG	NE-CZ	5.17	1.39	1.33
67	B1	304	G	C3'-O3'	-5.17	1.34	1.42
67	B1	1688	C	C4'-C3'	-5.17	1.47	1.52
67	B1	1862	G	P-O5'	5.17	1.65	1.59
1	AQ	7	ARG	NE-CZ	5.17	1.39	1.33
21	A2	159	C	P-O5'	-5.17	1.54	1.59
21	A2	341	C	C5'-C4'	5.17	1.57	1.51
21	A2	1094	U	C5'-C4'	5.17	1.57	1.51
21	A2	1205	G	O3'-P	-5.17	1.54	1.61
21	A2	1211	A	O4'-C1'	5.17	1.48	1.41
36	Bf	43	TYR	CB-CG	-5.17	1.43	1.51
42	BT	32	ARG	NE-CZ	5.17	1.39	1.33
67	B1	142	G	C4'-O4'	-5.17	1.38	1.45
67	B1	2115	U	O4'-C1'	-5.17	1.34	1.41
67	B1	2256	G	O3'-P	-5.17	1.54	1.61
67	B1	2382	A	C3'-O3'	5.17	1.49	1.42
67	B1	2995	A	C3'-O3'	5.17	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AK	27	ARG	CZ-NH1	5.17	1.39	1.33
21	A2	404	C	P-O5'	5.17	1.65	1.59
21	A2	500	A	O3'-P	-5.17	1.54	1.61
21	A2	769	A	O4'-C1'	-5.17	1.34	1.41
21	A2	1018	C	O3'-P	-5.17	1.54	1.61
21	A2	1397	C	P-O5'	-5.17	1.54	1.59
27	A0	42	G	O3'-P	-5.17	1.54	1.61
67	B1	1306	A	C2'-C1'	-5.17	1.47	1.53
67	B1	1580	G	C5'-C4'	5.17	1.57	1.51
10	AD	26	GLU	CB-CG	5.17	1.61	1.52
21	A2	200	G	P-O5'	5.17	1.65	1.59
21	A2	806	G	C3'-O3'	5.17	1.49	1.42
21	A2	1203	G	C3'-C2'	-5.17	1.47	1.52
33	BC	90	TYR	CE1-CZ	5.17	1.45	1.38
67	B1	1807	G	O4'-C1'	5.17	1.48	1.41
67	B1	2543	A	C4'-C3'	5.17	1.58	1.53
21	A2	870	U	P-O5'	5.16	1.65	1.59
21	A2	1266	A	C5'-C4'	5.16	1.57	1.51
21	A2	1272	G	P-O5'	-5.16	1.54	1.59
35	BL	9	ARG	C-N	-5.16	1.22	1.34
37	BU	38	LYS	CA-CB	5.16	1.65	1.53
59	BM	122	ASP	CB-CG	5.16	1.62	1.51
67	B1	449	G	C3'-C2'	5.16	1.58	1.52
67	B1	1629	G	C2'-C1'	-5.16	1.47	1.53
67	B1	2409	C	C3'-C2'	-5.16	1.47	1.52
67	B1	2935	A	C4'-C3'	5.16	1.58	1.53
21	A2	882	C	C4'-O4'	5.16	1.52	1.45
67	B1	748	G	C4'-C3'	-5.16	1.47	1.52
67	B1	1840	G	P-O5'	-5.16	1.54	1.59
52	BB	54	ARG	CZ-NH2	5.16	1.39	1.33
67	B1	276	G	O3'-P	-5.16	1.54	1.61
67	B1	1443	G	C5'-C4'	-5.16	1.45	1.51
67	B1	2966	C	O3'-P	5.16	1.67	1.61
17	AO	119	ARG	NE-CZ	5.16	1.39	1.33
21	A2	48	G	C3'-O3'	5.16	1.49	1.42
21	A2	397	C	C3'-O3'	5.16	1.49	1.42
21	A2	630	A	O4'-C1'	5.16	1.48	1.41
21	A2	1207	G	C2'-C1'	5.16	1.59	1.53
21	A2	1474	A	C4'-C3'	5.16	1.58	1.53
33	BC	124	PHE	CG-CD2	5.16	1.46	1.38
67	B1	455	G	C5'-C4'	5.16	1.57	1.51
67	B1	522	A	C3'-O3'	5.16	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	1262	C	C2'-C1'	-5.16	1.47	1.53
67	B1	1350	C	C4'-C3'	-5.16	1.47	1.52
67	B1	2739	G	C3'-O3'	5.16	1.49	1.42
27	A0	36	U	O3'-P	5.16	1.67	1.61
39	Be	50	ARG	NE-CZ	5.16	1.39	1.33
67	B1	707	U	O3'-P	-5.16	1.54	1.61
67	B1	1938	G	C3'-C2'	-5.16	1.47	1.52
21	A2	75	C	C3'-C2'	-5.16	1.47	1.52
21	A2	493	C	C3'-O3'	5.16	1.49	1.42
21	A2	1049	U	O4'-C1'	5.16	1.48	1.41
67	B1	312	G	C2'-O2'	-5.16	1.34	1.41
67	B1	372	A	C4'-O4'	-5.16	1.38	1.45
21	A2	1070	C	C5'-C4'	5.15	1.57	1.51
34	B5	71	VAL	CB-CG2	5.15	1.63	1.52
67	B1	1170	G	O3'-P	-5.15	1.54	1.61
67	B1	1750	C	O4'-C1'	5.15	1.48	1.41
67	B1	2304	C	O3'-P	-5.15	1.54	1.61
8	AR	3	ARG	CZ-NH1	5.15	1.39	1.33
21	A2	552	C	C3'-C2'	5.15	1.58	1.52
67	B1	542	A	C4'-C3'	-5.15	1.47	1.52
21	A2	515	U	P-OP1	-5.15	1.40	1.49
37	BU	75	ARG	CZ-NH1	5.15	1.39	1.33
67	B1	218	A	O4'-C1'	-5.15	1.34	1.41
67	B1	533	G	C5'-C4'	5.15	1.57	1.51
67	B1	538	G	C4'-C3'	-5.15	1.47	1.52
67	B1	2456	C	C5'-C4'	5.15	1.57	1.51
67	B1	2462	U	C2'-C1'	-5.15	1.47	1.53
67	B1	2709	C	C2'-C1'	5.15	1.59	1.53
21	A2	334	G	C3'-C2'	-5.15	1.47	1.52
67	B1	731	C	C3'-C2'	-5.15	1.47	1.52
67	B1	2371	A	C3'-O3'	5.15	1.49	1.42
67	B1	2619	U	C3'-O3'	5.15	1.49	1.42
21	A2	624	G	C5'-C4'	5.15	1.57	1.51
21	A2	756	A	C4'-O4'	5.15	1.52	1.45
21	A2	1343	C	O3'-P	-5.15	1.54	1.61
27	A0	62	C	C4'-O4'	-5.15	1.38	1.45
67	B1	191	U	P-O5'	-5.15	1.54	1.59
67	B1	747	G	C5'-C4'	5.15	1.57	1.51
67	B1	2412	A	O4'-C1'	5.15	1.48	1.41
16	AJ	53	ARG	CZ-NH2	5.15	1.39	1.33
21	A2	572	U	C3'-O3'	5.15	1.49	1.42
67	B1	2605	G	C4'-O4'	-5.15	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2829	C	C5'-C4'	5.15	1.57	1.51
8	AR	50	GLU	CB-CG	5.14	1.61	1.52
21	A2	17	C	C2'-O2'	-5.14	1.34	1.41
59	BM	106	ARG	NE-CZ	5.14	1.39	1.33
67	B1	40	G	P-O5'	-5.14	1.54	1.59
67	B1	804	C	O3'-P	-5.14	1.54	1.61
11	A1	36	A	P-O5'	5.14	1.64	1.59
21	A2	40	C	P-O5'	-5.14	1.54	1.59
21	A2	153	G	C5'-C4'	5.14	1.57	1.51
21	A2	239	A	C4'-C3'	5.14	1.58	1.53
21	A2	347	G	C4'-C3'	5.14	1.58	1.53
27	A0	66	C	C2'-O2'	-5.14	1.34	1.41
21	A2	303	G	P-O5'	-5.14	1.54	1.59
67	B1	554	C	P-O5'	-5.14	1.54	1.59
67	B1	855	G	O3'-P	-5.14	1.54	1.61
67	B1	1609	G	C5'-C4'	5.14	1.57	1.51
67	B1	1708	U	O4'-C1'	-5.14	1.34	1.41
67	B1	2768	C	O3'-P	-5.14	1.54	1.61
67	B1	1496	A	O3'-P	-5.14	1.54	1.61
11	A1	65	C	C3'-C2'	5.14	1.58	1.52
21	A2	1145	C	C4'-O4'	-5.14	1.38	1.45
34	BK	71	VAL	CB-CG2	5.14	1.63	1.52
67	B1	523	C	C4'-C3'	5.14	1.58	1.53
31	BY	27	ARG	NE-CZ	5.14	1.39	1.33
67	B1	2517	U	C3'-C2'	5.14	1.58	1.52
67	B1	2738	G	P-O5'	5.14	1.64	1.59
6	AC	73	PHE	CG-CD2	5.13	1.46	1.38
21	A2	435	A	C5'-C4'	5.13	1.57	1.51
21	A2	1326	G	C4'-C3'	5.13	1.58	1.53
21	A2	1414	G	C3'-C2'	5.13	1.58	1.52
27	A0	30	G	C2'-C1'	-5.13	1.47	1.53
67	B1	591	G	P-O5'	5.13	1.64	1.59
67	B1	1742	C	C3'-C2'	-5.13	1.47	1.52
2	AK	127	ARG	NE-CZ	5.13	1.39	1.33
67	B1	1649	G	O3'-P	-5.13	1.54	1.61
67	B1	1849	A	P-O5'	-5.13	1.54	1.59
21	A2	64	G	C5'-C4'	5.13	1.57	1.51
21	A2	1034	G	P-O5'	-5.13	1.54	1.59
21	A2	1493	C	C2'-C1'	5.13	1.58	1.53
67	B1	1910	C	C2'-C1'	-5.13	1.47	1.53
67	B1	2268	C	P-O5'	5.13	1.64	1.59
21	A2	516	A	C2'-O2'	-5.13	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	385	U	C2'-C1'	5.13	1.58	1.53
67	B1	828	G	C4'-C3'	5.13	1.58	1.53
17	AO	116	ARG	CZ-NH1	5.13	1.39	1.33
21	A2	548	A	C4'-C3'	5.13	1.58	1.53
21	A2	808	C	C4'-O4'	-5.13	1.38	1.45
67	B1	259	A	C3'-O3'	5.13	1.49	1.42
67	B1	1212	A	C5'-C4'	5.13	1.57	1.51
67	B1	1304	G	C3'-C2'	-5.13	1.47	1.52
67	B1	1325	A	C2'-C1'	-5.13	1.47	1.53
67	B1	2065	C	O3'-P	5.13	1.67	1.61
67	B1	2193	G	C5'-C4'	5.13	1.57	1.51
21	A2	324	C	O3'-P	-5.13	1.54	1.61
62	BN	4	ARG	CD-NE	5.13	1.55	1.46
67	B1	2618	C	C3'-C2'	-5.13	1.47	1.52
67	B1	504	G	P-O5'	-5.12	1.54	1.59
21	A2	569	G	C3'-C2'	-5.12	1.47	1.52
21	A2	1124	G	P-O5'	-5.12	1.54	1.59
67	B1	515	G	C5'-C4'	5.12	1.57	1.51
67	B1	864	C	C3'-C2'	5.12	1.58	1.52
67	B1	1978	A	O4'-C1'	5.12	1.48	1.41
67	B1	2490	C	C3'-C2'	5.12	1.58	1.52
56	BH	30	LEU	N-CA	-5.12	1.36	1.46
67	B1	387	A	C2'-C1'	-5.12	1.47	1.53
67	B1	2130	C	O4'-C1'	5.12	1.48	1.41
21	A2	413	G	C3'-C2'	-5.12	1.47	1.52
21	A2	617	A	C3'-O3'	5.12	1.49	1.42
21	A2	1491	C	C4'-C3'	-5.12	1.47	1.52
61	Bd	9	SER	CA-CB	5.12	1.60	1.52
67	B1	751	U	O4'-C1'	-5.12	1.34	1.41
67	B1	955	A	C3'-C2'	-5.12	1.47	1.52
67	B1	1430	A	C5'-C4'	5.12	1.57	1.51
40	BE	138	ASP	C-N	5.12	1.45	1.34
67	B1	1330	G	C5'-C4'	5.12	1.57	1.51
67	B1	1510	U	C3'-O3'	5.12	1.49	1.42
67	B1	1794	C	P-O5'	5.12	1.64	1.59
67	B1	2413	G	C4'-O4'	-5.12	1.38	1.45
21	A2	696	G	O4'-C1'	5.12	1.48	1.41
21	A2	1074	C	O3'-P	-5.12	1.55	1.61
67	B1	30	G	O4'-C1'	5.12	1.48	1.41
67	B1	278	C	C3'-O3'	-5.12	1.34	1.42
67	B1	866	G	O4'-C1'	5.12	1.48	1.41
67	B1	2274	C	C4'-C3'	5.12	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2593	A	C2'-C1'	-5.12	1.47	1.53
67	B1	300	U	C3'-O3'	5.11	1.49	1.42
67	B1	460	C	P-O5'	5.11	1.64	1.59
67	B1	2232	U	C2'-C1'	5.11	1.58	1.53
21	A2	98	U	O4'-C1'	5.11	1.48	1.41
21	A2	106	A	C2'-C1'	5.11	1.58	1.53
10	AD	156	ARG	CD-NE	5.11	1.55	1.46
21	A2	194	C	O3'-P	-5.11	1.55	1.61
67	B1	161	C	C5'-C4'	5.11	1.57	1.51
67	B1	2050	U	O3'-P	-5.11	1.55	1.61
67	B1	2348	G	C5'-C4'	5.11	1.57	1.51
67	B1	3046	C	C3'-C2'	-5.11	1.47	1.52
21	A2	574	A	C4'-O4'	-5.11	1.39	1.45
21	A2	1110	U	C5'-C4'	5.11	1.57	1.51
67	B1	2689	G	O3'-P	-5.11	1.55	1.61
21	A2	728	G	C2'-C1'	-5.11	1.47	1.53
21	A2	827	G	C5'-C4'	5.11	1.57	1.51
21	A2	906	G	C2'-C1'	-5.11	1.47	1.53
66	B1	53	PHE	CA-CB	5.11	1.65	1.53
67	B1	159	C	O4'-C1'	5.11	1.48	1.41
67	B1	175	G	C5'-C4'	5.11	1.57	1.51
67	B1	811	C	C4'-C3'	-5.11	1.47	1.52
67	B1	1838	C	O5'-C5'	-5.11	1.34	1.42
67	B1	2274	C	O3'-P	5.11	1.67	1.61
59	BM	46	ASP	CB-CG	5.11	1.62	1.51
67	B1	562	G	C4'-O4'	5.11	1.52	1.45
67	B1	1425	U	C2'-C1'	5.11	1.58	1.53
17	AO	75	PRO	N-CA	-5.10	1.38	1.47
53	BD	254	TYR	CD2-CE2	5.10	1.47	1.39
20	B4	45	ARG	CD-NE	5.10	1.55	1.46
21	A2	90	C	C4'-C3'	5.10	1.58	1.53
21	A2	783	G	C4'-C3'	5.10	1.58	1.53
39	Be	44	ARG	NE-CZ	5.10	1.39	1.33
67	B1	550	A	C2'-C1'	-5.10	1.47	1.53
67	B1	1781	C	C5'-C4'	5.10	1.57	1.51
67	B1	2304	C	C5'-C4'	5.10	1.57	1.51
67	B1	2408	G	C4'-C3'	-5.10	1.47	1.52
67	B1	2590	C	C4'-O4'	5.10	1.52	1.45
67	B1	2953	U	C5'-C4'	5.10	1.57	1.51
21	A2	1250	C	P-O5'	5.10	1.64	1.59
67	B1	1483	U	C2'-O2'	5.10	1.48	1.41
67	B1	2983	G	O4'-C1'	5.10	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	148	C	C5'-C4'	5.10	1.57	1.51
34	B5	59	LYS	N-CA	-5.10	1.36	1.46
67	B1	40	G	O4'-C1'	5.10	1.48	1.41
67	B1	706	U	C4'-O4'	5.10	1.52	1.45
67	B1	723	A	C4'-O4'	5.10	1.52	1.45
67	B1	2292	A	P-O5'	-5.10	1.54	1.59
67	B1	2691	G	C4'-C3'	5.10	1.58	1.53
67	B1	2843	C	O3'-P	-5.10	1.55	1.61
27	A0	71	G	C3'-O3'	5.10	1.49	1.42
38	Bb	65	TRP	NE1-CE2	5.10	1.44	1.37
39	Be	22	ARG	CZ-NH2	5.10	1.39	1.33
59	BM	49	ARG	NE-CZ	5.10	1.39	1.33
8	AR	110	GLU	CD-OE2	-5.09	1.20	1.25
21	A2	582	G	C4'-C3'	-5.09	1.47	1.52
25	AH	84	HIS	C-N	5.09	1.45	1.34
26	AP	12	ARG	NE-CZ	5.09	1.39	1.33
67	B1	190	C	O3'-P	5.09	1.67	1.61
67	B1	546	C	C2'-C1'	5.09	1.58	1.53
67	B1	785	C	C5'-C4'	5.09	1.57	1.51
31	BY	106	SER	CA-CB	5.09	1.60	1.52
47	BI	2	ARG	CZ-NH2	5.09	1.39	1.33
65	BJ	112	VAL	CB-CG1	5.09	1.63	1.52
7	AB	55	ALA	C-N	5.09	1.42	1.33
21	A2	743	U	P-O5'	-5.09	1.54	1.59
67	B1	1680	G	O3'-P	-5.09	1.55	1.61
67	B1	1789	A	P-O5'	-5.09	1.54	1.59
67	B1	2503	C	C2'-O2'	-5.09	1.35	1.41
67	B1	2615	U	C3'-C2'	-5.09	1.47	1.52
68	B3	66	A	C2'-O2'	5.09	1.48	1.41
12	AN	123	ARG	CZ-NH2	5.09	1.39	1.33
21	A2	568	C	O4'-C1'	5.09	1.48	1.41
67	B1	859	G	P-O5'	-5.09	1.54	1.59
67	B1	1526	G	C3'-O3'	5.09	1.49	1.42
52	BB	121	TYR	CE1-CZ	5.09	1.45	1.38
67	B1	2568	A	C2'-C1'	5.09	1.58	1.53
21	A2	546	G	O3'-P	5.09	1.67	1.61
21	A2	1292	A	C5'-C4'	5.09	1.57	1.51
21	A2	1300	A	O4'-C1'	-5.09	1.35	1.41
67	B1	111	U	C3'-C2'	5.09	1.58	1.52
67	B1	177	G	C5'-C4'	5.09	1.57	1.51
67	B1	189	U	C4'-C3'	5.09	1.58	1.53
67	B1	432	C	C2'-C1'	-5.09	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	718	G	C4'-C3'	5.09	1.58	1.53
67	B1	989	G	C2'-O2'	5.09	1.48	1.41
67	B1	1457	C	O3'-P	-5.09	1.55	1.61
67	B1	2554	A	C5'-C4'	5.09	1.57	1.51
27	A0	40	C	C2'-C1'	5.08	1.58	1.53
67	B1	645	U	P-O5'	5.08	1.64	1.59
67	B1	1092	U	P-O5'	-5.08	1.54	1.59
6	AC	26	ARG	NE-CZ	5.08	1.39	1.33
27	A0	7	G	O4'-C1'	5.08	1.48	1.41
32	BO	101	GLU	CD-OE1	5.08	1.31	1.25
67	B1	1784	G	P-O5'	-5.08	1.54	1.59
67	B1	2341	G	C3'-C2'	-5.08	1.47	1.52
67	B1	2396	G	C4'-C3'	-5.08	1.47	1.52
67	B1	2970	U	C5'-C4'	5.08	1.57	1.51
21	A2	121	C	C4'-C3'	5.08	1.58	1.53
21	A2	430	G	C2-N3	5.08	1.36	1.32
21	A2	723	G	C2'-O2'	-5.08	1.35	1.41
46	BA	3	PHE	CG-CD2	5.08	1.46	1.38
67	B1	1125	A	O4'-C1'	5.08	1.48	1.41
67	B1	1164	C	P-O5'	5.08	1.64	1.59
67	B1	1596	G	P-OP2	-5.08	1.40	1.49
67	B1	1899	C	P-O5'	5.08	1.64	1.59
67	B1	2053	G	C3'-O3'	5.08	1.49	1.42
67	B1	2725	U	C4'-C3'	5.08	1.58	1.53
21	A2	1111	G	C4'-C3'	5.08	1.58	1.53
67	B1	1601	G	O3'-P	-5.08	1.55	1.61
21	A2	56	A	C5'-C4'	5.08	1.57	1.51
21	A2	632	C	C4'-C3'	-5.08	1.47	1.52
21	A2	1028	C	C3'-O3'	5.08	1.49	1.42
31	BY	76	GLY	CA-C	-5.08	1.43	1.51
31	BY	132	ARG	NE-CZ	5.08	1.39	1.33
40	BE	101	ARG	NE-CZ	5.08	1.39	1.33
67	B1	814	G	O3'-P	-5.08	1.55	1.61
67	B1	1464	A	P-O5'	-5.08	1.54	1.59
67	B1	2606	C	P-O5'	-5.08	1.54	1.59
21	A2	629	U	C3'-C2'	-5.08	1.47	1.52
21	A2	1054	A	P-O5'	-5.08	1.54	1.59
29	AL	33	ARG	CZ-NH2	5.08	1.39	1.33
7	AB	5	TYR	CZ-OH	5.08	1.46	1.37
21	A2	864	G	C3'-C2'	-5.08	1.47	1.52
21	A2	1111	G	O3'-P	-5.08	1.55	1.61
67	B1	244	A	C4'-C3'	-5.08	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	552	A	C3'-C2'	-5.08	1.47	1.52
67	B1	2240	G	C4'-C3'	5.08	1.58	1.53
67	B1	2797	C	C5'-C4'	5.08	1.57	1.51
67	B1	2949	G	O4'-C1'	5.08	1.48	1.41
16	AJ	66	PHE	CE1-CZ	5.07	1.47	1.37
17	AO	127	ARG	CZ-NH1	5.07	1.39	1.33
21	A2	904	G	O4'-C1'	5.07	1.48	1.41
21	A2	1055	C	C2'-C1'	-5.07	1.47	1.53
21	A2	1313	G	C3'-C2'	5.07	1.58	1.52
32	BO	194	GLU	CD-OE1	5.07	1.31	1.25
49	BQ	9	ARG	CZ-NH2	5.07	1.39	1.33
52	BB	54	ARG	CZ-NH1	5.07	1.39	1.33
67	B1	289	G	O4'-C1'	5.07	1.48	1.41
67	B1	825	C	C4'-O4'	5.07	1.52	1.45
67	B1	1211	C	C2'-O2'	5.07	1.48	1.41
67	B1	2226	G	C4'-C3'	-5.07	1.47	1.52
67	B1	2565	A	C3'-C2'	-5.07	1.47	1.52
67	B1	2940	C	C2'-C1'	-5.07	1.47	1.53
67	B1	1576	C	C4'-C3'	5.07	1.58	1.53
67	B1	1975	C	C4'-O4'	-5.07	1.39	1.45
21	A2	596	A	C2'-C1'	-5.07	1.47	1.53
21	A2	1324	U	P-O5'	-5.07	1.54	1.59
50	BV	3	ARG	CZ-NH2	5.07	1.39	1.33
67	B1	752	U	P-O5'	5.07	1.64	1.59
67	B1	1093	G	C5'-C4'	5.07	1.57	1.51
67	B1	1646	G	O3'-P	-5.07	1.55	1.61
67	B1	1937	A	C5'-C4'	5.07	1.57	1.51
67	B1	3007	A	O4'-C1'	5.07	1.48	1.41
46	BA	5	ARG	NE-CZ	5.07	1.39	1.33
34	BK	59	LYS	N-CA	-5.07	1.36	1.46
67	B1	129	C	O3'-P	-5.07	1.55	1.61
67	B1	165	G	O3'-P	-5.07	1.55	1.61
67	B1	928	A	O3'-P	-5.07	1.55	1.61
67	B1	1190	G	O4'-C1'	5.07	1.48	1.41
67	B1	1999	G	O3'-P	-5.07	1.55	1.61
25	AH	85	PHE	C-N	5.07	1.45	1.34
32	BO	34	ARG	NE-CZ	5.07	1.39	1.33
32	BO	191	ARG	CZ-NH2	5.07	1.39	1.33
33	BC	204	GLY	CA-C	-5.07	1.43	1.51
39	Be	42	ARG	CZ-NH1	5.07	1.39	1.33
47	BI	77	ARG	CZ-NH1	5.07	1.39	1.33
67	B1	1651	A	C5'-C4'	5.07	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
67	B1	2360	G	C2'-C1'	-5.07	1.47	1.53
67	B1	2653	G	C2'-C1'	-5.07	1.47	1.53
21	A2	1001	A	C2'-C1'	-5.07	1.47	1.53
25	AH	91	ARG	CZ-NH1	5.07	1.39	1.33
39	Be	21	ARG	NE-CZ	5.07	1.39	1.33
67	B1	1897	G	C2'-C1'	5.07	1.58	1.53
67	B1	2834	C	O3'-P	-5.07	1.55	1.61
15	AE	40	ARG	CZ-NH2	5.06	1.39	1.33
21	A2	1106	A	P-O5'	-5.06	1.54	1.59
30	AU	83	ARG	CD-NE	5.06	1.55	1.46
67	B1	19	G	C5'-C4'	5.06	1.57	1.51
68	B3	37	U	C2'-O2'	-5.06	1.35	1.41
21	A2	568	C	P-O5'	-5.06	1.54	1.59
56	BH	48	GLY	N-CA	-5.06	1.38	1.46
67	B1	2205	A	C5'-C4'	5.06	1.57	1.51
21	A2	388	G	C3'-C2'	-5.06	1.47	1.52
21	A2	997	G	C2-N3	5.06	1.36	1.32
21	A2	308	G	C4'-C3'	5.06	1.58	1.53
21	A2	601	G	C2'-C1'	5.06	1.58	1.53
21	A2	782	A	C4'-C3'	5.06	1.58	1.53
52	BB	189	TRP	CD2-CE3	5.06	1.48	1.40
67	B1	1214	C	C2'-C1'	-5.06	1.47	1.53
67	B1	1439	G	C5'-C4'	5.06	1.57	1.51
67	B1	2843	C	C5'-C4'	5.06	1.57	1.51
4	AG	108	ARG	CZ-NH2	5.06	1.39	1.33
21	A2	993	C	C2'-C1'	-5.06	1.47	1.53
21	A2	1348	C	P-O5'	-5.06	1.54	1.59
21	A2	1412	A	C4'-C3'	-5.06	1.47	1.52
33	BC	111	ALA	CA-CB	5.06	1.63	1.52
46	BA	56	ARG	CZ-NH1	5.06	1.39	1.33
67	B1	2250	G	O4'-C1'	5.06	1.48	1.41
67	B1	2336	G	O4'-C1'	5.06	1.48	1.41
67	B1	2938	G	P-O5'	-5.06	1.54	1.59
1	AQ	115	ASP	CB-CG	5.06	1.62	1.51
67	B1	2259	G	C2'-C1'	-5.06	1.47	1.53
68	B3	104	C	C5'-C4'	5.06	1.57	1.51
21	A2	221	A	P-O5'	-5.05	1.54	1.59
40	BE	152	ARG	NE-CZ	5.05	1.39	1.33
21	A2	402	G	C4'-O4'	5.05	1.52	1.45
32	BO	174	LYS	C-N	5.05	1.42	1.33
67	B1	1369	G	C5'-C4'	5.05	1.57	1.51
67	B1	2973	A	C4'-O4'	5.05	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	77	G	O4'-C1'	5.05	1.48	1.41
28	B6	63	TYR	CD1-CE1	5.05	1.47	1.39
67	B1	1689	G	C4'-C3'	5.05	1.58	1.53
67	B1	1983	C	O3'-P	-5.05	1.55	1.61
11	A1	28	C	C2'-O2'	-5.05	1.35	1.41
13	AX	50	ARG	CZ-NH1	5.05	1.39	1.33
21	A2	801	A	C2'-C1'	5.05	1.58	1.53
21	A2	1276	G	O3'-P	-5.05	1.55	1.61
67	B1	263	U	C2'-C1'	-5.05	1.47	1.53
67	B1	2912	G	P-O5'	5.05	1.64	1.59
67	B1	2926	G	C5'-C4'	5.05	1.57	1.51
68	B3	20	G	C5'-C4'	5.05	1.57	1.51
11	A1	33	C	C2'-C1'	5.05	1.58	1.53
21	A2	1175	C	C5'-C4'	5.05	1.57	1.51
67	B1	868	U	C2'-C1'	-5.05	1.47	1.53
67	B1	1431	U	C3'-C2'	5.05	1.58	1.52
14	AM	107	ARG	NE-CZ	5.05	1.39	1.33
19	AS	49	ARG	NE-CZ	5.05	1.39	1.33
67	B1	213	G	O4'-C1'	5.05	1.48	1.41
67	B1	1921	U	C3'-C2'	5.05	1.58	1.52
67	B1	2788	U	O4'-C1'	5.05	1.48	1.41
67	B1	2833	G	C5'-C4'	5.05	1.57	1.51
68	B3	84	U	O4'-C1'	-5.04	1.35	1.41
11	A1	31	G	C5'-C4'	5.04	1.57	1.51
21	A2	405	G	O4'-C1'	5.04	1.48	1.41
27	A0	61	C	C5'-C4'	5.04	1.57	1.51
33	BC	299	GLU	CG-CD	5.04	1.59	1.51
59	BM	170	ARG	CZ-NH2	5.04	1.39	1.33
67	B1	781	C	C4'-C3'	5.04	1.58	1.53
67	B1	999	A	C4'-O4'	-5.04	1.39	1.45
67	B1	1391	C	C5'-C4'	5.04	1.57	1.51
67	B1	1414	G	C5'-C4'	5.04	1.57	1.51
67	B1	2148	U	C4'-O4'	-5.04	1.39	1.45
21	A2	1454	A	C3'-C2'	5.04	1.58	1.52
67	B1	428	A	P-O5'	-5.04	1.54	1.59
67	B1	1383	G	C5'-C4'	5.04	1.57	1.51
67	B1	2715	A	O4'-C1'	5.04	1.48	1.41
68	B3	13	C	O3'-P	-5.04	1.55	1.61
21	A2	1299	A	C5'-C4'	5.04	1.57	1.51
67	B1	302	U	C2'-C1'	5.04	1.58	1.53
67	B1	1616	A	C2'-C1'	5.04	1.58	1.53
42	BT	78	GLU	CG-CD	5.04	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	Bk	211	SER	N-CA	-5.04	1.36	1.46
58	BP	83	TRP	CB-CG	5.04	1.59	1.50
67	B1	886	G	C4'-C3'	-5.04	1.47	1.52
67	B1	1462	G	P-O5'	-5.04	1.54	1.59
67	B1	1703	G	O5'-C5'	5.04	1.52	1.44
67	B1	1820	C	C4'-O4'	5.04	1.52	1.45
38	Bb	51	ARG	NE-CZ	5.04	1.39	1.33
67	B1	2936	U	C4'-O4'	5.04	1.52	1.45
20	A3	85	GLU	CD-OE1	-5.04	1.20	1.25
21	A2	186	U	P-O5'	-5.04	1.54	1.59
21	A2	1005	G	O4'-C1'	-5.04	1.35	1.41
67	B1	675	G	O3'-P	-5.04	1.55	1.61
67	B1	1136	G	P-O5'	-5.04	1.54	1.59
67	B1	2392	A	C5'-C4'	5.04	1.57	1.51
21	A2	272	C	C3'-C2'	-5.03	1.47	1.52
21	A2	770	A	C4'-O4'	5.03	1.52	1.45
21	A2	1237	G	C3'-O3'	5.03	1.49	1.42
52	BB	42	ARG	CA-CB	5.03	1.65	1.53
67	B1	506	G	C2'-C1'	-5.03	1.47	1.53
67	B1	1846	G	C3'-C2'	-5.03	1.47	1.52
67	B1	2449	A	C3'-C2'	5.03	1.58	1.52
67	B1	2664	G	C4'-O4'	-5.03	1.39	1.45
67	B1	545	G	C4'-C3'	5.03	1.58	1.53
67	B1	1460	C	P-O5'	-5.03	1.54	1.59
67	B1	2284	C	O3'-P	-5.03	1.55	1.61
49	BQ	88	ARG	NE-CZ	5.03	1.39	1.33
67	B1	1890	U	P-O5'	-5.03	1.54	1.59
67	B1	2769	U	O4'-C1'	5.03	1.48	1.41
14	AM	58	TYR	CZ-OH	5.03	1.46	1.37
21	A2	1411	G	C4'-O4'	5.03	1.52	1.45
26	AP	55	TYR	CZ-OH	5.03	1.46	1.37
59	BM	53	TYR	CD1-CE1	5.03	1.46	1.39
67	B1	604	A	C5'-C4'	5.03	1.57	1.51
67	B1	1158	G	P-O5'	-5.03	1.54	1.59
67	B1	1536	U	O4'-C1'	5.03	1.48	1.41
67	B1	2638	G	O4'-C1'	5.03	1.48	1.41
21	A2	404	C	O4'-C1'	5.03	1.48	1.41
67	B1	420	U	C4'-C3'	5.03	1.58	1.53
67	B1	1485	A	C5'-C4'	5.03	1.57	1.51
67	B1	2007	C	P-O5'	-5.03	1.54	1.59
67	B1	2551	G	C3'-C2'	-5.03	1.47	1.52
67	B1	2614	C	P-O5'	-5.03	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	37	G	O3'-P	5.03	1.67	1.61
21	A2	365	C	C2'-C1'	-5.03	1.47	1.53
21	A2	691	G	P-O5'	-5.03	1.54	1.59
40	BE	163	ARG	CZ-NH1	5.03	1.39	1.33
62	BN	130	GLN	CA-C	-5.03	1.39	1.52
67	B1	756	C	O4'-C1'	5.03	1.48	1.41
11	A1	54	G	C5'-C4'	5.02	1.57	1.51
11	A1	58	A	C5'-C4'	5.02	1.57	1.51
17	AO	64	GLU	CA-CB	5.02	1.65	1.53
21	A2	394	C	O4'-C1'	5.02	1.48	1.41
21	A2	573	C	O3'-P	-5.02	1.55	1.61
30	AU	61	ARG	NE-CZ	5.02	1.39	1.33
35	BL	47	TRP	CB-CG	5.02	1.59	1.50
67	B1	1042	G	O3'-P	-5.02	1.55	1.61
67	B1	1144	A	C5'-C4'	5.02	1.57	1.51
67	B1	2619	U	C3'-C2'	5.02	1.58	1.52
10	AD	22	ARG	CZ-NH2	5.02	1.39	1.33
21	A2	134	A	C3'-O3'	5.02	1.49	1.42
66	B1	27	GLY	CA-C	-5.02	1.43	1.51
67	B1	843	C	C3'-C2'	-5.02	1.47	1.52
21	A2	125	G	O4'-C1'	5.02	1.48	1.41
67	B1	456	G	O3'-P	-5.02	1.55	1.61
67	B1	1372	C	C2'-C1'	-5.02	1.47	1.53
67	B1	1566	G	O5'-C5'	-5.02	1.34	1.42
67	B1	2184	G	C5'-C4'	5.02	1.57	1.51
67	B1	2278	U	C3'-C2'	5.02	1.58	1.52
67	B1	2592	U	O3'-P	-5.02	1.55	1.61
11	A1	15	G	P-O5'	-5.02	1.54	1.59
11	A1	60	A	C3'-C2'	5.02	1.58	1.52
24	AA	46	ARG	CZ-NH2	5.02	1.39	1.33
27	A0	75	C	C2'-O2'	-5.02	1.35	1.41
67	B1	277	A	O3'-P	5.02	1.67	1.61
67	B1	604	A	C3'-C2'	-5.02	1.47	1.52
67	B1	760	G	C3'-C2'	-5.02	1.47	1.52
67	B1	899	A	C5'-C4'	5.02	1.57	1.51
67	B1	993	G	C5'-C4'	5.02	1.57	1.51
67	B1	1636	C	P-O5'	5.02	1.64	1.59
67	B1	1886	C	O4'-C1'	5.02	1.48	1.41
67	B1	2006	C	O3'-P	-5.02	1.55	1.61
67	B1	2423	G	P-O5'	-5.02	1.54	1.59
68	B3	75	G	P-O5'	-5.02	1.54	1.59
68	B3	80	G	O3'-P	-5.02	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	A2	331	C	O3'-P	-5.02	1.55	1.61
33	BC	156	LYS	CD-CE	5.02	1.63	1.51
67	B1	1419	G	C3'-C2'	5.02	1.58	1.52
67	B1	2782	A	C5'-C4'	5.02	1.57	1.51
6	AC	131	ARG	NE-CZ	5.01	1.39	1.33
21	A2	259	A	O3'-P	-5.01	1.55	1.61
21	A2	540	G	O3'-P	-5.01	1.55	1.61
21	A2	554	C	C3'-C2'	5.01	1.58	1.52
67	B1	1788	G	C4'-C3'	5.01	1.58	1.53
67	B1	2730	U	O3'-P	5.01	1.67	1.61
21	A2	1350	U	P-O5'	-5.01	1.54	1.59
67	B1	816	C	C2'-O2'	-5.01	1.35	1.41
67	B1	1597	G	C5'-C4'	5.01	1.57	1.51
67	B1	2180	C	C5'-C4'	5.01	1.57	1.51
15	AE	33	ARG	N-CA	-5.01	1.36	1.46
33	BC	345	PRO	CA-C	-5.01	1.42	1.52
67	B1	981	A	O4'-C1'	-5.01	1.35	1.41
67	B1	1958	A	P-O5'	-5.01	1.54	1.59
67	B1	2066	C	C5'-C4'	5.01	1.57	1.51
68	B3	27	C	P-O5'	-5.01	1.54	1.59
21	A2	1025	U	C2'-C1'	-5.01	1.47	1.53
65	BJ	132	ARG	CZ-NH2	5.01	1.39	1.33
21	A2	290	C	C3'-C2'	-5.01	1.47	1.52
21	A2	702	G	O3'-P	-5.01	1.55	1.61
67	B1	406	G	P-O5'	5.01	1.64	1.59
67	B1	2187	C	O3'-P	-5.01	1.55	1.61
11	A1	66	C	C2'-C1'	-5.01	1.47	1.53
21	A2	807	C	C3'-O3'	5.01	1.49	1.42
47	BI	80	ARG	CD-NE	5.01	1.54	1.46
65	BJ	16	ARG	NE-CZ	5.01	1.39	1.33
67	B1	171	A	C4'-C3'	5.01	1.58	1.53
67	B1	391	C	C4'-O4'	5.01	1.52	1.45
67	B1	502	G	O3'-P	-5.01	1.55	1.61
67	B1	1188	C	C4'-C3'	-5.01	1.47	1.52
67	B1	1335	C	C2'-C1'	-5.01	1.47	1.53
67	B1	1385	C	C4'-C3'	-5.01	1.47	1.52
67	B1	1830	U	O4'-C1'	-5.01	1.35	1.41
67	B1	2907	C	P-O5'	5.01	1.64	1.59
21	A2	677	U	C2'-C1'	5.00	1.58	1.53
21	A2	1392	G	C5'-C4'	5.00	1.57	1.51
32	BO	8	ARG	CZ-NH2	5.00	1.39	1.33
33	BC	86	TYR	CG-CD1	5.00	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	BM	53	TYR	CZ-OH	5.00	1.46	1.37
67	B1	206	A	C4'-O4'	5.00	1.52	1.45
67	B1	944	G	O4'-C1'	5.00	1.48	1.41
67	B1	954	A	C2'-C1'	5.00	1.58	1.53
67	B1	1768	C	C2'-C1'	-5.00	1.47	1.53
67	B1	1778	G	P-O5'	-5.00	1.54	1.59
67	B1	2703	G	O4'-C1'	5.00	1.48	1.41
21	A2	1491	C	C3'-O3'	5.00	1.49	1.42
24	AA	75	GLY	CA-C	5.00	1.59	1.51
67	B1	822	A	O3'-P	-5.00	1.55	1.61
67	B1	958	A	O3'-P	-5.00	1.55	1.61
67	B1	1535	U	O4'-C1'	5.00	1.48	1.41
67	B1	3045	G	C4'-C3'	-5.00	1.47	1.52
11	A1	3	G	O4'-C1'	5.00	1.48	1.41
59	BM	76	TRP	CD2-CE2	5.00	1.47	1.41
67	B1	1118	A	P-O5'	-5.00	1.54	1.59
67	B1	1289	C	O3'-P	-5.00	1.55	1.61
67	B1	1479	U	O3'-P	-5.00	1.55	1.61

