



Full wwPDB X-ray Structure Validation Report ⓘ

Dec 11, 2025 – 06:09 am GMT

PDB ID : 4U3N / pdb_00004u3n
Title : Crystal structure of CCA trinucleotide bound to the yeast 80S ribosome
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.
Deposited on : 2014-07-22
Resolution : 3.20 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp>

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:

MolProbity : 4-5-2 with Phenix2.0
Mogul : 1.8.4, CSD as541be (2020)
Xtriage (Phenix) : 2.0
EDS : 3.0
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4 : 9.0.010 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.47

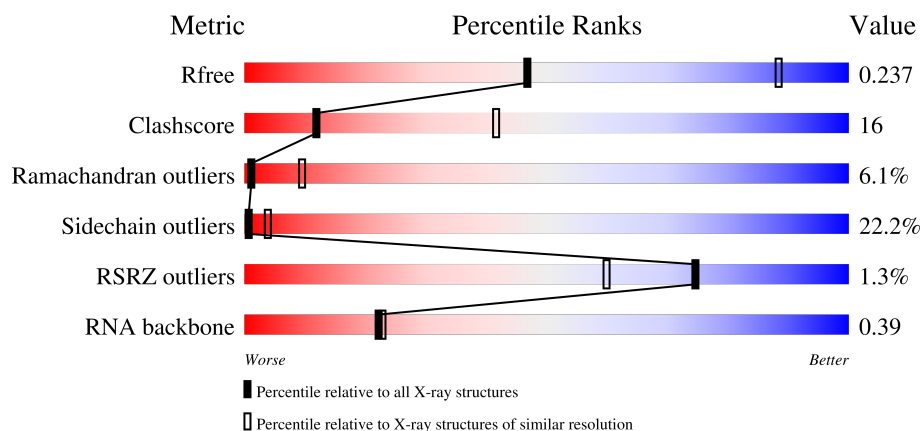
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.20 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1370 (3.20-3.20)
Clashscore	180529	1497 (3.20-3.20)
Ramachandran outliers	177936	1479 (3.20-3.20)
Sidechain outliers	177891	1478 (3.20-3.20)
RSRZ outliers	164620	1371 (3.20-3.20)
RNA backbone	3690	1111 (3.50-2.90)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	2	1800	2% 38% 43% 17%
1	6	1800	42% 42% 16%
2	S0	251	2% 33% 37% 8% 5% 18%
2	s0	251	32% 36% 12% 18%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	S1	254	
3	s1	254	
4	S2	253	
4	s2	253	
5	S3	239	
5	s3	239	
6	S4	260	
6	s4	260	
7	S5	224	
7	s5	224	
8	S6	236	
8	s6	236	
9	S7	189	
9	s7	189	
10	S8	200	
10	s8	200	
11	S9	196	
11	s9	196	
12	C0	105	
13	C1	155	
13	c1	155	
14	C2	142	
14	c2	142	
15	C3	150	
15	c3	150	

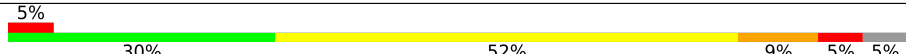
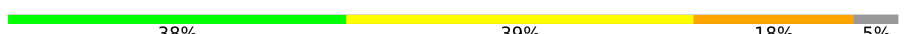
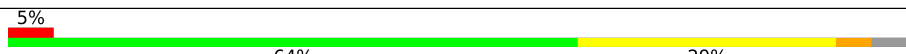
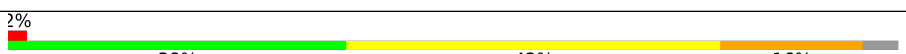
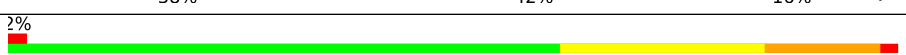
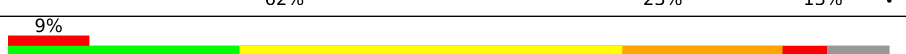
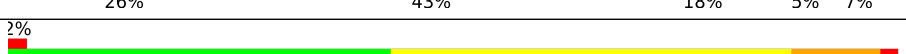
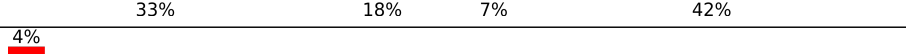
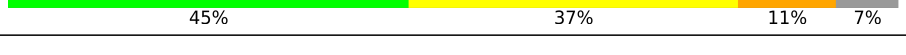
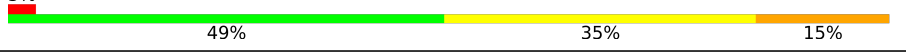
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
16	C4	136	
16	c4	136	
17	C5	141	
17	c5	141	
18	C6	142	
18	c6	142	
19	C7	136	
19	c7	136	
20	C8	145	
20	c8	145	
21	C9	143	
21	c9	143	
22	D0	120	
22	d0	120	
23	D1	87	
23	d1	87	
24	D2	129	
24	d2	129	
25	D3	144	
25	d3	144	
26	D4	134	
26	d4	134	
27	D5	107	
27	d5	107	
28	D6	97	

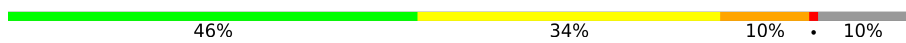
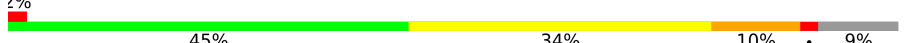
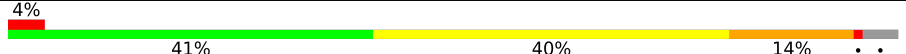
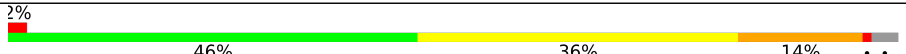
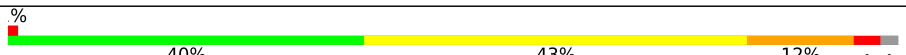
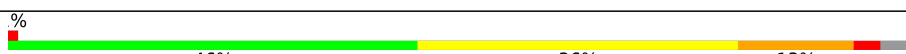
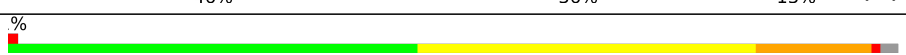
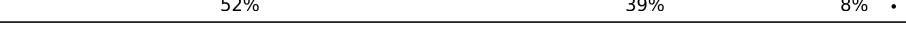
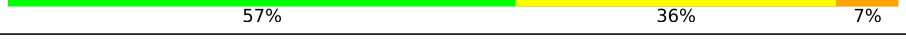
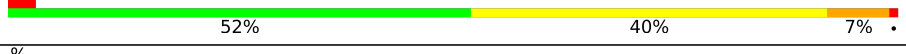
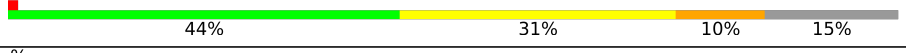
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	d6	97	
29	D7	81	
29	d7	81	
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	60	
33	E1	76	
34	SR	318	
34	sR	318	
35	SM	273	
35	sM	273	
36	1	3396	
36	5	3396	
37	3	121	
37	7	121	
38	4	158	
38	8	158	
39	L2	253	
39	l2	253	
40	L3	386	
40	l3	386	
41	L4	361	
41	l4	361	

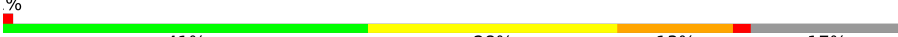
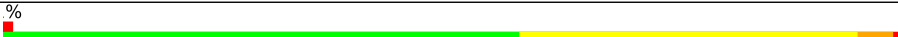
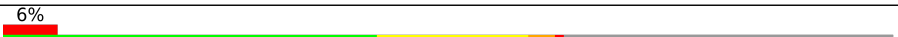
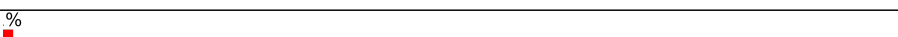
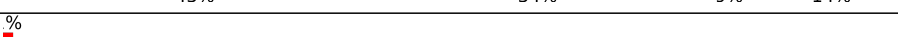
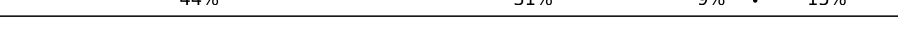
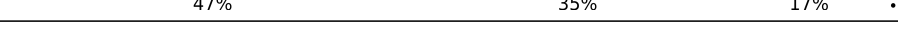
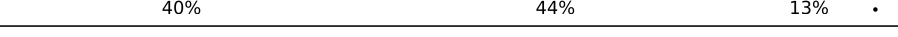
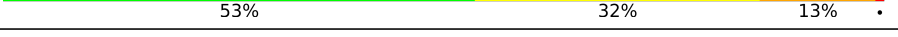
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
42	L5	296	
42	l5	296	
43	L6	175	
43	l6	175	
44	L7	243	
44	l7	243	
45	L8	255	
45	l8	255	
46	L9	191	
46	l9	191	
47	M0	220	
47	m0	220	
48	M1	173	
48	m1	173	
49	M3	198	
49	m3	198	
50	M4	137	
50	m4	137	
51	M5	203	
51	m5	203	
52	M6	198	
52	m6	198	
53	M7	183	
53	m7	183	
54	M8	185	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
54	m8	185	
55	M9	188	
55	m9	188	
56	N0	172	
56	n0	172	
57	N1	159	
57	n1	159	
58	N2	120	
58	n2	120	
59	N3	136	
59	n3	136	
60	N4	155	
60	n4	155	
61	N5	141	
61	n5	141	
62	N6	126	
62	n6	126	
63	N7	135	
63	n7	135	
64	N8	148	
64	n8	148	
65	N9	58	
65	n9	58	
66	O0	104	
66	o0	104	

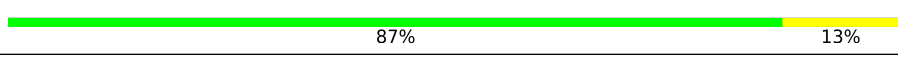
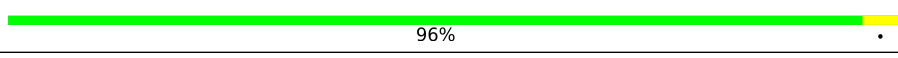
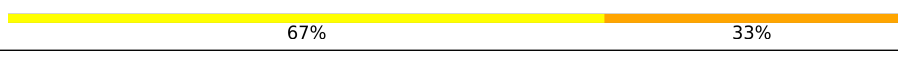
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
67	O1	112	
67	o1	112	
68	O2	129	
68	o2	129	
69	O3	106	
69	o3	106	
70	O4	120	
70	o4	120	
71	O5	119	
71	o5	119	
72	O6	99	
72	o6	99	
73	O7	87	
73	o7	87	
74	O8	77	
74	o8	77	
75	O9	50	
75	o9	50	
76	Q0	52	
76	q0	52	
77	Q1	25	
77	q1	25	
78	Q2	105	
78	q2	105	
79	Q3	91	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
79	q3	91	
80	c0	105	
81	e0	62	
82	e1	76	
83	m2	160	
84	p0	311	
85	p1	47	
86	p2	46	
87	A	3	
87	B	3	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
88	MG	1	3674	-	-	-	X
88	MG	6	1920	-	-	-	X
89	OHX	1	3982	-	-	X	-
89	OHX	1	4015	-	-	X	-
89	OHX	1	4170	-	-	X	-
89	OHX	1	4186	-	-	X	-
89	OHX	2	2044	-	-	X	-
89	OHX	2	2099	-	-	X	-
89	OHX	5	3980	-	-	X	-
89	OHX	5	4013	-	-	X	-
89	OHX	5	4022	-	-	X	-
89	OHX	5	4202	-	-	X	-
89	OHX	5	4204	-	-	X	-
89	OHX	5	4221	-	-	X	-
89	OHX	5	4247	-	-	X	-
89	OHX	6	2105	-	-	X	-
89	OHX	6	2143	-	-	X	-
89	OHX	8	219	-	-	X	-
89	OHX	8	226	-	-	X	-

2 Entry composition

There are 90 unique types of molecules in this entry. The entry contains 411288 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	2	1750	Total	C	N	O	P	0	0	0
			37283	16668	6591	12274	1750			
1	6	1795	Total	C	N	O	P	0	0	0
			38238	17095	6758	12590	1795			

- Molecule 2 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	S0	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 3 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	S1	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
3	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 4 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	S2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
4	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 5 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	S3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
5	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 6 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	S4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
6	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 7 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	S5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
7	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 8 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	S6	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
8	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 9 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	S7	184	Total	C	N	O	0	0	0
			1481	951	265	265			
9	s7	186	Total	C	N	O	0	0	0
			1491	957	267	267			

- Molecule 10 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	S8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 11 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	S9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
11	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			

- Molecule 12 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	C0	96	Total	C	N	O	S	0	0	0
			773	500	126	145	2			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C0	89	ALA	GLY	conflict	UNP Q08745

- Molecule 13 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	C1	155	Total	C	N	O	S	0	0	0
			1214	775	230	206	3			
13	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	147	ALA	GLY	conflict	UNP P0CX47
c1	147	ALA	GLY	conflict	UNP P0CX47

- Molecule 14 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	C2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C2	104	ALA	GLY	conflict	UNP P48589
C2	110	ALA	GLY	conflict	UNP P48589
c2	104	ALA	GLY	conflict	UNP P48589
c2	110	ALA	GLY	conflict	UNP P48589

- Molecule 15 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	C3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
15	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 16 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	C4	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
16	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 17 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	C5	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
17	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

- Molecule 18 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	C6	141	Total	C	N	O	0	0	0
			1105	708	203	194			
18	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 19 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 20 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	C8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
20	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 21 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	C9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
21	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 22 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	D0	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
22	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 23 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	D1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
23	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 24 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	D2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
24	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 25 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	D3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
25	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 26 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	D4	134	Total	C	N	O	0	0	0
			1073	676	208	189			
26	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 27 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	D5	70	Total	C	N	O	0	0	0
			563	360	104	99			
27	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 28 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			
28	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 29 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	D7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 30 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	D8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
30	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 31 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 32 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			

- Molecule 33 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	E1	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			

- Molecule 34 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	SR	318	Total	C	N	O	S	0	0	0
			2441	1544	419	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 35 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
35	SM	159	Total	C	N	O	0	0	0
			1104	652	221	231			
35	sM	104	Total	C	N	O	0	0	0
			680	403	140	137			

- Molecule 36 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			
36	5	3150	Total	C	N	O	P	0	0	0
			67376	30095	12145	21987	3149			

- Molecule 37 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
37	7	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 38 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
38	8	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 39 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	L2	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			
39	l2	252	Total	C	N	O	S	0	0	0
			1912	1190	388	333	1			

- Molecule 40 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	L3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	l3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 41 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	L4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
41	l4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 42 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	L5	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	l5	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- Molecule 43 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	L6	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	l6	157	Total	C	N	O	S	0	0	0
			1248	806	224	217	1			

- Molecule 44 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	L7	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
44	l7	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- Molecule 45 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	L8	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			
45	l8	231	Total	C	N	O	S	0	0	0
			1763	1130	316	314	3			

- Molecule 46 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	l9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	M0	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
47	m0	213	Total	C	N	O	S	0	0	0
			1722	1094	325	297	6			

- Molecule 48 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	M1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
48	m1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 49 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	M3	193	Total	C	N	O		0	0	0
			1543	962	315	266				
49	m3	194	Total	C	N	O		0	0	0
			1548	965	316	267				

- Molecule 50 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	M4	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
50	m4	137	Total	C	N	O	S	0	0	0
			1059	678	200	179	2			

- Molecule 51 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
51	m5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 52 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
52	m6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 53 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	M7	183	Total	C	N	O		0	0	0
			1420	882	281	257				
53	m7	155	Total	C	N	O		0	0	0
			1227	764	238	225				

- Molecule 54 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	M8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
54	m8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 55 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	M9	188	Total	C	N	O		0	0	0
			1521	935	326	260				
55	m9	188	Total	C	N	O		0	0	0
			1521	935	326	260				

- Molecule 56 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	n0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 57 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	N1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
57	n1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 58 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	N2	100	Total	C	N	O	S	0	0	0
			796	516	131	149				
58	n2	98	Total	C	N	O	S	0	0	0
			778	505	127	146				

- Molecule 59 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	N3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
59	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 60 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	N4	98	Total	C	N	O	S	0	0	0
			699	443	137	118	1			
60	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

- Molecule 61 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	N5	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			
61	n5	120	Total	C	N	O	S	0	0	0
			959	617	168	172	2			

- Molecule 62 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
62	N6	126	Total	C	N	O	0	0	0
			993	625	192	176			
62	n6	126	Total	C	N	O	0	0	0
			993	625	192	176			

- Molecule 63 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
63	N7	135	Total	C	N	O	0	0	0
			1092	710	202	180			
63	n7	135	Total	C	N	O	0	0	0
			1092	710	202	180			

- Molecule 64 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	N8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
64	n8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 65 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
65	N9	58	Total	C	N	O	0	0	0
			462	289	100	73			
65	n9	58	Total	C	N	O	0	0	0
			462	289	100	73			

- Molecule 66 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	O0	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			
66	o0	100	Total	C	N	O	S	0	0	0
			767	492	128	146	1			

- Molecule 67 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	O1	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
67	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 68 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	O2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
68	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 69 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	O3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
69	o3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 70 is a protein called Large ribosomal subunit protein eL34A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

- Molecule 71 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			965	612	185	167	1			

- Molecule 72 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	O6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	o6	99	Total	C	N	O	S	0	0	0
			770	481	156	131	2			

- Molecule 73 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	O7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			
73	o7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 74 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	O8	77	Total	C	N	O	S	0	0	0
			612	391	115	106				
74	o8	77	Total	C	N	O	S	0	0	0
			608	388	114	106				

- Molecule 75 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	O9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
75	o9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 76 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	Q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
76	q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 77 is a protein called 60S ribosomal protein L41-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	Q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			
77	q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 78 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	Q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			
78	q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 79 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	Q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
79	q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 80 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	c0	96	Total	C	N	O	S	0	0	0
			762	491	125	144	2			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
c0	89	ALA	GLY	conflict	UNP Q08745
c0	98	SER	THR	conflict	UNP Q08745

- Molecule 81 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
81	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 82 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
82	e1	76	Total	C	N	O	S	0	0	0
			608	388	117	99	4			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
e1	77	ALA	GLY	conflict	UNP P05759

- Molecule 83 is a protein called UNKNOWN PROTEIN m2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
83	m2	150	Total	C	N	O	0	0	0
			750	450	150	150			

- Molecule 84 is a protein called Large ribosomal subunit protein uL10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
84	p0	143	Total	C	N	O	S	0	0	0
			1077	687	192	195	3			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
p0	286	ALA	GLY	conflict	UNP P05317

- Molecule 85 is a protein called UNKNOWN PROTEIN p1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
85	p1	47	Total	C	N	O	0	0	0
			235	141	47	47			

- Molecule 86 is a protein called UNKNOWN PROTEIN p2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
86	p2	46	Total	C	N	O	0	0	0
			230	138	46	46			

- Molecule 87 is a RNA chain called CCA trinucleotide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
87	A	3	Total	C	N	O	P	0	0	0
			62	28	11	20	3			
87	B	3	Total	C	N	O	P	0	0	0
			62	28	11	20	3			

- Molecule 88 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
88	2	123	Total Mg 123 123	0	0
88	S4	2	Total Mg 2 2	0	0
88	S6	1	Total Mg 1 1	0	0
88	S8	1	Total Mg 1 1	0	0
88	C8	1	Total Mg 1 1	0	0
88	1	472	Total Mg 472 472	0	0
88	3	14	Total Mg 14 14	0	0
88	4	19	Total Mg 19 19	0	0
88	L2	2	Total Mg 2 2	0	0
88	L3	4	Total Mg 4 4	0	0
88	L4	1	Total Mg 1 1	0	0
88	L5	1	Total Mg 1 1	0	0
88	L7	4	Total Mg 4 4	0	0
88	L8	1	Total Mg 1 1	0	0
88	M0	2	Total Mg 2 2	0	0
88	M1	1	Total Mg 1 1	0	0
88	M3	2	Total Mg 2 2	0	0
88	M5	4	Total Mg 4 4	0	0
88	M6	1	Total Mg 1 1	0	0
88	M7	5	Total Mg 5 5	0	0
88	M9	2	Total Mg 2 2	0	0
88	N0	1	Total Mg 1 1	0	0

Continued on next page...

Continued from previous page...

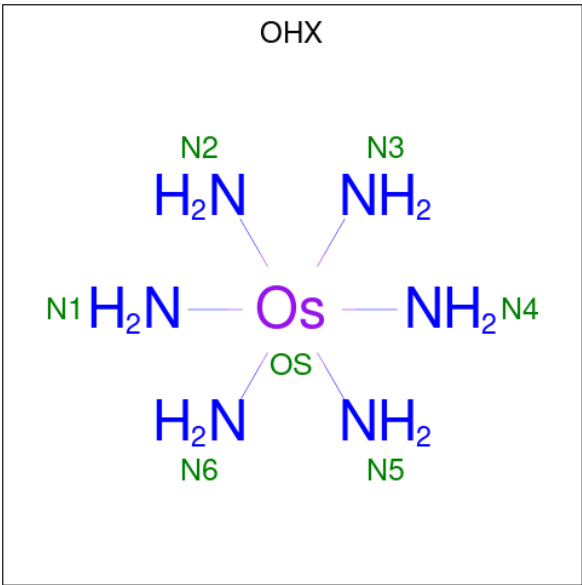
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
88	N3	3	Total 3	Mg 3	0	0
88	N5	1	Total 1	Mg 1	0	0
88	N8	5	Total 5	Mg 5	0	0
88	O2	1	Total 1	Mg 1	0	0
88	O4	1	Total 1	Mg 1	0	0
88	O5	1	Total 1	Mg 1	0	0
88	O7	1	Total 1	Mg 1	0	0
88	6	145	Total 145	Mg 145	0	0
88	s1	1	Total 1	Mg 1	0	0
88	s4	1	Total 1	Mg 1	0	0
88	s8	2	Total 2	Mg 2	0	0
88	c1	1	Total 1	Mg 1	0	0
88	c7	2	Total 2	Mg 2	0	0
88	c8	1	Total 1	Mg 1	0	0
88	c9	1	Total 1	Mg 1	0	0
88	d3	1	Total 1	Mg 1	0	0
88	d4	1	Total 1	Mg 1	0	0
88	d6	1	Total 1	Mg 1	0	0
88	sM	1	Total 1	Mg 1	0	0
88	5	503	Total 503	Mg 503	0	0
88	7	14	Total 14	Mg 14	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
88	8	17	Total 17	Mg 17	0	0
88	l2	1	Total 1	Mg 1	0	0
88	l3	4	Total 4	Mg 4	0	0
88	l4	2	Total 2	Mg 2	0	0
88	l5	2	Total 2	Mg 2	0	0
88	l7	2	Total 2	Mg 2	0	0
88	m1	1	Total 1	Mg 1	0	0
88	m5	4	Total 4	Mg 4	0	0
88	m6	2	Total 2	Mg 2	0	0
88	m7	5	Total 5	Mg 5	0	0
88	n0	2	Total 2	Mg 2	0	0
88	n3	2	Total 2	Mg 2	0	0
88	n6	2	Total 2	Mg 2	0	0
88	n8	3	Total 3	Mg 3	0	0
88	o1	1	Total 1	Mg 1	0	0
88	o3	1	Total 1	Mg 1	0	0
88	o4	1	Total 1	Mg 1	0	0
88	q0	1	Total 1	Mg 1	0	0
88	q1	1	Total 1	Mg 1	0	0
88	q3	2	Total 2	Mg 2	0	0

- Molecule 89 is osmium (III) hexammine (CCD ID: OHX) (formula: $\text{H}_{12}\text{N}_6\text{Os}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	2	1	Total	N	Os	0	0
			7	6	1		
89	S8	1	Total	N	Os	0	0
			7	6	1		
89	C3	1	Total	N	Os	0	0
			7	6	1		
89	C5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	C8	1	Total	N	Os	0	0
			7	6	1		
89	D3	1	Total	N	Os	0	0
			7	6	1		
89	D9	1	Total	N	Os	0	0
			7	6	1		
89	SR	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		
89	1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	1	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	3	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		
89	4	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	4	1	Total 7	N 6	Os 1	0	0
89	4	1	Total 7	N 6	Os 1	0	0
89	4	1	Total 7	N 6	Os 1	0	0
89	4	1	Total 7	N 6	Os 1	0	0
89	4	1	Total 7	N 6	Os 1	0	0
89	L3	1	Total 7	N 6	Os 1	0	0
89	L3	1	Total 7	N 6	Os 1	0	0
89	L3	1	Total 7	N 6	Os 1	0	0
89	L4	1	Total 7	N 6	Os 1	0	0
89	M0	1	Total 7	N 6	Os 1	0	0
89	M5	1	Total 7	N 6	Os 1	0	0
89	M7	1	Total 7	N 6	Os 1	0	0
89	M7	1	Total 7	N 6	Os 1	0	0
89	M8	1	Total 7	N 6	Os 1	0	0
89	M9	1	Total 7	N 6	Os 1	0	0
89	N9	1	Total 7	N 6	Os 1	0	0
89	O3	1	Total 7	N 6	Os 1	0	0
89	O7	1	Total 7	N 6	Os 1	0	0
89	O7	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		
89	6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	6	1	Total 7	N 6	Os 1	0	0
89	s1	1	Total 7	N 6	Os 1	0	0
89	s1	1	Total 7	N 6	Os 1	0	0
89	s8	1	Total 7	N 6	Os 1	0	0
89	c1	1	Total 7	N 6	Os 1	0	0
89	c3	1	Total 7	N 6	Os 1	0	0
89	c5	1	Total 7	N 6	Os 1	0	0
89	c8	1	Total 7	N 6	Os 1	0	0
89	d4	1	Total 7	N 6	Os 1	0	0
89	d9	1	Total 7	N 6	Os 1	0	0
89	sR	1	Total 7	N 6	Os 1	0	0
89	5	1	Total 7	N 6	Os 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		
89	5	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	7	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	8	1	Total	N	Os	0	0
			7	6	1		
89	l3	1	Total	N	Os	0	0
			7	6	1		
89	l3	1	Total	N	Os	0	0
			7	6	1		
89	l3	1	Total	N	Os	0	0
			7	6	1		
89	l4	1	Total	N	Os	0	0
			7	6	1		
89	l4	1	Total	N	Os	0	0
			7	6	1		
89	l5	1	Total	N	Os	0	0
			7	6	1		
89	l5	1	Total	N	Os	0	0
			7	6	1		
89	l5	1	Total	N	Os	0	0
			7	6	1		
89	l5	1	Total	N	Os	0	0
			7	6	1		
89	l9	1	Total	N	Os	0	0
			7	6	1		
89	m0	1	Total	N	Os	0	0
			7	6	1		
89	m0	1	Total	N	Os	0	0
			7	6	1		
89	m1	1	Total	N	Os	0	0
			7	6	1		
89	m4	1	Total	N	Os	0	0
			7	6	1		
89	m5	1	Total	N	Os	0	0
			7	6	1		
89	m6	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
89	n3	1	Total	N	Os	0	0
			7	6	1		
89	n3	1	Total	N	Os	0	0
			7	6	1		
89	n9	1	Total	N	Os	0	0
			7	6	1		
89	o3	1	Total	N	Os	0	0
			7	6	1		
89	o7	1	Total	N	Os	0	0
			7	6	1		
89	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 90 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
90	D6	1	Total	Zn	0	0
			1	1		
90	D7	1	Total	Zn	0	0
			1	1		
90	D9	1	Total	Zn	0	0
			1	1		
90	E1	1	Total	Zn	0	0
			1	1		
90	O7	1	Total	Zn	0	0
			1	1		
90	Q0	1	Total	Zn	0	0
			1	1		
90	Q2	1	Total	Zn	0	0
			1	1		
90	Q3	1	Total	Zn	0	0
			1	1		
90	d6	1	Total	Zn	0	0
			1	1		
90	d7	1	Total	Zn	0	0
			1	1		
90	d9	1	Total	Zn	0	0
			1	1		
90	e1	1	Total	Zn	0	0
			1	1		
90	o7	1	Total	Zn	0	0
			1	1		

Continued on next page...

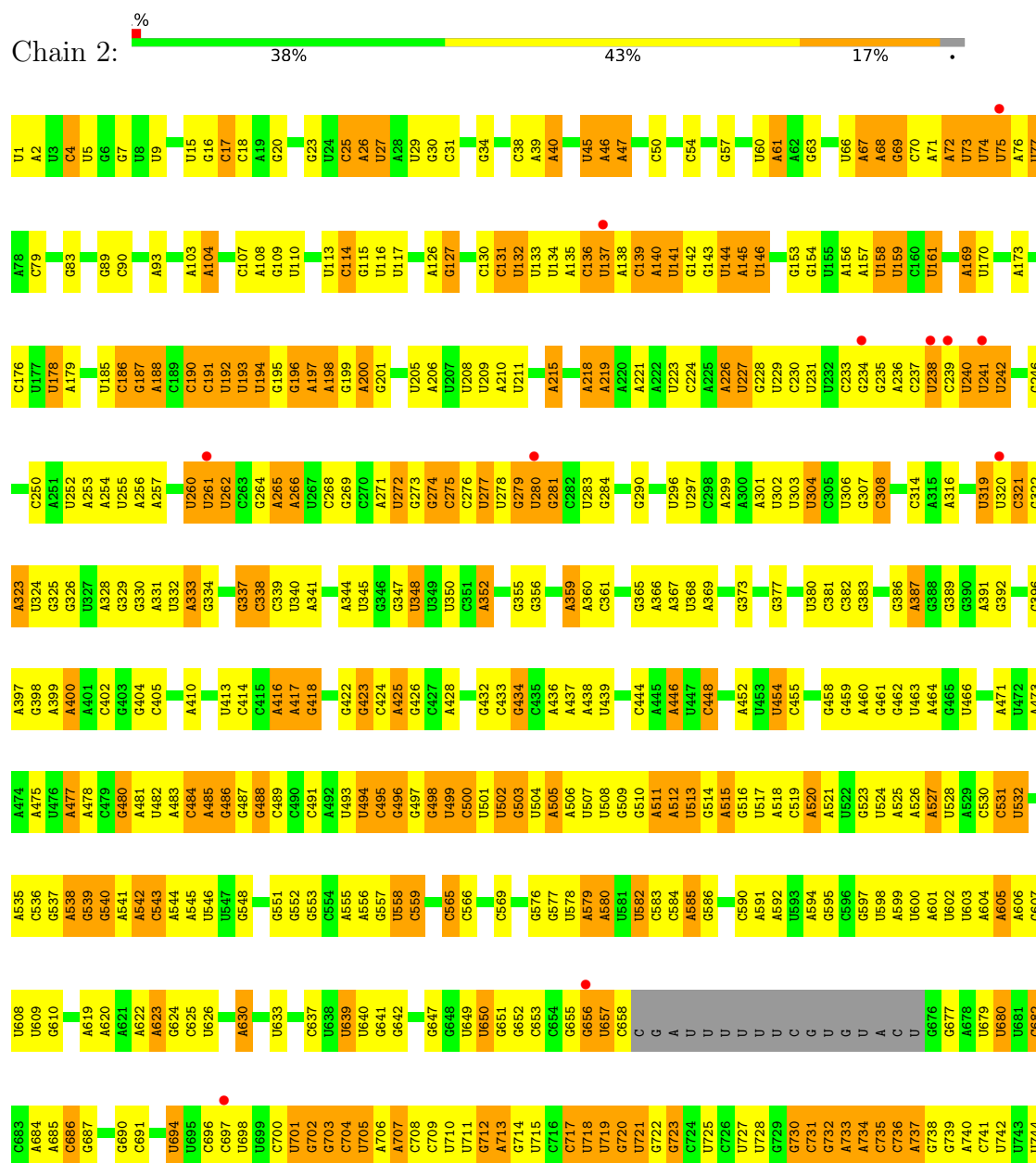
Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
90	q0	1	Total 1	Zn 1	0	0
90	q2	1	Total 1	Zn 1	0	0
90	q3	1	Total 1	Zn 1	0	0

3 Residue-property plots

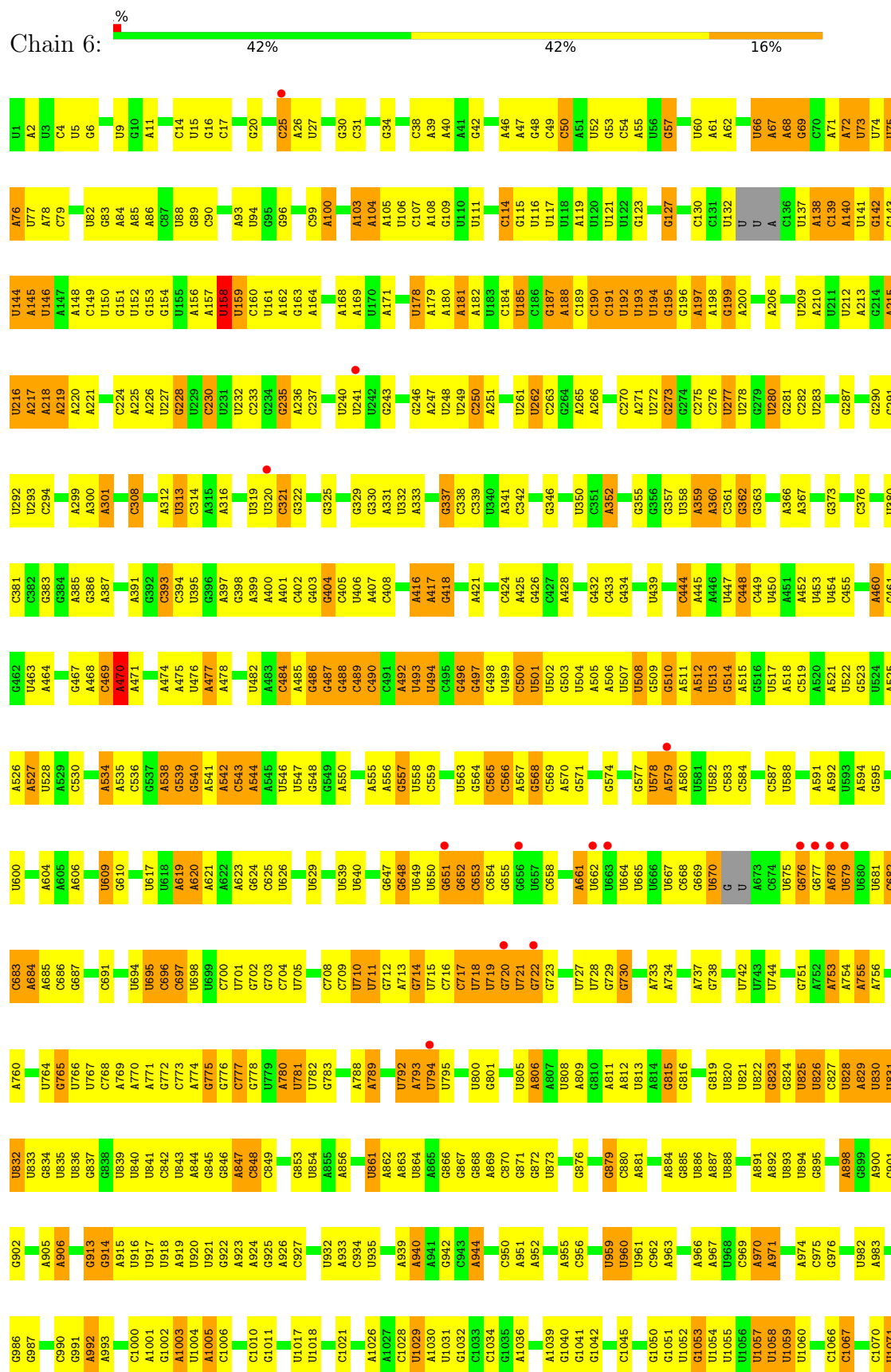
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

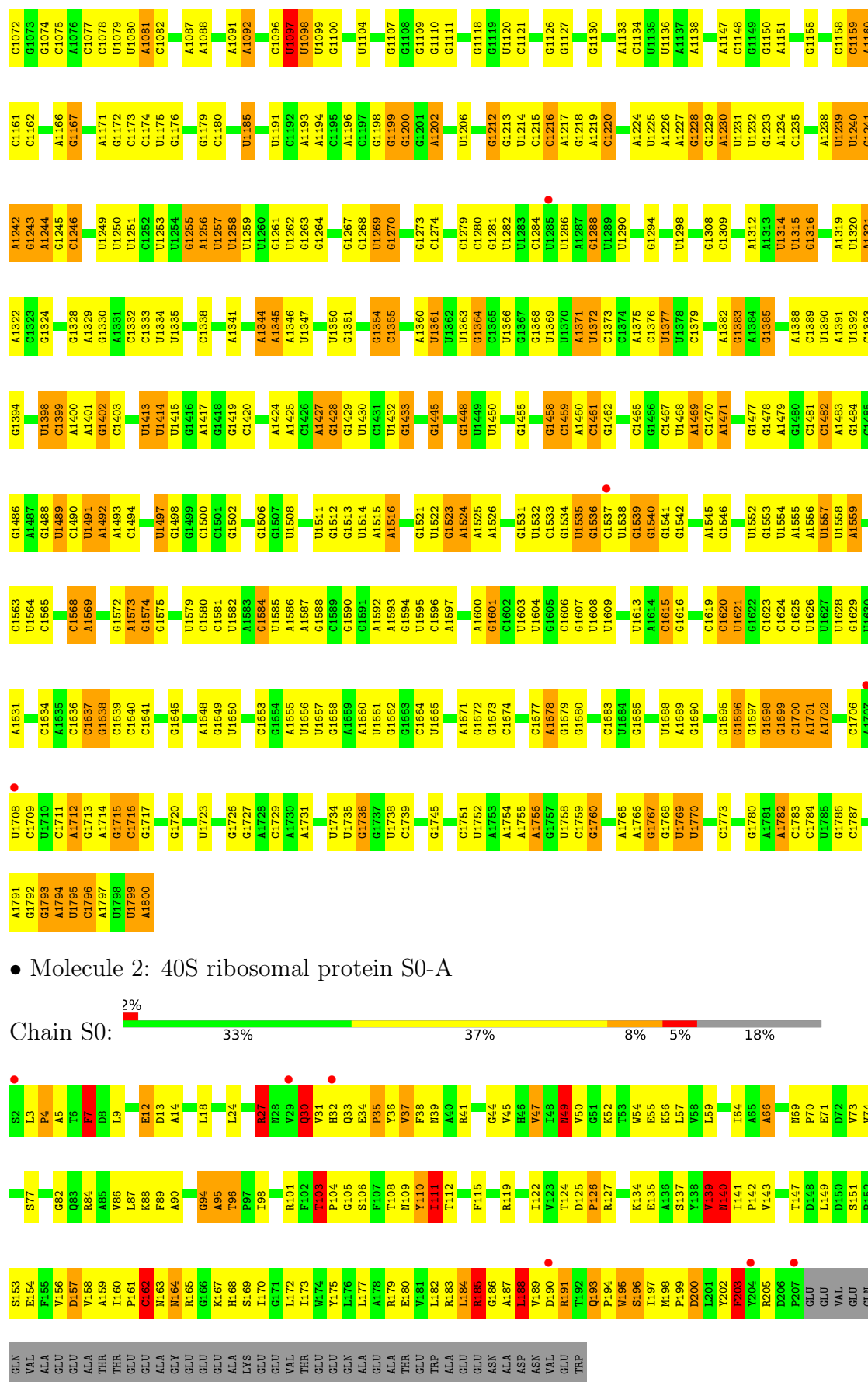
• Molecule 1: 18S ribosomal RNA



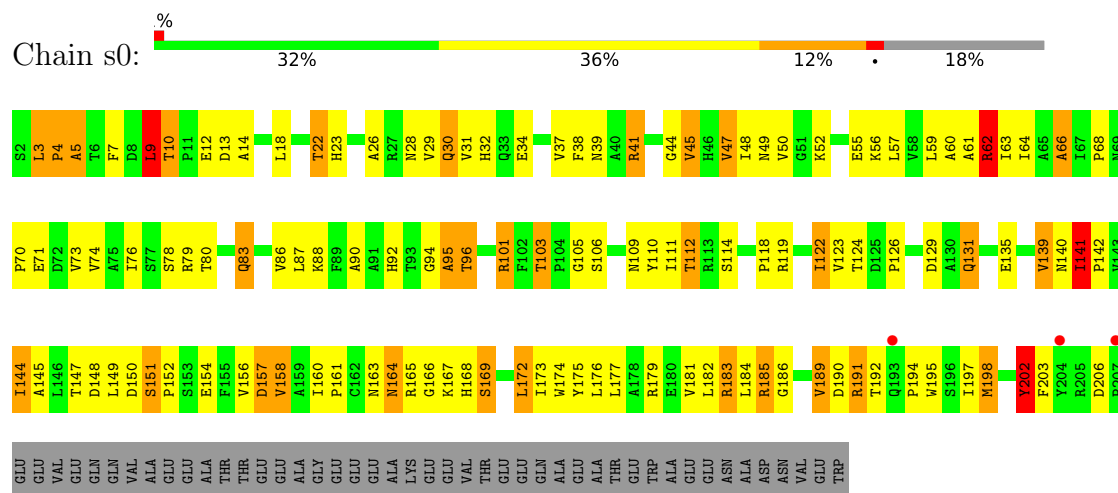
A1794	G	A1573	G1506	G1428	U1350	G1263	G1188	G1112	G1040	U968	G885	G819	U748
U1795	C	G1574	G1507	G1429	G1354	G1266	A1189	A1113	G1041	C969	U886	U820	U749
A1796	G	U1575	U1508	U1430	C1355	U1266	U1190	G1114	A1042	A970	A887	U821	U750
U1797	U	A1576	C1509	C1431	C1356	G1267	U1191	U1117	U1044	G972	U888	U822	A751
A		A1577	U1510	U1432	U1357	C1274	A1194	G1118	C1045		A892	G824	A752
		U1578	U1513	U1433	G1358		G1195	G1119	G1046	C975	U893	U826	A753
		U1579	U1514	U1434	C1359		A1196	G1120	G1047	G976	U894	U827	A754
		C1580	U1515	G1435	U1360	G1277	G1197	G1130	G1048	A977	U895	U828	A755
		U1581	A1516	G1445	U1361	C1280	G1198	A1133	U1049	U896	U896	U829	A756
		G1584	U1517	A1446	U1362	G1281	G1199	G1133	G1050	A979	C897	A757	A757
		A1585	C1518	G1449	U1363		G1200	A1137	G1051	U882	U898	U830	U758
		A1586	U1519	U1450	U1366	U1285	G1201	A1138	U1052		G901	U831	
		A1587	U1520	C1451	U1369	U1286	A1202	A1139	G1053	A983	U902	U832	G763
		G1588	U1521		U1370	A1287	A1203		U1054	G984	G902	U833	G764
		G1589	U1522		U1371		U1206	A1142	U1055	G987	A905	U834	G765
		U1590	A1523	C1456	U1372	U1290	C1207	A1143	U1056	A906	A906	U835	U766
		G1591	U1524	U1457	U1373	G1291	U1214	A1144	U1057	U988	A907	U838	U767
		A1592	A1525	G1458	U1374		U1217	U1145	U1058	C990	A907	U839	G768
		A1593		C1459		G1294	A1211	G1146	U1059		U911	U840	A771
		A1594	U1528	A1460	C1376		U1217	G1149	U1060	U912	U912	U841	G772
		U1595	C1529	G1461	U1377	U1301	U1218	G1150	A1061	A992	G913	U842	G773
		G1596	U1530	G1462	U1378	U1302	U1219	G1151	U1062	A993	G914	A844	A774
		A1597	G1531		U1380	U1310	A1220	G1152	U1063	G994	A915	G845	G775
		A1600	U1532	C1467	U1381		C1220	A1151	G1064	A995	U916	G846	
		G1601	C1533	U1468		U1314		A1152	A1065	C1000	U917	G847	G778
		C1602	U1535	A1469	G1385	U1315	A1226	G1153	C1066	A1001	U918	C848	G779
		U1603	G1536	A1470		U1316	U1226	G1154	C1067	C1002	U919	C849	A780
		G1607	C1537	A1471	A1388	G1317	G1228	G1155	A1068	A1003		C850	A781
		U1608	U1538	U1473	C1389	G1318	G1229	C1156	G1070	U1004	A926	U851	G782
		A1609	G1539	A1474	U1390	A1319	U1231	G1157	C1071	A1005	C927	C852	G783
		G1610	U1540	U1475	U1391	G1319	U1231	C1158	C1072	U1006	U928	G853	C784
		A1611	G1541	G1477	C1393	A1321	U1231	C1159	G1073	A930	U929	U854	U785
		U1612	U1543	G1478	G1394	A1322	A1234	A1160	C1074	G1011	A933	A855	A788
		A1613	A1544	A1479	G1395	C1323	C1235	C1162	C1075	G1012	C934	A856	A789
		G1614	U1545	G1480	U1396	G1324		A1163	A1076	U1015	U935	U857	U790
		C1615	G1546	C1481	U1397	A1325	U1239	G1164	U1080	U1016	U936	U861	A793
		U1616		C1482	U1398	A1326	U1240	G1165	A1081	C1017	G936	A862	U794
		C1618	U1550	A1483	C1399		G1241	A1166	G1085	U1017	G942	A863	U795
		G1622	G1553	G1484	C1400	A1329	U1242	G1167	G1086	U1018	C943	A796	A796
		C1623	U1554	C1485	G1401	G1330	G1243	U1168	A1087	A1019	A944	U864	G797
		C1624	A1555	A1486	C1403	C1332	G1244	A1171	A1088	A1020		G867	C798
		U1629	U1557	A1487	G1404		G1245	G1172	A1091	C1021	U947	A869	A799
		A1631	U1558	U1488	G1405	U1335	U1246	C1173	A1092	C1022	G948	U870	U800
		U1630	A1559	U1491	A1410	A1336	U1248	C1174		A1023	A951	C871	G801
		C1635	U1560	A1492	G1411	A1337	U1250	U1175	C1096	A1026	A952	G872	G802
		G1636	U1561	A1493	G1412	C1338	U1251	C1176	U1097	A1027	G953	U873	A806
		C1637	U1562	C1494	U1413	C1339	U1252	G1177	U1098	C1028	G954	G876	A811
		U1638	C1563	C1495	U1414	A1341	U1254	C1180	U1099	U1029	G954	G877	A812
		C1639	U1564	G1498	U1415	A1344	U1255	G1181	G1100	A1030	U958	G878	U813
		U1645	C1565	A1416	A1345	A1346	U1256	U1182	G1101	U1031	U959	G879	U814
		G1646	U1566	A1417	G1418	A1347	U1257	A1183	G1102	C1032	U960	A881	G815
		U1647	C1567	C1500	G1418	A1348	U1258	U1185	U1103	C1033	U961	U882	G816
				G1504	C1426	A1349	U1259		U1104	C1034	A966	C883	A817
				A1505	A1427	G1349	U1260		G1111	A1039	A967	A884	C818

● Molecule 1: 18S ribosomal RNA

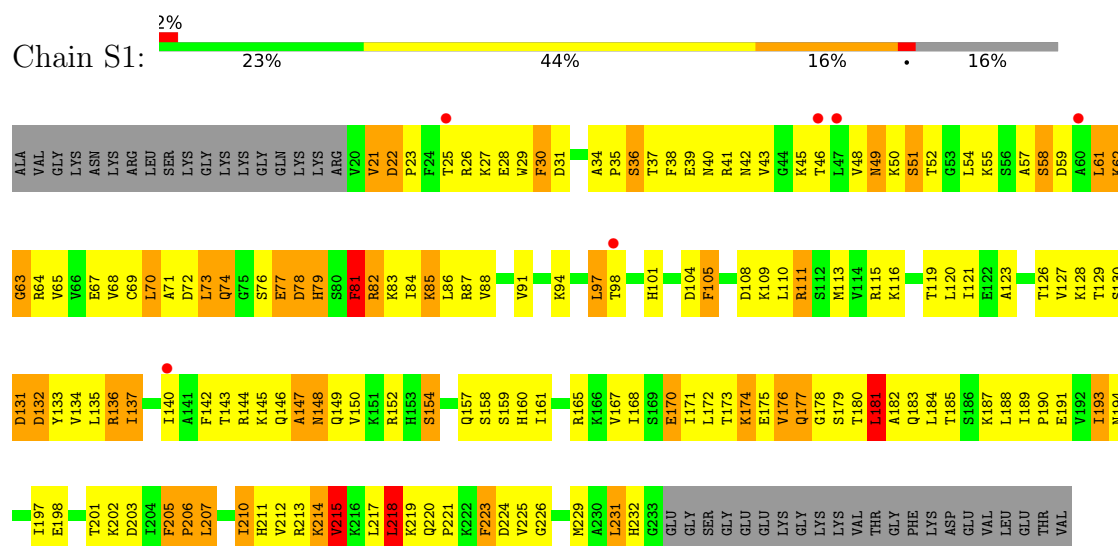




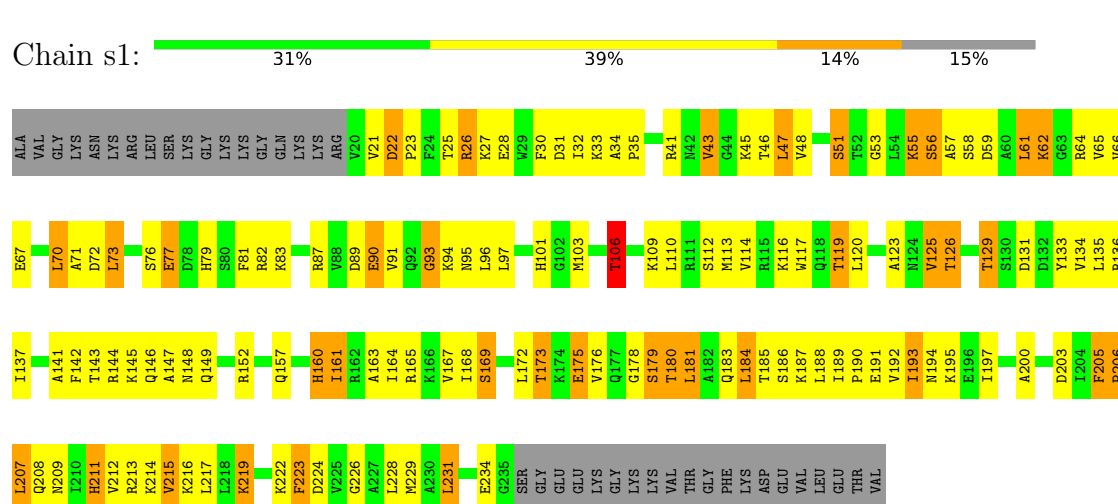
• Molecule 2: 40S ribosomal protein S0-A



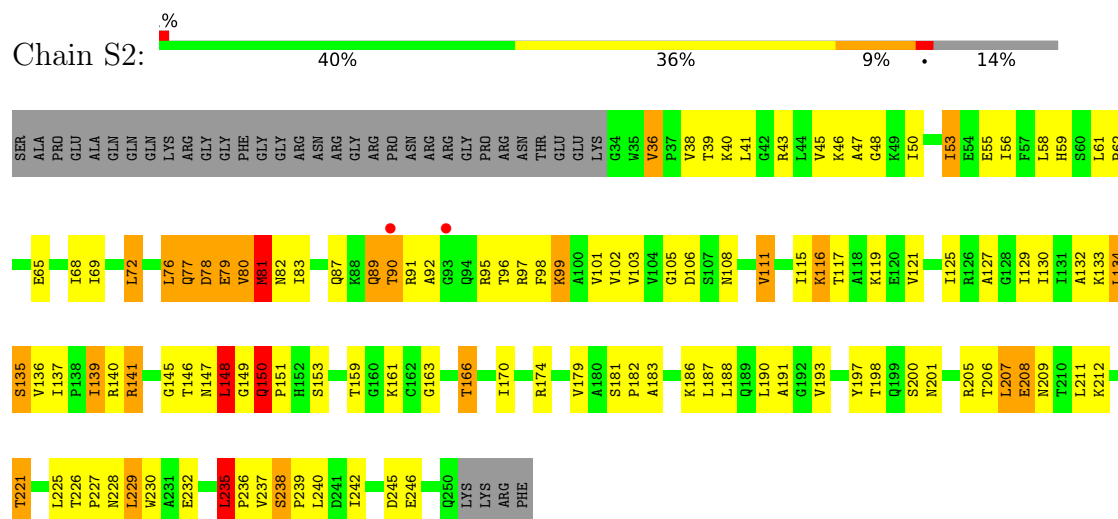
• Molecule 3: 40S ribosomal protein S1-A



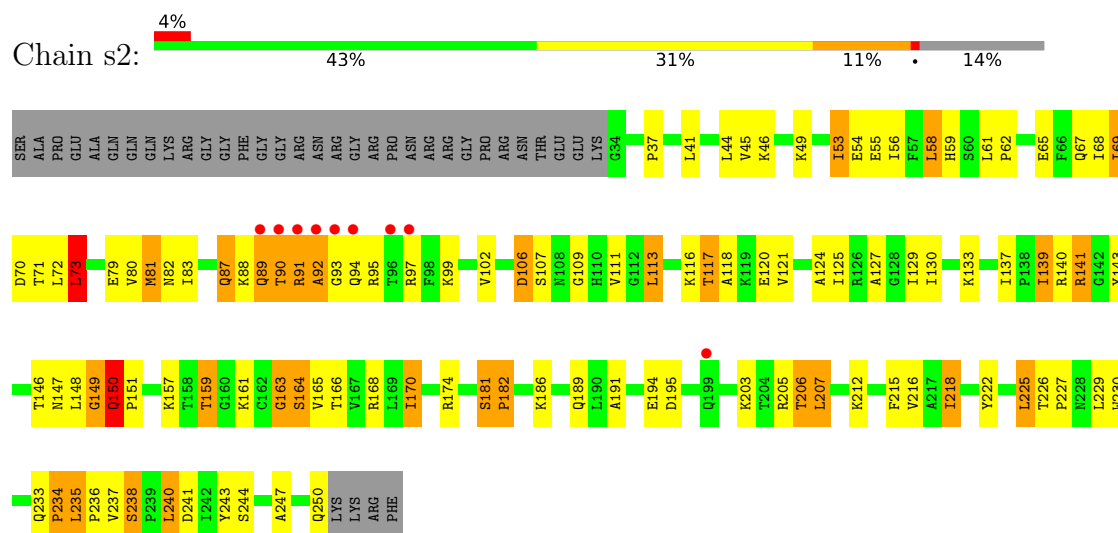
• Molecule 3: 40S ribosomal protein S1-A



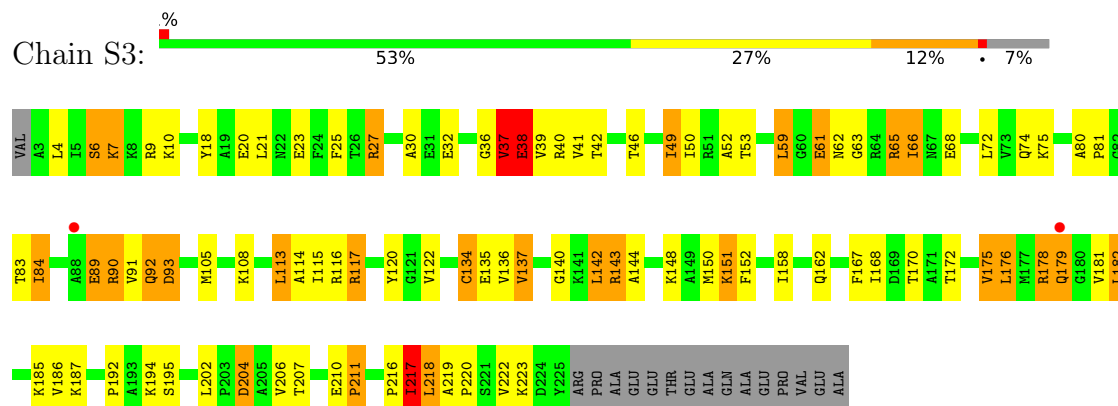
• Molecule 4: 40S ribosomal protein S2



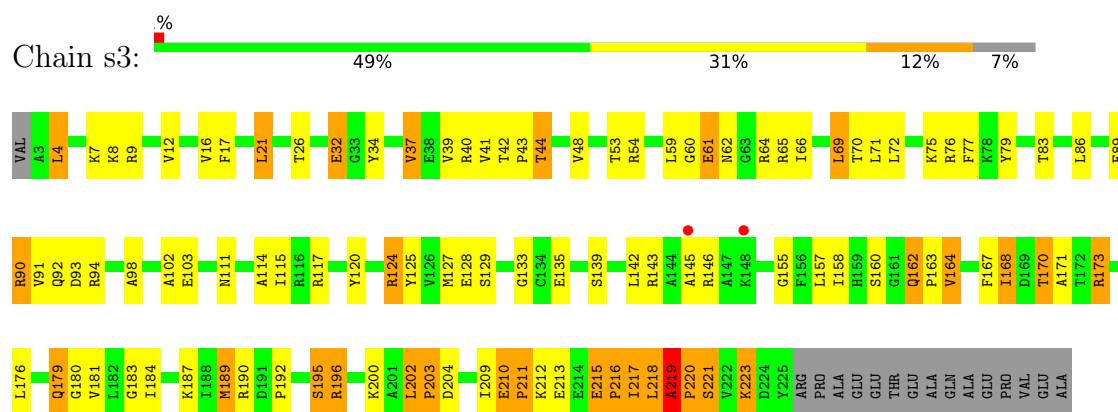
• Molecule 4: 40S ribosomal protein S2



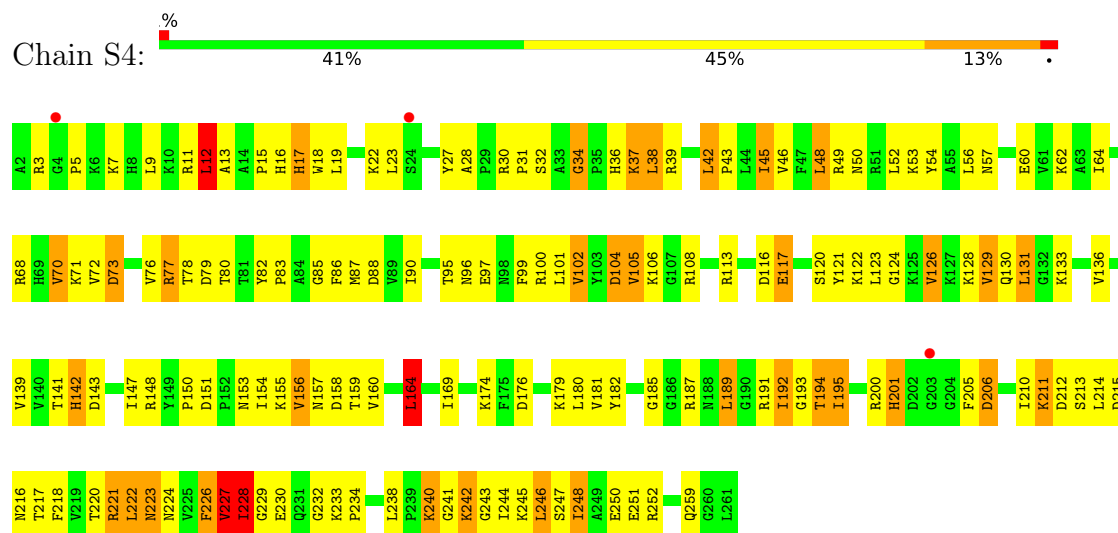
• Molecule 5: 40S ribosomal protein S3



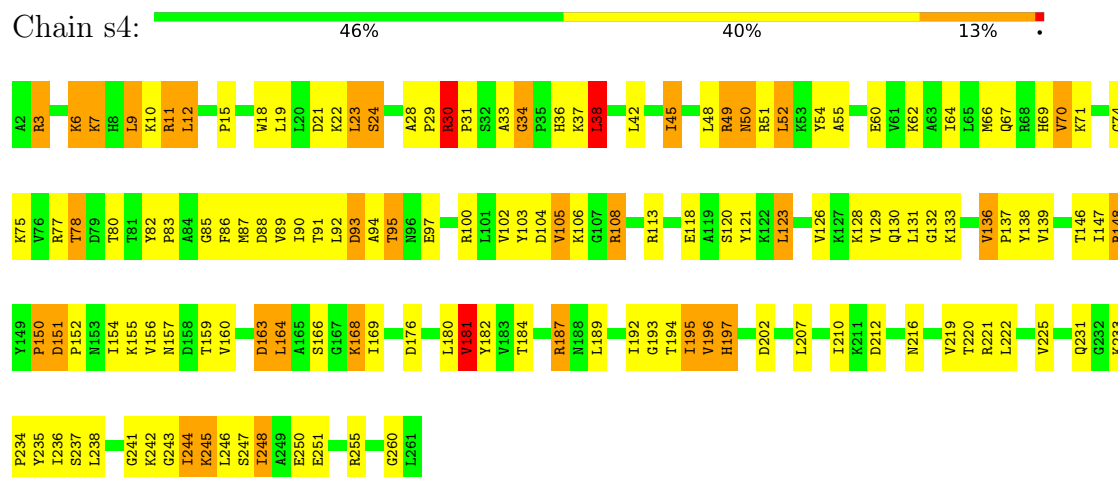
• Molecule 5: 40S ribosomal protein S3



• Molecule 6: 40S ribosomal protein S4-A

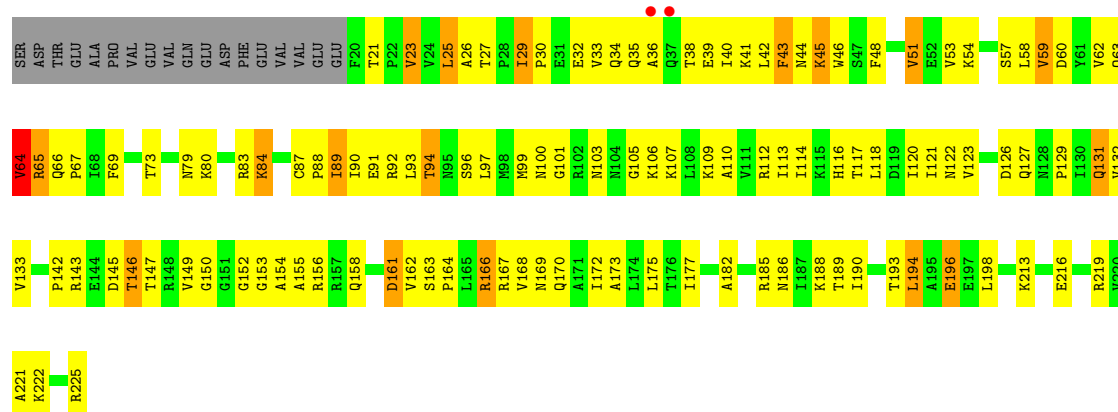


• Molecule 6: 40S ribosomal protein S4-A

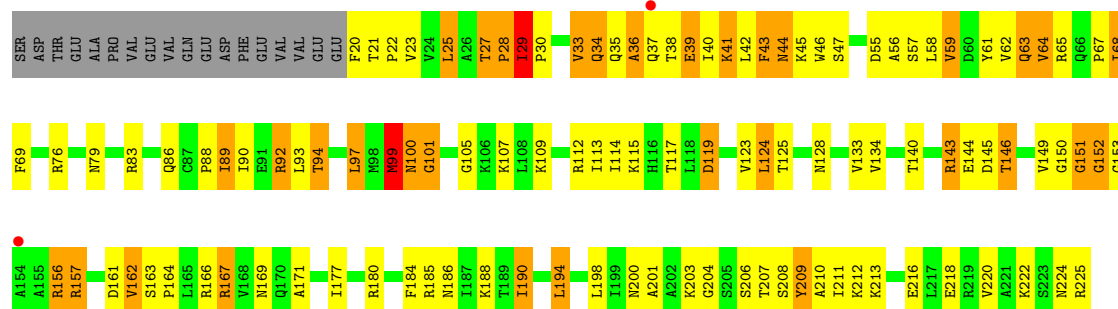
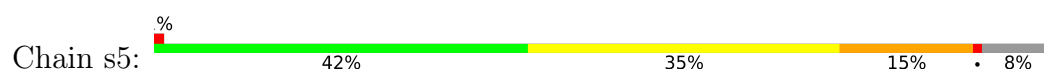


• Molecule 7: 40S ribosomal protein S5

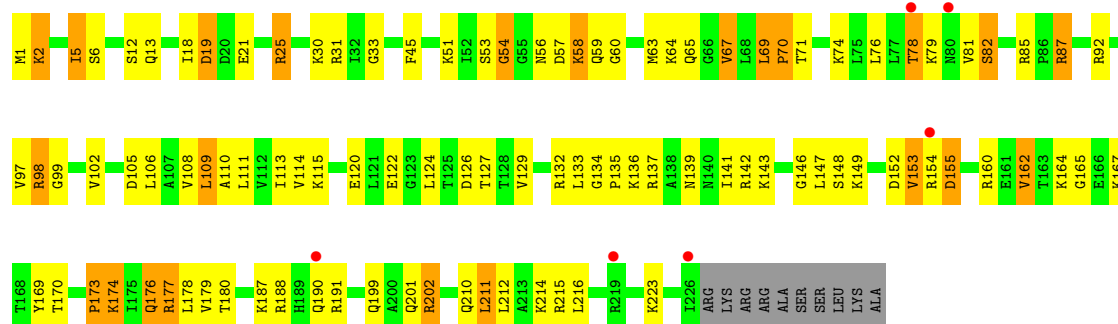




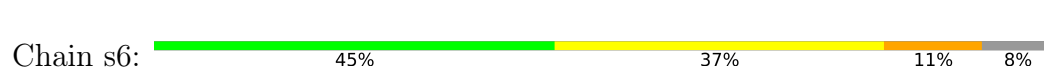
• Molecule 7: 40S ribosomal protein S5

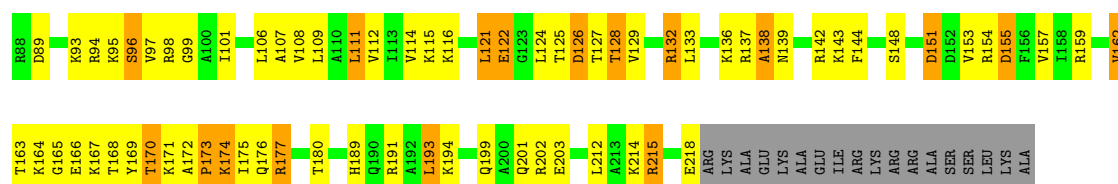


• Molecule 8: 40S ribosomal protein S6-A

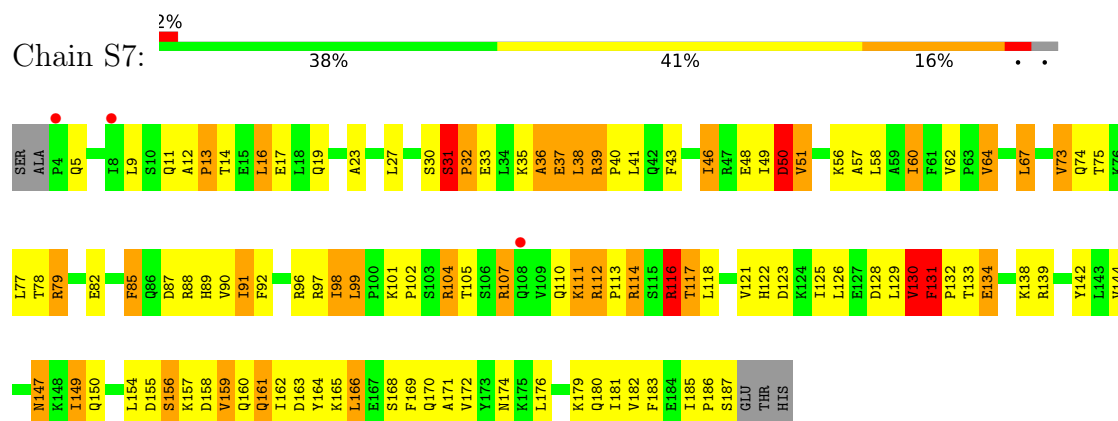


• Molecule 8: 40S ribosomal protein S6-A

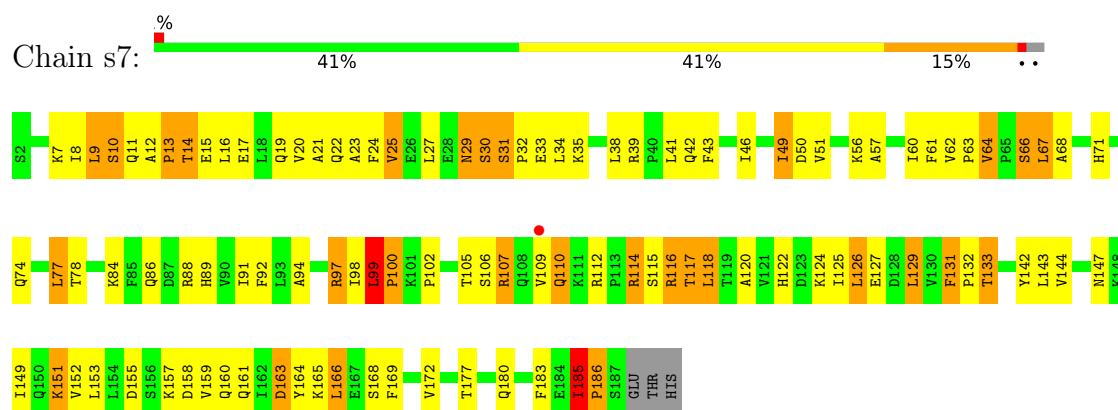




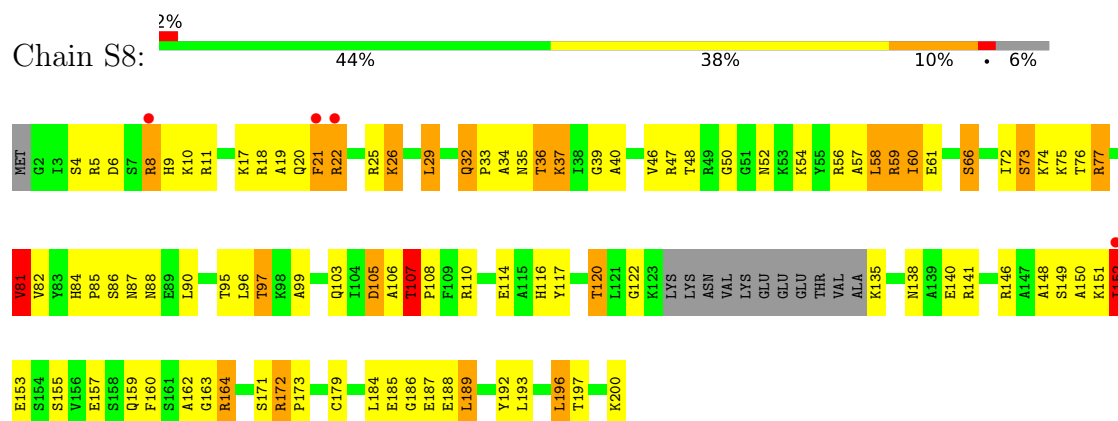
• Molecule 9: 40S ribosomal protein S7-A



• Molecule 9: 40S ribosomal protein S7-A

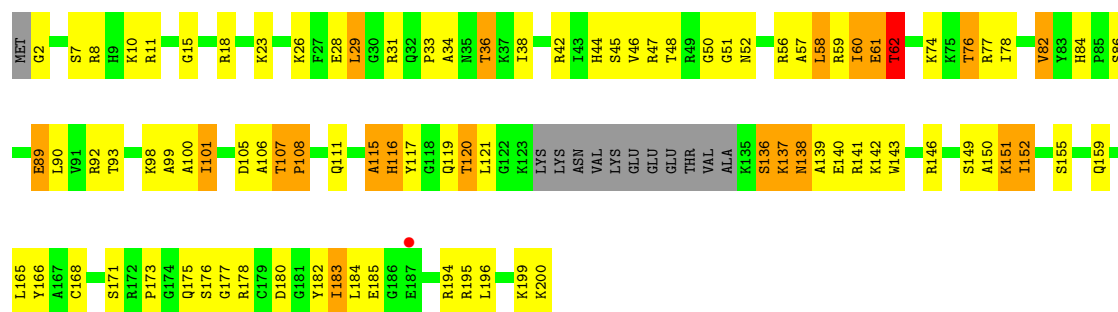


• Molecule 10: 40S ribosomal protein S8-A



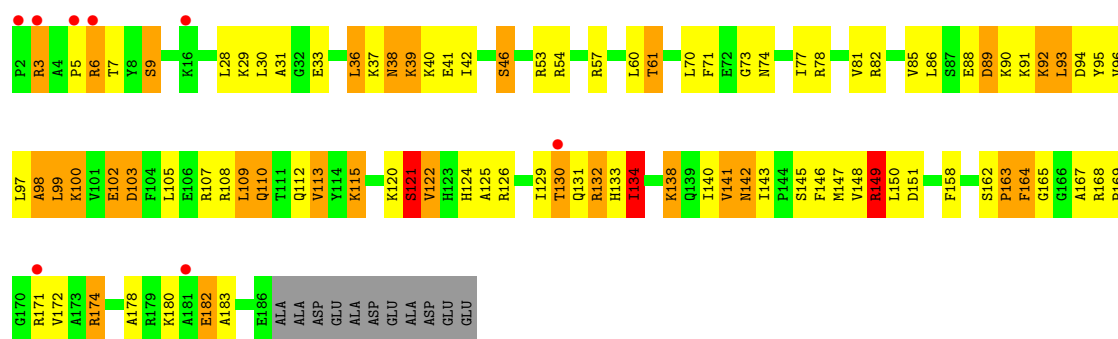
• Molecule 10: 40S ribosomal protein S8-A

Chain s8: 



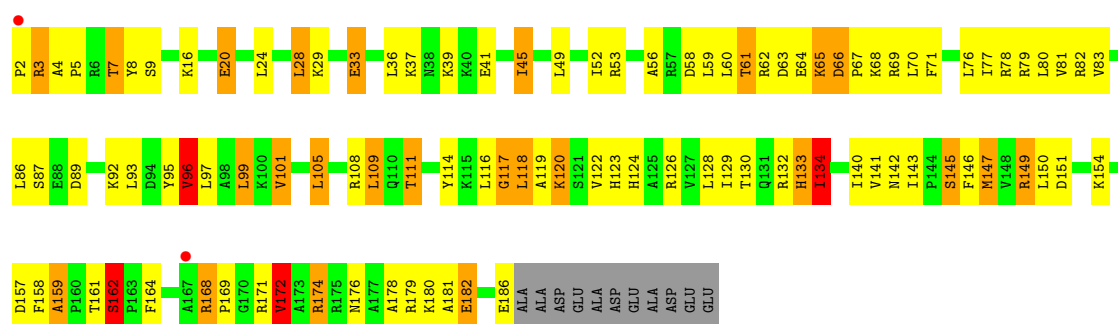
• Molecule 11: 40S ribosomal protein S9-A

Chain S9: 

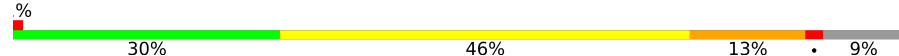


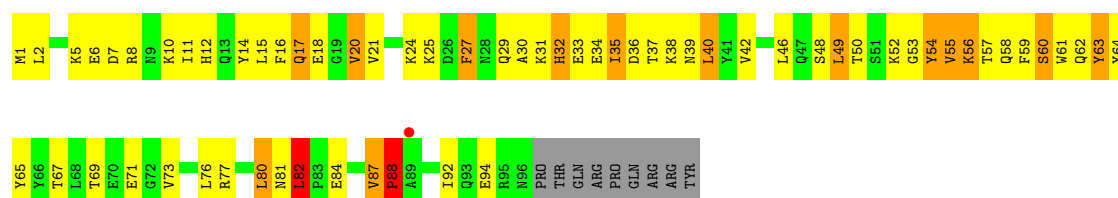
• Molecule 11: 40S ribosomal protein S9-A

Chain s9: 

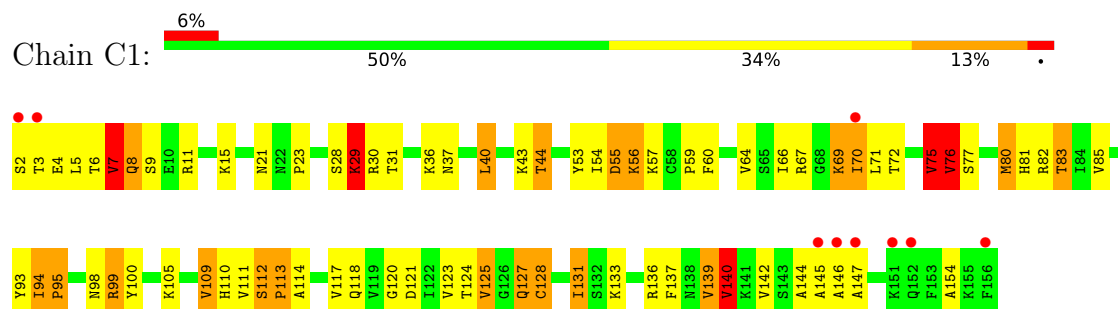


• Molecule 12: 40S ribosomal protein S10-A

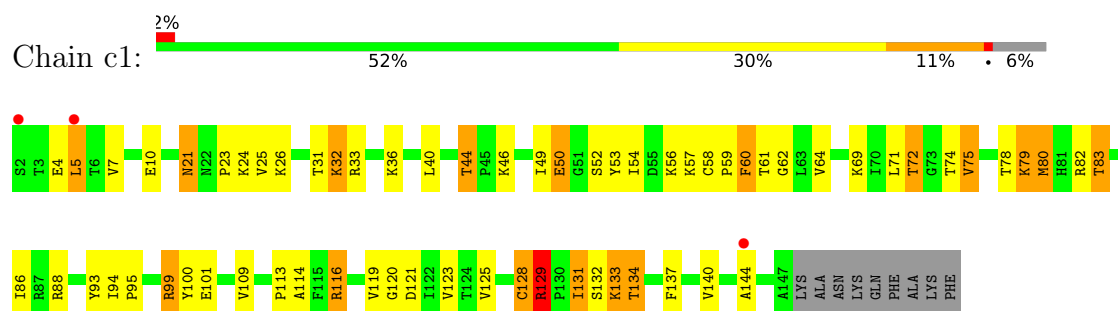
Chain C0: 



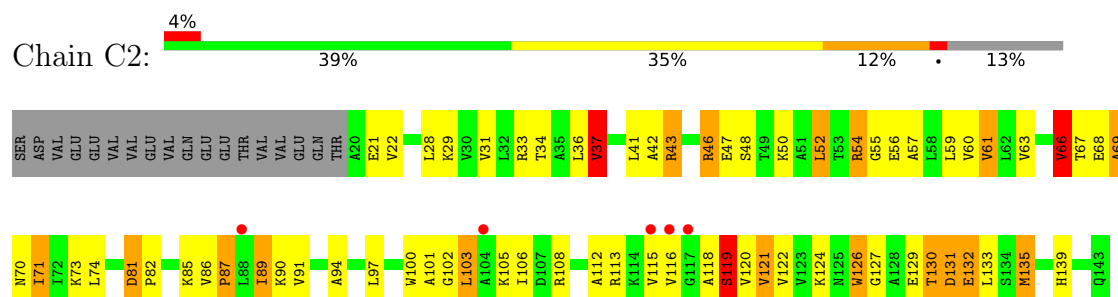
- Molecule 13: 40S ribosomal protein S11-A



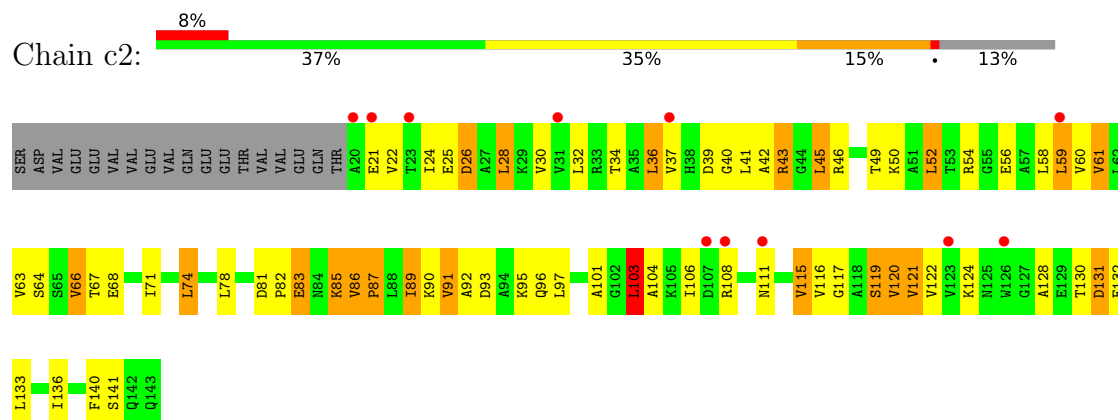
- Molecule 13: 40S ribosomal protein S11-A



- Molecule 14: 40S ribosomal protein S12

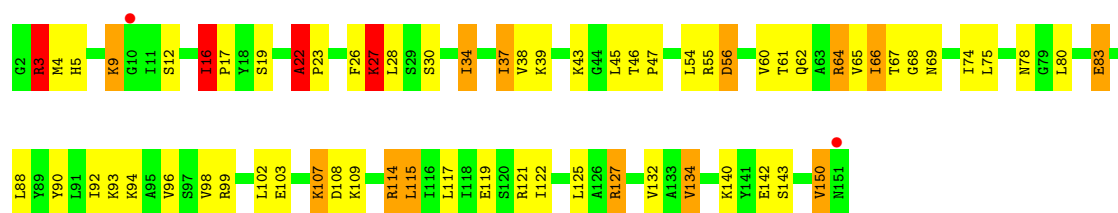


- Molecule 14: 40S ribosomal protein S12



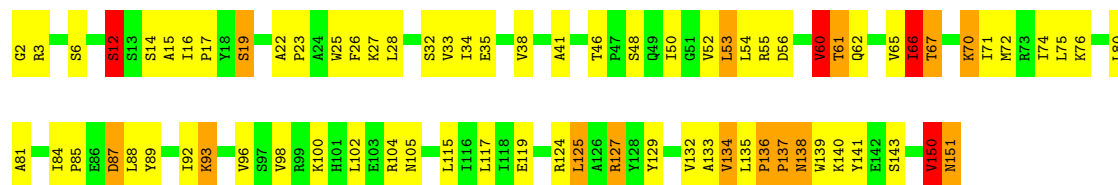
- Molecule 15: 40S ribosomal protein S13





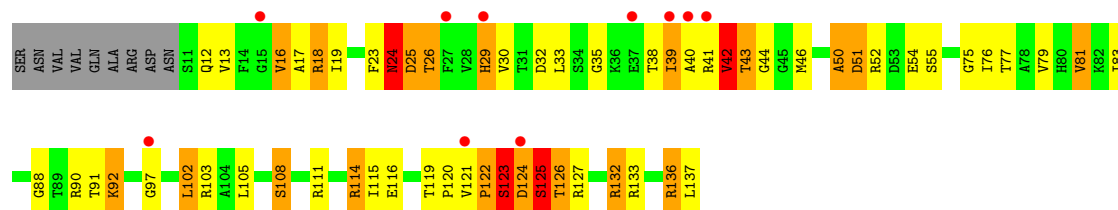
• Molecule 15: 40S ribosomal protein S13

Chain c3: 49% 39% 9%



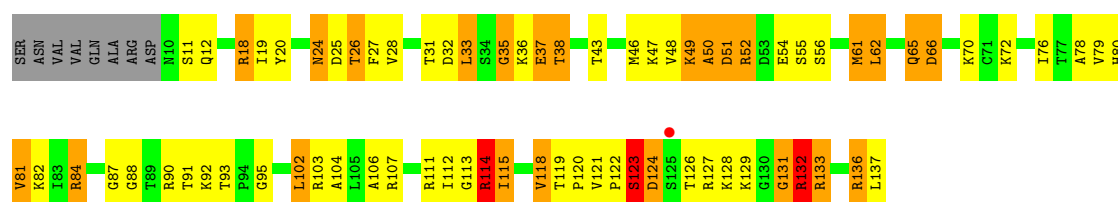
• Molecule 16: 40S ribosomal protein S14-A

Chain C4: 7% 49% 27% 14% 7%



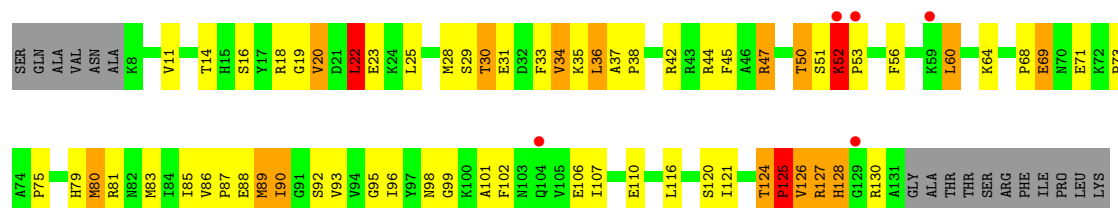
• Molecule 16: 40S ribosomal protein S14-A

Chain c4: 40% 35% 18% 6%

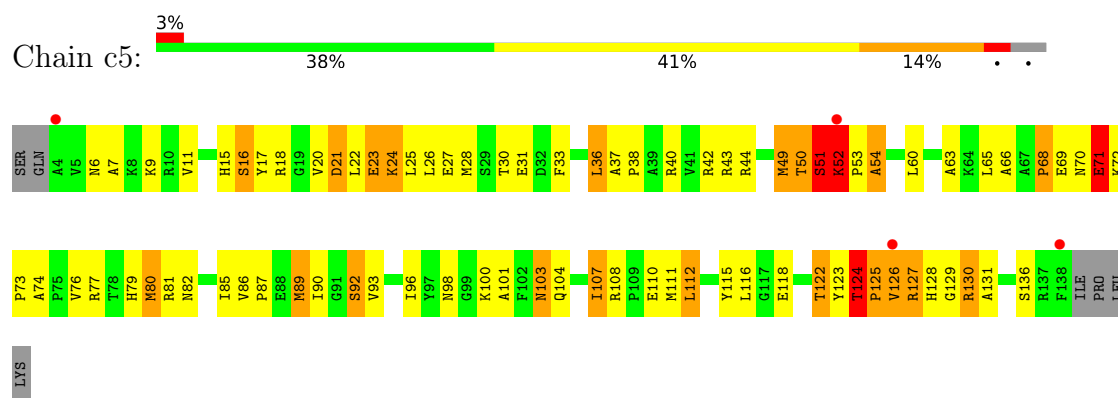


• Molecule 17: 40S ribosomal protein S15

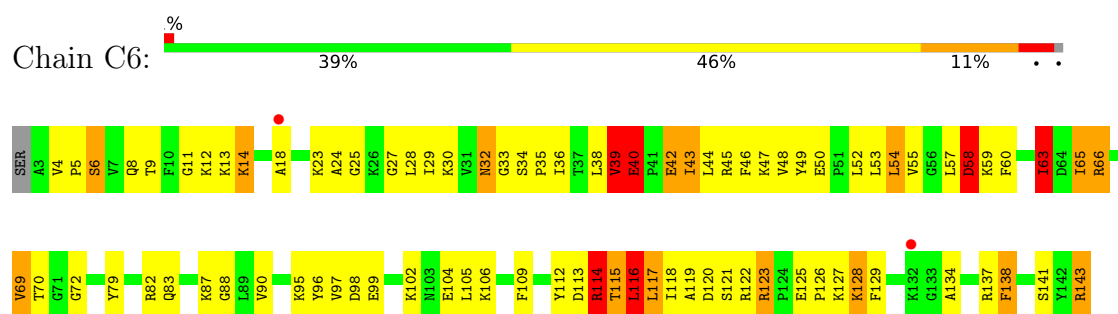
Chain C5: 4% 42% 33% 11% 12%



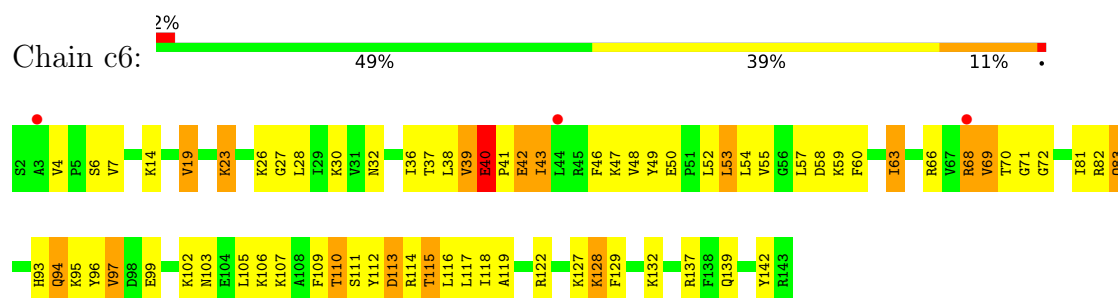
- Molecule 17: 40S ribosomal protein S15



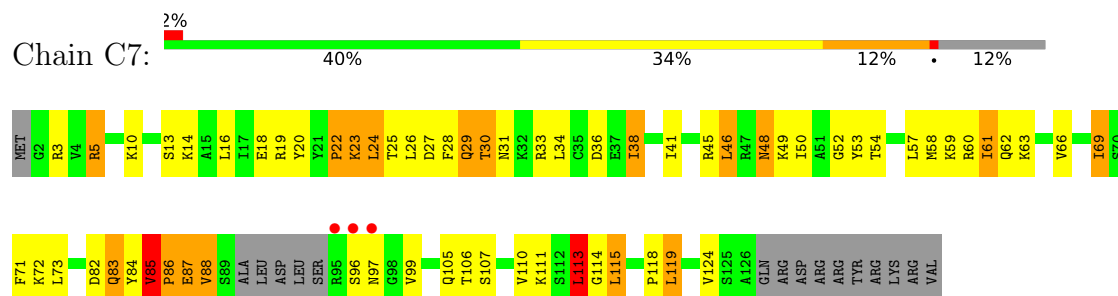
- Molecule 18: 40S ribosomal protein S16-A



- Molecule 18: 40S ribosomal protein S16-A

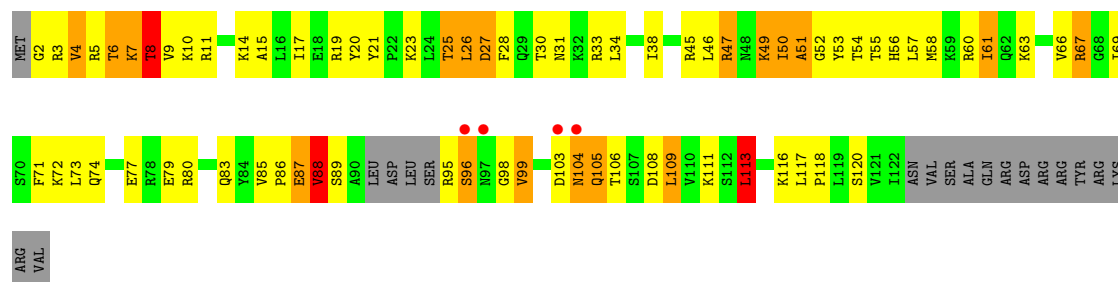


- Molecule 19: 40S ribosomal protein S17-A

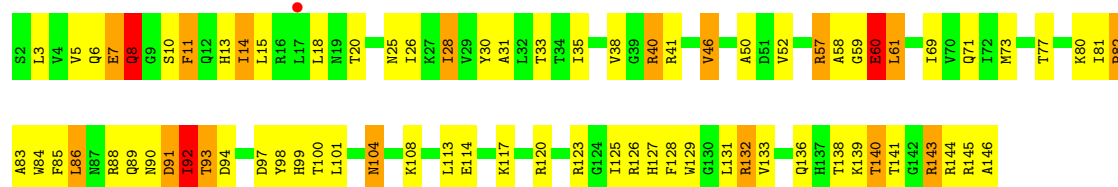


- Molecule 19: 40S ribosomal protein S17-A

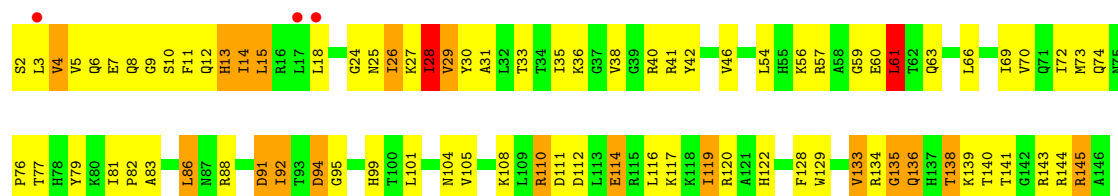




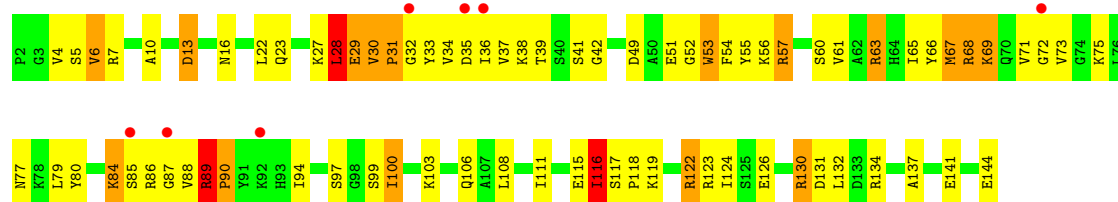
- Molecule 20: 40S ribosomal protein S18-A



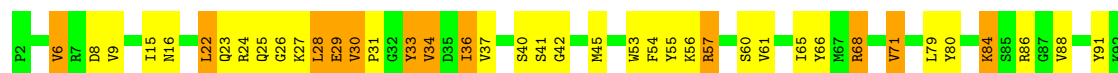
- Molecule 20: 40S ribosomal protein S18-A

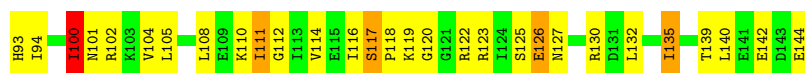


- Molecule 21: 40S ribosomal protein S19-A

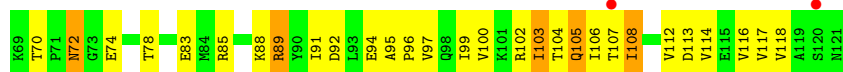
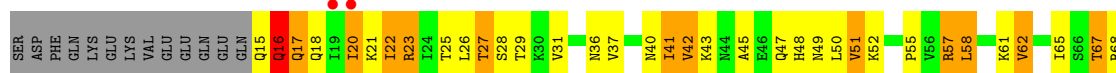


- Molecule 21: 40S ribosomal protein S19-A

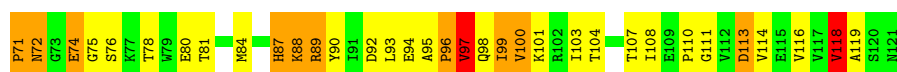




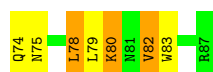
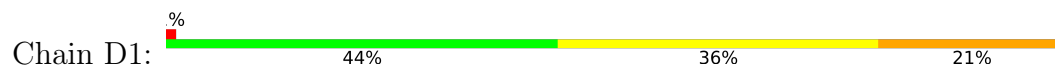
- Molecule 22: 40S ribosomal protein S20



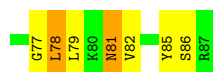
- Molecule 22: 40S ribosomal protein S20



- Molecule 23: 40S ribosomal protein S21-A

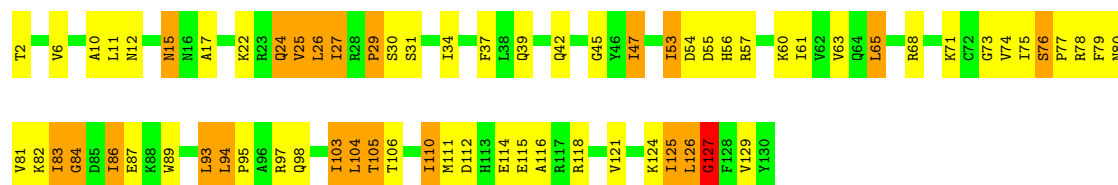


- Molecule 23: 40S ribosomal protein S21-A

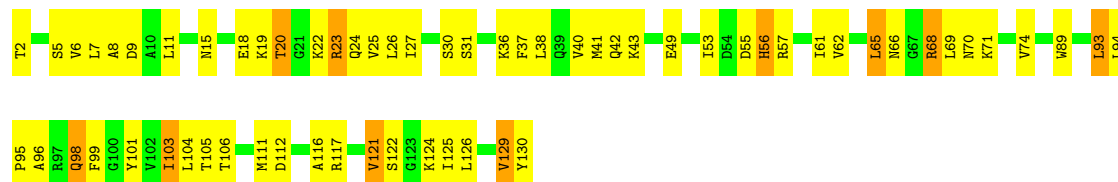


- Molecule 24: 40S ribosomal protein S22-A

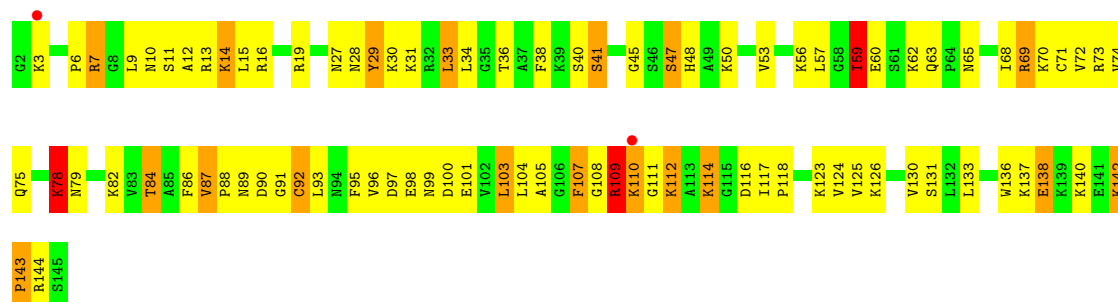




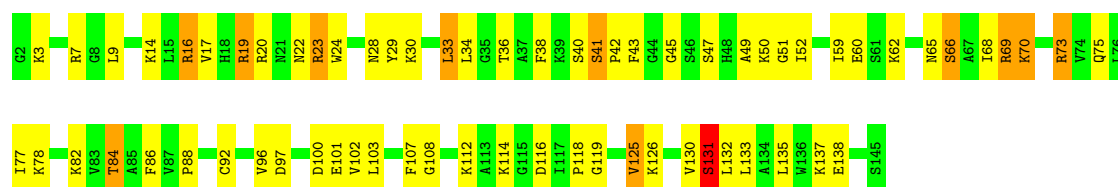
• Molecule 24: 40S ribosomal protein S22-A



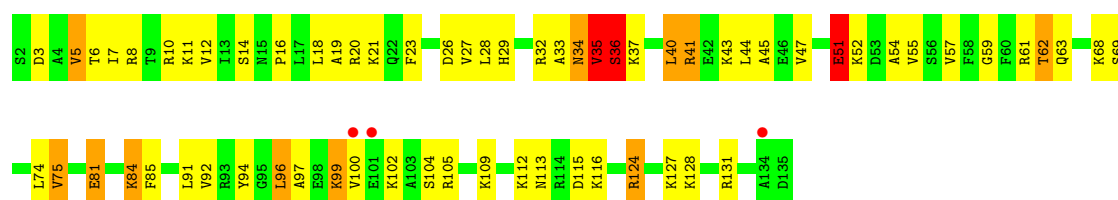
• Molecule 25: 40S ribosomal protein S23-A



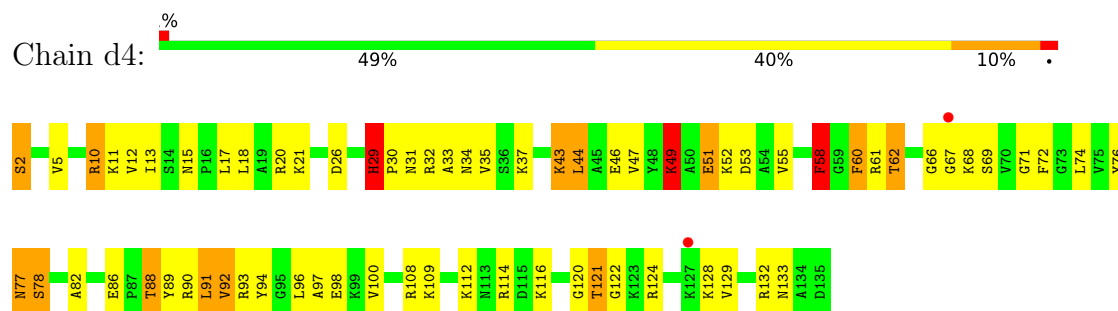
• Molecule 25: 40S ribosomal protein S23-A



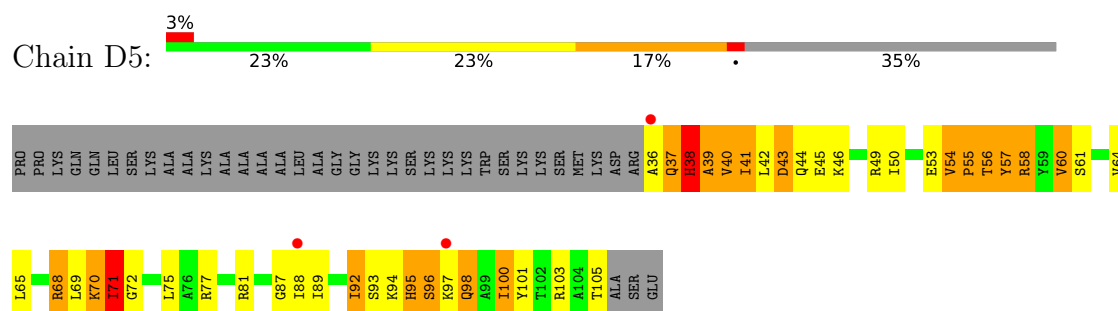
• Molecule 26: 40S ribosomal protein S24-A



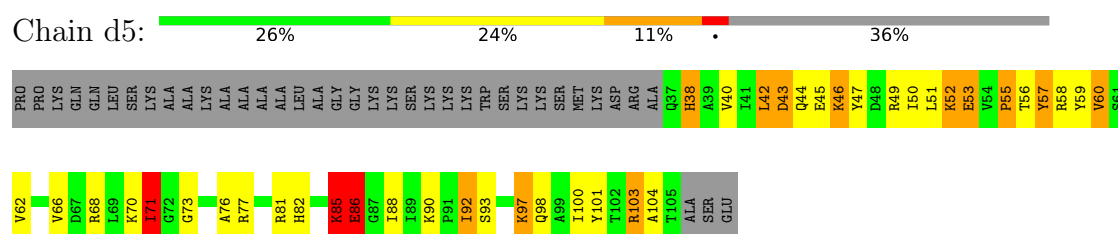
- Molecule 26: 40S ribosomal protein S24-A



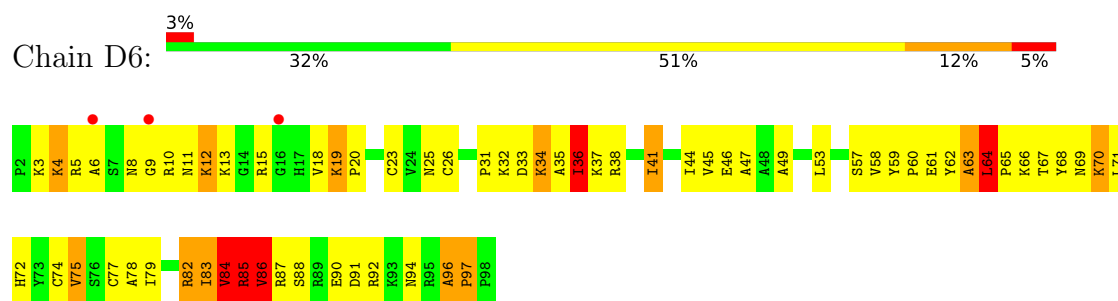
- Molecule 27: 40S ribosomal protein S25-A



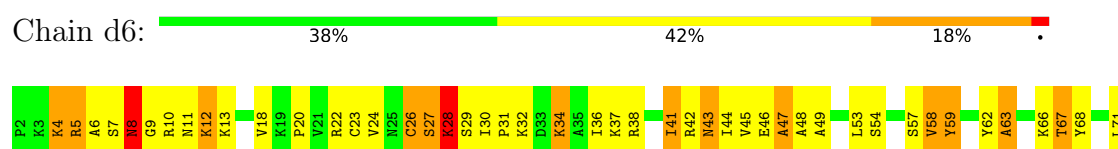
- Molecule 27: 40S ribosomal protein S25-A

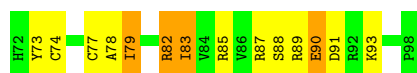


- Molecule 28: 40S ribosomal protein S26-B

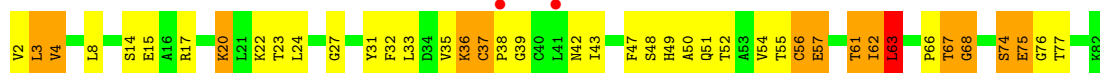


- Molecule 28: 40S ribosomal protein S26-B

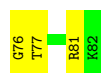




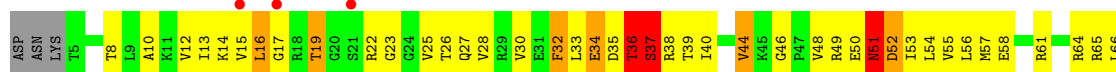
- Molecule 29: 40S ribosomal protein S27-A



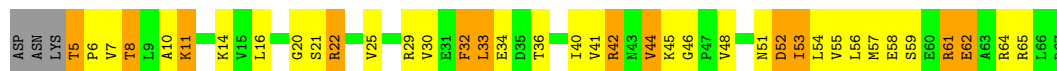
- Molecule 29: 40S ribosomal protein S27-A



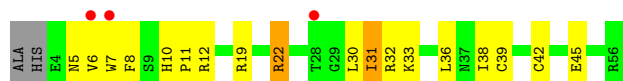
- Molecule 30: 40S ribosomal protein S28-A



- Molecule 30: 40S ribosomal protein S28-A

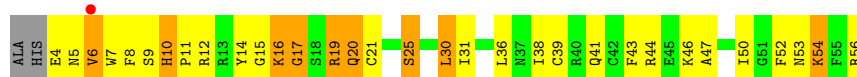


- Molecule 31: 40S ribosomal protein S29-A



- Molecule 31: 40S ribosomal protein S29-A





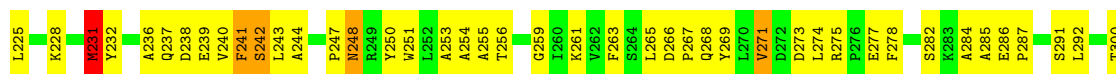
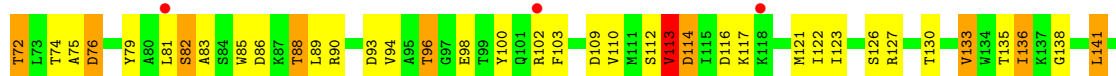
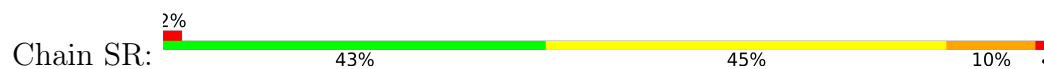
- Molecule 32: 40S ribosomal protein S30-A



- Molecule 33: Ubiquitin-40S ribosomal protein S31

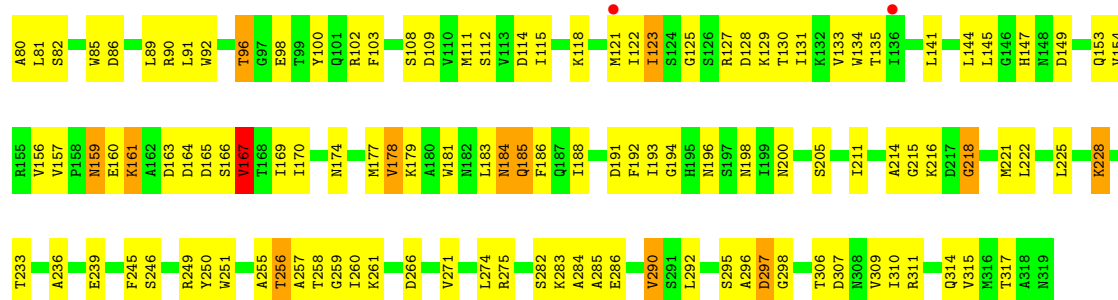


- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

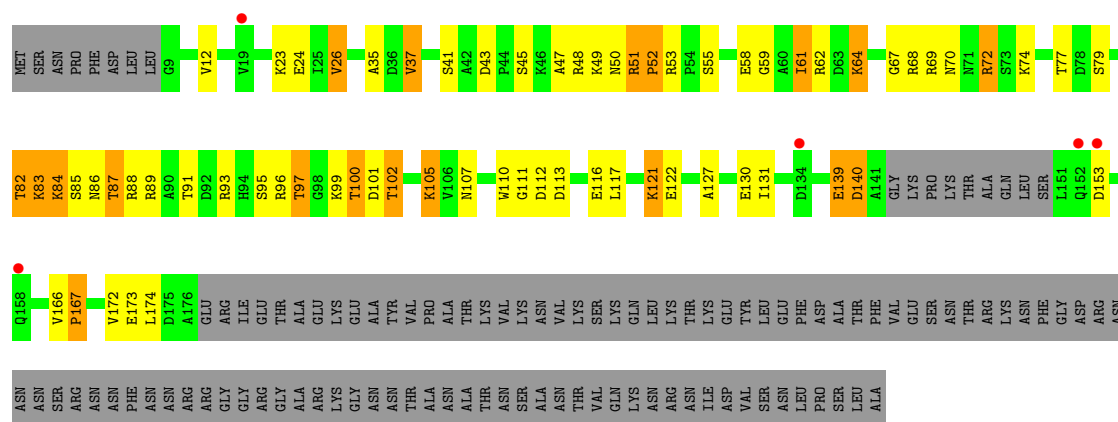
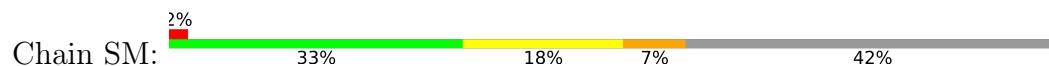


- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

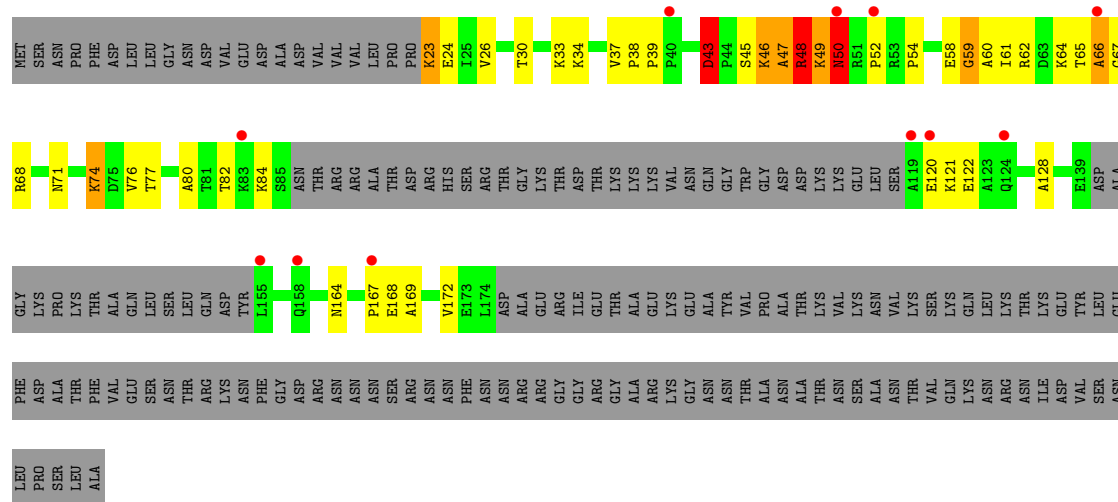




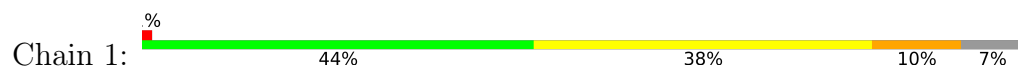
• Molecule 35: Suppressor protein STM1



• Molecule 35: Suppressor protein STM1

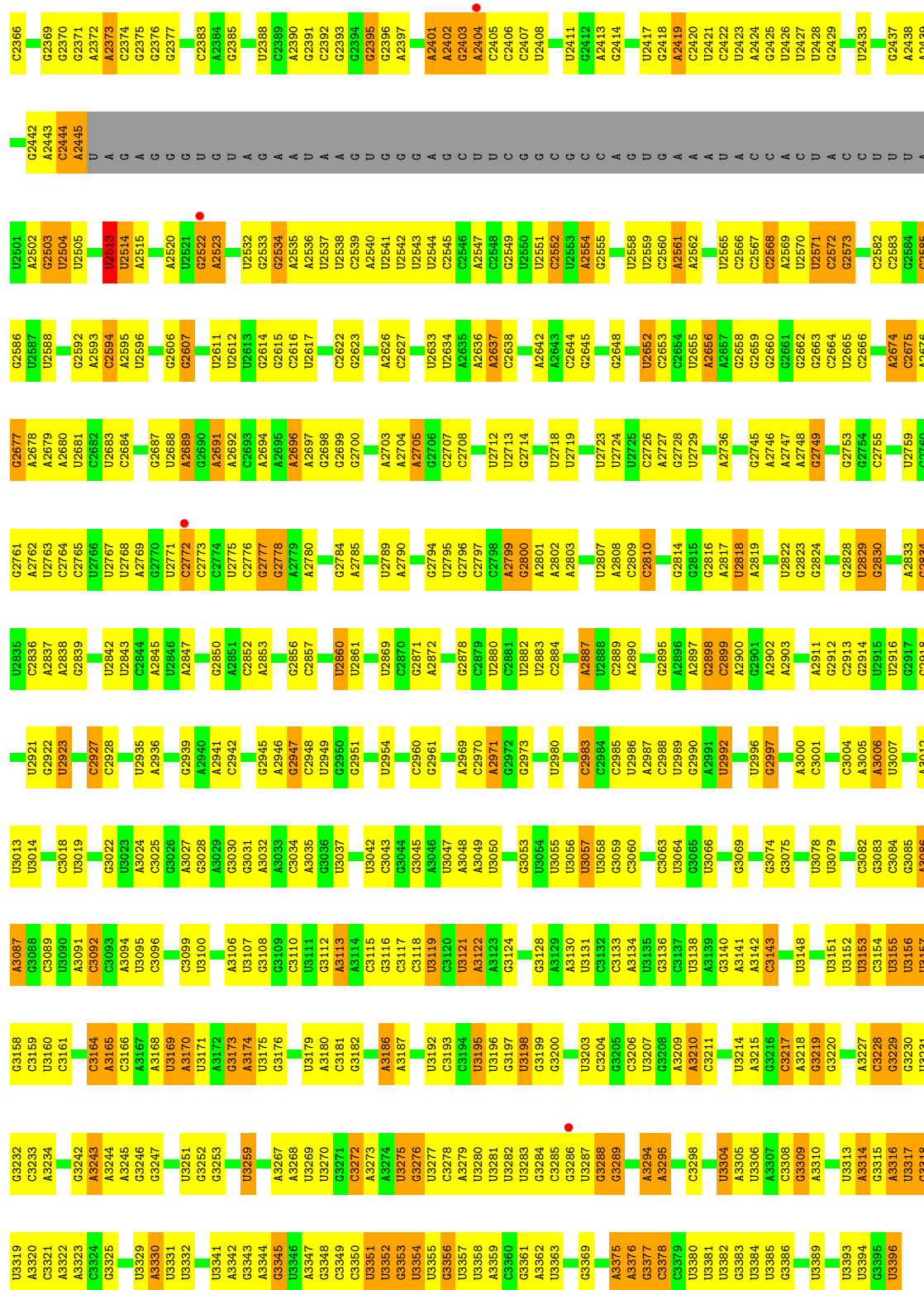


• Molecule 36: 25S ribosomal RNA

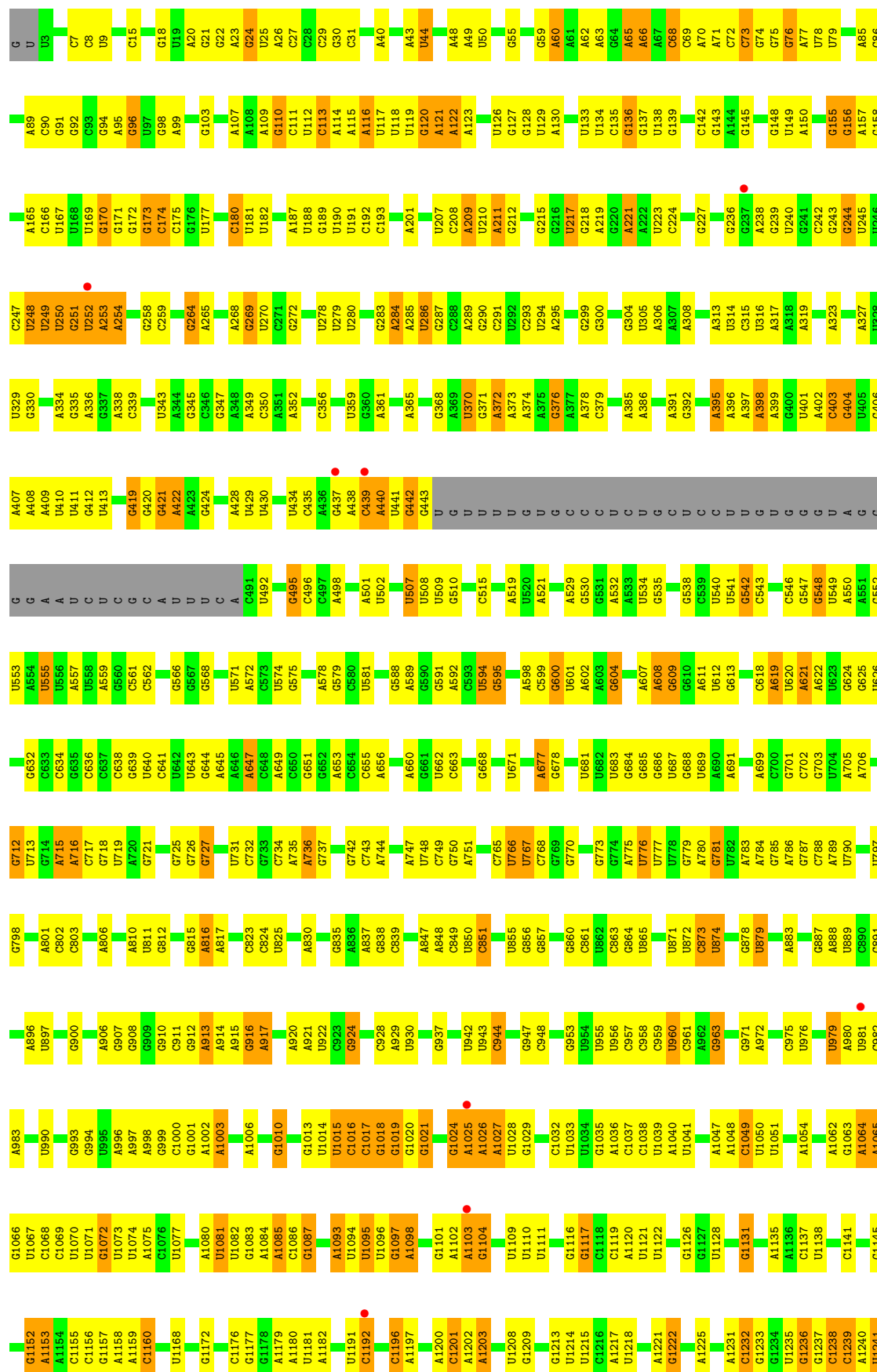


U1191	U1088	G1018	U922	A841	G742	A660	C561	U	A422	U329	A255	U169	G
C1192	G1089	G1019	C923	A846	C743	G661	C562	U	A423	G330	G256	G170	U
A1193	A1093	G1020	G924	A847	A744	U662	U563	U	G424	C339	U257	G171	U3
G1194	U1094	A1024	A929	A848	A746	C663	U565	C	G425	C340	G92	C8	
A1195	U1095	A1025	U930	C849	G763	A665	G568	A	A428	G341	G93	U9	
C1196	U1096	A1026	G934	U850	G764	A666		U	U429	A342	G94	A12	
	A1097	U1028	G937	C851	C765	C667	C573	G	U434	U343	A95	A13	
	A1098	G1029	G937	U852	U766	G668	U574	G494	A435	A344	G96	A14	
		A1030		G853	U767	U669		G495	A436	G345	U97	C15	
	G1101	U1033	U943	U854	G768	C670	A578	A498	A437	A349	U181	C16	
	A1102	U1034	C944	U855	C769		G579	A499	A438	C350	G187	A16	
	G1104	G1035		G856	G770	C675		C500	C439	A351		G17	
	A1105	A1036	A952	G860	U776	U676	G588	A501	A440	A352	U190	G18	
	G1106	C1037	G953	C861	U777	A677		U502	U	A273	U191	U19	
	C1107	G1038	U954	U862	U778	G678	A592	C503	G	G274	C192	G21	
	U1108	U1039	U955	G863	U779	U679	A593	U507	U	U275	A108		
	U1109	A1040	U956	C863	A780	G680	U594	U508	U	U276	G109	U25	
	U1110	U1041	C957	G864	G781	U681	G595	U509	U	U277	A198	A26	
	U1111	U1042	C958	G867	U782	U682	G600		U	G281	C111	C27	
		C1045	C959	A783	A783	U683	G514	G514	U	G282	A199	C28	
	U1114	A1046	U960	C868	A784	G684	C515	A516	U	G283	A201	C29	
	G1115	A1047	C961	G869	G785	G685	A517	G517	U	A284	A114	G30	
	G1116	A1048	A962	U871		U687	G603		U	G371		C31	
	G1117		A965	U872	A789		G609		U	A285	U117		
		C1049	A970	C873	U790	A691	G610	U520	G	U286	U118		
	G1126	U1051	A970	U874	A791		A521	A521	C	U287	U119		
	A1129	U1057	C975	U879	G792	A699	U612	U528	C	A374	G120		
	A1130	A1054	U976	G880	C793	C700	U613	A529	U	A375	A121		
	G1131	A1057	C977	A883	U796	G701	G618	A530	U	A289	A122		
	C1132		U978	A884	U797	C702	A619	G530	U	A376			
	G1133	U1060	U979	A887	A801	A705	U620	G531	G	G376			
	A1134	A1061	U980	G887	A806	A706	A621	U534	U				
	G1145	A1062	U981		A807	A709		G535	C				
	C1146	G1063	C982	C890			G624	C539	U	A391	U223	A49	
		A1064	G993	A895	A810	G712	G625	U540	U	G394	C224	C54	
	G1236	A1065	U994	A896	U811	U713	U626	U541	U	A395	C225		
	C1238	G1066	U995	A897	U812	G714	U627	G542	G	A396	C226	G58	
	A1240	C1068	A996	G900	G815	A715	A628	C543	U	A397	U230	G59	
	U1241	C1069	G999	A906	G816	C717	U629	C544	G	A398	G231	A60	
	G1242	U1070	C1000	G907	A817	G718	A630	C544	G			A61	
	G1243	U1071	G1001	G908	C818	U719	C634	U545	G	U401	G237	A62	
	A1244	G1072	A1002	G909	U819	A720	C635	C546	U	A402	A238	A65	
	A1245	U1073	A1003	G910	U820	G721	C636	G548	G	C311	G239	A66	
	G1246	U1074	A1006	G911	A820	G722		U549	U	C312	U240	A67	
	U1247	A1075	A1006	C911			U640	A550	G	A313	G241	C68	
	C1248	U1077	A1009	G912	C824	G725	G641	A551	G	U314	C242	C69	
	G1249	U1078	G1010	A913	U825	U726	U642	G552	A	C315	G243	A70	
	A1250	A1079	A1011	A915	C826	G727	U643	U553	A	U316	G244		
	C1251	U1080	G1012	U829	U829	G728	A649	A554	U	A317	U245	C73	
	G1254	A1081	G1013	A917	A830	C729	C650	U555	C	A318	G247	G74	
	C1255	U1082	U1014	G918	G831	C730	G651	A557	U	A323	U248	G75	
	G1256	G1083	U1015	U919	U837	C731	A656	U558	C	A324	U249	G76	
	C1257	A920	C1016	G920	A837	U731	A657	A559	G	A325	U250	A77	
	U1258	G1087	C1017	U741	G838	U741		G560	A	U328	U252	U83	

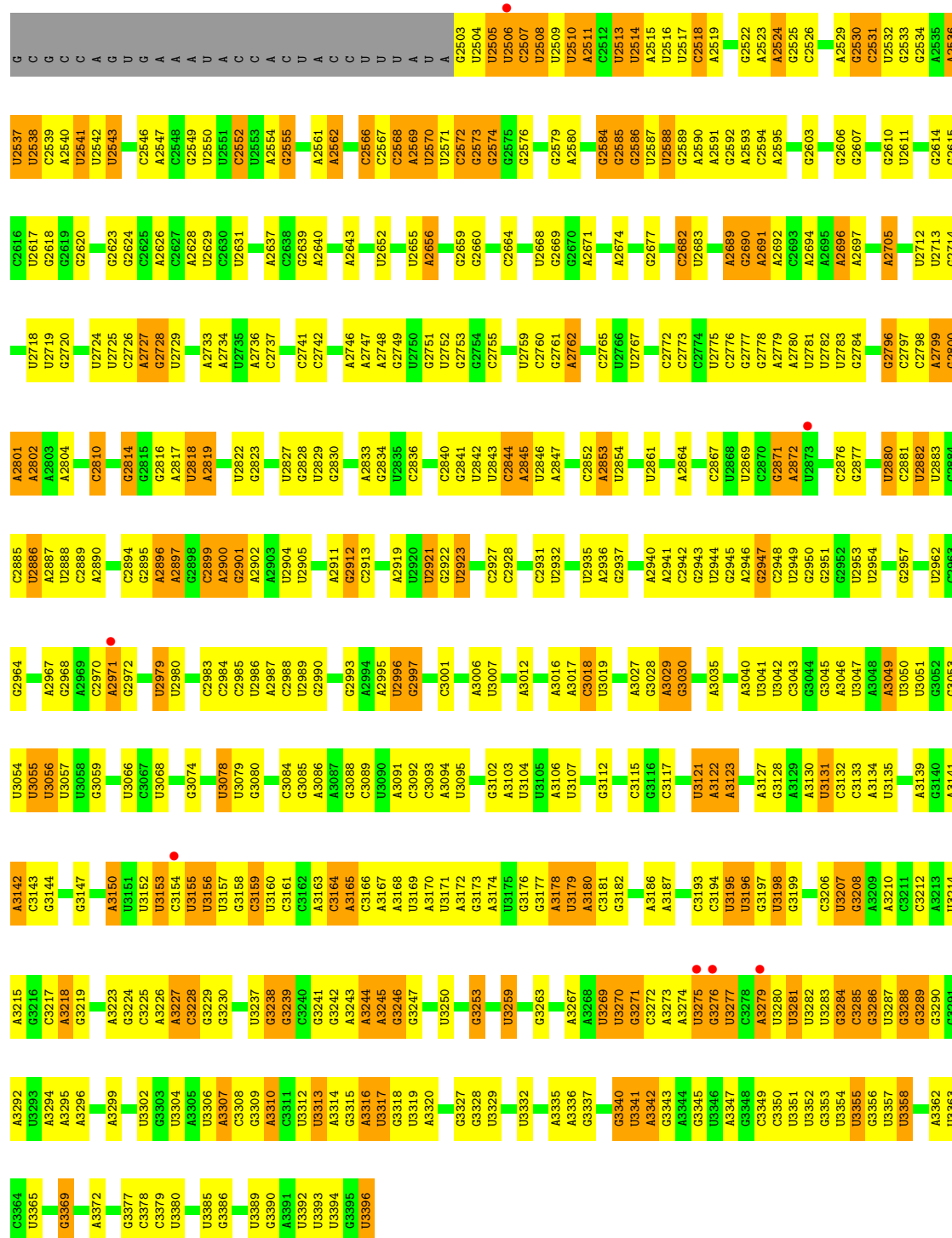
U2282	G2283	G2284	G2285	A2286	U2287	U2288	A2289	G2290	U2291	G2292	U2293	A2294	G2295	U2296	G2297	U2298	A2299	G2300	U2301	G2302	A2303	U2304	G2305	U2306	A2307	G2308	U2309	G2310	A2311	U2312	G2313	U2314	G2315	U2316	A2317	G2318	U2319	A2320	U2321	G2322	A2323	U2324	G2325	U2326	A2327	G2328	U2329	A2330	U2331	G2332	U2333	A2334	G2335	U2336	A2337	G2338	U2339	A2340	G2341	U2342	A2343	G2344	U2345	A2346	U2347	G2348	U2349	A2350	G2351	U2352	A2353	G2354	U2355	A2356	U2357	G2358	A2359	U2360	G2361	A2362	U2363	G2364	U2365	A2366	U2367	G2368	U2369	A2370	G2371	U2372	A2373	G2374	U2375	A2376	G2377	U2378	A2379	G2380	U2381	A2382	G2383	U2384	A2385	G2386	U2387	A2388	G2389	U2390	A2391	G2392	U2393	A2394	G2395	U2396	A2397	G2398	U2399	A2400	G2401	U2402	A2403	G2404	U2405	A2406	G2407	U2408	A2409	G2410	U2411	A2412	G2413	U2414	A2415	G2416	U2417	A2418	G2419	U2420	A2421	G2422	U2423	A2424	G2425	U2426	A2427	G2428	U2429	A2430	G2431	U2432	A2433	G2434	U2435	A2436	G2437	U2438	A2439	G2440	U2441	A2442	G2443	U2444	A2445	G2446	U2447	A2448	G2449	U2450	A2451	G2452	U2453	A2454	G2455	U2456	A2457	G2458	U2459	A2460	G2461	U2462	A2463	G2464	U2465	A2466	G2467	U2468	A2469	G2470	U2471	A2472	G2473	U2474	A2475	G2476	U2477	A2478	G2479	U2480	A2481	G2482	U2483	A2484	G2485	U2486	A2487	G2488	U2489	A2490	G2491	U2492	A2493	G2494	U2495	A2496	G2497	U2498	A2499	G2500	U2501	A2502	G2503	U2504	A2505	G2506	U2507	A2508	G2509	U2510	A2511	G2512	U2513	A2514	G2515	U2516	A2517	G2518	U2519	A2520	G2521	U2522	A2523	G2524	U2525	A2526	G2527	U2528	A2529	G2530	U2531	A2532	G2533	U2534	A2535	G2536	U2537	A2538	G2539	U2540	A2541	G2542	U2543	A2544	G2545	U2546	A2547	G2548	U2549	A2550	G2551	U2552	A2553	G2554	U2555	A2556	G2557	U2558	A2559	G2560	U2561	A2562	G2563	U2564	A2565	G2566	U2567	A2568	G2569	U2570	A2571	G2572	U2573	A2574	G2575	U2576	A2577	G2578	U2579	A2580	G2581	U2582	A2583	G2584	U2585	A2586	G2587	U2588	A2589	G2590	U2591	A2592	G2593	U2594	A2595	G2596	U2597	A2598	G2599	U2600	A2601	G2602	U2603	A2604	G2605	U2606	A2607	G2608	U2609	A2610	G2611	U2612	A2613	G2614	U2615	A2616	G2617	U2618	A2619	G2620	U2621	A2622	G2623	U2624	A2625	G2626	U2627	A2628	G2629	U2630	A2631	G2632	U2633	A2634	G2635	U2636	A2637	G2638	U2639	A2640	G2641	U2642	A2643	G2644	U2645	A2646	G2647	U2648	A2649	G2650	U2651	A2652	G2653	U2654	A2655	G2656	U2657	A2658	G2659	U2660	A2661	G2662	U2663	A2664	G2665	U2666	A2667	G2668	U2669	A2670	G2671	U2672	A2673	G2674	U2675	A2676	G2677	U2678	A2679	G2680	U2681	A2682	G2683	U2684	A2685	G2686	U2687	A2688	G2689	U2690	A2691	G2692	U2693	A2694	G2695	U2696	A2697	G2698	U2699	A2700	G2701	U2702	A2703	G2704	U2705	A2706	G2707	U2708	A2709	G2710	U2711	A2712	G2713	U2714	A2715	G2716	U2717	A2718	G2719	U2720	A2721	G2722	U2723	A2724	G2725	U2726	A2727	U2728	A2729	G2730	U2731	A2732	G2733	U2734	A2735	G2736	U2737	A2738	G2739	U2740	A2741	G2742	U2743	A2744	G2745	U2746	A2747	G2748	U2749	A2750	G2751	U2752	A2753	G2754	U2755	A2756	G2757	U2758	A2759	G2760	U2761	A2762	G2763	U2764	A2765	G2766	U2767	A2768	G2769	U2770	A2771	G2772	U2773	A2774	G2775	U2776	A2777	G2778	U2779	A2780	G2781	U2782	A2783	G2784	U2785	A2786	G2787	U2788	A2789	G2790	U2791	A2792	U2793	A2794	G2795	U2796	A2797	U2798	A2799	U2800	A2801	G2802	U2803	A2804	G2805	U2806	A2807	G2808	U2809	A2810	U2811	A2812	G2813	U2814	A2815	G2816	U2817	A2818	G2819	U2820	A2821	G2822	U2823	A2824	G2825	U2826	A2827	G2828	U2829	A2830	G2831	U2832	A2833	G2834	U2835	A2836	G2837	U2838	A2839	G2840	U2841	A2842	G2843	U2844	A2845	G2846	U2847	A2848	G2849	U2850	A2851	G2852	U2853	A2854	G2855	U2856	A2857	G2858	U2859	A2860	G2861	U2862	A2863	G2864	U2865	A2866	G2867	U2868	A2869	G2870	U2871	A2872	G2873	U2874	A2875	G2876	U2877	A2878	G2879	U2880	A2881	G2882	U2883	A2884	G2885	U2886	A2887	G2888	U2889	A2890	G2891	U2892	A2893	G2894	U2895	A2896	G2897	U2898	A2899	G2900	U2901	A2902	G2903	U2904	A2905	G2906	U2907	A2908	G2909	U2910	A2911	G2912	U2913	A2914	G2915	U2916	A2917	G2918	U2919	A2920	G2921	U2922	A2923	G2924	U2925	A2926	G2927	U2928	A2929	G2930	U2931	A2932	G2933	U2934	A2935	G2936	U2937	A2938	G2939	U2940	A2941	G2942	U2943	A2944	G2945	U2946	A2947	G2948	U2949	A2950	U2951	A2952	G2953	U2954	A2955	G2956	U2957	A2958	G2959	U2960	A2961	G2962	U2963	A2964	G2965	U2966	A2967	G2968	U2969	A2970	G2971	U2972	A2973	G2974	U2975	A2976	G2977	U2978	A2979	G2980	U2981	A2982	G2983	U2984	A2985	G2986	U2987	A2988	G2989	U2990	A2991	G2992	U2993	A2994	G2995	U2996	A2997	G2998	U2999	A3000	G3001	U3002	A3003	G3004	U3005	A3006	G3007	U3008	A3009	G3010	U3011	A3012	G3013	U3014	A3015	G3016	U3017	A3018	G3019	U3020	A3021	G3022	U3023	A3024	G3025	U3026	A3027	G3028	U3029	A3030	G3031	U3032	A3033	G3034	U3035	A3036	G3037	U3038	A3039	G3040	U3041	A3042	G3043	U3044	A3045	G3046	U3047	A3048	G3049	U3050	A3051	G3052	U3053	A3054	G3055	U3056	A3057	G3058	U3059	A3060	G3061	U3062	A3063	G3064	U3065	A3066	G3067	U3068	A3069	G3070	U3071	A3072	G3073	U3074	A3075	G3076	U3077	A3078	G3079	U3080	A3081	G3082	U3083	A3084	G3085	U3086	A3087	G3088	U3089	A3090	G3091	U3092	A3093	G3094	U3095	A3096	G3097	U3098	A3099	G3100	U3101	A3102	G3103	U3104	A3105	G3106	U3107	A3108	G3109	U3110	A3111	G3112	U3113	A3114	G3115	U3116	A3117	G3118	U3119	A3120	G3121	U3122	A3123	G3124	U3125	A3126	G3127	U3128	A3129	G3130	U3131	A3132	G3133	U3134	A3135	G3136	U3137	A3138	G3139	U3140	A3141	G3142	U3143	A3144	G3145	U3146	A3147	G3148	U3149	A3150	G3151	U3152	A3153	G3154	U3155	A3156	G3157	U3158	A3159	G3160	U3161	A3162	G3163	U3164	A3165	G3166	U3167	A3168	G3169	U3170	A3171	G3172	U3173	A3174	G3175	U3176	A3177	G3178	U3179	A3180	G3181	U3182	A3183	G3184	U3185	A3186	G3187	U3188	A3189	G3190	U3191	A3192	G3193	U3194	A3195	G3196	U3197	A3198	G3199	U3200	A3201	G3202	U3203	A3204	G3205	U3206	A3207	G3208	U3209	A3210	G3211	U3212	A3213	G3214	U3215	A3216	G3217	U3218	A3219	G3220	U3221	A3222	G3223	U3224	A3225	G3226	U3227	A3228	G3229	U3230	A3231	G3232	U3233	A3234	G3235	U3236	A3237	G3238	U3239	A3240	G3241	U3242	A3243	G3244	U3245	A3246	G3247	U3248	A3249	G3250	U3251	A3252	G3253	U3254	A3255	G3256	U3257	A3258	G3259	U3260	A3261	G3262	U3263	A3264	G3265	U3266	A3267	G3268	U3269	A3270	G3271	U3272	A3273	G3274	U3275	A3276	G3277	U3278	A3279	G3280	U3281	A3282	G3283	U3284	A3285	G3286	U3287	A3288	G3289	U3290	A3291	G3292	U3293	A3294	G3295	U3296	A3297	G3298	U3299	A3300	G3301	U3302	A3303	G3304	U3305	A3306	G3307	U3308	A3309	G3310	U3311	A3312	G3313	U3314	A3315	G3316	U3317	A3318	G3319	U3320	A3321	G3322	U3323	A3324	G3325	U3326	A3327	G3328	U3329	A3330	G3331	U3332	A3333	G3334	U3335	A3336	G3337	U3338	A3339	G3340	U3341	A3342	G3343	U3344	A3345	G3346	U3347	A3348	G3349	U3350	A3351	G3352	U3353	A3354	G3355	U3356	A3357	G3358	U3359	A3360	G3361	U3362	A3363	G3364	U3365	A3366	G3367	U3368	A3369	G3370	U3371	A3372	G3373	U3374	A3375	G3376	U3377	A3378	G3379	U3380	A3381	G3382	U3383	A3384	G3385	U3386	A3387	G3388	U3389	A3390	G3391	U3392	A3393	G3394	U3395	A3396	G3397	U3398	A3399	G3400	U3401	A3402	G3403	U3404	A3405	G3406	U3407	A3408	G3409	U3410	A3411	G3412	U3413	A3414	G3415	U3416	A3417	G3418	U3419	A3420	G3421	U3422	A3423	G3424	U3425	A3426	G3427	U3428	A3429	G3430	U3431	A3432	G3433	U3434	A3435	G3436	U3437	A3438	G3439	U3440	A3441	G3442	U3443	A3444	G3445	U3446	A3447	G3448	U3449	A3450	G3451	U3452	A3453	G3454	U3455	A3456	G3457	U3458	A3459	G3460	U3461	A3462	G3463	U3464	A3465	G3466	U3467	A3468	G3469	U3470	A3471	G3472	U3473	A3474	G3475	U3476	A3477	G3478	U3479	A3480	G3481	U3482	A3483	G3484	U3485	A3486	G3487	U3488	A3489	G3490	U3491	A3492	G3493	U3494	A3495	G3496	U3497	A3498	G3499	U3500	A3501	G3502	U3503	A3504	G3505	U3506	A3507	G3508	U3509	A3510	G3511	U3512	A3513	G3514	U3515	A3516	G3517	U3518	A3519	G3520	U3521	A3522	G3523	U3524	A3525	G3526	U3527	A3528	G3529	U3530	A3531	G3532	U3533	A3534	G3535	U3536	A3537	G3538	U3539	A3540	G3541	U3542	A3543	G3544	U3545	A3546	G3547	U3548	A3549	G3550	U3551	A3552	G3553	U3554	A3555	G3556	U3557	A3558	G3559	U3560	A3561	G3562	U3563	A3564	G3565	U3566	A3567	G3568	U3569	A3570	G3571	U3572	A3573	G3574	U3575	A3576	G3577	U3578	A3579	G3580	U3581	A3582	G3583	U3584	A3585	G3586	U3587	A3588	G3589	U3590	A3591	G3592	U

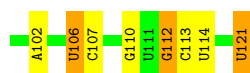


• Molecule 36: 25S ribosomal RNA



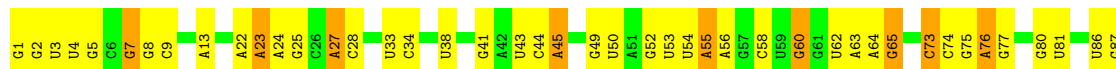
G2407	G2307	A2233	A2144	G	G1952	A1859	U1785	C1693	U1530	G1434	C1339	G1242
U2408	C2306	G2234	A2145	C	G1953	G1860	G1786	U1694	U1533	C1437	G1340	G1243
U2411	U2309	C2235	C2146	C	U	U1861	A1787	A1695	U1534	U1438	U1341	A1244
	U2310	G2236	A2147	U	A	U1862	C1788	A1696	A1535	U1439	G1345	A1245
G2418	A2313	G2238	U2148	G	G	A1864	G1790	G1700	G1536	G1440	U1348	G1246
A2419	U2314	G2239	U2157	U	U	A1865	U1795	C1701	A1612	G1441	U1349	U1247
G2420	G2315	G2240	G2157	C	G	C1866	U1796	U1702	A1613	U1446	G1249	C1248
U2421		U2241	A2158	U	U	U1867	A1797	C1708	A1537	G1447	G1250	
G2422	U2318	A2244	U2162	C	A	A1874	U1798	C1709	G1541	A1466	U1258	
U2423	U2319	G2245	C2163	U	G	U1875	A1799	U1716	G1542	G1450	A1259	
G2425	C2322	C2246	A2167	G	C	U1876	A1800	G1713	G1543	U1454	A1260	
U2426		G2247	U2168	C	C	G1878	U1801	U1717	A1546	U1455	G1261	
U2427	U2327	C2248	A2169	A	U	A1879	C1802	U1718	C1550	A1456	A1352	
U2428	U2328	G2249	G2170	C	U	U1880	C1803	G1718	G1551	G1457	A1353	
G2429	U2334	G2250	A1881	U	G	A1881	A1804	U1723	U1553	U1460	A1355	
	G2335	G2251	A2172	A	A	G1882	C1805	U1724	U1554	A1465	A1356	
U2433	U2336	A2252	U2173	U	C	U1887	A1806	U1725	U1555	G1466	U1265	
U2434		G2253	G2174	U	C	U1888	C1807	C1725	U1556	U1467	G1266	
G2435	C2339	U2254	C2177	U	U	U1889	A1808	G1728	A1557	G1467	U1276	
U2436	U2340	A2255	A2178	C	G	U1890	A1809	U1729	G1560	A1468	C1280	
G2437	C2350	G2256	G2179	C	C	U1891	A1810	G1730	C1561	U1469	G1281	
A2438		C2257	C2179	U	G	G1892	G1811	U1731	C1562	C1469	C1282	
G2439	G2355	U2258	C2180	G	C	A1893	A1812	G1732	C1563	U1470	C1283	
G2440	A2356	A2259	C2181	C	C	U1894	A1813	G1733	U1564	U1471	G1285	
A2441	A2357	U2260	G2187	C	A	U1895	U1814	U1734	C1565	A1479	C1292	
G2442	A2363	G2261	C2192	U	C	A1896	A1815	G1735	A1566	U1480	U1293	
A2443	G2365	A2262	U2193	U	C	G1898	A1816	G1736	U1567	A1481	A1294	
C2444	C2366	U2264	G2194	U	G	U1901	U1817	A1741	U1570	A1482	G1295	
A	A2367	G2267	A2198	U	C	G1902	U1818	U1746	A1571	G1488	C1298	
U	G2368	U2272	G2201	C	U	U1903	U1819	G1750	G1572	U1489	U1405	
A	G2369	G2273	U2112	A	U	U1907	U1820	A1751	G1573	A1490	A1406	
G	G2370	A2274	A2113	C	C	A1908	A1821	G1756	C1574	A1493	G1407	
G	G2371	U2274	C2114	A	C	A1909	G1822	A1757	G1575	U1498	G1408	
U	A2372	U2283	G2115	C	G	U1912	U1823	G1758	G1576	C1499	U1410	
G	A2373	C2204	G2116	C	U	A1913	G1824	C1762	C1577	C1499	G1411	
G	C2374	U2205	A2117	C	G	U1914	U1825	U1763	A1580	G1502	G1412	
U	G2375	G2206	C2118	C	C	A1915	G1826	U1764	C1581	A1503	C1314	
A	G2376	A2207	A2119	U	A	U1916	U1827	U1765	C1582	A1504	U1315	
G	G2377	U2208	C2120	C	C	U1919	G1828	G1766	A1583	C1505	C1316	
A		A2209	G2121	U	C	U1920	U1829	U1767	G1586	A1506	A1317	
A	G2385	G2210	G2122	G	U	U1921	A1830	G1769	A1587	G1507	A1318	
U	C2392	U2211	G2123	C	U	U1922	A1831	C1771	A1588	C1508	U1322	
A	G2393	C2212	A2124	U	C	A1933	A1832	U1772	G1590	G1514	G1422	
G	G2394	A2214	A2215	C	U	G1934	C1833	C1773	G1591	U1519	U1329	
U	C2395	U2294	A2222	G	G	U1935	U1834	C1774	G1592	G1520	A1330	
G	A2296	A2296	A2223	U	U	A1936	A1845	U1778	A1593	U1521	U1331	
G	U2297	G2224	G2134	C	U	U1937	C1846	G1779	A1594	G1525	A1428	
A	U2298	A2224	U2133	C	G	U1938	A1847	U1687	U1595	U1430	G1332	
G	A2299	U2225	U2135	C	G	G1939	G1848	G1780	C1596	G1432	U1333	
		U2226	C2136	U	G	U1940	A1849	C1781	C1597	U1528	C1338	
A2303		C2227	U2137	U	C		A1850	U1782				
C2304		A2228	A2138	G	C		G1851	C1690				
G2305		A2229	G1949	U	U		A1858	U1691				
C2406			A	A	U			G1784				





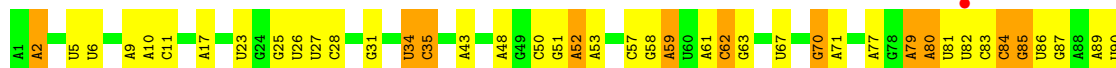
• Molecule 37: 5S ribosomal RNA

Chain 7: 50% 39% 11%



• Molecule 38: 5.8S ribosomal RNA

Chain 4: % 50% 40% 10%



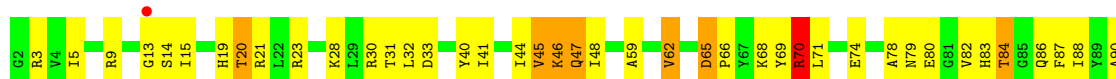
• Molecule 38: 5.8S ribosomal RNA

Chain 8: % 40% 49% 11%



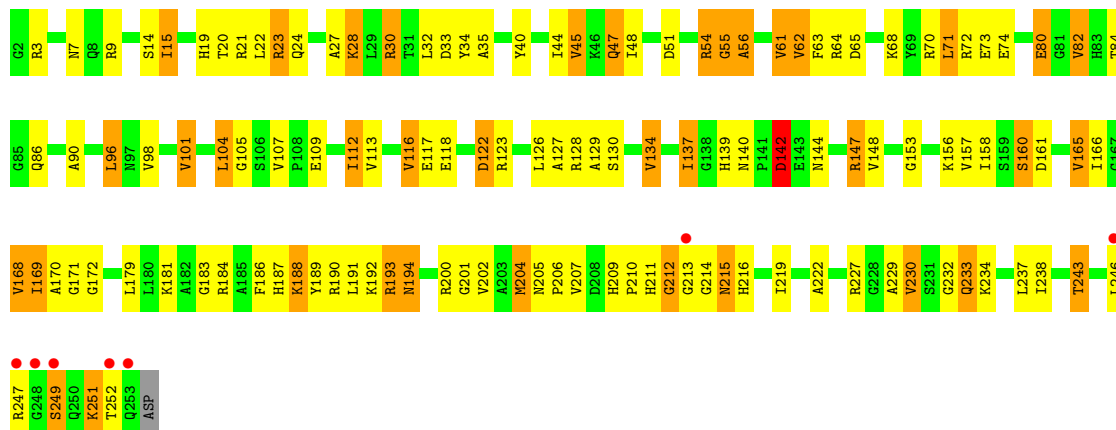
• Molecule 39: 60S ribosomal protein L2-A

Chain L2: % 52% 36% 10%

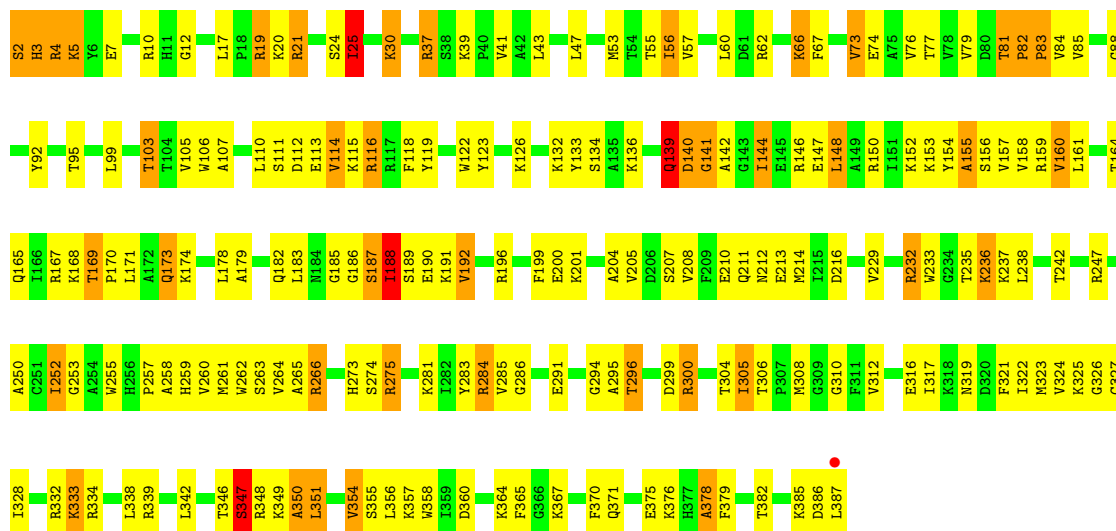




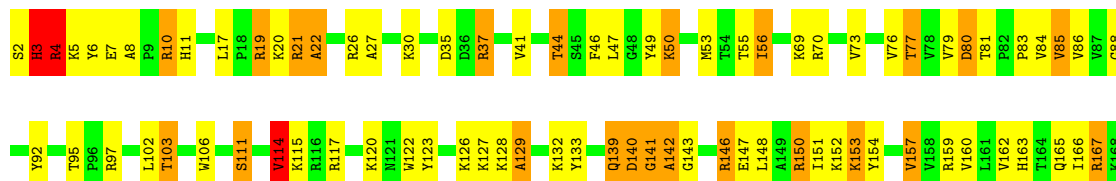
• Molecule 39: 60S ribosomal protein L2-A

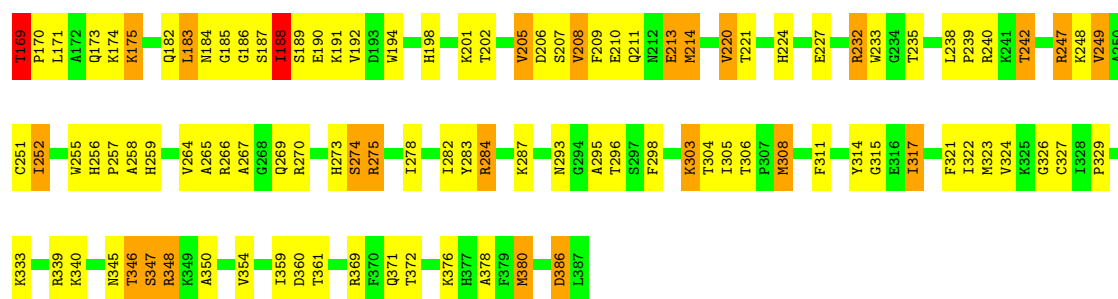


• Molecule 40: 60S ribosomal protein L3

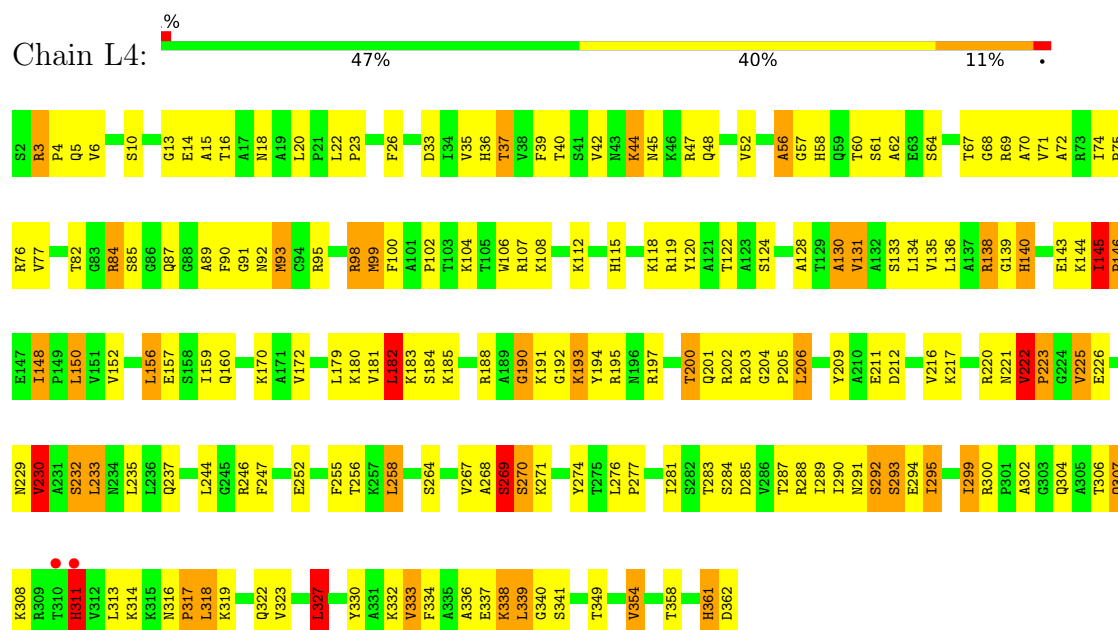


• Molecule 40: 60S ribosomal protein L3

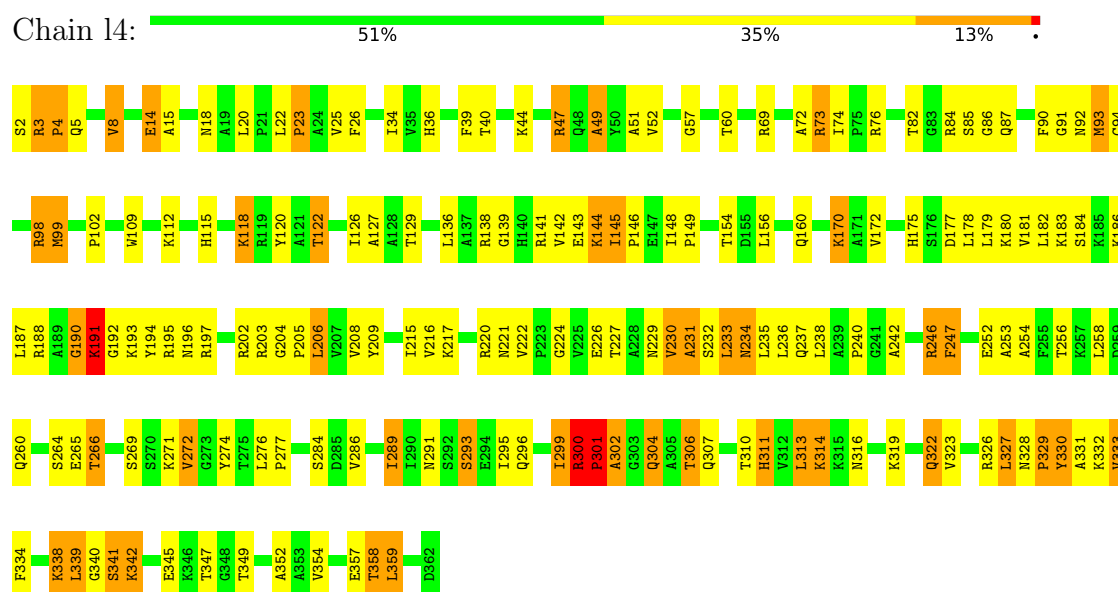




• Molecule 41: 60S ribosomal protein L4-A



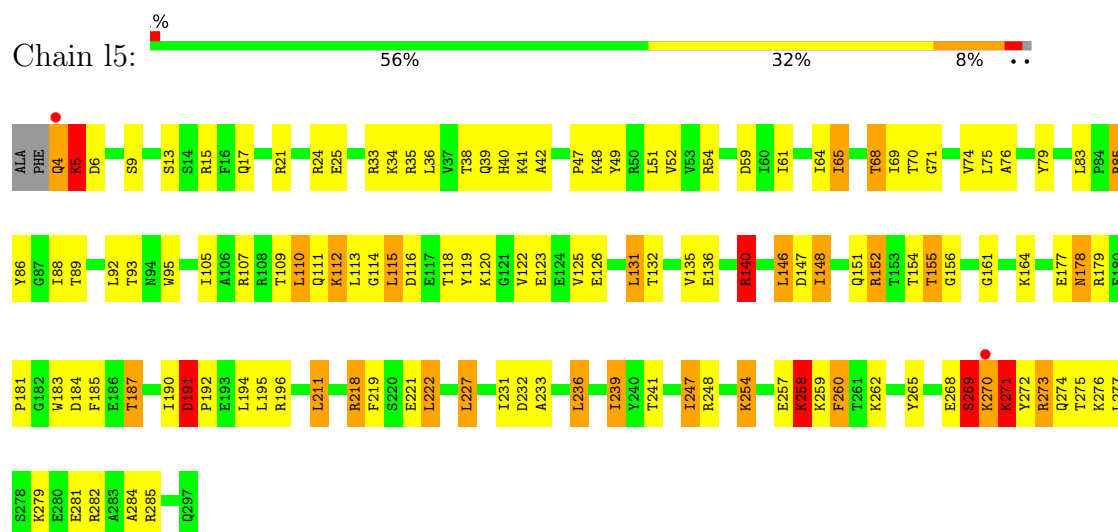
• Molecule 41: 60S ribosomal protein L4-A



• Molecule 42: 60S ribosomal protein L5



• Molecule 42: 60S ribosomal protein L5

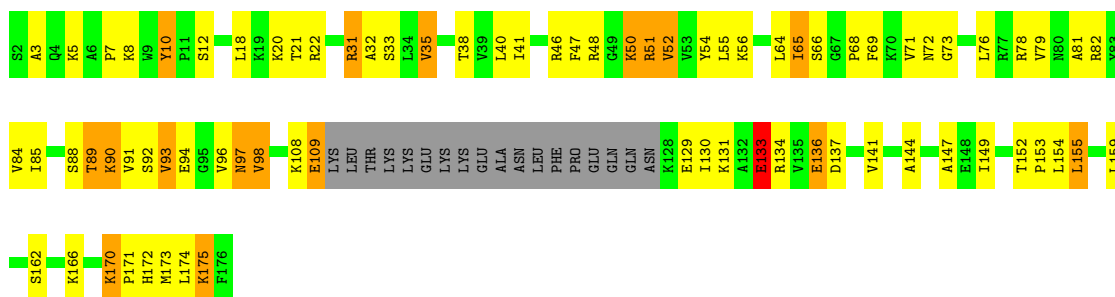


• Molecule 43: 60S ribosomal protein L6-A

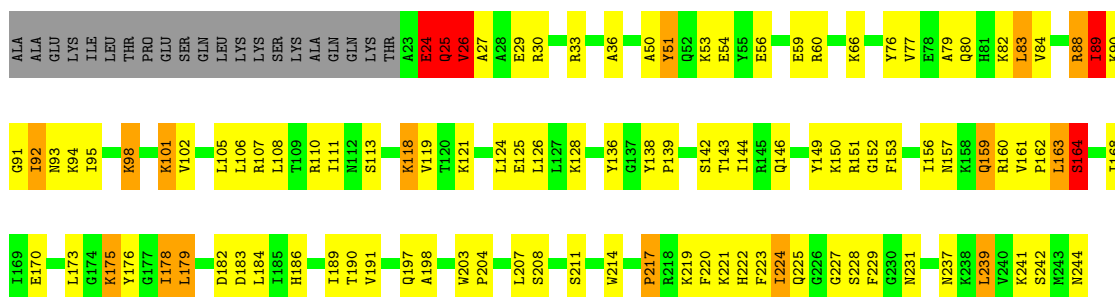


• Molecule 43: 60S ribosomal protein L6-A

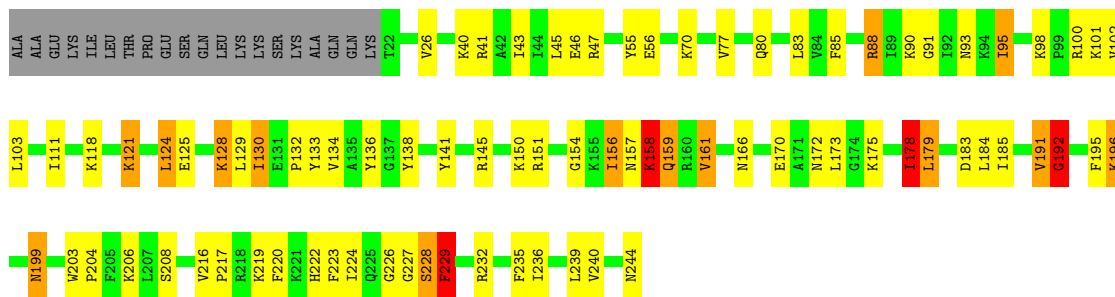




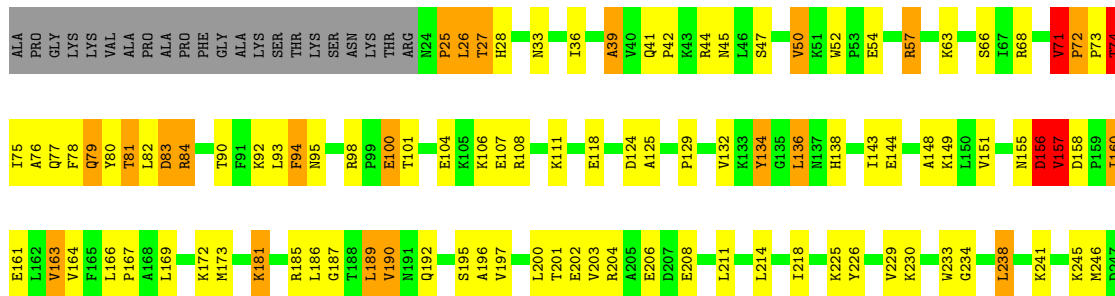
- Molecule 44: 60S ribosomal protein L7-A



- Molecule 44: 60S ribosomal protein L7-A

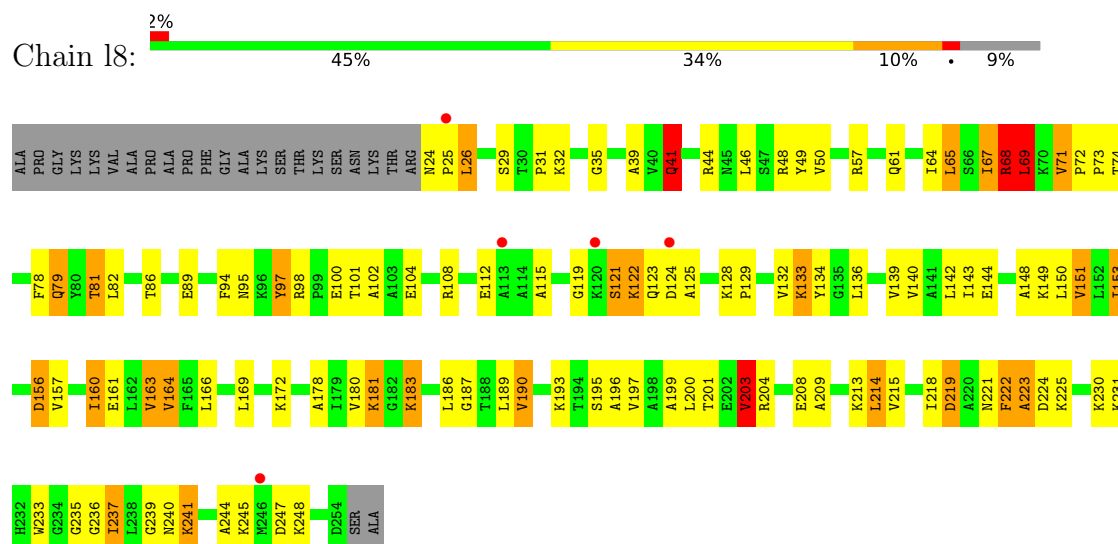


- Molecule 45: 60S ribosomal protein L8-A

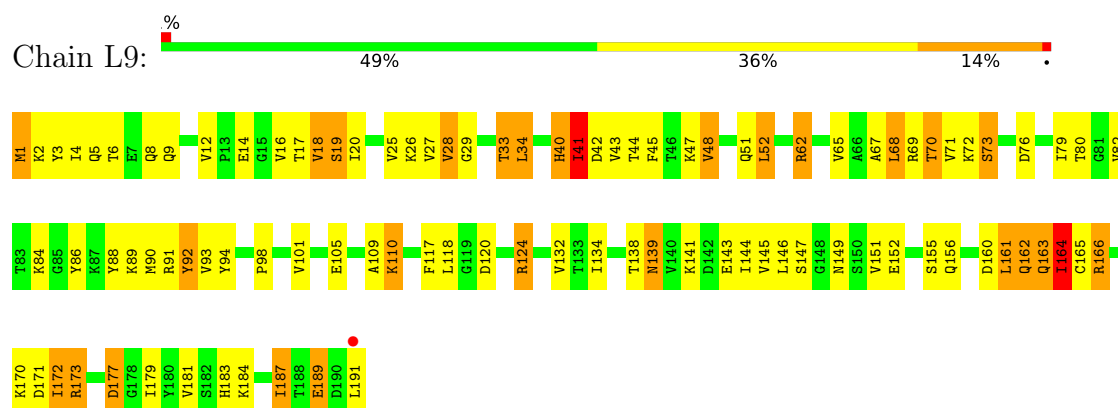




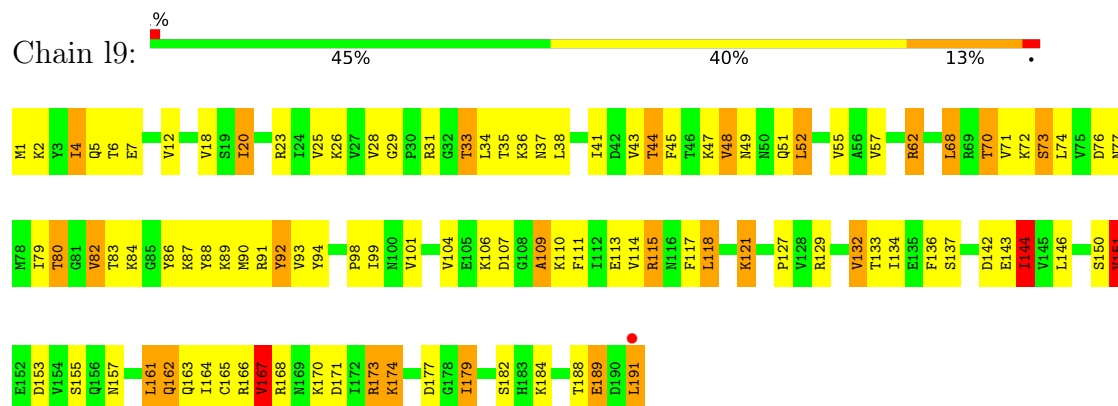
• Molecule 45: 60S ribosomal protein L8-A



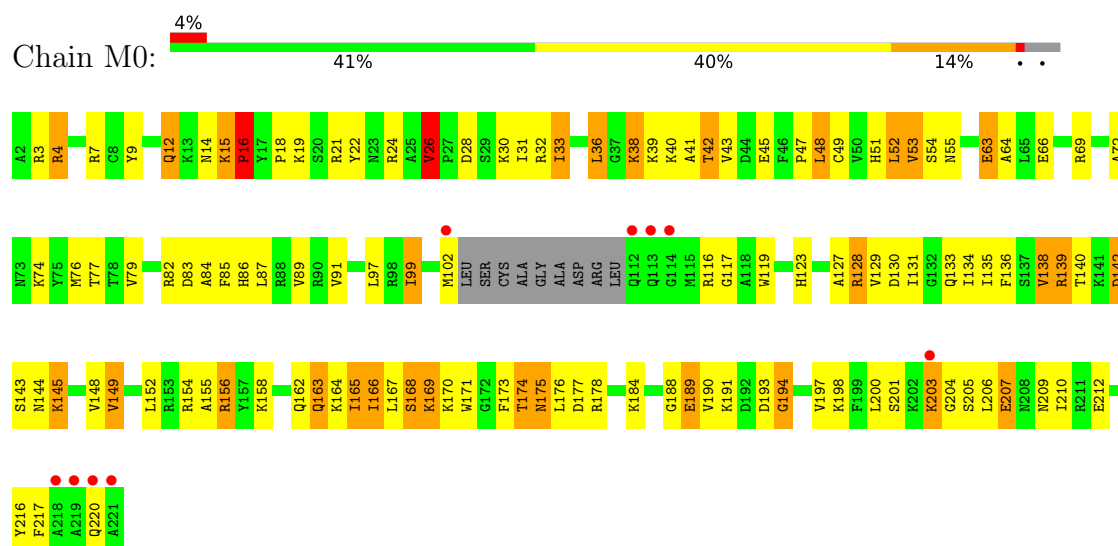
• Molecule 46: 60S ribosomal protein L9-A



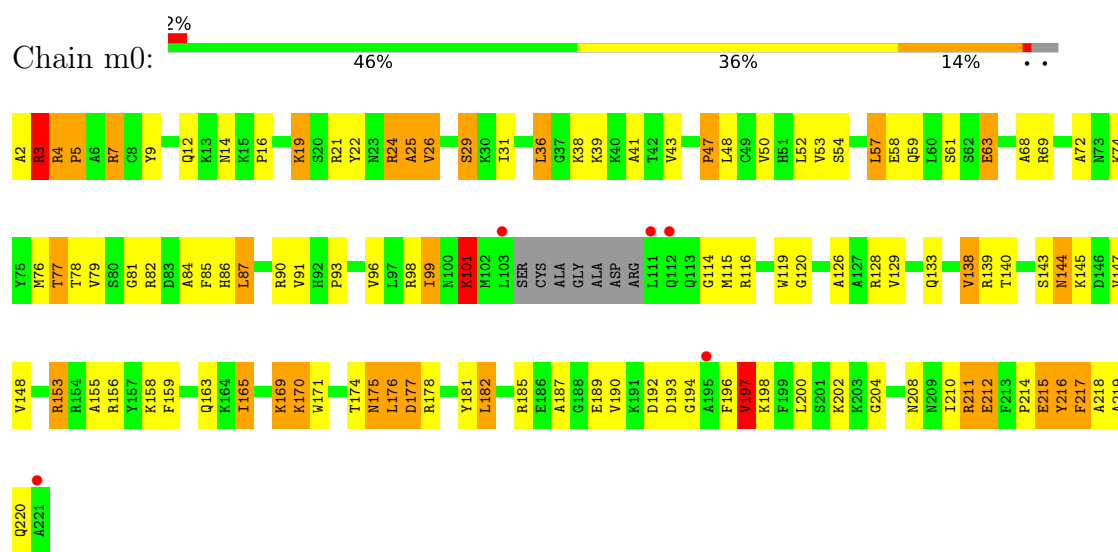
• Molecule 46: 60S ribosomal protein L9-A



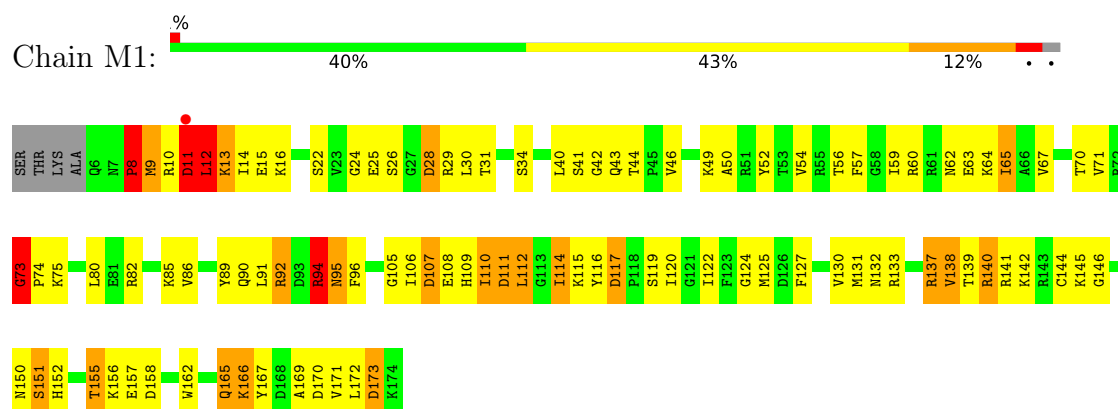
• Molecule 47: 60S ribosomal protein L10



• Molecule 47: 60S ribosomal protein L10

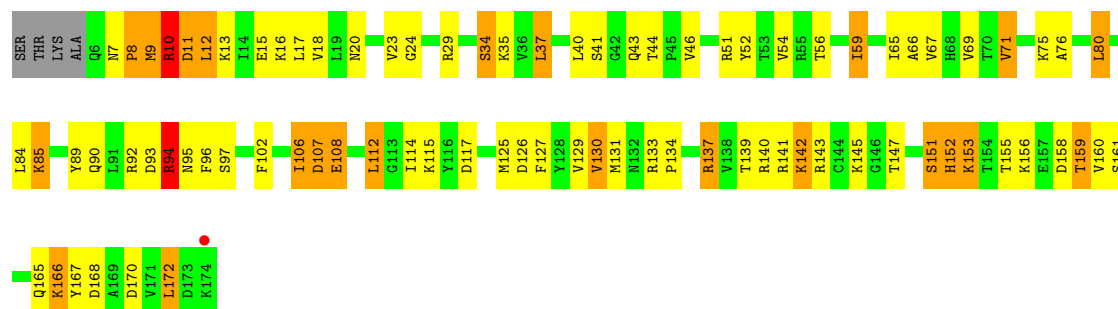


• Molecule 48: 60S ribosomal protein L11-B

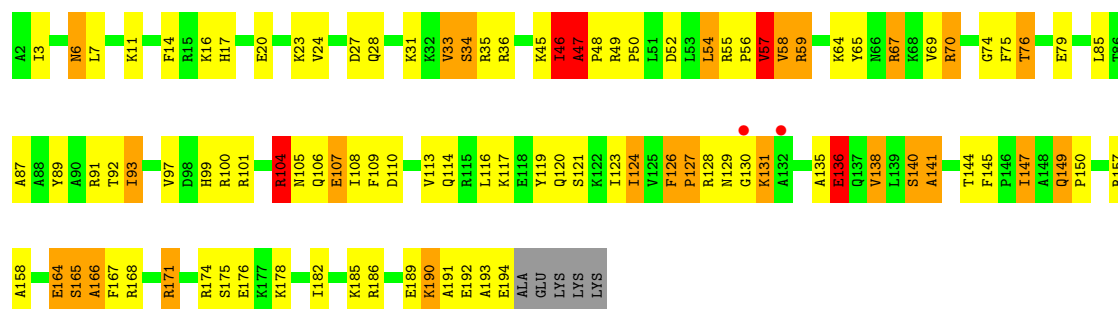


• Molecule 48: 60S ribosomal protein L11-B

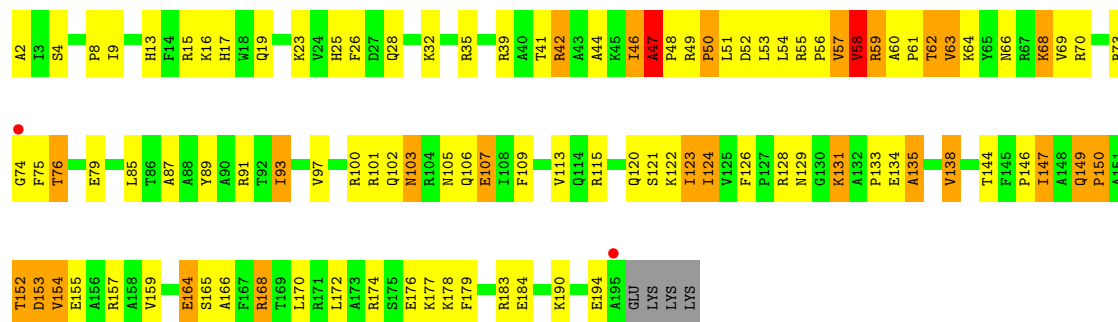




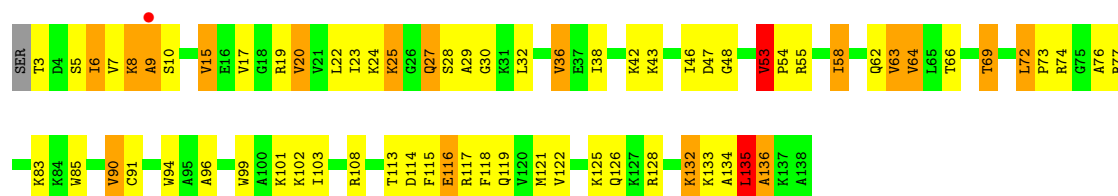
- Molecule 49: 60S ribosomal protein L13-A



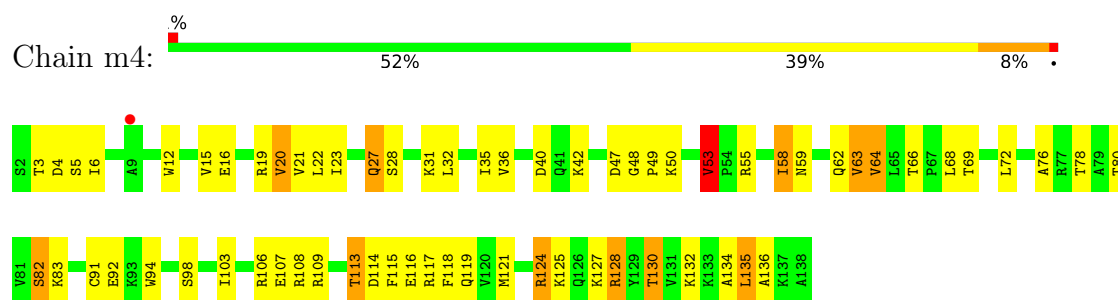
- Molecule 49: 60S ribosomal protein L13-A



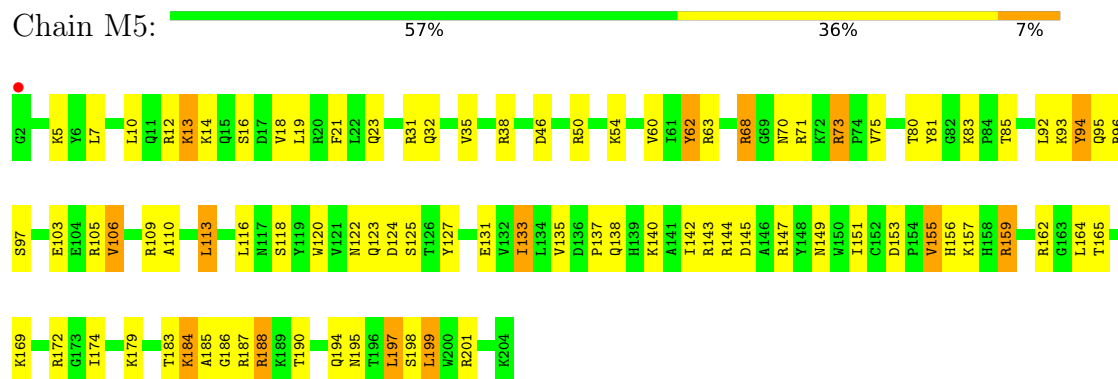
- Molecule 50: 60S ribosomal protein L14-A



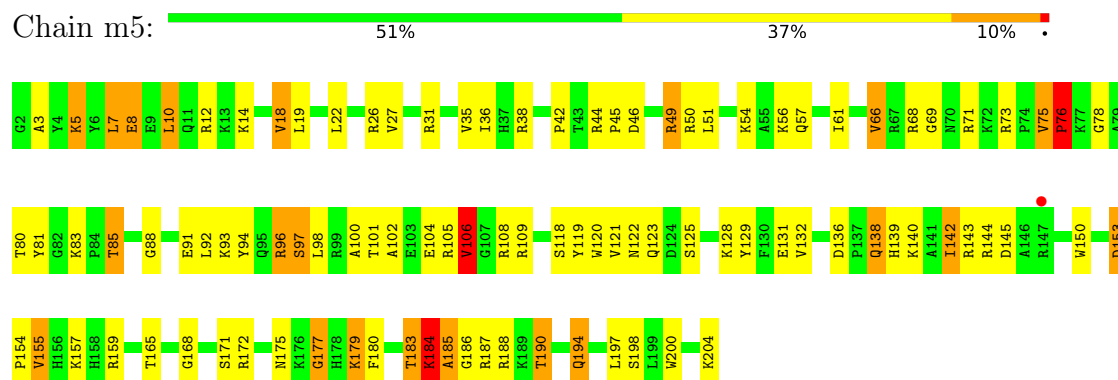
- Molecule 50: 60S ribosomal protein L14-A



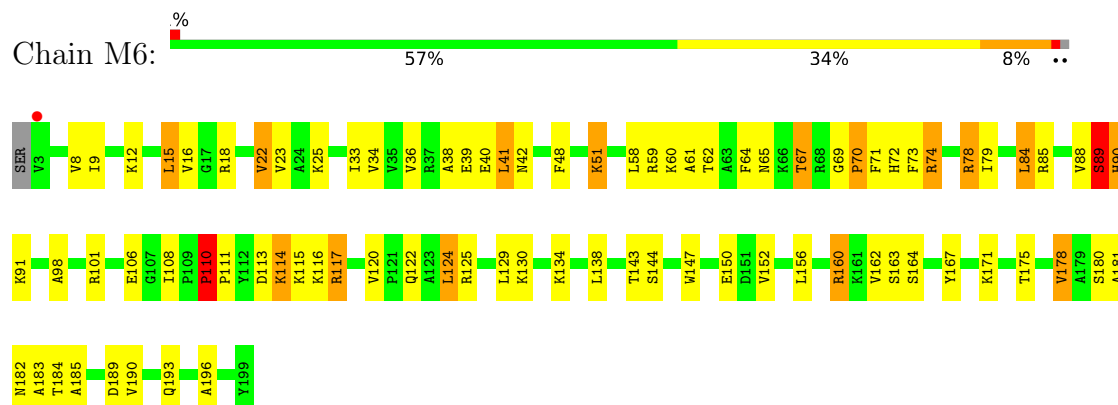
- Molecule 51: 60S ribosomal protein L15-A



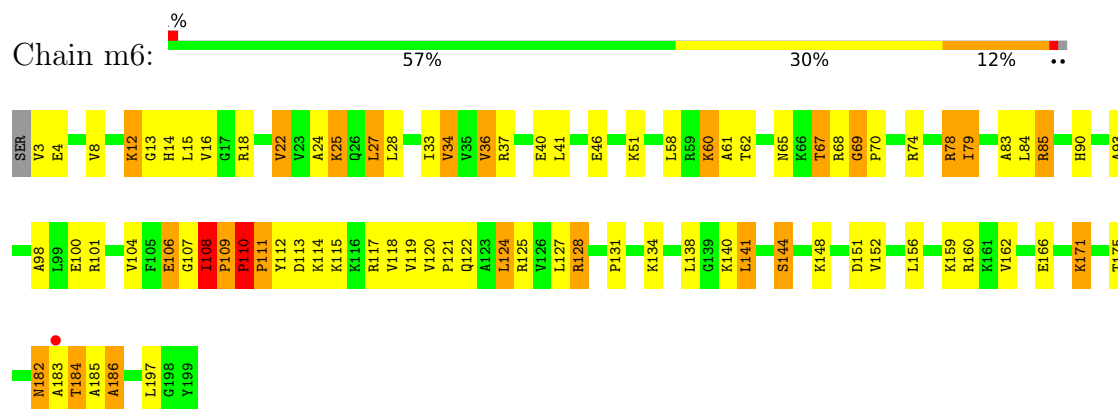
- Molecule 51: 60S ribosomal protein L15-A



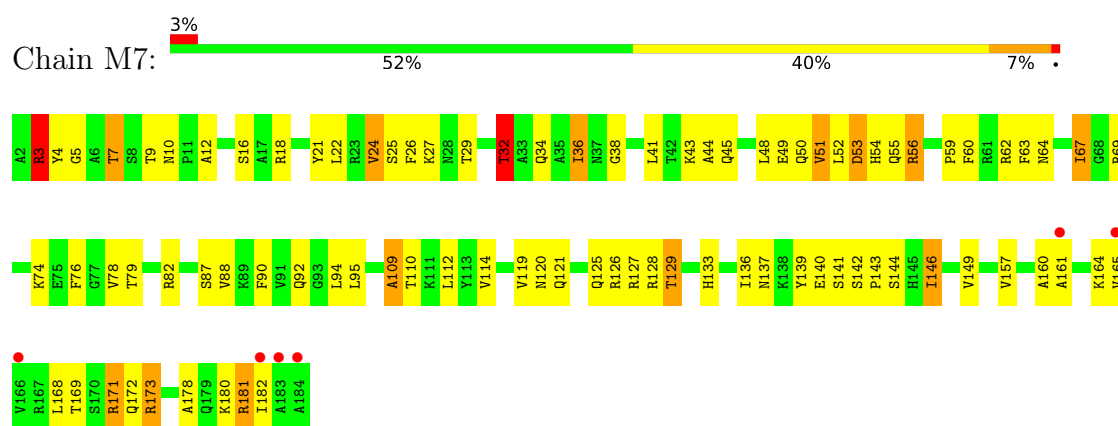
- Molecule 52: 60S ribosomal protein L16-A



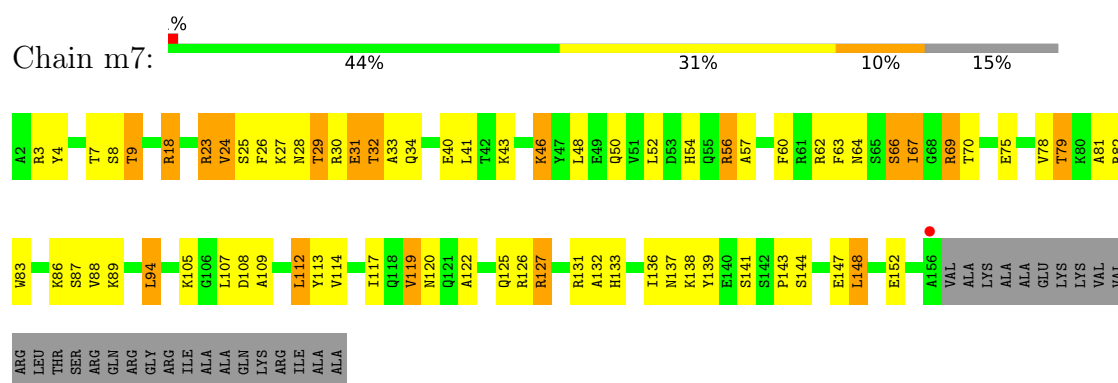
- Molecule 52: 60S ribosomal protein L16-A



- Molecule 53: 60S ribosomal protein L17-A



- Molecule 53: 60S ribosomal protein L17-A



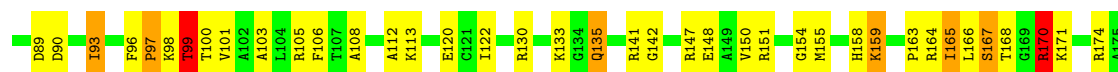
- Molecule 54: 60S ribosomal protein L18-A





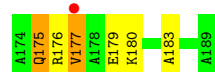
- Molecule 54: 60S ribosomal protein L18-A

Chain m8: 56% 37% 6% .