All (13452) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2363	G	O4'-C1'-N9	44.16	143.53	108.20
67	B1	1754	A	O4'-C1'-N9	36.92	137.74	108.20
21	A2	1207	G	O4'-C1'-N9	31.50	133.40	108.20
11	A1	49	C	O4'-C1'-N1	30.68	132.75	108.20
67	B1	2174	G	O4'-C1'-N9	30.40	132.52	108.20
67	B1	2287	C	O4'-C1'-N1	29.82	132.05	108.20
67	B1	862	G	O4'-C1'-N9	29.48	131.78	108.20
11	A1	77	A	O4'-C1'-N9	28.96	131.37	108.20
67	B1	2507	C	O4'-C1'-C2'	-28.78	77.02	105.80
21	A2	393	A	O4'-C1'-N9	28.74	131.19	108.20
67	B1	1037	C	P-O3'-C3'	28.72	154.16	119.70
67	B1	154	U	O4'-C1'-N1	28.61	131.09	108.20
21	A2	798	U	O4'-C1'-N1	28.30	130.84	108.20
21	A2	1200	U	O4'-C1'-N1	27.99	130.59	108.20
67	B1	1678	A	O4'-C1'-N9	27.77	130.42	108.20
67	B1	1612	G	P-O3'-C3'	27.64	152.87	119.70
68	B3	122	C	O4'-C1'-N1	27.55	130.24	108.20
21	A2	1336	U	O4'-C1'-N1	27.53	130.23	108.20
11	A1	47	G	O4'-C1'-N9	27.26	130.01	108.20
67	B1	1279	U	O4'-C1'-N1	27.14	129.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A0	47	U	O4'-C1'-N1	26.78	129.62	108.20
67	B1	1348	G	O4'-C1'-N9	26.74	129.59	108.20
67	B1	1393	C	O4'-C1'-N1	26.52	129.42	108.20
21	A2	192	G	O4'-C1'-N9	26.28	129.22	108.20
21	A2	1409	G	O4'-C1'-N9	26.23	129.18	108.20
67	B1	1981	G	O4'-C1'-N9	26.18	129.14	108.20
67	B1	1642	G	O4'-C1'-C2'	-25.94	79.86	105.80
21	A2	1484	C	O4'-C1'-N1	25.72	128.78	108.20
21	A2	60	A	O4'-C1'-N9	25.67	128.74	108.20
21	A2	45	U	O4'-C1'-N1	25.52	128.62	108.20
21	A2	1101	G	O4'-C1'-N9	25.31	128.45	108.20
67	B1	1553	G	O4'-C1'-N9	25.30	128.44	108.20
67	B1	2064	U	P-O3'-C3'	25.25	150.00	119.70
21	A2	746	A	O4'-C1'-N9	25.12	128.29	108.20
21	A2	1128	U	O4'-C1'-N1	25.04	128.23	108.20
67	B1	1319	U	P-O3'-C3'	25.00	149.70	119.70
67	B1	3026	C	O4'-C1'-N1	24.91	128.13	108.20
67	B1	1248	C	O4'-C1'-N1	24.90	128.12	108.20
21	A2	423	U	O4'-C1'-N1	24.82	128.06	108.20
67	B1	2963	G	O4'-C1'-N9	24.76	128.01	108.20
67	B1	1184	U	O4'-C1'-N1	24.69	127.95	108.20
67	B1	1163	U	O4'-C1'-N1	24.44	127.75	108.20
21	A2	656	U	O4'-C1'-N1	24.43	127.75	108.20
21	A2	92	G	O4'-C1'-N9	24.43	127.74	108.20
67	B1	2477	G	O4'-C1'-N9	24.36	127.69	108.20
21	A2	1095	C	O4'-C1'-N1	24.33	127.66	108.20
21	A2	962	G	O5'-P-OP1	-23.81	82.13	110.70
11	A1	59	A	O4'-C1'-N9	23.78	127.23	108.20
67	B1	1738	A	O4'-C1'-N9	23.65	127.12	108.20
67	B1	2800	U	O4'-C1'-N1	23.64	127.11	108.20
21	A2	8	U	O4'-C1'-N1	23.58	127.07	108.20
21	A2	1406	U	O4'-C1'-N1	23.47	126.97	108.20
67	B1	1706	G	O4'-C1'-N9	23.44	126.95	108.20
67	B1	1569	A	O4'-C1'-N9	23.40	126.92	108.20
67	B1	2936	U	O4'-C1'-N1	23.31	126.85	108.20
67	B1	166	G	O4'-C1'-N9	23.29	126.83	108.20
21	A2	1156	A	O4'-C1'-N9	23.24	126.79	108.20
67	B1	1179	G	O4'-C1'-N9	23.17	126.73	108.20
68	B3	52	U	P-O3'-C3'	23.07	147.38	119.70
67	B1	1615	G	O4'-C1'-N9	23.00	126.60	108.20
67	B1	111	U	O4'-C1'-N1	23.00	126.60	108.20
67	B1	1093	G	O4'-C1'-N9	22.96	126.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1541	U	O4'-C1'-N1	22.95	126.56	108.20
67	B1	155	U	O4'-C1'-N1	22.82	126.46	108.20
67	B1	1069	A	O4'-C1'-N9	22.78	126.42	108.20
67	B1	1711	C	O4'-C1'-N1	22.74	126.39	108.20
67	B1	1752	C	P-O3'-C3'	22.69	146.93	119.70
67	B1	694	A	O4'-C1'-N9	22.61	126.29	108.20
67	B1	1205	U	O4'-C1'-N1	22.61	126.29	108.20
67	B1	2182	A	O4'-C1'-N9	22.61	126.28	108.20
21	A2	175	G	O4'-C1'-N9	22.57	126.26	108.20
67	B1	278	C	O4'-C1'-N1	22.57	126.26	108.20
67	B1	486	A	O4'-C1'-N9	22.43	126.15	108.20
21	A2	962	G	O5'-P-OP2	-22.36	83.86	110.70
67	B1	411	U	O4'-C1'-N1	22.31	126.05	108.20
67	B1	702	G	O4'-C1'-N9	22.15	125.92	108.20
67	B1	1670	A	O4'-C1'-N9	21.97	125.78	108.20
67	B1	1624	U	O4'-C1'-N1	21.86	125.69	108.20
67	B1	2492	G	O4'-C1'-N9	21.77	125.62	108.20
67	B1	2238	G	O4'-C1'-N9	21.71	125.56	108.20
21	A2	243	G	O4'-C1'-N9	21.69	125.55	108.20
67	B1	333	A	O4'-C1'-N9	21.67	125.53	108.20
67	B1	1595	G	O4'-C1'-N9	21.64	125.52	108.20
67	B1	1084	G	P-O3'-C3'	21.62	145.64	119.70
67	B1	2134	G	C1'-O4'-C4'	-21.51	92.69	109.90
67	B1	565	A	C1'-O4'-C4'	21.41	127.03	109.90
21	A2	1200	U	C1'-O4'-C4'	21.35	126.98	109.90
67	B1	3000	U	O4'-C1'-N1	21.34	125.27	108.20
21	A2	192	G	C3'-C2'-C1'	-21.33	84.43	101.50
67	B1	2912	G	P-O3'-C3'	21.23	145.17	119.70
67	B1	2241	U	O4'-C1'-N1	21.15	125.12	108.20
67	B1	565	A	O4'-C1'-N9	21.10	125.08	108.20
67	B1	1854	G	O4'-C1'-N9	21.06	125.05	108.20
67	B1	1200	A	O4'-C1'-N9	20.91	124.93	108.20
21	A2	1419	G	O4'-C1'-N9	20.87	124.89	108.20
21	A2	406	U	P-O3'-C3'	20.75	144.60	119.70
67	B1	777	A	O4'-C1'-N9	20.71	124.77	108.20
67	B1	613	C	O4'-C1'-N1	20.70	124.76	108.20
21	A2	242	A	O4'-C1'-N9	20.70	124.76	108.20
67	B1	1740	U	O4'-C1'-N1	20.67	124.73	108.20
67	B1	2871	A	O4'-C1'-N9	20.56	124.64	108.20
67	B1	3035	C	P-O3'-C3'	20.43	144.22	119.70
67	B1	1226	G	P-O3'-C3'	20.42	144.20	119.70
67	B1	1825	G	O4'-C1'-N9	20.32	124.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2980	G	O4'-C1'-N9	20.31	124.45	108.20
21	A2	1416	C	O4'-C1'-N1	20.29	124.43	108.20
67	B1	923	A	O4'-C1'-N9	20.26	124.41	108.20
67	B1	2012	G	O4'-C1'-N9	20.21	124.37	108.20
67	B1	584	G	P-O3'-C3'	20.06	143.77	119.70
68	B3	19	G	P-O3'-C3'	20.00	143.70	119.70
67	B1	1473	C	N1-C1'-C2'	19.93	139.92	114.00
21	A2	1053	A	P-O3'-C3'	19.83	143.50	119.70
67	B1	83	G	P-O3'-C3'	19.80	143.46	119.70
67	B1	1429	A	O4'-C1'-N9	19.76	124.01	108.20
67	B1	645	U	O4'-C1'-N1	19.75	124.00	108.20
67	B1	129	C	O4'-C1'-N1	19.73	123.98	108.20
67	B1	809	A	O4'-C1'-N9	19.71	123.97	108.20
67	B1	2301	C	P-O3'-C3'	19.66	143.30	119.70
67	B1	1565	G	O4'-C1'-C2'	-19.62	86.18	105.80
21	A2	379	A	O4'-C1'-N9	19.57	123.85	108.20
68	B3	84	U	O4'-C1'-N1	19.55	123.84	108.20
27	A0	9	A	O4'-C1'-N9	19.51	123.81	108.20
21	A2	433	U	O4'-C1'-N1	19.50	123.80	108.20
67	B1	1494	U	O4'-C1'-N1	19.47	123.78	108.20
67	B1	1313	G	O4'-C1'-N9	19.43	123.74	108.20
67	B1	1617	G	O4'-C1'-N9	19.42	123.73	108.20
68	B3	74	U	P-O3'-C3'	19.42	143.00	119.70
67	B1	2917	G	O4'-C1'-N9	19.40	123.72	108.20
67	B1	1993	A	O4'-C1'-N9	19.39	123.71	108.20
67	B1	1250	A	O4'-C1'-N9	19.36	123.69	108.20
67	B1	1251	G	P-O3'-C3'	19.34	142.91	119.70
67	B1	2507	C	O4'-C1'-N1	-19.32	92.75	108.20
21	A2	804	U	P-O3'-C3'	19.30	142.86	119.70
67	B1	1865	U	O4'-C1'-N1	19.26	123.61	108.20
67	B1	1811	G	O4'-C1'-N9	19.25	123.60	108.20
21	A2	708	C	O4'-C1'-N1	19.21	123.57	108.20
21	A2	1241	U	O4'-C1'-N1	19.17	123.54	108.20
68	B3	37	U	O4'-C1'-N1	19.13	123.50	108.20
21	A2	152	G	C1'-O4'-C4'	-19.12	94.60	109.90
67	B1	2916	G	O4'-C1'-N9	19.11	123.49	108.20
67	B1	129	C	P-O3'-C3'	19.11	142.63	119.70
67	B1	2068	U	O4'-C1'-C2'	-19.09	86.71	105.80
21	A2	63	G	P-O3'-C3'	19.07	142.59	119.70
67	B1	2177	A	O4'-C1'-N9	19.06	123.45	108.20
67	B1	1783	U	N1-C1'-C2'	19.05	138.77	114.00
67	B1	2609	G	O4'-C1'-N9	19.02	123.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	6	A	O4'-C1'-N9	18.98	123.39	108.20
21	A2	654	U	O4'-C1'-N1	18.96	123.37	108.20
21	A2	194	C	P-O3'-C3'	18.92	142.41	119.70
67	B1	715	G	O4'-C1'-C2'	-18.87	86.93	105.80
21	A2	736	A	O4'-C1'-N9	18.86	123.29	108.20
67	B1	855	G	O4'-C1'-N9	18.85	123.28	108.20
67	B1	2363	G	P-O3'-C3'	18.84	142.30	119.70
67	B1	2869	U	O4'-C1'-N1	-18.84	93.13	108.20
67	B1	1034	G	O4'-C1'-N9	18.78	123.22	108.20
21	A2	85	A	O4'-C1'-C2'	-18.77	87.03	105.80
67	B1	770	G	O4'-C1'-N9	18.73	123.19	108.20
67	B1	2851	A	O4'-C1'-N9	18.73	123.19	108.20
67	B1	634	G	P-O3'-C3'	18.70	142.13	119.70
67	B1	2450	A	O4'-C1'-N9	18.69	123.16	108.20
67	B1	1178	G	O4'-C1'-C2'	18.69	124.49	105.80
21	A2	665	G	O4'-C1'-N9	18.66	123.13	108.20
67	B1	1045	A	O4'-C1'-C2'	-18.64	87.16	105.80
21	A2	871	A	P-O3'-C3'	18.64	142.06	119.70
67	B1	1911	G	O4'-C1'-N9	18.62	123.10	108.20
21	A2	369	A	N9-C1'-C2'	18.57	138.15	114.00
67	B1	216	A	O4'-C1'-N9	18.56	123.05	108.20
67	B1	733	A	O4'-C1'-N9	18.55	123.04	108.20
21	A2	1081	C	O4'-C1'-N1	18.54	123.03	108.20
21	A2	422	U	O4'-C1'-N1	18.52	123.02	108.20
67	B1	956	U	C1'-O4'-C4'	18.52	124.71	109.90
67	B1	887	U	O4'-C1'-N1	18.52	123.01	108.20
67	B1	704	G	O4'-C1'-N9	18.50	123.00	108.20
67	B1	159	C	O4'-C1'-N1	18.49	122.99	108.20
21	A2	681	G	O4'-C1'-N9	18.49	122.99	108.20
67	B1	1390	U	O4'-C1'-N1	18.47	122.97	108.20
67	B1	1955	U	O4'-C1'-N1	18.41	122.93	108.20
67	B1	1024	G	O4'-C1'-N9	18.40	122.92	108.20
67	B1	734	C	P-O3'-C3'	18.37	141.75	119.70
21	A2	334	G	O4'-C1'-N9	18.33	122.86	108.20
68	B3	106	G	O4'-C1'-N9	18.33	122.86	108.20
67	B1	677	A	O4'-C1'-N9	18.28	122.82	108.20
67	B1	1452	G	O4'-C1'-N9	18.27	122.82	108.20
67	B1	2095	U	O4'-C1'-N1	18.23	122.79	108.20
67	B1	214	C	O4'-C1'-N1	18.22	122.78	108.20
21	A2	1337	A	O4'-C1'-N9	18.20	122.76	108.20
67	B1	530	A	O4'-C1'-N9	18.20	122.76	108.20
67	B1	366	G	N9-C1'-C2'	18.18	137.63	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	715	G	C3'-C2'-C1'	18.16	116.03	101.50
67	B1	304	G	O4'-C1'-N9	18.16	122.73	108.20
21	A2	1262	U	O4'-C1'-N1	18.15	122.72	108.20
67	B1	1513	G	O4'-C1'-N9	18.15	122.72	108.20
67	B1	1598	U	O4'-C1'-N1	18.12	122.70	108.20
30	AU	15	ARG	NE-CZ-NH1	18.12	129.36	120.30
21	A2	641	A	P-O3'-C3'	18.11	141.44	119.70
67	B1	579	C	P-O3'-C3'	18.09	141.41	119.70
67	B1	1745	U	O4'-C1'-C2'	-18.07	87.73	105.80
67	B1	979	G	O4'-C1'-C2'	18.06	123.86	105.80
67	B1	404	G	C1'-O4'-C4'	18.04	124.33	109.90
67	B1	1960	U	N1-C1'-C2'	18.04	137.45	114.00
67	B1	1180	G	P-O3'-C3'	18.01	141.31	119.70
67	B1	2753	G	O4'-C1'-N9	18.00	122.60	108.20
67	B1	221	G	O4'-C1'-N9	18.00	122.60	108.20
67	B1	956	U	O4'-C1'-C2'	-18.00	87.80	105.80
38	Bb	11	ARG	NE-CZ-NH2	-18.00	111.30	120.30
21	A2	655	A	P-O3'-C3'	17.94	141.22	119.70
21	A2	470	G	O4'-C1'-N9	17.91	122.53	108.20
67	B1	980	G	P-O3'-C3'	17.90	141.18	119.70
67	B1	1080	G	P-O3'-C3'	17.88	141.16	119.70
21	A2	1082	A	C3'-C2'-C1'	17.87	115.80	101.50
67	B1	1045	A	C1'-O4'-C4'	17.87	124.19	109.90
21	A2	801	A	O4'-C1'-N9	17.85	122.48	108.20
67	B1	758	C	O4'-C1'-N1	17.83	122.46	108.20
21	A2	616	G	C3'-C2'-C1'	-17.80	87.26	101.50
21	A2	958	G	O4'-C1'-N9	17.78	122.43	108.20
21	A2	1322	C	P-O3'-C3'	17.77	141.03	119.70
62	BN	113	ARG	NE-CZ-NH1	-17.77	111.42	120.30
21	A2	1259	A	O4'-C1'-N9	-17.71	94.03	108.20
67	B1	1440	C	N1-C1'-C2'	17.68	136.99	114.00
67	B1	1437	C	O4'-C1'-N1	17.67	122.33	108.20
21	A2	179	U	O4'-C1'-N1	17.61	122.29	108.20
67	B1	545	G	O4'-C1'-N9	17.61	122.29	108.20
67	B1	215	A	O4'-C1'-N9	17.61	122.29	108.20
67	B1	246	A	O4'-C1'-N9	17.47	122.18	108.20
21	A2	1403	U	N1-C1'-C2'	17.47	136.71	114.00
67	B1	594	U	O4'-C1'-N1	17.42	122.14	108.20
21	A2	581	G	C1'-O4'-C4'	-17.41	95.97	109.90
21	A2	694	U	O4'-C1'-N1	17.40	122.12	108.20
67	B1	601	A	O4'-C1'-N9	17.39	122.11	108.20
67	B1	1744	A	O4'-C1'-N9	17.39	122.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	3043	C	O4'-C1'-N1	17.39	122.11	108.20
67	B1	898	G	C3'-C2'-C1'	17.35	115.38	101.50
21	A2	85	A	N9-C1'-C2'	-17.34	91.45	114.00
67	B1	1208	A	O4'-C1'-N9	17.34	122.07	108.20
67	B1	202	A	O4'-C1'-N9	17.33	122.07	108.20
15	AE	26	TYR	CB-CG-CD2	-17.33	110.60	121.00
21	A2	949	G	O4'-C1'-N9	17.32	122.06	108.20
67	B1	2650	G	C3'-C2'-C1'	-17.31	87.65	101.50
21	A2	1161	A	P-O3'-C3'	17.30	140.46	119.70
67	B1	3038	A	P-O3'-C3'	17.30	140.46	119.70
21	A2	677	U	O4'-C1'-N1	17.30	122.04	108.20
21	A2	486	A	P-O3'-C3'	17.29	140.45	119.70
67	B1	1568	A	C3'-C2'-C1'	-17.29	87.67	101.50
67	B1	994	G	P-O3'-C3'	17.29	140.45	119.70
67	B1	2687	A	O4'-C1'-N9	17.29	122.03	108.20
68	B3	35	A	C1'-O4'-C4'	17.28	123.72	109.90
67	B1	2606	C	P-O3'-C3'	17.24	140.39	119.70
67	B1	2891	A	P-O3'-C3'	17.20	140.34	119.70
67	B1	2270	G	O4'-C1'-N9	17.18	121.94	108.20
21	A2	1272	G	C1'-O4'-C4'	-17.17	96.16	109.90
21	A2	1336	U	C1'-O4'-C4'	17.16	123.63	109.90
67	B1	1178	G	C1'-O4'-C4'	-17.16	96.17	109.90
21	A2	1453	U	P-O3'-C3'	17.15	140.28	119.70
67	B1	1889	G	O4'-C1'-N9	17.14	121.91	108.20
67	B1	614	G	C3'-C2'-C1'	17.14	115.21	101.50
21	A2	487	U	O4'-C1'-N1	17.13	121.91	108.20
21	A2	1436	U	P-O3'-C3'	17.12	140.25	119.70
21	A2	1436	U	O4'-C1'-N1	17.11	121.89	108.20
21	A2	1262	U	P-O3'-C3'	17.09	140.21	119.70
21	A2	804	U	O4'-C1'-N1	17.09	121.87	108.20
67	B1	917	A	O4'-C1'-N9	17.08	121.86	108.20
67	B1	2803	U	O4'-C1'-N1	17.08	121.86	108.20
67	B1	2088	G	O4'-C1'-N9	-17.07	94.54	108.20
21	A2	85	A	C1'-O4'-C4'	17.06	123.55	109.90
21	A2	974	G	O4'-C1'-C2'	-17.05	88.75	105.80
67	B1	397	G	O4'-C1'-N9	17.03	121.82	108.20
67	B1	1256	G	O4'-C1'-N9	17.00	121.80	108.20
67	B1	2022	U	O4'-C1'-N1	16.99	121.79	108.20
21	A2	1195	U	C3'-C2'-C1'	-16.97	87.93	101.50
67	B1	2745	G	O4'-C1'-N9	16.97	121.77	108.20
21	A2	364	U	O4'-C1'-N1	16.95	121.76	108.20
67	B1	2814	U	O4'-C1'-N1	16.95	121.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2438	U	O4'-C1'-N1	16.94	121.75	108.20
60	BS	19	ARG	NE-CZ-NH2	-16.94	111.83	120.30
21	A2	324	C	P-O3'-C3'	16.93	140.02	119.70
21	A2	61	A	O4'-C1'-N9	16.93	121.74	108.20
67	B1	2998	G	O4'-C1'-N9	16.92	121.74	108.20
67	B1	2923	G	O4'-C1'-N9	16.92	121.73	108.20
67	B1	2590	C	N1-C1'-C2'	16.92	135.99	114.00
67	B1	1530	A	O4'-C1'-N9	16.90	121.72	108.20
21	A2	1182	G	O4'-C1'-N9	16.89	121.71	108.20
67	B1	1471	G	N9-C1'-C2'	16.86	135.92	114.00
67	B1	1585	U	O4'-C1'-N1	16.86	121.69	108.20
21	A2	1490	C	N1-C1'-C2'	16.82	135.87	114.00
67	B1	2717	A	O4'-C1'-N9	16.81	121.65	108.20
67	B1	3004	C	P-O3'-C3'	16.81	139.87	119.70
53	BD	56	ARG	NE-CZ-NH1	16.79	128.69	120.30
67	B1	409	C	N1-C1'-C2'	16.78	135.81	114.00
67	B1	859	G	P-O3'-C3'	16.77	139.82	119.70
67	B1	1592	U	N1-C1'-C2'	16.76	135.79	114.00
67	B1	2794	G	O4'-C1'-N9	16.74	121.59	108.20
67	B1	2735	C	N1-C1'-C2'	16.72	135.74	114.00
27	A0	6	C	N1-C1'-C2'	16.72	135.73	114.00
67	B1	2393	G	O4'-C1'-N9	16.71	121.57	108.20
67	B1	2507	C	P-O3'-C3'	16.71	139.75	119.70
67	B1	445	G	O4'-C1'-N9	16.69	121.56	108.20
67	B1	507	G	O4'-C1'-N9	16.68	121.55	108.20
67	B1	1600	G	O4'-C1'-C2'	-16.67	89.13	105.80
67	B1	82	C	N1-C1'-C2'	16.66	135.66	114.00
67	B1	1031	C	N1-C1'-C2'	16.66	135.66	114.00
21	A2	367	G	O4'-C1'-N9	-16.66	94.87	108.20
67	B1	402	G	O4'-C1'-N9	16.65	121.52	108.20
67	B1	2077	A	C1'-O4'-C4'	16.64	123.21	109.90
67	B1	1936	C	P-O3'-C3'	16.63	139.66	119.70
21	A2	434	A	C1'-O4'-C4'	16.63	123.20	109.90
67	B1	1117	C	P-O3'-C3'	16.62	139.65	119.70
67	B1	1563	G	P-O3'-C3'	16.62	139.65	119.70
67	B1	362	A	O4'-C1'-N9	16.59	121.47	108.20
67	B1	2908	U	O4'-C1'-N1	16.59	121.47	108.20
67	B1	924	A	O4'-C1'-N9	16.58	121.47	108.20
32	BO	12	ARG	NE-CZ-NH1	16.55	128.58	120.30
21	A2	362	C	C3'-C2'-C1'	16.53	114.73	101.50
67	B1	813	G	O4'-C1'-N9	16.53	121.43	108.20
21	A2	340	A	O4'-C1'-N9	16.53	121.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1395	G	O4'-C1'-N9	-16.50	95.00	108.20
67	B1	2583	G	O4'-C1'-N9	16.45	121.36	108.20
67	B1	379	U	P-O3'-C3'	16.44	139.43	119.70
21	A2	1389	G	O4'-C1'-N9	16.44	121.35	108.20
67	B1	404	G	O4'-C1'-C2'	-16.43	89.37	105.80
67	B1	2921	U	P-O3'-C3'	16.42	139.41	119.70
67	B1	429	U	O4'-C1'-N1	16.40	121.32	108.20
21	A2	1321	U	O4'-C1'-N1	16.38	121.31	108.20
7	AB	33	TYR	CB-CG-CD2	-16.38	111.17	121.00
31	BY	126	PHE	CB-CG-CD1	-16.38	109.34	120.80
21	A2	472	C	N1-C1'-C2'	16.35	135.26	114.00
67	B1	909	A	O4'-C1'-N9	16.35	121.28	108.20
67	B1	2586	A	O4'-C1'-N9	16.35	121.28	108.20
60	BS	129	TYR	CB-CG-CD1	-16.35	111.19	121.00
67	B1	385	U	O4'-C1'-N1	16.35	121.28	108.20
67	B1	2916	G	C1'-O4'-C4'	16.34	122.98	109.90
67	B1	1643	A	N9-C1'-C2'	16.32	135.21	114.00
67	B1	2677	U	O4'-C1'-N1	16.31	121.25	108.20
21	A2	299	G	O4'-C1'-N9	16.30	121.24	108.20
36	Bf	12	ARG	NE-CZ-NH2	-16.30	112.15	120.30
11	A1	51	G	C1'-O4'-C4'	-16.29	96.87	109.90
67	B1	1245	C	O4'-C1'-C2'	-16.28	89.52	105.80
21	A2	152	G	O4'-C1'-C2'	16.28	122.25	107.60
21	A2	1333	G	O4'-C1'-N9	16.28	121.23	108.20
67	B1	751	U	O4'-C1'-N1	16.25	121.20	108.20
21	A2	1261	U	P-O3'-C3'	16.23	139.17	119.70
67	B1	1388	U	N1-C1'-C2'	16.22	135.09	114.00
21	A2	1420	U	O4'-C1'-N1	16.22	121.18	108.20
12	AN	30	TYR	CB-CG-CD2	-16.19	111.28	121.00
21	A2	46	A	O4'-C1'-N9	16.18	121.14	108.20
67	B1	674	G	O4'-C1'-N9	16.17	121.13	108.20
21	A2	367	G	N9-C1'-C2'	16.16	135.01	114.00
67	B1	2033	G	O4'-C1'-C2'	-16.16	89.64	105.80
67	B1	1782	C	O4'-C1'-N1	16.16	121.12	108.20
67	B1	2053	G	O4'-C1'-N9	16.16	121.12	108.20
67	B1	1394	G	O4'-C1'-N9	-16.15	95.28	108.20
67	B1	1743	G	O4'-C1'-N9	16.15	121.12	108.20
67	B1	2115	U	C1'-O4'-C4'	16.15	122.82	109.90
67	B1	2745	G	C3'-C2'-C1'	-16.15	88.58	101.50
67	B1	158	C	C3'-C2'-C1'	16.13	114.41	101.50
67	B1	1029	C	C3'-C2'-C1'	16.13	114.41	101.50
67	B1	425	U	O4'-C1'-N1	16.13	121.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1896	U	O4'-C1'-N1	16.12	121.09	108.20
67	B1	2506	G	P-O3'-C3'	-16.11	100.36	119.70
21	A2	439	G	O4'-C1'-N9	-16.10	95.32	108.20
67	B1	543	G	O4'-C1'-N9	16.09	121.07	108.20
67	B1	1417	U	O4'-C1'-N1	16.06	121.05	108.20
67	B1	19	G	O4'-C1'-N9	16.05	121.04	108.20
68	B3	123	U	O4'-C1'-N1	16.04	121.03	108.20
35	BL	11	LEU	N-CA-CB	16.02	142.44	110.40
67	B1	1037	C	N1-C1'-C2'	-16.01	93.18	114.00
21	A2	1424	G	N9-C1'-C2'	16.01	134.81	114.00
67	B1	1605	A	O4'-C1'-N9	16.01	121.00	108.20
21	A2	455	C	N1-C1'-C2'	16.00	134.79	114.00
67	B1	424	U	N1-C1'-C2'	15.99	134.79	114.00
67	B1	966	G	O4'-C1'-N9	15.99	120.99	108.20
67	B1	2696	G	O4'-C1'-N9	15.99	120.99	108.20
67	B1	2232	U	O4'-C1'-N1	15.98	120.98	108.20
67	B1	1260	C	P-O3'-C3'	15.95	138.84	119.70
21	A2	1458	A	O4'-C1'-C2'	-15.95	89.85	105.80
67	B1	897	U	P-O3'-C3'	15.95	138.83	119.70
67	B1	715	G	P-O3'-C3'	15.94	138.83	119.70
67	B1	350	A	O4'-C1'-N9	15.93	120.94	108.20
67	B1	2548	A	O4'-C1'-N9	15.93	120.94	108.20
67	B1	1066	C	O4'-C1'-N1	15.92	120.94	108.20
21	A2	32	A	O4'-C1'-N9	15.91	120.93	108.20
67	B1	1574	A	O4'-C1'-N9	-15.89	95.48	108.20
27	A0	72	C	P-O3'-C3'	15.88	138.75	119.70
67	B1	1080	G	C1'-O4'-C4'	15.88	122.60	109.90
67	B1	1613	A	O4'-C1'-N9	15.86	120.89	108.20
67	B1	2710	G	O4'-C1'-N9	15.87	120.89	108.20
67	B1	219	G	O4'-C1'-N9	15.80	120.84	108.20
67	B1	1201	G	C1'-O4'-C4'	-15.79	97.26	109.90
67	B1	1780	C	P-O3'-C3'	15.79	138.65	119.70
67	B1	404	G	O4'-C1'-N9	15.77	120.81	108.20
68	B3	26	C	N1-C1'-C2'	15.75	134.48	114.00
47	BI	67	TYR	CB-CG-CD2	-15.74	111.55	121.00
11	A1	19	G	O4'-C1'-N9	15.74	120.79	108.20
21	A2	325	A	C3'-C2'-C1'	15.70	114.06	101.50
67	B1	2253	G	O4'-C1'-N9	15.69	120.75	108.20
67	B1	2702	A	C1'-O4'-C4'	15.69	122.45	109.90
67	B1	1961	G	O4'-C1'-N9	15.67	120.74	108.20
21	A2	382	G	O4'-C1'-N9	15.66	120.73	108.20
67	B1	1131	G	O4'-C1'-N9	15.65	120.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1830	U	O4'-C1'-N1	15.64	120.71	108.20
21	A2	177	A	O4'-C1'-N9	15.64	120.71	108.20
67	B1	204	G	O4'-C1'-N9	15.63	120.70	108.20
67	B1	2793	C	P-O3'-C3'	15.61	138.44	119.70
67	B1	2267	U	O4'-C1'-N1	15.61	120.69	108.20
21	A2	804	U	C1'-O4'-C4'	15.60	122.38	109.90
68	B3	107	G	O4'-C1'-N9	15.59	120.67	108.20
21	A2	1473	A	O4'-C1'-N9	15.57	120.66	108.20
11	A1	15	G	O4'-C1'-N9	15.56	120.65	108.20
68	B3	40	G	P-O3'-C3'	15.54	138.35	119.70
21	A2	1118	C	O4'-C1'-N1	15.53	120.62	108.20
67	B1	1197	G	O4'-C1'-N9	15.52	120.62	108.20
21	A2	342	G	O4'-C1'-N9	15.50	120.60	108.20
11	A1	51	G	N9-C1'-C2'	15.49	134.14	114.00
67	B1	2312	U	O4'-C1'-N1	15.48	120.58	108.20
68	B3	71	G	O4'-C1'-N9	15.48	120.58	108.20
67	B1	2260	C	N1-C1'-C2'	15.46	134.10	114.00
21	A2	1190	C	N1-C1'-C2'	15.46	134.10	114.00
67	B1	374	C	N1-C1'-C2'	15.45	134.09	114.00
67	B1	1222	U	N1-C1'-C2'	15.45	134.09	114.00
67	B1	2443	G	O4'-C1'-N9	15.43	120.55	108.20
67	B1	2725	U	O4'-C1'-N1	15.42	120.54	108.20
21	A2	1448	A	O4'-C1'-N9	15.42	120.53	108.20
67	B1	614	G	O4'-C1'-N9	-15.42	95.87	108.20
67	B1	714	C	P-O3'-C3'	15.41	138.19	119.70
67	B1	1618	G	C1'-O4'-C4'	-15.40	97.58	109.90
67	B1	998	G	O4'-C1'-N9	15.38	120.50	108.20
67	B1	1179	G	N9-C1'-C2'	-15.37	94.02	114.00
67	B1	363	G	O4'-C1'-N9	15.36	120.49	108.20
67	B1	2062	A	P-O3'-C3'	15.34	138.11	119.70
21	A2	78	G	O4'-C1'-N9	15.32	120.46	108.20
67	B1	2902	G	O4'-C1'-N9	15.32	120.46	108.20
21	A2	283	U	O4'-C1'-N1	15.31	120.45	108.20
21	A2	1017	U	P-O3'-C3'	15.31	138.08	119.70
67	B1	1707	A	O4'-C1'-C2'	-15.31	90.49	105.80
21	A2	79	G	O4'-C1'-N9	15.30	120.44	108.20
21	A2	962	G	OP1-P-OP2	15.30	142.54	119.60
21	A2	866	A	O4'-C1'-N9	15.30	120.44	108.20
21	A2	366	C	N1-C1'-C2'	15.29	133.88	114.00
21	A2	629	U	O4'-C1'-N1	15.26	120.41	108.20
21	A2	262	G	P-O3'-C3'	15.25	138.00	119.70
67	B1	1618	G	C3'-C2'-C1'	-15.25	89.30	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2199	U	O4'-C1'-N1	15.24	120.40	108.20
67	B1	2749	G	O4'-C1'-N9	15.24	120.40	108.20
67	B1	2172	G	C3'-C2'-C1'	-15.23	89.31	101.50
67	B1	1454	G	O4'-C1'-N9	15.23	120.38	108.20
67	B1	2320	U	O4'-C1'-N1	15.23	120.38	108.20
67	B1	2243	G	O4'-C1'-N9	15.21	120.37	108.20
37	BU	42	ARG	NE-CZ-NH1	15.21	127.91	120.30
67	B1	470	A	C1'-O4'-C4'	15.20	122.06	109.90
21	A2	1423	A	P-O3'-C3'	15.20	137.94	119.70
21	A2	798	U	C1'-O4'-C4'	15.19	122.05	109.90
67	B1	152	G	O4'-C1'-N9	15.18	120.35	108.20
67	B1	2304	C	N1-C1'-C2'	15.18	133.73	114.00
21	A2	985	C	P-O3'-C3'	15.18	137.91	119.70
67	B1	1038	U	O4'-C1'-N1	15.17	120.33	108.20
67	B1	1048	C	N1-C1'-C2'	15.17	133.72	114.00
67	B1	1485	A	P-O3'-C3'	15.15	137.88	119.70
21	A2	260	C	N1-C1'-C2'	15.15	133.69	114.00
67	B1	1707	A	N9-C1'-C2'	-15.13	94.33	114.00
67	B1	2545	A	P-O3'-C3'	15.13	137.86	119.70
38	Bb	11	ARG	NE-CZ-NH1	15.12	127.86	120.30
67	B1	1109	G	P-O3'-C3'	15.12	137.84	119.70
21	A2	1160	C	O4'-C1'-N1	15.11	120.28	108.20
21	A2	367	G	C1'-O4'-C4'	-15.10	97.82	109.90
67	B1	44	C	N1-C1'-C2'	15.09	133.62	114.00
67	B1	713	C	O4'-C1'-N1	15.08	120.26	108.20
67	B1	2844	G	C1'-O4'-C4'	-15.06	97.86	109.90
21	A2	616	G	C1'-O4'-C4'	-15.04	97.87	109.90
67	B1	1234	A	C3'-C2'-C1'	15.04	113.53	101.50
67	B1	2086	C	N1-C1'-C2'	15.03	133.54	114.00
67	B1	646	U	O4'-C1'-N1	15.02	120.22	108.20
67	B1	1918	U	P-O3'-C3'	15.01	137.72	119.70
67	B1	962	C	C3'-C2'-C1'	15.00	113.50	101.50
67	B1	2846	A	O4'-C1'-N9	15.00	120.20	108.20
21	A2	72	C	N1-C1'-C2'	15.00	133.50	114.00
21	A2	311	A	O4'-C1'-N9	14.97	120.18	108.20
67	B1	899	A	O4'-C1'-N9	14.97	120.17	108.20
21	A2	176	U	P-O3'-C3'	14.95	137.64	119.70
68	B3	35	A	O4'-C1'-C2'	-14.93	90.87	105.80
68	B3	119	C	C3'-C2'-C1'	14.89	113.41	101.50
21	A2	1491	C	C3'-C2'-C1'	14.86	113.39	101.50
67	B1	314	A	O4'-C1'-N9	14.85	120.08	108.20
67	B1	1042	G	O4'-C1'-C2'	-14.85	90.95	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	202	G	O4'-C1'-N9	14.84	120.08	108.20
21	A2	806	G	O4'-C1'-N9	-14.84	96.33	108.20
67	B1	1201	G	N9-C1'-C2'	14.84	133.29	114.00
67	B1	1616	A	O4'-C1'-N9	14.83	120.06	108.20
67	B1	1096	A	P-O3'-C3'	14.83	137.50	119.70
68	B3	41	A	C3'-C2'-C1'	14.83	113.36	101.50
67	B1	867	C	O4'-C1'-N1	14.82	120.06	108.20
67	B1	1030	C	C3'-C2'-C1'	14.79	113.33	101.50
67	B1	2424	A	C3'-C2'-C1'	14.78	113.33	101.50
21	A2	210	A	C3'-C2'-C1'	14.78	113.33	101.50
67	B1	756	C	P-O3'-C3'	14.78	137.43	119.70
67	B1	452	A	C1'-O4'-C4'	-14.77	98.08	109.90
67	B1	2306	C	O4'-C1'-N1	14.77	120.02	108.20
21	A2	513	A	P-O3'-C3'	14.76	137.41	119.70
67	B1	2144	U	O4'-C1'-N1	14.76	120.01	108.20
67	B1	2324	C	P-O3'-C3'	14.76	137.41	119.70
21	A2	113	U	O4'-C1'-N1	14.75	120.00	108.20
11	A1	55	U	O4'-C1'-N1	14.75	120.00	108.20
67	B1	480	A	P-O3'-C3'	14.74	137.39	119.70
21	A2	1043	U	O4'-C1'-N1	14.73	119.99	108.20
67	B1	754	U	O4'-C1'-N1	14.73	119.98	108.20
21	A2	746	A	P-O3'-C3'	14.70	137.34	119.70
67	B1	1643	A	P-O3'-C3'	14.70	137.34	119.70
21	A2	186	U	O4'-C1'-N1	14.70	119.96	108.20
21	A2	121	C	N1-C1'-C2'	14.69	133.10	114.00
27	A0	37	A	O4'-C1'-N9	14.69	119.95	108.20
67	B1	1082	A	P-O3'-C3'	14.68	137.31	119.70
21	A2	277	G	P-O3'-C3'	14.67	137.30	119.70
67	B1	362	A	P-O3'-C3'	-14.67	102.10	119.70
67	B1	788	A	O4'-C1'-N9	14.66	119.93	108.20
68	B3	110	C	C3'-C2'-C1'	14.66	113.23	101.50
68	B3	62	A	P-O3'-C3'	14.66	137.29	119.70
67	B1	1906	G	O4'-C1'-N9	14.65	119.92	108.20
21	A2	392	G	P-O3'-C3'	14.65	137.28	119.70
67	B1	3	G	O4'-C1'-N9	14.64	119.92	108.20
67	B1	547	C	O4'-C1'-N1	14.62	119.90	108.20
67	B1	2624	G	O4'-C1'-N9	14.62	119.90	108.20
21	A2	714	G	O4'-C1'-N9	14.60	119.88	108.20
67	B1	2280	G	P-O3'-C3'	14.60	137.22	119.70
67	B1	1496	A	O4'-C1'-N9	14.60	119.88	108.20
16	AJ	30	ARG	NE-CZ-NH1	14.59	127.59	120.30
68	B3	54	A	O4'-C1'-N9	14.57	119.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	828	U	O4'-C1'-N1	14.57	119.85	108.20
67	B1	932	C	C3'-C2'-C1'	14.57	113.16	101.50
21	A2	358	G	O4'-C1'-N9	14.56	119.85	108.20
68	B3	75	G	P-O3'-C3'	14.56	137.17	119.70
25	AH	88	ARG	NE-CZ-NH1	14.55	127.58	120.30
67	B1	1407	A	P-O3'-C3'	14.53	137.13	119.70
21	A2	483	G	O4'-C1'-N9	14.53	119.82	108.20
21	A2	976	A	O4'-C1'-N9	14.53	119.82	108.20
67	B1	1291	C	O4'-C1'-N1	14.52	119.82	108.20
67	B1	2319	C	N1-C1'-C2'	14.52	132.88	114.00
67	B1	934	G	N9-C1'-C2'	14.52	132.87	114.00
52	BB	237	ARG	NE-CZ-NH2	-14.51	113.04	120.30
21	A2	1167	C	N1-C1'-C2'	14.51	132.86	114.00
21	A2	699	C	N1-C1'-C2'	14.50	132.84	114.00
67	B1	2916	G	N9-C1'-C2'	-14.49	95.16	114.00
67	B1	435	G	C1'-O4'-C4'	-14.49	98.31	109.90
21	A2	323	A	O4'-C1'-N9	14.48	119.79	108.20
67	B1	2665	G	O4'-C1'-N9	14.48	119.78	108.20
67	B1	1754	A	N9-C1'-C2'	-14.48	95.18	114.00
67	B1	1886	C	O4'-C1'-N1	14.47	119.78	108.20
21	A2	112	G	P-O3'-C3'	14.46	137.06	119.70
21	A2	1260	G	P-O3'-C3'	14.46	137.05	119.70
67	B1	2860	G	O4'-C1'-N9	14.46	119.76	108.20
67	B1	237	G	O4'-C1'-C2'	-14.45	91.35	105.80
68	B3	97	G	O4'-C1'-N9	14.45	119.76	108.20
67	B1	258	C	N1-C1'-C2'	14.45	132.78	114.00
21	A2	434	A	O4'-C1'-N9	14.44	119.75	108.20
67	B1	2305	U	O4'-C1'-N1	14.43	119.75	108.20
67	B1	1519	G	O4'-C1'-N9	14.43	119.74	108.20
67	B1	1565	G	O4'-C1'-N9	14.43	119.74	108.20
67	B1	1063	C	O4'-C1'-N1	14.42	119.74	108.20
67	B1	919	G	P-O3'-C3'	14.42	137.00	119.70
67	B1	181	U	N1-C1'-C2'	-14.42	95.26	114.00
67	B1	2890	A	O4'-C1'-C2'	-14.41	91.39	105.80
21	A2	71	C	N1-C1'-C2'	14.41	132.73	114.00
21	A2	616	G	O4'-C1'-C2'	14.40	120.56	107.60
67	B1	1440	C	C1'-O4'-C4'	-14.38	98.40	109.90
67	B1	1999	G	O4'-C1'-N9	14.38	119.70	108.20
21	A2	919	U	N1-C1'-C2'	14.37	132.69	114.00
21	A2	703	U	C1'-O4'-C4'	14.37	121.40	109.90
21	A2	1115	G	O4'-C1'-C2'	14.37	120.53	107.60
67	B1	565	A	O4'-C1'-C2'	-14.37	91.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	B3	76	U	O4'-C1'-N1	14.35	119.68	108.20
21	A2	434	A	O4'-C1'-C2'	-14.34	91.46	105.80
21	A2	1423	A	C1'-O4'-C4'	14.33	121.36	109.90
68	B3	7	C	O4'-C1'-N1	14.33	119.67	108.20
21	A2	1154	G	N9-C1'-C2'	14.32	132.62	114.00
21	A2	615	G	O4'-C1'-C2'	14.32	120.49	107.60
67	B1	2407	G	C1'-O4'-C4'	-14.32	98.44	109.90
67	B1	2329	A	O4'-C1'-N9	14.32	119.66	108.20
21	A2	1195	U	C1'-O4'-C4'	-14.31	98.45	109.90
67	B1	1707	A	C1'-O4'-C4'	14.31	121.35	109.90
67	B1	415	U	C1'-O4'-C4'	14.31	121.35	109.90
67	B1	2928	C	O4'-C1'-C2'	-14.31	91.49	105.80
21	A2	56	A	P-O3'-C3'	14.30	136.86	119.70
67	B1	1732	C	P-O3'-C3'	14.27	136.82	119.70
67	B1	297	G	N9-C1'-C2'	14.26	132.54	114.00
67	B1	3013	U	N1-C1'-C2'	14.26	132.54	114.00
21	A2	965	G	O4'-C1'-C2'	-14.26	91.54	105.80
21	A2	1306	A	P-O3'-C3'	14.25	136.80	119.70
67	B1	1700	U	N1-C1'-C2'	-14.23	95.50	114.00
67	B1	2543	A	O4'-C1'-N9	14.23	119.58	108.20
67	B1	228	U	O4'-C1'-N1	14.23	119.58	108.20
2	AK	16	ARG	NE-CZ-NH1	14.21	127.40	120.30
67	B1	980	G	N9-C1'-C2'	14.21	132.47	114.00
67	B1	1042	G	C1'-O4'-C4'	14.19	121.25	109.90
67	B1	1851	U	O4'-C1'-N1	14.19	119.55	108.20
67	B1	1301	G	O4'-C1'-C2'	14.19	120.37	107.60
21	A2	111	G	P-O3'-C3'	14.18	136.71	119.70
21	A2	1491	C	P-O3'-C3'	-14.17	102.70	119.70
41	Ba	25	TRP	CB-CG-CD2	-14.16	108.19	126.60
21	A2	1075	A	O4'-C1'-N9	14.15	119.52	108.20
67	B1	2442	A	O4'-C1'-N9	14.14	119.51	108.20
21	A2	762	G	O4'-C1'-N9	14.14	119.51	108.20
67	B1	758	C	P-O3'-C3'	14.13	136.66	119.70
21	A2	416	A	O4'-C1'-N9	14.12	119.50	108.20
21	A2	21	A	O4'-C1'-N9	14.11	119.49	108.20
67	B1	2698	G	O4'-C1'-N9	14.10	119.48	108.20
67	B1	2036	A	O4'-C1'-N9	14.10	119.48	108.20
67	B1	2937	U	C1'-O4'-C4'	14.10	121.18	109.90
67	B1	2209	U	C1'-O4'-C4'	14.09	121.17	109.90
67	B1	2605	G	O4'-C1'-N9	14.09	119.47	108.20
4	AG	77	ASP	CB-CG-OD2	-14.09	105.62	118.30
67	B1	2810	G	O4'-C1'-N9	14.08	119.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1301	G	C1'-O4'-C4'	-14.07	98.64	109.90
21	A2	1430	G	O4'-C1'-N9	14.07	119.46	108.20
21	A2	790	G	O4'-C1'-N9	14.06	119.45	108.20
67	B1	1817	C	C1'-O4'-C4'	-14.06	98.65	109.90
21	A2	1222	C	O4'-C1'-N1	14.06	119.45	108.20
21	A2	1290	U	C1'-O4'-C4'	-14.05	98.66	109.90
21	A2	581	G	O4'-C1'-C2'	14.05	120.24	107.60
27	A0	64	G	O4'-C1'-N9	14.04	119.44	108.20
67	B1	2263	G	O4'-C1'-N9	14.04	119.44	108.20
21	A2	275	A	P-O3'-C3'	14.02	136.53	119.70
67	B1	1840	G	O4'-C1'-C2'	-14.02	91.78	105.80
67	B1	301	G	P-O3'-C3'	14.02	136.52	119.70
68	B3	14	G	O4'-C1'-N9	14.01	119.41	108.20
21	A2	415	C	O4'-C1'-C2'	-14.01	91.79	105.80
67	B1	1547	U	O4'-C1'-N1	14.00	119.40	108.20
67	B1	2356	U	O4'-C1'-N1	14.00	119.40	108.20
42	BT	82	ARG	NE-CZ-NH1	14.00	127.30	120.30
21	A2	1008	U	O4'-C1'-N1	13.99	119.39	108.20
28	B6	63	TYR	CB-CG-CD2	-13.96	112.62	121.00
49	BQ	101	ALA	N-CA-CB	13.96	129.64	110.10
21	A2	362	C	N1-C1'-C2'	13.94	132.12	114.00
67	B1	2234	C	C3'-C2'-C1'	13.93	112.64	101.50
67	B1	1411	G	C1'-O4'-C4'	-13.93	98.76	109.90
21	A2	1323	A	N9-C1'-C2'	13.93	132.10	114.00
67	B1	1796	U	O4'-C1'-N1	13.92	119.33	108.20
21	A2	965	G	C3'-C2'-C1'	13.91	112.63	101.50
67	B1	1991	G	O4'-C1'-N9	13.89	119.31	108.20
21	A2	860	G	O4'-C1'-N9	13.87	119.30	108.20
21	A2	1370	U	O4'-C1'-N1	13.87	119.30	108.20
21	A2	1101	G	N9-C1'-C2'	-13.87	95.97	114.00
67	B1	318	G	O4'-C1'-C2'	13.87	120.08	107.60
21	A2	1291	G	O4'-C1'-N9	13.87	119.29	108.20
21	A2	665	G	C3'-C2'-C1'	-13.86	90.41	101.50
27	A0	67	G	O4'-C1'-N9	13.86	119.29	108.20
67	B1	1601	G	P-O3'-C3'	13.86	136.33	119.70
49	BQ	81	ARG	NE-CZ-NH1	13.86	127.23	120.30
67	B1	170	A	O4'-C1'-N9	13.86	119.28	108.20
21	A2	615	G	C3'-C2'-C1'	-13.83	90.43	101.50
67	B1	1600	G	C1'-O4'-C4'	13.83	120.97	109.90
27	A0	11	C	N1-C1'-C2'	13.83	131.98	114.00
21	A2	70	C	O4'-C1'-N1	13.82	119.26	108.20
21	A2	975	A	O4'-C1'-N9	13.81	119.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1897	G	O4'-C1'-N9	13.80	119.24	108.20
68	B3	30	G	O4'-C1'-N9	13.80	119.24	108.20
67	B1	857	U	C1'-O4'-C4'	-13.80	98.86	109.90
24	AA	46	ARG	NE-CZ-NH2	-13.79	113.40	120.30
67	B1	99	U	P-O3'-C3'	13.78	136.23	119.70
67	B1	406	G	O4'-C1'-N9	13.77	119.22	108.20
67	B1	880	U	N1-C1'-C2'	13.77	131.90	114.00
21	A2	1491	C	C4'-C3'-C2'	-13.76	88.84	102.60
21	A2	176	U	O4'-C1'-N1	13.76	119.21	108.20
2	AK	16	ARG	NE-CZ-NH2	-13.76	113.42	120.30
1	AQ	58	TYR	CB-CG-CD2	13.75	129.25	121.00
11	A1	6	G	O4'-C1'-N9	13.75	119.20	108.20
67	B1	2543	A	P-O3'-C3'	13.75	136.21	119.70
67	B1	2113	G	O4'-C1'-N9	13.75	119.20	108.20
21	A2	250	G	C1'-O4'-C4'	-13.74	98.91	109.90
67	B1	536	G	P-O3'-C3'	13.74	136.19	119.70
21	A2	246	A	P-O3'-C3'	13.73	136.17	119.70
67	B1	1165	C	O4'-C1'-C2'	-13.73	92.07	105.80
67	B1	1876	G	O4'-C1'-N9	13.72	119.18	108.20
21	A2	391	G	O4'-C1'-N9	13.71	119.17	108.20
67	B1	886	G	O4'-C1'-N9	13.71	119.17	108.20
21	A2	1072	C	N1-C1'-C2'	13.71	131.82	114.00
67	B1	1494	U	C1'-O4'-C4'	13.70	120.86	109.90
67	B1	2554	A	O4'-C1'-C2'	-13.71	92.09	105.80
67	B1	2912	G	O4'-C1'-N9	13.71	119.17	108.20
67	B1	344	G	O4'-C1'-N9	13.70	119.16	108.20
67	B1	2411	C	O4'-C1'-N1	13.70	119.16	108.20
21	A2	831	A	O4'-C1'-C2'	-13.69	92.11	105.80
11	A1	46	U	O4'-C1'-N1	13.68	119.15	108.20
67	B1	274	C	N1-C1'-C2'	13.67	131.77	114.00
67	B1	2321	A	O4'-C1'-N9	13.67	119.14	108.20
11	A1	30	G	O4'-C1'-N9	13.66	119.13	108.20
21	A2	1036	G	O4'-C1'-N9	13.66	119.13	108.20
67	B1	883	G	C3'-C2'-C1'	13.66	112.43	101.50
67	B1	2226	G	O4'-C1'-N9	13.66	119.13	108.20
15	AE	3	ARG	NE-CZ-NH1	13.65	127.13	120.30
67	B1	1533	G	O4'-C1'-N9	13.65	119.12	108.20
67	B1	293	G	O4'-C1'-N9	13.64	119.11	108.20
67	B1	800	G	C1'-O4'-C4'	-13.64	98.99	109.90
62	BN	11	TYR	CB-CG-CD2	-13.63	112.82	121.00
67	B1	1864	G	O4'-C1'-N9	13.62	119.10	108.20
67	B1	2382	A	C1'-O4'-C4'	13.62	120.80	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	34	G	O4'-C1'-N9	13.62	119.09	108.20
67	B1	1272	A	O4'-C1'-N9	13.61	119.09	108.20
67	B1	2161	A	O4'-C1'-N9	13.60	119.08	108.20
67	B1	2326	C	N1-C1'-C2'	13.60	131.68	114.00
67	B1	2585	G	O4'-C1'-N9	13.59	119.07	108.20
67	B1	363	G	P-O5'-C5'	13.58	142.63	120.90
67	B1	2651	G	C1'-O4'-C4'	-13.58	99.04	109.90
21	A2	633	C	N1-C1'-C2'	13.58	131.65	114.00
67	B1	1405	G	C1'-O4'-C4'	-13.57	99.05	109.90
24	AA	93	ARG	NE-CZ-NH1	13.56	127.08	120.30
67	B1	473	C	N1-C1'-C2'	13.56	131.63	114.00
67	B1	1154	A	O4'-C1'-N9	13.55	119.04	108.20
67	B1	2607	U	O4'-C1'-N1	13.54	119.04	108.20
67	B1	2458	U	O4'-C1'-N1	13.54	119.03	108.20
21	A2	1483	U	P-O3'-C3'	13.54	135.95	119.70
67	B1	463	A	C1'-O4'-C4'	-13.54	99.07	109.90
28	AV	60	PHE	CB-CG-CD1	13.54	130.28	120.80
67	B1	1045	A	N9-C1'-C2'	-13.54	96.40	114.00
67	B1	1561	G	O4'-C1'-N9	13.54	119.03	108.20
67	B1	1037	C	O4'-C1'-C2'	-13.53	92.27	105.80
67	B1	2674	C	N1-C1'-C2'	13.53	131.59	114.00
21	A2	455	C	C1'-O4'-C4'	-13.53	99.08	109.90
68	B3	102	G	O4'-C1'-N9	13.53	119.02	108.20
21	A2	1154	G	C1'-O4'-C4'	-13.52	99.08	109.90
7	AB	185	ARG	NE-CZ-NH2	-13.52	113.54	120.30
67	B1	1323	U	O4'-C1'-N1	13.50	119.00	108.20
67	B1	936	G	P-O3'-C3'	13.49	135.89	119.70
67	B1	2218	C	N1-C1'-C2'	13.48	131.52	114.00
68	B3	108	G	O4'-C1'-N9	13.47	118.97	108.20
67	B1	2650	G	C1'-O4'-C4'	-13.46	99.13	109.90
21	A2	1050	G	O4'-C1'-N9	13.46	118.97	108.20
67	B1	3036	C	P-O3'-C3'	13.46	135.85	119.70
21	A2	9	U	O4'-C1'-N1	13.44	118.95	108.20
67	B1	2155	C	O4'-C1'-N1	13.44	118.95	108.20
67	B1	2507	C	C1'-O4'-C4'	13.44	120.65	109.90
21	A2	255	G	C1'-O4'-C4'	-13.44	99.15	109.90
21	A2	1245	C	P-O3'-C3'	13.44	135.82	119.70
67	B1	305	G	O4'-C1'-N9	13.43	118.95	108.20
21	A2	161	C	C3'-C2'-C1'	13.43	112.24	101.50
67	B1	2360	G	O4'-C1'-N9	13.43	118.94	108.20
21	A2	381	C	N1-C1'-C2'	13.42	131.44	114.00
67	B1	1835	A	C3'-C2'-C1'	13.42	112.23	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2737	G	O4'-C1'-N9	13.42	118.94	108.20
67	B1	1146	U	O4'-C1'-N1	13.42	118.93	108.20
67	B1	1574	A	O4'-C1'-C2'	-13.41	92.39	105.80
67	B1	2747	C	P-O3'-C3'	13.39	135.77	119.70
21	A2	1426	C	C1'-O4'-C4'	-13.39	99.19	109.90
30	AU	110	PHE	CB-CG-CD1	13.39	130.18	120.80
21	A2	33	U	O4'-C1'-N1	13.39	118.91	108.20
67	B1	617	G	O4'-C1'-N9	13.38	118.91	108.20
67	B1	1170	G	N9-C1'-C2'	-13.38	96.60	114.00
67	B1	43	G	O4'-C1'-N9	13.38	118.90	108.20
67	B1	1033	C	O4'-C1'-C2'	-13.37	92.43	105.80
21	A2	1444	G	O4'-C1'-C2'	13.36	119.62	107.60
21	A2	1493	C	P-O3'-C3'	13.35	135.72	119.70
67	B1	1783	U	C3'-C2'-C1'	13.35	112.18	101.50
67	B1	2702	A	O4'-C1'-C2'	-13.33	92.47	105.80
67	B1	139	G	O4'-C1'-N9	13.33	118.86	108.20
67	B1	1140	C	N1-C1'-C2'	13.33	131.33	114.00
21	A2	338	C	O4'-C1'-N1	13.32	118.86	108.20
40	BE	88	TYR	CB-CG-CD1	13.31	128.99	121.00
67	B1	1420	U	O4'-C1'-N1	13.31	118.85	108.20
67	B1	2997	G	P-O3'-C3'	13.30	135.66	119.70
67	B1	2878	A	O4'-C1'-N9	13.29	118.84	108.20
67	B1	1627	G	O4'-C1'-N9	13.29	118.83	108.20
21	A2	1184	U	P-O3'-C3'	13.29	135.65	119.70
21	A2	439	G	N9-C1'-C2'	13.28	131.27	114.00
67	B1	414	G	O4'-C1'-C2'	-13.28	92.52	105.80
67	B1	1989	G	C1'-O4'-C4'	-13.28	99.28	109.90
67	B1	1367	A	P-O3'-C3'	13.27	135.62	119.70
67	B1	2061	A	C1'-O4'-C4'	13.27	120.51	109.90
67	B1	2968	G	O4'-C1'-N9	13.26	118.81	108.20
21	A2	63	G	O4'-C1'-C2'	13.26	119.53	107.60
67	B1	364	A	P-O3'-C3'	13.26	135.61	119.70
67	B1	1523	A	O4'-C1'-N9	13.26	118.81	108.20
21	A2	65	G	O4'-C1'-N9	13.25	118.80	108.20
67	B1	518	A	P-O3'-C3'	13.25	135.60	119.70
21	A2	114	A	P-O3'-C3'	13.25	135.59	119.70
67	B1	1158	G	N9-C1'-C2'	13.25	131.22	114.00
67	B1	1655	G	C1'-O4'-C4'	-13.24	99.30	109.90
67	B1	2518	G	O4'-C1'-N9	13.23	118.78	108.20
6	AC	140	ARG	NE-CZ-NH2	-13.22	113.69	120.30
67	B1	2139	A	N1-C6-N6	13.22	126.53	118.60
67	B1	2873	G	O4'-C1'-N9	13.22	118.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2970	U	O4'-C1'-N1	13.21	118.77	108.20
67	B1	58	G	N9-C1'-C2'	13.20	131.16	114.00
67	B1	545	G	P-O3'-C3'	13.20	135.54	119.70
67	B1	726	G	O4'-C1'-N9	13.20	118.76	108.20
67	B1	2636	C	C3'-C2'-C1'	13.20	112.06	101.50
67	B1	2069	G	N9-C1'-C2'	13.20	131.16	114.00
67	B1	587	A	N1-C6-N6	13.20	126.52	118.60
21	A2	647	G	C1'-O4'-C4'	-13.18	99.35	109.90
67	B1	634	G	O4'-C1'-N9	13.18	118.75	108.20
67	B1	149	G	O4'-C1'-N9	13.18	118.74	108.20
67	B1	1567	C	C4'-C3'-C2'	13.16	115.76	102.60
21	A2	250	G	O4'-C1'-C2'	13.16	119.44	107.60
67	B1	1548	A	O4'-C1'-N9	13.15	118.72	108.20
67	B1	355	G	O4'-C1'-C2'	13.15	119.44	107.60
21	A2	602	G	O4'-C1'-N9	13.14	118.71	108.20
21	A2	813	G	O4'-C1'-N9	13.13	118.71	108.20
67	B1	92	G	N9-C1'-C2'	13.13	131.07	114.00
67	B1	1465	A	O4'-C1'-N9	13.13	118.71	108.20
68	B3	20	G	N9-C1'-C2'	13.13	131.07	114.00
67	B1	2448	A	O4'-C1'-N9	13.13	118.70	108.20
21	A2	1401	U	C1'-O4'-C4'	-13.12	99.40	109.90
21	A2	716	G	C3'-C2'-C1'	-13.11	91.01	101.50
40	BE	88	TYR	CB-CG-CD2	-13.12	113.13	121.00
67	B1	2515	U	P-O5'-C5'	13.11	141.88	120.90
67	B1	2189	C	C3'-C2'-C1'	13.11	111.99	101.50
67	B1	1847	U	O4'-C1'-N1	13.10	118.68	108.20
21	A2	1079	G	N9-C1'-C2'	-13.10	96.97	114.00
21	A2	798	U	O4'-C1'-C2'	-13.09	92.71	105.80
67	B1	2893	U	O4'-C1'-N1	13.09	118.67	108.20
67	B1	1224	A	O4'-C1'-N9	13.09	118.67	108.20
11	A1	43	G	O4'-C1'-N9	13.09	118.67	108.20
21	A2	72	C	C3'-C2'-C1'	13.07	111.96	101.50
67	B1	415	U	O4'-C1'-N1	13.07	118.66	108.20
67	B1	2118	C	O4'-C1'-N1	13.07	118.66	108.20
67	B1	162	G	C1'-O4'-C4'	-13.07	99.44	109.90
67	B1	2939	C	O4'-C1'-N1	13.07	118.66	108.20
67	B1	1642	G	N9-C1'-C2'	-13.07	97.01	114.00
21	A2	226	G	O4'-C1'-N9	13.07	118.65	108.20
67	B1	906	G	O4'-C1'-C2'	13.06	119.36	107.60
67	B1	2987	U	P-O3'-C3'	13.06	135.37	119.70
11	A1	16	C	C3'-C2'-C1'	13.05	111.94	101.50
21	A2	842	U	O4'-C1'-N1	13.05	118.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2368	G	O4'-C1'-N9	13.05	118.64	108.20
21	A2	1486	A	O4'-C1'-N9	13.05	118.64	108.20
21	A2	1116	G	C1'-O4'-C4'	-13.04	99.47	109.90
21	A2	618	G	O4'-C1'-N9	13.03	118.62	108.20
21	A2	1157	G	C1'-O4'-C4'	-13.03	99.47	109.90
67	B1	168	G	O4'-C1'-C2'	13.03	119.33	107.60
67	B1	2796	C	C3'-C2'-C1'	13.03	111.92	101.50
67	B1	1879	U	P-O3'-C3'	13.02	135.33	119.70
67	B1	2754	A	N9-C1'-C2'	13.02	130.93	114.00
21	A2	1024	G	C1'-O4'-C4'	-13.02	99.49	109.90
21	A2	408	C	O4'-C1'-N1	13.00	118.60	108.20
67	B1	562	G	O4'-C1'-N9	13.00	118.60	108.20
67	B1	407	A	C3'-C2'-C1'	12.99	111.90	101.50
67	B1	2371	A	O4'-C1'-N9	12.99	118.59	108.20
67	B1	350	A	O4'-C1'-C2'	-12.99	92.81	105.80
21	A2	150	G	O4'-C1'-N9	12.99	118.59	108.20
21	A2	192	G	C1'-O4'-C4'	-12.99	99.51	109.90
21	A2	574	A	O4'-C1'-N9	12.99	118.59	108.20
67	B1	72	U	O4'-C1'-N1	12.98	118.59	108.20
59	BM	47	ARG	NE-CZ-NH2	-12.98	113.81	120.30
67	B1	1599	A	O4'-C1'-N9	12.98	118.58	108.20
21	A2	99	C	P-O3'-C3'	12.97	135.27	119.70
24	AA	115	TYR	CB-CG-CD2	-12.97	113.22	121.00
67	B1	219	G	P-O5'-C5'	12.96	141.64	120.90
21	A2	1019	A	P-O3'-C3'	12.96	135.25	119.70
67	B1	1767	C	N1-C1'-C2'	12.95	130.83	114.00
21	A2	1127	A	N9-C1'-C2'	12.94	130.82	114.00
21	A2	768	A	O4'-C1'-N9	12.94	118.55	108.20
67	B1	2811	U	O4'-C1'-N1	12.94	118.55	108.20
67	B1	1645	U	O4'-C1'-N1	12.93	118.55	108.20
68	B3	53	A	N9-C1'-C2'	12.93	130.81	114.00
21	A2	183	A	N9-C1'-C2'	12.92	130.80	114.00
67	B1	948	C	O4'-C1'-N1	12.92	118.53	108.20
67	B1	2587	G	C3'-C2'-C1'	12.92	111.83	101.50
60	BS	129	TYR	CB-CG-CD2	12.91	128.75	121.00
67	B1	958	A	O4'-C1'-N9	12.91	118.53	108.20
21	A2	1429	G	O4'-C1'-N9	12.90	118.52	108.20
21	A2	440	C	N1-C1'-C2'	12.90	130.77	114.00
67	B1	234	G	O4'-C1'-N9	12.89	118.52	108.20
21	A2	625	G	O4'-C1'-N9	12.88	118.51	108.20
67	B1	492	A	O4'-C1'-N9	12.88	118.51	108.20
21	A2	1076	G	O4'-C1'-C2'	12.88	119.19	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1453	G	O4'-C1'-C2'	12.88	119.19	107.60
67	B1	1969	C	N1-C1'-C2'	12.88	130.74	114.00
16	AJ	16	ARG	NE-CZ-NH1	12.88	126.74	120.30
21	A2	1120	G	C1'-O4'-C4'	-12.87	99.60	109.90
21	A2	199	A	C3'-C2'-C1'	12.87	111.79	101.50
67	B1	143	C	C3'-C2'-C1'	12.87	111.79	101.50
67	B1	2180	C	C3'-C2'-C1'	12.86	111.79	101.50
67	B1	2948	A	C1'-O4'-C4'	12.86	120.19	109.90
27	A0	8	U	O4'-C1'-N1	12.86	118.49	108.20
67	B1	2628	U	O4'-C1'-N1	12.85	118.48	108.20
68	B3	22	C	O4'-C1'-C2'	-12.85	92.95	105.80
21	A2	475	C	C3'-C2'-C1'	12.84	111.78	101.50
67	B1	957	C	N1-C1'-C2'	12.84	130.70	114.00
31	BY	126	PHE	CB-CG-CD2	12.84	129.79	120.80
21	A2	394	C	P-O5'-C5'	12.84	141.44	120.90
21	A2	964	A	N1-C6-N6	12.84	126.30	118.60
67	B1	2505	A	C3'-C2'-C1'	12.83	111.77	101.50
24	AA	19	TYR	CB-CG-CD1	12.83	128.70	121.00
21	A2	601	G	O4'-C1'-N9	12.83	118.46	108.20
67	B1	1313	G	C3'-C2'-C1'	-12.82	91.24	101.50
67	B1	1290	G	C1'-O4'-C4'	-12.82	99.65	109.90
53	BD	87	ARG	NE-CZ-NH2	-12.81	113.89	120.30
67	B1	1453	G	C1'-O4'-C4'	-12.81	99.65	109.90
21	A2	1341	C	N1-C1'-C2'	12.80	130.64	114.00
20	BG	79	TYR	CB-CG-CD1	12.80	128.68	121.00
67	B1	131	C	O4'-C1'-C2'	-12.79	93.00	105.80
67	B1	955	A	O4'-C1'-N9	12.79	118.44	108.20
67	B1	1246	G	O4'-C1'-N9	12.80	118.44	108.20
67	B1	3040	G	P-O3'-C3'	12.79	135.05	119.70
21	A2	240	U	O4'-C1'-N1	12.79	118.43	108.20
67	B1	1118	A	N9-C1'-C2'	12.79	130.63	114.00
67	B1	1950	G	C1'-O4'-C4'	12.79	120.13	109.90
21	A2	528	G	O4'-C1'-N9	-12.78	97.97	108.20
41	Ba	86	THR	N-CA-CB	12.78	134.58	110.30
67	B1	876	C	C3'-C2'-C1'	12.78	111.72	101.50
21	A2	63	G	C1'-O4'-C4'	-12.77	99.68	109.90
21	A2	266	A	O4'-C1'-N9	12.77	118.42	108.20
27	A0	36	U	O4'-C1'-N1	12.77	118.42	108.20
67	B1	2962	A	O4'-C1'-N9	12.77	118.42	108.20
68	B3	25	A	P-O3'-C3'	12.77	135.02	119.70
67	B1	55	G	O4'-C1'-N9	12.77	118.41	108.20
21	A2	829	U	O4'-C1'-N1	12.77	118.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1251	C	O4'-C1'-N1	12.77	118.41	108.20
42	BT	32	ARG	NE-CZ-NH1	12.77	126.68	120.30
67	B1	2475	G	C1'-O4'-C4'	-12.77	99.69	109.90
21	A2	205	C	N1-C1'-C2'	12.76	130.59	114.00
67	B1	796	C	N1-C1'-C2'	12.76	130.59	114.00
21	A2	671	C	C3'-C2'-C1'	12.76	111.71	101.50
67	B1	2402	A	O4'-C1'-C2'	-12.76	93.04	105.80
67	B1	1995	C	O4'-C1'-N1	12.75	118.40	108.20
67	B1	2011	U	O4'-C1'-N1	12.75	118.40	108.20
67	B1	1600	G	O4'-C1'-N9	12.74	118.39	108.20
21	A2	736	A	C1'-O4'-C4'	12.74	120.09	109.90
67	B1	1229	U	N1-C1'-C2'	12.74	130.56	114.00
23	AT	8	TYR	CB-CG-CD2	-12.73	113.36	121.00
21	A2	516	A	N9-C1'-C2'	12.73	130.55	114.00
67	B1	700	A	N9-C1'-C2'	-12.72	97.46	114.00
67	B1	2573	C	O4'-C1'-N1	12.72	118.38	108.20
67	B1	1277	G	O4'-C1'-N9	12.72	118.38	108.20
67	B1	1975	C	O4'-C1'-N1	12.71	118.37	108.20
67	B1	2779	G	O4'-C1'-N9	12.71	118.37	108.20
67	B1	2957	G	P-O3'-C3'	12.71	134.96	119.70
67	B1	372	A	O4'-C1'-C2'	-12.70	93.10	105.80
67	B1	2432	G	O4'-C1'-N9	12.70	118.36	108.20
28	B6	77	ARG	NE-CZ-NH2	-12.70	113.95	120.30
21	A2	996	A	N1-C6-N6	12.70	126.22	118.60
21	A2	91	G	C1'-O4'-C4'	-12.69	99.75	109.90
21	A2	988	A	N1-C6-N6	12.69	126.22	118.60
67	B1	84	A	N9-C1'-C2'	12.69	130.50	114.00
21	A2	440	C	O4'-C1'-N1	-12.69	98.05	108.20
33	BC	87	ARG	NE-CZ-NH1	12.69	126.64	120.30
67	B1	1542	U	O4'-C1'-N1	12.68	118.35	108.20
67	B1	1574	A	P-O3'-C3'	12.68	134.92	119.70
67	B1	2650	G	O4'-C1'-C2'	12.68	119.01	107.60
21	A2	1338	C	O4'-C1'-N1	12.67	118.34	108.20
67	B1	2678	U	O4'-C1'-N1	12.67	118.33	108.20
68	B3	30	G	C1'-O4'-C4'	12.67	120.03	109.90
67	B1	969	U	O4'-C1'-N1	12.67	118.33	108.20
3	AI	86	PHE	CB-CG-CD2	-12.66	111.94	120.80
21	A2	263	C	C3'-C2'-C1'	12.66	111.63	101.50
67	B1	2586	A	N9-C1'-C2'	-12.66	97.54	114.00
67	B1	693	G	C1'-O4'-C4'	12.66	120.03	109.90
21	A2	259	A	O4'-C1'-N9	12.66	118.33	108.20
21	A2	607	U	O4'-C1'-N1	12.66	118.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	891	A	P-O3'-C3'	12.65	134.88	119.70
67	B1	1036	C	P-O3'-C3'	12.65	134.88	119.70
33	BC	263	ARG	NE-CZ-NH1	12.65	126.62	120.30
68	B3	67	U	O4'-C1'-N1	12.65	118.32	108.20
67	B1	408	C	C5'-C4'-C3'	12.65	136.24	116.00
67	B1	2005	A	O4'-C1'-N9	12.65	118.32	108.20
67	B1	706	U	O4'-C1'-N1	12.65	118.32	108.20
67	B1	584	G	O4'-C1'-N9	12.64	118.31	108.20
31	BY	71	ARG	NE-CZ-NH2	-12.64	113.98	120.30
67	B1	1912	A	O4'-C1'-N9	12.64	118.31	108.20
67	B1	1569	A	C3'-C2'-C1'	-12.63	91.40	101.50
51	Bj	1	MET	CG-SD-CE	-12.62	80.00	100.20
67	B1	2914	U	O4'-C1'-N1	12.62	118.29	108.20
21	A2	199	A	N9-C1'-C2'	12.61	130.40	114.00
67	B1	489	G	O4'-C1'-N9	12.61	118.29	108.20
67	B1	1299	C	C3'-C2'-C1'	12.61	111.59	101.50
67	B1	1490	G	O4'-C1'-N9	12.61	118.28	108.20
67	B1	1671	A	N9-C1'-C2'	-12.60	97.62	114.00
24	AA	146	TYR	CB-CG-CD2	12.60	128.56	121.00
21	A2	1345	G	O4'-C1'-N9	12.60	118.28	108.20
38	Bb	15	ARG	NE-CZ-NH2	-12.60	114.00	120.30
67	B1	435	G	O4'-C1'-C2'	12.60	118.94	107.60
21	A2	668	G	O4'-C1'-N9	12.59	118.27	108.20
21	A2	756	A	O4'-C1'-N9	12.59	118.27	108.20
67	B1	1919	A	N1-C6-N6	12.59	126.15	118.60
21	A2	241	U	O4'-C1'-N1	12.59	118.27	108.20
67	B1	1003	C	P-O3'-C3'	12.59	134.80	119.70
67	B1	511	A	O4'-C1'-N9	12.58	118.26	108.20
67	B1	821	U	O4'-C1'-N1	12.58	118.26	108.20
67	B1	1786	G	O4'-C1'-N9	12.58	118.26	108.20
21	A2	184	G	O4'-C1'-N9	12.57	118.26	108.20
67	B1	1817	C	N1-C1'-C2'	12.57	130.34	114.00
21	A2	1249	A	O4'-C1'-N9	12.57	118.26	108.20
67	B1	773	U	O4'-C1'-N1	12.57	118.25	108.20
21	A2	1029	G	O4'-C1'-N9	12.57	118.25	108.20
21	A2	589	U	O4'-C1'-N1	12.56	118.25	108.20
67	B1	1136	G	O4'-C1'-N9	12.56	118.25	108.20
21	A2	68	G	C1'-O4'-C4'	-12.56	99.85	109.90
67	B1	1961	G	N9-C1'-C2'	-12.56	97.67	114.00
67	B1	2185	A	O4'-C1'-N9	12.56	118.25	108.20
21	A2	136	A	N9-C1'-C2'	12.55	130.32	114.00
67	B1	693	G	O4'-C1'-N9	12.55	118.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2594	U	N1-C1'-C2'	12.55	130.31	114.00
67	B1	1491	U	O4'-C1'-N1	12.55	118.24	108.20
21	A2	42	G	P-O3'-C3'	12.54	134.75	119.70
21	A2	959	G	P-O3'-C3'	12.53	134.73	119.70
67	B1	1866	G	O4'-C1'-N9	12.53	118.22	108.20
31	BY	27	ARG	NE-CZ-NH1	12.53	126.56	120.30
67	B1	2507	C	C3'-C2'-C1'	12.53	111.52	101.50
21	A2	531	G	O4'-C1'-C2'	12.52	118.87	107.60
21	A2	765	U	C1'-O4'-C4'	12.52	119.92	109.90
67	B1	175	G	O4'-C1'-N9	12.52	118.22	108.20
67	B1	1708	U	O4'-C1'-N1	12.52	118.22	108.20
21	A2	1444	G	C1'-O4'-C4'	-12.52	99.89	109.90
67	B1	1724	A	O4'-C1'-N9	12.52	118.21	108.20
67	B1	2938	G	O4'-C1'-N9	12.50	118.20	108.20
21	A2	304	C	N1-C1'-C2'	12.50	130.25	114.00
21	A2	709	G	C1'-O4'-C4'	12.50	119.90	109.90
21	A2	1340	U	P-O3'-C3'	12.50	134.70	119.70
67	B1	1565	G	C3'-C2'-C1'	12.49	111.50	101.50
67	B1	2882	G	O4'-C1'-N9	12.49	118.19	108.20
21	A2	1317	G	C1'-O4'-C4'	-12.49	99.91	109.90
24	AA	46	ARG	NE-CZ-NH1	12.49	126.55	120.30
67	B1	2847	G	O4'-C1'-N9	12.48	118.19	108.20
67	B1	1283	G	O4'-C1'-N9	12.48	118.18	108.20
21	A2	1114	G	O4'-C1'-N9	12.48	118.18	108.20
67	B1	310	C	O4'-C1'-N1	12.47	118.18	108.20
57	BZ	51	TYR	CB-CG-CD1	-12.47	113.52	121.00
54	BF	88	TYR	CB-CG-CD1	12.47	128.48	121.00
21	A2	520	G	O4'-C1'-N9	12.46	118.17	108.20
21	A2	1162	G	C1'-O4'-C4'	-12.46	99.93	109.90
33	BC	104	PHE	CB-CG-CD2	-12.46	112.08	120.80
21	A2	765	U	O4'-C1'-C2'	-12.46	93.34	105.80
67	B1	1077	G	O4'-C1'-N9	12.45	118.16	108.20
15	AE	55	TYR	CB-CG-CD1	12.45	128.47	121.00
67	B1	2921	U	O4'-C1'-N1	12.45	118.16	108.20
67	B1	2554	A	O4'-C1'-N9	12.44	118.15	108.20
7	AB	33	TYR	CB-CG-CD1	12.43	128.46	121.00
21	A2	989	C	O4'-C1'-N1	12.43	118.14	108.20
21	A2	978	G	N9-C1'-C2'	12.43	130.16	114.00
21	A2	832	G	C1'-O4'-C4'	-12.42	99.96	109.90
67	B1	1575	G	O4'-C1'-N9	12.41	118.13	108.20
21	A2	348	C	N1-C1'-C2'	12.41	130.13	114.00
21	A2	1477	U	O4'-C1'-N1	12.41	118.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	119	U	C3'-C2'-C1'	12.40	111.42	101.50
67	B1	1017	A	N1-C6-N6	12.40	126.04	118.60
67	B1	1629	G	O4'-C1'-N9	12.40	118.12	108.20
67	B1	1898	A	C3'-C2'-C1'	12.40	111.42	101.50
21	A2	61	A	N9-C1'-C2'	-12.39	97.89	114.00
67	B1	1898	A	O4'-C1'-C2'	-12.39	93.41	105.80
67	B1	1087	G	O4'-C1'-N9	12.38	118.11	108.20
67	B1	3027	C	N1-C1'-C2'	12.38	130.10	114.00
21	A2	762	G	C1'-O4'-C4'	12.38	119.80	109.90
21	A2	777	G	O4'-C1'-N9	12.38	118.10	108.20
67	B1	1655	G	O4'-C1'-C2'	12.38	118.74	107.60
21	A2	821	G	O4'-C1'-N9	12.38	118.10	108.20
67	B1	1403	C	C3'-C2'-C1'	12.37	111.40	101.50
21	A2	966	G	C1'-O4'-C4'	12.37	119.80	109.90
21	A2	1053	A	O4'-C1'-N9	-12.37	98.30	108.20
67	B1	14	A	C3'-C2'-C1'	12.37	111.40	101.50
67	B1	1337	G	O4'-C1'-N9	12.37	118.10	108.20
67	B1	1956	G	P-O3'-C3'	12.37	134.54	119.70
45	Bi	23	ARG	NE-CZ-NH2	-12.37	114.12	120.30
67	B1	717	A	O4'-C1'-N9	12.37	118.09	108.20
21	A2	26	A	O4'-C1'-N9	-12.37	98.31	108.20
67	B1	564	U	O4'-C1'-N1	12.36	118.09	108.20
21	A2	1038	C	N1-C1'-C2'	12.36	130.07	114.00
67	B1	724	G	O4'-C1'-N9	12.36	118.09	108.20
67	B1	1773	C	C3'-C2'-C1'	12.36	111.39	101.50
21	A2	142	G	C3'-C2'-C1'	-12.36	91.61	101.50
21	A2	846	G	O4'-C1'-N9	12.36	118.09	108.20
67	B1	582	A	C3'-C2'-C1'	12.36	111.39	101.50
21	A2	141	C	O4'-C1'-N1	12.35	118.08	108.20
21	A2	562	A	O4'-C1'-N9	12.35	118.08	108.20
21	A2	1480	G	O4'-C1'-N9	12.35	118.08	108.20
21	A2	1183	C	C3'-C2'-C1'	12.34	111.38	101.50
67	B1	136	U	O4'-C1'-N1	12.34	118.08	108.20
21	A2	1205	G	O4'-C1'-N9	12.34	118.07	108.20
21	A2	1333	G	C1'-O4'-C4'	12.34	119.77	109.90
67	B1	827	G	O4'-C1'-C2'	12.34	118.70	107.60
67	B1	2299	G	O4'-C1'-N9	12.34	118.07	108.20
67	B1	2554	A	C1'-O4'-C4'	12.33	119.76	109.90
67	B1	1033	C	C1'-O4'-C4'	12.33	119.76	109.90
67	B1	1642	G	P-O3'-C3'	12.32	134.49	119.70
67	B1	1043	U	O4'-C1'-N1	12.32	118.06	108.20
67	B1	241	C	C1'-O4'-C4'	-12.32	100.04	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1267	A	O4'-C1'-N9	12.32	118.06	108.20
67	B1	2615	U	O4'-C1'-N1	12.31	118.05	108.20
27	A0	41	C	O4'-C1'-C2'	-12.31	93.49	105.80
68	B3	47	G	O4'-C1'-C2'	12.31	118.68	107.60
67	B1	2209	U	O4'-C1'-N1	12.30	118.04	108.20
67	B1	1072	U	O4'-C1'-C2'	-12.30	93.50	105.80
67	B1	1990	U	P-O3'-C3'	12.30	134.46	119.70
67	B1	2165	A	P-O3'-C3'	12.30	134.46	119.70
67	B1	1938	G	O4'-C1'-N9	12.29	118.03	108.20
21	A2	99	C	C3'-C2'-C1'	12.28	111.32	101.50
67	B1	2257	A	O4'-C1'-N9	12.28	118.02	108.20
13	AX	71	ARG	NE-CZ-NH2	-12.28	114.16	120.30
67	B1	1923	A	N9-C1'-C2'	-12.27	98.05	114.00
67	B1	319	A	O4'-C1'-N9	12.27	118.02	108.20
21	A2	1440	G	O4'-C1'-N9	12.27	118.01	108.20
67	B1	1324	G	C1'-O4'-C4'	12.26	119.71	109.90
68	B3	79	U	C1'-O4'-C4'	12.26	119.71	109.90
67	B1	1387	G	O4'-C1'-N9	12.26	118.01	108.20
67	B1	2273	U	P-O5'-C5'	12.26	140.51	120.90
67	B1	2949	G	C1'-O4'-C4'	12.26	119.70	109.90
21	A2	531	G	C1'-O4'-C4'	-12.25	100.10	109.90
25	AH	79	TYR	CA-CB-CG	12.25	136.68	113.40
67	B1	12	C	P-O3'-C3'	12.25	134.40	119.70
67	B1	427	G	P-O3'-C3'	12.25	134.40	119.70
21	A2	977	G	P-O3'-C3'	12.24	134.39	119.70
67	B1	586	A	N1-C6-N6	12.24	125.94	118.60
21	A2	1139	A	O4'-C1'-N9	12.24	117.99	108.20
67	B1	2250	G	P-O3'-C3'	12.24	134.39	119.70
33	BC	125	TYR	CB-CA-C	12.24	134.88	110.40
67	B1	2941	A	P-O3'-C3'	12.24	134.39	119.70
67	B1	1660	A	N1-C6-N6	12.24	125.94	118.60
67	B1	2720	U	O4'-C1'-N1	12.24	117.99	108.20
68	B3	86	C	O4'-C1'-N1	12.24	117.99	108.20
21	A2	1018	C	C3'-C2'-C1'	12.23	111.29	101.50
21	A2	1217	C	P-O3'-C3'	12.23	134.38	119.70
67	B1	50	C	O4'-C1'-C2'	-12.23	93.57	105.80
67	B1	2736	G	O4'-C1'-N9	12.22	117.98	108.20
67	B1	84	A	P-O5'-C5'	-12.21	101.36	120.90
67	B1	351	C	O4'-C1'-C2'	-12.21	93.58	105.80
67	B1	248	C	C3'-C2'-C1'	12.21	111.27	101.50
67	B1	999	A	O4'-C1'-N9	12.21	117.97	108.20
67	B1	502	G	O4'-C1'-N9	12.21	117.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	619	A	O4'-C1'-N9	12.20	117.96	108.20
21	A2	664	G	O4'-C1'-N9	12.20	117.96	108.20
62	BN	4	ARG	NE-CZ-NH2	-12.20	114.20	120.30
67	B1	2437	G	O4'-C1'-N9	12.20	117.96	108.20
67	B1	2279	G	O4'-C1'-C2'	12.20	118.58	107.60
67	B1	365	G	O4'-C1'-N9	12.20	117.96	108.20
67	B1	2892	A	P-O3'-C3'	12.19	134.33	119.70
67	B1	787	G	N9-C1'-C2'	12.19	129.85	114.00
67	B1	2826	U	O4'-C1'-C2'	-12.19	93.61	105.80
21	A2	805	C	C1'-O4'-C4'	-12.19	100.15	109.90
21	A2	1458	A	N9-C1'-C2'	-12.18	98.17	114.00
67	B1	1839	U	O4'-C1'-N1	12.18	117.94	108.20
67	B1	94	A	N9-C1'-C2'	-12.18	98.17	114.00
67	B1	919	G	C1'-O4'-C4'	12.18	119.64	109.90
67	B1	2003	C	C3'-C2'-C1'	12.18	111.24	101.50
67	B1	241	C	N1-C1'-C2'	12.17	129.82	114.00
21	A2	147	A	O4'-C1'-C2'	-12.16	93.64	105.80
21	A2	1448	A	N9-C1'-C2'	-12.16	98.19	114.00
67	B1	3014	U	C1'-O4'-C4'	12.16	119.63	109.90
27	A0	40	C	O4'-C1'-C2'	-12.16	93.64	105.80
27	A0	6	C	C1'-O4'-C4'	-12.16	100.17	109.90
67	B1	481	G	O4'-C1'-N9	12.16	117.93	108.20
67	B1	700	A	C1'-O4'-C4'	12.16	119.63	109.90
67	B1	1709	C	N1-C1'-C2'	12.16	129.81	114.00
67	B1	362	A	N9-C1'-C2'	-12.16	98.19	114.00
67	B1	1396	A	C1'-O4'-C4'	12.16	119.63	109.90
21	A2	1200	U	N1-C1'-C2'	-12.16	98.20	114.00
67	B1	2264	G	O4'-C1'-N9	12.15	117.92	108.20
67	B1	2011	U	N1-C1'-C2'	-12.15	98.21	114.00
21	A2	1256	C	O4'-C1'-N1	12.14	117.92	108.20
67	B1	165	G	N9-C1'-C2'	12.14	129.79	114.00
67	B1	1151	G	O4'-C1'-N9	12.14	117.91	108.20
67	B1	140	C	C3'-C2'-C1'	12.14	111.21	101.50
67	B1	1039	C	C3'-C2'-C1'	12.13	111.21	101.50
11	A1	71	C	O4'-C1'-N1	12.13	117.91	108.20
35	BL	9	ARG	CB-CA-C	12.13	134.66	110.40
21	A2	422	U	P-O3'-C3'	12.13	134.25	119.70
67	B1	511	A	N9-C1'-C2'	-12.13	98.24	114.00
21	A2	306	C	O4'-C1'-C2'	-12.12	93.68	105.80
67	B1	1572	C	P-O3'-C3'	12.12	134.24	119.70
67	B1	2043	A	O4'-C1'-C2'	-12.12	93.68	105.80
6	AC	57	ARG	NE-CZ-NH2	-12.12	114.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1088	U	P-O3'-C3'	-12.11	105.17	119.70
67	B1	359	C	C3'-C2'-C1'	12.11	111.19	101.50
23	AT	7	ARG	NE-CZ-NH2	-12.11	114.25	120.30
67	B1	1049	U	O4'-C1'-N1	12.11	117.89	108.20
67	B1	181	U	C1'-O4'-C4'	12.10	119.58	109.90
21	A2	698	A	C1'-O4'-C4'	-12.10	100.22	109.90
67	B1	350	A	C1'-O4'-C4'	12.10	119.58	109.90
68	B3	33	U	O4'-C1'-N1	12.10	117.88	108.20
21	A2	126	G	P-O3'-C3'	12.10	134.22	119.70
21	A2	657	A	C1'-O4'-C4'	12.09	119.58	109.90
67	B1	629	G	N9-C1'-C2'	-12.09	98.28	114.00
21	A2	353	G	O4'-C1'-N9	12.09	117.87	108.20
67	B1	156	A	O4'-C1'-N9	12.08	117.87	108.20
21	A2	157	A	O4'-C1'-C2'	-12.08	93.72	105.80
67	B1	135	U	C3'-C2'-C1'	12.08	111.16	101.50
24	AA	93	ARG	NE-CZ-NH2	-12.08	114.26	120.30
67	B1	2630	C	C1'-O4'-C4'	-12.08	100.24	109.90
21	A2	615	G	C1'-O4'-C4'	-12.07	100.24	109.90
67	B1	187	C	N1-C1'-C2'	12.07	129.69	114.00
67	B1	2382	A	N9-C1'-C2'	-12.07	98.31	114.00
67	B1	715	G	O4'-C1'-N9	-12.06	98.55	108.20
30	AU	110	PHE	CB-CG-CD2	-12.06	112.36	120.80
67	B1	2007	C	O4'-C1'-N1	12.06	117.84	108.20
67	B1	2308	C	O4'-C1'-C2'	-12.05	93.75	105.80
67	B1	817	G	C3'-C2'-C1'	12.05	111.14	101.50
67	B1	2713	A	C1'-O4'-C4'	12.05	119.54	109.90
67	B1	332	A	N1-C6-N6	12.05	125.83	118.60
21	A2	1253	G	C1'-O4'-C4'	-12.04	100.26	109.90
67	B1	1357	G	O4'-C1'-N9	12.04	117.83	108.20
67	B1	1920	A	C3'-C2'-C1'	12.04	111.13	101.50
67	B1	749	G	O4'-C1'-N9	12.03	117.82	108.20
67	B1	2504	U	O4'-C1'-N1	12.03	117.82	108.20
67	B1	2307	C	O4'-C1'-N1	12.02	117.82	108.20
21	A2	32	A	N9-C1'-C2'	-12.02	98.38	114.00
67	B1	1953	U	N1-C1'-C2'	12.02	129.63	114.00
67	B1	2434	A	N9-C1'-C2'	12.02	129.62	114.00
67	B1	514	U	O4'-C1'-N1	12.01	117.81	108.20
34	B5	47	ARG	O-C-N	-12.01	103.48	122.70
52	BB	35	TYR	CB-CG-CD2	-12.01	113.80	121.00
67	B1	243	G	C1'-O4'-C4'	12.01	119.51	109.90
67	B1	2397	C	O4'-C1'-N1	12.01	117.81	108.20
17	AO	115	TYR	CB-CG-CD1	12.01	128.20	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2487	G	O4'-C1'-N9	12.00	117.80	108.20
21	A2	553	C	C3'-C2'-C1'	12.00	111.10	101.50
21	A2	1269	G	O4'-C1'-C2'	-11.99	93.81	105.80
27	A0	62	C	O4'-C1'-C2'	-11.99	93.81	105.80
59	BM	65	ARG	NE-CZ-NH2	-11.99	114.30	120.30
21	A2	1402	C	O4'-C1'-N1	11.99	117.79	108.20
67	B1	1539	U	O4'-C1'-N1	11.99	117.79	108.20
67	B1	1726	A	O4'-C1'-N9	11.99	117.79	108.20
67	B1	1157	U	O4'-C1'-N1	11.99	117.79	108.20
21	A2	324	C	O4'-C1'-N1	11.98	117.79	108.20
21	A2	702	G	N9-C1'-C2'	11.98	129.58	114.00
67	B1	64	A	O4'-C1'-N9	11.98	117.79	108.20
67	B1	1290	G	O4'-C1'-C2'	11.98	118.38	107.60
67	B1	1218	C	C1'-O4'-C4'	-11.98	100.32	109.90
67	B1	2020	G	C1'-O4'-C4'	-11.98	100.32	109.90
21	A2	1086	C	N1-C1'-C2'	11.97	129.57	114.00
67	B1	1921	U	N1-C1'-C2'	11.97	129.56	114.00
67	B1	434	G	C1'-O4'-C4'	-11.97	100.33	109.90
67	B1	355	G	C1'-O4'-C4'	-11.96	100.33	109.90
67	B1	366	G	O4'-C1'-N9	-11.96	98.63	108.20
67	B1	1843	C	C1'-O4'-C4'	-11.97	100.33	109.90
21	A2	175	G	C3'-C2'-C1'	-11.96	91.94	101.50
67	B1	2172	G	O4'-C1'-N9	11.95	117.76	108.20
67	B1	636	G	N9-C1'-C2'	11.95	129.53	114.00
67	B1	761	U	O4'-C1'-N1	11.95	117.76	108.20
68	B3	79	U	O4'-C1'-N1	11.94	117.75	108.20
67	B1	1592	U	C1'-O4'-C4'	-11.94	100.35	109.90
21	A2	634	C	C1'-O4'-C4'	-11.93	100.36	109.90
24	AA	19	TYR	CB-CG-CD2	-11.93	113.84	121.00
67	B1	2470	U	O4'-C1'-N1	11.93	117.74	108.20
21	A2	1142	G	P-O3'-C3'	11.92	134.01	119.70
21	A2	1116	G	O4'-C1'-C2'	11.92	118.33	107.60
67	B1	976	C	C3'-C2'-C1'	11.92	111.04	101.50
67	B1	1570	C	C4'-C3'-C2'	11.92	114.52	102.60
67	B1	719	C	N1-C1'-C2'	11.92	129.49	114.00
67	B1	1359	C	O4'-C1'-N1	11.92	117.73	108.20
21	A2	292	U	N1-C1'-C2'	11.91	129.49	114.00
21	A2	371	U	O4'-C1'-N1	11.90	117.72	108.20
67	B1	48	G	N9-C1'-C2'	-11.90	98.53	114.00
67	B1	324	C	P-O3'-C3'	11.90	133.98	119.70
67	B1	1319	U	O4'-C1'-N1	11.90	117.72	108.20
67	B1	2088	G	C1'-O4'-C4'	-11.90	100.38	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	BP	12	ARG	NE-CZ-NH2	-11.90	114.35	120.30
67	B1	2585	G	C3'-C2'-C1'	-11.90	91.98	101.50
68	B3	43	C	C3'-C2'-C1'	11.90	111.02	101.50
21	A2	1495	U	O4'-C1'-N1	11.89	117.72	108.20
67	B1	1244	C	C1'-O4'-C4'	11.89	119.42	109.90
67	B1	1482	G	O4'-C1'-N9	11.89	117.71	108.20
67	B1	2654	C	N1-C1'-C2'	11.88	129.45	114.00
21	A2	1439	G	C1'-O4'-C4'	11.88	119.41	109.90
68	B3	31	U	C3'-C2'-C1'	11.88	111.00	101.50
67	B1	716	U	P-O3'-C3'	11.88	133.95	119.70
15	AE	229	TYR	CB-CG-CD2	-11.87	113.88	121.00
21	A2	407	G	P-O5'-C5'	11.87	139.89	120.90
67	B1	590	A	N1-C6-N6	11.87	125.72	118.60
11	A1	41	C	N1-C1'-C2'	11.85	129.41	114.00
60	BS	154	ARG	NE-CZ-NH2	-11.85	114.37	120.30
67	B1	266	A	N9-C1'-C2'	11.85	129.41	114.00
67	B1	2033	G	C3'-C2'-C1'	11.85	110.98	101.50
67	B1	2338	A	P-O3'-C3'	11.85	133.92	119.70
67	B1	2056	A	O4'-C1'-N9	11.85	117.68	108.20
67	B1	515	G	O4'-C1'-N9	11.84	117.67	108.20
38	Bb	117	ARG	NE-CZ-NH2	-11.84	114.38	120.30
67	B1	985	A	N1-C6-N6	11.83	125.70	118.60
21	A2	959	G	O4'-C1'-N9	11.83	117.66	108.20
21	A2	306	C	C3'-C2'-C1'	11.82	110.96	101.50
21	A2	454	G	O4'-C1'-N9	11.82	117.66	108.20
21	A2	178	C	O4'-C1'-N1	11.82	117.66	108.20
21	A2	961	U	OP1-P-O3'	-11.82	79.19	105.20
67	B1	366	G	C1'-O4'-C4'	-11.82	100.44	109.90
67	B1	768	C	N1-C1'-C2'	11.82	129.36	114.00
67	B1	847	A	C1'-O4'-C4'	11.81	119.35	109.90
21	A2	961	U	O3'-P-O5'	11.81	126.44	104.00
21	A2	1282	C	C3'-C2'-C1'	11.81	110.95	101.50
67	B1	115	C	N1-C1'-C2'	11.80	129.34	114.00
67	B1	549	G	O4'-C1'-N9	11.80	117.64	108.20
67	B1	1630	U	O4'-C1'-N1	11.80	117.64	108.20
68	B3	93	G	O4'-C1'-C2'	11.80	118.22	107.60
21	A2	138	C	C3'-C2'-C1'	11.80	110.94	101.50
67	B1	1880	A	N1-C6-N6	11.80	125.68	118.60
67	B1	1396	A	O4'-C1'-C2'	-11.79	94.01	105.80
67	B1	1200	A	N9-C1'-C2'	-11.79	98.68	114.00
21	A2	486	A	C3'-C2'-C1'	11.79	110.93	101.50
67	B1	899	A	P-O3'-C3'	11.79	133.84	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1860	A	O4'-C1'-N9	11.78	117.63	108.20
67	B1	946	U	O4'-C1'-N1	11.78	117.62	108.20
21	A2	1398	U	O4'-C1'-N1	11.78	117.62	108.20
21	A2	450	A	N1-C6-N6	11.78	125.67	118.60
21	A2	963	A	P-O3'-C3'	11.78	133.83	119.70
67	B1	318	G	C1'-O4'-C4'	-11.78	100.48	109.90
67	B1	358	C	N1-C1'-C2'	11.77	129.30	114.00
67	B1	1577	C	O4'-C1'-N1	11.77	117.61	108.20
67	B1	2235	G	N9-C1'-C2'	11.77	129.30	114.00
67	B1	9	A	N1-C6-N6	11.77	125.66	118.60
21	A2	1319	C	O4'-C1'-N1	11.76	117.61	108.20
67	B1	1348	G	C3'-C2'-C1'	-11.76	92.09	101.50
67	B1	1601	G	O4'-C1'-N9	11.76	117.61	108.20
21	A2	239	A	O4'-C1'-N9	-11.76	98.79	108.20
39	Be	8	PHE	CB-CG-CD2	-11.76	112.57	120.80
21	A2	1391	U	O4'-C1'-N1	11.75	117.60	108.20
11	A1	25	G	C3'-C2'-C1'	11.75	110.90	101.50
62	BN	113	ARG	NE-CZ-NH2	11.75	126.17	120.30
67	B1	2006	C	C3'-C2'-C1'	11.75	110.90	101.50
67	B1	2852	U	O4'-C1'-N1	11.74	117.60	108.20
67	B1	2879	G	N9-C1'-C2'	11.74	129.27	114.00
67	B1	317	A	N1-C6-N6	11.74	125.64	118.60
21	A2	529	C	O4'-C1'-C2'	-11.74	94.06	105.80
37	BU	50	ASP	CB-CG-OD2	-11.74	107.74	118.30
67	B1	1697	G	C1'-O4'-C4'	11.74	119.29	109.90
21	A2	748	A	O4'-C1'-N9	11.73	117.59	108.20
67	B1	1870	G	O4'-C1'-N9	11.73	117.59	108.20
67	B1	1779	C	N1-C1'-C2'	11.73	129.25	114.00
53	BD	158	ARG	NE-CZ-NH1	11.72	126.16	120.30
21	A2	223	G	O4'-C1'-N9	11.72	117.58	108.20
21	A2	765	U	C3'-C2'-C1'	11.72	110.87	101.50
67	B1	634	G	N9-C1'-C2'	-11.72	98.77	114.00
67	B1	2240	G	O4'-C1'-N9	11.72	117.57	108.20
67	B1	2963	G	N9-C1'-C2'	-11.72	98.77	114.00
21	A2	30	C	C3'-C2'-C1'	11.71	110.87	101.50
21	A2	1458	A	P-O3'-C3'	11.71	133.75	119.70
21	A2	300	G	O4'-C1'-N9	11.71	117.56	108.20
67	B1	408	C	C3'-C2'-C1'	11.71	110.87	101.50
67	B1	1042	G	P-O5'-C5'	11.71	139.63	120.90
21	A2	1424	G	C1'-O4'-C4'	-11.70	100.54	109.90
21	A2	14	C	O4'-C1'-N1	11.70	117.56	108.20
21	A2	78	G	C1'-O4'-C4'	-11.70	100.54	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	700	A	O4'-C1'-C2'	-11.70	94.10	105.80
67	B1	1376	U	O4'-C1'-N1	11.70	117.56	108.20
67	B1	1006	A	N1-C6-N6	11.70	125.62	118.60
21	A2	975	A	P-O3'-C3'	11.70	133.73	119.70
67	B1	471	U	P-O3'-C3'	11.70	133.74	119.70
67	B1	325	G	C3'-C2'-C1'	11.69	110.86	101.50
67	B1	428	A	C3'-C2'-C1'	11.69	110.86	101.50
67	B1	1042	G	P-O3'-C3'	11.69	133.73	119.70
17	AO	111	ARG	NE-CZ-NH1	11.69	126.14	120.30
21	A2	562	A	N9-C1'-C2'	-11.69	98.81	114.00
67	B1	1661	A	N1-C6-N6	11.68	125.61	118.60
21	A2	1335	A	C3'-C2'-C1'	11.68	110.84	101.50
67	B1	532	G	O4'-C1'-N9	11.68	117.54	108.20
52	BB	60	ARG	NE-CZ-NH1	11.66	126.13	120.30
21	A2	1082	A	O4'-C1'-C2'	-11.66	94.14	105.80
21	A2	1242	C	N1-C1'-C2'	11.66	129.16	114.00
67	B1	1336	G	C1'-O4'-C4'	11.66	119.23	109.90
21	A2	418	G	O4'-C1'-N9	11.66	117.53	108.20
21	A2	255	G	O4'-C1'-C2'	11.65	118.09	107.60
16	AJ	113	ARG	NE-CZ-NH1	-11.65	114.47	120.30
57	BZ	51	TYR	CB-CG-CD2	11.65	127.99	121.00
67	B1	2386	U	N1-C1'-C2'	11.65	129.15	114.00
21	A2	152	G	C3'-C2'-C1'	-11.65	92.18	101.50
67	B1	537	U	C1'-O4'-C4'	-11.65	100.58	109.90
67	B1	1567	C	O4'-C1'-N1	-11.65	98.88	108.20
27	A0	58	A	O4'-C1'-C2'	-11.65	94.15	105.80
67	B1	815	U	O4'-C1'-N1	11.65	117.52	108.20
67	B1	2294	A	O4'-C1'-C2'	-11.65	94.15	105.80
67	B1	2510	A	C1'-O4'-C4'	-11.65	100.58	109.90
67	B1	673	A	O4'-C1'-N9	11.64	117.52	108.20
67	B1	1140	C	C1'-O4'-C4'	-11.64	100.58	109.90
67	B1	1811	G	C3'-C2'-C1'	-11.64	92.19	101.50
67	B1	2671	C	C3'-C2'-C1'	11.64	110.81	101.50
14	AM	58	TYR	CB-CG-CD1	11.64	127.98	121.00
67	B1	1994	G	O4'-C1'-N9	11.63	117.50	108.20
21	A2	1340	U	O4'-C1'-N1	11.62	117.50	108.20
67	B1	953	G	C1'-O4'-C4'	11.61	119.19	109.90
21	A2	88	G	O4'-C1'-N9	-11.61	98.91	108.20
67	B1	1093	G	N9-C1'-C2'	-11.61	98.90	114.00
21	A2	757	G	O4'-C1'-C2'	11.61	118.05	107.60
37	BU	75	ARG	NE-CZ-NH2	-11.61	114.50	120.30
67	B1	144	A	N1-C6-N6	11.61	125.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1324	G	O4'-C1'-N9	11.61	117.48	108.20
67	B1	1715	G	O4'-C1'-N9	11.60	117.48	108.20
21	A2	709	G	N9-C1'-C2'	-11.60	98.92	114.00
67	B1	520	G	O4'-C1'-C2'	-11.60	94.20	105.80
67	B1	2302	C	O4'-C1'-N1	11.60	117.48	108.20
67	B1	367	G	O4'-C1'-N9	11.60	117.48	108.20
67	B1	2636	C	N1-C1'-C2'	11.59	129.07	114.00
15	AE	126	ARG	NE-CZ-NH1	11.59	126.10	120.30
21	A2	891	A	N1-C6-N6	11.59	125.56	118.60
27	A0	25	C	O4'-C1'-C2'	-11.59	94.21	105.80
67	B1	1614	U	O4'-C1'-N1	11.59	117.47	108.20
21	A2	1213	G	N9-C1'-C2'	11.59	129.07	114.00
67	B1	2251	G	O4'-C1'-C2'	11.59	118.03	107.60
21	A2	424	U	C1'-O4'-C4'	-11.59	100.63	109.90
21	A2	103	A	P-O3'-C3'	11.58	133.60	119.70
21	A2	722	G	O4'-C1'-N9	11.58	117.47	108.20
67	B1	1553	G	P-O3'-C3'	11.58	133.60	119.70
67	B1	2272	G	C1'-O4'-C4'	-11.58	100.63	109.90
67	B1	2734	C	O4'-C1'-N1	11.58	117.47	108.20
68	B3	66	A	O4'-C1'-N9	11.58	117.47	108.20
21	A2	356	G	C1'-O4'-C4'	-11.58	100.64	109.90
67	B1	1642	G	O4'-C1'-N9	11.58	117.46	108.20
67	B1	1764	G	P-O3'-C3'	11.57	133.59	119.70
21	A2	216	G	O4'-C1'-N9	11.57	117.46	108.20
33	BC	263	ARG	NE-CZ-NH2	-11.57	114.51	120.30
21	A2	288	G	O4'-C1'-N9	11.57	117.46	108.20
67	B1	1881	A	N1-C6-N6	11.57	125.54	118.60
67	B1	595	C	O4'-C1'-N1	11.56	117.45	108.20
21	A2	1048	G	O4'-C1'-N9	11.56	117.45	108.20
67	B1	1822	G	N9-C1'-C2'	-11.56	98.97	114.00
21	A2	201	G	P-O3'-C3'	11.56	133.57	119.70
59	BM	8	ARG	NE-CZ-NH2	-11.56	114.52	120.30
10	AD	25	ARG	NE-CZ-NH1	11.56	126.08	120.30
40	BE	145	ARG	NE-CZ-NH1	-11.56	114.52	120.30
67	B1	2764	G	C1'-O4'-C4'	-11.56	100.65	109.90
68	B3	21	C	O4'-C1'-N1	11.56	117.44	108.20
67	B1	616	C	O4'-C1'-N1	11.55	117.44	108.20
67	B1	1670	A	C3'-C2'-C1'	-11.55	92.26	101.50
67	B1	2732	U	O4'-C1'-N1	11.55	117.44	108.20
24	AA	138	ARG	NE-CZ-NH2	11.54	126.07	120.30
21	A2	1144	G	N9-C1'-C2'	11.54	129.00	114.00
67	B1	2618	C	O4'-C1'-C2'	-11.54	94.27	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	924	U	P-O3'-C3'	11.53	133.54	119.70
21	A2	494	G	C3'-C2'-C1'	-11.52	92.28	101.50
35	BL	10	LYS	N-CA-CB	-11.52	89.86	110.60
67	B1	2769	U	N1-C1'-C2'	11.52	128.98	114.00
21	A2	181	G	N9-C1'-C2'	11.52	128.97	114.00
21	A2	448	A	N1-C6-N6	11.52	125.51	118.60
21	A2	1155	U	N1-C1'-C2'	11.52	128.97	114.00
67	B1	2260	C	C1'-O4'-C4'	-11.52	100.69	109.90
21	A2	948	G	O4'-C1'-N9	11.52	117.41	108.20
67	B1	474	G	N9-C1'-C2'	11.52	128.97	114.00
67	B1	1064	G	O4'-C1'-N9	11.51	117.41	108.20
21	A2	45	U	N1-C1'-C2'	-11.51	99.04	114.00
21	A2	1318	U	O4'-C1'-N1	11.51	117.41	108.20
67	B1	297	G	C3'-C2'-C1'	11.51	110.70	101.50
68	B3	123	U	P-O3'-C3'	11.50	133.50	119.70
67	B1	1414	G	C3'-C2'-C1'	11.50	110.70	101.50
67	B1	3021	C	O4'-C1'-N1	11.50	117.40	108.20
67	B1	2875	C	C1'-O4'-C4'	-11.49	100.70	109.90
21	A2	1130	A	O4'-C1'-N9	11.49	117.39	108.20
67	B1	605	A	O4'-C1'-C2'	-11.49	94.31	105.80
67	B1	1859	A	O4'-C1'-N9	11.49	117.39	108.20
67	B1	528	G	C1'-O4'-C4'	-11.48	100.71	109.90
20	A3	27	ARG	NE-CZ-NH2	-11.48	114.56	120.30
67	B1	424	U	C1'-O4'-C4'	-11.48	100.72	109.90
67	B1	61	G	N9-C1'-C2'	11.48	128.92	114.00
67	B1	593	C	C3'-C2'-C1'	11.48	110.68	101.50
21	A2	166	A	P-O5'-C5'	11.48	139.26	120.90
21	A2	483	G	O4'-C1'-C2'	11.47	117.93	107.60
68	B3	67	U	C1'-O4'-C4'	11.47	119.08	109.90
21	A2	861	G	N9-C1'-C2'	11.47	128.91	114.00
67	B1	2911	C	O4'-C1'-N1	11.47	117.38	108.20
21	A2	660	C	N1-C1'-C2'	11.47	128.91	114.00
60	BS	65	ARG	NE-CZ-NH2	-11.47	114.57	120.30
67	B1	705	G	C3'-C2'-C1'	11.47	110.67	101.50
67	B1	2359	G	O4'-C1'-N9	11.46	117.37	108.20
67	B1	2544	C	C3'-C2'-C1'	11.47	110.67	101.50
21	A2	52	U	O4'-C1'-N1	11.46	117.37	108.20
21	A2	136	A	C1'-O4'-C4'	-11.46	100.73	109.90
67	B1	1322	G	C1'-O4'-C4'	-11.46	100.73	109.90
7	AB	177	TYR	CB-CG-CD1	11.46	127.87	121.00
12	AN	133	SER	N-CA-CB	11.46	127.68	110.50
47	BI	49	TYR	CB-CG-CD2	-11.45	114.13	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2037	A	O4'-C1'-N9	11.45	117.36	108.20
21	A2	573	C	C3'-C2'-C1'	11.44	110.66	101.50
21	A2	859	A	O4'-C1'-N9	11.44	117.36	108.20
67	B1	302	U	O4'-C1'-N1	11.44	117.36	108.20
33	BC	343	ARG	NE-CZ-NH1	11.44	126.02	120.30
67	B1	976	C	O4'-C1'-C2'	-11.44	94.36	105.80
67	B1	2115	U	O4'-C1'-C2'	-11.44	94.36	105.80
67	B1	814	G	C3'-C2'-C1'	11.44	110.65	101.50
46	BA	75	ARG	NE-CZ-NH1	11.44	126.02	120.30
67	B1	979	G	C1'-O4'-C4'	-11.44	100.75	109.90
67	B1	639	C	P-O3'-C3'	11.43	133.42	119.70
67	B1	1315	U	O4'-C1'-N1	11.43	117.35	108.20
21	A2	1443	G	O4'-C1'-N9	11.43	117.34	108.20
67	B1	1369	G	O4'-C1'-C2'	11.43	117.89	107.60
67	B1	2215	U	C3'-C2'-C1'	11.43	110.64	101.50
67	B1	596	C	O4'-C1'-N1	11.43	117.34	108.20
21	A2	101	G	O4'-C1'-N9	11.43	117.34	108.20
21	A2	160	C	O4'-C1'-N1	11.43	117.34	108.20
67	B1	817	G	N9-C1'-C2'	11.42	128.85	114.00
21	A2	257	U	O4'-C1'-N1	11.42	117.34	108.20
67	B1	2928	C	C1'-O4'-C4'	11.42	119.03	109.90
32	BO	8	ARG	NE-CZ-NH2	-11.41	114.59	120.30
21	A2	133	G	O4'-C1'-N9	11.41	117.33	108.20
67	B1	2523	C	C3'-C2'-C1'	11.41	110.63	101.50
27	A0	19	G	P-O3'-C3'	11.41	133.39	119.70
67	B1	1456	U	O4'-C1'-N1	11.41	117.33	108.20
21	A2	165	U	P-O3'-C3'	-11.40	106.02	119.70
21	A2	808	C	O4'-C1'-N1	11.40	117.32	108.20
21	A2	556	G	C1'-O4'-C4'	-11.40	100.78	109.90
67	B1	1946	G	O4'-C1'-N9	11.40	117.32	108.20
67	B1	177	G	C1'-O4'-C4'	-11.40	100.78	109.90
67	B1	1610	C	C3'-C2'-C1'	11.39	110.61	101.50
67	B1	369	G	O4'-C1'-C2'	-11.39	94.41	105.80
67	B1	1579	G	O4'-C1'-N9	11.39	117.31	108.20
67	B1	1658	A	N1-C6-N6	11.39	125.44	118.60
67	B1	1875	U	O4'-C1'-N1	11.39	117.31	108.20
67	B1	3042	C	C3'-C2'-C1'	11.39	110.61	101.50
67	B1	1272	A	O4'-C1'-C2'	-11.39	94.41	105.80
21	A2	1278	A	O4'-C1'-N9	11.38	117.31	108.20
21	A2	447	A	N1-C6-N6	11.38	125.43	118.60
67	B1	1182	C	C3'-C2'-C1'	11.38	110.61	101.50
67	B1	2362	U	P-O3'-C3'	11.38	133.36	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1121	C	C3'-C2'-C1'	11.37	110.60	101.50
65	BJ	26	TYR	CB-CG-CD2	-11.37	114.18	121.00
67	B1	683	C	O4'-C1'-N1	11.37	117.30	108.20
21	A2	451	A	N1-C6-N6	11.37	125.42	118.60
21	A2	592	G	O4'-C1'-N9	11.37	117.30	108.20
67	B1	1019	G	N1-C6-O6	11.37	126.72	119.90
67	B1	2401	A	P-O3'-C3'	11.37	133.34	119.70
11	A1	74	A	O4'-C1'-N9	11.37	117.29	108.20
21	A2	867	A	O4'-C1'-C2'	-11.37	94.44	105.80
21	A2	1200	U	O4'-C1'-C2'	-11.36	94.44	105.80
60	BS	131	ARG	NE-CZ-NH2	-11.36	114.62	120.30
21	A2	1111	G	O4'-C1'-C2'	-11.36	94.44	105.80
21	A2	234	G	O4'-C1'-N9	11.35	117.28	108.20
21	A2	1060	G	O4'-C1'-N9	11.35	117.28	108.20
67	B1	477	C	O4'-C1'-N1	11.35	117.28	108.20
67	B1	779	A	P-O3'-C3'	-11.35	106.08	119.70
67	B1	1898	A	C1'-O4'-C4'	11.35	118.98	109.90
67	B1	1272	A	C3'-C2'-C1'	11.35	110.58	101.50
68	B3	100	A	O4'-C1'-N9	11.35	117.28	108.20
21	A2	1248	A	O4'-C1'-N9	11.34	117.27	108.20
67	B1	2894	A	O4'-C1'-N9	11.34	117.27	108.20
67	B1	494	C	O4'-C1'-N1	11.34	117.27	108.20
67	B1	1276	G	O4'-C1'-N9	11.34	117.27	108.20
67	B1	2142	U	O4'-C1'-N1	11.33	117.27	108.20
21	A2	503	G	O4'-C1'-N9	11.33	117.26	108.20
67	B1	1711	C	C1'-O4'-C4'	11.33	118.96	109.90
21	A2	351	C	P-O3'-C3'	-11.33	106.11	119.70
67	B1	1808	G	O4'-C1'-N9	11.32	117.26	108.20
67	B1	2716	C	O4'-C1'-C2'	-11.32	94.48	105.80
67	B1	835	G	N9-C1'-C2'	11.32	128.72	114.00
67	B1	1457	C	N1-C1'-C2'	11.32	128.72	114.00
38	Bb	25	ARG	NE-CZ-NH2	-11.31	114.64	120.30
67	B1	2837	C	N1-C1'-C2'	11.31	128.70	114.00
67	B1	3044	U	O4'-C1'-N1	11.31	117.25	108.20
68	B3	44	C	O4'-C1'-C2'	-11.31	94.49	105.80
37	BU	50	ASP	CB-CG-OD1	11.31	128.48	118.30
67	B1	324	C	O4'-C1'-C2'	-11.31	94.49	105.80
21	A2	409	C	N1-C1'-C2'	11.30	128.70	114.00
67	B1	1022	G	O4'-C1'-N9	11.31	117.25	108.20
49	BQ	81	ARG	NE-CZ-NH2	-11.30	114.65	120.30
68	B3	54	A	N9-C1'-C2'	-11.30	99.31	114.00
67	B1	2548	A	C1'-O4'-C4'	11.29	118.93	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1098	G	O4'-C1'-N9	11.29	117.23	108.20
21	A2	1116	G	C3'-C2'-C1'	-11.29	92.47	101.50
67	B1	538	G	O4'-C1'-N9	11.28	117.23	108.20
67	B1	573	G	O4'-C1'-N9	11.28	117.23	108.20
27	A0	60	U	C3'-C2'-C1'	11.28	110.52	101.50
21	A2	409	C	C1'-O4'-C4'	-11.28	100.88	109.90
67	B1	456	G	O4'-C1'-C2'	11.28	117.75	107.60
67	B1	2669	U	O4'-C1'-N1	11.28	117.22	108.20
67	B1	1081	U	C3'-C2'-C1'	11.27	110.52	101.50
11	A1	52	G	C1'-O4'-C4'	-11.27	100.89	109.90
21	A2	172	G	C1'-O4'-C4'	-11.27	100.89	109.90
21	A2	250	G	C3'-C2'-C1'	-11.27	92.49	101.50
67	B1	1738	A	C1'-O4'-C4'	11.27	118.91	109.90
21	A2	1492	U	O4'-C1'-N1	11.26	117.21	108.20
67	B1	779	A	O4'-C1'-N9	11.26	117.21	108.20
67	B1	1968	A	O4'-C1'-N9	11.26	117.21	108.20
21	A2	992	G	C1'-O4'-C4'	-11.26	100.89	109.90
67	B1	3045	G	O4'-C1'-N9	11.26	117.21	108.20
21	A2	1272	G	N9-C1'-C2'	11.26	128.63	114.00
21	A2	1491	C	O4'-C1'-N1	11.26	117.20	108.20
67	B1	1072	U	C1'-O4'-C4'	11.25	118.90	109.90
67	B1	363	G	N9-C1'-C2'	-11.25	99.37	114.00
67	B1	2222	C	O4'-C1'-N1	11.25	117.20	108.20
21	A2	695	G	C3'-C2'-C1'	-11.24	92.51	101.50
67	B1	2439	G	N9-C1'-C2'	11.24	128.62	114.00
67	B1	2314	U	O4'-C1'-C2'	-11.24	94.56	105.80
67	B1	1793	G	O4'-C1'-N9	11.24	117.19	108.20
67	B1	537	U	N1-C1'-C2'	11.23	128.60	114.00
21	A2	1306	A	N1-C6-N6	11.23	125.34	118.60
67	B1	513	C	O4'-C1'-N1	-11.23	99.22	108.20
67	B1	1244	C	O4'-C1'-C2'	-11.23	94.57	105.80
67	B1	981	A	C1'-O4'-C4'	11.23	118.88	109.90
67	B1	1243	C	C3'-C2'-C1'	11.23	110.48	101.50
67	B1	2761	G	C1'-O4'-C4'	11.23	118.88	109.90
67	B1	2856	G	O4'-C1'-N9	11.23	117.18	108.20
67	B1	1794	C	N1-C1'-C2'	11.22	128.59	114.00
67	B1	245	A	O4'-C1'-N9	11.22	117.18	108.20
67	B1	1563	G	O4'-C1'-N9	11.22	117.18	108.20
67	B1	1604	G	P-O5'-C5'	11.22	138.85	120.90
44	BW	29	ARG	NE-CZ-NH2	-11.22	114.69	120.30
59	BM	65	ARG	NE-CZ-NH1	11.22	125.91	120.30
67	B1	1085	G	N9-C1'-C2'	11.22	128.58	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1868	C	C1'-O4'-C4'	11.22	118.87	109.90
21	A2	434	A	O3'-P-O5'	11.21	125.31	104.00
49	BQ	9	ARG	NE-CZ-NH2	-11.21	114.69	120.30
68	B3	21	C	P-O3'-C3'	11.21	133.15	119.70
21	A2	1371	C	N1-C1'-C2'	11.21	128.57	114.00
21	A2	1269	G	C3'-C2'-C1'	11.21	110.47	101.50
67	B1	354	G	O4'-C1'-N9	11.20	117.16	108.20
67	B1	1982	C	C3'-C2'-C1'	11.20	110.46	101.50
67	B1	2985	U	O4'-C1'-N1	11.20	117.16	108.20
21	A2	410	U	O4'-C1'-N1	11.20	117.16	108.20
67	B1	410	C	P-O3'-C3'	11.20	133.13	119.70
67	B1	884	C	N1-C1'-C2'	11.20	128.55	114.00
67	B1	2464	G	O4'-C1'-N9	11.19	117.16	108.20
67	B1	1272	A	C1'-O4'-C4'	11.19	118.85	109.90
36	Bf	41	ARG	NE-CZ-NH2	-11.18	114.71	120.30
21	A2	960	A	P-O3'-C3'	11.17	133.11	119.70
67	B1	1578	C	C3'-C2'-C1'	11.16	110.43	101.50
67	B1	1765	A	C3'-C2'-C1'	11.16	110.43	101.50
21	A2	1168	C	O4'-C1'-N1	11.15	117.12	108.20
67	B1	739	C	O4'-C1'-N1	11.15	117.12	108.20
21	A2	88	G	N9-C1'-C2'	11.15	128.50	114.00
67	B1	485	G	C3'-C2'-C1'	11.15	110.42	101.50
67	B1	810	A	C3'-C2'-C1'	11.14	110.41	101.50
67	B1	2833	G	C1'-O4'-C4'	-11.14	100.98	109.90
67	B1	277	A	C3'-C2'-C1'	11.13	110.41	101.50
15	AE	26	TYR	CB-CG-CD1	11.13	127.68	121.00
67	B1	753	A	O4'-C1'-N9	11.13	117.10	108.20
67	B1	906	G	C3'-C2'-C1'	-11.13	92.60	101.50
67	B1	1899	C	C3'-C2'-C1'	11.13	110.40	101.50
21	A2	956	C	P-O3'-C3'	11.12	133.05	119.70
67	B1	1443	G	P-O3'-C3'	11.12	133.05	119.70
67	B1	2579	G	O4'-C1'-N9	11.12	117.10	108.20
67	B1	1273	C	C3'-C2'-C1'	11.12	110.40	101.50
67	B1	1774	A	O4'-C1'-N9	11.12	117.10	108.20
67	B1	107	G	O4'-C1'-N9	11.12	117.09	108.20
21	A2	651	U	N1-C1'-C2'	11.11	128.44	114.00
67	B1	529	G	O4'-C1'-N9	11.11	117.08	108.20
68	B3	56	C	C3'-C2'-C1'	11.10	110.38	101.50
21	A2	149	U	O4'-C1'-N1	11.10	117.08	108.20
21	A2	232	G	N9-C1'-C2'	11.10	128.43	114.00
21	A2	1466	G	O4'-C1'-N9	11.10	117.08	108.20
67	B1	2453	C	O4'-C1'-N1	11.10	117.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AO	76	ARG	NE-CZ-NH1	11.10	125.85	120.30
21	A2	181	G	C1'-O4'-C4'	-11.09	101.03	109.90
67	B1	560	G	C3'-C2'-C1'	-11.09	92.62	101.50
67	B1	1644	G	O4'-C1'-C2'	-11.09	94.71	105.80
67	B1	2369	G	O4'-C1'-N9	11.09	117.07	108.20
67	B1	1828	A	N9-C1'-C2'	11.09	128.42	114.00
67	B1	2889	A	C3'-C2'-C1'	11.09	110.37	101.50
67	B1	533	G	O4'-C1'-N9	11.09	117.07	108.20
67	B1	2245	C	N1-C1'-C2'	11.09	128.41	114.00
67	B1	2283	C	C3'-C2'-C1'	11.09	110.37	101.50
67	B1	2839	A	O4'-C1'-N9	11.09	117.07	108.20
21	A2	583	G	C1'-O4'-C4'	-11.09	101.03	109.90
35	BL	9	ARG	NE-CZ-NH1	11.09	125.84	120.30
67	B1	2701	U	O4'-C1'-N1	11.09	117.07	108.20
67	B1	153	U	O4'-C1'-N1	11.08	117.07	108.20
21	A2	94	C	N1-C1'-C2'	11.08	128.41	114.00
21	A2	1290	U	N1-C1'-C2'	11.08	128.41	114.00
21	A2	1336	U	N1-C1'-C2'	-11.08	99.59	114.00
27	A0	76	A	C3'-C2'-C1'	11.08	110.36	101.50
15	AE	137	ARG	NE-CZ-NH2	-11.08	114.76	120.30
52	BB	237	ARG	NE-CZ-NH1	11.07	125.84	120.30
67	B1	1256	G	C3'-C2'-C1'	-11.07	92.64	101.50
21	A2	1106	A	C3'-C2'-C1'	11.07	110.35	101.50
67	B1	1553	G	N9-C1'-C2'	-11.07	99.61	114.00
21	A2	495	G	O4'-C1'-N9	11.06	117.05	108.20
21	A2	1124	G	C3'-C2'-C1'	-11.06	92.65	101.50
67	B1	703	G	P-O3'-C3'	-11.06	106.42	119.70
67	B1	935	A	O4'-C1'-N9	11.06	117.05	108.20
67	B1	1068	U	C3'-C2'-C1'	11.06	110.35	101.50
21	A2	935	G	O4'-C1'-C2'	-11.06	94.74	105.80
21	A2	998	A	N1-C6-N6	11.05	125.23	118.60
67	B1	1257	G	C3'-C2'-C1'	-11.06	92.66	101.50
67	B1	2920	C	C3'-C2'-C1'	11.05	110.34	101.50
21	A2	171	U	O4'-C1'-N1	11.05	117.04	108.20
67	B1	582	A	O4'-C1'-C2'	-11.05	94.75	105.80
67	B1	925	U	O4'-C1'-N1	11.05	117.04	108.20
67	B1	441	A	N9-C1'-C2'	11.05	128.36	114.00
67	B1	642	G	O4'-C1'-N9	11.05	117.04	108.20
68	B3	25	A	N9-C1'-C2'	11.04	128.36	114.00
21	A2	727	G	O4'-C1'-N9	11.04	117.03	108.20
67	B1	326	C	O4'-C1'-N1	11.04	117.03	108.20
67	B1	1227	A	O4'-C1'-N9	11.04	117.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1864	G	C3'-C2'-C1'	-11.04	92.67	101.50
68	B3	107	G	N9-C1'-C2'	-11.04	99.65	114.00
60	BS	133	PHE	CB-CG-CD2	-11.03	113.08	120.80
68	B3	34	C	O4'-C1'-N1	11.03	117.03	108.20
21	A2	802	G	O4'-C1'-C2'	11.03	117.53	107.60
21	A2	1363	C	N1-C1'-C2'	11.03	128.33	114.00
67	B1	745	C	N1-C1'-C2'	11.02	128.33	114.00
67	B1	379	U	O4'-C1'-N1	11.02	117.01	108.20
67	B1	1176	C	O4'-C1'-N1	11.02	117.01	108.20
21	A2	980	C	N1-C1'-C2'	11.01	128.31	114.00
67	B1	1580	G	O4'-C1'-C2'	11.01	117.51	107.60
49	BQ	66	ARG	NE-CZ-NH2	-11.01	114.80	120.30
21	A2	440	C	C3'-C2'-C1'	11.00	110.30	101.50
67	B1	2254	U	C1'-O4'-C4'	11.00	118.70	109.90
67	B1	937	A	N9-C1'-C2'	11.00	128.30	114.00
21	A2	392	G	C3'-C2'-C1'	-10.99	92.70	101.50
33	BC	242	ARG	NE-CZ-NH2	-10.99	114.80	120.30
68	B3	98	G	O4'-C1'-N9	10.99	117.00	108.20
21	A2	695	G	O4'-C1'-N9	10.99	116.99	108.20
21	A2	1056	G	O4'-C1'-N9	10.99	116.99	108.20
21	A2	316	C	C3'-C2'-C1'	10.99	110.29	101.50
67	B1	1369	G	C1'-O4'-C4'	-10.99	101.11	109.90
67	B1	2702	A	N9-C1'-C2'	-10.99	99.72	114.00
67	B1	996	U	O4'-C1'-N1	10.98	116.99	108.20
67	B1	1787	U	N1-C1'-C2'	10.98	128.28	114.00
44	BW	45	ARG	NE-CZ-NH1	10.97	125.79	120.30
21	A2	44	C	C3'-C2'-C1'	10.97	110.28	101.50
67	B1	2646	A	O4'-C1'-N9	10.97	116.98	108.20
21	A2	1335	A	O4'-C1'-C2'	-10.97	94.83	105.80
36	Bf	34	ARG	CB-CA-C	-10.97	88.46	110.40
21	A2	1259	A	N9-C1'-C2'	10.97	128.26	114.00
67	B1	443	C	N1-C1'-C2'	10.97	128.26	114.00
21	A2	1490	C	P-O3'-C3'	-10.97	106.54	119.70
21	A2	1067	G	P-O3'-C3'	10.96	132.86	119.70
67	B1	1132	U	O4'-C1'-N1	10.96	116.97	108.20
67	B1	1270	G	N9-C1'-C2'	10.96	128.25	114.00
67	B1	1602	C	P-O3'-C3'	10.96	132.85	119.70
67	B1	2363	G	C1'-O4'-C4'	10.96	118.67	109.90
67	B1	2284	C	C3'-C2'-C1'	10.96	110.26	101.50
21	A2	789	G	O4'-C1'-N9	10.95	116.96	108.20
67	B1	393	C	O4'-C1'-C2'	-10.95	94.85	105.80
67	B1	822	A	C3'-C2'-C1'	10.95	110.26	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	BH	19	PRO	N-CD-CG	-10.95	86.78	103.20
67	B1	1580	G	O4'-C1'-N9	10.95	116.96	108.20
21	A2	88	G	C3'-C2'-C1'	10.95	110.26	101.50
21	A2	1088	U	O4'-C4'-C3'	-10.95	93.05	104.00
67	B1	53	A	O4'-C1'-N9	10.95	116.96	108.20
67	B1	1811	G	P-O3'-C3'	10.94	132.83	119.70
51	Bj	89	PHE	CB-CG-CD2	-10.94	113.14	120.80
67	B1	1773	C	O4'-C1'-C2'	-10.94	94.86	105.80
67	B1	1939	C	P-O3'-C3'	10.94	132.83	119.70
68	B3	8	C	O4'-C1'-N1	10.94	116.95	108.20
21	A2	988	A	P-O3'-C3'	10.94	132.82	119.70
11	A1	5	C	O4'-C1'-N1	10.93	116.94	108.20
67	B1	922	C	N1-C1'-C2'	10.93	128.21	114.00
21	A2	535	U	O4'-C1'-N1	10.93	116.94	108.20
23	AT	7	ARG	NE-CZ-NH1	10.93	125.76	120.30
43	Bk	36	TYR	CB-CG-CD2	-10.92	114.45	121.00
67	B1	1944	C	O4'-C1'-C2'	-10.92	94.88	105.80
28	B6	80	TYR	CB-CG-CD2	10.92	127.55	121.00
67	B1	1096	A	O4'-C1'-N9	10.92	116.94	108.20
21	A2	470	G	N9-C1'-C2'	-10.92	99.81	114.00
67	B1	1905	G	O4'-C1'-N9	10.91	116.93	108.20
67	B1	276	G	O4'-C1'-N9	10.91	116.93	108.20
67	B1	1222	U	C1'-O4'-C4'	-10.90	101.18	109.90
67	B1	2227	G	O4'-C1'-C2'	10.90	117.41	107.60
67	B1	2608	U	O4'-C1'-N1	10.90	116.92	108.20
67	B1	2285	G	O4'-C1'-N9	10.90	116.92	108.20
21	A2	826	C	O4'-C1'-N1	10.89	116.92	108.20
67	B1	1107	G	N9-C1'-C2'	10.89	128.16	114.00
67	B1	2571	G	C1'-O4'-C4'	10.89	118.61	109.90
67	B1	2797	C	O4'-C1'-N1	10.89	116.91	108.20
21	A2	505	U	O4'-C1'-N1	10.89	116.91	108.20
21	A2	1273	G	C1'-O4'-C4'	-10.89	101.19	109.90
67	B1	2419	U	O4'-C1'-N1	10.89	116.91	108.20
67	B1	206	A	C3'-C2'-C1'	10.88	110.20	101.50
67	B1	1163	U	C1'-O4'-C4'	10.88	118.60	109.90
67	B1	2914	U	N1-C1'-C2'	-10.88	99.86	114.00
67	B1	96	C	O3'-P-O5'	-10.88	83.33	104.00
11	A1	70	C	O4'-C1'-N1	10.88	116.90	108.20
67	B1	292	U	O4'-C1'-N1	10.87	116.90	108.20
67	B1	1891	C	C1'-O4'-C4'	-10.88	101.20	109.90
21	A2	389	G	O4'-C1'-N9	10.87	116.90	108.20
67	B1	2948	A	P-O3'-C3'	10.87	132.74	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BW	65	ARG	NE-CZ-NH2	-10.86	114.87	120.30
67	B1	42	G	N9-C1'-C2'	10.86	128.11	114.00
67	B1	2120	C	C3'-C2'-C1'	10.86	110.19	101.50
67	B1	1523	A	C1'-O4'-C4'	10.86	118.58	109.90
67	B1	2055	U	O4'-C1'-C2'	-10.85	94.95	105.80
67	B1	2302	C	P-O3'-C3'	-10.85	106.67	119.70
67	B1	2507	C	N1-C1'-C2'	-10.85	99.89	114.00
21	A2	694	U	C1'-O4'-C4'	10.85	118.58	109.90
67	B1	1228	G	O4'-C1'-N9	10.85	116.88	108.20
67	B1	1196	A	N9-C1'-C2'	-10.85	99.90	114.00
67	B1	2272	G	P-O3'-C3'	-10.85	106.69	119.70
67	B1	2061	A	C3'-C2'-C1'	10.84	110.17	101.50
67	B1	210	A	C3'-C2'-C1'	10.84	110.17	101.50
67	B1	1755	C	O4'-C1'-N1	10.84	116.87	108.20
67	B1	2065	C	N1-C1'-C2'	10.84	128.09	114.00
67	B1	2462	U	O4'-C1'-N1	10.84	116.87	108.20
21	A2	499	G	O4'-C1'-C2'	10.84	117.35	107.60
67	B1	452	A	O4'-C1'-C2'	10.83	117.35	107.60
67	B1	1339	C	O4'-C1'-N1	10.83	116.87	108.20
67	B1	2151	C	C1'-O4'-C4'	-10.83	101.23	109.90
67	B1	2237	A	N9-C1'-C2'	10.83	128.09	114.00
67	B1	2	G	O4'-C1'-N9	10.83	116.86	108.20
67	B1	18	C	O4'-C1'-N1	10.83	116.86	108.20
67	B1	1085	G	O3'-P-O5'	-10.82	83.44	104.00
67	B1	1690	U	O4'-C1'-N1	10.82	116.86	108.20
28	B6	77	ARG	NE-CZ-NH1	10.82	125.71	120.30
67	B1	1103	C	P-O5'-C5'	10.82	138.21	120.90
67	B1	1646	G	N9-C1'-C2'	-10.82	99.93	114.00
67	B1	2091	U	N1-C1'-C2'	10.82	128.06	114.00
67	B1	3029	A	O4'-C1'-N9	10.82	116.86	108.20
67	B1	444	U	P-O3'-C3'	10.82	132.68	119.70
68	B3	8	C	O4'-C1'-C2'	-10.81	94.99	105.80
67	B1	1196	A	C1'-O4'-C4'	10.81	118.55	109.90
67	B1	1301	G	C3'-C2'-C1'	-10.81	92.85	101.50
67	B1	2824	C	N1-C1'-C2'	10.81	128.06	114.00
21	A2	678	G	O4'-C1'-N9	10.80	116.84	108.20
21	A2	869	U	O4'-C1'-N1	10.80	116.84	108.20
67	B1	168	G	C1'-O4'-C4'	-10.80	101.26	109.90
67	B1	883	G	O4'-C1'-C2'	-10.80	95.00	105.80
67	B1	1805	U	O4'-C1'-N1	10.80	116.84	108.20
67	B1	1515	G	C1'-O4'-C4'	-10.79	101.27	109.90
32	BO	155	MET	CG-SD-CE	-10.79	82.93	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1459	A	O4'-C1'-N9	10.79	116.83	108.20
21	A2	1406	U	N1-C1'-C2'	-10.79	99.97	114.00
21	A2	236	C	O4'-C1'-C2'	-10.79	95.01	105.80
67	B1	2163	G	O4'-C1'-N9	10.79	116.83	108.20
21	A2	130	G	C1'-O4'-C4'	10.79	118.53	109.90
67	B1	119	U	P-O3'-C3'	10.79	132.64	119.70
67	B1	1251	G	C3'-C2'-C1'	10.78	110.12	101.50
21	A2	340	A	N9-C1'-C2'	-10.78	99.99	114.00
67	B1	85	G	C5'-C4'-C3'	10.78	133.25	116.00
21	A2	1312	C	C3'-C2'-C1'	10.78	110.12	101.50
21	A2	1440	G	N9-C1'-C2'	-10.78	99.99	114.00
67	B1	935	A	C1'-O4'-C4'	10.78	118.52	109.90
67	B1	2914	U	O4'-C1'-C2'	-10.78	95.02	105.80
67	B1	282	G	O4'-C1'-N9	10.77	116.82	108.20
67	B1	1534	G	O4'-C1'-N9	10.77	116.82	108.20
67	B1	94	A	O4'-C1'-C2'	-10.75	95.05	105.80
67	B1	716	U	C3'-C2'-C1'	10.75	110.10	101.50
8	AR	67	ARG	NE-CZ-NH1	10.75	125.68	120.30
67	B1	2937	U	O4'-C1'-N1	10.75	116.80	108.20
67	B1	2951	G	N9-C1'-C2'	10.75	127.98	114.00
67	B1	626	C	O4'-C1'-N1	10.74	116.80	108.20
67	B1	2409	C	N1-C1'-C2'	10.74	127.97	114.00
67	B1	2938	G	C3'-C2'-C1'	-10.74	92.91	101.50
67	B1	830	G	C1'-O4'-C4'	-10.74	101.31	109.90
67	B1	2897	C	C3'-C2'-C1'	10.74	110.09	101.50
67	B1	1604	G	C1'-O4'-C4'	-10.73	101.31	109.90
67	B1	2492	G	C3'-C2'-C1'	-10.73	92.92	101.50
21	A2	733	C	C3'-C2'-C1'	10.73	110.08	101.50
21	A2	427	G	O4'-C1'-N9	10.72	116.78	108.20
67	B1	1373	C	O4'-C1'-N1	10.72	116.78	108.20
21	A2	184	G	P-O3'-C3'	10.72	132.56	119.70
21	A2	806	G	C3'-C2'-C1'	10.72	110.08	101.50
67	B1	2818	C	N1-C1'-C2'	10.72	127.94	114.00
67	B1	1863	G	O4'-C1'-N9	10.72	116.77	108.20
21	A2	1395	G	O4'-C1'-N9	10.71	116.77	108.20
21	A2	849	U	N1-C1'-C2'	10.71	127.93	114.00
67	B1	975	C	C3'-C2'-C1'	10.71	110.07	101.50
21	A2	41	C	O4'-C1'-N1	10.71	116.77	108.20
21	A2	33	U	C3'-C2'-C1'	-10.71	92.94	101.50
67	B1	426	G	C1'-O4'-C4'	-10.71	101.33	109.90
21	A2	112	G	O4'-C1'-C2'	-10.71	95.09	105.80
67	B1	306	G	C3'-C2'-C1'	10.71	110.06	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	AB	38	ASP	CB-CG-OD2	-10.70	108.67	118.30
11	A1	75	C	O4'-C1'-N1	10.70	116.76	108.20
67	B1	2224	G	O4'-C1'-N9	10.71	116.76	108.20
21	A2	961	U	OP2-P-O3'	-10.70	81.66	105.20
68	B3	26	C	C1'-O4'-C4'	-10.70	101.34	109.90
67	B1	859	G	O4'-C1'-N9	10.70	116.76	108.20
64	Bc	17	GLN	CB-CA-C	-10.69	89.01	110.40
21	A2	1413	G	O4'-C1'-N9	10.69	116.75	108.20
53	BD	78	ARG	NE-CZ-NH2	-10.69	114.96	120.30
41	Ba	25	TRP	N-CA-CB	10.69	129.84	110.60
21	A2	889	G	O4'-C1'-N9	10.68	116.75	108.20
67	B1	2892	A	N9-C1'-C2'	10.68	127.89	114.00
67	B1	2892	A	C3'-C2'-C1'	10.68	110.04	101.50
21	A2	783	G	O4'-C1'-N9	10.68	116.74	108.20
67	B1	2500	G	N9-C1'-C2'	-10.68	100.12	114.00
68	B3	35	A	N9-C1'-C2'	-10.68	100.12	114.00
21	A2	510	A	C1'-O4'-C4'	10.67	118.44	109.90
21	A2	730	G	O4'-C1'-N9	10.67	116.74	108.20
21	A2	1115	G	C1'-O4'-C4'	-10.67	101.36	109.90
33	BC	339	ARG	NE-CZ-NH2	-10.67	114.96	120.30
67	B1	1406	G	N9-C1'-C2'	10.67	127.87	114.00
35	BL	11	LEU	CB-CA-C	-10.67	89.93	110.20
67	B1	143	C	O4'-C1'-C2'	-10.67	95.13	105.80
68	B3	41	A	N9-C1'-C2'	10.67	127.86	114.00
21	A2	546	G	C1'-O4'-C4'	-10.66	101.37	109.90
21	A2	1097	G	O4'-C1'-N9	10.66	116.73	108.20
21	A2	1101	G	C3'-C2'-C1'	-10.66	92.97	101.50
67	B1	2484	C	N1-C1'-C2'	10.66	127.86	114.00
21	A2	1029	G	C1'-O4'-C4'	10.66	118.43	109.90
67	B1	362	A	C1'-O4'-C4'	10.66	118.43	109.90
67	B1	1346	G	C1'-O4'-C4'	-10.66	101.37	109.90
67	B1	1957	U	O4'-C1'-N1	10.66	116.73	108.20
67	B1	1899	C	O4'-C1'-N1	10.66	116.73	108.20
21	A2	689	C	C3'-C2'-C1'	10.65	110.02	101.50
21	A2	1282	C	N1-C1'-C2'	10.65	127.85	114.00
67	B1	2596	G	O4'-C1'-C2'	10.65	117.19	107.60
33	BC	251	ARG	NE-CZ-NH1	10.65	125.62	120.30
67	B1	2991	C	O4'-C1'-N1	10.65	116.72	108.20
21	A2	207	G	O4'-C1'-N9	10.65	116.72	108.20
67	B1	344	G	C1'-O4'-C4'	-10.65	101.38	109.90
67	B1	2178	A	N9-C1'-C2'	10.64	127.83	114.00
67	B1	1674	G	O4'-C1'-N9	10.64	116.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2969	G	N9-C1'-C2'	10.64	127.83	114.00
68	B3	24	C	C3'-C2'-C1'	10.64	110.01	101.50
33	BC	8	ARG	NE-CZ-NH2	-10.63	114.98	120.30
67	B1	1129	G	O4'-C1'-N9	10.63	116.71	108.20
21	A2	1087	C	C3'-C2'-C1'	10.63	110.00	101.50
67	B1	2401	A	O4'-C1'-N9	10.63	116.70	108.20
67	B1	990	G	C1'-O4'-C4'	-10.62	101.40	109.90
21	A2	963	A	N1-C6-N6	10.62	124.97	118.60
67	B1	2919	C	O4'-C1'-N1	10.62	116.70	108.20
21	A2	406	U	O4'-C1'-N1	10.62	116.69	108.20
67	B1	394	A	C5'-C4'-C3'	10.62	132.99	116.00
21	A2	1372	C	C1'-O4'-C4'	-10.62	101.41	109.90
67	B1	795	G	C1'-O4'-C4'	-10.62	101.41	109.90
68	B3	60	C	O4'-C1'-N1	10.62	116.69	108.20
21	A2	1326	G	O4'-C1'-N9	10.61	116.69	108.20
67	B1	245	A	C3'-C2'-C1'	-10.61	93.01	101.50
28	AV	60	PHE	O-C-N	-10.61	105.16	123.20
67	B1	1090	G	O4'-C1'-C2'	10.61	117.15	107.60
67	B1	3043	C	C1'-O4'-C4'	10.61	118.39	109.90
67	B1	486	A	N9-C1'-C2'	-10.61	100.21	114.00
7	AB	188	PHE	CB-CG-CD2	10.60	128.22	120.80
67	B1	1234	A	O4'-C1'-N9	-10.60	99.72	108.20
67	B1	2670	U	C1'-O4'-C4'	10.60	118.38	109.90
67	B1	1289	C	N1-C1'-C2'	10.60	127.78	114.00
67	B1	847	A	O4'-C1'-C2'	-10.60	95.20	105.80
21	A2	1080	C	C3'-C2'-C1'	10.60	109.98	101.50
27	A0	66	C	O4'-C1'-C2'	-10.60	95.20	105.80
67	B1	394	A	O4'-C1'-N9	10.60	116.68	108.20
21	A2	262	G	O4'-C1'-N9	-10.59	99.73	108.20
67	B1	1322	G	O4'-C1'-C2'	10.59	117.13	107.60
67	B1	1000	G	O4'-C1'-C2'	10.59	117.13	107.60
15	AE	33	ARG	NE-CZ-NH2	-10.58	115.01	120.30
67	B1	2268	C	O4'-C1'-N1	10.58	116.67	108.20
67	B1	1678	A	C1'-O4'-C4'	10.58	118.36	109.90
21	A2	800	G	O4'-C1'-N9	10.57	116.66	108.20
21	A2	34	G	N9-C1'-C2'	-10.57	100.25	114.00
45	Bi	16	ARG	NE-CZ-NH2	-10.57	115.01	120.30
67	B1	1814	A	N9-C1'-C2'	10.57	127.75	114.00
67	B1	888	U	O4'-C1'-N1	10.57	116.66	108.20
67	B1	1698	G	P-O3'-C3'	-10.57	107.01	119.70
20	A3	6	TYR	CB-CG-CD2	-10.57	114.66	121.00
67	B1	374	C	O4'-C1'-C2'	-10.57	95.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2068	U	C1'-O4'-C4'	10.56	118.35	109.90
4	AG	77	ASP	CB-CG-OD1	10.56	127.81	118.30
21	A2	866	A	C1'-O4'-C4'	10.56	118.35	109.90
67	B1	1041	U	O4'-C1'-N1	10.56	116.65	108.20
67	B1	2587	G	C1'-O4'-C4'	-10.56	101.45	109.90
67	B1	1147	G	N9-C1'-C2'	10.56	127.72	114.00
67	B1	1324	G	O4'-C1'-C2'	-10.55	95.25	105.80
67	B1	1445	G	P-O3'-C3'	10.55	132.37	119.70
21	A2	717	C	N1-C1'-C2'	10.55	127.72	114.00
67	B1	1235	A	P-O3'-C3'	10.55	132.36	119.70
21	A2	1086	C	P-O3'-C3'	-10.55	107.04	119.70
67	B1	1511	C	N1-C1'-C2'	10.55	127.71	114.00
67	B1	2528	U	O4'-C1'-N1	10.55	116.64	108.20
67	B1	686	C	N1-C1'-C2'	10.55	127.71	114.00
67	B1	259	A	O4'-C1'-N9	10.54	116.64	108.20
67	B1	2294	A	O4'-C1'-N9	10.54	116.64	108.20
67	B1	1214	C	N1-C1'-C2'	10.54	127.71	114.00
21	A2	1264	G	O4'-C1'-C2'	10.53	117.08	107.60
21	A2	1329	C	N1-C1'-C2'	10.53	127.69	114.00
67	B1	48	G	O4'-C1'-N9	10.53	116.63	108.20
67	B1	3020	G	O4'-C1'-N9	10.53	116.62	108.20
21	A2	804	U	O4'-C1'-C2'	-10.53	95.27	105.80
20	BG	27	ARG	NE-CZ-NH2	-10.53	115.04	120.30
67	B1	767	G	C1'-O4'-C4'	-10.53	101.48	109.90
67	B1	876	C	O4'-C1'-C2'	-10.53	95.27	105.80
67	B1	2370	C	C1'-O4'-C4'	10.53	118.32	109.90
21	A2	1078	U	O4'-C1'-N1	10.52	116.62	108.20
67	B1	1363	C	C3'-C2'-C1'	10.52	109.92	101.50
67	B1	25	U	O4'-C1'-N1	10.52	116.62	108.20
67	B1	2310	G	O4'-C1'-N9	10.52	116.62	108.20
2	AK	20	ARG	NE-CZ-NH2	10.52	125.56	120.30
21	A2	402	G	C1'-O4'-C4'	-10.52	101.49	109.90
67	B1	2284	C	P-O3'-C3'	10.52	132.32	119.70
30	AU	5	TYR	CB-CG-CD1	10.52	127.31	121.00
14	AM	58	TYR	CB-CG-CD2	-10.51	114.69	121.00
52	BB	35	TYR	CB-CG-CD1	10.51	127.31	121.00
21	A2	135	U	N1-C1'-C2'	10.51	127.66	114.00
67	B1	2488	C	C3'-C2'-C1'	10.51	109.91	101.50
67	B1	1181	C	O4'-C1'-N1	10.51	116.61	108.20
3	AI	86	PHE	CB-CG-CD1	10.50	128.15	120.80
67	B1	2251	G	C1'-O4'-C4'	-10.50	101.50	109.90
67	B1	2466	C	N1-C1'-C2'	10.50	127.65	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	660	C	O3'-P-O5'	-10.50	84.05	104.00
21	A2	680	C	O4'-C1'-N1	10.50	116.60	108.20
31	BY	20	ARG	NE-CZ-NH1	-10.50	115.05	120.30
47	BI	46	PHE	CB-CG-CD2	10.50	128.15	120.80
67	B1	38	U	O4'-C1'-N1	10.50	116.60	108.20
67	B1	357	G	O4'-C1'-N9	10.50	116.60	108.20
67	B1	1439	G	N9-C1'-C2'	10.49	127.64	114.00
21	A2	1290	U	O4'-C1'-C2'	10.49	117.04	107.60
11	A1	61	U	C3'-C2'-C1'	10.49	109.89	101.50
21	A2	408	C	O4'-C1'-C2'	-10.49	95.31	105.80
21	A2	919	U	P-O3'-C3'	10.49	132.28	119.70
67	B1	2367	C	C3'-C2'-C1'	10.49	109.89	101.50
21	A2	1175	C	O4'-C1'-N1	10.48	116.59	108.20
67	B1	70	G	O4'-C1'-C2'	10.48	117.04	107.60
67	B1	1292	C	C3'-C2'-C1'	10.48	109.88	101.50
67	B1	2182	A	C1'-O4'-C4'	10.48	118.28	109.90
21	A2	462	A	O4'-C1'-N9	10.47	116.58	108.20
27	A0	54	U	O4'-C1'-N1	10.47	116.58	108.20
67	B1	2718	G	O4'-C1'-N9	10.47	116.58	108.20
67	B1	1565	G	O4'-C4'-C3'	-10.47	93.53	104.00
67	B1	1712	U	P-O3'-C3'	-10.47	107.14	119.70
67	B1	1973	U	O4'-C1'-N1	10.47	116.57	108.20
67	B1	2173	U	N1-C1'-C2'	10.47	127.61	114.00
10	AD	119	ARG	NE-CZ-NH1	10.46	125.53	120.30
21	A2	126	G	O4'-C1'-N9	10.46	116.57	108.20
21	A2	1289	G	O4'-C1'-N9	10.46	116.57	108.20
67	B1	113	C	N1-C1'-C2'	10.46	127.60	114.00
21	A2	1322	C	C3'-C2'-C1'	10.46	109.86	101.50
21	A2	1382	G	O4'-C1'-N9	10.46	116.56	108.20
67	B1	2195	G	O4'-C1'-C2'	10.45	117.01	107.60
21	A2	1173	A	N9-C1'-C2'	10.45	127.59	114.00
67	B1	2227	G	C1'-O4'-C4'	-10.45	101.54	109.90
21	A2	1263	C	N1-C1'-C2'	10.45	127.58	114.00
21	A2	6	G	N9-C1'-C2'	10.44	127.57	114.00
36	Bf	2	ALA	N-CA-CB	-10.44	95.48	110.10
21	A2	77	G	O4'-C1'-N9	10.44	116.55	108.20
51	Bj	33	LEU	CA-CB-CG	10.44	139.31	115.30
21	A2	1169	C	C3'-C2'-C1'	10.44	109.85	101.50
21	A2	1175	C	N1-C1'-C2'	10.44	127.56	114.00
67	B1	1621	G	O4'-C1'-N9	10.44	116.55	108.20
21	A2	360	A	P-O3'-C3'	10.43	132.22	119.70
21	A2	394	C	O4'-C1'-N1	10.43	116.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1264	G	C1'-O4'-C4'	-10.43	101.56	109.90
67	B1	349	A	C3'-C2'-C1'	10.43	109.84	101.50
15	AE	158	TYR	CB-CG-CD2	-10.43	114.74	121.00
67	B1	1822	G	O4'-C1'-N9	10.43	116.54	108.20
21	A2	1179	C	C3'-C2'-C1'	10.43	109.84	101.50
67	B1	116	G	N9-C1'-C2'	10.43	127.56	114.00
67	B1	769	G	C1'-O4'-C4'	-10.43	101.56	109.90
67	B1	2115	U	O4'-C1'-N1	10.43	116.54	108.20
67	B1	2427	C	C3'-C2'-C1'	10.43	109.84	101.50
67	B1	409	C	C1'-O4'-C4'	-10.42	101.56	109.90
21	A2	108	G	O4'-C1'-C2'	10.42	116.98	107.60
67	B1	2937	U	O4'-C1'-C2'	-10.42	95.38	105.80
20	BG	79	TYR	CB-CG-CD2	-10.42	114.75	121.00
67	B1	1071	A	P-O3'-C3'	10.42	132.20	119.70
67	B1	1316	U	O4'-C1'-N1	10.42	116.53	108.20
21	A2	173	G	O4'-C1'-N9	10.41	116.53	108.20
67	B1	374	C	C3'-C2'-C1'	10.41	109.83	101.50
67	B1	1559	A	O4'-C1'-N9	-10.41	99.87	108.20
21	A2	1150	G	P-O3'-C3'	10.41	132.19	119.70
67	B1	275	C	O4'-C1'-N1	10.41	116.53	108.20
67	B1	1907	G	C3'-C2'-C1'	-10.41	93.17	101.50
21	A2	1328	G	O4'-C1'-C2'	10.41	116.97	107.60
67	B1	1035	G	O4'-C1'-N9	10.41	116.53	108.20
67	B1	1253	U	O4'-C1'-C2'	-10.40	95.40	105.80
67	B1	2742	G	N1-C6-O6	10.40	126.14	119.90
67	B1	1902	G	C1'-O4'-C4'	-10.40	101.58	109.90
16	AJ	73	ARG	NE-CZ-NH2	-10.39	115.10	120.30
21	A2	951	G	O4'-C1'-N9	10.39	116.52	108.20
67	B1	2370	C	P-O3'-C3'	10.39	132.17	119.70
50	BV	40	TYR	CB-CG-CD2	10.39	127.23	121.00
67	B1	2924	G	N9-C1'-C2'	-10.39	100.50	114.00
67	B1	648	C	O4'-C1'-N1	10.38	116.51	108.20
67	B1	1735	G	O4'-C1'-C2'	-10.38	95.42	105.80
67	B1	2926	G	C1'-O4'-C4'	-10.38	101.59	109.90
67	B1	1084	G	C3'-C2'-C1'	10.38	109.80	101.50
67	B1	825	C	O4'-C1'-C2'	-10.38	95.42	105.80
67	B1	1867	C	N1-C1'-C2'	10.38	127.49	114.00
67	B1	2047	U	C3'-C2'-C1'	10.38	109.80	101.50
68	B3	96	C	C3'-C2'-C1'	10.37	109.80	101.50
21	A2	424	U	C3'-C2'-C1'	-10.37	93.20	101.50
67	B1	1976	C	C3'-C2'-C1'	10.37	109.79	101.50
21	A2	1154	G	O4'-C1'-C2'	10.36	116.93	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1700	U	O4'-C1'-N1	10.36	116.49	108.20
67	B1	2514	C	P-O3'-C3'	-10.36	107.27	119.70
21	A2	926	C	N1-C1'-C2'	10.36	127.47	114.00
21	A2	1204	C	C3'-C2'-C1'	10.36	109.79	101.50
67	B1	2463	G	N9-C1'-C2'	10.36	127.46	114.00
67	B1	502	G	N9-C1'-C2'	-10.35	100.54	114.00
21	A2	721	A	O4'-C1'-N9	10.35	116.48	108.20
21	A2	1248	A	O4'-C1'-C2'	-10.35	95.45	105.80
67	B1	1644	G	C1'-O4'-C4'	10.35	118.18	109.90
67	B1	1722	G	C3'-C2'-C1'	10.35	109.78	101.50
67	B1	347	G	C1'-O4'-C4'	-10.35	101.62	109.90
6	AC	47	PHE	CB-CG-CD2	-10.34	113.56	120.80
67	B1	420	U	O4'-C1'-N1	10.34	116.47	108.20
21	A2	246	A	O4'-C1'-C2'	-10.34	95.46	105.80
38	Bb	34	PHE	CB-CG-CD2	-10.33	113.57	120.80
67	B1	887	U	C1'-O4'-C4'	10.33	118.16	109.90
21	A2	1317	G	N9-C1'-C2'	10.33	127.43	114.00
21	A2	369	A	C3'-C2'-C1'	10.32	109.76	101.50
21	A2	885	G	O4'-C1'-N9	10.32	116.46	108.20
21	A2	1242	C	C1'-O4'-C4'	-10.32	101.64	109.90
21	A2	745	G	O4'-C1'-N9	10.32	116.45	108.20
21	A2	1100	G	O4'-C1'-N9	-10.32	99.94	108.20
67	B1	1919	A	O4'-C1'-N9	10.31	116.45	108.20
21	A2	1273	G	N9-C1'-C2'	10.31	127.40	114.00
67	B1	1233	U	O4'-C1'-N1	10.31	116.45	108.20
67	B1	2587	G	O4'-C1'-N9	-10.31	99.95	108.20
67	B1	63	A	O4'-C1'-C2'	-10.30	95.50	105.80
67	B1	697	U	O4'-C1'-N1	10.30	116.44	108.20
21	A2	734	G	O4'-C1'-N9	10.30	116.44	108.20
21	A2	267	C	C3'-C2'-C1'	10.29	109.74	101.50
21	A2	368	C	C3'-C2'-C1'	10.29	109.73	101.50
21	A2	1151	A	N9-C1'-C2'	10.29	127.38	114.00
36	Bf	22	ARG	NE-CZ-NH1	10.30	125.45	120.30
67	B1	2418	G	P-O3'-C3'	10.30	132.06	119.70
67	B1	2632	C	C1'-O4'-C4'	10.29	118.14	109.90
21	A2	687	G	N9-C1'-C2'	10.29	127.38	114.00
21	A2	785	U	O4'-C1'-N1	10.29	116.43	108.20
67	B1	133	G	O4'-C1'-N9	10.29	116.43	108.20
67	B1	1547	U	C1'-O4'-C4'	10.29	118.13	109.90
67	B1	1465	A	C1'-O4'-C4'	10.29	118.13	109.90
15	AE	184	TYR	CB-CG-CD2	10.28	127.17	121.00
21	A2	132	G	O4'-C1'-N9	10.28	116.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	473	A	C1'-O4'-C4'	-10.28	101.67	109.90
67	B1	176	G	O4'-C1'-N9	10.28	116.42	108.20
68	B3	48	A	P-O3'-C3'	10.28	132.04	119.70
21	A2	261	G	O4'-C1'-N9	10.28	116.42	108.20
21	A2	18	C	N1-C1'-C2'	10.28	127.36	114.00
21	A2	747	U	O4'-C1'-N1	10.28	116.42	108.20
21	A2	949	G	C3'-C2'-C1'	-10.28	93.28	101.50
24	AA	146	TYR	CB-CG-CD1	-10.28	114.83	121.00
60	BS	26	ARG	NE-CZ-NH2	-10.28	115.16	120.30
60	BS	82	ARG	NE-CZ-NH1	-10.28	115.16	120.30
49	BQ	126	ARG	NE-CZ-NH2	10.27	125.44	120.30
27	A0	33	U	O4'-C1'-N1	10.27	116.42	108.20
67	B1	2349	U	O4'-C1'-N1	10.27	116.42	108.20
67	B1	495	U	O4'-C1'-N1	10.27	116.41	108.20
67	B1	2121	C	O4'-C1'-C2'	-10.27	95.53	105.80
67	B1	2516	G	N9-C1'-C2'	10.27	127.35	114.00
67	B1	2802	G	O4'-C1'-N9	10.27	116.41	108.20
67	B1	2544	C	N1-C1'-C2'	10.26	127.34	114.00
21	A2	943	C	N1-C1'-C2'	10.26	127.34	114.00
14	AM	103	ARG	NE-CZ-NH1	10.26	125.43	120.30
21	A2	1421	C	O4'-C1'-N1	10.26	116.41	108.20
67	B1	1040	C	C3'-C2'-C1'	10.25	109.70	101.50
67	B1	2542	G	O4'-C1'-N9	10.25	116.40	108.20
8	AR	54	TYR	CB-CG-CD2	10.25	127.15	121.00
21	A2	754	G	N9-C1'-C2'	10.25	127.32	114.00
21	A2	1391	U	P-O3'-C3'	10.25	132.00	119.70
67	B1	137	A	C3'-C2'-C1'	10.25	109.70	101.50
67	B1	748	G	O4'-C1'-N9	10.25	116.40	108.20
67	B1	2434	A	O4'-C1'-N9	-10.25	100.00	108.20
67	B1	2455	G	O4'-C1'-N9	10.25	116.40	108.20
67	B1	2503	C	C3'-C2'-C1'	10.24	109.69	101.50
21	A2	750	C	C3'-C2'-C1'	10.24	109.69	101.50
67	B1	2119	C	O4'-C1'-C2'	-10.24	95.56	105.80
67	B1	996	U	C1'-O4'-C4'	10.23	118.09	109.90
67	B1	2881	G	C1'-O4'-C4'	-10.23	101.71	109.90
21	A2	244	G	P-O3'-C3'	-10.23	107.42	119.70
67	B1	2875	C	N1-C1'-C2'	10.23	127.30	114.00
67	B1	1469	U	O4'-C1'-N1	10.23	116.38	108.20
67	B1	3048	C	N1-C1'-C2'	10.23	127.30	114.00
67	B1	393	C	N1-C1'-C2'	10.23	127.30	114.00
8	AR	44	ARG	NE-CZ-NH2	-10.23	115.19	120.30
67	B1	794	G	C3'-C2'-C1'	-10.23	93.32	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	764	G	N9-C1'-C2'	-10.22	100.71	114.00
67	B1	799	C	O4'-C1'-N1	10.22	116.38	108.20
21	A2	877	A	C3'-C2'-C1'	10.22	109.68	101.50
67	B1	2347	G	O4'-C1'-N9	10.22	116.38	108.20
33	BC	276	PHE	CB-CG-CD2	10.22	127.95	120.80
67	B1	2476	A	O4'-C1'-N9	-10.22	100.03	108.20
67	B1	152	G	P-O3'-C3'	10.22	131.96	119.70
67	B1	1368	A	C1'-O4'-C4'	10.22	118.07	109.90
67	B1	2269	C	O4'-C1'-C2'	-10.21	95.58	105.80
21	A2	1165	U	O4'-C1'-N1	10.21	116.37	108.20
8	AR	54	TYR	CB-CG-CD1	-10.21	114.87	121.00
18	AF	8	TYR	CB-CG-CD1	10.21	127.13	121.00
61	Bd	28	ARG	NE-CZ-NH2	-10.21	115.19	120.30
67	B1	2165	A	N1-C6-N6	10.21	124.73	118.60
21	A2	422	U	N1-C1'-C2'	-10.21	100.73	114.00
21	A2	505	U	C1'-O4'-C4'	10.21	118.06	109.90
40	BE	107	PHE	CB-CG-CD2	-10.21	113.66	120.80
67	B1	938	U	O4'-C1'-N1	10.20	116.36	108.20
21	A2	942	A	O4'-C1'-C2'	10.20	116.78	107.60
21	A2	1064	C	N1-C1'-C2'	10.20	127.26	114.00
49	BQ	121	ARG	NE-CZ-NH2	-10.20	115.20	120.30
67	B1	2239	C	N1-C1'-C2'	10.20	127.26	114.00
6	AC	20	PHE	CB-CG-CD2	-10.20	113.66	120.80
21	A2	626	G	N9-C1'-C2'	-10.20	100.74	114.00
21	A2	1043	U	C1'-O4'-C4'	10.20	118.06	109.90
21	A2	439	G	C4'-C3'-C2'	10.19	112.79	102.60
21	A2	1229	A	O4'-C1'-N9	10.19	116.35	108.20
67	B1	2970	U	P-O3'-C3'	10.19	131.93	119.70
67	B1	2686	A	P-O3'-C3'	10.19	131.92	119.70
67	B1	719	C	C1'-O4'-C4'	-10.18	101.75	109.90
67	B1	68	G	C3'-C2'-C1'	10.18	109.64	101.50
15	AE	204	ARG	NE-CZ-NH1	10.18	125.39	120.30
21	A2	199	A	P-O3'-C3'	10.18	131.91	119.70
67	B1	1944	C	C1'-O4'-C4'	10.18	118.04	109.90
67	B1	1157	U	O4'-C1'-C2'	-10.18	95.62	105.80
21	A2	1439	G	O4'-C1'-N9	10.17	116.34	108.20
21	A2	1142	G	O4'-C1'-N9	-10.17	100.06	108.20
67	B1	894	C	C3'-C2'-C1'	10.17	109.64	101.50
21	A2	746	A	N9-C1'-C2'	-10.17	100.78	114.00
67	B1	740	C	N1-C1'-C2'	10.17	127.22	114.00
21	A2	1172	A	O4'-C1'-N9	10.17	116.33	108.20
23	AT	28	PHE	CB-CG-CD1	-10.17	113.68	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1223	A	O4'-C1'-C2'	-10.17	95.63	105.80
21	A2	802	G	C1'-O4'-C4'	-10.16	101.77	109.90
67	B1	2543	A	N9-C1'-C2'	-10.16	100.79	114.00
68	B3	49	A	O4'-C1'-C2'	-10.16	95.64	105.80
21	A2	268	C	C3'-C2'-C1'	10.16	109.63	101.50
21	A2	1217	C	C3'-C2'-C1'	10.16	109.62	101.50
67	B1	1767	C	C1'-O4'-C4'	-10.15	101.78	109.90
67	B1	2069	G	C1'-O4'-C4'	-10.15	101.78	109.90
68	B3	98	G	C1'-O4'-C4'	10.15	118.02	109.90
47	BI	49	TYR	CB-CG-CD1	10.15	127.09	121.00
62	BN	82	TYR	CB-CG-CD2	-10.15	114.91	121.00
67	B1	1916	U	O4'-C1'-N1	10.15	116.32	108.20
67	B1	2593	A	O4'-C1'-N9	10.15	116.32	108.20
21	A2	674	C	O4'-C1'-C2'	-10.14	95.66	105.80
67	B1	1379	A	O4'-C1'-C2'	-10.14	95.66	105.80
21	A2	680	C	O4'-C1'-C2'	-10.14	95.66	105.80
67	B1	50	C	C1'-O4'-C4'	10.14	118.02	109.90
67	B1	1674	G	C3'-C2'-C1'	-10.14	93.39	101.50
21	A2	774	U	N1-C1'-C2'	10.14	127.18	114.00
21	A2	1156	A	P-O3'-C3'	10.14	131.87	119.70
67	B1	1726	A	C1'-O4'-C4'	10.14	118.01	109.90
21	A2	657	A	O4'-C1'-N9	10.14	116.31	108.20
67	B1	963	G	N9-C1'-C2'	10.14	127.18	114.00
67	B1	2195	G	C1'-O4'-C4'	-10.14	101.79	109.90
67	B1	2390	G	O4'-C1'-N9	10.14	116.31	108.20
21	A2	1155	U	C3'-C2'-C1'	10.13	109.61	101.50
17	AO	115	TYR	CB-CG-CD2	-10.13	114.92	121.00
15	AE	8	ARG	NE-CZ-NH1	-10.13	115.23	120.30
67	B1	220	C	P-O3'-C3'	10.13	131.85	119.70
67	B1	426	G	N9-C1'-C2'	10.13	127.17	114.00
67	B1	517	A	C1'-O4'-C4'	10.13	118.00	109.90
67	B1	2892	A	O4'-C1'-N9	-10.13	100.10	108.20
21	A2	20	G	O4'-C1'-N9	10.13	116.30	108.20
21	A2	1217	C	O4'-C1'-N1	-10.12	100.10	108.20
58	BP	117	ARG	NE-CZ-NH1	10.12	125.36	120.30
67	B1	1317	G	C3'-C2'-C1'	-10.12	93.40	101.50
67	B1	754	U	C3'-C2'-C1'	-10.12	93.40	101.50
67	B1	1037	C	O4'-C1'-N1	10.12	116.30	108.20
38	Bb	79	TYR	CB-CG-CD1	-10.12	114.93	121.00
67	B1	3036	C	O4'-C4'-C3'	-10.12	93.88	104.00
68	B3	15	G	O4'-C1'-N9	10.12	116.29	108.20
21	A2	848	G	O4'-C1'-N9	10.12	116.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1099	A	O4'-C1'-N9	10.11	116.29	108.20
67	B1	1887	A	C3'-C2'-C1'	10.11	109.59	101.50
67	B1	2257	A	N9-C1'-C2'	-10.11	100.85	114.00
16	AJ	79	ARG	NE-CZ-NH1	10.11	125.36	120.30
67	B1	1559	A	C3'-C2'-C1'	10.11	109.59	101.50
21	A2	110	C	C3'-C2'-C1'	10.11	109.59	101.50
21	A2	1171	G	C3'-C2'-C1'	10.11	109.58	101.50
67	B1	778	A	N9-C1'-C2'	10.11	127.14	114.00
67	B1	2040	A	C1'-O4'-C4'	10.11	117.98	109.90
21	A2	946	G	O4'-C1'-N9	10.10	116.28	108.20
21	A2	575	A	C1'-O4'-C4'	10.10	117.98	109.90
60	BS	131	ARG	NE-CZ-NH1	10.10	125.35	120.30
25	AH	48	HIS	C-N-CA	10.10	143.50	122.30
67	B1	2186	C	O4'-C1'-N1	10.09	116.27	108.20
68	B3	71	G	C3'-C2'-C1'	-10.09	93.43	101.50
67	B1	556	G	O4'-C1'-N9	10.09	116.27	108.20
21	A2	392	G	C1'-O4'-C4'	-10.09	101.83	109.90
67	B1	1804	G	N9-C1'-C2'	10.09	127.11	114.00
68	B3	45	C	O4'-C1'-C2'	-10.08	95.72	105.80
67	B1	1326	U	O4'-C1'-N1	10.08	116.27	108.20
21	A2	434	A	C5'-C4'-C3'	-10.08	99.87	116.00
67	B1	974	U	C3'-C2'-C1'	10.08	109.56	101.50
21	A2	116	C	C3'-C2'-C1'	10.08	109.56	101.50
67	B1	1228	G	O4'-C1'-C2'	-10.08	95.72	105.80
67	B1	2184	G	O4'-C1'-N9	10.08	116.26	108.20
67	B1	1501	G	C1'-O4'-C4'	-10.08	101.84	109.90
67	B1	2864	G	O4'-C1'-N9	10.08	116.26	108.20
28	B6	24	TYR	CB-CG-CD1	10.07	127.05	121.00
67	B1	569	G	C3'-C2'-C1'	10.07	109.56	101.50
67	B1	428	A	N9-C1'-C2'	-10.07	100.91	114.00
67	B1	2581	G	O4'-C1'-N9	10.07	116.26	108.20
67	B1	1090	G	C1'-O4'-C4'	-10.06	101.85	109.90
67	B1	1347	U	P-O3'-C3'	10.06	131.78	119.70
67	B1	1739	U	P-O3'-C3'	10.06	131.78	119.70
21	A2	1106	A	O4'-C1'-C2'	-10.06	95.74	105.80
4	AG	102	ARG	NE-CZ-NH1	-10.06	115.27	120.30
67	B1	1230	G	C1'-O4'-C4'	-10.06	101.85	109.90
67	B1	605	A	C1'-O4'-C4'	10.06	117.95	109.90
67	B1	1865	U	N1-C1'-C2'	-10.06	100.92	114.00
67	B1	2210	G	O4'-C1'-C2'	10.05	116.65	107.60
67	B1	2382	A	O4'-C1'-C2'	-10.05	95.75	105.80
67	B1	2725	U	C3'-C2'-C1'	10.05	109.54	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2562	G	P-O3'-C3'	10.05	131.76	119.70
21	A2	1100	G	C1'-O4'-C4'	-10.05	101.86	109.90
21	A2	437	A	N9-C1'-C2'	10.04	127.06	114.00
67	B1	1097	G	O5'-C5'-C4'	10.04	130.79	111.70
11	A1	76	C	C3'-C2'-C1'	10.04	109.53	101.50
21	A2	47	A	P-O3'-C3'	10.04	131.75	119.70
21	A2	467	G	C1'-O4'-C4'	-10.04	101.87	109.90
21	A2	1457	A	C3'-C2'-C1'	10.04	109.53	101.50
67	B1	923	A	C1'-O4'-C4'	10.04	117.93	109.90
21	A2	147	A	C3'-C2'-C1'	10.04	109.53	101.50
52	BB	25	ARG	NE-CZ-NH2	10.04	125.32	120.30
67	B1	962	C	N1-C1'-C2'	10.04	127.05	114.00
49	BQ	61	TYR	CB-CG-CD1	-10.03	114.98	121.00
67	B1	1487	U	O4'-C1'-N1	10.03	116.22	108.20
67	B1	2650	G	N9-C1'-C2'	10.03	127.04	114.00
67	B1	2694	C	N1-C1'-C2'	10.03	127.04	114.00
67	B1	732	G	N9-C1'-C2'	10.03	127.04	114.00
21	A2	689	C	O4'-C1'-C2'	-10.03	95.77	105.80
67	B1	1080	G	O4'-C1'-N9	10.03	116.22	108.20
67	B1	1602	C	O4'-C1'-N1	10.03	116.22	108.20
67	B1	1826	G	O4'-C1'-N9	10.03	116.22	108.20
67	B1	1571	G	C5'-C4'-C3'	10.03	132.04	116.00
67	B1	1612	G	P-O5'-C5'	10.03	136.94	120.90
67	B1	2592	U	N1-C1'-C2'	10.03	127.03	114.00
67	B1	1895	G	O4'-C1'-N9	10.02	116.22	108.20
67	B1	2912	G	C1'-O4'-C4'	10.02	117.92	109.90
67	B1	2967	C	C1'-O4'-C4'	-10.02	101.88	109.90
67	B1	1504	C	N1-C1'-C2'	10.02	127.03	114.00
67	B1	1622	G	C1'-O4'-C4'	10.02	117.92	109.90
67	B1	2517	U	C3'-C2'-C1'	10.02	109.52	101.50
11	A1	40	U	O4'-C1'-N1	10.02	116.21	108.20
21	A2	526	A	N9-C1'-C2'	10.02	127.02	114.00
21	A2	284	A	O4'-C1'-C2'	-10.02	95.78	105.80
67	B1	256	G	O4'-C1'-N9	10.02	116.21	108.20
67	B1	2012	G	C3'-C2'-C1'	-10.02	93.49	101.50
67	B1	2830	C	O4'-C1'-N1	10.01	116.21	108.20
21	A2	1115	G	C3'-C2'-C1'	-10.01	93.49	101.50
67	B1	2585	G	O4'-C1'-C2'	10.01	116.61	107.60
21	A2	1081	C	O4'-C1'-C2'	-10.01	95.80	105.80
67	B1	417	C	O4'-C1'-N1	10.00	116.20	108.20
21	A2	423	U	C1'-O4'-C4'	10.00	117.90	109.90
67	B1	2011	U	O4'-C1'-C2'	-10.00	95.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2178	A	C3'-C2'-C1'	10.00	109.50	101.50
67	B1	2764	G	O4'-C1'-C2'	10.00	116.60	107.60
21	A2	357	C	N1-C1'-C2'	10.00	127.00	114.00
67	B1	2819	C	N1-C1'-C2'	10.00	127.00	114.00
21	A2	513	A	C3'-C2'-C1'	9.99	109.50	101.50
28	AV	60	PHE	CB-CG-CD2	-9.99	113.80	120.80
67	B1	1480	G	O4'-C1'-C2'	-9.99	95.81	105.80
21	A2	117	C	C3'-C2'-C1'	9.99	109.49	101.50
21	A2	915	U	O4'-C1'-N1	9.99	116.19	108.20
67	B1	1335	C	N1-C1'-C2'	9.99	126.99	114.00
67	B1	1872	G	O4'-C1'-N9	9.99	116.19	108.20
67	B1	2266	C	C3'-C2'-C1'	9.99	109.50	101.50
2	AK	10	ARG	NE-CZ-NH1	9.99	125.30	120.30
67	B1	2680	A	C1'-O4'-C4'	9.99	117.89	109.90
67	B1	1747	C	N1-C1'-C2'	9.99	126.98	114.00
21	A2	1017	U	C3'-C2'-C1'	9.98	109.49	101.50
67	B1	1363	C	O4'-C1'-C2'	-9.98	95.81	105.80
21	A2	580	G	C3'-C2'-C1'	-9.98	93.52	101.50
21	A2	709	G	O4'-C1'-C2'	-9.98	95.82	105.80
67	B1	412	G	O4'-C1'-N9	-9.98	100.21	108.20
67	B1	487	U	O4'-C1'-N1	9.98	116.19	108.20
21	A2	1124	G	C1'-O4'-C4'	-9.98	101.92	109.90
67	B1	2865	C	C1'-O4'-C4'	-9.98	101.92	109.90
67	B1	1326	U	N1-C1'-C2'	-9.98	101.03	112.00
21	A2	1472	G	O4'-C1'-N9	9.97	116.18	108.20
67	B1	879	A	O4'-C1'-N9	9.97	116.18	108.20
68	B3	46	G	O4'-C1'-N9	9.97	116.18	108.20
21	A2	1013	G	N1-C6-O6	9.97	125.88	119.90
21	A2	1362	C	O4'-C1'-C2'	-9.97	95.83	105.80
67	B1	1557	G	O4'-C1'-N9	9.97	116.18	108.20
21	A2	721	A	C1'-O4'-C4'	9.97	117.88	109.90
27	A0	19	G	O4'-C1'-N9	9.97	116.17	108.20
67	B1	327	G	O4'-C1'-N9	9.97	116.17	108.20
21	A2	111	G	O4'-C1'-N9	9.96	116.17	108.20
21	A2	400	G	O4'-C1'-N9	9.96	116.17	108.20
21	A2	528	G	P-O3'-C3'	9.97	131.66	119.70
18	AF	5	TRP	CA-CB-CG	9.96	132.63	113.70
21	A2	26	A	P-O5'-C5'	9.96	136.84	120.90
67	B1	1400	U	O4'-C1'-N1	9.96	116.17	108.20
67	B1	3033	G	C1'-O4'-C4'	-9.96	101.93	109.90
67	B1	2662	G	O4'-C1'-C2'	9.96	116.56	107.60
67	B1	2988	A	C1'-O4'-C4'	9.96	117.87	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	942	A	O4'-C1'-N9	9.96	116.16	108.20
67	B1	905	G	C1'-O4'-C4'	-9.96	101.94	109.90
67	B1	1484	U	P-O5'-C5'	9.96	136.83	120.90
68	B3	67	U	O4'-C1'-C2'	-9.95	95.85	105.80
67	B1	1342	G	O4'-C1'-N9	9.95	116.16	108.20
67	B1	1513	G	C3'-C2'-C1'	-9.95	93.54	101.50
21	A2	794	A	C1'-O4'-C4'	-9.95	101.94	109.90
67	B1	426	G	O4'-C1'-C2'	9.95	116.56	107.60
27	A0	41	C	N1-C1'-C2'	9.95	126.93	114.00
67	B1	817	G	O4'-C1'-N9	-9.95	100.24	108.20
67	B1	1869	U	O4'-C1'-N1	9.95	116.16	108.20
67	B1	1263	C	N1-C1'-C2'	9.95	126.93	114.00
21	A2	192	G	O4'-C1'-C2'	9.94	116.55	107.60
21	A2	598	U	O4'-C1'-N1	9.95	116.16	108.20
53	BD	180	ARG	NE-CZ-NH1	9.95	125.27	120.30
67	B1	2206	G	C1'-O4'-C4'	-9.95	101.94	109.90
21	A2	904	G	O4'-C1'-C2'	-9.94	95.86	105.80
21	A2	1035	C	N1-C1'-C2'	9.94	126.93	114.00
67	B1	1632	U	O4'-C1'-N1	9.94	116.15	108.20
67	B1	1220	U	O4'-C1'-N1	9.94	116.15	108.20
67	B1	2152	G	C1'-O4'-C4'	9.94	117.85	109.90
21	A2	705	C	C3'-C2'-C1'	9.94	109.45	101.50
21	A2	847	A	O4'-C1'-C2'	9.94	116.54	107.60
52	BB	54	ARG	NE-CZ-NH2	-9.93	115.34	120.30
67	B1	638	A	N1-C6-N6	9.93	124.56	118.60
67	B1	1547	U	O4'-C1'-C2'	-9.93	95.87	105.80
21	A2	328	G	C4'-C3'-C2'	-9.93	92.67	102.60
67	B1	406	G	P-O3'-C3'	9.93	131.61	119.70
67	B1	696	G	O4'-C1'-N9	9.92	116.14	108.20
11	A1	25	G	O4'-C1'-C2'	-9.92	95.88	105.80
11	A1	53	G	O4'-C1'-N9	9.92	116.14	108.20
21	A2	309	A	O4'-C1'-C2'	-9.92	95.88	105.80
67	B1	1346	G	O4'-C1'-N9	9.92	116.14	108.20
67	B1	2099	G	O4'-C1'-C2'	9.92	116.53	107.60
67	B1	1200	A	O4'-C1'-C2'	-9.92	95.88	105.80
67	B1	1385	C	O4'-C1'-N1	9.92	116.14	108.20
10	AD	27	ARG	NE-CZ-NH2	9.92	125.26	120.30
11	A1	21	G	O4'-C1'-N9	9.92	116.13	108.20
59	BM	71	ARG	NE-CZ-NH2	9.92	125.26	120.30
67	B1	1682	C	N1-C1'-C2'	9.92	126.89	114.00
67	B1	3022	C	C1'-O4'-C4'	-9.92	101.97	109.90
21	A2	1042	U	O4'-C1'-N1	9.91	116.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	478	C	C3'-C2'-C1'	9.91	109.43	101.50
67	B1	1080	G	N9-C1'-C2'	-9.91	101.09	112.00
67	B1	2024	A	O4'-C1'-C2'	-9.91	95.89	105.80
67	B1	1806	C	O4'-C1'-N1	9.91	116.13	108.20
21	A2	424	U	O4'-C1'-C2'	9.90	116.52	107.60
54	BF	37	ARG	NE-CZ-NH1	9.90	125.25	120.30
67	B1	436	C	C3'-C2'-C1'	9.90	109.42	101.50
67	B1	1601	G	O3'-P-O5'	-9.90	85.18	104.00
67	B1	2529	G	N9-C1'-C2'	9.90	126.88	114.00
21	A2	540	G	N9-C1'-C2'	-9.90	101.11	112.00
67	B1	2428	C	O4'-C1'-N1	9.90	116.12	108.20
67	B1	544	A	C3'-C2'-C1'	9.90	109.42	101.50
67	B1	1048	C	C1'-O4'-C4'	-9.90	101.98	109.90
67	B1	2417	G	O4'-C1'-N9	9.90	116.12	108.20
67	B1	1958	A	C1'-O4'-C4'	9.90	117.82	109.90
21	A2	728	G	O4'-C1'-N9	9.90	116.12	108.20
67	B1	2612	A	O4'-C1'-C2'	-9.90	95.90	105.80
67	B1	2190	A	O4'-C1'-N9	9.90	116.12	108.20
67	B1	2575	U	C1'-O4'-C4'	-9.90	101.98	109.90
1	AQ	58	TYR	CB-CG-CD1	-9.89	115.06	121.00
21	A2	583	G	N9-C1'-C2'	9.89	126.86	114.00
67	B1	2879	G	O4'-C1'-C2'	-9.89	95.91	105.80
67	B1	2752	U	O4'-C1'-N1	9.89	116.11	108.20
21	A2	1095	C	C1'-O4'-C4'	-9.88	101.99	109.90
67	B1	236	G	O4'-C1'-C2'	9.88	116.50	107.60
67	B1	239	G	O4'-C1'-C2'	9.88	116.50	107.60
67	B1	2935	A	P-O3'-C3'	9.88	131.56	119.70
21	A2	1485	G	O4'-C1'-N9	9.88	116.11	108.20
53	BD	90	ARG	NE-CZ-NH2	-9.88	115.36	120.30
67	B1	867	C	O4'-C1'-C2'	-9.88	95.92	105.80
67	B1	947	C	O4'-C1'-C2'	-9.88	95.92	105.80
67	B1	1449	C	C3'-C2'-C1'	9.88	109.40	101.50
67	B1	2245	C	C3'-C2'-C1'	9.88	109.41	101.50
67	B1	76	C	C1'-O4'-C4'	9.88	117.80	109.90
29	AL	59	ALA	CB-CA-C	9.88	124.91	110.10
67	B1	2440	C	O4'-C1'-N1	9.87	116.10	108.20
67	B1	2801	G	C1'-O4'-C4'	-9.88	102.00	109.90
21	A2	919	U	C3'-C2'-C1'	9.87	109.40	101.50
21	A2	1005	G	C3'-C2'-C1'	-9.87	93.60	101.50
67	B1	2396	G	C3'-C2'-C1'	9.87	109.40	101.50
67	B1	2672	A	C3'-C2'-C1'	9.87	109.40	101.50
67	B1	324	C	C3'-C2'-C1'	9.87	109.39	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AH	73	ARG	NE-CZ-NH2	-9.86	115.37	120.30
68	B3	44	C	O4'-C1'-N1	9.86	116.09	108.20
27	A0	18	G	P-O3'-C3'	-9.86	107.87	119.70
67	B1	2374	C	O4'-C1'-N1	9.86	116.09	108.20
67	B1	16	G	O4'-C1'-N9	9.86	116.09	108.20
21	A2	1206	G	O4'-C1'-N9	9.86	116.09	108.20
67	B1	2907	C	P-O3'-C3'	-9.86	107.87	119.70
21	A2	1195	U	N1-C1'-C2'	9.86	126.81	114.00
67	B1	1654	G	O4'-C1'-N9	9.86	116.08	108.20
67	B1	2337	G	N9-C1'-C2'	9.86	126.81	114.00
67	B1	3041	U	P-O3'-C3'	9.86	131.53	119.70
27	A0	73	G	O4'-C1'-N9	9.85	116.08	108.20
67	B1	2549	A	O4'-C1'-C2'	-9.85	95.95	105.80
6	AC	147	TYR	CB-CG-CD2	-9.85	115.09	121.00
37	BU	36	ARG	NE-CZ-NH2	-9.85	115.37	120.30
67	B1	990	G	O4'-C1'-C2'	9.85	116.46	107.60
67	B1	2271	G	O4'-C1'-N9	9.85	116.08	108.20
67	B1	2546	G	C3'-C2'-C1'	9.85	109.38	101.50
21	A2	1064	C	C1'-O4'-C4'	-9.85	102.02	109.90
67	B1	2730	U	C1'-O4'-C4'	9.85	117.78	109.90
21	A2	378	A	O4'-C1'-N9	9.84	116.08	108.20
67	B1	1485	A	C3'-C2'-C1'	9.84	109.37	101.50
67	B1	2554	A	N9-C1'-C2'	-9.84	101.17	112.00
21	A2	611	A	O4'-C1'-N9	9.84	116.07	108.20
67	B1	1483	U	C3'-C2'-C1'	9.84	109.37	101.50
67	B1	1554	G	N9-C1'-C2'	9.84	126.79	114.00
21	A2	440	C	C5'-C4'-C3'	-9.84	100.26	116.00
67	B1	286	G	O4'-C1'-N9	9.84	116.07	108.20
11	A1	22	A	N9-C1'-C2'	9.83	126.78	114.00
21	A2	551	U	N1-C1'-C2'	9.83	126.78	114.00
21	A2	1292	A	C1'-O4'-C4'	9.83	117.76	109.90
21	A2	1079	G	O4'-C1'-C2'	-9.83	95.97	105.80
11	A1	68	C	O4'-C1'-N1	9.82	116.06	108.20
67	B1	937	A	C1'-O4'-C4'	-9.82	102.04	109.90
67	B1	2209	U	N1-C1'-C2'	-9.82	101.19	112.00
21	A2	369	A	P-O5'-C5'	9.82	136.61	120.90
21	A2	1336	U	O4'-C1'-C2'	-9.82	95.98	105.80
67	B1	576	G	C1'-O4'-C4'	-9.82	102.04	109.90
67	B1	2617	G	C3'-C2'-C1'	9.82	109.36	101.50
67	B1	67	U	O4'-C1'-N1	9.82	116.06	108.20
21	A2	867	A	C1'-O4'-C4'	9.82	117.75	109.90
67	B1	1438	C	C3'-C2'-C1'	9.81	109.35	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	617	A	O4'-C1'-C2'	-9.81	95.99	105.80
67	B1	226	C	C3'-C2'-C1'	9.81	109.35	101.50
67	B1	2280	G	O4'-C1'-N9	9.81	116.05	108.20
67	B1	2754	A	P-O5'-C5'	9.81	136.60	120.90
67	B1	1096	A	C4'-C3'-C2'	-9.81	92.79	102.60
67	B1	1979	G	O4'-C1'-N9	9.81	116.05	108.20
67	B1	2761	G	O4'-C1'-C2'	-9.81	95.99	105.80
67	B1	2961	A	C1'-O4'-C4'	9.80	117.74	109.90
67	B1	486	A	C1'-O4'-C4'	9.80	117.74	109.90
67	B1	1076	G	N9-C1'-C2'	-9.80	101.22	112.00
21	A2	659	U	O4'-C1'-N1	9.80	116.04	108.20
21	A2	1019	A	C3'-C2'-C1'	9.80	109.34	101.50
67	B1	371	U	C3'-C2'-C1'	9.80	109.34	101.50
21	A2	181	G	O4'-C1'-C2'	9.79	116.42	107.60
67	B1	277	A	O4'-C1'-N9	-9.79	100.36	108.20
21	A2	1485	G	P-O3'-C3'	-9.79	107.95	119.70
51	Bj	33	LEU	CB-CG-CD1	9.79	127.65	111.00
44	BW	22	ARG	NE-CZ-NH1	9.79	125.19	120.30
67	B1	781	C	O4'-C1'-N1	9.79	116.03	108.20
21	A2	31	U	O4'-C1'-C2'	-9.79	96.01	105.80
67	B1	2108	U	O4'-C1'-N1	9.79	116.03	108.20
66	B1	61	ARG	NE-CZ-NH1	9.79	125.19	120.30
67	B1	1577	C	O4'-C1'-C2'	-9.79	96.01	105.80
67	B1	3031	U	N1-C1'-C2'	9.79	126.72	114.00
21	A2	814	C	N1-C1'-C2'	9.78	126.72	114.00
67	B1	130	G	C3'-C2'-C1'	9.78	109.33	101.50
67	B1	526	C	O4'-C1'-N1	9.78	116.03	108.20
68	B3	119	C	O4'-C1'-C2'	-9.78	96.02	105.80
21	A2	1345	G	C3'-C2'-C1'	-9.78	93.68	101.50
27	A0	35	U	C3'-C2'-C1'	9.78	109.32	101.50
67	B1	2318	G	C1'-O4'-C4'	-9.78	102.08	109.90
67	B1	251	C	C1'-O4'-C4'	-9.77	102.08	109.90
67	B1	2655	C	O4'-C1'-N1	9.77	116.02	108.20
67	B1	2765	C	N1-C1'-C2'	9.77	126.70	114.00
21	A2	557	G	O4'-C1'-N9	9.77	116.02	108.20
12	AN	96	PHE	CB-CG-CD2	-9.77	113.96	120.80
21	A2	403	C	O4'-C1'-N1	9.77	116.02	108.20
67	B1	1956	G	C3'-C2'-C1'	-9.77	93.68	101.50
67	B1	2969	G	C1'-O4'-C4'	-9.77	102.08	109.90
67	B1	278	C	O4'-C1'-C2'	9.77	116.39	107.60
67	B1	1951	G	N9-C1'-C2'	-9.76	101.26	112.00
21	A2	200	G	C1'-O4'-C4'	9.76	117.71	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1016	G	O4'-C1'-N9	9.76	116.01	108.20
43	Bk	42	ARG	NE-CZ-NH2	9.76	125.18	120.30
67	B1	2078	A	N9-C1'-C2'	-9.76	101.27	112.00
21	A2	201	G	C1'-O4'-C4'	9.75	117.70	109.90
21	A2	1490	C	C3'-C2'-C1'	9.75	109.30	101.50
38	Bb	41	ARG	NE-CZ-NH2	-9.75	115.42	120.30
67	B1	2473	C	C3'-C2'-C1'	9.75	109.30	101.50
67	B1	2308	C	N1-C1'-C2'	9.75	126.67	114.00
67	B1	2345	U	C1'-O4'-C4'	-9.75	102.10	109.90
21	A2	820	G	O4'-C1'-C2'	9.75	116.37	107.60
67	B1	2042	A	O4'-C1'-N9	9.75	116.00	108.20
21	A2	842	U	C1'-O4'-C4'	9.75	117.70	109.90
67	B1	2270	G	C4'-C3'-C2'	-9.75	92.85	102.60
67	B1	1650	U	O4'-C1'-N1	9.74	116.00	108.20
21	A2	466	C	C1'-O4'-C4'	-9.74	102.11	109.90
15	AE	184	TYR	CB-CG-CD1	-9.74	115.16	121.00
21	A2	157	A	C3'-C2'-C1'	9.74	109.29	101.50
67	B1	2630	C	O4'-C1'-C2'	9.74	116.36	107.60
21	A2	1457	A	N9-C1'-C2'	9.73	126.66	114.00
21	A2	413	G	O4'-C1'-N9	9.73	115.99	108.20
21	A2	387	G	N9-C1'-C2'	9.73	126.65	114.00
21	A2	1281	U	O4'-C1'-N1	9.73	115.98	108.20
67	B1	188	A	C1'-O4'-C4'	9.73	117.69	109.90
67	B1	816	C	O4'-C1'-N1	9.73	115.99	108.20
67	B1	1868	C	O4'-C1'-C2'	-9.73	96.07	105.80
68	B3	43	C	O4'-C1'-C2'	-9.73	96.07	105.80
67	B1	58	G	C1'-O4'-C4'	-9.73	102.12	109.90
67	B1	250	G	O4'-C1'-N9	9.73	115.98	108.20
67	B1	2076	A	C1'-O4'-C4'	-9.73	102.12	109.90
21	A2	228	G	C1'-O4'-C4'	9.73	117.68	109.90
21	A2	539	C	C3'-C2'-C1'	9.73	109.28	101.50
21	A2	25	C	O4'-C1'-N1	9.72	115.98	108.20
21	A2	1144	G	P-O3'-C3'	-9.72	108.03	119.70
7	AB	161	ARG	NE-CZ-NH1	-9.72	115.44	120.30
67	B1	934	G	C1'-O4'-C4'	-9.72	102.12	109.90
67	B1	1422	G	O4'-C1'-N9	9.72	115.98	108.20
52	BB	84	TYR	CB-CG-CD2	-9.72	115.17	121.00
21	A2	657	A	O4'-C1'-C2'	-9.72	96.08	105.80
21	A2	945	G	C1'-O4'-C4'	-9.71	102.13	109.90
67	B1	1932	G	O4'-C1'-C2'	-9.71	96.08	105.80
67	B1	2486	A	O4'-C1'-C2'	-9.72	96.08	105.80
67	B1	1470	C	C1'-O4'-C4'	-9.71	102.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2407	G	O4'-C1'-C2'	9.71	116.34	107.60
67	B1	10	C	O4'-C1'-N1	9.71	115.97	108.20
67	B1	1308	G	C1'-O4'-C4'	-9.71	102.13	109.90
67	B1	1580	G	C3'-C2'-C1'	-9.71	93.73	101.50
21	A2	1045	A	O4'-C1'-N9	9.71	115.97	108.20
21	A2	1416	C	N1-C1'-C2'	-9.71	101.32	112.00
67	B1	301	G	O4'-C1'-C2'	-9.71	96.09	105.80
67	B1	1236	C	O4'-C1'-N1	9.71	115.97	108.20
67	B1	1396	A	C3'-C2'-C1'	9.71	109.27	101.50
67	B1	889	C	O4'-C1'-C2'	-9.71	96.09	105.80
67	B1	1719	C	P-O3'-C3'	9.71	131.35	119.70
21	A2	1317	G	O4'-C1'-N9	9.71	115.97	108.20
67	B1	1803	U	O4'-C1'-N1	9.71	115.96	108.20
52	BB	233	ARG	NE-CZ-NH2	-9.70	115.45	120.30
67	B1	2422	G	N9-C1'-C2'	9.70	126.61	114.00
67	B1	1712	U	O4'-C1'-N1	9.70	115.96	108.20
21	A2	142	G	O4'-C1'-N9	9.70	115.96	108.20
21	A2	197	A	P-O5'-C5'	9.70	136.42	120.90
67	B1	825	C	C3'-C2'-C1'	9.70	109.26	101.50
67	B1	2575	U	O4'-C1'-C2'	9.70	116.33	107.60
67	B1	2652	G	O4'-C1'-N9	9.70	115.96	108.20
21	A2	718	G	O4'-C1'-C2'	9.70	116.33	107.60
21	A2	1011	C	O4'-C1'-N1	9.70	115.96	108.20
21	A2	1150	G	O4'-C1'-N9	9.69	115.95	108.20
67	B1	147	C	N1-C1'-C2'	9.69	126.60	114.00
67	B1	225	C	N1-C1'-C2'	9.69	126.60	114.00
21	A2	671	C	O4'-C1'-C2'	-9.69	96.11	105.80
67	B1	215	A	P-O3'-C3'	9.69	131.32	119.70
60	BS	133	PHE	CB-CG-CD1	9.69	127.58	120.80
67	B1	1604	G	C3'-C2'-C1'	-9.69	93.75	101.50
67	B1	2152	G	O4'-C1'-N9	9.69	115.95	108.20
67	B1	2414	G	O4'-C1'-N9	9.69	115.95	108.20
67	B1	439	G	C3'-C2'-C1'	9.68	109.25	101.50
67	B1	695	G	O4'-C1'-N9	9.68	115.95	108.20
67	B1	2584	A	O4'-C1'-N9	9.68	115.95	108.20
67	B1	1574	A	C3'-C2'-C1'	9.68	109.25	101.50
67	B1	2335	G	C1'-O4'-C4'	-9.68	102.16	109.90
21	A2	894	A	O4'-C1'-N9	9.68	115.94	108.20
67	B1	2594	U	C1'-O4'-C4'	-9.68	102.16	109.90
43	Bk	107	ARG	CB-CA-C	-9.68	91.05	110.40
67	B1	83	G	O3'-P-O5'	-9.68	85.61	104.00
67	B1	1657	G	N1-C6-O6	9.68	125.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2328	G	O4'-C1'-N9	9.68	115.94	108.20
67	B1	2573	C	O4'-C1'-C2'	-9.68	96.12	105.80
67	B1	2816	C	O4'-C1'-N1	9.68	115.94	108.20
21	A2	1469	G	O4'-C1'-C2'	9.67	116.31	107.60
67	B1	65	G	O4'-C1'-N9	9.67	115.94	108.20
67	B1	942	U	O4'-C1'-N1	9.67	115.94	108.20
67	B1	2379	G	O4'-C1'-N9	9.67	115.94	108.20
21	A2	438	A	P-O3'-C3'	-9.67	108.10	119.70
21	A2	825	C	N1-C1'-C2'	9.67	126.57	114.00
67	B1	437	G	C1'-O4'-C4'	9.67	117.64	109.90
67	B1	1251	G	O4'-C1'-C2'	-9.67	96.13	105.80
21	A2	643	G	N9-C1'-C2'	9.67	126.57	114.00
21	A2	1307	G	P-O3'-C3'	9.67	131.30	119.70
53	BD	91	ARG	C-N-CA	9.67	145.87	121.70
67	B1	98	G	O4'-C1'-N9	9.67	115.93	108.20
67	B1	2266	C	O4'-C1'-C2'	-9.67	96.13	105.80
67	B1	459	C	O4'-C1'-C2'	-9.66	96.14	105.80
21	A2	1224	U	O4'-C1'-N1	9.66	115.93	108.20
27	A0	14	A	O4'-C1'-C2'	-9.66	96.14	105.80
67	B1	124	C	N1-C1'-C2'	9.66	126.55	114.00
67	B1	2017	A	O4'-C1'-N9	9.66	115.93	108.20
7	AB	5	TYR	CB-CG-CD2	-9.65	115.21	121.00
21	A2	318	C	O4'-C1'-N1	9.65	115.92	108.20
53	BD	83	VAL	O-C-N	9.65	139.44	121.10
67	B1	3049	C	O4'-C1'-C2'	-9.65	96.14	105.80
67	B1	1186	G	O4'-C1'-N9	-9.65	100.48	108.20
21	A2	1379	G	O4'-C1'-N9	9.65	115.92	108.20
67	B1	753	A	P-O3'-C3'	9.65	131.28	119.70
67	B1	2496	G	O4'-C1'-N9	9.65	115.92	108.20
11	A1	28	C	C3'-C2'-C1'	9.64	109.22	101.50
67	B1	2093	A	O4'-C1'-N9	9.64	115.92	108.20
21	A2	1405	C	O4'-C1'-C2'	-9.64	96.16	105.80
67	B1	2354	A	O4'-C1'-N9	9.64	115.91	108.20
21	A2	152	G	P-O3'-C3'	9.64	131.27	119.70
67	B1	428	A	O4'-C1'-C2'	-9.64	96.16	105.80
67	B1	730	C	C3'-C2'-C1'	9.64	109.21	101.50
67	B1	1077	G	C3'-C2'-C1'	-9.64	93.79	101.50
21	A2	673	C	N1-C1'-C2'	9.64	126.53	114.00
21	A2	1323	A	C3'-C2'-C1'	9.64	109.21	101.50
67	B1	2262	C	C3'-C2'-C1'	9.64	109.21	101.50
67	B1	1542	U	P-O3'-C3'	9.63	131.26	119.70
67	B1	2083	G	O4'-C1'-N9	9.63	115.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	B3	115	C	C3'-C2'-C1'	9.64	109.21	101.50
17	AO	9	ARG	NE-CZ-NH1	-9.63	115.48	120.30
21	A2	177	A	C1'-O4'-C4'	9.63	117.61	109.90
21	A2	1027	C	O4'-C1'-N1	9.63	115.91	108.20
67	B1	819	U	O4'-C1'-C2'	-9.63	96.17	105.80
64	Bc	15	GLU	CA-CB-CG	9.63	134.58	113.40
67	B1	3041	U	C3'-C2'-C1'	9.63	109.20	101.50
21	A2	1285	C	O4'-C1'-N1	9.62	115.90	108.20
67	B1	1473	C	C1'-O4'-C4'	-9.62	102.20	109.90
68	B3	122	C	P-O3'-C3'	9.62	131.25	119.70
67	B1	2632	C	O4'-C1'-C2'	-9.62	96.18	105.80
21	A2	1162	G	C3'-C2'-C1'	9.62	109.20	101.50
21	A2	108	G	C1'-O4'-C4'	-9.62	102.20	109.90
21	A2	440	C	O4'-C1'-C2'	-9.62	96.18	105.80
21	A2	822	A	C3'-C2'-C1'	9.62	109.19	101.50
67	B1	1452	G	C3'-C2'-C1'	-9.62	93.81	101.50
67	B1	2657	A	O4'-C1'-N9	9.62	115.89	108.20
67	B1	165	G	C1'-O4'-C4'	-9.61	102.21	109.90
67	B1	1039	C	P-O3'-C3'	9.61	131.23	119.70
67	B1	1573	A	O4'-C1'-N9	9.61	115.89	108.20
67	B1	2489	C	C3'-C2'-C1'	9.61	109.19	101.50
67	B1	697	U	O4'-C1'-C2'	-9.61	96.19	105.80
67	B1	1630	U	O4'-C1'-C2'	-9.60	96.20	105.80
67	B1	2598	C	N1-C1'-C2'	9.60	126.48	114.00
21	A2	832	G	O4'-C1'-C2'	9.60	116.24	107.60
21	A2	1459	G	P-O3'-C3'	9.60	131.22	119.70
67	B1	1078	G	O4'-C1'-N9	9.60	115.88	108.20
67	B1	2192	G	O4'-C1'-N9	9.60	115.88	108.20
21	A2	648	A	N9-C1'-C2'	9.59	126.47	114.00
21	A2	1357	C	O4'-C1'-N1	9.59	115.87	108.20
25	AH	43	LEU	N-CA-CB	-9.59	91.22	110.40
30	AU	76	TYR	CB-CG-CD1	9.59	126.75	121.00
67	B1	1221	U	O4'-C1'-N1	9.59	115.87	108.20
67	B1	2078	A	C1'-O4'-C4'	9.59	117.58	109.90
21	A2	93	A	N9-C1'-C2'	9.59	126.47	114.00
21	A2	239	A	P-O3'-C3'	9.59	131.21	119.70
21	A2	1025	U	O4'-C1'-N1	9.59	115.87	108.20
67	B1	1679	U	O4'-C1'-N1	9.59	115.87	108.20
67	B1	1261	C	O4'-C1'-N1	9.59	115.87	108.20
68	B3	74	U	N1-C1'-C2'	9.59	126.47	114.00
67	B1	2877	A	N9-C1'-C2'	9.59	126.46	114.00
21	A2	577	C	C3'-C2'-C1'	9.58	109.17	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A0	73	G	P-O5'-C5'	9.58	136.23	120.90
67	B1	506	G	O4'-C1'-N9	9.58	115.87	108.20
12	AN	124	TYR	CB-CG-CD2	-9.58	115.25	121.00
67	B1	2831	G	O4'-C1'-N9	9.58	115.86	108.20
67	B1	1374	G	C3'-C2'-C1'	-9.58	93.84	101.50
67	B1	1990	U	O4'-C1'-N1	9.58	115.86	108.20
21	A2	1261	U	N1-C1'-C2'	9.57	126.45	114.00
21	A2	1186	C	P-O3'-C3'	9.57	131.19	119.70
67	B1	134	C	O4'-C1'-N1	9.57	115.86	108.20
67	B1	2033	G	C1'-O4'-C4'	9.57	117.56	109.90
67	B1	518	A	C3'-C2'-C1'	9.57	109.16	101.50
67	B1	2545	A	O4'-C4'-C3'	-9.57	94.43	104.00
21	A2	217	C	C3'-C2'-C1'	9.57	109.16	101.50
21	A2	1083	G	N1-C6-O6	9.57	125.64	119.90
30	AU	83	ARG	NE-CZ-NH1	9.57	125.08	120.30
28	B6	68	TYR	CB-CG-CD2	-9.57	115.26	121.00
67	B1	605	A	C3'-C2'-C1'	9.57	109.15	101.50
67	B1	300	U	P-O3'-C3'	9.56	131.18	119.70
67	B1	538	G	P-O5'-C5'	-9.56	105.60	120.90
67	B1	1509	C	P-O3'-C3'	9.56	131.18	119.70
21	A2	747	U	P-O3'-C3'	9.56	131.18	119.70
21	A2	270	A	O4'-C1'-N9	9.56	115.85	108.20
21	A2	608	G	O4'-C1'-N9	9.56	115.85	108.20
67	B1	565	A	N9-C1'-C2'	-9.56	101.48	112.00
21	A2	238	G	C1'-O4'-C4'	9.56	117.55	109.90
21	A2	547	U	C1'-O4'-C4'	-9.56	102.25	109.90
21	A2	1022	U	C1'-O4'-C4'	9.56	117.55	109.90
67	B1	919	G	C3'-C2'-C1'	9.56	109.15	101.50
17	AO	89	ARG	NE-CZ-NH2	-9.56	115.52	120.30
67	B1	835	G	C1'-O4'-C4'	-9.56	102.25	109.90
21	A2	407	G	C5'-C4'-C3'	9.55	131.28	116.00
11	A1	59	A	P-O3'-C3'	9.55	131.16	119.70
21	A2	1149	C	C3'-C2'-C1'	9.55	109.14	101.50
54	BF	39	PHE	CB-CG-CD2	-9.55	114.11	120.80
67	B1	1989	G	O4'-C1'-C2'	9.55	116.19	107.60
10	AD	33	TYR	CB-CG-CD1	9.55	126.73	121.00
21	A2	1308	U	N1-C1'-C2'	9.55	126.41	114.00
67	B1	2281	A	P-O3'-C3'	9.55	131.16	119.70
21	A2	459	G	P-O3'-C3'	9.55	131.16	119.70
43	Bk	33	MET	O-C-N	9.55	139.24	121.10
43	Bk	42	ARG	CB-CA-C	9.55	129.50	110.40
21	A2	393	A	N9-C1'-C2'	-9.54	101.50	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	B6	80	TYR	CB-CG-CD1	-9.54	115.28	121.00
67	B1	59	U	O4'-C1'-N1	9.54	115.83	108.20
67	B1	752	U	O4'-C1'-N1	9.54	115.83	108.20
67	B1	1408	G	P-O5'-C5'	9.54	136.17	120.90
21	A2	1081	C	C1'-O4'-C4'	9.54	117.53	109.90
21	A2	1065	C	O4'-C1'-N1	9.54	115.83	108.20
67	B1	2428	C	P-O3'-C3'	-9.54	108.25	119.70
21	A2	1068	C	O4'-C1'-N1	9.54	115.83	108.20
67	B1	2503	C	O4'-C1'-C2'	-9.54	96.26	105.80
67	B1	857	U	N1-C1'-C2'	9.53	126.39	114.00
67	B1	1567	C	O4'-C4'-C3'	-9.54	94.47	104.00
67	B1	3037	G	C3'-C2'-C1'	9.54	109.13	101.50
67	B1	392	G	C1'-O4'-C4'	-9.53	102.28	109.90
67	B1	741	G	C3'-C2'-C1'	9.53	109.12	101.50
67	B1	751	U	N1-C1'-C2'	-9.53	101.52	112.00
67	B1	1578	C	O4'-C1'-C2'	-9.53	96.27	105.80
21	A2	579	U	O4'-C1'-N1	9.53	115.82	108.20
21	A2	1199	A	O4'-C1'-N9	9.53	115.82	108.20
67	B1	162	G	N9-C1'-C2'	9.53	126.38	114.00
67	B1	431	U	C3'-C2'-C1'	9.53	109.12	101.50
67	B1	1937	A	O4'-C1'-N9	9.53	115.82	108.20
67	B1	1181	C	N1-C1'-C2'	9.53	126.38	114.00
67	B1	1939	C	C3'-C2'-C1'	9.53	109.12	101.50
21	A2	127	G	C3'-C2'-C1'	9.52	109.12	101.50
21	A2	974	G	C3'-C2'-C1'	9.52	109.12	101.50
67	B1	7	G	N1-C6-O6	9.52	125.61	119.90
67	B1	3049	C	C3'-C2'-C1'	9.52	109.11	101.50
67	B1	1569	A	O4'-C1'-C2'	-9.52	96.28	105.80
15	AE	40	ARG	NE-CZ-NH1	9.51	125.06	120.30
67	B1	2173	U	O4'-C1'-C2'	-9.51	96.29	105.80
68	B3	93	G	C1'-O4'-C4'	-9.51	102.29	109.90
19	AS	20	TYR	CB-CG-CD2	9.51	126.70	121.00
21	A2	1378	A	C1'-O4'-C4'	9.51	117.51	109.90
67	B1	179	A	N9-C1'-C2'	9.51	126.36	114.00
21	A2	516	A	P-O3'-C3'	9.50	131.10	119.70
66	B1	21	PHE	CB-CG-CD2	-9.50	114.15	120.80
17	AO	110	ARG	NE-CZ-NH1	-9.50	115.55	120.30
21	A2	1004	U	N1-C1'-C2'	9.50	126.35	114.00
67	B1	1112	G	O4'-C1'-N9	9.50	115.80	108.20
21	A2	62	G	N9-C1'-C2'	9.50	126.34	114.00
67	B1	322	C	O4'-C1'-N1	9.50	115.80	108.20
21	A2	616	G	O4'-C1'-N9	9.49	115.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1381	G	O4'-C1'-N9	9.49	115.80	108.20
46	BA	98	ARG	NE-CZ-NH2	9.49	125.05	120.30
67	B1	745	C	C1'-O4'-C4'	-9.49	102.31	109.90
67	B1	2826	U	P-O3'-C3'	9.49	131.09	119.70
67	B1	926	C	O4'-C1'-C2'	-9.49	96.31	105.80
67	B1	2574	G	C1'-O4'-C4'	9.49	117.49	109.90
67	B1	797	C	O4'-C1'-C2'	-9.49	96.31	105.80
21	A2	393	A	C1'-O4'-C4'	9.48	117.49	109.90
21	A2	17	C	C3'-C2'-C1'	9.48	109.09	101.50
67	B1	120	G	O4'-C1'-C2'	9.48	116.14	107.60
67	B1	76	C	O4'-C1'-N1	9.48	115.78	108.20
67	B1	2293	G	O4'-C1'-C2'	-9.48	96.32	105.80
54	BF	97	PHE	CB-CG-CD1	-9.48	114.16	120.80
67	B1	447	G	O4'-C1'-C2'	9.48	116.13	107.60
67	B1	768	C	C1'-O4'-C4'	-9.48	102.32	109.90
67	B1	1380	G	O4'-C1'-C2'	-9.48	96.32	105.80
21	A2	1339	G	C1'-O4'-C4'	-9.48	102.32	109.90
67	B1	1519	G	C1'-O4'-C4'	9.48	117.48	109.90
67	B1	3027	C	C1'-O4'-C4'	-9.48	102.32	109.90
67	B1	2003	C	N1-C1'-C2'	9.47	126.32	114.00
21	A2	966	G	O4'-C1'-C2'	-9.47	96.33	105.80
40	BE	163	ARG	NE-CZ-NH2	9.47	125.04	120.30
67	B1	8	G	N1-C6-O6	9.47	125.58	119.90
67	B1	18	C	O4'-C1'-C2'	-9.47	96.33	105.80
21	A2	703	U	N1-C1'-C2'	-9.47	101.59	112.00
67	B1	1650	U	N1-C1'-C2'	9.47	126.31	114.00
67	B1	2944	G	O4'-C1'-N9	9.46	115.77	108.20
2	AK	130	ARG	NE-CZ-NH1	9.46	125.03	120.30
67	B1	258	C	O4'-C1'-N1	9.46	115.77	108.20
67	B1	329	G	N1-C6-O6	9.46	125.58	119.90
67	B1	744	G	N9-C1'-C2'	9.46	126.30	114.00
67	B1	2872	G	O4'-C1'-N9	9.46	115.77	108.20
21	A2	718	G	C1'-O4'-C4'	-9.46	102.33	109.90
21	A2	985	C	O4'-C1'-N1	9.46	115.77	108.20
67	B1	447	G	C1'-O4'-C4'	-9.46	102.33	109.90
21	A2	196	G	C3'-C2'-C1'	9.46	109.06	101.50
21	A2	37	G	O4'-C1'-N9	9.45	115.76	108.20
67	B1	809	A	C1'-O4'-C4'	9.46	117.46	109.90
67	B1	2313	G	O4'-C1'-C2'	-9.46	96.34	105.80
67	B1	2798	U	O4'-C1'-N1	9.45	115.76	108.20
21	A2	296	A	O4'-C1'-N9	9.45	115.76	108.20
21	A2	1324	U	P-O3'-C3'	9.45	131.04	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1133	U	O4'-C1'-N1	9.45	115.76	108.20
67	B1	293	G	C1'-O4'-C4'	9.45	117.46	109.90
21	A2	348	C	C1'-O4'-C4'	-9.45	102.34	109.90
21	A2	485	A	P-O3'-C3'	9.45	131.03	119.70
67	B1	2975	A	O4'-C1'-N9	9.45	115.76	108.20
21	A2	610	G	C1'-O4'-C4'	-9.45	102.34	109.90
67	B1	1571	G	P-O3'-C3'	9.45	131.03	119.70
67	B1	3014	U	O4'-C1'-N1	9.45	115.76	108.20
67	B1	132	G	O4'-C1'-N9	9.44	115.75	108.20
67	B1	2450	A	P-O3'-C3'	9.44	131.03	119.70
68	B3	96	C	O4'-C1'-C2'	-9.44	96.36	105.80
21	A2	439	G	P-O3'-C3'	9.44	131.03	119.70
21	A2	803	C	N1-C1'-C2'	9.44	126.27	114.00
32	BO	191	ARG	NE-CZ-NH1	9.44	125.02	120.30
29	AL	33	ARG	NE-CZ-NH2	-9.44	115.58	120.30
21	A2	1144	G	C3'-C2'-C1'	9.44	109.05	101.50
21	A2	1164	A	C1'-O4'-C4'	-9.44	102.35	109.90
67	B1	1494	U	O4'-C1'-C2'	-9.44	96.36	105.80
21	A2	42	G	C1'-O4'-C4'	-9.43	102.36	109.90
67	B1	2841	G	O4'-C1'-N9	9.43	115.75	108.20
21	A2	680	C	C1'-O4'-C4'	9.43	117.44	109.90
33	BC	37	ARG	NE-CZ-NH2	-9.43	115.59	120.30
67	B1	956	U	C3'-C2'-C1'	9.43	109.04	101.50
67	B1	1572	C	O4'-C1'-N1	9.43	115.74	108.20
21	A2	724	C	C1'-O4'-C4'	-9.43	102.36	109.90
68	B3	39	C	P-O3'-C3'	9.43	131.01	119.70
20	A3	6	TYR	CB-CG-CD1	9.42	126.65	121.00
21	A2	807	C	N1-C1'-C2'	9.42	126.25	114.00
21	A2	539	C	O4'-C1'-C2'	-9.42	96.38	105.80
67	B1	2689	G	O4'-C1'-N9	9.42	115.74	108.20
67	B1	1802	G	O4'-C1'-C2'	-9.42	96.38	105.80
21	A2	1207	G	C3'-C2'-C1'	-9.42	93.97	101.50
67	B1	158	C	O4'-C1'-C2'	-9.42	96.38	105.80
61	Bd	74	ARG	NE-CZ-NH2	-9.42	115.59	120.30
37	BU	42	ARG	NE-CZ-NH2	-9.41	115.60	120.30
67	B1	2604	G	N9-C1'-C2'	9.41	126.23	114.00
67	B1	1356	A	C3'-C2'-C1'	9.40	109.02	101.50
67	B1	1015	G	N1-C6-O6	9.40	125.54	119.90
67	B1	1719	C	O4'-C1'-N1	9.40	115.72	108.20
21	A2	401	U	O4'-C1'-C2'	-9.40	96.40	105.80
67	B1	2704	A	O4'-C1'-C2'	-9.40	96.40	105.80
67	B1	1751	G	N9-C1'-C2'	9.40	126.22	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1905	G	N9-C1'-C2'	-9.40	101.66	112.00
67	B1	2932	C	C3'-C2'-C1'	9.40	109.02	101.50
67	B1	428	A	C1'-O4'-C4'	9.39	117.42	109.90
21	A2	857	C	C3'-C2'-C1'	9.39	109.01	101.50
21	A2	879	U	O4'-C1'-N1	9.39	115.72	108.20
67	B1	1913	C	N1-C1'-C2'	9.39	126.21	114.00
67	B1	181	U	O4'-C1'-N1	9.39	115.71	108.20
17	AO	108	ARG	NE-CZ-NH2	-9.39	115.61	120.30
67	B1	55	G	C1'-O4'-C4'	9.39	117.41	109.90
67	B1	1134	A	O4'-C1'-N9	-9.39	100.69	108.20
27	A0	36	U	C5'-C4'-O4'	9.38	120.36	109.10
67	B1	1604	G	O4'-C1'-C2'	9.38	116.05	107.60
67	B1	2136	G	C1'-O4'-C4'	-9.38	102.39	109.90
21	A2	28	U	O4'-C1'-N1	9.38	115.71	108.20
67	B1	1019	G	C5-C6-O6	-9.38	122.97	128.60
21	A2	156	A	C3'-C2'-C1'	9.38	109.00	101.50
67	B1	2028	G	C1'-O4'-C4'	-9.38	102.40	109.90
68	B3	111	G	O4'-C1'-C2'	9.38	116.04	107.60
15	AE	217	ASP	CB-CG-OD2	-9.38	109.86	118.30
21	A2	699	C	C1'-O4'-C4'	-9.37	102.40	109.90
21	A2	1093	C	O4'-C1'-C2'	-9.37	96.43	105.80
67	B1	460	C	N1-C1'-C2'	9.37	126.19	114.00
67	B1	519	A	O4'-C1'-C2'	-9.37	96.43	105.80
67	B1	1649	G	O4'-C1'-N9	9.37	115.70	108.20
67	B1	2731	C	C1'-O4'-C4'	9.37	117.40	109.90
67	B1	1234	A	O4'-C1'-C2'	-9.37	96.43	105.80
67	B1	2356	U	O4'-C1'-C2'	-9.37	96.43	105.80
21	A2	1393	A	O4'-C1'-C2'	-9.37	96.43	105.80
67	B1	1906	G	O4'-C1'-C2'	9.37	116.03	107.60
21	A2	1079	G	C1'-O4'-C4'	9.36	117.39	109.90
67	B1	655	C	C3'-C2'-C1'	9.37	108.99	101.50
67	B1	2952	C	O4'-C1'-N1	9.37	115.69	108.20
15	AE	40	ARG	NE-CZ-NH2	-9.36	115.62	120.30
21	A2	530	G	O4'-C1'-N9	9.36	115.69	108.20
21	A2	882	C	O4'-C1'-C2'	-9.36	96.44	105.80
67	B1	993	G	C1'-O4'-C4'	-9.36	102.41	109.90
67	B1	895	C	O4'-C1'-N1	9.36	115.69	108.20
67	B1	1653	U	N1-C1'-C2'	9.36	126.17	114.00
67	B1	1072	U	O4'-C1'-N1	9.36	115.69	108.20
67	B1	673	A	C1'-O4'-C4'	-9.36	102.41	109.90
40	BE	58	ARG	NE-CZ-NH2	-9.35	115.62	120.30
21	A2	166	A	C1'-O4'-C4'	-9.35	102.42	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A0	59	A	C1'-O4'-C4'	9.35	117.38	109.90
21	A2	739	G	C3'-C2'-C1'	-9.35	94.02	101.50
21	A2	949	G	C1'-O4'-C4'	-9.35	102.42	109.90
21	A2	1400	A	P-O3'-C3'	9.35	130.92	119.70
67	B1	1306	A	C3'-C2'-C1'	9.35	108.98	101.50
21	A2	1047	U	C1'-O4'-C4'	-9.35	102.42	109.90
67	B1	2948	A	O4'-C1'-C2'	-9.35	96.45	105.80
67	B1	1444	A	O4'-C1'-N9	9.34	115.67	108.20
67	B1	2061	A	P-O3'-C3'	9.34	130.91	119.70
67	B1	2933	C	O4'-C1'-N1	9.34	115.67	108.20
67	B1	2952	C	C3'-C2'-C1'	-9.34	94.03	101.50
67	B1	569	G	N9-C1'-C2'	9.34	126.14	114.00
21	A2	949	G	O4'-C1'-C2'	9.34	116.00	107.60
67	B1	475	U	N1-C1'-C2'	-9.34	101.73	112.00
67	B1	1412	C	C3'-C2'-C1'	9.34	108.97	101.50
67	B1	1814	A	C1'-O4'-C4'	-9.34	102.43	109.90
21	A2	538	C	C3'-C2'-C1'	9.34	108.97	101.50
21	A2	751	C	N1-C1'-C2'	9.34	126.14	114.00
67	B1	2234	C	O4'-C1'-C2'	-9.34	96.46	105.80
67	B1	2304	C	C3'-C2'-C1'	9.34	108.97	101.50
67	B1	2866	A	C1'-O4'-C4'	-9.34	102.43	109.90
21	A2	580	G	O4'-C1'-C2'	9.33	116.00	107.60
67	B1	972	C	O4'-C1'-N1	9.33	115.67	108.20
67	B1	2654	C	O4'-C1'-C2'	-9.33	96.47	105.80
67	B1	2906	C	O4'-C1'-C2'	-9.33	96.47	105.80
21	A2	1406	U	C1'-O4'-C4'	9.33	117.36	109.90
67	B1	254	A	C1'-O4'-C4'	-9.33	102.44	109.90
67	B1	2170	C	N1-C1'-C2'	9.33	126.13	114.00
67	B1	713	C	C3'-C2'-C1'	9.33	108.96	101.50
67	B1	1700	U	C1'-O4'-C4'	9.33	117.36	109.90
21	A2	597	C	O4'-C1'-N1	9.32	115.66	108.20
67	B1	1485	A	O4'-C1'-C2'	-9.32	96.47	105.80
67	B1	2047	U	O4'-C1'-C2'	-9.32	96.47	105.80
11	A1	54	G	C1'-O4'-C4'	-9.32	102.44	109.90
21	A2	999	G	N9-C1'-C2'	9.32	126.12	114.00
21	A2	1317	G	C3'-C2'-C1'	-9.32	94.04	101.50
21	A2	63	G	N9-C1'-C2'	9.32	126.11	114.00
67	B1	2590	C	C3'-C2'-C1'	9.32	108.96	101.50
21	A2	58	U	P-O5'-C5'	9.32	135.81	120.90
67	B1	1941	A	N9-C1'-C2'	9.32	126.11	114.00
67	B1	795	G	O4'-C1'-C2'	9.32	115.98	107.60
67	B1	2269	C	O4'-C1'-N1	9.32	115.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	251	G	O4'-C1'-N9	9.31	115.65	108.20
21	A2	793	G	O4'-C1'-N9	9.31	115.65	108.20
67	B1	1646	G	O4'-C1'-N9	9.31	115.65	108.20
67	B1	1925	A	C1'-O4'-C4'	-9.31	102.45	109.90
67	B1	2103	C	C1'-O4'-C4'	-9.31	102.45	109.90
68	B3	4	C	O4'-C1'-N1	9.31	115.65	108.20
67	B1	744	G	C1'-O4'-C4'	-9.31	102.45	109.90
11	A1	4	G	O4'-C1'-N9	9.30	115.64	108.20
21	A2	1390	G	O4'-C1'-N9	9.30	115.64	108.20
51	Bj	60	LYS	N-CA-CB	9.30	127.35	110.60
67	B1	232	U	C1'-O4'-C4'	9.31	117.34	109.90
67	B1	323	U	O4'-C1'-N1	9.30	115.64	108.20
67	B1	1861	G	O4'-C1'-N9	9.30	115.64	108.20
67	B1	636	G	C1'-O4'-C4'	-9.30	102.46	109.90
21	A2	1277	C	O4'-C1'-N1	9.30	115.64	108.20
67	B1	1405	G	N9-C1'-C2'	9.30	126.09	114.00
67	B1	1946	G	C1'-O4'-C4'	9.30	117.34	109.90
67	B1	1393	C	O4'-C1'-C2'	9.30	115.97	107.60
21	A2	643	G	C1'-O4'-C4'	-9.30	102.46	109.90
67	B1	1562	U	C3'-C2'-C1'	9.30	108.94	101.50
21	A2	396	C	O4'-C1'-N1	9.29	115.64	108.20
21	A2	1130	A	P-O3'-C3'	9.29	130.85	119.70
67	B1	14	A	O4'-C1'-C2'	-9.29	96.51	105.80
27	A0	11	C	C1'-O4'-C4'	-9.29	102.47	109.90
67	B1	1171	G	C1'-O4'-C4'	9.29	117.33	109.90
67	B1	2119	C	C1'-O4'-C4'	9.29	117.33	109.90
21	A2	116	C	C1'-O4'-C4'	-9.29	102.47	109.90
21	A2	1043	U	N1-C1'-C2'	-9.29	101.79	112.00
67	B1	1745	U	C3'-C2'-C1'	9.29	108.93	101.50
67	B1	612	G	O4'-C1'-N9	9.28	115.62	108.20
21	A2	570	G	O4'-C1'-C2'	9.28	115.95	107.60
27	A0	58	A	N9-C1'-C2'	-9.28	101.79	112.00
67	B1	1371	U	O4'-C1'-N1	9.28	115.62	108.20
67	B1	1950	G	O4'-C1'-C2'	-9.28	96.52	105.80
46	BA	119	ARG	NE-CZ-NH2	-9.28	115.66	120.30
67	B1	560	G	O4'-C1'-N9	9.28	115.62	108.20
67	B1	859	G	N9-C1'-C2'	-9.28	101.80	112.00
67	B1	689	U	O4'-C1'-N1	9.28	115.62	108.20
67	B1	1961	G	O4'-C1'-C2'	-9.28	96.53	105.80
67	B1	2232	U	P-O3'-C3'	9.28	130.83	119.70
67	B1	2889	A	O4'-C1'-N9	-9.28	100.78	108.20
21	A2	303	G	O4'-C1'-N9	9.27	115.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	658	C	O4'-C1'-C2'	-9.27	96.53	105.80
67	B1	1222	U	P-O3'-C3'	9.27	130.83	119.70
67	B1	1669	A	C1'-O4'-C4'	-9.27	102.48	109.90
67	B1	163	G	O4'-C1'-N9	9.27	115.62	108.20
67	B1	1245	C	C1'-O4'-C4'	9.27	117.32	109.90
49	BQ	100	ARG	NE-CZ-NH2	-9.27	115.67	120.30
67	B1	1675	C	N1-C1'-C2'	9.27	126.05	114.00
67	B1	2021	G	C1'-O4'-C4'	-9.27	102.49	109.90
21	A2	183	A	P-O5'-C5'	9.27	135.73	120.90
21	A2	868	C	O4'-C1'-C2'	-9.27	96.53	105.80
67	B1	297	G	O4'-C1'-N9	-9.26	100.79	108.20
67	B1	1439	G	C3'-C2'-C1'	9.26	108.91	101.50
67	B1	1618	G	N9-C1'-C2'	9.26	126.04	114.00
67	B1	1012	G	N1-C6-O6	9.26	125.46	119.90
67	B1	2179	G	O4'-C1'-C2'	-9.26	96.54	105.80
21	A2	1439	G	N9-C1'-C2'	-9.26	101.82	112.00
21	A2	423	U	N1-C1'-C2'	-9.26	101.82	112.00
36	Bf	46	ARG	NE-CZ-NH2	-9.26	115.67	120.30
67	B1	406	G	C5'-C4'-C3'	-9.26	101.19	116.00
67	B1	891	C	N1-C1'-C2'	9.26	126.03	114.00
67	B1	1586	G	P-O3'-C3'	9.26	130.81	119.70
67	B1	2230	G	O4'-C1'-N9	9.26	115.60	108.20
67	B1	2223	G	O4'-C1'-N9	9.25	115.60	108.20
61	Bd	50	ARG	NE-CZ-NH1	9.25	124.93	120.30
67	B1	2278	U	O4'-C1'-N1	9.25	115.60	108.20
67	B1	2639	G	O4'-C1'-N9	9.25	115.60	108.20
67	B1	1041	U	P-O5'-C5'	9.25	135.69	120.90
67	B1	2637	U	O4'-C1'-N1	9.25	115.60	108.20
37	BU	73	ARG	NE-CZ-NH2	-9.24	115.68	120.30
21	A2	1093	C	C3'-C2'-C1'	9.24	108.89	101.50
21	A2	1415	U	O4'-C1'-N1	9.24	115.59	108.20
21	A2	1460	G	P-O3'-C3'	9.24	130.79	119.70
67	B1	194	G	O4'-C1'-C2'	-9.24	96.56	105.80
67	B1	1670	A	P-O3'-C3'	9.24	130.79	119.70
27	A0	24	G	O4'-C1'-N9	9.23	115.59	108.20
67	B1	2077	A	O4'-C1'-N9	9.23	115.59	108.20
67	B1	2482	G	N9-C1'-C2'	9.23	126.00	114.00
67	B1	2562	G	O4'-C1'-C2'	-9.23	96.57	105.80
67	B1	3047	C	N1-C1'-C2'	9.23	126.00	114.00
21	A2	1021	C	C1'-O4'-C4'	-9.23	102.52	109.90
21	A2	765	U	O4'-C1'-N1	9.23	115.58	108.20
67	B1	1141	C	C3'-C2'-C1'	9.23	108.88	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AO	9	ARG	NE-CZ-NH2	9.22	124.91	120.30
21	A2	865	A	C1'-O4'-C4'	9.22	117.28	109.90
67	B1	1643	A	C5'-C4'-C3'	9.22	130.76	116.00
27	A0	25	C	O4'-C1'-N1	9.22	115.58	108.20
67	B1	386	A	O4'-C1'-N9	9.22	115.58	108.20
67	B1	791	C	O4'-C1'-C2'	-9.22	96.58	105.80
67	B1	1038	U	O4'-C1'-C2'	-9.22	96.58	105.80
21	A2	1216	A	O4'-C1'-N9	9.22	115.58	108.20
67	B1	1726	A	N9-C1'-C2'	-9.22	101.86	112.00
21	A2	1101	G	C1'-O4'-C4'	9.22	117.28	109.90
57	BZ	90	GLU	N-CA-CB	9.22	127.19	110.60
67	B1	1969	C	C1'-O4'-C4'	-9.22	102.53	109.90
21	A2	755	U	O4'-C1'-N1	9.21	115.57	108.20
62	BN	11	TYR	CB-CG-CD1	9.21	126.53	121.00
67	B1	2840	C	C3'-C2'-C1'	9.21	108.87	101.50
67	B1	219	G	C1'-O4'-C4'	9.21	117.27	109.90
67	B1	1711	C	P-O5'-C5'	9.21	135.64	120.90
67	B1	2877	A	C1'-O4'-C4'	-9.21	102.53	109.90
21	A2	218	C	O4'-C1'-N1	-9.21	100.83	108.20
21	A2	415	C	C3'-C2'-C1'	9.21	108.87	101.50
56	BH	2	PRO	N-CA-CB	9.21	114.35	103.30
21	A2	832	G	N9-C1'-C2'	9.21	125.97	114.00
67	B1	2289	A	C3'-C2'-C1'	9.21	108.87	101.50
67	B1	194	G	O4'-C1'-N9	9.21	115.56	108.20
21	A2	1471	G	O4'-C1'-N9	9.20	115.56	108.20
67	B1	1738	A	N9-C1'-C2'	-9.20	101.88	112.00
67	B1	185	A	C3'-C2'-C1'	9.20	108.86	101.50
21	A2	1003	G	O4'-C1'-C2'	9.20	115.88	107.60
61	Bd	48	ARG	NE-CZ-NH2	-9.20	115.70	120.30
21	A2	1187	A	C3'-C2'-C1'	9.20	108.86	101.50
67	B1	2055	U	O4'-C1'-N1	9.19	115.55	108.20
67	B1	2617	G	P-O3'-C3'	9.19	130.73	119.70
67	B1	2461	C	C3'-C2'-C1'	9.19	108.85	101.50
68	B3	109	A	O4'-C1'-N9	9.19	115.55	108.20
21	A2	692	G	C1'-O4'-C4'	-9.18	102.55	109.90
27	A0	40	C	C1'-O4'-C4'	9.18	117.25	109.90
46	BA	104	TYR	CB-CG-CD1	9.18	126.51	121.00
67	B1	311	C	O4'-C1'-N1	9.18	115.55	108.20
67	B1	2895	G	C1'-O4'-C4'	-9.18	102.55	109.90
67	B1	531	G	O4'-C1'-N9	9.18	115.55	108.20
67	B1	2125	C	N1-C1'-C2'	9.18	125.94	114.00
67	B1	2670	U	O4'-C1'-N1	9.18	115.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1208	A	C2'-C3'-O3'	9.18	129.70	109.50
67	B1	391	C	C3'-C2'-C1'	9.18	108.84	101.50
67	B1	1336	G	N9-C1'-C2'	-9.18	101.90	112.00
67	B1	970	G	O4'-C1'-C2'	9.18	115.86	107.60
67	B1	444	U	O4'-C1'-C2'	-9.18	96.62	105.80
67	B1	2955	G	C3'-C2'-C1'	9.18	108.84	101.50
27	A0	13	U	C5'-C4'-C3'	-9.17	101.32	116.00
32	BO	143	ARG	NE-CZ-NH1	9.17	124.89	120.30
67	B1	737	G	C1'-O4'-C4'	-9.17	102.56	109.90
11	A1	23	G	O4'-C1'-N9	9.17	115.53	108.20
67	B1	242	C	O4'-C1'-N1	9.17	115.53	108.20
67	B1	2790	C	N1-C1'-C2'	9.17	125.92	114.00
11	A1	22	A	O4'-C1'-C2'	9.16	115.85	107.60
11	A1	34	U	O4'-C1'-N1	9.16	115.53	108.20
21	A2	671	C	O4'-C1'-N1	9.16	115.53	108.20
31	BY	69	ARG	NE-CZ-NH1	-9.16	115.72	120.30
67	B1	274	C	O4'-C1'-C2'	-9.16	96.64	105.80
67	B1	393	C	C5'-C4'-C3'	9.16	130.65	116.00
67	B1	1336	G	O4'-C1'-C2'	-9.16	96.64	105.80
21	A2	470	G	C1'-O4'-C4'	9.15	117.22	109.90
21	A2	904	G	C1'-O4'-C4'	9.15	117.22	109.90
21	A2	1294	G	C3'-C2'-C1'	9.15	108.82	101.50
67	B1	220	C	O4'-C1'-C2'	-9.15	96.65	105.80
21	A2	193	G	O4'-C1'-N9	9.15	115.52	108.20
67	B1	2923	G	N9-C1'-C2'	-9.15	101.94	112.00
21	A2	207	G	C1'-O4'-C4'	9.15	117.22	109.90
68	B3	87	G	P-O3'-C3'	-9.15	108.72	119.70
21	A2	227	C	P-O3'-C3'	-9.15	108.72	119.70
67	B1	355	G	C3'-C2'-C1'	-9.15	94.18	101.50
67	B1	2403	G	N9-C1'-C2'	9.15	125.89	114.00
21	A2	1250	C	N1-C1'-C2'	9.14	125.89	114.00
67	B1	1653	U	C1'-O4'-C4'	-9.14	102.59	109.90
21	A2	306	C	C1'-O4'-C4'	9.14	117.21	109.90
21	A2	384	G	O4'-C1'-N9	-9.14	100.89	108.20
65	BJ	114	ARG	NE-CZ-NH1	9.14	124.87	120.30
67	B1	1152	C	N1-C1'-C2'	9.14	125.89	114.00
67	B1	1681	G	C1'-O4'-C4'	-9.14	102.59	109.90
21	A2	100	A	C3'-C2'-C1'	9.14	108.81	101.50
21	A2	166	A	N9-C1'-C2'	9.14	125.88	114.00
21	A2	218	C	C3'-C2'-C1'	9.14	108.81	101.50
21	A2	581	G	O4'-C1'-N9	9.14	115.51	108.20
21	A2	1157	G	O4'-C1'-C2'	9.14	115.83	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	422	U	C1'-O4'-C4'	9.13	117.21	109.90
67	B1	1566	G	C4'-C3'-C2'	9.14	111.74	102.60
67	B1	2954	C	O4'-C1'-N1	9.14	115.51	108.20
21	A2	976	A	N9-C1'-C2'	-9.13	101.95	112.00
8	AR	92	ARG	NE-CZ-NH2	-9.13	115.73	120.30
67	B1	868	U	O4'-C1'-N1	9.13	115.50	108.20
21	A2	1131	G	P-O3'-C3'	9.13	130.66	119.70
67	B1	2865	C	N1-C1'-C2'	9.13	125.87	114.00
67	B1	493	A	O4'-C1'-N9	-9.13	100.90	108.20
11	A1	9	A	O4'-C1'-N9	9.13	115.50	108.20
68	B3	45	C	C1'-O4'-C4'	9.13	117.20	109.90
67	B1	2745	G	O4'-C1'-C2'	9.12	115.81	107.60
21	A2	95	G	O4'-C1'-N9	9.12	115.50	108.20
53	BD	254	TYR	CB-CG-CD1	-9.12	115.53	121.00
67	B1	2846	A	O4'-C1'-C2'	9.12	115.81	107.60
21	A2	957	A	C1'-O4'-C4'	9.12	117.19	109.90
67	B1	308	C	P-O3'-C3'	9.12	130.64	119.70
67	B1	1785	G	O4'-C1'-N9	9.12	115.49	108.20
68	B3	18	G	O4'-C1'-C2'	9.12	115.81	107.60
50	BV	52	TRP	CA-CB-CG	9.11	131.02	113.70
27	A0	15	G	O4'-C1'-N9	9.11	115.49	108.20
67	B1	3030	A	O4'-C1'-N9	9.11	115.49	108.20
67	B1	1255	C	O4'-C1'-C2'	-9.11	96.69	105.80
67	B1	2392	A	C1'-O4'-C4'	-9.11	102.61	109.90
67	B1	2666	G	C1'-O4'-C4'	-9.11	102.61	109.90
67	B1	882	U	N1-C1'-C2'	9.11	125.84	114.00
21	A2	1358	A	O4'-C1'-C2'	-9.11	96.69	105.80
67	B1	2301	C	P-O5'-C5'	9.11	135.47	120.90
11	A1	50	G	C1'-O4'-C4'	9.11	117.19	109.90
67	B1	924	A	C3'-C2'-C1'	-9.11	94.21	101.50
67	B1	2560	G	C3'-C2'-C1'	-9.11	94.21	101.50
67	B1	3047	C	P-O5'-C5'	9.11	135.47	120.90
11	A1	24	A	O4'-C1'-N9	9.10	115.48	108.20
21	A2	636	G	O4'-C1'-N9	9.10	115.48	108.20
67	B1	241	C	C3'-C2'-C1'	-9.10	94.22	101.50
21	A2	119	A	C3'-C2'-C1'	9.10	108.78	101.50
21	A2	167	G	C3'-C2'-C1'	9.10	108.78	101.50
67	B1	18	C	C1'-O4'-C4'	9.10	117.18	109.90
67	B1	2396	G	P-O3'-C3'	9.10	130.61	119.70
21	A2	131	G	O4'-C1'-N9	9.09	115.47	108.20
67	B1	1243	C	C1'-O4'-C4'	-9.09	102.63	109.90
11	A1	66	C	N1-C1'-C2'	9.09	125.82	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	817	U	O4'-C1'-N1	9.09	115.47	108.20
21	A2	1444	G	O4'-C1'-N9	9.09	115.47	108.20
54	BF	40	PHE	CB-CG-CD2	-9.09	114.44	120.80
21	A2	331	C	O4'-C1'-N1	9.08	115.47	108.20
67	B1	41	G	O4'-C1'-N9	9.08	115.47	108.20
67	B1	66	C	C3'-C2'-C1'	9.08	108.77	101.50
67	B1	2972	G	C1'-O4'-C4'	-9.08	102.63	109.90
67	B1	157	U	C4'-C3'-C2'	-9.08	93.52	102.60
67	B1	821	U	C1'-O4'-C4'	9.08	117.16	109.90
67	B1	260	A	O4'-C1'-N9	9.08	115.46	108.20
67	B1	1533	G	C3'-C2'-C1'	-9.08	94.24	101.50
19	AS	20	TYR	CB-CG-CD1	-9.07	115.56	121.00
21	A2	3	U	O4'-C1'-C2'	-9.07	96.72	105.80
67	B1	602	G	O4'-C1'-N9	9.07	115.46	108.20
21	A2	805	C	P-O3'-C3'	-9.07	108.81	119.70
68	B3	9	A	N9-C1'-C2'	-9.07	102.02	112.00
21	A2	936	A	N9-C1'-C2'	9.07	125.79	114.00
21	A2	1144	G	O4'-C1'-C2'	-9.07	96.73	105.80
67	B1	2070	U	O4'-C1'-N1	9.07	115.46	108.20
36	Bf	12	ARG	NE-CZ-NH1	9.07	124.83	120.30
67	B1	1622	G	O4'-C1'-C2'	-9.07	96.73	105.80
67	B1	2846	A	C3'-C2'-C1'	-9.07	94.25	101.50
21	A2	920	U	O4'-C1'-N1	9.06	115.45	108.20
21	A2	990	G	O4'-C1'-N9	9.06	115.45	108.20
52	BB	24	PHE	CB-CG-CD2	-9.06	114.45	120.80
67	B1	451	C	O4'-C1'-C2'	-9.06	96.74	105.80
67	B1	1903	G	O4'-C1'-N9	9.06	115.45	108.20
52	BB	158	THR	CA-CB-CG2	9.06	125.09	112.40
21	A2	262	G	C3'-C2'-C1'	9.06	108.75	101.50
67	B1	2949	G	O4'-C1'-C2'	-9.06	96.74	105.80
21	A2	702	G	C5'-C4'-C3'	9.06	130.49	116.00
67	B1	2458	U	C1'-O4'-C4'	9.06	117.15	109.90
67	B1	2574	G	C3'-C2'-C1'	9.06	108.75	101.50
67	B1	2206	G	O4'-C1'-N9	-9.05	100.96	108.20
21	A2	568	C	O4'-C1'-N1	9.05	115.44	108.20
67	B1	2651	G	N9-C1'-C2'	9.05	125.77	114.00
37	BU	75	ARG	NE-CZ-NH1	9.05	124.83	120.30
67	B1	1223	A	C3'-C2'-C1'	9.05	108.74	101.50
21	A2	373	C	N1-C1'-C2'	9.04	125.76	114.00
21	A2	489	C	N1-C1'-C2'	9.04	125.76	114.00
67	B1	1749	C	N1-C1'-C2'	-9.04	102.05	112.00
21	A2	309	A	C1'-O4'-C4'	9.04	117.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2366	G	O4'-C1'-N9	9.04	115.43	108.20
67	B1	2395	C	C3'-C2'-C1'	9.04	108.73	101.50
67	B1	3037	G	O4'-C1'-N9	9.04	115.43	108.20
67	B1	1754	A	C3'-C2'-C1'	-9.04	94.27	101.50
67	B1	1558	U	O4'-C1'-N1	9.04	115.43	108.20
67	B1	2103	C	N1-C1'-C2'	9.04	125.75	114.00
67	B1	2895	G	N9-C1'-C2'	9.04	125.75	114.00
67	B1	2920	C	N1-C1'-C2'	9.04	125.75	114.00
67	B1	1068	U	O4'-C1'-C2'	-9.04	96.77	105.80
67	B1	2746	G	N1-C6-O6	9.04	125.32	119.90
21	A2	93	A	C5'-C4'-C3'	-9.03	101.55	116.00
67	B1	633	A	O4'-C1'-N9	9.03	115.43	108.20
20	BG	27	ARG	NE-CZ-NH1	9.03	124.82	120.30
68	B3	50	G	O4'-C1'-C2'	-9.03	96.77	105.80
21	A2	130	G	O4'-C1'-C2'	-9.03	96.77	105.80
21	A2	155	U	O4'-C1'-N1	9.03	115.42	108.20
27	A0	22	G	O4'-C1'-C2'	9.03	115.73	107.60
67	B1	2414	G	P-O3'-C3'	-9.03	108.86	119.70
67	B1	822	A	C1'-O4'-C4'	-9.03	102.68	109.90
67	B1	1642	G	C1'-O4'-C4'	9.03	117.12	109.90
67	B1	2710	G	C1'-O4'-C4'	9.03	117.12	109.90
67	B1	2152	G	O4'-C1'-C2'	-9.03	96.77	105.80
21	A2	215	C	N1-C1'-C2'	9.03	125.73	114.00
21	A2	424	U	N1-C1'-C2'	9.03	125.73	114.00
67	B1	2377	C	C1'-O4'-C4'	-9.03	102.68	109.90
21	A2	284	A	C3'-C2'-C1'	9.02	108.72	101.50
21	A2	674	C	C3'-C2'-C1'	9.02	108.72	101.50
37	BU	93	TYR	CB-CG-CD2	-9.02	115.58	121.00
2	AK	100	MET	CG-SD-CE	-9.02	85.77	100.20
67	B1	2238	G	C1'-O4'-C4'	9.02	117.12	109.90
67	B1	2618	C	C3'-C2'-C1'	9.02	108.72	101.50
67	B1	69	C	N1-C1'-C2'	9.02	125.73	114.00
67	B1	2873	G	C3'-C2'-C1'	-9.02	94.28	101.50
67	B1	660	U	C1'-O4'-C4'	-9.02	102.69	109.90
67	B1	1677	A	P-O3'-C3'	9.02	130.52	119.70
67	B1	2614	C	N1-C1'-C2'	9.02	125.72	114.00
67	B1	1782	C	P-O3'-C3'	9.01	130.52	119.70
67	B1	2489	C	P-O5'-C5'	9.01	135.32	120.90
21	A2	156	A	O4'-C1'-N9	-9.01	100.99	108.20
67	B1	2476	A	O4'-C1'-C2'	-9.01	96.79	105.80
21	A2	1437	G	C3'-C2'-C1'	9.01	108.70	101.50
67	B1	227	G	O4'-C1'-N9	9.01	115.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1570	C	C5'-C4'-C3'	9.01	130.41	116.00
67	B1	2417	G	N9-C1'-C2'	-9.01	102.09	112.00
67	B1	1225	A	N9-C1'-C2'	9.00	125.70	114.00
67	B1	657	U	O4'-C1'-N1	9.00	115.40	108.20
67	B1	1483	U	O4'-C1'-N1	9.00	115.40	108.20
21	A2	65	G	C3'-C2'-C1'	-9.00	94.30	101.50
21	A2	328	G	O4'-C1'-N9	9.00	115.40	108.20
21	A2	640	U	P-O3'-C3'	9.00	130.50	119.70
67	B1	1136	G	C3'-C2'-C1'	-9.00	94.30	101.50
67	B1	186	A	O4'-C1'-C2'	-9.00	96.80	105.80
67	B1	1479	U	O4'-C1'-N1	9.00	115.40	108.20
11	A1	22	A	C1'-O4'-C4'	-9.00	102.70	109.90
68	B3	40	G	N9-C1'-C2'	9.00	125.70	114.00
67	B1	1240	U	O4'-C1'-N1	9.00	115.40	108.20
42	BT	67	TYR	CB-CG-CD1	-8.99	115.60	121.00
67	B1	1125	A	P-O3'-C3'	8.99	130.49	119.70
67	B1	1731	U	O4'-C1'-N1	8.99	115.39	108.20
67	B1	2553	U	O4'-C1'-N1	8.99	115.39	108.20
67	B1	2562	G	C3'-C2'-C1'	8.99	108.69	101.50
13	AX	69	SER	N-CA-CB	8.99	123.98	110.50
67	B1	443	C	O4'-C1'-C2'	-8.99	96.81	105.80
67	B1	1775	G	N1-C6-O6	8.99	125.29	119.90
67	B1	2958	U	O4'-C1'-N1	8.99	115.39	108.20
68	B3	65	G	N9-C1'-C2'	8.99	125.69	114.00
68	B3	123	U	O4'-C1'-C2'	-8.99	96.81	105.80
11	A1	41	C	C1'-O4'-C4'	-8.99	102.71	109.90
62	BN	66	ARG	NE-CZ-NH1	8.99	124.79	120.30
67	B1	2448	A	C3'-C2'-C1'	-8.99	94.31	101.50
21	A2	71	C	C3'-C2'-C1'	8.98	108.69	101.50
21	A2	767	U	O4'-C1'-N1	8.98	115.39	108.20
12	AN	96	PHE	CB-CG-CD1	8.98	127.09	120.80
67	B1	751	U	C1'-O4'-C4'	8.98	117.08	109.90
67	B1	1206	A	C3'-C2'-C1'	8.98	108.68	101.50
67	B1	2192	G	C3'-C2'-C1'	-8.98	94.32	101.50
67	B1	20	C	C3'-C2'-C1'	8.97	108.68	101.50
67	B1	909	A	C1'-O4'-C4'	8.97	117.08	109.90
67	B1	956	U	P-O3'-C3'	8.97	130.47	119.70
67	B1	2506	G	O4'-C1'-N9	8.97	115.38	108.20
21	A2	941	C	N1-C1'-C2'	8.97	125.66	114.00
67	B1	711	C	O4'-C1'-C2'	-8.97	96.83	105.80
11	A1	73	C	C3'-C2'-C1'	8.97	108.67	101.50
21	A2	628	G	O4'-C1'-N9	8.97	115.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	99	U	O4'-C1'-N1	8.97	115.37	108.20
67	B1	3017	U	O4'-C1'-N1	8.97	115.37	108.20
21	A2	511	C	P-O5'-C5'	8.96	135.24	120.90
21	A2	843	G	O4'-C1'-N9	8.96	115.37	108.20
67	B1	86	G	P-O5'-C5'	8.96	135.24	120.90
67	B1	640	C	C1'-O4'-C4'	-8.96	102.73	109.90
67	B1	1995	C	C3'-C2'-C1'	-8.96	94.33	101.50
67	B1	2559	G	C1'-O4'-C4'	-8.96	102.73	109.90
67	B1	3035	C	O4'-C1'-C2'	-8.96	96.84	105.80
67	B1	284	U	O4'-C1'-N1	8.96	115.37	108.20
67	B1	398	U	O4'-C1'-N1	8.96	115.37	108.20
21	A2	532	C	N1-C1'-C2'	8.96	125.64	114.00
21	A2	1119	U	C3'-C2'-C1'	8.96	108.66	101.50
59	BM	187	ARG	NE-CZ-NH2	-8.96	115.82	120.30
67	B1	900	C	C3'-C2'-C1'	8.95	108.66	101.50
67	B1	2599	C	N1-C1'-C2'	8.96	125.64	114.00
21	A2	458	G	N1-C6-O6	8.95	125.27	119.90
27	A0	66	C	P-O3'-C3'	8.95	130.44	119.70
67	B1	210	A	O4'-C1'-N9	-8.95	101.04	108.20
67	B1	602	G	O4'-C1'-C2'	8.95	115.66	107.60
67	B1	2796	C	P-O3'-C3'	8.95	130.44	119.70
67	B1	2363	G	O4'-C1'-C2'	-8.95	96.85	105.80
67	B1	2771	G	O4'-C1'-N9	8.95	115.36	108.20
21	A2	540	G	C1'-O4'-C4'	8.95	117.06	109.90
21	A2	1020	G	N9-C1'-C2'	8.95	125.63	114.00
68	B3	31	U	O4'-C1'-C2'	-8.95	96.85	105.80
21	A2	1339	G	N9-C1'-C2'	8.94	125.62	114.00
58	BP	8	ASP	CB-CG-OD2	-8.94	110.25	118.30
67	B1	935	A	O4'-C1'-C2'	-8.94	96.86	105.80
67	B1	1567	C	O5'-P-OP2	8.94	121.43	110.70
67	B1	1734	G	C1'-O4'-C4'	8.94	117.05	109.90
67	B1	2303	A	O4'-C1'-N9	-8.94	101.05	108.20
67	B1	127	C	C3'-C2'-C1'	8.94	108.65	101.50
37	BU	56	ARG	NE-CZ-NH1	8.94	124.77	120.30
67	B1	2216	G	O4'-C1'-N9	8.94	115.35	108.20
67	B1	2441	A	C3'-C2'-C1'	8.94	108.65	101.50
67	B1	1851	U	C1'-O4'-C4'	8.94	117.05	109.90
21	A2	8	U	C1'-O4'-C4'	8.93	117.05	109.90
21	A2	948	G	N9-C1'-C2'	-8.93	102.17	112.00
21	A2	492	G	C3'-C2'-C1'	8.93	108.65	101.50
65	BJ	84	ARG	NE-CZ-NH1	8.93	124.77	120.30
67	B1	872	G	C1'-O4'-C4'	-8.93	102.75	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1576	C	C3'-C2'-C1'	8.93	108.64	101.50
67	B1	1924	A	C3'-C2'-C1'	-8.93	94.35	101.50
15	AE	83	PHE	CB-CG-CD1	-8.93	114.55	120.80
21	A2	248	U	O4'-C1'-C2'	-8.93	96.87	105.80
21	A2	721	A	O4'-C1'-C2'	-8.93	96.87	105.80
21	A2	1318	U	O4'-C1'-C2'	-8.93	96.87	105.80
21	A2	844	G	O4'-C1'-N9	8.93	115.34	108.20
21	A2	64	G	C3'-C2'-C1'	8.93	108.64	101.50
21	A2	348	C	P-O3'-C3'	8.93	130.41	119.70
67	B1	268	C	C3'-C2'-C1'	8.93	108.64	101.50
67	B1	1196	A	P-O3'-C3'	8.93	130.41	119.70
67	B1	1233	U	N1-C1'-C2'	-8.93	102.18	112.00
67	B1	1681	G	O4'-C1'-N9	8.93	115.34	108.20
67	B1	1568	A	P-O3'-C3'	-8.93	108.99	119.70
21	A2	525	A	O4'-C1'-N9	8.92	115.34	108.20
21	A2	177	A	N9-C1'-C2'	-8.92	102.19	112.00
21	A2	1117	A	N9-C1'-C2'	8.92	125.60	114.00
27	A0	17	U	O4'-C1'-C2'	-8.92	96.88	105.80
33	BC	323	MET	CG-SD-CE	-8.92	85.93	100.20
67	B1	2146	C	C3'-C2'-C1'	8.92	108.64	101.50
67	B1	2520	C	N1-C1'-C2'	8.92	125.60	114.00
21	A2	868	C	C3'-C2'-C1'	8.92	108.63	101.50
67	B1	2099	G	C1'-O4'-C4'	-8.92	102.77	109.90
67	B1	2516	G	C1'-O4'-C4'	-8.91	102.77	109.90
35	BL	10	LYS	CB-CA-C	8.91	128.22	110.40
67	B1	116	G	C3'-C2'-C1'	8.91	108.63	101.50
67	B1	697	U	C3'-C2'-C1'	8.91	108.63	101.50
67	B1	2476	A	C3'-C2'-C1'	8.91	108.63	101.50
68	B3	105	G	O4'-C1'-N9	8.91	115.33	108.20
67	B1	539	A	P-O3'-C3'	8.91	130.39	119.70
21	A2	459	G	N1-C6-O6	8.91	125.25	119.90
67	B1	461	C	C3'-C2'-C1'	8.91	108.63	101.50
67	B1	632	G	O4'-C1'-N9	8.91	115.33	108.20
62	BN	91	PHE	CB-CG-CD2	-8.91	114.56	120.80
67	B1	621	G	N9-C1'-C2'	8.91	125.58	114.00
67	B1	1827	A	O4'-C1'-C2'	-8.91	96.89	105.80
21	A2	712	G	O4'-C1'-N9	8.90	115.32	108.20
51	Bj	82	ARG	CA-CB-CG	8.90	132.99	113.40
21	A2	92	G	C3'-C2'-C1'	-8.90	94.38	101.50
49	BQ	66	ARG	NE-CZ-NH1	8.90	124.75	120.30
67	B1	2596	G	C1'-O4'-C4'	-8.90	102.78	109.90
21	A2	244	G	O4'-C1'-N9	8.90	115.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1266	A	O4'-C1'-N9	8.90	115.32	108.20
67	B1	1110	A	O4'-C1'-N9	8.90	115.32	108.20
67	B1	2176	G	O4'-C1'-C2'	8.89	115.61	107.60
21	A2	91	G	O4'-C1'-C2'	8.89	115.60	107.60
21	A2	1492	U	C4'-C3'-C2'	-8.89	93.71	102.60
67	B1	370	A	C3'-C2'-C1'	8.89	108.61	101.50
67	B1	1572	C	O4'-C1'-C2'	-8.89	96.91	105.80
67	B1	1401	G	O4'-C1'-N9	8.89	115.31	108.20
67	B1	1547	U	N1-C1'-C2'	-8.89	102.22	112.00
67	B1	1934	C	C3'-C2'-C1'	8.89	108.61	101.50
67	B1	2858	C	N1-C1'-C2'	8.89	125.56	114.00
5	AW	10	ARG	NE-CZ-NH2	-8.89	115.86	120.30
21	A2	893	U	O4'-C1'-N1	8.89	115.31	108.20
57	BZ	70	LEU	CB-CG-CD1	8.89	126.11	111.00
21	A2	962	G	N1-C6-O6	8.88	125.23	119.90
25	AH	84	HIS	C-N-CA	8.88	143.91	121.70
60	BS	22	ALA	N-CA-CB	8.88	122.54	110.10
67	B1	206	A	N9-C1'-C2'	8.88	125.55	114.00
21	A2	681	G	C1'-O4'-C4'	8.88	117.00	109.90
67	B1	2157	U	N1-C1'-C2'	8.88	125.55	114.00
67	B1	2164	G	N1-C6-O6	8.88	125.23	119.90
67	B1	1096	A	O3'-P-O5'	8.88	120.87	104.00
21	A2	1459	G	P-O5'-C5'	8.88	135.11	120.90
21	A2	370	A	O4'-C1'-N9	8.88	115.30	108.20
26	AP	14	PHE	CB-CG-CD2	-8.88	114.59	120.80
67	B1	876	C	P-O3'-C3'	8.88	130.35	119.70
67	B1	1869	U	C1'-O4'-C4'	8.88	117.00	109.90
21	A2	1404	C	O4'-C1'-N1	8.87	115.30	108.20
14	AM	66	ARG	NE-CZ-NH1	8.87	124.74	120.30
21	A2	1074	C	C1'-O4'-C4'	-8.87	102.80	109.90
67	B1	1106	C	C1'-O4'-C4'	-8.87	102.80	109.90
67	B1	1973	U	P-O3'-C3'	8.87	130.35	119.70
21	A2	96	G	N9-C1'-C2'	8.87	125.53	114.00
21	A2	1052	U	O4'-C1'-N1	8.87	115.30	108.20
54	BF	39	PHE	CB-CG-CD1	8.87	127.01	120.80
21	A2	989	C	P-O3'-C3'	8.87	130.34	119.70
67	B1	112	U	O4'-C1'-N1	8.87	115.30	108.20
67	B1	555	G	O4'-C1'-C2'	8.87	115.58	107.60
21	A2	207	G	N9-C1'-C2'	-8.87	102.25	112.00
29	AL	92	GLU	C-N-CA	8.87	143.87	121.70
33	BC	353	ARG	NE-CZ-NH2	-8.87	115.87	120.30
67	B1	1034	G	O4'-C1'-C2'	8.86	115.58	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	665	G	C1'-O4'-C4'	-8.86	102.81	109.90
12	AN	29	ARG	NE-CZ-NH1	8.86	124.73	120.30
67	B1	755	G	O4'-C1'-N9	8.86	115.29	108.20
11	A1	39	A	O4'-C1'-N9	8.86	115.29	108.20
67	B1	1283	G	C1'-O4'-C4'	8.86	116.99	109.90
67	B1	273	G	P-O3'-C3'	8.86	130.33	119.70
67	B1	1045	A	C3'-C2'-C1'	8.86	108.58	101.50
8	AR	113	ARG	NE-CZ-NH2	-8.86	115.87	120.30
21	A2	356	G	N9-C1'-C2'	8.86	125.51	114.00
67	B1	1204	U	P-O5'-C5'	8.86	135.07	120.90
21	A2	339	U	O4'-C1'-N1	8.85	115.28	108.20
21	A2	456	U	N1-C1'-C2'	8.85	125.51	114.00
67	B1	1799	G	C1'-O4'-C4'	-8.85	102.82	109.90
67	B1	2293	G	O4'-C1'-N9	8.85	115.28	108.20
21	A2	1376	C	O4'-C1'-N1	8.85	115.28	108.20
25	AH	103	VAL	CA-CB-CG2	-8.85	97.62	110.90
67	B1	2667	U	O4'-C1'-N1	8.85	115.28	108.20
67	B1	78	C	N1-C1'-C2'	8.85	125.50	114.00
67	B1	2074	U	O4'-C1'-N1	8.85	115.28	108.20
21	A2	432	G	N1-C6-O6	8.85	125.21	119.90
40	BE	128	TYR	CB-CG-CD1	-8.85	115.69	121.00
67	B1	904	G	O4'-C1'-N9	8.85	115.28	108.20
67	B1	1561	G	P-O3'-C3'	8.85	130.31	119.70
67	B1	1776	G	N1-C6-O6	8.85	125.21	119.90
67	B1	2295	C	O4'-C1'-N1	8.84	115.28	108.20
21	A2	231	G	O4'-C1'-N9	8.84	115.27	108.20
21	A2	1423	A	N9-C1'-C2'	-8.84	102.27	112.00
38	Bb	31	TYR	CG-CD1-CE1	-8.84	114.23	121.30
21	A2	626	G	C1'-O4'-C4'	8.84	116.97	109.90
35	BL	45	SER	N-CA-CB	8.84	123.76	110.50
67	B1	381	G	O4'-C1'-N9	8.84	115.27	108.20
67	B1	1849	A	O4'-C1'-N9	8.84	115.27	108.20
67	B1	2514	C	C1'-O4'-C4'	-8.84	102.83	109.90
7	AB	122	ALA	CB-CA-C	-8.84	96.84	110.10
67	B1	1010	G	N1-C6-O6	8.84	125.20	119.90
21	A2	773	A	O4'-C1'-C2'	-8.84	96.96	105.80
21	A2	1474	A	N9-C1'-C2'	-8.84	102.28	112.00
67	B1	850	C	C3'-C2'-C1'	8.84	108.57	101.50
31	BY	8	ARG	NE-CZ-NH2	-8.83	115.88	120.30
67	B1	990	G	O4'-C1'-N9	8.83	115.27	108.20
67	B1	1350	C	O4'-C1'-C2'	-8.83	96.97	105.80
21	A2	1185	A	N9-C1'-C2'	8.83	125.48	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	725	G	O4'-C1'-N9	8.83	115.26	108.20
67	B1	2850	G	C1'-O4'-C4'	-8.83	102.84	109.90
21	A2	1418	G	C1'-O4'-C4'	-8.83	102.84	109.90
67	B1	384	G	N1-C6-O6	8.83	125.20	119.90
67	B1	1699	U	N1-C1'-C2'	8.83	125.47	114.00
51	Bj	84	PHE	CB-CG-CD2	-8.82	114.62	120.80
67	B1	841	U	O4'-C1'-N1	8.82	115.26	108.20
21	A2	1170	C	C3'-C2'-C1'	8.82	108.56	101.50
21	A2	1385	U	O4'-C1'-N1	8.82	115.25	108.20
33	BC	198	TYR	CB-CG-CD1	-8.82	115.71	121.00
67	B1	1499	C	C1'-O4'-C4'	-8.82	102.84	109.90
67	B1	1674	G	O4'-C1'-C2'	8.82	115.54	107.60
67	B1	2236	C	O4'-C1'-N1	8.82	115.26	108.20
67	B1	161	C	C4'-C3'-C2'	-8.82	93.78	102.60
21	A2	421	U	C1'-O4'-C4'	-8.82	102.85	109.90
21	A2	1063	A	O4'-C1'-C2'	-8.82	96.98	105.80
21	A2	527	A	C1'-O4'-C4'	8.81	116.95	109.90
59	BM	173	ARG	NE-CZ-NH1	8.81	124.71	120.30
21	A2	386	C	N1-C1'-C2'	8.81	125.46	114.00
21	A2	605	C	N1-C1'-C2'	8.81	125.45	114.00
67	B1	1569	A	N9-C1'-C2'	8.81	125.45	114.00
21	A2	840	C	O4'-C1'-N1	8.81	115.25	108.20
18	AF	43	GLN	CB-CA-C	-8.81	92.79	110.40
21	A2	1179	C	O4'-C1'-N1	-8.81	101.15	108.20
21	A2	597	C	C3'-C2'-C1'	8.81	108.55	101.50
67	B1	2513	C	N1-C1'-C2'	8.81	125.45	114.00
67	B1	132	G	C3'-C2'-C1'	-8.80	94.46	101.50
67	B1	2249	A	O4'-C1'-C2'	-8.80	97.00	105.80
67	B1	2640	C	N1-C1'-C2'	8.80	125.44	114.00
21	A2	1204	C	O4'-C1'-C2'	-8.80	97.00	105.80
67	B1	2118	C	O4'-C1'-C2'	-8.80	97.00	105.80
21	A2	31	U	C3'-C2'-C1'	8.80	108.54	101.50
67	B1	485	G	P-O3'-C3'	8.80	130.26	119.70
67	B1	2348	G	O4'-C1'-N9	8.80	115.24	108.20
67	B1	34	C	C1'-O4'-C4'	8.80	116.94	109.90
21	A2	1199	A	C1'-O4'-C4'	8.80	116.94	109.90
67	B1	2376	U	O4'-C1'-C2'	-8.80	97.00	105.80
67	B1	2402	A	C3'-C2'-C1'	8.80	108.54	101.50
21	A2	1413	G	C3'-C2'-C1'	-8.79	94.47	101.50
27	A0	58	A	C1'-O4'-C4'	8.79	116.94	109.90
67	B1	474	G	C1'-O4'-C4'	-8.79	102.86	109.90
67	B1	580	G	O4'-C1'-N9	8.79	115.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2904	U	C4'-C3'-C2'	-8.79	93.81	102.60
67	B1	1770	A	O4'-C1'-C2'	-8.79	97.01	105.80
11	A1	37	A	C1'-O4'-C4'	-8.79	102.87	109.90
21	A2	1145	C	P-O3'-C3'	-8.79	109.15	119.70
22	AY	17	ARG	NE-CZ-NH2	-8.79	115.90	120.30
67	B1	430	A	O4'-C1'-N9	8.79	115.23	108.20
67	B1	1852	U	C3'-C2'-C1'	8.79	108.53	101.50
67	B1	2435	G	O4'-C1'-C2'	8.79	115.51	107.60
68	B3	27	C	N1-C1'-C2'	8.79	125.43	114.00
67	B1	89	C	O4'-C1'-N1	8.79	115.23	108.20
67	B1	2032	G	N9-C1'-C2'	8.79	125.42	114.00
21	A2	1175	C	O4'-C1'-C2'	-8.79	97.01	105.80
21	A2	1339	G	O4'-C1'-N9	8.79	115.23	108.20
67	B1	1198	G	O4'-C1'-N9	8.79	115.23	108.20
67	B1	2694	C	P-O3'-C3'	-8.79	109.16	119.70
67	B1	2213	G	C1'-O4'-C4'	-8.78	102.87	109.90
67	B1	2747	C	O4'-C1'-N1	8.79	115.23	108.20
65	BJ	26	TYR	CB-CG-CD1	8.78	126.27	121.00
67	B1	1763	A	O4'-C1'-N9	8.78	115.22	108.20
67	B1	3042	C	O4'-C1'-C2'	-8.78	97.02	105.80
21	A2	101	G	C3'-C2'-C1'	-8.78	94.48	101.50
21	A2	246	A	C1'-O4'-C4'	8.78	116.92	109.90
21	A2	483	G	C3'-C2'-C1'	-8.78	94.48	101.50
21	A2	1362	C	C3'-C2'-C1'	8.78	108.52	101.50
67	B1	378	G	N1-C6-O6	8.78	125.17	119.90
67	B1	1574	A	C1'-O4'-C4'	8.78	116.92	109.90
67	B1	2427	C	P-O3'-C3'	8.78	130.24	119.70
21	A2	957	A	O4'-C1'-N9	8.78	115.22	108.20
67	B1	24	G	C3'-C2'-C1'	8.78	108.52	101.50
67	B1	251	C	N1-C1'-C2'	8.78	125.41	114.00
67	B1	979	G	N9-C1'-C2'	8.78	125.41	114.00
67	B1	1913	C	C1'-O4'-C4'	-8.78	102.88	109.90
67	B1	1430	A	O4'-C1'-N9	8.78	115.22	108.20
67	B1	2484	C	C1'-O4'-C4'	-8.78	102.88	109.90
67	B1	953	G	O4'-C1'-C2'	-8.77	97.03	105.80
15	AE	198	ARG	NE-CZ-NH1	8.77	124.69	120.30
44	BW	48	ARG	NE-CZ-NH1	8.77	124.69	120.30
67	B1	561	C	P-O5'-C5'	-8.77	106.86	120.90
67	B1	2586	A	C3'-C2'-C1'	-8.77	94.48	101.50
67	B1	1139	C	N1-C1'-C2'	8.77	125.40	114.00
21	A2	760	C	C1'-O4'-C4'	-8.77	102.89	109.90
42	BT	33	ARG	NE-CZ-NH1	8.77	124.68	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	872	G	N9-C1'-C2'	8.77	125.40	114.00
67	B1	1566	G	O4'-C1'-N9	-8.77	101.19	108.20
68	B3	42	A	O4'-C1'-N9	-8.77	101.19	108.20
67	B1	1206	A	P-O3'-C3'	8.77	130.22	119.70
67	B1	1620	C	O4'-C1'-N1	8.77	115.21	108.20
67	B1	2735	C	C3'-C2'-C1'	8.77	108.51	101.50
67	B1	382	G	N1-C6-O6	8.76	125.16	119.90
67	B1	1982	C	N1-C1'-C2'	8.76	125.39	114.00
11	A1	16	C	O4'-C1'-C2'	-8.76	97.04	105.80
21	A2	374	G	C1'-O4'-C4'	-8.76	102.89	109.90
67	B1	249	G	N9-C1'-C2'	8.76	125.39	114.00
51	Bj	47	TYR	CG-CD2-CE2	-8.76	114.29	121.30
67	B1	137	A	O4'-C1'-C2'	-8.76	97.04	105.80
21	A2	591	G	O4'-C1'-N9	8.76	115.20	108.20
21	A2	1151	A	C1'-O4'-C4'	-8.76	102.89	109.90
31	BY	118	ARG	NE-CZ-NH1	-8.76	115.92	120.30
67	B1	2891	A	C1'-O4'-C4'	-8.76	102.89	109.90
67	B1	1733	C	O4'-C1'-N1	8.75	115.20	108.20
67	B1	496	A	P-O3'-C3'	8.75	130.20	119.70
67	B1	1082	A	C1'-O4'-C4'	-8.75	102.90	109.90
68	B3	117	G	O4'-C1'-N9	8.75	115.20	108.20
67	B1	1834	C	C1'-O4'-C4'	-8.75	102.90	109.90
67	B1	386	A	C1'-O4'-C4'	-8.75	102.90	109.90
67	B1	1029	C	N1-C1'-C2'	8.75	125.37	114.00
67	B1	1545	C	N1-C1'-C2'	8.75	125.37	114.00
68	B3	49	A	O4'-C1'-N9	8.75	115.20	108.20
21	A2	200	G	O4'-C1'-N9	8.75	115.20	108.20
21	A2	1102	A	O4'-C1'-N9	8.74	115.20	108.20
21	A2	774	U	O4'-C1'-N1	-8.74	101.21	108.20
21	A2	1153	G	N9-C1'-C2'	8.74	125.37	114.00
26	AP	14	PHE	CB-CG-CD1	8.74	126.92	120.80
67	B1	1967	G	O4'-C1'-N9	8.74	115.20	108.20
21	A2	267	C	O4'-C1'-C2'	-8.74	97.06	105.80
67	B1	13	U	O4'-C1'-N1	8.74	115.19	108.20
67	B1	216	A	C1'-O4'-C4'	8.74	116.89	109.90
21	A2	1002	G	P-O5'-C5'	-8.74	106.92	120.90
67	B1	1476	C	C1'-O4'-C4'	8.74	116.89	109.90
67	B1	1963	G	O4'-C1'-C2'	8.74	115.46	107.60
67	B1	1971	C	O4'-C1'-N1	8.74	115.19	108.20
67	B1	2327	C	O4'-C1'-N1	8.74	115.19	108.20
56	BH	121	ALA	CB-CA-C	-8.73	97.00	110.10
21	A2	1060	G	P-O3'-C3'	8.73	130.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1338	C	C3'-C2'-C1'	8.73	108.49	101.50
46	BA	41	ARG	NE-CZ-NH1	8.73	124.67	120.30
67	B1	519	A	C3'-C2'-C1'	8.73	108.49	101.50
67	B1	2809	G	C1'-O4'-C4'	-8.73	102.91	109.90
67	B1	2836	G	N9-C1'-C2'	8.73	125.35	114.00
20	A3	27	ARG	NE-CZ-NH1	8.73	124.67	120.30
67	B1	1288	C	N1-C1'-C2'	8.73	125.35	114.00
49	BQ	139	TYR	CB-CG-CD2	-8.73	115.76	121.00
67	B1	1390	U	P-O3'-C3'	8.73	130.18	119.70
52	BB	134	ARG	NE-CZ-NH1	8.73	124.66	120.30
21	A2	73	U	O4'-C1'-N1	8.73	115.18	108.20
67	B1	1165	C	P-O3'-C3'	8.73	130.17	119.70
7	AB	36	ARG	NE-CZ-NH2	-8.72	115.94	120.30
67	B1	2774	C	N1-C1'-C2'	8.72	125.34	114.00
21	A2	1211	A	O4'-C1'-N9	8.72	115.18	108.20
67	B1	571	G	C1'-O4'-C4'	-8.72	102.92	109.90
67	B1	2788	U	C1'-O4'-C4'	-8.72	102.92	109.90
50	BV	39	ARG	NE-CZ-NH1	8.72	124.66	120.30
51	Bj	54	LYS	N-CA-CB	8.72	126.29	110.60
67	B1	847	A	N9-C1'-C2'	-8.72	102.41	112.00
21	A2	1054	A	C3'-C2'-C1'	8.71	108.47	101.50
27	A0	21	G	O4'-C1'-N9	8.71	115.17	108.20
67	B1	239	G	C1'-O4'-C4'	-8.72	102.93	109.90
67	B1	1042	G	C3'-C2'-C1'	8.72	108.47	101.50
67	B1	2668	G	O4'-C1'-N9	8.71	115.17	108.20
67	B1	2104	G	O4'-C1'-N9	-8.71	101.23	108.20
21	A2	335	G	C3'-C2'-C1'	-8.71	94.53	101.50
21	A2	1195	U	O4'-C1'-C2'	8.71	115.44	107.60
67	B1	936	G	O4'-C1'-N9	-8.71	101.23	108.20
67	B1	1064	G	O4'-C1'-C2'	8.71	115.44	107.60
67	B1	1753	G	O4'-C1'-C2'	-8.71	97.09	105.80
67	B1	2962	A	C1'-O4'-C4'	-8.71	102.93	109.90
67	B1	658	C	C3'-C2'-C1'	8.70	108.46	101.50
21	A2	768	A	N9-C1'-C2'	-8.70	102.43	112.00
21	A2	89	G	C1'-O4'-C4'	-8.70	102.94	109.90
21	A2	101	G	P-O3'-C3'	8.70	130.14	119.70
21	A2	502	U	O4'-C1'-N1	8.70	115.16	108.20
21	A2	1045	A	C1'-O4'-C4'	-8.70	102.94	109.90
67	B1	1720	G	N1-C6-O6	8.70	125.12	119.90
21	A2	773	A	C1'-O4'-C4'	8.70	116.86	109.90
57	BZ	8	ARG	NE-CZ-NH1	-8.70	115.95	120.30
67	B1	1281	A	O4'-C1'-N9	8.70	115.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2179	G	C1'-O4'-C4'	8.70	116.86	109.90
21	A2	1182	G	C5'-C4'-O4'	8.69	119.53	109.10
28	AV	60	PHE	C-N-CA	8.69	140.55	122.30
21	A2	10	G	O4'-C1'-N9	8.69	115.15	108.20
21	A2	474	G	N9-C1'-C2'	8.69	125.30	114.00
21	A2	980	C	C1'-O4'-C4'	-8.69	102.95	109.90
52	BB	17	PHE	CB-CG-CD2	-8.69	114.72	120.80
67	B1	1161	A	O4'-C1'-C2'	-8.69	97.11	105.80
67	B1	2420	C	O4'-C1'-C2'	-8.69	97.11	105.80
68	B3	15	G	C3'-C2'-C1'	-8.69	94.55	101.50
21	A2	1374	C	O4'-C1'-N1	8.69	115.15	108.20
67	B1	769	G	N9-C1'-C2'	8.68	125.29	114.00
67	B1	1575	G	O4'-C1'-C2'	-8.68	97.12	105.80
50	BV	39	ARG	NE-CZ-NH2	-8.68	115.96	120.30
67	B1	1804	G	O4'-C1'-N9	8.68	115.15	108.20
67	B1	3030	A	N9-C1'-C2'	-8.68	102.45	112.00
43	Bk	42	ARG	NH1-CZ-NH2	-8.68	109.85	119.40
67	B1	316	G	N1-C6-O6	8.68	125.11	119.90
21	A2	1095	C	C3'-C2'-C1'	-8.68	94.56	101.50
21	A2	1100	G	N9-C1'-C2'	8.68	125.28	114.00
67	B1	3016	G	O4'-C1'-N9	8.68	115.14	108.20
13	AX	17	ARG	NE-CZ-NH1	8.67	124.64	120.30
25	AH	84	HIS	CA-C-N	8.67	136.27	117.20
67	B1	878	G	C1'-O4'-C4'	-8.67	102.97	109.90
21	A2	435	A	O4'-C1'-C2'	-8.67	97.13	105.80
21	A2	1184	U	O4'-C1'-N1	8.67	115.13	108.20
21	A2	892	C	P-O3'-C3'	8.67	130.10	119.70
37	BU	93	TYR	CB-CG-CD1	8.67	126.20	121.00
67	B1	1170	G	O4'-C1'-N9	8.67	115.13	108.20
67	B1	2936	U	O4'-C4'-C3'	-8.67	95.33	104.00
67	B1	370	A	O4'-C1'-C2'	-8.66	97.14	105.80
67	B1	986	G	N1-C6-O6	8.66	125.10	119.90
67	B1	1186	G	C1'-O4'-C4'	-8.66	102.97	109.90
67	B1	2218	C	C1'-O4'-C4'	-8.66	102.97	109.90
21	A2	1212	U	O4'-C1'-N1	8.66	115.13	108.20
51	Bj	40	PHE	CB-CG-CD2	-8.66	114.74	120.80
67	B1	699	A	O4'-C1'-N9	8.66	115.13	108.20
21	A2	570	G	C1'-O4'-C4'	-8.66	102.97	109.90
21	A2	680	C	C3'-C2'-C1'	8.66	108.43	101.50
67	B1	1812	A	O4'-C1'-N9	8.66	115.13	108.20
67	B1	1071	A	C3'-C2'-C1'	8.66	108.42	101.50
67	B1	1771	C	P-O3'-C3'	8.65	130.09	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1845	C	O4'-C1'-N1	8.65	115.12	108.20
2	AK	92	ASP	CB-CG-OD2	-8.65	110.51	118.30
67	B1	2187	C	O4'-C1'-C2'	-8.65	97.15	105.80
67	B1	2643	U	O4'-C1'-N1	8.65	115.12	108.20
67	B1	1013	G	N1-C6-O6	8.65	125.09	119.90
21	A2	541	G	C1'-O4'-C4'	-8.65	102.98	109.90
21	A2	1067	G	O4'-C1'-N9	8.65	115.12	108.20
67	B1	729	A	N9-C1'-C2'	8.65	125.25	114.00
67	B1	1039	C	O4'-C1'-C2'	-8.65	97.15	105.80
67	B1	1963	G	C1'-O4'-C4'	-8.65	102.98	109.90
21	A2	495	G	C1'-O4'-C4'	-8.65	102.98	109.90
21	A2	587	G	N1-C6-O6	8.65	125.09	119.90
21	A2	605	C	C3'-C2'-C1'	8.65	108.42	101.50
21	A2	762	G	N9-C1'-C2'	-8.65	102.49	112.00
67	B1	2220	C	O4'-C1'-C2'	-8.65	97.15	105.80
67	B1	701	G	C1'-O4'-C4'	-8.65	102.98	109.90
67	B1	2238	G	C3'-C2'-C1'	-8.65	94.58	101.50
21	A2	1278	A	C1'-O4'-C4'	8.64	116.81	109.90
67	B1	775	C	C3'-C2'-C1'	8.64	108.41	101.50
67	B1	1403	C	O4'-C1'-C2'	-8.64	97.16	105.80
67	B1	2985	U	C3'-C2'-C1'	8.64	108.42	101.50
53	BD	32	ARG	NE-CZ-NH2	-8.64	115.98	120.30
67	B1	1127	C	O4'-C1'-N1	8.64	115.11	108.20
67	B1	2373	G	O5'-P-OP1	8.64	121.07	110.70
21	A2	706	G	O4'-C1'-C2'	-8.64	97.16	105.80
21	A2	1132	C	C3'-C2'-C1'	8.64	108.41	101.50
21	A2	239	A	C2'-C3'-O3'	8.63	128.50	109.50
21	A2	1196	A	N9-C1'-C2'	8.63	125.22	114.00
21	A2	1411	G	C3'-C2'-C1'	8.63	108.41	101.50
67	B1	603	G	C1'-O4'-C4'	-8.64	102.99	109.90
67	B1	2344	G	O4'-C1'-N9	8.63	115.11	108.20
67	B1	2354	A	C1'-O4'-C4'	-8.63	102.99	109.90
7	AB	201	ARG	NE-CZ-NH1	8.63	124.62	120.30
18	AF	11	ARG	NE-CZ-NH1	-8.63	115.98	120.30
67	B1	1709	C	O5'-P-OP1	-8.63	97.93	105.70
33	BC	139	TYR	CB-CG-CD1	-8.63	115.82	121.00
37	BU	23	ARG	NE-CZ-NH2	8.63	124.62	120.30
67	B1	274	C	C3'-C2'-C1'	8.63	108.41	101.50
67	B1	756	C	O4'-C1'-N1	8.63	115.10	108.20
54	BF	168	PHE	CB-CG-CD2	8.63	126.84	120.80
67	B1	117	A	C3'-C2'-C1'	8.63	108.40	101.50
67	B1	1589	G	C3'-C2'-C1'	8.63	108.40	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1431	U	O4'-C1'-N1	8.63	115.10	108.20
67	B1	1669	A	O4'-C1'-C2'	8.63	115.36	107.60
67	B1	2169	C	C3'-C2'-C1'	8.63	108.40	101.50
67	B1	2926	G	O4'-C1'-C2'	8.63	115.36	107.60
17	AO	145	ARG	NE-CZ-NH2	-8.62	115.99	120.30
21	A2	1406	U	O4'-C1'-C2'	-8.62	97.18	105.80
67	B1	1883	C	O4'-C1'-N1	8.62	115.10	108.20
21	A2	643	G	C3'-C2'-C1'	-8.62	94.60	101.50
67	B1	34	C	O4'-C1'-C2'	-8.62	97.18	105.80
21	A2	446	G	N1-C6-O6	8.62	125.07	119.90
67	B1	2519	C	O4'-C1'-N1	8.62	115.09	108.20
23	AT	28	PHE	CB-CG-CD2	8.62	126.83	120.80
67	B1	1228	G	C1'-O4'-C4'	8.62	116.79	109.90
67	B1	2334	G	C1'-O4'-C4'	-8.62	103.01	109.90
67	B1	2225	C	C3'-C2'-C1'	8.62	108.39	101.50
21	A2	1396	C	O4'-C1'-N1	8.61	115.09	108.20
67	B1	1612	G	O4'-C1'-N9	8.61	115.09	108.20
67	B1	2162	G	O4'-C1'-N9	8.61	115.09	108.20
21	A2	1399	G	P-O3'-C3'	-8.61	109.37	119.70
67	B1	2275	G	O4'-C1'-N9	8.61	115.09	108.20
5	AW	12	ARG	NE-CZ-NH1	8.61	124.60	120.30
6	AC	27	ARG	NE-CZ-NH1	8.61	124.60	120.30
21	A2	106	A	O4'-C1'-C2'	-8.61	97.19	105.80
30	AU	53	TYR	CB-CG-CD1	-8.61	115.83	121.00
51	Bj	52	ARG	NE-CZ-NH2	-8.61	116.00	120.30
67	B1	750	C	C3'-C2'-C1'	8.61	108.39	101.50
43	Bk	148	ARG	NE-CZ-NH1	8.61	124.60	120.30
67	B1	331	G	N1-C6-O6	8.61	125.06	119.90
30	AU	119	ARG	NE-CZ-NH2	8.61	124.60	120.30
6	AC	20	PHE	CB-CG-CD1	8.60	126.82	120.80
21	A2	512	U	O4'-C1'-C2'	8.60	115.34	107.60
67	B1	457	C	N1-C1'-C2'	8.60	125.18	114.00
67	B1	987	G	N1-C6-O6	8.60	125.06	119.90
21	A2	547	U	N1-C1'-C2'	8.60	125.18	114.00
21	A2	1241	U	O4'-C1'-C2'	-8.60	97.20	105.80
21	A2	1239	A	O4'-C1'-C2'	8.60	115.34	107.60
21	A2	831	A	C1'-O4'-C4'	8.60	116.78	109.90
21	A2	1445	A	P-O3'-C3'	-8.60	109.39	119.70
59	BM	75	ARG	NE-CZ-NH1	8.60	124.60	120.30
67	B1	2261	C	P-O3'-C3'	-8.60	109.38	119.70
67	B1	2432	G	C1'-O4'-C4'	8.60	116.78	109.90
21	A2	140	C	O4'-C1'-N1	8.59	115.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	279	U	N1-C1'-C2'	8.59	125.17	114.00
67	B1	547	C	N1-C1'-C2'	8.59	125.17	114.00
67	B1	711	C	C1'-O4'-C4'	8.59	116.78	109.90
21	A2	991	C	O4'-C1'-N1	8.59	115.07	108.20
21	A2	1208	A	O4'-C1'-C2'	-8.59	97.21	105.80
21	A2	1239	A	O4'-C1'-N9	8.59	115.07	108.20
28	B6	63	TYR	CB-CG-CD1	8.59	126.15	121.00
67	B1	770	G	C4'-C3'-C2'	-8.59	94.01	102.60
36	Bf	33	ARG	O-C-N	-8.59	108.96	122.70
67	B1	540	A	C3'-C2'-C1'	8.59	108.37	101.50
67	B1	2458	U	O4'-C1'-C2'	-8.58	97.22	105.80
67	B1	943	G	C4'-C3'-C2'	-8.58	94.02	102.60
67	B1	1697	G	O4'-C1'-N9	8.58	115.07	108.20
67	B1	1585	U	C5'-C4'-O4'	-8.58	98.80	109.10
67	B1	2993	G	O4'-C1'-N9	8.58	115.06	108.20
15	AE	171	ARG	NE-CZ-NH2	-8.58	116.01	120.30
67	B1	2890	A	C3'-C2'-C1'	8.58	108.36	101.50
21	A2	1294	G	O4'-C1'-C2'	-8.58	97.22	105.80
47	BI	67	TYR	CB-CG-CD1	8.58	126.15	121.00
21	A2	22	G	P-O3'-C3'	-8.57	109.41	119.70
21	A2	352	A	O4'-C1'-C2'	-8.57	97.22	105.80
21	A2	1458	A	C1'-O4'-C4'	8.57	116.76	109.90
29	AL	92	GLU	N-CA-C	8.57	134.15	111.00
21	A2	106	A	C1'-O4'-C4'	8.57	116.76	109.90
67	B1	917	A	C5'-C4'-O4'	8.57	119.39	109.10
21	A2	556	G	O4'-C1'-C2'	8.57	115.31	107.60
67	B1	311	C	O4'-C1'-C2'	-8.57	97.23	105.80
67	B1	2622	C	C1'-O4'-C4'	-8.57	103.04	109.90
67	B1	2826	U	O4'-C1'-N1	8.57	115.06	108.20
67	B1	645	U	C1'-O4'-C4'	8.57	116.75	109.90
67	B1	711	C	O4'-C1'-N1	8.57	115.05	108.20
67	B1	1411	G	N9-C1'-C2'	8.57	125.14	114.00
67	B1	2354	A	N9-C1'-C2'	8.57	125.14	114.00
21	A2	335	G	C1'-O4'-C4'	-8.56	103.05	109.90
67	B1	349	A	O4'-C1'-C2'	-8.56	97.23	105.80
67	B1	684	G	O4'-C1'-C2'	8.56	115.31	107.60
67	B1	1389	A	O4'-C1'-C2'	-8.56	97.23	105.80
67	B1	528	G	O4'-C1'-C2'	8.56	115.31	107.60
67	B1	1600	G	N9-C1'-C2'	-8.56	102.58	112.00
21	A2	1097	G	P-O3'-C3'	-8.56	109.43	119.70
67	B1	998	G	N9-C1'-C2'	-8.56	102.58	112.00
67	B1	1237	A	O4'-C1'-N9	8.56	115.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	142	G	O4'-C1'-N9	8.56	115.05	108.20
67	B1	1346	G	O4'-C1'-C2'	8.56	115.30	107.60
67	B1	1407	A	C3'-C2'-C1'	8.56	108.35	101.50
21	A2	145	A	O4'-C1'-C2'	-8.56	97.24	105.80
21	A2	735	A	O4'-C1'-N9	8.56	115.05	108.20
67	B1	1365	G	C3'-C2'-C1'	-8.56	94.65	101.50
67	B1	2435	G	C3'-C2'-C1'	-8.56	94.65	101.50
67	B1	23	G	O4'-C1'-N9	8.56	115.05	108.20
67	B1	2040	A	O4'-C1'-C2'	-8.56	97.24	105.80
12	AN	131	ARG	NE-CZ-NH1	8.55	124.58	120.30
21	A2	1229	A	C1'-O4'-C4'	8.55	116.74	109.90
67	B1	2258	A	C3'-C2'-C1'	8.55	108.34	101.50
67	B1	1878	G	N1-C6-O6	8.55	125.03	119.90
67	B1	2303	A	P-O5'-C5'	8.55	134.58	120.90
21	A2	472	C	C3'-C2'-C1'	8.55	108.34	101.50
67	B1	2052	A	C3'-C2'-C1'	-8.55	94.66	101.50
21	A2	694	U	N1-C1'-C2'	-8.55	102.60	112.00
67	B1	1431	U	C3'-C2'-C1'	-8.55	94.66	101.50
25	AH	201	TYR	CB-CG-CD1	-8.55	115.87	121.00
67	B1	728	A	O4'-C1'-N9	8.55	115.04	108.20
67	B1	1057	C	P-O3'-C3'	-8.54	109.45	119.70
67	B1	2985	U	C1'-O4'-C4'	8.54	116.74	109.90
67	B1	2189	C	C1'-O4'-C4'	-8.54	103.07	109.90
21	A2	35	G	N9-C1'-C2'	8.54	125.10	114.00
21	A2	200	G	N9-C1'-C2'	-8.54	102.61	112.00
21	A2	1174	A	C3'-C2'-C1'	8.54	108.33	101.50
67	B1	1040	C	O4'-C1'-C2'	-8.54	97.26	105.80
67	B1	1163	U	N1-C1'-C2'	-8.54	102.61	112.00
67	B1	2015	G	O4'-C1'-C2'	-8.54	97.26	105.80
67	B1	2753	G	C3'-C2'-C1'	-8.54	94.67	101.50
67	B1	2979	C	O4'-C1'-N1	8.54	115.03	108.20
27	A0	28	C	C3'-C2'-C1'	8.54	108.33	101.50
67	B1	1486	G	O4'-C1'-N9	8.53	115.03	108.20
67	B1	1632	U	C1'-O4'-C4'	8.54	116.73	109.90
67	B1	1915	G	O4'-C1'-N9	8.53	115.03	108.20
16	AJ	43	ARG	NE-CZ-NH1	8.53	124.56	120.30
52	BB	220	ARG	NE-CZ-NH1	8.53	124.56	120.30
67	B1	2251	G	P-O5'-C5'	8.53	134.55	120.90
67	B1	798	G	C1'-O4'-C4'	-8.53	103.08	109.90
67	B1	2750	C	N1-C1'-C2'	8.53	125.09	114.00
21	A2	109	U	O4'-C1'-N1	8.52	115.02	108.20
21	A2	1491	C	N1-C1'-C2'	8.52	125.08	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	542	G	C3'-C2'-C1'	-8.52	94.68	101.50
18	AF	13	LEU	CB-CA-C	8.52	126.39	110.20
67	B1	365	G	N9-C1'-C2'	-8.52	102.63	112.00
67	B1	1565	G	C1'-O4'-C4'	8.52	116.71	109.90
68	B3	79	U	C3'-C2'-C1'	8.52	108.31	101.50
67	B1	699	A	P-O3'-C3'	-8.52	109.48	119.70
67	B1	1152	C	C1'-O4'-C4'	-8.52	103.09	109.90
21	A2	494	G	O4'-C1'-C2'	8.52	115.26	107.60
68	B3	79	U	O4'-C1'-C2'	-8.52	97.28	105.80
21	A2	18	C	P-O3'-C3'	-8.51	109.48	119.70
21	A2	385	A	O4'-C1'-N9	8.51	115.01	108.20
21	A2	1403	U	C5'-C4'-O4'	-8.51	98.89	109.10
67	B1	512	G	O4'-C1'-N9	8.51	115.01	108.20
67	B1	2672	A	O4'-C1'-N9	8.51	115.01	108.20
67	B1	2927	A	C3'-C2'-C1'	8.51	108.31	101.50
21	A2	1059	C	N1-C1'-C2'	8.51	125.06	114.00
67	B1	45	G	N1-C6-O6	8.51	125.00	119.90
28	B6	68	TYR	CG-CD1-CE1	-8.51	114.50	121.30
67	B1	1097	G	O4'-C1'-N9	8.51	115.01	108.20
67	B1	2070	U	C1'-O4'-C4'	-8.51	103.09	109.90
21	A2	1182	G	C3'-C2'-C1'	-8.50	94.70	101.50
25	AH	95	SER	N-CA-C	8.50	133.96	111.00
67	B1	665	C	C3'-C2'-C1'	8.50	108.30	101.50
67	B1	1494	U	N1-C1'-C2'	-8.50	102.65	112.00
21	A2	986	G	N1-C6-O6	8.50	125.00	119.90
11	A1	58	A	C1'-O4'-C4'	8.50	116.70	109.90
29	AL	92	GLU	CA-C-N	8.50	135.89	117.20
67	B1	2158	G	P-O3'-C3'	8.50	129.90	119.70
67	B1	2298	C	C3'-C2'-C1'	8.50	108.30	101.50
67	B1	1955	U	C1'-O4'-C4'	8.49	116.69	109.90
67	B1	2188	C	N1-C1'-C2'	8.49	125.04	114.00
67	B1	2365	G	O4'-C1'-N9	8.49	115.00	108.20
21	A2	302	A	O4'-C1'-C2'	-8.49	97.31	105.80
67	B1	1530	A	N9-C1'-C2'	-8.49	102.66	112.00
21	A2	421	U	O4'-C1'-N1	8.49	114.99	108.20
21	A2	1353	C	C3'-C2'-C1'	8.49	108.29	101.50
67	B1	443	C	C3'-C2'-C1'	8.49	108.29	101.50
67	B1	2515	U	N1-C1'-C2'	8.49	125.03	114.00
67	B1	2699	U	O4'-C1'-N1	8.49	114.99	108.20
7	AB	109	PHE	CB-CG-CD2	-8.48	114.86	120.80
8	AR	53	TYR	CB-CG-CD2	-8.48	115.91	121.00
21	A2	565	C	P-O3'-C3'	-8.48	109.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	835	C	O4'-C1'-N1	8.48	114.98	108.20
67	B1	1416	G	O4'-C1'-N9	8.48	114.99	108.20
67	B1	2843	C	C1'-O4'-C4'	-8.48	103.11	109.90
11	A1	66	C	C3'-C2'-C1'	8.48	108.28	101.50
21	A2	88	G	O5'-P-OP1	-8.48	98.07	105.70
67	B1	840	G	O4'-C1'-N9	8.48	114.98	108.20
67	B1	1245	C	C3'-C2'-C1'	8.48	108.28	101.50
21	A2	57	G	O4'-C1'-N9	8.47	114.98	108.20
21	A2	1453	U	C1'-O4'-C4'	8.47	116.68	109.90
34	B5	47	ARG	CA-C-N	8.47	135.84	117.20
21	A2	1143	G	O4'-C1'-N9	8.47	114.98	108.20
67	B1	585	G	C1'-O4'-C4'	-8.47	103.12	109.90
67	B1	2351	G	N9-C1'-C2'	-8.47	102.68	112.00
67	B1	1476	C	C3'-C2'-C1'	8.47	108.28	101.50
67	B1	2604	G	C1'-O4'-C4'	-8.47	103.12	109.90
21	A2	445	G	N1-C6-O6	8.47	124.98	119.90
21	A2	601	G	N9-C1'-C2'	-8.47	102.68	112.00
67	B1	243	G	O4'-C1'-C2'	-8.47	97.33	105.80
67	B1	664	A	O4'-C1'-N9	8.47	114.97	108.20
67	B1	1005	G	N1-C6-O6	8.47	124.98	119.90
67	B1	2136	G	N9-C1'-C2'	8.47	125.01	114.00
21	A2	169	C	O4'-C1'-N1	8.47	114.97	108.20
67	B1	393	C	C4'-C3'-C2'	-8.47	94.13	102.60
21	A2	1167	C	O4'-C1'-C2'	-8.46	97.34	105.80
21	A2	1365	G	C1'-O4'-C4'	-8.46	103.13	109.90
67	B1	656	G	O4'-C1'-N9	8.46	114.97	108.20
21	A2	1146	G	O4'-C1'-N9	8.46	114.97	108.20
67	B1	1734	G	O4'-C1'-N9	8.46	114.97	108.20
21	A2	376	G	O4'-C1'-N9	8.46	114.97	108.20
54	BF	56	TYR	CB-CG-CD1	8.46	126.08	121.00
21	A2	142	G	O4'-C1'-C2'	8.46	115.21	107.60
67	B1	331	G	P-O3'-C3'	8.46	129.85	119.70
21	A2	1403	U	C3'-C2'-C1'	8.46	108.27	101.50
21	A2	1272	G	O4'-C1'-C2'	8.45	115.21	107.60
21	A2	1337	A	N9-C1'-C2'	-8.45	102.70	112.00
33	BC	44	TYR	CB-CG-CD1	-8.46	115.93	121.00
67	B1	2947	G	P-O5'-C5'	-8.46	107.37	120.90
21	A2	1220	G	P-O5'-C5'	8.45	134.42	120.90
27	A0	32	C	O4'-C1'-C2'	-8.45	97.35	105.80
67	B1	1060	C	C1'-O4'-C4'	8.45	116.66	109.90
67	B1	1223	A	C5'-C4'-C3'	-8.45	102.48	116.00
21	A2	479	C	O4'-C1'-N1	8.45	114.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	761	U	P-O3'-C3'	8.45	129.84	119.70
67	B1	2851	A	O4'-C1'-C2'	8.45	115.20	107.60
1	AQ	16	ARG	NE-CZ-NH2	8.45	124.52	120.30
25	AH	163	ARG	NE-CZ-NH1	8.45	124.52	120.30
67	B1	43	G	P-O3'-C3'	8.45	129.84	119.70
67	B1	620	G	O4'-C1'-C2'	8.45	115.20	107.60
67	B1	3046	C	O4'-C1'-N1	8.45	114.96	108.20
21	A2	50	C	C3'-C2'-C1'	8.44	108.25	101.50
21	A2	214	C	N1-C1'-C2'	8.44	124.98	114.00
21	A2	503	G	C3'-C2'-C1'	-8.45	94.74	101.50
21	A2	510	A	O4'-C1'-C2'	-8.45	97.36	105.80
67	B1	1018	G	N1-C6-O6	8.45	124.97	119.90
21	A2	559	G	C3'-C2'-C1'	8.44	108.25	101.50
21	A2	1255	C	C1'-O4'-C4'	-8.44	103.15	109.90
21	A2	1312	C	O4'-C1'-C2'	-8.44	97.36	105.80
67	B1	182	U	O4'-C1'-N1	8.44	114.95	108.20
67	B1	2489	C	N1-C1'-C2'	8.44	124.98	114.00
36	Bf	3	ARG	CB-CG-CD	8.44	133.54	111.60
40	BE	83	ARG	NE-CZ-NH1	8.44	124.52	120.30
67	B1	670	G	C3'-C2'-C1'	8.44	108.25	101.50
67	B1	1082	A	C3'-C2'-C1'	8.44	108.25	101.50
67	B1	2295	C	O4'-C1'-C2'	-8.44	97.36	105.80
21	A2	1256	C	P-O3'-C3'	8.44	129.82	119.70
67	B1	2708	U	N1-C1'-C2'	8.44	124.97	114.00
21	A2	1278	A	O4'-C1'-C2'	-8.43	97.37	105.80
21	A2	1405	C	C1'-O4'-C4'	8.43	116.65	109.90
67	B1	2174	G	N9-C1'-C2'	-8.43	102.72	112.00
61	Bd	80	MET	N-CA-CB	8.43	125.78	110.60
67	B1	770	G	P-O3'-C3'	-8.43	109.58	119.70
67	B1	2942	G	O4'-C1'-N9	8.43	114.95	108.20
21	A2	30	C	C1'-O4'-C4'	-8.43	103.16	109.90
32	BO	196	PHE	CB-CG-CD2	8.43	126.70	120.80
67	B1	1331	U	O4'-C1'-N1	8.43	114.94	108.20
36	Bf	4	ASN	N-CA-C	-8.43	88.24	111.00
67	B1	1328	G	C3'-C2'-C1'	8.43	108.24	101.50
67	B1	1962	G	O4'-C1'-N9	8.43	114.94	108.20
67	B1	2563	A	C1'-O4'-C4'	8.43	116.64	109.90
21	A2	67	C	O4'-C1'-N1	8.43	114.94	108.20
21	A2	330	U	P-O3'-C3'	-8.43	109.59	119.70
27	A0	47	U	C3'-C2'-C1'	-8.43	94.76	101.50
67	B1	1219	C	O4'-C1'-N1	8.43	114.94	108.20
21	A2	1185	A	C3'-C2'-C1'	8.42	108.24	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2220	C	C3'-C2'-C1'	8.42	108.24	101.50
67	B1	2438	U	C4'-C3'-C2'	-8.42	94.18	102.60
67	B1	2319	C	O4'-C1'-C2'	-8.42	97.38	105.80
21	A2	784	G	O4'-C1'-N9	8.42	114.94	108.20
21	A2	463	G	O4'-C1'-C2'	8.42	115.18	107.60
24	AA	26	PHE	CB-CG-CD1	8.42	126.69	120.80
67	B1	571	G	O4'-C1'-N9	8.42	114.93	108.20
67	B1	1201	G	C3'-C2'-C1'	-8.42	94.77	101.50
67	B1	863	C	N1-C1'-C2'	8.41	124.94	114.00
67	B1	1368	A	O4'-C1'-C2'	-8.41	97.39	105.80
67	B1	3028	U	O4'-C1'-N1	8.41	114.93	108.20
67	B1	2077	A	O4'-C1'-C2'	-8.41	97.39	105.80
67	B1	3003	A	O4'-C1'-N9	8.41	114.93	108.20
67	B1	1230	G	N9-C1'-C2'	8.41	124.93	114.00
21	A2	717	C	O4'-C1'-N1	8.40	114.92	108.20
21	A2	151	G	O4'-C1'-N9	8.40	114.92	108.20
67	B1	2016	C	O4'-C1'-N1	8.40	114.92	108.20
67	B1	2318	G	C3'-C2'-C1'	-8.40	94.78	101.50
43	Bk	42	ARG	CB-CG-CD	8.40	133.44	111.60
67	B1	128	C	C1'-O4'-C4'	-8.40	103.18	109.90
67	B1	354	G	O4'-C1'-C2'	8.40	115.16	107.60
67	B1	2058	C	O4'-C1'-N1	8.40	114.92	108.20
67	B1	2193	G	O4'-C1'-N9	8.40	114.92	108.20
67	B1	2582	C	O4'-C1'-C2'	-8.40	97.40	105.80
21	A2	56	A	O4'-C1'-N9	8.40	114.92	108.20
21	A2	1208	A	C5'-C4'-O4'	8.40	119.18	109.10
67	B1	171	A	C3'-C2'-C1'	8.40	108.22	101.50
67	B1	707	U	O4'-C1'-N1	8.40	114.92	108.20
67	B1	420	U	C1'-O4'-C4'	8.40	116.62	109.90
67	B1	1860	A	C1'-O4'-C4'	8.40	116.62	109.90
67	B1	2574	G	O4'-C1'-C2'	-8.40	97.40	105.80
21	A2	1448	A	C1'-O4'-C4'	8.39	116.61	109.90
67	B1	2732	U	P-O3'-C3'	8.39	129.77	119.70
21	A2	499	G	C1'-O4'-C4'	-8.39	103.19	109.90
21	A2	1301	U	O4'-C1'-N1	8.39	114.91	108.20
62	BN	108	TYR	CB-CG-CD1	-8.39	115.97	121.00
67	B1	2740	G	N1-C6-O6	8.39	124.93	119.90
21	A2	1352	G	C1'-O4'-C4'	-8.39	103.19	109.90
67	B1	116	G	P-O3'-C3'	-8.39	109.63	119.70
67	B1	1011	A	N9-C1'-C2'	8.39	124.90	114.00
12	AN	30	TYR	CB-CG-CD1	8.38	126.03	121.00
21	A2	575	A	O4'-C1'-C2'	-8.38	97.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	397	G	C3'-C2'-C1'	-8.38	94.79	101.50
67	B1	437	G	N9-C1'-C2'	-8.38	102.78	112.00
67	B1	1098	C	N1-C1'-C2'	8.39	124.90	114.00
67	B1	1706	G	N9-C1'-C2'	-8.38	102.78	112.00
68	B3	99	G	C1'-O4'-C4'	-8.38	103.19	109.90
20	A3	6	TYR	N-CA-CB	8.38	125.69	110.60
61	Bd	18	PRO	C-N-CA	8.38	139.90	122.30
67	B1	237	G	P-O3'-C3'	8.38	129.76	119.70
67	B1	1246	G	O5'-P-OP2	-8.38	98.16	105.70
67	B1	1402	C	C1'-O4'-C4'	-8.38	103.19	109.90
67	B1	1470	C	N1-C1'-C2'	8.38	124.89	114.00
67	B1	3038	A	P-O5'-C5'	8.38	134.31	120.90
68	B3	74	U	C3'-C2'-C1'	8.38	108.20	101.50
21	A2	365	C	C3'-C2'-C1'	8.38	108.20	101.50
67	B1	1567	C	O5'-P-OP1	-8.38	98.16	105.70
67	B1	1677	A	C1'-O4'-C4'	-8.38	103.20	109.90
67	B1	1927	C	O4'-C1'-N1	8.38	114.90	108.20
67	B1	2559	G	N9-C1'-C2'	8.38	124.89	114.00
67	B1	878	G	P-O3'-C3'	-8.38	109.65	119.70
67	B1	1659	G	N1-C6-O6	8.38	124.93	119.90
67	B1	2938	G	C1'-O4'-C4'	-8.38	103.20	109.90
4	AG	53	LYS	C-N-CA	8.37	142.63	121.70
61	Bd	9	SER	N-CA-CB	8.37	123.06	110.50
67	B1	1519	G	O4'-C1'-C2'	-8.37	97.43	105.80
67	B1	701	G	P-O3'-C3'	8.37	129.75	119.70
67	B1	2766	C	C1'-O4'-C4'	-8.37	103.20	109.90
21	A2	1265	G	O4'-C1'-N9	8.37	114.90	108.20
67	B1	2049	U	O4'-C1'-N1	8.37	114.89	108.20
67	B1	2511	C	C3'-C2'-C1'	8.37	108.20	101.50
58	BP	85	PHE	CB-CG-CD2	-8.37	114.94	120.80
67	B1	302	U	P-O3'-C3'	8.37	129.74	119.70
67	B1	306	G	N9-C1'-C2'	8.37	124.88	114.00
67	B1	1539	U	C1'-O4'-C4'	8.36	116.59	109.90
27	A0	22	G	N9-C1'-C2'	8.36	124.87	114.00
67	B1	59	U	C3'-C2'-C1'	8.36	108.19	101.50
67	B1	433	C	O4'-C1'-N1	8.36	114.89	108.20
67	B1	1535	U	O4'-C1'-N1	8.36	114.89	108.20
67	B1	76	C	O4'-C1'-C2'	-8.36	97.44	105.80
21	A2	370	A	N9-C1'-C2'	-8.35	102.81	112.00
21	A2	486	A	C5'-C4'-O4'	8.35	119.12	109.10
67	B1	328	G	O4'-C1'-N9	8.35	114.88	108.20
67	B1	777	A	O4'-C1'-C2'	-8.35	97.45	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	780	G	O4'-C1'-N9	8.35	114.88	108.20
68	B3	100	A	C3'-C2'-C1'	-8.35	94.82	101.50
13	AX	46	ARG	NE-CZ-NH1	8.35	124.47	120.30
49	BQ	100	ARG	NE-CZ-NH1	8.35	124.47	120.30
67	B1	1195	G	C1'-O4'-C4'	8.35	116.58	109.90
67	B1	1659	G	C5-C6-O6	-8.35	123.59	128.60
21	A2	703	U	O4'-C1'-C2'	-8.34	97.46	105.80
67	B1	692	C	C3'-C2'-C1'	8.34	108.17	101.50
67	B1	845	U	C3'-C2'-C1'	8.34	108.17	101.50
67	B1	1368	A	O4'-C1'-N9	8.34	114.87	108.20
67	B1	3025	C	O4'-C1'-N1	8.34	114.88	108.20
67	B1	233	A	C1'-O4'-C4'	-8.34	103.23	109.90
67	B1	747	G	O4'-C1'-N9	8.34	114.87	108.20
67	B1	2075	U	O4'-C1'-N1	8.34	114.87	108.20
67	B1	1705	C	C1'-O4'-C4'	-8.34	103.23	109.90
67	B1	2144	U	C1'-O4'-C4'	8.34	116.57	109.90
67	B1	2378	C	N1-C1'-C2'	8.34	124.84	114.00
11	A1	38	G	C5'-C4'-O4'	8.34	119.11	109.10
21	A2	494	G	O4'-C1'-N9	8.34	114.87	108.20
21	A2	941	C	C3'-C2'-C1'	8.34	108.17	101.50
21	A2	1142	G	N9-C1'-C2'	8.34	124.84	114.00
67	B1	2371	A	N9-C1'-C2'	8.34	124.84	114.00
21	A2	723	G	C4'-C3'-C2'	-8.33	94.27	102.60
21	A2	1394	G	N9-C1'-C2'	8.33	124.83	114.00
63	Bg	19	ARG	NE-CZ-NH2	-8.33	116.13	120.30
21	A2	666	G	O4'-C1'-N9	8.33	114.86	108.20
25	AH	98	VAL	CA-CB-CG1	-8.33	98.40	110.90
67	B1	637	G	N1-C6-O6	8.33	124.90	119.90
67	B1	826	C	N1-C1'-C2'	8.33	124.83	114.00
67	B1	1038	U	C5'-C4'-C3'	-8.33	102.67	116.00
67	B1	2739	G	C1'-O4'-C4'	-8.33	103.24	109.90
21	A2	276	A	O4'-C1'-N9	8.33	114.86	108.20
27	A0	27	C	N1-C1'-C2'	8.33	124.83	114.00
67	B1	56	G	O4'-C1'-N9	8.33	114.86	108.20
21	A2	912	G	O4'-C1'-N9	8.33	114.86	108.20
11	A1	29	C	O4'-C1'-N1	8.32	114.86	108.20
21	A2	255	G	N9-C1'-C2'	8.32	124.82	114.00
67	B1	2009	G	O4'-C1'-C2'	8.32	115.09	107.60
49	BQ	120	TYR	CB-CG-CD2	-8.32	116.01	121.00
67	B1	1070	G	O4'-C1'-C2'	-8.32	97.48	105.80
67	B1	2514	C	N1-C1'-C2'	8.32	124.82	114.00
67	B1	3041	U	N1-C1'-C2'	8.32	124.82	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	Ba	88	ARG	NE-CZ-NH2	-8.32	116.14	120.30
67	B1	2522	C	C1'-O4'-C4'	8.32	116.56	109.90
67	B1	2662	G	O4'-C1'-N9	8.32	114.86	108.20
21	A2	498	C	O4'-C1'-N1	8.32	114.85	108.20
21	A2	1410	G	C3'-C2'-C1'	8.32	108.16	101.50
67	B1	239	G	O4'-C1'-N9	8.32	114.85	108.20
67	B1	2263	G	C1'-O4'-C4'	8.32	116.55	109.90
21	A2	1468	A	N9-C1'-C2'	-8.32	102.85	112.00
67	B1	2999	G	C1'-O4'-C4'	-8.32	103.25	109.90
21	A2	913	G	O4'-C1'-N9	8.31	114.85	108.20
67	B1	2215	U	N1-C1'-C2'	8.31	124.81	114.00
67	B1	1271	G	C1'-O4'-C4'	-8.31	103.25	109.90
21	A2	39	U	O4'-C1'-N1	8.31	114.85	108.20
21	A2	253	G	O4'-C1'-N9	8.31	114.85	108.20
21	A2	1258	C	O4'-C1'-C2'	-8.31	97.49	105.80
67	B1	2279	G	N9-C1'-C2'	8.31	124.80	114.00
67	B1	2758	G	O4'-C1'-N9	8.31	114.85	108.20
67	B1	3004	C	N1-C1'-C2'	8.31	124.81	114.00
67	B1	507	G	C4'-C3'-C2'	-8.31	94.29	102.60
38	Bb	15	ARG	NE-CZ-NH1	8.31	124.45	120.30
67	B1	1394	G	O4'-C1'-C2'	-8.31	97.49	105.80
67	B1	2298	C	O4'-C1'-C2'	-8.31	97.49	105.80
21	A2	41	C	N1-C1'-C2'	8.31	124.80	114.00
2	AK	10	ARG	NE-CZ-NH2	-8.30	116.15	120.30
21	A2	658	A	C3'-C2'-C1'	8.30	108.14	101.50
67	B1	791	C	C1'-O4'-C4'	8.31	116.55	109.90
67	B1	2431	C	C3'-C2'-C1'	8.31	108.14	101.50
62	BN	79	ARG	NE-CZ-NH2	-8.30	116.15	120.30
67	B1	996	U	N1-C1'-C2'	-8.30	102.87	112.00
67	B1	1165	C	C3'-C2'-C1'	8.30	108.14	101.50
67	B1	1241	C	O4'-C1'-C2'	-8.30	97.50	105.80
67	B1	2447	A	C1'-O4'-C4'	-8.30	103.26	109.90
54	BF	168	PHE	CB-CG-CD1	-8.30	114.99	120.80
67	B1	399	C	O4'-C1'-N1	8.30	114.84	108.20
67	B1	2057	G	C1'-O4'-C4'	8.30	116.54	109.90
67	B1	2597	A	C3'-C2'-C1'	8.30	108.14	101.50
67	B1	2809	G	O4'-C1'-C2'	8.30	115.07	107.60
21	A2	1022	U	O4'-C1'-C2'	-8.30	97.50	105.80
10	AD	168	ARG	NE-CZ-NH1	8.29	124.45	120.30
21	A2	1358	A	C4'-C3'-C2'	-8.29	94.31	102.60
67	B1	1241	C	C3'-C2'-C1'	8.30	108.14	101.50
67	B1	1409	U	N1-C1'-C2'	8.29	124.78	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1517	G	C3'-C2'-C1'	-8.30	94.86	101.50
67	B1	2065	C	O4'-C1'-N1	8.29	114.83	108.20
67	B1	2172	G	O4'-C1'-C2'	8.29	115.06	107.60
67	B1	219	G	C5'-C4'-C3'	8.29	129.27	116.00
49	BQ	139	TYR	CG-CD1-CE1	-8.29	114.67	121.30
53	BD	254	TYR	CB-CG-CD2	8.29	125.97	121.00
67	B1	1562	U	O4'-C1'-C2'	-8.29	97.51	105.80
67	B1	36	G	O4'-C1'-N9	8.29	114.83	108.20
67	B1	293	G	N9-C1'-C2'	-8.29	102.88	112.00
67	B1	2920	C	O4'-C1'-C2'	-8.29	97.51	105.80
7	AB	15	ALA	N-CA-CB	8.29	121.70	110.10
20	A3	79	TYR	CB-CG-CD1	-8.29	116.03	121.00
33	BC	343	ARG	NE-CZ-NH2	-8.29	116.16	120.30
67	B1	1509	C	N1-C1'-C2'	8.28	124.77	114.00
21	A2	228	G	O4'-C1'-C2'	-8.28	97.52	105.80
67	B1	1119	A	O4'-C1'-N9	8.28	114.82	108.20
67	B1	1431	U	P-O3'-C3'	-8.28	109.76	119.70
67	B1	1597	G	N9-C1'-C2'	-8.28	102.89	112.00
67	B1	1628	C	C3'-C2'-C1'	8.28	108.12	101.50
21	A2	1171	G	O4'-C1'-C2'	-8.28	97.52	105.80
31	BY	29	HIS	CA-CB-CG	-8.28	99.53	113.60
63	Bg	15	TYR	CB-CG-CD2	-8.28	116.03	121.00
67	B1	2057	G	O4'-C1'-C2'	-8.28	97.52	105.80
21	A2	798	U	C3'-C2'-C1'	8.28	108.12	101.50
67	B1	98	G	P-O5'-C5'	8.28	134.14	120.90
67	B1	898	G	N9-C1'-C2'	8.28	124.76	114.00
67	B1	2178	A	O4'-C1'-N9	-8.28	101.58	108.20
67	B1	1298	C	N1-C1'-C2'	8.27	124.76	114.00
67	B1	3033	G	C4'-C3'-C2'	-8.27	94.33	102.60
15	AE	55	TYR	CB-CG-CD2	-8.27	116.04	121.00
53	BD	78	ARG	NE-CZ-NH1	8.27	124.44	120.30
21	A2	1043	U	O4'-C1'-C2'	-8.27	97.53	105.80
21	A2	1311	C	C3'-C2'-C1'	8.27	108.11	101.50
64	Bc	73	LYS	N-CA-CB	-8.27	95.72	110.60
21	A2	1231	G	C3'-C2'-C1'	8.27	108.11	101.50
7	AB	121	ARG	NE-CZ-NH1	8.27	124.43	120.30
67	B1	1484	U	C3'-C2'-C1'	8.27	108.11	101.50
67	B1	2615	U	C1'-O4'-C4'	-8.27	103.29	109.90
67	B1	2742	G	C5-C6-O6	-8.27	123.64	128.60
67	B1	2907	C	N1-C1'-C2'	8.27	124.75	114.00
21	A2	159	C	C3'-C2'-C1'	8.26	108.11	101.50
67	B1	2904	U	O4'-C1'-N1	8.26	114.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	553	C	C3'-C2'-C1'	8.26	108.11	101.50
67	B1	1347	U	O4'-C1'-N1	8.26	114.81	108.20
67	B1	2019	C	O4'-C1'-C2'	-8.26	97.54	105.80
67	B1	798	G	O4'-C1'-N9	-8.26	101.59	108.20
67	B1	857	U	O4'-C1'-C2'	8.26	115.03	107.60
67	B1	1882	C	C3'-C2'-C1'	8.26	108.11	101.50
67	B1	575	G	N9-C1'-C2'	8.26	124.74	114.00
67	B1	2319	C	C3'-C2'-C1'	8.26	108.11	101.50
67	B1	2416	G	C1'-O4'-C4'	8.26	116.51	109.90
67	B1	2990	G	C1'-O4'-C4'	-8.26	103.29	109.90
21	A2	412	U	O4'-C1'-N1	8.26	114.81	108.20
4	AG	77	ASP	N-CA-C	8.26	133.29	111.00
21	A2	654	U	C1'-O4'-C4'	8.26	116.50	109.90
21	A2	697	A	O4'-C1'-C2'	8.26	115.03	107.60
27	A0	76	A	O4'-C1'-N9	8.26	114.81	108.20
46	BA	104	TYR	CB-CG-CD2	-8.26	116.05	121.00
28	B6	72	TYR	CB-CG-CD2	-8.26	116.05	121.00
67	B1	69	C	O4'-C1'-C2'	-8.26	97.55	105.80
67	B1	517	A	O4'-C1'-N9	8.26	114.80	108.20
67	B1	652	G	C3'-C2'-C1'	8.26	108.11	101.50
67	B1	2345	U	O4'-C1'-N1	8.26	114.81	108.20
67	B1	2423	G	O4'-C1'-N9	8.26	114.80	108.20
21	A2	1487	U	O4'-C1'-N1	8.25	114.80	108.20
52	BB	220	ARG	NE-CZ-NH2	-8.25	116.17	120.30
67	B1	361	G	O4'-C1'-N9	8.25	114.80	108.20
67	B1	1305	C	O5'-P-OP1	-8.25	98.27	105.70
21	A2	673	C	O4'-C1'-N1	8.25	114.80	108.20
67	B1	42	G	C1'-O4'-C4'	-8.25	103.30	109.90
21	A2	523	C	O4'-C1'-C2'	-8.25	97.55	105.80
27	A0	12	U	O4'-C1'-N1	8.25	114.80	108.20
33	BC	279	ARG	NE-CZ-NH2	-8.25	116.17	120.30
67	B1	2055	U	C4'-C3'-C2'	-8.25	94.35	102.60
11	A1	44	G	C1'-O4'-C4'	-8.25	103.30	109.90
21	A2	195	C	C3'-C2'-C1'	8.25	108.10	101.50
21	A2	806	G	P-O3'-C3'	-8.24	109.81	119.70
67	B1	1070	G	C3'-C2'-C1'	8.24	108.09	101.50
67	B1	2922	G	N9-C1'-C2'	-8.24	102.93	112.00
21	A2	110	C	O4'-C1'-C2'	-8.24	97.56	105.80
32	BO	61	SER	N-CA-CB	8.24	122.86	110.50
34	B5	45	ARG	NE-CZ-NH2	-8.24	116.18	120.30
67	B1	2013	A	C3'-C2'-C1'	8.24	108.09	101.50
67	B1	2385	G	C3'-C2'-C1'	8.24	108.09	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2901	C	O4'-C1'-N1	8.24	114.79	108.20
67	B1	285	C	P-O3'-C3'	8.24	129.59	119.70
67	B1	1787	U	C1'-O4'-C4'	-8.24	103.31	109.90
21	A2	383	C	N1-C1'-C2'	8.24	124.71	114.00
56	BH	60	VAL	CG1-CB-CG2	-8.23	97.72	110.90
67	B1	1988	U	O4'-C1'-C2'	-8.23	97.57	105.80
21	A2	797	U	N1-C1'-C2'	8.23	124.70	114.00
67	B1	372	A	C1'-O4'-C4'	8.23	116.48	109.90
67	B1	1937	A	N9-C1'-C2'	-8.23	102.94	112.00
21	A2	1412	A	P-O3'-C3'	8.23	129.58	119.70
68	B3	49	A	C1'-O4'-C4'	8.23	116.48	109.90
27	A0	56	C	O4'-C1'-N1	8.23	114.78	108.20
21	A2	547	U	C3'-C2'-C1'	-8.23	94.92	101.50
21	A2	562	A	C1'-O4'-C4'	8.23	116.48	109.90
53	BD	23	PHE	CB-CG-CD1	8.23	126.56	120.80
67	B1	1040	C	N1-C1'-C2'	8.23	124.69	114.00
21	A2	112	G	C3'-C2'-C1'	8.22	108.08	101.50
23	AT	9	ARG	NE-CZ-NH1	8.22	124.41	120.30
67	B1	434	G	O4'-C1'-C2'	8.22	115.00	107.60
21	A2	593	G	P-O3'-C3'	-8.22	109.83	119.70
67	B1	138	U	O4'-C1'-N1	8.22	114.78	108.20
67	B1	831	C	O4'-C1'-N1	8.22	114.78	108.20
67	B1	2459	G	O4'-C1'-N9	8.22	114.78	108.20
58	BP	42	ARG	NE-CZ-NH1	8.22	124.41	120.30
67	B1	797	C	C3'-C2'-C1'	8.22	108.08	101.50
67	B1	2531	G	O4'-C1'-N9	-8.22	101.62	108.20
67	B1	623	G	O4'-C1'-N9	8.22	114.78	108.20
67	B1	2819	C	O4'-C1'-C2'	-8.22	97.58	105.80
57	BZ	51	TYR	CA-CB-CG	8.22	129.01	113.40
67	B1	118	A	C1'-O4'-C4'	-8.22	103.33	109.90
67	B1	860	A	N9-C1'-C2'	-8.22	102.96	112.00
67	B1	906	G	C1'-O4'-C4'	-8.22	103.33	109.90
67	B1	1964	G	O4'-C1'-C2'	8.22	115.00	107.60
67	B1	2408	G	C1'-O4'-C4'	-8.22	103.33	109.90
21	A2	1264	G	C3'-C2'-C1'	-8.22	94.93	101.50
25	AH	103	VAL	CB-CA-C	-8.21	95.79	111.40
67	B1	1009	G	N1-C6-O6	8.21	124.83	119.90
67	B1	2153	C	C3'-C2'-C1'	8.21	108.07	101.50
67	B1	2274	C	O4'-C1'-N1	8.21	114.77	108.20
38	Bb	75	HIS	CA-CB-CG	8.21	127.56	113.60
21	A2	36	G	O4'-C1'-N9	8.21	114.77	108.20
67	B1	1375	G	O4'-C1'-N9	8.21	114.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1772	A	O4'-C1'-N9	-8.21	101.63	108.20
67	B1	1813	A	O4'-C1'-C2'	-8.21	97.59	105.80
67	B1	1835	A	O4'-C1'-C2'	-8.21	97.59	105.80
67	B1	2400	U	C1'-O4'-C4'	-8.21	103.33	109.90
68	B3	58	C	C1'-O4'-C4'	-8.21	103.33	109.90
67	B1	182	U	N1-C1'-C2'	8.21	124.67	114.00
67	B1	252	A	C1'-O4'-C4'	8.21	116.47	109.90
67	B1	506	G	C3'-C2'-C1'	-8.21	94.94	101.50
67	B1	1960	U	C3'-C2'-C1'	8.21	108.06	101.50
67	B1	3038	A	N9-C1'-C2'	-8.21	102.97	112.00
67	B1	1168	A	C3'-C2'-C1'	8.21	108.06	101.50
67	B1	1556	G	O4'-C1'-N9	8.21	114.76	108.20
67	B1	701	G	O4'-C1'-C2'	8.20	114.98	107.60
1	AQ	101	ARG	NE-CZ-NH2	-8.20	116.20	120.30
23	AT	31	ARG	NE-CZ-NH2	-8.20	116.20	120.30
27	A0	69	C	N1-C1'-C2'	8.20	124.66	114.00
67	B1	360	G	C5'-C4'-O4'	8.20	118.94	109.10
67	B1	807	G	O4'-C1'-N9	8.20	114.76	108.20
68	B3	21	C	C3'-C2'-C1'	8.20	108.06	101.50
21	A2	439	G	C3'-C2'-C1'	8.20	108.06	101.50
21	A2	1141	G	O4'-C1'-C2'	8.20	114.98	107.60
67	B1	1536	U	O4'-C1'-N1	8.20	114.76	108.20
67	B1	1788	G	O4'-C1'-N9	8.20	114.76	108.20
67	B1	135	U	O4'-C1'-C2'	-8.20	97.60	105.80
67	B1	919	G	O4'-C1'-C2'	-8.20	97.60	105.80
67	B1	1058	A	N9-C1'-C2'	-8.20	102.98	112.00
21	A2	533	C	N1-C1'-C2'	8.19	124.65	114.00
8	AR	32	ARG	NE-CZ-NH2	-8.19	116.20	120.30
67	B1	719	C	O4'-C1'-N1	-8.19	101.65	108.20
67	B1	1191	C	C3'-C2'-C1'	8.19	108.05	101.50
21	A2	1024	G	N9-C1'-C2'	8.19	124.65	114.00
67	B1	2209	U	O4'-C1'-C2'	-8.19	97.61	105.80
67	B1	2289	A	C1'-O4'-C4'	8.19	116.45	109.90
67	B1	569	G	O4'-C1'-C2'	-8.19	97.61	105.80
67	B1	1818	G	O4'-C1'-N9	8.19	114.75	108.20
21	A2	1046	G	C3'-C2'-C1'	-8.19	94.95	101.50
67	B1	403	G	C4'-C3'-C2'	-8.19	94.41	102.60
67	B1	894	C	C1'-O4'-C4'	8.19	116.45	109.90
4	AG	102	ARG	CD-NE-CZ	-8.18	112.14	123.60
13	AX	50	ARG	NE-CZ-NH1	8.18	124.39	120.30
21	A2	60	A	N9-C1'-C2'	-8.18	103.00	112.00
21	A2	1174	A	O4'-C1'-N9	-8.18	101.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	943	C	C3'-C2'-C1'	8.18	108.04	101.50
46	BA	22	ARG	NE-CZ-NH1	8.18	124.39	120.30
67	B1	857	U	C3'-C2'-C1'	-8.18	94.96	101.50
67	B1	1327	C	P-O3'-C3'	8.18	129.51	119.70
21	A2	199	A	O4'-C1'-N9	-8.18	101.66	108.20
21	A2	1308	U	C3'-C2'-C1'	8.18	108.04	101.50
27	A0	51	C	O4'-C1'-N1	8.18	114.74	108.20
67	B1	1378	G	O4'-C1'-N9	8.18	114.74	108.20
67	B1	1991	G	C1'-O4'-C4'	8.18	116.44	109.90
67	B1	2763	U	O4'-C1'-N1	8.18	114.74	108.20
67	B1	866	G	N9-C1'-C2'	8.17	124.63	114.00
35	BL	15	HIS	CA-CB-CG	8.17	127.49	113.60
67	B1	894	C	O4'-C1'-C2'	-8.17	97.63	105.80
67	B1	383	C	O4'-C1'-N1	8.17	114.74	108.20
67	B1	1510	U	P-O3'-C3'	8.17	129.50	119.70
67	B1	1619	C	N1-C1'-C2'	8.17	124.62	114.00
27	A0	66	C	C3'-C2'-C1'	8.17	108.03	101.50
67	B1	219	G	O4'-C1'-C2'	-8.17	97.63	105.80
67	B1	585	G	O4'-C1'-C2'	8.17	114.95	107.60
67	B1	1618	G	O4'-C1'-N9	8.17	114.73	108.20
67	B1	1038	U	P-O5'-C5'	8.16	133.96	120.90
21	A2	1213	G	C1'-O4'-C4'	-8.16	103.37	109.90
63	Bg	36	TYR	CB-CG-CD2	-8.16	116.10	121.00
67	B1	248	C	O4'-C1'-C2'	-8.16	97.64	105.80
21	A2	1319	C	P-O3'-C3'	-8.16	109.91	119.70
67	B1	1047	A	O4'-C1'-C2'	-8.16	97.64	105.80
27	A0	9	A	C1'-O4'-C4'	8.16	116.43	109.90
33	BC	236	ARG	NE-CZ-NH2	-8.16	116.22	120.30
67	B1	12	C	C3'-C2'-C1'	8.16	108.03	101.50
67	B1	1278	C	C3'-C2'-C1'	8.16	108.03	101.50
21	A2	208	U	O4'-C1'-N1	8.16	114.72	108.20
25	AH	78	HIS	C-N-CA	8.16	142.09	121.70
67	B1	298	G	P-O3'-C3'	8.16	129.49	119.70
67	B1	2666	G	O4'-C1'-C2'	8.16	114.94	107.60
21	A2	218	C	P-O5'-C5'	8.15	133.95	120.90
21	A2	836	G	C1'-O4'-C4'	-8.15	103.38	109.90
21	A2	1364	C	O4'-C1'-C2'	-8.15	97.65	105.80
67	B1	818	A	O4'-C1'-N9	8.15	114.72	108.20
67	B1	1618	G	O4'-C1'-C2'	8.15	114.94	107.60
67	B1	1944	C	C3'-C2'-C1'	8.15	108.02	101.50
67	B1	2155	C	C3'-C2'-C1'	-8.15	94.98	101.50
67	B1	2842	C	C3'-C2'-C1'	8.15	108.02	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	987	G	N1-C6-O6	8.15	124.79	119.90
59	BM	157	ARG	NE-CZ-NH2	-8.15	116.22	120.30
60	BS	126	ARG	NE-CZ-NH1	8.15	124.38	120.30
21	A2	1037	U	O4'-C1'-N1	-8.15	101.68	108.20
67	B1	2235	G	O4'-C1'-N9	8.15	114.72	108.20
21	A2	1318	U	C3'-C2'-C1'	8.15	108.02	101.50
51	Bj	32	GLU	N-CA-CB	8.15	125.26	110.60
56	BH	121	ALA	N-CA-CB	-8.15	98.69	110.10
67	B1	303	A	O4'-C1'-C2'	-8.15	97.65	105.80
67	B1	2572	U	N1-C1'-C2'	8.15	124.59	114.00
67	B1	2844	G	O4'-C1'-C2'	8.15	114.93	107.60
67	B1	2975	A	N9-C1'-C2'	-8.15	103.04	112.00
21	A2	586	C	O4'-C1'-N1	8.14	114.72	108.20
21	A2	1257	U	C3'-C2'-C1'	8.14	108.02	101.50
27	A0	43	G	N9-C1'-C2'	8.14	124.59	114.00
67	B1	2467	C	N1-C1'-C2'	8.14	124.59	114.00
67	B1	2578	C	O4'-C1'-N1	8.14	114.72	108.20
25	AH	84	HIS	N-CA-CB	8.14	125.26	110.60
67	B1	975	C	O4'-C1'-C2'	-8.14	97.66	105.80
67	B1	1647	C	O4'-C1'-N1	8.14	114.72	108.20
67	B1	1925	A	C3'-C2'-C1'	-8.14	94.99	101.50
67	B1	1954	U	O4'-C1'-N1	8.14	114.72	108.20
67	B1	2849	C	N1-C1'-C2'	8.14	124.59	114.00
31	BY	30	ARG	NE-CZ-NH2	-8.14	116.23	120.30
67	B1	1048	C	C5'-C4'-O4'	-8.14	99.33	109.10
21	A2	746	A	C1'-O4'-C4'	8.14	116.41	109.90
37	BU	77	TYR	CB-CG-CD2	-8.14	116.12	121.00
62	BN	34	PHE	CB-CG-CD1	-8.14	115.10	120.80
67	B1	480	A	O4'-C1'-N9	8.14	114.71	108.20
67	B1	1130	G	C3'-C2'-C1'	8.14	108.01	101.50
67	B1	2463	G	C1'-O4'-C4'	-8.14	103.39	109.90
68	B3	30	G	O4'-C1'-C2'	-8.14	97.66	105.80
21	A2	1013	G	C5-C6-O6	-8.14	123.72	128.60
21	A2	1066	C	N1-C1'-C2'	8.13	124.58	114.00
21	A2	1237	G	C1'-O4'-C4'	-8.14	103.39	109.90
21	A2	1315	G	O4'-C1'-N9	8.13	114.71	108.20
67	B1	915	G	O4'-C1'-N9	8.14	114.71	108.20
67	B1	2647	G	N9-C1'-C2'	8.13	124.58	114.00
67	B1	858	G	N9-C1'-C2'	8.13	124.57	114.00
67	B1	1223	A	P-O3'-C3'	8.13	129.46	119.70
67	B1	2475	G	N9-C1'-C2'	8.13	124.57	114.00
21	A2	159	C	O3'-P-O5'	-8.13	88.55	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2356	U	C1'-O4'-C4'	8.13	116.41	109.90
21	A2	539	C	C1'-O4'-C4'	8.13	116.40	109.90
67	B1	3024	C	C1'-O4'-C4'	-8.13	103.40	109.90
67	B1	2626	U	N1-C1'-C2'	8.13	124.57	114.00
21	A2	159	C	N1-C1'-C2'	8.13	124.56	114.00
47	BI	70	ARG	NE-CZ-NH1	8.13	124.36	120.30
51	Bj	50	PHE	N-CA-CB	8.13	125.23	110.60
61	Bd	6	ARG	NE-CZ-NH1	8.13	124.36	120.30
8	AR	51	ARG	NE-CZ-NH1	8.12	124.36	120.30
35	BL	71	ARG	NE-CZ-NH2	-8.12	116.24	120.30
67	B1	3022	C	O4'-C1'-N1	8.12	114.70	108.20
67	B1	1595	G	C1'-O4'-C4'	8.12	116.40	109.90
62	BN	165	TYR	CG-CD2-CE2	-8.12	114.81	121.30
67	B1	263	U	O4'-C1'-N1	8.12	114.70	108.20
67	B1	1200	A	C3'-C2'-C1'	-8.12	95.00	101.50
67	B1	1640	G	C1'-O4'-C4'	-8.12	103.40	109.90
21	A2	878	U	C1'-O4'-C4'	-8.12	103.41	109.90
21	A2	688	C	C3'-C2'-C1'	8.11	107.99	101.50
21	A2	1438	A	C3'-C2'-C1'	8.12	107.99	101.50
67	B1	1763	A	N9-C1'-C2'	8.12	124.55	114.00
21	A2	1052	U	C1'-O4'-C4'	8.11	116.39	109.90
21	A2	1470	G	C1'-O4'-C4'	-8.11	103.41	109.90
39	Be	49	TYR	CB-CG-CD1	8.11	125.87	121.00
62	BN	10	ARG	NE-CZ-NH1	8.11	124.36	120.30
68	B3	78	C	O4'-C1'-N1	8.11	114.69	108.20
67	B1	1099	C	O4'-C1'-C2'	-8.11	97.69	105.80
67	B1	1501	G	N9-C1'-C2'	8.11	124.55	114.00
21	A2	324	C	O4'-C1'-C2'	8.11	114.90	107.60
21	A2	951	G	C1'-O4'-C4'	-8.11	103.41	109.90
21	A2	1428	G	O4'-C1'-N9	8.11	114.69	108.20
1	AQ	138	ARG	NE-CZ-NH1	8.11	124.35	120.30
21	A2	651	U	C1'-O4'-C4'	-8.11	103.42	109.90
67	B1	112	U	N1-C1'-C2'	8.11	124.54	114.00
21	A2	262	G	N9-C1'-C2'	8.10	124.53	114.00
21	A2	696	G	C1'-O4'-C4'	-8.10	103.42	109.90
67	B1	627	G	O4'-C1'-N9	8.10	114.68	108.20
64	Bc	15	GLU	CA-C-N	8.10	135.02	117.20
67	B1	511	A	C1'-O4'-C4'	8.10	116.38	109.90
67	B1	1098	C	O4'-C1'-C2'	-8.10	97.70	105.80
67	B1	2676	A	O4'-C1'-N9	8.10	114.68	108.20
21	A2	1279	A	C3'-C2'-C1'	8.10	107.98	101.50
67	B1	993	G	N9-C1'-C2'	8.10	124.53	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1128	G	C3'-C2'-C1'	-8.10	95.02	101.50
67	B1	1810	G	O4'-C1'-N9	8.10	114.68	108.20
21	A2	1072	C	C1'-O4'-C4'	-8.10	103.42	109.90
21	A2	1223	C	C3'-C2'-C1'	8.10	107.98	101.50
67	B1	214	C	O4'-C1'-C2'	-8.10	97.70	105.80
67	B1	493	A	C3'-C2'-C1'	8.10	107.98	101.50
67	B1	1188	C	C3'-C2'-C1'	8.10	107.98	101.50
67	B1	947	C	C3'-C2'-C1'	8.10	107.98	101.50
67	B1	2174	G	C4'-C3'-C2'	-8.10	94.50	102.60
67	B1	2972	G	N9-C1'-C2'	8.10	124.52	114.00
67	B1	196	A	C3'-C2'-C1'	8.09	107.97	101.50
27	A0	76	A	O4'-C1'-C2'	-8.09	97.71	105.80
67	B1	671	G	O4'-C1'-C2'	8.09	114.88	107.60
67	B1	2420	C	C3'-C2'-C1'	8.09	107.97	101.50
21	A2	845	G	O4'-C1'-N9	8.09	114.67	108.20
67	B1	1481	G	C1'-O4'-C4'	-8.09	103.43	109.90
21	A2	1473	A	C3'-C2'-C1'	8.09	107.97	101.50
21	A2	1488	C	C3'-C2'-C1'	8.09	107.97	101.50
67	B1	252	A	O4'-C1'-C2'	-8.09	97.71	105.80
67	B1	1696	G	O4'-C1'-N9	8.09	114.67	108.20
11	A1	10	G	O4'-C1'-N9	8.09	114.67	108.20
21	A2	867	A	C3'-C2'-C1'	8.09	107.97	101.50
21	A2	966	G	O4'-C1'-N9	8.09	114.67	108.20
67	B1	914	U	O4'-C1'-N1	8.09	114.67	108.20
21	A2	401	U	C1'-O4'-C4'	8.09	116.37	109.90
21	A2	1109	C	N1-C1'-C2'	8.09	124.51	114.00
21	A2	1141	G	O4'-C1'-N9	8.09	114.67	108.20
67	B1	2207	C	C3'-C2'-C1'	8.09	107.97	101.50
21	A2	1378	A	N9-C1'-C2'	-8.09	103.11	112.00
67	B1	837	G	C1'-O4'-C4'	-8.09	103.43	109.90
67	B1	1841	G	N9-C1'-C2'	8.09	124.51	114.00
67	B1	1948	A	C3'-C2'-C1'	8.09	107.97	101.50
67	B1	2700	U	C3'-C2'-C1'	8.09	107.97	101.50
61	Bd	14	TYR	CB-CG-CD2	-8.08	116.15	121.00
67	B1	1153	U	O4'-C1'-N1	8.08	114.67	108.20
21	A2	1334	A	O4'-C1'-C2'	-8.08	97.72	105.80
67	B1	646	U	C1'-O4'-C4'	8.08	116.37	109.90
67	B1	1548	A	N9-C1'-C2'	-8.08	103.11	112.00
67	B1	1984	G	C1'-O4'-C4'	-8.08	103.43	109.90
67	B1	2926	G	N9-C1'-C2'	8.08	124.51	114.00
67	B1	437	G	C3'-C2'-C1'	8.08	107.97	101.50
67	B1	1722	G	P-O5'-C5'	8.08	133.83	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2400	U	O4'-C1'-N1	8.08	114.66	108.20
21	A2	737	C	C3'-C2'-C1'	8.08	107.96	101.50
21	A2	1089	C	P-O3'-C3'	-8.08	110.01	119.70
25	AH	89	GLU	N-CA-CB	8.08	125.14	110.60
67	B1	839	A	P-O3'-C3'	-8.08	110.01	119.70
67	B1	2304	C	C1'-O4'-C4'	-8.08	103.44	109.90
21	A2	282	G	O4'-C1'-N9	8.07	114.66	108.20
21	A2	842	U	O4'-C1'-C2'	-8.07	97.72	105.80
39	Be	49	TYR	CB-CG-CD2	-8.07	116.16	121.00
67	B1	2731	C	O4'-C1'-C2'	-8.07	97.72	105.80
21	A2	505	U	N1-C1'-C2'	-8.07	103.12	112.00
21	A2	711	U	O4'-C1'-N1	8.07	114.66	108.20
21	A2	1029	G	N9-C1'-C2'	-8.07	103.12	112.00
67	B1	1014	U	P-O3'-C3'	8.07	129.39	119.70
21	A2	1113	G	O4'-C1'-N9	8.07	114.66	108.20
67	B1	2621	U	O4'-C1'-C2'	-8.07	97.73	105.80
21	A2	215	C	C1'-O4'-C4'	-8.07	103.44	109.90
67	B1	1465	A	C5'-C4'-C3'	8.07	128.91	116.00
67	B1	1982	C	O4'-C1'-C2'	-8.07	97.73	105.80
21	A2	27	C	C3'-C2'-C1'	8.06	107.95	101.50
67	B1	401	C	O4'-C1'-N1	8.06	114.65	108.20
21	A2	14	C	O4'-C1'-C2'	-8.06	97.74	105.80
21	A2	1265	G	P-O3'-C3'	8.06	129.38	119.70
67	B1	2493	A	C1'-O4'-C4'	-8.06	103.45	109.90
21	A2	764	C	C4'-C3'-C2'	-8.06	94.54	102.60
67	B1	1869	U	O4'-C1'-C2'	-8.06	97.74	105.80
21	A2	985	C	N3-C4-N4	8.06	123.64	118.00
67	B1	1117	C	N1-C1'-C2'	8.06	124.48	114.00
67	B1	1251	G	C1'-O4'-C4'	8.06	116.35	109.90
1	AQ	55	ARG	NE-CZ-NH2	-8.06	116.27	120.30
21	A2	672	G	P-O3'-C3'	8.06	129.37	119.70
67	B1	335	C	O4'-C1'-N1	8.06	114.65	108.20
67	B1	1257	G	C5'-C4'-C3'	-8.06	103.11	116.00
67	B1	119	U	N1-C1'-C2'	8.05	124.47	114.00
67	B1	2853	A	C1'-O4'-C4'	-8.06	103.45	109.90
67	B1	1651	A	C3'-C2'-C1'	8.05	107.94	101.50
17	AO	22	ARG	NE-CZ-NH1	8.05	124.33	120.30
21	A2	31	U	P-O3'-C3'	-8.05	110.04	119.70
67	B1	1217	U	P-O3'-C3'	8.05	129.36	119.70
67	B1	1369	G	C3'-C2'-C1'	-8.05	95.06	101.50
67	B1	1937	A	C1'-O4'-C4'	8.05	116.34	109.90
67	B1	1964	G	O4'-C1'-N9	8.05	114.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1432	U	C3'-C2'-C1'	8.05	107.94	101.50
67	B1	47	C	O4'-C1'-N1	8.05	114.64	108.20
67	B1	519	A	C1'-O4'-C4'	8.05	116.34	109.90
67	B1	1500	C	O4'-C1'-N1	8.05	114.64	108.20
67	B1	2517	U	O4'-C1'-N1	-8.05	101.76	108.20
67	B1	2891	A	C3'-C2'-C1'	8.05	107.94	101.50
67	B1	2582	C	C3'-C2'-C1'	8.04	107.94	101.50
67	B1	1243	C	N1-C1'-C2'	8.04	124.45	114.00
67	B1	1954	U	O4'-C1'-C2'	-8.04	97.76	105.80
67	B1	2220	C	N1-C1'-C2'	8.04	124.45	114.00
67	B1	2288	C	C1'-O4'-C4'	-8.04	103.47	109.90
67	B1	2543	A	C1'-O4'-C4'	8.04	116.33	109.90
21	A2	99	C	C2'-C3'-O3'	8.04	127.19	109.50
21	A2	200	G	O4'-C1'-C2'	-8.04	97.76	105.80
21	A2	707	A	O4'-C1'-C2'	-8.04	97.76	105.80
21	A2	1350	U	O4'-C1'-N1	8.04	114.63	108.20
67	B1	308	C	C1'-O4'-C4'	8.04	116.33	109.90
47	BI	94	PHE	CB-CG-CD2	8.04	126.43	120.80
67	B1	593	C	O4'-C1'-C2'	-8.04	97.76	105.80
67	B1	1390	U	C3'-C2'-C1'	-8.04	95.07	101.50
67	B1	2833	G	N9-C1'-C2'	8.04	124.45	114.00
21	A2	1293	A	C1'-O4'-C4'	8.03	116.33	109.90
42	BT	82	ARG	NE-CZ-NH2	-8.04	116.28	120.30
67	B1	1735	G	C1'-O4'-C4'	8.04	116.33	109.90
67	B1	2834	C	N1-C1'-C2'	8.04	124.45	114.00
21	A2	708	C	P-O3'-C3'	8.03	129.34	119.70
67	B1	2080	G	C3'-C2'-C1'	8.03	107.93	101.50
67	B1	2405	U	O4'-C1'-N1	8.03	114.63	108.20
67	B1	2291	G	O4'-C1'-N9	8.03	114.62	108.20
67	B1	2722	G	C1'-O4'-C4'	-8.03	103.47	109.90
67	B1	3003	A	O4'-C1'-C2'	-8.03	97.77	105.80
68	B3	16	G	C1'-O4'-C4'	-8.03	103.47	109.90
21	A2	1049	U	O4'-C1'-N1	8.03	114.62	108.20
21	A2	431	U	O4'-C1'-N1	8.03	114.62	108.20
21	A2	635	C	O4'-C1'-N1	8.03	114.62	108.20
67	B1	594	U	C1'-O4'-C4'	8.03	116.32	109.90
67	B1	1732	C	C3'-C2'-C1'	8.03	107.92	101.50
21	A2	1111	G	C1'-O4'-C4'	8.03	116.32	109.90
67	B1	496	A	O4'-C1'-C2'	-8.03	97.77	105.80
21	A2	1	A	O4'-C1'-N9	8.03	114.62	108.20
30	AU	60	ARG	NE-CZ-NH2	-8.03	116.29	120.30
67	B1	836	U	O4'-C1'-N1	8.03	114.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2098	C	N1-C1'-C2'	8.03	124.43	114.00
67	B1	1667	U	O4'-C1'-N1	8.02	114.62	108.20
67	B1	111	U	C1'-O4'-C4'	8.02	116.32	109.90
67	B1	1738	A	O4'-C1'-C2'	-8.02	97.78	105.80
67	B1	548	U	O4'-C1'-N1	8.02	114.61	108.20
67	B1	2697	G	O4'-C1'-C2'	-8.02	97.78	105.80
21	A2	1031	G	O4'-C1'-N9	8.02	114.61	108.20
67	B1	576	G	P-O5'-C5'	-8.02	108.07	120.90
67	B1	2936	U	N1-C1'-C2'	-8.01	103.18	112.00
21	A2	1391	U	O4'-C1'-C2'	-8.01	97.79	105.80
21	A2	1396	C	O4'-C1'-C2'	-8.01	97.79	105.80
26	AP	40	ARG	NE-CZ-NH1	-8.01	116.29	120.30
67	B1	2673	C	C3'-C2'-C1'	8.01	107.91	101.50
21	A2	1368	A	O4'-C1'-N9	8.01	114.61	108.20
67	B1	407	A	C5'-C4'-C3'	-8.01	103.18	116.00
67	B1	1907	G	O4'-C1'-C2'	8.01	114.81	107.60
21	A2	705	C	N1-C1'-C2'	8.01	124.41	114.00
67	B1	1126	C	C3'-C2'-C1'	8.01	107.91	101.50
67	B1	2353	C	N1-C1'-C2'	8.01	124.41	114.00
67	B1	2512	C	C3'-C2'-C1'	8.01	107.91	101.50
6	AC	147	TYR	CG-CD1-CE1	-8.01	114.89	121.30
21	A2	217	C	N1-C1'-C2'	8.01	124.41	114.00
67	B1	1158	G	C1'-O4'-C4'	-8.01	103.49	109.90
21	A2	890	C	O4'-C1'-N1	8.01	114.60	108.20
29	AL	44	ARG	NE-CZ-NH2	-8.01	116.30	120.30
21	A2	613	C	N1-C1'-C2'	8.00	124.41	114.00
67	B1	39	C	C3'-C2'-C1'	8.00	107.90	101.50
67	B1	1823	A	C3'-C2'-C1'	8.00	107.90	101.50
67	B1	2087	U	O4'-C1'-N1	8.00	114.60	108.20
67	B1	2583	G	N9-C1'-C2'	-8.00	103.20	112.00
67	B1	1352	U	O4'-C1'-N1	8.00	114.60	108.20
67	B1	1747	C	C3'-C2'-C1'	8.00	107.90	101.50
68	B3	75	G	O4'-C1'-N9	8.00	114.60	108.20
21	A2	144	G	O4'-C1'-N9	8.00	114.60	108.20
67	B1	1919	A	C5-C6-N6	-8.00	117.30	123.70
21	A2	1159	U	O4'-C1'-C2'	-8.00	97.80	105.80
67	B1	2562	G	O4'-C1'-N9	-8.00	101.80	108.20
21	A2	1464	C	O4'-C1'-N1	8.00	114.60	108.20
67	B1	729	A	C1'-O4'-C4'	-8.00	103.50	109.90
67	B1	919	G	O4'-C1'-N9	8.00	114.60	108.20
68	B3	85	C	O4'-C1'-N1	8.00	114.60	108.20
67	B1	758	C	C1'-O4'-C4'	7.99	116.29	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	B5	18	ALA	CB-CA-C	7.99	122.08	110.10
67	B1	75	G	O4'-C1'-N9	7.99	114.59	108.20
67	B1	1726	A	O4'-C1'-C2'	-7.99	97.81	105.80
67	B1	1901	A	C1'-O4'-C4'	7.99	116.29	109.90
21	A2	1227	A	O4'-C1'-N9	7.99	114.59	108.20
38	Bb	47	ASP	CB-CG-OD2	7.99	125.49	118.30
67	B1	634	G	C3'-C2'-C1'	-7.99	95.11	101.50
67	B1	852	A	O4'-C1'-C2'	7.99	114.79	107.60
67	B1	2545	A	N9-C1'-C2'	7.99	124.38	114.00
21	A2	1214	G	C1'-O4'-C4'	-7.98	103.51	109.90
67	B1	934	G	O4'-C1'-C2'	7.98	114.78	107.60
67	B1	1521	G	C1'-O4'-C4'	-7.98	103.51	109.90
67	B1	154	U	N1-C1'-C2'	-7.98	103.22	112.00
67	B1	1030	C	O4'-C1'-C2'	-7.98	97.82	105.80
67	B1	27	G	C1'-O4'-C4'	7.98	116.28	109.90
67	B1	1943	C	O4'-C1'-C2'	-7.98	97.82	105.80
68	B3	93	G	O4'-C1'-N9	7.98	114.58	108.20
67	B1	784	C	O4'-C1'-N1	7.98	114.58	108.20
67	B1	2698	G	C1'-O4'-C4'	7.98	116.28	109.90
67	B1	2754	A	C3'-C2'-C1'	-7.98	95.12	101.50
21	A2	562	A	O4'-C1'-C2'	-7.98	97.82	105.80
21	A2	788	C	C3'-C2'-C1'	7.98	107.88	101.50
21	A2	1377	G	C3'-C2'-C1'	-7.98	95.12	101.50
67	B1	300	U	P-O5'-C5'	7.98	133.66	120.90
67	B1	2500	G	O4'-C1'-N9	7.98	114.58	108.20
21	A2	763	G	O4'-C1'-N9	7.98	114.58	108.20
67	B1	303	A	P-O5'-C5'	7.97	133.66	120.90
67	B1	2613	C	O4'-C1'-C2'	-7.97	97.83	105.80
67	B1	2159	C	N1-C1'-C2'	7.97	124.36	114.00
21	A2	297	G	O4'-C1'-N9	7.97	114.58	108.20
67	B1	464	C	C1'-O4'-C4'	7.97	116.28	109.90
8	AR	34	PHE	CB-CG-CD2	-7.97	115.22	120.80
33	BC	329	PRO	N-CA-CB	7.97	112.86	103.30
48	BR	49	TYR	CB-CG-CD1	7.97	125.78	121.00
67	B1	1790	G	C3'-C2'-C1'	7.97	107.88	101.50
67	B1	1864	G	O4'-C1'-C2'	7.97	114.77	107.60
67	B1	2064	U	O4'-C1'-N1	7.97	114.58	108.20
21	A2	290	C	O4'-C1'-C2'	-7.97	97.83	105.80
67	B1	1423	G	O4'-C1'-N9	7.97	114.57	108.20
67	B1	3048	C	C3'-C2'-C1'	7.97	107.87	101.50
21	A2	484	U	C1'-O4'-C4'	7.97	116.27	109.90
21	A2	1222	C	N1-C1'-C2'	7.97	124.36	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	BI	82	MET	CG-SD-CE	-7.97	87.45	100.20
67	B1	1586	G	O4'-C1'-C2'	-7.97	97.83	105.80
21	A2	212	G	C1'-O4'-C4'	-7.96	103.53	109.90
21	A2	1464	C	C3'-C2'-C1'	7.96	107.87	101.50
27	A0	41	C	C3'-C2'-C1'	7.96	107.87	101.50
67	B1	476	C	N1-C1'-C2'	7.96	124.35	114.00
67	B1	1117	C	C1'-O4'-C4'	-7.96	103.53	109.90
67	B1	1406	G	C1'-O4'-C4'	-7.96	103.53	109.90
67	B1	1843	C	O4'-C1'-N1	7.96	114.57	108.20
56	BH	115	LEU	CB-CA-C	7.96	125.33	110.20
21	A2	185	G	C3'-C2'-C1'	7.96	107.87	101.50
25	AH	86	MET	N-CA-C	7.96	132.50	111.00
62	BN	114	ARG	NE-CZ-NH2	7.96	124.28	120.30
67	B1	1675	C	OP1-P-OP2	-7.96	107.66	119.60
67	B1	2735	C	C1'-O4'-C4'	-7.96	103.53	109.90
67	B1	2762	G	C1'-O4'-C4'	-7.96	103.53	109.90
67	B1	2777	G	P-O3'-C3'	7.96	129.25	119.70
67	B1	2877	A	O4'-C1'-N9	-7.96	101.83	108.20
7	AB	201	ARG	NE-CZ-NH2	-7.96	116.32	120.30
21	A2	294	A	C1'-O4'-C4'	-7.96	103.53	109.90
67	B1	1404	G	O4'-C1'-C2'	7.96	114.76	107.60
34	BK	18	ALA	CB-CA-C	7.96	122.04	110.10
53	BD	85	PHE	CB-CG-CD1	-7.96	115.23	120.80
67	B1	2386	U	O4'-C1'-N1	7.96	114.57	108.20
68	B3	120	C	N1-C1'-C2'	7.96	124.35	114.00
67	B1	450	G	O4'-C1'-N9	7.96	114.56	108.20
67	B1	3035	C	O3'-P-O5'	7.96	119.11	104.00
21	A2	953	C	O4'-C1'-C2'	-7.96	97.84	105.80
21	A2	1186	C	O4'-C1'-C2'	7.96	114.76	107.60
67	B1	2680	A	C3'-C2'-C1'	7.96	107.86	101.50
67	B1	1945	C	O4'-C1'-C2'	-7.95	97.85	105.80
67	B1	1221	U	N1-C1'-C2'	-7.95	103.25	112.00
67	B1	2908	U	C1'-O4'-C4'	7.95	116.26	109.90
67	B1	1719	C	C2-N1-C1'	7.95	127.55	118.80
21	A2	971	G	O3'-P-O5'	-7.95	88.90	104.00
52	BB	134	ARG	NE-CZ-NH2	-7.95	116.33	120.30
67	B1	2001	U	C3'-C2'-C1'	7.95	107.86	101.50
64	Bc	12	ARG	NE-CZ-NH1	7.95	124.27	120.30
67	B1	435	G	N9-C1'-C2'	7.95	124.33	114.00
67	B1	1597	G	C3'-C2'-C1'	7.95	107.86	101.50
67	B1	2983	G	O4'-C1'-N9	7.95	114.56	108.20
21	A2	534	G	C4'-C3'-C2'	-7.94	94.66	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	879	U	N1-C1'-C2'	-7.94	103.26	112.00
67	B1	2507	C	OP1-P-OP2	-7.94	107.68	119.60
67	B1	97	C	C3'-C2'-C1'	7.94	107.85	101.50
67	B1	324	C	C4'-C3'-C2'	-7.94	94.66	102.60
67	B1	1673	C	C1'-O4'-C4'	-7.94	103.55	109.90
21	A2	201	G	O4'-C1'-C2'	-7.94	97.86	105.80
67	B1	210	A	P-O3'-C3'	7.94	129.23	119.70
67	B1	348	G	N9-C1'-C2'	7.94	124.32	114.00
67	B1	1407	A	O4'-C1'-C2'	-7.94	97.86	105.80
67	B1	2571	G	O4'-C1'-N9	7.94	114.55	108.20
67	B1	1814	A	C3'-C2'-C1'	-7.94	95.15	101.50
67	B1	1159	U	P-O3'-C3'	-7.94	110.18	119.70
67	B1	1713	G	P-O3'-C3'	7.94	129.22	119.70
67	B1	1924	A	N9-C1'-C2'	7.94	124.32	114.00
67	B1	2828	G	C3'-C2'-C1'	-7.94	95.15	101.50
21	A2	227	C	C3'-C2'-C1'	7.94	107.85	101.50
67	B1	2958	U	C1'-O4'-C4'	7.94	116.25	109.90
21	A2	242	A	N9-C1'-C2'	-7.93	103.27	112.00
67	B1	855	G	C1'-O4'-C4'	7.93	116.25	109.90
21	A2	456	U	O4'-C1'-N1	7.93	114.55	108.20
21	A2	349	A	N9-C1'-C2'	-7.93	103.28	112.00
27	A0	73	G	O4'-C1'-C2'	7.93	114.74	107.60
67	B1	2152	G	P-O3'-C3'	-7.93	110.19	119.70
67	B1	1522	A	C1'-O4'-C4'	7.93	116.24	109.90
21	A2	113	U	N1-C1'-C2'	-7.93	103.28	112.00
21	A2	837	C	O4'-C1'-N1	7.93	114.54	108.20
67	B1	1464	A	C3'-C2'-C1'	7.93	107.84	101.50
29	AL	47	ILE	N-CA-C	-7.92	89.61	111.00
67	B1	606	A	N9-C1'-C2'	7.92	124.30	114.00
67	B1	921	C	C1'-O4'-C4'	-7.92	103.56	109.90
67	B1	1274	G	O4'-C1'-N9	7.92	114.54	108.20
67	B1	2491	C	C3'-C2'-C1'	7.92	107.84	101.50
21	A2	663	G	O4'-C1'-N9	7.92	114.54	108.20
67	B1	183	G	O4'-C1'-N9	7.92	114.54	108.20
67	B1	1366	U	P-O3'-C3'	7.92	129.21	119.70
68	B3	45	C	P-O3'-C3'	-7.92	110.19	119.70
21	A2	523	C	O4'-C1'-N1	7.92	114.54	108.20
54	BF	58	ASP	CB-CG-OD2	-7.92	111.17	118.30
67	B1	1037	C	C1'-O4'-C4'	7.92	116.24	109.90
21	A2	836	G	O4'-C1'-C2'	7.92	114.73	107.60
25	AH	73	ARG	NE-CZ-NH1	7.92	124.26	120.30
67	B1	1885	G	P-O3'-C3'	-7.92	110.20	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AQ	70	ASP	CB-CG-OD1	-7.92	111.17	118.30
6	AC	67	ARG	NE-CZ-NH2	-7.92	116.34	120.30
21	A2	305	C	O4'-C1'-N1	7.92	114.53	108.20
27	A0	38	A	C1'-O4'-C4'	-7.92	103.57	109.90
67	B1	617	G	O4'-C1'-C2'	-7.92	97.88	105.80
67	B1	1136	G	O4'-C1'-C2'	7.92	114.72	107.60
67	B1	1325	A	C3'-C2'-C1'	7.92	107.83	101.50
21	A2	34	G	C1'-O4'-C4'	7.92	116.23	109.90
21	A2	1198	A	C3'-C2'-C1'	7.91	107.83	101.50
67	B1	732	G	C1'-O4'-C4'	-7.91	103.57	109.90
67	B1	2023	A	C1'-O4'-C4'	7.91	116.23	109.90
21	A2	222	G	N9-C1'-C2'	-7.91	103.30	112.00
27	A0	14	A	C3'-C2'-C1'	7.91	107.83	101.50
21	A2	159	C	O4'-C1'-N1	7.91	114.53	108.20
21	A2	473	A	C3'-C2'-C1'	-7.91	95.17	101.50
67	B1	184	A	C1'-O4'-C4'	7.91	116.23	109.90
67	B1	1145	G	P-O3'-C3'	7.91	129.19	119.70
21	A2	1419	G	N9-C1'-C2'	-7.91	103.30	112.00
39	Be	45	ARG	NE-CZ-NH2	-7.91	116.35	120.30
67	B1	2010	G	O4'-C4'-C3'	-7.91	96.09	104.00
18	AF	1	MET	CB-CA-C	7.91	126.21	110.40
67	B1	1693	G	O4'-C1'-N9	7.91	114.53	108.20
11	A1	56	U	O4'-C1'-N1	7.90	114.52	108.20
21	A2	1197	C	P-O3'-C3'	7.90	129.19	119.70
21	A2	517	U	O4'-C1'-N1	7.90	114.52	108.20
24	AA	79	TYR	CB-CG-CD2	-7.90	116.26	121.00
67	B1	236	G	C1'-O4'-C4'	-7.90	103.58	109.90
67	B1	391	C	O4'-C1'-C2'	-7.90	97.90	105.80
67	B1	2303	A	C3'-C2'-C1'	7.90	107.82	101.50
68	B3	82	C	O4'-C1'-N1	7.90	114.52	108.20
67	B1	2156	A	P-O3'-C3'	7.90	129.18	119.70
21	A2	759	C	C3'-C2'-C1'	7.90	107.82	101.50
67	B1	2264	G	C3'-C2'-C1'	-7.90	95.18	101.50
67	B1	2868	C	C3'-C2'-C1'	7.90	107.82	101.50
21	A2	115	A	O4'-C1'-N9	7.89	114.52	108.20
67	B1	887	U	O4'-C1'-C2'	-7.89	97.91	105.80
67	B1	1241	C	N1-C1'-C2'	7.89	124.26	114.00
67	B1	2082	C	C3'-C2'-C1'	7.89	107.81	101.50
21	A2	124	C	N1-C1'-C2'	7.89	124.26	114.00
21	A2	177	A	O4'-C1'-C2'	-7.89	97.91	105.80
21	A2	1407	U	O4'-C1'-N1	7.89	114.52	108.20
42	BT	66	ALA	N-CA-CB	7.89	121.15	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	757	C	O4'-C1'-C2'	-7.89	97.91	105.80
67	B1	1092	U	O4'-C1'-N1	7.89	114.51	108.20
67	B1	2536	A	C3'-C2'-C1'	7.89	107.81	101.50
67	B1	2988	A	O4'-C1'-N9	7.89	114.52	108.20
21	A2	1370	U	N1-C1'-C2'	-7.89	103.32	112.00
67	B1	132	G	P-O3'-C3'	-7.89	110.23	119.70
67	B1	1741	C	P-O3'-C3'	7.89	129.17	119.70
67	B1	2531	G	O4'-C1'-C2'	-7.89	97.91	105.80
67	B1	220	C	C3'-C2'-C1'	7.89	107.81	101.50
67	B1	897	U	O4'-C1'-N1	7.89	114.51	108.20
21	A2	908	G	O4'-C1'-N9	7.89	114.51	108.20
23	AT	82	TYR	CB-CG-CD2	7.89	125.73	121.00
67	B1	2776	A	C3'-C2'-C1'	7.89	107.81	101.50
11	A1	55	U	N1-C1'-C2'	7.88	124.25	114.00
21	A2	38	G	C5'-C4'-C3'	7.88	128.61	116.00
67	B1	334	G	C4'-C3'-C2'	-7.88	94.72	102.60
67	B1	1678	A	O4'-C1'-C2'	-7.88	97.92	105.80
67	B1	1802	G	C1'-O4'-C4'	7.88	116.20	109.90
67	B1	1920	A	N9-C1'-C2'	7.88	124.25	114.00
33	BC	292	ASN	N-CA-CB	7.88	124.78	110.60
67	B1	715	G	C1'-O4'-C4'	7.88	116.20	109.90
21	A2	85	A	C3'-C2'-C1'	7.88	107.80	101.50
21	A2	255	G	C3'-C2'-C1'	-7.88	95.20	101.50
67	B1	674	G	C3'-C2'-C1'	-7.88	95.20	101.50
67	B1	2052	A	O4'-C1'-N9	7.88	114.50	108.20
21	A2	201	G	O4'-C1'-N9	7.88	114.50	108.20
67	B1	868	U	N1-C1'-C2'	7.88	124.24	114.00
67	B1	1341	U	N1-C1'-C2'	7.88	124.24	114.00
67	B1	1615	G	N9-C1'-C2'	-7.88	103.34	112.00
67	B1	1766	A	O4'-C1'-C2'	-7.88	97.92	105.80
21	A2	69	U	C1'-O4'-C4'	-7.88	103.60	109.90
25	AH	86	MET	CG-SD-CE	-7.88	87.60	100.20
21	A2	33	U	P-O3'-C3'	7.87	129.15	119.70
21	A2	872	A	C1'-O4'-C4'	-7.87	103.60	109.90
21	A2	1367	C	C3'-C2'-C1'	7.87	107.80	101.50
48	BR	13	ARG	NE-CZ-NH1	7.87	124.24	120.30
67	B1	388	G	O4'-C1'-N9	7.87	114.50	108.20
67	B1	834	G	O4'-C1'-N9	7.87	114.50	108.20
67	B1	1244	C	P-O3'-C3'	7.87	129.15	119.70
21	A2	141	C	P-O3'-C3'	-7.87	110.26	119.70
42	BT	43	VAL	CA-CB-CG2	-7.87	99.10	110.90
56	BH	115	LEU	CB-CG-CD1	7.87	124.38	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1552	C	O4'-C1'-C2'	-7.87	97.93	105.80
67	B1	2288	C	N1-C1'-C2'	7.87	124.23	114.00
21	A2	91	G	N9-C1'-C2'	7.87	124.22	114.00
67	B1	901	C	C3'-C2'-C1'	7.87	107.79	101.50
67	B1	1553	G	C3'-C2'-C1'	-7.87	95.21	101.50
67	B1	2372	C	C1'-O4'-C4'	7.87	116.19	109.90
21	A2	302	A	N9-C1'-C2'	-7.86	103.35	112.00
21	A2	1403	U	O4'-C1'-N1	7.86	114.49	108.20
31	BY	27	ARG	NE-CZ-NH2	-7.86	116.37	120.30
67	B1	398	U	P-O3'-C3'	7.86	129.14	119.70
67	B1	2324	C	O4'-C1'-N1	7.86	114.49	108.20
27	A0	61	C	C3'-C2'-C1'	7.86	107.79	101.50
52	BB	24	PHE	CB-CG-CD1	7.86	126.30	120.80
62	BN	4	ARG	NE-CZ-NH1	7.86	124.23	120.30
67	B1	378	G	P-O3'-C3'	7.86	129.13	119.70
67	B1	1314	A	O4'-C1'-N9	7.86	114.49	108.20
67	B1	2676	A	C1'-O4'-C4'	7.86	116.19	109.90
21	A2	1074	C	N1-C1'-C2'	7.86	124.22	114.00
21	A2	1139	A	C1'-O4'-C4'	-7.86	103.61	109.90
67	B1	775	C	N1-C1'-C2'	7.85	124.21	114.00
67	B1	1134	A	C3'-C2'-C1'	7.85	107.78	101.50
21	A2	751	C	C3'-C2'-C1'	7.85	107.78	101.50
67	B1	2300	C	C3'-C2'-C1'	7.85	107.78	101.50
67	B1	2489	C	O4'-C1'-N1	-7.85	101.92	108.20
21	A2	1174	A	P-O3'-C3'	7.85	129.12	119.70
67	B1	567	G	P-O3'-C3'	7.85	129.12	119.70
67	B1	1204	U	O4'-C1'-C2'	-7.85	97.95	105.80
67	B1	746	C	P-O3'-C3'	-7.85	110.28	119.70
67	B1	1993	A	C3'-C2'-C1'	-7.85	95.22	101.50
67	B1	2406	C	C3'-C2'-C1'	7.85	107.78	101.50
21	A2	63	G	C3'-C2'-C1'	-7.84	95.22	101.50
21	A2	201	G	N9-C1'-C2'	-7.84	103.37	112.00
29	AL	44	ARG	N-CA-C	-7.84	89.82	111.00
67	B1	1173	G	N9-C1'-C2'	7.84	124.20	114.00
67	B1	2140	C	O4'-C1'-N1	7.84	114.48	108.20
67	B1	2187	C	N1-C1'-C2'	7.84	124.20	114.00
67	B1	2513	C	C1'-O4'-C4'	-7.84	103.62	109.90
67	B1	2753	G	C1'-O4'-C4'	7.84	116.17	109.90
21	A2	610	G	O4'-C1'-N9	7.84	114.47	108.20
67	B1	349	A	C1'-O4'-C4'	7.84	116.17	109.90
68	B3	117	G	C3'-C2'-C1'	7.84	107.77	101.50
21	A2	104	A	C3'-C2'-C1'	7.83	107.77	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	BB	109	TYR	CB-CG-CD1	-7.83	116.30	121.00
67	B1	2088	G	C3'-C2'-C1'	7.83	107.77	101.50
1	AQ	135	TYR	CZ-CE2-CD2	7.83	126.85	119.80
21	A2	295	G	C3'-C2'-C1'	7.83	107.77	101.50
67	B1	408	C	O5'-C5'-C4'	7.83	126.58	111.70
67	B1	1754	A	C1'-O4'-C4'	7.83	116.17	109.90
67	B1	2251	G	C3'-C2'-C1'	-7.83	95.23	101.50
21	A2	762	G	O4'-C1'-C2'	-7.83	97.97	105.80
21	A2	997	G	N1-C6-O6	7.83	124.60	119.90
67	B1	212	A	P-O5'-C5'	7.83	133.43	120.90
67	B1	1282	A	O4'-C1'-N9	7.83	114.47	108.20
67	B1	2834	C	C1'-O4'-C4'	-7.83	103.63	109.90
67	B1	1016	C	O4'-C1'-N1	7.83	114.46	108.20
67	B1	3004	C	C1'-O4'-C4'	-7.83	103.64	109.90
68	B3	118	G	O4'-C1'-N9	7.83	114.46	108.20
21	A2	461	A	O4'-C1'-C2'	-7.83	97.97	105.80
25	AH	14	GLU	CA-C-N	7.83	134.42	117.20
67	B1	815	U	O4'-C1'-C2'	-7.83	97.97	105.80
21	A2	901	G	O4'-C1'-N9	7.83	114.46	108.20
25	AH	80	LYS	CB-CA-C	-7.83	94.75	110.40
67	B1	2683	G	N9-C1'-C2'	7.83	124.17	114.00
21	A2	645	G	C1'-O4'-C4'	7.82	116.16	109.90
21	A2	1003	G	C1'-O4'-C4'	-7.82	103.64	109.90
67	B1	787	G	C1'-O4'-C4'	-7.82	103.64	109.90
67	B1	820	C	N1-C1'-C2'	7.82	124.17	114.00
67	B1	1869	U	P-O3'-C3'	-7.82	110.31	119.70
67	B1	2395	C	N1-C1'-C2'	7.82	124.17	114.00
21	A2	263	C	N1-C1'-C2'	7.82	124.17	114.00
46	BA	123	ARG	NE-CZ-NH2	-7.82	116.39	120.30
32	BO	8	ARG	NE-CZ-NH1	7.82	124.21	120.30
67	B1	147	C	O4'-C1'-C2'	-7.82	97.98	105.80
21	A2	723	G	N9-C1'-C2'	7.82	124.17	114.00
67	B1	889	C	C3'-C2'-C1'	7.82	107.75	101.50
67	B1	2926	G	P-O3'-C3'	-7.82	110.32	119.70
56	BH	19	PRO	N-CA-C	7.82	132.42	112.10
67	B1	240	A	C1'-O4'-C4'	7.82	116.15	109.90
67	B1	299	U	O4'-C1'-N1	7.82	114.45	108.20
67	B1	577	C	O4'-C1'-C2'	-7.82	97.98	105.80
67	B1	1622	G	N9-C1'-C2'	-7.82	103.40	112.00
67	B1	2434	A	C3'-C2'-C1'	7.82	107.75	101.50
21	A2	42	G	N9-C1'-C2'	7.81	124.16	114.00
21	A2	875	G	P-O3'-C3'	7.81	129.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	AB	75	TYR	CB-CG-CD2	7.81	125.69	121.00
21	A2	245	U	O4'-C1'-N1	7.81	114.45	108.20
21	A2	1235	A	C1'-O4'-C4'	-7.81	103.65	109.90
21	A2	1367	C	N1-C1'-C2'	7.81	124.16	114.00
67	B1	973	C	C1'-O4'-C4'	-7.81	103.65	109.90
67	B1	1544	C	N1-C1'-C2'	7.81	124.16	114.00
67	B1	2231	G	P-O3'-C3'	7.81	129.08	119.70
21	A2	691	G	C1'-O4'-C4'	-7.81	103.65	109.90
21	A2	1402	C	O4'-C1'-C2'	-7.81	97.99	105.80
67	B1	2796	C	O4'-C1'-N1	7.81	114.45	108.20
67	B1	2937	U	OP1-P-OP2	-7.81	107.89	119.60
21	A2	485	A	O4'-C1'-N9	7.81	114.44	108.20
21	A2	773	A	O4'-C1'-N9	-7.81	101.95	108.20
67	B1	2883	C	C3'-C2'-C1'	7.81	107.75	101.50
67	B1	509	A	C3'-C2'-C1'	7.80	107.74	101.50
67	B1	1555	G	C3'-C2'-C1'	7.80	107.74	101.50
21	A2	1491	C	O4'-C1'-C2'	-7.80	98.00	105.80
57	BZ	16	VAL	CA-CB-CG1	7.80	122.60	110.90
67	B1	224	G	C3'-C2'-C1'	7.80	107.74	101.50
67	B1	308	C	O4'-C1'-C2'	-7.80	98.00	105.80
67	B1	2851	A	C3'-C2'-C1'	-7.80	95.26	101.50
25	AH	87	ARG	N-CA-CB	7.80	124.64	110.60
67	B1	1432	C	N1-C1'-C2'	7.80	124.14	114.00
21	A2	626	G	O4'-C1'-N9	7.80	114.44	108.20
67	B1	366	G	P-O3'-C3'	-7.80	110.34	119.70
67	B1	693	G	N9-C1'-C2'	-7.80	103.42	112.00
67	B1	1651	A	N9-C1'-C2'	7.80	124.14	114.00
67	B1	2711	U	N1-C1'-C2'	7.80	124.14	114.00
67	B1	2731	C	O4'-C1'-N1	7.80	114.44	108.20
67	B1	2903	U	P-O5'-C5'	7.80	133.37	120.90
68	B3	18	G	C1'-O4'-C4'	-7.80	103.66	109.90
21	A2	361	A	N9-C1'-C2'	7.79	124.13	114.00
21	A2	1021	C	N1-C1'-C2'	7.79	124.13	114.00
67	B1	1728	C	O4'-C1'-C2'	-7.79	98.00	105.80
21	A2	366	C	C1'-O4'-C4'	-7.79	103.67	109.90
67	B1	1051	C	C3'-C2'-C1'	7.79	107.73	101.50
67	B1	1056	C	C3'-C2'-C1'	7.79	107.73	101.50
67	B1	1314	A	C1'-O4'-C4'	7.79	116.14	109.90
67	B1	2038	C	O4'-C1'-N1	7.79	114.44	108.20
67	B1	2211	C	N1-C1'-C2'	7.79	124.13	114.00
21	A2	1203	G	N9-C1'-C2'	7.79	124.13	114.00
30	AU	54	ARG	NE-CZ-NH2	7.79	124.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	102	A	O4'-C1'-N9	7.79	114.43	108.20
47	BI	62	ARG	NE-CZ-NH1	7.79	124.19	120.30
68	B3	40	G	C1'-O4'-C4'	-7.79	103.67	109.90
21	A2	808	C	O4'-C1'-C2'	-7.79	98.01	105.80
67	B1	1278	C	C1'-O4'-C4'	-7.79	103.67	109.90
67	B1	2169	C	O4'-C1'-C2'	-7.79	98.01	105.80
67	B1	2255	C	P-O3'-C3'	7.79	129.05	119.70
11	A1	6	G	O4'-C1'-C2'	-7.79	98.01	105.80
21	A2	965	G	C5'-C4'-C3'	7.79	128.46	116.00
67	B1	1248	C	C3'-C2'-C1'	-7.79	95.27	101.50
21	A2	641	A	C4'-C3'-C2'	7.79	110.39	102.60
21	A2	914	U	O4'-C1'-N1	7.78	114.43	108.20
67	B1	2688	C	N1-C1'-C2'	7.78	124.12	114.00
50	BV	56	TYR	CB-CA-C	7.78	125.97	110.40
67	B1	1268	A	O4'-C1'-N9	7.78	114.43	108.20
67	B1	2050	U	N1-C1'-C2'	7.78	124.12	114.00
67	B1	434	G	N9-C1'-C2'	7.78	124.11	114.00
67	B1	1765	A	O4'-C1'-N9	7.78	114.42	108.20
21	A2	872	A	O4'-C1'-N9	7.78	114.42	108.20
67	B1	1311	C	O4'-C1'-N1	7.78	114.42	108.20
67	B1	1616	A	N9-C1'-C2'	-7.78	103.44	112.00
21	A2	885	G	C1'-O4'-C4'	-7.78	103.68	109.90
21	A2	886	G	O4'-C1'-N9	7.78	114.42	108.20
67	B1	464	C	O4'-C1'-N1	7.78	114.42	108.20
67	B1	2125	C	C1'-O4'-C4'	-7.78	103.68	109.90
68	B3	1	C	O5'-P-OP2	7.78	120.03	110.70
21	A2	1077	U	O4'-C1'-C2'	-7.78	98.02	105.80
67	B1	357	G	C1'-O4'-C4'	7.77	116.12	109.90
67	B1	2968	G	C1'-O4'-C4'	-7.77	103.68	109.90
67	B1	1180	G	C3'-C2'-C1'	7.77	107.72	101.50
67	B1	1263	C	O4'-C1'-N1	7.77	114.42	108.20
67	B1	2053	G	C3'-C2'-C1'	-7.77	95.28	101.50
67	B1	2592	U	C1'-O4'-C4'	-7.77	103.68	109.90
68	B3	1	C	O5'-P-OP1	7.77	120.03	110.70
67	B1	461	C	O4'-C1'-C2'	-7.77	98.03	105.80
67	B1	1164	C	C3'-C2'-C1'	7.77	107.72	101.50
21	A2	1391	U	C1'-O4'-C4'	7.77	116.12	109.90
21	A2	430	G	C5-C6-O6	-7.77	123.94	128.60
21	A2	1051	G	O4'-C1'-N9	7.77	114.41	108.20
67	B1	812	C	O4'-C1'-N1	7.77	114.41	108.20
67	B1	1113	G	O4'-C1'-N9	7.77	114.41	108.20
21	A2	872	A	C4'-C3'-C2'	-7.77	94.83	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AE	101	ARG	NE-CZ-NH2	-7.76	116.42	120.30
21	A2	1	A	O5'-P-OP2	7.76	120.02	110.70
21	A2	1192	C	C3'-C2'-C1'	7.76	107.71	101.50
67	B1	2416	G	N9-C1'-C2'	-7.76	103.46	112.00
21	A2	876	A	C3'-C2'-C1'	7.76	107.71	101.50
17	AO	137	ARG	N-CA-CB	7.76	124.57	110.60
67	B1	849	C	N1-C1'-C2'	7.76	124.09	114.00
21	A2	874	G	O4'-C1'-N9	7.76	114.41	108.20
67	B1	1623	C	N1-C1'-C2'	7.76	124.09	114.00
67	B1	1670	A	C5'-C4'-O4'	7.76	118.41	109.10
21	A2	426	C	C3'-C2'-C1'	7.76	107.70	101.50
21	A2	1469	G	C1'-O4'-C4'	-7.76	103.69	109.90
67	B1	334	G	O4'-C1'-N9	7.76	114.41	108.20
67	B1	583	A	C1'-O4'-C4'	7.76	116.11	109.90
67	B1	2060	A	O4'-C1'-C2'	-7.76	98.04	105.80
67	B1	2653	G	O4'-C1'-N9	7.76	114.41	108.20
67	B1	1966	C	O4'-C1'-N1	7.75	114.40	108.20
67	B1	2799	C	N1-C1'-C2'	7.75	124.08	114.00
21	A2	460	C	O4'-C1'-N1	7.75	114.40	108.20
21	A2	788	C	C1'-O4'-C4'	-7.75	103.70	109.90
21	A2	1416	C	P-O3'-C3'	-7.75	110.40	119.70
21	A2	57	G	C3'-C2'-C1'	-7.75	95.30	101.50
67	B1	1	G	O5'-P-OP2	7.75	120.00	110.70
21	A2	974	G	C1'-O4'-C4'	7.75	116.10	109.90
67	B1	127	C	O4'-C1'-C2'	-7.75	98.05	105.80
21	A2	121	C	C1'-O4'-C4'	-7.75	103.70	109.90
21	A2	265	C	P-O3'-C3'	-7.75	110.40	119.70
21	A2	296	A	C4'-C3'-C2'	-7.75	94.85	102.60
67	B1	929	G	C3'-C2'-C1'	7.75	107.70	101.50
67	B1	1565	G	O5'-P-OP2	-7.75	98.73	105.70
67	B1	1734	G	O4'-C1'-C2'	-7.75	98.05	105.80
21	A2	218	C	N1-C1'-C2'	7.75	124.07	114.00
21	A2	383	C	C1'-O4'-C4'	-7.75	103.70	109.90
64	Bc	15	GLU	O-C-N	-7.75	110.31	122.70
67	B1	185	A	N9-C1'-C2'	7.75	124.07	114.00
67	B1	963	G	C1'-O4'-C4'	-7.75	103.70	109.90
21	A2	156	A	O4'-C1'-C2'	-7.75	98.06	105.80
54	BF	174	ILE	CA-CB-CG1	7.75	125.72	111.00
67	B1	459	C	O4'-C1'-N1	7.75	114.40	108.20
11	A1	1	G	O5'-P-OP2	7.74	119.99	110.70
67	B1	1603	G	P-O3'-C3'	7.74	128.99	119.70
67	B1	2459	G	P-O3'-C3'	7.74	128.99	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A1	52	G	O4'-C1'-C2'	7.74	114.57	107.60
21	A2	144	G	P-O3'-C3'	7.74	128.99	119.70
21	A2	504	G	C1'-O4'-C4'	-7.74	103.71	109.90
44	BW	63	ARG	NE-CZ-NH2	-7.74	116.43	120.30
67	B1	735	A	C5'-C4'-O4'	7.74	118.39	109.10
21	A2	111	G	C1'-O4'-C4'	-7.74	103.71	109.90
21	A2	168	G	O4'-C1'-N9	7.74	114.39	108.20
21	A2	697	A	O4'-C1'-N9	7.74	114.39	108.20
42	BT	32	ARG	NE-CZ-NH2	-7.74	116.43	120.30
48	BR	22	ARG	NE-CZ-NH2	-7.74	116.43	120.30
67	B1	9	A	O4'-C1'-N9	7.74	114.39	108.20
67	B1	616	C	C1'-O4'-C4'	7.74	116.09	109.90
67	B1	337	G	C1'-O4'-C4'	-7.74	103.71	109.90
67	B1	767	G	O4'-C1'-C2'	7.74	114.56	107.60
67	B1	826	C	C3'-C2'-C1'	7.74	107.69	101.50
67	B1	318	G	N9-C1'-C2'	7.73	124.05	114.00
67	B1	834	G	N9-C1'-C2'	-7.73	103.49	112.00
67	B1	2290	U	O4'-C1'-N1	7.73	114.39	108.20
21	A2	1302	C	O4'-C1'-N1	7.73	114.39	108.20
67	B1	1296	A	N9-C1'-C2'	7.73	124.05	114.00
67	B1	1603	G	C3'-C2'-C1'	7.73	107.69	101.50
21	A2	1	A	O5'-P-OP1	7.73	119.98	110.70
67	B1	1160	U	O4'-C1'-N1	7.73	114.38	108.20
67	B1	1480	G	OP1-P-OP2	-7.73	108.00	119.60
67	B1	2032	G	C3'-C2'-C1'	-7.73	95.32	101.50
68	B3	110	C	O4'-C1'-C2'	-7.73	98.07	105.80
46	BA	119	ARG	NE-CZ-NH1	7.73	124.17	120.30
67	B1	208	A	C3'-C2'-C1'	7.73	107.68	101.50
67	B1	2332	G	O4'-C1'-N9	7.73	114.38	108.20
68	B3	50	G	C3'-C2'-C1'	7.73	107.68	101.50
67	B1	1564	C	O4'-C1'-N1	7.73	114.38	108.20
21	A2	127	G	O4'-C1'-C2'	-7.73	98.07	105.80
27	A0	1	G	O5'-P-OP2	7.73	119.97	110.70
11	A1	15	G	P-O3'-C3'	7.72	128.97	119.70
21	A2	760	C	N1-C1'-C2'	7.72	124.04	114.00
21	A2	771	G	C1'-O4'-C4'	-7.72	103.72	109.90
67	B1	821	U	O4'-C1'-C2'	-7.72	98.08	105.80
27	A0	1	G	O5'-P-OP1	7.72	119.97	110.70
21	A2	703	U	C3'-C2'-C1'	7.72	107.68	101.50
67	B1	2167	C	O4'-C1'-N1	7.72	114.38	108.20
67	B1	2662	G	C3'-C2'-C1'	-7.72	95.32	101.50
11	A1	1	G	O5'-P-OP1	7.72	119.96	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A1	12	U	O4'-C1'-N1	7.72	114.38	108.20
67	B1	85	G	C5'-C4'-O4'	-7.72	99.84	109.10
67	B1	1377	G	C3'-C2'-C1'	7.72	107.68	101.50
67	B1	2944	G	P-O5'-C5'	7.72	133.25	120.90
8	AR	44	ARG	NE-CZ-NH1	7.72	124.16	120.30
29	AL	44	ARG	NE-CZ-NH1	7.72	124.16	120.30
67	B1	2007	C	O4'-C1'-C2'	7.72	114.55	107.60
67	B1	2308	C	C3'-C2'-C1'	7.72	107.67	101.50
67	B1	125	C	N1-C1'-C2'	7.72	124.03	114.00
67	B1	324	C	N1-C1'-C2'	-7.72	103.51	112.00
67	B1	1703	G	O4'-C1'-N9	7.72	114.37	108.20
21	A2	670	C	N1-C1'-C2'	7.71	124.03	114.00
51	Bj	50	PHE	CB-CA-C	-7.71	94.97	110.40
67	B1	2833	G	O4'-C1'-N9	7.71	114.37	108.20
21	A2	757	G	C1'-O4'-C4'	-7.71	103.73	109.90
4	AG	54	GLU	N-CA-CB	7.71	124.48	110.60
6	AC	141	ALA	N-CA-CB	7.71	120.90	110.10
25	AH	94	ASN	C-N-CA	7.71	140.98	121.70
67	B1	1523	A	O4'-C1'-C2'	-7.71	98.09	105.80
67	B1	2421	A	C1'-O4'-C4'	-7.71	103.73	109.90
21	A2	213	C	O4'-C1'-N1	7.71	114.37	108.20
21	A2	1233	G	O4'-C1'-N9	7.71	114.37	108.20
67	B1	893	C	O4'-C1'-N1	7.71	114.37	108.20
67	B1	1265	A	O4'-C1'-C2'	-7.71	98.09	105.80
67	B1	1611	C	N1-C1'-C2'	7.71	124.02	114.00
67	B1	1650	U	C3'-C2'-C1'	-7.71	95.33	101.50
67	B1	1924	A	C1'-O4'-C4'	-7.71	103.73	109.90
21	A2	20	G	C1'-O4'-C4'	-7.71	103.73	109.90
21	A2	973	U	O4'-C1'-N1	7.71	114.36	108.20
27	A0	68	G	C1'-O4'-C4'	-7.71	103.73	109.90
67	B1	1104	A	C1'-O4'-C4'	-7.71	103.73	109.90
35	BL	48	THR	N-CA-CB	7.71	124.94	110.30
21	A2	113	U	C1'-O4'-C4'	7.70	116.06	109.90
21	A2	408	C	P-O3'-C3'	7.70	128.94	119.70
67	B1	1	G	O5'-P-OP1	7.70	119.94	110.70
67	B1	310	C	C3'-C2'-C1'	7.70	107.66	101.50
67	B1	2293	G	N9-C1'-C2'	-7.70	103.53	112.00
21	A2	440	C	C5'-C4'-O4'	7.70	118.34	109.10
40	BE	22	ARG	NE-CZ-NH1	7.70	124.15	120.30
67	B1	2134	G	N9-C1'-C2'	7.70	124.01	114.00
68	B3	78	C	C3'-C2'-C1'	7.70	107.66	101.50
21	A2	477	G	C3'-C2'-C1'	7.70	107.66	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	32	C	N1-C1'-C2'	7.70	124.01	114.00
67	B1	1065	C	O4'-C1'-N1	7.70	114.36	108.20
67	B1	2648	C	O4'-C1'-N1	7.70	114.36	108.20
67	B1	2823	G	O4'-C1'-N9	7.70	114.36	108.20
21	A2	178	C	O4'-C1'-C2'	-7.70	98.10	105.80
67	B1	1149	C	N1-C1'-C2'	7.70	124.01	114.00
21	A2	471	G	P-O3'-C3'	7.70	128.94	119.70
67	B1	1761	C	O4'-C1'-N1	7.70	114.36	108.20
67	B1	2825	A	C3'-C2'-C1'	7.70	107.66	101.50
67	B1	2141	C	O4'-C1'-N1	7.69	114.36	108.20
67	B1	2520	C	C5'-C4'-C3'	7.69	128.31	116.00
21	A2	1446	G	O4'-C1'-N9	7.69	114.35	108.20
67	B1	844	C	N1-C1'-C2'	7.69	124.00	114.00
67	B1	1462	G	O4'-C1'-N9	7.69	114.35	108.20
67	B1	1712	U	C4'-C3'-C2'	-7.69	94.91	102.60
67	B1	2299	G	C1'-O4'-C4'	-7.69	103.75	109.90
68	B3	71	G	C1'-O4'-C4'	-7.69	103.75	109.90
67	B1	7	G	C5-C6-O6	-7.69	123.99	128.60
67	B1	13	U	C5'-C4'-C3'	7.69	128.30	116.00
67	B1	974	U	O4'-C1'-C2'	-7.69	98.11	105.80
21	A2	27	C	O4'-C1'-C2'	-7.69	98.11	105.80
67	B1	43	G	C1'-O4'-C4'	7.69	116.05	109.90
21	A2	1085	C	O4'-C1'-N1	7.68	114.35	108.20
21	A2	1120	G	O4'-C1'-C2'	7.68	114.52	107.60
43	Bk	35	ALA	N-CA-CB	7.68	120.86	110.10
67	B1	876	C	C1'-O4'-C4'	7.68	116.05	109.90
67	B1	893	C	P-O3'-C3'	-7.68	110.48	119.70
67	B1	2016	C	O4'-C1'-C2'	-7.68	98.11	105.80
67	B1	2485	C	C1'-O4'-C4'	7.68	116.05	109.90
67	B1	2617	G	O4'-C1'-N9	-7.68	102.05	108.20
2	AK	52	ALA	N-CA-CB	7.68	120.86	110.10
21	A2	1320	A	O4'-C1'-N9	7.68	114.35	108.20
67	B1	959	U	P-O3'-C3'	-7.68	110.48	119.70
67	B1	1211	C	C1'-O4'-C4'	7.68	116.05	109.90
67	B1	2279	G	C1'-O4'-C4'	-7.68	103.75	109.90
33	BC	270	MET	CG-SD-CE	-7.68	87.91	100.20
40	BE	163	ARG	NE-CZ-NH1	-7.68	116.46	120.30
67	B1	151	G	P-O3'-C3'	7.68	128.91	119.70
67	B1	3015	A	C3'-C2'-C1'	7.68	107.64	101.50
68	B3	117	G	P-O3'-C3'	-7.68	110.49	119.70
21	A2	332	C	P-O3'-C3'	-7.67	110.49	119.70
21	A2	390	G	O4'-C1'-C2'	7.67	114.51	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2225	C	O4'-C1'-C2'	-7.67	98.12	105.80
67	B1	2481	G	O4'-C1'-N9	7.67	114.34	108.20
67	B1	1971	C	N1-C1'-C2'	7.67	123.97	114.00
67	B1	1001	C	P-O3'-C3'	7.67	128.91	119.70
67	B1	1923	A	O4'-C1'-C2'	-7.67	98.13	105.80
67	B1	2745	G	C1'-O4'-C4'	-7.67	103.76	109.90
21	A2	1367	C	O4'-C1'-C2'	-7.67	98.13	105.80
21	A2	294	A	O4'-C1'-C2'	7.67	114.50	107.60
21	A2	790	G	N9-C1'-C2'	-7.67	103.56	112.00
27	A0	56	C	C3'-C2'-C1'	-7.67	95.37	101.50
41	Ba	31	ALA	CB-CA-C	-7.67	98.60	110.10
64	Bc	73	LYS	CB-CA-C	7.67	125.74	110.40
67	B1	633	A	O4'-C1'-C2'	-7.67	98.13	105.80
67	B1	794	G	O4'-C1'-N9	7.67	114.33	108.20
67	B1	2685	G	C3'-C2'-C1'	7.67	107.64	101.50
67	B1	2706	C	N1-C1'-C2'	7.67	123.97	114.00
68	B3	44	C	C3'-C2'-C1'	7.67	107.64	101.50
21	A2	743	U	C5'-C4'-O4'	7.67	118.30	109.10
67	B1	147	C	C3'-C2'-C1'	7.67	107.63	101.50
67	B1	169	G	O4'-C1'-N9	7.67	114.33	108.20
67	B1	2216	G	C1'-O4'-C4'	7.67	116.03	109.90
67	B1	1214	C	C3'-C2'-C1'	7.66	107.63	101.50
21	A2	473	A	N9-C1'-C2'	7.66	123.96	114.00
21	A2	751	C	O4'-C1'-C2'	-7.66	98.14	105.80
21	A2	430	G	N1-C6-O6	7.66	124.50	119.90
21	A2	1159	U	O4'-C1'-N1	7.66	114.33	108.20
21	A2	1288	C	C3'-C2'-C1'	7.66	107.63	101.50
67	B1	1694	G	O4'-C4'-C3'	-7.66	96.34	104.00
67	B1	2622	C	C3'-C2'-C1'	7.66	107.63	101.50
21	A2	248	U	O3'-P-O5'	-7.66	89.45	104.00
67	B1	1140	C	C4'-C3'-C2'	-7.66	94.94	102.60
67	B1	1489	G	O4'-C1'-N9	7.66	114.33	108.20
67	B1	2079	U	C1'-O4'-C4'	-7.66	103.77	109.90
67	B1	2020	G	N9-C1'-C2'	7.66	123.95	114.00
21	A2	688	C	O4'-C1'-N1	7.66	114.32	108.20
46	BA	24	PHE	CB-CG-CD2	7.66	126.16	120.80
67	B1	1407	A	C4'-C3'-C2'	7.66	110.25	102.60
21	A2	1104	G	O4'-C1'-N9	7.65	114.32	108.20
67	B1	131	C	C3'-C2'-C1'	7.65	107.62	101.50
67	B1	1414	G	O4'-C1'-C2'	-7.65	98.15	105.80
21	A2	145	A	C1'-O4'-C4'	7.65	116.02	109.90
21	A2	1352	G	N9-C1'-C2'	7.65	123.95	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1194	G	N9-C1'-C2'	7.65	123.95	114.00
31	BY	96	PHE	CB-CG-CD1	-7.65	115.44	120.80
67	B1	1926	A	C1'-O4'-C4'	-7.65	103.78	109.90
67	B1	2254	U	O4'-C4'-C3'	-7.65	96.35	104.00
67	B1	2427	C	C1'-O4'-C4'	-7.65	103.78	109.90
67	B1	2468	C	O4'-C1'-C2'	-7.65	98.15	105.80
67	B1	2942	G	P-O5'-C5'	-7.65	108.66	120.90
67	B1	1922	A	O4'-C1'-N9	7.65	114.32	108.20
67	B1	2112	C	C3'-C2'-C1'	7.65	107.62	101.50
67	B1	2505	A	O4'-C1'-N9	-7.65	102.08	108.20
67	B1	1165	C	C1'-O4'-C4'	7.65	116.02	109.90
67	B1	2260	C	P-O3'-C3'	7.65	128.88	119.70
67	B1	2944	G	P-O3'-C3'	-7.65	110.53	119.70
67	B1	1028	G	P-O3'-C3'	7.64	128.87	119.70
11	A1	22	A	O4'-C1'-N9	7.64	114.31	108.20
21	A2	196	G	P-O3'-C3'	7.64	128.87	119.70
67	B1	2433	U	C1'-O4'-C4'	-7.64	103.79	109.90
21	A2	1037	U	C1'-O4'-C4'	-7.64	103.79	109.90
21	A2	1393	A	P-O5'-C5'	-7.64	108.67	120.90
67	B1	1080	G	O3'-P-O5'	7.64	118.52	104.00
67	B1	2905	C	N1-C1'-C2'	7.64	123.93	114.00
52	BB	25	ARG	NE-CZ-NH1	-7.64	116.48	120.30
67	B1	916	A	O4'-C1'-N9	7.64	114.31	108.20
67	B1	2688	C	O4'-C1'-N1	7.64	114.31	108.20
67	B1	2796	C	O4'-C1'-C2'	-7.64	98.16	105.80
21	A2	350	G	C1'-O4'-C4'	-7.63	103.79	109.90
67	B1	106	G	O4'-C1'-N9	7.63	114.31	108.20
67	B1	299	U	P-O3'-C3'	7.63	128.86	119.70
67	B1	2251	G	O4'-C1'-N9	7.63	114.31	108.20
67	B1	2754	A	C1'-O4'-C4'	-7.63	103.79	109.90
68	B3	29	G	P-O3'-C3'	7.63	128.86	119.70
68	B3	42	A	P-O3'-C3'	7.63	128.86	119.70
67	B1	2061	A	O4'-C1'-C2'	-7.63	98.17	105.80
67	B1	2524	C	O4'-C1'-C2'	-7.63	98.17	105.80
25	AH	149	ALA	CB-CA-C	-7.63	98.65	110.10
67	B1	467	U	P-O3'-C3'	7.63	128.86	119.70
67	B1	2810	G	C3'-C2'-C1'	-7.63	95.39	101.50
67	B1	32	C	C3'-C2'-C1'	7.63	107.60	101.50
21	A2	318	C	N1-C1'-C2'	7.63	123.92	114.00
40	BE	93	ARG	NE-CZ-NH1	7.63	124.11	120.30
54	BF	8	ARG	NE-CZ-NH1	-7.63	116.49	120.30
62	BN	19	ARG	NE-CZ-NH2	7.63	124.11	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	231	G	O4'-C1'-C2'	-7.63	98.17	105.80
67	B1	2623	G	O4'-C1'-N9	7.63	114.30	108.20
18	AF	8	TYR	CB-CG-CD2	-7.63	116.42	121.00
21	A2	833	C	N1-C1'-C2'	7.63	123.92	114.00
21	A2	1072	C	O4'-C1'-N1	-7.63	102.10	108.20
68	B3	31	U	O4'-C1'-N1	7.63	114.30	108.20
21	A2	55	G	O4'-C1'-N9	7.62	114.30	108.20
41	Ba	33	LYS	N-CA-CB	7.62	124.33	110.60
67	B1	978	C	O4'-C1'-N1	7.62	114.30	108.20
67	B1	1665	G	O4'-C1'-C2'	-7.62	98.17	105.80
67	B1	2621	U	C1'-O4'-C4'	7.62	116.00	109.90
21	A2	804	U	N1-C1'-C2'	-7.62	103.61	112.00
21	A2	958	G	N9-C1'-C2'	-7.62	103.61	112.00
67	B1	628	A	P-O3'-C3'	-7.62	110.55	119.70
67	B1	1038	U	C1'-O4'-C4'	7.62	116.00	109.90
67	B1	1339	C	C1'-O4'-C4'	-7.62	103.80	109.90
67	B1	2308	C	C4'-C3'-C2'	-7.62	94.98	102.60
21	A2	1490	C	C1'-O4'-C4'	-7.62	103.80	109.90
30	AU	15	ARG	NE-CZ-NH2	-7.62	116.49	120.30
67	B1	336	C	O4'-C1'-C2'	-7.62	98.18	105.80
67	B1	997	A	C4'-C3'-C2'	-7.62	94.98	102.60
67	B1	1478	G	O4'-C1'-C2'	7.62	114.46	107.60
67	B1	2212	C	C3'-C2'-C1'	7.62	107.60	101.50
28	B6	16	ARG	NE-CZ-NH2	-7.62	116.49	120.30
12	AN	11	PHE	CB-CG-CD2	-7.62	115.47	120.80
67	B1	971	G	C3'-C2'-C1'	-7.62	95.41	101.50
67	B1	3006	G	C3'-C2'-C1'	7.62	107.59	101.50
68	B3	113	C	O4'-C1'-N1	7.62	114.29	108.20
67	B1	812	C	N1-C1'-C2'	7.62	123.90	114.00
67	B1	2622	C	N1-C1'-C2'	7.62	123.90	114.00
21	A2	79	G	P-O3'-C3'	-7.61	110.56	119.70
67	B1	1825	G	N9-C1'-C2'	-7.61	103.62	112.00
67	B1	2889	A	O4'-C1'-C2'	-7.61	98.19	105.80
21	A2	393	A	C3'-C2'-C1'	-7.61	95.41	101.50
21	A2	792	C	O4'-C1'-N1	7.61	114.29	108.20
67	B1	197	C	P-O3'-C3'	-7.61	110.57	119.70
67	B1	753	A	C1'-O4'-C4'	7.61	115.99	109.90
67	B1	1657	G	C5-C6-O6	-7.61	124.03	128.60
67	B1	2135	C	P-O5'-C5'	7.61	133.08	120.90
21	A2	1083	G	C5-C6-O6	-7.61	124.03	128.60
67	B1	2254	U	O4'-C1'-C2'	-7.61	98.19	105.80
10	AD	52	ARG	NE-CZ-NH2	-7.61	116.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	439	G	C2'-C3'-O3'	7.61	126.24	109.50
67	B1	2201	C	N1-C1'-C2'	7.61	123.89	114.00
67	B1	2854	A	C3'-C2'-C1'	-7.61	95.41	101.50
67	B1	2144	U	O4'-C1'-C2'	-7.61	98.19	105.80
23	AT	49	ARG	NE-CZ-NH2	-7.60	116.50	120.30
67	B1	2210	G	C3'-C2'-C1'	-7.60	95.42	101.50
29	AL	41	PRO	CA-N-CD	-7.60	100.86	111.50
67	B1	49	A	O4'-C1'-N9	-7.60	102.12	108.20
67	B1	404	G	N9-C1'-C2'	-7.60	103.64	112.00
67	B1	465	C	O4'-C1'-N1	7.60	114.28	108.20
67	B1	823	G	C1'-O4'-C4'	-7.60	103.82	109.90
67	B1	1844	C	O4'-C1'-N1	7.60	114.28	108.20
21	A2	335	G	O4'-C1'-C2'	7.60	114.44	107.60
21	A2	834	C	O4'-C1'-C2'	-7.60	98.20	105.80
21	A2	884	G	N9-C1'-C2'	7.60	123.88	114.00
35	BL	74	ARG	N-CA-C	-7.60	90.49	111.00
67	B1	797	C	C1'-O4'-C4'	7.60	115.98	109.90
67	B1	1179	G	O4'-C4'-C3'	7.60	112.18	106.10
21	A2	645	G	N9-C1'-C2'	-7.60	103.64	112.00
67	B1	1893	C	N1-C1'-C2'	7.60	123.88	114.00
21	A2	491	G	N9-C1'-C2'	7.59	123.87	114.00
67	B1	2713	A	O4'-C1'-N9	7.59	114.28	108.20
21	A2	367	G	C3'-C2'-C1'	7.59	107.57	101.50
67	B1	941	C	O4'-C1'-N1	7.59	114.27	108.20
67	B1	1250	A	C1'-O4'-C4'	7.59	115.97	109.90
67	B1	1362	G	O4'-C1'-N9	7.59	114.27	108.20
67	B1	2485	C	O4'-C1'-C2'	-7.59	98.21	105.80
21	A2	504	G	C4'-C3'-C2'	-7.59	95.01	102.60
21	A2	1176	C	O4'-C1'-N1	7.59	114.27	108.20
67	B1	500	C	C3'-C2'-C1'	7.59	107.57	101.50
67	B1	2276	G	P-O5'-C5'	7.59	133.05	120.90
67	B1	2876	G	O4'-C1'-N9	7.59	114.27	108.20
21	A2	519	G	O4'-C1'-C2'	-7.59	98.21	105.80
21	A2	736	A	O4'-C1'-C2'	-7.59	98.21	105.80
21	A2	1000	G	C1'-O4'-C4'	-7.59	103.83	109.90
67	B1	1760	C	N1-C1'-C2'	7.59	123.87	114.00
67	B1	2042	A	C1'-O4'-C4'	7.59	115.97	109.90
68	B3	112	C	O4'-C1'-N1	7.59	114.27	108.20
21	A2	772	G	O4'-C1'-N9	7.59	114.27	108.20
21	A2	291	G	O4'-C1'-N9	7.59	114.27	108.20
27	A0	12	U	C3'-C2'-C1'	7.59	107.57	101.50
67	B1	2526	G	N9-C1'-C2'	-7.59	103.65	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	AF	5	TRP	N-CA-CB	-7.58	96.95	110.60
21	A2	600	C	O4'-C1'-C2'	-7.58	98.22	105.80
21	A2	1140	A	O4'-C1'-N9	7.58	114.27	108.20
67	B1	116	G	O4'-C1'-N9	-7.58	102.13	108.20
67	B1	1218	C	P-O3'-C3'	7.58	128.80	119.70
67	B1	2565	A	C3'-C2'-C1'	7.58	107.57	101.50
67	B1	2413	G	C4'-C3'-C2'	-7.58	95.02	102.60
10	AD	110	TYR	CB-CG-CD1	7.58	125.55	121.00
11	A1	7	G	C5'-C4'-C3'	7.58	128.13	116.00
17	AO	105	ASP	CB-CG-OD2	-7.58	111.48	118.30
21	A2	949	G	P-O3'-C3'	7.58	128.80	119.70
67	B1	2201	C	O4'-C1'-C2'	-7.58	98.22	105.80
21	A2	770	A	C3'-C2'-C1'	7.58	107.56	101.50
67	B1	546	C	C3'-C2'-C1'	7.58	107.56	101.50
67	B1	1593	C	O4'-C1'-N1	7.58	114.26	108.20
67	B1	2619	U	O4'-C1'-C2'	-7.58	98.22	105.80
4	AG	77	ASP	CA-CB-CG	-7.58	96.72	113.40
44	BW	65	ARG	NE-CZ-NH1	7.58	124.09	120.30
67	B1	210	A	C2'-C3'-O3'	7.58	126.17	109.50
67	B1	1883	C	C5'-C4'-C3'	7.58	128.13	116.00
67	B1	2287	C	N1-C1'-C2'	-7.58	103.66	112.00
67	B1	2376	U	C1'-O4'-C4'	7.58	115.96	109.90
21	A2	811	G	N9-C1'-C2'	-7.58	103.67	112.00
21	A2	211	G	O4'-C1'-N9	7.58	114.26	108.20
21	A2	542	G	C1'-O4'-C4'	-7.58	103.84	109.90
21	A2	592	G	N9-C1'-C2'	-7.58	103.67	112.00
40	BE	83	ARG	NE-CZ-NH2	-7.58	116.51	120.30
67	B1	329	G	C5-C6-O6	-7.58	124.05	128.60
67	B1	942	U	P-O5'-C5'	-7.58	108.78	120.90
67	B1	1114	G	O4'-C1'-N9	7.57	114.26	108.20
67	B1	339	A	O4'-C1'-N9	7.57	114.26	108.20
67	B1	746	C	O4'-C1'-C2'	-7.57	98.23	105.80
67	B1	1274	G	O4'-C1'-C2'	7.57	114.42	107.60
21	A2	816	G	O4'-C1'-N9	7.57	114.26	108.20
21	A2	1435	G	C3'-C2'-C1'	7.57	107.56	101.50
67	B1	2997	G	N9-C1'-C2'	7.57	123.84	114.00
67	B1	2727	C	N1-C1'-C2'	7.57	123.84	114.00
21	A2	4	C	C1'-O4'-C4'	7.57	115.95	109.90
21	A2	321	A	N9-C1'-C2'	7.57	123.84	114.00
21	A2	1269	G	C4'-C3'-C2'	-7.57	95.03	102.60
67	B1	375	C	O4'-C1'-N1	7.57	114.25	108.20
21	A2	1104	G	C1'-O4'-C4'	7.57	115.95	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1161	A	C1'-O4'-C4'	-7.56	103.85	109.90
27	A0	32	C	N1-C1'-C2'	7.56	123.83	114.00
67	B1	1365	G	O4'-C1'-C2'	7.56	114.41	107.60
21	A2	701	G	O4'-C1'-N9	7.56	114.25	108.20
21	A2	1131	G	N9-C1'-C2'	7.56	123.83	114.00
67	B1	2045	C	O4'-C1'-N1	7.56	114.25	108.20
1	AQ	28	TYR	CB-CG-CD2	-7.56	116.47	121.00
21	A2	556	G	P-O3'-C3'	-7.56	110.63	119.70
67	B1	2286	U	O4'-C1'-N1	7.56	114.25	108.20
67	B1	2464	G	C1'-O4'-C4'	7.56	115.95	109.90
21	A2	88	G	C1'-O4'-C4'	-7.55	103.86	109.90
67	B1	2470	U	O4'-C1'-C2'	-7.55	98.25	105.80
67	B1	2794	G	O4'-C1'-C2'	7.55	114.40	107.60
21	A2	1153	G	C1'-O4'-C4'	-7.55	103.86	109.90
67	B1	323	U	O4'-C1'-C2'	-7.55	98.25	105.80
67	B1	685	G	C3'-C2'-C1'	7.55	107.54	101.50
21	A2	276	A	N9-C1'-C2'	7.55	123.81	114.00
67	B1	651	C	P-O3'-C3'	-7.55	110.64	119.70
67	B1	2610	C	C1'-O4'-C4'	7.55	115.94	109.90
67	B1	2851	A	P-O3'-C3'	7.55	128.76	119.70
16	AJ	16	ARG	NE-CZ-NH2	-7.55	116.53	120.30
21	A2	635	C	O4'-C1'-C2'	-7.55	98.25	105.80
67	B1	2026	C	N1-C1'-C2'	7.55	123.81	114.00
21	A2	354	G	N9-C1'-C2'	7.55	123.81	114.00
67	B1	1087	G	P-O3'-C3'	7.55	128.75	119.70
67	B1	1285	C	C1'-O4'-C4'	-7.55	103.86	109.90
67	B1	1851	U	C3'-C2'-C1'	7.55	107.54	101.50
67	B1	2612	A	P-O3'-C3'	7.55	128.76	119.70
67	B1	570	G	O4'-C1'-N9	7.54	114.24	108.20
67	B1	2155	C	C1'-O4'-C4'	7.54	115.94	109.90
67	B1	1592	U	O4'-C1'-N1	-7.54	102.17	108.20
67	B1	1717	C	N1-C1'-C2'	7.54	123.81	114.00
21	A2	560	A	C1'-O4'-C4'	7.54	115.93	109.90
67	B1	935	A	C3'-C2'-C1'	-7.54	95.47	101.50
67	B1	1885	G	O4'-C1'-N9	7.54	114.23	108.20
67	B1	2357	U	C1'-O4'-C4'	7.54	115.93	109.90
21	A2	571	C	N1-C1'-C2'	7.54	123.80	114.00
21	A2	1480	G	N9-C1'-C2'	-7.54	103.71	112.00
64	Bc	14	LYS	C-N-CA	7.54	140.54	121.70
67	B1	219	G	O4'-C4'-C3'	-7.54	96.46	104.00
67	B1	1180	G	N9-C1'-C2'	7.54	123.80	114.00
21	A2	1492	U	C3'-C2'-C1'	7.54	107.53	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1214	C	O4'-C1'-C2'	-7.54	98.26	105.80
67	B1	1313	G	P-O5'-C5'	-7.54	108.84	120.90
67	B1	2929	C	P-O3'-C3'	7.54	128.74	119.70
11	A1	46	U	C3'-C2'-C1'	-7.54	95.47	101.50
21	A2	205	C	C1'-O4'-C4'	-7.54	103.87	109.90
21	A2	566	C	P-O3'-C3'	7.54	128.74	119.70
67	B1	1568	A	O5'-P-OP2	7.54	119.74	110.70
67	B1	1627	G	C3'-C2'-C1'	-7.54	95.47	101.50
21	A2	53	G	C3'-C2'-C1'	7.53	107.53	101.50
21	A2	343	G	O4'-C1'-N9	7.53	114.23	108.20
21	A2	588	C	O4'-C1'-N1	7.53	114.23	108.20
52	BB	109	TYR	CD1-CE1-CZ	-7.53	113.02	119.80
21	A2	950	C	O4'-C1'-C2'	-7.53	98.27	105.80
26	AP	19	ARG	NE-CZ-NH1	-7.53	116.53	120.30
67	B1	1504	C	C3'-C2'-C1'	7.53	107.53	101.50
21	A2	47	A	O4'-C1'-N9	-7.53	102.17	108.20
21	A2	834	C	C3'-C2'-C1'	7.53	107.53	101.50
21	A2	984	C	O4'-C1'-N1	7.53	114.22	108.20
64	Bc	15	GLU	CB-CA-C	7.53	125.46	110.40
67	B1	2109	C	O4'-C1'-C2'	-7.53	98.27	105.80
67	B1	2325	C	O4'-C1'-N1	7.53	114.22	108.20
67	B1	1036	C	N1-C1'-C2'	7.53	123.79	114.00
67	B1	1614	U	C5'-C4'-O4'	7.53	118.14	109.10
67	B1	3048	C	O4'-C1'-C2'	-7.53	98.27	105.80
21	A2	448	A	P-O3'-C3'	7.53	128.73	119.70
21	A2	766	G	O4'-C1'-N9	7.53	114.22	108.20
67	B1	315	U	O4'-C1'-N1	7.53	114.22	108.20
67	B1	1122	C	O4'-C1'-N1	7.53	114.22	108.20
67	B1	2175	G	N9-C1'-C2'	-7.53	103.72	112.00
27	A0	74	C	O4'-C1'-N1	7.53	114.22	108.20
36	Bf	42	ARG	NE-CZ-NH2	-7.53	116.54	120.30
67	B1	1438	C	O4'-C1'-C2'	-7.53	98.28	105.80
67	B1	1570	C	O4'-C1'-N1	-7.53	102.18	108.20
67	B1	2512	C	P-O5'-C5'	-7.53	108.86	120.90
67	B1	2620	G	N9-C1'-C2'	7.53	123.78	114.00
27	A0	43	G	C3'-C2'-C1'	7.52	107.52	101.50
32	BO	65	ARG	NE-CZ-NH2	-7.52	116.54	120.30
11	A1	27	A	C4'-C3'-C2'	-7.52	95.08	102.60
21	A2	647	G	O4'-C1'-C2'	7.52	114.37	107.60
21	A2	845	G	C3'-C2'-C1'	-7.52	95.48	101.50
20	B4	35	GLY	C-N-CA	7.52	140.51	121.70
67	B1	1533	G	C1'-O4'-C4'	-7.52	103.88	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1254	C	C3'-C2'-C1'	7.52	107.52	101.50
67	B1	742	C	C1'-O4'-C4'	-7.52	103.88	109.90
8	AR	55	PHE	CB-CG-CD2	7.52	126.06	120.80
67	B1	1115	A	C3'-C2'-C1'	7.52	107.52	101.50
67	B1	2548	A	P-O3'-C3'	7.52	128.72	119.70
67	B1	2949	G	C3'-C2'-C1'	7.52	107.52	101.50
67	B1	955	A	N9-C1'-C2'	-7.52	103.73	112.00
67	B1	1139	C	C1'-O4'-C4'	-7.52	103.89	109.90
67	B1	2786	G	O4'-C1'-N9	7.52	114.22	108.20
21	A2	332	C	N1-C1'-C2'	7.52	123.77	114.00
67	B1	578	C	O4'-C1'-N1	7.52	114.21	108.20
21	A2	675	A	C1'-O4'-C4'	7.51	115.91	109.90
21	A2	1493	C	O4'-C1'-C2'	-7.51	98.29	105.80
49	BQ	28	ARG	NE-CZ-NH2	-7.51	116.54	120.30
14	AM	135	ARG	NE-CZ-NH1	7.51	124.06	120.30
21	A2	1401	U	O4'-C1'-C2'	7.51	114.36	107.60
67	B1	2151	C	N1-C1'-C2'	7.51	123.77	114.00
11	A1	64	C	O4'-C1'-N1	7.51	114.21	108.20
55	Bh	3	TRP	CB-CG-CD1	7.51	136.76	127.00
67	B1	653	U	P-O3'-C3'	7.51	128.71	119.70
67	B1	750	C	C1'-O4'-C4'	-7.51	103.89	109.90
67	B1	1235	A	O4'-C1'-C2'	-7.51	98.29	105.80
67	B1	1997	C	C1'-O4'-C4'	-7.51	103.89	109.90
21	A2	806	G	N9-C1'-C2'	7.51	123.76	114.00
67	B1	979	G	O3'-P-O5'	7.51	118.27	104.00
67	B1	996	U	O4'-C1'-C2'	-7.51	98.29	105.80
67	B1	1646	G	P-O3'-C3'	7.51	128.71	119.70
67	B1	2671	C	N1-C1'-C2'	7.51	123.76	114.00
21	A2	1244	C	O4'-C1'-N1	7.51	114.21	108.20
67	B1	2808	C	C3'-C2'-C1'	7.51	107.51	101.50
21	A2	268	C	O4'-C1'-C2'	-7.51	98.29	105.80
21	A2	343	G	O4'-C1'-C2'	-7.51	98.29	105.80
53	BD	23	PHE	CB-CG-CD2	-7.51	115.55	120.80
67	B1	475	U	C3'-C2'-C1'	7.51	107.50	101.50
67	B1	2909	G	O4'-C1'-N9	7.51	114.20	108.20
21	A2	686	C	N1-C1'-C2'	7.50	123.75	114.00
21	A2	1219	C	N1-C1'-C2'	7.50	123.75	114.00
67	B1	1604	G	O4'-C1'-N9	7.50	114.20	108.20
67	B1	1912	A	C3'-C2'-C1'	-7.50	95.50	101.50
67	B1	283	U	O4'-C1'-N1	7.50	114.20	108.20
67	B1	685	G	C1'-O4'-C4'	-7.50	103.90	109.90
67	B1	1399	C	O4'-C1'-N1	7.50	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	457	G	C3'-C2'-C1'	7.50	107.50	101.50
67	B1	1976	C	O4'-C1'-C2'	-7.50	98.30	105.80
67	B1	2765	C	C1'-O4'-C4'	-7.50	103.90	109.90
21	A2	319	U	C1'-O4'-C4'	7.50	115.90	109.90
52	BB	184	ALA	N-CA-CB	7.50	120.60	110.10
67	B1	437	G	O4'-C1'-C2'	-7.50	98.30	105.80
67	B1	1419	G	O4'-C1'-N9	7.50	114.20	108.20
67	B1	1844	C	O4'-C1'-C2'	-7.50	98.30	105.80
67	B1	3036	C	N1-C1'-C2'	7.50	123.75	114.00
67	B1	529	G	P-O3'-C3'	7.50	128.69	119.70
67	B1	1607	C	C3'-C2'-C1'	7.50	107.50	101.50
10	AD	76	ARG	NE-CZ-NH2	7.49	124.05	120.30
21	A2	1060	G	C5'-C4'-O4'	7.49	118.09	109.10
67	B1	2007	C	C1'-O4'-C4'	-7.49	103.91	109.90
67	B1	2800	U	O4'-C1'-C2'	-7.49	98.31	105.80
21	A2	1372	C	N1-C1'-C2'	7.49	123.74	114.00
67	B1	420	U	N1-C1'-C2'	-7.49	103.76	112.00
67	B1	1733	C	N1-C1'-C2'	7.49	123.74	114.00
67	B1	2337	G	C3'-C2'-C1'	7.49	107.49	101.50
67	B1	2730	U	O4'-C1'-C2'	-7.49	98.31	105.80
67	B1	669	G	O4'-C1'-N9	7.49	114.19	108.20
67	B1	1212	A	O4'-C1'-N9	7.49	114.19	108.20
67	B1	1586	G	C3'-C2'-C1'	7.49	107.49	101.50
21	A2	752	G	O4'-C1'-N9	7.49	114.19	108.20
21	A2	1378	A	O4'-C1'-C2'	-7.49	98.31	105.80
67	B1	655	C	O4'-C1'-C2'	-7.49	98.31	105.80
67	B1	1383	G	C1'-O4'-C4'	-7.49	103.91	109.90
67	B1	1728	C	N1-C1'-C2'	7.49	123.73	114.00
11	A1	54	G	C3'-C2'-C1'	7.49	107.49	101.50
67	B1	1826	G	C1'-O4'-C4'	-7.49	103.91	109.90
67	B1	2961	A	O4'-C1'-C2'	-7.49	98.31	105.80
67	B1	2432	G	N9-C1'-C2'	-7.48	103.77	112.00
61	Bd	4	MET	CG-SD-CE	-7.48	88.23	100.20
67	B1	1408	G	O4'-C1'-N9	-7.48	102.21	108.20
67	B1	2509	A	O4'-C1'-N9	7.48	114.19	108.20
11	A1	13	C	N1-C1'-C2'	7.48	123.72	114.00
67	B1	538	G	N9-C1'-C2'	7.48	123.72	114.00
36	Bf	41	ARG	NE-CZ-NH1	7.48	124.04	120.30
67	B1	2170	C	C1'-O4'-C4'	-7.48	103.92	109.90
40	BE	179	PHE	CB-CG-CD2	-7.48	115.57	120.80
67	B1	906	G	O4'-C1'-N9	7.48	114.18	108.20
67	B1	1023	C	N1-C1'-C2'	7.48	123.72	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1565	G	P-O5'-C5'	-7.48	108.94	120.90
67	B1	2693	G	C4'-C3'-C2'	-7.48	95.12	102.60
21	A2	1343	C	O4'-C1'-N1	7.48	114.18	108.20
67	B1	2826	U	C1'-O4'-C4'	7.48	115.88	109.90
67	B1	2855	G	O4'-C1'-C2'	7.48	114.33	107.60
67	B1	412	G	C3'-C2'-C1'	7.47	107.48	101.50
67	B1	953	G	O4'-C1'-N9	7.47	114.18	108.20
67	B1	2507	C	C2'-C3'-O3'	7.47	125.94	109.50
36	Bf	33	ARG	CB-CA-C	7.47	125.35	110.40
67	B1	1517	G	O4'-C1'-N9	7.47	114.18	108.20
67	B1	536	G	O3'-P-O5'	7.47	118.19	104.00
65	BJ	47	HIS	CB-CA-C	7.47	125.33	110.40
21	A2	47	A	C3'-C2'-C1'	7.47	107.47	101.50
21	A2	820	G	C1'-O4'-C4'	-7.47	103.93	109.90
67	B1	1035	G	P-O3'-C3'	7.47	128.66	119.70
67	B1	2556	C	N1-C1'-C2'	7.47	123.70	114.00
68	B3	112	C	C4'-C3'-C2'	-7.47	95.13	102.60
21	A2	1118	C	O4'-C1'-C2'	7.46	114.32	107.60
33	BC	124	PHE	C-N-CA	7.46	140.36	121.70
67	B1	204	G	C5'-C4'-O4'	7.46	118.06	109.10
67	B1	1819	G	O4'-C1'-N9	7.46	114.17	108.20
67	B1	1403	C	C4'-C3'-C2'	-7.46	95.14	102.60
67	B1	1777	U	O4'-C1'-N1	7.46	114.17	108.20
21	A2	945	G	O4'-C1'-C2'	7.46	114.31	107.60
42	BT	33	ARG	NE-CZ-NH2	-7.46	116.57	120.30
67	B1	346	U	O4'-C1'-N1	7.46	114.17	108.20
67	B1	1646	G	C1'-O4'-C4'	7.46	115.87	109.90
66	B1	61	ARG	NE-CZ-NH2	-7.46	116.57	120.30
67	B1	44	C	O4'-C1'-C2'	-7.46	98.34	105.80
67	B1	2071	C	C3'-C2'-C1'	7.46	107.47	101.50
67	B1	2357	U	O4'-C1'-N1	7.46	114.17	108.20
21	A2	311	A	C3'-C2'-C1'	-7.46	95.53	101.50
56	BH	133	MET	C-N-CA	-7.46	106.64	122.30
67	B1	984	U	O4'-C1'-N1	7.46	114.17	108.20
67	B1	2748	C	O4'-C1'-N1	7.46	114.17	108.20
68	B3	38	U	P-O3'-C3'	7.46	128.65	119.70
67	B1	376	C	O4'-C1'-N1	7.45	114.16	108.20
67	B1	2259	G	C5'-C4'-O4'	7.45	118.05	109.10
67	B1	2800	U	C4'-C3'-C2'	-7.45	95.15	102.60
68	B3	118	G	N9-C1'-C2'	-7.45	103.80	112.00
13	AX	4	ASP	N-CA-C	-7.45	90.88	111.00
67	B1	588	U	P-O3'-C3'	7.45	128.64	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2564	U	O4'-C1'-N1	7.45	114.16	108.20
68	B3	97	G	C3'-C2'-C1'	-7.45	95.54	101.50
21	A2	859	A	C1'-O4'-C4'	7.45	115.86	109.90
46	BA	5	ARG	NE-CZ-NH2	7.45	124.02	120.30
67	B1	1997	C	O4'-C1'-C2'	7.45	114.30	107.60
21	A2	865	A	O4'-C1'-C2'	-7.45	98.36	105.80
21	A2	909	U	O4'-C1'-N1	7.45	114.16	108.20
21	A2	1434	C	C3'-C2'-C1'	7.45	107.46	101.50
65	BJ	74	ARG	NE-CZ-NH1	-7.44	116.58	120.30
67	B1	897	U	C1'-O4'-C4'	7.44	115.86	109.90
67	B1	1571	G	N9-C1'-C2'	7.44	123.68	114.00
67	B1	2869	U	C3'-C2'-C1'	7.44	107.45	101.50
12	AN	20	ARG	NE-CZ-NH1	7.44	124.02	120.30
57	BZ	25	ARG	NE-CZ-NH1	-7.44	116.58	120.30
67	B1	2610	C	O4'-C1'-C2'	-7.44	98.36	105.80
16	AJ	92	ARG	NE-CZ-NH1	-7.44	116.58	120.30
21	A2	792	C	C1'-O4'-C4'	-7.44	103.95	109.90
21	A2	1076	G	C1'-O4'-C4'	-7.44	103.95	109.90
67	B1	1052	G	N9-C1'-C2'	7.44	123.67	114.00
27	A0	2	C	N1-C1'-C2'	7.44	123.67	114.00
67	B1	2372	C	O4'-C1'-C2'	-7.44	98.36	105.80
67	B1	2656	A	O4'-C1'-N9	7.44	114.15	108.20
67	B1	2721	C	O4'-C1'-N1	-7.44	102.25	108.20
61	Bd	74	ARG	NE-CZ-NH1	7.44	124.02	120.30
67	B1	1204	U	C3'-C2'-C1'	7.44	107.45	101.50
21	A2	92	G	O4'-C1'-C2'	7.43	114.29	107.60
40	BE	93	ARG	CD-NE-CZ	7.43	134.01	123.60
67	B1	582	A	C1'-O4'-C4'	7.43	115.85	109.90
67	B1	1077	G	O4'-C1'-C2'	7.43	114.29	107.60
67	B1	1713	G	P-O5'-C5'	-7.43	109.00	120.90
21	A2	484	U	O4'-C1'-C2'	-7.43	98.37	105.80
21	A2	1208	A	C1'-O4'-C4'	7.43	115.85	109.90
53	BD	241	VAL	CB-CA-C	7.43	125.52	111.40
67	B1	688	G	C3'-C2'-C1'	7.43	107.45	101.50
67	B1	2791	C	O4'-C1'-C2'	-7.43	98.37	105.80
21	A2	242	A	C1'-O4'-C4'	7.43	115.84	109.90
21	A2	1399	G	C4'-C3'-C2'	-7.43	95.17	102.60
67	B1	223	U	O4'-C1'-N1	7.43	114.14	108.20
21	A2	1185	A	C1'-O4'-C4'	-7.43	103.96	109.90
21	A2	311	A	N9-C1'-C2'	-7.43	103.83	112.00
21	A2	1392	G	O3'-P-O5'	-7.43	89.89	104.00
67	B1	2297	C	C3'-C2'-C1'	7.43	107.44	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2990	G	N9-C1'-C2'	7.43	123.66	114.00
21	A2	11	A	C3'-C2'-C1'	7.42	107.44	101.50
21	A2	766	G	P-O3'-C3'	7.42	128.61	119.70
62	BN	108	TYR	CB-CG-CD2	7.42	125.45	121.00
67	B1	1662	C	O4'-C1'-N1	7.42	114.14	108.20
21	A2	889	G	C1'-O4'-C4'	-7.42	103.96	109.90
21	A2	1053	A	C3'-C2'-C1'	7.42	107.44	101.50
67	B1	524	C	O4'-C1'-N1	7.42	114.14	108.20
67	B1	330	U	O4'-C1'-N1	7.42	114.14	108.20
21	A2	236	C	O4'-C1'-N1	7.42	114.14	108.20
62	BN	84	PHE	CB-CG-CD2	-7.42	115.61	120.80
67	B1	1518	G	O4'-C1'-N9	7.42	114.14	108.20
21	A2	675	A	O4'-C1'-N9	7.42	114.13	108.20
21	A2	1298	G	O4'-C1'-N9	-7.42	102.27	108.20
41	Ba	88	ARG	NE-CZ-NH1	7.42	124.01	120.30
67	B1	237	G	C1'-O4'-C4'	7.42	115.83	109.90
67	B1	1852	U	O4'-C1'-N1	-7.42	102.27	108.20
21	A2	1127	A	C1'-O4'-C4'	-7.42	103.97	109.90
29	AL	49	THR	N-CA-CB	7.42	124.39	110.30
67	B1	285	C	O4'-C1'-N1	7.42	114.13	108.20
67	B1	2046	C	O4'-C1'-N1	7.42	114.13	108.20
21	A2	1453	U	O4'-C1'-N1	7.41	114.13	108.20
67	B1	1249	G	N9-C1'-C2'	7.41	123.64	114.00
67	B1	2229	G	P-O3'-C3'	7.41	128.60	119.70
67	B1	321	C	O4'-C1'-N1	7.41	114.13	108.20
67	B1	515	G	N9-C1'-C2'	-7.41	103.85	112.00
68	B3	86	C	O4'-C1'-C2'	-7.41	98.39	105.80
68	B3	99	G	N9-C1'-C2'	7.41	123.64	114.00
67	B1	2145	G	C5'-C4'-C3'	7.41	127.86	116.00
16	AJ	60	ALA	N-CA-CB	7.41	120.47	110.10
21	A2	1218	C	P-O3'-C3'	-7.41	110.81	119.70
67	B1	345	C	O4'-C1'-N1	7.41	114.13	108.20
67	B1	475	U	O4'-C1'-C2'	-7.41	98.39	105.80
68	B3	122	C	N1-C1'-C2'	-7.41	103.85	112.00
21	A2	713	A	O4'-C1'-N9	7.41	114.12	108.20
53	BD	158	ARG	NE-CZ-NH2	-7.41	116.60	120.30
68	B3	9	A	O4'-C1'-C2'	-7.41	98.39	105.80
67	B1	2367	C	O4'-C1'-C2'	-7.40	98.40	105.80
21	A2	1354	A	C3'-C2'-C1'	7.40	107.42	101.50
67	B1	568	A	N9-C1'-C2'	7.40	123.62	114.00
67	B1	1705	C	O4'-C1'-N1	7.40	114.12	108.20
67	B1	1994	G	O4'-C1'-C2'	-7.40	98.40	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2134	G	O4'-C1'-C2'	7.40	114.26	107.60
67	B1	2924	G	C1'-O4'-C4'	7.40	115.82	109.90
67	B1	28	A	O4'-C1'-N9	7.40	114.12	108.20
67	B1	46	C	O4'-C1'-N1	7.40	114.12	108.20
67	B1	1837	A	O5'-P-OP1	-7.40	99.04	105.70
67	B1	2632	C	O4'-C1'-N1	7.40	114.12	108.20
67	B1	354	G	C3'-C2'-C1'	-7.40	95.58	101.50
67	B1	2312	U	N1-C1'-C2'	-7.40	103.86	112.00
67	B1	2474	A	O4'-C1'-N9	-7.40	102.28	108.20
67	B1	2879	G	O4'-C1'-N9	7.40	114.12	108.20
21	A2	1130	A	N9-C1'-C2'	-7.40	103.86	112.00
21	A2	580	G	O4'-C1'-N9	7.39	114.11	108.20
29	AL	92	GLU	O-C-N	-7.39	110.87	122.70
41	Ba	71	ARG	NE-CZ-NH2	-7.39	116.60	120.30
55	Bh	3	TRP	CB-CG-CD2	-7.39	116.99	126.60
67	B1	1770	A	N9-C1'-C2'	7.39	123.61	114.00
67	B1	2353	C	C4'-C3'-C2'	-7.39	95.20	102.60
27	A0	68	G	O4'-C1'-N9	7.39	114.11	108.20
67	B1	1420	U	O4'-C4'-C3'	-7.39	96.61	104.00
67	B1	927	G	C3'-C2'-C1'	7.39	107.41	101.50
67	B1	977	C	C3'-C2'-C1'	7.39	107.41	101.50
67	B1	1313	G	O4'-C1'-C2'	7.39	114.25	107.60
12	AN	51	ARG	NE-CZ-NH1	7.39	124.00	120.30
21	A2	577	C	O4'-C1'-C2'	-7.39	98.41	105.80
36	Bf	30	LYS	N-CA-CB	7.39	123.90	110.60
67	B1	195	U	O4'-C1'-N1	7.39	114.11	108.20
67	B1	971	G	O4'-C1'-N9	7.39	114.11	108.20
21	A2	175	G	N9-C1'-C2'	-7.39	103.88	112.00
21	A2	748	A	C3'-C2'-C1'	-7.39	95.59	101.50
21	A2	252	U	O4'-C1'-N1	7.38	114.11	108.20
67	B1	1570	C	O5'-P-OP1	7.38	119.56	110.70
67	B1	1903	G	O4'-C1'-C2'	-7.38	98.42	105.80
67	B1	2180	C	O4'-C1'-C2'	-7.38	98.42	105.80
67	B1	2277	G	O4'-C1'-C2'	-7.38	98.42	105.80
67	B1	2696	G	N9-C1'-C2'	-7.38	103.88	112.00
67	B1	2816	C	N1-C1'-C2'	-7.38	103.88	112.00
21	A2	658	A	O4'-C1'-C2'	-7.38	98.42	105.80
54	BF	71	PHE	CB-CG-CD2	-7.38	115.63	120.80
67	B1	1461	G	O4'-C1'-N9	7.38	114.11	108.20
11	A1	9	A	P-O3'-C3'	7.38	128.56	119.70
67	B1	2614	C	C1'-O4'-C4'	-7.38	103.99	109.90
67	B1	2965	C	N1-C1'-C2'	7.38	123.60	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2298	C	C1'-O4'-C4'	7.38	115.80	109.90
21	A2	399	A	O4'-C4'-C3'	-7.38	96.62	104.00
21	A2	701	G	O4'-C1'-C2'	-7.38	98.42	105.80
21	A2	1367	C	O4'-C1'-N1	7.38	114.10	108.20
67	B1	1147	G	C1'-O4'-C4'	-7.38	104.00	109.90
67	B1	1413	A	P-O3'-C3'	-7.38	110.85	119.70
67	B1	2662	G	C1'-O4'-C4'	-7.38	104.00	109.90
21	A2	97	C	O4'-C1'-N1	7.38	114.10	108.20
67	B1	565	A	O4'-C4'-C3'	-7.38	96.62	104.00
67	B1	1575	G	N9-C1'-C2'	-7.38	103.89	112.00
67	B1	1899	C	O4'-C1'-C2'	-7.38	98.42	105.80
21	A2	435	A	C3'-C2'-C1'	7.38	107.40	101.50
68	B3	28	C	O4'-C1'-N1	7.38	114.10	108.20
21	A2	384	G	C3'-C2'-C1'	7.37	107.40	101.50
49	BQ	100	ARG	CB-CA-C	-7.37	95.65	110.40
21	A2	946	G	O4'-C1'-C2'	7.37	114.23	107.60
25	AH	85	PHE	CB-CG-CD1	-7.37	115.64	120.80
1	AQ	3	ARG	NE-CZ-NH2	-7.37	116.61	120.30
67	B1	303	A	C3'-C2'-C1'	7.37	107.40	101.50
67	B1	732	G	O5'-P-OP1	-7.37	99.07	105.70
21	A2	372	G	C1'-O4'-C4'	-7.37	104.00	109.90
21	A2	906	G	O4'-C1'-N9	7.37	114.09	108.20
33	BC	107	ASP	CB-CG-OD1	-7.37	111.67	118.30
67	B1	964	C	P-O3'-C3'	7.37	128.54	119.70
67	B1	2062	A	C2'-C3'-O3'	7.37	125.71	109.50
67	B1	830	G	O4'-C1'-C2'	7.37	114.23	107.60
67	B1	1475	G	C5'-C4'-O4'	7.37	117.94	109.10
67	B1	2741	U	O4'-C1'-N1	7.37	114.09	108.20
6	AC	75	LEU	CB-CG-CD2	7.37	123.52	111.00
67	B1	956	U	N1-C1'-C2'	-7.37	103.90	112.00
67	B1	1244	C	C3'-C2'-C1'	7.37	107.39	101.50
67	B1	2101	A	C3'-C2'-C1'	7.37	107.39	101.50
21	A2	1141	G	C1'-O4'-C4'	-7.36	104.01	109.90
67	B1	735	A	O4'-C1'-N9	7.36	114.09	108.20
67	B1	2036	A	N9-C1'-C2'	-7.36	103.90	112.00
67	B1	2733	A	O3'-P-O5'	-7.36	90.01	104.00
67	B1	2100	U	O4'-C1'-C2'	-7.36	98.44	105.80
67	B1	1450	C	N1-C1'-C2'	7.36	123.57	114.00
67	B1	1522	A	O4'-C1'-C2'	-7.36	98.44	105.80
67	B1	2621	U	O4'-C1'-N1	7.36	114.09	108.20
17	AO	5	ARG	NE-CZ-NH2	-7.36	116.62	120.30
67	B1	161	C	C1'-O4'-C4'	-7.36	104.01	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	528	G	N9-C1'-C2'	7.36	123.57	114.00
21	A2	49	C	O4'-C1'-N1	7.36	114.08	108.20
67	B1	1643	A	O4'-C4'-C3'	-7.36	96.64	104.00
68	B3	111	G	C1'-O4'-C4'	-7.36	104.02	109.90
24	AA	22	TYR	CB-CG-CD2	-7.35	116.59	121.00
67	B1	855	G	N9-C1'-C2'	-7.35	103.91	112.00
67	B1	121	G	C1'-O4'-C4'	-7.35	104.02	109.90
67	B1	577	C	O4'-C1'-N1	7.35	114.08	108.20
67	B1	1801	C	O4'-C1'-N1	7.35	114.08	108.20
68	B3	17	G	O4'-C1'-N9	7.35	114.08	108.20
21	A2	804	U	P-O5'-C5'	-7.35	109.14	120.90
21	A2	1402	C	C1'-O4'-C4'	7.35	115.78	109.90
67	B1	863	C	O4'-C4'-C3'	-7.35	96.65	104.00
67	B1	2332	G	P-O3'-C3'	7.35	128.52	119.70
68	B3	16	G	O4'-C1'-N9	7.35	114.08	108.20
13	AX	23	ASP	CB-CG-OD1	-7.35	111.69	118.30
67	B1	2050	U	O4'-C1'-C2'	-7.35	98.45	105.80
21	A2	78	G	C3'-C2'-C1'	-7.35	95.62	101.50
21	A2	1336	U	C4'-C3'-C2'	-7.35	95.25	102.60
67	B1	627	G	C4'-C3'-C2'	-7.35	95.25	102.60
15	AE	76	ARG	NE-CZ-NH2	-7.34	116.63	120.30
21	A2	392	G	O4'-C1'-N9	7.34	114.08	108.20
21	A2	423	U	O4'-C1'-C2'	-7.34	98.46	105.80
21	A2	1342	C	C3'-C2'-C1'	7.34	107.38	101.50
27	A0	25	C	C3'-C2'-C1'	7.34	107.38	101.50
36	Bf	27	VAL	CA-CB-CG2	-7.34	99.88	110.90
67	B1	1596	G	O4'-C1'-C2'	-7.34	98.46	105.80
67	B1	1865	U	C1'-O4'-C4'	7.34	115.78	109.90
21	A2	755	U	C1'-O4'-C4'	-7.34	104.03	109.90
21	A2	1421	C	O4'-C1'-C2'	-7.34	98.46	105.80
53	BD	161	PHE	CB-CG-CD1	7.34	125.94	120.80
60	BS	154	ARG	NE-CZ-NH1	7.34	123.97	120.30
67	B1	483	C	O4'-C1'-N1	7.34	114.07	108.20
67	B1	1091	G	N9-C1'-C2'	-7.34	103.93	112.00
67	B1	1746	C	P-O3'-C3'	7.34	128.51	119.70
67	B1	2196	C	N1-C1'-C2'	7.34	123.54	114.00
67	B1	2323	C	O4'-C1'-N1	7.34	114.07	108.20
25	AH	88	ARG	CA-CB-CG	7.34	129.54	113.40
67	B1	1303	C	C1'-O4'-C4'	-7.34	104.03	109.90
67	B1	1446	G	O4'-C1'-C2'	-7.34	98.46	105.80
21	A2	75	C	P-O3'-C3'	7.34	128.50	119.70
67	B1	45	G	O4'-C1'-N9	7.34	114.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	336	C	O4'-C1'-N1	7.33	114.07	108.20
67	B1	791	C	C3'-C2'-C1'	7.33	107.37	101.50
67	B1	1656	C	O4'-C1'-C2'	-7.33	98.47	105.80
21	A2	557	G	N9-C1'-C2'	-7.33	103.93	112.00
21	A2	575	A	N9-C1'-C2'	-7.33	103.93	112.00
67	B1	1406	G	C3'-C2'-C1'	7.33	107.37	101.50
67	B1	2822	G	O4'-C1'-N9	7.33	114.07	108.20
21	A2	1177	C	C1'-O4'-C4'	-7.33	104.04	109.90
67	B1	654	C	N1-C1'-C2'	7.33	123.53	114.00
67	B1	1398	C	N1-C1'-C2'	7.33	123.53	114.00
67	B1	1795	C	N1-C1'-C2'	7.33	123.53	114.00
67	B1	2359	G	O4'-C1'-C2'	-7.33	98.47	105.80
67	B1	2857	C	N1-C1'-C2'	7.33	123.53	114.00
67	B1	306	G	C5'-C4'-C3'	-7.33	104.27	116.00
21	A2	764	C	C3'-C2'-C1'	7.33	107.36	101.50
21	A2	806	G	P-O5'-C5'	7.33	132.62	120.90
21	A2	1001	A	P-O3'-C3'	7.33	128.49	119.70
21	A2	1218	C	O4'-C1'-N1	7.33	114.06	108.20
21	A2	1257	U	O4'-C1'-N1	7.33	114.06	108.20
67	B1	94	A	C3'-C2'-C1'	7.33	107.36	101.50
67	B1	812	C	C4'-C3'-C2'	-7.33	95.27	102.60
67	B1	2376	U	C3'-C2'-C1'	7.33	107.36	101.50
68	B3	73	U	N1-C1'-C2'	7.33	123.53	114.00
67	B1	407	A	O3'-P-O5'	7.33	117.92	104.00
67	B1	927	G	N9-C1'-C2'	7.33	123.53	114.00
67	B1	1260	C	O4'-C1'-N1	7.33	114.06	108.20
21	A2	112	G	P-O5'-C5'	7.33	132.62	120.90
67	B1	2353	C	C3'-C2'-C1'	7.33	107.36	101.50
67	B1	2727	C	P-O3'-C3'	7.33	128.49	119.70
67	B1	2848	C	C1'-O4'-C4'	-7.33	104.04	109.90
68	B3	10	U	N1-C1'-C2'	7.33	123.52	114.00
21	A2	146	A	C3'-C2'-C1'	7.32	107.36	101.50
68	B3	18	G	O4'-C1'-N9	7.32	114.06	108.20
29	AL	44	ARG	N-CA-CB	7.32	123.78	110.60
67	B1	937	A	P-O5'-C5'	7.32	132.62	120.90
67	B1	2015	G	C3'-C2'-C1'	7.32	107.36	101.50
7	AB	161	ARG	NE-CZ-NH2	7.32	123.96	120.30
21	A2	1237	G	O4'-C1'-C2'	7.32	114.19	107.60
67	B1	71	A	O4'-C1'-N9	7.32	114.06	108.20
67	B1	1877	C	O4'-C1'-N1	7.32	114.06	108.20
67	B1	2173	U	C3'-C2'-C1'	7.32	107.36	101.50
67	B1	1415	C	O4'-C1'-N1	7.32	114.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2642	C	C3'-C2'-C1'	7.32	107.35	101.50
10	AD	25	ARG	NE-CZ-NH2	-7.32	116.64	120.30
21	A2	1142	G	C3'-C2'-C1'	7.32	107.35	101.50
21	A2	1479	C	C3'-C2'-C1'	7.32	107.35	101.50
67	B1	2129	G	N9-C1'-C2'	7.32	123.51	114.00
67	B1	2730	U	C3'-C2'-C1'	7.32	107.35	101.50
67	B1	2869	U	O4'-C1'-C2'	-7.32	98.48	105.80
21	A2	232	G	C1'-O4'-C4'	-7.31	104.05	109.90
21	A2	1303	C	N1-C1'-C2'	7.31	123.51	114.00
21	A2	437	A	C5'-C4'-C3'	7.31	127.70	116.00
21	A2	1156	A	O4'-C1'-C2'	-7.31	98.49	105.80
67	B1	146	U	O4'-C1'-N1	7.31	114.05	108.20
67	B1	159	C	C3'-C2'-C1'	7.31	107.35	101.50
21	A2	457	G	O4'-C1'-C2'	-7.31	98.49	105.80
67	B1	272	G	O4'-C1'-N9	7.31	114.05	108.20
67	B1	408	C	P-O5'-C5'	7.31	132.60	120.90
21	A2	1161	A	O4'-C1'-C2'	7.31	114.18	107.60
67	B1	277	A	O4'-C1'-C2'	-7.31	98.49	105.80
67	B1	1619	C	C3'-C2'-C1'	7.31	107.35	101.50
21	A2	989	C	C3'-C2'-C1'	7.31	107.35	101.50
21	A2	1112	G	C4'-C3'-C2'	-7.31	95.29	102.60
34	B5	45	ARG	NE-CZ-NH1	7.31	123.95	120.30
68	B3	30	G	C3'-C2'-C1'	7.31	107.35	101.50
21	A2	98	U	O4'-C1'-N1	7.31	114.05	108.20
21	A2	961	U	P-O3'-C3'	7.31	128.47	119.70
67	B1	1688	C	C1'-O4'-C4'	-7.31	104.06	109.90
67	B1	1795	C	O4'-C1'-C2'	-7.30	98.50	105.80
67	B1	632	G	C1'-O4'-C4'	-7.30	104.06	109.90
67	B1	1673	C	N1-C1'-C2'	7.30	123.49	114.00
8	AR	100	PHE	CB-CG-CD2	-7.30	115.69	120.80
58	BP	55	TYR	CB-CG-CD1	-7.30	116.62	121.00
67	B1	2860	G	C4'-C3'-C2'	-7.30	95.30	102.60
67	B1	218	A	C4'-C3'-C2'	-7.30	95.30	102.60
67	B1	458	U	N1-C1'-C2'	7.30	123.49	114.00
67	B1	1607	C	O4'-C1'-C2'	-7.30	98.50	105.80
67	B1	2750	C	C1'-O4'-C4'	-7.30	104.06	109.90
68	B3	39	C	C1'-O4'-C4'	-7.30	104.06	109.90
21	A2	900	G	O4'-C1'-N9	7.30	114.04	108.20
67	B1	1058	A	C1'-O4'-C4'	7.30	115.74	109.90
67	B1	2273	U	C1'-O4'-C4'	-7.30	104.06	109.90
67	B1	2313	G	C3'-C2'-C1'	7.30	107.34	101.50
21	A2	508	C	O4'-C1'-N1	7.29	114.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1514	C	C3'-C2'-C1'	7.29	107.33	101.50
67	B1	2916	G	O4'-C1'-C2'	-7.29	98.51	105.80
21	A2	1264	G	P-O3'-C3'	7.29	128.45	119.70
67	B1	56	G	N9-C1'-C2'	-7.29	103.98	112.00
67	B1	2671	C	O4'-C1'-N1	-7.29	102.37	108.20
21	A2	851	C	P-O3'-C3'	-7.29	110.95	119.70
27	A0	21	G	N9-C1'-C2'	7.29	123.48	114.00
67	B1	2333	G	OP1-P-OP2	-7.29	108.67	119.60
67	B1	2427	C	N1-C1'-C2'	7.29	123.48	114.00
4	AG	79	HIS	N-CA-CB	7.29	123.72	110.60
21	A2	460	C	C2-N1-C1'	7.29	126.82	118.80
67	B1	727	A	N9-C1'-C2'	7.29	123.47	114.00
67	B1	823	G	O4'-C1'-N9	7.29	114.03	108.20
67	B1	961	C	O4'-C1'-N1	7.29	114.03	108.20
67	B1	2329	A	C4'-C3'-C2'	-7.29	95.31	102.60
67	B1	2682	G	O4'-C1'-N9	7.29	114.03	108.20
67	B1	2508	G	C3'-C2'-C1'	7.29	107.33	101.50
21	A2	86	C	P-O3'-C3'	-7.29	110.96	119.70
21	A2	1079	G	O4'-C1'-N9	7.29	114.03	108.20
67	B1	1001	C	O4'-C1'-C2'	-7.29	98.52	105.80
67	B1	1557	G	O4'-C4'-C3'	7.29	111.93	106.10
21	A2	1403	U	P-O3'-C3'	-7.28	110.96	119.70
65	BJ	109	PRO	CA-N-CD	-7.28	101.30	111.50
67	B1	142	G	C1'-O4'-C4'	7.28	115.73	109.90
67	B1	159	C	C1'-O4'-C4'	7.28	115.73	109.90
67	B1	412	G	O4'-C1'-C2'	-7.28	98.52	105.80
21	A2	111	G	OP1-P-O3'	7.28	121.22	105.20
21	A2	816	G	C5'-C4'-O4'	7.28	117.84	109.10
67	B1	582	A	P-O3'-C3'	7.28	128.44	119.70
67	B1	2952	C	C1'-O4'-C4'	-7.28	104.08	109.90
21	A2	536	A	C3'-C2'-C1'	7.28	107.32	101.50
21	A2	1004	U	O4'-C1'-C2'	-7.28	98.52	105.80
67	B1	226	C	C1'-O4'-C4'	-7.28	104.08	109.90
67	B1	793	C	P-O3'-C3'	-7.28	110.97	119.70
67	B1	2616	C	O4'-C1'-N1	7.28	114.02	108.20
67	B1	2714	G	C3'-C2'-C1'	7.28	107.32	101.50
68	B3	46	G	C3'-C2'-C1'	-7.28	95.68	101.50
21	A2	417	C	O4'-C1'-N1	7.28	114.02	108.20
21	A2	1460	G	O4'-C1'-N9	-7.28	102.38	108.20
67	B1	651	C	O4'-C1'-C2'	-7.28	98.52	105.80
67	B1	2475	G	O4'-C4'-C3'	7.28	111.92	106.10
68	B3	12	G	C1'-O4'-C4'	7.28	115.72	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1423	A	C5'-C4'-C3'	7.27	127.64	116.00
21	A2	566	C	C1'-O4'-C4'	-7.27	104.08	109.90
49	BQ	61	TYR	CA-CB-CG	-7.27	99.58	113.40
49	BQ	95	TRP	CB-CA-C	7.27	124.94	110.40
67	B1	620	G	O4'-C1'-N9	7.27	114.02	108.20
15	AE	20	TYR	CB-CG-CD1	-7.27	116.64	121.00
46	BA	69	ALA	N-CA-CB	-7.27	99.92	110.10
49	BQ	60	ARG	NE-CZ-NH1	-7.27	116.67	120.30
67	B1	1977	C	O4'-C1'-N1	-7.27	102.38	108.20
67	B1	2867	U	N1-C1'-C2'	7.27	123.45	114.00
11	A1	76	C	O4'-C1'-C2'	-7.27	98.53	105.80
52	BB	54	ARG	NE-CZ-NH1	7.27	123.93	120.30
67	B1	794	G	O4'-C1'-C2'	7.27	114.14	107.60
67	B1	1309	G	P-O3'-C3'	-7.27	110.98	119.70
67	B1	1908	C	C1'-O4'-C4'	-7.27	104.09	109.90
67	B1	1972	C	N1-C1'-C2'	7.27	123.45	114.00
67	B1	2761	G	N9-C1'-C2'	-7.27	104.01	112.00
67	B1	1130	G	O4'-C1'-C2'	-7.27	98.53	105.80
67	B1	2339	C	O4'-C1'-N1	7.27	114.01	108.20
21	A2	168	G	N9-C1'-C2'	7.26	123.44	114.00
67	B1	1673	C	C3'-C2'-C1'	7.26	107.31	101.50
67	B1	2665	G	C1'-O4'-C4'	7.26	115.71	109.90
21	A2	1037	U	C4'-C3'-C2'	7.26	109.86	102.60
67	B1	1405	G	C4'-C3'-C2'	-7.26	95.34	102.60
11	A1	18	U	O4'-C1'-C2'	-7.26	98.54	105.80
67	B1	212	A	P-O3'-C3'	7.26	128.41	119.70
67	B1	22	C	O4'-C1'-C2'	-7.26	98.54	105.80
67	B1	865	C	C1'-O4'-C4'	-7.26	104.09	109.90
67	B1	945	U	O4'-C1'-N1	7.26	114.01	108.20
21	A2	1331	G	O4'-C1'-N9	7.26	114.01	108.20
21	A2	1396	C	C3'-C2'-C1'	7.26	107.31	101.50
67	B1	90	A	C3'-C2'-C1'	7.26	107.31	101.50
21	A2	892	C	O4'-C1'-N1	7.26	114.00	108.20
29	AL	91	PRO	C-N-CA	7.26	139.84	121.70
67	B1	1044	C	O4'-C1'-N1	7.26	114.00	108.20
67	B1	1202	G	C5'-C4'-C3'	7.26	127.61	116.00
67	B1	1814	A	O4'-C1'-N9	7.26	114.00	108.20
21	A2	189	C	C3'-C2'-C1'	7.25	107.30	101.50
59	BM	67	ARG	NE-CZ-NH2	-7.25	116.67	120.30
21	A2	25	C	C3'-C2'-C1'	7.25	107.30	101.50
21	A2	116	C	O4'-C1'-N1	7.25	114.00	108.20
21	A2	951	G	P-O3'-C3'	7.25	128.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1291	G	C4'-C3'-C2'	-7.25	95.35	102.60
21	A2	1452	G	O4'-C1'-N9	7.25	114.00	108.20
67	B1	168	G	C3'-C2'-C1'	-7.25	95.70	101.50
67	B1	830	G	C3'-C2'-C1'	-7.25	95.70	101.50
67	B1	2535	C	N1-C1'-C2'	7.25	123.43	114.00
4	AG	75	ARG	N-CA-C	-7.25	91.42	111.00
21	A2	45	U	C1'-O4'-C4'	7.25	115.70	109.90
21	A2	567	A	C3'-C2'-C1'	7.25	107.30	101.50
67	B1	596	C	N1-C1'-C2'	7.25	123.43	114.00
67	B1	2696	G	C2'-C3'-O3'	7.25	125.45	109.50
67	B1	2808	C	N1-C1'-C2'	7.25	123.43	114.00
50	BV	56	TYR	CB-CG-CD2	7.25	125.35	121.00
67	B1	1610	C	O4'-C1'-C2'	-7.25	98.55	105.80
67	B1	2540	A	P-O3'-C3'	7.25	128.40	119.70
48	BR	5	ALA	N-CA-CB	-7.25	99.95	110.10
67	B1	422	G	O4'-C1'-N9	7.25	114.00	108.20
67	B1	1742	C	N1-C1'-C2'	7.25	123.42	114.00
67	B1	2053	G	N9-C1'-C2'	-7.25	104.03	112.00
67	B1	2109	C	C3'-C2'-C1'	7.25	107.30	101.50
68	B3	93	G	C3'-C2'-C1'	-7.25	95.70	101.50
21	A2	13	C	C1'-O4'-C4'	-7.25	104.10	109.90
21	A2	395	C	N1-C1'-C2'	7.25	123.42	114.00
21	A2	433	U	O3'-P-O5'	-7.25	90.23	104.00
21	A2	441	U	P-O5'-C5'	7.25	132.50	120.90
67	B1	85	G	P-O5'-C5'	7.25	132.50	120.90
67	B1	1259	G	C1'-O4'-C4'	-7.25	104.10	109.90
67	B1	1640	G	P-O3'-C3'	7.25	128.40	119.70
67	B1	1008	U	O4'-C1'-N1	7.25	114.00	108.20
67	B1	1462	G	O4'-C4'-C3'	-7.25	96.75	104.00
21	A2	542	G	O4'-C1'-N9	7.24	114.00	108.20
21	A2	575	A	O4'-C1'-N9	7.24	113.99	108.20
21	A2	866	A	O4'-C1'-C2'	-7.24	98.56	105.80
68	B3	55	G	N9-C1'-C2'	7.24	123.42	114.00
21	A2	613	C	C1'-O4'-C4'	-7.24	104.11	109.90
67	B1	840	G	C5'-C4'-C3'	-7.24	104.42	116.00
67	B1	1701	C	O5'-P-OP1	-7.24	99.18	105.70
67	B1	2987	U	C2'-C3'-O3'	7.24	125.43	109.50
21	A2	1440	G	C1'-O4'-C4'	7.24	115.69	109.90
27	A0	40	C	C3'-C2'-C1'	7.24	107.29	101.50
27	A0	46	G	O4'-C1'-N9	7.24	113.99	108.20
67	B1	974	U	O4'-C1'-N1	7.24	113.99	108.20
67	B1	1691	U	O4'-C1'-N1	7.24	113.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2791	C	P-O3'-C3'	-7.24	111.01	119.70
53	BD	90	ARG	NE-CZ-NH1	7.24	123.92	120.30
67	B1	1015	G	C5-C6-O6	-7.24	124.26	128.60
67	B1	2410	U	C3'-C2'-C1'	7.24	107.29	101.50
67	B1	2531	G	C3'-C2'-C1'	7.24	107.29	101.50
21	A2	344	G	O4'-C1'-C2'	-7.24	98.56	105.80
36	Bf	34	ARG	N-CA-C	7.24	130.53	111.00
67	B1	58	G	C3'-C2'-C1'	-7.24	95.71	101.50
67	B1	2783	C	P-O3'-C3'	7.24	128.38	119.70
21	A2	1449	G	C1'-O4'-C4'	-7.23	104.11	109.90
67	B1	515	G	P-O5'-C5'	-7.23	109.33	120.90
21	A2	64	G	O4'-C1'-N9	-7.23	102.41	108.20
21	A2	295	G	N9-C1'-C2'	7.23	123.40	114.00
21	A2	852	G	P-O5'-C5'	7.23	132.47	120.90
67	B1	541	A	O4'-C1'-N9	7.23	113.99	108.20
67	B1	794	G	C1'-O4'-C4'	-7.23	104.11	109.90
67	B1	1458	C	C3'-C2'-C1'	7.23	107.29	101.50
67	B1	2619	U	P-O3'-C3'	-7.23	111.02	119.70
21	A2	106	A	O4'-C1'-N9	7.23	113.98	108.20
21	A2	300	G	N9-C1'-C2'	-7.23	104.05	112.00
6	AC	140	ARG	N-CA-CB	7.23	123.61	110.60
21	A2	949	G	P-O5'-C5'	7.23	132.46	120.90
24	AA	102	ARG	NE-CZ-NH1	7.23	123.91	120.30
67	B1	180	A	C3'-C2'-C1'	7.23	107.28	101.50
67	B1	878	G	C4'-C3'-C2'	-7.23	95.37	102.60
67	B1	1415	C	O4'-C1'-C2'	-7.23	98.57	105.80
67	B1	1782	C	C3'-C2'-C1'	7.23	107.28	101.50
67	B1	2691	G	N9-C1'-C2'	7.23	123.39	114.00
67	B1	152	G	C1'-O4'-C4'	7.23	115.68	109.90
67	B1	1174	U	O4'-C1'-N1	7.23	113.98	108.20
21	A2	1343	C	C5'-C4'-O4'	7.22	117.77	109.10
67	B1	1566	G	C3'-C2'-C1'	-7.22	95.72	101.50
67	B1	1622	G	O4'-C1'-N9	7.22	113.98	108.20
67	B1	2967	C	N1-C1'-C2'	7.22	123.39	114.00
8	AR	17	ASP	CB-CG-OD2	7.22	124.80	118.30
15	AE	137	ARG	N-CA-CB	7.22	123.60	110.60
21	A2	864	G	C1'-O4'-C4'	7.22	115.68	109.90
41	Ba	8	GLU	CB-CA-C	-7.22	95.96	110.40
67	B1	415	U	O4'-C1'-C2'	-7.22	98.58	105.80
67	B1	805	C	C4'-C3'-C2'	-7.22	95.38	102.60
67	B1	1469	U	OP1-P-OP2	-7.22	108.77	119.60
67	B1	2746	G	C5-C6-O6	-7.22	124.27	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	AU	74	ARG	CD-NE-CZ	-7.22	113.49	123.60
67	B1	624	U	O4'-C1'-N1	7.22	113.98	108.20
67	B1	1035	G	O4'-C1'-C2'	7.22	114.10	107.60
67	B1	1128	G	P-O3'-C3'	-7.22	111.04	119.70
67	B1	1152	C	C3'-C2'-C1'	7.22	107.27	101.50
21	A2	271	G	N9-C1'-C2'	7.22	123.38	114.00
67	B1	1080	G	C5'-C4'-C3'	7.22	127.55	116.00
67	B1	2635	C	P-O5'-C5'	7.22	132.45	120.90
11	A1	51	G	O4'-C1'-N9	-7.21	102.43	108.20
67	B1	189	U	C1'-O4'-C4'	-7.21	104.13	109.90
67	B1	1839	U	C1'-O4'-C4'	7.21	115.67	109.90
67	B1	2076	A	O4'-C1'-N9	-7.21	102.43	108.20
28	B6	33	ARG	NE-CZ-NH1	7.21	123.91	120.30
67	B1	2197	U	O4'-C1'-C2'	-7.21	98.59	105.80
67	B1	1928	A	C1'-O4'-C4'	-7.21	104.13	109.90
67	B1	2921	U	OP1-P-OP2	-7.21	108.79	119.60
21	A2	434	A	C3'-C2'-C1'	7.21	107.27	101.50
67	B1	448	A	C1'-O4'-C4'	7.21	115.67	109.90
67	B1	1846	G	O4'-C1'-N9	7.21	113.97	108.20
21	A2	641	A	O4'-C4'-C3'	-7.21	96.80	104.00
33	BC	107	ASP	N-CA-CB	7.21	123.57	110.60
21	A2	883	G	P-O3'-C3'	-7.20	111.06	119.70
21	A2	1093	C	O4'-C1'-N1	7.20	113.96	108.20
32	BO	12	ARG	NE-CZ-NH2	-7.20	116.70	120.30
67	B1	1003	C	C3'-C2'-C1'	7.20	107.26	101.50
67	B1	1029	C	O4'-C1'-C2'	-7.20	98.60	105.80
67	B1	2273	U	N1-C1'-C2'	7.20	123.36	114.00
67	B1	2490	C	N1-C1'-C2'	7.20	123.36	114.00
27	A0	16	C	O4'-C1'-N1	7.20	113.96	108.20
21	A2	392	G	N9-C1'-C2'	7.20	123.36	114.00
21	A2	1215	G	O4'-C1'-N9	7.20	113.96	108.20
21	A2	1326	G	C3'-C2'-C1'	-7.20	95.74	101.50
67	B1	485	G	O4'-C1'-C2'	-7.20	98.60	105.80
67	B1	2784	A	C4'-C3'-C2'	-7.20	95.40	102.60
21	A2	657	A	C3'-C2'-C1'	7.20	107.26	101.50
27	A0	50	C	N1-C1'-C2'	7.20	123.36	114.00
67	B1	1926	A	C3'-C2'-C1'	-7.20	95.74	101.50
67	B1	2560	G	O4'-C1'-N9	7.20	113.96	108.20
21	A2	520	G	N9-C1'-C2'	-7.20	104.08	112.00
56	BH	87	SER	N-CA-CB	7.20	121.29	110.50
67	B1	1517	G	O4'-C4'-C3'	-7.20	96.80	104.00
67	B1	2358	U	O4'-C1'-C2'	-7.20	98.60	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2538	G	O4'-C1'-N9	7.20	113.96	108.20
21	A2	805	C	O4'-C1'-C2'	7.19	114.08	107.60
67	B1	1480	G	C3'-C2'-C1'	7.19	107.25	101.50
21	A2	1320	A	C3'-C2'-C1'	-7.19	95.75	101.50
44	BW	1	MET	CG-SD-CE	-7.19	88.69	100.20
67	B1	319	A	C3'-C2'-C1'	-7.19	95.75	101.50
67	B1	895	C	O4'-C1'-C2'	-7.19	98.61	105.80
67	B1	2029	C	C3'-C2'-C1'	7.19	107.25	101.50
67	B1	2130	C	O4'-C1'-N1	7.19	113.95	108.20
67	B1	2435	G	P-O3'-C3'	7.19	128.33	119.70
67	B1	2771	G	C3'-C2'-C1'	-7.19	95.75	101.50
21	A2	497	C	C3'-C2'-C1'	7.19	107.25	101.50
67	B1	454	C	OP1-P-OP2	-7.19	108.81	119.60
67	B1	1509	C	C3'-C2'-C1'	7.19	107.25	101.50
21	A2	116	C	C5'-C4'-O4'	7.19	117.72	109.10
21	A2	252	U	O4'-C1'-C2'	-7.19	98.61	105.80
54	BF	35	LEU	CB-CG-CD2	7.19	123.22	111.00
67	B1	651	C	C3'-C2'-C1'	7.19	107.25	101.50
67	B1	1311	C	P-O3'-C3'	7.19	128.32	119.70
67	B1	1520	G	C1'-O4'-C4'	-7.19	104.15	109.90
21	A2	1124	G	O4'-C1'-C2'	7.18	114.07	107.60
67	B1	2299	G	C5'-C4'-O4'	7.18	117.72	109.10
10	AD	154	TYR	CG-CD2-CE2	-7.18	115.55	121.30
67	B1	899	A	C1'-O4'-C4'	7.18	115.65	109.90
67	B1	1000	G	C1'-O4'-C4'	-7.18	104.15	109.90
67	B1	2189	C	N1-C1'-C2'	7.18	123.34	114.00
21	A2	1198	A	C5'-C4'-O4'	7.18	117.72	109.10
21	A2	766	G	O4'-C1'-C2'	7.18	114.06	107.60
67	B1	2085	C	C1'-O4'-C4'	-7.18	104.16	109.90
21	A2	62	G	C3'-C2'-C1'	7.18	107.24	101.50
21	A2	122	C	O4'-C1'-N1	7.18	113.94	108.20
67	B1	459	C	N1-C1'-C2'	7.18	123.33	114.00
21	A2	7	G	C3'-C2'-C1'	7.18	107.24	101.50
21	A2	27	C	P-O5'-C5'	7.18	132.38	120.90
21	A2	103	A	O4'-C1'-N9	7.18	113.94	108.20
21	A2	235	G	P-O3'-C3'	-7.18	111.09	119.70
21	A2	508	C	P-O5'-C5'	7.18	132.38	120.90
67	B1	1097	G	C5'-C4'-C3'	7.18	127.48	116.00
68	B3	55	G	C1'-O4'-C4'	-7.18	104.16	109.90
21	A2	547	U	O4'-C1'-C2'	7.17	114.06	107.60
21	A2	590	G	O4'-C1'-N9	7.17	113.94	108.20
21	A2	819	G	C1'-O4'-C4'	-7.17	104.16	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	Bj	39	ARG	NE-CZ-NH1	7.17	123.89	120.30
67	B1	818	A	P-O5'-C5'	-7.17	109.42	120.90
21	A2	453	G	O4'-C1'-N9	7.17	113.94	108.20
21	A2	620	G	C3'-C2'-C1'	7.17	107.24	101.50
49	BQ	87	ALA	CB-CA-C	-7.17	99.34	110.10
67	B1	340	G	O4'-C1'-N9	7.17	113.94	108.20
67	B1	1388	U	C1'-O4'-C4'	-7.17	104.16	109.90
67	B1	2064	U	C2'-C3'-O3'	7.17	125.28	109.50
67	B1	2760	A	O4'-C1'-N9	-7.17	102.46	108.20
67	B1	2926	G	O4'-C1'-N9	-7.17	102.46	108.20
1	AQ	7	ARG	NE-CZ-NH1	-7.17	116.72	120.30
21	A2	167	G	C4'-C3'-C2'	-7.17	95.43	102.60
21	A2	400	G	C1'-O4'-C4'	7.17	115.64	109.90
21	A2	428	G	C1'-O4'-C4'	-7.17	104.17	109.90
51	Bj	84	PHE	CB-CG-CD1	-7.17	115.78	120.80
67	B1	1280	C	O4'-C1'-C2'	-7.17	98.63	105.80
67	B1	2760	A	C5'-C4'-O4'	7.17	117.70	109.10
67	B1	2930	G	O4'-C1'-N9	7.17	113.93	108.20
11	A1	27	A	N9-C1'-C2'	7.17	123.32	114.00
21	A2	1091	C	O4'-C1'-N1	7.17	113.93	108.20
21	A2	1095	C	O4'-C1'-C2'	7.17	114.05	107.60
67	B1	408	C	O4'-C1'-N1	7.17	113.93	108.20
67	B1	1253	U	C1'-O4'-C4'	7.17	115.63	109.90
67	B1	1597	G	O4'-C1'-C2'	-7.17	98.63	105.80
67	B1	2954	C	C3'-C2'-C1'	7.17	107.23	101.50
68	B3	110	C	O4'-C1'-N1	-7.17	102.47	108.20
21	A2	988	A	C5-C6-N6	-7.17	117.97	123.70
27	A0	56	C	N1-C1'-C2'	7.17	123.31	114.00
46	BA	160	ASN	N-CA-CB	7.17	123.50	110.60
67	B1	1284	C	O4'-C1'-N1	7.16	113.93	108.20
67	B1	2283	C	C5'-C4'-O4'	7.16	117.70	109.10
67	B1	2362	U	C1'-O4'-C4'	7.16	115.63	109.90
68	B3	22	C	C3'-C2'-C1'	7.16	107.23	101.50
49	BQ	131	GLN	N-CA-CB	7.16	123.49	110.60
67	B1	394	A	C5'-C4'-O4'	-7.16	100.51	109.10
67	B1	2578	C	O4'-C1'-C2'	-7.16	98.64	105.80
67	B1	505	A	O4'-C1'-N9	7.16	113.93	108.20
67	B1	2448	A	C1'-O4'-C4'	7.16	115.63	109.90
7	AB	185	ARG	NH1-CZ-NH2	7.16	127.28	119.40
21	A2	964	A	C5-C6-N6	-7.16	117.97	123.70
46	BA	120	TYR	CB-CG-CD1	7.16	125.30	121.00
52	BB	17	PHE	CB-CG-CD1	7.16	125.81	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2894	A	P-O3'-C3'	-7.16	111.11	119.70
51	Bj	25	VAL	CA-CB-CG1	7.16	121.64	110.90
21	A2	373	C	C1'-O4'-C4'	-7.16	104.18	109.90
67	B1	589	G	N1-C6-O6	7.16	124.19	119.90
67	B1	1457	C	O4'-C1'-C2'	-7.16	98.64	105.80
67	B1	2246	G	O4'-C1'-N9	7.16	113.92	108.20
21	A2	530	G	P-O3'-C3'	7.15	128.28	119.70
21	A2	807	C	C3'-C2'-C1'	7.15	107.22	101.50
67	B1	2013	A	O4'-C1'-N9	7.15	113.92	108.20
67	B1	68	G	O4'-C1'-C2'	-7.15	98.65	105.80
67	B1	110	A	O4'-C1'-C2'	-7.15	98.65	105.80
67	B1	1012	G	C5-C6-O6	-7.15	124.31	128.60
21	A2	23	G	O4'-C1'-C2'	-7.15	98.65	105.80
21	A2	400	G	O4'-C1'-C2'	-7.15	98.65	105.80
21	A2	491	G	C1'-O4'-C4'	-7.15	104.18	109.90
21	A2	1221	A	N9-C1'-C2'	7.15	123.30	114.00
46	BA	46	PHE	CB-CG-CD2	-7.15	115.80	120.80
67	B1	2522	C	O4'-C1'-C2'	-7.15	98.65	105.80
67	B1	2774	C	O4'-C1'-C2'	-7.15	98.65	105.80
67	B1	1425	U	C1'-O4'-C4'	7.15	115.62	109.90
11	A1	39	A	P-O5'-C5'	7.15	132.34	120.90
21	A2	1245	C	O4'-C1'-N1	7.15	113.92	108.20
67	B1	2436	A	O4'-C1'-N9	7.15	113.92	108.20
67	B1	1071	A	O4'-C1'-C2'	-7.15	98.65	105.80
21	A2	202	G	N9-C1'-C2'	-7.14	104.14	112.00
21	A2	746	A	C2'-C3'-O3'	7.14	125.22	109.50
21	A2	1286	C	C3'-C2'-C1'	7.14	107.22	101.50
27	A0	34	G	O4'-C1'-C2'	7.14	114.03	107.60
51	Bj	10	TYR	CB-CG-CD2	-7.14	116.71	121.00
67	B1	116	G	C1'-O4'-C4'	-7.14	104.18	109.90
67	B1	2370	C	O4'-C1'-N1	7.14	113.92	108.20
68	B3	57	C	C1'-O4'-C4'	-7.14	104.19	109.90
21	A2	836	G	O4'-C1'-N9	7.14	113.91	108.20
67	B1	149	G	N9-C1'-C2'	-7.14	104.14	112.00
67	B1	295	G	O4'-C1'-N9	7.14	113.91	108.20
67	B1	843	C	C3'-C2'-C1'	7.14	107.21	101.50
67	B1	1473	C	P-O3'-C3'	-7.14	111.13	119.70
67	B1	1492	C	C3'-C2'-C1'	7.14	107.21	101.50
27	A0	58	A	O4'-C1'-N9	7.14	113.91	108.20
62	BN	71	ARG	NE-CZ-NH1	7.14	123.87	120.30
67	B1	1992	A	O4'-C1'-N9	7.14	113.91	108.20
67	B1	1004	U	O4'-C1'-N1	7.14	113.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2272	G	O4'-C1'-C2'	7.14	114.02	107.60
21	A2	256	G	O4'-C1'-N9	7.14	113.91	108.20
21	A2	687	G	C3'-C2'-C1'	7.14	107.21	101.50
25	AH	88	ARG	NH1-CZ-NH2	-7.14	111.55	119.40
67	B1	667	C	P-O3'-C3'	-7.14	111.14	119.70
67	B1	2145	G	C1'-O4'-C4'	7.14	115.61	109.90
21	A2	130	G	O4'-C1'-N9	7.13	113.91	108.20
21	A2	825	C	C4'-C3'-C2'	-7.13	95.47	102.60
21	A2	1132	C	O4'-C1'-C2'	-7.13	98.67	105.80
67	B1	1336	G	O4'-C1'-N9	7.13	113.91	108.20
67	B1	1630	U	C1'-O4'-C4'	7.13	115.61	109.90
67	B1	2812	U	C1'-O4'-C4'	-7.13	104.19	109.90
21	A2	339	U	P-O3'-C3'	7.13	128.26	119.70
51	Bj	10	TYR	CB-CG-CD1	7.13	125.28	121.00
67	B1	2331	A	C3'-C2'-C1'	7.13	107.21	101.50
11	A1	8	U	C3'-C2'-C1'	7.13	107.20	101.50
21	A2	608	G	P-O3'-C3'	-7.13	111.14	119.70
67	B1	1841	G	C1'-O4'-C4'	-7.13	104.19	109.90
67	B1	2076	A	O4'-C1'-C2'	7.13	114.02	107.60
67	B1	2142	U	C5'-C4'-O4'	7.13	117.66	109.10
67	B1	2266	C	C1'-O4'-C4'	7.13	115.61	109.90
67	B1	3013	U	C3'-C2'-C1'	7.13	107.20	101.50
24	AA	128	ARG	CD-NE-CZ	7.13	133.58	123.60
27	A0	27	C	C4'-C3'-C2'	-7.13	95.47	102.60
27	A0	44	C	C3'-C2'-C1'	7.13	107.20	101.50
67	B1	8	G	C5-C6-O6	-7.13	124.32	128.60
67	B1	1470	C	C4'-C3'-C2'	-7.13	95.47	102.60
11	A1	33	C	O4'-C1'-C2'	-7.12	98.67	105.80
21	A2	4	C	O4'-C1'-C2'	-7.12	98.67	105.80
21	A2	1117	A	C3'-C2'-C1'	7.12	107.20	101.50
64	Bc	28	ASP	CB-CG-OD2	-7.12	111.89	118.30
67	B1	1247	U	O4'-C1'-N1	7.12	113.90	108.20
67	B1	1468	G	O4'-C1'-C2'	-7.12	98.67	105.80
21	A2	1479	C	O4'-C1'-N1	7.12	113.90	108.20
67	B1	1032	C	O4'-C1'-C2'	-7.12	98.68	105.80
67	B1	2191	U	C1'-O4'-C4'	-7.12	104.20	109.90
21	A2	1006	C	C3'-C2'-C1'	7.12	107.20	101.50
46	BA	123	ARG	NE-CZ-NH1	7.12	123.86	120.30
49	BQ	88	ARG	N-CA-CB	7.12	123.42	110.60
67	B1	414	G	C4'-C3'-C2'	-7.12	95.48	102.60
67	B1	464	C	N1-C1'-C2'	-7.12	104.17	112.00
67	B1	1211	C	P-O3'-C3'	-7.12	111.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2239	C	P-O5'-C5'	-7.12	109.51	120.90
67	B1	697	U	N1-C1'-C2'	-7.12	104.17	112.00
21	A2	605	C	C1'-O4'-C4'	-7.12	104.21	109.90
67	B1	729	A	P-O3'-C3'	7.12	128.24	119.70
67	B1	2684	G	C3'-C2'-C1'	7.12	107.19	101.50
21	A2	1057	A	C1'-O4'-C4'	7.12	115.59	109.90
21	A2	142	G	C5'-C4'-O4'	-7.11	100.56	109.10
67	B1	813	G	C3'-C2'-C1'	-7.11	95.81	101.50
67	B1	2989	A	C4'-C3'-C2'	-7.11	95.49	102.60
21	A2	489	C	C3'-C2'-C1'	7.11	107.19	101.50
27	A0	59	A	O4'-C1'-N9	7.11	113.89	108.20
67	B1	1832	G	O4'-C1'-N9	7.11	113.89	108.20
21	A2	1144	G	P-O5'-C5'	7.11	132.27	120.90
67	B1	493	A	O4'-C1'-C2'	-7.11	98.69	105.80
21	A2	316	C	O4'-C1'-C2'	-7.11	98.69	105.80
67	B1	895	C	N1-C1'-C2'	7.11	123.24	114.00
35	BL	17	HIS	CB-CA-C	7.11	124.61	110.40
60	BS	108	ASP	CB-CG-OD2	-7.11	111.91	118.30
67	B1	642	G	P-O3'-C3'	-7.11	111.17	119.70
67	B1	682	G	O4'-C1'-C2'	7.11	113.99	107.60
67	B1	2201	C	C3'-C2'-C1'	7.11	107.19	101.50
67	B1	2666	G	C3'-C2'-C1'	-7.11	95.81	101.50
67	B1	2924	G	O4'-C1'-N9	7.11	113.88	108.20
67	B1	2320	U	P-O3'-C3'	7.10	128.22	119.70
21	A2	1227	A	N9-C1'-C2'	7.10	123.23	114.00
31	BY	73	ARG	NE-CZ-NH1	7.10	123.85	120.30
67	B1	426	G	C4'-C3'-C2'	-7.10	95.50	102.60
21	A2	936	A	C1'-O4'-C4'	-7.10	104.22	109.90
21	A2	440	C	C1'-O4'-C4'	-7.10	104.22	109.90
21	A2	1471	G	C5'-C4'-O4'	7.10	117.62	109.10
29	AL	59	ALA	N-CA-CB	7.10	120.04	110.10
67	B1	2660	G	C1'-O4'-C4'	-7.10	104.22	109.90
67	B1	1436	A	P-O3'-C3'	7.10	128.22	119.70
21	A2	1174	A	N9-C1'-C2'	7.10	123.22	114.00
67	B1	1221	U	C5'-C4'-C3'	-7.10	104.65	116.00
67	B1	1996	C	O4'-C1'-N1	7.10	113.88	108.20
67	B1	1570	C	O4'-C4'-C3'	-7.09	96.91	104.00
67	B1	1746	C	O4'-C1'-C2'	-7.09	98.71	105.80
67	B1	2566	A	N9-C1'-C2'	-7.09	104.20	112.00
21	A2	1393	A	C3'-C2'-C1'	7.09	107.17	101.50
67	B1	1134	A	C1'-O4'-C4'	-7.09	104.23	109.90
21	A2	894	A	O4'-C4'-C3'	-7.09	96.91	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1317	G	O4'-C1'-C2'	7.09	113.98	107.60
67	B1	51	G	O4'-C1'-C2'	-7.09	98.71	105.80
67	B1	2719	G	C3'-C2'-C1'	7.09	107.17	101.50
20	A3	120	GLU	OE1-CD-OE2	-7.09	114.79	123.30
67	B1	1170	G	C1'-O4'-C4'	7.09	115.57	109.90
67	B1	1254	C	O4'-C1'-C2'	-7.09	98.71	105.80
67	B1	2917	G	C5'-C4'-C3'	7.09	127.34	116.00
67	B1	2962	A	C3'-C2'-C1'	-7.09	95.83	101.50
5	AW	10	ARG	NE-CZ-NH1	7.09	123.84	120.30
21	A2	35	G	O4'-C1'-C2'	7.09	113.98	107.60
21	A2	386	C	O4'-C1'-N1	-7.09	102.53	108.20
67	B1	1035	G	C1'-O4'-C4'	-7.09	104.23	109.90
64	Bc	16	ASN	N-CA-CB	7.09	123.35	110.60
67	B1	2380	A	C1'-O4'-C4'	-7.09	104.23	109.90
67	B1	760	G	N9-C1'-C2'	7.08	123.21	114.00
67	B1	1038	U	C3'-C2'-C1'	7.08	107.17	101.50
67	B1	1802	G	C3'-C2'-C1'	7.08	107.17	101.50
68	B3	34	C	C3'-C2'-C1'	7.08	107.17	101.50
15	AE	230	ALA	N-CA-CB	7.08	120.02	110.10
21	A2	796	C	P-O3'-C3'	7.08	128.20	119.70
67	B1	205	A	C3'-C2'-C1'	7.08	107.17	101.50
67	B1	1851	U	O4'-C1'-C2'	-7.08	98.72	105.80
11	A1	3	G	O4'-C1'-N9	7.08	113.86	108.20
21	A2	415	C	P-O3'-C3'	-7.08	111.20	119.70
21	A2	826	C	O4'-C1'-C2'	-7.08	98.72	105.80
21	A2	1266	A	C4'-C3'-C2'	-7.08	95.52	102.60
27	A0	75	C	N1-C1'-C2'	7.08	123.21	114.00
67	B1	1615	G	C1'-O4'-C4'	7.08	115.56	109.90
67	B1	1649	G	N9-C1'-C2'	7.08	123.21	114.00
67	B1	2777	G	C1'-O4'-C4'	-7.08	104.23	109.90
14	AM	86	PRO	N-CA-CB	7.08	111.80	103.30
67	B1	1917	U	O4'-C1'-N1	7.08	113.86	108.20
2	AK	20	ARG	NE-CZ-NH1	-7.08	116.76	120.30
19	AS	42	THR	CA-CB-CG2	7.08	122.31	112.40
67	B1	80	G	O4'-C1'-N9	7.08	113.86	108.20
67	B1	222	A	P-O3'-C3'	-7.08	111.20	119.70
67	B1	1295	G	N9-C1'-C2'	7.08	123.20	114.00
67	B1	171	A	N9-C1'-C2'	7.08	123.20	114.00
67	B1	2884	C	C3'-C2'-C1'	7.08	107.16	101.50
11	A1	27	A	C1'-O4'-C4'	-7.08	104.24	109.90
21	A2	482	G	N9-C1'-C2'	-7.08	104.22	112.00
67	B1	45	G	C5-C6-O6	-7.08	124.36	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	474	G	C3'-C2'-C1'	7.08	107.16	101.50
67	B1	2319	C	C1'-O4'-C4'	-7.08	104.24	109.90
21	A2	75	C	O4'-C1'-N1	7.07	113.86	108.20
67	B1	11	G	O4'-C1'-N9	7.07	113.86	108.20
67	B1	292	U	C1'-O4'-C4'	7.07	115.56	109.90
67	B1	559	G	C1'-O4'-C4'	-7.07	104.24	109.90
67	B1	629	G	C1'-O4'-C4'	7.07	115.56	109.90
27	A0	67	G	C3'-C2'-C1'	-7.07	95.84	101.50
47	BI	76	ARG	NE-CZ-NH2	-7.07	116.76	120.30
58	BP	58	ASP	CB-CA-C	-7.07	96.26	110.40
67	B1	2378	C	P-O3'-C3'	7.07	128.19	119.70
8	AR	8	ARG	NE-CZ-NH2	-7.07	116.77	120.30
27	A0	65	G	O4'-C1'-N9	7.07	113.86	108.20
67	B1	1085	G	P-O3'-C3'	7.07	128.19	119.70
67	B1	2572	U	O4'-C1'-N1	7.07	113.86	108.20
67	B1	2700	U	N1-C1'-C2'	7.07	123.19	114.00
67	B1	2495	A	C3'-C2'-C1'	-7.07	95.84	101.50
21	A2	351	C	O4'-C1'-N1	7.07	113.85	108.20
25	AH	81	VAL	CA-CB-CG2	-7.07	100.30	110.90
42	BT	9	ARG	NE-CZ-NH1	7.07	123.83	120.30
67	B1	1946	G	N9-C1'-C2'	-7.07	104.23	112.00
21	A2	1280	C	N1-C1'-C2'	7.06	123.18	114.00
67	B1	95	G	O4'-C1'-N9	7.06	113.85	108.20
67	B1	615	A	C1'-O4'-C4'	7.06	115.55	109.90
67	B1	666	A	C1'-O4'-C4'	-7.06	104.25	109.90
21	A2	635	C	C3'-C2'-C1'	7.06	107.15	101.50
21	A2	1252	C	O4'-C1'-C2'	-7.06	98.74	105.80
27	A0	22	G	C1'-O4'-C4'	-7.06	104.25	109.90
39	Be	44	ARG	NE-CZ-NH2	7.06	123.83	120.30
67	B1	209	G	C1'-O4'-C4'	7.06	115.55	109.90
67	B1	408	C	O4'-C4'-C3'	-7.06	96.94	104.00
67	B1	1595	G	N9-C1'-C2'	-7.06	104.23	112.00
67	B1	2932	C	N1-C1'-C2'	-7.06	104.23	112.00
21	A2	374	G	O4'-C1'-C2'	7.06	113.95	107.60
67	B1	1	G	O4'-C1'-N9	7.06	113.85	108.20
67	B1	671	G	C3'-C2'-C1'	-7.06	95.85	101.50
67	B1	1094	U	C5'-C4'-O4'	7.06	117.57	109.10
67	B1	271	G	O4'-C1'-N9	7.06	113.85	108.20
67	B1	1858	G	P-O5'-C5'	7.06	132.20	120.90
21	A2	194	C	O4'-C1'-C2'	-7.06	98.74	105.80
33	BC	8	ARG	NE-CZ-NH1	7.06	123.83	120.30
67	B1	1289	C	C1'-O4'-C4'	-7.06	104.25	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	B3	43	C	N1-C1'-C2'	7.06	123.17	114.00
21	A2	402	G	P-O5'-C5'	7.05	132.19	120.90
21	A2	573	C	O4'-C1'-C2'	-7.05	98.75	105.80
21	A2	1298	G	N9-C1'-C2'	7.05	123.17	114.00
67	B1	2683	G	C3'-C2'-C1'	-7.05	95.86	101.50
67	B1	2915	U	O4'-C4'-C3'	-7.05	96.95	104.00
25	AH	91	ARG	N-CA-CB	7.05	123.30	110.60
27	A0	31	A	O4'-C1'-N9	7.05	113.84	108.20
67	B1	368	U	N1-C1'-C2'	7.05	123.17	114.00
67	B1	1025	A	P-O3'-C3'	-7.05	111.24	119.70
42	BT	61	ARG	NE-CZ-NH2	-7.05	116.77	120.30
67	B1	676	G	N9-C1'-C2'	7.05	123.17	114.00
67	B1	2176	G	C1'-O4'-C4'	-7.05	104.26	109.90
68	B3	36	U	C1'-O4'-C4'	-7.05	104.26	109.90
21	A2	777	G	P-O3'-C3'	-7.05	111.24	119.70
21	A2	1470	G	N9-C1'-C2'	7.05	123.17	114.00
27	A0	30	G	O4'-C1'-N9	7.05	113.84	108.20
67	B1	313	U	N1-C1'-C2'	7.05	123.16	114.00
67	B1	379	U	C3'-C2'-C1'	7.05	107.14	101.50
67	B1	1330	G	O4'-C1'-C2'	7.05	113.94	107.60
11	A1	49	C	C4'-C3'-C2'	-7.05	95.55	102.60
68	B3	74	U	C2'-C3'-O3'	7.05	125.01	109.50
10	AD	104	ARG	NE-CZ-NH2	-7.05	116.78	120.30
21	A2	1399	G	C1'-O4'-C4'	-7.05	104.26	109.90
67	B1	85	G	O5'-C5'-C4'	-7.05	98.31	111.70
67	B1	123	A	C1'-O4'-C4'	-7.05	104.26	109.90
67	B1	956	U	O4'-C1'-N1	-7.05	102.56	108.20
67	B1	1588	C	O4'-C1'-N1	-7.05	102.56	108.20
67	B1	2230	G	P-O3'-C3'	7.05	128.16	119.70
21	A2	1007	A	P-O3'-C3'	-7.04	111.25	119.70
67	B1	709	A	C1'-O4'-C4'	-7.04	104.26	109.90
67	B1	2778	A	N9-C1'-C2'	7.04	123.16	114.00
21	A2	666	G	C1'-O4'-C4'	-7.04	104.27	109.90
62	BN	125	ARG	NE-CZ-NH1	7.04	123.82	120.30
67	B1	161	C	O4'-C1'-N1	7.04	113.83	108.20
21	A2	258	A	C1'-O4'-C4'	-7.04	104.27	109.90
67	B1	1257	G	O4'-C1'-N9	7.04	113.83	108.20
67	B1	1301	G	O4'-C1'-N9	7.04	113.83	108.20
67	B1	2258	A	O4'-C4'-C3'	-7.04	96.96	104.00
67	B1	2904	U	C2'-C3'-O3'	7.04	124.99	109.50
21	A2	78	G	O4'-C1'-C2'	7.04	113.94	107.60
17	AO	105	ASP	CB-CG-OD1	7.04	124.64	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1719	C	C6-N1-C1'	-7.04	112.35	120.80
67	B1	1876	G	C1'-O4'-C4'	7.04	115.53	109.90
67	B1	1907	G	O4'-C1'-N9	7.04	113.83	108.20
67	B1	2301	C	N1-C1'-C2'	7.04	123.15	114.00
21	A2	1380	C	C3'-C2'-C1'	7.04	107.13	101.50
38	Bb	41	ARG	NH1-CZ-NH2	7.04	127.14	119.40
40	BE	173	VAL	CG1-CB-CG2	7.04	122.16	110.90
67	B1	1118	A	O4'-C1'-N9	-7.04	102.57	108.20
67	B1	2645	C	C3'-C2'-C1'	7.04	107.13	101.50
21	A2	1194	C	N1-C1'-C2'	7.03	123.14	114.00
67	B1	462	A	N9-C1'-C2'	7.03	123.14	114.00
67	B1	1666	G	C1'-O4'-C4'	-7.03	104.27	109.90
67	B1	2407	G	N9-C1'-C2'	7.03	123.14	114.00
30	AU	39	ARG	NE-CZ-NH2	-7.03	116.78	120.30
35	BL	4	ARG	CD-NE-CZ	7.03	133.44	123.60
67	B1	1310	A	O4'-C1'-C2'	7.03	113.93	107.60
67	B1	1692	A	O4'-C1'-C2'	7.03	113.93	107.60
67	B1	2537	G	OP1-P-OP2	-7.03	109.05	119.60
67	B1	2651	G	P-O3'-C3'	-7.03	111.26	119.70
21	A2	594	A	C3'-C2'-C1'	7.03	107.12	101.50
67	B1	882	U	C3'-C2'-C1'	7.03	107.12	101.50
67	B1	2206	G	O4'-C1'-C2'	7.03	113.93	107.60
67	B1	2728	U	N1-C1'-C2'	7.03	123.14	114.00
27	A0	18	G	O4'-C1'-C2'	-7.03	98.77	105.80
33	BC	28	ARG	NE-CZ-NH2	-7.03	116.79	120.30
38	Bb	47	ASP	CB-CG-OD1	-7.03	111.97	118.30
40	BE	115	PHE	CB-CG-CD1	7.03	125.72	120.80
67	B1	697	U	P-O3'-C3'	7.03	128.13	119.70
67	B1	2724	A	C5'-C4'-O4'	7.03	117.53	109.10
68	B3	83	C	P-O3'-C3'	7.03	128.13	119.70
6	AC	47	PHE	CB-CG-CD1	7.03	125.72	120.80
67	B1	2070	U	O4'-C1'-C2'	7.03	113.92	107.60
67	B1	2928	C	O4'-C1'-N1	7.03	113.82	108.20
67	B1	2492	G	N9-C1'-C2'	-7.02	104.27	112.00
25	AH	84	HIS	O-C-N	-7.02	111.47	122.70
67	B1	991	U	C1'-O4'-C4'	-7.02	104.28	109.90
67	B1	1521	G	O4'-C1'-C2'	7.02	113.92	107.60
68	B3	103	C	O4'-C1'-N1	7.02	113.82	108.20
24	AA	191	LEU	CB-CG-CD2	7.02	122.94	111.00
17	AO	76	ARG	NE-CZ-NH2	-7.02	116.79	120.30
67	B1	2307	C	C1'-O4'-C4'	7.02	115.52	109.90
67	B1	3045	G	P-O3'-C3'	-7.02	111.28	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AE	61	GLU	N-CA-CB	7.02	123.23	110.60
21	A2	1422	G	N9-C1'-C2'	-7.02	104.28	112.00
22	AY	24	ARG	NE-CZ-NH2	-7.02	116.79	120.30
33	BC	251	ARG	NE-CZ-NH2	-7.02	116.79	120.30
56	BH	116	ALA	N-CA-CB	7.02	119.92	110.10
67	B1	436	C	O4'-C1'-C2'	-7.02	98.78	105.80
68	B3	77	A	C3'-C2'-C1'	7.02	107.11	101.50
33	BC	111	ALA	N-CA-CB	7.01	119.92	110.10
67	B1	444	U	O4'-C1'-N1	7.01	113.81	108.20
67	B1	1216	A	P-O3'-C3'	7.01	128.12	119.70
67	B1	1271	G	C5'-C4'-O4'	7.01	117.52	109.10
67	B1	1832	G	P-O3'-C3'	7.01	128.12	119.70
67	B1	2739	G	N9-C1'-C2'	7.01	123.12	114.00
67	B1	2832	G	O4'-C1'-N9	7.01	113.81	108.20
7	AB	146	LEU	CB-CA-C	-7.01	96.88	110.20
21	A2	981	U	C3'-C2'-C1'	7.01	107.11	101.50
25	AH	66	ARG	NE-CZ-NH2	-7.01	116.79	120.30
67	B1	163	G	C5'-C4'-C3'	7.01	127.22	116.00
67	B1	470	A	O4'-C1'-N9	7.01	113.81	108.20
67	B1	1630	U	C3'-C2'-C1'	7.01	107.11	101.50
67	B1	2426	U	O4'-C4'-C3'	-7.01	96.99	104.00
21	A2	161	C	O4'-C1'-C2'	-7.01	98.79	105.80
21	A2	553	C	O4'-C1'-C2'	-7.01	98.79	105.80
67	B1	1299	C	O4'-C1'-C2'	-7.01	98.79	105.80
67	B1	1475	G	N9-C1'-C2'	7.01	123.11	114.00
67	B1	2318	G	O4'-C1'-C2'	7.01	113.91	107.60
67	B1	2501	G	C2'-C3'-O3'	7.01	124.92	109.50
15	AE	229	TYR	CB-CG-CD1	7.01	125.20	121.00
67	B1	2317	G	C4'-C3'-C2'	-7.01	95.59	102.60
21	A2	172	G	O4'-C1'-C2'	7.01	113.91	107.60
67	B1	3002	A	P-O3'-C3'	-7.01	111.29	119.70
67	B1	1310	A	C1'-O4'-C4'	-7.00	104.30	109.90
67	B1	1100	G	C3'-C2'-C1'	-7.00	95.90	101.50
67	B1	1202	G	N9-C1'-C2'	7.00	123.11	114.00
67	B1	1310	A	O4'-C1'-N9	7.00	113.80	108.20
67	B1	1340	G	C1'-O4'-C4'	-7.00	104.30	109.90
67	B1	1462	G	C3'-C2'-C1'	-7.00	95.90	101.50
67	B1	3000	U	O4'-C1'-C2'	7.00	113.90	107.60
68	B3	97	G	N9-C1'-C2'	-7.00	104.30	112.00
21	A2	1404	C	C5'-C4'-C3'	7.00	127.20	116.00
33	BC	185	TYR	CB-CG-CD1	-7.00	116.80	121.00
67	B1	2073	G	C1'-O4'-C4'	-7.00	104.30	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2586	A	O4'-C1'-C2'	-7.00	98.80	105.80
67	B1	63	A	O4'-C1'-N9	-7.00	102.60	108.20
21	A2	229	G	P-O5'-C5'	-7.00	109.70	120.90
67	B1	576	G	N9-C1'-C2'	7.00	123.10	114.00
67	B1	1273	C	N1-C1'-C2'	7.00	123.09	114.00
67	B1	1356	A	P-O3'-C3'	-7.00	111.30	119.70
67	B1	1491	U	P-O5'-C5'	7.00	132.10	120.90
67	B1	2145	G	O4'-C1'-N9	7.00	113.80	108.20
21	A2	300	G	C3'-C2'-C1'	-6.99	95.91	101.50
21	A2	429	A	C3'-C2'-C1'	6.99	107.09	101.50
62	BN	139	ARG	NE-CZ-NH2	-6.99	116.80	120.30
67	B1	1389	A	O4'-C1'-N9	6.99	113.80	108.20
67	B1	2828	G	N9-C1'-C2'	6.99	123.09	114.00
21	A2	143	G	O4'-C1'-N9	6.99	113.79	108.20
67	B1	1078	G	O4'-C1'-C2'	-6.99	98.81	105.80
67	B1	1164	C	O4'-C1'-C2'	-6.99	98.81	105.80
67	B1	581	A	O4'-C1'-N9	6.99	113.79	108.20
67	B1	1009	G	O4'-C1'-N9	6.99	113.79	108.20
67	B1	1175	C	O4'-C1'-N1	6.99	113.79	108.20
67	B1	2409	C	C3'-C2'-C1'	6.99	107.09	101.50
67	B1	1903	G	C3'-C2'-C1'	6.99	107.09	101.50
21	A2	187	C	P-O3'-C3'	-6.99	111.32	119.70
21	A2	1261	U	C2'-C3'-O3'	6.99	124.88	113.70
21	A2	1450	U	OP1-P-OP2	-6.99	109.12	119.60
67	B1	772	G	O4'-C1'-N9	6.99	113.79	108.20
67	B1	2658	G	C1'-O4'-C4'	-6.98	104.31	109.90
67	B1	942	U	C4'-C3'-C2'	-6.98	95.62	102.60
67	B1	967	G	O4'-C1'-C2'	6.98	113.88	107.60
67	B1	2714	G	O4'-C1'-C2'	-6.98	98.82	105.80
67	B1	2968	G	C3'-C2'-C1'	-6.98	95.91	101.50
21	A2	32	A	P-O3'-C3'	-6.98	111.33	119.70
21	A2	796	C	P-O5'-C5'	6.98	132.07	120.90
21	A2	895	C	C3'-C2'-C1'	6.98	107.08	101.50
27	A0	19	G	C1'-O4'-C4'	6.98	115.48	109.90
47	BI	76	ARG	NE-CZ-NH1	6.98	123.79	120.30
67	B1	66	C	C1'-O4'-C4'	-6.98	104.32	109.90
67	B1	2644	G	C3'-C2'-C1'	6.98	107.08	101.50
67	B1	3001	C	N1-C1'-C2'	6.98	123.08	114.00
20	BG	92	ILE	CG1-CB-CG2	6.98	126.75	111.40
67	B1	1569	A	P-O3'-C3'	-6.98	111.33	119.70
61	Bd	77	ARG	N-CA-CB	6.98	123.16	110.60
67	B1	671	G	C1'-O4'-C4'	-6.98	104.32	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1537	U	N1-C1'-C2'	6.98	123.07	114.00
67	B1	2607	U	C3'-C2'-C1'	-6.98	95.92	101.50
67	B1	2705	C	O4'-C1'-N1	6.98	113.78	108.20
67	B1	2669	U	C5'-C4'-O4'	6.98	117.47	109.10
67	B1	1546	G	O4'-C1'-N9	6.97	113.78	108.20
12	AN	43	PRO	C-N-CA	6.97	139.13	121.70
21	A2	437	A	P-O3'-C3'	6.97	128.07	119.70
21	A2	621	G	C4'-C3'-C2'	-6.97	95.63	102.60
67	B1	439	G	O4'-C1'-C2'	-6.97	98.83	105.80
67	B1	1346	G	C3'-C2'-C1'	-6.97	95.92	101.50
67	B1	2039	U	N1-C1'-C2'	6.97	123.06	114.00
16	AJ	24	ARG	NE-CZ-NH2	-6.97	116.81	120.30
24	AA	100	THR	CA-CB-CG2	6.97	122.16	112.40
67	B1	1773	C	O4'-C1'-N1	-6.97	102.62	108.20
21	A2	136	A	O4'-C1'-C2'	6.97	113.87	107.60
21	A2	1154	G	O4'-C1'-N9	-6.97	102.62	108.20
47	BI	2	ARG	NE-CZ-NH2	-6.97	116.81	120.30
67	B1	1615	G	C3'-C2'-C1'	-6.97	95.92	101.50
67	B1	1986	U	O4'-C1'-N1	6.97	113.78	108.20
67	B1	2720	U	C1'-O4'-C4'	6.97	115.48	109.90
27	A0	32	C	O4'-C1'-N1	6.97	113.78	108.20
46	BA	66	ALA	N-CA-CB	6.97	119.86	110.10
67	B1	418	C	C1'-O4'-C4'	-6.97	104.33	109.90
67	B1	2310	G	C3'-C2'-C1'	-6.97	95.93	101.50
67	B1	974	U	C4'-C3'-C2'	-6.97	95.63	102.60
67	B1	1381	C	N1-C1'-C2'	6.97	123.06	114.00
67	B1	1531	C	O4'-C1'-N1	6.97	113.77	108.20
15	AE	3	ARG	NE-CZ-NH2	-6.96	116.82	120.30
21	A2	1110	U	N1-C1'-C2'	6.96	123.05	114.00
23	AT	113	VAL	CA-CB-CG2	6.96	121.35	110.90
67	B1	1676	G	C3'-C2'-C1'	6.96	107.07	101.50
67	B1	2450	A	O4'-C1'-C2'	6.96	113.87	107.60
67	B1	1156	G	C3'-C2'-C1'	6.96	107.07	101.50
21	A2	1067	G	C4'-C3'-C2'	-6.96	95.64	102.60
67	B1	310	C	C4'-C3'-C2'	-6.96	95.64	102.60
67	B1	407	A	P-O5'-C5'	-6.96	109.76	120.90
67	B1	2391	G	O4'-C4'-C3'	-6.96	97.04	104.00
21	A2	1425	C	P-O5'-C5'	6.96	132.03	120.90
67	B1	43	G	O4'-C1'-C2'	-6.96	98.84	105.80
67	B1	862	G	P-O3'-C3'	6.96	128.05	119.70
67	B1	993	G	O4'-C1'-C2'	6.96	113.86	107.60
12	AN	51	ARG	NE-CZ-NH2	-6.96	116.82	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AH	86	MET	C-N-CA	6.96	139.09	121.70
67	B1	710	G	C3'-C2'-C1'	6.96	107.06	101.50
67	B1	1135	A	C5'-C4'-C3'	-6.96	104.87	116.00
67	B1	1231	C	N1-C1'-C2'	6.96	123.04	114.00
21	A2	432	G	O4'-C1'-N9	6.96	113.76	108.20
64	Bc	16	ASN	CB-CA-C	-6.96	96.49	110.40
68	B3	45	C	C3'-C2'-C1'	6.96	107.06	101.50
4	AG	51	PHE	CB-CG-CD2	-6.95	115.93	120.80
21	A2	170	C	O4'-C1'-N1	6.95	113.76	108.20
21	A2	1423	A	O4'-C1'-C2'	-6.95	98.85	105.80
67	B1	308	C	C3'-C2'-C1'	6.95	107.06	101.50
67	B1	1254	C	C3'-C2'-C1'	6.95	107.06	101.50
67	B1	2905	C	O4'-C1'-C2'	-6.95	98.85	105.80
68	B3	68	C	P-O5'-C5'	6.95	132.02	120.90
21	A2	1360	C	O4'-C1'-C2'	-6.95	98.85	105.80
21	A2	1439	G	O4'-C1'-C2'	-6.95	98.85	105.80
67	B1	211	A	O4'-C1'-C2'	-6.95	98.85	105.80
67	B1	771	G	P-O5'-C5'	6.95	132.02	120.90
67	B1	2469	G	O4'-C1'-N9	6.95	113.76	108.20
67	B1	2705	C	C3'-C2'-C1'	6.95	107.06	101.50
67	B1	118	A	N9-C1'-C2'	6.95	123.03	114.00
67	B1	712	C	N1-C1'-C2'	6.95	123.03	114.00
67	B1	115	C	C1'-O4'-C4'	-6.95	104.34	109.90
21	A2	154	C	N1-C1'-C2'	-6.95	104.36	112.00
21	A2	1429	G	O5'-P-OP1	-6.95	99.45	105.70
21	A2	1469	G	C3'-C2'-C1'	-6.95	95.94	101.50
67	B1	2952	C	N1-C1'-C2'	6.95	123.03	114.00
67	B1	698	U	O4'-C1'-N1	6.94	113.75	108.20
67	B1	2068	U	C3'-C2'-C1'	6.94	107.06	101.50
21	A2	1056	G	N9-C1'-C2'	-6.94	104.36	112.00
36	Bf	2	ALA	CB-CA-C	6.94	120.51	110.10
67	B1	2996	A	O4'-C1'-N9	-6.94	102.65	108.20
21	A2	828	U	C4'-C3'-C2'	-6.94	95.66	102.60
67	B1	1699	U	O4'-C4'-C3'	-6.94	97.06	104.00
67	B1	2836	G	C3'-C2'-C1'	6.94	107.05	101.50
20	A3	33	ARG	NE-CZ-NH2	-6.94	116.83	120.30
21	A2	1423	A	C3'-C2'-C1'	6.94	107.05	101.50
11	A1	3	G	O4'-C1'-C2'	-6.94	98.86	105.80
21	A2	546	G	O4'-C1'-N9	6.94	113.75	108.20
21	A2	1292	A	O4'-C1'-C2'	-6.94	98.86	105.80
41	Ba	22	VAL	CB-CA-C	6.94	124.58	111.40
67	B1	869	A	O4'-C1'-N9	6.94	113.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1384	C	O4'-C1'-N1	6.94	113.75	108.20
67	B1	2904	U	O3'-P-O5'	6.94	117.18	104.00
67	B1	2346	A	N9-C1'-C2'	-6.94	104.37	112.00
67	B1	1066	C	N1-C1'-C2'	-6.93	104.37	112.00
21	A2	973	U	P-O3'-C3'	6.93	128.02	119.70
21	A2	1158	G	O4'-C1'-N9	6.93	113.75	108.20
67	B1	466	C	N1-C1'-C2'	6.93	123.01	114.00
67	B1	530	A	O4'-C1'-C2'	-6.93	98.87	105.80
21	A2	897	A	P-O5'-C5'	-6.93	109.81	120.90
21	A2	1469	G	N9-C1'-C2'	6.93	123.01	114.00
67	B1	839	A	N9-C1'-C2'	6.93	123.01	114.00
21	A2	962	G	C5-C6-O6	-6.93	124.44	128.60
21	A2	1139	A	P-O5'-C5'	-6.93	109.81	120.90
21	A2	1357	C	C1'-O4'-C4'	6.93	115.44	109.90
53	BD	56	ARG	N-CA-C	-6.93	92.29	111.00
67	B1	1229	U	C3'-C2'-C1'	6.93	107.04	101.50
11	A1	65	C	O4'-C1'-N1	6.93	113.74	108.20
67	B1	215	A	N9-C1'-C2'	-6.93	104.38	112.00
67	B1	1596	G	N9-C1'-C2'	-6.93	104.38	112.00
67	B1	1718	C	O4'-C1'-N1	6.93	113.74	108.20
21	A2	825	C	P-O3'-C3'	-6.92	111.39	119.70
67	B1	2138	A	C3'-C2'-C1'	6.92	107.04	101.50
32	BO	196	PHE	CG-CD2-CE2	6.92	128.41	120.80
67	B1	465	C	C4'-C3'-C2'	-6.92	95.68	102.60
67	B1	1397	U	O4'-C1'-N1	6.92	113.74	108.20
67	B1	2194	A	O4'-C1'-C2'	-6.92	98.88	105.80
68	B3	14	G	C3'-C2'-C1'	-6.92	95.96	101.50
21	A2	597	C	O4'-C1'-C2'	-6.92	98.88	105.80
67	B1	1979	G	O4'-C1'-C2'	6.92	113.83	107.60
68	B3	48	A	C3'-C2'-C1'	6.92	107.04	101.50
68	B3	57	C	O4'-C1'-N1	-6.92	102.66	108.20
67	B1	2510	A	O4'-C1'-C2'	6.92	113.83	107.60
68	B3	47	G	C1'-O4'-C4'	-6.92	104.36	109.90
21	A2	565	C	C3'-C2'-C1'	6.92	107.03	101.50
21	A2	628	G	C1'-O4'-C4'	-6.92	104.36	109.90
21	A2	994	C	O4'-C1'-C2'	-6.92	98.88	105.80
50	BV	18	THR	CA-CB-CG2	6.92	122.09	112.40
64	Bc	51	LYS	N-CA-CB	6.92	123.06	110.60
67	B1	203	G	P-O5'-C5'	-6.92	109.83	120.90
68	B3	54	A	OP1-P-OP2	-6.92	109.22	119.60
68	B3	124	A	P-O3'-C3'	6.92	128.00	119.70
21	A2	51	A	O4'-C1'-N9	6.92	113.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1210	A	O4'-C1'-C2'	-6.92	98.88	105.80
25	AH	86	MET	CA-CB-CG	6.92	125.06	113.30
67	B1	3029	A	N9-C1'-C2'	-6.92	104.39	112.00
68	B3	117	G	C4'-C3'-C2'	-6.92	95.68	102.60
67	B1	1567	C	C3'-C2'-C1'	-6.92	95.97	101.50
11	A1	12	U	C3'-C2'-C1'	6.91	107.03	101.50
16	AJ	7	ARG	NE-CZ-NH1	6.91	123.76	120.30
21	A2	352	A	C3'-C2'-C1'	6.91	107.03	101.50
21	A2	957	A	O4'-C1'-C2'	-6.91	98.89	105.80
21	A2	1088	U	N1-C1'-C2'	6.91	122.99	114.00
67	B1	619	G	O4'-C1'-N9	6.91	113.73	108.20
67	B1	1033	C	C3'-C2'-C1'	6.91	107.03	101.50
67	B1	2334	G	O4'-C1'-C2'	6.91	113.82	107.60
67	B1	2396	G	C4'-C3'-C2'	-6.91	95.69	102.60
67	B1	2552	C	O4'-C1'-N1	6.91	113.73	108.20
21	A2	283	U	C1'-O4'-C4'	-6.91	104.37	109.90
67	B1	378	G	C5-C6-O6	-6.91	124.45	128.60
21	A2	994	C	O4'-C1'-N1	6.91	113.73	108.20
21	A2	1029	G	O4'-C1'-C2'	-6.91	98.89	105.80
21	A2	1086	C	C1'-O4'-C4'	-6.91	104.37	109.90
67	B1	152	G	O4'-C1'-C2'	-6.91	98.89	105.80
67	B1	481	G	C1'-O4'-C4'	6.91	115.43	109.90
67	B1	2277	G	P-O5'-C5'	6.91	131.96	120.90
11	A1	13	C	P-O5'-C5'	6.91	131.95	120.90
21	A2	495	G	N9-C1'-C2'	6.91	122.98	114.00
21	A2	1171	G	P-O3'-C3'	6.91	127.99	119.70
67	B1	885	A	P-O3'-C3'	6.91	127.99	119.70
11	A1	73	C	O4'-C1'-C2'	-6.91	98.89	105.80
21	A2	100	A	C1'-O4'-C4'	-6.91	104.38	109.90
21	A2	1205	G	C3'-C2'-C1'	-6.91	95.97	101.50
67	B1	380	A	C3'-C2'-C1'	-6.91	95.97	101.50
67	B1	1839	U	O4'-C1'-C2'	-6.91	98.89	105.80
67	B1	2258	A	C1'-O4'-C4'	6.91	115.43	109.90
49	BQ	141	PHE	CG-CD2-CE2	-6.91	113.20	120.80
67	B1	1218	C	O4'-C1'-N1	6.91	113.72	108.20
67	B1	1960	U	O4'-C1'-N1	-6.91	102.68	108.20
11	A1	30	G	C1'-O4'-C4'	-6.90	104.38	109.90
21	A2	56	A	C3'-C2'-C1'	6.90	107.02	101.50
21	A2	666	G	C3'-C2'-C1'	-6.90	95.98	101.50
21	A2	669	A	N9-C1'-C2'	-6.90	104.41	112.00
44	BW	54	LEU	CB-CG-CD1	6.90	122.73	111.00
64	Bc	80	LEU	N-CA-C	-6.90	92.36	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1202	G	O4'-C1'-N9	6.90	113.72	108.20
21	A2	1465	C	C1'-O4'-C4'	-6.90	104.38	109.90
67	B1	2884	C	N1-C1'-C2'	6.90	122.97	114.00
13	AX	43	ARG	NE-CZ-NH2	6.90	123.75	120.30
61	Bd	84	ILE	CA-CB-CG1	6.90	124.11	111.00
67	B1	731	C	C1'-O4'-C4'	-6.90	104.38	109.90
67	B1	2370	C	O4'-C1'-C2'	-6.90	98.90	105.80
14	AM	23	PHE	CB-CG-CD2	-6.90	115.97	120.80
21	A2	251	G	C3'-C2'-C1'	-6.90	95.98	101.50
21	A2	1026	A	C1'-O4'-C4'	-6.90	104.38	109.90
21	A2	334	G	N9-C1'-C2'	-6.89	104.42	112.00
21	A2	499	G	O4'-C1'-N9	6.89	113.72	108.20
67	B1	1691	U	C5'-C4'-O4'	6.89	117.37	109.10
4	AG	97	LYS	CB-CA-C	-6.89	96.61	110.40
21	A2	662	C	O4'-C1'-N1	6.89	113.71	108.20
67	B1	1223	A	C1'-O4'-C4'	6.89	115.41	109.90
67	B1	1499	C	N1-C1'-C2'	6.89	122.96	114.00
67	B1	466	C	C3'-C2'-C1'	6.89	107.01	101.50
21	A2	254	G	N9-C1'-C2'	-6.89	104.42	112.00
67	B1	2008	G	O4'-C1'-N9	6.89	113.71	108.20
67	B1	2473	C	O4'-C1'-C2'	-6.89	98.91	105.80
67	B1	2838	U	N1-C1'-C2'	6.89	122.95	114.00
21	A2	978	G	C3'-C2'-C1'	6.89	107.01	101.50
32	BO	113	ARG	NE-CZ-NH2	-6.89	116.86	120.30
67	B1	90	A	O4'-C1'-C2'	-6.89	98.91	105.80
67	B1	247	A	O4'-C1'-N9	6.89	113.71	108.20
67	B1	1976	C	N1-C1'-C2'	6.89	122.95	114.00
67	B1	405	G	C1'-O4'-C4'	-6.89	104.39	109.90
67	B1	712	C	O3'-P-O5'	-6.89	90.92	104.00
67	B1	1400	U	P-O3'-C3'	-6.89	111.44	119.70
67	B1	1789	A	C3'-C2'-C1'	6.89	107.01	101.50
67	B1	2469	G	P-O3'-C3'	-6.89	111.44	119.70
11	A1	71	C	C1'-O4'-C4'	-6.88	104.39	109.90
15	AE	8	ARG	NH1-CZ-NH2	6.88	126.97	119.40
21	A2	63	G	O3'-P-O5'	-6.88	90.92	104.00
67	B1	89	C	C3'-C2'-C1'	6.88	107.01	101.50
67	B1	2038	C	P-O3'-C3'	-6.88	111.44	119.70
67	B1	2235	G	C1'-O4'-C4'	-6.88	104.39	109.90
68	B3	92	G	O4'-C1'-N9	6.88	113.71	108.20
67	B1	1775	G	C5-C6-O6	-6.88	124.47	128.60
68	B3	13	C	O4'-C1'-N1	6.88	113.71	108.20
4	AG	47	LEU	C-N-CA	6.88	138.90	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1124	G	N9-C1'-C2'	6.88	122.95	114.00
67	B1	855	G	C3'-C2'-C1'	-6.88	96.00	101.50
67	B1	1850	C	O4'-C1'-N1	6.88	113.70	108.20
67	B1	2707	G	N9-C1'-C2'	6.88	122.94	114.00
67	B1	2773	A	C3'-C2'-C1'	6.88	107.00	101.50
67	B1	49	A	N9-C1'-C2'	-6.88	104.43	112.00
67	B1	2813	G	O4'-C1'-N9	6.88	113.70	108.20
21	A2	227	C	O4'-C1'-N1	6.88	113.70	108.20
67	B1	1911	G	N9-C1'-C2'	-6.88	104.44	112.00
67	B1	1223	A	N9-C1'-C2'	6.88	122.94	114.00
67	B1	2157	U	O4'-C1'-N1	6.88	113.70	108.20
21	A2	493	C	O4'-C1'-N1	6.87	113.70	108.20
67	B1	592	C	N1-C1'-C2'	6.87	122.94	114.00
67	B1	1234	A	O5'-P-OP1	6.87	118.95	110.70
67	B1	1376	U	N1-C1'-C2'	6.87	122.94	114.00
67	B1	1425	U	O4'-C1'-N1	6.87	113.70	108.20
67	B1	2472	A	O4'-C1'-N9	6.87	113.70	108.20
21	A2	74	U	C3'-C2'-C1'	-6.87	96.00	101.50
21	A2	1189	G	O4'-C1'-N9	6.87	113.70	108.20
28	AV	33	ARG	CB-CA-C	6.87	124.14	110.40
67	B1	344	G	P-O3'-C3'	-6.87	111.45	119.70
67	B1	467	U	N1-C1'-C2'	6.87	122.93	114.00
67	B1	2208	C	N1-C1'-C2'	6.87	122.93	114.00
67	B1	3005	C	P-O5'-C5'	-6.87	109.91	120.90
21	A2	206	C	O4'-C1'-N1	6.87	113.70	108.20
38	Bb	22	ARG	NE-CZ-NH1	-6.87	116.86	120.30
21	A2	877	A	O4'-C1'-C2'	-6.87	98.93	105.80
21	A2	1397	C	O4'-C1'-N1	6.87	113.69	108.20
21	A2	353	G	N9-C1'-C2'	-6.87	104.45	112.00
67	B1	1382	C	C5'-C4'-C3'	-6.87	105.01	116.00
21	A2	138	C	N1-C1'-C2'	6.87	122.92	114.00
67	B1	1686	C	O4'-C1'-N1	6.86	113.69	108.20
67	B1	33	U	P-O3'-C3'	-6.86	111.47	119.70
21	A2	1211	A	O4'-C1'-C2'	-6.86	98.94	105.80
67	B1	373	G	N9-C1'-C2'	6.86	122.92	114.00
67	B1	755	G	P-O3'-C3'	6.86	127.93	119.70
67	B1	2571	G	P-O3'-C3'	-6.86	111.47	119.70
67	B1	55	G	C3'-C2'-C1'	-6.86	96.01	101.50
67	B1	1484	U	N1-C1'-C2'	6.86	122.92	114.00
21	A2	1041	C	C3'-C2'-C1'	-6.86	96.02	101.50
67	B1	199	C	N1-C1'-C2'	6.86	122.92	114.00
67	B1	2538	G	O4'-C4'-C3'	-6.86	97.14	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BL	42	ARG	N-CA-CB	-6.86	98.26	110.60
67	B1	922	C	C1'-O4'-C4'	-6.86	104.42	109.90
67	B1	1826	G	O4'-C1'-C2'	6.86	113.77	107.60
67	B1	2338	A	C3'-C2'-C1'	6.86	106.98	101.50
21	A2	238	G	O4'-C1'-C2'	-6.85	98.95	105.80
21	A2	1371	C	O4'-C1'-C2'	-6.85	98.95	105.80
31	BY	123	ARG	NE-CZ-NH2	6.85	123.73	120.30
37	BU	12	ARG	NE-CZ-NH1	-6.85	116.87	120.30
67	B1	128	C	O4'-C1'-N1	6.85	113.68	108.20
68	B3	1	C	C5'-C4'-C3'	6.85	126.97	116.00
67	B1	1971	C	O4'-C1'-C2'	-6.85	98.95	105.80
21	A2	35	G	C1'-O4'-C4'	-6.85	104.42	109.90
21	A2	523	C	C3'-C2'-C1'	6.85	106.98	101.50
21	A2	1313	G	O4'-C1'-C2'	6.85	113.76	107.60
21	A2	1344	U	O4'-C1'-N1	6.85	113.68	108.20
33	BC	319	SER	N-CA-CB	6.85	120.77	110.50
67	B1	2174	G	C1'-O4'-C4'	6.85	115.38	109.90
67	B1	2317	G	O4'-C1'-N9	6.85	113.68	108.20
67	B1	2410	U	N1-C1'-C2'	6.85	122.91	114.00
21	A2	958	G	C1'-O4'-C4'	6.85	115.38	109.90
21	A2	1306	A	O4'-C1'-N9	6.85	113.68	108.20
67	B1	531	G	OP1-P-OP2	-6.85	109.33	119.60
67	B1	1174	U	N1-C1'-C2'	6.85	122.90	114.00
67	B1	1207	G	O4'-C1'-C2'	-6.85	98.95	105.80
67	B1	1858	G	C1'-O4'-C4'	-6.85	104.42	109.90
67	B1	2246	G	P-O5'-C5'	6.85	131.86	120.90
68	B3	90	A	C1'-O4'-C4'	-6.85	104.42	109.90
21	A2	463	G	C1'-O4'-C4'	-6.84	104.42	109.90
43	Bk	38	LEU	CA-C-N	6.84	132.26	117.20
46	BA	131	MET	CB-CA-C	6.84	124.09	110.40
67	B1	78	C	C1'-O4'-C4'	-6.84	104.42	109.90
67	B1	768	C	C5'-C4'-C3'	-6.84	105.05	116.00
67	B1	2460	A	C3'-C2'-C1'	6.84	106.98	101.50
67	B1	2546	G	O4'-C1'-C2'	-6.84	98.96	105.80
67	B1	333	A	C1'-O4'-C4'	6.84	115.38	109.90
67	B1	955	A	P-O5'-C5'	-6.84	109.95	120.90
67	B1	1720	G	C5-C6-O6	-6.84	124.49	128.60
67	B1	1776	G	C5-C6-O6	-6.84	124.49	128.60
5	AW	36	ARG	NE-CZ-NH2	6.84	123.72	120.30
21	A2	301	G	O4'-C1'-N9	6.84	113.67	108.20
21	A2	1051	G	C1'-O4'-C4'	6.84	115.37	109.90
21	A2	1104	G	N9-C1'-C2'	-6.84	104.47	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	196	A	P-O5'-C5'	-6.84	109.95	120.90
67	B1	2192	G	C5'-C4'-O4'	6.84	117.31	109.10
67	B1	2396	G	O4'-C1'-N9	6.84	113.67	108.20
24	AA	115	TYR	CG-CD2-CE2	-6.84	115.83	121.30
47	BI	122	ARG	NE-CZ-NH2	6.84	123.72	120.30
67	B1	156	A	O4'-C1'-C2'	6.84	113.76	107.60
67	B1	639	C	O4'-C1'-N1	6.84	113.67	108.20
67	B1	897	U	N1-C1'-C2'	-6.84	104.48	112.00
67	B1	1501	G	O4'-C1'-C2'	6.84	113.75	107.60
35	BL	11	LEU	CA-CB-CG	6.84	131.03	115.30
67	B1	1565	G	N9-C1'-C2'	6.84	122.89	114.00
21	A2	136	A	C3'-C2'-C1'	-6.84	96.03	101.50
21	A2	483	G	P-O3'-C3'	-6.84	111.50	119.70
21	A2	626	G	O4'-C1'-C2'	-6.84	98.96	105.80
21	A2	978	G	C1'-O4'-C4'	-6.84	104.43	109.90
27	A0	62	C	N1-C1'-C2'	6.84	122.89	114.00
67	B1	749	G	OP1-P-OP2	-6.84	109.34	119.60
67	B1	889	C	O4'-C1'-N1	6.84	113.67	108.20
67	B1	961	C	P-O3'-C3'	6.84	127.90	119.70
67	B1	1158	G	P-O3'-C3'	-6.84	111.50	119.70
67	B1	2658	G	O4'-C4'-C3'	6.84	111.57	106.10
21	A2	17	C	O4'-C1'-C2'	-6.83	98.97	105.80
21	A2	468	G	C1'-O4'-C4'	-6.83	104.43	109.90
21	A2	503	G	O4'-C1'-C2'	6.83	113.75	107.60
67	B1	513	C	N1-C1'-C2'	6.83	122.88	114.00
67	B1	1061	G	O4'-C1'-N9	6.83	113.67	108.20
21	A2	1230	G	P-O3'-C3'	-6.83	111.50	119.70
46	BA	194	ARG	NE-CZ-NH1	-6.83	116.88	120.30
67	B1	1213	G	O4'-C1'-N9	6.83	113.67	108.20
21	A2	165	U	OP2-P-O3'	6.83	120.23	105.20
67	B1	532	G	N9-C1'-C2'	-6.83	104.49	112.00
25	AH	87	ARG	NE-CZ-NH1	-6.83	116.89	120.30
61	Bd	87	GLN	CB-CA-C	6.83	124.06	110.40
67	B1	384	G	C5-C6-O6	-6.83	124.50	128.60
67	B1	1743	G	C1'-O4'-C4'	6.83	115.36	109.90
67	B1	2149	G	O4'-C1'-N9	6.83	113.66	108.20
51	Bj	31	SER	N-CA-CB	6.83	120.74	110.50
21	A2	688	C	O4'-C1'-C2'	-6.83	98.97	105.80
21	A2	840	C	N1-C1'-C2'	6.83	122.87	114.00
21	A2	1339	G	O4'-C1'-C2'	6.83	113.74	107.60
52	BB	59	ALA	N-CA-CB	6.83	119.66	110.10
54	BF	113	PHE	CB-CG-CD1	-6.83	116.02	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1462	G	N9-C1'-C2'	6.83	122.87	114.00
67	B1	2031	G	C1'-O4'-C4'	6.83	115.36	109.90
21	A2	468	G	N9-C1'-C2'	6.82	122.87	114.00
67	B1	571	G	O4'-C1'-C2'	6.82	113.74	107.60
67	B1	827	G	C3'-C2'-C1'	-6.82	96.04	101.50
67	B1	2013	A	C4'-C3'-C2'	-6.82	95.78	102.60
67	B1	2276	G	C1'-O4'-C4'	6.82	115.36	109.90
21	A2	723	G	C1'-O4'-C4'	-6.82	104.44	109.90
67	B1	1512	G	C3'-C2'-C1'	-6.82	96.04	101.50
67	B1	2416	G	P-O3'-C3'	-6.82	111.51	119.70
21	A2	1140	A	P-O3'-C3'	6.82	127.88	119.70
34	B5	32	PHE	CB-CG-CD1	6.82	125.57	120.80
46	BA	56	ARG	NE-CZ-NH1	-6.82	116.89	120.30
67	B1	94	A	C1'-O4'-C4'	6.82	115.36	109.90
67	B1	2011	U	C1'-O4'-C4'	6.82	115.36	109.90
67	B1	989	G	O4'-C1'-N9	6.82	113.66	108.20
67	B1	1752	C	C1'-O4'-C4'	-6.82	104.44	109.90
67	B1	2142	U	C3'-C2'-C1'	-6.82	96.05	101.50
21	A2	515	U	C5'-C4'-O4'	6.82	117.28	109.10
21	A2	1156	A	C1'-O4'-C4'	6.82	115.35	109.90
21	A2	1362	C	C1'-O4'-C4'	6.82	115.35	109.90
21	A2	1399	G	O4'-C1'-N9	6.82	113.65	108.20
52	BB	107	TYR	CB-CG-CD2	6.82	125.09	121.00
67	B1	1926	A	N9-C1'-C2'	6.82	122.86	114.00
67	B1	2109	C	O4'-C1'-N1	6.82	113.65	108.20
67	B1	2198	U	C3'-C2'-C1'	6.82	106.95	101.50
21	A2	1038	C	O4'-C1'-C2'	-6.82	98.98	105.80
21	A2	1082	A	O4'-C1'-N9	-6.82	102.75	108.20
21	A2	1449	G	C3'-C2'-C1'	6.82	106.95	101.50
67	B1	858	G	C3'-C2'-C1'	6.82	106.95	101.50
67	B1	1939	C	C2'-C3'-O3'	6.82	124.61	113.70
21	A2	953	C	O4'-C1'-N1	6.81	113.65	108.20
43	Bk	42	ARG	NE-CZ-NH1	6.81	123.71	120.30
67	B1	567	G	O4'-C1'-N9	6.81	113.65	108.20
67	B1	2016	C	C1'-O4'-C4'	6.81	115.35	109.90
67	B1	2144	U	P-O3'-C3'	6.81	127.88	119.70
67	B1	2834	C	C3'-C2'-C1'	-6.81	96.05	101.50
67	B1	1258	G	O4'-C1'-N9	6.81	113.65	108.20
67	B1	1800	G	C1'-O4'-C4'	-6.81	104.45	109.90
21	A2	606	U	N1-C1'-C2'	6.81	122.85	114.00
21	A2	702	G	C1'-O4'-C4'	-6.81	104.45	109.90
56	BH	19	PRO	N-CA-CB	-6.81	95.11	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	811	C	C1'-O4'-C4'	-6.81	104.45	109.90
67	B1	2154	G	P-O3'-C3'	6.81	127.87	119.70
67	B1	2316	U	O4'-C1'-N1	6.81	113.65	108.20
68	B3	98	G	O4'-C1'-C2'	-6.81	98.99	105.80
21	A2	57	G	P-O3'-C3'	6.81	127.87	119.70
21	A2	430	G	O4'-C1'-N9	6.81	113.64	108.20
67	B1	666	A	N9-C1'-C2'	6.81	122.85	114.00
67	B1	750	C	N1-C1'-C2'	6.81	122.85	114.00
67	B1	856	A	C3'-C2'-C1'	6.81	106.94	101.50
21	A2	1456	C	O4'-C1'-N1	6.80	113.64	108.20
28	B6	57	ARG	NE-CZ-NH1	-6.80	116.90	120.30
67	B1	535	G	O4'-C1'-N9	6.80	113.64	108.20
67	B1	2088	G	O4'-C1'-C2'	-6.80	99.00	105.80
68	B3	32	C	C3'-C2'-C1'	-6.80	96.06	101.50
21	A2	1087	C	C5'-C4'-C3'	6.80	126.89	116.00
21	A2	716	G	O4'-C1'-N9	6.80	113.64	108.20
67	B1	466	C	C1'-O4'-C4'	-6.80	104.46	109.90
67	B1	1296	A	C1'-O4'-C4'	-6.80	104.46	109.90
67	B1	2621	U	OP1-P-OP2	-6.80	109.40	119.60
4	AG	1	MET	CA-CB-CG	6.80	124.86	113.30
21	A2	484	U	C4'-C3'-C2'	6.80	109.40	102.60
21	A2	781	U	O4'-C1'-N1	6.80	113.64	108.20
21	A2	1360	C	C3'-C2'-C1'	6.80	106.94	101.50
67	B1	1120	C	C1'-O4'-C4'	-6.80	104.46	109.90
67	B1	1548	A	C1'-O4'-C4'	6.80	115.34	109.90
67	B1	1859	A	P-O3'-C3'	6.80	127.86	119.70
67	B1	2887	C	C3'-C2'-C1'	6.80	106.94	101.50
67	B1	2720	U	N1-C1'-C2'	-6.80	104.52	112.00
21	A2	762	G	P-O5'-C5'	-6.80	110.02	120.90
68	B3	120	C	OP1-P-OP2	-6.80	109.41	119.60
21	A2	922	G	O4'-C1'-N9	6.79	113.64	108.20
67	B1	702	G	C3'-C2'-C1'	-6.79	96.06	101.50
67	B1	800	G	N9-C1'-C2'	6.79	122.83	114.00
21	A2	1283	G	O4'-C1'-N9	6.79	113.64	108.20
67	B1	892	U	O4'-C1'-N1	6.79	113.64	108.20
19	AS	11	ARG	NE-CZ-NH2	-6.79	116.90	120.30
21	A2	733	C	C1'-O4'-C4'	-6.79	104.47	109.90
20	B4	100	ALA	N-CA-CB	6.79	119.61	110.10
67	B1	51	G	O4'-C1'-N9	-6.79	102.77	108.20
67	B1	101	G	C5'-C4'-C3'	-6.79	105.13	116.00
67	B1	1920	A	O4'-C1'-C2'	-6.79	99.01	105.80
67	B1	2398	C	C1'-O4'-C4'	-6.79	104.47	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2411	C	C1'-O4'-C4'	6.79	115.33	109.90
67	B1	2658	G	C5'-C4'-C3'	-6.79	105.13	116.00
67	B1	1654	G	C1'-O4'-C4'	6.79	115.33	109.90
21	A2	815	C	P-O3'-C3'	6.79	127.84	119.70
21	A2	1017	U	C1'-O4'-C4'	-6.79	104.47	109.90
57	BZ	51	TYR	N-CA-CB	-6.79	98.38	110.60
67	B1	423	G	C3'-C2'-C1'	-6.79	96.07	101.50
67	B1	983	G	C3'-C2'-C1'	6.79	106.93	101.50
67	B1	2025	A	O4'-C1'-N9	6.79	113.63	108.20
67	B1	2058	C	O4'-C1'-C2'	-6.79	99.01	105.80
67	B1	2933	C	C4'-C3'-C2'	-6.79	95.81	102.60
28	B6	90	ASP	CB-CG-OD2	-6.79	112.19	118.30
67	B1	1013	G	C5-C6-O6	-6.79	124.53	128.60
21	A2	151	G	C1'-O4'-C4'	6.79	115.33	109.90
21	A2	308	G	C3'-C2'-C1'	6.79	106.93	101.50
21	A2	652	C	N1-C1'-C2'	6.79	122.82	114.00
27	A0	11	C	C3'-C2'-C1'	6.79	106.93	101.50
53	BD	56	ARG	NH1-CZ-NH2	-6.79	111.94	119.40
19	AS	27	ASP	CB-CG-OD2	-6.78	112.19	118.30
67	B1	1730	C	O4'-C1'-N1	6.78	113.63	108.20
21	A2	1455	A	C1'-O4'-C4'	-6.78	104.47	109.90
21	A2	1393	A	C1'-O4'-C4'	6.78	115.33	109.90
61	Bd	21	ARG	NE-CZ-NH1	6.78	123.69	120.30
67	B1	801	A	O4'-C1'-N9	6.78	113.62	108.20
67	B1	2870	A	C5'-C4'-C3'	-6.78	105.15	116.00
68	B3	27	C	O4'-C4'-C3'	-6.78	97.22	104.00
21	A2	679	G	C1'-O4'-C4'	6.78	115.32	109.90
21	A2	6	G	O4'-C1'-N9	6.78	113.62	108.20
21	A2	476	C	O4'-C1'-N1	6.78	113.62	108.20
21	A2	1105	C	P-O3'-C3'	6.78	127.83	119.70
21	A2	1113	G	C4'-C3'-C2'	-6.78	95.82	102.60
56	BH	2	PRO	C-N-CA	-6.78	104.75	121.70
67	B1	2364	G	P-O3'-C3'	-6.78	111.57	119.70
67	B1	461	C	C1'-O4'-C4'	6.78	115.32	109.90
67	B1	1137	G	N9-C1'-C2'	6.78	122.81	114.00
67	B1	2258	A	O4'-C1'-C2'	-6.78	99.03	105.80
67	B1	2304	C	O4'-C1'-C2'	-6.77	99.03	105.80
21	A2	1297	G	C1'-O4'-C4'	6.77	115.32	109.90
67	B1	1000	G	P-O3'-C3'	6.77	127.83	119.70
67	B1	1691	U	C3'-C2'-C1'	6.77	106.92	101.50
67	B1	2233	G	P-O3'-C3'	6.77	127.83	119.70
67	B1	2307	C	O4'-C4'-C3'	-6.77	97.23	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2446	C	N1-C1'-C2'	6.77	122.80	114.00
67	B1	2999	G	O4'-C1'-N9	6.77	113.62	108.20
67	B1	2951	G	C1'-O4'-C4'	-6.77	104.48	109.90
21	A2	1145	C	C4'-C3'-C2'	-6.77	95.83	102.60
21	A2	1463	A	C3'-C2'-C1'	6.77	106.92	101.50
24	AA	101	THR	N-CA-CB	6.77	123.16	110.30
51	Bj	87	LYS	CB-CA-C	-6.77	96.86	110.40
67	B1	64	A	N9-C1'-C2'	-6.77	104.55	112.00
67	B1	191	U	P-O3'-C3'	6.77	127.82	119.70
67	B1	456	G	C1'-O4'-C4'	-6.77	104.48	109.90
67	B1	505	A	N9-C1'-C2'	-6.77	104.55	112.00
67	B1	2037	A	C4'-C3'-C2'	6.77	109.37	102.60
67	B1	2585	G	C1'-O4'-C4'	-6.77	104.48	109.90
67	B1	2890	A	C5'-C4'-O4'	6.77	117.22	109.10
21	A2	765	U	P-O5'-C5'	6.77	131.73	120.90
21	A2	1321	U	C1'-O4'-C4'	6.77	115.31	109.90
35	BL	48	THR	O-C-N	-6.77	111.87	122.70
67	B1	2023	A	O4'-C1'-C2'	-6.77	99.03	105.80
67	B1	2967	C	C4'-C3'-C2'	-6.77	95.83	102.60
67	B1	3028	U	P-O3'-C3'	-6.77	111.58	119.70
21	A2	548	A	O4'-C1'-N9	-6.77	102.79	108.20
27	A0	63	G	C1'-O4'-C4'	-6.77	104.49	109.90
34	B5	32	PHE	CB-CG-CD2	-6.77	116.06	120.80
52	BB	179	TYR	CB-CG-CD2	-6.77	116.94	121.00
67	B1	946	U	P-O3'-C3'	6.77	127.82	119.70
7	AB	5	TYR	CB-CG-CD1	6.76	125.06	121.00
21	A2	553	C	N1-C1'-C2'	6.76	122.79	114.00
21	A2	1237	G	C3'-C2'-C1'	-6.76	96.09	101.50
67	B1	75	G	P-O5'-C5'	6.76	131.72	120.90
67	B1	187	C	C1'-O4'-C4'	-6.76	104.49	109.90
21	A2	727	G	N9-C1'-C2'	-6.76	104.56	112.00
32	BO	97	ALA	CB-CA-C	-6.76	99.96	110.10
61	Bd	5	TYR	CB-CG-CD2	-6.76	116.94	121.00
67	B1	1935	C	O4'-C1'-N1	6.76	113.61	108.20
67	B1	2446	C	C3'-C2'-C1'	6.76	106.91	101.50
21	A2	1228	A	C3'-C2'-C1'	6.76	106.91	101.50
48	BR	23	ARG	NE-CZ-NH2	-6.76	116.92	120.30
67	B1	120	G	C1'-O4'-C4'	-6.76	104.49	109.90
21	A2	1478	A	N9-C1'-C2'	6.76	122.79	114.00
27	A0	42	G	P-O3'-C3'	6.76	127.81	119.70
21	A2	1369	C	C3'-C2'-C1'	6.76	106.91	101.50
43	Bk	36	TYR	CB-CG-CD1	-6.76	116.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	222	A	N9-C1'-C2'	6.76	122.78	114.00
67	B1	562	G	C3'-C2'-C1'	-6.76	96.10	101.50
21	A2	1426	C	O4'-C1'-C2'	6.75	113.68	107.60
25	AH	94	ASN	O-C-N	6.75	133.51	122.70
67	B1	316	G	C5-C6-O6	-6.75	124.55	128.60
67	B1	441	A	C1'-O4'-C4'	-6.75	104.50	109.90
67	B1	738	C	C1'-O4'-C4'	-6.75	104.50	109.90
67	B1	2389	C	C3'-C2'-C1'	6.75	106.90	101.50
67	B1	641	G	P-O3'-C3'	6.75	127.80	119.70
67	B1	701	G	C3'-C2'-C1'	-6.75	96.10	101.50
67	B1	2126	G	N9-C1'-C2'	-6.75	104.57	112.00
21	A2	1241	U	P-O3'-C3'	6.75	127.80	119.70
67	B1	2104	G	O4'-C1'-C2'	-6.75	99.05	105.80
21	A2	108	G	C3'-C2'-C1'	-6.75	96.10	101.50
56	BH	71	PRO	CA-N-CD	-6.75	102.05	111.50
67	B1	479	G	O4'-C1'-N9	6.75	113.60	108.20
67	B1	936	G	C3'-C2'-C1'	6.75	106.90	101.50
15	AE	162	TYR	CB-CG-CD1	6.75	125.05	121.00
21	A2	1400	A	O4'-C1'-C2'	-6.75	99.05	105.80
33	BC	292	ASN	CB-CA-C	6.75	123.89	110.40
57	BZ	55	LEU	CB-CG-CD2	6.75	122.47	111.00
67	B1	246	A	N9-C1'-C2'	-6.75	104.58	112.00
67	B1	957	C	O4'-C1'-C2'	-6.75	99.05	105.80
67	B1	2370	C	N1-C1'-C2'	-6.75	104.58	112.00
67	B1	2589	C	C4'-C3'-C2'	6.75	109.35	102.60
22	AY	33	ASP	CB-CG-OD1	-6.75	112.23	118.30
67	B1	1515	G	O4'-C1'-N9	6.75	113.60	108.20
21	A2	28	U	P-O3'-C3'	-6.74	111.61	119.70
21	A2	665	G	O4'-C1'-C2'	6.74	113.67	107.60
21	A2	1183	C	O4'-C1'-C2'	-6.74	99.06	105.80
21	A2	1401	U	O4'-C1'-N1	6.74	113.59	108.20
26	AP	12	ARG	NE-CZ-NH2	-6.74	116.93	120.30
67	B1	411	U	C1'-O4'-C4'	6.74	115.29	109.90
67	B1	642	G	C3'-C2'-C1'	-6.74	96.11	101.50
67	B1	1386	G	O4'-C1'-C2'	6.74	113.67	107.60
67	B1	286	G	C1'-O4'-C4'	6.74	115.29	109.90
67	B1	2082	C	O4'-C1'-C2'	-6.74	99.06	105.80
21	A2	432	G	C5-C6-O6	-6.74	124.56	128.60
21	A2	459	G	C5-C6-O6	-6.74	124.56	128.60
53	BD	87	ARG	NH1-CZ-NH2	6.74	126.81	119.40
67	B1	1665	G	P-O3'-C3'	6.74	127.79	119.70
21	A2	547	U	P-O3'-C3'	-6.74	111.61	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1556	G	C4'-C3'-C2'	-6.74	95.86	102.60
21	A2	1256	C	O4'-C1'-C2'	-6.74	99.06	105.80
21	A2	1463	A	O4'-C1'-C2'	-6.74	99.06	105.80
67	B1	1887	A	O4'-C1'-C2'	-6.74	99.06	105.80
21	A2	587	G	C5-C6-O6	-6.74	124.56	128.60
21	A2	944	C	N1-C1'-C2'	6.74	122.75	114.00
67	B1	1236	C	N1-C1'-C2'	-6.74	104.59	112.00
67	B1	1360	G	O4'-C1'-N9	6.74	113.59	108.20
21	A2	223	G	C3'-C2'-C1'	-6.73	96.11	101.50
67	B1	1959	C	C4'-C3'-C2'	-6.73	95.87	102.60
67	B1	2435	G	O4'-C1'-N9	6.73	113.59	108.20
67	B1	204	G	C1'-O4'-C4'	6.73	115.29	109.90
67	B1	413	A	O4'-C1'-C2'	-6.73	99.07	105.80
68	B3	30	G	O4'-C4'-C3'	-6.73	97.27	104.00
21	A2	814	C	C1'-O4'-C4'	-6.73	104.52	109.90
21	A2	1205	G	N9-C1'-C2'	-6.73	104.60	112.00
24	AA	97	ARG	NE-CZ-NH1	-6.73	116.94	120.30
58	BP	19	ARG	NE-CZ-NH2	-6.73	116.94	120.30
67	B1	803	A	C3'-C2'-C1'	6.73	106.88	101.50
67	B1	1080	G	O4'-C1'-C2'	-6.73	99.07	105.80
67	B1	2458	U	C5'-C4'-O4'	6.73	117.18	109.10
21	A2	681	G	O4'-C1'-C2'	-6.73	99.07	105.80
21	A2	1111	G	N9-C1'-C2'	-6.73	104.60	112.00
67	B1	232	U	O4'-C1'-C2'	-6.73	99.07	105.80
21	A2	330	U	C3'-C2'-C1'	6.73	106.88	101.50
21	A2	1275	U	N1-C1'-C2'	6.73	122.75	114.00
25	AH	78	HIS	N-CA-C	6.73	129.17	111.00
59	BM	75	ARG	NE-CZ-NH2	-6.73	116.94	120.30
67	B1	456	G	P-O3'-C3'	-6.73	111.63	119.70
67	B1	1034	G	C1'-O4'-C4'	-6.73	104.52	109.90
67	B1	2090	A	P-O3'-C3'	-6.73	111.63	119.70
21	A2	930	G	C1'-O4'-C4'	-6.73	104.52	109.90
21	A2	992	G	N9-C1'-C2'	6.73	122.74	114.00
21	A2	1046	G	N9-C1'-C2'	-6.73	104.60	112.00
21	A2	1384	G	O4'-C1'-N9	6.73	113.58	108.20
67	B1	2089	C	N1-C1'-C2'	6.73	122.74	114.00
18	AF	12	VAL	C-N-CA	6.72	138.51	121.70
21	A2	284	A	P-O3'-C3'	-6.72	111.63	119.70
67	B1	1692	A	C5'-C4'-O4'	6.72	117.17	109.10
67	B1	1815	C	O4'-C1'-N1	6.72	113.58	108.20
68	B3	26	C	P-O3'-C3'	6.72	127.77	119.70
21	A2	1258	C	O4'-C1'-N1	6.72	113.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1227	A	C1'-O4'-C4'	6.72	115.28	109.90
67	B1	1317	G	O3'-P-O5'	-6.72	91.23	104.00
21	A2	462	A	OP2-P-O3'	6.72	119.99	105.20
21	A2	1051	G	O4'-C4'-C3'	-6.72	97.28	104.00
25	AH	81	VAL	CB-CA-C	-6.72	98.63	111.40
67	B1	1340	G	N9-C1'-C2'	6.72	122.73	114.00
67	B1	2881	G	O4'-C1'-C2'	6.72	113.65	107.60
21	A2	585	U	O4'-C1'-N1	6.72	113.58	108.20
46	BA	107	PHE	CG-CD1-CE1	6.72	128.19	120.80
67	B1	39	C	O4'-C1'-C2'	-6.72	99.08	105.80
67	B1	2192	G	C1'-O4'-C4'	-6.72	104.53	109.90
67	B1	2317	G	O4'-C1'-C2'	6.72	113.65	107.60
36	Bf	34	ARG	NE-CZ-NH2	-6.72	116.94	120.30
67	B1	1245	C	C2'-C3'-O3'	6.72	124.45	113.70
67	B1	1402	C	N1-C1'-C2'	6.72	122.73	114.00
67	B1	2174	G	P-O3'-C3'	6.72	127.76	119.70
67	B1	2695	U	C1'-O4'-C4'	-6.72	104.53	109.90
21	A2	1138	G	O4'-C1'-N9	6.71	113.57	108.20
33	BC	6	ARG	NE-CZ-NH2	-6.71	116.94	120.30
62	BN	161	TYR	CZ-CE2-CD2	6.71	125.84	119.80
67	B1	2882	G	C3'-C2'-C1'	-6.71	96.13	101.50
67	B1	2978	G	C3'-C2'-C1'	6.71	106.87	101.50
67	B1	1049	U	N1-C1'-C2'	-6.71	104.62	112.00
21	A2	488	A	O4'-C1'-N9	-6.71	102.83	108.20
29	AL	5	ARG	NE-CZ-NH2	-6.71	116.94	120.30
67	B1	239	G	C3'-C2'-C1'	-6.71	96.13	101.50
21	A2	952	A	P-O5'-C5'	6.71	131.64	120.90
67	B1	108	G	C1'-O4'-C4'	-6.71	104.53	109.90
21	A2	509	C	N1-C1'-C2'	6.71	122.72	114.00
67	B1	1294	A	P-O3'-C3'	6.71	127.75	119.70
67	B1	1353	A	O4'-C1'-N9	6.71	113.57	108.20
67	B1	1390	U	N1-C1'-C2'	-6.71	104.62	112.00
67	B1	2363	G	C3'-C2'-C1'	6.71	106.87	101.50
11	A1	4	G	N9-C1'-C2'	-6.71	104.62	112.00
64	Bc	17	GLN	CA-CB-CG	6.71	128.16	113.40
67	B1	104	C	C3'-C2'-C1'	6.71	106.86	101.50
67	B1	621	G	P-O3'-C3'	6.71	127.75	119.70
67	B1	1435	G	C1'-O4'-C4'	-6.71	104.53	109.90
67	B1	2329	A	P-O3'-C3'	6.71	127.75	119.70
67	B1	2465	A	C3'-C2'-C1'	6.71	106.86	101.50
67	B1	2962	A	O4'-C1'-C2'	6.71	113.64	107.60
21	A2	700	G	C1'-O4'-C4'	-6.71	104.54	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1493	C	O4'-C1'-N1	6.71	113.56	108.20
45	Bi	16	ARG	C-N-CA	6.71	138.46	121.70
67	B1	2278	U	C1'-O4'-C4'	6.71	115.26	109.90
11	A1	69	G	OP1-P-OP2	-6.70	109.54	119.60
12	AN	20	ARG	NE-CZ-NH2	-6.70	116.95	120.30
30	AU	128	PHE	CB-CG-CD1	6.70	125.49	120.80
67	B1	1710	C	P-O5'-C5'	6.70	131.62	120.90
67	B1	1855	G	C3'-C2'-C1'	6.70	106.86	101.50
67	B1	2026	C	C1'-O4'-C4'	-6.70	104.54	109.90
67	B1	2869	U	N1-C1'-C2'	6.70	122.71	114.00
8	AR	66	ARG	NE-CZ-NH2	-6.70	116.95	120.30
21	A2	1345	G	P-O3'-C3'	-6.70	111.66	119.70
10	AD	175	LYS	N-CA-CB	6.70	122.66	110.60
25	AH	215	ARG	NE-CZ-NH1	6.70	123.65	120.30
10	AD	57	ARG	NE-CZ-NH1	-6.70	116.95	120.30
21	A2	253	G	C1'-O4'-C4'	6.70	115.26	109.90
59	BM	47	ARG	NH1-CZ-NH2	6.70	126.77	119.40
67	B1	2571	G	O4'-C1'-C2'	-6.70	99.10	105.80
21	A2	152	G	O4'-C1'-N9	6.70	113.56	108.20
67	B1	2293	G	C4'-C3'-C2'	-6.70	95.90	102.60
7	AB	188	PHE	CB-CG-CD1	-6.70	116.11	120.80
21	A2	13	C	P-O3'-C3'	-6.70	111.67	119.70
21	A2	390	G	C3'-C2'-C1'	-6.70	96.14	101.50
21	A2	577	C	P-O3'-C3'	-6.70	111.67	119.70
21	A2	885	G	O4'-C1'-C2'	6.70	113.63	107.60
21	A2	1187	A	O4'-C1'-C2'	-6.70	99.11	105.80
21	A2	1303	C	C3'-C2'-C1'	6.70	106.86	101.50
67	B1	1133	U	C3'-C2'-C1'	6.70	106.86	101.50
21	A2	1468	A	C3'-C2'-C1'	6.69	106.86	101.50
67	B1	1801	C	C3'-C2'-C1'	6.69	106.86	101.50
67	B1	406	G	O5'-C5'-C4'	6.69	124.42	111.70
67	B1	746	C	O4'-C1'-N1	6.69	113.56	108.20
21	A2	19	G	O4'-C1'-N9	6.69	113.55	108.20
27	A0	73	G	C1'-O4'-C4'	-6.69	104.55	109.90
67	B1	145	C	O4'-C1'-N1	6.69	113.55	108.20
67	B1	1739	U	C1'-O4'-C4'	-6.69	104.55	109.90
67	B1	2336	G	C1'-O4'-C4'	-6.69	104.55	109.90
67	B1	2526	G	C1'-O4'-C4'	6.69	115.25	109.90
6	AC	119	ALA	N-CA-CB	6.69	119.47	110.10
21	A2	728	G	O4'-C1'-C2'	6.69	113.62	107.60
49	BQ	76	ARG	NE-CZ-NH2	-6.69	116.95	120.30
67	B1	809	A	O4'-C4'-C3'	-6.69	97.31	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1534	G	C3'-C2'-C1'	-6.69	96.15	101.50
67	B1	2276	G	O4'-C1'-N9	6.69	113.55	108.20
21	A2	234	G	P-O3'-C3'	-6.69	111.68	119.70
21	A2	573	C	N1-C1'-C2'	6.69	122.69	114.00
21	A2	916	U	O4'-C1'-N1	6.69	113.55	108.20
67	B1	2119	C	C3'-C2'-C1'	6.69	106.85	101.50
21	A2	264	C	C3'-C2'-C1'	6.68	106.85	101.50
21	A2	373	C	P-O5'-C5'	6.68	131.59	120.90
67	B1	458	U	C1'-O4'-C4'	-6.68	104.55	109.90
67	B1	1878	G	C5-C6-O6	-6.68	124.59	128.60
67	B1	2817	U	O4'-C1'-N1	6.68	113.55	108.20
21	A2	1005	G	O4'-C1'-N9	6.68	113.55	108.20
67	B1	117	A	O4'-C1'-N9	-6.68	102.86	108.20
67	B1	546	C	O4'-C1'-C2'	-6.68	99.12	105.80
67	B1	1032	C	C3'-C2'-C1'	6.68	106.85	101.50
67	B1	1645	U	C1'-O4'-C4'	6.68	115.25	109.90
21	A2	852	G	O4'-C1'-C2'	6.68	113.61	107.60
51	Bj	17	HIS	CA-CB-CG	-6.68	102.25	113.60
67	B1	1398	C	C3'-C2'-C1'	6.68	106.84	101.50
67	B1	2246	G	C1'-O4'-C4'	-6.68	104.56	109.90
21	A2	176	U	C5'-C4'-O4'	-6.68	101.09	109.10
67	B1	1182	C	P-O3'-C3'	6.68	127.71	119.70
67	B1	1634	A	C4'-C3'-C2'	-6.68	95.92	102.60
67	B1	1903	G	C1'-O4'-C4'	6.68	115.24	109.90
66	B1	17	ARG	NE-CZ-NH2	-6.68	116.96	120.30
67	B1	1307	C	O4'-C1'-N1	6.68	113.54	108.20
21	A2	446	G	C5-C6-O6	-6.67	124.59	128.60
21	A2	880	G	C1'-O4'-C4'	-6.67	104.56	109.90
67	B1	534	G	O4'-C1'-N9	6.67	113.54	108.20
21	A2	691	G	N9-C1'-C2'	6.67	122.67	114.00
67	B1	382	G	C5-C6-O6	-6.67	124.60	128.60
14	AM	65	ARG	O-C-N	-6.67	112.03	122.70
21	A2	290	C	C1'-O4'-C4'	6.67	115.24	109.90
21	A2	602	G	C3'-C2'-C1'	-6.67	96.16	101.50
21	A2	662	C	C1'-O4'-C4'	6.67	115.24	109.90
21	A2	1033	G	O4'-C1'-C2'	-6.67	99.13	105.80
67	B1	488	A	O4'-C1'-N9	6.67	113.54	108.20
67	B1	325	G	P-O3'-C3'	-6.67	111.70	119.70
21	A2	622	C	O4'-C1'-N1	6.67	113.53	108.20
46	BA	154	ARG	NE-CZ-NH2	6.67	123.64	120.30
67	B1	980	G	OP1-P-O3'	6.67	119.87	105.20
67	B1	1036	C	C3'-C2'-C1'	6.67	106.83	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1409	U	O4'-C1'-N1	6.67	113.53	108.20
67	B1	2154	G	C3'-C2'-C1'	6.67	106.83	101.50
67	B1	2312	U	OP2-P-O3'	6.67	119.87	105.20
21	A2	513	A	O4'-C1'-C2'	-6.67	99.13	105.80
21	A2	744	A	C1'-O4'-C4'	6.67	115.23	109.90
21	A2	696	G	N9-C1'-C2'	6.67	122.66	114.00
67	B1	2932	C	O4'-C1'-C2'	-6.67	99.14	105.80
67	B1	580	G	O4'-C4'-C3'	-6.66	97.34	104.00
67	B1	1086	U	C5'-C4'-C3'	6.66	126.66	116.00
67	B1	1173	G	C1'-O4'-C4'	-6.66	104.57	109.90
4	AG	46	ASN	N-CA-CB	6.66	122.59	110.60
21	A2	704	C	O4'-C1'-N1	6.66	113.53	108.20
67	B1	524	C	P-O3'-C3'	-6.66	111.71	119.70
67	B1	1127	C	OP1-P-OP2	-6.66	109.61	119.60
67	B1	1960	U	P-O5'-C5'	6.66	131.56	120.90
67	B1	2712	G	C3'-C2'-C1'	6.66	106.83	101.50
67	B1	482	A	O4'-C1'-N9	6.66	113.53	108.20
67	B1	2043	A	C1'-O4'-C4'	6.66	115.23	109.90
67	B1	2277	G	O4'-C1'-N9	6.66	113.53	108.20
21	A2	1442	G	O4'-C1'-C2'	6.66	113.59	107.60
20	B4	94	VAL	CA-CB-CG1	6.66	120.88	110.90
67	B1	1666	G	N9-C1'-C2'	6.66	122.65	114.00
67	B1	2625	C	C3'-C2'-C1'	6.66	106.83	101.50
21	A2	1132	C	O4'-C1'-N1	6.65	113.52	108.20
21	A2	1155	U	O4'-C1'-N1	-6.65	102.88	108.20
67	B1	285	C	C5'-C4'-C3'	6.65	126.64	116.00
67	B1	1962	G	C1'-O4'-C4'	-6.65	104.58	109.90
67	B1	2109	C	C1'-O4'-C4'	6.65	115.22	109.90
67	B1	2254	U	N1-C1'-C2'	6.65	122.65	114.00
27	A0	56	C	C4'-C3'-C2'	6.65	109.25	102.60
43	Bk	55	SER	N-CA-CB	6.65	120.47	110.50
51	Bj	55	PRO	CA-N-CD	-6.65	102.19	111.50
20	B4	1	MET	CG-SD-CE	-6.65	89.56	100.20
67	B1	1088	G	O4'-C1'-N9	6.65	113.52	108.20
67	B1	2064	U	C4'-C3'-C2'	6.65	109.25	102.60
67	B1	2645	C	O4'-C1'-C2'	-6.65	99.15	105.80
60	BS	17	MET	N-CA-CB	6.65	122.57	110.60
67	B1	672	C	O4'-C1'-N1	6.65	113.52	108.20
67	B1	2898	G	P-O3'-C3'	-6.65	111.72	119.70
34	BK	46	ARG	NE-CZ-NH1	6.65	123.62	120.30
67	B1	77	C	N1-C1'-C2'	6.65	122.64	114.00
67	B1	1010	G	C5-C6-O6	-6.65	124.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1550	C	P-O5'-C5'	6.65	131.54	120.90
21	A2	114	A	C1'-O4'-C4'	-6.65	104.58	109.90
21	A2	347	G	P-O3'-C3'	6.65	127.67	119.70
54	BF	133	ARG	NE-CZ-NH1	6.65	123.62	120.30
21	A2	425	C	O4'-C4'-C3'	-6.64	97.36	104.00
21	A2	972	C	P-O5'-C5'	6.64	131.53	120.90
21	A2	1092	G	O4'-C1'-N9	6.64	113.52	108.20
67	B1	2156	A	O4'-C1'-N9	6.64	113.52	108.20
67	B1	2243	G	P-O3'-C3'	6.64	127.67	119.70
21	A2	228	G	N9-C1'-C2'	-6.64	104.69	112.00
67	B1	273	G	O3'-P-O5'	6.64	116.62	104.00
67	B1	2306	C	C1'-O4'-C4'	-6.64	104.59	109.90
21	A2	1262	U	C3'-C2'-C1'	-6.64	96.19	101.50
67	B1	708	A	N9-C1'-C2'	6.64	122.63	114.00
67	B1	1374	G	O4'-C1'-C2'	6.64	113.58	107.60
21	A2	335	G	N9-C1'-C2'	6.64	122.63	114.00
21	A2	382	G	C1'-O4'-C4'	6.64	115.21	109.90
21	A2	1141	G	C3'-C2'-C1'	-6.64	96.19	101.50
67	B1	1134	A	N9-C1'-C2'	6.64	122.63	114.00
67	B1	1305	C	C3'-C2'-C1'	6.64	106.81	101.50
67	B1	1896	U	O4'-C1'-C2'	-6.64	99.16	105.80
21	A2	248	U	C3'-C2'-C1'	6.64	106.81	101.50
38	Bb	39	LYS	N-CA-CB	6.64	122.55	110.60
67	B1	614	G	C1'-O4'-C4'	-6.64	104.59	109.90
67	B1	2839	A	O4'-C1'-C2'	-6.64	99.16	105.80
67	B1	3035	C	C1'-O4'-C4'	6.64	115.21	109.90
21	A2	442	C	C3'-C2'-C1'	6.64	106.81	101.50
67	B1	2283	C	P-O3'-C3'	6.64	127.66	119.70
67	B1	2950	G	O4'-C1'-N9	6.64	113.51	108.20
11	A1	7	G	C1'-O4'-C4'	6.63	115.21	109.90
21	A2	5	C	P-O3'-C3'	-6.63	111.74	119.70
21	A2	1125	C	C3'-C2'-C1'	6.63	106.81	101.50
67	B1	35	G	O4'-C1'-N9	6.63	113.51	108.20
67	B1	1077	G	C5'-C4'-C3'	-6.63	105.39	116.00
6	AC	16	LEU	CB-CA-C	-6.63	97.60	110.20
21	A2	377	A	C1'-O4'-C4'	6.63	115.21	109.90
67	B1	1995	C	N1-C1'-C2'	6.63	122.62	114.00
67	B1	2482	G	C3'-C2'-C1'	6.63	106.81	101.50
21	A2	875	G	O4'-C1'-N9	6.63	113.50	108.20
20	BG	97	ALA	N-CA-CB	6.63	119.38	110.10
67	B1	347	G	N9-C1'-C2'	6.63	122.61	114.00
67	B1	2243	G	C3'-C2'-C1'	-6.63	96.20	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2558	U	P-O3'-C3'	-6.63	111.75	119.70
67	B1	2733	A	P-O5'-C5'	6.63	131.50	120.90
7	AB	96	PHE	CB-CG-CD1	-6.62	116.16	120.80
21	A2	343	G	N9-C1'-C2'	-6.62	104.71	112.00
21	A2	715	C	N1-C1'-C2'	6.62	122.61	114.00
21	A2	1295	C	P-O3'-C3'	6.62	127.65	119.70
29	AL	43	LYS	N-CA-C	-6.62	93.11	111.00
62	BN	22	TYR	CB-CG-CD1	-6.62	117.03	121.00
67	B1	496	A	N9-C1'-C2'	-6.62	104.72	112.00
67	B1	1007	U	O4'-C1'-N1	6.62	113.50	108.20
21	A2	1180	G	C3'-C2'-C1'	6.62	106.80	101.50
67	B1	2272	G	N9-C1'-C2'	6.62	122.61	114.00
35	BL	42	ARG	O-C-N	6.62	133.29	122.70
67	B1	1005	G	C5-C6-O6	-6.62	124.63	128.60
67	B1	1185	A	C4'-C3'-C2'	-6.62	95.98	102.60
67	B1	1949	A	O4'-C1'-N9	6.62	113.50	108.20
67	B1	2382	A	O4'-C1'-N9	6.62	113.50	108.20
21	A2	798	U	N1-C1'-C2'	-6.62	104.72	112.00
21	A2	1468	A	C1'-O4'-C4'	6.62	115.19	109.90
68	B3	101	A	N9-C1'-C2'	6.62	122.61	114.00
68	B3	106	G	C3'-C2'-C1'	-6.62	96.20	101.50
11	A1	7	G	P-O3'-C3'	6.62	127.64	119.70
33	BC	303	ILE	O-C-N	6.62	133.29	122.70
67	B1	1574	A	C5'-C4'-O4'	6.62	117.04	109.10
67	B1	1979	G	C1'-O4'-C4'	-6.62	104.61	109.90
21	A2	2	U	O4'-C1'-N1	6.62	113.49	108.20
25	AH	85	PHE	CA-C-N	6.62	131.75	117.20
27	A0	69	C	P-O3'-C3'	6.62	127.64	119.70
21	A2	1293	A	O4'-C1'-N9	6.61	113.49	108.20
67	B1	550	A	C1'-O4'-C4'	6.61	115.19	109.90
67	B1	1950	G	O4'-C1'-N9	6.61	113.49	108.20
11	A1	49	C	C3'-C2'-C1'	-6.61	96.21	101.50
21	A2	441	U	C3'-C2'-C1'	6.61	106.79	101.50
21	A2	803	C	C3'-C2'-C1'	6.61	106.79	101.50
67	B1	1340	G	O4'-C1'-N9	6.61	113.49	108.20
67	B1	2421	A	N9-C1'-C2'	6.61	122.59	114.00
68	B3	18	G	C4'-C3'-C2'	-6.61	95.99	102.60
21	A2	442	C	O4'-C1'-C2'	-6.61	99.19	105.80
21	A2	800	G	N9-C1'-C2'	6.61	122.59	114.00
21	A2	1093	C	N1-C1'-C2'	-6.61	104.73	112.00
38	Bb	8	ARG	NE-CZ-NH2	-6.61	117.00	120.30
68	B3	22	C	C1'-O4'-C4'	6.61	115.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	43	A	C4'-C3'-C2'	-6.61	95.99	102.60
21	A2	1418	G	N9-C1'-C2'	6.61	122.59	114.00
21	A2	408	C	C1'-O4'-C4'	6.61	115.19	109.90
21	A2	946	G	C3'-C2'-C1'	-6.61	96.22	101.50
21	A2	987	G	C5-C6-O6	-6.61	124.64	128.60
37	BU	39	TYR	CB-CG-CD1	-6.61	117.04	121.00
39	Be	50	ARG	NE-CZ-NH1	6.61	123.60	120.30
67	B1	22	C	O4'-C1'-N1	6.61	113.49	108.20
67	B1	377	C	O4'-C1'-N1	6.61	113.49	108.20
67	B1	549	G	C3'-C2'-C1'	6.61	106.78	101.50
67	B1	2670	U	O4'-C1'-C2'	-6.61	99.19	105.80
67	B1	2974	U	O5'-P-OP1	-6.61	99.75	105.70
68	B3	69	C	N1-C1'-C2'	6.61	122.59	114.00
67	B1	1064	G	C3'-C2'-C1'	-6.61	96.22	101.50
67	B1	1857	A	O4'-C1'-C2'	6.61	113.54	107.60
67	B1	2918	G	O4'-C1'-N9	6.61	113.48	108.20
21	A2	200	G	C3'-C2'-C1'	6.60	106.78	101.50
21	A2	681	G	N9-C1'-C2'	-6.60	104.73	112.00
21	A2	702	G	O3'-P-O5'	-6.60	91.45	104.00
67	B1	1218	C	O3'-P-O5'	-6.60	91.45	104.00
23	AT	8	TYR	CD1-CG-CD2	6.60	125.16	117.90
27	A0	43	G	C1'-O4'-C4'	-6.60	104.62	109.90
67	B1	781	C	N1-C1'-C2'	6.60	122.58	114.00
67	B1	1302	G	O4'-C1'-N9	6.60	113.48	108.20
67	B1	1923	A	C4'-C3'-C2'	-6.60	96.00	102.60
67	B1	2807	C	N1-C1'-C2'	6.60	122.58	114.00
11	A1	58	A	C3'-C2'-C1'	6.60	106.78	101.50
21	A2	679	G	O4'-C1'-C2'	-6.60	99.20	105.80
67	B1	2164	G	C5-C6-O6	-6.60	124.64	128.60
3	AI	32	LYS	CB-CA-C	-6.60	97.20	110.40
24	AA	107	PHE	CB-CG-CD2	-6.60	116.18	120.80
49	BQ	121	ARG	NH1-CZ-NH2	6.60	126.66	119.40
67	B1	332	A	P-O3'-C3'	6.60	127.62	119.70
67	B1	475	U	C1'-O4'-C4'	6.60	115.18	109.90
67	B1	2139	A	C4-C5-C6	6.60	120.30	117.00
67	B1	2314	U	C3'-C2'-C1'	6.60	106.78	101.50
21	A2	828	U	C3'-C2'-C1'	6.60	106.78	101.50
67	B1	186	A	C3'-C2'-C1'	6.60	106.78	101.50
67	B1	2986	G	O4'-C1'-C2'	-6.60	99.20	105.80
25	AH	42	ARG	NE-CZ-NH1	6.60	123.60	120.30
60	BS	19	ARG	NE-CZ-NH1	6.60	123.60	120.30
67	B1	1386	G	OP1-P-OP2	-6.60	109.71	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	834	C	O4'-C1'-N1	6.59	113.47	108.20
67	B1	2066	C	C3'-C2'-C1'	6.59	106.78	101.50
67	B1	3021	C	C3'-C2'-C1'	6.59	106.77	101.50
21	A2	742	U	N1-C1'-C2'	6.59	122.57	114.00
21	A2	830	A	N9-C1'-C2'	6.59	122.57	114.00
67	B1	2641	C	C3'-C2'-C1'	6.59	106.77	101.50
67	B1	358	C	O4'-C1'-N1	6.59	113.47	108.20
21	A2	1199	A	OP1-P-OP2	-6.59	109.72	119.60
33	BC	208	ARG	NE-CZ-NH1	6.59	123.59	120.30
67	B1	2896	G	O4'-C1'-N9	6.59	113.47	108.20
67	B1	2991	C	C1'-O4'-C4'	-6.59	104.63	109.90
67	B1	150	G	C3'-C2'-C1'	-6.58	96.23	101.50
67	B1	1281	A	C4'-C3'-C2'	-6.58	96.02	102.60
67	B1	1312	C	O4'-C1'-N1	6.58	113.47	108.20
21	A2	165	U	N1-C1'-C2'	6.58	122.56	114.00
21	A2	881	G	O4'-C1'-N9	6.58	113.47	108.20
21	A2	968	C	O4'-C1'-N1	6.58	113.47	108.20
62	BN	165	TYR	CZ-CE2-CD2	6.58	125.72	119.80
67	B1	535	G	N9-C1'-C2'	-6.58	104.76	112.00
4	AG	33	ARG	NE-CZ-NH2	-6.58	117.01	120.30
15	AE	223	PHE	CB-CG-CD2	-6.58	116.19	120.80
21	A2	260	C	C3'-C2'-C1'	6.58	106.77	101.50
61	Bd	16	ARG	CA-CB-CG	-6.58	98.92	113.40
67	B1	1210	G	O4'-C1'-N9	6.58	113.47	108.20
67	B1	1433	C	O4'-C1'-C2'	-6.58	99.22	105.80
67	B1	1547	U	C4'-C3'-C2'	-6.58	96.02	102.60
67	B1	2097	G	N9-C1'-C2'	6.58	122.56	114.00
67	B1	2415	C	P-O5'-C5'	6.58	131.43	120.90
21	A2	1060	G	C4'-C3'-C2'	-6.58	96.02	102.60
2	AK	135	ARG	NE-CZ-NH2	-6.58	117.01	120.30
12	AN	11	PHE	CB-CG-CD1	6.58	125.41	120.80
21	A2	777	G	C1'-O4'-C4'	6.58	115.16	109.90
21	A2	1309	A	C1'-O4'-C4'	6.58	115.16	109.90
27	A0	74	C	C4'-C3'-C2'	-6.58	96.02	102.60
30	AU	91	TYR	CB-CG-CD2	-6.58	117.05	121.00
61	Bd	1	MET	CG-SD-CE	-6.58	89.67	100.20
67	B1	1626	A	C5'-C4'-C3'	6.58	126.53	116.00
8	AR	24	HIS	O-C-N	-6.58	112.02	123.20
25	AH	85	PHE	CA-C-O	-6.58	106.29	120.10
47	BI	125	ARG	NE-CZ-NH1	6.58	123.59	120.30
67	B1	408	C	C5'-C4'-O4'	-6.58	101.21	109.10
21	A2	742	U	O4'-C1'-N1	6.58	113.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1241	U	C1'-O4'-C4'	6.58	115.16	109.90
39	Be	8	PHE	CB-CG-CD1	6.58	125.40	120.80
67	B1	684	G	C1'-O4'-C4'	-6.58	104.64	109.90
67	B1	948	C	O4'-C1'-C2'	-6.58	99.22	105.80
21	A2	525	A	O4'-C1'-C2'	-6.57	99.23	105.80
21	A2	798	U	C5'-C4'-O4'	6.57	116.99	109.10
21	A2	967	C	C1'-O4'-C4'	-6.57	104.64	109.90
67	B1	145	C	N3-C4-N4	6.57	122.60	118.00
67	B1	1184	U	C4'-C3'-C2'	-6.57	96.03	102.60
67	B1	1566	G	C5'-C4'-C3'	6.57	126.52	116.00
67	B1	2049	U	O4'-C1'-C2'	-6.57	99.23	105.80
67	B1	3010	C	C3'-C2'-C1'	6.57	106.76	101.50
21	A2	260	C	O4'-C1'-C2'	-6.57	99.23	105.80
21	A2	1226	G	O4'-C1'-N9	6.57	113.46	108.20
67	B1	851	G	C1'-O4'-C4'	-6.57	104.64	109.90
67	B1	1276	G	P-O3'-C3'	6.57	127.59	119.70
67	B1	1907	G	C1'-O4'-C4'	-6.57	104.64	109.90
2	AK	102	TYR	CB-CG-CD1	6.57	124.94	121.00
67	B1	1203	C	C3'-C2'-C1'	6.57	106.76	101.50
67	B1	2310	G	P-O5'-C5'	-6.57	110.39	120.90
67	B1	3000	U	C3'-C2'-C1'	-6.57	96.25	101.50
21	A2	400	G	N9-C1'-C2'	-6.57	104.78	112.00
21	A2	510	A	P-O5'-C5'	-6.57	110.39	120.90
21	A2	631	C	O4'-C1'-C2'	-6.57	99.23	105.80
21	A2	669	A	O4'-C1'-N9	6.57	113.45	108.20
67	B1	1029	C	P-O5'-C5'	6.57	131.41	120.90
67	B1	1983	C	O4'-C1'-N1	6.57	113.45	108.20
67	B1	2300	C	C5'-C4'-C3'	-6.57	105.49	116.00
53	BD	79	TYR	CB-CG-CD2	-6.57	117.06	121.00
67	B1	1795	C	C4'-C3'-C2'	-6.57	96.03	102.60
67	B1	1816	C	P-O5'-C5'	6.57	131.41	120.90
67	B1	1965	C	O4'-C1'-N1	6.57	113.45	108.20
6	AC	1	MET	CG-SD-CE	6.56	110.70	100.20
67	B1	1102	C	P-O3'-C3'	-6.56	111.82	119.70
21	A2	377	A	C3'-C2'-C1'	6.56	106.75	101.50
67	B1	612	G	C3'-C2'-C1'	-6.56	96.25	101.50
67	B1	2139	A	C5-C6-N6	-6.56	118.45	123.70
67	B1	2914	U	C1'-O4'-C4'	6.56	115.15	109.90
67	B1	459	C	C3'-C2'-C1'	6.56	106.75	101.50
19	AS	28	PHE	CZ-CE2-CD2	-6.56	112.23	120.10
21	A2	465	C	O4'-C1'-N1	6.56	113.45	108.20
21	A2	548	A	C3'-C2'-C1'	6.56	106.75	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	555	U	O4'-C1'-N1	6.56	113.45	108.20
67	B1	65	G	C3'-C2'-C1'	-6.56	96.25	101.50
67	B1	117	A	OP1-P-OP2	-6.56	109.76	119.60
67	B1	218	A	C1'-O4'-C4'	6.56	115.15	109.90
21	A2	1416	C	C1'-O4'-C4'	6.56	115.14	109.90
27	A0	36	U	P-O5'-C5'	-6.56	110.41	120.90
53	BD	83	VAL	C-N-CD	-6.56	106.17	120.60
67	B1	299	U	P-O5'-C5'	6.56	131.39	120.90
67	B1	2182	A	C3'-C2'-C1'	-6.56	96.25	101.50
67	B1	989	G	C3'-C2'-C1'	6.56	106.75	101.50
21	A2	674	C	N1-C1'-C2'	6.55	122.52	114.00
26	AP	50	LEU	CB-CA-C	-6.55	97.75	110.20
67	B1	587	A	C5-C6-N6	-6.55	118.46	123.70
21	A2	808	C	C1'-O4'-C4'	6.55	115.14	109.90
21	A2	1393	A	O4'-C1'-N9	6.55	113.44	108.20
21	A2	398	C	O4'-C1'-N1	6.55	113.44	108.20
67	B1	513	C	P-O3'-C3'	6.55	127.56	119.70
67	B1	949	C	O4'-C1'-C2'	-6.55	99.25	105.80
60	BS	155	ARG	NE-CZ-NH1	6.55	123.57	120.30
67	B1	712	C	C4'-C3'-C2'	6.55	109.15	102.60
67	B1	1636	C	C1'-O4'-C4'	-6.55	104.66	109.90
21	A2	78	G	P-O3'-C3'	-6.55	111.84	119.70
21	A2	194	C	O4'-C1'-N1	6.55	113.44	108.20
21	A2	1120	G	N9-C1'-C2'	6.55	122.51	114.00
21	A2	1364	C	C3'-C2'-C1'	6.55	106.74	101.50
27	A0	2	C	O4'-C1'-C2'	-6.55	99.25	105.80
27	A0	9	A	P-O3'-C3'	6.55	127.56	119.70
67	B1	25	U	P-O3'-C3'	6.55	127.56	119.70
67	B1	762	G	C1'-O4'-C4'	6.55	115.14	109.90
67	B1	775	C	C1'-O4'-C4'	-6.55	104.66	109.90
67	B1	921	C	N1-C1'-C2'	6.55	122.51	114.00
67	B1	2556	C	C3'-C2'-C1'	6.55	106.74	101.50
21	A2	613	C	P-O3'-C3'	-6.54	111.85	119.70
46	BA	24	PHE	CB-CG-CD1	-6.54	116.22	120.80
34	BK	17	ARG	N-CA-CB	6.54	122.38	110.60
67	B1	1255	C	C5'-C4'-C3'	-6.54	105.53	116.00
67	B1	1802	G	P-O3'-C3'	6.54	127.55	119.70
21	A2	62	G	P-O3'-C3'	6.54	127.55	119.70
21	A2	511	C	C3'-C2'-C1'	6.54	106.73	101.50
21	A2	1103	G	O4'-C1'-N9	6.54	113.43	108.20
33	BC	86	TYR	CG-CD2-CE2	-6.54	116.07	121.30
67	B1	1721	U	C1'-O4'-C4'	-6.54	104.67	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2586	A	C1'-O4'-C4'	6.54	115.13	109.90
52	BB	107	TYR	CZ-CE2-CD2	6.54	125.69	119.80
67	B1	666	A	P-O5'-C5'	6.54	131.36	120.90
43	Bk	204	ASP	CB-CG-OD1	-6.54	112.42	118.30
67	B1	413	A	C1'-O4'-C4'	6.54	115.13	109.90
67	B1	502	G	C3'-C2'-C1'	-6.54	96.27	101.50
67	B1	1382	C	O4'-C1'-C2'	-6.54	99.26	105.80
67	B1	2205	A	N9-C1'-C2'	6.54	122.50	114.00
67	B1	2233	G	O5'-P-OP1	-6.54	99.81	105.70
67	B1	2304	C	O4'-C4'-C3'	-6.54	97.46	104.00
67	B1	2527	G	O4'-C1'-N9	6.54	113.43	108.20
21	A2	1282	C	O4'-C1'-C2'	-6.54	99.26	105.80
21	A2	617	A	C1'-O4'-C4'	6.54	115.13	109.90
24	AA	171	ALA	CB-CA-C	-6.54	100.30	110.10
67	B1	2889	A	P-O3'-C3'	6.54	127.54	119.70
10	AD	168	ARG	NE-CZ-NH2	-6.53	117.03	120.30
21	A2	347	G	N9-C1'-C2'	6.53	122.49	114.00
34	B5	8	ARG	NE-CZ-NH1	6.53	123.57	120.30
67	B1	981	A	C4'-C3'-C2'	6.53	109.13	102.60
67	B1	2207	C	O4'-C1'-C2'	-6.53	99.27	105.80
67	B1	2589	C	C5'-C4'-O4'	6.53	116.94	109.10
21	A2	749	C	C3'-C2'-C1'	6.53	106.73	101.50
67	B1	249	G	P-O3'-C3'	-6.53	111.86	119.70
11	A1	67	C	C3'-C2'-C1'	6.53	106.72	101.50
27	A0	68	G	O4'-C1'-C2'	6.53	113.48	107.60
44	BW	70	VAL	CA-CB-CG2	-6.53	101.11	110.90
32	BO	171	TYR	CB-CG-CD1	-6.53	117.08	121.00
21	A2	165	U	O3'-P-O5'	-6.53	91.60	104.00
21	A2	198	A	C3'-C2'-C1'	-6.53	96.28	101.50
21	A2	321	A	C1'-O4'-C4'	-6.53	104.68	109.90
21	A2	570	G	N9-C1'-C2'	6.53	122.48	114.00
67	B1	2326	C	C1'-O4'-C4'	-6.53	104.68	109.90
67	B1	2616	C	C1'-O4'-C4'	6.53	115.12	109.90
21	A2	500	A	C3'-C2'-C1'	-6.53	96.28	101.50
21	A2	827	G	P-O3'-C3'	-6.53	111.87	119.70
21	A2	1133	C	C3'-C2'-C1'	6.53	106.72	101.50
67	B1	385	U	C1'-O4'-C4'	6.53	115.12	109.90
21	A2	934	G	P-O3'-C3'	6.52	127.53	119.70
58	BP	109	ARG	NE-CZ-NH2	-6.52	117.04	120.30
67	B1	979	G	C3'-C2'-C1'	-6.52	96.28	101.50
21	A2	120	C	N1-C1'-C2'	6.52	122.48	114.00
21	A2	321	A	P-O5'-C5'	-6.52	110.46	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	730	G	P-O3'-C3'	6.52	127.53	119.70
67	B1	70	G	C3'-C2'-C1'	-6.52	96.28	101.50
67	B1	320	C	O4'-C1'-N1	6.52	113.42	108.20
21	A2	554	C	C1'-O4'-C4'	-6.52	104.68	109.90
67	B1	700	A	C4'-C3'-C2'	-6.52	96.08	102.60
27	A0	43	G	P-O3'-C3'	6.52	127.52	119.70
27	A0	76	A	N9-C1'-C2'	-6.52	104.83	112.00
67	B1	631	G	O4'-C1'-N9	6.52	113.42	108.20
67	B1	2048	C	O4'-C4'-C3'	-6.52	97.48	104.00
67	B1	2181	G	C1'-O4'-C4'	-6.52	104.69	109.90
21	A2	1040	A	C1'-O4'-C4'	-6.52	104.69	109.90
67	B1	82	C	C1'-O4'-C4'	-6.52	104.69	109.90
67	B1	331	G	C5-C6-O6	-6.52	124.69	128.60
67	B1	2284	C	C1'-O4'-C4'	-6.52	104.69	109.90
21	A2	739	G	O4'-C1'-C2'	6.52	113.47	107.60
67	B1	986	G	C5-C6-O6	-6.52	124.69	128.60
67	B1	1123	A	P-O3'-C3'	6.52	127.52	119.70
67	B1	1141	C	N1-C1'-C2'	6.52	122.47	114.00
67	B1	1949	A	P-O3'-C3'	-6.52	111.88	119.70
1	AQ	47	THR	CA-CB-CG2	-6.51	103.28	112.40
67	B1	364	A	O4'-C1'-N9	6.51	113.41	108.20
67	B1	1091	G	O4'-C1'-N9	6.51	113.41	108.20
67	B1	1809	G	O4'-C1'-N9	6.51	113.41	108.20
67	B1	1905	G	C1'-O4'-C4'	6.51	115.11	109.90
11	A1	26	C	O4'-C1'-C2'	-6.51	99.29	105.80
21	A2	19	G	N9-C1'-C2'	-6.51	104.84	112.00
21	A2	662	C	O4'-C1'-C2'	-6.51	99.29	105.80
21	A2	1071	C	C3'-C2'-C1'	6.51	106.71	101.50
27	A0	35	U	P-O3'-C3'	-6.51	111.89	119.70
67	B1	2635	C	C3'-C2'-C1'	6.51	106.71	101.50
67	B1	2772	U	N1-C1'-C2'	6.51	122.47	114.00
67	B1	2791	C	C1'-O4'-C4'	6.51	115.11	109.90
67	B1	959	U	O4'-C1'-N1	6.51	113.41	108.20
67	B1	1503	C	C5'-C4'-O4'	6.51	116.91	109.10
67	B1	1613	A	C5'-C4'-C3'	-6.51	105.58	116.00
21	A2	1366	U	O4'-C1'-N1	6.51	113.41	108.20
40	BE	120	HIS	N-CA-C	-6.51	93.43	111.00
67	B1	16	G	OP1-P-OP2	-6.51	109.84	119.60
67	B1	1444	A	C3'-C2'-C1'	6.51	106.71	101.50
21	A2	91	G	P-O3'-C3'	-6.51	111.89	119.70
21	A2	933	G	C3'-C2'-C1'	6.51	106.70	101.50
21	A2	1297	G	C3'-C2'-C1'	6.51	106.70	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	BD	218	ASP	CB-CG-OD2	-6.51	112.44	118.30
67	B1	48	G	C1'-O4'-C4'	6.51	115.11	109.90
67	B1	1231	C	C3'-C2'-C1'	6.51	106.70	101.50
67	B1	2785	G	C1'-O4'-C4'	-6.51	104.69	109.90
21	A2	128	A	C1'-O4'-C4'	-6.50	104.70	109.90
21	A2	361	A	C3'-C2'-C1'	6.50	106.70	101.50
52	BB	180	TYR	CB-CG-CD1	-6.50	117.10	121.00
67	B1	1707	A	O4'-C1'-N9	6.50	113.40	108.20
1	AQ	45	TYR	CB-CG-CD2	6.50	124.90	121.00
21	A2	1009	G	N9-C1'-C2'	6.50	122.45	114.00
61	Bd	88	LEU	CB-CG-CD2	6.50	122.05	111.00
67	B1	202	A	O4'-C1'-C2'	-6.50	99.30	105.80
67	B1	2238	G	N9-C1'-C2'	-6.50	104.85	112.00
31	BY	30	ARG	NE-CZ-NH1	6.50	123.55	120.30
53	BD	91	ARG	O-C-N	6.50	133.10	122.70
67	B1	987	G	C5-C6-O6	-6.50	124.70	128.60
21	A2	525	A	C1'-O4'-C4'	6.50	115.10	109.90
34	B5	17	ARG	N-CA-CB	6.50	122.30	110.60
67	B1	273	G	C1'-O4'-C4'	-6.50	104.70	109.90
67	B1	1554	G	O4'-C1'-N9	-6.50	103.00	108.20
67	B1	2113	G	C3'-C2'-C1'	-6.50	96.30	101.50
21	A2	380	C	C3'-C2'-C1'	6.50	106.70	101.50
21	A2	618	G	P-O3'-C3'	-6.50	111.90	119.70
21	A2	924	U	C3'-C2'-C1'	6.50	106.70	101.50
67	B1	313	U	O4'-C1'-N1	6.50	113.40	108.20
67	B1	862	G	C3'-C2'-C1'	-6.50	96.30	101.50
67	B1	1637	C	N1-C1'-C2'	6.50	122.44	114.00
67	B1	1896	U	C1'-O4'-C4'	6.50	115.10	109.90
67	B1	2700	U	O4'-C1'-C2'	-6.50	99.30	105.80
67	B1	1648	C	C5'-C4'-C3'	6.50	126.39	116.00
68	B3	41	A	O4'-C1'-C2'	-6.50	99.31	105.80
68	B3	32	C	P-O3'-C3'	-6.49	111.91	119.70
21	A2	256	G	C4'-C3'-C2'	-6.49	96.11	102.60
21	A2	975	A	O4'-C1'-C2'	-6.49	99.31	105.80
67	B1	192	U	N1-C1'-C2'	6.49	122.44	114.00
67	B1	2168	C	N1-C1'-C2'	6.49	122.44	114.00
67	B1	2907	C	O4'-C1'-N1	6.49	113.39	108.20
21	A2	645	G	O4'-C1'-N9	6.49	113.39	108.20
41	Ba	61	ARG	NE-CZ-NH1	6.49	123.55	120.30
45	Bi	80	ARG	NE-CZ-NH2	-6.49	117.05	120.30
67	B1	28	A	P-O3'-C3'	-6.49	111.91	119.70
67	B1	96	C	C5'-C4'-C3'	6.49	126.39	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1584	G	C1'-O4'-C4'	-6.49	104.71	109.90
21	A2	1413	G	C4'-C3'-C2'	-6.49	96.11	102.60
21	A2	1133	C	O4'-C1'-C2'	-6.49	99.31	105.80
67	B1	451	C	C3'-C2'-C1'	6.49	106.69	101.50
67	B1	509	A	O4'-C1'-C2'	-6.49	99.31	105.80
35	BL	42	ARG	NE-CZ-NH1	6.49	123.54	120.30
67	B1	885	A	C3'-C2'-C1'	6.49	106.69	101.50
67	B1	907	C	N1-C1'-C2'	6.49	122.43	114.00
67	B1	2685	G	O4'-C1'-C2'	-6.49	99.31	105.80
21	A2	278	A	C3'-C2'-C1'	6.48	106.69	101.50
38	Bb	27	GLU	CB-CA-C	6.48	123.36	110.40
51	Bj	68	ARG	NE-CZ-NH2	-6.48	117.06	120.30
66	B1	25	TYR	CG-CD1-CE1	6.48	126.49	121.30
67	B1	391	C	O4'-C1'-N1	6.48	113.39	108.20
67	B1	1144	A	O4'-C1'-N9	6.48	113.39	108.20
67	B1	1280	C	C1'-O4'-C4'	6.48	115.09	109.90
67	B1	1391	C	C3'-C2'-C1'	6.48	106.69	101.50
21	A2	358	G	C3'-C2'-C1'	-6.48	96.32	101.50
21	A2	820	G	C3'-C2'-C1'	-6.48	96.32	101.50
21	A2	1004	U	C3'-C2'-C1'	6.48	106.69	101.50
21	A2	1436	U	N1-C1'-C2'	-6.48	104.87	112.00
37	BU	12	ARG	NE-CZ-NH2	6.48	123.54	120.30
67	B1	360	G	O4'-C1'-N9	-6.48	103.02	108.20
67	B1	2649	A	O4'-C1'-N9	6.48	113.39	108.20
21	A2	859	A	OP1-P-OP2	-6.48	109.88	119.60
37	BU	46	VAL	CA-CB-CG2	-6.48	101.18	110.90
21	A2	445	G	C5-C6-O6	-6.48	124.71	128.60
21	A2	1098	G	C4'-C3'-C2'	-6.48	96.12	102.60
21	A2	1296	U	O4'-C1'-N1	6.48	113.38	108.20
62	BN	163	ARG	CB-CA-C	6.48	123.36	110.40
64	Bc	32	ARG	CB-CA-C	-6.48	97.44	110.40
67	B1	1225	A	C1'-O4'-C4'	-6.48	104.72	109.90
67	B1	2680	A	O4'-C1'-C2'	-6.48	99.32	105.80
21	A2	1469	G	O4'-C4'-C3'	-6.47	97.53	104.00
67	B1	217	A	N9-C1'-C2'	-6.47	104.88	112.00
21	A2	280	C	N1-C1'-C2'	6.47	122.41	114.00
21	A2	1137	G	C1'-O4'-C4'	6.47	115.08	109.90
51	Bj	3	TYR	CB-CG-CD1	-6.47	117.12	121.00
62	BN	26	ALA	CB-CA-C	-6.47	100.39	110.10
67	B1	637	G	C5-C6-O6	-6.47	124.72	128.60
67	B1	2495	A	O4'-C4'-C3'	-6.47	97.53	104.00
68	B3	39	C	O4'-C1'-N1	6.47	113.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2096	G	O4'-C1'-N9	6.47	113.38	108.20
67	B1	2194	A	C1'-O4'-C4'	6.47	115.08	109.90
21	A2	240	U	P-O5'-C5'	6.47	131.25	120.90
21	A2	249	U	O4'-C1'-N1	6.47	113.38	108.20
21	A2	458	G	C8-N9-C4	-6.47	103.81	106.40
37	BU	39	TYR	CG-CD1-CE1	-6.47	116.12	121.30
39	Be	34	TYR	CB-CG-CD2	-6.47	117.12	121.00
67	B1	230	A	O4'-C1'-N9	6.47	113.38	108.20
67	B1	407	A	N9-C1'-C2'	6.47	122.41	114.00
67	B1	709	A	O4'-C1'-N9	6.47	113.38	108.20
67	B1	1362	G	P-O3'-C3'	-6.47	111.94	119.70
67	B1	2243	G	O3'-P-O5'	6.47	116.29	104.00
67	B1	2939	C	C1'-O4'-C4'	6.47	115.08	109.90
21	A2	672	G	C1'-O4'-C4'	-6.47	104.72	109.90
21	A2	715	C	P-O5'-C5'	6.47	131.25	120.90
21	A2	1352	G	O4'-C1'-C2'	6.47	113.42	107.60
45	Bi	17	TYR	CB-CG-CD1	-6.47	117.12	121.00
34	BK	8	ARG	NE-CZ-NH1	6.47	123.53	120.30
67	B1	455	G	O4'-C1'-C2'	-6.47	99.33	105.80
67	B1	1594	G	O4'-C1'-N9	6.47	113.37	108.20
67	B1	2566	A	C1'-O4'-C4'	6.47	115.08	109.90
67	B1	2972	G	C4'-C3'-C2'	-6.47	96.13	102.60
14	AM	132	ARG	N-CA-CB	6.47	122.24	110.60
21	A2	963	A	O4'-C1'-N9	6.47	113.37	108.20
67	B1	266	A	C1'-O4'-C4'	-6.47	104.73	109.90
67	B1	694	A	C5'-C4'-O4'	6.47	116.86	109.10
67	B1	1836	A	O4'-C1'-N9	6.47	113.37	108.20
67	B1	2494	A	O4'-C1'-N9	6.47	113.37	108.20
21	A2	1183	C	N1-C1'-C2'	6.46	122.40	114.00
21	A2	1493	C	P-O5'-C5'	-6.46	110.56	120.90
34	BK	8	ARG	NE-CZ-NH2	-6.46	117.07	120.30
67	B1	2081	C	N1-C1'-C2'	6.46	122.41	114.00
67	B1	1949	A	O4'-C1'-C2'	-6.46	99.34	105.80
67	B1	2054	G	N9-C1'-C2'	6.46	122.40	114.00
21	A2	1160	C	O4'-C1'-C2'	-6.46	99.34	105.80
67	B1	522	A	N9-C1'-C2'	6.46	122.40	114.00
67	B1	848	A	O4'-C1'-C2'	-6.46	99.34	105.80
67	B1	1680	G	O4'-C1'-N9	6.46	113.37	108.20
67	B1	2561	G	O4'-C1'-N9	6.46	113.37	108.20
7	AB	60	ALA	N-CA-CB	6.46	119.14	110.10
21	A2	1329	C	OP1-P-OP2	-6.46	109.91	119.60
67	B1	939	A	O4'-C1'-C2'	-6.46	99.34	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1638	C	C3'-C2'-C1'	6.46	106.67	101.50
21	A2	359	A	C1'-O4'-C4'	-6.46	104.73	109.90
21	A2	1129	A	P-O5'-C5'	6.46	131.23	120.90
21	A2	1216	A	C5'-C4'-O4'	6.46	116.85	109.10
67	B1	2388	U	C1'-O4'-C4'	6.46	115.07	109.90
68	B3	62	A	C3'-C2'-C1'	6.46	106.67	101.50
21	A2	65	G	N9-C1'-C2'	6.46	122.39	114.00
21	A2	1080	C	N1-C1'-C2'	6.46	122.39	114.00
21	A2	1116	G	O4'-C1'-N9	6.46	113.36	108.20
27	A0	50	C	C3'-C2'-C1'	6.46	106.67	101.50
67	B1	967	G	P-O5'-C5'	-6.46	110.57	120.90
67	B1	971	G	O4'-C1'-C2'	6.46	113.41	107.60
21	A2	522	C	O4'-C1'-N1	6.46	113.36	108.20
67	B1	2262	C	O4'-C1'-C2'	-6.46	99.34	105.80
27	A0	68	G	O3'-P-O5'	6.45	116.26	104.00
67	B1	2430	C	O4'-C1'-N1	6.45	113.36	108.20
67	B1	231	G	C1'-O4'-C4'	6.45	115.06	109.90
67	B1	667	C	N1-C1'-C2'	6.45	122.39	114.00
67	B1	1808	G	O4'-C1'-C2'	6.45	113.41	107.60
21	A2	212	G	O4'-C1'-C2'	6.45	113.41	107.60
21	A2	563	U	O4'-C1'-C2'	-6.45	99.35	105.80
67	B1	2838	U	C5'-C4'-O4'	6.45	116.84	109.10
68	B3	12	G	O4'-C1'-C2'	-6.45	99.35	105.80
35	BL	65	ARG	CB-CA-C	-6.45	97.50	110.40
67	B1	596	C	C3'-C2'-C1'	-6.45	96.34	101.50
67	B1	823	G	P-O3'-C3'	-6.45	111.96	119.70
67	B1	1211	C	O4'-C1'-N1	6.45	113.36	108.20
67	B1	1958	A	O4'-C1'-C2'	-6.45	99.35	105.80
67	B1	3043	C	O4'-C1'-C2'	-6.45	99.35	105.80
21	A2	278	A	O4'-C1'-C2'	-6.45	99.35	105.80
21	A2	541	G	O4'-C1'-C2'	6.45	113.40	107.60
21	A2	1295	C	O4'-C1'-N1	6.45	113.36	108.20
31	BY	56	TRP	N-CA-CB	6.45	122.20	110.60
67	B1	2755	G	C1'-O4'-C4'	-6.45	104.74	109.90
7	AB	38	ASP	CB-CG-OD1	6.45	124.10	118.30
11	A1	48	U	O4'-C1'-N1	6.45	113.36	108.20
67	B1	603	G	N9-C1'-C2'	6.45	122.38	114.00
67	B1	2481	G	O4'-C1'-C2'	-6.45	99.35	105.80
67	B1	2924	G	O4'-C1'-C2'	-6.45	99.35	105.80
67	B1	2981	G	O4'-C1'-N9	6.45	113.36	108.20
17	AO	113	ARG	N-CA-CB	6.44	122.20	110.60
67	B1	1344	C	C3'-C2'-C1'	6.44	106.66	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1379	A	O5'-P-OP1	-6.44	99.90	105.70
67	B1	1831	C	N1-C1'-C2'	6.44	122.38	114.00
67	B1	2829	C	C3'-C2'-C1'	6.44	106.66	101.50
7	AB	105	ALA	N-CA-CB	6.44	119.12	110.10
21	A2	1330	G	C1'-O4'-C4'	6.44	115.05	109.90
63	Bg	13	LYS	CB-CA-C	6.44	123.29	110.40
67	B1	654	C	C3'-C2'-C1'	6.44	106.65	101.50
67	B1	1124	G	O4'-C1'-N9	-6.44	103.05	108.20
67	B1	2309	C	C1'-O4'-C4'	-6.44	104.75	109.90
67	B1	2311	C	C1'-O4'-C4'	-6.44	104.75	109.90
34	B5	8	ARG	NE-CZ-NH2	-6.44	117.08	120.30
67	B1	1466	U	C4'-C3'-C2'	-6.44	96.16	102.60
67	B1	2008	G	P-O3'-C3'	-6.44	111.97	119.70
67	B1	2633	A	O4'-C1'-N9	6.44	113.35	108.20
43	Bk	109	PRO	N-CA-CB	-6.44	95.52	102.60
67	B1	438	G	C4'-C3'-C2'	-6.44	96.16	102.60
25	AH	90	HIS	CA-CB-CG	6.44	124.54	113.60
57	BZ	57	ASP	CB-CG-OD2	-6.44	112.51	118.30
67	B1	1882	C	P-O5'-C5'	6.44	131.20	120.90
12	AN	44	LEU	CB-CG-CD2	6.44	121.94	111.00
67	B1	671	G	O4'-C1'-N9	6.44	113.35	108.20
21	A2	280	C	C1'-O4'-C4'	-6.43	104.75	109.90
21	A2	367	G	P-O5'-C5'	-6.43	110.60	120.90
21	A2	986	G	C5-C6-O6	-6.43	124.74	128.60
67	B1	706	U	C5'-C4'-O4'	6.43	116.82	109.10
67	B1	1182	C	O4'-C1'-N1	6.43	113.35	108.20
21	A2	1034	G	O4'-C1'-N9	6.43	113.35	108.20
67	B1	2812	U	O4'-C1'-N1	6.43	113.35	108.20
21	A2	600	C	C3'-C2'-C1'	6.43	106.64	101.50
67	B1	1446	G	O4'-C1'-N9	6.43	113.34	108.20
67	B1	1507	A	O4'-C1'-N9	6.43	113.34	108.20
67	B1	3007	A	C1'-O4'-C4'	6.43	115.04	109.90
21	A2	367	G	C5'-C4'-C3'	6.43	126.28	116.00
21	A2	1203	G	C1'-O4'-C4'	-6.43	104.76	109.90
17	AO	23	TRP	CE3-CZ3-CH2	-6.43	114.13	121.20
35	BL	58	LEU	O-C-N	6.43	134.12	123.20
59	BM	96	LEU	CB-CG-CD1	6.43	121.92	111.00
67	B1	400	U	O4'-C1'-N1	6.43	113.34	108.20
67	B1	1614	U	C5'-C4'-C3'	-6.43	105.72	116.00
67	B1	2314	U	C1'-O4'-C4'	6.43	115.04	109.90
67	B1	2655	C	N1-C1'-C2'	6.43	122.35	114.00
21	A2	1015	C	O4'-C1'-N1	6.42	113.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1314	C	C3'-C2'-C1'	6.42	106.64	101.50
67	B1	819	U	C5'-C4'-O4'	6.42	116.81	109.10
67	B1	1884	C	C3'-C2'-C1'	6.42	106.64	101.50
21	A2	1409	G	P-O3'-C3'	6.42	127.41	119.70
21	A2	926	C	C3'-C2'-C1'	6.42	106.64	101.50
67	B1	150	G	O4'-C1'-N9	6.42	113.34	108.20
67	B1	188	A	O4'-C1'-N9	6.42	113.34	108.20
21	A2	481	C	N1-C1'-C2'	6.42	122.35	114.00
21	A2	761	U	O4'-C1'-N1	6.42	113.34	108.20
67	B1	1450	C	O4'-C1'-N1	6.42	113.34	108.20
68	B3	15	G	O4'-C1'-C2'	6.42	113.38	107.60
21	A2	511	C	P-O3'-C3'	6.42	127.40	119.70
21	A2	1250	C	O4'-C1'-C2'	-6.42	99.38	105.80
53	BD	83	VAL	CA-C-N	-6.42	99.13	117.10
67	B1	586	A	C4-C5-C6	6.42	120.21	117.00
67	B1	598	C	O4'-C1'-C2'	-6.42	99.38	105.80
67	B1	1043	U	N1-C1'-C2'	-6.42	104.94	112.00
67	B1	1710	C	O4'-C1'-N1	6.42	113.34	108.20
67	B1	2396	G	O4'-C1'-C2'	-6.42	99.38	105.80
67	B1	2662	G	C4'-C3'-C2'	-6.42	96.18	102.60
67	B1	2813	G	O4'-C4'-C3'	-6.42	97.58	104.00
67	B1	3012	C	C3'-C2'-C1'	6.42	106.63	101.50
6	AC	114	TYR	CB-CG-CD2	6.42	124.85	121.00
25	AH	47	THR	N-CA-C	6.42	128.33	111.00
67	B1	1734	G	C5'-C4'-C3'	-6.42	105.73	116.00
67	B1	2925	C	C1'-O4'-C4'	-6.42	104.77	109.90
62	BN	6	ALA	N-CA-CB	6.42	119.08	110.10
21	A2	1050	G	O4'-C1'-C2'	6.41	113.37	107.60
21	A2	1468	A	O4'-C1'-C2'	-6.41	99.39	105.80
35	BL	47	TRP	CB-CG-CD2	-6.41	118.26	126.60
51	Bj	40	PHE	CB-CG-CD1	6.41	125.29	120.80
60	BS	78	PHE	CG-CD2-CE2	6.41	127.86	120.80
67	B1	1054	A	O4'-C1'-C2'	6.41	113.37	107.60
2	AK	26	VAL	CA-CB-CG1	-6.41	101.28	110.90
21	A2	864	G	O4'-C1'-N9	6.41	113.33	108.20
67	B1	2090	A	C3'-C2'-C1'	6.41	106.63	101.50
68	B3	84	U	C5'-C4'-O4'	6.41	116.80	109.10
37	BU	72	LYS	CA-CB-CG	6.41	127.50	113.40
42	BT	85	LEU	N-CA-C	-6.41	93.69	111.00
67	B1	335	C	N1-C1'-C2'	6.41	122.33	114.00
67	B1	589	G	C5-C6-O6	-6.41	124.75	128.60
67	B1	1956	G	C1'-O4'-C4'	-6.41	104.77	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1976	C	P-O5'-C5'	6.41	131.16	120.90
67	B1	2988	A	N9-C1'-C2'	-6.41	104.95	112.00
16	AJ	91	ARG	NE-CZ-NH2	6.41	123.50	120.30
46	BA	127	PRO	N-CA-CB	-6.41	95.55	102.60
67	B1	1787	U	C3'-C2'-C1'	6.41	106.63	101.50
21	A2	450	A	C4-C5-C6	6.41	120.20	117.00
21	A2	1033	G	O4'-C1'-N9	6.41	113.32	108.20
24	AA	115	TYR	CB-CG-CD1	6.41	124.84	121.00
67	B1	443	C	O4'-C4'-C3'	-6.41	97.59	104.00
67	B1	1867	C	O4'-C1'-C2'	-6.41	99.39	105.80
67	B1	2358	U	C5'-C4'-O4'	6.41	116.79	109.10
68	B3	73	U	C1'-O4'-C4'	-6.41	104.78	109.90
67	B1	225	C	O4'-C1'-C2'	-6.40	99.40	105.80
67	B1	948	C	C4'-C3'-C2'	-6.40	96.20	102.60
21	A2	750	C	O4'-C1'-C2'	-6.40	99.40	105.80
21	A2	1252	C	P-O5'-C5'	6.40	131.14	120.90
67	B1	913	G	N9-C1'-C2'	6.40	122.32	114.00
67	B1	1748	C	C1'-O4'-C4'	6.40	115.02	109.90
67	B1	1972	C	O4'-C1'-N1	6.40	113.32	108.20
1	AQ	118	SER	O-C-N	6.40	132.94	122.70
21	A2	589	U	C1'-O4'-C4'	6.40	115.02	109.90
67	B1	1018	G	C5-C6-O6	-6.40	124.76	128.60
67	B1	1540	A	P-O3'-C3'	6.40	127.38	119.70
6	AC	5	ARG	NE-CZ-NH2	-6.40	117.10	120.30
68	B3	71	G	O4'-C1'-C2'	6.40	113.36	107.60
21	A2	295	G	O4'-C1'-C2'	-6.40	99.40	105.80
25	AH	95	SER	C-N-CA	6.40	137.69	121.70
67	B1	214	C	C3'-C2'-C1'	6.40	106.62	101.50
67	B1	904	G	N9-C1'-C2'	-6.40	104.96	112.00
67	B1	1943	C	C1'-O4'-C4'	6.40	115.02	109.90
21	A2	561	A	C4'-C3'-C2'	-6.40	96.20	102.60
21	A2	1197	C	C3'-C2'-C1'	6.40	106.62	101.50
21	A2	811	G	O4'-C1'-C2'	-6.39	99.41	105.80
21	A2	847	A	N9-C1'-C2'	6.39	122.31	114.00
21	A2	1281	U	N1-C1'-C2'	6.39	122.31	114.00
25	AH	87	ARG	CD-NE-CZ	-6.39	114.65	123.60
57	BZ	99	ARG	NE-CZ-NH1	-6.39	117.10	120.30
67	B1	209	G	P-O3'-C3'	6.39	127.37	119.70
67	B1	2166	C	O4'-C1'-N1	6.39	113.31	108.20
45	Bi	16	ARG	NE-CZ-NH1	6.39	123.50	120.30
67	B1	1219	C	C3'-C2'-C1'	6.39	106.61	101.50
67	B1	1280	C	C3'-C2'-C1'	6.39	106.61	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2353	C	O4'-C1'-C2'	-6.39	99.41	105.80
67	B1	2926	G	O4'-C4'-C3'	-6.39	97.61	104.00
67	B1	2958	U	N1-C1'-C2'	-6.39	104.97	112.00
67	B1	3032	C	O4'-C1'-C2'	-6.39	99.41	105.80
67	B1	17	C	O4'-C1'-C2'	-6.39	99.41	105.80
21	A2	629	U	C5'-C4'-O4'	6.39	116.77	109.10
21	A2	1483	U	C1'-O4'-C4'	6.39	115.01	109.90
34	BK	61	ASP	CB-CG-OD2	-6.39	112.55	118.30
67	B1	1633	A	O4'-C1'-N9	6.39	113.31	108.20
67	B1	2341	G	N9-C1'-C2'	-6.39	104.97	112.00
17	AO	132	ARG	NE-CZ-NH1	-6.39	117.11	120.30
21	A2	158	U	C5'-C4'-C3'	-6.39	105.78	116.00
67	B1	1937	A	C5'-C4'-O4'	6.39	116.77	109.10
67	B1	2502	C	N1-C1'-C2'	6.39	122.30	114.00
21	A2	167	G	C5'-C4'-C3'	-6.39	105.78	116.00
21	A2	1338	C	O4'-C1'-C2'	-6.39	99.41	105.80
48	BR	23	ARG	NE-CZ-NH1	6.39	123.49	120.30
51	Bj	13	PHE	CB-CG-CD1	-6.39	116.33	120.80
67	B1	1367	A	C2'-C3'-O3'	6.39	123.92	113.70
67	B1	1410	A	C1'-O4'-C4'	-6.39	104.79	109.90
67	B1	2153	C	OP1-P-OP2	-6.39	110.02	119.60
67	B1	2959	A	C1'-O4'-C4'	-6.39	104.79	109.90
68	B3	92	G	C1'-O4'-C4'	-6.39	104.79	109.90
27	A0	2	C	C3'-C2'-C1'	6.38	106.61	101.50
67	B1	590	A	C4-C5-C6	6.38	120.19	117.00
67	B1	802	G	C3'-C2'-C1'	6.38	106.61	101.50
67	B1	884	C	C1'-O4'-C4'	-6.38	104.79	109.90
67	B1	998	G	C1'-O4'-C4'	6.38	115.01	109.90
67	B1	1735	G	O4'-C1'-N9	6.38	113.31	108.20
67	B1	2687	A	N9-C1'-C2'	-6.38	104.98	112.00
67	B1	415	U	O4'-C4'-C3'	-6.38	97.62	104.00
67	B1	1013	G	O4'-C1'-N9	6.38	113.31	108.20
21	A2	1006	C	O4'-C1'-C2'	-6.38	99.42	105.80
67	B1	324	C	O3'-P-O5'	6.38	116.12	104.00
67	B1	1576	C	N1-C1'-C2'	6.38	122.30	114.00
67	B1	1590	C	OP1-P-OP2	-6.38	110.03	119.60
67	B1	2537	G	N9-C1'-C2'	6.38	122.30	114.00
21	A2	853	G	O4'-C1'-N9	6.38	113.30	108.20
21	A2	1239	A	P-O3'-C3'	-6.38	112.04	119.70
41	Ba	8	GLU	N-CA-CB	6.38	122.08	110.60
67	B1	1846	G	C1'-O4'-C4'	-6.38	104.80	109.90
21	A2	1265	G	C1'-O4'-C4'	-6.38	104.80	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2177	A	C1'-O4'-C4'	-6.38	104.80	109.90
67	B1	2655	C	C1'-O4'-C4'	-6.38	104.80	109.90
67	B1	2727	C	C3'-C2'-C1'	6.38	106.60	101.50
19	AS	41	VAL	N-CA-C	-6.38	93.78	111.00
21	A2	200	G	C5'-C4'-C3'	6.38	126.20	116.00
21	A2	1204	C	P-O5'-C5'	6.38	131.10	120.90
21	A2	1348	C	N1-C1'-C2'	6.38	122.29	114.00
61	Bd	30	LYS	CB-CA-C	6.38	123.15	110.40
67	B1	490	C	O4'-C4'-C3'	-6.38	97.62	104.00
67	B1	1095	A	N9-C1'-C2'	6.38	122.29	114.00
67	B1	2253	G	O4'-C1'-C2'	-6.38	99.42	105.80
67	B1	2287	C	C3'-C2'-C1'	-6.38	96.40	101.50
68	B3	68	C	O4'-C1'-N1	6.38	113.30	108.20
67	B1	587	A	C4-C5-C6	6.38	120.19	117.00
67	B1	1338	G	C1'-O4'-C4'	-6.38	104.80	109.90
11	A1	59	A	C3'-C2'-C1'	-6.37	96.40	101.50
21	A2	1133	C	P-O3'-C3'	-6.37	112.05	119.70
27	A0	73	G	C3'-C2'-C1'	-6.37	96.40	101.50
67	B1	1436	A	O4'-C4'-C3'	-6.37	97.63	104.00
21	A2	468	G	C4'-C3'-C2'	-6.37	96.23	102.60
21	A2	471	G	O4'-C1'-N9	6.37	113.30	108.20
21	A2	601	G	OP1-P-OP2	-6.37	110.04	119.60
21	A2	1105	C	N1-C1'-C2'	6.37	122.28	114.00
34	B5	61	ASP	CB-CG-OD2	-6.37	112.56	118.30
67	B1	776	G	C1'-O4'-C4'	6.37	115.00	109.90
67	B1	1155	A	C1'-O4'-C4'	6.37	115.00	109.90
67	B1	1708	U	P-O3'-C3'	6.37	127.34	119.70
11	A1	33	C	C1'-O4'-C4'	6.37	115.00	109.90
23	AT	82	TYR	CB-CG-CD1	-6.37	117.18	121.00
67	B1	2838	U	C1'-O4'-C4'	-6.37	104.80	109.90
67	B1	2334	G	P-O5'-C5'	-6.37	110.71	120.90
67	B1	3024	C	N1-C1'-C2'	6.37	122.28	114.00
7	AB	46	ARG	NE-CZ-NH2	6.37	123.48	120.30
21	A2	287	G	N9-C1'-C2'	-6.37	105.00	112.00
46	BA	23	ASN	O-C-N	-6.37	112.51	122.70
67	B1	742	C	N1-C1'-C2'	6.37	122.28	114.00
21	A2	184	G	N9-C1'-C2'	-6.37	105.00	112.00
21	A2	1312	C	OP1-P-OP2	-6.37	110.05	119.60
40	BE	153	ARG	NE-CZ-NH2	-6.37	117.12	120.30
67	B1	2483	U	C4'-C3'-C2'	-6.37	96.23	102.60
21	A2	1418	G	O4'-C1'-N9	6.36	113.29	108.20
27	A0	20	U	O4'-C1'-C2'	-6.36	99.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	BC	334	ARG	N-CA-CB	6.36	122.06	110.60
67	B1	1683	C	O4'-C1'-N1	6.36	113.29	108.20
67	B1	2751	C	P-O3'-C3'	6.36	127.33	119.70
67	B1	610	C	C3'-C2'-C1'	6.36	106.59	101.50
67	B1	1644	G	O4'-C1'-N9	6.36	113.29	108.20
67	B1	2617	G	N9-C1'-C2'	6.36	122.27	114.00
67	B1	791	C	O4'-C1'-N1	6.36	113.29	108.20
67	B1	1271	G	N9-C1'-C2'	6.36	122.27	114.00
67	B1	1552	C	P-O3'-C3'	6.36	127.33	119.70
67	B1	2731	C	C5'-C4'-O4'	6.36	116.73	109.10
21	A2	526	A	C3'-C2'-C1'	6.36	106.59	101.50
21	A2	572	U	O4'-C1'-N1	6.36	113.29	108.20
48	BR	7	SER	N-CA-CB	6.36	120.04	110.50
67	B1	1998	G	N9-C1'-C2'	-6.36	105.00	112.00
67	B1	2740	G	C5-C6-O6	-6.36	124.78	128.60
53	BD	26	PHE	CB-CG-CD1	-6.36	116.35	120.80
28	B6	60	PHE	CB-CG-CD1	6.36	125.25	120.80
67	B1	716	U	O4'-C1'-C2'	-6.36	99.44	105.80
67	B1	1793	G	N9-C1'-C2'	6.36	122.26	114.00
67	B1	1933	U	N1-C1'-C2'	6.36	122.26	114.00
67	B1	2144	U	N1-C1'-C2'	-6.36	105.01	112.00
8	AR	46	THR	CA-CB-CG2	-6.36	103.50	112.40
21	A2	1050	G	C3'-C2'-C1'	-6.36	96.42	101.50
67	B1	392	G	N9-C1'-C2'	6.35	122.26	114.00
67	B1	1471	G	C1'-O4'-C4'	-6.35	104.82	109.90
67	B1	1645	U	O4'-C1'-C2'	-6.35	99.45	105.80
67	B1	2868	C	N1-C1'-C2'	6.35	122.26	114.00
6	AC	126	ARG	CD-NE-CZ	6.35	132.49	123.60
21	A2	1045	A	P-O5'-C5'	-6.35	110.74	120.90
39	Be	42	ARG	NE-CZ-NH1	6.35	123.48	120.30
47	BI	107	PHE	CB-CG-CD1	-6.35	116.35	120.80
67	B1	1614	U	C1'-O4'-C4'	-6.35	104.82	109.90
67	B1	2457	C	O4'-C1'-N1	6.35	113.28	108.20
67	B1	1250	A	C5'-C4'-O4'	6.35	116.72	109.10
67	B1	2783	C	N1-C1'-C2'	6.35	122.26	114.00
21	A2	646	U	O5'-P-OP1	-6.35	99.98	105.70
21	A2	1426	C	O4'-C1'-N1	6.35	113.28	108.20
63	Bg	34	CYS	CA-C-N	6.35	128.90	116.20
67	B1	1274	G	C1'-O4'-C4'	-6.35	104.82	109.90
67	B1	2263	G	O4'-C1'-C2'	-6.35	99.45	105.80
68	B3	2	G	C1'-O4'-C4'	6.35	114.98	109.90
4	AG	99	LYS	CA-CB-CG	6.35	127.36	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	AS	14	ARG	NE-CZ-NH1	6.35	123.47	120.30
21	A2	272	C	N1-C1'-C2'	6.35	122.25	114.00
21	A2	749	C	N1-C1'-C2'	6.35	122.25	114.00
33	BC	69	PRO	N-CA-CB	6.35	110.92	103.30
67	B1	170	A	O4'-C1'-C2'	-6.35	99.45	105.80
67	B1	927	G	O4'-C1'-C2'	-6.35	99.45	105.80
67	B1	2206	G	P-O3'-C3'	-6.35	112.08	119.70
67	B1	2961	A	N9-C1'-C2'	-6.35	105.02	112.00
11	A1	36	A	C5'-C4'-O4'	6.34	116.71	109.10
35	BL	37	ALA	N-CA-CB	6.34	118.98	110.10
67	B1	1035	G	P-O5'-C5'	6.34	131.05	120.90
67	B1	1553	G	O3'-P-O5'	-6.34	91.95	104.00
67	B1	1907	G	N9-C1'-C2'	6.34	122.25	114.00
21	A2	211	G	N9-C1'-C2'	6.34	122.25	114.00
21	A2	692	G	O4'-C1'-C2'	6.34	113.31	107.60
21	A2	1392	G	P-O3'-C3'	6.34	127.31	119.70
67	B1	547	C	O4'-C1'-C2'	-6.34	99.46	105.80
67	B1	1165	C	N1-C1'-C2'	-6.34	105.02	112.00
10	AD	99	ASP	CB-CG-OD2	-6.34	112.59	118.30
21	A2	1271	G	N9-C1'-C2'	6.34	122.25	114.00
49	BQ	125	ILE	CB-CA-C	6.34	124.28	111.60
67	B1	297	G	O4'-C1'-C2'	-6.34	99.46	105.80
67	B1	492	A	N9-C1'-C2'	-6.34	105.03	112.00
67	B1	498	U	N1-C1'-C2'	6.34	122.24	114.00
67	B1	1628	C	C5'-C4'-O4'	6.34	116.71	109.10
67	B1	2351	G	C3'-C2'-C1'	-6.34	96.43	101.50
67	B1	2672	A	O4'-C1'-C2'	-6.34	99.46	105.80
21	A2	1066	C	C1'-O4'-C4'	-6.34	104.83	109.90
21	A2	1088	U	OP2-P-O3'	6.34	119.15	105.20
21	A2	1411	G	O4'-C1'-C2'	-6.34	99.46	105.80
67	B1	159	C	P-O5'-C5'	6.34	131.04	120.90
67	B1	568	A	C1'-O4'-C4'	-6.34	104.83	109.90
67	B1	721	G	O4'-C1'-C2'	-6.34	99.46	105.80
67	B1	2143	C	N1-C1'-C2'	6.34	122.24	114.00
67	B1	2698	G	N9-C1'-C2'	-6.34	105.03	112.00
68	B3	56	C	N1-C1'-C2'	6.34	122.24	114.00
68	B3	37	U	C4'-C3'-C2'	-6.34	96.26	102.60
13	AX	7	TYR	N-CA-CB	-6.34	99.19	110.60
21	A2	248	U	P-O5'-C5'	-6.34	110.76	120.90
21	A2	542	G	O4'-C1'-C2'	6.34	113.30	107.60
67	B1	314	A	C5'-C4'-O4'	6.34	116.70	109.10
67	B1	561	C	O4'-C1'-N1	6.34	113.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	970	G	O4'-C1'-N9	6.34	113.27	108.20
21	A2	882	C	C3'-C2'-C1'	6.33	106.57	101.50
47	BI	46	PHE	CB-CG-CD1	-6.33	116.37	120.80
67	B1	2424	A	O4'-C1'-C2'	-6.33	99.47	105.80
21	A2	94	C	C1'-O4'-C4'	-6.33	104.83	109.90
21	A2	1304	C	O4'-C1'-N1	6.33	113.27	108.20
49	BQ	107	ARG	NE-CZ-NH2	-6.33	117.13	120.30
67	B1	112	U	C1'-O4'-C4'	-6.33	104.83	109.90
67	B1	160	C	C3'-C2'-C1'	6.33	106.57	101.50
67	B1	806	C	N1-C1'-C2'	6.33	122.23	114.00
67	B1	827	G	O4'-C1'-N9	6.33	113.27	108.20
67	B1	1254	C	C1'-O4'-C4'	6.33	114.97	109.90
67	B1	2804	C	O4'-C1'-N1	6.33	113.27	108.20
68	B3	55	G	O4'-C1'-C2'	6.33	113.30	107.60
27	A0	65	G	C3'-C2'-C1'	6.33	106.56	101.50
67	B1	1666	G	C4'-C3'-C2'	-6.33	96.27	102.60
67	B1	2021	G	O4'-C1'-C2'	6.33	113.30	107.60
67	B1	2502	C	O4'-C1'-N1	6.33	113.27	108.20
67	B1	2931	G	O4'-C1'-N9	6.33	113.27	108.20
21	A2	88	G	P-O5'-C5'	6.33	131.03	120.90
21	A2	732	G	P-O5'-C5'	6.33	131.03	120.90
67	B1	18	C	P-O3'-C3'	-6.33	112.11	119.70
67	B1	1094	U	O4'-C1'-N1	6.33	113.26	108.20
67	B1	2199	U	P-O3'-C3'	-6.33	112.11	119.70
67	B1	2328	G	P-O3'-C3'	-6.33	112.11	119.70
67	B1	2877	A	O4'-C1'-C2'	6.33	113.30	107.60
36	Bf	44	TRP	CA-CB-CG	6.33	125.72	113.70
67	B1	2558	U	O4'-C1'-N1	6.33	113.26	108.20
67	B1	2766	C	O4'-C1'-N1	6.33	113.26	108.20
21	A2	141	C	C3'-C2'-C1'	6.33	106.56	101.50
21	A2	840	C	P-O3'-C3'	-6.33	112.11	119.70
67	B1	518	A	O4'-C1'-C2'	-6.33	99.47	105.80
67	B1	1262	C	C3'-C2'-C1'	6.33	106.56	101.50
67	B1	2662	G	OP1-P-OP2	-6.33	110.11	119.60
21	A2	1073	C	N1-C1'-C2'	6.32	122.22	114.00
21	A2	1203	G	C4'-C3'-C2'	-6.32	96.28	102.60
21	A2	1419	G	O4'-C4'-C3'	-6.32	97.68	104.00
43	Bk	165	ALA	CB-CA-C	-6.32	100.61	110.10
67	B1	1584	G	P-O5'-C5'	6.32	131.02	120.90
67	B1	1049	U	C1'-O4'-C4'	6.32	114.96	109.90
67	B1	1964	G	C5'-C4'-C3'	-6.32	105.89	116.00
67	B1	2450	A	C2'-C3'-O3'	6.32	123.81	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AQ	130	ARG	NE-CZ-NH1	6.32	123.46	120.30
67	B1	915	G	C1'-O4'-C4'	-6.32	104.84	109.90
67	B1	987	G	O4'-C1'-N9	6.32	113.26	108.20
68	B3	45	C	N1-C1'-C2'	-6.32	105.05	112.00
68	B3	69	C	O4'-C4'-C3'	-6.32	97.68	104.00
21	A2	1254	C	O4'-C1'-C2'	-6.32	99.48	105.80
67	B1	1580	G	C1'-O4'-C4'	-6.32	104.84	109.90
4	AG	55	PHE	CA-C-N	6.32	134.79	117.10
7	AB	28	MET	CG-SD-CE	-6.32	90.09	100.20
21	A2	354	G	C1'-O4'-C4'	-6.32	104.85	109.90
21	A2	1415	U	O4'-C4'-C3'	-6.32	97.68	104.00
67	B1	2697	G	C1'-O4'-C4'	6.32	114.95	109.90
67	B1	172	C	C1'-O4'-C4'	-6.32	104.85	109.90
67	B1	997	A	C3'-C2'-C1'	6.32	106.55	101.50
67	B1	2210	G	O4'-C1'-N9	6.32	113.25	108.20
67	B1	2683	G	C1'-O4'-C4'	-6.32	104.85	109.90
67	B1	2725	U	O4'-C1'-C2'	-6.32	99.48	105.80
68	B3	91	G	P-O5'-C5'	6.32	131.00	120.90
21	A2	152	G	P-O5'-C5'	-6.31	110.80	120.90
67	B1	296	G	O4'-C1'-N9	6.31	113.25	108.20
67	B1	406	G	C5'-C4'-O4'	6.31	116.68	109.10
67	B1	815	U	C1'-O4'-C4'	6.31	114.95	109.90
67	B1	2493	A	O4'-C1'-C2'	6.31	113.28	107.60
20	A3	108	ARG	NE-CZ-NH2	6.31	123.46	120.30
67	B1	793	C	O4'-C1'-N1	6.31	113.25	108.20
67	B1	1143	A	C4'-C3'-C2'	6.31	108.91	102.60
21	A2	1435	G	N9-C1'-C2'	6.31	122.20	114.00
67	B1	3004	C	P-O5'-C5'	6.31	131.00	120.90
17	AO	132	ARG	NE-CZ-NH2	6.31	123.45	120.30
21	A2	289	C	C5'-C4'-O4'	6.31	116.67	109.10
29	AL	56	GLU	N-CA-CB	-6.31	99.24	110.60
49	BQ	6	MET	CB-CA-C	6.31	123.02	110.40
67	B1	441	A	P-O3'-C3'	-6.31	112.13	119.70
67	B1	459	C	C1'-O4'-C4'	6.31	114.95	109.90
67	B1	2042	A	N9-C1'-C2'	-6.31	105.06	112.00
68	B3	19	G	P-O5'-C5'	6.31	131.00	120.90
11	A1	3	G	C1'-O4'-C4'	6.31	114.95	109.90
21	A2	877	A	C4'-C3'-C2'	-6.31	96.29	102.60
21	A2	1458	A	O4'-C1'-N9	6.31	113.25	108.20
67	B1	190	C	C1'-O4'-C4'	-6.31	104.85	109.90
67	B1	1849	A	C4'-C3'-C2'	-6.31	96.29	102.60
67	B1	2287	C	C4'-C3'-C2'	-6.31	96.29	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2405	U	C5'-C4'-C3'	-6.31	105.91	116.00
21	A2	527	A	C5'-C4'-C3'	6.30	126.09	116.00
21	A2	660	C	P-O3'-C3'	6.30	127.27	119.70
57	BZ	84	ALA	N-CA-CB	6.30	118.93	110.10
67	B1	12	C	O4'-C1'-C2'	-6.30	99.50	105.80
67	B1	856	A	O4'-C1'-C2'	-6.30	99.50	105.80
67	B1	2486	A	C1'-O4'-C4'	6.30	114.94	109.90
67	B1	2610	C	O4'-C4'-C3'	-6.30	97.69	104.00
67	B1	2649	A	C1'-O4'-C4'	-6.30	104.86	109.90
67	B1	2683	G	O4'-C1'-N9	6.30	113.24	108.20
21	A2	827	G	N9-C1'-C2'	6.30	122.19	114.00
43	Bk	54	VAL	CB-CA-C	-6.30	99.42	111.40
67	B1	1456	U	P-O5'-C5'	-6.30	110.82	120.90
67	B1	2272	G	C4'-C3'-C2'	-6.30	96.30	102.60
21	A2	95	G	C1'-O4'-C4'	6.30	114.94	109.90
21	A2	1276	G	O4'-C1'-C2'	-6.30	99.50	105.80
21	A2	1388	G	C3'-C2'-C1'	6.30	106.54	101.50
67	B1	205	A	O4'-C1'-N9	6.30	113.24	108.20
67	B1	980	G	P-O5'-C5'	6.30	130.98	120.90
67	B1	2969	G	O4'-C1'-N9	-6.30	103.16	108.20
21	A2	375	G	O4'-C1'-N9	6.30	113.24	108.20
21	A2	908	G	N9-C1'-C2'	6.30	122.19	114.00
21	A2	1231	G	O4'-C1'-N9	6.30	113.24	108.20
40	BE	155	ARG	NE-CZ-NH1	-6.30	117.15	120.30
67	B1	1271	G	O4'-C1'-N9	-6.30	103.16	108.20
67	B1	1668	G	O4'-C1'-N9	6.30	113.24	108.20
68	B3	100	A	C4'-C3'-C2'	6.30	108.90	102.60
67	B1	726	G	C3'-C2'-C1'	-6.30	96.46	101.50
67	B1	2936	U	C3'-C2'-C1'	-6.30	96.46	101.50
21	A2	153	G	P-O3'-C3'	-6.30	112.14	119.70
21	A2	402	G	C4'-C3'-C2'	-6.30	96.30	102.60
21	A2	523	C	N1-C1'-C2'	6.30	122.19	114.00
21	A2	1158	G	N9-C1'-C2'	-6.30	105.07	112.00
67	B1	839	A	C3'-C2'-C1'	6.30	106.54	101.50
67	B1	1420	U	C1'-O4'-C4'	6.30	114.94	109.90
67	B1	1873	G	O4'-C1'-N9	6.30	113.24	108.20
21	A2	1151	A	C3'-C2'-C1'	6.29	106.54	101.50
67	B1	216	A	C4'-C3'-C2'	-6.29	96.31	102.60
67	B1	548	U	OP1-P-OP2	-6.29	110.16	119.60
67	B1	1642	G	C4'-C3'-C2'	-6.29	96.31	102.60
67	B1	2371	A	C3'-C2'-C1'	-6.29	96.46	101.50
21	A2	756	A	O4'-C1'-C2'	-6.29	99.51	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	865	A	O4'-C1'-N9	6.29	113.23	108.20
67	B1	34	C	P-O3'-C3'	6.29	127.25	119.70
67	B1	487	U	C1'-O4'-C4'	6.29	114.94	109.90
67	B1	606	A	C4'-C3'-C2'	-6.29	96.31	102.60
67	B1	1802	G	O4'-C1'-N9	6.29	113.23	108.20
67	B1	1929	C	C5'-C4'-O4'	6.29	116.65	109.10
67	B1	2647	G	C1'-O4'-C4'	-6.29	104.87	109.90
21	A2	1	A	C1'-O4'-C4'	6.29	114.93	109.90
21	A2	199	A	C4'-C3'-C2'	6.29	108.89	102.60
21	A2	913	G	C1'-O4'-C4'	-6.29	104.87	109.90
35	BL	47	TRP	O-C-N	-6.29	112.63	122.70
67	B1	1455	U	P-O5'-C5'	-6.29	110.83	120.90
67	B1	2094	A	P-O3'-C3'	6.29	127.25	119.70
67	B1	2998	G	C3'-C2'-C1'	-6.29	96.47	101.50
67	B1	396	G	O4'-C1'-N9	6.29	113.23	108.20
67	B1	1256	G	O4'-C1'-C2'	6.29	113.26	107.60
21	A2	488	A	O4'-C1'-C2'	-6.29	99.51	105.80
21	A2	868	C	C1'-O4'-C4'	6.29	114.93	109.90
21	A2	975	A	C1'-O4'-C4'	6.29	114.93	109.90
21	A2	1239	A	C3'-C2'-C1'	6.29	106.53	101.50
53	BD	22	PHE	CB-CG-CD1	-6.29	116.40	120.80
67	B1	2229	G	C1'-O4'-C4'	6.29	114.93	109.90
67	B1	2501	G	P-O3'-C3'	6.29	127.25	119.70
21	A2	740	G	N9-C1'-C2'	-6.29	105.08	112.00
21	A2	1053	A	C4'-C3'-C2'	6.29	108.89	102.60
67	B1	1722	G	O4'-C1'-N9	-6.29	103.17	108.20
21	A2	3	U	O4'-C1'-N1	6.29	113.23	108.20
21	A2	1056	G	O4'-C1'-C2'	6.29	113.26	107.60
48	BR	12	THR	CA-CB-CG2	-6.29	103.60	112.40
67	B1	1621	G	O5'-P-OP2	-6.29	100.04	105.70
67	B1	2454	G	O4'-C1'-N9	6.29	113.23	108.20
48	BR	97	LYS	N-CA-CB	6.28	121.91	110.60
67	B1	1087	G	N9-C1'-C2'	-6.28	105.09	112.00
67	B1	1648	C	O4'-C1'-N1	6.28	113.23	108.20
67	B1	2079	U	P-O3'-C3'	-6.28	112.16	119.70
67	B1	2748	C	N3-C4-N4	6.28	122.40	118.00
21	A2	713	A	O4'-C4'-C3'	-6.28	97.72	104.00
21	A2	1166	G	C1'-O4'-C4'	-6.28	104.88	109.90
21	A2	1460	G	C2'-C3'-O3'	6.28	123.75	113.70
67	B1	898	G	O4'-C1'-N9	-6.28	103.17	108.20
67	B1	1104	A	O4'-C1'-N9	6.28	113.22	108.20
67	B1	2606	C	O4'-C1'-N1	6.28	113.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	81	G	C1'-O4'-C4'	-6.28	104.88	109.90
67	B1	1229	U	O4'-C1'-N1	-6.28	103.18	108.20
21	A2	549	A	C5'-C4'-O4'	6.28	116.63	109.10
27	A0	76	A	C4'-C3'-C2'	-6.28	96.32	102.60
67	B1	323	U	P-O5'-C5'	-6.28	110.86	120.90
67	B1	350	A	N9-C1'-C2'	-6.28	105.09	112.00
67	B1	1550	C	O3'-P-O5'	-6.28	92.07	104.00
67	B1	1880	A	C4-C5-C6	6.28	120.14	117.00
67	B1	2422	G	C3'-C2'-C1'	-6.28	96.48	101.50
67	B1	2794	G	N9-C1'-C2'	-6.28	105.09	112.00
67	B1	2959	A	N9-C1'-C2'	6.28	122.16	114.00
21	A2	601	G	C1'-O4'-C4'	6.28	114.92	109.90
67	B1	1753	G	P-O3'-C3'	6.28	127.23	119.70
67	B1	2175	G	O4'-C1'-N9	6.28	113.22	108.20
67	B1	2578	C	C4'-C3'-C2'	-6.28	96.32	102.60
67	B1	2921	U	N1-C1'-C2'	-6.28	105.10	112.00
68	B3	59	C	C1'-O4'-C4'	-6.28	104.88	109.90
67	B1	1947	A	P-O3'-C3'	6.27	127.23	119.70
68	B3	8	C	O4'-C4'-C3'	6.27	111.12	106.10
12	AN	9	GLY	N-CA-C	-6.27	97.42	113.10
13	AX	39	ARG	NE-CZ-NH1	6.27	123.44	120.30
21	A2	71	C	O4'-C1'-C2'	-6.27	99.53	105.80
67	B1	44	C	P-O3'-C3'	6.27	127.23	119.70
67	B1	688	G	O4'-C1'-N9	-6.27	103.18	108.20
67	B1	1407	A	C2'-C3'-O3'	6.27	123.74	113.70
67	B1	1888	G	C3'-C2'-C1'	6.27	106.52	101.50
67	B1	1992	A	P-O3'-C3'	6.27	127.23	119.70
53	BD	22	PHE	CB-CG-CD2	6.27	125.19	120.80
67	B1	463	A	C3'-C2'-C1'	-6.27	96.48	101.50
35	BL	9	ARG	CA-C-N	-6.27	103.41	117.20
67	B1	1302	G	N9-C1'-C2'	6.27	122.15	114.00
67	B1	1769	G	C1'-O4'-C4'	-6.27	104.88	109.90
67	B1	2481	G	C1'-O4'-C4'	6.27	114.92	109.90
19	AS	47	ARG	NE-CZ-NH2	-6.27	117.17	120.30
21	A2	676	G	P-O3'-C3'	6.27	127.22	119.70
21	A2	681	G	P-O5'-C5'	-6.27	110.87	120.90
21	A2	1318	U	N1-C1'-C2'	6.27	122.15	114.00
67	B1	732	G	C3'-C2'-C1'	-6.27	96.49	101.50
67	B1	1923	A	O4'-C4'-C3'	6.27	111.11	106.10
21	A2	874	G	P-O3'-C3'	-6.27	112.18	119.70
67	B1	1615	G	P-O3'-C3'	6.27	127.22	119.70
68	B3	49	A	N9-C1'-C2'	-6.27	105.11	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1457	C	OP1-P-OP2	-6.26	110.20	119.60
67	B1	229	G	N9-C1'-C2'	6.26	122.14	114.00
67	B1	2718	G	C5'-C4'-C3'	-6.26	105.98	116.00
1	AQ	158	ARG	NE-CZ-NH2	-6.26	117.17	120.30
21	A2	72	C	O4'-C1'-C2'	-6.26	99.54	105.80
21	A2	560	A	C3'-C2'-C1'	6.26	106.51	101.50
43	Bk	42	ARG	CA-CB-CG	6.26	127.17	113.40
67	B1	333	A	P-O3'-C3'	6.26	127.22	119.70
67	B1	1017	A	C5-C6-N6	-6.26	118.69	123.70
67	B1	1139	C	O4'-C1'-N1	6.26	113.21	108.20
67	B1	1288	C	C3'-C2'-C1'	6.26	106.51	101.50
67	B1	3017	U	C1'-O4'-C4'	-6.26	104.89	109.90
67	B1	774	G	C3'-C2'-C1'	-6.26	96.49	101.50
67	B1	1695	G	P-O3'-C3'	6.26	127.21	119.70
67	B1	1816	C	N1-C1'-C2'	6.26	122.14	114.00
67	B1	2477	G	P-O3'-C3'	-6.26	112.19	119.70
67	B1	2950	G	N9-C1'-C2'	-6.26	105.11	112.00
21	A2	904	G	C3'-C2'-C1'	6.26	106.51	101.50
67	B1	723	A	O4'-C1'-C2'	-6.26	99.54	105.80
67	B1	2077	A	N9-C1'-C2'	-6.26	105.12	112.00
67	B1	2977	G	N9-C1'-C2'	6.26	122.14	114.00
21	A2	34	G	P-O3'-C3'	-6.26	112.19	119.70
21	A2	1307	G	C3'-C2'-C1'	6.26	106.51	101.50
67	B1	553	C	N1-C1'-C2'	6.26	122.13	114.00
67	B1	1248	C	P-O3'-C3'	-6.26	112.19	119.70
67	B1	1298	C	O4'-C1'-C2'	-6.26	99.54	105.80
67	B1	2348	G	C3'-C2'-C1'	-6.26	96.50	101.50
67	B1	2869	U	C4'-C3'-C2'	-6.26	96.34	102.60
67	B1	1481	G	N9-C1'-C2'	6.25	122.13	114.00
67	B1	2406	C	O4'-C1'-C2'	-6.25	99.55	105.80
7	AB	110	PHE	CB-CG-CD1	-6.25	116.42	120.80
11	A1	27	A	O4'-C4'-C3'	6.25	111.10	106.10
67	B1	784	C	O4'-C1'-C2'	-6.25	99.55	105.80
11	A1	57	C	C5'-C4'-O4'	6.25	116.60	109.10
21	A2	111	G	O3'-P-O5'	-6.25	92.12	104.00
40	BE	138	ASP	CB-CG-OD2	-6.25	112.67	118.30
67	B1	1183	U	O4'-C1'-N1	6.25	113.20	108.20
67	B1	1318	G	O4'-C1'-N9	6.25	113.20	108.20
67	B1	1823	A	C5'-C4'-C3'	-6.25	106.00	116.00
68	B3	96	C	C4'-C3'-C2'	-6.25	96.35	102.60
7	AB	200	VAL	CG1-CB-CG2	-6.25	100.90	110.90
11	A1	10	G	P-O3'-C3'	-6.25	112.20	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AO	122	LEU	CB-CG-CD2	6.25	121.62	111.00
21	A2	739	G	P-O3'-C3'	-6.25	112.20	119.70
67	B1	2055	U	C3'-C2'-C1'	6.25	106.50	101.50
67	B1	2688	C	C5'-C4'-O4'	6.25	116.60	109.10
21	A2	726	A	C1'-O4'-C4'	-6.25	104.90	109.90
21	A2	1374	C	N1-C1'-C2'	6.25	122.12	114.00
59	BM	59	TYR	CB-CG-CD2	6.25	124.75	121.00
21	A2	66	G	N9-C1'-C2'	6.25	122.12	114.00
67	B1	1404	G	C5'-C4'-O4'	6.25	116.60	109.10
67	B1	2278	U	P-O3'-C3'	-6.25	112.20	119.70
21	A2	848	G	C4'-C3'-C2'	-6.25	96.36	102.60
52	BB	219	ARG	NE-CZ-NH1	6.25	123.42	120.30
67	B1	1820	C	C1'-O4'-C4'	-6.25	104.90	109.90
67	B1	2657	A	C1'-O4'-C4'	6.25	114.90	109.90
67	B1	2664	G	P-O3'-C3'	-6.25	112.20	119.70
20	A3	106	LYS	N-CA-CB	6.24	121.84	110.60
21	A2	1099	A	P-O3'-C3'	6.24	127.19	119.70
21	A2	1289	G	C4'-C3'-C2'	-6.24	96.36	102.60
67	B1	371	U	N1-C1'-C2'	6.24	122.12	114.00
67	B1	463	A	N9-C1'-C2'	6.24	122.12	114.00
67	B1	1408	G	C4'-C3'-C2'	-6.24	96.36	102.60
67	B1	1542	U	OP1-P-OP2	-6.24	110.24	119.60
67	B1	1969	C	P-O3'-C3'	6.24	127.19	119.70
21	A2	831	A	C3'-C2'-C1'	6.24	106.49	101.50
67	B1	1348	G	N9-C1'-C2'	-6.24	105.13	112.00
21	A2	581	G	P-O3'-C3'	6.24	127.19	119.70
41	Ba	24	ARG	NE-CZ-NH1	6.24	123.42	120.30
67	B1	2696	G	C1'-O4'-C4'	6.24	114.89	109.90
11	A1	10	G	C3'-C2'-C1'	-6.24	96.51	101.50
21	A2	1053	A	O4'-C1'-C2'	-6.24	99.56	105.80
59	BM	118	TRP	CG-CD2-CE3	-6.24	128.29	133.90
67	B1	1363	C	O4'-C1'-N1	6.24	113.19	108.20
67	B1	2958	U	O4'-C1'-C2'	-6.24	99.56	105.80
68	B3	58	C	N1-C1'-C2'	6.24	122.11	114.00
21	A2	671	C	P-O3'-C3'	-6.24	112.22	119.70
67	B1	1559	A	N9-C1'-C2'	6.24	122.11	114.00
67	B1	686	C	C3'-C2'-C1'	6.24	106.49	101.50
67	B1	719	C	C3'-C2'-C1'	6.24	106.49	101.50
67	B1	980	G	O4'-C1'-N9	-6.24	103.21	108.20
67	B1	1547	U	C3'-C2'-C1'	6.24	106.49	101.50
67	B1	2951	G	P-O3'-C3'	6.24	127.18	119.70
11	A1	38	G	O4'-C1'-C2'	-6.23	99.57	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1412	A	C3'-C2'-C1'	6.23	106.49	101.50
67	B1	204	G	C5'-C4'-C3'	-6.23	106.03	116.00
67	B1	393	C	C5'-C4'-O4'	-6.23	101.62	109.10
67	B1	2566	A	O4'-C1'-N9	6.23	113.19	108.20
67	B1	2586	A	OP1-P-OP2	-6.23	110.25	119.60
21	A2	604	C	C4'-C3'-C2'	-6.23	96.37	102.60
52	BB	162	VAL	CA-CB-CG2	-6.23	101.55	110.90
67	B1	450	G	C3'-C2'-C1'	6.23	106.48	101.50
67	B1	873	G	O4'-C1'-N9	6.23	113.18	108.20
25	AH	97	LYS	N-CA-CB	6.23	121.81	110.60
67	B1	332	A	C4-C5-C6	6.23	120.11	117.00
67	B1	866	G	P-O3'-C3'	6.23	127.17	119.70
67	B1	932	C	O4'-C1'-C2'	-6.23	99.57	105.80
67	B1	3003	A	C1'-O4'-C4'	6.23	114.88	109.90
15	AE	198	ARG	NH1-CZ-NH2	-6.23	112.55	119.40
21	A2	925	U	N1-C1'-C2'	6.23	122.09	114.00
21	A2	1012	C	C3'-C2'-C1'	6.23	106.48	101.50
52	BB	185	ARG	NE-CZ-NH1	-6.23	117.19	120.30
61	Bd	88	LEU	N-CA-CB	6.23	122.86	110.40
67	B1	1745	U	C1'-O4'-C4'	6.23	114.88	109.90
1	AQ	138	ARG	NE-CZ-NH2	-6.23	117.19	120.30
59	BM	64	VAL	N-CA-C	-6.23	94.19	111.00
67	B1	1056	C	O4'-C1'-C2'	-6.23	99.57	105.80
21	A2	810	G	O4'-C1'-N9	6.22	113.18	108.20
21	A2	993	C	O4'-C1'-N1	6.22	113.18	108.20
67	B1	2699	U	C3'-C2'-C1'	6.22	106.48	101.50
21	A2	791	G	O4'-C1'-N9	6.22	113.18	108.20
21	A2	1090	C	C3'-C2'-C1'	6.22	106.48	101.50
21	A2	1363	C	P-O5'-C5'	6.22	130.86	120.90
67	B1	325	G	O4'-C1'-C2'	-6.22	99.58	105.80
67	B1	774	G	O4'-C1'-N9	6.22	113.18	108.20
67	B1	839	A	O4'-C1'-C2'	-6.22	99.58	105.80
67	B1	1215	C	O4'-C1'-C2'	-6.22	99.58	105.80
21	A2	360	A	C3'-C2'-C1'	6.22	106.48	101.50
67	B1	1392	G	N9-C1'-C2'	6.22	122.09	114.00
67	B1	1480	G	C1'-O4'-C4'	6.22	114.88	109.90
67	B1	2764	G	O5'-P-OP2	-6.22	100.10	105.70
21	A2	576	C	O4'-C1'-N1	6.22	113.18	108.20
24	AA	16	LYS	O-C-N	6.22	132.65	122.70
65	BJ	129	ARG	NE-CZ-NH1	6.22	123.41	120.30
67	B1	234	G	O4'-C1'-C2'	6.22	113.20	107.60
67	B1	395	G	O4'-C1'-N9	6.22	113.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AQ	80	ARG	NE-CZ-NH1	6.22	123.41	120.30
24	AA	76	GLN	N-CA-CB	6.22	121.79	110.60
67	B1	692	C	O4'-C1'-C2'	-6.22	99.58	105.80
67	B1	1856	G	N9-C1'-C2'	6.22	122.08	114.00
21	A2	664	G	N9-C1'-C2'	-6.22	105.16	112.00
67	B1	2766	C	O4'-C1'-C2'	6.22	113.19	107.60
7	AB	31	PHE	CB-CG-CD2	-6.21	116.45	120.80
21	A2	521	G	P-O3'-C3'	-6.21	112.24	119.70
67	B1	320	C	O4'-C1'-C2'	-6.21	99.58	105.80
67	B1	1837	A	C5'-C4'-O4'	6.21	116.56	109.10
67	B1	2490	C	C1'-O4'-C4'	-6.21	104.93	109.90
21	A2	913	G	O4'-C1'-C2'	6.21	113.19	107.60
27	A0	74	C	P-O3'-C3'	6.21	127.15	119.70
53	BD	162	LYS	N-CA-CB	6.21	121.78	110.60
67	B1	1009	G	C5-C6-O6	-6.21	124.87	128.60
67	B1	1014	U	O4'-C1'-N1	6.21	113.17	108.20
67	B1	1867	C	C3'-C2'-C1'	6.21	106.47	101.50
67	B1	2425	A	O4'-C1'-N9	-6.21	103.23	108.20
68	B3	36	U	P-O3'-C3'	6.21	127.15	119.70
21	A2	410	U	O4'-C4'-C3'	-6.21	97.79	104.00
21	A2	1260	G	O4'-C1'-C2'	6.21	113.19	107.60
51	Bj	50	PHE	CA-CB-CG	6.21	128.80	113.90
67	B1	1001	C	P-O5'-C5'	-6.21	110.96	120.90
67	B1	1795	C	C3'-C2'-C1'	6.21	106.47	101.50
67	B1	2296	A	P-O3'-C3'	6.21	127.15	119.70
67	B1	2494	A	P-O5'-C5'	-6.21	110.96	120.90
67	B1	2774	C	C3'-C2'-C1'	6.21	106.47	101.50
67	B1	728	A	N9-C1'-C2'	6.21	122.07	114.00
67	B1	939	A	C1'-O4'-C4'	6.21	114.87	109.90
67	B1	1658	A	C4-C5-C6	6.21	120.11	117.00
67	B1	2006	C	O4'-C1'-C2'	-6.21	99.59	105.80
67	B1	2277	G	C1'-O4'-C4'	6.21	114.87	109.90
67	B1	2425	A	C3'-C2'-C1'	6.21	106.47	101.50
67	B1	2738	G	P-O5'-C5'	-6.21	110.97	120.90
68	B3	1	C	P-O3'-C3'	-6.21	112.25	119.70
12	AN	24	ARG	NE-CZ-NH1	6.21	123.40	120.30
21	A2	1398	U	O4'-C1'-C2'	-6.21	99.59	105.80
32	BO	57	ARG	NE-CZ-NH2	6.21	123.40	120.30
67	B1	530	A	N9-C1'-C2'	-6.21	105.17	112.00
67	B1	1508	A	O4'-C1'-N9	6.21	113.16	108.20
67	B1	1813	A	O4'-C1'-N9	6.21	113.17	108.20
67	B1	2966	C	C1'-O4'-C4'	-6.21	104.94	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	82	G	O4'-C1'-C2'	6.21	113.19	107.60
67	B1	1298	C	C3'-C2'-C1'	6.21	106.46	101.50
13	AX	39	ARG	NE-CZ-NH2	-6.20	117.20	120.30
14	AM	84	ARG	NE-CZ-NH2	6.20	123.40	120.30
21	A2	664	G	C4'-C3'-C2'	-6.20	96.40	102.60
22	AY	32	ALA	N-CA-CB	6.20	118.79	110.10
36	Bf	1	MET	C-N-CA	6.20	137.21	121.70
67	B1	317	A	C4-C5-C6	6.20	120.10	117.00
67	B1	500	C	N1-C1'-C2'	6.20	122.07	114.00
67	B1	1118	A	C1'-O4'-C4'	-6.20	104.94	109.90
67	B1	1349	G	O4'-C1'-N9	6.20	113.16	108.20
67	B1	2094	A	O4'-C1'-N9	-6.20	103.24	108.20
67	B1	2819	C	C3'-C2'-C1'	6.20	106.46	101.50
67	B1	1145	G	C4'-C3'-C2'	6.20	108.80	102.60
18	AF	13	LEU	O-C-N	-6.20	112.78	122.70
67	B1	1074	G	P-O5'-C5'	6.20	130.82	120.90
67	B1	1873	G	C1'-O4'-C4'	-6.20	104.94	109.90
67	B1	2945	A	C4'-C3'-C2'	-6.20	96.40	102.60
67	B1	2957	G	C3'-C2'-C1'	6.20	106.46	101.50
43	Bk	107	ARG	NE-CZ-NH1	-6.20	117.20	120.30
67	B1	2099	G	O4'-C1'-N9	6.20	113.16	108.20
21	A2	758	U	O4'-C1'-N1	6.20	113.16	108.20
21	A2	1014	C	N3-C4-C5	-6.20	119.42	121.90
21	A2	1176	C	N1-C1'-C2'	6.20	122.06	114.00
67	B1	1269	U	O4'-C1'-N1	6.20	113.16	108.20
67	B1	2266	C	N1-C1'-C2'	6.20	122.06	114.00
21	A2	1098	G	P-O3'-C3'	-6.20	112.26	119.70
44	BW	53	ARG	NE-CZ-NH2	-6.20	117.20	120.30
67	B1	835	G	P-O3'-C3'	6.20	127.13	119.70
67	B1	1652	A	O4'-C1'-N9	6.20	113.16	108.20
68	B3	117	G	O4'-C1'-C2'	-6.20	99.61	105.80
21	A2	1209	C	N1-C1'-C2'	6.19	122.05	114.00
21	A2	1328	G	C1'-O4'-C4'	-6.19	104.94	109.90
67	B1	2778	A	C4'-C3'-C2'	-6.19	96.41	102.60
68	B3	38	U	P-O5'-C5'	6.19	130.81	120.90
21	A2	101	G	O4'-C1'-C2'	6.19	113.17	107.60
21	A2	545	C	O4'-C1'-N1	6.19	113.15	108.20
21	A2	607	U	C5'-C4'-C3'	-6.19	106.09	116.00
21	A2	732	G	O4'-C1'-N9	6.19	113.15	108.20
21	A2	1403	U	P-O5'-C5'	-6.19	110.99	120.90
33	BC	358	TYR	CB-CG-CD1	6.19	124.72	121.00
67	B1	129	C	C1'-O4'-C4'	6.19	114.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1199	U	C5'-C4'-C3'	6.19	125.91	116.00
67	B1	1344	C	O4'-C1'-C2'	-6.19	99.61	105.80
67	B1	1755	C	P-O3'-C3'	6.19	127.13	119.70
67	B1	1863	G	C1'-O4'-C4'	-6.19	104.95	109.90
21	A2	226	G	N9-C1'-C2'	-6.19	105.19	112.00
21	A2	1219	C	P-O3'-C3'	-6.19	112.27	119.70
21	A2	1381	G	C4'-C3'-C2'	-6.19	96.41	102.60
67	B1	2441	A	O4'-C1'-C2'	-6.19	99.61	105.80
67	B1	2541	U	O4'-C1'-C2'	-6.19	99.61	105.80
67	B1	2740	G	O4'-C1'-N9	6.19	113.15	108.20
21	A2	1091	C	O4'-C1'-C2'	-6.19	99.61	105.80
21	A2	1294	G	C1'-O4'-C4'	6.19	114.85	109.90
59	BM	11	TRP	CD1-CG-CD2	6.19	111.25	106.30
67	B1	602	G	C1'-O4'-C4'	-6.19	104.95	109.90
67	B1	2664	G	O4'-C1'-N9	6.19	113.15	108.20
15	AE	27	LYS	N-CA-CB	-6.19	99.46	110.60
21	A2	561	A	P-O5'-C5'	-6.19	111.00	120.90
21	A2	620	G	O4'-C1'-N9	-6.19	103.25	108.20
21	A2	642	G	C4'-C3'-C2'	-6.19	96.41	102.60
21	A2	1190	C	C1'-O4'-C4'	-6.19	104.95	109.90
28	AV	21	PHE	CB-CG-CD1	6.19	125.13	120.80
49	BQ	85	LYS	CB-CA-C	-6.19	98.03	110.40
53	BD	172	ARG	NE-CZ-NH1	6.19	123.39	120.30
62	BN	103	ARG	CD-NE-CZ	-6.19	114.94	123.60
67	B1	581	A	P-O3'-C3'	6.19	127.13	119.70
67	B1	2753	G	OP1-P-OP2	-6.19	110.32	119.60
67	B1	2912	G	C5'-C4'-O4'	-6.19	101.67	109.10
67	B1	3003	A	C3'-C2'-C1'	6.19	106.45	101.50
21	A2	96	G	C1'-O4'-C4'	-6.19	104.95	109.90
65	BJ	23	VAL	CA-CB-CG2	-6.19	101.62	110.90
67	B1	235	G	O4'-C1'-C2'	6.19	113.17	107.60
67	B1	1490	G	C1'-O4'-C4'	6.19	114.85	109.90
21	A2	276	A	P-O3'-C3'	6.18	127.12	119.70
21	A2	1045	A	P-O3'-C3'	6.18	127.12	119.70
35	BL	4	ARG	CG-CD-NE	-6.18	98.81	111.80
38	Bb	127	ASN	C-N-CD	-6.18	107.00	120.60
67	B1	836	U	N1-C1'-C2'	6.18	122.04	114.00
67	B1	1162	C	C1'-O4'-C4'	-6.18	104.95	109.90
67	B1	1962	G	C4'-C3'-C2'	-6.18	96.42	102.60
67	B1	2724	A	C5'-C4'-C3'	-6.18	106.11	116.00
7	AB	6	LEU	C-N-CA	6.18	137.16	121.70
14	AM	14	TRP	CB-CG-CD2	-6.18	118.56	126.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	24	C	C3'-C2'-C1'	6.18	106.45	101.50
67	B1	71	A	P-O3'-C3'	-6.18	112.28	119.70
67	B1	365	G	C4'-C3'-C2'	-6.18	96.42	102.60
67	B1	421	C	O4'-C1'-C2'	-6.18	99.62	105.80
67	B1	490	C	P-O3'-C3'	6.18	127.12	119.70
67	B1	490	C	C5'-C4'-O4'	6.18	116.52	109.10
67	B1	1195	G	O4'-C1'-C2'	-6.18	99.62	105.80
67	B1	1216	A	C3'-C2'-C1'	-6.18	96.55	101.50
67	B1	1466	U	O4'-C1'-C2'	-6.18	99.62	105.80
67	B1	2136	G	C5'-C4'-O4'	6.18	116.52	109.10
21	A2	908	G	C1'-O4'-C4'	-6.18	104.95	109.90
46	BA	67	ASP	CB-CG-OD1	-6.18	112.74	118.30
67	B1	1058	A	O4'-C1'-N9	6.18	113.14	108.20
67	B1	1681	G	OP1-P-OP2	-6.18	110.33	119.60
7	AB	96	PHE	CB-CG-CD2	6.18	125.13	120.80
21	A2	1022	U	O4'-C1'-N1	6.18	113.14	108.20
67	B1	1296	A	C3'-C2'-C1'	6.18	106.44	101.50
27	A0	58	A	P-O3'-C3'	-6.18	112.29	119.70
27	A0	70	G	OP1-P-OP2	-6.18	110.33	119.60
21	A2	462	A	C2'-C3'-O3'	6.18	123.58	113.70
54	BF	71	PHE	CB-CG-CD1	6.18	125.12	120.80
67	B1	50	C	O4'-C1'-N1	6.18	113.14	108.20
67	B1	534	G	O4'-C1'-C2'	6.18	113.16	107.60
21	A2	421	U	N1-C1'-C2'	6.17	122.03	114.00
67	B1	566	G	O4'-C1'-N9	6.17	113.14	108.20
67	B1	566	G	P-O5'-C5'	-6.17	111.02	120.90
67	B1	1260	C	C4'-C3'-C2'	-6.17	96.43	102.60
67	B1	1923	A	C3'-C2'-C1'	6.17	106.44	101.50
68	B3	57	C	N1-C1'-C2'	6.17	122.03	114.00
21	A2	32	A	C4'-C3'-C2'	-6.17	96.43	102.60
21	A2	426	C	N1-C1'-C2'	6.17	122.03	114.00
67	B1	734	C	C3'-C2'-C1'	6.17	106.44	101.50
67	B1	2002	A	O4'-C1'-N9	6.17	113.14	108.20
67	B1	3047	C	C1'-O4'-C4'	-6.17	104.96	109.90
21	A2	511	C	O4'-C1'-C2'	-6.17	99.63	105.80
21	A2	698	A	N9-C1'-C2'	6.17	122.02	114.00
21	A2	1450	U	O4'-C1'-N1	6.17	113.14	108.20
33	BC	125	TYR	CB-CG-CD1	-6.17	117.30	121.00
43	Bk	41	MET	N-CA-CB	6.17	121.71	110.60
67	B1	1360	G	O4'-C1'-C2'	6.17	113.15	107.60
67	B1	91	G	C3'-C2'-C1'	6.17	106.44	101.50
67	B1	515	G	C3'-C2'-C1'	-6.17	96.57	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1011	A	C5'-C4'-C3'	6.17	125.87	116.00
67	B1	1162	C	O4'-C1'-C2'	-6.17	99.63	105.80
67	B1	1225	A	C4'-C3'-C2'	6.17	108.77	102.60
67	B1	2072	G	C4'-C3'-C2'	-6.17	96.43	102.60
67	B1	2563	A	C5'-C4'-C3'	-6.17	106.13	116.00
21	A2	456	U	C3'-C2'-C1'	-6.17	96.57	101.50
67	B1	1942	G	O4'-C1'-C2'	6.17	113.15	107.60
67	B1	2923	G	C1'-O4'-C4'	6.17	114.83	109.90
67	B1	2484	C	P-O3'-C3'	-6.17	112.30	119.70
68	B3	90	A	C3'-C2'-C1'	6.17	106.43	101.50
11	A1	57	C	C3'-C2'-C1'	6.16	106.43	101.50
21	A2	1084	U	O4'-C1'-N1	6.16	113.13	108.20
67	B1	625	A	C4'-C3'-C2'	-6.16	96.44	102.60
67	B1	1200	A	C5'-C4'-O4'	6.16	116.50	109.10
67	B1	2299	G	P-O5'-C5'	-6.16	111.04	120.90
67	B1	2370	C	C3'-C2'-C1'	6.16	106.43	101.50
67	B1	2656	A	C3'-C2'-C1'	-6.16	96.57	101.50
21	A2	312	U	O4'-C1'-C2'	-6.16	99.64	105.80
21	A2	1124	G	O4'-C1'-N9	6.16	113.13	108.20
21	A2	1431	C	O4'-C1'-N1	6.16	113.13	108.20
21	A2	1438	A	O4'-C1'-C2'	-6.16	99.64	105.80
67	B1	328	G	C1'-O4'-C4'	6.16	114.83	109.90
67	B1	1955	U	O4'-C1'-C2'	-6.16	99.64	105.80
21	A2	1014	C	O4'-C1'-N1	6.16	113.13	108.20
21	A2	787	U	C1'-O4'-C4'	-6.16	104.97	109.90
21	A2	1037	U	C3'-C2'-C1'	6.16	106.43	101.50
67	B1	120	G	N9-C1'-C2'	6.16	122.00	114.00
67	B1	2032	G	C1'-O4'-C4'	-6.16	104.97	109.90
67	B1	2672	A	C1'-O4'-C4'	6.16	114.83	109.90
67	B1	2782	A	C3'-C2'-C1'	6.16	106.43	101.50
68	B3	37	U	C1'-O4'-C4'	6.16	114.83	109.90
68	B3	75	G	C1'-O4'-C4'	6.16	114.83	109.90
21	A2	754	G	O4'-C1'-N9	-6.16	103.27	108.20
21	A2	1001	A	C4'-C3'-C2'	6.16	108.76	102.60
67	B1	377	C	N3-C4-N4	6.16	122.31	118.00
67	B1	1325	A	P-O5'-C5'	6.16	130.75	120.90
21	A2	816	G	O4'-C1'-C2'	6.16	113.14	107.60
42	BT	74	TYR	CB-CG-CD2	-6.16	117.31	121.00
67	B1	427	G	C2'-C3'-O3'	6.16	123.55	113.70
68	B3	57	C	C3'-C2'-C1'	6.15	106.42	101.50
11	A1	64	C	O4'-C1'-C2'	-6.15	99.65	105.80
21	A2	130	G	N9-C1'-C2'	-6.15	105.23	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	254	G	O4'-C1'-N9	6.15	113.12	108.20
27	A0	75	C	C3'-C2'-C1'	6.15	106.42	101.50
33	BC	198	TYR	CG-CD1-CE1	-6.15	116.38	121.30
67	B1	65	G	N9-C1'-C2'	6.15	122.00	114.00
67	B1	128	C	N1-C1'-C2'	6.15	122.00	114.00
67	B1	201	C	O4'-C1'-N1	6.15	113.12	108.20
67	B1	555	G	C3'-C2'-C1'	-6.15	96.58	101.50
21	A2	31	U	O4'-C1'-N1	6.15	113.12	108.20
67	B1	453	U	O4'-C1'-N1	6.15	113.12	108.20
67	B1	1168	A	O4'-C1'-C2'	-6.15	99.65	105.80
67	B1	1832	G	P-O5'-C5'	-6.15	111.06	120.90
54	BF	140	GLU	OE1-CD-OE2	6.15	130.68	123.30
64	Bc	22	MET	CG-SD-CE	6.15	110.04	100.20
21	A2	579	U	C1'-O4'-C4'	6.15	114.82	109.90
21	A2	1029	G	C4'-C3'-C2'	-6.15	96.45	102.60
21	A2	1197	C	N1-C1'-C2'	6.15	121.99	114.00
21	A2	1394	G	O4'-C1'-N9	6.15	113.12	108.20
30	AU	83	ARG	NE-CZ-NH2	-6.15	117.23	120.30
59	BM	147	ALA	CB-CA-C	-6.15	100.88	110.10
67	B1	1566	G	O4'-C1'-C2'	6.15	113.13	107.60
14	AM	133	ARG	NE-CZ-NH1	6.15	123.37	120.30
21	A2	989	C	P-O5'-C5'	6.15	130.73	120.90
21	A2	1233	G	C4'-C3'-C2'	-6.15	96.45	102.60
34	BK	26	ASP	CB-CG-OD2	6.15	123.83	118.30
68	B3	25	A	C4'-C3'-C2'	-6.15	96.45	102.60
18	AF	14	ASP	CA-C-N	6.14	130.72	117.20
21	A2	458	G	C5-C6-O6	-6.14	124.91	128.60
21	A2	760	C	O4'-C1'-N1	6.14	113.11	108.20
34	B5	26	ASP	CB-CG-OD2	6.14	123.83	118.30
67	B1	1391	C	OP1-P-OP2	-6.14	110.38	119.60
67	B1	2395	C	P-O3'-C3'	6.14	127.07	119.70
10	AD	54	ARG	NE-CZ-NH1	6.14	123.37	120.30
21	A2	59	C	C3'-C2'-C1'	6.14	106.41	101.50
21	A2	185	G	O4'-C1'-C2'	-6.14	99.66	105.80
21	A2	1077	U	C3'-C2'-C1'	6.14	106.42	101.50
67	B1	165	G	P-O5'-C5'	6.14	130.73	120.90
67	B1	1104	A	OP1-P-OP2	-6.14	110.39	119.60
67	B1	1515	G	N9-C1'-C2'	6.14	121.98	114.00
25	AH	79	TYR	N-CA-CB	-6.14	99.55	110.60
32	BO	69	ARG	NE-CZ-NH2	6.14	123.37	120.30
39	Be	34	TYR	CB-CG-CD1	6.14	124.69	121.00
67	B1	700	A	C3'-C2'-C1'	6.14	106.41	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AK	71	PHE	CB-CG-CD2	-6.14	116.50	120.80
21	A2	140	C	P-O3'-C3'	6.14	127.07	119.70
27	A0	19	G	C3'-C2'-C1'	6.14	106.41	101.50
67	B1	368	U	P-O3'-C3'	6.14	127.07	119.70
67	B1	396	G	C1'-O4'-C4'	-6.14	104.99	109.90
67	B1	1591	C	O4'-C1'-C2'	-6.14	99.66	105.80
67	B1	2601	C	N1-C1'-C2'	6.14	121.98	114.00
67	B1	2691	G	C1'-O4'-C4'	-6.14	104.99	109.90
67	B1	170	A	C3'-C2'-C1'	6.14	106.41	101.50
21	A2	334	G	C3'-C2'-C1'	-6.14	96.59	101.50
21	A2	384	G	O4'-C1'-C2'	-6.14	99.66	105.80
26	AP	29	PRO	N-CA-CB	6.14	110.66	103.30
67	B1	2483	U	O4'-C1'-C2'	-6.14	99.66	105.80
11	A1	49	C	P-O3'-C3'	6.13	127.06	119.70
21	A2	434	A	P-O5'-C5'	6.13	130.71	120.90
31	BY	31	VAL	CA-CB-CG1	6.13	120.10	110.90
67	B1	665	C	O4'-C1'-C2'	-6.13	99.67	105.80
67	B1	1478	G	C1'-O4'-C4'	-6.13	104.99	109.90
67	B1	2344	G	C4'-C3'-C2'	-6.13	96.47	102.60
67	B1	2627	C	O4'-C1'-C2'	-6.13	99.67	105.80
67	B1	2704	A	P-O3'-C3'	-6.13	112.34	119.70
67	B1	2439	G	O4'-C1'-N9	-6.13	103.29	108.20
67	B1	242	C	N1-C1'-C2'	6.13	121.97	114.00
67	B1	1326	U	C5'-C4'-O4'	-6.13	101.74	109.10
17	AO	108	ARG	NE-CZ-NH1	6.13	123.36	120.30
28	AV	96	LYS	N-CA-CB	6.13	121.63	110.60
67	B1	280	A	O4'-C1'-N9	-6.13	103.30	108.20
67	B1	933	G	O4'-C1'-N9	6.13	113.10	108.20
21	A2	142	G	C5'-C4'-C3'	6.13	125.81	116.00
49	BQ	132	PHE	C-N-CA	6.13	137.02	121.70
67	B1	914	U	C3'-C2'-C1'	6.13	106.40	101.50
67	B1	1288	C	O4'-C1'-C2'	-6.13	99.67	105.80
67	B1	1783	U	O4'-C1'-N1	6.13	113.10	108.20
67	B1	2289	A	P-O3'-C3'	6.13	127.05	119.70
67	B1	2374	C	N1-C1'-C2'	6.13	121.97	114.00
68	B3	33	U	N1-C1'-C2'	-6.13	105.26	112.00
21	A2	1377	G	O4'-C1'-N9	6.13	113.10	108.20
25	AH	87	ARG	CB-CA-C	-6.13	98.15	110.40
67	B1	74	A	C3'-C2'-C1'	6.13	106.40	101.50
67	B1	1300	C	P-O3'-C3'	-6.13	112.35	119.70
67	B1	1483	U	P-O3'-C3'	-6.13	112.35	119.70
67	B1	1671	A	C4'-C3'-C2'	-6.13	96.47	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2012	G	O4'-C4'-C3'	-6.13	97.87	104.00
67	B1	2658	G	C3'-C2'-C1'	6.13	106.40	101.50
21	A2	349	A	C1'-O4'-C4'	6.12	114.80	109.90
68	B3	8	C	C1'-O4'-C4'	6.12	114.80	109.90
21	A2	619	A	P-O5'-C5'	-6.12	111.10	120.90
21	A2	1332	C	P-O5'-C5'	6.12	130.70	120.90
67	B1	1255	C	C5'-C4'-O4'	6.12	116.45	109.10
67	B1	2182	A	P-O3'-C3'	-6.12	112.35	119.70
67	B1	2891	A	N9-C1'-C2'	6.12	121.96	114.00
21	A2	518	U	C3'-C2'-C1'	6.12	106.40	101.50
21	A2	1203	G	C5'-C4'-C3'	-6.12	106.21	116.00
44	BW	29	ARG	NE-CZ-NH1	6.12	123.36	120.30
47	BI	52	ARG	NE-CZ-NH2	6.12	123.36	120.30
67	B1	1583	G	N9-C1'-C2'	-6.12	105.27	112.00
67	B1	1641	G	P-O3'-C3'	6.12	127.05	119.70
21	A2	1164	A	C4'-C3'-C2'	-6.12	96.48	102.60
67	B1	780	G	P-O5'-C5'	6.12	130.69	120.90
21	A2	35	G	P-O3'-C3'	-6.12	112.36	119.70
21	A2	365	C	N1-C1'-C2'	6.12	121.95	114.00
67	B1	234	G	P-O5'-C5'	6.12	130.69	120.90
67	B1	1029	C	C5'-C4'-C3'	-6.12	106.21	116.00
67	B1	1749	C	O4'-C1'-N1	6.12	113.09	108.20
67	B1	1833	G	O4'-C1'-C2'	-6.12	99.68	105.80
67	B1	1875	U	P-O5'-C5'	6.12	130.69	120.90
67	B1	2149	G	C5'-C4'-C3'	-6.12	106.21	116.00
67	B1	2801	G	P-O5'-C5'	-6.12	111.11	120.90
67	B1	1022	G	O4'-C1'-C2'	6.12	113.11	107.60
67	B1	1502	C	C3'-C2'-C1'	6.12	106.39	101.50
21	A2	792	C	N1-C1'-C2'	6.12	121.95	114.00
67	B1	1422	G	C1'-O4'-C4'	-6.12	105.01	109.90
67	B1	1669	A	P-O3'-C3'	-6.12	112.36	119.70
67	B1	2165	A	O4'-C1'-N9	6.12	113.09	108.20
2	AK	93	MET	CG-SD-CE	6.11	109.98	100.20
4	AG	95	ARG	NE-CZ-NH2	-6.11	117.24	120.30
21	A2	304	C	O4'-C4'-C3'	-6.11	97.89	104.00
21	A2	1014	C	N3-C4-N4	6.11	122.28	118.00
25	AH	8	ARG	N-CA-CB	6.11	121.60	110.60
50	BV	57	GLN	CB-CA-C	-6.11	98.17	110.40
67	B1	63	A	C3'-C2'-C1'	6.11	106.39	101.50
67	B1	204	G	P-O3'-C3'	6.11	127.04	119.70
67	B1	603	G	P-O3'-C3'	-6.11	112.36	119.70
67	B1	899	A	N9-C1'-C2'	-6.11	105.28	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1331	U	N1-C1'-C2'	6.11	121.95	114.00
67	B1	1881	A	O4'-C1'-N9	6.11	113.09	108.20
67	B1	1906	G	C4'-C3'-C2'	-6.11	96.49	102.60
67	B1	2037	A	N9-C1'-C2'	-6.11	105.28	112.00
67	B1	2224	G	C3'-C2'-C1'	-6.11	96.61	101.50
67	B1	2879	G	C3'-C2'-C1'	6.11	106.39	101.50
21	A2	703	U	O4'-C1'-N1	6.11	113.09	108.20
33	BC	9	ARG	NE-CZ-NH1	6.11	123.36	120.30
33	BC	87	ARG	NE-CZ-NH2	-6.11	117.24	120.30
67	B1	2124	C	C1'-O4'-C4'	6.11	114.79	109.90
1	AQ	62	SER	N-CA-CB	6.11	119.67	110.50
21	A2	1025	U	C3'-C2'-C1'	6.11	106.39	101.50
21	A2	1460	G	O4'-C1'-C2'	-6.11	99.69	105.80
24	AA	118	ARG	NE-CZ-NH1	6.11	123.36	120.30
67	B1	393	C	OP1-P-O3'	6.11	118.64	105.20
67	B1	1904	G	P-O3'-C3'	-6.11	112.37	119.70
67	B1	2114	C	O4'-C1'-N1	6.11	113.09	108.20
67	B1	2883	C	C5'-C4'-O4'	6.11	116.43	109.10
3	AI	82	LYS	CB-CA-C	-6.11	98.18	110.40
21	A2	197	A	C1'-O4'-C4'	6.11	114.79	109.90
21	A2	758	U	C3'-C2'-C1'	6.11	106.39	101.50
21	A2	289	C	C5'-C4'-C3'	-6.11	106.23	116.00
67	B1	2471	A	O4'-C1'-C2'	-6.11	99.69	105.80
68	B3	30	G	C4'-C3'-C2'	6.11	108.71	102.60
21	A2	549	A	C1'-O4'-C4'	6.11	114.78	109.90
63	Bg	12	PHE	CB-CG-CD2	-6.11	116.53	120.80
67	B1	438	G	O4'-C1'-C2'	6.11	113.09	107.60
67	B1	770	G	O3'-P-O5'	6.11	115.60	104.00
67	B1	1371	U	N1-C1'-C2'	6.11	121.94	114.00
67	B1	2479	C	C1'-O4'-C4'	6.11	114.78	109.90
21	A2	852	G	O4'-C4'-C3'	-6.10	97.90	104.00
21	A2	913	G	C3'-C2'-C1'	-6.10	96.62	101.50
67	B1	2350	G	O5'-P-OP2	-6.10	100.21	105.70
21	A2	449	U	O4'-C1'-N1	6.10	113.08	108.20
21	A2	1044	A	O4'-C1'-N9	-6.10	103.32	108.20
67	B1	622	A	O4'-C1'-C2'	6.10	113.09	107.60
67	B1	945	U	O4'-C4'-C3'	-6.10	97.90	104.00
67	B1	997	A	O4'-C1'-C2'	-6.10	99.70	105.80
67	B1	1646	G	O4'-C1'-C2'	-6.10	99.70	105.80
67	B1	2231	G	O4'-C1'-C2'	-6.10	99.70	105.80
68	B3	43	C	P-O5'-C5'	6.10	130.66	120.90
67	B1	1196	A	O4'-C1'-N9	6.10	113.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2974	U	C3'-C2'-C1'	6.10	106.38	101.50
21	A2	290	C	O4'-C1'-N1	6.10	113.08	108.20
21	A2	298	C	O4'-C1'-N1	6.10	113.08	108.20
21	A2	396	C	C1'-O4'-C4'	-6.10	105.02	109.90
46	BA	98	ARG	NH1-CZ-NH2	-6.10	112.69	119.40
67	B1	410	C	O4'-C1'-C2'	-6.10	99.70	105.80
67	B1	2213	G	N9-C1'-C2'	6.10	121.93	114.00
67	B1	2479	C	O4'-C1'-C2'	-6.10	99.70	105.80
67	B1	2535	C	C3'-C2'-C1'	6.10	106.38	101.50
68	B3	52	U	C1'-O4'-C4'	-6.10	105.02	109.90
21	A2	104	A	N9-C1'-C2'	6.10	121.93	114.00
34	B5	68	ASP	CB-CG-OD2	-6.10	112.81	118.30
54	BF	48	THR	CA-CB-CG2	-6.10	103.86	112.40
67	B1	721	G	C3'-C2'-C1'	6.10	106.38	101.50
67	B1	934	G	O4'-C1'-N9	-6.10	103.32	108.20
67	B1	1195	G	C5'-C4'-O4'	6.10	116.42	109.10
67	B1	2182	A	C5'-C4'-O4'	6.10	116.42	109.10
21	A2	1234	A	C1'-O4'-C4'	-6.10	105.02	109.90
38	Bb	82	VAL	CA-CB-CG1	-6.10	101.76	110.90
67	B1	82	C	C4'-C3'-C2'	-6.10	96.50	102.60
67	B1	1099	C	C1'-O4'-C4'	6.10	114.78	109.90
67	B1	1372	C	O4'-C1'-N1	6.10	113.08	108.20
14	AM	136	ARG	NE-CZ-NH1	6.09	123.35	120.30
21	A2	312	U	C1'-O4'-C4'	6.09	114.78	109.90
21	A2	777	G	N9-C1'-C2'	-6.09	105.30	112.00
21	A2	1087	C	O4'-C1'-N1	6.09	113.08	108.20
40	BE	108	ASP	CB-CG-OD1	-6.09	112.81	118.30
11	A1	40	U	O4'-C1'-C2'	-6.09	99.71	105.80
21	A2	1241	U	C4'-C3'-C2'	-6.09	96.51	102.60
67	B1	286	G	O4'-C1'-C2'	-6.09	99.71	105.80
67	B1	481	G	O4'-C1'-C2'	-6.09	99.71	105.80
67	B1	1034	G	C3'-C2'-C1'	-6.09	96.63	101.50
67	B1	2787	G	O4'-C1'-N9	6.09	113.08	108.20
21	A2	484	U	O4'-C4'-C3'	-6.09	97.91	104.00
34	BK	68	ASP	CB-CG-OD2	-6.09	112.82	118.30
67	B1	422	G	C3'-C2'-C1'	6.09	106.37	101.50
67	B1	2040	A	C3'-C2'-C1'	6.09	106.37	101.50
15	AE	193	VAL	CG1-CB-CG2	6.09	120.64	110.90
21	A2	44	C	O4'-C1'-C2'	-6.09	99.71	105.80
21	A2	565	C	P-O5'-C5'	6.09	130.64	120.90
21	A2	684	G	O4'-C1'-N9	6.09	113.07	108.20
35	BL	47	TRP	N-CA-CB	6.09	121.56	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1568	A	N9-C1'-C2'	6.09	121.92	114.00
67	B1	1671	A	O4'-C1'-N9	6.09	113.07	108.20
67	B1	2244	G	P-O5'-C5'	6.09	130.64	120.90
67	B1	2487	G	O4'-C1'-C2'	6.09	113.08	107.60
33	BC	358	TYR	CB-CG-CD2	-6.09	117.35	121.00
67	B1	544	A	N9-C1'-C2'	6.09	121.91	114.00
67	B1	664	A	C3'-C2'-C1'	6.09	106.37	101.50
67	B1	1225	A	C3'-C2'-C1'	-6.09	96.63	101.50
67	B1	1452	G	C5'-C4'-O4'	6.09	116.41	109.10
3	AI	102	LEU	N-CA-C	-6.09	94.56	111.00
21	A2	128	A	O4'-C1'-N9	6.09	113.07	108.20
42	BT	56	THR	O-C-N	6.09	132.44	122.70
67	B1	2037	A	C1'-O4'-C4'	6.09	114.77	109.90
67	B1	2078	A	O4'-C1'-N9	6.09	113.07	108.20
67	B1	2410	U	O5'-P-OP2	-6.09	100.22	105.70
67	B1	2795	G	C3'-C2'-C1'	6.09	106.37	101.50
67	B1	421	C	N1-C1'-C2'	6.08	121.91	114.00
67	B1	764	G	O4'-C1'-C2'	-6.08	99.72	105.80
67	B1	917	A	P-O5'-C5'	-6.08	111.16	120.90
33	BC	112	LYS	N-CA-CB	6.08	121.55	110.60
59	BM	157	ARG	NE-CZ-NH1	6.08	123.34	120.30
67	B1	1842	C	C3'-C2'-C1'	6.08	106.37	101.50
67	B1	2675	C	N1-C1'-C2'	6.08	121.91	114.00
21	A2	1149	C	O4'-C1'-C2'	-6.08	99.72	105.80
21	A2	1274	C	N1-C1'-C2'	6.08	121.91	114.00
67	B1	1776	G	O4'-C1'-N9	6.08	113.07	108.20
21	A2	1082	A	N9-C1'-C2'	6.08	121.90	114.00
67	B1	160	C	N1-C1'-C2'	6.08	121.90	114.00
67	B1	1226	G	O3'-P-O5'	-6.08	92.45	104.00
67	B1	2430	C	P-O5'-C5'	6.08	130.63	120.90
21	A2	90	C	C1'-O4'-C4'	-6.08	105.04	109.90
21	A2	482	G	O4'-C1'-N9	6.08	113.06	108.20
21	A2	724	C	N1-C1'-C2'	6.08	121.90	114.00
67	B1	2422	G	C1'-O4'-C4'	-6.08	105.04	109.90
21	A2	260	C	P-O3'-C3'	6.08	126.99	119.70
67	B1	2555	C	C3'-C2'-C1'	6.08	106.36	101.50
21	A2	1177	C	O4'-C4'-C3'	-6.08	97.92	104.00
67	B1	645	U	N1-C1'-C2'	-6.08	105.32	112.00
67	B1	748	G	C3'-C2'-C1'	-6.08	96.64	101.50
67	B1	1670	A	O4'-C4'-C3'	-6.08	97.92	104.00
67	B1	2137	A	N9-C1'-C2'	-6.08	105.32	112.00
67	B1	3007	A	O4'-C1'-C2'	-6.08	99.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AO	113	ARG	NE-CZ-NH1	-6.07	117.26	120.30
67	B1	2193	G	C1'-O4'-C4'	-6.07	105.04	109.90
67	B1	2453	C	C3'-C2'-C1'	6.07	106.36	101.50
67	B1	2772	U	O4'-C1'-N1	6.07	113.06	108.20
21	A2	1209	C	C1'-O4'-C4'	-6.07	105.04	109.90
21	A2	1244	C	N3-C4-N4	6.07	122.25	118.00
67	B1	1030	C	O4'-C1'-N1	-6.07	103.34	108.20
11	A1	76	C	P-O3'-C3'	-6.07	112.42	119.70
21	A2	740	G	C3'-C2'-C1'	6.07	106.36	101.50
21	A2	996	A	C5-C6-N6	-6.07	118.84	123.70
27	A0	69	C	C5'-C4'-O4'	-6.07	101.81	109.10
50	BV	60	ARG	NE-CZ-NH2	-6.07	117.27	120.30
67	B1	159	C	O4'-C1'-C2'	-6.07	99.73	105.80
67	B1	2547	A	C1'-O4'-C4'	-6.07	105.04	109.90
67	B1	2613	C	P-O5'-C5'	6.07	130.61	120.90
21	A2	967	C	N1-C1'-C2'	6.07	121.89	114.00
28	B6	52	VAL	CA-CB-CG2	-6.07	101.80	110.90
21	A2	964	A	C4-C5-C6	6.07	120.03	117.00
21	A2	1121	C	O4'-C1'-C2'	-6.07	99.73	105.80
20	BG	55	GLU	N-CA-CB	6.07	121.52	110.60
20	BG	77	TYR	CB-CG-CD2	-6.07	117.36	121.00
67	B1	712	C	C5'-C4'-O4'	6.07	116.38	109.10
67	B1	1070	G	O4'-C1'-N9	-6.07	103.35	108.20
68	B3	114	G	P-O5'-C5'	6.07	130.61	120.90
21	A2	545	C	O4'-C1'-C2'	-6.07	99.73	105.80
21	A2	894	A	C1'-O4'-C4'	6.07	114.75	109.90
67	B1	2543	A	C3'-C2'-C1'	-6.07	96.65	101.50
67	B1	221	G	O5'-P-OP1	6.06	117.98	110.70
21	A2	678	G	P-O3'-C3'	-6.06	112.42	119.70
67	B1	770	G	P-O5'-C5'	6.06	130.60	120.90
67	B1	935	A	N9-C1'-C2'	-6.06	105.33	112.00
67	B1	1868	C	O4'-C4'-C3'	-6.06	97.94	104.00
11	A1	17	C	C3'-C2'-C1'	6.06	106.35	101.50
67	B1	75	G	C3'-C2'-C1'	-6.06	96.65	101.50
67	B1	376	C	N3-C4-N4	6.06	122.24	118.00
67	B1	2088	G	P-O5'-C5'	6.06	130.60	120.90
33	BC	250	ARG	NE-CZ-NH2	-6.06	117.27	120.30
67	B1	380	A	N9-C1'-C2'	6.06	121.88	114.00
67	B1	591	G	P-O5'-C5'	-6.06	111.20	120.90
67	B1	920	G	C1'-O4'-C4'	-6.06	105.05	109.90
67	B1	1628	C	N1-C1'-C2'	6.06	121.88	114.00
67	B1	1747	C	P-O3'-C3'	6.06	126.97	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1893	C	P-O5'-C5'	-6.06	111.20	120.90
67	B1	2062	A	C1'-O4'-C4'	-6.06	105.05	109.90
67	B1	2099	G	O5'-P-OP2	-6.06	100.25	105.70
67	B1	2134	G	C4'-C3'-C2'	-6.06	96.54	102.60
67	B1	2224	G	OP2-P-O3'	6.06	118.53	105.20
67	B1	555	G	O4'-C1'-N9	6.06	113.05	108.20
67	B1	2377	C	C3'-C2'-C1'	6.06	106.34	101.50
67	B1	1544	C	C1'-O4'-C4'	-6.06	105.06	109.90
67	B1	2915	U	P-O3'-C3'	-6.06	112.43	119.70
60	BS	136	ALA	N-CA-CB	6.05	118.58	110.10
62	BN	136	ARG	NE-CZ-NH1	-6.05	117.27	120.30
67	B1	238	C	P-O3'-C3'	6.05	126.97	119.70
67	B1	923	A	N9-C1'-C2'	-6.05	105.34	112.00
67	B1	1293	G	O4'-C1'-N9	6.05	113.04	108.20
67	B1	2389	C	P-O3'-C3'	-6.05	112.44	119.70
27	A0	9	A	N9-C1'-C2'	-6.05	105.34	112.00
21	A2	20	G	N9-C1'-C2'	6.05	121.87	114.00
21	A2	690	C	O4'-C1'-N1	6.05	113.04	108.20
67	B1	324	C	C1'-O4'-C4'	6.05	114.74	109.90
67	B1	368	U	O4'-C1'-N1	6.05	113.04	108.20
67	B1	822	A	O5'-P-OP2	-6.05	100.25	105.70
67	B1	1660	A	C4-C5-C6	6.05	120.03	117.00
21	A2	68	G	P-O3'-C3'	-6.05	112.44	119.70
21	A2	489	C	P-O5'-C5'	6.05	130.58	120.90
58	BP	12	ARG	NE-CZ-NH1	6.05	123.32	120.30
67	B1	177	G	O4'-C1'-C2'	6.05	113.04	107.60
21	A2	1177	C	O4'-C1'-C2'	6.05	113.04	107.60
33	BC	137	LYS	N-CA-CB	6.05	121.49	110.60
67	B1	3035	C	C3'-C2'-C1'	6.05	106.34	101.50
68	B3	21	C	O4'-C1'-C2'	-6.05	99.75	105.80
21	A2	420	C	OP1-P-OP2	-6.05	110.53	119.60
67	B1	1205	U	O5'-P-OP1	6.05	117.95	110.70
67	B1	2912	G	O4'-C1'-C2'	-6.05	99.75	105.80
21	A2	409	C	P-O5'-C5'	6.04	130.57	120.90
21	A2	1354	A	O4'-C1'-C2'	-6.04	99.75	105.80
33	BC	41	PHE	CG-CD2-CE2	-6.04	114.15	120.80
67	B1	720	C	O4'-C1'-N1	6.04	113.04	108.20
67	B1	3039	G	O4'-C1'-N9	6.04	113.04	108.20
21	A2	167	G	N9-C1'-C2'	6.04	121.86	114.00
21	A2	248	U	C5'-C4'-C3'	6.04	125.67	116.00
21	A2	1028	C	C1'-O4'-C4'	-6.04	105.06	109.90
27	A0	14	A	N9-C1'-C2'	-6.04	105.35	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	246	A	C1'-O4'-C4'	6.04	114.73	109.90
67	B1	254	A	O4'-C1'-N9	-6.04	103.37	108.20
67	B1	1989	G	C3'-C2'-C1'	-6.04	96.67	101.50
67	B1	2124	C	C3'-C2'-C1'	6.04	106.33	101.50
67	B1	2388	U	O4'-C1'-N1	6.04	113.03	108.20
21	A2	1079	G	C3'-C2'-C1'	6.04	106.33	101.50
21	A2	1221	A	C5'-C4'-O4'	6.04	116.35	109.10
48	BR	94	ARG	NE-CZ-NH1	6.04	123.32	120.30
67	B1	586	A	C5-C6-N6	-6.04	118.87	123.70
67	B1	954	A	O4'-C1'-C2'	-6.04	99.76	105.80
67	B1	1667	U	N1-C1'-C2'	-6.04	105.35	112.00
67	B1	2312	U	P-O3'-C3'	-6.04	112.45	119.70
67	B1	2543	A	C4'-C3'-C2'	6.04	108.64	102.60
21	A2	380	C	O4'-C1'-N1	6.04	113.03	108.20
21	A2	687	G	C5'-C4'-C3'	6.04	125.66	116.00
21	A2	918	A	N9-C1'-C2'	-6.04	105.36	112.00
27	A0	26	G	O4'-C1'-C2'	-6.04	99.76	105.80
67	B1	887	U	N1-C1'-C2'	-6.04	105.36	112.00
67	B1	1811	G	O4'-C1'-C2'	6.04	113.04	107.60
21	A2	1020	G	C1'-O4'-C4'	-6.04	105.07	109.90
67	B1	484	C	C3'-C2'-C1'	6.04	106.33	101.50
67	B1	2547	A	C4'-C3'-C2'	6.04	108.64	102.60
68	B3	111	G	O4'-C1'-N9	6.04	113.03	108.20