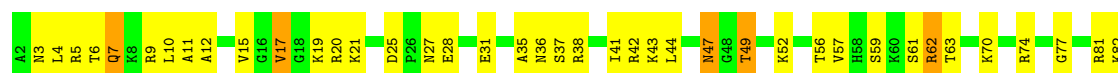
- Molecule 55: 60S ribosomal protein L19-A

Chain M9: 56% 34% 10% .



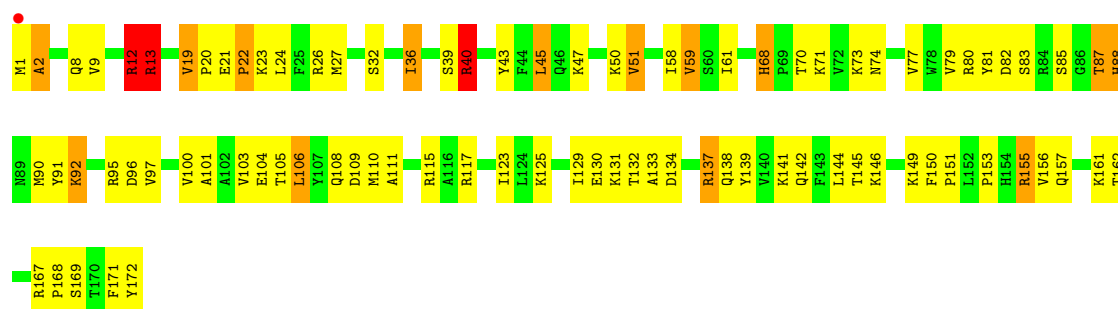
- Molecule 55: 60S ribosomal protein L19-A

Chain m9: 54% 36% 9% .

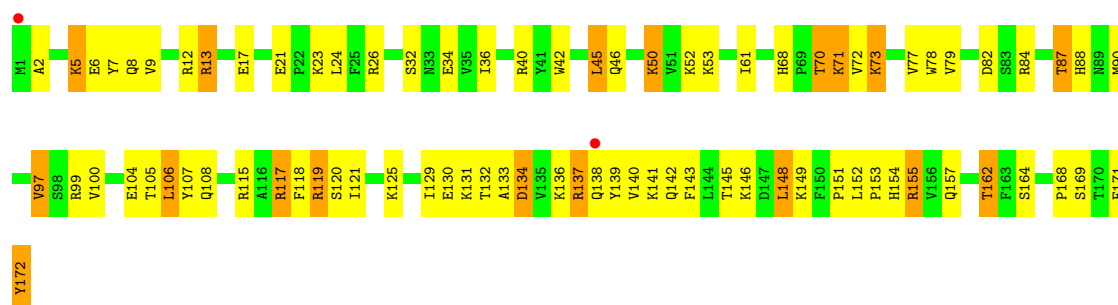


- Molecule 56: 60S ribosomal protein L20-A

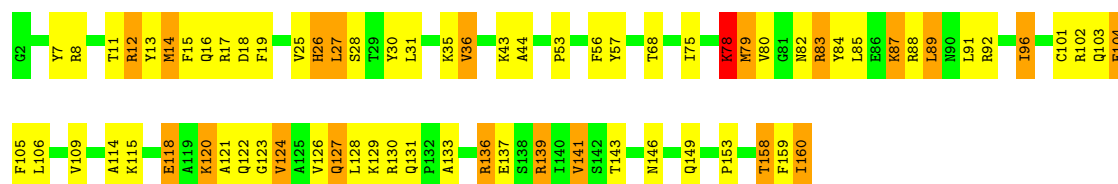
Chain N0: 49% 41% 8% .



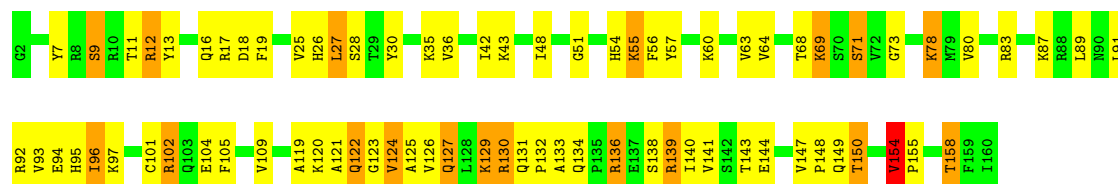
- Molecule 56: 60S ribosomal protein L20-A



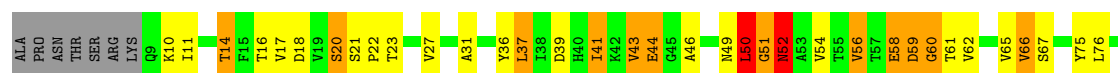
- Molecule 57: 60S ribosomal protein L21-A



- Molecule 57: 60S ribosomal protein L21-A



- Molecule 58: 60S ribosomal protein L22-A

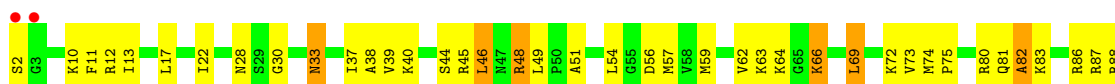




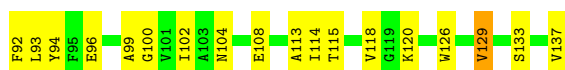
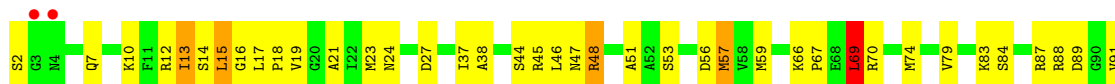
- Molecule 58: 60S ribosomal protein L22-A



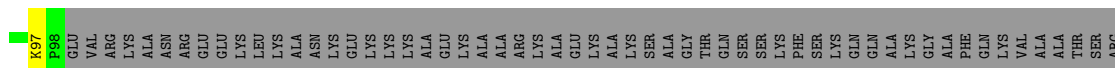
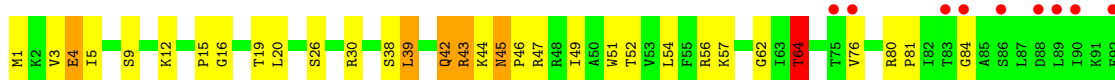
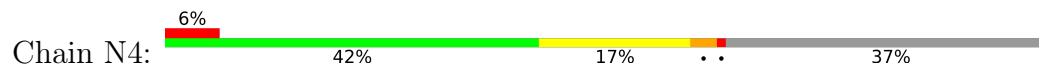
- Molecule 59: 60S ribosomal protein L23-A



- Molecule 59: 60S ribosomal protein L23-A

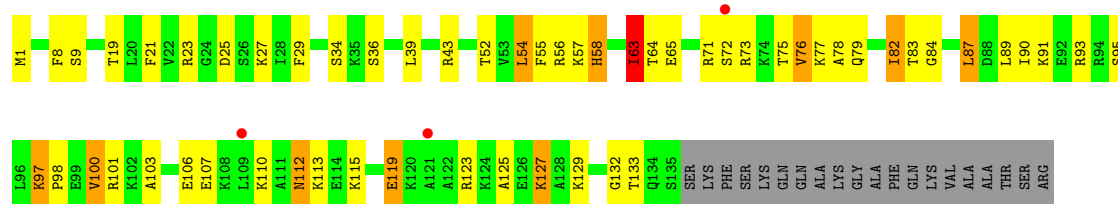


- Molecule 60: 60S ribosomal protein L24-A

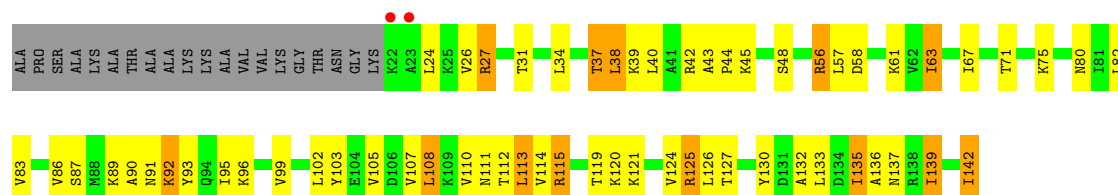


- Molecule 60: 60S ribosomal protein L24-A

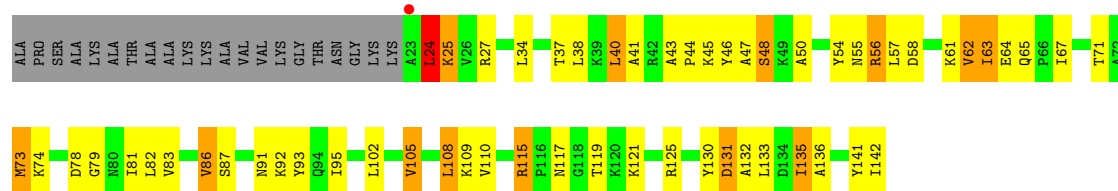
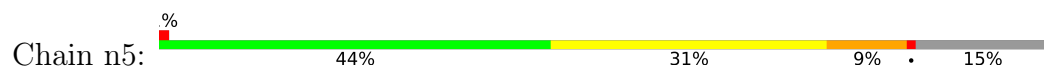




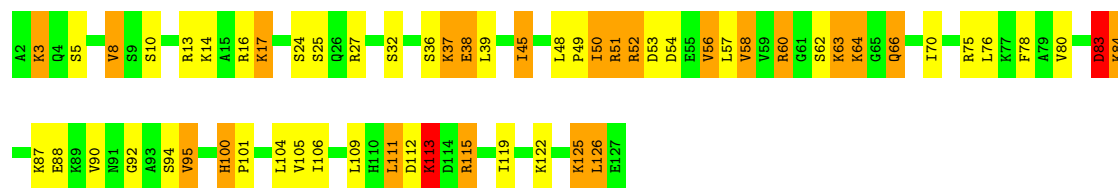
• Molecule 61: 60S ribosomal protein L25



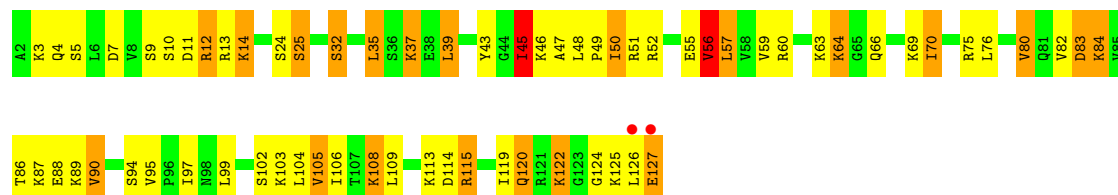
• Molecule 61: 60S ribosomal protein L25



• Molecule 62: 60S ribosomal protein L26-A

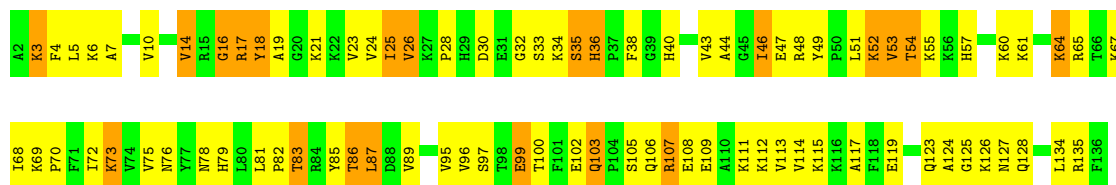


• Molecule 62: 60S ribosomal protein L26-A



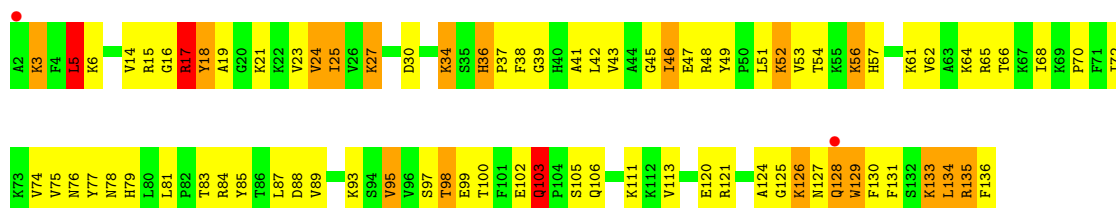
• Molecule 63: 60S ribosomal protein L27-A

Chain N7: 37% 47% 16%



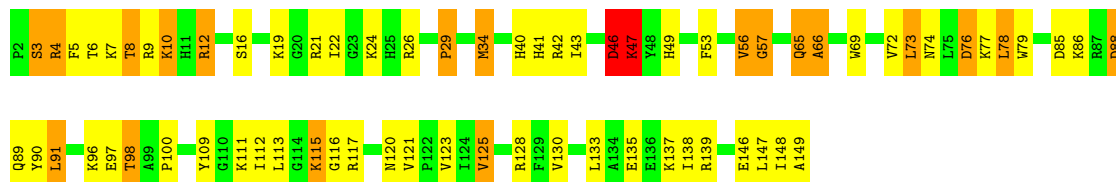
• Molecule 63: 60S ribosomal protein L27-A

Chain n7: % 40% 44% 13% .



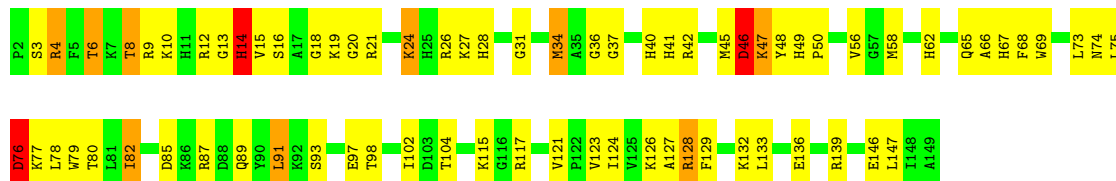
• Molecule 64: 60S ribosomal protein L28

Chain N8: 53% 32% 13% .



• Molecule 64: 60S ribosomal protein L28

Chain n8: 51% 41% 6% .



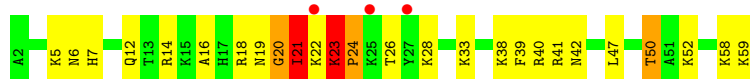
• Molecule 65: 60S ribosomal protein L29

Chain N9: 2% 66% 21% 12% .

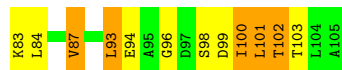


• Molecule 65: 60S ribosomal protein L29

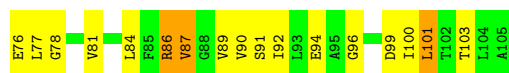
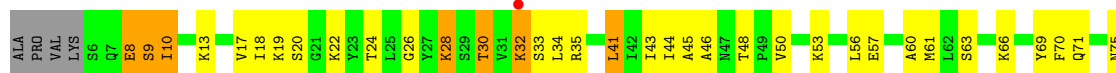
Chain n9: 5% 55% 36% 5% .



- Molecule 66: 60S ribosomal protein L30



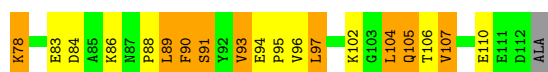
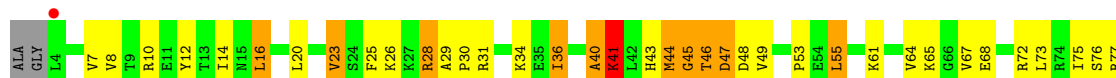
- Molecule 66: 60S ribosomal protein L30



- Molecule 67: 60S ribosomal protein L31-A

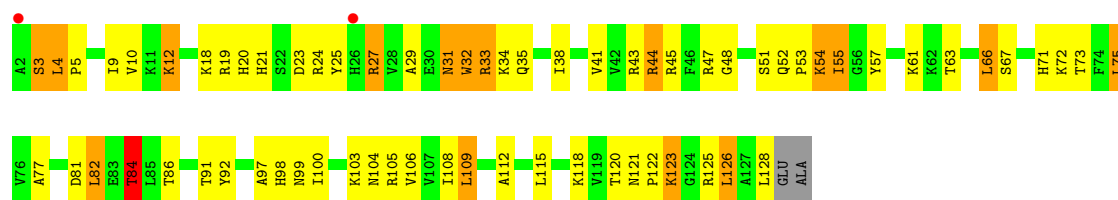


- Molecule 67: 60S ribosomal protein L31-A

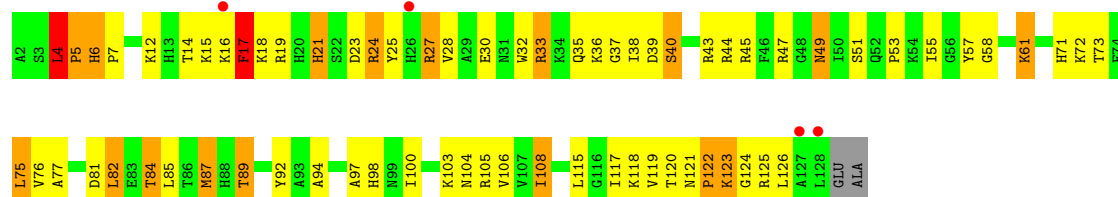
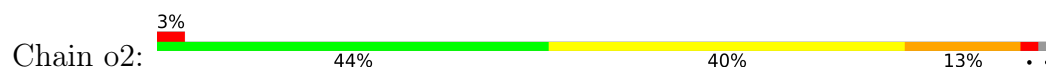


- Molecule 68: 60S ribosomal protein L32

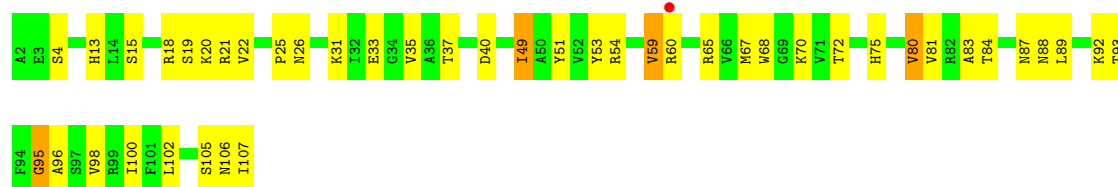




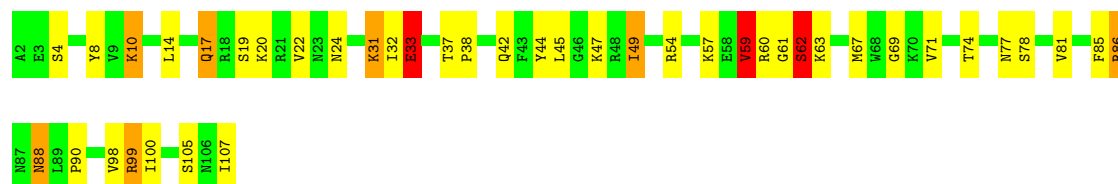
• Molecule 68: 60S ribosomal protein L32



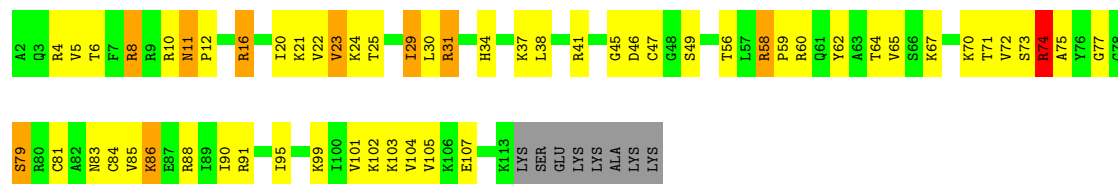
• Molecule 69: 60S ribosomal protein L33-A



• Molecule 69: 60S ribosomal protein L33-A

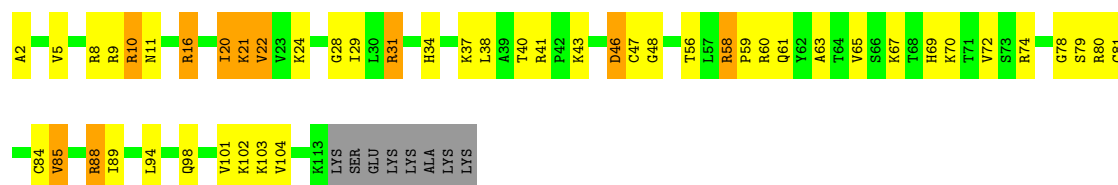


• Molecule 70: Large ribosomal subunit protein eL34A



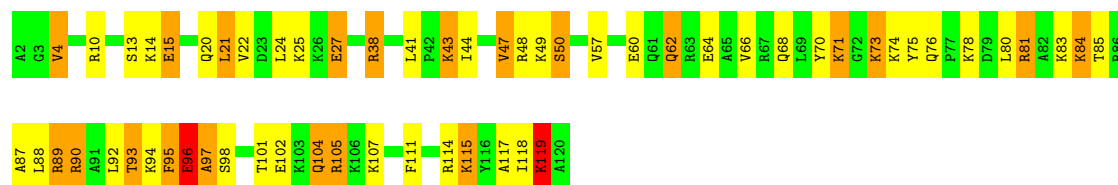
• Molecule 70: Large ribosomal subunit protein eL34A

Chain o4: 



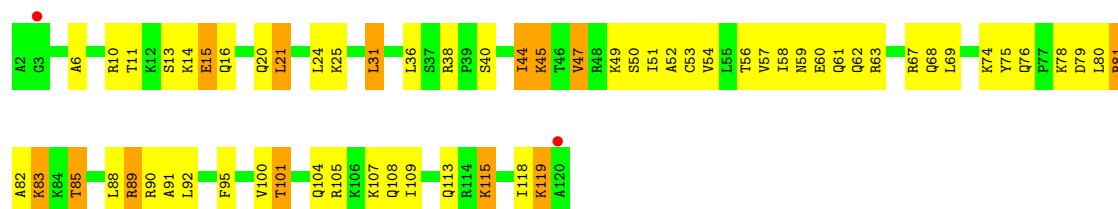
- Molecule 71: 60S ribosomal protein L35-A

Chain O5: 



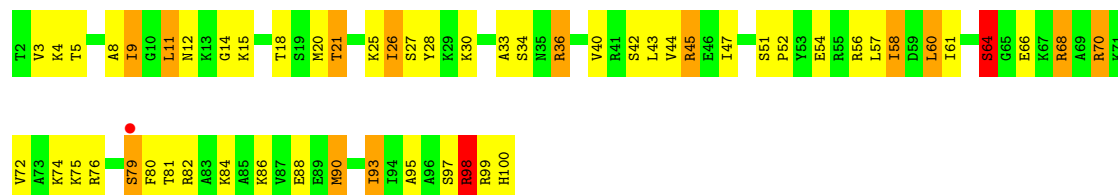
- Molecule 71: 60S ribosomal protein L35-A

Chain o5: 



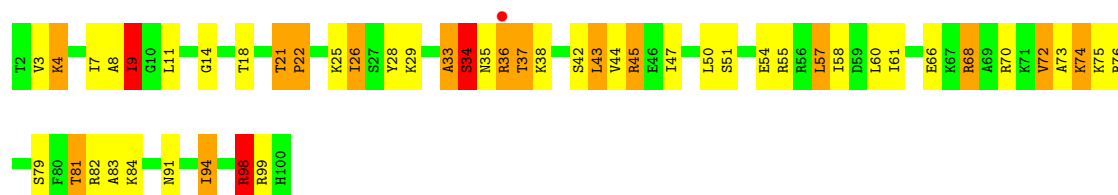
- Molecule 72: 60S ribosomal protein L36-A

Chain O6: 

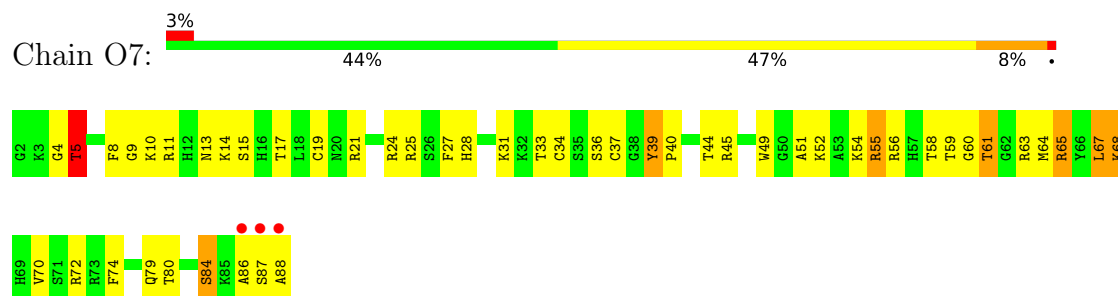


- Molecule 72: 60S ribosomal protein L36-A

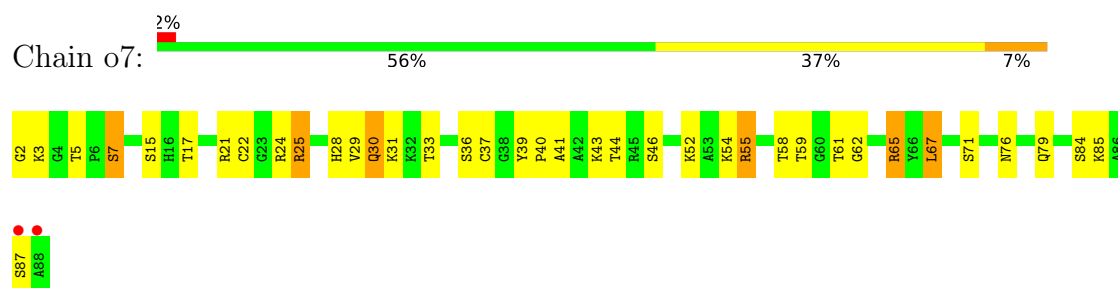
Chain o6: 



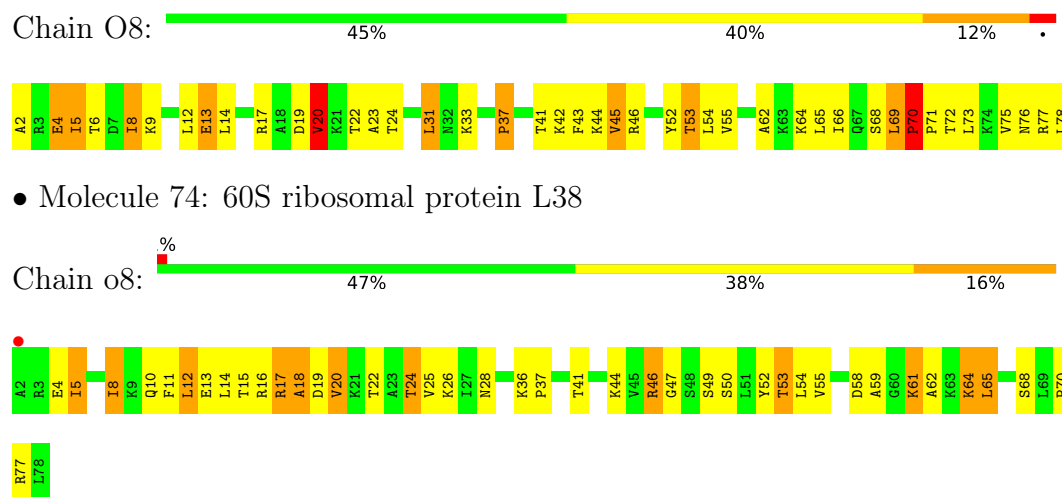
- Molecule 73: 60S ribosomal protein L37-A



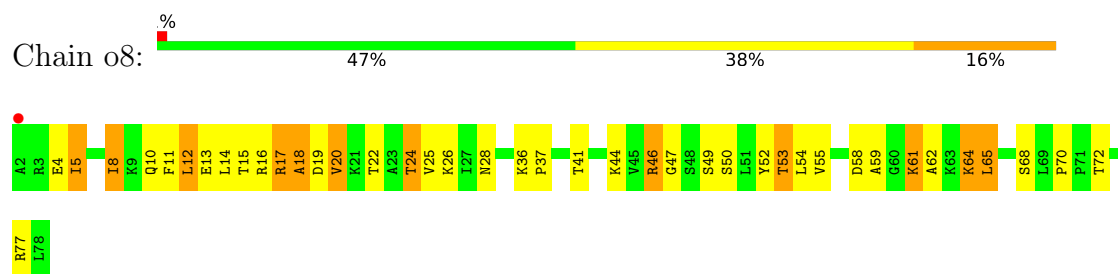
- Molecule 73: 60S ribosomal protein L37-A



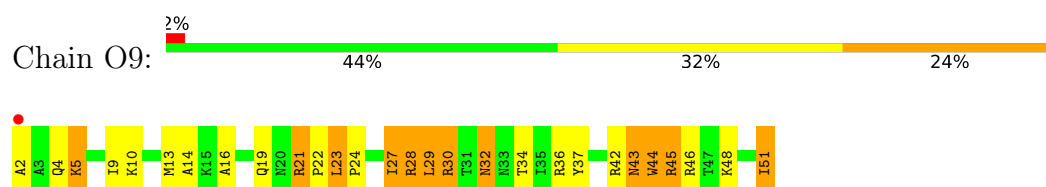
- Molecule 74: 60S ribosomal protein L38



- Molecule 74: 60S ribosomal protein L38

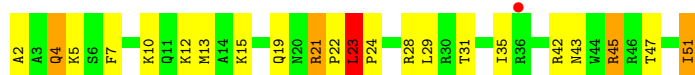


- Molecule 75: 60S ribosomal protein L39

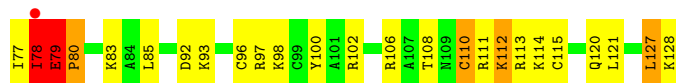


- Molecule 75: 60S ribosomal protein L39

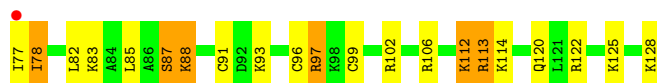




- Molecule 76: Ubiquitin-60S ribosomal protein L40



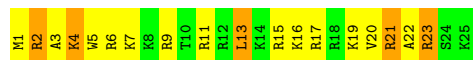
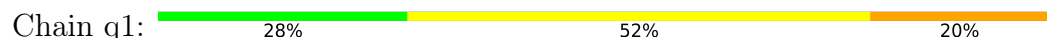
- Molecule 76: Ubiquitin-60S ribosomal protein L40



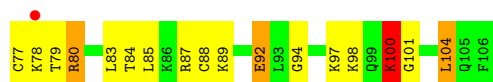
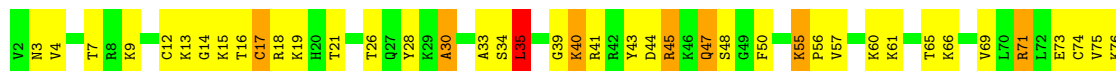
- Molecule 77: 60S ribosomal protein L41-A



- Molecule 77: 60S ribosomal protein L41-A



- Molecule 78: 60S ribosomal protein L42-A



- Molecule 78: 60S ribosomal protein L42-A





- Molecule 79: 60S ribosomal protein L43-A

Chain Q3: 56% 37% 5% •



- Molecule 79: 60S ribosomal protein L43-A

Chain q3: 47% 46% 7%



- Molecule 80: 40S ribosomal protein S10-A

Chain c0: 39% 38% 13% 9%



- Molecule 81: 40S ribosomal protein S30-A

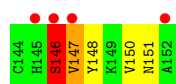
Chain e0: 42% 37% 19%



- Molecule 82: Ubiquitin-40S ribosomal protein S31

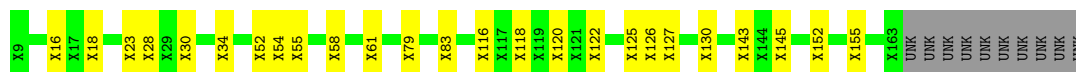
Chain e1: 32% 45% 18% 5%





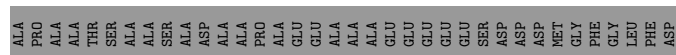
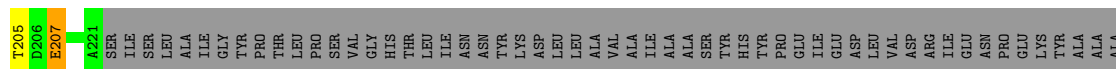
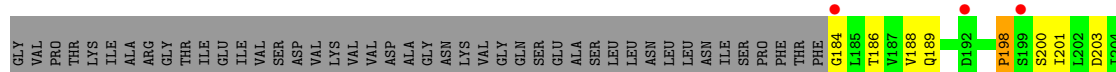
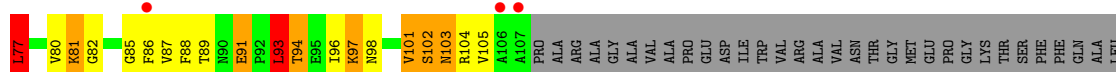
• Molecule 83: UNKNOWN PROTEIN m2

Chain m2: 78% 16% 6%



• Molecule 84: Large ribosomal subunit protein uL10

Chain p0: 2% 23% 16% 6% 54%



• Molecule 85: UNKNOWN PROTEIN p1

Chain p1: 87% 13%



• Molecule 86: UNKNOWN PROTEIN p2

Chain p2: 96% 4%



• Molecule 87: CCA trinucleotide

Chain A: 67% 33%



- Molecule 87: CCA trinucleotide

Chain B: 

C502
C503
A504

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	436.02Å 287.59Å 304.52Å 90.00° 99.02° 90.00°	Depositor
Resolution (Å)	49.82 – 3.20 49.82 – 3.20	Depositor EDS
% Data completeness (in resolution range)	100.0 (49.82-3.20) 99.9 (49.82-3.20)	Depositor EDS
R_{merge}	0.31	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.45 (at 3.19Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.8.4_1496)	Depositor
R, R_{free}	0.181 , 0.237 0.183 , 0.237	Depositor DCC
R_{free} test set	24290 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å ²)	70.5	Xtriage
Anisotropy	0.157	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 84.6	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	411288	wwPDB-VP
Average B, all atoms (Å ²)	70.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.44% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: OHX, MG, ZN

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	2	0.38	0/41698	0.60	5/64972 (0.0%)
1	6	0.45	0/42765	0.64	7/66634 (0.0%)
2	S0	0.56	0/1617	1.08	10/2215 (0.5%)
2	s0	0.66	0/1623	1.17	11/2222 (0.5%)
3	S1	0.49	0/1735	1.00	7/2335 (0.3%)
3	s1	0.63	0/1748	1.04	8/2352 (0.3%)
4	S2	0.61	1/1665 (0.1%)	1.03	5/2263 (0.2%)
4	s2	0.74	0/1665	1.13	10/2263 (0.4%)
5	S3	0.58	0/1759	1.10	11/2368 (0.5%)
5	s3	0.57	0/1759	0.98	8/2368 (0.3%)
6	S4	0.58	0/2109	1.07	12/2839 (0.4%)
6	s4	0.65	0/2109	1.10	14/2839 (0.5%)
7	S5	0.49	0/1629	0.97	4/2202 (0.2%)
7	s5	0.61	0/1629	1.11	9/2202 (0.4%)
8	S6	0.55	0/1823	0.95	3/2439 (0.1%)
8	s6	0.62	0/1779	0.99	5/2379 (0.2%)
9	S7	0.55	0/1506	1.04	8/2028 (0.4%)
9	s7	0.60	0/1516	1.15	12/2043 (0.6%)
10	S8	0.65	0/1514	1.10	7/2021 (0.3%)
10	s8	0.76	0/1514	1.08	2/2021 (0.1%)
11	S9	0.54	0/1519	1.02	5/2035 (0.2%)
11	s9	0.66	0/1519	1.13	11/2035 (0.5%)
12	C0	0.55	0/790	1.08	6/1069 (0.6%)
13	C1	0.68	0/1240	1.04	2/1675 (0.1%)
13	c1	0.76	0/1194	1.15	2/1610 (0.1%)
14	C2	0.51	0/900	0.99	2/1224 (0.2%)
14	c2	0.46	0/900	0.92	2/1224 (0.2%)
15	C3	0.60	0/1215	1.04	6/1638 (0.4%)
15	c3	0.70	1/1215 (0.1%)	1.13	3/1638 (0.2%)
16	C4	0.51	0/901	0.96	1/1217 (0.1%)
16	c4	0.68	0/960	1.13	5/1290 (0.4%)
17	C5	0.59	0/998	1.02	4/1341 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	c5	0.61	0/1060	1.10	7/1426 (0.5%)
18	C6	0.56	0/1125	0.99	2/1510 (0.1%)
18	c6	0.62	0/1131	1.06	3/1518 (0.2%)
19	C7	0.57	0/935	1.07	2/1254 (0.2%)
19	c7	0.62	0/914	1.09	4/1224 (0.3%)
20	C8	0.56	0/1211	0.96	1/1628 (0.1%)
20	c8	0.62	0/1211	0.98	0/1628
21	C9	0.56	0/1130	1.04	4/1517 (0.3%)
21	c9	0.60	0/1130	1.07	2/1517 (0.1%)
22	D0	0.60	1/865 (0.1%)	1.03	2/1169 (0.2%)
22	d0	0.58	0/892	1.05	5/1205 (0.4%)
23	D1	0.51	0/693	0.92	0/935
23	d1	0.65	0/693	1.06	4/935 (0.4%)
24	D2	0.63	0/1038	1.12	7/1395 (0.5%)
24	d2	0.80	0/1038	1.13	3/1395 (0.2%)
25	D3	0.70	0/1139	1.12	8/1518 (0.5%)
25	d3	0.80	0/1139	1.10	4/1518 (0.3%)
26	D4	0.54	0/1087	0.95	0/1449
26	d4	0.65	0/1087	1.04	3/1449 (0.2%)
27	D5	0.53	0/571	1.08	2/768 (0.3%)
27	d5	0.56	0/566	1.06	2/761 (0.3%)
28	D6	0.56	0/782	0.97	3/1047 (0.3%)
28	d6	0.68	0/782	1.00	0/1047
29	D7	0.55	0/620	1.09	5/838 (0.6%)
29	d7	0.55	0/620	1.00	2/838 (0.2%)
30	D8	0.48	0/499	0.98	0/670
30	d8	0.49	0/499	0.99	1/670 (0.1%)
31	D9	0.59	0/452	0.94	0/600
31	d9	0.63	0/452	1.01	3/600 (0.5%)
32	E0	0.51	0/483	1.01	2/643 (0.3%)
33	E1	0.56	0/577	1.10	2/770 (0.3%)
34	SR	0.52	0/2494	0.98	8/3393 (0.2%)
34	sR	0.51	0/2495	0.89	1/3395 (0.0%)
35	SM	0.63	0/1113	1.04	2/1502 (0.1%)
35	sM	0.57	0/683	1.04	5/923 (0.5%)
36	1	0.54	0/75394	0.72	10/117545 (0.0%)
36	5	0.57	0/75414	0.72	11/117575 (0.0%)
37	3	0.47	0/2883	0.62	0/4491
37	7	0.56	0/2883	0.70	0/4491
38	4	0.54	0/3746	0.69	0/5832
38	8	0.50	0/3746	0.64	0/5832
39	L2	0.83	1/1948 (0.1%)	1.17	8/2617 (0.3%)
39	l2	0.82	0/1946	1.22	9/2614 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
40	L3	0.78	0/3146	1.13	8/4228 (0.2%)
40	l3	0.96	0/3146	1.20	17/4228 (0.4%)
41	L4	0.89	1/2800 (0.0%)	1.24	18/3790 (0.5%)
41	l4	0.86	0/2800	1.25	22/3790 (0.6%)
42	L5	0.63	0/2425	1.02	8/3271 (0.2%)
42	l5	0.78	0/2408	1.11	9/3248 (0.3%)
43	L6	0.80	0/1260	1.09	0/1694
43	l6	0.81	0/1269	1.09	0/1705
44	L7	0.88	1/1821 (0.1%)	1.16	7/2451 (0.3%)
44	l7	0.86	0/1828	1.18	8/2461 (0.3%)
45	L8	0.65	0/1836	1.13	9/2481 (0.4%)
45	l8	0.65	0/1795	1.03	9/2429 (0.4%)
46	L9	0.73	0/1539	1.08	5/2073 (0.2%)
46	l9	0.88	0/1539	1.12	6/2073 (0.3%)
47	M0	0.80	1/1741 (0.1%)	1.09	8/2335 (0.3%)
47	m0	0.83	1/1758 (0.1%)	1.17	9/2358 (0.4%)
48	M1	0.61	0/1374	1.03	2/1842 (0.1%)
48	m1	0.75	0/1374	1.14	4/1842 (0.2%)
49	M3	0.92	3/1568 (0.2%)	1.22	13/2106 (0.6%)
49	m3	0.82	0/1573	1.18	7/2113 (0.3%)
50	M4	0.82	0/1068	1.12	3/1438 (0.2%)
50	m4	0.87	0/1074	1.19	2/1446 (0.1%)
51	M5	0.79	0/1757	1.09	4/2354 (0.2%)
51	m5	0.77	0/1757	1.11	9/2354 (0.4%)
52	M6	0.87	0/1585	1.22	8/2128 (0.4%)
52	m6	1.03	1/1585 (0.1%)	1.33	15/2128 (0.7%)
53	M7	0.83	0/1443	1.11	3/1944 (0.2%)
53	m7	0.98	1/1250 (0.1%)	1.17	3/1683 (0.2%)
54	M8	0.90	0/1465	1.34	18/1965 (0.9%)
54	m8	0.83	0/1465	1.21	11/1965 (0.6%)
55	M9	0.66	0/1538	1.00	1/2050 (0.0%)
55	m9	0.73	0/1538	1.03	5/2050 (0.2%)
56	N0	0.80	0/1481	1.13	4/1990 (0.2%)
56	n0	0.92	0/1481	1.15	6/1990 (0.3%)
57	N1	0.79	0/1300	1.06	3/1743 (0.2%)
57	n1	0.89	0/1300	1.15	4/1743 (0.2%)
58	N2	0.51	0/812	0.99	2/1099 (0.2%)
58	n2	0.54	0/794	1.00	3/1076 (0.3%)
59	N3	0.76	0/1018	1.10	1/1369 (0.1%)
59	n3	0.86	0/1018	1.22	7/1369 (0.5%)
60	N4	0.65	0/712	1.33	2/958 (0.2%)
60	n4	0.81	0/1052	1.08	6/1398 (0.4%)
61	N5	0.68	0/979	1.05	2/1321 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
61	n5	0.71	0/974	1.10	3/1314 (0.2%)
62	N6	0.80	0/1004	1.16	7/1341 (0.5%)
62	n6	0.74	0/1004	1.11	1/1341 (0.1%)
63	N7	0.58	0/1118	1.01	3/1497 (0.2%)
63	n7	0.58	0/1118	1.00	5/1497 (0.3%)
64	N8	0.89	1/1204 (0.1%)	1.20	5/1612 (0.3%)
64	n8	0.87	0/1204	1.23	8/1612 (0.5%)
65	N9	0.77	0/473	1.19	3/629 (0.5%)
65	n9	0.88	0/473	1.36	3/629 (0.5%)
66	O0	0.56	0/751	0.95	1/1008 (0.1%)
66	o0	0.59	0/775	0.96	1/1040 (0.1%)
67	O1	0.71	0/890	1.09	6/1196 (0.5%)
67	o1	0.79	0/897	1.18	2/1205 (0.2%)
68	O2	0.97	2/1041 (0.2%)	1.23	5/1394 (0.4%)
68	o2	0.95	1/1041 (0.1%)	1.28	3/1394 (0.2%)
69	O3	0.96	0/868	1.17	2/1168 (0.2%)
69	o3	0.97	2/868 (0.2%)	1.19	3/1168 (0.3%)
70	O4	0.73	0/890	1.15	4/1189 (0.3%)
70	o4	0.71	0/890	1.19	5/1189 (0.4%)
71	O5	0.80	0/978	1.12	1/1301 (0.1%)
71	o5	0.67	0/974	0.97	0/1297
72	O6	0.74	0/778	1.13	4/1034 (0.4%)
72	o6	0.68	0/777	1.10	3/1033 (0.3%)
73	O7	0.85	0/696	1.28	7/923 (0.8%)
73	o7	0.81	0/696	1.15	2/923 (0.2%)
74	O8	0.56	0/618	1.07	6/826 (0.7%)
74	o8	0.56	0/614	0.99	0/822
75	O9	0.84	0/443	1.18	5/588 (0.9%)
75	o9	0.84	0/443	1.11	2/588 (0.3%)
76	Q0	0.75	0/423	1.13	2/562 (0.4%)
76	q0	0.97	0/423	1.14	0/562
77	Q1	0.75	0/234	1.07	1/300 (0.3%)
77	q1	0.79	0/234	1.06	0/300
78	Q2	0.87	0/860	1.19	6/1136 (0.5%)
78	q2	0.80	0/860	1.10	3/1136 (0.3%)
79	Q3	0.83	0/701	1.09	0/934
79	q3	0.78	0/701	1.14	1/934 (0.1%)
80	c0	0.50	0/777	0.96	4/1049 (0.4%)
81	e0	0.64	0/499	1.13	2/665 (0.3%)
82	e1	0.55	0/619	1.09	5/822 (0.6%)
84	p0	0.52	0/1092	1.00	5/1474 (0.3%)
87	A	0.61	0/68	0.80	0/103
87	B	0.52	0/68	0.80	0/103

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
All	All	0.61	19/430210 (0.0%)	0.87	764/631570 (0.1%)

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
3	s1	0	1
7	s5	0	2
9	S7	0	1
9	s7	0	1
10	s8	0	1
13	C1	0	1
15	c3	0	1
16	C4	0	1
17	c5	0	1
18	C6	0	1
18	c6	0	1
19	C7	0	2
19	c7	0	3
22	d0	0	1
25	D3	0	1
26	d4	0	2
27	D5	0	3
27	d5	0	1
33	E1	0	1
39	L2	0	1
39	l2	0	2
42	l5	0	2
43	l6	0	1
44	l7	0	2
45	L8	0	2
48	M1	0	2
51	m5	0	1
52	M6	0	1
52	m6	0	1
56	N0	0	2
56	n0	0	1
57	N1	0	1
60	n4	0	1
63	n7	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
64	n8	0	2
65	N9	0	1
65	n9	0	1
82	e1	0	1
All	All	0	52

All (19) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	M0	127	ALA	CA-CB	-6.33	1.44	1.53
15	c3	60	VAL	CA-CB	6.31	1.60	1.53
49	M3	6	ASN	CA-C	-5.95	1.46	1.53
52	m6	104	VAL	CA-CB	5.89	1.62	1.54
39	L2	5	ILE	CA-CB	-5.77	1.46	1.54
68	O2	32	TRP	CA-C	-5.57	1.45	1.52
53	m7	66	SER	C-O	5.55	1.30	1.24
68	o2	38	ILE	CA-CB	-5.53	1.48	1.54
69	o3	22	VAL	CA-CB	-5.53	1.47	1.54
22	D0	72	ASN	CA-C	-5.43	1.50	1.53
4	S2	206	THR	CA-CB	5.41	1.60	1.52
44	L7	164	SER	CA-C	5.38	1.59	1.52
64	N8	56	VAL	CA-CB	-5.38	1.47	1.54
68	O2	77	ALA	CA-CB	-5.32	1.46	1.53
69	o3	49	ILE	CA-CB	-5.14	1.48	1.54
49	M3	57	VAL	CA-C	-5.14	1.47	1.53
49	M3	46	ILE	CA-CB	5.11	1.61	1.54
41	L4	56	ALA	CA-CB	-5.06	1.46	1.53
47	m0	197	VAL	CA-CB	-5.05	1.52	1.55

All (764) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
60	N4	80	ARG	CA-C-N	17.32	141.50	119.84
60	N4	80	ARG	C-N-CA	17.32	141.50	119.84
68	o2	4	LEU	CA-C-N	-15.45	100.53	119.84
68	o2	4	LEU	C-N-CA	-15.45	100.53	119.84
45	L8	158	ASP	CA-C-N	-14.13	102.18	119.84
45	L8	158	ASP	C-N-CA	-14.13	102.18	119.84
65	n9	23	LYS	CA-C-N	-13.03	103.55	119.84
65	n9	23	LYS	C-N-CA	-13.03	103.55	119.84
9	s7	131	PHE	CA-C-N	-12.84	107.89	120.21
9	s7	131	PHE	C-N-CA	-12.84	107.89	120.21

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	s2	93	GLY	N-CA-C	11.24	120.44	110.21
15	c3	136	PRO	CA-C-N	11.15	133.78	119.84
15	c3	136	PRO	C-N-CA	11.15	133.78	119.84
2	s0	166	GLY	N-CA-C	11.03	124.41	110.29
52	M6	69	GLY	CA-C-N	10.78	132.49	119.98
52	M6	69	GLY	C-N-CA	10.78	132.49	119.98
41	L4	222	VAL	CA-C-N	10.74	133.26	119.84
41	L4	222	VAL	C-N-CA	10.74	133.26	119.84
54	M8	60	PRO	O-C-N	10.30	125.99	121.15
54	M8	59	ARG	CA-C-N	-10.12	112.37	119.66
54	M8	59	ARG	C-N-CA	-10.12	112.37	119.66
5	s3	210	GLU	CA-C-N	9.67	131.93	119.84
5	s3	210	GLU	C-N-CA	9.67	131.93	119.84
56	N0	68	HIS	CA-C-N	9.63	129.87	119.28
56	N0	68	HIS	C-N-CA	9.63	129.87	119.28
73	O7	5	THR	CA-C-N	-9.41	109.22	119.19
73	O7	5	THR	C-N-CA	-9.41	109.22	119.19
9	s7	185	ILE	CA-C-N	-9.39	108.10	119.84
9	s7	185	ILE	C-N-CA	-9.39	108.10	119.84
72	o6	21	THR	CA-C-N	9.38	131.56	119.84
72	o6	21	THR	C-N-CA	9.38	131.56	119.84
5	S3	210	GLU	CA-C-N	9.32	131.49	119.84
5	S3	210	GLU	C-N-CA	9.32	131.49	119.84
76	Q0	79	GLU	CA-C-N	9.26	131.41	119.84
76	Q0	79	GLU	C-N-CA	9.26	131.41	119.84
61	N5	43	ALA	CA-C-N	9.17	131.30	119.84
61	N5	43	ALA	C-N-CA	9.17	131.30	119.84
49	M3	47	ALA	CA-C-N	-8.91	111.74	120.83
49	M3	47	ALA	C-N-CA	-8.91	111.74	120.83
61	n5	43	ALA	CA-C-N	8.91	130.97	119.84
61	n5	43	ALA	C-N-CA	8.91	130.97	119.84
12	C0	82	LEU	CA-C-N	8.89	128.96	119.89
12	C0	82	LEU	C-N-CA	8.89	128.96	119.89
4	s2	150	GLN	CA-C-N	8.89	129.44	119.93
4	s2	150	GLN	C-N-CA	8.89	129.44	119.93
7	s5	27	THR	CA-C-N	8.88	130.94	119.84
7	s5	27	THR	C-N-CA	8.88	130.94	119.84
24	D2	94	LEU	CA-C-N	8.84	129.01	119.28
24	D2	94	LEU	C-N-CA	8.84	129.01	119.28
51	M5	185	ALA	N-CA-C	-8.84	102.50	113.38
36	5	1307	G	C2'-C3'-O3'	8.84	122.76	109.50
6	S4	105	VAL	N-CA-C	-8.82	105.33	113.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
70	O4	25	THR	CA-C-N	-8.80	110.72	119.87
70	O4	25	THR	C-N-CA	-8.80	110.72	119.87
44	l7	95	ILE	CA-C-N	8.78	129.42	120.38
44	l7	95	ILE	C-N-CA	8.78	129.42	120.38
41	L4	57	GLY	N-CA-C	-8.68	103.93	115.21
12	C0	88	PRO	N-CA-CB	8.67	112.36	103.25
47	m0	159	PHE	CA-C-N	8.62	129.28	120.14
47	m0	159	PHE	C-N-CA	8.62	129.28	120.14
36	5	1307	G	P-O3'-C3'	8.57	133.06	120.20
2	s0	3	LEU	CA-C-N	8.47	130.43	119.84
2	s0	3	LEU	C-N-CA	8.47	130.43	119.84
47	m0	4	ARG	CA-C-N	8.45	130.40	119.84
47	m0	4	ARG	C-N-CA	8.45	130.40	119.84
56	n0	134	ASP	N-CA-C	-8.44	102.39	114.12
39	l2	107	VAL	CA-C-N	8.43	128.94	119.92
39	l2	107	VAL	C-N-CA	8.43	128.94	119.92
81	e0	62	VAL	N-CA-C	-8.43	102.50	110.42
11	s9	172	VAL	N-CA-C	-8.40	104.56	112.96
41	l4	23	PRO	CA-C-O	-8.35	115.13	121.31
44	l7	192	GLY	CA-C-N	8.34	130.27	119.84
44	l7	192	GLY	C-N-CA	8.34	130.27	119.84
73	O7	49	TRP	N-CA-C	-8.31	103.16	113.38
52	m6	108	ILE	CA-C-N	8.27	128.90	120.38
52	m6	108	ILE	C-N-CA	8.27	128.90	120.38
54	M8	60	PRO	CA-C-N	8.25	128.76	119.93
54	M8	60	PRO	C-N-CA	8.25	128.76	119.93
78	Q2	4	VAL	CA-C-N	8.24	128.29	119.89
78	Q2	4	VAL	C-N-CA	8.24	128.29	119.89
52	m6	107	GLY	CA-C-N	-8.23	114.20	123.25
52	m6	107	GLY	C-N-CA	-8.23	114.20	123.25
46	L9	164	ILE	N-CA-C	-8.22	104.47	113.43
49	m3	149	GLN	CA-C-N	8.18	130.06	119.84
49	m3	149	GLN	C-N-CA	8.18	130.06	119.84
40	L3	82	PRO	CA-C-N	8.08	129.94	119.84
40	L3	82	PRO	C-N-CA	8.08	129.94	119.84
25	D3	142	LYS	CA-C-N	8.07	129.93	119.84
25	D3	142	LYS	C-N-CA	8.07	129.93	119.84
47	M0	15	LYS	CA-C-N	8.04	129.89	119.84
47	M0	15	LYS	C-N-CA	8.04	129.89	119.84
68	O2	4	LEU	CA-C-N	8.04	128.53	119.93
68	O2	4	LEU	C-N-CA	8.04	128.53	119.93
36	1	1307	G	C2'-C3'-O3'	7.94	121.41	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D7	68	GLY	N-CA-C	-7.89	103.35	112.50
69	O3	92	LYS	N-CA-C	-7.87	103.14	112.89
54	m8	59	ARG	CA-C-N	-7.85	112.29	120.38
54	m8	59	ARG	C-N-CA	-7.85	112.29	120.38
5	S3	219	ALA	CA-C-N	7.85	129.65	119.84
5	S3	219	ALA	C-N-CA	7.85	129.65	119.84
64	n8	67	HIS	N-CA-C	-7.84	101.84	111.33
21	C9	30	VAL	CA-C-N	7.83	129.62	119.84
21	C9	30	VAL	C-N-CA	7.83	129.62	119.84
49	M3	138	VAL	N-CA-C	-7.79	98.61	109.21
35	SM	167	PRO	N-CA-CB	7.79	111.43	103.25
35	sM	167	PRO	N-CA-CB	7.79	111.43	103.25
41	L4	3	ARG	CA-C-N	7.79	129.57	119.84
41	L4	3	ARG	C-N-CA	7.79	129.57	119.84
41	l4	3	ARG	CA-C-N	7.78	129.57	119.84
41	l4	3	ARG	C-N-CA	7.78	129.57	119.84
57	n1	154	VAL	CA-C-N	7.78	127.70	119.85
57	n1	154	VAL	C-N-CA	7.78	127.70	119.85
17	c5	124	THR	CA-C-N	7.75	129.53	119.84
17	c5	124	THR	C-N-CA	7.75	129.53	119.84
3	s1	205	PHE	CA-C-N	7.74	129.52	119.84
3	s1	205	PHE	C-N-CA	7.74	129.52	119.84
3	S1	205	PHE	CA-C-N	7.70	129.46	119.84
3	S1	205	PHE	C-N-CA	7.70	129.46	119.84
29	D7	37	CYS	CA-C-N	7.61	129.35	119.84
29	D7	37	CYS	C-N-CA	7.61	129.35	119.84
68	o2	39	ASP	N-CA-C	-7.58	104.27	113.97
42	l5	191	ASP	CA-C-N	7.56	127.60	119.28
42	l5	191	ASP	C-N-CA	7.56	127.60	119.28
46	L9	41	ILE	N-CA-C	7.56	118.47	112.12
9	S7	62	VAL	CA-C-N	7.54	129.27	119.84
9	S7	62	VAL	C-N-CA	7.54	129.27	119.84
21	c9	30	VAL	CA-C-N	7.48	127.52	119.89
21	c9	30	VAL	C-N-CA	7.48	127.52	119.89
45	l8	68	ARG	N-CA-C	-7.45	100.00	110.50
10	S8	172	ARG	CA-C-N	7.43	128.09	119.47
10	S8	172	ARG	C-N-CA	7.43	128.09	119.47
51	m5	76	PRO	CA-C-N	-7.43	110.67	122.79
51	m5	76	PRO	C-N-CA	-7.43	110.67	122.79
56	N0	134	ASP	N-CA-C	-7.39	104.30	113.38
54	m8	18	ALA	CA-C-N	-7.36	112.75	120.03
54	m8	18	ALA	C-N-CA	-7.36	112.75	120.03

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
78	Q2	30	ALA	N-CA-C	7.33	119.46	108.31
45	l8	24	ASN	CA-C-N	7.32	128.99	119.84
45	l8	24	ASN	C-N-CA	7.32	128.99	119.84
39	L2	119	LYS	CA-C-N	-7.31	112.47	119.85
39	L2	119	LYS	C-N-CA	-7.31	112.47	119.85
80	c0	97	PRO	N-CA-CB	7.30	110.92	103.25
4	S2	181	SER	CA-C-N	7.29	128.95	119.84
4	S2	181	SER	C-N-CA	7.29	128.95	119.84
71	O5	80	LEU	N-CA-C	-7.28	103.83	114.39
16	c4	95	GLY	CA-C-N	7.28	128.94	119.84
16	c4	95	GLY	C-N-CA	7.28	128.94	119.84
19	C7	85	VAL	CA-C-N	7.26	128.91	119.84
19	C7	85	VAL	C-N-CA	7.26	128.91	119.84
2	s0	151	SER	CA-C-N	7.26	128.40	119.98
2	s0	151	SER	C-N-CA	7.26	128.40	119.98
50	M4	30	GLY	N-CA-C	-7.25	105.71	115.36
54	M8	99	THR	N-CA-C	7.25	126.24	110.80
3	s1	22	ASP	CA-C-N	7.17	127.78	120.04
3	s1	22	ASP	C-N-CA	7.17	127.78	120.04
63	N7	103	GLN	CA-C-N	7.16	126.42	118.97
63	N7	103	GLN	C-N-CA	7.16	126.42	118.97
6	s4	34	GLY	CA-C-N	7.15	126.78	119.56
6	s4	34	GLY	C-N-CA	7.15	126.78	119.56
58	n2	21	SER	CA-C-N	-7.15	112.32	120.04
58	n2	21	SER	C-N-CA	-7.15	112.32	120.04
24	D2	76	SER	CA-C-N	-7.14	112.06	120.13
24	D2	76	SER	C-N-CA	-7.14	112.06	120.13
41	l4	300	ARG	CA-C-N	7.12	128.74	119.84
41	l4	300	ARG	C-N-CA	7.12	128.74	119.84
6	S4	28	ALA	CA-C-N	-7.10	112.66	119.76
6	S4	28	ALA	C-N-CA	-7.10	112.66	119.76
80	c0	83	PRO	N-CA-CB	7.10	110.70	103.25
49	M3	104	ARG	N-CA-C	-7.09	106.54	114.62
54	M8	162	ALA	CA-C-N	7.08	127.12	119.90
54	M8	162	ALA	C-N-CA	7.08	127.12	119.90
22	D0	62	VAL	N-CA-C	7.07	117.97	106.72
50	m4	53	VAL	CA-C-N	7.07	127.46	119.83
50	m4	53	VAL	C-N-CA	7.07	127.46	119.83
73	O7	61	THR	N-CA-C	-7.06	104.27	113.17
15	C3	22	ALA	CA-C-N	7.05	143.93	127.00
15	C3	22	ALA	C-N-CA	7.05	143.93	127.00
45	L8	71	VAL	CA-C-N	7.04	127.63	120.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	L8	71	VAL	C-N-CA	7.04	127.63	120.38
6	S4	229	GLY	N-CA-C	7.04	120.08	110.58
51	M5	73	ARG	CA-C-N	7.03	128.63	119.84
51	M5	73	ARG	C-N-CA	7.03	128.63	119.84
12	C0	87	VAL	CA-C-N	7.01	128.60	119.84
12	C0	87	VAL	C-N-CA	7.01	128.60	119.84
82	e1	147	VAL	N-CA-C	7.00	117.68	110.05
18	c6	40	GLU	CA-C-N	-6.99	112.43	119.56
18	c6	40	GLU	C-N-CA	-6.99	112.43	119.56
6	S4	34	GLY	CA-C-N	6.98	126.69	119.64
6	S4	34	GLY	C-N-CA	6.98	126.69	119.64
2	S0	193	GLN	CA-C-N	6.95	128.53	119.84
2	S0	193	GLN	C-N-CA	6.95	128.53	119.84
65	N9	23	LYS	CA-C-N	-6.95	113.74	120.83
65	N9	23	LYS	C-N-CA	-6.95	113.74	120.83
6	s4	103	TYR	N-CA-C	6.94	121.36	110.32
49	M3	126	PHE	CA-C-N	6.92	128.50	119.84
49	M3	126	PHE	C-N-CA	6.92	128.50	119.84
78	Q2	30	ALA	CB-CA-C	-6.92	108.58	116.54
7	S5	29	ILE	CA-C-N	6.92	128.49	119.84
7	S5	29	ILE	C-N-CA	6.92	128.49	119.84
2	s0	122	ILE	N-CA-C	-6.91	102.51	110.05
5	s3	215	GLU	CA-C-N	6.91	128.48	119.84
5	s3	215	GLU	C-N-CA	6.91	128.48	119.84
4	S2	150	GLN	CA-C-N	6.90	128.47	119.84
4	S2	150	GLN	C-N-CA	6.90	128.47	119.84
41	l4	191	LYS	N-CA-C	-6.89	104.69	113.23
60	n4	75	THR	N-CA-C	6.88	119.96	108.13
48	M1	73	GLY	CA-C-N	6.87	128.43	119.84
48	M1	73	GLY	C-N-CA	6.87	128.43	119.84
10	S8	148	ALA	N-CA-C	-6.83	103.49	112.24
36	1	1329	U	C4'-C3'-O3'	6.83	119.64	109.40
80	c0	88	PRO	N-CA-CB	6.81	110.40	103.25
31	d9	9	SER	N-CA-C	6.78	117.44	107.88
7	s5	29	ILE	CA-C-N	6.77	127.16	119.92
7	s5	29	ILE	C-N-CA	6.77	127.16	119.92
41	l4	57	GLY	N-CA-C	-6.75	106.14	114.92
64	n8	46	ASP	N-CA-C	-6.75	98.62	109.96
21	C9	89	ARG	CA-C-N	6.71	128.23	119.84
21	C9	89	ARG	C-N-CA	6.71	128.23	119.84
17	C5	52	LYS	CA-C-N	-6.70	111.46	119.84
17	C5	52	LYS	C-N-CA	-6.70	111.46	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d7	37	CYS	CA-C-N	6.69	128.21	119.84
29	d7	37	CYS	C-N-CA	6.69	128.21	119.84
5	S3	42	THR	CA-C-N	-6.67	112.89	119.76
5	S3	42	THR	C-N-CA	-6.67	112.89	119.76
15	C3	22	ALA	C-N-CD	-6.65	105.96	120.60
41	L4	145	ILE	CA-C-N	6.64	128.14	119.84
41	L4	145	ILE	C-N-CA	6.64	128.14	119.84
11	S9	138	LYS	N-CA-C	-6.61	104.97	113.16
4	s2	181	SER	CA-C-N	6.59	128.08	119.84
4	s2	181	SER	C-N-CA	6.59	128.08	119.84
56	n0	171	PHE	N-CA-C	6.59	121.48	113.17
68	O2	84	THR	N-CA-C	-6.59	105.10	113.01
34	SR	56	VAL	CA-C-N	6.59	128.08	119.84
34	SR	56	VAL	C-N-CA	6.59	128.08	119.84
51	m5	78	GLY	N-CA-C	-6.58	105.98	115.27
9	S7	31	SER	CA-C-N	-6.58	111.62	119.84
9	S7	31	SER	C-N-CA	-6.58	111.62	119.84
39	l2	14	SER	CB-CA-C	-6.57	108.29	117.23
28	D6	97	PRO	N-CA-C	6.57	118.72	110.70
57	n1	147	VAL	CA-C-N	6.56	128.04	119.84
57	n1	147	VAL	C-N-CA	6.56	128.04	119.84
49	M3	149	GLN	CA-C-N	6.56	128.30	120.23
49	M3	149	GLN	C-N-CA	6.56	128.30	120.23
27	D5	95	HIS	N-CA-C	6.55	124.75	110.80
75	O9	43	ASN	N-CA-C	6.55	119.01	107.61
17	c5	74	ALA	CA-C-N	6.55	128.03	119.84
17	c5	74	ALA	C-N-CA	6.55	128.03	119.84
41	l4	316	ASN	CA-C-N	6.54	128.01	119.84
41	l4	316	ASN	C-N-CA	6.54	128.01	119.84
6	s4	136	VAL	N-CA-C	6.52	114.24	108.63
54	m8	99	THR	N-CA-C	6.52	124.69	110.80
44	L7	89	ILE	N-CA-C	-6.51	107.15	113.53
39	L2	209	HIS	N-CA-C	6.51	114.08	108.22
70	O4	11	ASN	CA-C-N	6.50	127.43	120.47
70	O4	11	ASN	C-N-CA	6.50	127.43	120.47
9	s7	62	VAL	CA-C-N	6.50	127.97	119.84
9	s7	62	VAL	C-N-CA	6.50	127.97	119.84
46	l9	164	ILE	N-CA-C	-6.50	106.40	112.83
24	D2	84	GLY	N-CA-C	-6.49	104.46	112.77
7	S5	126	ASP	CB-CA-C	-6.49	109.08	116.54
49	m3	47	ALA	CA-C-N	-6.48	111.74	119.84
49	m3	47	ALA	C-N-CA	-6.48	111.74	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	s9	4	ALA	CA-C-N	6.48	127.94	119.84
11	s9	4	ALA	C-N-CA	6.48	127.94	119.84
40	l3	88	GLY	N-CA-C	6.48	120.56	110.91
39	L2	138	GLY	N-CA-C	6.44	119.68	111.37
18	C6	65	ILE	N-CA-C	6.44	117.30	107.77
84	p0	77	LEU	CA-C-N	-6.44	113.10	120.89
84	p0	77	LEU	C-N-CA	-6.44	113.10	120.89
10	S8	107	THR	CA-C-N	-6.44	111.80	119.84
10	S8	107	THR	C-N-CA	-6.44	111.80	119.84
36	5	2372	A	C4'-C3'-O3'	6.43	119.05	109.40
9	s7	31	SER	N-CA-C	6.41	121.58	113.25
9	S7	50	ASP	N-CA-C	6.41	119.61	109.81
36	5	2372	A	P-O3'-C3'	6.39	129.79	120.20
41	L4	330	TYR	N-CA-C	-6.38	104.98	112.89
40	l3	8	ALA	CA-C-N	-6.37	114.09	120.21
40	l3	8	ALA	C-N-CA	-6.37	114.09	120.21
48	m1	151	SER	N-CA-C	-6.36	102.09	110.43
6	S4	42	LEU	CA-C-N	6.36	126.38	119.90
6	S4	42	LEU	C-N-CA	6.36	126.38	119.90
6	s4	181	VAL	N-CA-C	6.34	116.72	108.35
74	O8	69	LEU	CA-C-N	6.33	126.91	120.38
74	O8	69	LEU	C-N-CA	6.33	126.91	120.38
52	m6	128	ARG	N-CA-C	6.32	119.40	111.24
49	M3	57	VAL	CB-CA-C	-6.32	104.64	111.59
28	D6	96	ALA	CA-C-N	6.31	126.88	120.38
28	D6	96	ALA	C-N-CA	6.31	126.88	120.38
5	S3	37	VAL	N-CA-C	6.30	122.44	109.34
27	D5	98	GLN	N-CA-C	6.29	118.96	108.96
19	c7	117	LEU	CA-C-N	6.28	128.42	120.51
19	c7	117	LEU	C-N-CA	6.28	128.42	120.51
40	L3	25	ILE	CB-CA-C	-6.26	102.91	112.05
17	c5	52	LYS	CA-C-N	-6.26	112.01	119.84
17	c5	52	LYS	C-N-CA	-6.26	112.01	119.84
41	L4	139	GLY	N-CA-C	-6.25	98.36	113.18
36	1	282	G	C2'-C3'-O3'	6.25	123.08	113.70
72	O6	51	SER	CA-C-N	6.25	127.65	119.84
72	O6	51	SER	C-N-CA	6.25	127.65	119.84
42	L5	12	TYR	N-CA-C	-6.23	104.11	111.03
84	p0	91	GLU	CA-C-N	-6.23	111.83	120.25
84	p0	91	GLU	C-N-CA	-6.23	111.83	120.25
52	m6	109	PRO	CA-C-N	6.23	126.80	120.38
52	m6	109	PRO	C-N-CA	6.23	126.80	120.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	s5	44	ASN	N-CA-C	-6.21	103.66	111.11
23	d1	13	VAL	CA-C-N	6.20	126.56	119.92
23	d1	13	VAL	C-N-CA	6.20	126.56	119.92
10	s8	107	THR	CA-C-N	-6.19	112.10	119.84
10	s8	107	THR	C-N-CA	-6.19	112.10	119.84
47	M0	4	ARG	CA-C-N	6.17	126.12	119.76
47	M0	4	ARG	C-N-CA	6.17	126.12	119.76
41	l4	74	ILE	CA-C-N	-6.17	113.40	119.76
41	l4	74	ILE	C-N-CA	-6.17	113.40	119.76
49	m3	42	ARG	N-CA-C	-6.17	104.25	110.97
35	sM	80	ALA	N-CA-C	-6.17	106.29	113.88
67	O1	64	VAL	CB-CA-C	-6.16	103.97	112.04
18	c6	63	ILE	N-CA-C	6.15	116.69	108.27
54	M8	131	ALA	CA-C-N	6.13	125.69	119.19
54	M8	131	ALA	C-N-CA	6.13	125.69	119.19
74	O8	70	PRO	CA-C-N	6.13	127.08	120.83
74	O8	70	PRO	C-N-CA	6.13	127.08	120.83
8	s6	33	GLY	N-CA-C	-6.12	107.41	114.69
73	O7	51	ALA	N-CA-C	6.12	117.62	111.07
69	o3	32	ILE	N-CA-C	6.11	116.61	107.51
13	C1	112	SER	CA-C-N	6.10	127.47	119.84
13	C1	112	SER	C-N-CA	6.10	127.47	119.84
4	S2	238	SER	N-CA-C	6.10	117.07	109.57
25	D3	29	TYR	N-CA-C	-6.10	104.55	111.14
42	l5	271	LYS	N-CA-C	-6.10	104.21	112.26
17	C5	124	THR	CA-C-N	6.08	127.44	119.84
17	C5	124	THR	C-N-CA	6.08	127.44	119.84
6	s4	151	ASP	CA-C-N	6.08	126.19	119.87
6	s4	151	ASP	C-N-CA	6.08	126.19	119.87
45	L8	72	PRO	CA-C-N	6.06	126.85	120.12
45	L8	72	PRO	C-N-CA	6.06	126.85	120.12
35	sM	43	ASP	CA-C-N	6.06	127.42	119.84
35	sM	43	ASP	C-N-CA	6.06	127.42	119.84
52	M6	15	LEU	N-CA-C	6.05	117.87	109.15
11	s9	143	ILE	CA-C-N	6.05	127.40	119.84
11	s9	143	ILE	C-N-CA	6.05	127.40	119.84
16	c4	56	SER	CA-C-N	6.05	126.21	119.32
16	c4	56	SER	C-N-CA	6.05	126.21	119.32
62	N6	111	LEU	N-CA-C	6.04	118.80	109.07
44	l7	229	PHE	CA-CB-CG	6.04	119.84	113.80
22	d0	71	PRO	CA-C-O	-6.03	114.59	122.19
41	l4	260	GLN	N-CA-C	-6.03	104.63	112.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	c1	128	CYS	N-CA-C	6.03	123.44	113.50
39	l2	216	HIS	N-CA-C	-6.03	100.14	109.24
75	O9	44	TRP	CA-C-N	-6.02	114.20	123.17
75	O9	44	TRP	C-N-CA	-6.02	114.20	123.17
56	n0	88	HIS	N-CA-C	6.02	118.44	108.99
55	m9	89	LEU	CA-C-N	6.02	126.04	119.90
55	m9	89	LEU	C-N-CA	6.02	126.04	119.90
59	n3	21	ALA	CA-C-N	-6.01	115.11	123.10
59	n3	21	ALA	C-N-CA	-6.01	115.11	123.10
67	o1	107	VAL	N-CA-C	6.00	116.94	108.17
70	o4	28	GLY	N-CA-C	-6.00	106.43	115.32
45	l8	97	TYR	N-CA-C	6.00	117.49	110.41
22	d0	54	GLY	CA-C-N	6.00	127.34	119.84
22	d0	54	GLY	C-N-CA	6.00	127.34	119.84
2	S0	3	LEU	CA-C-N	5.99	127.32	119.84
2	S0	3	LEU	C-N-CA	5.99	127.32	119.84
2	S0	162	CYS	CB-CA-C	-5.98	107.81	116.54
78	q2	92	GLU	CA-C-N	-5.98	113.97	122.94
78	q2	92	GLU	C-N-CA	-5.98	113.97	122.94
49	m3	46	ILE	N-CA-C	-5.98	106.67	112.29
51	m5	185	ALA	N-CA-C	-5.97	105.97	113.20
56	n0	5	LYS	N-CA-C	-5.97	100.89	110.14
2	S0	167	LYS	CB-CA-C	-5.96	109.71	116.63
39	l2	122	ASP	N-CA-C	-5.96	105.59	112.92
67	O1	29	ALA	CA-C-N	-5.96	113.54	119.56
67	O1	29	ALA	C-N-CA	-5.96	113.54	119.56
7	s5	99	MET	N-CA-C	5.96	116.42	108.38
4	s2	233	GLN	CA-C-N	-5.94	112.41	119.84
4	s2	233	GLN	C-N-CA	-5.94	112.41	119.84
42	L5	24	ARG	N-CA-C	-5.92	104.83	111.28
24	D2	55	ASP	N-CA-C	-5.91	102.17	110.50
47	M0	155	ALA	N-CA-C	-5.91	104.96	111.82
40	l3	278	ILE	N-CA-C	5.90	117.67	109.29
46	L9	92	TYR	N-CA-C	-5.90	102.18	110.50
42	l5	140	ARG	CA-C-N	-5.90	114.19	120.03
42	l5	140	ARG	C-N-CA	-5.90	114.19	120.03
16	C4	132	ARG	N-CA-C	5.90	118.47	111.33
36	1	1308	A	O5'-P-OP2	-5.88	90.35	108.00
53	m7	43	LYS	N-CA-C	-5.88	104.78	111.07
60	n4	79	GLN	N-CA-C	5.87	119.29	109.95
3	s1	34	ALA	CA-C-N	5.86	127.17	119.84
3	s1	34	ALA	C-N-CA	5.86	127.17	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
65	n9	20	GLY	O-C-N	5.85	127.03	123.35
40	L3	291	GLU	N-CA-C	-5.84	102.79	110.33
26	d4	58	PHE	N-CA-C	5.83	123.22	110.80
64	N8	57	GLY	N-CA-C	5.83	127.00	113.18
3	S1	218	LEU	CA-CB-CG	5.83	136.69	116.30
39	L2	150	LEU	CA-C-N	-5.83	113.68	119.56
39	L2	150	LEU	C-N-CA	-5.83	113.68	119.56
55	m9	57	VAL	N-CA-C	5.81	116.56	108.89
52	M6	79	ILE	N-CA-C	-5.81	104.86	110.72
44	L7	119	VAL	N-CA-C	5.80	115.90	108.12
36	5	1481	A	P-O3'-C3'	5.80	128.91	120.20
51	m5	142	ILE	N-CA-C	-5.80	107.16	112.96
40	L3	173	GLN	N-CA-C	5.79	117.59	111.28
25	D3	45	GLY	N-CA-C	-5.79	107.01	115.63
63	n7	103	GLN	CA-C-N	5.79	126.18	119.47
63	n7	103	GLN	C-N-CA	5.79	126.18	119.47
26	d4	60	PHE	N-CA-C	5.79	117.73	108.41
6	s4	30	ARG	CA-C-N	5.79	127.07	119.84
6	s4	30	ARG	C-N-CA	5.79	127.07	119.84
77	Q1	6	ARG	N-CA-C	-5.78	105.49	112.54
15	c3	150	VAL	N-CA-C	-5.78	108.22	113.71
15	C3	43	LYS	N-CA-C	-5.77	106.24	113.28
4	s2	82	ASN	N-CA-C	5.76	117.86	108.76
59	n3	17	LEU	CA-C-N	5.76	126.08	119.92
59	n3	17	LEU	C-N-CA	5.76	126.08	119.92
27	d5	98	GLN	N-CA-C	5.74	117.79	108.26
73	o7	29	VAL	N-CA-C	5.74	115.93	110.42
70	o4	11	ASN	CA-C-N	5.74	127.84	120.89
70	o4	11	ASN	C-N-CA	5.74	127.84	120.89
8	S6	85	ARG	CA-C-N	5.74	125.67	119.76
8	S6	85	ARG	C-N-CA	5.74	125.67	119.76
67	O1	23	VAL	N-CA-C	5.74	117.71	109.51
3	s1	53	GLY	N-CA-C	-5.74	103.74	111.54
51	m5	106	VAL	N-CA-C	-5.74	104.53	112.50
2	S0	103	THR	CA-C-N	5.73	125.92	120.31
2	S0	103	THR	C-N-CA	5.73	125.92	120.31
1	2	1761	U	C2'-C3'-O3'	5.72	118.08	109.50
6	S4	30	ARG	CA-C-N	5.70	126.97	119.84
6	S4	30	ARG	C-N-CA	5.70	126.97	119.84
67	o1	49	VAL	N-CA-C	5.70	115.79	106.72
14	c2	34	THR	N-CA-C	-5.70	106.87	113.88
5	S3	37	VAL	CB-CA-C	-5.69	101.96	111.29

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	c1	120	GLY	N-CA-C	-5.68	99.71	113.18
27	d5	86	GLU	N-CA-C	-5.68	99.93	108.96
41	l4	247	PHE	CA-C-N	-5.68	116.15	123.19
41	l4	247	PHE	C-N-CA	-5.68	116.15	123.19
47	M0	169	LYS	N-CA-C	-5.67	106.02	113.17
1	6	1097	U	P-O3'-C3'	5.67	128.70	120.20
40	l3	220	VAL	CA-C-N	5.67	129.31	120.75
40	l3	220	VAL	C-N-CA	5.67	129.31	120.75
51	M5	201	ARG	N-CA-C	-5.66	105.03	111.14
1	6	103	A	C4'-C3'-O3'	5.66	117.89	109.40
44	l7	93	ASN	N-CA-C	5.66	119.28	110.17
46	L9	40	HIS	CA-C-N	-5.65	116.84	122.77
46	L9	40	HIS	C-N-CA	-5.65	116.84	122.77
41	l4	276	LEU	CA-C-N	5.65	125.65	119.89
41	l4	276	LEU	C-N-CA	5.65	125.65	119.89
47	m0	81	GLY	N-CA-C	5.65	118.61	112.29
51	m5	75	VAL	CA-C-N	5.64	126.89	119.84
51	m5	75	VAL	C-N-CA	5.64	126.89	119.84
51	m5	177	GLY	N-CA-C	5.63	117.78	112.04
14	C2	81	ASP	CA-C-N	5.63	126.87	119.84
14	C2	81	ASP	C-N-CA	5.63	126.87	119.84
29	D7	27	GLY	CA-C-N	5.62	125.60	120.03
29	D7	27	GLY	C-N-CA	5.62	125.60	120.03
52	m6	27	LEU	N-CA-C	5.62	117.10	110.97
24	d2	101	TYR	N-CA-C	5.62	116.62	107.23
34	sR	233	THR	N-CA-C	5.62	116.61	107.23
64	N8	5	PHE	CA-C-N	-5.62	112.47	122.07
64	N8	5	PHE	C-N-CA	-5.62	112.47	122.07
54	M8	133	LYS	N-CA-C	-5.62	106.28	113.02
49	M3	7	LEU	CA-C-N	-5.61	114.54	120.66
49	M3	7	LEU	C-N-CA	-5.61	114.54	120.66
81	e0	52	GLY	N-CA-C	-5.61	107.58	115.32
23	d1	30	ALA	N-CA-C	-5.60	105.79	113.30
54	m8	170	ARG	N-CA-C	-5.60	102.60	110.50
3	s1	43	VAL	N-CA-C	5.60	117.00	110.62
40	l3	306	THR	CA-C-N	5.59	125.53	119.78
40	l3	306	THR	C-N-CA	5.59	125.53	119.78
46	l9	121	LYS	N-CA-C	-5.58	106.31	113.23
1	2	1039	A	O4'-C1'-N9	5.58	116.57	108.20
22	d0	75	GLY	N-CA-C	-5.58	106.44	112.08
62	N6	113	LYS	N-CA-C	-5.58	105.20	111.28
59	n3	44	SER	N-CA-C	5.58	118.54	109.06

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	c7	52	GLY	N-CA-C	5.58	120.84	113.37
70	o4	10	ARG	N-CA-C	5.58	118.08	111.33
53	M7	121	GLN	N-CA-C	5.57	117.81	108.73
54	M8	126	GLN	N-CA-C	-5.57	105.28	111.36
64	n8	37	GLY	N-CA-C	-5.57	107.42	114.16
50	M4	53	VAL	CA-C-N	5.57	126.01	119.99
50	M4	53	VAL	C-N-CA	5.57	126.01	119.99
47	M0	26	VAL	CA-C-N	5.57	125.55	120.03
47	M0	26	VAL	C-N-CA	5.57	125.55	120.03
8	S6	54	GLY	N-CA-C	5.57	126.37	113.18
39	l2	232	GLY	N-CA-C	-5.56	107.86	114.48
64	n8	121	VAL	CA-C-N	5.56	125.74	119.90
64	n8	121	VAL	C-N-CA	5.56	125.74	119.90
62	n6	56	VAL	N-CA-C	5.55	117.05	108.44
47	m0	26	VAL	CA-C-N	5.55	126.33	120.11
47	m0	26	VAL	C-N-CA	5.55	126.33	120.11
3	S1	178	GLY	N-CA-C	-5.55	104.12	112.89
36	5	2682	C	C2'-C3'-O3'	5.55	122.02	113.70
48	m1	112	LEU	CA-CB-CG	5.53	135.65	116.30
17	c5	23	GLU	N-CA-C	-5.53	104.28	111.02
41	L4	192	GLY	N-CA-C	-5.52	106.11	112.73
40	l3	80	ASP	CA-C-N	-5.51	116.47	122.59
40	l3	80	ASP	C-N-CA	-5.51	116.47	122.59
44	l7	138	TYR	CA-C-N	5.51	125.41	119.85
44	l7	138	TYR	C-N-CA	5.51	125.41	119.85
59	N3	89	ASP	N-CA-C	-5.50	106.15	112.92
84	p0	207	GLU	N-CA-C	-5.50	107.22	114.04
22	d0	71	PRO	N-CA-C	-5.50	101.89	112.01
5	s3	219	ALA	CA-C-N	5.50	126.71	119.84
5	s3	219	ALA	C-N-CA	5.50	126.71	119.84
40	L3	357	LYS	N-CA-C	-5.50	107.58	114.56
44	L7	95	ILE	CA-C-N	-5.50	114.72	120.38
44	L7	95	ILE	C-N-CA	-5.50	114.72	120.38
34	SR	203	THR	N-CA-C	5.49	122.50	110.80
56	N0	40	ARG	N-CA-C	-5.49	104.94	111.69
45	l8	41	GLN	CA-C-N	5.49	125.79	119.92
45	l8	41	GLN	C-N-CA	5.49	125.79	119.92
52	m6	108	ILE	CB-CA-C	5.48	116.29	111.08
25	D3	87	VAL	N-CA-C	5.48	113.57	108.15
9	s7	9	LEU	CB-CA-C	-5.47	108.48	116.53
36	5	2272	G	O4'-C1'-N9	5.47	116.41	108.20
72	O6	79	SER	N-CA-C	5.47	115.25	108.19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	s6	172	ALA	CA-C-N	5.47	126.68	119.84
8	s6	172	ALA	C-N-CA	5.47	126.68	119.84
36	1	65	A	P-O3'-C3'	5.47	128.40	120.20
40	L3	253	GLY	N-CA-C	5.46	119.09	111.00
45	l8	128	LYS	CA-C-N	5.46	125.37	119.85
45	l8	128	LYS	C-N-CA	5.46	125.37	119.85
34	SR	71	CYS	CB-CA-C	-5.46	108.57	116.54
66	o0	44	ILE	N-CA-C	5.45	115.75	108.11
41	L4	191	LYS	N-CA-C	-5.45	106.58	113.18
5	s3	173	ARG	N-CA-C	5.45	118.32	109.06
41	L4	221	ASN	CA-C-N	-5.45	118.03	123.04
41	L4	221	ASN	C-N-CA	-5.45	118.03	123.04
41	L4	307	GLN	N-CA-C	5.45	118.98	110.32
36	1	2513	U	C4'-C3'-O3'	5.45	117.57	109.40
74	O8	20	VAL	N-CA-C	5.45	114.45	106.55
36	5	2513	U	C4'-C3'-O3'	5.44	117.56	109.40
5	S3	49	ILE	N-CA-C	5.44	114.57	106.85
11	S9	142	ASN	CA-C-N	-5.44	118.90	122.60
11	S9	142	ASN	C-N-CA	-5.44	118.90	122.60
34	SR	157	VAL	CA-C-N	5.43	125.38	119.78
34	SR	157	VAL	C-N-CA	5.43	125.38	119.78
82	e1	123	ASN	CA-C-N	5.43	126.63	119.84
82	e1	123	ASN	C-N-CA	5.43	126.63	119.84
58	N2	46	ALA	N-CA-C	5.43	116.52	108.86
64	N8	66	ALA	N-CA-C	-5.43	99.23	110.80
41	l4	86	GLY	N-CA-C	-5.43	107.77	113.58
54	M8	26	LEU	N-CA-C	-5.43	105.26	111.07
12	C0	63	TYR	N-CA-C	5.43	121.77	113.19
11	s9	159	ALA	CA-C-N	5.43	124.94	119.19
11	s9	159	ALA	C-N-CA	5.43	124.94	119.19
42	l5	59	ASP	N-CA-C	5.42	117.92	109.52
64	n8	20	GLY	CA-C-O	-5.42	118.49	122.23
78	Q2	35	LEU	N-CA-C	-5.41	103.75	110.41
55	m9	146	LYS	N-CA-C	-5.41	105.28	111.07
78	Q2	40	LYS	N-CA-C	-5.41	105.47	111.36
65	N9	3	LYS	N-CA-C	-5.40	101.66	110.20
39	l2	55	GLY	N-CA-C	-5.40	105.17	112.14
45	L8	241	LYS	N-CA-C	-5.40	105.55	111.82
72	o6	47	ILE	CB-CA-C	-5.40	104.84	111.92
52	M6	120	VAL	CA-C-N	5.39	125.47	119.32
52	M6	120	VAL	C-N-CA	5.39	125.47	119.32
53	M7	140	GLU	N-CA-C	5.39	118.52	109.95

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	L7	98	LYS	CA-C-N	-5.39	114.06	119.56
44	L7	98	LYS	C-N-CA	-5.39	114.06	119.56
60	n4	8	PHE	N-CA-C	-5.39	106.76	113.55
69	O3	95	GLY	N-CA-C	-5.38	107.61	115.63
2	s0	202	TYR	N-CA-C	-5.38	101.69	110.20
25	d3	45	GLY	N-CA-C	-5.38	100.42	113.18
36	5	2524	A	O4'-C1'-N9	5.38	116.27	108.20
57	N1	7	TYR	N-CA-C	5.37	118.63	111.75
48	m1	127	PHE	CA-C-N	-5.37	115.59	123.00
48	m1	127	PHE	C-N-CA	-5.37	115.59	123.00
19	c7	8	THR	N-CA-C	-5.37	105.60	111.82
56	n0	68	HIS	CA-C-N	5.36	126.07	120.12
56	n0	68	HIS	C-N-CA	5.36	126.07	120.12
49	M3	135	ALA	N-CA-C	5.36	116.74	110.41
9	s7	13	PRO	CA-C-N	5.36	131.35	121.70
9	s7	13	PRO	C-N-CA	5.36	131.35	121.70
7	s5	21	THR	CA-C-N	5.36	125.28	119.76
7	s5	21	THR	C-N-CA	5.36	125.28	119.76
2	s0	141	ILE	CA-C-N	5.35	125.35	119.89
2	s0	141	ILE	C-N-CA	5.35	125.35	119.89
6	s4	28	ALA	CA-C-N	5.35	124.81	119.24
6	s4	28	ALA	C-N-CA	5.35	124.81	119.24
73	o7	61	THR	N-CA-C	-5.35	106.89	113.41
32	E0	18	THR	CA-C-N	5.35	125.60	119.83
32	E0	18	THR	C-N-CA	5.35	125.60	119.83
45	l8	151	VAL	N-CA-C	5.34	116.42	108.46
5	S3	50	ILE	N-CA-C	5.33	115.27	108.12
20	C8	58	ALA	N-CA-C	-5.33	106.73	113.18
54	m8	154	GLY	N-CA-C	-5.33	107.99	114.92
44	L7	164	SER	N-CA-C	5.33	122.14	110.80
11	S9	94	ASP	N-CA-C	-5.32	106.29	112.89
53	m7	86	LYS	N-CA-C	-5.32	106.05	112.54
4	s2	73	LEU	CA-C-N	5.32	125.32	120.21
4	s2	73	LEU	C-N-CA	5.32	125.32	120.21
35	SM	26	VAL	N-CA-C	5.32	115.77	108.12
42	L5	97	ALA	N-CA-C	-5.32	105.57	111.36
54	m8	42	ALA	CA-C-N	5.32	126.48	119.84
54	m8	42	ALA	C-N-CA	5.32	126.48	119.84
40	l3	169	THR	CA-C-N	-5.31	114.84	121.00
40	l3	169	THR	C-N-CA	-5.31	114.84	121.00
61	n5	93	TYR	N-CA-C	-5.31	105.41	111.14
33	E1	138	ARG	N-CA-C	5.31	122.10	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	n2	103	TYR	N-CA-C	5.30	117.30	108.02
45	L8	134	TYR	N-CA-C	5.30	115.28	108.34
52	m6	69	GLY	N-CA-C	-5.30	101.53	112.34
36	5	1481	A	O3'-P-O5'	5.29	111.94	104.00
59	n3	69	LEU	N-CA-C	-5.29	107.48	114.31
42	L5	18	THR	CA-C-N	5.28	125.28	120.21
42	L5	18	THR	C-N-CA	5.28	125.28	120.21
64	n8	28	HIS	N-CA-C	5.28	121.48	109.81
40	l3	249	VAL	N-CA-C	-5.28	100.87	108.53
5	S3	39	VAL	N-CA-C	5.28	117.18	111.58
25	D3	111	GLY	N-CA-C	-5.27	103.04	112.22
39	l2	160	SER	N-CA-C	-5.27	106.80	113.18
11	s9	66	ASP	CA-C-N	5.27	126.43	119.84
11	s9	66	ASP	C-N-CA	5.27	126.43	119.84
30	d8	53	ILE	N-CA-C	5.27	116.17	108.53
82	e1	104	SER	N-CA-C	-5.27	106.11	112.54
63	n7	27	LYS	CA-C-N	5.27	126.42	119.84
63	n7	27	LYS	C-N-CA	5.27	126.42	119.84
18	C6	63	ILE	N-CA-C	5.26	116.28	108.65
41	l4	234	ASN	N-CA-C	5.26	116.98	108.41
5	s3	145	ALA	CB-CA-C	-5.26	110.53	116.63
60	n4	76	VAL	N-CA-C	5.26	120.28	109.34
7	S5	105	GLY	N-CA-C	-5.25	102.25	112.02
33	E1	102	VAL	N-CA-C	5.25	120.27	109.34
40	L3	350	ALA	N-CA-C	-5.25	102.71	110.48
53	M7	32	THR	N-CA-C	-5.25	105.23	111.69
23	d1	71	ARG	N-CA-C	-5.25	105.25	110.97
40	l3	22	ALA	CA-C-N	-5.24	114.29	122.73
40	l3	22	ALA	C-N-CA	-5.24	114.29	122.73
41	l4	14	GLU	N-CA-C	5.24	121.96	110.80
1	6	755	A	C4'-C3'-O3'	5.24	117.26	109.40
58	N2	93	ILE	N-CA-C	5.24	116.03	107.24
1	6	1097	U	C2'-C3'-O3'	5.24	117.35	109.50
1	2	1761	U	P-O3'-C3'	5.23	128.05	120.20
36	5	1116	G	O5'-P-OP1	-5.23	92.31	108.00
69	o3	99	ARG	N-CA-C	5.23	116.94	108.41
64	N8	46	ASP	N-CA-C	-5.23	101.94	110.20
55	m9	6	THR	N-CA-C	5.23	116.66	111.07
75	o9	23	LEU	CA-C-N	5.23	125.52	119.93
75	o9	23	LEU	C-N-CA	5.23	125.52	119.93
80	c0	34	GLU	N-CA-C	-5.23	102.78	110.52
54	M8	42	ALA	CA-C-N	5.22	126.37	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	M8	42	ALA	C-N-CA	5.22	126.37	119.84
36	1	1716	U	C2'-C3'-O3'	5.22	117.33	109.50
35	sM	49	LYS	N-CA-C	-5.22	107.57	114.04
10	S8	81	VAL	N-CA-C	5.21	120.17	109.34
11	s9	180	LYS	N-CA-C	-5.21	106.96	113.15
74	O8	72	THR	N-CA-C	-5.20	107.60	114.31
9	S7	39	ARG	CA-C-N	-5.20	114.31	119.56
9	S7	39	ARG	C-N-CA	-5.20	114.31	119.56
52	m6	131	PRO	CA-C-N	-5.20	117.79	123.30
52	m6	131	PRO	C-N-CA	-5.20	117.79	123.30
11	S9	38	ASN	N-CA-C	5.19	117.87	109.40
54	M8	168	THR	N-CA-C	5.18	116.35	107.28
42	l5	161	GLY	N-CA-C	-5.18	106.22	112.49
25	d3	59	ILE	N-CA-C	5.18	115.81	107.73
82	e1	151	ASN	N-CA-C	5.18	116.68	108.96
42	L5	10	SER	N-CA-C	-5.18	105.33	110.97
15	C3	16	ILE	CA-C-N	5.18	125.09	119.76
15	C3	16	ILE	C-N-CA	5.18	125.09	119.76
26	d4	66	GLY	N-CA-C	5.17	120.47	112.81
9	S7	130	VAL	N-CA-C	-5.17	102.39	109.37
39	l2	96	LEU	N-CA-C	5.17	117.61	109.39
41	l4	208	VAL	N-CA-C	5.17	115.30	107.80
52	m6	144	SER	CA-C-N	-5.17	114.39	122.56
52	m6	144	SER	C-N-CA	-5.17	114.39	122.56
41	L4	190	GLY	N-CA-C	5.16	125.42	113.18
42	l5	126	GLU	N-CA-C	-5.16	105.66	112.94
42	L5	43	LYS	N-CA-C	-5.16	105.87	113.61
54	M8	99	THR	CB-CA-C	-5.16	100.16	110.42
9	s7	99	LEU	CA-C-N	5.16	126.28	119.84
9	s7	99	LEU	C-N-CA	5.16	126.28	119.84
73	O7	87	SER	N-CA-C	5.15	116.67	108.79
36	1	715	A	C4'-C3'-O3'	5.14	120.72	113.00
25	D3	130	VAL	N-CA-C	5.14	120.03	109.34
53	m7	9	THR	N-CA-C	5.14	116.92	110.24
79	q3	23	ARG	N-CA-C	-5.14	105.68	111.28
3	S1	181	LEU	N-CA-C	-5.14	105.68	111.28
70	o4	31	ARG	N-CA-C	5.13	116.88	109.07
1	6	470	A	C5'-C4'-C3'	-5.13	108.30	116.00
41	l4	49	ALA	N-CA-C	5.13	117.53	110.35
47	m0	165	ILE	CA-C-N	-5.13	116.83	123.19
47	m0	165	ILE	C-N-CA	-5.13	116.83	123.19
52	M6	70	PRO	CA-C-O	-5.12	115.89	121.27

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	c4	123	SER	N-CA-C	-5.12	107.54	112.97
3	S1	22	ASP	CA-C-N	5.12	126.24	119.84
3	S1	22	ASP	C-N-CA	5.12	126.24	119.84
67	O1	95	PRO	CA-C-N	-5.11	116.85	123.19
67	O1	95	PRO	C-N-CA	-5.11	116.85	123.19
42	l5	114	GLY	N-CA-C	-5.11	108.61	114.69
46	l9	43	VAL	CA-C-N	-5.11	115.56	122.77
46	l9	43	VAL	C-N-CA	-5.11	115.56	122.77
54	m8	142	GLY	CA-C-N	5.11	126.23	119.84
54	m8	142	GLY	C-N-CA	5.11	126.23	119.84
69	o3	62	SER	N-CA-C	5.11	116.06	108.60
66	O0	93	LEU	N-CA-C	-5.11	107.72	114.31
63	N7	7	ALA	N-CA-C	5.11	118.29	111.75
62	N6	95	VAL	CA-C-N	-5.11	114.65	119.76
62	N6	95	VAL	C-N-CA	-5.11	114.65	119.76
62	N6	100	HIS	CA-C-N	5.10	126.22	119.84
62	N6	100	HIS	C-N-CA	5.10	126.22	119.84
11	s9	96	VAL	N-CA-C	-5.10	106.17	111.58
63	n7	133	LYS	N-CA-C	5.10	116.92	111.36
6	s4	197	HIS	N-CA-C	5.10	116.69	108.32
72	O6	93	ILE	N-CA-C	-5.10	105.74	110.53
46	l9	134	ILE	N-CA-C	5.10	115.25	108.11
60	n4	73	ARG	N-CA-C	5.10	114.97	108.24
41	L4	84	ARG	N-CA-C	-5.10	105.91	111.82
54	M8	34	THR	N-CA-C	-5.10	106.57	112.89
2	s0	157	ASP	N-CA-C	-5.10	102.92	110.46
49	M3	141	ALA	N-CA-C	-5.10	99.95	110.80
1	6	158	U	C2'-C3'-O3'	5.10	117.14	109.50
6	s4	70	VAL	N-CA-C	5.09	115.25	108.27
10	S8	9	HIS	N-CA-C	-5.09	99.95	110.80
34	SR	205	SER	CA-C-N	-5.09	113.79	119.19
34	SR	205	SER	C-N-CA	-5.09	113.79	119.19
68	O2	120	THR	CA-C-N	-5.09	117.15	123.21
68	O2	120	THR	C-N-CA	-5.09	117.15	123.21
7	s5	207	THR	N-CA-C	-5.08	107.13	113.38
25	D3	59	ILE	N-CA-C	5.08	115.62	108.36
2	S0	143	VAL	N-CA-C	5.08	115.97	107.18
40	l3	114	VAL	CB-CA-C	-5.08	105.21	112.22
6	S4	228	ILE	CB-CA-C	-5.08	102.97	111.29
64	n8	14	HIS	N-CA-C	-5.07	101.44	109.76
75	O9	34	THR	N-CA-C	-5.07	108.36	114.75
25	d3	41	SER	CA-C-N	5.07	124.38	118.85

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	d3	41	SER	C-N-CA	5.07	124.38	118.85
41	l4	115	HIS	N-CA-C	-5.07	105.94	111.82
36	1	1307	G	P-O3'-C3'	5.07	127.80	120.20
1	6	1615	C	N1-C1'-C2'	-5.06	106.41	114.00
52	M6	9	ILE	N-CA-C	5.06	115.25	108.17
2	s0	9	LEU	N-CA-C	5.06	116.48	111.07
1	2	1196	A	P-O3'-C3'	5.05	127.78	120.20
75	O9	46	ARG	N-CA-C	-5.05	108.86	114.62
57	N1	78	LYS	CA-C-N	-5.05	116.05	122.77
57	N1	78	LYS	C-N-CA	-5.05	116.05	122.77
41	L4	327	LEU	N-CA-C	-5.05	103.05	110.52
22	D0	72	ASN	CB-CA-C	-5.04	109.81	117.07
45	L8	125	ALA	N-CA-C	-5.04	102.60	109.71
52	m6	33	ILE	N-CA-C	5.04	115.73	108.48
59	n3	129	VAL	N-CA-C	-5.04	105.80	110.53
60	n4	84	GLY	N-CA-C	-5.03	108.38	114.92
39	L2	65	ASP	CA-C-N	5.03	124.75	119.82
39	L2	65	ASP	C-N-CA	5.03	124.75	119.82
73	O7	39	TYR	N-CA-C	-5.03	103.26	109.64
24	d2	94	LEU	CA-C-N	-5.03	115.21	120.94
24	d2	94	LEU	C-N-CA	-5.03	115.21	120.94
49	m3	153	ASP	N-CA-C	5.03	116.16	108.42
62	N6	63	LYS	N-CA-C	-5.02	105.89	112.72
1	2	829	A	C2'-C3'-O3'	5.02	117.03	109.50
36	1	1820	U	P-O3'-C3'	5.02	127.73	120.20
24	D2	127	GLY	N-CA-C	5.02	125.08	113.18
41	L4	269	SER	N-CA-C	5.02	121.49	110.80
46	l9	151	VAL	CB-CA-C	-5.02	103.06	111.29
2	S0	74	VAL	N-CA-C	5.02	115.14	108.11
6	S4	136	VAL	N-CA-C	5.01	112.12	107.56
55	M9	160	GLU	N-CA-C	-5.01	106.68	112.89
6	s4	193	GLY	N-CA-C	5.01	117.79	110.38
31	d9	10	HIS	CA-C-N	5.01	126.10	119.84
31	d9	10	HIS	C-N-CA	5.01	126.10	119.84
78	q2	77	CYS	N-CA-C	5.01	118.87	112.26
14	c2	111	ASN	CB-CA-C	-5.01	110.42	117.23
42	L5	126	GLU	N-CA-C	-5.00	105.91	112.41
8	s6	85	ARG	CA-C-N	5.00	125.23	119.83
8	s6	85	ARG	C-N-CA	5.00	125.23	119.83
40	l3	4	ARG	CG-CD-NE	5.00	123.00	112.00

There are no chirality outliers.

All (52) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
13	C1	127	GLN	Peptide
16	C4	124	ASP	Peptide
18	C6	40	GLU	Peptide
19	C7	22	PRO	Peptide
19	C7	85	VAL	Peptide
25	D3	78	LYS	Peptide
27	D5	54	VAL	Peptide
27	D5	94	LYS	Peptide
27	D5	96	SER	Peptide
33	E1	137	ASP	Peptide
39	L2	19	HIS	Peptide
45	L8	124	ASP	Peptide
45	L8	74	THR	Peptide
48	M1	64	LYS	Peptide
48	M1	8	PRO	Peptide
52	M6	110	PRO	Peptide
56	N0	12	ARG	Peptide
56	N0	22	PRO	Peptide
57	N1	16	GLN	Peptide
65	N9	20	GLY	Peptide
9	S7	131	PHE	Peptide
15	c3	17	PRO	Peptide
17	c5	52	LYS	Peptide
18	c6	40	GLU	Peptide
19	c7	87	GLU	Peptide
19	c7	88	VAL	Peptide
19	c7	96	SER	Peptide
22	d0	70	THR	Peptide
26	d4	29	HIS	Peptide
26	d4	49	LYS	Peptide
27	d5	85	LYS	Peptide
82	e1	146	SER	Peptide
39	l2	171	GLY	Peptide
39	l2	237	LEU	Peptide
42	l5	270	LYS	Peptide
42	l5	271	LYS	Peptide
43	l6	51	ARG	Peptide
44	l7	192	GLY	Peptide
44	l7	226	GLY	Peptide
51	m5	66	VAL	Peptide
52	m6	110	PRO	Peptide
56	n0	133	ALA	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
60	n4	78	ALA	Peptide
63	n7	5	LEU	Peptide
64	n8	18	GLY	Peptide
64	n8	66	ALA	Peptide
65	n9	22	LYS	Peptide
3	s1	134	VAL	Peptide
7	s5	44	ASN	Peptide
7	s5	99	MET	Peptide
9	s7	29	ASN	Peptide
10	s8	60	ILE	Peptide

5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	2	37283	0	18758	896	0
1	6	38238	0	19240	866	0
2	S0	1577	0	1567	89	0
2	s0	1583	0	1578	90	0
3	S1	1709	0	1784	123	0
3	s1	1722	0	1793	89	0
4	S2	1635	0	1723	67	0
4	s2	1635	0	1723	61	0
5	S3	1734	0	1817	63	0
5	s3	1734	0	1817	54	0
6	S4	2068	0	2154	102	0
6	s4	2068	0	2154	98	0
7	S5	1609	0	1675	81	0
7	s5	1609	0	1675	84	0
8	S6	1799	0	1879	67	0
8	s6	1755	0	1846	79	0
9	S7	1481	0	1572	75	0
9	s7	1491	0	1578	62	0
10	S8	1489	0	1525	75	0
10	s8	1489	0	1525	64	0
11	S9	1494	0	1573	74	0
11	s9	1494	0	1573	85	0
12	C0	773	0	729	51	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
13	C1	1214	0	1259	66	0
13	c1	1168	0	1231	45	0
14	C2	892	0	891	40	0
14	c2	892	0	891	30	0
15	C3	1192	0	1255	46	0
15	c3	1192	0	1255	53	0
16	C4	891	0	883	55	0
16	c4	949	0	985	54	0
17	C5	977	0	1002	41	0
17	c5	1039	0	1050	56	0
18	C6	1105	0	1166	73	0
18	c6	1111	0	1171	46	0
19	C7	926	0	930	52	0
19	c7	906	0	909	48	0
20	C8	1192	0	1222	51	0
20	c8	1192	0	1222	67	0
21	C9	1112	0	1124	59	0
21	c9	1112	0	1124	47	0
22	D0	855	0	917	50	0
22	d0	882	0	939	45	0
23	D1	684	0	672	43	0
23	d1	684	0	672	39	0
24	D2	1021	0	1060	53	0
24	d2	1021	0	1060	45	0
25	D3	1121	0	1196	57	0
25	d3	1121	0	1196	34	0
26	D4	1073	0	1132	51	0
26	d4	1073	0	1132	49	0
27	D5	563	0	603	41	0
27	d5	558	0	598	30	0
28	D6	769	0	814	54	0
28	d6	769	0	815	52	0
29	D7	610	0	630	23	0
29	d7	610	0	631	31	0
30	D8	497	0	535	29	0
30	d8	497	0	535	22	0
31	D9	442	0	428	13	0
31	d9	442	0	428	21	0
32	E0	475	0	525	16	0
33	E1	566	0	602	31	0
34	SR	2441	0	2397	114	0
34	sR	2442	0	2392	88	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	SM	1104	0	996	46	0
35	sM	680	0	607	32	0
36	1	67355	0	33846	1238	0
36	5	67376	0	33861	1209	0
37	3	2579	0	1304	45	0
37	7	2579	0	1304	50	0
38	4	3353	0	1695	61	0
38	8	3353	0	1695	71	0
39	L2	1914	0	1981	79	0
39	l2	1912	0	1976	90	0
40	L3	3075	0	3142	141	0
40	l3	3075	0	3142	153	0
41	L4	2748	0	2859	119	0
41	l4	2748	0	2859	114	0
42	L5	2375	0	2325	106	0
42	l5	2359	0	2311	90	0
43	L6	1239	0	1326	40	0
43	l6	1248	0	1339	56	0
44	L7	1784	0	1862	85	0
44	l7	1791	0	1869	59	0
45	L8	1804	0	1877	67	0
45	l8	1763	0	1819	72	0
46	L9	1518	0	1587	67	0
46	l9	1518	0	1587	78	0
47	M0	1705	0	1736	84	0
47	m0	1722	0	1755	90	0
48	M1	1353	0	1383	66	0
48	m1	1353	0	1383	46	0
49	M3	1543	0	1608	76	0
49	m3	1548	0	1613	74	0
50	M4	1053	0	1149	58	0
50	m4	1059	0	1154	43	0
51	M5	1720	0	1779	63	0
51	m5	1720	0	1779	67	0
52	M6	1555	0	1659	51	0
52	m6	1555	0	1659	61	0
53	M7	1420	0	1437	57	0
53	m7	1227	0	1236	53	0
54	M8	1441	0	1543	63	0
54	m8	1441	0	1543	49	0
55	M9	1521	0	1616	57	0
55	m9	1521	0	1617	54	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	N0	1445	0	1487	58	0
56	n0	1445	0	1487	56	0
57	N1	1276	0	1323	58	0
57	n1	1276	0	1323	54	0
58	N2	796	0	812	26	0
58	n2	778	0	791	27	0
59	N3	1003	0	1048	44	0
59	n3	1003	0	1048	35	0
60	N4	699	0	640	17	0
60	n4	1038	0	1071	31	0
61	N5	964	0	1025	36	0
61	n5	959	0	1023	31	0
62	N6	993	0	1081	41	0
62	n6	993	0	1081	49	0
63	N7	1092	0	1155	61	0
63	n7	1092	0	1155	52	0
64	N8	1173	0	1215	51	0
64	n8	1173	0	1215	51	0
65	N9	462	0	491	17	0
65	n9	462	0	491	16	0
66	O0	743	0	797	31	0
66	o0	767	0	816	36	0
67	O1	876	0	912	29	0
67	o1	883	0	918	35	0
68	O2	1020	0	1090	44	0
68	o2	1020	0	1090	51	0
69	O3	850	0	880	29	0
69	o3	850	0	880	23	0
70	O4	880	0	945	42	0
70	o4	880	0	945	32	0
71	O5	969	0	1078	47	0
71	o5	965	0	1067	39	0
72	O6	771	0	849	43	0
72	o6	770	0	846	31	0
73	O7	681	0	683	30	0
73	o7	681	0	683	24	0
74	O8	612	0	682	22	0
74	o8	608	0	671	30	0
75	O9	436	0	475	21	0
75	o9	436	0	475	18	0
76	Q0	417	0	455	13	0
76	q0	417	0	456	13	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
77	Q1	233	0	284	12	0
77	q1	233	0	284	14	0
78	Q2	847	0	915	33	0
78	q2	847	0	915	38	0
79	Q3	694	0	734	30	0
79	q3	694	0	734	29	0
80	c0	762	0	699	34	0
81	e0	491	0	542	20	0
82	e1	608	0	654	35	0
83	m2	750	0	178	13	0
84	p0	1077	0	1041	49	0
85	p1	235	0	50	5	0
86	p2	230	0	52	1	0
87	A	62	0	34	1	0
87	B	62	0	34	2	0
88	1	472	0	0	0	0
88	2	123	0	0	0	0
88	3	14	0	0	0	0
88	4	19	0	0	0	0
88	5	503	0	0	0	0
88	6	145	0	0	0	0
88	7	14	0	0	0	0
88	8	17	0	0	0	0
88	C8	1	0	0	0	0
88	L2	2	0	0	0	0
88	L3	4	0	0	0	0
88	L4	1	0	0	0	0
88	L5	1	0	0	0	0
88	L7	4	0	0	0	0
88	L8	1	0	0	0	0
88	M0	2	0	0	0	0
88	M1	1	0	0	0	0
88	M3	2	0	0	0	0
88	M5	4	0	0	0	0
88	M6	1	0	0	0	0
88	M7	5	0	0	0	0
88	M9	2	0	0	0	0
88	N0	1	0	0	0	0
88	N3	3	0	0	0	0
88	N5	1	0	0	0	0
88	N8	5	0	0	0	0
88	O2	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
88	O4	1	0	0	0	0
88	O5	1	0	0	0	0
88	O7	1	0	0	0	0
88	S4	2	0	0	0	0
88	S6	1	0	0	0	0
88	S8	1	0	0	0	0
88	c1	1	0	0	0	0
88	c7	2	0	0	0	0
88	c8	1	0	0	0	0
88	c9	1	0	0	0	0
88	d3	1	0	0	0	0
88	d4	1	0	0	0	0
88	d6	1	0	0	0	0
88	l2	1	0	0	0	0
88	l3	4	0	0	0	0
88	l4	2	0	0	0	0
88	l5	2	0	0	0	0
88	l7	2	0	0	0	0
88	m1	1	0	0	0	0
88	m5	4	0	0	0	0
88	m6	2	0	0	0	0
88	m7	5	0	0	0	0
88	n0	2	0	0	0	0
88	n3	2	0	0	0	0
88	n6	2	0	0	0	0
88	n8	3	0	0	0	0
88	o1	1	0	0	0	0
88	o3	1	0	0	0	0
88	o4	1	0	0	0	0
88	q0	1	0	0	0	0
88	q1	1	0	0	0	0
88	q3	2	0	0	0	0
88	s1	1	0	0	0	0
88	s4	1	0	0	0	0
88	s8	2	0	0	0	0
88	sM	1	0	0	0	0
89	1	2478	0	0	145	0
89	2	1106	0	0	73	0
89	3	77	0	0	1	0
89	4	98	0	0	6	0
89	5	2506	0	0	157	0
89	6	1113	0	0	73	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
89	7	84	0	0	5	0
89	8	98	0	0	11	0
89	C3	7	0	0	0	0
89	C5	7	0	0	2	0
89	C8	7	0	0	0	0
89	D3	7	0	0	0	0
89	D9	7	0	0	0	0
89	L3	21	0	0	1	0
89	L4	7	0	0	3	0
89	M0	7	0	0	0	0
89	M5	7	0	0	1	0
89	M7	14	0	0	1	0
89	M8	7	0	0	0	0
89	M9	7	0	0	0	0
89	N9	7	0	0	0	0
89	O3	7	0	0	0	0
89	O7	14	0	0	2	0
89	S8	7	0	0	1	0
89	SR	7	0	0	0	0
89	c1	7	0	0	1	0
89	c3	7	0	0	1	0
89	c5	7	0	0	3	0
89	c8	7	0	0	0	0
89	d4	7	0	0	0	0
89	d9	7	0	0	0	0
89	l3	21	0	0	1	0
89	l4	14	0	0	1	0
89	l5	28	0	0	0	0
89	l9	7	0	0	0	0
89	m0	14	0	0	1	0
89	m1	7	0	0	1	0
89	m4	7	0	0	0	0
89	m5	7	0	0	0	0
89	m6	7	0	0	0	0
89	n3	14	0	0	0	0
89	n9	7	0	0	0	0
89	o3	7	0	0	1	0
89	o7	7	0	0	1	0
89	q2	7	0	0	2	0
89	s1	14	0	0	1	0
89	s8	7	0	0	1	0
89	sR	7	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
90	D6	1	0	0	0	0
90	D7	1	0	0	0	0
90	D9	1	0	0	0	0
90	E1	1	0	0	0	0
90	O7	1	0	0	0	0
90	Q0	1	0	0	0	0
90	Q2	1	0	0	0	0
90	Q3	1	0	0	0	0
90	d6	1	0	0	1	0
90	d7	1	0	0	0	0
90	d9	1	0	0	0	0
90	e1	1	0	0	0	0
90	o7	1	0	0	0	0
90	q0	1	0	0	1	0
90	q2	1	0	0	0	0
90	q3	1	0	0	0	0
All	All	411288	0	297360	10749	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 16.