25	AH	131	ALA	CB-CA-C	-6.04	101.04	110.10
67	B1	1597	G	O4'-C1'-N9	6.04	113.03	108.20
67	B1	1661	A	C4-C5-C6	6.04	120.02	117.00
67	B1	2707	G	C1'-O4'-C4'	-6.04	105.07	109.90
17	AO	48	PHE	CB-CG-CD1	-6.04	116.58	120.80
21	A2	228	G	C3'-C2'-C1'	6.04	106.33	101.50
21	A2	338	C	O4'-C1'-C2'	-6.04	99.77	105.80
21	A2	996	A	C4-C5-C6	6.04	120.02	117.00
67	B1	261	A	C3'-C2'-C1'	6.04	106.33	101.50
67	B1	698	U	O4'-C4'-C3'	-6.04	97.96	104.00
67	B1	1178	G	C3'-C2'-C1'	-6.04	96.67	101.50
67	B1	2046	C	O4'-C1'-C2'	-6.04	99.77	105.80
68	B3	39	C	C3'-C2'-C1'	6.04	106.33	101.50
27	A0	40	C	O4'-C1'-N1	6.03	113.03	108.20
67	B1	1939	C	O4'-C1'-N1	-6.03	103.37	108.20
67	B1	443	C	C4'-C3'-C2'	6.03	108.63	102.60
67	B1	1006	A	C4-C5-C6	6.03	120.02	117.00
67	B1	2887	C	O4'-C1'-N1	6.03	113.03	108.20
2	AK	104	ARG	NE-CZ-NH2	-6.03	117.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	352	A	O4'-C1'-N9	6.03	113.03	108.20
21	A2	1022	U	C3'-C2'-C1'	6.03	106.32	101.50
28	B6	21	PHE	CB-CG-CD2	6.03	125.02	120.80
67	B1	2719	G	O4'-C1'-C2'	-6.03	99.77	105.80
14	AM	82	ARG	NE-CZ-NH1	6.03	123.31	120.30
21	A2	1158	G	C3'-C2'-C1'	-6.03	96.68	101.50
67	B1	190	C	N1-C1'-C2'	6.03	121.84	114.00
67	B1	2703	G	N9-C1'-C2'	-6.03	105.37	112.00
21	A2	428	G	C3'-C2'-C1'	-6.03	96.68	101.50
21	A2	1128	U	C1'-O4'-C4'	6.03	114.72	109.90
21	A2	1285	C	C1'-O4'-C4'	-6.03	105.08	109.90
67	B1	537	U	P-O5'-C5'	-6.03	111.26	120.90
67	B1	831	C	P-O3'-C3'	-6.03	112.47	119.70
67	B1	861	G	C1'-O4'-C4'	6.03	114.72	109.90
67	B1	1306	A	O4'-C1'-N9	6.03	113.02	108.20
67	B1	1566	G	N9-C1'-C2'	-6.03	105.37	112.00
21	A2	550	G	O4'-C1'-N9	6.03	113.02	108.20
21	A2	627	G	C1'-O4'-C4'	-6.03	105.08	109.90
21	A2	1137	G	C3'-C2'-C1'	6.03	106.32	101.50
21	A2	1442	G	C3'-C2'-C1'	-6.03	96.68	101.50
24	AA	47	VAL	CA-CB-CG2	-6.03	101.86	110.90
46	BA	107	PHE	CB-CG-CD2	6.03	125.02	120.80
67	B1	389	C	O4'-C1'-N1	6.03	113.02	108.20
67	B1	443	C	C5'-C4'-O4'	6.03	116.33	109.10
67	B1	664	A	O4'-C1'-C2'	-6.03	99.77	105.80
67	B1	1043	U	C5'-C4'-C3'	6.03	125.64	116.00
67	B1	1178	G	OP1-P-OP2	-6.03	110.56	119.60
21	A2	294	A	N9-C1'-C2'	6.02	121.83	114.00
21	A2	1002	G	O4'-C1'-N9	6.02	113.02	108.20
67	B1	310	C	OP2-P-O3'	6.02	118.45	105.20
67	B1	2989	A	O5'-C5'-C4'	-6.02	100.25	111.70
21	A2	812	U	O4'-C1'-N1	6.02	113.02	108.20
32	BO	13	ARG	NE-CZ-NH1	6.02	123.31	120.30
33	BC	314	TYR	CG-CD1-CE1	6.02	126.12	121.30
35	BL	25	HIS	CB-CA-C	-6.02	98.35	110.40
67	B1	54	G	C1'-O4'-C4'	-6.02	105.08	109.90
67	B1	829	G	P-O3'-C3'	-6.02	112.47	119.70
67	B1	1395	G	O4'-C1'-C2'	-6.02	99.78	105.80
67	B1	1407	A	C1'-O4'-C4'	6.02	114.72	109.90
67	B1	2893	U	C1'-O4'-C4'	-6.02	105.08	109.90
67	B1	2910	G	O4'-C1'-N9	6.02	113.02	108.20
21	A2	233	C	O4'-C1'-N1	6.02	113.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
63	Bg	44	LYS	C-N-CA	6.02	136.75	121.70
67	B1	32	C	C1'-O4'-C4'	-6.02	105.08	109.90
11	A1	51	G	O4'-C1'-C2'	6.02	113.02	107.60
21	A2	1054	A	C5'-C4'-C3'	-6.02	106.37	116.00
67	B1	410	C	C5'-C4'-C3'	-6.02	106.37	116.00
67	B1	950	G	C1'-O4'-C4'	-6.02	105.08	109.90
67	B1	2717	A	C3'-C2'-C1'	-6.02	96.68	101.50
21	A2	307	G	N9-C1'-C2'	-6.02	105.38	112.00
21	A2	774	U	P-O3'-C3'	6.02	126.92	119.70
21	A2	907	C	O4'-C1'-N1	6.02	113.01	108.20
21	A2	1180	G	O4'-C1'-C2'	-6.02	99.78	105.80
21	A2	1494	C	C3'-C2'-C1'	6.02	106.31	101.50
33	BC	195	LYS	CB-CA-C	-6.02	98.36	110.40
41	Ba	25	TRP	CG-CD2-CE3	-6.02	128.48	133.90
67	B1	856	A	C1'-O4'-C4'	6.02	114.71	109.90
67	B1	1338	G	C4'-C3'-C2'	-6.02	96.58	102.60
67	B1	1576	C	C1'-O4'-C4'	-6.02	105.09	109.90
67	B1	1721	U	O4'-C1'-C2'	6.02	113.02	107.60
67	B1	2743	U	O4'-C1'-N1	6.02	113.01	108.20
68	B3	17	G	C1'-O4'-C4'	6.02	114.71	109.90
21	A2	971	G	P-O3'-C3'	-6.02	112.48	119.70
27	A0	18	G	N9-C1'-C2'	-6.02	105.38	112.00
27	A0	34	G	C3'-C2'-C1'	-6.02	96.69	101.50
56	BH	91	LYS	C-N-CA	6.02	136.74	121.70
67	B1	1551	G	O5'-P-OP1	6.02	117.92	110.70
10	AD	110	TYR	CG-CD1-CE1	6.01	126.11	121.30
15	AE	100	TYR	N-CA-CB	6.01	121.43	110.60
21	A2	149	U	C3'-C2'-C1'	-6.01	96.69	101.50
27	A0	16	C	C1'-O4'-C4'	6.01	114.71	109.90
20	BG	7	VAL	CG1-CB-CG2	-6.01	101.28	110.90
67	B1	458	U	C3'-C2'-C1'	-6.01	96.69	101.50
67	B1	1365	G	N9-C1'-C2'	-6.01	105.38	112.00
67	B1	1748	C	C3'-C2'-C1'	6.01	106.31	101.50
67	B1	1922	A	P-O3'-C3'	6.01	126.92	119.70
18	AF	5	TRP	CD1-CG-CD2	-6.01	101.49	106.30
21	A2	873	A	O4'-C1'-C2'	-6.01	99.79	105.80
21	A2	885	G	C4'-C3'-C2'	-6.01	96.59	102.60
67	B1	445	G	C3'-C2'-C1'	-6.01	96.69	101.50
67	B1	2095	U	N1-C1'-C2'	6.01	121.82	114.00
46	BA	154	ARG	NE-CZ-NH1	-6.01	117.30	120.30
65	BJ	17	PRO	N-CD-CG	6.01	112.22	103.20
21	A2	117	C	P-O5'-C5'	6.01	130.52	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	B6	85	TYR	CB-CG-CD2	-6.01	117.39	121.00
67	B1	1082	A	N9-C1'-C2'	6.01	121.81	114.00
67	B1	1188	C	C1'-O4'-C4'	-6.01	105.09	109.90
67	B1	1286	G	C1'-O4'-C4'	-6.01	105.09	109.90
21	A2	720	A	C5'-C4'-C3'	6.01	125.61	116.00
25	AH	80	LYS	CD-CE-NZ	6.01	125.52	111.70
54	BF	8	ARG	CD-NE-CZ	6.01	132.01	123.60
60	BS	24	ASP	CB-CG-OD1	-6.01	112.89	118.30
67	B1	1868	C	C3'-C2'-C1'	6.01	106.31	101.50
7	AB	62	PHE	CB-CG-CD1	-6.01	116.59	120.80
56	BH	116	ALA	CB-CA-C	-6.01	101.09	110.10
67	B1	798	G	C3'-C2'-C1'	6.01	106.30	101.50
67	B1	1975	C	C1'-O4'-C4'	6.01	114.70	109.90
67	B1	2941	A	O4'-C1'-N9	6.01	113.01	108.20
21	A2	223	G	O4'-C1'-C2'	6.00	113.00	107.60
21	A2	1292	A	OP1-P-OP2	-6.00	110.59	119.60
21	A2	597	C	C4'-C3'-C2'	-6.00	96.60	102.60
30	AU	91	TYR	CZ-CE2-CD2	-6.00	114.40	119.80
67	B1	143	C	N1-C1'-C2'	6.00	121.81	114.00
67	B1	1064	G	C1'-O4'-C4'	-6.00	105.10	109.90
67	B1	1962	G	O4'-C1'-C2'	6.00	113.00	107.60
67	B1	1997	C	O4'-C1'-N1	6.00	113.00	108.20
67	B1	885	A	O4'-C1'-C2'	-6.00	99.80	105.80
67	B1	1164	C	C1'-O4'-C4'	-6.00	105.10	109.90
67	B1	2839	A	C1'-O4'-C4'	6.00	114.70	109.90
21	A2	340	A	P-O5'-C5'	-6.00	111.30	120.90
21	A2	460	C	C6-N1-C1'	-6.00	113.60	120.80
67	B1	764	G	C4'-C3'-C2'	-6.00	96.60	102.60
67	B1	2067	U	C1'-O4'-C4'	6.00	114.70	109.90
67	B1	2262	C	C4'-C3'-C2'	-6.00	96.60	102.60
21	A2	609	G	O4'-C1'-N9	6.00	113.00	108.20
21	A2	695	G	C1'-O4'-C4'	-6.00	105.10	109.90
49	BQ	86	THR	N-CA-CB	6.00	121.70	110.30
59	BM	183	ARG	NE-CZ-NH2	-6.00	117.30	120.30
60	BS	59	ARG	NE-CZ-NH1	6.00	123.30	120.30
67	B1	374	C	C4'-C3'-C2'	-6.00	96.60	102.60
67	B1	607	C	C3'-C2'-C1'	6.00	106.30	101.50
67	B1	687	C	C5'-C4'-O4'	6.00	116.30	109.10
68	B3	99	G	OP2-P-O3'	6.00	118.40	105.20
21	A2	921	G	O4'-C1'-N9	6.00	113.00	108.20
67	B1	1567	C	C5'-C4'-C3'	6.00	125.59	116.00
67	B1	1577	C	C1'-O4'-C4'	-6.00	105.10	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1672	G	C5'-C4'-C3'	6.00	125.59	116.00
67	B1	1860	A	N9-C1'-C2'	-6.00	105.40	112.00
67	B1	1914	U	O4'-C1'-N1	6.00	113.00	108.20
67	B1	2101	A	O4'-C1'-C2'	-6.00	99.80	105.80
67	B1	2376	U	C5'-C4'-O4'	6.00	116.30	109.10
21	A2	114	A	O4'-C1'-C2'	6.00	113.00	107.60
67	B1	665	C	C5'-C4'-C3'	-6.00	106.41	116.00
58	BP	13	ARG	NE-CZ-NH2	-5.99	117.30	120.30
67	B1	427	G	O4'-C1'-N9	5.99	113.00	108.20
67	B1	1124	G	N9-C1'-C2'	5.99	121.79	114.00
67	B1	1105	C	N1-C1'-C2'	5.99	121.79	114.00
68	B3	74	U	O4'-C1'-C2'	-5.99	99.81	105.80
11	A1	72	C	C1'-O4'-C4'	5.99	114.69	109.90
21	A2	1286	C	C5'-C4'-O4'	5.99	116.29	109.10
24	AA	193	GLU	OE1-CD-OE2	5.99	130.49	123.30
67	B1	412	G	N9-C1'-C2'	5.99	121.79	114.00
67	B1	1340	G	P-O5'-C5'	-5.99	111.32	120.90
67	B1	2173	U	P-O5'-C5'	-5.99	111.32	120.90
17	AO	110	ARG	NH1-CZ-NH2	5.99	125.99	119.40
21	A2	1031	G	P-O3'-C3'	5.99	126.89	119.70
28	B6	21	PHE	CB-CG-CD1	-5.99	116.61	120.80
64	Bc	53	LEU	CB-CA-C	-5.99	98.82	110.20
67	B1	231	G	O4'-C1'-N9	5.99	112.99	108.20
67	B1	659	U	O4'-C1'-N1	5.99	112.99	108.20
67	B1	1950	G	N9-C1'-C2'	-5.99	105.41	112.00
11	A1	7	G	O4'-C1'-N9	5.99	112.99	108.20
21	A2	1162	G	C4'-C3'-C2'	-5.99	96.61	102.60
35	BL	9	ARG	CB-CG-CD	5.99	127.16	111.60
41	Ba	30	ARG	NE-CZ-NH1	5.99	123.29	120.30
20	BG	63	VAL	CG1-CB-CG2	5.99	120.48	110.90
67	B1	126	U	O4'-C1'-N1	5.99	112.99	108.20
67	B1	412	G	P-O5'-C5'	-5.99	111.32	120.90
67	B1	642	G	O4'-C1'-C2'	5.99	112.99	107.60
67	B1	675	G	C1'-O4'-C4'	-5.99	105.11	109.90
67	B1	801	A	C1'-O4'-C4'	5.99	114.69	109.90
67	B1	1741	C	C1'-O4'-C4'	-5.99	105.11	109.90
67	B1	2954	C	O4'-C1'-C2'	-5.99	99.81	105.80
12	AN	89	PRO	C-N-CA	5.98	134.87	122.30
62	BN	72	TYR	CB-CG-CD1	-5.98	117.41	121.00
67	B1	2925	C	N1-C1'-C2'	5.98	121.78	114.00
21	A2	411	C	C1'-O4'-C4'	5.98	114.69	109.90
21	A2	880	G	N9-C1'-C2'	5.98	121.78	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	B6	72	TYR	CG-CD2-CE2	-5.98	116.52	121.30
67	B1	599	G	C1'-O4'-C4'	-5.98	105.11	109.90
67	B1	1157	U	C3'-C2'-C1'	5.98	106.29	101.50
67	B1	1184	U	C3'-C2'-C1'	-5.98	96.71	101.50
67	B1	1267	A	C3'-C2'-C1'	-5.98	96.71	101.50
67	B1	1570	C	O3'-P-O5'	5.98	115.37	104.00
67	B1	1968	A	N9-C1'-C2'	-5.98	105.42	112.00
21	A2	14	C	N1-C1'-C2'	5.98	121.77	114.00
32	BO	34	ARG	NE-CZ-NH2	-5.98	117.31	120.30
33	BC	139	TYR	CB-CG-CD2	5.98	124.59	121.00
43	Bk	43	ARG	CB-CA-C	-5.98	98.44	110.40
52	BB	30	TYR	CD1-CE1-CZ	-5.98	114.42	119.80
67	B1	876	C	N1-C1'-C2'	5.98	121.78	114.00
67	B1	1510	U	O4'-C1'-N1	5.98	112.98	108.20
67	B1	1983	C	C5'-C4'-O4'	5.98	116.28	109.10
67	B1	2335	G	C3'-C2'-C1'	5.98	106.28	101.50
67	B1	66	C	N1-C1'-C2'	5.98	121.77	114.00
67	B1	382	G	O4'-C1'-N9	5.98	112.98	108.20
67	B1	438	G	C1'-O4'-C4'	-5.98	105.12	109.90
67	B1	865	C	N1-C1'-C2'	5.98	121.77	114.00
67	B1	1221	U	C4'-C3'-C2'	-5.98	96.62	102.60
67	B1	1622	G	C3'-C2'-C1'	5.98	106.28	101.50
67	B1	2179	G	N9-C1'-C2'	-5.98	105.42	112.00
21	A2	1325	C	N1-C1'-C2'	5.98	121.77	114.00
67	B1	59	U	O4'-C1'-C2'	-5.98	99.82	105.80
67	B1	874	U	O4'-C1'-C2'	-5.98	99.82	105.80
67	B1	2922	G	O4'-C1'-C2'	-5.98	99.82	105.80
10	AD	110	TYR	CD1-CE1-CZ	-5.98	114.42	119.80
21	A2	409	C	P-O3'-C3'	-5.97	112.53	119.70
21	A2	802	G	C3'-C2'-C1'	-5.97	96.72	101.50
67	B1	488	A	C5'-C4'-O4'	5.97	116.27	109.10
67	B1	683	C	C4'-C3'-C2'	-5.97	96.62	102.60
67	B1	2054	G	C5'-C4'-O4'	5.97	116.27	109.10
67	B1	2150	G	C4'-C3'-C2'	-5.97	96.62	102.60
67	B1	2279	G	P-O3'-C3'	5.97	126.87	119.70
21	A2	102	U	C3'-C2'-C1'	5.97	106.28	101.50
21	A2	150	G	N9-C1'-C2'	-5.97	105.43	112.00
21	A2	540	G	O4'-C1'-N9	5.97	112.98	108.20
21	A2	1078	U	P-O3'-C3'	5.97	126.87	119.70
67	B1	1149	C	O4'-C1'-C2'	-5.97	99.83	105.80
67	B1	2312	U	C1'-O4'-C4'	5.97	114.68	109.90
67	B1	2423	G	P-O3'-C3'	-5.97	112.53	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	169	C	P-O3'-C3'	-5.97	112.54	119.70
21	A2	1333	G	O4'-C1'-C2'	-5.97	99.83	105.80
21	A2	1368	A	N9-C1'-C2'	-5.97	105.43	112.00
40	BE	64	THR	N-CA-C	-5.97	94.88	111.00
43	Bk	33	MET	CA-C-N	-5.97	100.38	117.10
43	Bk	195	TYR	CB-CG-CD2	-5.97	117.42	121.00
64	Bc	63	THR	N-CA-CB	5.97	121.64	110.30
67	B1	449	G	C3'-C2'-C1'	5.97	106.28	101.50
67	B1	1518	G	C5'-C4'-C3'	5.97	125.55	116.00
21	A2	240	U	C3'-C2'-C1'	5.97	106.27	101.50
21	A2	643	G	O4'-C1'-N9	5.97	112.97	108.20
51	Bj	28	ARG	N-CA-CB	5.97	121.34	110.60
60	BS	141	GLU	OE1-CD-OE2	-5.97	116.14	123.30
67	B1	110	A	C1'-O4'-C4'	5.97	114.67	109.90
67	B1	2929	C	C3'-C2'-C1'	5.97	106.27	101.50
68	B3	94	G	N9-C1'-C2'	5.97	121.76	114.00
4	AG	99	LYS	N-CA-CB	-5.97	99.86	110.60
7	AB	36	ARG	NE-CZ-NH1	5.97	123.28	120.30
21	A2	1091	C	P-O3'-C3'	-5.97	112.54	119.70
21	A2	1304	C	N3-C4-C5	-5.97	119.51	121.90
67	B1	658	C	C1'-O4'-C4'	5.97	114.67	109.90
67	B1	939	A	C3'-C2'-C1'	5.97	106.27	101.50
67	B1	1127	C	O4'-C1'-C2'	-5.97	99.83	105.80
67	B1	2857	C	O4'-C1'-C2'	-5.97	99.83	105.80
7	AB	151	ASP	CB-CG-OD2	5.96	123.67	118.30
64	Bc	11	ARG	NE-CZ-NH1	5.96	123.28	120.30
67	B1	2055	U	C1'-O4'-C4'	5.96	114.67	109.90
67	B1	2666	G	N9-C1'-C2'	5.96	121.75	114.00
27	A0	19	G	C5'-C4'-C3'	-5.96	106.46	116.00
68	B3	75	G	O4'-C4'-C3'	-5.96	98.04	104.00
21	A2	270	A	N9-C1'-C2'	-5.96	105.44	112.00
21	A2	809	C	O4'-C1'-N1	5.96	112.97	108.20
62	BN	72	TYR	CG-CD1-CE1	5.96	126.07	121.30
67	B1	380	A	O4'-C4'-C3'	-5.96	98.04	104.00
67	B1	465	C	N1-C1'-C2'	5.96	121.75	114.00
67	B1	762	G	C4'-C3'-C2'	5.96	108.56	102.60
67	B1	990	G	P-O3'-C3'	-5.96	112.55	119.70
67	B1	1818	G	C5'-C4'-O4'	5.96	116.25	109.10
67	B1	2532	G	P-O5'-C5'	-5.96	111.36	120.90
21	A2	1339	G	C3'-C2'-C1'	-5.96	96.73	101.50
67	B1	17	C	O4'-C1'-N1	5.96	112.97	108.20
67	B1	1610	C	OP1-P-OP2	-5.96	110.66	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2245	C	C4'-C3'-C2'	-5.96	96.64	102.60
67	B1	2491	C	O4'-C1'-C2'	-5.96	99.84	105.80
21	A2	622	C	C1'-O4'-C4'	5.96	114.67	109.90
21	A2	1416	C	O4'-C1'-C2'	-5.96	99.84	105.80
67	B1	1250	A	O4'-C4'-C3'	-5.96	98.04	104.00
67	B1	1366	U	O4'-C4'-C3'	-5.96	98.04	104.00
67	B1	1910	C	C3'-C2'-C1'	5.96	106.27	101.50
67	B1	2067	U	O4'-C1'-C2'	-5.96	99.84	105.80
67	B1	2265	C	C3'-C2'-C1'	5.96	106.27	101.50
67	B1	2314	U	O4'-C1'-N1	5.96	112.97	108.20
21	A2	368	C	C2'-C3'-O3'	5.96	123.23	113.70
25	AH	86	MET	CB-CA-C	-5.96	98.49	110.40
67	B1	111	U	O4'-C1'-C2'	-5.96	99.84	105.80
67	B1	232	U	O4'-C1'-N1	5.96	112.97	108.20
67	B1	1450	C	OP1-P-OP2	-5.96	110.67	119.60
67	B1	2028	G	N9-C1'-C2'	5.96	121.74	114.00
21	A2	550	G	C1'-O4'-C4'	-5.96	105.14	109.90
21	A2	1346	C	N1-C1'-C2'	5.96	121.74	114.00
33	BC	9	ARG	NE-CZ-NH2	-5.96	117.32	120.30
67	B1	2155	C	P-O3'-C3'	-5.96	112.55	119.70
67	B1	2905	C	OP1-P-OP2	-5.96	110.67	119.60
21	A2	1094	U	C3'-C2'-C1'	5.95	106.26	101.50
23	AT	8	TYR	CG-CD2-CE2	-5.95	116.54	121.30
47	BI	121	SER	N-CA-C	-5.95	94.92	111.00
67	B1	2692	A	O4'-C1'-N9	5.95	112.96	108.20
21	A2	1017	U	O4'-C1'-C2'	-5.95	99.85	105.80
21	A2	1030	U	P-O5'-C5'	-5.95	111.38	120.90
67	B1	1423	G	N9-C1'-C2'	-5.95	105.45	112.00
21	A2	363	C	C1'-O4'-C4'	5.95	114.66	109.90
21	A2	1171	G	C1'-O4'-C4'	5.95	114.66	109.90
54	BF	88	TYR	CB-CG-CD2	-5.95	117.43	121.00
56	BH	114	MET	CB-CA-C	-5.95	98.50	110.40
67	B1	1927	C	O4'-C1'-C2'	-5.95	99.85	105.80
67	B1	2327	C	C4'-C3'-C2'	-5.95	96.65	102.60
21	A2	451	A	O4'-C1'-N9	5.95	112.96	108.20
21	A2	1365	G	O4'-C1'-C2'	5.95	112.95	107.60
30	AU	92	LYS	CB-CA-C	-5.95	98.50	110.40
38	Bb	82	VAL	N-CA-C	-5.95	94.94	111.00
43	Bk	20	LYS	CB-CA-C	-5.95	98.50	110.40
43	Bk	107	ARG	NE-CZ-NH2	-5.95	117.33	120.30
67	B1	15	A	O4'-C1'-N9	5.95	112.96	108.20
67	B1	19	G	N9-C1'-C2'	-5.95	105.46	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	109	G	C4'-C3'-C2'	-5.95	96.65	102.60
67	B1	1626	A	C3'-C2'-C1'	5.95	106.26	101.50
21	A2	197	A	OP1-P-OP2	-5.95	110.68	119.60
21	A2	1354	A	O4'-C1'-N9	-5.95	103.44	108.20
67	B1	2317	G	C3'-C2'-C1'	-5.95	96.74	101.50
27	A0	74	C	O3'-P-O5'	-5.95	92.70	104.00
61	Bd	50	ARG	NE-CZ-NH2	-5.95	117.33	120.30
67	B1	1660	A	C5-C6-N6	-5.95	118.94	123.70
67	B1	2054	G	O4'-C1'-N9	5.95	112.96	108.20
67	B1	2300	C	N1-C1'-C2'	5.95	121.73	114.00
67	B1	2595	C	O4'-C1'-N1	5.95	112.96	108.20
10	AD	121	ALA	CB-CA-C	-5.94	101.18	110.10
67	B1	879	A	C3'-C2'-C1'	-5.94	96.74	101.50
67	B1	1797	A	P-O5'-C5'	5.94	130.41	120.90
67	B1	2820	C	C3'-C2'-C1'	5.94	106.26	101.50
67	B1	111	U	C3'-C2'-C1'	-5.94	96.75	101.50
67	B1	380	A	C1'-O4'-C4'	-5.94	105.15	109.90
67	B1	1451	A	O4'-C1'-C2'	-5.94	99.86	105.80
8	AR	63	TYR	CG-CD2-CE2	-5.94	116.55	121.30
21	A2	1139	A	C4'-C3'-C2'	-5.94	96.66	102.60
49	BQ	147	LEU	CB-CG-CD2	5.94	121.10	111.00
67	B1	334	G	C3'-C2'-C1'	5.94	106.25	101.50
67	B1	1892	G	O4'-C1'-N9	5.94	112.95	108.20
67	B1	2185	A	C3'-C2'-C1'	-5.94	96.75	101.50
21	A2	563	U	C1'-O4'-C4'	5.94	114.65	109.90
21	A2	1108	U	C3'-C2'-C1'	5.94	106.25	101.50
67	B1	130	G	C4'-C3'-C2'	-5.94	96.66	102.60
67	B1	508	G	O4'-C1'-N9	5.94	112.95	108.20
67	B1	648	C	N1-C1'-C2'	-5.94	105.47	112.00
67	B1	1643	A	C1'-O4'-C4'	5.94	114.65	109.90
21	A2	683	A	O4'-C4'-C3'	-5.94	98.06	104.00
21	A2	1008	U	N1-C1'-C2'	5.94	121.72	114.00
21	A2	1267	U	O4'-C1'-N1	5.94	112.95	108.20
67	B1	130	G	O4'-C1'-C2'	-5.94	99.86	105.80
67	B1	833	G	C3'-C2'-C1'	5.94	106.25	101.50
67	B1	902	C	C1'-O4'-C4'	5.94	114.65	109.90
67	B1	1115	A	O4'-C1'-N9	-5.94	103.45	108.20
67	B1	2384	G	C5'-C4'-O4'	5.94	116.22	109.10
67	B1	2876	G	C1'-O4'-C4'	5.94	114.65	109.90
67	B1	2941	A	C1'-O4'-C4'	5.94	114.65	109.90
21	A2	600	C	P-O3'-C3'	-5.94	112.58	119.70
21	A2	106	A	O5'-P-OP1	-5.93	100.36	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	994	C	C3'-C2'-C1'	5.93	106.25	101.50
67	B1	740	C	C3'-C2'-C1'	5.93	106.25	101.50
67	B1	1309	G	O4'-C4'-C3'	-5.93	98.07	104.00
67	B1	1407	A	P-O5'-C5'	5.93	130.40	120.90
67	B1	1563	G	O3'-P-O5'	-5.93	92.72	104.00
67	B1	2297	C	P-O3'-C3'	-5.93	112.58	119.70
2	AK	92	ASP	CB-CG-OD1	5.93	123.64	118.30
21	A2	62	G	O4'-C1'-N9	-5.93	103.45	108.20
21	A2	726	A	N9-C1'-C2'	5.93	121.71	114.00
42	BT	67	TYR	CD1-CE1-CZ	-5.93	114.46	119.80
52	BB	187	LYS	N-CA-CB	5.93	121.28	110.60
67	B1	191	U	O4'-C1'-N1	5.93	112.95	108.20
67	B1	1209	A	O4'-C1'-C2'	-5.93	99.87	105.80
67	B1	1898	A	N9-C1'-C2'	-5.93	105.47	112.00
67	B1	2191	U	O4'-C1'-C2'	5.93	112.94	107.60
67	B1	2250	G	O4'-C1'-N9	5.93	112.95	108.20
21	A2	977	G	O4'-C1'-C2'	5.93	112.94	107.60
67	B1	2694	C	C1'-O4'-C4'	-5.93	105.16	109.90
7	AB	200	VAL	CA-CB-CG2	-5.93	102.00	110.90
21	A2	338	C	C1'-O4'-C4'	5.93	114.64	109.90
21	A2	1089	C	C5'-C4'-C3'	5.93	125.49	116.00
67	B1	69	C	O4'-C1'-N1	5.93	112.94	108.20
67	B1	423	G	O4'-C1'-C2'	5.93	112.94	107.60
67	B1	587	A	O4'-C1'-N9	5.93	112.94	108.20
67	B1	1318	G	C5'-C4'-C3'	5.93	125.49	116.00
67	B1	1349	G	OP1-P-OP2	-5.93	110.71	119.60
67	B1	1534	G	O4'-C1'-C2'	5.93	112.94	107.60
68	B3	87	G	C5'-C4'-O4'	5.93	116.22	109.10
21	A2	1421	C	N1-C1'-C2'	5.93	121.71	114.00
28	AV	60	PHE	CA-C-N	5.93	128.06	116.20
67	B1	992	G	O4'-C1'-N9	5.93	112.94	108.20
21	A2	1322	C	OP1-P-OP2	-5.93	110.71	119.60
28	AV	97	GLU	C-N-CA	5.93	134.75	122.30
67	B1	1555	G	O4'-C1'-C2'	-5.93	99.87	105.80
21	A2	134	A	O4'-C1'-N9	5.92	112.94	108.20
67	B1	2502	C	P-O5'-C5'	5.92	130.38	120.90
51	Bj	42	ARG	NE-CZ-NH1	-5.92	117.34	120.30
51	Bj	82	ARG	CB-CA-C	5.92	122.25	110.40
67	B1	229	G	O4'-C1'-N9	5.92	112.94	108.20
67	B1	857	U	O4'-C1'-N1	5.92	112.94	108.20
67	B1	1336	G	C4'-C3'-C2'	-5.92	96.68	102.60
67	B1	1507	A	C1'-O4'-C4'	-5.92	105.16	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1689	G	P-O3'-C3'	5.92	126.81	119.70
11	A1	2	G	O4'-C4'-C3'	-5.92	98.08	104.00
21	A2	1256	C	C1'-O4'-C4'	5.92	114.64	109.90
33	BC	172	TRP	CB-CG-CD1	5.92	134.70	127.00
34	BK	46	ARG	CA-CB-CG	5.92	126.43	113.40
67	B1	490	C	P-O5'-C5'	5.92	130.37	120.90
67	B1	1495	A	C1'-O4'-C4'	-5.92	105.16	109.90
67	B1	1964	G	C1'-O4'-C4'	-5.92	105.16	109.90
67	B1	2682	G	P-O3'-C3'	-5.92	112.60	119.70
21	A2	557	G	C4'-C3'-C2'	-5.92	96.68	102.60
21	A2	1073	C	C1'-O4'-C4'	-5.92	105.17	109.90
30	AU	34	PHE	CB-CG-CD2	5.92	124.94	120.80
41	Ba	7	GLU	C-N-CA	5.92	136.50	121.70
67	B1	615	A	N9-C1'-C2'	-5.92	105.49	112.00
67	B1	918	A	O4'-C1'-N9	-5.92	103.47	108.20
15	AE	163	THR	N-CA-C	-5.92	95.03	111.00
21	A2	326	C	C1'-O4'-C4'	-5.92	105.17	109.90
21	A2	1213	G	O5'-P-OP1	5.92	117.80	110.70
46	BA	5	ARG	NE-CZ-NH1	-5.92	117.34	120.30
67	B1	131	C	N1-C1'-C2'	5.92	121.69	114.00
67	B1	1769	G	C5'-C4'-O4'	5.92	116.20	109.10
67	B1	2263	G	N9-C1'-C2'	-5.92	105.49	112.00
67	B1	2607	U	C1'-O4'-C4'	5.92	114.63	109.90
21	A2	574	A	N9-C1'-C2'	-5.92	105.49	112.00
67	B1	942	U	OP1-P-OP2	-5.92	110.73	119.60
5	AW	56	ALA	N-CA-CB	5.91	118.38	110.10
21	A2	1455	A	O4'-C1'-N9	5.91	112.93	108.20
34	B5	5	ASP	O-C-N	-5.91	113.24	122.70
52	BB	123	ARG	NE-CZ-NH1	5.91	123.26	120.30
67	B1	363	G	C3'-C2'-C1'	-5.91	96.77	101.50
67	B1	2197	U	C3'-C2'-C1'	5.91	106.23	101.50
68	B3	73	U	P-O3'-C3'	5.91	126.80	119.70
21	A2	485	A	N9-C1'-C2'	-5.91	105.50	112.00
67	B1	969	U	O4'-C1'-C2'	-5.91	99.89	105.80
67	B1	2611	U	O4'-C1'-N1	5.91	112.93	108.20
21	A2	157	A	C4'-C3'-C2'	-5.91	96.69	102.60
21	A2	1492	U	N1-C1'-C2'	-5.91	105.50	112.00
46	BA	143	THR	CA-CB-CG2	-5.91	104.12	112.40
67	B1	1524	A	P-O3'-C3'	-5.91	112.61	119.70
67	B1	2146	C	N1-C1'-C2'	5.91	121.69	114.00
21	A2	90	C	C3'-C2'-C1'	-5.91	96.77	101.50
21	A2	963	A	C4-C5-C6	5.91	119.95	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
61	Bd	11	ARG	N-CA-C	-5.91	95.05	111.00
67	B1	1229	U	C1'-O4'-C4'	-5.91	105.17	109.90
67	B1	1668	G	C1'-O4'-C4'	-5.91	105.17	109.90
67	B1	2213	G	O4'-C1'-C2'	5.91	112.92	107.60
67	B1	2479	C	C3'-C2'-C1'	5.91	106.23	101.50
11	A1	58	A	N9-C1'-C2'	-5.91	105.50	112.00
67	B1	900	C	O4'-C1'-C2'	-5.91	99.89	105.80
67	B1	1248	C	O4'-C1'-C2'	5.91	112.92	107.60
11	A1	56	U	C1'-O4'-C4'	-5.91	105.17	109.90
11	A1	66	C	O4'-C1'-C2'	-5.91	99.89	105.80
21	A2	841	C	C3'-C2'-C1'	5.91	106.22	101.50
33	BC	86	TYR	CB-CG-CD2	-5.91	117.46	121.00
61	Bd	11	ARG	NE-CZ-NH2	-5.91	117.35	120.30
67	B1	408	C	O3'-P-O5'	-5.91	92.78	104.00
67	B1	1358	C	O4'-C1'-N1	5.91	112.92	108.20
67	B1	2864	G	C3'-C2'-C1'	5.91	106.22	101.50
15	AE	158	TYR	CG-CD1-CE1	-5.90	116.58	121.30
21	A2	531	G	P-O5'-C5'	5.90	130.35	120.90
21	A2	631	C	O4'-C1'-N1	5.90	112.92	108.20
27	A0	17	U	C1'-O4'-C4'	5.90	114.62	109.90
59	BM	183	ARG	NE-CZ-NH1	5.90	123.25	120.30
67	B1	617	G	C1'-O4'-C4'	5.90	114.62	109.90
67	B1	2642	C	C1'-O4'-C4'	-5.90	105.18	109.90
21	A2	872	A	N9-C1'-C2'	5.90	121.67	114.00
21	A2	1256	C	C3'-C2'-C1'	5.90	106.22	101.50
21	A2	1456	C	N1-C1'-C2'	5.90	121.67	114.00
21	A2	1461	U	O4'-C4'-C3'	5.90	110.82	106.10
58	BP	44	ARG	NE-CZ-NH1	-5.90	117.35	120.30
67	B1	991	U	N1-C1'-C2'	5.90	121.67	114.00
67	B1	1236	C	OP1-P-OP2	-5.90	110.75	119.60
67	B1	2569	G	C3'-C2'-C1'	5.90	106.22	101.50
8	AR	73	HIS	CA-CB-CG	5.90	123.63	113.60
21	A2	789	G	C3'-C2'-C1'	-5.90	96.78	101.50
21	A2	1020	G	P-O3'-C3'	-5.90	112.62	119.70
50	BV	34	SER	N-CA-CB	5.90	119.35	110.50
54	BF	40	PHE	CB-CG-CD1	5.90	124.93	120.80
64	Bc	11	ARG	CB-CA-C	-5.90	98.60	110.40
67	B1	238	C	C5'-C4'-C3'	-5.90	106.56	116.00
67	B1	518	A	C1'-O4'-C4'	5.90	114.62	109.90
67	B1	2998	G	O4'-C1'-C2'	5.90	112.91	107.60
21	A2	414	G	P-O3'-C3'	-5.90	112.62	119.70
67	B1	1540	A	O4'-C1'-N9	5.90	112.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2437	G	P-O3'-C3'	5.90	126.78	119.70
68	B3	35	A	C3'-C2'-C1'	5.90	106.22	101.50
21	A2	1261	U	C1'-O4'-C4'	-5.90	105.18	109.90
21	A2	1298	G	C1'-O4'-C4'	-5.90	105.18	109.90
21	A2	1318	U	C1'-O4'-C4'	5.90	114.62	109.90
51	Bj	41	ARG	NE-CZ-NH2	-5.90	117.35	120.30
68	B3	83	C	C3'-C2'-C1'	5.90	106.22	101.50
21	A2	63	G	P-O5'-C5'	-5.90	111.47	120.90
51	Bj	54	LYS	C-N-CD	-5.90	107.63	120.60
67	B1	825	C	O4'-C1'-N1	5.90	112.92	108.20
67	B1	940	G	C5'-C4'-C3'	5.90	125.43	116.00
67	B1	1028	G	O4'-C1'-N9	5.90	112.92	108.20
67	B1	1894	A	C3'-C2'-C1'	5.90	106.22	101.50
67	B1	2540	A	C3'-C2'-C1'	5.90	106.22	101.50
67	B1	2826	U	C3'-C2'-C1'	5.90	106.22	101.50
67	B1	2937	U	N1-C1'-C2'	-5.90	105.52	112.00
67	B1	1317	G	C1'-O4'-C4'	-5.89	105.19	109.90
67	B1	1421	C	C4'-C3'-C2'	5.89	108.49	102.60
67	B1	2121	C	C4'-C3'-C2'	-5.89	96.71	102.60
67	B1	2147	C	O4'-C1'-N1	5.89	112.92	108.20
11	A1	50	G	O4'-C1'-C2'	-5.89	99.91	105.80
67	B1	807	G	C4'-C3'-C2'	-5.89	96.71	102.60
67	B1	1495	A	C5'-C4'-O4'	5.89	116.17	109.10
67	B1	2937	U	O4'-C4'-C3'	-5.89	98.11	104.00
44	BW	42	MET	CB-CA-C	-5.89	98.62	110.40
10	AD	11	TYR	CZ-CE2-CD2	5.89	125.10	119.80
21	A2	86	C	O4'-C1'-N1	5.89	112.91	108.20
21	A2	368	C	P-O3'-C3'	5.89	126.77	119.70
27	A0	14	A	P-O3'-C3'	-5.89	112.63	119.70
59	BM	111	LEU	N-CA-CB	5.89	122.18	110.40
67	B1	1757	G	O4'-C1'-C2'	5.89	112.90	107.60
67	B1	2108	U	C1'-O4'-C4'	5.89	114.61	109.90
67	B1	2166	C	N3-C4-C5	-5.89	119.54	121.90
51	Bj	77	ALA	N-CA-CB	5.89	118.34	110.10
67	B1	1252	G	C5'-C4'-C3'	5.89	125.42	116.00
21	A2	204	G	C3'-C2'-C1'	5.89	106.21	101.50
21	A2	408	C	C4'-C3'-C2'	-5.89	96.71	102.60
21	A2	558	C	C3'-C2'-C1'	5.89	106.21	101.50
21	A2	1149	C	C5'-C4'-C3'	-5.89	106.58	116.00
65	BJ	84	ARG	NE-CZ-NH2	-5.89	117.36	120.30
67	B1	1307	C	C3'-C2'-C1'	5.89	106.21	101.50
21	A2	1189	G	C3'-C2'-C1'	5.88	106.21	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	160	C	C1'-O4'-C4'	-5.88	105.19	109.90
67	B1	1257	G	O4'-C1'-C2'	5.88	112.90	107.60
67	B1	2300	C	P-O5'-C5'	5.88	130.32	120.90
67	B1	2314	U	C5'-C4'-C3'	-5.88	106.58	116.00
67	B1	198	C	O4'-C1'-N1	5.88	112.91	108.20
67	B1	540	A	C1'-O4'-C4'	5.88	114.61	109.90
10	AD	111	LYS	CA-CB-CG	5.88	126.34	113.40
21	A2	178	C	C1'-O4'-C4'	5.88	114.61	109.90
27	A0	48	C	C3'-C2'-C1'	5.88	106.21	101.50
34	BK	5	ASP	O-C-N	-5.88	113.29	122.70
59	BM	127	TRP	CG-CD2-CE3	-5.88	128.61	133.90
63	Bg	42	LYS	CB-CA-C	-5.88	98.64	110.40
67	B1	816	C	N1-C1'-C2'	5.88	121.64	114.00
67	B1	1830	U	P-O3'-C3'	-5.88	112.64	119.70
67	B1	2381	A	C5'-C4'-C3'	5.88	125.41	116.00
67	B1	2429	G	O4'-C1'-N9	5.88	112.91	108.20
21	A2	1146	G	C3'-C2'-C1'	5.88	106.20	101.50
59	BM	130	VAL	CA-CB-CG1	5.88	119.72	110.90
67	B1	1736	G	N9-C1'-C2'	5.88	121.64	114.00
67	B1	1772	A	O4'-C1'-C2'	-5.88	99.92	105.80
67	B1	423	G	C1'-O4'-C4'	-5.88	105.20	109.90
67	B1	448	A	O4'-C1'-C2'	-5.88	99.92	105.80
67	B1	1264	G	N9-C1'-C2'	5.88	121.64	114.00
4	AG	40	ALA	N-CA-CB	5.88	118.33	110.10
21	A2	1157	G	O4'-C1'-N9	5.88	112.90	108.20
67	B1	6	A	C3'-C2'-C1'	-5.88	96.80	101.50
67	B1	166	G	C1'-O4'-C4'	5.88	114.60	109.90
67	B1	487	U	C5'-C4'-O4'	5.88	116.15	109.10
67	B1	1354	G	O4'-C1'-C2'	-5.88	99.92	105.80
67	B1	1856	G	OP1-P-O3'	5.88	118.13	105.20
67	B1	2133	G	O5'-C5'-C4'	-5.88	100.53	111.70
67	B1	2776	A	N9-C1'-C2'	5.88	121.64	114.00
27	A0	39	U	O4'-C1'-N1	5.88	112.90	108.20
67	B1	1956	G	O3'-P-O5'	5.88	115.16	104.00
67	B1	2079	U	O4'-C1'-C2'	-5.88	99.92	105.80
67	B1	2702	A	P-O3'-C3'	5.88	126.75	119.70
67	B1	2720	U	O4'-C1'-C2'	-5.88	99.92	105.80
21	A2	1067	G	O3'-P-O5'	5.87	115.16	104.00
67	B1	31	G	O4'-C1'-N9	5.87	112.90	108.20
67	B1	676	G	C1'-O4'-C4'	-5.87	105.20	109.90
67	B1	1100	G	O4'-C1'-C2'	5.87	112.89	107.60
67	B1	1812	A	O3'-P-O5'	-5.87	92.84	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2960	G	P-O3'-C3'	5.87	126.75	119.70
21	A2	718	G	O4'-C1'-N9	-5.87	103.50	108.20
21	A2	998	A	C4-C5-C6	5.87	119.94	117.00
27	A0	44	C	O4'-C1'-C2'	-5.87	99.93	105.80
54	BF	179	GLY	N-CA-C	-5.87	98.42	113.10
67	B1	903	C	N1-C1'-C2'	5.87	121.63	114.00
67	B1	1743	G	N9-C1'-C2'	-5.87	105.54	112.00
67	B1	1844	C	O4'-C4'-C3'	-5.87	98.13	104.00
67	B1	336	C	C3'-C2'-C1'	5.87	106.20	101.50
1	AQ	37	VAL	CA-CB-CG2	-5.87	102.10	110.90
21	A2	1136	A	C1'-O4'-C4'	-5.87	105.21	109.90
49	BQ	97	LYS	CB-CA-C	5.87	122.14	110.40
67	B1	693	G	O4'-C4'-C3'	-5.87	98.13	104.00
67	B1	1166	A	C1'-O4'-C4'	-5.87	105.20	109.90
38	Bb	67	SER	N-CA-CB	5.87	119.30	110.50
41	Ba	30	ARG	N-CA-CB	5.87	121.16	110.60
67	B1	101	G	P-O5'-C5'	-5.87	111.52	120.90
67	B1	121	G	N9-C1'-C2'	5.87	121.63	114.00
67	B1	579	C	C2'-C3'-O3'	5.87	123.09	113.70
67	B1	2830	C	O4'-C1'-C2'	-5.87	99.93	105.80
21	A2	421	U	O4'-C1'-C2'	5.86	112.88	107.60
21	A2	1248	A	C1'-O4'-C4'	5.86	114.59	109.90
67	B1	192	U	C1'-O4'-C4'	-5.86	105.21	109.90
67	B1	654	C	C4'-C3'-C2'	-5.86	96.74	102.60
67	B1	704	G	C1'-O4'-C4'	5.86	114.59	109.90
67	B1	1316	U	C5'-C4'-O4'	-5.86	102.06	109.10
67	B1	1751	G	O4'-C4'-C3'	-5.86	98.14	104.00
67	B1	2038	C	C5'-C4'-O4'	5.86	116.14	109.10
67	B1	2801	G	P-O3'-C3'	-5.86	112.66	119.70
67	B1	2920	C	C1'-O4'-C4'	-5.86	105.21	109.90
51	Bj	52	ARG	NE-CZ-NH1	5.86	123.23	120.30
67	B1	215	A	C3'-C2'-C1'	-5.86	96.81	101.50
14	AM	109	GLY	CA-C-O	-5.86	110.05	120.60
21	A2	567	A	C5'-C4'-O4'	5.86	116.13	109.10
21	A2	685	G	O4'-C1'-N9	5.86	112.89	108.20
21	A2	1193	G	O4'-C1'-N9	-5.86	103.51	108.20
27	A0	16	C	O4'-C1'-C2'	-5.86	99.94	105.80
33	BC	322	MET	CG-SD-CE	-5.86	90.82	100.20
54	BF	78	MET	CG-SD-CE	-5.86	90.82	100.20
67	B1	961	C	C3'-C2'-C1'	5.86	106.19	101.50
67	B1	985	A	C4-C5-C6	5.86	119.93	117.00
67	B1	1258	G	OP1-P-OP2	-5.86	110.81	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1478	G	P-O3'-C3'	-5.86	112.67	119.70
67	B1	1728	C	C3'-C2'-C1'	5.86	106.19	101.50
67	B1	2991	C	N1-C1'-C2'	5.86	121.62	114.00
67	B1	520	G	P-O3'-C3'	5.86	126.73	119.70
21	A2	1067	G	O4'-C1'-C2'	-5.86	99.94	105.80
21	A2	1181	G	C1'-O4'-C4'	5.86	114.59	109.90
51	Bj	56	GLU	C-N-CA	5.86	134.60	122.30
61	Bd	11	ARG	N-CA-CB	5.86	121.14	110.60
67	B1	1075	G	O4'-C1'-N9	5.86	112.89	108.20
67	B1	2161	A	P-O3'-C3'	5.86	126.73	119.70
67	B1	2595	C	O4'-C1'-C2'	-5.86	99.94	105.80
5	AW	2	ALA	N-CA-CB	5.86	118.30	110.10
21	A2	114	A	C4'-C3'-C2'	5.86	108.45	102.60
21	A2	1156	A	N9-C1'-C2'	-5.86	105.56	112.00
39	Be	45	ARG	CB-CA-C	-5.86	98.69	110.40
49	BQ	142	LEU	CB-CA-C	5.86	121.32	110.20
67	B1	361	G	C4'-C3'-C2'	-5.86	96.74	102.60
67	B1	957	C	O4'-C1'-N1	5.86	112.88	108.20
67	B1	1097	G	C5'-C4'-O4'	-5.86	102.07	109.10
67	B1	1225	A	O4'-C1'-C2'	5.86	112.87	107.60
68	B3	79	U	N1-C1'-C2'	-5.86	105.56	112.00
21	A2	315	A	C1'-O4'-C4'	5.85	114.58	109.90
21	A2	584	C	C3'-C2'-C1'	5.85	106.18	101.50
21	A2	622	C	C3'-C2'-C1'	-5.85	96.82	101.50
36	Bf	3	ARG	NE-CZ-NH2	-5.85	117.37	120.30
15	AE	194	ALA	N-CA-CB	5.85	118.30	110.10
25	AH	9	PHE	CB-CG-CD1	-5.85	116.70	120.80
25	AH	85	PHE	CB-CG-CD2	5.85	124.90	120.80
45	Bi	10	ALA	CB-CA-C	-5.85	101.32	110.10
21	A2	82	G	C1'-O4'-C4'	-5.85	105.22	109.90
67	B1	2222	C	O4'-C1'-C2'	-5.85	99.95	105.80
4	AG	125	TYR	CB-CG-CD2	-5.85	117.49	121.00
17	AO	2	ALA	N-CA-CB	5.85	118.29	110.10
21	A2	1402	C	P-O3'-C3'	5.85	126.72	119.70
30	AU	86	ALA	CB-CA-C	-5.85	101.33	110.10
58	BP	71	ALA	CB-CA-C	5.85	118.87	110.10
61	Bd	52	VAL	CG1-CB-CG2	5.85	120.26	110.90
65	BJ	105	VAL	CA-CB-CG1	5.85	119.67	110.90
67	B1	653	U	O4'-C1'-N1	5.85	112.88	108.20
67	B1	820	C	O4'-C1'-C2'	-5.85	99.95	105.80
67	B1	1011	A	P-O5'-C5'	5.85	130.26	120.90
67	B1	1617	G	OP1-P-OP2	-5.85	110.83	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2419	U	C5'-C4'-C3'	-5.85	106.64	116.00
67	B1	2858	C	C1'-O4'-C4'	-5.85	105.22	109.90
21	A2	1061	A	C4'-C3'-C2'	-5.85	96.75	102.60
67	B1	1297	C	C3'-C2'-C1'	5.85	106.18	101.50
67	B1	2179	G	O4'-C1'-N9	5.85	112.88	108.20
67	B1	2393	G	C3'-C2'-C1'	-5.85	96.82	101.50
67	B1	2418	G	C3'-C2'-C1'	5.85	106.18	101.50
67	B1	2746	G	O4'-C1'-N9	5.85	112.88	108.20
20	A3	29	THR	CA-CB-CG2	-5.85	104.22	112.40
21	A2	821	G	C1'-O4'-C4'	5.85	114.58	109.90
21	A2	1159	U	N1-C1'-C2'	5.85	121.60	114.00
67	B1	952	C	C3'-C2'-C1'	5.85	106.18	101.50
67	B1	1489	G	P-O5'-C5'	-5.85	111.55	120.90
67	B1	1759	A	O4'-C1'-N9	5.85	112.88	108.20
67	B1	2441	A	O5'-P-OP2	-5.85	100.44	105.70
2	AK	108	VAL	CA-CB-CG2	5.84	119.67	110.90
15	AE	15	ALA	N-CA-CB	5.84	118.28	110.10
21	A2	209	A	C3'-C2'-C1'	5.84	106.17	101.50
21	A2	837	C	OP1-P-OP2	-5.84	110.83	119.60
26	AP	24	CYS	CA-CB-SG	5.84	124.52	114.00
67	B1	516	A	O4'-C4'-C3'	-5.84	98.16	104.00
67	B1	982	G	O4'-C1'-C2'	-5.84	99.95	105.80
67	B1	1499	C	O4'-C1'-N1	5.84	112.88	108.20
67	B1	1704	C	O4'-C1'-N1	5.84	112.88	108.20
67	B1	1927	C	N1-C1'-C2'	5.84	121.60	114.00
10	AD	56	ARG	NE-CZ-NH2	5.84	123.22	120.30
21	A2	89	G	C5'-C4'-C3'	-5.84	106.65	116.00
21	A2	676	G	C4'-C3'-C2'	5.84	108.44	102.60
27	A0	5	C	C3'-C2'-C1'	5.84	106.17	101.50
33	BC	189	GLY	N-CA-C	-5.84	98.49	113.10
67	B1	3009	C	C3'-C2'-C1'	5.84	106.17	101.50
21	A2	47	A	N9-C1'-C2'	5.84	121.59	114.00
21	A2	414	G	O4'-C1'-N9	5.84	112.87	108.20
67	B1	776	G	O4'-C1'-C2'	-5.84	99.96	105.80
67	B1	2846	A	C1'-O4'-C4'	-5.84	105.23	109.90
67	B1	1321	C	P-O3'-C3'	-5.84	112.69	119.70
8	AR	108	ARG	NE-CZ-NH1	5.84	123.22	120.30
67	B1	594	U	O4'-C1'-C2'	-5.84	99.96	105.80
67	B1	1750	C	O4'-C1'-N1	5.84	112.87	108.20
10	AD	109	VAL	CA-CB-CG1	5.84	119.66	110.90
21	A2	229	G	C1'-O4'-C4'	-5.84	105.23	109.90
26	AP	29	PRO	C-N-CA	5.84	136.29	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	Bf	4	ASN	CA-CB-CG	5.84	126.24	113.40
38	Bb	48	SER	N-CA-CB	5.84	119.25	110.50
56	BH	60	VAL	CA-CB-CG2	5.84	119.65	110.90
67	B1	875	G	C1'-O4'-C4'	-5.84	105.23	109.90
67	B1	931	C	N1-C1'-C2'	5.84	121.59	114.00
67	B1	2867	U	C3'-C2'-C1'	5.84	106.17	101.50
21	A2	451	A	C4-C5-C6	5.83	119.92	117.00
30	AU	77	TYR	CB-CG-CD1	5.83	124.50	121.00
38	Bb	41	ARG	NE-CZ-NH1	-5.83	117.38	120.30
67	B1	369	G	O4'-C1'-N9	-5.83	103.53	108.20
67	B1	1940	U	O4'-C1'-N1	5.83	112.87	108.20
68	B3	29	G	O4'-C1'-C2'	5.83	112.85	107.60
15	AE	153	ALA	N-CA-CB	5.83	118.27	110.10
21	A2	543	C	C3'-C2'-C1'	5.83	106.17	101.50
21	A2	686	C	C3'-C2'-C1'	5.83	106.17	101.50
21	A2	751	C	C1'-O4'-C4'	-5.83	105.23	109.90
62	BN	124	ALA	N-CA-CB	5.83	118.27	110.10
67	B1	1655	G	N9-C1'-C2'	5.83	121.58	114.00
68	B3	119	C	C4'-C3'-C2'	-5.83	96.77	102.60
21	A2	236	C	C3'-C2'-C1'	5.83	106.17	101.50
21	A2	1494	C	P-O5'-C5'	5.83	130.23	120.90
40	BE	135	PHE	CB-CG-CD1	5.83	124.88	120.80
48	BR	8	PHE	C-N-CA	5.83	136.28	121.70
67	B1	1516	C	C3'-C2'-C1'	5.83	106.17	101.50
6	AC	14	GLU	CA-CB-CG	5.83	126.23	113.40
21	A2	497	C	C5'-C4'-O4'	5.83	116.09	109.10
67	B1	1084	G	N9-C1'-C2'	5.83	121.58	114.00
67	B1	1993	A	P-O3'-C3'	-5.83	112.71	119.70
67	B1	2229	G	O4'-C1'-C2'	-5.83	99.97	105.80
67	B1	341	U	O4'-C1'-N1	5.83	112.86	108.20
21	A2	245	U	OP2-P-O3'	5.83	118.02	105.20
21	A2	434	A	C2'-C3'-O3'	5.83	123.02	113.70
21	A2	705	C	C1'-O4'-C4'	-5.83	105.24	109.90
21	A2	891	A	C4-C5-C6	5.83	119.91	117.00
67	B1	247	A	C1'-O4'-C4'	5.83	114.56	109.90
67	B1	344	G	C4'-C3'-C2'	-5.83	96.78	102.60
67	B1	603	G	C3'-C2'-C1'	5.83	106.16	101.50
67	B1	858	G	O4'-C1'-N9	-5.83	103.54	108.20
67	B1	1278	C	O4'-C1'-N1	-5.83	103.54	108.20
67	B1	1860	A	O4'-C1'-C2'	-5.83	99.97	105.80
67	B1	2092	G	O4'-C4'-C3'	-5.83	98.17	104.00
67	B1	2119	C	C5'-C4'-O4'	5.83	116.09	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AI	60	VAL	N-CA-C	-5.82	95.28	111.00
21	A2	985	C	N3-C4-C5	-5.82	119.57	121.90
60	BS	65	ARG	CA-CB-CG	5.82	126.21	113.40
67	B1	84	A	O4'-C1'-N9	-5.82	103.54	108.20
67	B1	492	A	C1'-O4'-C4'	5.82	114.56	109.90
67	B1	553	C	O4'-C1'-N1	5.82	112.86	108.20
67	B1	556	G	P-O3'-C3'	-5.82	112.71	119.70
67	B1	1025	A	O4'-C1'-N9	5.82	112.86	108.20
67	B1	1245	C	C4'-C3'-C2'	5.82	108.42	102.60
67	B1	2580	G	O4'-C1'-N9	5.82	112.86	108.20
67	B1	2815	C	O4'-C1'-C2'	-5.82	99.98	105.80
68	B3	40	G	C5'-C4'-C3'	-5.82	106.68	116.00
5	AW	16	VAL	CA-CB-CG2	-5.82	102.17	110.90
67	B1	1178	G	N9-C1'-C2'	5.82	121.57	114.00
67	B1	2652	G	C3'-C2'-C1'	-5.82	96.84	101.50
21	A2	15	U	O4'-C1'-N1	5.82	112.86	108.20
21	A2	443	C	O4'-C1'-N1	5.82	112.86	108.20
21	A2	1461	U	P-O5'-C5'	-5.82	111.59	120.90
51	Bj	61	PRO	N-CA-C	5.82	127.23	112.10
67	B1	644	G	C3'-C2'-C1'	5.82	106.16	101.50
67	B1	714	C	C3'-C2'-C1'	5.82	106.16	101.50
67	B1	2335	G	O4'-C1'-C2'	5.82	112.84	107.60
67	B1	939	A	O4'-C1'-N9	5.82	112.86	108.20
21	A2	427	G	C3'-C2'-C1'	-5.82	96.84	101.50
21	A2	1485	G	O3'-P-O5'	-5.82	92.95	104.00
31	BY	127	ARG	NE-CZ-NH1	5.82	123.21	120.30
67	B1	139	G	C5'-C4'-O4'	5.82	116.08	109.10
67	B1	406	G	C3'-C2'-C1'	5.82	106.15	101.50
67	B1	1589	G	O4'-C1'-C2'	-5.82	99.98	105.80
67	B1	1590	C	C3'-C2'-C1'	5.82	106.15	101.50
27	A0	33	U	O4'-C1'-C2'	-5.82	99.98	105.80
34	B5	46	ARG	NE-CZ-NH1	5.82	123.21	120.30
39	Be	53	LYS	CB-CG-CD	5.82	126.72	111.60
67	B1	1274	G	C3'-C2'-C1'	-5.82	96.85	101.50
67	B1	2380	A	N9-C1'-C2'	5.82	121.56	114.00
21	A2	236	C	C1'-O4'-C4'	5.81	114.55	109.90
21	A2	715	C	C1'-O4'-C4'	-5.81	105.25	109.90
67	B1	267	C	C3'-C2'-C1'	5.81	106.15	101.50
21	A2	375	G	N9-C1'-C2'	5.81	121.56	114.00
21	A2	1227	A	C1'-O4'-C4'	-5.81	105.25	109.90
67	B1	9	A	C4-C5-C6	5.81	119.91	117.00
67	B1	937	A	O5'-C5'-C4'	-5.81	100.66	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1097	G	C1'-O4'-C4'	-5.81	105.25	109.90
67	B1	1613	A	C5'-C4'-O4'	5.81	116.08	109.10
67	B1	2340	A	C1'-O4'-C4'	-5.81	105.25	109.90
67	B1	2417	G	C4'-C3'-C2'	-5.81	96.79	102.60
11	A1	50	G	N9-C1'-C2'	-5.81	105.61	112.00
17	AO	48	PHE	CG-CD1-CE1	-5.81	114.41	120.80
52	BB	238	ARG	NE-CZ-NH1	-5.81	117.39	120.30
67	B1	48	G	P-O3'-C3'	5.81	126.67	119.70
67	B1	259	A	C5'-C4'-C3'	5.81	125.30	116.00
67	B1	1092	U	O5'-C5'-C4'	-5.81	100.66	111.70
67	B1	1326	U	C1'-O4'-C4'	5.81	114.55	109.90
21	A2	305	C	C3'-C2'-C1'	5.81	106.15	101.50
21	A2	336	C	C1'-O4'-C4'	-5.81	105.25	109.90
21	A2	586	C	N3-C4-N4	5.81	122.07	118.00
21	A2	688	C	C1'-O4'-C4'	5.81	114.55	109.90
67	B1	530	A	C1'-O4'-C4'	5.81	114.55	109.90
67	B1	925	U	C1'-O4'-C4'	-5.81	105.25	109.90
67	B1	1303	C	N1-C1'-C2'	5.81	121.55	114.00
67	B1	1834	C	O4'-C1'-N1	5.81	112.85	108.20
67	B1	2505	A	C1'-O4'-C4'	-5.81	105.25	109.90
21	A2	532	C	OP1-P-OP2	-5.81	110.89	119.60
21	A2	543	C	O4'-C1'-C2'	-5.81	99.99	105.80
67	B1	138	U	O4'-C1'-C2'	-5.81	99.99	105.80
67	B1	140	C	P-O5'-C5'	-5.81	111.61	120.90
67	B1	1180	G	C2'-C3'-O3'	5.81	122.99	113.70
67	B1	1305	C	N1-C1'-C2'	5.81	121.55	114.00
57	BZ	99	ARG	NE-CZ-NH2	5.81	123.20	120.30
63	Bg	15	TYR	CB-CA-C	5.81	122.01	110.40
67	B1	778	A	C5'-C4'-O4'	5.81	116.07	109.10
67	B1	2454	G	C4'-C3'-C2'	-5.81	96.79	102.60
67	B1	2323	C	N3-C4-N4	5.80	122.06	118.00
21	A2	12	U	C3'-C2'-C1'	5.80	106.14	101.50
21	A2	16	G	N9-C1'-C2'	-5.80	105.62	112.00
21	A2	90	C	N1-C1'-C2'	5.80	121.54	114.00
21	A2	990	G	C1'-O4'-C4'	5.80	114.54	109.90
67	B1	649	A	N9-C1'-C2'	-5.80	105.62	112.00
21	A2	455	C	P-O3'-C3'	-5.80	112.74	119.70
67	B1	359	C	N1-C1'-C2'	5.80	121.54	114.00
67	B1	2780	G	O4'-C1'-N9	5.80	112.84	108.20
21	A2	123	U	C3'-C2'-C1'	5.80	106.14	101.50
21	A2	978	G	O4'-C1'-N9	-5.80	103.56	108.20
57	BZ	84	ALA	CB-CA-C	-5.80	101.40	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2350	G	O4'-C1'-N9	5.80	112.84	108.20
11	A1	8	U	OP1-P-OP2	-5.80	110.90	119.60
21	A2	1080	C	C5'-C4'-O4'	5.80	116.06	109.10
67	B1	539	A	N9-C1'-C2'	-5.80	105.62	112.00
68	B3	95	G	C4'-C3'-C2'	-5.80	96.80	102.60
21	A2	114	A	C5'-C4'-O4'	5.80	116.06	109.10
44	BW	19	ARG	NE-CZ-NH1	-5.80	117.40	120.30
67	B1	588	U	O4'-C1'-N1	5.80	112.84	108.20
67	B1	2151	C	P-O5'-C5'	5.80	130.18	120.90
21	A2	694	U	O4'-C1'-C2'	-5.79	100.00	105.80
23	AT	6	PHE	CB-CG-CD1	-5.79	116.74	120.80
37	BU	74	TYR	CB-CG-CD2	5.79	124.48	121.00
11	A1	17	C	O4'-C1'-C2'	-5.79	100.01	105.80
11	A1	22	A	C3'-C2'-C1'	-5.79	96.87	101.50
21	A2	997	G	C5-C6-O6	-5.79	125.12	128.60
21	A2	1347	U	P-O3'-C3'	5.79	126.65	119.70
45	Bi	46	VAL	CG1-CB-CG2	-5.79	101.63	110.90
48	BR	87	PHE	CB-CG-CD1	-5.79	116.74	120.80
67	B1	412	G	C1'-O4'-C4'	-5.79	105.27	109.90
67	B1	1418	A	C3'-C2'-C1'	5.79	106.14	101.50
67	B1	2350	G	C1'-O4'-C4'	5.79	114.53	109.90
67	B1	2706	C	O4'-C1'-C2'	-5.79	100.01	105.80
21	A2	457	G	N9-C1'-C2'	5.79	121.53	114.00
49	BQ	23	TRP	CH2-CZ2-CE2	5.79	123.19	117.40
20	BG	92	ILE	CB-CA-C	5.79	123.18	111.60
67	B1	145	C	C6-N1-C2	-5.79	117.98	120.30
67	B1	1599	A	C3'-C2'-C1'	-5.79	96.87	101.50
67	B1	1725	A	O4'-C1'-C2'	-5.79	100.01	105.80
67	B1	1920	A	C5'-C4'-O4'	5.79	116.05	109.10
11	A1	52	G	N9-C1'-C2'	5.79	121.53	114.00
21	A2	154	C	O4'-C1'-N1	5.79	112.83	108.20
21	A2	1198	A	C5'-C4'-C3'	-5.79	106.74	116.00
67	B1	1684	C	N1-C1'-C2'	5.79	121.53	114.00
67	B1	3037	G	C2'-C3'-O3'	5.79	122.96	113.70
21	A2	445	G	O4'-C1'-N9	5.79	112.83	108.20
21	A2	988	A	C4-C5-C6	5.79	119.89	117.00
28	B6	85	TYR	CB-CG-CD1	5.79	124.47	121.00
67	B1	691	G	O4'-C1'-N9	5.79	112.83	108.20
67	B1	1290	G	O4'-C1'-N9	5.79	112.83	108.20
67	B1	1389	A	C3'-C2'-C1'	5.79	106.13	101.50
67	B1	2019	C	O4'-C1'-N1	5.79	112.83	108.20
67	B1	3022	C	OP1-P-OP2	-5.79	110.92	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	667	G	O4'-C1'-N9	5.79	112.83	108.20
67	B1	458	U	O4'-C1'-N1	5.79	112.83	108.20
67	B1	1400	U	O4'-C4'-C3'	-5.79	98.21	104.00
14	AM	127	ARG	NE-CZ-NH1	5.79	123.19	120.30
21	A2	711	U	P-O5'-C5'	5.79	130.16	120.90
56	BH	47	ALA	N-CA-CB	5.79	118.20	110.10
67	B1	1	G	OP2-P-O3'	5.79	117.93	105.20
67	B1	52	A	C3'-C2'-C1'	5.79	106.13	101.50
67	B1	557	G	C1'-O4'-C4'	-5.79	105.27	109.90
21	A2	166	A	O4'-C1'-C2'	5.78	112.81	107.60
21	A2	982	U	C3'-C2'-C1'	5.78	106.13	101.50
47	BI	88	ASP	N-CA-CB	5.78	121.01	110.60
67	B1	635	G	O4'-C1'-N9	5.78	112.83	108.20
67	B1	641	G	O4'-C1'-N9	5.78	112.83	108.20
67	B1	1017	A	C4-C5-C6	5.78	119.89	117.00
21	A2	171	U	C3'-C2'-C1'	-5.78	96.87	101.50
67	B1	1098	C	O4'-C1'-N1	5.78	112.83	108.20
67	B1	1970	G	C1'-O4'-C4'	-5.78	105.27	109.90
32	BO	11	PHE	CG-CD2-CE2	5.78	127.16	120.80
35	BL	110	ASP	CB-CG-OD1	5.78	123.50	118.30
64	Bc	71	PHE	CB-CG-CD2	-5.78	116.75	120.80
67	B1	216	A	N9-C1'-C2'	-5.78	105.64	112.00
67	B1	817	G	C1'-O4'-C4'	-5.78	105.28	109.90
67	B1	911	G	C3'-C2'-C1'	5.78	106.12	101.50
67	B1	2178	A	C1'-O4'-C4'	-5.78	105.28	109.90
67	B1	2679	A	C1'-O4'-C4'	-5.78	105.28	109.90
67	B1	2858	C	C5'-C4'-O4'	5.78	116.04	109.10
67	B1	2961	A	O4'-C1'-N9	5.78	112.82	108.20
21	A2	452	G	C3'-C2'-C1'	5.78	106.12	101.50
21	A2	550	G	N9-C1'-C2'	5.78	121.51	114.00
21	A2	1136	A	P-O3'-C3'	-5.78	112.77	119.70
67	B1	2695	U	O4'-C1'-C2'	5.78	112.80	107.60
21	A2	571	C	P-O3'-C3'	5.78	126.63	119.70
27	A0	7	G	O4'-C1'-N9	-5.78	103.58	108.20
35	BL	53	TYR	CB-CG-CD2	-5.78	117.53	121.00
34	BK	64	ARG	NE-CZ-NH1	-5.78	117.41	120.30
51	Bj	33	LEU	CB-CA-C	-5.78	99.22	110.20
67	B1	286	G	C5'-C4'-C3'	5.78	125.24	116.00
67	B1	793	C	O5'-P-OP1	5.78	117.63	110.70
67	B1	811	C	C3'-C2'-C1'	5.78	106.12	101.50
67	B1	2519	C	P-O5'-C5'	5.78	130.15	120.90
67	B1	3009	C	P-O5'-C5'	5.78	130.15	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	B3	122	C	C5'-C4'-O4'	5.78	116.03	109.10
21	A2	527	A	O4'-C1'-N9	5.78	112.82	108.20
21	A2	795	G	C5'-C4'-C3'	5.78	125.24	116.00
21	A2	826	C	P-O3'-C3'	-5.78	112.77	119.70
21	A2	943	C	O4'-C1'-C2'	-5.78	100.02	105.80
21	A2	1177	C	N1-C1'-C2'	5.78	121.51	114.00
67	B1	307	C	C3'-C2'-C1'	5.78	106.12	101.50
67	B1	602	G	OP1-P-OP2	-5.78	110.94	119.60
67	B1	1679	U	C1'-O4'-C4'	5.78	114.52	109.90
21	A2	1166	G	C3'-C2'-C1'	-5.77	96.88	101.50
67	B1	1073	G	N9-C1'-C2'	-5.77	105.65	112.00
67	B1	1221	U	P-O3'-C3'	-5.77	112.77	119.70
21	A2	347	G	O4'-C1'-C2'	5.77	112.80	107.60
21	A2	1361	G	C3'-C2'-C1'	5.77	106.12	101.50
29	AL	32	VAL	CA-CB-CG1	5.77	119.56	110.90
50	BV	56	TYR	CB-CG-CD1	-5.77	117.54	121.00
67	B1	24	G	C4'-C3'-C2'	-5.77	96.83	102.60
67	B1	394	A	OP1-P-OP2	-5.77	110.94	119.60
67	B1	1685	C	O4'-C1'-N1	5.77	112.82	108.20
67	B1	2971	U	C5'-C4'-C3'	5.77	125.24	116.00
67	B1	208	A	O4'-C1'-C2'	-5.77	100.03	105.80
67	B1	837	G	C3'-C2'-C1'	5.77	106.12	101.50
67	B1	1582	G	C4'-C3'-C2'	-5.77	96.83	102.60
67	B1	1970	G	C3'-C2'-C1'	-5.77	96.88	101.50
11	A1	64	C	C3'-C2'-C1'	5.77	106.11	101.50
21	A2	376	G	C1'-O4'-C4'	5.77	114.52	109.90
52	BB	204	PHE	CB-CG-CD1	5.77	124.84	120.80
67	B1	1147	G	O4'-C4'-C3'	-5.77	98.23	104.00
67	B1	2248	G	P-O3'-C3'	5.77	126.62	119.70
67	B1	2323	C	N3-C4-C5	-5.77	119.59	121.90
67	B1	2373	G	C3'-C2'-C1'	5.77	106.12	101.50
67	B1	2524	C	N1-C1'-C2'	5.77	121.50	114.00
20	A3	45	ARG	NE-CZ-NH2	-5.77	117.42	120.30
21	A2	683	A	P-O5'-C5'	5.77	130.13	120.90
67	B1	1796	U	N1-C1'-C2'	-5.77	105.66	112.00
67	B1	2196	C	C3'-C2'-C1'	5.77	106.11	101.50
47	BI	2	ARG	NE-CZ-NH1	5.77	123.18	120.30
21	A2	1351	U	O4'-C1'-N1	5.76	112.81	108.20
67	B1	1810	G	P-O3'-C3'	-5.76	112.78	119.70
67	B1	2145	G	N9-C1'-C2'	-5.76	105.66	112.00
67	B1	2599	C	O4'-C1'-N1	5.76	112.81	108.20
67	B1	2996	A	C3'-C2'-C1'	5.76	106.11	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	241	U	O4'-C1'-C2'	-5.76	100.04	105.80
21	A2	860	G	C1'-O4'-C4'	-5.76	105.29	109.90
34	B5	64	ARG	NE-CZ-NH1	-5.76	117.42	120.30
58	BP	20	LYS	N-CA-CB	5.76	120.97	110.60
67	B1	166	G	P-O3'-C3'	-5.76	112.78	119.70
17	AO	84	ASP	CB-CG-OD1	-5.76	113.11	118.30
21	A2	1255	C	N1-C1'-C2'	5.76	121.49	114.00
67	B1	1221	U	C1'-O4'-C4'	5.76	114.51	109.90
67	B1	2500	G	C4'-C3'-C2'	-5.76	96.84	102.60
67	B1	203	G	C3'-C2'-C1'	5.76	106.11	101.50
67	B1	1390	U	C1'-O4'-C4'	5.76	114.51	109.90
21	A2	525	A	C3'-C2'-C1'	5.76	106.11	101.50
21	A2	1067	G	OP1-P-OP2	-5.76	110.96	119.60
30	AU	128	PHE	CB-CG-CD2	-5.76	116.77	120.80
67	B1	1575	G	C3'-C2'-C1'	5.76	106.11	101.50
21	A2	465	C	C4'-C3'-C2'	-5.76	96.84	102.60
21	A2	647	G	N9-C1'-C2'	5.76	121.48	114.00
21	A2	731	A	O4'-C1'-N9	5.76	112.81	108.20
21	A2	1300	A	C3'-C2'-C1'	5.76	106.11	101.50
21	A2	1394	G	C4'-C3'-C2'	5.76	108.36	102.60
57	BZ	5	PHE	CB-CG-CD2	-5.76	116.77	120.80
67	B1	869	A	C5'-C4'-O4'	5.76	116.01	109.10
67	B1	1434	C	P-O5'-C5'	5.76	130.11	120.90
67	B1	2676	A	O4'-C1'-C2'	-5.76	100.04	105.80
17	AO	4	PHE	CB-CG-CD1	5.75	124.83	120.80
7	AB	2	ALA	N-CA-CB	5.75	118.16	110.10
21	A2	40	C	P-O3'-C3'	5.75	126.60	119.70
21	A2	1203	G	P-O3'-C3'	-5.75	112.80	119.70
34	B5	48	MET	CG-SD-CE	-5.75	90.99	100.20
67	B1	432	C	O4'-C1'-N1	5.75	112.80	108.20
67	B1	1728	C	O4'-C1'-N1	5.75	112.80	108.20
67	B1	2374	C	P-O5'-C5'	-5.75	111.69	120.90
50	BV	40	TYR	CB-CG-CD1	-5.75	117.55	121.00
67	B1	433	C	C4'-C3'-C2'	-5.75	96.85	102.60
67	B1	1531	C	P-O3'-C3'	5.75	126.60	119.70
67	B1	2104	G	C1'-O4'-C4'	-5.75	105.30	109.90
11	A1	51	G	C4'-C3'-C2'	-5.75	96.85	102.60
21	A2	85	A	O3'-P-O5'	5.75	114.93	104.00
21	A2	796	C	O4'-C1'-N1	5.75	112.80	108.20
24	AA	125	ALA	N-CA-CB	5.75	118.15	110.10
40	BE	145	ARG	NH1-CZ-NH2	5.75	125.72	119.40
48	BR	22	ARG	NE-CZ-NH1	5.75	123.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	BF	56	TYR	CG-CD2-CE2	5.75	125.90	121.30
12	AN	50	ALA	C-N-CA	5.75	136.07	121.70
15	AE	186	PHE	CB-CG-CD1	-5.75	116.78	120.80
21	A2	43	A	P-O5'-C5'	-5.75	111.70	120.90
21	A2	581	G	C3'-C2'-C1'	-5.75	96.90	101.50
63	Bg	13	LYS	N-CA-CB	5.75	120.95	110.60
67	B1	2189	C	O5'-P-OP2	-5.75	100.53	105.70
41	Ba	27	ARG	NE-CZ-NH1	-5.75	117.43	120.30
51	Bj	52	ARG	CA-C-N	5.75	133.19	117.10
60	BS	50	TYR	CB-CG-CD1	-5.75	117.55	121.00
67	B1	241	C	O4'-C1'-C2'	5.75	112.77	107.60
67	B1	1184	U	P-O3'-C3'	5.75	126.60	119.70
67	B1	1503	C	O4'-C1'-N1	5.75	112.80	108.20
67	B1	2016	C	C5'-C4'-O4'	5.75	116.00	109.10
68	B3	59	C	C3'-C2'-C1'	5.75	106.10	101.50
68	B3	83	C	O4'-C1'-C2'	-5.75	100.05	105.80
21	A2	385	A	O4'-C4'-C3'	-5.75	98.25	104.00
67	B1	225	C	O4'-C1'-N1	5.75	112.80	108.20
21	A2	329	G	N9-C1'-C2'	5.74	121.47	114.00
21	A2	609	G	C3'-C2'-C1'	-5.74	96.91	101.50
21	A2	952	A	O4'-C1'-C2'	-5.74	100.06	105.80
21	A2	1169	C	O4'-C1'-C2'	-5.74	100.06	105.80
67	B1	144	A	C5-C6-N6	-5.74	119.11	123.70
67	B1	367	G	C3'-C2'-C1'	-5.74	96.91	101.50
67	B1	1013	G	P-O3'-C3'	5.74	126.59	119.70
67	B1	1193	G	C3'-C2'-C1'	5.74	106.09	101.50
67	B1	2044	C	O4'-C1'-N1	5.74	112.80	108.20
67	B1	2696	G	P-O3'-C3'	5.74	126.59	119.70
21	A2	668	G	C1'-O4'-C4'	-5.74	105.31	109.90
21	A2	1015	C	N3-C4-N4	5.74	122.02	118.00
46	BA	3	PHE	CG-CD2-CE2	-5.74	114.48	120.80
67	B1	384	G	O4'-C1'-N9	5.74	112.79	108.20
67	B1	764	G	O4'-C1'-N9	5.74	112.79	108.20
67	B1	2402	A	OP1-P-OP2	-5.74	110.99	119.60
6	AC	146	PHE	N-CA-CB	5.74	120.93	110.60
17	AO	38	MET	CG-SD-CE	-5.74	91.02	100.20
19	AS	59	ARG	CB-CA-C	-5.74	98.92	110.40
21	A2	317	A	C1'-O4'-C4'	-5.74	105.31	109.90
67	B1	399	C	N3-C4-C5	-5.74	119.60	121.90
67	B1	416	A	O4'-C1'-N9	5.74	112.79	108.20
67	B1	776	G	O4'-C4'-C3'	-5.74	98.26	104.00
67	B1	2143	C	P-O5'-C5'	-5.74	111.71	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AK	25	ARG	NE-CZ-NH2	-5.74	117.43	120.30
21	A2	582	G	C1'-O4'-C4'	-5.74	105.31	109.90
21	A2	676	G	C1'-O4'-C4'	5.74	114.49	109.90
21	A2	1450	U	OP2-P-O3'	5.74	117.83	105.20
31	BY	35	VAL	CB-CA-C	-5.74	100.50	111.40
31	BY	46	MET	CG-SD-CE	-5.74	91.02	100.20
67	B1	168	G	O4'-C1'-N9	5.74	112.79	108.20
67	B1	611	G	N9-C1'-C2'	5.74	121.46	114.00
67	B1	2883	C	O4'-C1'-N1	5.74	112.79	108.20
13	AX	9	ALA	CB-CA-C	5.74	118.71	110.10
67	B1	1755	C	O4'-C1'-C2'	-5.74	100.06	105.80
21	A2	1408	C	O4'-C1'-C2'	-5.74	100.06	105.80
33	BC	26	ARG	NE-CZ-NH1	-5.74	117.43	120.30
38	Bb	23	PHE	N-CA-CB	5.74	120.92	110.60
56	BH	17	PRO	N-CA-CB	5.74	110.18	103.30
61	Bd	12	ARG	NE-CZ-NH2	-5.74	117.43	120.30
67	B1	631	G	C1'-O4'-C4'	-5.74	105.31	109.90
67	B1	1110	A	C5'-C4'-O4'	5.74	115.98	109.10
21	A2	157	A	O4'-C1'-N9	-5.73	103.61	108.20
67	B1	778	A	OP1-P-OP2	-5.73	111.00	119.60
8	AR	109	ALA	C-N-CA	5.73	136.03	121.70
19	AS	35	VAL	CA-CB-CG1	5.73	119.50	110.90
21	A2	92	G	C5'-C4'-O4'	5.73	115.98	109.10
21	A2	617	A	C4'-C3'-C2'	-5.73	96.87	102.60
21	A2	768	A	C1'-O4'-C4'	5.73	114.48	109.90
21	A2	784	G	O5'-P-OP2	-5.73	100.54	105.70
35	BL	17	HIS	CA-CB-CG	5.73	123.35	113.60
67	B1	85	G	C1'-O4'-C4'	-5.73	105.31	109.90
67	B1	128	C	C5'-C4'-C3'	5.73	125.17	116.00
67	B1	157	U	O4'-C1'-C2'	-5.73	100.07	105.80
67	B1	578	C	O4'-C1'-C2'	-5.73	100.07	105.80
67	B1	879	A	C5'-C4'-O4'	5.73	115.98	109.10
67	B1	1505	G	O4'-C1'-N9	5.73	112.78	108.20
67	B1	2257	A	C3'-C2'-C1'	-5.73	96.91	101.50
67	B1	2606	C	C5'-C4'-O4'	5.73	115.98	109.10
67	B1	2761	G	C4'-C3'-C2'	-5.73	96.87	102.60
67	B1	2954	C	N1-C1'-C2'	5.73	121.45	114.00
21	A2	252	U	C4'-C3'-C2'	-5.73	96.87	102.60
21	A2	1166	G	O4'-C1'-C2'	5.73	112.76	107.60
67	B1	528	G	C4'-C3'-C2'	-5.73	96.87	102.60
11	A1	37	A	C5'-C4'-O4'	5.73	115.97	109.10
21	A2	266	A	P-O3'-C3'	-5.73	112.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	938	C	N1-C1'-C2'	5.73	121.45	114.00
67	B1	661	G	OP1-P-OP2	-5.73	111.01	119.60
67	B1	2052	A	C1'-O4'-C4'	5.73	114.48	109.90
21	A2	539	C	O4'-C1'-N1	5.73	112.78	108.20
21	A2	1400	A	C3'-C2'-C1'	5.73	106.08	101.50
49	BQ	88	ARG	CB-CA-C	5.73	121.85	110.40
67	B1	1079	A	O4'-C1'-N9	5.73	112.78	108.20
67	B1	2590	C	C1'-O4'-C4'	-5.73	105.32	109.90
67	B1	2748	C	N3-C4-C5	-5.73	119.61	121.90
5	AW	33	THR	N-CA-C	-5.73	95.54	111.00
20	A3	118	VAL	CA-CB-CG2	-5.73	102.31	110.90
21	A2	397	C	C3'-C2'-C1'	5.73	106.08	101.50
21	A2	670	C	C1'-O4'-C4'	-5.73	105.32	109.90
21	A2	1299	A	C4'-C3'-C2'	-5.73	96.87	102.60
32	BO	171	TYR	CG-CD2-CE2	-5.73	116.72	121.30
67	B1	180	A	N9-C1'-C2'	5.73	121.44	114.00
67	B1	406	G	O3'-P-O5'	5.73	114.88	104.00
67	B1	2004	A	C3'-C2'-C1'	5.73	106.08	101.50
67	B1	2271	G	C4'-C3'-C2'	-5.73	96.87	102.60
67	B1	2892	A	C1'-O4'-C4'	-5.73	105.32	109.90
25	AH	180	PHE	N-CA-CB	5.72	120.90	110.60
67	B1	215	A	C1'-O4'-C4'	5.72	114.48	109.90
67	B1	842	C	C3'-C2'-C1'	5.72	106.08	101.50
20	BG	6	TYR	CB-CG-CD1	-5.72	117.57	121.00
67	B1	332	A	C5-C6-N6	-5.72	119.12	123.70
67	B1	888	U	C1'-O4'-C4'	-5.72	105.32	109.90
67	B1	1626	A	P-O5'-C5'	5.72	130.06	120.90
67	B1	2813	G	P-O3'-C3'	-5.72	112.83	119.70
21	A2	460	C	N3-C4-N4	5.72	122.00	118.00
21	A2	1403	U	O4'-C1'-C2'	-5.72	100.08	105.80
24	AA	71	TYR	CD1-CE1-CZ	5.72	124.95	119.80
24	AA	186	ARG	NE-CZ-NH2	5.72	123.16	120.30
27	A0	66	C	C4'-C3'-C2'	-5.72	96.88	102.60
54	BF	62	ARG	NE-CZ-NH2	-5.72	117.44	120.30
58	BP	36	ARG	NE-CZ-NH1	5.72	123.16	120.30
11	A1	42	C	N1-C1'-C2'	5.72	121.44	114.00
21	A2	181	G	C5'-C4'-C3'	5.72	125.15	116.00
21	A2	1272	G	O4'-C1'-N9	-5.72	103.62	108.20
33	BC	333	LYS	N-CA-CB	5.72	120.89	110.60
34	B5	50	ILE	N-CA-CB	5.72	123.95	110.80
67	B1	803	A	O4'-C1'-C2'	-5.72	100.08	105.80
67	B1	985	A	C5-C6-N6	-5.72	119.12	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	220	C	O4'-C1'-N1	5.72	112.77	108.20
67	B1	1121	C	P-O3'-C3'	5.72	126.56	119.70
21	A2	1001	A	O4'-C4'-C3'	-5.72	98.28	104.00
67	B1	1608	G	C3'-C2'-C1'	-5.72	96.93	101.50
67	B1	2100	U	C3'-C2'-C1'	5.72	106.07	101.50
67	B1	2263	G	C3'-C2'-C1'	-5.72	96.93	101.50
67	B1	2472	A	C1'-O4'-C4'	5.72	114.47	109.90
11	A1	10	G	C1'-O4'-C4'	-5.71	105.33	109.90
21	A2	217	C	O4'-C1'-C2'	-5.71	100.08	105.80
21	A2	472	C	C4'-C3'-C2'	-5.71	96.89	102.60
21	A2	524	U	P-O3'-C3'	5.71	126.56	119.70
27	A0	36	U	P-O3'-C3'	-5.71	112.84	119.70
67	B1	237	G	O4'-C1'-N9	5.71	112.77	108.20
21	A2	351	C	C4'-C3'-C2'	-5.71	96.89	102.60
23	AT	62	PRO	O-C-N	-5.71	113.56	122.70
67	B1	2140	C	N3-C4-N4	5.71	122.00	118.00
21	A2	316	C	N1-C1'-C2'	5.71	121.42	114.00
67	B1	1	G	C5'-C4'-O4'	5.71	115.95	109.10
67	B1	1806	C	C5'-C4'-C3'	-5.71	106.86	116.00
67	B1	852	A	C1'-O4'-C4'	-5.71	105.33	109.90
67	B1	1881	A	C4-C5-C6	5.71	119.86	117.00
21	A2	250	G	N9-C1'-C2'	5.71	121.42	114.00
21	A2	1476	C	C1'-O4'-C4'	-5.71	105.33	109.90
27	A0	40	C	OP1-P-OP2	-5.71	111.04	119.60
33	BC	125	TYR	N-CA-C	-5.71	95.59	111.00
38	Bb	52	LEU	N-CA-CB	5.71	121.82	110.40
67	B1	583	A	P-O5'-C5'	5.71	130.03	120.90
67	B1	845	U	O4'-C1'-C2'	-5.71	100.09	105.80
67	B1	2156	A	C4'-C3'-C2'	5.71	108.31	102.60
68	B3	29	G	O4'-C1'-N9	-5.71	103.63	108.20
21	A2	38	G	C1'-O4'-C4'	-5.71	105.33	109.90
21	A2	111	G	C4'-C3'-C2'	-5.71	96.89	102.60
21	A2	841	C	O4'-C1'-N1	-5.71	103.64	108.20
33	BC	203	LEU	CB-CA-C	-5.71	99.36	110.20
33	BC	211	GLU	OE1-CD-OE2	-5.71	116.45	123.30
66	B1	72	ARG	NE-CZ-NH2	-5.71	117.45	120.30
67	B1	1108	A	P-O3'-C3'	-5.71	112.85	119.70
68	B3	22	C	O4'-C1'-N1	5.71	112.77	108.20
37	BU	39	TYR	CD1-CG-CD2	5.71	124.17	117.90
59	BM	51	LEU	CB-CG-CD2	5.71	120.70	111.00
67	B1	31	G	C3'-C2'-C1'	-5.71	96.94	101.50
67	B1	650	C	O4'-C1'-N1	5.71	112.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2897	C	O4'-C1'-C2'	-5.71	100.09	105.80
68	B3	105	G	P-O5'-C5'	5.71	130.03	120.90
7	AB	72	VAL	CA-CB-CG2	-5.70	102.35	110.90
17	AO	10	VAL	CA-CB-CG2	5.70	119.46	110.90
21	A2	102	U	O4'-C1'-N1	5.70	112.76	108.20
27	A0	41	C	OP1-P-OP2	-5.70	111.05	119.60
41	Ba	80	LYS	C-N-CA	5.70	135.96	121.70
58	BP	74	LEU	N-CA-C	-5.70	95.60	111.00
67	B1	208	A	N9-C1'-C2'	5.70	121.42	114.00
67	B1	554	C	O4'-C1'-N1	5.70	112.76	108.20
67	B1	677	A	P-O5'-C5'	-5.70	111.78	120.90
67	B1	703	G	O4'-C4'-C3'	-5.70	98.30	104.00
67	B1	747	G	C3'-C2'-C1'	-5.70	96.94	101.50
67	B1	750	C	O4'-C1'-N1	-5.70	103.64	108.20
67	B1	1879	U	O4'-C1'-N1	5.70	112.76	108.20
67	B1	2450	A	C4'-C3'-C2'	5.70	108.30	102.60
67	B1	2523	C	N1-C1'-C2'	5.70	121.41	114.00
67	B1	701	G	O4'-C4'-C3'	-5.70	98.30	104.00
21	A2	578	G	O4'-C1'-N9	5.70	112.76	108.20
35	BL	5	ARG	NE-CZ-NH1	-5.70	117.45	120.30
67	B1	954	A	O4'-C1'-N9	5.70	112.76	108.20
67	B1	1142	A	O4'-C1'-N9	5.70	112.76	108.20
67	B1	1571	G	O4'-C1'-N9	5.70	112.76	108.20
67	B1	1678	A	N9-C1'-C2'	-5.70	105.73	112.00
67	B1	1768	C	C1'-O4'-C4'	-5.70	105.34	109.90
67	B1	1920	A	P-O5'-C5'	-5.70	111.78	120.90
67	B1	2431	C	C1'-O4'-C4'	-5.70	105.34	109.90
21	A2	703	U	P-O5'-C5'	5.70	130.02	120.90
21	A2	1365	G	O4'-C1'-N9	5.70	112.76	108.20
48	BR	61	ARG	NE-CZ-NH2	-5.70	117.45	120.30
67	B1	1040	C	C4'-C3'-C2'	-5.70	96.90	102.60
67	B1	1060	C	C3'-C2'-C1'	5.70	106.06	101.50
67	B1	2819	C	O4'-C1'-N1	5.70	112.76	108.20
15	AE	137	ARG	NH1-CZ-NH2	5.70	125.67	119.40
23	AT	8	TYR	N-CA-CB	5.70	120.85	110.60
67	B1	1188	C	P-O5'-C5'	5.70	130.01	120.90
67	B1	2085	C	N1-C1'-C2'	5.70	121.41	114.00
13	AX	69	SER	C-N-CA	5.70	135.94	121.70
21	A2	393	A	P-O3'-C3'	-5.70	112.86	119.70
21	A2	874	G	N9-C1'-C2'	-5.70	105.73	112.00
21	A2	1054	A	O4'-C1'-C2'	-5.70	100.10	105.80
21	A2	1454	A	C3'-C2'-C1'	5.70	106.06	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	Bi	24	ARG	NE-CZ-NH1	5.70	123.15	120.30
34	BK	50	ILE	N-CA-CB	5.70	123.90	110.80
67	B1	377	C	N3-C4-C5	-5.70	119.62	121.90
67	B1	1457	C	P-O3'-C3'	5.70	126.53	119.70
67	B1	1595	G	C3'-C2'-C1'	-5.70	96.94	101.50
67	B1	1697	G	C5'-C4'-O4'	5.70	115.93	109.10
67	B1	1850	C	O4'-C1'-C2'	-5.70	100.11	105.80
67	B1	2035	U	C1'-O4'-C4'	-5.70	105.34	109.90
67	B1	2325	C	N3-C4-N4	5.70	121.99	118.00
67	B1	2450	A	OP1-P-O3'	5.70	117.73	105.20
67	B1	3037	G	O4'-C1'-C2'	-5.70	100.11	105.80
68	B3	117	G	C5'-C4'-O4'	5.70	115.94	109.10
21	A2	286	G	O4'-C1'-N9	5.69	112.75	108.20
21	A2	412	U	C1'-O4'-C4'	5.69	114.45	109.90
30	AU	91	TYR	CG-CD1-CE1	-5.69	116.75	121.30
46	BA	59	ASP	CA-CB-CG	-5.69	100.87	113.40
67	B1	30	G	C1'-O4'-C4'	-5.69	105.34	109.90
67	B1	473	C	C3'-C2'-C1'	5.69	106.06	101.50
21	A2	188	C	C1'-O4'-C4'	-5.69	105.34	109.90
21	A2	458	G	O4'-C1'-N9	5.69	112.75	108.20
30	AU	86	ALA	N-CA-CB	5.69	118.07	110.10
67	B1	1499	C	P-O3'-C3'	-5.69	112.87	119.70
67	B1	1671	A	O4'-C1'-C2'	-5.69	100.11	105.80
67	B1	2327	C	O4'-C1'-C2'	-5.69	100.11	105.80
67	B1	2855	G	N9-C1'-C2'	5.69	121.40	114.00
21	A2	439	G	C1'-O4'-C4'	-5.69	105.35	109.90
21	A2	555	U	P-O3'-C3'	5.69	126.53	119.70
21	A2	1112	G	C1'-O4'-C4'	-5.69	105.35	109.90
21	A2	1192	C	O4'-C1'-C2'	-5.69	100.11	105.80
21	A2	1376	C	C5'-C4'-C3'	5.69	125.10	116.00
24	AA	160	GLU	CB-CA-C	-5.69	99.02	110.40
67	B1	21	C	C1'-O4'-C4'	-5.69	105.35	109.90
21	A2	1437	G	O4'-C1'-N9	-5.69	103.65	108.20
21	A2	528	G	C5'-C4'-C3'	-5.69	106.90	116.00
21	A2	1236	G	O4'-C1'-N9	5.69	112.75	108.20
67	B1	585	G	C3'-C2'-C1'	-5.69	96.95	101.50
67	B1	655	C	C1'-O4'-C4'	5.69	114.45	109.90
67	B1	924	A	P-O3'-C3'	5.69	126.53	119.70
36	Bf	33	ARG	CA-C-N	5.69	129.71	117.20
67	B1	279	G	P-O5'-C5'	-5.69	111.80	120.90
67	B1	2800	U	N1-C1'-C2'	-5.69	105.75	112.00
7	AB	49	ASP	CB-CG-OD1	-5.68	113.18	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	615	G	N9-C1'-C2'	5.68	121.39	114.00
21	A2	1032	A	C5'-C4'-O4'	-5.68	102.28	109.10
21	A2	1136	A	N9-C1'-C2'	5.68	121.39	114.00
21	A2	1422	G	O4'-C1'-C2'	-5.68	100.11	105.80
67	B1	633	A	C3'-C2'-C1'	5.68	106.05	101.50
21	A2	395	C	P-O5'-C5'	-5.68	111.81	120.90
21	A2	450	A	C5-C6-N1	-5.68	114.86	117.70
21	A2	588	C	N3-C4-C5	-5.68	119.63	121.90
21	A2	933	G	N9-C1'-C2'	5.68	121.39	114.00
21	A2	1096	G	OP1-P-OP2	-5.68	111.08	119.60
32	BO	18	LYS	N-CA-CB	5.68	120.83	110.60
43	Bk	56	ARG	NE-CZ-NH2	5.68	123.14	120.30
45	Bi	68	TYR	CB-CG-CD2	-5.68	117.59	121.00
67	B1	222	A	C5'-C4'-C3'	5.68	125.09	116.00
67	B1	2944	G	C1'-O4'-C4'	5.68	114.45	109.90
21	A2	33	U	O4'-C1'-C2'	5.68	112.71	107.60
67	B1	2235	G	OP2-P-O3'	5.68	117.70	105.20
21	A2	148	C	C1'-O4'-C4'	5.68	114.44	109.90
21	A2	362	C	C2'-C3'-O3'	5.68	122.79	113.70
21	A2	420	C	C1'-O4'-C4'	-5.68	105.36	109.90
24	AA	67	TYR	CB-CG-CD2	-5.68	117.59	121.00
67	B1	165	G	P-O3'-C3'	5.68	126.52	119.70
67	B1	342	C	P-O5'-C5'	-5.68	111.81	120.90
67	B1	563	A	P-O3'-C3'	5.68	126.52	119.70
67	B1	622	A	C1'-O4'-C4'	-5.68	105.36	109.90
67	B1	1852	U	C5'-C4'-C3'	5.68	125.09	116.00
67	B1	2153	C	P-O5'-C5'	-5.68	111.81	120.90
67	B1	2789	G	OP1-P-OP2	-5.68	111.08	119.60
36	Bf	3	ARG	CA-CB-CG	5.68	125.89	113.40
67	B1	396	G	P-O5'-C5'	5.68	129.99	120.90
67	B1	769	G	O4'-C1'-C2'	5.68	112.71	107.60
67	B1	837	G	C4'-C3'-C2'	-5.68	96.92	102.60
67	B1	2907	C	O4'-C4'-C3'	-5.68	98.32	104.00
67	B1	3007	A	O4'-C1'-N9	5.68	112.74	108.20
11	A1	26	C	C3'-C2'-C1'	5.68	106.04	101.50
21	A2	98	U	P-O3'-C3'	-5.68	112.89	119.70
21	A2	226	G	C3'-C2'-C1'	-5.68	96.96	101.50
21	A2	946	G	N9-C1'-C2'	-5.68	105.76	112.00
21	A2	1244	C	N3-C4-C5	-5.68	119.63	121.90
37	BU	119	ARG	CD-NE-CZ	-5.68	115.65	123.60
67	B1	223	U	N1-C1'-C2'	5.68	121.38	114.00
67	B1	294	U	N1-C1'-C2'	5.68	121.38	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	753	G	O4'-C1'-C2'	-5.67	100.12	105.80
67	B1	304	G	C5'-C4'-C3'	5.67	125.08	116.00
67	B1	1409	U	C3'-C2'-C1'	-5.67	96.96	101.50
21	A2	692	G	O4'-C1'-N9	5.67	112.74	108.20
21	A2	1160	C	N1-C1'-C2'	5.67	121.38	114.00
34	BK	75	LEU	CB-CA-C	5.67	120.98	110.20
67	B1	586	A	O4'-C1'-N9	5.67	112.74	108.20
68	B3	102	G	C1'-O4'-C4'	-5.67	105.36	109.90
6	AC	61	ARG	NE-CZ-NH2	-5.67	117.47	120.30
15	AE	19	TRP	CG-CD2-CE3	-5.67	128.80	133.90
21	A2	1433	C	P-O5'-C5'	5.67	129.97	120.90
67	B1	243	G	O4'-C1'-N9	5.67	112.74	108.20
67	B1	1005	G	O4'-C1'-N9	5.67	112.74	108.20
67	B1	1643	A	O4'-C1'-N9	-5.67	103.66	108.20
67	B1	2230	G	C4'-C3'-C2'	-5.67	96.93	102.60
67	B1	2725	U	P-O3'-C3'	5.67	126.50	119.70
21	A2	399	A	O4'-C1'-N9	5.67	112.74	108.20
21	A2	772	G	O4'-C1'-C2'	5.67	112.70	107.60
33	BC	304	GLU	N-CA-CB	5.67	120.81	110.60
67	B1	2041	U	C1'-O4'-C4'	5.67	114.44	109.90
10	AD	51	PHE	CB-CG-CD1	-5.67	116.83	120.80
67	B1	172	C	C3'-C2'-C1'	5.67	106.03	101.50
67	B1	2267	U	C1'-O4'-C4'	-5.67	105.37	109.90
67	B1	2922	G	C3'-C2'-C1'	5.67	106.03	101.50
21	A2	158	U	O4'-C1'-C2'	-5.67	100.13	105.80
21	A2	1215	G	C3'-C2'-C1'	5.67	106.03	101.50
21	A2	1361	G	O4'-C1'-N9	5.67	112.73	108.20
32	BO	69	ARG	NE-CZ-NH1	5.67	123.13	120.30
46	BA	95	ARG	NE-CZ-NH1	5.67	123.13	120.30
67	B1	647	G	C3'-C2'-C1'	5.67	106.03	101.50
67	B1	1016	C	N3-C4-N4	5.67	121.97	118.00
67	B1	1719	C	N3-C4-N4	5.67	121.97	118.00
67	B1	2134	G	P-O5'-C5'	-5.67	111.83	120.90
67	B1	2464	G	N9-C1'-C2'	-5.67	105.77	112.00
21	A2	325	A	O4'-C1'-N9	-5.67	103.67	108.20
35	BL	73	VAL	N-CA-C	-5.67	95.70	111.00
67	B1	144	A	C4-C5-C6	5.67	119.83	117.00
67	B1	2948	A	C3'-C2'-C1'	5.67	106.03	101.50
11	A1	43	G	P-O3'-C3'	-5.66	112.90	119.70
21	A2	702	G	C2'-C3'-O3'	5.66	122.76	113.70
21	A2	997	G	O4'-C1'-N9	5.66	112.73	108.20
21	A2	1454	A	P-O3'-C3'	-5.66	112.90	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	AU	77	TYR	CB-CG-CD2	-5.66	117.60	121.00
51	Bj	84	PHE	CA-CB-CG	-5.66	100.31	113.90
67	B1	1545	C	P-O3'-C3'	-5.66	112.90	119.70
67	B1	1740	U	C3'-C2'-C1'	-5.66	96.97	101.50
67	B1	2444	G	C4'-C3'-C2'	-5.66	96.94	102.60
67	B1	2895	G	C3'-C2'-C1'	-5.66	96.97	101.50
67	B1	2913	C	P-O5'-C5'	5.66	129.96	120.90
16	AJ	62	TYR	CA-CB-CG	-5.66	102.64	113.40
67	B1	347	G	O4'-C1'-C2'	5.66	112.69	107.60
67	B1	824	C	C4'-C3'-C2'	-5.66	96.94	102.60
67	B1	3003	A	P-O3'-C3'	5.66	126.50	119.70
21	A2	413	G	C5'-C4'-O4'	-5.66	102.31	109.10
21	A2	552	C	C3'-C2'-C1'	5.66	106.03	101.50
33	BC	334	ARG	NE-CZ-NH1	-5.66	117.47	120.30
67	B1	138	U	C3'-C2'-C1'	5.66	106.03	101.50
67	B1	407	A	C4'-C3'-C2'	-5.66	96.94	102.60
67	B1	882	U	O4'-C1'-N1	5.66	112.73	108.20
67	B1	1469	U	C3'-C2'-C1'	-5.66	96.97	101.50
67	B1	1566	G	O5'-P-OP1	5.66	117.49	110.70
67	B1	1880	A	C5-C6-N1	-5.66	114.87	117.70
67	B1	2854	A	O4'-C1'-C2'	5.66	112.69	107.60
67	B1	2992	G	C1'-O4'-C4'	-5.66	105.37	109.90
21	A2	402	G	P-O3'-C3'	5.66	126.49	119.70
34	B5	75	LEU	CB-CA-C	5.66	120.95	110.20
67	B1	1041	U	O4'-C4'-C3'	-5.66	98.34	104.00
67	B1	2472	A	C5'-C4'-O4'	5.66	115.89	109.10
67	B1	2825	A	N9-C1'-C2'	-5.66	105.78	112.00
67	B1	2900	C	P-O3'-C3'	-5.66	112.91	119.70
26	AP	20	ARG	NE-CZ-NH1	5.66	123.13	120.30
67	B1	565	A	P-O5'-C5'	-5.66	111.85	120.90
67	B1	814	G	C4'-C3'-C2'	-5.66	96.94	102.60
67	B1	878	G	N9-C1'-C2'	5.66	121.35	114.00
21	A2	245	U	P-O3'-C3'	-5.66	112.91	119.70
27	A0	36	U	O3'-P-O5'	-5.66	93.26	104.00
35	BL	9	ARG	CA-C-O	5.66	131.98	120.10
54	BF	139	VAL	CA-CB-CG2	-5.66	102.42	110.90
67	B1	614	G	N9-C1'-C2'	5.66	121.35	114.00
67	B1	731	C	P-O3'-C3'	5.66	126.49	119.70
67	B1	1241	C	O4'-C1'-N1	5.66	112.72	108.20
67	B1	1655	G	C3'-C2'-C1'	-5.66	96.98	101.50
67	B1	1744	A	P-O3'-C3'	5.66	126.49	119.70
67	B1	1997	C	P-O3'-C3'	-5.66	112.91	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	AE	101	ARG	NE-CZ-NH1	5.65	123.13	120.30
21	A2	635	C	C4'-C3'-C2'	-5.65	96.95	102.60
21	A2	1346	C	C1'-O4'-C4'	-5.65	105.38	109.90
67	B1	1930	A	C3'-C2'-C1'	5.65	106.02	101.50
67	B1	1985	G	O4'-C1'-N9	5.65	112.72	108.20
67	B1	3004	C	O4'-C1'-C2'	5.65	112.69	107.60
11	A1	11	C	O4'-C1'-N1	5.65	112.72	108.20
21	A2	265	C	N1-C1'-C2'	5.65	121.35	114.00
21	A2	753	G	C1'-O4'-C4'	5.65	114.42	109.90
43	Bk	36	TYR	CA-CB-CG	-5.65	102.66	113.40
67	B1	1028	G	C3'-C2'-C1'	5.65	106.02	101.50
67	B1	1030	C	C4'-C3'-C2'	-5.65	96.95	102.60
67	B1	1270	G	O5'-C5'-C4'	-5.65	100.96	111.70
67	B1	1418	A	C1'-O4'-C4'	5.65	114.42	109.90
67	B1	2165	A	C4-C5-C6	5.65	119.83	117.00
67	B1	2536	A	O3'-P-O5'	5.65	114.74	104.00
67	B1	2733	A	C3'-C2'-C1'	5.65	106.02	101.50
16	AJ	82	GLU	N-CA-CB	5.65	120.77	110.60
21	A2	312	U	O4'-C1'-N1	5.65	112.72	108.20
21	A2	580	G	C1'-O4'-C4'	-5.65	105.38	109.90
21	A2	648	A	C5'-C4'-O4'	5.65	115.88	109.10
21	A2	748	A	P-O3'-C3'	5.65	126.48	119.70
21	A2	1250	C	P-O3'-C3'	5.65	126.48	119.70
67	B1	847	A	O4'-C4'-C3'	-5.65	98.35	104.00
67	B1	891	C	C4'-C3'-C2'	-5.65	96.95	102.60
67	B1	1227	A	O5'-C5'-C4'	-5.65	100.96	111.70
67	B1	1599	A	P-O3'-C3'	5.65	126.48	119.70
67	B1	2233	G	C5'-C4'-O4'	5.65	115.88	109.10
21	A2	238	G	C3'-C2'-C1'	5.65	106.02	101.50
21	A2	1292	A	O4'-C1'-N9	5.65	112.72	108.20
35	BL	47	TRP	CD1-NE1-CE2	-5.65	103.92	109.00
67	B1	60	G	C4'-C3'-C2'	5.65	108.25	102.60
67	B1	2274	C	C1'-O4'-C4'	5.65	114.42	109.90
21	A2	310	G	O4'-C1'-N9	5.65	112.72	108.20
21	A2	1000	G	O4'-C4'-C3'	-5.65	98.35	104.00
21	A2	1417	A	P-O5'-C5'	5.65	129.94	120.90
54	BF	166	ARG	NE-CZ-NH1	5.65	123.12	120.30
67	B1	1330	G	C3'-C2'-C1'	-5.65	96.98	101.50
67	B1	1465	A	C3'-C2'-C1'	-5.65	96.98	101.50
67	B1	2863	A	O4'-C1'-N9	5.65	112.72	108.20
68	B3	75	G	OP1-P-OP2	5.65	128.07	119.60
17	AO	10	VAL	N-CA-CB	5.65	123.92	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	413	G	C3'-C2'-C1'	-5.65	96.98	101.50
43	Bk	38	LEU	CA-C-O	-5.65	108.24	120.10
67	B1	2562	G	C2'-C3'-O3'	5.65	122.73	113.70
21	A2	327	G	C1'-O4'-C4'	-5.64	105.39	109.90
21	A2	480	G	P-O3'-C3'	-5.64	112.93	119.70
21	A2	512	U	C1'-O4'-C4'	-5.64	105.39	109.90
21	A2	532	C	C3'-C2'-C1'	5.64	106.02	101.50
21	A2	658	A	C1'-O4'-C4'	5.64	114.42	109.90
21	A2	835	C	O4'-C4'-C3'	5.64	110.62	106.10
21	A2	1064	C	O4'-C1'-C2'	5.64	112.68	107.60
21	A2	1088	U	O4'-C1'-N1	5.64	112.72	108.20
67	B1	57	C	C5'-C4'-O4'	5.64	115.87	109.10
67	B1	1264	G	C2'-C3'-O3'	5.64	122.73	113.70
67	B1	1673	C	O4'-C1'-N1	-5.64	103.69	108.20
67	B1	1697	G	N9-C1'-C2'	-5.64	105.79	112.00
21	A2	335	G	O4'-C1'-N9	5.64	112.71	108.20
21	A2	358	G	O4'-C1'-C2'	5.64	112.68	107.60
21	A2	604	C	O4'-C1'-N1	5.64	112.71	108.20
21	A2	1380	C	O4'-C1'-N1	5.64	112.72	108.20
67	B1	878	G	O4'-C1'-N9	5.64	112.71	108.20
67	B1	2159	C	P-O5'-C5'	5.64	129.93	120.90
67	B1	2786	G	C5'-C4'-C3'	5.64	125.03	116.00
67	B1	3012	C	O5'-P-OP2	5.64	117.47	110.70
21	A2	76	U	O5'-C5'-C4'	-5.64	100.98	111.70
22	AY	30	PHE	CB-CG-CD2	5.64	124.75	120.80
67	B1	1424	G	O4'-C1'-N9	5.64	112.71	108.20
67	B1	2071	C	C4'-C3'-C2'	-5.64	96.96	102.60
67	B1	2114	C	P-O3'-C3'	-5.64	112.93	119.70
14	AM	32	ASP	CB-CG-OD1	5.64	123.38	118.30
21	A2	654	U	O4'-C1'-C2'	-5.64	100.16	105.80
33	BC	304	GLU	CB-CA-C	5.64	121.68	110.40
40	BE	110	HIS	O-C-N	-5.64	113.61	123.20
52	BB	9	ARG	NE-CZ-NH1	5.64	123.12	120.30
67	B1	2399	C	O4'-C1'-N1	5.64	112.71	108.20
67	B1	2681	A	O4'-C1'-N9	5.64	112.71	108.20
21	A2	314	G	O4'-C1'-N9	5.64	112.71	108.20
21	A2	315	A	O4'-C1'-C2'	-5.64	100.16	105.80
21	A2	433	U	O5'-C5'-C4'	5.64	122.41	111.70
21	A2	483	G	O3'-P-O5'	-5.64	93.29	104.00
21	A2	649	A	P-O5'-C5'	-5.64	111.88	120.90
21	A2	738	C	C3'-C2'-C1'	5.64	106.01	101.50
54	BF	133	ARG	NH1-CZ-NH2	-5.64	113.20	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	433	C	O4'-C1'-C2'	-5.64	100.16	105.80
67	B1	435	G	C3'-C2'-C1'	-5.64	96.99	101.50
67	B1	652	G	C5'-C4'-O4'	5.64	115.86	109.10
67	B1	1047	A	C3'-C2'-C1'	5.64	106.01	101.50
67	B1	1952	G	O4'-C1'-N9	5.64	112.71	108.20
67	B1	2456	C	C3'-C2'-C1'	5.64	106.01	101.50
21	A2	94	C	O4'-C1'-N1	5.63	112.71	108.20
21	A2	97	C	C3'-C2'-C1'	5.63	106.01	101.50
52	BB	84	TYR	CG-CD2-CE2	-5.63	116.79	121.30
67	B1	129	C	O4'-C1'-C2'	-5.63	100.17	105.80
67	B1	691	G	C1'-O4'-C4'	-5.63	105.39	109.90
67	B1	1391	C	C1'-O4'-C4'	-5.63	105.39	109.90
68	B3	69	C	O4'-C1'-N1	5.63	112.71	108.20
28	AV	33	ARG	NE-CZ-NH2	5.63	123.12	120.30
50	BV	40	TYR	CD1-CE1-CZ	5.63	124.87	119.80
67	B1	1186	G	C3'-C2'-C1'	5.63	106.01	101.50
67	B1	3043	C	O4'-C4'-C3'	-5.63	98.37	104.00
21	A2	550	G	C3'-C2'-C1'	-5.63	97.00	101.50
24	AA	11	ASP	CB-CG-OD2	5.63	123.37	118.30
51	Bj	78	HIS	N-CA-CB	5.63	120.74	110.60
67	B1	553	C	O4'-C1'-C2'	-5.63	100.17	105.80
67	B1	3017	U	OP1-P-OP2	-5.63	111.15	119.60
21	A2	57	G	C5'-C4'-O4'	-5.63	102.34	109.10
21	A2	359	A	P-O5'-C5'	-5.63	111.89	120.90
21	A2	917	A	N9-C1'-C2'	5.63	121.32	114.00
29	AL	40	LEU	CB-CA-C	5.63	120.90	110.20
67	B1	1239	C	C3'-C2'-C1'	5.63	106.00	101.50
21	A2	448	A	C4-C5-C6	5.63	119.81	117.00
21	A2	1008	U	O4'-C1'-C2'	-5.63	100.17	105.80
60	BS	109	PRO	N-CA-CB	5.63	110.06	103.30
67	B1	157	U	N1-C1'-C2'	5.63	121.32	114.00
67	B1	1573	A	C3'-C2'-C1'	-5.63	97.00	101.50
67	B1	1910	C	O4'-C1'-C2'	-5.63	100.17	105.80
67	B1	2257	A	O4'-C1'-C2'	5.63	112.67	107.60
67	B1	2382	A	P-O3'-C3'	-5.63	112.95	119.70
15	AE	83	PHE	CB-CG-CD2	5.63	124.74	120.80
15	AE	126	ARG	NE-CZ-NH2	-5.63	117.49	120.30
21	A2	1080	C	C5'-C4'-C3'	-5.63	107.00	116.00
21	A2	1448	A	O4'-C1'-C2'	-5.63	100.17	105.80
50	BV	45	ARG	NE-CZ-NH2	5.63	123.11	120.30
67	B1	717	A	C5'-C4'-C3'	5.63	125.00	116.00
67	B1	1552	C	O4'-C1'-N1	5.63	112.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2229	G	N9-C1'-C2'	5.63	121.31	114.00
21	A2	1039	C	P-O3'-C3'	5.62	126.45	119.70
67	B1	1960	U	C1'-O4'-C4'	-5.62	105.40	109.90
67	B1	2258	A	C4'-C3'-C2'	5.62	108.22	102.60
67	B1	2301	C	O4'-C1'-C2'	-5.62	100.17	105.80
67	B1	2325	C	N3-C4-C5	-5.62	119.65	121.90
21	A2	632	C	C1'-O4'-C4'	-5.62	105.40	109.90
21	A2	672	G	N9-C1'-C2'	5.62	121.31	114.00
41	Ba	37	GLU	CB-CA-C	-5.62	99.15	110.40
63	Bg	36	TYR	CB-CA-C	-5.62	99.15	110.40
67	B1	512	G	N9-C1'-C2'	5.62	121.31	114.00
67	B1	554	C	O4'-C1'-C2'	-5.62	100.18	105.80
67	B1	1650	U	P-O3'-C3'	-5.62	112.95	119.70
67	B1	2095	U	C3'-C2'-C1'	-5.62	97.00	101.50
67	B1	2303	A	O4'-C1'-C2'	-5.62	100.18	105.80
40	BE	93	ARG	NE-CZ-NH2	-5.62	117.49	120.30
67	B1	399	C	N3-C4-N4	5.62	121.94	118.00
67	B1	1537	U	C1'-O4'-C4'	-5.62	105.40	109.90
67	B1	1648	C	C5'-C4'-O4'	-5.62	102.35	109.10
67	B1	2752	U	C4'-C3'-C2'	5.62	108.22	102.60
67	B1	2899	G	N9-C1'-C2'	5.62	121.31	114.00
11	A1	6	G	C1'-O4'-C4'	5.62	114.40	109.90
67	B1	137	A	C1'-O4'-C4'	5.62	114.40	109.90
21	A2	85	A	P-O3'-C3'	5.62	126.44	119.70
58	BP	88	THR	CA-CB-OG1	5.62	120.80	109.00
67	B1	407	A	C1'-O4'-C4'	-5.62	105.41	109.90
67	B1	430	A	P-O3'-C3'	5.62	126.44	119.70
67	B1	528	G	P-O3'-C3'	5.62	126.44	119.70
67	B1	687	C	C3'-C2'-C1'	5.62	106.00	101.50
67	B1	807	G	P-O3'-C3'	5.62	126.44	119.70
67	B1	1261	C	P-O3'-C3'	-5.62	112.96	119.70
67	B1	1407	A	C5'-C4'-C3'	-5.62	107.01	116.00
67	B1	2412	A	C3'-C2'-C1'	5.62	105.99	101.50
67	B1	3036	C	OP1-P-OP2	-5.62	111.17	119.60
21	A2	535	U	P-O3'-C3'	-5.62	112.96	119.70
27	A0	48	C	O4'-C1'-C2'	-5.62	100.18	105.80
21	A2	359	A	O4'-C1'-N9	5.62	112.69	108.20
21	A2	940	U	O4'-C1'-N1	5.62	112.69	108.20
21	A2	1108	U	C4'-C3'-C2'	-5.62	96.98	102.60
24	AA	156	ASP	CB-CG-OD2	-5.62	113.25	118.30
67	B1	1074	G	O4'-C1'-C2'	5.62	112.65	107.60
67	B1	1589	G	O4'-C1'-N9	5.62	112.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1750	C	C5'-C4'-C3'	5.62	124.99	116.00
67	B1	1851	U	C2'-C3'-O3'	5.62	122.69	113.70
67	B1	1932	G	C3'-C2'-C1'	5.62	105.99	101.50
21	A2	418	G	C1'-O4'-C4'	5.61	114.39	109.90
22	AY	17	ARG	NH1-CZ-NH2	5.61	125.58	119.40
67	B1	500	C	O4'-C1'-C2'	-5.61	100.19	105.80
67	B1	630	G	O4'-C1'-N9	5.61	112.69	108.20
67	B1	688	G	C1'-O4'-C4'	-5.61	105.41	109.90
67	B1	2760	A	C5'-C4'-C3'	-5.61	107.02	116.00
21	A2	260	C	C5'-C4'-O4'	5.61	115.83	109.10
52	BB	24	PHE	CD1-CE1-CZ	-5.61	113.37	120.10
67	B1	624	U	C3'-C2'-C1'	5.61	105.99	101.50
67	B1	1742	C	O4'-C1'-N1	5.61	112.69	108.20
67	B1	2332	G	N9-C1'-C2'	-5.61	105.83	112.00
21	A2	189	C	P-O3'-C3'	-5.61	112.97	119.70
21	A2	694	U	C3'-C2'-C1'	-5.61	97.01	101.50
21	A2	1063	A	C1'-O4'-C4'	5.61	114.39	109.90
27	A0	23	A	C3'-C2'-C1'	5.61	105.99	101.50
31	BY	132	ARG	NE-CZ-NH2	5.61	123.11	120.30
52	BB	48	ILE	CB-CA-C	-5.61	100.38	111.60
53	BD	155	ARG	NE-CZ-NH1	5.61	123.11	120.30
66	B1	17	ARG	NE-CZ-NH1	5.61	123.11	120.30
67	B1	375	C	N3-C4-C5	-5.61	119.66	121.90
67	B1	548	U	C3'-C2'-C1'	5.61	105.99	101.50
67	B1	1413	A	C5'-C4'-O4'	5.61	115.83	109.10
15	AE	217	ASP	CB-CG-OD1	5.61	123.35	118.30
21	A2	820	G	P-O5'-C5'	5.61	129.88	120.90
37	BU	48	VAL	O-C-N	-5.61	113.67	123.20
60	BS	57	LEU	CB-CG-CD1	5.61	120.54	111.00
67	B1	215	A	C4'-C3'-C2'	5.61	108.21	102.60
67	B1	1530	A	C4'-C3'-C2'	-5.61	96.99	102.60
21	A2	155	U	P-O3'-C3'	5.61	126.43	119.70
21	A2	160	C	P-O5'-C5'	5.61	129.87	120.90
21	A2	1491	C	C5'-C4'-C3'	-5.61	107.03	116.00
24	AA	43	VAL	O-C-N	-5.61	113.73	122.70
36	Bf	30	LYS	CB-CA-C	-5.61	99.19	110.40
67	B1	796	C	C1'-O4'-C4'	-5.61	105.41	109.90
11	A1	11	C	N1-C1'-C2'	5.61	121.29	114.00
21	A2	297	G	C1'-O4'-C4'	5.61	114.39	109.90
21	A2	1213	G	O4'-C1'-C2'	5.61	112.64	107.60
35	BL	12	ARG	CB-CA-C	5.61	121.61	110.40
40	BE	59	ARG	NE-CZ-NH1	5.61	123.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
61	Bd	17	THR	N-CA-C	-5.61	95.87	111.00
67	B1	1391	C	C4'-C3'-C2'	-5.61	96.99	102.60
67	B1	1699	U	O4'-C1'-N1	5.61	112.68	108.20
67	B1	2530	G	O4'-C1'-N9	5.61	112.68	108.20
21	A2	1123	G	P-O3'-C3'	5.60	126.42	119.70
67	B1	2566	A	O4'-C1'-C2'	-5.60	100.20	105.80
33	BC	353	ARG	NH1-CZ-NH2	5.60	125.56	119.40
52	BB	95	ASN	CA-CB-CG	-5.60	101.08	113.40
60	BS	129	TYR	N-CA-CB	5.60	120.68	110.60
67	B1	453	U	C1'-O4'-C4'	5.60	114.38	109.90
67	B1	517	A	O4'-C1'-C2'	-5.60	100.20	105.80
67	B1	625	A	C1'-O4'-C4'	5.60	114.38	109.90
67	B1	1146	U	C1'-O4'-C4'	5.60	114.38	109.90
67	B1	2859	U	C3'-C2'-C1'	5.60	105.98	101.50
21	A2	341	C	O4'-C1'-C2'	-5.60	100.20	105.80
21	A2	438	A	OP1-P-O3'	5.60	117.52	105.20
36	Bf	48	LYS	CB-CG-CD	5.60	126.16	111.60
67	B1	270	C	P-O3'-C3'	-5.60	112.98	119.70
67	B1	2269	C	C1'-O4'-C4'	5.60	114.38	109.90
14	AM	41	ARG	NE-CZ-NH2	5.60	123.10	120.30
21	A2	495	G	C3'-C2'-C1'	-5.60	97.02	101.50
36	Bf	20	ASN	CA-CB-CG	-5.60	101.08	113.40
46	BA	31	ALA	N-CA-CB	5.60	117.94	110.10
48	BR	43	ILE	CA-CB-CG1	5.60	121.64	111.00
51	Bj	42	ARG	CB-CA-C	-5.60	99.20	110.40
20	BG	16	ALA	N-CA-CB	5.60	117.94	110.10
67	B1	2166	C	N3-C4-N4	5.60	121.92	118.00
67	B1	2318	G	N9-C1'-C2'	5.60	121.28	114.00
67	B1	2359	G	C1'-O4'-C4'	5.60	114.38	109.90
68	B3	51	U	O4'-C1'-N1	5.60	112.68	108.20
68	B3	112	C	C3'-C2'-C1'	5.60	105.98	101.50
21	A2	416	A	C3'-C2'-C1'	-5.60	97.02	101.50
21	A2	435	A	O5'-C5'-C4'	5.60	122.34	111.70
21	A2	606	U	O4'-C1'-N1	5.60	112.68	108.20
40	BE	53	GLY	CA-C-O	-5.60	110.52	120.60
47	BI	34	GLU	CA-CB-CG	5.60	125.72	113.40
67	B1	454	C	P-O5'-C5'	-5.60	111.94	120.90
67	B1	1835	A	N9-C1'-C2'	-5.60	105.84	112.00
68	B3	29	G	C1'-O4'-C4'	-5.60	105.42	109.90
21	A2	498	C	C3'-C2'-C1'	5.60	105.98	101.50
61	Bd	76	MET	N-CA-CB	5.60	120.67	110.60
8	AR	67	ARG	NH1-CZ-NH2	-5.59	113.25	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	725	C	C1'-O4'-C4'	-5.59	105.42	109.90
21	A2	781	U	P-O5'-C5'	5.59	129.85	120.90
21	A2	950	C	C3'-C2'-C1'	5.59	105.97	101.50
54	BF	147	VAL	CG1-CB-CG2	-5.59	101.95	110.90
63	Bg	35	GLY	C-N-CA	5.59	135.69	121.70
67	B1	311	C	C1'-O4'-C4'	5.59	114.38	109.90
67	B1	517	A	C3'-C2'-C1'	5.59	105.98	101.50
67	B1	1527	G	C3'-C2'-C1'	5.59	105.97	101.50
67	B1	2041	U	C3'-C2'-C1'	5.59	105.97	101.50
67	B1	2170	C	OP1-P-OP2	-5.59	111.21	119.60
1	AQ	136	TYR	CA-CB-CG	-5.59	102.77	113.40
21	A2	1271	G	O4'-C1'-C2'	-5.59	100.21	105.80
67	B1	764	G	C1'-O4'-C4'	5.59	114.37	109.90
67	B1	1753	G	O4'-C1'-N9	5.59	112.67	108.20
67	B1	2664	G	O4'-C4'-C3'	5.59	110.57	106.10
68	B3	81	C	O4'-C1'-C2'	-5.59	100.21	105.80
21	A2	911	C	O4'-C1'-N1	5.59	112.67	108.20
21	A2	1018	C	O4'-C1'-N1	5.59	112.67	108.20
21	A2	1037	U	P-O3'-C3'	5.59	126.41	119.70
29	AL	64	TRP	CB-CG-CD1	5.59	134.27	127.00
32	BO	84	TYR	CD1-CE1-CZ	5.59	124.83	119.80
28	B6	4	ARG	CD-NE-CZ	-5.59	115.77	123.60
67	B1	216	A	O4'-C1'-C2'	-5.59	100.21	105.80
67	B1	234	G	C3'-C2'-C1'	-5.59	97.03	101.50
67	B1	1736	G	C1'-O4'-C4'	-5.59	105.43	109.90
21	A2	306	C	OP1-P-OP2	-5.59	111.22	119.60
21	A2	352	A	P-O5'-C5'	5.59	129.84	120.90
21	A2	1408	C	C3'-C2'-C1'	5.59	105.97	101.50
67	B1	494	C	C3'-C2'-C1'	5.59	105.97	101.50
67	B1	1006	A	C5-C6-N1	-5.59	114.91	117.70
67	B1	2209	U	C5'-C4'-C3'	5.59	124.94	116.00
67	B1	2284	C	N1-C1'-C2'	5.59	121.27	114.00
21	A2	1168	C	N1-C1'-C2'	5.59	121.27	114.00
67	B1	164	A	O4'-C1'-N9	5.59	112.67	108.20
33	BC	4	VAL	CA-CB-CG2	-5.59	102.52	110.90
67	B1	1405	G	O4'-C1'-C2'	5.59	112.63	107.60
67	B1	1906	G	C3'-C2'-C1'	-5.59	97.03	101.50
21	A2	1313	G	O4'-C1'-N9	5.58	112.67	108.20
53	BD	127	VAL	CA-CB-CG1	5.58	119.28	110.90
67	B1	17	C	C3'-C2'-C1'	5.58	105.97	101.50
67	B1	131	C	C1'-O4'-C4'	5.58	114.37	109.90
67	B1	663	A	P-O5'-C5'	5.58	129.84	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1100	G	C5'-C4'-O4'	5.58	115.80	109.10
67	B1	2179	G	C3'-C2'-C1'	5.58	105.97	101.50
67	B1	2390	G	N9-C1'-C2'	-5.58	105.86	112.00
67	B1	2733	A	P-O3'-C3'	5.58	126.40	119.70
21	A2	666	G	O4'-C1'-C2'	5.58	112.62	107.60
21	A2	1304	C	N3-C4-N4	5.58	121.91	118.00
27	A0	63	G	N9-C1'-C2'	5.58	121.26	114.00
44	BW	63	ARG	NE-CZ-NH1	5.58	123.09	120.30
65	BJ	60	ASP	CB-CG-OD2	-5.58	113.28	118.30
67	B1	1476	C	O4'-C1'-N1	5.58	112.67	108.20
67	B1	1968	A	OP1-P-OP2	-5.58	111.22	119.60
67	B1	2908	U	N1-C1'-C2'	-5.58	105.86	112.00
67	B1	2938	G	O4'-C1'-C2'	5.58	112.63	107.60
68	B3	102	G	P-O5'-C5'	5.58	129.83	120.90
10	AD	149	GLU	CB-CA-C	-5.58	99.24	110.40
21	A2	570	G	C3'-C2'-C1'	-5.58	97.03	101.50
21	A2	1024	G	O4'-C1'-C2'	5.58	112.62	107.60
21	A2	1194	C	C1'-O4'-C4'	-5.58	105.44	109.90
57	BZ	50	TYR	CB-CG-CD1	-5.58	117.65	121.00
67	B1	1310	A	P-O3'-C3'	-5.58	113.00	119.70
11	A1	58	A	O4'-C1'-C2'	-5.58	100.22	105.80
18	AF	16	TRP	CA-C-N	5.58	129.48	117.20
21	A2	248	U	O4'-C4'-C3'	-5.58	98.42	104.00
21	A2	356	G	P-O3'-C3'	5.58	126.39	119.70
21	A2	483	G	N9-C1'-C2'	-5.58	105.86	112.00
21	A2	1450	U	O5'-P-OP2	5.58	117.39	110.70
48	BR	8	PHE	CB-CA-C	-5.58	99.24	110.40
67	B1	975	C	C4'-C3'-C2'	-5.58	97.02	102.60
67	B1	1564	C	C3'-C2'-C1'	5.58	105.96	101.50
67	B1	1763	A	C1'-O4'-C4'	-5.58	105.44	109.90
67	B1	2639	G	C1'-O4'-C4'	-5.58	105.44	109.90
21	A2	414	G	OP1-P-OP2	-5.58	111.23	119.60
21	A2	709	G	P-O3'-C3'	-5.58	113.01	119.70
21	A2	733	C	C4'-C3'-C2'	-5.58	97.02	102.60
21	A2	819	G	O4'-C1'-N9	5.58	112.66	108.20
25	AH	75	GLY	N-CA-C	5.58	127.04	113.10
20	BG	6	TYR	CB-CG-CD2	5.58	124.35	121.00
67	B1	134	C	C1'-O4'-C4'	5.58	114.36	109.90
67	B1	1588	C	O4'-C1'-C2'	-5.58	100.22	105.80
68	B3	75	G	O4'-C1'-C2'	-5.58	100.22	105.80
15	AE	83	PHE	CB-CA-C	-5.58	99.25	110.40
21	A2	551	U	P-O3'-C3'	-5.58	113.01	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1154	G	C3'-C2'-C1'	-5.58	97.04	101.50
21	A2	1323	A	O4'-C1'-N9	5.58	112.66	108.20
27	A0	65	G	C4'-C3'-C2'	-5.58	97.02	102.60
33	BC	225	THR	CA-CB-CG2	-5.58	104.59	112.40
64	Bc	8	LEU	CB-CA-C	-5.58	99.61	110.20
67	B1	679	U	C4'-C3'-C2'	-5.58	97.03	102.60
67	B1	1130	G	C4'-C3'-C2'	-5.58	97.03	102.60
67	B1	1270	G	C1'-O4'-C4'	-5.58	105.44	109.90
67	B1	1525	G	N9-C1'-C2'	5.58	121.25	114.00
67	B1	1880	A	O4'-C1'-N9	5.58	112.66	108.20
21	A2	76	U	O4'-C1'-N1	5.57	112.66	108.20
21	A2	810	G	C1'-O4'-C4'	-5.57	105.44	109.90
21	A2	969	A	O4'-C1'-C2'	-5.57	100.23	105.80
67	B1	572	U	P-O3'-C3'	-5.57	113.01	119.70
67	B1	716	U	N1-C1'-C2'	5.57	121.24	114.00
67	B1	1343	C	C4'-C3'-C2'	-5.57	97.03	102.60
67	B1	2001	U	O4'-C1'-C2'	-5.57	100.23	105.80
67	B1	2201	C	P-O3'-C3'	-5.57	113.01	119.70
67	B1	2889	A	N9-C1'-C2'	5.57	121.25	114.00
21	A2	356	G	O4'-C1'-N9	5.57	112.66	108.20
32	BO	94	ALA	CB-CA-C	-5.57	101.74	110.10
67	B1	1226	G	O4'-C1'-N9	5.57	112.66	108.20
67	B1	2431	C	N1-C1'-C2'	5.57	121.24	114.00
67	B1	2523	C	O4'-C1'-C2'	-5.57	100.23	105.80
21	A2	308	G	C1'-O4'-C4'	5.57	114.36	109.90
28	B6	41	VAL	CA-CB-CG2	-5.57	102.55	110.90
67	B1	2613	C	O4'-C1'-N1	5.57	112.66	108.20
67	B1	2679	A	O4'-C1'-N9	5.57	112.66	108.20
6	AC	150	TYR	CB-CG-CD1	-5.57	117.66	121.00
21	A2	641	A	C2'-C3'-O3'	5.57	122.61	113.70
26	AP	55	TYR	N-CA-CB	5.57	120.62	110.60
41	Ba	50	ILE	O-C-N	-5.57	113.79	122.70
67	B1	407	A	OP1-P-OP2	-5.57	111.25	119.60
67	B1	410	C	N1-C1'-C2'	5.57	121.24	114.00
67	B1	1202	G	C5'-C4'-O4'	-5.57	102.42	109.10
67	B1	2640	C	C1'-O4'-C4'	-5.57	105.44	109.90
8	AR	8	ARG	N-CA-CB	5.57	120.62	110.60
21	A2	766	G	C2'-C3'-O3'	5.57	122.61	113.70
21	A2	1118	C	C1'-O4'-C4'	-5.57	105.45	109.90
21	A2	1139	A	P-O3'-C3'	-5.57	113.02	119.70
67	B1	644	G	O4'-C1'-N9	-5.57	103.75	108.20
67	B1	962	C	C5'-C4'-O4'	5.57	115.78	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2795	G	N9-C1'-C2'	5.57	121.24	114.00
15	AE	58	THR	CA-CB-OG1	5.57	120.69	109.00
21	A2	215	C	C4'-C3'-C2'	-5.57	97.03	102.60
35	BL	14	SER	N-CA-CB	5.57	118.85	110.50
28	B6	35	ASP	CB-CG-OD1	-5.57	113.29	118.30
67	B1	795	G	P-O3'-C3'	-5.57	113.02	119.70
67	B1	822	A	C4'-C3'-C2'	-5.57	97.03	102.60
67	B1	1575	G	C1'-O4'-C4'	5.57	114.35	109.90
67	B1	1980	U	P-O5'-C5'	-5.57	111.99	120.90
67	B1	2835	A	C3'-C2'-C1'	5.57	105.95	101.50
67	B1	2856	G	O4'-C1'-C2'	5.57	112.61	107.60
67	B1	312	G	C5'-C4'-C3'	5.56	124.90	116.00
67	B1	1097	G	C3'-C2'-C1'	-5.56	97.05	101.50
21	A2	95	G	O4'-C1'-C2'	-5.56	100.24	105.80
67	B1	1213	G	OP2-P-O3'	5.56	117.44	105.20
68	B3	72	G	O4'-C1'-N9	5.56	112.65	108.20
15	AE	64	LYS	CB-CA-C	-5.56	99.28	110.40
21	A2	1427	C	O4'-C1'-N1	5.56	112.65	108.20
67	B1	7	G	O4'-C1'-N9	5.56	112.65	108.20
67	B1	2140	C	N3-C4-C5	-5.56	119.68	121.90
16	AJ	63	ALA	C-N-CA	5.56	135.60	121.70
21	A2	167	G	O3'-P-O5'	5.56	114.56	104.00
21	A2	460	C	N3-C4-C5	-5.56	119.68	121.90
21	A2	807	C	C1'-O4'-C4'	-5.56	105.45	109.90
36	Bf	51	GLU	CB-CA-C	-5.56	99.28	110.40
28	B6	55	TYR	CB-CG-CD2	-5.56	117.66	121.00
67	B1	88	G	O4'-C1'-N9	5.56	112.65	108.20
67	B1	496	A	O4'-C1'-N9	5.56	112.65	108.20
67	B1	2623	G	N9-C1'-C2'	-5.56	105.88	112.00
67	B1	2988	A	C3'-C2'-C1'	5.56	105.95	101.50
21	A2	286	G	C4'-C3'-C2'	-5.56	97.04	102.60
21	A2	532	C	O4'-C1'-C2'	-5.56	100.24	105.80
21	A2	1117	A	C5'-C4'-C3'	5.56	124.89	116.00
67	B1	312	G	P-O5'-C5'	-5.56	112.01	120.90
67	B1	537	U	C5'-C4'-O4'	5.56	115.77	109.10
67	B1	652	G	O4'-C1'-C2'	-5.56	100.24	105.80
67	B1	1612	G	O3'-P-O5'	-5.56	93.44	104.00
67	B1	1719	C	N3-C4-C5	-5.56	119.68	121.90
67	B1	2488	C	P-O3'-C3'	5.56	126.37	119.70
21	A2	133	G	C5'-C4'-C3'	-5.56	107.11	116.00
67	B1	2324	C	N3-C4-N4	5.56	121.89	118.00
21	A2	80	A	P-O5'-C5'	5.55	129.79	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	407	G	P-O3'-C3'	-5.55	113.03	119.70
21	A2	1085	C	N3-C4-N4	5.55	121.89	118.00
67	B1	269	C	N1-C1'-C2'	5.55	121.22	114.00
67	B1	1510	U	C1'-O4'-C4'	-5.55	105.46	109.90
21	A2	1431	C	P-O3'-C3'	-5.55	113.04	119.70
23	AT	90	VAL	CA-CB-CG2	5.55	119.23	110.90
50	BV	1	MET	CG-SD-CE	-5.55	91.31	100.20
67	B1	1323	U	O4'-C1'-C2'	-5.55	100.25	105.80
67	B1	2874	C	N1-C1'-C2'	5.55	121.22	114.00
21	A2	229	G	OP2-P-O3'	5.55	117.41	105.20
21	A2	1287	G	N9-C1'-C2'	-5.55	105.89	112.00
31	BY	73	ARG	NE-CZ-NH2	-5.55	117.52	120.30
67	B1	468	A	N9-C1'-C2'	5.55	121.22	114.00
67	B1	470	A	O4'-C1'-C2'	-5.55	100.25	105.80
67	B1	625	A	O4'-C1'-C2'	-5.55	100.25	105.80
67	B1	1204	U	N1-C1'-C2'	5.55	121.22	114.00
67	B1	2283	C	N1-C1'-C2'	5.55	121.22	114.00
67	B1	3019	C	OP2-P-O3'	5.55	117.41	105.20
21	A2	378	A	P-O3'-C3'	5.55	126.36	119.70
21	A2	842	U	N1-C1'-C2'	-5.55	105.90	112.00
21	A2	1057	A	N9-C1'-C2'	-5.55	105.89	112.00
21	A2	1245	C	N3-C4-N4	5.55	121.88	118.00
21	A2	1383	A	O4'-C4'-C3'	-5.55	98.45	104.00
21	A2	1460	G	C1'-O4'-C4'	5.55	114.34	109.90
33	BC	101	VAL	CA-CB-CG2	-5.55	102.58	110.90
36	Bf	34	ARG	NH1-CZ-NH2	5.55	125.51	119.40
61	Bd	6	ARG	NE-CZ-NH2	-5.55	117.53	120.30
67	B1	962	C	P-O3'-C3'	5.55	126.36	119.70
67	B1	1662	C	N3-C4-N4	5.55	121.88	118.00
67	B1	2475	G	P-O3'-C3'	5.55	126.36	119.70
67	B1	2850	G	O4'-C1'-C2'	5.55	112.59	107.60
21	A2	246	A	P-O5'-C5'	-5.55	112.03	120.90
21	A2	1295	C	C5'-C4'-O4'	5.55	115.76	109.10
33	BC	104	PHE	CB-CG-CD1	5.55	124.68	120.80
67	B1	506	G	O4'-C1'-C2'	5.55	112.59	107.60
67	B1	1234	A	C5'-C4'-C3'	-5.55	107.12	116.00
58	BP	8	ASP	CB-CG-OD1	5.54	123.29	118.30
21	A2	786	G	O4'-C1'-N9	5.54	112.64	108.20
21	A2	829	U	C1'-O4'-C4'	5.54	114.33	109.90
21	A2	1418	G	P-O3'-C3'	-5.54	113.05	119.70
60	BS	129	TYR	CG-CD2-CE2	-5.54	116.86	121.30
64	Bc	41	ARG	NE-CZ-NH1	-5.54	117.53	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1505	G	P-O5'-C5'	-5.54	112.03	120.90
67	B1	2924	G	C5'-C4'-O4'	5.54	115.75	109.10
67	B1	2984	A	O4'-C1'-C2'	-5.54	100.26	105.80
7	AB	123	ASP	N-CA-CB	5.54	120.57	110.60
10	AD	160	PHE	CB-CG-CD1	5.54	124.68	120.80
21	A2	257	U	OP1-P-OP2	-5.54	111.29	119.60
21	A2	413	G	C1'-O4'-C4'	-5.54	105.47	109.90
21	A2	463	G	P-O3'-C3'	5.54	126.35	119.70
21	A2	663	G	P-O3'-C3'	-5.54	113.05	119.70
27	A0	71	G	C5'-C4'-C3'	5.54	124.86	116.00
41	Ba	24	ARG	N-CA-C	5.54	125.96	111.00
66	B1	38	TYR	CG-CD2-CE2	-5.54	116.87	121.30
67	B1	309	C	N1-C1'-C2'	-5.54	105.90	112.00
67	B1	401	C	N3-C4-N4	5.54	121.88	118.00
67	B1	567	G	C5'-C4'-C3'	5.54	124.87	116.00
43	Bk	123	VAL	CG1-CB-CG2	-5.54	102.04	110.90
67	B1	1083	G	P-O3'-C3'	-5.54	113.05	119.70
67	B1	1564	C	O4'-C1'-C2'	-5.54	100.26	105.80
67	B1	1956	G	O4'-C1'-N9	5.54	112.63	108.20
67	B1	2426	U	O4'-C1'-N1	5.54	112.63	108.20
5	AW	42	ALA	N-CA-CB	5.54	117.86	110.10
21	A2	890	C	N3-C4-N4	5.54	121.88	118.00
21	A2	1096	G	C4'-C3'-C2'	-5.54	97.06	102.60
32	BO	152	TYR	CB-CG-CD1	-5.54	117.68	121.00
20	B4	116	MET	CG-SD-CE	-5.54	91.34	100.20
67	B1	23	G	C1'-O4'-C4'	5.54	114.33	109.90
67	B1	85	G	C4'-C3'-C2'	-5.54	97.06	102.60
67	B1	579	C	O4'-C1'-C2'	-5.54	100.26	105.80
67	B1	1801	C	OP1-P-OP2	-5.54	111.29	119.60
15	AE	102	VAL	O-C-N	-5.54	113.84	122.70
67	B1	228	U	C4'-C3'-C2'	-5.54	97.06	102.60
67	B1	2727	C	C1'-O4'-C4'	-5.54	105.47	109.90
67	B1	2835	A	O4'-C1'-C2'	-5.54	100.26	105.80
4	AG	84	VAL	CA-CB-CG1	5.54	119.20	110.90
21	A2	1003	G	P-O3'-C3'	-5.54	113.06	119.70
34	BK	8	ARG	CD-NE-CZ	-5.54	115.85	123.60
67	B1	70	G	O4'-C1'-N9	5.54	112.63	108.20
67	B1	2362	U	O4'-C1'-C2'	-5.54	100.26	105.80
21	A2	240	U	N1-C1'-C2'	-5.53	105.91	112.00
21	A2	447	A	C5-C6-N1	-5.53	114.93	117.70
21	A2	996	A	C5-C6-N1	-5.53	114.93	117.70
21	A2	1309	A	C3'-C2'-C1'	5.53	105.93	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2135	C	C4'-C3'-C2'	5.53	108.13	102.60
67	B1	2141	C	N3-C4-C5	-5.53	119.69	121.90
67	B1	2181	G	C5'-C4'-O4'	5.53	115.74	109.10
67	B1	2313	G	P-O3'-C3'	-5.53	113.06	119.70
11	A1	40	U	C1'-O4'-C4'	5.53	114.33	109.90
21	A2	435	A	O4'-C1'-N9	-5.53	103.77	108.20
21	A2	1426	C	N1-C1'-C2'	5.53	121.19	114.00
67	B1	622	A	N9-C1'-C2'	5.53	121.19	114.00
67	B1	1655	G	O4'-C1'-N9	-5.53	103.77	108.20
11	A1	42	C	O4'-C1'-C2'	-5.53	100.27	105.80
21	A2	133	G	O4'-C1'-C2'	-5.53	100.27	105.80
21	A2	549	A	O4'-C1'-N9	5.53	112.62	108.20
21	A2	641	A	P-O5'-C5'	-5.53	112.05	120.90
21	A2	1279	A	P-O5'-C5'	-5.53	112.05	120.90
67	B1	1478	G	O4'-C1'-N9	5.53	112.62	108.20
67	B1	2671	C	O4'-C1'-C2'	-5.53	100.27	105.80
34	B5	8	ARG	CD-NE-CZ	-5.53	115.86	123.60
67	B1	479	G	C1'-O4'-C4'	-5.53	105.48	109.90
67	B1	2779	G	C4'-C3'-C2'	-5.53	97.07	102.60
68	B3	78	C	C4'-C3'-C2'	-5.53	97.07	102.60
21	A2	411	C	O4'-C1'-C2'	-5.53	100.27	105.80
21	A2	661	C	O4'-C1'-N1	5.53	112.62	108.20
21	A2	1210	A	C1'-O4'-C4'	5.53	114.32	109.90
67	B1	1174	U	C1'-O4'-C4'	-5.53	105.48	109.90
67	B1	1195	G	OP2-P-O3'	5.53	117.36	105.20
6	AC	126	ARG	NE-CZ-NH1	-5.53	117.54	120.30
21	A2	1047	U	O5'-P-OP1	-5.53	100.73	105.70
65	BJ	52	ARG	NE-CZ-NH2	-5.53	117.54	120.30
67	B1	62	C	C3'-C2'-C1'	5.53	105.92	101.50
67	B1	92	G	C1'-O4'-C4'	-5.53	105.48	109.90
67	B1	879	A	P-O5'-C5'	-5.53	112.06	120.90
67	B1	1929	C	P-O3'-C3'	5.53	126.33	119.70
4	AG	72	PHE	N-CA-CB	5.52	120.54	110.60
21	A2	116	C	P-O5'-C5'	-5.52	112.06	120.90
21	A2	342	G	P-O5'-C5'	-5.52	112.06	120.90
21	A2	1099	A	O3'-P-O5'	5.52	114.50	104.00
27	A0	9	A	C5'-C4'-O4'	5.52	115.73	109.10
48	BR	23	ARG	N-CA-CB	5.52	120.54	110.60
64	Bc	17	GLN	N-CA-C	5.52	125.91	111.00
67	B1	109	G	O4'-C1'-N9	5.52	112.62	108.20
67	B1	747	G	O4'-C1'-C2'	5.52	112.57	107.60
67	B1	2767	C	N1-C1'-C2'	5.52	121.18	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	748	A	O4'-C1'-C2'	5.52	112.57	107.60
21	A2	993	C	N1-C1'-C2'	5.52	121.18	114.00
24	AA	26	PHE	CB-CG-CD2	-5.52	116.93	120.80
28	AV	59	TYR	CB-CG-CD1	-5.52	117.69	121.00
29	AL	82	MET	CG-SD-CE	-5.52	91.36	100.20
28	B6	4	ARG	NE-CZ-NH2	5.52	123.06	120.30
59	BM	11	TRP	CG-CD1-NE1	-5.52	104.58	110.10
67	B1	638	A	C4-C5-C6	5.52	119.76	117.00
67	B1	1321	C	O4'-C1'-N1	5.52	112.62	108.20
67	B1	1391	C	P-O3'-C3'	5.52	126.33	119.70
67	B1	1392	G	C1'-O4'-C4'	-5.52	105.48	109.90
67	B1	2060	A	P-O3'-C3'	-5.52	113.07	119.70
21	A2	244	G	C4'-C3'-C2'	-5.52	97.08	102.60
21	A2	542	G	O5'-P-OP1	5.52	117.33	110.70
67	B1	59	U	C1'-O4'-C4'	5.52	114.32	109.90
67	B1	312	G	O4'-C4'-C3'	-5.52	98.48	104.00
67	B1	2553	U	C3'-C2'-C1'	5.52	105.92	101.50
21	A2	776	C	C3'-C2'-C1'	5.52	105.92	101.50
21	A2	1186	C	C2'-C3'-O3'	5.52	122.53	113.70
67	B1	364	A	N9-C1'-C2'	-5.52	105.93	112.00
67	B1	1350	C	C1'-O4'-C4'	5.52	114.31	109.90
67	B1	1459	A	P-O5'-C5'	-5.52	112.07	120.90
68	B3	53	A	O4'-C1'-N9	5.52	112.61	108.20
21	A2	770	A	C1'-O4'-C4'	5.52	114.31	109.90
21	A2	858	A	O4'-C1'-N9	5.52	112.61	108.20
23	AT	103	LEU	CB-CG-CD1	5.52	120.38	111.00
43	Bk	16	ALA	N-CA-CB	5.52	117.83	110.10
67	B1	358	C	C1'-O4'-C4'	-5.52	105.49	109.90
67	B1	1685	C	C3'-C2'-C1'	5.52	105.91	101.50
67	B1	1716	G	O4'-C1'-N9	5.52	112.61	108.20
20	A3	122	MET	CG-SD-CE	-5.52	91.37	100.20
21	A2	774	U	C3'-C2'-C1'	5.52	105.91	101.50
67	B1	513	C	C2'-C3'-O3'	5.52	122.53	113.70
67	B1	1616	A	C3'-C2'-C1'	-5.52	97.09	101.50
67	B1	2747	C	N3-C4-N4	5.52	121.86	118.00
13	AX	36	ASP	N-CA-CB	5.51	120.53	110.60
15	AE	156	ASP	CB-CG-OD2	-5.51	113.34	118.30
21	A2	772	G	C1'-O4'-C4'	-5.51	105.49	109.90
21	A2	972	C	C3'-C2'-C1'	5.51	105.91	101.50
24	AA	98	ARG	NE-CZ-NH1	5.51	123.06	120.30
50	BV	53	THR	N-CA-CB	-5.51	99.82	110.30
67	B1	1568	A	P-O5'-C5'	5.51	129.72	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1951	G	C3'-C2'-C1'	5.51	105.91	101.50
67	B1	2880	C	O4'-C1'-C2'	-5.51	100.29	105.80
21	A2	230	C	C4'-C3'-C2'	-5.51	97.09	102.60
21	A2	1007	A	N9-C1'-C2'	-5.51	105.94	112.00
65	BJ	90	ARG	NE-CZ-NH2	-5.51	117.54	120.30
67	B1	905	G	N9-C1'-C2'	5.51	121.17	114.00
67	B1	1128	G	O4'-C1'-C2'	5.51	112.56	107.60
21	A2	133	G	O3'-P-O5'	5.51	114.47	104.00
21	A2	560	A	O4'-C1'-C2'	-5.51	100.29	105.80
21	A2	634	C	N1-C1'-C2'	5.51	121.17	114.00
21	A2	1275	U	O4'-C1'-N1	5.51	112.61	108.20
24	AA	55	VAL	N-CA-C	-5.51	96.12	111.00
25	AH	113	GLN	N-CA-CB	5.51	120.52	110.60
47	BI	28	VAL	CG1-CB-CG2	5.51	119.72	110.90
28	B6	55	TYR	O-C-N	-5.51	113.88	122.70
67	B1	824	C	C3'-C2'-C1'	5.51	105.91	101.50
67	B1	825	C	C1'-O4'-C4'	5.51	114.31	109.90
67	B1	1467	G	C1'-O4'-C4'	-5.51	105.49	109.90
21	A2	109	U	C3'-C2'-C1'	5.51	105.91	101.50
21	A2	776	C	O4'-C1'-C2'	-5.51	100.29	105.80
21	A2	1410	G	C4'-C3'-C2'	-5.51	97.09	102.60
67	B1	306	G	O4'-C1'-C2'	-5.51	100.29	105.80
67	B1	401	C	N3-C4-C5	-5.51	119.70	121.90
67	B1	592	C	P-O5'-C5'	-5.51	112.08	120.90
67	B1	774	G	N9-C1'-C2'	5.51	121.16	114.00
27	A0	55	U	OP1-P-OP2	-5.51	111.34	119.60
43	Bk	107	ARG	NH1-CZ-NH2	5.51	125.46	119.40
67	B1	802	G	C1'-O4'-C4'	5.51	114.31	109.90
67	B1	2432	G	P-O5'-C5'	5.51	129.71	120.90
21	A2	456	U	C4'-C3'-C2'	-5.51	97.09	102.60
21	A2	960	A	O4'-C1'-N9	5.51	112.61	108.20
40	BE	68	PHE	CB-CG-CD1	5.51	124.65	120.80
67	B1	237	G	N9-C1'-C2'	-5.51	105.94	112.00
67	B1	826	C	P-O3'-C3'	-5.51	113.09	119.70
67	B1	1565	G	O5'-P-OP1	5.51	117.31	110.70
67	B1	1925	A	P-O3'-C3'	-5.51	113.09	119.70
67	B1	2131	C	C1'-O4'-C4'	-5.51	105.49	109.90
67	B1	2150	G	C3'-C2'-C1'	5.51	105.91	101.50
67	B1	2847	G	C1'-O4'-C4'	5.51	114.31	109.90
21	A2	16	G	O4'-C1'-N9	5.50	112.60	108.20
21	A2	1151	A	O4'-C1'-N9	-5.50	103.80	108.20
67	B1	214	C	P-O3'-C3'	5.50	126.31	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A1	68	C	C5'-C4'-O4'	-5.50	102.50	109.10
21	A2	451	A	C5-C6-N1	-5.50	114.95	117.70
21	A2	620	G	P-O3'-C3'	-5.50	113.10	119.70
25	AH	42	ARG	NE-CZ-NH2	-5.50	117.55	120.30
41	Ba	7	GLU	N-CA-CB	-5.50	100.69	110.60
64	Bc	83	TYR	CB-CG-CD1	5.50	124.30	121.00
67	B1	590	A	C5-C6-N6	-5.50	119.30	123.70
67	B1	1281	A	P-O3'-C3'	5.50	126.30	119.70
67	B1	2168	C	O4'-C1'-N1	5.50	112.60	108.20
67	B1	2480	G	C4'-C3'-C2'	-5.50	97.10	102.60
21	A2	642	G	C1'-O4'-C4'	-5.50	105.50	109.90
21	A2	891	A	O4'-C1'-N9	5.50	112.60	108.20
27	A0	40	C	OP2-P-O3'	5.50	117.30	105.20
43	Bk	21	SER	N-CA-CB	5.50	118.75	110.50
54	BF	108	VAL	CA-CB-CG2	5.50	119.15	110.90
67	B1	474	G	O4'-C1'-C2'	5.50	112.55	107.60
67	B1	575	G	O4'-C1'-N9	-5.50	103.80	108.20
67	B1	936	G	C4'-C3'-C2'	5.50	108.10	102.60
67	B1	1439	G	C1'-O4'-C4'	-5.50	105.50	109.90
67	B1	2333	G	C3'-C2'-C1'	5.50	105.90	101.50
67	B1	2530	G	N9-C1'-C2'	-5.50	105.95	112.00
67	B1	2743	U	C4'-C3'-C2'	-5.50	97.10	102.60
67	B1	2989	A	C1'-O4'-C4'	-5.50	105.50	109.90
10	AD	155	ALA	N-CA-CB	5.50	117.80	110.10
21	A2	1130	A	P-O5'-C5'	-5.50	112.10	120.90
23	AT	63	ILE	C-N-CA	5.50	135.45	121.70
36	Bf	34	ARG	NE-CZ-NH1	-5.50	117.55	120.30
21	A2	471	G	C4'-C3'-C2'	5.50	108.10	102.60
21	A2	623	C	O4'-C1'-N1	5.50	112.60	108.20
21	A2	726	A	O4'-C1'-C2'	5.50	112.55	107.60
21	A2	1316	U	C3'-C2'-C1'	5.50	105.90	101.50
56	BH	93	ASN	CA-CB-CG	-5.50	101.30	113.40
67	B1	9	A	C5-C6-N6	-5.50	119.30	123.70
67	B1	889	C	C1'-O4'-C4'	5.50	114.30	109.90
67	B1	1000	G	N9-C1'-C2'	5.50	121.15	114.00
67	B1	1813	A	C1'-O4'-C4'	5.50	114.30	109.90
67	B1	2141	C	N3-C4-N4	5.50	121.85	118.00
20	A3	9	PHE	N-CA-CB	5.50	120.50	110.60
21	A2	1133	C	C5'-C4'-C3'	5.50	124.80	116.00
25	AH	73	ARG	CA-CB-CG	5.50	125.49	113.40
27	A0	30	G	N9-C1'-C2'	5.50	121.15	114.00
67	B1	2856	G	C1'-O4'-C4'	-5.50	105.50	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	507	G	N9-C1'-C2'	-5.50	105.95	112.00
21	A2	347	G	C3'-C2'-C1'	5.49	105.89	101.50
21	A2	368	C	P-O5'-C5'	5.49	129.69	120.90
21	A2	1324	U	C2'-C3'-O3'	5.49	122.49	113.70
67	B1	1476	C	O4'-C1'-C2'	-5.49	100.31	105.80
67	B1	1656	C	C3'-C2'-C1'	5.49	105.89	101.50
67	B1	2053	G	P-O3'-C3'	5.49	126.29	119.70
67	B1	2490	C	C3'-C2'-C1'	5.49	105.89	101.50
67	B1	3001	C	C3'-C2'-C1'	5.49	105.89	101.50
7	AB	100	THR	CA-CB-CG2	-5.49	104.71	112.40
11	A1	68	C	C4'-C3'-C2'	-5.49	97.11	102.60
21	A2	988	A	O4'-C1'-N9	5.49	112.59	108.20
8	AR	33	VAL	CA-CB-CG1	5.49	119.14	110.90
21	A2	426	C	C4'-C3'-C2'	-5.49	97.11	102.60
21	A2	462	A	O4'-C4'-C3'	-5.49	98.51	104.00
67	B1	1213	G	C1'-O4'-C4'	5.49	114.29	109.90
67	B1	2959	A	O4'-C1'-N9	-5.49	103.81	108.20
68	B3	115	C	C1'-O4'-C4'	-5.49	105.51	109.90
21	A2	1048	G	C4'-C3'-C2'	-5.49	97.11	102.60
21	A2	1311	C	O4'-C1'-C2'	-5.49	100.31	105.80
67	B1	1566	G	O4'-C4'-C3'	-5.49	98.51	104.00
19	AS	5	ARG	NE-CZ-NH2	-5.49	117.56	120.30
21	A2	942	A	C1'-O4'-C4'	-5.49	105.51	109.90
67	B1	928	A	C3'-C2'-C1'	5.49	105.89	101.50
67	B1	1067	G	O4'-C1'-C2'	5.49	112.54	107.60
21	A2	50	C	O4'-C1'-C2'	-5.49	100.31	105.80
21	A2	509	C	O4'-C4'-C3'	-5.49	98.51	104.00
62	BN	72	TYR	CB-CG-CD2	5.49	124.29	121.00
67	B1	438	G	OP1-P-OP2	-5.49	111.37	119.60
67	B1	1001	C	OP1-P-O3'	5.49	117.27	105.20
67	B1	1493	C	N1-C1'-C2'	5.49	121.13	114.00
67	B1	1735	G	P-O3'-C3'	5.49	126.28	119.70
67	B1	1807	G	O4'-C1'-C2'	-5.49	100.31	105.80
67	B1	2791	C	P-O5'-C5'	5.49	129.68	120.90
21	A2	20	G	C3'-C2'-C1'	-5.48	97.11	101.50
25	AH	99	LYS	CB-CA-C	5.48	121.37	110.40
68	B3	81	C	C3'-C2'-C1'	5.48	105.89	101.50
11	A1	38	G	C3'-C2'-C1'	5.48	105.89	101.50
12	AN	136	GLU	CA-CB-CG	5.48	125.46	113.40
46	BA	23	ASN	CA-C-O	5.48	131.61	120.10
54	BF	56	TYR	O-C-N	-5.48	113.93	122.70
67	B1	32	C	C4'-C3'-C2'	-5.48	97.12	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1587	A	C1'-O4'-C4'	-5.48	105.51	109.90
67	B1	1810	G	P-O5'-C5'	5.48	129.67	120.90
67	B1	2042	A	O3'-P-O5'	-5.48	93.58	104.00
67	B1	2494	A	O4'-C1'-C2'	-5.48	100.32	105.80
67	B1	2613	C	C3'-C2'-C1'	5.48	105.89	101.50
67	B1	3034	C	O4'-C1'-N1	5.48	112.59	108.20
21	A2	1036	G	O4'-C1'-C2'	5.48	112.53	107.60
67	B1	535	G	C1'-O4'-C4'	5.48	114.28	109.90
67	B1	867	C	C1'-O4'-C4'	5.48	114.28	109.90
67	B1	2404	G	C3'-C2'-C1'	-5.48	97.12	101.50
21	A2	392	G	O4'-C1'-C2'	5.48	112.53	107.60
21	A2	845	G	C1'-O4'-C4'	-5.48	105.52	109.90
38	Bb	128	PRO	C-N-CA	5.48	135.40	121.70
67	B1	26	G	C3'-C2'-C1'	5.48	105.88	101.50
21	A2	26	A	N9-C1'-C2'	5.48	121.12	114.00
21	A2	701	G	P-O3'-C3'	-5.48	113.13	119.70
21	A2	871	A	C4'-C3'-C2'	5.48	108.08	102.60
21	A2	1085	C	N3-C4-C5	-5.48	119.71	121.90
21	A2	1152	C	C4'-C3'-C2'	-5.48	97.12	102.60
21	A2	1454	A	O4'-C1'-N9	5.48	112.58	108.20
21	A2	1465	C	N1-C1'-C2'	5.48	121.12	114.00
67	B1	445	G	P-O3'-C3'	-5.48	113.13	119.70
67	B1	1093	G	P-O5'-C5'	-5.48	112.14	120.90
67	B1	1341	U	OP1-P-OP2	-5.48	111.38	119.60
67	B1	1761	C	N1-C1'-C2'	5.48	121.12	114.00
7	AB	162	LYS	CA-CB-CG	5.48	125.45	113.40
21	A2	147	A	C1'-O4'-C4'	5.48	114.28	109.90
45	Bi	24	ARG	NE-CZ-NH2	-5.48	117.56	120.30
67	B1	422	G	O4'-C1'-C2'	-5.48	100.32	105.80
67	B1	1153	U	C2'-C3'-O3'	5.48	122.46	113.70
67	B1	1956	G	N9-C1'-C2'	-5.48	105.98	112.00
6	AC	73	PHE	CB-CG-CD1	-5.47	116.97	120.80
21	A2	274	G	C3'-C2'-C1'	5.47	105.88	101.50
21	A2	659	U	P-O3'-C3'	-5.47	113.13	119.70
21	A2	1394	G	O4'-C4'-C3'	-5.47	98.53	104.00
48	BR	10	ARG	CA-C-O	5.47	131.59	120.10
50	BV	45	ARG	NE-CZ-NH1	-5.47	117.56	120.30
20	BG	106	LYS	N-CA-CB	5.47	120.45	110.60
62	BN	95	ARG	NE-CZ-NH2	5.47	123.04	120.30
62	BN	153	ALA	CB-CA-C	-5.47	101.89	110.10
67	B1	861	G	P-O5'-C5'	-5.47	112.14	120.90
67	B1	1093	G	C5'-C4'-O4'	5.47	115.67	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1177	C	O4'-C1'-N1	5.47	112.58	108.20
67	B1	1317	G	C5'-C4'-C3'	5.47	124.76	116.00
67	B1	1785	G	C1'-O4'-C4'	-5.47	105.52	109.90
67	B1	1831	C	O4'-C1'-N1	5.47	112.58	108.20
67	B1	2034	G	C1'-O4'-C4'	-5.47	105.52	109.90
11	A1	24	A	P-O5'-C5'	5.47	129.66	120.90
21	A2	563	U	C3'-C2'-C1'	5.47	105.88	101.50
46	BA	97	ALA	N-CA-CB	5.47	117.76	110.10
51	Bj	54	LYS	CG-CD-CE	5.47	128.32	111.90
67	B1	258	C	C3'-C2'-C1'	5.47	105.88	101.50
67	B1	259	A	C3'-C2'-C1'	5.47	105.88	101.50
67	B1	653	U	OP1-P-OP2	-5.47	111.39	119.60
67	B1	1207	G	C1'-O4'-C4'	5.47	114.28	109.90
67	B1	1365	G	O4'-C1'-N9	5.47	112.58	108.20
67	B1	1380	G	C1'-O4'-C4'	5.47	114.28	109.90
67	B1	1514	C	N1-C1'-C2'	5.47	121.11	114.00
68	B3	17	G	C4'-C3'-C2'	-5.47	97.13	102.60
21	A2	337	C	N1-C1'-C2'	5.47	121.11	114.00
25	AH	176	ASN	N-CA-CB	5.47	120.45	110.60
68	B3	43	C	C4'-C3'-C2'	-5.47	97.13	102.60
2	AK	17	ALA	N-CA-CB	-5.47	102.44	110.10
3	AI	44	TYR	CB-CG-CD1	-5.47	117.72	121.00
14	AM	13	LYS	N-CA-CB	5.47	120.45	110.60
15	AE	81	TYR	CB-CG-CD2	5.47	124.28	121.00
21	A2	194	C	C3'-C2'-C1'	5.47	105.88	101.50
40	BE	71	ARG	NE-CZ-NH2	-5.47	117.57	120.30
67	B1	710	G	P-O3'-C3'	-5.47	113.14	119.70
67	B1	812	C	P-O3'-C3'	-5.47	113.14	119.70
67	B1	1082	A	P-O5'-C5'	-5.47	112.15	120.90
67	B1	2322	A	O4'-C1'-C2'	-5.47	100.33	105.80
48	BR	6	HIS	N-CA-CB	5.47	120.44	110.60
21	A2	294	A	C3'-C2'-C1'	-5.47	97.13	101.50
21	A2	1175	C	C4'-C3'-C2'	-5.47	97.13	102.60
46	BA	30	VAL	CA-CB-CG2	-5.47	102.70	110.90
28	B6	40	LEU	O-C-N	-5.47	113.95	122.70
67	B1	47	C	N3-C4-C5	-5.47	119.71	121.90
67	B1	61	G	P-O5'-C5'	-5.47	112.15	120.90
67	B1	634	G	C1'-O4'-C4'	5.47	114.27	109.90
67	B1	995	G	O4'-C1'-C2'	-5.47	100.33	105.80
67	B1	1681	G	C2'-C3'-O3'	5.47	122.44	113.70
67	B1	2111	C	C1'-O4'-C4'	-5.47	105.53	109.90
67	B1	2160	C	O4'-C4'-C3'	-5.47	98.53	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2486	A	C3'-C2'-C1'	5.47	105.87	101.50
67	B1	2577	U	C3'-C2'-C1'	5.47	105.87	101.50
21	A2	164	A	OP1-P-OP2	-5.46	111.40	119.60
21	A2	1164	A	N9-C1'-C2'	5.46	121.10	114.00
32	BO	46	ALA	N-CA-CB	5.46	117.75	110.10
53	BD	234	THR	N-CA-CB	5.46	120.68	110.30
67	B1	1061	G	C4'-C3'-C2'	-5.46	97.14	102.60
67	B1	1418	A	O4'-C1'-C2'	-5.46	100.34	105.80
67	B1	1685	C	N1-C1'-C2'	5.46	121.10	114.00
21	A2	1245	C	N3-C4-C5	-5.46	119.72	121.90
52	BB	182	TYR	CG-CD2-CE2	5.46	125.67	121.30
67	B1	725	G	C1'-O4'-C4'	-5.46	105.53	109.90
67	B1	2000	G	O4'-C1'-N9	5.46	112.57	108.20
21	A2	1121	C	N1-C1'-C2'	5.46	121.10	114.00
67	B1	616	C	O4'-C4'-C3'	-5.46	98.54	104.00
67	B1	917	A	N9-C1'-C2'	-5.46	105.99	112.00
67	B1	1613	A	C3'-C2'-C1'	-5.46	97.13	101.50
67	B1	2892	A	P-O5'-C5'	5.46	129.64	120.90
67	B1	3008	C	C5'-C4'-O4'	5.46	115.65	109.10
68	B3	16	G	C4'-C3'-C2'	-5.46	97.14	102.60
11	A1	35	G	C1'-O4'-C4'	-5.46	105.53	109.90
20	B4	23	VAL	CB-CA-C	5.46	121.77	111.40
67	B1	1821	C	C1'-O4'-C4'	-5.46	105.53	109.90
67	B1	1978	A	P-O5'-C5'	-5.46	112.16	120.90
21	A2	401	U	P-O5'-C5'	5.46	129.63	120.90
21	A2	1297	G	O4'-C1'-C2'	-5.46	100.34	105.80
40	BE	104	ALA	N-CA-CB	5.46	117.74	110.10
67	B1	156	A	P-O3'-C3'	-5.46	113.15	119.70
67	B1	462	A	OP2-P-O3'	5.46	117.21	105.20
67	B1	505	A	C3'-C2'-C1'	5.46	105.87	101.50
67	B1	1878	G	O4'-C1'-N9	5.46	112.57	108.20
67	B1	1926	A	OP1-P-OP2	-5.46	111.41	119.60
67	B1	2120	C	O4'-C1'-C2'	-5.46	100.34	105.80
67	B1	2623	G	P-O5'-C5'	-5.46	112.17	120.90
67	B1	2633	A	O4'-C1'-C2'	5.46	112.51	107.60
11	A1	9	A	P-O5'-C5'	-5.46	112.17	120.90
21	A2	237	C	C1'-O4'-C4'	5.46	114.26	109.90
21	A2	859	A	P-O3'-C3'	5.46	126.25	119.70
21	A2	1039	C	C5'-C4'-O4'	5.46	115.65	109.10
31	BY	73	ARG	N-CA-CB	5.46	120.42	110.60
20	BG	113	GLU	N-CA-CB	5.46	120.42	110.60
53	BD	133	ILE	N-CA-C	-5.46	96.27	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	243	G	OP1-P-OP2	-5.46	111.42	119.60
67	B1	743	A	N9-C1'-C2'	5.46	121.09	114.00
67	B1	1364	C	N1-C1'-C2'	5.46	121.09	114.00
68	B3	87	G	N9-C1'-C2'	-5.46	106.00	112.00
19	AS	8	PHE	CB-CG-CD2	-5.46	116.98	120.80
68	B3	86	C	OP1-P-OP2	-5.46	111.42	119.60
8	AR	66	ARG	NE-CZ-NH1	-5.45	117.57	120.30
21	A2	167	G	O4'-C1'-C2'	-5.45	100.35	105.80
21	A2	671	C	C1'-O4'-C4'	5.45	114.26	109.90
24	AA	59	PHE	CB-CG-CD1	5.45	124.62	120.80
27	A0	57	G	O4'-C1'-C2'	5.45	112.51	107.60
47	BI	80	ARG	CG-CD-NE	-5.45	100.35	111.80
65	BJ	56	ALA	N-CA-CB	5.45	117.73	110.10
67	B1	58	G	O4'-C1'-N9	5.45	112.56	108.20
67	B1	372	A	C4'-C3'-C2'	-5.45	97.15	102.60
67	B1	639	C	N3-C4-N4	5.45	121.82	118.00
67	B1	890	G	P-O3'-C3'	-5.45	113.16	119.70
67	B1	1503	C	P-O3'-C3'	5.45	126.24	119.70
67	B1	1603	G	C4'-C3'-C2'	-5.45	97.15	102.60
67	B1	2641	C	N1-C1'-C2'	5.45	121.09	114.00
67	B1	2965	C	O4'-C1'-C2'	-5.45	100.35	105.80
21	A2	355	C	O4'-C1'-N1	5.45	112.56	108.20
21	A2	405	G	O4'-C1'-N9	5.45	112.56	108.20
67	B1	1309	G	N9-C1'-C2'	5.45	121.09	114.00
67	B1	3020	G	N9-C1'-C2'	5.45	121.09	114.00
8	AR	34	PHE	CG-CD2-CE2	-5.45	114.80	120.80
43	Bk	56	ARG	CA-CB-CG	5.45	125.39	113.40
64	Bc	15	GLU	CB-CG-CD	-5.45	99.48	114.20
67	B1	1019	G	O4'-C1'-N9	5.45	112.56	108.20
67	B1	1055	C	C3'-C2'-C1'	5.45	105.86	101.50
67	B1	2120	C	P-O3'-C3'	-5.45	113.16	119.70
67	B1	2913	C	C3'-C2'-C1'	5.45	105.86	101.50
67	B1	2943	G	O3'-P-O5'	5.45	114.36	104.00
7	AB	109	PHE	CB-CG-CD1	5.45	124.61	120.80
21	A2	450	A	O4'-C1'-N9	5.45	112.56	108.20
56	BH	91	LYS	N-CA-CB	5.45	120.41	110.60
20	B4	97	ALA	N-CA-CB	5.45	117.73	110.10
67	B1	2448	A	N9-C1'-C2'	-5.45	106.01	112.00
21	A2	971	G	C1'-O4'-C4'	-5.45	105.54	109.90
67	B1	314	A	N9-C1'-C2'	-5.45	106.01	112.00
67	B1	2324	C	N3-C4-C5	-5.45	119.72	121.90
16	AJ	12	PRO	N-CA-CB	-5.45	96.61	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AA	12	LYS	C-N-CA	5.45	135.31	121.70
53	BD	223	ASP	CB-CG-OD1	5.45	123.20	118.30
54	BF	62	ARG	NE-CZ-NH1	-5.45	117.58	120.30
57	BZ	51	TYR	CB-CA-C	5.45	121.29	110.40
59	BM	6	TYR	CZ-CE2-CD2	-5.45	114.90	119.80
67	B1	683	C	O4'-C1'-C2'	-5.45	100.36	105.80
67	B1	870	G	P-O3'-C3'	-5.45	113.17	119.70
67	B1	1046	A	O4'-C1'-N9	5.45	112.56	108.20
67	B1	2333	G	N9-C1'-C2'	5.45	121.08	114.00
51	Bj	80	ARG	NE-CZ-NH2	-5.44	117.58	120.30
53	BD	37	ALA	N-CA-CB	5.44	117.72	110.10
62	BN	66	ARG	NE-CZ-NH2	-5.44	117.58	120.30
64	Bc	64	LYS	CB-CA-C	-5.44	99.51	110.40
67	B1	510	A	O4'-C1'-N9	5.44	112.56	108.20
67	B1	1388	U	O4'-C1'-N1	5.44	112.56	108.20
67	B1	1404	G	O4'-C1'-N9	5.44	112.56	108.20
67	B1	1729	C	C3'-C2'-C1'	5.44	105.86	101.50
67	B1	2900	C	O4'-C1'-C2'	-5.44	100.36	105.80
21	A2	929	C	C3'-C2'-C1'	5.44	105.85	101.50
67	B1	62	C	O4'-C1'-C2'	-5.44	100.36	105.80
67	B1	101	G	O4'-C1'-C2'	-5.44	100.36	105.80
67	B1	1909	C	N1-C1'-C2'	5.44	121.08	114.00
67	B1	2048	C	C4'-C3'-C2'	5.44	108.04	102.60
67	B1	2447	A	O4'-C4'-C3'	5.44	110.45	106.10
67	B1	2871	A	N9-C1'-C2'	-5.44	106.01	112.00
3	AI	62	ARG	N-CA-C	-5.44	96.31	111.00
21	A2	419	G	C3'-C2'-C1'	-5.44	97.15	101.50
21	A2	971	G	N9-C1'-C2'	5.44	121.07	114.00
67	B1	142	G	P-O5'-C5'	-5.44	112.19	120.90
67	B1	318	G	C3'-C2'-C1'	-5.44	97.15	101.50
67	B1	541	A	P-O3'-C3'	5.44	126.23	119.70
67	B1	590	A	C5-C6-N1	-5.44	114.98	117.70
67	B1	904	G	OP1-P-OP2	-5.44	111.44	119.60
67	B1	1971	C	OP1-P-OP2	-5.44	111.44	119.60
68	B3	13	C	C3'-C2'-C1'	5.44	105.85	101.50
68	B3	73	U	O4'-C1'-N1	-5.44	103.85	108.20
21	A2	199	A	C2'-C3'-O3'	5.44	122.40	113.70
67	B1	145	C	P-O3'-C3'	5.44	126.23	119.70
67	B1	155	U	N1-C1'-C2'	-5.44	106.02	112.00
67	B1	210	A	C4'-C3'-C2'	5.44	108.04	102.60
67	B1	786	G	C3'-C2'-C1'	5.44	105.85	101.50
67	B1	2786	G	C1'-O4'-C4'	5.44	114.25	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	3002	A	O4'-C1'-N9	5.44	112.55	108.20
68	B3	49	A	O4'-C4'-C3'	-5.44	98.56	104.00
21	A2	319	U	O4'-C1'-N1	5.44	112.55	108.20
21	A2	340	A	C1'-O4'-C4'	5.44	114.25	109.90
32	BO	156	LEU	CB-CG-CD2	5.44	120.24	111.00
41	Ba	25	TRP	CB-CG-CD1	5.44	134.07	127.00
53	BD	124	TYR	CG-CD2-CE2	-5.44	116.95	121.30
59	BM	62	VAL	CG1-CB-CG2	-5.44	102.20	110.90
61	Bd	71	LEU	CB-CG-CD2	5.44	120.24	111.00
67	B1	75	G	O4'-C1'-C2'	5.44	112.49	107.60
67	B1	679	U	N1-C1'-C2'	-5.44	106.02	112.00
67	B1	2284	C	O4'-C1'-C2'	-5.44	100.36	105.80
67	B1	2564	U	OP1-P-OP2	-5.44	111.44	119.60
67	B1	2574	G	C5'-C4'-O4'	5.44	115.63	109.10
67	B1	2728	U	O4'-C1'-N1	5.44	112.55	108.20
21	A2	622	C	N1-C1'-C2'	5.44	121.07	114.00
21	A2	1361	G	C4'-C3'-C2'	-5.44	97.16	102.60
67	B1	160	C	OP1-P-OP2	-5.44	111.45	119.60
67	B1	219	G	C5'-C4'-O4'	-5.44	102.58	109.10
67	B1	1442	G	O4'-C1'-N9	5.44	112.55	108.20
67	B1	2600	C	C3'-C2'-C1'	5.44	105.85	101.50
68	B3	61	C	O4'-C1'-N1	5.44	112.55	108.20
21	A2	195	C	O4'-C1'-N1	5.43	112.55	108.20
21	A2	518	U	C5'-C4'-O4'	5.43	115.62	109.10
21	A2	1476	C	C3'-C2'-C1'	5.43	105.85	101.50
25	AH	14	GLU	O-C-N	-5.43	114.00	122.70
62	BN	82	TYR	CG-CD1-CE1	-5.43	116.95	121.30
67	B1	455	G	C3'-C2'-C1'	5.43	105.85	101.50
67	B1	582	A	C5'-C4'-C3'	5.43	124.70	116.00
67	B1	1234	A	O5'-P-OP2	-5.43	100.81	105.70
67	B1	1371	U	C1'-O4'-C4'	-5.43	105.55	109.90
67	B1	1477	C	O4'-C1'-N1	5.43	112.55	108.20
67	B1	2195	G	C3'-C2'-C1'	-5.43	97.15	101.50
67	B1	2870	A	O4'-C1'-N9	5.43	112.55	108.20
11	A1	63	C	C1'-O4'-C4'	5.43	114.25	109.90
21	A2	272	C	C1'-O4'-C4'	-5.43	105.55	109.90
21	A2	1296	U	P-O3'-C3'	5.43	126.22	119.70
33	BC	267	THR	CA-CB-CG2	-5.43	104.79	112.40
67	B1	913	G	O4'-C1'-N9	5.43	112.55	108.20
67	B1	1220	U	P-O3'-C3'	-5.43	113.18	119.70
67	B1	2130	C	P-O3'-C3'	-5.43	113.18	119.70
67	B1	2317	G	C1'-O4'-C4'	-5.43	105.55	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2518	G	C3'-C2'-C1'	-5.43	97.15	101.50
67	B1	2533	G	O4'-C1'-N9	5.43	112.55	108.20
67	B1	2910	G	C1'-O4'-C4'	5.43	114.25	109.90
67	B1	323	U	C1'-O4'-C4'	5.43	114.24	109.90
67	B1	371	U	C1'-O4'-C4'	-5.43	105.56	109.90
16	AJ	49	TYR	CB-CG-CD2	5.43	124.26	121.00
17	AO	119	ARG	NE-CZ-NH1	5.43	123.02	120.30
21	A2	87	C	C4'-C3'-C2'	-5.43	97.17	102.60
21	A2	402	G	O4'-C1'-C2'	5.43	112.49	107.60
21	A2	827	G	O4'-C1'-N9	5.43	112.54	108.20
21	A2	953	C	N1-C1'-C2'	5.43	121.06	114.00
33	BC	164	ARG	NE-CZ-NH1	5.43	123.02	120.30
48	BR	30	ARG	NE-CZ-NH1	5.43	123.02	120.30
49	BQ	6	MET	N-CA-CB	5.43	120.37	110.60
67	B1	873	G	C5'-C4'-C3'	-5.43	107.31	116.00
67	B1	1235	A	O3'-P-O5'	5.43	114.31	104.00
67	B1	1804	G	C4'-C3'-C2'	5.43	108.03	102.60
67	B1	1956	G	C5'-C4'-O4'	5.43	115.61	109.10
67	B1	2043	A	C3'-C2'-C1'	5.43	105.84	101.50
67	B1	2964	A	O4'-C1'-N9	5.43	112.54	108.20
67	B1	624	U	OP1-P-OP2	-5.43	111.46	119.60
67	B1	1596	G	P-O3'-C3'	-5.43	113.19	119.70
67	B1	1943	C	C3'-C2'-C1'	5.43	105.84	101.50
21	A2	85	A	C4'-C3'-C2'	-5.43	97.17	102.60
23	AT	40	LEU	C-N-CA	5.43	135.27	121.70
27	A0	71	G	O4'-C1'-C2'	-5.43	100.37	105.80
67	B1	1088	G	C3'-C2'-C1'	5.43	105.84	101.50
67	B1	1093	G	C3'-C2'-C1'	-5.43	97.16	101.50
67	B1	1638	C	O4'-C1'-C2'	-5.43	100.37	105.80
67	B1	2377	C	N1-C1'-C2'	5.43	121.06	114.00
67	B1	2866	A	O4'-C1'-C2'	5.43	112.48	107.60
68	B3	124	A	O4'-C1'-N9	5.43	112.54	108.20
21	A2	107	C	N1-C1'-C2'	5.42	121.05	114.00
21	A2	368	C	C1'-O4'-C4'	5.42	114.24	109.90
21	A2	380	C	P-O3'-C3'	5.42	126.21	119.70
21	A2	453	G	C4'-C3'-C2'	-5.42	97.18	102.60
21	A2	825	C	O4'-C1'-N1	5.42	112.54	108.20
21	A2	902	U	N1-C1'-C2'	5.42	121.05	114.00
21	A2	1134	G	O4'-C1'-C2'	5.42	112.48	107.60
21	A2	1381	G	P-O3'-C3'	5.42	126.21	119.70
25	AH	42	ARG	N-CA-C	5.42	125.64	111.00
65	BJ	132	ARG	NE-CZ-NH1	5.42	123.01	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	8	G	O4'-C1'-N9	5.42	112.54	108.20
67	B1	10	C	O4'-C1'-C2'	-5.42	100.38	105.80
67	B1	73	A	C5'-C4'-C3'	-5.42	107.32	116.00
67	B1	317	A	C5-C6-N6	-5.42	119.36	123.70
67	B1	810	A	C4'-C3'-C2'	-5.42	97.17	102.60
67	B1	845	U	P-O5'-C5'	5.42	129.58	120.90
67	B1	1445	G	N9-C1'-C2'	5.42	121.05	114.00
67	B1	1855	G	C4'-C3'-C2'	-5.42	97.18	102.60
67	B1	1962	G	P-O3'-C3'	-5.42	113.19	119.70
67	B1	2311	C	N1-C1'-C2'	5.42	121.05	114.00
67	B1	2566	A	P-O5'-C5'	5.42	129.58	120.90
67	B1	2612	A	C1'-O4'-C4'	5.42	114.24	109.90
4	AG	55	PHE	O-C-N	-5.42	110.80	121.10
21	A2	1306	A	C4-C5-C6	5.42	119.71	117.00
67	B1	2690	U	N1-C1'-C2'	5.42	121.05	114.00
68	B3	1	C	C1'-O4'-C4'	-5.42	105.56	109.90
21	A2	447	A	C4-C5-C6	5.42	119.71	117.00
41	Ba	81	ARG	CA-CB-CG	5.42	125.33	113.40
43	Bk	110	ALA	N-CA-CB	5.42	117.69	110.10
67	B1	640	C	P-O3'-C3'	5.42	126.21	119.70
67	B1	1308	G	N9-C1'-C2'	5.42	121.05	114.00
67	B1	1332	A	N9-C1'-C2'	5.42	121.05	114.00
67	B1	1924	A	O5'-C5'-C4'	-5.42	101.40	111.70
67	B1	2035	U	O4'-C1'-C2'	5.42	112.48	107.60
67	B1	2181	G	N9-C1'-C2'	5.42	121.05	114.00
67	B1	2230	G	O5'-C5'-C4'	-5.42	101.40	111.70
67	B1	2447	A	O4'-C1'-C2'	-5.42	100.38	105.80
21	A2	1165	U	P-O3'-C3'	-5.42	113.20	119.70
21	A2	1306	A	C5-C6-N6	-5.42	119.36	123.70
38	Bb	87	VAL	CA-CB-CG1	5.42	119.03	110.90
67	B1	1370	G	N9-C1'-C2'	5.42	121.05	114.00
67	B1	2304	C	O4'-C1'-N1	-5.42	103.86	108.20
21	A2	152	G	C4'-C3'-C2'	-5.42	97.18	102.60
21	A2	188	C	N1-C1'-C2'	5.42	121.04	114.00
35	BL	110	ASP	CB-CA-C	-5.42	99.56	110.40
38	Bb	31	TYR	CB-CG-CD2	-5.42	117.75	121.00
67	B1	1149	C	C3'-C2'-C1'	5.42	105.83	101.50
67	B1	1995	C	C1'-O4'-C4'	-5.42	105.57	109.90
67	B1	2522	C	O4'-C1'-N1	5.42	112.53	108.20
67	B1	2930	G	P-O3'-C3'	-5.42	113.20	119.70
11	A1	42	C	O4'-C1'-N1	5.42	112.53	108.20
21	A2	969	A	C4'-C3'-C2'	-5.42	97.18	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1037	U	OP1-P-OP2	-5.42	111.47	119.60
21	A2	1387	C	O4'-C1'-N1	5.42	112.53	108.20
67	B1	324	C	O4'-C1'-N1	5.42	112.53	108.20
67	B1	1820	C	O4'-C4'-C3'	-5.42	98.58	104.00
67	B1	2566	A	C3'-C2'-C1'	5.42	105.83	101.50
67	B1	2643	U	P-O3'-C3'	-5.42	113.20	119.70
21	A2	946	G	C1'-O4'-C4'	-5.42	105.57	109.90
21	A2	1120	G	C4'-C3'-C2'	-5.42	97.19	102.60
67	B1	1565	G	C5'-C4'-O4'	5.42	115.60	109.10
8	AR	51	ARG	NH1-CZ-NH2	-5.41	113.44	119.40
14	AM	132	ARG	NE-CZ-NH2	5.41	123.01	120.30
17	AO	71	ALA	CB-CA-C	-5.41	101.98	110.10
21	A2	68	G	O4'-C1'-C2'	5.41	112.47	107.60
21	A2	1386	C	C3'-C2'-C1'	5.41	105.83	101.50
26	AP	28	GLY	CA-C-O	-5.41	110.86	120.60
26	AP	40	ARG	NE-CZ-NH2	5.41	123.01	120.30
67	B1	317	A	C5-C6-N1	-5.41	114.99	117.70
67	B1	458	U	P-O3'-C3'	-5.41	113.20	119.70
67	B1	686	C	O4'-C1'-C2'	-5.41	100.39	105.80
67	B1	1062	C	O4'-C1'-N1	5.41	112.53	108.20
67	B1	1697	G	O5'-P-OP1	5.41	117.20	110.70
67	B1	1834	C	N1-C1'-C2'	5.41	121.04	114.00
67	B1	2965	C	O4'-C1'-N1	5.41	112.53	108.20
68	B3	25	A	C1'-O4'-C4'	-5.41	105.57	109.90
21	A2	386	C	C3'-C2'-C1'	5.41	105.83	101.50
50	BV	55	ALA	CB-CA-C	-5.41	101.98	110.10
65	BJ	16	ARG	NE-CZ-NH1	-5.41	117.59	120.30
67	B1	521	C	P-O3'-C3'	5.41	126.19	119.70
67	B1	822	A	C5'-C4'-O4'	-5.41	102.61	109.10
67	B1	1140	C	C3'-C2'-C1'	5.41	105.83	101.50
67	B1	1141	C	C4'-C3'-C2'	-5.41	97.19	102.60
67	B1	1881	A	C5-C6-N6	-5.41	119.37	123.70
67	B1	2050	U	C3'-C2'-C1'	5.41	105.83	101.50
67	B1	2453	C	P-O3'-C3'	-5.41	113.21	119.70
21	A2	565	C	N1-C1'-C2'	5.41	121.03	114.00
21	A2	750	C	OP2-P-O3'	5.41	117.10	105.20
21	A2	986	G	O4'-C1'-N9	5.41	112.53	108.20
43	Bk	97	PHE	CB-CG-CD1	-5.41	117.01	120.80
67	B1	262	C	O4'-C1'-N1	5.41	112.53	108.20
67	B1	358	C	OP1-P-OP2	-5.41	111.49	119.60
67	B1	949	C	C3'-C2'-C1'	5.41	105.83	101.50
67	B1	1554	G	C5'-C4'-C3'	-5.41	107.34	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2238	G	O4'-C4'-C3'	-5.41	98.59	104.00
67	B1	2493	A	C4'-C3'-C2'	-5.41	97.19	102.60
67	B1	2660	G	O4'-C1'-C2'	5.41	112.47	107.60
68	B3	3	G	O4'-C4'-C3'	-5.41	98.59	104.00
67	B1	601	A	N9-C1'-C2'	-5.41	106.05	112.00
68	B3	40	G	C4'-C3'-C2'	5.41	108.01	102.60
21	A2	209	A	OP1-P-OP2	-5.41	111.49	119.60
21	A2	303	G	OP1-P-OP2	-5.41	111.49	119.60
21	A2	1044	A	C3'-C2'-C1'	5.41	105.83	101.50
21	A2	1278	A	C4'-C3'-C2'	5.41	108.01	102.60
67	B1	1591	C	O4'-C1'-N1	5.41	112.53	108.20
67	B1	1661	A	C5-C6-N6	-5.41	119.38	123.70
67	B1	2128	G	P-O5'-C5'	-5.41	112.25	120.90
68	B3	124	A	C5'-C4'-O4'	5.41	115.59	109.10
12	AN	36	ARG	NE-CZ-NH1	5.40	123.00	120.30
21	A2	448	A	C5-C6-N6	-5.40	119.38	123.70
29	AL	64	TRP	CG-CD2-CE3	-5.40	129.04	133.90
32	BO	15	ARG	N-CA-CB	5.40	120.33	110.60
67	B1	592	C	O4'-C1'-C2'	-5.40	100.40	105.80
67	B1	599	G	P-O3'-C3'	5.40	126.18	119.70
67	B1	660	U	O4'-C1'-C2'	5.40	112.46	107.60
67	B1	1416	G	O5'-C5'-C4'	-5.40	101.43	111.70
67	B1	2366	G	O4'-C4'-C3'	-5.40	98.60	104.00
67	B1	3037	G	C5'-C4'-C3'	-5.40	107.35	116.00
21	A2	248	U	P-O3'-C3'	5.40	126.18	119.70
21	A2	324	C	C3'-C2'-C1'	-5.40	97.18	101.50
21	A2	586	C	N3-C4-C5	-5.40	119.74	121.90
21	A2	1107	C	C3'-C2'-C1'	5.40	105.82	101.50
21	A2	1240	A	C3'-C2'-C1'	5.40	105.82	101.50
27	A0	33	U	P-O3'-C3'	-5.40	113.22	119.70
27	A0	46	G	O4'-C1'-C2'	-5.40	100.40	105.80
40	BE	67	ASP	CB-CG-OD1	-5.40	113.44	118.30
61	Bd	58	PRO	C-N-CA	5.40	135.21	121.70
67	B1	389	C	O4'-C1'-C2'	-5.40	100.40	105.80
67	B1	551	A	P-O3'-C3'	-5.40	113.22	119.70
67	B1	979	G	O4'-C1'-N9	-5.40	103.88	108.20
67	B1	1436	A	O4'-C1'-N9	5.40	112.52	108.20
67	B1	1468	G	P-O3'-C3'	-5.40	113.22	119.70
67	B1	1511	C	C1'-O4'-C4'	-5.40	105.58	109.90
67	B1	1774	A	C5'-C4'-C3'	-5.40	107.36	116.00
67	B1	2003	C	O4'-C1'-C2'	-5.40	100.40	105.80
67	B1	2059	G	O4'-C1'-N9	5.40	112.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	297	G	N9-C1'-C2'	-5.40	106.06	112.00
21	A2	625	G	N9-C1'-C2'	5.40	121.02	114.00
21	A2	754	G	C1'-O4'-C4'	-5.40	105.58	109.90
21	A2	1265	G	O4'-C1'-C2'	5.40	112.46	107.60
67	B1	794	G	P-O3'-C3'	-5.40	113.22	119.70
67	B1	2598	C	C1'-O4'-C4'	-5.40	105.58	109.90
67	B1	2902	G	O4'-C1'-C2'	5.40	112.46	107.60
67	B1	2973	A	C1'-O4'-C4'	-5.40	105.58	109.90
67	B1	1430	A	O4'-C1'-C2'	-5.40	100.40	105.80
67	B1	1996	C	O4'-C4'-C3'	-5.40	98.60	104.00
67	B1	2045	C	P-O3'-C3'	-5.40	113.22	119.70
68	B3	50	G	C1'-O4'-C4'	5.40	114.22	109.90
14	AM	53	ASP	CB-CG-OD2	-5.40	113.44	118.30
15	AE	33	ARG	NE-CZ-NH1	5.40	123.00	120.30
21	A2	432	G	P-O3'-C3'	5.40	126.18	119.70
21	A2	434	A	C5'-C4'-O4'	5.40	115.58	109.10
21	A2	835	C	C1'-O4'-C4'	-5.40	105.58	109.90
21	A2	902	U	O4'-C1'-N1	5.40	112.52	108.20
21	A2	1288	C	C4'-C3'-C2'	-5.40	97.20	102.60
33	BC	109	TYR	CG-CD2-CE2	5.40	125.62	121.30
67	B1	383	C	N3-C4-N4	5.40	121.78	118.00
67	B1	2726	G	O4'-C1'-N9	5.40	112.52	108.20
67	B1	2854	A	C1'-O4'-C4'	-5.40	105.58	109.90
67	B1	3009	C	C1'-O4'-C4'	-5.40	105.58	109.90
21	A2	412	U	O4'-C1'-C2'	-5.40	100.40	105.80
21	A2	891	A	C5-C6-N6	-5.40	119.38	123.70
31	BY	27	ARG	CD-NE-CZ	5.40	131.15	123.60
67	B1	325	G	C1'-O4'-C4'	-5.40	105.58	109.90
67	B1	602	G	C3'-C2'-C1'	-5.40	97.18	101.50
67	B1	1970	G	O4'-C1'-N9	5.40	112.52	108.20
21	A2	1395	G	OP1-P-O3'	5.39	117.07	105.20
27	A0	64	G	N9-C1'-C2'	-5.39	106.06	112.00
48	BR	31	PHE	CB-CA-C	-5.39	99.61	110.40
56	BH	64	PHE	CB-CG-CD2	-5.39	117.02	120.80
62	BN	91	PHE	CB-CG-CD1	5.39	124.58	120.80
67	B1	74	A	O4'-C1'-C2'	-5.39	100.41	105.80
67	B1	1832	G	N9-C1'-C2'	5.39	121.01	114.00
67	B1	2654	C	O4'-C1'-N1	5.39	112.52	108.20
67	B1	2757	G	P-O3'-C3'	5.39	126.17	119.70
67	B1	2852	U	C4'-C3'-C2'	-5.39	97.20	102.60
68	B3	3	G	O4'-C1'-N9	5.39	112.52	108.20
21	A2	447	A	O4'-C1'-N9	5.39	112.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	955	G	O4'-C1'-C2'	5.39	112.45	107.60
21	A2	1337	A	O4'-C1'-C2'	-5.39	100.41	105.80
67	B1	344	G	O4'-C1'-C2'	5.39	112.45	107.60
67	B1	927	G	C5'-C4'-O4'	-5.39	102.63	109.10
67	B1	1075	G	C1'-O4'-C4'	5.39	114.21	109.90
67	B1	1437	C	N1-C1'-C2'	5.39	121.01	114.00
67	B1	2197	U	O5'-P-OP2	-5.39	100.85	105.70
21	A2	257	U	C3'-C2'-C1'	-5.39	97.19	101.50
23	AT	59	TYR	CB-CG-CD1	5.39	124.23	121.00
67	B1	679	U	O4'-C1'-N1	5.39	112.51	108.20
67	B1	2883	C	O4'-C1'-C2'	-5.39	100.41	105.80
67	B1	3000	U	O4'-C4'-C3'	-5.39	98.61	104.00
14	AM	115	VAL	N-CA-C	-5.39	96.45	111.00
21	A2	73	U	O4'-C4'-C3'	-5.39	98.61	104.00
21	A2	1040	A	O4'-C1'-N9	5.39	112.51	108.20
27	A0	28	C	O4'-C1'-C2'	-5.39	100.41	105.80
38	Bb	21	PRO	N-CA-CB	5.39	109.77	103.30
60	BS	7	TYR	CB-CA-C	-5.39	99.62	110.40
67	B1	3018	C	O4'-C1'-N1	5.39	112.51	108.20
21	A2	1322	C	C1'-O4'-C4'	-5.39	105.59	109.90
21	A2	170	C	P-O5'-C5'	-5.39	112.28	120.90
21	A2	231	G	N9-C1'-C2'	-5.39	106.08	112.00
21	A2	379	A	O4'-C1'-C2'	-5.39	100.41	105.80
21	A2	1438	A	OP1-P-OP2	-5.39	111.52	119.60
25	AH	45	PRO	N-CA-C	5.39	126.10	112.10
67	B1	897	U	C4'-C3'-C2'	5.39	107.99	102.60
67	B1	2050	U	P-O3'-C3'	5.39	126.16	119.70
67	B1	2139	A	C5-C6-N1	-5.39	115.01	117.70
67	B1	2575	U	N1-C1'-C2'	5.39	121.00	114.00
21	A2	89	G	C4'-C3'-C2'	-5.38	97.22	102.60
21	A2	714	G	P-O3'-C3'	-5.38	113.24	119.70
27	A0	6	C	C3'-C2'-C1'	-5.38	97.19	101.50
67	B1	731	C	N1-C1'-C2'	5.38	121.00	114.00
67	B1	2205	A	C1'-O4'-C4'	-5.38	105.59	109.90
67	B1	2522	C	P-O5'-C5'	5.38	129.51	120.90
67	B1	2676	A	C3'-C2'-C1'	5.38	105.81	101.50
14	AM	14	TRP	CB-CG-CD1	5.38	134.00	127.00
21	A2	1356	A	C3'-C2'-C1'	-5.38	97.19	101.50
67	B1	1491	U	C4'-C3'-C2'	-5.38	97.22	102.60
68	B3	118	G	P-O5'-C5'	5.38	129.51	120.90
21	A2	1173	A	OP1-P-OP2	-5.38	111.53	119.60
24	AA	178	TYR	CA-CB-CG	5.38	123.62	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	BY	112	ASN	N-CA-CB	5.38	120.29	110.60
38	Bb	126	LEU	CB-CA-C	-5.38	99.97	110.20
59	BM	128	PHE	CB-CG-CD1	-5.38	117.03	120.80
67	B1	337	G	C5'-C4'-C3'	-5.38	107.39	116.00
67	B1	720	C	P-O3'-C3'	-5.38	113.24	119.70
67	B1	1006	A	O4'-C1'-N9	5.38	112.51	108.20
67	B1	1411	G	O4'-C1'-C2'	5.38	112.44	107.60
67	B1	2416	G	O5'-P-OP2	-5.38	100.86	105.70
67	B1	2885	C	P-O3'-C3'	-5.38	113.24	119.70
67	B1	46	C	N3-C4-N4	5.38	121.77	118.00
67	B1	279	G	N9-C1'-C2'	5.38	120.99	114.00
67	B1	1475	G	C3'-C2'-C1'	5.38	105.80	101.50
67	B1	1528	A	OP1-P-OP2	-5.38	111.53	119.60
67	B1	2253	G	C4'-C3'-C2'	-5.38	97.22	102.60
67	B1	2948	A	O4'-C1'-N9	5.38	112.50	108.20
21	A2	716	G	O4'-C4'-C3'	-5.38	98.62	104.00
21	A2	1401	U	P-O5'-C5'	5.38	129.50	120.90
21	A2	1457	A	C1'-O4'-C4'	-5.38	105.60	109.90
56	BH	114	MET	CA-CB-CG	5.38	122.44	113.30
61	Bd	18	PRO	N-CD-CG	5.38	111.27	103.20
67	B1	751	U	P-O3'-C3'	-5.38	113.25	119.70
67	B1	1098	C	P-O5'-C5'	5.38	129.50	120.90
67	B1	1453	G	C4'-C3'-C2'	-5.38	97.22	102.60
67	B1	1807	G	C3'-C2'-C1'	5.38	105.80	101.50
67	B1	2045	C	O4'-C1'-C2'	-5.38	100.42	105.80
67	B1	2920	C	O4'-C1'-N1	-5.38	103.90	108.20
68	B3	19	G	N9-C1'-C2'	5.38	120.99	114.00
21	A2	148	C	O4'-C1'-C2'	-5.38	100.42	105.80
21	A2	186	U	O4'-C1'-C2'	-5.38	100.42	105.80
24	AA	157	PHE	CZ-CE2-CD2	-5.38	113.65	120.10
32	BO	69	ARG	NH1-CZ-NH2	-5.38	113.49	119.40
67	B1	732	G	O4'-C1'-N9	5.38	112.50	108.20
67	B1	1193	G	O4'-C1'-C2'	-5.38	100.42	105.80
67	B1	1434	C	O4'-C1'-N1	5.38	112.50	108.20
67	B1	2858	C	C4'-C3'-C2'	5.38	107.98	102.60
67	B1	3036	C	O4'-C1'-N1	5.38	112.50	108.20
21	A2	569	G	OP1-P-OP2	-5.38	111.54	119.60
67	B1	587	A	C5-C6-N1	-5.38	115.01	117.70
21	A2	187	C	N1-C1'-C2'	5.37	120.99	114.00
21	A2	527	A	N9-C1'-C2'	-5.37	106.09	112.00
24	AA	43	VAL	CA-CB-CG2	5.37	118.96	110.90
33	BC	138	ASN	N-CA-CB	5.37	120.27	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	630	G	N9-C1'-C2'	-5.37	106.09	112.00
67	B1	863	C	C3'-C2'-C1'	-5.37	97.20	101.50
67	B1	1543	C	C3'-C2'-C1'	5.37	105.80	101.50
67	B1	2065	C	C3'-C2'-C1'	5.37	105.80	101.50
67	B1	2506	G	OP1-P-O3'	5.37	117.02	105.20
67	B1	2604	G	C3'-C2'-C1'	-5.37	97.20	101.50
67	B1	3039	G	C1'-O4'-C4'	5.37	114.20	109.90
21	A2	652	C	C5'-C4'-C3'	-5.37	107.40	116.00
21	A2	669	A	C4'-C3'-C2'	-5.37	97.23	102.60
27	A0	75	C	P-O3'-C3'	-5.37	113.25	119.70
62	BN	43	PHE	CB-CG-CD2	-5.37	117.04	120.80
67	B1	1195	G	P-O3'-C3'	-5.37	113.25	119.70
67	B1	1661	A	C5-C6-N1	-5.37	115.02	117.70
11	A1	62	C	O4'-C1'-N1	5.37	112.50	108.20
21	A2	1164	A	O4'-C1'-C2'	5.37	112.43	107.60
67	B1	1972	C	C4'-C3'-C2'	-5.37	97.23	102.60
67	B1	2124	C	O4'-C1'-C2'	-5.37	100.43	105.80
19	AS	28	PHE	CG-CD2-CE2	5.37	126.71	120.80
21	A2	892	C	N3-C4-N4	5.37	121.76	118.00
21	A2	1225	C	O4'-C1'-N1	5.37	112.50	108.20
30	AU	45	PRO	N-CA-CB	5.37	109.74	103.30
67	B1	2302	C	O4'-C1'-C2'	-5.37	100.43	105.80
67	B1	2411	C	O4'-C1'-C2'	-5.37	100.43	105.80
67	B1	3045	G	C1'-O4'-C4'	5.37	114.19	109.90
11	A1	9	A	O4'-C1'-C2'	-5.37	100.43	105.80
21	A2	75	C	O4'-C1'-C2'	-5.37	100.44	105.80
21	A2	190	C	N1-C1'-C2'	5.37	120.98	114.00
21	A2	1093	C	C1'-O4'-C4'	5.37	114.19	109.90
37	BU	5	SER	N-CA-CB	5.37	118.55	110.50
53	BD	22	PHE	O-C-N	-5.37	114.12	122.70
67	B1	459	C	C5'-C4'-C3'	5.37	124.58	116.00
67	B1	2732	U	C3'-C2'-C1'	-5.37	97.21	101.50
67	B1	2852	U	C1'-O4'-C4'	5.37	114.19	109.90
67	B1	2980	G	C3'-C2'-C1'	-5.37	97.21	101.50
2	AK	75	ALA	O-C-N	5.36	131.28	122.70
21	A2	141	C	O4'-C1'-C2'	-5.36	100.44	105.80
67	B1	319	A	O4'-C4'-C3'	-5.36	98.64	104.00
67	B1	735	A	C5'-C4'-C3'	-5.36	107.42	116.00
67	B1	765	G	C4'-C3'-C2'	-5.36	97.24	102.60
67	B1	2381	A	N9-C1'-C2'	5.36	120.97	114.00
30	AU	39	ARG	NH1-CZ-NH2	5.36	125.30	119.40
67	B1	259	A	O4'-C1'-C2'	-5.36	100.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	738	C	C3'-C2'-C1'	5.36	105.79	101.50
21	A2	265	C	OP1-P-OP2	-5.36	111.56	119.60
27	A0	39	U	O4'-C1'-C2'	-5.36	100.44	105.80
61	Bd	52	VAL	N-CA-CB	-5.36	99.70	111.50
62	BN	103	ARG	CA-CB-CG	5.36	125.19	113.40
67	B1	285	C	C5'-C4'-O4'	-5.36	102.67	109.10
67	B1	1603	G	O4'-C1'-N9	-5.36	103.91	108.20
67	B1	1704	C	O3'-P-O5'	5.36	114.18	104.00
67	B1	1746	C	N1-C1'-C2'	5.36	120.97	114.00
67	B1	2300	C	O4'-C1'-C2'	-5.36	100.44	105.80
67	B1	2985	U	O4'-C1'-C2'	-5.36	100.44	105.80
59	BM	98	TRP	CB-CG-CD1	5.36	133.97	127.00
67	B1	161	C	N1-C1'-C2'	5.36	120.97	114.00
21	A2	140	C	O4'-C1'-C2'	5.36	112.42	107.60
21	A2	869	U	P-O3'-C3'	-5.36	113.27	119.70
21	A2	952	A	C5'-C4'-C3'	5.36	124.57	116.00
27	A0	22	G	O4'-C1'-N9	-5.36	103.91	108.20
67	B1	1395	G	C1'-O4'-C4'	-5.36	105.61	109.90
67	B1	2820	C	N1-C1'-C2'	5.36	120.96	114.00
20	A3	79	TYR	CG-CD1-CE1	-5.36	117.02	121.30
21	A2	1260	G	C1'-O4'-C4'	-5.36	105.62	109.90
25	AH	174	TYR	CB-CG-CD1	-5.36	117.79	121.00
67	B1	8	G	P-O3'-C3'	5.36	126.13	119.70
67	B1	513	C	C4'-C3'-C2'	5.36	107.95	102.60
67	B1	1180	G	C1'-O4'-C4'	-5.36	105.61	109.90
67	B1	1384	C	N1-C1'-C2'	5.36	120.96	114.00
67	B1	2024	A	C3'-C2'-C1'	5.36	105.78	101.50
68	B3	114	G	O4'-C1'-N9	5.36	112.48	108.20
21	A2	716	G	N9-C1'-C2'	5.35	120.96	114.00
51	Bj	89	PHE	CB-CG-CD1	5.35	124.55	120.80
62	BN	103	ARG	NE-CZ-NH1	-5.35	117.62	120.30
67	B1	84	A	O3'-P-O5'	5.35	114.17	104.00
67	B1	329	G	O4'-C1'-N9	5.35	112.48	108.20
21	A2	437	A	C1'-O4'-C4'	-5.35	105.62	109.90
24	AA	88	ALA	CB-CA-C	5.35	118.13	110.10
67	B1	5	U	O5'-P-OP1	-5.35	100.88	105.70
67	B1	870	G	O4'-C1'-N9	5.35	112.48	108.20
67	B1	2041	U	O4'-C1'-C2'	-5.35	100.45	105.80
67	B1	2784	A	C3'-C2'-C1'	5.35	105.78	101.50
42	BT	28	PHE	CD1-CE1-CZ	-5.35	113.68	120.10
53	BD	35	VAL	CA-CB-CG1	5.35	118.93	110.90
21	A2	838	C	N1-C1'-C2'	5.35	120.95	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	890	C	N3-C4-C5	-5.35	119.76	121.90
21	A2	1310	C	C1'-O4'-C4'	-5.35	105.62	109.90
32	BO	129	LEU	CB-CA-C	-5.35	100.04	110.20
62	BN	165	TYR	CG-CD1-CE1	-5.35	117.02	121.30
67	B1	802	G	P-O3'-C3'	-5.35	113.28	119.70
67	B1	2164	G	O4'-C1'-N9	5.35	112.48	108.20
67	B1	2269	C	C3'-C2'-C1'	5.35	105.78	101.50
11	A1	19	G	O4'-C1'-C2'	5.35	112.41	107.60
21	A2	529	C	C3'-C2'-C1'	5.35	105.78	101.50
24	AA	156	ASP	CB-CG-OD1	5.35	123.11	118.30
62	BN	115	PRO	N-CA-CB	5.35	109.72	103.30
63	Bg	44	LYS	CB-CG-CD	5.35	125.50	111.60
67	B1	794	G	N9-C1'-C2'	5.35	120.95	114.00
67	B1	1408	G	C1'-O4'-C4'	-5.35	105.62	109.90
67	B1	2769	U	O4'-C1'-N1	5.35	112.48	108.20
67	B1	2817	U	C3'-C2'-C1'	5.35	105.78	101.50
68	B3	23	A	C3'-C2'-C1'	5.35	105.78	101.50
12	AN	88	CYS	CA-CB-SG	-5.35	104.38	114.00
43	Bk	54	VAL	CG1-CB-CG2	5.35	119.45	110.90
67	B1	1350	C	O4'-C1'-N1	5.35	112.48	108.20
67	B1	1654	G	N9-C1'-C2'	-5.35	106.12	112.00
67	B1	1996	C	P-O3'-C3'	-5.35	113.28	119.70
67	B1	2231	G	C5'-C4'-C3'	-5.35	107.45	116.00
20	A3	36	THR	CA-CB-CG2	-5.34	104.92	112.40
21	A2	134	A	C1'-O4'-C4'	5.34	114.18	109.90
21	A2	145	A	C3'-C2'-C1'	5.34	105.78	101.50
21	A2	446	G	O4'-C1'-N9	5.34	112.47	108.20
21	A2	520	G	O4'-C1'-C2'	-5.34	100.45	105.80
21	A2	556	G	C3'-C2'-C1'	-5.34	97.22	101.50
21	A2	596	A	N9-C1'-C2'	5.34	120.95	114.00
32	BO	66	GLU	N-CA-CB	5.34	120.22	110.60
67	B1	230	A	C1'-O4'-C4'	5.34	114.17	109.90
67	B1	841	U	C1'-O4'-C4'	-5.34	105.62	109.90
67	B1	1218	C	N1-C1'-C2'	5.34	120.95	114.00
67	B1	1225	A	O3'-P-O5'	-5.34	93.85	104.00
67	B1	1389	A	C1'-O4'-C4'	5.34	114.18	109.90
67	B1	1640	G	N9-C1'-C2'	5.34	120.95	114.00
67	B1	2550	A	C1'-O4'-C4'	5.34	114.18	109.90
67	B1	2719	G	C4'-C3'-C2'	-5.34	97.25	102.60
67	B1	2750	C	C4'-C3'-C2'	5.34	107.94	102.60
21	A2	253	G	N9-C1'-C2'	-5.34	106.12	112.00
21	A2	458	G	N3-C2-N2	5.34	123.64	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	BC	34	THR	CA-CB-OG1	5.34	120.22	109.00
67	B1	1236	C	C5'-C4'-C3'	5.34	124.55	116.00
67	B1	2592	U	O4'-C1'-C2'	5.34	112.41	107.60
68	B3	120	C	C3'-C2'-C1'	5.34	105.77	101.50
11	A1	1	G	C1'-O4'-C4'	-5.34	105.63	109.90
21	A2	50	C	OP1-P-OP2	-5.34	111.59	119.60
21	A2	1049	U	O4'-C1'-C2'	-5.34	100.46	105.80
28	AV	58	SER	N-CA-CB	5.34	118.51	110.50
61	Bd	10	TRP	N-CA-C	-5.34	96.58	111.00
62	BN	125	ARG	NH1-CZ-NH2	-5.34	113.52	119.40
67	B1	100	C	O4'-C1'-C2'	-5.34	100.46	105.80
67	B1	1154	A	C3'-C2'-C1'	-5.34	97.23	101.50
67	B1	1294	A	O4'-C1'-C2'	-5.34	100.46	105.80
67	B1	1584	G	N9-C1'-C2'	5.34	120.94	114.00
67	B1	1695	G	O4'-C1'-N9	5.34	112.47	108.20
67	B1	1713	G	O5'-C5'-C4'	-5.34	101.55	111.70
67	B1	1762	G	P-O3'-C3'	5.34	126.11	119.70
12	AN	123	ARG	NE-CZ-NH1	5.34	122.97	120.30
21	A2	339	U	O4'-C1'-C2'	-5.34	100.46	105.80
21	A2	579	U	O4'-C4'-C3'	-5.34	98.66	104.00
21	A2	822	A	N9-C1'-C2'	5.34	120.94	114.00
21	A2	1122	C	O4'-C1'-N1	5.34	112.47	108.20
67	B1	1516	C	O4'-C1'-C2'	-5.34	100.46	105.80
67	B1	2062	A	O4'-C1'-C2'	5.34	112.41	107.60
67	B1	2679	A	N9-C1'-C2'	5.34	120.94	114.00
67	B1	3013	U	O4'-C1'-C2'	-5.34	100.46	105.80
68	B3	52	U	O4'-C1'-C2'	5.34	112.41	107.60
14	AM	46	MET	CG-SD-CE	-5.34	91.66	100.20
21	A2	103	A	C1'-O4'-C4'	5.34	114.17	109.90
1	AQ	120	ARG	CA-CB-CG	5.34	125.14	113.40
15	AE	128	ARG	N-CA-CB	5.34	120.20	110.60
21	A2	142	G	O4'-C4'-C3'	-5.34	98.66	104.00
28	AV	35	ASP	CB-CG-OD2	-5.34	113.50	118.30
29	AL	95	THR	N-CA-CB	5.34	120.44	110.30
67	B1	379	U	O4'-C1'-C2'	-5.34	100.46	105.80
67	B1	513	C	C3'-C2'-C1'	5.34	105.77	101.50
67	B1	590	A	O4'-C1'-N9	5.34	112.47	108.20
67	B1	764	G	OP1-P-OP2	-5.34	111.60	119.60
67	B1	923	A	OP1-P-OP2	-5.34	111.60	119.60
67	B1	2375	C	C3'-C2'-C1'	5.34	105.77	101.50
67	B1	2710	G	C3'-C2'-C1'	-5.34	97.23	101.50
10	AD	22	ARG	NE-CZ-NH1	-5.33	117.63	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A3	99	VAL	CA-CB-CG1	5.33	118.90	110.90
32	BO	14	ARG	NE-CZ-NH2	-5.33	117.63	120.30
67	B1	723	A	N9-C1'-C2'	5.33	120.94	114.00
67	B1	1605	A	N9-C1'-C2'	-5.33	106.13	112.00
67	B1	2604	G	O4'-C1'-C2'	5.33	112.40	107.60
67	B1	2840	C	O4'-C1'-C2'	-5.33	100.47	105.80
17	AO	7	ILE	O-C-N	-5.33	114.17	122.70
21	A2	857	C	O4'-C1'-N1	-5.33	103.93	108.20
21	A2	1202	G	N9-C1'-C2'	5.33	120.93	114.00
21	A2	1369	C	O4'-C1'-C2'	-5.33	100.47	105.80
67	B1	46	C	N3-C4-C5	-5.33	119.77	121.90
67	B1	483	C	C4'-C3'-C2'	-5.33	97.27	102.60
67	B1	1138	C	C1'-O4'-C4'	-5.33	105.63	109.90
67	B1	1934	C	O4'-C1'-N1	-5.33	103.93	108.20
67	B1	2564	U	P-O3'-C3'	-5.33	113.30	119.70
67	B1	2886	C	O4'-C1'-C2'	-5.33	100.47	105.80
68	B3	122	C	C3'-C2'-C1'	-5.33	97.23	101.50
5	AW	43	THR	N-CA-C	-5.33	96.61	111.00
15	AE	123	LYS	N-CA-C	-5.33	96.61	111.00
21	A2	307	G	O4'-C1'-C2'	5.33	112.40	107.60
21	A2	465	C	C1'-O4'-C4'	-5.33	105.64	109.90
21	A2	604	C	C5'-C4'-O4'	5.33	115.50	109.10
21	A2	1442	G	O4'-C1'-N9	5.33	112.47	108.20
41	Ba	59	TRP	CB-CG-CD2	-5.33	119.67	126.60
34	BK	17	ARG	C-N-CA	5.33	135.03	121.70
49	BQ	54	PRO	N-CA-CB	5.33	109.70	103.30
53	BD	91	ARG	CA-C-N	-5.33	105.47	117.20
67	B1	521	C	C4'-C3'-C2'	5.33	107.93	102.60
67	B1	1503	C	P-O5'-C5'	-5.33	112.37	120.90
67	B1	1563	G	OP1-P-OP2	-5.33	111.60	119.60
67	B1	1989	G	N9-C1'-C2'	5.33	120.93	114.00
67	B1	2514	C	C4'-C3'-C2'	-5.33	97.27	102.60
21	A2	1188	C	N1-C1'-C2'	5.33	120.93	114.00
27	A0	8	U	N1-C1'-C2'	5.33	120.93	114.00
62	BN	153	ALA	N-CA-CB	5.33	117.56	110.10
67	B1	1210	G	O4'-C1'-C2'	5.33	112.40	107.60
67	B1	1894	A	O4'-C1'-C2'	-5.33	100.47	105.80
13	AX	2	ALA	N-CA-CB	5.33	117.56	110.10
21	A2	984	C	N3-C4-N4	5.33	121.73	118.00
53	BD	49	ASP	CB-CG-OD1	5.33	123.10	118.30
67	B1	1570	C	C3'-C2'-C1'	-5.33	97.24	101.50
67	B1	1611	C	C4'-C3'-C2'	-5.33	97.27	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2838	U	O4'-C4'-C3'	5.33	110.36	106.10
67	B1	2966	C	P-O3'-C3'	-5.33	113.31	119.70
10	AD	70	ARG	NE-CZ-NH2	-5.33	117.64	120.30
41	Ba	37	GLU	N-CA-CB	5.33	120.19	110.60
59	BM	174	ASN	N-CA-CB	5.33	120.19	110.60
7	AB	33	TYR	CD1-CE1-CZ	-5.33	115.01	119.80
21	A2	1089	C	C3'-C2'-C1'	5.33	105.76	101.50
33	BC	299	GLU	CA-CB-CG	5.33	125.12	113.40
53	BD	91	ARG	CB-CA-C	5.33	121.05	110.40
57	BZ	90	GLU	N-CA-C	-5.33	96.62	111.00
67	B1	276	G	P-O3'-C3'	5.33	126.09	119.70
67	B1	1735	G	N9-C1'-C2'	-5.33	106.14	112.00
67	B1	1772	A	O3'-P-O5'	-5.33	93.88	104.00
67	B1	2519	C	P-O3'-C3'	-5.33	113.31	119.70
68	B3	92	G	O4'-C1'-C2'	5.33	112.39	107.60
20	A3	94	VAL	C-N-CA	5.32	135.01	121.70
52	BB	71	ILE	N-CA-C	-5.32	96.63	111.00
66	B1	62	PRO	N-CA-CB	5.32	109.69	103.30
67	B1	681	C	C1'-O4'-C4'	-5.32	105.64	109.90
67	B1	1041	U	C1'-O4'-C4'	5.32	114.16	109.90
67	B1	1270	G	O4'-C1'-N9	-5.32	103.94	108.20
67	B1	1397	U	O4'-C4'-C3'	-5.32	98.68	104.00
67	B1	1600	G	OP1-P-OP2	-5.32	111.61	119.60
67	B1	1864	G	C4'-C3'-C2'	5.32	107.92	102.60
67	B1	2135	C	O4'-C1'-N1	5.32	112.46	108.20
67	B1	2764	G	OP2-P-O3'	5.32	116.91	105.20
67	B1	2808	C	O4'-C1'-C2'	-5.32	100.48	105.80
1	AQ	25	TRP	NE1-CE2-CZ2	5.32	136.25	130.40
21	A2	897	A	O4'-C1'-C2'	-5.32	100.48	105.80
67	B1	9	A	C5-C6-N1	-5.32	115.04	117.70
67	B1	1331	U	C1'-O4'-C4'	-5.32	105.64	109.90
67	B1	2241	U	C1'-O4'-C4'	5.32	114.16	109.90
21	A2	908	G	C3'-C2'-C1'	-5.32	97.24	101.50
21	A2	956	C	O4'-C4'-C3'	-5.32	98.68	104.00
21	A2	1055	C	O4'-C1'-N1	5.32	112.46	108.20
67	B1	320	C	C3'-C2'-C1'	5.32	105.76	101.50
67	B1	1145	G	C2'-C3'-O3'	5.32	122.21	113.70
67	B1	1266	A	P-O5'-C5'	5.32	129.41	120.90
67	B1	2752	U	N1-C1'-C2'	5.32	120.92	114.00
54	BF	18	GLU	OE1-CD-OE2	5.32	129.68	123.30
67	B1	2399	C	P-O3'-C3'	-5.32	113.32	119.70
1	AQ	112	HIS	N-CA-C	5.32	125.36	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	710	G	O4'-C4'-C3'	-5.32	98.68	104.00
21	A2	1488	C	O4'-C1'-C2'	-5.32	100.48	105.80
22	AY	12	ASP	CB-CG-OD2	-5.32	113.52	118.30
24	AA	138	ARG	NH1-CZ-NH2	-5.32	113.55	119.40
67	B1	141	C	C3'-C2'-C1'	5.32	105.75	101.50
67	B1	282	G	P-O3'-C3'	-5.32	113.32	119.70
67	B1	989	G	C5'-C4'-C3'	5.32	124.51	116.00
67	B1	1067	G	C1'-O4'-C4'	-5.32	105.65	109.90
67	B1	1542	U	O4'-C1'-C2'	-5.32	100.48	105.80
67	B1	1587	A	C5'-C4'-C3'	-5.32	107.49	116.00
67	B1	1881	A	C5-C6-N1	-5.32	115.04	117.70
67	B1	2431	C	P-O3'-C3'	5.32	126.08	119.70
21	A2	1328	G	C4'-C3'-C2'	-5.32	97.28	102.60
21	A2	1334	A	O4'-C1'-N9	5.32	112.45	108.20
67	B1	1017	A	O4'-C1'-N9	5.32	112.45	108.20
67	B1	1661	A	O4'-C1'-N9	5.32	112.45	108.20
67	B1	2333	G	C4'-C3'-C2'	-5.32	97.28	102.60
21	A2	148	C	C3'-C2'-C1'	5.31	105.75	101.50
21	A2	1280	C	O4'-C1'-N1	5.31	112.45	108.20
67	B1	1635	G	P-O3'-C3'	5.31	126.08	119.70
67	B1	1880	A	C5-C6-N6	-5.31	119.45	123.70
67	B1	2102	A	C1'-O4'-C4'	-5.31	105.65	109.90
21	A2	415	C	O4'-C4'-C3'	-5.31	98.69	104.00
21	A2	1201	G	O4'-C1'-N9	5.31	112.45	108.20
21	A2	1217	C	C1'-O4'-C4'	-5.31	105.65	109.90
29	AL	9	ALA	CB-CA-C	5.31	118.07	110.10
67	B1	110	A	O4'-C1'-N9	5.31	112.45	108.20
67	B1	705	G	O4'-C1'-N9	-5.31	103.95	108.20
67	B1	717	A	C4'-C3'-C2'	-5.31	97.29	102.60
67	B1	1268	A	O4'-C1'-C2'	-5.31	100.49	105.80
67	B1	1947	A	C1'-O4'-C4'	-5.31	105.65	109.90
67	B1	2648	C	O4'-C1'-C2'	-5.31	100.49	105.80
67	B1	2747	C	N3-C4-C5	-5.31	119.78	121.90
3	AI	121	ILE	N-CA-C	-5.31	96.66	111.00
21	A2	1192	C	C1'-O4'-C4'	5.31	114.15	109.90
63	Bg	10	ARG	NE-CZ-NH2	-5.31	117.64	120.30
67	B1	589	G	O4'-C1'-N9	5.31	112.45	108.20
67	B1	1391	C	O4'-C1'-N1	5.31	112.45	108.20
67	B1	1606	C	N1-C1'-C2'	5.31	120.90	114.00
67	B1	1718	C	N3-C4-N4	5.31	121.72	118.00
67	B1	2289	A	C5'-C4'-O4'	5.31	115.47	109.10
67	B1	2510	A	O4'-C1'-N9	-5.31	103.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	299	G	C3'-C2'-C1'	-5.31	97.25	101.50
36	Bf	38	HIS	CA-CB-CG	-5.31	104.58	113.60
67	B1	304	G	C3'-C2'-C1'	5.31	105.75	101.50
67	B1	1520	G	O4'-C1'-N9	5.31	112.45	108.20
67	B1	1745	U	O4'-C1'-N1	-5.31	103.95	108.20
67	B1	1899	C	P-O3'-C3'	5.31	126.07	119.70
67	B1	2439	G	C1'-O4'-C4'	-5.31	105.65	109.90
31	BY	27	ARG	C-N-CA	5.31	134.97	121.70
53	BD	8	LEU	CB-CG-CD2	5.31	120.02	111.00
67	B1	936	G	C1'-O4'-C4'	-5.31	105.66	109.90
67	B1	1191	C	N1-C1'-C2'	5.31	120.90	114.00
67	B1	1449	C	N1-C1'-C2'	5.31	120.90	114.00
67	B1	1760	C	C1'-O4'-C4'	-5.31	105.66	109.90
67	B1	1884	C	P-O3'-C3'	-5.31	113.33	119.70
67	B1	2304	C	C5'-C4'-C3'	5.31	124.49	116.00
67	B1	2344	G	C3'-C2'-C1'	5.31	105.75	101.50
21	A2	805	C	N1-C1'-C2'	5.30	120.90	114.00
21	A2	998	A	O4'-C1'-N9	5.30	112.44	108.20
21	A2	1395	G	P-O5'-C5'	5.30	129.39	120.90
33	BC	321	PHE	CB-CG-CD1	-5.30	117.09	120.80
67	B1	998	G	C5'-C4'-O4'	5.30	115.47	109.10
67	B1	1131	G	N9-C1'-C2'	5.30	120.89	114.00
67	B1	1450	C	P-O3'-C3'	-5.30	113.34	119.70
67	B1	1458	C	O4'-C1'-N1	5.30	112.44	108.20
67	B1	1978	A	O4'-C1'-N9	5.30	112.44	108.20
67	B1	2665	G	O4'-C4'-C3'	-5.30	98.69	104.00
21	A2	1330	G	N9-C1'-C2'	-5.30	106.17	112.00
36	Bf	15	LYS	CG-CD-CE	5.30	127.81	111.90
58	BP	55	TYR	CG-CD1-CE1	-5.30	117.06	121.30
67	B1	703	G	C5'-C4'-C3'	5.30	124.48	116.00
1	AQ	73	ASN	CA-CB-CG	-5.30	101.74	113.40
17	AO	53	TYR	N-CA-C	-5.30	96.69	111.00
66	B1	69	VAL	CA-CB-CG1	5.30	118.85	110.90
67	B1	221	G	C5'-C4'-O4'	5.30	115.46	109.10
67	B1	422	G	C1'-O4'-C4'	5.30	114.14	109.90
67	B1	661	G	C3'-C2'-C1'	5.30	105.74	101.50
67	B1	2481	G	C4'-C3'-C2'	-5.30	97.30	102.60
67	B1	2872	G	C1'-O4'-C4'	5.30	114.14	109.90
2	AK	43	PHE	CB-CG-CD1	5.30	124.51	120.80
21	A2	830	A	O4'-C1'-N9	-5.30	103.96	108.20
21	A2	834	C	OP1-P-OP2	-5.30	111.65	119.60
54	BF	133	ARG	NE-CZ-NH2	5.30	122.95	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	332	A	C5-C6-N1	-5.30	115.05	117.70
67	B1	576	G	O4'-C1'-N9	5.30	112.44	108.20
67	B1	713	C	P-O3'-C3'	-5.30	113.34	119.70
67	B1	818	A	OP1-P-OP2	-5.30	111.65	119.60
67	B1	1043	U	P-O5'-C5'	-5.30	112.42	120.90
67	B1	1251	G	C5'-C4'-O4'	5.30	115.46	109.10
67	B1	1479	U	O4'-C1'-C2'	-5.30	100.50	105.80
67	B1	1489	G	C5'-C4'-O4'	5.30	115.46	109.10
67	B1	1634	A	C1'-O4'-C4'	-5.30	105.66	109.90
67	B1	2579	G	C4'-C3'-C2'	-5.30	97.30	102.60
68	B3	36	U	N1-C1'-C2'	5.30	120.89	114.00
6	AC	1	MET	CA-CB-CG	5.30	122.31	113.30
20	A3	45	ARG	NE-CZ-NH1	5.30	122.95	120.30
28	AV	68	TYR	CB-CG-CD2	-5.30	117.82	121.00
67	B1	2588	C	O4'-C1'-C2'	-5.30	100.50	105.80
16	AJ	53	ARG	NH1-CZ-NH2	-5.30	113.58	119.40
21	A2	73	U	C4'-C3'-C2'	5.30	107.90	102.60
21	A2	546	G	O5'-P-OP2	5.30	117.06	110.70
21	A2	634	C	OP1-P-OP2	-5.30	111.66	119.60
21	A2	1492	U	O4'-C1'-C2'	-5.30	100.50	105.80
49	BQ	38	ARG	CB-CA-C	-5.30	99.81	110.40
50	BV	3	ARG	NE-CZ-NH2	5.30	122.95	120.30
57	BZ	5	PHE	CG-CD2-CE2	-5.30	114.97	120.80
67	B1	354	G	C1'-O4'-C4'	-5.30	105.66	109.90
67	B1	383	C	N3-C4-C5	-5.30	119.78	121.90
67	B1	1315	U	P-O3'-C3'	-5.30	113.34	119.70
67	B1	1704	C	C1'-O4'-C4'	-5.30	105.66	109.90
67	B1	2812	U	C5'-C4'-C3'	-5.30	107.53	116.00
21	A2	892	C	N3-C4-C5	-5.29	119.78	121.90
21	A2	1412	A	O4'-C1'-C2'	-5.29	100.50	105.80
67	B1	91	G	O4'-C1'-N9	5.29	112.44	108.20
67	B1	317	A	O4'-C1'-N9	5.29	112.44	108.20
67	B1	545	G	P-O5'-C5'	-5.29	112.43	120.90
67	B1	667	C	O4'-C1'-N1	5.29	112.44	108.20
67	B1	1443	G	O4'-C1'-N9	5.29	112.44	108.20
21	A2	414	G	C1'-O4'-C4'	5.29	114.14	109.90
21	A2	941	C	O4'-C1'-N1	-5.29	103.96	108.20
41	Ba	24	ARG	CB-CA-C	5.29	120.99	110.40
52	BB	114	ILE	N-CA-C	-5.29	96.71	111.00
54	BF	155	GLU	OE1-CD-OE2	5.29	129.65	123.30
67	B1	140	C	P-O3'-C3'	5.29	126.05	119.70
67	B1	823	G	O4'-C1'-C2'	5.29	112.36	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1658	A	C5-C6-N6	-5.29	119.47	123.70
67	B1	2157	U	P-O3'-C3'	5.29	126.05	119.70
11	A1	15	G	N9-C1'-C2'	-5.29	106.18	112.00
18	AF	129	GLY	N-CA-C	-5.29	99.87	113.10
21	A2	11	A	O4'-C1'-N9	-5.29	103.97	108.20
21	A2	966	G	C5'-C4'-O4'	5.29	115.45	109.10
21	A2	1053	A	N9-C1'-C2'	5.29	120.88	114.00
25	AH	211	ALA	N-CA-CB	5.29	117.51	110.10
27	A0	75	C	O4'-C1'-C2'	-5.29	100.51	105.80
62	BN	125	ARG	O-C-N	5.29	131.16	122.70
67	B1	886	G	C3'-C2'-C1'	-5.29	97.27	101.50
67	B1	1454	G	P-O5'-C5'	-5.29	112.44	120.90
67	B1	1703	G	C1'-O4'-C4'	-5.29	105.67	109.90
67	B1	1718	C	N3-C4-C5	-5.29	119.78	121.90
67	B1	1911	G	C5'-C4'-C3'	5.29	124.47	116.00
67	B1	2696	G	C4'-C3'-C2'	5.29	107.89	102.60
21	A2	891	A	C5-C6-N1	-5.29	115.06	117.70
22	AY	11	LYS	N-CA-CB	5.29	120.12	110.60
46	BA	14	GLU	OE1-CD-OE2	-5.29	116.95	123.30
67	B1	615	A	OP1-P-OP2	-5.29	111.66	119.60
67	B1	1024	G	C5'-C4'-O4'	5.29	115.45	109.10
67	B1	2548	A	O4'-C4'-C3'	-5.29	98.71	104.00
68	B3	83	C	N1-C1'-C2'	-5.29	106.18	112.00
18	AF	217	MET	CA-C-O	-5.29	108.99	120.10
21	A2	1211	A	N9-C1'-C2'	-5.29	106.18	112.00
49	BQ	8	ARG	NE-CZ-NH2	-5.29	117.66	120.30
62	BN	9	ASP	CB-CG-OD1	-5.29	113.54	118.30
67	B1	70	G	O4'-C4'-C3'	-5.29	98.71	104.00
67	B1	2946	C	P-O3'-C3'	5.29	126.05	119.70
68	B3	38	U	C3'-C2'-C1'	5.29	105.73	101.50
21	A2	534	G	O4'-C4'-C3'	5.29	110.33	106.10
67	B1	558	C	OP1-P-OP2	-5.29	111.67	119.60
67	B1	675	G	C4'-C3'-C2'	-5.29	97.31	102.60
67	B1	1950	G	P-O3'-C3'	-5.29	113.36	119.70
67	B1	2037	A	O4'-C4'-C3'	-5.29	98.71	104.00
67	B1	2266	C	OP1-P-OP2	-5.29	111.67	119.60
67	B1	2856	G	C3'-C2'-C1'	-5.29	97.27	101.50
17	AO	73	GLY	O-C-N	5.29	131.16	122.70
21	A2	746	A	O3'-P-O5'	5.29	114.04	104.00
56	BH	129	THR	CB-CA-C	-5.29	97.33	111.60
67	B1	1754	A	P-O3'-C3'	-5.29	113.36	119.70
67	B1	2024	A	O4'-C1'-N9	5.29	112.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2598	C	OP1-P-OP2	-5.29	111.67	119.60
67	B1	2876	G	P-O5'-C5'	5.29	129.35	120.90
67	B1	2955	G	O5'-P-OP2	-5.29	100.94	105.70
21	A2	105	C	C5'-C4'-C3'	5.28	124.45	116.00
21	A2	450	A	C5-C6-N6	-5.28	119.47	123.70
36	Bf	27	VAL	CG1-CB-CG2	5.28	119.35	110.90
40	BE	101	ARG	CB-CA-C	5.28	120.97	110.40
53	BD	243	THR	N-CA-C	-5.28	96.74	111.00
67	B1	2314	U	C5'-C4'-O4'	5.28	115.44	109.10
64	Bc	12	ARG	NE-CZ-NH2	-5.28	117.66	120.30
67	B1	525	C	O4'-C1'-N1	5.28	112.42	108.20
67	B1	1551	G	O4'-C1'-C2'	-5.28	100.52	105.80
67	B1	1568	A	C5'-C4'-O4'	-5.28	102.76	109.10
21	A2	212	G	N9-C1'-C2'	5.28	120.87	114.00
21	A2	633	C	O4'-C1'-C2'	-5.28	100.52	105.80
21	A2	654	U	O5'-C5'-C4'	-5.28	101.67	111.70
21	A2	1344	U	P-O5'-C5'	-5.28	112.45	120.90
31	BY	13	VAL	CB-CA-C	-5.28	101.37	111.40
33	BC	294	LYS	O-C-N	5.28	131.15	122.70
65	BJ	100	GLU	CB-CA-C	-5.28	99.84	110.40
67	B1	47	C	N3-C4-N4	5.28	121.70	118.00
67	B1	376	C	N3-C4-C5	-5.28	119.79	121.90
67	B1	1006	A	C5-C6-N6	-5.28	119.48	123.70
67	B1	1658	A	O4'-C1'-N9	5.28	112.42	108.20
67	B1	1786	G	C4'-C3'-C2'	-5.28	97.32	102.60
67	B1	1751	G	C5'-C4'-C3'	5.28	124.45	116.00
67	B1	1790	G	N9-C1'-C2'	5.28	120.86	114.00
67	B1	2760	A	C1'-O4'-C4'	5.28	114.12	109.90
40	BE	173	VAL	CA-CB-CG1	-5.28	102.98	110.90
43	Bk	110	ALA	CB-CA-C	-5.28	102.18	110.10
67	B1	494	C	O4'-C1'-C2'	-5.28	100.52	105.80
67	B1	1460	C	N1-C1'-C2'	5.28	120.86	114.00
67	B1	1698	G	C3'-C2'-C1'	-5.28	97.28	101.50
67	B1	2213	G	C3'-C2'-C1'	-5.28	97.28	101.50
67	B1	2783	C	O4'-C1'-C2'	-5.28	100.52	105.80
67	B1	2874	C	P-O3'-C3'	5.28	126.03	119.70
21	A2	1020	G	O5'-P-OP2	5.28	117.03	110.70
25	AH	83	GLY	N-CA-C	5.28	126.29	113.10
50	BV	63	ARG	NE-CZ-NH2	5.28	122.94	120.30
60	BS	40	ARG	NE-CZ-NH2	5.28	122.94	120.30
67	B1	620	G	C3'-C2'-C1'	-5.28	97.28	101.50
67	B1	1276	G	C1'-O4'-C4'	-5.28	105.68	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2268	C	P-O3'-C3'	-5.28	113.37	119.70
21	A2	530	G	C1'-O4'-C4'	-5.27	105.68	109.90
21	A2	660	C	C5'-C4'-C3'	5.27	124.44	116.00
53	BD	129	ALA	CB-CA-C	-5.27	102.19	110.10
67	B1	526	C	C3'-C2'-C1'	5.27	105.72	101.50
67	B1	1306	A	C4'-C3'-C2'	-5.27	97.33	102.60
67	B1	1323	U	P-O3'-C3'	-5.27	113.37	119.70
67	B1	2600	C	O4'-C1'-N1	5.27	112.42	108.20
67	B1	2829	C	O4'-C1'-C2'	-5.27	100.53	105.80
21	A2	497	C	C1'-O4'-C4'	-5.27	105.68	109.90
21	A2	1196	A	C1'-O4'-C4'	-5.27	105.68	109.90
67	B1	493	A	P-O3'-C3'	5.27	126.03	119.70
67	B1	846	C	O4'-C1'-N1	5.27	112.42	108.20
67	B1	986	G	O4'-C1'-N9	5.27	112.42	108.20
67	B1	2735	C	O4'-C1'-N1	-5.27	103.98	108.20
67	B1	2888	G	OP1-P-OP2	-5.27	111.69	119.60
21	A2	565	C	O4'-C1'-C2'	-5.27	100.53	105.80
21	A2	1363	C	OP1-P-OP2	-5.27	111.69	119.60
21	A2	1471	G	C2'-C3'-O3'	5.27	122.13	113.70
67	B1	2834	C	O4'-C1'-N1	5.27	112.42	108.20
21	A2	404	C	P-O5'-C5'	-5.27	112.47	120.90
21	A2	596	A	C3'-C2'-C1'	5.27	105.72	101.50
21	A2	1159	U	OP1-P-OP2	-5.27	111.69	119.60
21	A2	1362	C	C4'-C3'-C2'	-5.27	97.33	102.60
21	A2	1490	C	O4'-C4'-C3'	-5.27	98.73	104.00
67	B1	1171	G	O4'-C1'-C2'	-5.27	100.53	105.80
67	B1	1279	U	C1'-O4'-C4'	5.27	114.12	109.90
67	B1	2106	G	OP1-P-OP2	-5.27	111.69	119.60
67	B1	2486	A	O4'-C1'-N9	5.27	112.42	108.20
67	B1	2522	C	C3'-C2'-C1'	5.27	105.72	101.50
67	B1	2573	C	C1'-O4'-C4'	5.27	114.12	109.90
67	B1	2783	C	C3'-C2'-C1'	5.27	105.72	101.50
11	A1	24	A	O4'-C1'-C2'	-5.27	100.53	105.80
21	A2	419	G	P-O3'-C3'	-5.27	113.38	119.70
21	A2	559	G	O5'-C5'-C4'	-5.27	101.69	111.70
21	A2	1374	C	O4'-C1'-C2'	-5.27	100.53	105.80
52	BB	60	ARG	NH1-CZ-NH2	-5.27	113.61	119.40
54	BF	110	ILE	CA-CB-CG1	5.27	121.01	111.00
67	B1	182	U	C1'-O4'-C4'	-5.27	105.69	109.90
67	B1	948	C	N1-C1'-C2'	5.27	120.85	114.00
67	B1	1782	C	C5'-C4'-O4'	5.27	115.42	109.10
67	B1	2250	G	O4'-C4'-C3'	-5.27	98.73	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2545	A	O4'-C1'-C2'	-5.27	100.53	105.80
67	B1	2771	G	C5'-C4'-C3'	-5.27	107.57	116.00
67	B1	2913	C	C5'-C4'-O4'	5.27	115.42	109.10
68	B3	30	G	C5'-C4'-O4'	5.27	115.42	109.10
21	A2	475	C	O4'-C1'-N1	-5.27	103.99	108.20
21	A2	1205	G	P-O3'-C3'	5.27	126.02	119.70
67	B1	409	C	O4'-C1'-N1	-5.27	103.99	108.20
67	B1	2766	C	P-O3'-C3'	-5.27	113.38	119.70
11	A1	32	A	O4'-C1'-C2'	-5.26	100.53	105.80
17	AO	45	LEU	N-CA-CB	5.26	120.93	110.40
21	A2	138	C	C4'-C3'-C2'	-5.26	97.34	102.60
21	A2	349	A	P-O5'-C5'	5.26	129.32	120.90
21	A2	865	A	P-O5'-C5'	5.26	129.32	120.90
25	AH	42	ARG	CA-C-N	-5.26	105.62	117.20
27	A0	20	U	O4'-C1'-N1	5.26	112.41	108.20
67	B1	307	C	P-O5'-C5'	5.26	129.32	120.90
67	B1	536	G	C1'-O4'-C4'	5.26	114.11	109.90
67	B1	597	C	P-O3'-C3'	5.26	126.02	119.70
67	B1	1370	G	O4'-C4'-C3'	-5.26	98.73	104.00
67	B1	1451	A	P-O5'-C5'	-5.26	112.48	120.90
67	B1	1746	C	P-O5'-C5'	5.26	129.32	120.90
67	B1	1790	G	O4'-C1'-N9	-5.26	103.99	108.20
67	B1	1854	G	C1'-O4'-C4'	5.26	114.11	109.90
67	B1	2126	G	P-O3'-C3'	-5.26	113.38	119.70
23	AT	26	ARG	NE-CZ-NH1	-5.26	117.67	120.30
21	A2	154	C	P-O3'-C3'	5.26	126.02	119.70
21	A2	234	G	C1'-O4'-C4'	-5.26	105.69	109.90
21	A2	1071	C	P-O5'-C5'	-5.26	112.48	120.90
27	A0	33	U	C5'-C4'-O4'	5.26	115.42	109.10
39	Be	24	GLY	O-C-N	-5.26	114.28	122.70
47	BI	80	ARG	NE-CZ-NH2	-5.26	117.67	120.30
55	Bh	24	ILE	CA-C-O	-5.26	109.05	120.10
67	B1	114	C	O4'-C4'-C3'	-5.26	98.74	104.00
67	B1	559	G	C3'-C2'-C1'	5.26	105.71	101.50
67	B1	898	G	O4'-C1'-C2'	-5.26	100.54	105.80
67	B1	1592	U	P-O5'-C5'	5.26	129.32	120.90
67	B1	1713	G	N9-C1'-C2'	5.26	120.84	114.00
67	B1	2597	A	C4'-C3'-C2'	-5.26	97.34	102.60
4	AG	64	ARG	NE-CZ-NH2	5.26	122.93	120.30
21	A2	140	C	C1'-O4'-C4'	-5.26	105.69	109.90
21	A2	185	G	C4'-C3'-C2'	-5.26	97.34	102.60
21	A2	917	A	C3'-C2'-C1'	5.26	105.71	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BL	4	ARG	NE-CZ-NH1	5.26	122.93	120.30
37	BU	4	SER	N-CA-CB	5.26	118.39	110.50
34	BK	16	ARG	C-N-CA	5.26	134.85	121.70
67	B1	40	G	N9-C1'-C2'	5.26	120.84	114.00
67	B1	53	A	C3'-C2'-C1'	-5.26	97.29	101.50
67	B1	864	C	O4'-C1'-N1	-5.26	103.99	108.20
67	B1	988	C	C1'-O4'-C4'	-5.26	105.69	109.90
67	B1	1908	C	N1-C1'-C2'	5.26	120.84	114.00
67	B1	2919	C	C4'-C3'-C2'	-5.26	97.34	102.60
67	B1	3011	G	C4'-C3'-C2'	-5.26	97.34	102.60
35	BL	63	PHE	C-N-CA	5.26	134.84	121.70
67	B1	105	C	O4'-C1'-N1	5.26	112.41	108.20
1	AQ	20	THR	CA-CB-CG2	-5.26	105.04	112.40
21	A2	715	C	OP1-P-OP2	-5.26	111.72	119.60
21	A2	1087	C	O4'-C1'-C2'	-5.26	100.54	105.80
21	A2	1345	G	O4'-C1'-C2'	5.26	112.33	107.60
60	BS	47	ALA	N-CA-CB	5.26	117.46	110.10
67	B1	300	U	N1-C1'-C2'	5.26	120.83	114.00
67	B1	1250	A	N9-C1'-C2'	-5.26	106.22	112.00
67	B1	1775	G	O4'-C1'-N9	5.26	112.41	108.20
67	B1	1961	G	C4'-C3'-C2'	-5.26	97.34	102.60
67	B1	2019	C	N1-C1'-C2'	5.26	120.83	114.00
67	B1	2132	C	N1-C1'-C2'	5.26	120.83	114.00
68	B3	80	G	C3'-C2'-C1'	-5.26	97.30	101.50
15	AE	166	MET	CG-SD-CE	-5.25	91.79	100.20
21	A2	1178	C	O4'-C1'-C2'	-5.25	100.55	105.80
36	Bf	49	LEU	N-CA-CB	5.25	120.91	110.40
67	B1	2212	C	C4'-C3'-C2'	-5.25	97.34	102.60
13	AX	35	ARG	NE-CZ-NH1	-5.25	117.67	120.30
21	A2	162	C	C1'-O4'-C4'	-5.25	105.70	109.90
21	A2	392	G	O4'-C4'-C3'	-5.25	98.75	104.00
21	A2	1083	G	O4'-C1'-N9	5.25	112.40	108.20
67	B1	29	U	N1-C1'-C2'	5.25	120.83	114.00
67	B1	2044	C	O5'-P-OP1	-5.25	100.97	105.70
67	B1	2713	A	O4'-C1'-C2'	-5.25	100.55	105.80
68	B3	74	U	O4'-C1'-N1	5.25	112.40	108.20
21	A2	229	G	P-O3'-C3'	5.25	126.00	119.70
21	A2	1291	G	O5'-C5'-C4'	-5.25	101.72	111.70
67	B1	678	G	C5'-C4'-O4'	5.25	115.40	109.10
67	B1	1261	C	C3'-C2'-C1'	5.25	105.70	101.50
67	B1	1295	G	O4'-C1'-N9	-5.25	104.00	108.20
67	B1	1511	C	C3'-C2'-C1'	5.25	105.70	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2114	C	C1'-O4'-C4'	-5.25	105.70	109.90
21	A2	1134	G	O4'-C1'-N9	5.25	112.40	108.20
52	BB	121	TYR	CD1-CE1-CZ	-5.25	115.08	119.80
67	B1	715	G	C5'-C4'-O4'	5.25	115.40	109.10
67	B1	1142	A	P-O3'-C3'	5.25	126.00	119.70
67	B1	2022	U	O5'-P-OP2	-5.25	100.97	105.70
67	B1	2875	C	O5'-C5'-C4'	-5.25	101.73	111.70
21	A2	1108	U	OP1-P-OP2	-5.25	111.73	119.60
33	BC	276	PHE	CB-CG-CD1	-5.25	117.13	120.80
61	Bd	48	ARG	NE-CZ-NH1	5.25	122.92	120.30
67	B1	506	G	P-O5'-C5'	5.25	129.30	120.90
67	B1	1175	C	P-O3'-C3'	-5.25	113.40	119.70
67	B1	1222	U	C3'-C2'-C1'	5.25	105.70	101.50
67	B1	1262	C	O4'-C1'-C2'	-5.25	100.55	105.80
67	B1	1617	G	C3'-C2'-C1'	-5.25	97.30	101.50
21	A2	879	U	C1'-O4'-C4'	5.25	114.10	109.90
21	A2	998	A	C5-C6-N1	-5.25	115.08	117.70
21	A2	1057	A	O4'-C1'-C2'	-5.25	100.55	105.80
21	A2	1161	A	C4'-C3'-C2'	5.25	107.85	102.60
21	A2	1423	A	C5'-C4'-O4'	-5.25	102.81	109.10
20	BG	38	GLU	OE1-CD-OE2	5.25	129.60	123.30
59	BM	8	ARG	NE-CZ-NH1	5.25	122.92	120.30
67	B1	87	C	C3'-C2'-C1'	5.25	105.70	101.50
67	B1	1124	G	C1'-O4'-C4'	-5.25	105.70	109.90
67	B1	2201	C	OP2-P-O3'	5.25	116.74	105.20
67	B1	2358	U	O4'-C1'-N1	5.25	112.40	108.20
67	B1	2723	G	C5'-C4'-C3'	5.25	124.39	116.00
15	AE	31	ARG	NE-CZ-NH2	5.25	122.92	120.30
21	A2	1432	U	P-O5'-C5'	5.25	129.29	120.90
37	BU	35	LEU	CB-CG-CD2	5.25	119.92	111.00
67	B1	286	G	N9-C1'-C2'	-5.25	106.23	112.00
67	B1	715	G	C5'-C4'-C3'	-5.25	107.61	116.00
67	B1	866	G	C5'-C4'-C3'	-5.25	107.61	116.00
21	A2	621	G	O4'-C1'-C2'	-5.24	100.56	105.80
21	A2	1420	U	OP2-P-O3'	5.24	116.74	105.20
24	AA	107	PHE	CG-CD1-CE1	-5.24	115.03	120.80
67	B1	154	U	P-O3'-C3'	5.24	125.99	119.70
67	B1	1126	C	O4'-C1'-C2'	-5.24	100.56	105.80
67	B1	1546	G	C1'-O4'-C4'	5.24	114.09	109.90
67	B1	2313	G	C5'-C4'-O4'	5.24	115.39	109.10
67	B1	2807	C	C1'-O4'-C4'	-5.24	105.70	109.90
30	AU	37	THR	N-CA-CB	5.24	120.26	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	260	A	C5'-C4'-C3'	5.24	124.39	116.00
67	B1	2484	C	C4'-C3'-C2'	-5.24	97.36	102.60
67	B1	2573	C	P-O3'-C3'	5.24	125.99	119.70
67	B1	3042	C	C5'-C4'-O4'	5.24	115.39	109.10
68	B3	62	A	C4'-C3'-C2'	-5.24	97.36	102.60
7	AB	89	ALA	N-CA-CB	5.24	117.44	110.10
21	A2	363	C	O4'-C1'-C2'	-5.24	100.56	105.80
25	AH	42	ARG	C-N-CA	5.24	134.80	121.70
58	BP	35	TRP	CB-CG-CD1	5.24	133.81	127.00
67	B1	38	U	C4'-C3'-C2'	-5.24	97.36	102.60
67	B1	756	C	C1'-O4'-C4'	5.24	114.09	109.90
67	B1	1759	A	O5'-P-OP2	-5.24	100.98	105.70
67	B1	2123	G	C1'-O4'-C4'	-5.24	105.71	109.90
67	B1	2202	U	OP1-P-OP2	-5.24	111.74	119.60
2	AK	130	ARG	N-CA-CB	5.24	120.03	110.60
24	AA	94	SER	N-CA-CB	5.24	118.36	110.50
34	B5	17	ARG	C-N-CA	5.24	134.80	121.70
40	BE	115	PHE	CG-CD1-CE1	5.24	126.56	120.80
46	BA	128	ARG	NE-CZ-NH1	5.24	122.92	120.30
53	BD	189	ARG	N-CA-CB	5.24	120.03	110.60
54	BF	94	TYR	CB-CG-CD2	-5.24	117.86	121.00
59	BM	5	LYS	N-CA-CB	-5.24	101.17	110.60
67	B1	497	G	C4'-C3'-C2'	-5.24	97.36	102.60
67	B1	2933	C	O4'-C1'-C2'	-5.24	100.56	105.80
21	A2	620	G	OP2-P-O3'	5.24	116.72	105.20
42	BT	11	VAL	CA-CB-CG2	5.24	118.76	110.90
20	B4	6	TYR	CB-CG-CD1	-5.24	117.86	121.00
21	A2	183	A	C5'-C4'-O4'	-5.24	102.82	109.10
21	A2	1037	U	O4'-C1'-C2'	5.24	112.31	107.60
21	A2	1228	A	P-O3'-C3'	-5.24	113.42	119.70
21	A2	1377	G	O4'-C1'-C2'	5.24	112.31	107.60
28	B6	24	TYR	CB-CG-CD2	-5.24	117.86	121.00
67	B1	696	G	N9-C1'-C2'	-5.24	106.24	112.00
67	B1	1560	G	O4'-C1'-N9	5.24	112.39	108.20
67	B1	1660	A	O4'-C1'-N9	5.24	112.39	108.20
67	B1	1803	U	C4'-C3'-C2'	5.24	107.83	102.60
67	B1	2143	C	O4'-C1'-N1	5.24	112.39	108.20
67	B1	2815	C	C3'-C2'-C1'	5.24	105.69	101.50
21	A2	950	C	C5'-C4'-C3'	5.23	124.38	116.00
64	Bc	73	LYS	CA-C-N	5.23	126.67	116.20
67	B1	707	U	C1'-O4'-C4'	-5.23	105.71	109.90
67	B1	2057	G	O5'-C5'-C4'	-5.23	101.75	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2648	C	C3'-C2'-C1'	5.23	105.69	101.50
67	B1	2932	C	C4'-C3'-C2'	-5.23	97.37	102.60
67	B1	3039	G	OP1-P-O3'	5.23	116.71	105.20
8	AR	66	ARG	NH1-CZ-NH2	5.23	125.16	119.40
21	A2	1262	U	P-O5'-C5'	5.23	129.27	120.90
39	Be	21	ARG	NE-CZ-NH2	5.23	122.92	120.30
54	BF	109	ILE	CA-CB-CG1	-5.23	101.06	111.00
56	BH	133	MET	CG-SD-CE	-5.23	91.83	100.20
65	BJ	47	HIS	N-CA-C	-5.23	96.87	111.00
67	B1	500	C	P-O3'-C3'	-5.23	113.42	119.70
67	B1	2010	G	O4'-C1'-N9	5.23	112.39	108.20
67	B1	2228	G	P-O3'-C3'	5.23	125.98	119.70
21	A2	1270	C	P-O5'-C5'	-5.23	112.53	120.90
60	BS	66	TYR	CB-CG-CD1	-5.23	117.86	121.00
67	B1	542	A	C3'-C2'-C1'	5.23	105.68	101.50
67	B1	634	G	OP2-P-O3'	5.23	116.71	105.20
67	B1	771	G	O4'-C1'-N9	5.23	112.39	108.20
67	B1	1476	C	C4'-C3'-C2'	5.23	107.83	102.60
67	B1	1532	G	C1'-O4'-C4'	-5.23	105.72	109.90
67	B1	1649	G	C1'-O4'-C4'	-5.23	105.72	109.90
67	B1	2309	C	N1-C1'-C2'	5.23	120.80	114.00
67	B1	2857	C	C3'-C2'-C1'	5.23	105.69	101.50
67	B1	2958	U	C3'-C2'-C1'	-5.23	97.31	101.50
21	A2	527	A	C4'-C3'-C2'	5.23	107.83	102.60
21	A2	873	A	P-O3'-C3'	-5.23	113.42	119.70
21	A2	1000	G	O4'-C1'-C2'	5.23	112.31	107.60
33	BC	191	SER	N-CA-CB	5.23	118.34	110.50
58	BP	60	GLU	OE1-CD-OE2	5.23	129.57	123.30
67	B1	429	U	P-O3'-C3'	5.23	125.97	119.70
67	B1	2716	C	OP1-P-OP2	-5.23	111.76	119.60
21	A2	260	C	C1'-O4'-C4'	-5.23	105.72	109.90
21	A2	300	G	C1'-O4'-C4'	5.23	114.08	109.90
21	A2	1251	C	OP2-P-O3'	5.23	116.70	105.20
35	BL	55	PRO	N-CA-CB	5.23	109.57	103.30
67	B1	1168	A	OP1-P-OP2	-5.23	111.76	119.60
67	B1	1204	U	P-O3'-C3'	-5.23	113.43	119.70
67	B1	1336	G	P-O3'-C3'	-5.23	113.43	119.70
67	B1	2455	G	C1'-O4'-C4'	5.23	114.08	109.90
21	A2	950	C	N1-C1'-C2'	-5.23	106.25	112.00
21	A2	1340	U	C3'-C2'-C1'	5.23	105.68	101.50
32	BO	157	LYS	N-CA-CB	5.23	120.01	110.60
45	Bi	43	ARG	NE-CZ-NH1	-5.23	117.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
63	Bg	3	ARG	C-N-CA	5.23	134.77	121.70
67	B1	230	A	P-O3'-C3'	5.23	125.97	119.70
67	B1	927	G	C1'-O4'-C4'	-5.23	105.72	109.90
67	B1	2034	G	C3'-C2'-C1'	-5.23	97.32	101.50
67	B1	2853	A	OP1-P-OP2	-5.23	111.76	119.60
21	A2	762	G	C5'-C4'-O4'	5.22	115.37	109.10
21	A2	987	G	O4'-C1'-N9	5.22	112.38	108.20
67	B1	122	G	P-O5'-C5'	-5.22	112.54	120.90
67	B1	888	U	N1-C1'-C2'	5.22	120.79	114.00
67	B1	2922	G	C4'-C3'-C2'	-5.22	97.38	102.60
11	A1	4	G	C1'-O4'-C4'	5.22	114.08	109.90
11	A1	40	U	O4'-C4'-C3'	-5.22	98.78	104.00
21	A2	307	G	O4'-C1'-N9	5.22	112.38	108.20
21	A2	619	A	C5'-C4'-C3'	5.22	124.36	116.00
21	A2	1263	C	C1'-O4'-C4'	-5.22	105.72	109.90
67	B1	154	U	C4'-C3'-C2'	5.22	107.82	102.60
67	B1	410	C	C3'-C2'-C1'	5.22	105.68	101.50
67	B1	526	C	C4'-C3'-C2'	-5.22	97.38	102.60
67	B1	732	G	P-O3'-C3'	5.22	125.97	119.70
67	B1	2832	G	O4'-C4'-C3'	-5.22	98.78	104.00
21	A2	932	C	N1-C1'-C2'	5.22	120.79	114.00
21	A2	1250	C	O3'-P-O5'	-5.22	94.08	104.00
67	B1	454	C	C1'-O4'-C4'	-5.22	105.72	109.90
67	B1	2806	A	OP1-P-OP2	-5.22	111.77	119.60
21	A2	868	C	O5'-P-OP1	-5.22	101.00	105.70
21	A2	992	G	C3'-C2'-C1'	-5.22	97.32	101.50
21	A2	1187	A	C4'-C3'-C2'	-5.22	97.38	102.60
27	A0	7	G	P-O5'-C5'	5.22	129.25	120.90
37	BU	93	TYR	CZ-CE2-CD2	-5.22	115.10	119.80
53	BD	80	ALA	N-CA-CB	-5.22	102.79	110.10
53	BD	90	ARG	CB-CA-C	-5.22	99.96	110.40
67	B1	194	G	C1'-O4'-C4'	5.22	114.08	109.90
67	B1	348	G	O4'-C1'-N9	5.22	112.38	108.20
67	B1	630	G	P-O3'-C3'	-5.22	113.44	119.70
67	B1	1269	U	C3'-C2'-C1'	5.22	105.67	101.50
67	B1	1483	U	N1-C1'-C2'	5.22	120.78	114.00
67	B1	1722	G	O5'-C5'-C4'	5.22	121.62	111.70
67	B1	2279	G	C3'-C2'-C1'	-5.22	97.32	101.50
67	B1	2534	C	P-O3'-C3'	-5.22	113.44	119.70
21	A2	963	A	C5-C6-N6	-5.22	119.53	123.70
21	A2	1055	C	O4'-C1'-C2'	-5.22	100.58	105.80
25	AH	88	ARG	CB-CA-C	5.22	120.84	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1818	G	C1'-O4'-C4'	-5.22	105.72	109.90
67	B1	2610	C	O4'-C1'-N1	5.22	112.37	108.20
21	A2	537	G	C4'-C3'-C2'	-5.22	97.38	102.60
67	B1	461	C	C5'-C4'-C3'	-5.22	107.65	116.00
67	B1	1207	G	C4'-C3'-C2'	-5.22	97.38	102.60
67	B1	1740	U	O4'-C4'-C3'	-5.22	98.78	104.00
2	AK	12	THR	CA-CB-OG1	5.21	119.95	109.00
35	BL	8	VAL	CA-CB-CG1	5.21	118.72	110.90
67	B1	100	C	C3'-C2'-C1'	5.21	105.67	101.50
67	B1	472	A	N9-C1'-C2'	5.21	120.78	114.00
67	B1	737	G	C4'-C3'-C2'	-5.21	97.39	102.60
67	B1	754	U	OP1-P-OP2	-5.21	111.78	119.60
67	B1	1459	A	C5'-C4'-C3'	5.21	124.34	116.00
67	B1	1572	C	C4'-C3'-C2'	-5.21	97.39	102.60
21	A2	753	G	C5'-C4'-O4'	5.21	115.36	109.10
21	A2	1047	U	N1-C1'-C2'	5.21	120.78	114.00
67	B1	1222	U	C5'-C4'-C3'	-5.21	107.66	116.00
67	B1	1442	G	O4'-C1'-C2'	5.21	112.29	107.60
67	B1	1679	U	O4'-C1'-C2'	-5.21	100.59	105.80
67	B1	2855	G	C3'-C2'-C1'	-5.21	97.33	101.50
7	AB	117	VAL	CG1-CB-CG2	5.21	119.24	110.90
8	AR	60	TYR	CB-CG-CD1	-5.21	117.87	121.00
10	AD	151	THR	CA-CB-CG2	5.21	119.70	112.40
21	A2	778	G	O4'-C1'-N9	5.21	112.37	108.20
33	BC	296	LYS	N-CA-C	-5.21	96.93	111.00
40	BE	123	ILE	CA-CB-CG1	5.21	120.90	111.00
67	B1	697	U	C1'-O4'-C4'	5.21	114.07	109.90
67	B1	1561	G	O5'-C5'-C4'	-5.21	101.80	111.70
67	B1	1742	C	P-O3'-C3'	5.21	125.95	119.70
67	B1	2167	C	N1-C1'-C2'	5.21	120.78	114.00
67	B1	2386	U	C3'-C2'-C1'	5.21	105.67	101.50
21	A2	712	G	C4'-C3'-C2'	5.21	107.81	102.60
67	B1	50	C	N1-C1'-C2'	-5.21	106.27	112.00
67	B1	179	A	O4'-C1'-N9	5.21	112.37	108.20
67	B1	337	G	O4'-C1'-C2'	5.21	112.29	107.60
67	B1	1649	G	C3'-C2'-C1'	-5.21	97.33	101.50
2	AK	45	ILE	O-C-N	5.21	131.03	122.70
51	Bj	51	PRO	CA-N-CD	-5.21	104.21	111.50
52	BB	238	ARG	CD-NE-CZ	5.21	130.89	123.60
61	Bd	18	PRO	N-CA-CB	5.21	109.55	103.30
67	B1	75	G	C1'-O4'-C4'	-5.21	105.73	109.90
67	B1	375	C	N3-C4-N4	5.21	121.65	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	423	G	O4'-C1'-N9	5.21	112.37	108.20
67	B1	584	G	C1'-O4'-C4'	-5.21	105.73	109.90
67	B1	1279	U	O4'-C1'-C2'	-5.21	100.59	105.80
67	B1	1658	A	C5-C6-N1	-5.21	115.10	117.70
67	B1	1950	G	C5'-C4'-C3'	-5.21	107.67	116.00
67	B1	2854	A	OP1-P-OP2	-5.21	111.79	119.60
67	B1	2922	G	O3'-P-O5'	5.21	113.90	104.00
67	B1	3020	G	C4'-C3'-C2'	5.21	107.81	102.60
68	B3	91	G	O4'-C1'-N9	5.21	112.37	108.20
20	A3	121	LEU	C-N-CA	5.21	134.72	121.70
21	A2	918	A	O4'-C1'-N9	5.21	112.37	108.20
25	AH	49	GLY	CA-C-N	5.21	128.65	117.20
43	Bk	107	ARG	CD-NE-CZ	-5.21	116.31	123.60
61	Bd	48	ARG	N-CA-C	-5.21	96.94	111.00
67	B1	281	G	N9-C1'-C2'	5.21	120.77	114.00
67	B1	1377	G	C1'-O4'-C4'	-5.21	105.73	109.90
67	B1	1565	G	C4'-C3'-C2'	5.21	107.81	102.60
67	B1	1709	C	C5'-C4'-C3'	5.21	124.33	116.00
67	B1	2822	G	O4'-C1'-C2'	5.21	112.29	107.60
68	B3	85	C	O4'-C1'-C2'	-5.21	100.59	105.80
21	A2	331	C	N1-C1'-C2'	-5.21	106.28	112.00
67	B1	712	C	OP2-P-O3'	5.21	116.65	105.20
67	B1	1717	C	C1'-O4'-C4'	-5.21	105.74	109.90
68	B3	124	A	P-O5'-C5'	-5.21	112.57	120.90
21	A2	176	U	C5'-C4'-C3'	5.20	124.32	116.00
21	A2	580	G	N9-C1'-C2'	-5.20	106.28	112.00
21	A2	1145	C	O4'-C1'-N1	5.20	112.36	108.20
21	A2	1173	A	C4'-C3'-C2'	5.20	107.80	102.60
21	A2	1422	G	C5'-C4'-O4'	-5.20	102.86	109.10
52	BB	167	ARG	CD-NE-CZ	-5.20	116.32	123.60
67	B1	2100	U	O4'-C1'-N1	5.20	112.36	108.20
67	B1	2640	C	C3'-C2'-C1'	-5.20	97.34	101.50
21	A2	163	C	C3'-C2'-C1'	5.20	105.66	101.50
21	A2	481	C	C1'-O4'-C4'	-5.20	105.74	109.90
67	B1	1132	U	P-O5'-C5'	5.20	129.22	120.90
67	B1	2488	C	C4'-C3'-C2'	5.20	107.80	102.60
67	B1	2537	G	P-O5'-C5'	5.20	129.22	120.90
15	AE	91	VAL	CG1-CB-CG2	5.20	119.22	110.90
21	A2	1249	A	C5'-C4'-O4'	5.20	115.34	109.10
21	A2	1296	U	C3'-C2'-C1'	-5.20	97.34	101.50
46	BA	172	MET	CA-CB-CG	5.20	122.14	113.30
51	Bj	64	LYS	CB-CA-C	5.20	120.80	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	B4	2	ALA	CB-CA-C	5.20	117.90	110.10
67	B1	264	G	O4'-C1'-C2'	-5.20	100.60	105.80
67	B1	361	G	O4'-C1'-C2'	-5.20	100.60	105.80
67	B1	917	A	OP1-P-OP2	-5.20	111.80	119.60
67	B1	2955	G	C4'-C3'-C2'	-5.20	97.40	102.60
67	B1	2980	G	C1'-O4'-C4'	-5.20	105.74	109.90
8	AR	102	VAL	CG1-CB-CG2	-5.20	102.58	110.90
21	A2	183	A	O4'-C4'-C3'	-5.20	98.80	104.00
34	B5	54	GLU	N-CA-C	-5.20	96.97	111.00
47	BI	42	ARG	NE-CZ-NH2	5.20	122.90	120.30
53	BD	180	ARG	CG-CD-NE	-5.20	100.89	111.80
67	B1	309	C	P-O3'-C3'	-5.20	113.46	119.70
67	B1	1422	G	C3'-C2'-C1'	-5.20	97.34	101.50
67	B1	2122	G	C1'-O4'-C4'	-5.20	105.74	109.90
67	B1	2775	G	O4'-C4'-C3'	-5.20	98.80	104.00
68	B3	82	C	C4'-C3'-C2'	-5.20	97.40	102.60
21	A2	720	A	P-O3'-C3'	-5.20	113.46	119.70
21	A2	1436	U	C3'-C2'-C1'	-5.20	97.34	101.50
60	BS	18	ALA	N-CA-CB	5.20	117.38	110.10
67	B1	759	G	O4'-C4'-C3'	-5.20	98.80	104.00
67	B1	2137	A	P-O5'-C5'	5.20	129.22	120.90
11	A1	9	A	C4'-C3'-C2'	5.20	107.80	102.60
65	BJ	26	TYR	N-CA-C	-5.20	96.97	111.00
67	B1	575	G	C5'-C4'-C3'	-5.20	107.69	116.00
67	B1	1146	U	O4'-C1'-C2'	-5.20	100.60	105.80
67	B1	2946	C	N1-C1'-C2'	5.20	120.75	114.00
33	BC	163	VAL	CA-CB-CG1	-5.19	103.11	110.90
67	B1	2163	G	N9-C1'-C2'	-5.19	106.29	112.00
67	B1	2947	G	O4'-C1'-N9	5.19	112.36	108.20
21	A2	238	G	O4'-C1'-N9	5.19	112.35	108.20
21	A2	430	G	N3-C2-N2	5.19	123.53	119.90
21	A2	972	C	N1-C1'-C2'	5.19	120.75	114.00
67	B1	1647	C	P-O3'-C3'	-5.19	113.47	119.70
67	B1	2341	G	O4'-C1'-N9	5.19	112.35	108.20
67	B1	2397	C	N1-C1'-C2'	5.19	120.75	114.00
67	B1	2586	A	P-O5'-C5'	5.19	129.21	120.90
18	AF	123	GLU	N-CA-CB	5.19	119.94	110.60
21	A2	394	C	O5'-P-OP1	-5.19	101.03	105.70
21	A2	867	A	N9-C1'-C2'	-5.19	106.29	112.00
21	A2	1091	C	C4'-C3'-C2'	-5.19	97.41	102.60
33	BC	197	ASN	N-CA-CB	5.19	119.94	110.60
67	B1	1236	C	P-O3'-C3'	5.19	125.93	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2071	C	P-O3'-C3'	-5.19	113.47	119.70
67	B1	2635	C	O4'-C1'-N1	5.19	112.35	108.20
67	B1	3046	C	C1'-O4'-C4'	-5.19	105.75	109.90
8	AR	60	TYR	CZ-CE2-CD2	5.19	124.47	119.80
11	A1	77	A	P-O5'-C5'	5.19	129.20	120.90
12	AN	147	ARG	NE-CZ-NH1	5.19	122.89	120.30
21	A2	699	C	P-O3'-C3'	-5.19	113.47	119.70
67	B1	1918	U	O4'-C1'-N1	5.19	112.35	108.20
67	B1	2801	G	C4'-C3'-C2'	-5.19	97.41	102.60
67	B1	2934	C	C1'-O4'-C4'	-5.19	105.75	109.90
21	A2	146	A	C1'-O4'-C4'	-5.19	105.75	109.90
21	A2	947	G	O4'-C1'-C2'	-5.19	100.61	105.80
52	BB	220	ARG	CG-CD-NE	-5.19	100.91	111.80
67	B1	804	C	C3'-C2'-C1'	5.19	105.65	101.50
67	B1	1996	C	N1-C1'-C2'	5.19	120.75	114.00
67	B1	2028	G	O4'-C1'-N9	-5.19	104.05	108.20
67	B1	2329	A	P-O5'-C5'	-5.19	112.60	120.90
67	B1	2430	C	C1'-O4'-C4'	-5.19	105.75	109.90
67	B1	2454	G	OP1-P-OP2	-5.19	111.82	119.60
67	B1	2674	C	C4'-C3'-C2'	-5.19	97.41	102.60
67	B1	2690	U	OP2-P-O3'	5.19	116.61	105.20
18	AF	5	TRP	N-CA-C	5.19	125.00	111.00
21	A2	1320	A	C5'-C4'-C3'	5.19	124.30	116.00
21	A2	1378	A	C5'-C4'-O4'	5.19	115.32	109.10
67	B1	19	G	C5'-C4'-O4'	5.19	115.32	109.10
67	B1	701	G	P-O5'-C5'	5.19	129.20	120.90
67	B1	829	G	C5'-C4'-C3'	5.19	124.30	116.00
67	B1	3030	A	C1'-O4'-C4'	5.19	114.05	109.90
11	A1	47	G	C4'-C3'-C2'	-5.18	97.42	102.60
21	A2	782	A	C4'-C3'-C2'	-5.18	97.42	102.60
21	A2	984	C	N3-C4-C5	-5.18	119.83	121.90
21	A2	1440	G	C3'-C2'-C1'	-5.18	97.35	101.50
40	BE	135	PHE	CB-CG-CD2	-5.18	117.17	120.80
34	BK	54	GLU	N-CA-C	-5.18	97.00	111.00
54	BF	67	ILE	C-N-CA	5.18	134.66	121.70
67	B1	971	G	N9-C1'-C2'	5.18	120.74	114.00
67	B1	1087	G	C1'-O4'-C4'	5.18	114.05	109.90
67	B1	1095	A	O4'-C4'-C3'	-5.18	98.81	104.00
67	B1	1309	G	C3'-C2'-C1'	-5.18	97.35	101.50
67	B1	2162	G	P-O5'-C5'	-5.18	112.60	120.90
67	B1	2433	U	N1-C1'-C2'	5.18	120.74	114.00
67	B1	2674	C	C5'-C4'-C3'	5.18	124.29	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	AW	15	ARG	NE-CZ-NH1	5.18	122.89	120.30
21	A2	773	A	OP1-P-OP2	-5.18	111.83	119.60
21	A2	1178	C	C3'-C2'-C1'	5.18	105.65	101.50
35	BL	46	LYS	CA-C-O	-5.18	109.22	120.10
46	BA	173	SER	CB-CA-C	-5.18	100.25	110.10
54	BF	22	GLU	N-CA-CB	5.18	119.93	110.60
67	B1	562	G	OP1-P-OP2	-5.18	111.83	119.60
67	B1	2300	C	P-O3'-C3'	5.18	125.92	119.70
67	B1	2628	U	OP1-P-OP2	-5.18	111.83	119.60
67	B1	2771	G	P-O3'-C3'	5.18	125.92	119.70
21	A2	1388	G	C1'-O4'-C4'	-5.18	105.75	109.90
21	A2	1475	C	N1-C1'-C2'	5.18	120.73	114.00
67	B1	1034	G	P-O3'-C3'	5.18	125.92	119.70
67	B1	1523	A	N9-C1'-C2'	-5.18	106.30	112.00
21	A2	462	A	P-O3'-C3'	5.18	125.92	119.70
21	A2	559	G	O4'-C1'-C2'	-5.18	100.62	105.80
21	A2	874	G	C4'-C3'-C2'	-5.18	97.42	102.60
21	A2	1393	A	O5'-P-OP1	5.18	116.92	110.70
39	Be	38	CYS	N-CA-CB	5.18	119.92	110.60
58	BP	94	ILE	CA-CB-CG1	5.18	120.84	111.00
67	B1	981	A	N9-C1'-C2'	-5.18	106.30	112.00
67	B1	1196	A	O4'-C1'-C2'	-5.18	100.62	105.80
67	B1	1280	C	O4'-C1'-N1	-5.18	104.06	108.20
67	B1	1446	G	C1'-O4'-C4'	5.18	114.04	109.90
67	B1	1483	U	O4'-C1'-C2'	-5.18	100.62	105.80
21	A2	628	G	O4'-C1'-C2'	5.18	112.26	107.60
67	B1	2483	U	O4'-C1'-N1	5.18	112.34	108.20
1	AQ	158	ARG	N-CA-CB	5.18	119.92	110.60
10	AD	116	ARG	NE-CZ-NH2	-5.18	117.71	120.30
16	AJ	16	ARG	CG-CD-NE	-5.18	100.93	111.80
21	A2	194	C	C4'-C3'-C2'	-5.18	97.42	102.60
21	A2	226	G	P-O3'-C3'	-5.18	113.49	119.70
21	A2	448	A	C5-C6-N1	-5.18	115.11	117.70
21	A2	812	U	OP2-P-O3'	5.18	116.59	105.20
21	A2	977	G	C1'-O4'-C4'	-5.18	105.76	109.90
21	A2	1040	A	P-O3'-C3'	-5.18	113.49	119.70
21	A2	1103	G	C4'-C3'-C2'	-5.18	97.42	102.60
41	Ba	63	ILE	CB-CA-C	5.18	121.95	111.60
67	B1	639	C	N3-C4-C5	-5.18	119.83	121.90
68	B3	44	C	P-O5'-C5'	5.18	129.18	120.90
21	A2	781	U	C3'-C2'-C1'	5.17	105.64	101.50
21	A2	1495	U	C1'-O4'-C4'	5.17	114.04	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	AT	92	VAL	CA-CB-CG1	-5.17	103.14	110.90
44	BW	26	ALA	CB-CA-C	-5.17	102.34	110.10
67	B1	240	A	C3'-C2'-C1'	5.17	105.64	101.50
67	B1	586	A	C5-C6-N1	-5.17	115.11	117.70
67	B1	1149	C	C5'-C4'-C3'	5.17	124.28	116.00
4	AG	80	GLY	N-CA-C	-5.17	100.17	113.10
56	BH	43	THR	CA-CB-CG2	-5.17	105.16	112.40
67	B1	540	A	OP1-P-O3'	5.17	116.58	105.20
67	B1	1660	A	C5-C6-N1	-5.17	115.11	117.70
4	AG	49	GLU	C-N-CA	5.17	134.63	121.70
11	A1	74	A	C1'-O4'-C4'	-5.17	105.76	109.90
12	AN	33	ARG	NE-CZ-NH2	-5.17	117.72	120.30
15	AE	128	ARG	CG-CD-NE	5.17	122.66	111.80
21	A2	207	G	O4'-C1'-C2'	-5.17	100.63	105.80
21	A2	1122	C	P-O3'-C3'	-5.17	113.49	119.70
23	AT	72	ILE	CA-CB-CG2	5.17	121.24	110.90
52	BB	136	PRO	N-CD-CG	5.17	110.96	103.20
67	B1	228	U	N1-C1'-C2'	5.17	120.72	114.00
67	B1	244	A	C1'-O4'-C4'	-5.17	105.76	109.90
67	B1	1170	G	C5'-C4'-O4'	5.17	115.31	109.10
67	B1	1500	C	C1'-O4'-C4'	-5.17	105.76	109.90
67	B1	1104	A	P-O3'-C3'	5.17	125.90	119.70
67	B1	1626	A	C4'-C3'-C2'	-5.17	97.43	102.60
15	AE	26	TYR	CG-CD1-CE1	-5.17	117.17	121.30
21	A2	903	G	N9-C1'-C2'	5.17	120.72	114.00
21	A2	1105	C	C1'-O4'-C4'	5.17	114.03	109.90
21	A2	1106	A	N9-C1'-C2'	5.17	120.72	114.00
44	BW	43	VAL	N-CA-CB	5.17	122.87	111.50
52	BB	180	TYR	CB-CG-CD2	5.17	124.10	121.00
67	B1	145	C	N3-C4-C5	-5.17	119.83	121.90
67	B1	708	A	O4'-C1'-N9	5.17	112.33	108.20
67	B1	890	G	N9-C1'-C2'	5.17	120.72	114.00
67	B1	2172	G	P-O3'-C3'	5.17	125.90	119.70
68	B3	3	G	O5'-C5'-C4'	-5.17	101.88	111.70
7	AB	78	LYS	CA-C-N	5.17	131.56	117.10
21	A2	87	C	C5'-C4'-O4'	5.17	115.30	109.10
21	A2	794	A	O4'-C1'-N9	-5.17	104.07	108.20
21	A2	880	G	C5'-C4'-O4'	5.17	115.30	109.10
33	BC	251	ARG	N-CA-C	-5.17	97.05	111.00
49	BQ	121	ARG	NE-CZ-NH1	-5.17	117.72	120.30
58	BP	55	TYR	CG-CD2-CE2	-5.17	117.17	121.30
67	B1	265	A	O4'-C1'-N9	5.17	112.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	734	C	O4'-C1'-C2'	-5.17	100.63	105.80
67	B1	1123	A	C4'-C3'-C2'	-5.17	97.43	102.60
67	B1	1217	U	C3'-C2'-C1'	5.17	105.63	101.50
67	B1	1401	G	C5'-C4'-C3'	-5.17	107.73	116.00
67	B1	2008	G	OP2-P-O3'	5.17	116.56	105.20
67	B1	2235	G	C3'-C2'-C1'	-5.17	97.37	101.50
67	B1	2801	G	O4'-C1'-N9	-5.17	104.07	108.20
21	A2	342	G	O4'-C1'-C2'	5.17	112.25	107.60
21	A2	1370	U	C1'-O4'-C4'	5.17	114.03	109.90
51	Bj	69	PHE	CB-CG-CD2	5.17	124.42	120.80
20	BG	6	TYR	CA-CB-CG	-5.17	103.59	113.40
67	B1	363	G	P-O3'-C3'	5.17	125.90	119.70
67	B1	2218	C	C4'-C3'-C2'	-5.17	97.44	102.60
11	A1	36	A	C4'-C3'-C2'	-5.16	97.44	102.60
21	A2	340	A	O4'-C4'-C3'	-5.16	98.84	104.00
21	A2	693	C	C5'-C4'-O4'	5.16	115.30	109.10
67	B1	1504	C	O4'-C1'-C2'	-5.16	100.64	105.80
67	B1	2122	G	N9-C1'-C2'	5.16	120.71	114.00
67	B1	2219	A	P-O3'-C3'	-5.16	113.50	119.70
67	B1	3011	G	C3'-C2'-C1'	5.16	105.63	101.50
21	A2	397	C	P-O3'-C3'	-5.16	113.51	119.70
39	Be	55	TRP	CB-CG-CD1	-5.16	120.29	127.00
66	Bl	2	LYS	N-CA-C	-5.16	97.06	111.00
67	B1	1621	G	P-O5'-C5'	5.16	129.16	120.90
6	AC	48	ALA	N-CA-CB	5.16	117.32	110.10
21	A2	141	C	N1-C1'-C2'	-5.16	106.32	112.00
27	A0	60	U	C5'-C4'-C3'	-5.16	107.74	116.00
30	AU	43	ARG	CD-NE-CZ	5.16	130.82	123.60
28	B6	68	TYR	CD1-CG-CD2	5.16	123.58	117.90
67	B1	1163	U	O4'-C1'-C2'	-5.16	100.64	105.80
67	B1	2132	C	P-O3'-C3'	-5.16	113.51	119.70
67	B1	2404	G	O4'-C4'-C3'	-5.16	98.84	104.00
67	B1	2552	C	C3'-C2'-C1'	5.16	105.63	101.50
67	B1	2627	C	O4'-C4'-C3'	-5.16	98.84	104.00
2	AK	2	ARG	NE-CZ-NH2	-5.16	117.72	120.30
21	A2	512	U	O4'-C1'-N1	5.16	112.33	108.20
20	B4	88	ALA	O-C-N	-5.16	114.45	122.70
67	B1	778	A	O5'-P-OP2	5.16	116.89	110.70
67	B1	783	C	O5'-P-OP1	5.16	116.89	110.70
67	B1	2516	G	O4'-C1'-N9	-5.16	104.07	108.20
67	B1	2797	C	P-O3'-C3'	5.16	125.89	119.70
68	B3	22	C	P-O3'-C3'	5.16	125.89	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	Bk	204	ASP	CB-CG-OD2	5.16	122.94	118.30
46	BA	63	ALA	N-CA-CB	5.16	117.32	110.10
67	B1	558	C	C3'-C2'-C1'	5.16	105.62	101.50
7	AB	141	VAL	CB-CA-C	-5.16	101.61	111.40
11	A1	67	C	O4'-C1'-C2'	-5.16	100.64	105.80
12	AN	147	ARG	NE-CZ-NH2	5.16	122.88	120.30
21	A2	225	U	O4'-C1'-N1	5.16	112.32	108.20
21	A2	1094	U	N1-C1'-C2'	5.16	120.70	114.00
21	A2	1272	G	C3'-C2'-C1'	-5.16	97.38	101.50
28	AV	72	TYR	CB-CG-CD1	5.16	124.09	121.00
67	B1	124	C	C4'-C3'-C2'	-5.16	97.44	102.60
67	B1	823	G	N9-C1'-C2'	5.16	120.70	114.00
67	B1	1010	G	O4'-C1'-N9	5.16	112.32	108.20
67	B1	1105	C	O4'-C1'-C2'	-5.16	100.64	105.80
21	A2	1138	G	N9-C1'-C2'	-5.15	106.33	112.00
47	BI	78	THR	CA-CB-OG1	5.15	119.82	109.00
67	B1	137	A	N9-C1'-C2'	-5.15	106.33	112.00
67	B1	144	A	O4'-C1'-N9	5.15	112.32	108.20
67	B1	1041	U	P-O3'-C3'	-5.15	113.52	119.70
67	B1	1825	G	C1'-O4'-C4'	5.15	114.02	109.90
1	AQ	135	TYR	CB-CG-CD1	-5.15	117.91	121.00
7	AB	177	TYR	CD1-CG-CD2	-5.15	112.23	117.90
21	A2	550	G	O4'-C1'-C2'	5.15	112.24	107.60
21	A2	1270	C	O4'-C1'-C2'	-5.15	100.65	105.80
21	A2	1297	G	C5'-C4'-O4'	-5.15	102.92	109.10
35	BL	45	SER	N-CA-C	-5.15	97.09	111.00
39	Be	40	PHE	CB-CG-CD1	-5.15	117.19	120.80
67	B1	170	A	C1'-O4'-C4'	5.15	114.02	109.90
67	B1	579	C	C3'-C2'-C1'	5.15	105.62	101.50
67	B1	797	C	N1-C1'-C2'	-5.15	106.33	112.00
67	B1	1226	G	C5'-C4'-C3'	5.15	124.24	116.00
67	B1	1794	C	C3'-C2'-C1'	5.15	105.62	101.50
67	B1	1903	G	OP1-P-OP2	-5.15	111.87	119.60
67	B1	2420	C	C1'-O4'-C4'	5.15	114.02	109.90
68	B3	108	G	O4'-C1'-C2'	5.15	112.24	107.60
11	A1	69	G	C4'-C3'-C2'	-5.15	97.45	102.60
21	A2	104	A	O4'-C1'-C2'	-5.15	100.65	105.80
21	A2	240	U	O5'-P-OP1	-5.15	101.06	105.70
21	A2	748	A	O4'-C4'-C3'	-5.15	98.85	104.00
21	A2	976	A	C5'-C4'-C3'	-5.15	107.76	116.00
27	A0	20	U	C5'-C4'-O4'	5.15	115.28	109.10
67	B1	177	G	N9-C1'-C2'	5.15	120.70	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1822	G	O4'-C1'-C2'	5.15	112.23	107.60
67	B1	2043	A	O4'-C1'-N9	-5.15	104.08	108.20
68	B3	115	C	O4'-C1'-C2'	-5.15	100.65	105.80
21	A2	507	G	C1'-O4'-C4'	-5.15	105.78	109.90
67	B1	1581	A	O4'-C1'-N9	5.15	112.32	108.20
67	B1	2123	G	O4'-C1'-N9	5.15	112.32	108.20
21	A2	1412	A	P-O5'-C5'	-5.15	112.66	120.90
45	Bi	33	ARG	NE-CZ-NH2	-5.15	117.73	120.30
62	BN	81	ASN	N-CA-CB	5.15	119.87	110.60
67	B1	641	G	C5'-C4'-O4'	5.15	115.28	109.10
67	B1	1060	C	O4'-C1'-C2'	-5.15	100.65	105.80
67	B1	1284	C	C3'-C2'-C1'	5.15	105.62	101.50
67	B1	1709	C	P-O5'-C5'	5.15	129.14	120.90
67	B1	1831	C	P-O5'-C5'	-5.15	112.66	120.90
67	B1	2364	G	C5'-C4'-C3'	5.15	124.23	116.00
67	B1	2891	A	C2'-C3'-O3'	5.15	121.94	113.70
11	A1	2	G	N9-C1'-C2'	5.15	120.69	114.00
16	AJ	30	ARG	NE-CZ-NH2	-5.15	117.73	120.30
21	A2	729	G	O4'-C1'-N9	5.15	112.32	108.20
52	BB	25	ARG	N-CA-CB	5.15	119.86	110.60
67	B1	813	G	C4'-C3'-C2'	5.15	107.75	102.60
21	A2	217	C	O3'-P-O5'	5.14	113.77	104.00
21	A2	303	G	O5'-P-OP1	5.14	116.87	110.70
21	A2	612	C	C5'-C4'-O4'	-5.14	102.93	109.10
21	A2	1324	U	C3'-C2'-C1'	5.14	105.61	101.50
21	A2	1343	C	P-O3'-C3'	-5.14	113.53	119.70
50	BV	43	MET	CG-SD-CE	-5.14	91.97	100.20
53	BD	28	PRO	CA-N-CD	-5.14	104.30	111.50
67	B1	1187	A	C5'-C4'-O4'	5.14	115.27	109.10
67	B1	2754	A	C5'-C4'-O4'	5.14	115.27	109.10
67	B1	2917	G	P-O5'-C5'	-5.14	112.67	120.90
21	A2	387	G	C1'-O4'-C4'	-5.14	105.79	109.90
21	A2	757	G	C3'-C2'-C1'	-5.14	97.39	101.50
27	A0	68	G	C3'-C2'-C1'	-5.14	97.39	101.50
43	Bk	39	SER	CB-CA-C	5.14	119.87	110.10
67	B1	167	G	O4'-C1'-N9	5.14	112.31	108.20
67	B1	308	C	C5'-C4'-O4'	5.14	115.27	109.10
67	B1	1925	A	O4'-C1'-N9	-5.14	104.09	108.20
67	B1	2790	C	C1'-O4'-C4'	-5.14	105.79	109.90
67	B1	2968	G	P-O5'-C5'	-5.14	112.67	120.90
67	B1	1472	U	C3'-C2'-C1'	5.14	105.61	101.50
67	B1	2372	C	O4'-C1'-N1	5.14	112.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2395	C	C1'-O4'-C4'	-5.14	105.79	109.90
67	B1	2786	G	N9-C1'-C2'	-5.14	106.34	112.00
21	A2	296	A	O5'-P-OP2	5.14	116.87	110.70
21	A2	804	U	O3'-P-O5'	5.14	113.76	104.00
21	A2	1458	A	C2'-C3'-O3'	5.14	121.92	113.70
47	BI	93	ALA	N-CA-CB	5.14	117.29	110.10
67	B1	3023	G	C4'-C3'-C2'	-5.14	97.46	102.60
68	B3	1	C	O4'-C1'-C2'	-5.14	100.66	105.80
67	B1	874	U	C3'-C2'-C1'	5.14	105.61	101.50
67	B1	1728	C	C5'-C4'-O4'	5.14	115.27	109.10
67	B1	1894	A	C1'-O4'-C4'	5.14	114.01	109.90
67	B1	1934	C	P-O3'-C3'	-5.14	113.53	119.70
14	AM	20	TYR	CB-CG-CD2	5.14	124.08	121.00
21	A2	628	G	C3'-C2'-C1'	-5.14	97.39	101.50
21	A2	1009	G	P-O3'-C3'	5.14	125.86	119.70
34	BK	48	MET	CG-SD-CE	-5.14	91.98	100.20
67	B1	386	A	P-O3'-C3'	-5.14	113.54	119.70
67	B1	810	A	N9-C1'-C2'	5.14	120.68	114.00
67	B1	1411	G	O4'-C1'-N9	-5.14	104.09	108.20
67	B1	1762	G	O4'-C1'-N9	5.14	112.31	108.20
67	B1	2218	C	P-O3'-C3'	5.14	125.86	119.70
2	AK	81	ALA	CB-CA-C	-5.13	102.40	110.10
21	A2	640	U	O4'-C1'-N1	5.13	112.31	108.20
21	A2	1058	G	O4'-C4'-C3'	-5.13	98.87	104.00
21	A2	1403	U	C1'-O4'-C4'	5.13	114.01	109.90
31	BY	75	ILE	CA-CB-CG1	5.13	120.76	111.00
45	Bi	68	TYR	CA-CB-CG	-5.13	103.64	113.40
56	BH	5	VAL	N-CA-C	-5.13	97.14	111.00
67	B1	477	C	OP1-P-O3'	5.13	116.50	105.20
67	B1	1171	G	O4'-C4'-C3'	-5.13	98.87	104.00
67	B1	1649	G	O4'-C1'-C2'	5.13	112.22	107.60
67	B1	1959	C	O4'-C1'-C2'	-5.13	100.67	105.80
67	B1	2914	U	P-O3'-C3'	-5.13	113.54	119.70
41	Ba	73	LYS	N-CA-CB	5.13	119.84	110.60
67	B1	598	C	O4'-C1'-N1	5.13	112.31	108.20
67	B1	1781	C	O4'-C1'-N1	5.13	112.31	108.20
21	A2	412	U	O4'-C4'-C3'	-5.13	98.87	104.00
21	A2	514	U	C4'-C3'-C2'	5.13	107.73	102.60
21	A2	1039	C	P-O5'-C5'	-5.13	112.69	120.90
21	A2	1486	A	C1'-O4'-C4'	5.13	114.00	109.90
26	AP	53	ARG	CD-NE-CZ	5.13	130.78	123.60
27	A0	13	U	O4'-C1'-N1	5.13	112.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	410	C	C1'-O4'-C4'	5.13	114.00	109.90
67	B1	796	C	C5'-C4'-O4'	-5.13	102.94	109.10
67	B1	2208	C	O4'-C1'-C2'	-5.13	100.67	105.80
67	B1	2485	C	C3'-C2'-C1'	5.13	105.61	101.50
67	B1	2653	G	O4'-C1'-C2'	5.13	112.22	107.60
68	B3	114	G	OP1-P-O3'	5.13	116.49	105.20
21	A2	117	C	O4'-C4'-C3'	-5.13	98.87	104.00
33	BC	318	ARG	NE-CZ-NH1	-5.13	117.73	120.30
50	BV	50	LEU	C-N-CA	5.13	134.53	121.70
52	BB	238	ARG	N-CA-CB	5.13	119.83	110.60
67	B1	1791	A	O4'-C1'-C2'	-5.13	100.67	105.80
67	B1	2197	U	N1-C1'-C2'	5.13	120.67	114.00
21	A2	1303	C	O4'-C4'-C3'	-5.13	98.87	104.00
67	B1	209	G	O4'-C1'-C2'	-5.13	100.67	105.80
67	B1	650	C	C3'-C2'-C1'	5.13	105.60	101.50
67	B1	757	C	C3'-C2'-C1'	5.13	105.60	101.50
67	B1	1016	C	N3-C4-C5	-5.13	119.85	121.90
67	B1	1621	G	C3'-C2'-C1'	5.13	105.60	101.50
67	B1	2767	C	C1'-O4'-C4'	-5.13	105.80	109.90
7	AB	21	THR	CA-CB-CG2	-5.13	105.22	112.40
10	AD	93	LEU	CB-CG-CD2	5.13	119.72	111.00
21	A2	573	C	P-O5'-C5'	-5.13	112.70	120.90
21	A2	618	G	C4'-C3'-C2'	-5.13	97.47	102.60
67	B1	130	G	O4'-C1'-N9	-5.13	104.10	108.20
67	B1	668	G	O4'-C1'-C2'	5.13	112.21	107.60
67	B1	722	C	N1-C1'-C2'	5.13	120.66	114.00
67	B1	1021	G	O4'-C1'-N9	5.13	112.30	108.20
67	B1	2620	G	C1'-O4'-C4'	-5.13	105.80	109.90
67	B1	2631	C	O4'-C1'-N1	5.13	112.30	108.20
2	AK	79	ARG	NE-CZ-NH2	-5.12	117.74	120.30
12	AN	4	LYS	N-CA-C	-5.12	97.16	111.00
21	A2	357	C	P-O3'-C3'	5.12	125.85	119.70
21	A2	882	C	O4'-C1'-N1	5.12	112.30	108.20
21	A2	1190	C	C3'-C2'-C1'	5.12	105.60	101.50
67	B1	2549	A	O4'-C1'-N9	5.12	112.30	108.20
10	AD	52	ARG	CB-CA-C	-5.12	100.15	110.40
10	AD	141	SER	N-CA-CB	5.12	118.19	110.50
11	A1	21	G	C5'-C4'-O4'	5.12	115.25	109.10
21	A2	364	U	C1'-O4'-C4'	5.12	114.00	109.90
21	A2	701	G	C4'-C3'-C2'	-5.12	97.48	102.60
21	A2	1260	G	O4'-C1'-N9	5.12	112.30	108.20
51	Bj	69	PHE	CB-CG-CD1	-5.12	117.21	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1604	G	O5'-P-OP1	-5.12	101.09	105.70
67	B1	1713	G	C5'-C4'-O4'	5.12	115.25	109.10
67	B1	2001	U	OP1-P-OP2	-5.12	111.91	119.60
67	B1	2530	G	C3'-C2'-C1'	-5.12	97.40	101.50
67	B1	2764	G	O4'-C4'-C3'	5.12	110.20	106.10
21	A2	1288	C	O4'-C1'-C2'	-5.12	100.68	105.80
38	Bb	62	SER	N-CA-C	-5.12	97.17	111.00
29	AL	45	ILE	N-CA-C	-5.12	97.18	111.00
38	Bb	62	SER	C-N-CA	5.12	134.50	121.70
46	BA	50	VAL	N-CA-C	-5.12	97.17	111.00
67	B1	2231	G	N9-C1'-C2'	5.12	120.66	114.00
67	B1	2927	A	C5'-C4'-O4'	-5.12	102.96	109.10
6	AC	118	ARG	NE-CZ-NH2	-5.12	117.74	120.30
11	A1	14	A	C4'-C3'-C2'	-5.12	97.48	102.60
21	A2	105	C	P-O5'-C5'	5.12	129.09	120.90
21	A2	832	G	C3'-C2'-C1'	-5.12	97.41	101.50
28	AV	78	MET	CA-CB-CG	5.12	122.00	113.30
52	BB	233	ARG	NH1-CZ-NH2	5.12	125.03	119.40
20	BG	33	ARG	CB-CA-C	-5.12	100.16	110.40
67	B1	89	C	O4'-C1'-C2'	-5.12	100.68	105.80
67	B1	734	C	O4'-C1'-N1	5.12	112.30	108.20
67	B1	931	C	C3'-C2'-C1'	5.12	105.59	101.50
67	B1	1167	A	O4'-C1'-N9	5.12	112.29	108.20
67	B1	1341	U	O5'-P-OP1	5.12	116.84	110.70
67	B1	1412	C	C4'-C3'-C2'	-5.12	97.48	102.60
67	B1	2234	C	O5'-C5'-C4'	-5.12	101.97	111.70
67	B1	2941	A	C5'-C4'-O4'	-5.12	102.96	109.10
1	AQ	105	LEU	CB-CA-C	-5.12	100.48	110.20
25	AH	148	VAL	CG1-CB-CG2	-5.12	102.71	110.90
27	A0	73	G	C4'-C3'-C2'	-5.12	97.48	102.60
67	B1	206	A	O4'-C1'-C2'	-5.12	100.68	105.80
67	B1	921	C	C4'-C3'-C2'	-5.12	97.48	102.60
4	AG	4	PHE	N-CA-CB	5.12	119.81	110.60
67	B1	1037	C	P-O5'-C5'	-5.12	112.71	120.90
67	B1	1191	C	O4'-C1'-C2'	-5.12	100.68	105.80
67	B1	2850	G	C3'-C2'-C1'	-5.12	97.41	101.50
21	A2	254	G	P-O5'-C5'	-5.11	112.72	120.90
21	A2	1251	C	C4'-C3'-C2'	-5.11	97.49	102.60
21	A2	1311	C	C5'-C4'-C3'	-5.11	107.82	116.00
27	A0	71	G	O5'-C5'-C4'	-5.11	101.99	111.70
29	AL	39	PRO	C-N-CA	5.11	134.49	121.70
20	BG	108	ARG	NE-CZ-NH2	-5.11	117.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1138	C	O5'-C5'-C4'	-5.11	101.99	111.70
67	B1	1565	G	P-O3'-C3'	-5.11	113.56	119.70
67	B1	1670	A	O4'-C1'-C2'	5.11	112.20	107.60
67	B1	2041	U	O4'-C1'-N1	5.11	112.29	108.20
67	B1	2467	C	O4'-C1'-C2'	-5.11	100.69	105.80
67	B1	2636	C	C1'-O4'-C4'	-5.11	105.81	109.90
68	B3	10	U	O4'-C1'-N1	5.11	112.29	108.20
21	A2	308	G	C5'-C4'-C3'	5.11	124.18	116.00
47	BI	67	TYR	CG-CD2-CE2	-5.11	117.21	121.30
67	B1	371	U	O4'-C1'-N1	5.11	112.29	108.20
67	B1	632	G	C3'-C2'-C1'	-5.11	97.41	101.50
67	B1	1899	C	C4'-C3'-C2'	-5.11	97.49	102.60
67	B1	1994	G	C3'-C2'-C1'	5.11	105.59	101.50
67	B1	2060	A	O4'-C1'-N9	-5.11	104.11	108.20
67	B1	2100	U	OP1-P-OP2	-5.11	111.93	119.60
67	B1	2337	G	O4'-C1'-C2'	-5.11	100.69	105.80
67	B1	2636	C	O4'-C1'-C2'	-5.11	100.69	105.80
15	AE	81	TYR	CB-CG-CD1	-5.11	117.93	121.00
21	A2	232	G	P-O3'-C3'	-5.11	113.57	119.70
21	A2	240	U	O4'-C1'-C2'	-5.11	100.69	105.80
21	A2	615	G	O4'-C1'-N9	5.11	112.29	108.20
49	BQ	24	ILE	N-CA-C	-5.11	97.20	111.00
50	BV	1	MET	CA-CB-CG	5.11	121.99	113.30
28	B6	33	ARG	NE-CZ-NH2	-5.11	117.75	120.30
65	BJ	136	ILE	N-CA-CB	5.11	122.56	110.80
67	B1	514	U	C1'-O4'-C4'	5.11	113.99	109.90
67	B1	702	G	O5'-P-OP2	5.11	116.83	110.70
67	B1	1593	C	P-O3'-C3'	5.11	125.83	119.70
67	B1	1866	G	P-O3'-C3'	5.11	125.83	119.70
67	B1	2264	G	O3'-P-O5'	5.11	113.71	104.00
21	A2	132	G	C3'-C2'-C1'	-5.11	97.41	101.50
21	A2	797	U	O4'-C4'-C3'	-5.11	98.89	104.00
21	A2	957	A	N9-C1'-C2'	-5.11	106.38	112.00
33	BC	221	VAL	N-CA-CB	5.11	122.74	111.50
34	B5	16	ARG	C-N-CA	5.11	134.47	121.70
39	Be	2	GLY	N-CA-C	-5.11	100.33	113.10
67	B1	347	G	P-O5'-C5'	-5.11	112.73	120.90
67	B1	2146	C	C5'-C4'-O4'	5.11	115.23	109.10
11	A1	30	G	O4'-C1'-C2'	5.11	112.20	107.60
18	AF	13	LEU	CB-CG-CD2	-5.11	102.32	111.00
21	A2	319	U	C3'-C2'-C1'	5.11	105.59	101.50
21	A2	451	A	C5-C6-N6	-5.11	119.61	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	996	A	O4'-C1'-N9	5.11	112.29	108.20
27	A0	52	G	O4'-C4'-C3'	-5.11	98.89	104.00
31	BY	22	THR	N-CA-CB	5.11	120.00	110.30
61	Bd	70	HIS	CA-CB-CG	-5.11	104.92	113.60
67	B1	356	C	C5'-C4'-C3'	5.11	124.17	116.00
67	B1	1141	C	C1'-O4'-C4'	-5.11	105.81	109.90
67	B1	1508	A	C1'-O4'-C4'	-5.11	105.81	109.90
67	B1	1511	C	O4'-C1'-N1	5.11	112.29	108.20
67	B1	1674	G	OP1-P-O3'	5.11	116.44	105.20
67	B1	2112	C	O4'-C1'-C2'	-5.11	100.69	105.80
67	B1	2912	G	C2'-C3'-O3'	5.11	121.87	113.70
21	A2	1177	C	P-O3'-C3'	-5.11	113.57	119.70
21	A2	1231	G	O4'-C1'-C2'	-5.11	100.69	105.80
21	A2	1299	A	O5'-P-OP2	5.11	116.83	110.70
21	A2	1327	C	O4'-C1'-C2'	-5.11	100.69	105.80
21	A2	1477	U	P-O3'-C3'	-5.11	113.57	119.70
24	AA	26	PHE	CA-C-O	5.11	130.82	120.10
33	BC	242	ARG	NH1-CZ-NH2	5.11	125.02	119.40
43	Bk	33	MET	N-CA-C	-5.11	97.21	111.00
47	BI	137	PHE	CB-CG-CD2	-5.11	117.23	120.80
67	B1	497	G	N9-C1'-C2'	5.11	120.64	114.00
67	B1	629	G	C3'-C2'-C1'	5.11	105.58	101.50
2	AK	47	GLU	O-C-N	-5.10	111.40	121.10
67	B1	946	U	O3'-P-O5'	5.10	113.70	104.00
67	B1	1164	C	C5'-C4'-O4'	5.10	115.22	109.10
67	B1	2629	U	C3'-C2'-C1'	5.10	105.58	101.50
21	A2	33	U	C5'-C4'-C3'	5.10	124.17	116.00
21	A2	1046	G	C1'-O4'-C4'	-5.10	105.82	109.90
21	A2	1172	A	OP1-P-O3'	5.10	116.42	105.20
21	A2	1425	C	O4'-C1'-N1	5.10	112.28	108.20
59	BM	171	GLY	O-C-N	-5.10	114.54	122.70
67	B1	43	G	C4'-C3'-C2'	-5.10	97.50	102.60
67	B1	930	G	N9-C1'-C2'	5.10	120.63	114.00
67	B1	1263	C	C3'-C2'-C1'	-5.10	97.42	101.50
67	B1	1763	A	C5'-C4'-C3'	-5.10	107.84	116.00
67	B1	2625	C	N1-C1'-C2'	5.10	120.63	114.00
6	AC	171	LEU	N-CA-C	-5.10	97.23	111.00
21	A2	156	A	OP1-P-O3'	5.10	116.42	105.20
21	A2	878	U	O4'-C1'-C2'	5.10	112.19	107.60
21	A2	1149	C	P-O3'-C3'	5.10	125.82	119.70
67	B1	825	C	P-O5'-C5'	-5.10	112.74	120.90
67	B1	2136	G	O4'-C1'-N9	5.10	112.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A3	52	ILE	CB-CA-C	5.10	121.80	111.60
21	A2	92	G	N9-C1'-C2'	-5.10	106.39	112.00
21	A2	563	U	O4'-C1'-N1	5.10	112.28	108.20
33	BC	339	ARG	NH1-CZ-NH2	5.10	125.01	119.40
20	BG	63	VAL	N-CA-CB	-5.10	100.28	111.50
67	B1	409	C	P-O5'-C5'	5.10	129.06	120.90
67	B1	731	C	C3'-C2'-C1'	5.10	105.58	101.50
67	B1	789	G	C4'-C3'-C2'	5.10	107.70	102.60
67	B1	1213	G	P-O3'-C3'	5.10	125.82	119.70
67	B1	1386	G	C1'-O4'-C4'	-5.10	105.82	109.90
67	B1	1577	C	P-O3'-C3'	5.10	125.82	119.70
67	B1	2154	G	O4'-C1'-C2'	-5.10	100.70	105.80
6	AC	6	TYR	CB-CG-CD2	-5.10	117.94	121.00
21	A2	1046	G	O4'-C1'-N9	5.10	112.28	108.20
21	A2	1472	G	C5'-C4'-C3'	5.10	124.16	116.00
34	B5	68	ASP	CB-CG-OD1	5.10	122.89	118.30
62	BN	150	ARG	NE-CZ-NH2	5.10	122.85	120.30
67	B1	1118	A	C4'-C3'-C2'	-5.10	97.50	102.60
67	B1	1988	U	OP2-P-O3'	5.10	116.41	105.20
67	B1	2307	C	C4'-C3'-C2'	5.10	107.70	102.60
67	B1	2470	U	C1'-O4'-C4'	5.10	113.98	109.90
21	A2	290	C	C3'-C2'-C1'	5.10	105.58	101.50
47	BI	94	PHE	CB-CG-CD1	-5.10	117.23	120.80
67	B1	1851	U	N1-C1'-C2'	5.10	120.62	114.00
4	AG	83	ARG	NE-CZ-NH2	-5.09	117.75	120.30
21	A2	332	C	C5'-C4'-C3'	5.09	124.15	116.00
21	A2	358	G	N9-C1'-C2'	-5.09	106.40	112.00
21	A2	965	G	O4'-C4'-C3'	-5.09	98.91	104.00
36	Bf	49	LEU	CD1-CG-CD2	5.09	125.78	110.50
38	Bb	30	ARG	NE-CZ-NH1	5.09	122.85	120.30
67	B1	1218	C	C5'-C4'-C3'	-5.09	107.85	116.00
67	B1	1835	A	O4'-C1'-N9	-5.09	104.12	108.20
67	B1	2415	C	C3'-C2'-C1'	5.09	105.58	101.50
20	A3	86	LEU	N-CA-CB	5.09	120.59	110.40
21	A2	198	A	O4'-C1'-N9	5.09	112.27	108.20
21	A2	887	G	O4'-C1'-N9	5.09	112.27	108.20
28	AV	45	ASP	N-CA-CB	5.09	119.77	110.60
53	BD	58	THR	N-CA-CB	5.09	119.98	110.30
67	B1	783	C	O4'-C1'-N1	5.09	112.27	108.20
21	A2	974	G	O4'-C1'-N9	-5.09	104.13	108.20
21	A2	1001	A	OP2-P-O3'	5.09	116.40	105.20
25	AH	89	GLU	CA-CB-CG	5.09	124.60	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	AP	46	VAL	CA-CB-CG1	5.09	118.54	110.90
44	BW	48	ARG	NH1-CZ-NH2	-5.09	113.80	119.40
52	BB	204	PHE	CB-CG-CD2	-5.09	117.24	120.80
63	Bg	3	ARG	CA-CB-CG	5.09	124.60	113.40
63	Bg	18	LEU	N-CA-CB	-5.09	100.22	110.40
67	B1	106	G	C1'-O4'-C4'	-5.09	105.83	109.90
67	B1	244	A	C4'-C3'-C2'	5.09	107.69	102.60
67	B1	2032	G	P-O3'-C3'	5.09	125.81	119.70
67	B1	2161	A	C1'-O4'-C4'	5.09	113.97	109.90
67	B1	2562	G	C5'-C4'-O4'	5.09	115.21	109.10
21	A2	227	C	O4'-C1'-C2'	-5.09	100.71	105.80
21	A2	670	C	P-O5'-C5'	5.09	129.04	120.90
21	A2	1478	A	O4'-C4'-C3'	-5.09	98.91	104.00
27	A0	61	C	O4'-C1'-C2'	-5.09	100.71	105.80
32	BO	83	ALA	N-CA-CB	5.09	117.22	110.10
35	BL	51	ILE	N-CA-C	-5.09	97.26	111.00
52	BB	128	TYR	CB-CG-CD2	-5.09	117.95	121.00
60	BS	40	ARG	CB-CA-C	5.09	120.58	110.40
67	B1	243	G	O5'-P-OP2	5.09	116.81	110.70
67	B1	404	G	C4'-C3'-C2'	-5.09	97.51	102.60
67	B1	721	G	O4'-C1'-N9	5.09	112.27	108.20
67	B1	943	G	C3'-C2'-C1'	5.09	105.57	101.50
67	B1	1216	A	C5'-C4'-O4'	5.09	115.21	109.10
67	B1	1468	G	O5'-C5'-C4'	-5.09	102.03	111.70
67	B1	1518	G	C1'-O4'-C4'	5.09	113.97	109.90
67	B1	1601	G	C5'-C4'-C3'	5.09	124.14	116.00
67	B1	1666	G	OP1-P-O3'	5.09	116.40	105.20
67	B1	2298	C	O4'-C1'-N1	5.09	112.27	108.20
21	A2	164	A	P-O3'-C3'	5.09	125.81	119.70
21	A2	1250	C	C5'-C4'-C3'	-5.09	107.86	116.00
27	A0	30	G	O4'-C1'-C2'	-5.09	100.71	105.80
67	B1	336	C	C4'-C3'-C2'	-5.09	97.51	102.60
67	B1	419	G	C5'-C4'-C3'	-5.09	107.86	116.00
67	B1	982	G	OP1-P-OP2	-5.09	111.97	119.60
21	A2	74	U	C4'-C3'-C2'	5.09	107.69	102.60
40	BE	24	ARG	NE-CZ-NH2	-5.09	117.76	120.30
54	BF	151	ALA	N-CA-CB	5.09	117.22	110.10
60	BS	26	ARG	NE-CZ-NH1	5.09	122.84	120.30
67	B1	1408	G	O4'-C1'-C2'	-5.09	100.71	105.80
67	B1	1569	A	O4'-C4'-C3'	-5.09	98.91	104.00
67	B1	1632	U	N1-C1'-C2'	-5.09	106.40	112.00
67	B1	1947	A	O4'-C1'-N9	-5.09	104.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2098	C	C3'-C2'-C1'	5.09	105.57	101.50
67	B1	2275	G	C1'-O4'-C4'	5.09	113.97	109.90
68	B3	66	A	P-O5'-C5'	5.09	129.04	120.90
6	AC	140	ARG	NH1-CZ-NH2	5.08	124.99	119.40
21	A2	133	G	P-O3'-C3'	5.08	125.80	119.70
21	A2	219	C	C5'-C4'-C3'	5.08	124.14	116.00
49	BQ	115	ILE	CB-CA-C	5.08	121.77	111.60
67	B1	2862	A	P-O5'-C5'	-5.08	112.76	120.90
1	AQ	103	VAL	CA-CB-CG2	-5.08	103.27	110.90
21	A2	710	G	C1'-O4'-C4'	-5.08	105.83	109.90
21	A2	1156	A	C3'-C2'-C1'	5.08	105.57	101.50
67	B1	113	C	O4'-C1'-C2'	-5.08	100.72	105.80
67	B1	671	G	C5'-C4'-C3'	-5.08	107.86	116.00
67	B1	802	G	P-O5'-C5'	5.08	129.03	120.90
67	B1	888	U	P-O5'-C5'	5.08	129.03	120.90
67	B1	1055	C	C5'-C4'-O4'	5.08	115.20	109.10
67	B1	1491	U	C1'-O4'-C4'	5.08	113.97	109.90
67	B1	2627	C	P-O5'-C5'	-5.08	112.77	120.90
10	AD	30	MET	CG-SD-CE	-5.08	92.07	100.20
21	A2	975	A	O3'-P-O5'	5.08	113.65	104.00
29	AL	49	THR	CA-CB-CG2	-5.08	105.29	112.40
67	B1	40	G	OP1-P-OP2	-5.08	111.98	119.60
67	B1	98	G	N9-C1'-C2'	-5.08	106.41	112.00
67	B1	455	G	OP1-P-OP2	-5.08	111.98	119.60
67	B1	694	A	C1'-O4'-C4'	5.08	113.97	109.90
67	B1	1211	C	C4'-C3'-C2'	5.08	107.68	102.60
67	B1	1224	A	C5'-C4'-C3'	5.08	124.13	116.00
67	B1	1765	A	C5'-C4'-O4'	-5.08	103.00	109.10
67	B1	2365	G	C5'-C4'-O4'	5.08	115.20	109.10
67	B1	2668	G	O4'-C4'-C3'	-5.08	98.92	104.00
13	AX	70	ARG	NE-CZ-NH2	-5.08	117.76	120.30
21	A2	619	A	C1'-O4'-C4'	5.08	113.96	109.90
34	BK	68	ASP	CB-CG-OD1	5.08	122.87	118.30
67	B1	705	G	C4'-C3'-C2'	-5.08	97.52	102.60
67	B1	855	G	P-O5'-C5'	-5.08	112.77	120.90
67	B1	1892	G	C3'-C2'-C1'	-5.08	97.44	101.50
2	AK	112	ARG	NE-CZ-NH2	5.08	122.84	120.30
6	AC	34	ASP	CB-CG-OD1	5.08	122.87	118.30
14	AM	26	THR	CA-CB-CG2	-5.08	105.29	112.40
21	A2	210	A	O4'-C1'-N9	5.08	112.26	108.20
21	A2	554	C	P-O3'-C3'	-5.08	113.61	119.70
21	A2	559	G	C4'-C3'-C2'	-5.08	97.52	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	682	A	C5'-C4'-C3'	5.08	124.12	116.00
21	A2	1329	C	C4'-C3'-C2'	5.08	107.68	102.60
21	A2	1455	A	N9-C1'-C2'	5.08	120.60	114.00
21	A2	1476	C	N1-C1'-C2'	5.08	120.60	114.00
24	AA	175	LYS	N-CA-CB	5.08	119.74	110.60
44	BW	42	MET	CA-CB-CG	5.08	121.93	113.30
67	B1	92	G	C3'-C2'-C1'	5.08	105.56	101.50
67	B1	805	C	O4'-C1'-N1	5.08	112.26	108.20
67	B1	837	G	N9-C1'-C2'	5.08	120.60	114.00
67	B1	1244	C	C5'-C4'-C3'	5.08	124.13	116.00
67	B1	2976	G	O4'-C1'-N9	5.08	112.26	108.20
68	B3	65	G	C1'-O4'-C4'	-5.08	105.84	109.90
8	AR	61	GLU	N-CA-CB	5.08	119.74	110.60
21	A2	482	G	C1'-O4'-C4'	-5.08	105.84	109.90
21	A2	678	G	OP1-P-OP2	-5.08	111.98	119.60
67	B1	1550	C	O4'-C1'-N1	5.08	112.26	108.20
21	A2	447	A	C5-C6-N6	-5.08	119.64	123.70
21	A2	593	G	C1'-O4'-C4'	-5.08	105.84	109.90
21	A2	729	G	C5'-C4'-C3'	5.08	124.12	116.00
21	A2	765	U	P-O3'-C3'	5.08	125.79	119.70
21	A2	1249	A	O4'-C1'-C2'	-5.08	100.72	105.80
45	Bi	22	ARG	NE-CZ-NH1	5.08	122.84	120.30
61	Bd	59	LYS	CB-CA-C	5.08	120.55	110.40
66	Bl	12	PHE	CB-CG-CD1	-5.08	117.25	120.80
67	B1	598	C	C5'-C4'-C3'	5.08	124.12	116.00
67	B1	780	G	C3'-C2'-C1'	-5.08	97.44	101.50
67	B1	1540	A	C5'-C4'-C3'	5.08	124.12	116.00
67	B1	2054	G	P-O5'-C5'	-5.08	112.78	120.90
67	B1	2494	A	C3'-C2'-C1'	5.08	105.56	101.50
6	AC	147	TYR	CD1-CG-CD2	5.07	123.48	117.90
21	A2	112	G	OP1-P-OP2	-5.07	111.99	119.60
21	A2	317	A	N9-C1'-C2'	5.07	120.59	114.00
21	A2	1419	G	C3'-C2'-C1'	-5.07	97.44	101.50
27	A0	21	G	C5'-C4'-O4'	5.07	115.19	109.10
31	BY	16	LYS	N-CA-CB	5.07	119.73	110.60
42	BT	65	LYS	N-CA-C	-5.07	97.30	111.00
67	B1	1781	C	P-O3'-C3'	-5.07	113.61	119.70
67	B1	2198	U	C1'-O4'-C4'	-5.07	105.84	109.90
67	B1	2202	U	N1-C1'-C2'	5.07	120.60	114.00
67	B1	3045	G	O4'-C1'-C2'	-5.07	100.73	105.80
68	B3	78	C	C1'-O4'-C4'	5.07	113.96	109.90
21	A2	73	U	P-O5'-C5'	5.07	129.01	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	BH	2	PRO	CA-N-CD	-5.07	104.40	111.50
28	B6	10	GLU	N-CA-CB	5.07	119.73	110.60
67	B1	2283	C	O4'-C1'-C2'	-5.07	100.73	105.80
67	B1	2291	G	OP1-P-OP2	-5.07	111.99	119.60
67	B1	2350	G	O4'-C1'-C2'	-5.07	100.73	105.80
21	A2	553	C	C1'-O4'-C4'	-5.07	105.84	109.90
58	BP	86	SER	N-CA-CB	5.07	118.11	110.50
66	B1	65	ALA	N-CA-CB	5.07	117.20	110.10
67	B1	626	C	C3'-C2'-C1'	5.07	105.56	101.50
67	B1	2256	G	O4'-C4'-C3'	-5.07	98.93	104.00
67	B1	2311	C	O4'-C1'-N1	5.07	112.26	108.20
67	B1	2710	G	O4'-C1'-C2'	-5.07	100.73	105.80
15	AE	224	ASP	N-CA-C	-5.07	97.31	111.00
25	AH	179	SER	N-CA-CB	-5.07	102.90	110.50
27	A0	76	A	C1'-O4'-C4'	5.07	113.96	109.90
33	BC	125	TYR	CG-CD2-CE2	-5.07	117.25	121.30
53	BD	225	LEU	CB-CG-CD2	5.07	119.62	111.00
67	B1	1018	G	O4'-C1'-N9	5.07	112.25	108.20
67	B1	2265	C	O4'-C1'-C2'	-5.07	100.73	105.80
21	A2	303	G	C3'-C2'-C1'	-5.07	97.44	101.50
21	A2	375	G	C1'-O4'-C4'	-5.07	105.84	109.90
32	BO	96	GLN	N-CA-CB	5.07	119.72	110.60
33	BC	236	ARG	NE-CZ-NH1	5.07	122.83	120.30
67	B1	584	G	P-O5'-C5'	-5.07	112.79	120.90
67	B1	1054	A	O4'-C4'-C3'	-5.07	98.93	104.00
67	B1	1257	G	C1'-O4'-C4'	-5.07	105.85	109.90
67	B1	1288	C	C1'-O4'-C4'	5.07	113.95	109.90
67	B1	1406	G	C5'-C4'-C3'	-5.07	107.89	116.00
67	B1	1607	C	C5'-C4'-O4'	5.07	115.18	109.10
67	B1	1739	U	C2'-C3'-O3'	5.07	121.81	113.70
67	B1	1819	G	C4'-C3'-C2'	-5.07	97.53	102.60
67	B1	2216	G	C5'-C4'-C3'	-5.07	107.89	116.00
67	B1	2468	C	C1'-O4'-C4'	5.07	113.95	109.90
6	AC	51	PRO	CA-C-N	5.07	126.33	116.20
21	A2	77	G	OP2-P-O3'	5.07	116.34	105.20
21	A2	322	G	O4'-C1'-N9	5.07	112.25	108.20
21	A2	419	G	O4'-C1'-N9	5.07	112.25	108.20
33	BC	42	ALA	CB-CA-C	-5.07	102.50	110.10
38	Bb	92	ALA	N-CA-CB	5.07	117.19	110.10
46	BA	203	TYR	CB-CG-CD1	-5.07	117.96	121.00
67	B1	20	C	P-O3'-C3'	-5.07	113.62	119.70
67	B1	782	G	C5'-C4'-C3'	-5.07	107.89	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1057	C	C3'-C2'-C1'	5.07	105.55	101.50
21	A2	1114	G	C1'-O4'-C4'	5.06	113.95	109.90
67	B1	2978	G	C1'-O4'-C4'	-5.06	105.85	109.90
68	B3	38	U	C1'-O4'-C4'	-5.06	105.85	109.90
21	A2	70	C	C2'-C3'-O3'	5.06	121.80	113.70
21	A2	774	U	O4'-C1'-C2'	-5.06	100.74	105.80
21	A2	997	G	N3-C2-N2	5.06	123.44	119.90
21	A2	1386	C	N1-C1'-C2'	5.06	120.58	114.00
51	Bj	31	SER	N-CA-C	5.06	124.67	111.00
67	B1	1173	G	P-O3'-C3'	5.06	125.78	119.70
67	B1	1698	G	O4'-C1'-C2'	5.06	112.16	107.60
67	B1	1339	C	N1-C1'-C2'	5.06	120.58	114.00
67	B1	2002	A	N9-C1'-C2'	5.06	120.58	114.00
67	B1	2888	G	N9-C1'-C2'	-5.06	106.43	112.00
21	A2	426	C	O4'-C1'-C2'	-5.06	100.74	105.80
21	A2	637	G	C1'-O4'-C4'	-5.06	105.85	109.90
21	A2	913	G	N9-C1'-C2'	5.06	120.58	114.00
21	A2	1031	G	C1'-O4'-C4'	5.06	113.95	109.90
21	A2	1473	A	P-O3'-C3'	-5.06	113.63	119.70
67	B1	577	C	C1'-O4'-C4'	5.06	113.95	109.90
67	B1	2160	C	OP1-P-OP2	-5.06	112.01	119.60
68	B3	26	C	C2'-C3'-O3'	5.06	121.79	113.70
21	A2	969	A	C3'-C2'-C1'	5.06	105.55	101.50
33	BC	124	PHE	CB-CG-CD1	5.06	124.34	120.80
67	B1	1068	U	N1-C1'-C2'	5.06	120.58	114.00
67	B1	1725	A	O4'-C1'-N9	5.06	112.25	108.20
67	B1	1937	A	O4'-C1'-C2'	-5.06	100.74	105.80
68	B3	53	A	C5'-C4'-O4'	-5.06	103.03	109.10
21	A2	198	A	O4'-C1'-C2'	5.06	112.15	107.60
21	A2	538	C	O4'-C1'-C2'	-5.06	100.74	105.80
31	BY	129	SER	N-CA-CB	5.06	118.08	110.50
67	B1	1641	G	C1'-O4'-C4'	-5.06	105.86	109.90
12	AN	44	LEU	CB-CA-C	-5.05	100.59	110.20
21	A2	72	C	O4'-C1'-N1	5.05	112.24	108.20
21	A2	179	U	O4'-C1'-C2'	-5.05	100.75	105.80
21	A2	529	C	C1'-O4'-C4'	-5.05	105.86	109.90
21	A2	950	C	C1'-O4'-C4'	5.05	113.94	109.90
21	A2	1320	A	O4'-C1'-C2'	5.05	112.15	107.60
43	Bk	97	PHE	CB-CG-CD2	5.05	124.34	120.80
48	BR	39	GLN	N-CA-CB	5.05	119.70	110.60
56	BH	70	VAL	C-N-CD	-5.05	109.48	120.60
20	B4	63	VAL	N-CA-CB	-5.05	100.38	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	1607	C	O3'-P-O5'	-5.05	94.40	104.00
67	B1	2110	C	O4'-C4'-C3'	-5.05	98.94	104.00
67	B1	2953	U	C5'-C4'-C3'	-5.05	107.91	116.00
21	A2	135	U	P-O3'-C3'	5.05	125.76	119.70
21	A2	295	G	O4'-C1'-N9	5.05	112.24	108.20
21	A2	316	C	P-O3'-C3'	5.05	125.76	119.70
67	B1	207	A	N9-C1'-C2'	5.05	120.57	114.00
67	B1	938	U	C5'-C4'-C3'	5.05	124.08	116.00
67	B1	2409	C	O4'-C1'-C2'	-5.05	100.75	105.80
67	B1	2606	C	C3'-C2'-C1'	5.05	105.54	101.50
67	B1	3001	C	P-O3'-C3'	-5.05	113.64	119.70
68	B3	84	U	C1'-O4'-C4'	5.05	113.94	109.90
13	AX	31	ILE	CA-CB-CG2	5.05	121.00	110.90
21	A2	805	C	P-O5'-C5'	5.05	128.98	120.90
21	A2	1032	A	N9-C1'-C2'	-5.05	106.44	112.00
21	A2	1227	A	P-O3'-C3'	-5.05	113.64	119.70
21	A2	1400	A	OP1-P-OP2	-5.05	112.02	119.60
32	BO	194	GLU	OE1-CD-OE2	-5.05	117.24	123.30
35	BL	10	LYS	C-N-CA	5.05	134.33	121.70
67	B1	308	C	O4'-C4'-C3'	-5.05	98.95	104.00
67	B1	597	C	C3'-C2'-C1'	5.05	105.54	101.50
67	B1	1386	G	C3'-C2'-C1'	-5.05	97.46	101.50
67	B1	1665	G	O4'-C1'-N9	5.05	112.24	108.20
67	B1	1678	A	O4'-C4'-C3'	-5.05	98.95	104.00
67	B1	2108	U	P-O5'-C5'	-5.05	112.82	120.90
67	B1	2573	C	C3'-C2'-C1'	5.05	105.54	101.50
14	AM	49	LYS	O-C-N	-5.05	114.62	122.70
20	A3	73	LYS	CB-CA-C	-5.05	100.30	110.40
21	A2	806	G	C1'-O4'-C4'	-5.05	105.86	109.90
21	A2	821	G	O4'-C1'-C2'	-5.05	100.75	105.80
21	A2	1078	U	C3'-C2'-C1'	5.05	105.54	101.50
21	A2	1232	G	C3'-C2'-C1'	5.05	105.54	101.50
24	AA	97	ARG	NE-CZ-NH2	5.05	122.83	120.30
51	Bj	62	VAL	CB-CA-C	5.05	121.00	111.40
67	B1	980	G	C3'-C2'-C1'	5.05	105.54	101.50
67	B1	1468	G	OP2-P-O3'	5.05	116.31	105.20
67	B1	1813	A	P-O5'-C5'	5.05	128.98	120.90
67	B1	2086	C	C1'-O4'-C4'	-5.05	105.86	109.90
67	B1	2471	A	C1'-O4'-C4'	5.05	113.94	109.90
67	B1	2883	C	O5'-C5'-C4'	-5.05	102.11	111.70
15	AE	106	ARG	C-N-CA	5.05	134.32	121.70
21	A2	1198	A	P-O5'-C5'	5.05	128.98	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1279	A	O4'-C1'-C2'	-5.05	100.75	105.80
67	B1	117	A	O4'-C1'-C2'	-5.05	100.75	105.80
67	B1	275	C	C3'-C2'-C1'	5.05	105.54	101.50
67	B1	1470	C	C3'-C2'-C1'	5.05	105.54	101.50
21	A2	425	C	P-O3'-C3'	-5.05	113.64	119.70
21	A2	1103	G	C3'-C2'-C1'	5.05	105.54	101.50
37	BU	33	ARG	NE-CZ-NH1	5.05	122.82	120.30
40	BE	18	HIS	N-CA-CB	5.05	119.68	110.60
67	B1	985	A	C5-C6-N1	-5.05	115.18	117.70
67	B1	2442	A	O5'-P-OP1	5.05	116.76	110.70
67	B1	2780	G	C4'-C3'-C2'	-5.05	97.55	102.60
67	B1	2890	A	C1'-O4'-C4'	5.05	113.94	109.90
68	B3	3	G	C3'-C2'-C1'	5.05	105.54	101.50
4	AG	104	LYS	N-CA-CB	5.04	119.68	110.60
11	A1	16	C	O4'-C1'-N1	5.04	112.24	108.20
21	A2	341	C	P-O5'-C5'	-5.04	112.83	120.90
46	BA	107	PHE	CD1-CE1-CZ	-5.04	114.05	120.10
53	BD	211	ALA	N-CA-CB	5.04	117.16	110.10
56	BH	78	LYS	CB-CA-C	-5.04	100.31	110.40
60	BS	13	ASP	CA-C-O	-5.04	109.51	120.10
67	B1	183	G	C1'-O4'-C4'	-5.04	105.86	109.90
67	B1	184	A	N9-C1'-C2'	-5.04	106.45	112.00
67	B1	1708	U	C5'-C4'-O4'	5.04	115.15	109.10
67	B1	2364	G	O4'-C1'-C2'	5.04	112.14	107.60
67	B1	2366	G	C3'-C2'-C1'	-5.04	97.47	101.50
67	B1	2400	U	C5'-C4'-O4'	5.04	115.15	109.10
67	B1	2812	U	C4'-C3'-C2'	-5.04	97.56	102.60
2	AK	74	GLN	N-CA-CB	5.04	119.67	110.60
21	A2	81	C	O4'-C1'-C2'	-5.04	100.76	105.80
43	Bk	27	LEU	CB-CG-CD1	5.04	119.57	111.00
67	B1	152	G	C4'-C3'-C2'	-5.04	97.56	102.60
67	B1	732	G	O4'-C1'-C2'	5.04	112.14	107.60
67	B1	1054	A	C1'-O4'-C4'	-5.04	105.87	109.90
67	B1	1110	A	O4'-C1'-C2'	5.04	112.14	107.60
68	B3	12	G	N9-C1'-C2'	-5.04	106.45	112.00
21	A2	998	A	C5-C6-N6	-5.04	119.67	123.70
33	BC	111	ALA	CB-CA-C	5.04	117.66	110.10
54	BF	163	TRP	CE2-CD2-CE3	5.04	124.75	118.70
67	B1	189	U	P-O3'-C3'	-5.04	113.65	119.70
67	B1	1528	A	O4'-C1'-C2'	5.04	112.14	107.60
67	B1	2251	G	OP1-P-OP2	-5.04	112.04	119.60
67	B1	2416	G	O4'-C1'-N9	5.04	112.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	2560	G	O4'-C1'-C2'	5.04	112.14	107.60
21	A2	22	G	C5'-C4'-O4'	-5.04	103.05	109.10
36	Bf	32	ASN	C-N-CA	5.04	134.30	121.70
53	BD	13	VAL	N-CA-C	-5.04	97.39	111.00
67	B1	516	A	N9-C1'-C2'	5.04	120.55	114.00
67	B1	811	C	N1-C1'-C2'	5.04	120.55	114.00
67	B1	1553	G	C1'-O4'-C4'	5.04	113.93	109.90
67	B1	2867	U	C5'-C4'-O4'	-5.04	103.06	109.10
67	B1	2907	C	C4'-C3'-C2'	-5.04	97.56	102.60
21	A2	623	C	O4'-C4'-C3'	-5.04	98.96	104.00
21	A2	1258	C	O5'-P-OP2	5.04	116.75	110.70
2	AK	117	HIS	CA-CB-CG	5.04	122.16	113.60
21	A2	157	A	C1'-O4'-C4'	5.04	113.93	109.90
21	A2	304	C	C1'-O4'-C4'	-5.04	105.87	109.90
21	A2	716	G	P-O3'-C3'	5.04	125.74	119.70
21	A2	1000	G	O3'-P-O5'	-5.04	94.43	104.00
21	A2	1051	G	C5'-C4'-C3'	5.04	124.06	116.00
21	A2	1322	C	O4'-C1'-C2'	-5.04	100.77	105.80
45	Bi	50	SER	N-CA-C	-5.04	97.40	111.00
67	B1	643	G	O4'-C1'-N9	5.04	112.23	108.20
67	B1	1779	C	O4'-C4'-C3'	-5.04	98.96	104.00
67	B1	1938	G	C5'-C4'-O4'	5.04	115.14	109.10
67	B1	2043	A	O4'-C4'-C3'	-5.04	98.97	104.00
67	B1	2316	U	C4'-C3'-C2'	-5.04	97.56	102.60
27	A0	71	G	O3'-P-O5'	5.03	113.56	104.00
67	B1	381	G	C4'-C3'-C2'	-5.03	97.57	102.60
67	B1	431	U	P-O3'-C3'	5.03	125.74	119.70
67	B1	751	U	P-O5'-C5'	-5.03	112.85	120.90
67	B1	979	G	O5'-C5'-C4'	-5.03	102.14	111.70
67	B1	1854	G	C5'-C4'-C3'	-5.03	107.95	116.00
67	B1	1863	G	O4'-C1'-C2'	5.03	112.13	107.60
67	B1	2332	G	O4'-C4'-C3'	-5.03	98.97	104.00
68	B3	111	G	C3'-C2'-C1'	-5.03	97.47	101.50
21	A2	166	A	C4'-C3'-C2'	-5.03	97.57	102.60
21	A2	1345	G	C4'-C3'-C2'	-5.03	97.57	102.60
21	A2	1451	C	O4'-C1'-C2'	-5.03	100.77	105.80
67	B1	690	G	O4'-C1'-N9	5.03	112.23	108.20
67	B1	2978	G	O5'-P-OP1	5.03	116.74	110.70
21	A2	237	C	N1-C1'-C2'	5.03	120.54	114.00
21	A2	362	C	P-O3'-C3'	5.03	125.74	119.70
21	A2	1055	C	C3'-C2'-C1'	5.03	105.53	101.50
21	A2	1117	A	C5'-C4'-O4'	-5.03	103.06	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	A2	1489	A	O4'-C1'-N9	5.03	112.22	108.20
53	BD	191	TYR	CB-CG-CD1	-5.03	117.98	121.00
67	B1	246	A	O4'-C1'-C2'	-5.03	100.77	105.80
67	B1	411	U	P-O3'-C3'	5.03	125.74	119.70
67	B1	415	U	P-O5'-C5'	5.03	128.95	120.90
67	B1	1026	A	O4'-C1'-N9	5.03	112.22	108.20
67	B1	1431	U	O5'-P-OP2	-5.03	101.17	105.70
67	B1	2508	G	N9-C1'-C2'	5.03	120.54	114.00
21	A2	74	U	O4'-C1'-C2'	5.03	112.13	107.60
21	A2	1474	A	O4'-C1'-N9	5.03	112.22	108.20
67	B1	2423	G	P-O5'-C5'	5.03	128.95	120.90
8	AR	8	ARG	NE-CZ-NH1	5.03	122.81	120.30
21	A2	1006	C	C5'-C4'-O4'	5.03	115.13	109.10
21	A2	1111	G	O4'-C1'-N9	5.03	112.22	108.20
43	Bk	41	MET	CA-CB-CG	5.03	121.85	113.30
62	BN	116	PHE	CB-CG-CD1	-5.03	117.28	120.80
67	B1	257	G	OP1-P-OP2	-5.03	112.06	119.60
67	B1	589	G	N3-C2-N2	5.03	123.42	119.90
67	B1	962	C	O4'-C1'-C2'	-5.03	100.77	105.80
67	B1	1762	G	O4'-C1'-C2'	-5.03	100.77	105.80
67	B1	2199	U	O4'-C4'-C3'	-5.03	98.97	104.00
67	B1	2589	C	O4'-C1'-N1	5.03	112.22	108.20
67	B1	2850	G	N9-C1'-C2'	5.03	120.54	114.00
8	AR	37	ILE	CG1-CB-CG2	5.03	122.45	111.40
21	A2	212	G	C4'-C3'-C2'	-5.03	97.57	102.60
21	A2	474	G	C4'-C3'-C2'	-5.03	97.58	102.60
21	A2	625	G	C5'-C4'-C3'	-5.03	107.96	116.00
42	BT	74	TYR	CG-CD2-CE2	-5.03	117.28	121.30
66	B1	43	SER	CB-CA-C	5.03	119.65	110.10
67	B1	1287	G	O4'-C1'-C2'	-5.03	100.77	105.80
67	B1	1519	G	C3'-C2'-C1'	5.03	105.52	101.50
67	B1	2029	C	O4'-C1'-N1	5.03	112.22	108.20
68	B3	20	G	C1'-O4'-C4'	-5.03	105.88	109.90
21	A2	1438	A	C4'-C3'-C2'	-5.02	97.58	102.60
67	B1	3	G	O4'-C4'-C3'	-5.02	98.98	104.00
67	B1	1342	G	C3'-C2'-C1'	5.02	105.52	101.50
67	B1	1982	C	O4'-C1'-N1	5.02	112.22	108.20
67	B1	2020	G	C4'-C3'-C2'	-5.02	97.58	102.60
67	B1	2836	G	P-O3'-C3'	5.02	125.73	119.70
11	A1	55	U	P-O3'-C3'	-5.02	113.67	119.70
15	AE	8	ARG	NE-CZ-NH2	-5.02	117.79	120.30
36	Bf	41	ARG	CB-CA-C	-5.02	100.36	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
60	BS	20	ALA	N-CA-CB	5.02	117.13	110.10
67	B1	699	A	C5'-C4'-C3'	5.02	124.04	116.00
67	B1	969	U	C3'-C2'-C1'	5.02	105.52	101.50
67	B1	1379	A	N9-C1'-C2'	-5.02	106.48	112.00
67	B1	1557	G	O3'-P-O5'	-5.02	94.46	104.00
67	B1	2196	C	O4'-C1'-C2'	-5.02	100.78	105.80
67	B1	2502	C	C1'-O4'-C4'	-5.02	105.88	109.90
67	B1	3008	C	P-O5'-C5'	5.02	128.94	120.90
13	AX	17	ARG	N-CA-CB	5.02	119.64	110.60
21	A2	2	U	OP1-P-OP2	-5.02	112.07	119.60
21	A2	401	U	C3'-C2'-C1'	5.02	105.52	101.50
67	B1	1738	A	C4'-C3'-C2'	-5.02	97.58	102.60
11	A1	16	C	P-O3'-C3'	5.02	125.72	119.70
67	B1	435	G	OP2-P-O3'	5.02	116.24	105.20
67	B1	567	G	C3'-C2'-C1'	-5.02	97.48	101.50
67	B1	989	G	P-O3'-C3'	-5.02	113.68	119.70
67	B1	1467	G	N9-C1'-C2'	-5.02	106.48	112.00
67	B1	1724	A	O4'-C1'-C2'	-5.02	100.78	105.80
67	B1	2198	U	C4'-C3'-C2'	-5.02	97.58	102.60
67	B1	2488	C	O4'-C1'-C2'	-5.02	100.78	105.80
25	AH	48	HIS	CA-CB-CG	5.02	122.13	113.60
36	Bf	27	VAL	CB-CA-C	-5.02	101.87	111.40
39	Be	24	GLY	CA-C-N	5.02	128.24	117.20
67	B1	1177	C	O3'-P-O5'	5.02	113.53	104.00
67	B1	2074	U	O4'-C4'-C3'	-5.02	98.98	104.00
67	B1	2766	C	N1-C1'-C2'	5.02	120.52	114.00
67	B1	2864	G	O4'-C1'-C2'	-5.02	100.78	105.80
21	A2	587	G	O4'-C1'-N9	5.02	112.21	108.20
33	BC	37	ARG	NE-CZ-NH1	5.02	122.81	120.30
65	BJ	91	ARG	N-CA-CB	5.02	119.63	110.60
67	B1	1162	C	O4'-C1'-N1	-5.02	104.19	108.20
67	B1	1213	G	O4'-C4'-C3'	-5.02	98.98	104.00
67	B1	1701	C	O4'-C1'-N1	5.02	112.21	108.20
67	B1	2691	G	O4'-C1'-C2'	5.02	112.11	107.60
12	AN	38	LYS	CB-CA-C	-5.01	100.37	110.40
21	A2	247	G	P-O3'-C3'	5.01	125.72	119.70
21	A2	595	U	O4'-C1'-C2'	-5.01	100.78	105.80
21	A2	819	G	C5'-C4'-O4'	5.01	115.12	109.10
21	A2	1243	C	N1-C1'-C2'	5.01	120.52	114.00
24	AA	19	TYR	N-CA-C	-5.01	97.46	111.00
32	BO	22	ARG	N-CA-CB	5.01	119.63	110.60
38	Bb	36	ASN	N-CA-CB	5.01	119.63	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	BF	180	LYS	N-CA-CB	5.01	119.63	110.60
66	B1	71	ARG	NE-CZ-NH1	5.01	122.81	120.30
67	B1	442	G	C5'-C4'-C3'	-5.01	107.97	116.00
67	B1	890	G	O4'-C1'-C2'	5.01	112.11	107.60
67	B1	2000	G	P-O3'-C3'	-5.01	113.68	119.70
67	B1	2837	C	O4'-C4'-C3'	-5.01	98.98	104.00
67	B1	2944	G	C5'-C4'-C3'	5.01	124.02	116.00
21	A2	1013	G	O4'-C1'-N9	5.01	112.21	108.20
21	A2	488	A	C3'-C2'-C1'	5.01	105.51	101.50
33	BC	122	MET	CG-SD-CE	-5.01	92.18	100.20
67	B1	190	C	P-O3'-C3'	-5.01	113.69	119.70
67	B1	275	C	O3'-P-O5'	5.01	113.52	104.00
67	B1	606	A	C1'-O4'-C4'	-5.01	105.89	109.90
67	B1	1225	A	O4'-C1'-N9	5.01	112.21	108.20
67	B1	1285	C	O4'-C1'-N1	5.01	112.21	108.20
67	B1	1748	C	O4'-C1'-C2'	-5.01	100.79	105.80
67	B1	1966	C	C4'-C3'-C2'	-5.01	97.59	102.60
67	B1	2723	G	C5'-C4'-O4'	-5.01	103.09	109.10
67	B1	2866	A	N9-C1'-C2'	5.01	120.52	114.00
10	AD	27	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
27	A0	68	G	P-O3'-C3'	5.01	125.71	119.70
67	B1	290	G	C3'-C2'-C1'	5.01	105.51	101.50
67	B1	306	G	O5'-C5'-C4'	-5.01	102.18	111.70
67	B1	899	A	C2'-C3'-O3'	5.01	121.72	113.70
67	B1	1723	A	O4'-C1'-C2'	-5.01	100.79	105.80
67	B1	2427	C	C2'-C3'-O3'	5.01	121.72	113.70
62	BN	143	LYS	CB-CA-C	-5.01	100.39	110.40
65	BJ	14	ALA	N-CA-CB	5.01	117.11	110.10
67	B1	1104	A	C3'-C2'-C1'	-5.01	97.49	101.50
67	B1	2426	U	C3'-C2'-C1'	-5.01	97.49	101.50
67	B1	2818	C	C1'-O4'-C4'	-5.01	105.89	109.90
7	AB	95	ARG	NE-CZ-NH2	5.01	122.80	120.30
12	AN	12	ALA	CB-CA-C	-5.01	102.59	110.10
21	A2	36	G	C3'-C2'-C1'	5.01	105.50	101.50
21	A2	680	C	N1-C1'-C2'	-5.01	106.49	112.00
21	A2	870	U	C3'-C2'-C1'	5.01	105.50	101.50
21	A2	961	U	O4'-C1'-N1	5.01	112.20	108.20
21	A2	1063	A	C3'-C2'-C1'	5.01	105.50	101.50
21	A2	1186	C	P-O5'-C5'	-5.01	112.89	120.90
21	A2	1296	U	OP1-P-OP2	-5.01	112.09	119.60
37	BU	77	TYR	CB-CG-CD1	5.01	124.00	121.00
61	Bd	26	PHE	N-CA-CB	5.01	119.61	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	B1	363	G	C5'-C4'-O4'	5.01	115.11	109.10
67	B1	471	U	C2'-C3'-O3'	5.01	121.71	113.70
67	B1	1848	A	C3'-C2'-C1'	5.01	105.50	101.50
67	B1	2180	C	O4'-C1'-N1	5.01	112.20	108.20
67	B1	2513	C	P-O5'-C5'	5.01	128.91	120.90
67	B1	2811	U	C3'-C2'-C1'	-5.01	97.49	101.50
17	AO	5	ARG	N-CA-C	-5.00	97.49	111.00
67	B1	657	U	OP1-P-OP2	-5.00	112.09	119.60
67	B1	1427	A	O4'-C1'-N9	5.00	112.20	108.20
67	B1	1565	G	O5'-C5'-C4'	-5.00	102.19	111.70
67	B1	2102	A	C3'-C2'-C1'	-5.00	97.50	101.50
21	A2	555	U	O4'-C1'-C2'	5.00	112.10	107.60
21	A2	674	C	C1'-O4'-C4'	5.00	113.90	109.90
67	B1	574	C	P-O3'-C3'	5.00	125.70	119.70
67	B1	1135	A	C5'-C4'-O4'	5.00	115.11	109.10
67	B1	1464	A	O4'-C1'-C2'	-5.00	100.80	105.80
67	B1	2262	C	P-O5'-C5'	5.00	128.91	120.90
67	B1	2309	C	C3'-C2'-C1'	5.00	105.50	101.50
67	B1	2614	C	P-O3'-C3'	-5.00	113.69	119.70
67	B1	2776	A	C5'-C4'-C3'	-5.00	107.99	116.00
15	AE	133	ILE	CA-CB-CG1	5.00	120.50	111.00
21	A2	114	A	O4'-C1'-N9	-5.00	104.20	108.20
33	BC	182	VAL	CA-CB-CG2	-5.00	103.40	110.90
59	BM	106	ARG	NE-CZ-NH2	-5.00	117.80	120.30
67	B1	122	G	C5'-C4'-C3'	5.00	124.00	116.00
67	B1	200	G	C1'-O4'-C4'	-5.00	105.90	109.90
67	B1	370	A	C4'-C3'-C2'	5.00	107.60	102.60
67	B1	652	G	C2'-C3'-O3'	5.00	121.70	113.70
67	B1	953	G	O5'-P-OP1	-5.00	101.20	105.70
67	B1	2284	C	P-O5'-C5'	-5.00	112.90	120.90
67	B1	2497	G	C1'-O4'-C4'	-5.00	105.90	109.90
67	B1	2670	U	P-O5'-C5'	-5.00	112.90	120.90
67	B1	3018	C	C2'-C3'-O3'	5.00	121.70	113.70
67	B1	3024	C	O4'-C1'-C2'	-5.00	100.80	105.80

All (22) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
4	AG	53	LYS	CA
21	A2	1317	G	C1'
25	AH	85	PHE	CA
25	AH	86	MET	CA

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Mol	Chain	Res	Type	Atom
25	AH	87	ARG	CA
25	AH	96	LYS	CA
29	AL	59	ALA	CA
34	B5	17	ARG	CA
35	BL	11	LEU	CA
35	BL	17	HIS	CA
35	BL	44	LYS	CA
39	Be	14	THR	CB
34	BK	17	ARG	CA
49	BQ	6	MET	CA
49	BQ	88	ARG	CA
49	BQ	101	ALA	CA
50	BV	56	TYR	CA
51	Bj	31	SER	CA
56	BH	91	LYS	CA
61	Bd	80	MET	CA
63	Bg	13	LYS	CA
64	Bc	63	THR	CA

All (442) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
21	A2	430	G	Sidechain
21	A2	431	U	Sidechain
21	A2	458	G	Sidechain
21	A2	459	G	Sidechain
21	A2	587	G	Sidechain
21	A2	962	G	Sidechain
21	A2	986	G	Sidechain
9	A9	26	UNK	Peptide
24	AA	27	PHE	Sidechain
24	AA	91	TYR	Sidechain
7	AB	121	ARG	Sidechain
7	AB	168	TYR	Sidechain
7	AB	202	ARG	Sidechain
7	AB	34	ARG	Sidechain
7	AB	41	TYR	Sidechain
7	AB	75	TYR	Sidechain
6	AC	109	PHE	Sidechain
6	AC	110	ARG	Sidechain
6	AC	145	ARG	Sidechain
6	AC	27	ARG	Sidechain