All (10749) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:I3:41:VAL:HA	40:I3:185:GLY:HA3	1.31	1.11
40:I3:296:THR:HG22	40:I3:298:PHE:H	1.19	1.06
1:6:1636:C:H4'	1:6:1637:C:H5'	1.34	1.05
78:Q2:74:CYS:SG	78:Q2:77:CYS:SG	2.55	1.05
28:d6:26:CYS:SG	28:d6:77:CYS:SG	2.58	1.01
36:5:3274:A:H3'	36:5:3275:U:H5''	1.42	1.01
34:sR:89:LEU:HB2	34:sR:103:PHE:HB2	1.46	0.98
71:O5:85:THR:HG22	71:O5:87:ALA:H	1.27	0.96
50:m4:55:ARG:NH2	50:m4:76:ALA:O	1.98	0.96
36:1:640:U:OP1	64:N8:21:ARG:NH2	1.97	0.96
1:6:1552:U:OP2	17:c5:43:ARG:NH2	1.99	0.95
36:5:1239:C:H42	36:5:1249:G:H1	1.12	0.95
36:5:437:G:H22	36:5:622:A:H61	1.12	0.95
41:L4:283:THR:HG22	41:L4:285:ASP:H	1.31	0.94
1:6:448:C:OP2	6:s4:49:ARG:NH1	1.99	0.94
41:L4:317:PRO:O	41:L4:319:LYS:N	2.00	0.94
36:1:1898:G:OP2	89:1:3940:OHX:N4	2.00	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:78:ARG:HH11	43:L6:78:ARG:HG3	1.32	0.93
36:1:31:C:OP2	51:M5:188:ARG:NH2	2.00	0.93
36:5:1639:C:OP2	70:o4:74:ARG:NH2	2.02	0.93
36:5:2174:G:OP2	39:l2:193:ARG:NH1	2.01	0.93
36:1:3182:G:OP1	52:M6:160:ARG:NH2	2.02	0.93
41:L4:300:ARG:O	54:M8:39:ARG:NH1	2.02	0.92
56:n0:6:GLU:OE1	56:n0:99:ARG:NH2	2.03	0.92
42:l5:76:ALA:HB3	42:l5:109:THR:HG22	1.49	0.92
36:1:1362:G:H4'	44:L7:159:GLN:O	1.70	0.92
63:n7:83:THR:HG22	63:n7:85:TYR:H	1.34	0.91
41:L4:3:ARG:HH11	41:L4:22:LEU:HD12	1.33	0.91
16:C4:29:HIS:HB2	16:C4:41:ARG:HG3	1.50	0.91
50:m4:113:THR:HG22	50:m4:116:GLU:HB2	1.52	0.91
36:5:1555:U:O4	36:5:1557:A:N6	2.03	0.91
43:l6:40:LEU:HD13	43:l6:84:VAL:HG11	1.52	0.91
36:1:1639:C:OP2	70:O4:74:ARG:NH2	2.02	0.90
36:5:640:U:OP1	64:n8:21:ARG:NH2	2.05	0.90
36:1:1951:C:H42	36:1:2095:G:H1	1.19	0.90
36:5:1213:G:H4'	56:n0:90:MET:HG3	1.52	0.90
1:2:1585:U:H3	1:2:1611:A:H2	1.19	0.90
5:S3:178:ARG:HE	5:S3:178:ARG:H	1.20	0.90
36:1:2356:A:H61	36:1:2983:C:H5	1.19	0.89
36:5:31:C:OP2	51:m5:188:ARG:NH2	2.06	0.89
1:2:868:G:OP1	15:C3:121:ARG:NH1	2.05	0.89
1:6:488:G:H21	1:6:499:U:H3	1.20	0.89
3:S1:39:GLU:HG3	3:S1:40:ASN:H	1.37	0.88
36:1:1233:G:H1	36:1:1255:C:H42	1.20	0.88
49:m3:46:ILE:HG22	49:m3:49:ARG:HB2	1.53	0.88
64:n8:6:THR:HG23	64:n8:8:THR:HG23	1.56	0.88
78:q2:12:CYS:SG	78:q2:17:CYS:HB3	2.14	0.88
1:6:1402:G:OP2	19:c7:5:ARG:NH1	2.08	0.87
36:5:284:A:OP2	78:q2:41:ARG:NH1	2.07	0.87
41:L4:338:LYS:O	41:L4:340:GLY:N	2.08	0.87
40:L3:41:VAL:HA	40:L3:185:GLY:HA3	1.56	0.87
42:L5:64:ILE:HD12	42:L5:109:THR:HG21	1.56	0.87
47:M0:174:THR:HG23	47:M0:176:LEU:H	1.37	0.87
18:C6:58:ASP:O	18:C6:60:PHE:N	2.08	0.87
36:5:2273:G:O6	89:5:4202:OHX:N5	2.08	0.87
52:m6:110:PRO:O	52:m6:112:TYR:N	2.07	0.87
4:S2:56:ILE:HG23	4:S2:61:LEU:HB2	1.57	0.86
89:1:3985:OHX:N2	78:Q2:50:PHE:O	2.08	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:D0:27:THR:HG23	22:D0:113:ASP:HB3	1.57	0.86
54:M8:158:HIS:H	54:M8:186:VAL:HG12	1.37	0.86
1:2:1508:U:O4	89:2:2031:OHX:N5	2.08	0.86
42:l5:111:GLN:HA	42:l5:116:ASP:HB3	1.57	0.86
17:c5:22:LEU:HA	17:c5:25:LEU:HB2	1.54	0.86
1:6:1588:G:H1	1:6:1608:U:H3	1.21	0.86
36:5:1877:U:H5''	36:5:1878:G:H5'	1.57	0.86
9:s7:117:THR:HG22	9:s7:120:ALA:H	1.41	0.86
10:S8:76:THR:HG22	10:S8:108:PRO:HG2	1.57	0.85
38:4:135:G:OP2	61:N5:56:ARG:NH2	2.09	0.85
11:s9:59:LEU:HD22	11:s9:69:ARG:HA	1.55	0.85
36:5:1073:U:H1'	65:n9:50:THR:HG22	1.57	0.85
36:5:2836:C:H5	36:5:2852:C:H42	1.21	0.85
36:5:1145:G:OP1	68:o2:44:ARG:NH1	2.09	0.85
15:C3:114:ARG:HG2	15:C3:114:ARG:HH11	1.41	0.85
1:6:475:A:OP2	11:s9:126:ARG:NH1	2.09	0.85
36:1:1427:U:OP2	64:N8:4:ARG:NH2	2.09	0.85
71:o5:78:LYS:HA	71:o5:81:ARG:HD3	1.57	0.85
36:1:2736:A:OP1	57:N1:92:ARG:NH1	2.09	0.85
38:4:95:G:OP2	73:O7:72:ARG:NH1	2.09	0.85
36:5:2392:C:O2'	40:l3:266:ARG:NH2	2.10	0.85
71:o5:76:GLN:O	71:o5:81:ARG:NH1	2.09	0.85
53:m7:122:ALA:HB3	53:m7:143:PRO:HB2	1.59	0.85
63:n7:27:LYS:HB3	63:n7:42:LEU:HB2	1.59	0.85
54:m8:100:THR:HG22	54:m8:120:GLU:HB3	1.56	0.84
49:M3:165:SER:O	49:M3:167:PHE:N	2.11	0.84
40:l3:81:THR:HG22	40:l3:321:PHE:HA	1.56	0.84
42:l5:120:LYS:O	42:l5:248:ARG:NH2	2.09	0.84
48:M1:15:GLU:HB3	48:M1:130:VAL:HG23	1.56	0.84
1:6:486:G:H22	1:6:501:U:H3	1.25	0.84
1:2:475:A:OP2	11:S9:126:ARG:NH1	2.11	0.84
57:n1:51:GLY:HA3	57:n1:92:ARG:HG3	1.58	0.84
36:5:2620:G:O6	89:5:4247:OHX:N4	2.09	0.84
36:1:1369:A:OP1	64:N8:21:ARG:NH1	2.10	0.84
1:6:471:A:OP2	89:6:2100:OHX:N5	2.11	0.84
36:1:709:A:OP1	54:M8:179:ARG:NH2	2.11	0.83
50:M4:55:ARG:NH2	50:M4:76:ALA:O	2.10	0.83
3:s1:77:GLU:OE1	16:c4:114:ARG:NH2	2.10	0.83
26:d4:91:LEU:HD13	26:d4:96:LEU:HB2	1.59	0.83
43:l6:31:ARG:NH1	69:o3:107:ILE:O	2.11	0.83
1:6:280:U:OP2	60:n4:113:LYS:NZ	2.10	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:s4:9:LEU:HB2	6:s4:30:ARG:HB2	1.58	0.83
36:5:2439:A:H61	36:5:2508:U:H3	1.25	0.83
36:5:3182:G:OP1	52:m6:160:ARG:NH2	2.11	0.83
11:S9:38:ASN:HB2	11:S9:41:GLU:HG3	1.59	0.83
34:SR:38:ARG:HG2	34:SR:67:ILE:HG23	1.61	0.83
54:M8:170:ARG:HA	54:M8:174:ARG:HD2	1.60	0.83
75:o9:5:LYS:HD3	75:o9:13:MET:HE1	1.61	0.83
14:C2:66:VAL:HG11	14:C2:71:ILE:HD12	1.59	0.83
36:5:343:U:OP2	89:5:3926:OHX:N3	2.12	0.83
13:C1:94:ILE:HD13	25:D3:16:ARG:HD2	1.61	0.82
2:s0:139:VAL:HG23	4:s2:62:PRO:HG3	1.60	0.82
36:5:1427:U:OP2	64:n8:4:ARG:NH2	2.12	0.82
84:p0:198:PRO:HG2	84:p0:201:ILE:H	1.45	0.82
34:SR:89:LEU:HB2	34:SR:103:PHE:HB2	1.59	0.82
36:1:2656:A:H4'	78:Q2:98:LYS:HD2	1.58	0.82
22:d0:71:PRO:O	22:d0:72:ASN:ND2	2.12	0.82
13:c1:101:GLU:OE2	25:d3:16:ARG:NH2	2.11	0.82
36:5:2741:C:HO2'	78:q2:20:HIS:HD1	1.28	0.82
67:o1:75:ILE:HG12	67:o1:93:VAL:HG13	1.59	0.82
36:5:18:G:OP1	71:o5:81:ARG:NH2	2.11	0.82
3:S1:128:LYS:HE2	3:S1:132:ASP:HB3	1.59	0.82
52:M6:12:LYS:O	56:N0:167:ARG:NH2	2.13	0.82
7:s5:200:ASN:HB3	7:s5:208:SER:HB3	1.61	0.82
10:s8:36:THR:HG21	10:s8:173:PRO:HB2	1.60	0.82
36:5:3343:G:H21	36:5:3362:A:H2	1.28	0.82
36:1:3344:A:H2	36:1:3361:G:H21	1.24	0.82
1:6:1799:U:O2'	3:s1:152:ARG:NH1	2.13	0.82
36:1:3166:C:H42	36:1:3284:G:H1	1.24	0.81
36:1:1230:G:H1	36:1:1279:C:H42	1.28	0.81
8:s6:98:ARG:NH2	8:s6:101:ILE:O	2.11	0.81
13:c1:132:SER:O	13:c1:134:THR:N	2.11	0.81
1:2:1331:A:OP1	19:C7:45:ARG:NH2	2.12	0.81
36:1:2818:U:H6	36:1:2818:U:H5'	1.44	0.81
36:1:3214:U:OP2	50:M4:128:ARG:NH2	2.13	0.81
36:5:2897:A:H5''	76:q0:125:LYS:HG3	1.62	0.81
3:S1:181:LEU:O	3:S1:185:THR:N	2.12	0.81
43:L6:31:ARG:NH1	69:O3:107:ILE:O	2.13	0.81
1:6:1097:U:H4'	1:6:1098:U:H5'	1.62	0.81
1:2:325:G:H4'	13:C1:83:THR:HG21	1.62	0.81
36:1:3049:A:OP2	89:1:4195:OHX:N1	2.12	0.81
37:3:44:C:OP2	48:M1:137:ARG:NH2	2.13	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:22:LEU:HD11	41:L4:26:PHE:HB2	1.62	0.81
36:5:3194:C:O2	36:5:3197:G:N2	2.14	0.81
1:6:1726:G:N7	89:6:2143:OHX:N5	2.29	0.81
1:2:1773:C:OP2	77:Q1:2:ARG:NH1	2.13	0.81
74:O8:24:THR:HG22	74:O8:76:ASN:HB3	1.63	0.81
3:s1:125:VAL:HG11	3:s1:173:THR:HG22	1.62	0.81
73:o7:21:ARG:NH2	73:o7:41:ALA:O	2.14	0.81
5:S3:179:GLN:NE2	5:S3:179:GLN:O	2.14	0.81
27:D5:55:PRO:O	27:D5:57:TYR:N	2.13	0.81
66:O0:16:LEU:HB3	66:O0:98:SER:HB2	1.62	0.81
1:6:230:C:H42	1:6:235:G:H1	1.28	0.81
1:6:1695:G:H21	1:6:1706:C:H41	1.28	0.81
31:d9:21:CYS:HB2	31:d9:39:CYS:HB3	1.63	0.81
41:l4:300:ARG:HG2	41:l4:300:ARG:HH11	1.46	0.81
2:s0:13:ASP:OD1	2:s0:179:ARG:NH2	2.12	0.80
1:2:237:C:H5''	1:2:238:U:H5'	1.64	0.80
2:s0:112:THR:HG23	2:s0:114:SER:H	1.46	0.80
36:1:2836:C:H5	36:1:2852:C:H42	1.29	0.80
36:5:2123:G:N7	89:5:4102:OHX:N1	2.30	0.80
36:5:2818:U:H5'	36:5:2818:U:H6	1.47	0.80
70:o4:102:LYS:HD2	70:o4:103:LYS:HE3	1.61	0.80
56:N0:155:ARG:HH21	56:N0:155:ARG:HG2	1.45	0.80
62:N6:52:ARG:O	62:N6:54:ASP:N	2.13	0.80
66:O0:13:LYS:HE3	66:O0:103:THR:HG21	1.63	0.80
10:s8:11:ARG:NH1	10:s8:15:GLY:O	2.14	0.80
36:1:2443:A:N6	36:1:2504:U:O4	2.14	0.80
36:5:2588:U:OP1	45:l8:48:ARG:NH2	2.14	0.80
9:S7:131:PHE:O	9:S7:133:THR:N	2.14	0.80
10:S8:39:GLY:N	10:S8:60:ILE:O	2.15	0.80
2:S0:49:ASN:HB3	2:S0:52:LYS:HG3	1.62	0.80
28:d6:10:ARG:HB2	28:d6:34:LYS:HA	1.63	0.80
36:5:3230:G:H4'	50:m4:132:LYS:HD3	1.63	0.80
54:m8:34:THR:HG22	54:m8:49:LEU:HD21	1.64	0.80
7:S5:166:ARG:NH1	7:S5:170:GLN:OE1	2.15	0.79
41:L4:181:VAL:O	41:L4:182:LEU:HB2	1.81	0.79
10:s8:26:LYS:HG2	10:s8:29:LEU:HD12	1.63	0.79
21:C9:63:ARG:HD2	21:C9:67:MET:HE1	1.62	0.79
36:5:3153:U:H4'	36:5:3154:C:H5'	1.64	0.79
36:1:2794:G:N7	89:1:3943:OHX:N2	2.30	0.79
48:M1:155:THR:HG23	48:M1:158:ASP:HB2	1.64	0.79
1:6:57:G:OP1	26:d4:112:LYS:NZ	2.16	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:c6:83:GLN:HE22	18:c6:119:ALA:HA	1.47	0.79
1:2:741:C:O2	9:S7:107:ARG:NH1	2.16	0.79
36:5:744:A:OP1	54:m8:66:ARG:NH2	2.15	0.79
62:n6:39:LEU:HD13	62:n6:43:TYR:HE2	1.48	0.79
1:2:565:C:O2	89:2:2039:OHX:N5	2.16	0.79
18:C6:112:TYR:OH	18:C6:114:ARG:NH1	2.16	0.79
36:1:3375:A:O2'	36:1:3378:C:OP2	2.00	0.79
1:6:1150:G:O6	89:6:2112:OHX:N5	2.15	0.79
1:2:1564:U:OP1	21:C9:38:LYS:NZ	2.13	0.79
6:S4:50:ASN:O	6:S4:53:LYS:NZ	2.15	0.79
73:O7:65:ARG:HG3	73:O7:65:ARG:HH11	1.45	0.79
37:7:62:U:O3'	42:l5:285:ARG:NH1	2.16	0.79
8:s6:163:THR:HA	8:s6:168:THR:HG22	1.64	0.79
16:c4:50:ALA:O	16:c4:52:ARG:N	2.16	0.79
39:l2:28:LYS:HB3	39:l2:123:ARG:HD3	1.65	0.79
36:5:110:G:OP2	49:m3:73:ARG:NH1	2.15	0.78
36:1:3272:C:OP2	43:L6:78:ARG:NH1	2.16	0.78
36:1:18:G:OP1	71:O5:81:ARG:NH2	2.16	0.78
36:1:1095:U:H4'	36:1:1096:U:H5'	1.62	0.78
5:S3:175:VAL:HG13	5:S3:182:LEU:HD13	1.66	0.78
61:n5:115:ARG:NH1	61:n5:119:THR:OG1	2.17	0.78
17:C5:64:LYS:HA	17:C5:73:PRO:HB3	1.64	0.78
34:SR:220:ILE:HD11	34:SR:254:ALA:HB2	1.65	0.78
15:C3:4:MET:HE3	15:C3:121:ARG:HG2	1.65	0.78
21:C9:63:ARG:NH1	21:C9:67:MET:SD	2.57	0.78
41:L4:269:SER:O	41:L4:271:LYS:N	2.16	0.78
3:s1:103:MET:HB3	3:s1:215:VAL:HG13	1.66	0.78
13:C1:64:VAL:HG11	13:C1:131:ILE:HD11	1.66	0.78
37:7:121:U:OP2	42:l5:265:TYR:OH	2.01	0.78
1:2:569:C:H41	25:D3:69:ARG:HH12	1.31	0.78
48:M1:94:ARG:O	48:M1:96:PHE:N	2.14	0.78
23:d1:62:ARG:HH12	24:d2:20:THR:HG22	1.50	0.78
36:5:2854:U:OP2	47:m0:3:ARG:NH2	2.17	0.78
41:l4:204:GLY:O	41:l4:246:ARG:NH1	2.17	0.78
47:m0:86:HIS:HB3	47:m0:139:ARG:HG2	1.66	0.78
73:o7:52:LYS:HG2	73:o7:55:ARG:HH11	1.47	0.78
73:o7:65:ARG:HG3	73:o7:65:ARG:HH11	1.49	0.78
44:L7:139:PRO:HA	44:L7:237:ASN:HD21	1.48	0.77
1:2:452:A:OP2	89:2:2038:OHX:N5	2.17	0.77
1:2:702:G:O6	1:2:736:C:N4	2.17	0.77
1:2:794:U:O2'	1:2:795:U:O2	2.01	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:216:LYS:HA	34:SR:239:GLU:HG3	1.65	0.77
68:O2:81:ASP:O	68:O2:84:THR:HG23	1.82	0.77
6:S4:48:LEU:HD21	6:S4:70:VAL:HG11	1.65	0.77
36:1:3134:A:OP1	89:1:3910:OHX:N4	2.18	0.77
49:M3:3:ILE:HG12	64:N8:34:MET:HE2	1.65	0.77
1:2:740:A:H2'	1:2:741:C:H5''	1.65	0.77
36:1:2561:A:HO2'	36:1:2562:A:H8	1.32	0.77
80:c0:32:HIS:CD2	80:c0:33:GLU:H	2.03	0.77
36:5:2211:U:H5	36:5:2234:G:O6	1.67	0.77
36:5:2853:A:H5'	47:m0:63:GLU:HB2	1.67	0.77
3:S1:48:VAL:HG13	3:S1:61:LEU:HD21	1.65	0.77
41:l4:329:PRO:O	41:l4:331:ALA:N	2.18	0.77
42:l5:184:ASP:OD2	42:l5:187:THR:OG1	2.02	0.77
1:2:1010:C:OP2	89:2:2131:OHX:N6	2.17	0.77
18:C6:40:GLU:HA	18:C6:42:GLU:H	1.48	0.77
49:M3:126:PHE:HD2	71:O5:115:LYS:HG2	1.48	0.77
1:2:523:G:OP2	26:D4:37:LYS:NZ	2.16	0.77
15:C3:55:ARG:NH1	15:C3:56:ASP:OD2	2.18	0.77
19:C7:14:LYS:NZ	19:C7:18:GLU:OE2	2.17	0.77
36:1:776:U:H5	36:1:2719:U:O2	1.68	0.77
36:5:1330:A:OP1	69:o3:19:SER:HB3	1.84	0.77
1:2:1291:G:N2	1:2:1324:G:H22	1.83	0.77
36:1:3376:A:OP2	89:1:3915:OHX:N5	2.18	0.77
53:M7:25:SER:O	53:M7:29:THR:HG23	1.85	0.77
11:s9:116:LEU:O	11:s9:118:LEU:N	2.16	0.77
42:l5:269:SER:OG	42:l5:270:LYS:N	2.08	0.77
36:1:860:G:OP1	79:Q3:17:ARG:NH1	2.17	0.77
36:1:2828:G:O2'	47:M0:4:ARG:NH1	2.18	0.77
36:1:1565:G:N2	36:1:1574:C:O2	2.17	0.76
47:M0:14:ASN:O	47:M0:128:ARG:NH2	2.16	0.76
1:6:845:G:H2'	1:6:846:G:H8	1.48	0.76
40:l3:37:ARG:HG2	40:l3:187:SER:H	1.48	0.76
56:n0:73:LYS:NZ	56:n0:97:VAL:O	2.18	0.76
2:S0:139:VAL:HG23	4:S2:62:PRO:HG3	1.67	0.76
66:O0:9:SER:OG	66:O0:10:ILE:N	2.17	0.76
36:5:2407:C:H2'	36:5:2408:U:H6	1.50	0.76
53:m7:105:LYS:HB3	53:m7:107:LEU:HD13	1.68	0.76
89:1:4093:OHX:N1	72:O6:28:TYR:O	2.17	0.76
46:L9:171:ASP:OD2	46:L9:173:ARG:NH1	2.19	0.76
1:6:1280:C:H2'	1:6:1281:G:H8	1.50	0.76
36:5:838:G:O6	79:q3:4:ARG:NH2	2.18	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:n3:2:SER:HA	59:n3:56:ASP:HA	1.66	0.76
28:D6:25:ASN:ND2	28:D6:77:CYS:SG	2.57	0.76
36:1:368:G:OP1	89:1:3892:OHX:N1	2.19	0.76
1:6:826:U:O4	89:6:2063:OHX:N3	2.18	0.76
36:1:3361:G:O6	89:1:4174:OHX:N6	2.18	0.76
36:5:2211:U:O4	89:5:3964:OHX:N4	2.17	0.76
1:2:1680:G:O6	89:2:2110:OHX:N5	2.19	0.76
15:C3:115:LEU:HD22	15:C3:119:GLU:HG3	1.68	0.76
36:1:3259:U:H6	36:1:3259:U:H5'	1.50	0.76
13:C1:99:ARG:NH1	25:D3:7:ARG:O	2.19	0.76
36:1:283:G:OP1	78:Q2:45:ARG:NH2	2.19	0.76
53:M7:29:THR:HA	53:M7:32:THR:HG23	1.68	0.76
70:O4:41:ARG:HG2	70:O4:56:THR:HG21	1.67	0.76
6:s4:151:ASP:OD1	8:s6:215:ARG:NH1	2.19	0.76
15:c3:65:VAL:HG23	15:c3:66:ILE:HG23	1.67	0.76
1:2:104:A:OP2	1:2:308:C:N4	2.18	0.76
2:S0:55:GLU:OE2	23:D1:80:LYS:N	2.19	0.76
36:1:1464:G:OP2	89:1:4212:OHX:N5	2.18	0.76
40:L3:139:GLN:O	40:L3:141:GLY:N	2.18	0.76
52:M6:65:ASN:OD1	52:M6:67:THR:HB	1.85	0.76
48:m1:106:ILE:HD11	48:m1:125:MET:HG2	1.66	0.76
36:1:1334:U:O2'	44:L7:151:ARG:NH2	2.19	0.76
42:L5:60:ILE:HB	42:L5:80:SER:HB3	1.67	0.76
56:N0:91:TYR:O	56:N0:137:ARG:NH1	2.19	0.76
3:S1:35:PRO:HD3	3:S1:98:THR:HG23	1.67	0.75
1:6:1521:G:O6	21:c9:68:ARG:NH1	2.19	0.75
65:n9:23:LYS:HB3	65:n9:24:PRO:HD3	1.66	0.75
3:S1:70:LEU:HA	3:S1:73:LEU:HB3	1.67	0.75
36:1:1454:A:OP2	89:1:4221:OHX:N6	2.19	0.75
63:N7:38:PHE:O	63:N7:40:HIS:ND1	2.17	0.75
1:6:902:G:N1	16:c4:51:ASP:OD1	2.18	0.75
36:1:2177:G:OP2	39:L2:128:ARG:NH1	2.18	0.75
68:O2:100:ILE:O	68:O2:105:ARG:NH1	2.18	0.75
71:O5:92:LEU:HB3	71:O5:96:GLU:O	1.86	0.75
36:5:2522:G:O6	39:l2:70:ARG:NH2	2.19	0.75
40:l3:147:GLU:OE2	40:l3:150:ARG:NH1	2.19	0.75
1:2:1339:C:O2'	1:2:1341:A:N7	2.18	0.75
67:o1:46:THR:OG1	67:o1:47:ASP:N	2.20	0.75
72:o6:70:ARG:HD3	72:o6:84:LYS:HG2	1.69	0.75
1:2:1535:U:O2'	1:2:1536:G:N3	2.18	0.75
41:L4:292:SER:HB3	41:L4:295:ILE:HB	1.66	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:31:ARG:NH1	51:M5:124:ASP:OD1	2.19	0.75
1:6:1471:A:OP1	7:s5:185:ARG:NH1	2.20	0.75
25:d3:125:VAL:HG12	25:d3:126:LYS:HG3	1.67	0.75
39:l2:70:ARG:HD2	39:l2:72:ARG:HE	1.52	0.75
1:2:895:G:H1	1:2:917:U:H3	1.34	0.75
37:3:112:G:OP2	89:3:220:OHX:N1	2.19	0.75
41:l4:44:LYS:HB3	41:l4:47:ARG:NH1	2.00	0.75
46:l9:48:VAL:HG21	46:l9:52:LEU:HD13	1.67	0.75
63:N7:26:VAL:HG21	63:N7:96:VAL:HB	1.68	0.75
79:Q3:8:VAL:HB	79:Q3:11:THR:HG22	1.69	0.75
36:5:1235:U:H4'	36:5:1236:G:H5'	1.68	0.75
36:5:1804:A:H2'	36:5:1805:C:C6	2.20	0.75
66:o0:22:LYS:HD3	66:o0:94:GLU:HG3	1.68	0.75
1:2:1369:U:OP1	21:C9:119:LYS:NZ	2.19	0.74
36:1:1466:G:O6	89:1:3887:OHX:N4	2.20	0.74
1:6:1160:A:H2'	1:6:1161:C:C6	2.22	0.74
15:c3:132:VAL:HG23	15:c3:134:VAL:HG13	1.69	0.74
53:m7:25:SER:O	53:m7:29:THR:HG23	1.86	0.74
7:S5:64:VAL:HG22	7:S5:89:ILE:HD11	1.66	0.74
11:S9:93:LEU:HA	11:S9:96:VAL:HG13	1.67	0.74
24:D2:53:ILE:HG12	24:D2:60:LYS:HB2	1.69	0.74
63:N7:33:SER:HB2	63:N7:36:HIS:HB2	1.69	0.74
1:2:1228:G:H1	14:C2:67:THR:HB	1.53	0.74
24:d2:70:ASN:HB2	24:d2:130:TYR:O	1.87	0.74
36:1:768:C:OP1	49:M3:186:ARG:NH2	2.18	0.74
36:1:829:U:H3	36:1:895:A:H62	1.36	0.74
37:3:17:A:OP1	42:L5:2:ALA:N	2.20	0.74
42:L5:68:THR:HG22	42:L5:70:THR:H	1.52	0.74
54:M8:30:VAL:O	54:M8:34:THR:HG23	1.88	0.74
1:2:169:A:H5''	8:S6:176:GLN:HG2	1.69	0.74
3:S1:51:SER:HA	3:S1:57:ALA:H	1.52	0.74
22:D0:48:HIS:ND1	22:D0:48:HIS:O	2.20	0.74
39:L2:142:ASP:OD2	39:L2:142:ASP:N	2.19	0.74
61:N5:67:ILE:HD12	61:N5:121:LYS:HG3	1.69	0.74
27:d5:92:ILE:HD11	27:d5:100:ILE:HG22	1.69	0.74
1:2:1532:U:OP1	27:D5:81:ARG:NH2	2.20	0.74
28:D6:10:ARG:HB2	28:D6:34:LYS:HG2	1.68	0.74
42:l5:279:LYS:HD2	42:l5:282:ARG:HH12	1.53	0.74
19:C7:66:VAL:HB	19:C7:69:ILE:HD11	1.69	0.74
37:3:49:G:N7	42:L5:58:LYS:HG3	2.02	0.74
1:6:25:C:O2	89:6:2105:OHX:N6	2.21	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:218:A:H2'	1:6:219:A:H5''	1.70	0.74
36:5:1878:G:OP1	89:5:3959:OHX:N5	2.19	0.74
45:l8:68:ARG:O	45:l8:69:LEU:HB2	1.87	0.74
47:m0:36:LEU:HD21	47:m0:69:ARG:HD3	1.70	0.74
2:S0:59:LEU:HD11	23:D1:78:LEU:HD12	1.70	0.74
1:6:833:U:O4	89:6:2098:OHX:N2	2.21	0.74
1:6:932:U:O2	28:d6:32:LYS:NZ	2.21	0.74
34:sR:42:LEU:HD21	34:sR:82:SER:HB3	1.70	0.74
36:5:863:C:OP1	89:5:3918:OHX:N3	2.21	0.74
41:l4:170:LYS:HG3	41:l4:175:HIS:HB2	1.69	0.74
47:m0:43:VAL:HG21	47:m0:197:VAL:HB	1.70	0.74
9:S7:50:ASP:HB3	9:S7:56:LYS:HG2	1.70	0.74
36:1:2663:G:H5'	42:L5:152:ARG:HD3	1.70	0.74
38:4:126:A:O2'	38:4:128:U:OP1	2.06	0.74
27:d5:85:LYS:HG3	27:d5:86:GLU:H	1.53	0.74
47:m0:41:ALA:O	47:m0:139:ARG:NH2	2.17	0.74
47:m0:208:ASN:HB3	47:m0:211:ARG:HH11	1.52	0.74
36:1:1145:G:OP1	68:O2:44:ARG:NH1	2.20	0.74
68:O2:97:ALA:HB3	68:O2:100:ILE:HG12	1.70	0.74
8:s6:98:ARG:HD3	8:s6:99:GLY:N	2.02	0.74
42:l5:4:GLN:O	42:l5:6:ASP:N	2.20	0.74
43:l6:85:ILE:HG23	69:o3:107:ILE:HG21	1.68	0.74
9:S7:11:GLN:HG3	9:S7:13:PRO:HD2	1.70	0.73
36:1:1740:U:H1'	36:1:1741:A:H2	1.53	0.73
1:6:1479:A:OP1	21:c9:57:ARG:NH1	2.21	0.73
50:m4:19:ARG:HA	50:m4:69:THR:HG22	1.69	0.73
1:2:190:C:N4	1:2:196:G:O6	2.19	0.73
1:2:273:G:H1	1:2:283:U:H3	1.35	0.73
47:m0:78:THR:OG1	47:m0:79:VAL:N	2.19	0.73
3:S1:137:ILE:HD11	3:S1:172:LEU:HB3	1.71	0.73
36:1:2208:A:N1	89:1:4056:OHX:N2	2.35	0.73
36:5:155:G:H1'	72:o6:26:ILE:HD13	1.70	0.73
36:1:517:G:P	44:L7:60:ARG:HH22	2.11	0.73
6:s4:49:ARG:NH2	6:s4:50:ASN:OD1	2.22	0.73
36:5:174:C:H42	36:5:244:G:H1	1.37	0.73
36:5:419:G:N7	89:5:3906:OHX:N3	2.37	0.73
10:s8:34:ALA:HB2	10:s8:56:ARG:HD3	1.71	0.73
14:c2:61:VAL:HG13	14:c2:121:VAL:HG23	1.71	0.73
1:2:1202:A:OP1	89:2:2111:OHX:N1	2.22	0.73
3:S1:109:LYS:HG3	3:S1:113:MET:HE3	1.71	0.73
25:D3:6:PRO:HG3	25:D3:14:LYS:HG2	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:125:VAL:HG12	25:D3:126:LYS:HG3	1.71	0.73
36:1:1215:U:H2'	36:1:1216:C:H5''	1.69	0.73
1:6:1253:U:O4	82:e1:97:LYS:NZ	2.21	0.73
46:19:91:ARG:HG2	46:19:182:SER:HB3	1.71	0.73
36:1:838:G:O6	79:Q3:4:ARG:NH2	2.22	0.73
36:1:3329:U:H5''	40:L3:308:MET:HE3	1.70	0.73
63:N7:52:LYS:O	63:N7:65:ARG:NH1	2.21	0.73
36:5:2233:A:OP2	89:5:3964:OHX:N5	2.21	0.73
1:2:79:C:H1'	8:S6:174:LYS:HD3	1.70	0.73
36:1:544:C:H1'	36:1:548:G:H22	1.53	0.73
1:6:959:U:H5''	29:d7:28:PRO:HB3	1.71	0.73
1:6:1126:G:OP1	77:q1:15:ARG:NH1	2.22	0.73
6:s4:187:ARG:HB2	6:s4:187:ARG:HH11	1.54	0.73
10:s8:36:THR:HB	10:s8:57:ALA:O	1.89	0.73
19:c7:104:ASN:O	19:c7:106:THR:N	2.21	0.73
37:7:121:U:H5''	42:l5:265:TYR:HE1	1.52	0.73
47:m0:77:THR:HG22	47:m0:82:ARG:HA	1.70	0.73
36:1:1878:G:OP1	89:1:3936:OHX:N4	2.22	0.73
36:1:3343:G:H21	36:1:3362:A:H2	1.35	0.73
41:L4:93:MET:H	41:L4:93:MET:HE2	1.54	0.73
1:6:895:G:H1	1:6:917:U:H3	1.35	0.73
25:d3:30:LYS:HE2	25:d3:34:LEU:HD11	1.69	0.73
72:o6:4:LYS:HD3	72:o6:14:GLY:HA3	1.71	0.73
1:2:583:C:OP1	89:2:2026:OHX:N3	2.21	0.72
36:1:1243:G:N2	36:1:1244:A:N7	2.36	0.72
36:1:1942:U:OP2	55:M9:74:ARG:NH1	2.22	0.72
36:1:1944:U:H2'	36:1:1945:A:C8	2.24	0.72
37:3:7:G:OP1	42:L5:33:ARG:NH1	2.22	0.72
45:L8:148:ALA:HA	45:L8:201:THR:HG22	1.71	0.72
40:l3:346:THR:O	40:l3:348:ARG:N	2.22	0.72
20:C8:83:ALA:HA	20:C8:86:LEU:HD22	1.71	0.72
59:N3:108:GLU:HG2	59:N3:128:ARG:HD3	1.70	0.72
11:s9:109:LEU:HB2	11:s9:146:PHE:HB3	1.70	0.72
28:d6:58:VAL:HG22	28:d6:59:TYR:H	1.53	0.72
36:5:1066:G:OP1	89:5:4232:OHX:N2	2.22	0.72
36:5:2249:G:OP1	89:5:4202:OHX:N6	2.22	0.72
1:2:328:A:OP2	13:C1:56:LYS:NZ	2.22	0.72
39:L2:83:HIS:CE1	39:L2:86:GLN:HB2	2.23	0.72
56:N0:1:MET:HE3	56:N0:32:SER:HB3	1.69	0.72
63:N7:46:ILE:HD11	63:N7:49:TYR:HA	1.71	0.72
71:O5:101:THR:HG22	71:O5:104:GLN:HB2	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:s2:53:ILE:HG12	4:s2:73:LEU:HD22	1.71	0.72
8:s6:155:ASP:N	8:s6:155:ASP:OD2	2.22	0.72
36:5:410:U:O4	89:5:4105:OHX:N1	2.23	0.72
36:5:3295:A:H2'	36:5:3296:A:C8	2.24	0.72
11:S9:100:LYS:HE3	11:S9:102:GLU:HB2	1.70	0.72
36:1:2852:C:N3	47:M0:158:LYS:NZ	2.36	0.72
1:6:397:A:O3'	10:s8:50:GLY:HA2	1.90	0.72
82:e1:90:LYS:HB2	82:e1:93:HIS:HE1	1.54	0.72
36:5:437:G:H22	36:5:622:A:N6	1.85	0.72
34:SR:135:THR:HG22	34:SR:141:LEU:HD23	1.72	0.72
36:1:1456:A:N7	67:O1:26:LYS:NZ	2.37	0.72
36:1:2992:U:H1'	53:M7:69:ARG:HH21	1.54	0.72
63:N7:95:VAL:HG21	63:N7:113:VAL:HG11	1.69	0.72
1:6:169:A:H5'	8:s6:176:GLN:HG2	1.72	0.72
1:6:1678:A:OP1	10:s8:59:ARG:NH2	2.23	0.72
37:7:2:G:O2'	37:7:23:A:N1	2.22	0.72
39:l2:68:LYS:HD2	39:l2:70:ARG:HH21	1.54	0.72
41:l4:226:GLU:OE1	41:l4:237:GLN:NE2	2.20	0.72
19:C7:82:ASP:O	19:C7:83:GLN:NE2	2.23	0.72
27:D5:46:LYS:HE2	27:D5:70:LYS:HD2	1.69	0.72
34:SR:200:ASN:ND2	34:SR:240:VAL:O	2.22	0.72
56:N0:82:ASP:OD1	56:N0:87:THR:HB	1.89	0.72
36:5:900:G:H1'	36:5:1589:A:N6	2.03	0.72
46:l9:77:ASN:HA	46:l9:80:THR:HG23	1.70	0.72
1:6:104:A:H61	1:6:308:C:H5'	1.54	0.72
1:6:1398:U:O2'	19:c7:67:ARG:NH2	2.18	0.72
19:c7:33:ARG:NH2	34:sR:109:ASP:OD1	2.22	0.72
22:d0:95:ALA:HB1	22:d0:99:ILE:HG13	1.71	0.72
36:5:2895:G:H2'	36:5:2896:A:H5''	1.72	0.72
68:o2:81:ASP:O	68:o2:84:THR:OG1	2.08	0.72
36:1:1238:C:N4	36:1:1245:A:OP2	2.22	0.72
43:L6:31:ARG:NH2	43:L6:81:ALA:O	2.23	0.72
46:L9:138:THR:O	46:L9:139:ASN:ND2	2.20	0.72
1:6:339:C:OP2	10:s8:10:LYS:NZ	2.21	0.72
7:s5:92:ARG:HG2	7:s5:92:ARG:HH11	1.53	0.72
44:l7:88:ARG:HD2	44:l7:90:LYS:O	1.88	0.72
48:m1:107:ASP:OD1	48:m1:107:ASP:N	2.23	0.72
2:S0:185:ARG:HB2	23:D1:45:ALA:HB3	1.70	0.72
36:1:76:G:O2'	49:M3:100:ARG:NH1	2.23	0.72
36:1:300:G:O6	89:1:4164:OHX:N1	2.22	0.72
36:1:2395:G:H5''	40:L3:255:TRP:CD1	2.25	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:101:HIS:HA	3:s1:217:LEU:HD22	1.71	0.72
22:d0:53:LYS:HB2	22:d0:92:ASP:HB2	1.72	0.72
50:m4:48:GLY:HA3	50:m4:53:VAL:HG13	1.70	0.72
64:N8:90:TYR:CG	64:N8:100:PRO:HG3	2.25	0.72
1:6:1011:G:OP2	89:6:2117:OHX:N3	2.22	0.72
1:6:1330:G:H21	19:c7:8:THR:HG21	1.52	0.72
11:s9:3:ARG:HG2	11:s9:3:ARG:HH21	1.55	0.72
36:5:1949:G:H1	36:5:2097:U:H3	1.36	0.72
55:m9:145:ALA:HA	55:m9:148:ASP:HB2	1.71	0.72
36:1:679:U:O4	89:1:3983:OHX:N1	2.23	0.71
1:6:151:G:H1	1:6:163:G:H1	1.38	0.71
20:c8:29:VAL:HG21	20:c8:54:LEU:HD23	1.72	0.71
42:l5:122:VAL:HG23	42:l5:123:GLU:H	1.55	0.71
74:o8:24:THR:HG23	74:o8:44:LYS:HB2	1.72	0.71
1:2:851:U:H2'	1:2:852:C:C6	2.25	0.71
9:S7:150:GLN:HB3	9:S7:181:ILE:HD12	1.72	0.71
36:1:718:G:C2	36:1:721:G:H1'	2.25	0.71
51:m5:18:VAL:HG22	51:m5:19:LEU:HD12	1.73	0.71
76:q0:99:CYS:SG	90:q0:201:ZN:ZN	1.77	0.71
1:2:7:G:O6	4:S2:205:ARG:NH2	2.22	0.71
1:2:471:A:OP2	89:2:2076:OHX:N4	2.22	0.71
1:2:1034:C:HO2'	24:D2:2:THR:N	1.88	0.71
1:2:1745:G:O6	89:2:2086:OHX:N6	2.23	0.71
3:S1:181:LEU:H	3:S1:181:LEU:HD13	1.55	0.71
51:M5:14:LYS:HA	51:M5:19:LEU:HD23	1.72	0.71
2:s0:71:GLU:O	2:s0:96:THR:HG22	1.90	0.71
24:d2:20:THR:HB	24:d2:22:LYS:HD3	1.72	0.71
47:m0:4:ARG:NH2	47:m0:99:ILE:HG22	2.04	0.71
36:1:1808:G:O6	89:1:3993:OHX:N3	2.22	0.71
89:1:3921:OHX:N6	51:M5:32:GLN:O	2.22	0.71
46:L9:18:VAL:HB	46:L9:27:VAL:HG22	1.72	0.71
1:6:833:U:O4	89:6:2098:OHX:N5	2.23	0.71
1:6:1251:U:H4'	82:e1:134:ASN:H	1.55	0.71
1:6:1294:G:O6	89:6:2066:OHX:N5	2.23	0.71
17:c5:65:LEU:O	89:c5:201:OHX:N2	2.23	0.71
34:sR:52:GLN:HG2	34:sR:53:LYS:HG3	1.72	0.71
46:l9:171:ASP:OD2	46:l9:173:ARG:NH1	2.23	0.71
27:D5:60:VAL:HG22	27:D5:101:TYR:HB2	1.72	0.71
40:L3:152:LYS:HG2	40:L3:192:VAL:HG11	1.72	0.71
44:L7:25:GLN:NE2	44:L7:25:GLN:O	2.24	0.71
47:M0:134:ILE:HD11	57:N1:160:ILE:HD12	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:83:THR:HG23	63:N7:85:TYR:H	1.55	0.71
70:O4:22:VAL:HG12	70:O4:30:LEU:HD22	1.71	0.71
15:c3:55:ARG:NH1	15:c3:56:ASP:OD1	2.20	0.71
26:d4:20:ARG:HD2	26:d4:74:LEU:HD22	1.72	0.71
36:5:437:G:N2	36:5:622:A:H61	1.86	0.71
36:5:2356:A:OP1	53:m7:138:LYS:NZ	2.23	0.71
36:5:3272:C:OP2	43:l6:78:ARG:NH1	2.23	0.71
1:2:1796:C:OP1	28:D6:87:ARG:NH1	2.23	0.71
11:S9:163:PRO:O	11:S9:165:GLY:N	2.18	0.71
14:C2:103:LEU:HG	14:C2:116:VAL:HG22	1.71	0.71
36:1:830:A:OP1	89:1:4022:OHX:N4	2.23	0.71
36:1:2248:C:OP2	89:1:3890:OHX:N3	2.24	0.71
39:L2:30:ARG:NH2	39:L2:33:ASP:OD2	2.23	0.71
54:M8:151:ARG:HB2	54:M8:152:HIS:HD2	1.55	0.71
36:5:510:G:O6	89:5:4025:OHX:N2	2.24	0.71
36:5:3074:G:OP1	89:5:4122:OHX:N4	2.24	0.71
71:o5:85:THR:HG22	71:o5:88:LEU:H	1.55	0.71
1:2:1529:C:OP1	7:S5:112:ARG:NH1	2.23	0.71
36:1:3115:C:OP1	46:L9:62:ARG:NH2	2.24	0.71
46:L9:171:ASP:OD1	46:L9:173:ARG:HD3	1.91	0.71
1:6:228:G:N2	1:6:237:C:N3	2.38	0.71
1:6:885:G:OP1	3:s1:216:LYS:NZ	2.14	0.71
1:6:1794:A:H1'	28:d6:79:ILE:HD12	1.72	0.71
7:s5:143:ARG:HD3	30:d8:55:VAL:HG11	1.73	0.71
36:5:1010:G:N3	47:m0:194:GLY:HA3	2.06	0.71
66:o0:13:LYS:HB3	66:o0:100:ILE:HG22	1.72	0.71
3:S1:157:GLN:O	3:S1:159:SER:N	2.24	0.71
1:2:656:G:O2'	1:2:657:U:O4'	2.08	0.71
1:2:796:A:OP2	89:2:2057:OHX:N6	2.23	0.71
36:1:2503:G:H1'	36:1:2504:U:H5	1.55	0.71
36:1:3358:U:H2'	36:1:3359:A:O4'	1.91	0.71
17:c5:68:PRO:O	89:c5:201:OHX:N5	2.24	0.71
19:c7:14:LYS:HG3	19:c7:69:ILE:HG22	1.72	0.71
29:d7:19:HIS:CD2	29:d7:21:LEU:H	2.09	0.71
39:l2:3:ARG:HB2	39:l2:207:VAL:HG12	1.72	0.71
49:m3:166:ALA:HB1	64:n8:147:LEU:HD21	1.73	0.71
84:p0:102:SER:OG	84:p0:103:ASN:N	2.24	0.71
7:S5:57:SER:O	7:S5:59:VAL:N	2.23	0.71
80:c0:29:GLN:NE2	80:c0:31:LYS:O	2.22	0.71
14:c2:103:LEU:HD23	14:c2:115:VAL:HA	1.73	0.71
81:e0:29:LYS:HG3	81:e0:30:PRO:HD2	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:647:G:N2	1:2:687:G:H22	1.88	0.70
1:2:829:A:O2'	1:2:830:U:OP2	2.09	0.70
36:1:514:G:N3	41:L4:341:SER:OG	2.23	0.70
4:s2:58:LEU:HD11	4:s2:236:PRO:HG2	1.71	0.70
30:d8:32:PHE:O	30:d8:34:GLU:N	2.24	0.70
36:5:2255:A:H5'	36:5:2261:G:H22	1.54	0.70
42:l5:83:LEU:HB3	42:l5:88:ILE:HB	1.73	0.70
5:S3:142:LEU:O	5:S3:144:ALA:N	2.23	0.70
22:D0:42:VAL:HG21	22:D0:55:PRO:HD3	1.72	0.70
10:s8:82:VAL:HG12	10:s8:101:ILE:HG22	1.72	0.70
17:c5:44:ARG:NH2	17:c5:82:ASN:O	2.23	0.70
36:5:1898:G:OP2	89:5:3947:OHX:N5	2.23	0.70
36:5:2322:C:OP1	89:5:4163:OHX:N6	2.24	0.70
36:1:1015:U:O2'	36:1:1017:C:OP2	2.09	0.70
46:l9:86:TYR:CE2	46:l9:151:VAL:HG22	2.25	0.70
34:SR:160:GLU:O	34:SR:162:ALA:N	2.24	0.70
36:1:2123:G:N7	89:1:4213:OHX:N2	2.40	0.70
54:M8:151:ARG:HB2	54:M8:152:HIS:CD2	2.26	0.70
1:6:93:A:H1'	6:s4:3:ARG:HB3	1.72	0.70
36:5:2579:G:O6	89:5:4033:OHX:N3	2.24	0.70
2:S0:182:LEU:HB3	2:S0:188:LEU:HD23	1.74	0.70
79:Q3:46:THR:HB	79:Q3:58:SER:HB2	1.74	0.70
8:s6:67:VAL:HG21	8:s6:99:GLY:HA2	1.72	0.70
24:d2:111:MET:HE3	24:d2:116:ALA:HA	1.72	0.70
36:5:3122:A:N1	46:l9:70:THR:HG21	2.07	0.70
36:5:3155:U:OP1	89:5:4230:OHX:N4	2.25	0.70
38:8:135:G:OP2	61:n5:56:ARG:NH2	2.24	0.70
3:S1:87:ARG:NH2	3:S1:220:GLN:OE1	2.24	0.70
22:D0:27:THR:HB	22:D0:88:LYS:HG3	1.72	0.70
36:1:1320:C:O2	56:N0:115:ARG:NH2	2.24	0.70
13:c1:99:ARG:NH1	25:d3:7:ARG:O	2.24	0.70
17:C5:85:ILE:HD11	17:C5:116:LEU:HD23	1.74	0.70
18:C6:50:GLU:OE1	18:C6:114:ARG:NH1	2.25	0.70
36:1:883:A:H5'	53:M7:133:HIS:HA	1.73	0.70
46:L9:8:GLN:HG2	46:L9:68:LEU:HD13	1.74	0.70
36:5:916:G:C6	39:l2:207:VAL:HG21	2.26	0.70
44:l7:121:LYS:HB2	57:n1:133:ALA:HB3	1.73	0.70
66:o0:26:GLY:O	66:o0:30:THR:HG23	1.92	0.70
70:o4:58:ARG:HG3	70:o4:59:PRO:HD2	1.74	0.70
25:D3:78:LYS:HG3	25:D3:79:ASN:HB2	1.74	0.70
1:6:1564:U:H2'	1:6:1565:C:C6	2.26	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:s7:66:SER:O	9:s7:68:ALA:N	2.24	0.70
22:d0:69:LYS:HE2	22:d0:80:GLU:HG3	1.74	0.70
1:2:1550:A:OP2	17:C5:42:ARG:NH2	2.25	0.70
7:S5:182:ALA:O	7:S5:186:ASN:ND2	2.25	0.70
11:S9:96:VAL:HA	11:S9:99:LEU:HD22	1.73	0.70
21:c9:16:ASN:OD1	21:c9:56:LYS:NZ	2.25	0.70
58:n2:59:ASP:OD1	58:n2:60:GLY:N	2.24	0.70
60:n4:58:HIS:ND1	60:n4:58:HIS:O	2.23	0.70
77:q1:23:ARG:HG2	77:q1:23:ARG:HH11	1.56	0.70
1:2:301:A:OP2	89:2:2064:OHX:N2	2.24	0.70
27:D5:36:ALA:O	27:D5:38:HIS:N	2.24	0.70
71:O5:70:TYR:HA	71:O5:73:LYS:HD2	1.73	0.70
23:d1:3:ASN:HD21	23:d1:7:GLN:HB3	1.56	0.70
25:D3:91:GLY:O	25:D3:93:LEU:N	2.25	0.69
36:1:2703:A:OP2	42:L5:23:ARG:NH1	2.25	0.69
72:O6:58:ILE:HA	72:O6:61:ILE:HD12	1.74	0.69
1:6:1417:A:OP1	89:6:2084:OHX:N4	2.25	0.69
89:5:4193:OHX:N2	72:o6:28:TYR:O	2.25	0.69
1:2:66:U:OP1	8:S6:136:LYS:NZ	2.22	0.69
9:S7:162:ILE:HB	9:S7:169:PHE:HE2	1.57	0.69
12:C0:29:GLN:HB2	12:C0:39:ASN:HB2	1.74	0.69
59:N3:40:LYS:HD2	59:N3:59:MET:HE2	1.73	0.69
1:6:823:G:H2'	1:6:824:G:O4'	1.92	0.69
47:m0:21:ARG:NH1	47:m0:22:TYR:OH	2.25	0.69
3:S1:180:THR:HG22	3:S1:181:LEU:HD22	1.75	0.69
36:1:1662:G:O6	89:1:3894:OHX:N2	2.25	0.69
1:6:67:A:O2'	1:6:69:G:OP1	2.07	0.69
1:6:915:A:OP1	89:6:2068:OHX:N6	2.24	0.69
1:6:1765:A:OP1	89:6:2122:OHX:N2	2.26	0.69
2:s0:126:PRO:HB2	2:s0:152:PRO:HG2	1.73	0.69
41:l4:144:LYS:HD2	41:l4:145:ILE:H	1.57	0.69
50:m4:55:ARG:HD3	56:n0:70:THR:OG1	1.92	0.69
3:S1:110:LEU:HD11	3:S1:213:ARG:HD2	1.74	0.69
16:C4:81:VAL:H	16:C4:115:ILE:HG22	1.57	0.69
74:O8:8:ILE:H	74:O8:8:ILE:HD12	1.56	0.69
46:l9:28:VAL:HG22	46:l9:33:THR:HB	1.75	0.69
3:S1:173:THR:O	3:S1:177:GLN:NE2	2.21	0.69
7:S5:149:VAL:HG23	30:D8:67:ARG:H	1.56	0.69
9:S7:38:LEU:HD23	9:S7:41:LEU:HD12	1.74	0.69
36:1:3116:G:OP1	36:1:3116:G:N2	2.25	0.69
53:M7:27:LYS:HD3	53:M7:63:PHE:HB3	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:144:ARG:NH2	3:s1:207:LEU:O	2.25	0.69
7:s5:163:SER:HB2	30:d8:48:VAL:HG22	1.74	0.69
19:c7:103:ASP:O	19:c7:104:ASN:ND2	2.25	0.69
66:o0:9:SER:OG	66:o0:10:ILE:N	2.22	0.69
25:D3:69:ARG:NH1	25:D3:116:ASP:OD1	2.25	0.69
51:M5:197:LEU:HD21	51:M5:199:LEU:HD21	1.74	0.69
1:6:193:U:C2	1:6:195:G:H1'	2.28	0.69
7:s5:43:PHE:N	7:s5:46:TRP:O	2.25	0.69
34:sR:38:ARG:HG2	34:sR:67:ILE:HG23	1.74	0.69
36:5:300:G:O6	89:5:4195:OHX:N2	2.26	0.69
54:m8:133:LYS:HB2	54:m8:135:GLN:HE22	1.56	0.69
63:n7:23:VAL:HG12	63:n7:45:GLY:HA3	1.72	0.69
73:o7:28:HIS:CD2	73:o7:31:LYS:HE2	2.27	0.69
4:S2:80:VAL:HG13	4:S2:81:MET:H	1.55	0.69
14:C2:97:LEU:HD11	14:C2:121:VAL:HG22	1.73	0.69
36:1:687:U:OP2	49:M3:36:ARG:NH2	2.24	0.69
42:L5:294:ALA:HB1	47:M0:217:PHE:HB3	1.75	0.69
1:6:25:C:O2	89:6:2105:OHX:N5	2.25	0.69
2:s0:119:ARG:HE	4:s2:240:LEU:HD23	1.58	0.69
1:2:649:U:O2'	1:2:650:U:O5'	2.11	0.69
1:2:715:U:H3	1:2:723:G:H1	1.38	0.69
1:2:1203:A:OP2	89:2:2111:OHX:N5	2.26	0.69
30:D8:12:VAL:HG22	30:D8:28:VAL:HG11	1.74	0.69
33:E1:144:CYS:HB3	33:E1:147:VAL:HG13	1.74	0.69
36:1:911:C:H42	39:L2:3:ARG:HD3	1.57	0.69
89:1:3968:OHX:N3	44:L7:217:PRO:O	2.26	0.69
48:M1:107:ASP:OD1	48:M1:107:ASP:N	2.24	0.69
53:M7:172:GLN:NE2	69:O3:60:ARG:O	2.25	0.69
54:M8:122:ILE:HG23	54:M8:126:GLN:HB2	1.75	0.69
62:N6:3:LYS:HG3	62:N6:8:VAL:HG13	1.75	0.69
63:N7:3:LYS:HE3	66:O0:36:GLN:HA	1.74	0.69
63:N7:78:ASN:OD1	66:O0:35:ARG:NH2	2.26	0.69
1:6:1280:C:H2'	1:6:1281:G:C8	2.27	0.69
13:c1:109:VAL:HG12	13:c1:137:PHE:HB2	1.75	0.69
25:d3:23:ARG:HG3	25:d3:23:ARG:HH11	1.56	0.69
89:5:4004:OHX:N3	44:I7:217:PRO:O	2.26	0.69
41:I4:82:THR:HG23	41:I4:84:ARG:H	1.57	0.69
62:n6:120:GLN:HG3	62:n6:126:LEU:HA	1.75	0.69
22:D0:83:GLU:HG3	22:D0:85:ARG:HE	1.57	0.69
36:1:1786:G:H2'	36:1:1787:A:C8	2.28	0.69
42:L5:76:ALA:HB3	42:L5:109:THR:HG22	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:350:U:H5''	1:6:352:A:H5'	1.75	0.69
9:s7:30:SER:HB3	9:s7:34:LEU:HD12	1.75	0.69
11:s9:147:MET:O	11:s9:149:ARG:NH1	2.26	0.69
40:l3:3:HIS:ND1	40:l3:3:HIS:O	2.24	0.69
79:q3:13:LYS:HD2	79:q3:14:TYR:CZ	2.27	0.69
13:C1:139:VAL:O	13:C1:140:VAL:HB	1.92	0.69
29:D7:14:SER:HA	29:D7:17:ARG:HG2	1.73	0.69
36:1:1024:G:N7	89:1:4179:OHX:N6	2.41	0.69
44:L7:88:ARG:HD2	44:L7:90:LYS:O	1.92	0.69
57:N1:8:ARG:O	57:N1:11:THR:OG1	2.10	0.69
5:s3:211:PRO:HG2	19:c7:19:ARG:HB2	1.76	0.69
11:s9:146:PHE:O	11:s9:147:MET:HB2	1.93	0.69
36:5:549:U:H2'	36:5:550:A:C8	2.27	0.69
36:5:1258:U:OP1	84:p0:46:ARG:NH2	2.26	0.69
62:n6:37:LYS:H	62:n6:37:LYS:HD3	1.58	0.69
18:C6:125:GLU:HG2	18:C6:126:PRO:HD2	1.76	0.68
25:D3:75:GLN:HG3	25:D3:82:LYS:HG3	1.74	0.68
27:D5:56:THR:HA	27:D5:103:ARG:HH11	1.58	0.68
36:1:3047:U:O2'	40:L3:53:MET:HE1	1.93	0.68
36:1:3118:C:H4'	76:Q0:106:ARG:HH22	1.58	0.68
50:M4:113:THR:HB	50:M4:116:GLU:HB2	1.75	0.68
51:M5:23:GLN:HG2	51:M5:122:ASN:HD21	1.58	0.68
59:N3:80:ARG:HH12	59:N3:116:GLY:HA3	1.56	0.68
1:6:868:G:H1	1:6:960:U:H3	1.41	0.68
1:6:1127:G:OP1	77:q1:11:ARG:NH2	2.25	0.68
3:s1:70:LEU:HB3	3:s1:79:HIS:HB3	1.74	0.68
4:s2:56:ILE:HG23	4:s2:61:LEU:HB2	1.75	0.68
11:s9:109:LEU:HD13	11:s9:129:ILE:HD13	1.75	0.68
36:5:283:G:OP2	78:q2:45:ARG:NH2	2.26	0.68
42:l5:110:LEU:HA	42:l5:113:LEU:HB2	1.75	0.68
83:m2:143:UNK:O	83:m2:145:UNK:N	2.26	0.68
58:n2:54:VAL:HG13	58:n2:67:SER:HB2	1.73	0.68
1:2:1682:U:O4	1:2:1720:G:N2	2.25	0.68
1:2:1796:C:OP2	28:D6:5:ARG:NH1	2.26	0.68
19:C7:13:SER:HA	19:C7:54:THR:HG22	1.75	0.68
22:D0:23:ARG:NH1	22:D0:92:ASP:OD1	2.21	0.68
36:1:291:C:OP1	51:M5:68:ARG:NH1	2.26	0.68
58:N2:99:LYS:HG3	58:N2:102:GLU:HB2	1.76	0.68
43:l6:31:ARG:NH2	43:l6:81:ALA:O	2.27	0.68
47:m0:99:ILE:HD13	47:m0:101:LYS:HB2	1.75	0.68
1:2:399:A:H4'	6:S4:3:ARG:HG2	1.74	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:60:LEU:HD21	72:O6:68:ARG:HH21	1.58	0.68
1:6:219:A:C6	1:6:843:U:H1'	2.29	0.68
1:6:845:G:H2'	1:6:846:G:C8	2.28	0.68
36:5:1334:U:H5''	44:17:206:LYS:HB3	1.75	0.68
1:2:1479:A:OP1	21:C9:57:ARG:NH1	2.27	0.68
3:S1:171:ILE:HA	3:S1:174:LYS:HE3	1.75	0.68
4:S2:140:ARG:HB3	4:S2:221:THR:HB	1.75	0.68
35:SM:23:LYS:H	35:SM:23:LYS:HD2	1.59	0.68
36:1:276:U:O2	51:M5:93:LYS:NZ	2.27	0.68
36:1:619:A:H5''	36:1:620:U:OP1	1.94	0.68
36:1:1381:A:OP1	41:L4:197:ARG:NH1	2.25	0.68
52:M6:23:VAL:HG11	52:M6:84:LEU:HD11	1.73	0.68
60:N4:39:LEU:HD12	60:N4:44:LYS:HG3	1.74	0.68
1:6:1696:G:H2'	1:6:1698:G:O6	1.93	0.68
9:s7:129:LEU:HD13	9:s7:169:PHE:HB3	1.76	0.68
36:5:3043:C:OP2	59:n3:48:ARG:NH2	2.27	0.68
1:2:591:A:H2'	1:2:592:A:C8	2.27	0.68
1:2:916:U:H3	16:C4:41:ARG:HH22	1.40	0.68
1:2:936:G:N7	28:D6:15:ARG:NH1	2.41	0.68
36:1:612:U:H2'	36:1:613:G:H8	1.57	0.68
37:3:76:A:O2'	56:N0:50:LYS:NZ	2.26	0.68
53:M7:36:ILE:HG12	53:M7:44:ALA:HB1	1.75	0.68
70:O4:58:ARG:HH11	70:O4:58:ARG:HG3	1.59	0.68
24:d2:104:LEU:HD23	24:d2:125:ILE:HA	1.74	0.68
36:5:116:A:OP1	72:o6:36:ARG:NH1	2.27	0.68
36:5:1541:G:OP2	89:5:4096:OHX:N4	2.26	0.68
38:8:82:U:H2'	38:8:83:C:H5'	1.76	0.68
41:l4:188:ARG:HG2	41:l4:190:GLY:H	1.58	0.68
63:n7:62:VAL:O	63:n7:66:THR:OG1	2.11	0.68
73:o7:52:LYS:HA	73:o7:55:ARG:HD2	1.75	0.68
1:2:734:A:H5''	1:2:735:C:OP1	1.93	0.68
36:1:2296:A:OP1	89:1:4161:OHX:N2	2.26	0.68
71:O5:85:THR:HG22	71:O5:87:ALA:N	2.06	0.68
1:6:373:G:N7	89:6:2184:OHX:N3	2.41	0.68
7:s5:94:THR:HG22	7:s5:114:ILE:HG13	1.75	0.68
11:s9:129:ILE:HA	11:s9:134:ILE:HG12	1.75	0.68
21:c9:105:LEU:HD13	21:c9:122:ARG:HD3	1.75	0.68
36:5:1369:A:OP1	64:n8:21:ARG:NH1	2.25	0.68
36:5:1949:G:OP1	55:m9:104:ARG:NH1	2.26	0.68
36:5:2827:U:O4	89:5:3902:OHX:N6	2.26	0.68
46:l9:12:VAL:HB	46:l9:51:GLN:HA	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:m0:210:ILE:HA	47:m0:217:PHE:CE2	2.28	0.68
1:2:491:C:H42	1:2:496:G:H1	1.39	0.68
3:S1:72:ASP:OD1	28:D6:59:TYR:OH	2.11	0.68
5:S3:114:ALA:HB3	5:S3:117:ARG:HB2	1.75	0.68
54:M8:143:PRO:HB2	54:M8:146:SER:HB2	1.75	0.68
11:s9:108:ARG:HB2	11:s9:111:THR:HG23	1.76	0.68
54:m8:89:ASP:OD1	54:m8:90:ASP:N	2.27	0.68
33:E1:108:VAL:HB	33:E1:114:VAL:HG22	1.76	0.68
36:1:837:A:OP2	79:Q3:4:ARG:NH1	2.25	0.68
36:1:847:A:H2'	36:1:848:A:C8	2.27	0.68
71:O5:95:PHE:O	71:O5:97:ALA:N	2.27	0.68
76:Q0:78:ILE:HG12	76:Q0:83:LYS:HD2	1.76	0.68
10:s8:42:ARG:HB3	10:s8:59:ARG:HB2	1.75	0.68
17:c5:130:ARG:HH12	35:sM:71:ASN:HA	1.58	0.68
36:5:498:A:H5'	69:o3:86:ARG:HH22	1.58	0.68
36:5:3043:C:P	59:n3:48:ARG:HH22	2.16	0.68
40:l3:4:ARG:HG3	40:l3:4:ARG:HH11	1.59	0.68
63:n7:36:HIS:CD2	63:n7:74:VAL:HG11	2.28	0.68
14:C2:61:VAL:HG13	14:C2:121:VAL:HG23	1.76	0.68
48:M1:49:LYS:HB3	48:M1:62:ASN:HA	1.76	0.68
1:6:831:U:O2'	1:6:832:U:H5'	1.94	0.68
1:6:1462:G:N7	20:c8:143:ARG:NH2	2.41	0.68
25:d3:62:LYS:HG3	25:d3:118:PRO:HG3	1.76	0.68
27:d5:71:ILE:HG23	27:d5:73:GLY:H	1.59	0.68
28:d6:26:CYS:SG	90:d6:101:ZN:ZN	1.82	0.68
82:e1:86:THR:O	82:e1:87:THR:OG1	2.09	0.68
36:5:25:U:O4	89:5:3908:OHX:N6	2.27	0.68
36:5:1781:C:H2'	36:5:1782:U:C6	2.29	0.68
36:5:3214:U:OP2	50:m4:128:ARG:NH2	2.27	0.68
37:7:73:C:O2	56:n0:13:ARG:NH1	2.27	0.68
8:S6:2:LYS:HB2	8:S6:108:VAL:HG22	1.76	0.68
36:1:829:U:H3	36:1:895:A:N6	1.92	0.68
36:1:1724:U:H4'	36:1:1725:C:OP1	1.92	0.68
36:1:2897:A:H2'	36:1:2899:C:H5''	1.74	0.68
13:c1:116:ARG:HE	13:c1:116:ARG:H	1.42	0.68
36:5:118:U:O2	36:5:121:A:H5'	1.93	0.68
36:5:990:U:H1'	57:n1:101:CYS:HB3	1.74	0.68
44:l7:216:VAL:HG11	44:l7:227:GLY:HA3	1.75	0.68
84:p0:72:ASP:OD1	84:p0:72:ASP:N	2.24	0.68
1:2:959:U:C6	15:C3:61:THR:HB	2.29	0.67
23:D1:74:GLN:HE22	23:D1:83:TRP:H	1.42	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3309:G:O6	40:L3:21:ARG:NH2	2.27	0.67
1:6:620:A:H8	1:6:620:A:H5'	1.58	0.67
1:6:822:U:H2'	1:6:823:G:H5''	1.76	0.67
7:s5:164:PRO:HA	7:s5:167:ARG:HG3	1.77	0.67
59:n3:89:ASP:OD1	59:n3:91:VAL:HG12	1.94	0.67
62:n6:35:LEU:HD13	62:n6:39:LEU:HB3	1.77	0.67
1:2:386:G:OP2	10:S8:25:ARG:NH2	2.27	0.67
53:M7:88:VAL:O	53:M7:92:GLN:HG2	1.94	0.67
9:s7:49:ILE:HG13	9:s7:57:ALA:HB3	1.77	0.67
18:c6:109:PHE:O	18:c6:113:ASP:N	2.25	0.67
36:5:595:G:H1	36:5:609:G:H5''	1.59	0.67
54:m8:158:HIS:H	54:m8:186:VAL:HG12	1.59	0.67
59:n3:87:ARG:HH22	59:n3:137:VAL:HG22	1.59	0.67
69:o3:59:VAL:O	69:o3:61:GLY:N	2.27	0.67
1:2:1338:C:H1'	1:2:1410:A:C4	2.30	0.67
1:2:1500:C:OP1	21:C9:122:ARG:NH2	2.26	0.67
36:1:385:A:H2'	36:1:386:A:C8	2.29	0.67
41:L4:217:LYS:HD3	41:L4:220:ARG:HH21	1.59	0.67
63:N7:100:THR:HA	63:N7:106:GLN:HG2	1.75	0.67
4:s2:230:TRP:CE2	24:d2:68:ARG:HD2	2.28	0.67
45:l8:156:ASP:OD2	45:l8:156:ASP:N	2.27	0.67
52:m6:108:ILE:HD11	52:m6:113:ASP:HA	1.76	0.67
53:m7:64:ASN:O	53:m7:67:ILE:HG12	1.95	0.67
1:2:702:G:O6	1:2:737:A:N6	2.28	0.67
1:2:1201:G:N2	1:2:1600:A:H5''	2.08	0.67
49:M3:56:PRO:HG3	49:M3:74:GLY:O	1.95	0.67
1:6:770:A:OP2	89:6:2134:OHX:N3	2.28	0.67
34:sR:307:ASP:OD2	34:sR:311:ARG:NH2	2.24	0.67
83:m2:120:UNK:O	83:m2:122:UNK:N	2.28	0.67
4:S2:161:LYS:NZ	4:S2:163:GLY:O	2.27	0.67
57:N1:115:LYS:HA	57:N1:118:GLU:HB2	1.76	0.67
1:6:1579:U:OP1	89:6:2180:OHX:N4	2.27	0.67
34:sR:177:MET:HE1	34:sR:193:ILE:HG13	1.77	0.67
36:5:743:C:O2	54:m8:141:ARG:HD3	1.94	0.67
36:1:912:G:OP2	39:L2:9:ARG:NH1	2.28	0.67
36:1:2916:U:H1'	59:N3:44:SER:HB3	1.77	0.67
54:M8:34:THR:HG22	54:M8:49:LEU:HD21	1.76	0.67
5:s3:72:LEU:HD22	80:c0:65:TYR:HD1	1.59	0.67
8:s6:98:ARG:HD3	8:s6:99:GLY:H	1.59	0.67
36:5:990:U:O4	89:5:4188:OHX:N6	2.28	0.67
36:5:1025:A:H3'	36:5:1026:A:H4'	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2568:C:N4	36:5:2574:G:O6	2.28	0.67
36:1:223:U:O4	89:1:4210:OHX:N5	2.27	0.67
40:L3:178:LEU:HD12	40:L3:179:ALA:H	1.59	0.67
47:M0:21:ARG:NH2	47:M0:22:TYR:OH	2.28	0.67
55:M9:13:SER:OG	55:M9:38:ARG:NH2	2.28	0.67
6:s4:139:VAL:HG13	6:s4:150:PRO:HG3	1.76	0.67
26:d4:29:HIS:O	26:d4:31:ASN:N	2.28	0.67
34:sR:81:LEU:HD11	34:sR:122:ILE:HD13	1.76	0.67
36:5:96:G:OP1	49:m3:15:ARG:NH2	2.28	0.67
64:n8:77:LYS:O	64:n8:79:TRP:N	2.26	0.67
66:o0:101:LEU:HD22	66:o0:101:LEU:H	1.60	0.67
1:2:1145:U:O2'	4:S2:89:GLN:O	2.12	0.67
1:2:1795:U:O2	28:D6:10:ARG:HD2	1.95	0.67
27:D5:43:ASP:O	27:D5:45:GLU:N	2.28	0.67
36:1:2233:A:OP2	89:1:4056:OHX:N5	2.28	0.67
62:N6:112:ASP:HB2	62:N6:115:ARG:H	1.60	0.67
36:5:847:A:H2'	36:5:848:A:C8	2.30	0.67
8:S6:164:LYS:N	8:S6:167:LYS:O	2.26	0.67
12:C0:30:ALA:HA	12:C0:38:LYS:HG2	1.77	0.67
22:D0:45:ALA:HB1	22:D0:50:LEU:HD12	1.77	0.67
36:1:1420:C:OP2	41:L4:193:LYS:NZ	2.28	0.67
36:1:2683:U:H2'	36:1:2684:C:C6	2.30	0.67
36:1:2895:G:O2'	76:Q0:100:TYR:O	2.13	0.67
37:3:4:U:H2'	37:3:5:G:C8	2.29	0.67
39:L2:204:MET:HE2	39:L2:209:HIS:HB2	1.76	0.67
6:s4:23:LEU:H	6:s4:23:LEU:HD22	1.60	0.67
7:s5:190:ILE:O	7:s5:194:LEU:HB2	1.94	0.67
36:5:2439:A:N6	36:5:2508:U:H3	1.92	0.67
40:l3:227:GLU:HG3	40:l3:270:ARG:HD3	1.77	0.67
74:o8:5:ILE:HG22	74:o8:54:LEU:HB2	1.77	0.67
1:2:142:G:H22	1:2:173:A:H2	1.43	0.67
17:C5:69:GLU:OE1	89:C5:201:OHX:N4	2.28	0.67
1:6:1720:G:O6	89:6:2091:OHX:N4	2.28	0.67
49:m3:9:ILE:HD11	64:n8:45:MET:HE1	1.77	0.67
49:m3:56:PRO:HG3	49:m3:74:GLY:O	1.94	0.67
74:o8:44:LYS:HG2	74:o8:53:THR:HB	1.77	0.67
1:2:652:G:H1	1:2:682:C:H42	1.42	0.66
34:SR:22:SER:HB3	34:SR:70:ASP:HA	1.76	0.66
46:L9:28:VAL:HG13	46:L9:33:THR:HB	1.75	0.66
66:O0:29:SER:HA	66:O0:32:LYS:HD3	1.76	0.66
76:Q0:97:ARG:HB2	76:Q0:120:GLN:O	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:184:C:H2'	1:6:185:U:C6	2.30	0.66
36:5:2967:A:H5''	39:12:213:GLY:HA2	1.77	0.66
38:8:79:A:H3'	38:8:80:A:C8	2.30	0.66
47:m0:72:ALA:O	47:m0:76:MET:HG3	1.95	0.66
84:p0:51:VAL:HB	84:p0:87:VAL:HG22	1.76	0.66
2:S0:70:PRO:HB2	2:S0:94:GLY:HA3	1.76	0.66
5:S3:65:ARG:HA	5:S3:68:GLU:HG3	1.76	0.66
36:5:1919:G:N7	89:5:4074:OHX:N4	2.44	0.66
36:5:2117:A:HO2'	36:5:3080:G:HO2'	1.43	0.66
36:5:2128:C:OP1	89:5:4093:OHX:N3	2.28	0.66
40:l3:221:THR:HB	40:l3:273:HIS:H	1.59	0.66
1:2:820:U:H2'	1:2:821:U:H4'	1.76	0.66
2:S0:110:TYR:O	2:S0:112:THR:N	2.27	0.66
6:S4:11:ARG:O	6:S4:12:LEU:HB2	1.93	0.66
25:D3:63:GLN:HA	25:D3:65:ASN:H	1.60	0.66
29:D7:56:CYS:SG	29:D7:57:GLU:N	2.68	0.66
48:M1:15:GLU:HB2	48:M1:132:ASN:ND2	2.11	0.66
71:O5:21:LEU:HD22	71:O5:25:LYS:HE2	1.77	0.66
1:6:1680:G:O6	89:6:2187:OHX:N4	2.29	0.66
53:m7:29:THR:HA	53:m7:32:THR:HG23	1.78	0.66
67:o1:23:VAL:O	67:o1:28:ARG:NH1	2.25	0.66
36:1:2356:A:N6	36:1:2983:C:H5	1.93	0.66
78:Q2:77:CYS:O	78:Q2:79:THR:N	2.28	0.66
1:6:1628:U:H2'	1:6:1629:G:C8	2.30	0.66
1:6:1665:U:O4	89:6:2120:OHX:N6	2.28	0.66
4:s2:140:ARG:NH1	23:d1:10:GLU:OE1	2.29	0.66
29:d7:2:VAL:O	29:d7:3:LEU:HB2	1.95	0.66
36:5:1246:G:O2'	36:5:1264:G:OP2	2.12	0.66
56:n0:82:ASP:OD1	56:n0:87:THR:HB	1.95	0.66
1:2:205:U:O4	89:2:2067:OHX:N3	2.28	0.66
21:C9:86:ARG:NH1	21:C9:90:PRO:O	2.29	0.66
43:L6:51:ARG:NH1	50:M4:114:ASP:OD2	2.28	0.66
1:6:1542:G:N2	1:6:1569:A:OP2	2.25	0.66
17:c5:53:PRO:HB3	17:c5:80:MET:HE1	1.78	0.66
34:sR:184:ASN:HD22	34:sR:185:GLN:N	1.92	0.66
40:l3:81:THR:HG22	40:l3:321:PHE:CA	2.25	0.66
42:l5:270:LYS:O	42:l5:273:ARG:HB3	1.95	0.66
68:o2:103:LYS:O	68:o2:106:VAL:HG22	1.96	0.66
74:o8:17:ARG:HB3	74:o8:20:VAL:HG21	1.77	0.66
9:S7:50:ASP:OD1	9:S7:50:ASP:N	2.29	0.66
30:D8:36:THR:O	30:D8:38:ARG:N	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2255:A:H5'	36:1:2261:G:H22	1.60	0.66
1:6:195:G:H2'	1:6:196:G:H5''	1.78	0.66
1:6:789:A:OP1	6:s4:108:ARG:NH2	2.27	0.66
1:6:1369:U:OP1	21:c9:119:LYS:NZ	2.25	0.66
36:5:2988:C:OP1	52:m6:68:ARG:NH1	2.28	0.66
1:2:1041:G:OP1	89:2:2149:OHX:N5	2.29	0.66
3:S1:131:ASP:HB3	3:S1:180:THR:HG23	1.75	0.66
6:S4:158:ASP:OD2	6:S4:174:LYS:NZ	2.29	0.66
36:1:2307:G:O2'	36:1:2310:U:OP2	2.11	0.66
1:6:1559:A:H5''	20:c8:135:GLY:HA3	1.78	0.66
34:sR:64:HIS:ND1	34:sR:86:ASP:OD2	2.25	0.66
36:5:3372:A:OP2	89:5:4241:OHX:N3	2.28	0.66
38:8:74:U:O2	89:8:222:OHX:N5	2.29	0.66
41:l4:301:PRO:O	54:m8:39:ARG:NH1	2.28	0.66
51:m5:180:PHE:O	51:m5:184:LYS:HD2	1.96	0.66
66:o0:8:GLU:HB3	66:o0:13:LYS:HE2	1.78	0.66
74:o8:46:ARG:NH1	74:o8:47:GLY:O	2.29	0.66
77:q1:2:ARG:HG2	77:q1:5:TRP:CD1	2.30	0.66
1:2:623:A:OP1	89:2:2157:OHX:N1	2.29	0.66
6:S4:139:VAL:HG13	6:S4:150:PRO:HG3	1.76	0.66
36:1:3353:G:O2'	36:1:3356:G:OP2	2.13	0.66
56:N0:137:ARG:HG2	56:N0:139:TYR:CE1	2.31	0.66
65:N9:14:ARG:HH12	65:N9:18:ARG:HH11	1.44	0.66
89:6:2132:OHX:N3	10:s8:52:ASN:OD1	2.28	0.66
18:c6:66:ARG:HE	18:c6:68:ARG:HG2	1.59	0.66
43:l6:3:ALA:HB2	68:o2:77:ALA:HB2	1.77	0.66
1:2:520:A:H2'	1:2:521:A:C8	2.30	0.66
36:1:2298:U:O4	36:1:2923:U:H5	1.78	0.66
36:1:3115:C:O2'	36:1:3117:C:N4	2.29	0.66
37:3:62:U:O3'	42:L5:285:ARG:NH1	2.29	0.66
52:M6:61:ALA:HA	52:M6:70:PRO:HD2	1.76	0.66
54:M8:123:THR:OG1	54:M8:125:ASP:OD2	2.10	0.66
1:6:539:G:H8	1:6:539:G:OP2	1.78	0.66
36:5:595:G:N1	36:5:609:G:H5''	2.10	0.66
36:5:1815:U:O2'	36:5:1816:A:OP2	2.13	0.66
79:q3:58:SER:O	79:q3:61:LYS:NZ	2.27	0.66
1:2:365:G:N7	89:2:2106:OHX:N5	2.43	0.66
1:2:1564:U:H2'	1:2:1565:C:C6	2.31	0.66
24:D2:10:ALA:HB1	24:D2:27:ILE:HD12	1.78	0.66
36:1:3057:U:H5'	36:1:3086:A:H61	1.61	0.66
89:1:3968:OHX:N6	44:L7:217:PRO:O	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:66:U:H5	8:s6:173:PRO:HG3	1.61	0.66
1:6:1756:A:O5'	1:6:1756:A:H8	1.77	0.66
2:s0:70:PRO:HB2	2:s0:94:GLY:HA3	1.77	0.66
19:c7:47:ARG:HB3	19:c7:47:ARG:HH11	1.61	0.66
25:d3:97:ASP:O	25:d3:100:ASP:HB2	1.96	0.66
36:5:1580:A:O2'	36:5:1581:C:OP2	2.14	0.66
36:5:1654:A:H2'	36:5:1655:G:H5'	1.76	0.66
62:n6:119:ILE:HG22	62:n6:124:GLY:HA3	1.78	0.66
7:S5:161:ASP:O	30:D8:44:VAL:HA	1.96	0.65
10:S8:36:THR:HG21	10:S8:173:PRO:HB2	1.78	0.65
18:C6:18:ALA:HB2	18:C6:69:VAL:HG13	1.77	0.65
36:1:2948:C:O2'	40:L3:242:THR:HG22	1.96	0.65
1:6:57:G:OP2	26:d4:116:LYS:HE3	1.96	0.65
1:6:778:G:O6	26:d4:10:ARG:HD2	1.95	0.65
1:6:1228:G:OP1	14:c2:119:SER:OG	2.13	0.65
13:c1:57:LYS:HD3	13:c1:131:ILE:HG23	1.77	0.65
1:2:347:G:OP1	13:C1:77:SER:OG	2.12	0.65
36:1:1447:G:H3'	53:M7:67:ILE:HD11	1.77	0.65
36:1:1815:U:O2'	36:1:1816:A:OP2	2.15	0.65
36:1:2775:U:H2'	36:1:2776:C:H6	1.61	0.65
36:1:3074:G:OP1	89:1:4051:OHX:N1	2.30	0.65
45:L8:101:THR:HG23	45:L8:104:GLU:H	1.62	0.65
64:N8:74:ASN:HB2	64:N8:76:ASP:HB2	1.78	0.65
3:s1:28:GLU:OE2	3:s1:94:LYS:NZ	2.29	0.65
16:c4:47:LYS:HB3	16:c4:62:LEU:HD23	1.77	0.65
36:5:1806:A:OP2	89:5:4026:OHX:N5	2.29	0.65
66:o0:75:ASN:HA	66:o0:86:ARG:HB2	1.77	0.65
1:2:1533:C:H4'	1:2:1539:G:N1	2.11	0.65
3:S1:133:TYR:CD2	3:S1:181:LEU:HD11	2.32	0.65
9:S7:139:ARG:HD3	24:D2:53:ILE:HA	1.79	0.65
11:S9:134:ILE:HA	11:S9:158:PHE:HA	1.78	0.65
36:1:1035:G:H3'	36:1:1036:A:H8	1.61	0.65
36:1:1567:U:O2	36:1:1571:A:N6	2.26	0.65
89:1:3881:OHX:N5	38:4:2:A:OP2	2.29	0.65
39:L2:178:PRO:HG2	79:Q3:26:VAL:HG23	1.79	0.65
41:L4:10:SER:OG	41:L4:13:GLY:O	2.13	0.65
42:L5:120:LYS:O	42:L5:248:ARG:NH2	2.30	0.65
1:6:1699:G:H22	1:6:1702:A:H5''	1.61	0.65
27:d5:42:LEU:HD22	27:d5:47:TYR:HB2	1.77	0.65
36:5:3035:A:OP2	89:5:4053:OHX:N5	2.29	0.65
47:m0:12:GLN:HA	47:m0:59:GLN:HE21	1.60	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:m8:135:GLN:CD	54:m8:135:GLN:H	2.02	0.65
1:2:218:A:O2'	1:2:219:A:OP1	2.13	0.65
3:S1:154:SER:O	3:S1:154:SER:OG	2.10	0.65
34:SR:16:HIS:CE1	34:SR:43:ILE:HG12	2.30	0.65
36:1:1495:U:H5	36:1:1835:A:N1	1.94	0.65
11:s9:45:ILE:HG22	11:s9:101:VAL:HG12	1.78	0.65
38:8:91:C:O2'	62:n6:25:SER:OG	2.14	0.65
41:l4:326:ARG:O	44:l7:41:ARG:NH2	2.28	0.65
47:m0:38:LYS:HG2	47:m0:41:ALA:HB2	1.79	0.65
75:o9:21:ARG:HH11	75:o9:21:ARG:HB2	1.61	0.65
27:D5:41:ILE:HG13	27:D5:42:LEU:HG	1.78	0.65
36:1:1348:U:O2	36:1:1349:G:N2	2.28	0.65
36:1:2108:C:O2'	36:1:3362:A:N6	2.29	0.65
36:1:2155:G:O2'	39:L2:227:ARG:NH2	2.29	0.65
36:1:2960:C:H2'	36:1:2961:G:H8	1.62	0.65
36:1:3148:U:O4	89:1:4122:OHX:N2	2.28	0.65
45:L8:75:ILE:HG22	45:L8:76:ALA:H	1.59	0.65
1:6:1795:U:O2	28:d6:10:ARG:NE	2.30	0.65
11:s9:171:ARG:HE	11:s9:174:ARG:HB2	1.61	0.65
36:5:2146:C:OP1	39:l2:200:ARG:NH1	2.30	0.65
44:l7:157:ASN:O	44:l7:159:GLN:N	2.28	0.65
53:m7:69:ARG:HG3	53:m7:79:THR:HG23	1.78	0.65
56:n0:26:ARG:HH11	57:n1:150:THR:HG21	1.62	0.65
2:S0:179:ARG:HD3	2:S0:183:ARG:HH11	1.61	0.65
3:S1:62:LYS:O	3:S1:64:ARG:N	2.29	0.65
10:S8:197:THR:HA	10:S8:200:LYS:HB2	1.76	0.65
36:1:155:G:H5'	36:1:156:G:C8	2.32	0.65
40:L3:76:VAL:HG11	40:L3:323:MET:HE3	1.79	0.65
48:M1:50:ALA:HB2	48:M1:65:ILE:HD12	1.79	0.65
63:N7:21:LYS:HD3	63:N7:47:GLU:HA	1.78	0.65
1:6:235:G:H2'	1:6:236:A:H8	1.61	0.65
2:s0:74:VAL:HG23	2:s0:118:PRO:HB3	1.78	0.65
36:5:1565:G:N1	36:5:1574:C:N3	2.45	0.65
36:5:2407:C:H2'	36:5:2408:U:C6	2.32	0.65
46:l9:57:VAL:HG23	46:l9:68:LEU:HG	1.78	0.65
46:l9:166:ARG:HH21	46:l9:168:ARG:HH12	1.44	0.65
73:o7:62:GLY:O	89:o7:502:OHX:N3	2.30	0.65
1:2:1428:G:H5'	1:2:1428:G:H8	1.62	0.65
16:C4:50:ALA:O	16:C4:52:ARG:N	2.29	0.65
30:D8:27:GLN:OE1	30:D8:64:ARG:NH2	2.30	0.65
36:1:2254:U:H2'	36:1:2261:G:N2	2.12	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:30:G:O5'	51:m5:172:ARG:HD2	1.97	0.65
36:5:3212:C:OP2	50:m4:124:ARG:NH2	2.29	0.65
36:5:3274:A:H3'	36:5:3275:U:C5'	2.23	0.65
40:l3:150:ARG:HG2	40:l3:150:ARG:HH11	1.62	0.65
36:1:1286:A:O2'	36:1:1287:A:OP2	2.14	0.65
50:M4:113:THR:HG22	50:M4:115:PHE:H	1.62	0.65
1:6:187:G:OP2	10:s8:142:LYS:NZ	2.30	0.65
1:6:1797:A:OP2	28:d6:10:ARG:NE	2.30	0.65
7:s5:64:VAL:HG13	7:s5:89:ILE:HD11	1.77	0.65
7:s5:109:LYS:HE2	27:d5:97:LYS:HE2	1.79	0.65
36:5:347:G:N7	73:o7:55:ARG:NH2	2.44	0.65
42:l5:64:ILE:HG13	42:l5:109:THR:HG21	1.77	0.65
65:n9:16:ALA:O	65:n9:20:GLY:HA3	1.97	0.65
18:C6:82:ARG:HH22	18:C6:114:ARG:HB3	1.60	0.65
25:D3:92:CYS:HA	25:D3:95:PHE:HD2	1.60	0.65
30:D8:52:ASP:N	30:D8:52:ASP:OD1	2.28	0.65
1:6:550:A:OP2	89:6:2047:OHX:N2	2.30	0.65
36:5:1730:G:N7	66:o0:28:LYS:HB2	2.12	0.65
36:5:1952:G:H1	36:5:2094:C:H42	1.44	0.65
54:m8:178:ARG:HD3	64:n8:50:PRO:HB2	1.79	0.65
74:o8:11:PHE:HD1	74:o8:12:LEU:HD22	1.61	0.65
1:2:337:G:H3'	13:C1:133:LYS:HB2	1.79	0.65
1:2:1234:A:O2'	1:2:1235:C:O5'	2.13	0.65
39:L2:209:HIS:CD2	39:L2:211:HIS:H	2.15	0.65
4:s2:109:GLY:HA2	4:s2:139:ILE:HG22	1.77	0.65
36:5:2433:U:H1'	51:m5:125:SER:HB3	1.79	0.65
58:n2:47:VAL:C	58:n2:49:ASN:H	2.04	0.65
1:2:197:A:H61	10:S8:138:ASN:ND2	1.94	0.64
1:2:1518:C:OP1	89:2:2121:OHX:N5	2.30	0.64
36:1:1064:A:H4'	36:1:1065:A:O5'	1.97	0.64
36:1:2402:A:OP2	89:1:4101:OHX:N6	2.30	0.64
52:M6:183:ALA:C	52:M6:185:ALA:H	2.03	0.64
27:d5:58:ARG:HB3	27:d5:103:ARG:HH11	1.62	0.64
29:d7:37:CYS:O	29:d7:39:GLY:N	2.29	0.64
36:5:1875:G:OP2	55:m9:20:ARG:HG3	1.97	0.64
36:5:3001:C:OP1	40:l3:120:LYS:NZ	2.30	0.64
9:S7:31:SER:HB2	9:S7:32:PRO:HD3	1.79	0.64
13:C1:57:LYS:HD3	13:C1:131:ILE:HG23	1.79	0.64
36:1:2572:C:O2'	36:1:2573:G:O4'	2.15	0.64
50:M4:23:ILE:HA	50:M4:63:VAL:HG23	1.79	0.64
53:M7:129:THR:HG22	53:M7:139:TYR:HB2	1.78	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:s4:100:ARG:NH2	6:s4:121:TYR:O	2.29	0.64
36:5:3164:C:H42	36:5:3286:G:H1	1.45	0.64
37:7:5:G:OP1	48:m1:143:ARG:NH2	2.30	0.64
1:2:1034:C:OP1	15:C3:9:LYS:NZ	2.29	0.64
36:1:562:C:H2'	36:1:563:U:H6	1.63	0.64
36:1:1374:G:O6	64:N8:10:LYS:NZ	2.31	0.64
1:6:393:C:OP2	10:s8:2:GLY:N	2.30	0.64
20:c8:33:THR:HA	20:c8:38:VAL:HG23	1.80	0.64
36:5:2947:G:OP2	36:5:2947:G:H4'	1.98	0.64
37:7:112:G:OP2	89:7:220:OHX:N2	2.30	0.64
43:l6:149:ILE:HG23	43:l6:155:LEU:HD13	1.79	0.64
1:2:933:A:OP2	28:D6:37:LYS:NZ	2.24	0.64
3:S1:77:GLU:OE1	16:C4:114:ARG:NH2	2.31	0.64
36:1:2244:A:H5''	39:L2:243:THR:OG1	1.96	0.64
44:L7:143:THR:HG22	44:L7:241:LYS:HE3	1.79	0.64
46:L9:163:GLN:O	46:L9:166:ARG:HD2	1.97	0.64
51:M5:68:ARG:HG2	51:M5:68:ARG:HH11	1.62	0.64
9:s7:122:HIS:HA	9:s7:125:ILE:HD12	1.79	0.64
26:d4:44:LEU:HA	26:d4:47:VAL:HG22	1.79	0.64
36:5:23:A:OP1	89:5:3908:OHX:N4	2.31	0.64
53:m7:25:SER:HB3	53:m7:28:ASN:HB2	1.79	0.64
68:o2:123:LYS:HA	68:o2:126:LEU:HG	1.79	0.64
1:2:1061:A:H2'	1:2:1062:A:H5'	1.79	0.64
3:S1:176:VAL:HG12	3:S1:177:GLN:H	1.61	0.64
4:S2:174:ARG:O	11:S9:53:ARG:NH2	2.27	0.64
6:S4:151:ASP:HB3	6:S4:154:ILE:HG13	1.79	0.64
13:C1:6:THR:O	13:C1:8:GLN:N	2.31	0.64
25:D3:30:LYS:HE3	25:D3:34:LEU:HD11	1.79	0.64
34:SR:16:HIS:CE1	34:SR:37:SER:HB2	2.33	0.64
36:1:2592:G:H4'	36:1:2594:C:C2	2.32	0.64
36:1:2746:A:C6	42:L5:148:ILE:HD12	2.32	0.64
42:L5:40:HIS:CD2	42:L5:42:ALA:HB3	2.33	0.64
1:6:235:G:H2'	1:6:236:A:C8	2.33	0.64
1:6:1445:G:N1	82:e1:87:THR:O	2.30	0.64
2:s0:9:LEU:HD11	2:s0:14:ALA:HB2	1.80	0.64
19:c7:88:VAL:HG22	19:c7:89:SER:O	1.98	0.64
20:c8:145:ARG:HB3	35:sM:68:ARG:HH12	1.62	0.64
36:5:549:U:O4	89:5:4015:OHX:N4	2.30	0.64
36:5:1561:G:O2'	36:5:1562:C:OP2	2.14	0.64
36:5:3121:U:H1'	36:5:3122:A:H5''	1.78	0.64
37:7:28:C:H5''	48:m1:137:ARG:HG2	1.78	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:m1:141:ARG:O	48:m1:145:LYS:HE2	1.97	0.64
1:2:1067:C:H5''	3:S1:150:VAL:HG23	1.79	0.64
13:C1:124:THR:O	13:C1:140:VAL:HG12	1.96	0.64
18:C6:49:TYR:HB3	18:C6:53:LEU:HD11	1.79	0.64
36:1:1078:U:O4	89:1:3976:OHX:N2	2.30	0.64
36:1:2674:A:H5''	48:M1:105:GLY:HA3	1.79	0.64
36:5:315:C:OP2	72:o6:28:TYR:OH	2.16	0.64
36:5:1307:G:H5''	52:m6:60:LYS:HD3	1.80	0.64
55:m9:182:ASP:O	55:m9:184:LEU:N	2.29	0.64
57:n1:17:ARG:HG2	57:n1:17:ARG:HH11	1.61	0.64
74:o8:8:ILE:HD12	74:o8:8:ILE:H	1.63	0.64
1:2:1450:U:H2'	1:2:1451:C:C6	2.33	0.64
9:S7:99:LEU:HD12	9:S7:116:ARG:HG2	1.80	0.64
36:1:118:U:O2	36:1:121:A:H5'	1.97	0.64
36:1:1222:G:HO2'	36:1:1285:G:H1	1.45	0.64
36:1:1813:A:OP1	36:1:1817:G:O2'	2.16	0.64
36:1:2193:U:H5'	36:1:2194:G:H5'	1.78	0.64
41:L4:204:GLY:O	41:L4:246:ARG:NH1	2.31	0.64
55:M9:40:ALA:HB2	55:M9:43:LYS:HZ2	1.63	0.64
67:O1:19:ARG:HD3	67:O1:35:GLU:HG2	1.79	0.64
1:6:484:C:H42	1:6:503:G:H1	1.46	0.64
3:s1:169:SER:O	3:s1:173:THR:HG23	1.98	0.64
25:d3:126:LYS:HA	25:d3:131:SER:HA	1.79	0.64
36:5:1329:U:H4'	36:5:1330:A:OP1	1.97	0.64
49:m3:103:ASN:N	49:m3:103:ASN:OD1	2.30	0.64
1:2:799:A:H5''	6:S4:201:HIS:CD2	2.33	0.64
3:S1:61:LEU:O	3:S1:62:LYS:NZ	2.27	0.64
36:1:873:C:H5''	36:1:874:U:O5'	1.98	0.64
36:1:2775:U:H2'	36:1:2776:C:C6	2.33	0.64
70:O4:74:ARG:HG2	70:O4:75:ALA:N	2.11	0.64
1:6:197:A:H2'	1:6:198:A:C8	2.32	0.64
40:l3:76:VAL:HG11	40:l3:323:MET:HE3	1.80	0.64
49:m3:55:ARG:O	49:m3:115:ARG:NH2	2.30	0.64
61:n5:58:ASP:O	61:n5:62:VAL:HG23	1.97	0.64
69:o3:14:LEU:HD11	69:o3:31:LYS:HB2	1.80	0.64
2:S0:24:LEU:O	2:S0:163:ASN:ND2	2.31	0.64
10:S8:8:ARG:NH2	10:S8:21:PHE:H	1.96	0.64
11:S9:57:ARG:HG3	11:S9:97:LEU:HD21	1.79	0.64
24:D2:73:GLY:O	24:D2:127:GLY:HA3	1.98	0.64
36:1:1752:A:OP2	89:1:4060:OHX:N3	2.31	0.64
36:1:1823:A:H2'	36:1:1824:U:H6	1.63	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:90:THR:HA	45:L8:214:LEU:HD21	1.79	0.64
82:e1:88:PRO:HB2	82:e1:89:LYS:HD3	1.79	0.64
34:sR:164:ASP:O	34:sR:166:SER:N	2.31	0.64
36:5:2227:C:H2'	36:5:2228:A:H5''	1.80	0.64
44:l7:134:VAL:O	44:l7:229:PHE:HA	1.98	0.64
22:D0:58:LEU:HD12	22:D0:88:LYS:HB3	1.80	0.64
25:D3:96:VAL:HG23	25:D3:97:ASP:H	1.63	0.64
36:1:716:A:C5	64:N8:117:ARG:HD3	2.33	0.64
44:L7:222:HIS:CE1	44:L7:224:ILE:HG13	2.33	0.64
47:M0:85:PHE:HA	47:M0:140:THR:HG22	1.79	0.64
77:Q1:22:ALA:HA	77:Q1:25:LYS:HG3	1.80	0.64
78:Q2:73:GLU:OE1	78:Q2:80:ARG:NH2	2.31	0.64
1:6:263:C:H4'	1:6:292:U:H5'	1.80	0.64
1:6:717:C:O2	1:6:722:G:N2	2.28	0.64
26:d4:94:TYR:HB2	26:d4:96:LEU:HG	1.79	0.64
37:7:86:U:O2	89:7:218:OHX:N4	2.31	0.64
45:l8:121:SER:O	45:l8:123:GLN:N	2.31	0.64
62:n6:32:SER:HA	62:n6:49:PRO:HA	1.77	0.64
1:2:397:A:O3'	10:S8:50:GLY:HA2	1.98	0.63
1:2:702:G:O2'	1:2:703:G:O4'	2.16	0.63
1:2:1649:G:N7	89:2:2051:OHX:N1	2.45	0.63
7:S5:120:ILE:HG12	27:D5:100:ILE:HD11	1.80	0.63
18:C6:5:PRO:HG2	18:C6:24:ALA:HB2	1.79	0.63
18:C6:46:PHE:O	18:C6:50:GLU:HG3	1.98	0.63
72:O6:74:LYS:HD2	72:O6:80:PHE:HD2	1.62	0.63
4:s2:147:ASN:O	4:s2:147:ASN:ND2	2.31	0.63
18:c6:82:ARG:NH1	18:c6:114:ARG:O	2.30	0.63
20:c8:88:ARG:NH1	20:c8:112:ASP:OD2	2.30	0.63
38:8:84:C:H1'	62:n6:113:LYS:HB2	1.80	0.63
62:n6:3:LYS:NZ	62:n6:5:SER:O	2.31	0.63
6:S4:31:PRO:HG2	6:S4:38:LEU:HD13	1.79	0.63
36:1:1308:A:C8	36:1:1308:A:OP2	2.51	0.63
39:L2:209:HIS:HD2	39:L2:211:HIS:H	1.44	0.63
47:M0:9:TYR:CG	47:M0:97:LEU:HD13	2.33	0.63
14:c2:81:ASP:O	14:c2:83:GLU:N	2.30	0.63
36:5:155:G:H5'	36:5:156:G:C8	2.33	0.63
36:5:1778:G:O2'	36:5:1780:G:OP2	2.16	0.63
36:5:2940:A:N7	40:l3:2:SER:N	2.46	0.63
54:m8:176:ARG:NH1	64:n8:46:ASP:OD2	2.31	0.63
64:n8:6:THR:HG22	64:n8:9:ARG:HG2	1.80	0.63
1:2:886:U:O2'	16:C4:121:VAL:O	2.15	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:105:GLU:HG3	46:L9:109:ALA:H	1.62	0.63
49:M3:175:SER:O	49:M3:178:LYS:N	2.32	0.63
63:N7:115:LYS:NZ	63:N7:119:GLU:OE2	2.31	0.63
36:5:223:U:O4	89:5:4248:OHX:N4	2.32	0.63
1:2:911:U:O2'	1:2:915:A:H1'	1.97	0.63
1:2:1572:G:H1'	7:S5:185:ARG:HH12	1.63	0.63
10:S8:48:THR:HG21	10:S8:54:LYS:HB2	1.81	0.63
19:C7:20:TYR:CD1	19:C7:38:ILE:HD11	2.32	0.63
25:D3:70:LYS:HB3	25:D3:93:LEU:HD22	1.79	0.63
36:1:1276:U:OP1	89:1:4098:OHX:N4	2.31	0.63
38:8:21:C:OP1	41:l4:193:LYS:NZ	2.29	0.63
60:n4:98:PRO:HA	60:n4:101:ARG:HD2	1.80	0.63
36:1:434:U:O4	89:1:4178:OHX:N5	2.32	0.63
36:1:2179:C:O3'	39:L2:174:ARG:NH2	2.28	0.63
36:1:2818:U:H5'	36:1:2818:U:C6	2.32	0.63
36:1:2992:U:H1'	53:M7:69:ARG:NH2	2.13	0.63
36:1:3043:C:OP2	59:N3:48:ARG:NH2	2.31	0.63
48:M1:10:ARG:NH2	48:M1:151:SER:O	2.31	0.63
49:M3:157:ARG:HG2	49:M3:158:ALA:N	2.13	0.63
59:N3:33:ASN:HD21	59:N3:63:LYS:H	1.45	0.63
1:6:383:G:N7	89:6:2145:OHX:N5	2.46	0.63
1:6:417:A:H4'	1:6:418:G:O5'	1.97	0.63
1:6:1767:G:OP1	1:6:1770:U:H4'	1.97	0.63
6:s4:49:ARG:HG3	6:s4:50:ASN:N	2.13	0.63
6:s4:241:GLY:O	6:s4:243:GLY:N	2.31	0.63
10:s8:138:ASN:HA	10:s8:141:ARG:HD3	1.79	0.63
36:5:1717:U:H2'	36:5:1718:G:C8	2.34	0.63
36:5:2569:A:H4'	36:5:2570:U:H5'	1.80	0.63
72:o6:79:SER:HB3	72:o6:82:ARG:HG3	1.81	0.63
76:q0:96:CYS:SG	76:q0:99:CYS:SG	2.97	0.63
76:q0:97:ARG:HB2	76:q0:120:GLN:O	1.99	0.63
1:2:209:U:H2'	1:2:210:A:C8	2.34	0.63
3:S1:34:ALA:N	3:S1:41:ARG:O	2.30	0.63
5:S3:206:VAL:HG22	19:C7:41:ILE:HG12	1.80	0.63
13:C1:139:VAL:HG12	13:C1:140:VAL:H	1.64	0.63
17:C5:34:VAL:HG21	17:C5:45:PHE:HB2	1.80	0.63
44:L7:138:TYR:O	44:L7:237:ASN:ND2	2.30	0.63
1:6:470:A:H8	1:6:470:A:H5''	1.63	0.63
1:6:1350:U:H2'	1:6:1351:G:C8	2.33	0.63
1:6:1699:G:C2	1:6:1701:A:H5''	2.33	0.63
36:5:268:A:C4	51:m5:12:ARG:HG2	2.33	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:126:ILE:HD11	41:l4:233:LEU:HD13	1.79	0.63
47:m0:12:GLN:HA	47:m0:59:GLN:NE2	2.14	0.63
52:m6:79:ILE:HG21	52:m6:138:LEU:HD11	1.80	0.63
72:o6:57:LEU:HD11	72:o6:73:ALA:HB2	1.79	0.63
1:2:542:A:C8	1:2:543:C:H3'	2.34	0.63
6:S4:13:ALA:O	6:S4:39:ARG:NH2	2.32	0.63
34:SR:161:LYS:HE3	34:SR:164:ASP:HB3	1.81	0.63
45:L8:156:ASP:OD2	45:L8:156:ASP:N	2.31	0.63
60:N4:4:GLU:HG2	60:N4:30:ARG:HD3	1.81	0.63
1:6:800:U:H2'	1:6:801:G:H8	1.64	0.63
1:6:1417:A:O3'	18:c6:128:LYS:HE3	1.98	0.63
11:s9:123:HIS:HB3	81:e0:33:ARG:HH21	1.64	0.63
36:5:1236:G:N2	36:5:1244:A:OP1	2.32	0.63
36:5:2522:G:H1	39:l2:70:ARG:HH22	1.44	0.63
36:5:3068:U:OP2	55:m9:62:ARG:NH2	2.32	0.63
42:l5:52:VAL:HA	42:l5:147:ASP:HB3	1.81	0.63
49:m3:50:PRO:O	49:m3:52:ASP:N	2.31	0.63
52:m6:85:ARG:HD3	52:m6:90:HIS:CG	2.34	0.63
53:m7:31:GLU:HG3	53:m7:60:PHE:HA	1.80	0.63
1:2:1585:U:N3	1:2:1611:A:H2	1.95	0.63
11:S9:110:GLN:HE22	11:S9:126:ARG:HG2	1.63	0.63
20:C8:114:GLU:HA	20:C8:117:LYS:HD2	1.81	0.63
21:C9:137:ALA:O	21:C9:141:GLU:HG2	1.99	0.63
36:1:1229:G:H1	36:1:1280:C:H42	1.47	0.63
39:L2:40:TYR:HA	39:L2:91:GLY:HA3	1.80	0.63
1:6:1787:C:OP2	16:c4:132:ARG:HB2	1.99	0.63
17:c5:86:VAL:HG22	17:c5:89:MET:HE3	1.79	0.63
19:c7:25:THR:OG1	19:c7:26:LEU:N	2.30	0.63
50:m4:47:ASP:CG	50:m4:55:ARG:HB2	2.24	0.63
1:2:1528:U:OP1	7:S5:109:LYS:HG2	1.99	0.63
1:2:1623:C:H2'	1:2:1624:C:C6	2.33	0.63
4:S2:227:PRO:HA	4:S2:230:TRP:CE2	2.34	0.63
36:1:975:C:H2'	36:1:976:U:C6	2.34	0.63
36:1:1724:U:H1'	36:1:1725:C:C6	2.33	0.63
36:1:1940:G:H21	36:1:3362:A:H8	1.45	0.63
36:1:2255:A:OP1	89:1:3942:OHX:N3	2.32	0.63
58:N2:51:GLY:O	58:N2:52:ASN:ND2	2.28	0.63
5:s3:125:TYR:O	5:s3:129:SER:OG	2.06	0.63
10:s8:106:ALA:HB2	10:s8:165:LEU:HG	1.81	0.63
29:d7:31:TYR:OH	29:d7:70:LYS:NZ	2.27	0.63
36:5:1348:U:OP2	54:m8:38:ARG:NH2	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1895:A:O2'	36:5:3053:G:H4'	1.98	0.63
36:5:2996:U:H4'	36:5:2996:U:OP1	1.97	0.63
47:m0:86:HIS:HB3	47:m0:139:ARG:CG	2.28	0.63
78:q2:12:CYS:SG	78:q2:17:CYS:CB	2.86	0.63
4:S2:134:LEU:O	4:S2:136:VAL:N	2.32	0.62
8:S6:57:ASP:HA	8:S6:106:LEU:HA	1.80	0.62
36:1:662:U:OP1	64:N8:8:THR:HG21	1.99	0.62
36:1:3164:C:H1'	36:1:3165:A:H5'	1.80	0.62
39:L2:80:GLU:HG3	79:Q3:66:GLY:HA2	1.81	0.62
67:O1:24:SER:HB2	67:O1:27:LYS:HG3	1.81	0.62
72:O6:97:SER:O	72:O6:99:ARG:N	2.32	0.62
1:6:1603:U:H2'	1:6:1604:U:H6	1.64	0.62
10:s8:61:GLU:HG2	10:s8:62:THR:HG23	1.81	0.62
11:s9:41:GLU:OE1	11:s9:126:ARG:NH2	2.32	0.62
17:c5:122:THR:HG22	17:c5:123:TYR:HD1	1.64	0.62
36:5:2436:U:H2'	36:5:2437:G:H5''	1.80	0.62
36:5:2586:G:O2'	36:5:2588:U:OP1	2.17	0.62
52:m6:37:ARG:HG3	52:m6:108:ILE:HG22	1.81	0.62
1:2:398:G:P	10:S8:47:ARG:HH12	2.21	0.62
1:2:499:U:O2'	1:2:500:C:OP1	2.17	0.62
1:2:778:G:H22	26:D4:10:ARG:HH22	1.47	0.62
1:2:1097:U:O2'	4:S2:159:THR:OG1	2.14	0.62
2:S0:200:ASP:HB2	19:C7:85:VAL:HG22	1.81	0.62
3:S1:201:THR:HG21	3:S1:207:LEU:HD22	1.80	0.62
27:D5:61:SER:H	27:D5:64:VAL:HB	1.63	0.62
27:D5:87:GLY:C	27:D5:89:ILE:H	2.08	0.62
36:1:634:C:O2'	68:O2:47:ARG:HD3	1.99	0.62
37:3:106:U:H2'	37:3:107:C:C6	2.34	0.62
38:4:23:U:OP1	62:N6:16:ARG:NH2	2.32	0.62
55:M9:148:ASP:OD1	55:M9:151:ARG:NH2	2.31	0.62
1:6:711:U:H5'	1:6:712:G:OP2	1.98	0.62
1:6:717:C:O2'	1:6:718:U:OP1	2.16	0.62
1:6:1563:C:OP1	21:c9:84:LYS:NZ	2.23	0.62
36:5:2836:C:H5	36:5:2852:C:N4	1.94	0.62
39:l2:30:ARG:NH2	39:l2:33:ASP:OD2	2.33	0.62
70:o4:9:ARG:HG2	70:o4:34:HIS:CE1	2.33	0.62
36:1:1080:A:OP2	42:L5:140:ARG:NH2	2.32	0.62
41:L4:156:LEU:HD23	41:L4:159:ILE:HD12	1.80	0.62
41:L4:185:LYS:HD2	41:L4:201:GLN:HB3	1.82	0.62
46:L9:41:ILE:HD11	46:L9:67:ALA:HB1	1.81	0.62
1:6:190:C:N4	1:6:196:G:O6	2.33	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:s8:62:THR:HA	10:s8:76:THR:O	1.99	0.62
17:c5:18:ARG:NH2	17:c5:38:PRO:HG3	2.13	0.62
36:5:90:C:H2'	36:5:91:G:H5'	1.79	0.62
1:2:542:A:H8	1:2:543:C:H5'	1.63	0.62
1:2:1562:G:OP1	21:C9:89:ARG:NH2	2.27	0.62
36:1:2150:G:H4'	79:Q3:22:LEU:HD21	1.80	0.62
36:1:2503:G:H1'	36:1:2504:U:C5	2.34	0.62
44:L7:151:ARG:HD2	44:L7:244:ASN:ND2	2.14	0.62
53:M7:29:THR:HG22	53:M7:87:SER:OG	1.99	0.62
54:M8:64:VAL:HG22	54:M8:96:PHE:CE2	2.34	0.62
15:c3:61:THR:OG1	15:c3:62:GLN:N	2.32	0.62
20:c8:91:ASP:HB3	20:c8:95:GLY:H	1.65	0.62
36:5:1818:U:H2'	36:5:1819:U:H6	1.63	0.62
36:5:2841:G:OP2	89:5:4141:OHX:N1	2.32	0.62
39:l2:105:GLY:HA3	39:l2:160:SER:HB3	1.82	0.62
40:l3:187:SER:HB3	40:l3:190:GLU:OE1	2.00	0.62
67:o1:55:LEU:HB2	67:o1:95:PRO:HD3	1.81	0.62
1:2:1041:G:H2'	1:2:1042:G:C8	2.34	0.62
15:C3:34:ILE:O	15:C3:38:VAL:HG23	1.99	0.62
15:C3:67:THR:O	15:C3:69:ASN:N	2.29	0.62
17:C5:19:GLY:N	20:C8:93:THR:O	2.32	0.62
18:C6:113:ASP:HA	18:C6:116:LEU:HD23	1.82	0.62
36:1:1278:A:O2'	36:1:1279:C:O5'	2.16	0.62
36:1:3243:A:H4'	40:L3:95:THR:HG22	1.81	0.62
47:M0:38:LYS:HG2	47:M0:41:ALA:HB2	1.81	0.62
69:O3:72:THR:HG23	69:O3:83:ALA:HA	1.80	0.62
1:6:250:C:H6	1:6:250:C:H5'	1.65	0.62
1:6:1455:G:OP1	17:c5:122:THR:HG21	2.00	0.62
1:2:862:A:N7	15:C3:64:ARG:NH2	2.45	0.62
1:2:1002:G:H2'	1:2:1003:A:H5'	1.81	0.62
33:E1:135:HIS:ND1	33:E1:138:ARG:HD2	2.14	0.62
36:1:410:U:O4	89:1:4069:OHX:N2	2.33	0.62
36:1:1634:G:N7	63:N7:17:ARG:NH2	2.47	0.62
44:L7:50:ALA:O	44:L7:53:LYS:N	2.32	0.62
58:N2:59:ASP:O	58:N2:61:THR:N	2.32	0.62
1:6:1130:G:OP2	89:6:2110:OHX:N1	2.32	0.62
9:s7:9:LEU:HD21	9:s7:17:GLU:HB3	1.80	0.62
34:sR:198:ASN:O	34:sR:215:GLY:HA3	1.99	0.62
36:5:2728:G:O6	57:n1:78:LYS:HE3	1.98	0.62
7:S5:40:ILE:HG23	7:S5:42:LEU:HD22	1.80	0.62
18:C6:40:GLU:HG3	18:C6:42:GLU:H	1.65	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1363:A:OP2	89:1:4057:OHX:N6	2.33	0.62
41:L4:226:GLU:OE2	41:L4:246:ARG:NH2	2.33	0.62
45:L8:144:GLU:OE1	72:O6:36:ARG:NH2	2.32	0.62
62:N6:38:GLU:HG3	62:N6:39:LEU:HD23	1.82	0.62
80:c0:50:THR:HG22	80:c0:55:VAL:HG22	1.81	0.62
20:c8:26:ILE:HD11	20:c8:31:ALA:HA	1.82	0.62
81:e0:59:GLY:C	81:e0:61:SER:H	2.08	0.62
34:sR:16:HIS:CE1	34:sR:43:ILE:HG12	2.34	0.62
36:5:336:A:OP1	62:n6:10:SER:N	2.29	0.62
36:5:2177:G:OP2	39:l2:128:ARG:NH1	2.32	0.62
46:l9:4:ILE:HD11	56:n0:148:LEU:HD21	1.82	0.62
53:m7:50:GLN:OE1	53:m7:56:ARG:NH2	2.33	0.62
63:n7:52:LYS:O	63:n7:65:ARG:NH1	2.32	0.62
1:2:839:U:H2'	1:2:840:U:H5'	1.81	0.62
13:C1:95:PRO:O	13:C1:98:ASN:N	2.33	0.62
20:C8:57:ARG:HB2	20:C8:59:GLY:H	1.65	0.62
25:D3:92:CYS:HG	25:D3:136:TRP:CD1	2.18	0.62
36:1:621:A:O2'	89:1:4178:OHX:N3	2.32	0.62
36:1:1727:G:OP1	79:Q3:44:LYS:NZ	2.31	0.62
36:1:2314:U:O4	89:1:3890:OHX:N5	2.32	0.62
1:6:161:U:OP2	8:s6:87:ARG:NH2	2.33	0.62
1:6:357:G:OP2	89:6:2072:OHX:N6	2.33	0.62
1:6:1315:U:OP1	1:6:1328:G:N2	2.29	0.62
2:s0:55:GLU:HG2	23:d1:79:LEU:HD22	1.82	0.62
17:c5:126:VAL:O	17:c5:127:ARG:HB2	1.98	0.62
27:d5:59:TYR:HE1	27:d5:100:ILE:HG23	1.65	0.62
36:5:412:G:OP1	53:m7:62:ARG:NH1	2.32	0.62
36:5:1841:A:N3	75:o9:45:ARG:NH2	2.48	0.62
36:5:3227:A:H2'	36:5:3228:C:H5'	1.81	0.62
40:l3:283:TYR:HB3	40:l3:323:MET:HE2	1.82	0.62
10:S8:188:GLU:OE2	13:C1:15:LYS:NZ	2.33	0.62
30:D8:26:THR:HB	30:D8:44:VAL:HG13	1.82	0.62
35:SM:107:ASN:CG	35:SM:112:ASP:HB3	2.25	0.62
36:1:1636:U:H5''	63:N7:73:LYS:HZ2	1.64	0.62
36:1:2120:A:OP2	89:1:4020:OHX:N2	2.32	0.62
36:1:2677:G:H2'	36:1:2679:A:H2	1.65	0.62
47:M0:76:MET:HE3	47:M0:148:VAL:HA	1.81	0.62
75:O9:5:LYS:HD3	75:O9:13:MET:HE1	1.81	0.62
75:O9:23:LEU:HD23	75:O9:24:PRO:HD2	1.82	0.62
1:6:1239:U:O4	89:6:2094:OHX:N1	2.33	0.62
18:c6:6:SER:HB2	18:c6:23:LYS:HB3	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:l8:67:ILE:HG23	45:l8:237:ILE:HD13	1.82	0.62
45:l8:95:ASN:OD1	45:l8:98:ARG:NH1	2.31	0.62
48:m1:106:ILE:CD1	48:m1:125:MET:HG2	2.30	0.62
49:m3:153:ASP:OD1	49:m3:157:ARG:NH2	2.33	0.62
5:S3:179:GLN:HE21	5:S3:179:GLN:C	2.07	0.62
11:S9:31:ALA:HA	11:S9:36:LEU:HD12	1.82	0.62
18:C6:6:SER:HB3	18:C6:23:LYS:HA	1.81	0.62
36:1:1752:A:OP2	89:1:4060:OHX:N5	2.33	0.62
48:M1:90:GLN:HG2	48:M1:170:ASP:HB2	1.82	0.62
63:N7:48:ARG:HB3	63:N7:69:LYS:HB3	1.81	0.62
63:N7:83:THR:HG23	63:N7:85:TYR:N	2.14	0.62
1:6:138:A:H2'	1:6:139:C:H5'	1.82	0.62
1:6:1042:G:N2	1:6:1077:C:O2	2.32	0.62
2:s0:41:ARG:HB3	2:s0:45:VAL:HG23	1.82	0.62
4:s2:45:VAL:HG21	4:s2:68:ILE:HG23	1.80	0.62
16:c4:24:ASN:HA	16:c4:55:SER:HB3	1.82	0.62
18:c6:39:VAL:HG12	18:c6:41:PRO:HD2	1.82	0.62
64:n8:47:LYS:O	64:n8:49:HIS:N	2.29	0.62
2:S0:184:LEU:O	2:S0:186:GLY:N	2.32	0.61
16:C4:88:GLY:H	16:C4:120:PRO:HG2	1.64	0.61
36:1:1412:G:OP1	68:O2:105:ARG:NH2	2.33	0.61
36:1:1826:C:H2'	36:1:1827:C:H6	1.64	0.61
1:6:565:C:O2	89:6:2155:OHX:N2	2.33	0.61
1:6:901:G:N2	16:c4:54:GLU:OE1	2.33	0.61
1:6:1413:U:H4'	1:6:1414:U:OP2	2.00	0.61
11:s9:92:LYS:HB2	11:s9:95:TYR:HD2	1.65	0.61
81:e0:50:VAL:HA	81:e0:54:ARG:HA	1.81	0.61
36:5:1661:G:H2'	36:5:1662:G:C8	2.35	0.61
46:l9:101:VAL:HG22	46:l9:114:VAL:HG22	1.82	0.61
58:n2:104:ARG:HH11	58:n2:106:ALA:HB2	1.65	0.61
1:2:1160:A:H2'	1:2:1161:C:C6	2.35	0.61
1:2:1290:U:H2'	1:2:1291:G:C8	2.35	0.61
6:S4:129:VAL:HB	6:S4:139:VAL:HG12	1.82	0.61
9:S7:16:LEU:HA	9:S7:19:GLN:HG3	1.82	0.61
13:C1:72:THR:HA	13:C1:124:THR:HA	1.80	0.61
26:D4:35:VAL:HG13	26:D4:36:SER:H	1.64	0.61
36:1:2960:C:OP1	89:1:4013:OHX:N4	2.33	0.61
36:1:3192:U:H2'	36:1:3193:C:H6	1.62	0.61
40:L3:286:GLY:HA3	40:L3:321:PHE:CE2	2.35	0.61
56:N0:167:ARG:HG3	56:N0:168:PRO:HD2	1.82	0.61
71:O5:13:SER:C	71:O5:15:GLU:H	2.08	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:85:THR:HB	71:O5:88:LEU:HB2	1.82	0.61
1:6:1603:U:H2'	1:6:1604:U:C6	2.35	0.61
22:d0:71:PRO:HB3	31:d9:41:GLN:HG2	1.81	0.61
26:d4:29:HIS:HB3	26:d4:32:ARG:HB2	1.82	0.61
38:8:130:C:H2'	38:8:131:A:C8	2.35	0.61
42:l5:40:HIS:CE1	57:n1:69:LYS:HA	2.35	0.61
34:SR:282:SER:H	34:SR:285:ALA:HB3	1.63	0.61
45:L8:195:SER:O	45:L8:197:VAL:N	2.33	0.61
57:N1:78:LYS:HB3	57:N1:87:LYS:HG3	1.81	0.61
1:6:325:G:H4'	13:c1:83:THR:HG21	1.81	0.61
3:s1:110:LEU:HD11	3:s1:213:ARG:HD2	1.80	0.61
28:d6:10:ARG:NH2	28:d6:34:LYS:O	2.33	0.61
36:5:107:A:OP1	49:m3:39:ARG:NH1	2.33	0.61
59:n3:13:ILE:HG12	59:n3:53:SER:HB2	1.82	0.61
1:2:280:U:O2'	1:2:281:G:OP2	2.14	0.61
1:2:647:G:H22	1:2:687:G:N2	1.98	0.61
6:S4:182:TYR:HB2	6:S4:228:ILE:HD13	1.81	0.61
24:D2:76:SER:OG	24:D2:77:PRO:HD3	2.01	0.61
36:1:1240:A:H3'	36:1:1241:U:H5'	1.82	0.61
55:M9:175:GLN:O	55:M9:179:GLU:N	2.33	0.61
1:6:73:U:H2'	1:6:74:U:C6	2.35	0.61
1:6:144:U:H5	8:s6:137:ARG:NH1	1.97	0.61
1:6:1565:C:OP1	20:c8:41:ARG:HD3	1.99	0.61
11:s9:159:ALA:HB3	11:s9:162:SER:HB3	1.82	0.61
36:5:911:C:H42	39:l2:3:ARG:HD3	1.66	0.61
36:5:3178:A:H5''	36:5:3179:U:OP1	2.01	0.61
38:8:155:A:H2'	38:8:156:U:O4'	2.00	0.61
48:m1:10:ARG:HB2	48:m1:133:ARG:HD3	1.83	0.61
53:m7:108:ASP:N	53:m7:152:GLU:OE2	2.33	0.61
1:2:1006:C:O2	89:2:2145:OHX:N2	2.33	0.61
1:2:1657:U:H4'	1:2:1658:G:O5'	1.99	0.61
2:S0:200:ASP:HA	2:S0:203:PHE:CE1	2.35	0.61
3:S1:77:GLU:O	3:S1:79:HIS:N	2.32	0.61
7:S5:129:PRO:O	7:S5:133:VAL:HG23	2.01	0.61
25:D3:59:ILE:HD13	32:E0:4:VAL:HG13	1.81	0.61
36:1:561:C:H2'	36:1:562:C:C6	2.35	0.61
36:1:3060:C:OP1	89:1:4051:OHX:N4	2.34	0.61
58:N2:76:LEU:O	58:N2:80:THR:HG23	2.01	0.61
1:6:542:A:C8	1:6:543:C:H2'	2.36	0.61
2:s0:179:ARG:HD3	2:s0:183:ARG:NE	2.16	0.61
80:c0:3:MET:HE1	80:c0:45:ALA:HB2	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:c8:30:TYR:O	20:c8:33:THR:OG1	2.17	0.61
20:c8:56:LYS:HD2	20:c8:61:LEU:HD23	1.81	0.61
36:5:177:U:OP2	89:5:4019:OHX:N6	2.34	0.61
36:5:543:C:H42	36:5:548:G:H1	1.48	0.61
40:l3:92:TYR:HB2	40:l3:157:VAL:HG22	1.81	0.61
46:l9:117:PHE:CE1	46:l9:165:CYS:HB3	2.36	0.61
57:n1:105:PHE:O	57:n1:109:VAL:HG23	2.00	0.61
60:n4:97:LYS:HG3	60:n4:98:PRO:HD2	1.80	0.61
63:n7:46:ILE:HD11	63:n7:49:TYR:HA	1.81	0.61
73:o7:28:HIS:CD2	73:o7:31:LYS:HG3	2.36	0.61
2:S0:56:LYS:NZ	2:S0:159:ALA:O	2.34	0.61
3:S1:126:THR:HG22	3:S1:136:ARG:HE	1.64	0.61
4:S2:98:PHE:CZ	35:SM:116:GLU:HG3	2.36	0.61
24:D2:47:ILE:HG22	24:D2:65:LEU:HB3	1.83	0.61
36:1:564:G:H2'	36:1:565:U:C6	2.36	0.61
36:1:1688:U:H2'	36:1:1689:U:C6	2.35	0.61
38:4:137:C:OP2	89:4:229:OHX:N5	2.34	0.61
40:L3:171:LEU:O	89:L3:406:OHX:N6	2.33	0.61
45:L8:45:ASN:HD21	45:L8:47:SER:HB3	1.66	0.61
19:c7:6:THR:OG1	19:c7:8:THR:HG23	2.00	0.61
27:d5:47:TYR:CZ	27:d5:51:LEU:HD11	2.35	0.61
34:sR:111:MET:N	34:sR:125:GLY:O	2.33	0.61
36:5:2736:A:OP1	57:n1:92:ARG:NH1	2.34	0.61
36:5:3206:C:O2	56:n0:155:ARG:NH1	2.33	0.61
37:7:77:G:N2	37:7:102:A:OP2	2.30	0.61
39:l2:116:VAL:HG13	39:l2:126:LEU:HB2	1.82	0.61
47:m0:68:ALA:HB2	47:m0:158:LYS:HB2	1.81	0.61
48:m1:59:ILE:HD12	48:m1:65:ILE:HD11	1.83	0.61
73:o7:25:ARG:HE	75:o9:51:ILE:HG13	1.65	0.61
1:2:226:A:H2'	1:2:227:U:H5'	1.81	0.61
7:S5:57:SER:HB3	30:D8:53:ILE:HB	1.82	0.61
7:S5:113:ILE:O	7:S5:117:THR:OG1	2.13	0.61
7:S5:216:GLU:OE2	7:S5:219:ARG:NH2	2.34	0.61
25:D3:27:ASN:O	25:D3:31:LYS:HG2	2.00	0.61
27:D5:43:ASP:O	27:D5:46:LYS:N	2.25	0.61
2:s0:49:ASN:HA	19:c7:109:LEU:HD21	1.82	0.61
8:s6:139:ASN:OD1	8:s6:142:ARG:NH1	2.33	0.61
44:l7:229:PHE:C	44:l7:229:PHE:HD1	2.09	0.61
54:m8:170:ARG:O	54:m8:171:LYS:HB2	2.01	0.61
65:n9:14:ARG:HH12	65:n9:18:ARG:HH11	1.48	0.61
1:2:1234:A:O2'	33:E1:146:SER:HB3	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:39:GLU:CG	3:S1:40:ASN:H	2.13	0.61
22:D0:117:VAL:HG22	22:D0:118:VAL:H	1.64	0.61
36:1:1077:U:OP1	65:N9:38:LYS:NZ	2.25	0.61
55:M9:133:LYS:HG2	55:M9:134:HIS:CD2	2.36	0.61
72:O6:25:LYS:HB2	72:O6:28:TYR:HD2	1.64	0.61
1:6:1398:U:HO2'	19:c7:67:ARG:HH22	1.45	0.61
80:c0:73:VAL:O	80:c0:77:ARG:HG3	2.01	0.61
26:d4:120:GLY:O	26:d4:122:GLY:N	2.34	0.61
36:5:1716:U:H6	36:5:1716:U:H5'	1.64	0.61
40:l3:44:THR:OG1	40:l3:182:GLN:O	2.19	0.61
46:l9:88:TYR:CZ	46:l9:184:LYS:HD3	2.36	0.61
49:m3:91:ARG:NH2	49:m3:97:VAL:O	2.34	0.61
84:p0:40:GLU:HB2	84:p0:104:ARG:HG3	1.82	0.61
84:p0:64:ARG:HA	84:p0:67:LEU:HD23	1.82	0.61
1:2:591:A:H2'	1:2:592:A:H8	1.66	0.61
1:2:732:G:O2'	1:2:733:A:O4'	2.18	0.61
1:2:1291:G:O5'	1:2:1291:G:H8	1.84	0.61
1:2:1795:U:H3'	28:D6:5:ARG:HH12	1.66	0.61
4:S2:140:ARG:NH1	23:D1:1:MET:SD	2.73	0.61
6:S4:85:GLY:N	6:S4:88:ASP:OD2	2.32	0.61
36:1:562:C:OP2	50:M4:77:ARG:NH1	2.34	0.61
36:1:3155:U:H3'	36:1:3156:U:H4'	1.81	0.61
39:L2:45:VAL:HG22	39:L2:84:THR:HA	1.83	0.61
61:N5:57:LEU:HD21	61:N5:90:ALA:HB2	1.82	0.61
64:N8:116:GLY:HA2	64:N8:137:LYS:HZ3	1.65	0.61
72:O6:58:ILE:HG22	72:O6:90:MET:HG3	1.81	0.61
1:6:891:A:H2'	1:6:892:A:C8	2.36	0.61
1:6:1098:U:OP2	4:s2:168:ARG:NE	2.34	0.61
3:s1:176:VAL:HG22	3:s1:184:LEU:HD21	1.82	0.61
9:s7:143:LEU:HB2	9:s7:147:ASN:O	2.00	0.61
36:5:63:A:OP1	51:m5:172:ARG:NH2	2.33	0.61
36:5:174:C:N4	36:5:244:G:H1	1.97	0.61
45:l8:148:ALA:HA	45:l8:201:THR:HG22	1.81	0.61
54:m8:158:HIS:H	54:m8:186:VAL:CG1	2.14	0.61
1:2:45:U:O2'	1:2:46:A:H2'	2.01	0.61
1:2:647:G:H22	1:2:687:G:H22	1.47	0.61
17:C5:33:PHE:CD2	17:C5:87:PRO:HD3	2.36	0.61
18:C6:125:GLU:OE1	18:C6:128:LYS:NZ	2.33	0.61
19:C7:28:PHE:HZ	19:C7:48:ASN:HB3	1.65	0.61
21:C9:115:GLU:O	21:C9:117:SER:N	2.34	0.61
36:1:516:A:O3'	44:L7:60:ARG:NH2	2.33	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2242:A:H5'	39:L2:243:THR:HG23	1.83	0.61
37:3:113:C:H2'	37:3:114:U:O4'	2.01	0.61
38:4:85:G:O6	62:N6:112:ASP:HB3	2.01	0.61
58:N2:84:LEU:HB3	58:N2:90:ARG:HG2	1.81	0.61
1:6:1057:U:O2'	1:6:1059:U:OP1	2.14	0.61
1:6:1465:C:OP1	18:c6:139:GLN:NE2	2.34	0.61
10:s8:151:LYS:NZ	10:s8:152:ILE:O	2.31	0.61
82:e1:119:ARG:O	82:e1:132:LEU:HG	2.01	0.61
36:5:2425:G:H2'	36:5:2426:U:O4'	2.00	0.61
41:l4:299:ILE:HG22	54:m8:39:ARG:HB3	1.83	0.61
42:l5:75:LEU:HD23	42:l5:112:LYS:HE2	1.82	0.61
55:m9:92:GLN:O	55:m9:96:ILE:HG13	2.01	0.61
1:2:1173:C:H3'	20:C8:141:THR:HG21	1.83	0.60
1:2:1401:A:O3'	19:C7:10:LYS:NZ	2.34	0.60
1:2:1783:C:H2'	1:2:1784:C:H6	1.66	0.60
7:S5:103:ASN:HA	7:S5:106:LYS:HD2	1.83	0.60
10:S8:39:GLY:O	10:S8:59:ARG:HB3	2.00	0.60
36:1:1307:G:OP1	52:M6:59:ARG:NH1	2.33	0.60
41:L4:128:ALA:HB1	41:L4:134:LEU:HD12	1.83	0.60
48:M1:34:SER:HA	48:M1:67:VAL:HG21	1.82	0.60
1:6:914:G:H5'	1:6:914:G:C8	2.36	0.60
1:6:955:A:OP1	15:c3:3:ARG:NH1	2.34	0.60
1:6:1672:G:H2'	1:6:1673:G:C8	2.35	0.60
2:s0:79:ARG:NH1	2:s0:164:ASN:O	2.28	0.60
11:s9:29:LYS:O	11:s9:33:GLU:HG2	2.01	0.60
1:2:1459:C:H4'	17:C5:126:VAL:HG11	1.82	0.60
19:C7:24:LEU:HD23	19:C7:34:LEU:HD13	1.83	0.60
24:D2:29:PRO:O	24:D2:30:SER:HB3	2.01	0.60
34:SR:170:ILE:HG21	34:SR:211:ILE:HD11	1.83	0.60
36:1:975:C:H2'	36:1:976:U:H6	1.66	0.60
36:1:2745:G:N2	36:1:2748:A:OP2	2.33	0.60
36:1:2878:G:H5''	40:L3:5:LYS:HE2	1.83	0.60
37:3:121:U:OP2	42:L5:265:TYR:OH	2.13	0.60
53:M7:50:GLN:O	53:M7:53:ASP:N	2.34	0.60
1:6:1653:C:O3'	77:q1:21:ARG:HD2	2.00	0.60
4:s2:67:GLN:HA	4:s2:70:ASP:HB2	1.83	0.60
14:c2:50:LYS:O	14:c2:54:ARG:HG2	2.00	0.60
40:l3:166:ILE:HD13	40:l3:173:GLN:HG2	1.83	0.60
54:m8:70:ALA:O	54:m8:73:GLN:HG3	2.01	0.60
73:o7:39:TYR:CD2	73:o7:40:PRO:HA	2.36	0.60
1:2:40:A:OP1	11:S9:3:ARG:NH1	2.35	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:107:C:H42	1:2:307:G:H1	1.49	0.60
1:2:1681:A:H2'	1:2:1682:U:H5'	1.82	0.60
7:S5:112:ARG:HD3	27:D5:95:HIS:CE1	2.37	0.60
7:S5:158:GLN:HG2	30:D8:66:LEU:HD21	1.82	0.60
9:S7:49:ILE:O	9:S7:57:ALA:N	2.22	0.60
20:C8:120:ARG:NH2	35:SM:58:GLU:OE1	2.34	0.60
34:SR:76:ASP:OD1	34:SR:76:ASP:N	2.33	0.60
36:1:1460:A:H2'	36:1:1461:A:C8	2.36	0.60
36:1:2611:U:H2'	36:1:2612:U:C6	2.37	0.60
55:M9:104:ARG:CZ	55:M9:104:ARG:HB3	2.31	0.60
57:N1:120:LYS:C	57:N1:122:GLN:H	2.08	0.60
66:O0:34:LEU:HD23	66:O0:59:TYR:HB3	1.83	0.60
1:6:40:A:O2'	89:6:2105:OHX:N4	2.34	0.60
1:6:813:U:OP2	15:c3:76:LYS:NZ	2.34	0.60
3:s1:123:ALA:HB2	3:s1:165:ARG:HG2	1.82	0.60
30:d8:58:GLU:HB3	30:d8:61:ARG:HG3	1.83	0.60
36:5:1912:U:N3	36:5:2122:G:OP2	2.33	0.60
36:5:2510:U:O2'	36:5:2511:A:H5''	2.00	0.60
40:l3:139:GLN:O	40:l3:141:GLY:N	2.35	0.60
48:m1:92:ARG:HG3	48:m1:172:LEU:HD12	1.84	0.60
56:n0:137:ARG:HG2	56:n0:139:TYR:CZ	2.35	0.60
1:2:637:C:O2	9:S7:114:ARG:NH2	2.34	0.60
1:2:927:C:H2'	1:2:928:U:C6	2.36	0.60
1:2:1291:G:N2	1:2:1324:G:N2	2.49	0.60
1:2:1316:G:HO2'	1:2:1401:A:HO2'	1.49	0.60
4:S2:139:ILE:HG22	4:S2:141:ARG:HD2	1.83	0.60
7:S5:36:ALA:HB1	7:S5:42:LEU:HD21	1.83	0.60
36:1:1933:A:OP2	89:1:3893:OHX:N6	2.35	0.60
48:M1:94:ARG:NH2	48:M1:173:ASP:OD2	2.34	0.60
66:O0:9:SER:N	66:O0:12:GLN:HE21	1.99	0.60
73:O7:27:PHE:HA	73:O7:34:CYS:HA	1.82	0.60
1:6:1502:G:N7	21:c9:102:ARG:NH2	2.49	0.60
13:c1:116:ARG:HE	13:c1:116:ARG:N	2.00	0.60
16:c4:115:ILE:HG21	28:d6:44:ILE:HG21	1.83	0.60
36:5:1017:C:H42	36:5:2671:A:P	2.23	0.60
36:5:1728:G:OP1	79:q3:44:LYS:NZ	2.33	0.60
66:o0:99:ASP:N	66:o0:99:ASP:OD2	2.34	0.60
1:2:75:U:H2'	1:2:76:A:O4'	2.01	0.60
1:2:208:U:H2'	1:2:209:U:H6	1.65	0.60
17:C5:68:PRO:HG2	17:C5:71:GLU:OE2	2.01	0.60
32:E0:55:ARG:HB3	32:E0:58:PRO:HG3	1.84	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2573:G:O6	89:1:4009:OHX:N3	2.34	0.60
36:1:3308:C:N3	53:M7:69:ARG:NH1	2.48	0.60
42:L5:83:LEU:HB3	42:L5:88:ILE:HB	1.82	0.60
75:O9:21:ARG:HD3	75:O9:22:PRO:O	2.02	0.60
1:6:489:C:O2'	1:6:490:C:O4'	2.18	0.60
9:s7:105:THR:O	9:s7:107:ARG:N	2.34	0.60
27:d5:49:ARG:O	27:d5:53:GLU:HB2	2.01	0.60
36:5:90:C:C2'	36:5:91:G:H5'	2.32	0.60
36:5:103:G:OP1	49:m3:70:ARG:NH2	2.29	0.60
36:5:2131:A:H61	79:q3:18:TYR:H	1.50	0.60
47:m0:16:PRO:HG3	47:m0:128:ARG:HH11	1.65	0.60
52:m6:65:ASN:OD1	52:m6:67:THR:HB	2.00	0.60
56:n0:13:ARG:NH2	56:n0:50:LYS:O	2.34	0.60
60:n4:27:LYS:HG2	60:n4:29:PHE:CE2	2.36	0.60
1:2:422:G:OP1	89:2:2042:OHX:N6	2.34	0.60
13:C1:6:THR:HB	13:C1:9:SER:HB3	1.82	0.60
30:D8:25:VAL:HG11	30:D8:66:LEU:HD12	1.83	0.60
36:1:341:G:N7	41:L4:195:ARG:NH2	2.46	0.60
37:3:26:C:H5'	42:L5:56:THR:HB	1.84	0.60
49:M3:74:GLY:O	49:M3:101:ARG:NH1	2.34	0.60
1:6:1488:G:O2'	1:6:1494:C:O2	2.14	0.60
1:6:1534:G:N7	27:d5:77:ARG:NH2	2.45	0.60
6:s4:31:PRO:HG2	6:s4:38:LEU:HD13	1.84	0.60
7:s5:92:ARG:HG2	7:s5:92:ARG:NH1	2.15	0.60
9:s7:91:ILE:HD12	9:s7:92:PHE:H	1.67	0.60
23:d1:32:VAL:HG12	23:d1:55:LEU:HB2	1.83	0.60
36:5:1110:U:H2'	36:5:1111:U:C6	2.36	0.60
38:8:141:C:OP1	51:m5:109:ARG:NH1	2.34	0.60
39:l2:80:GLU:OE2	79:q3:73:THR:OG1	2.19	0.60
54:m8:155:MET:HE2	54:m8:163:PRO:HA	1.81	0.60
77:q1:16:LYS:O	77:q1:20:VAL:HG23	2.01	0.60
1:2:108:A:H2'	1:2:109:G:C8	2.36	0.60
2:S0:142:PRO:HB3	23:D1:34:ILE:HD13	1.82	0.60
2:S0:183:ARG:NH2	2:S0:191:ARG:O	2.35	0.60
36:1:600:G:N7	89:1:4109:OHX:N1	2.49	0.60
36:1:2108:C:H1'	36:1:3344:A:C8	2.36	0.60
40:L3:3:HIS:O	40:L3:5:LYS:N	2.34	0.60
40:L3:60:LEU:HD23	40:L3:67:PHE:HB3	1.84	0.60
46:L9:4:ILE:HG22	56:N0:142:GLN:CD	2.27	0.60
47:M0:55:ASN:HB3	47:M0:162:GLN:HG2	1.83	0.60
76:Q0:127:LEU:HD22	76:Q0:128:LYS:HG2	1.81	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1087:A:H2'	1:6:1088:A:C8	2.36	0.60
1:6:1508:U:O4	89:6:2052:OHX:N4	2.34	0.60
7:s5:143:ARG:NH1	7:s5:218:GLU:OE2	2.35	0.60
34:sR:309:VAL:HB	34:sR:311:ARG:HH12	1.66	0.60
36:5:594:U:C5'	36:5:609:G:H1	2.15	0.60
36:5:860:G:O5'	39:l2:181:LYS:NZ	2.35	0.60
38:8:59:A:O2'	61:n5:61:LYS:NZ	2.29	0.60
39:l2:82:VAL:HA	39:l2:86:GLN:OE1	2.02	0.60
40:l3:19:ARG:HB3	40:l3:232:ARG:NH1	2.17	0.60
59:n3:114:ILE:HD12	59:n3:133:SER:HA	1.84	0.60
1:2:481:A:H61	1:2:505:A:H62	1.49	0.60
1:2:1147:A:H2'	1:2:1148:C:H6	1.67	0.60
15:C3:114:ARG:HG2	15:C3:114:ARG:NH1	2.12	0.60
34:SR:93:ASP:HB2	34:SR:100:TYR:CE1	2.36	0.60
41:L4:89:ALA:O	41:L4:91:GLY:N	2.31	0.60
47:M0:36:LEU:HD21	47:M0:69:ARG:HD2	1.82	0.60
58:N2:49:ASN:O	58:N2:51:GLY:N	2.32	0.60
62:N6:5:SER:HB3	62:N6:8:VAL:HG12	1.83	0.60
72:O6:97:SER:OG	72:O6:98:ARG:N	2.34	0.60
7:s5:200:ASN:CB	7:s5:208:SER:HB3	2.31	0.60
20:c8:30:TYR:HE2	20:c8:40:ARG:HH11	1.49	0.60
26:d4:91:LEU:HD12	26:d4:97:ALA:HB2	1.84	0.60
36:5:215:G:H5''	62:n6:12:ARG:HD3	1.84	0.60
36:5:1221:A:H3'	36:5:1222:G:H5'	1.83	0.60
71:o5:101:THR:HG22	71:o5:104:GLN:HB2	1.84	0.60
84:p0:93:LEU:HD13	84:p0:94:THR:HG23	1.83	0.60
1:2:513:U:OP1	11:S9:133:HIS:NE2	2.30	0.60
1:2:1765:A:OP1	89:2:2092:OHX:N3	2.35	0.60
5:S3:74:GLN:HE22	5:S3:81:PRO:HG3	1.67	0.60
9:S7:58:LEU:HD12	9:S7:90:VAL:HG22	1.84	0.60
36:1:871:U:H2'	36:1:872:U:C6	2.37	0.60
36:1:2433:U:H1'	51:M5:125:SER:HB3	1.83	0.60
46:L9:41:ILE:HG23	46:L9:43:VAL:HG13	1.84	0.60
59:N3:33:ASN:ND2	59:N3:63:LYS:H	2.00	0.60
63:N7:46:ILE:HD13	63:N7:68:ILE:HG23	1.84	0.60
1:6:197:A:H2'	1:6:198:A:H8	1.66	0.60
2:s0:163:ASN:O	2:s0:165:ARG:N	2.29	0.60
26:d4:91:LEU:HB3	26:d4:97:ALA:HB3	1.84	0.60
36:5:59:G:H4'	36:5:60:A:H4'	1.82	0.60
36:5:1355:A:H4'	36:5:1356:U:O5'	2.02	0.60
36:5:2748:A:N3	42:l5:36:LEU:HD23	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3242:G:H5''	36:5:3245:A:C8	2.37	0.60
40:13:187:SER:O	40:13:189:SER:N	2.35	0.60
63:n7:84:ARG:CZ	63:n7:85:TYR:HE1	2.14	0.60
1:2:1459:C:OP2	20:C8:138:THR:OG1	2.20	0.60
1:2:1490:C:H4'	1:2:1491:U:OP1	2.02	0.60
3:S1:157:GLN:H	3:S1:160:HIS:HB2	1.66	0.60
4:S2:147:ASN:HB3	23:D1:4:ASP:HA	1.84	0.60
20:C8:131:LEU:HA	20:C8:145:ARG:HH12	1.67	0.60
21:C9:49:ASP:HB3	21:C9:53:TRP:HB3	1.84	0.60
36:1:1596:C:H2'	36:1:1597:C:C6	2.37	0.60
36:1:1652:G:O2'	70:O4:45:GLY:HA3	2.02	0.60
36:1:1887:A:OP2	89:1:3901:OHX:N4	2.35	0.60
36:1:3192:U:H2'	36:1:3193:C:C6	2.37	0.60
36:1:3377:G:O6	89:1:4048:OHX:N1	2.34	0.60
39:L2:188:LYS:HD3	39:L2:189:TYR:CE1	2.35	0.60
73:O7:8:PHE:O	73:O7:11:ARG:HG3	2.01	0.60
16:c4:81:VAL:HG13	16:c4:115:ILE:HG23	1.83	0.60
36:5:2580:A:O2'	89:5:4133:OHX:N1	2.34	0.60
42:l5:47:PRO:HG2	42:l5:49:TYR:CE2	2.36	0.60
44:l7:229:PHE:C	44:l7:229:PHE:CD1	2.80	0.60
56:n0:71:LYS:HG2	56:n0:73:LYS:HD3	1.84	0.60
1:2:1566:U:H2'	1:2:1567:U:H6	1.67	0.59
6:S4:141:THR:O	6:S4:143:ASP:N	2.35	0.59
12:C0:8:ARG:HD2	12:C0:12:HIS:CE1	2.37	0.59
21:C9:52:GLY:O	21:C9:54:PHE:N	2.30	0.59
36:1:155:G:H1'	72:O6:26:ILE:HD13	1.84	0.59
36:1:1097:G:H4'	57:N1:129:LYS:HG2	1.83	0.59
36:1:2310:U:OP1	89:1:4152:OHX:N2	2.34	0.59
36:1:2340:U:OP1	40:L3:236:LYS:HE3	2.02	0.59
36:1:2645:G:OP2	47:M0:117:GLY:HA2	2.02	0.59
40:L3:346:THR:O	40:L3:348:ARG:N	2.35	0.59
55:M9:86:GLU:CD	55:M9:91:SER:HG	2.09	0.59
66:O0:98:SER:OG	66:O0:99:ASP:N	2.27	0.59
8:s6:57:ASP:O	8:s6:59:GLN:N	2.35	0.59
17:c5:127:ARG:CZ	35:sM:66:ALA:HB2	2.32	0.59
34:sR:5:GLU:HA	34:sR:317:THR:HA	1.82	0.59
36:5:1790:G:O6	89:5:4201:OHX:N4	2.35	0.59
36:5:2659:G:H4'	36:5:2751:G:O2'	2.02	0.59
54:m8:165:ILE:HG23	54:m8:167:SER:H	1.65	0.59
85:p1:38:UNK:O	85:p1:42:UNK:N	2.36	0.59
1:2:1266:U:H2'	1:2:1267:G:C8	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1280:C:H2'	1:2:1281:G:H8	1.67	0.59
1:2:1645:G:O2'	36:1:2259:A:N1	2.33	0.59
1:2:1650:U:H2'	1:2:1651:A:C8	2.37	0.59
1:2:1776:A:H2'	1:2:1777:G:C8	2.37	0.59
7:S5:145:ASP:OD2	7:S5:146:THR:N	2.33	0.59
26:D4:92:VAL:HG21	26:D4:99:LYS:HG2	1.83	0.59
28:D6:75:VAL:O	28:D6:79:ILE:N	2.35	0.59
31:D9:5:ASN:HB3	31:D9:7:TRP:NE1	2.17	0.59
36:1:2206:G:H1	36:1:2237:C:H42	1.48	0.59
36:1:3165:A:H61	36:1:3285:C:H42	1.50	0.59
41:L4:52:VAL:HG11	41:L4:99:MET:HE3	1.83	0.59
42:L5:105:ILE:O	42:L5:109:THR:HG23	2.01	0.59
3:s1:157:GLN:OE1	89:s1:302:OHX:N3	2.35	0.59
13:c1:75:VAL:HG12	13:c1:119:VAL:HA	1.84	0.59
16:c4:20:TYR:HB3	16:c4:27:PHE:HB2	1.84	0.59
19:c7:77:GLU:HG2	19:c7:80:ARG:HH21	1.66	0.59
19:c7:109:LEU:O	19:c7:113:LEU:HB2	2.01	0.59
36:5:398:A:O2'	36:5:1416:C:OP1	2.19	0.59
36:5:1659:U:H2'	36:5:1660:C:C6	2.37	0.59
36:5:2897:A:H2'	36:5:2899:C:H5''	1.84	0.59
36:5:3115:C:OP1	46:19:62:ARG:NH2	2.35	0.59
38:8:154:C:H5''	45:18:181:LYS:HD2	1.83	0.59
62:n6:59:VAL:HG22	62:n6:103:LYS:O	2.02	0.59
64:n8:47:LYS:HE3	64:n8:48:TYR:CZ	2.37	0.59
66:o0:57:GLU:OE1	66:o0:69:TYR:OH	2.09	0.59
79:q3:36:ARG:HG3	79:q3:48:LYS:HG3	1.83	0.59
8:S6:164:LYS:HB3	8:S6:167:LYS:HB3	1.85	0.59
12:C0:46:LEU:HA	12:C0:49:LEU:HB2	1.85	0.59
16:C4:81:VAL:HG11	16:C4:102:LEU:HD21	1.82	0.59
18:C6:129:PHE:HE1	22:D0:78:THR:HA	1.67	0.59
23:D1:15:ARG:NH1	23:D1:33:GLN:OE1	2.35	0.59
36:1:634:C:HO2'	68:O2:47:ARG:HD3	1.65	0.59
36:1:1460:A:H2'	36:1:1461:A:H8	1.68	0.59
49:M3:75:PHE:H	49:M3:97:VAL:HA	1.67	0.59
49:M3:157:ARG:HG2	49:M3:158:ALA:H	1.67	0.59
66:O0:102:THR:O	66:O0:102:THR:OG1	2.16	0.59
1:6:880:C:OP2	89:6:2106:OHX:N2	2.35	0.59
3:s1:126:THR:HG22	3:s1:136:ARG:HE	1.67	0.59
16:c4:80:HIS:ND1	16:c4:113:GLY:O	2.24	0.59
34:sR:80:ALA:HB3	34:sR:92:TRP:HB2	1.84	0.59
36:5:601:U:H2'	36:5:602:A:O4'	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2603:G:O6	89:5:3905:OHX:N1	2.36	0.59
55:m9:154:ALA:O	55:m9:156:ASN:N	2.34	0.59
62:n6:52:ARG:HA	62:n6:70:ILE:HG22	1.82	0.59
63:n7:95:VAL:HG11	63:n7:113:VAL:HG21	1.84	0.59
1:2:605:A:OP2	1:2:606:A:O2'	2.20	0.59
1:2:1393:C:H2'	1:2:1394:G:O4'	2.02	0.59
18:C6:47:LYS:HZ3	18:C6:114:ARG:NE	2.00	0.59
23:D1:79:LEU:HD13	23:D1:82:VAL:HG11	1.84	0.59
28:D6:79:ILE:HG23	28:D6:84:VAL:HG21	1.83	0.59
29:D7:56:CYS:HB3	29:D7:61:THR:HG21	1.84	0.59
36:1:1564:U:H2'	36:1:1565:G:C8	2.37	0.59
36:1:1798:A:H2'	36:1:1799:A:C8	2.38	0.59
36:1:2208:A:N1	89:1:4056:OHX:N4	2.50	0.59
38:4:10:A:H2'	38:4:11:C:C6	2.37	0.59
39:L2:117:GLU:HB3	39:L2:119:LYS:O	2.02	0.59
1:6:221:A:OP2	1:6:832:U:O2'	2.18	0.59
1:6:488:G:N2	1:6:499:U:H3	1.97	0.59
1:6:1558:U:H3	17:c5:122:THR:HB	1.68	0.59
17:c5:129:GLY:HA3	35:sM:74:LYS:HG2	1.84	0.59
36:5:44:U:O2	78:q2:46:LYS:NZ	2.34	0.59
36:5:1155:C:O2'	36:5:1197:A:N1	2.32	0.59
36:5:2299:A:OP2	89:5:3962:OHX:N1	2.35	0.59
36:5:2444:C:H42	36:5:2503:G:H1	1.50	0.59
36:5:2568:C:O2'	36:5:2569:A:O5'	2.12	0.59
57:n1:122:GLN:HB3	57:n1:124:VAL:HG23	1.85	0.59
23:D1:73:ALA:HB1	23:D1:78:LEU:HG	1.85	0.59
25:D3:90:ASP:O	25:D3:136:TRP:NE1	2.30	0.59
36:1:2514:U:H5'	45:L8:68:ARG:HG3	1.84	0.59
36:1:3276:G:O6	69:O3:60:ARG:NH1	2.36	0.59
71:O5:68:GLN:C	71:O5:70:TYR:H	2.11	0.59
73:O7:5:THR:HA	73:O7:8:PHE:CD2	2.36	0.59
1:6:67:A:OP1	8:s6:171:LYS:NZ	2.33	0.59
1:6:116:U:H2'	1:6:117:U:C6	2.37	0.59
1:6:329:G:H5'	10:s8:99:ALA:HB3	1.83	0.59
1:6:991:G:OP2	89:6:2168:OHX:N2	2.35	0.59
2:s0:56:LYS:NZ	2:s0:158:VAL:HA	2.17	0.59
36:5:156:G:OP2	72:o6:25:LYS:HB3	2.02	0.59
36:5:541:U:H2'	36:5:542:G:C8	2.38	0.59
36:5:3309:G:O6	40:l3:21:ARG:NH2	2.34	0.59
40:l3:44:THR:HG23	40:l3:184:ASN:HB2	1.83	0.59
54:m8:30:VAL:O	54:m8:34:THR:HG23	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:o2:119:VAL:O	68:o2:122:PRO:HD3	2.03	0.59
1:2:901:G:N2	16:C4:54:GLU:OE1	2.36	0.59
1:2:1067:C:H2'	1:2:1068:C:H6	1.67	0.59
1:2:1345:A:H2'	1:2:1348:A:H62	1.68	0.59
1:2:1537:C:N3	89:2:2154:OHX:N3	2.51	0.59
21:C9:49:ASP:OD1	21:C9:53:TRP:N	2.36	0.59
36:1:1040:A:N3	47:M0:198:LYS:NZ	2.48	0.59
36:1:3298:C:OP1	53:M7:74:LYS:NZ	2.35	0.59
89:1:4097:OHX:N4	55:M9:14:VAL:O	2.35	0.59
1:6:158:U:O2'	1:6:159:U:H3'	2.02	0.59
1:6:564:G:O6	89:6:2150:OHX:N5	2.35	0.59
1:6:629:U:OP1	15:c3:127:ARG:NH2	2.35	0.59
1:6:794:U:H4'	1:6:795:U:OP2	2.03	0.59
5:s3:40:ARG:HG2	22:d0:110:PRO:HB3	1.84	0.59
13:c1:21:ASN:OD1	13:c1:21:ASN:N	2.33	0.59
47:m0:14:ASN:O	47:m0:128:ARG:NH2	2.35	0.59
58:n2:47:VAL:O	58:n2:49:ASN:N	2.36	0.59
68:o2:4:LEU:HG	68:o2:5:PRO:HD3	1.84	0.59
1:2:143:G:N7	8:S6:177:ARG:NH2	2.51	0.59
14:C2:54:ARG:O	14:C2:56:GLU:N	2.34	0.59
19:C7:24:LEU:HB3	19:C7:58:MET:HE2	1.84	0.59
36:1:743:C:N3	54:M8:141:ARG:NH1	2.50	0.59
36:1:2094:C:H2'	36:1:2095:G:H8	1.67	0.59
40:L3:25:ILE:HD13	40:L3:25:ILE:H	1.67	0.59
44:L7:136:TYR:CZ	44:L7:231:ASN:HB2	2.37	0.59
58:N2:37:LEU:O	58:N2:41:ILE:HG13	2.02	0.59
1:6:1714:A:H2'	1:6:1715:G:O4'	2.02	0.59
16:c4:131:GLY:O	16:c4:133:ARG:N	2.36	0.59
81:e0:33:ARG:HB3	81:e0:33:ARG:HH11	1.68	0.59
36:5:148:G:O2'	36:5:149:U:OP2	2.21	0.59
36:5:2533:G:O6	89:5:4043:OHX:N1	2.35	0.59
46:l9:4:ILE:HG23	56:n0:142:GLN:CD	2.27	0.59
84:p0:11:TYR:HE1	84:p0:15:LEU:HD12	1.68	0.59
1:2:324:U:O2'	13:C1:80:MET:HE1	2.03	0.59
21:C9:28:LEU:HD13	21:C9:29:GLU:H	1.67	0.59
36:1:2969:A:N7	39:L2:215:ASN:ND2	2.48	0.59
36:1:3152:U:O2	89:1:4158:OHX:N4	2.36	0.59
36:1:3195:U:O2'	36:1:3197:G:N2	2.35	0.59
45:L8:54:GLU:HG2	45:L8:57:ARG:HH21	1.66	0.59
52:M6:36:VAL:HG11	52:M6:108:ILE:HG23	1.84	0.59
61:N5:132:ALA:O	61:N5:135:ILE:HG22	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:813:U:C2	55:m9:163:ARG:HD3	2.38	0.59
1:6:1402:G:H5'	19:c7:4:VAL:HG13	1.83	0.59
2:s0:122:ILE:HG12	2:s0:144:ILE:HG13	1.83	0.59
8:s6:139:ASN:HA	8:s6:142:ARG:HB2	1.85	0.59
16:c4:62:LEU:HA	16:c4:65:GLN:HG3	1.84	0.59
36:5:75:G:H5''	49:m3:58:VAL:HG13	1.83	0.59
36:5:3341:U:H5''	36:5:3342:A:OP2	2.02	0.59
41:l4:233:LEU:HD22	41:l4:238:LEU:HD11	1.84	0.59
43:l6:172:HIS:CD2	43:l6:173:MET:HG2	2.37	0.59
1:2:894:U:H3	1:2:918:U:H3	1.51	0.59
2:S0:66:ALA:HB2	23:D1:37:ALA:HB2	1.85	0.59
7:S5:166:ARG:HD2	30:D8:46:GLY:HA2	1.85	0.59
22:D0:106:ILE:HG13	22:D0:107:THR:H	1.68	0.59
36:1:86:G:O2'	49:M3:11:LYS:HD3	2.02	0.59
36:1:1443:G:O6	89:1:3988:OHX:N3	2.36	0.59
37:3:97:A:O4'	44:L7:225:GLN:NE2	2.36	0.59
38:4:107:G:OP2	89:4:229:OHX:N2	2.35	0.59
51:M5:138:GLN:HA	51:M5:143:ARG:HH11	1.67	0.59
52:M6:18:ARG:O	52:M6:22:VAL:HG13	2.02	0.59
53:M7:38:GLY:H	53:M7:114:VAL:HG13	1.68	0.59
61:N5:139:ILE:HG13	61:N5:139:ILE:O	2.03	0.59
1:6:584:C:H1'	81:e0:18:THR:HG21	1.83	0.59
1:6:1524:A:H2'	1:6:1525:A:C8	2.38	0.59
1:6:1533:C:H4'	1:6:1539:G:N1	2.17	0.59
1:6:1700:C:O2'	1:6:1701:A:OP1	2.20	0.59
6:s4:10:LYS:HE2	11:s9:2:PRO:HB3	1.85	0.59
9:s7:132:PRO:O	9:s7:133:THR:OG1	2.18	0.59
36:5:1080:A:OP2	42:l5:140:ARG:NH2	2.35	0.59
36:5:1824:U:O3'	74:o8:17:ARG:NH2	2.36	0.59
40:l3:188:ILE:HA	40:l3:191:LYS:HD2	1.85	0.59
3:S1:26:ARG:NH1	3:S1:49:ASN:OD1	2.35	0.59
4:S2:68:ILE:O	4:S2:72:LEU:HB2	2.03	0.59
6:S4:71:LYS:HB3	6:S4:76:VAL:HA	1.85	0.59
8:S6:137:ARG:HD3	8:S6:177:ARG:HE	1.67	0.59
36:1:2660:G:O3'	36:1:2749:G:N2	2.36	0.59
36:1:3159:C:H2'	36:1:3160:U:C6	2.37	0.59
44:L7:83:LEU:HD22	44:L7:84:VAL:N	2.18	0.59
66:O0:22:LYS:H	66:O0:94:GLU:HB2	1.67	0.59
74:O8:5:ILE:HG22	74:O8:54:LEU:HB2	1.85	0.59
1:6:1166:A:H2'	1:6:1167:G:O4'	2.02	0.59
1:6:1597:A:OP1	31:d9:19:ARG:NH2	2.34	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1754:A:H4'	1:6:1755:A:O5'	2.03	0.59
2:s0:92:HIS:HB3	2:s0:182:LEU:HD11	1.85	0.59
6:s4:151:ASP:HB3	6:s4:154:ILE:HG13	1.84	0.59
19:c7:28:PHE:HA	19:c7:55:THR:HG21	1.85	0.59
19:c7:86:PRO:HG2	19:c7:88:VAL:HA	1.85	0.59
36:5:495:G:H2'	36:5:496:C:O4'	2.02	0.59
36:5:1381:A:OP1	41:l4:197:ARG:NH1	2.35	0.59
41:l4:304:GLN:C	41:l4:306:THR:H	2.11	0.59
45:l8:82:LEU:HD21	45:l8:86:THR:HG22	1.83	0.59
53:m7:29:THR:HG22	53:m7:87:SER:OG	2.03	0.59
1:2:23:G:O2'	1:2:368:U:OP1	2.21	0.58
1:2:896:U:H1'	16:C4:38:THR:HG21	1.85	0.58
1:2:1672:G:H2'	1:2:1673:G:C8	2.37	0.58
1:2:1769:U:OP2	89:2:2145:OHX:N1	2.36	0.58
14:C2:119:SER:OG	14:C2:120:VAL:N	2.35	0.58
17:C5:14:THR:HB	17:C5:22:LEU:HB2	1.85	0.58
34:SR:20:VAL:O	34:SR:291:SER:OG	2.21	0.58
36:1:49:A:OP1	49:M3:16:LYS:NZ	2.35	0.58
36:1:1632:A:C8	36:1:1644:C:H2'	2.38	0.58
89:1:3898:OHX:N5	57:N1:13:TYR:O	2.36	0.58
41:L4:316:ASN:OD1	41:L4:318:LEU:HB2	2.03	0.58
45:L8:26:LEU:HD13	63:N7:53:VAL:HG11	1.84	0.58
45:L8:245:LYS:HZ2	45:L8:246:MET:HB3	1.68	0.58
50:M4:48:GLY:HA3	50:M4:53:VAL:HG13	1.85	0.58
1:6:478:A:O2'	11:s9:124:HIS:HD2	1.85	0.58
5:s3:8:LYS:HG2	22:d0:63:LEU:HD21	1.85	0.58
27:d5:53:GLU:O	27:d5:56:THR:N	2.36	0.58
36:5:953:G:H2'	36:5:1117:G:H5''	1.85	0.58
36:5:2355:G:H4'	53:m7:139:TYR:CE2	2.38	0.58
39:l2:211:HIS:O	39:l2:213:GLY:N	2.36	0.58
41:l4:192:GLY:HA2	41:l4:195:ARG:HG3	1.85	0.58
62:n6:37:LYS:H	62:n6:37:LYS:CD	2.13	0.58
68:o2:100:ILE:O	68:o2:105:ARG:NH1	2.36	0.58
74:o8:65:LEU:HD23	74:o8:68:SER:HB2	1.83	0.58
1:2:584:C:H1'	32:E0:18:THR:HG21	1.84	0.58
1:2:1000:C:O2'	1:2:1002:G:N7	2.29	0.58
1:2:1062:A:OP2	89:2:2165:OHX:N4	2.36	0.58
15:C3:114:ARG:HH11	15:C3:114:ARG:CG	2.15	0.58
18:C6:34:SER:HB3	18:C6:38:LEU:HD12	1.84	0.58
20:C8:30:TYR:O	20:C8:33:THR:OG1	2.21	0.58
25:D3:50:LYS:HD3	25:D3:101:GLU:HG2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:911:C:N4	39:L2:3:ARG:HD3	2.16	0.58
36:1:917:A:OP2	89:1:4157:OHX:N2	2.36	0.58
36:1:1317:A:O2'	36:1:1318:A:H3'	2.02	0.58
48:M1:59:ILE:HG21	48:M1:65:ILE:HD11	1.85	0.58
75:O9:28:ARG:NH1	75:O9:36:ARG:O	2.36	0.58
1:6:1688:U:H2'	1:6:1689:A:C8	2.38	0.58
7:s5:208:SER:O	7:s5:210:ALA:N	2.37	0.58
20:c8:86:LEU:HG	20:c8:99:HIS:HB2	1.85	0.58
36:5:20:A:OP2	71:o5:90:ARG:NH1	2.36	0.58
41:l4:354:VAL:O	41:l4:358:THR:HG23	2.03	0.58
73:o7:28:HIS:HD2	73:o7:31:LYS:HE2	1.66	0.58
5:S3:46:THR:HB	5:S3:84:ILE:HG12	1.85	0.58
7:S5:193:THR:HA	7:S5:196:GLU:HB2	1.83	0.58
29:D7:37:CYS:O	29:D7:39:GLY:N	2.36	0.58
36:1:1636:U:H5''	63:N7:73:LYS:NZ	2.19	0.58
36:1:3233:C:H2'	36:1:3234:A:C8	2.38	0.58
42:L5:91:GLY:O	42:L5:94:ASN:ND2	2.36	0.58
66:O0:26:GLY:O	66:O0:30:THR:HG23	2.03	0.58
1:6:771:A:OP1	11:s9:9:SER:OG	2.22	0.58
21:c9:30:VAL:HG12	21:c9:54:PHE:CD2	2.38	0.58
28:d6:4:LYS:HE2	28:d6:5:ARG:NH2	2.18	0.58
36:5:173:G:H1'	36:5:174:C:H5'	1.86	0.58
36:5:1024:G:N2	36:5:1026:A:OP2	2.36	0.58
36:5:1239:C:N4	36:5:1249:G:H1	1.93	0.58
36:5:1534:A:OP1	89:5:3924:OHX:N1	2.37	0.58
36:5:1662:G:O6	89:5:3921:OHX:N1	2.36	0.58
40:l3:53:MET:HE2	40:l3:77:THR:CG2	2.33	0.58
1:2:446:A:N6	1:2:461:G:H21	2.01	0.58
1:2:1449:U:H2'	1:2:1450:U:C6	2.38	0.58
1:2:1675:C:H1'	10:S8:32:GLN:NE2	2.18	0.58
26:D4:12:VAL:HG13	26:D4:23:PHE:HB3	1.85	0.58
36:1:1915:A:H2'	36:1:1916:U:C6	2.38	0.58
36:1:2534:G:H1	36:1:2545:C:H42	1.49	0.58
36:1:2790:A:OP2	54:M8:181:SER:HB3	2.02	0.58
36:1:2927:C:H2'	36:1:2928:C:C6	2.38	0.58
36:1:3308:C:O2	53:M7:69:ARG:HD3	2.03	0.58
46:L9:120:ASP:OD1	46:L9:124:ARG:NH2	2.36	0.58
1:6:1010:C:OP2	89:6:2168:OHX:N3	2.36	0.58
5:s3:168:ILE:HG22	5:s3:189:MET:HB2	1.86	0.58
22:d0:27:THR:HB	22:d0:88:LYS:HG2	1.84	0.58
36:5:1386:A:N7	41:l4:183:LYS:HE3	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2509:U:H2'	36:5:2510:U:H5''	1.85	0.58
36:5:3283:U:H2'	36:5:3284:G:C8	2.38	0.58
40:l3:345:ASN:OD1	40:l3:346:THR:N	2.37	0.58
42:l5:155:THR:HA	42:l5:179:ARG:HA	1.85	0.58
45:l8:163:VAL:HG22	45:l8:166:LEU:HD12	1.85	0.58
51:m5:121:VAL:HG11	51:m5:131:GLU:HG3	1.86	0.58
52:m6:8:VAL:HG13	52:m6:34:VAL:HG22	1.85	0.58
67:o1:44:MET:O	67:o1:46:THR:N	2.35	0.58
1:2:1147:A:H2'	1:2:1148:C:C6	2.38	0.58
1:2:1381:U:H1'	1:2:1516:A:N6	2.17	0.58
1:2:1486:G:H1'	1:2:1592:A:O2'	2.03	0.58
1:2:1783:C:H2'	1:2:1784:C:C6	2.39	0.58
2:S0:112:THR:O	2:S0:115:PHE:HB2	2.03	0.58
6:S4:79:ASP:HB3	6:S4:82:TYR:HB2	1.84	0.58
30:D8:12:VAL:HA	30:D8:30:VAL:HG12	1.84	0.58
34:SR:70:ASP:HB2	34:SR:112:SER:HA	1.85	0.58
36:1:425:G:O6	89:1:3883:OHX:N6	2.36	0.58
36:1:1014:U:H2'	36:1:1015:U:H5''	1.85	0.58
36:1:3160:U:H5''	36:1:3396:U:H2'	1.85	0.58
40:L3:211:GLN:NE2	40:L3:283:TYR:O	2.34	0.58
41:L4:122:THR:HG22	41:L4:235:LEU:HB2	1.86	0.58
1:6:1460:A:C5	35:sM:76:VAL:HG13	2.39	0.58
6:s4:60:GLU:OE1	26:d4:20:ARG:NH1	2.35	0.58
22:d0:22:ILE:HG22	22:d0:93:LEU:HB2	1.85	0.58
23:d1:3:ASN:ND2	23:d1:7:GLN:HB3	2.19	0.58
82:e1:98:VAL:HG12	82:e1:99:LYS:H	1.69	0.58
36:5:1725:C:H5''	79:q3:36:ARG:HH22	1.69	0.58
36:5:3155:U:OP1	89:5:4230:OHX:N2	2.36	0.58
47:m0:215:GLU:CD	47:m0:215:GLU:H	2.11	0.58
1:2:499:U:O2'	1:2:500:C:O4'	2.21	0.58
1:2:514:G:O2'	1:2:515:A:H5'	2.04	0.58
1:2:953:G:H2'	1:2:954:G:C8	2.39	0.58
5:S3:59:LEU:HA	5:S3:66:ILE:HG13	1.85	0.58
10:S8:155:SER:HB2	10:S8:189:LEU:HD21	1.86	0.58
24:D2:27:ILE:HD11	24:D2:61:ILE:HD12	1.86	0.58
36:1:2636:A:H5''	36:1:2637:A:H5'	1.86	0.58
36:1:2828:G:OP1	47:M0:7:ARG:NH1	2.37	0.58
44:L7:151:ARG:HH11	44:L7:244:ASN:HD22	1.51	0.58
70:O4:29:ILE:HG12	70:O4:30:LEU:N	2.19	0.58
1:6:485:A:H61	1:6:502:U:H3	1.52	0.58
6:s4:196:VAL:HG12	6:s4:197:HIS:HB2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:409:A:OP2	89:5:4105:OHX:N3	2.37	0.58
36:5:1231:A:H5''	36:5:1232:C:H5'	1.85	0.58
36:5:1677:G:OP2	58:n2:103:TYR:OH	2.19	0.58
36:5:1734:G:O6	89:5:3971:OHX:N5	2.37	0.58
62:n6:106:ILE:HG21	62:n6:109:LEU:HD23	1.85	0.58
79:q3:73:THR:HB	79:q3:76:ALA:H	1.69	0.58
6:S4:206:ASP:N	6:S4:206:ASP:OD1	2.36	0.58
9:S7:147:ASN:N	9:S7:147:ASN:OD1	2.36	0.58
14:C2:124:LYS:O	14:C2:126:TRP:N	2.31	0.58
34:SR:159:ASN:ND2	34:SR:166:SER:O	2.36	0.58
36:1:353:G:N7	73:O7:55:ARG:HD3	2.19	0.58
36:1:651:G:O2'	36:1:1435:A:OP1	2.22	0.58
40:L3:306:THR:HG22	40:L3:310:GLY:HA2	1.86	0.58
44:L7:80:GLN:OE1	57:N1:136:ARG:N	2.30	0.58
55:M9:102:LEU:HD22	55:M9:138:LEU:HD12	1.86	0.58
61:N5:38:LEU:HD11	61:N5:40:LEU:HD13	1.86	0.58
66:O0:73:GLY:O	66:O0:76:GLU:HG2	2.03	0.58
3:s1:51:SER:HB3	3:s1:57:ALA:H	1.66	0.58
4:s2:44:LEU:HD21	4:s2:247:ALA:HB2	1.85	0.58
28:d6:5:ARG:O	28:d6:8:ASN:N	2.33	0.58
36:5:136:G:H5'	71:o5:95:PHE:CD2	2.38	0.58
36:5:2537:U:O2	36:5:2543:U:N3	2.36	0.58
36:5:3259:U:H5'	36:5:3259:U:H6	1.69	0.58
54:m8:122:ILE:HD11	54:m8:130:ARG:NH1	2.19	0.58
61:n5:82:LEU:HD11	61:n5:135:ILE:HD12	1.85	0.58
1:2:9:U:O4	89:2:2155:OHX:N6	2.36	0.58
6:S4:73:ASP:OD2	6:S4:122:LYS:NZ	2.33	0.58
9:S7:35:LYS:O	9:S7:37:GLU:N	2.33	0.58
17:C5:86:VAL:HG22	17:C5:89:MET:HG2	1.85	0.58
18:C6:129:PHE:CE1	22:D0:78:THR:HA	2.39	0.58
19:C7:20:TYR:CG	19:C7:38:ILE:HD11	2.38	0.58
24:D2:105:THR:HG23	24:D2:110:ILE:HG12	1.84	0.58
36:1:239:G:O2'	36:1:240:U:OP1	2.20	0.58
58:N2:50:LEU:O	58:N2:52:ASN:N	2.36	0.58
62:N6:52:ARG:C	62:N6:54:ASP:H	2.10	0.58
1:6:496:G:O6	1:6:497:G:N2	2.36	0.58
1:6:1393:C:H2'	1:6:1394:G:C8	2.39	0.58
3:s1:33:LYS:HE2	3:s1:41:ARG:HH12	1.69	0.58
11:s9:157:ASP:OD1	11:s9:158:PHE:N	2.35	0.58
15:c3:41:ALA:HB1	15:c3:75:LEU:HD21	1.85	0.58
21:c9:33:TYR:CD1	21:c9:37:VAL:HG21	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:c9:126:GLU:H	21:c9:126:GLU:CD	2.11	0.58
36:5:3276:G:O2'	43:l6:48:ARG:NH2	2.36	0.58
44:l7:191:VAL:HG12	44:l7:192:GLY:H	1.68	0.58
49:m3:42:ARG:O	49:m3:46:ILE:HG12	2.02	0.58
67:o1:44:MET:HB3	67:o1:77:ARG:CZ	2.34	0.58
1:2:142:G:O6	8:S6:177:ARG:NH1	2.28	0.58
1:2:477:A:H2'	1:2:478:A:H8	1.69	0.58
1:2:1426:C:H5''	35:SM:93:ARG:HH12	1.68	0.58
3:S1:76:SER:OG	3:S1:78:ASP:OD1	2.22	0.58
6:S4:153:ASN:O	6:S4:174:LYS:NZ	2.37	0.58
10:S8:192:TYR:O	10:S8:196:LEU:HB2	2.04	0.58
20:C8:126:ARG:HG2	20:C8:133:VAL:HA	1.85	0.58
22:D0:57:ARG:HG3	22:D0:89:ARG:CZ	2.34	0.58
36:1:1017:C:O2'	36:1:1018:G:OP2	2.21	0.58
52:M6:181:ALA:C	52:M6:183:ALA:H	2.12	0.58
64:N8:74:ASN:HB3	64:N8:115:LYS:H	1.69	0.58
74:O8:23:ALA:HB3	74:O8:75:VAL:HG22	1.86	0.58
7:s5:25:LEU:HB2	18:c6:27:GLY:O	2.04	0.58
10:s8:120:THR:O	89:s8:303:OHX:N4	2.36	0.58
24:d2:15:ASN:HD21	24:d2:71:LYS:HG3	1.69	0.58
36:5:268:A:C5	51:m5:12:ARG:HG2	2.39	0.58
36:5:1080:A:OP1	42:l5:140:ARG:HD3	2.04	0.58
36:5:2507:C:O2'	36:5:2508:U:OP1	2.18	0.58
36:5:3152:U:O2	89:5:4230:OHX:N5	2.37	0.58
63:n7:15:ARG:HG3	63:n7:15:ARG:HH11	1.68	0.58
63:n7:21:LYS:NZ	63:n7:47:GLU:O	2.37	0.58
8:S6:53:SER:O	8:S6:110:ALA:HB3	2.04	0.58
33:E1:151:ASN:O	33:E1:151:ASN:ND2	2.37	0.58
36:1:13:A:H5''	36:1:13:A:H8	1.68	0.58
36:1:246:U:H2'	36:1:247:C:H6	1.68	0.58
36:1:2683:U:H2'	36:1:2684:C:H6	1.67	0.58
74:O8:9:LYS:O	74:O8:13:GLU:HG2	2.03	0.58
74:O8:42:LYS:HG2	74:O8:55:VAL:HG22	1.86	0.58
3:s1:167:VAL:HG11	3:s1:200:ALA:HB1	1.84	0.58
4:s2:53:ILE:HD12	4:s2:53:ILE:H	1.68	0.58
6:s4:95:THR:HG23	6:s4:97:GLU:HG2	1.84	0.58
36:5:209:A:H4'	36:5:211:A:C8	2.39	0.58
36:5:879:U:O2	36:5:2357:A:H1'	2.04	0.58
36:5:1387:G:OP1	89:5:4204:OHX:N3	2.37	0.58
44:l7:195:PHE:O	44:l7:199:ASN:HB3	2.04	0.58
45:l8:244:ALA:HA	45:l8:247:ASP:HB2	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:m0:61:SER:HB2	47:m0:63:GLU:HG2	1.86	0.58
60:n4:112:ASN:HB3	60:n4:115:LYS:HE3	1.86	0.58
63:n7:51:LEU:HB2	63:n7:65:ARG:HB2	1.84	0.58
79:q3:74:ALA:O	79:q3:78:THR:HG23	2.04	0.58
1:2:1430:U:O4'	22:D0:72:ASN:ND2	2.31	0.57
36:1:1819:U:O4	89:1:4053:OHX:N4	2.37	0.57
1:6:1202:A:OP1	89:6:2126:OHX:N1	2.37	0.57
1:6:1573:A:H4'	1:6:1574:G:O5'	2.03	0.57
1:6:1783:C:H2'	1:6:1784:C:C6	2.39	0.57
4:s2:118:ALA:HB3	4:s2:124:ALA:HB2	1.85	0.57
13:c1:21:ASN:HB3	13:c1:32:LYS:HD3	1.86	0.57
20:c8:82:PRO:HG3	21:c9:36:ILE:HD12	1.86	0.57
20:c8:140:THR:HA	20:c8:143:ARG:HH11	1.69	0.57
82:e1:82:LYS:O	82:e1:84:VAL:N	2.37	0.57
34:sR:59:ARG:NH1	34:sR:96:THR:H	2.02	0.57
36:5:283:G:OP2	36:5:285:A:O2'	2.14	0.57
36:5:1940:G:H21	36:5:3362:A:H8	1.52	0.57
41:l4:338:LYS:O	41:l4:340:GLY:N	2.37	0.57
73:o7:21:ARG:HD2	73:o7:37:CYS:SG	2.44	0.57
1:2:1248:C:H2'	1:2:1249:U:C6	2.39	0.57
1:2:1592:A:H2'	1:2:1593:A:C8	2.38	0.57
11:S9:125:ALA:O	11:S9:129:ILE:HG13	2.04	0.57
36:1:439:C:H3'	36:1:440:A:C8	2.39	0.57
36:1:1823:A:H2'	36:1:1824:U:C6	2.39	0.57
39:L2:201:GLY:HA2	39:L2:204:MET:HG3	1.86	0.57
43:L6:58:LEU:HD12	43:L6:78:ARG:HD3	1.85	0.57
44:L7:80:GLN:OE1	57:N1:136:ARG:HG2	2.04	0.57
46:L9:1:MET:HE2	46:L9:3:TYR:CE1	2.39	0.57
46:L9:91:ARG:NH1	46:L9:141:LYS:O	2.32	0.57
3:s1:93:GLY:C	3:s1:95:ASN:H	2.11	0.57
10:s8:138:ASN:HA	10:s8:141:ARG:HB2	1.86	0.57
36:5:787:G:H2'	36:5:788:C:C6	2.39	0.57
47:m0:177:ASP:OD2	47:m0:177:ASP:N	2.35	0.57
1:2:356:G:OP2	89:2:2036:OHX:N6	2.37	0.57
1:2:438:A:H1'	1:2:466:U:O2	2.04	0.57
1:2:1738:U:O4	89:2:2041:OHX:N4	2.37	0.57
3:S1:39:GLU:HB3	3:S1:73:LEU:O	2.05	0.57
5:S3:176:LEU:H	5:S3:176:LEU:HD12	1.68	0.57
6:S4:11:ARG:HB2	6:S4:27:TYR:C	2.28	0.57
9:S7:82:GLU:OE2	9:S7:165:LYS:HE2	2.04	0.57
15:C3:62:GLN:HB2	15:C3:65:VAL:HG23	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:125:GLN:HB2	53:M7:141:SER:HB2	1.85	0.57
68:O2:105:ARG:O	68:O2:109:LEU:HB2	2.04	0.57
1:6:542:A:OP1	1:6:544:A:C5	2.58	0.57
1:6:846:G:H2'	1:6:847:A:C8	2.39	0.57
1:6:1244:A:N3	1:6:1244:A:H3'	2.19	0.57
6:s4:77:ARG:HD2	6:s4:82:TYR:CE1	2.40	0.57
29:d7:36:LYS:HG2	29:d7:43:ILE:HA	1.85	0.57
36:5:1560:G:H1	36:5:1579:C:H42	1.52	0.57
36:5:1806:A:H2'	36:5:1807:G:O4'	2.04	0.57
36:5:1914:G:O2'	55:m9:82:LYS:O	2.23	0.57
36:5:3243:A:OP1	52:m6:159:LYS:NZ	2.36	0.57
41:l4:47:ARG:NH1	41:l4:109:TRP:O	2.38	0.57
62:n6:57:LEU:HD13	62:n6:59:VAL:HG12	1.85	0.57
63:n7:135:ARG:HB3	63:n7:135:ARG:HH21	1.69	0.57
1:2:192:U:O2'	1:2:193:U:O5'	2.19	0.57
7:S5:42:LEU:HB2	7:S5:46:TRP:O	2.05	0.57
12:C0:17:GLN:HG2	12:C0:18:GLU:HG2	1.86	0.57
27:D5:41:ILE:HG23	27:D5:42:LEU:H	1.70	0.57
36:1:716:A:OP2	64:N8:137:LYS:NZ	2.36	0.57
40:L3:347:SER:HB3	40:L3:350:ALA:H	1.68	0.57
73:O7:21:ARG:HD2	73:O7:37:CYS:SG	2.44	0.57
1:6:399:A:H4'	6:s4:3:ARG:HG2	1.86	0.57
2:s0:26:ALA:HB3	2:s0:149:LEU:HB2	1.86	0.57
9:s7:164:TYR:CE1	9:s7:165:LYS:HG3	2.38	0.57
14:c2:95:LYS:HA	14:c2:117:GLY:HA2	1.85	0.57
18:c6:50:GLU:OE2	18:c6:82:ARG:NH2	2.37	0.57
25:d3:68:ILE:O	25:d3:70:LYS:NZ	2.38	0.57
36:5:2440:G:H2'	36:5:2441:A:C8	2.38	0.57
36:5:3045:G:O3'	40:l3:275:ARG:NH1	2.37	0.57
39:l2:105:GLY:HA2	39:l2:139:HIS:CE1	2.40	0.57
40:l3:81:THR:HG23	40:l3:81:THR:O	2.05	0.57
42:l5:181:PRO:HD2	42:l5:195:LEU:HD13	1.85	0.57
1:2:398:G:OP2	10:S8:47:ARG:NH1	2.37	0.57
1:2:434:G:N7	89:2:2048:OHX:N4	2.53	0.57
1:2:488:G:N2	1:2:500:C:O2	2.38	0.57
1:2:885:G:OP1	3:S1:136:ARG:NH1	2.36	0.57
1:2:1240:U:OP2	89:2:2144:OHX:N1	2.38	0.57
17:C5:16:SER:HA	17:C5:20:VAL:O	2.04	0.57
22:D0:26:LEU:HD22	22:D0:114:VAL:HG22	1.86	0.57
25:D3:30:LYS:O	25:D3:34:LEU:HG	2.04	0.57
35:SM:35:ALA:HB1	35:SM:37:VAL:HG23	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:316:U:O2'	72:O6:30:LYS:HD2	2.04	0.57
38:4:131:A:H5''	61:N5:93:TYR:CE2	2.40	0.57
40:L3:153:LYS:HD3	40:L3:154:TYR:CZ	2.39	0.57
46:L9:86:TYR:CE2	46:L9:151:VAL:HG22	2.39	0.57
47:M0:38:LYS:HB2	47:M0:83:ASP:HA	1.85	0.57
50:M4:24:LYS:HE2	50:M4:25:LYS:HE2	1.85	0.57
55:M9:180:LYS:HA	55:M9:183:ALA:HB3	1.85	0.57
61:N5:115:ARG:NH1	61:N5:119:THR:OG1	2.38	0.57
70:O4:58:ARG:HH11	70:O4:58:ARG:CG	2.17	0.57
1:6:901:G:H22	16:c4:54:GLU:CD	2.13	0.57
1:6:1482:C:OP2	1:6:1521:G:N1	2.36	0.57
3:s1:66:VAL:HG23	16:c4:33:LEU:HB3	1.87	0.57
6:s4:66:MET:HE1	6:s4:78:THR:HG23	1.86	0.57
10:s8:137:LYS:O	10:s8:140:GLU:N	2.36	0.57
81:e0:39:LEU:HD12	81:e0:42:ARG:HH12	1.69	0.57
36:5:549:U:H2'	36:5:550:A:H8	1.67	0.57
36:5:3327:G:O6	89:5:3960:OHX:N1	2.37	0.57
63:n7:39:GLY:C	63:n7:77:TYR:HD1	2.13	0.57
63:n7:128:GLN:O	63:n7:131:PHE:N	2.30	0.57
71:o5:105:ARG:O	71:o5:109:ILE:HG13	2.05	0.57
1:2:732:G:O6	89:2:2129:OHX:N5	2.38	0.57
1:2:789:A:O2'	6:S4:106:LYS:NZ	2.23	0.57
1:2:918:U:O3'	16:C4:18:ARG:NH1	2.36	0.57
1:2:1347:U:O2	1:2:1516:A:H5'	2.04	0.57
1:2:1595:U:H3	1:2:1600:A:H2	1.53	0.57
7:S5:146:THR:HG23	7:S5:221:ALA:HA	1.86	0.57
8:S6:19:ASP:N	8:S6:19:ASP:OD1	2.37	0.57
11:S9:163:PRO:HG2	11:S9:164:PHE:HD2	1.69	0.57
13:C1:2:SER:HB2	13:C1:81:HIS:HD2	1.69	0.57
36:1:356:C:OP2	89:1:4155:OHX:N1	2.37	0.57
36:1:1029:G:H2'	36:1:1030:A:C8	2.39	0.57
36:1:2712:U:H2'	36:1:2713:U:C6	2.39	0.57
37:3:3:U:H2'	37:3:4:U:H6	1.70	0.57
47:M0:16:PRO:HD3	47:M0:128:ARG:CZ	2.35	0.57
56:N0:23:LYS:O	56:N0:24:LEU:HB2	2.02	0.57
59:N3:33:ASN:C	59:N3:33:ASN:HD22	2.12	0.57
62:N6:83:ASP:O	62:N6:84:LYS:HB2	2.04	0.57
1:6:776:G:H2'	1:6:777:C:H5''	1.86	0.57
1:6:1432:U:H4'	1:6:1433:G:H5''	1.87	0.57
22:d0:50:LEU:HD22	22:d0:95:ALA:HB2	1.87	0.57
26:d4:89:TYR:HE1	26:d4:93:ARG:HH12	1.53	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3197:G:H2'	36:5:3198:U:H5''	1.86	0.57
39:12:214:GLY:O	39:12:215:ASN:HB2	2.05	0.57
40:13:111:SER:O	40:13:114:VAL:HG23	2.05	0.57
46:19:90:MET:HB2	46:19:144:ILE:HG22	1.87	0.57
47:m0:76:MET:HE3	47:m0:148:VAL:HA	1.87	0.57
62:n6:24:SER:OG	62:n6:75:ARG:NH1	2.38	0.57
1:2:67:A:O3'	1:2:68:A:H3'	2.05	0.57
1:2:1199:G:O6	22:D0:67:THR:HG23	2.04	0.57
6:S4:31:PRO:HB2	6:S4:38:LEU:HD22	1.86	0.57
12:C0:32:HIS:CD2	12:C0:35:ILE:HB	2.39	0.57
28:D6:41:ILE:HG22	28:D6:68:TYR:HA	1.86	0.57
34:SR:161:LYS:O	34:SR:161:LYS:HG2	2.04	0.57
36:1:501:A:H2'	36:1:502:U:C6	2.39	0.57
36:1:900:G:H1'	36:1:1589:A:N6	2.20	0.57
36:1:3278:C:H2'	36:1:3278:C:O2	2.04	0.57
1:6:355:G:OP1	89:6:2064:OHX:N5	2.38	0.57
6:s4:118:GLU:HA	6:s4:121:TYR:CE1	2.40	0.57
34:sR:25:THR:HG21	34:sR:295:SER:HA	1.85	0.57
36:5:621:A:H2'	36:5:622:A:C8	2.39	0.57
36:5:1318:A:OP1	52:m6:18:ARG:NH2	2.38	0.57
36:5:2310:U:OP1	89:5:4202:OHX:N2	2.38	0.57
36:5:2552:C:H5	66:o0:53:LYS:HE2	1.70	0.57
36:5:3028:G:H2'	36:5:3029:A:C8	2.39	0.57
40:13:3:HIS:C	40:13:3:HIS:HD1	2.10	0.57
40:13:53:MET:HG2	40:13:77:THR:HG22	1.86	0.57
44:17:40:LYS:HE2	44:17:170:GLU:OE1	2.05	0.57
45:18:41:GLN:HG3	45:18:44:ARG:HH12	1.69	0.57
65:n9:20:GLY:O	65:n9:21:ILE:HB	2.04	0.57
70:o4:16:ARG:HH11	70:o4:16:ARG:HG3	1.70	0.57
84:p0:63:ILE:HG21	84:p0:77:LEU:HD21	1.85	0.57
1:2:701:U:H3	1:2:737:A:H61	1.52	0.57
15:C3:37:ILE:HD12	15:C3:74:ILE:HD12	1.87	0.57
34:SR:26:SER:OG	34:SR:75:ALA:O	2.22	0.57
34:SR:70:ASP:OD2	34:SR:155:ARG:NH2	2.32	0.57
36:1:595:G:N1	36:1:609:G:H5''	2.19	0.57
45:L8:75:ILE:C	45:L8:77:GLN:H	2.13	0.57
58:N2:50:LEU:HB3	58:N2:54:VAL:HG22	1.87	0.57
7:s5:90:ILE:O	7:s5:94:THR:HG23	2.05	0.57
16:c4:122:PRO:C	16:c4:124:ASP:H	2.11	0.57
21:c9:28:LEU:O	21:c9:29:GLU:HB2	2.03	0.57
36:5:677:A:H4'	36:5:678:G:O5'	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:m1:15:GLU:HB3	48:m1:130:VAL:HG22	1.87	0.57
1:2:93:A:H1'	6:S4:3:ARG:HB3	1.87	0.57
1:2:1564:U:H2'	1:2:1565:C:H6	1.68	0.57
3:S1:101:HIS:HA	3:S1:217:LEU:HD22	1.86	0.57
5:S3:117:ARG:HD3	35:SM:122:GLU:HB3	1.86	0.57
15:C3:5:HIS:CE1	15:C3:121:ARG:HG3	2.39	0.57
17:C5:98:ASN:HB3	17:C5:120:SER:OG	2.05	0.57
18:C6:40:GLU:HA	18:C6:42:GLU:N	2.18	0.57
28:D6:37:LYS:O	28:D6:38:ARG:NH1	2.38	0.57
34:SR:70:ASP:CB	34:SR:112:SER:HA	2.33	0.57
36:1:1097:G:H5'	57:N1:129:LYS:HE2	1.86	0.57
36:1:1323:G:O3'	56:N0:2:ALA:HA	2.05	0.57
36:1:2960:C:H2'	36:1:2961:G:C8	2.40	0.57
42:L5:64:ILE:HG13	42:L5:105:ILE:HD12	1.85	0.57
44:L7:170:GLU:HG3	44:L7:179:LEU:HB3	1.85	0.57
57:N1:17:ARG:O	57:N1:18:ASP:HB2	2.04	0.57
60:N4:1:MET:HE3	60:N4:15:PRO:HD3	1.87	0.57
67:O1:10:ARG:HB3	67:O1:108:VAL:HA	1.87	0.57
74:O8:44:LYS:HG2	74:O8:53:THR:HB	1.87	0.57
1:6:1364:G:O3'	18:c6:26:LYS:NZ	2.37	0.57
11:s9:129:ILE:HA	11:s9:134:ILE:CG1	2.35	0.57
18:c6:99:GLU:HG2	34:sR:57:PRO:HB2	1.87	0.57
24:d2:11:LEU:HD11	24:d2:37:PHE:CZ	2.39	0.57
36:5:129:U:H2'	36:5:130:A:C8	2.40	0.57
36:5:308:A:H5'	36:5:2223:A:O2'	2.05	0.57
36:5:604:G:N7	89:5:4171:OHX:N2	2.52	0.57
36:5:1192:C:N4	36:5:1301:A:O2'	2.36	0.57
36:5:1493:G:O6	75:o9:2:ALA:N	2.38	0.57
60:n4:23:ARG:NH2	60:n4:25:ASP:OD1	2.38	0.57
1:2:1175:U:H2'	1:2:1176:G:C8	2.40	0.57
8:S6:142:ARG:HA	8:S6:147:LEU:HD12	1.87	0.57
9:S7:50:ASP:HA	9:S7:56:LYS:HA	1.87	0.57
19:C7:23:LYS:O	19:C7:24:LEU:HB2	2.05	0.57
22:D0:51:VAL:HG13	22:D0:94:GLU:HB2	1.85	0.57
25:D3:28:ASN:OD1	25:D3:28:ASN:N	2.37	0.57
35:SM:127:ALA:HA	35:SM:130:GLU:HB2	1.86	0.57
36:1:249:U:O2	36:1:250:U:N3	2.37	0.57
40:L3:37:ARG:O	40:L3:186:GLY:HA2	2.05	0.57
44:L7:139:PRO:HA	44:L7:237:ASN:ND2	2.18	0.57
52:M6:15:LEU:HD21	52:M6:125:ARG:HG3	1.87	0.57
69:O3:75:HIS:HB3	69:O3:80:VAL:CG1	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1255:G:O2'	1:6:1256:A:O5'	2.22	0.57
2:s0:86:VAL:HG12	2:s0:174:TRP:CZ2	2.40	0.57
6:s4:251:GLU:O	6:s4:255:ARG:HG3	2.05	0.57
7:s5:222:LYS:HA	7:s5:225:ARG:HH11	1.69	0.57
8:s6:138:ALA:HB2	8:s6:177:ARG:HB3	1.86	0.57
11:s9:58:ASP:O	11:s9:61:THR:OG1	2.21	0.57
89:5:4022:OHX:N6	89:5:4221:OHX:N2	2.53	0.57
46:l9:136:PHE:CE1	46:l9:144:ILE:HG12	2.39	0.57
46:l9:137:SER:HB2	46:l9:143:GLU:HB3	1.86	0.57
53:m7:67:ILE:HD12	53:m7:82:ARG:CZ	2.34	0.57
54:m8:148:GLU:O	54:m8:151:ARG:HG3	2.05	0.57
56:n0:12:ARG:HG3	56:n0:13:ARG:O	2.05	0.57
66:o0:41:LEU:HD12	66:o0:100:ILE:HD12	1.86	0.57
1:2:780:A:H62	26:D4:8:ARG:HH21	1.53	0.56
1:2:867:G:OP2	15:C3:3:ARG:NH1	2.37	0.56
1:2:1280:C:H2'	1:2:1281:G:C8	2.40	0.56
1:2:1795:U:H3'	28:D6:5:ARG:NH1	2.19	0.56
36:1:551:A:O2'	36:1:552:G:O5'	2.22	0.56
36:1:1213:G:OP1	56:N0:137:ARG:HD3	2.05	0.56
36:1:2303:A:OP1	77:Q1:23:ARG:NH2	2.38	0.56
45:L8:82:LEU:HD12	45:L8:83:ASP:H	1.68	0.56
47:M0:188:GLY:O	47:M0:190:VAL:N	2.31	0.56
1:6:1054:U:H2'	1:6:1055:U:H6	1.70	0.56
3:s1:87:ARG:NH2	3:s1:89:ASP:OD1	2.37	0.56
16:c4:112:ILE:H	28:d6:57:SER:HA	1.70	0.56
22:d0:57:ARG:HG3	22:d0:89:ARG:CZ	2.35	0.56
34:sR:225:LEU:HD12	34:sR:228:LYS:HG3	1.87	0.56
36:5:801:A:OP1	64:n8:27:LYS:NZ	2.22	0.56
36:5:2724:U:OP1	57:n1:57:TYR:OH	2.18	0.56
36:5:2818:U:H5'	36:5:2818:U:C6	2.34	0.56
46:l9:86:TYR:CD1	46:l9:151:VAL:HG13	2.40	0.56
64:n8:82:ILE:HG22	64:n8:87:ARG:HG3	1.87	0.56
67:o1:40:ALA:O	67:o1:43:HIS:N	2.37	0.56
67:o1:90:PHE:O	67:o1:91:SER:HB2	2.04	0.56
86:p2:16:UNK:O	86:p2:18:UNK:N	2.38	0.56
1:2:265:A:N7	8:S6:190:GLN:NE2	2.52	0.56
1:2:432:G:H2'	1:2:433:C:O4'	2.05	0.56
1:2:649:U:O2'	1:2:650:U:O4'	2.23	0.56
14:C2:89:ILE:HD13	14:C2:90:LYS:H	1.70	0.56
19:C7:26:LEU:HD13	19:C7:59:LYS:HG3	1.87	0.56
36:1:2997:G:O4'	36:1:3396:U:H5'	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:295:ILE:HG23	41:L4:299:ILE:HD11	1.87	0.56
42:L5:279:LYS:HG2	42:L5:282:ARG:NH1	2.19	0.56
44:L7:121:LYS:HD2	44:L7:125:GLU:HG2	1.87	0.56
49:M3:119:TYR:O	49:M3:123:ILE:HG23	2.06	0.56
51:M5:190:THR:O	51:M5:194:GLN:HG2	2.05	0.56
57:N1:15:PHE:CE2	57:N1:44:ALA:HB3	2.40	0.56
62:N6:48:LEU:HD23	62:N6:49:PRO:HD2	1.87	0.56
73:O7:39:TYR:CD2	73:O7:40:PRO:HA	2.40	0.56
1:6:159:U:O2'	8:s6:87:ARG:NH1	2.37	0.56
1:6:600:U:OP2	25:d3:108:GLY:HA2	2.06	0.56
1:6:729:G:O2'	1:6:730:G:O5'	2.21	0.56
3:s1:178:GLY:O	3:s1:179:SER:HB2	2.03	0.56
20:c8:117:LYS:O	20:c8:120:ARG:HD2	2.05	0.56
34:sR:133:VAL:O	34:sR:141:LEU:N	2.31	0.56
36:5:779:G:OP1	54:m8:185:LYS:NZ	2.36	0.56
49:m3:59:ARG:NH1	49:m3:66:ASN:O	2.38	0.56
52:m6:110:PRO:O	52:m6:111:PRO:C	2.48	0.56
54:m8:36:LEU:HB3	54:m8:45:ASN:ND2	2.19	0.56
1:2:331:A:H5'	10:S8:33:PRO:HA	1.88	0.56
1:2:1499:G:OP1	21:C9:122:ARG:NH1	2.38	0.56
3:S1:34:ALA:HB3	3:S1:41:ARG:HA	1.87	0.56
6:S4:242:LYS:N	6:S4:242:LYS:HE3	2.20	0.56
32:E0:14:VAL:O	32:E0:18:THR:HG23	2.06	0.56
33:E1:102:VAL:O	33:E1:104:SER:N	2.37	0.56
34:SR:69:GLN:O	34:SR:83:ALA:HB3	2.05	0.56
36:1:132:C:H2'	36:1:133:U:H5''	1.86	0.56
36:1:1062:A:N3	57:N1:130:ARG:NH2	2.53	0.56
36:1:2442:G:H22	36:1:2505:U:H3	1.52	0.56
36:1:2676:A:N1	48:M1:22:SER:OG	2.37	0.56
36:1:3050:U:OP2	89:1:4195:OHX:N2	2.38	0.56
36:1:3243:A:C8	52:M6:156:LEU:HD22	2.40	0.56
89:1:3979:OHX:N1	38:4:31:G:OP2	2.38	0.56
37:3:4:U:H2'	37:3:5:G:H8	1.70	0.56
40:L3:233:TRP:CD1	40:L3:265:ALA:HB1	2.40	0.56
47:M0:86:HIS:HB3	47:M0:139:ARG:HG2	1.87	0.56
47:M0:140:THR:HG21	47:M0:144:ASN:HD22	1.71	0.56
50:M4:115:PHE:O	50:M4:119:GLN:HG3	2.05	0.56
63:N7:4:PHE:CZ	66:O0:35:ARG:HA	2.39	0.56
71:O5:105:ARG:HH21	71:O5:105:ARG:HB2	1.70	0.56
1:6:209:U:H2'	1:6:210:A:H8	1.68	0.56
5:s3:114:ALA:HB3	5:s3:117:ARG:HB3	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:d0:118:VAL:HG13	22:d0:119:ALA:H	1.70	0.56
34:sR:64:HIS:HD1	34:sR:86:ASP:CG	2.12	0.56
36:5:252:U:H4'	36:5:253:A:C5'	2.36	0.56
36:5:370:U:H4'	36:5:404:G:H5'	1.88	0.56
36:5:1239:C:N3	36:5:1249:G:N2	2.52	0.56
36:5:1861:G:OP2	89:5:3997:OHX:N2	2.38	0.56
36:5:3112:G:O2'	46:l9:70:THR:HB	2.05	0.56
36:5:3139:A:OP1	40:l3:274:SER:OG	2.23	0.56
38:8:77:A:H2'	38:8:78:G:O4'	2.05	0.56
39:l2:45:VAL:HG22	39:l2:84:THR:HA	1.87	0.56
39:l2:204:MET:HE2	39:l2:209:HIS:HB2	1.87	0.56
54:m8:165:ILE:HG21	54:m8:168:THR:HG22	1.86	0.56
63:n7:36:HIS:HD2	63:n7:74:VAL:HG11	1.70	0.56
71:o5:47:VAL:O	71:o5:51:ILE:HG13	2.05	0.56
72:o6:25:LYS:HB2	72:o6:28:TYR:HD2	1.70	0.56
1:2:912:U:O4	1:2:914:G:N2	2.38	0.56
1:2:1226:A:O2'	1:2:1227:A:OP1	2.21	0.56
1:2:1358:G:H2'	1:2:1359:C:C6	2.40	0.56
1:2:1479:A:H2'	1:2:1480:G:H8	1.70	0.56
1:2:1588:G:H1	1:2:1608:U:H3	1.52	0.56
1:2:1609:U:OP2	18:C6:14:LYS:NZ	2.38	0.56
3:S1:183:GLN:O	3:S1:187:LYS:N	2.38	0.56
6:S4:45:ILE:HB	6:S4:80:THR:HG22	1.88	0.56
6:S4:100:ARG:NH2	6:S4:121:TYR:O	2.38	0.56
7:S5:91:GLU:HA	7:S5:94:THR:HG23	1.86	0.56
7:S5:142:PRO:HG2	7:S5:170:GLN:HE22	1.70	0.56
15:C3:93:LYS:HG3	15:C3:150:VAL:HG11	1.86	0.56
21:C9:97:SER:OG	21:C9:100:ILE:HB	2.06	0.56
36:1:562:C:H2'	36:1:563:U:C6	2.39	0.56
36:1:2900:A:N3	36:1:3025:C:O2'	2.37	0.56
36:1:3155:U:H3'	36:1:3156:U:C4'	2.36	0.56
37:3:64:A:H3'	47:M0:204:GLY:O	2.04	0.56
40:L3:76:VAL:HA	40:L3:326:GLY:H	1.71	0.56
40:L3:296:THR:HB	40:L3:299:ASP:H	1.70	0.56
49:M3:185:LYS:NZ	49:M3:189:GLU:OE2	2.38	0.56
54:M8:150:VAL:HA	54:M8:153:PHE:CD1	2.40	0.56
55:M9:130:ASN:C	55:M9:132:PHE:H	2.14	0.56
78:Q2:71:ARG:HH21	78:Q2:80:ARG:HH21	1.53	0.56
1:6:127:G:N7	8:s6:202:ARG:NH2	2.53	0.56
1:6:151:G:O6	26:d4:124:ARG:NH2	2.38	0.56
1:6:922:G:H2'	1:6:923:A:C8	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:816:A:H5''	36:5:920:A:H62	1.70	0.56
36:5:2244:A:H5''	39:12:243:THR:OG1	2.06	0.56
89:5:4022:OHX:N5	89:5:4221:OHX:N2	2.53	0.56
37:7:23:A:H2'	37:7:24:A:C8	2.41	0.56
41:14:341:SER:O	41:14:342:LYS:HB3	2.06	0.56
42:15:49:TYR:CE1	42:15:75:LEU:HD12	2.41	0.56
56:n0:79:VAL:HG21	56:n0:106:LEU:HD21	1.88	0.56
1:2:901:G:H22	16:C4:54:GLU:CD	2.12	0.56
1:2:972:G:O2'	36:1:847:A:N1	2.37	0.56
1:2:1726:G:N7	89:2:2099:OHX:N4	2.54	0.56
8:S6:114:VAL:HG12	8:S6:115:LYS:HD3	1.87	0.56
10:S8:8:ARG:HD3	10:S8:21:PHE:HD1	1.69	0.56
25:D3:107:PHE:CE1	25:D3:123:LYS:HB3	2.41	0.56
36:1:2357:A:H2'	36:1:2358:A:C8	2.41	0.56
36:1:2676:A:H4'	36:1:2677:G:O5'	2.04	0.56
36:1:2763:U:H5'	54:M8:176:ARG:HG3	1.88	0.56
36:1:2989:U:O2'	40:L3:232:ARG:NH2	2.38	0.56
37:3:46:A:OP1	42:L5:158:ARG:HG2	2.05	0.56
40:L3:159:ARG:HG2	40:L3:182:GLN:HA	1.88	0.56
41:L4:182:LEU:C	41:L4:184:SER:H	2.14	0.56
42:L5:56:THR:O	42:L5:58:LYS:N	2.33	0.56
45:L8:50:VAL:HG22	45:L8:52:TRP:CE2	2.40	0.56
49:M3:64:LYS:HG3	64:N8:69:TRP:CG	2.39	0.56
59:N3:10:LYS:NZ	59:N3:56:ASP:OD1	2.39	0.56
1:6:333:A:OP1	10:s8:31:ARG:NH2	2.38	0.56
1:6:1688:U:H3	1:6:1713:G:H1	1.52	0.56
1:6:1783:C:H2'	1:6:1784:C:H6	1.71	0.56
5:s3:179:GLN:OE1	5:s3:180:GLY:N	2.39	0.56
5:s3:220:PRO:O	5:s3:221:SER:OG	2.16	0.56
9:s7:38:LEU:HD23	9:s7:41:LEU:HD12	1.87	0.56
81:e0:13:LYS:O	81:e0:17:GLN:HG2	2.06	0.56
81:e0:14:VAL:HA	81:e0:17:GLN:HG2	1.87	0.56
82:e1:108:VAL:HG12	82:e1:114:VAL:HG22	1.87	0.56
36:5:2586:G:N7	45:l8:241:LYS:HB2	2.20	0.56
38:8:16:G:O6	89:8:218:OHX:N6	2.38	0.56
62:n6:50:ILE:HD12	62:n6:70:ILE:HG12	1.88	0.56
84:p0:48:ARG:NH2	84:p0:91:GLU:HG3	2.20	0.56
1:2:7:G:N7	4:S2:205:ARG:NH1	2.50	0.56
4:S2:98:PHE:HE1	35:SM:113:ASP:HB3	1.71	0.56
28:D6:79:ILE:HA	28:D6:84:VAL:HB	1.88	0.56
34:SR:22:SER:CB	34:SR:70:ASP:HA	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1549:U:H2'	36:1:1550:C:H6	1.70	0.56
89:1:4015:OHX:N6	89:1:4186:OHX:N1	2.54	0.56
51:M5:110:ALA:HB1	51:M5:113:LEU:HD22	1.87	0.56
54:M8:123:THR:OG1	54:M8:126:GLN:HG3	2.05	0.56
54:M8:185:LYS:HG3	54:M8:186:VAL:HG23	1.87	0.56
61:N5:96:LYS:HE3	61:N5:107:VAL:HB	1.88	0.56
1:6:329:G:H2'	1:6:330:G:H8	1.71	0.56
6:s4:11:ARG:O	6:s4:12:LEU:HB2	2.06	0.56
17:c5:85:ILE:HD11	17:c5:116:LEU:HD23	1.88	0.56
36:5:378:A:N7	36:5:391:A:H2	2.04	0.56
40:l3:77:THR:HG23	40:l3:326:GLY:O	2.06	0.56
48:m1:71:VAL:HB	48:m1:76:ALA:HB2	1.88	0.56
49:m3:177:LYS:HG3	72:o6:11:LEU:HD13	1.88	0.56
59:n3:104:ASN:HD21	59:n3:108:GLU:HB2	1.71	0.56
62:n6:11:ASP:HB3	62:n6:14:LYS:HG3	1.88	0.56
84:p0:4:ILE:HD13	84:p0:4:ILE:H	1.70	0.56
1:2:17:C:O2'	1:2:1137:A:N1	2.35	0.56
1:2:953:G:OP2	15:C3:94:LYS:NZ	2.39	0.56
3:S1:206:PRO:O	3:S1:207:LEU:HB2	2.05	0.56
4:S2:111:VAL:O	4:S2:136:VAL:HA	2.05	0.56
27:D5:71:ILE:HG22	27:D5:75:LEU:HB2	1.88	0.56
36:1:438:A:O2'	36:1:495:G:H4'	2.05	0.56
36:1:2314:U:O2'	36:1:2315:G:OP1	2.23	0.56
41:L4:292:SER:OG	41:L4:293:SER:N	2.35	0.56
44:L7:160:ARG:HD2	44:L7:203:TRP:CE2	2.40	0.56
50:M4:17:VAL:HG22	50:M4:36:VAL:O	2.05	0.56
78:Q2:71:ARG:HH21	78:Q2:80:ARG:NH2	2.04	0.56
1:6:837:G:O6	89:6:2098:OHX:N1	2.38	0.56
1:6:922:G:H2'	1:6:923:A:H8	1.70	0.56
1:6:1680:G:O6	89:6:2187:OHX:N1	2.38	0.56
6:s4:49:ARG:HB3	6:s4:55:ALA:HB3	1.87	0.56
15:c3:129:TYR:HB3	15:c3:135:LEU:HG	1.86	0.56
21:c9:57:ARG:HG3	21:c9:57:ARG:HH11	1.71	0.56
36:5:1631:C:H5''	36:5:1632:A:H5''	1.88	0.56
36:5:1804:A:H2'	36:5:1805:C:H6	1.66	0.56
36:5:3243:A:C8	52:m6:156:LEU:HD22	2.41	0.56
38:8:143:U:OP1	51:m5:38:ARG:NH2	2.29	0.56
48:m1:155:THR:O	48:m1:159:THR:HG23	2.05	0.56
49:m3:126:PHE:CD2	71:o5:115:LYS:HG2	2.40	0.56
1:2:526:A:H2'	1:2:527:A:O4'	2.06	0.56
1:2:771:A:OP1	11:S9:9:SER:OG	2.23	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:134:CYS:SG	5:S3:135:GLU:N	2.79	0.56
18:C6:109:PHE:HB3	18:C6:117:LEU:HD21	1.88	0.56
36:1:1444:G:H2'	36:1:1445:U:O4'	2.05	0.56
48:M1:73:GLY:O	48:M1:75:LYS:N	2.39	0.56
49:M3:75:PHE:O	49:M3:79:GLU:HB2	2.06	0.56
65:N9:28:LYS:HG3	65:N9:29:TYR:CD1	2.40	0.56
70:O4:85:VAL:HA	70:O4:88:ARG:HG3	1.86	0.56
1:6:895:G:O2'	16:c4:37:GLU:HA	2.06	0.56
2:s0:88:LYS:O	2:s0:92:HIS:ND1	2.39	0.56
7:s5:37:GLN:OE1	18:c6:53:LEU:HD22	2.06	0.56
7:s5:92:ARG:NH2	7:s5:169:ASN:OD1	2.39	0.56
7:s5:94:THR:CG2	7:s5:114:ILE:HG13	2.35	0.56
46:l9:92:TYR:CG	46:l9:142:ASP:HB3	2.40	0.56
49:m3:47:ALA:HB1	49:m3:48:PRO:HD2	1.88	0.56
54:m8:170:ARG:HA	54:m8:174:ARG:HD2	1.87	0.56
62:n6:50:ILE:HG21	62:n6:80:VAL:HG21	1.88	0.56
1:2:74:U:O2'	1:2:75:U:OP2	2.23	0.56
1:2:542:A:N1	32:E0:28:LYS:HD2	2.21	0.56
1:2:1274:C:H5	35:SM:96:ARG:H	1.53	0.56
5:S3:92:GLN:CD	5:S3:92:GLN:H	2.13	0.56
13:C1:93:TYR:OH	13:C1:98:ASN:OD1	2.24	0.56
18:C6:115:THR:O	18:C6:117:LEU:N	2.38	0.56
26:D4:124:ARG:HB3	26:D4:124:ARG:HH11	1.71	0.56
30:D8:19:THR:O	30:D8:23:GLY:HA2	2.06	0.56
36:1:924:G:OP1	89:1:4157:OHX:N5	2.39	0.56
36:1:1493:G:O6	75:O9:2:ALA:HB2	2.05	0.56
36:1:1674:G:OP2	89:1:3957:OHX:N2	2.39	0.56
36:1:2554:A:N7	79:Q3:62:LYS:NZ	2.54	0.56
54:M8:158:HIS:H	54:M8:186:VAL:CG1	2.14	0.56
20:c8:83:ALA:HA	20:c8:86:LEU:HD22	1.88	0.56
36:5:955:U:H2'	36:5:956:U:C6	2.41	0.56
36:5:1322:U:O2	56:n0:108:GLN:NE2	2.38	0.56
36:5:1686:U:O4	58:n2:82:LYS:NZ	2.36	0.56
36:5:3159:C:H2'	36:5:3160:U:C6	2.41	0.56
78:q2:78:LYS:HG2	78:q2:79:THR:N	2.20	0.56
1:2:196:G:O6	10:S8:141:ARG:NH2	2.39	0.56
1:2:552:G:C6	1:2:553:G:C6	2.94	0.56
1:2:703:G:H2'	1:2:704:C:H5'	1.88	0.56
5:S3:178:ARG:H	5:S3:178:ARG:NE	1.96	0.56
12:C0:14:TYR:CE1	12:C0:18:GLU:HG3	2.41	0.56
18:C6:127:LYS:HA	18:C6:134:ALA:HA	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:88:SER:O	28:D6:92:ARG:HG3	2.05	0.56
44:L7:222:HIS:ND1	44:L7:224:ILE:HG13	2.21	0.56
46:L9:124:ARG:HG2	46:L9:164:ILE:HD12	1.88	0.56
66:O0:51:LEU:HD11	70:O4:91:ARG:HA	1.87	0.56
72:O6:97:SER:C	72:O6:99:ARG:H	2.14	0.56
8:s6:114:VAL:HG12	8:s6:115:LYS:HG2	1.88	0.56
15:c3:46:THR:O	15:c3:50:ILE:HG13	2.06	0.56
27:d5:60:VAL:HG13	27:d5:101:TYR:HB2	1.87	0.56
36:5:119:U:H4'	36:5:120:G:H3'	1.87	0.56
36:5:1936:A:H2'	36:5:1937:U:O4'	2.05	0.56
36:5:2533:G:O6	89:5:4043:OHX:N2	2.39	0.56
89:5:4022:OHX:N5	89:5:4221:OHX:N1	2.54	0.56
41:l4:192:GLY:O	41:l4:195:ARG:N	2.36	0.56
59:n3:15:LEU:HD22	59:n3:51:ALA:HB3	1.87	0.56
1:2:355:G:O6	89:2:2027:OHX:N6	2.39	0.55
1:2:753:A:H5'	6:S4:221:ARG:HG3	1.86	0.55
1:2:990:C:O2'	16:C4:127:ARG:HD3	2.05	0.55
1:2:1488:G:H3'	1:2:1515:A:H61	1.72	0.55
6:S4:222:LEU:O	6:S4:224:ASN:N	2.39	0.55
33:E1:119:ARG:HH11	33:E1:152:ALA:HB3	1.71	0.55
36:1:1062:A:H5''	36:1:1063:G:H5'	1.88	0.55
36:1:2407:C:H2'	36:1:2408:U:H6	1.70	0.55
36:1:3157:U:H4'	36:1:3158:G:H5'	1.88	0.55
42:L5:187:THR:HG23	42:L5:189:GLU:HB2	1.88	0.55
44:L7:203:TRP:CD1	44:L7:204:PRO:HD2	2.42	0.55
48:M1:11:ASP:O	48:M1:12:LEU:HB2	2.06	0.55
56:N0:12:ARG:HG2	56:N0:24:LEU:HD23	1.87	0.55
57:N1:56:PHE:CZ	57:N1:78:LYS:HD3	2.41	0.55
74:O8:45:VAL:HG23	74:O8:52:TYR:HB2	1.87	0.55
1:6:292:U:H2'	1:6:293:U:C6	2.40	0.55
1:6:540:G:O2'	1:6:542:A:H5'	2.06	0.55
1:6:1525:A:H2'	1:6:1526:A:O4'	2.05	0.55
1:6:1608:U:H5''	18:c6:72:GLY:HA2	1.87	0.55
1:6:1623:C:H2'	1:6:1624:C:H6	1.70	0.55
6:s4:34:GLY:HA3	6:s4:83:PRO:HG2	1.89	0.55
13:c1:21:ASN:HD22	13:c1:32:LYS:H	1.54	0.55
20:c8:41:ARG:NH2	21:c9:36:ILE:O	2.34	0.55
25:d3:43:PHE:CE1	25:d3:49:ALA:HB3	2.40	0.55
36:5:1581:C:OP2	36:5:1581:C:H4'	2.06	0.55
36:5:1654:A:C2'	36:5:1655:G:H5'	2.35	0.55
41:l4:271:LYS:HB2	41:l4:274:TYR:HB3	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:n0:70:THR:OG1	56:n0:70:THR:O	2.21	0.55
63:n7:76:ASN:HB3	63:n7:79:HIS:ND1	2.21	0.55
68:o2:24:ARG:HG2	68:o2:25:TYR:CZ	2.41	0.55
1:2:38:C:C2'	1:2:39:A:H5'	2.36	0.55
1:2:405:C:O2'	8:S6:92:ARG:O	2.17	0.55
1:2:1459:C:N4	20:C8:139:LYS:HE2	2.21	0.55
1:2:1600:A:H4'	1:2:1601:G:OP1	2.06	0.55
12:C0:77:ARG:HD3	12:C0:84:GLU:HA	1.87	0.55
18:C6:60:PHE:HA	18:C6:63:ILE:HG13	1.87	0.55
21:C9:117:SER:HB2	21:C9:123:ARG:HB3	1.88	0.55
27:D5:40:VAL:C	27:D5:75:LEU:HD11	2.30	0.55
34:SR:153:GLN:HB3	34:SR:202:LEU:HD22	1.87	0.55
36:1:824:C:H2'	36:1:825:U:C6	2.41	0.55
36:1:1833:G:OP1	75:O9:10:LYS:NZ	2.32	0.55
36:1:2355:G:H4'	53:M7:139:TYR:CE2	2.41	0.55
36:1:2699:G:OP2	89:1:3916:OHX:N1	2.40	0.55
89:1:4015:OHX:N3	89:1:4186:OHX:N5	2.54	0.55
46:L9:172:ILE:HD13	46:L9:172:ILE:H	1.70	0.55
1:6:193:U:C4	1:6:195:G:C8	2.94	0.55
2:s0:41:ARG:HH11	2:s0:45:VAL:HG21	1.71	0.55
7:s5:119:ASP:O	7:s5:123:VAL:HG23	2.04	0.55
36:5:1588:A:C2	75:o9:4:GLN:HG2	2.41	0.55
36:5:2236:G:OP1	89:5:4253:OHX:N3	2.39	0.55
36:5:3180:A:C6	52:m6:114:LYS:HG2	2.41	0.55
45:l8:161:GLU:HA	45:l8:164:VAL:HG22	1.86	0.55
47:m0:174:THR:OG1	47:m0:175:ASN:O	2.25	0.55
61:n5:115:ARG:HD3	61:n5:121:LYS:HE3	1.88	0.55
84:p0:105:VAL:HG23	84:p0:184:GLY:N	2.22	0.55
1:2:513:U:H2'	1:2:514:G:C8	2.42	0.55
1:2:730:G:O6	89:2:2156:OHX:N4	2.39	0.55
1:2:1114:G:O2'	1:2:1130:G:O6	2.19	0.55
4:S2:90:THR:HG23	4:S2:92:ALA:H	1.72	0.55
7:S5:91:GLU:OE2	7:S5:107:LYS:NZ	2.33	0.55
36:1:1506:A:H1'	36:1:1848:G:O6	2.07	0.55
36:1:1769:G:N7	89:1:4183:OHX:N2	2.55	0.55
38:4:23:U:C4'	62:N6:17:LYS:HG2	2.37	0.55
41:L4:283:THR:HG22	41:L4:285:ASP:N	2.13	0.55
45:L8:163:VAL:HG22	45:L8:166:LEU:HD12	1.89	0.55
47:M0:66:GLU:CD	47:M0:69:ARG:HH21	2.13	0.55
52:M6:39:GLU:HG2	52:M6:40:GLU:HG2	1.86	0.55
55:M9:86:GLU:OE2	55:M9:91:SER:OG	2.18	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:105:LEU:HD23	55:M9:138:LEU:HD13	1.88	0.55
67:O1:79:ARG:H	67:O1:79:ARG:NE	2.05	0.55
1:6:276:C:H1'	1:6:277:U:H5	1.70	0.55
1:6:1699:G:H22	1:6:1701:A:H3'	1.72	0.55
2:s0:41:ARG:NH1	2:s0:45:VAL:HG21	2.22	0.55
6:s4:87:MET:SD	6:s4:123:LEU:HB2	2.46	0.55
13:c1:5:LEU:HD23	13:c1:7:VAL:HA	1.87	0.55
18:c6:93:HIS:HA	18:c6:97:VAL:HG23	1.87	0.55
36:5:1368:U:H5'	68:o2:43:ARG:NH1	2.21	0.55
36:5:2162:U:OP1	39:l2:234:LYS:NZ	2.35	0.55
1:2:264:G:N7	89:2:2034:OHX:N1	2.53	0.55
1:2:320:U:H3'	1:2:321:C:H5''	1.88	0.55
1:2:717:C:H42	1:2:720:G:H22	1.54	0.55
4:S2:170:ILE:HB	4:S2:197:TYR:HB2	1.87	0.55
4:S2:179:VAL:O	4:S2:198:THR:OG1	2.20	0.55
12:C0:15:LEU:HD13	12:C0:21:VAL:HG23	1.89	0.55
36:1:1231:A:OP2	89:1:4098:OHX:N6	2.39	0.55
36:1:1695:U:O2'	36:1:1749:A:N1	2.36	0.55
36:1:2443:A:O2'	36:1:2444:C:OP2	2.22	0.55
36:1:2514:U:OP1	36:1:2514:U:H6	1.90	0.55
36:1:2698:G:O2'	57:N1:12:ARG:HG2	2.06	0.55
89:1:4015:OHX:N3	89:1:4186:OHX:N1	2.55	0.55
45:L8:225:LYS:O	45:L8:229:VAL:HG23	2.07	0.55
49:M3:92:THR:HB	71:O5:114:ARG:HG2	1.88	0.55
51:M5:23:GLN:HG2	51:M5:122:ASN:ND2	2.22	0.55
64:N8:3:SER:O	64:N8:6:THR:HG22	2.05	0.55
79:Q3:38:ASP:OD1	79:Q3:45:LYS:HB3	2.06	0.55
11:s9:124:HIS:CE1	11:s9:128:LEU:HD11	2.42	0.55
36:5:395:A:H5''	36:5:396:A:OP2	2.07	0.55
36:5:958:C:H1'	64:n8:40:HIS:HA	1.89	0.55
36:5:1098:A:OP2	57:n1:130:ARG:NH1	2.32	0.55
36:5:1306:G:C6	52:m6:62:THR:HA	2.41	0.55
36:5:2319:U:OP1	89:5:4003:OHX:N5	2.40	0.55
36:5:2586:G:C8	45:l8:241:LYS:HD3	2.41	0.55
45:l8:151:VAL:HG13	45:l8:199:ALA:HB2	1.86	0.55
45:l8:215:VAL:O	45:l8:219:ASP:HB2	2.06	0.55
47:m0:187:ALA:HB3	47:m0:189:GLU:HG3	1.88	0.55
48:m1:9:MET:O	48:m1:11:ASP:N	2.39	0.55
48:m1:20:ASN:HB3	48:m1:126:ASP:HB2	1.89	0.55
52:m6:62:THR:H	52:m6:69:GLY:HA3	1.71	0.55
1:2:782:U:H4'	1:2:783:G:OP2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1761:U:O2'	1:2:1762:A:OP2	2.23	0.55
3:S1:36:SER:OG	3:S1:231:LEU:O	2.24	0.55
3:S1:109:LYS:O	3:S1:113:MET:HG3	2.07	0.55
5:S3:53:THR:HG22	5:S3:91:VAL:HG12	1.88	0.55
7:S5:142:PRO:HG2	7:S5:170:GLN:NE2	2.21	0.55
10:S8:162:ALA:HA	36:1:3353:G:H5'	1.89	0.55
36:1:849:C:H2'	36:1:850:U:H6	1.72	0.55
36:1:863:C:H2'	36:1:864:G:O4'	2.06	0.55
36:1:1942:U:HO2'	36:1:3345:G:HO2'	1.50	0.55
36:1:1950:U:H3	36:1:2096:A:H2	1.54	0.55
38:4:43:A:OP1	89:4:231:OHX:N5	2.39	0.55
40:L3:106:TRP:HB2	40:L3:133:TYR:CE2	2.42	0.55
40:L3:204:ALA:O	40:L3:207:SER:OG	2.23	0.55
46:L9:34:LEU:HD21	46:L9:149:ASN:HB3	1.89	0.55
59:N3:17:LEU:HD21	59:N3:98:ASN:ND2	2.22	0.55
65:N9:14:ARG:NH1	65:N9:18:ARG:HH11	2.04	0.55
67:O1:55:LEU:HB2	67:O1:95:PRO:HD3	1.89	0.55
68:O2:31:ASN:OD1	68:O2:31:ASN:N	2.35	0.55
79:Q3:56:THR:HB	79:Q3:63:THR:OG1	2.07	0.55
1:6:1360:A:C4	1:6:1361:U:H1'	2.42	0.55
6:s4:157:ASN:OD1	6:s4:222:LEU:HD11	2.07	0.55
7:s5:35:GLN:O	7:s5:37:GLN:N	2.39	0.55
7:s5:35:GLN:C	7:s5:37:GLN:H	2.14	0.55
10:s8:76:THR:HG22	10:s8:105:ASP:HB3	1.88	0.55
34:sR:135:THR:HG23	34:sR:141:LEU:HD21	1.88	0.55
34:sR:159:ASN:OD1	34:sR:159:ASN:N	2.35	0.55
36:5:72:C:H5'	49:m3:63:VAL:HG22	1.87	0.55
36:5:2964:G:N2	36:5:2967:A:OP2	2.37	0.55
36:5:3139:A:OP2	40:l3:30:LYS:NZ	2.39	0.55
40:l3:46:PHE:CE2	40:l3:205:VAL:HG13	2.42	0.55
40:l3:169:THR:CG2	40:l3:171:LEU:HG	2.36	0.55
42:l5:68:THR:HG22	42:l5:71:GLY:H	1.71	0.55
48:m1:152:HIS:O	48:m1:153:LYS:HB3	2.05	0.55
48:m1:166:LYS:C	48:m1:168:ASP:H	2.13	0.55
67:o1:10:ARG:HH12	67:o1:44:MET:HG2	1.71	0.55
68:o2:49:ASN:OD1	68:o2:49:ASN:N	2.40	0.55
1:2:277:U:H6	1:2:279:G:H22	1.54	0.55
1:2:991:G:OP2	89:2:2131:OHX:N1	2.40	0.55
1:2:1252:C:O4'	33:E1:133:ALA:HB2	2.07	0.55
1:2:1459:C:OP1	20:C8:126:ARG:NH2	2.37	0.55
6:S4:179:LYS:N	6:S4:194:THR:O	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:57:LYS:HB2	13:C1:110:HIS:CE1	2.42	0.55
22:D0:28:SER:HB2	22:D0:112:VAL:HA	1.87	0.55
24:D2:26:LEU:HD21	24:D2:60:LYS:HD3	1.89	0.55
34:SR:33:LEU:HB3	34:SR:45:TRP:HB2	1.88	0.55
36:1:573:C:H2'	36:1:574:U:C6	2.42	0.55
39:L2:204:MET:HE3	39:L2:208:ASP:HB3	1.87	0.55
45:L8:186:LEU:HD23	45:L8:189:LEU:HD21	1.89	0.55
52:M6:181:ALA:O	52:M6:184:THR:HG22	2.06	0.55
54:M8:176:ARG:NH1	64:N8:46:ASP:OD2	2.40	0.55
1:6:542:A:H8	1:6:543:C:H5'	1.70	0.55
1:6:711:U:H3'	1:6:712:G:H8	1.70	0.55
1:6:825:U:O2'	1:6:826:U:H6	1.90	0.55
3:s1:190:PRO:HG2	3:s1:192:VAL:HG23	1.88	0.55
8:s6:121:LEU:H	8:s6:125:THR:HG1	1.50	0.55
10:s8:194:ARG:HD2	10:s8:195:ARG:HH12	1.71	0.55
13:c1:93:TYR:HB2	13:c1:100:TYR:CE1	2.42	0.55
18:c6:38:LEU:O	18:c6:40:GLU:N	2.39	0.55
27:d5:57:TYR:CD2	27:d5:57:TYR:N	2.74	0.55
35:sM:39:PRO:HD3	48:m1:52:TYR:CZ	2.41	0.55
36:5:55:G:OP1	73:o7:43:LYS:HE3	2.06	0.55
36:5:947:G:H5''	68:o2:55:ILE:HB	1.88	0.55
41:l4:82:THR:HG23	41:l4:84:ARG:N	2.22	0.55
42:l5:39:GLN:OE1	42:l5:40:HIS:N	2.39	0.55
45:l8:100:GLU:OE1	45:l8:108:ARG:NH1	2.39	0.55
52:m6:108:ILE:HG12	52:m6:108:ILE:O	2.06	0.55
1:2:579:A:C8	5:S3:178:ARG:HD2	2.41	0.55
1:2:1683:C:O2'	1:2:1684:U:O5'	2.24	0.55
12:C0:12:HIS:CE1	12:C0:49:LEU:HD21	2.42	0.55
15:C3:55:ARG:HD3	29:D7:47:PHE:CG	2.41	0.55
21:C9:28:LEU:CD1	21:C9:29:GLU:H	2.19	0.55
36:1:230:U:H2'	36:1:231:G:O4'	2.07	0.55
36:1:770:G:N7	89:1:4108:OHX:N6	2.54	0.55
36:1:2207:A:H2'	36:1:2208:A:H8	1.71	0.55
36:1:2407:C:H2'	36:1:2408:U:C6	2.42	0.55
43:L6:108:LYS:C	43:L6:109:GLU:HG2	2.30	0.55
74:O8:43:PHE:HZ	74:O8:66:ILE:HG12	1.72	0.55
75:O9:9:ILE:HG22	75:O9:13:MET:HE2	1.88	0.55
1:6:85:A:O3'	26:d4:120:GLY:HA2	2.06	0.55
1:6:416:A:H4'	1:6:417:A:OP2	2.07	0.55
1:6:542:A:C8	1:6:543:C:H5'	2.42	0.55
1:6:700:C:H2'	1:6:701:U:C6	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1427:A:O2'	1:6:1428:G:OP1	2.22	0.55
1:6:1649:G:N7	89:6:2107:OHX:N2	2.55	0.55
7:s5:92:ARG:HH11	7:s5:92:ARG:CG	2.20	0.55
34:sR:159:ASN:O	34:sR:161:LYS:N	2.28	0.55
36:5:272:G:OP2	89:5:4076:OHX:N6	2.40	0.55
36:5:306:A:C2	36:5:2784:G:H1'	2.42	0.55
36:5:2592:G:H4'	36:5:2594:C:C2	2.41	0.55
38:8:68:G:O6	89:8:228:OHX:N6	2.39	0.55
47:m0:74:LYS:O	47:m0:78:THR:HG23	2.07	0.55
1:2:1277:G:H5'	5:S3:140:GLY:HA2	1.88	0.55
1:2:1514:U:H5''	1:2:1515:A:O4'	2.06	0.55
2:S0:193:GLN:O	2:S0:195:TRP:N	2.40	0.55
7:S5:73:THR:HG23	18:C6:114:ARG:HD2	1.89	0.55
8:S6:5:ILE:HG23	8:S6:111:LEU:HB2	1.89	0.55
36:1:1051:U:H4'	57:N1:19:PHE:CD2	2.41	0.55
36:1:1245:A:H3'	36:1:1246:G:H5''	1.87	0.55
36:1:1634:G:OP1	63:N7:107:ARG:NH1	2.40	0.55
36:1:1944:U:H2'	36:1:1945:A:H8	1.68	0.55
36:1:2273:G:O6	89:1:4152:OHX:N5	2.40	0.55
36:1:2273:G:N2	36:1:2311:G:H2'	2.21	0.55
36:1:3018:C:H2'	36:1:3019:U:O4'	2.07	0.55
42:L5:40:HIS:HB3	42:L5:43:LYS:HG3	1.88	0.55
47:M0:36:LEU:HD21	47:M0:69:ARG:HH11	1.72	0.55
57:N1:28:SER:HA	57:N1:31:LEU:HB2	1.89	0.55
59:N3:93:LEU:HD23	59:N3:93:LEU:H	1.71	0.55
61:N5:99:VAL:HG11	61:N5:124:VAL:HG11	1.88	0.55
63:N7:70:PRO:HG3	63:N7:115:LYS:HB2	1.87	0.55
1:6:407:A:H5'	8:s6:94:ARG:HH21	1.72	0.55
1:6:484:C:N4	1:6:503:G:H1	2.04	0.55
1:6:1227:A:H4'	1:6:1228:G:H5'	1.87	0.55
4:s2:139:ILE:HG13	4:s2:218:ILE:HB	1.89	0.55
8:s6:148:SER:O	8:s6:151:ASP:HB2	2.07	0.55
22:d0:28:SER:OG	22:d0:111:GLY:O	2.13	0.55
36:5:1103:A:H3'	36:5:1104:G:H5'	1.88	0.55
36:5:2554:A:N7	79:q3:62:LYS:NZ	2.54	0.55
36:5:3270:U:O2'	43:l6:46:ARG:HD3	2.07	0.55
41:l4:93:MET:H	41:l4:93:MET:HE2	1.72	0.55
56:n0:12:ARG:HB3	56:n0:24:LEU:HD23	1.87	0.55
56:n0:13:ARG:HH11	56:n0:13:ARG:HG3	1.71	0.55
1:2:1234:A:H1'	33:E1:140:TYR:OH	2.06	0.55
2:S0:200:ASP:HB2	19:C7:85:VAL:CG2	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:61:LEU:HG	3:S1:64:ARG:HH21	1.72	0.55
11:S9:163:PRO:HG2	11:S9:164:PHE:CD2	2.42	0.55
12:C0:50:THR:HG21	12:C0:57:THR:OG1	2.06	0.55
22:D0:83:GLU:CD	22:D0:85:ARG:HH21	2.15	0.55
34:SR:109:ASP:O	34:SR:126:SER:OG	2.18	0.55
36:1:75:G:H5''	49:M3:58:VAL:HG13	1.88	0.55
36:1:1235:U:H4'	36:1:1236:G:H5'	1.89	0.55
36:1:2107:A:H2	36:1:3344:A:C8	2.24	0.55
40:L3:10:ARG:NH1	40:L3:12:GLY:O	2.40	0.55
48:M1:54:VAL:O	48:M1:56:THR:N	2.38	0.55
50:M4:17:VAL:HG21	50:M4:74:ARG:HB2	1.89	0.55
1:6:926:A:H2'	1:6:927:C:C6	2.42	0.55
9:s7:168:SER:O	9:s7:172:VAL:HG23	2.07	0.55
21:c9:33:TYR:O	21:c9:34:VAL:HB	2.07	0.55
34:sR:255:ALA:HB2	34:sR:292:LEU:HD21	1.89	0.55
36:5:95:A:H5''	64:n8:34:MET:HB2	1.88	0.55
37:7:3:U:H2'	37:7:4:U:H6	1.71	0.55
42:l5:122:VAL:HG23	42:l5:123:GLU:N	2.20	0.55
51:m5:31:ARG:HG3	51:m5:129:TYR:OH	2.07	0.55
67:o1:41:LYS:HA	67:o1:46:THR:HG23	1.89	0.55
69:o3:45:LEU:HA	69:o3:71:VAL:HG12	1.89	0.55
4:S2:229:LEU:O	23:D1:16:LYS:NZ	2.39	0.55
28:D6:4:LYS:HE2	28:D6:5:ARG:NH2	2.22	0.55
34:SR:29:GLN:C	34:SR:31:ASN:H	2.14	0.55
34:SR:93:ASP:HB3	34:SR:96:THR:HG22	1.89	0.55
36:1:1226:G:H2'	36:1:1227:C:C6	2.42	0.55
36:1:1382:G:OP2	41:L4:188:ARG:NH1	2.40	0.55
36:1:2232:A:H2'	36:1:2233:A:C8	2.42	0.55
36:1:2615:G:H2'	36:1:2616:C:C6	2.42	0.55
37:3:27:A:O5'	42:L5:57:ASN:ND2	2.40	0.55
39:L2:204:MET:CE	39:L2:209:HIS:HB2	2.37	0.55
40:L3:41:VAL:HA	40:L3:185:GLY:CA	2.30	0.55
41:L4:269:SER:O	41:L4:269:SER:OG	2.23	0.55
46:L9:189:GLU:C	46:L9:191:LEU:H	2.15	0.55
52:M6:78:ARG:HH11	52:M6:78:ARG:CG	2.20	0.55
54:M8:70:ALA:O	54:M8:73:GLN:HB2	2.07	0.55
57:N1:104:GLU:OE1	57:N1:130:ARG:NH1	2.40	0.55
67:O1:37:LYS:HA	67:O1:49:VAL:HG11	1.89	0.55
71:O5:13:SER:O	71:O5:15:GLU:N	2.40	0.55
72:O6:4:LYS:HD2	72:O6:14:GLY:HA3	1.89	0.55
1:6:407:A:H2'	1:6:408:C:C6	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:800:U:H2'	1:6:801:G:C8	2.42	0.55
1:6:1097:U:O3'	4:s2:159:THR:HG21	2.07	0.55
1:6:1354:G:H5'	1:6:1355:C:OP2	2.07	0.55
3:s1:81:PHE:HA	3:s1:106:THR:HG21	1.89	0.55
10:s8:8:ARG:NH2	10:s8:28:GLU:OE1	2.39	0.55
28:d6:71:LEU:HD13	28:d6:73:TYR:OH	2.07	0.55
36:5:208:C:C2'	36:5:209:A:H5'	2.37	0.55
36:5:943:U:H3'	64:n8:13:GLY:HA2	1.89	0.55
36:5:2169:G:O6	89:5:3956:OHX:N5	2.39	0.55
36:5:2211:U:C5	36:5:2234:G:O6	2.54	0.55
36:5:2298:U:O4	36:5:2923:U:H5	1.90	0.55
37:7:91:G:H2'	37:7:92:A:C8	2.42	0.55
42:l5:88:ILE:HD13	42:l5:239:ILE:HG22	1.89	0.55
83:m2:116:UNK:O	83:m2:118:UNK:N	2.40	0.55
55:m9:90:PRO:HG2	55:m9:93:VAL:HB	1.88	0.55
63:n7:46:ILE:HD13	63:n7:68:ILE:HG23	1.89	0.55
1:2:1338:C:OP1	18:C6:12:LYS:NZ	2.40	0.54
1:2:1445:G:N2	33:E1:90:LYS:O	2.39	0.54
6:S4:128:LYS:HD3	6:S4:130:GLN:HE21	1.72	0.54
20:C8:6:GLN:O	27:D5:42:LEU:HD11	2.08	0.54
24:D2:82:LYS:C	24:D2:84:GLY:H	2.15	0.54
24:D2:86:ILE:HD12	24:D2:87:GLU:N	2.21	0.54
34:SR:22:SER:H	34:SR:291:SER:HB3	1.73	0.54
36:1:1562:C:H2'	36:1:1563:C:C6	2.42	0.54
36:1:2094:C:H2'	36:1:2095:G:C8	2.42	0.54
36:1:2616:C:C2'	36:1:2617:U:H5'	2.37	0.54
36:1:2677:G:H2'	36:1:2679:A:C2	2.40	0.54
38:4:141:C:OP1	51:M5:109:ARG:NH1	2.37	0.54
40:L3:19:ARG:HB3	40:L3:232:ARG:NH1	2.21	0.54
54:M8:120:GLU:CD	54:M8:130:ARG:HH22	2.15	0.54
63:N7:23:VAL:HB	63:N7:43:VAL:HB	1.89	0.54
1:6:230:C:N4	1:6:235:G:H1	2.01	0.54
1:6:538:A:C8	1:6:543:C:N4	2.74	0.54
1:6:934:C:H6	28:d6:11:ASN:HB3	1.70	0.54
2:s0:175:TYR:HE1	2:s0:197:ILE:HG22	1.72	0.54
18:c6:83:GLN:HE21	18:c6:115:THR:HG23	1.72	0.54
19:c7:27:ASP:O	19:c7:31:ASN:ND2	2.40	0.54
19:c7:71:PHE:CZ	19:c7:74:GLN:HB2	2.41	0.54
24:d2:24:GLN:HE22	29:d7:4:VAL:HA	1.72	0.54
36:5:1812:G:O6	63:n7:64:LYS:HD2	2.06	0.54
40:l3:185:GLY:O	40:l3:191:LYS:NZ	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:n0:36:ILE:O	56:n0:40:ARG:HG2	2.07	0.54
63:n7:3:LYS:O	63:n7:5:LEU:HB2	2.07	0.54
1:2:219:A:H5'	1:2:831:U:O2'	2.08	0.54
1:2:918:U:H2'	1:2:919:A:C8	2.42	0.54
5:S3:80:ALA:HB3	5:S3:83:THR:HG21	1.89	0.54
18:C6:126:PRO:O	18:C6:128:LYS:HE3	2.08	0.54
28:D6:38:ARG:HH21	28:D6:83:ILE:HG21	1.72	0.54
29:D7:47:PHE:HD1	29:D7:49:HIS:O	1.91	0.54
36:1:263:C:H2'	36:1:264:G:O4'	2.06	0.54
36:1:1658:G:H2'	36:1:1659:U:C6	2.42	0.54
36:1:2946:A:H5''	36:1:2947:G:H5'	1.89	0.54
38:4:79:A:H5''	71:O5:43:LYS:NZ	2.22	0.54
38:4:84:C:H1'	62:N6:113:LYS:HG3	1.89	0.54
39:L2:28:LYS:HB3	39:L2:123:ARG:HB3	1.89	0.54
41:L4:35:VAL:HG21	41:L4:244:LEU:HD21	1.88	0.54
42:L5:40:HIS:HD2	42:L5:42:ALA:H	1.55	0.54
1:6:453:U:O4	89:6:2059:OHX:N4	2.40	0.54
1:6:484:C:H42	1:6:503:G:H22	1.55	0.54
6:s4:31:PRO:HB2	6:s4:38:LEU:HD22	1.87	0.54
10:s8:115:ALA:O	10:s8:117:TYR:N	2.40	0.54
15:c3:23:PRO:HD2	15:c3:26:PHE:HB2	1.89	0.54
15:c3:41:ALA:CB	15:c3:75:LEU:HD21	2.38	0.54
36:5:1176:C:OP1	52:m6:25:LYS:HE3	2.06	0.54
36:5:1688:U:H2'	36:5:1689:U:C6	2.41	0.54
36:5:2209:U:H4'	36:5:2210:G:OP1	2.05	0.54
36:5:2718:U:H2'	36:5:2719:U:C6	2.43	0.54
36:5:3066:U:O4	89:5:4108:OHX:N4	2.40	0.54
36:5:3214:U:C4	50:m4:121:MET:HG3	2.42	0.54
36:5:3237:U:H2'	36:5:3238:G:O4'	2.07	0.54
44:l7:228:SER:HA	44:l7:232:ARG:NH2	2.22	0.54
47:m0:144:ASN:O	47:m0:148:VAL:HG23	2.07	0.54
55:m9:5:ARG:HH11	55:m9:5:ARG:HG3	1.71	0.54
67:o1:29:ALA:HB3	67:o1:30:PRO:HD3	1.88	0.54
70:o4:8:ARG:HH21	70:o4:31:ARG:HD2	1.72	0.54
84:p0:11:TYR:OH	84:p0:54:GLY:HA3	2.07	0.54
1:2:916:U:O2	16:C4:41:ARG:NH2	2.40	0.54
1:2:1235:C:C2	33:E1:138:ARG:NH2	2.75	0.54
1:2:1239:U:O4	89:2:2047:OHX:N2	2.40	0.54
8:S6:78:THR:HG23	8:S6:92:ARG:HG2	1.88	0.54
14:C2:52:LEU:O	14:C2:85:LYS:NZ	2.39	0.54
34:SR:127:ARG:HG2	34:SR:150:TRP:CD1	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:190:U:H2'	62:N6:60:ARG:NH2	2.22	0.54
36:1:1114:U:H5''	64:N8:22:ILE:HD13	1.89	0.54
41:L4:22:LEU:HD22	41:L4:23:PRO:HD2	1.89	0.54
46:L9:16:VAL:HG12	46:L9:29:GLY:HA3	1.89	0.54
50:M4:99:TRP:O	50:M4:103:ILE:HG13	2.06	0.54
1:6:470:A:H5''	1:6:470:A:C8	2.42	0.54
1:6:492:A:H1'	1:6:496:G:H1	1.73	0.54
1:6:1034:C:HO2'	24:d2:2:THR:N	2.05	0.54
1:6:1458:G:H5''	1:6:1459:C:OP2	2.07	0.54
2:s0:167:LYS:HB3	2:s0:168:HIS:CD2	2.43	0.54
13:c1:80:MET:HB3	13:c1:83:THR:HG23	1.89	0.54
17:c5:73:PRO:HD2	17:c5:93:VAL:HG23	1.89	0.54
26:d4:2:SER:N	26:d4:32:ARG:HD3	2.21	0.54
36:5:441:U:H2'	36:5:442:G:C8	2.41	0.54
36:5:1283:C:OP1	84:p0:81:LYS:HD3	2.08	0.54
36:5:1657:C:C5	36:5:1797:A:H5''	2.43	0.54
36:5:1833:G:OP1	75:o9:10:LYS:NZ	2.37	0.54
36:5:2902:A:OP1	46:l9:170:LYS:HE3	2.06	0.54
41:l4:122:THR:HG22	41:l4:235:LEU:HB2	1.89	0.54
44:l7:158:LYS:HD2	44:l7:159:GLN:HA	1.89	0.54
45:l8:139:VAL:O	45:l8:143:ILE:HG13	2.07	0.54
84:p0:67:LEU:HD11	84:p0:74:GLU:HB3	1.89	0.54
1:2:16:G:H2'	1:2:17:C:C6	2.43	0.54
1:2:145:A:O2'	1:2:146:U:O5'	2.23	0.54
1:2:647:G:H1	1:2:687:G:H1	1.54	0.54
1:2:1320:U:O2	1:2:1322:A:H5'	2.07	0.54
1:2:1460:A:O3'	35:SM:72:ARG:NH2	2.41	0.54
1:2:1595:U:N3	1:2:1600:A:H2	2.05	0.54
13:C1:98:ASN:HD22	24:D2:79:PHE:HD1	1.53	0.54
34:SR:70:ASP:HB3	34:SR:113:VAL:HG12	1.90	0.54
36:1:1126:G:H5''	47:M0:119:TRP:HZ3	1.72	0.54
36:1:1498:A:H2'	36:1:1499:C:C6	2.42	0.54
36:1:2339:C:P	59:N3:48:ARG:HG2	2.47	0.54
38:4:62:C:O2	89:4:225:OHX:N5	2.41	0.54
38:4:79:A:O3'	38:4:80:A:H4'	2.07	0.54
42:L5:40:HIS:CD2	42:L5:42:ALA:H	2.25	0.54
42:L5:85:ARG:HD2	42:L5:86:TYR:CE2	2.42	0.54
44:L7:151:ARG:HD2	44:L7:244:ASN:HD22	1.73	0.54
45:L8:245:LYS:NZ	45:L8:246:MET:HB3	2.23	0.54
59:N3:87:ARG:HH22	59:N3:137:VAL:CG2	2.20	0.54
1:6:833:U:OP2	89:6:2200:OHX:N5	2.39	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:s5:36:ALA:HB1	7:s5:42:LEU:HD12	1.88	0.54
16:c4:128:LYS:HD3	28:d6:27:SER:HB3	1.88	0.54
29:d7:47:PHE:CE1	29:d7:49:HIS:HB2	2.43	0.54
36:5:1949:G:N2	36:5:2097:U:O2	2.28	0.54
36:5:3166:C:H42	36:5:3284:G:H1	1.54	0.54
37:7:64:A:C6	47:m0:202:LYS:HA	2.42	0.54
41:l4:36:HIS:O	41:l4:40:THR:HG23	2.07	0.54
44:l7:88:ARG:NH1	44:l7:91:GLY:O	2.40	0.54
46:l9:113:GLU:OE1	46:l9:115:ARG:NE	2.40	0.54
52:m6:24:ALA:HA	52:m6:27:LEU:HD12	1.89	0.54
63:n7:85:TYR:HE2	63:n7:129:TRP:CE2	2.25	0.54
1:2:1561:U:H2'	1:2:1562:G:H8	1.71	0.54
7:S5:175:LEU:HD22	7:S5:198:LEU:HD23	1.90	0.54
14:C2:68:GLU:C	14:C2:70:ASN:H	2.14	0.54
28:D6:84:VAL:O	28:D6:86:VAL:N	2.31	0.54
36:1:595:G:C8	36:1:609:G:C6	2.95	0.54
36:1:1240:A:H3'	36:1:1241:U:C5'	2.37	0.54
36:1:1480:G:H4'	36:1:1481:A:OP1	2.08	0.54
36:1:2403:G:N2	36:1:2404:A:H62	2.04	0.54
41:L4:337:GLU:O	41:L4:339:LEU:N	2.41	0.54
46:L9:20:ILE:HD12	50:M4:7:VAL:HG22	1.89	0.54
1:6:753:A:OP2	6:s4:187:ARG:NH1	2.40	0.54
1:6:1173:C:H2'	1:6:1174:C:H6	1.72	0.54
1:6:1698:G:N2	1:6:1699:G:N7	2.55	0.54
1:6:1699:G:N1	1:6:1701:A:H5''	2.21	0.54
4:s2:157:LYS:HG2	4:s2:170:ILE:HG23	1.89	0.54
6:s4:52:LEU:HB3	6:s4:54:TYR:CD2	2.43	0.54
6:s4:93:ASP:O	6:s4:95:THR:N	2.40	0.54
11:s9:171:ARG:NH1	11:s9:174:ARG:HD3	2.22	0.54
20:c8:140:THR:HA	20:c8:143:ARG:NH1	2.22	0.54
35:sM:23:LYS:HG3	35:sM:24:GLU:H	1.71	0.54
36:5:209:A:H4'	36:5:211:A:N7	2.22	0.54
36:5:253:A:HO2'	36:5:254:A:H8	1.56	0.54
36:5:1157:G:H2'	36:5:1158:A:O4'	2.07	0.54
36:5:3280:U:O2'	36:5:3281:U:H5''	2.08	0.54
70:o4:46:ASP:OD2	70:o4:80:ARG:NH1	2.35	0.54
1:2:296:U:H2'	1:2:297:U:H6	1.73	0.54
1:2:609:U:H4'	1:2:610:G:O5'	2.08	0.54
1:2:930:A:OP1	28:D6:32:LYS:NZ	2.40	0.54
4:S2:235:LEU:HD13	23:D1:33:GLN:NE2	2.23	0.54
6:S4:43:PRO:HB2	6:S4:46:VAL:HG23	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:62:VAL:HG13	7:S5:89:ILE:HG12	1.88	0.54
24:D2:82:LYS:O	24:D2:84:GLY:N	2.35	0.54
25:D3:57:LEU:HD22	32:E0:4:VAL:HG12	1.90	0.54
25:D3:92:CYS:HA	25:D3:95:PHE:CD2	2.42	0.54
34:SR:64:HIS:NE2	34:SR:82:SER:HB2	2.22	0.54
35:SM:102:THR:CG2	35:SM:105:LYS:HB2	2.38	0.54
36:1:70:A:N1	36:1:313:A:O2'	2.33	0.54
36:1:2552:C:H5	66:O0:53:LYS:HE3	1.72	0.54
36:1:2571:U:O2'	36:1:2572:C:O2	2.23	0.54
40:L3:3:HIS:O	40:L3:3:HIS:CD2	2.61	0.54
40:L3:57:VAL:HG23	40:L3:358:TRP:HE3	1.71	0.54
41:L4:255:PHE:O	41:L4:258:LEU:HB2	2.07	0.54
42:L5:184:ASP:OD2	42:L5:187:THR:HG22	2.07	0.54
44:L7:143:THR:CG2	44:L7:241:LYS:HE3	2.38	0.54
52:M6:98:ALA:HA	52:M6:101:ARG:HH11	1.72	0.54
61:N5:91:ASN:O	61:N5:95:ILE:HG13	2.07	0.54
7:s5:149:VAL:HG13	7:s5:151:GLY:H	1.72	0.54
10:s8:84:HIS:CE1	10:s8:86:SER:HB2	2.42	0.54
14:c2:59:LEU:HA	14:c2:87:PRO:HB2	1.88	0.54
20:c8:145:ARG:HD3	35:sM:68:ARG:CZ	2.37	0.54
27:d5:71:ILE:HG21	27:d5:76:ALA:HB2	1.90	0.54
82:e1:119:ARG:NH2	82:e1:119:ARG:HB3	2.22	0.54
34:sR:48:THR:HG22	34:sR:55:GLY:HA2	1.88	0.54
34:sR:260:ILE:HB	34:sR:274:LEU:HD12	1.90	0.54
36:5:283:G:O6	36:5:304:G:H1'	2.07	0.54
36:5:1017:C:OP1	36:5:1017:C:H2'	2.07	0.54
36:5:1232:C:O2'	84:p0:36:GLN:OE1	2.18	0.54
36:5:1235:U:C4'	36:5:1236:G:H5'	2.37	0.54
36:5:2213:A:H2'	36:5:2214:A:C8	2.42	0.54
36:5:3106:A:H2'	36:5:3107:U:O4'	2.08	0.54
89:5:4022:OHX:N3	89:5:4221:OHX:N1	2.55	0.54
41:l4:144:LYS:O	89:l4:403:OHX:N4	2.40	0.54
83:m2:18:UNK:HA	83:m2:58:UNK:HA	1.89	0.54
60:n4:97:LYS:HA	60:n4:97:LYS:HE3	1.90	0.54
70:o4:41:ARG:HG2	70:o4:56:THR:HG21	1.89	0.54
1:2:485:A:H2'	1:2:486:G:O4'	2.08	0.54
1:2:1362:U:H1'	1:2:1363:U:C4	2.43	0.54
1:2:1471:A:OP1	7:S5:185:ARG:NH1	2.41	0.54
1:2:1720:G:O6	89:2:2082:OHX:N5	2.39	0.54
3:S1:212:VAL:O	3:S1:214:LYS:N	2.40	0.54
10:S8:163:GLY:HA3	36:1:3354:U:H1'	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:104:LEU:HB2	24:D2:124:LYS:O	2.08	0.54
28:D6:53:LEU:O	28:D6:57:SER:OG	2.22	0.54
31:D9:33:LYS:O	31:D9:36:LEU:HD23	2.06	0.54
36:1:1088:U:H2'	36:1:1089:G:H8	1.73	0.54
36:1:3351:U:O2'	36:1:3352:U:OP1	2.22	0.54
89:1:4015:OHX:N6	89:1:4186:OHX:N5	2.55	0.54
38:4:52:A:H4'	75:O9:19:GLN:HA	1.89	0.54
41:L4:36:HIS:O	41:L4:40:THR:HG23	2.07	0.54
44:L7:176:TYR:CZ	44:L7:197:GLN:HG2	2.42	0.54
49:M3:50:PRO:HB2	49:M3:140:SER:O	2.08	0.54
57:N1:78:LYS:HE3	57:N1:87:LYS:HD2	1.89	0.54
64:N8:86:LYS:O	64:N8:89:GLN:HB3	2.06	0.54
1:6:162:A:H2'	1:6:163:G:C8	2.43	0.54
1:6:449:C:H2'	1:6:450:U:H6	1.72	0.54
1:6:694:U:H3'	1:6:695:U:O2	2.08	0.54
8:s6:122:GLU:O	8:s6:124:LEU:N	2.37	0.54
20:c8:72:ILE:HG12	20:c8:79:TYR:CG	2.43	0.54
27:d5:49:ARG:NH2	27:d5:53:GLU:OE2	2.40	0.54
34:sR:184:ASN:HD22	34:sR:185:GLN:H	1.55	0.54
36:5:1232:C:H2'	36:5:1233:G:H8	1.72	0.54
36:5:2844:C:H5''	36:5:2845:A:OP2	2.08	0.54
36:5:3362:A:H2'	36:5:3363:U:O4'	2.07	0.54
59:n3:83:LYS:HE3	59:n3:84:SER:O	2.08	0.54
1:2:719:U:OP2	1:2:720:G:N1	2.40	0.54
1:2:1291:G:H1	1:2:1324:G:H1	1.55	0.54
24:D2:77:PRO:HG3	25:D3:7:ARG:O	2.08	0.54
36:1:246:U:H2'	36:1:247:C:C6	2.42	0.54
36:1:1234:G:H1	36:1:1254:C:H42	1.56	0.54
36:1:2947:G:OP2	36:1:2947:G:H4'	2.08	0.54
36:1:3006:A:H2'	36:1:3007:U:O4'	2.08	0.54
36:1:3230:G:H4'	50:M4:132:LYS:HD3	1.90	0.54
40:L3:160:VAL:HG22	40:L3:183:LEU:HD22	1.90	0.54
52:M6:108:ILE:HD12	52:M6:160:ARG:CZ	2.38	0.54
1:6:217:A:C8	1:6:218:A:C8	2.96	0.54
1:6:448:C:OP1	6:s4:29:PRO:HD3	2.07	0.54
1:6:578:U:O2	89:6:2150:OHX:N3	2.40	0.54
1:6:1133:A:H2'	1:6:1134:C:O4'	2.08	0.54
23:d1:30:ALA:O	23:d1:60:ARG:HD3	2.08	0.54
28:d6:44:ILE:HD12	28:d6:67:THR:HG22	1.89	0.54
36:5:1438:U:H2'	36:5:1439:U:C6	2.43	0.54
36:5:1566:A:H2'	36:5:1567:U:H5'	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:234:ASN:OD1	41:l4:236:LEU:N	2.37	0.54
83:m2:79:UNK:O	83:m2:83:UNK:N	2.41	0.54
51:m5:154:PRO:O	51:m5:157:LYS:HG3	2.08	0.54
75:o9:21:ARG:HD3	75:o9:22:PRO:O	2.08	0.54
1:2:417:A:H4'	1:2:418:G:O5'	2.07	0.54
1:2:1586:A:H1'	1:2:1611:A:N6	2.23	0.54
6:S4:176:ASP:HB2	6:S4:179:LYS:HZ3	1.72	0.54
9:S7:162:ILE:HB	9:S7:169:PHE:CE2	2.42	0.54
21:C9:84:LYS:HD2	21:C9:86:ARG:HG2	1.90	0.54
23:D1:71:ARG:O	23:D1:75:ASN:ND2	2.41	0.54
36:1:2697:A:H2'	36:1:2698:G:C8	2.43	0.54
47:M0:138:VAL:HG21	47:M0:152:LEU:HD11	1.89	0.54
58:N2:14:THR:HG23	58:N2:66:VAL:HG13	1.89	0.54
72:O6:60:LEU:HD11	72:O6:68:ARG:HE	1.72	0.54
79:Q3:84:ARG:O	79:Q3:88:GLU:HG2	2.08	0.54
1:6:169:A:H5'	8:s6:176:GLN:CG	2.36	0.54
1:6:525:A:H5''	26:d4:89:TYR:CD1	2.42	0.54
1:6:710:U:H5'	1:6:711:U:OP2	2.08	0.54
1:6:775:G:N7	26:d4:11:LYS:NZ	2.55	0.54
1:6:848:C:H2'	1:6:849:C:C6	2.43	0.54
1:6:1255:G:O2'	1:6:1256:A:H8	1.91	0.54
3:s1:30:PHE:HB3	3:s1:96:LEU:HD22	1.90	0.54
7:s5:194:LEU:HD22	7:s5:198:LEU:HG	1.88	0.54
18:c6:107:LYS:O	18:c6:111:SER:OG	2.16	0.54
18:c6:110:THR:HA	18:c6:113:ASP:HB2	1.90	0.54
20:c8:145:ARG:HB3	35:sM:68:ARG:NH1	2.22	0.54
36:5:2724:U:OP1	57:n1:78:LYS:HE2	2.08	0.54
61:n5:105:VAL:HG12	61:n5:130:TYR:CD2	2.43	0.54
65:n9:5:LYS:HG3	65:n9:6:ASN:H	1.73	0.54
67:o1:44:MET:HB3	67:o1:77:ARG:NH1	2.23	0.54
74:o8:16:ARG:HG3	74:o8:70:PRO:HG3	1.90	0.54
1:2:1151:A:O2'	1:2:1152:A:H5'	2.08	0.54
1:2:1521:G:O6	21:C9:68:ARG:NH1	2.41	0.54
4:S2:80:VAL:O	4:S2:81:MET:HB2	2.07	0.54
5:S3:21:LEU:HD22	5:S3:25:PHE:CE2	2.43	0.54
6:S4:34:GLY:HA3	6:S4:83:PRO:HG3	1.89	0.54
7:S5:152:GLY:O	7:S5:154:ALA:N	2.41	0.54
16:C4:19:ILE:HB	16:C4:83:ILE:HG13	1.90	0.54
17:C5:87:PRO:HA	17:C5:90:ILE:HD12	1.89	0.54
17:C5:126:VAL:HG13	17:C5:127:ARG:H	1.73	0.54
23:D1:42:GLU:O	23:D1:44:ARG:N	2.39	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:209:A:H4'	36:1:211:A:C8	2.43	0.54
36:1:290:G:H2'	36:1:291:C:C6	2.43	0.54
36:1:508:U:H2'	36:1:509:U:C6	2.43	0.54
36:1:1864:A:OP1	55:M9:88:ARG:NH1	2.40	0.54
36:1:2626:A:H5'	36:1:2627:C:H5''	1.90	0.54
36:1:2880:U:H1'	40:L3:250:ALA:HB3	1.90	0.54
36:1:3082:C:H2'	36:1:3083:G:C8	2.43	0.54
1:6:521:A:H2'	1:6:522:U:O4'	2.08	0.54
1:6:591:A:H2'	1:6:592:A:C8	2.43	0.54
1:6:898:A:H5''	16:c4:46:MET:HE3	1.90	0.54
1:6:1161:C:H2'	1:6:1162:C:H6	1.72	0.54
3:s1:67:GLU:CD	3:s1:83:LYS:HE2	2.33	0.54
9:s7:63:PRO:O	9:s7:64:VAL:HB	2.08	0.54
16:c4:87:GLY:HA3	16:c4:120:PRO:HG2	1.90	0.54
28:d6:7:SER:O	28:d6:9:GLY:N	2.41	0.54
34:sR:178:VAL:HB	34:sR:192:PHE:HB2	1.88	0.54
36:5:837:A:OP2	79:q3:4:ARG:NH1	2.35	0.54
36:5:1019:G:H22	36:5:1033:U:H3	1.54	0.54
36:5:1135:A:H5'	65:n9:7:HIS:O	2.07	0.54
36:5:2552:C:C5	66:o0:53:LYS:HE2	2.43	0.54
36:5:3016:A:H2'	36:5:3017:A:C8	2.43	0.54
41:l4:300:ARG:HH11	41:l4:300:ARG:CG	2.19	0.54
43:l6:170:LYS:HB2	43:l6:173:MET:HB2	1.90	0.54
69:o3:10:LYS:O	69:o3:33:GLU:HB2	2.08	0.54
70:o4:85:VAL:O	70:o4:89:ILE:HG13	2.08	0.54
76:q0:83:LYS:O	76:q0:87:SER:OG	2.26	0.54
1:2:1789:G:N7	16:C4:132:ARG:NH2	2.51	0.53
11:S9:92:LYS:O	11:S9:93:LEU:HD23	2.08	0.53
22:D0:106:ILE:HG23	22:D0:107:THR:HG23	1.90	0.53
36:1:196:G:N2	36:1:198:A:H3'	2.23	0.53
36:1:2401:A:O3'	41:L4:68:GLY:HA2	2.08	0.53
36:1:2689:A:N3	36:1:2689:A:H2'	2.22	0.53
37:3:110:G:OP2	42:L5:279:LYS:HG3	2.07	0.53
47:M0:12:GLN:HE21	47:M0:128:ARG:NH1	2.06	0.53
62:N6:45:ILE:HD12	62:N6:119:ILE:HG23	1.90	0.53
63:N7:114:VAL:HA	63:N7:117:ALA:HB3	1.89	0.53
68:O2:122:PRO:O	68:O2:123:LYS:HB2	2.08	0.53
73:O7:58:THR:O	73:O7:61:THR:HG23	2.08	0.53
1:6:152:U:C2	1:6:163:G:N2	2.75	0.53
1:6:224:C:H2'	1:6:225:A:C8	2.44	0.53
1:6:1332:C:H4'	5:s3:203:PRO:HB3	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1769:U:O2	16:c4:136:ARG:HD2	2.08	0.53
4:s2:125:ILE:O	4:s2:129:ILE:HG13	2.08	0.53
16:c4:25:ASP:OD1	16:c4:26:THR:N	2.30	0.53
16:c4:103:ARG:HH12	28:d6:48:ALA:HB3	1.73	0.53
17:c5:51:SER:OG	17:c5:53:PRO:HD2	2.08	0.53
36:5:1080:A:P	42:l5:140:ARG:HH21	2.31	0.53
37:7:64:A:C5	47:m0:202:LYS:HA	2.43	0.53
39:l2:104:LEU:O	39:l2:139:HIS:HE1	1.92	0.53
42:l5:120:LYS:NZ	42:l5:123:GLU:OE1	2.28	0.53
42:l5:279:LYS:HD2	42:l5:282:ARG:NH1	2.20	0.53
51:m5:184:LYS:H	51:m5:186:GLY:H	1.57	0.53
59:n3:79:VAL:HB	59:n3:118:VAL:HG13	1.90	0.53
77:q1:2:ARG:HD2	77:q1:4:LYS:HB3	1.90	0.53
1:2:527:A:OP2	89:2:2053:OHX:N4	2.41	0.53
1:2:540:G:H2'	1:2:540:G:OP2	2.09	0.53
1:2:975:C:H5''	15:C3:109:LYS:HE3	1.89	0.53
3:S1:39:GLU:HG3	3:S1:40:ASN:N	2.15	0.53
13:C1:69:LYS:O	13:C1:70:ILE:HD12	2.08	0.53
20:C8:123:ARG:HG3	20:C8:133:VAL:HG21	1.90	0.53
21:C9:42:GLY:HA2	21:C9:84:LYS:HG3	1.90	0.53
36:1:2767:U:OP2	89:1:4146:OHX:N2	2.41	0.53
40:L3:60:LEU:HD11	40:L3:62:ARG:HE	1.73	0.53
47:M0:205:SER:O	47:M0:209:ASN:HB2	2.08	0.53
60:N4:62:GLY:O	60:N4:64:THR:OG1	2.26	0.53
66:O0:18:ILE:HD13	66:O0:81:VAL:HB	1.90	0.53
1:6:485:A:N6	1:6:486:G:N3	2.57	0.53
1:6:1234:A:H2'	1:6:1235:C:H5	1.73	0.53
17:c5:87:PRO:HA	17:c5:90:ILE:HG13	1.89	0.53
20:c8:54:LEU:HD12	20:c8:54:LEU:H	1.72	0.53
24:d2:15:ASN:O	24:d2:19:LYS:HG3	2.09	0.53
25:d3:65:ASN:ND2	25:d3:116:ASP:OD1	2.41	0.53
30:d8:5:THR:O	30:d8:7:VAL:N	2.37	0.53
34:sR:90:ARG:HH21	34:sR:102:ARG:HE	1.56	0.53
36:5:121:A:C2	45:l8:129:PRO:HB3	2.43	0.53
36:5:776:U:H5	36:5:2719:U:O2	1.92	0.53
36:5:2103:U:H2'	36:5:2104:A:C8	2.42	0.53
40:l3:293:ASN:HB2	40:l3:305:ILE:H	1.72	0.53
43:l6:55:LEU:HD11	43:l6:66:SER:HB2	1.90	0.53
50:m4:21:VAL:HB	50:m4:63:VAL:HG13	1.90	0.53
57:n1:91:LEU:HD12	57:n1:96:ILE:HD11	1.91	0.53
64:n8:46:ASP:O	64:n8:47:LYS:HB3	2.07	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:161:U:OP2	8:S6:87:ARG:NH2	2.41	0.53
1:2:197:A:H2'	1:2:198:A:C8	2.44	0.53
1:2:647:G:N2	1:2:687:G:N2	2.56	0.53
1:2:1031:U:H4'	1:2:1032:G:OP2	2.06	0.53
1:2:1130:G:OP2	89:2:2074:OHX:N2	2.42	0.53
1:2:1654:G:H2'	1:2:1745:G:N2	2.22	0.53
7:S5:163:SER:HB3	30:D8:46:GLY:HA3	1.88	0.53
15:C3:67:THR:C	15:C3:69:ASN:H	2.15	0.53
16:C4:12:GLN:HB3	16:C4:77:THR:OG1	2.09	0.53
22:D0:96:PRO:HG2	22:D0:99:ILE:HG22	1.91	0.53
24:D2:15:ASN:HD21	24:D2:71:LYS:HA	1.73	0.53
36:1:528:U:H2'	36:1:529:A:C8	2.44	0.53
38:4:85:G:C8	38:4:85:G:H3'	2.43	0.53
39:L2:209:HIS:HD2	39:L2:211:HIS:N	2.07	0.53
40:L3:92:TYR:O	40:L3:155:ALA:HA	2.09	0.53
41:L4:264:SER:OG	41:L4:267:VAL:HG12	2.09	0.53
53:M7:26:PHE:HE1	53:M7:120:ASN:HA	1.74	0.53
7:s5:43:PHE:HZ	7:s5:90:ILE:HG21	1.73	0.53
23:d1:81:ASN:OD1	23:d1:81:ASN:N	2.40	0.53
36:5:689:U:O4	41:l4:209:TYR:OH	2.25	0.53
36:5:1586:G:OP1	89:5:3993:OHX:N3	2.42	0.53
36:5:2822:U:OP2	89:5:3955:OHX:N1	2.41	0.53
36:5:2896:A:OP1	76:q0:102:ARG:NE	2.32	0.53
36:5:2968:G:N7	39:l2:215:ASN:HB2	2.23	0.53
36:5:3041:U:H2'	36:5:3042:U:C6	2.43	0.53
36:5:3186:A:C2	46:l9:44:THR:HG22	2.43	0.53
39:l2:90:ALA:HB2	39:l2:101:VAL:HG13	1.89	0.53
45:l8:101:THR:OG1	45:l8:104:GLU:HG3	2.09	0.53
84:p0:97:LYS:O	84:p0:101:VAL:HG23	2.07	0.53
3:S1:111:ARG:HB3	28:D6:68:TYR:CD2	2.44	0.53
30:D8:16:LEU:HB2	30:D8:27:GLN:O	2.08	0.53
34:SR:11:GLY:HA3	34:SR:54:PHE:HB2	1.90	0.53
36:1:1117:G:OP1	65:N9:4:SER:HB2	2.08	0.53
36:1:1260:A:H1'	36:1:1280:C:H1'	1.91	0.53
40:L3:283:TYR:HB2	40:L3:323:MET:HE2	1.90	0.53
61:N5:63:ILE:HA	61:N5:86:VAL:HG23	1.91	0.53
1:6:250:C:H2'	1:6:251:A:C8	2.43	0.53
1:6:1280:C:O2'	22:d0:70:THR:HG23	2.07	0.53
22:d0:97:VAL:HG13	22:d0:98:GLN:H	1.73	0.53
36:5:1411:C:P	68:o2:98:HIS:HB3	2.47	0.53
36:5:1796:G:O6	89:5:4231:OHX:N5	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:823:G:O2'	1:2:824:G:OP1	2.26	0.53
2:S0:36:TYR:OH	23:D1:66:ASP:OD2	2.21	0.53
3:S1:70:LEU:HD12	3:S1:82:ARG:HB2	1.90	0.53
6:S4:86:PHE:O	6:S4:87:MET:HB2	2.08	0.53
8:S6:58:LYS:O	8:S6:59:GLN:HB2	2.08	0.53
22:D0:42:VAL:HG23	22:D0:91:ILE:HD13	1.90	0.53
34:SR:24:ALA:HB2	34:SR:72:THR:H	1.72	0.53
36:1:3276:G:O6	53:M7:171:ARG:NH1	2.41	0.53
36:1:3344:A:H2	36:1:3361:G:N2	2.01	0.53
40:L3:161:LEU:HB3	40:L3:178:LEU:HD11	1.88	0.53
41:L4:293:SER:HB2	41:L4:294:GLU:OE1	2.08	0.53
43:L6:142:ASP:O	43:L6:146:ILE:HG12	2.09	0.53
53:M7:22:LEU:HD12	53:M7:146:ILE:HG13	1.90	0.53
69:O3:49:ILE:HG23	69:O3:100:ILE:HG13	1.90	0.53
70:O4:99:LYS:C	70:O4:103:LYS:HZ2	2.17	0.53
1:6:312:A:H4'	1:6:313:U:H5''	1.90	0.53
1:6:484:C:H42	1:6:503:G:N2	2.06	0.53
1:6:1230:A:H8	1:6:1258:U:C5	2.27	0.53
2:s0:167:LYS:HE3	2:s0:168:HIS:NE2	2.23	0.53
3:s1:23:PRO:O	3:s1:27:LYS:HG2	2.09	0.53
23:d1:35:ASN:OD1	23:d1:52:THR:HB	2.08	0.53
28:d6:26:CYS:SG	28:d6:74:CYS:SG	3.07	0.53
81:e0:51:ASN:HB3	81:e0:53:LYS:HG2	1.89	0.53
36:5:424:G:O2'	68:o2:23:ASP:OD2	2.26	0.53
36:5:2552:C:H2'	66:o0:50:VAL:HG11	1.89	0.53
36:5:2988:C:P	52:m6:68:ARG:NH1	2.82	0.53
38:8:65:A:O3'	71:o5:10:ARG:NH2	2.41	0.53
42:l5:21:ARG:HG2	42:l5:21:ARG:HH11	1.74	0.53
50:m4:32:LEU:HD11	50:m4:94:TRP:CG	2.44	0.53
63:n7:16:GLY:O	63:n7:18:TYR:N	2.42	0.53
66:o0:13:LYS:O	66:o0:17:VAL:HG23	2.09	0.53
71:o5:47:VAL:HA	71:o5:50:SER:HB2	1.90	0.53
1:2:511:A:N6	1:2:539:G:O6	2.37	0.53
2:S0:27:ARG:HG3	2:S0:44:GLY:O	2.09	0.53
3:S1:123:ALA:HB2	3:S1:165:ARG:HD2	1.91	0.53
4:S2:78:ASP:O	4:S2:79:GLU:HB3	2.08	0.53
10:S8:185:GLU:HG2	13:C1:23:PRO:HG3	1.90	0.53
24:D2:106:THR:OG1	24:D2:111:MET:HE2	2.08	0.53
36:1:656:A:H2'	36:1:657:A:C8	2.43	0.53
36:1:1765:U:H5''	55:M9:43:LYS:HE2	1.91	0.53
36:1:2254:U:H2'	36:1:2261:G:H22	1.74	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2810:C:OP1	89:1:4095:OHX:N6	2.42	0.53
49:M3:87:ALA:O	49:M3:91:ARG:HG3	2.09	0.53
49:M3:164:GLU:O	49:M3:166:ALA:N	2.38	0.53
70:O4:58:ARG:HG3	70:O4:59:PRO:HD2	1.90	0.53
1:6:180:A:H2'	1:6:181:A:O4'	2.07	0.53
1:6:1429:G:H2'	1:6:1430:U:C6	2.43	0.53
1:6:1796:C:OP1	28:d6:87:ARG:HD3	2.08	0.53
8:s6:7:TYR:CE1	8:s6:125:THR:HA	2.43	0.53
20:c8:4:VAL:HG21	27:d5:82:HIS:CG	2.44	0.53
36:5:378:A:H3'	36:5:379:C:H6	1.73	0.53
36:5:1701:C:H2'	36:5:1702:U:O4'	2.08	0.53
36:5:2897:A:H2'	36:5:2899:C:C5'	2.38	0.53
37:7:3:U:H2'	37:7:4:U:C6	2.44	0.53
38:8:38:U:C4	71:o5:89:ARG:HD2	2.43	0.53
40:l3:53:MET:HE2	40:l3:77:THR:HG22	1.91	0.53
40:l3:153:LYS:HG2	40:l3:154:TYR:CE2	2.43	0.53
41:l4:120:TYR:CE2	41:l4:277:PRO:HB3	2.44	0.53
46:l9:20:ILE:HD12	46:l9:45:PHE:CG	2.44	0.53
47:m0:192:ASP:HA	47:m0:197:VAL:HG23	1.91	0.53
68:o2:97:ALA:O	68:o2:100:ILE:HG12	2.08	0.53
1:2:71:A:H2'	1:2:72:A:O4'	2.09	0.53
1:2:755:A:H2'	1:2:756:A:C8	2.44	0.53
1:2:919:A:H5'	16:C4:18:ARG:HH12	1.73	0.53
1:2:1366:U:O2'	21:C9:7:ARG:NH1	2.41	0.53
2:S0:52:LYS:HD2	23:D1:82:VAL:HA	1.91	0.53
3:S1:184:LEU:HA	3:S1:187:LYS:HE3	1.91	0.53
4:S2:82:ASN:HB2	4:S2:207:LEU:HD13	1.91	0.53
8:S6:137:ARG:HH21	8:S6:177:ARG:HE	1.55	0.53
10:S8:138:ASN:HA	10:S8:141:ARG:HD2	1.90	0.53
13:C1:2:SER:HB2	13:C1:81:HIS:CD2	2.44	0.53
20:C8:128:PHE:CD2	35:SM:61:ILE:HG22	2.44	0.53
22:D0:27:THR:HB	22:D0:88:LYS:CG	2.39	0.53
36:1:391:A:OP2	89:1:4160:OHX:N1	2.42	0.53
36:1:627:U:H4'	36:1:1399:A:O2'	2.09	0.53
36:1:1362:G:H2'	36:1:1363:A:C8	2.44	0.53
36:1:2257:C:H2'	36:1:2258:U:O4'	2.09	0.53
36:1:2522:G:O6	39:L2:70:ARG:NH2	2.42	0.53
36:1:3174:A:H2'	36:1:3175:U:H5'	1.91	0.53
40:L3:2:SER:O	40:L3:3:HIS:HB3	2.08	0.53
40:L3:73:VAL:HG22	59:N3:90:GLY:HA3	1.89	0.53
57:N1:44:ALA:HB2	57:N1:53:PRO:HG2	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:738:G:O6	89:6:2071:OHX:N4	2.42	0.53
1:6:961:U:H2'	1:6:962:C:C6	2.44	0.53
1:6:1321:A:H4'	1:6:1322:A:O5'	2.09	0.53
9:s7:64:VAL:HG22	9:s7:94:ALA:HB1	1.91	0.53
20:c8:12:GLN:NE2	20:c8:14:ILE:O	2.34	0.53
52:m6:182:ASN:O	52:m6:185:ALA:N	2.42	0.53
55:m9:172:ARG:O	55:m9:176:ARG:HG2	2.09	0.53
58:n2:67:SER:OG	58:n2:69:ALA:O	2.27	0.53
1:2:186:C:H3'	1:2:187:G:C8	2.43	0.53
1:2:773:C:OP1	6:S4:22:LYS:N	2.42	0.53
1:2:855:A:C2	1:2:857:U:H1'	2.44	0.53
1:2:881:A:H2'	1:2:882:U:O4'	2.08	0.53
10:S8:116:HIS:CE1	10:S8:146:ARG:HD3	2.44	0.53
22:D0:20:ILE:HG13	22:D0:95:ALA:O	2.09	0.53
22:D0:23:ARG:HD3	22:D0:92:ASP:OD1	2.09	0.53
36:1:2107:A:H2	36:1:3344:A:H8	1.57	0.53
36:1:3393:U:H2'	36:1:3394:U:C6	2.43	0.53
40:L3:284:ARG:NH2	40:L3:295:ALA:O	2.42	0.53
44:L7:25:GLN:HG2	44:L7:29:GLU:HB2	1.90	0.53
53:M7:34:GLN:C	53:M7:36:ILE:H	2.16	0.53
1:6:25:C:O2	89:6:2105:OHX:N2	2.42	0.53
1:6:346:G:H5'	13:c1:79:LYS:HB2	1.91	0.53
1:6:753:A:OP1	6:s4:220:THR:HG22	2.09	0.53
1:6:1321:A:OP2	2:s0:101:ARG:NH2	2.37	0.53
1:6:1459:C:OP2	1:6:1459:C:H6	1.92	0.53
7:s5:156:ARG:HA	7:s5:157:ARG:HH21	1.74	0.53
34:sR:144:LEU:HB3	34:sR:181:TRP:CZ3	2.44	0.53
36:5:655:C:H2'	36:5:656:A:C8	2.44	0.53
36:5:2309:A:H4'	89:5:4202:OHX:N4	2.24	0.53
38:8:15:G:C6	38:8:16:G:N1	2.77	0.53
40:l3:53:MET:HE1	40:l3:327:CYS:HB3	1.91	0.53
40:l3:103:THR:HG21	40:l3:147:GLU:OE2	2.09	0.53
41:l4:300:ARG:O	54:m8:39:ARG:NH1	2.42	0.53
42:l5:257:GLU:C	42:l5:258:LYS:HD3	2.34	0.53
43:l6:76:LEU:HD11	43:l6:141:VAL:HG21	1.91	0.53
46:l9:90:MET:O	46:l9:91:ARG:HD2	2.09	0.53
1:2:373:G:N7	89:2:2159:OHX:N6	2.56	0.53
1:2:788:A:OP2	6:S4:108:ARG:NH1	2.19	0.53
1:2:1178:G:H2'	1:2:1179:G:O4'	2.09	0.53
1:2:1460:A:C8	17:C5:128:HIS:HB3	2.44	0.53
2:S0:139:VAL:O	2:S0:141:ILE:N	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:38:GLU:HG3	5:S3:38:GLU:O	2.09	0.53
5:S3:182:LEU:H	5:S3:182:LEU:HD12	1.72	0.53
6:S4:19:LEU:HD11	6:S4:108:ARG:HD2	1.91	0.53
17:C5:33:PHE:O	17:C5:36:LEU:HD23	2.09	0.53
17:C5:75:PRO:HA	17:C5:93:VAL:HG12	1.89	0.53
29:D7:50:ALA:O	29:D7:52:THR:N	2.42	0.53
42:L5:108:ARG:CZ	42:L5:253:PHE:HB2	2.39	0.53
42:L5:115:LEU:H	42:L5:115:LEU:HD22	1.74	0.53
46:L9:47:LYS:HB2	50:M4:7:VAL:HB	1.90	0.53
51:M5:155:VAL:O	51:M5:162:ARG:NH2	2.42	0.53
57:N1:104:GLU:HG3	57:N1:105:PHE:N	2.24	0.53
70:O4:86:LYS:O	70:O4:90:ILE:HG12	2.09	0.53
1:6:198:A:H2'	1:6:199:G:H5'	1.90	0.53
1:6:886:U:H2'	1:6:887:A:H8	1.74	0.53
1:6:1099:U:OP1	24:d2:71:LYS:NZ	2.37	0.53
3:s1:226:GLY:HA2	36:5:2536:A:H4'	1.90	0.53
35:sM:48:ARG:HA	36:5:1019:G:OP1	2.09	0.53
36:5:717:C:OP1	36:5:751:A:O2'	2.25	0.53
36:5:1128:U:OP1	47:m0:4:ARG:NH2	2.39	0.53
36:5:1819:U:H2'	36:5:1820:U:H5'	1.90	0.53
36:5:2180:G:H2'	36:5:2181:C:C6	2.44	0.53
36:5:2304:C:C5	36:5:2305:G:C6	2.97	0.53
36:5:2796:G:H5''	36:5:2798:C:O4'	2.08	0.53
36:5:3078:U:H1'	89:5:4199:OHX:N1	2.24	0.53
39:l2:209:HIS:CE1	39:l2:210:PRO:HD2	2.43	0.53
40:l3:142:ALA:O	40:l3:146:ARG:N	2.41	0.53
43:l6:68:PRO:HB2	43:l6:71:VAL:HG23	1.91	0.53
45:l8:156:ASP:O	45:l8:183:LYS:HE3	2.09	0.53
49:m3:154:VAL:HG12	49:m3:155:GLU:H	1.74	0.53
55:m9:15:VAL:HG12	55:m9:52:LYS:HE3	1.91	0.53
1:2:377:G:O6	89:2:2078:OHX:N5	2.41	0.53
1:2:720:G:H1'	1:2:721:U:H5''	1.90	0.53
1:2:978:A:H2'	1:2:979:A:O4'	2.09	0.53
1:2:1435:G:N7	12:C0:25:LYS:NZ	2.57	0.53
2:S0:189:VAL:HG22	2:S0:190:ASP:H	1.73	0.53
7:S5:117:THR:HG21	7:S5:194:LEU:HD12	1.91	0.53
18:C6:95:LYS:O	34:SR:59:ARG:NH2	2.42	0.53
25:D3:62:LYS:HD2	25:D3:118:PRO:HB3	1.91	0.53
36:1:612:U:H2'	36:1:613:G:C8	2.42	0.53
36:1:956:U:OP1	89:1:4138:OHX:N1	2.42	0.53
36:1:1742:U:H2'	36:1:1743:G:C8	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1770:G:H5'	36:1:1771:C:OP2	2.09	0.53
36:1:2115:G:H22	36:1:2120:A:H1'	1.74	0.53
36:1:2582:C:H2'	36:1:2583:C:H6	1.74	0.53
40:L3:178:LEU:HD12	40:L3:179:ALA:N	2.22	0.53
46:L9:76:ASP:O	46:L9:80:THR:HG23	2.09	0.53
49:M3:190:LYS:HB2	49:M3:190:LYS:NZ	2.23	0.53
1:6:1393:C:H2'	1:6:1394:G:H8	1.74	0.53
2:s0:183:ARG:HG2	2:s0:191:ARG:HG2	1.90	0.53
4:s2:174:ARG:HA	4:s2:195:ASP:OD2	2.09	0.53
10:s8:82:VAL:HG13	10:s8:196:LEU:HD21	1.91	0.53
34:sR:114:ASP:OD1	34:sR:115:ILE:N	2.34	0.53
36:5:1340:G:H2'	36:5:1341:U:H6	1.74	0.53
36:5:1407:A:O3'	68:o2:33:ARG:NH2	2.42	0.53
36:5:1564:U:H2'	36:5:1565:G:C8	2.44	0.53
36:5:2225:U:H2'	36:5:2226:U:C6	2.44	0.53
36:5:2840:C:OP1	89:5:4141:OHX:N3	2.42	0.53
37:7:44:C:OP2	48:m1:137:ARG:NH2	2.42	0.53
37:7:110:G:OP2	42:l5:279:LYS:NZ	2.25	0.53
48:m1:16:LYS:HG2	48:m1:130:VAL:HG13	1.90	0.53
48:m1:133:ARG:HB3	48:m1:134:PRO:HD2	1.91	0.53
84:p0:26:PHE:HB2	84:p0:87:VAL:HB	1.90	0.53
1:2:256:A:H2'	1:2:257:A:O4'	2.09	0.52
1:2:494:U:O2'	1:2:495:C:O5'	2.25	0.52
3:S1:180:THR:HG22	3:S1:182:ALA:H	1.74	0.52
6:S4:227:VAL:O	6:S4:228:ILE:HG12	2.08	0.52
8:S6:102:VAL:HG13	8:S6:106:LEU:HD12	1.90	0.52
26:D4:14:SER:O	26:D4:16:PRO:HD3	2.09	0.52
29:D7:54:VAL:O	29:D7:63:LEU:HB2	2.08	0.52
36:1:801:A:O2'	89:1:3992:OHX:N2	2.42	0.52
36:1:2988:C:O2	40:L3:266:ARG:NH1	2.42	0.52
36:1:3000:A:H2'	36:1:3001:C:C6	2.44	0.52
37:3:3:U:H2'	37:3:4:U:C6	2.45	0.52
37:3:48:U:O4	42:L5:58:LYS:NZ	2.39	0.52
55:M9:160:GLU:HG2	55:M9:164:LEU:HD23	1.91	0.52
66:O0:9:SER:HB3	66:O0:12:GLN:HB3	1.91	0.52
1:6:418:G:O2'	8:s6:59:GLN:OE1	2.26	0.52
1:6:1545:A:H2'	1:6:1546:G:H8	1.75	0.52
3:s1:66:VAL:CG2	16:c4:33:LEU:HB3	2.38	0.52
4:s2:225:LEU:HD22	4:s2:230:TRP:HD1	1.73	0.52
11:s9:65:LYS:HA	11:s9:70:LEU:HD11	1.90	0.52
17:c5:115:TYR:HB2	17:c5:118:GLU:HG3	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:378:A:H3'	36:5:379:C:C6	2.44	0.52
36:5:1085:A:H5''	36:5:1085:A:H8	1.74	0.52
38:8:97:A:OP1	71:o5:63:ARG:NH2	2.32	0.52
41:l4:138:ARG:NH2	41:l4:240:PRO:HB2	2.24	0.52
49:m3:8:PRO:HD3	54:m8:164:ARG:HB3	1.90	0.52
64:n8:132:LYS:O	64:n8:136:GLU:HG3	2.09	0.52
1:2:329:G:H2'	1:2:330:G:H8	1.73	0.52
1:2:953:G:H2'	1:2:954:G:H8	1.74	0.52
1:2:1738:U:H2'	1:2:1739:C:C6	2.44	0.52
9:S7:75:THR:O	9:S7:79:ARG:HB2	2.09	0.52
18:C6:32:ASN:O	18:C6:66:ARG:NH1	2.42	0.52
20:C8:30:TYR:HE2	20:C8:40:ARG:HH11	1.56	0.52
34:SR:89:LEU:O	34:SR:103:PHE:HD2	1.91	0.52
36:1:621:A:O2'	89:1:4178:OHX:N1	2.42	0.52
36:1:1110:U:H2'	36:1:1111:U:C6	2.43	0.52
36:1:1807:G:C6	36:1:1808:G:N1	2.77	0.52
36:1:2442:G:N2	36:1:2505:U:H3	2.07	0.52
36:1:3085:G:OP2	89:1:3895:OHX:N2	2.42	0.52
40:L3:305:ILE:HG12	40:L3:321:PHE:CZ	2.44	0.52
48:M1:90:GLN:OE1	48:M1:172:LEU:HD11	2.09	0.52
51:M5:143:ARG:NH2	71:O5:92:LEU:HD23	2.23	0.52
64:N8:96:LYS:C	64:N8:98:THR:H	2.17	0.52
1:6:140:A:N6	1:6:281:G:OP1	2.42	0.52
1:6:363:G:OP1	89:6:2109:OHX:N1	2.42	0.52
1:6:950:C:H2'	1:6:951:A:C8	2.45	0.52
6:s4:181:VAL:HG11	6:s4:225:VAL:HG13	1.91	0.52
9:s7:24:PHE:CE1	9:s7:77:LEU:HD11	2.44	0.52
20:c8:15:LEU:HD12	20:c8:66:LEU:HD11	1.91	0.52
36:5:352:A:H61	36:5:365:A:H5''	1.74	0.52
36:5:594:U:H5''	36:5:609:G:H1	1.74	0.52
36:5:1222:G:O6	89:5:4132:OHX:N1	2.42	0.52
36:5:1438:U:H2'	36:5:1439:U:H6	1.74	0.52
36:5:1818:U:H2'	36:5:1819:U:C6	2.44	0.52
40:l3:117:ARG:CZ	40:l3:175:LYS:HD2	2.39	0.52
49:m3:87:ALA:O	49:m3:91:ARG:HG3	2.09	0.52
56:n0:7:TYR:CE1	56:n0:34:GLU:HG2	2.44	0.52
59:n3:38:ALA:HB3	59:n3:59:MET:HB2	1.89	0.52
63:n7:46:ILE:HD11	63:n7:48:ARG:C	2.35	0.52
66:o0:66:LYS:H	66:o0:66:LYS:HD2	1.74	0.52
68:o2:12:LYS:NZ	68:o2:58:GLY:O	2.40	0.52
1:2:158:U:O2'	1:2:159:U:H3'	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1201:G:H21	1:2:1600:A:H5''	1.73	0.52
1:2:1369:U:O4	89:2:2095:OHX:N5	2.42	0.52
1:2:1600:A:O2'	1:2:1602:C:N4	2.42	0.52
1:2:1606:C:H2'	1:2:1607:G:C8	2.45	0.52
7:S5:23:VAL:O	7:S5:34:GLN:NE2	2.38	0.52
9:S7:122:HIS:HA	9:S7:125:ILE:HD12	1.92	0.52
9:S7:164:TYR:CE1	9:S7:165:LYS:HG3	2.44	0.52
21:C9:73:VAL:HG12	21:C9:77:ASN:HD21	1.74	0.52
22:D0:28:SER:OG	22:D0:29:THR:N	2.42	0.52
36:1:1047:A:N3	36:1:2633:U:O2'	2.41	0.52
36:1:1352:A:H4'	36:1:1353:U:OP1	2.09	0.52
36:1:2108:C:H1'	36:1:3344:A:H8	1.75	0.52
47:M0:216:TYR:CG	47:M0:217:PHE:N	2.75	0.52
51:M5:13:LYS:O	51:M5:16:SER:OG	2.22	0.52
56:N0:137:ARG:HG2	56:N0:139:TYR:CZ	2.45	0.52
62:N6:125:LYS:C	62:N6:126:LEU:HG	2.33	0.52
63:N7:17:ARG:O	63:N7:19:ALA:N	2.42	0.52
63:N7:57:HIS:CD2	63:N7:65:ARG:HG3	2.44	0.52
74:O8:31:LEU:HD23	74:O8:31:LEU:H	1.74	0.52
4:s2:59:HIS:CE1	4:s2:238:SER:HA	2.43	0.52
9:s7:122:HIS:CE1	9:s7:177:THR:HB	2.44	0.52
14:c2:104:ALA:HB2	14:c2:115:VAL:HG22	1.91	0.52
20:c8:117:LYS:HE2	20:c8:128:PHE:HB2	1.90	0.52
36:5:192:C:H2'	36:5:193:C:C6	2.44	0.52
36:5:392:G:O2'	62:n6:90:VAL:HG11	2.08	0.52
36:5:1764:U:H3'	36:5:1765:U:H5''	1.91	0.52
36:5:1877:U:OP2	89:5:3959:OHX:N1	2.43	0.52
36:5:2366:C:H5'	40:l3:259:HIS:CE1	2.44	0.52
36:5:2846:U:O2	89:5:4054:OHX:N5	2.41	0.52
36:5:3335:A:H2'	36:5:3336:A:C8	2.44	0.52
51:m5:184:LYS:HG2	51:m5:185:ALA:N	2.23	0.52
64:n8:45:MET:HE2	64:n8:45:MET:HA	1.92	0.52
85:p1:34:UNK:O	85:p1:36:UNK:N	2.43	0.52
1:2:178:U:C4	8:S6:191:ARG:HD3	2.44	0.52
2:S0:4:PRO:HB2	2:S0:7:PHE:HB2	1.89	0.52
2:S0:163:ASN:C	2:S0:165:ARG:H	2.16	0.52
12:C0:80:LEU:O	12:C0:82:LEU:N	2.42	0.52
16:C4:102:LEU:HD22	16:C4:105:LEU:HD11	1.90	0.52
18:C6:143:ARG:HH22	35:SM:84:LYS:HZ3	1.57	0.52
26:D4:94:TYR:HB2	26:D4:96:LEU:HD11	1.92	0.52
36:1:1549:U:H2'	36:1:1550:C:C6	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:47:PHE:O	43:L6:50:LYS:HB2	2.10	0.52
44:L7:160:ARG:HD2	44:L7:203:TRP:CD1	2.44	0.52
52:M6:72:HIS:O	52:M6:74:ARG:HD3	2.10	0.52
58:N2:50:LEU:HB3	58:N2:54:VAL:CG2	2.40	0.52
62:N6:63:LYS:O	62:N6:66:GLN:HG3	2.10	0.52
64:N8:123:VAL:HG12	64:N8:125:VAL:HG22	1.92	0.52
67:O1:54:GLU:OE2	67:O1:54:GLU:N	2.42	0.52
68:O2:63:THR:O	68:O2:66:LEU:HG	2.10	0.52
1:6:765:G:N7	11:s9:149:ARG:NE	2.57	0.52
1:6:1542:G:N2	1:6:1568:C:H1'	2.24	0.52
7:s5:28:PRO:O	7:s5:29:ILE:HB	2.10	0.52
7:s5:146:THR:HG23	7:s5:157:ARG:HB3	1.90	0.52
80:c0:32:HIS:CG	80:c0:33:GLU:H	2.27	0.52
25:d3:130:VAL:O	25:d3:131:SER:HB3	2.08	0.52
36:5:2339:C:P	59:n3:48:ARG:HG2	2.49	0.52
36:5:2426:U:H2'	36:5:2427:U:C6	2.45	0.52
36:5:2943:G:H2'	36:5:2944:U:O4'	2.09	0.52
47:m0:169:LYS:O	47:m0:170:LYS:HD3	2.09	0.52
52:m6:12:LYS:HA	52:m6:40:GLU:O	2.09	0.52
62:n6:82:VAL:O	62:n6:84:LYS:N	2.41	0.52
1:2:1244:A:H3'	1:2:1244:A:N3	2.24	0.52
1:2:1534:G:O6	27:D5:77:ARG:NE	2.42	0.52
2:S0:105:GLY:N	2:S0:135:GLU:OE2	2.39	0.52
12:C0:11:ILE:HD13	12:C0:42:VAL:HA	1.91	0.52
24:D2:37:PHE:CD2	24:D2:103:ILE:HD12	2.45	0.52
26:D4:45:ALA:C	26:D4:47:VAL:H	2.16	0.52
36:1:410:U:O4	89:1:4069:OHX:N5	2.43	0.52
36:1:551:A:O2'	36:1:552:G:H8	1.93	0.52
36:1:929:A:H2'	36:1:930:U:C6	2.45	0.52
36:1:1073:U:H1'	65:N9:50:THR:HG22	1.91	0.52
36:1:1584:U:H2'	36:1:1585:C:C6	2.45	0.52
36:1:2273:G:O2'	36:1:2274:U:OP2	2.28	0.52
36:1:2338:C:OP1	40:L3:236:LYS:HE2	2.09	0.52
36:1:3198:U:O4	46:L9:26:LYS:HB2	2.10	0.52
41:L4:82:THR:O	41:L4:84:ARG:N	2.41	0.52
46:L9:20:ILE:HD13	46:L9:45:PHE:CD1	2.45	0.52
71:O5:78:LYS:HA	71:O5:81:ARG:HD3	1.91	0.52
1:6:830:U:H2'	1:6:831:U:H5'	1.92	0.52
3:s1:191:GLU:O	3:s1:194:ASN:HB2	2.10	0.52
5:s3:195:SER:OG	5:s3:200:LYS:HA	2.10	0.52
11:s9:117:GLY:O	11:s9:119:ALA:N	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:c5:127:ARG:O	17:c5:130:ARG:NH1	2.42	0.52
34:sR:121:MET:HE1	34:sR:167:VAL:HG21	1.92	0.52
36:5:314:U:O4	89:5:4195:OHX:N5	2.43	0.52
36:5:835:G:O2'	36:5:857:G:N2	2.31	0.52
36:5:1858:A:O2'	36:5:1859:A:OP2	2.27	0.52
40:l3:169:THR:CG2	40:l3:171:LEU:H	2.22	0.52
41:l4:141:ARG:CZ	41:l4:180:LYS:HD3	2.39	0.52
45:l8:144:GLU:OE1	72:o6:36:ARG:NH2	2.42	0.52
53:m7:67:ILE:N	53:m7:67:ILE:HD13	2.25	0.52
64:n8:76:ASP:HB3	64:n8:115:LYS:O	2.10	0.52
65:n9:23:LYS:HB3	65:n9:24:PRO:CD	2.39	0.52
1:2:482:U:H2'	1:2:483:A:C8	2.44	0.52
3:S1:181:LEU:HD13	3:S1:181:LEU:N	2.23	0.52
3:S1:183:GLN:HG2	3:S1:187:LYS:HE2	1.90	0.52
5:S3:27:ARG:HB3	12:C0:58:GLN:HE22	1.75	0.52
11:S9:126:ARG:O	11:S9:130:THR:HG22	2.09	0.52
14:C2:42:ALA:HB3	14:C2:122:VAL:HB	1.92	0.52
34:SR:274:LEU:HD13	34:SR:313:TRP:CE2	2.45	0.52
36:1:40:A:N7	64:N8:29:PRO:O	2.42	0.52
36:1:156:G:OP2	72:O6:25:LYS:HB3	2.09	0.52
36:1:1485:G:N2	70:O4:4:ARG:HD2	2.25	0.52
36:1:2357:A:H2'	36:1:2358:A:H8	1.74	0.52
36:1:2552:C:H2'	66:O0:50:VAL:HG11	1.91	0.52
36:1:3106:A:H2'	36:1:3107:U:O4'	2.10	0.52
37:3:27:A:OP2	42:L5:57:ASN:HB2	2.09	0.52
39:L2:227:ARG:HG2	39:L2:239:ALA:HB2	1.91	0.52
40:L3:56:ILE:HD13	40:L3:76:VAL:HG21	1.90	0.52
48:M1:150:ASN:C	48:M1:152:HIS:H	2.18	0.52
50:M4:55:ARG:HG2	56:N0:70:THR:HB	1.92	0.52
53:M7:51:VAL:HA	53:M7:56:ARG:O	2.10	0.52
69:O3:13:HIS:O	69:O3:95:GLY:N	2.43	0.52
1:6:75:U:O2'	1:6:76:A:O5'	2.19	0.52
1:6:191:C:O2'	1:6:192:U:O5'	2.27	0.52
1:6:463:U:OP1	89:6:2202:OHX:N1	2.42	0.52
2:s0:172:LEU:HD13	2:s0:176:LEU:HD11	1.91	0.52
15:c3:96:VAL:O	15:c3:100:LYS:HG2	2.09	0.52
20:c8:143:ARG:C	20:c8:145:ARG:H	2.17	0.52
21:c9:24:ARG:O	21:c9:26:GLY:N	2.42	0.52
31:d9:20:GLN:HG3	31:d9:25:SER:HA	1.91	0.52
36:5:278:U:H2'	36:5:279:U:C6	2.43	0.52
36:5:286:U:H2'	36:5:287:G:C8	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:612:U:H2'	36:5:613:G:H8	1.75	0.52
36:5:1882:G:H1	36:5:2350:C:H42	1.57	0.52
36:5:2931:C:H2'	36:5:2932:U:O4'	2.09	0.52
37:7:95:A:OP2	89:7:225:OHX:N1	2.42	0.52
38:8:145:U:H2'	38:8:146:U:C6	2.45	0.52
49:m3:89:TYR:CE1	49:m3:93:ILE:HD11	2.45	0.52
50:m4:58:ILE:HD11	50:m4:62:GLN:HG3	1.92	0.52
53:m7:30:ARG:HA	53:m7:119:VAL:HG11	1.91	0.52
1:2:272:U:O2'	1:2:273:G:O4'	2.27	0.52
1:2:704:C:H3'	1:2:704:C:OP2	2.10	0.52
1:2:767:U:H6	11:S9:141:VAL:HA	1.74	0.52
1:2:887:A:H2'	1:2:888:U:C6	2.44	0.52
1:2:1149:G:H1'	1:2:1765:A:C4	2.44	0.52
1:2:1370:U:O4	89:2:2121:OHX:N1	2.42	0.52
3:S1:119:THR:HB	3:S1:143:THR:HG23	1.92	0.52
5:S3:18:TYR:CE1	5:S3:37:VAL:HG23	2.44	0.52
6:S4:64:ILE:HG12	26:D4:18:LEU:HG	1.91	0.52
6:S4:105:VAL:HG22	6:S4:243:GLY:HA2	1.92	0.52
12:C0:53:GLY:O	12:C0:55:VAL:N	2.36	0.52
19:C7:71:PHE:HE1	19:C7:73:LEU:HD22	1.75	0.52
34:SR:195:HIS:NE2	34:SR:213:SER:HB2	2.25	0.52
36:1:20:A:OP2	71:O5:90:ARG:NH1	2.43	0.52
36:1:603:A:H2'	36:1:604:G:O4'	2.09	0.52
36:1:1196:C:O2	89:1:4005:OHX:N2	2.41	0.52
36:1:2746:A:H2'	36:1:2747:A:O4'	2.09	0.52
40:L3:168:LYS:O	40:L3:319:ASN:ND2	2.42	0.52
41:L4:120:TYR:CE2	41:L4:277:PRO:HB3	2.44	0.52
45:L8:94:PHE:CZ	45:L8:200:LEU:HG	2.45	0.52
47:M0:47:PRO:HB3	47:M0:171:TRP:CZ2	2.44	0.52
57:N1:79:MET:HB3	57:N1:84:TYR:CE2	2.45	0.52
61:N5:137:ASN:HB3	61:N5:142:ILE:HG12	1.92	0.52
67:O1:55:LEU:HD23	67:O1:95:PRO:HB3	1.92	0.52
1:6:987:G:O6	89:6:2116:OHX:N4	2.43	0.52
4:s2:227:PRO:HA	4:s2:230:TRP:CG	2.45	0.52
5:s3:223:LYS:HD3	34:sR:191:ASP:HB2	1.91	0.52
7:s5:143:ARG:HB2	7:s5:218:GLU:OE2	2.09	0.52
34:sR:76:ASP:OD1	34:sR:76:ASP:N	2.37	0.52
34:sR:123:ILE:HD13	34:sR:169:ILE:HG21	1.91	0.52
36:5:299:G:N7	89:5:4193:OHX:N1	2.57	0.52
36:5:873:C:H5''	36:5:874:U:O5'	2.10	0.52
39:l2:27:ALA:O	39:l2:128:ARG:NH2	2.41	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:l3:19:ARG:HB3	40:l3:232:ARG:HH12	1.73	0.52
41:l4:271:LYS:HB2	41:l4:274:TYR:CB	2.40	0.52
47:m0:76:MET:HE1	47:m0:148:VAL:HG13	1.91	0.52
56:n0:42:TRP:O	56:n0:46:GLN:HG3	2.10	0.52
75:o9:23:LEU:HD11	75:o9:35:ILE:HG22	1.92	0.52
1:2:39:A:O2'	1:2:40:A:OP2	2.28	0.52
1:2:306:U:P	13:C1:105:LYS:HD2	2.50	0.52
1:2:329:G:H2'	1:2:330:G:C8	2.44	0.52
1:2:625:C:H2'	1:2:626:U:C6	2.45	0.52
1:2:1294:G:O2'	1:2:1321:A:N1	2.43	0.52
3:S1:147:ALA:O	3:S1:148:ASN:HB3	2.08	0.52
7:S5:189:THR:OG1	27:D5:98:GLN:OE1	2.21	0.52
13:C1:75:VAL:HG13	13:C1:76:VAL:N	2.24	0.52
19:C7:26:LEU:HD22	19:C7:59:LYS:HA	1.91	0.52
22:D0:20:ILE:HD13	22:D0:22:ILE:HB	1.91	0.52
23:D1:40:ASP:HB3	23:D1:46:ILE:HD11	1.91	0.52
32:E0:3:LYS:NZ	32:E0:3:LYS:HB3	2.25	0.52
36:1:535:G:O2'	36:1:554:A:N1	2.40	0.52
36:1:2284:C:H3'	36:1:2285:C:C6	2.45	0.52
37:3:45:A:H5'	42:L5:154:THR:HG21	1.92	0.52
45:L8:78:PHE:C	45:L8:80:TYR:H	2.18	0.52
56:N0:151:PRO:C	56:N0:153:PRO:HD3	2.35	0.52
1:6:74:U:H5''	1:6:75:U:OP2	2.10	0.52
1:6:230:C:N3	1:6:235:G:N2	2.48	0.52
1:6:397:A:H5''	10:s8:51:GLY:N	2.24	0.52
1:6:887:A:H2'	1:6:888:U:C6	2.45	0.52
2:s0:142:PRO:HG3	23:d1:32:VAL:HG22	1.92	0.52
7:s5:163:SER:HB3	30:d8:46:GLY:HA3	1.92	0.52
28:d6:12:LYS:NZ	28:d6:12:LYS:HB3	2.25	0.52
36:5:112:U:O2'	36:5:113:C:OP2	2.27	0.52
36:5:612:U:H2'	36:5:613:G:C8	2.44	0.52
36:5:1014:U:H3	36:5:1036:A:H61	1.58	0.52
36:5:3027:A:H2'	36:5:3028:G:O4'	2.09	0.52
36:5:3178:A:C2	52:m6:115:LYS:HD3	2.45	0.52
36:5:3369:G:C6	40:l3:380:MET:HE3	2.45	0.52
46:l9:113:GLU:OE1	46:l9:115:ARG:NH2	2.41	0.52
1:2:1228:G:N1	14:C2:67:THR:HB	2.23	0.52
1:2:1229:G:H1	14:C2:47:GLU:HG3	1.75	0.52
6:S4:206:ASP:HB2	6:S4:222:LEU:HD12	1.91	0.52
6:S4:230:GLU:HB2	6:S4:233:LYS:HB2	1.92	0.52
26:D4:19:ALA:HB1	26:D4:81:GLU:HG2	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D7:15:GLU:OE2	29:D7:24:LEU:N	2.42	0.52
34:SR:121:MET:HE2	34:SR:133:VAL:HG11	1.91	0.52
36:1:171:G:H2'	36:1:172:G:O4'	2.08	0.52
36:1:1608:C:H2'	36:1:1609:C:H6	1.74	0.52
46:L9:9:GLN:HG2	46:L9:52:LEU:HD21	1.92	0.52
46:L9:156:GLN:NE2	46:L9:160:ASP:OD1	2.42	0.52
1:6:66:U:H4'	1:6:67:A:OP1	2.10	0.52
1:6:152:U:O2	1:6:163:G:N2	2.43	0.52
1:6:499:U:O2	1:6:500:C:N4	2.43	0.52
1:6:542:A:OP1	1:6:542:A:H2'	2.09	0.52
1:6:1202:A:OP1	89:6:2126:OHX:N2	2.42	0.52
2:s0:63:ILE:HD13	23:d1:34:ILE:HG21	1.92	0.52
2:s0:175:TYR:OH	2:s0:197:ILE:O	2.19	0.52
6:s4:160:VAL:HG13	6:s4:169:ILE:HG23	1.91	0.52
10:s8:57:ALA:HB2	10:s8:177:GLY:HA2	1.91	0.52
36:5:1077:U:OP1	65:n9:38:LYS:NZ	2.43	0.52
36:5:1750:A:OP2	74:o8:28:ASN:ND2	2.41	0.52
40:l3:50:LYS:HA	40:l3:79:VAL:HG23	1.90	0.52
42:l5:95:TRP:CH2	42:l5:181:PRO:HD3	2.45	0.52
45:l8:161:GLU:OE2	51:m5:26:ARG:NH2	2.36	0.52
50:m4:113:THR:HG22	50:m4:116:GLU:H	1.74	0.52
54:m8:96:PHE:CD2	54:m8:97:PRO:HD2	2.45	0.52
1:2:66:U:H5	8:S6:173:PRO:HG3	1.74	0.52
1:2:482:U:H2'	1:2:483:A:H8	1.75	0.52
1:2:542:A:H2'	1:2:543:C:H5'	1.92	0.52
1:2:1530:C:OP1	27:D5:95:HIS:HB3	2.10	0.52
2:S0:90:ALA:HA	2:S0:95:ALA:HB3	1.91	0.52
3:S1:104:ASP:OD1	3:S1:214:LYS:HD3	2.10	0.52
17:C5:18:ARG:HG2	20:C8:92:ILE:HA	1.92	0.52
21:C9:61:VAL:O	21:C9:65:ILE:HG13	2.10	0.52
34:SR:192:PHE:HD1	34:SR:223:TRP:CE3	2.28	0.52
36:1:1508:C:C6	36:1:1880:U:H1'	2.45	0.52
36:1:1951:C:N4	36:1:2095:G:H1	1.99	0.52
89:1:3985:OHX:N6	78:Q2:48:SER:O	2.43	0.52
40:L3:116:ARG:HH22	40:L3:174:LYS:HD3	1.74	0.52
42:L5:143:LYS:HG3	42:L5:172:TYR:HD2	1.75	0.52
43:L6:56:LYS:HD2	43:L6:98:VAL:HG13	1.92	0.52
45:L8:246:MET:HA	45:L8:249:ARG:HB3	1.92	0.52
56:N0:40:ARG:O	56:N0:43:TYR:HB3	2.10	0.52
56:N0:92:LYS:NZ	56:N0:109:ASP:OD2	2.43	0.52
68:O2:97:ALA:HB3	68:O2:100:ILE:CG1	2.38	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:366:A:H2'	1:6:367:A:C8	2.45	0.52
1:6:432:G:H2'	1:6:433:C:O4'	2.10	0.52
1:6:924:A:H2'	1:6:925:G:C8	2.45	0.52
1:6:1079:U:H2'	1:6:1080:U:O4'	2.10	0.52
2:s0:119:ARG:NH1	4:s2:241:ASP:OD2	2.43	0.52
9:s7:56:LYS:HB2	9:s7:88:ARG:HH11	1.75	0.52
80:c0:34:GLU:O	80:c0:35:ILE:HB	2.10	0.52
21:c9:53:TRP:HH2	21:c9:100:ILE:HD13	1.75	0.52
23:d1:32:VAL:HB	23:d1:60:ARG:HD2	1.92	0.52
82:e1:78:LYS:O	82:e1:80:ARG:N	2.38	0.52
36:5:860:G:C5	39:12:181:LYS:HB3	2.45	0.52
36:5:1536:G:N7	89:5:3924:OHX:N2	2.58	0.52
36:5:1728:G:H4'	36:5:1729:A:H5''	1.92	0.52
36:5:2970:C:H4'	36:5:2971:A:N1	2.25	0.52
41:l4:205:PRO:HB3	41:l4:247:PHE:CD2	2.45	0.52
53:m7:125:GLN:HB2	53:m7:141:SER:OG	2.10	0.52
63:n7:25:ILE:HG23	63:n7:41:ALA:HB1	1.92	0.52
65:n9:5:LYS:HG3	65:n9:6:ASN:N	2.25	0.52
1:2:186:C:H3'	1:2:187:G:H8	1.75	0.51
1:2:1623:C:H2'	1:2:1624:C:H6	1.75	0.51
1:2:1772:C:H3'	77:Q1:2:ARG:NH1	2.26	0.51
1:2:1795:U:OP2	28:D6:5:ARG:NH2	2.41	0.51
2:S0:73:VAL:O	2:S0:95:ALA:HA	2.10	0.51
2:S0:198:MET:SD	19:C7:85:VAL:HG11	2.50	0.51
5:S3:116:ARG:O	5:S3:120:TYR:HB2	2.09	0.51
5:S3:150:MET:HE3	35:SM:110:TRP:HE3	1.75	0.51
21:C9:23:GLN:HG2	21:C9:55:TYR:CD1	2.45	0.51
28:D6:87:ARG:HB3	28:D6:91:ASP:HB2	1.92	0.51
36:1:103:G:OP1	49:M3:70:ARG:NH2	2.33	0.51
36:1:108:A:O2'	36:1:109:A:H2'	2.10	0.51
36:1:190:U:H2'	62:N6:60:ARG:HH22	1.75	0.51
36:1:1278:A:HO2'	36:1:1279:C:H6	1.52	0.51
36:1:3035:A:OP2	89:1:4087:OHX:N4	2.44	0.51
36:1:3203:U:H2'	36:1:3204:C:C6	2.46	0.51
36:1:3275:U:H5''	69:O3:68:TRP:HZ2	1.74	0.51
41:L4:16:THR:HG22	41:L4:18:ASN:H	1.75	0.51
41:L4:205:PRO:HB3	41:L4:247:PHE:CD2	2.46	0.51
42:L5:58:LYS:HA	42:L5:93:THR:HB	1.91	0.51
42:L5:227:LEU:O	42:L5:229:ASP:N	2.43	0.51
46:L9:84:LYS:O	46:L9:187:ILE:HB	2.11	0.51
56:N0:155:ARG:HG2	56:N0:155:ARG:NH2	2.16	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:85:ASP:OD1	64:N8:86:LYS:N	2.43	0.51
1:6:565:C:H4'	1:6:566:C:O5'	2.09	0.51
1:6:1459:C:OP2	20:c8:138:THR:OG1	2.18	0.51
1:6:1660:A:H2'	1:6:1661:U:C6	2.45	0.51
6:s4:106:LYS:HG3	6:s4:108:ARG:NH1	2.25	0.51
8:s6:67:VAL:O	8:s6:68:LEU:HB2	2.09	0.51
13:c1:132:SER:O	13:c1:132:SER:OG	2.23	0.51
16:c4:84:ARG:HB2	16:c4:118:VAL:HG23	1.91	0.51
18:c6:49:TYR:HB3	18:c6:53:LEU:HD21	1.92	0.51
18:c6:109:PHE:O	18:c6:112:TYR:N	2.44	0.51
34:sR:16:HIS:ND1	34:sR:39:ASP:OD2	2.44	0.51
36:5:595:G:C8	36:5:609:G:C6	2.98	0.51
36:5:1481:A:H61	70:o4:2:ALA:HB1	1.74	0.51
36:5:2225:U:H2'	36:5:2226:U:H6	1.75	0.51
36:5:2964:G:N7	89:5:3984:OHX:N6	2.58	0.51
36:5:3292:A:H4'	40:l3:132:LYS:NZ	2.25	0.51
44:l7:178:ILE:HA	44:l7:183:ASP:HB3	1.90	0.51
46:l9:94:TYR:CD2	46:l9:98:PRO:HA	2.44	0.51
52:m6:15:LEU:HD21	52:m6:125:ARG:HG3	1.91	0.51
69:o3:69:GLY:HA3	69:o3:85:PHE:HA	1.92	0.51
71:o5:67:ARG:HG3	71:o5:80:LEU:HD22	1.91	0.51
74:o8:18:ALA:C	74:o8:20:VAL:H	2.18	0.51
1:2:1062:A:H2'	1:2:1063:U:O4'	2.10	0.51
1:2:1662:G:C2'	1:2:1663:G:H5'	2.40	0.51
4:S2:80:VAL:O	4:S2:102:VAL:HA	2.11	0.51
11:S9:113:VAL:HG21	11:S9:134:ILE:HD12	1.93	0.51
19:C7:29:GLN:HG2	34:SR:67:ILE:HD11	1.93	0.51
22:D0:65:ILE:HD11	31:D9:36:LEU:HD21	1.92	0.51
27:D5:60:VAL:HA	27:D5:64:VAL:HG11	1.91	0.51
36:1:976:U:H5'	54:M8:144:ARG:HH12	1.74	0.51
36:1:3087:A:H5''	40:L3:365:PHE:CD1	2.45	0.51
36:1:3267:A:H2'	43:L6:69:PHE:CZ	2.45	0.51
44:L7:223:PHE:HA	44:L7:227:GLY:O	2.11	0.51
49:M3:104:ARG:HA	72:O6:20:MET:HB2	1.93	0.51
60:N4:38:SER:O	60:N4:42:GLN:HB2	2.09	0.51
1:6:773:C:OP1	6:s4:21:ASP:HB2	2.10	0.51
1:6:1316:G:O2'	1:6:1401:A:O2'	2.28	0.51
1:6:1699:G:N2	1:6:1702:A:O4'	2.44	0.51
80:c0:31:LYS:H	80:c0:38:LYS:HA	1.75	0.51
16:c4:11:SER:OG	16:c4:12:GLN:N	2.39	0.51
19:c7:87:GLU:O	19:c7:88:VAL:HB	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:sM:43:ASP:OD1	35:sM:45:SER:OG	2.29	0.51
36:5:78:U:O2'	36:5:79:U:H5'	2.10	0.51
36:5:860:G:OP1	79:q3:17:ARG:NH1	2.43	0.51
36:5:1307:G:C2	36:5:1308:A:C2	2.98	0.51
36:5:1560:G:O2'	36:5:1561:G:OP1	2.28	0.51
36:5:2157:G:N2	36:5:2177:G:O2'	2.44	0.51
36:5:2434:U:H4'	36:5:2435:G:O5'	2.09	0.51
36:5:3315:G:H2'	40:l3:123:TYR:CD1	2.45	0.51
40:l3:169:THR:HG23	40:l3:171:LEU:H	1.76	0.51
47:m0:156:ARG:NH1	47:m0:163:GLN:O	2.43	0.51
49:m3:2:ALA:N	64:n8:31:GLY:O	2.42	0.51
49:m3:50:PRO:HB3	49:m3:138:VAL:O	2.11	0.51
62:n6:56:VAL:HG21	62:n6:104:LEU:HD13	1.91	0.51
1:2:868:G:O6	89:2:2032:OHX:N6	2.43	0.51
20:C8:6:GLN:HA	27:D5:42:LEU:HD13	1.92	0.51
23:D1:74:GLN:HB2	23:D1:79:LEU:HB2	1.91	0.51
25:D3:59:ILE:HG13	25:D3:71:CYS:SG	2.50	0.51
28:D6:35:ALA:HB3	28:D6:37:LYS:HE2	1.91	0.51
36:1:412:G:OP1	53:M7:62:ARG:NH1	2.43	0.51
36:1:1445:U:H5''	36:1:1446:A:OP2	2.10	0.51
36:1:2986:U:H2'	36:1:2987:A:C8	2.45	0.51
36:1:3043:C:P	59:N3:48:ARG:HH22	2.33	0.51
45:L8:74:THR:HB	45:L8:230:LYS:NZ	2.25	0.51
48:M1:109:HIS:CD2	48:M1:114:ILE:HG21	2.45	0.51
73:O7:28:HIS:CG	73:O7:31:LYS:HB2	2.45	0.51
1:6:139:C:H4'	1:6:140:A:O5'	2.09	0.51
3:s1:141:ALA:HB1	3:s1:207:LEU:HD22	1.92	0.51
5:s3:70:THR:HG22	5:s3:86:LEU:HB2	1.93	0.51
7:s5:222:LYS:HA	7:s5:225:ARG:NH1	2.25	0.51
9:s7:22:GLN:HA	9:s7:25:VAL:HG23	1.93	0.51
14:c2:36:LEU:HD12	14:c2:41:LEU:HD12	1.92	0.51
16:c4:88:GLY:O	16:c4:92:LYS:NZ	2.43	0.51
20:c8:13:HIS:O	20:c8:14:ILE:HG22	2.11	0.51
26:d4:51:GLU:O	26:d4:53:ASP:N	2.44	0.51
36:5:538:G:H8	36:5:538:G:O5'	1.93	0.51
36:5:1765:U:H4'	36:5:1765:U:OP1	2.09	0.51
89:5:3923:OHX:N4	51:m5:91:GLU:OE1	2.43	0.51
38:8:15:G:C6	38:8:16:G:C6	2.99	0.51
42:l5:85:ARG:HH12	42:l5:254:LYS:H	1.58	0.51
76:q0:77:ILE:HG23	76:q0:78:ILE:HG22	1.92	0.51
1:2:484:C:H42	1:2:503:G:H22	1.57	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:843:U:H2'	1:2:844:A:C8	2.45	0.51
5:S3:27:ARG:HE	12:C0:60:SER:HB2	1.76	0.51
12:C0:61:TRP:HZ3	31:D9:22:ARG:HD2	1.75	0.51
36:1:3325:G:H5'	67:O1:104:LEU:O	2.10	0.51
38:4:85:G:H3'	38:4:85:G:H8	1.75	0.51
39:L2:68:LYS:HD3	39:L2:70:ARG:HH21	1.74	0.51
41:L4:33:ASP:O	41:L4:37:THR:HG23	2.10	0.51
41:L4:232:SER:O	41:L4:233:LEU:HB2	2.09	0.51
43:L6:80:ASN:O	43:L6:82:ARG:N	2.43	0.51
44:L7:121:LYS:HB2	57:N1:133:ALA:HB3	1.92	0.51
73:O7:88:ALA:O	89:O7:103:OHX:N4	2.44	0.51
1:6:189:C:C2'	1:6:190:C:H5'	2.41	0.51
1:6:341:A:H2'	1:6:342:C:C6	2.45	0.51
1:6:534:A:H5'	1:6:535:A:OP2	2.10	0.51
1:6:825:U:O2'	1:6:826:U:OP2	2.25	0.51
1:6:1258:U:H5	1:6:1259:U:C2	2.29	0.51
1:6:1420:C:O2'	5:s3:160:SER:O	2.19	0.51
2:s0:78:SER:OG	2:s0:129:ASP:OD1	2.27	0.51
2:s0:169:SER:O	2:s0:173:ILE:HG12	2.11	0.51
5:s3:76:ARG:HG3	5:s3:77:PHE:CD1	2.45	0.51
9:s7:98:ILE:HD13	9:s7:118:LEU:HA	1.91	0.51
15:c3:89:TYR:OH	15:c3:93:LYS:NZ	2.44	0.51
18:c6:107:LYS:HA	18:c6:110:THR:HG22	1.93	0.51
20:c8:72:ILE:HG12	20:c8:79:TYR:CD2	2.46	0.51
25:d3:73:ARG:HH21	25:d3:84:THR:HG22	1.76	0.51
30:d8:44:VAL:HG21	30:d8:48:VAL:HG23	1.93	0.51
34:sR:200:ASN:N	34:sR:214:ALA:O	2.42	0.51
36:5:243:G:O2'	36:5:244:G:H5'	2.10	0.51
36:5:2369:G:H2'	36:5:2370:G:C8	2.46	0.51
36:5:2741:C:O2'	78:q2:20:HIS:ND1	2.31	0.51
38:8:62:C:OP1	71:o5:49:LYS:NZ	2.43	0.51
40:l3:187:SER:O	40:l3:190:GLU:N	2.44	0.51
41:l4:304:GLN:O	41:l4:306:THR:N	2.37	0.51
44:l7:85:PHE:O	44:l7:136:TYR:HB2	2.10	0.51
53:m7:24:VAL:HB	53:m7:29:THR:HG21	1.92	0.51
63:n7:124:ALA:O	63:n7:126:LYS:N	2.43	0.51
64:n8:82:ILE:HD13	64:n8:102:ILE:HG12	1.92	0.51
1:2:569:C:H41	25:D3:69:ARG:NH1	2.06	0.51
1:2:1002:G:N1	1:2:1761:U:OP1	2.35	0.51
1:2:1119:G:O6	89:2:2148:OHX:N1	2.43	0.51
2:S0:126:PRO:HG2	2:S0:151:SER:HB3	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:211:PRO:HG2	19:C7:19:ARG:HB2	1.93	0.51
10:S8:37:LYS:H	10:S8:59:ARG:H	1.58	0.51
21:C9:108:LEU:HA	21:C9:111:ILE:HG22	1.91	0.51
31:D9:39:CYS:SG	31:D9:42:CYS:HB2	2.51	0.51
36:1:1019:G:O6	89:1:4071:OHX:N1	2.43	0.51
36:1:1194:G:H2'	36:1:1195:A:C8	2.46	0.51
36:1:1804:A:H2'	36:1:1805:C:C6	2.45	0.51
36:1:2284:C:N4	36:1:2308:C:OP2	2.43	0.51
36:1:3108:G:N3	46:L9:163:GLN:NE2	2.55	0.51
39:L2:187:HIS:ND1	39:L2:190:ARG:NH2	2.59	0.51
43:L6:43:LEU:HD11	43:L6:85:ILE:HG13	1.93	0.51
55:M9:78:TYR:HA	55:M9:81:ARG:HD3	1.93	0.51
73:O7:14:LYS:NZ	75:O9:51:ILE:HD11	2.26	0.51
78:Q2:3:ASN:HA	78:Q2:92:GLU:O	2.11	0.51
1:6:604:A:OP2	89:6:2147:OHX:N4	2.44	0.51
2:s0:90:ALA:HA	2:s0:95:ALA:HB3	1.92	0.51
5:s3:70:THR:CG2	5:s3:86:LEU:HB2	2.40	0.51
19:c7:50:ILE:O	19:c7:53:TYR:N	2.42	0.51
24:d2:37:PHE:HD1	24:d2:41:MET:HE2	1.74	0.51
36:5:201:A:OP2	89:5:3989:OHX:N1	2.44	0.51
36:5:591:G:N2	43:l6:18:LEU:HB3	2.24	0.51
36:5:1051:U:H4'	57:n1:19:PHE:CD2	2.46	0.51
36:5:1233:G:H5'	84:p0:36:GLN:OE1	2.10	0.51
36:5:1414:G:O6	89:5:4150:OHX:N1	2.44	0.51
36:5:3343:G:N2	36:5:3362:A:H2	2.03	0.51
36:5:3353:G:O2'	36:5:3356:G:OP2	2.28	0.51
37:7:64:A:H5'	37:7:65:G:H5''	1.93	0.51
39:l2:179:LEU:O	39:l2:184:ARG:HD2	2.10	0.51
44:l7:77:VAL:HG21	57:n1:139:ARG:HD3	1.91	0.51
44:l7:103:LEU:HA	44:l7:130:ILE:HD11	1.92	0.51
47:m0:29:SER:OG	47:m0:31:ILE:O	2.28	0.51
63:n7:36:HIS:H	63:n7:37:PRO:HD3	1.75	0.51
67:o1:72:ARG:HD3	67:o1:104:LEU:HD13	1.93	0.51
78:q2:28:TYR:HB3	78:q2:69:VAL:HB	1.92	0.51
1:2:176:C:OP1	89:2:2073:OHX:N3	2.43	0.51
3:S1:70:LEU:HB2	3:S1:73:LEU:HD23	1.93	0.51
6:S4:194:THR:O	6:S4:195:ILE:HB	2.10	0.51
19:C7:50:ILE:O	19:C7:54:THR:HG23	2.10	0.51
26:D4:62:THR:HB	26:D4:69:SER:OG	2.11	0.51
34:SR:69:GLN:N	34:SR:83:ALA:O	2.38	0.51
36:1:129:U:H2'	36:1:130:A:C8	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2137:U:C6	36:1:2141:U:C4	2.99	0.51
36:1:2616:C:H2'	36:1:2617:U:H5'	1.93	0.51
36:1:2986:U:H2'	36:1:2987:A:H8	1.73	0.51
45:L8:134:TYR:CG	45:L8:190:VAL:HG21	2.45	0.51
48:M1:89:TYR:HB3	48:M1:169:ALA:CB	2.41	0.51
5:s3:167:PHE:CE1	5:s3:192:PRO:HB3	2.45	0.51
7:s5:65:ARG:HA	7:s5:65:ARG:HE	1.75	0.51
7:s5:161:ASP:OD2	30:d8:42:ARG:NH1	2.43	0.51
15:c3:33:VAL:HG11	15:c3:66:ILE:HD11	1.92	0.51
31:d9:19:ARG:HD2	31:d9:19:ARG:H	1.76	0.51
36:5:138:U:H2'	36:5:139:G:C8	2.45	0.51
36:5:1643:A:H4'	36:5:1822:C:H5'	1.92	0.51
36:5:1770:G:H5'	36:5:1771:C:OP2	2.11	0.51
36:5:2549:G:N7	45:l8:35:GLY:HA2	2.25	0.51
39:l2:140:ASN:OD1	39:l2:142:ASP:HB3	2.10	0.51
47:m0:16:PRO:HG3	47:m0:128:ARG:NH1	2.25	0.51
48:m1:37:LEU:HD13	48:m1:69:VAL:HG12	1.93	0.51
52:m6:51:LYS:HD2	52:m6:144:SER:OG	2.10	0.51
53:m7:141:SER:O	53:m7:143:PRO:HD3	2.10	0.51
70:o4:81:CYS:SG	70:o4:84:CYS:SG	3.09	0.51
73:o7:25:ARG:HB3	73:o7:25:ARG:HH11	1.76	0.51
1:2:778:G:H22	26:D4:10:ARG:NH2	2.08	0.51
1:2:1196:A:H4'	1:2:1197:C:O5'	2.11	0.51
5:S3:140:GLY:HA3	5:S3:182:LEU:HB3	1.93	0.51
6:S4:95:THR:O	6:S4:97:GLU:N	2.44	0.51
6:S4:192:ILE:HG13	6:S4:243:GLY:HA3	1.92	0.51
6:S4:241:GLY:O	6:S4:244:ILE:HG12	2.10	0.51
15:C3:127:ARG:HG2	15:C3:127:ARG:HH11	1.75	0.51
18:C6:40:GLU:HG3	18:C6:42:GLU:N	2.25	0.51
36:1:1215:U:C2'	36:1:1216:C:H5''	2.39	0.51
45:L8:93:LEU:O	45:L8:95:ASN:N	2.44	0.51
47:M0:138:VAL:CG2	47:M0:152:LEU:HD11	2.41	0.51
47:M0:169:LYS:NZ	57:N1:158:THR:OG1	2.43	0.51
70:O4:22:VAL:HG12	70:O4:23:VAL:H	1.75	0.51
1:6:678:A:N7	1:6:679:U:N3	2.59	0.51
2:s0:64:ILE:HG23	2:s0:73:VAL:HG11	1.93	0.51
4:s2:68:ILE:O	4:s2:72:LEU:HB2	2.11	0.51
4:s2:227:PRO:HA	4:s2:230:TRP:CD1	2.45	0.51
7:s5:68:ILE:HD13	7:s5:69:PHE:N	2.26	0.51
13:c1:53:TYR:CD1	13:c1:113:PRO:HG2	2.46	0.51
17:c5:79:HIS:O	17:c5:81:ARG:N	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:c7:57:LEU:O	19:c7:61:ILE:N	2.44	0.51
21:c9:42:GLY:HA2	21:c9:84:LYS:HB2	1.93	0.51
36:5:77:A:N7	49:m3:73:ARG:NH2	2.58	0.51
36:5:1340:G:H2'	36:5:1341:U:C6	2.46	0.51
36:5:2103:U:OP1	55:m9:88:ARG:NH1	2.43	0.51
36:5:2746:A:H2'	36:5:2747:A:O4'	2.11	0.51
36:5:2985:C:H2'	36:5:2986:U:C6	2.46	0.51
46:l9:117:PHE:CE2	46:l9:118:LEU:HD12	2.45	0.51
46:l9:166:ARG:HH21	46:l9:168:ARG:NH1	2.08	0.51
60:n4:103:ALA:O	60:n4:107:GLU:HB2	2.10	0.51
63:n7:34:LYS:O	63:n7:37:PRO:HG3	2.11	0.51
79:q3:56:THR:HB	79:q3:63:THR:HG23	1.92	0.51
1:2:530:C:C2'	1:2:531:C:H5'	2.41	0.51
1:2:712:G:H2'	1:2:713:A:O4'	2.10	0.51
1:2:1057:U:O2'	1:2:1058:U:OP2	2.23	0.51
1:2:1239:U:O2	1:2:1246:C:N4	2.43	0.51
1:2:1349:G:H2'	1:2:1350:U:C6	2.46	0.51
2:S0:157:ASP:OD2	23:D1:60:ARG:NH2	2.43	0.51
3:S1:133:TYR:CG	3:S1:181:LEU:HD11	2.46	0.51
3:S1:175:GLU:HG3	3:S1:193:ILE:HG23	1.92	0.51
8:S6:64:LYS:O	8:S6:67:VAL:HG22	2.10	0.51
36:1:121:A:C2	45:L8:129:PRO:HB3	2.45	0.51
36:1:268:A:C4	51:M5:12:ARG:HG2	2.45	0.51
36:1:352:A:H61	36:1:365:A:H5''	1.76	0.51
36:1:595:G:H1	36:1:609:G:H5''	1.76	0.51
36:1:2303:A:P	77:Q1:23:ARG:HH22	2.33	0.51
36:1:2726:C:O2'	36:1:2727:A:H2'	2.11	0.51
36:1:3316:A:OP1	36:1:3318:G:N2	2.44	0.51
36:1:3353:G:O2'	36:1:3354:U:OP1	2.28	0.51
48:M1:155:THR:OG1	48:M1:156:LYS:N	2.43	0.51
50:M4:118:PHE:O	50:M4:122:VAL:HG23	2.11	0.51
56:N0:13:ARG:O	56:N0:22:PRO:HG2	2.11	0.51
62:N6:56:VAL:HG21	62:N6:104:LEU:HD13	1.93	0.51
1:6:9:U:O4	89:6:2142:OHX:N3	2.43	0.51
1:6:75:U:O2'	1:6:76:A:O4'	2.29	0.51
1:6:647:G:H22	1:6:687:G:N2	2.09	0.51
1:6:1756:A:O5'	1:6:1756:A:C8	2.62	0.51
1:6:1769:U:OP2	89:6:2140:OHX:N2	2.44	0.51
18:c6:95:LYS:HG2	18:c6:96:TYR:CE1	2.45	0.51
24:d2:89:TRP:O	24:d2:93:LEU:HB2	2.11	0.51
81:e0:62:VAL:HG23	81:e0:63:GLN:H	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:sR:309:VAL:HB	34:sR:311:ARG:NH1	2.26	0.51
36:5:634:C:O2'	68:o2:47:ARG:HD3	2.11	0.51
36:5:1240:A:H2'	36:5:1241:U:H5'	1.93	0.51
36:5:2927:C:H2'	36:5:2928:C:C6	2.46	0.51
38:8:78:G:H2'	38:8:79:A:O4'	2.10	0.51
40:l3:308:MET:HE2	40:l3:372:THR:C	2.35	0.51
56:n0:137:ARG:HG2	56:n0:139:TYR:CE1	2.45	0.51
60:n4:112:ASN:HA	60:n4:115:LYS:HG3	1.92	0.51
1:2:324:U:OP1	13:C1:133:LYS:NZ	2.36	0.51
1:2:623:A:OP1	89:2:2157:OHX:N2	2.44	0.51
1:2:717:C:N4	1:2:720:G:H22	2.09	0.51
1:2:850:A:H5'	55:M9:165:LYS:HD3	1.92	0.51
1:2:868:G:H1	1:2:960:U:H3	1.57	0.51
1:2:1001:A:C6	1:2:1002:G:C6	2.99	0.51
1:2:1114:G:O6	89:2:2074:OHX:N5	2.44	0.51
1:2:1291:G:H22	1:2:1324:G:N2	2.08	0.51
1:2:1584:G:C8	18:C6:122:ARG:HB3	2.46	0.51
1:2:1592:A:H2'	1:2:1593:A:H8	1.76	0.51
10:S8:188:GLU:HG3	10:S8:192:TYR:HE2	1.75	0.51
24:D2:24:GLN:OE1	29:D7:4:VAL:HA	2.10	0.51
34:SR:83:ALA:HB1	34:SR:110:VAL:HG12	1.93	0.51
36:1:864:G:OP2	89:1:3891:OHX:N5	2.44	0.51
36:1:1009:A:O3'	47:M0:39:LYS:NZ	2.44	0.51
36:1:1051:U:H4'	57:N1:19:PHE:CE2	2.45	0.51
36:1:1230:G:H1	36:1:1279:C:N4	2.04	0.51
36:1:1240:A:H2	36:1:1248:C:H41	1.57	0.51
36:1:1877:U:H5''	36:1:1878:G:O4'	2.11	0.51
36:1:1884:A:H5''	36:1:1884:A:H8	1.75	0.51
39:L2:59:ALA:HB2	39:L2:78:ALA:HB2	1.93	0.51
40:L3:199:PHE:C	40:L3:201:LYS:H	2.19	0.51
41:L4:82:THR:C	41:L4:84:ARG:H	2.18	0.51
41:L4:311:HIS:CE1	41:L4:314:LYS:HA	2.46	0.51
44:L7:144:ILE:HD12	44:L7:189:ILE:HD12	1.93	0.51
61:N5:135:ILE:O	61:N5:139:ILE:HG22	2.10	0.51
69:O3:31:LYS:NZ	69:O3:35:VAL:O	2.39	0.51
1:6:209:U:H2'	1:6:210:A:C8	2.44	0.51
1:6:513:U:H2'	1:6:514:G:C8	2.46	0.51
1:6:654:C:H2'	1:6:655:G:C8	2.46	0.51
1:6:1316:G:OP1	19:c7:7:LYS:HB3	2.11	0.51
1:6:1324:G:N7	89:6:2101:OHX:N2	2.59	0.51
2:s0:147:THR:O	2:s0:161:PRO:HA	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:48:VAL:HG21	3:s1:61:LEU:HD22	1.91	0.51
6:s4:15:PRO:HG2	6:s4:18:TRP:CE2	2.46	0.51
10:s8:76:THR:HG21	10:s8:105:ASP:O	2.10	0.51
36:5:1915:A:H2'	36:5:1916:U:C6	2.46	0.51
36:5:2279:A:H2'	36:5:2288:G:O6	2.10	0.51
36:5:3279:A:H2'	36:5:3280:U:H5'	1.92	0.51
41:l4:230:VAL:O	41:l4:232:SER:N	2.44	0.51
42:l5:178:ASN:HA	42:l5:183:TRP:CG	2.46	0.51
43:l6:51:ARG:NH1	50:m4:114:ASP:OD2	2.44	0.51
45:l8:133:LYS:HB2	45:l8:199:ALA:O	2.11	0.51
60:n4:129:LYS:O	60:n4:133:THR:HG22	2.11	0.51
67:o1:55:LEU:HD23	67:o1:95:PRO:HB3	1.91	0.51
1:2:83:G:OP2	89:2:2066:OHX:N5	2.44	0.51
1:2:1055:U:H3	1:2:1064:G:H1	1.57	0.51
1:2:1785:U:OP2	16:C4:133:ARG:NH2	2.44	0.51
9:S7:35:LYS:HG2	9:S7:36:ALA:H	1.75	0.51
17:C5:30:THR:O	17:C5:34:VAL:HG12	2.11	0.51
25:D3:48:HIS:CD2	25:D3:105:ALA:HB2	2.45	0.51
30:D8:15:VAL:O	30:D8:17:GLY:N	2.39	0.51
36:1:706:A:H4'	36:1:781:G:O2'	2.11	0.51
36:1:1039:U:H2'	36:1:1040:A:C8	2.45	0.51
36:1:1166:G:N7	89:1:3873:OHX:N4	2.59	0.51
36:1:1170:A:OP2	89:1:3968:OHX:N5	2.44	0.51
36:1:1348:U:OP2	54:M8:38:ARG:NH2	2.43	0.51
36:1:2213:A:H2'	36:1:2214:A:C8	2.46	0.51
41:L4:56:ALA:C	41:L4:58:HIS:H	2.17	0.51
45:L8:107:GLU:O	45:L8:111:LYS:HG2	2.11	0.51
52:M6:175:THR:HA	52:M6:178:VAL:HB	1.93	0.51
54:M8:73:GLN:HB3	54:M8:76:ALA:HB2	1.92	0.51
57:N1:82:ASN:OD1	57:N1:82:ASN:N	2.39	0.51
66:O0:25:LEU:HD22	66:O0:87:VAL:HG21	1.93	0.51
1:6:16:G:H2'	1:6:17:C:C6	2.46	0.51
1:6:96:G:H22	1:6:387:A:H2	1.58	0.51
1:6:542:A:N1	81:e0:28:LYS:HD3	2.26	0.51
1:6:1595:U:N3	1:6:1600:A:H2	2.09	0.51
3:s1:185:THR:HG22	3:s1:189:ILE:HD11	1.93	0.51
7:s5:20:PHE:CE1	7:s5:34:GLN:HB3	2.45	0.51
7:s5:140:THR:HG22	7:s5:211:ILE:HG12	1.93	0.51
25:d3:100:ASP:O	25:d3:101:GLU:HB3	2.11	0.51
27:d5:66:VAL:HA	27:d5:71:ILE:HG22	1.92	0.51
29:d7:31:TYR:CD2	29:d7:81:ARG:HG3	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:568:G:N7	89:5:3941:OHX:N6	2.59	0.51
36:5:748:U:H2'	36:5:749:C:C6	2.46	0.51
36:5:3091:A:N3	36:5:3093:C:O2'	2.42	0.51
36:5:3287:U:H2'	36:5:3288:G:H5'	1.92	0.51
36:5:3308:C:OP2	36:5:3309:G:N2	2.44	0.51
41:l4:302:ALA:HB2	54:m8:39:ARG:NH1	2.25	0.51
50:m4:36:VAL:HG11	50:m4:55:ARG:NH2	2.26	0.51
51:m5:102:ALA:O	51:m5:106:VAL:HG13	2.11	0.51
66:o0:28:LYS:O	66:o0:32:LYS:HD3	2.11	0.51
9:S7:46:ILE:HD11	9:S7:60:ILE:HG12	1.93	0.50
11:S9:89:ASP:HB2	11:S9:90:LYS:HE2	1.94	0.50
18:C6:120:ASP:OD1	18:C6:121:SER:N	2.43	0.50
21:C9:57:ARG:CG	21:C9:57:ARG:HH11	2.25	0.50
36:1:1262:G:O6	36:1:1278:A:N6	2.43	0.50
36:1:1482:A:C2	36:1:1867:A:H5''	2.46	0.50
36:1:2688:U:OP1	42:L5:12:TYR:OH	2.29	0.50
37:3:99:G:O2'	44:L7:128:LYS:NZ	2.43	0.50
41:L4:212:ASP:OD1	41:L4:216:VAL:HG22	2.11	0.50
42:L5:236:LEU:HA	42:L5:239:ILE:HD12	1.91	0.50
44:L7:79:ALA:CB	57:N1:137:GLU:HA	2.42	0.50
52:M6:8:VAL:HG12	52:M6:117:ARG:HB3	1.93	0.50
1:6:25:C:OP2	1:6:25:C:H4'	2.11	0.50
1:6:703:G:H2'	1:6:704:C:C6	2.45	0.50
1:6:793:A:H3'	1:6:794:U:H5'	1.91	0.50
1:6:1017:U:H2'	1:6:1018:U:C6	2.47	0.50
1:6:1491:U:H5'	1:6:1492:A:OP1	2.10	0.50
1:6:1521:G:O2'	1:6:1523:G:OP2	2.26	0.50
4:s2:67:GLN:O	4:s2:71:THR:HG23	2.11	0.50
8:s6:14:LYS:HD3	8:s6:16:PHE:CZ	2.46	0.50
34:sR:33:LEU:O	34:sR:45:TRP:HD1	1.94	0.50
36:5:742:G:N7	89:5:4005:OHX:N4	2.58	0.50
36:5:2402:A:OP2	89:5:4113:OHX:N3	2.43	0.50
38:8:38:U:C4	71:o5:81:ARG:HB3	2.46	0.50
39:l2:230:VAL:H	39:l2:233:GLN:HG3	1.76	0.50
41:l4:191:LYS:HG3	41:l4:194:TYR:CZ	2.47	0.50
49:m3:75:PHE:O	49:m3:79:GLU:HB2	2.10	0.50
77:q1:4:LYS:HG2	77:q1:5:TRP:CE3	2.46	0.50
1:2:359:A:C2	25:D3:38:PHE:HB3	2.45	0.50
6:S4:147:ILE:HG21	6:S4:169:ILE:HG13	1.92	0.50
6:S4:247:SER:OG	6:S4:250:GLU:HG3	2.11	0.50
9:S7:11:GLN:HG3	9:S7:12:ALA:H	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:14:THR:HG22	9:S7:17:GLU:HB2	1.93	0.50
18:C6:83:GLN:HE22	18:C6:119:ALA:HB2	1.76	0.50
21:C9:5:SER:OG	21:C9:6:VAL:N	2.44	0.50
28:D6:12:LYS:HB2	28:D6:33:ASP:OD2	2.11	0.50
34:SR:198:ASN:O	34:SR:215:GLY:HA3	2.11	0.50
36:1:1471:U:H2'	36:1:1472:U:C6	2.46	0.50
36:1:2662:G:H2'	36:1:2663:G:C8	2.46	0.50
36:1:3315:G:OP1	40:L3:174:LYS:NZ	2.44	0.50
48:M1:92:ARG:HB2	48:M1:94:ARG:HG2	1.92	0.50
49:M3:64:LYS:HD3	49:M3:65:TYR:CE1	2.47	0.50
55:M9:172:ARG:O	55:M9:176:ARG:HG2	2.11	0.50
67:O1:72:ARG:O	67:O1:96:VAL:HG13	2.11	0.50
1:6:66:U:C5	8:s6:173:PRO:HG3	2.43	0.50
1:6:190:C:O2'	1:6:191:C:O5'	2.30	0.50
1:6:196:G:O2'	1:6:197:A:OP2	2.22	0.50
1:6:366:A:C2	1:6:376:C:C2	2.99	0.50
1:6:500:C:O2'	1:6:501:U:O4'	2.29	0.50
1:6:591:A:H2'	1:6:592:A:H8	1.76	0.50
1:6:619:A:H5'	1:6:620:A:OP2	2.12	0.50
1:6:653:C:H42	1:6:677:G:H1	1.58	0.50
1:6:1429:G:H2'	1:6:1430:U:H6	1.77	0.50
1:6:1662:G:O6	89:6:2060:OHX:N6	2.43	0.50
2:s0:7:PHE:HZ	23:d1:43:GLY:HA2	1.75	0.50
3:s1:113:MET:HE3	3:s1:209:ASN:HB3	1.94	0.50
6:s4:34:GLY:HA3	6:s4:83:PRO:CG	2.41	0.50
34:sR:14:GLU:HG2	34:sR:309:VAL:HG22	1.94	0.50
36:5:7:C:H5''	45:l8:193:LYS:HB3	1.93	0.50
36:5:599:C:H2'	36:5:600:G:O4'	2.11	0.50
36:5:1550:C:O2'	36:5:2167:A:N1	2.40	0.50
36:5:2228:A:H2'	36:5:2229:A:C8	2.46	0.50
36:5:2439:A:OP1	36:5:2439:A:H4'	2.11	0.50
36:5:3122:A:H2'	36:5:3123:A:H5'	1.93	0.50
36:5:3241:G:H2'	36:5:3245:A:C8	2.46	0.50
36:5:3267:A:H2'	43:l6:69:PHE:CZ	2.46	0.50
36:5:3308:C:N3	53:m7:69:ARG:NH1	2.59	0.50
89:8:226:OHX:N2	62:n6:114:ASP:OD1	2.44	0.50
47:m0:208:ASN:HB3	47:m0:211:ARG:NH1	2.23	0.50
48:m1:93:ASP:C	48:m1:94:ARG:O	2.54	0.50
51:m5:73:ARG:HG2	51:m5:75:VAL:HG22	1.93	0.50
67:o1:44:MET:O	67:o1:46:THR:HG22	2.10	0.50
72:o6:25:LYS:HB2	72:o6:28:TYR:CD2	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:651:G:N7	89:2:2104:OHX:N6	2.60	0.50
1:2:705:U:H2'	1:2:706:A:C8	2.46	0.50
6:S4:32:SER:HB2	6:S4:83:PRO:HD3	1.92	0.50
7:S5:42:LEU:HD21	7:S5:45:LYS:HD2	1.92	0.50
9:S7:38:LEU:N	9:S7:40:PRO:HD2	2.27	0.50
9:S7:43:PHE:CE1	9:S7:46:ILE:HG12	2.47	0.50
11:S9:174:ARG:HA	11:S9:174:ARG:HE	1.77	0.50
19:C7:20:TYR:CE1	19:C7:38:ILE:HD11	2.47	0.50
34:SR:274:LEU:HD13	34:SR:313:TRP:CD2	2.46	0.50
36:1:2371:G:O6	89:1:3880:OHX:N3	2.45	0.50
36:1:2745:G:O2'	36:1:2747:A:N7	2.40	0.50
36:1:3013:U:H2'	36:1:3014:U:C6	2.47	0.50
37:3:121:U:C2	42:L5:268:GLU:HB3	2.47	0.50
42:L5:233:ALA:O	42:L5:235:SER:N	2.44	0.50
46:L9:17:THR:HG21	50:M4:3:THR:O	2.11	0.50
52:M6:42:ASN:OD1	52:M6:125:ARG:HD3	2.12	0.50
64:N8:77:LYS:O	64:N8:79:TRP:N	2.43	0.50
1:6:492:A:H2'	1:6:493:U:H5''	1.93	0.50
1:6:788:A:H3'	6:s4:108:ARG:HH22	1.77	0.50
3:s1:229:MET:C	3:s1:231:LEU:H	2.19	0.50
9:s7:185:ILE:HG22	9:s7:186:PRO:HD3	1.92	0.50
24:d2:103:ILE:HB	24:d2:112:ASP:HA	1.94	0.50
29:d7:19:HIS:CD2	29:d7:21:LEU:N	2.79	0.50
36:5:598:A:H1'	41:l4:322:GLN:OE1	2.11	0.50
36:5:975:C:H2'	36:5:976:U:H6	1.76	0.50
36:5:1020:G:N2	36:5:1033:U:O2	2.45	0.50
36:5:1479:U:C3'	36:5:1480:G:H5'	2.41	0.50
36:5:1595:U:C2	36:5:1596:C:C5	2.99	0.50
36:5:2696:A:H2'	36:5:2697:A:C8	2.46	0.50
38:8:26:U:H2'	38:8:27:U:C6	2.47	0.50
39:l2:209:HIS:ND1	39:l2:210:PRO:HD2	2.26	0.50
40:l3:296:THR:HG22	40:l3:298:PHE:N	2.05	0.50
41:l4:23:PRO:HD2	41:l4:26:PHE:CD2	2.47	0.50
41:l4:184:SER:HB2	41:l4:202:ARG:HG2	1.94	0.50
41:l4:296:GLN:HA	41:l4:299:ILE:HD11	1.93	0.50
53:m7:4:TYR:HA	53:m7:18:ARG:HH21	1.76	0.50
55:m9:133:LYS:HB3	55:m9:134:HIS:CD2	2.47	0.50
84:p0:19:LEU:HD22	84:p0:73:PHE:CE1	2.47	0.50
1:2:208:U:H2'	1:2:209:U:C6	2.45	0.50
1:2:240:U:OP1	1:2:240:U:H4'	2.12	0.50
1:2:755:A:HO2'	1:2:756:A:P	2.35	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:11:ARG:H	6:S4:27:TYR:HA	1.76	0.50
13:C1:100:TYR:O	25:D3:10:ASN:HA	2.11	0.50
14:C2:132:GLU:HA	14:C2:135:MET:HB2	1.93	0.50
34:SR:172:ALA:HB2	34:SR:202:LEU:HD13	1.93	0.50
36:1:138:U:H2'	36:1:139:G:C8	2.46	0.50
36:1:1307:G:C2	36:1:1308:A:C2	3.00	0.50
36:1:1456:A:C6	67:O1:64:VAL:HG22	2.47	0.50
36:1:1889:G:OP1	40:L3:247:ARG:HG3	2.11	0.50
36:1:2278:C:OP1	89:1:3967:OHX:N3	2.45	0.50
38:4:104:A:C8	38:4:105:A:C8	3.00	0.50
39:L2:113:VAL:HG23	39:L2:134:VAL:HG22	1.92	0.50
39:L2:225:ILE:HG21	39:L2:234:LYS:HA	1.93	0.50
41:L4:130:ALA:O	41:L4:148:ILE:HG21	2.11	0.50
46:L9:3:TYR:HA	56:N0:142:GLN:OE1	2.12	0.50
46:L9:20:ILE:HG12	46:L9:25:VAL:HG13	1.94	0.50
46:L9:89:LYS:HD3	46:L9:183:HIS:HB3	1.94	0.50
51:M5:70:ASN:HB3	51:M5:92:LEU:O	2.11	0.50
62:N6:24:SER:OG	62:N6:75:ARG:NH1	2.45	0.50
63:N7:54:THR:OG1	63:N7:55:LYS:N	2.45	0.50
68:O2:12:LYS:HD3	68:O2:57:TYR:O	2.11	0.50
74:O8:31:LEU:HA	74:O8:37:PRO:HA	1.94	0.50
1:6:329:G:H2'	1:6:330:G:C8	2.46	0.50
1:6:1193:A:H8	1:6:1193:A:OP1	1.94	0.50
1:6:1308:G:C2	1:6:1309:C:C2	2.98	0.50
1:6:1799:U:H4'	1:6:1800:A:H2'	1.94	0.50
8:s6:58:LYS:C	8:s6:59:GLN:HE21	2.20	0.50
20:c8:101:LEU:O	20:c8:104:ASN:HB3	2.10	0.50
22:d0:34:LEU:HD21	22:d0:89:ARG:HD2	1.94	0.50
34:sR:66:HIS:HB3	34:sR:85:TRP:HB2	1.94	0.50
36:5:73:C:N3	49:m3:59:ARG:NH1	2.58	0.50
36:5:571:U:H2'	36:5:572:A:H8	1.76	0.50
36:5:1024:G:N2	36:5:1024:G:OP2	2.44	0.50
36:5:1819:U:O4	89:5:4052:OHX:N5	2.45	0.50
36:5:2989:U:O2'	40:l3:267:ALA:O	2.22	0.50
41:l4:148:ILE:HA	41:l4:149:PRO:C	2.37	0.50
49:m3:8:PRO:HA	54:m8:164:ARG:O	2.11	0.50
49:m3:124:ILE:HG23	49:m3:126:PHE:HE1	1.76	0.50
49:m3:168:ARG:O	49:m3:172:LEU:HG	2.11	0.50
51:m5:45:PRO:O	51:m5:49:ARG:HB2	2.11	0.50
51:m5:153:ASP:OD2	51:m5:155:VAL:HG23	2.11	0.50
52:m6:171:LYS:O	52:m6:175:THR:HG23	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:n1:57:TYR:HA	57:n1:60:LYS:HG3	1.94	0.50
67:o1:41:LYS:O	67:o1:45:GLY:HA2	2.12	0.50
6:S4:117:GLU:O	6:S4:120:SER:OG	2.17	0.50
9:S7:158:ASP:O	9:S7:160:GLN:N	2.45	0.50
14:C2:67:THR:C	14:C2:69:ALA:H	2.20	0.50
23:D1:64:GLU:OE1	29:D7:3:LEU:HB2	2.11	0.50
34:SR:44:SER:O	34:SR:58:VAL:HG22	2.12	0.50
36:1:372:A:H2'	36:1:373:A:O4'	2.11	0.50
36:1:700:C:OP1	49:M3:65:TYR:OH	2.25	0.50
36:1:784:A:C6	54:M8:93:ILE:HG22	2.47	0.50
36:1:1332:A:H2'	36:1:1333:C:C6	2.46	0.50
36:1:1441:G:O6	89:1:3934:OHX:N1	2.45	0.50
36:1:1807:G:C6	36:1:1808:G:C6	2.99	0.50
36:1:3006:A:C2	36:1:3141:A:C4	2.99	0.50
36:1:3084:C:H2'	36:1:3085:G:O4'	2.11	0.50
37:3:71:G:H2'	37:3:72:A:C8	2.46	0.50
40:L3:296:THR:H	40:L3:299:ASP:HB3	1.77	0.50
42:L5:86:TYR:CE1	42:L5:247:ILE:HA	2.46	0.50
43:L6:50:LYS:HE3	43:L6:72:ASN:HB2	1.93	0.50
47:M0:168:SER:OG	57:N1:160:ILE:O	2.22	0.50
63:N7:17:ARG:C	63:N7:19:ALA:H	2.19	0.50
1:6:476:U:OP1	1:6:477:A:O2'	2.23	0.50
1:6:1540:G:C6	1:6:1541:G:C4	3.00	0.50
3:s1:184:LEU:HD12	3:s1:188:LEU:HG	1.93	0.50
8:s6:48:TYR:CE2	8:s6:121:LEU:HD22	2.46	0.50
9:s7:142:TYR:O	24:d2:49:GLU:HB2	2.12	0.50
36:5:158:G:N2	36:5:264:G:H1'	2.27	0.50
36:5:1200:A:H5'	36:5:1201:C:O5'	2.12	0.50
36:5:1573:G:C5	36:5:1574:C:H1'	2.45	0.50
36:5:1751:G:OP1	74:o8:26:LYS:NZ	2.42	0.50
39:l2:28:LYS:HE3	39:l2:123:ARG:HH11	1.77	0.50
43:l6:129:GLU:HG2	43:l6:130:ILE:H	1.76	0.50
51:m5:42:PRO:HG3	51:m5:61:ILE:HG13	1.93	0.50
51:m5:136:ASP:OD2	51:m5:138:GLN:HG2	2.10	0.50
62:n6:102:SER:OG	62:n6:103:LYS:HE2	2.12	0.50
68:o2:76:VAL:HG21	68:o2:94:ALA:HB1	1.93	0.50
78:q2:71:ARG:NH1	78:q2:80:ARG:HD3	2.26	0.50
1:2:1509:C:H2'	1:2:1510:U:O4'	2.10	0.50
1:2:1576:A:H2'	1:2:1577:A:O4'	2.11	0.50
7:S5:43:PHE:CZ	7:S5:90:ILE:HG21	2.47	0.50
10:S8:95:THR:HG22	10:S8:97:THR:HG22	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:S9:38:ASN:HB3	11:S9:40:LYS:H	1.77	0.50
16:C4:108:SER:O	16:C4:108:SER:OG	2.26	0.50
22:D0:104:THR:HG22	22:D0:116:VAL:HG21	1.94	0.50
36:1:561:C:H2'	36:1:562:C:H6	1.77	0.50
36:1:701:G:H2'	36:1:702:C:C6	2.47	0.50
36:1:807:A:H61	36:1:934:G:H22	1.58	0.50
36:1:846:A:H2'	36:1:847:A:O4'	2.12	0.50
36:1:1719:G:H5''	55:M9:110:ARG:HH22	1.75	0.50
36:1:2662:G:H2'	36:1:2663:G:H8	1.77	0.50
40:L3:81:THR:OG1	40:L3:321:PHE:HA	2.12	0.50
41:L4:62:ALA:HB1	41:L4:76:ARG:O	2.11	0.50
69:O3:53:TYR:CZ	69:O3:65:ARG:HB2	2.46	0.50
1:6:727:U:H2'	1:6:728:U:H6	1.76	0.50
1:6:828:U:H2'	1:6:829:A:H5''	1.94	0.50
3:s1:184:LEU:O	3:s1:188:LEU:HG	2.11	0.50
5:s3:62:ASN:ND2	5:s3:62:ASN:O	2.44	0.50
6:s4:166:SER:O	6:s4:168:LYS:HG2	2.12	0.50
7:s5:177:ILE:HG12	7:s5:180:ARG:HH12	1.77	0.50
8:s6:164:LYS:HB3	8:s6:167:LYS:O	2.12	0.50
11:s9:176:ASN:HA	11:s9:179:ARG:HG2	1.92	0.50
23:d1:62:ARG:NH1	24:d2:20:THR:HG22	2.22	0.50
23:d1:68:SER:O	23:d1:72:LEU:HG	2.11	0.50
25:d3:51:GLY:O	25:d3:101:GLU:HA	2.11	0.50
36:5:27:C:O2'	36:5:327:A:N3	2.40	0.50
36:5:411:U:H2'	36:5:412:G:H8	1.75	0.50
36:5:1196:C:O2	89:7:218:OHX:N1	2.44	0.50
36:5:1708:C:H2'	36:5:1709:C:H6	1.76	0.50
36:5:2440:G:O2'	36:5:2441:A:OP1	2.29	0.50
36:5:2762:A:OP2	89:5:3991:OHX:N5	2.44	0.50
36:5:2828:G:O2'	47:m0:4:ARG:NH1	2.29	0.50
89:5:3906:OHX:N2	38:8:1:A:OP1	2.45	0.50
39:l2:61:VAL:HG22	39:l2:63:PHE:CE1	2.47	0.50
41:l4:203:ARG:NH2	41:l4:240:PRO:HB3	2.27	0.50
46:l9:162:GLN:HG3	46:l9:163:GLN:N	2.26	0.50
67:o1:28:ARG:HB3	67:o1:64:VAL:O	2.12	0.50
1:2:480:G:N2	1:2:509:G:H1'	2.26	0.50
2:S0:38:PHE:HB3	2:S0:47:VAL:O	2.12	0.50
2:S0:140:ASN:ND2	23:D1:29:HIS:HA	2.26	0.50
3:S1:97:LEU:HD12	3:S1:98:THR:H	1.76	0.50
9:S7:33:GLU:HA	9:S7:37:GLU:OE2	2.12	0.50
13:C1:29:LYS:O	13:C1:31:THR:N	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:C2:46:ARG:HB2	33:E1:103:LEU:HD12	1.94	0.50
20:C8:35:ILE:HB	20:C8:38:VAL:HG22	1.94	0.50
21:C9:66:TYR:HA	21:C9:124:ILE:HB	1.94	0.50
22:D0:100:VAL:O	22:D0:104:THR:HG23	2.12	0.50
24:D2:80:ASN:OD1	24:D2:124:LYS:HG2	2.12	0.50
34:SR:113:VAL:HG13	34:SR:114:ASP:H	1.77	0.50
35:SM:84:LYS:HZ2	35:SM:86:ASN:HD22	1.59	0.50
36:1:402:A:C6	53:M7:21:TYR:CE2	3.00	0.50
36:1:820:A:OP1	89:1:3951:OHX:N5	2.45	0.50
36:1:1722:U:H5''	55:M9:99:LEU:HD12	1.94	0.50
36:1:2136:C:H2'	36:1:2142:A:N6	2.27	0.50
36:1:2218:G:H2'	36:1:2219:A:H8	1.76	0.50
36:1:2376:G:H2'	36:1:2377:G:C8	2.46	0.50
42:L5:34:LYS:HD2	57:N1:30:TYR:CZ	2.47	0.50
42:L5:34:LYS:O	42:L5:38:THR:HG23	2.12	0.50
43:L6:78:ARG:HG3	43:L6:78:ARG:NH1	2.10	0.50
44:L7:108:LEU:HD23	44:L7:113:SER:O	2.11	0.50
44:L7:179:LEU:HD22	44:L7:183:ASP:OD2	2.12	0.50
53:M7:59:PRO:HG3	53:M7:76:PHE:CD1	2.47	0.50
72:O6:25:LYS:HB2	72:O6:28:TYR:CD2	2.44	0.50
72:O6:56:ARG:HH22	72:O6:76:ARG:NH1	2.10	0.50
74:O8:4:GLU:HG3	74:O8:5:ILE:N	2.26	0.50
1:6:521:A:N3	26:d4:34:ASN:ND2	2.60	0.50
1:6:1071:U:H2'	1:6:1072:C:C6	2.47	0.50
1:6:1175:U:H2'	1:6:1176:G:C8	2.47	0.50
1:6:1270:G:O2'	82:e1:79:LYS:HB2	2.12	0.50
2:s0:148:ASP:HB2	2:s0:164:ASN:ND2	2.26	0.50
6:s4:184:THR:C	6:s4:189:LEU:HD13	2.37	0.50
10:s8:176:SER:O	10:s8:178:ARG:HG2	2.12	0.50
11:s9:178:ALA:HA	11:s9:181:ALA:HB3	1.94	0.50
26:d4:88:THR:O	26:d4:92:VAL:HG22	2.12	0.50
36:5:188:U:H1'	36:5:208:C:H1'	1.94	0.50
36:5:247:C:C2	36:5:248:U:H1'	2.47	0.50
36:5:668:G:OP1	89:5:4144:OHX:N1	2.43	0.50
36:5:1098:A:OP2	57:n1:130:ARG:HD3	2.12	0.50
36:5:1368:U:O2'	36:5:1369:A:H5'	2.12	0.50
36:5:3029:A:H5''	36:5:3030:G:OP2	2.11	0.50
36:5:3242:G:H5''	36:5:3245:A:H8	1.76	0.50
36:5:3347:A:H61	36:5:3358:U:H3	1.60	0.50
38:8:6:U:H2'	38:8:7:U:C6	2.47	0.50
83:m2:52:UNK:C	83:m2:54:UNK:H	2.25	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:m5:68:ARG:HD2	51:m5:128:LYS:HE3	1.93	0.50
62:n6:39:LEU:HD13	62:n6:43:TYR:CE2	2.38	0.50
71:o5:54:VAL:O	71:o5:58:ILE:HG13	2.12	0.50
1:2:780:A:C8	26:D4:8:ARG:HB3	2.47	0.50
1:2:1760:G:H2'	1:2:1761:U:H5'	1.93	0.50
7:S5:92:ARG:NH2	7:S5:169:ASN:OD1	2.45	0.50
10:S8:114:GLU:HG2	10:S8:120:THR:HA	1.94	0.50
11:S9:120:LYS:O	11:S9:121:SER:HB3	2.12	0.50
13:C1:139:VAL:HG12	13:C1:140:VAL:N	2.24	0.50
15:C3:119:GLU:O	15:C3:122:ILE:HB	2.12	0.50
18:C6:27:GLY:HA2	18:C6:60:PHE:O	2.12	0.50
34:SR:23:LEU:HD12	34:SR:292:LEU:HA	1.94	0.50
36:1:428:A:H2'	36:1:429:U:C6	2.47	0.50
36:1:979:U:H1'	36:1:980:A:C8	2.47	0.50
36:1:1130:A:C8	36:1:1132:C:C6	2.99	0.50
36:1:2358:A:H2'	36:1:2359:C:O4'	2.11	0.50
36:1:2444:C:H3'	36:1:2445:A:H5''	1.94	0.50
39:L2:20:THR:HA	39:L2:23:ARG:HD2	1.94	0.50
39:L2:48:ILE:HD11	79:Q3:54:ILE:HG23	1.92	0.50
40:L3:41:VAL:HG22	40:L3:185:GLY:HA3	1.93	0.50
48:M1:12:LEU:HD12	48:M1:131:MET:HE3	1.94	0.50
49:M3:64:LYS:HE3	64:N8:69:TRP:CD1	2.47	0.50
1:6:11:A:H5'	4:s2:87:GLN:HG3	1.93	0.50
1:6:108:A:H2'	1:6:109:G:C8	2.47	0.50
1:6:160:C:O3'	8:s6:95:LYS:NZ	2.45	0.50
1:6:866:G:H5''	15:c3:2:GLY:O	2.12	0.50
1:6:1379:C:H1'	18:c6:19:VAL:HG21	1.92	0.50
1:6:1382:A:H5''	22:d0:60:THR:HG22	1.94	0.50
2:s0:22:THR:HG21	2:s0:173:ILE:HD11	1.94	0.50
13:c1:72:THR:O	13:c1:88:ARG:NH1	2.44	0.50
22:d0:18:GLN:O	22:d0:19:ILE:HG13	2.12	0.50
22:d0:80:GLU:HG2	31:d9:54:LYS:HZ1	1.77	0.50
25:d3:23:ARG:HG3	25:d3:23:ARG:NH1	2.25	0.50
25:d3:92:CYS:HB3	25:d3:132:LEU:HD23	1.93	0.50
28:d6:45:VAL:O	28:d6:49:ALA:HB3	2.12	0.50
35:sM:52:PRO:O	35:sM:54:PRO:HD3	2.12	0.50
36:5:686:G:C6	36:5:687:U:C2	3.00	0.50
36:5:2277:C:O2'	36:5:2278:C:H5'	2.11	0.50
51:m5:56:LYS:NZ	51:m5:145:ASP:OD2	2.42	0.50
53:m7:67:ILE:HD12	53:m7:82:ARG:NH1	2.27	0.50
55:m9:89:LEU:HD12	55:m9:90:PRO:HD2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:m9:167:ARG:HB3	55:m9:167:ARG:HH11	1.77	0.50
62:n6:57:LEU:HB3	62:n6:105:VAL:HG12	1.93	0.50
1:2:116:U:H2'	1:2:117:U:C6	2.47	0.50
1:2:592:A:OP1	11:S9:39:LYS:HG2	2.11	0.50
5:S3:168:ILE:HD12	5:S3:187:LYS:HE3	1.93	0.50
6:S4:16:HIS:C	6:S4:18:TRP:H	2.20	0.50
13:C1:112:SER:C	13:C1:114:ALA:H	2.20	0.50
23:D1:71:ARG:HG3	23:D1:83:TRP:CZ2	2.47	0.50
28:D6:23:CYS:SG	28:D6:74:CYS:HB3	2.51	0.50
34:SR:42:LEU:HB2	34:SR:61:PHE:HB2	1.94	0.50
36:1:256:G:H2'	36:1:257:U:C6	2.47	0.50
36:1:407:A:C2	38:4:17:A:H1'	2.47	0.50
36:1:1134:G:O2'	36:1:2642:A:N3	2.32	0.50
36:1:1712:G:N2	36:1:1731:A:OP2	2.41	0.50
36:1:3173:G:C2	69:O3:96:ALA:HB2	2.47	0.50
37:3:60:G:H2'	37:3:61:G:H8	1.76	0.50
40:L3:257:PRO:HG2	40:L3:261:MET:HE3	1.94	0.50
40:L3:339:ARG:NH1	40:L3:342:LEU:HD11	2.26	0.50
49:M3:144:THR:HG21	71:O5:118:ILE:HG21	1.94	0.50
50:M4:135:LEU:HD11	52:M6:178:VAL:HG22	1.93	0.50
58:N2:20:SER:OG	58:N2:21:SER:N	2.44	0.50
71:O5:4:VAL:HG13	71:O5:50:SER:OG	2.12	0.50
72:O6:5:THR:HG23	72:O6:12:ASN:C	2.36	0.50
72:O6:66:GLU:HB3	72:O6:70:ARG:HH21	1.77	0.50
1:6:359:A:C2	25:d3:38:PHE:HB3	2.47	0.50
1:6:486:G:OP1	1:6:486:G:H4'	2.11	0.50
1:6:768:C:H2'	1:6:769:A:O4'	2.12	0.50
1:6:963:A:OP2	15:c3:70:LYS:NZ	2.44	0.50
1:6:1058:U:H4'	1:6:1059:U:OP1	2.12	0.50
2:s0:105:GLY:O	2:s0:109:ASN:HB3	2.12	0.50
3:s1:71:ALA:HB3	16:c4:114:ARG:NH1	2.26	0.50
3:s1:146:GLN:O	3:s1:148:ASN:N	2.45	0.50
4:s2:90:THR:C	4:s2:92:ALA:H	2.20	0.50
6:s4:45:ILE:HB	6:s4:80:THR:HG23	1.94	0.50
7:s5:97:LEU:O	7:s5:99:MET:N	2.45	0.50
8:s6:153:VAL:HG21	8:s6:175:ILE:HG21	1.94	0.50
9:s7:133:THR:HG22	9:s7:157:LYS:O	2.12	0.50
10:s8:38:ILE:HA	10:s8:60:ILE:O	2.12	0.50
18:c6:103:ASN:HA	18:c6:106:LYS:HB2	1.94	0.50
18:c6:129:PHE:CE1	22:d0:78:THR:HA	2.46	0.50
34:sR:216:LYS:HA	34:sR:239:GLU:HG3	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:750:G:H2'	36:5:751:A:H8	1.77	0.50
36:5:944:C:H4'	68:o2:33:ARG:NH1	2.27	0.50
36:5:1530:U:OP1	89:5:3993:OHX:N1	2.45	0.50
36:5:1573:G:C6	36:5:1574:C:H1'	2.47	0.50
40:l3:171:LEU:HD21	40:l3:314:TYR:CE2	2.47	0.50
41:l4:293:SER:HA	41:l4:296:GLN:HB2	1.94	0.50
43:l6:47:PHE:O	43:l6:50:LYS:HB2	2.11	0.50
56:n0:78:TRP:CE3	56:n0:125:LYS:HG2	2.47	0.50
1:2:61:A:H8	1:2:269:G:HO2'	1.57	0.49
1:2:209:U:H5'	10:S8:171:SER:HB3	1.94	0.49
1:2:1101:G:O3'	24:D2:76:SER:HB2	2.12	0.49
1:2:1480:G:H3'	1:2:1481:C:C6	2.47	0.49
1:2:1769:U:O2	16:C4:136:ARG:NH1	2.45	0.49
2:S0:36:TYR:CD1	2:S0:161:PRO:HG3	2.48	0.49
7:S5:94:THR:HB	7:S5:114:ILE:HG13	1.94	0.49
11:S9:85:VAL:HG13	11:S9:103:ASP:HB2	1.94	0.49
12:C0:1:MET:HG2	12:C0:2:LEU:N	2.27	0.49
13:C1:109:VAL:HG12	13:C1:137:PHE:HB2	1.94	0.49
16:C4:43:THR:OG1	16:C4:44:GLY:N	2.40	0.49
18:C6:35:PRO:HG2	18:C6:38:LEU:HG	1.93	0.49
24:D2:78:ARG:HD2	24:D2:126:LEU:HD23	1.94	0.49
25:D3:53:VAL:HG23	25:D3:100:ASP:O	2.11	0.49
34:SR:273:ASP:CG	34:SR:275:ARG:HH22	2.20	0.49
36:1:256:G:H2'	36:1:257:U:H6	1.77	0.49
36:1:730:C:H2'	36:1:731:U:H6	1.77	0.49
36:1:2299:A:OP1	89:1:3956:OHX:N1	2.45	0.49
37:3:98:C:OP1	56:N0:39:SER:OG	2.29	0.49
48:M1:34:SER:HB2	48:M1:67:VAL:HG11	1.94	0.49
48:M1:107:ASP:HA	48:M1:124:GLY:HA2	1.94	0.49
54:M8:89:ASP:OD1	54:M8:90:ASP:N	2.39	0.49
55:M9:21:LYS:HE3	55:M9:55:VAL:HA	1.94	0.49
1:6:1491:U:H4'	1:6:1492:A:H5''	1.94	0.49
1:6:1619:C:C2	30:d8:22:ARG:HD2	2.47	0.49
3:s1:90:GLU:OE1	3:s1:91:VAL:N	2.33	0.49
8:s6:48:TYR:CZ	8:s6:121:LEU:HD22	2.47	0.49
14:c2:91:VAL:HG22	14:c2:92:ALA:H	1.76	0.49
16:c4:123:SER:O	16:c4:124:ASP:HB2	2.12	0.49
22:d0:27:THR:HG23	22:d0:113:ASP:OD1	2.12	0.49
34:sR:112:SER:HB2	34:sR:153:GLN:HA	1.93	0.49
35:sM:64:LYS:O	35:sM:66:ALA:N	2.43	0.49
36:5:76:G:N7	49:m3:101:ARG:HB2	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:519:A:OP2	44:l7:70:LYS:NZ	2.45	0.49
36:5:566:G:N7	89:5:4134:OHX:N5	2.60	0.49
36:5:2400:G:H5''	36:5:2401:A:OP2	2.12	0.49
44:l7:55:TYR:HE2	44:l7:141:TYR:CE2	2.30	0.49
49:m3:2:ALA:HA	64:n8:41:HIS:HE1	1.77	0.49
68:o2:40:SER:O	68:o2:44:ARG:HG3	2.12	0.49
74:o8:14:LEU:HD21	74:o8:52:TYR:CD2	2.47	0.49
1:2:283:U:H5''	8:S6:188:ARG:HD3	1.94	0.49
1:2:495:C:H3'	1:2:496:G:O4'	2.12	0.49
1:2:1483:A:H2'	1:2:1484:G:C8	2.46	0.49
1:2:1646:C:H2'	1:2:1647:U:C6	2.47	0.49
3:S1:126:THR:CG2	3:S1:136:ARG:HE	2.25	0.49
4:S2:183:ALA:HB1	4:S2:211:LEU:HD21	1.94	0.49
10:S8:82:VAL:HG22	10:S8:196:LEU:HD11	1.93	0.49
17:C5:37:ALA:HB1	17:C5:38:PRO:HD2	1.94	0.49
18:C6:82:ARG:HH22	18:C6:114:ARG:CB	2.25	0.49
21:C9:57:ARG:HH11	21:C9:57:ARG:HG3	1.77	0.49
23:D1:71:ARG:HG3	23:D1:83:TRP:CH2	2.48	0.49
36:1:13:A:OP2	89:1:4217:OHX:N5	2.46	0.49
36:1:1212:A:H2'	36:1:1213:G:H5''	1.94	0.49
36:1:2655:U:H4'	36:1:2656:A:O4'	2.13	0.49
38:4:103:G:O6	89:4:222:OHX:N4	2.45	0.49
40:L3:212:ASN:O	40:L3:281:LYS:NZ	2.43	0.49
57:N1:57:TYR:CD1	57:N1:89:LEU:HD21	2.47	0.49
71:O5:21:LEU:HD22	71:O5:25:LYS:HG3	1.94	0.49
1:6:150:U:H2'	1:6:151:G:O4'	2.11	0.49
1:6:219:A:H2'	1:6:831:U:O2	2.12	0.49
1:6:990:C:O2'	16:c4:127:ARG:HD3	2.12	0.49
1:6:1459:C:N4	20:c8:139:LYS:HE2	2.27	0.49
16:c4:91:THR:O	16:c4:93:THR:N	2.43	0.49
22:d0:100:VAL:O	22:d0:104:THR:HG23	2.12	0.49
82:e1:80:ARG:NH1	82:e1:80:ARG:HB2	2.27	0.49
82:e1:86:THR:C	82:e1:87:THR:HG1	2.13	0.49
36:5:1615:C:H2'	36:5:1616:U:C6	2.47	0.49
37:7:106:U:H2'	37:7:107:C:O4'	2.11	0.49
56:n0:13:ARG:NH1	56:n0:13:ARG:HG3	2.26	0.49
73:o7:21:ARG:HD2	73:o7:39:TYR:HB2	1.93	0.49
1:2:25:C:O2	89:2:2084:OHX:N1	2.45	0.49
1:2:192:U:HO2'	1:2:193:U:P	2.36	0.49
1:2:717:C:H2'	1:2:718:U:H5''	1.94	0.49
1:2:1393:C:H42	1:2:1405:G:H1	1.61	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1545:A:H2'	1:2:1546:G:C8	2.47	0.49
1:2:1609:U:H2'	1:2:1610:G:O4'	2.12	0.49
3:S1:129:THR:HA	3:S1:177:GLN:HA	1.94	0.49
16:C4:23:PHE:HE2	16:C4:91:THR:HG21	1.77	0.49
17:C5:96:ILE:HD11	17:C5:116:LEU:HD22	1.93	0.49
20:C8:82:PRO:O	20:C8:84:TRP:N	2.43	0.49
36:1:2534:G:H2'	36:1:2535:A:H8	1.77	0.49
40:L3:332:ARG:O	40:L3:333:LYS:HB2	2.11	0.49
42:L5:44:TYR:HE1	57:N1:35:LYS:HB3	1.76	0.49
44:L7:173:LEU:HD23	44:L7:178:ILE:HG21	1.94	0.49
45:L8:101:THR:CG2	45:L8:104:GLU:H	2.25	0.49
48:M1:8:PRO:HD2	48:M1:10:ARG:H	1.77	0.49
50:M4:72:LEU:HD23	50:M4:73:PRO:HD2	1.92	0.49
51:M5:46:ASP:OD1	51:M5:50:ARG:NH2	2.35	0.49
68:O2:20:HIS:O	68:O2:21:HIS:HB2	2.12	0.49
1:6:380:U:C2	11:s9:5:PRO:HG3	2.46	0.49
1:6:542:A:O2'	1:6:543:C:O5'	2.29	0.49
1:6:788:A:OP1	6:s4:106:LYS:NZ	2.40	0.49
1:6:886:U:H2'	1:6:887:A:C8	2.47	0.49
1:6:1041:G:OP1	89:6:2172:OHX:N4	2.44	0.49
1:6:1461:C:H1'	35:sM:76:VAL:HG11	1.93	0.49
8:s6:57:ASP:HA	8:s6:106:LEU:HA	1.94	0.49
80:c0:32:HIS:CD2	80:c0:33:GLU:HG2	2.46	0.49
13:c1:93:TYR:HB2	13:c1:100:TYR:HE1	1.76	0.49
15:c3:119:GLU:HG2	15:c3:141:TYR:CE2	2.47	0.49
19:c7:108:ASP:HA	19:c7:111:LYS:HB2	1.95	0.49
28:d6:23:CYS:HB3	28:d6:28:LYS:H	1.78	0.49
82:e1:96:LYS:O	82:e1:97:LYS:HB2	2.12	0.49
36:5:113:C:C2	36:5:319:A:C2	3.00	0.49
39:l2:189:TYR:HA	39:l2:192:LYS:HB2	1.94	0.49
40:l3:232:ARG:NH1	40:l3:269:GLN:O	2.45	0.49
42:l5:269:SER:C	42:l5:271:LYS:H	2.21	0.49
44:l7:145:ARG:HA	44:l7:185:ILE:HD13	1.94	0.49
46:l9:93:VAL:O	46:l9:177:ASP:HA	2.12	0.49
57:n1:12:ARG:HD3	57:n1:13:TYR:CE1	2.47	0.49
57:n1:101:CYS:SG	57:n1:102:ARG:N	2.84	0.49
63:n7:97:SER:OG	63:n7:98:THR:N	2.43	0.49
64:n8:89:GLN:O	64:n8:93:SER:HB2	2.12	0.49
66:o0:100:ILE:HG13	66:o0:101:LEU:HD13	1.93	0.49
67:o1:44:MET:HB3	67:o1:77:ARG:NH2	2.28	0.49
68:o2:71:HIS:CE1	68:o2:118:LYS:HD2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:68:A:OP1	8:S6:160:ARG:NH2	2.44	0.49
1:2:538:A:H8	1:2:543:C:N4	2.10	0.49
1:2:775:G:N7	26:D4:11:LYS:NZ	2.61	0.49
2:S0:125:ASP:O	2:S0:127:ARG:N	2.45	0.49
6:S4:45:ILE:HD11	6:S4:49:ARG:HH21	1.76	0.49
12:C0:16:PHE:O	12:C0:88:PRO:HA	2.12	0.49
16:C4:16:VAL:HG11	16:C4:18:ARG:HE	1.76	0.49
30:D8:10:ALA:HB1	30:D8:30:VAL:HB	1.94	0.49
36:1:1074:U:O2'	36:1:1075:A:H2'	2.12	0.49
36:1:2112:U:H6	36:1:2112:U:O5'	1.95	0.49
36:1:2259:A:OP2	89:1:3942:OHX:N2	2.45	0.49
36:1:2383:C:H5'	52:M6:71:PHE:CE2	2.48	0.49
40:L3:116:ARG:HD2	40:L3:122:TRP:CG	2.48	0.49
45:L8:100:GLU:OE1	45:L8:108:ARG:HD3	2.12	0.49
49:M3:166:ALA:HB1	64:N8:147:LEU:HD21	1.94	0.49
51:M5:122:ASN:OD1	51:M5:123:GLN:N	2.45	0.49
52:M6:110:PRO:HA	52:M6:113:ASP:OD2	2.12	0.49
53:M7:4:TYR:CZ	53:M7:18:ARG:HG3	2.47	0.49
59:N3:87:ARG:HH22	59:N3:137:VAL:HG23	1.77	0.49
66:O0:27:TYR:O	66:O0:31:VAL:HG23	2.12	0.49
1:6:119:A:H1'	1:6:397:A:C5	2.46	0.49
1:6:523:G:H5'	26:d4:60:PHE:O	2.12	0.49
1:6:702:G:N7	89:6:2096:OHX:N4	2.60	0.49
1:6:1120:U:H2'	1:6:1121:C:C6	2.47	0.49
3:s1:186:SER:HA	3:s1:189:ILE:HD12	1.94	0.49
5:s3:64:ARG:HG2	5:s3:65:ARG:H	1.76	0.49
6:s4:104:ASP:HB3	6:s4:106:LYS:H	1.77	0.49
17:c5:33:PHE:O	17:c5:36:LEU:HD22	2.13	0.49
17:c5:124:THR:O	17:c5:124:THR:OG1	2.30	0.49
28:d6:10:ARG:NH1	28:d6:36:ILE:HG13	2.27	0.49
81:e0:53:LYS:HE2	81:e0:55:ARG:HD3	1.94	0.49
34:sR:129:LYS:HG2	34:sR:149:ASP:O	2.13	0.49
36:5:63:A:P	51:m5:172:ARG:HH22	2.34	0.49
36:5:912:G:OP2	39:l2:9:ARG:NH1	2.46	0.49
37:7:80:G:H2'	37:7:81:U:O4'	2.12	0.49
43:l6:56:LYS:HD2	43:l6:98:VAL:HG13	1.94	0.49
47:m0:47:PRO:HB3	47:m0:171:TRP:CZ2	2.47	0.49
47:m0:144:ASN:ND2	47:m0:147:VAL:HB	2.28	0.49
53:m7:29:THR:HG22	53:m7:87:SER:CB	2.42	0.49
56:n0:42:TRP:CD2	56:n0:53:LYS:HB3	2.48	0.49
62:n6:124:GLY:C	62:n6:126:LEU:H	2.21	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
85:p1:29:UNK:O	85:p1:31:UNK:N	2.45	0.49
1:2:29:U:H2'	1:2:30:G:H8	1.77	0.49
1:2:140:A:OP2	8:S6:187:LYS:NZ	2.38	0.49
1:2:1085:G:N2	1:2:1087:A:H3'	2.27	0.49
1:2:1164:G:O2'	1:2:1612:U:O2	2.30	0.49
1:2:1357:A:H2'	1:2:1358:G:C8	2.48	0.49
1:2:1543:A:H2'	1:2:1544:U:O4'	2.12	0.49
2:S0:82:GLY:O	2:S0:86:VAL:HG22	2.12	0.49
2:S0:134:LYS:O	2:S0:137:SER:OG	2.22	0.49
3:S1:84:ILE:HG22	3:S1:86:LEU:HD22	1.94	0.49
3:S1:130:SER:OG	3:S1:180:THR:N	2.43	0.49
7:S5:62:VAL:HG13	7:S5:89:ILE:HG21	1.95	0.49
9:S7:123:ASP:OD1	9:S7:138:LYS:NZ	2.45	0.49
10:S8:117:TYR:CD1	10:S8:150:ALA:HB2	2.47	0.49
11:S9:109:LEU:HB2	11:S9:146:PHE:HB3	1.95	0.49
12:C0:61:TRP:CZ3	31:D9:22:ARG:HD2	2.47	0.49
36:1:371:G:H4'	36:1:396:A:N1	2.27	0.49
36:1:558:U:H6	36:1:558:U:O5'	1.95	0.49
36:1:650:C:O2'	36:1:651:G:H5'	2.12	0.49
36:1:3004:C:O2'	36:1:3005:A:H5'	2.12	0.49
36:1:3048:A:O3'	89:1:4195:OHX:N4	2.45	0.49
53:M7:29:THR:HG22	53:M7:87:SER:CB	2.42	0.49
54:M8:175:ALA:HB3	64:N8:53:PHE:O	2.11	0.49
70:O4:16:ARG:HD2	70:O4:37:LYS:HD2	1.92	0.49
78:Q2:12:CYS:SG	78:Q2:17:CYS:CB	3.00	0.49
1:6:713:A:H2'	1:6:714:G:H5''	1.92	0.49
1:6:1249:U:H2'	1:6:1250:U:O4'	2.12	0.49
2:s0:190:ASP:C	2:s0:192:THR:H	2.21	0.49
5:s3:209:ILE:HG22	19:c7:38:ILE:O	2.12	0.49
7:s5:117:THR:HG21	7:s5:194:LEU:HD13	1.94	0.49
10:s8:196:LEU:HD22	10:s8:200:LYS:HD3	1.94	0.49
23:d1:60:ARG:HA	23:d1:65:SER:HB2	1.94	0.49
25:d3:50:LYS:HG2	25:d3:77:ILE:HD12	1.94	0.49
29:d7:58:SER:O	29:d7:60:SER:N	2.46	0.49
31:d9:15:GLY:O	31:d9:17:GLY:N	2.45	0.49
36:5:1798:A:H2'	36:5:1799:A:C8	2.47	0.49
36:5:2213:A:N1	36:5:2429:G:H1'	2.27	0.49
36:5:2254:U:H2'	36:5:2261:G:N2	2.27	0.49
37:7:27:A:C2	37:7:28:C:C2	3.01	0.49
39:l2:201:GLY:HA2	39:l2:204:MET:SD	2.53	0.49
49:m3:57:VAL:HG13	49:m3:147:ILE:CG2	2.43	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:n2:20:SER:O	58:n2:24:GLU:HG2	2.12	0.49
61:n5:79:GLY:O	61:n5:81:ILE:HD12	2.12	0.49
78:q2:48:SER:O	89:q2:502:OHX:N3	2.46	0.49
1:2:487:G:H3'	1:2:488:G:H5''	1.93	0.49
1:2:1339:C:O2'	1:2:1340:U:OP1	2.31	0.49
1:2:1474:G:P	7:S5:109:LYS:HE2	2.52	0.49
1:2:1519:U:H2'	1:2:1520:U:C5	2.48	0.49
1:2:1597:A:OP1	31:D9:19:ARG:NH2	2.45	0.49
1:2:1785:U:H2'	1:2:1786:G:H8	1.77	0.49
15:C3:66:ILE:HG13	15:C3:67:THR:HG23	1.95	0.49
21:C9:117:SER:OG	21:C9:118:PRO:O	2.30	0.49
33:E1:126:CYS:O	33:E1:128:ALA:N	2.45	0.49
34:SR:63:GLY:HA3	34:SR:90:ARG:NH1	2.27	0.49
36:1:439:C:H3'	36:1:440:A:H8	1.77	0.49
36:1:872:U:H2'	36:1:873:C:C6	2.47	0.49
36:1:1355:A:H4'	36:1:1356:U:O5'	2.11	0.49
40:L3:10:ARG:NH2	40:L3:263:SER:O	2.45	0.49
40:L3:77:THR:HG23	40:L3:326:GLY:O	2.13	0.49
44:L7:101:LYS:C	44:L7:101:LYS:HD3	2.37	0.49
46:L9:144:ILE:HD13	46:L9:161:LEU:HD11	1.95	0.49
48:M1:60:ARG:O	48:M1:63:GLU:HB2	2.12	0.49
50:M4:23:ILE:HD13	50:M4:63:VAL:HG23	1.94	0.49
55:M9:101:VAL:HG13	55:M9:104:ARG:HH22	1.78	0.49
56:N0:68:HIS:O	56:N0:73:LYS:NZ	2.45	0.49
1:6:104:A:N6	1:6:308:C:H5'	2.23	0.49
36:5:73:C:O2'	49:m3:59:ARG:HG2	2.13	0.49
36:5:374:A:N3	36:5:376:G:H5''	2.27	0.49
36:5:942:U:N3	64:n8:16:SER:HA	2.28	0.49
36:5:1214:U:H2'	36:5:1215:U:C6	2.48	0.49
36:5:1464:G:N2	36:5:1466:G:H3'	2.28	0.49
36:5:2546:C:H2'	36:5:2547:A:C8	2.47	0.49
36:5:2890:A:N1	36:5:2913:C:N3	2.60	0.49
40:l3:210:GLU:O	40:l3:213:GLU:HB2	2.12	0.49
41:l4:264:SER:C	41:l4:266:THR:H	2.20	0.49
83:m2:30:UNK:O	83:m2:34:UNK:N	2.46	0.49
52:m6:85:ARG:HD3	52:m6:90:HIS:ND1	2.27	0.49
56:n0:117:ARG:O	56:n0:121:ILE:HD12	2.11	0.49
57:n1:27:LEU:O	57:n1:28:SER:C	2.56	0.49
63:n7:54:THR:HG22	63:n7:57:HIS:CD2	2.47	0.49
67:o1:88:PRO:O	67:o1:89:LEU:HD12	2.12	0.49
75:o9:10:LYS:HA	75:o9:13:MET:HE3	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:138:A:N6	1:2:266:A:H61	2.11	0.49
1:2:348:U:OP1	13:C1:85:VAL:HG11	2.13	0.49
1:2:788:A:C4	6:S4:19:LEU:HD13	2.48	0.49
1:2:1347:U:C2	1:2:1517:U:C5	3.01	0.49
1:2:1480:G:H3'	1:2:1481:C:H6	1.78	0.49
1:2:1764:C:H3'	1:2:1767:G:N7	2.27	0.49
3:S1:70:LEU:O	3:S1:74:GLN:N	2.33	0.49
4:S2:81:MET:HE1	4:S2:186:LYS:HB3	1.95	0.49
5:S3:18:TYR:HE1	5:S3:37:VAL:HG23	1.78	0.49
9:S7:113:PRO:HG2	9:S7:116:ARG:HD2	1.94	0.49
23:D1:38:LYS:HE3	23:D1:51:VAL:HG23	1.93	0.49
27:D5:92:ILE:HG23	27:D5:100:ILE:HG22	1.94	0.49
36:1:95:A:C5	36:1:96:G:H1'	2.48	0.49
36:1:501:A:H2'	36:1:502:U:H6	1.76	0.49
36:1:561:C:OP1	50:M4:77:ARG:HG3	2.12	0.49
36:1:1270:A:N6	36:1:1271:A:N3	2.60	0.49
36:1:1493:G:C6	75:O9:2:ALA:HB2	2.46	0.49
36:1:1495:U:C5	36:1:1835:A:N1	2.76	0.49
40:L3:73:VAL:CG2	59:N3:90:GLY:HA3	2.42	0.49
41:L4:354:VAL:O	41:L4:358:THR:HG23	2.13	0.49
44:L7:118:LYS:HG3	44:L7:191:VAL:HG11	1.95	0.49
44:L7:173:LEU:HD21	44:L7:198:ALA:HA	1.94	0.49
47:M0:16:PRO:C	47:M0:18:PRO:HD3	2.37	0.49
54:M8:64:VAL:O	54:M8:96:PHE:HE2	1.95	0.49
61:N5:67:ILE:HD13	61:N5:115:ARG:NH2	2.27	0.49
63:N7:10:VAL:HG23	63:N7:86:THR:HA	1.95	0.49
71:O5:44:ILE:O	71:O5:47:VAL:HG13	2.12	0.49
71:O5:68:GLN:HA	71:O5:71:LYS:HB2	1.94	0.49
1:6:66:U:OP1	8:s6:136:LYS:NZ	2.35	0.49
1:6:1734:U:H2'	1:6:1735:U:H6	1.78	0.49
2:s0:52:LYS:HD3	23:d1:82:VAL:HA	1.94	0.49
4:s2:116:LYS:NZ	4:s2:117:THR:O	2.37	0.49
7:s5:57:SER:HB2	30:d8:53:ILE:HB	1.94	0.49
7:s5:64:VAL:CG1	7:s5:89:ILE:HD11	2.40	0.49
8:s6:24:ILE:O	8:s6:26:VAL:N	2.46	0.49
21:c9:79:LEU:HD23	21:c9:80:TYR:CZ	2.48	0.49
26:d4:90:ARG:O	26:d4:93:ARG:HB2	2.12	0.49
27:d5:71:ILE:CG2	27:d5:76:ALA:HB2	2.42	0.49
34:sR:156:VAL:HA	34:sR:169:ILE:HG22	1.94	0.49
35:sM:46:LYS:HA	36:5:1018:G:H4'	1.95	0.49
36:5:430:U:OP2	89:5:3985:OHX:N5	2.45	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1020:G:H2'	36:5:1021:G:O4'	2.13	0.49
36:5:1939:G:OP1	55:m9:77:GLY:HA3	2.12	0.49
36:5:2187:G:OP2	89:5:3974:OHX:N4	2.45	0.49
36:5:2911:A:H4'	36:5:2912:G:C8	2.47	0.49
36:5:3016:A:H2'	36:5:3017:A:H8	1.77	0.49
36:5:3049:A:H5'	36:5:3049:A:H8	1.78	0.49
36:5:3269:U:O2	36:5:3271:G:N1	2.46	0.49
36:5:3377:G:O6	89:5:4090:OHX:N2	2.45	0.49
40:l3:169:THR:HG23	40:l3:171:LEU:HG	1.94	0.49
40:l3:227:GLU:HG3	40:l3:270:ARG:CD	2.41	0.49
46:l9:79:ILE:O	46:l9:83:THR:HG23	2.13	0.49
48:m1:7:ASN:HA	48:m1:10:ARG:HD2	1.95	0.49
53:m7:57:ALA:HB2	53:m7:83:TRP:CE2	2.48	0.49
53:m7:70:THR:HG21	53:m7:81:ALA:HB3	1.94	0.49
58:n2:47:VAL:C	58:n2:49:ASN:N	2.71	0.49
63:n7:128:GLN:O	63:n7:130:PHE:N	2.45	0.49
84:p0:25:LEU:HD21	84:p0:76:LEU:HD11	1.94	0.49
1:2:186:C:OP1	10:S8:146:ARG:NH2	2.43	0.49
1:2:639:U:OP1	9:S7:118:LEU:N	2.45	0.49
1:2:793:A:H5''	1:2:794:U:C6	2.48	0.49
1:2:1316:G:O2'	1:2:1401:A:O2'	2.20	0.49
1:2:1433:G:H22	31:D9:45:GLU:CD	2.21	0.49
6:S4:246:LEU:HB2	6:S4:251:GLU:HG3	1.95	0.49
21:C9:126:GLU:H	21:C9:126:GLU:CD	2.19	0.49
28:D6:38:ARG:NH2	28:D6:83:ILE:HG21	2.28	0.49
34:SR:50:ASP:HB3	34:SR:53:LYS:HG3	1.93	0.49
34:SR:241:PHE:O	34:SR:255:ALA:HB3	2.12	0.49
36:1:217:U:H4'	62:N6:100:HIS:CD2	2.47	0.49
36:1:660:A:H5''	41:L4:100:PHE:CD1	2.48	0.49
36:1:817:A:H8	73:O7:15:SER:HG	1.60	0.49
36:1:1069:C:H2'	36:1:1070:U:H6	1.78	0.49
36:1:1097:G:H4'	36:1:1098:A:O5'	2.12	0.49
36:1:1553:U:H4'	36:1:1554:U:H5'	1.95	0.49
36:1:2707:C:H2'	36:1:2708:C:H6	1.77	0.49
36:1:3322:A:H2'	36:1:3323:A:C8	2.47	0.49
37:3:23:A:H2'	37:3:24:A:C8	2.47	0.49
38:4:71:A:O2'	62:N6:52:ARG:NH2	2.45	0.49
40:L3:77:THR:HG23	40:L3:327:CYS:HA	1.95	0.49
41:L4:209:TYR:CZ	41:L4:229:ASN:HB2	2.48	0.49
42:L5:119:TYR:CZ	42:L5:135:VAL:HG12	2.46	0.49
42:L5:160:PHE:O	42:L5:180:PHE:HE1	1.96	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:91:ARG:HD2	46:L9:143:GLU:HG3	1.94	0.49
54:M8:40:THR:C	54:M8:42:ALA:H	2.21	0.49
73:O7:65:ARG:HG3	73:O7:65:ARG:NH1	2.22	0.49
78:Q2:35:LEU:HD23	78:Q2:35:LEU:H	1.77	0.49
1:6:918:U:H2'	1:6:919:A:H8	1.76	0.49
1:6:1460:A:P	35:sM:68:ARG:HD3	2.53	0.49
1:6:1534:G:OP2	20:c8:57:ARG:NH1	2.45	0.49
1:6:1535:U:O2'	1:6:1536:G:O5'	2.31	0.49
1:6:1553:G:O6	17:c5:43:ARG:HD3	2.12	0.49
1:6:1648:A:H2'	1:6:1649:G:C8	2.47	0.49
2:s0:126:PRO:CG	2:s0:151:SER:HB2	2.42	0.49
7:s5:156:ARG:HA	7:s5:157:ARG:NH2	2.26	0.49
36:5:420:G:OP2	36:5:420:G:O5'	2.29	0.49
36:5:501:A:H2'	36:5:502:U:C6	2.47	0.49
36:5:2946:A:H5''	36:5:2947:G:H5'	1.94	0.49
40:l3:224:HIS:HB2	40:l3:270:ARG:O	2.13	0.49
42:l5:265:TYR:O	42:l5:269:SER:HB3	2.12	0.49
43:l6:131:LYS:HB2	43:l6:134:ARG:HG2	1.94	0.49
64:n8:104:THR:OG1	64:n8:127:ALA:HB2	2.13	0.49
1:2:396:G:N2	1:2:398:G:H3'	2.28	0.49
1:2:959:U:H6	15:C3:61:THR:HB	1.76	0.49
1:2:1149:G:H5''	1:2:1150:G:OP1	2.12	0.49
1:2:1229:G:O2'	1:2:1255:G:N2	2.41	0.49
1:2:1255:G:O6	14:C2:46:ARG:HD3	2.12	0.49
6:S4:211:LYS:HA	6:S4:216:ASN:O	2.13	0.49
10:S8:122:GLY:O	89:S8:302:OHX:N5	2.45	0.49
12:C0:7:ASP:O	12:C0:11:ILE:HG13	2.13	0.49
17:C5:34:VAL:HG21	17:C5:45:PHE:CB	2.42	0.49
21:C9:85:SER:C	21:C9:87:GLY:H	2.21	0.49
34:SR:123:ILE:HD13	34:SR:169:ILE:HG21	1.95	0.49
36:1:612:U:OP1	43:L6:21:THR:HB	2.13	0.49
36:1:792:G:H2'	36:1:793:C:C6	2.47	0.49
36:1:1367:G:OP1	68:O2:45:ARG:NH2	2.45	0.49
36:1:1639:C:N4	70:O4:73:SER:HB2	2.28	0.49
36:1:3343:G:N2	36:1:3362:A:H2	2.08	0.49
40:L3:187:SER:O	40:L3:190:GLU:N	2.46	0.49
41:L4:52:VAL:CG1	41:L4:99:MET:HE3	2.42	0.49
72:O6:40:VAL:O	72:O6:44:VAL:HG23	2.13	0.49
79:Q3:30:GLU:HA	79:Q3:33:GLN:HG2	1.95	0.49
79:Q3:84:ARG:NH2	79:Q3:88:GLU:OE2	2.46	0.49
1:6:187:G:H8	1:6:187:G:O5'	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:282:C:H2'	1:6:283:U:O4'	2.12	0.49
1:6:332:U:OP2	10:s8:175:GLN:NE2	2.40	0.49
1:6:542:A:H1'	1:6:543:C:OP1	2.13	0.49
1:6:1250:U:O2'	82:e1:135:HIS:HB3	2.13	0.49
1:6:1477:G:H2'	1:6:1478:G:C8	2.48	0.49
1:6:1584:G:N7	18:c6:14:LYS:HE2	2.28	0.49
1:6:1595:U:N3	1:6:1600:A:C2	2.81	0.49
2:s0:119:ARG:NE	4:s2:240:LEU:HD23	2.25	0.49
2:s0:195:TRP:NE1	2:s0:197:ILE:HD13	2.28	0.49
4:s2:241:ASP:HA	4:s2:244:SER:HB3	1.94	0.49
6:s4:75:LYS:HD3	6:s4:77:ARG:NH2	2.28	0.49
9:s7:43:PHE:HB2	9:s7:61:PHE:O	2.12	0.49
15:c3:25:TRP:HA	15:c3:27:LYS:HE2	1.95	0.49
21:c9:57:ARG:HH11	21:c9:57:ARG:CG	2.25	0.49
27:d5:44:GLN:HA	27:d5:47:TYR:HB3	1.94	0.49
28:d6:57:SER:OG	28:d6:58:VAL:O	2.20	0.49
35:sM:120:GLU:O	35:sM:122:GLU:N	2.45	0.49
36:5:408:A:N6	38:8:15:G:H1'	2.28	0.49
36:5:1366:A:C2	36:5:1367:G:C4	3.01	0.49
36:5:2319:U:O4	89:5:3998:OHX:N2	2.46	0.49
36:5:2988:C:P	52:m6:68:ARG:HH12	2.36	0.49
36:5:3299:A:H61	36:5:3315:G:H1	1.61	0.49
43:l6:109:GLU:CD	43:l6:109:GLU:H	2.21	0.49
49:m3:105:ASN:C	49:m3:105:ASN:OD1	2.56	0.49
49:m3:157:ARG:NH1	64:n8:146:GLU:OE2	2.46	0.49
61:n5:67:ILE:HB	61:n5:83:VAL:HG12	1.95	0.49
63:n7:95:VAL:O	63:n7:100:THR:HG21	2.12	0.49
1:2:793:A:H5''	1:2:794:U:C5	2.48	0.49
1:2:1071:U:H2'	1:2:1072:C:C6	2.48	0.49
3:S1:180:THR:HG22	3:S1:181:LEU:N	2.28	0.49
11:S9:167:ALA:O	11:S9:168:ARG:HB2	2.13	0.49
16:C4:24:ASN:O	16:C4:25:ASP:HB2	2.13	0.49
30:D8:50:GLU:O	30:D8:51:ASN:HB2	2.13	0.49
33:E1:109:ASP:HB2	33:E1:113:LYS:HE2	1.95	0.49
36:1:242:C:HO2'	36:1:243:G:H8	1.60	0.49
36:1:507:U:H2'	36:1:508:U:C6	2.48	0.49
36:1:634:C:H5'	69:O3:21:ARG:O	2.12	0.49
36:1:729:C:OP1	54:M8:43:PRO:HD2	2.12	0.49
36:1:1033:U:H2'	36:1:1034:U:C6	2.48	0.49
36:1:1214:U:H2'	36:1:1215:U:C6	2.48	0.49
36:1:1546:A:N7	51:M5:71:ARG:NH1	2.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2113:A:O2'	36:1:2116:G:N7	2.44	0.49
36:1:2404:A:H2'	36:1:2404:A:N3	2.28	0.49
42:L5:155:THR:HB	42:L5:179:ARG:HD3	1.95	0.49
43:L6:96:VAL:HG12	43:L6:98:VAL:HG23	1.94	0.49
50:M4:32:LEU:HD11	50:M4:94:TRP:CD1	2.48	0.49
70:O4:31:ARG:HG2	70:O4:31:ARG:HH11	1.77	0.49
71:O5:76:GLN:O	71:O5:81:ARG:NH1	2.38	0.49
1:6:30:G:H2'	1:6:31:C:C6	2.48	0.49
1:6:250:C:H5'	1:6:250:C:C6	2.48	0.49
1:6:485:A:C5	1:6:486:G:H1'	2.48	0.49
1:6:867:G:O6	89:6:2055:OHX:N1	2.46	0.49
5:s3:12:VAL:O	5:s3:16:VAL:HG23	2.13	0.49
9:s7:109:VAL:HG13	9:s7:110:GLN:HB2	1.95	0.49
11:s9:92:LYS:HB2	11:s9:95:TYR:CD2	2.45	0.49
30:d8:11:LYS:HB3	30:d8:33:LEU:HD23	1.95	0.49
36:5:624:G:H2'	36:5:625:G:H8	1.77	0.49
36:5:715:A:H4'	36:5:716:A:OP1	2.13	0.49
37:7:55:A:H2'	37:7:56:A:O4'	2.13	0.49
37:7:91:G:H2'	37:7:92:A:H8	1.78	0.49
39:l2:183:GLY:O	39:l2:186:PHE:HB3	2.13	0.49
44:l7:151:ARG:NH1	44:l7:244:ASN:O	2.46	0.49
46:l9:171:ASP:OD1	46:l9:173:ARG:HD3	2.13	0.49
47:m0:72:ALA:HB2	47:m0:155:ALA:HB2	1.95	0.49
47:m0:77:THR:HG23	47:m0:85:PHE:CZ	2.48	0.49
48:m1:90:GLN:NE2	48:m1:170:ASP:OD1	2.46	0.49
63:n7:53:VAL:HA	63:n7:57:HIS:HD2	1.78	0.49
68:o2:24:ARG:HG2	68:o2:25:TYR:CE2	2.48	0.49
72:o6:81:THR:HA	72:o6:84:LYS:HE3	1.94	0.49
84:p0:15:LEU:O	84:p0:19:LEU:HG	2.13	0.49
1:2:138:A:O2'	8:S6:149:LYS:NZ	2.45	0.48
1:2:206:A:H1'	1:2:262:U:C2	2.48	0.48
1:2:702:G:N2	1:2:703:G:H1'	2.28	0.48
1:2:1019:A:OP2	15:C3:107:LYS:HE3	2.12	0.48
1:2:1389:C:O2'	19:C7:52:GLY:HA3	2.12	0.48
1:2:1618:C:O2'	89:2:2166:OHX:N3	2.46	0.48
9:S7:154:LEU:HD21	9:S7:183:PHE:HD1	1.78	0.48
19:C7:28:PHE:CZ	19:C7:48:ASN:HB3	2.48	0.48
36:1:147:U:O4	45:L8:157:VAL:HA	2.12	0.48
36:1:265:A:O3'	51:M5:5:LYS:NZ	2.46	0.48
36:1:789:A:H2'	36:1:790:U:C6	2.48	0.48
36:1:1334:U:H1'	44:L7:208:SER:HB2	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2513:U:H2'	36:1:2592:G:H1	1.78	0.48
36:1:2551:U:O4	39:L2:95:SER:HB3	2.12	0.48
36:1:2582:C:H2'	36:1:2583:C:C6	2.47	0.48
36:1:2767:U:O2'	78:Q2:30:ALA:O	2.31	0.48
36:1:2808:A:H4'	36:1:2809:C:O5'	2.13	0.48
36:1:3151:U:OP1	40:L3:132:LYS:NZ	2.45	0.48
42:L5:279:LYS:HG2	42:L5:282:ARG:CZ	2.43	0.48
44:L7:24:GLU:O	44:L7:26:VAL:N	2.37	0.48
47:M0:162:GLN:HE22	56:N0:85:SER:HB2	1.78	0.48
48:M1:85:LYS:HE3	48:M1:85:LYS:HB2	1.69	0.48
49:M3:52:ASP:OD1	49:M3:52:ASP:N	2.45	0.48
52:M6:89:SER:O	52:M6:91:LYS:N	2.46	0.48
52:M6:167:TYR:OH	52:M6:171:LYS:HE3	2.13	0.48
62:N6:112:ASP:H	62:N6:115:ARG:HB2	1.78	0.48
71:O5:93:THR:HG23	71:O5:96:GLU:CD	2.38	0.48
77:Q1:1:MET:HE2	77:Q1:5:TRP:HB2	1.95	0.48
1:6:38:C:C2'	1:6:39:A:H5'	2.43	0.48
1:6:300:A:C2'	1:6:301:A:H5'	2.43	0.48
1:6:538:A:H2	1:6:540:G:H22	1.61	0.48
1:6:587:C:H2'	1:6:588:U:O4'	2.13	0.48
1:6:1796:C:C5	28:d6:6:ALA:N	2.81	0.48
3:s1:120:LEU:HG	3:s1:142:PHE:CE1	2.48	0.48
15:c3:54:LEU:HB3	15:c3:60:VAL:HG13	1.94	0.48
16:c4:66:ASP:N	16:c4:66:ASP:OD1	2.46	0.48
17:c5:92:SER:HB2	17:c5:107:ILE:HD11	1.95	0.48
27:d5:43:ASP:C	27:d5:45:GLU:H	2.21	0.48
36:5:335:G:OP2	62:n6:14:LYS:HE3	2.13	0.48
36:5:501:A:H2'	36:5:502:U:H6	1.78	0.48
36:5:2882:U:H2'	36:5:2883:U:O4'	2.13	0.48
36:5:3043:C:P	59:n3:48:ARG:NH2	2.86	0.48
36:5:3379:C:H4'	40:l3:315:GLY:HA2	1.95	0.48
41:l4:178:LEU:O	41:l4:182:LEU:HD23	2.13	0.48
48:m1:65:ILE:HG22	48:m1:66:ALA:HB2	1.94	0.48
74:o8:11:PHE:O	74:o8:15:THR:HG23	2.13	0.48
1:2:45:U:O2	1:2:434:G:H1'	2.13	0.48
1:2:89:G:C6	1:2:90:C:C4	3.01	0.48
1:2:448:C:OP2	6:S4:49:ARG:NH2	2.42	0.48
1:2:602:U:H2'	1:2:603:U:C6	2.47	0.48
1:2:649:U:O2'	1:2:650:U:H6	1.96	0.48
1:2:929:A:C8	16:C4:123:SER:HA	2.48	0.48
1:2:990:C:H2'	1:2:991:G:O4'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:71:GLU:O	2:S0:96:THR:HG22	2.12	0.48
5:S3:59:LEU:HG	5:S3:63:GLY:HA2	1.95	0.48
6:S4:15:PRO:HG2	6:S4:18:TRP:CE2	2.48	0.48
12:C0:14:TYR:CE2	12:C0:21:VAL:HG22	2.48	0.48
21:C9:10:ALA:HB3	21:C9:13:ASP:OD2	2.12	0.48
23:D1:1:MET:HE3	23:D1:10:GLU:O	2.13	0.48
27:D5:65:LEU:HD22	27:D5:71:ILE:HD11	1.95	0.48
36:1:351:A:N6	75:O9:37:TYR:O	2.46	0.48
36:1:398:A:C8	53:M7:3:ARG:NH2	2.81	0.48
36:1:715:A:H4'	36:1:716:A:OP1	2.13	0.48
36:1:764:U:O4	89:1:3972:OHX:N5	2.46	0.48
36:1:1795:U:OP1	39:L2:191:LEU:HD22	2.14	0.48
36:1:2376:G:C6	36:1:2377:G:O6	2.66	0.48
36:1:3140:G:OP1	40:L3:20:LYS:NZ	2.46	0.48
41:L4:16:THR:HG22	41:L4:18:ASN:N	2.28	0.48
44:L7:160:ARG:HD2	44:L7:203:TRP:NE1	2.28	0.48
45:L8:75:ILE:O	45:L8:77:GLN:N	2.46	0.48
47:M0:54:SER:HB2	47:M0:135:ILE:HD11	1.95	0.48
49:M3:105:ASN:OD1	49:M3:107:GLU:HG2	2.13	0.48
49:M3:126:PHE:CD2	71:O5:115:LYS:HG2	2.39	0.48
72:O6:76:ARG:HA	72:O6:76:ARG:HE	1.77	0.48
78:Q2:35:LEU:HA	78:Q2:40:LYS:HG2	1.95	0.48
1:6:5:U:H2'	1:6:6:G:H8	1.77	0.48
1:6:151:G:N2	1:6:163:G:N2	2.61	0.48
1:6:1005:A:C5	1:6:1006:C:C4	3.01	0.48
1:6:1477:G:H2'	1:6:1478:G:H8	1.78	0.48
1:6:1557:U:O2'	1:6:1558:U:H2'	2.13	0.48
1:6:1759:C:H2'	1:6:1760:G:O4'	2.12	0.48
80:c0:1:MET:HE2	80:c0:41:TYR:HE1	1.78	0.48
80:c0:72:GLY:C	80:c0:74:GLU:H	2.20	0.48
17:c5:108:ARG:HH21	20:c8:119:ILE:HD12	1.78	0.48
23:d1:85:TYR:CD1	29:d7:6:ASP:HB2	2.47	0.48
36:5:979:U:H1'	36:5:980:A:C4	2.47	0.48
36:5:2705:A:OP2	89:5:3900:OHX:N2	2.46	0.48
40:l3:167:ARG:O	89:l3:405:OHX:N5	2.46	0.48
44:l7:219:LYS:O	44:l7:228:SER:HB2	2.13	0.48
50:m4:115:PHE:O	50:m4:119:GLN:HG3	2.13	0.48
55:m9:17:VAL:HG21	55:m9:21:LYS:HB2	1.95	0.48
67:o1:25:PHE:HB3	67:o1:65:LYS:HG2	1.93	0.48
69:o3:38:PRO:HD3	69:o3:77:ASN:O	2.12	0.48
72:o6:34:SER:OG	72:o6:37:THR:HG23	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:110:U:O2'	1:2:797:G:H1'	2.12	0.48
1:2:197:A:N6	10:S8:141:ARG:HH12	2.11	0.48
1:2:241:U:H5'	1:2:242:U:OP2	2.13	0.48
1:2:686:C:H2'	1:2:687:G:O4'	2.13	0.48
1:2:1231:U:H4'	1:2:1258:U:H6	1.78	0.48
1:2:1450:U:H2'	1:2:1451:C:H6	1.78	0.48
1:2:1660:A:H2'	1:2:1661:U:C6	2.48	0.48
7:S5:106:LYS:HB3	7:S5:109:LYS:HG3	1.95	0.48
10:S8:57:ALA:HB1	10:S8:60:ILE:HD11	1.95	0.48
13:C1:44:THR:HB	13:C1:60:PHE:CD1	2.48	0.48
18:C6:34:SER:HB3	18:C6:35:PRO:HD2	1.93	0.48
22:D0:106:ILE:C	22:D0:108:ILE:H	2.20	0.48
26:D4:62:THR:HA	26:D4:69:SER:HA	1.95	0.48
36:1:1048:A:H2'	47:M0:22:TYR:CZ	2.49	0.48
36:1:1589:A:OP1	70:O4:11:ASN:HB2	2.14	0.48
36:1:1615:C:H2'	36:1:1616:U:C6	2.47	0.48
36:1:1804:A:H2'	36:1:1805:C:H6	1.79	0.48
36:1:3200:G:O6	89:1:4141:OHX:N4	2.47	0.48
36:1:3321:C:H2'	36:1:3322:A:C8	2.48	0.48
42:L5:58:LYS:HD2	42:L5:93:THR:OG1	2.14	0.48
43:L6:60:ASP:O	43:L6:61:ASN:HB2	2.13	0.48
44:L7:150:LYS:HD3	44:L7:244:ASN:HD21	1.77	0.48
45:L8:42:PRO:HD2	45:L8:44:ARG:NH1	2.29	0.48
49:M3:54:LEU:HD12	49:M3:75:PHE:CE2	2.49	0.48
59:N3:75:PRO:HG2	59:N3:105:PRO:HD3	1.94	0.48
68:O2:104:ASN:O	68:O2:108:ILE:HG13	2.13	0.48
1:6:454:U:P	1:6:455:C:H41	2.35	0.48
3:s1:129:THR:HG22	3:s1:135:LEU:HD12	1.95	0.48
5:s3:217:ILE:C	5:s3:219:ALA:H	2.22	0.48
8:s6:121:LEU:N	8:s6:125:THR:HG1	2.12	0.48
14:c2:42:ALA:HB2	14:c2:124:LYS:HD2	1.96	0.48
14:c2:83:GLU:C	14:c2:85:LYS:H	2.21	0.48
20:c8:26:ILE:HG12	20:c8:31:ALA:HB2	1.95	0.48
21:c9:45:MET:HE3	21:c9:45:MET:HB3	1.72	0.48
89:5:4022:OHX:N6	89:5:4221:OHX:N4	2.62	0.48
37:7:76:A:O2'	56:n0:50:LYS:NZ	2.47	0.48
44:l7:90:LYS:HB2	44:l7:220:PHE:HE1	1.78	0.48
48:m1:10:ARG:HA	48:m1:134:PRO:HD2	1.95	0.48
51:m5:66:VAL:HG11	51:m5:101:THR:HG22	1.95	0.48
51:m5:96:ARG:HG2	51:m5:96:ARG:HH11	1.77	0.48
57:n1:68:THR:HG22	57:n1:71:SER:O	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:n4:63:ILE:O	60:n4:65:GLU:N	2.47	0.48
64:n8:3:SER:O	64:n8:6:THR:HB	2.13	0.48
1:2:4:C:OP2	4:S2:200:SER:OG	2.31	0.48
1:2:190:C:O2'	1:2:191:C:H5'	2.13	0.48
1:2:301:A:H2'	1:2:302:U:O4'	2.13	0.48
1:2:480:G:H22	1:2:509:G:H1'	1.79	0.48
1:2:639:U:P	9:S7:117:THR:HG1	2.36	0.48
1:2:811:A:C2	1:2:858:G:H1'	2.48	0.48
1:2:818:C:N4	1:2:819:G:O6	2.38	0.48
1:2:1584:G:H5''	18:C6:122:ARG:HG2	1.94	0.48
7:S5:222:LYS:HE3	7:S5:225:ARG:HH12	1.78	0.48
14:C2:81:ASP:HA	14:C2:82:PRO:HD3	1.60	0.48
17:C5:50:THR:O	17:C5:50:THR:OG1	2.26	0.48
19:C7:61:ILE:HD11	19:C7:69:ILE:HG13	1.94	0.48
24:D2:114:GLU:O	24:D2:118:ARG:HG3	2.13	0.48
28:D6:74:CYS:SG	28:D6:77:CYS:HB2	2.53	0.48
34:SR:178:VAL:HG13	34:SR:202:LEU:HD12	1.96	0.48
36:1:551:A:C4	36:1:552:G:C8	3.01	0.48
36:1:1599:G:H2'	36:1:1600:U:H6	1.78	0.48
36:1:1895:A:O2'	36:1:3053:G:H4'	2.12	0.48
36:1:2355:G:H4'	53:M7:139:TYR:CZ	2.48	0.48
40:L3:66:LYS:HZ1	59:N3:120:LYS:HE2	1.77	0.48
46:L9:27:VAL:HG11	46:L9:79:ILE:HA	1.95	0.48
47:M0:3:ARG:CZ	47:M0:63:GLU:HG3	2.43	0.48
47:M0:210:ILE:HA	47:M0:217:PHE:CE2	2.48	0.48
69:O3:75:HIS:HB3	69:O3:80:VAL:HG13	1.94	0.48
77:Q1:13:LEU:HD11	77:Q1:17:ARG:CZ	2.43	0.48
1:6:149:C:OP1	26:d4:121:THR:OG1	2.28	0.48
1:6:151:G:N2	1:6:163:G:H22	2.10	0.48
1:6:546:U:H2'	1:6:547:U:C6	2.49	0.48
1:6:1600:A:H4'	1:6:1601:G:OP1	2.14	0.48
3:s1:71:ALA:HB3	16:c4:114:ARG:HH12	1.78	0.48
7:s5:43:PHE:CZ	7:s5:90:ILE:HG21	2.48	0.48
8:s6:2:LYS:HE2	8:s6:17:GLU:OE2	2.14	0.48
16:c4:106:ALA:HA	16:c4:112:ILE:HD11	1.96	0.48
24:d2:41:MET:HG2	24:d2:129:VAL:HG11	1.95	0.48
36:5:916:G:H4'	36:5:917:A:O5'	2.12	0.48
36:5:1137:C:H2'	36:5:1138:U:O4'	2.14	0.48
36:5:2105:G:H2'	36:5:2106:A:H8	1.77	0.48
36:5:2864:A:H5''	47:m0:114:GLY:HA2	1.95	0.48
89:5:4110:OHX:N5	38:8:139:U:O4	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:l3:122:TRP:CZ2	40:l3:127:LYS:HD2	2.48	0.48
44:l7:158:LYS:HD2	44:l7:159:GLN:N	2.29	0.48
47:m0:36:LEU:HD12	47:m0:87:LEU:HB3	1.96	0.48
49:m3:91:ARG:CZ	49:m3:97:VAL:HB	2.43	0.48
78:q2:38:GLN:O	78:q2:38:GLN:NE2	2.31	0.48
1:2:603:U:H2'	1:2:604:A:H8	1.78	0.48
1:2:833:U:OP2	89:2:2141:OHX:N4	2.47	0.48
1:2:987:G:C2	39:L2:249:SER:HB2	2.49	0.48
1:2:1076:A:O5'	28:D6:13:LYS:HB3	2.13	0.48
1:2:1102:G:P	24:D2:76:SER:HB2	2.54	0.48
2:S0:185:ARG:HA	23:D1:44:ARG:HA	1.95	0.48
4:S2:78:ASP:OD2	4:S2:79:GLU:N	2.38	0.48
6:S4:52:LEU:HB3	6:S4:54:TYR:CD2	2.49	0.48
13:C1:59:PRO:HB3	13:C1:66:ILE:HD11	1.95	0.48
13:C1:98:ASN:O	13:C1:98:ASN:ND2	2.46	0.48
18:C6:55:VAL:HG21	18:C6:105:LEU:HG	1.96	0.48
20:C8:18:LEU:HD21	20:C8:101:LEU:HD13	1.94	0.48
25:D3:73:ARG:HH21	25:D3:84:THR:HG22	1.78	0.48
25:D3:103:LEU:HB3	25:D3:126:LYS:HB2	1.96	0.48
36:1:42:C:H5''	36:1:2612:U:OP1	2.14	0.48
36:1:73:C:N3	49:M3:59:ARG:NH1	2.61	0.48
36:1:283:G:O6	36:1:304:G:H1'	2.12	0.48
36:1:849:C:H2'	36:1:850:U:C6	2.48	0.48
36:1:1555:U:O2'	36:1:2169:G:N2	2.45	0.48
36:1:2403:G:H21	36:1:2404:A:H62	1.62	0.48
38:4:9:A:H2'	38:4:10:A:C8	2.48	0.48
39:L2:46:LYS:O	39:L2:47:GLN:HB2	2.13	0.48
53:M7:26:PHE:CE1	53:M7:120:ASN:HA	2.49	0.48
79:Q3:8:VAL:O	79:Q3:11:THR:HB	2.13	0.48
1:6:213:A:OP2	89:6:2146:OHX:N1	2.46	0.48
1:6:509:G:H2'	1:6:510:G:O4'	2.14	0.48
1:6:517:U:H3	1:6:535:A:H61	1.62	0.48
1:6:530:C:O2	26:d4:61:ARG:NH2	2.47	0.48
1:6:620:A:H5'	1:6:620:A:C8	2.44	0.48
1:6:686:C:H2'	1:6:687:G:C8	2.49	0.48
1:6:1220:C:H4'	80:c0:52:LYS:HE2	1.96	0.48
1:6:1597:A:P	31:d9:19:ARG:HH22	2.35	0.48
2:s0:90:ALA:HB1	2:s0:95:ALA:O	2.14	0.48
4:s2:79:GLU:HG2	4:s2:81:MET:HE3	1.96	0.48
4:s2:149:GLY:H	23:d1:4:ASP:HB2	1.78	0.48
6:s4:62:LYS:CE	6:s4:66:MET:HE3	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:c3:54:LEU:HB3	15:c3:60:VAL:CG1	2.44	0.48
18:c6:82:ARG:HH12	18:c6:114:ARG:HB2	1.79	0.48
21:c9:127:ASN:OD1	21:c9:130:ARG:NH1	2.46	0.48
31:d9:6:VAL:O	31:d9:8:PHE:N	2.38	0.48
34:sR:194:GLY:HA3	34:sR:221:MET:HE1	1.96	0.48
35:sM:37:VAL:HG12	35:sM:38:PRO:O	2.13	0.48
36:5:519:A:O5'	44:l7:70:LYS:NZ	2.45	0.48
36:5:781:G:OP1	54:m8:151:ARG:NH1	2.43	0.48
36:5:1064:A:H4'	36:5:1065:A:O5'	2.13	0.48
36:5:1650:G:N7	89:5:4185:OHX:N3	2.62	0.48
36:5:3141:A:C2	36:5:3144:G:H1'	2.49	0.48
41:l4:34:ILE:HD12	41:l4:120:TYR:CE1	2.48	0.48
43:l6:3:ALA:HB1	68:o2:75:LEU:HD13	1.95	0.48
48:m1:34:SER:HB2	48:m1:67:VAL:HG21	1.96	0.48
49:m3:123:ILE:HG22	71:o5:118:ILE:HG12	1.94	0.48
56:n0:155:ARG:HD3	56:n0:172:TYR:CD2	2.48	0.48
67:o1:43:HIS:O	67:o1:44:MET:HE2	2.13	0.48
1:2:196:G:O2'	1:2:197:A:P	2.71	0.48
1:2:200:A:H2'	1:2:201:G:C8	2.48	0.48
1:2:499:U:O2'	1:2:500:C:P	2.71	0.48
1:2:896:U:C1'	16:C4:38:THR:HG21	2.43	0.48
1:2:958:U:OP2	29:D7:20:LYS:HE3	2.14	0.48
1:2:1175:U:H2'	1:2:1176:G:H8	1.78	0.48
1:2:1178:G:H5'	1:2:1190:C:H42	1.78	0.48
5:S3:61:GLU:O	5:S3:63:GLY:N	2.47	0.48
14:C2:66:VAL:HB	14:C2:67:THR:H	1.34	0.48
18:C6:114:ARG:O	18:C6:115:THR:OG1	2.28	0.48
22:D0:58:LEU:HD11	22:D0:88:LYS:HD2	1.94	0.48
22:D0:70:THR:OG1	22:D0:72:ASN:OD1	2.30	0.48
25:D3:63:GLN:HA	25:D3:65:ASN:N	2.29	0.48
36:1:128:G:H2'	36:1:129:U:O4'	2.13	0.48
36:1:501:A:H5''	43:L6:28:GLN:HE21	1.79	0.48
36:1:1063:G:C6	36:1:1097:G:C5	3.01	0.48
36:1:1936:A:H2'	36:1:1937:U:O4'	2.13	0.48
36:1:2830:G:H1'	36:1:2861:U:C2	2.48	0.48
41:L4:107:ARG:HG2	41:L4:108:LYS:N	2.29	0.48
41:L4:237:GLN:O	41:L4:246:ARG:HG3	2.14	0.48
41:L4:271:LYS:HB2	41:L4:274:TYR:HB3	1.94	0.48
41:L4:316:ASN:ND2	44:L7:150:LYS:HG3	2.28	0.48
45:L8:71:VAL:HG13	45:L8:234:GLY:C	2.39	0.48
51:M5:103:GLU:OE1	51:M5:118:SER:OG	2.19	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:140:LYS:HB3	51:M5:144:ARG:NH1	2.28	0.48
51:M5:143:ARG:HH21	71:O5:92:LEU:HD23	1.78	0.48
62:N6:37:LYS:H	62:N6:37:LYS:HD3	1.77	0.48
63:N7:10:VAL:HB	63:N7:83:THR:HG21	1.96	0.48
66:O0:41:LEU:HD22	66:O0:42:ILE:N	2.27	0.48
13:c1:60:PHE:O	13:c1:62:GLY:N	2.46	0.48
14:c2:60:VAL:HG22	14:c2:122:VAL:HG22	1.96	0.48
20:c8:35:ILE:HB	20:c8:38:VAL:HG22	1.94	0.48
22:d0:20:ILE:HD12	22:d0:100:VAL:HG21	1.96	0.48
24:d2:66:ASN:OD1	24:d2:68:ARG:HG2	2.14	0.48
36:5:69:C:H2'	36:5:70:A:O4'	2.12	0.48
36:5:279:U:H2'	36:5:280:U:C6	2.48	0.48
36:5:770:G:N7	89:5:4099:OHX:N6	2.62	0.48
36:5:1018:G:C2	36:5:1019:G:H1'	2.49	0.48
36:5:1298:C:O3'	76:q0:113:ARG:NH1	2.46	0.48
41:l4:20:LEU:HD22	41:l4:256:THR:HG22	1.95	0.48
83:m2:152:UNK:O	83:m2:155:UNK:N	2.47	0.48
66:o0:43:ILE:HD12	66:o0:90:VAL:HB	1.94	0.48
68:o2:16:LYS:O	68:o2:17:PHE:HB2	2.13	0.48
1:2:66:U:H5'	8:S6:173:PRO:HA	1.95	0.48
1:2:139:C:O4'	1:2:141:U:H5''	2.13	0.48
1:2:223:U:H2'	1:2:224:C:C6	2.48	0.48
1:2:602:U:H2'	1:2:603:U:H6	1.79	0.48
1:2:740:A:C2'	1:2:741:C:H5''	2.39	0.48
1:2:1080:U:O2'	1:2:1081:A:H5'	2.13	0.48
1:2:1600:A:HO2'	1:2:1602:C:N4	2.12	0.48
2:S0:179:ARG:O	2:S0:183:ARG:HG3	2.13	0.48
8:S6:21:GLU:O	8:S6:25:ARG:HB2	2.13	0.48
13:C1:127:GLN:HG2	13:C1:128:CYS:H	1.78	0.48
36:1:685:G:P	49:M3:35:ARG:HH11	2.36	0.48
36:1:884:A:OP1	73:O7:5:THR:HG23	2.14	0.48
36:1:1245:A:C3'	36:1:1246:G:H5''	2.42	0.48
36:1:1584:U:H2'	36:1:1585:C:H6	1.78	0.48
36:1:2674:A:C2	48:M1:124:GLY:HA3	2.49	0.48
36:1:2718:U:H2'	36:1:2719:U:C6	2.48	0.48
44:L7:136:TYR:CE2	44:L7:231:ASN:HB2	2.49	0.48
57:N1:12:ARG:HD2	57:N1:13:TYR:CE1	2.49	0.48
63:N7:60:LYS:HD2	63:N7:60:LYS:HA	1.72	0.48
1:6:121:U:H1'	6:s4:33:ALA:O	2.14	0.48
1:6:872:G:H2'	1:6:873:U:O4'	2.14	0.48
1:6:1629:G:H5''	1:6:1794:A:OP2	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:s3:72:LEU:HD22	80:c0:65:TYR:CD1	2.46	0.48
8:s6:56:ASN:O	8:s6:107:ALA:N	2.47	0.48
8:s6:144:PHE:HZ	60:n4:90:ILE:HD13	1.79	0.48
13:c1:46:LYS:HD2	13:c1:46:LYS:HA	1.75	0.48
20:c8:139:LYS:O	20:c8:143:ARG:NH1	2.46	0.48
34:sR:79:TYR:HE1	34:sR:100:TYR:CE1	2.31	0.48
36:5:44:U:H5''	51:m5:85:THR:HG23	1.96	0.48
36:5:824:C:H5''	39:l2:21:ARG:HD3	1.96	0.48
36:5:2810:C:OP1	89:5:4081:OHX:N3	2.46	0.48
36:5:3340:G:H4'	36:5:3341:U:OP1	2.13	0.48
41:l4:98:ARG:HB3	41:l4:98:ARG:CZ	2.39	0.48
42:l5:152:ARG:HG3	42:l5:152:ARG:NH1	2.29	0.48
42:l5:219:PHE:C	42:l5:221:GLU:H	2.21	0.48
45:l8:108:ARG:O	45:l8:112:GLU:N	2.28	0.48
47:m0:208:ASN:O	47:m0:212:GLU:HB2	2.12	0.48
50:m4:103:ILE:HG23	50:m4:106:ARG:HH21	1.78	0.48
69:o3:62:SER:OG	69:o3:63:LYS:N	2.46	0.48
79:q3:35:ALA:HB3	79:q3:37:TYR:CE2	2.49	0.48
1:2:54:C:O2'	1:2:459:G:N7	2.40	0.48
1:2:131:C:O2'	1:2:132:U:OP1	2.26	0.48
1:2:488:G:H4'	1:2:488:G:OP1	2.13	0.48
1:2:558:U:H2'	1:2:558:U:O2	2.13	0.48
1:2:1274:C:C5	35:SM:95:SER:HA	2.49	0.48
2:S0:64:ILE:HG12	2:S0:122:ILE:HD11	1.95	0.48
3:S1:69:CYS:SG	16:C4:114:ARG:HD3	2.54	0.48
5:S3:135:GLU:HB3	5:S3:187:LYS:HB3	1.96	0.48
15:C3:27:LYS:H	15:C3:27:LYS:HE3	1.79	0.48
15:C3:119:GLU:HA	15:C3:122:ILE:HD12	1.96	0.48
34:SR:225:LEU:O	34:SR:228:LYS:HG3	2.13	0.48
36:1:73:C:O2	49:M3:59:ARG:HD3	2.13	0.48
36:1:86:G:O2'	36:1:98:G:O6	2.25	0.48
36:1:315:C:OP2	72:O6:28:TYR:OH	2.27	0.48
36:1:2419:A:H2'	36:1:2420:C:C6	2.48	0.48
38:4:70:G:O6	89:O7:103:OHX:N4	2.47	0.48
39:L2:62:VAL:HG21	39:L2:71:LEU:HD23	1.96	0.48
40:L3:25:ILE:HD13	40:L3:25:ILE:N	2.28	0.48
40:L3:169:THR:HG23	40:L3:170:PRO:HD2	1.95	0.48
54:M8:44:PHE:CD2	54:M8:134:GLY:HA3	2.49	0.48
62:N6:51:ARG:HG3	62:N6:52:ARG:N	2.27	0.48
68:O2:32:TRP:CZ2	68:O2:53:PRO:HD2	2.49	0.48
1:6:107:C:H1'	1:6:362:G:O2'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:215:A:H5''	1:6:216:U:OP2	2.14	0.48
1:6:653:C:N4	1:6:677:G:H1	2.12	0.48
6:s4:136:VAL:HG12	6:s4:137:PRO:O	2.14	0.48
13:c1:4:GLU:OE1	13:c1:82:ARG:NH2	2.34	0.48
22:d0:24:ILE:HG12	22:d0:116:VAL:HG12	1.95	0.48
36:5:127:G:H2'	36:5:128:G:C8	2.48	0.48
36:5:507:U:H2'	36:5:508:U:C6	2.48	0.48
36:5:1213:G:H4'	56:n0:90:MET:CG	2.35	0.48
36:5:2103:U:H2'	36:5:2104:A:H8	1.79	0.48
40:l3:46:PHE:CD1	40:l3:208:VAL:HG21	2.49	0.48
40:l3:194:TRP:O	40:l3:198:HIS:ND1	2.37	0.48
41:l4:229:ASN:OD1	41:l4:231:ALA:N	2.47	0.48
43:l6:144:ALA:O	43:l6:147:ALA:HB3	2.13	0.48
46:l9:26:LYS:HG3	46:l9:35:THR:HG22	1.94	0.48
47:m0:5:PRO:HB2	47:m0:7:ARG:HB3	1.94	0.48
49:m3:144:THR:O	49:m3:146:PRO:HD3	2.14	0.48
59:n3:19:VAL:HG13	59:n3:37:ILE:HA	1.95	0.48
67:o1:36:ILE:HG12	67:o1:73:LEU:HD11	1.96	0.48
1:2:17:C:H2'	1:2:18:C:C6	2.48	0.48
1:2:912:U:H4'	1:2:913:G:H2'	1.95	0.48
1:2:1301:U:H2'	1:2:1302:U:O4'	2.14	0.48
1:2:1545:A:H2'	1:2:1546:G:H8	1.79	0.48
2:S0:200:ASP:HA	2:S0:203:PHE:CZ	2.48	0.48
4:S2:103:VAL:HG12	4:S2:190:LEU:HD12	1.96	0.48
9:S7:133:THR:O	9:S7:134:GLU:HB2	2.14	0.48
14:C2:60:VAL:HG13	14:C2:122:VAL:HG22	1.96	0.48
15:C3:55:ARG:HD3	29:D7:47:PHE:CD1	2.49	0.48
17:C5:28:MET:HE2	17:C5:28:MET:HB3	1.65	0.48
18:C6:95:LYS:HE3	18:C6:96:TYR:CZ	2.49	0.48
26:D4:8:ARG:NH1	26:D4:26:ASP:OD1	2.47	0.48
26:D4:19:ALA:CB	26:D4:81:GLU:HG2	2.43	0.48
36:1:256:G:H4'	71:O5:111:PHE:HZ	1.79	0.48
36:1:1826:C:H2'	36:1:1827:C:C6	2.48	0.48
36:1:2902:A:H2'	36:1:2903:A:O4'	2.13	0.48
38:4:91:C:H2'	38:4:92:A:C8	2.48	0.48
40:L3:116:ARG:NH2	40:L3:174:LYS:HD3	2.28	0.48
41:L4:327:LEU:H	41:L4:327:LEU:HD22	1.79	0.48
43:L6:164:SER:HB2	69:O3:4:SER:OG	2.13	0.48
47:M0:164:LYS:NZ	56:N0:85:SER:O	2.43	0.48
55:M9:38:ARG:O	55:M9:41:ILE:HG22	2.14	0.48
72:O6:43:LEU:O	72:O6:47:ILE:HG13	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1110:G:N2	1:6:1136:U:H1'	2.29	0.48
1:6:1212:G:C2	1:6:1213:G:C8	3.02	0.48
1:6:1685:G:H1	1:6:1716:C:H42	1.60	0.48
7:s5:145:ASP:OD1	30:d8:45:LYS:HE2	2.14	0.48
16:c4:61:MET:HE2	16:c4:61:MET:HB3	1.66	0.48
17:c5:111:MET:HG2	20:c8:119:ILE:CG1	2.43	0.48
22:d0:63:LEU:HB2	22:d0:84:MET:HB3	1.96	0.48
26:d4:29:HIS:HB2	26:d4:67:GLY:HA2	1.95	0.48
26:d4:62:THR:HA	26:d4:69:SER:HA	1.96	0.48
34:sR:10:ARG:NH1	34:sR:51:ASP:OD1	2.46	0.48
36:5:655:C:H2'	36:5:656:A:H8	1.79	0.48
36:5:1062:A:H4'	57:n1:105:PHE:CE2	2.49	0.48
36:5:2623:G:H2'	36:5:2624:G:O4'	2.14	0.48
36:5:2765:C:O3'	78:q2:39:GLY:HA3	2.13	0.48
36:5:3084:C:H2'	36:5:3085:G:O4'	2.13	0.48
36:5:3103:A:OP2	89:5:4162:OHX:N4	2.47	0.48
40:l3:37:ARG:HA	40:l3:186:GLY:HA2	1.95	0.48
45:l8:67:ILE:HA	45:l8:67:ILE:HD13	1.57	0.48
53:m7:30:ARG:HA	53:m7:119:VAL:CG1	2.44	0.48
61:n5:73:MET:HE1	61:n5:141:TYR:CD1	2.49	0.48
63:n7:84:ARG:HB3	66:o0:61:MET:HE1	1.96	0.48
64:n8:13:GLY:O	68:o2:36:LYS:HE2	2.14	0.48
71:o5:24:LEU:HB3	71:o5:51:ILE:HG12	1.96	0.48
1:2:350:U:O2	1:2:352:A:C6	2.67	0.48
1:2:413:U:H2'	1:2:414:C:C6	2.48	0.48
1:2:1234:A:HO2'	33:E1:146:SER:HB3	1.79	0.48
1:2:1340:U:C2	1:2:1378:U:H4'	2.49	0.48
1:2:1565:C:H2'	1:2:1566:U:O4'	2.14	0.48
3:S1:191:GLU:HB2	3:S1:194:ASN:HB2	1.96	0.48
4:S2:99:LYS:HE2	4:S2:208:GLU:OE1	2.14	0.48
6:S4:87:MET:O	6:S4:122:LYS:HE3	2.14	0.48
6:S4:193:GLY:O	6:S4:210:ILE:HG23	2.14	0.48
9:S7:182:VAL:HG12	9:S7:183:PHE:H	1.79	0.48
13:C1:57:LYS:HB2	13:C1:110:HIS:NE2	2.29	0.48
17:C5:69:GLU:OE1	89:C5:201:OHX:N2	2.47	0.48
18:C6:28:LEU:HD12	18:C6:65:ILE:H	1.78	0.48
18:C6:38:LEU:O	18:C6:45:ARG:NE	2.46	0.48
20:C8:125:ILE:HG23	35:SM:61:ILE:HG23	1.96	0.48
36:1:661:G:OP2	64:N8:12:ARG:NH2	2.47	0.48
36:1:1766:G:N7	55:M9:46:LYS:NZ	2.62	0.48
36:1:1947:G:H1	36:1:2101:C:N4	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2421:U:H2'	36:1:2422:C:O4'	2.13	0.48
36:1:3151:U:H4'	36:1:3294:A:H1'	1.96	0.48
36:1:3377:G:O6	89:1:4048:OHX:N2	2.47	0.48
39:L2:65:ASP:HB3	39:L2:68:LYS:O	2.14	0.48
42:L5:106:ALA:O	42:L5:110:LEU:HB2	2.14	0.48
43:L6:31:ARG:HH11	69:O3:107:ILE:C	2.20	0.48
46:L9:93:VAL:O	46:L9:177:ASP:HA	2.13	0.48
48:M1:13:LYS:NZ	48:M1:14:ILE:O	2.37	0.48
54:M8:121:CYS:O	54:M8:122:ILE:HD13	2.14	0.48
61:N5:86:VAL:O	61:N5:120:LYS:HB3	2.13	0.48
63:N7:57:HIS:HD2	63:N7:65:ARG:HG3	1.78	0.48
66:O0:40:LYS:HB3	66:O0:101:LEU:HD11	1.95	0.48
71:O5:94:LYS:O	71:O5:97:ALA:HB3	2.14	0.48
1:6:489:C:O2'	1:6:490:C:O5'	2.32	0.48
1:6:828:U:O2'	1:6:829:A:OP1	2.29	0.48
1:6:869:A:H2'	1:6:870:C:O4'	2.14	0.48
1:6:918:U:H2'	1:6:919:A:C8	2.48	0.48
1:6:1460:A:OP2	35:sM:68:ARG:HD3	2.14	0.48
1:6:1558:U:H3	17:c5:122:THR:CG2	2.27	0.48
4:s2:37:PRO:HA	4:s2:65:GLU:OE1	2.13	0.48
10:s8:10:LYS:HG2	13:c1:133:LYS:HE2	1.95	0.48
21:c9:37:VAL:HG11	21:c9:100:ILE:HD11	1.94	0.48
24:d2:53:ILE:HD11	24:d2:62:VAL:HG23	1.96	0.48
36:5:1546:A:N7	51:m5:71:ARG:NH1	2.62	0.48
36:5:2248:C:OP2	89:5:3980:OHX:N6	2.47	0.48
36:5:2643:A:H5'	65:n9:6:ASN:ND2	2.28	0.48
36:5:2655:U:H4'	36:5:2656:A:O4'	2.14	0.48
37:7:58:C:OP1	89:7:216:OHX:N3	2.47	0.48
37:7:110:G:C6	37:7:111:U:C4	3.02	0.48
41:l4:98:ARG:HG2	41:l4:99:MET:N	2.28	0.48
41:l4:193:LYS:HE3	41:l4:193:LYS:HB3	1.65	0.48
69:o3:17:GLN:HG2	69:o3:24:ASN:HB3	1.96	0.48
1:2:366:A:OP1	1:2:758:U:O2'	2.18	0.47
1:2:542:A:C2	32:E0:28:LYS:HD2	2.49	0.47
1:2:639:U:H5''	9:S7:101:LYS:HB2	1.95	0.47
3:S1:27:LYS:HD3	3:S1:48:VAL:C	2.39	0.47
6:S4:36:HIS:CD2	6:S4:85:GLY:HA3	2.49	0.47
6:S4:104:ASP:HB3	6:S4:106:LYS:H	1.78	0.47
7:S5:116:HIS:NE2	27:D5:95:HIS:HE1	2.11	0.47
10:S8:87:ASN:HB3	10:S8:90:LEU:HG	1.96	0.47
12:C0:80:LEU:HB2	12:C0:82:LEU:HG	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:C3:99:ARG:O	15:C3:103:GLU:HG2	2.14	0.47
16:C4:16:VAL:HG22	16:C4:33:LEU:HA	1.96	0.47
18:C6:113:ASP:CG	18:C6:114:ARG:H	2.22	0.47
19:C7:84:TYR:C	19:C7:85:VAL:HG23	2.39	0.47
20:C8:41:ARG:NH1	21:C9:38:LYS:HG3	2.29	0.47
25:D3:69:ARG:HH11	25:D3:116:ASP:CG	2.22	0.47
36:1:27:C:H1'	36:1:328:U:H1'	1.96	0.47
36:1:345:G:O2'	38:4:25:G:N3	2.47	0.47
36:1:437:G:H2'	36:1:438:A:O4'	2.13	0.47
36:1:1556:C:O5'	36:1:2169:G:N2	2.47	0.47
36:1:2552:C:C5	66:O0:53:LYS:HE3	2.48	0.47
36:1:3268:A:OP2	53:M7:181:ARG:NH1	2.46	0.47
39:L2:174:ARG:O	79:Q3:69:TYR:OH	2.32	0.47
40:L3:55:THR:O	40:L3:56:ILE:HD12	2.14	0.47
41:L4:119:ARG:O	41:L4:120:TYR:C	2.56	0.47
42:L5:79:TYR:HB2	42:L5:81:HIS:CE1	2.49	0.47
46:L9:19:SER:C	46:L9:20:ILE:HG13	2.39	0.47
46:L9:90:MET:HG2	46:L9:181:VAL:HG22	1.96	0.47
46:L9:94:TYR:CE2	46:L9:98:PRO:HA	2.49	0.47
47:M0:16:PRO:O	47:M0:18:PRO:HD3	2.14	0.47
47:M0:76:MET:HE1	47:M0:148:VAL:HG13	1.95	0.47
51:M5:19:LEU:HD12	51:M5:19:LEU:HA	1.68	0.47
52:M6:38:ALA:O	52:M6:41:LEU:HB2	2.14	0.47
54:M8:64:VAL:HG13	54:M8:93:ILE:HD11	1.96	0.47
57:N1:120:LYS:O	57:N1:122:GLN:N	2.47	0.47
59:N3:11:PHE:CG	59:N3:88:ARG:HD2	2.48	0.47
63:N7:25:ILE:HA	63:N7:43:VAL:HG12	1.96	0.47
70:O4:67:LYS:HA	70:O4:70:LYS:HE3	1.95	0.47
72:O6:95:ALA:O	72:O6:99:ARG:HB2	2.14	0.47
1:6:14:C:OP2	4:s2:206:THR:HG21	2.13	0.47
1:6:276:C:H1'	1:6:277:U:C5	2.49	0.47
1:6:577:G:C8	1:6:577:G:H3'	2.48	0.47
1:6:1031:U:H4'	1:6:1032:G:OP2	2.14	0.47
1:6:1636:C:H4'	1:6:1637:C:C5'	2.25	0.47
9:s7:38:LEU:HD23	9:s7:38:LEU:HA	1.75	0.47
9:s7:99:LEU:HA	9:s7:100:PRO:HD2	1.67	0.47
9:s7:124:LYS:HD2	9:s7:127:GLU:OE2	2.13	0.47
10:s8:171:SER:HB3	10:s8:180:ASP:HB2	1.95	0.47
14:c2:45:LEU:H	14:c2:120:VAL:HG23	1.79	0.47
14:c2:93:ASP:HB3	14:c2:96:GLN:HB2	1.95	0.47
18:c6:113:ASP:C	18:c6:115:THR:H	2.22	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:c8:145:ARG:HA	20:c8:145:ARG:HE	1.79	0.47
26:d4:89:TYR:HE1	26:d4:93:ARG:NH1	2.11	0.47
36:5:8:C:H2'	36:5:9:U:O4'	2.14	0.47
36:5:913:A:H2	36:5:2134:G:N3	2.12	0.47
36:5:1072:G:H1'	36:5:1087:G:N2	2.28	0.47
36:5:1554:U:H4'	36:5:1555:U:OP1	2.13	0.47
36:5:2112:U:H4'	36:5:2113:A:H5'	1.95	0.47
36:5:2904:U:H2'	36:5:2905:U:C6	2.48	0.47
36:5:3018:C:C4	36:5:3019:U:C4	3.02	0.47
40:l3:84:VAL:HG22	40:l3:162:VAL:HB	1.96	0.47
40:l3:209:PHE:HA	40:l3:213:GLU:OE2	2.14	0.47
40:l3:256:HIS:HA	40:l3:257:PRO:C	2.38	0.47
41:l4:181:VAL:HG11	41:l4:224:GLY:HA3	1.96	0.47
41:l4:338:LYS:HD2	41:l4:338:LYS:HA	1.67	0.47
42:l5:41:LYS:HB2	57:n1:68:THR:O	2.13	0.47
43:l6:171:PRO:C	43:l6:173:MET:H	2.22	0.47
71:o5:24:LEU:HD12	71:o5:54:VAL:HG21	1.96	0.47
1:2:488:G:O6	1:2:498:G:N2	2.47	0.47
1:2:1789:G:O2'	1:2:1790:A:H5'	2.15	0.47
19:C7:53:TYR:O	19:C7:57:LEU:HG	2.14	0.47
36:1:624:G:OP2	89:1:4145:OHX:N3	2.47	0.47
36:1:1577:G:H2'	36:1:1578:C:O4'	2.14	0.47
36:1:2341:A:OP2	40:L3:247:ARG:NH2	2.47	0.47
36:1:2828:G:HO2'	47:M0:4:ARG:HH11	1.56	0.47
36:1:2883:U:H2'	36:1:2884:C:C6	2.49	0.47
36:1:3215:A:O5'	50:M4:121:MET:HE1	2.15	0.47
39:L2:209:HIS:CD2	39:L2:210:PRO:HD2	2.49	0.47
40:L3:133:TYR:O	40:L3:136:LYS:HB2	2.13	0.47
40:L3:187:SER:OG	40:L3:188:ILE:HD12	2.14	0.47
41:L4:222:VAL:HG22	41:L4:225:VAL:HB	1.95	0.47
42:L5:148:ILE:HG12	42:L5:159:VAL:HG21	1.95	0.47
48:M1:82:ARG:HG2	48:M1:112:LEU:HB2	1.95	0.47
50:M4:134:ALA:O	50:M4:136:ALA:N	2.46	0.47
57:N1:102:ARG:O	57:N1:105:PHE:HB3	2.14	0.47
58:N2:51:GLY:C	58:N2:52:ASN:HD22	2.18	0.47
59:N3:38:ALA:HB3	59:N3:59:MET:HB2	1.95	0.47
67:O1:8:VAL:HG23	67:O1:77:ARG:HH21	1.80	0.47
68:O2:82:LEU:HD11	68:O2:112:ALA:HA	1.95	0.47
70:O4:37:LYS:HE3	70:O4:58:ARG:NH2	2.29	0.47
74:O8:62:ALA:O	74:O8:66:ILE:HG13	2.14	0.47
1:6:273:G:OP1	60:n4:123:ARG:HD3	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:320:U:H3'	1:6:321:C:H2'	1.96	0.47
1:6:404:G:H2'	1:6:405:C:C6	2.49	0.47
1:6:542:A:H1'	1:6:543:C:P	2.54	0.47
1:6:1198:G:OP1	1:6:1199:G:O2'	2.29	0.47
1:6:1319:A:H2'	1:6:1320:U:O4'	2.14	0.47
1:6:1334:U:H2'	1:6:1335:U:O4'	2.14	0.47
1:6:1385:G:N7	89:6:2118:OHX:N6	2.62	0.47
1:6:1392:U:H2'	1:6:1393:C:C6	2.49	0.47
1:6:1592:A:H2'	1:6:1593:A:C8	2.48	0.47
1:6:1791:A:H5''	28:d6:8:ASN:HB3	1.96	0.47
2:s0:28:ASN:O	2:s0:150:ASP:HB3	2.13	0.47
3:s1:129:THR:OG1	3:s1:131:ASP:O	2.24	0.47
8:s6:72:ARG:HG2	8:s6:98:ARG:HG2	1.96	0.47
9:s7:39:ARG:CZ	55:m9:189:ALA:HB2	2.44	0.47
10:s8:117:TYR:CE1	10:s8:150:ALA:HA	2.49	0.47
22:d0:23:ARG:HD2	22:d0:90:TYR:HB2	1.97	0.47
36:5:924:G:OP1	89:5:4218:OHX:N4	2.47	0.47
36:5:1506:A:H1'	36:5:1848:G:O6	2.13	0.47
36:5:3292:A:H4'	40:l3:132:LYS:HZ1	1.79	0.47
38:8:10:A:H2'	38:8:11:C:C6	2.48	0.47
42:l5:61:ILE:HG23	42:l5:79:TYR:CE1	2.49	0.47
43:l6:166:LYS:HA	43:l6:166:LYS:HD3	1.69	0.47
45:l8:222:PHE:O	45:l8:223:ALA:HB2	2.13	0.47
48:m1:94:ARG:C	48:m1:96:PHE:H	2.22	0.47
48:m1:106:ILE:HD13	48:m1:106:ILE:H	1.79	0.47
51:m5:120:TRP:HZ2	51:m5:123:GLN:HG2	1.80	0.47
52:m6:109:PRO:O	52:m6:110:PRO:O	2.32	0.47
55:m9:11:ALA:O	55:m9:15:VAL:HG23	2.13	0.47
56:n0:131:LYS:HE3	56:n0:134:ASP:OD2	2.14	0.47
62:n6:45:ILE:HG13	62:n6:122:LYS:HE2	1.97	0.47
66:o0:24:THR:HG22	66:o0:91:SER:HB3	1.96	0.47
1:2:61:A:H8	1:2:269:G:O2'	1.97	0.47
1:2:252:U:H2'	1:2:253:A:H8	1.78	0.47
1:2:1520:U:OP2	21:C9:75:LYS:NZ	2.41	0.47
1:2:1530:C:OP2	27:D5:95:HIS:CD2	2.67	0.47
10:S8:96:LEU:HD13	10:S8:179:CYS:SG	2.54	0.47
13:C1:109:VAL:HG11	13:C1:125:VAL:HG11	1.96	0.47
16:C4:17:ALA:HB3	16:C4:81:VAL:HA	1.96	0.47
16:C4:81:VAL:N	16:C4:115:ILE:HG22	2.27	0.47
19:C7:85:VAL:HG12	19:C7:87:GLU:H	1.79	0.47
20:C8:120:ARG:HD2	35:SM:61:ILE:HD11	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D4:113:ASN:HA	26:D4:116:LYS:HD3	1.97	0.47
29:D7:8:LEU:HD23	29:D7:8:LEU:HA	1.76	0.47
34:SR:164:ASP:C	34:SR:166:SER:H	2.22	0.47
36:1:539:C:H2'	36:1:540:U:C6	2.49	0.47
36:1:863:C:OP1	89:1:3891:OHX:N5	2.47	0.47
36:1:1716:U:HO2'	36:1:1717:U:P	2.37	0.47
36:1:2109:U:O2'	36:1:2110:G:O5'	2.29	0.47
36:1:2218:G:H2'	36:1:2219:A:C8	2.49	0.47
36:1:2226:U:O2'	36:1:2227:C:H5'	2.14	0.47
36:1:3318:G:OP2	36:1:3318:G:H2'	2.14	0.47
41:L4:99:MET:SD	41:L4:102:PRO:HA	2.55	0.47
48:M1:42:GLY:HA3	48:M1:75:LYS:NZ	2.28	0.47
49:M3:109:PHE:O	49:M3:113:VAL:HG23	2.13	0.47
50:M4:32:LEU:HD11	50:M4:94:TRP:CG	2.49	0.47
51:M5:147:ARG:HH11	51:M5:147:ARG:HG3	1.80	0.47
52:M6:183:ALA:C	52:M6:185:ALA:N	2.70	0.47
58:N2:36:TYR:OH	58:N2:82:LYS:HG2	2.14	0.47
1:6:156:A:H2'	1:6:157:A:O4'	2.15	0.47
1:6:198:A:C2'	1:6:199:G:H5'	2.45	0.47
1:6:876:G:H1'	1:6:944:A:O4'	2.13	0.47
1:6:1391:A:H2'	1:6:1392:U:C6	2.49	0.47
1:6:1401:A:O3'	19:c7:10:LYS:NZ	2.48	0.47
1:6:1609:U:O2'	7:s5:105:GLY:O	2.30	0.47
2:s0:23:HIS:H	2:s0:23:HIS:CD2	2.32	0.47
3:s1:113:MET:HE1	3:s1:211:HIS:CD2	2.49	0.47
5:s3:64:ARG:O	5:s3:66:ILE:N	2.41	0.47
5:s3:162:GLN:O	5:s3:164:VAL:N	2.48	0.47
9:s7:99:LEU:HD23	9:s7:116:ARG:HG2	1.96	0.47
10:s8:194:ARG:HH11	10:s8:195:ARG:HH22	1.61	0.47
11:s9:133:HIS:C	11:s9:134:ILE:HG13	2.39	0.47
20:c8:2:SER:HB3	20:c8:4:VAL:HG22	1.96	0.47
36:5:291:C:OP1	51:m5:68:ARG:NH1	2.36	0.47
36:5:1808:G:O6	89:5:4026:OHX:N3	2.47	0.47
36:5:2207:A:H2'	36:5:2208:A:O4'	2.14	0.47
38:8:92:A:H2'	38:8:93:U:O4'	2.14	0.47
38:8:106:C:H4'	38:8:107:G:H5''	1.96	0.47
38:8:121:U:O2'	38:8:122:U:H5'	2.14	0.47
39:l2:70:ARG:HD2	39:l2:72:ARG:NE	2.25	0.47
41:l4:99:MET:SD	41:l4:102:PRO:HA	2.54	0.47
46:l9:92:TYR:CD1	46:l9:142:ASP:HB3	2.48	0.47
51:m5:122:ASN:OD1	51:m5:123:GLN:N	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:m7:136:ILE:O	53:m7:137:ASN:ND2	2.47	0.47
57:n1:56:PHE:CZ	57:n1:78:LYS:HD2	2.50	0.47
61:n5:73:MET:HE1	61:n5:141:TYR:CE1	2.49	0.47
64:n8:128:ARG:HB3	72:o6:8:ALA:CB	2.44	0.47
1:2:79:C:H4'	8:S6:173:PRO:O	2.13	0.47
1:2:297:U:OP1	6:S4:37:LYS:HD3	2.15	0.47
1:2:947:U:H2'	1:2:948:G:C8	2.50	0.47
1:2:1530:C:OP2	27:D5:95:HIS:HD2	1.97	0.47
1:2:1542:G:N2	1:2:1568:C:O2'	2.46	0.47
2:S0:164:ASN:OD1	2:S0:165:ARG:NH1	2.48	0.47
2:S0:200:ASP:N	2:S0:200:ASP:OD1	2.48	0.47
4:S2:81:MET:HB2	4:S2:101:VAL:O	2.14	0.47
5:S3:74:GLN:OE1	5:S3:81:PRO:HA	2.14	0.47
6:S4:248:ILE:HD13	6:S4:248:ILE:H	1.78	0.47
8:S6:67:VAL:HG21	8:S6:99:GLY:HA2	1.95	0.47
8:S6:135:PRO:HB2	8:S6:141:ILE:HG13	1.96	0.47
10:S8:106:ALA:HB1	10:S8:160:PHE:CD1	2.49	0.47
11:S9:109:LEU:CB	11:S9:146:PHE:HB3	2.44	0.47
20:C8:146:ALA:HB3	35:SM:68:ARG:HH21	1.78	0.47
30:D8:65:ARG:HG2	30:D8:67:ARG:CZ	2.45	0.47
36:1:109:A:H4'	36:1:110:G:OP1	2.13	0.47
36:1:239:G:HO2'	36:1:240:U:P	2.37	0.47
36:1:900:G:H1'	36:1:1589:A:H61	1.79	0.47
36:1:1097:G:N3	36:1:1097:G:H2'	2.29	0.47
36:1:1273:A:H2'	36:1:1274:A:H8	1.79	0.47
36:1:1407:A:O3'	68:O2:33:ARG:NH2	2.47	0.47
36:1:1849:C:H5'	36:1:1849:C:H6	1.78	0.47
36:1:2523:A:OP1	61:N5:31:THR:OG1	2.25	0.47
36:1:3288:G:O2'	36:1:3289:G:OP2	2.24	0.47
36:1:3304:U:O3'	40:L3:334:ARG:NH2	2.47	0.47
39:L2:245:LEU:HG	39:L2:247:ARG:HD3	1.95	0.47
41:L4:146:PRO:O	89:L4:402:OHX:N5	2.47	0.47
44:L7:33:ARG:O	44:L7:36:ALA:N	2.47	0.47
45:L8:72:PRO:HA	45:L8:73:PRO:HD3	1.64	0.47
48:M1:165:GLN:O	48:M1:166:LYS:C	2.57	0.47
53:M7:5:GLY:O	53:M7:7:THR:HG22	2.13	0.47
54:M8:100:THR:HG23	54:M8:120:GLU:HB3	1.95	0.47
57:N1:14:MET:HE2	57:N1:14:MET:HB3	1.61	0.47
68:O2:4:LEU:HD12	68:O2:5:PRO:HD2	1.96	0.47
78:Q2:40:LYS:HE3	78:Q2:44:ASP:OD2	2.14	0.47
1:6:138:A:N6	1:6:266:A:H61	2.12	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:844:A:H2'	1:6:845:G:C8	2.49	0.47
1:6:1001:A:C6	1:6:1002:G:C6	3.03	0.47
1:6:1316:G:OP1	19:c7:7:LYS:N	2.43	0.47
1:6:1735:U:H2'	1:6:1736:G:O4'	2.15	0.47
2:s0:80:THR:HA	2:s0:83:GLN:OE1	2.14	0.47
3:s1:103:MET:HE2	3:s1:215:VAL:HG12	1.96	0.47
4:s2:116:LYS:HG2	4:s2:127:ALA:HB3	1.95	0.47
6:s4:71:LYS:HD2	6:s4:74:GLY:HA2	1.96	0.47
8:s6:10:ASN:HB3	8:s6:128:THR:HA	1.95	0.47
19:c7:50:ILE:O	19:c7:51:ALA:C	2.56	0.47
22:d0:80:GLU:HG2	31:d9:54:LYS:NZ	2.29	0.47
36:5:1317:A:O2'	36:5:1318:A:H3'	2.14	0.47
36:5:2163:C:H4'	39:l2:7:ASN:O	2.15	0.47
36:5:3316:A:H4'	36:5:3317:U:O2	2.13	0.47
89:5:4022:OHX:N3	89:5:4221:OHX:N4	2.61	0.47
41:l4:22:LEU:HD11	41:l4:26:PHE:HB2	1.95	0.47
42:l5:68:THR:HG22	42:l5:71:GLY:N	2.30	0.47
42:l5:257:GLU:OE1	42:l5:257:GLU:N	2.47	0.47
61:n5:50:ALA:N	71:o5:79:ASP:OD1	2.33	0.47
63:n7:54:THR:H	63:n7:57:HIS:CD2	2.32	0.47
67:o1:77:ARG:HD3	67:o1:89:LEU:HD23	1.95	0.47
1:2:332:U:P	10:S8:56:ARG:HH22	2.37	0.47
1:2:912:U:H4'	1:2:913:G:O5'	2.15	0.47
1:2:1321:A:H4'	1:2:1322:A:O5'	2.15	0.47
3:S1:34:ALA:HB1	3:S1:35:PRO:HD2	1.96	0.47
3:S1:83:LYS:NZ	16:C4:116:GLU:OE2	2.36	0.47
6:S4:226:PHE:CD1	6:S4:226:PHE:C	2.93	0.47
19:C7:63:LYS:NZ	34:SR:284:ALA:HB2	2.30	0.47
28:D6:38:ARG:HH21	28:D6:83:ILE:HG13	1.80	0.47
36:1:317:A:C2	36:1:318:A:C4	3.02	0.47
36:1:367:A:OP1	89:1:3892:OHX:N2	2.47	0.47
36:1:970:A:OP2	65:N9:19:ASN:ND2	2.44	0.47
36:1:1064:A:H5''	36:1:1066:G:O4'	2.14	0.47
36:1:1104:G:H8	36:1:1104:G:O5'	1.97	0.47
36:1:1273:A:HO2'	36:1:1274:A:P	2.37	0.47
36:1:1488:G:O2'	70:O4:10:ARG:O	2.31	0.47
36:1:1493:G:H2'	36:1:1493:G:N3	2.30	0.47
36:1:2338:C:H1'	59:N3:49:LEU:HD12	1.97	0.47
36:1:2585:G:C6	61:N5:24:LEU:HD13	2.49	0.47
38:4:77:A:OP2	89:4:223:OHX:N2	2.47	0.47
40:L3:136:LYS:HB3	40:L3:144:ILE:HD12	1.94	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:50:ALA:O	44:L7:51:TYR:C	2.57	0.47
44:L7:142:SER:O	44:L7:146:GLN:HG3	2.14	0.47
47:M0:89:VAL:HG13	47:M0:136:PHE:CE1	2.49	0.47
51:M5:73:ARG:HG2	51:M5:75:VAL:HG22	1.96	0.47
59:N3:87:ARG:HH12	59:N3:137:VAL:HG21	1.79	0.47
61:N5:105:VAL:HG11	61:N5:126:LEU:HD13	1.95	0.47
1:6:884:A:O2'	1:6:885:G:H5'	2.14	0.47
1:6:1066:C:H4'	3:s1:149:GLN:HE21	1.78	0.47
1:6:1526:A:N1	1:6:1608:U:O2'	2.39	0.47
1:6:1541:G:C6	1:6:1542:G:N1	2.82	0.47
3:s1:48:VAL:HG22	3:s1:64:ARG:NH2	2.30	0.47
4:s2:212:LYS:O	4:s2:216:VAL:HG23	2.14	0.47
9:s7:46:ILE:HG12	9:s7:60:ILE:HA	1.96	0.47
17:c5:21:ASP:O	17:c5:24:LYS:N	2.47	0.47
22:d0:12:GLN:NE2	22:d0:13:GLU:O	2.47	0.47
36:5:911:C:N4	39:l2:3:ARG:HD3	2.30	0.47
36:5:1716:U:H5'	36:5:1716:U:C6	2.47	0.47
37:7:4:U:H2'	37:7:5:G:C8	2.50	0.47
40:l3:4:ARG:HH11	40:l3:4:ARG:CG	2.27	0.47
40:l3:252:ILE:HD12	40:l3:252:ILE:HA	1.63	0.47
42:l5:111:GLN:CA	42:l5:116:ASP:HB3	2.39	0.47
42:l5:227:LEU:HD12	42:l5:227:LEU:HA	1.74	0.47
43:l6:175:LYS:HD2	43:l6:175:LYS:HA	1.72	0.47
46:l9:89:LYS:HE3	46:l9:191:LEU:HD11	1.96	0.47
46:l9:166:ARG:HD2	46:l9:168:ARG:NH1	2.29	0.47
58:n2:28:PHE:HE1	58:n2:83:TYR:HE2	1.61	0.47
61:n5:24:LEU:HB3	61:n5:25:LYS:H	1.50	0.47
62:n6:45:ILE:HD12	62:n6:119:ILE:HG23	1.96	0.47
68:o2:85:LEU:HB2	68:o2:117:ILE:HD13	1.95	0.47
1:2:328:A:H2'	1:2:329:G:O4'	2.15	0.47
1:2:410:A:H2	1:2:423:G:H22	1.62	0.47
1:2:918:U:H2'	1:2:919:A:H8	1.78	0.47
1:2:1578:U:O2'	1:2:1579:U:H5'	2.15	0.47
1:2:1670:G:N7	89:2:2123:OHX:N5	2.61	0.47
1:2:1729:C:H2'	1:2:1730:A:O4'	2.14	0.47
3:S1:120:LEU:HG	3:S1:142:PHE:CE1	2.49	0.47
5:S3:20:GLU:HG3	12:C0:61:TRP:CD2	2.50	0.47
8:S6:56:ASN:ND2	8:S6:60:GLY:O	2.36	0.47
14:C2:52:LEU:HD22	14:C2:57:ALA:HB2	1.95	0.47
14:C2:73:LYS:NZ	33:E1:108:VAL:HG13	2.29	0.47
23:D1:1:MET:HE2	23:D1:13:VAL:HG22	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:29:TYR:CE1	25:D3:33:LEU:HD13	2.50	0.47
36:1:284:A:O4'	78:Q2:41:ARG:HD3	2.15	0.47
36:1:1240:A:H61	36:1:1244:A:H5''	1.78	0.47
36:1:1488:G:H5''	36:1:1838:G:O6	2.15	0.47
36:1:2112:U:O2	89:1:3969:OHX:N1	2.48	0.47
36:1:2117:A:C8	36:1:3064:U:H1'	2.49	0.47
36:1:2691:A:H2'	36:1:2692:A:C8	2.49	0.47
36:1:2723:U:H2'	36:1:2724:U:C6	2.50	0.47
36:1:3094:A:H2'	36:1:3095:U:C6	2.49	0.47
36:1:3119:U:OP2	89:1:3900:OHX:N3	2.47	0.47
39:L2:181:LYS:HE2	39:L2:184:ARG:HH21	1.79	0.47
41:L4:6:VAL:N	41:L4:20:LEU:O	2.41	0.47
41:L4:61:SER:O	41:L4:61:SER:OG	2.31	0.47
42:L5:235:SER:O	42:L5:239:ILE:HG13	2.15	0.47
44:L7:157:ASN:O	44:L7:159:GLN:HG2	2.15	0.47
46:L9:67:ALA:O	46:L9:71:VAL:HG23	2.14	0.47
47:M0:142:ASP:C	47:M0:144:ASN:H	2.22	0.47
54:M8:170:ARG:O	54:M8:171:LYS:HG2	2.14	0.47
56:N0:74:ASN:OD1	56:N0:95:ARG:NH1	2.48	0.47
60:N4:52:THR:O	60:N4:56:ARG:HG3	2.14	0.47
63:N7:51:LEU:HB2	63:N7:65:ARG:HD2	1.96	0.47
71:O5:13:SER:C	71:O5:15:GLU:N	2.72	0.47
71:O5:20:GLN:HG2	71:O5:24:LEU:HD12	1.95	0.47
71:O5:118:ILE:O	71:O5:119:LYS:HB2	2.14	0.47
1:6:15:U:H2'	1:6:16:G:O4'	2.15	0.47
1:6:539:G:OP2	1:6:539:G:C8	2.65	0.47
1:6:826:U:H2'	1:6:827:C:C6	2.50	0.47
1:6:921:U:O4	89:6:2177:OHX:N3	2.48	0.47
1:6:1371:A:H5'	1:6:1372:U:OP2	2.14	0.47
7:s5:43:PHE:HB3	7:s5:46:TRP:H	1.80	0.47
8:s6:162:VAL:N	8:s6:169:TYR:O	2.42	0.47
9:s7:24:PHE:HE1	9:s7:77:LEU:HD11	1.79	0.47
26:d4:26:ASP:OD1	26:d4:68:LYS:HE2	2.15	0.47
28:d6:28:LYS:HD2	28:d6:29:SER:H	1.79	0.47
34:sR:123:ILE:HD11	34:sR:156:VAL:HG22	1.96	0.47
36:5:996:A:H2'	36:5:997:A:O4'	2.14	0.47
36:5:1037:C:H2'	36:5:1038:C:H6	1.80	0.47
36:5:1070:U:C4	36:5:1071:U:C4	3.02	0.47
36:5:1592:G:OP1	70:o4:58:ARG:NH1	2.48	0.47
36:5:2211:U:H2'	36:5:2212:C:O4'	2.15	0.47
36:5:2264:U:OP2	89:5:3958:OHX:N4	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2516:U:O2	36:5:2594:C:N4	2.47	0.47
39:l2:47:GLN:HA	39:l2:84:THR:HG22	1.97	0.47
53:m7:40:GLU:HA	53:m7:113:TYR:HA	1.96	0.47
53:m7:109:ALA:HA	53:m7:112:LEU:HD22	1.96	0.47
1:2:66:U:C5	8:S6:173:PRO:HG3	2.49	0.47
1:2:73:U:H4'	1:2:74:U:OP1	2.14	0.47
1:2:229:U:H2'	1:2:230:C:C6	2.50	0.47
1:2:246:G:C2	13:C1:40:LEU:HD22	2.50	0.47
1:2:254:A:H2'	1:2:255:U:H6	1.79	0.47
1:2:898:A:H4'	16:C4:46:MET:HE3	1.96	0.47
1:2:1049:U:H2'	1:2:1050:G:H8	1.79	0.47
1:2:1769:U:O2	16:C4:136:ARG:HG3	2.14	0.47
2:S0:110:TYR:HA	2:S0:115:PHE:CE2	2.50	0.47
2:S0:110:TYR:HA	2:S0:115:PHE:CZ	2.50	0.47
5:S3:49:ILE:CG2	5:S3:89:GLU:HG3	2.45	0.47
7:S5:99:MET:O	7:S5:100:ASN:HB2	2.15	0.47
8:S6:139:ASN:HA	8:S6:142:ARG:HB2	1.97	0.47
14:C2:131:ASP:HB2	14:C2:132:GLU:OE1	2.15	0.47
22:D0:106:ILE:O	22:D0:107:THR:OG1	2.30	0.47
24:D2:77:PRO:HG2	24:D2:79:PHE:CZ	2.49	0.47
26:D4:63:GLN:HB2	26:D4:68:LYS:HB3	1.96	0.47
34:SR:236:ALA:O	34:SR:261:LYS:NZ	2.43	0.47
34:SR:286:GLU:HA	34:SR:287:PRO:HD3	1.72	0.47
36:1:25:U:O4	89:1:3878:OHX:N4	2.47	0.47
36:1:274:G:H2'	36:1:275:U:O4'	2.15	0.47
36:1:386:A:C5	36:1:387:A:H1'	2.50	0.47
36:1:1564:U:H2'	36:1:1565:G:H8	1.78	0.47
36:1:1624:G:O2'	36:1:1643:A:N1	2.44	0.47
36:1:2278:C:C2	36:1:2307:G:C2	3.03	0.47
36:1:2648:G:HO2'	36:1:2696:A:HO2'	1.60	0.47
36:1:2748:A:N3	42:L5:36:LEU:HD23	2.29	0.47
36:1:3000:A:H2'	36:1:3001:C:H6	1.78	0.47
36:1:3113:A:OP1	46:L9:73:SER:OG	2.25	0.47
36:1:3122:A:N1	46:L9:70:THR:HG21	2.30	0.47
36:1:3349:C:H42	36:1:3356:G:H1	1.63	0.47
36:1:3385:U:H2'	36:1:3386:G:O4'	2.15	0.47
40:L3:115:LYS:HA	40:L3:118:PHE:HD1	1.79	0.47
42:L5:21:ARG:O	42:L5:25:GLU:HG3	2.15	0.47
43:L6:175:LYS:O	50:M4:117:ARG:NH2	2.47	0.47
45:L8:190:VAL:HG13	45:L8:192:GLN:HG2	1.96	0.47
47:M0:42:THR:HG23	47:M0:45:GLU:HB2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:51:HIS:CG	47:M0:134:ILE:HD13	2.50	0.47
49:M3:46:ILE:CG2	49:M3:49:ARG:HB2	2.44	0.47
52:M6:51:LYS:HE3	52:M6:144:SER:OG	2.14	0.47
79:Q3:73:THR:HG23	79:Q3:76:ALA:H	1.80	0.47
1:6:571:G:H5'	25:d3:114:LYS:HE2	1.97	0.47
1:6:737:A:H2'	1:6:738:G:C8	2.50	0.47
1:6:1234:A:O2'	82:e1:146:SER:HA	2.14	0.47
1:6:1263:G:C2	1:6:1264:G:H1'	2.49	0.47
1:6:1320:U:O2	1:6:1322:A:H5'	2.15	0.47
1:6:1375:A:H2'	1:6:1376:C:O4'	2.15	0.47
2:s0:9:LEU:HD21	2:s0:14:ALA:HB2	1.97	0.47
2:s0:142:PRO:HB3	23:d1:34:ILE:HD12	1.97	0.47
4:s2:225:LEU:HD22	4:s2:230:TRP:CD1	2.48	0.47
8:s6:5:ILE:O	8:s6:13:GLN:HA	2.15	0.47
10:s8:42:ARG:O	10:s8:58:LEU:HD12	2.14	0.47
10:s8:168:CYS:HB3	10:s8:182:TYR:CE2	2.50	0.47
13:c1:109:VAL:HG11	13:c1:125:VAL:HG11	1.96	0.47
15:c3:19:SER:OG	15:c3:22:ALA:HB2	2.14	0.47
15:c3:65:VAL:O	15:c3:67:THR:N	2.44	0.47
16:c4:127:ARG:HG2	28:d6:22:ARG:HH12	1.80	0.47
24:d2:37:PHE:CD1	24:d2:41:MET:HE2	2.49	0.47
28:d6:43:ASN:OD1	28:d6:43:ASN:N	2.48	0.47
34:sR:128:ASP:OD1	34:sR:130:THR:OG1	2.32	0.47
36:5:429:U:H5'	69:o3:88:ASN:HB2	1.96	0.47
36:5:916:G:O2'	36:5:917:A:H5''	2.14	0.47
36:5:982:C:H42	36:5:1101:G:H1	1.62	0.47
36:5:1339:C:OP1	68:o2:61:LYS:HD3	2.15	0.47
36:5:1895:A:HO2'	36:5:3053:G:H4'	1.78	0.47
36:5:3160:U:OP1	89:5:4186:OHX:N1	2.48	0.47
36:5:3238:G:N2	36:5:3250:U:H1'	2.29	0.47
41:l4:300:ARG:HG2	41:l4:300:ARG:NH1	2.24	0.47
42:l5:211:LEU:HB3	42:l5:219:PHE:HB2	1.96	0.47
42:l5:232:ASP:OD1	42:l5:233:ALA:N	2.47	0.47
45:l8:160:ILE:HG23	45:l8:164:VAL:HG13	1.95	0.47
46:l9:106:LYS:O	46:l9:109:ALA:HB2	2.14	0.47
46:l9:161:LEU:O	46:l9:161:LEU:HD22	2.14	0.47
46:l9:166:ARG:NH2	46:l9:168:ARG:HH12	2.12	0.47
47:m0:74:LYS:HB2	47:m0:74:LYS:NZ	2.28	0.47
48:m1:8:PRO:CG	48:m1:9:MET:H	2.26	0.47
49:m3:144:THR:C	49:m3:146:PRO:HD3	2.40	0.47
49:m3:168:ARG:CZ	49:m3:172:LEU:HD21	2.45	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:m4:134:ALA:C	50:m4:136:ALA:H	2.22	0.47
56:n0:139:TYR:HD2	56:n0:140:VAL:HG23	1.79	0.47
59:n3:24:ASN:O	59:n3:99:ALA:HA	2.15	0.47
60:n4:100:VAL:O	60:n4:103:ALA:HB3	2.15	0.47
63:n7:88:ASP:HB3	63:n7:121:ARG:HH22	1.79	0.47
65:n9:14:ARG:HH12	65:n9:18:ARG:NH1	2.12	0.47
75:o9:15:LYS:O	75:o9:19:GLN:HG3	2.14	0.47
78:q2:65:THR:OG1	78:q2:87:ARG:HD3	2.15	0.47
84:p0:30:VAL:HG12	84:p0:33:VAL:HG11	1.97	0.47
1:2:454:U:H3'	1:2:455:C:C6	2.50	0.47
1:2:512:A:H2'	1:2:513:U:C6	2.50	0.47
1:2:918:U:H4'	16:C4:29:HIS:HE1	1.79	0.47
1:2:1044:U:H2'	1:2:1045:C:C6	2.50	0.47
1:2:1173:C:OP1	20:C8:132:ARG:NH1	2.47	0.47
1:2:1785:U:H2'	1:2:1786:G:C8	2.49	0.47
2:S0:175:TYR:HE1	2:S0:197:ILE:HG22	1.78	0.47
5:S3:115:ILE:HG21	35:SM:110:TRP:HA	1.97	0.47
6:S4:176:ASP:HB2	6:S4:179:LYS:NZ	2.29	0.47
11:S9:110:GLN:NE2	11:S9:126:ARG:HG2	2.27	0.47
11:S9:178:ALA:O	11:S9:182:GLU:HG2	2.14	0.47
15:C3:92:ILE:O	15:C3:96:VAL:HG23	2.15	0.47
18:C6:9:THR:HG21	18:C6:88:GLY:HA2	1.97	0.47
36:1:99:A:H5'	51:M5:194:GLN:CD	2.39	0.47
36:1:962:A:N1	36:1:2814:G:O2'	2.40	0.47
36:1:1409:G:N7	89:1:4079:OHX:N3	2.63	0.47
36:1:1613:A:OP1	74:O8:2:ALA:N	2.48	0.47
39:L2:190:ARG:HH11	39:L2:191:LEU:HD11	1.80	0.47
41:L4:143:GLU:O	89:L4:402:OHX:N2	2.48	0.47
42:L5:294:ALA:C	42:L5:296:GLN:H	2.23	0.47
43:L6:22:ARG:O	43:L6:23:LYS:HD3	2.15	0.47
47:M0:84:ALA:O	47:M0:140:THR:HG22	2.14	0.47
51:M5:68:ARG:NH1	51:M5:68:ARG:HG2	2.29	0.47
52:M6:62:THR:HG22	52:M6:65:ASN:H	1.80	0.47
54:M8:21:SER:OG	54:M8:22:ASP:N	2.48	0.47
56:N0:21:GLU:N	56:N0:22:PRO:HD3	2.29	0.47
68:O2:24:ARG:HD3	68:O2:25:TYR:CZ	2.50	0.47
69:O3:13:HIS:HB3	69:O3:93:THR:O	2.15	0.47
69:O3:51:TYR:HD2	69:O3:67:MET:HE3	1.79	0.47
1:6:105:A:H2'	1:6:106:U:O4'	2.15	0.47
1:6:879:G:O2'	15:c3:105:ASN:HB3	2.15	0.47
1:6:1050:G:O6	89:6:2193:OHX:N4	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1230:A:H8	1:6:1258:U:C4	2.33	0.47
1:6:1623:C:H2'	1:6:1624:C:C6	2.50	0.47
1:6:1734:U:H2'	1:6:1735:U:C6	2.50	0.47
89:6:2175:OHX:N4	11:s9:8:TYR:O	2.48	0.47
6:s4:136:VAL:HG11	6:s4:148:ARG:NH2	2.30	0.47
7:s5:150:GLY:O	7:s5:152:GLY:N	2.48	0.47
22:d0:35:GLU:OE1	22:d0:89:ARG:NH1	2.47	0.47
24:d2:38:LEU:HA	24:d2:41:MET:HE3	1.97	0.47
24:d2:111:MET:HE3	24:d2:116:ALA:CA	2.42	0.47
35:sM:23:LYS:HG3	35:sM:24:GLU:N	2.30	0.47
36:5:30:G:P	51:m5:172:ARG:HD2	2.54	0.47
36:5:145:G:O6	89:5:4020:OHX:N5	2.48	0.47
36:5:1807:G:C6	36:5:1808:G:N1	2.82	0.47
36:5:2919:A:N1	36:5:2927:C:O2	2.48	0.47
36:5:2971:A:H3'	36:5:2971:A:N3	2.29	0.47
36:5:3049:A:H5''	40:l3:53:MET:HB2	1.97	0.47
38:8:83:C:H4'	38:8:85:G:N3	2.29	0.47
39:l2:45:VAL:HA	39:l2:61:VAL:HA	1.97	0.47
39:l2:118:GLU:HG2	39:l2:126:LEU:HD21	1.97	0.47
57:n1:7:TYR:OH	57:n1:54:HIS:HB2	2.15	0.47
58:n2:90:ARG:C	58:n2:92:TRP:H	2.23	0.47
59:n3:46:LEU:O	59:n3:47:ASN:HB2	2.14	0.47
62:n6:87:LYS:HB2	62:n6:97:ILE:HD11	1.95	0.47
71:o5:6:ALA:O	71:o5:10:ARG:HG3	2.15	0.47
75:o9:35:ILE:H	75:o9:35:ILE:HD12	1.79	0.47
84:p0:53:MET:SD	84:p0:85:GLY:HA3	2.55	0.47
1:2:76:A:H5'	1:2:77:U:OP2	2.15	0.47
8:S6:58:LYS:HG2	8:S6:105:ASP:O	2.15	0.47
17:C5:34:VAL:O	17:C5:42:ARG:HG2	2.14	0.47
19:C7:71:PHE:CD1	19:C7:73:LEU:HB3	2.49	0.47
20:C8:132:ARG:HG3	20:C8:138:THR:HG22	1.97	0.47
22:D0:105:GLN:HG3	22:D0:106:ILE:N	2.29	0.47
24:D2:17:ALA:HB2	24:D2:25:VAL:HG13	1.96	0.47
36:1:2316:G:H2'	36:1:2317:A:O4'	2.15	0.47
36:1:2898:G:H5''	36:1:2899:C:H5'	1.97	0.47
42:L5:76:ALA:CB	42:L5:109:THR:HG22	2.44	0.47
42:L5:107:ARG:HA	42:L5:107:ARG:HE	1.79	0.47
42:L5:218:ARG:HH21	42:L5:222:LEU:HD21	1.80	0.47
43:L6:52:VAL:HG23	43:L6:67:GLY:HA2	1.95	0.47
44:L7:102:VAL:HG13	44:L7:126:LEU:HD22	1.97	0.47
47:M0:165:ILE:O	47:M0:166:ILE:HG13	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:16:LYS:HD2	48:M1:70:THR:HB	1.97	0.47
53:M7:90:PHE:O	53:M7:94:LEU:HD13	2.14	0.47
54:M8:176:ARG:HA	54:M8:182:LYS:O	2.15	0.47
57:N1:31:LEU:HD23	57:N1:31:LEU:HA	1.69	0.47
59:N3:128:ARG:H	59:N3:128:ARG:HG2	1.33	0.47
61:N5:114:VAL:HB	75:O9:10:LYS:NZ	2.29	0.47
64:N8:72:VAL:HG12	64:N8:111:LYS:HB3	1.96	0.47
1:6:76:A:N3	1:6:76:A:H2'	2.30	0.47
1:6:1368:G:C5	1:6:1369:U:C5	3.03	0.47
1:6:1619:C:H2'	1:6:1620:C:H6	1.79	0.47
3:s1:133:TYR:CZ	3:s1:181:LEU:HD12	2.50	0.47
3:s1:142:PHE:O	3:s1:207:LEU:HA	2.15	0.47
4:s2:90:THR:OG1	4:s2:91:ARG:N	2.48	0.47
5:s3:34:TYR:OH	5:s3:37:VAL:HG22	2.14	0.47
6:s4:130:GLN:HB3	6:s4:138:TYR:CZ	2.50	0.47
8:s6:57:ASP:C	8:s6:59:GLN:H	2.22	0.47
11:s9:96:VAL:O	11:s9:99:LEU:HB2	2.15	0.47
15:c3:65:VAL:C	15:c3:67:THR:H	2.22	0.47
24:d2:38:LEU:HD23	24:d2:41:MET:CE	2.45	0.47
36:5:48:A:O4'	36:5:50:U:C6	2.68	0.47
36:5:356:C:OP2	89:5:4213:OHX:N2	2.48	0.47
36:5:1024:G:H2'	36:5:1026:A:H8	1.78	0.47
36:5:1636:U:H1'	63:n7:38:PHE:CZ	2.50	0.47
36:5:1734:G:H2'	36:5:1735:G:O4'	2.14	0.47
36:5:1888:U:OP1	40:l3:247:ARG:HD3	2.15	0.47
36:5:1933:A:OP2	89:5:3917:OHX:N6	2.48	0.47
36:5:3051:U:H1'	59:n3:92:PHE:CZ	2.50	0.47
39:l2:118:GLU:CG	39:l2:126:LEU:HD21	2.45	0.47
40:l3:152:LYS:HD3	40:l3:189:SER:HA	1.97	0.47
43:l6:54:TYR:HA	43:l6:65:ILE:CD1	2.45	0.47
46:l9:20:ILE:HG23	46:l9:25:VAL:HG22	1.97	0.47
47:m0:86:HIS:O	47:m0:138:VAL:HA	2.15	0.47
51:m5:140:LYS:O	51:m5:144:ARG:HB2	2.15	0.47
55:m9:116:ASP:OD1	55:m9:116:ASP:N	2.46	0.47
56:n0:155:ARG:HD3	56:n0:172:TYR:CG	2.50	0.47
60:n4:54:LEU:HD13	60:n4:54:LEU:HA	1.65	0.47
1:2:47:A:N1	1:2:386:G:H1'	2.30	0.47
1:2:338:C:P	13:C1:133:LYS:HG3	2.55	0.47
1:2:1183:A:C6	1:2:1184:A:N1	2.83	0.47
89:2:2044:OHX:N1	89:2:2099:OHX:N5	2.63	0.47
2:S0:9:LEU:HD23	2:S0:54:TRP:CD2	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:121:TYR:HA	6:S4:164:LEU:HG	1.96	0.47
9:S7:162:ILE:O	9:S7:166:LEU:HD13	2.15	0.47
10:S8:90:LEU:HD13	10:S8:97:THR:HG21	1.97	0.47
20:C8:94:ASP:OD1	20:C8:98:TYR:OH	2.32	0.47
22:D0:43:LYS:HD2	22:D0:43:LYS:HA	1.70	0.47
28:D6:37:LYS:HG2	28:D6:72:HIS:ND1	2.30	0.47
36:1:29:C:H4'	36:1:62:A:H4'	1.97	0.47
36:1:58:G:OP1	51:M5:157:LYS:NZ	2.38	0.47
36:1:429:U:H5''	69:O3:87:ASN:HB3	1.97	0.47
36:1:860:G:C5	39:L2:181:LYS:HB2	2.50	0.47
36:1:1073:U:H2'	36:1:1074:U:C6	2.49	0.47
36:1:1262:G:C6	36:1:1278:A:N6	2.83	0.47
36:1:1949:G:OP1	55:M9:104:ARG:NH2	2.48	0.47
36:1:2155:G:OP1	39:L2:241:ARG:HG2	2.15	0.47
36:1:3152:U:O2'	36:1:3153:U:H5'	2.14	0.47
41:L4:232:SER:OG	41:L4:233:LEU:N	2.45	0.47
42:L5:61:ILE:HG23	42:L5:79:TYR:CE1	2.49	0.47
45:L8:161:GLU:HA	45:L8:164:VAL:HG22	1.96	0.47
48:M1:139:THR:HG22	48:M1:146:GLY:O	2.15	0.47
54:M8:42:ALA:HA	54:M8:43:PRO:HD3	1.61	0.47
56:N0:77:VAL:HG11	56:N0:106:LEU:HD12	1.96	0.47
56:N0:155:ARG:NH2	56:N0:171:PHE:O	2.48	0.47
60:N4:3:VAL:HG11	60:N4:12:LYS:HE2	1.97	0.47
62:N6:32:SER:O	62:N6:101:PRO:HB2	2.15	0.47
67:O1:19:ARG:HD3	67:O1:35:GLU:CG	2.45	0.47
1:6:145:A:O2'	1:6:146:U:OP1	2.31	0.47
1:6:1333:C:H4'	5:s3:162:GLN:HG3	1.97	0.47
1:6:1592:A:H2'	1:6:1593:A:H8	1.79	0.47
5:s3:21:LEU:HD23	5:s3:21:LEU:HA	1.83	0.47
11:s9:53:ARG:O	11:s9:56:ALA:HB3	2.14	0.47
11:s9:64:GLU:O	11:s9:65:LYS:HB2	2.15	0.47
24:d2:18:GLU:OE1	24:d2:65:LEU:HD12	2.15	0.47
35:sM:65:THR:OG1	35:sM:66:ALA:N	2.47	0.47
36:5:22:G:H1'	38:8:104:A:N3	2.29	0.47
36:5:655:C:OP1	68:o2:27:ARG:HB3	2.15	0.47
36:5:872:U:H2'	36:5:873:C:C6	2.50	0.47
36:5:1560:G:H2'	36:5:1561:G:C8	2.49	0.47
36:5:2289:U:H2'	36:5:2290:C:C6	2.50	0.47
36:5:2314:U:H4'	36:5:2314:U:OP2	2.16	0.47
36:5:3084:C:O2'	36:5:3332:U:OP1	2.23	0.47
40:l3:95:THR:C	40:l3:97:ARG:H	2.23	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:26:PHE:HA	41:l4:127:ALA:HA	1.97	0.47
41:l4:209:TYR:C	41:l4:254:ALA:HB2	2.40	0.47
52:m6:121:PRO:HD2	56:n0:162:THR:O	2.15	0.47
55:m9:47:ASN:HB3	55:m9:49:THR:HG23	1.97	0.47
56:n0:139:TYR:CD2	56:n0:140:VAL:HG23	2.50	0.47
57:n1:12:ARG:HD3	57:n1:13:TYR:CZ	2.50	0.47
59:n3:126:TRP:HB2	59:n3:129:VAL:HG23	1.95	0.47
70:o4:21:LYS:HB3	70:o4:21:LYS:HE2	1.80	0.47
71:o5:45:LYS:O	71:o5:49:LYS:HG2	2.15	0.47
71:o5:49:LYS:O	71:o5:52:ALA:N	2.48	0.47
73:o7:54:LYS:O	73:o7:58:THR:HG23	2.15	0.47
74:o8:18:ALA:O	74:o8:20:VAL:N	2.46	0.47
79:q3:70:THR:HG23	79:q3:72:SER:H	1.80	0.47
84:p0:37:GLN:NE2	84:p0:184:GLY:HA2	2.29	0.47
1:2:779:U:OP2	1:2:780:A:H2	1.98	0.46
1:2:1781:A:H2'	1:2:1782:A:O4'	2.15	0.46
11:S9:70:LEU:O	11:S9:74:ASN:HB2	2.15	0.46
28:D6:20:PRO:HA	28:D6:31:PRO:HA	1.97	0.46
30:D8:66:LEU:HD23	30:D8:66:LEU:HA	1.77	0.46
35:SM:55:SER:O	35:SM:59:GLY:N	2.41	0.46
36:1:255:A:O2'	36:1:256:G:H5'	2.15	0.46
36:1:994:G:H3'	57:N1:13:TYR:CD2	2.51	0.46
36:1:2523:A:H62	45:L8:57:ARG:HD2	1.79	0.46
36:1:3106:A:N6	36:1:3128:G:H1'	2.30	0.46
36:1:3294:A:H2'	36:1:3295:A:O4'	2.15	0.46
38:4:71:A:H2'	62:N6:51:ARG:NH1	2.30	0.46
43:L6:153:PRO:O	43:L6:154:LEU:HB2	2.15	0.46
49:M3:75:PHE:HA	49:M3:101:ARG:HH12	1.80	0.46
49:M3:174:ARG:CZ	72:O6:9:ILE:HD13	2.45	0.46
51:M5:38:ARG:CZ	51:M5:60:VAL:HG13	2.45	0.46
1:6:1000:C:N4	1:6:1003:A:OP2	2.41	0.46
1:6:1161:C:O5'	1:6:1161:C:H6	1.98	0.46
1:6:1398:U:H3'	1:6:1399:C:H4'	1.97	0.46
7:s5:41:LYS:NZ	7:s5:67:PRO:O	2.48	0.46
24:d2:65:LEU:HD13	24:d2:65:LEU:HA	1.65	0.46
25:d3:86:PHE:O	25:d3:88:PRO:HD3	2.15	0.46
36:5:370:U:H5''	36:5:371:G:OP2	2.14	0.46
36:5:1249:G:H2'	36:5:1250:G:H8	1.80	0.46
36:5:3041:U:H2'	36:5:3042:U:H6	1.80	0.46
40:l3:141:GLY:O	40:l3:143:GLY:N	2.48	0.46
40:l3:339:ARG:HG2	40:l3:340:LYS:O	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:139:GLY:O	41:l4:141:ARG:NH1	2.48	0.46
41:l4:334:PHE:HA	41:l4:339:LEU:HD11	1.96	0.46
41:l4:341:SER:O	41:l4:342:LYS:CB	2.63	0.46
44:l7:228:SER:HA	44:l7:232:ARG:HH22	1.80	0.46
61:n5:24:LEU:O	61:n5:25:LYS:HB2	2.15	0.46
61:n5:79:GLY:C	61:n5:81:ILE:HD12	2.40	0.46
62:n6:120:GLN:HG2	62:n6:126:LEU:HD23	1.97	0.46
79:q3:49:ARG:HG2	79:q3:50:GLY:N	2.30	0.46
84:p0:73:PHE:O	84:p0:76:LEU:HB2	2.15	0.46
1:2:883:C:H2'	1:2:884:A:H8	1.80	0.46
1:2:915:A:H5''	1:2:916:U:H5	1.80	0.46
6:S4:17:HIS:HB2	6:S4:108:ARG:HA	1.97	0.46
8:S6:199:GLN:HG3	8:S6:202:ARG:NH2	2.31	0.46
12:C0:31:LYS:HE3	12:C0:36:ASP:OD1	2.13	0.46
15:C3:23:PRO:HD2	15:C3:26:PHE:HB3	1.96	0.46
26:D4:43:LYS:O	26:D4:47:VAL:HG23	2.15	0.46
26:D4:105:ARG:NH1	26:D4:109:LYS:HE2	2.30	0.46
34:SR:130:THR:HG22	34:SR:145:LEU:HB3	1.96	0.46
36:1:239:G:O6	89:1:4046:OHX:N3	2.48	0.46
36:1:1057:A:H2'	36:1:1057:A:N3	2.30	0.46
36:1:1095:U:N3	57:N1:127:GLN:OE1	2.39	0.46
36:1:1922:A:H2'	36:1:1923:C:O4'	2.14	0.46
36:1:2611:U:H2'	36:1:2612:U:H6	1.76	0.46
40:L3:92:TYR:CE1	40:L3:159:ARG:HD2	2.51	0.46
40:L3:105:VAL:HG21	40:L3:148:LEU:HD13	1.96	0.46
46:L9:86:TYR:CZ	46:L9:151:VAL:HG22	2.51	0.46
67:O1:74:ARG:NH1	67:O1:109:VAL:HG21	2.30	0.46
1:6:281:G:C6	1:6:282:C:C4	3.03	0.46
1:6:397:A:H5''	10:s8:51:GLY:H	1.80	0.46
2:s0:131:GLN:HE22	2:s0:135:GLU:HG3	1.80	0.46
3:s1:168:ILE:O	3:s1:172:LEU:HG	2.14	0.46
4:s2:141:ARG:H	4:s2:141:ARG:HG2	1.27	0.46
8:s6:159:ARG:NH2	8:s6:170:THR:OG1	2.37	0.46
11:s9:20:GLU:O	11:s9:24:LEU:HG	2.15	0.46
18:c6:32:ASN:HD21	18:c6:69:VAL:HG23	1.80	0.46
21:c9:84:LYS:HE2	21:c9:94:ILE:HG13	1.96	0.46
35:sM:65:THR:C	35:sM:67:GLY:H	2.23	0.46
36:5:407:A:C2	38:8:17:A:H1'	2.49	0.46
36:5:789:A:H2'	36:5:790:U:C6	2.50	0.46
36:5:1081:U:H6	36:5:1081:U:H2'	1.49	0.46
36:5:1294:A:O2'	36:5:1295:G:H5''	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2712:U:H2'	36:5:2713:U:C6	2.51	0.46
36:5:2746:A:H2	42:15:146:LEU:HB3	1.80	0.46
36:5:2953:U:H2'	36:5:2954:U:H2'	1.96	0.46
38:8:145:U:H2'	38:8:146:U:O4'	2.15	0.46
55:m9:17:VAL:HG11	55:m9:52:LYS:HG3	1.97	0.46
68:o2:32:TRP:CZ2	68:o2:53:PRO:HD2	2.50	0.46
84:p0:10:GLU:O	84:p0:13:ALA:HB3	2.15	0.46
1:2:30:G:H2'	1:2:31:C:C6	2.51	0.46
1:2:223:U:H2'	1:2:224:C:H6	1.80	0.46
1:2:1682:U:O2'	1:2:1683:C:H5'	2.15	0.46
6:S4:240:LYS:HA	6:S4:242:LYS:NZ	2.31	0.46
8:S6:178:LEU:O	8:S6:180:THR:HG23	2.15	0.46
9:S7:23:ALA:O	9:S7:27:LEU:HG	2.15	0.46
10:S8:8:ARG:HD3	10:S8:21:PHE:CD1	2.50	0.46
10:S8:39:GLY:HA2	10:S8:61:GLU:HB3	1.96	0.46
13:C1:131:ILE:HA	13:C1:131:ILE:HD13	1.74	0.46
15:C3:94:LYS:HB2	15:C3:94:LYS:HE3	1.76	0.46
24:D2:94:LEU:HA	24:D2:95:PRO:HD3	1.62	0.46
26:D4:124:ARG:HA	26:D4:127:LYS:HG2	1.96	0.46
36:1:1069:C:H2'	36:1:1070:U:C6	2.51	0.46
36:1:1278:A:O2'	36:1:1279:C:H6	1.97	0.46
36:1:2558:U:O2'	36:1:2559:U:H5'	2.15	0.46
36:1:2850:G:O6	89:1:4088:OHX:N6	2.49	0.46
36:1:3174:A:C2'	36:1:3175:U:H5'	2.46	0.46
41:L4:118:LYS:O	41:L4:122:THR:HG23	2.15	0.46
45:L8:84:ARG:HH12	45:L8:181:LYS:NZ	2.13	0.46
49:M3:186:ARG:O	49:M3:190:LYS:HB3	2.15	0.46
61:N5:58:ASP:OD2	61:N5:61:LYS:N	2.48	0.46
64:N8:128:ARG:HG2	72:O6:8:ALA:HB2	1.95	0.46
65:N9:47:LEU:HA	65:N9:50:THR:HG23	1.97	0.46
1:6:194:U:H2'	1:6:194:U:O2	2.16	0.46
1:6:486:G:O6	1:6:488:G:N2	2.48	0.46
1:6:839:U:H2'	1:6:840:U:C6	2.50	0.46
1:6:1553:G:N7	17:c5:43:ARG:NH1	2.64	0.46
1:6:1640:C:O5'	1:6:1640:C:H6	1.98	0.46
3:s1:193:ILE:H	3:s1:193:ILE:HG12	1.45	0.46
4:s2:59:HIS:NE2	4:s2:238:SER:HA	2.30	0.46
5:s3:215:GLU:HA	5:s3:216:PRO:HD2	1.68	0.46
9:s7:114:ARG:O	9:s7:117:THR:HB	2.15	0.46
13:c1:21:ASN:ND2	13:c1:32:LYS:H	2.12	0.46
23:d1:14:PRO:HB2	23:d1:23:ILE:HG23	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:d1:41:GLU:CD	23:d1:41:GLU:H	2.23	0.46
26:d4:15:ASN:OD1	26:d4:17:LEU:HB2	2.15	0.46
82:e1:103:LEU:HA	82:e1:105:TYR:HD2	1.81	0.46
82:e1:119:ARG:NH1	82:e1:120:GLU:O	2.49	0.46
34:sR:246:SER:HB3	34:sR:251:TRP:HB2	1.98	0.46
36:5:86:G:O2'	36:5:98:G:O6	2.28	0.46
36:5:2573:G:H2'	36:5:2574:G:O4'	2.15	0.46
38:8:141:C:H2'	38:8:142:C:C6	2.50	0.46
42:l5:122:VAL:O	42:l5:123:GLU:HB2	2.16	0.46
44:l7:47:ARG:NH1	44:l7:183:ASP:OD2	2.49	0.46
45:l8:156:ASP:CG	45:l8:183:LYS:HG2	2.41	0.46
46:l9:92:TYR:CD2	46:l9:92:TYR:N	2.81	0.46
59:n3:67:PRO:C	59:n3:69:LEU:H	2.24	0.46
60:n4:9:SER:HA	60:n4:52:THR:HG22	1.97	0.46
78:q2:40:LYS:HE3	78:q2:44:ASP:OD2	2.16	0.46
1:2:463:U:H2'	1:2:464:A:H8	1.79	0.46
1:2:763:G:C6	1:2:764:U:C4	3.04	0.46
1:2:992:A:C2	1:2:1012:U:N3	2.75	0.46
1:2:1044:U:H2'	1:2:1045:C:H6	1.81	0.46
1:2:1153:G:H2'	1:2:1154:G:O4'	2.15	0.46
1:2:1508:U:H2'	1:2:1509:C:H6	1.81	0.46
6:S4:156:VAL:O	6:S4:157:ASN:HB2	2.16	0.46
11:S9:122:VAL:O	11:S9:125:ALA:HB3	2.15	0.46
21:C9:52:GLY:C	21:C9:54:PHE:H	2.21	0.46
36:1:508:U:H2'	36:1:509:U:H6	1.81	0.46
36:1:535:G:O6	89:1:4073:OHX:N3	2.49	0.46
36:1:824:C:H2'	36:1:825:U:H6	1.81	0.46
36:1:1014:U:C2'	36:1:1015:U:H5''	2.46	0.46
36:1:1304:A:N6	36:1:2860:U:OP1	2.47	0.46
36:1:1706:C:H2'	36:1:1707:A:O4'	2.15	0.46
36:1:2562:A:O2'	45:L8:28:HIS:O	2.28	0.46
36:1:2665:U:H4'	36:1:2666:C:OP1	2.16	0.46
36:1:2680:A:C2	48:M1:24:GLY:HA2	2.50	0.46
36:1:3259:U:H5'	36:1:3259:U:C6	2.40	0.46
37:3:76:A:C8	37:3:78:U:C2	3.03	0.46
40:L3:169:THR:HG21	40:L3:171:LEU:HD12	1.97	0.46
44:L7:92:ILE:HA	44:L7:92:ILE:HD12	1.56	0.46
45:L8:164:VAL:O	45:L8:167:PRO:HD2	2.15	0.46
55:M9:90:PRO:HB2	55:M9:93:VAL:HG23	1.95	0.46
62:N6:27:ARG:HG2	62:N6:78:PHE:CE1	2.50	0.46
63:N7:16:GLY:O	63:N7:18:TYR:N	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:113:VAL:O	63:N7:117:ALA:N	2.36	0.46
1:6:393:C:H2'	1:6:394:C:C6	2.50	0.46
1:6:1080:U:O2'	1:6:1081:A:H5'	2.15	0.46
1:6:1087:A:H5'	1:6:1298:U:O4	2.15	0.46
1:6:1429:G:H1'	22:d0:74:GLU:HG2	1.98	0.46
1:6:1758:U:O2'	36:5:2262:A:N1	2.45	0.46
2:s0:32:HIS:CE1	23:d1:63:GLY:HA3	2.51	0.46
9:s7:14:THR:HG22	9:s7:17:GLU:H	1.79	0.46
11:s9:3:ARG:HH21	11:s9:3:ARG:CG	2.25	0.46
16:c4:104:ALA:HA	16:c4:107:ARG:HB3	1.96	0.46
19:c7:53:TYR:O	19:c7:56:HIS:HB3	2.15	0.46
24:d2:106:THR:HG21	24:d2:121:VAL:HG23	1.97	0.46
82:e1:141:CYS:SG	82:e1:143:LYS:HB3	2.55	0.46
36:5:121:A:H4'	36:5:122:A:OP2	2.15	0.46
36:5:1213:G:OP1	56:n0:137:ARG:HD3	2.15	0.46
36:5:2419:A:H1'	36:5:2804:A:O4'	2.15	0.46
36:5:2561:A:O2'	36:5:2562:A:H5''	2.15	0.46
39:l2:230:VAL:O	39:l2:233:GLN:HG3	2.14	0.46
40:l3:86:VAL:HG22	40:l3:162:VAL:HG12	1.97	0.46
46:l9:49:ASN:OD1	46:l9:51:GLN:N	2.40	0.46
46:l9:111:PHE:CD1	46:l9:127:PRO:HA	2.50	0.46
49:m3:120:GLN:C	49:m3:122:LYS:H	2.23	0.46
52:m6:36:VAL:HB	52:m6:108:ILE:HB	1.98	0.46
61:n5:54:TYR:O	61:n5:56:ARG:N	2.47	0.46
85:p1:29:UNK:C	85:p1:31:UNK:N	2.78	0.46
1:2:274:G:C2	1:2:275:C:H1'	2.50	0.46
1:2:325:G:H2'	1:2:326:G:H8	1.81	0.46
1:2:460:A:H3'	1:2:461:G:H8	1.79	0.46
1:2:819:G:H22	1:2:853:G:H2'	1.80	0.46
1:2:1796:C:H5	28:D6:6:ALA:N	2.14	0.46
2:S0:147:THR:OG1	2:S0:159:ALA:HB1	2.15	0.46
3:S1:36:SER:O	3:S1:38:PHE:N	2.49	0.46
8:S6:137:ARG:HH21	8:S6:177:ARG:NE	2.14	0.46
12:C0:54:TYR:O	12:C0:69:THR:OG1	2.29	0.46
14:C2:29:LYS:HG3	14:C2:100:TRP:CD1	2.51	0.46
33:E1:109:ASP:OD1	33:E1:109:ASP:N	2.49	0.46
36:1:434:U:H3	36:1:625:G:H1	1.63	0.46
36:1:627:U:H2'	36:1:628:A:C8	2.50	0.46
36:1:1016:C:H1'	36:1:1028:U:C2	2.50	0.46
36:1:1559:A:H4'	36:1:1560:G:OP2	2.15	0.46
36:1:2883:U:H2'	36:1:2884:C:H6	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3160:U:H2'	36:1:3161:C:C6	2.51	0.46
37:3:47:C:H2'	37:3:48:U:H6	1.81	0.46
39:L2:113:VAL:HG12	39:L2:166:ILE:HA	1.98	0.46
39:L2:185:ALA:O	39:L2:189:TYR:HD1	1.99	0.46
42:L5:184:ASP:HB3	42:L5:187:THR:O	2.16	0.46
44:L7:224:ILE:HG23	56:N0:36:ILE:HA	1.97	0.46
46:L9:88:TYR:CE2	46:L9:184:LYS:HG2	2.51	0.46
47:M0:77:THR:HG22	47:M0:82:ARG:HA	1.97	0.46
49:M3:89:TYR:O	49:M3:92:THR:OG1	2.32	0.46
50:M4:22:LEU:HD13	50:M4:32:LEU:HD23	1.96	0.46
50:M4:22:LEU:HB3	50:M4:64:VAL:HG13	1.98	0.46
64:N8:88:ASP:N	64:N8:88:ASP:OD1	2.49	0.46
75:O9:30:ARG:HE	75:O9:30:ARG:HB2	1.46	0.46
1:6:85:A:H4'	26:d4:121:THR:H	1.81	0.46
1:6:625:C:H2'	1:6:626:U:C6	2.50	0.46
1:6:788:A:C4	6:s4:19:LEU:HD13	2.51	0.46
1:6:1253:U:H4'	82:e1:143:LYS:N	2.31	0.46
1:6:1269:U:H4'	1:6:1270:G:C5'	2.46	0.46
7:s5:149:VAL:HG13	7:s5:151:GLY:N	2.30	0.46
8:s6:31:ARG:N	8:s6:34:GLN:OE1	2.45	0.46
8:s6:68:LEU:HD13	8:s6:68:LEU:HA	1.59	0.46
11:s9:97:LEU:HD23	11:s9:97:LEU:HA	1.75	0.46
11:s9:109:LEU:HB2	11:s9:146:PHE:CB	2.42	0.46
11:s9:126:ARG:O	11:s9:129:ILE:N	2.49	0.46
80:c0:1:MET:HE3	80:c0:2:LEU:H	1.79	0.46
23:d1:9:VAL:HG22	23:d1:10:GLU:H	1.80	0.46
28:d6:10:ARG:HH12	28:d6:36:ILE:HG13	1.80	0.46
31:d9:21:CYS:HA	31:d9:30:LEU:HD21	1.97	0.46
34:sR:80:ALA:O	34:sR:91:LEU:HD12	2.16	0.46
36:5:174:C:H2'	36:5:175:C:O4'	2.14	0.46
36:5:305:U:C5	36:5:2776:C:H1'	2.50	0.46
36:5:1696:A:OP2	89:5:4189:OHX:N6	2.49	0.46
36:5:1874:A:OP2	55:m9:20:ARG:HD3	2.16	0.46
36:5:2946:A:C5'	36:5:2947:G:H5'	2.45	0.46
36:5:3288:G:O2'	36:5:3289:G:P	2.74	0.46
41:l4:313:LEU:HD23	41:l4:313:LEU:HA	1.82	0.46
44:l7:203:TRP:CD1	44:l7:204:PRO:HD2	2.50	0.46
46:l9:88:TYR:CE1	46:l9:184:LYS:HB2	2.51	0.46
47:m0:38:LYS:CG	47:m0:41:ALA:HB2	2.44	0.46
47:m0:153:ARG:HG2	47:m0:156:ARG:HH21	1.80	0.46
66:o0:46:ALA:HB2	66:o0:70:PHE:O	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:o4:16:ARG:HH11	70:o4:16:ARG:CG	2.29	0.46
1:2:15:U:H2'	1:2:16:G:O4'	2.15	0.46
1:2:304:U:OP1	13:C1:136:ARG:HD3	2.15	0.46
1:2:330:G:OP2	10:S8:172:ARG:NH1	2.48	0.46
1:2:416:A:H4'	1:2:417:A:OP2	2.15	0.46
1:2:463:U:H2'	1:2:464:A:C8	2.51	0.46
1:2:502:U:H2'	1:2:503:G:O4'	2.16	0.46
1:2:839:U:C2'	1:2:840:U:H5'	2.44	0.46
1:2:856:A:H1'	9:S7:64:VAL:HG11	1.98	0.46
1:2:905:A:H5''	16:C4:52:ARG:HD3	1.98	0.46
2:S0:175:TYR:CD1	2:S0:199:PRO:HA	2.50	0.46
3:S1:172:LEU:O	3:S1:176:VAL:HG23	2.14	0.46
4:S2:46:LYS:C	4:S2:48:GLY:H	2.23	0.46
14:C2:63:VAL:HG13	14:C2:119:SER:O	2.15	0.46
20:C8:83:ALA:O	20:C8:86:LEU:HB2	2.16	0.46
22:D0:99:ILE:O	22:D0:103:ILE:N	2.49	0.46
26:D4:52:LYS:C	26:D4:54:ALA:H	2.24	0.46
29:D7:47:PHE:CD1	29:D7:49:HIS:O	2.68	0.46
36:1:16:A:H2'	36:1:17:G:O4'	2.16	0.46
36:1:394:G:N1	36:1:397:A:OP2	2.44	0.46
36:1:1290:A:O2'	36:1:1291:A:H5'	2.16	0.46
36:1:1541:G:OP2	89:1:4031:OHX:N5	2.49	0.46
36:1:1638:A:HO2'	36:1:1708:C:HO2'	1.61	0.46
36:1:2116:G:C4	36:1:3063:C:O2'	2.69	0.46
36:1:2403:G:H21	36:1:2404:A:N6	2.14	0.46
36:1:2747:A:H2'	36:1:2748:A:C8	2.49	0.46
36:1:3004:C:H4'	40:L3:99:LEU:O	2.15	0.46
36:1:3106:A:H61	36:1:3128:G:H1'	1.80	0.46
36:1:3317:U:H4'	36:1:3318:G:O5'	2.16	0.46
37:3:60:G:H2'	37:3:61:G:C8	2.50	0.46
44:L7:27:ALA:HA	44:L7:30:ARG:HB3	1.96	0.46
53:M7:178:ALA:HA	53:M7:181:ARG:HB3	1.98	0.46
57:N1:105:PHE:O	57:N1:109:VAL:HG23	2.16	0.46
59:N3:62:VAL:HG21	59:N3:69:LEU:HB3	1.97	0.46
61:N5:103:TYR:O	61:N5:105:VAL:HG23	2.16	0.46
65:N9:14:ARG:NH1	65:N9:18:ARG:HD2	2.30	0.46
68:O2:3:SER:HB3	68:O2:71:HIS:CE1	2.51	0.46
1:6:219:A:N6	1:6:843:U:C2	2.84	0.46
1:6:407:A:H5'	8:s6:94:ARG:NH2	2.30	0.46
1:6:512:A:H4'	11:s9:164:PHE:HE2	1.80	0.46
1:6:526:A:N6	1:6:527:A:C6	2.83	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1257:U:H4'	80:c0:8:ARG:NH1	2.31	0.46
1:6:1350:U:H2'	1:6:1351:G:H8	1.77	0.46
1:6:1698:G:H1'	1:6:1699:G:OP1	2.15	0.46
2:s0:156:VAL:O	23:d1:65:SER:HB3	2.16	0.46
3:s1:144:ARG:HB3	3:s1:208:GLN:HG2	1.97	0.46
7:s5:41:LYS:HG2	7:s5:69:PHE:CZ	2.51	0.46
9:s7:151:LYS:HB2	9:s7:151:LYS:HE3	1.62	0.46
9:s7:158:ASP:O	9:s7:160:GLN:N	2.49	0.46
80:c0:58:GLN:HB3	80:c0:65:TYR:HB2	1.97	0.46
36:5:1258:U:O2	36:5:1260:A:H8	1.98	0.46
36:5:1397:C:O2'	36:5:1398:U:H5'	2.16	0.46
36:5:1801:U:H2'	36:5:1802:C:C6	2.51	0.46
36:5:2138:A:C4	73:o7:3:LYS:HB3	2.51	0.46
36:5:2617:U:O3'	47:m0:116:ARG:NH2	2.46	0.46
36:5:2628:A:C2	36:5:2629:U:H1'	2.50	0.46
36:5:2726:C:O2'	36:5:2727:A:H2'	2.16	0.46
41:l4:93:MET:HE2	41:l4:93:MET:N	2.31	0.46
42:l5:86:TYR:CE1	42:l5:247:ILE:HA	2.51	0.46
42:l5:231:ILE:HD12	42:l5:239:ILE:HD11	1.97	0.46
47:m0:85:PHE:HA	47:m0:140:THR:HG22	1.96	0.46
61:n5:91:ASN:O	61:n5:95:ILE:HG13	2.16	0.46
62:n6:52:ARG:HA	62:n6:70:ILE:CG2	2.45	0.46
68:o2:4:LEU:HD12	68:o2:4:LEU:HA	1.70	0.46
68:o2:32:TRP:CG	68:o2:33:ARG:N	2.83	0.46
74:o8:4:GLU:HG2	74:o8:5:ILE:N	2.31	0.46
1:2:539:G:OP2	1:2:539:G:H8	1.97	0.46
1:2:852:C:H6	1:2:852:C:O5'	1.99	0.46
1:2:1332:C:O2'	5:S3:162:GLN:HB3	2.16	0.46
1:2:1469:A:H2'	1:2:1470:C:C6	2.50	0.46
3:S1:170:GLU:O	3:S1:174:LYS:HG3	2.16	0.46
5:S3:137:VAL:HG22	5:S3:151:LYS:HE2	1.96	0.46
7:S5:123:VAL:O	27:D5:58:ARG:HD2	2.15	0.46
7:S5:222:LYS:HG3	7:S5:225:ARG:CZ	2.46	0.46
9:S7:130:VAL:HB	9:S7:162:ILE:HD12	1.98	0.46
10:S8:36:THR:OG1	10:S8:96:LEU:HB2	2.16	0.46
12:C0:55:VAL:HA	12:C0:69:THR:HG23	1.98	0.46
17:C5:80:MET:HE2	17:C5:83:MET:HB2	1.98	0.46
22:D0:55:PRO:HA	22:D0:91:ILE:HG12	1.98	0.46
24:D2:53:ILE:HG13	24:D2:54:ASP:N	2.30	0.46
25:D3:109:ARG:HB3	25:D3:112:LYS:HB2	1.97	0.46
32:E0:28:LYS:NZ	32:E0:31:LYS:HE2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:SM:79:SER:HA	35:SM:82:THR:HG23	1.96	0.46
36:1:304:G:H5'	36:1:304:G:N3	2.31	0.46
36:1:550:A:N6	36:1:551:A:H62	2.14	0.46
36:1:670:C:OP1	54:M8:147:ARG:NH2	2.43	0.46
36:1:944:C:H4'	68:O2:33:ARG:NH1	2.30	0.46
36:1:1482:A:H4'	36:1:1483:G:OP2	2.15	0.46
39:L2:87:PHE:O	39:L2:88:ILE:HD13	2.16	0.46
40:L3:284:ARG:HB2	40:L3:284:ARG:HH11	1.81	0.46
42:L5:22:ARG:NH1	42:L5:27:LYS:HD3	2.31	0.46
45:L8:155:ASN:OD1	45:L8:181:LYS:HA	2.14	0.46
50:M4:27:GLN:CD	50:M4:27:GLN:H	2.23	0.46
51:M5:68:ARG:HD2	51:M5:127:TYR:C	2.40	0.46
51:M5:137:PRO:HD2	51:M5:138:GLN:NE2	2.31	0.46
51:M5:156:HIS:O	51:M5:159:ARG:HG2	2.15	0.46
58:N2:54:VAL:HG12	58:N2:67:SER:HA	1.97	0.46
58:N2:58:GLU:O	58:N2:60:GLY:N	2.49	0.46
1:6:89:G:C6	1:6:90:C:C4	3.04	0.46
1:6:331:A:H5'	10:s8:33:PRO:HA	1.97	0.46
1:6:913:G:H3'	1:6:914:G:C5'	2.45	0.46
1:6:1341:A:O2'	34:sR:102:ARG:NH2	2.49	0.46
1:6:1649:G:H2'	1:6:1650:U:C6	2.51	0.46
5:s3:71:LEU:O	5:s3:75:LYS:HG2	2.16	0.46
5:s3:102:ALA:HB1	5:s3:173:ARG:HG3	1.98	0.46
9:s7:78:THR:HG22	9:s7:92:PHE:HE1	1.81	0.46
9:s7:126:LEU:HD12	9:s7:126:LEU:HA	1.71	0.46
11:s9:134:ILE:HD13	11:s9:141:VAL:O	2.16	0.46
14:c2:74:LEU:O	14:c2:78:LEU:N	2.48	0.46
18:c6:26:LYS:HE3	18:c6:26:LYS:HB2	1.71	0.46
30:d8:44:VAL:HG11	30:d8:48:VAL:HG21	1.97	0.46
36:5:1313:G:H2'	36:5:1314:C:H6	1.81	0.46
36:5:1616:U:H4'	70:o4:60:ARG:NH2	2.30	0.46
36:5:1694:U:N3	36:5:1695:U:C4	2.84	0.46
36:5:2801:A:O2'	36:5:2802:A:H2'	2.14	0.46
39:l2:101:VAL:HB	39:l2:165:VAL:HG12	1.98	0.46
40:l3:77:THR:CG2	40:l3:327:CYS:HA	2.46	0.46
40:l3:283:TYR:CB	40:l3:323:MET:HE2	2.45	0.46
45:l8:78:PHE:O	45:l8:79:GLN:HB3	2.15	0.46
49:m3:100:ARG:O	49:m3:101:ARG:HB3	2.15	0.46
55:m9:146:LYS:HA	55:m9:146:LYS:HD3	1.37	0.46
56:n0:34:GLU:HB3	56:n0:61:ILE:HD13	1.98	0.46
66:o0:53:LYS:HE3	66:o0:57:GLU:OE1	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:o4:67:LYS:HA	70:o4:70:LYS:HE3	1.98	0.46
74:o8:10:GLN:O	74:o8:14:LEU:HB2	2.15	0.46
78:q2:12:CYS:HG	78:q2:17:CYS:CB	2.26	0.46
1:2:601:A:OP1	25:D3:110:LYS:NZ	2.46	0.46
1:2:1428:G:H5'	1:2:1428:G:C8	2.47	0.46
89:2:2044:OHX:N1	89:2:2099:OHX:N3	2.64	0.46
13:C1:3:THR:OG1	13:C1:82:ARG:NE	2.43	0.46
13:C1:94:ILE:HA	13:C1:95:PRO:HD3	1.79	0.46
13:C1:123:VAL:CG2	13:C1:139:VAL:HG13	2.46	0.46
14:C2:31:VAL:O	14:C2:34:THR:OG1	2.28	0.46
14:C2:97:LEU:HD12	14:C2:118:ALA:HB1	1.98	0.46
19:C7:106:THR:O	19:C7:110:VAL:HG23	2.16	0.46
21:C9:53:TRP:HH2	21:C9:100:ILE:HD11	1.80	0.46
27:D5:39:ALA:O	27:D5:71:ILE:HA	2.16	0.46
34:SR:49:GLY:C	34:SR:51:ASP:H	2.24	0.46
34:SR:200:ASN:O	34:SR:201:THR:HB	2.15	0.46
36:1:287:G:OP1	51:M5:179:LYS:HE3	2.16	0.46
36:1:428:A:H1'	69:O3:25:PRO:HG2	1.97	0.46
36:1:618:C:H5'	53:M7:169:THR:HG22	1.96	0.46
36:1:1222:G:O2'	36:1:1285:G:N1	2.33	0.46
36:1:1851:G:H8	36:1:1851:G:O5'	1.98	0.46
36:1:1927:G:P	79:Q3:5:THR:HB	2.55	0.46
36:1:2426:U:H2'	36:1:2427:U:C6	2.51	0.46
36:1:2653:C:P	78:Q2:89:LYS:HB2	2.55	0.46
36:1:3284:G:O5'	36:1:3284:G:H8	1.97	0.46
38:4:34:U:C5	73:O7:74:PHE:CE2	3.04	0.46
41:L4:92:ASN:HA	41:L4:98:ARG:O	2.16	0.46
48:M1:110:ILE:C	48:M1:112:LEU:H	2.24	0.46
53:M7:16:SER:HB3	53:M7:149:VAL:HG22	1.96	0.46
60:N4:42:GLN:HB3	60:N4:44:LYS:HG2	1.96	0.46
71:O5:68:GLN:C	71:O5:70:TYR:N	2.73	0.46
72:O6:93:ILE:O	72:O6:97:SER:HB3	2.16	0.46
78:Q2:15:LYS:HA	78:Q2:18:ARG:NH2	2.30	0.46
78:Q2:100:LYS:HE3	78:Q2:100:LYS:H	1.80	0.46
1:6:184:C:H2'	1:6:185:U:H6	1.79	0.46
1:6:525:A:H5''	26:d4:89:TYR:CE1	2.50	0.46
1:6:805:U:C2'	1:6:806:A:H5'	2.46	0.46
1:6:836:U:H2'	1:6:837:G:C8	2.51	0.46
1:6:1585:U:H2'	1:6:1586:A:H8	1.81	0.46
1:6:1699:G:N2	1:6:1702:A:H5''	2.31	0.46
2:s0:105:GLY:N	2:s0:135:GLU:OE2	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:s3:133:GLY:HA3	5:s3:157:LEU:HD23	1.98	0.46
6:s4:60:GLU:O	6:s4:64:ILE:HG13	2.16	0.46
6:s4:105:VAL:HG11	6:s4:245:LYS:H	1.81	0.46
6:s4:248:ILE:HD11	11:s9:71:PHE:CG	2.51	0.46
8:s6:73:ILE:CD1	8:s6:75:LEU:HD21	2.45	0.46
19:c7:105:GLN:O	19:c7:108:ASP:HB2	2.16	0.46
20:c8:24:GLY:O	20:c8:59:GLY:N	2.37	0.46
24:d2:23:ARG:NH1	24:d2:66:ASN:HA	2.31	0.46
28:d6:62:TYR:CG	28:d6:63:ALA:N	2.84	0.46
29:d7:33:LEU:HD23	29:d7:81:ARG:HA	1.98	0.46
36:5:956:U:H2'	36:5:957:C:C6	2.51	0.46
36:5:996:A:C2	36:5:1054:A:C4	3.04	0.46
36:5:1243:G:C6	36:5:1244:A:N7	2.84	0.46
36:5:1667:A:H2'	36:5:1668:G:C8	2.51	0.46
36:5:2133:U:O4	36:5:2147:A:H2	1.99	0.46
36:5:3122:A:C2'	36:5:3123:A:H5'	2.45	0.46
36:5:3135:U:OP1	52:m6:148:LYS:HE2	2.16	0.46
36:5:3147:G:H4'	40:l3:102:LEU:O	2.15	0.46
36:5:3163:A:O2'	36:5:3164:C:H5'	2.15	0.46
39:l2:251:LYS:HB3	39:l2:252:THR:H	1.52	0.46
42:l5:85:ARG:HG2	42:l5:86:TYR:CD2	2.50	0.46
45:l8:72:PRO:HA	45:l8:73:PRO:HD3	1.71	0.46
47:m0:2:ALA:O	47:m0:3:ARG:HB2	2.16	0.46
52:m6:65:ASN:O	52:m6:67:THR:N	2.49	0.46
57:n1:124:VAL:HG12	57:n1:125:ALA:H	1.81	0.46
63:n7:24:VAL:HG11	63:n7:87:LEU:HB3	1.98	0.46
64:n8:14:HIS:N	64:n8:14:HIS:ND1	2.64	0.46
66:o0:60:ALA:O	66:o0:63:SER:N	2.45	0.46
1:2:196:G:O2'	1:2:197:A:H8	1.99	0.46
1:2:1111:G:C6	1:2:1112:G:C4	3.04	0.46
1:2:1234:A:HO2'	1:2:1235:C:P	2.38	0.46
1:2:1253:U:H4'	33:E1:143:LYS:N	2.31	0.46
1:2:1504:G:H2'	1:2:1505:A:C8	2.50	0.46
3:S1:59:ASP:HA	3:S1:62:LYS:NZ	2.31	0.46
6:S4:232:GLY:O	6:S4:234:PRO:HD3	2.16	0.46
7:S5:43:PHE:HZ	7:S5:90:ILE:HG21	1.80	0.46
9:S7:9:LEU:HD23	9:S7:9:LEU:HA	1.80	0.46
12:C0:6:GLU:O	12:C0:10:LYS:HG3	2.16	0.46
12:C0:49:LEU:HB3	12:C0:55:VAL:CG1	2.46	0.46
20:C8:90:ASN:O	20:C8:91:ASP:C	2.58	0.46
36:1:812:G:N7	89:1:3995:OHX:N1	2.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1573:G:H2'	36:1:1573:G:N3	2.30	0.46
36:1:1581:C:H2'	36:1:1582:C:H5''	1.98	0.46
36:1:3309:G:H5''	36:1:3309:G:N3	2.30	0.46
37:3:62:U:H5''	42:L5:277:LEU:HD22	1.97	0.46
42:L5:289:LYS:HD3	47:M0:206:LEU:HD23	1.98	0.46
44:L7:89:ILE:HD12	44:L7:214:TRP:CH2	2.51	0.46
47:M0:99:ILE:HG22	47:M0:123:HIS:HB2	1.97	0.46
49:M3:76:THR:HG23	49:M3:101:ARG:NH1	2.30	0.46
55:M9:40:ALA:O	55:M9:44:LEU:HD23	2.16	0.46
59:N3:48:ARG:HH11	59:N3:48:ARG:HG3	1.80	0.46
73:O7:39:TYR:CG	73:O7:40:PRO:HA	2.50	0.46
78:Q2:14:GLY:O	78:Q2:16:THR:N	2.43	0.46
1:6:720:G:H5''	1:6:720:G:N3	2.31	0.46
1:6:1268:G:H1'	1:6:1448:G:H5''	1.97	0.46
1:6:1553:G:O2'	31:d9:14:TYR:OH	2.34	0.46
4:s2:121:VAL:O	4:s2:125:ILE:HG13	2.16	0.46
9:s7:97:ARG:HD3	9:s7:97:ARG:HA	1.72	0.46
13:c1:33:ARG:NH2	13:c1:52:SER:HA	2.31	0.46
14:c2:45:LEU:O	14:c2:49:THR:HG23	2.16	0.46
17:c5:98:ASN:HD21	17:c5:101:ALA:HB3	1.79	0.46
18:c6:46:PHE:HA	18:c6:49:TYR:HB2	1.98	0.46
24:d2:98:GLN:H	24:d2:98:GLN:CD	2.24	0.46
36:5:1565:G:N2	36:5:1566:A:H1'	2.31	0.46
36:5:1614:C:O2'	36:5:1615:C:H5'	2.16	0.46
36:5:2376:G:H2'	36:5:2377:G:C8	2.51	0.46
36:5:2572:C:O2'	36:5:2573:G:OP2	2.27	0.46
36:5:3132:C:H2'	36:5:3133:C:C6	2.50	0.46
39:l2:169:ILE:HG22	39:l2:170:ALA:O	2.15	0.46
39:l2:206:PRO:HD3	39:l2:212:GLY:O	2.15	0.46
53:m7:94:LEU:HB3	53:m7:148:LEU:HD21	1.98	0.46
54:m8:8:LYS:HE3	54:m8:8:LYS:HB2	1.69	0.46
60:n4:106:GLU:O	60:n4:110:LYS:HB2	2.16	0.46
60:n4:125:ALA:C	60:n4:127:LYS:H	2.24	0.46
64:n8:117:ARG:HH11	64:n8:117:ARG:HG3	1.80	0.46
72:o6:35:ASN:HA	72:o6:38:LYS:HB2	1.98	0.46
78:q2:47:GLN:NE2	78:q2:53:GLN:OE1	2.49	0.46
1:2:606:A:H4'	1:2:607:G:O5'	2.16	0.46
1:2:838:G:H2'	1:2:839:U:C6	2.51	0.46
1:2:1417:A:H2'	1:2:1418:G:O4'	2.15	0.46
1:2:1727:G:H2'	1:2:1728:A:C8	2.51	0.46
1:2:1748:G:O6	89:2:2105:OHX:N4	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:83:ILE:HD12	35:SM:117:LEU:HD12	1.97	0.46
7:S5:164:PRO:O	7:S5:168:VAL:HG23	2.16	0.46
9:S7:159:VAL:O	9:S7:162:ILE:HG12	2.16	0.46
20:C8:113:LEU:HD21	20:C8:127:HIS:CE1	2.51	0.46
22:D0:16:GLN:HB3	22:D0:17:GLN:H	1.47	0.46
24:D2:89:TRP:HE3	24:D2:93:LEU:HD21	1.81	0.46
26:D4:45:ALA:HB2	26:D4:55:VAL:HG21	1.98	0.46
27:D5:57:TYR:OH	27:D5:68:ARG:HG3	2.16	0.46
34:SR:278:PHE:CE2	34:SR:287:PRO:HG2	2.51	0.46
36:1:915:A:H2'	36:1:915:A:N3	2.31	0.46
36:1:965:A:H1'	64:N8:40:HIS:O	2.15	0.46
36:1:1048:A:H2'	47:M0:22:TYR:CE1	2.50	0.46
36:1:1240:A:N6	36:1:1244:A:OP2	2.49	0.46
36:1:1282:G:C6	36:1:1283:C:C4	3.05	0.46
36:1:1602:A:C6	36:1:1603:A:C6	3.04	0.46
36:1:1629:U:O4	63:N7:111:LYS:HE3	2.15	0.46
36:1:2295:A:N3	59:N3:37:ILE:HD12	2.30	0.46
36:1:2890:A:N1	36:1:2913:C:N3	2.63	0.46
36:1:3275:U:C5'	69:O3:68:TRP:HZ2	2.28	0.46
40:L3:210:GLU:O	40:L3:213:GLU:HB2	2.16	0.46
41:L4:5:GLN:HA	41:L4:20:LEU:O	2.15	0.46
41:L4:60:THR:CG2	41:L4:62:ALA:HB2	2.46	0.46
42:L5:38:THR:HG22	57:N1:30:TYR:HB3	1.98	0.46
51:M5:38:ARG:NH2	51:M5:60:VAL:HG13	2.31	0.46
51:M5:186:GLY:O	51:M5:190:THR:HG23	2.16	0.46
76:Q0:110:CYS:HB2	76:Q0:121:LEU:HD21	1.98	0.46
1:6:461:G:OP1	11:s9:2:PRO:HD2	2.15	0.46
1:6:650:U:H2'	1:6:651:G:H5'	1.97	0.46
1:6:846:G:N2	13:c1:46:LYS:HE2	2.31	0.46
1:6:1171:A:H2'	1:6:1172:G:C8	2.50	0.46
1:6:1263:G:H2'	1:6:1264:G:O4'	2.16	0.46
2:s0:74:VAL:CG2	2:s0:118:PRO:HB3	2.46	0.46
7:s5:63:GLN:HB3	7:s5:88:PRO:HA	1.98	0.46
17:c5:111:MET:HG2	20:c8:119:ILE:HD11	1.98	0.46
22:d0:15:GLN:O	22:d0:16:GLN:HB2	2.15	0.46
24:d2:55:ASP:O	24:d2:57:ARG:N	2.45	0.46
34:sR:159:ASN:C	34:sR:161:LYS:H	2.20	0.46
34:sR:251:TRP:NE1	34:sR:271:VAL:HG21	2.31	0.46
36:5:1098:A:P	57:n1:130:ARG:HH11	2.38	0.46
36:5:1098:A:O2'	57:n1:130:ARG:O	2.20	0.46
36:5:1109:U:H2'	36:5:1110:U:O4'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1519:G:H2'	36:5:1520:G:H8	1.79	0.46
36:5:2255:A:H5'	36:5:2261:G:N2	2.28	0.46
36:5:2660:G:O3'	36:5:2749:G:N2	2.49	0.46
36:5:2894:C:OP1	46:19:168:ARG:HD2	2.16	0.46
37:7:43:U:C4	37:7:44:C:C4	3.04	0.46
37:7:63:A:OP2	42:15:282:ARG:HD3	2.16	0.46
51:m5:10:LEU:HD23	72:o6:44:VAL:HG13	1.98	0.46
51:m5:94:TYR:CE2	51:m5:96:ARG:HB2	2.51	0.46
52:m6:119:VAL:HG23	56:n0:164:SER:HB3	1.97	0.46
72:o6:33:ALA:HB1	72:o6:38:LYS:HD2	1.98	0.46
73:o7:28:HIS:HE1	73:o7:30:GLN:HG3	1.80	0.46
1:2:463:U:C2	1:2:464:A:C8	3.04	0.45
1:2:1199:G:H1	31:D9:31:ILE:CD1	2.29	0.45
11:S9:129:ILE:HG22	11:S9:142:ASN:HA	1.98	0.45
33:E1:125:THR:OG1	33:E1:126:CYS:SG	2.74	0.45
34:SR:10:ARG:HG2	34:SR:51:ASP:O	2.16	0.45
34:SR:253:ALA:O	34:SR:292:LEU:HD11	2.16	0.45
35:SM:47:ALA:HB2	36:1:2678:A:C8	2.50	0.45
36:1:553:U:H2'	36:1:554:A:O4'	2.16	0.45
36:1:1385:C:OP2	41:L4:202:ARG:HD3	2.16	0.45
36:1:1534:A:O4'	36:1:1797:A:H2	1.99	0.45
36:1:1547:G:P	51:M5:105:ARG:NH1	2.89	0.45
36:1:1796:G:H5''	36:1:1797:A:OP1	2.17	0.45
36:1:2139:A:H62	73:O7:4:GLY:HA3	1.80	0.45
36:1:2258:U:H2'	36:1:2259:A:O4'	2.15	0.45
36:1:2320:A:H2	79:Q3:16:VAL:HG13	1.82	0.45
36:1:2535:A:N6	36:1:2544:U:H3	2.14	0.45
36:1:2807:U:O3'	36:1:2808:A:H3'	2.17	0.45
37:3:106:U:H2'	37:3:107:C:H6	1.78	0.45
39:L2:111:THR:HB	39:L2:136:ILE:HD13	1.97	0.45
41:L4:285:ASP:OD2	41:L4:288:ARG:HB2	2.15	0.45
43:L6:76:LEU:HD12	43:L6:138:GLN:HA	1.98	0.45
64:N8:148:ILE:HB	64:N8:149:ALA:H	1.52	0.45
69:O3:89:LEU:HA	69:O3:89:LEU:HD23	1.70	0.45
72:O6:45:ARG:NH2	72:O6:54:GLU:OE2	2.49	0.45
1:6:661:A:N3	1:6:670:U:N3	2.64	0.45
1:6:708:C:H2'	1:6:709:C:O4'	2.16	0.45
4:s2:69:ILE:HG12	4:s2:133:LYS:HB3	1.98	0.45
8:s6:49:VAL:HB	8:s6:115:LYS:HG3	1.97	0.45
16:c4:20:TYR:CD1	16:c4:84:ARG:HD3	2.51	0.45
22:d0:51:VAL:HG22	22:d0:94:GLU:H	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:d2:36:LYS:O	24:d2:40:VAL:HG23	2.16	0.45
25:d3:17:VAL:HG23	25:d3:20:ARG:NH2	2.31	0.45
27:d5:57:TYR:N	27:d5:57:TYR:HD2	2.14	0.45
30:d8:10:ALA:HB1	30:d8:30:VAL:HB	1.98	0.45
34:sR:112:SER:CB	34:sR:153:GLN:HA	2.46	0.45
34:sR:147:HIS:CD2	34:sR:179:LYS:HE2	2.52	0.45
35:sM:34:LYS:HD3	35:sM:34:LYS:HA	1.77	0.45
36:5:810:A:H2'	36:5:811:U:C6	2.51	0.45
36:5:1068:C:H2'	36:5:1069:C:C6	2.52	0.45
36:5:1525:G:O2'	36:5:1594:A:N1	2.40	0.45
36:5:1597:C:H2'	36:5:1598:G:H8	1.80	0.45
36:5:1677:G:OP1	58:n2:100:THR:HA	2.15	0.45
36:5:1902:G:C6	36:5:1903:U:C2	3.04	0.45
36:5:3047:U:H5'	40:l3:329:PRO:HA	1.98	0.45
36:5:3259:U:H5'	36:5:3259:U:C6	2.50	0.45
38:8:38:U:C5	71:o5:83:LYS:HA	2.51	0.45
41:l4:91:GLY:O	41:l4:94:CYS:HB2	2.15	0.45
41:l4:330:TYR:O	41:l4:333:VAL:HG13	2.17	0.45
43:l6:35:VAL:O	43:l6:38:THR:OG1	2.24	0.45
48:m1:80:LEU:O	48:m1:80:LEU:HD22	2.16	0.45
83:m2:54:UNK:HA	83:m2:55:UNK:HA	1.78	0.45
53:m7:48:LEU:HD22	53:m7:88:VAL:HG13	1.98	0.45
54:m8:46:LYS:O	54:m8:50:LYS:HG3	2.15	0.45
61:n5:131:ASP:O	61:n5:135:ILE:HG22	2.15	0.45
66:o0:20:SER:OG	66:o0:96:GLY:HA3	2.16	0.45
67:o1:14:ILE:HG23	67:o1:16:LEU:HD22	1.98	0.45
67:o1:46:THR:HG21	67:o1:91:SER:OG	2.16	0.45
78:q2:12:CYS:SG	78:q2:77:CYS:SG	3.14	0.45
84:p0:97:LYS:NZ	84:p0:101:VAL:HG21	2.30	0.45
1:2:25:C:H1'	1:2:26:A:OP2	2.16	0.45
1:2:191:C:O2'	1:2:192:U:O5'	2.34	0.45
1:2:221:A:H5''	1:2:833:U:H1'	1.97	0.45
1:2:959:U:C4	29:D7:32:PHE:HE2	2.35	0.45
1:2:1171:A:H2'	1:2:1172:G:C8	2.50	0.45
2:S0:9:LEU:HD23	2:S0:54:TRP:CG	2.51	0.45
2:S0:162:CYS:HB2	2:S0:163:ASN:H	1.44	0.45
3:S1:50:LYS:O	3:S1:52:THR:N	2.48	0.45
4:S2:40:LYS:HA	4:S2:43:ARG:NH1	2.31	0.45
4:S2:188:LEU:O	4:S2:191:ALA:HB3	2.17	0.45
5:S3:30:ALA:C	5:S3:32:GLU:H	2.24	0.45
6:S4:104:ASP:HB3	6:S4:105:VAL:H	1.42	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:70:PRO:C	8:S6:98:ARG:HH11	2.24	0.45
14:C2:131:ASP:OD1	14:C2:132:GLU:N	2.49	0.45
20:C8:146:ALA:H	35:SM:68:ARG:NH2	2.13	0.45
36:1:999:G:C6	36:1:1000:C:N4	2.85	0.45
36:1:1060:U:O2	57:N1:101:CYS:HB2	2.16	0.45
36:1:2190:U:C4	36:1:2191:U:C4	3.04	0.45
36:1:2240:G:H2'	36:1:2241:U:O4'	2.16	0.45
36:1:2443:A:N6	36:1:2504:U:C4	2.84	0.45
36:1:2828:G:C6	36:1:2829:U:C2	3.04	0.45
36:1:3143:C:O2'	89:1:3909:OHX:N2	2.49	0.45
47:M0:47:PRO:HB3	47:M0:171:TRP:CE2	2.51	0.45
52:M6:124:LEU:HD12	52:M6:124:LEU:HA	1.49	0.45
54:M8:162:ALA:HA	54:M8:163:PRO:HD2	1.59	0.45
56:N0:155:ARG:HH21	56:N0:155:ARG:CG	2.23	0.45
58:N2:43:VAL:O	58:N2:44:GLU:C	2.59	0.45
59:N3:48:ARG:HG3	59:N3:48:ARG:NH1	2.30	0.45
66:O0:70:PHE:O	66:O0:72:GLY:N	2.48	0.45
72:O6:11:LEU:HD13	72:O6:11:LEU:HA	1.68	0.45
1:6:79:C:H1'	8:s6:174:LYS:HG3	1.98	0.45
1:6:792:U:O2'	1:6:793:A:H5'	2.15	0.45
1:6:982:U:OP1	89:6:2073:OHX:N2	2.49	0.45
1:6:1036:A:H1'	24:d2:9:ASP:OD1	2.17	0.45
7:s5:90:ILE:HA	7:s5:90:ILE:HD13	1.75	0.45
19:c7:21:TYR:CD2	19:c7:58:MET:HE1	2.51	0.45
19:c7:30:THR:HG22	34:sR:127:ARG:NH2	2.32	0.45
21:c9:22:LEU:HD22	21:c9:28:LEU:HG	1.99	0.45
29:d7:41:LEU:HD23	29:d7:41:LEU:H	1.82	0.45
81:e0:29:LYS:HG2	81:e0:35:TYR:HE2	1.81	0.45
34:sR:249:ARG:O	34:sR:251:TRP:N	2.49	0.45
36:5:372:A:H2'	36:5:373:A:O4'	2.16	0.45
36:5:1817:G:O2'	36:5:1818:U:OP2	2.28	0.45
36:5:2372:A:H5''	36:5:2373:A:H5'	1.98	0.45
36:5:2546:C:H2'	36:5:2547:A:H8	1.81	0.45
36:5:2828:G:OP2	47:m0:7:ARG:NH1	2.48	0.45
36:5:2943:G:N7	36:5:2944:U:C5	2.84	0.45
40:l3:53:MET:HE2	40:l3:77:THR:HG21	1.97	0.45
40:l3:360:ASP:OD1	40:l3:361:THR:N	2.50	0.45
48:m1:139:THR:C	48:m1:140:ARG:HD2	2.41	0.45
52:m6:28:LEU:HD23	52:m6:28:LEU:HA	1.71	0.45
55:m9:7:GLN:OE1	55:m9:35:ALA:HB3	2.15	0.45
64:n8:24:LYS:HB2	64:n8:26:ARG:HG2	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:o2:82:LEU:HD22	68:o2:117:ILE:HD12	1.98	0.45
74:o8:59:ALA:O	74:o8:62:ALA:HB3	2.16	0.45
75:o9:23:LEU:HA	75:o9:24:PRO:HD2	1.67	0.45
84:p0:49:ALA:HB2	84:p0:96:ILE:HD12	1.98	0.45
1:2:284:G:N7	8:S6:188:ARG:NH1	2.64	0.45
1:2:296:U:H2'	1:2:297:U:C6	2.52	0.45
1:2:319:U:H1'	1:2:323:A:C4	2.51	0.45
1:2:720:G:O2'	1:2:721:U:H5'	2.17	0.45
1:2:1385:G:N7	89:2:2132:OHX:N3	2.65	0.45
1:2:1389:C:OP1	19:C7:48:ASN:ND2	2.49	0.45
1:2:1613:U:OP2	7:S5:84:LYS:HE3	2.16	0.45
1:2:1767:G:OP2	1:2:1770:U:O2'	2.28	0.45
3:S1:181:LEU:O	3:S1:184:LEU:N	2.50	0.45
7:S5:66:GLN:CD	7:S5:66:GLN:H	2.25	0.45
10:S8:103:GLN:HB3	10:S8:164:ARG:HG2	1.98	0.45
12:C0:27:PHE:HB3	12:C0:40:LEU:HD23	1.98	0.45
13:C1:6:THR:CB	13:C1:9:SER:HB3	2.45	0.45
13:C1:110:HIS:O	13:C1:139:VAL:HG23	2.17	0.45
18:C6:25:GLY:H	18:C6:63:ILE:HA	1.81	0.45
23:D1:32:VAL:HG21	23:D1:60:ARG:NH2	2.31	0.45
23:D1:71:ARG:HD2	23:D1:75:ASN:HD21	1.80	0.45
36:1:54:C:O2'	36:1:1547:G:H1'	2.16	0.45
36:1:1301:A:H4'	36:1:1302:A:O5'	2.16	0.45
36:1:1547:G:OP2	51:M5:105:ARG:NH1	2.48	0.45
36:1:2675:C:N4	48:M1:22:SER:HB3	2.31	0.45
36:1:2764:C:H2'	36:1:2765:C:O4'	2.16	0.45
36:1:3169:U:H2'	36:1:3170:A:O4'	2.16	0.45
36:1:3344:A:H5''	36:1:3345:G:OP2	2.16	0.45
38:4:93:U:H2'	38:4:94:C:O4'	2.17	0.45
42:L5:155:THR:HA	42:L5:179:ARG:HA	1.98	0.45
42:L5:234:ASP:OD2	42:L5:234:ASP:N	2.48	0.45
45:L8:78:PHE:C	45:L8:80:TYR:N	2.73	0.45
46:L9:170:LYS:HA	46:L9:170:LYS:HD3	1.74	0.45
48:M1:85:LYS:HA	48:M1:89:TYR:CE2	2.51	0.45
48:M1:116:TYR:CD2	48:M1:122:ILE:HD11	2.51	0.45
52:M6:73:PHE:CD1	52:M6:78:ARG:HG2	2.50	0.45
53:M7:4:TYR:OH	53:M7:18:ARG:HG3	2.17	0.45
55:M9:101:VAL:HA	55:M9:104:ARG:NH1	2.31	0.45
56:N0:101:ALA:O	56:N0:105:THR:HG23	2.16	0.45
63:N7:97:SER:HB3	63:N7:99:GLU:HG3	1.98	0.45
67:O1:84:ASP:OD1	67:O1:84:ASP:N	2.48	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:Q0:79:GLU:HA	76:Q0:80:PRO:HD2	1.77	0.45
1:6:143:G:N7	8:s6:177:ARG:NH2	2.64	0.45
1:6:871:G:O2'	29:d7:67:THR:O	2.33	0.45
1:6:1267:G:H2'	1:6:1268:G:C8	2.52	0.45
3:s1:131:ASP:CG	3:s1:180:THR:HB	2.40	0.45
5:s3:34:TYR:HE2	5:s3:37:VAL:HG13	1.81	0.45
6:s4:62:LYS:HE3	6:s4:66:MET:HE3	1.98	0.45
7:s5:177:ILE:HG12	7:s5:180:ARG:NH1	2.32	0.45
9:s7:51:VAL:HG11	9:s7:168:SER:HB3	1.97	0.45
15:c3:134:VAL:O	15:c3:135:LEU:HD23	2.16	0.45
22:d0:87:HIS:N	22:d0:87:HIS:CD2	2.84	0.45
23:d1:1:MET:HB3	23:d1:10:GLU:HB3	1.97	0.45
25:d3:50:LYS:HA	25:d3:102:VAL:O	2.16	0.45
26:d4:58:PHE:CE2	26:d4:72:PHE:HB3	2.50	0.45
82:e1:88:PRO:HA	82:e1:89:LYS:HA	1.63	0.45
35:sM:47:ALA:O	35:sM:48:ARG:HB2	2.16	0.45
36:5:59:G:C4'	36:5:60:A:H4'	2.45	0.45
36:5:1093:A:OP1	36:5:1093:A:H4'	2.16	0.45
36:5:1597:C:H5'	36:5:1696:A:H1'	1.97	0.45
36:5:1916:U:H4'	55:m9:85:ARG:NH2	2.32	0.45
36:5:2373:A:N7	36:5:2867:C:H1'	2.31	0.45
36:5:3150:A:H5'	40:l3:129:ALA:O	2.16	0.45
36:5:3244:A:N1	40:l3:97:ARG:NH1	2.64	0.45
39:l2:116:VAL:HG11	39:l2:134:VAL:HG11	1.98	0.45
44:l7:151:ARG:HD2	44:l7:244:ASN:OD1	2.16	0.45
45:l8:139:VAL:HG21	45:l8:197:VAL:HG23	1.98	0.45
50:m4:103:ILE:HG12	50:m4:106:ARG:HH21	1.81	0.45
55:m9:3:ASN:OD1	55:m9:3:ASN:C	2.60	0.45
67:o1:44:MET:HB2	67:o1:44:MET:HE3	1.48	0.45
73:o7:65:ARG:HG3	73:o7:65:ARG:NH1	2.25	0.45
1:2:585:A:H2'	1:2:586:G:C8	2.51	0.45
1:2:698:U:O4	89:2:2097:OHX:N3	2.49	0.45
1:2:711:U:H4'	1:2:712:G:OP1	2.17	0.45
1:2:774:A:H2'	1:2:775:G:O4'	2.16	0.45
1:2:1336:A:O2'	18:C6:123:ARG:HG2	2.16	0.45
1:2:1376:C:N4	1:2:1377:U:O4	2.50	0.45
1:2:1535:U:OP1	1:2:1535:U:H4'	2.15	0.45
4:S2:140:ARG:HH22	4:S2:228:ASN:HD21	1.63	0.45
6:S4:240:LYS:H	6:S4:240:LYS:HE2	1.81	0.45
8:S6:211:LEU:O	8:S6:215:ARG:HB2	2.16	0.45
9:S7:12:ALA:HB3	9:S7:13:PRO:HD3	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:111:LYS:O	9:S7:112:ARG:HB2	2.16	0.45
12:C0:59:PHE:CE1	12:C0:62:GLN:HA	2.52	0.45
16:C4:81:VAL:HG22	16:C4:115:ILE:HB	1.99	0.45
21:C9:30:VAL:O	21:C9:32:GLY:N	2.50	0.45
25:D3:93:LEU:O	25:D3:96:VAL:HG22	2.16	0.45
26:D4:7:ILE:HD11	26:D4:40:LEU:HD22	1.98	0.45
36:1:13:A:H5''	36:1:13:A:C8	2.50	0.45
36:1:284:A:OP2	78:Q2:41:ARG:HD2	2.16	0.45
36:1:1554:U:O2'	36:1:1582:C:H5	2.00	0.45
36:1:1562:C:O2'	36:1:1563:C:O5'	2.30	0.45
36:1:1615:C:H2'	36:1:1616:U:H6	1.82	0.45
36:1:1899:G:N7	89:1:3940:OHX:N3	2.64	0.45
36:1:2816:G:C8	36:1:2869:U:H3'	2.52	0.45
36:1:3118:C:H4'	76:Q0:106:ARG:NH2	2.28	0.45
36:1:3231:U:H2'	36:1:3232:G:C8	2.51	0.45
40:L3:107:ALA:HA	40:L3:199:PHE:CD2	2.51	0.45
56:N0:12:ARG:HB3	56:N0:24:LEU:HA	1.98	0.45
59:N3:33:ASN:HD21	59:N3:63:LYS:N	2.13	0.45
1:6:486:G:O2'	1:6:487:G:H5'	2.17	0.45
1:6:567:A:H2'	1:6:568:G:O4'	2.16	0.45
4:s2:207:LEU:HD23	4:s2:207:LEU:HA	1.81	0.45
11:s9:132:ARG:O	11:s9:134:ILE:HD12	2.17	0.45
13:c1:50:GLU:H	13:c1:50:GLU:HG2	1.48	0.45
14:c2:67:THR:O	14:c2:68:GLU:HB2	2.16	0.45
18:c6:47:LYS:HA	18:c6:47:LYS:HD2	1.81	0.45
81:e0:44:PHE:O	81:e0:45:VAL:HG23	2.15	0.45
34:sR:50:ASP:HB3	34:sR:51:ASP:H	1.48	0.45
36:5:508:U:H2'	36:5:509:U:C6	2.51	0.45
36:5:2440:G:N2	36:5:2508:U:C2	2.85	0.45
36:5:2940:A:H62	40:l3:3:HIS:H	1.63	0.45
36:5:3068:U:OP1	55:m9:59:SER:N	2.49	0.45
36:5:3078:U:O2	36:5:3078:U:O4'	2.34	0.45
36:5:3328:G:C2	36:5:3329:U:H1'	2.51	0.45
37:7:5:G:O3'	42:l5:54:ARG:HG3	2.16	0.45
40:l3:205:VAL:C	40:l3:207:SER:H	2.25	0.45
40:l3:376:LYS:HG2	40:l3:380:MET:HG3	1.97	0.45
41:l4:142:VAL:O	41:l4:144:LYS:N	2.48	0.45
47:m0:153:ARG:HG3	47:m0:165:ILE:HD12	1.98	0.45
48:m1:41:SER:C	48:m1:43:GLN:H	2.25	0.45
55:m9:109:TYR:CD2	55:m9:114:LYS:HD2	2.52	0.45
58:n2:43:VAL:HG23	58:n2:49:ASN:HB3	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:n3:27:ASP:HA	59:n3:113:ALA:O	2.16	0.45
63:n7:97:SER:O	63:n7:100:THR:OG1	2.33	0.45
84:p0:42:ARG:O	84:p0:46:ARG:HG2	2.15	0.45
1:2:711:U:H1'	1:2:712:G:H5'	1.97	0.45
1:2:767:U:H5	11:S9:142:ASN:OD1	1.99	0.45
1:2:1426:C:H5''	35:SM:93:ARG:NH1	2.32	0.45
1:2:1662:G:O2'	1:2:1663:G:H5'	2.17	0.45
2:S0:12:GLU:HG2	2:S0:13:ASP:N	2.32	0.45
2:S0:14:ALA:O	2:S0:18:LEU:HG	2.17	0.45
6:S4:191:ARG:HH21	6:S4:218:PHE:HB3	1.81	0.45
7:S5:118:LEU:HA	7:S5:121:ILE:HD12	1.97	0.45
8:S6:211:LEU:HD21	8:S6:215:ARG:HH21	1.81	0.45
9:S7:74:GLN:NE2	9:S7:92:PHE:HB2	2.31	0.45
11:S9:61:THR:O	11:S9:61:THR:OG1	2.26	0.45
14:C2:63:VAL:HG11	14:C2:94:ALA:HB2	1.99	0.45
20:C8:8:GLN:H	20:C8:8:GLN:HG3	1.48	0.45
20:C8:46:VAL:HG21	20:C8:73:MET:HG2	1.99	0.45
21:C9:118:PRO:HD2	21:C9:123:ARG:NH2	2.32	0.45
34:SR:136:ILE:H	34:SR:136:ILE:HD13	1.80	0.45
36:1:210:U:C2	36:1:230:U:H4'	2.51	0.45
36:1:306:A:C2	36:1:307:A:C8	3.05	0.45
36:1:422:A:C2	36:1:2363:A:H4'	2.52	0.45
36:1:1109:U:H2'	36:1:1110:U:C6	2.51	0.45
36:1:1717:U:H2'	36:1:1718:G:C8	2.51	0.45
36:1:1927:G:OP1	79:Q3:8:VAL:HG13	2.16	0.45
36:1:2261:G:O2'	36:1:2263:C:N4	2.49	0.45
36:1:2674:A:OP2	89:1:4061:OHX:N3	2.50	0.45
36:1:2970:C:H4'	36:1:2971:A:N1	2.31	0.45
36:1:3348:G:H1	36:1:3357:U:H3	1.65	0.45
40:L3:83:PRO:O	40:L3:165:GLN:HG3	2.17	0.45
42:L5:34:LYS:HA	57:N1:27:LEU:HD11	1.98	0.45
44:L7:186:HIS:O	44:L7:190:THR:HG23	2.16	0.45
50:M4:113:THR:HG22	50:M4:115:PHE:N	2.31	0.45
53:M7:41:LEU:O	53:M7:45:GLN:HG3	2.17	0.45
55:M9:115:ILE:HG12	55:M9:119:LEU:HD23	1.98	0.45
61:N5:80:ASN:ND2	61:N5:132:ALA:H	2.14	0.45
1:6:358:U:O2'	1:6:360:A:H5''	2.17	0.45
1:6:512:A:OP2	11:s9:172:VAL:HG13	2.16	0.45
1:6:815:G:H5'	1:6:815:G:H8	1.80	0.45
1:6:1180:C:O2'	17:c5:128:HIS:HA	2.16	0.45
1:6:1645:G:H22	1:6:1756:A:H2	1.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:180:THR:HG23	3:s1:183:GLN:OE1	2.17	0.45
4:s2:140:ARG:HB2	4:s2:222:TYR:CD2	2.51	0.45
9:s7:164:TYR:CZ	9:s7:165:LYS:HE2	2.51	0.45
21:c9:6:VAL:HG13	21:c9:66:TYR:CZ	2.51	0.45
26:d4:86:GLU:OE1	26:d4:90:ARG:NH1	2.38	0.45
34:sR:283:LYS:HG3	34:sR:284:ALA:N	2.31	0.45
35:sM:23:LYS:NZ	35:sM:23:LYS:HA	2.32	0.45
36:5:166:C:H2'	36:5:167:U:H6	1.81	0.45
36:5:408:A:H61	38:8:15:G:H1'	1.81	0.45
36:5:920:A:OP1	36:5:922:U:H5	1.99	0.45
36:5:1176:C:H2'	36:5:1177:G:N2	2.32	0.45
36:5:1813:A:H2'	36:5:1814:A:H5''	1.98	0.45
36:5:2566:C:H1'	36:5:2576:G:N2	2.31	0.45
36:5:2741:C:HO2'	78:q2:20:HIS:CG	2.34	0.45
36:5:3267:A:C4	43:l6:73:GLY:HA3	2.52	0.45
36:5:3276:G:H2'	36:5:3276:G:OP2	2.16	0.45
89:5:3980:OHX:N2	89:5:4202:OHX:N1	2.64	0.45
89:5:4024:OHX:N2	38:8:31:G:OP2	2.50	0.45
42:l5:233:ALA:O	42:l5:236:LEU:HB2	2.15	0.45
55:m9:90:PRO:HG2	55:m9:93:VAL:CG2	2.47	0.45
71:o5:59:ASN:O	71:o5:63:ARG:HG2	2.16	0.45
72:o6:98:ARG:HB3	72:o6:99:ARG:H	1.48	0.45
77:q1:13:LEU:HD13	77:q1:17:ARG:NH2	2.31	0.45
78:q2:83:LEU:HD23	78:q2:84:THR:H	1.82	0.45
1:2:531:C:H1'	26:D4:61:ARG:HD2	1.99	0.45
1:2:1085:G:N2	1:2:1088:A:OP2	2.33	0.45
1:2:1214:U:OP1	1:2:1246:C:H1'	2.17	0.45
1:2:1231:U:O5'	1:2:1259:U:H1'	2.16	0.45
1:2:1324:G:C6	1:2:1325:A:N7	2.85	0.45
2:S0:140:ASN:OD1	4:S2:62:PRO:HD3	2.17	0.45
3:S1:59:ASP:HA	3:S1:62:LYS:HZ1	1.82	0.45
3:S1:121:ILE:HG23	3:S1:161:ILE:HG23	1.98	0.45
3:S1:146:GLN:O	3:S1:148:ASN:N	2.49	0.45
6:S4:87:MET:HG3	6:S4:226:PHE:CE2	2.51	0.45
7:S5:51:VAL:HG13	7:S5:131:GLN:HB2	1.98	0.45
7:S5:143:ARG:HD3	30:D8:55:VAL:HG11	1.99	0.45
8:S6:153:VAL:O	8:S6:155:ASP:N	2.49	0.45
10:S8:196:LEU:HD12	10:S8:196:LEU:HA	1.73	0.45
22:D0:108:ILE:H	22:D0:108:ILE:HG13	1.52	0.45
26:D4:91:LEU:O	26:D4:96:LEU:HD12	2.15	0.45
36:1:712:G:H2'	36:1:713:U:C6	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:810:A:H2'	36:1:811:U:C6	2.51	0.45
36:1:1146:C:H4'	36:1:1331:U:C4	2.52	0.45
36:1:1556:C:H5''	36:1:2169:G:H22	1.82	0.45
36:1:1632:A:H2'	36:1:1633:C:C6	2.51	0.45
36:1:1925:U:O2	79:Q3:19:GLY:HA2	2.17	0.45
36:1:2838:A:C2	36:1:2839:G:H1'	2.52	0.45
36:1:3159:C:H2'	36:1:3160:U:H6	1.81	0.45
38:4:122:U:H2'	38:4:123:G:H8	1.80	0.45
40:L3:3:HIS:O	40:L3:4:ARG:C	2.59	0.45
47:M0:191:LYS:HE2	47:M0:212:GLU:CD	2.42	0.45
48:M1:110:ILE:O	48:M1:112:LEU:N	2.49	0.45
49:M3:124:ILE:HD11	49:M3:126:PHE:CZ	2.52	0.45
53:M7:27:LYS:HA	53:M7:63:PHE:CD2	2.52	0.45
57:N1:56:PHE:CE1	57:N1:78:LYS:HD3	2.52	0.45
63:N7:76:ASN:HB3	63:N7:79:HIS:ND1	2.31	0.45
76:Q0:93:LYS:HG3	76:Q0:102:ARG:HG2	1.99	0.45
1:6:66:U:O2'	1:6:67:A:H5''	2.16	0.45
1:6:144:U:H5	8:s6:137:ARG:HH11	1.64	0.45
1:6:609:U:H5	25:d3:22:ASN:HB3	1.82	0.45
1:6:697:C:OP2	89:6:2071:OHX:N5	2.50	0.45
1:6:820:U:H5''	1:6:821:U:OP2	2.16	0.45
1:6:1118:G:OP2	77:q1:21:ARG:NH2	2.50	0.45
1:6:1282:U:OP1	89:6:2133:OHX:N4	2.50	0.45
1:6:1294:G:O2'	1:6:1321:A:N1	2.50	0.45
1:6:1708:U:H2'	1:6:1709:C:C6	2.52	0.45
2:s0:177:LEU:O	2:s0:181:VAL:HG13	2.17	0.45
3:s1:31:ASP:OD2	3:s1:45:LYS:HE2	2.17	0.45
9:s7:110:GLN:HE21	9:s7:110:GLN:HB3	1.48	0.45
16:c4:78:ALA:HB2	16:c4:111:ARG:HB2	1.99	0.45
20:c8:11:PHE:CZ	20:c8:59:GLY:HA3	2.51	0.45
34:sR:19:TRP:CD2	34:sR:306:THR:HG22	2.52	0.45
34:sR:103:PHE:CZ	34:sR:122:ILE:HD12	2.51	0.45
36:5:641:C:H42	36:5:645:A:H8	1.63	0.45
36:5:717:C:H2'	36:5:718:G:O4'	2.17	0.45
36:5:1519:G:H2'	36:5:1520:G:C8	2.52	0.45
36:5:1543:G:OP1	51:m5:35:VAL:HG23	2.17	0.45
36:5:2514:U:C6	36:5:2514:U:OP1	2.69	0.45
36:5:2882:U:H2'	36:5:2883:U:C6	2.52	0.45
36:5:3316:A:H5''	36:5:3318:G:N2	2.31	0.45
89:5:3975:OHX:N3	89:5:4247:OHX:N5	2.64	0.45
41:l4:22:LEU:HA	41:l4:23:PRO:HD3	1.71	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:l7:132:PRO:HA	44:l7:229:PHE:CD2	2.52	0.45
45:l8:140:VAL:HG21	51:m5:3:ALA:HB2	1.99	0.45
46:l9:73:SER:HA	46:l9:76:ASP:HB2	1.99	0.45
47:m0:193:ASP:CG	47:m0:198:LYS:HE3	2.41	0.45
48:m1:166:LYS:C	48:m1:168:ASP:N	2.74	0.45
49:m3:105:ASN:OD1	49:m3:107:GLU:HG2	2.16	0.45
50:m4:40:ASP:HA	56:n0:143:PHE:CE1	2.51	0.45
65:n9:40:ARG:O	65:n9:41:ARG:C	2.58	0.45
71:o5:21:LEU:HD21	71:o5:25:LYS:HE3	1.98	0.45
72:o6:57:LEU:O	72:o6:61:ILE:HG13	2.17	0.45
74:o8:64:LYS:HG3	74:o8:65:LEU:N	2.32	0.45
1:2:386:G:N3	1:2:425:A:H2	2.14	0.45
1:2:524:U:H1'	1:2:527:A:N7	2.31	0.45
1:2:878:G:O2'	15:C3:108:ASP:OD2	2.22	0.45
1:2:979:A:N3	1:2:1775:U:O2'	2.46	0.45
1:2:1349:G:H2'	1:2:1350:U:H6	1.82	0.45
1:2:1489:U:H5'	1:2:1494:C:H1'	1.98	0.45
3:S1:182:ALA:O	3:S1:185:THR:HB	2.16	0.45
10:S8:155:SER:O	10:S8:159:GLN:HG3	2.17	0.45
24:D2:82:LYS:C	24:D2:84:GLY:N	2.75	0.45
27:D5:70:LYS:HA	27:D5:70:LYS:HD3	1.75	0.45
31:D9:10:HIS:CG	31:D9:11:PRO:HD2	2.52	0.45
36:1:26:A:C4	36:1:330:G:C8	3.05	0.45
36:1:435:C:H2'	36:1:436:A:C8	2.51	0.45
36:1:1105:A:H2'	36:1:1106:G:C8	2.52	0.45
36:1:1415:U:H2'	36:1:1416:C:O4'	2.17	0.45
36:1:1951:C:H5'	36:1:1952:G:OP1	2.16	0.45
36:1:2107:A:C2	36:1:3344:A:H8	2.35	0.45
36:1:3330:A:H2'	36:1:3331:U:H6	1.82	0.45
44:L7:89:ILE:HG22	44:L7:220:PHE:HE1	1.81	0.45
44:L7:118:LYS:HG3	44:L7:191:VAL:CG1	2.47	0.45
46:L9:90:MET:HE3	46:L9:181:VAL:HG23	1.97	0.45
47:M0:52:LEU:HA	47:M0:52:LEU:HD23	1.80	0.45
50:M4:96:ALA:O	50:M4:101:LYS:HE3	2.16	0.45
51:M5:120:TRP:HZ2	51:M5:123:GLN:HG2	1.81	0.45
52:M6:181:ALA:O	52:M6:183:ALA:N	2.50	0.45
60:N4:9:SER:HB2	60:N4:51:TRP:CZ3	2.52	0.45
60:N4:30:ARG:HG2	60:N4:30:ARG:HH11	1.82	0.45
63:N7:109:GLU:O	63:N7:112:LYS:HB2	2.17	0.45
64:N8:77:LYS:HD3	64:N8:77:LYS:HA	1.66	0.45
74:O8:70:PRO:HB2	74:O8:73:LEU:HB2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:168:A:C6	1:6:169:A:N6	2.85	0.45
1:6:819:G:O2'	1:6:821:U:OP2	2.34	0.45
1:6:939:A:H2'	1:6:940:A:C8	2.52	0.45
1:6:1469:A:H2'	1:6:1470:C:C6	2.52	0.45
1:6:1677:C:OP1	10:s8:42:ARG:NH1	2.50	0.45
2:s0:57:LEU:HD12	2:s0:173:ILE:HG23	1.98	0.45
5:s3:200:LYS:HE2	5:s3:200:LYS:HB3	1.79	0.45
7:s5:149:VAL:HG12	7:s5:156:ARG:O	2.16	0.45
9:s7:166:LEU:HD12	9:s7:183:PHE:CD2	2.51	0.45
80:c0:54:TYR:CZ	80:c0:75:TYR:HB2	2.52	0.45
19:c7:5:ARG:O	19:c7:10:LYS:HE2	2.17	0.45
19:c7:21:TYR:HE2	19:c7:61:ILE:HG21	1.81	0.45
23:d1:74:GLN:O	23:d1:77:GLY:N	2.50	0.45
26:d4:89:TYR:O	26:d4:93:ARG:HG3	2.17	0.45
26:d4:91:LEU:HD22	26:d4:91:LEU:HA	1.78	0.45
36:5:29:C:H4'	36:5:62:A:H4'	1.98	0.45
36:5:370:U:H1'	36:5:403:C:C2	2.51	0.45
36:5:626:U:O4	89:5:3985:OHX:N4	2.49	0.45
36:5:734:C:H2'	36:5:735:A:O4'	2.17	0.45
36:5:1070:U:O4	89:5:4114:OHX:N6	2.50	0.45
36:5:1805:C:H2'	36:5:1806:A:C8	2.52	0.45
36:5:1949:G:H5''	55:m9:104:ARG:NH1	2.32	0.45
36:5:2830:G:H1'	36:5:2861:U:C2	2.52	0.45
37:7:8:G:C6	37:7:9:C:C4	3.04	0.45
41:l4:286:VAL:HA	41:l4:289:ILE:HG13	1.97	0.45
43:l6:170:LYS:O	43:l6:173:MET:HB2	2.17	0.45
45:l8:153:ILE:HD13	45:l8:166:LEU:HB3	1.99	0.45
47:m0:36:LEU:CD1	47:m0:87:LEU:HB3	2.47	0.45
53:m7:18:ARG:HG3	53:m7:147:GLU:HB3	1.99	0.45
61:n5:64:GLU:O	61:n5:65:GLN:HB2	2.17	0.45
66:o0:56:LEU:HD23	66:o0:56:LEU:HA	1.78	0.45
84:p0:188:VAL:O	84:p0:189:GLN:HG2	2.16	0.45
1:2:505:A:H2'	1:2:505:A:N3	2.31	0.45
1:2:555:A:C6	1:2:556:A:N1	2.85	0.45
1:2:872:G:N2	1:2:1047:G:H4'	2.32	0.45
1:2:886:U:H2'	1:2:887:A:O4'	2.17	0.45
1:2:915:A:H2'	1:2:915:A:N3	2.32	0.45
1:2:1000:C:H2'	1:2:1002:G:OP2	2.17	0.45
1:2:1513:G:O2'	1:2:1515:A:N3	2.42	0.45
1:2:1601:G:O5'	21:C9:90:PRO:HG2	2.16	0.45
1:2:1645:G:H22	1:2:1756:A:H2	1.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:184:LEU:C	2:S0:186:GLY:N	2.75	0.45
5:S3:37:VAL:O	5:S3:38:GLU:C	2.59	0.45
9:S7:57:ALA:HA	9:S7:89:HIS:O	2.16	0.45
9:S7:98:ILE:HG12	9:S7:121:VAL:HG21	1.99	0.45
10:S8:84:HIS:CE1	10:S8:86:SER:HB2	2.52	0.45
14:C2:43:ARG:HA	14:C2:121:VAL:HG12	1.99	0.45
24:D2:37:PHE:CE2	24:D2:103:ILE:HD12	2.52	0.45
26:D4:23:PHE:HE2	26:D4:75:VAL:HG12	1.82	0.45
35:SM:97:THR:HG22	35:SM:99:LYS:HG3	1.98	0.45
35:SM:113:ASP:O	35:SM:116:GLU:HB2	2.17	0.45
36:1:650:C:H2'	36:1:651:G:C8	2.52	0.45
36:1:1131:G:C4	36:1:2373:A:C2	3.05	0.45
36:1:1161:G:H5'	36:1:1365:G:O2'	2.16	0.45
36:1:1273:A:O2'	36:1:1274:A:OP1	2.30	0.45
38:4:144:G:O2'	38:4:145:U:H5'	2.17	0.45
42:L5:140:ARG:HB2	42:L5:140:ARG:HH21	1.82	0.45
45:L8:101:THR:HG22	45:L8:104:GLU:CG	2.47	0.45
51:M5:165:THR:O	51:M5:169:LYS:HG3	2.17	0.45
56:N0:12:ARG:O	56:N0:13:ARG:C	2.59	0.45
63:N7:14:VAL:HG12	63:N7:79:HIS:HA	1.99	0.45
67:O1:52:ALA:O	67:O1:55:LEU:N	2.48	0.45
70:O4:22:VAL:HG12	70:O4:23:VAL:N	2.31	0.45
79:Q3:38:ASP:HA	79:Q3:45:LYS:HA	1.98	0.45
1:6:920:U:H2'	1:6:921:U:O4'	2.16	0.45
1:6:1613:U:H6	1:6:1613:U:O5'	2.00	0.45
1:6:1673:G:C5	1:6:1674:C:C5	3.04	0.45
2:s0:198:MET:SD	19:c7:88:VAL:HG23	2.57	0.45
5:s3:167:PHE:O	5:s3:190:ARG:HG2	2.16	0.45
6:s4:160:VAL:HG11	6:s4:169:ILE:HG12	1.99	0.45
23:d1:46:ILE:H	23:d1:46:ILE:HD12	1.81	0.45
36:5:776:U:C5	36:5:2719:U:O2	2.69	0.45
36:5:1502:C:OP2	89:5:3914:OHX:N3	2.50	0.45
36:5:2655:U:H2'	78:q2:3:ASN:O	2.17	0.45
36:5:2733:A:H2'	36:5:2734:A:O4'	2.17	0.45
36:5:3195:U:H4'	36:5:3196:U:OP2	2.16	0.45
89:5:3975:OHX:N1	89:5:4247:OHX:N5	2.64	0.45
40:l3:209:PHE:HB3	40:l3:282:ILE:HD12	1.98	0.45
44:l7:179:LEU:H	44:l7:179:LEU:HD22	1.82	0.45
46:l9:7:GLU:HA	46:l9:68:LEU:HD11	1.98	0.45
48:m1:75:LYS:HB3	48:m1:75:LYS:HE2	1.79	0.45
48:m1:92:ARG:HH21	48:m1:94:ARG:HD2	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:m3:159:VAL:HA	64:n8:124:ILE:HD11	1.98	0.45
50:m4:49:PRO:HG3	50:m4:78:THR:HG23	1.98	0.45
51:m5:51:LEU:CD1	51:m5:119:TYR:HB3	2.46	0.45
53:m7:31:GLU:CG	53:m7:60:PHE:HA	2.46	0.45
54:m8:147:ARG:O	54:m8:150:VAL:HG22	2.16	0.45
62:n6:47:ALA:O	62:n6:122:LYS:NZ	2.49	0.45
74:o8:12:LEU:HD13	74:o8:12:LEU:HA	1.85	0.45
1:2:332:U:OP2	10:S8:56:ARG:NH2	2.50	0.45
1:2:478:A:O2'	11:S9:124:HIS:ND1	2.40	0.45
1:2:1015:U:OP1	89:2:2045:OHX:N3	2.50	0.45
1:2:1101:G:H5''	24:D2:76:SER:HB3	1.99	0.45
3:S1:172:LEU:HD23	3:S1:172:LEU:HA	1.78	0.45
6:S4:86:PHE:HE1	6:S4:226:PHE:CD2	2.35	0.45
9:S7:60:ILE:HD12	9:S7:92:PHE:CZ	2.52	0.45
10:S8:152:ILE:HD13	10:S8:157:GLU:OE1	2.17	0.45
11:S9:148:VAL:C	11:S9:150:LEU:H	2.24	0.45
18:C6:87:LYS:HA	18:C6:90:VAL:HG22	1.98	0.45
19:C7:113:LEU:HG	19:C7:114:GLY:N	2.32	0.45
33:E1:119:ARG:H	33:E1:119:ARG:HG2	1.56	0.45
33:E1:136:LYS:O	33:E1:138:ARG:HB2	2.17	0.45
34:SR:211:ILE:HG22	34:SR:223:TRP:CD1	2.52	0.45
36:1:530:G:H2'	36:1:531:G:O4'	2.17	0.45
36:1:1162:U:H4'	68:O2:57:TYR:CD1	2.52	0.45
36:1:3316:A:O2'	36:1:3317:U:OP2	2.22	0.45
40:L3:88:GLY:O	40:L3:161:LEU:N	2.38	0.45
54:M8:100:THR:CG2	54:M8:120:GLU:HB3	2.47	0.45
56:N0:132:THR:O	56:N0:133:ALA:HB3	2.17	0.45
58:N2:49:ASN:C	58:N2:51:GLY:H	2.23	0.45
63:N7:4:PHE:CE2	66:O0:35:ARG:HA	2.51	0.45
64:N8:112:ILE:HD13	64:N8:112:ILE:HA	1.72	0.45
66:O0:100:ILE:HD12	66:O0:101:LEU:H	1.81	0.45
75:O9:27:ILE:C	75:O9:29:LEU:H	2.25	0.45
78:Q2:104:LEU:HD12	78:Q2:104:LEU:HA	1.71	0.45
1:6:523:G:OP2	26:d4:37:LYS:HE3	2.16	0.45
1:6:1541:G:C5	1:6:1542:G:C6	3.05	0.45
1:6:1595:U:H3	1:6:1600:A:H2	1.62	0.45
3:s1:116:LYS:HB3	3:s1:117:TRP:CD1	2.52	0.45
5:s3:42:THR:OG1	5:s3:44:THR:O	2.28	0.45
5:s3:202:LEU:O	5:s3:204:ASP:N	2.50	0.45
31:d9:43:PHE:O	31:d9:47:ALA:N	2.38	0.45
36:5:766:U:H4'	36:5:767:U:O5'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:839:C:H4'	36:5:1724:U:H2'	1.98	0.45
36:5:848:A:C5	36:5:849:C:H1'	2.52	0.45
36:5:1063:G:H2'	36:5:1097:G:N2	2.32	0.45
36:5:1131:G:C4	36:5:2373:A:C2	3.05	0.45
36:5:1348:U:O4'	36:5:1355:A:N6	2.50	0.45
36:5:1563:C:O2	36:5:1577:G:N2	2.50	0.45
36:5:1597:C:H2'	36:5:1598:G:C8	2.52	0.45
36:5:1724:U:H1'	36:5:1725:C:C6	2.52	0.45
36:5:3006:A:H2'	36:5:3007:U:O4'	2.17	0.45
89:5:4013:OHX:N6	89:5:4204:OHX:N2	2.65	0.45
40:13:284:ARG:NH2	40:13:295:ALA:O	2.40	0.45
42:15:191:ASP:HA	42:15:192:PRO:HD3	1.67	0.45
46:19:29:GLY:HA3	46:19:82:VAL:HG13	1.99	0.45
49:m3:75:PHE:H	49:m3:97:VAL:HA	1.81	0.45
52:m6:41:LEU:O	52:m6:138:LEU:HB2	2.17	0.45
67:o1:12:TYR:O	67:o1:73:LEU:N	2.42	0.45
1:2:861:U:H5'	1:2:862:A:OP2	2.17	0.45
1:2:1410:A:H2'	1:2:1411:A:O4'	2.17	0.45
2:S0:88:LYS:HZ1	19:C7:82:ASP:HB3	1.82	0.45
2:S0:103:THR:HA	2:S0:104:PRO:HD3	1.75	0.45
3:S1:131:ASP:O	3:S1:133:TYR:N	2.41	0.45
4:S2:76:LEU:HD12	4:S2:105:GLY:C	2.42	0.45
4:S2:150:GLN:HA	4:S2:151:PRO:HD3	1.90	0.45
8:S6:1:MET:N	8:S6:18:ILE:O	2.50	0.45
8:S6:70:PRO:HD2	8:S6:71:THR:HG23	1.98	0.45
9:S7:104:ARG:H	9:S7:104:ARG:HG2	1.53	0.45
11:S9:42:ILE:O	11:S9:46:SER:OG	2.35	0.45
12:C0:77:ARG:HA	12:C0:82:LEU:CD1	2.47	0.45
14:C2:59:LEU:HD23	14:C2:60:VAL:N	2.32	0.45
20:C8:60:GLU:H	20:C8:60:GLU:HG2	1.50	0.45
36:1:114:A:OP1	51:M5:54:LYS:NZ	2.46	0.45
36:1:415:G:H2'	36:1:416:A:C8	2.53	0.45
36:1:730:C:H2'	36:1:731:U:C6	2.52	0.45
36:1:785:G:OP2	54:M8:66:ARG:NH1	2.50	0.45
36:1:796:U:H2'	36:1:797:U:C6	2.52	0.45
36:1:1306:G:C6	52:M6:62:THR:HA	2.52	0.45
36:1:1540:U:OP1	89:1:4031:OHX:N1	2.50	0.45
36:1:2777:G:H5''	36:1:2778:G:OP1	2.17	0.45
36:1:3042:U:OP2	36:1:3092:C:N4	2.46	0.45
36:1:3321:C:H2'	36:1:3322:A:H8	1.81	0.45
39:L2:107:VAL:HB	39:L2:111:THR:OG1	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:116:VAL:HG22	39:L2:126:LEU:HD12	1.98	0.45
39:L2:142:ASP:C	39:L2:143:GLU:HG3	2.42	0.45
46:L9:12:VAL:HB	46:L9:51:GLN:HA	1.99	0.45
46:L9:34:LEU:HD21	46:L9:149:ASN:CB	2.47	0.45
55:M9:86:GLU:OE2	55:M9:91:SER:N	2.40	0.45
62:N6:58:VAL:HA	62:N6:104:LEU:HD23	1.99	0.45
62:N6:62:SER:C	62:N6:64:LYS:H	2.25	0.45
70:O4:11:ASN:HA	70:O4:12:PRO:HD3	1.58	0.45
1:6:79:C:H4'	8:s6:173:PRO:O	2.17	0.45
1:6:675:U:H2'	1:6:676:G:C8	2.52	0.45
2:s0:9:LEU:HD13	2:s0:10:THR:O	2.16	0.45
2:s0:118:PRO:HG2	2:s0:141:ILE:HD13	1.99	0.45
2:s0:163:ASN:C	2:s0:165:ARG:H	2.21	0.45
8:s6:199:GLN:O	8:s6:203:GLU:HG3	2.16	0.45
9:s7:31:SER:N	9:s7:32:PRO:HD2	2.32	0.45
10:s8:136:SER:HB2	10:s8:139:ALA:HB3	1.99	0.45
11:s9:150:LEU:HD12	11:s9:150:LEU:HA	1.74	0.45
80:c0:23:ALA:O	80:c0:24:LYS:HB3	2.17	0.45
15:c3:87:ASP:OD2	15:c3:129:TYR:OH	2.26	0.45
21:c9:93:HIS:O	21:c9:94:ILE:HD13	2.17	0.45
24:d2:18:GLU:HG3	24:d2:69:LEU:HD23	1.98	0.45
34:sR:122:ILE:HB	34:sR:134:TRP:HB2	1.98	0.45
36:5:639:G:P	68:o2:37:GLY:HA3	2.57	0.45
36:5:1393:A:C8	36:5:1418:A:C6	3.05	0.45
36:5:1621:A:H2'	36:5:1622:U:C6	2.52	0.45
36:5:1831:U:OP2	61:n5:92:LYS:HE3	2.16	0.45
36:5:2668:U:H2'	36:5:2669:G:C8	2.52	0.45
36:5:3056:U:OP2	89:5:3943:OHX:N2	2.49	0.45
36:5:3177:G:O2'	36:5:3179:U:OP1	2.26	0.45
89:5:3980:OHX:N4	89:5:4202:OHX:N3	2.65	0.45
37:7:7:G:OP1	42:l5:33:ARG:HD2	2.16	0.45
38:8:154:C:H2'	38:8:155:A:O4'	2.17	0.45
89:8:219:OHX:N2	89:8:226:OHX:N1	2.65	0.45
42:l5:269:SER:O	42:l5:272:TYR:HD2	2.00	0.45
43:l6:31:ARG:O	43:l6:33:SER:N	2.50	0.45
44:l7:191:VAL:HG12	44:l7:192:GLY:N	2.31	0.45
45:l8:178:ALA:HB2	45:l8:218:ILE:HG23	1.99	0.45
47:m0:68:ALA:HB1	47:m0:155:ALA:HB1	1.98	0.45
49:m3:107:GLU:H	49:m3:107:GLU:CD	2.24	0.45
51:m5:57:GLN:HB3	51:m5:139:HIS:NE2	2.32	0.45
51:m5:118:SER:HB3	51:m5:132:VAL:HG22	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:m6:124:LEU:HD23	56:n0:168:PRO:HG3	1.99	0.45
59:n3:23:MET:HE3	59:n3:100:GLY:HA3	1.98	0.45
64:n8:75:LEU:O	64:n8:77:LYS:N	2.50	0.45
68:o2:6:HIS:HA	68:o2:7:PRO:HD2	1.80	0.45
70:o4:58:ARG:HH11	70:o4:58:ARG:CG	2.30	0.45
78:q2:55:LYS:NZ	87:B:503:C:O2	2.47	0.45
1:2:812:A:OP1	1:2:814:A:C8	2.70	0.44
1:2:1335:U:H3	1:2:1416:G:H1	1.64	0.44
1:2:1396:U:H2'	1:2:1397:U:C6	2.52	0.44
1:2:1474:G:H2'	1:2:1475:A:C8	2.52	0.44
1:2:1573:A:H4'	1:2:1574:G:H5'	1.98	0.44
1:2:1746:A:H2'	1:2:1747:G:O4'	2.16	0.44
10:S8:8:ARG:HG3	10:S8:8:ARG:O	2.17	0.44
10:S8:162:ALA:HA	36:1:3353:G:C5'	2.47	0.44
11:S9:95:TYR:O	11:S9:98:ALA:HB3	2.16	0.44
15:C3:54:LEU:O	15:C3:60:VAL:HB	2.17	0.44
25:D3:108:GLY:O	25:D3:109:ARG:HG2	2.17	0.44
33:E1:98:VAL:HG22	33:E1:99:LYS:H	1.81	0.44
33:E1:98:VAL:HG13	33:E1:99:LYS:N	2.32	0.44
34:SR:38:ARG:HG2	34:SR:67:ILE:CG2	2.38	0.44
36:1:1211:U:H2'	36:1:1212:A:C8	2.53	0.44
36:1:1492:G:O2'	75:O9:48:LYS:NZ	2.50	0.44
36:1:1668:G:C6	36:1:1669:C:C4	3.06	0.44
36:1:1915:A:H5''	55:M9:84:THR:HG22	1.99	0.44
36:1:2213:A:N1	36:1:2429:G:H1'	2.32	0.44
36:1:2898:G:H5''	36:1:2899:C:C5'	2.47	0.44
40:L3:257:PRO:O	40:L3:259:HIS:N	2.44	0.44
53:M7:62:ARG:O	53:M7:64:ASN:N	2.51	0.44
61:N5:136:ALA:O	61:N5:139:ILE:HG23	2.17	0.44
63:N7:87:LEU:HB2	63:N7:127:ASN:ND2	2.32	0.44
63:N7:135:ARG:HG2	63:N7:135:ARG:HH21	1.81	0.44
67:O1:27:LYS:C	67:O1:30:PRO:HD2	2.42	0.44
1:6:974:A:H2'	1:6:975:C:O4'	2.17	0.44
1:6:1625:C:H2'	1:6:1626:U:C6	2.52	0.44
3:s1:93:GLY:C	3:s1:95:ASN:N	2.75	0.44
5:s3:192:PRO:O	5:s3:195:SER:OG	2.20	0.44
6:s4:195:ILE:O	6:s4:210:ILE:HA	2.17	0.44
11:s9:133:HIS:HB3	11:s9:162:SER:HB2	1.99	0.44
80:c0:45:ALA:O	80:c0:49:LEU:HD23	2.17	0.44
23:d1:78:LEU:HD12	23:d1:78:LEU:HA	1.72	0.44
31:d9:30:LEU:HA	31:d9:39:CYS:HA	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:sR:22:SER:OG	34:sR:70:ASP:HA	2.16	0.44
36:5:123:A:C6	36:5:150:A:C5	3.05	0.44
36:5:170:G:OP1	49:m3:128:ARG:NH1	2.49	0.44
36:5:621:A:H2'	36:5:622:A:H8	1.78	0.44
36:5:736:A:C5	36:5:737:G:H1'	2.52	0.44
36:5:1021:G:N1	36:5:1032:C:O2	2.49	0.44
36:5:1245:A:H5'	36:5:1247:U:OP2	2.17	0.44
36:5:2147:A:H2'	36:5:2148:U:O4'	2.17	0.44
36:5:2355:G:H4'	53:m7:139:TYR:CZ	2.52	0.44
89:5:3980:OHX:N6	89:5:4202:OHX:N3	2.65	0.44
40:l3:232:ARG:HG2	40:l3:233:TRP:CD1	2.51	0.44
42:l5:92:LEU:HA	42:l5:92:LEU:HD23	1.83	0.44
45:l8:123:GLN:C	45:l8:125:ALA:H	2.25	0.44
45:l8:214:LEU:HD12	45:l8:214:LEU:HA	1.79	0.44
52:m6:14:HIS:HE1	52:m6:119:VAL:HG12	1.82	0.44
61:n5:105:VAL:HA	61:n5:130:TYR:CE2	2.52	0.44
61:n5:108:LEU:HD22	61:n5:108:LEU:HA	1.67	0.44
67:o1:97:LEU:HD22	67:o1:97:LEU:HA	1.72	0.44
72:o6:43:LEU:HD22	72:o6:43:LEU:HA	1.55	0.44
1:2:279:G:N7	1:2:281:G:C8	2.86	0.44
1:2:768:C:C2	11:S9:143:ILE:HG12	2.52	0.44
1:2:1017:U:H2'	1:2:1018:U:C6	2.51	0.44
1:2:1553:G:N2	1:2:1555:A:H3'	2.32	0.44
89:2:2044:OHX:N4	89:2:2099:OHX:N6	2.65	0.44
3:S1:127:VAL:HG13	3:S1:176:VAL:HG11	1.98	0.44
4:S2:108:ASN:HA	4:S2:141:ARG:HH12	1.81	0.44
5:S3:74:GLN:NE2	5:S3:81:PRO:HG3	2.32	0.44
8:S6:210:GLN:HB3	8:S6:214:LYS:NZ	2.32	0.44
11:S9:148:VAL:HG12	11:S9:150:LEU:H	1.83	0.44
12:C0:69:THR:O	12:C0:73:VAL:HG23	2.17	0.44
19:C7:46:LEU:O	19:C7:50:ILE:HG13	2.17	0.44
25:D3:87:VAL:HA	25:D3:88:PRO:HD3	1.73	0.44
34:SR:302:PHE:N	34:SR:302:PHE:CD2	2.84	0.44
36:1:329:U:H4'	36:1:330:G:OP2	2.17	0.44
36:1:2664:C:O2'	36:1:2665:U:H5'	2.17	0.44
36:1:2947:G:C2	40:L3:250:ALA:HB1	2.53	0.44
36:1:3305:A:OP1	40:L3:334:ARG:NH2	2.48	0.44
38:4:35:C:H5''	73:O7:70:VAL:HG11	1.99	0.44
40:L3:82:PRO:HA	40:L3:83:PRO:HD2	1.65	0.44
41:L4:150:LEU:HD11	41:L4:172:VAL:HG12	1.99	0.44
43:L6:155:LEU:HD23	43:L6:155:LEU:HA	1.78	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:152:GLY:O	44:L7:163:LEU:HG	2.17	0.44
64:N8:91:LEU:HA	64:N8:121:VAL:HG21	1.98	0.44
67:O1:16:LEU:HD12	67:O1:16:LEU:HA	1.59	0.44
67:O1:17:HIS:CG	67:O1:69:TYR:HD1	2.34	0.44
68:O2:72:LYS:O	68:O2:92:TYR:HA	2.17	0.44
73:O7:60:GLY:HA2	73:O7:64:MET:HE2	1.98	0.44
1:6:188:A:H3'	1:6:189:C:H6	1.83	0.44
1:6:444:C:OP2	26:d4:108:ARG:NH2	2.50	0.44
1:6:474:A:OP1	11:s9:145:SER:HB2	2.17	0.44
1:6:825:U:O2'	1:6:826:U:P	2.75	0.44
1:6:1224:A:C6	1:6:1225:U:C4	3.04	0.44
1:6:1541:G:C6	1:6:1542:G:C6	3.05	0.44
9:s7:15:GLU:O	9:s7:19:GLN:HG3	2.17	0.44
11:s9:28:LEU:HD23	11:s9:28:LEU:HA	1.76	0.44
11:s9:63:ASP:O	11:s9:66:ASP:N	2.49	0.44
11:s9:114:TYR:HA	11:s9:119:ALA:HB3	1.99	0.44
15:c3:26:PHE:CE2	15:c3:28:LEU:HB2	2.52	0.44
15:c3:53:LEU:HD12	15:c3:53:LEU:HA	1.74	0.44
17:c5:70:ASN:O	17:c5:71:GLU:HG2	2.17	0.44
20:c8:129:TRP:O	35:sM:68:ARG:HB2	2.18	0.44
36:5:998:A:H2	36:5:1051:U:O4	1.99	0.44
36:5:1039:U:H2'	36:5:1040:A:C8	2.51	0.44
36:5:1208:U:H6	36:5:3115:C:H42	1.63	0.44
36:5:1603:A:P	55:m9:38:ARG:HH21	2.40	0.44
36:5:1825:G:OP1	74:o8:49:SER:OG	2.34	0.44
36:5:2258:U:H2'	36:5:2259:A:O4'	2.18	0.44
36:5:2529:A:H2'	36:5:2530:G:O4'	2.17	0.44
36:5:2718:U:OP2	89:5:4070:OHX:N6	2.49	0.44
36:5:3046:A:H2'	36:5:3047:U:O4'	2.18	0.44
39:l2:137:ILE:HG23	39:l2:147:ARG:O	2.17	0.44
40:l3:3:HIS:ND1	40:l3:3:HIS:C	2.72	0.44
40:l3:169:THR:HG23	40:l3:170:PRO:N	2.32	0.44
46:l9:188:THR:O	46:l9:189:GLU:HB2	2.16	0.44
47:m0:19:LYS:HE3	47:m0:26:VAL:HG22	1.99	0.44
47:m0:93:PRO:HA	47:m0:126:ALA:O	2.17	0.44
49:m3:64:LYS:HG3	64:n8:69:TRP:CG	2.52	0.44
50:m4:50:LYS:HD2	50:m4:91:CYS:SG	2.57	0.44
51:m5:143:ARG:HH21	71:o5:92:LEU:HA	1.82	0.44
59:n3:87:ARG:HB2	59:n3:89:ASP:OD1	2.17	0.44
73:o7:2:GLY:O	73:o7:7:SER:HB3	2.16	0.44
84:p0:27:VAL:HG22	84:p0:86:PHE:HE1	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:767:U:H5	11:S9:142:ASN:H	1.65	0.44
1:2:778:G:H1	26:D4:10:ARG:NH1	2.15	0.44
1:2:1009:U:H2'	1:2:1010:C:C6	2.51	0.44
1:2:1331:A:H8	1:2:1331:A:O5'	2.01	0.44
1:2:1555:A:P	17:C5:47:ARG:HH21	2.40	0.44
1:2:1560:U:C4	1:2:1561:U:C4	3.05	0.44
2:S0:188:LEU:HD12	2:S0:189:VAL:HB	2.00	0.44
4:S2:98:PHE:CE1	35:SM:116:GLU:HG3	2.52	0.44
5:S3:32:GLU:O	5:S3:52:ALA:HB1	2.18	0.44
7:S5:29:ILE:HG22	7:S5:34:GLN:HG2	1.99	0.44
7:S5:194:LEU:HD22	7:S5:194:LEU:HA	1.81	0.44
9:S7:96:ARG:NH1	9:S7:128:ASP:OD2	2.30	0.44
10:S8:8:ARG:HH22	10:S8:21:PHE:H	1.63	0.44
13:C1:75:VAL:CG1	13:C1:120:GLY:H	2.30	0.44
18:C6:11:GLY:HA2	18:C6:83:GLN:HE21	1.82	0.44
18:C6:39:VAL:O	18:C6:40:GLU:C	2.60	0.44
22:D0:20:ILE:HD13	22:D0:22:ILE:HD13	1.99	0.44
22:D0:102:ARG:O	22:D0:106:ILE:HG22	2.18	0.44
34:SR:243:LEU:HD23	34:SR:254:ALA:HA	1.99	0.44
36:1:817:A:C4	73:O7:13:ASN:O	2.71	0.44
36:1:911:C:H5''	39:L2:15:ILE:HD13	1.99	0.44
36:1:1185:C:OP1	50:M4:42:LYS:HE2	2.18	0.44
36:1:1204:A:H2	36:1:2834:G:N3	2.15	0.44
36:1:1321:G:O2'	56:N0:111:ALA:O	2.29	0.44
36:1:1477:A:OP1	36:1:3075:G:O2'	2.30	0.44
36:1:1701:C:H2'	36:1:1702:U:O4'	2.17	0.44
36:1:1947:G:H1	36:1:2101:C:H42	1.64	0.44
36:1:1952:G:H3'	36:1:1953:G:H5''	1.99	0.44
36:1:2157:G:O6	39:L2:152:SER:HB3	2.16	0.44
40:L3:188:ILE:O	40:L3:192:VAL:HG12	2.17	0.44
43:L6:149:ILE:HG23	43:L6:155:LEU:HB3	1.98	0.44
45:L8:246:MET:HE3	45:L8:246:MET:HB2	1.75	0.44
47:M0:190:VAL:HG13	47:M0:197:VAL:CG2	2.47	0.44
47:M0:210:ILE:HG12	47:M0:217:PHE:CZ	2.51	0.44
48:M1:141:ARG:NH2	48:M1:144:CYS:O	2.33	0.44
49:M3:16:LYS:HE3	51:M5:195:ASN:OD1	2.18	0.44
51:M5:106:VAL:O	51:M5:109:ARG:N	2.49	0.44
57:N1:120:LYS:C	57:N1:122:GLN:N	2.75	0.44
61:N5:108:LEU:HD12	61:N5:125:ARG:HD2	1.99	0.44
61:N5:115:ARG:HG3	61:N5:115:ARG:HH11	1.82	0.44
62:N6:56:VAL:HG22	62:N6:104:LEU:HB3	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:14:VAL:HG21	70:O4:90:ILE:HD11	1.99	0.44
64:N8:40:HIS:CD2	64:N8:41:HIS:CE1	3.05	0.44
64:N8:73:LEU:HB2	64:N8:109:TYR:CD2	2.53	0.44
73:O7:52:LYS:HA	73:O7:55:ARG:HD2	1.99	0.44
1:6:846:G:H2'	1:6:847:A:H8	1.82	0.44
1:6:1557:U:OP2	1:6:1559:A:O2'	2.26	0.44
2:s0:61:ALA:HA	2:s0:181:VAL:HG12	1.99	0.44
3:s1:70:LEU:HA	3:s1:73:LEU:HD23	2.00	0.44
3:s1:160:HIS:O	3:s1:164:ILE:HG13	2.17	0.44
6:s4:29:PRO:O	6:s4:30:ARG:HB3	2.17	0.44
10:s8:166:TYR:O	10:s8:183:ILE:HD12	2.17	0.44
13:c1:128:CYS:O	13:c1:129:ARG:HB3	2.17	0.44
19:c7:30:THR:HG22	34:sR:127:ARG:HH22	1.82	0.44
82:e1:95:HIS:CG	82:e1:96:LYS:H	2.35	0.44
34:sR:314:GLN:HG3	34:sR:315:VAL:N	2.31	0.44
35:sM:58:GLU:OE2	35:sM:62:ARG:HD2	2.18	0.44
36:5:149:U:OP1	51:m5:49:ARG:NH1	2.51	0.44
36:5:731:U:H2'	36:5:732:C:C6	2.53	0.44
36:5:783:A:OP2	89:5:4197:OHX:N6	2.51	0.44
36:5:1553:U:H1'	36:5:1554:U:H5	1.81	0.44
36:5:2433:U:OP2	36:5:2434:U:O2'	2.34	0.44
36:5:2505:U:H2'	36:5:2506:U:C5	2.53	0.44
36:5:2799:A:H5''	36:5:2800:G:O5'	2.17	0.44
89:5:4004:OHX:N6	44:l7:217:PRO:O	2.50	0.44
39:l2:34:TYR:O	39:l2:35:ALA:C	2.60	0.44
45:l8:32:LYS:HD3	45:l8:32:LYS:HA	1.80	0.44
46:l9:38:LEU:HD13	46:l9:71:VAL:HG22	1.99	0.44
46:l9:129:ARG:O	46:l9:132:VAL:HG13	2.17	0.44
49:m3:61:PRO:C	49:m3:62:THR:HG23	2.42	0.44
62:n6:59:VAL:C	62:n6:64:LYS:HD2	2.42	0.44
66:o0:24:THR:CG2	66:o0:91:SER:HB3	2.46	0.44
68:o2:72:LYS:HB2	68:o2:92:TYR:CE1	2.52	0.44
70:o4:46:ASP:CG	70:o4:80:ARG:HD2	2.41	0.44
78:q2:10:THR:O	78:q2:20:HIS:HA	2.17	0.44
1:2:387:A:H8	1:2:387:A:OP2	2.00	0.44
1:2:582:U:H3'	1:2:583:C:H6	1.83	0.44
1:2:603:U:H2'	1:2:604:A:C8	2.52	0.44
1:2:1165:G:C6	1:2:1166:A:C6	3.05	0.44
1:2:1174:C:H2'	1:2:1175:U:O4'	2.18	0.44
3:S1:61:LEU:HD23	3:S1:62:LYS:H	1.82	0.44
3:S1:104:ASP:HA	3:S1:214:LYS:HG3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:140:ILE:HG21	3:S1:213:ARG:HD3	1.99	0.44
3:S1:187:LYS:O	3:S1:190:PRO:HD2	2.16	0.44
4:S2:166:THR:HG23	4:S2:201:ASN:HB3	2.00	0.44
4:S2:212:LYS:HB3	4:S2:212:LYS:HE2	1.63	0.44
6:S4:57:ASN:HB2	6:S4:60:GLU:H	1.82	0.44
10:S8:188:GLU:HG3	10:S8:192:TYR:CE2	2.51	0.44
11:S9:129:ILE:C	11:S9:131:GLN:H	2.25	0.44
11:S9:146:PHE:O	11:S9:147:MET:HB2	2.16	0.44
21:C9:42:GLY:HA2	21:C9:84:LYS:HB2	2.00	0.44
21:C9:53:TRP:HA	21:C9:56:LYS:HB2	1.99	0.44
23:D1:11:LEU:H	23:D1:11:LEU:HG	1.50	0.44
36:1:665:A:H1'	49:M3:14:PHE:CE1	2.52	0.44
36:1:1919:G:N7	89:1:4025:OHX:N5	2.64	0.44
36:1:2144:A:C4	36:1:2281:A:N6	2.86	0.44
36:1:2278:C:C2	36:1:2307:G:N2	2.86	0.44
36:1:2902:A:P	46:L9:170:LYS:HE3	2.57	0.44
41:L4:77:VAL:HB	41:L4:85:SER:HA	1.98	0.44
41:L4:291:ASN:O	41:L4:292:SER:C	2.59	0.44
42:L5:106:ALA:HB2	42:L5:166:ALA:HA	2.00	0.44
42:L5:184:ASP:CG	42:L5:187:THR:HG22	2.43	0.44
47:M0:16:PRO:HD3	47:M0:128:ARG:NH1	2.32	0.44
48:M1:25:GLU:OE1	48:M1:29:ARG:HB3	2.17	0.44
49:M3:57:VAL:HG13	49:M3:147:ILE:HG23	1.98	0.44
55:M9:169:ALA:HA	55:M9:172:ARG:HD2	1.99	0.44
59:N3:30:GLY:HA3	59:N3:66:LYS:HD2	1.99	0.44
68:O2:9:ILE:HG23	68:O2:63:THR:HB	2.00	0.44
68:O2:12:LYS:HE2	68:O2:57:TYR:HA	1.98	0.44
78:Q2:57:VAL:HG22	87:A:503:C:H4'	1.99	0.44
1:6:82:U:H2'	1:6:83:G:O4'	2.17	0.44
1:6:621:A:N3	1:6:1107:G:H1'	2.32	0.44
1:6:1066:C:H4'	3:s1:149:GLN:NE2	2.32	0.44
1:6:1648:A:H2'	1:6:1649:G:H8	1.82	0.44
3:s1:46:THR:OG1	3:s1:47:LEU:N	2.50	0.44
3:s1:145:LYS:HG2	3:s1:149:GLN:HB3	1.99	0.44
13:c1:64:VAL:HG11	13:c1:131:ILE:HD11	1.99	0.44
23:d1:78:LEU:O	23:d1:79:LEU:HD23	2.17	0.44
24:d2:30:SER:OG	24:d2:31:SER:N	2.49	0.44
81:e0:46:ASN:OD1	81:e0:47:VAL:N	2.50	0.44
36:5:435:C:H42	36:5:624:G:H1	1.65	0.44
36:5:618:C:H2'	36:5:619:A:C8	2.53	0.44
36:5:878:G:C2	36:5:2980:U:H5'	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1160:C:N3	68:o2:45:ARG:NH1	2.66	0.44
36:5:1409:G:N7	89:5:4165:OHX:N6	2.66	0.44
36:5:1447:G:H3'	53:m7:67:ILE:HD11	2.00	0.44
36:5:2093:A:H5''	55:m9:143:ILE:HG12	2.00	0.44
36:5:2101:C:H2'	36:5:2102:U:H6	1.83	0.44
36:5:2117:A:H3'	36:5:2118:C:C6	2.52	0.44
36:5:2518:C:C2	36:5:2590:A:C2	3.05	0.44
36:5:2530:G:H2'	36:5:2531:C:H5''	2.00	0.44
36:5:3169:U:H2'	36:5:3170:A:C8	2.52	0.44
36:5:3306:U:H2'	36:5:3307:A:H5''	2.00	0.44
36:5:3349:C:H2'	36:5:3350:C:O4'	2.17	0.44
36:5:3355:U:O2'	36:5:3356:G:H5''	2.18	0.44
89:5:3975:OHX:N4	89:5:4247:OHX:N2	2.66	0.44
89:5:4013:OHX:N4	89:5:4204:OHX:N1	2.66	0.44
37:7:4:U:H2'	37:7:5:G:H8	1.83	0.44
40:l3:56:ILE:HG12	40:l3:323:MET:HE1	2.00	0.44
40:l3:159:ARG:HG2	40:l3:182:GLN:HA	2.00	0.44
45:l8:180:VAL:HG11	45:l8:186:LEU:HD21	1.99	0.44
46:l9:94:TYR:CE2	46:l9:98:PRO:HA	2.53	0.44
46:l9:162:GLN:HB2	46:l9:179:ILE:O	2.17	0.44
50:m4:40:ASP:C	50:m4:42:LYS:H	2.25	0.44
50:m4:113:THR:CG2	50:m4:116:GLU:H	2.29	0.44
52:m6:22:VAL:HG11	52:m6:120:VAL:HG11	2.00	0.44
53:m7:27:LYS:HG2	53:m7:63:PHE:CG	2.52	0.44
53:m7:46:LYS:HB2	53:m7:46:LYS:HE3	1.67	0.44
54:m8:99:THR:HB	54:m8:100:THR:H	1.40	0.44
55:m9:61:SER:OG	55:m9:62:ARG:N	2.50	0.44
55:m9:163:ARG:O	55:m9:167:ARG:HG2	2.18	0.44
56:n0:77:VAL:HG11	56:n0:106:LEU:HG	1.98	0.44
57:n1:18:ASP:OD2	57:n1:18:ASP:N	2.49	0.44
57:n1:63:VAL:HG12	57:n1:64:VAL:N	2.33	0.44
57:n1:138:SER:C	57:n1:139:ARG:HG3	2.42	0.44
58:n2:19:VAL:HG12	58:n2:105:LEU:HD22	2.00	0.44
60:n4:119:GLU:H	60:n4:119:GLU:HG3	1.49	0.44
61:n5:38:LEU:HD22	61:n5:40:LEU:HD13	1.99	0.44
73:o7:76:ASN:O	73:o7:79:GLN:HG3	2.17	0.44
1:2:117:U:H5'	1:2:333:A:O2'	2.17	0.44
1:2:458:G:OP1	26:D4:109:LYS:NZ	2.50	0.44
1:2:558:U:O2'	1:2:559:C:O5'	2.32	0.44
1:2:1049:U:H2'	1:2:1050:G:C8	2.52	0.44
1:2:1146:G:C6	1:2:1147:A:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1475:A:H2'	1:2:1476:C:O4'	2.17	0.44
1:2:1481:C:O2'	1:2:1482:C:O5'	2.24	0.44
6:S4:212:ASP:OD2	6:S4:212:ASP:N	2.49	0.44
9:S7:157:LYS:O	9:S7:159:VAL:N	2.48	0.44
10:S8:11:ARG:O	13:C1:133:LYS:NZ	2.51	0.44
11:S9:115:LYS:HD2	11:S9:115:LYS:HA	1.65	0.44
16:C4:29:HIS:HA	16:C4:41:ARG:HA	1.99	0.44
18:C6:99:GLU:OE2	34:SR:60:SER:HB2	2.18	0.44
19:C7:36:ASP:C	19:C7:38:ILE:H	2.26	0.44
20:C8:145:ARG:HB3	20:C8:146:ALA:H	1.49	0.44
24:D2:74:VAL:HA	24:D2:127:GLY:HA3	1.99	0.44
25:D3:68:ILE:O	25:D3:70:LYS:NZ	2.44	0.44
25:D3:86:PHE:O	25:D3:124:VAL:HG23	2.17	0.44
33:E1:144:CYS:C	33:E1:146:SER:N	2.75	0.44
34:SR:74:THR:HG21	34:SR:79:TYR:HD2	1.83	0.44
34:SR:216:LYS:O	34:SR:218:GLY:N	2.51	0.44
35:SM:117:LEU:HD23	35:SM:121:LYS:HG3	2.00	0.44
36:1:685:G:OP1	49:M3:35:ARG:HD2	2.17	0.44
36:1:715:A:H8	64:N8:115:LYS:HG2	1.81	0.44
36:1:776:U:C5	36:1:2719:U:O2	2.59	0.44
36:1:2656:A:C8	36:1:2658:G:C8	3.06	0.44
36:1:3045:G:O3'	40:L3:275:ARG:NH1	2.51	0.44
37:3:19:C:H42	37:3:60:G:H1	1.66	0.44
38:4:59:A:N1	38:4:100:U:H1'	2.32	0.44
39:L2:190:ARG:NH1	39:L2:191:LEU:HD11	2.33	0.44
40:L3:214:MET:SD	40:L3:281:LYS:HG3	2.57	0.44
41:L4:333:VAL:HA	41:L4:336:ALA:HB3	1.99	0.44
42:L5:4:GLN:OE1	42:L5:4:GLN:N	2.50	0.44
46:L9:4:ILE:HG22	56:N0:142:GLN:OE1	2.18	0.44
47:M0:53:VAL:HG21	47:M0:166:ILE:HD12	1.99	0.44
49:M3:67:ARG:H	49:M3:67:ARG:HG3	1.48	0.44
59:N3:93:LEU:HB2	60:N4:20:LEU:HD22	2.00	0.44
59:N3:126:TRP:HA	59:N3:127:PRO:HD3	1.84	0.44
64:N8:24:LYS:HD2	64:N8:26:ARG:NH2	2.32	0.44
71:O5:89:ARG:HG2	71:O5:89:ARG:HH11	1.82	0.44
1:6:121:U:O2'	6:s4:33:ALA:O	2.30	0.44
1:6:337:G:H3'	13:c1:133:LYS:HG2	2.00	0.44
1:6:341:A:H2'	1:6:342:C:H6	1.83	0.44
1:6:485:A:N6	1:6:502:U:H3	2.16	0.44
1:6:760:A:OP2	89:6:2081:OHX:N5	2.51	0.44
1:6:777:C:C2	1:6:778:G:C8	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1081:A:OP2	1:6:1081:A:H8	2.00	0.44
1:6:1273:G:O5'	1:6:1274:C:H3'	2.18	0.44
1:6:1671:A:H2'	1:6:1672:G:O4'	2.18	0.44
1:6:1796:C:OP2	28:d6:5:ARG:NH1	2.50	0.44
6:s4:132:GLY:N	6:s4:136:VAL:O	2.47	0.44
8:s6:57:ASP:OD1	8:s6:72:ARG:NH1	2.41	0.44
13:c1:58:CYS:HA	13:c1:59:PRO:HD3	1.86	0.44
15:c3:136:PRO:HA	15:c3:137:PRO:HD2	1.58	0.44
17:c5:37:ALA:O	17:c5:42:ARG:HD3	2.18	0.44
20:c8:8:GLN:HB3	20:c8:9:GLY:H	1.58	0.44
20:c8:140:THR:O	20:c8:143:ARG:HD2	2.17	0.44
25:d3:14:LYS:HA	25:d3:17:VAL:HG12	1.99	0.44
36:5:345:G:OP1	36:5:1429:G:N1	2.38	0.44
36:5:731:U:H2'	36:5:732:C:H6	1.81	0.44
36:5:855:U:H2'	36:5:856:G:C8	2.53	0.44
36:5:1603:A:OP1	55:m9:38:ARG:NH2	2.50	0.44
36:5:1773:C:H2'	36:5:1774:C:C6	2.53	0.44
36:5:1781:C:H2'	36:5:1782:U:H6	1.82	0.44
36:5:2245:C:O4'	39:l2:222:ALA:HA	2.18	0.44
36:5:3094:A:OP1	59:n3:14:SER:OG	2.35	0.44
36:5:3133:C:H2'	36:5:3134:A:O4'	2.17	0.44
36:5:3210:A:OP1	50:m4:109:ARG:NH1	2.51	0.44
38:8:44:A:H2'	38:8:45:C:C6	2.52	0.44
40:l3:183:LEU:HD12	40:l3:183:LEU:HA	1.76	0.44
40:l3:205:VAL:HA	40:l3:208:VAL:HG23	1.99	0.44
42:l5:281:GLU:O	42:l5:284:ALA:HB3	2.18	0.44
46:l9:88:TYR:CD1	46:l9:184:LYS:HB2	2.51	0.44
47:m0:171:TRP:CE3	47:m0:178:ARG:HD2	2.52	0.44
47:m0:176:LEU:HD12	47:m0:181:TYR:HD1	1.83	0.44
51:m5:143:ARG:NH2	71:o5:91:ALA:O	2.50	0.44
57:n1:132:PRO:O	57:n1:134:GLN:HG2	2.17	0.44
58:n2:89:LEU:HD13	58:n2:93:ILE:HD12	1.99	0.44
70:o4:43:LYS:HB3	70:o4:48:GLY:O	2.18	0.44
72:o6:51:SER:O	72:o6:55:ARG:HG3	2.17	0.44
1:2:355:G:OP2	89:2:2036:OHX:N4	2.50	0.44
1:2:1329:A:H8	1:2:1329:A:O5'	2.00	0.44
1:2:1572:G:H2'	1:2:1572:G:N3	2.32	0.44
1:2:1646:C:H2'	1:2:1647:U:H6	1.83	0.44
1:2:1760:G:C2'	1:2:1761:U:H5'	2.47	0.44
1:2:1773:C:H2'	1:2:1774:G:C8	2.53	0.44
3:S1:63:GLY:HA2	3:S1:88:VAL:HB	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:85:LYS:HB2	3:S1:101:HIS:C	2.43	0.44
3:S1:145:LYS:HE3	3:S1:152:ARG:O	2.17	0.44
3:S1:168:ILE:HG12	3:S1:197:ILE:HD12	2.00	0.44
7:S5:110:ALA:HA	7:S5:113:ILE:HD12	1.99	0.44
8:S6:176:GLN:HE21	8:S6:176:GLN:HB2	1.65	0.44
15:C3:5:HIS:HB3	15:C3:117:LEU:HD13	1.99	0.44
17:C5:64:LYS:NZ	17:C5:90:ILE:O	2.50	0.44
17:C5:79:HIS:O	17:C5:81:ARG:N	2.50	0.44
19:C7:16:LEU:HD23	19:C7:16:LEU:HA	1.84	0.44
19:C7:119:LEU:H	19:C7:119:LEU:HD12	1.83	0.44
25:D3:74:VAL:HG21	25:D3:104:LEU:HD11	2.00	0.44
26:D4:21:LYS:N	26:D4:21:LYS:HD2	2.32	0.44
26:D4:45:ALA:C	26:D4:47:VAL:N	2.76	0.44
31:D9:31:ILE:HB	31:D9:38:ILE:O	2.18	0.44
35:SM:41:SER:C	35:SM:43:ASP:H	2.26	0.44
36:1:440:A:H8	36:1:440:A:OP2	2.01	0.44
36:1:684:G:OP2	49:M3:28:GLN:NE2	2.50	0.44
36:1:1470:U:H2'	36:1:1471:U:H6	1.83	0.44
36:1:1818:U:H2'	36:1:1819:U:O4'	2.17	0.44
36:1:2922:G:H1'	36:1:2951:G:N3	2.32	0.44
37:3:22:A:H1'	42:L5:272:TYR:CZ	2.53	0.44
38:4:143:U:H2'	38:4:144:G:O4'	2.16	0.44
40:L3:140:ASP:OD1	40:L3:142:ALA:HB2	2.17	0.44
42:L5:261:THR:HG23	42:L5:264:GLN:OE1	2.17	0.44
48:M1:91:LEU:HB3	48:M1:95:ASN:HD22	1.83	0.44
50:M4:43:LYS:HE2	56:N0:96:ASP:OD2	2.17	0.44
52:M6:138:LEU:HD12	52:M6:138:LEU:HA	1.65	0.44
55:M9:60:LYS:HE2	55:M9:60:LYS:HB2	1.62	0.44
56:N0:59:VAL:HG22	57:N1:141:VAL:HG11	2.00	0.44
56:N0:106:LEU:HD23	56:N0:110:MET:HG2	1.99	0.44
58:N2:22:PRO:HG3	58:N2:105:LEU:HB3	1.99	0.44
63:N7:124:ALA:O	63:N7:126:LYS:N	2.50	0.44
64:N8:47:LYS:C	64:N8:49:HIS:H	2.25	0.44
64:N8:116:GLY:HA2	64:N8:137:LYS:NZ	2.33	0.44
67:O1:12:TYR:O	67:O1:72:ARG:HD2	2.17	0.44
67:O1:97:LEU:HD23	67:O1:97:LEU:HA	1.75	0.44
77:Q1:6:ARG:O	77:Q1:10:THR:HG23	2.18	0.44
78:Q2:14:GLY:C	78:Q2:16:THR:H	2.23	0.44
1:6:38:C:H2'	1:6:39:A:H5'	2.00	0.44
1:6:507:U:H2'	1:6:508:U:O4'	2.18	0.44
1:6:563:U:C4	1:6:564:G:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:992:A:OP1	1:6:1786:G:H5'	2.16	0.44
1:6:1253:U:OP2	14:c2:46:ARG:NH2	2.39	0.44
1:6:1699:G:H2'	1:6:1700:C:H5'	2.00	0.44
2:s0:74:VAL:HG12	2:s0:76:ILE:HG12	2.00	0.44
5:s3:69:LEU:HD12	5:s3:69:LEU:HA	1.77	0.44
6:s4:18:TRP:HH2	6:s4:31:PRO:HD3	1.83	0.44
6:s4:85:GLY:H	6:s4:88:ASP:CG	2.26	0.44
11:s9:182:GLU:H	11:s9:182:GLU:HG3	1.61	0.44
80:c0:24:LYS:HB2	80:c0:63:TYR:CE1	2.53	0.44
13:c1:23:PRO:C	13:c1:25:VAL:H	2.24	0.44
15:c3:16:ILE:HG23	15:c3:62:GLN:OE1	2.17	0.44
20:c8:8:GLN:O	20:c8:10:SER:N	2.46	0.44
22:d0:16:GLN:HG3	22:d0:18:GLN:HG2	1.99	0.44
27:d5:55:PRO:HG3	27:d5:88:ILE:HG23	2.00	0.44
28:d6:90:GLU:OE1	28:d6:90:GLU:N	2.50	0.44
30:d8:10:ALA:HA	30:d8:33:LEU:HB2	1.99	0.44
36:5:289:A:C2	51:m5:93:LYS:HG3	2.53	0.44
36:5:1003:A:H1'	42:l5:15:ARG:CZ	2.47	0.44
36:5:1119:C:H2'	36:5:1120:A:C8	2.52	0.44
36:5:1260:A:H1'	36:5:1280:C:H1'	2.00	0.44
36:5:3365:U:OP1	89:5:4238:OHX:N1	2.50	0.44
40:l3:10:ARG:NH1	40:l3:11:HIS:O	2.50	0.44
45:l8:41:GLN:HG3	45:l8:44:ARG:NH1	2.31	0.44
45:l8:160:ILE:HD12	45:l8:164:VAL:HG13	1.99	0.44
47:m0:4:ARG:HD2	47:m0:9:TYR:OH	2.17	0.44
47:m0:129:VAL:HA	47:m0:133:GLN:OE1	2.18	0.44
48:m1:24:GLY:H	48:m1:65:ILE:HG23	1.83	0.44
50:m4:22:LEU:HB3	50:m4:64:VAL:HG13	2.00	0.44
56:n0:151:PRO:C	56:n0:153:PRO:HD3	2.43	0.44
59:n3:57:MET:HE3	59:n3:126:TRP:CH2	2.53	0.44
71:o5:85:THR:HG22	71:o5:88:LEU:N	2.27	0.44
72:o6:94:ILE:HA	72:o6:94:ILE:HD13	1.58	0.44
74:o8:18:ALA:H	74:o8:20:VAL:CG2	2.30	0.44
1:2:853:G:N7	55:M9:173:ARG:NH2	2.59	0.44
1:2:1369:U:OP2	21:C9:69:LYS:HE3	2.17	0.44
1:2:1391:A:H2'	1:2:1392:U:C6	2.52	0.44
1:2:1617:U:O2'	1:2:1618:C:H5'	2.18	0.44
2:S0:179:ARG:HD3	2:S0:183:ARG:HD2	1.98	0.44
3:S1:190:PRO:C	3:S1:191:GLU:HG2	2.42	0.44
6:S4:90:ILE:HB	6:S4:99:PHE:HB2	1.99	0.44
7:S5:57:SER:O	7:S5:59:VAL:HG23	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:35:ASN:O	10:S8:37:LYS:HD3	2.17	0.44
14:C2:48:SER:O	14:C2:52:LEU:HD23	2.17	0.44
23:D1:63:GLY:C	23:D1:65:SER:H	2.26	0.44
24:D2:75:ILE:HG13	24:D2:125:ILE:HD11	1.99	0.44
25:D3:11:SER:O	25:D3:13:ARG:N	2.51	0.44
27:D5:54:VAL:HG22	27:D5:57:TYR:CE1	2.53	0.44
27:D5:87:GLY:C	27:D5:89:ILE:N	2.73	0.44
29:D7:74:SER:O	29:D7:76:GLY:N	2.50	0.44
30:D8:36:THR:OG1	30:D8:37:SER:N	2.48	0.44
36:1:981:U:HO2'	36:1:982:C:P	2.41	0.44
36:1:996:A:C2	36:1:1054:A:C4	3.05	0.44
36:1:2765:C:O3'	78:Q2:39:GLY:HA3	2.18	0.44
36:1:2768:U:H2'	36:1:2769:A:C8	2.52	0.44
36:1:3217:C:O2	36:1:3217:C:H2'	2.18	0.44
37:3:10:C:OP2	57:N1:26:HIS:HD2	1.99	0.44
46:L9:134:ILE:HD11	46:L9:146:LEU:HD23	1.99	0.44
53:M7:50:GLN:O	53:M7:51:VAL:C	2.61	0.44
1:6:46:A:N6	1:6:433:C:H4'	2.33	0.44
1:6:647:G:H1	1:6:687:G:H22	1.63	0.44
1:6:864:U:OP2	29:d7:26:GLN:NE2	2.51	0.44
1:6:901:G:C2	1:6:902:G:C6	3.06	0.44
1:6:986:G:OP2	89:6:2116:OHX:N2	2.50	0.44
1:6:1288:G:N7	1:6:1314:U:H2'	2.33	0.44
2:s0:74:VAL:HG22	2:s0:96:THR:HG23	1.99	0.44
3:s1:219:LYS:NZ	79:q3:89:MET:O	2.50	0.44
4:s2:113:LEU:HB2	4:s2:215:PHE:CD1	2.52	0.44
10:s8:151:LYS:HZ2	10:s8:151:LYS:HB3	1.82	0.44
11:s9:133:HIS:HB3	11:s9:162:SER:CB	2.46	0.44
11:s9:141:VAL:HG11	11:s9:146:PHE:CD2	2.53	0.44
16:c4:102:LEU:HD11	28:d6:45:VAL:HG12	2.00	0.44
18:c6:94:GLN:HG3	18:c6:95:LYS:N	2.32	0.44
26:d4:43:LYS:O	26:d4:47:VAL:HG13	2.17	0.44
36:5:111:C:O2'	36:5:112:U:H5'	2.17	0.44
36:5:128:G:H2'	36:5:129:U:O4'	2.18	0.44
36:5:166:C:H2'	36:5:167:U:C6	2.52	0.44
36:5:249:U:O2'	36:5:250:U:H5''	2.18	0.44
36:5:269:G:P	51:m5:44:ARG:HH22	2.40	0.44
36:5:632:G:OP1	52:m6:93:ALA:HB3	2.17	0.44
36:5:929:A:H2'	36:5:930:U:C6	2.52	0.44
36:5:1074:U:O2'	36:5:1075:A:H2'	2.18	0.44
36:5:1282:G:H2'	36:5:1283:C:O4'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1307:G:H1'	36:5:1308:A:C8	2.52	0.44
36:5:1833:G:H5''	75:o9:10:LYS:HD3	1.99	0.44
36:5:2147:A:OP1	39:l2:200:ARG:HG3	2.17	0.44
36:5:2172:A:OP2	89:5:4155:OHX:N5	2.51	0.44
36:5:2395:G:H5''	40:l3:255:TRP:CD1	2.51	0.44
36:5:2537:U:HO2'	36:5:2538:U:P	2.41	0.44
36:5:2759:U:H5''	36:5:2760:C:H5'	1.99	0.44
36:5:3153:U:H1'	36:5:3154:C:C6	2.52	0.44
36:5:3186:A:N3	46:l9:44:THR:HG22	2.31	0.44
37:7:13:A:N3	42:l5:24:ARG:NH2	2.65	0.44
39:l2:129:ALA:O	39:l2:130:SER:C	2.60	0.44
40:l3:4:ARG:HG3	40:l3:6:TYR:O	2.18	0.44
40:l3:233:TRP:CD1	40:l3:265:ALA:HB1	2.52	0.44
41:l4:206:LEU:HD23	41:l4:226:GLU:HB2	1.99	0.44
42:l5:218:ARG:HG3	42:l5:222:LEU:HD12	1.99	0.44
44:l7:95:ILE:HD12	44:l7:133:TYR:CE1	2.53	0.44
44:l7:156:ILE:HD12	44:l7:172:ASN:ND2	2.33	0.44
46:l9:121:LYS:HD2	46:l9:121:LYS:HA	1.85	0.44
49:m3:47:ALA:HB1	49:m3:48:PRO:CD	2.48	0.44
52:m6:127:LEU:HD11	56:n0:168:PRO:HG3	1.98	0.44
58:n2:90:ARG:O	58:n2:91:ASP:HB2	2.18	0.44
71:o5:31:LEU:HB3	71:o5:44:ILE:HD12	1.97	0.44
84:p0:12:PHE:H	84:p0:12:PHE:HD2	1.65	0.44
1:2:1:U:C4	1:2:369:A:C6	3.06	0.44
1:2:876:G:H1'	1:2:944:A:O4'	2.17	0.44
1:2:1488:G:H5''	1:2:1489:U:OP1	2.17	0.44
3:S1:58:SER:HA	3:S1:62:LYS:HD3	2.00	0.44
3:S1:81:PHE:HB2	3:S1:82:ARG:H	1.65	0.44
4:S2:116:LYS:HG2	4:S2:127:ALA:HB3	2.00	0.44
9:S7:149:ILE:HG12	9:S7:180:GLN:HB3	2.00	0.44
9:S7:163:ASP:O	9:S7:166:LEU:HB2	2.18	0.44
24:D2:26:LEU:HD22	24:D2:27:ILE:N	2.33	0.44
25:D3:68:ILE:HG22	25:D3:70:LYS:HD3	1.99	0.44
26:D4:10:ARG:HD2	26:D4:26:ASP:HB2	2.00	0.44
28:D6:19:LYS:HB2	28:D6:19:LYS:HE3	1.78	0.44
33:E1:147:VAL:HG23	33:E1:148:TYR:CG	2.53	0.44
34:SR:9:LEU:HG	34:SR:10:ARG:N	2.32	0.44
36:1:668:G:OP1	89:1:4133:OHX:N2	2.51	0.44
36:1:1362:G:H1'	44:L7:159:GLN:NE2	2.33	0.44
36:1:1791:C:H2'	36:1:1792:C:C6	2.53	0.44
36:1:2373:A:N3	36:1:2824:G:O2'	2.35	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2596:U:O2'	89:1:4220:OHX:N3	2.51	0.44
37:3:62:U:OP1	42:L5:277:LEU:HB2	2.18	0.44
38:4:107:G:C2	38:4:116:G:C5	3.06	0.44
41:L4:290:ILE:HG23	54:M8:35:PHE:CE2	2.53	0.44
46:L9:117:PHE:CE1	46:L9:165:CYS:HB3	2.53	0.44
48:M1:133:ARG:HD2	48:M1:152:HIS:O	2.17	0.44
50:M4:17:VAL:HG11	50:M4:74:ARG:HA	1.99	0.44
50:M4:19:ARG:HA	50:M4:69:THR:HG22	2.00	0.44
50:M4:47:ASP:OD1	50:M4:55:ARG:HB2	2.17	0.44
53:M7:53:ASP:O	89:M7:207:OHX:N3	2.50	0.44
57:N1:136:ARG:HD2	57:N1:139:ARG:NH1	2.33	0.44
61:N5:57:LEU:HD12	61:N5:57:LEU:HA	1.83	0.44
67:O1:35:GLU:O	67:O1:38:LYS:HB3	2.18	0.44
70:O4:22:VAL:CG1	70:O4:30:LEU:HD22	2.44	0.44
1:6:1199:G:OP1	1:6:1200:G:H8	2.01	0.44
2:s0:38:PHE:CD2	19:c7:109:LEU:HD13	2.53	0.44
2:s0:140:ASN:OD1	23:d1:29:HIS:HA	2.18	0.44
3:s1:32:ILE:HB	3:s1:43:VAL:HB	1.99	0.44
7:s5:61:TYR:OH	30:d8:52:ASP:OD1	2.31	0.44
8:s6:7:TYR:OH	8:s6:116:LYS:HD2	2.18	0.44
14:c2:128:ALA:HB3	14:c2:133:LEU:HD22	1.99	0.44
17:c5:33:PHE:CZ	17:c5:112:LEU:HD13	2.53	0.44
20:c8:28:ILE:H	20:c8:28:ILE:HG13	1.60	0.44
20:c8:88:ARG:HH12	20:c8:112:ASP:CG	2.25	0.44
25:d3:69:ARG:NH1	25:d3:116:ASP:OD2	2.51	0.44
28:d6:66:LYS:HB2	28:d6:68:TYR:CZ	2.53	0.44
28:d6:90:GLU:H	28:d6:90:GLU:CD	2.26	0.44
31:d9:46:LYS:O	31:d9:50:ILE:HG13	2.17	0.44
36:5:815:G:C6	36:5:906:A:C4	3.06	0.44
36:5:1168:U:O4	36:5:1329:U:H2'	2.17	0.44
36:5:1596:C:H2'	36:5:1597:C:C6	2.53	0.44
36:5:1937:U:C4	36:5:1938:U:O4	2.71	0.44
36:5:2294:U:O2	36:5:2296:A:H8	1.99	0.44
36:5:3047:U:O2'	40:l3:53:MET:HE1	2.18	0.44
36:5:3269:U:H5'	36:5:3271:G:O4'	2.18	0.44
36:5:3314:A:OP1	40:l3:174:LYS:N	2.47	0.44
37:7:1:G:H21	42:l5:269:SER:CB	2.31	0.44
38:8:28:C:H2'	38:8:29:U:H6	1.83	0.44
38:8:132:G:C6	38:8:133:G:N7	2.85	0.44
38:8:145:U:H2'	38:8:146:U:H6	1.82	0.44
39:l2:28:LYS:HE3	39:l2:123:ARG:NH1	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:l2:113:VAL:HG12	39:l2:166:ILE:HA	2.00	0.44
40:l3:56:ILE:HD12	40:l3:56:ILE:HA	1.66	0.44
41:l4:138:ARG:HH21	41:l4:240:PRO:HB2	1.83	0.44
46:l9:23:ARG:NH2	46:l9:41:ILE:O	2.47	0.44
46:l9:93:VAL:HG22	76:q0:82:LEU:HB3	2.00	0.44
49:m3:53:LEU:HA	49:m3:53:LEU:HD23	1.73	0.44
50:m4:27:GLN:H	50:m4:27:GLN:HG2	1.43	0.44
50:m4:127:LYS:O	50:m4:130:THR:HG23	2.17	0.44
51:m5:46:ASP:HB2	51:m5:50:ARG:HH21	1.83	0.44
57:n1:154:VAL:HA	57:n1:155:PRO:HD3	1.80	0.44
63:n7:34:LYS:HA	63:n7:34:LYS:HD2	1.50	0.44
66:o0:77:LEU:HD23	66:o0:87:VAL:O	2.18	0.44
67:o1:105:GLN:O	67:o1:107:VAL:HG23	2.18	0.44
68:o2:123:LYS:HA	68:o2:126:LEU:CG	2.46	0.44
71:o5:10:ARG:NH1	71:o5:60:GLU:OE1	2.51	0.44
72:o6:45:ARG:HH21	72:o6:50:LEU:HA	1.83	0.44
84:p0:34:SER:OG	84:p0:37:GLN:HB2	2.17	0.44
1:2:320:U:H3'	1:2:321:C:C5'	2.45	0.44
1:2:1515:A:OP2	5:S3:7:LYS:HB2	2.18	0.44
1:2:1767:G:OP1	1:2:1770:U:H4'	2.18	0.44
7:S5:45:LYS:HA	7:S5:45:LYS:HD3	1.22	0.44
7:S5:64:VAL:O	7:S5:65:ARG:HB2	2.18	0.44
13:C1:37:ASN:HA	13:C1:44:THR:HG21	1.98	0.44
24:D2:11:LEU:HD12	24:D2:74:VAL:HB	1.99	0.44
27:D5:60:VAL:HG13	27:D5:101:TYR:O	2.18	0.44
30:D8:32:PHE:HE2	30:D8:38:ARG:HB3	1.82	0.44
32:E0:48:THR:HB	32:E0:49:LEU:H	1.57	0.44
36:1:1593:A:O4'	70:O4:60:ARG:HD3	2.18	0.44
36:1:2253:G:C2'	36:1:2254:U:H5'	2.48	0.44
36:1:2383:C:H5'	52:M6:71:PHE:HE2	1.83	0.44
36:1:2392:C:HO2'	40:L3:266:ARG:HH22	1.59	0.44
36:1:2700:G:O2'	36:1:2705:A:N1	2.45	0.44
36:1:2759:U:H6	36:1:2759:U:O5'	2.00	0.44
36:1:2882:U:H2'	36:1:2883:U:C6	2.52	0.44
36:1:2921:U:H2'	36:1:2923:U:OP2	2.18	0.44
36:1:3084:C:O2'	36:1:3332:U:OP1	2.26	0.44
36:1:3136:G:OP2	89:1:4112:OHX:N6	2.51	0.44
89:1:3982:OHX:N3	89:1:4170:OHX:N1	2.66	0.44
41:L4:145:ILE:O	89:L4:402:OHX:N5	2.51	0.44
44:L7:25:GLN:HE21	44:L7:29:GLU:HB2	1.83	0.44
45:L8:238:LEU:HD12	45:L8:238:LEU:HA	1.79	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:M4:15:VAL:HG13	56:N0:150:PHE:O	2.17	0.44
52:M6:162:VAL:C	52:M6:164:SER:H	2.25	0.44
55:M9:8:LYS:HG3	55:M9:22:VAL:HG21	2.00	0.44
72:O6:20:MET:HE2	72:O6:20:MET:HB3	1.91	0.44
74:O8:17:ARG:O	74:O8:19:ASP:N	2.49	0.44
75:O9:43:ASN:O	75:O9:45:ARG:N	2.50	0.44
76:Q0:98:LYS:HE2	76:Q0:115:CYS:HB2	2.00	0.44
1:6:49:C:H2'	1:6:50:C:O4'	2.18	0.44
1:6:366:A:H2'	1:6:367:A:H8	1.82	0.44
1:6:406:U:O3'	8:s6:94:ARG:NH2	2.48	0.44
1:6:452:A:H3'	1:6:453:U:C5	2.53	0.44
1:6:493:U:H2'	1:6:494:U:H5''	2.00	0.44
1:6:952:A:H5'	15:c3:98:VAL:CG2	2.48	0.44
1:6:1097:U:H5''	1:6:1099:U:O4'	2.18	0.44
1:6:1213:G:O2'	1:6:1244:A:N6	2.51	0.44
1:6:1232:U:H2'	1:6:1233:G:O4'	2.18	0.44
1:6:1382:A:O2'	1:6:1383:G:H5''	2.18	0.44
1:6:1445:G:C6	82:e1:91:ILE:HB	2.52	0.44
1:6:1558:U:H3	17:c5:122:THR:CB	2.30	0.44
3:s1:222:LYS:HD3	3:s1:222:LYS:HA	1.69	0.44
4:s2:53:ILE:H	4:s2:53:ILE:CD1	2.29	0.44
4:s2:88:LYS:CG	4:s2:89:GLN:H	2.30	0.44
6:s4:121:TYR:OH	6:s4:235:TYR:O	2.26	0.44
7:s5:33:VAL:HG13	7:s5:37:GLN:NE2	2.33	0.44
80:c0:1:MET:HE3	80:c0:2:LEU:N	2.32	0.44
16:c4:92:LYS:HD2	16:c4:121:VAL:HG22	1.99	0.44
16:c4:136:ARG:H	16:c4:136:ARG:HG2	1.58	0.44
17:c5:15:HIS:CG	17:c5:16:SER:N	2.86	0.44
17:c5:126:VAL:HG13	17:c5:127:ARG:H	1.83	0.44
18:c6:82:ARG:HH22	18:c6:114:ARG:HB2	1.82	0.44
20:c8:143:ARG:C	20:c8:145:ARG:N	2.76	0.44
24:d2:5:SER:HB3	24:d2:8:ALA:HB3	1.98	0.44
28:d6:10:ARG:HD3	28:d6:34:LYS:O	2.17	0.44
81:e0:59:GLY:O	81:e0:61:SER:N	2.39	0.44
34:sR:37:SER:OG	34:sR:38:ARG:N	2.51	0.44
36:5:180:C:H2'	36:5:181:U:H6	1.83	0.44
36:5:293:C:H2'	36:5:294:U:O4'	2.18	0.44
36:5:1839:A:N6	36:5:1843:C:C2	2.86	0.44
36:5:1863:G:N1	36:5:1866:C:OP2	2.42	0.44
36:5:3117:C:N3	89:5:4208:OHX:N2	2.65	0.44
38:8:27:U:H5'	41:l4:51:ALA:O	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:264:SER:C	41:l4:266:THR:N	2.76	0.44
41:l4:359:LEU:HA	56:n0:8:GLN:OE1	2.18	0.44
42:l5:107:ARG:O	42:l5:111:GLN:N	2.49	0.44
43:l6:92:SER:OG	43:l6:93:VAL:N	2.51	0.44
43:l6:94:GLU:C	43:l6:96:VAL:H	2.26	0.44
45:l8:68:ARG:HA	45:l8:236:GLY:O	2.17	0.44
45:l8:142:LEU:HD13	45:l8:201:THR:HG21	2.00	0.44
47:m0:4:ARG:HA	47:m0:5:PRO:HD2	1.65	0.44
47:m0:76:MET:HE2	47:m0:76:MET:HB3	1.89	0.44
49:m3:109:PHE:O	49:m3:113:VAL:HG23	2.18	0.44
51:m5:190:THR:O	51:m5:194:GLN:HG2	2.18	0.44
52:m6:62:THR:HG22	52:m6:65:ASN:H	1.81	0.44
54:m8:96:PHE:CG	54:m8:97:PRO:HD2	2.53	0.44
57:n1:120:LYS:C	57:n1:122:GLN:H	2.26	0.44
62:n6:5:SER:C	62:n6:7:ASP:H	2.25	0.44
65:n9:14:ARG:NH1	65:n9:18:ARG:HH11	2.16	0.44
1:2:392:G:H4'	1:2:1672:G:N2	2.33	0.43
1:2:530:C:H2'	1:2:531:C:H5'	1.98	0.43
1:2:926:A:H2'	1:2:927:C:O4'	2.17	0.43
1:2:1470:C:OP1	1:2:1540:G:O2'	2.32	0.43
5:S3:105:MET:HA	5:S3:108:LYS:HB2	1.99	0.43
9:S7:101:LYS:HA	9:S7:102:PRO:HD3	1.88	0.43
18:C6:54:LEU:HD22	18:C6:54:LEU:HA	1.68	0.43
22:D0:48:HIS:O	22:D0:48:HIS:CG	2.70	0.43
27:D5:56:THR:O	27:D5:58:ARG:N	2.51	0.43
28:D6:60:PRO:C	28:D6:62:TYR:H	2.26	0.43
33:E1:127:GLY:O	33:E1:129:GLY:N	2.50	0.43
34:SR:42:LEU:HD11	34:SR:68:VAL:HG11	2.00	0.43
35:SM:51:ARG:HB2	35:SM:52:PRO:HD2	2.00	0.43
36:1:94:G:H2'	36:1:95:A:C8	2.53	0.43
36:1:1065:A:C4	65:N9:28:LYS:HB2	2.53	0.43
36:1:1306:G:O2'	36:1:1307:G:H5'	2.18	0.43
36:1:1614:C:H2'	36:1:1615:C:H6	1.82	0.43
36:1:1742:U:H2'	36:1:1743:G:H8	1.81	0.43
36:1:2438:A:H2'	36:1:2439:A:C8	2.53	0.43
36:1:3063:C:O2'	36:1:3064:U:H5'	2.17	0.43
36:1:3174:A:C6	36:1:3175:U:C4	3.06	0.43
41:L4:299:ILE:CG2	54:M8:39:ARG:HB3	2.48	0.43
45:L8:71:VAL:HB	51:M5:21:PHE:CE1	2.52	0.43
53:M7:136:ILE:O	53:M7:137:ASN:ND2	2.46	0.43
55:M9:158:GLU:O	55:M9:161:ALA:HB3	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:91:LEU:HD12	57:N1:96:ILE:HD11	2.00	0.43
63:N7:26:VAL:HB	63:N7:89:VAL:HG21	1.98	0.43
63:N7:81:LEU:HD23	63:N7:81:LEU:HA	1.69	0.43
68:O2:75:LEU:HD23	68:O2:75:LEU:HA	1.86	0.43
69:O3:21:ARG:HH11	69:O3:21:ARG:HG3	1.83	0.43
1:6:610:G:H21	25:d3:19:ARG:NH1	2.16	0.43
1:6:648:G:C4	1:6:687:G:N2	2.86	0.43
1:6:716:C:H2'	1:6:717:C:O4'	2.18	0.43
1:6:956:C:OP2	15:c3:12:SER:HB3	2.18	0.43
4:s2:58:LEU:O	4:s2:58:LEU:HD22	2.17	0.43
5:s3:216:PRO:HB2	5:s3:217:ILE:H	1.56	0.43
6:s4:152:PRO:HD2	8:s6:215:ARG:HD3	2.00	0.43
7:s5:68:ILE:HD13	7:s5:69:PHE:H	1.83	0.43
8:s6:61:PHE:CE1	8:s6:96:SER:HB2	2.53	0.43
15:c3:56:ASP:OD2	29:d7:51:GLN:N	2.51	0.43
17:c5:28:MET:HE3	17:c5:28:MET:HB2	1.67	0.43
17:c5:60:LEU:HD23	17:c5:76:VAL:HG21	2.00	0.43
18:c6:58:ASP:OD2	18:c6:59:LYS:HD2	2.18	0.43
21:c9:15:ILE:HD13	21:c9:60:SER:HA	1.99	0.43
25:d3:23:ARG:HB3	25:d3:29:TYR:CE1	2.53	0.43
25:d3:24:TRP:CZ3	25:d3:30:LYS:HG3	2.52	0.43
36:5:114:A:H2'	36:5:115:A:O4'	2.18	0.43
36:5:188:U:OP2	62:n6:46:LYS:NZ	2.50	0.43
36:5:361:A:OP1	73:o7:24:ARG:NH1	2.52	0.43
36:5:687:U:O2'	36:5:688:G:H5'	2.18	0.43
36:5:953:G:C8	36:5:1117:G:C8	3.06	0.43
36:5:1018:G:H2'	36:5:1019:G:O4'	2.18	0.43
36:5:1456:A:C6	67:o1:64:VAL:HG13	2.52	0.43
36:5:1640:G:C6	36:5:1641:U:C4	3.06	0.43
36:5:2405:C:O2	36:5:2819:A:N1	2.51	0.43
36:5:2572:C:O2	36:5:2572:C:H2'	2.18	0.43
36:5:2775:U:H2'	36:5:2776:C:C6	2.52	0.43
36:5:2896:A:O2'	76:q0:122:ARG:NH2	2.51	0.43
36:5:2949:U:O2'	36:5:2950:G:H5'	2.17	0.43
36:5:3106:A:H61	36:5:3128:G:H1'	1.82	0.43
89:5:4013:OHX:N6	89:5:4204:OHX:N5	2.66	0.43
89:5:4013:OHX:N3	89:5:4204:OHX:N5	2.66	0.43
38:8:72:A:C5	38:8:73:U:C5	3.06	0.43
40:l3:83:PRO:HB2	40:l3:165:GLN:HE22	1.83	0.43
45:l8:95:ASN:C	45:l8:97:TYR:H	2.26	0.43
73:o7:52:LYS:HA	73:o7:55:ARG:CD	2.45	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:q2:14:GLY:O	78:q2:18:ARG:HG3	2.18	0.43
84:p0:26:PHE:N	84:p0:87:VAL:O	2.46	0.43
1:2:702:G:C2	1:2:703:G:H1'	2.54	0.43
1:2:748:U:O2	1:2:802:G:C2	2.71	0.43
1:2:895:G:O2'	16:C4:38:THR:N	2.46	0.43
1:2:967:A:H2'	1:2:968:U:O4'	2.18	0.43
1:2:1172:G:H21	21:C9:88:VAL:CG2	2.32	0.43
1:2:1754:A:H4'	1:2:1755:A:O4'	2.18	0.43
89:2:2044:OHX:N2	89:2:2099:OHX:N6	2.66	0.43
2:S0:77:SER:OG	2:S0:82:GLY:HA3	2.19	0.43
3:S1:31:ASP:HB3	3:S1:45:LYS:HD3	1.99	0.43
6:S4:126:VAL:HG13	6:S4:158:ASP:O	2.18	0.43
6:S4:159:THR:OG1	6:S4:226:PHE:HE1	2.01	0.43
7:S5:166:ARG:HD2	30:D8:46:GLY:CA	2.48	0.43
11:S9:107:ARG:NH1	11:S9:112:GLN:OE1	2.51	0.43
11:S9:132:ARG:HH11	11:S9:132:ARG:HG3	1.83	0.43
12:C0:49:LEU:HB3	12:C0:55:VAL:HG11	1.99	0.43
24:D2:24:GLN:HA	24:D2:63:VAL:O	2.18	0.43
34:SR:273:ASP:OD1	34:SR:275:ARG:NH1	2.51	0.43
35:SM:82:THR:HB	35:SM:83:LYS:H	1.64	0.43
36:1:177:U:C4	36:1:178:U:C4	3.07	0.43
36:1:208:C:C2'	36:1:209:A:H5'	2.47	0.43
36:1:952:A:OP1	65:N9:14:ARG:NH2	2.51	0.43
36:1:1103:A:H2	54:M8:9:GLN:HE22	1.63	0.43
39:L2:178:PRO:HG2	79:Q3:26:VAL:CG2	2.47	0.43
42:L5:183:TRP:CH2	42:L5:188:GLU:HA	2.52	0.43
42:L5:278:SER:N	42:L5:281:GLU:OE2	2.51	0.43
43:L6:172:HIS:CD2	43:L6:173:MET:HG2	2.53	0.43
50:M4:8:LYS:HE3	50:M4:8:LYS:HB3	1.69	0.43
55:M9:173:ARG:O	55:M9:177:VAL:HG23	2.18	0.43
58:N2:56:VAL:HG13	58:N2:65:VAL:HG22	2.00	0.43
65:N9:23:LYS:HD2	65:N9:23:LYS:HA	1.55	0.43
72:O6:60:LEU:HD22	72:O6:64:SER:HB2	2.00	0.43
73:O7:45:ARG:HH11	73:O7:45:ARG:HD2	1.65	0.43
1:6:53:G:H2'	1:6:54:C:O4'	2.18	0.43
1:6:853:G:H2'	1:6:854:U:C6	2.53	0.43
1:6:880:C:H2'	1:6:881:A:C8	2.53	0.43
1:6:1279:C:H2'	1:6:1280:C:O4'	2.18	0.43
1:6:1389:C:H4'	19:c7:49:LYS:HA	2.00	0.43
1:6:1531:G:C6	1:6:1532:U:C4	3.06	0.43
2:s0:76:ILE:HB	2:s0:123:VAL:HG23	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:70:LEU:HB3	3:s1:79:HIS:CB	2.44	0.43
6:s4:128:LYS:HB3	6:s4:128:LYS:HE2	1.84	0.43
7:s5:59:VAL:C	7:s5:61:TYR:H	2.27	0.43
7:s5:89:ILE:HD12	7:s5:90:ILE:N	2.33	0.43
7:s5:151:GLY:HA3	7:s5:156:ARG:H	1.83	0.43
8:s6:5:ILE:HG12	8:s6:111:LEU:HD12	1.99	0.43
11:s9:59:LEU:O	11:s9:62:ARG:HB2	2.18	0.43
11:s9:79:ARG:O	11:s9:83:VAL:HG22	2.18	0.43
22:d0:101:LYS:O	22:d0:104:THR:OG1	2.34	0.43
81:e0:49:LEU:H	81:e0:49:LEU:HD22	1.83	0.43
36:5:374:A:O2'	36:5:376:G:H5'	2.18	0.43
36:5:1412:G:OP1	68:o2:105:ARG:NH2	2.52	0.43
36:5:2234:G:O6	89:5:3964:OHX:N1	2.52	0.43
36:5:3131:U:H2'	36:5:3132:C:C6	2.53	0.43
36:5:3218:A:H8	36:5:3218:A:H2'	1.68	0.43
36:5:3239:G:N7	89:5:3990:OHX:N5	2.66	0.43
38:8:149:A:H2'	38:8:150:G:C8	2.54	0.43
40:l3:106:TRP:HB2	40:l3:133:TYR:CE2	2.53	0.43
41:l4:84:ARG:O	41:l4:87:GLN:HG3	2.18	0.43
42:l5:105:ILE:O	42:l5:109:THR:HG23	2.17	0.43
42:l5:115:LEU:HA	42:l5:115:LEU:HD13	1.70	0.43
43:l6:89:THR:HG21	50:m4:115:PHE:HB2	2.00	0.43
45:l8:26:LEU:HD23	45:l8:26:LEU:HA	1.90	0.43
47:m0:12:GLN:NE2	47:m0:57:LEU:HD22	2.33	0.43
47:m0:193:ASP:OD2	47:m0:198:LYS:HE3	2.19	0.43
48:m1:80:LEU:O	48:m1:84:LEU:HG	2.17	0.43
50:m4:47:ASP:C	50:m4:49:PRO:HD3	2.44	0.43
63:n7:136:PHE:CE1	70:o4:89:ILE:HG12	2.53	0.43
72:o6:45:ARG:HH22	72:o6:54:GLU:CD	2.26	0.43
79:q3:73:THR:HB	79:q3:76:ALA:CB	2.48	0.43
1:2:730:G:H21	1:2:731:C:H5'	1.84	0.43
1:2:737:A:OP2	1:2:737:A:H2'	2.19	0.43
1:2:788:A:H3'	6:S4:108:ARG:NH2	2.33	0.43
1:2:1792:G:O5'	28:D6:3:LYS:HA	2.18	0.43
2:S0:180:GLU:O	2:S0:183:ARG:N	2.51	0.43
4:S2:134:LEU:C	4:S2:136:VAL:H	2.26	0.43
12:C0:29:GLN:HB2	12:C0:39:ASN:CB	2.46	0.43
21:C9:86:ARG:HH11	21:C9:86:ARG:HG3	1.82	0.43
29:D7:67:THR:HG22	29:D7:68:GLY:H	1.83	0.43
30:D8:8:THR:HB	30:D8:56:LEU:O	2.19	0.43
34:SR:85:TRP:N	34:SR:85:TRP:CD1	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:401:U:H4'	36:1:403:C:C2	2.53	0.43
36:1:784:A:H2'	54:M8:69:ARG:HH21	1.83	0.43
36:1:1345:G:N7	89:1:3970:OHX:N4	2.66	0.43
36:1:1556:C:C5'	36:1:2169:G:H22	2.31	0.43
36:1:1881:A:H61	36:1:2351:U:H3	1.65	0.43
36:1:2167:A:C6	36:1:2168:A:C6	3.05	0.43
36:1:2267:C:H2'	36:1:2268:U:O4'	2.18	0.43
36:1:2396:G:N2	36:1:2985:C:C2	2.86	0.43
36:1:2419:A:H2'	36:1:2420:C:H6	1.83	0.43
89:1:3982:OHX:N5	89:1:4170:OHX:N2	2.66	0.43
37:3:47:C:H2'	37:3:48:U:C6	2.53	0.43
38:4:23:U:H4'	62:N6:17:LYS:HG2	2.00	0.43
40:L3:92:TYR:HE1	40:L3:159:ARG:HD2	1.83	0.43
41:L4:71:VAL:HG22	41:L4:72:ALA:H	1.82	0.43
42:L5:111:GLN:HA	42:L5:116:ASP:CG	2.43	0.43
49:M3:99:HIS:CE1	49:M3:100:ARG:HG2	2.53	0.43
50:M4:85:TRP:NE1	50:M4:90:VAL:HG13	2.33	0.43
57:N1:83:ARG:HD2	57:N1:85:LEU:HD21	2.00	0.43
70:O4:56:THR:HA	70:O4:62:TYR:OH	2.19	0.43
1:6:85:A:O2'	1:6:148:A:O2'	2.32	0.43
1:6:447:U:C4	1:6:448:C:C4	3.06	0.43
1:6:1159:C:H5''	1:6:1160:A:H5'	1.99	0.43
1:6:1270:G:O3'	82:e1:78:LYS:HB3	2.19	0.43
1:6:1424:A:H2'	1:6:1425:A:O4'	2.18	0.43
6:s4:52:LEU:HB3	6:s4:54:TYR:HD2	1.83	0.43
7:s5:27:THR:HA	7:s5:28:PRO:HD2	1.57	0.43
9:s7:102:PRO:HD3	9:s7:112:ARG:HD3	2.00	0.43
11:s9:66:ASP:OD2	11:s9:68:LYS:N	2.52	0.43
11:s9:129:ILE:O	11:s9:134:ILE:HD11	2.17	0.43
80:c0:25:LYS:HB2	80:c0:59:PHE:HE2	1.83	0.43
80:c0:49:LEU:HB3	80:c0:55:VAL:HG13	1.99	0.43
15:c3:72:MET:HE2	15:c3:72:MET:HB3	1.85	0.43
22:d0:20:ILE:O	22:d0:94:GLU:HA	2.18	0.43
22:d0:92:ASP:O	22:d0:93:LEU:HD23	2.17	0.43
34:sR:236:ALA:O	34:sR:261:LYS:NZ	2.49	0.43
35:sM:50:ASN:OD1	35:sM:50:ASN:N	2.49	0.43
35:sM:54:PRO:HB2	35:sM:59:GLY:HA2	1.99	0.43
36:5:127:G:H2'	36:5:128:G:H8	1.83	0.43
36:5:677:A:OP1	54:m8:89:ASP:HB3	2.17	0.43
36:5:706:A:H4'	36:5:781:G:O2'	2.18	0.43
36:5:999:G:C6	36:5:1000:C:N4	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1095:U:O2	57:n1:129:LYS:HG2	2.18	0.43
36:5:2541:U:H4'	36:5:2542:U:OP1	2.18	0.43
36:5:3198:U:H4'	36:5:3199:G:OP2	2.17	0.43
36:5:3218:A:C2	36:5:3277:U:H1'	2.53	0.43
37:7:114:U:H2'	37:7:115:G:H8	1.83	0.43
41:l4:329:PRO:HB2	41:l4:330:TYR:H	1.52	0.43
42:l5:269:SER:O	42:l5:271:LYS:N	2.51	0.43
44:l7:222:HIS:CE1	44:l7:224:ILE:HG13	2.52	0.43
51:m5:96:ARG:HG2	51:m5:96:ARG:NH1	2.34	0.43
58:n2:77:LYS:HD2	58:n2:95:PHE:CD1	2.53	0.43
67:o1:78:LYS:O	67:o1:90:PHE:HB2	2.17	0.43
68:o2:18:LYS:HD3	68:o2:30:GLU:CD	2.43	0.43
69:o3:45:LEU:HA	69:o3:71:VAL:CG1	2.48	0.43
71:o5:14:LYS:HB3	71:o5:15:GLU:OE2	2.17	0.43
71:o5:74:LYS:HE2	71:o5:75:TYR:CZ	2.54	0.43
84:p0:198:PRO:HG2	84:p0:200:SER:H	1.82	0.43
1:2:545:A:H4'	1:2:546:U:OP1	2.19	0.43
1:2:577:G:H2'	35:SM:99:LYS:NZ	2.33	0.43
1:2:892:A:H2'	1:2:893:U:C6	2.53	0.43
1:2:1235:C:O2'	33:E1:149:LYS:HE3	2.18	0.43
1:2:1392:U:OP1	19:C7:59:LYS:NZ	2.47	0.43
1:2:1556:A:C5	1:2:1560:U:C2	3.06	0.43
1:2:1671:A:H2'	1:2:1672:G:O4'	2.18	0.43
1:2:1774:G:N7	77:Q1:4:LYS:NZ	2.66	0.43
9:S7:74:GLN:O	9:S7:78:THR:OG1	2.18	0.43
14:C2:89:ILE:HD13	14:C2:90:LYS:N	2.33	0.43
16:C4:90:ARG:HB3	16:C4:91:THR:H	1.57	0.43
19:C7:27:ASP:OD2	19:C7:30:THR:HG23	2.18	0.43
23:D1:64:GLU:O	23:D1:68:SER:HB2	2.19	0.43
34:SR:81:LEU:HD21	34:SR:122:ILE:HD13	2.00	0.43
34:SR:231:MET:HB3	34:SR:232:TYR:HD2	1.83	0.43
36:1:40:A:C2	64:N8:40:HIS:CE1	3.07	0.43
36:1:77:A:H5'	49:M3:100:ARG:NH1	2.34	0.43
36:1:819:U:OP1	73:O7:10:LYS:NZ	2.45	0.43
36:1:1101:G:H5''	44:L7:107:ARG:HD3	2.00	0.43
36:1:1734:G:H2'	36:1:1735:G:O4'	2.19	0.43
36:1:2186:U:H2'	36:1:2187:G:O4'	2.19	0.43
36:1:2342:U:H5''	36:1:3089:C:O2'	2.19	0.43
36:1:3295:A:H5'	40:L3:119:TYR:HE1	1.82	0.43
89:1:4044:OHX:N4	89:1:4057:OHX:N1	2.66	0.43
38:4:125:U:HO2'	38:4:126:A:P	2.41	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:79:ASN:ND2	39:L2:165:VAL:HG22	2.33	0.43
39:L2:185:ALA:O	39:L2:188:LYS:HB3	2.19	0.43
42:L5:81:HIS:O	42:L5:84:PRO:HD2	2.19	0.43
47:M0:12:GLN:HG2	47:M0:128:ARG:CZ	2.48	0.43
49:M3:191:ALA:C	49:M3:193:ALA:H	2.27	0.43
51:M5:116:LEU:HB3	51:M5:133:ILE:HG13	2.00	0.43
54:M8:41:ASP:OD1	54:M8:41:ASP:C	2.61	0.43
55:M9:70:LYS:HD2	55:M9:70:LYS:HA	1.64	0.43
55:M9:116:ASP:C	55:M9:116:ASP:OD1	2.61	0.43
56:N0:27:MET:CE	57:N1:153:PRO:HD3	2.48	0.43
63:N7:46:ILE:HD11	63:N7:49:TYR:CA	2.43	0.43
1:6:72:A:H5'	1:6:73:U:OP2	2.17	0.43
1:6:727:U:H2'	1:6:728:U:C6	2.53	0.43
1:6:788:A:OP2	6:s4:108:ARG:NH1	2.51	0.43
1:6:1005:A:H2'	1:6:1006:C:C6	2.53	0.43
1:6:1147:A:C6	1:6:1148:C:C4	3.07	0.43
1:6:1450:U:OP2	89:6:2124:OHX:N4	2.51	0.43
1:6:1690:G:H1	1:6:1711:C:H42	1.66	0.43
3:s1:161:ILE:H	3:s1:161:ILE:HG13	1.65	0.43
7:s5:41:LYS:HE2	7:s5:41:LYS:HB3	1.57	0.43
7:s5:201:ALA:HA	7:s5:211:ILE:HG13	2.00	0.43
17:c5:22:LEU:HA	17:c5:25:LEU:HD12	2.00	0.43
20:c8:42:TYR:HE2	20:c8:73:MET:HG2	1.83	0.43
28:d6:20:PRO:HA	28:d6:31:PRO:HA	2.01	0.43
28:d6:78:ALA:HA	28:d6:83:ILE:HG13	2.01	0.43
29:d7:59:CYS:O	29:d7:61:THR:N	2.50	0.43
34:sR:115:ILE:HG13	34:sR:121:MET:O	2.18	0.43
36:5:352:A:N6	36:5:365:A:H5''	2.32	0.43
36:5:971:G:H2'	36:5:972:A:O4'	2.17	0.43
36:5:1454:A:OP1	89:5:4199:OHX:N6	2.52	0.43
36:5:1603:A:OP1	55:m9:9:ARG:NH2	2.51	0.43
36:5:2158:A:OP2	39:l2:156:LYS:NZ	2.43	0.43
36:5:2610:G:H2'	36:5:2611:U:O4'	2.17	0.43
36:5:2691:A:H2'	36:5:2692:A:C8	2.53	0.43
36:5:3193:C:H2'	36:5:3194:C:C6	2.53	0.43
36:5:3362:A:C2	36:5:3363:U:C2	3.07	0.43
42:l5:40:HIS:CE1	42:l5:42:ALA:HB3	2.53	0.43
43:l6:170:LYS:HB3	43:l6:172:HIS:CE1	2.53	0.43
83:m2:23:UNK:O	83:m2:28:UNK:N	2.51	0.43
52:m6:65:ASN:O	52:m6:68:ARG:HG2	2.18	0.43
59:n3:69:LEU:HD12	59:n3:69:LEU:HA	1.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:n7:78:ASN:OD1	66:o0:35:ARG:NH2	2.41	0.43
64:n8:82:ILE:HD12	64:n8:82:ILE:HA	1.68	0.43
66:o0:66:LYS:H	66:o0:66:LYS:CD	2.32	0.43
68:o2:87:MET:HA	68:o2:87:MET:HE3	2.01	0.43
78:q2:34:SER:C	78:q2:36:PHE:H	2.25	0.43
78:q2:43:TYR:O	78:q2:47:GLN:HB2	2.18	0.43
1:2:580:A:H5''	5:S3:143:ARG:HH12	1.84	0.43
1:2:582:U:H3'	1:2:583:C:C6	2.53	0.43
1:2:1074:G:H2'	1:2:1075:C:C6	2.53	0.43
89:2:2044:OHX:N2	89:2:2099:OHX:N5	2.66	0.43
2:S0:57:LEU:HD21	2:S0:177:LEU:HA	1.99	0.43
5:S3:7:LYS:NZ	22:D0:27:THR:HG21	2.33	0.43
7:S5:94:THR:O	7:S5:97:LEU:HB2	2.18	0.43
10:S8:21:PHE:CZ	10:S8:22:ARG:HD3	2.53	0.43
12:C0:80:LEU:C	12:C0:82:LEU:H	2.27	0.43
13:C1:5:LEU:C	13:C1:6:THR:HG1	2.26	0.43
19:C7:22:PRO:HA	34:SR:216:LYS:NZ	2.33	0.43
25:D3:142:LYS:HA	25:D3:143:PRO:HD3	1.83	0.43
26:D4:35:VAL:HG11	26:D4:40:LEU:HD21	1.99	0.43
26:D4:44:LEU:O	26:D4:47:VAL:HB	2.18	0.43
28:D6:36:ILE:HD12	28:D6:78:ALA:HB1	2.01	0.43
36:1:1063:G:H2'	36:1:1097:G:N2	2.33	0.43
36:1:1080:A:OP1	42:L5:140:ARG:HB2	2.18	0.43
36:1:1108:U:H2'	36:1:1109:U:C6	2.53	0.43
36:1:1489:A:OP1	70:O4:10:ARG:NH1	2.51	0.43
36:1:1864:A:O4'	55:M9:83:GLY:HA3	2.18	0.43
36:1:2973:G:N7	89:1:4111:OHX:N2	2.67	0.43
36:1:3082:C:H2'	36:1:3083:G:H8	1.84	0.43
36:1:3276:G:OP1	36:1:3276:G:H4'	2.19	0.43
38:4:67:U:H5''	73:O7:84:SER:O	2.18	0.43
40:L3:285:VAL:HG13	40:L3:322:ILE:CD1	2.48	0.43
42:L5:22:ARG:HG2	42:L5:28:THR:OG1	2.19	0.43
45:L8:47:SER:O	45:L8:50:VAL:HG13	2.18	0.43
47:M0:48:LEU:HD22	47:M0:49:CYS:N	2.33	0.43
49:M3:106:GLN:HG3	49:M3:110:ASP:OD2	2.18	0.43
52:M6:12:LYS:HA	52:M6:40:GLU:O	2.19	0.43
59:N3:109:MET:HE3	59:N3:109:MET:HB3	1.60	0.43
69:O3:49:ILE:CG2	69:O3:100:ILE:HG13	2.48	0.43
79:Q3:50:GLY:O	79:Q3:51:ALA:HB3	2.19	0.43
1:6:771:A:P	11:s9:9:SER:HG	2.42	0.43
1:6:1045:C:C2	1:6:1074:G:C2	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1641:C:O2	1:6:1782:A:O2'	2.34	0.43
89:6:2057:OHX:N1	89:6:2143:OHX:N3	2.67	0.43
2:s0:126:PRO:HG2	2:s0:151:SER:HB2	2.00	0.43
3:s1:126:THR:CG2	3:s1:136:ARG:HE	2.29	0.43
3:s1:180:THR:OG1	3:s1:181:LEU:N	2.49	0.43
4:s2:139:ILE:HD12	4:s2:191:ALA:HB1	2.01	0.43
4:s2:186:LYS:HD2	4:s2:189:GLN:OE1	2.19	0.43
7:s5:124:LEU:HD12	7:s5:124:LEU:HA	1.74	0.43
7:s5:144:GLU:HA	7:s5:162:VAL:HG13	2.01	0.43
9:s7:21:ALA:O	9:s7:24:PHE:HB2	2.18	0.43
13:c1:46:LYS:O	13:c1:50:GLU:HG2	2.19	0.43
15:c3:15:ALA:HB2	29:d7:20:LYS:HD3	2.01	0.43
16:c4:24:ASN:O	16:c4:25:ASP:HB2	2.17	0.43
24:d2:126:LEU:HD23	24:d2:126:LEU:HA	1.65	0.43
27:d5:59:TYR:CE1	27:d5:100:ILE:HG23	2.50	0.43
29:d7:19:HIS:HD2	29:d7:21:LEU:N	2.15	0.43
36:5:73:C:C2	49:m3:59:ARG:HD3	2.53	0.43
36:5:188:U:O2'	36:5:207:U:O2	2.34	0.43
36:5:561:C:H2'	36:5:562:C:H6	1.83	0.43
36:5:571:U:H2'	36:5:572:A:C8	2.53	0.43
36:5:1015:U:O3'	36:5:1016:C:H2'	2.17	0.43
36:5:1048:A:H2'	47:m0:22:TYR:CZ	2.54	0.43
36:5:1690:C:C4	36:5:1691:U:C4	3.06	0.43
36:5:1889:G:OP1	40:l3:247:ARG:HG3	2.19	0.43
36:5:3379:C:H2'	36:5:3380:U:O4'	2.19	0.43
39:l2:187:HIS:ND1	39:l2:190:ARG:NH1	2.66	0.43
40:l3:284:ARG:NH2	40:l3:293:ASN:O	2.48	0.43
41:l4:203:ARG:NH1	41:l4:226:GLU:OE2	2.43	0.43
45:l8:65:LEU:O	45:l8:65:LEU:HD22	2.18	0.43
45:l8:186:LEU:O	45:l8:189:LEU:HB3	2.18	0.43
46:l9:104:VAL:HG11	46:l9:113:GLU:OE2	2.19	0.43
53:m7:131:ARG:HA	53:m7:131:ARG:HD2	1.86	0.43
57:n1:73:GLY:HA2	57:n1:89:LEU:O	2.17	0.43
63:n7:51:LEU:HD23	63:n7:51:LEU:HA	1.83	0.43
64:n8:79:TRP:CH2	64:n8:91:LEU:HD13	2.54	0.43
69:o3:8:TYR:CE2	69:o3:99:ARG:HG2	2.54	0.43
72:o6:21:THR:HA	72:o6:22:PRO:HD2	1.56	0.43
1:2:38:C:H2'	1:2:39:A:H5'	2.01	0.43
1:2:38:C:O2'	1:2:39:A:H5'	2.19	0.43
1:2:70:C:H2'	1:2:71:A:O4'	2.19	0.43
1:2:144:U:H5	8:S6:137:ARG:NH1	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:210:A:H2'	1:2:211:U:O4'	2.19	0.43
1:2:1086:A:C6	1:2:1087:A:C6	3.07	0.43
1:2:1207:C:H42	1:2:1456:C:H5	1.65	0.43
1:2:1400:A:H4'	19:C7:60:ARG:HH22	1.83	0.43
3:S1:36:SER:H	3:S1:231:LEU:HD13	1.83	0.43
4:S2:141:ARG:HG2	23:D1:10:GLU:OE2	2.18	0.43
4:S2:163:GLY:HA3	4:S2:209:ASN:ND2	2.34	0.43
4:S2:235:LEU:HD11	23:D1:54:ALA:HB2	2.01	0.43
5:S3:21:LEU:HD23	5:S3:21:LEU:HA	1.91	0.43
5:S3:68:GLU:OE2	12:C0:67:THR:HG23	2.19	0.43
5:S3:179:GLN:NE2	5:S3:179:GLN:C	2.73	0.43
12:C0:24:LYS:HB2	12:C0:63:TYR:CE1	2.53	0.43
18:C6:23:LYS:O	18:C6:63:ILE:HG22	2.18	0.43
19:C7:41:ILE:HG23	19:C7:46:LEU:HD13	2.00	0.43
26:D4:37:LYS:O	26:D4:41:ARG:HG3	2.19	0.43
26:D4:112:LYS:O	26:D4:115:ASP:HB2	2.18	0.43
34:SR:57:PRO:HB2	34:SR:58:VAL:H	1.43	0.43
34:SR:135:THR:CG2	34:SR:141:LEU:HD23	2.46	0.43
36:1:675:C:O2'	36:1:679:U:OP1	2.36	0.43
36:1:684:G:H5''	49:M3:35:ARG:NH1	2.33	0.43
36:1:1256:G:O6	36:1:1261:G:N2	2.51	0.43
36:1:1483:G:O6	70:O4:4:ARG:NH2	2.40	0.43
36:1:1645:U:H2'	36:1:1646:G:H5'	2.00	0.43
36:1:3024:A:C2	36:1:3032:A:C5	3.07	0.43
36:1:3228:C:H4'	36:1:3229:G:O5'	2.18	0.43
38:4:79:A:H2'	38:4:80:A:H1'	2.01	0.43
39:L2:150:LEU:HB3	39:L2:151:PRO:CD	2.49	0.43
40:L3:111:SER:O	40:L3:114:VAL:HG23	2.18	0.43
42:L5:252:ALA:O	42:L5:253:PHE:HB3	2.19	0.43
45:L8:75:ILE:C	45:L8:77:GLN:N	2.76	0.43
48:M1:30:LEU:HD21	48:M1:67:VAL:HG13	2.00	0.43
49:M3:93:ILE:HD13	49:M3:93:ILE:HA	1.66	0.43
50:M4:128:ARG:HG2	50:M4:132:LYS:HG3	2.01	0.43
53:M7:32:THR:HG21	53:M7:87:SER:HB2	2.01	0.43
54:M8:26:LEU:O	54:M8:30:VAL:HG23	2.19	0.43
58:N2:17:VAL:HA	58:N2:103:TYR:O	2.19	0.43
63:N7:3:LYS:O	63:N7:6:LYS:HG3	2.18	0.43
67:O1:71:LEU:HD23	67:O1:71:LEU:HA	1.83	0.43
71:O5:62:GLN:O	71:O5:66:VAL:HG23	2.18	0.43
77:Q1:2:ARG:HB3	77:Q1:5:TRP:CD1	2.53	0.43
1:6:178:U:O4	8:s6:194:LYS:HD2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:206:A:H1'	1:6:262:U:C2	2.54	0.43
1:6:518:A:O2'	1:6:534:A:N6	2.52	0.43
1:6:569:C:H2'	1:6:570:A:O4'	2.18	0.43
1:6:1091:A:H4'	1:6:1092:A:O5'	2.18	0.43
1:6:1483:A:H2'	1:6:1484:G:C8	2.54	0.43
1:6:1784:C:N4	77:q1:5:TRP:CH2	2.87	0.43
6:s4:77:ARG:HD2	6:s4:82:TYR:CD1	2.53	0.43
8:s6:7:TYR:CD1	8:s6:125:THR:HA	2.54	0.43
9:s7:27:LEU:C	9:s7:29:ASN:H	2.27	0.43
11:s9:77:ILE:HG23	11:s9:86:LEU:HD23	1.99	0.43
11:s9:80:LEU:HB3	11:s9:86:LEU:HB2	2.00	0.43
20:c8:76:PRO:O	20:c8:81:ILE:HB	2.18	0.43
25:d3:29:TYR:CZ	25:d3:33:LEU:HD13	2.54	0.43
36:5:411:U:H2'	36:5:412:G:C8	2.52	0.43
36:5:960:U:H4'	36:5:963:G:N1	2.33	0.43
36:5:1758:G:H5'	58:n2:104:ARG:NH2	2.33	0.43
36:5:2833:A:C2	36:5:2834:G:C8	3.07	0.43
89:5:4013:OHX:N3	89:5:4204:OHX:N1	2.67	0.43
38:8:43:A:OP1	89:8:227:OHX:N3	2.51	0.43
39:l2:113:VAL:HG12	39:l2:166:ILE:HD13	2.01	0.43
40:l3:287:LYS:HB3	40:l3:287:LYS:HE3	1.90	0.43
41:l4:216:VAL:HG13	41:l4:227:THR:OG1	2.18	0.43
41:l4:295:ILE:HG22	41:l4:299:ILE:HD11	2.01	0.43
44:l7:118:LYS:HG3	44:l7:191:VAL:HG11	2.00	0.43
47:m0:24:ARG:O	47:m0:25:ALA:HB3	2.19	0.43
47:m0:77:THR:HG23	47:m0:85:PHE:HZ	1.83	0.43
47:m0:98:ARG:HB3	47:m0:120:GLY:HA3	2.00	0.43
49:m3:16:LYS:O	49:m3:17:HIS:HB2	2.18	0.43
49:m3:32:LYS:HA	49:m3:35:ARG:NH1	2.33	0.43
53:m7:127:ARG:HB2	53:m7:139:TYR:O	2.19	0.43
60:n4:52:THR:O	60:n4:56:ARG:HG3	2.18	0.43
63:n7:15:ARG:HG3	63:n7:15:ARG:NH1	2.32	0.43
64:n8:126:LYS:HA	64:n8:146:GLU:O	2.18	0.43
67:o1:23:VAL:HG11	67:o1:28:ARG:HA	2.00	0.43
1:2:27:U:OP1	89:2:2084:OHX:N6	2.51	0.43
1:2:720:G:H1'	1:2:721:U:C5'	2.49	0.43
1:2:826:U:H2'	1:2:827:C:C6	2.53	0.43
1:2:864:U:C5	29:D7:22:LYS:HG2	2.54	0.43
1:2:960:U:H2'	1:2:961:U:C6	2.53	0.43
1:2:1165:G:O6	1:2:1166:A:N6	2.52	0.43
1:2:1566:U:O2'	1:2:1567:U:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:119:ARG:HB3	2:S0:119:ARG:NH1	2.32	0.43
3:S1:68:VAL:HG22	3:S1:69:CYS:O	2.17	0.43
6:S4:48:LEU:HD12	6:S4:48:LEU:HA	1.78	0.43
7:S5:59:VAL:O	7:S5:60:ASP:HB2	2.19	0.43
8:S6:63:MET:HA	8:S6:98:ARG:O	2.18	0.43
19:C7:24:LEU:HD22	19:C7:31:ASN:ND2	2.33	0.43
21:C9:57:ARG:NH2	21:C9:80:TYR:HB3	2.34	0.43
24:D2:82:LYS:O	24:D2:83:ILE:HG22	2.19	0.43
32:E0:46:ASN:O	32:E0:47:VAL:HG12	2.19	0.43
36:1:829:U:N3	36:1:895:A:N6	2.64	0.43
36:1:1103:A:H1'	36:1:1104:G:OP1	2.19	0.43
36:1:1573:G:N2	36:1:1574:C:O2'	2.52	0.43
36:1:1599:G:H2'	36:1:1600:U:C6	2.54	0.43
36:1:2369:G:H2'	36:1:2370:G:O4'	2.18	0.43
36:1:3315:G:C5	40:L3:123:TYR:CE2	3.06	0.43
89:1:4044:OHX:N4	89:1:4057:OHX:N3	2.67	0.43
39:L2:69:TYR:O	39:L2:70:ARG:HB3	2.18	0.43
41:L4:3:ARG:O	41:L4:5:GLN:N	2.52	0.43
41:L4:39:PHE:C	41:L4:39:PHE:CD2	2.96	0.43
42:L5:261:THR:OG1	42:L5:264:GLN:HG3	2.18	0.43
53:M7:24:VAL:HB	53:M7:29:THR:HG21	1.99	0.43
59:N3:39:VAL:HG21	59:N3:51:ALA:C	2.43	0.43
59:N3:46:LEU:HD12	59:N3:46:LEU:HA	1.74	0.43
62:N6:109:LEU:HD22	62:N6:115:ARG:CZ	2.49	0.43
63:N7:105:SER:HA	63:N7:108:GLU:HG3	2.01	0.43
64:N8:74:ASN:CB	64:N8:115:LYS:HB2	2.48	0.43
71:O5:10:ARG:HD3	71:O5:60:GLU:OE1	2.18	0.43
1:6:154:G:H1	1:6:160:C:H42	1.67	0.43
1:6:250:C:H2'	1:6:251:A:H8	1.82	0.43
1:6:892:A:H2'	1:6:893:U:O4'	2.19	0.43
1:6:1234:A:H2'	1:6:1235:C:C5	2.53	0.43
1:6:1552:U:H2'	1:6:1553:G:O4'	2.19	0.43
6:s4:86:PHE:O	6:s4:87:MET:HB2	2.18	0.43
6:s4:118:GLU:C	6:s4:120:SER:H	2.27	0.43
10:s8:18:ARG:H	10:s8:18:ARG:HG2	1.66	0.43
10:s8:89:GLU:HA	10:s8:92:ARG:NH1	2.34	0.43
14:c2:54:ARG:HD3	14:c2:56:GLU:CD	2.44	0.43
15:c3:85:PRO:HG2	15:c3:129:TYR:CE2	2.54	0.43
16:c4:31:THR:OG1	16:c4:32:ASP:O	2.35	0.43
18:c6:127:LYS:HE2	18:c6:132:LYS:O	2.19	0.43
27:d5:82:HIS:O	27:d5:85:LYS:HB2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:d6:37:LYS:O	28:d6:38:ARG:NE	2.46	0.43
29:d7:61:THR:OG1	29:d7:62:ILE:N	2.48	0.43
30:d8:52:ASP:OD2	30:d8:52:ASP:N	2.51	0.43
30:d8:64:ARG:HB3	30:d8:65:ARG:H	1.52	0.43
35:sM:58:GLU:O	35:sM:62:ARG:HB2	2.19	0.43
36:5:59:G:H2'	38:8:33:A:O2'	2.19	0.43
36:5:149:U:P	51:m5:49:ARG:NH1	2.92	0.43
36:5:189:G:H2'	36:5:224:C:OP1	2.18	0.43
36:5:638:C:N4	36:5:647:A:OP1	2.41	0.43
36:5:662:U:OP1	64:n8:8:THR:HG21	2.19	0.43
36:5:1313:G:H2'	36:5:1314:C:C6	2.54	0.43
36:5:1315:U:OP1	52:m6:18:ARG:NH1	2.51	0.43
36:5:1566:A:C2'	36:5:1567:U:H5'	2.48	0.43
36:5:1783:U:H2'	36:5:1784:G:C8	2.53	0.43
36:5:2207:A:N6	36:5:2236:G:H1	2.16	0.43
36:5:2880:U:H2'	36:5:2881:C:C6	2.53	0.43
38:8:27:U:O5'	38:8:27:U:H6	2.01	0.43
39:l2:51:ASP:HB3	39:l2:54:ARG:HD2	1.99	0.43
45:l8:94:PHE:HB3	45:l8:189:LEU:HD21	2.00	0.43
55:m9:4:LEU:O	55:m9:5:ARG:C	2.61	0.43
57:n1:48:ILE:HG13	57:n1:94:GLU:HG2	1.99	0.43
59:n3:70:ARG:CZ	59:n3:70:ARG:HB3	2.48	0.43
61:n5:74:LYS:O	61:n5:78:ASP:HB2	2.18	0.43
62:n6:69:LYS:O	62:n6:83:ASP:N	2.49	0.43
68:o2:12:LYS:HD3	68:o2:57:TYR:HA	2.01	0.43
75:o9:42:ARG:HG2	75:o9:43:ASN:N	2.33	0.43
78:q2:46:LYS:O	89:q2:502:OHX:N3	2.52	0.43
78:q2:77:CYS:SG	78:q2:79:THR:HG23	2.59	0.43
1:2:434:G:N2	1:2:436:A:H3'	2.34	0.43
1:2:436:A:H5''	1:2:437:A:OP1	2.18	0.43
1:2:473:A:H4'	1:2:768:C:O2	2.19	0.43
1:2:1097:U:O4	4:S2:201:ASN:ND2	2.50	0.43
1:2:1317:C:H2'	1:2:1318:G:O4'	2.19	0.43
1:2:1388:A:C5	1:2:1411:A:C6	3.06	0.43
2:S0:41:ARG:HE	2:S0:45:VAL:CG2	2.32	0.43
2:S0:170:ILE:H	2:S0:170:ILE:HD12	1.83	0.43
5:S3:49:ILE:HG21	5:S3:89:GLU:HG3	2.00	0.43
5:S3:217:ILE:HG22	5:S3:218:LEU:H	1.83	0.43
7:S5:25:LEU:HD22	7:S5:25:LEU:H	1.83	0.43
14:C2:67:THR:HG22	14:C2:68:GLU:HG3	2.01	0.43
20:C8:18:LEU:HD12	20:C8:18:LEU:HA	1.88	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:100:ILE:HD13	21:C9:100:ILE:HA	1.75	0.43
23:D1:41:GLU:OE2	23:D1:41:GLU:N	2.52	0.43
31:D9:31:ILE:HD13	31:D9:31:ILE:HA	1.92	0.43
36:1:158:G:H2'	36:1:159:A:C8	2.54	0.43
36:1:158:G:H2'	36:1:159:A:H8	1.82	0.43
36:1:353:G:O2'	36:1:364:G:O6	2.36	0.43
36:1:543:C:H3'	36:1:544:C:C6	2.54	0.43
36:1:1213:G:C2	36:1:1293:U:C2	3.06	0.43
36:1:1336:U:H2'	36:1:1337:A:C8	2.54	0.43
36:1:1863:G:N1	36:1:1866:C:OP2	2.48	0.43
36:1:2344:U:H2'	36:1:2345:A:C8	2.54	0.43
36:1:3022:G:O2'	36:1:3031:G:O6	2.30	0.43
36:1:3047:U:O2'	36:1:3048:A:H5'	2.19	0.43
36:1:3050:U:O2'	60:N4:16:GLY:O	2.34	0.43
89:1:3982:OHX:N3	89:1:4170:OHX:N4	2.66	0.43
46:L9:171:ASP:CG	46:L9:173:ARG:HH11	2.24	0.43
48:M1:41:SER:C	48:M1:43:GLN:H	2.26	0.43
48:M1:94:ARG:C	48:M1:96:PHE:N	2.76	0.43
49:M3:144:THR:HB	49:M3:145:PHE:CD2	2.53	0.43
51:M5:164:LEU:HD23	51:M5:164:LEU:HA	1.86	0.43
51:M5:172:ARG:CZ	51:M5:174:ILE:HD11	2.49	0.43
55:M9:81:ARG:HG2	55:M9:88:ARG:CZ	2.48	0.43
56:N0:20:PRO:O	56:N0:21:GLU:HB2	2.19	0.43
61:N5:113:LEU:HD12	61:N5:113:LEU:C	2.43	0.43
62:N6:37:LYS:H	62:N6:37:LYS:CD	2.32	0.43
70:O4:64:THR:O	70:O4:64:THR:OG1	2.30	0.43
72:O6:82:ARG:O	72:O6:86:LYS:N	2.47	0.43
1:6:488:G:H2'	1:6:498:G:O6	2.19	0.43
1:6:753:A:N7	6:s4:187:ARG:NH2	2.55	0.43
1:6:764:U:OP2	11:s9:78:ARG:NH1	2.51	0.43
1:6:827:C:C2'	1:6:828:U:H5'	2.49	0.43
1:6:970:A:H2'	1:6:971:A:H5'	2.01	0.43
1:6:1559:A:H5''	20:c8:135:GLY:CA	2.49	0.43
1:6:1797:A:C6	28:d6:87:ARG:HD2	2.52	0.43
2:s0:163:ASN:HB3	2:s0:169:SER:OG	2.18	0.43
3:s1:58:SER:O	3:s1:62:LYS:HD3	2.19	0.43
5:s3:98:ALA:HB1	5:s3:171:ALA:H	1.84	0.43
6:s4:128:LYS:HD3	6:s4:130:GLN:OE1	2.18	0.43
10:s8:108:PRO:HA	10:s8:111:GLN:HB2	1.99	0.43
11:s9:118:LEU:HD23	11:s9:158:PHE:CE1	2.52	0.43
13:c1:5:LEU:H	13:c1:5:LEU:HD22	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c2:43:ARG:HA	14:c2:121:VAL:HG12	2.00	0.43
16:c4:18:ARG:HE	16:c4:18:ARG:HB2	1.57	0.43
16:c4:31:THR:HA	16:c4:38:THR:HA	2.00	0.43
19:c7:99:VAL:HA	19:c7:118:PRO:CB	2.49	0.43
22:d0:33:GLN:OE1	22:d0:33:GLN:N	2.38	0.43
24:d2:96:ALA:HB3	24:d2:99:PHE:CE1	2.54	0.43
24:d2:106:THR:HG22	24:d2:122:SER:C	2.44	0.43
26:d4:20:ARG:HD3	26:d4:76:TYR:CE2	2.54	0.43
26:d4:77:ASN:O	26:d4:78:SER:HB3	2.19	0.43
36:5:268:A:O4'	36:5:270:U:H1'	2.19	0.43
36:5:1126:G:H5''	47:m0:119:TRP:HZ3	1.83	0.43
36:5:1470:U:H2'	36:5:1471:U:C6	2.54	0.43
36:5:1815:U:O2'	36:5:1816:A:P	2.77	0.43
36:5:2775:U:H1'	64:n8:58:MET:SD	2.59	0.43
36:5:2993:G:C6	36:5:3142:A:C4	3.07	0.43
89:5:3980:OHX:N6	89:5:4202:OHX:N5	2.67	0.43
38:8:134:G:OP1	61:n5:56:ARG:HG2	2.19	0.43
39:l2:15:ILE:HG23	39:l2:194:ASN:ND2	2.33	0.43
39:l2:112:ILE:HD11	39:l2:168:VAL:HG12	2.00	0.43
39:l2:117:GLU:HB3	39:l2:122:ASP:OD2	2.18	0.43
39:l2:140:ASN:CG	39:l2:142:ASP:HB3	2.43	0.43
40:l3:27:ALA:HB2	40:l3:220:VAL:HG23	1.99	0.43
41:l4:39:PHE:CD2	41:l4:242:ALA:HB2	2.54	0.43
41:l4:209:TYR:O	41:l4:230:VAL:HG22	2.18	0.43
44:l7:124:LEU:HD22	44:l7:124:LEU:HA	1.84	0.43
44:l7:125:GLU:HA	44:l7:128:LYS:HG3	2.00	0.43
46:l9:170:LYS:HA	46:l9:170:LYS:HD3	1.82	0.43
47:m0:210:ILE:HD13	47:m0:217:PHE:CE2	2.53	0.43
57:n1:9:SER:O	57:n1:11:THR:HG23	2.19	0.43
61:n5:92:LYS:HD3	61:n5:110:VAL:O	2.19	0.43
62:n6:108:LYS:HA	62:n6:108:LYS:HD3	1.70	0.43
78:q2:104:LEU:HD12	78:q2:104:LEU:HA	1.88	0.43
84:p0:27:VAL:O	84:p0:188:VAL:HG22	2.19	0.43
1:2:63:G:H4'	1:2:170:U:C5	2.54	0.43
1:2:142:G:N2	1:2:173:A:H2	2.11	0.43
1:2:329:G:H5'	10:S8:99:ALA:HB3	2.01	0.43
1:2:381:C:H2'	1:2:382:C:C6	2.54	0.43
1:2:383:G:N7	89:2:2130:OHX:N4	2.66	0.43
1:2:590:C:H5''	32:E0:43:ARG:HH12	1.83	0.43
3:S1:101:HIS:HA	3:S1:217:LEU:CD2	2.49	0.43
4:S2:45:VAL:HG21	4:S2:68:ILE:HG12	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:58:LYS:HG2	8:S6:58:LYS:H	1.54	0.43
20:C8:50:ALA:HB3	20:C8:52:VAL:HG23	2.00	0.43
22:D0:37:VAL:O	22:D0:41:ILE:HD13	2.19	0.43
22:D0:58:LEU:CD1	22:D0:88:LYS:HD2	2.49	0.43
24:D2:45:GLY:O	24:D2:47:ILE:N	2.52	0.43
24:D2:125:ILE:HG13	24:D2:126:LEU:O	2.19	0.43
36:1:289:A:H5'	51:M5:95:GLN:O	2.19	0.43
36:1:371:G:O6	89:1:4194:OHX:N4	2.51	0.43
36:1:1364:C:H4'	54:M8:9:GLN:OE1	2.19	0.43
36:1:1433:A:N3	68:O2:27:ARG:NH1	2.67	0.43
36:1:1567:U:H5	36:1:1568:U:C2	2.37	0.43
36:1:1887:A:OP1	89:1:4100:OHX:N3	2.52	0.43
36:1:2236:G:OP1	89:1:4131:OHX:N6	2.52	0.43
36:1:2310:U:OP1	89:1:4152:OHX:N1	2.51	0.43
36:1:2413:A:H2'	36:1:2414:G:C8	2.54	0.43
36:1:2707:C:H2'	36:1:2708:C:C6	2.53	0.43
36:1:3210:A:H2'	36:1:3211:C:C6	2.53	0.43
36:1:3282:U:H2'	36:1:3283:U:O4'	2.18	0.43
38:4:124:G:N2	38:4:130:C:C2	2.87	0.43
40:L3:152:LYS:HD3	40:L3:189:SER:HA	2.01	0.43
41:L4:42:VAL:HA	41:L4:45:ASN:ND2	2.34	0.43
41:L4:136:LEU:HD23	41:L4:136:LEU:HA	1.69	0.43
44:L7:207:LEU:HA	44:L7:207:LEU:HD23	1.74	0.43
45:L8:84:ARG:HH12	45:L8:181:LYS:HZ1	1.65	0.43
46:L9:41:ILE:O	46:L9:42:ASP:HB2	2.17	0.43
47:M0:33:ILE:O	47:M0:33:ILE:HG12	2.19	0.43
47:M0:76:MET:CE	47:M0:148:VAL:HG13	2.49	0.43
47:M0:184:LYS:HA	47:M0:189:GLU:OE2	2.19	0.43
51:M5:63:ARG:NH2	51:M5:131:GLU:OE2	2.51	0.43
62:N6:36:SER:HB3	62:N6:106:ILE:O	2.18	0.43
65:N9:22:LYS:H	65:N9:22:LYS:HG2	1.50	0.43
67:O1:36:ILE:O	67:O1:39:PHE:HB3	2.19	0.43
72:O6:99:ARG:HB3	72:O6:100:HIS:H	1.53	0.43
78:Q2:77:CYS:C	78:Q2:79:THR:H	2.26	0.43
1:6:484:C:N4	1:6:503:G:H22	2.16	0.43
1:6:557:G:OP1	81:e0:55:ARG:NH1	2.52	0.43
1:6:844:A:H2'	1:6:845:G:H8	1.84	0.43
1:6:1586:A:H2'	1:6:1587:A:O4'	2.18	0.43
6:s4:148:ARG:H	6:s4:148:ARG:HG2	1.62	0.43
9:s7:143:LEU:O	24:d2:42:GLN:NE2	2.52	0.43
17:c5:52:LYS:C	17:c5:54:ALA:H	2.27	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:c9:57:ARG:HH22	21:c9:80:TYR:HB3	1.83	0.43
25:d3:41:SER:HA	25:d3:42:PRO:HD3	1.75	0.43
82:e1:121:CYS:HB3	82:e1:130:VAL:HG11	2.01	0.43
36:5:1065:A:N3	65:n9:28:LYS:HD3	2.33	0.43
36:5:1465:A:H5''	36:5:1466:G:OP2	2.19	0.43
36:5:1723:A:OP1	55:m9:128:LYS:HE2	2.19	0.43
36:5:2947:G:N2	36:5:2948:C:C2	2.87	0.43
36:5:2989:U:O3'	40:l3:232:ARG:NH2	2.51	0.43
36:5:3088:G:H2'	36:5:3089:C:O4'	2.19	0.43
36:5:3164:C:O2'	36:5:3165:A:P	2.77	0.43
37:7:112:G:H2'	37:7:113:C:C6	2.54	0.43
40:l3:205:VAL:O	40:l3:208:VAL:HG23	2.18	0.43
43:l6:46:ARG:HG3	43:l6:46:ARG:HH11	1.83	0.43
45:l8:157:VAL:HG21	45:l8:163:VAL:HG21	2.00	0.43
47:m0:210:ILE:HA	47:m0:217:PHE:HE2	1.82	0.43
49:m3:178:LYS:HD3	49:m3:179:PHE:CE2	2.54	0.43
52:m6:182:ASN:OD1	52:m6:186:ALA:HB2	2.19	0.43
58:n2:29:ASP:OD2	58:n2:31:ALA:HB3	2.19	0.43
61:n5:63:ILE:HA	61:n5:86:VAL:HG23	2.01	0.43
63:n7:36:HIS:N	63:n7:37:PRO:HD3	2.34	0.43
1:2:156:A:H2'	1:2:157:A:O4'	2.19	0.43
1:2:767:U:C5	11:S9:142:ASN:OD1	2.72	0.43
1:2:832:U:H2'	1:2:833:U:H5''	2.01	0.43
1:2:1230:A:H2'	1:2:1258:U:C5	2.54	0.43
1:2:1572:G:H1'	7:S5:185:ARG:HH22	1.83	0.43
89:2:2044:OHX:N4	89:2:2099:OHX:N3	2.67	0.43
2:S0:86:VAL:O	2:S0:89:PHE:N	2.52	0.43
3:S1:130:SER:OG	3:S1:131:ASP:N	2.52	0.43
3:S1:137:ILE:HG22	3:S1:215:VAL:HG23	2.01	0.43
4:S2:148:LEU:HB3	4:S2:149:GLY:H	1.59	0.43
11:S9:41:GLU:OE1	11:S9:126:ARG:NH2	2.52	0.43
12:C0:32:HIS:NE2	12:C0:35:ILE:HB	2.34	0.43
13:C1:112:SER:C	13:C1:114:ALA:N	2.77	0.43
15:C3:93:LYS:O	15:C3:96:VAL:HB	2.19	0.43
18:C6:143:ARG:HH22	35:SM:84:LYS:NZ	2.16	0.43
19:C7:19:ARG:HG3	19:C7:20:TYR:CD1	2.52	0.43
20:C8:120:ARG:HA	20:C8:120:ARG:HD3	1.77	0.43
22:D0:36:ASN:O	22:D0:40:ASN:HB2	2.19	0.43
30:D8:38:ARG:HH11	30:D8:40:ILE:HD11	1.83	0.43
36:1:196:G:N1	36:1:199:A:OP2	2.51	0.43
36:1:629:U:H2'	36:1:630:A:C8	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:705:A:C4	36:1:715:A:N6	2.86	0.43
36:1:1054:A:H5''	36:1:2637:A:H61	1.84	0.43
36:1:1522:U:H3'	61:N5:113:LEU:HD22	2.01	0.43
36:1:1554:U:H4'	36:1:1555:U:H5'	2.01	0.43
36:1:1821:U:C4	70:O4:67:LYS:HD2	2.53	0.43
36:1:2216:G:OP1	72:O6:75:LYS:NZ	2.49	0.43
36:1:2284:C:H5''	36:1:2285:C:OP2	2.19	0.43
36:1:2407:C:H1'	36:1:2818:U:C2	2.54	0.43
36:1:2561:A:O2'	36:1:2562:A:H8	1.98	0.43
36:1:2607:G:H5'	39:L2:232:GLY:O	2.19	0.43
36:1:3124:G:H5'	46:L9:40:HIS:ND1	2.34	0.43
36:1:3174:A:H2'	36:1:3175:U:C5'	2.49	0.43
38:4:5:U:H2'	38:4:6:U:O4'	2.19	0.43
41:L4:185:LYS:HA	41:L4:200:THR:O	2.19	0.43
42:L5:124:GLU:O	42:L5:125:VAL:HB	2.19	0.43
44:L7:153:PHE:CE1	44:L7:162:PRO:HB3	2.54	0.43
45:L8:143:ILE:HD11	45:L8:151:VAL:HG21	2.00	0.43
51:M5:68:ARG:HH11	51:M5:68:ARG:CG	2.30	0.43
63:N7:35:SER:O	63:N7:36:HIS:C	2.60	0.43
69:O3:102:LEU:HD23	69:O3:102:LEU:HA	1.71	0.43
1:6:20:G:H5'	1:6:571:G:C4	2.54	0.43
1:6:460:A:H3'	1:6:461:G:H8	1.84	0.43
1:6:967:A:OP2	15:c3:124:ARG:NH2	2.49	0.43
1:6:1150:G:C6	1:6:1768:G:C6	3.07	0.43
1:6:1242:A:H5''	1:6:1243:G:OP1	2.19	0.43
1:6:1419:G:O4'	31:d9:56:ARG:HA	2.18	0.43
1:6:1467:C:H2'	1:6:1468:U:H6	1.83	0.43
1:6:1483:A:H4'	18:c6:71:GLY:HA2	1.99	0.43
1:6:1539:G:O4'	20:c8:40:ARG:NH1	2.51	0.43
1:6:1729:C:O2'	10:s8:2:GLY:HA2	2.19	0.43
3:s1:26:ARG:O	3:s1:26:ARG:HG2	2.19	0.43
3:s1:47:LEU:O	16:c4:37:GLU:HG3	2.19	0.43
4:s2:234:PRO:O	4:s2:235:LEU:HB2	2.19	0.43
7:s5:20:PHE:CZ	7:s5:22:PRO:HG3	2.54	0.43
9:s7:20:VAL:O	9:s7:23:ALA:HB3	2.18	0.43
10:s8:140:GLU:HG2	10:s8:143:TRP:CE3	2.53	0.43
14:c2:86:VAL:N	14:c2:87:PRO:HD3	2.33	0.43
15:c3:52:VAL:HG13	15:c3:55:ARG:HH12	1.84	0.43
17:c5:68:PRO:HG2	17:c5:71:GLU:CD	2.43	0.43
21:c9:28:LEU:HD23	21:c9:111:ILE:HD11	2.01	0.43
21:c9:117:SER:OG	21:c9:118:PRO:O	2.35	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:d0:80:GLU:OE1	31:d9:44:ARG:HD2	2.17	0.43
26:d4:76:TYR:HB2	26:d4:82:ALA:HB2	2.01	0.43
28:d6:28:LYS:HB3	28:d6:29:SER:H	1.52	0.43
36:5:683:U:OP2	49:m3:28:GLN:NE2	2.50	0.43
36:5:824:C:H2'	36:5:825:U:C6	2.54	0.43
36:5:1334:U:H1'	44:l7:208:SER:HB2	2.01	0.43
89:5:3980:OHX:N4	89:5:4202:OHX:N1	2.67	0.43
39:l2:15:ILE:HG23	39:l2:194:ASN:HD22	1.83	0.43
39:l2:172:GLY:HA3	79:q3:67:GLY:HA2	2.01	0.43
40:l3:85:VAL:O	40:l3:162:VAL:HA	2.19	0.43
40:l3:214:MET:HE3	40:l3:214:MET:HB3	1.79	0.43
45:l8:71:VAL:HG13	45:l8:235:GLY:N	2.33	0.43
45:l8:221:ASN:OD1	45:l8:225:LYS:NZ	2.48	0.43
46:l9:99:ILE:HG22	46:l9:101:VAL:HG23	2.01	0.43
47:m0:190:VAL:HG12	47:m0:197:VAL:HG21	2.01	0.43
47:m0:216:TYR:O	89:m0:301:OHX:N4	2.51	0.43
50:m4:121:MET:O	50:m4:125:LYS:HG3	2.19	0.43
51:m5:97:SER:O	51:m5:100:ALA:N	2.48	0.43
52:m6:78:ARG:HB3	52:m6:78:ARG:HH11	1.84	0.43
52:m6:138:LEU:O	52:m6:141:LEU:N	2.50	0.43
55:m9:4:LEU:O	55:m9:7:GLN:HG2	2.18	0.43
1:2:143:G:C2	1:2:173:A:N3	2.87	0.42
1:2:641:G:H2'	1:2:642:G:C8	2.54	0.42
1:2:694:U:O2	1:2:694:U:H2'	2.19	0.42
1:2:831:U:O2	1:2:831:U:H2'	2.18	0.42
1:2:1012:U:O5'	1:2:1012:U:H6	2.02	0.42
3:S1:111:ARG:CG	28:D6:68:TYR:HB2	2.49	0.42
4:S2:59:HIS:CE1	4:S2:239:PRO:HD3	2.54	0.42
6:S4:15:PRO:HG2	6:S4:18:TRP:CD2	2.54	0.42
7:S5:43:PHE:CG	7:S5:44:ASN:N	2.87	0.42
11:S9:99:LEU:HB3	11:S9:100:LYS:H	1.69	0.42
14:C2:59:LEU:HA	14:C2:87:PRO:HB2	2.01	0.42
18:C6:82:ARG:NH2	18:C6:114:ARG:HB3	2.30	0.42
21:C9:30:VAL:HA	21:C9:31:PRO:HD2	1.70	0.42
25:D3:87:VAL:HG22	25:D3:124:VAL:HG21	2.01	0.42
27:D5:89:ILE:HB	27:D5:101:TYR:HB3	2.00	0.42
30:D8:34:GLU:O	30:D8:35:ASP:HB2	2.19	0.42
32:E0:49:LEU:HD12	32:E0:51:ASN:HB2	2.01	0.42
34:SR:255:ALA:HB2	34:SR:292:LEU:HD22	2.01	0.42
36:1:156:G:P	72:O6:27:SER:HB3	2.58	0.42
36:1:1322:U:O2	56:N0:108:GLN:NE2	2.48	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1846:C:OP1	36:1:1849:C:N4	2.46	0.42
36:1:2567:C:C2'	36:1:2568:C:H5'	2.49	0.42
36:1:2633:U:H2'	36:1:2634:U:O4'	2.19	0.42
36:1:3206:C:O2	56:N0:155:ARG:NH1	2.52	0.42
37:3:73:C:H42	56:N0:19:VAL:HG11	1.84	0.42
46:L9:162:GLN:HB2	46:L9:179:ILE:O	2.19	0.42
47:M0:139:ARG:HB3	47:M0:173:PHE:CE1	2.53	0.42
47:M0:170:LYS:NZ	47:M0:175:ASN:O	2.49	0.42
48:M1:25:GLU:HG3	48:M1:26:SER:O	2.19	0.42
53:M7:48:LEU:HB3	53:M7:88:VAL:CG1	2.49	0.42
53:M7:171:ARG:H	53:M7:171:ARG:HG3	1.39	0.42
60:N4:43:ARG:HB3	60:N4:43:ARG:HH11	1.84	0.42
68:O2:123:LYS:HA	68:O2:126:LEU:HD12	2.01	0.42
79:Q3:45:LYS:HB2	79:Q3:45:LYS:HE3	1.50	0.42
1:6:212:U:OP2	89:c1:202:OHX:N1	2.52	0.42
1:6:300:A:O2'	1:6:301:A:H5'	2.19	0.42
1:6:332:U:P	10:s8:56:ARG:HH22	2.41	0.42
1:6:862:A:C2	1:6:963:A:C4	3.07	0.42
1:6:1469:A:H4'	1:6:1541:G:H4'	2.01	0.42
1:6:1796:C:C6	28:d6:5:ARG:HG2	2.54	0.42
3:s1:129:THR:OG1	3:s1:131:ASP:OD1	2.37	0.42
5:s3:60:GLY:HA3	5:s3:65:ARG:HB3	2.01	0.42
8:s6:214:LYS:HD2	8:s6:218:GLU:OE1	2.19	0.42
9:s7:7:LYS:NZ	55:m9:188:ASP:OD2	2.52	0.42
10:s8:84:HIS:NE2	10:s8:90:LEU:HD13	2.34	0.42
14:c2:103:LEU:HG	14:c2:116:VAL:HG12	2.01	0.42
15:c3:76:LYS:HG2	15:c3:81:ALA:HB2	2.00	0.42
18:c6:6:SER:OG	18:c6:7:VAL:N	2.51	0.42
21:c9:6:VAL:C	21:c9:8:ASP:H	2.27	0.42
27:d5:43:ASP:HB3	27:d5:46:LYS:H	1.84	0.42
28:d6:90:GLU:N	28:d6:90:GLU:CD	2.77	0.42
36:5:115:A:H2'	36:5:265:A:N3	2.34	0.42
36:5:1135:A:OP1	65:n9:6:ASN:HB2	2.19	0.42
36:5:1141:C:O2'	36:5:1153:A:N3	2.49	0.42
36:5:2781:U:C4	36:5:2782:U:C4	3.06	0.42
36:5:3107:U:P	76:q0:112:LYS:HZ3	2.42	0.42
37:7:1:G:H21	42:l5:269:SER:HB2	1.83	0.42
38:8:114:G:C2'	38:8:115:C:H5'	2.49	0.42
38:8:136:G:OP1	61:n5:48:SER:HB2	2.19	0.42
40:l3:114:VAL:HG22	40:l3:163:HIS:CE1	2.54	0.42
41:l4:49:ALA:HA	41:l4:109:TRP:CZ2	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:14:129:THR:HB	41:14:246:ARG:O	2.19	0.42
41:14:304:GLN:C	41:14:306:THR:N	2.77	0.42
47:m0:26:VAL:HG11	47:m0:96:VAL:HG21	2.01	0.42
83:m2:126:UNK:O	83:m2:130:UNK:N	2.52	0.42
51:m5:88:GLY:HA2	78:q2:50:PHE:CE1	2.54	0.42
51:m5:168:GLY:O	51:m5:172:ARG:HB2	2.18	0.42
60:n4:97:LYS:O	60:n4:100:VAL:N	2.41	0.42
64:n8:36:GLY:O	64:n8:41:HIS:HB2	2.18	0.42
1:2:71:A:N1	1:2:72:A:C6	2.87	0.42
1:2:268:C:O2'	1:2:269:G:H5'	2.19	0.42
1:2:339:C:H2'	1:2:340:U:H6	1.83	0.42
1:2:380:U:C5	11:S9:5:PRO:HG3	2.54	0.42
1:2:462:G:OP1	11:S9:3:ARG:HG2	2.19	0.42
1:2:517:U:H3	1:2:535:A:H61	1.66	0.42
1:2:639:U:OP1	9:S7:117:THR:OG1	2.34	0.42
1:2:1009:U:H2'	1:2:1010:C:H6	1.84	0.42
1:2:1285:U:OP1	89:2:2115:OHX:N4	2.52	0.42
1:2:1459:C:OP2	1:2:1459:C:H6	2.02	0.42
1:2:1629:G:H2'	1:2:1630:U:C6	2.54	0.42
3:S1:86:LEU:HB3	3:S1:98:THR:OG1	2.19	0.42
3:S1:144:ARG:HG2	3:S1:145:LYS:O	2.18	0.42
8:S6:64:LYS:HB2	8:S6:97:VAL:CG1	2.49	0.42
9:S7:166:LEU:HD12	9:S7:166:LEU:HA	1.93	0.42
12:C0:35:ILE:HG22	12:C0:37:THR:H	1.84	0.42
18:C6:48:VAL:HA	18:C6:82:ARG:HB3	2.00	0.42
18:C6:109:PHE:CB	18:C6:117:LEU:HD21	2.48	0.42
18:C6:141:SER:O	18:C6:143:ARG:N	2.52	0.42
24:D2:31:SER:H	24:D2:34:ILE:HB	1.83	0.42
28:D6:84:VAL:HG13	28:D6:85:ARG:H	1.84	0.42
34:SR:85:TRP:HA	34:SR:109:ASP:HA	2.02	0.42
35:SM:61:ILE:H	35:SM:61:ILE:HG13	1.63	0.42
35:SM:102:THR:HG22	35:SM:105:LYS:HB2	2.01	0.42
36:1:419:G:O6	89:1:3881:OHX:N6	2.52	0.42
36:1:867:G:C6	36:1:868:C:C4	3.07	0.42
36:1:954:U:O4	36:1:1115:G:H1'	2.19	0.42
36:1:1072:G:C4	36:1:1087:G:C2	3.07	0.42
36:1:1162:U:OP1	68:O2:54:LYS:HE3	2.18	0.42
36:1:1177:G:H5'	69:O3:18:ARG:NH1	2.34	0.42
36:1:1238:C:H41	36:1:1245:A:P	2.41	0.42
36:1:1675:G:O2'	36:1:1676:A:H5'	2.19	0.42
36:1:2424:A:H2'	36:1:2425:G:O4'	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2652:U:C4	36:1:2653:C:C4	3.07	0.42
36:1:2856:G:H2'	36:1:2857:C:C6	2.55	0.42
36:1:3099:C:O2'	36:1:3100:U:H5'	2.18	0.42
36:1:3186:A:O2'	46:L9:42:ASP:HA	2.19	0.42
40:L3:265:ALA:C	40:L3:266:ARG:HG2	2.43	0.42
40:L3:284:ARG:NH1	40:L3:356:LEU:HD12	2.34	0.42
41:L4:64:SER:HA	41:L4:75:PRO:HA	2.02	0.42
44:L7:160:ARG:HB2	44:L7:203:TRP:CZ3	2.54	0.42
45:L8:160:ILE:H	45:L8:160:ILE:HG12	1.38	0.42
47:M0:144:ASN:O	47:M0:145:LYS:C	2.62	0.42
48:M1:15:GLU:OE2	48:M1:132:ASN:ND2	2.52	0.42
48:M1:54:VAL:HG11	48:M1:57:PHE:CG	2.54	0.42
49:M3:54:LEU:HD22	49:M3:54:LEU:HA	1.78	0.42
49:M3:149:GLN:HA	49:M3:150:PRO:HD3	1.76	0.42
54:M8:19:PRO:HD3	54:M8:53:PHE:CD1	2.54	0.42
56:N0:83:SER:CB	56:N0:88:HIS:HE2	2.31	0.42
63:N7:67:LYS:HD3	63:N7:67:LYS:HA	1.81	0.42
72:O6:79:SER:HB3	72:O6:80:PHE:H	1.69	0.42
1:6:40:A:H61	1:6:467:G:H1'	1.84	0.42
1:6:1489:U:H5'	1:6:1494:C:H1'	1.99	0.42
1:6:1638:G:C2	1:6:1639:C:H1'	2.54	0.42
2:s0:39:ASN:O	2:s0:47:VAL:HG23	2.19	0.42
3:s1:56:SER:HB2	3:s1:59:ASP:OD2	2.19	0.42
17:c5:96:ILE:O	17:c5:103:ASN:N	2.41	0.42
21:c9:61:VAL:O	21:c9:65:ILE:HG13	2.19	0.42
24:d2:27:ILE:HB	24:d2:61:ILE:HB	2.00	0.42
82:e1:88:PRO:C	82:e1:89:LYS:HZ2	2.27	0.42
36:5:23:A:H2'	36:5:24:G:O4'	2.19	0.42
36:5:689:U:N3	41:l4:227:THR:O	2.49	0.42
36:5:1202:A:N6	36:5:1301:A:C4	2.87	0.42
36:5:1650:G:H2'	36:5:1651:U:O4'	2.20	0.42
36:5:1908:A:H2'	36:5:1909:A:O4'	2.19	0.42
36:5:2618:G:H5'	47:m0:116:ARG:HH21	1.84	0.42
36:5:2814:G:OP1	41:l4:73:ARG:NH2	2.43	0.42
36:5:2921:U:H2'	36:5:2923:U:OP2	2.19	0.42
36:5:3242:G:N2	36:5:3245:A:H5''	2.33	0.42
89:5:3926:OHX:N5	38:8:17:A:OP1	2.52	0.42
37:7:121:U:H5'	42:l5:260:PHE:CE2	2.53	0.42
38:8:19:C:H2'	38:8:20:U:O4'	2.18	0.42
89:8:219:OHX:N2	89:8:226:OHX:N4	2.67	0.42
41:l4:191:LYS:HG3	41:l4:194:TYR:CE2	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:l5:64:ILE:C	42:l5:65:ILE:HG12	2.43	0.42
52:m6:128:ARG:HD3	52:m6:128:ARG:HA	1.60	0.42
55:m9:105:LEU:HD21	55:m9:139:VAL:HG12	2.00	0.42
79:q3:17:ARG:O	79:q3:23:ARG:HD3	2.20	0.42
84:p0:25:LEU:HB2	84:p0:88:PHE:CD2	2.55	0.42
84:p0:205:THR:C	84:p0:207:GLU:H	2.26	0.42
1:2:136:C:H4'	1:2:137:U:OP1	2.17	0.42
1:2:1500:C:H5'	21:C9:106:GLN:NE2	2.34	0.42
1:2:1508:U:H2'	1:2:1509:C:C6	2.54	0.42
3:S1:205:PHE:HA	3:S1:206:PRO:HD2	1.79	0.42
6:S4:90:ILE:HD11	6:S4:101:LEU:HD11	2.00	0.42
8:S6:64:LYS:HB2	8:S6:97:VAL:HG11	2.01	0.42
8:S6:160:ARG:CD	60:N4:84:GLY:HA3	2.49	0.42
36:1:118:U:C5	36:1:119:U:C4	3.07	0.42
36:1:716:A:C6	64:N8:117:ARG:HD3	2.55	0.42
36:1:1307:G:O5'	52:M6:60:LYS:NZ	2.53	0.42
36:1:1815:U:O2'	36:1:1816:A:P	2.77	0.42
36:1:2402:A:OP1	41:L4:70:ALA:N	2.45	0.42
36:1:2644:C:O2	47:M0:116:ARG:HD3	2.20	0.42
36:1:3180:A:C6	52:M6:114:LYS:HD2	2.54	0.42
37:3:121:U:H5''	42:L5:265:TYR:HE1	1.83	0.42
38:4:122:U:H2'	38:4:123:G:C8	2.53	0.42
40:L3:169:THR:HG22	40:L3:171:LEU:H	1.84	0.42
40:L3:387:LEU:H	40:L3:387:LEU:HD12	1.84	0.42
41:L4:334:PHE:HA	41:L4:339:LEU:HD12	2.02	0.42
42:L5:69:ILE:HG22	57:N1:31:LEU:HB3	2.01	0.42
42:L5:211:LEU:HB3	42:L5:219:PHE:HB2	2.01	0.42
46:L9:48:VAL:HG11	46:L9:52:LEU:HD13	2.00	0.42
47:M0:156:ARG:HD3	47:M0:163:GLN:O	2.18	0.42
49:M3:131:LYS:H	49:M3:131:LYS:HG2	1.53	0.42
50:M4:46:ILE:HD13	50:M4:58:ILE:HG21	2.00	0.42
54:M8:53:PHE:CD1	54:M8:53:PHE:N	2.86	0.42
55:M9:11:ALA:O	55:M9:15:VAL:HG23	2.19	0.42
55:M9:37:SER:HG	55:M9:40:ALA:H	1.63	0.42
56:N0:74:ASN:HD21	56:N0:144:LEU:HD21	1.83	0.42
58:N2:79:LEU:O	58:N2:82:LYS:HB3	2.18	0.42
74:O8:13:GLU:HG2	74:O8:13:GLU:H	1.62	0.42
76:Q0:110:CYS:SG	76:Q0:111:ARG:N	2.91	0.42
78:Q2:43:TYR:CZ	78:Q2:47:GLN:NE2	2.86	0.42
1:6:52:U:H2'	1:6:53:G:C8	2.54	0.42
1:6:151:G:H22	1:6:163:G:N2	2.16	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:329:G:H5''	10:s8:98:LYS:HB3	2.02	0.42
1:6:385:A:H2'	1:6:386:G:C8	2.55	0.42
1:6:767:U:H5	11:s9:142:ASN:OD1	2.01	0.42
1:6:846:G:C2	1:6:847:A:C4	3.08	0.42
1:6:1228:G:N3	1:6:1228:G:H2'	2.34	0.42
1:6:1402:G:C6	1:6:1403:C:C4	3.08	0.42
2:s0:4:PRO:HB2	2:s0:5:ALA:H	1.66	0.42
7:s5:166:ARG:HA	7:s5:169:ASN:HB2	2.00	0.42
15:c3:151:ASN:O	89:c3:201:OHX:N6	2.52	0.42
17:c5:129:GLY:O	17:c5:130:ARG:HB2	2.19	0.42
20:c8:91:ASP:O	20:c8:92:ILE:HB	2.19	0.42
26:d4:60:PHE:CD2	26:d4:71:GLY:HA3	2.54	0.42
29:d7:23:THR:HG21	29:d7:29:ARG:NH2	2.35	0.42
34:sR:216:LYS:C	34:sR:218:GLY:H	2.27	0.42
36:5:169:U:H4'	36:5:170:G:OP1	2.19	0.42
36:5:385:A:H2'	36:5:386:A:C8	2.54	0.42
36:5:864:G:OP2	89:5:3918:OHX:N4	2.53	0.42
36:5:1155:C:H2'	36:5:1156:C:H6	1.84	0.42
36:5:1466:G:O6	89:5:3914:OHX:N5	2.51	0.42
36:5:1723:A:N1	36:5:1788:C:O2'	2.48	0.42
36:5:1730:G:C5	66:o0:28:LYS:HB2	2.54	0.42
36:5:3049:A:H2'	36:5:3050:U:O4'	2.18	0.42
38:8:38:U:H5	71:o5:83:LYS:HA	1.84	0.42
38:8:113:U:C4	75:o9:7:PHE:CE2	3.06	0.42
40:l3:35:ASP:HA	40:l3:184:ASN:ND2	2.34	0.42
40:l3:255:TRP:CD1	40:l3:255:TRP:C	2.97	0.42
43:l6:133:GLU:O	43:l6:136:GLU:N	2.50	0.42
44:l7:150:LYS:HD3	44:l7:244:ASN:OD1	2.20	0.42
45:l8:81:THR:OG1	45:l8:181:LYS:HG3	2.18	0.42
46:l9:47:LYS:NZ	50:m4:5:SER:O	2.40	0.42
47:m0:76:MET:CE	47:m0:148:VAL:HA	2.49	0.42
49:m3:131:LYS:HD3	49:m3:131:LYS:H	1.83	0.42
51:m5:5:LYS:HA	51:m5:5:LYS:HD3	1.78	0.42
52:m6:182:ASN:O	52:m6:184:THR:N	2.52	0.42
56:n0:107:TYR:CZ	56:n0:118:PHE:CE1	3.07	0.42
57:n1:42:ILE:HG12	57:n1:91:LEU:HD11	2.02	0.42
69:o3:85:PHE:O	89:o3:202:OHX:N2	2.52	0.42
79:q3:49:ARG:HB2	79:q3:55:TRP:CD2	2.53	0.42
1:2:333:A:C6	1:2:334:G:C6	3.07	0.42
1:2:994:G:OP1	1:2:1778:G:H4'	2.20	0.42
1:2:1677:C:H2'	1:2:1678:A:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:30:PRO:O	7:S5:33:VAL:HB	2.19	0.42
8:S6:64:LYS:NZ	8:S6:82:SER:O	2.53	0.42
12:C0:48:SER:O	12:C0:52:LYS:HG2	2.18	0.42
15:C3:61:THR:OG1	15:C3:62:GLN:N	2.52	0.42
16:C4:41:ARG:O	16:C4:42:VAL:HG22	2.19	0.42
18:C6:32:ASN:OD1	18:C6:69:VAL:HG23	2.20	0.42
19:C7:96:SER:HA	19:C7:97:ASN:HA	1.52	0.42
20:C8:139:LYS:O	20:C8:143:ARG:NH1	2.52	0.42
25:D3:56:LYS:HG2	25:D3:93:LEU:HD11	2.00	0.42
33:E1:123:ASN:OD1	33:E1:124:PRO:HD2	2.19	0.42
34:SR:42:LEU:O	34:SR:43:ILE:HD13	2.19	0.42
34:SR:86:ASP:O	34:SR:88:THR:HG23	2.19	0.42
36:1:12:A:H1'	61:N5:37:THR:HG21	2.01	0.42
36:1:717:C:N4	36:1:718:G:N1	2.68	0.42
36:1:824:C:H5''	39:L2:21:ARG:HD3	2.01	0.42
36:1:1072:G:H21	65:N9:50:THR:HB	1.85	0.42
36:1:1237:G:H2'	36:1:1237:G:N3	2.34	0.42
36:1:1340:G:H2'	36:1:1341:U:H6	1.83	0.42
36:1:1368:U:H5'	68:O2:43:ARG:NH1	2.34	0.42
36:1:1430:U:H2'	64:N8:9:ARG:HH22	1.84	0.42
36:1:1447:G:H3'	53:M7:67:ILE:CD1	2.49	0.42
36:1:3055:U:H6	36:1:3055:U:O5'	2.03	0.42
36:1:3380:U:H2'	36:1:3381:U:C6	2.55	0.42
41:L4:229:ASN:O	41:L4:230:VAL:C	2.61	0.42
42:L5:38:THR:HG22	57:N1:30:TYR:CB	2.49	0.42
51:M5:10:LEU:O	51:M5:10:LEU:HD23	2.19	0.42
59:N3:104:ASN:OD1	59:N3:107:GLY:N	2.53	0.42
1:6:138:A:N3	1:6:138:A:H5''	2.34	0.42
1:6:719:U:C4	1:6:721:U:H5	2.38	0.42
1:6:1580:C:H2'	1:6:1581:C:O4'	2.18	0.42
2:s0:80:THR:O	2:s0:83:GLN:HB2	2.19	0.42
4:s2:225:LEU:HD13	24:d2:68:ARG:HA	2.00	0.42
5:s3:124:ARG:HD2	35:sM:128:ALA:HA	2.01	0.42
7:s5:186:ASN:OD1	7:s5:188:LYS:HB2	2.19	0.42
8:s6:76:LEU:HD23	8:s6:76:LEU:HA	1.79	0.42
9:s7:166:LEU:HA	9:s7:166:LEU:HD13	1.64	0.42
15:c3:55:ARG:O	29:d7:47:PHE:HB2	2.18	0.42
17:c5:63:ALA:HA	17:c5:66:ALA:HB3	2.01	0.42
17:c5:86:VAL:HB	17:c5:87:PRO:HD2	2.01	0.42
21:c9:105:LEU:HD23	21:c9:105:LEU:HA	1.83	0.42
21:c9:112:GLY:O	21:c9:125:SER:OG	2.24	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:d4:18:LEU:HD23	26:d4:18:LEU:HA	1.84	0.42
29:d7:37:CYS:HA	29:d7:38:PRO:HD3	1.87	0.42
36:5:142:C:H2'	36:5:143:G:O4'	2.18	0.42
36:5:286:U:H2'	36:5:287:G:H8	1.84	0.42
36:5:406:G:H1'	38:8:16:G:N2	2.35	0.42
36:5:409:A:H61	38:8:15:G:H1'	1.84	0.42
36:5:422:A:C2	36:5:2363:A:H4'	2.54	0.42
36:5:773:G:N7	89:5:3940:OHX:N5	2.68	0.42
36:5:1241:U:O2'	36:5:1242:G:O5'	2.31	0.42
36:5:1348:U:H5''	36:5:1355:A:H61	1.84	0.42
36:5:1450:G:OP1	89:5:4233:OHX:N2	2.52	0.42
36:5:2240:G:H2'	36:5:2241:U:O4'	2.19	0.42
36:5:2555:G:O2'	70:o4:88:ARG:HG3	2.19	0.42
36:5:3055:U:O2'	36:5:3057:U:OP1	2.29	0.42
36:5:3337:G:H8	36:5:3337:G:O5'	2.01	0.42
89:5:3944:OHX:N5	89:5:4238:OHX:N6	2.67	0.42
39:l2:55:GLY:O	39:l2:56:ALA:HB3	2.19	0.42
39:l2:70:ARG:HG3	39:l2:71:LEU:N	2.33	0.42
39:l2:153:GLY:HA3	39:l2:251:LYS:HG2	2.00	0.42
40:l3:37:ARG:HG2	40:l3:187:SER:N	2.25	0.42
41:l4:118:LYS:O	41:l4:122:THR:HG23	2.20	0.42
41:l4:202:ARG:NE	41:l4:202:ARG:HA	2.34	0.42
41:l4:269:SER:O	41:l4:269:SER:OG	2.36	0.42
41:l4:327:LEU:HA	44:l7:166:ASN:HD21	1.84	0.42
43:l6:41:ILE:HB	43:l6:85:ILE:HB	2.01	0.42
43:l6:173:MET:HE3	43:l6:173:MET:HB3	1.91	0.42
44:l7:118:LYS:HG3	44:l7:191:VAL:CG1	2.49	0.42
44:l7:154:GLY:N	44:l7:161:VAL:O	2.36	0.42
44:l7:158:LYS:O	44:l7:203:TRP:HZ3	2.02	0.42
45:l8:64:ILE:O	45:l8:68:ARG:HG2	2.19	0.42
46:l9:88:TYR:CE2	46:l9:155:SER:HB3	2.54	0.42
50:m4:59:ASN:O	50:m4:62:GLN:HG2	2.19	0.42
51:m5:187:ARG:HH22	51:m5:188:ARG:NH1	2.17	0.42
54:m8:86:THR:HB	54:m8:105:ARG:HB2	2.01	0.42
57:n1:119:ALA:O	57:n1:123:GLY:N	2.51	0.42
59:n3:94:TYR:CE2	60:n4:21:PHE:HB2	2.53	0.42
63:n7:25:ILE:H	63:n7:25:ILE:HG12	1.30	0.42
76:q0:88:LYS:HB3	76:q0:88:LYS:HE3	1.63	0.42
79:q3:11:THR:HG21	79:q3:27:LYS:HB2	2.01	0.42
87:B:502:C:H4'	87:B:503:C:OP1	2.19	0.42
1:2:127:G:O6	8:S6:202:ARG:NH2	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:601:A:H2'	1:2:602:U:O4'	2.20	0.42
1:2:823:G:H3'	1:2:824:G:H8	1.83	0.42
1:2:895:G:HO2'	16:C4:38:THR:H	1.64	0.42
1:2:1325:A:C2	1:2:1326:A:C5	3.07	0.42
1:2:1393:C:N4	1:2:1405:G:H1	2.18	0.42
1:2:1580:C:H2'	1:2:1581:C:O4'	2.19	0.42
1:2:1584:G:H5'	18:C6:123:ARG:H	1.85	0.42
3:S1:185:THR:O	3:S1:189:ILE:HG13	2.18	0.42
3:S1:225:VAL:O	3:S1:229:MET:HB2	2.20	0.42
6:S4:227:VAL:HB	6:S4:228:ILE:H	1.62	0.42
10:S8:106:ALA:O	10:S8:110:ARG:N	2.41	0.42
23:D1:17:CYS:HB2	23:D1:56:SER:HB3	2.01	0.42
24:D2:76:SER:HG	24:D2:77:PRO:HD3	1.85	0.42
36:1:741:U:O2'	54:M8:73:GLN:HG2	2.19	0.42
36:1:831:G:O2'	36:1:1864:A:N3	2.51	0.42
36:1:1307:G:C4	52:M6:60:LYS:HD3	2.54	0.42
36:1:1496:C:C2	36:1:1521:G:N2	2.87	0.42
36:1:1832:C:O2'	36:1:1833:G:H5'	2.19	0.42
36:1:2390:A:H2'	36:1:2391:G:O4'	2.18	0.42
36:1:3110:C:O3'	46:L9:155:SER:HB2	2.20	0.42
36:1:3314:A:H5''	40:L3:174:LYS:HD2	2.01	0.42
36:1:3384:U:H2'	36:1:3385:U:C6	2.54	0.42
39:L2:180:LEU:HD23	39:L2:180:LEU:HA	1.89	0.42
40:L3:19:ARG:HG3	40:L3:273:HIS:NE2	2.35	0.42
40:L3:116:ARG:HD2	40:L3:122:TRP:CD1	2.55	0.42
40:L3:375:GLU:O	40:L3:378:ALA:HB3	2.20	0.42
41:L4:22:LEU:CD1	41:L4:26:PHE:HB2	2.41	0.42
41:L4:82:THR:C	41:L4:84:ARG:N	2.77	0.42
41:L4:150:LEU:HA	41:L4:150:LEU:HD23	1.81	0.42
41:L4:157:GLU:HB3	41:L4:211:GLU:O	2.20	0.42
42:L5:78:ALA:HB1	42:L5:104:LEU:HD23	2.01	0.42
43:L6:62:THR:OG1	43:L6:78:ARG:HD2	2.19	0.42
44:L7:89:ILE:HG22	44:L7:220:PHE:CE1	2.54	0.42
50:M4:22:LEU:HD12	50:M4:22:LEU:HA	1.70	0.42
51:M5:93:LYS:O	51:M5:94:TYR:HB3	2.20	0.42
52:M6:88:VAL:C	52:M6:90:HIS:H	2.26	0.42
56:N0:9:VAL:O	56:N0:26:ARG:HA	2.20	0.42
56:N0:155:ARG:HD3	56:N0:172:TYR:CD2	2.55	0.42
58:N2:18:ASP:HB3	58:N2:104:ARG:HB2	2.02	0.42
68:O2:121:ASN:OD1	68:O2:121:ASN:N	2.47	0.42
74:O8:14:LEU:O	74:O8:20:VAL:HG21	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:O8:69:LEU:HA	74:O8:70:PRO:HD2	1.88	0.42
1:6:68:A:C5	8:s6:132:ARG:NH2	2.88	0.42
1:6:114:C:H6	1:6:114:C:H5'	1.84	0.42
1:6:772:G:C6	1:6:773:C:N4	2.87	0.42
1:6:1234:A:H4'	82:e1:146:SER:OG	2.20	0.42
2:s0:172:LEU:HD22	2:s0:176:LEU:HG	2.01	0.42
2:s0:185:ARG:HB3	2:s0:186:GLY:H	1.49	0.42
3:s1:205:PHE:HA	3:s1:206:PRO:HD2	1.79	0.42
7:s5:109:LYS:O	7:s5:113:ILE:HG13	2.19	0.42
8:s6:151:ASP:OD2	60:n4:101:ARG:HD3	2.20	0.42
9:s7:68:ALA:HA	9:s7:71:HIS:HB2	2.01	0.42
11:s9:171:ARG:HE	11:s9:174:ARG:CB	2.29	0.42
21:c9:105:LEU:HB3	21:c9:122:ARG:NE	2.35	0.42
28:d6:87:ARG:NH2	28:d6:91:ASP:O	2.52	0.42
81:e0:33:ARG:HB3	81:e0:33:ARG:NH1	2.33	0.42
36:5:7:C:H2'	36:5:8:C:C6	2.55	0.42
36:5:1295:G:O2'	56:n0:115:ARG:NH1	2.52	0.42
36:5:1597:C:C4'	36:5:1696:A:H1'	2.50	0.42
36:5:1690:C:H2'	36:5:1691:U:O4'	2.19	0.42
36:5:2105:G:H2'	36:5:2106:A:C8	2.54	0.42
36:5:2516:U:O2'	36:5:2595:A:N1	2.46	0.42
36:5:2525:G:H4'	45:l8:49:TYR:OH	2.19	0.42
36:5:2640:A:OP1	57:n1:55:LYS:HE2	2.19	0.42
36:5:2871:G:H5''	36:5:2872:A:H5'	2.02	0.42
36:5:3163:A:C6	36:5:3164:C:N4	2.87	0.42
37:7:28:C:O2'	37:7:55:A:N1	2.49	0.42
38:8:100:U:OP2	89:8:220:OHX:N2	2.52	0.42
40:l3:347:SER:HB2	40:l3:350:ALA:H	1.84	0.42
41:l4:8:VAL:HG23	41:l4:18:ASN:O	2.20	0.42
42:l5:258:LYS:HD3	42:l5:258:LYS:N	2.34	0.42
43:l6:5:LYS:HD2	43:l6:5:LYS:HA	1.84	0.42
50:m4:20:VAL:HG22	50:m4:68:LEU:HB2	2.01	0.42
63:n7:54:THR:CG2	63:n7:56:LYS:HB3	2.50	0.42
66:o0:13:LYS:NZ	66:o0:103:THR:HG21	2.34	0.42
68:o2:121:ASN:C	68:o2:122:PRO:O	2.62	0.42
70:o4:94:LEU:HD23	70:o4:94:LEU:HA	1.62	0.42
71:o5:13:SER:OG	71:o5:16:GLN:HG3	2.19	0.42
1:2:624:G:C8	1:2:1027:A:C6	3.08	0.42
1:2:679:U:H2'	1:2:680:U:C6	2.54	0.42
1:2:706:A:C6	1:2:734:A:N6	2.87	0.42
1:2:1175:U:O4	20:C8:140:THR:HG21	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1357:A:H2'	1:2:1358:G:H8	1.84	0.42
2:S0:31:VAL:N	2:S0:149:LEU:O	2.49	0.42
2:S0:41:ARG:HE	2:S0:45:VAL:HB	1.84	0.42
2:S0:109:ASN:OD1	2:S0:111:ILE:HB	2.20	0.42
4:S2:38:VAL:HG12	4:S2:65:GLU:OE1	2.20	0.42
5:S3:167:PHE:CE1	5:S3:192:PRO:HB3	2.54	0.42
6:S4:185:GLY:C	6:S4:189:LEU:HB2	2.45	0.42
11:S9:6:ARG:HA	11:S9:6:ARG:HD3	1.75	0.42
11:S9:38:ASN:HB3	11:S9:40:LYS:N	2.34	0.42
13:C1:75:VAL:HG11	13:C1:120:GLY:N	2.34	0.42
13:C1:142:VAL:HG12	13:C1:144:ALA:H	1.83	0.42
17:C5:18:ARG:NH1	20:C8:90:ASN:O	2.52	0.42
17:C5:80:MET:HE2	17:C5:80:MET:HB3	1.69	0.42
20:C8:91:ASP:O	20:C8:92:ILE:HB	2.20	0.42
20:C8:120:ARG:HH21	35:SM:61:ILE:HD11	1.84	0.42
27:D5:42:LEU:C	27:D5:42:LEU:HD12	2.44	0.42
34:SR:256:THR:OG1	34:SR:259:GLY:N	2.48	0.42
36:1:643:U:OP1	36:1:1116:G:O2'	2.25	0.42
36:1:727:G:H2'	36:1:728:G:O4'	2.19	0.42
36:1:1844:C:O2	73:O7:9:GLY:HA2	2.19	0.42
36:1:3112:G:O2'	46:L9:70:THR:HB	2.20	0.42
38:4:85:G:C8	38:4:85:G:C3'	3.03	0.42
39:L2:101:VAL:C	39:L2:102:LEU:HD12	2.45	0.42
40:L3:350:ALA:O	40:L3:351:LEU:HB2	2.19	0.42
41:L4:135:VAL:O	41:L4:140:HIS:HB2	2.20	0.42
41:L4:295:ILE:CG2	41:L4:299:ILE:HD11	2.48	0.42
41:L4:311:HIS:NE2	41:L4:314:LYS:HA	2.35	0.42
43:L6:65:ILE:HD11	43:L6:77:ARG:HB3	2.02	0.42
43:L6:158:TYR:CG	50:M4:115:PHE:CD2	3.08	0.42
47:M0:174:THR:HG23	47:M0:175:ASN:N	2.34	0.42
47:M0:201:SER:OG	47:M0:203:LYS:HG2	2.20	0.42
50:M4:85:TRP:CD1	50:M4:90:VAL:HG13	2.54	0.42
59:N3:33:ASN:ND2	59:N3:33:ASN:C	2.77	0.42
62:N6:50:ILE:CD1	62:N6:70:ILE:HG12	2.49	0.42
77:Q1:4:LYS:HG3	77:Q1:5:TRP:CE3	2.54	0.42
1:6:94:U:O2'	6:s4:7:LYS:HB2	2.20	0.42
1:6:652:G:N1	1:6:682:C:O2	2.53	0.42
1:6:1366:U:OP1	18:c6:30:LYS:HD3	2.19	0.42
1:6:1796:C:OP1	28:d6:87:ARG:NH1	2.49	0.42
2:s0:179:ARG:HD3	2:s0:183:ARG:CD	2.50	0.42
3:s1:114:VAL:HG22	3:s1:142:PHE:HZ	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:s1:119:THR:HB	3:s1:143:THR:HG23	2.01	0.42
4:s2:143:TYR:CD2	4:s2:147:ASN:HA	2.54	0.42
7:s5:29:ILE:HA	7:s5:30:PRO:HD3	1.87	0.42
13:c1:54:ILE:HD12	13:c1:54:ILE:HG23	1.80	0.42
15:c3:34:ILE:O	15:c3:38:VAL:HG23	2.19	0.42
19:c7:23:LYS:HE3	34:sR:174:ASN:HB3	2.02	0.42
24:d2:37:PHE:CE2	24:d2:103:ILE:HD11	2.55	0.42
30:d8:11:LYS:HD2	30:d8:51:ASN:HA	2.02	0.42
34:sR:123:ILE:HD11	34:sR:156:VAL:CG2	2.50	0.42
36:5:209:A:H1'	36:5:212:G:N2	2.35	0.42
36:5:215:G:OP1	62:n6:12:ARG:HG2	2.20	0.42
36:5:217:U:O2	62:n6:103:LYS:NZ	2.40	0.42
36:5:928:C:H2'	36:5:929:A:C8	2.55	0.42
36:5:1505:C:OP1	53:m7:23:ARG:NH2	2.50	0.42
36:5:1786:G:H2'	36:5:1787:A:C8	2.55	0.42
36:5:2822:U:H2'	36:5:2823:G:O4'	2.20	0.42
36:5:2864:A:O3'	47:m0:115:MET:HB2	2.19	0.42
36:5:3155:U:H4'	36:5:3156:U:OP2	2.18	0.42
36:5:3241:G:H2'	36:5:3245:A:H8	1.84	0.42
36:5:3244:A:C2	40:l3:97:ARG:NH1	2.87	0.42
36:5:3316:A:OP1	36:5:3318:G:N2	2.38	0.42
37:7:33:U:H2'	37:7:34:C:O4'	2.18	0.42
89:8:219:OHX:N6	89:8:226:OHX:N4	2.67	0.42
39:l2:9:ARG:HH21	39:l2:9:ARG:HD3	1.72	0.42
43:l6:137:ASP:O	43:l6:141:VAL:HG23	2.20	0.42
44:l7:102:VAL:HG12	44:l7:130:ILE:HD12	2.00	0.42
47:m0:169:LYS:HE3	57:n1:158:THR:OG1	2.19	0.42
49:m3:26:PHE:C	49:m3:28:GLN:H	2.27	0.42
49:m3:46:ILE:HA	49:m3:49:ARG:HH11	1.84	0.42
54:m8:103:ALA:HB3	54:m8:106:PHE:CE2	2.54	0.42
54:m8:159:LYS:HD2	54:m8:159:LYS:HA	1.77	0.42
55:m9:38:ARG:O	55:m9:42:ARG:HG2	2.20	0.42
62:n6:126:LEU:HB2	62:n6:127:GLU:H	1.58	0.42
67:o1:20:LEU:HD23	67:o1:20:LEU:HA	1.83	0.42
68:o2:15:LYS:HE3	68:o2:15:LYS:HB3	1.79	0.42
78:q2:38:GLN:HE21	78:q2:38:GLN:C	2.20	0.42
1:2:193:U:H2'	1:2:194:U:H2'	2.01	0.42
1:2:830:U:O2	1:2:830:U:H2'	2.19	0.42
1:2:1143:A:O2'	1:2:1144:U:H5'	2.19	0.42
1:2:1487:A:H2'	1:2:1488:G:C8	2.54	0.42
1:2:1500:C:H5'	21:C9:106:GLN:HE22	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:186:GLY:O	2:S0:188:LEU:N	2.53	0.42
5:S3:59:LEU:HA	5:S3:66:ILE:CG1	2.48	0.42
6:S4:124:GLY:HA2	6:S4:142:HIS:CE1	2.54	0.42
17:C5:25:LEU:HA	17:C5:28:MET:HE2	2.01	0.42
18:C6:14:LYS:O	18:C6:123:ARG:NH1	2.52	0.42
20:C8:99:HIS:HD2	20:C8:101:LEU:HD21	1.85	0.42
21:C9:86:ARG:O	21:C9:89:ARG:HG3	2.19	0.42
36:1:61:A:H2'	36:1:62:A:O4'	2.18	0.42
36:1:237:G:H2'	36:1:238:A:O4'	2.20	0.42
36:1:424:G:O2'	68:O2:23:ASP:OD2	2.32	0.42
36:1:841:A:H5'	55:M9:125:LYS:O	2.20	0.42
36:1:871:U:H2'	36:1:872:U:H6	1.80	0.42
36:1:1691:U:H2'	36:1:1692:U:C6	2.54	0.42
36:1:1915:A:H2'	36:1:1916:U:H6	1.84	0.42
36:1:2175:U:H4'	36:1:2176:U:OP2	2.20	0.42
36:1:2565:U:H2'	36:1:2566:C:H6	1.83	0.42
36:1:2887:A:N3	36:1:2887:A:H2'	2.34	0.42
36:1:3209:A:OP2	56:N0:161:LYS:HD2	2.19	0.42
38:4:27:U:H2'	38:4:28:C:H6	1.85	0.42
39:L2:66:PRO:O	45:L8:41:GLN:HG2	2.20	0.42
40:L3:57:VAL:HG21	60:N4:15:PRO:HG2	2.02	0.42
41:L4:138:ARG:HG3	41:L4:244:LEU:O	2.20	0.42
41:L4:180:LYS:HE2	41:L4:180:LYS:HB3	1.81	0.42
43:L6:18:LEU:N	43:L6:18:LEU:HD22	2.34	0.42
44:L7:24:GLU:C	44:L7:26:VAL:H	2.23	0.42
44:L7:51:TYR:O	44:L7:54:GLU:HB3	2.19	0.42
44:L7:110:ARG:O	44:L7:113:SER:HB2	2.19	0.42
44:L7:156:ILE:HD12	44:L7:161:VAL:HB	2.02	0.42
45:L8:25:PRO:HG2	45:L8:27:THR:HB	2.02	0.42
45:L8:187:GLY:O	45:L8:190:VAL:HG12	2.20	0.42
49:M3:126:PHE:HA	49:M3:127:PRO:HD2	1.57	0.42
50:M4:55:ARG:NH2	50:M4:77:ARG:HA	2.35	0.42
57:N1:11:THR:HB	57:N1:15:PHE:CD1	2.55	0.42
67:O1:17:HIS:HB2	67:O1:69:TYR:HB3	2.01	0.42
68:O2:122:PRO:O	68:O2:123:LYS:CB	2.68	0.42
1:6:84:A:H2'	1:6:85:A:O4'	2.19	0.42
1:6:683:C:H5'	1:6:684:A:OP2	2.18	0.42
1:6:919:A:H5'	16:c4:35:GLY:HA3	2.01	0.42
1:6:1341:A:OP1	34:sR:63:GLY:HA2	2.19	0.42
1:6:1639:C:OP1	89:6:2152:OHX:N5	2.52	0.42
5:s3:48:VAL:HB	5:s3:86:LEU:HD12	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:s4:212:ASP:OD2	6:s4:216:ASN:HB2	2.20	0.42
6:s4:234:PRO:HG3	6:s4:238:LEU:HD11	2.01	0.42
14:c2:52:LEU:HD22	14:c2:52:LEU:HA	1.84	0.42
15:c3:16:ILE:HA	15:c3:16:ILE:HD13	1.69	0.42
17:c5:22:LEU:O	17:c5:26:LEU:HD12	2.20	0.42
21:c9:28:LEU:HB3	21:c9:29:GLU:H	1.59	0.42
21:c9:57:ARG:NH1	21:c9:57:ARG:HG3	2.34	0.42
22:d0:17:GLN:HG3	22:d0:18:GLN:H	1.84	0.42
36:5:413:U:H5''	53:m7:34:GLN:NE2	2.33	0.42
36:5:428:A:H2'	36:5:429:U:C6	2.55	0.42
36:5:3225:C:H2'	36:5:3226:A:O4'	2.19	0.42
36:5:3242:G:H21	36:5:3245:A:H5''	1.85	0.42
36:5:3245:A:H2	36:5:3246:G:N1	2.17	0.42
38:8:120:C:H2'	38:8:121:U:O4'	2.20	0.42
39:l2:65:ASP:HB3	39:l2:68:LYS:O	2.20	0.42
39:l2:205:ASN:HB3	39:l2:206:PRO:HD2	2.01	0.42
41:l4:154:THR:HG23	41:l4:253:ALA:HB2	2.01	0.42
42:l5:85:ARG:NH1	42:l5:254:LYS:H	2.17	0.42
42:l5:152:ARG:HH11	42:l5:152:ARG:CG	2.32	0.42
44:l7:222:HIS:ND1	44:l7:224:ILE:HG13	2.35	0.42
45:l8:95:ASN:CG	45:l8:98:ARG:HH12	2.23	0.42
45:l8:187:GLY:HA2	45:l8:195:SER:HB2	2.00	0.42
48:m1:17:LEU:HB3	48:m1:76:ALA:HB1	2.02	0.42
50:m4:134:ALA:O	50:m4:136:ALA:N	2.52	0.42
55:m9:81:ARG:HG2	55:m9:88:ARG:NH2	2.35	0.42
60:n4:91:LYS:O	60:n4:95:SER:HB2	2.18	0.42
68:o2:89:THR:H	68:o2:89:THR:HG22	1.60	0.42
74:o8:44:LYS:HA	74:o8:53:THR:HA	2.01	0.42
78:q2:73:GLU:HG3	78:q2:80:ARG:HG2	2.01	0.42
1:2:252:U:H2'	1:2:253:A:C8	2.54	0.42
1:2:523:G:H5''	26:D4:59:GLY:O	2.20	0.42
1:2:690:G:C2	1:2:691:C:C2	3.08	0.42
1:2:749:U:H3	1:2:800:U:H3	1.68	0.42
1:2:1211:A:H1'	17:C5:99:GLY:O	2.19	0.42
3:S1:35:PRO:O	3:S1:41:ARG:HG2	2.19	0.42
3:S1:133:TYR:CE1	3:S1:220:GLN:HB3	2.55	0.42
4:S2:140:ARG:CZ	23:D1:1:MET:SD	3.08	0.42
11:S9:37:LYS:HA	32:E0:33:ARG:HA	2.01	0.42
11:S9:88:GLU:O	11:S9:91:LYS:HB2	2.20	0.42
13:C1:53:TYR:CD1	13:C1:53:TYR:C	2.98	0.42
13:C1:75:VAL:HB	13:C1:121:ASP:O	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:C4:32:ASP:O	16:C4:35:GLY:N	2.51	0.42
16:C4:42:VAL:HA	16:C4:46:MET:SD	2.59	0.42
22:D0:42:VAL:HG13	22:D0:52:LYS:NZ	2.35	0.42
24:D2:103:ILE:CD1	24:D2:126:LEU:HD12	2.50	0.42
26:D4:105:ARG:O	26:D4:109:LYS:HG3	2.19	0.42
28:D6:87:ARG:NH2	28:D6:94:ASN:O	2.52	0.42
29:D7:50:ALA:HB1	29:D7:52:THR:O	2.19	0.42
34:SR:112:SER:CB	34:SR:153:GLN:HA	2.50	0.42
35:SM:47:ALA:HA	36:1:2678:A:H5'	2.02	0.42
36:1:718:G:N1	36:1:721:G:H1'	2.35	0.42
36:1:745:C:H2'	36:1:746:A:C8	2.55	0.42
36:1:781:G:O6	89:1:3950:OHX:N5	2.53	0.42
36:1:1694:U:N3	36:1:1695:U:C4	2.87	0.42
36:1:3252:G:H2'	36:1:3253:G:C8	2.55	0.42
38:4:59:A:H5''	38:4:61:A:C8	2.55	0.42
39:L2:230:VAL:O	39:L2:233:GLN:HB2	2.20	0.42
40:L3:173:GLN:O	40:L3:174:LYS:HB2	2.20	0.42
41:L4:188:ARG:O	41:L4:193:LYS:HE3	2.19	0.42
42:L5:263:GLU:O	42:L5:266:ALA:HB3	2.19	0.42
43:L6:46:ARG:HG3	43:L6:47:PHE:CD1	2.54	0.42
45:L8:71:VAL:HA	45:L8:72:PRO:HD2	1.72	0.42
45:L8:79:GLN:O	45:L8:81:THR:HG22	2.20	0.42
49:M3:27:ASP:OD1	49:M3:31:LYS:HE2	2.20	0.42
50:M4:108:ARG:NH2	52:M6:196:ALA:O	2.53	0.42
54:M8:152:HIS:CD2	54:M8:152:HIS:N	2.88	0.42
57:N1:82:ASN:HA	65:N9:21:ILE:HD13	2.02	0.42
64:N8:65:GLN:H	64:N8:65:GLN:HG2	1.59	0.42
68:O2:103:LYS:O	68:O2:106:VAL:HG12	2.19	0.42
71:O5:84:LYS:HB3	71:O5:85:THR:H	1.63	0.42
1:6:386:G:H2'	1:6:387:A:C8	2.55	0.42
1:6:772:G:OP1	11:s9:7:THR:HG23	2.20	0.42
1:6:894:U:H2'	1:6:895:G:C8	2.54	0.42
1:6:1053:G:N7	89:6:2194:OHX:N4	2.67	0.42
1:6:1220:C:H5'	80:c0:52:LYS:HE2	2.02	0.42
2:s0:3:LEU:HA	2:s0:4:PRO:HD2	1.74	0.42
7:s5:62:VAL:HG13	7:s5:89:ILE:HG12	2.01	0.42
11:s9:49:LEU:CD2	11:s9:53:ARG:HG3	2.50	0.42
11:s9:132:ARG:HA	11:s9:132:ARG:HD2	1.91	0.42
13:c1:33:ARG:HD3	13:c1:49:ILE:O	2.20	0.42
15:c3:125:LEU:HD23	15:c3:125:LEU:HA	1.89	0.42
20:c8:28:ILE:O	20:c8:31:ALA:N	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:c8:28:ILE:HD11	20:c8:56:LYS:HB2	2.00	0.42
21:c9:101:ASN:O	21:c9:104:VAL:HB	2.19	0.42
22:d0:18:GLN:C	22:d0:96:PRO:HB3	2.45	0.42
25:d3:137:LYS:O	25:d3:138:GLU:HB2	2.20	0.42
34:sR:21:THR:HG23	34:sR:36:ALA:O	2.20	0.42
36:5:574:U:H2'	36:5:575:G:O4'	2.20	0.42
36:5:718:G:N7	36:5:721:G:H1'	2.34	0.42
36:5:811:U:H2'	36:5:812:G:C8	2.55	0.42
36:5:1580:A:HO2'	36:5:1581:C:P	2.41	0.42
36:5:1708:C:H2'	36:5:1709:C:C6	2.55	0.42
36:5:1803:C:H5'	70:o4:63:ALA:HB2	2.00	0.42
36:5:2984:C:H2'	36:5:2985:C:H6	1.84	0.42
36:5:3309:G:H2'	36:5:3310:A:C5'	2.50	0.42
39:l2:62:VAL:HB	39:l2:73:GLU:HA	2.01	0.42
43:l6:40:LEU:HB3	43:l6:84:VAL:CG1	2.49	0.42
43:l6:174:LEU:HD22	50:m4:117:ARG:CZ	2.50	0.42
44:l7:80:GLN:HG3	57:n1:136:ARG:HB3	2.01	0.42
49:m3:170:LEU:HD22	72:o6:9:ILE:CG2	2.50	0.42
50:m4:12:TRP:HB2	56:n0:151:PRO:HB3	2.01	0.42
50:m4:118:PHE:O	50:m4:121:MET:HB3	2.20	0.42
52:m6:98:ALA:HA	52:m6:101:ARG:NH1	2.34	0.42
53:m7:27:LYS:HE2	53:m7:63:PHE:CD1	2.55	0.42
63:n7:5:LEU:HD11	63:n7:30:ASP:OD1	2.20	0.42
64:n8:75:LEU:C	64:n8:77:LYS:N	2.77	0.42
66:o0:101:LEU:C	66:o0:103:THR:H	2.28	0.42
69:o3:44:TYR:HA	69:o3:47:LYS:HG3	2.02	0.42
79:q3:11:THR:CG2	79:q3:27:LYS:HB2	2.50	0.42
1:2:5:U:N3	1:2:20:G:C2	2.87	0.42
1:2:215:A:OP2	1:2:215:A:H8	2.03	0.42
1:2:735:C:O2'	1:2:736:C:H5''	2.20	0.42
1:2:901:G:C6	1:2:902:G:C6	3.07	0.42
1:2:905:A:H4'	16:C4:52:ARG:NH1	2.34	0.42
1:2:976:G:C6	1:2:1023:A:C4	3.08	0.42
1:2:1467:C:O2'	21:C9:90:PRO:HD3	2.20	0.42
1:2:1498:G:H5''	21:C9:72:GLY:HA3	2.01	0.42
3:S1:71:ALA:HB2	3:S1:79:HIS:C	2.45	0.42
4:S2:115:ILE:HD13	4:S2:208:GLU:HG2	2.01	0.42
5:S3:6:SER:O	5:S3:10:LYS:HB2	2.20	0.42
6:S4:43:PRO:HA	6:S4:82:TYR:O	2.20	0.42
7:S5:48:PHE:CG	7:S5:67:PRO:HB3	2.55	0.42
7:S5:92:ARG:HB3	7:S5:172:ILE:HD13	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:164:PRO:O	7:S5:167:ARG:HB2	2.20	0.42
9:S7:142:TYR:HE1	24:D2:39:GLN:NE2	2.18	0.42
11:S9:97:LEU:HD23	11:S9:97:LEU:HA	1.79	0.42
11:S9:149:ARG:C	11:S9:151:ASP:H	2.27	0.42
13:C1:112:SER:HA	13:C1:113:PRO:HD2	1.66	0.42
18:C6:43:ILE:H	18:C6:43:ILE:HD13	1.85	0.42
28:D6:9:GLY:O	28:D6:10:ARG:HG3	2.20	0.42
34:SR:162:ALA:O	34:SR:163:ASP:HB3	2.20	0.42
36:1:373:A:H62	36:1:396:A:N6	2.18	0.42
36:1:499:G:H2'	36:1:500:C:C6	2.54	0.42
36:1:860:G:H5'	36:1:861:C:H5'	2.01	0.42
36:1:1331:U:OP2	36:1:1332:A:N6	2.48	0.42
36:1:1566:A:H2'	36:1:1567:U:H5''	2.02	0.42
36:1:1674:G:C2	36:1:1774:C:N3	2.88	0.42
36:1:2296:A:H2	36:1:2918:G:N3	2.18	0.42
36:1:2799:A:H5''	36:1:2800:G:O5'	2.20	0.42
36:1:3133:C:H2'	36:1:3134:A:O4'	2.20	0.42
36:1:3165:A:H2'	36:1:3166:C:C6	2.55	0.42
36:1:3279:A:C6	36:1:3280:U:C4	3.08	0.42
36:1:3295:A:OP2	40:L3:126:LYS:N	2.42	0.42
37:3:36:C:H2'	37:3:37:G:C8	2.55	0.42
38:4:23:U:P	62:N6:16:ARG:HH21	2.43	0.42
40:L3:53:MET:HE2	40:L3:77:THR:CG2	2.49	0.42
41:L4:48:GLN:HE21	41:L4:48:GLN:HB3	1.62	0.42
41:L4:193:LYS:HE3	41:L4:193:LYS:HB2	1.70	0.42
42:L5:238:ASP:HA	42:L5:241:THR:HB	2.01	0.42
43:L6:142:ASP:O	43:L6:143:LYS:C	2.61	0.42
43:L6:148:GLU:O	43:L6:151:LYS:HB2	2.20	0.42
44:L7:175:LYS:HE2	44:L7:175:LYS:HB2	1.71	0.42
45:L8:94:PHE:HB3	45:L8:189:LEU:CD1	2.49	0.42
45:L8:101:THR:N	45:L8:104:GLU:OE2	2.49	0.42
48:M1:150:ASN:O	48:M1:152:HIS:N	2.53	0.42
49:M3:6:ASN:O	54:M8:164:ARG:HD2	2.20	0.42
50:M4:24:LYS:HG3	50:M4:25:LYS:HG2	2.01	0.42
50:M4:121:MET:O	50:M4:125:LYS:HG2	2.19	0.42
52:M6:193:GLN:O	52:M6:196:ALA:HB3	2.20	0.42
57:N1:146:ASN:C	57:N1:146:ASN:HD22	2.26	0.42
64:N8:7:LYS:HA	64:N8:7:LYS:HD2	1.77	0.42
64:N8:90:TYR:CD1	64:N8:100:PRO:HG3	2.54	0.42
1:6:55:A:N6	1:6:403:G:H1'	2.34	0.42
1:6:715:U:H2'	1:6:716:C:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1160:A:H2'	1:6:1161:C:H6	1.77	0.42
1:6:1215:C:H2'	1:6:1216:C:C6	2.54	0.42
1:6:1376:C:O2'	1:6:1377:U:H5'	2.19	0.42
1:6:1594:G:C6	1:6:1595:U:N3	2.88	0.42
1:6:1655:A:N1	36:5:2291:A:O2'	2.47	0.42
4:s2:99:LYS:HB2	4:s2:117:THR:HB	2.02	0.42
8:s6:189:HIS:CE1	8:s6:193:LEU:HD12	2.55	0.42
11:s9:36:LEU:HD23	11:s9:36:LEU:HA	1.83	0.42
14:c2:131:ASP:OD1	14:c2:133:LEU:HD12	2.20	0.42
20:c8:134:ARG:O	20:c8:136:GLN:N	2.48	0.42
21:c9:65:ILE:HG12	21:c9:71:VAL:HG13	2.01	0.42
22:d0:26:LEU:HD23	22:d0:114:VAL:HA	2.01	0.42
23:d1:15:ARG:NH1	23:d1:33:GLN:OE1	2.53	0.42
23:d1:64:GLU:OE2	29:d7:2:VAL:HG13	2.19	0.42
24:d2:56:HIS:C	24:d2:57:ARG:HG3	2.45	0.42
27:d5:46:LYS:O	27:d5:50:ILE:HG13	2.20	0.42
82:e1:123:ASN:HA	82:e1:124:PRO:HD2	1.80	0.42
36:5:434:U:H2'	36:5:435:C:C6	2.55	0.42
36:5:534:U:OP1	56:n0:132:THR:OG1	2.30	0.42
36:5:802:C:O2'	36:5:803:C:H5'	2.20	0.42
36:5:1049:C:H2'	36:5:1050:U:C6	2.55	0.42
36:5:1203:A:H5'	37:7:90:U:N3	2.35	0.42
36:5:1488:G:O2'	70:o4:10:ARG:O	2.38	0.42
36:5:1576:G:H5'	36:5:1577:G:OP2	2.19	0.42
36:5:1616:U:H4'	70:o4:60:ARG:HH21	1.84	0.42
36:5:1668:G:H4'	70:o4:22:VAL:HG12	2.02	0.42
36:5:2313:A:O4'	36:5:2315:G:C8	2.73	0.42
36:5:2372:A:H4'	36:5:2373:A:OP2	2.19	0.42
36:5:2572:C:O2'	36:5:2573:G:P	2.78	0.42
36:5:2900:A:H2'	36:5:2901:G:O5'	2.20	0.42
36:5:2997:G:O4'	36:5:3396:U:H5'	2.19	0.42
36:5:3163:A:C6	36:5:3288:G:O6	2.73	0.42
36:5:3316:A:H5''	36:5:3318:G:H22	1.84	0.42
37:7:60:G:N2	42:l5:274:GLN:OE1	2.46	0.42
37:7:92:A:C5	37:7:93:C:H1'	2.55	0.42
38:8:104:A:C8	38:8:105:A:C8	3.08	0.42
40:l3:21:ARG:HD3	40:l3:269:GLN:OE1	2.20	0.42
40:l3:258:ALA:O	40:l3:259:HIS:CD2	2.73	0.42
40:l3:347:SER:HB2	40:l3:350:ALA:HB2	2.01	0.42
40:l3:361:THR:HG22	40:l3:371:GLN:OE1	2.20	0.42
45:l8:29:SER:O	45:l8:31:PRO:HD3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:l8:224:ASP:N	45:l8:224:ASP:OD1	2.50	0.42
47:m0:169:LYS:HD3	57:n1:158:THR:O	2.19	0.42
55:m9:25:ASP:HB3	55:m9:28:GLU:HB2	2.01	0.42
56:n0:141:LYS:HE3	56:n0:141:LYS:HB3	1.89	0.42
57:n1:139:ARG:HH21	57:n1:139:ARG:CG	2.33	0.42
58:n2:43:VAL:C	58:n2:45:GLY:H	2.28	0.42
70:o4:78:GLY:O	70:o4:80:ARG:N	2.53	0.42
84:p0:6:GLU:O	84:p0:10:GLU:HG3	2.20	0.42
1:2:260:U:H3'	1:2:261:U:C5'	2.50	0.42
1:2:598:U:H2'	1:2:599:A:C8	2.55	0.42
1:2:851:U:H2'	1:2:852:C:C5	2.54	0.42
1:2:871:G:O2'	29:D7:66:PRO:HB2	2.20	0.42
1:2:888:U:H1'	16:C4:126:THR:HG21	2.01	0.42
1:2:1003:A:H1'	1:2:1005:A:N7	2.35	0.42
1:2:1032:G:C6	1:2:1033:C:C4	3.08	0.42
1:2:1033:C:H2'	1:2:1034:C:H6	1.85	0.42
1:2:1067:C:H2'	1:2:1068:C:C6	2.52	0.42
1:2:1492:A:N3	1:2:1493:A:C8	2.88	0.42
1:2:1537:C:C4	89:2:2154:OHX:N3	2.88	0.42
4:S2:53:ILE:HG12	4:S2:72:LEU:HB3	2.01	0.42
4:S2:77:GLN:HG3	4:S2:105:GLY:O	2.20	0.42
4:S2:108:ASN:HA	4:S2:141:ARG:NH1	2.35	0.42
4:S2:132:ALA:O	4:S2:135:SER:OG	2.38	0.42
6:S4:128:LYS:HE2	6:S4:128:LYS:HB3	1.73	0.42
7:S5:87:CYS:HA	7:S5:88:PRO:HD2	1.73	0.42
8:S6:33:GLY:HA2	8:S6:51:LYS:HE2	2.02	0.42
9:S7:48:GLU:OE2	9:S7:88:ARG:NH2	2.51	0.42
9:S7:157:LYS:C	9:S7:159:VAL:H	2.28	0.42
11:S9:57:ARG:O	11:S9:61:THR:HG22	2.20	0.42
12:C0:14:TYR:CD2	12:C0:35:ILE:HD11	2.54	0.42
13:C1:7:VAL:HG13	13:C1:8:GLN:H	1.85	0.42
15:C3:27:LYS:HB2	15:C3:28:LEU:H	1.62	0.42
18:C6:11:GLY:HA2	18:C6:83:GLN:NE2	2.35	0.42
18:C6:50:GLU:O	18:C6:54:LEU:HB2	2.19	0.42
20:C8:28:ILE:HA	20:C8:31:ALA:HB3	2.01	0.42
26:D4:3:ASP:C	26:D4:5:VAL:H	2.25	0.42
28:D6:79:ILE:HA	28:D6:84:VAL:CB	2.48	0.42
33:E1:127:GLY:C	33:E1:129:GLY:H	2.28	0.42
35:SM:85:SER:C	35:SM:87:THR:H	2.28	0.42
36:1:99:A:H5'	51:M5:194:GLN:NE2	2.35	0.42
36:1:155:G:H1'	72:O6:26:ILE:CD1	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1191:U:C2	52:M6:48:PHE:CE1	3.08	0.42
36:1:1216:C:H6	36:1:1216:C:C5'	2.33	0.42
36:1:1472:U:H5'	55:M9:4:LEU:HB2	2.01	0.42
36:1:2111:G:C8	60:N4:49:ILE:HD13	2.55	0.42
36:1:2856:G:H2'	36:1:2857:C:H6	1.84	0.42
37:3:10:C:OP2	57:N1:26:HIS:CD2	2.73	0.42
38:4:23:U:O4'	62:N6:17:LYS:HG2	2.20	0.42
38:4:120:C:H2'	38:4:121:U:O4'	2.20	0.42
40:L3:283:TYR:CB	40:L3:323:MET:HE2	2.49	0.42
45:L8:82:LEU:HD12	45:L8:83:ASP:N	2.35	0.42
46:L9:94:TYR:CD2	46:L9:98:PRO:HA	2.55	0.42
48:M1:117:ASP:OD2	48:M1:119:SER:HB3	2.19	0.42
48:M1:137:ARG:O	48:M1:138:VAL:C	2.61	0.42
53:M7:109:ALA:HA	53:M7:112:LEU:HD22	2.02	0.42
62:N6:63:LYS:C	62:N6:66:GLN:HG3	2.44	0.42
63:N7:44:ALA:HB1	63:N7:114:VAL:HG11	2.02	0.42
67:O1:59:ILE:C	67:O1:61:LYS:H	2.28	0.42
71:O5:21:LEU:O	71:O5:25:LYS:HG3	2.20	0.42
73:O7:19:CYS:SG	73:O7:34:CYS:HB2	2.60	0.42
1:6:123:G:H21	6:s4:146:THR:HG21	1.84	0.42
1:6:1751:C:H2'	1:6:1752:U:O4'	2.20	0.42
2:s0:41:ARG:CB	2:s0:45:VAL:HG23	2.49	0.42
4:s2:163:GLY:O	4:s2:164:SER:HB3	2.20	0.42
5:s3:32:GLU:O	5:s3:54:ARG:HB2	2.20	0.42
6:s4:139:VAL:HG13	6:s4:150:PRO:CG	2.48	0.42
8:s6:67:VAL:HG23	8:s6:68:LEU:O	2.20	0.42
80:c0:1:MET:HE2	80:c0:41:TYR:CE1	2.54	0.42
14:c2:28:LEU:HD22	14:c2:32:LEU:HG	2.02	0.42
19:c7:6:THR:HG23	19:c7:9:VAL:HG23	2.00	0.42
26:d4:89:TYR:O	26:d4:92:VAL:HG23	2.20	0.42
28:d6:46:GLU:HG3	28:d6:47:ALA:N	2.35	0.42
29:d7:75:GLU:HB3	29:d7:76:GLY:H	1.63	0.42
36:5:94:G:H2'	36:5:95:A:C8	2.54	0.42
36:5:624:G:H2'	36:5:625:G:C8	2.53	0.42
36:5:797:U:O2'	36:5:798:G:H5'	2.20	0.42
36:5:1013:G:H2'	36:5:1014:U:O4'	2.20	0.42
36:5:1276:U:OP2	89:5:4009:OHX:N1	2.53	0.42
36:5:1313:G:H5'	52:m6:83:ALA:HB1	2.00	0.42
36:5:2158:A:O2'	39:l2:118:GLU:OE1	2.29	0.42
36:5:2366:C:H5'	40:l3:259:HIS:NE2	2.35	0.42
36:5:2762:A:H1'	36:5:2800:G:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3040:A:H5''	59:n3:12:ARG:HB2	2.01	0.42
36:5:3094:A:H2'	36:5:3095:U:C6	2.54	0.42
36:5:3132:C:H2'	36:5:3133:C:H6	1.84	0.42
36:5:3288:G:O2'	36:5:3289:G:OP2	2.32	0.42
36:5:3317:U:H4'	36:5:3318:G:O5'	2.20	0.42
89:5:4013:OHX:N4	89:5:4204:OHX:N2	2.68	0.42
38:8:4:C:H2'	38:8:5:U:H6	1.84	0.42
39:l2:144:ASN:ND2	39:l2:161:ASP:OD1	2.50	0.42
40:l3:240:ARG:C	40:l3:242:THR:H	2.27	0.42
42:l5:41:LYS:HD2	57:n1:93:VAL:HG11	2.01	0.42
43:l6:136:GLU:OE2	43:l6:136:GLU:HA	2.19	0.42
43:l6:155:LEU:HD23	43:l6:155:LEU:HA	1.86	0.42
45:l8:97:TYR:O	45:l8:132:VAL:HG13	2.20	0.42
45:l8:189:LEU:O	45:l8:190:VAL:HG23	2.19	0.42
48:m1:11:ASP:O	48:m1:12:LEU:HB3	2.20	0.42
49:m3:164:GLU:O	64:n8:139:ARG:NH1	2.53	0.42
50:m4:68:LEU:HA	50:m4:68:LEU:HD23	1.75	0.42
51:m5:7:LEU:HD12	51:m5:7:LEU:HA	1.82	0.42
52:m6:27:LEU:H	52:m6:27:LEU:HG	1.55	0.42
53:m7:132:ALA:O	53:m7:133:HIS:HB2	2.19	0.42
54:m8:54:LEU:HD23	54:m8:54:LEU:HA	1.81	0.42
58:n2:50:LEU:H	58:n2:50:LEU:HG	1.27	0.42
61:n5:132:ALA:O	61:n5:136:ALA:N	2.46	0.42
67:o1:43:HIS:C	67:o1:44:MET:HG3	2.45	0.42
1:2:158:U:H5'	1:2:158:U:H6	1.85	0.41
1:2:169:A:OP1	8:S6:137:ARG:NH2	2.53	0.41
1:2:558:U:HO2'	1:2:559:C:P	2.43	0.41
1:2:717:C:H42	1:2:720:G:N2	2.17	0.41
1:2:930:A:H5''	28:D6:70:LYS:HE2	2.00	0.41
1:2:1188:G:H5''	1:2:1189:A:OP2	2.19	0.41
1:2:1542:G:O2'	89:2:2102:OHX:N4	2.53	0.41
1:2:1636:C:C2	1:2:1638:G:C5	3.08	0.41
2:S0:185:ARG:CA	23:D1:45:ALA:H	2.33	0.41
3:S1:31:ASP:HA	3:S1:45:LYS:HA	2.01	0.41
7:S5:173:ALA:O	7:S5:177:ILE:HG13	2.20	0.41
10:S8:48:THR:CG2	10:S8:54:LYS:HB2	2.49	0.41
12:C0:18:GLU:C	12:C0:20:VAL:H	2.28	0.41
13:C1:98:ASN:C	13:C1:99:ARG:HG2	2.45	0.41
15:C3:83:GLU:H	15:C3:83:GLU:HG2	1.60	0.41
16:C4:26:THR:HG21	16:C4:97:GLY:CA	2.50	0.41
23:D1:5:LYS:H	23:D1:5:LYS:HG2	1.73	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1599:G:C5	36:1:1600:U:C5	3.07	0.41
36:1:1764:U:H5''	55:M9:43:LYS:NZ	2.34	0.41
36:1:2225:U:H2'	36:1:2226:U:C6	2.55	0.41
36:1:2927:C:H2'	36:1:2928:C:H6	1.85	0.41
36:1:2946:A:C5'	36:1:2947:G:H5'	2.50	0.41
36:1:3066:U:O4	89:1:4148:OHX:N5	2.53	0.41
37:3:64:A:H5'	37:3:65:G:H5''	2.02	0.41
39:L2:136:ILE:HA	39:L2:148:VAL:HG12	2.02	0.41
41:L4:281:ILE:HG22	54:M8:25:TYR:HB3	2.02	0.41
44:L7:89:ILE:HD13	44:L7:89:ILE:HA	1.62	0.41
45:L8:25:PRO:HB2	45:L8:26:LEU:H	1.56	0.41
48:M1:162:TRP:CZ2	48:M1:166:LYS:HD2	2.55	0.41
49:M3:116:LEU:HD23	49:M3:116:LEU:HA	1.68	0.41
49:M3:171:ARG:HA	49:M3:171:ARG:HD3	1.73	0.41
1:6:246:G:C6	1:6:247:A:C6	3.08	0.41
1:6:381:C:H5''	6:s4:10:LYS:HD3	2.02	0.41
1:6:448:C:H2'	1:6:449:C:C6	2.55	0.41
1:6:609:U:H4'	1:6:610:G:O5'	2.20	0.41
1:6:647:G:N2	1:6:687:G:N2	2.67	0.41
1:6:841:U:H2'	1:6:842:C:C6	2.55	0.41
1:6:1078:C:H2'	1:6:1079:U:C6	2.55	0.41
1:6:1078:C:H2'	1:6:1079:U:H6	1.85	0.41
1:6:1596:C:OP1	31:d9:16:LYS:HG2	2.20	0.41
89:6:2057:OHX:N1	89:6:2143:OHX:N4	2.68	0.41
3:s1:126:THR:HA	3:s1:136:ARG:HA	2.02	0.41
7:s5:56:ALA:HA	7:s5:59:VAL:HG23	2.01	0.41
11:s9:66:ASP:HA	11:s9:67:PRO:HD2	1.60	0.41
13:c1:36:LYS:O	13:c1:44:THR:HG21	2.19	0.41
14:c2:24:ILE:O	14:c2:26:ASP:N	2.44	0.41
17:c5:60:LEU:HD23	17:c5:60:LEU:HA	1.85	0.41
21:c9:23:GLN:HG3	21:c9:55:TYR:CE2	2.54	0.41
25:d3:23:ARG:HH11	25:d3:23:ARG:CG	2.26	0.41
34:sR:170:ILE:HD12	34:sR:211:ILE:HG23	2.02	0.41
36:5:137:G:N2	36:5:138:U:C2	2.88	0.41
36:5:247:C:N3	36:5:248:U:H1'	2.35	0.41
36:5:368:G:OP1	89:5:3926:OHX:N4	2.53	0.41
36:5:561:C:H2'	36:5:562:C:C6	2.55	0.41
36:5:685:G:P	49:m3:35:ARG:NH1	2.93	0.41
36:5:1345:G:N7	89:5:4068:OHX:N5	2.68	0.41
36:5:1807:G:H5'	63:n7:135:ARG:NH1	2.35	0.41
36:5:2689:A:H4'	36:5:2690:G:H5'	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2724:U:C4	36:5:2725:U:O4	2.73	0.41
36:5:2761:G:N7	78:q2:63:LYS:NZ	2.68	0.41
36:5:2836:C:O2	36:5:2836:C:O4'	2.38	0.41
36:5:2987:A:O2'	40:l3:259:HIS:HB3	2.20	0.41
36:5:3302:U:H3	36:5:3312:U:H3	1.67	0.41
89:8:219:OHX:N5	89:8:226:OHX:N3	2.68	0.41
40:l3:115:LYS:HE3	40:l3:129:ALA:HB3	2.01	0.41
42:l5:113:LEU:HD12	42:l5:113:LEU:HA	1.74	0.41
42:l5:148:ILE:HG23	42:l5:151:GLN:HB3	2.02	0.41
45:l8:203:VAL:HG13	45:l8:204:ARG:O	2.20	0.41
46:l9:106:LYS:HG3	46:l9:107:ASP:OD2	2.20	0.41
48:m1:85:LYS:HA	48:m1:89:TYR:CE2	2.55	0.41
53:m7:33:ALA:HB1	53:m7:117:ILE:HG12	2.01	0.41
58:n2:34:ALA:O	58:n2:38:ILE:HG13	2.20	0.41
62:n6:124:GLY:O	62:n6:126:LEU:N	2.52	0.41
63:n7:64:LYS:HB2	63:n7:64:LYS:HE2	1.90	0.41
74:o8:17:ARG:HB3	74:o8:20:VAL:CG2	2.46	0.41
84:p0:81:LYS:HD3	84:p0:82:GLY:H	1.85	0.41
1:2:140:A:O4'	8:S6:179:VAL:HG21	2.20	0.41
1:2:339:C:O2'	1:2:340:U:H5'	2.20	0.41
1:2:498:G:C4	1:2:499:U:N3	2.88	0.41
1:2:839:U:H5''	13:C1:28:SER:OG	2.19	0.41
1:2:872:G:H22	1:2:1047:G:H4'	1.85	0.41
1:2:872:G:H2'	1:2:873:U:O4'	2.20	0.41
1:2:1181:U:H2'	1:2:1182:U:O4'	2.20	0.41
10:S8:8:ARG:NH2	10:S8:21:PHE:HB3	2.34	0.41
10:S8:59:ARG:C	10:S8:60:ILE:HG12	2.44	0.41
15:C3:47:PRO:HG3	15:C3:75:LEU:HD22	2.02	0.41
18:C6:5:PRO:HG2	18:C6:24:ALA:CB	2.47	0.41
21:C9:116:ILE:H	21:C9:116:ILE:HG13	1.58	0.41
24:D2:103:ILE:HA	24:D2:112:ASP:HA	2.02	0.41
27:D5:49:ARG:HD3	27:D5:53:GLU:OE2	2.19	0.41
32:E0:50:VAL:HA	32:E0:53:LYS:O	2.20	0.41
36:1:181:U:H2'	36:1:182:U:O4'	2.20	0.41
36:1:343:U:O2	41:L4:95:ARG:HD2	2.20	0.41
36:1:534:U:O2	56:N0:146:LYS:HA	2.21	0.41
36:1:1599:G:C6	36:1:1600:U:C4	3.07	0.41
36:1:1645:U:C2'	36:1:1646:G:H5'	2.51	0.41
36:1:3199:G:H5''	50:M4:6:ILE:HG21	2.02	0.41
40:L3:183:LEU:HD12	40:L3:183:LEU:HA	1.96	0.41
42:L5:107:ARG:HA	42:L5:107:ARG:NE	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:89:THR:HG21	50:M4:115:PHE:CB	2.50	0.41
44:L7:150:LYS:HD3	44:L7:244:ASN:ND2	2.35	0.41
44:L7:229:PHE:CD1	44:L7:229:PHE:C	2.98	0.41
48:M1:49:LYS:NZ	78:Q2:101:GLY:O	2.53	0.41
49:M3:136:GLU:O	49:M3:136:GLU:HG3	2.16	0.41
54:M8:44:PHE:CD1	54:M8:139:ILE:HD11	2.56	0.41
55:M9:69:SER:HA	55:M9:72:GLU:HB2	2.02	0.41
55:M9:89:LEU:HD21	55:M9:94:VAL:HG22	2.02	0.41
59:N3:81:GLN:O	59:N3:82:ALA:CB	2.69	0.41
59:N3:86:ARG:HB2	59:N3:92:PHE:CE1	2.54	0.41
61:N5:27:ARG:H	61:N5:27:ARG:HG2	1.62	0.41
61:N5:87:SER:C	61:N5:89:LYS:H	2.28	0.41
62:N6:27:ARG:CZ	62:N6:78:PHE:CZ	3.03	0.41
68:O2:32:TRP:CE2	68:O2:53:PRO:HD2	2.55	0.41
68:O2:55:ILE:HD12	68:O2:55:ILE:HA	1.77	0.41
70:O4:8:ARG:HB2	70:O4:34:HIS:NE2	2.35	0.41
79:Q3:36:ARG:NH2	79:Q3:46:THR:HG22	2.35	0.41
1:6:142:G:C6	8:s6:177:ARG:NH2	2.88	0.41
1:6:525:A:C6	1:6:526:A:C6	3.08	0.41
1:6:976:G:O6	89:6:2077:OHX:N6	2.52	0.41
1:6:1185:U:C2	1:6:1458:G:N7	2.88	0.41
1:6:1606:C:H2'	1:6:1607:G:C8	2.55	0.41
1:6:1673:G:H8	1:6:1673:G:O5'	2.03	0.41
2:s0:9:LEU:O	2:s0:9:LEU:HD22	2.20	0.41
2:s0:184:LEU:HD12	23:d1:45:ALA:HB2	2.01	0.41
5:s3:90:ARG:HH21	5:s3:91:VAL:HG12	1.83	0.41
5:s3:170:THR:HG23	5:s3:187:LYS:HG3	2.01	0.41
6:s4:36:HIS:NE2	6:s4:88:ASP:OD1	2.40	0.41
10:s8:44:HIS:O	10:s8:56:ARG:N	2.51	0.41
15:c3:56:ASP:HA	29:d7:47:PHE:HB3	2.01	0.41
15:c3:89:TYR:CZ	15:c3:150:VAL:HG22	2.55	0.41
23:d1:56:SER:O	23:d1:60:ARG:HG3	2.20	0.41
29:d7:54:VAL:O	29:d7:63:LEU:HB2	2.21	0.41
36:5:253:A:O2'	36:5:254:A:H8	2.02	0.41
36:5:439:C:H1'	36:5:440:A:C8	2.54	0.41
36:5:662:U:H2'	36:5:663:C:C6	2.54	0.41
36:5:871:U:H2'	36:5:872:U:C6	2.55	0.41
36:5:980:A:N6	36:5:1102:A:C6	2.88	0.41
36:5:1013:G:C2	36:5:1014:U:H1'	2.56	0.41
36:5:1295:G:OP1	56:n0:84:ARG:HG3	2.21	0.41
36:5:1631:C:H5''	36:5:1632:A:C5'	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2573:G:OP1	63:n7:61:LYS:HE3	2.21	0.41
36:5:2724:U:O4	89:5:3961:OHX:N1	2.53	0.41
36:5:3287:U:H2'	36:5:3288:G:C5'	2.50	0.41
39:l2:20:THR:HG22	39:l2:23:ARG:CZ	2.50	0.41
39:l2:211:HIS:C	39:l2:213:GLY:N	2.76	0.41
40:l3:147:GLU:O	40:l3:150:ARG:HB3	2.20	0.41
40:l3:311:PHE:HE2	40:l3:317:ILE:HG13	1.84	0.41
41:l4:289:ILE:H	41:l4:289:ILE:HG12	1.69	0.41
44:l7:232:ARG:HG3	44:l7:235:PHE:HB2	2.01	0.41
47:m0:182:LEU:HD21	47:m0:185:ARG:NH1	2.34	0.41
53:m7:127:ARG:O	53:m7:139:TYR:N	2.52	0.41
56:n0:9:VAL:O	56:n0:26:ARG:HA	2.21	0.41
64:n8:104:THR:HG23	64:n8:126:LYS:O	2.20	0.41
74:o8:25:VAL:HB	74:o8:77:ARG:HD2	2.01	0.41
79:q3:70:THR:HG23	79:q3:71:VAL:N	2.35	0.41
1:2:767:U:C5	11:S9:143:ILE:HD12	2.55	0.41
1:2:1196:A:C8	1:2:1602:C:H4'	2.55	0.41
1:2:1206:U:H5''	1:2:1207:C:OP2	2.19	0.41
1:2:1540:G:C6	1:2:1541:G:C4	3.09	0.41
1:2:1657:U:C4	89:2:2089:OHX:N4	2.88	0.41
4:S2:36:VAL:O	4:S2:36:VAL:HG12	2.19	0.41
4:S2:148:LEU:O	23:D1:4:ASP:HB2	2.19	0.41
6:S4:88:ASP:HB2	6:S4:101:LEU:HD12	2.03	0.41
7:S5:149:VAL:O	7:S5:155:ALA:HB1	2.21	0.41
11:S9:163:PRO:C	11:S9:165:GLY:N	2.79	0.41
13:C1:54:ILE:HG22	13:C1:55:ASP:N	2.35	0.41
19:C7:33:ARG:NH2	34:SR:109:ASP:OD1	2.53	0.41
28:D6:4:LYS:O	28:D6:4:LYS:HG3	2.16	0.41
34:SR:57:PRO:O	34:SR:58:VAL:HG13	2.20	0.41
36:1:285:A:H3'	36:1:285:A:C8	2.54	0.41
36:1:310:U:H2'	36:1:311:C:O4'	2.20	0.41
36:1:503:C:OP1	43:L6:26:ARG:NH1	2.53	0.41
36:1:1316:C:C6	52:M6:130:LYS:HB2	2.55	0.41
36:1:1348:U:H4'	36:1:1349:G:OP1	2.19	0.41
36:1:1408:G:P	68:O2:33:ARG:HH22	2.42	0.41
36:1:2207:A:H2'	36:1:2208:A:C8	2.53	0.41
36:1:2273:G:H22	36:1:2311:G:H2'	1.84	0.41
36:1:2948:C:H2'	36:1:2949:U:O4'	2.20	0.41
36:1:3138:U:OP2	40:L3:30:LYS:HD3	2.20	0.41
38:4:79:A:H5''	71:O5:43:LYS:HZ2	1.84	0.41
40:L3:113:GLU:OE2	40:L3:167:ARG:HB3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:261:MET:HG2	52:M6:64:PHE:HA	2.01	0.41
41:L4:302:ALA:HB2	54:M8:39:ARG:CZ	2.50	0.41
42:L5:55:PHE:CD1	42:L5:60:ILE:HG12	2.55	0.41
47:M0:149:VAL:O	47:M0:152:LEU:N	2.53	0.41
48:M1:42:GLY:HA3	48:M1:75:LYS:HZ3	1.85	0.41
48:M1:117:ASP:O	48:M1:120:ILE:HG22	2.20	0.41
51:M5:135:VAL:HG13	51:M5:142:ILE:HG12	2.01	0.41
52:M6:181:ALA:C	52:M6:183:ALA:N	2.76	0.41
55:M9:154:ALA:O	55:M9:158:GLU:HG2	2.20	0.41
58:N2:20:SER:O	58:N2:23:THR:N	2.54	0.41
61:N5:105:VAL:HA	61:N5:130:TYR:CE2	2.55	0.41
63:N7:5:LEU:HD23	63:N7:5:LEU:HA	1.72	0.41
64:N8:46:ASP:OD1	64:N8:46:ASP:N	2.53	0.41
70:O4:81:CYS:O	70:O4:83:ASN:N	2.53	0.41
71:O5:10:ARG:HG2	71:O5:57:VAL:HG13	2.01	0.41
72:O6:97:SER:C	72:O6:99:ARG:N	2.78	0.41
78:Q2:65:THR:OG1	78:Q2:87:ARG:HD3	2.20	0.41
1:6:168:A:H2'	1:6:169:A:C8	2.55	0.41
2:s0:60:ALA:CB	2:s0:160:ILE:HD11	2.50	0.41
4:s2:150:GLN:HA	4:s2:151:PRO:HD3	1.74	0.41
13:c1:69:LYS:HB3	13:c1:71:LEU:HD21	2.02	0.41
21:c9:135:ILE:O	21:c9:139:THR:OG1	2.38	0.41
26:d4:109:LYS:O	26:d4:112:LYS:HB3	2.20	0.41
30:d8:8:THR:HB	30:d8:56:LEU:HB2	2.02	0.41
36:5:20:A:O2'	36:5:21:G:H5'	2.21	0.41
36:5:372:A:C6	36:5:373:A:C6	3.08	0.41
36:5:1152:G:N2	36:5:1200:A:H61	2.17	0.41
36:5:2179:C:H4'	36:5:2180:G:OP2	2.20	0.41
36:5:2204:C:H4'	36:5:2205:U:OP1	2.20	0.41
36:5:2206:G:O2'	36:5:2207:A:H5'	2.20	0.41
36:5:2591:A:O2'	36:5:2592:G:H5'	2.20	0.41
36:5:3279:A:N6	36:5:3280:U:C4	2.89	0.41
36:5:3287:U:H2'	36:5:3287:U:O2	2.20	0.41
36:5:3308:C:O2	53:m7:69:ARG:HD3	2.21	0.41
39:l2:19:HIS:CD2	39:l2:19:HIS:N	2.87	0.41
40:l3:205:VAL:C	40:l3:207:SER:N	2.79	0.41
41:l4:191:LYS:HD2	41:l4:194:TYR:OH	2.20	0.41
42:l5:131:LEU:HA	42:l5:131:LEU:HD13	1.57	0.41
43:l6:38:THR:HG23	43:l6:90:LYS:HG3	2.03	0.41
43:l6:82:ARG:HH11	43:l6:82:ARG:HD2	1.73	0.41
45:l8:108:ARG:HH11	45:l8:108:ARG:HD3	1.72	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:l9:37:ASN:OD1	46:l9:37:ASN:C	2.63	0.41
48:m1:95:ASN:O	48:m1:102:PHE:HA	2.19	0.41
51:m5:197:LEU:HA	51:m5:197:LEU:HD12	1.78	0.41
53:m7:136:ILE:HD13	53:m7:136:ILE:HG21	1.77	0.41
61:n5:46:TYR:OH	71:o5:78:LYS:HE3	2.21	0.41
62:n6:103:LYS:HA	62:n6:103:LYS:HD3	1.70	0.41
84:p0:4:ILE:HG12	84:p0:5:ARG:H	1.85	0.41
85:p1:34:UNK:C	85:p1:36:UNK:N	2.83	0.41
1:2:215:A:N6	1:2:242:U:H3'	2.36	0.41
1:2:1226:A:C2	14:C2:116:VAL:HG11	2.55	0.41
1:2:1487:A:H2	1:2:1495:C:O2'	2.03	0.41
1:2:1773:C:H2'	1:2:1774:G:H8	1.85	0.41
2:S0:202:TYR:N	2:S0:202:TYR:CD2	2.88	0.41
2:S0:203:PHE:N	2:S0:203:PHE:CD2	2.87	0.41
3:S1:184:LEU:O	3:S1:188:LEU:HG	2.21	0.41
8:S6:30:LYS:O	8:S6:102:VAL:HG23	2.21	0.41
13:C1:83:THR:HA	13:C1:111:VAL:HG12	2.03	0.41
21:C9:68:ARG:H	21:C9:68:ARG:HG2	1.63	0.41
34:SR:216:LYS:C	34:SR:218:GLY:H	2.28	0.41
36:1:155:G:H4'	36:1:156:G:H2'	2.03	0.41
36:1:660:A:H5'	41:L4:92:ASN:ND2	2.35	0.41
36:1:1597:C:C4'	36:1:1696:A:H1'	2.50	0.41
36:1:2395:G:H4'	40:L3:258:ALA:HB1	2.02	0.41
36:1:2523:A:N6	45:L8:57:ARG:HD2	2.35	0.41
36:1:3121:U:H1'	36:1:3122:A:H5''	2.02	0.41
36:1:3362:A:H2'	36:1:3363:U:O4'	2.20	0.41
89:1:3982:OHX:N6	89:1:4170:OHX:N4	2.67	0.41
39:L2:117:GLU:OE2	39:L2:120:PRO:HA	2.20	0.41
42:L5:21:ARG:C	42:L5:23:ARG:N	2.78	0.41
44:L7:101:LYS:HD3	44:L7:101:LYS:O	2.21	0.41
49:M3:47:ALA:HB1	49:M3:48:PRO:CD	2.49	0.41
69:O3:19:SER:O	69:O3:20:LYS:C	2.63	0.41
76:Q0:96:CYS:C	76:Q0:98:LYS:H	2.29	0.41
1:6:86:A:OP2	89:6:2186:OHX:N1	2.53	0.41
1:6:330:G:H2'	1:6:331:A:O4'	2.20	0.41
1:6:453:U:H3'	1:6:453:U:O2	2.21	0.41
1:6:583:C:OP1	89:6:2047:OHX:N6	2.54	0.41
1:6:900:A:OP1	16:c4:43:THR:OG1	2.26	0.41
1:6:1172:G:H21	21:c9:88:VAL:CG2	2.33	0.41
1:6:1251:U:H4'	82:e1:134:ASN:N	2.28	0.41
1:6:1511:U:H2'	1:6:1512:G:C8	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1620:C:O2'	1:6:1621:U:OP1	2.34	0.41
1:6:1711:C:H2'	1:6:1712:A:H5''	2.02	0.41
3:s1:113:MET:HE2	3:s1:142:PHE:HE2	1.85	0.41
3:s1:125:VAL:CG1	3:s1:173:THR:HG22	2.43	0.41
5:s3:133:GLY:HA2	5:s3:155:GLY:HA3	2.02	0.41
6:s4:92:LEU:HB2	6:s4:95:THR:CG2	2.51	0.41
6:s4:126:VAL:HG21	6:s4:155:LYS:O	2.21	0.41
6:s4:207:LEU:HA	6:s4:207:LEU:HD23	1.70	0.41
8:s6:214:LYS:HB2	8:s6:214:LYS:HE3	1.90	0.41
9:s7:152:VAL:C	9:s7:153:LEU:HD23	2.45	0.41
10:s8:42:ARG:CB	10:s8:59:ARG:HB2	2.48	0.41
15:c3:15:ALA:HB2	29:d7:20:LYS:CD	2.50	0.41
18:c6:6:SER:HA	18:c6:23:LYS:HA	2.01	0.41
18:c6:38:LEU:HD23	18:c6:38:LEU:HA	1.79	0.41
34:sR:21:THR:OG1	34:sR:69:GLN:O	2.38	0.41
36:5:22:G:O4'	38:8:104:A:H1'	2.20	0.41
36:5:529:A:H2'	36:5:530:G:O4'	2.20	0.41
36:5:541:U:O4	89:5:4015:OHX:N3	2.53	0.41
36:5:1073:U:H2'	36:5:1074:U:C6	2.55	0.41
36:5:1085:A:H5'	36:5:1086:C:OP2	2.20	0.41
36:5:1676:A:OP1	58:n2:13:LYS:NZ	2.53	0.41
36:5:1785:U:H2'	36:5:1786:G:C8	2.55	0.41
36:5:3053:G:H2'	36:5:3054:U:C6	2.55	0.41
36:5:3207:U:O2'	36:5:3208:G:H5'	2.19	0.41
89:5:3944:OHX:N5	89:5:4238:OHX:N3	2.67	0.41
89:8:219:OHX:N6	89:8:226:OHX:N3	2.68	0.41
40:l3:227:GLU:HB3	40:l3:232:ARG:HB2	2.02	0.41
40:l3:293:ASN:HB2	40:l3:305:ILE:N	2.35	0.41
42:l5:5:LYS:HA	42:l5:5:LYS:NZ	2.35	0.41
43:l6:159:LEU:HD23	43:l6:159:LEU:HA	1.81	0.41
45:l8:115:ALA:O	45:l8:119:GLY:N	2.52	0.41
46:l9:82:VAL:HG13	46:l9:82:VAL:O	2.20	0.41
48:m1:131:MET:HB3	48:m1:131:MET:HE3	1.76	0.41
83:m2:16:UNK:O	83:m2:61:UNK:N	2.53	0.41
55:m9:12:ALA:HB1	55:m9:17:VAL:O	2.20	0.41
58:n2:100:THR:O	58:n2:102:GLU:HG3	2.19	0.41
59:n3:12:ARG:HG3	59:n3:13:ILE:N	2.31	0.41
64:n8:74:ASN:CG	64:n8:115:LYS:HB3	2.45	0.41
72:o6:66:GLU:OE2	72:o6:91:ASN:ND2	2.53	0.41
74:o8:58:ASP:HB3	74:o8:61:LYS:HD3	2.03	0.41
75:o9:23:LEU:HD23	75:o9:24:PRO:HD2	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:46:A:N1	1:2:432:G:O2'	2.48	0.41
1:2:701:U:H3	1:2:737:A:N6	2.17	0.41
1:2:702:G:C6	1:2:737:A:N6	2.87	0.41
1:2:732:G:N3	1:2:732:G:H2'	2.36	0.41
1:2:1142:A:H2'	1:2:1143:A:C8	2.55	0.41
1:2:1524:A:C6	1:2:1525:A:C6	3.08	0.41
1:2:1597:A:OP2	31:D9:32:ARG:NH2	2.53	0.41
3:S1:41:ARG:O	3:S1:43:VAL:HG23	2.20	0.41
3:S1:105:PHE:HE1	3:S1:113:MET:HE1	1.86	0.41
5:S3:137:VAL:HB	5:S3:185:LYS:HB2	2.01	0.41
6:S4:252:ARG:HH11	11:S9:71:PHE:HA	1.85	0.41
7:S5:89:ILE:HD12	7:S5:90:ILE:N	2.36	0.41
7:S5:186:ASN:OD1	7:S5:188:LYS:HB2	2.21	0.41
10:S8:29:LEU:HD23	10:S8:29:LEU:C	2.45	0.41
15:C3:78:ASN:HB3	15:C3:80:LEU:HD23	2.02	0.41
16:C4:25:ASP:N	16:C4:55:SER:HB3	2.36	0.41
16:C4:92:LYS:HG2	28:D6:69:ASN:HD21	1.86	0.41
21:C9:16:ASN:HA	21:C9:56:LYS:NZ	2.35	0.41
25:D3:47:SER:HB2	25:D3:48:HIS:ND1	2.36	0.41
26:D4:20:ARG:C	26:D4:21:LYS:HD2	2.46	0.41
29:D7:31:TYR:CD2	29:D7:48:SER:HB3	2.56	0.41
34:SR:50:ASP:CB	34:SR:53:LYS:HG3	2.50	0.41
34:SR:201:THR:OG1	34:SR:242:SER:HA	2.20	0.41
34:SR:250:TYR:O	34:SR:251:TRP:HD1	2.03	0.41
36:1:8:C:H2'	36:1:9:U:O4'	2.21	0.41
36:1:30:G:P	51:M5:172:ARG:HE	2.44	0.41
36:1:225:C:H2'	36:1:226:C:C6	2.55	0.41
36:1:783:A:H5''	36:1:784:A:C5'	2.51	0.41
36:1:1598:G:OP2	70:O4:31:ARG:NH2	2.48	0.41
36:1:1613:A:OP2	74:O8:46:ARG:NH2	2.53	0.41
36:1:2261:G:H21	36:1:2262:A:N6	2.19	0.41
36:1:2659:G:N7	89:1:3888:OHX:N5	2.69	0.41
36:1:2789:U:OP1	54:M8:179:ARG:NH1	2.53	0.41
36:1:3227:A:O3'	50:M4:133:LYS:NZ	2.54	0.41
36:1:3251:U:H2'	36:1:3252:G:C8	2.56	0.41
40:L3:370:PHE:CD1	40:L3:376:LYS:HA	2.56	0.41
41:L4:84:ARG:O	41:L4:87:GLN:HG3	2.20	0.41
42:L5:55:PHE:CE1	42:L5:60:ILE:HG12	2.56	0.41
44:L7:149:TYR:OH	44:L7:182:ASP:OD1	2.37	0.41
47:M0:72:ALA:O	47:M0:76:MET:HG3	2.21	0.41
48:M1:59:ILE:CG2	48:M1:65:ILE:HD11	2.49	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:131:MET:HE3	48:M1:131:MET:HB3	1.84	0.41
53:M7:36:ILE:HG21	53:M7:36:ILE:HD13	1.76	0.41
53:M7:95:LEU:HD23	53:M7:95:LEU:HA	1.89	0.41
59:N3:2:SER:N	59:N3:57:MET:H	2.19	0.41
62:N6:3:LYS:HG3	62:N6:8:VAL:CG1	2.45	0.41
63:N7:82:PRO:HD2	66:O0:59:TYR:CZ	2.54	0.41
65:N9:23:LYS:CD	65:N9:24:PRO:HD3	2.50	0.41
66:O0:41:LEU:HD22	66:O0:42:ILE:H	1.84	0.41
67:O1:29:ALA:HB3	67:O1:30:PRO:HD3	2.03	0.41
70:O4:5:VAL:HG22	70:O4:6:THR:N	2.35	0.41
1:6:88:U:H4'	1:6:171:A:O4'	2.20	0.41
1:6:291:G:H2'	1:6:292:U:C6	2.55	0.41
1:6:905:A:C2	1:6:906:A:H1'	2.55	0.41
1:6:1079:U:H2'	1:6:1080:U:C6	2.56	0.41
1:6:1497:U:C2	1:6:1498:G:C8	3.08	0.41
1:6:1713:G:H8	1:6:1713:G:O5'	2.03	0.41
89:6:2057:OHX:N2	89:6:2143:OHX:N4	2.69	0.41
3:s1:72:ASP:OD1	16:c4:114:ARG:NH1	2.54	0.41
4:s2:203:LYS:O	4:s2:206:THR:HG23	2.21	0.41
7:s5:100:ASN:O	7:s5:101:GLY:C	2.63	0.41
10:s8:116:HIS:CE1	10:s8:146:ARG:HD3	2.55	0.41
11:s9:120:LYS:HE2	11:s9:120:LYS:O	2.20	0.41
11:s9:169:PRO:HG2	11:s9:174:ARG:HG3	2.02	0.41
80:c0:53:GLY:O	80:c0:54:TYR:HB2	2.21	0.41
14:c2:124:LYS:C	35:sM:169:ALA:HB2	2.45	0.41
19:c7:20:TYR:CD1	19:c7:38:ILE:HD12	2.55	0.41
27:d5:55:PRO:HG3	27:d5:88:ILE:CG2	2.50	0.41
31:d9:31:ILE:HD13	31:d9:31:ILE:HA	1.92	0.41
34:sR:239:GLU:O	34:sR:257:ALA:N	2.54	0.41
36:5:330:G:OP2	89:5:4051:OHX:N1	2.54	0.41
36:5:726:G:H5'	36:5:727:G:P	2.60	0.41
36:5:915:A:H8	36:5:2136:C:O2'	2.04	0.41
36:5:2201:G:H2'	36:5:2202:C:C6	2.55	0.41
36:5:3049:A:C5'	40:l3:53:MET:HB2	2.51	0.41
38:8:37:A:H5''	38:8:39:G:O4'	2.21	0.41
38:8:59:A:H5''	38:8:61:A:C8	2.55	0.41
39:l2:30:ARG:O	39:l2:123:ARG:HG2	2.20	0.41
40:l3:380:MET:HE2	40:l3:380:MET:HB3	1.60	0.41
41:l4:72:ALA:O	41:l4:76:ARG:NH1	2.53	0.41
41:l4:91:GLY:C	41:l4:93:MET:HE2	2.46	0.41
41:l4:181:VAL:HG11	41:l4:224:GLY:CA	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:l4:311:HIS:CE1	41:l4:314:LYS:HA	2.54	0.41
45:l8:41:GLN:CG	45:l8:44:ARG:HH12	2.33	0.41
49:m3:46:ILE:HG23	49:m3:46:ILE:HD12	1.79	0.41
52:m6:61:ALA:HA	52:m6:70:PRO:HD2	2.03	0.41
54:m8:81:VAL:HG22	54:m8:101:VAL:HG22	2.01	0.41
55:m9:122:VAL:O	55:m9:126:GLU:HB2	2.20	0.41
62:n6:115:ARG:HH11	62:n6:115:ARG:HG3	1.85	0.41
66:o0:30:THR:HG21	66:o0:89:VAL:HG22	2.03	0.41
68:o2:104:ASN:O	68:o2:108:ILE:HD12	2.20	0.41
1:2:226:A:H2'	1:2:226:A:N3	2.34	0.41
1:2:819:G:O6	1:2:853:G:C6	2.73	0.41
1:2:1357:A:C6	1:2:1358:G:C6	3.09	0.41
2:S0:30:GLN:HA	2:S0:149:LEU:O	2.21	0.41
2:S0:69:ASN:HB3	2:S0:71:GLU:OE1	2.21	0.41
3:S1:63:GLY:HA2	3:S1:88:VAL:O	2.20	0.41
3:S1:217:LEU:O	3:S1:218:LEU:HD22	2.20	0.41
6:S4:16:HIS:O	6:S4:18:TRP:N	2.54	0.41
6:S4:210:ILE:O	6:S4:217:THR:HA	2.20	0.41
10:S8:34:ALA:CB	10:S8:36:THR:HG22	2.51	0.41
11:S9:108:ARG:HH21	11:S9:145:SER:HB2	1.86	0.41
12:C0:50:THR:O	12:C0:53:GLY:N	2.53	0.41
24:D2:111:MET:SD	24:D2:115:GLU:HG2	2.60	0.41
27:D5:41:ILE:HG23	27:D5:42:LEU:N	2.33	0.41
28:D6:26:CYS:HB3	28:D6:77:CYS:SG	2.61	0.41
28:D6:64:LEU:HD22	28:D6:64:LEU:HA	1.87	0.41
28:D6:84:VAL:HG22	28:D6:85:ARG:N	2.34	0.41
34:SR:200:ASN:ND2	34:SR:215:GLY:HA2	2.35	0.41
36:1:73:C:C4	72:O6:15:LYS:HD3	2.56	0.41
36:1:138:U:H2'	36:1:139:G:H8	1.85	0.41
36:1:564:G:H2'	36:1:565:U:H6	1.83	0.41
36:1:1011:A:O4'	47:M0:194:GLY:HA2	2.21	0.41
36:1:1220:U:H4'	36:1:1222:G:C8	2.56	0.41
36:1:1464:G:O2'	89:1:3887:OHX:N4	2.54	0.41
36:1:1608:C:H2'	36:1:1609:C:C6	2.53	0.41
36:1:2119:A:O5'	36:1:2119:A:H8	2.04	0.41
36:1:2761:G:C4	36:1:2795:U:C5	3.08	0.41
36:1:2771:U:H2'	36:1:2772:C:O2	2.21	0.41
36:1:3306:U:O2	36:1:3306:U:O4'	2.38	0.41
38:4:79:A:O5'	38:4:79:A:H8	2.03	0.41
39:L2:177:LYS:HA	39:L2:178:PRO:HD2	1.88	0.41
40:L3:252:ILE:HD13	40:L3:252:ILE:HA	1.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:294:GLY:H	40:L3:304:THR:HA	1.86	0.41
40:L3:358:TRP:CZ2	40:L3:360:ASP:HA	2.56	0.41
42:L5:148:ILE:HD11	42:L5:160:PHE:CZ	2.55	0.41
44:L7:106:LEU:HA	44:L7:106:LEU:HD23	1.78	0.41
45:L8:73:PRO:HD3	45:L8:233:TRP:CD2	2.55	0.41
47:M0:19:LYS:HG3	47:M0:26:VAL:HG13	2.02	0.41
50:M4:53:VAL:HA	50:M4:54:PRO:HD3	1.65	0.41
58:N2:58:GLU:HA	58:N2:62:VAL:O	2.20	0.41
59:N3:33:ASN:HD21	59:N3:63:LYS:HB2	1.85	0.41
59:N3:45:ARG:HD2	59:N3:46:LEU:N	2.36	0.41
70:O4:99:LYS:O	70:O4:103:LYS:HG2	2.21	0.41
71:O5:101:THR:HG23	71:O5:104:GLN:H	1.85	0.41
73:O7:67:LEU:O	73:O7:68:LYS:C	2.63	0.41
1:6:151:G:N2	1:6:164:A:C4	2.88	0.41
1:6:219:A:N6	1:6:843:U:H1'	2.35	0.41
1:6:293:U:H2'	1:6:294:C:C6	2.55	0.41
1:6:861:U:H5''	1:6:862:A:OP2	2.21	0.41
1:6:1533:C:H4'	1:6:1539:G:C6	2.56	0.41
1:6:1664:C:H2'	1:6:1665:U:O4'	2.20	0.41
2:s0:167:LYS:HE3	2:s0:168:HIS:CD2	2.55	0.41
2:s0:202:TYR:CD2	2:s0:202:TYR:N	2.89	0.41
6:s4:246:LEU:HB2	6:s4:251:GLU:HG2	2.03	0.41
11:s9:171:ARG:HH11	11:s9:174:ARG:HB3	1.85	0.41
13:c1:75:VAL:CG1	13:c1:119:VAL:HA	2.49	0.41
24:d2:23:ARG:H	24:d2:24:GLN:NE2	2.19	0.41
82:e1:96:LYS:HG3	82:e1:97:LYS:N	2.35	0.41
34:sR:79:TYR:HB3	34:sR:91:LEU:HD11	2.03	0.41
36:5:244:G:C6	36:5:245:U:C4	3.09	0.41
36:5:316:U:H4'	36:5:317:A:H5'	2.01	0.41
36:5:540:U:C2	36:5:552:G:N2	2.89	0.41
36:5:1262:G:H5''	36:5:1263:A:OP2	2.20	0.41
36:5:1611:G:H2'	36:5:1612:A:C8	2.56	0.41
36:5:2239:G:N7	89:5:4196:OHX:N5	2.68	0.41
36:5:2397:A:H8	36:5:2941:A:N1	2.19	0.41
36:5:2816:G:C8	36:5:2869:U:H3'	2.56	0.41
36:5:2962:U:O5'	36:5:2962:U:H6	2.03	0.41
42:l5:95:TRP:HZ3	42:l5:156:GLY:C	2.28	0.41
44:l7:236:ILE:O	44:l7:240:VAL:HG23	2.20	0.41
46:l9:129:ARG:HB3	46:l9:132:VAL:CG1	2.51	0.41
48:m1:168:ASP:OD1	89:m1:202:OHX:N3	2.53	0.41
54:m8:178:ARG:HA	54:m8:178:ARG:HD2	1.47	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:m9:150:GLN:OE1	55:m9:153:LYS:HD2	2.20	0.41
56:n0:45:LEU:HD13	56:n0:45:LEU:HA	1.71	0.41
57:n1:95:HIS:O	57:n1:96:ILE:HD13	2.19	0.41
59:n3:10:LYS:NZ	59:n3:53:SER:OG	2.50	0.41
59:n3:16:GLY:O	59:n3:18:PRO:HD3	2.19	0.41
60:n4:87:LEU:O	60:n4:91:LYS:N	2.48	0.41
60:n4:97:LYS:O	60:n4:100:VAL:HG23	2.20	0.41
63:n7:135:ARG:HB3	63:n7:135:ARG:NH2	2.34	0.41
70:o4:20:ILE:HD13	70:o4:20:ILE:HG21	1.77	0.41
84:p0:4:ILE:HG12	84:p0:5:ARG:N	2.36	0.41
1:2:367:A:C6	1:2:368:U:C4	3.09	0.41
1:2:387:A:H5''	1:2:389:G:OP2	2.20	0.41
1:2:400:A:C4	10:S8:26:LYS:HB2	2.55	0.41
1:2:799:A:H5''	6:S4:201:HIS:NE2	2.35	0.41
1:2:869:A:H4'	15:C3:90:TYR:CE1	2.56	0.41
1:2:926:A:H2'	1:2:927:C:C6	2.55	0.41
1:2:1098:U:O3'	24:D2:71:LYS:NZ	2.46	0.41
1:2:1202:A:H2'	1:2:1203:A:H5''	2.02	0.41
1:2:1220:C:H42	1:2:1263:G:H1	1.69	0.41
1:2:1533:C:H4'	1:2:1539:G:H1	1.85	0.41
1:2:1612:U:H4'	7:S5:96:SER:OG	2.21	0.41
2:S0:182:LEU:CB	2:S0:188:LEU:HD23	2.48	0.41
3:S1:61:LEU:O	3:S1:63:GLY:N	2.54	0.41
3:S1:189:ILE:HB	3:S1:190:PRO:HD3	2.03	0.41
6:S4:131:LEU:HD22	6:S4:131:LEU:HA	1.86	0.41
8:S6:215:ARG:HD3	8:S6:215:ARG:HA	1.91	0.41
9:S7:168:SER:O	9:S7:171:ALA:N	2.54	0.41
11:S9:73:GLY:O	11:S9:77:ILE:HG13	2.20	0.41
18:C6:99:GLU:HB2	34:SR:58:VAL:C	2.46	0.41
20:C8:146:ALA:CB	35:SM:68:ARG:HH21	2.34	0.41
23:D1:11:LEU:HD12	23:D1:11:LEU:O	2.20	0.41
24:D2:86:ILE:H	24:D2:86:ILE:HG13	1.59	0.41
26:D4:35:VAL:O	26:D4:36:SER:HB3	2.21	0.41
30:D8:44:VAL:HG21	30:D8:48:VAL:HG23	2.03	0.41
34:SR:103:PHE:CE1	34:SR:138:GLY:HA2	2.56	0.41
34:SR:267:PRO:HG2	34:SR:269:TYR:CE1	2.56	0.41
36:1:668:G:H2'	36:1:669:U:H6	1.86	0.41
36:1:815:G:C2	36:1:906:A:C2	3.09	0.41
36:1:826:G:OP1	36:1:1590:G:H4'	2.20	0.41
36:1:852:U:O2'	36:1:853:G:H5'	2.21	0.41
36:1:955:U:H2'	36:1:956:U:C6	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:958:C:OP1	36:1:2799:A:H3'	2.21	0.41
36:1:978:G:O2'	36:1:979:U:O2	2.27	0.41
36:1:2192:C:O2'	36:1:2312:A:N1	2.46	0.41
36:1:2565:U:H2'	36:1:2566:C:C6	2.55	0.41
36:1:3219:G:H4'	36:1:3220:G:H5'	2.03	0.41
37:3:7:G:H5''	42:L5:22:ARG:HD3	2.03	0.41
38:4:140:G:H2'	38:4:141:C:O4'	2.20	0.41
39:L2:219:ILE:HG22	39:L2:221:LYS:O	2.21	0.41
40:L3:103:THR:HG21	40:L3:147:GLU:OE2	2.20	0.41
42:L5:286:VAL:O	42:L5:290:ILE:HG12	2.21	0.41
44:L7:105:LEU:HD23	44:L7:105:LEU:HA	1.67	0.41
45:L8:73:PRO:HD3	45:L8:233:TRP:CE2	2.55	0.41
47:M0:99:ILE:CG2	47:M0:123:HIS:HB2	2.50	0.41
49:M3:85:LEU:HD22	49:M3:120:GLN:OE1	2.20	0.41
50:M4:8:LYS:HB3	50:M4:9:ALA:H	1.39	0.41
55:M9:23:TRP:CZ3	55:M9:25:ASP:HB2	2.55	0.41
69:O3:26:ASN:O	69:O3:84:THR:HG22	2.21	0.41
72:O6:60:LEU:HD21	72:O6:68:ARG:HE	1.86	0.41
75:O9:9:ILE:HG23	75:O9:9:ILE:HD12	1.80	0.41
1:6:72:A:H2'	1:6:73:U:C1'	2.51	0.41
1:6:119:A:H1'	1:6:397:A:C4	2.56	0.41
1:6:1179:G:C6	1:6:1180:C:N3	2.88	0.41
1:6:1219:A:N3	80:c0:51:SER:OG	2.54	0.41
1:6:1240:U:H5'	1:6:1241:G:OP2	2.21	0.41
1:6:1329:A:H8	1:6:1329:A:O5'	2.03	0.41
1:6:1344:A:O2'	1:6:1345:A:OP1	2.33	0.41
2:s0:122:ILE:HG23	2:s0:144:ILE:HB	2.03	0.41
3:s1:222:LYS:O	3:s1:223:PHE:C	2.63	0.41
4:s2:120:GLU:OE2	5:s3:120:TYR:OH	2.30	0.41
5:s3:12:VAL:HA	22:d0:84:MET:HE1	2.02	0.41
6:s4:6:LYS:C	6:s4:7:LYS:HD2	2.46	0.41
8:s6:126:ASP:CG	8:s6:127:THR:N	2.78	0.41
16:c4:19:ILE:HA	16:c4:27:PHE:O	2.21	0.41
20:c8:108:LYS:O	20:c8:111:ASP:HB2	2.20	0.41
29:d7:44:THR:HB	29:d7:63:LEU:HD11	2.02	0.41
34:sR:131:ILE:HG23	34:sR:154:VAL:HG11	2.02	0.41
34:sR:256:THR:N	34:sR:259:GLY:O	2.54	0.41
36:5:65:A:H4'	36:5:66:A:O5'	2.21	0.41
36:5:498:A:O2'	36:5:3273:A:N1	2.49	0.41
36:5:683:U:H2'	36:5:684:G:O4'	2.20	0.41
36:5:703:G:O2'	36:5:787:G:H4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1095:U:N3	57:n1:127:GLN:HG2	2.35	0.41
36:5:1656:A:H4'	36:5:1657:C:O4'	2.21	0.41
36:5:2442:G:C2	36:5:2443:A:N7	2.88	0.41
36:5:2767:U:OP1	78:q2:33:ALA:HA	2.21	0.41
36:5:2944:U:H1'	40:l3:251:CYS:SG	2.61	0.41
36:5:3165:A:H61	36:5:3285:C:N4	2.19	0.41
36:5:3215:A:O5'	50:m4:121:MET:HE1	2.21	0.41
36:5:3253:G:N7	89:5:4242:OHX:N1	2.68	0.41
89:5:4004:OHX:N5	44:l7:217:PRO:HA	2.35	0.41
41:l4:4:PRO:O	41:l4:5:GLN:HB2	2.19	0.41
44:l7:223:PHE:HA	44:l7:227:GLY:HA2	2.03	0.41
45:l8:57:ARG:O	45:l8:61:GLN:HG3	2.21	0.41
45:l8:122:LYS:C	45:l8:124:ASP:H	2.29	0.41
46:l9:91:ARG:HD2	46:l9:91:ARG:HA	1.75	0.41
47:m0:193:ASP:CG	47:m0:194:GLY:H	2.29	0.41
48:m1:172:LEU:H	48:m1:172:LEU:HG	1.75	0.41
49:m3:157:ARG:HH12	64:n8:146:GLU:CD	2.28	0.41
51:m5:98:LEU:O	51:m5:101:THR:HB	2.20	0.41
51:m5:150:TRP:O	51:m5:153:ASP:HB2	2.20	0.41
59:n3:13:ILE:HG13	59:n3:14:SER:N	2.35	0.41
59:n3:94:TYR:CZ	60:n4:21:PHE:HB2	2.56	0.41
64:n8:62:HIS:O	64:n8:62:HIS:CG	2.73	0.41
69:o3:49:ILE:HD13	69:o3:49:ILE:HG21	1.74	0.41
70:o4:85:VAL:HA	70:o4:88:ARG:HB2	2.02	0.41
72:o6:68:ARG:O	72:o6:72:VAL:HG23	2.20	0.41
74:o8:12:LEU:HD21	74:o8:65:LEU:HD21	2.03	0.41
79:q3:6:LYS:HE2	79:q3:7:LYS:HE3	2.03	0.41
84:p0:40:GLU:HB2	84:p0:104:ARG:CG	2.50	0.41
84:p0:93:LEU:O	84:p0:97:LYS:HB3	2.21	0.41
1:2:66:U:O4	8:S6:134:GLY:N	2.45	0.41
1:2:113:U:O3'	1:2:114:C:H3'	2.20	0.41
1:2:600:U:OP2	25:D3:108:GLY:HA2	2.21	0.41
1:2:989:U:H2'	1:2:990:C:C6	2.55	0.41
1:2:1059:U:O2'	1:2:1060:U:N3	2.54	0.41
1:2:1390:U:O2	1:2:1412:G:H1'	2.20	0.41
2:S0:169:SER:O	2:S0:173:ILE:HG12	2.20	0.41
5:S3:136:VAL:HB	5:S3:152:PHE:HB2	2.02	0.41
10:S8:6:ASP:OD1	10:S8:8:ARG:N	2.54	0.41
24:D2:111:MET:HE3	24:D2:116:ALA:HA	2.02	0.41
26:D4:127:LYS:O	26:D4:131:ARG:HG2	2.20	0.41
28:D6:49:ALA:O	28:D6:53:LEU:HB2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:96:ALA:HA	28:D6:97:PRO:HD3	1.72	0.41
34:SR:23:LEU:HD23	34:SR:23:LEU:HA	1.87	0.41
34:SR:29:GLN:O	34:SR:31:ASN:N	2.54	0.41
34:SR:32:LEU:HD21	34:SR:94:VAL:HG11	2.02	0.41
34:SR:74:THR:HG21	34:SR:79:TYR:CD2	2.56	0.41
36:1:912:G:H8	36:1:912:G:O5'	2.03	0.41
36:1:1075:A:C6	65:N9:45:HIS:CE1	3.09	0.41
36:1:2784:G:H2'	36:1:2785:A:O4'	2.21	0.41
36:1:2802:A:C8	78:Q2:56:PRO:HA	2.55	0.41
89:1:3982:OHX:N6	89:1:4170:OHX:N2	2.69	0.41
39:L2:171:GLY:O	79:Q3:68:ALA:HB2	2.20	0.41
40:L3:74:GLU:OE2	40:L3:325:LYS:HE3	2.20	0.41
40:L3:252:ILE:HG23	40:L3:260:VAL:HG13	2.03	0.41
47:M0:178:ARG:H	47:M0:178:ARG:HG2	1.61	0.41
64:N8:74:ASN:OD1	64:N8:113:LEU:HB2	2.20	0.41
64:N8:125:VAL:HG21	64:N8:138:ILE:HD13	2.02	0.41
69:O3:51:TYR:CD2	69:O3:67:MET:HE3	2.56	0.41
75:O9:14:ALA:O	75:O9:16:ALA:N	2.54	0.41
76:Q0:112:LYS:HA	76:Q0:112:LYS:HD2	1.83	0.41
1:6:74:U:H3'	1:6:75:U:H3'	2.02	0.41
1:6:398:G:H8	1:6:398:G:O5'	2.03	0.41
1:6:1312:A:N7	19:c7:2:GLY:N	2.68	0.41
1:6:1595:U:H3'	1:6:1596:C:O2	2.21	0.41
1:6:1783:C:OP1	77:q1:1:MET:HA	2.20	0.41
7:s5:57:SER:CB	30:d8:53:ILE:HB	2.50	0.41
9:s7:102:PRO:HD3	9:s7:112:ARG:CD	2.50	0.41
10:s8:48:THR:OG1	10:s8:52:ASN:HB3	2.20	0.41
13:c1:21:ASN:ND2	13:c1:31:THR:HA	2.36	0.41
17:c5:15:HIS:CG	17:c5:16:SER:H	2.39	0.41
34:sR:183:LEU:HD12	34:sR:186:PHE:CD1	2.56	0.41
34:sR:296:ALA:C	34:sR:298:GLY:H	2.29	0.41
36:5:145:G:O5'	36:5:145:G:H8	2.03	0.41
36:5:290:G:H4'	51:m5:69:GLY:O	2.21	0.41
36:5:420:G:OP2	36:5:420:G:OP1	2.39	0.41
36:5:699:A:OP1	49:m3:68:LYS:HE3	2.21	0.41
36:5:1239:C:H3'	36:5:1240:A:C8	2.56	0.41
36:5:1369:A:H5''	64:n8:21:ARG:HD2	2.03	0.41
36:5:1429:G:C6	41:l4:99:MET:HE2	2.56	0.41
36:5:1602:A:O3'	55:m9:9:ARG:NH2	2.53	0.41
36:5:1668:G:H2'	36:5:1669:C:O4'	2.20	0.41
36:5:1757:A:H2'	36:5:1758:G:C8	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2115:G:H22	36:5:2120:A:H1'	1.85	0.41
36:5:2294:U:O2	36:5:2296:A:C8	2.74	0.41
36:5:2396:G:OP1	36:5:2397:A:H4'	2.21	0.41
36:5:2406:C:H2'	36:5:2407:C:C6	2.56	0.41
36:5:2550:U:H5	39:12:40:TYR:O	2.03	0.41
36:5:2584:G:H3'	36:5:2585:G:H4'	2.02	0.41
36:5:2656:A:H4'	78:q2:98:LYS:HD2	2.02	0.41
36:5:2885:C:C2'	36:5:2886:U:H5'	2.50	0.41
36:5:3107:U:P	76:q0:112:LYS:NZ	2.93	0.41
36:5:3302:U:C2	36:5:3313:U:C2	3.09	0.41
40:13:275:ARG:HH11	40:13:275:ARG:HD2	1.74	0.41
41:14:271:LYS:O	41:14:272:VAL:C	2.64	0.41
46:19:80:THR:O	46:19:84:LYS:N	2.44	0.41
55:m9:44:LEU:HA	55:m9:47:ASN:HB2	2.03	0.41
58:n2:95:PHE:HA	58:n2:105:LEU:HD12	2.03	0.41
84:p0:25:LEU:HD12	84:p0:26:PHE:N	2.36	0.41
1:2:608:U:H4'	1:2:610:G:O6	2.21	0.41
1:2:608:U:H5''	1:2:610:G:N7	2.35	0.41
1:2:610:G:N3	1:2:610:G:H2'	2.35	0.41
1:2:652:G:H1	1:2:682:C:N4	2.13	0.41
1:2:707:A:H2'	1:2:708:C:H5''	2.03	0.41
1:2:735:C:H2'	1:2:735:C:OP2	2.20	0.41
1:2:1064:G:H2'	1:2:1065:A:C8	2.55	0.41
1:2:1341:A:OP1	34:SR:63:GLY:HA2	2.21	0.41
1:2:1482:C:O2'	18:C6:72:GLY:O	2.38	0.41
1:2:1555:A:OP2	17:C5:47:ARG:NH2	2.54	0.41
2:S0:27:ARG:HA	2:S0:44:GLY:O	2.21	0.41
2:S0:35:PRO:C	2:S0:37:VAL:H	2.27	0.41
2:S0:71:GLU:HA	2:S0:95:ALA:N	2.35	0.41
3:S1:134:VAL:O	3:S1:218:LEU:HD22	2.21	0.41
4:S2:228:ASN:OD1	4:S2:229:LEU:N	2.54	0.41
7:S5:27:THR:HG22	18:C6:30:LYS:HE2	2.03	0.41
9:S7:35:LYS:O	9:S7:37:GLU:HG2	2.21	0.41
10:S8:66:SER:HA	10:S8:73:SER:HA	2.03	0.41
10:S8:76:THR:HB	10:S8:105:ASP:HB2	2.03	0.41
10:S8:85:PRO:HA	13:C1:11:ARG:HE	1.86	0.41
10:S8:107:THR:HA	10:S8:110:ARG:HB3	2.03	0.41
11:S9:31:ALA:HA	11:S9:36:LEU:CD1	2.50	0.41
12:C0:65:TYR:CD2	12:C0:65:TYR:N	2.89	0.41
14:C2:68:GLU:O	14:C2:70:ASN:N	2.54	0.41
14:C2:130:THR:HB	14:C2:131:ASP:H	1.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:79:TYR:HA	18:C6:82:ARG:HD3	2.03	0.41
19:C7:23:LYS:HB3	19:C7:34:LEU:HD11	2.02	0.41
20:C8:69:ILE:HG22	20:C8:73:MET:HE2	2.03	0.41
23:D1:60:ARG:HG2	23:D1:65:SER:OG	2.21	0.41
24:D2:104:LEU:HB2	24:D2:125:ILE:HA	2.02	0.41
25:D3:98:GLU:O	25:D3:99:ASN:HB2	2.20	0.41
26:D4:14:SER:C	26:D4:16:PRO:HD3	2.45	0.41
26:D4:45:ALA:HB1	26:D4:51:GLU:H	1.85	0.41
27:D5:39:ALA:HB1	27:D5:72:GLY:N	2.36	0.41
28:D6:85:ARG:HD3	28:D6:85:ARG:HA	1.90	0.41
33:E1:103:LEU:HD23	33:E1:103:LEU:HA	1.87	0.41
35:SM:99:LYS:O	35:SM:100:THR:HG22	2.21	0.41
36:1:14:U:H1'	61:N5:42:ARG:HD2	2.02	0.41
36:1:65:A:C4	36:1:110:G:N7	2.88	0.41
36:1:285:A:H3'	36:1:285:A:H8	1.85	0.41
36:1:285:A:C8	36:1:285:A:C3'	3.04	0.41
36:1:681:U:C2	41:L4:115:HIS:ND1	2.89	0.41
36:1:722:G:O6	89:1:4027:OHX:N6	2.53	0.41
36:1:1501:U:O5'	36:1:1501:U:H6	2.02	0.41
36:1:1543:G:OP1	51:M5:35:VAL:HG23	2.20	0.41
36:1:1543:G:P	51:M5:35:VAL:HG23	2.61	0.41
36:1:1658:G:H2'	36:1:1659:U:H6	1.85	0.41
36:1:1750:A:H4'	36:1:1751:G:H5'	2.03	0.41
36:1:1763:U:H5'	36:1:1764:U:OP2	2.20	0.41
36:1:1764:U:OP1	55:M9:43:LYS:NZ	2.46	0.41
36:1:1845:G:O2'	73:O7:5:THR:HB	2.21	0.41
36:1:2263:C:OP1	89:1:3997:OHX:N1	2.53	0.41
36:1:2615:G:H2'	36:1:2616:C:H6	1.84	0.41
36:1:2705:A:OP2	89:1:3877:OHX:N1	2.54	0.41
36:1:2822:U:H2'	36:1:2823:G:O4'	2.21	0.41
40:L3:347:SER:O	40:L3:349:LYS:N	2.51	0.41
45:L8:33:ASN:O	45:L8:39:ALA:HB3	2.21	0.41
45:L8:186:LEU:HD23	45:L8:186:LEU:HA	1.79	0.41
46:L9:92:TYR:OH	46:L9:101:VAL:HB	2.21	0.41
47:M0:55:ASN:ND2	47:M0:164:LYS:HE2	2.36	0.41
49:M3:131:LYS:NZ	49:M3:131:LYS:HB3	2.36	0.41
50:M4:47:ASP:CG	50:M4:55:ARG:HB2	2.46	0.41
50:M4:102:LYS:HB2	50:M4:102:LYS:HE3	1.79	0.41
53:M7:10:ASN:OD1	53:M7:12:ALA:HB3	2.20	0.41
59:N3:28:ASN:ND2	59:N3:112:SER:OG	2.40	0.41
59:N3:45:ARG:O	59:N3:46:LEU:C	2.63	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:N4:45:ASN:HA	60:N4:46:PRO:HD3	1.81	0.41
63:N7:17:ARG:C	63:N7:19:ALA:N	2.79	0.41
63:N7:52:LYS:H	63:N7:52:LYS:HG2	1.43	0.41
70:O4:91:ARG:O	70:O4:95:ILE:HG13	2.21	0.41
71:O5:83:LYS:O	71:O5:89:ARG:NE	2.54	0.41
78:Q2:28:TYR:HB3	78:Q2:69:VAL:HB	2.03	0.41
79:Q3:29:LEU:HD23	79:Q3:29:LEU:HA	1.81	0.41
1:6:99:C:H1'	1:6:100:A:N7	2.36	0.41
1:6:217:A:O2'	1:6:218:A:H8	2.03	0.41
1:6:248:U:H4'	13:c1:36:LYS:HD3	2.03	0.41
1:6:391:A:OP2	10:s8:23:LYS:NZ	2.40	0.41
1:6:517:U:H2'	1:6:518:A:O4'	2.20	0.41
1:6:578:U:H4'	1:6:579:A:H5'	2.03	0.41
1:6:839:U:H2'	1:6:840:U:H6	1.83	0.41
1:6:959:U:O2	15:c3:61:THR:HB	2.21	0.41
1:6:1001:A:N6	1:6:1002:G:O6	2.54	0.41
1:6:1054:U:H2'	1:6:1055:U:C6	2.54	0.41
1:6:1066:C:C2'	1:6:1067:C:H5'	2.51	0.41
1:6:1174:C:OP2	20:c8:141:THR:HG21	2.20	0.41
1:6:1214:U:OP1	1:6:1246:C:H1'	2.21	0.41
1:6:1235:C:H5'	82:e1:146:SER:HB3	2.02	0.41
1:6:1267:G:H2'	1:6:1268:G:H8	1.85	0.41
1:6:1333:C:C4'	5:s3:162:GLN:HG3	2.50	0.41
1:6:1489:U:C4	1:6:1513:G:C6	3.09	0.41
1:6:1556:A:P	17:c5:44:ARG:HE	2.44	0.41
1:6:1698:G:O2'	1:6:1699:G:O5'	2.34	0.41
1:6:1738:U:H2'	1:6:1739:C:C6	2.56	0.41
1:6:1793:G:N7	28:d6:34:LYS:NZ	2.69	0.41
2:s0:66:ALA:HB2	23:d1:37:ALA:HB2	2.01	0.41
2:s0:123:VAL:O	2:s0:145:ALA:HA	2.21	0.41
6:s4:9:LEU:HD12	6:s4:30:ARG:HA	2.03	0.41
6:s4:30:ARG:HA	6:s4:31:PRO:HD2	1.90	0.41
6:s4:126:VAL:HG23	6:s4:156:VAL:HA	2.02	0.41
6:s4:231:GLN:C	6:s4:233:LYS:H	2.28	0.41
6:s4:235:TYR:N	6:s4:235:TYR:CD2	2.89	0.41
6:s4:244:ILE:HD12	6:s4:244:ILE:HA	1.91	0.41
7:s5:20:PHE:CE1	7:s5:22:PRO:HA	2.56	0.41
9:s7:31:SER:O	9:s7:35:LYS:HB3	2.20	0.41
10:s8:194:ARG:HB3	10:s8:195:ARG:HH12	1.84	0.41
11:s9:39:LYS:HD3	11:s9:39:LYS:HA	1.92	0.41
11:s9:60:LEU:HA	11:s9:60:LEU:HD23	1.80	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
80:c0:56:LYS:N	80:c0:67:THR:O	2.48	0.41
18:c6:42:GLU:HG3	18:c6:43:ILE:HD13	2.02	0.41
20:c8:70:VAL:O	20:c8:74:GLN:HG2	2.20	0.41
20:c8:110:ARG:O	20:c8:114:GLU:HB2	2.21	0.41
26:d4:89:TYR:CE1	26:d4:93:ARG:NH1	2.88	0.41
28:d6:41:ILE:O	28:d6:42:ARG:HG2	2.20	0.41
29:d7:29:ARG:HA	29:d7:29:ARG:HD3	1.93	0.41
34:sR:282:SER:H	34:sR:285:ALA:HB3	1.86	0.41
36:5:242:C:H2'	36:5:243:G:H8	1.85	0.41
36:5:409:A:H2	36:5:1441:G:N3	2.19	0.41
36:5:421:G:C8	36:5:2365:C:C6	3.09	0.41
36:5:534:U:O3'	56:n0:146:LYS:HD2	2.21	0.41
36:5:608:A:C4	43:l6:22:ARG:NH1	2.88	0.41
36:5:671:U:H5''	54:m8:55:SER:CB	2.51	0.41
36:5:685:G:OP2	49:m3:35:ARG:NH1	2.54	0.41
36:5:887:G:H2'	36:5:888:A:O4'	2.21	0.41
36:5:1013:G:N2	36:5:1014:U:H1'	2.36	0.41
36:5:1024:G:N7	36:5:1027:A:N6	2.69	0.41
36:5:1307:G:H1'	36:5:1308:A:C5	2.56	0.41
36:5:1367:G:OP1	68:o2:45:ARG:NH2	2.54	0.41
36:5:1538:G:O5'	36:5:1538:G:H8	2.03	0.41
36:5:1560:G:O2'	36:5:1561:G:P	2.79	0.41
36:5:1654:A:N3	70:o4:59:PRO:HB3	2.36	0.41
36:5:1813:A:OP1	36:5:1817:G:H4'	2.21	0.41
36:5:1880:U:H2'	36:5:1881:A:O4'	2.20	0.41
36:5:1887:A:OP1	89:5:4117:OHX:N6	2.54	0.41
36:5:2542:U:O2'	36:5:2543:U:H3'	2.21	0.41
36:5:2876:C:H2'	36:5:2877:G:O4'	2.21	0.41
36:5:3309:G:H2'	36:5:3310:A:O5'	2.21	0.41
89:5:3981:OHX:N4	51:m5:204:LYS:O	2.54	0.41
89:5:4068:OHX:N5	89:5:4146:OHX:N2	2.68	0.41
37:7:44:C:C2'	37:7:45:A:H5'	2.51	0.41
37:7:87:G:O2'	56:n0:119:ARG:NH1	2.54	0.41
40:l3:187:SER:C	40:l3:189:SER:N	2.79	0.41
40:l3:206:ASP:OD2	40:l3:206:ASP:C	2.64	0.41
40:l3:347:SER:HB2	40:l3:350:ALA:CB	2.50	0.41
41:l4:139:GLY:O	41:l4:180:LYS:HE2	2.21	0.41
41:l4:177:ASP:O	41:l4:180:LYS:HB3	2.21	0.41
42:l5:21:ARG:O	42:l5:25:GLU:HG3	2.21	0.41
43:l6:97:ASN:O	43:l6:98:VAL:HB	2.20	0.41
43:l6:153:PRO:O	43:l6:154:LEU:HB2	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:l7:55:TYR:O	44:l7:56:GLU:C	2.63	0.41
44:l7:55:TYR:CE2	44:l7:141:TYR:CE2	3.09	0.41
45:l8:73:PRO:HG3	45:l8:233:TRP:CD1	2.56	0.41
45:l8:134:TYR:CE2	45:l8:190:VAL:HG13	2.56	0.41
47:m0:84:ALA:O	47:m0:140:THR:HG22	2.21	0.41
83:m2:125:UNK:C	83:m2:127:UNK:N	2.82	0.41
49:m3:25:HIS:CD2	51:m5:200:TRP:CD2	3.09	0.41
52:m6:108:ILE:HA	52:m6:109:PRO:HD2	1.74	0.41
52:m6:108:ILE:HG23	52:m6:160:ARG:NH1	2.36	0.41
56:n0:152:LEU:HD23	56:n0:152:LEU:HA	1.76	0.41
57:n1:139:ARG:CG	57:n1:139:ARG:NH2	2.83	0.41
60:n4:55:PHE:CD1	60:n4:55:PHE:C	2.99	0.41
60:n4:115:LYS:O	60:n4:119:GLU:HG3	2.21	0.41
63:n7:17:ARG:C	63:n7:19:ALA:H	2.29	0.41
69:o3:67:MET:HE1	69:o3:90:PRO:HD3	2.03	0.41
70:o4:65:VAL:CG1	70:o4:69:HIS:HB2	2.51	0.41
72:o6:74:LYS:HA	72:o6:83:ALA:HB2	2.02	0.41
74:o8:36:LYS:HA	74:o8:37:PRO:HD3	1.84	0.41
74:o8:61:LYS:H	74:o8:61:LYS:HG2	1.67	0.41
84:p0:29:GLY:N	84:p0:186:THR:O	2.35	0.41
84:p0:97:LYS:HG3	84:p0:98:ASN:N	2.35	0.41
1:2:69:G:C2	1:2:70:C:C2	3.09	0.41
1:2:224:C:C2	1:2:838:G:C2	3.09	0.41
1:2:517:U:H2'	1:2:518:A:O4'	2.20	0.41
1:2:778:G:H1	26:D4:10:ARG:CZ	2.34	0.41
1:2:795:U:C5	1:2:796:A:C8	3.08	0.41
2:S0:57:LEU:HG	2:S0:160:ILE:HD13	2.03	0.41
2:S0:59:LEU:HD12	2:S0:59:LEU:HA	1.68	0.41
2:S0:69:ASN:HB3	2:S0:71:GLU:CD	2.46	0.41
3:S1:207:LEU:HB3	3:S1:210:ILE:HD11	2.03	0.41
4:S2:245:ASP:OD1	4:S2:245:ASP:N	2.54	0.41
5:S3:89:GLU:O	5:S3:90:ARG:C	2.63	0.41
6:S4:5:PRO:HB2	6:S4:7:LYS:NZ	2.36	0.41
10:S8:58:LEU:O	10:S8:59:ARG:HB2	2.20	0.41
12:C0:56:LYS:HG3	12:C0:67:THR:HB	2.02	0.41
21:C9:126:GLU:CD	21:C9:126:GLU:N	2.79	0.41
25:D3:6:PRO:HG2	25:D3:15:LEU:HD21	2.03	0.41
28:D6:62:TYR:CG	28:D6:63:ALA:N	2.86	0.41
30:D8:38:ARG:NH1	30:D8:40:ILE:HD11	2.36	0.41
33:E1:135:HIS:HB2	33:E1:138:ARG:CB	2.51	0.41
35:SM:61:ILE:HD12	35:SM:62:ARG:N	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:83:U:H2'	36:1:84:U:O4'	2.20	0.41
36:1:198:A:C6	36:1:219:A:C6	3.09	0.41
36:1:352:A:N6	36:1:365:A:H5''	2.36	0.41
36:1:1077:U:O3'	42:L5:43:LYS:HD3	2.21	0.41
36:1:1156:C:OP2	44:L7:94:LYS:NZ	2.54	0.41
36:1:1334:U:H2'	36:1:1335:C:C6	2.56	0.41
36:1:1752:A:H2'	36:1:1753:G:O4'	2.21	0.41
36:1:1781:C:H2'	36:1:1782:U:C6	2.55	0.41
36:1:2316:G:C6	36:1:2317:A:C5	3.09	0.41
36:1:2853:A:O3'	47:M0:64:ALA:HB2	2.21	0.41
36:1:2911:A:H4'	36:1:2912:G:C8	2.56	0.41
89:1:3982:OHX:N5	89:1:4170:OHX:N1	2.68	0.41
38:4:104:A:H3'	38:4:105:A:C5'	2.51	0.41
41:L4:91:GLY:HA3	41:L4:93:MET:CE	2.51	0.41
41:L4:206:LEU:HB2	41:L4:246:ARG:CZ	2.51	0.41
42:L5:259:LYS:O	42:L5:260:PHE:HB2	2.21	0.41
44:L7:66:LYS:HG3	44:L7:76:TYR:CD2	2.56	0.41
44:L7:219:LYS:HB3	44:L7:219:LYS:HE2	1.92	0.41
53:M7:173:ARG:H	53:M7:173:ARG:HG3	1.71	0.41
56:N0:23:LYS:O	57:N1:146:ASN:ND2	2.37	0.41
61:N5:82:LEU:HD11	61:N5:135:ILE:HG21	2.02	0.41
62:N6:112:ASP:HB2	62:N6:115:ARG:HB2	2.03	0.41
63:N7:64:LYS:HD3	63:N7:64:LYS:HA	1.78	0.41
64:N8:112:ILE:HD12	64:N8:112:ILE:HG23	1.91	0.41
67:O1:11:GLU:HG2	67:O1:74:ARG:HB2	2.03	0.41
68:O2:29:ALA:HB1	68:O2:31:ASN:OD1	2.21	0.41
1:6:189:C:O2'	1:6:190:C:H5'	2.20	0.41
1:6:513:U:OP1	11:s9:133:HIS:NE2	2.54	0.41
1:6:765:G:N3	1:6:765:G:C2'	2.84	0.41
1:6:846:G:H21	13:c1:46:LYS:HE2	1.85	0.41
1:6:926:A:H2'	1:6:927:C:H6	1.85	0.41
1:6:1029:U:O2'	1:6:1030:A:H5'	2.21	0.41
1:6:1773:C:OP1	77:q1:3:ALA:HB3	2.21	0.41
2:s0:41:ARG:HH21	19:c7:103:ASP:CB	2.34	0.41
3:s1:55:LYS:HD3	3:s1:55:LYS:HA	1.62	0.41
3:s1:163:ALA:O	3:s1:167:VAL:HG23	2.21	0.41
5:s3:17:PHE:HE1	5:s3:77:PHE:CD2	2.39	0.41
5:s3:183:GLY:O	5:s3:184:ILE:HD13	2.21	0.41
7:s5:33:VAL:HG13	7:s5:37:GLN:CD	2.46	0.41
8:s6:54:GLY:C	8:s6:63:MET:HE3	2.46	0.41
8:s6:57:ASP:C	8:s6:59:GLN:N	2.79	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:s7:27:LEU:C	9:s7:29:ASN:N	2.79	0.41
9:s7:49:ILE:HD12	9:s7:172:VAL:HA	2.02	0.41
80:c0:44:LYS:HD3	80:c0:44:LYS:HA	1.90	0.41
16:c4:50:ALA:C	16:c4:52:ARG:N	2.76	0.41
18:c6:52:LEU:HA	18:c6:60:PHE:CE1	2.56	0.41
20:c8:119:ILE:HD12	20:c8:119:ILE:HA	1.74	0.41
23:d1:17:CYS:SG	23:d1:56:SER:HB3	2.61	0.41
27:d5:38:HIS:HA	27:d5:70:LYS:HG2	2.02	0.41
82:e1:80:ARG:HB2	82:e1:80:ARG:CZ	2.51	0.41
36:5:287:G:OP1	51:m5:179:LYS:HG2	2.21	0.41
36:5:643:U:O4	36:5:644:G:C6	2.74	0.41
36:5:784:A:C6	54:m8:93:ILE:HG23	2.56	0.41
36:5:850:U:H2'	36:5:851:C:C6	2.56	0.41
36:5:1066:G:C6	36:5:1067:U:C4	3.09	0.41
36:5:1354:G:C6	36:5:1358:C:H5'	2.55	0.41
36:5:1498:A:H2'	36:5:1499:C:C6	2.56	0.41
36:5:1796:G:H5''	39:l2:22:LEU:HD22	2.02	0.41
36:5:2111:G:H4'	36:5:2112:U:OP2	2.21	0.41
36:5:2631:U:H4'	36:5:2697:A:H2	1.86	0.41
36:5:3006:A:C2	36:5:3141:A:C4	3.08	0.41
36:5:3160:U:H2'	36:5:3161:C:C6	2.56	0.41
36:5:3164:C:H1'	36:5:3165:A:H5'	2.03	0.41
36:5:3215:A:H5'	50:m4:121:MET:HE1	2.02	0.41
36:5:3385:U:H2'	36:5:3386:G:O4'	2.21	0.41
40:l3:303:LYS:CD	40:l3:361:THR:HG21	2.51	0.41
46:l9:174:LYS:HA	46:l9:174:LYS:HD3	1.91	0.41
49:m3:57:VAL:HG12	49:m3:58:VAL:H	1.85	0.41
55:m9:35:ALA:O	55:m9:37:SER:N	2.53	0.41
62:n6:48:LEU:HD23	62:n6:48:LEU:HA	1.87	0.41
68:o2:25:TYR:HB2	68:o2:28:VAL:HG23	2.03	0.41
69:o3:85:PHE:O	69:o3:86:ARG:C	2.65	0.41
69:o3:100:ILE:N	69:o3:100:ILE:HD12	2.36	0.41
78:q2:99:GLN:OE1	78:q2:102:GLN:HG3	2.21	0.41
1:2:1:U:C4	11:S9:54:ARG:HG3	2.56	0.40
1:2:739:G:O6	89:2:2097:OHX:N4	2.55	0.40
1:2:906:A:C6	1:2:907:A:C6	3.09	0.40
1:2:1403:C:H2'	1:2:1404:C:C6	2.56	0.40
1:2:1472:C:H4'	1:2:1473:U:H5'	2.02	0.40
5:S3:175:VAL:HG13	5:S3:182:LEU:CD1	2.45	0.40
9:S7:170:GLN:HA	9:S7:181:ILE:CG2	2.51	0.40
11:S9:29:LYS:HA	32:E0:40:TYR:CE2	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:28:SER:OG	13:C1:28:SER:O	2.34	0.40
15:C3:22:ALA:HB1	15:C3:23:PRO:CA	2.52	0.40
15:C3:132:VAL:HG23	15:C3:134:VAL:CG1	2.51	0.40
16:C4:102:LEU:HD22	16:C4:102:LEU:HA	1.78	0.40
17:C5:14:THR:CB	17:C5:22:LEU:HB2	2.49	0.40
17:C5:53:PRO:O	17:C5:56:PHE:HB3	2.20	0.40
17:C5:81:ARG:HH12	17:C5:120:SER:HB3	1.85	0.40
18:C6:13:LYS:HD3	18:C6:14:LYS:N	2.35	0.40
25:D3:112:LYS:HA	25:D3:112:LYS:HD3	1.97	0.40
26:D4:84:LYS:HD2	26:D4:85:PHE:CE2	2.55	0.40
34:SR:71:CYS:HB3	34:SR:72:THR:H	1.35	0.40
34:SR:144:LEU:HA	34:SR:144:LEU:HD13	1.78	0.40
36:1:281:G:C6	36:1:282:G:C6	3.08	0.40
36:1:436:A:H2'	36:1:437:G:O4'	2.22	0.40
36:1:662:U:H2'	36:1:663:C:C6	2.56	0.40
36:1:743:C:O2	54:M8:141:ARG:HD3	2.22	0.40
36:1:745:C:H5''	54:M8:145:ASN:ND2	2.36	0.40
36:1:1299:U:H2'	36:1:1300:G:O4'	2.21	0.40
36:1:1404:G:C6	36:1:1408:G:C6	3.09	0.40
36:1:1734:G:N7	89:1:3924:OHX:N5	2.69	0.40
36:1:1841:A:H2	75:O9:45:ARG:HH12	1.67	0.40
36:1:1941:C:O2'	36:1:3344:A:N6	2.50	0.40
36:1:2301:U:H2'	36:1:2302:G:H8	1.86	0.40
36:1:2585:G:N3	38:4:151:C:H5	2.19	0.40
38:4:70:G:OP2	38:4:70:G:H8	2.03	0.40
40:L3:188:ILE:O	40:L3:191:LYS:HB2	2.21	0.40
40:L3:211:GLN:NE2	40:L3:284:ARG:HA	2.36	0.40
40:L3:299:ASP:O	40:L3:300:ARG:HB2	2.22	0.40
40:L3:305:ILE:H	40:L3:305:ILE:HG13	1.55	0.40
41:L4:104:LYS:HD2	41:L4:106:TRP:CZ2	2.56	0.40
42:L5:182:GLY:HA2	42:L5:194:LEU:HD13	2.03	0.40
44:L7:221:LYS:HB3	44:L7:227:GLY:HA3	2.03	0.40
47:M0:216:TYR:CD2	47:M0:217:PHE:N	2.89	0.40
49:M3:17:HIS:O	49:M3:20:GLU:HB2	2.21	0.40
53:M7:60:PHE:CE2	53:M7:82:ARG:HB2	2.56	0.40
55:M9:149:ALA:O	55:M9:152:GLU:HB3	2.22	0.40
56:N0:45:LEU:HD12	56:N0:51:VAL:HG21	2.02	0.40
63:N7:70:PRO:HD3	63:N7:115:LYS:HG3	2.03	0.40
70:O4:47:CYS:HB3	70:O4:84:CYS:SG	2.60	0.40
70:O4:103:LYS:O	70:O4:107:GLU:HB2	2.21	0.40
74:O8:70:PRO:HA	74:O8:71:PRO:HD3	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:61:A:C6	1:6:62:A:C6	3.10	0.40
1:6:469:C:H2'	1:6:470:A:H5''	2.03	0.40
1:6:780:A:H3'	1:6:781:U:H5'	2.02	0.40
1:6:829:A:HO2'	1:6:830:U:P	2.43	0.40
1:6:901:G:C2	1:6:902:G:O6	2.75	0.40
1:6:1545:A:H5''	20:c8:133:VAL:CG1	2.51	0.40
1:6:1558:U:C5	20:c8:122:HIS:CD2	3.09	0.40
1:6:1673:G:C6	1:6:1674:C:C4	3.09	0.40
6:s4:121:TYR:HA	6:s4:163:ASP:O	2.21	0.40
7:s5:90:ILE:HD12	7:s5:90:ILE:HG23	1.91	0.40
7:s5:113:ILE:HG21	7:s5:190:ILE:HB	2.03	0.40
7:s5:208:SER:O	7:s5:209:TYR:C	2.64	0.40
9:s7:9:LEU:HB3	9:s7:10:SER:H	1.34	0.40
13:c1:86:ILE:HD11	13:c1:125:VAL:HG11	2.03	0.40
15:c3:117:LEU:HD23	15:c3:117:LEU:HA	1.79	0.40
82:e1:121:CYS:HB2	82:e1:132:LEU:HD21	2.03	0.40
36:5:71:A:C2	36:5:313:A:H1'	2.56	0.40
36:5:75:G:O6	36:5:76:G:N1	2.54	0.40
36:5:221:A:N6	62:n6:103:LYS:NZ	2.69	0.40
36:5:1121:U:C4	36:5:1122:U:C4	3.09	0.40
36:5:1338:C:H2'	36:5:1339:C:H6	1.85	0.40
36:5:1456:A:H4'	36:5:1457:U:O5'	2.20	0.40
36:5:2194:G:H1'	36:5:2274:U:C2	2.56	0.40
36:5:2585:G:H2'	36:5:2585:G:N3	2.35	0.40
36:5:2726:C:O2	36:5:2726:C:O5'	2.38	0.40
36:5:2950:G:C5	36:5:2979:U:C4	3.09	0.40
36:5:3279:A:C2'	36:5:3280:U:H5'	2.51	0.40
36:5:3392:U:O2'	53:m7:75:GLU:OE2	2.32	0.40
38:8:1:A:C2	38:8:2:A:C4	3.09	0.40
39:l2:188:LYS:HD3	39:l2:192:LYS:HE3	2.03	0.40
40:l3:49:TYR:O	40:l3:80:ASP:N	2.54	0.40
46:l9:150:SER:HB3	46:l9:153:ASP:HB2	2.03	0.40
50:m4:82:SER:O	50:m4:83:LYS:C	2.64	0.40
52:m6:106:GLU:H	52:m6:106:GLU:HG2	1.40	0.40
53:m7:64:ASN:C	53:m7:67:ILE:HG12	2.46	0.40
54:m8:83:VAL:O	54:m8:85:GLY:N	2.48	0.40
1:2:187:G:H4'	1:2:188:A:OP1	2.21	0.40
1:2:633:U:O2'	1:2:1102:G:H4'	2.21	0.40
1:2:755:A:O2'	1:2:756:A:P	2.79	0.40
89:2:2036:OHX:N2	10:S8:17:LYS:O	2.53	0.40
2:S0:31:VAL:HG12	2:S0:33:GLN:H	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:193:GLN:C	2:S0:195:TRP:H	2.29	0.40
3:S1:30:PHE:CZ	3:S1:94:LYS:HA	2.55	0.40
3:S1:41:ARG:HH22	3:S1:232:HIS:HB3	1.87	0.40
3:S1:142:PHE:O	3:S1:207:LEU:HA	2.21	0.40
6:S4:102:VAL:HG23	6:S4:182:TYR:CE1	2.57	0.40
9:S7:13:PRO:HB3	9:S7:14:THR:HB	2.02	0.40
9:S7:35:LYS:C	9:S7:37:GLU:H	2.24	0.40
9:S7:39:ARG:N	9:S7:40:PRO:HD2	2.36	0.40
9:S7:51:VAL:HG11	9:S7:168:SER:OG	2.21	0.40
11:S9:29:LYS:O	11:S9:33:GLU:HB2	2.21	0.40
11:S9:86:LEU:HD12	11:S9:86:LEU:HA	1.88	0.40
12:C0:49:LEU:O	12:C0:54:TYR:HB2	2.21	0.40
14:C2:33:ARG:O	14:C2:37:VAL:HG23	2.22	0.40
19:C7:20:TYR:CD2	19:C7:38:ILE:HD11	2.56	0.40
22:D0:25:THR:CG2	22:D0:88:LYS:HD3	2.51	0.40
22:D0:67:THR:HG22	22:D0:68:ARG:N	2.36	0.40
24:D2:26:LEU:HD21	24:D2:60:LYS:HB3	2.02	0.40
25:D3:11:SER:O	25:D3:14:LYS:N	2.54	0.40
29:D7:36:LYS:HB3	29:D7:43:ILE:HG22	2.04	0.40
34:SR:202:LEU:HA	34:SR:212:ALA:O	2.21	0.40
35:SM:140:ASP:OD1	35:SM:140:ASP:N	2.54	0.40
36:1:22:G:H1'	38:4:104:A:N3	2.36	0.40
36:1:39:A:N6	36:1:42:C:OP2	2.54	0.40
36:1:126:U:H2'	36:1:127:G:O4'	2.20	0.40
36:1:199:A:C4	36:1:201:A:C8	3.09	0.40
36:1:890:C:O2'	36:1:2324:A:N3	2.46	0.40
36:1:1202:A:N6	36:1:1301:A:C4	2.89	0.40
36:1:1659:U:H2'	36:1:1660:C:C6	2.56	0.40
36:1:1939:G:C6	36:1:1940:G:C5	3.09	0.40
36:1:1949:G:H2'	36:1:1950:U:C6	2.56	0.40
36:1:2264:U:OP2	89:1:3997:OHX:N5	2.55	0.40
36:1:2853:A:H5'	47:M0:3:ARG:NH2	2.37	0.40
36:1:2941:A:N7	40:L3:255:TRP:CE2	2.89	0.40
36:1:3007:U:OP1	52:M6:73:PHE:HA	2.21	0.40
38:4:123:G:C6	38:4:131:A:N1	2.89	0.40
39:L2:109:GLU:H	39:L2:109:GLU:HG2	1.55	0.40
39:L2:198:LYS:HZ3	39:L2:198:LYS:HG3	1.48	0.40
40:L3:212:ASN:OD1	40:L3:354:VAL:HG13	2.22	0.40
40:L3:261:MET:C	40:L3:263:SER:H	2.29	0.40
44:L7:239:LEU:O	44:L7:242:SER:OG	2.32	0.40
45:L8:203:VAL:HG11	45:L8:211:LEU:HD23	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:124:ARG:HD3	46:L9:164:ILE:O	2.21	0.40
49:M3:48:PRO:HB2	71:O5:117:ALA:HB2	2.03	0.40
49:M3:107:GLU:OE2	49:M3:107:GLU:N	2.55	0.40
50:M4:20:VAL:HG22	50:M4:66:THR:OG1	2.21	0.40
51:M5:149:ASN:OD1	89:M5:305:OHX:N2	2.55	0.40
54:M8:67:ILE:HG12	54:M8:81:VAL:HG21	2.02	0.40
66:O0:11:ASN:HA	66:O0:14:LEU:HD12	2.02	0.40
66:O0:100:ILE:H	66:O0:100:ILE:HG13	1.48	0.40
72:O6:26:ILE:C	72:O6:28:TYR:N	2.77	0.40
77:Q1:25:LYS:HE3	77:Q1:25:LYS:HB2	1.67	0.40
1:6:394:C:H2'	1:6:395:U:O4'	2.20	0.40
1:6:477:A:H62	1:6:539:G:N2	2.19	0.40
1:6:486:G:N7	1:6:488:G:C2	2.89	0.40
1:6:714:G:H2'	1:6:715:U:O4'	2.22	0.40
1:6:808:U:H2'	1:6:809:A:C8	2.56	0.40
1:6:1486:G:C6	1:6:1522:U:H5	2.39	0.40
1:6:1597:A:C8	31:d9:14:TYR:CD2	3.09	0.40
1:6:1795:U:O2'	1:6:1797:A:N7	2.52	0.40
80:c0:14:TYR:CE1	80:c0:18:GLU:HG3	2.55	0.40
80:c0:72:GLY:C	80:c0:74:GLU:N	2.77	0.40
17:c5:25:LEU:O	17:c5:28:MET:HE2	2.21	0.40
17:c5:49:MET:HB3	17:c5:50:THR:H	1.54	0.40
17:c5:68:PRO:O	89:c5:201:OHX:N1	2.53	0.40
19:c7:95:ARG:CB	19:c7:96:SER:HA	2.51	0.40
21:c9:30:VAL:HA	21:c9:31:PRO:HD3	1.87	0.40
22:d0:84:MET:HE3	31:d9:52:PHE:CE2	2.56	0.40
28:d6:8:ASN:N	28:d6:8:ASN:OD1	2.53	0.40
36:5:68:C:O3'	51:m5:177:GLY:HA2	2.21	0.40
36:5:278:U:H2'	36:5:279:U:H6	1.85	0.40
36:5:398:A:C6	53:m7:3:ARG:NH1	2.90	0.40
36:5:532:A:C8	36:5:555:U:C4	3.09	0.40
36:5:2442:G:H22	36:5:2506:U:H3	1.68	0.40
36:5:2573:G:O6	89:5:4198:OHX:N6	2.54	0.40
36:5:2594:C:H2'	36:5:2595:A:O4'	2.20	0.40
37:7:76:A:H61	37:7:102:A:H5'	1.85	0.40
41:l4:44:LYS:HB3	41:l4:47:ARG:HH11	1.81	0.40
42:l5:152:ARG:NH1	42:l5:152:ARG:CG	2.84	0.40
47:m0:153:ARG:HG2	47:m0:156:ARG:NH2	2.35	0.40
52:m6:46:GLU:HB3	52:m6:134:LYS:HB3	2.03	0.40
52:m6:182:ASN:O	52:m6:183:ALA:C	2.65	0.40
55:m9:15:VAL:CG1	55:m9:52:LYS:HE3	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:n2:58:GLU:HB2	58:n2:63:VAL:HG13	2.01	0.40
59:n3:74:MET:HE2	59:n3:74:MET:HB3	1.85	0.40
66:o0:45:ALA:HB3	66:o0:48:THR:HG23	2.03	0.40
71:o5:67:ARG:CG	71:o5:80:LEU:HD22	2.51	0.40
77:q1:19:LYS:O	77:q1:22:ALA:HB3	2.22	0.40
1:2:143:G:H2'	1:2:144:U:H5''	2.01	0.40
1:2:154:G:H5'	8:S6:108:VAL:HG21	2.04	0.40
1:2:532:U:O2'	26:D4:33:ALA:HB1	2.22	0.40
1:2:848:C:H2'	1:2:849:C:C6	2.56	0.40
1:2:887:A:H1'	16:C4:122:PRO:HB3	2.03	0.40
1:2:916:U:H3	16:C4:41:ARG:NH2	2.12	0.40
1:2:1015:U:H5''	1:2:1016:C:OP2	2.22	0.40
1:2:1133:A:N3	1:2:1650:U:O2'	2.47	0.40
1:2:1167:G:H2'	1:2:1168:U:H6	1.87	0.40
1:2:1322:A:H2'	1:2:1323:C:H6	1.86	0.40
1:2:1622:G:H2'	1:2:1623:C:C6	2.56	0.40
1:2:1675:C:H1'	10:S8:32:GLN:HE22	1.84	0.40
6:S4:104:ASP:OD2	6:S4:108:ARG:HB2	2.21	0.40
8:S6:109:LEU:HD23	8:S6:109:LEU:HA	1.91	0.40
9:S7:64:VAL:O	9:S7:67:LEU:HB2	2.22	0.40
10:S8:25:ARG:HD3	10:S8:25:ARG:HA	1.92	0.40
13:C1:70:ILE:O	13:C1:71:LEU:HD23	2.22	0.40
15:C3:16:ILE:HA	15:C3:17:PRO:HD3	1.98	0.40
16:C4:12:GLN:CD	16:C4:111:ARG:HG3	2.45	0.40
36:1:324:A:H2'	36:1:325:A:C8	2.57	0.40
36:1:668:G:H2'	36:1:669:U:C6	2.57	0.40
36:1:855:U:H2'	36:1:856:G:O4'	2.21	0.40
36:1:943:U:O2	36:1:1431:G:H5''	2.22	0.40
36:1:1617:G:H2'	36:1:1618:G:O4'	2.21	0.40
36:1:1687:U:H1'	58:N2:75:TYR:CD2	2.56	0.40
36:1:2180:G:P	39:L2:174:ARG:HH22	2.45	0.40
36:1:2359:C:H6	36:1:2359:C:O5'	2.04	0.40
36:1:2535:A:H3'	36:1:2536:A:C8	2.56	0.40
38:4:58:G:O6	73:O7:63:ARG:NH2	2.53	0.40
41:L4:44:LYS:HB3	41:L4:47:ARG:HH11	1.86	0.40
48:M1:155:THR:OG1	48:M1:157:GLU:N	2.53	0.40
49:M3:76:THR:HG23	49:M3:101:ARG:CZ	2.52	0.40
52:M6:73:PHE:CG	52:M6:78:ARG:HG2	2.56	0.40
52:M6:147:TRP:CZ3	52:M6:150:GLU:HA	2.56	0.40
54:M8:133:LYS:N	54:M8:135:GLN:OE1	2.52	0.40
68:O2:47:ARG:HG2	68:O2:48:GLY:N	2.32	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:109:LEU:HD22	68:O2:109:LEU:HA	1.91	0.40
69:O3:21:ARG:HG3	69:O3:21:ARG:NH1	2.37	0.40
70:O4:77:GLY:C	70:O4:79:SER:H	2.29	0.40
71:O5:38:ARG:HD2	71:O5:41:LEU:HD13	2.03	0.40
71:O5:90:ARG:H	71:O5:90:ARG:HG2	1.76	0.40
75:O9:27:ILE:C	75:O9:29:LEU:N	2.78	0.40
1:6:1228:G:N7	14:c2:67:THR:HB	2.36	0.40
1:6:1699:G:C2'	1:6:1700:C:H5'	2.52	0.40
3:s1:83:LYS:HD2	3:s1:106:THR:H	1.87	0.40
3:s1:109:LYS:O	3:s1:112:SER:OG	2.30	0.40
3:s1:175:GLU:O	3:s1:187:LYS:NZ	2.51	0.40
5:s3:217:ILE:HB	5:s3:218:LEU:H	1.61	0.40
6:s4:54:TYR:CD1	26:d4:17:LEU:HD12	2.56	0.40
9:s7:74:GLN:HE22	9:s7:92:PHE:HB2	1.86	0.40
10:s8:105:ASP:OD1	10:s8:106:ALA:N	2.54	0.40
11:s9:52:ILE:HG23	11:s9:76:LEU:HD11	2.04	0.40
11:s9:105:LEU:HD12	11:s9:105:LEU:HA	1.87	0.40
15:c3:89:TYR:CD1	15:c3:89:TYR:C	2.99	0.40
15:c3:136:PRO:O	15:c3:138:ASN:N	2.54	0.40
27:d5:52:LYS:HB3	27:d5:52:LYS:HE2	1.78	0.40
34:sR:205:SER:HA	34:sR:245:PHE:CD2	2.57	0.40
36:5:242:C:H2'	36:5:243:G:C8	2.56	0.40
36:5:250:U:H2'	36:5:251:G:H21	1.87	0.40
36:5:419:G:O3'	36:5:420:G:OP2	2.38	0.40
36:5:701:G:H2'	36:5:702:C:C6	2.56	0.40
36:5:743:C:N3	54:m8:141:ARG:NH1	2.69	0.40
36:5:2131:A:N6	79:q3:18:TYR:H	2.17	0.40
36:5:2259:A:H2'	36:5:2260:U:O4'	2.21	0.40
36:5:2289:U:H2'	36:5:2290:C:H6	1.85	0.40
36:5:2995:A:H5''	36:5:2996:U:OP2	2.21	0.40
36:5:3288:G:C4	36:5:3289:G:C8	3.10	0.40
39:l2:104:LEU:HD12	39:l2:104:LEU:HA	1.78	0.40
40:l3:46:PHE:CD2	40:l3:205:VAL:HG13	2.56	0.40
41:l4:3:ARG:O	41:l4:5:GLN:N	2.55	0.40
41:l4:52:VAL:HB	41:l4:99:MET:HE3	2.03	0.40
41:l4:195:ARG:O	41:l4:196:ASN:HB2	2.21	0.40
43:l6:7:PRO:HD2	43:l6:10:TYR:OH	2.21	0.40
43:l6:50:LYS:NZ	43:l6:72:ASN:O	2.54	0.40
44:l7:43:ILE:O	44:l7:47:ARG:HG3	2.20	0.40
49:m3:41:THR:O	49:m3:44:ALA:HB3	2.22	0.40
53:m7:30:ARG:HD3	53:m7:30:ARG:C	2.46	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:m8:32:LEU:O	54:m8:35:PHE:HB3	2.22	0.40
57:n1:87:LYS:HB3	57:n1:87:LYS:HE3	1.80	0.40
60:n4:82:ILE:O	60:n4:82:ILE:HG22	2.22	0.40
62:n6:104:LEU:HA	62:n6:104:LEU:HD23	1.82	0.40
67:o1:90:PHE:HB3	67:o1:91:SER:H	1.23	0.40
68:o2:21:HIS:CE1	68:o2:24:ARG:HD2	2.56	0.40
78:q2:74:CYS:HB3	78:q2:77:CYS:SG	2.61	0.40
79:q3:13:LYS:NZ	79:q3:30:GLU:OE1	2.38	0.40
79:q3:19:GLY:O	79:q3:20:SER:C	2.63	0.40
1:2:107:C:N4	1:2:307:G:H1	2.17	0.40
1:2:153:G:OP2	26:D4:131:ARG:NH1	2.38	0.40
1:2:768:C:H1'	11:S9:143:ILE:HG21	2.03	0.40
1:2:927:C:H1'	16:C4:125:SER:HB2	2.04	0.40
2:S0:84:ARG:HD2	2:S0:203:PHE:O	2.21	0.40
5:S3:75:LYS:NZ	12:C0:34:GLU:OE2	2.25	0.40
5:S3:113:LEU:HD22	5:S3:113:LEU:HA	1.79	0.40
6:S4:159:THR:CG2	6:S4:227:VAL:HB	2.51	0.40
7:S5:143:ARG:HA	7:S5:167:ARG:HD3	2.03	0.40
9:S7:91:ILE:HD12	9:S7:91:ILE:HA	1.67	0.40
9:S7:129:LEU:HD21	9:S7:172:VAL:HG11	2.03	0.40
9:S7:161:GLN:H	9:S7:161:GLN:HG2	1.57	0.40
10:S8:77:ARG:HE	10:S8:77:ARG:HB2	1.62	0.40
11:S9:182:GLU:HG3	11:S9:183:ALA:H	1.86	0.40
12:C0:46:LEU:O	12:C0:50:THR:N	2.46	0.40
17:C5:95:GLY:C	17:C5:102:PHE:HB3	2.46	0.40
18:C6:29:ILE:HA	18:C6:65:ILE:HB	2.03	0.40
19:C7:5:ARG:HB2	19:C7:10:LYS:HE2	2.03	0.40
20:C8:11:PHE:HB2	20:C8:59:GLY:O	2.21	0.40
27:D5:43:ASP:N	27:D5:46:LYS:HD2	2.36	0.40
34:SR:15:GLY:H	34:SR:45:TRP:HH2	1.69	0.40
34:SR:19:TRP:CD2	34:SR:306:THR:HG22	2.56	0.40
34:SR:220:ILE:HD12	34:SR:263:PHE:HE2	1.85	0.40
36:1:173:G:N2	36:1:246:U:H1'	2.37	0.40
36:1:1080:A:P	42:L5:140:ARG:NH2	2.95	0.40
36:1:1230:G:H2'	36:1:1231:A:H8	1.86	0.40
36:1:1603:A:OP1	55:M9:38:ARG:NH1	2.54	0.40
36:1:1789:G:O6	89:1:4182:OHX:N2	2.55	0.40
36:1:1942:U:O2'	36:1:3345:G:O2'	2.21	0.40
36:1:2124:G:C2	36:1:2330:C:C2	3.09	0.40
36:1:2209:U:OP2	36:1:2209:U:H6	2.05	0.40
36:1:2899:C:H41	46:L9:172:ILE:HD11	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3121:U:C2	36:1:3122:A:N7	2.90	0.40
39:L2:192:LYS:HB3	39:L2:193:ARG:CZ	2.51	0.40
41:L4:60:THR:HG22	41:L4:61:SER:N	2.36	0.40
41:L4:361:HIS:HB3	56:N0:26:ARG:NH1	2.37	0.40
41:L4:361:HIS:ND1	41:L4:362:ASP:HB2	2.35	0.40
47:M0:9:TYR:CD1	47:M0:97:LEU:HD13	2.56	0.40
48:M1:30:LEU:CD2	48:M1:67:VAL:HG13	2.51	0.40
51:M5:62:TYR:O	51:M5:131:GLU:HA	2.21	0.40
55:M9:40:ALA:HB2	55:M9:43:LYS:NZ	2.35	0.40
55:M9:138:LEU:HD22	55:M9:142:ILE:HD11	2.03	0.40
61:N5:92:LYS:HE2	61:N5:110:VAL:O	2.21	0.40
68:O2:115:LEU:HD23	68:O2:115:LEU:HA	1.71	0.40
78:Q2:55:LYS:HA	78:Q2:56:PRO:HD3	1.96	0.40
1:6:696:C:H3'	1:6:697:C:H5'	2.02	0.40
1:6:1173:C:H2'	1:6:1174:C:C6	2.54	0.40
1:6:1228:G:OP2	1:6:1228:G:H4'	2.22	0.40
1:6:1258:U:H6	1:6:1258:U:H2'	1.78	0.40
6:s4:11:ARG:O	6:s4:12:LEU:CB	2.69	0.40
6:s4:247:SER:OG	6:s4:250:GLU:HG3	2.21	0.40
7:s5:76:ARG:HD2	18:c6:122:ARG:NE	2.36	0.40
8:s6:137:ARG:O	8:s6:138:ALA:C	2.64	0.40
9:s7:89:HIS:CE1	9:s7:165:LYS:HA	2.56	0.40
11:s9:149:ARG:H	11:s9:149:ARG:HG2	1.65	0.40
11:s9:179:ARG:C	11:s9:181:ALA:H	2.28	0.40
80:c0:23:ALA:CB	80:c0:64:TYR:HB2	2.51	0.40
80:c0:32:HIS:CD2	80:c0:34:GLU:O	2.74	0.40
23:d1:56:SER:OG	23:d1:59:VAL:HG23	2.20	0.40
36:5:712:G:H2'	36:5:713:U:C6	2.57	0.40
36:5:942:U:H6	36:5:942:U:O5'	2.03	0.40
36:5:1238:C:H2'	36:5:1239:C:O4'	2.22	0.40
36:5:1700:G:C6	36:5:1701:C:C4	3.10	0.40
36:5:1724:U:O2	36:5:1725:C:C2	2.74	0.40
36:5:1845:G:C2	36:5:1851:G:C6	3.10	0.40
36:5:1882:G:H1	36:5:2350:C:N4	2.18	0.40
36:5:2194:G:H1'	36:5:2274:U:O2	2.21	0.40
36:5:2278:C:C2	36:5:2307:G:C2	3.10	0.40
36:5:2951:G:H2'	36:5:2951:G:N3	2.36	0.40
89:5:4068:OHX:N3	89:5:4146:OHX:N4	2.69	0.40
38:8:113:U:H5''	75:o9:7:PHE:HB3	2.04	0.40
39:l2:201:GLY:O	39:l2:204:MET:HB2	2.21	0.40
42:l5:276:LYS:HB2	42:l5:276:LYS:HE3	1.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:l6:52:VAL:HG13	43:l6:65:ILE:HG23	2.04	0.40
43:l6:85:ILE:HG23	69:o3:107:ILE:CG2	2.46	0.40
44:l7:157:ASN:C	44:l7:159:GLN:N	2.80	0.40
46:l9:70:THR:O	46:l9:74:LEU:HG	2.22	0.40
46:l9:118:LEU:CD1	46:l9:167:VAL:HG13	2.52	0.40
46:l9:150:SER:O	46:l9:151:VAL:C	2.63	0.40
49:m3:133:PRO:O	49:m3:135:ALA:N	2.55	0.40
51:m5:8:GLU:HG3	51:m5:50:ARG:NH1	2.37	0.40
52:m6:84:LEU:HD23	52:m6:84:LEU:C	2.47	0.40
52:m6:108:ILE:HD12	52:m6:108:ILE:HG21	1.89	0.40
54:m8:151:ARG:HH11	54:m8:151:ARG:HD2	1.68	0.40
56:n0:138:GLN:C	56:n0:140:VAL:H	2.30	0.40
57:n1:30:TYR:OH	57:n1:94:GLU:OE2	2.16	0.40
68:o2:123:LYS:HA	68:o2:126:LEU:CD1	2.50	0.40
69:o3:8:TYR:CD2	69:o3:99:ARG:HG2	2.57	0.40
73:o7:22:CYS:SG	73:o7:24:ARG:HG3	2.61	0.40
1:2:193:U:C2'	1:2:194:U:H2'	2.52	0.40
1:2:344:A:C6	1:2:345:U:C4	3.09	0.40
1:2:630:A:H1'	1:2:970:A:N6	2.36	0.40
1:2:734:A:O2'	1:2:735:C:H5'	2.22	0.40
3:S1:180:THR:HB	3:S1:182:ALA:HB3	2.03	0.40
6:S4:222:LEU:HB3	6:S4:223:ASN:H	1.81	0.40
7:S5:69:PHE:CD2	18:C6:50:GLU:HG2	2.57	0.40
8:S6:87:ARG:HA	8:S6:87:ARG:HD3	1.86	0.40
9:S7:16:LEU:HD22	9:S7:46:ILE:HG21	2.02	0.40
11:S9:110:GLN:OE1	11:S9:126:ARG:HG2	2.22	0.40
12:C0:59:PHE:CZ	12:C0:62:GLN:HA	2.57	0.40
17:C5:125:PRO:HG3	20:C8:129:TRP:CH2	2.57	0.40
19:C7:99:VAL:CB	19:C7:118:PRO:HB2	2.52	0.40
20:C8:84:TRP:HA	20:C8:89:GLN:OE1	2.22	0.40
21:C9:23:GLN:HG2	21:C9:55:TYR:CG	2.56	0.40
25:D3:69:ARG:HD2	25:D3:116:ASP:OD2	2.20	0.40
28:D6:84:VAL:C	28:D6:86:VAL:H	2.24	0.40
34:SR:247:PRO:HG2	34:SR:248:ASN:OD1	2.22	0.40
35:SM:70:ASN:O	35:SM:74:LYS:HD3	2.21	0.40
36:1:265:A:H5''	36:1:266:A:OP2	2.22	0.40
36:1:294:U:H5'	72:O6:76:ARG:HG3	2.03	0.40
36:1:563:U:OP1	56:N0:71:LYS:NZ	2.47	0.40
36:1:783:A:H5''	36:1:784:A:H5'	2.02	0.40
36:1:1103:A:H2'	36:1:1103:A:N3	2.36	0.40
36:1:1694:U:C2	36:1:1695:U:C5	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2208:A:O3'	36:1:2209:U:H6	2.04	0.40
36:1:2258:U:OP2	89:1:3942:OHX:N1	2.55	0.40
36:1:2376:G:C6	36:1:2377:G:C6	3.10	0.40
36:1:2402:A:H5''	41:L4:67:THR:OG1	2.21	0.40
36:1:2656:A:OP2	78:Q2:97:LYS:HB3	2.22	0.40
36:1:3027:A:H2'	36:1:3028:G:O4'	2.21	0.40
36:1:3095:U:H2'	36:1:3096:C:C6	2.57	0.40
36:1:3393:U:H2'	36:1:3394:U:H6	1.84	0.40
39:L2:90:ALA:HB2	39:L2:101:VAL:HG13	2.04	0.40
41:L4:276:LEU:HA	41:L4:277:PRO:HD3	1.91	0.40
43:L6:50:LYS:HG2	43:L6:74:VAL:CG2	2.52	0.40
43:L6:98:VAL:HA	43:L6:101:PHE:CD2	2.57	0.40
45:L8:226:TYR:CD2	45:L8:226:TYR:C	2.98	0.40
46:L9:173:ARG:HD3	46:L9:173:ARG:HH11	1.79	0.40
48:M1:86:VAL:HG22	48:M1:111:ASP:O	2.21	0.40
48:M1:171:VAL:O	48:M1:172:LEU:HB2	2.20	0.40
49:M3:33:VAL:HG12	49:M3:34:SER:N	2.35	0.40
53:M7:64:ASN:O	53:M7:67:ILE:HB	2.21	0.40
56:N0:141:LYS:HA	56:N0:144:LEU:HD12	2.04	0.40
63:N7:54:THR:HG23	63:N7:57:HIS:CE1	2.56	0.40
68:O2:98:HIS:CG	68:O2:99:ASN:N	2.90	0.40
70:O4:8:ARG:NH1	70:O4:8:ARG:HG2	2.35	0.40
71:O5:118:ILE:HG21	71:O5:118:ILE:HD13	1.88	0.40
74:O8:41:THR:HG21	74:O8:62:ALA:HB2	2.03	0.40
75:O9:29:LEU:HD12	75:O9:29:LEU:HA	1.71	0.40
1:6:46:A:H1'	1:6:48:G:C8	2.57	0.40
1:6:281:G:C2	1:6:282:C:C2	3.09	0.40
1:6:914:G:H8	1:6:914:G:OP2	2.05	0.40
1:6:1516:A:C8	22:d0:58:LEU:HD23	2.57	0.40
1:6:1553:G:N2	1:6:1555:A:H3'	2.36	0.40
1:6:1678:A:C6	1:6:1679:G:C5	3.10	0.40
1:6:1688:U:H2'	1:6:1689:A:H8	1.85	0.40
1:6:1758:U:H1'	36:5:2255:A:N3	2.36	0.40
2:s0:62:ARG:HE	23:d1:39:VAL:HG13	1.86	0.40
4:s2:49:LYS:HD2	4:s2:243:TYR:CE1	2.57	0.40
8:s6:173:PRO:HB2	8:s6:174:LYS:H	1.49	0.40
10:s8:117:TYR:HE1	10:s8:150:ALA:HA	1.86	0.40
11:s9:117:GLY:C	11:s9:119:ALA:H	2.30	0.40
11:s9:168:ARG:HD2	11:s9:174:ARG:HD2	2.03	0.40
15:c3:119:GLU:HG2	15:c3:141:TYR:HE2	1.86	0.40
16:c4:48:VAL:HG22	16:c4:49:LYS:N	2.37	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:c6:99:GLU:O	18:c6:102:LYS:N	2.55	0.40
19:c7:60:ARG:CZ	19:c7:66:VAL:HG22	2.52	0.40
20:c8:134:ARG:HB2	20:c8:136:GLN:OE1	2.21	0.40
21:c9:108:LEU:HB3	21:c9:114:VAL:HG22	2.03	0.40
21:c9:118:PRO:C	21:c9:120:GLY:H	2.30	0.40
21:c9:127:ASN:O	21:c9:130:ARG:HB3	2.21	0.40
24:d2:95:PRO:HD3	24:d2:130:TYR:CD1	2.57	0.40
27:d5:85:LYS:HG3	27:d5:86:GLU:N	2.28	0.40
30:d8:29:ARG:HH11	30:d8:29:ARG:HD2	1.78	0.40
36:5:412:G:H5'	53:m7:26:PHE:HZ	1.87	0.40
36:5:911:C:O2	36:5:917:A:N1	2.54	0.40
36:5:1069:C:H2'	36:5:1070:U:H6	1.86	0.40
36:5:1084:A:C6	36:5:1085:A:C6	3.10	0.40
36:5:1591:G:OP1	70:o4:37:LYS:NZ	2.52	0.40
36:5:1692:U:O4	36:5:1693:C:N4	2.54	0.40
36:5:2518:C:H2'	36:5:2519:A:H8	1.87	0.40
36:5:2664:C:OP2	48:m1:142:LYS:HE2	2.21	0.40
37:7:7:G:O3'	42:l5:33:ARG:NH2	2.55	0.40
40:l3:188:ILE:HD12	40:l3:189:SER:H	1.86	0.40
40:l3:209:PHE:HB3	40:l3:282:ILE:CD1	2.52	0.40
40:l3:361:THR:HG23	40:l3:371:GLN:O	2.21	0.40
42:l5:187:THR:H	42:l5:187:THR:HG1	1.55	0.40
45:l8:100:GLU:CD	45:l8:108:ARG:HH12	2.30	0.40
46:l9:20:ILE:HD12	46:l9:45:PHE:CD1	2.56	0.40
51:m5:184:LYS:C	51:m5:186:GLY:N	2.79	0.40
57:n1:120:LYS:C	57:n1:122:GLN:N	2.79	0.40
61:n5:40:LEU:HB3	61:n5:41:ALA:H	1.61	0.40
64:n8:9:ARG:HE	64:n8:9:ARG:HB3	1.64	0.40
66:o0:78:GLY:HA2	66:o0:87:VAL:HG13	2.04	0.40
68:o2:120:THR:H	68:o2:120:THR:HG23	1.55	0.40
78:q2:61:LYS:H	78:q2:61:LYS:HG2	1.71	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	
2	S0	204/251 (81%)	143 (70%)	34 (17%)	27 (13%)	0	1
2	s0	204/251 (81%)	152 (74%)	33 (16%)	19 (9%)	0	3
3	S1	212/254 (84%)	141 (66%)	38 (18%)	33 (16%)	0	0
3	s1	214/254 (84%)	171 (80%)	30 (14%)	13 (6%)	1	9
4	S2	215/253 (85%)	173 (80%)	27 (13%)	15 (7%)	1	6
4	s2	215/253 (85%)	184 (86%)	21 (10%)	10 (5%)	2	14
5	S3	221/239 (92%)	182 (82%)	24 (11%)	15 (7%)	1	7
5	s3	221/239 (92%)	174 (79%)	31 (14%)	16 (7%)	1	6
6	S4	258/260 (99%)	206 (80%)	34 (13%)	18 (7%)	1	6
6	s4	258/260 (99%)	210 (81%)	28 (11%)	20 (8%)	1	5
7	S5	204/224 (91%)	154 (76%)	34 (17%)	16 (8%)	1	5
7	s5	204/224 (91%)	154 (76%)	35 (17%)	15 (7%)	1	6
8	S6	224/236 (95%)	197 (88%)	15 (7%)	12 (5%)	1	12
8	s6	216/236 (92%)	184 (85%)	22 (10%)	10 (5%)	2	15
9	S7	182/189 (96%)	136 (75%)	25 (14%)	21 (12%)	0	2
9	s7	184/189 (97%)	141 (77%)	28 (15%)	15 (8%)	1	4
10	S8	184/200 (92%)	148 (80%)	23 (12%)	13 (7%)	1	6
10	s8	184/200 (92%)	155 (84%)	16 (9%)	13 (7%)	1	6
11	S9	183/196 (93%)	147 (80%)	26 (14%)	10 (6%)	1	11
11	s9	183/196 (93%)	148 (81%)	28 (15%)	7 (4%)	2	18
12	C0	94/105 (90%)	68 (72%)	17 (18%)	9 (10%)	0	3
13	C1	153/155 (99%)	114 (74%)	24 (16%)	15 (10%)	0	3
13	c1	144/155 (93%)	122 (85%)	16 (11%)	6 (4%)	2	17
14	C2	122/142 (86%)	67 (55%)	34 (28%)	21 (17%)	0	0
14	c2	122/142 (86%)	67 (55%)	32 (26%)	23 (19%)	0	0
15	C3	148/150 (99%)	122 (82%)	20 (14%)	6 (4%)	2	17
15	c3	148/150 (99%)	120 (81%)	18 (12%)	10 (7%)	1	7
16	C4	125/136 (92%)	90 (72%)	19 (15%)	16 (13%)	0	1
16	c4	126/136 (93%)	96 (76%)	19 (15%)	11 (9%)	0	3
17	C5	122/141 (86%)	88 (72%)	22 (18%)	12 (10%)	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	c5	133/141 (94%)	94 (71%)	20 (15%)	19 (14%)	0	1
18	C6	139/142 (98%)	117 (84%)	11 (8%)	11 (8%)	1	5
18	c6	140/142 (99%)	120 (86%)	12 (9%)	8 (6%)	1	11
19	C7	116/136 (85%)	87 (75%)	21 (18%)	8 (7%)	1	7
19	c7	113/136 (83%)	84 (74%)	19 (17%)	10 (9%)	0	3
20	C8	143/145 (99%)	111 (78%)	20 (14%)	12 (8%)	0	4
20	c8	143/145 (99%)	115 (80%)	18 (13%)	10 (7%)	1	6
21	C9	141/143 (99%)	120 (85%)	14 (10%)	7 (5%)	1	13
21	c9	141/143 (99%)	114 (81%)	21 (15%)	6 (4%)	2	16
22	D0	105/120 (88%)	82 (78%)	19 (18%)	4 (4%)	2	18
22	d0	108/120 (90%)	87 (81%)	10 (9%)	11 (10%)	0	2
23	D1	85/87 (98%)	64 (75%)	12 (14%)	9 (11%)	0	2
23	d1	85/87 (98%)	72 (85%)	10 (12%)	3 (4%)	3	20
24	D2	127/129 (98%)	112 (88%)	12 (9%)	3 (2%)	5	29
24	d2	127/129 (98%)	112 (88%)	14 (11%)	1 (1%)	16	51
25	D3	142/144 (99%)	109 (77%)	19 (13%)	14 (10%)	0	2
25	d3	142/144 (99%)	119 (84%)	18 (13%)	5 (4%)	3	20
26	D4	132/134 (98%)	106 (80%)	18 (14%)	8 (6%)	1	9
26	d4	132/134 (98%)	106 (80%)	16 (12%)	10 (8%)	1	5
27	D5	68/107 (64%)	44 (65%)	11 (16%)	13 (19%)	0	0
27	d5	67/107 (63%)	49 (73%)	11 (16%)	7 (10%)	0	2
28	D6	95/97 (98%)	62 (65%)	19 (20%)	14 (15%)	0	1
28	d6	95/97 (98%)	67 (70%)	18 (19%)	10 (10%)	0	2
29	D7	79/81 (98%)	63 (80%)	9 (11%)	7 (9%)	0	3
29	d7	79/81 (98%)	60 (76%)	12 (15%)	7 (9%)	0	3
30	D8	61/66 (92%)	49 (80%)	6 (10%)	6 (10%)	0	3
30	d8	61/66 (92%)	43 (70%)	13 (21%)	5 (8%)	1	4
31	D9	51/55 (93%)	41 (80%)	8 (16%)	2 (4%)	2	18
31	d9	51/55 (93%)	36 (71%)	9 (18%)	6 (12%)	0	1
32	E0	58/60 (97%)	47 (81%)	10 (17%)	1 (2%)	7	36
33	E1	69/76 (91%)	38 (55%)	12 (17%)	19 (28%)	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	SR	316/318 (99%)	244 (77%)	45 (14%)	27 (8%)	0	3
34	sR	316/318 (99%)	261 (83%)	42 (13%)	13 (4%)	2	17
35	SM	155/273 (57%)	111 (72%)	27 (17%)	17 (11%)	0	2
35	sM	98/273 (36%)	57 (58%)	28 (29%)	13 (13%)	0	1
39	L2	250/253 (99%)	224 (90%)	17 (7%)	9 (4%)	3	20
39	l2	250/253 (99%)	214 (86%)	23 (9%)	13 (5%)	1	12
40	L3	384/386 (100%)	322 (84%)	45 (12%)	17 (4%)	2	15
40	l3	384/386 (100%)	339 (88%)	32 (8%)	13 (3%)	3	21
41	L4	359/361 (99%)	297 (83%)	34 (10%)	28 (8%)	1	5
41	l4	359/361 (99%)	299 (83%)	38 (11%)	22 (6%)	1	9
42	L5	294/296 (99%)	237 (81%)	35 (12%)	22 (8%)	1	6
42	l5	292/296 (99%)	253 (87%)	32 (11%)	7 (2%)	5	29
43	L6	152/175 (87%)	134 (88%)	12 (8%)	6 (4%)	2	18
43	l6	153/175 (87%)	130 (85%)	17 (11%)	6 (4%)	2	18
44	L7	220/243 (90%)	184 (84%)	26 (12%)	10 (4%)	2	15
44	l7	221/243 (91%)	189 (86%)	27 (12%)	5 (2%)	5	29
45	L8	231/255 (91%)	189 (82%)	31 (13%)	11 (5%)	2	14
45	l8	229/255 (90%)	188 (82%)	23 (10%)	18 (8%)	1	5
46	L9	189/191 (99%)	166 (88%)	21 (11%)	2 (1%)	12	44
46	l9	189/191 (99%)	166 (88%)	17 (9%)	6 (3%)	3	22
47	M0	207/220 (94%)	171 (83%)	28 (14%)	8 (4%)	2	18
47	m0	209/220 (95%)	172 (82%)	23 (11%)	14 (7%)	1	7
48	M1	167/173 (96%)	122 (73%)	29 (17%)	16 (10%)	0	3
48	m1	167/173 (96%)	141 (84%)	15 (9%)	11 (7%)	1	7
49	M3	191/198 (96%)	154 (81%)	26 (14%)	11 (6%)	1	10
49	m3	192/198 (97%)	150 (78%)	28 (15%)	14 (7%)	1	6
50	M4	134/137 (98%)	113 (84%)	12 (9%)	9 (7%)	1	7
50	m4	135/137 (98%)	118 (87%)	16 (12%)	1 (1%)	19	54
51	M5	201/203 (99%)	183 (91%)	14 (7%)	4 (2%)	6	32
51	m5	201/203 (99%)	181 (90%)	16 (8%)	4 (2%)	6	32
52	M6	195/198 (98%)	176 (90%)	12 (6%)	7 (4%)	3	20