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Mol	Chain	Res	Type	Group
6	AC	47	PHE	Sidechain
6	AC	57	ARG	Sidechain
6	AC	6	TYR	Sidechain
6	AC	60	ARG	Sidechain
6	AC	63	ARG	Sidechain
6	AC	67	ARG	Sidechain
6	AC	98	ARG	Sidechain
10	AD	142	TYR	Sidechain
10	AD	154	TYR	Sidechain
10	AD	22	ARG	Sidechain
10	AD	33	TYR	Sidechain
10	AD	52	ARG	Sidechain
10	AD	53	ARG	Sidechain
15	AE	121	PHE	Sidechain
15	AE	125	LEU	Peptide
15	AE	126	ARG	Sidechain
15	AE	137	ARG	Sidechain
15	AE	198	ARG	Sidechain
15	AE	20	TYR	Sidechain
15	AE	205	PHE	Peptide
15	AE	26	TYR	Sidechain
15	AE	31	ARG	Sidechain
15	AE	52	TYR	Sidechain
15	AE	55	TYR	Sidechain
18	AF	8	TYR	Sidechain
4	AG	101	GLU	Peptide
4	AG	43	LEU	Peptide
4	AG	49	GLU	Peptide
4	AG	52	GLY	Peptide
4	AG	56	PRO	Peptide
4	AG	64	ARG	Sidechain
4	AG	76	PRO	Peptide
4	AG	85	ARG	Sidechain
4	AG	99	LYS	Peptide
25	AH	101	TYR	Sidechain
25	AH	13	HIS	Mainchain
25	AH	137	THR	Peptide
25	AH	14	GLU	Peptide
25	AH	146	TYR	Sidechain
25	AH	174	TYR	Sidechain
25	AH	175	ARG	Sidechain
25	AH	178	MET	Peptide

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Mol	Chain	Res	Type	Group
25	AH	199	TYR	Sidechain
25	AH	42	ARG	Sidechain
25	AH	47	THR	Peptide
25	AH	49	GLY	Peptide
25	AH	66	ARG	Sidechain
25	AH	72	MET	Peptide
25	AH	83	GLY	Peptide
25	AH	84	HIS	Peptide
25	AH	86	MET	Peptide
25	AH	87	ARG	Peptide,Sidechain
25	AH	90	HIS	Peptide,Sidechain
3	AI	130	TYR	Sidechain
3	AI	3	LEU	Peptide
3	AI	46	TYR	Sidechain
3	AI	61	TYR	Sidechain
3	AI	79	PHE	Sidechain
16	AJ	36	ARG	Sidechain
16	AJ	62	TYR	Sidechain
16	AJ	64	ASN	Peptide
16	AJ	91	ARG	Sidechain
2	AK	12	THR	Peptide
2	AK	130	ARG	Sidechain
2	AK	16	ARG	Sidechain
2	AK	27	ARG	Sidechain
29	AL	41	PRO	Peptide
29	AL	61	PHE	Sidechain
29	AL	63	ARG	Sidechain
29	AL	83	ARG	Sidechain
29	AL	90	VAL	Peptide
14	AM	103	ARG	Sidechain
14	AM	58	TYR	Sidechain
12	AN	124	TYR	Sidechain
12	AN	144	LYS	Peptide
12	AN	20	ARG	Sidechain
12	AN	29	ARG	Sidechain
12	AN	30	TYR	Sidechain
12	AN	32	ARG	Mainchain
12	AN	36	ARG	Sidechain
12	AN	5	LYS	Peptide
12	AN	65	PRO	Peptide
12	AN	70	ARG	Sidechain
17	AO	115	TYR	Sidechain