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
52	m6	195/198 (98%)	179 (92%)	10 (5%)	6 (3%)	3	22
53	M7	181/183 (99%)	144 (80%)	27 (15%)	10 (6%)	1	11
53	m7	153/183 (84%)	132 (86%)	18 (12%)	3 (2%)	6	32
54	M8	183/185 (99%)	154 (84%)	24 (13%)	5 (3%)	4	26
54	m8	183/185 (99%)	151 (82%)	26 (14%)	6 (3%)	3	21
55	M9	186/188 (99%)	172 (92%)	13 (7%)	1 (0%)	25	60
55	m9	186/188 (99%)	167 (90%)	14 (8%)	5 (3%)	4	26
56	N0	170/172 (99%)	154 (91%)	13 (8%)	3 (2%)	7	35
56	n0	170/172 (99%)	160 (94%)	7 (4%)	3 (2%)	7	35
57	N1	157/159 (99%)	139 (88%)	11 (7%)	7 (4%)	2	15
57	n1	157/159 (99%)	140 (89%)	12 (8%)	5 (3%)	3	22
58	N2	98/120 (82%)	72 (74%)	15 (15%)	11 (11%)	0	2
58	n2	96/120 (80%)	78 (81%)	15 (16%)	3 (3%)	3	22
59	N3	134/136 (98%)	120 (90%)	12 (9%)	2 (2%)	8	38
59	n3	134/136 (98%)	124 (92%)	10 (8%)	0	100	100
60	N4	96/155 (62%)	78 (81%)	13 (14%)	5 (5%)	1	12
60	n4	133/155 (86%)	109 (82%)	15 (11%)	9 (7%)	1	7
61	N5	119/141 (84%)	106 (89%)	11 (9%)	2 (2%)	7	36
61	n5	118/141 (84%)	98 (83%)	11 (9%)	9 (8%)	1	5
62	N6	124/126 (98%)	104 (84%)	14 (11%)	6 (5%)	2	14
62	n6	124/126 (98%)	112 (90%)	8 (6%)	4 (3%)	3	22
63	N7	133/135 (98%)	111 (84%)	11 (8%)	11 (8%)	0	4
63	n7	133/135 (98%)	101 (76%)	21 (16%)	11 (8%)	0	4
64	N8	146/148 (99%)	121 (83%)	18 (12%)	7 (5%)	2	14
64	n8	146/148 (99%)	119 (82%)	22 (15%)	5 (3%)	3	21
65	N9	56/58 (97%)	47 (84%)	6 (11%)	3 (5%)	1	12
65	n9	56/58 (97%)	44 (79%)	7 (12%)	5 (9%)	0	3
66	O0	95/104 (91%)	76 (80%)	15 (16%)	4 (4%)	2	17
66	o0	98/104 (94%)	85 (87%)	13 (13%)	0	100	100
67	O1	107/112 (96%)	91 (85%)	8 (8%)	8 (8%)	1	6
67	o1	107/112 (96%)	85 (79%)	13 (12%)	9 (8%)	0	4