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Mol	Chain	Res	Type	Group
17	AO	119	ARG	Sidechain
17	AO	124	LEU	Peptide
17	AO	127	ARG	Sidechain
17	AO	137	ARG	Sidechain
17	AO	4	PHE	Sidechain
17	AO	5	ARG	Sidechain
17	AO	6	HIS	Sidechain
17	AO	76	ARG	Sidechain
17	AO	85	TYR	Sidechain
17	AO	9	ARG	Sidechain
26	AP	23	ARG	Sidechain
26	AP	27	TYR	Sidechain
26	AP	32	ARG	Sidechain
26	AP	44	ARG	Sidechain
26	AP	53	ARG	Sidechain
26	AP	55	TYR	Sidechain
1	AQ	117	HIS	Sidechain
1	AQ	131	ARG	Sidechain
1	AQ	28	TYR	Sidechain
1	AQ	3	ARG	Sidechain
1	AQ	58	TYR	Sidechain
1	AQ	68	ASP	Peptide
1	AQ	74	ARG	Sidechain
8	AR	112	ARG	Sidechain
8	AR	113	ARG	Sidechain
8	AR	55	PHE	Sidechain
19	AS	20	TYR	Sidechain
23	AT	11	TYR	Sidechain
23	AT	19	MET	Peptide
23	AT	38	ARG	Sidechain
23	AT	52	ARG	Sidechain
23	AT	7	ARG	Sidechain
30	AU	126	ARG	Sidechain
30	AU	15	ARG	Sidechain
30	AU	53	TYR	Sidechain
30	AU	76	TYR	Sidechain
30	AU	80	ARG	Sidechain
30	AU	91	TYR	Sidechain
28	AV	21	PHE	Peptide
28	AV	55	TYR	Peptide,Sidechain
28	AV	59	TYR	Sidechain
28	AV	60	PHE	Sidechain

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Mol	Chain	Res	Type	Group
28	AV	77	ARG	Sidechain
28	AV	85	TYR	Sidechain
28	AV	89	ARG	Sidechain
28	AV	94	GLU	Peptide
28	AV	96	LYS	Peptide
5	AW	12	ARG	Sidechain
5	AW	28	PHE	Sidechain
13	AX	22	GLY	Peptide
13	AX	4	ASP	Peptide
13	AX	46	ARG	Sidechain
13	AX	62	ARG	Sidechain
13	AX	66	GLU	Peptide
13	AX	7	TYR	Sidechain
13	AX	70	ARG	Sidechain
22	AY	21	PHE	Sidechain
22	AY	24	ARG	Sidechain
22	AY	37	ARG	Sidechain
22	AY	45	TYR	Sidechain
67	B1	1008	U	Sidechain
67	B1	1009	G	Sidechain
67	B1	1659	G	Sidechain
67	B1	1775	G	Sidechain
67	B1	1777	U	Sidechain
67	B1	1881	A	Sidechain
67	B1	1917	U	Sidechain
67	B1	1919	A	Sidechain
67	B1	2165	A	Sidechain
67	B1	331	G	Sidechain
67	B1	45	G	Sidechain
67	B1	8	G	Sidechain
20	B4	6	TYR	Sidechain
34	B5	46	ARG	Peptide,Sidechain
34	B5	47	ARG	Mainchain
28	B6	72	TYR	Sidechain
28	B6	85	TYR	Sidechain
46	BA	123	ARG	Sidechain
46	BA	203	TYR	Sidechain
46	BA	40	LYS	Peptide
46	BA	98	ARG	Sidechain
52	BB	117	ASP	Peptide
52	BB	121	TYR	Sidechain
52	BB	123	ARG	Sidechain

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Mol	Chain	Res	Type	Group
52	BB	128	TYR	Sidechain
52	BB	14	SER	Peptide
52	BB	167	ARG	Sidechain
52	BB	180	TYR	Sidechain
52	BB	185	ARG	Sidechain
52	BB	204	PHE	Sidechain
52	BB	210	HIS	Sidechain
52	BB	237	ARG	Sidechain
52	BB	25	ARG	Sidechain
52	BB	30	TYR	Sidechain
52	BB	40	THR	Peptide
52	BB	54	ARG	Sidechain
52	BB	84	TYR	Sidechain
33	BC	104	PHE	Sidechain
33	BC	111	ALA	Peptide
33	BC	119	LYS	Peptide
33	BC	122	MET	Peptide
33	BC	125	TYR	Peptide,Sidechain
33	BC	17	ARG	Sidechain
33	BC	236	ARG	Sidechain
33	BC	242	ARG	Sidechain
33	BC	28	ARG	Sidechain
33	BC	285	ARG	Sidechain
33	BC	292	ASN	Peptide
33	BC	304	GLU	Peptide
33	BC	318	ARG	Sidechain
33	BC	343	ARG	Sidechain
33	BC	353	ARG	Sidechain
33	BC	6	ARG	Sidechain
33	BC	90	TYR	Sidechain
53	BD	140	LEU	Peptide
53	BD	187	ARG	Sidechain
53	BD	254	TYR	Sidechain
53	BD	42	ARG	Sidechain
53	BD	56	ARG	Sidechain
53	BD	79	TYR	Sidechain
53	BD	85	PHE	Sidechain
53	BD	90	ARG	Sidechain
40	BE	128	TYR	Peptide
40	BE	157	ARG	Sidechain
40	BE	22	ARG	Sidechain
40	BE	59	ARG	Sidechain

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Mol	Chain	Res	Type	Group
40	BE	71	ARG	Sidechain
40	BE	88	TYR	Sidechain
54	BF	159	ARG	Sidechain
54	BF	181	PRO	Peptide
54	BF	24	TYR	Sidechain
54	BF	40	PHE	Sidechain
54	BF	6	TRP	Peptide
54	BF	61	ARG	Sidechain
54	BF	76	ARG	Sidechain
54	BF	97	PHE	Sidechain
20	BG	33	ARG	Sidechain
20	BG	45	ARG	Sidechain
20	BG	6	TYR	Sidechain
56	BH	1	MET	Peptide
56	BH	114	MET	Peptide
56	BH	116	ALA	Peptide,Mainchain
56	BH	16	THR	Peptide
56	BH	2	PRO	Peptide
56	BH	59	PRO	Peptide,Mainchain
56	BH	70	VAL	Peptide
47	BI	125	ARG	Sidechain
47	BI	13	ARG	Sidechain
47	BI	52	ARG	Sidechain
65	BJ	114	ARG	Sidechain
65	BJ	124	ARG	Sidechain
65	BJ	86	ARG	Sidechain
34	BK	45	ARG	Sidechain
35	BL	10	LYS	Peptide
35	BL	17	HIS	Sidechain
35	BL	25	HIS	Sidechain
35	BL	34	ARG	Sidechain
35	BL	53	TYR	Peptide
35	BL	54	ALA	Peptide,Mainchain
35	BL	63	PHE	Peptide
35	BL	65	ARG	Sidechain
35	BL	8	VAL	Peptide
35	BL	9	ARG	Peptide,Mainchain
59	BM	106	ARG	Sidechain
59	BM	128	PHE	Sidechain
59	BM	173	ARG	Sidechain
59	BM	53	TYR	Sidechain
59	BM	59	TYR	Sidechain

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Mol	Chain	Res	Type	Group
59	BM	80	ARG	Sidechain
59	BM	90	TYR	Sidechain
62	BN	117	GLY	Peptide
62	BN	162	TYR	Sidechain
62	BN	22	TYR	Sidechain
62	BN	4	ARG	Sidechain
62	BN	58	ARG	Sidechain
62	BN	72	TYR	Sidechain
62	BN	79	ARG	Sidechain
62	BN	87	ARG	Sidechain
32	BO	113	ARG	Sidechain
32	BO	14	ARG	Sidechain
32	BO	142	TYR	Sidechain
32	BO	152	TYR	Sidechain
32	BO	171	TYR	Sidechain
32	BO	191	ARG	Sidechain
32	BO	34	ARG	Sidechain
32	BO	51	TYR	Sidechain
32	BO	7	TYR	Sidechain
32	BO	8	ARG	Sidechain
32	BO	84	TYR	Sidechain
58	BP	25	TYR	Sidechain
58	BP	3	ARG	Sidechain
49	BQ	100	ARG	Sidechain
49	BQ	115	ILE	Mainchain
49	BQ	117	ARG	Sidechain
49	BQ	133	LYS	Peptide
49	BQ	2	ASN	Peptide
49	BQ	3	THR	Peptide
49	BQ	61	TYR	Sidechain
49	BQ	66	ARG	Sidechain
49	BQ	76	ARG	Sidechain
49	BQ	8	ARG	Sidechain
48	BR	22	ARG	Sidechain
48	BR	3	GLN	Peptide
48	BR	40	ARG	Sidechain
48	BR	57	ARG	Sidechain
48	BR	8	PHE	Sidechain
48	BR	87	PHE	Sidechain
60	BS	131	ARG	Sidechain
60	BS	133	PHE	Sidechain
60	BS	16	ARG	Sidechain

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Mol	Chain	Res	Type	Group
60	BS	50	TYR	Sidechain
60	BS	72	HIS	Sidechain
60	BS	82	ARG	Sidechain
60	BS	9	PHE	Sidechain
42	BT	4	TYR	Sidechain
42	BT	74	TYR	Sidechain
42	BT	86	PHE	Sidechain
37	BU	14	PHE	Sidechain
37	BU	3	ILE	Peptide
37	BU	73	ARG	Sidechain
50	BV	14	PHE	Sidechain
50	BV	48	ARG	Sidechain
50	BV	56	TYR	Sidechain
50	BV	9	TYR	Sidechain
44	BW	48	ARG	Sidechain
44	BW	53	ARG	Sidechain
31	BY	110	LEU	Peptide
31	BY	120	HIS	Sidechain
31	BY	29	HIS	Peptide,Sidechain
31	BY	53	TYR	Sidechain
31	BY	71	ARG	Sidechain
31	BY	73	ARG	Sidechain
57	BZ	51	TYR	Sidechain
41	Ba	24	ARG	Peptide,Sidechain
41	Ba	34	PHE	Sidechain
41	Ba	7	GLU	Peptide
41	Ba	79	GLU	Peptide
41	Ba	84	GLU	Peptide
41	Ba	85	GLU	Peptide
38	Bb	111	ARG	Sidechain
38	Bb	117	ARG	Sidechain
38	Bb	126	LEU	Peptide
38	Bb	128	PRO	Peptide
38	Bb	31	TYR	Sidechain
38	Bb	34	PHE	Peptide,Sidechain
38	Bb	35	LYS	Peptide
38	Bb	38	PRO	Peptide
38	Bb	74	LEU	Peptide
64	Bc	10	TYR	Sidechain
64	Bc	15	GLU	Mainchain
64	Bc	18	HIS	Sidechain
64	Bc	32	ARG	Sidechain

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Mol	Chain	Res	Type	Group
64	Bc	50	GLY	Peptide
64	Bc	51	LYS	Peptide
64	Bc	68	ARG	Sidechain
61	Bd	30	LYS	Peptide
61	Bd	38	MET	Peptide
61	Bd	5	TYR	Sidechain
61	Bd	55	ARG	Sidechain
61	Bd	6	ARG	Sidechain
61	Bd	66	ARG	Sidechain
61	Bd	8	ARG	Sidechain
39	Be	1	MET	Peptide
39	Be	11	ARG	Sidechain
39	Be	25	ARG	Sidechain
39	Be	34	TYR	Sidechain
39	Be	42	ARG	Sidechain
39	Be	44	ARG	Sidechain
39	Be	47	ARG	Sidechain
39	Be	49	TYR	Sidechain
39	Be	50	ARG	Sidechain
39	Be	51	TRP	Peptide
39	Be	52	SER	Peptide
39	Be	8	PHE	Peptide
36	Bf	12	ARG	Sidechain
36	Bf	2	ALA	Peptide
36	Bf	22	ARG	Sidechain
36	Bf	3	ARG	Peptide,Sidechain
36	Bf	33	ARG	Peptide,Sidechain
36	Bf	34	ARG	Sidechain
36	Bf	37	THR	Peptide
36	Bf	38	HIS	Peptide,Sidechain
36	Bf	48	LYS	Peptide
36	Bf	49	LEU	Peptide
63	Bg	10	ARG	Sidechain
63	Bg	12	PHE	Sidechain
63	Bg	4	PHE	Peptide
63	Bg	41	PRO	Peptide
45	Bi	16	ARG	Sidechain
45	Bi	17	TYR	Sidechain
45	Bi	68	TYR	Sidechain
45	Bi	80	ARG	Sidechain
51	Bj	13	PHE	Sidechain
51	Bj	28	ARG	Sidechain

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Mol	Chain	Res	Type	Group
51	Bj	30	ARG	Peptide,Sidechain
51	Bj	38	ARG	Sidechain
51	Bj	39	ARG	Sidechain
51	Bj	42	ARG	Sidechain
51	Bj	47	TYR	Sidechain
51	Bj	50	PHE	Sidechain
51	Bj	52	ARG	Peptide
51	Bj	54	LYS	Peptide
51	Bj	55	PRO	Peptide
51	Bj	57	GLY	Peptide
51	Bj	58	ARG	Peptide
51	Bj	62	VAL	Peptide
51	Bj	63	LYS	Peptide
51	Bj	82	ARG	Sidechain
51	Bj	84	PHE	Sidechain
43	Bk	107	ARG	Peptide,Sidechain
43	Bk	109	PRO	Peptide
43	Bk	187	VAL	Peptide
43	Bk	213	TYR	Sidechain
43	Bk	33	MET	Peptide
43	Bk	36	TYR	Sidechain
43	Bk	42	ARG	Sidechain
43	Bk	54	VAL	Peptide
43	Bk	70	GLU	Peptide
66	Bl	25	TYR	Sidechain
66	Bl	38	TYR	Sidechain
66	Bl	71	ARG	Sidechain

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AQ	156/158 (99%)	139 (89%)	8 (5%)	9 (6%)	1	18
2	AK	133/135 (98%)	119 (90%)	12 (9%)	2 (2%)	10	46
3	AI	127/130 (98%)	121 (95%)	4 (3%)	2 (2%)	9	44
4	AG	123/125 (98%)	103 (84%)	11 (9%)	9 (7%)	1	14
5	AW	61/63 (97%)	55 (90%)	4 (7%)	2 (3%)	4	26
6	AC	184/210 (88%)	175 (95%)	6 (3%)	3 (2%)	9	44
7	AB	200/202 (99%)	177 (88%)	19 (10%)	4 (2%)	7	38
8	AR	111/113 (98%)	100 (90%)	9 (8%)	2 (2%)	8	40
10	AD	170/180 (94%)	151 (89%)	14 (8%)	5 (3%)	4	29
12	AN	143/147 (97%)	129 (90%)	8 (6%)	6 (4%)	3	22
13	AX	69/71 (97%)	59 (86%)	4 (6%)	6 (9%)	1	11
14	AM	131/137 (96%)	118 (90%)	8 (6%)	5 (4%)	3	24
15	AE	239/243 (98%)	210 (88%)	23 (10%)	6 (2%)	5	32
16	AJ	125/127 (98%)	101 (81%)	18 (14%)	6 (5%)	2	21
17	AO	146/148 (99%)	122 (84%)	15 (10%)	9 (6%)	1	17
18	AF	215/236 (91%)	191 (89%)	22 (10%)	2 (1%)	17	57
19	AS	65/67 (97%)	64 (98%)	0	1 (2%)	10	46
20	A3	121/123 (98%)	105 (87%)	8 (7%)	8 (7%)	1	15
20	B4	121/123 (98%)	113 (93%)	6 (5%)	2 (2%)	9	42
20	BG	121/123 (98%)	109 (90%)	8 (7%)	4 (3%)	4	26
22	AY	48/50 (96%)	43 (90%)	3 (6%)	2 (4%)	3	22
23	AT	109/132 (83%)	98 (90%)	9 (8%)	2 (2%)	8	40
24	AA	188/198 (95%)	170 (90%)	12 (6%)	6 (3%)	4	26
25	AH	213/215 (99%)	181 (85%)	14 (7%)	18 (8%)	1	11
26	AP	54/56 (96%)	43 (80%)	8 (15%)	3 (6%)	2	18
28	AV	97/99 (98%)	86 (89%)	6 (6%)	5 (5%)	2	19
28	B6	92/99 (93%)	84 (91%)	4 (4%)	4 (4%)	2	22
29	AL	100/102 (98%)	92 (92%)	1 (1%)	7 (7%)	1	14
30	AU	142/150 (95%)	134 (94%)	5 (4%)	3 (2%)	7	36
31	BY	153/155 (99%)	143 (94%)	5 (3%)	5 (3%)	4	26
32	BO	195/203 (96%)	164 (84%)	17 (9%)	14 (7%)	1	14
33	BC	363/365 (100%)	303 (84%)	34 (9%)	26 (7%)	1	14

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	B5	79/83 (95%)	69 (87%)	5 (6%)	5 (6%)	1	16
34	BK	79/83 (95%)	68 (86%)	6 (8%)	5 (6%)	1	16
35	BL	145/147 (99%)	128 (88%)	8 (6%)	9 (6%)	1	17
36	Bf	49/51 (96%)	37 (76%)	8 (16%)	4 (8%)	1	12
37	BU	119/121 (98%)	113 (95%)	3 (2%)	3 (2%)	5	32
38	Bb	125/130 (96%)	102 (82%)	13 (10%)	10 (8%)	1	12
39	Be	60/62 (97%)	45 (75%)	11 (18%)	4 (7%)	1	15
40	BE	184/186 (99%)	170 (92%)	8 (4%)	6 (3%)	4	26
41	Ba	88/95 (93%)	74 (84%)	7 (8%)	7 (8%)	1	12
42	BT	82/86 (95%)	78 (95%)	3 (4%)	1 (1%)	13	50
43	Bk	210/339 (62%)	187 (89%)	12 (6%)	11 (5%)	2	19
44	BW	70/72 (97%)	70 (100%)	0	0	100	100
45	Bi	76/83 (92%)	70 (92%)	6 (8%)	0	100	100
46	BA	214/216 (99%)	190 (89%)	12 (6%)	12 (6%)	2	18
47	BI	140/142 (99%)	129 (92%)	7 (5%)	4 (3%)	4	29
48	BR	93/97 (96%)	85 (91%)	6 (6%)	2 (2%)	6	35
49	BQ	148/150 (99%)	141 (95%)	4 (3%)	3 (2%)	7	38
50	BV	64/66 (97%)	63 (98%)	1 (2%)	0	100	100
51	Bj	92/94 (98%)	71 (77%)	8 (9%)	13 (14%)	0	4
52	BB	237/239 (99%)	213 (90%)	17 (7%)	7 (3%)	4	28
53	BD	253/255 (99%)	218 (86%)	21 (8%)	14 (6%)	2	19
54	BF	182/184 (99%)	169 (93%)	13 (7%)	0	100	100
55	Bh	22/24 (92%)	21 (96%)	1 (4%)	0	100	100
56	BH	132/164 (80%)	108 (82%)	14 (11%)	10 (8%)	1	13
57	BZ	97/99 (98%)	84 (87%)	7 (7%)	6 (6%)	1	17
58	BP	118/120 (98%)	102 (86%)	13 (11%)	3 (2%)	5	32
59	BM	192/194 (99%)	173 (90%)	17 (9%)	2 (1%)	15	54
60	BS	148/155 (96%)	137 (93%)	8 (5%)	3 (2%)	7	38
61	Bd	87/89 (98%)	78 (90%)	6 (7%)	3 (3%)	3	26
62	BN	166/181 (92%)	137 (82%)	20 (12%)	9 (5%)	2	19
63	Bg	43/51 (84%)	31 (72%)	3 (7%)	9 (21%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
64	Bc	85/87 (98%)	74 (87%)	7 (8%)	4 (5%)	2	21
65	BJ	130/141 (92%)	124 (95%)	4 (3%)	2 (2%)	10	46
66	Bl	75/77 (97%)	69 (92%)	4 (5%)	2 (3%)	5	31
All	All	8599/9048 (95%)	7630 (89%)	608 (7%)	361 (4%)	5	22

All (361) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	AQ	78	ILE
2	AK	133	SER
3	AI	121	ILE
4	AG	48	ASN
4	AG	50	LEU
4	AG	56	PRO
5	AW	2	ALA
7	AB	7	VAL
8	AR	16	CYS
10	AD	163	PRO
10	AD	174	ALA
12	AN	36	ARG
12	AN	43	PRO
12	AN	44	LEU
12	AN	120	PRO
13	AX	4	ASP
14	AM	132	ARG
17	AO	20	GLN
17	AO	113	ARG
17	AO	129	GLN
18	AF	132	GLU
19	AS	6	GLN
20	A3	122	MET
24	AA	193	GLU
24	AA	194	PRO
25	AH	46	HIS
25	AH	47	THR
25	AH	48	HIS
25	AH	49	GLY
25	AH	50	ARG
25	AH	78	HIS
25	AH	89	GLU
25	AH	175	ARG

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Mol	Chain	Res	Type
28	AV	55	TYR
28	AV	95	LYS
28	AV	98	GLY
29	AL	30	THR
29	AL	91	PRO
29	AL	92	GLU
30	AU	35	VAL
30	AU	93	ALA
31	BY	110	LEU
31	BY	112	ASN
31	BY	129	SER
32	BO	56	ASP
32	BO	109	HIS
32	BO	157	LYS
32	BO	193	ILE
33	BC	110	PRO
33	BC	112	LYS
33	BC	125	TYR
33	BC	126	LYS
33	BC	138	ASN
33	BC	292	ASN
34	B5	17	ARG
34	B5	50	ILE
35	BL	9	ARG
35	BL	11	LEU
35	BL	47	TRP
35	BL	64	SER
36	Bf	37	THR
38	Bb	21	PRO
38	Bb	26	GLN
38	Bb	36	ASN
38	Bb	39	LYS
38	Bb	58	PRO
38	Bb	75	HIS
38	Bb	126	LEU
38	Bb	128	PRO
39	Be	52	SER
40	BE	18	HIS
41	Ba	48	VAL
41	Ba	80	LYS
43	Bk	61	GLU
43	Bk	107	ARG

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Mol	Chain	Res	Type
43	Bk	109	PRO
43	Bk	110	ALA
46	BA	160	ASN
47	BI	60	ASN
34	BK	17	ARG
34	BK	50	ILE
49	BQ	2	ASN
51	Bj	25	VAL
51	Bj	31	SER
51	Bj	33	LEU
51	Bj	52	ARG
51	Bj	53	PRO
51	Bj	54	LYS
51	Bj	55	PRO
51	Bj	61	PRO
52	BB	39	LYS
53	BD	75	THR
53	BD	92	THR
53	BD	101	ILE
56	BH	2	PRO
56	BH	12	GLY
56	BH	47	ALA
56	BH	60	VAL
56	BH	71	PRO
57	BZ	79	VAL
28	B6	55	TYR
62	BN	10	ARG
62	BN	19	ARG
63	Bg	34	CYS
63	Bg	36	TYR
63	Bg	44	LYS
63	Bg	45	GLU
64	Bc	58	VAL
1	AQ	114	LYS
4	AG	43	LEU
4	AG	54	GLU
4	AG	102	ARG
6	AC	152	ALA
8	AR	22	PRO
10	AD	175	LYS
12	AN	90	GLY
14	AM	55	PRO

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Mol	Chain	Res	Type
15	AE	150	VAL
15	AE	160	THR
15	AE	193	VAL
20	A3	95	ALA
20	A3	96	ALA
22	AY	5	TRP
23	AT	56	LYS
24	AA	45	ASN
25	AH	77	SER
25	AH	82	ALA
25	AH	90	HIS
25	AH	138	SER
25	AH	178	MET
25	AH	179	SER
26	AP	12	ARG
29	AL	51	LYS
29	AL	88	ILE
31	BY	73	ARG
32	BO	5	PRO
32	BO	136	GLU
32	BO	172	LEU
32	BO	179	GLU
33	BC	56	ASP
33	BC	108	ASN
33	BC	111	ALA
33	BC	173	VAL
33	BC	245	LYS
33	BC	250	ARG
33	BC	304	GLU
34	B5	69	GLU
35	BL	55	PRO
36	Bf	34	ARG
39	Be	3	SER
41	Ba	81	ARG
41	Ba	86	THR
43	Bk	71	LEU
43	Bk	80	ILE
46	BA	127	PRO
47	BI	117	GLU
48	BR	38	GLY
34	BK	69	GLU
51	Bj	42	ARG

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Mol	Chain	Res	Type
51	Bj	58	ARG
52	BB	35	TYR
20	BG	3	LYS
20	BG	4	PRO
20	BG	5	SER
53	BD	189	ARG
56	BH	5	VAL
56	BH	25	ILE
56	BH	33	LYS
57	BZ	57	ASP
57	BZ	90	GLU
28	B6	63	TYR
59	BM	82	PRO
61	Bd	57	LEU
63	Bg	5	PRO
63	Bg	9	ALA
63	Bg	42	LYS
65	BJ	33	SER
1	AQ	7	ARG
1	AQ	71	ASN
1	AQ	72	PRO
3	AI	112	SER
6	AC	31	GLY
6	AC	58	GLY
7	AB	23	GLN
10	AD	84	PRO
13	AX	19	GLY
13	AX	35	ARG
13	AX	62	ARG
16	AJ	4	TRP
16	AJ	82	GLU
16	AJ	105	ILE
17	AO	83	LYS
17	AO	137	ARG
18	AF	165	LEU
20	A3	106	LYS
23	AT	20	SER
26	AP	7	ASN
28	AV	97	GLU
30	AU	117	LYS
33	BC	63	GLY
33	BC	122	MET

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Mol	Chain	Res	Type
33	BC	319	SER
37	BU	74	TYR
37	BU	88	GLY
37	BU	106	ASN
40	BE	123	ILE
40	BE	128	TYR
41	Ba	79	GLU
41	Ba	85	GLU
42	BT	48	ASN
43	Bk	72	GLY
46	BA	19	ALA
46	BA	97	ALA
46	BA	159	ASN
47	BI	84	PRO
49	BQ	4	LEU
51	Bj	34	SER
52	BB	173	VAL
20	BG	103	GLU
53	BD	45	PRO
53	BD	65	HIS
53	BD	68	ALA
53	BD	84	PRO
53	BD	193	LYS
53	BD	205	GLU
56	BH	70	VAL
56	BH	72	PRO
57	BZ	78	PHE
28	B6	26	PRO
59	BM	135	PRO
60	BS	84	PRO
61	Bd	58	PRO
62	BN	163	ARG
62	BN	169	GLY
20	B4	3	LYS
20	B4	103	GLU
64	Bc	65	GLY
1	AQ	150	PRO
4	AG	46	ASN
4	AG	60	LYS
7	AB	38	ASP
10	AD	164	GLN
15	AE	236	ASP

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Mol	Chain	Res	Type
15	AE	237	LYS
17	AO	143	VAL
20	A3	74	GLU
22	AY	23	PRO
24	AA	129	ILE
26	AP	8	LYS
28	AV	73	ASP
32	BO	160	ASP
33	BC	114	ARG
33	BC	116	GLY
33	BC	190	THR
33	BC	306	THR
35	BL	45	SER
35	BL	97	GLU
36	Bf	50	LYS
38	Bb	66	SER
46	BA	45	ARG
46	BA	140	THR
46	BA	151	LYS
51	Bj	62	VAL
52	BB	31	ILE
52	BB	187	LYS
53	BD	58	THR
57	BZ	42	PRO
58	BP	56	ALA
58	BP	71	ALA
60	BS	69	SER
62	BN	82	TYR
62	BN	102	GLY
62	BN	103	ARG
64	Bc	75	LEU
66	Bl	4	LYS
1	AQ	62	SER
1	AQ	112	HIS
2	AK	23	LYS
5	AW	6	ILE
13	AX	69	SER
14	AM	25	ASN
14	AM	85	ALA
15	AE	79	LYS
16	AJ	114	PRO
20	A3	56	ASP

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Mol	Chain	Res	Type
20	A3	103	GLU
24	AA	52	LEU
25	AH	85	PHE
25	AH	93	LEU
29	AL	90	VAL
31	BY	89	LEU
33	BC	34	THR
33	BC	119	LYS
33	BC	162	ASP
34	B5	4	ILE
38	Bb	125	VAL
40	BE	120	HIS
40	BE	121	ILE
41	Ba	46	GLN
43	Bk	36	TYR
43	Bk	74	PRO
46	BA	81	VAL
34	BK	4	ILE
49	BQ	134	ASN
51	Bj	60	LYS
53	BD	77	PRO
60	BS	57	LEU
61	Bd	22	VAL
62	BN	107	ARG
64	Bc	9	SER
66	Bl	28	ILE
12	AN	145	PRO
13	AX	3	GLU
17	AO	74	ILE
17	AO	125	PRO
20	A3	58	ASP
25	AH	88	ARG
32	BO	147	GLU
32	BO	174	LYS
32	BO	180	LYS
32	BO	192	ILE
33	BC	57	GLU
33	BC	137	LYS
34	B5	80	ILE
35	BL	26	ARG
35	BL	88	LEU
36	Bf	23	VAL

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Mol	Chain	Res	Type
39	Be	15	PRO
40	BE	3	VAL
34	BK	80	ILE
53	BD	50	PRO
63	Bg	32	ARG
4	AG	55	PHE
14	AM	128	PRO
16	AJ	65	VAL
24	AA	24	PRO
32	BO	139	PRO
47	BI	104	PRO
48	BR	54	PRO
52	BB	212	GLY
28	B6	83	PRO
62	BN	114	ARG
65	BJ	22	PRO
1	AQ	61	PRO
43	Bk	187	VAL
43	Bk	188	GLY
57	BZ	86	VAL
63	Bg	4	PHE
7	AB	104	PRO
17	AO	82	PRO
29	AL	52	SER
39	Be	4	GLY
46	BA	21	PRO
52	BB	122	VAL
16	AJ	3	ILE
25	AH	83	GLY
46	BA	55	GLY
53	BD	105	ILE
58	BP	65	PRO
33	BC	344	PRO
46	BA	161	PRO

5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	AQ	143/143 (100%)	138 (96%)	5 (4%)	36	59
2	AK	111/111 (100%)	105 (95%)	6 (5%)	22	47
3	AI	107/108 (99%)	100 (94%)	7 (6%)	17	42
4	AG	108/108 (100%)	88 (82%)	20 (18%)	1	10
5	AW	54/54 (100%)	52 (96%)	2 (4%)	34	58
6	AC	145/167 (87%)	143 (99%)	2 (1%)	67	80
7	AB	173/173 (100%)	164 (95%)	9 (5%)	23	48
8	AR	102/102 (100%)	101 (99%)	1 (1%)	76	86
10	AD	153/160 (96%)	147 (96%)	6 (4%)	32	56
12	AN	118/121 (98%)	104 (88%)	14 (12%)	5	20
13	AX	60/60 (100%)	55 (92%)	5 (8%)	11	34
14	AM	100/104 (96%)	94 (94%)	6 (6%)	19	44
15	AE	212/213 (100%)	198 (93%)	14 (7%)	16	41
16	AJ	103/103 (100%)	98 (95%)	5 (5%)	25	50
17	AO	122/122 (100%)	119 (98%)	3 (2%)	47	68
18	AF	181/197 (92%)	176 (97%)	5 (3%)	43	65
19	AS	61/61 (100%)	61 (100%)	0	100	100
20	A3	99/99 (100%)	95 (96%)	4 (4%)	31	55
20	B4	99/99 (100%)	95 (96%)	4 (4%)	31	55
20	BG	99/99 (100%)	92 (93%)	7 (7%)	14	39
22	AY	41/41 (100%)	39 (95%)	2 (5%)	25	50
23	AT	99/114 (87%)	99 (100%)	0	100	100
24	AA	166/171 (97%)	163 (98%)	3 (2%)	59	77
25	AH	184/184 (100%)	166 (90%)	18 (10%)	8	27
26	AP	46/46 (100%)	39 (85%)	7 (15%)	3	15
28	AV	89/89 (100%)	81 (91%)	8 (9%)	9	30
28	B6	85/89 (96%)	78 (92%)	7 (8%)	11	34
29	AL	91/91 (100%)	82 (90%)	9 (10%)	8	26
30	AU	121/127 (95%)	114 (94%)	7 (6%)	20	45
31	BY	133/133 (100%)	112 (84%)	21 (16%)	2	14
32	BO	166/169 (98%)	157 (95%)	9 (5%)	22	47
33	BC	312/312 (100%)	293 (94%)	19 (6%)	18	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
34	B5	64/66 (97%)	60 (94%)	4 (6%)	18	43
34	BK	64/66 (97%)	62 (97%)	2 (3%)	40	62
35	BL	117/117 (100%)	102 (87%)	15 (13%)	4	19
36	Bf	47/47 (100%)	40 (85%)	7 (15%)	3	15
37	BU	110/110 (100%)	106 (96%)	4 (4%)	35	59
38	Bb	114/117 (97%)	105 (92%)	9 (8%)	12	36
39	Be	51/51 (100%)	46 (90%)	5 (10%)	8	27
40	BE	158/158 (100%)	152 (96%)	6 (4%)	33	57
41	Ba	80/83 (96%)	71 (89%)	9 (11%)	6	21
42	BT	75/77 (97%)	72 (96%)	3 (4%)	31	55
43	Bk	179/280 (64%)	159 (89%)	20 (11%)	6	22
44	BW	66/66 (100%)	63 (96%)	3 (4%)	27	52
45	Bi	57/61 (93%)	55 (96%)	2 (4%)	36	59
46	BA	182/182 (100%)	174 (96%)	8 (4%)	28	53
47	BI	122/122 (100%)	119 (98%)	3 (2%)	47	68
48	BR	85/87 (98%)	75 (88%)	10 (12%)	5	20
49	BQ	130/130 (100%)	121 (93%)	9 (7%)	15	40
50	BV	56/56 (100%)	54 (96%)	2 (4%)	35	59
51	Bj	82/83 (99%)	65 (79%)	17 (21%)	1	7
52	BB	189/189 (100%)	180 (95%)	9 (5%)	25	51
53	BD	213/213 (100%)	197 (92%)	16 (8%)	13	38
54	BF	156/156 (100%)	150 (96%)	6 (4%)	33	57
55	Bh	23/23 (100%)	23 (100%)	0	100	100
56	BH	110/137 (80%)	96 (87%)	14 (13%)	4	19
57	BZ	80/80 (100%)	73 (91%)	7 (9%)	10	31
58	BP	101/101 (100%)	98 (97%)	3 (3%)	41	63
59	BM	162/162 (100%)	152 (94%)	10 (6%)	18	43
60	BS	126/130 (97%)	121 (96%)	5 (4%)	31	55
61	Bd	81/81 (100%)	66 (82%)	15 (18%)	1	10
62	BN	140/152 (92%)	138 (99%)	2 (1%)	67	80
63	Bg	37/39 (95%)	29 (78%)	8 (22%)	1	6

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
64	Bc	74/74 (100%)	65 (88%)	9 (12%)	5	20
65	BJ	104/108 (96%)	99 (95%)	5 (5%)	25	51
66	Bl	72/72 (100%)	68 (94%)	4 (6%)	21	46
All	All	7390/7646 (97%)	6904 (93%)	486 (7%)	20	41

All (486) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AQ	4	MET
1	AQ	9	ARG
1	AQ	15	LYS
1	AQ	145	ASN
1	AQ	152	THR
2	AK	3	ILE
2	AK	23	LYS
2	AK	31	LYS
2	AK	38	PRO
2	AK	71	PHE
2	AK	112	ARG
3	AI	22	LYS
3	AI	24	GLU
3	AI	27	ILE
3	AI	28	LYS
3	AI	44	TYR
3	AI	110	VAL
3	AI	125	LEU
4	AG	8	ILE
4	AG	15	ILE
4	AG	18	GLN
4	AG	34	ILE
4	AG	48	ASN
4	AG	51	PHE
4	AG	57	GLU
4	AG	64	ARG
4	AG	75	ARG
4	AG	77	ASP
4	AG	79	HIS
4	AG	81	PRO
4	AG	84	VAL
4	AG	86	VAL
4	AG	87	LEU

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Mol	Chain	Res	Type
4	AG	99	LYS
4	AG	102	ARG
4	AG	118	GLN
4	AG	121	VAL
4	AG	122	LYS
5	AW	14	LEU
5	AW	45	VAL
6	AC	75	LEU
6	AC	172	LYS
7	AB	7	VAL
7	AB	13	LEU
7	AB	33	TYR
7	AB	38	ASP
7	AB	52	LEU
7	AB	59	LEU
7	AB	67	ILE
7	AB	114	VAL
7	AB	188	PHE
8	AR	27	LEU
10	AD	34	GLU
10	AD	49	LYS
10	AD	59	LEU
10	AD	118	MET
10	AD	125	ILE
10	AD	137	ILE
12	AN	16	LEU
12	AN	30	TYR
12	AN	57	LYS
12	AN	61	GLU
12	AN	64	GLN
12	AN	69	MET
12	AN	80	ASN
12	AN	97	ILE
12	AN	105	ILE
12	AN	111	PRO
12	AN	119	ILE
12	AN	127	VAL
12	AN	132	VAL
12	AN	136	GLU
13	AX	17	ARG
13	AX	20	THR
13	AX	24	VAL

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Mol	Chain	Res	Type
13	AX	46	ARG
13	AX	65	ARG
14	AM	13	LYS
14	AM	20	TYR
14	AM	42	TRP
14	AM	84	ARG
14	AM	92	LYS
14	AM	137	VAL
15	AE	4	LYS
15	AE	36	PRO
15	AE	41	THR
15	AE	81	TYR
15	AE	122	ILE
15	AE	142	PHE
15	AE	143	HIS
15	AE	179	PHE
15	AE	195	ARG
15	AE	198	ARG
15	AE	212	VAL
15	AE	215	ILE
15	AE	237	LYS
15	AE	242	LEU
16	AJ	34	ASN
16	AJ	45	ILE
16	AJ	49	TYR
16	AJ	83	ASN
16	AJ	105	ILE
17	AO	4	PHE
17	AO	7	ILE
17	AO	139	GLN
18	AF	5	TRP
18	AF	13	LEU
18	AF	21	LYS
18	AF	70	LEU
18	AF	112	LYS
20	A3	1	MET
20	A3	51	VAL
20	A3	62	ILE
20	A3	66	LEU
22	AY	5	TRP
22	AY	15	VAL
24	AA	43	VAL

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Mol	Chain	Res	Type
24	AA	101	THR
24	AA	178	TYR
25	AH	4	PRO
25	AH	9	PHE
25	AH	47	THR
25	AH	48	HIS
25	AH	50	ARG
25	AH	69	ASN
25	AH	73	ARG
25	AH	84	HIS
25	AH	85	PHE
25	AH	86	MET
25	AH	87	ARG
25	AH	88	ARG
25	AH	96	LYS
25	AH	97	LYS
25	AH	119	PRO
25	AH	174	TYR
25	AH	175	ARG
25	AH	212	GLU
26	AP	3	LYS
26	AP	7	ASN
26	AP	11	PRO
26	AP	14	PHE
26	AP	36	LEU
26	AP	41	HIS
26	AP	55	TYR
28	AV	12	LYS
28	AV	14	ILE
28	AV	50	THR
28	AV	57	ARG
28	AV	60	PHE
28	AV	81	ILE
28	AV	85	TYR
28	AV	88	ILE
29	AL	34	MET
29	AL	41	PRO
29	AL	45	ILE
29	AL	48	THR
29	AL	52	SER
29	AL	68	VAL
29	AL	69	HIS

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Mol	Chain	Res	Type
29	AL	70	LYS
29	AL	84	GLN
30	AU	39	ARG
30	AU	61	ARG
30	AU	67	PRO
30	AU	77	TYR
30	AU	81	LYS
30	AU	103	GLN
30	AU	121	ILE
31	BY	3	LYS
31	BY	13	VAL
31	BY	14	ASN
31	BY	18	PRO
31	BY	26	LEU
31	BY	28	LEU
31	BY	37	VAL
31	BY	39	ASP
31	BY	41	PRO
31	BY	43	TYR
31	BY	74	LEU
31	BY	75	ILE
31	BY	88	LYS
31	BY	89	LEU
31	BY	114	LYS
31	BY	116	VAL
31	BY	118	ARG
31	BY	126	PHE
31	BY	127	ARG
31	BY	131	LYS
31	BY	149	GLU
32	BO	9	VAL
32	BO	81	PRO
32	BO	86	LEU
32	BO	103	ILE
32	BO	116	SER
32	BO	140	ASP
32	BO	143	ARG
32	BO	168	PHE
32	BO	176	LEU
33	BC	51	ILE
33	BC	72	ILE
33	BC	79	ARG

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Mol	Chain	Res	Type
33	BC	83	ILE
33	BC	95	THR
33	BC	112	LYS
33	BC	123	THR
33	BC	125	TYR
33	BC	138	ASN
33	BC	176	LEU
33	BC	247	SER
33	BC	252	LYS
33	BC	255	SER
33	BC	263	ARG
33	BC	266	TRP
33	BC	276	PHE
33	BC	286	LEU
33	BC	343	ARG
33	BC	363	SER
34	B5	12	VAL
34	B5	44	LYS
34	B5	45	ARG
34	B5	46	ARG
35	BL	3	ARG
35	BL	8	VAL
35	BL	9	ARG
35	BL	10	LYS
35	BL	11	LEU
35	BL	34	ARG
35	BL	42	ARG
35	BL	43	ASN
35	BL	44	LYS
35	BL	45	SER
35	BL	47	TRP
35	BL	48	THR
35	BL	52	LYS
35	BL	102	ILE
35	BL	110	ASP
36	Bf	1	MET
36	Bf	3	ARG
36	Bf	28	ILE
36	Bf	34	ARG
36	Bf	37	THR
36	Bf	38	HIS
36	Bf	46	ARG

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Mol	Chain	Res	Type
37	BU	8	PRO
37	BU	43	ASN
37	BU	52	VAL
37	BU	93	TYR
38	Bb	5	GLU
38	Bb	18	ARG
38	Bb	26	GLN
38	Bb	41	ARG
38	Bb	48	SER
38	Bb	52	LEU
38	Bb	69	LYS
38	Bb	70	LEU
38	Bb	110	LYS
39	Be	10	LYS
39	Be	43	SER
39	Be	45	ARG
39	Be	55	TRP
39	Be	62	HIS
40	BE	66	ARG
40	BE	101	ARG
40	BE	128	TYR
40	BE	137	MET
40	BE	140	CYS
40	BE	150	VAL
41	Ba	4	LYS
41	Ba	16	LYS
41	Ba	22	VAL
41	Ba	46	GLN
41	Ba	49	ILE
41	Ba	53	LYS
41	Ba	55	ASN
41	Ba	61	ARG
41	Ba	86	THR
42	BT	11	VAL
42	BT	18	SER
42	BT	83	LEU
43	Bk	8	LYS
43	Bk	12	VAL
43	Bk	30	VAL
43	Bk	36	TYR
43	Bk	42	ARG
43	Bk	51	LEU

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Mol	Chain	Res	Type
43	Bk	55	SER
43	Bk	56	ARG
43	Bk	58	THR
43	Bk	59	LEU
43	Bk	61	GLU
43	Bk	66	LYS
43	Bk	74	PRO
43	Bk	98	LYS
43	Bk	117	LYS
43	Bk	136	ILE
43	Bk	151	ARG
43	Bk	158	LYS
43	Bk	183	GLN
43	Bk	192	LEU
44	BW	19	ARG
44	BW	33	THR
44	BW	38	LEU
45	Bi	16	ARG
45	Bi	50	SER
46	BA	4	ASP
46	BA	24	PHE
46	BA	39	LEU
46	BA	48	LEU
46	BA	94	PRO
46	BA	138	THR
46	BA	143	THR
46	BA	206	THR
47	BI	87	THR
47	BI	106	GLU
47	BI	129	VAL
48	BR	4	LYS
48	BR	11	LYS
48	BR	13	ARG
48	BR	23	ARG
48	BR	28	LEU
48	BR	29	THR
48	BR	31	PHE
48	BR	43	ILE
48	BR	47	PRO
48	BR	85	THR
34	BK	12	VAL
34	BK	45	ARG

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Mol	Chain	Res	Type
49	BQ	3	THR
49	BQ	17	CYS
49	BQ	23	TRP
49	BQ	40	ASP
49	BQ	58	GLN
49	BQ	86	THR
49	BQ	103	ARG
49	BQ	119	THR
49	BQ	121	ARG
50	BV	3	ARG
50	BV	51	LYS
51	Bj	2	LYS
51	Bj	7	ILE
51	Bj	8	ARG
51	Bj	17	HIS
51	Bj	24	ARG
51	Bj	33	LEU
51	Bj	34	SER
51	Bj	39	ARG
51	Bj	50	PHE
51	Bj	51	PRO
51	Bj	52	ARG
51	Bj	63	LYS
51	Bj	72	THR
51	Bj	82	ARG
51	Bj	86	VAL
51	Bj	88	LYS
51	Bj	92	VAL
52	BB	23	ARG
52	BB	36	THR
52	BB	39	LYS
52	BB	55	THR
52	BB	83	ILE
52	BB	136	PRO
52	BB	168	LEU
52	BB	196	LYS
52	BB	222	PRO
20	BG	3	LYS
20	BG	6	TYR
20	BG	49	LYS
20	BG	63	VAL
20	BG	92	ILE

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Mol	Chain	Res	Type
20	BG	106	LYS
20	BG	117	LYS
53	BD	12	PRO
53	BD	25	PRO
53	BD	58	THR
53	BD	60	ASN
53	BD	65	HIS
53	BD	69	ARG
53	BD	82	PHE
53	BD	83	VAL
53	BD	90	ARG
53	BD	101	ILE
53	BD	114	LEU
53	BD	123	ASN
53	BD	155	ARG
53	BD	199	ILE
53	BD	209	LEU
53	BD	250	LEU
54	BF	24	TYR
54	BF	29	LYS
54	BF	34	GLU
54	BF	137	ILE
54	BF	167	ILE
54	BF	184	PHE
56	BH	1	MET
56	BH	3	LYS
56	BH	25	ILE
56	BH	50	GLN
56	BH	74	SER
56	BH	81	LEU
56	BH	84	GLU
56	BH	87	SER
56	BH	91	LYS
56	BH	95	VAL
56	BH	115	LEU
56	BH	117	LEU
56	BH	129	THR
56	BH	133	MET
57	BZ	34	LEU
57	BZ	37	VAL
57	BZ	51	TYR
57	BZ	55	LEU

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Mol	Chain	Res	Type
57	BZ	64	GLU
57	BZ	73	LEU
57	BZ	74	LEU
28	B6	5	ILE
28	B6	12	LYS
28	B6	14	ILE
28	B6	33	ARG
28	B6	50	THR
28	B6	66	LYS
28	B6	81	ILE
58	BP	6	PRO
58	BP	79	ILE
58	BP	85	PHE
59	BM	45	LEU
59	BM	59	TYR
59	BM	67	ARG
59	BM	77	LYS
59	BM	90	TYR
59	BM	115	ASN
59	BM	124	MET
59	BM	140	ILE
59	BM	172	LEU
59	BM	173	ARG
60	BS	9	PHE
60	BS	17	MET
60	BS	27	ILE
60	BS	129	TYR
60	BS	155	ARG
61	Bd	7	SER
61	Bd	12	ARG
61	Bd	28	ARG
61	Bd	29	LYS
61	Bd	30	LYS
61	Bd	44	ASN
61	Bd	47	PRO
61	Bd	50	ARG
61	Bd	58	PRO
61	Bd	60	THR
61	Bd	66	ARG
61	Bd	71	LEU
61	Bd	77	ARG
61	Bd	80	MET

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Mol	Chain	Res	Type
61	Bd	88	LEU
62	BN	116	PHE
62	BN	150	ARG
63	Bg	6	GLU
63	Bg	12	PHE
63	Bg	13	LYS
63	Bg	15	TYR
63	Bg	33	LYS
63	Bg	36	TYR
63	Bg	37	LYS
63	Bg	44	LYS
20	B4	6	TYR
20	B4	92	ILE
20	B4	94	VAL
20	B4	106	LYS
64	Bc	16	ASN
64	Bc	17	GLN
64	Bc	19	ASN
64	Bc	23	ILE
64	Bc	25	LYS
64	Bc	51	LYS
64	Bc	53	LEU
64	Bc	67	VAL
64	Bc	73	LYS
65	BJ	21	LEU
65	BJ	38	ILE
65	BJ	101	ASP
65	BJ	107	VAL
65	BJ	109	PRO
66	Bl	26	ARG
66	Bl	41	ILE
66	Bl	49	ARG
66	Bl	77	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (65) such sidechains are listed below:

Mol	Chain	Res	Type
1	AQ	117	HIS
2	AK	29	ASN
2	AK	117	HIS
3	AI	9	ASN
3	AI	13	HIS

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Mol	Chain	Res	Type
3	AI	16	ASN
4	AG	110	ASN
7	AB	22	GLN
10	AD	44	HIS
10	AD	72	GLN
10	AD	165	HIS
12	AN	8	ASN
14	AM	29	HIS
15	AE	37	HIS
15	AE	143	HIS
15	AE	157	ASN
16	AJ	34	ASN
16	AJ	121	ASN
17	AO	72	HIS
17	AO	120	HIS
18	AF	196	ASN
24	AA	133	GLN
25	AH	46	HIS
25	AH	48	HIS
25	AH	69	ASN
25	AH	94	ASN
26	AP	41	HIS
30	AU	47	GLN
31	BY	32	ASN
32	BO	43	HIS
33	BC	50	HIS
33	BC	108	ASN
33	BC	313	HIS
34	B5	31	ASN
35	BL	15	HIS
36	Bf	19	GLN
38	Bb	26	GLN
39	Be	12	ASN
39	Be	17	HIS
40	BE	110	HIS
40	BE	122	ASN
42	BT	37	GLN
43	Bk	40	GLN
43	Bk	183	GLN
46	BA	26	GLN
46	BA	33	ASN
46	BA	186	ASN

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Mol	Chain	Res	Type
47	BI	5	ASN
48	BR	3	GLN
48	BR	19	HIS
50	BV	62	GLN
51	Bj	20	HIS
51	Bj	37	GLN
52	BB	202	HIS
53	BD	123	ASN
53	BD	214	HIS
54	BF	112	ASN
28	B6	11	ASN
58	BP	110	ASN
59	BM	25	GLN
61	Bd	25	HIS
61	Bd	44	ASN
62	BN	50	HIS
62	BN	59	GLN
64	Bc	16	ASN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
11	A1	76/77 (98%)	15 (19%)	3 (3%)
21	A2	1494/1495 (99%)	260 (17%)	118 (7%)
27	A0	75/76 (98%)	18 (24%)	3 (4%)
67	B1	3047/3049 (99%)	603 (19%)	194 (6%)
68	B3	126/126 (100%)	35 (27%)	13 (10%)
All	All	4818/4823 (99%)	931 (19%)	331 (6%)

All (931) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
11	A1	8	U
11	A1	9	A
11	A1	10	G
11	A1	16	C
11	A1	21	G
11	A1	22	A
11	A1	23	G
11	A1	43	G
11	A1	47	G

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Mol	Chain	Res	Type
11	A1	48	U
11	A1	50	G
11	A1	59	A
11	A1	60	A
11	A1	62	C
11	A1	77	A
21	A2	3	U
21	A2	4	C
21	A2	42	G
21	A2	43	A
21	A2	46	A
21	A2	47	A
21	A2	48	G
21	A2	57	G
21	A2	63	G
21	A2	64	G
21	A2	71	C
21	A2	72	C
21	A2	73	U
21	A2	74	U
21	A2	75	C
21	A2	80	A
21	A2	100	A
21	A2	102	U
21	A2	104	A
21	A2	105	C
21	A2	106	A
21	A2	112	G
21	A2	114	A
21	A2	115	A
21	A2	116	C
21	A2	127	G
21	A2	151	G
21	A2	160	C
21	A2	166	A
21	A2	177	A
21	A2	184	G
21	A2	195	C
21	A2	196	G
21	A2	197	A
21	A2	199	A
21	A2	200	G

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Mol	Chain	Res	Type
21	A2	202	G
21	A2	211	G
21	A2	240	U
21	A2	243	G
21	A2	247	G
21	A2	248	U
21	A2	249	U
21	A2	262	G
21	A2	263	C
21	A2	276	A
21	A2	278	A
21	A2	285	C
21	A2	317	A
21	A2	324	C
21	A2	325	A
21	A2	326	C
21	A2	328	G
21	A2	340	A
21	A2	341	C
21	A2	348	C
21	A2	349	A
21	A2	350	G
21	A2	362	C
21	A2	363	C
21	A2	369	A
21	A2	393	A
21	A2	394	C
21	A2	407	G
21	A2	409	C
21	A2	410	U
21	A2	411	C
21	A2	412	U
21	A2	413	G
21	A2	423	U
21	A2	425	C
21	A2	431	U
21	A2	432	G
21	A2	433	U
21	A2	434	A
21	A2	435	A
21	A2	438	A
21	A2	439	G

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Mol	Chain	Res	Type
21	A2	440	C
21	A2	449	U
21	A2	450	A
21	A2	459	G
21	A2	460	C
21	A2	461	A
21	A2	462	A
21	A2	463	G
21	A2	464	G
21	A2	471	G
21	A2	472	C
21	A2	480	G
21	A2	485	A
21	A2	486	A
21	A2	487	U
21	A2	500	A
21	A2	512	U
21	A2	513	A
21	A2	514	U
21	A2	515	U
21	A2	525	A
21	A2	526	A
21	A2	528	G
21	A2	529	C
21	A2	530	G
21	A2	541	G
21	A2	574	A
21	A2	585	U
21	A2	586	C
21	A2	607	U
21	A2	619	A
21	A2	640	U
21	A2	642	G
21	A2	648	A
21	A2	655	A
21	A2	656	U
21	A2	657	A
21	A2	672	G
21	A2	673	C
21	A2	677	U
21	A2	678	G
21	A2	685	G

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Mol	Chain	Res	Type
21	A2	702	G
21	A2	703	U
21	A2	709	G
21	A2	731	A
21	A2	735	A
21	A2	736	A
21	A2	747	U
21	A2	748	A
21	A2	767	U
21	A2	769	A
21	A2	771	G
21	A2	782	A
21	A2	801	A
21	A2	805	C
21	A2	806	G
21	A2	816	G
21	A2	843	G
21	A2	860	G
21	A2	872	A
21	A2	884	G
21	A2	885	G
21	A2	892	C
21	A2	893	U
21	A2	904	G
21	A2	919	U
21	A2	920	U
21	A2	925	U
21	A2	928	A
21	A2	933	G
21	A2	934	G
21	A2	935	G
21	A2	936	A
21	A2	942	A
21	A2	950	C
21	A2	951	G
21	A2	952	A
21	A2	953	C
21	A2	960	A
21	A2	961	U
21	A2	962	G
21	A2	964	A
21	A2	965	G

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Mol	Chain	Res	Type
21	A2	970	G
21	A2	972	C
21	A2	973	U
21	A2	974	G
21	A2	975	A
21	A2	976	A
21	A2	977	G
21	A2	978	G
21	A2	986	G
21	A2	988	A
21	A2	989	C
21	A2	993	C
21	A2	1002	G
21	A2	1005	G
21	A2	1006	C
21	A2	1017	U
21	A2	1018	C
21	A2	1019	A
21	A2	1020	G
21	A2	1037	U
21	A2	1038	C
21	A2	1046	G
21	A2	1047	U
21	A2	1053	A
21	A2	1054	A
21	A2	1064	C
21	A2	1068	C
21	A2	1076	G
21	A2	1077	U
21	A2	1078	U
21	A2	1081	C
21	A2	1082	A
21	A2	1083	G
21	A2	1105	C
21	A2	1112	G
21	A2	1117	A
21	A2	1119	U
21	A2	1128	U
21	A2	1143	G
21	A2	1144	G
21	A2	1151	A
21	A2	1156	A

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Mol	Chain	Res	Type
21	A2	1157	G
21	A2	1161	A
21	A2	1162	G
21	A2	1171	G
21	A2	1172	A
21	A2	1175	C
21	A2	1184	U
21	A2	1185	A
21	A2	1186	C
21	A2	1187	A
21	A2	1198	A
21	A2	1208	A
21	A2	1209	C
21	A2	1210	A
21	A2	1216	A
21	A2	1218	C
21	A2	1239	A
21	A2	1240	A
21	A2	1242	C
21	A2	1245	C
21	A2	1246	U
21	A2	1247	A
21	A2	1258	C
21	A2	1260	G
21	A2	1261	U
21	A2	1262	U
21	A2	1263	C
21	A2	1265	G
21	A2	1280	C
21	A2	1292	A
21	A2	1306	A
21	A2	1307	G
21	A2	1308	U
21	A2	1323	A
21	A2	1324	U
21	A2	1325	C
21	A2	1332	C
21	A2	1341	C
21	A2	1354	A
21	A2	1358	A
21	A2	1379	G
21	A2	1424	G

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Mol	Chain	Res	Type
21	A2	1437	G
21	A2	1445	A
21	A2	1448	A
21	A2	1454	A
21	A2	1457	A
21	A2	1458	A
21	A2	1459	G
21	A2	1460	G
21	A2	1461	U
21	A2	1475	C
21	A2	1484	C
21	A2	1485	G
21	A2	1486	A
21	A2	1487	U
27	A0	7	G
27	A0	9	A
27	A0	18	G
27	A0	19	G
27	A0	20	U
27	A0	22	G
27	A0	36	U
27	A0	41	C
27	A0	42	G
27	A0	48	C
27	A0	61	C
27	A0	63	G
27	A0	69	C
27	A0	72	C
27	A0	73	G
27	A0	74	C
27	A0	75	C
27	A0	76	A
67	B1	9	A
67	B1	10	C
67	B1	12	C
67	B1	13	U
67	B1	34	C
67	B1	44	C
67	B1	45	G
67	B1	46	C
67	B1	50	C
67	B1	64	A

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Mol	Chain	Res	Type
67	B1	74	A
67	B1	75	G
67	B1	84	A
67	B1	85	G
67	B1	91	G
67	B1	98	G
67	B1	99	U
67	B1	100	C
67	B1	101	G
67	B1	118	A
67	B1	119	U
67	B1	120	G
67	B1	124	C
67	B1	130	G
67	B1	144	A
67	B1	145	C
67	B1	146	U
67	B1	152	G
67	B1	154	U
67	B1	155	U
67	B1	157	U
67	B1	158	C
67	B1	159	C
67	B1	160	C
67	B1	170	A
67	B1	185	A
67	B1	188	A
67	B1	205	A
67	B1	211	A
67	B1	216	A
67	B1	217	A
67	B1	219	G
67	B1	221	G
67	B1	222	A
67	B1	237	G
67	B1	238	C
67	B1	254	A
67	B1	255	G
67	B1	278	C
67	B1	286	G
67	B1	291	A
67	B1	292	U

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Mol	Chain	Res	Type
67	B1	299	U
67	B1	300	U
67	B1	301	G
67	B1	302	U
67	B1	303	A
67	B1	304	G
67	B1	305	G
67	B1	306	G
67	B1	309	C
67	B1	315	U
67	B1	319	A
67	B1	325	G
67	B1	332	A
67	B1	333	A
67	B1	341	U
67	B1	342	C
67	B1	351	C
67	B1	361	G
67	B1	363	G
67	B1	365	G
67	B1	369	G
67	B1	370	A
67	B1	379	U
67	B1	380	A
67	B1	385	U
67	B1	394	A
67	B1	399	C
67	B1	401	C
67	B1	403	G
67	B1	404	G
67	B1	405	G
67	B1	406	G
67	B1	407	A
67	B1	408	C
67	B1	409	C
67	B1	410	C
67	B1	411	U
67	B1	414	G
67	B1	428	A
67	B1	430	A
67	B1	440	A
67	B1	442	G

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Mol	Chain	Res	Type
67	B1	444	U
67	B1	450	G
67	B1	472	A
67	B1	480	A
67	B1	481	G
67	B1	486	A
67	B1	488	A
67	B1	490	C
67	B1	495	U
67	B1	496	A
67	B1	514	U
67	B1	518	A
67	B1	519	A
67	B1	520	G
67	B1	528	G
67	B1	530	A
67	B1	531	G
67	B1	537	U
67	B1	542	A
67	B1	543	G
67	B1	546	C
67	B1	568	A
67	B1	569	G
67	B1	570	G
67	B1	576	G
67	B1	579	C
67	B1	580	G
67	B1	581	A
67	B1	583	A
67	B1	584	G
67	B1	585	G
67	B1	588	U
67	B1	589	G
67	B1	599	G
67	B1	623	G
67	B1	640	C
67	B1	642	G
67	B1	654	C
67	B1	666	A
67	B1	694	A
67	B1	716	U
67	B1	717	A

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Mol	Chain	Res	Type
67	B1	733	A
67	B1	734	C
67	B1	735	A
67	B1	736	U
67	B1	759	G
67	B1	788	A
67	B1	801	A
67	B1	819	U
67	B1	848	A
67	B1	851	G
67	B1	859	G
67	B1	860	A
67	B1	863	C
67	B1	877	U
67	B1	882	U
67	B1	898	G
67	B1	899	A
67	B1	900	C
67	B1	910	G
67	B1	911	G
67	B1	917	A
67	B1	919	G
67	B1	920	G
67	B1	923	A
67	B1	924	A
67	B1	925	U
67	B1	927	G
67	B1	937	A
67	B1	940	G
67	B1	947	C
67	B1	962	C
67	B1	963	G
67	B1	965	A
67	B1	982	G
67	B1	995	G
67	B1	1002	A
67	B1	1004	U
67	B1	1006	A
67	B1	1007	U
67	B1	1010	G
67	B1	1011	A
67	B1	1013	G

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Mol	Chain	Res	Type
67	B1	1014	U
67	B1	1015	G
67	B1	1016	C
67	B1	1018	G
67	B1	1019	G
67	B1	1024	G
67	B1	1025	A
67	B1	1026	A
67	B1	1027	A
67	B1	1028	G
67	B1	1029	C
67	B1	1030	C
67	B1	1033	C
67	B1	1036	C
67	B1	1037	C
67	B1	1038	U
67	B1	1039	C
67	B1	1041	U
67	B1	1042	G
67	B1	1043	U
67	B1	1046	A
67	B1	1048	C
67	B1	1069	A
67	B1	1070	G
67	B1	1072	U
67	B1	1081	U
67	B1	1083	G
67	B1	1085	G
67	B1	1097	G
67	B1	1109	G
67	B1	1110	A
67	B1	1118	A
67	B1	1126	C
67	B1	1143	A
67	B1	1145	G
67	B1	1146	U
67	B1	1147	G
67	B1	1156	G
67	B1	1161	A
67	B1	1162	C
67	B1	1163	U
67	B1	1178	G

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Mol	Chain	Res	Type
67	B1	1180	G
67	B1	1181	C
67	B1	1185	A
67	B1	1186	G
67	B1	1188	C
67	B1	1194	G
67	B1	1199	U
67	B1	1206	A
67	B1	1217	U
67	B1	1223	A
67	B1	1226	G
67	B1	1227	A
67	B1	1233	U
67	B1	1237	A
67	B1	1241	C
67	B1	1242	A
67	B1	1245	C
67	B1	1246	G
67	B1	1247	U
67	B1	1250	A
67	B1	1251	G
67	B1	1252	G
67	B1	1253	U
67	B1	1254	C
67	B1	1261	C
67	B1	1269	U
67	B1	1271	G
67	B1	1272	A
67	B1	1273	C
67	B1	1274	G
67	B1	1317	G
67	B1	1320	C
67	B1	1325	A
67	B1	1327	C
67	B1	1329	G
67	B1	1348	G
67	B1	1354	G
67	B1	1368	A
67	B1	1369	G
67	B1	1379	A
67	B1	1380	G
67	B1	1391	C

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Mol	Chain	Res	Type
67	B1	1393	C
67	B1	1398	C
67	B1	1407	A
67	B1	1408	G
67	B1	1415	C
67	B1	1416	G
67	B1	1417	U
67	B1	1418	A
67	B1	1427	A
67	B1	1443	G
67	B1	1444	A
67	B1	1446	G
67	B1	1475	G
67	B1	1486	G
67	B1	1488	C
67	B1	1511	C
67	B1	1522	A
67	B1	1523	A
67	B1	1524	A
67	B1	1525	G
67	B1	1543	C
67	B1	1554	G
67	B1	1556	G
67	B1	1561	G
67	B1	1562	U
67	B1	1563	G
67	B1	1564	C
67	B1	1573	A
67	B1	1574	A
67	B1	1575	G
67	B1	1576	C
67	B1	1577	C
67	B1	1578	C
67	B1	1583	G
67	B1	1584	G
67	B1	1585	U
67	B1	1586	G
67	B1	1587	A
67	B1	1588	C
67	B1	1592	U
67	B1	1598	U
67	B1	1602	C

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Mol	Chain	Res	Type
67	B1	1609	G
67	B1	1612	G
67	B1	1613	A
67	B1	1614	U
67	B1	1615	G
67	B1	1616	A
67	B1	1621	G
67	B1	1623	C
67	B1	1627	G
67	B1	1628	C
67	B1	1632	U
67	B1	1633	A
67	B1	1634	A
67	B1	1635	G
67	B1	1637	C
67	B1	1639	G
67	B1	1642	G
67	B1	1643	A
67	B1	1644	G
67	B1	1645	U
67	B1	1646	G
67	B1	1654	G
67	B1	1655	G
67	B1	1656	C
67	B1	1657	G
67	B1	1659	G
67	B1	1663	C
67	B1	1664	G
67	B1	1665	G
67	B1	1668	G
67	B1	1669	A
67	B1	1671	A
67	B1	1672	G
67	B1	1678	A
67	B1	1679	U
67	B1	1682	C
67	B1	1684	C
67	B1	1688	C
67	B1	1690	U
67	B1	1694	G
67	B1	1697	G
67	B1	1701	C

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Mol	Chain	Res	Type
67	B1	1702	C
67	B1	1703	G
67	B1	1705	C
67	B1	1706	G
67	B1	1707	A
67	B1	1708	U
67	B1	1709	C
67	B1	1712	U
67	B1	1713	G
67	B1	1714	G
67	B1	1718	C
67	B1	1719	C
67	B1	1720	G
67	B1	1721	U
67	B1	1722	G
67	B1	1723	A
67	B1	1728	C
67	B1	1729	C
67	B1	1732	C
67	B1	1733	C
67	B1	1734	G
67	B1	1735	G
67	B1	1736	G
67	B1	1738	A
67	B1	1740	U
67	B1	1741	C
67	B1	1744	A
67	B1	1746	C
67	B1	1753	G
67	B1	1754	A
67	B1	1763	A
67	B1	1765	A
67	B1	1771	C
67	B1	1772	A
67	B1	1773	C
67	B1	1777	U
67	B1	1780	C
67	B1	1781	C
67	B1	1782	C
67	B1	1783	U
67	B1	1791	A
67	B1	1803	U

Continued on next page...

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Mol	Chain	Res	Type
67	B1	1804	G
67	B1	1806	C
67	B1	1812	A
67	B1	1833	G
67	B1	1853	C
67	B1	1855	G
67	B1	1859	A
67	B1	1876	G
67	B1	1878	G
67	B1	1880	A
67	B1	1897	G
67	B1	1902	G
67	B1	1903	G
67	B1	1912	A
67	B1	1919	A
67	B1	1937	A
67	B1	1939	C
67	B1	1940	U
67	B1	1955	U
67	B1	1956	G
67	B1	1957	U
67	B1	1962	G
67	B1	1976	C
67	B1	1991	G
67	B1	2002	A
67	B1	2003	C
67	B1	2013	A
67	B1	2025	A
67	B1	2032	G
67	B1	2033	G
67	B1	2038	C
67	B1	2044	C
67	B1	2054	G
67	B1	2056	A
67	B1	2062	A
67	B1	2065	C
67	B1	2079	U
67	B1	2087	U
67	B1	2088	G
67	B1	2091	U
67	B1	2094	A
67	B1	2095	U

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Mol	Chain	Res	Type
67	B1	2096	G
67	B1	2116	G
67	B1	2117	U
67	B1	2146	C
67	B1	2154	G
67	B1	2155	C
67	B1	2156	A
67	B1	2157	U
67	B1	2159	C
67	B1	2166	C
67	B1	2173	U
67	B1	2178	A
67	B1	2183	A
67	B1	2184	G
67	B1	2192	G
67	B1	2219	A
67	B1	2220	C
67	B1	2224	G
67	B1	2225	C
67	B1	2227	G
67	B1	2230	G
67	B1	2231	G
67	B1	2232	U
67	B1	2233	G
67	B1	2234	C
67	B1	2235	G
67	B1	2236	C
67	B1	2237	A
67	B1	2238	G
67	B1	2239	C
67	B1	2240	G
67	B1	2242	A
67	B1	2243	G
67	B1	2245	C
67	B1	2246	G
67	B1	2249	A
67	B1	2251	G
67	B1	2252	C
67	B1	2254	U
67	B1	2255	C
67	B1	2256	G
67	B1	2258	A

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Mol	Chain	Res	Type
67	B1	2259	G
67	B1	2268	C
67	B1	2269	C
67	B1	2270	G
67	B1	2275	G
67	B1	2276	G
67	B1	2278	U
67	B1	2280	G
67	B1	2281	A
67	B1	2283	C
67	B1	2285	G
67	B1	2286	U
67	B1	2288	C
67	B1	2290	U
67	B1	2292	A
67	B1	2293	G
67	B1	2294	A
67	B1	2295	C
67	B1	2296	A
67	B1	2301	C
67	B1	2302	C
67	B1	2303	A
67	B1	2304	C
67	B1	2306	C
67	B1	2308	C
67	B1	2310	G
67	B1	2321	A
67	B1	2325	C
67	B1	2332	G
67	B1	2338	A
67	B1	2339	C
67	B1	2351	G
67	B1	2352	G
67	B1	2363	G
67	B1	2364	G
67	B1	2371	A
67	B1	2396	G
67	B1	2397	C
67	B1	2401	A
67	B1	2402	A
67	B1	2434	A
67	B1	2441	A

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Mol	Chain	Res	Type
67	B1	2449	A
67	B1	2450	A
67	B1	2451	G
67	B1	2459	G
67	B1	2476	A
67	B1	2502	C
67	B1	2507	C
67	B1	2508	G
67	B1	2515	U
67	B1	2542	G
67	B1	2543	A
67	B1	2544	C
67	B1	2545	A
67	B1	2546	G
67	B1	2547	A
67	B1	2549	A
67	B1	2556	C
67	B1	2562	G
67	B1	2563	A
67	B1	2587	G
67	B1	2588	C
67	B1	2591	A
67	B1	2606	C
67	B1	2607	U
67	B1	2613	C
67	B1	2617	G
67	B1	2618	C
67	B1	2619	U
67	B1	2620	G
67	B1	2621	U
67	B1	2633	A
67	B1	2644	G
67	B1	2669	U
67	B1	2681	A
67	B1	2682	G
67	B1	2688	C
67	B1	2693	G
67	B1	2697	G
67	B1	2718	G
67	B1	2725	U
67	B1	2729	A
67	B1	2744	U

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Mol	Chain	Res	Type
67	B1	2748	C
67	B1	2760	A
67	B1	2761	G
67	B1	2794	G
67	B1	2798	U
67	B1	2826	U
67	B1	2827	C
67	B1	2840	C
67	B1	2846	A
67	B1	2861	A
67	B1	2864	G
67	B1	2870	A
67	B1	2871	A
67	B1	2878	A
67	B1	2889	A
67	B1	2892	A
67	B1	2893	U
67	B1	2904	U
67	B1	2913	C
67	B1	2914	U
67	B1	2915	U
67	B1	2922	G
67	B1	2928	C
67	B1	2930	G
67	B1	2936	U
67	B1	2937	U
67	B1	2942	G
67	B1	2945	A
67	B1	2947	G
67	B1	2949	G
67	B1	2958	U
67	B1	2971	U
67	B1	2988	A
67	B1	2997	G
67	B1	2998	G
67	B1	3001	C
67	B1	3002	A
67	B1	3004	C
67	B1	3005	C
67	B1	3027	C
67	B1	3036	C
67	B1	3037	G

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Mol	Chain	Res	Type
67	B1	3038	A
67	B1	3039	G
67	B1	3040	G
67	B1	3042	C
67	B1	3047	C
68	B3	2	G
68	B3	11	A
68	B3	20	G
68	B3	21	C
68	B3	22	C
68	B3	23	A
68	B3	25	A
68	B3	26	C
68	B3	29	G
68	B3	31	U
68	B3	33	U
68	B3	35	A
68	B3	38	U
68	B3	41	A
68	B3	42	A
68	B3	44	C
68	B3	49	A
68	B3	53	A
68	B3	54	A
68	B3	55	G
68	B3	63	G
68	B3	70	C
68	B3	74	U
68	B3	75	G
68	B3	76	U
68	B3	83	C
68	B3	84	U
68	B3	85	C
68	B3	90	A
68	B3	100	A
68	B3	106	G
68	B3	111	G
68	B3	123	U
68	B3	124	A
68	B3	125	U

All (331) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
11	A1	8	U
11	A1	9	A
11	A1	59	A
21	A2	3	U
21	A2	42	G
21	A2	45	U
21	A2	47	A
21	A2	56	A
21	A2	85	A
21	A2	99	C
21	A2	103	A
21	A2	105	C
21	A2	111	G
21	A2	114	A
21	A2	126	G
21	A2	176	U
21	A2	196	G
21	A2	199	A
21	A2	201	G
21	A2	239	A
21	A2	246	A
21	A2	247	G
21	A2	262	G
21	A2	275	A
21	A2	277	G
21	A2	324	C
21	A2	325	A
21	A2	347	G
21	A2	362	C
21	A2	368	C
21	A2	369	A
21	A2	408	C
21	A2	411	C
21	A2	422	U
21	A2	434	A
21	A2	439	G
21	A2	448	A
21	A2	461	A
21	A2	462	A
21	A2	471	G
21	A2	486	A
21	A2	512	U
21	A2	513	A

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Mol	Chain	Res	Type
21	A2	515	U
21	A2	528	G
21	A2	540	G
21	A2	562	A
21	A2	575	A
21	A2	584	C
21	A2	641	A
21	A2	655	A
21	A2	677	U
21	A2	687	G
21	A2	702	G
21	A2	746	A
21	A2	766	G
21	A2	774	U
21	A2	798	U
21	A2	804	U
21	A2	867	A
21	A2	871	A
21	A2	891	A
21	A2	892	C
21	A2	919	U
21	A2	924	U
21	A2	934	G
21	A2	935	G
21	A2	949	G
21	A2	951	G
21	A2	959	G
21	A2	960	A
21	A2	961	U
21	A2	963	A
21	A2	964	A
21	A2	966	G
21	A2	974	G
21	A2	975	A
21	A2	977	G
21	A2	985	C
21	A2	1001	A
21	A2	1017	U
21	A2	1019	A
21	A2	1029	G
21	A2	1037	U
21	A2	1053	A

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Mol	Chain	Res	Type
21	A2	1079	G
21	A2	1081	C
21	A2	1142	G
21	A2	1150	G
21	A2	1156	A
21	A2	1161	A
21	A2	1172	A
21	A2	1173	A
21	A2	1174	A
21	A2	1184	U
21	A2	1186	C
21	A2	1208	A
21	A2	1217	C
21	A2	1238	G
21	A2	1239	A
21	A2	1241	U
21	A2	1245	C
21	A2	1260	G
21	A2	1261	U
21	A2	1262	U
21	A2	1291	G
21	A2	1306	A
21	A2	1307	G
21	A2	1322	C
21	A2	1324	U
21	A2	1340	U
21	A2	1378	A
21	A2	1399	G
21	A2	1423	A
21	A2	1436	U
21	A2	1453	U
21	A2	1457	A
21	A2	1458	A
21	A2	1459	G
21	A2	1460	G
21	A2	1483	U
27	A0	14	A
27	A0	19	G
27	A0	36	U
67	B1	10	C
67	B1	12	C
67	B1	50	C

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Mol	Chain	Res	Type
67	B1	84	A
67	B1	94	A
67	B1	99	U
67	B1	110	A
67	B1	119	U
67	B1	129	C
67	B1	181	U
67	B1	210	A
67	B1	215	A
67	B1	285	C
67	B1	291	A
67	B1	299	U
67	B1	300	U
67	B1	301	G
67	B1	302	U
67	B1	310	C
67	B1	324	C
67	B1	332	A
67	B1	362	A
67	B1	364	A
67	B1	379	U
67	B1	393	C
67	B1	410	C
67	B1	427	G
67	B1	428	A
67	B1	443	C
67	B1	450	G
67	B1	471	U
67	B1	480	A
67	B1	485	G
67	B1	511	A
67	B1	513	C
67	B1	518	A
67	B1	529	G
67	B1	545	G
67	B1	565	A
67	B1	579	C
67	B1	584	G
67	B1	588	U
67	B1	598	C
67	B1	658	C
67	B1	700	A

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Mol	Chain	Res	Type
67	B1	716	U
67	B1	734	C
67	B1	859	G
67	B1	897	U
67	B1	899	A
67	B1	919	G
67	B1	936	G
67	B1	940	G
67	B1	956	U
67	B1	981	A
67	B1	994	G
67	B1	1003	C
67	B1	1013	G
67	B1	1014	U
67	B1	1035	G
67	B1	1037	C
67	B1	1038	U
67	B1	1045	A
67	B1	1046	A
67	B1	1068	U
67	B1	1082	A
67	B1	1109	G
67	B1	1117	C
67	B1	1125	A
67	B1	1143	A
67	B1	1145	G
67	B1	1157	U
67	B1	1162	C
67	B1	1165	C
67	B1	1179	G
67	B1	1180	G
67	B1	1208	A
67	B1	1209	A
67	B1	1233	U
67	B1	1245	C
67	B1	1246	G
67	B1	1253	U
67	B1	1260	C
67	B1	1267	A
67	B1	1271	G
67	B1	1319	U
67	B1	1367	A

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Mol	Chain	Res	Type
67	B1	1390	U
67	B1	1407	A
67	B1	1417	U
67	B1	1443	G
67	B1	1445	G
67	B1	1485	A
67	B1	1487	U
67	B1	1510	U
67	B1	1523	A
67	B1	1541	U
67	B1	1553	G
67	B1	1561	G
67	B1	1572	C
67	B1	1573	A
67	B1	1574	A
67	B1	1577	C
67	B1	1585	U
67	B1	1597	G
67	B1	1600	G
67	B1	1643	A
67	B1	1665	G
67	B1	1670	A
67	B1	1677	A
67	B1	1718	C
67	B1	1719	C
67	B1	1722	G
67	B1	1726	A
67	B1	1734	G
67	B1	1739	U
67	B1	1752	C
67	B1	1753	G
67	B1	1764	G
67	B1	1771	C
67	B1	1774	A
67	B1	1782	C
67	B1	1803	U
67	B1	1804	G
67	B1	1805	U
67	B1	1811	G
67	B1	1813	A
67	B1	1835	A
67	B1	1879	U

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Mol	Chain	Res	Type
67	B1	1918	U
67	B1	1936	C
67	B1	1938	G
67	B1	1939	C
67	B1	1961	G
67	B1	2002	A
67	B1	2033	G
67	B1	2043	A
67	B1	2061	A
67	B1	2062	A
67	B1	2064	U
67	B1	2068	U
67	B1	2094	A
67	B1	2145	G
67	B1	2156	A
67	B1	2158	G
67	B1	2165	A
67	B1	2172	G
67	B1	2250	G
67	B1	2280	G
67	B1	2301	C
67	B1	2314	U
67	B1	2324	C
67	B1	2338	A
67	B1	2362	U
67	B1	2363	G
67	B1	2370	C
67	B1	2382	A
67	B1	2396	G
67	B1	2400	U
67	B1	2401	A
67	B1	2450	A
67	B1	2501	G
67	B1	2507	C
67	B1	2543	A
67	B1	2545	A
67	B1	2546	G
67	B1	2548	A
67	B1	2562	G
67	B1	2586	A
67	B1	2606	C
67	B1	2619	U

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Mol	Chain	Res	Type
67	B1	2644	G
67	B1	2696	G
67	B1	2702	A
67	B1	2747	C
67	B1	2793	C
67	B1	2805	U
67	B1	2826	U
67	B1	2840	C
67	B1	2869	U
67	B1	2891	A
67	B1	2892	A
67	B1	2912	G
67	B1	2941	A
67	B1	2946	C
67	B1	2947	G
67	B1	2948	A
67	B1	2949	G
67	B1	2957	G
67	B1	2970	U
67	B1	2987	U
67	B1	3004	C
67	B1	3035	C
67	B1	3041	U
68	B3	1	C
68	B3	19	G
68	B3	21	C
68	B3	25	A
68	B3	35	A
68	B3	40	G
68	B3	48	A
68	B3	52	U
68	B3	62	A
68	B3	74	U
68	B3	75	G
68	B3	122	C
68	B3	123	U

5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
67	B1	1
56	BH	1
53	BD	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B1	2506:G	O3'	2507:C	P	1.83
1	BH	18:GLY	C	19:PRO	N	1.19
1	BD	91:ARG	C	92:THR	N	0.93

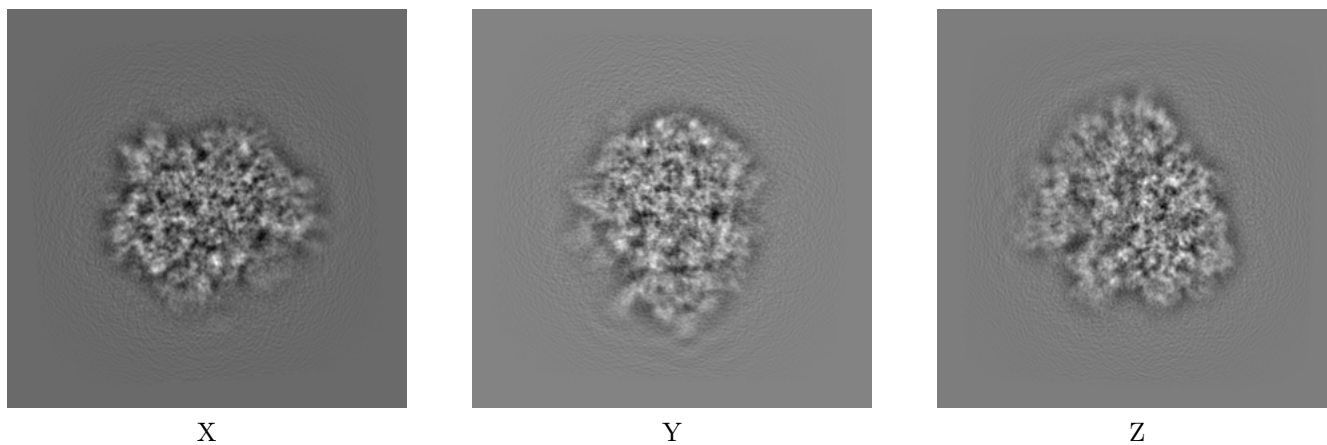
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2009. These allow visual inspection of the internal detail of the map and identification of artifacts.

No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

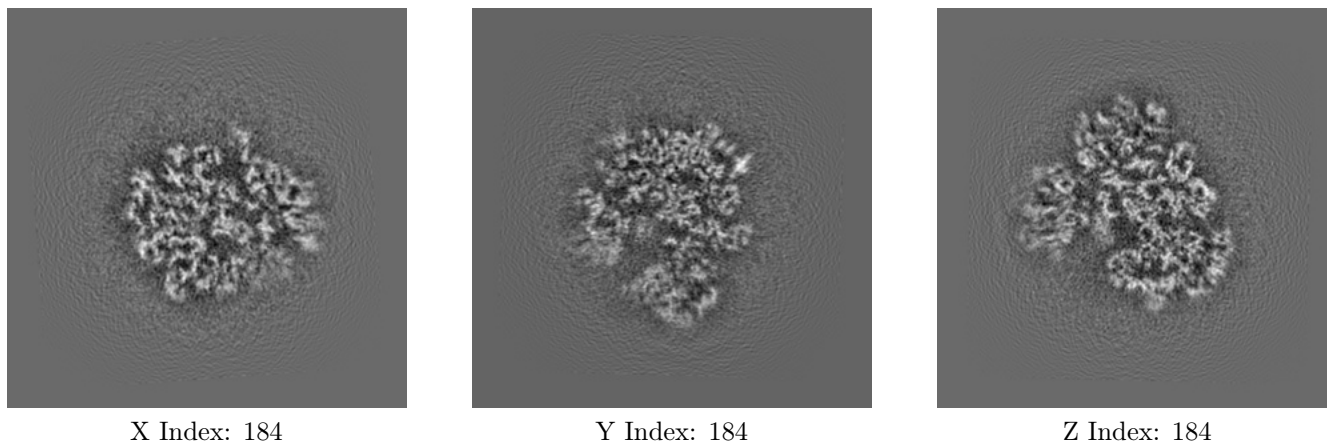
6.1.1 Primary map



The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

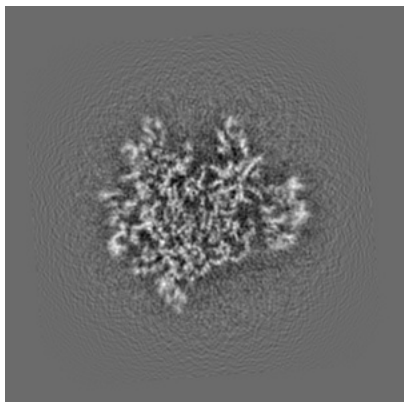
6.2.1 Primary map



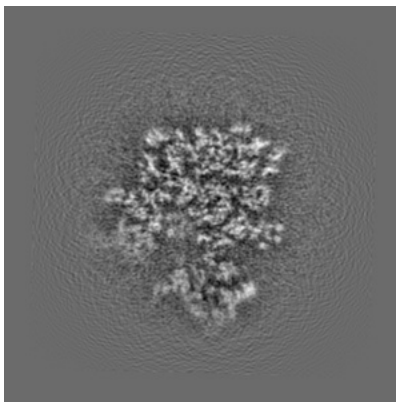
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

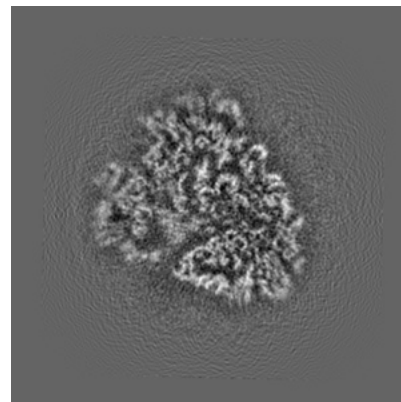
6.3.1 Primary map



X Index: 207



Y Index: 187



Z Index: 178

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.13. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

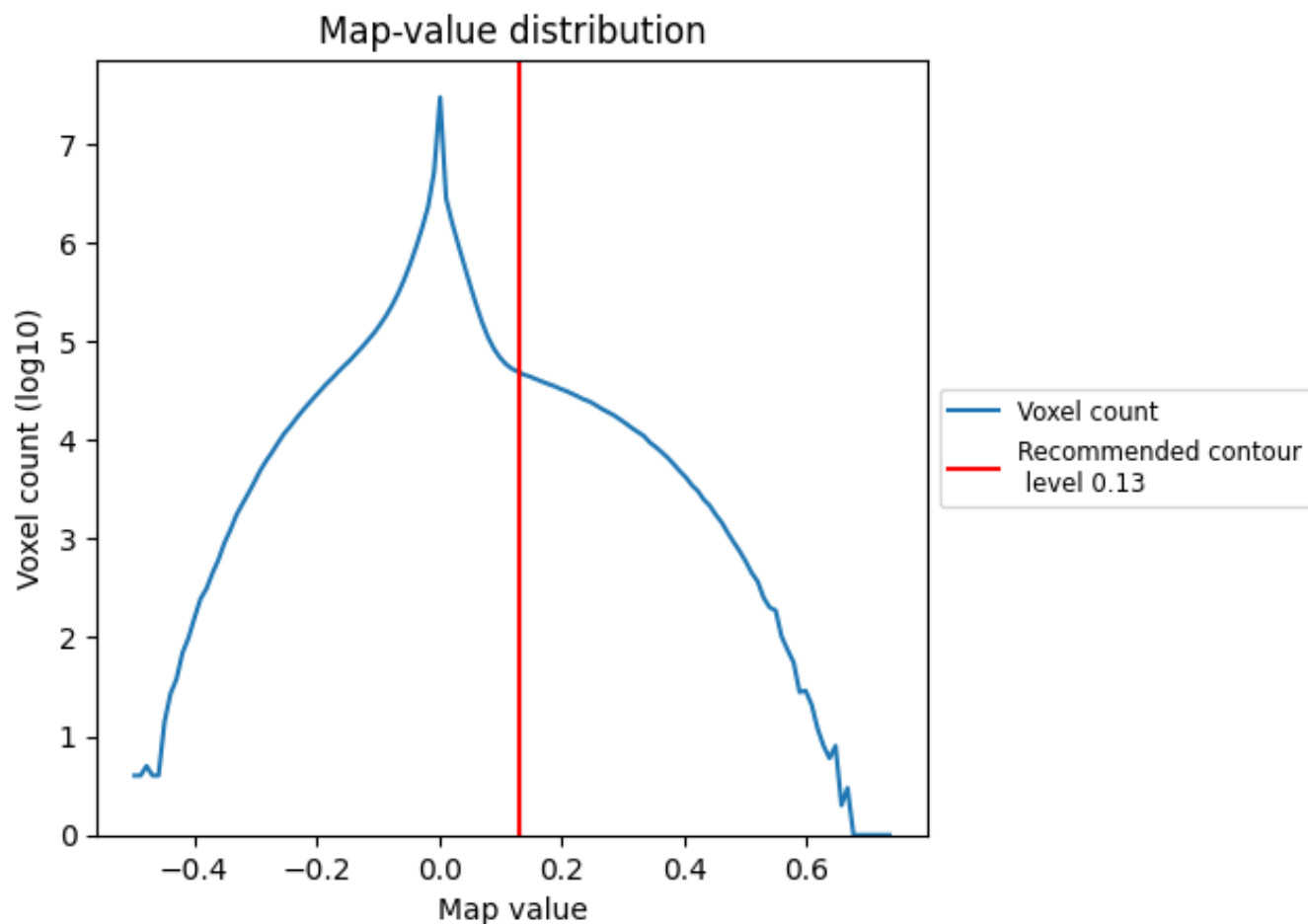
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

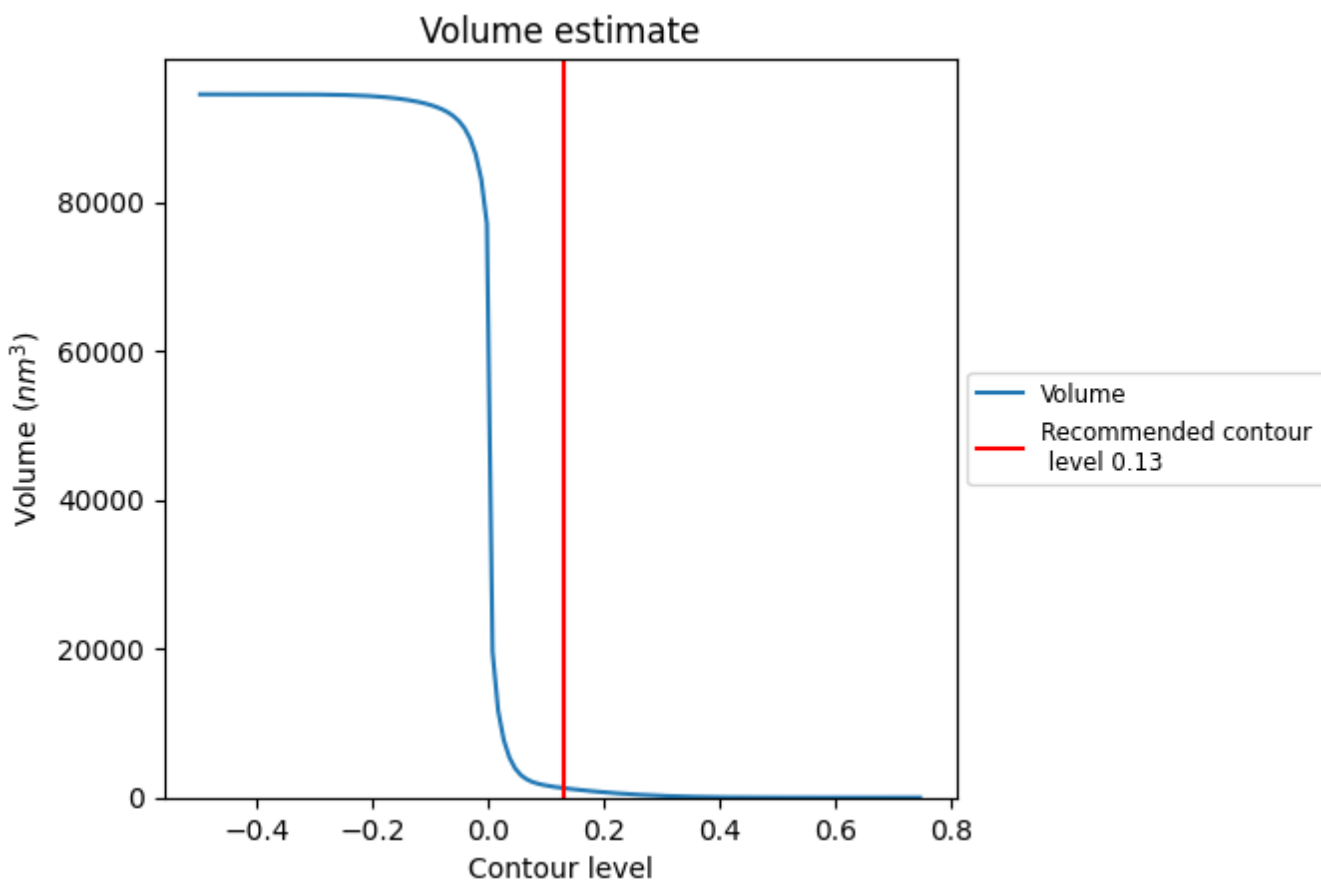
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

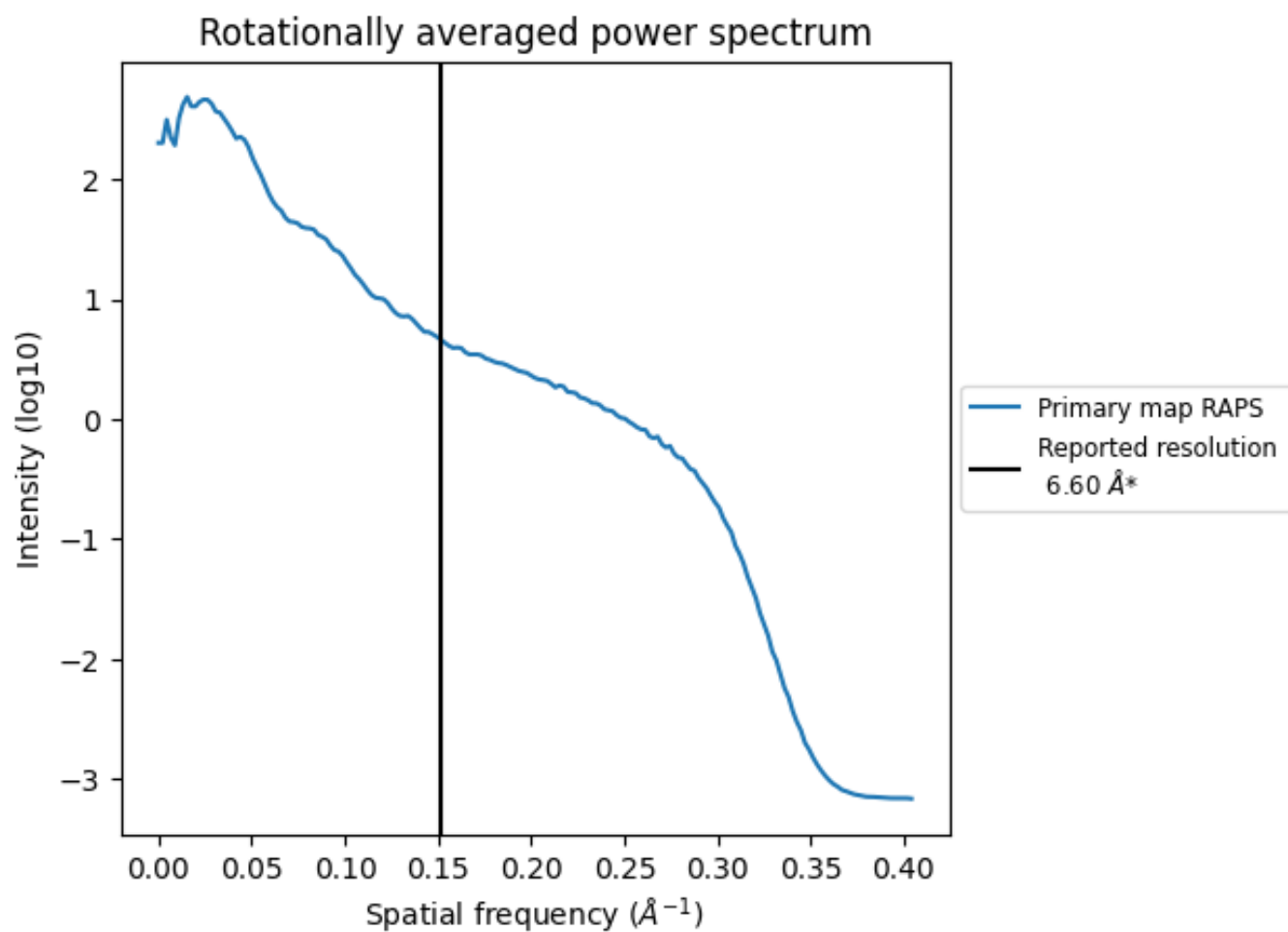
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1275 nm³; this corresponds to an approximate mass of 1152 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)



*Reported resolution corresponds to spatial frequency of 0.152\AA^{-1}

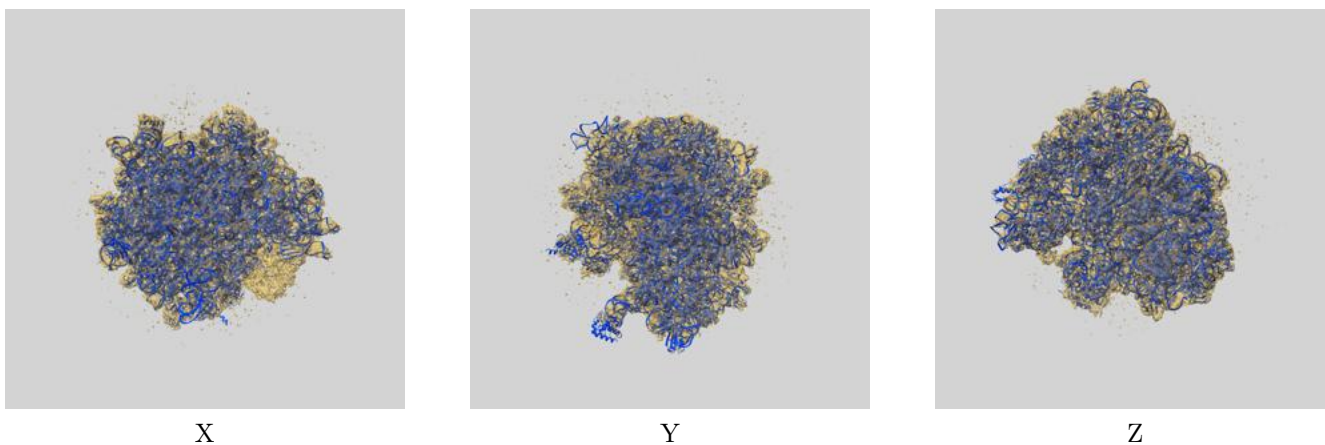
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

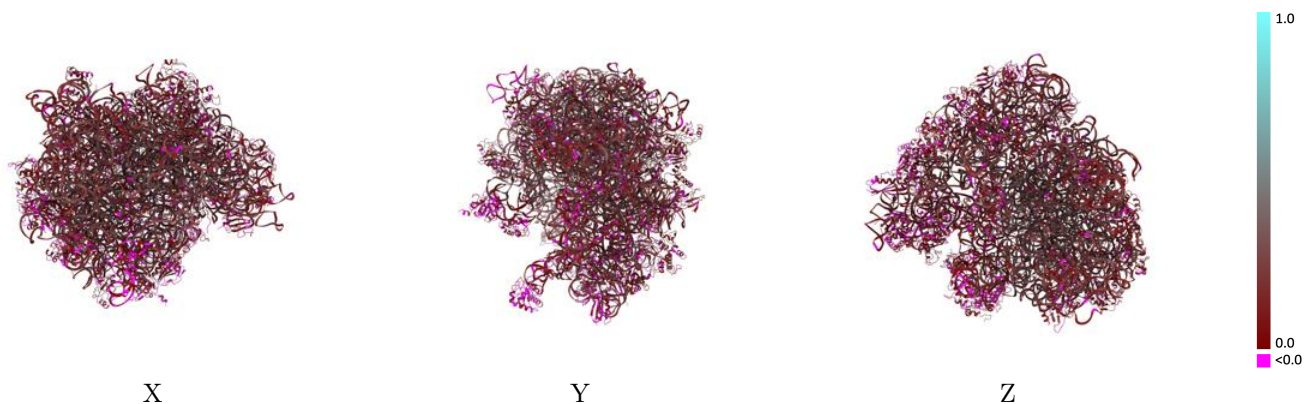
This section contains information regarding the fit between EMDB map EMD-2009 and PDB model 4V6U. Per-residue inclusion information can be found in section 3 on page 16.

9.1 Map-model overlay [i](#)



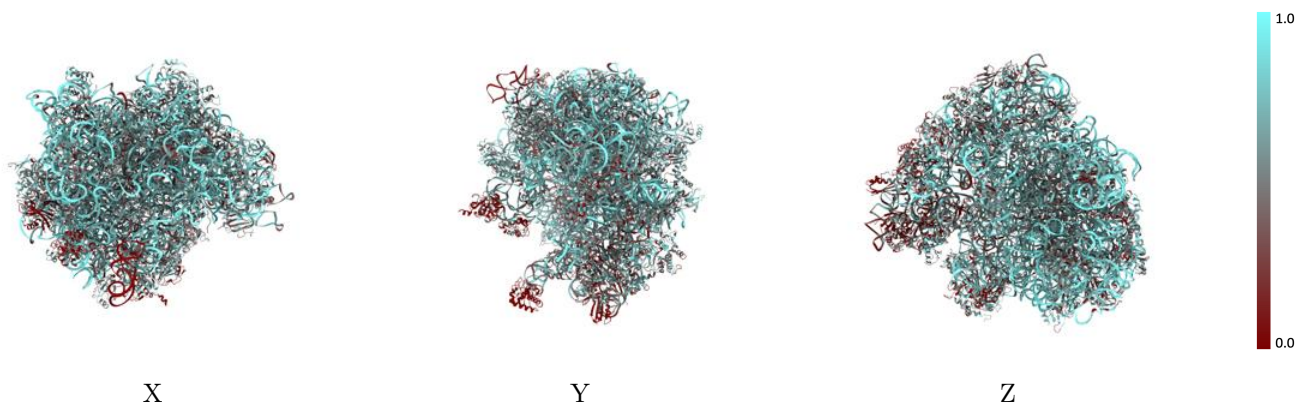
The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



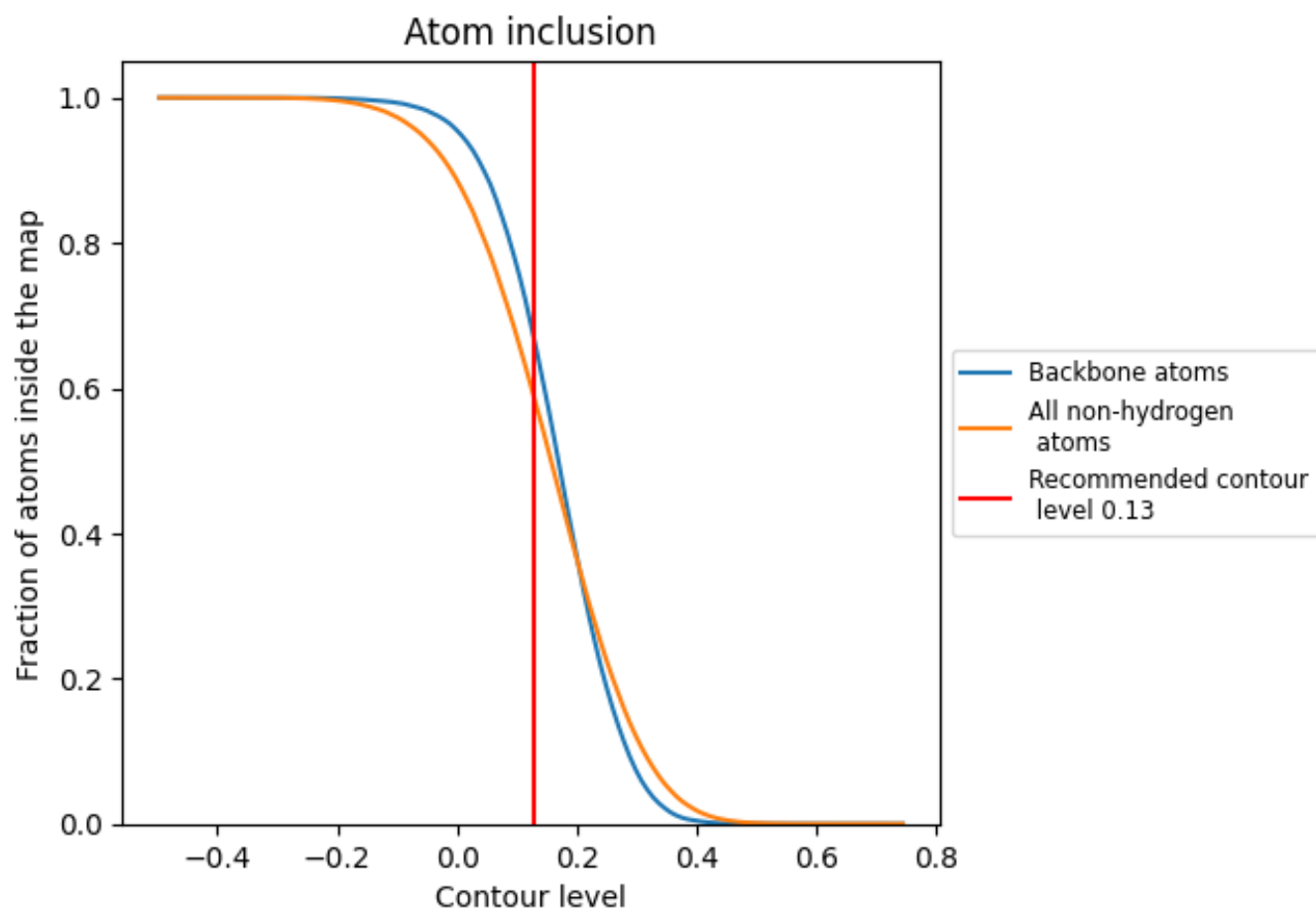
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.13).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 66% of all backbone atoms, 58% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.13) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5849	 0.1970
A0	 0.5348	 0.1690
A1	 0.5731	 0.1410
A2	 0.6951	 0.2250
A3	 0.0388	 0.0200
A9	 0.6783	 0.2060
AA	 0.5368	 0.1380
AB	 0.4356	 0.1460
AC	 0.4006	 0.1390
AD	 0.4182	 0.1260
AE	 0.3493	 0.1190
AF	 0.3928	 0.1500
AG	 0.3915	 0.0820
AH	 0.2889	 0.0810
AI	 0.4307	 0.1390
AJ	 0.4062	 0.1520
AK	 0.1950	 0.1020
AL	 0.1400	 0.0710
AM	 0.4444	 0.1560
AN	 0.3731	 0.1420
AO	 0.3785	 0.1050
AP	 0.2358	 0.0950
AQ	 0.4921	 0.1430
AR	 0.4237	 0.1750
AS	 0.4262	 0.1170
AT	 0.3557	 0.0990
AU	 0.2278	 0.0850
AV	 0.3491	 0.1020
AW	 0.5255	 0.1240
AX	 0.3956	 0.1410
AY	 0.0980	 0.0320
B1	 0.7262	 0.2500
B3	 0.7984	 0.2180
B4	 0.1961	 0.1010
B5	 0.5635	 0.1560



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Chain	Atom inclusion	Q-score
B6	0.0171	0.0390
BA	0.2176	0.0480
BB	0.4494	0.2180
BC	0.4304	0.1680
BD	0.4160	0.1590
BE	0.4775	0.1130
BF	0.5643	0.1920
BG	0.5603	0.1520
BH	0.2308	0.0610
BI	0.4295	0.1670
BJ	0.4342	0.2070
BK	0.5251	0.1440
BL	0.3961	0.1390
BM	0.3396	0.1790
BN	0.4502	0.1800
BO	0.4606	0.1510
BP	0.4882	0.1710
BQ	0.4513	0.1440
BR	0.3653	0.1810
BS	0.4527	0.1730
BT	0.4692	0.1790
BU	0.4496	0.1560
BV	0.4302	0.1440
BW	0.5401	0.1570
BY	0.4660	0.1800
BZ	0.5685	0.1650
Ba	0.4979	0.1790
Bb	0.3983	0.1540
Bc	0.3919	0.1610
Bd	0.3206	0.1200
Be	0.2931	0.1250
Bf	0.3294	0.1430
Bg	0.3672	0.1280
Bh	0.3318	0.0850
Bi	0.5062	0.2030
Bj	0.3952	0.1330
Bk	0.1443	0.0340
Bl	0.5093	0.1590