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
68	O2	125/129 (97%)	108 (86%)	17 (14%)	0	100	100
68	o2	125/129 (97%)	109 (87%)	9 (7%)	7 (6%)	1	11
69	O3	104/106 (98%)	92 (88%)	9 (9%)	3 (3%)	3	24
69	o3	104/106 (98%)	96 (92%)	4 (4%)	4 (4%)	2	18
70	O4	110/120 (92%)	94 (86%)	14 (13%)	2 (2%)	7	35
70	o4	110/120 (92%)	100 (91%)	9 (8%)	1 (1%)	14	49
71	O5	117/119 (98%)	99 (85%)	10 (8%)	8 (7%)	1	7
71	o5	117/119 (98%)	95 (81%)	17 (14%)	5 (4%)	2	16
72	O6	97/99 (98%)	78 (80%)	13 (13%)	6 (6%)	1	9
72	o6	97/99 (98%)	76 (78%)	15 (16%)	6 (6%)	1	9
73	O7	85/87 (98%)	74 (87%)	8 (9%)	3 (4%)	3	20
73	o7	85/87 (98%)	70 (82%)	11 (13%)	4 (5%)	2	14
74	O8	75/77 (97%)	65 (87%)	7 (9%)	3 (4%)	2	18
74	o8	75/77 (97%)	60 (80%)	12 (16%)	3 (4%)	2	18
75	O9	48/50 (96%)	40 (83%)	6 (12%)	2 (4%)	2	17
75	o9	48/50 (96%)	43 (90%)	5 (10%)	0	100	100
76	Q0	50/52 (96%)	39 (78%)	9 (18%)	2 (4%)	2	18
76	q0	50/52 (96%)	49 (98%)	0	1 (2%)	6	32
77	Q1	23/25 (92%)	19 (83%)	4 (17%)	0	100	100
77	q1	23/25 (92%)	20 (87%)	2 (9%)	1 (4%)	2	16
78	Q2	103/105 (98%)	84 (82%)	13 (13%)	6 (6%)	1	10
78	q2	103/105 (98%)	92 (89%)	9 (9%)	2 (2%)	6	34
79	Q3	89/91 (98%)	76 (85%)	10 (11%)	3 (3%)	3	21
79	q3	89/91 (98%)	81 (91%)	7 (8%)	1 (1%)	12	44
80	c0	92/105 (88%)	59 (64%)	16 (17%)	17 (18%)	0	0
81	e0	60/62 (97%)	43 (72%)	10 (17%)	7 (12%)	0	1
82	e1	74/76 (97%)	34 (46%)	21 (28%)	19 (26%)	0	0
84	p0	139/311 (45%)	116 (84%)	16 (12%)	7 (5%)	1	13
All	All	22333/24143 (92%)	18253 (82%)	2722 (12%)	1358 (6%)	1	9

All (1358) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	30	GLN
2	S0	39	ASN
2	S0	66	ALA
2	S0	111	ILE
2	S0	140	ASN
2	S0	158	VAL
2	S0	185	ARG
2	S0	187	ALA
2	S0	191	ARG
3	S1	36	SER
3	S1	37	THR
3	S1	49	ASN
3	S1	63	GLY
3	S1	79	HIS
3	S1	132	ASP
3	S1	147	ALA
3	S1	148	ASN
3	S1	206	PRO
3	S1	223	PHE
3	S1	224	ASP
4	S2	78	ASP
4	S2	80	VAL
4	S2	135	SER
4	S2	148	LEU
5	S3	62	ASN
5	S3	93	ASP
5	S3	211	PRO
5	S3	220	PRO
6	S4	104	ASP
6	S4	142	HIS
6	S4	223	ASN
6	S4	227	VAL
6	S4	228	ILE
7	S5	26	ALA
7	S5	39	GLU
7	S5	43	PHE
7	S5	63	GLN
7	S5	84	LYS
7	S5	153	GLY
8	S6	54	GLY
8	S6	122	GLU
8	S6	173	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	S6	174	LYS
9	S7	31	SER
9	S7	32	PRO
9	S7	64	VAL
9	S7	85	PHE
9	S7	111	LYS
9	S7	116	ARG
9	S7	131	PHE
9	S7	134	GLU
11	S9	121	SER
11	S9	134	ILE
11	S9	169	PRO
12	C0	60	SER
12	C0	81	ASN
12	C0	87	VAL
12	C0	88	PRO
13	C1	7	VAL
13	C1	75	VAL
13	C1	76	VAL
13	C1	140	VAL
14	C2	108	ARG
14	C2	126	TRP
14	C2	127	GLY
15	C3	27	LYS
16	C4	42	VAL
16	C4	50	ALA
16	C4	126	THR
17	C5	60	LEU
17	C5	125	PRO
17	C5	126	VAL
18	C6	39	VAL
18	C6	42	GLU
18	C6	58	ASP
18	C6	59	LYS
18	C6	97	VAL
18	C6	114	ARG
18	C6	115	THR
18	C6	138	PHE
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL
20	C8	14	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	60	GLU
20	C8	91	ASP
20	C8	92	ILE
21	C9	31	PRO
21	C9	53	TRP
21	C9	116	ILE
24	D2	83	ILE
25	D3	3	LYS
25	D3	12	ALA
25	D3	92	CYS
25	D3	114	LYS
25	D3	137	LYS
27	D5	37	GLN
27	D5	39	ALA
27	D5	43	ASP
27	D5	44	GLN
27	D5	55	PRO
27	D5	56	THR
27	D5	57	TYR
27	D5	97	LYS
28	D6	36	ILE
28	D6	45	VAL
28	D6	46	GLU
28	D6	65	PRO
28	D6	82	ARG
28	D6	84	VAL
28	D6	85	ARG
29	D7	38	PRO
29	D7	62	ILE
30	D8	36	THR
30	D8	37	SER
30	D8	61	ARG
32	E0	47	VAL
33	E1	85	TYR
33	E1	103	LEU
33	E1	138	ARG
34	SR	24	ALA
34	SR	57	PRO
34	SR	58	VAL
34	SR	155	ARG
34	SR	160	GLU
34	SR	161	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	SR	201	THR
34	SR	203	THR
34	SR	318	ALA
35	SM	102	THR
35	SM	140	ASP
35	SM	166	VAL
35	SM	167	PRO
40	L3	4	ARG
40	L3	5	LYS
40	L3	83	PRO
40	L3	140	ASP
40	L3	347	SER
40	L3	378	ALA
41	L4	131	VAL
41	L4	182	LEU
41	L4	268	ALA
41	L4	292	SER
41	L4	293	SER
41	L4	311	HIS
41	L4	317	PRO
41	L4	318	LEU
41	L4	338	LYS
41	L4	361	HIS
42	L5	233	ALA
42	L5	234	ASP
42	L5	258	LYS
44	L7	24	GLU
44	L7	26	VAL
45	L8	25	PRO
45	L8	36	ILE
47	M0	189	GLU
47	M0	207	GLU
48	M1	8	PRO
48	M1	9	MET
48	M1	11	ASP
48	M1	12	LEU
48	M1	28	ASP
48	M1	74	PRO
48	M1	165	GLN
49	M3	47	ALA
49	M3	129	ASN
49	M3	141	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	M4	9	ALA
50	M4	135	LEU
50	M4	136	ALA
52	M6	111	PRO
53	M7	157	VAL
54	M8	98	LYS
54	M8	99	THR
56	N0	13	ARG
57	N1	36	VAL
57	N1	124	VAL
58	N2	44	GLU
58	N2	51	GLY
58	N2	60	GLY
60	N4	26	SER
60	N4	64	THR
60	N4	81	PRO
61	N5	44	PRO
63	N7	18	TYR
63	N7	125	GLY
64	N8	57	GLY
64	N8	76	ASP
67	O1	83	GLU
71	O5	96	GLU
71	O5	97	ALA
71	O5	98	SER
71	O5	119	LYS
72	O6	33	ALA
72	O6	98	ARG
73	O7	84	SER
76	Q0	78	ILE
76	Q0	79	GLU
78	Q2	100	LYS
2	s0	4	PRO
2	s0	30	GLN
2	s0	62	ARG
2	s0	95	ALA
2	s0	158	VAL
2	s0	164	ASN
2	s0	189	VAL
2	s0	203	PHE
2	s0	206	ASP
3	s1	106	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	s1	147	ALA
3	s1	206	PRO
3	s1	223	PHE
4	s2	106	ASP
4	s2	238	SER
5	s3	179	GLN
5	s3	195	SER
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
5	s3	220	PRO
6	s4	24	SER
6	s4	95	THR
6	s4	163	ASP
6	s4	196	VAL
6	s4	242	LYS
7	s5	28	PRO
7	s5	43	PHE
7	s5	151	GLY
7	s5	184	PHE
7	s5	209	TYR
8	s6	25	ARG
8	s6	138	ALA
8	s6	173	PRO
8	s6	174	LYS
9	s7	30	SER
9	s7	64	VAL
9	s7	66	SER
9	s7	106	SER
9	s7	131	PHE
9	s7	163	ASP
9	s7	185	ILE
10	s8	101	ILE
10	s8	115	ALA
10	s8	116	HIS
10	s8	136	SER
11	s9	117	GLY
11	s9	147	MET
80	c0	2	LEU
80	c0	32	HIS
80	c0	82	LEU
80	c0	83	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
80	c0	88	PRO
80	c0	94	GLU
80	c0	97	PRO
13	c1	61	THR
13	c1	114	ALA
14	c2	22	VAL
15	c3	19	SER
15	c3	66	ILE
15	c3	87	ASP
15	c3	137	PRO
15	c3	143	SER
16	c4	126	THR
16	c4	132	ARG
17	c5	11	VAL
17	c5	17	TYR
17	c5	50	THR
17	c5	51	SER
17	c5	68	PRO
17	c5	125	PRO
17	c5	126	VAL
17	c5	127	ARG
17	c5	131	ALA
18	c6	39	VAL
18	c6	42	GLU
19	c7	88	VAL
20	c8	91	ASP
20	c8	92	ILE
21	c9	25	GLN
21	c9	29	GLU
21	c9	34	VAL
22	d0	15	GLN
22	d0	118	VAL
23	d1	4	ASP
26	d4	30	PRO
26	d4	33	ALA
26	d4	35	VAL
26	d4	52	LYS
26	d4	121	THR
27	d5	38	HIS
27	d5	85	LYS
27	d5	104	ALA
28	d6	13	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	d6	28	LYS
28	d6	47	ALA
29	d7	38	PRO
29	d7	59	CYS
29	d7	60	SER
31	d9	6	VAL
82	e1	87	THR
82	e1	92	LYS
82	e1	97	LYS
82	e1	98	VAL
82	e1	102	VAL
82	e1	103	LEU
82	e1	106	TYR
82	e1	127	GLY
34	sR	4	ASN
34	sR	96	THR
34	sR	163	ASP
34	sR	165	ASP
34	sR	250	TYR
35	sM	47	ALA
35	sM	48	ARG
35	sM	50	ASN
35	sM	60	ALA
35	sM	172	VAL
39	l2	24	GLN
40	l3	129	ALA
40	l3	140	ASP
40	l3	142	ALA
40	l3	188	ILE
40	l3	347	SER
41	l4	14	GLU
41	l4	145	ILE
41	l4	301	PRO
41	l4	302	ALA
41	l4	329	PRO
41	l4	330	TYR
41	l4	339	LEU
41	l4	342	LYS
42	l5	5	LYS
42	l5	258	LYS
42	l5	260	PHE
42	l5	269	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	l7	158	LYS
45	l8	25	PRO
45	l8	39	ALA
45	l8	122	LYS
45	l8	190	VAL
45	l8	203	VAL
45	l8	223	ALA
47	m0	7	ARG
47	m0	204	GLY
47	m0	219	ALA
47	m0	220	GLN
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
48	m1	108	GLU
48	m1	165	GLN
49	m3	47	ALA
49	m3	50	PRO
49	m3	51	LEU
49	m3	58	VAL
49	m3	150	PRO
49	m3	152	THR
51	m5	183	THR
52	m6	16	VAL
52	m6	110	PRO
53	m7	67	ILE
54	m8	99	THR
55	m9	156	ASN
55	m9	183	ALA
56	n0	2	ALA
57	n1	122	GLN
60	n4	63	ILE
60	n4	71	ARG
60	n4	76	VAL
61	n5	25	LYS
61	n5	44	PRO
61	n5	45	LYS
61	n5	55	ASN
62	n6	83	ASP
63	n7	5	LEU
63	n7	56	LYS
63	n7	125	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
63	n7	129	TRP
65	n9	21	ILE
65	n9	23	LYS
65	n9	39	PHE
67	o1	7	VAL
67	o1	45	GLY
67	o1	86	LYS
68	o2	4	LEU
68	o2	5	PRO
68	o2	6	HIS
70	o4	79	SER
72	o6	33	ALA
72	o6	98	ARG
73	o7	84	SER
74	o8	17	ARG
74	o8	18	ALA
74	o8	19	ASP
76	q0	78	ILE
84	p0	93	LEU
84	p0	198	PRO
2	S0	5	ALA
2	S0	49	ASN
2	S0	94	GLY
2	S0	205	ARG
3	S1	51	SER
3	S1	58	SER
3	S1	78	ASP
3	S1	81	PHE
3	S1	177	GLN
3	S1	221	PRO
4	S2	81	MET
4	S2	182	PRO
5	S3	38	GLU
5	S3	40	ARG
5	S3	90	ARG
5	S3	216	PRO
6	S4	12	LEU
6	S4	17	HIS
6	S4	96	ASN
6	S4	195	ILE
6	S4	222	LEU
6	S4	245	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	S5	51	VAL
7	S5	64	VAL
7	S5	101	GLY
7	S5	127	GLN
7	S5	150	GLY
8	S6	70	PRO
8	S6	154	ARG
9	S7	73	VAL
9	S7	98	ILE
9	S7	155	ASP
9	S7	159	VAL
10	S8	52	ASN
10	S8	81	VAL
10	S8	149	SER
10	S8	186	GLY
11	S9	98	ALA
11	S9	100	LYS
12	C0	35	ILE
12	C0	64	TYR
12	C0	92	ILE
13	C1	29	LYS
13	C1	55	ASP
13	C1	145	ALA
13	C1	154	ALA
14	C2	22	VAL
14	C2	55	GLY
14	C2	66	VAL
14	C2	91	VAL
14	C2	101	ALA
14	C2	119	SER
15	C3	22	ALA
15	C3	68	GLY
16	C4	39	ILE
16	C4	51	ASP
16	C4	124	ASP
17	C5	80	MET
17	C5	101	ALA
18	C6	116	LEU
19	C7	113	LEU
19	C7	115	LEU
19	C7	124	VAL
20	C8	10	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	61	LEU
20	C8	104	ASN
20	C8	144	ARG
21	C9	90	PRO
23	D1	4	ASP
23	D1	7	GLN
23	D1	43	GLY
24	D2	127	GLY
25	D3	40	SER
25	D3	41	SER
25	D3	112	LYS
25	D3	138	GLU
26	D4	5	VAL
26	D4	34	ASN
26	D4	35	VAL
27	D5	41	ILE
28	D6	47	ALA
28	D6	86	VAL
29	D7	63	LEU
30	D8	51	ASN
31	D9	6	VAL
33	E1	83	LYS
33	E1	84	VAL
33	E1	98	VAL
33	E1	127	GLY
35	SM	64	LYS
35	SM	139	GLU
35	SM	173	GLU
39	L2	13	GLY
39	L2	47	GLN
39	L2	246	LEU
40	L3	3	HIS
40	L3	139	GLN
40	L3	262	TRP
40	L3	351	LEU
40	L3	379	PHE
40	L3	385	LYS
40	L3	386	ASP
41	L4	4	PRO
41	L4	130	ALA
41	L4	146	PRO
41	L4	190	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	232	SER
41	L4	313	LEU
41	L4	339	LEU
42	L5	7	ALA
42	L5	57	ASN
42	L5	85	ARG
42	L5	228	ALA
43	L6	81	ALA
44	L7	25	GLN
44	L7	51	TYR
44	L7	91	GLY
45	L8	94	PHE
45	L8	100	GLU
45	L8	196	ALA
47	M0	16	PRO
47	M0	194	GLY
48	M1	94	ARG
48	M1	117	ASP
48	M1	151	SER
48	M1	167	TYR
49	M3	76	THR
50	M4	8	LYS
50	M4	10	SER
50	M4	28	SER
50	M4	36	VAL
51	M5	184	LYS
52	M6	16	VAL
52	M6	110	PRO
52	M6	182	ASN
53	M7	110	THR
53	M7	161	ALA
55	M9	53	LYS
57	N1	121	ALA
57	N1	159	PHE
58	N2	50	LEU
58	N2	59	ASP
58	N2	91	ASP
59	N3	82	ALA
60	N4	97	LYS
61	N5	45	LYS
62	N6	52	ARG
62	N6	53	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
62	N6	84	LYS
63	N7	16	GLY
63	N7	17	ARG
63	N7	35	SER
63	N7	128	GLN
64	N8	66	ALA
66	O0	71	GLN
66	O0	96	GLY
67	O1	6	ASP
67	O1	84	ASP
69	O3	59	VAL
72	O6	3	VAL
75	O9	44	TRP
79	Q3	58	SER
2	s0	44	GLY
2	s0	66	ALA
2	s0	111	ILE
2	s0	139	VAL
2	s0	191	ARG
3	s1	93	GLY
3	s1	161	ILE
3	s1	179	SER
4	s2	92	ALA
4	s2	163	GLY
5	s3	61	GLU
5	s3	90	ARG
5	s3	203	PRO
6	s4	12	LEU
6	s4	93	ASP
6	s4	164	LEU
6	s4	195	ILE
6	s4	202	ASP
7	s5	36	ALA
7	s5	204	GLY
8	s6	68	LEU
9	s7	67	LEU
10	s8	199	LYS
11	s9	118	LEU
80	c0	23	ALA
13	c1	144	ALA
14	c2	26	ASP
14	c2	89	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	c2	90	LYS
14	c2	101	ALA
14	c2	103	LEU
14	c2	131	ASP
15	c3	12	SER
15	c3	139	TRP
15	c3	140	LYS
16	c4	35	GLY
16	c4	50	ALA
16	c4	90	ARG
16	c4	131	GLY
18	c6	40	GLU
18	c6	97	VAL
18	c6	113	ASP
19	c7	50	ILE
19	c7	51	ALA
19	c7	98	GLY
19	c7	99	VAL
19	c7	113	LEU
20	c8	61	LEU
21	c9	33	TYR
22	d0	17	GLN
22	d0	49	ASN
22	d0	51	VAL
22	d0	52	LYS
22	d0	96	PRO
23	d1	44	ARG
24	d2	68	ARG
25	d3	66	SER
26	d4	49	LYS
27	d5	103	ARG
28	d6	8	ASN
28	d6	63	ALA
29	d7	62	ILE
30	d8	61	ARG
31	d9	5	ASN
31	d9	7	TRP
81	e0	45	VAL
81	e0	51	ASN
82	e1	83	LYS
82	e1	84	VAL
82	e1	100	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	sR	28	GLY
34	sR	160	GLU
34	sR	218	GLY
39	l2	30	ARG
39	l2	142	ASP
39	l2	212	GLY
39	l2	215	ASN
40	l3	247	ARG
41	l4	4	PRO
41	l4	15	ALA
41	l4	90	PHE
41	l4	143	GLU
41	l4	146	PRO
41	l4	272	VAL
41	l4	311	HIS
42	l5	178	ASN
43	l6	32	ALA
44	l7	191	VAL
45	l8	26	LEU
45	l8	209	ALA
45	l8	239	GLY
46	l9	144	ILE
46	l9	189	GLU
47	m0	25	ALA
47	m0	176	LEU
47	m0	216	TYR
47	m0	218	ALA
48	m1	114	ILE
49	m3	76	THR
49	m3	121	SER
49	m3	134	GLU
49	m3	135	ALA
50	m4	135	LEU
51	m5	184	LYS
52	m6	13	GLY
52	m6	111	PRO
52	m6	186	ALA
53	m7	54	HIS
53	m7	66	SER
54	m8	41	ASP
55	m9	155	LEU
55	m9	182	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	n2	48	GLY
58	n2	50	LEU
60	n4	64	THR
62	n6	45	ILE
62	n6	84	LYS
62	n6	125	LYS
63	n7	17	ARG
63	n7	36	HIS
65	n9	24	PRO
67	o1	84	ASP
67	o1	91	SER
68	o2	27	ARG
68	o2	124	GLY
69	o3	33	GLU
69	o3	60	ARG
69	o3	88	ASN
71	o5	82	ALA
71	o5	119	LYS
73	o7	85	LYS
78	q2	17	CYS
84	p0	33	VAL
84	p0	102	SER
2	S0	27	ARG
2	S0	95	ALA
2	S0	195	TRP
2	S0	196	SER
3	S1	62	LYS
3	S1	82	ARG
3	S1	131	ASP
3	S1	158	SER
3	S1	179	SER
3	S1	218	LEU
4	S2	39	THR
5	S3	72	LEU
5	S3	217	ILE
5	S3	218	LEU
6	S4	77	ARG
6	S4	201	HIS
6	S4	205	PHE
7	S5	35	GLN
7	S5	58	LEU
8	S6	146	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	S6	152	ASP
9	S7	5	GLN
9	S7	30	SER
9	S7	36	ALA
9	S7	112	ARG
9	S7	156	SER
9	S7	186	PRO
10	S8	40	ALA
10	S8	120	THR
11	S9	9	SER
11	S9	163	PRO
11	S9	164	PHE
12	C0	94	GLU
13	C1	4	GLU
13	C1	30	ARG
13	C1	113	PRO
13	C1	139	VAL
13	C1	146	ALA
13	C1	147	ALA
14	C2	21	GLU
14	C2	87	PRO
14	C2	105	LYS
14	C2	112	ALA
16	C4	18	ARG
16	C4	40	ALA
16	C4	75	GLY
16	C4	125	SER
17	C5	22	LEU
17	C5	52	LYS
17	C5	130	ARG
20	C8	7	GLU
20	C8	100	THR
21	C9	69	LYS
23	D1	64	GLU
24	D2	57	ARG
25	D3	131	SER
26	D4	6	THR
26	D4	36	SER
26	D4	97	ALA
26	D4	104	SER
27	D5	38	HIS
27	D5	70	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	D6	11	ASN
30	D8	14	LYS
30	D8	16	LEU
33	E1	87	THR
33	E1	102	VAL
33	E1	118	ARG
34	SR	13	LEU
34	SR	22	SER
34	SR	50	ASP
34	SR	153	GLN
34	SR	194	GLY
34	SR	242	SER
35	SM	52	PRO
35	SM	87	THR
35	SM	174	LEU
39	L2	127	ALA
39	L2	180	LEU
39	L2	251	LYS
40	L3	155	ALA
41	L4	230	VAL
41	L4	304	GLN
42	L5	58	LYS
42	L5	110	LEU
42	L5	124	GLU
42	L5	125	VAL
42	L5	188	GLU
42	L5	259	LYS
42	L5	269	SER
43	L6	97	ASN
43	L6	150	LYS
44	L7	163	LEU
45	L8	39	ALA
47	M0	220	GLN
48	M1	73	GLY
48	M1	95	ASN
48	M1	114	ILE
48	M1	140	ARG
49	M3	130	GLY
49	M3	136	GLU
49	M3	165	SER
51	M5	81	TYR
52	M6	90	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	M7	3	ARG
53	M7	109	ALA
53	M7	164	LYS
56	N0	2	ALA
56	N0	130	GLU
58	N2	11	ILE
58	N2	20	SER
58	N2	31	ALA
58	N2	52	ASN
62	N6	83	ASP
63	N7	28	PRO
63	N7	102	GLU
64	N8	47	LYS
64	N8	78	LEU
65	N9	44	LYS
67	O1	60	TRP
69	O3	40	ASP
69	O3	88	ASN
70	O4	46	ASP
71	O5	14	LYS
71	O5	27	GLU
71	O5	75	TYR
71	O5	95	PHE
72	O6	64	SER
73	O7	68	LYS
74	O8	33	LYS
75	O9	32	ASN
78	Q2	33	ALA
78	Q2	34	SER
78	Q2	78	LYS
78	Q2	94	GLY
2	s0	103	THR
3	s1	82	ARG
4	s2	107	SER
5	s3	221	SER
6	s4	3	ARG
6	s4	94	ALA
6	s4	245	LYS
7	s5	29	ILE
7	s5	39	GLU
7	s5	55	ASP
9	s7	159	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	s8	108	PRO
11	s9	65	LYS
80	c0	3	MET
80	c0	30	ALA
80	c0	31	LYS
80	c0	92	ILE
13	c1	133	LYS
14	c2	106	ILE
14	c2	108	ARG
14	c2	119	SER
15	c3	48	SER
15	c3	133	ALA
17	c5	7	ALA
17	c5	9	LYS
17	c5	71	GLU
17	c5	80	MET
18	c6	116	LEU
19	c7	67	ARG
19	c7	120	SER
20	c8	94	ASP
21	c9	40	SER
22	d0	19	ILE
22	d0	55	PRO
22	d0	97	VAL
25	d3	60	GLU
25	d3	70	LYS
26	d4	58	PHE
26	d4	132	ARG
27	d5	93	SER
28	d6	59	TYR
28	d6	82	ARG
29	d7	3	LEU
29	d7	20	LYS
30	d8	57	MET
81	e0	47	VAL
81	e0	54	ARG
82	e1	90	LYS
82	e1	112	GLY
82	e1	131	PHE
34	sR	161	LYS
34	sR	297	ASP
35	sM	66	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	sM	168	GLU
39	l2	80	GLU
39	l2	127	ALA
39	l2	194	ASN
39	l2	229	ALA
39	l2	249	SER
40	l3	378	ALA
41	l4	233	LEU
41	l4	338	LYS
41	l4	341	SER
43	l6	97	ASN
43	l6	98	VAL
43	l6	133	GLU
44	l7	228	SER
45	l8	69	LEU
45	l8	121	SER
45	l8	133	LYS
45	l8	237	ILE
46	l9	109	ALA
46	l9	110	LYS
47	m0	3	ARG
47	m0	196	PHE
48	m1	94	ARG
49	m3	129	ASN
51	m5	81	TYR
52	m6	4	GLU
55	m9	36	ASN
57	n1	16	GLN
57	n1	121	ALA
60	n4	83	THR
60	n4	93	ARG
60	n4	132	GLY
61	n5	40	LEU
61	n5	47	ALA
61	n5	48	SER
63	n7	134	LEU
67	o1	40	ALA
67	o1	83	GLU
69	o3	59	VAL
71	o5	61	GLN
71	o5	83	LYS
72	o6	4	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
73	o7	87	SER
77	q1	4	LYS
79	q3	51	ALA
2	S0	103	THR
2	S0	126	PRO
2	S0	164	ASN
2	S0	188	LEU
2	S0	194	PRO
3	S1	21	VAL
3	S1	54	LEU
3	S1	55	LYS
3	S1	116	LYS
4	S2	150	GLN
5	S3	195	SER
5	S3	204	ASP
6	S4	73	ASP
6	S4	194	THR
6	S4	200	ARG
7	S5	21	THR
7	S5	54	LYS
10	S8	10	LYS
10	S8	19	ALA
10	S8	152	ILE
10	S8	153	GLU
11	S9	162	SER
14	C2	69	ALA
14	C2	106	ILE
14	C2	115	VAL
14	C2	130	THR
15	C3	19	SER
16	C4	25	ASP
16	C4	79	VAL
16	C4	114	ARG
16	C4	123	SER
17	C5	11	VAL
17	C5	51	SER
18	C6	33	GLY
20	C8	8	GLN
21	C9	28	LEU
21	C9	130	ARG
22	D0	16	GLN
22	D0	49	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	D1	10	GLU
23	D1	12	TYR
23	D1	42	GLU
25	D3	109	ARG
26	D4	51	GLU
28	D6	8	ASN
28	D6	63	ALA
28	D6	64	LEU
29	D7	23	THR
29	D7	51	GLN
33	E1	94	LYS
33	E1	100	LEU
33	E1	111	GLU
34	SR	51	ASP
34	SR	114	ASP
34	SR	217	ASP
34	SR	231	MET
34	SR	237	GLN
34	SR	244	ALA
35	SM	53	ARG
39	L2	70	ARG
39	L2	130	SER
40	L3	141	GLY
41	L4	90	PHE
41	L4	140	HIS
41	L4	270	SER
42	L5	178	ASN
42	L5	185	PHE
42	L5	215	ASP
42	L5	253	PHE
45	L8	136	LEU
45	L8	138	HIS
45	L8	157	VAL
46	L9	2	LYS
48	M1	111	ASP
49	M3	140	SER
49	M3	166	ALA
50	M4	6	ILE
51	M5	145	ASP
52	M6	178	VAL
53	M7	160	ALA
54	M8	21	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	M8	162	ALA
57	N1	114	ALA
59	N3	46	LEU
60	N4	76	VAL
62	N6	25	SER
63	N7	32	GLY
63	N7	103	GLN
66	O0	46	ALA
67	O1	5	LYS
67	O1	7	VAL
67	O1	21	HIS
79	Q3	84	ARG
2	s0	5	ALA
2	s0	68	PRO
3	s1	22	ASP
4	s2	150	GLN
4	s2	235	LEU
5	s3	4	LEU
5	s3	79	TYR
5	s3	196	ARG
5	s3	219	ALA
6	s4	90	ILE
6	s4	168	LYS
6	s4	260	GLY
8	s6	58	LYS
8	s6	70	PRO
9	s7	13	PRO
9	s7	155	ASP
9	s7	186	PRO
10	s8	62	THR
10	s8	100	ALA
10	s8	137	LYS
10	s8	149	SER
80	c0	9	ASN
13	c1	121	ASP
14	c2	21	GLU
14	c2	87	PRO
14	c2	91	VAL
14	c2	130	THR
16	c4	37	GLU
16	c4	114	ARG
17	c5	6	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	c5	54	ALA
17	c5	100	LYS
17	c5	136	SER
18	c6	142	TYR
19	c7	15	ALA
19	c7	116	LYS
20	c8	7	GLU
20	c8	60	GLU
22	d0	16	GLN
23	d1	10	GLU
25	d3	131	SER
27	d5	71	ILE
28	d6	93	LYS
31	d9	16	LYS
82	e1	79	LYS
82	e1	85	TYR
34	sR	290	VAL
35	sM	43	ASP
35	sM	46	LYS
35	sM	84	LYS
35	sM	121	LYS
35	sM	164	ASN
39	l2	56	ALA
40	l3	3	HIS
40	l3	22	ALA
40	l3	348	ARG
41	l4	190	GLY
41	l4	231	ALA
41	l4	352	ALA
42	l5	119	TYR
43	l6	10	TYR
45	l8	79	GLN
45	l8	222	PHE
45	l8	240	ASN
46	l9	2	LYS
47	m0	101	LYS
48	m1	167	TYR
49	m3	60	ALA
51	m5	76	PRO
54	m8	112	ALA
56	n0	154	HIS
58	n2	60	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
60	n4	77	LYS
61	n5	24	LEU
63	n7	6	LYS
64	n8	24	LYS
64	n8	56	VAL
65	n9	26	THR
71	o5	40	SER
72	o6	34	SER
78	q2	33	ALA
84	p0	21	GLU
84	p0	203	ASP
2	S0	203	PHE
3	S1	207	LEU
3	S1	215	VAL
4	S2	47	ALA
4	S2	79	GLU
4	S2	106	ASP
7	S5	65	ARG
8	S6	148	SER
9	S7	13	PRO
9	S7	110	GLN
10	S8	59	ARG
10	S8	105	ASP
12	C0	54	TYR
14	C2	113	ARG
14	C2	131	ASP
15	C3	12	SER
16	C4	24	ASN
17	C5	29	SER
18	C6	40	GLU
19	C7	23	LYS
19	C7	24	LEU
22	D0	17	GLN
22	D0	21	LYS
23	D1	21	ASN
27	D5	88	ILE
29	D7	57	GLU
29	D7	75	GLU
33	E1	99	LYS
33	E1	110	ALA
33	E1	137	ASP
34	SR	98	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	SR	163	ASP
35	SM	88	ARG
35	SM	153	ASP
39	L2	143	GLU
41	L4	14	GLU
41	L4	15	ALA
41	L4	223	PRO
41	L4	233	LEU
41	L4	269	SER
42	L5	260	PHE
42	L5	267	ALA
43	L6	6	ALA
43	L6	100	LYS
44	L7	159	GLN
44	L7	164	SER
44	L7	217	PRO
45	L8	156	ASP
46	L9	110	LYS
47	M0	38	LYS
50	M4	29	ALA
51	M5	94	TYR
52	M6	89	SER
54	M8	176	ARG
57	N1	127	GLN
58	N2	107	PHE
66	O0	20	SER
72	O6	21	THR
72	O6	34	SER
74	O8	70	PRO
78	Q2	17	CYS
2	s0	10	THR
2	s0	194	PRO
3	s1	160	HIS
3	s1	224	ASP
4	s2	182	PRO
4	s2	234	PRO
5	s3	43	PRO
6	s4	22	LYS
6	s4	30	ARG
6	s4	38	LEU
7	s5	100	ASN
7	s5	171	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	s7	100	PRO
9	s7	133	THR
10	s8	78	ILE
10	s8	107	THR
10	s8	159	GLN
11	s9	162	SER
80	c0	35	ILE
80	c0	49	LEU
80	c0	95	ARG
13	c1	129	ARG
14	c2	25	GLU
14	c2	39	ASP
14	c2	64	SER
14	c2	82	PRO
16	c4	124	ASP
17	c5	52	LYS
17	c5	130	ARG
20	c8	14	ILE
26	d4	51	GLU
26	d4	78	SER
28	d6	5	ARG
29	d7	75	GLU
81	e0	60	PRO
81	e0	61	SER
82	e1	128	ALA
34	sR	185	GLN
39	l2	247	ARG
39	l2	251	LYS
40	l3	386	ASP
41	l4	328	ASN
44	l7	196	LYS
45	l8	102	ALA
45	l8	196	ALA
46	l9	167	VAL
48	m1	115	LYS
49	m3	13	HIS
49	m3	93	ILE
63	n7	18	TYR
64	n8	76	ASP
64	n8	129	PHE
67	o1	47	ASP
68	o2	17	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	S0	7	PHE
2	S0	35	PRO
3	S1	23	PRO
3	S1	210	ILE
3	S1	226	GLY
4	S2	235	LEU
4	S2	236	PRO
5	S3	36	GLY
6	S4	164	LEU
11	S9	149	ARG
13	C1	95	PRO
15	C3	3	ARG
17	C5	127	ARG
25	D3	78	LYS
25	D3	89	ASN
31	D9	8	PHE
33	E1	128	ALA
33	E1	144	CYS
34	SR	30	PRO
35	SM	12	VAL
35	SM	67	GLY
35	SM	111	GLY
35	SM	172	VAL
40	L3	188	ILE
41	L4	183	LYS
42	L5	137	ASP
42	L5	212	ALA
44	L7	178	ILE
47	M0	145	LYS
49	M3	127	PRO
49	M3	192	GLU
64	N8	56	VAL
64	N8	97	GLU
65	N9	45	HIS
70	O4	74	ARG
73	O7	86	ALA
74	O8	37	PRO
79	Q3	7	LYS
3	s1	207	LEU
7	s5	152	GLY
11	s9	134	ILE
14	c2	40	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	c2	45	LEU
30	d8	62	GLU
31	d9	11	PRO
81	e0	38	LEU
82	e1	148	TYR
35	sM	59	GLY
40	l3	239	PRO
42	l5	125	VAL
43	l6	93	VAL
47	m0	47	PRO
48	m1	153	LYS
54	m8	108	ALA
57	n1	136	ARG
60	n4	72	SER
64	n8	68	PHE
67	o1	41	LYS
72	o6	22	PRO
73	o7	67	LEU
4	S2	36	VAL
8	S6	69	LEU
8	S6	162	VAL
8	S6	165	GLY
27	D5	71	ILE
34	SR	113	VAL
34	SR	146	GLY
34	SR	271	VAL
47	M0	149	VAL
53	M7	51	VAL
53	M7	143	PRO
65	N9	21	ILE
6	s4	150	PRO
80	c0	73	VAL
14	c2	63	VAL
14	c2	66	VAL
44	l7	178	ILE
48	m1	117	ASP
61	n5	62	VAL
63	n7	70	PRO
3	S1	176	VAL
5	S3	37	VAL
43	L6	98	VAL
8	s6	165	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	s9	168	ARG
16	c4	79	VAL
20	c8	29	VAL
31	d9	17	GLY
40	l3	141	GLY
63	n7	103	GLN
2	S0	139	VAL
10	S8	107	THR
14	C2	37	VAL
23	D1	46	ILE
33	E1	112	GLY
40	L3	317	ILE
53	M7	182	ILE
57	N1	123	GLY
63	N7	36	HIS
8	s6	69	LEU
8	s6	157	VAL
18	c6	4	VAL
20	c8	135	GLY
21	c9	100	ILE
25	d3	119	GLY
28	d6	58	VAL
30	d8	20	GLY
54	m8	84	VAL
68	o2	122	PRO
72	o6	9	ILE
4	S2	145	GLY
9	S7	132	PRO
25	D3	143	PRO
28	D6	75	VAL
45	L8	190	VAL
62	N6	92	GLY
67	O1	67	VAL
5	s3	163	PRO
7	s5	101	GLY
9	s7	12	ALA
14	c2	115	VAL
27	d5	55	PRO
47	m0	5	PRO
47	m0	214	PRO
54	m8	97	PRO
56	n0	129	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
84	p0	77	LEU
14	C2	102	GLY
16	C4	122	PRO
20	C8	82	PRO
3	s1	35	PRO
4	s2	149	GLY
7	s5	153	GLY
16	c4	76	ILE
20	c8	28	ILE
30	d8	6	PRO
82	e1	124	PRO
34	sR	167	VAL
57	n1	148	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	
2	S0	164/209 (78%)	130 (79%)	34 (21%)	1	5
2	s0	165/209 (79%)	128 (78%)	37 (22%)	1	4
3	S1	191/223 (86%)	148 (78%)	43 (22%)	1	4
3	s1	192/223 (86%)	152 (79%)	40 (21%)	1	5
4	S2	176/204 (86%)	126 (72%)	50 (28%)	0	1
4	s2	176/204 (86%)	127 (72%)	49 (28%)	0	1
5	S3	182/194 (94%)	139 (76%)	43 (24%)	0	3
5	s3	182/194 (94%)	137 (75%)	45 (25%)	0	2
6	S4	221/221 (100%)	172 (78%)	49 (22%)	1	4
6	s4	221/221 (100%)	175 (79%)	46 (21%)	1	5
7	S5	173/190 (91%)	145 (84%)	28 (16%)	2	9
7	s5	173/190 (91%)	126 (73%)	47 (27%)	0	1
8	S6	188/201 (94%)	144 (77%)	44 (23%)	0	3
8	s6	187/201 (93%)	144 (77%)	43 (23%)	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	S7	165/169 (98%)	130 (79%)	35 (21%)	1	5
9	s7	165/169 (98%)	132 (80%)	33 (20%)	1	5
10	S8	150/161 (93%)	116 (77%)	34 (23%)	0	3
10	s8	150/161 (93%)	125 (83%)	25 (17%)	2	9
11	S9	158/165 (96%)	120 (76%)	38 (24%)	0	2
11	s9	158/165 (96%)	122 (77%)	36 (23%)	0	3
12	C0	77/98 (79%)	63 (82%)	14 (18%)	1	7
13	C1	129/136 (95%)	104 (81%)	25 (19%)	1	6
13	c1	129/136 (95%)	102 (79%)	27 (21%)	1	5
14	C2	88/118 (75%)	65 (74%)	23 (26%)	0	1
14	c2	88/118 (75%)	64 (73%)	24 (27%)	0	1
15	C3	127/127 (100%)	100 (79%)	27 (21%)	1	5
15	c3	127/127 (100%)	100 (79%)	27 (21%)	1	5
16	C4	81/104 (78%)	60 (74%)	21 (26%)	0	2
16	c4	97/104 (93%)	67 (69%)	30 (31%)	0	1
17	C5	101/117 (86%)	76 (75%)	25 (25%)	0	2
17	c5	103/117 (88%)	77 (75%)	26 (25%)	0	2
18	C6	117/118 (99%)	86 (74%)	31 (26%)	0	1
18	c6	118/118 (100%)	93 (79%)	25 (21%)	1	5
19	C7	94/124 (76%)	71 (76%)	23 (24%)	0	2
19	c7	92/124 (74%)	64 (70%)	28 (30%)	0	1
20	C8	128/128 (100%)	95 (74%)	33 (26%)	0	2
20	c8	128/128 (100%)	99 (77%)	29 (23%)	0	3
21	C9	115/115 (100%)	80 (70%)	35 (30%)	0	1
21	c9	115/115 (100%)	90 (78%)	25 (22%)	1	4
22	D0	100/113 (88%)	77 (77%)	23 (23%)	0	3
22	d0	103/113 (91%)	71 (69%)	32 (31%)	0	0
23	D1	74/74 (100%)	55 (74%)	19 (26%)	0	2
23	d1	74/74 (100%)	59 (80%)	15 (20%)	1	5
24	D2	110/110 (100%)	82 (74%)	28 (26%)	0	2
24	d2	110/110 (100%)	92 (84%)	18 (16%)	2	9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	D3	119/119 (100%)	95 (80%)	24 (20%)	1	5
25	d3	119/119 (100%)	93 (78%)	26 (22%)	1	4
26	D4	112/112 (100%)	90 (80%)	22 (20%)	1	6
26	d4	112/112 (100%)	89 (80%)	23 (20%)	1	5
27	D5	61/88 (69%)	47 (77%)	14 (23%)	0	3
27	d5	61/88 (69%)	45 (74%)	16 (26%)	0	1
28	D6	83/83 (100%)	62 (75%)	21 (25%)	0	2
28	d6	83/83 (100%)	61 (74%)	22 (26%)	0	1
29	D7	70/70 (100%)	53 (76%)	17 (24%)	0	2
29	d7	70/70 (100%)	58 (83%)	12 (17%)	1	8
30	D8	56/59 (95%)	40 (71%)	16 (29%)	0	1
30	d8	56/59 (95%)	37 (66%)	19 (34%)	0	0
31	D9	47/48 (98%)	43 (92%)	4 (8%)	8	34
31	d9	47/48 (98%)	36 (77%)	11 (23%)	0	3
32	E0	51/51 (100%)	38 (74%)	13 (26%)	0	2
33	E1	62/66 (94%)	42 (68%)	20 (32%)	0	0
34	SR	260/261 (100%)	207 (80%)	53 (20%)	1	5
34	sR	260/261 (100%)	231 (89%)	29 (11%)	5	22
35	SM	97/228 (42%)	72 (74%)	25 (26%)	0	2
35	sM	54/228 (24%)	42 (78%)	12 (22%)	1	4
39	L2	193/195 (99%)	151 (78%)	42 (22%)	1	4
39	l2	192/195 (98%)	147 (77%)	45 (23%)	0	3
40	L3	320/322 (99%)	248 (78%)	72 (22%)	1	4
40	l3	319/322 (99%)	247 (77%)	72 (23%)	1	4
41	L4	288/288 (100%)	237 (82%)	51 (18%)	1	8
41	l4	288/288 (100%)	226 (78%)	62 (22%)	1	4
42	L5	244/244 (100%)	194 (80%)	50 (20%)	1	5
42	l5	243/244 (100%)	186 (76%)	57 (24%)	0	3
43	L6	134/152 (88%)	112 (84%)	22 (16%)	2	9
43	l6	135/152 (89%)	111 (82%)	24 (18%)	1	7
44	L7	186/204 (91%)	160 (86%)	26 (14%)	3	14

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
44	l7	187/204 (92%)	160 (86%)	27 (14%)	2	13
45	L8	187/207 (90%)	151 (81%)	36 (19%)	1	6
45	l8	177/207 (86%)	143 (81%)	34 (19%)	1	6
46	L9	171/171 (100%)	132 (77%)	39 (23%)	0	3
46	l9	171/171 (100%)	133 (78%)	38 (22%)	1	4
47	M0	177/186 (95%)	130 (73%)	47 (27%)	0	1
47	m0	179/186 (96%)	143 (80%)	36 (20%)	1	5
48	M1	147/150 (98%)	116 (79%)	31 (21%)	1	5
48	m1	147/150 (98%)	107 (73%)	40 (27%)	0	1
49	M3	154/158 (98%)	120 (78%)	34 (22%)	1	4
49	m3	154/158 (98%)	119 (77%)	35 (23%)	0	3
50	M4	107/108 (99%)	87 (81%)	20 (19%)	1	6
50	m4	108/108 (100%)	80 (74%)	28 (26%)	0	2
51	M5	175/175 (100%)	151 (86%)	24 (14%)	3	14
51	m5	175/175 (100%)	139 (79%)	36 (21%)	1	5
52	M6	160/161 (99%)	130 (81%)	30 (19%)	1	6
52	m6	160/161 (99%)	129 (81%)	31 (19%)	1	6
53	M7	140/145 (97%)	110 (79%)	30 (21%)	1	5
53	m7	125/145 (86%)	99 (79%)	26 (21%)	1	5
54	M8	150/150 (100%)	117 (78%)	33 (22%)	1	4
54	m8	150/150 (100%)	122 (81%)	28 (19%)	1	6
55	M9	153/153 (100%)	123 (80%)	30 (20%)	1	6
55	m9	153/153 (100%)	116 (76%)	37 (24%)	0	2
56	N0	156/156 (100%)	118 (76%)	38 (24%)	0	2
56	n0	156/156 (100%)	123 (79%)	33 (21%)	1	5
57	N1	136/136 (100%)	103 (76%)	33 (24%)	0	2
57	n1	136/136 (100%)	103 (76%)	33 (24%)	0	2
58	N2	87/106 (82%)	67 (77%)	20 (23%)	0	3
58	n2	85/106 (80%)	64 (75%)	21 (25%)	0	2
59	N3	104/104 (100%)	86 (83%)	18 (17%)	1	8
59	n3	104/104 (100%)	90 (86%)	14 (14%)	3	15

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
60	N4	57/129 (44%)	46 (81%)	11 (19%)	1	6
60	n4	100/129 (78%)	82 (82%)	18 (18%)	1	7
61	N5	104/117 (89%)	79 (76%)	25 (24%)	0	2
61	n5	104/117 (89%)	82 (79%)	22 (21%)	1	5
62	N6	109/109 (100%)	77 (71%)	32 (29%)	0	1
62	n6	109/109 (100%)	73 (67%)	36 (33%)	0	0
63	N7	115/115 (100%)	92 (80%)	23 (20%)	1	5
63	n7	115/115 (100%)	85 (74%)	30 (26%)	0	1
64	N8	118/118 (100%)	91 (77%)	27 (23%)	0	3
64	n8	118/118 (100%)	93 (79%)	25 (21%)	1	5
65	N9	46/46 (100%)	37 (80%)	9 (20%)	1	6
65	n9	46/46 (100%)	36 (78%)	10 (22%)	1	4
66	O0	81/87 (93%)	59 (73%)	22 (27%)	0	1
66	o0	84/87 (97%)	65 (77%)	19 (23%)	1	4
67	O1	92/96 (96%)	71 (77%)	21 (23%)	0	3
67	o1	94/96 (98%)	64 (68%)	30 (32%)	0	0
68	O2	109/110 (99%)	77 (71%)	32 (29%)	0	1
68	o2	109/110 (99%)	88 (81%)	21 (19%)	1	6
69	O3	90/90 (100%)	77 (86%)	13 (14%)	2	13
69	o3	90/90 (100%)	72 (80%)	18 (20%)	1	5
70	O4	95/102 (93%)	74 (78%)	21 (22%)	1	4
70	o4	95/102 (93%)	76 (80%)	19 (20%)	1	5
71	O5	104/104 (100%)	76 (73%)	28 (27%)	0	1
71	o5	103/104 (99%)	77 (75%)	26 (25%)	0	2
72	O6	81/81 (100%)	60 (74%)	21 (26%)	0	2
72	o6	80/81 (99%)	57 (71%)	23 (29%)	0	1
73	O7	70/70 (100%)	55 (79%)	15 (21%)	1	5
73	o7	70/70 (100%)	55 (79%)	15 (21%)	1	5
74	O8	68/68 (100%)	52 (76%)	16 (24%)	0	3
74	o8	67/68 (98%)	51 (76%)	16 (24%)	0	2
75	O9	45/45 (100%)	33 (73%)	12 (27%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
75	o9	45/45 (100%)	35 (78%)	10 (22%)	1	4
76	Q0	47/47 (100%)	36 (77%)	11 (23%)	0	3
76	q0	47/47 (100%)	36 (77%)	11 (23%)	0	3
77	Q1	23/23 (100%)	18 (78%)	5 (22%)	1	4
77	q1	23/23 (100%)	16 (70%)	7 (30%)	0	1
78	Q2	90/90 (100%)	66 (73%)	24 (27%)	0	1
78	q2	90/90 (100%)	68 (76%)	22 (24%)	0	2
79	Q3	71/71 (100%)	58 (82%)	13 (18%)	1	7
79	q3	71/71 (100%)	54 (76%)	17 (24%)	0	2
80	c0	73/98 (74%)	61 (84%)	12 (16%)	2	9
81	e0	53/53 (100%)	37 (70%)	16 (30%)	0	1
82	e1	66/66 (100%)	49 (74%)	17 (26%)	0	2
84	p0	105/253 (42%)	80 (76%)	25 (24%)	0	3
All	All	18727/20241 (92%)	14567 (78%)	4160 (22%)	1	4

All (4160) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	7	PHE
2	S0	12	GLU
2	S0	27	ARG
2	S0	30	GLN
2	S0	32	HIS
2	S0	34	GLU
2	S0	37	VAL
2	S0	47	VAL
2	S0	49	ASN
2	S0	50	VAL
2	S0	87	LEU
2	S0	96	THR
2	S0	98	ILE
2	S0	101	ARG
2	S0	106	SER
2	S0	108	THR
2	S0	110	TYR
2	S0	111	ILE
2	S0	124	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	S0	139	VAL
2	S0	140	ASN
2	S0	153	SER
2	S0	154	GLU
2	S0	156	VAL
2	S0	157	ASP
2	S0	162	CYS
2	S0	168	HIS
2	S0	172	LEU
2	S0	184	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	196	SER
2	S0	200	ASP
2	S0	203	PHE
3	S1	21	VAL
3	S1	22	ASP
3	S1	25	THR
3	S1	28	GLU
3	S1	29	TRP
3	S1	30	PHE
3	S1	42	ASN
3	S1	46	THR
3	S1	61	LEU
3	S1	65	VAL
3	S1	67	GLU
3	S1	70	LEU
3	S1	73	LEU
3	S1	74	GLN
3	S1	77	GLU
3	S1	81	PHE
3	S1	85	LYS
3	S1	91	VAL
3	S1	97	LEU
3	S1	105	PHE
3	S1	108	ASP
3	S1	111	ARG
3	S1	115	ARG
3	S1	135	LEU
3	S1	136	ARG
3	S1	137	ILE
3	S1	149	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	S1	154	SER
3	S1	167	VAL
3	S1	170	GLU
3	S1	174	LYS
3	S1	181	LEU
3	S1	193	ILE
3	S1	198	GLU
3	S1	202	LYS
3	S1	203	ASP
3	S1	211	HIS
3	S1	214	LYS
3	S1	215	VAL
3	S1	218	LEU
3	S1	219	LYS
3	S1	223	PHE
3	S1	231	LEU
4	S2	41	LEU
4	S2	50	ILE
4	S2	53	ILE
4	S2	55	GLU
4	S2	58	LEU
4	S2	69	ILE
4	S2	72	LEU
4	S2	76	LEU
4	S2	77	GLN
4	S2	81	MET
4	S2	87	GLN
4	S2	89	GLN
4	S2	90	THR
4	S2	91	ARG
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG
4	S2	99	LYS
4	S2	111	VAL
4	S2	116	LYS
4	S2	117	THR
4	S2	119	LYS
4	S2	121	VAL
4	S2	125	ILE
4	S2	129	ILE
4	S2	130	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	S2	133	LYS
4	S2	134	LEU
4	S2	137	ILE
4	S2	139	ILE
4	S2	141	ARG
4	S2	146	THR
4	S2	148	LEU
4	S2	153	SER
4	S2	166	THR
4	S2	187	LEU
4	S2	193	VAL
4	S2	207	LEU
4	S2	208	GLU
4	S2	221	THR
4	S2	225	LEU
4	S2	226	THR
4	S2	229	LEU
4	S2	232	GLU
4	S2	235	LEU
4	S2	237	VAL
4	S2	238	SER
4	S2	240	LEU
4	S2	242	ILE
4	S2	246	GLU
5	S3	4	LEU
5	S3	6	SER
5	S3	7	LYS
5	S3	9	ARG
5	S3	23	GLU
5	S3	27	ARG
5	S3	37	VAL
5	S3	38	GLU
5	S3	41	VAL
5	S3	59	LEU
5	S3	61	GLU
5	S3	65	ARG
5	S3	66	ILE
5	S3	84	ILE
5	S3	89	GLU
5	S3	92	GLN
5	S3	93	ASP
5	S3	113	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	S3	117	ARG
5	S3	122	VAL
5	S3	134	CYS
5	S3	137	VAL
5	S3	142	LEU
5	S3	143	ARG
5	S3	148	LYS
5	S3	151	LYS
5	S3	158	ILE
5	S3	170	THR
5	S3	172	THR
5	S3	175	VAL
5	S3	176	LEU
5	S3	178	ARG
5	S3	179	GLN
5	S3	181	VAL
5	S3	182	LEU
5	S3	186	VAL
5	S3	194	LYS
5	S3	202	LEU
5	S3	204	ASP
5	S3	207	THR
5	S3	217	ILE
5	S3	222	VAL
5	S3	223	LYS
6	S4	9	LEU
6	S4	12	LEU
6	S4	23	LEU
6	S4	37	LYS
6	S4	38	LEU
6	S4	42	LEU
6	S4	45	ILE
6	S4	48	LEU
6	S4	56	LEU
6	S4	62	LYS
6	S4	68	ARG
6	S4	70	VAL
6	S4	72	VAL
6	S4	77	ARG
6	S4	78	THR
6	S4	102	VAL
6	S4	113	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	S4	116	ASP
6	S4	117	GLU
6	S4	123	LEU
6	S4	126	VAL
6	S4	129	VAL
6	S4	131	LEU
6	S4	133	LYS
6	S4	148	ARG
6	S4	155	LYS
6	S4	156	VAL
6	S4	160	VAL
6	S4	164	LEU
6	S4	180	LEU
6	S4	181	VAL
6	S4	187	ARG
6	S4	189	LEU
6	S4	192	ILE
6	S4	206	ASP
6	S4	211	LYS
6	S4	213	SER
6	S4	214	LEU
6	S4	215	ASP
6	S4	220	THR
6	S4	221	ARG
6	S4	226	PHE
6	S4	227	VAL
6	S4	238	LEU
6	S4	240	LYS
6	S4	242	LYS
6	S4	246	LEU
6	S4	248	ILE
6	S4	259	GLN
7	S5	23	VAL
7	S5	25	LEU
7	S5	32	GLU
7	S5	38	THR
7	S5	41	LYS
7	S5	45	LYS
7	S5	53	VAL
7	S5	59	VAL
7	S5	64	VAL
7	S5	79	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	S5	80	LYS
7	S5	83	ARG
7	S5	89	ILE
7	S5	93	LEU
7	S5	94	THR
7	S5	122	ASN
7	S5	131	GLN
7	S5	132	VAL
7	S5	146	THR
7	S5	147	THR
7	S5	156	ARG
7	S5	161	ASP
7	S5	162	VAL
7	S5	166	ARG
7	S5	190	ILE
7	S5	194	LEU
7	S5	196	GLU
7	S5	213	LYS
8	S6	2	LYS
8	S6	5	ILE
8	S6	6	SER
8	S6	12	SER
8	S6	13	GLN
8	S6	19	ASP
8	S6	25	ARG
8	S6	31	ARG
8	S6	45	PHE
8	S6	58	LYS
8	S6	65	GLN
8	S6	67	VAL
8	S6	69	LEU
8	S6	74	LYS
8	S6	76	LEU
8	S6	78	THR
8	S6	79	LYS
8	S6	81	VAL
8	S6	82	SER
8	S6	87	ARG
8	S6	98	ARG
8	S6	109	LEU
8	S6	113	ILE
8	S6	120	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	S6	124	LEU
8	S6	126	ASP
8	S6	127	THR
8	S6	129	VAL
8	S6	132	ARG
8	S6	133	LEU
8	S6	143	LYS
8	S6	153	VAL
8	S6	155	ASP
8	S6	162	VAL
8	S6	169	TYR
8	S6	170	THR
8	S6	176	GLN
8	S6	177	ARG
8	S6	201	GLN
8	S6	202	ARG
8	S6	211	LEU
8	S6	212	LEU
8	S6	216	LEU
8	S6	223	LYS
9	S7	16	LEU
9	S7	37	GLU
9	S7	38	LEU
9	S7	46	ILE
9	S7	50	ASP
9	S7	51	VAL
9	S7	60	ILE
9	S7	67	LEU
9	S7	73	VAL
9	S7	77	LEU
9	S7	79	ARG
9	S7	85	PHE
9	S7	87	ASP
9	S7	91	ILE
9	S7	97	ARG
9	S7	99	LEU
9	S7	104	ARG
9	S7	105	THR
9	S7	107	ARG
9	S7	114	ARG
9	S7	116	ARG
9	S7	117	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	S7	126	LEU
9	S7	130	VAL
9	S7	144	VAL
9	S7	147	ASN
9	S7	149	ILE
9	S7	156	SER
9	S7	161	GLN
9	S7	166	LEU
9	S7	174	ASN
9	S7	176	LEU
9	S7	179	LYS
9	S7	185	ILE
9	S7	187	SER
10	S8	4	SER
10	S8	5	ARG
10	S8	8	ARG
10	S8	18	ARG
10	S8	20	GLN
10	S8	21	PHE
10	S8	22	ARG
10	S8	26	LYS
10	S8	29	LEU
10	S8	32	GLN
10	S8	36	THR
10	S8	37	LYS
10	S8	46	VAL
10	S8	58	LEU
10	S8	60	ILE
10	S8	66	SER
10	S8	72	ILE
10	S8	73	SER
10	S8	74	LYS
10	S8	75	LYS
10	S8	77	ARG
10	S8	81	VAL
10	S8	88	ASN
10	S8	97	THR
10	S8	135	LYS
10	S8	140	GLU
10	S8	151	LYS
10	S8	152	ILE
10	S8	164	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	S8	184	LEU
10	S8	187	GLU
10	S8	189	LEU
10	S8	193	LEU
10	S8	196	LEU
11	S9	3	ARG
11	S9	6	ARG
11	S9	7	THR
11	S9	28	LEU
11	S9	30	LEU
11	S9	36	LEU
11	S9	39	LYS
11	S9	46	SER
11	S9	60	LEU
11	S9	61	THR
11	S9	78	ARG
11	S9	81	VAL
11	S9	82	ARG
11	S9	89	ASP
11	S9	92	LYS
11	S9	93	LEU
11	S9	99	LEU
11	S9	102	GLU
11	S9	103	ASP
11	S9	105	LEU
11	S9	109	LEU
11	S9	110	GLN
11	S9	113	VAL
11	S9	115	LYS
11	S9	121	SER
11	S9	122	VAL
11	S9	130	THR
11	S9	132	ARG
11	S9	134	ILE
11	S9	138	LYS
11	S9	140	ILE
11	S9	141	VAL
11	S9	149	ARG
11	S9	171	ARG
11	S9	172	VAL
11	S9	174	ARG
11	S9	180	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	S9	182	GLU
12	C0	5	LYS
12	C0	17	GLN
12	C0	20	VAL
12	C0	27	PHE
12	C0	32	HIS
12	C0	33	GLU
12	C0	40	LEU
12	C0	49	LEU
12	C0	55	VAL
12	C0	56	LYS
12	C0	71	GLU
12	C0	76	LEU
12	C0	80	LEU
12	C0	82	LEU
13	C1	7	VAL
13	C1	8	GLN
13	C1	21	ASN
13	C1	29	LYS
13	C1	36	LYS
13	C1	40	LEU
13	C1	43	LYS
13	C1	44	THR
13	C1	56	LYS
13	C1	67	ARG
13	C1	69	LYS
13	C1	70	ILE
13	C1	75	VAL
13	C1	76	VAL
13	C1	80	MET
13	C1	83	THR
13	C1	94	ILE
13	C1	99	ARG
13	C1	109	VAL
13	C1	117	VAL
13	C1	118	GLN
13	C1	125	VAL
13	C1	128	CYS
13	C1	131	ILE
13	C1	140	VAL
14	C2	28	LEU
14	C2	36	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	C2	37	VAL
14	C2	41	LEU
14	C2	43	ARG
14	C2	46	ARG
14	C2	50	LYS
14	C2	52	LEU
14	C2	54	ARG
14	C2	61	VAL
14	C2	66	VAL
14	C2	71	ILE
14	C2	74	LEU
14	C2	86	VAL
14	C2	89	ILE
14	C2	103	LEU
14	C2	119	SER
14	C2	121	VAL
14	C2	129	GLU
14	C2	132	GLU
14	C2	133	LEU
14	C2	135	MET
14	C2	139	HIS
15	C3	3	ARG
15	C3	9	LYS
15	C3	16	ILE
15	C3	27	LYS
15	C3	30	SER
15	C3	34	ILE
15	C3	37	ILE
15	C3	39	LYS
15	C3	45	LEU
15	C3	46	THR
15	C3	56	ASP
15	C3	64	ARG
15	C3	66	ILE
15	C3	83	GLU
15	C3	88	LEU
15	C3	98	VAL
15	C3	102	LEU
15	C3	107	LYS
15	C3	114	ARG
15	C3	115	LEU
15	C3	125	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	C3	127	ARG
15	C3	134	VAL
15	C3	140	LYS
15	C3	142	GLU
15	C3	143	SER
15	C3	150	VAL
16	C4	13	VAL
16	C4	16	VAL
16	C4	24	ASN
16	C4	26	THR
16	C4	29	HIS
16	C4	30	VAL
16	C4	39	ILE
16	C4	42	VAL
16	C4	43	THR
16	C4	51	ASP
16	C4	76	ILE
16	C4	81	VAL
16	C4	92	LYS
16	C4	102	LEU
16	C4	103	ARG
16	C4	108	SER
16	C4	119	THR
16	C4	123	SER
16	C4	125	SER
16	C4	136	ARG
16	C4	137	LEU
17	C5	20	VAL
17	C5	22	LEU
17	C5	23	GLU
17	C5	30	THR
17	C5	31	GLU
17	C5	34	VAL
17	C5	35	LYS
17	C5	36	LEU
17	C5	44	ARG
17	C5	47	ARG
17	C5	50	THR
17	C5	52	LYS
17	C5	60	LEU
17	C5	69	GLU
17	C5	88	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	C5	89	MET
17	C5	90	ILE
17	C5	92	SER
17	C5	106	GLU
17	C5	107	ILE
17	C5	110	GLU
17	C5	121	ILE
17	C5	124	THR
17	C5	125	PRO
17	C5	128	HIS
18	C6	4	VAL
18	C6	6	SER
18	C6	8	GLN
18	C6	14	LYS
18	C6	32	ASN
18	C6	36	ILE
18	C6	39	VAL
18	C6	40	GLU
18	C6	43	ILE
18	C6	44	LEU
18	C6	52	LEU
18	C6	54	LEU
18	C6	57	LEU
18	C6	58	ASP
18	C6	63	ILE
18	C6	66	ARG
18	C6	69	VAL
18	C6	70	THR
18	C6	98	ASP
18	C6	102	LYS
18	C6	104	GLU
18	C6	106	LYS
18	C6	114	ARG
18	C6	116	LEU
18	C6	117	LEU
18	C6	118	ILE
18	C6	123	ARG
18	C6	128	LYS
18	C6	137	ARG
18	C6	138	PHE
18	C6	143	ARG
19	C7	3	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	C7	5	ARG
19	C7	25	THR
19	C7	29	GLN
19	C7	30	THR
19	C7	38	ILE
19	C7	46	LEU
19	C7	48	ASN
19	C7	49	LYS
19	C7	61	ILE
19	C7	62	GLN
19	C7	69	ILE
19	C7	72	LYS
19	C7	83	GLN
19	C7	86	PRO
19	C7	87	GLU
19	C7	88	VAL
19	C7	105	GLN
19	C7	107	SER
19	C7	111	LYS
19	C7	113	LEU
19	C7	115	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	5	VAL
20	C8	7	GLU
20	C8	8	GLN
20	C8	11	PHE
20	C8	13	HIS
20	C8	14	ILE
20	C8	15	LEU
20	C8	20	THR
20	C8	25	ASN
20	C8	26	ILE
20	C8	28	ILE
20	C8	40	ARG
20	C8	46	VAL
20	C8	57	ARG
20	C8	60	GLU
20	C8	61	LEU
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	81	ILE
20	C8	85	PHE
20	C8	86	LEU
20	C8	88	ARG
20	C8	92	ILE
20	C8	93	THR
20	C8	97	ASP
20	C8	104	ASN
20	C8	108	LYS
20	C8	132	ARG
20	C8	136	GLN
20	C8	140	THR
20	C8	143	ARG
21	C9	4	VAL
21	C9	6	VAL
21	C9	13	ASP
21	C9	22	LEU
21	C9	27	LYS
21	C9	28	LEU
21	C9	29	GLU
21	C9	33	TYR
21	C9	34	VAL
21	C9	35	ASP
21	C9	36	ILE
21	C9	37	VAL
21	C9	39	THR
21	C9	41	SER
21	C9	51	GLU
21	C9	57	ARG
21	C9	60	SER
21	C9	63	ARG
21	C9	67	MET
21	C9	68	ARG
21	C9	71	VAL
21	C9	79	LEU
21	C9	84	LYS
21	C9	89	ARG
21	C9	94	ILE
21	C9	99	SER
21	C9	100	ILE
21	C9	103	LYS
21	C9	116	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	C9	122	ARG
21	C9	130	ARG
21	C9	131	ASP
21	C9	132	LEU
21	C9	134	ARG
21	C9	144	GLU
22	D0	15	GLN
22	D0	16	GLN
22	D0	18	GLN
22	D0	20	ILE
22	D0	22	ILE
22	D0	23	ARG
22	D0	27	THR
22	D0	31	VAL
22	D0	41	ILE
22	D0	42	VAL
22	D0	47	GLN
22	D0	51	VAL
22	D0	57	ARG
22	D0	58	LEU
22	D0	61	LYS
22	D0	62	VAL
22	D0	67	THR
22	D0	74	GLU
22	D0	89	ARG
22	D0	97	VAL
22	D0	103	ILE
22	D0	105	GLN
22	D0	108	ILE
23	D1	5	LYS
23	D1	7	GLN
23	D1	9	VAL
23	D1	11	LEU
23	D1	12	TYR
23	D1	18	SER
23	D1	23	ILE
23	D1	32	VAL
23	D1	33	GLN
23	D1	34	ILE
23	D1	36	VAL
23	D1	41	GLU
23	D1	52	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	D1	56	SER
23	D1	68	SER
23	D1	69	LEU
23	D1	78	LEU
23	D1	80	LYS
23	D1	82	VAL
24	D2	6	VAL
24	D2	12	ASN
24	D2	15	ASN
24	D2	22	LYS
24	D2	24	GLN
24	D2	25	VAL
24	D2	26	LEU
24	D2	27	ILE
24	D2	29	PRO
24	D2	42	GLN
24	D2	47	ILE
24	D2	53	ILE
24	D2	56	HIS
24	D2	65	LEU
24	D2	68	ARG
24	D2	81	VAL
24	D2	86	ILE
24	D2	93	LEU
24	D2	97	ARG
24	D2	98	GLN
24	D2	103	ILE
24	D2	104	LEU
24	D2	105	THR
24	D2	110	ILE
24	D2	121	VAL
24	D2	125	ILE
24	D2	126	LEU
24	D2	129	VAL
25	D3	7	ARG
25	D3	9	LEU
25	D3	14	LYS
25	D3	19	ARG
25	D3	33	LEU
25	D3	36	THR
25	D3	41	SER
25	D3	47	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	D3	59	ILE
25	D3	60	GLU
25	D3	69	ARG
25	D3	72	VAL
25	D3	78	LYS
25	D3	84	THR
25	D3	103	LEU
25	D3	107	PHE
25	D3	109	ARG
25	D3	110	LYS
25	D3	114	LYS
25	D3	117	ILE
25	D3	133	LEU
25	D3	138	GLU
25	D3	140	LYS
25	D3	144	ARG
26	D4	27	VAL
26	D4	28	LEU
26	D4	29	HIS
26	D4	32	ARG
26	D4	34	ASN
26	D4	35	VAL
26	D4	36	SER
26	D4	40	LEU
26	D4	41	ARG
26	D4	51	GLU
26	D4	57	VAL
26	D4	62	THR
26	D4	74	LEU
26	D4	75	VAL
26	D4	81	GLU
26	D4	84	LYS
26	D4	96	LEU
26	D4	99	LYS
26	D4	100	VAL
26	D4	102	LYS
26	D4	124	ARG
26	D4	128	LYS
27	D5	37	GLN
27	D5	38	HIS
27	D5	40	VAL
27	D5	50	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	D5	58	ARG
27	D5	60	VAL
27	D5	68	ARG
27	D5	69	LEU
27	D5	71	ILE
27	D5	92	ILE
27	D5	93	SER
27	D5	96	SER
27	D5	100	ILE
27	D5	105	THR
28	D6	4	LYS
28	D6	12	LYS
28	D6	18	VAL
28	D6	19	LYS
28	D6	34	LYS
28	D6	36	ILE
28	D6	41	ILE
28	D6	44	ILE
28	D6	58	VAL
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	67	THR
28	D6	70	LYS
28	D6	71	LEU
28	D6	82	ARG
28	D6	83	ILE
28	D6	84	VAL
28	D6	85	ARG
28	D6	86	VAL
28	D6	90	GLU
29	D7	2	VAL
29	D7	3	LEU
29	D7	4	VAL
29	D7	20	LYS
29	D7	33	LEU
29	D7	35	VAL
29	D7	36	LYS
29	D7	42	ASN
29	D7	55	THR
29	D7	56	CYS
29	D7	61	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	D7	62	ILE
29	D7	63	LEU
29	D7	67	THR
29	D7	74	SER
29	D7	75	GLU
29	D7	77	THR
30	D8	13	ILE
30	D8	19	THR
30	D8	22	ARG
30	D8	32	PHE
30	D8	33	LEU
30	D8	34	GLU
30	D8	36	THR
30	D8	37	SER
30	D8	39	THR
30	D8	44	VAL
30	D8	49	ARG
30	D8	51	ASN
30	D8	52	ASP
30	D8	54	LEU
30	D8	57	MET
30	D8	58	GLU
31	D9	12	ARG
31	D9	22	ARG
31	D9	30	LEU
31	D9	31	ILE
32	E0	3	LYS
32	E0	4	VAL
32	E0	8	LEU
32	E0	14	VAL
32	E0	20	LYS
32	E0	21	VAL
32	E0	28	LYS
32	E0	41	THR
32	E0	42	ARG
32	E0	43	ARG
32	E0	47	VAL
32	E0	48	THR
32	E0	50	VAL
33	E1	82	LYS
33	E1	83	LYS
33	E1	84	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	E1	91	ILE
33	E1	93	HIS
33	E1	96	LYS
33	E1	97	LYS
33	E1	103	LEU
33	E1	108	VAL
33	E1	109	ASP
33	E1	113	LYS
33	E1	115	THR
33	E1	119	ARG
33	E1	120	GLU
33	E1	126	CYS
33	E1	130	VAL
33	E1	137	ASP
33	E1	139	LEU
33	E1	146	SER
33	E1	147	VAL
34	SR	6	VAL
34	SR	7	LEU
34	SR	9	LEU
34	SR	12	THR
34	SR	29	GLN
34	SR	48	THR
34	SR	50	ASP
34	SR	52	GLN
34	SR	60	SER
34	SR	69	GLN
34	SR	71	CYS
34	SR	72	THR
34	SR	76	ASP
34	SR	82	SER
34	SR	88	THR
34	SR	96	THR
34	SR	102	ARG
34	SR	113	VAL
34	SR	116	ASP
34	SR	117	LYS
34	SR	133	VAL
34	SR	136	ILE
34	SR	141	LEU
34	SR	144	LEU
34	SR	145	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	SR	153	GLN
34	SR	156	VAL
34	SR	165	ASP
34	SR	167	VAL
34	SR	188	ILE
34	SR	196	ASN
34	SR	199	ILE
34	SR	200	ASN
34	SR	202	LEU
34	SR	213	SER
34	SR	221	MET
34	SR	222	LEU
34	SR	231	MET
34	SR	238	ASP
34	SR	241	PHE
34	SR	248	ASN
34	SR	265	LEU
34	SR	266	ASP
34	SR	268	GLN
34	SR	271	VAL
34	SR	277	GLU
34	SR	300	THR
34	SR	310	ILE
34	SR	312	VAL
34	SR	314	GLN
34	SR	315	VAL
34	SR	316	MET
34	SR	317	THR
35	SM	24	GLU
35	SM	26	VAL
35	SM	37	VAL
35	SM	45	SER
35	SM	48	ARG
35	SM	49	LYS
35	SM	50	ASN
35	SM	51	ARG
35	SM	61	ILE
35	SM	64	LYS
35	SM	69	ARG
35	SM	72	ARG
35	SM	77	THR
35	SM	82	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	SM	83	LYS
35	SM	84	LYS
35	SM	89	ARG
35	SM	91	THR
35	SM	97	THR
35	SM	100	THR
35	SM	101	ASP
35	SM	105	LYS
35	SM	121	LYS
35	SM	131	ILE
35	SM	139	GLU
39	L2	14	SER
39	L2	20	THR
39	L2	31	THR
39	L2	32	LEU
39	L2	41	ILE
39	L2	44	ILE
39	L2	45	VAL
39	L2	46	LYS
39	L2	62	VAL
39	L2	70	ARG
39	L2	74	GLU
39	L2	82	VAL
39	L2	84	THR
39	L2	96	LEU
39	L2	97	ASN
39	L2	101	VAL
39	L2	104	LEU
39	L2	107	VAL
39	L2	109	GLU
39	L2	116	VAL
39	L2	122	ASP
39	L2	134	VAL
39	L2	137	ILE
39	L2	139	HIS
39	L2	142	ASP
39	L2	143	GLU
39	L2	148	VAL
39	L2	152	SER
39	L2	157	VAL
39	L2	160	SER
39	L2	165	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	L2	168	VAL
39	L2	177	LYS
39	L2	179	LEU
39	L2	180	LEU
39	L2	198	LYS
39	L2	202	VAL
39	L2	207	VAL
39	L2	227	ARG
39	L2	230	VAL
39	L2	241	ARG
39	L2	245	LEU
40	L3	2	SER
40	L3	7	GLU
40	L3	17	LEU
40	L3	19	ARG
40	L3	21	ARG
40	L3	24	SER
40	L3	25	ILE
40	L3	30	LYS
40	L3	37	ARG
40	L3	39	LYS
40	L3	43	LEU
40	L3	47	LEU
40	L3	56	ILE
40	L3	66	LYS
40	L3	73	VAL
40	L3	79	VAL
40	L3	81	THR
40	L3	84	VAL
40	L3	85	VAL
40	L3	103	THR
40	L3	110	LEU
40	L3	112	ASP
40	L3	114	VAL
40	L3	116	ARG
40	L3	134	SER
40	L3	139	GLN
40	L3	144	ILE
40	L3	146	ARG
40	L3	148	LEU
40	L3	150	ARG
40	L3	156	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	L3	157	VAL
40	L3	158	VAL
40	L3	160	VAL
40	L3	164	THR
40	L3	169	THR
40	L3	187	SER
40	L3	188	ILE
40	L3	192	VAL
40	L3	196	ARG
40	L3	200	GLU
40	L3	205	VAL
40	L3	208	VAL
40	L3	216	ASP
40	L3	229	VAL
40	L3	232	ARG
40	L3	235	THR
40	L3	236	LYS
40	L3	237	LYS
40	L3	238	LEU
40	L3	252	ILE
40	L3	264	VAL
40	L3	266	ARG
40	L3	274	SER
40	L3	275	ARG
40	L3	284	ARG
40	L3	296	THR
40	L3	300	ARG
40	L3	305	ILE
40	L3	312	VAL
40	L3	316	GLU
40	L3	324	VAL
40	L3	328	ILE
40	L3	333	LYS
40	L3	338	LEU
40	L3	347	SER
40	L3	354	VAL
40	L3	355	SER
40	L3	364	LYS
40	L3	367	LYS
40	L3	371	GLN
40	L3	382	THR
41	L4	37	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	44	LYS
41	L4	69	ARG
41	L4	74	ILE
41	L4	93	MET
41	L4	98	ARG
41	L4	99	MET
41	L4	112	LYS
41	L4	124	SER
41	L4	131	VAL
41	L4	133	SER
41	L4	138	ARG
41	L4	144	LYS
41	L4	145	ILE
41	L4	148	ILE
41	L4	150	LEU
41	L4	152	VAL
41	L4	156	LEU
41	L4	160	GLN
41	L4	170	LYS
41	L4	179	LEU
41	L4	182	LEU
41	L4	193	LYS
41	L4	194	TYR
41	L4	200	THR
41	L4	203	ARG
41	L4	206	LEU
41	L4	222	VAL
41	L4	223	PRO
41	L4	225	VAL
41	L4	230	VAL
41	L4	252	GLU
41	L4	256	THR
41	L4	258	LEU
41	L4	270	SER
41	L4	284	SER
41	L4	287	THR
41	L4	289	ILE
41	L4	295	ILE
41	L4	299	ILE
41	L4	306	THR
41	L4	307	GLN
41	L4	308	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	311	HIS
41	L4	322	GLN
41	L4	323	VAL
41	L4	327	LEU
41	L4	332	LYS
41	L4	333	VAL
41	L4	349	THR
41	L4	354	VAL
42	L5	4	GLN
42	L5	5	LYS
42	L5	22	ARG
42	L5	23	ARG
42	L5	32	GLN
42	L5	35	ARG
42	L5	36	LEU
42	L5	41	LYS
42	L5	65	ILE
42	L5	66	SER
42	L5	69	ILE
42	L5	73	VAL
42	L5	75	LEU
42	L5	85	ARG
42	L5	105	ILE
42	L5	107	ARG
42	L5	110	LEU
42	L5	112	LYS
42	L5	115	LEU
42	L5	118	THR
42	L5	122	VAL
42	L5	131	LEU
42	L5	137	ASP
42	L5	140	ARG
42	L5	146	LEU
42	L5	148	ILE
42	L5	151	GLN
42	L5	152	ARG
42	L5	154	THR
42	L5	155	THR
42	L5	163	LEU
42	L5	164	LYS
42	L5	173	VAL
42	L5	177	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	L5	190	ILE
42	L5	193	GLU
42	L5	205	SER
42	L5	222	LEU
42	L5	231	ILE
42	L5	232	ASP
42	L5	236	LEU
42	L5	237	GLU
42	L5	254	LYS
42	L5	257	GLU
42	L5	259	LYS
42	L5	263	GLU
42	L5	273	ARG
42	L5	275	THR
42	L5	279	LYS
42	L5	293	LEU
43	L6	5	LYS
43	L6	21	THR
43	L6	29	LYS
43	L6	31	ARG
43	L6	35	VAL
43	L6	41	ILE
43	L6	46	ARG
43	L6	64	LEU
43	L6	65	ILE
43	L6	78	ARG
43	L6	79	VAL
43	L6	84	VAL
43	L6	89	THR
43	L6	90	LYS
43	L6	93	VAL
43	L6	109	GLU
43	L6	129	GLU
43	L6	146	ILE
43	L6	152	THR
43	L6	154	LEU
43	L6	155	LEU
43	L6	170	LYS
44	L7	24	GLU
44	L7	25	GLN
44	L7	26	VAL
44	L7	56	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	L7	59	GLU
44	L7	77	VAL
44	L7	82	LYS
44	L7	83	LEU
44	L7	88	ARG
44	L7	89	ILE
44	L7	92	ILE
44	L7	93	ASN
44	L7	98	LYS
44	L7	101	LYS
44	L7	111	ILE
44	L7	118	LYS
44	L7	124	LEU
44	L7	164	SER
44	L7	168	ILE
44	L7	175	LYS
44	L7	179	LEU
44	L7	184	LEU
44	L7	211	SER
44	L7	224	ILE
44	L7	228	SER
44	L7	239	LEU
45	L8	26	LEU
45	L8	27	THR
45	L8	50	VAL
45	L8	57	ARG
45	L8	63	LYS
45	L8	66	SER
45	L8	71	VAL
45	L8	74	THR
45	L8	79	GLN
45	L8	81	THR
45	L8	83	ASP
45	L8	84	ARG
45	L8	92	LYS
45	L8	98	ARG
45	L8	106	LYS
45	L8	118	GLU
45	L8	132	VAL
45	L8	136	LEU
45	L8	149	LYS
45	L8	156	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	L8	157	VAL
45	L8	160	ILE
45	L8	163	VAL
45	L8	169	LEU
45	L8	172	LYS
45	L8	173	MET
45	L8	181	LYS
45	L8	185	ARG
45	L8	189	LEU
45	L8	202	GLU
45	L8	204	ARG
45	L8	206	GLU
45	L8	208	GLU
45	L8	218	ILE
45	L8	238	LEU
45	L8	248	LYS
46	L9	1	MET
46	L9	5	GLN
46	L9	6	THR
46	L9	14	GLU
46	L9	18	VAL
46	L9	19	SER
46	L9	28	VAL
46	L9	33	THR
46	L9	34	LEU
46	L9	41	ILE
46	L9	44	THR
46	L9	48	VAL
46	L9	52	LEU
46	L9	62	ARG
46	L9	65	VAL
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	72	LYS
46	L9	73	SER
46	L9	82	VAL
46	L9	110	LYS
46	L9	118	LEU
46	L9	124	ARG
46	L9	132	VAL
46	L9	139	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	L9	145	VAL
46	L9	147	SER
46	L9	152	GLU
46	L9	161	LEU
46	L9	162	GLN
46	L9	163	GLN
46	L9	164	ILE
46	L9	166	ARG
46	L9	172	ILE
46	L9	173	ARG
46	L9	177	ASP
46	L9	187	ILE
46	L9	189	GLU
47	M0	12	GLN
47	M0	15	LYS
47	M0	16	PRO
47	M0	24	ARG
47	M0	26	VAL
47	M0	28	ASP
47	M0	30	LYS
47	M0	31	ILE
47	M0	32	ARG
47	M0	33	ILE
47	M0	36	LEU
47	M0	40	LYS
47	M0	42	THR
47	M0	43	VAL
47	M0	48	LEU
47	M0	52	LEU
47	M0	53	VAL
47	M0	63	GLU
47	M0	74	LYS
47	M0	79	VAL
47	M0	87	LEU
47	M0	91	VAL
47	M0	99	ILE
47	M0	102	MET
47	M0	128	ARG
47	M0	129	VAL
47	M0	130	ASP
47	M0	131	ILE
47	M0	133	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	M0	138	VAL
47	M0	139	ARG
47	M0	142	ASP
47	M0	143	SER
47	M0	154	ARG
47	M0	156	ARG
47	M0	163	GLN
47	M0	165	ILE
47	M0	166	ILE
47	M0	167	LEU
47	M0	168	SER
47	M0	174	THR
47	M0	175	ASN
47	M0	177	ASP
47	M0	193	ASP
47	M0	200	LEU
47	M0	203	LYS
47	M0	207	GLU
48	M1	9	MET
48	M1	11	ASP
48	M1	12	LEU
48	M1	13	LYS
48	M1	28	ASP
48	M1	31	THR
48	M1	40	LEU
48	M1	44	THR
48	M1	46	VAL
48	M1	52	TYR
48	M1	65	ILE
48	M1	71	VAL
48	M1	80	LEU
48	M1	92	ARG
48	M1	94	ARG
48	M1	106	ILE
48	M1	107	ASP
48	M1	108	GLU
48	M1	110	ILE
48	M1	112	LEU
48	M1	115	LYS
48	M1	125	MET
48	M1	127	PHE
48	M1	137	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	M1	138	VAL
48	M1	140	ARG
48	M1	142	LYS
48	M1	145	LYS
48	M1	155	THR
48	M1	166	LYS
48	M1	173	ASP
49	M3	23	LYS
49	M3	24	VAL
49	M3	33	VAL
49	M3	34	SER
49	M3	45	LYS
49	M3	46	ILE
49	M3	54	LEU
49	M3	55	ARG
49	M3	57	VAL
49	M3	58	VAL
49	M3	59	ARG
49	M3	67	ARG
49	M3	69	VAL
49	M3	70	ARG
49	M3	93	ILE
49	M3	104	ARG
49	M3	107	GLU
49	M3	108	ILE
49	M3	114	GLN
49	M3	117	LYS
49	M3	121	SER
49	M3	124	ILE
49	M3	128	ARG
49	M3	131	LYS
49	M3	136	GLU
49	M3	138	VAL
49	M3	147	ILE
49	M3	164	GLU
49	M3	168	ARG
49	M3	171	ARG
49	M3	176	GLU
49	M3	182	ILE
49	M3	190	LYS
49	M3	194	GLU
50	M4	5	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	M4	15	VAL
50	M4	20	VAL
50	M4	25	LYS
50	M4	27	GLN
50	M4	38	ILE
50	M4	53	VAL
50	M4	58	ILE
50	M4	62	GLN
50	M4	63	VAL
50	M4	64	VAL
50	M4	69	THR
50	M4	72	LEU
50	M4	83	LYS
50	M4	90	VAL
50	M4	91	CYS
50	M4	116	GLU
50	M4	126	GLN
50	M4	132	LYS
50	M4	135	LEU
51	M5	7	LEU
51	M5	13	LYS
51	M5	18	VAL
51	M5	62	TYR
51	M5	68	ARG
51	M5	80	THR
51	M5	83	LYS
51	M5	85	THR
51	M5	96	ARG
51	M5	97	SER
51	M5	106	VAL
51	M5	113	LEU
51	M5	133	ILE
51	M5	151	ILE
51	M5	153	ASP
51	M5	155	VAL
51	M5	159	ARG
51	M5	183	THR
51	M5	184	LYS
51	M5	187	ARG
51	M5	188	ARG
51	M5	197	LEU
51	M5	198	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	M5	199	LEU
52	M6	22	VAL
52	M6	25	LYS
52	M6	33	ILE
52	M6	34	VAL
52	M6	41	LEU
52	M6	51	LYS
52	M6	58	LEU
52	M6	67	THR
52	M6	74	ARG
52	M6	78	ARG
52	M6	84	LEU
52	M6	85	ARG
52	M6	89	SER
52	M6	106	GLU
52	M6	110	PRO
52	M6	114	LYS
52	M6	115	LYS
52	M6	116	LYS
52	M6	117	ARG
52	M6	122	GLN
52	M6	124	LEU
52	M6	129	LEU
52	M6	134	LYS
52	M6	143	THR
52	M6	152	VAL
52	M6	160	ARG
52	M6	163	SER
52	M6	180	SER
52	M6	189	ASP
52	M6	190	VAL
53	M7	3	ARG
53	M7	7	THR
53	M7	9	THR
53	M7	24	VAL
53	M7	32	THR
53	M7	36	ILE
53	M7	43	LYS
53	M7	49	GLU
53	M7	52	LEU
53	M7	53	ASP
53	M7	54	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	M7	55	GLN
53	M7	56	ARG
53	M7	67	ILE
53	M7	78	VAL
53	M7	79	THR
53	M7	119	VAL
53	M7	126	ARG
53	M7	127	ARG
53	M7	128	ARG
53	M7	129	THR
53	M7	142	SER
53	M7	144	SER
53	M7	146	ILE
53	M7	165	VAL
53	M7	168	LEU
53	M7	171	ARG
53	M7	173	ARG
53	M7	180	LYS
53	M7	181	ARG
54	M8	3	ILE
54	M8	11	LYS
54	M8	17	THR
54	M8	22	ASP
54	M8	24	VAL
54	M8	26	LEU
54	M8	27	LYS
54	M8	32	LEU
54	M8	41	ASP
54	M8	49	LEU
54	M8	50	LYS
54	M8	55	SER
54	M8	63	SER
54	M8	64	VAL
54	M8	67	ILE
54	M8	73	GLN
54	M8	74	GLU
54	M8	81	VAL
54	M8	86	THR
54	M8	95	GLU
54	M8	100	THR
54	M8	113	LYS
54	M8	115	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	M8	122	ILE
54	M8	127	LEU
54	M8	135	GLN
54	M8	138	LEU
54	M8	141	ARG
54	M8	146	SER
54	M8	147	ARG
54	M8	159	LYS
54	M8	179	ARG
54	M8	180	ARG
55	M9	10	LEU
55	M9	13	SER
55	M9	17	VAL
55	M9	31	GLU
55	M9	41	ILE
55	M9	42	ARG
55	M9	49	THR
55	M9	51	VAL
55	M9	55	VAL
55	M9	60	LYS
55	M9	63	THR
55	M9	71	ARG
55	M9	72	GLU
55	M9	74	ARG
55	M9	81	ARG
55	M9	86	GLU
55	M9	89	LEU
55	M9	91	SER
55	M9	98	ARG
55	M9	101	VAL
55	M9	103	ARG
55	M9	106	LEU
55	M9	110	ARG
55	M9	115	ILE
55	M9	133	LYS
55	M9	134	HIS
55	M9	138	LEU
55	M9	155	LEU
55	M9	175	GLN
55	M9	177	VAL
56	N0	8	GLN
56	N0	12	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	N0	13	ARG
56	N0	19	VAL
56	N0	36	ILE
56	N0	40	ARG
56	N0	45	LEU
56	N0	47	LYS
56	N0	51	VAL
56	N0	58	ILE
56	N0	59	VAL
56	N0	61	ILE
56	N0	79	VAL
56	N0	80	ARG
56	N0	81	TYR
56	N0	87	THR
56	N0	88	HIS
56	N0	90	MET
56	N0	92	LYS
56	N0	97	VAL
56	N0	100	VAL
56	N0	103	VAL
56	N0	104	GLU
56	N0	106	LEU
56	N0	117	ARG
56	N0	123	ILE
56	N0	125	LYS
56	N0	129	ILE
56	N0	131	LYS
56	N0	137	ARG
56	N0	138	GLN
56	N0	145	THR
56	N0	149	LYS
56	N0	155	ARG
56	N0	156	VAL
56	N0	157	GLN
56	N0	162	THR
56	N0	169	SER
57	N1	12	ARG
57	N1	14	MET
57	N1	25	VAL
57	N1	26	HIS
57	N1	27	LEU
57	N1	36	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	N1	43	LYS
57	N1	68	THR
57	N1	75	ILE
57	N1	78	LYS
57	N1	79	MET
57	N1	80	VAL
57	N1	83	ARG
57	N1	87	LYS
57	N1	88	ARG
57	N1	89	LEU
57	N1	96	ILE
57	N1	103	GLN
57	N1	104	GLU
57	N1	106	LEU
57	N1	118	GLU
57	N1	120	LYS
57	N1	124	VAL
57	N1	126	VAL
57	N1	128	LEU
57	N1	131	GLN
57	N1	136	ARG
57	N1	139	ARG
57	N1	141	VAL
57	N1	143	THR
57	N1	149	GLN
57	N1	158	THR
57	N1	160	ILE
58	N2	10	LYS
58	N2	14	THR
58	N2	16	THR
58	N2	27	VAL
58	N2	37	LEU
58	N2	39	ASP
58	N2	41	ILE
58	N2	43	VAL
58	N2	50	LEU
58	N2	52	ASN
58	N2	56	VAL
58	N2	58	GLU
58	N2	66	VAL
58	N2	82	LYS
58	N2	88	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	N2	93	ILE
58	N2	96	VAL
58	N2	98	THR
58	N2	102	GLU
58	N2	105	LEU
59	N3	12	ARG
59	N3	13	ILE
59	N3	22	ILE
59	N3	33	ASN
59	N3	48	ARG
59	N3	54	LEU
59	N3	64	LYS
59	N3	66	LYS
59	N3	69	LEU
59	N3	72	LYS
59	N3	73	VAL
59	N3	74	MET
59	N3	83	LYS
59	N3	102	ILE
59	N3	120	LYS
59	N3	128	ARG
59	N3	135	VAL
59	N3	137	VAL
60	N4	4	GLU
60	N4	5	ILE
60	N4	19	THR
60	N4	39	LEU
60	N4	42	GLN
60	N4	43	ARG
60	N4	45	ASN
60	N4	47	ARG
60	N4	54	LEU
60	N4	57	LYS
60	N4	64	THR
61	N5	26	VAL
61	N5	27	ARG
61	N5	34	LEU
61	N5	37	THR
61	N5	38	LEU
61	N5	39	LYS
61	N5	48	SER
61	N5	56	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
61	N5	63	ILE
61	N5	71	THR
61	N5	75	LYS
61	N5	83	VAL
61	N5	92	LYS
61	N5	102	LEU
61	N5	108	LEU
61	N5	111	ASN
61	N5	112	THR
61	N5	113	LEU
61	N5	115	ARG
61	N5	125	ARG
61	N5	127	THR
61	N5	133	LEU
61	N5	135	ILE
61	N5	139	ILE
61	N5	142	ILE
62	N6	3	LYS
62	N6	8	VAL
62	N6	10	SER
62	N6	13	ARG
62	N6	14	LYS
62	N6	17	LYS
62	N6	37	LYS
62	N6	38	GLU
62	N6	45	ILE
62	N6	50	ILE
62	N6	51	ARG
62	N6	56	VAL
62	N6	57	LEU
62	N6	58	VAL
62	N6	60	ARG
62	N6	64	LYS
62	N6	66	GLN
62	N6	76	LEU
62	N6	80	VAL
62	N6	83	ASP
62	N6	87	LYS
62	N6	88	GLU
62	N6	90	VAL
62	N6	94	SER
62	N6	95	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
62	N6	105	VAL
62	N6	111	LEU
62	N6	113	LYS
62	N6	115	ARG
62	N6	122	LYS
62	N6	125	LYS
62	N6	126	LEU
63	N7	3	LYS
63	N7	14	VAL
63	N7	24	VAL
63	N7	25	ILE
63	N7	26	VAL
63	N7	30	ASP
63	N7	34	LYS
63	N7	46	ILE
63	N7	52	LYS
63	N7	53	VAL
63	N7	54	THR
63	N7	61	LYS
63	N7	64	LYS
63	N7	72	ILE
63	N7	73	LYS
63	N7	75	VAL
63	N7	83	THR
63	N7	86	THR
63	N7	87	LEU
63	N7	99	GLU
63	N7	107	ARG
63	N7	123	GLN
63	N7	134	LEU
64	N8	3	SER
64	N8	4	ARG
64	N8	8	THR
64	N8	10	LYS
64	N8	12	ARG
64	N8	16	SER
64	N8	19	LYS
64	N8	29	PRO
64	N8	34	MET
64	N8	42	ARG
64	N8	43	ILE
64	N8	46	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
64	N8	47	LYS
64	N8	65	GLN
64	N8	73	LEU
64	N8	78	LEU
64	N8	88	ASP
64	N8	91	LEU
64	N8	98	THR
64	N8	115	LYS
64	N8	120	ASN
64	N8	125	VAL
64	N8	130	VAL
64	N8	133	LEU
64	N8	135	GLU
64	N8	139	ARG
64	N8	146	GLU
65	N9	13	THR
65	N9	18	ARG
65	N9	22	LYS
65	N9	23	LYS
65	N9	25	LYS
65	N9	38	LYS
65	N9	47	LEU
65	N9	50	THR
65	N9	59	LYS
66	O0	10	ILE
66	O0	12	GLN
66	O0	16	LEU
66	O0	18	ILE
66	O0	22	LYS
66	O0	32	LYS
66	O0	34	LEU
66	O0	36	GLN
66	O0	41	LEU
66	O0	42	ILE
66	O0	50	VAL
66	O0	54	SER
66	O0	61	MET
66	O0	71	GLN
66	O0	76	GLU
66	O0	83	LYS
66	O0	84	LEU
66	O0	87	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	O0	93	LEU
66	O0	100	ILE
66	O0	101	LEU
66	O0	102	THR
67	O1	6	ASP
67	O1	16	LEU
67	O1	26	LYS
67	O1	27	LYS
67	O1	31	ARG
67	O1	41	LYS
67	O1	46	THR
67	O1	55	LEU
67	O1	57	GLN
67	O1	64	VAL
67	O1	68	GLU
67	O1	73	LEU
67	O1	79	ARG
67	O1	82	GLU
67	O1	84	ASP
67	O1	86	LYS
67	O1	89	LEU
67	O1	96	VAL
67	O1	102	LYS
67	O1	104	LEU
67	O1	110	GLU
68	O2	3	SER
68	O2	10	VAL
68	O2	12	LYS
68	O2	18	LYS
68	O2	19	ARG
68	O2	27	ARG
68	O2	31	ASN
68	O2	33	ARG
68	O2	34	LYS
68	O2	35	GLN
68	O2	38	ILE
68	O2	41	VAL
68	O2	44	ARG
68	O2	51	SER
68	O2	52	GLN
68	O2	54	LYS
68	O2	55	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
68	O2	61	LYS
68	O2	66	LEU
68	O2	67	SER
68	O2	73	THR
68	O2	75	LEU
68	O2	82	LEU
68	O2	84	THR
68	O2	86	THR
68	O2	91	THR
68	O2	109	LEU
68	O2	118	LYS
68	O2	123	LYS
68	O2	125	ARG
68	O2	126	LEU
68	O2	128	LEU
69	O3	15	SER
69	O3	22	VAL
69	O3	33	GLU
69	O3	37	THR
69	O3	49	ILE
69	O3	54	ARG
69	O3	59	VAL
69	O3	70	LYS
69	O3	80	VAL
69	O3	81	VAL
69	O3	98	VAL
69	O3	105	SER
69	O3	106	ASN
70	O4	8	ARG
70	O4	16	ARG
70	O4	20	ILE
70	O4	21	LYS
70	O4	23	VAL
70	O4	24	LYS
70	O4	29	ILE
70	O4	31	ARG
70	O4	38	LEU
70	O4	49	SER
70	O4	58	ARG
70	O4	65	VAL
70	O4	71	THR
70	O4	72	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
70	O4	74	ARG
70	O4	79	SER
70	O4	86	LYS
70	O4	101	VAL
70	O4	102	LYS
70	O4	104	VAL
70	O4	105	VAL
71	O5	4	VAL
71	O5	15	GLU
71	O5	21	LEU
71	O5	22	VAL
71	O5	27	GLU
71	O5	38	ARG
71	O5	43	LYS
71	O5	47	VAL
71	O5	48	ARG
71	O5	49	LYS
71	O5	50	SER
71	O5	62	GLN
71	O5	64	GLU
71	O5	71	LYS
71	O5	73	LYS
71	O5	74	LYS
71	O5	81	ARG
71	O5	84	LYS
71	O5	89	ARG
71	O5	90	ARG
71	O5	93	THR
71	O5	96	GLU
71	O5	102	GLU
71	O5	104	GLN
71	O5	105	ARG
71	O5	107	LYS
71	O5	115	LYS
71	O5	119	LYS
72	O6	9	ILE
72	O6	11	LEU
72	O6	18	THR
72	O6	21	THR
72	O6	26	ILE
72	O6	36	ARG
72	O6	42	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
72	O6	45	ARG
72	O6	52	PRO
72	O6	57	LEU
72	O6	58	ILE
72	O6	60	LEU
72	O6	64	SER
72	O6	68	ARG
72	O6	70	ARG
72	O6	72	VAL
72	O6	81	THR
72	O6	84	LYS
72	O6	88	GLU
72	O6	90	MET
72	O6	98	ARG
73	O7	5	THR
73	O7	17	THR
73	O7	24	ARG
73	O7	25	ARG
73	O7	33	THR
73	O7	36	SER
73	O7	44	THR
73	O7	54	LYS
73	O7	55	ARG
73	O7	56	ARG
73	O7	59	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	79	GLN
73	O7	80	THR
74	O8	4	GLU
74	O8	5	ILE
74	O8	6	THR
74	O8	8	ILE
74	O8	12	LEU
74	O8	13	GLU
74	O8	20	VAL
74	O8	22	THR
74	O8	31	LEU
74	O8	45	VAL
74	O8	53	THR
74	O8	64	LYS
74	O8	65	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
74	O8	68	SER
74	O8	77	ARG
74	O8	78	LEU
75	O9	4	GLN
75	O9	5	LYS
75	O9	21	ARG
75	O9	23	LEU
75	O9	27	ILE
75	O9	28	ARG
75	O9	29	LEU
75	O9	30	ARG
75	O9	32	ASN
75	O9	42	ARG
75	O9	45	ARG
75	O9	51	ILE
76	Q0	77	ILE
76	Q0	78	ILE
76	Q0	80	PRO
76	Q0	85	LEU
76	Q0	92	ASP
76	Q0	108	THR
76	Q0	110	CYS
76	Q0	112	LYS
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	127	LEU
77	Q1	2	ARG
77	Q1	10	THR
77	Q1	14	LYS
77	Q1	15	ARG
77	Q1	17	ARG
78	Q2	7	THR
78	Q2	9	LYS
78	Q2	13	LYS
78	Q2	19	LYS
78	Q2	21	THR
78	Q2	26	THR
78	Q2	35	LEU
78	Q2	45	ARG
78	Q2	47	GLN
78	Q2	55	LYS
78	Q2	60	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	Q2	61	LYS
78	Q2	66	LYS
78	Q2	71	ARG
78	Q2	75	VAL
78	Q2	76	LYS
78	Q2	80	ARG
78	Q2	83	LEU
78	Q2	84	THR
78	Q2	85	LEU
78	Q2	88	CYS
78	Q2	92	GLU
78	Q2	100	LYS
78	Q2	104	LEU
79	Q3	10	ILE
79	Q3	11	THR
79	Q3	16	VAL
79	Q3	25	GLN
79	Q3	32	GLN
79	Q3	40	SER
79	Q3	45	LYS
79	Q3	49	ARG
79	Q3	56	THR
79	Q3	60	CYS
79	Q3	70	THR
79	Q3	84	ARG
79	Q3	91	GLU
2	s0	9	LEU
2	s0	12	GLU
2	s0	18	LEU
2	s0	22	THR
2	s0	29	VAL
2	s0	30	GLN
2	s0	31	VAL
2	s0	34	GLU
2	s0	37	VAL
2	s0	41	ARG
2	s0	45	VAL
2	s0	47	VAL
2	s0	48	ILE
2	s0	50	VAL
2	s0	59	LEU
2	s0	62	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	s0	83	GLN
2	s0	87	LEU
2	s0	96	THR
2	s0	101	ARG
2	s0	103	THR
2	s0	106	SER
2	s0	110	TYR
2	s0	112	THR
2	s0	124	THR
2	s0	131	GLN
2	s0	141	ILE
2	s0	144	ILE
2	s0	154	GLU
2	s0	157	ASP
2	s0	169	SER
2	s0	172	LEU
2	s0	183	ARG
2	s0	185	ARG
2	s0	189	VAL
2	s0	198	MET
2	s0	202	TYR
3	s1	21	VAL
3	s1	25	THR
3	s1	26	ARG
3	s1	47	LEU
3	s1	51	SER
3	s1	55	LYS
3	s1	56	SER
3	s1	61	LEU
3	s1	62	LYS
3	s1	65	VAL
3	s1	70	LEU
3	s1	73	LEU
3	s1	76	SER
3	s1	77	GLU
3	s1	90	GLU
3	s1	97	LEU
3	s1	106	THR
3	s1	119	THR
3	s1	125	VAL
3	s1	126	THR
3	s1	129	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	s1	137	ILE
3	s1	169	SER
3	s1	173	THR
3	s1	175	GLU
3	s1	180	THR
3	s1	181	LEU
3	s1	184	LEU
3	s1	193	ILE
3	s1	195	LYS
3	s1	197	ILE
3	s1	203	ASP
3	s1	211	HIS
3	s1	212	VAL
3	s1	214	LYS
3	s1	215	VAL
3	s1	219	LYS
3	s1	228	LEU
3	s1	231	LEU
3	s1	234	GLU
4	s2	41	LEU
4	s2	46	LYS
4	s2	53	ILE
4	s2	54	GLU
4	s2	55	GLU
4	s2	58	LEU
4	s2	69	ILE
4	s2	73	LEU
4	s2	80	VAL
4	s2	81	MET
4	s2	83	ILE
4	s2	87	GLN
4	s2	89	GLN
4	s2	90	THR
4	s2	91	ARG
4	s2	94	GLN
4	s2	95	ARG
4	s2	97	ARG
4	s2	102	VAL
4	s2	106	ASP
4	s2	111	VAL
4	s2	113	LEU
4	s2	117	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	s2	130	ILE
4	s2	137	ILE
4	s2	139	ILE
4	s2	141	ARG
4	s2	146	THR
4	s2	148	LEU
4	s2	150	GLN
4	s2	159	THR
4	s2	161	LYS
4	s2	164	SER
4	s2	165	VAL
4	s2	166	THR
4	s2	170	ILE
4	s2	181	SER
4	s2	182	PRO
4	s2	194	GLU
4	s2	205	ARG
4	s2	206	THR
4	s2	207	LEU
4	s2	218	ILE
4	s2	225	LEU
4	s2	226	THR
4	s2	229	LEU
4	s2	237	VAL
4	s2	240	LEU
4	s2	250	GLN
5	s3	4	LEU
5	s3	7	LYS
5	s3	9	ARG
5	s3	21	LEU
5	s3	26	THR
5	s3	32	GLU
5	s3	37	VAL
5	s3	39	VAL
5	s3	41	VAL
5	s3	44	THR
5	s3	53	THR
5	s3	59	LEU
5	s3	61	GLU
5	s3	69	LEU
5	s3	83	THR
5	s3	89	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	s3	92	GLN
5	s3	93	ASP
5	s3	94	ARG
5	s3	103	GLU
5	s3	111	ASN
5	s3	115	ILE
5	s3	124	ARG
5	s3	127	MET
5	s3	128	GLU
5	s3	135	GLU
5	s3	139	SER
5	s3	142	LEU
5	s3	143	ARG
5	s3	146	ARG
5	s3	158	ILE
5	s3	162	GLN
5	s3	164	VAL
5	s3	168	ILE
5	s3	170	THR
5	s3	176	LEU
5	s3	181	VAL
5	s3	189	MET
5	s3	196	ARG
5	s3	202	LEU
5	s3	210	GLU
5	s3	212	LYS
5	s3	213	GLU
5	s3	218	LEU
5	s3	223	LYS
6	s4	6	LYS
6	s4	7	LYS
6	s4	9	LEU
6	s4	11	ARG
6	s4	23	LEU
6	s4	24	SER
6	s4	37	LYS
6	s4	38	LEU
6	s4	42	LEU
6	s4	45	ILE
6	s4	48	LEU
6	s4	49	ARG
6	s4	50	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	s4	51	ARG
6	s4	52	LEU
6	s4	67	GLN
6	s4	69	HIS
6	s4	70	VAL
6	s4	78	THR
6	s4	89	VAL
6	s4	91	THR
6	s4	102	VAL
6	s4	105	VAL
6	s4	108	ARG
6	s4	113	ARG
6	s4	123	LEU
6	s4	129	VAL
6	s4	131	LEU
6	s4	133	LYS
6	s4	147	ILE
6	s4	148	ARG
6	s4	159	THR
6	s4	164	LEU
6	s4	176	ASP
6	s4	180	LEU
6	s4	181	VAL
6	s4	182	TYR
6	s4	187	ARG
6	s4	192	ILE
6	s4	194	THR
6	s4	219	VAL
6	s4	221	ARG
6	s4	236	ILE
6	s4	237	SER
6	s4	244	ILE
6	s4	248	ILE
7	s5	23	VAL
7	s5	25	LEU
7	s5	33	VAL
7	s5	34	GLN
7	s5	38	THR
7	s5	39	GLU
7	s5	40	ILE
7	s5	41	LYS
7	s5	45	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	s5	47	SER
7	s5	58	LEU
7	s5	59	VAL
7	s5	63	GLN
7	s5	64	VAL
7	s5	68	ILE
7	s5	79	ASN
7	s5	83	ARG
7	s5	86	GLN
7	s5	89	ILE
7	s5	92	ARG
7	s5	93	LEU
7	s5	94	THR
7	s5	97	LEU
7	s5	107	LYS
7	s5	112	ARG
7	s5	115	LYS
7	s5	119	ASP
7	s5	124	LEU
7	s5	125	THR
7	s5	128	ASN
7	s5	133	VAL
7	s5	134	VAL
7	s5	143	ARG
7	s5	146	THR
7	s5	156	ARG
7	s5	157	ARG
7	s5	162	VAL
7	s5	167	ARG
7	s5	190	ILE
7	s5	194	LEU
7	s5	203	LYS
7	s5	206	SER
7	s5	212	LYS
7	s5	213	LYS
7	s5	216	GLU
7	s5	220	VAL
7	s5	224	ASN
8	s6	6	SER
8	s6	12	SER
8	s6	15	THR
8	s6	21	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	s6	25	ARG
8	s6	26	VAL
8	s6	30	LYS
8	s6	34	GLN
8	s6	41	VAL
8	s6	59	GLN
8	s6	67	VAL
8	s6	71	THR
8	s6	76	LEU
8	s6	81	VAL
8	s6	89	ASP
8	s6	93	LYS
8	s6	96	SER
8	s6	97	VAL
8	s6	108	VAL
8	s6	109	LEU
8	s6	111	LEU
8	s6	112	VAL
8	s6	121	LEU
8	s6	122	GLU
8	s6	126	ASP
8	s6	128	THR
8	s6	129	VAL
8	s6	132	ARG
8	s6	133	LEU
8	s6	143	LYS
8	s6	151	ASP
8	s6	154	ARG
8	s6	155	ASP
8	s6	162	VAL
8	s6	166	GLU
8	s6	170	THR
8	s6	177	ARG
8	s6	180	THR
8	s6	191	ARG
8	s6	193	LEU
8	s6	201	GLN
8	s6	212	LEU
8	s6	215	ARG
9	s7	8	ILE
9	s7	10	SER
9	s7	11	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	s7	14	THR
9	s7	16	LEU
9	s7	25	VAL
9	s7	33	GLU
9	s7	42	GLN
9	s7	49	ILE
9	s7	50	ASP
9	s7	67	LEU
9	s7	77	LEU
9	s7	84	LYS
9	s7	86	GLN
9	s7	97	ARG
9	s7	99	LEU
9	s7	107	ARG
9	s7	110	GLN
9	s7	114	ARG
9	s7	115	SER
9	s7	116	ARG
9	s7	117	THR
9	s7	118	LEU
9	s7	126	LEU
9	s7	129	LEU
9	s7	144	VAL
9	s7	149	ILE
9	s7	151	LYS
9	s7	161	GLN
9	s7	163	ASP
9	s7	166	LEU
9	s7	180	GLN
9	s7	185	ILE
10	s8	7	SER
10	s8	29	LEU
10	s8	36	THR
10	s8	45	SER
10	s8	46	VAL
10	s8	47	ARG
10	s8	58	LEU
10	s8	61	GLU
10	s8	62	THR
10	s8	74	LYS
10	s8	76	THR
10	s8	77	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	s8	82	VAL
10	s8	89	GLU
10	s8	93	THR
10	s8	119	GLN
10	s8	120	THR
10	s8	121	LEU
10	s8	138	ASN
10	s8	151	LYS
10	s8	152	ILE
10	s8	155	SER
10	s8	183	ILE
10	s8	184	LEU
10	s8	185	GLU
11	s9	3	ARG
11	s9	7	THR
11	s9	16	LYS
11	s9	20	GLU
11	s9	28	LEU
11	s9	33	GLU
11	s9	37	LYS
11	s9	45	ILE
11	s9	61	THR
11	s9	81	VAL
11	s9	82	ARG
11	s9	87	SER
11	s9	89	ASP
11	s9	93	LEU
11	s9	96	VAL
11	s9	99	LEU
11	s9	101	VAL
11	s9	105	LEU
11	s9	109	LEU
11	s9	111	THR
11	s9	120	LYS
11	s9	122	VAL
11	s9	130	THR
11	s9	133	HIS
11	s9	134	ILE
11	s9	140	ILE
11	s9	145	SER
11	s9	149	ARG
11	s9	151	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	s9	154	LYS
11	s9	161	THR
11	s9	162	SER
11	s9	172	VAL
11	s9	174	ARG
11	s9	182	GLU
11	s9	186	GLU
80	c0	2	LEU
80	c0	5	LYS
80	c0	15	LEU
80	c0	20	VAL
80	c0	27	PHE
80	c0	37	THR
80	c0	40	LEU
80	c0	55	VAL
80	c0	56	LYS
80	c0	57	THR
80	c0	71	GLU
80	c0	77	ARG
13	c1	5	LEU
13	c1	10	GLU
13	c1	21	ASN
13	c1	24	LYS
13	c1	26	LYS
13	c1	32	LYS
13	c1	40	LEU
13	c1	44	THR
13	c1	50	GLU
13	c1	56	LYS
13	c1	60	PHE
13	c1	72	THR
13	c1	74	THR
13	c1	75	VAL
13	c1	78	THR
13	c1	79	LYS
13	c1	80	MET
13	c1	83	THR
13	c1	94	ILE
13	c1	95	PRO
13	c1	99	ARG
13	c1	116	ARG
13	c1	123	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	c1	129	ARG
13	c1	131	ILE
13	c1	134	THR
13	c1	140	VAL
14	c2	28	LEU
14	c2	30	VAL
14	c2	36	LEU
14	c2	37	VAL
14	c2	43	ARG
14	c2	52	LEU
14	c2	58	LEU
14	c2	59	LEU
14	c2	61	VAL
14	c2	66	VAL
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	86	VAL
14	c2	89	ILE
14	c2	97	LEU
14	c2	103	LEU
14	c2	120	VAL
14	c2	121	VAL
14	c2	132	GLU
14	c2	136	ILE
14	c2	140	PHE
14	c2	141	SER
15	c3	6	SER
15	c3	12	SER
15	c3	14	SER
15	c3	32	SER
15	c3	35	GLU
15	c3	53	LEU
15	c3	60	VAL
15	c3	61	THR
15	c3	66	ILE
15	c3	67	THR
15	c3	70	LYS
15	c3	71	ILE
15	c3	74	ILE
15	c3	80	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	c3	84	ILE
15	c3	88	LEU
15	c3	92	ILE
15	c3	93	LYS
15	c3	102	LEU
15	c3	104	ARG
15	c3	115	LEU
15	c3	125	LEU
15	c3	127	ARG
15	c3	134	VAL
15	c3	138	ASN
15	c3	150	VAL
15	c3	151	ASN
16	c4	18	ARG
16	c4	24	ASN
16	c4	26	THR
16	c4	28	VAL
16	c4	33	LEU
16	c4	36	LYS
16	c4	38	THR
16	c4	49	LYS
16	c4	51	ASP
16	c4	52	ARG
16	c4	61	MET
16	c4	62	LEU
16	c4	65	GLN
16	c4	66	ASP
16	c4	70	LYS
16	c4	72	LYS
16	c4	81	VAL
16	c4	82	LYS
16	c4	84	ARG
16	c4	102	LEU
16	c4	114	ARG
16	c4	115	ILE
16	c4	118	VAL
16	c4	119	THR
16	c4	123	SER
16	c4	129	LYS
16	c4	132	ARG
16	c4	133	ARG
16	c4	136	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	c4	137	LEU
17	c5	16	SER
17	c5	20	VAL
17	c5	21	ASP
17	c5	23	GLU
17	c5	24	LYS
17	c5	27	GLU
17	c5	30	THR
17	c5	31	GLU
17	c5	36	LEU
17	c5	40	ARG
17	c5	49	MET
17	c5	51	SER
17	c5	69	GLU
17	c5	71	GLU
17	c5	72	LYS
17	c5	77	ARG
17	c5	89	MET
17	c5	92	SER
17	c5	103	ASN
17	c5	104	GLN
17	c5	107	ILE
17	c5	110	GLU
17	c5	112	LEU
17	c5	122	THR
17	c5	124	THR
17	c5	125	PRO
18	c6	19	VAL
18	c6	23	LYS
18	c6	28	LEU
18	c6	36	ILE
18	c6	37	THR
18	c6	43	ILE
18	c6	48	VAL
18	c6	53	LEU
18	c6	54	LEU
18	c6	55	VAL
18	c6	57	LEU
18	c6	63	ILE
18	c6	68	ARG
18	c6	69	VAL
18	c6	70	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	c6	81	ILE
18	c6	83	GLN
18	c6	94	GLN
18	c6	105	LEU
18	c6	110	THR
18	c6	115	THR
18	c6	117	LEU
18	c6	118	ILE
18	c6	128	LYS
18	c6	137	ARG
19	c7	3	ARG
19	c7	4	VAL
19	c7	6	THR
19	c7	7	LYS
19	c7	8	THR
19	c7	11	ARG
19	c7	17	ILE
19	c7	25	THR
19	c7	26	LEU
19	c7	27	ASP
19	c7	34	LEU
19	c7	45	ARG
19	c7	46	LEU
19	c7	47	ARG
19	c7	49	LYS
19	c7	54	THR
19	c7	61	ILE
19	c7	63	LYS
19	c7	72	LYS
19	c7	73	LEU
19	c7	79	GLU
19	c7	83	GLN
19	c7	85	VAL
19	c7	88	VAL
19	c7	104	ASN
19	c7	105	GLN
19	c7	109	LEU
19	c7	113	LEU
20	c8	3	LEU
20	c8	4	VAL
20	c8	5	VAL
20	c8	6	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	c8	13	HIS
20	c8	15	LEU
20	c8	18	LEU
20	c8	25	ASN
20	c8	26	ILE
20	c8	27	LYS
20	c8	28	ILE
20	c8	36	LYS
20	c8	46	VAL
20	c8	61	LEU
20	c8	63	GLN
20	c8	69	ILE
20	c8	77	THR
20	c8	86	LEU
20	c8	94	ASP
20	c8	105	VAL
20	c8	110	ARG
20	c8	114	GLU
20	c8	116	LEU
20	c8	119	ILE
20	c8	133	VAL
20	c8	136	GLN
20	c8	138	THR
20	c8	144	ARG
20	c8	145	ARG
21	c9	6	VAL
21	c9	9	VAL
21	c9	22	LEU
21	c9	27	LYS
21	c9	28	LEU
21	c9	36	ILE
21	c9	41	SER
21	c9	57	ARG
21	c9	68	ARG
21	c9	71	VAL
21	c9	84	LYS
21	c9	86	ARG
21	c9	91	TYR
21	c9	100	ILE
21	c9	110	LYS
21	c9	111	ILE
21	c9	116	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	c9	117	SER
21	c9	123	ARG
21	c9	126	GLU
21	c9	132	LEU
21	c9	135	ILE
21	c9	140	LEU
21	c9	142	GLU
21	c9	144	GLU
22	d0	13	GLU
22	d0	16	GLN
22	d0	19	ILE
22	d0	22	ILE
22	d0	23	ARG
22	d0	27	THR
22	d0	30	LYS
22	d0	31	VAL
22	d0	34	LEU
22	d0	39	SER
22	d0	47	GLN
22	d0	51	VAL
22	d0	60	THR
22	d0	62	VAL
22	d0	63	LEU
22	d0	67	THR
22	d0	70	THR
22	d0	72	ASN
22	d0	74	GLU
22	d0	76	SER
22	d0	81	THR
22	d0	87	HIS
22	d0	88	LYS
22	d0	89	ARG
22	d0	97	VAL
22	d0	99	ILE
22	d0	100	VAL
22	d0	103	ILE
22	d0	107	THR
22	d0	108	ILE
22	d0	113	ASP
22	d0	118	VAL
23	d1	2	GLU
23	d1	10	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	d1	11	LEU
23	d1	12	TYR
23	d1	25	LYS
23	d1	32	VAL
23	d1	34	ILE
23	d1	38	LYS
23	d1	41	GLU
23	d1	52	THR
23	d1	68	SER
23	d1	69	LEU
23	d1	78	LEU
23	d1	81	ASN
23	d1	86	SER
24	d2	6	VAL
24	d2	7	LEU
24	d2	20	THR
24	d2	23	ARG
24	d2	25	VAL
24	d2	26	LEU
24	d2	43	LYS
24	d2	56	HIS
24	d2	65	LEU
24	d2	74	VAL
24	d2	93	LEU
24	d2	98	GLN
24	d2	103	ILE
24	d2	105	THR
24	d2	117	ARG
24	d2	121	VAL
24	d2	124	LYS
24	d2	129	VAL
25	d3	3	LYS
25	d3	9	LEU
25	d3	16	ARG
25	d3	19	ARG
25	d3	23	ARG
25	d3	28	ASN
25	d3	33	LEU
25	d3	36	THR
25	d3	40	SER
25	d3	47	SER
25	d3	52	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	d3	66	SER
25	d3	69	ARG
25	d3	73	ARG
25	d3	75	GLN
25	d3	78	LYS
25	d3	82	LYS
25	d3	84	THR
25	d3	96	VAL
25	d3	103	LEU
25	d3	107	PHE
25	d3	112	LYS
25	d3	125	VAL
25	d3	131	SER
25	d3	133	LEU
25	d3	135	LEU
26	d4	2	SER
26	d4	5	VAL
26	d4	10	ARG
26	d4	12	VAL
26	d4	13	ILE
26	d4	21	LYS
26	d4	29	HIS
26	d4	43	LYS
26	d4	44	LEU
26	d4	46	GLU
26	d4	49	LYS
26	d4	55	VAL
26	d4	62	THR
26	d4	77	ASN
26	d4	88	THR
26	d4	91	LEU
26	d4	92	VAL
26	d4	98	GLU
26	d4	100	VAL
26	d4	114	ARG
26	d4	128	LYS
26	d4	129	VAL
26	d4	133	ASN
27	d5	40	VAL
27	d5	42	LEU
27	d5	43	ASP
27	d5	46	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	d5	52	LYS
27	d5	53	GLU
27	d5	57	TYR
27	d5	60	VAL
27	d5	62	VAL
27	d5	68	ARG
27	d5	71	ILE
27	d5	81	ARG
27	d5	86	GLU
27	d5	90	LYS
27	d5	92	ILE
27	d5	97	LYS
28	d6	4	LYS
28	d6	8	ASN
28	d6	12	LYS
28	d6	18	VAL
28	d6	24	VAL
28	d6	26	CYS
28	d6	27	SER
28	d6	28	LYS
28	d6	30	ILE
28	d6	34	LYS
28	d6	41	ILE
28	d6	43	ASN
28	d6	53	LEU
28	d6	54	SER
28	d6	67	THR
28	d6	79	ILE
28	d6	82	ARG
28	d6	83	ILE
28	d6	85	ARG
28	d6	88	SER
28	d6	89	ARG
28	d6	90	GLU
29	d7	3	LEU
29	d7	4	VAL
29	d7	11	THR
29	d7	14	SER
29	d7	40	CYS
29	d7	43	ILE
29	d7	46	VAL
29	d7	61	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	d7	62	ILE
29	d7	65	THR
29	d7	72	LYS
29	d7	77	THR
30	d8	5	THR
30	d8	8	THR
30	d8	11	LYS
30	d8	14	LYS
30	d8	16	LEU
30	d8	21	SER
30	d8	22	ARG
30	d8	25	VAL
30	d8	32	PHE
30	d8	33	LEU
30	d8	36	THR
30	d8	40	ILE
30	d8	41	VAL
30	d8	42	ARG
30	d8	44	VAL
30	d8	52	ASP
30	d8	54	LEU
30	d8	59	SER
30	d8	62	GLU
31	d9	4	GLU
31	d9	10	HIS
31	d9	12	ARG
31	d9	19	ARG
31	d9	20	GLN
31	d9	25	SER
31	d9	30	LEU
31	d9	36	LEU
31	d9	38	ILE
31	d9	53	ASN
31	d9	54	LYS
81	e0	4	VAL
81	e0	14	VAL
81	e0	21	VAL
81	e0	23	LYS
81	e0	24	THR
81	e0	25	GLU
81	e0	26	LYS
81	e0	29	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
81	e0	36	LYS
81	e0	38	LEU
81	e0	39	LEU
81	e0	41	THR
81	e0	42	ARG
81	e0	45	VAL
81	e0	49	LEU
81	e0	55	ARG
82	e1	84	VAL
82	e1	86	THR
82	e1	97	LYS
82	e1	98	VAL
82	e1	102	VAL
82	e1	106	TYR
82	e1	107	LYS
82	e1	113	LYS
82	e1	115	THR
82	e1	116	LYS
82	e1	119	ARG
82	e1	121	CYS
82	e1	130	VAL
82	e1	135	HIS
82	e1	146	SER
82	e1	147	VAL
82	e1	150	VAL
34	sR	9	LEU
34	sR	21	THR
34	sR	23	LEU
34	sR	29	GLN
34	sR	58	VAL
34	sR	66	HIS
34	sR	76	ASP
34	sR	98	GLU
34	sR	108	SER
34	sR	118	LYS
34	sR	123	ILE
34	sR	145	LEU
34	sR	157	VAL
34	sR	159	ASN
34	sR	167	VAL
34	sR	178	VAL
34	sR	184	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	sR	188	ILE
34	sR	196	ASN
34	sR	222	LEU
34	sR	228	LYS
34	sR	256	THR
34	sR	258	THR
34	sR	266	ASP
34	sR	275	ARG
34	sR	286	GLU
34	sR	290	VAL
34	sR	297	ASP
34	sR	310	ILE
35	sM	23	LYS
35	sM	26	VAL
35	sM	30	THR
35	sM	33	LYS
35	sM	43	ASP
35	sM	48	ARG
35	sM	49	LYS
35	sM	50	ASN
35	sM	61	ILE
35	sM	74	LYS
35	sM	77	THR
35	sM	82	THR
39	l2	15	ILE
39	l2	23	ARG
39	l2	28	LYS
39	l2	32	LEU
39	l2	44	ILE
39	l2	45	VAL
39	l2	47	GLN
39	l2	48	ILE
39	l2	54	ARG
39	l2	61	VAL
39	l2	62	VAL
39	l2	64	ARG
39	l2	71	LEU
39	l2	74	GLU
39	l2	82	VAL
39	l2	96	LEU
39	l2	98	VAL
39	l2	101	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	l2	104	LEU
39	l2	109	GLU
39	l2	112	ILE
39	l2	116	VAL
39	l2	134	VAL
39	l2	137	ILE
39	l2	142	ASP
39	l2	147	ARG
39	l2	148	VAL
39	l2	157	VAL
39	l2	158	ILE
39	l2	165	VAL
39	l2	168	VAL
39	l2	169	ILE
39	l2	188	LYS
39	l2	191	LEU
39	l2	193	ARG
39	l2	202	VAL
39	l2	204	MET
39	l2	219	ILE
39	l2	227	ARG
39	l2	230	VAL
39	l2	233	GLN
39	l2	238	ILE
39	l2	243	THR
39	l2	246	LEU
39	l2	249	SER
40	l3	3	HIS
40	l3	4	ARG
40	l3	5	LYS
40	l3	7	GLU
40	l3	10	ARG
40	l3	17	LEU
40	l3	19	ARG
40	l3	20	LYS
40	l3	21	ARG
40	l3	26	ARG
40	l3	37	ARG
40	l3	44	THR
40	l3	47	LEU
40	l3	50	LYS
40	l3	55	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	l3	56	ILE
40	l3	69	LYS
40	l3	70	ARG
40	l3	73	VAL
40	l3	77	THR
40	l3	85	VAL
40	l3	103	THR
40	l3	111	SER
40	l3	114	VAL
40	l3	126	LYS
40	l3	128	LYS
40	l3	139	GLN
40	l3	140	ASP
40	l3	146	ARG
40	l3	148	LEU
40	l3	150	ARG
40	l3	151	ILE
40	l3	153	LYS
40	l3	157	VAL
40	l3	160	VAL
40	l3	167	ARG
40	l3	169	THR
40	l3	175	LYS
40	l3	183	LEU
40	l3	188	ILE
40	l3	192	VAL
40	l3	201	LYS
40	l3	202	THR
40	l3	205	VAL
40	l3	208	VAL
40	l3	211	GLN
40	l3	213	GLU
40	l3	214	MET
40	l3	232	ARG
40	l3	235	THR
40	l3	238	LEU
40	l3	242	THR
40	l3	248	LYS
40	l3	249	VAL
40	l3	252	ILE
40	l3	264	VAL
40	l3	274	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	l3	275	ARG
40	l3	284	ARG
40	l3	303	LYS
40	l3	304	THR
40	l3	308	MET
40	l3	317	ILE
40	l3	322	ILE
40	l3	324	VAL
40	l3	333	LYS
40	l3	346	THR
40	l3	354	VAL
40	l3	359	ILE
40	l3	369	ARG
40	l3	380	MET
40	l3	386	ASP
41	l4	2	SER
41	l4	8	VAL
41	l4	25	VAL
41	l4	47	ARG
41	l4	60	THR
41	l4	69	ARG
41	l4	73	ARG
41	l4	85	SER
41	l4	92	ASN
41	l4	93	MET
41	l4	98	ARG
41	l4	99	MET
41	l4	112	LYS
41	l4	118	LYS
41	l4	122	THR
41	l4	136	LEU
41	l4	144	LYS
41	l4	156	LEU
41	l4	160	GLN
41	l4	170	LYS
41	l4	172	VAL
41	l4	179	LEU
41	l4	186	LYS
41	l4	187	LEU
41	l4	191	LYS
41	l4	206	LEU
41	l4	215	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	l4	217	LYS
41	l4	220	ARG
41	l4	221	ASN
41	l4	222	VAL
41	l4	230	VAL
41	l4	246	ARG
41	l4	252	GLU
41	l4	258	LEU
41	l4	265	GLU
41	l4	266	THR
41	l4	284	SER
41	l4	289	ILE
41	l4	291	ASN
41	l4	293	SER
41	l4	299	ILE
41	l4	300	ARG
41	l4	301	PRO
41	l4	304	GLN
41	l4	306	THR
41	l4	307	GLN
41	l4	310	THR
41	l4	313	LEU
41	l4	314	LYS
41	l4	319	LYS
41	l4	322	GLN
41	l4	323	VAL
41	l4	327	LEU
41	l4	332	LYS
41	l4	333	VAL
41	l4	345	GLU
41	l4	347	THR
41	l4	349	THR
41	l4	357	GLU
41	l4	358	THR
41	l4	359	LEU
42	l5	4	GLN
42	l5	5	LYS
42	l5	9	SER
42	l5	13	SER
42	l5	17	GLN
42	l5	34	LYS
42	l5	35	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	15	38	THR
42	15	48	LYS
42	15	51	LEU
42	15	65	ILE
42	15	68	THR
42	15	69	ILE
42	15	70	THR
42	15	74	VAL
42	15	85	ARG
42	15	89	THR
42	15	93	THR
42	15	110	LEU
42	15	112	LYS
42	15	115	LEU
42	15	118	THR
42	15	131	LEU
42	15	132	THR
42	15	135	VAL
42	15	136	GLU
42	15	140	ARG
42	15	146	LEU
42	15	148	ILE
42	15	152	ARG
42	15	154	THR
42	15	155	THR
42	15	164	LYS
42	15	177	GLU
42	15	185	PHE
42	15	187	THR
42	15	190	ILE
42	15	191	ASP
42	15	194	LEU
42	15	196	ARG
42	15	211	LEU
42	15	218	ARG
42	15	222	LEU
42	15	227	LEU
42	15	236	LEU
42	15	239	ILE
42	15	241	THR
42	15	247	ILE
42	15	254	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	15	258	LYS
42	15	259	LYS
42	15	262	LYS
42	15	268	GLU
42	15	269	SER
42	15	273	ARG
42	15	275	THR
42	15	277	LEU
43	16	8	LYS
43	16	12	SER
43	16	20	LYS
43	16	21	THR
43	16	31	ARG
43	16	35	VAL
43	16	50	LYS
43	16	52	VAL
43	16	64	LEU
43	16	65	ILE
43	16	79	VAL
43	16	88	SER
43	16	89	THR
43	16	90	LYS
43	16	91	VAL
43	16	108	LYS
43	16	109	GLU
43	16	133	GLU
43	16	136	GLU
43	16	152	THR
43	16	155	LEU
43	16	162	SER
43	16	170	LYS
43	16	175	LYS
44	17	26	VAL
44	17	45	LEU
44	17	46	GLU
44	17	83	LEU
44	17	88	ARG
44	17	98	LYS
44	17	100	ARG
44	17	101	LYS
44	17	111	ILE
44	17	121	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	17	124	LEU
44	17	128	LYS
44	17	129	LEU
44	17	130	ILE
44	17	156	ILE
44	17	158	LYS
44	17	159	GLN
44	17	161	VAL
44	17	173	LEU
44	17	175	LYS
44	17	178	ILE
44	17	179	LEU
44	17	184	LEU
44	17	196	LYS
44	17	199	ASN
44	17	229	PHE
44	17	239	LEU
45	18	41	GLN
45	18	46	LEU
45	18	50	VAL
45	18	65	LEU
45	18	67	ILE
45	18	68	ARG
45	18	69	LEU
45	18	71	VAL
45	18	74	THR
45	18	81	THR
45	18	89	GLU
45	18	136	LEU
45	18	149	LYS
45	18	150	LEU
45	18	153	ILE
45	18	156	ASP
45	18	160	ILE
45	18	163	VAL
45	18	164	VAL
45	18	169	LEU
45	18	172	LYS
45	18	181	LYS
45	18	183	LYS
45	18	200	LEU
45	18	203	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	18	208	GLU
45	18	213	LYS
45	18	214	LEU
45	18	219	ASP
45	18	230	LYS
45	18	231	LYS
45	18	241	LYS
45	18	245	LYS
45	18	248	LYS
46	19	1	MET
46	19	4	ILE
46	19	5	GLN
46	19	6	THR
46	19	18	VAL
46	19	20	ILE
46	19	31	ARG
46	19	33	THR
46	19	34	LEU
46	19	36	LYS
46	19	44	THR
46	19	48	VAL
46	19	52	LEU
46	19	55	VAL
46	19	62	ARG
46	19	68	LEU
46	19	70	THR
46	19	72	LYS
46	19	73	SER
46	19	80	THR
46	19	82	VAL
46	19	87	LYS
46	19	92	TYR
46	19	115	ARG
46	19	118	LEU
46	19	132	VAL
46	19	133	THR
46	19	144	ILE
46	19	146	LEU
46	19	151	VAL
46	19	157	ASN
46	19	161	LEU
46	19	162	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	l9	167	VAL
46	l9	173	ARG
46	l9	174	LYS
46	l9	179	ILE
46	l9	191	LEU
47	m0	3	ARG
47	m0	19	LYS
47	m0	24	ARG
47	m0	29	SER
47	m0	36	LEU
47	m0	39	LYS
47	m0	48	LEU
47	m0	50	VAL
47	m0	52	LEU
47	m0	53	VAL
47	m0	54	SER
47	m0	57	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	77	THR
47	m0	87	LEU
47	m0	90	ARG
47	m0	91	VAL
47	m0	99	ILE
47	m0	101	LYS
47	m0	138	VAL
47	m0	143	SER
47	m0	144	ASN
47	m0	145	LYS
47	m0	153	ARG
47	m0	169	LYS
47	m0	170	LYS
47	m0	175	ASN
47	m0	177	ASP
47	m0	182	LEU
47	m0	197	VAL
47	m0	200	LEU
47	m0	211	ARG
47	m0	212	GLU
47	m0	215	GLU
47	m0	217	PHE
48	m1	10	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	m1	11	ASP
48	m1	12	LEU
48	m1	13	LYS
48	m1	18	VAL
48	m1	23	VAL
48	m1	29	ARG
48	m1	34	SER
48	m1	35	LYS
48	m1	37	LEU
48	m1	40	LEU
48	m1	44	THR
48	m1	46	VAL
48	m1	51	ARG
48	m1	54	VAL
48	m1	56	THR
48	m1	59	ILE
48	m1	71	VAL
48	m1	80	LEU
48	m1	85	LYS
48	m1	94	ARG
48	m1	97	SER
48	m1	106	ILE
48	m1	107	ASP
48	m1	108	GLU
48	m1	112	LEU
48	m1	129	VAL
48	m1	130	VAL
48	m1	137	ARG
48	m1	142	LYS
48	m1	147	THR
48	m1	151	SER
48	m1	152	HIS
48	m1	156	LYS
48	m1	158	ASP
48	m1	159	THR
48	m1	160	VAL
48	m1	161	SER
48	m1	166	LYS
48	m1	172	LEU
49	m3	4	SER
49	m3	19	GLN
49	m3	23	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	m3	54	LEU
49	m3	57	VAL
49	m3	58	VAL
49	m3	59	ARG
49	m3	62	THR
49	m3	63	VAL
49	m3	68	LYS
49	m3	69	VAL
49	m3	76	THR
49	m3	85	LEU
49	m3	102	GLN
49	m3	103	ASN
49	m3	106	GLN
49	m3	107	GLU
49	m3	123	ILE
49	m3	124	ILE
49	m3	131	LYS
49	m3	138	VAL
49	m3	147	ILE
49	m3	149	GLN
49	m3	150	PRO
49	m3	152	THR
49	m3	154	VAL
49	m3	164	GLU
49	m3	165	SER
49	m3	168	ARG
49	m3	174	ARG
49	m3	176	GLU
49	m3	183	ARG
49	m3	184	GLU
49	m3	190	LYS
49	m3	194	GLU
50	m4	3	THR
50	m4	4	ASP
50	m4	6	ILE
50	m4	15	VAL
50	m4	16	GLU
50	m4	20	VAL
50	m4	23	ILE
50	m4	27	GLN
50	m4	28	SER
50	m4	31	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	m4	35	ILE
50	m4	53	VAL
50	m4	58	ILE
50	m4	63	VAL
50	m4	64	VAL
50	m4	66	THR
50	m4	72	LEU
50	m4	80	THR
50	m4	82	SER
50	m4	92	GLU
50	m4	98	SER
50	m4	107	GLU
50	m4	108	ARG
50	m4	113	THR
50	m4	124	ARG
50	m4	128	ARG
50	m4	130	THR
50	m4	135	LEU
51	m5	5	LYS
51	m5	7	LEU
51	m5	8	GLU
51	m5	10	LEU
51	m5	14	LYS
51	m5	18	VAL
51	m5	22	LEU
51	m5	27	VAL
51	m5	36	ILE
51	m5	49	ARG
51	m5	54	LYS
51	m5	76	PRO
51	m5	80	THR
51	m5	83	LYS
51	m5	85	THR
51	m5	92	LEU
51	m5	96	ARG
51	m5	97	SER
51	m5	104	GLU
51	m5	105	ARG
51	m5	106	VAL
51	m5	108	ARG
51	m5	138	GLN
51	m5	142	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	m5	153	ASP
51	m5	155	VAL
51	m5	159	ARG
51	m5	165	THR
51	m5	171	SER
51	m5	175	ASN
51	m5	179	LYS
51	m5	183	THR
51	m5	184	LYS
51	m5	190	THR
51	m5	194	GLN
51	m5	198	SER
52	m6	3	VAL
52	m6	12	LYS
52	m6	22	VAL
52	m6	25	LYS
52	m6	34	VAL
52	m6	36	VAL
52	m6	58	LEU
52	m6	60	LYS
52	m6	67	THR
52	m6	74	ARG
52	m6	78	ARG
52	m6	79	ILE
52	m6	85	ARG
52	m6	100	GLU
52	m6	106	GLU
52	m6	108	ILE
52	m6	110	PRO
52	m6	117	ARG
52	m6	118	VAL
52	m6	122	GLN
52	m6	124	LEU
52	m6	140	LYS
52	m6	141	LEU
52	m6	151	ASP
52	m6	152	VAL
52	m6	162	VAL
52	m6	166	GLU
52	m6	171	LYS
52	m6	182	ASN
52	m6	184	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	m6	197	LEU
53	m7	7	THR
53	m7	8	SER
53	m7	9	THR
53	m7	18	ARG
53	m7	23	ARG
53	m7	24	VAL
53	m7	29	THR
53	m7	31	GLU
53	m7	32	THR
53	m7	41	LEU
53	m7	46	LYS
53	m7	52	LEU
53	m7	56	ARG
53	m7	69	ARG
53	m7	78	VAL
53	m7	79	THR
53	m7	89	LYS
53	m7	94	LEU
53	m7	112	LEU
53	m7	114	VAL
53	m7	119	VAL
53	m7	120	ASN
53	m7	126	ARG
53	m7	127	ARG
53	m7	144	SER
53	m7	148	LEU
54	m8	3	ILE
54	m8	7	SER
54	m8	17	THR
54	m8	22	ASP
54	m8	24	VAL
54	m8	26	LEU
54	m8	32	LEU
54	m8	34	THR
54	m8	49	LEU
54	m8	57	ILE
54	m8	63	SER
54	m8	69	ARG
54	m8	74	GLU
54	m8	79	LYS
54	m8	80	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	m8	81	VAL
54	m8	82	VAL
54	m8	86	THR
54	m8	93	ILE
54	m8	98	LYS
54	m8	113	LYS
54	m8	135	GLN
54	m8	159	LYS
54	m8	165	ILE
54	m8	166	LEU
54	m8	167	SER
54	m8	170	ARG
54	m8	178	ARG
55	m9	7	GLN
55	m9	10	LEU
55	m9	17	VAL
55	m9	19	LYS
55	m9	27	ASN
55	m9	31	GLU
55	m9	41	ILE
55	m9	43	LYS
55	m9	47	ASN
55	m9	49	THR
55	m9	56	THR
55	m9	62	ARG
55	m9	63	THR
55	m9	70	LYS
55	m9	74	ARG
55	m9	92	GLN
55	m9	93	VAL
55	m9	99	LEU
55	m9	101	VAL
55	m9	104	ARG
55	m9	116	ASP
55	m9	117	LYS
55	m9	121	HIS
55	m9	126	GLU
55	m9	138	LEU
55	m9	139	VAL
55	m9	143	ILE
55	m9	146	LYS
55	m9	148	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	m9	152	GLU
55	m9	153	LYS
55	m9	156	ASN
55	m9	158	GLU
55	m9	162	ARG
55	m9	164	LEU
55	m9	167	ARG
55	m9	180	LYS
56	n0	5	LYS
56	n0	13	ARG
56	n0	17	GLU
56	n0	21	GLU
56	n0	23	LYS
56	n0	32	SER
56	n0	45	LEU
56	n0	50	LYS
56	n0	52	LYS
56	n0	70	THR
56	n0	71	LYS
56	n0	72	VAL
56	n0	73	LYS
56	n0	87	THR
56	n0	97	VAL
56	n0	100	VAL
56	n0	104	GLU
56	n0	105	THR
56	n0	106	LEU
56	n0	117	ARG
56	n0	119	ARG
56	n0	120	SER
56	n0	130	GLU
56	n0	136	LYS
56	n0	137	ARG
56	n0	145	THR
56	n0	148	LEU
56	n0	149	LYS
56	n0	155	ARG
56	n0	157	GLN
56	n0	162	THR
56	n0	169	SER
56	n0	172	TYR
57	n1	9	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	n1	12	ARG
57	n1	25	VAL
57	n1	26	HIS
57	n1	27	LEU
57	n1	35	LYS
57	n1	36	VAL
57	n1	43	LYS
57	n1	55	LYS
57	n1	69	LYS
57	n1	71	SER
57	n1	78	LYS
57	n1	80	VAL
57	n1	83	ARG
57	n1	96	ILE
57	n1	97	LYS
57	n1	102	ARG
57	n1	104	GLU
57	n1	124	VAL
57	n1	126	VAL
57	n1	127	GLN
57	n1	129	LYS
57	n1	130	ARG
57	n1	131	GLN
57	n1	139	ARG
57	n1	140	ILE
57	n1	141	VAL
57	n1	143	THR
57	n1	144	GLU
57	n1	149	GLN
57	n1	150	THR
57	n1	154	VAL
57	n1	158	THR
58	n2	13	LYS
58	n2	14	THR
58	n2	16	THR
58	n2	21	SER
58	n2	27	VAL
58	n2	28	PHE
58	n2	37	LEU
58	n2	43	VAL
58	n2	50	LEU
58	n2	54	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	n2	55	THR
58	n2	57	THR
58	n2	62	VAL
58	n2	63	VAL
58	n2	64	THR
58	n2	68	THR
58	n2	90	ARG
58	n2	96	VAL
58	n2	98	THR
58	n2	100	THR
58	n2	104	ARG
59	n3	7	GLN
59	n3	13	ILE
59	n3	15	LEU
59	n3	45	ARG
59	n3	48	ARG
59	n3	57	MET
59	n3	66	LYS
59	n3	69	LEU
59	n3	88	ARG
59	n3	93	LEU
59	n3	96	GLU
59	n3	102	ILE
59	n3	115	THR
59	n3	120	LYS
60	n4	1	MET
60	n4	19	THR
60	n4	34	SER
60	n4	36	SER
60	n4	39	LEU
60	n4	43	ARG
60	n4	54	LEU
60	n4	57	LYS
60	n4	58	HIS
60	n4	63	ILE
60	n4	82	ILE
60	n4	87	LEU
60	n4	89	LEU
60	n4	97	LYS
60	n4	100	VAL
60	n4	112	ASN
60	n4	119	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
60	n4	127	LYS
61	n5	24	LEU
61	n5	27	ARG
61	n5	34	LEU
61	n5	37	THR
61	n5	56	ARG
61	n5	57	LEU
61	n5	63	ILE
61	n5	71	THR
61	n5	73	MET
61	n5	86	VAL
61	n5	87	SER
61	n5	102	LEU
61	n5	105	VAL
61	n5	108	LEU
61	n5	109	LYS
61	n5	115	ARG
61	n5	117	ASN
61	n5	125	ARG
61	n5	131	ASP
61	n5	133	LEU
61	n5	135	ILE
61	n5	142	ILE
62	n6	4	GLN
62	n6	9	SER
62	n6	12	ARG
62	n6	13	ARG
62	n6	14	LYS
62	n6	25	SER
62	n6	32	SER
62	n6	35	LEU
62	n6	37	LYS
62	n6	39	LEU
62	n6	45	ILE
62	n6	50	ILE
62	n6	51	ARG
62	n6	55	GLU
62	n6	56	VAL
62	n6	57	LEU
62	n6	60	ARG
62	n6	63	LYS
62	n6	64	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
62	n6	66	GLN
62	n6	70	ILE
62	n6	76	LEU
62	n6	80	VAL
62	n6	86	THR
62	n6	88	GLU
62	n6	89	LYS
62	n6	90	VAL
62	n6	94	SER
62	n6	95	VAL
62	n6	99	LEU
62	n6	105	VAL
62	n6	108	LYS
62	n6	115	ARG
62	n6	120	GLN
62	n6	122	LYS
62	n6	127	GLU
63	n7	3	LYS
63	n7	5	LEU
63	n7	14	VAL
63	n7	17	ARG
63	n7	24	VAL
63	n7	25	ILE
63	n7	34	LYS
63	n7	43	VAL
63	n7	46	ILE
63	n7	52	LYS
63	n7	72	ILE
63	n7	75	VAL
63	n7	81	LEU
63	n7	89	VAL
63	n7	93	LYS
63	n7	95	VAL
63	n7	98	THR
63	n7	99	GLU
63	n7	102	GLU
63	n7	103	GLN
63	n7	105	SER
63	n7	106	GLN
63	n7	111	LYS
63	n7	120	GLU
63	n7	126	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
63	n7	127	ASN
63	n7	128	GLN
63	n7	133	LYS
63	n7	134	LEU
63	n7	135	ARG
64	n8	4	ARG
64	n8	6	THR
64	n8	8	THR
64	n8	10	LYS
64	n8	12	ARG
64	n8	14	HIS
64	n8	15	VAL
64	n8	19	LYS
64	n8	34	MET
64	n8	42	ARG
64	n8	46	ASP
64	n8	47	LYS
64	n8	65	GLN
64	n8	73	LEU
64	n8	76	ASP
64	n8	78	LEU
64	n8	80	THR
64	n8	82	ILE
64	n8	85	ASP
64	n8	91	LEU
64	n8	97	GLU
64	n8	98	THR
64	n8	123	VAL
64	n8	128	ARG
64	n8	133	LEU
65	n9	12	GLN
65	n9	19	ASN
65	n9	21	ILE
65	n9	33	LYS
65	n9	42	ASN
65	n9	47	LEU
65	n9	50	THR
65	n9	52	LYS
65	n9	58	LYS
65	n9	59	LYS
66	o0	8	GLU
66	o0	9	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	o0	10	ILE
66	o0	18	ILE
66	o0	19	LYS
66	o0	28	LYS
66	o0	30	THR
66	o0	32	LYS
66	o0	33	SER
66	o0	34	LEU
66	o0	41	LEU
66	o0	71	GLN
66	o0	76	GLU
66	o0	81	VAL
66	o0	84	LEU
66	o0	86	ARG
66	o0	87	VAL
66	o0	92	ILE
66	o0	101	LEU
67	o1	8	VAL
67	o1	16	LEU
67	o1	23	VAL
67	o1	26	LYS
67	o1	28	ARG
67	o1	31	ARG
67	o1	34	LYS
67	o1	36	ILE
67	o1	41	LYS
67	o1	44	MET
67	o1	46	THR
67	o1	48	ASP
67	o1	53	PRO
67	o1	55	LEU
67	o1	61	LYS
67	o1	67	VAL
67	o1	68	GLU
67	o1	76	SER
67	o1	78	LYS
67	o1	89	LEU
67	o1	90	PHE
67	o1	93	VAL
67	o1	94	GLU
67	o1	96	VAL
67	o1	97	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
67	o1	102	LYS
67	o1	104	LEU
67	o1	105	GLN
67	o1	106	THR
67	o1	110	GLU
68	o2	14	THR
68	o2	17	PHE
68	o2	19	ARG
68	o2	21	HIS
68	o2	24	ARG
68	o2	33	ARG
68	o2	35	GLN
68	o2	40	SER
68	o2	49	ASN
68	o2	51	SER
68	o2	61	LYS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	84	THR
68	o2	87	MET
68	o2	89	THR
68	o2	108	ILE
68	o2	115	LEU
68	o2	123	LYS
68	o2	125	ARG
69	o3	4	SER
69	o3	10	LYS
69	o3	17	GLN
69	o3	20	LYS
69	o3	31	LYS
69	o3	33	GLU
69	o3	37	THR
69	o3	42	GLN
69	o3	54	ARG
69	o3	57	LYS
69	o3	59	VAL
69	o3	62	SER
69	o3	74	THR
69	o3	78	SER
69	o3	81	VAL
69	o3	86	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
69	o3	98	VAL
69	o3	105	SER
70	o4	5	VAL
70	o4	16	ARG
70	o4	20	ILE
70	o4	21	LYS
70	o4	22	VAL
70	o4	24	LYS
70	o4	29	ILE
70	o4	38	LEU
70	o4	40	THR
70	o4	46	ASP
70	o4	47	CYS
70	o4	58	ARG
70	o4	61	GLN
70	o4	72	VAL
70	o4	85	VAL
70	o4	88	ARG
70	o4	98	GLN
70	o4	101	VAL
70	o4	104	VAL
71	o5	11	THR
71	o5	15	GLU
71	o5	20	GLN
71	o5	21	LEU
71	o5	31	LEU
71	o5	36	LEU
71	o5	38	ARG
71	o5	44	ILE
71	o5	45	LYS
71	o5	47	VAL
71	o5	53	CYS
71	o5	56	THR
71	o5	57	VAL
71	o5	62	GLN
71	o5	68	GLN
71	o5	69	LEU
71	o5	81	ARG
71	o5	85	THR
71	o5	89	ARG
71	o5	100	VAL
71	o5	101	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
71	o5	107	LYS
71	o5	108	GLN
71	o5	113	GLN
71	o5	115	LYS
71	o5	119	LYS
72	o6	3	VAL
72	o6	7	ILE
72	o6	9	ILE
72	o6	18	THR
72	o6	26	ILE
72	o6	29	LYS
72	o6	34	SER
72	o6	36	ARG
72	o6	37	THR
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	57	LEU
72	o6	58	ILE
72	o6	60	LEU
72	o6	68	ARG
72	o6	72	VAL
72	o6	74	LYS
72	o6	75	LYS
72	o6	76	ARG
72	o6	81	THR
72	o6	94	ILE
72	o6	98	ARG
73	o7	5	THR
73	o7	7	SER
73	o7	15	SER
73	o7	17	THR
73	o7	25	ARG
73	o7	30	GLN
73	o7	33	THR
73	o7	36	SER
73	o7	44	THR
73	o7	46	SER
73	o7	55	ARG
73	o7	59	THR
73	o7	65	ARG
73	o7	67	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
73	o7	71	SER
74	o8	5	ILE
74	o8	8	ILE
74	o8	12	LEU
74	o8	13	GLU
74	o8	20	VAL
74	o8	22	THR
74	o8	24	THR
74	o8	41	THR
74	o8	46	ARG
74	o8	50	SER
74	o8	53	THR
74	o8	55	VAL
74	o8	61	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	72	THR
75	o9	4	GLN
75	o9	12	LYS
75	o9	21	ARG
75	o9	23	LEU
75	o9	28	ARG
75	o9	29	LEU
75	o9	31	THR
75	o9	45	ARG
75	o9	47	THR
75	o9	51	ILE
76	q0	85	LEU
76	q0	87	SER
76	q0	88	LYS
76	q0	91	CYS
76	q0	93	LYS
76	q0	97	ARG
76	q0	106	ARG
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
76	q0	128	LYS
77	q1	2	ARG
77	q1	6	ARG
77	q1	7	LYS
77	q1	9	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
77	q1	13	LEU
77	q1	21	ARG
77	q1	23	ARG
78	q2	6	LYS
78	q2	7	THR
78	q2	8	ARG
78	q2	15	LYS
78	q2	16	THR
78	q2	17	CYS
78	q2	45	ARG
78	q2	47	GLN
78	q2	48	SER
78	q2	61	LYS
78	q2	66	LYS
78	q2	71	ARG
78	q2	73	GLU
78	q2	75	VAL
78	q2	78	LYS
78	q2	79	THR
78	q2	83	LEU
78	q2	84	THR
78	q2	85	LEU
78	q2	89	LYS
78	q2	93	LEU
78	q2	100	LYS
79	q3	10	ILE
79	q3	16	VAL
79	q3	20	SER
79	q3	24	ARG
79	q3	40	SER
79	q3	42	CYS
79	q3	49	ARG
79	q3	54	ILE
79	q3	56	THR
79	q3	59	CYS
79	q3	60	CYS
79	q3	64	VAL
79	q3	70	THR
79	q3	73	THR
79	q3	79	VAL
79	q3	84	ARG
79	q3	90	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
84	p0	4	ILE
84	p0	5	ARG
84	p0	25	LEU
84	p0	30	VAL
84	p0	35	SER
84	p0	43	LYS
84	p0	50	VAL
84	p0	51	VAL
84	p0	52	LEU
84	p0	55	LYS
84	p0	57	THR
84	p0	63	ILE
84	p0	67	LEU
84	p0	70	LEU
84	p0	72	ASP
84	p0	74	GLU
84	p0	76	LEU
84	p0	80	VAL
84	p0	81	LYS
84	p0	89	THR
84	p0	93	LEU
84	p0	94	THR
84	p0	97	LYS
84	p0	101	VAL
84	p0	103	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (179) such sidechains are listed below:

Mol	Chain	Res	Type
2	S0	131	GLN
3	S1	199	ASN
4	S2	150	GLN
4	S2	189	GLN
5	S3	159	HIS
5	S3	179	GLN
6	S4	57	ASN
6	S4	130	GLN
6	S4	223	ASN
6	S4	258	GLN
6	S4	259	GLN
7	S5	103	ASN
7	S5	122	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	S5	200	ASN
9	S7	5	GLN
9	S7	180	GLN
10	S8	138	ASN
11	S9	110	GLN
11	S9	112	GLN
11	S9	155	HIS
12	C0	12	HIS
12	C0	81	ASN
13	C1	81	HIS
13	C1	110	HIS
17	C5	103	ASN
17	C5	104	GLN
18	C6	83	GLN
20	C8	44	ASN
20	C8	99	HIS
22	D0	18	GLN
23	D1	75	ASN
24	D2	56	HIS
27	D5	95	HIS
28	D6	43	ASN
29	D7	26	GLN
34	SR	153	GLN
34	SR	187	GLN
34	SR	200	ASN
35	SM	86	ASN
39	L2	7	ASN
39	L2	83	HIS
39	L2	205	ASN
39	L2	209	HIS
40	L3	224	HIS
41	L4	116	ASN
42	L5	40	HIS
43	L6	167	ASN
44	L7	25	GLN
44	L7	81	HIS
44	L7	172	ASN
44	L7	209	ASN
44	L7	244	ASN
46	L9	8	GLN
46	L9	156	GLN
47	M0	12	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	M0	55	ASN
47	M0	144	ASN
47	M0	162	GLN
48	M1	6	GLN
48	M1	7	ASN
48	M1	39	GLN
49	M3	103	ASN
50	M4	41	GLN
50	M4	56	GLN
51	M5	15	GLN
51	M5	87	GLN
52	M6	26	GLN
53	M7	55	GLN
54	M8	73	GLN
54	M8	152	HIS
55	M9	39	ASN
56	N0	108	GLN
56	N0	138	GLN
57	N1	5	HIS
57	N1	26	HIS
57	N1	98	HIS
57	N1	131	GLN
57	N1	146	ASN
59	N3	33	ASN
59	N3	98	ASN
60	N4	42	GLN
61	N5	80	ASN
61	N5	85	GLN
62	N6	42	GLN
64	N8	40	HIS
64	N8	62	HIS
66	O0	75	ASN
67	O1	105	GLN
68	O2	20	HIS
68	O2	49	ASN
75	O9	32	ASN
79	Q3	25	GLN
2	s0	21	ASN
3	s1	149	GLN
3	s1	220	GLN
4	s2	87	GLN
4	s2	147	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	s2	201	ASN
4	s2	250	GLN
5	s3	165	ASN
6	s4	216	ASN
7	s5	66	GLN
8	s6	201	GLN
10	s8	87	ASN
11	s9	124	HIS
80	c0	29	GLN
80	c0	32	HIS
80	c0	39	ASN
13	c1	98	ASN
14	c2	80	ASN
15	c3	78	ASN
16	c4	12	GLN
16	c4	99	GLN
17	c5	103	ASN
18	c6	77	GLN
18	c6	83	GLN
19	c7	74	GLN
19	c7	83	GLN
19	c7	101	ASN
21	c9	25	GLN
24	d2	24	GLN
26	d4	63	GLN
26	d4	107	GLN
29	d7	5	GLN
29	d7	19	HIS
30	d8	51	ASN
31	d9	27	HIS
82	e1	93	HIS
34	sR	184	ASN
34	sR	185	GLN
39	l2	50	HIS
39	l2	194	ASN
39	l2	205	ASN
40	l3	182	GLN
40	l3	184	ASN
41	l4	45	ASN
41	l4	87	GLN
41	l4	116	ASN
41	l4	304	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	l5	111	GLN
43	l6	97	ASN
44	l7	25	GLN
44	l7	112	ASN
44	l7	172	ASN
45	l8	192	GLN
46	l9	8	GLN
46	l9	9	GLN
46	l9	96	HIS
46	l9	125	ASN
46	l9	169	ASN
47	m0	73	ASN
47	m0	144	ASN
47	m0	175	ASN
48	m1	43	GLN
48	m1	90	GLN
49	m3	137	GLN
52	m6	50	ASN
53	m7	28	ASN
53	m7	34	GLN
53	m7	92	GLN
53	m7	137	ASN
55	m9	47	ASN
55	m9	66	HIS
55	m9	156	ASN
56	n0	122	HIS
57	n1	103	GLN
59	n3	132	ASN
60	n4	104	ASN
60	n4	112	ASN
61	n5	117	ASN
63	n7	57	HIS
64	n8	49	HIS
68	o2	78	ASN
70	o4	18	ASN
71	o5	108	GLN
72	o6	12	ASN
73	o7	48	ASN
76	q0	109	ASN
84	p0	103	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	490 (28%)	56 (3%)
1	6	1792/1800 (99%)	475 (26%)	57 (3%)
36	1	3145/3396 (92%)	694 (22%)	83 (2%)
36	5	3145/3396 (92%)	693 (22%)	76 (2%)
37	3	120/121 (99%)	14 (11%)	0
37	7	120/121 (99%)	25 (20%)	1 (0%)
38	4	157/158 (99%)	38 (24%)	2 (1%)
38	8	157/158 (99%)	37 (23%)	2 (1%)
87	A	3/3 (100%)	2 (66%)	1 (33%)
87	B	3/3 (100%)	2 (66%)	1 (33%)
All	All	10389/10956 (94%)	2470 (23%)	279 (2%)

All (2470) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	17	C
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	40	A
1	2	45	U
1	2	46	A
1	2	47	A
1	2	50	C
1	2	57	G
1	2	60	U
1	2	61	A
1	2	67	A
1	2	68	A
1	2	69	G
1	2	72	A
1	2	73	U
1	2	74	U
1	2	75	U
1	2	77	U
1	2	103	A
1	2	104	A
1	2	114	C
1	2	115	G
1	2	126	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	127	G
1	2	131	C
1	2	132	U
1	2	133	U
1	2	134	U
1	2	135	A
1	2	136	C
1	2	137	U
1	2	140	A
1	2	141	U
1	2	144	U
1	2	145	A
1	2	146	U
1	2	158	U
1	2	159	U
1	2	161	U
1	2	169	A
1	2	178	U
1	2	179	A
1	2	185	U
1	2	186	C
1	2	187	G
1	2	188	A
1	2	190	C
1	2	191	C
1	2	192	U
1	2	193	U
1	2	194	U
1	2	195	G
1	2	196	G
1	2	197	A
1	2	198	A
1	2	199	G
1	2	200	A
1	2	215	A
1	2	218	A
1	2	219	A
1	2	226	A
1	2	227	U
1	2	228	G
1	2	231	U
1	2	233	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	234	G
1	2	235	G
1	2	236	A
1	2	238	U
1	2	239	C
1	2	240	U
1	2	241	U
1	2	242	U
1	2	250	C
1	2	260	U
1	2	261	U
1	2	262	U
1	2	265	A
1	2	266	A
1	2	271	A
1	2	272	U
1	2	274	G
1	2	275	C
1	2	276	C
1	2	277	U
1	2	278	U
1	2	279	G
1	2	280	U
1	2	281	G
1	2	290	G
1	2	299	A
1	2	303	U
1	2	304	U
1	2	308	C
1	2	314	C
1	2	316	A
1	2	319	U
1	2	321	C
1	2	323	A
1	2	333	A
1	2	337	G
1	2	338	C
1	2	341	A
1	2	348	U
1	2	352	A
1	2	359	A
1	2	360	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	361	C
1	2	387	A
1	2	391	A
1	2	400	A
1	2	402	C
1	2	404	G
1	2	416	A
1	2	418	G
1	2	423	G
1	2	424	C
1	2	425	A
1	2	426	G
1	2	428	A
1	2	434	G
1	2	439	U
1	2	444	C
1	2	446	A
1	2	448	C
1	2	454	U
1	2	477	A
1	2	480	G
1	2	484	C
1	2	485	A
1	2	486	G
1	2	488	G
1	2	489	C
1	2	493	U
1	2	494	U
1	2	495	C
1	2	496	G
1	2	497	G
1	2	498	G
1	2	499	U
1	2	500	C
1	2	502	U
1	2	504	U
1	2	505	A
1	2	506	A
1	2	507	U
1	2	508	U
1	2	510	G
1	2	511	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	512	A
1	2	513	U
1	2	515	A
1	2	516	G
1	2	519	C
1	2	520	A
1	2	525	A
1	2	527	A
1	2	528	U
1	2	531	C
1	2	532	U
1	2	536	C
1	2	537	G
1	2	538	A
1	2	539	G
1	2	540	G
1	2	541	A
1	2	542	A
1	2	543	C
1	2	544	A
1	2	548	G
1	2	551	G
1	2	557	G
1	2	558	U
1	2	559	C
1	2	565	C
1	2	566	C
1	2	576	G
1	2	578	U
1	2	579	A
1	2	580	A
1	2	582	U
1	2	585	A
1	2	594	A
1	2	595	G
1	2	597	G
1	2	605	A
1	2	619	A
1	2	620	A
1	2	622	A
1	2	623	A
1	2	630	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	639	U
1	2	640	U
1	2	650	U
1	2	653	C
1	2	655	G
1	2	656	G
1	2	657	U
1	2	658	C
1	2	677	G
1	2	680	U
1	2	682	C
1	2	684	A
1	2	685	A
1	2	686	C
1	2	694	U
1	2	696	C
1	2	697	C
1	2	700	C
1	2	701	U
1	2	702	G
1	2	703	G
1	2	704	C
1	2	705	U
1	2	707	A
1	2	709	C
1	2	710	U
1	2	712	G
1	2	713	A
1	2	714	G
1	2	717	C
1	2	718	U
1	2	719	U
1	2	720	G
1	2	721	U
1	2	722	G
1	2	723	G
1	2	725	U
1	2	727	U
1	2	728	U
1	2	730	G
1	2	731	C
1	2	732	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	733	A
1	2	734	A
1	2	735	C
1	2	736	C
1	2	737	A
1	2	738	G
1	2	742	U
1	2	744	U
1	2	751	G
1	2	754	A
1	2	755	A
1	2	756	A
1	2	765	G
1	2	766	U
1	2	768	C
1	2	774	A
1	2	775	G
1	2	778	G
1	2	781	U
1	2	783	G
1	2	784	C
1	2	785	U
1	2	789	A
1	2	790	U
1	2	793	A
1	2	794	U
1	2	795	U
1	2	796	A
1	2	806	A
1	2	812	A
1	2	813	U
1	2	814	A
1	2	815	G
1	2	816	G
1	2	818	C
1	2	819	G
1	2	820	U
1	2	821	U
1	2	822	U
1	2	823	G
1	2	824	G
1	2	829	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	830	U
1	2	831	U
1	2	833	U
1	2	834	G
1	2	835	U
1	2	840	U
1	2	846	G
1	2	854	U
1	2	858	G
1	2	862	A
1	2	863	A
1	2	864	U
1	2	873	U
1	2	876	G
1	2	892	A
1	2	896	U
1	2	898	A
1	2	911	U
1	2	912	U
1	2	914	G
1	2	915	A
1	2	916	U
1	2	933	A
1	2	935	U
1	2	942	G
1	2	944	A
1	2	951	A
1	2	960	U
1	2	961	U
1	2	966	A
1	2	970	A
1	2	971	A
1	2	982	U
1	2	984	G
1	2	988	A
1	2	992	A
1	2	993	A
1	2	995	A
1	2	1003	A
1	2	1004	U
1	2	1005	A
1	2	1020	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1021	C
1	2	1026	A
1	2	1028	C
1	2	1029	U
1	2	1031	U
1	2	1039	A
1	2	1040	G
1	2	1052	U
1	2	1053	G
1	2	1058	U
1	2	1059	U
1	2	1060	U
1	2	1061	A
1	2	1064	G
1	2	1066	C
1	2	1067	C
1	2	1070	C
1	2	1081	A
1	2	1086	A
1	2	1091	A
1	2	1092	A
1	2	1096	C
1	2	1097	U
1	2	1100	G
1	2	1104	U
1	2	1111	G
1	2	1117	U
1	2	1138	A
1	2	1139	A
1	2	1146	G
1	2	1149	G
1	2	1150	G
1	2	1151	A
1	2	1152	A
1	2	1155	G
1	2	1158	C
1	2	1160	A
1	2	1163	A
1	2	1167	G
1	2	1176	G
1	2	1185	U
1	2	1188	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1191	U
1	2	1194	A
1	2	1196	A
1	2	1197	C
1	2	1199	G
1	2	1200	G
1	2	1202	A
1	2	1206	U
1	2	1207	C
1	2	1217	A
1	2	1218	G
1	2	1226	A
1	2	1227	A
1	2	1228	G
1	2	1235	C
1	2	1241	G
1	2	1243	G
1	2	1244	A
1	2	1245	G
1	2	1250	U
1	2	1251	U
1	2	1257	U
1	2	1258	U
1	2	1260	U
1	2	1286	U
1	2	1287	A
1	2	1302	U
1	2	1310	U
1	2	1314	U
1	2	1315	U
1	2	1321	A
1	2	1339	C
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1354	G
1	2	1355	C
1	2	1361	U
1	2	1363	U
1	2	1370	U
1	2	1371	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1372	U
1	2	1379	C
1	2	1388	A
1	2	1390	U
1	2	1398	U
1	2	1399	C
1	2	1400	A
1	2	1401	A
1	2	1412	G
1	2	1413	U
1	2	1415	U
1	2	1427	A
1	2	1428	G
1	2	1431	C
1	2	1433	G
1	2	1445	G
1	2	1446	A
1	2	1457	C
1	2	1458	G
1	2	1459	C
1	2	1461	C
1	2	1462	G
1	2	1469	A
1	2	1471	A
1	2	1473	U
1	2	1474	G
1	2	1478	G
1	2	1482	C
1	2	1486	G
1	2	1487	A
1	2	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1506	G
1	2	1514	U
1	2	1516	A
1	2	1517	U
1	2	1521	G
1	2	1523	G
1	2	1524	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1535	U
1	2	1536	G
1	2	1537	C
1	2	1538	U
1	2	1540	G
1	2	1557	U
1	2	1559	A
1	2	1574	G
1	2	1584	G
1	2	1590	G
1	2	1600	A
1	2	1601	G
1	2	1614	A
1	2	1616	G
1	2	1631	A
1	2	1635	A
1	2	1639	C
1	2	1657	U
1	2	1658	G
1	2	1663	G
1	2	1680	G
1	2	1681	A
1	2	1682	U
1	2	1683	C
1	2	1684	U
1	2	1731	A
1	2	1750	A
1	2	1756	A
1	2	1760	G
1	2	1761	U
1	2	1762	A
1	2	1766	A
1	2	1769	U
1	2	1770	U
1	2	1780	G
1	2	1782	A
1	2	1783	C
1	2	1792	G
1	2	1793	G
1	2	1794	A
1	2	1795	U
1	2	1796	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	13	A
36	1	14	U
36	1	15	C
36	1	16	A
36	1	26	A
36	1	33	G
36	1	40	A
36	1	42	C
36	1	43	A
36	1	44	U
36	1	49	A
36	1	59	G
36	1	60	A
36	1	65	A
36	1	66	A
36	1	68	C
36	1	76	G
36	1	83	U
36	1	92	G
36	1	93	C
36	1	94	G
36	1	99	A
36	1	102	C
36	1	105	C
36	1	109	A
36	1	110	G
36	1	111	C
36	1	117	U
36	1	121	A
36	1	122	A
36	1	133	U
36	1	135	C
36	1	136	G
36	1	147	U
36	1	150	A
36	1	156	G
36	1	157	A
36	1	160	G
36	1	166	C
36	1	170	G
36	1	173	G
36	1	187	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	190	U
36	1	191	U
36	1	192	C
36	1	210	U
36	1	211	A
36	1	213	A
36	1	218	G
36	1	219	A
36	1	224	C
36	1	240	U
36	1	241	G
36	1	243	G
36	1	245	U
36	1	248	U
36	1	249	U
36	1	250	U
36	1	251	G
36	1	252	U
36	1	256	G
36	1	269	G
36	1	270	U
36	1	272	G
36	1	277	G
36	1	282	G
36	1	283	G
36	1	286	U
36	1	295	A
36	1	298	U
36	1	299	G
36	1	311	C
36	1	315	C
36	1	318	A
36	1	323	A
36	1	329	U
36	1	339	C
36	1	344	A
36	1	349	A
36	1	350	C
36	1	352	A
36	1	375	A
36	1	376	G
36	1	397	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	398	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	412	G
36	1	420	G
36	1	421	G
36	1	422	A
36	1	438	A
36	1	440	A
36	1	498	A
36	1	520	U
36	1	521	A
36	1	531	G
36	1	535	G
36	1	541	U
36	1	543	C
36	1	544	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	551	A
36	1	552	G
36	1	555	U
36	1	557	A
36	1	559	A
36	1	568	G
36	1	578	A
36	1	579	G
36	1	592	A
36	1	594	U
36	1	595	G
36	1	604	G
36	1	609	G
36	1	611	A
36	1	619	A
36	1	620	U
36	1	621	A
36	1	624	G
36	1	636	C
36	1	642	U
36	1	643	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	649	A
36	1	660	A
36	1	661	G
36	1	667	C
36	1	677	A
36	1	681	U
36	1	683	U
36	1	691	A
36	1	699	A
36	1	705	A
36	1	712	G
36	1	715	A
36	1	716	A
36	1	725	G
36	1	764	U
36	1	766	U
36	1	767	U
36	1	776	U
36	1	777	U
36	1	780	A
36	1	781	G
36	1	784	A
36	1	785	G
36	1	791	A
36	1	792	G
36	1	806	A
36	1	816	A
36	1	817	A
36	1	830	A
36	1	849	C
36	1	861	C
36	1	874	U
36	1	879	U
36	1	880	G
36	1	887	G
36	1	890	C
36	1	896	A
36	1	907	G
36	1	908	G
36	1	910	G
36	1	914	A
36	1	916	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	917	A
36	1	919	U
36	1	921	A
36	1	923	C
36	1	924	G
36	1	937	G
36	1	944	C
36	1	953	G
36	1	959	C
36	1	960	U
36	1	979	U
36	1	980	A
36	1	981	U
36	1	982	C
36	1	993	G
36	1	994	G
36	1	1001	G
36	1	1002	A
36	1	1006	A
36	1	1010	G
36	1	1013	G
36	1	1017	C
36	1	1018	G
36	1	1020	G
36	1	1024	G
36	1	1025	A
36	1	1029	G
36	1	1036	A
36	1	1037	C
36	1	1042	U
36	1	1045	C
36	1	1047	A
36	1	1049	C
36	1	1064	A
36	1	1065	A
36	1	1068	C
36	1	1071	U
36	1	1072	G
36	1	1079	A
36	1	1081	U
36	1	1082	U
36	1	1083	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1087	G
36	1	1093	A
36	1	1094	U
36	1	1095	U
36	1	1096	U
36	1	1097	G
36	1	1098	A
36	1	1103	A
36	1	1104	G
36	1	1117	G
36	1	1129	A
36	1	1131	G
36	1	1153	A
36	1	1159	A
36	1	1161	G
36	1	1179	A
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1191	U
36	1	1192	C
36	1	1201	C
36	1	1202	A
36	1	1203	A
36	1	1209	G
36	1	1213	G
36	1	1216	C
36	1	1218	U
36	1	1222	G
36	1	1227	C
36	1	1232	C
36	1	1233	G
36	1	1236	G
36	1	1237	G
36	1	1241	U
36	1	1245	A
36	1	1246	G
36	1	1248	C
36	1	1249	G
36	1	1251	A
36	1	1258	U
36	1	1259	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1262	G
36	1	1263	A
36	1	1264	G
36	1	1266	G
36	1	1267	U
36	1	1269	U
36	1	1270	A
36	1	1271	A
36	1	1274	A
36	1	1278	A
36	1	1279	C
36	1	1280	C
36	1	1285	G
36	1	1286	A
36	1	1287	A
36	1	1292	C
36	1	1293	U
36	1	1307	G
36	1	1308	A
36	1	1309	U
36	1	1313	G
36	1	1319	G
36	1	1320	C
36	1	1330	A
36	1	1331	U
36	1	1348	U
36	1	1349	G
36	1	1350	A
36	1	1351	U
36	1	1352	A
36	1	1353	U
36	1	1355	A
36	1	1356	U
36	1	1357	G
36	1	1379	G
36	1	1386	A
36	1	1399	A
36	1	1400	G
36	1	1419	A
36	1	1431	G
36	1	1433	A
36	1	1434	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1437	C
36	1	1445	U
36	1	1446	A
36	1	1450	G
36	1	1455	U
36	1	1481	A
36	1	1482	A
36	1	1503	A
36	1	1506	A
36	1	1507	G
36	1	1508	C
36	1	1526	U
36	1	1527	C
36	1	1528	G
36	1	1534	A
36	1	1553	U
36	1	1556	C
36	1	1560	G
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1565	G
36	1	1566	A
36	1	1567	U
36	1	1568	U
36	1	1569	U
36	1	1570	U
36	1	1571	A
36	1	1572	U
36	1	1576	G
36	1	1579	C
36	1	1580	A
36	1	1582	C
36	1	1583	A
36	1	1587	A
36	1	1589	A
36	1	1593	A
36	1	1598	G
36	1	1599	G
36	1	1605	A
36	1	1607	U
36	1	1619	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1620	U
36	1	1621	A
36	1	1629	U
36	1	1633	C
36	1	1639	C
36	1	1643	A
36	1	1644	C
36	1	1645	U
36	1	1646	G
36	1	1657	C
36	1	1664	G
36	1	1677	G
36	1	1679	A
36	1	1683	A
36	1	1688	U
36	1	1714	A
36	1	1716	U
36	1	1717	U
36	1	1724	U
36	1	1725	C
36	1	1736	G
36	1	1741	A
36	1	1742	U
36	1	1749	A
36	1	1750	A
36	1	1751	G
36	1	1757	A
36	1	1761	C
36	1	1762	C
36	1	1765	U
36	1	1766	G
36	1	1767	C
36	1	1769	G
36	1	1770	G
36	1	1775	G
36	1	1779	C
36	1	1780	G
36	1	1797	A
36	1	1809	A
36	1	1810	A
36	1	1814	A
36	1	1816	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1817	G
36	1	1819	U
36	1	1820	U
36	1	1821	U
36	1	1839	A
36	1	1840	U
36	1	1841	A
36	1	1842	A
36	1	1846	C
36	1	1847	A
36	1	1849	C
36	1	1850	A
36	1	1855	U
36	1	1871	U
36	1	1879	A
36	1	1880	U
36	1	1883	A
36	1	1884	A
36	1	1886	A
36	1	1893	A
36	1	1906	G
36	1	1948	G
36	1	1951	C
36	1	1952	G
36	1	1953	G
36	1	1954	G
36	1	2094	C
36	1	2101	C
36	1	2102	U
36	1	2110	G
36	1	2111	G
36	1	2112	U
36	1	2113	A
36	1	2114	C
36	1	2121	G
36	1	2122	G
36	1	2131	A
36	1	2134	G
36	1	2140	U
36	1	2144	A
36	1	2158	A
36	1	2169	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2170	U
36	1	2179	C
36	1	2187	G
36	1	2188	A
36	1	2195	C
36	1	2205	U
36	1	2208	A
36	1	2209	U
36	1	2210	G
36	1	2223	A
36	1	2225	U
36	1	2228	A
36	1	2244	A
36	1	2245	C
36	1	2249	G
36	1	2254	U
36	1	2255	A
36	1	2256	A
36	1	2272	G
36	1	2273	G
36	1	2281	A
36	1	2282	U
36	1	2284	C
36	1	2301	U
36	1	2303	A
36	1	2304	C
36	1	2307	G
36	1	2310	U
36	1	2313	A
36	1	2314	U
36	1	2315	G
36	1	2317	A
36	1	2319	U
36	1	2324	A
36	1	2330	C
36	1	2334	U
36	1	2335	G
36	1	2336	U
36	1	2361	A
36	1	2366	C
36	1	2372	A
36	1	2373	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2374	C
36	1	2375	G
36	1	2385	G
36	1	2388	U
36	1	2393	G
36	1	2395	G
36	1	2397	A
36	1	2401	A
36	1	2402	A
36	1	2403	G
36	1	2404	A
36	1	2405	C
36	1	2406	C
36	1	2411	U
36	1	2417	U
36	1	2418	G
36	1	2419	A
36	1	2423	U
36	1	2428	U
36	1	2437	G
36	1	2444	C
36	1	2445	A
36	1	2502	A
36	1	2503	G
36	1	2504	U
36	1	2513	U
36	1	2514	U
36	1	2515	A
36	1	2520	A
36	1	2522	G
36	1	2523	A
36	1	2532	U
36	1	2533	G
36	1	2534	G
36	1	2537	U
36	1	2538	U
36	1	2539	C
36	1	2540	A
36	1	2541	U
36	1	2542	U
36	1	2543	U
36	1	2547	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2549	G
36	1	2552	C
36	1	2554	A
36	1	2555	G
36	1	2560	C
36	1	2561	A
36	1	2568	C
36	1	2569	A
36	1	2570	U
36	1	2571	U
36	1	2572	C
36	1	2573	G
36	1	2585	G
36	1	2586	G
36	1	2588	U
36	1	2593	A
36	1	2594	C
36	1	2595	A
36	1	2606	G
36	1	2607	G
36	1	2614	G
36	1	2622	C
36	1	2623	G
36	1	2637	A
36	1	2638	C
36	1	2652	U
36	1	2656	A
36	1	2674	A
36	1	2675	C
36	1	2677	G
36	1	2681	U
36	1	2687	G
36	1	2689	A
36	1	2691	A
36	1	2694	A
36	1	2696	A
36	1	2705	A
36	1	2714	G
36	1	2728	G
36	1	2729	U
36	1	2749	G
36	1	2753	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2755	C
36	1	2762	A
36	1	2772	C
36	1	2773	C
36	1	2777	G
36	1	2778	G
36	1	2780	A
36	1	2796	G
36	1	2797	C
36	1	2799	A
36	1	2800	G
36	1	2801	A
36	1	2803	A
36	1	2810	C
36	1	2817	A
36	1	2818	U
36	1	2819	A
36	1	2829	U
36	1	2830	G
36	1	2833	A
36	1	2834	G
36	1	2837	A
36	1	2842	U
36	1	2843	U
36	1	2845	A
36	1	2847	A
36	1	2860	U
36	1	2871	G
36	1	2872	A
36	1	2887	A
36	1	2889	C
36	1	2898	G
36	1	2899	C
36	1	2914	G
36	1	2923	U
36	1	2927	C
36	1	2935	U
36	1	2936	A
36	1	2939	G
36	1	2942	C
36	1	2945	G
36	1	2947	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2954	U
36	1	2971	A
36	1	2980	U
36	1	2983	C
36	1	2990	G
36	1	2992	U
36	1	2997	G
36	1	3006	A
36	1	3012	A
36	1	3030	G
36	1	3034	C
36	1	3037	U
36	1	3056	U
36	1	3057	U
36	1	3058	U
36	1	3059	G
36	1	3069	G
36	1	3078	U
36	1	3079	U
36	1	3086	A
36	1	3087	A
36	1	3091	A
36	1	3092	C
36	1	3113	A
36	1	3119	U
36	1	3122	A
36	1	3130	A
36	1	3131	U
36	1	3142	A
36	1	3143	C
36	1	3153	U
36	1	3154	C
36	1	3155	U
36	1	3156	U
36	1	3157	U
36	1	3164	C
36	1	3165	A
36	1	3168	A
36	1	3169	U
36	1	3170	A
36	1	3171	U
36	1	3173	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	3174	A
36	1	3176	G
36	1	3179	U
36	1	3181	C
36	1	3186	A
36	1	3187	A
36	1	3195	U
36	1	3196	U
36	1	3198	U
36	1	3207	U
36	1	3210	A
36	1	3217	C
36	1	3218	A
36	1	3219	G
36	1	3229	G
36	1	3243	A
36	1	3244	A
36	1	3245	A
36	1	3246	G
36	1	3247	G
36	1	3259	U
36	1	3269	U
36	1	3270	U
36	1	3272	C
36	1	3273	A
36	1	3276	G
36	1	3277	U
36	1	3281	U
36	1	3286	G
36	1	3287	U
36	1	3288	G
36	1	3289	G
36	1	3294	A
36	1	3295	A
36	1	3304	U
36	1	3309	G
36	1	3310	A
36	1	3313	U
36	1	3314	A
36	1	3316	A
36	1	3317	U
36	1	3318	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	3319	U
36	1	3320	A
36	1	3330	A
36	1	3341	U
36	1	3342	A
36	1	3345	G
36	1	3347	A
36	1	3350	C
36	1	3351	U
36	1	3352	U
36	1	3353	G
36	1	3354	U
36	1	3355	U
36	1	3356	G
36	1	3369	G
36	1	3375	A
36	1	3376	A
36	1	3378	C
36	1	3382	U
36	1	3383	G
36	1	3389	U
36	1	3396	U
37	3	11	A
37	3	13	A
37	3	22	A
37	3	41	G
37	3	42	A
37	3	54	U
37	3	65	G
37	3	74	C
37	3	76	A
37	3	91	G
37	3	102	A
37	3	106	U
37	3	112	G
37	3	121	U
38	4	2	A
38	4	26	U
38	4	34	U
38	4	35	C
38	4	48	A
38	4	50	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	4	51	G
38	4	52	A
38	4	53	A
38	4	57	C
38	4	59	A
38	4	62	C
38	4	63	G
38	4	70	G
38	4	79	A
38	4	80	A
38	4	81	U
38	4	82	U
38	4	83	C
38	4	84	C
38	4	85	G
38	4	86	U
38	4	87	G
38	4	89	A
38	4	90	U
38	4	95	G
38	4	105	A
38	4	106	C
38	4	111	A
38	4	113	U
38	4	125	U
38	4	126	A
38	4	128	U
38	4	133	G
38	4	138	A
38	4	148	G
38	4	152	G
38	4	158	U
1	6	2	A
1	6	4	C
1	6	25	C
1	6	26	A
1	6	27	U
1	6	34	G
1	6	42	G
1	6	47	A
1	6	50	C
1	6	57	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	60	U
1	6	66	U
1	6	67	A
1	6	68	A
1	6	69	G
1	6	71	A
1	6	72	A
1	6	73	U
1	6	75	U
1	6	76	A
1	6	77	U
1	6	78	A
1	6	100	A
1	6	103	A
1	6	104	A
1	6	111	U
1	6	114	C
1	6	115	G
1	6	127	G
1	6	130	C
1	6	132	U
1	6	137	U
1	6	138	A
1	6	140	A
1	6	141	U
1	6	142	G
1	6	144	U
1	6	145	A
1	6	146	U
1	6	153	G
1	6	159	U
1	6	178	U
1	6	179	A
1	6	181	A
1	6	182	A
1	6	185	U
1	6	187	G
1	6	188	A
1	6	190	C
1	6	191	C
1	6	192	U
1	6	193	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	194	U
1	6	195	G
1	6	197	A
1	6	199	G
1	6	200	A
1	6	215	A
1	6	216	U
1	6	217	A
1	6	218	A
1	6	219	A
1	6	220	A
1	6	226	A
1	6	227	U
1	6	228	G
1	6	230	C
1	6	232	U
1	6	233	C
1	6	235	G
1	6	240	U
1	6	241	U
1	6	243	G
1	6	249	U
1	6	250	C
1	6	261	U
1	6	262	U
1	6	265	A
1	6	270	C
1	6	271	A
1	6	272	U
1	6	273	G
1	6	275	C
1	6	277	U
1	6	278	U
1	6	280	U
1	6	287	G
1	6	290	G
1	6	299	A
1	6	301	A
1	6	308	C
1	6	313	U
1	6	314	C
1	6	316	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	319	U
1	6	321	C
1	6	322	G
1	6	337	G
1	6	338	C
1	6	352	A
1	6	359	A
1	6	360	A
1	6	361	C
1	6	362	G
1	6	393	C
1	6	400	A
1	6	401	A
1	6	402	C
1	6	404	G
1	6	416	A
1	6	417	A
1	6	418	G
1	6	421	A
1	6	424	C
1	6	425	A
1	6	426	G
1	6	428	A
1	6	434	G
1	6	439	U
1	6	444	C
1	6	445	A
1	6	448	C
1	6	460	A
1	6	464	A
1	6	468	A
1	6	469	C
1	6	470	A
1	6	477	A
1	6	482	U
1	6	484	C
1	6	486	G
1	6	487	G
1	6	488	G
1	6	489	C
1	6	490	C
1	6	492	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	493	U
1	6	494	U
1	6	496	G
1	6	497	G
1	6	500	C
1	6	501	U
1	6	504	U
1	6	505	A
1	6	506	A
1	6	508	U
1	6	510	G
1	6	511	A
1	6	512	A
1	6	513	U
1	6	514	G
1	6	515	A
1	6	519	C
1	6	527	A
1	6	528	U
1	6	534	A
1	6	536	C
1	6	538	A
1	6	539	G
1	6	540	G
1	6	541	A
1	6	542	A
1	6	543	C
1	6	544	A
1	6	548	G
1	6	555	A
1	6	556	A
1	6	557	G
1	6	558	U
1	6	559	C
1	6	565	C
1	6	566	C
1	6	568	G
1	6	574	G
1	6	578	U
1	6	579	A
1	6	580	A
1	6	582	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	594	A
1	6	595	G
1	6	606	A
1	6	609	U
1	6	617	U
1	6	619	A
1	6	620	A
1	6	623	A
1	6	624	G
1	6	639	U
1	6	640	U
1	6	648	G
1	6	649	U
1	6	652	G
1	6	653	C
1	6	658	C
1	6	661	A
1	6	662	U
1	6	665	U
1	6	667	U
1	6	668	C
1	6	669	G
1	6	670	U
1	6	676	G
1	6	678	A
1	6	679	U
1	6	681	U
1	6	682	C
1	6	683	C
1	6	684	A
1	6	685	A
1	6	691	C
1	6	695	U
1	6	696	C
1	6	697	C
1	6	698	U
1	6	705	U
1	6	710	U
1	6	711	U
1	6	714	G
1	6	717	C
1	6	718	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	719	U
1	6	720	G
1	6	721	U
1	6	722	G
1	6	723	G
1	6	730	G
1	6	733	A
1	6	734	A
1	6	742	U
1	6	744	U
1	6	751	G
1	6	753	A
1	6	754	A
1	6	755	A
1	6	756	A
1	6	765	G
1	6	766	U
1	6	774	A
1	6	775	G
1	6	777	C
1	6	780	A
1	6	781	U
1	6	782	U
1	6	783	G
1	6	789	A
1	6	792	U
1	6	793	A
1	6	794	U
1	6	806	A
1	6	811	A
1	6	812	A
1	6	815	G
1	6	816	G
1	6	823	G
1	6	825	U
1	6	826	U
1	6	828	U
1	6	829	A
1	6	830	U
1	6	831	U
1	6	832	U
1	6	834	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	835	U
1	6	847	A
1	6	848	C
1	6	856	A
1	6	861	U
1	6	863	A
1	6	879	G
1	6	898	A
1	6	906	A
1	6	913	G
1	6	914	G
1	6	916	U
1	6	933	A
1	6	935	U
1	6	940	A
1	6	942	G
1	6	959	U
1	6	960	U
1	6	966	A
1	6	969	C
1	6	970	A
1	6	971	A
1	6	983	A
1	6	992	A
1	6	993	A
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1021	C
1	6	1026	A
1	6	1028	C
1	6	1029	U
1	6	1039	A
1	6	1040	G
1	6	1052	U
1	6	1053	G
1	6	1057	U
1	6	1058	U
1	6	1059	U
1	6	1060	U
1	6	1067	C
1	6	1070	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1071	U
1	6	1075	C
1	6	1081	A
1	6	1082	C
1	6	1092	A
1	6	1096	C
1	6	1097	U
1	6	1098	U
1	6	1100	G
1	6	1104	U
1	6	1109	G
1	6	1111	G
1	6	1138	A
1	6	1151	A
1	6	1155	G
1	6	1158	C
1	6	1159	C
1	6	1160	A
1	6	1167	G
1	6	1185	U
1	6	1191	U
1	6	1194	A
1	6	1196	A
1	6	1199	G
1	6	1200	G
1	6	1202	A
1	6	1206	U
1	6	1212	G
1	6	1216	C
1	6	1217	A
1	6	1218	G
1	6	1220	C
1	6	1226	A
1	6	1228	G
1	6	1229	G
1	6	1230	A
1	6	1231	U
1	6	1238	A
1	6	1239	U
1	6	1240	U
1	6	1241	G
1	6	1242	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1243	G
1	6	1244	A
1	6	1245	G
1	6	1246	C
1	6	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	U
1	6	1261	G
1	6	1262	U
1	6	1270	G
1	6	1284	C
1	6	1286	U
1	6	1288	G
1	6	1290	U
1	6	1314	U
1	6	1315	U
1	6	1316	G
1	6	1321	A
1	6	1338	C
1	6	1344	A
1	6	1345	A
1	6	1346	A
1	6	1347	U
1	6	1354	G
1	6	1355	C
1	6	1361	U
1	6	1363	U
1	6	1364	G
1	6	1371	A
1	6	1372	U
1	6	1373	C
1	6	1377	U
1	6	1383	G
1	6	1385	G
1	6	1388	A
1	6	1390	U
1	6	1398	U
1	6	1399	C
1	6	1400	A
1	6	1402	G
1	6	1413	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1414	U
1	6	1415	U
1	6	1427	A
1	6	1428	G
1	6	1433	G
1	6	1445	G
1	6	1448	G
1	6	1458	G
1	6	1459	C
1	6	1461	C
1	6	1469	A
1	6	1471	A
1	6	1481	C
1	6	1482	C
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1497	U
1	6	1500	C
1	6	1506	G
1	6	1514	U
1	6	1515	A
1	6	1516	A
1	6	1523	G
1	6	1524	A
1	6	1535	U
1	6	1536	G
1	6	1537	C
1	6	1538	U
1	6	1539	G
1	6	1540	G
1	6	1554	U
1	6	1557	U
1	6	1559	A
1	6	1568	C
1	6	1569	A
1	6	1572	G
1	6	1573	A
1	6	1574	G
1	6	1575	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1582	U
1	6	1584	G
1	6	1590	G
1	6	1601	G
1	6	1616	G
1	6	1621	U
1	6	1631	A
1	6	1634	C
1	6	1637	C
1	6	1638	G
1	6	1656	U
1	6	1657	U
1	6	1658	G
1	6	1678	A
1	6	1683	C
1	6	1697	G
1	6	1698	G
1	6	1699	G
1	6	1700	C
1	6	1701	A
1	6	1702	A
1	6	1712	A
1	6	1715	G
1	6	1716	C
1	6	1717	G
1	6	1723	U
1	6	1727	G
1	6	1731	A
1	6	1736	G
1	6	1745	G
1	6	1756	A
1	6	1760	G
1	6	1766	A
1	6	1767	G
1	6	1769	U
1	6	1770	U
1	6	1780	G
1	6	1782	A
1	6	1792	G
1	6	1793	G
1	6	1794	A
1	6	1795	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1796	C
1	6	1799	U
1	6	1800	A
36	5	15	C
36	5	24	G
36	5	26	A
36	5	40	A
36	5	43	A
36	5	44	U
36	5	49	A
36	5	60	A
36	5	65	A
36	5	66	A
36	5	68	C
36	5	73	C
36	5	74	G
36	5	76	G
36	5	85	A
36	5	89	A
36	5	92	G
36	5	96	G
36	5	99	A
36	5	109	A
36	5	110	G
36	5	113	C
36	5	116	A
36	5	117	U
36	5	120	G
36	5	121	A
36	5	122	A
36	5	126	U
36	5	133	U
36	5	134	U
36	5	135	C
36	5	136	G
36	5	155	G
36	5	156	G
36	5	157	A
36	5	165	A
36	5	170	G
36	5	171	G
36	5	172	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	173	G
36	5	174	C
36	5	180	C
36	5	182	U
36	5	187	A
36	5	190	U
36	5	191	U
36	5	209	A
36	5	210	U
36	5	211	A
36	5	218	G
36	5	219	A
36	5	221	A
36	5	227	G
36	5	236	G
36	5	238	A
36	5	239	G
36	5	240	U
36	5	244	G
36	5	248	U
36	5	249	U
36	5	250	U
36	5	251	G
36	5	252	U
36	5	253	A
36	5	254	A
36	5	258	G
36	5	259	C
36	5	264	G
36	5	269	G
36	5	284	A
36	5	286	U
36	5	295	A
36	5	323	A
36	5	329	U
36	5	334	A
36	5	338	A
36	5	339	C
36	5	349	A
36	5	350	C
36	5	359	U
36	5	370	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	372	A
36	5	376	G
36	5	395	A
36	5	397	A
36	5	398	A
36	5	399	A
36	5	401	U
36	5	402	A
36	5	403	C
36	5	404	G
36	5	419	G
36	5	421	G
36	5	422	A
36	5	438	A
36	5	439	C
36	5	440	A
36	5	442	G
36	5	443	G
36	5	492	U
36	5	495	G
36	5	507	U
36	5	515	C
36	5	521	A
36	5	535	G
36	5	542	G
36	5	546	C
36	5	547	G
36	5	548	G
36	5	553	U
36	5	555	U
36	5	557	A
36	5	559	A
36	5	578	A
36	5	579	G
36	5	581	U
36	5	588	G
36	5	589	A
36	5	592	A
36	5	594	U
36	5	595	G
36	5	600	G
36	5	604	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	607	A
36	5	608	A
36	5	609	G
36	5	611	A
36	5	619	A
36	5	620	U
36	5	621	A
36	5	636	C
36	5	649	A
36	5	651	G
36	5	653	A
36	5	660	A
36	5	677	A
36	5	681	U
36	5	691	A
36	5	705	A
36	5	712	G
36	5	715	A
36	5	716	A
36	5	719	U
36	5	725	G
36	5	727	G
36	5	736	A
36	5	747	A
36	5	766	U
36	5	767	U
36	5	768	C
36	5	775	A
36	5	776	U
36	5	777	U
36	5	780	A
36	5	781	G
36	5	785	G
36	5	786	A
36	5	806	A
36	5	817	A
36	5	823	C
36	5	830	A
36	5	851	C
36	5	861	C
36	5	865	U
36	5	874	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	879	U
36	5	883	A
36	5	889	U
36	5	891	G
36	5	896	A
36	5	897	U
36	5	907	G
36	5	908	G
36	5	910	G
36	5	913	A
36	5	914	A
36	5	916	G
36	5	917	A
36	5	921	A
36	5	924	G
36	5	937	G
36	5	944	C
36	5	948	C
36	5	959	C
36	5	960	U
36	5	961	C
36	5	963	G
36	5	979	U
36	5	981	U
36	5	983	A
36	5	993	G
36	5	994	G
36	5	1001	G
36	5	1002	A
36	5	1003	A
36	5	1006	A
36	5	1010	G
36	5	1015	U
36	5	1016	C
36	5	1017	C
36	5	1018	G
36	5	1019	G
36	5	1021	G
36	5	1024	G
36	5	1025	A
36	5	1026	A
36	5	1027	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1028	U
36	5	1029	G
36	5	1035	G
36	5	1041	U
36	5	1047	A
36	5	1049	C
36	5	1064	A
36	5	1065	A
36	5	1072	G
36	5	1081	U
36	5	1082	U
36	5	1083	G
36	5	1085	A
36	5	1087	G
36	5	1093	A
36	5	1094	U
36	5	1095	U
36	5	1096	U
36	5	1097	G
36	5	1098	A
36	5	1103	A
36	5	1104	G
36	5	1117	G
36	5	1131	G
36	5	1152	G
36	5	1153	A
36	5	1159	A
36	5	1160	C
36	5	1172	G
36	5	1179	A
36	5	1180	A
36	5	1181	U
36	5	1182	A
36	5	1191	U
36	5	1192	C
36	5	1196	C
36	5	1201	C
36	5	1203	A
36	5	1209	G
36	5	1217	A
36	5	1218	U
36	5	1222	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1225	A
36	5	1232	C
36	5	1236	G
36	5	1237	G
36	5	1238	C
36	5	1239	C
36	5	1241	U
36	5	1242	G
36	5	1243	G
36	5	1245	A
36	5	1246	G
36	5	1258	U
36	5	1262	G
36	5	1263	A
36	5	1264	G
36	5	1265	U
36	5	1266	G
36	5	1284	C
36	5	1285	G
36	5	1292	C
36	5	1307	G
36	5	1308	A
36	5	1309	U
36	5	1313	G
36	5	1330	A
36	5	1331	U
36	5	1332	A
36	5	1348	U
36	5	1349	G
36	5	1351	U
36	5	1352	A
36	5	1353	U
36	5	1354	G
36	5	1355	A
36	5	1356	U
36	5	1357	G
36	5	1386	A
36	5	1399	A
36	5	1400	G
36	5	1405	U
36	5	1418	A
36	5	1419	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1422	G
36	5	1428	A
36	5	1431	G
36	5	1433	A
36	5	1434	G
36	5	1437	C
36	5	1446	A
36	5	1450	G
36	5	1460	A
36	5	1465	A
36	5	1468	A
36	5	1480	G
36	5	1481	A
36	5	1482	A
36	5	1490	A
36	5	1503	A
36	5	1508	C
36	5	1528	G
36	5	1533	U
36	5	1536	G
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1563	C
36	5	1564	U
36	5	1565	G
36	5	1566	A
36	5	1567	U
36	5	1570	U
36	5	1571	A
36	5	1572	U
36	5	1574	C
36	5	1575	A
36	5	1576	G
36	5	1577	G
36	5	1578	C
36	5	1579	C
36	5	1581	C
36	5	1582	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1583	A
36	5	1587	A
36	5	1589	A
36	5	1593	A
36	5	1620	U
36	5	1629	U
36	5	1635	G
36	5	1639	C
36	5	1641	U
36	5	1643	A
36	5	1644	C
36	5	1645	U
36	5	1655	G
36	5	1658	G
36	5	1677	G
36	5	1682	U
36	5	1713	G
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1725	C
36	5	1741	A
36	5	1746	U
36	5	1750	A
36	5	1751	G
36	5	1756	C
36	5	1762	C
36	5	1764	U
36	5	1765	U
36	5	1766	G
36	5	1769	G
36	5	1770	G
36	5	1780	G
36	5	1795	U
36	5	1797	A
36	5	1810	A
36	5	1814	A
36	5	1815	U
36	5	1816	A
36	5	1817	G
36	5	1818	U
36	5	1821	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1822	C
36	5	1829	G
36	5	1841	A
36	5	1842	A
36	5	1846	C
36	5	1847	A
36	5	1849	C
36	5	1850	A
36	5	1851	G
36	5	1864	A
36	5	1878	G
36	5	1879	A
36	5	1880	U
36	5	1891	A
36	5	1893	A
36	5	1895	A
36	5	1901	A
36	5	1906	G
36	5	1920	U
36	5	1935	G
36	5	2100	A
36	5	2101	C
36	5	2102	U
36	5	2111	G
36	5	2112	U
36	5	2113	A
36	5	2117	A
36	5	2121	G
36	5	2122	G
36	5	2131	A
36	5	2140	U
36	5	2144	A
36	5	2158	A
36	5	2169	G
36	5	2192	C
36	5	2198	A
36	5	2205	U
36	5	2206	G
36	5	2207	A
36	5	2210	G
36	5	2215	A
36	5	2222	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2223	A
36	5	2228	A
36	5	2234	G
36	5	2237	C
36	5	2244	A
36	5	2246	G
36	5	2249	G
36	5	2250	G
36	5	2252	A
36	5	2253	G
36	5	2255	A
36	5	2256	A
36	5	2267	C
36	5	2273	G
36	5	2278	C
36	5	2279	A
36	5	2280	A
36	5	2287	C
36	5	2288	G
36	5	2303	A
36	5	2307	G
36	5	2310	U
36	5	2313	A
36	5	2315	G
36	5	2318	U
36	5	2327	U
36	5	2334	U
36	5	2336	U
36	5	2366	C
36	5	2367	A
36	5	2373	A
36	5	2374	C
36	5	2375	G
36	5	2385	G
36	5	2393	G
36	5	2397	A
36	5	2401	A
36	5	2402	A
36	5	2403	G
36	5	2404	A
36	5	2405	C
36	5	2411	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2418	G
36	5	2420	C
36	5	2422	C
36	5	2423	U
36	5	2437	G
36	5	2439	A
36	5	2441	A
36	5	2443	A
36	5	2504	U
36	5	2505	U
36	5	2506	U
36	5	2507	C
36	5	2508	U
36	5	2510	U
36	5	2511	A
36	5	2514	U
36	5	2515	A
36	5	2517	U
36	5	2518	C
36	5	2523	A
36	5	2524	A
36	5	2526	C
36	5	2530	G
36	5	2531	C
36	5	2532	U
36	5	2534	G
36	5	2536	A
36	5	2537	U
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2541	U
36	5	2543	U
36	5	2552	C
36	5	2555	G
36	5	2562	A
36	5	2566	C
36	5	2567	C
36	5	2568	C
36	5	2569	A
36	5	2570	U
36	5	2571	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2572	C
36	5	2573	G
36	5	2574	G
36	5	2584	G
36	5	2585	G
36	5	2587	U
36	5	2588	U
36	5	2589	G
36	5	2593	A
36	5	2606	G
36	5	2607	G
36	5	2614	G
36	5	2615	G
36	5	2626	A
36	5	2637	A
36	5	2639	G
36	5	2652	U
36	5	2656	A
36	5	2674	A
36	5	2677	G
36	5	2683	U
36	5	2689	A
36	5	2690	G
36	5	2691	A
36	5	2694	A
36	5	2696	A
36	5	2705	A
36	5	2714	G
36	5	2720	G
36	5	2727	A
36	5	2728	G
36	5	2729	U
36	5	2737	C
36	5	2742	C
36	5	2752	U
36	5	2753	G
36	5	2755	C
36	5	2762	A
36	5	2772	C
36	5	2773	C
36	5	2777	G
36	5	2778	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2779	A
36	5	2780	A
36	5	2783	U
36	5	2796	G
36	5	2797	C
36	5	2799	A
36	5	2800	G
36	5	2801	A
36	5	2802	A
36	5	2810	C
36	5	2814	G
36	5	2817	A
36	5	2818	U
36	5	2819	A
36	5	2829	U
36	5	2842	U
36	5	2843	U
36	5	2844	C
36	5	2845	A
36	5	2847	A
36	5	2853	A
36	5	2871	G
36	5	2872	A
36	5	2880	U
36	5	2882	U
36	5	2886	U
36	5	2887	A
36	5	2888	U
36	5	2889	C
36	5	2896	A
36	5	2897	A
36	5	2899	C
36	5	2900	A
36	5	2901	G
36	5	2912	G
36	5	2921	U
36	5	2922	G
36	5	2923	U
36	5	2935	U
36	5	2936	A
36	5	2937	G
36	5	2942	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2945	G
36	5	2947	G
36	5	2957	G
36	5	2971	A
36	5	2972	G
36	5	2979	U
36	5	2983	C
36	5	2990	G
36	5	2996	U
36	5	2997	G
36	5	3012	A
36	5	3018	C
36	5	3029	A
36	5	3030	G
36	5	3049	A
36	5	3056	U
36	5	3059	G
36	5	3078	U
36	5	3079	U
36	5	3086	A
36	5	3092	C
36	5	3102	G
36	5	3104	U
36	5	3122	A
36	5	3123	A
36	5	3127	A
36	5	3130	A
36	5	3131	U
36	5	3142	A
36	5	3143	C
36	5	3150	A
36	5	3153	U
36	5	3155	U
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3159	C
36	5	3164	C
36	5	3165	A
36	5	3168	A
36	5	3171	U
36	5	3172	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	3173	G
36	5	3174	A
36	5	3176	G
36	5	3178	A
36	5	3179	U
36	5	3180	A
36	5	3181	C
36	5	3187	A
36	5	3196	U
36	5	3198	U
36	5	3207	U
36	5	3208	G
36	5	3217	C
36	5	3218	A
36	5	3219	G
36	5	3223	A
36	5	3224	G
36	5	3227	A
36	5	3228	C
36	5	3229	G
36	5	3238	G
36	5	3239	G
36	5	3244	A
36	5	3245	A
36	5	3246	G
36	5	3247	G
36	5	3253	G
36	5	3259	U
36	5	3263	G
36	5	3270	U
36	5	3275	U
36	5	3276	G
36	5	3277	U
36	5	3279	A
36	5	3281	U
36	5	3282	U
36	5	3284	G
36	5	3285	C
36	5	3286	G
36	5	3288	G
36	5	3289	G
36	5	3290	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	3294	A
36	5	3304	U
36	5	3307	A
36	5	3310	A
36	5	3313	U
36	5	3316	A
36	5	3317	U
36	5	3319	U
36	5	3320	A
36	5	3341	U
36	5	3342	A
36	5	3345	G
36	5	3351	U
36	5	3352	U
36	5	3354	U
36	5	3355	U
36	5	3358	U
36	5	3369	G
36	5	3378	C
36	5	3389	U
36	5	3390	G
36	5	3393	U
36	5	3394	U
36	5	3396	U
37	7	7	G
37	7	22	A
37	7	23	A
37	7	25	G
37	7	27	A
37	7	38	U
37	7	41	G
37	7	45	A
37	7	49	G
37	7	50	U
37	7	52	G
37	7	53	U
37	7	54	U
37	7	55	A
37	7	60	G
37	7	65	G
37	7	73	C
37	7	74	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	7	75	G
37	7	76	A
37	7	91	G
37	7	101	G
37	7	102	A
37	7	112	G
37	7	121	U
38	8	21	C
38	8	34	U
38	8	35	C
38	8	43	A
38	8	48	A
38	8	53	A
38	8	59	A
38	8	62	C
38	8	63	G
38	8	76	C
38	8	79	A
38	8	80	A
38	8	81	U
38	8	82	U
38	8	83	C
38	8	84	C
38	8	86	U
38	8	87	G
38	8	90	U
38	8	95	G
38	8	97	A
38	8	102	U
38	8	104	A
38	8	105	A
38	8	106	C
38	8	108	C
38	8	111	A
38	8	113	U
38	8	115	C
38	8	122	U
38	8	124	G
38	8	125	U
38	8	126	A
38	8	152	G
38	8	156	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	8	157	U
38	8	158	U
87	A	503	C
87	A	504	A
87	B	503	C
87	B	504	A

All (279) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	2	25	C
1	2	45	U
1	2	68	A
1	2	73	U
1	2	74	U
1	2	103	A
1	2	114	C
1	2	126	A
1	2	130	C
1	2	131	C
1	2	136	C
1	2	139	C
1	2	144	U
1	2	158	U
1	2	187	G
1	2	192	U
1	2	218	A
1	2	240	U
1	2	278	U
1	2	280	U
1	2	322	G
1	2	417	A
1	2	497	G
1	2	499	U
1	2	501	U
1	2	503	G
1	2	512	A
1	2	558	U
1	2	582	U
1	2	685	A
1	2	704	C
1	2	720	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	721	U
1	2	734	A
1	2	755	A
1	2	794	U
1	2	811	A
1	2	823	G
1	2	829	A
1	2	1058	U
1	2	1137	A
1	2	1157	A
1	2	1196	A
1	2	1226	A
1	2	1234	A
1	2	1244	A
1	2	1250	U
1	2	1344	A
1	2	1370	U
1	2	1481	C
1	2	1489	U
1	2	1573	A
1	2	1600	A
1	2	1615	C
1	2	1657	U
1	2	1761	U
36	1	43	A
36	1	65	A
36	1	169	U
36	1	210	U
36	1	217	U
36	1	223	U
36	1	239	G
36	1	282	G
36	1	285	A
36	1	397	A
36	1	547	G
36	1	588	G
36	1	594	U
36	1	715	A
36	1	719	U
36	1	763	G
36	1	816	A
36	1	896	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	916	G
36	1	981	U
36	1	993	G
36	1	1064	A
36	1	1094	U
36	1	1097	G
36	1	1103	A
36	1	1181	U
36	1	1273	A
36	1	1291	A
36	1	1307	G
36	1	1317	A
36	1	1329	U
36	1	1352	A
36	1	1355	A
36	1	1467	A
36	1	1562	C
36	1	1568	U
36	1	1716	U
36	1	1724	U
36	1	1751	G
36	1	1815	U
36	1	1816	A
36	1	1820	U
36	1	1841	A
36	1	1846	C
36	1	1849	C
36	1	2101	C
36	1	2109	U
36	1	2112	U
36	1	2209	U
36	1	2227	C
36	1	2281	A
36	1	2360	C
36	1	2372	A
36	1	2374	C
36	1	2403	G
36	1	2418	G
36	1	2513	U
36	1	2537	U
36	1	2541	U
36	1	2585	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2704	A
36	1	2728	G
36	1	2772	C
36	1	2818	U
36	1	2842	U
36	1	2996	U
36	1	3056	U
36	1	3078	U
36	1	3121	U
36	1	3169	U
36	1	3195	U
36	1	3218	A
36	1	3228	C
36	1	3242	G
36	1	3269	U
36	1	3275	U
36	1	3319	U
36	1	3350	C
36	1	3351	U
36	1	3353	G
36	1	3375	A
36	1	3377	G
36	1	3382	U
38	4	85	G
38	4	125	U
1	6	25	C
1	6	66	U
1	6	76	A
1	6	103	A
1	6	114	C
1	6	139	C
1	6	145	A
1	6	158	U
1	6	187	G
1	6	192	U
1	6	217	A
1	6	218	A
1	6	240	U
1	6	400	A
1	6	417	A
1	6	468	A
1	6	488	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	512	A
1	6	542	A
1	6	543	C
1	6	557	G
1	6	558	U
1	6	606	A
1	6	651	G
1	6	664	U
1	6	695	U
1	6	697	C
1	6	717	C
1	6	755	A
1	6	828	U
1	6	829	A
1	6	834	G
1	6	944	A
1	6	1004	U
1	6	1051	G
1	6	1058	U
1	6	1097	U
1	6	1238	A
1	6	1244	A
1	6	1255	G
1	6	1269	U
1	6	1314	U
1	6	1344	A
1	6	1346	A
1	6	1481	C
1	6	1489	U
1	6	1491	U
1	6	1535	U
1	6	1568	C
1	6	1572	G
1	6	1573	A
1	6	1615	C
1	6	1620	C
1	6	1657	U
1	6	1696	G
1	6	1698	G
1	6	1700	C
36	5	43	A
36	5	210	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	217	U
36	5	238	A
36	5	397	A
36	5	588	G
36	5	647	A
36	5	715	A
36	5	765	C
36	5	816	A
36	5	873	C
36	5	896	A
36	5	916	G
36	5	960	U
36	5	993	G
36	5	1027	A
36	5	1064	A
36	5	1081	U
36	5	1152	G
36	5	1236	G
36	5	1238	C
36	5	1241	U
36	5	1284	C
36	5	1307	G
36	5	1329	U
36	5	1331	U
36	5	1352	A
36	5	1355	A
36	5	1481	A
36	5	1514	G
36	5	1554	U
36	5	1560	G
36	5	1580	A
36	5	1716	U
36	5	1815	U
36	5	1816	A
36	5	1841	A
36	5	1846	C
36	5	1878	G
36	5	2101	C
36	5	2112	U
36	5	2204	C
36	5	2209	U
36	5	2255	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2372	A
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2531	C
36	5	2539	C
36	5	2586	G
36	5	2682	C
36	5	2728	G
36	5	2772	C
36	5	2801	A
36	5	2817	A
36	5	2818	U
36	5	2887	A
36	5	2896	A
36	5	2971	A
36	5	2979	U
36	5	3055	U
36	5	3078	U
36	5	3121	U
36	5	3167	A
36	5	3195	U
36	5	3218	A
36	5	3228	C
36	5	3269	U
36	5	3271	G
36	5	3275	U
36	5	3289	G
36	5	3340	G
36	5	3341	U
36	5	3354	U
36	5	3357	U
37	7	49	G
38	8	86	U
38	8	156	U
87	A	502	C
87	B	502	C

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2557 ligands modelled in this entry, 1424 are monoatomic - leaving 1133 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
89	OHX	1	4003	-	0,6,6	-	-	-		
89	OHX	1	4039	88	0,6,6	-	-	-		
89	OHX	6	2111	88	0,6,6	-	-	-		
89	OHX	5	4140	-	0,6,6	-	-	-		
89	OHX	5	4023	-	0,6,6	-	-	-		
89	OHX	6	2075	88	0,6,6	-	-	-		
89	OHX	2	2052	-	0,6,6	-	-	-		
89	OHX	5	4112	-	0,6,6	-	-	-		
89	OHX	7	224	-	0,6,6	-	-	-		
89	OHX	1	4041	-	0,6,6	-	-	-		
89	OHX	2	2069	-	0,6,6	-	-	-		
89	OHX	2	2117	-	0,6,6	-	-	-		
89	OHX	1	4019	-	0,6,6	-	-	-		
89	OHX	1	4198	-	0,6,6	-	-	-		
89	OHX	5	4133	-	0,6,6	-	-	-		
89	OHX	2	2135	-	0,6,6	-	-	-		
89	OHX	6	2147	-	0,6,6	-	-	-		
89	OHX	5	4254	-	0,6,6	-	-	-		
89	OHX	5	4153	-	0,6,6	-	-	-		
89	OHX	1	3967	88	0,6,6	-	-	-		
89	OHX	2	2174	-	0,6,6	-	-	-		
89	OHX	5	3998	-	0,6,6	-	-	-		
89	OHX	5	4152	-	0,6,6	-	-	-		
89	OHX	5	4072	88	0,6,6	-	-	-		
89	OHX	15	304	-	0,6,6	-	-	-		
89	OHX	1	4017	-	0,6,6	-	-	-		
89	OHX	2	2089	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	3954	-	0,6,6	-	-	-		
89	OHX	D3	201	-	0,6,6	-	-	-		
89	OHX	6	2158	-	0,6,6	-	-	-		
89	OHX	2	2126	-	0,6,6	-	-	-		
89	OHX	4	228	-	0,6,6	-	-	-		
89	OHX	1	4157	88	0,6,6	-	-	-		
89	OHX	6	2171	88	0,6,6	-	-	-		
89	OHX	1	3874	-	0,6,6	-	-	-		
89	OHX	5	3935	88	0,6,6	-	-	-		
89	OHX	7	222	-	0,6,6	-	-	-		
89	OHX	5	3957	-	0,6,6	-	-	-		
89	OHX	5	4001	-	0,6,6	-	-	-		
89	OHX	5	4108	-	0,6,6	-	-	-		
89	OHX	5	4055	-	0,6,6	-	-	-		
89	OHX	5	4126	88	0,6,6	-	-	-		
89	OHX	1	4142	-	0,6,6	-	-	-		
89	OHX	1	4040	-	0,6,6	-	-	-		
89	OHX	3	224	88	0,6,6	-	-	-		
89	OHX	6	2138	-	0,6,6	-	-	-		
89	OHX	L4	402	-	0,6,6	-	-	-		
89	OHX	2	2041	-	0,6,6	-	-	-		
89	OHX	l3	406	-	0,6,6	-	-	-		
89	OHX	5	4190	-	0,6,6	-	-	-		
89	OHX	4	232	-	0,6,6	-	-	-		
89	OHX	5	4150	-	0,6,6	-	-	-		
89	OHX	5	4038	-	0,6,6	-	-	-		
89	OHX	5	4172	88	0,6,6	-	-	-		
89	OHX	q2	502	88	0,6,6	-	-	-		
89	OHX	5	4236	-	0,6,6	-	-	-		
89	OHX	s8	303	-	0,6,6	-	-	-		
89	OHX	1	4061	-	0,6,6	-	-	-		
89	OHX	5	4158	-	0,6,6	-	-	-		
89	OHX	6	2167	-	0,6,6	-	-	-		
89	OHX	5	4239	-	0,6,6	-	-	-		
89	OHX	S8	302	-	0,6,6	-	-	-		
89	OHX	1	4010	-	0,6,6	-	-	-		
89	OHX	5	4012	-	0,6,6	-	-	-		
89	OHX	1	4052	-	0,6,6	-	-	-		
89	OHX	6	2127	-	0,6,6	-	-	-		
89	OHX	5	4107	-	0,6,6	-	-	-		
89	OHX	1	4028	-	0,6,6	-	-	-		
89	OHX	1	4098	-	0,6,6	-	-	-		
89	OHX	1	3899	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4118	-	0,6,6	-	-	-		
89	OHX	1	3916	-	0,6,6	-	-	-		
89	OHX	C5	201	-	0,6,6	-	-	-		
89	OHX	5	3923	-	0,6,6	-	-	-		
89	OHX	6	2082	-	0,6,6	-	-	-		
89	OHX	1	3917	-	0,6,6	-	-	-		
89	OHX	1	3974	-	0,6,6	-	-	-		
89	OHX	5	4119	-	0,6,6	-	-	-		
89	OHX	1	4123	88	0,6,6	-	-	-		
89	OHX	5	4186	-	0,6,6	-	-	-		
89	OHX	1	4096	-	0,6,6	-	-	-		
89	OHX	5	4249	-	0,6,6	-	-	-		
89	OHX	5	4241	-	0,6,6	-	-	-		
89	OHX	5	4235	-	0,6,6	-	-	-		
89	OHX	2	2150	-	0,6,6	-	-	-		
89	OHX	7	218	88	0,6,6	-	-	-		
89	OHX	2	2023	-	0,6,6	-	-	-		
89	OHX	5	4024	-	0,6,6	-	-	-		
89	OHX	5	4056	-	0,6,6	-	-	-		
89	OHX	1	4188	-	0,6,6	-	-	-		
89	OHX	8	221	-	0,6,6	-	-	-		
89	OHX	2	2031	-	0,6,6	-	-	-		
89	OHX	1	4211	-	0,6,6	-	-	-		
89	OHX	6	2160	-	0,6,6	-	-	-		
89	OHX	5	4104	-	0,6,6	-	-	-		
89	OHX	1	4023	-	0,6,6	-	-	-		
89	OHX	1	4116	-	0,6,6	-	-	-		
89	OHX	6	2114	-	0,6,6	-	-	-		
89	OHX	5	3907	-	0,6,6	-	-	-		
89	OHX	2	2128	-	0,6,6	-	-	-		
89	OHX	1	4027	-	0,6,6	-	-	-		
89	OHX	5	3963	-	0,6,6	-	-	-		
89	OHX	5	3997	-	0,6,6	-	-	-		
89	OHX	5	4073	-	0,6,6	-	-	-		
89	OHX	5	4092	-	0,6,6	-	-	-		
89	OHX	5	4099	-	0,6,6	-	-	-		
89	OHX	1	4022	-	0,6,6	-	-	-		
89	OHX	5	4170	-	0,6,6	-	-	-		
89	OHX	1	4062	-	0,6,6	-	-	-		
89	OHX	5	4118	-	0,6,6	-	-	-		
89	OHX	1	4082	-	0,6,6	-	-	-		
89	OHX	1	3913	-	0,6,6	-	-	-		
89	OHX	2	2162	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	4181	-	0,6,6	-	-	-		
89	OHX	2	2163	-	0,6,6	-	-	-		
89	OHX	2	2125	-	0,6,6	-	-	-		
89	OHX	7	219	88	0,6,6	-	-	-		
89	OHX	1	4050	-	0,6,6	-	-	-		
89	OHX	5	4224	-	0,6,6	-	-	-		
89	OHX	1	4153	-	0,6,6	-	-	-		
89	OHX	2	2046	-	0,6,6	-	-	-		
89	OHX	5	4121	-	0,6,6	-	-	-		
89	OHX	2	2177	-	0,6,6	-	-	-		
89	OHX	2	2090	-	0,6,6	-	-	-		
89	OHX	1	3892	-	0,6,6	-	-	-		
89	OHX	6	2053	-	0,6,6	-	-	-		
89	OHX	5	4015	-	0,6,6	-	-	-		
89	OHX	5	4125	88	0,6,6	-	-	-		
89	OHX	6	2182	-	0,6,6	-	-	-		
89	OHX	5	4048	-	0,6,6	-	-	-		
89	OHX	2	2075	-	0,6,6	-	-	-		
89	OHX	5	4188	-	0,6,6	-	-	-		
89	OHX	6	2077	-	0,6,6	-	-	-		
89	OHX	2	2172	-	0,6,6	-	-	-		
89	OHX	2	2025	-	0,6,6	-	-	-		
89	OHX	1	4108	-	0,6,6	-	-	-		
89	OHX	6	2084	-	0,6,6	-	-	-		
89	OHX	4	224	-	0,6,6	-	-	-		
89	OHX	2	2044	-	0,6,6	-	-	-		
89	OHX	5	4117	-	0,6,6	-	-	-		
89	OHX	5	4231	-	0,6,6	-	-	-		
89	OHX	1	3985	-	0,6,6	-	-	-		
89	OHX	5	4022	-	0,6,6	-	-	-		
89	OHX	1	3975	-	0,6,6	-	-	-		
89	OHX	1	3944	-	0,6,6	-	-	-		
89	OHX	5	3934	-	0,6,6	-	-	-		
89	OHX	6	2130	-	0,6,6	-	-	-		
89	OHX	1	4038	-	0,6,6	-	-	-		
89	OHX	2	2056	-	0,6,6	-	-	-		
89	OHX	2	2065	-	0,6,6	-	-	-		
89	OHX	5	4090	-	0,6,6	-	-	-		
89	OHX	15	303	-	0,6,6	-	-	-		
89	OHX	2	2068	88	0,6,6	-	-	-		
89	OHX	L3	405	-	0,6,6	-	-	-		
89	OHX	6	2136	-	0,6,6	-	-	-		
89	OHX	6	2152	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4107	-	0,6,6	-	-	-		
89	OHX	1	3927	88	0,6,6	-	-	-		
89	OHX	2	2081	-	0,6,6	-	-	-		
89	OHX	2	2037	-	0,6,6	-	-	-		
89	OHX	o3	202	-	0,6,6	-	-	-		
89	OHX	5	4141	-	0,6,6	-	-	-		
89	OHX	1	4135	88	0,6,6	-	-	-		
89	OHX	6	2128	-	0,6,6	-	-	-		
89	OHX	1	4006	-	0,6,6	-	-	-		
89	OHX	5	3973	-	0,6,6	-	-	-		
89	OHX	5	3985	-	0,6,6	-	-	-		
89	OHX	6	2079	-	0,6,6	-	-	-		
89	OHX	1	4119	-	0,6,6	-	-	-		
89	OHX	1	4222	-	0,6,6	-	-	-		
89	OHX	5	4036	-	0,6,6	-	-	-		
89	OHX	2	2099	-	0,6,6	-	-	-		
89	OHX	5	4114	-	0,6,6	-	-	-		
89	OHX	2	2036	-	0,6,6	-	-	-		
89	OHX	1	4058	-	0,6,6	-	-	-		
89	OHX	5	4217	-	0,6,6	-	-	-		
89	OHX	m4	201	-	0,6,6	-	-	-		
89	OHX	1	3957	-	0,6,6	-	-	-		
89	OHX	2	2051	-	0,6,6	-	-	-		
89	OHX	8	227	-	0,6,6	-	-	-		
89	OHX	1	4205	-	0,6,6	-	-	-		
89	OHX	1	4194	-	0,6,6	-	-	-		
89	OHX	5	4018	-	0,6,6	-	-	-		
89	OHX	5	4032	88	0,6,6	-	-	-		
89	OHX	5	4060	-	0,6,6	-	-	-		
89	OHX	1	4053	-	0,6,6	-	-	-		
89	OHX	6	2187	-	0,6,6	-	-	-		
89	OHX	5	4068	-	0,6,6	-	-	-		
89	OHX	1	3893	-	0,6,6	-	-	-		
89	OHX	1	4161	-	0,6,6	-	-	-		
89	OHX	5	4184	-	0,6,6	-	-	-		
89	OHX	6	2060	-	0,6,6	-	-	-		
89	OHX	1	4086	-	0,6,6	-	-	-		
89	OHX	1	4073	-	0,6,6	-	-	-		
89	OHX	1	4015	-	0,6,6	-	-	-		
89	OHX	5	3916	-	0,6,6	-	-	-		
89	OHX	2	2161	-	0,6,6	-	-	-		
89	OHX	3	220	-	0,6,6	-	-	-		
89	OHX	5	4149	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	4179	-	0,6,6	-	-	-		
89	OHX	5	4185	-	0,6,6	-	-	-		
89	OHX	5	4216	-	0,6,6	-	-	-		
89	OHX	5	4005	-	0,6,6	-	-	-		
89	OHX	1	3948	-	0,6,6	-	-	-		
89	OHX	5	4105	-	0,6,6	-	-	-		
89	OHX	6	2191	-	0,6,6	-	-	-		
89	OHX	1	3887	-	0,6,6	-	-	-		
89	OHX	6	2102	-	0,6,6	-	-	-		
89	OHX	1	4121	-	0,6,6	-	-	-		
89	OHX	7	215	-	0,6,6	-	-	-		
89	OHX	5	4237	-	0,6,6	-	-	-		
89	OHX	1	4114	-	0,6,6	-	-	-		
89	OHX	6	2141	-	0,6,6	-	-	-		
89	OHX	N9	101	-	0,6,6	-	-	-		
89	OHX	2	2034	-	0,6,6	-	-	-		
89	OHX	6	2098	-	0,6,6	-	-	-		
89	OHX	5	4234	-	0,6,6	-	-	-		
89	OHX	c1	202	-	0,6,6	-	-	-		
89	OHX	1	3942	-	0,6,6	-	-	-		
89	OHX	6	2062	-	0,6,6	-	-	-		
89	OHX	1	4203	88	0,6,6	-	-	-		
89	OHX	5	3900	-	0,6,6	-	-	-		
89	OHX	5	4253	-	0,6,6	-	-	-		
89	OHX	1	4018	-	0,6,6	-	-	-		
89	OHX	6	2150	-	0,6,6	-	-	-		
89	OHX	1	3884	-	0,6,6	-	-	-		
89	OHX	1	3958	-	0,6,6	-	-	-		
89	OHX	1	3956	88	0,6,6	-	-	-		
89	OHX	5	4067	-	0,6,6	-	-	-		
89	OHX	8	231	-	0,6,6	-	-	-		
89	OHX	1	4129	-	0,6,6	-	-	-		
89	OHX	6	2095	-	0,6,6	-	-	-		
89	OHX	1	3971	-	0,6,6	-	-	-		
89	OHX	5	3903	-	0,6,6	-	-	-		
89	OHX	6	2061	-	0,6,6	-	-	-		
89	OHX	2	2091	-	0,6,6	-	-	-		
89	OHX	5	4220	88	0,6,6	-	-	-		
89	OHX	1	3930	-	0,6,6	-	-	-		
89	OHX	5	3967	88	0,6,6	-	-	-		
89	OHX	1	3969	-	0,6,6	-	-	-		
89	OHX	1	4109	-	0,6,6	-	-	-		
89	OHX	5	3977	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	2	2124	-	0,6,6	-	-	-		
89	OHX	5	3984	-	0,6,6	-	-	-		
89	OHX	5	4221	-	0,6,6	-	-	-		
89	OHX	1	4223	-	0,6,6	-	-	-		
89	OHX	5	4193	-	0,6,6	-	-	-		
89	OHX	1	4004	-	0,6,6	-	-	-		
89	OHX	2	2083	-	0,6,6	-	-	-		
89	OHX	5	4240	-	0,6,6	-	-	-		
89	OHX	6	2112	-	0,6,6	-	-	-		
89	OHX	5	3928	-	0,6,6	-	-	-		
89	OHX	5	3951	-	0,6,6	-	-	-		
89	OHX	5	4200	-	0,6,6	-	-	-		
89	OHX	2	2111	-	0,6,6	-	-	-		
89	OHX	5	4182	88	0,6,6	-	-	-		
89	OHX	1	4132	-	0,6,6	-	-	-		
89	OHX	1	4007	-	0,6,6	-	-	-		
89	OHX	5	3955	-	0,6,6	-	-	-		
89	OHX	1	3996	-	0,6,6	-	-	-		
89	OHX	1	3915	-	0,6,6	-	-	-		
89	OHX	5	4142	-	0,6,6	-	-	-		
89	OHX	5	4162	-	0,6,6	-	-	-		
89	OHX	1	3924	88	0,6,6	-	-	-		
89	OHX	1	3896	-	0,6,6	-	-	-		
89	OHX	5	4232	-	0,6,6	-	-	-		
89	OHX	5	3938	88	0,6,6	-	-	-		
89	OHX	5	4233	-	0,6,6	-	-	-		
89	OHX	6	2073	-	0,6,6	-	-	-		
89	OHX	1	4117	-	0,6,6	-	-	-		
89	OHX	6	2101	-	0,6,6	-	-	-		
89	OHX	5	3918	88	0,6,6	-	-	-		
89	OHX	5	4212	-	0,6,6	-	-	-		
89	OHX	19	600	-	0,6,6	-	-	-		
89	OHX	5	4226	-	0,6,6	-	-	-		
89	OHX	6	2172	-	0,6,6	-	-	-		
89	OHX	1	4013	-	0,6,6	-	-	-		
89	OHX	6	2200	-	0,6,6	-	-	-		
89	OHX	6	2177	-	0,6,6	-	-	-		
89	OHX	2	2171	-	0,6,6	-	-	-		
89	OHX	1	3911	88	0,6,6	-	-	-		
89	OHX	6	2197	-	0,6,6	-	-	-		
89	OHX	2	2151	-	0,6,6	-	-	-		
89	OHX	6	2071	-	0,6,6	-	-	-		
89	OHX	6	2129	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	6	2193	-	0,6,6	-	-	-		
89	OHX	5	4198	-	0,6,6	-	-	-		
89	OHX	4	220	-	0,6,6	-	-	-		
89	OHX	M8	201	-	0,6,6	-	-	-		
89	OHX	5	4160	-	0,6,6	-	-	-		
89	OHX	6	2201	-	0,6,6	-	-	-		
89	OHX	5	3950	-	0,6,6	-	-	-		
89	OHX	5	3921	-	0,6,6	-	-	-		
89	OHX	5	4136	-	0,6,6	-	-	-		
89	OHX	1	4179	-	0,6,6	-	-	-		
89	OHX	1	4216	-	0,6,6	-	-	-		
89	OHX	5	3908	-	0,6,6	-	-	-		
89	OHX	1	4197	-	0,6,6	-	-	-		
89	OHX	6	2097	-	0,6,6	-	-	-		
89	OHX	5	4127	-	0,6,6	-	-	-		
89	OHX	5	4174	-	0,6,6	-	-	-		
89	OHX	5	4229	88	0,6,6	-	-	-		
89	OHX	8	228	-	0,6,6	-	-	-		
89	OHX	1	4065	-	0,6,6	-	-	-		
89	OHX	1	4115	-	0,6,6	-	-	-		
89	OHX	6	2134	-	0,6,6	-	-	-		
89	OHX	2	2077	-	0,6,6	-	-	-		
89	OHX	1	4078	-	0,6,6	-	-	-		
89	OHX	1	3875	-	0,6,6	-	-	-		
89	OHX	1	4147	-	0,6,6	-	-	-		
89	OHX	6	2194	-	0,6,6	-	-	-		
89	OHX	2	2167	-	0,6,6	-	-	-		
89	OHX	1	3885	-	0,6,6	-	-	-		
89	OHX	1	3879	-	0,6,6	-	-	-		
89	OHX	6	2076	-	0,6,6	-	-	-		
89	OHX	5	4027	88	0,6,6	-	-	-		
89	OHX	5	4230	-	0,6,6	-	-	-		
89	OHX	5	4007	-	0,6,6	-	-	-		
89	OHX	6	2175	-	0,6,6	-	-	-		
89	OHX	5	4094	-	0,6,6	-	-	-		
89	OHX	4	229	-	0,6,6	-	-	-		
89	OHX	2	2033	-	0,6,6	-	-	-		
89	OHX	2	2127	-	0,6,6	-	-	-		
89	OHX	5	3915	88	0,6,6	-	-	-		
89	OHX	5	3941	-	0,6,6	-	-	-		
89	OHX	5	4106	-	0,6,6	-	-	-		
89	OHX	1	4209	-	0,6,6	-	-	-		
89	OHX	m6	203	88	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	2	2063	-	0,6,6	-	-	-		
89	OHX	2	2082	-	0,6,6	-	-	-		
89	OHX	1	4060	-	0,6,6	-	-	-		
89	OHX	5	4061	-	0,6,6	-	-	-		
89	OHX	1	4170	-	0,6,6	-	-	-		
89	OHX	5	3917	88	0,6,6	-	-	-		
89	OHX	s1	303	-	0,6,6	-	-	-		
89	OHX	1	3979	-	0,6,6	-	-	-		
89	OHX	1	3895	88	0,6,6	-	-	-		
89	OHX	1	4081	88	0,6,6	-	-	-		
89	OHX	2	2130	-	0,6,6	-	-	-		
89	OHX	1	3925	-	0,6,6	-	-	-		
89	OHX	1	3989	-	0,6,6	-	-	-		
89	OHX	5	3936	-	0,6,6	-	-	-		
89	OHX	7	216	-	0,6,6	-	-	-		
89	OHX	1	3981	-	0,6,6	-	-	-		
89	OHX	1	3995	-	0,6,6	-	-	-		
89	OHX	1	4071	-	0,6,6	-	-	-		
89	OHX	6	2157	-	0,6,6	-	-	-		
89	OHX	1	4043	-	0,6,6	-	-	-		
89	OHX	5	4147	-	0,6,6	-	-	-		
89	OHX	1	4150	-	0,6,6	-	-	-		
89	OHX	o7	502	-	0,6,6	-	-	-		
89	OHX	1	4172	-	0,6,6	-	-	-		
89	OHX	2	2160	-	0,6,6	-	-	-		
89	OHX	1	4079	-	0,6,6	-	-	-		
89	OHX	6	2149	-	0,6,6	-	-	-		
89	OHX	5	4144	88	0,6,6	-	-	-		
89	OHX	1	4063	-	0,6,6	-	-	-		
89	OHX	5	4187	-	0,6,6	-	-	-		
89	OHX	2	2154	-	0,6,6	-	-	-		
89	OHX	1	4158	-	0,6,6	-	-	-		
89	OHX	5	4201	-	0,6,6	-	-	-		
89	OHX	6	2148	-	0,6,6	-	-	-		
89	OHX	4	230	-	0,6,6	-	-	-		
89	OHX	5	4218	-	0,6,6	-	-	-		
89	OHX	1	3876	-	0,6,6	-	-	-		
89	OHX	1	3980	-	0,6,6	-	-	-		
89	OHX	5	4069	-	0,6,6	-	-	-		
89	OHX	6	2196	-	0,6,6	-	-	-		
89	OHX	1	3909	-	0,6,6	-	-	-		
89	OHX	1	4143	-	0,6,6	-	-	-		
89	OHX	5	4165	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4140	-	0,6,6	-	-	-		
89	OHX	1	4183	-	0,6,6	-	-	-		
89	OHX	2	2148	-	0,6,6	-	-	-		
89	OHX	2	2053	-	0,6,6	-	-	-		
89	OHX	1	3923	-	0,6,6	-	-	-		
89	OHX	5	4132	-	0,6,6	-	-	-		
89	OHX	1	3966	-	0,6,6	-	-	-		
89	OHX	5	4059	-	0,6,6	-	-	-		
89	OHX	1	4127	-	0,6,6	-	-	-		
89	OHX	5	4091	88	0,6,6	-	-	-		
89	OHX	2	2129	-	0,6,6	-	-	-		
89	OHX	2	2158	-	0,6,6	-	-	-		
89	OHX	1	3961	-	0,6,6	-	-	-		
89	OHX	1	4154	-	0,6,6	-	-	-		
89	OHX	1	3921	-	0,6,6	-	-	-		
89	OHX	6	2092	-	0,6,6	-	-	-		
89	OHX	L3	407	-	0,6,6	-	-	-		
89	OHX	1	4120	-	0,6,6	-	-	-		
89	OHX	2	2084	-	0,6,6	-	-	-		
89	OHX	6	2113	-	0,6,6	-	-	-		
89	OHX	5	4006	-	0,6,6	-	-	-		
89	OHX	1	4160	-	0,6,6	-	-	-		
89	OHX	2	2079	88	0,6,6	-	-	-		
89	OHX	6	2142	-	0,6,6	-	-	-		
89	OHX	6	2161	-	0,6,6	-	-	-		
89	OHX	SR	401	-	0,6,6	-	-	-		
89	OHX	5	4081	-	0,6,6	-	-	-		
89	OHX	5	4219	-	0,6,6	-	-	-		
89	OHX	1	3997	-	0,6,6	-	-	-		
89	OHX	1	4092	-	0,6,6	-	-	-		
89	OHX	2	2165	-	0,6,6	-	-	-		
89	OHX	1	4176	-	0,6,6	-	-	-		
89	OHX	6	2110	-	0,6,6	-	-	-		
89	OHX	3	218	-	0,6,6	-	-	-		
89	OHX	5	4049	-	0,6,6	-	-	-		
89	OHX	1	3993	88	0,6,6	-	-	-		
89	OHX	5	4025	-	0,6,6	-	-	-		
89	OHX	2	2136	-	0,6,6	-	-	-		
89	OHX	2	2180	88	0,6,6	-	-	-		
89	OHX	1	4145	-	0,6,6	-	-	-		
89	OHX	1	3902	-	0,6,6	-	-	-		
89	OHX	5	4168	-	0,6,6	-	-	-		
89	OHX	8	220	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	3950	-	0,6,6	-	-	-		
89	OHX	7	225	88	0,6,6	-	-	-		
89	OHX	1	3886	-	0,6,6	-	-	-		
89	OHX	1	4113	-	0,6,6	-	-	-		
89	OHX	2	2141	-	0,6,6	-	-	-		
89	OHX	5	4086	-	0,6,6	-	-	-		
89	OHX	5	4039	-	0,6,6	-	-	-		
89	OHX	6	2195	-	0,6,6	-	-	-		
89	OHX	1	4180	88	0,6,6	-	-	-		
89	OHX	5	4063	-	0,6,6	-	-	-		
89	OHX	15	306	-	0,6,6	-	-	-		
89	OHX	5	4215	-	0,6,6	-	-	-		
89	OHX	2	2147	-	0,6,6	-	-	-		
89	OHX	1	4083	-	0,6,6	-	-	-		
89	OHX	6	2173	-	0,6,6	-	-	-		
89	OHX	1	4048	-	0,6,6	-	-	-		
89	OHX	1	4090	-	0,6,6	-	-	-		
89	OHX	6	2151	-	0,6,6	-	-	-		
89	OHX	5	4255	-	0,6,6	-	-	-		
89	OHX	2	2095	-	0,6,6	-	-	-		
89	OHX	2	2039	-	0,6,6	-	-	-		
89	OHX	1	4045	-	0,6,6	-	-	-		
89	OHX	5	3980	-	0,6,6	-	-	-		
89	OHX	6	2189	-	0,6,6	-	-	-		
89	OHX	5	3964	88	0,6,6	-	-	-		
89	OHX	1	3882	-	0,6,6	-	-	-		
89	OHX	5	4010	-	0,6,6	-	-	-		
89	OHX	5	4222	-	0,6,6	-	-	-		
89	OHX	1	4000	-	0,6,6	-	-	-		
89	OHX	1	4069	-	0,6,6	-	-	-		
89	OHX	5	4242	-	0,6,6	-	-	-		
89	OHX	2	2055	-	0,6,6	-	-	-		
89	OHX	5	4085	-	0,6,6	-	-	-		
89	OHX	1	3936	-	0,6,6	-	-	-		
89	OHX	1	4070	-	0,6,6	-	-	-		
89	OHX	1	4016	88	0,6,6	-	-	-		
89	OHX	6	2140	-	0,6,6	-	-	-		
89	OHX	n9	101	-	0,6,6	-	-	-		
89	OHX	5	4088	88	0,6,6	-	-	-		
89	OHX	5	4199	-	0,6,6	-	-	-		
89	OHX	6	2080	-	0,6,6	-	-	-		
89	OHX	5	4154	-	0,6,6	-	-	-		
89	OHX	1	4020	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	3962	-	0,6,6	-	-	-		
89	OHX	6	2045	-	0,6,6	-	-	-		
89	OHX	5	4130	-	0,6,6	-	-	-		
89	OHX	5	4167	-	0,6,6	-	-	-		
89	OHX	5	4213	88	0,6,6	-	-	-		
89	OHX	1	3982	-	0,6,6	-	-	-		
89	OHX	1	4064	-	0,6,6	-	-	-		
89	OHX	1	4134	-	0,6,6	-	-	-		
89	OHX	1	4169	-	0,6,6	-	-	-		
89	OHX	6	2072	-	0,6,6	-	-	-		
89	OHX	5	4171	-	0,6,6	-	-	-		
89	OHX	5	4177	-	0,6,6	-	-	-		
89	OHX	1	3878	-	0,6,6	-	-	-		
89	OHX	5	3932	-	0,6,6	-	-	-		
89	OHX	1	4074	-	0,6,6	-	-	-		
89	OHX	6	2116	-	0,6,6	-	-	-		
89	OHX	5	4045	-	0,6,6	-	-	-		
89	OHX	1	4024	-	0,6,6	-	-	-		
89	OHX	5	3989	-	0,6,6	-	-	-		
89	OHX	5	4164	-	0,6,6	-	-	-		
89	OHX	5	4047	-	0,6,6	-	-	-		
89	OHX	6	2093	-	0,6,6	-	-	-		
89	OHX	6	2164	-	0,6,6	-	-	-		
89	OHX	1	3912	-	0,6,6	-	-	-		
89	OHX	5	4139	-	0,6,6	-	-	-		
89	OHX	6	2070	88	0,6,6	-	-	-		
89	OHX	5	3953	-	0,6,6	-	-	-		
89	OHX	5	4101	88	0,6,6	-	-	-		
89	OHX	3	216	-	0,6,6	-	-	-		
89	OHX	1	3933	-	0,6,6	-	-	-		
89	OHX	1	4175	-	0,6,6	-	-	-		
89	OHX	6	2121	-	0,6,6	-	-	-		
89	OHX	2	2166	-	0,6,6	-	-	-		
89	OHX	2	2062	-	0,6,6	-	-	-		
89	OHX	2	2086	-	0,6,6	-	-	-		
89	OHX	2	2092	-	0,6,6	-	-	-		
89	OHX	1	4178	-	0,6,6	-	-	-		
89	OHX	1	4217	-	0,6,6	-	-	-		
89	OHX	6	2159	-	0,6,6	-	-	-		
89	OHX	5	4044	-	0,6,6	-	-	-		
89	OHX	5	4113	-	0,6,6	-	-	-		
89	OHX	5	4194	-	0,6,6	-	-	-		
89	OHX	1	3939	88	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	6	2166	-	0,6,6	-	-	-		
89	OHX	6	2074	-	0,6,6	-	-	-		
89	OHX	1	4032	-	0,6,6	-	-	-		
89	OHX	2	2071	-	0,6,6	-	-	-		
89	OHX	1	4199	-	0,6,6	-	-	-		
89	OHX	5	3971	-	0,6,6	-	-	-		
89	OHX	1	4181	-	0,6,6	-	-	-		
89	OHX	1	4208	-	0,6,6	-	-	-		
89	OHX	1	4008	-	0,6,6	-	-	-		
89	OHX	2	2058	88	0,6,6	-	-	-		
89	OHX	1	4049	-	0,6,6	-	-	-		
89	OHX	6	2169	-	0,6,6	-	-	-		
89	OHX	5	3910	-	0,6,6	-	-	-		
89	OHX	5	4098	-	0,6,6	-	-	-		
89	OHX	2	2049	-	0,6,6	-	-	-		
89	OHX	6	2143	88	0,6,6	-	-	-		
89	OHX	1	3897	88	0,6,6	-	-	-		
89	OHX	5	4029	-	0,6,6	-	-	-		
89	OHX	13	407	-	0,6,6	-	-	-		
89	OHX	1	3931	-	0,6,6	-	-	-		
89	OHX	5	3974	-	0,6,6	-	-	-		
89	OHX	5	4000	-	0,6,6	-	-	-		
89	OHX	5	3942	88	0,6,6	-	-	-		
89	OHX	2	2074	-	0,6,6	-	-	-		
89	OHX	3	222	-	0,6,6	-	-	-		
89	OHX	5	4077	-	0,6,6	-	-	-		
89	OHX	1	3965	-	0,6,6	-	-	-		
89	OHX	1	4005	-	0,6,6	-	-	-		
89	OHX	2	2134	-	0,6,6	-	-	-		
89	OHX	5	4080	-	0,6,6	-	-	-		
89	OHX	5	3988	-	0,6,6	-	-	-		
89	OHX	5	4166	-	0,6,6	-	-	-		
89	OHX	1	4168	-	0,6,6	-	-	-		
89	OHX	1	4112	-	0,6,6	-	-	-		
89	OHX	6	2044	-	0,6,6	-	-	-		
89	OHX	1	4159	-	0,6,6	-	-	-		
89	OHX	6	2123	-	0,6,6	-	-	-		
89	OHX	5	4120	-	0,6,6	-	-	-		
89	OHX	5	4175	-	0,6,6	-	-	-		
89	OHX	L3	406	-	0,6,6	-	-	-		
89	OHX	2	2164	-	0,6,6	-	-	-		
89	OHX	5	4238	-	0,6,6	-	-	-		
89	OHX	6	2120	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	8	219	-	0,6,6	-	-	-		
89	OHX	5	4163	88	0,6,6	-	-	-		
89	OHX	2	2103	-	0,6,6	-	-	-		
89	OHX	2	2093	-	0,6,6	-	-	-		
89	OHX	6	2047	-	0,6,6	-	-	-		
89	OHX	5	4093	-	0,6,6	-	-	-		
89	OHX	5	3982	-	0,6,6	-	-	-		
89	OHX	5	4135	88	0,6,6	-	-	-		
89	OHX	5	4243	-	0,6,6	-	-	-		
89	OHX	1	4044	-	0,6,6	-	-	-		
89	OHX	1	3922	88	0,6,6	-	-	-		
89	OHX	1	4215	-	0,6,6	-	-	-		
89	OHX	2	2085	-	0,6,6	-	-	-		
89	OHX	1	4214	-	0,6,6	-	-	-		
89	OHX	1	4021	-	0,6,6	-	-	-		
89	OHX	1	4224	88	0,6,6	-	-	-		
89	OHX	1	3992	88	0,6,6	-	-	-		
89	OHX	6	2090	88	0,6,6	-	-	-		
89	OHX	3	219	-	0,6,6	-	-	-		
89	OHX	6	2199	-	0,6,6	-	-	-		
89	OHX	5	3929	-	0,6,6	-	-	-		
89	OHX	2	2157	-	0,6,6	-	-	-		
89	OHX	5	3954	-	0,6,6	-	-	-		
89	OHX	6	2088	88	0,6,6	-	-	-		
89	OHX	2	2153	-	0,6,6	-	-	-		
89	OHX	5	3960	88	0,6,6	-	-	-		
89	OHX	2	2024	-	0,6,6	-	-	-		
89	OHX	5	4075	-	0,6,6	-	-	-		
89	OHX	5	4089	-	0,6,6	-	-	-		
89	OHX	1	4182	-	0,6,6	-	-	-		
89	OHX	5	4058	-	0,6,6	-	-	-		
89	OHX	2	2073	-	0,6,6	-	-	-		
89	OHX	6	2081	-	0,6,6	-	-	-		
89	OHX	6	2153	88	0,6,6	-	-	-		
89	OHX	6	2156	-	0,6,6	-	-	-		
89	OHX	5	3912	-	0,6,6	-	-	-		
89	OHX	1	4213	-	0,6,6	-	-	-		
89	OHX	5	3944	-	0,6,6	-	-	-		
89	OHX	5	4100	-	0,6,6	-	-	-		
89	OHX	6	2165	-	0,6,6	-	-	-		
89	OHX	8	224	-	0,6,6	-	-	-		
89	OHX	1	4080	-	0,6,6	-	-	-		
89	OHX	5	4052	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	4191	-	0,6,6	-	-	-		
89	OHX	1	4051	-	0,6,6	-	-	-		
89	OHX	1	3988	-	0,6,6	-	-	-		
89	OHX	1	4166	-	0,6,6	-	-	-		
89	OHX	5	4076	-	0,6,6	-	-	-		
89	OHX	5	4131	-	0,6,6	-	-	-		
89	OHX	5	3978	-	0,6,6	-	-	-		
89	OHX	1	3951	-	0,6,6	-	-	-		
89	OHX	6	2066	88	0,6,6	-	-	-		
89	OHX	2	2178	-	0,6,6	-	-	-		
89	OHX	5	4042	-	0,6,6	-	-	-		
89	OHX	c8	202	-	0,6,6	-	-	-		
89	OHX	5	3948	-	0,6,6	-	-	-		
89	OHX	1	3986	88	0,6,6	-	-	-		
89	OHX	5	4143	-	0,6,6	-	-	-		
89	OHX	1	4144	-	0,6,6	-	-	-		
89	OHX	6	2180	-	0,6,6	-	-	-		
89	OHX	2	2029	-	0,6,6	-	-	-		
89	OHX	5	4014	-	0,6,6	-	-	-		
89	OHX	1	4099	-	0,6,6	-	-	-		
89	OHX	1	4148	-	0,6,6	-	-	-		
89	OHX	4	222	-	0,6,6	-	-	-		
89	OHX	5	3905	-	0,6,6	-	-	-		
89	OHX	6	2118	-	0,6,6	-	-	-		
89	OHX	2	2097	-	0,6,6	-	-	-		
89	OHX	6	2109	-	0,6,6	-	-	-		
89	OHX	5	4247	-	0,6,6	-	-	-		
89	OHX	3	223	-	0,6,6	-	-	-		
89	OHX	6	2048	-	0,6,6	-	-	-		
89	OHX	c5	201	-	0,6,6	-	-	-		
89	OHX	6	2108	-	0,6,6	-	-	-		
89	OHX	5	3962	88	0,6,6	-	-	-		
89	OHX	2	2043	88	0,6,6	-	-	-		
89	OHX	1	3894	-	0,6,6	-	-	-		
89	OHX	1	3938	-	0,6,6	-	-	-		
89	OHX	5	4192	-	0,6,6	-	-	-		
89	OHX	2	2072	-	0,6,6	-	-	-		
89	OHX	1	4067	-	0,6,6	-	-	-		
89	OHX	2	2175	-	0,6,6	-	-	-		
89	OHX	5	4017	-	0,6,6	-	-	-		
89	OHX	1	4011	-	0,6,6	-	-	-		
89	OHX	1	4105	-	0,6,6	-	-	-		
89	OHX	5	3956	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4138	88	0,6,6	-	-	-		
89	OHX	2	2050	-	0,6,6	-	-	-		
89	OHX	5	3949	-	0,6,6	-	-	-		
89	OHX	5	3983	-	0,6,6	-	-	-		
89	OHX	6	2186	-	0,6,6	-	-	-		
89	OHX	2	2113	-	0,6,6	-	-	-		
89	OHX	5	4209	-	0,6,6	-	-	-		
89	OHX	6	2104	-	0,6,6	-	-	-		
89	OHX	5	3958	-	0,6,6	-	-	-		
89	OHX	2	2132	-	0,6,6	-	-	-		
89	OHX	1	3959	-	0,6,6	-	-	-		
89	OHX	1	3991	-	0,6,6	-	-	-		
89	OHX	1	3968	-	0,6,6	-	-	-		
89	OHX	1	4029	-	0,6,6	-	-	-		
89	OHX	1	3920	-	0,6,6	-	-	-		
89	OHX	5	3993	-	0,6,6	-	-	-		
89	OHX	5	4204	-	0,6,6	-	-	-		
89	OHX	1	4094	-	0,6,6	-	-	-		
89	OHX	1	4054	-	0,6,6	-	-	-		
89	OHX	5	4205	-	0,6,6	-	-	-		
89	OHX	1	4030	-	0,6,6	-	-	-		
89	OHX	2	2149	-	0,6,6	-	-	-		
89	OHX	M5	305	-	0,6,6	-	-	-		
89	OHX	6	2131	-	0,6,6	-	-	-		
89	OHX	2	2108	-	0,6,6	-	-	-		
89	OHX	1	4133	-	0,6,6	-	-	-		
89	OHX	6	2087	-	0,6,6	-	-	-		
89	OHX	5	3976	-	0,6,6	-	-	-		
89	OHX	1	3890	-	0,6,6	-	-	-		
89	OHX	1	4192	-	0,6,6	-	-	-		
89	OHX	5	3979	-	0,6,6	-	-	-		
89	OHX	7	221	-	0,6,6	-	-	-		
89	OHX	5	4087	-	0,6,6	-	-	-		
89	OHX	1	3984	-	0,6,6	-	-	-		
89	OHX	5	4155	-	0,6,6	-	-	-		
89	OHX	1	4195	88	0,6,6	-	-	-		
89	OHX	5	4156	-	0,6,6	-	-	-		
89	OHX	1	4102	-	0,6,6	-	-	-		
89	OHX	6	2137	-	0,6,6	-	-	-		
89	OHX	1	4131	-	0,6,6	-	-	-		
89	OHX	2	2173	-	0,6,6	-	-	-		
89	OHX	1	3929	-	0,6,6	-	-	-		
89	OHX	5	4111	88	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	3949	-	0,6,6	-	-	-		
89	OHX	1	3943	-	0,6,6	-	-	-		
89	OHX	1	4162	-	0,6,6	-	-	-		
89	OHX	1	3983	-	0,6,6	-	-	-		
89	OHX	1	4055	88	0,6,6	-	-	-		
89	OHX	1	3972	-	0,6,6	-	-	-		
89	OHX	1	4167	-	0,6,6	-	-	-		
89	OHX	1	4089	-	0,6,6	-	-	-		
89	OHX	O3	201	-	0,6,6	-	-	-		
89	OHX	6	2176	-	0,6,6	-	-	-		
89	OHX	5	3913	-	0,6,6	-	-	-		
89	OHX	5	4189	-	0,6,6	-	-	-		
89	OHX	1	3955	88	0,6,6	-	-	-		
89	OHX	2	2045	-	0,6,6	-	-	-		
89	OHX	1	4106	-	0,6,6	-	-	-		
89	OHX	6	2155	-	0,6,6	-	-	-		
89	OHX	1	4163	-	0,6,6	-	-	-		
89	OHX	1	4042	-	0,6,6	-	-	-		
89	OHX	6	2132	-	0,6,6	-	-	-		
89	OHX	5	4197	-	0,6,6	-	-	-		
89	OHX	5	4228	-	0,6,6	-	-	-		
89	OHX	5	3925	-	0,6,6	-	-	-		
89	OHX	1	4100	-	0,6,6	-	-	-		
89	OHX	2	2047	-	0,6,6	-	-	-		
89	OHX	1	4031	-	0,6,6	-	-	-		
89	OHX	1	3891	-	0,6,6	-	-	-		
89	OHX	6	2179	-	0,6,6	-	-	-		
89	OHX	1	4124	-	0,6,6	-	-	-		
89	OHX	5	4011	88	0,6,6	-	-	-		
89	OHX	7	217	-	0,6,6	-	-	-		
89	OHX	2	2142	-	0,6,6	-	-	-		
89	OHX	1	3898	-	0,6,6	-	-	-		
89	OHX	3	221	-	0,6,6	-	-	-		
89	OHX	2	2094	-	0,6,6	-	-	-		
89	OHX	2	2137	-	0,6,6	-	-	-		
89	OHX	1	3914	88	0,6,6	-	-	-		
89	OHX	1	4202	-	0,6,6	-	-	-		
89	OHX	2	2110	-	0,6,6	-	-	-		
89	OHX	1	3889	-	0,6,6	-	-	-		
89	OHX	5	3930	88	0,6,6	-	-	-		
89	OHX	5	3966	-	0,6,6	-	-	-		
89	OHX	5	4176	88	0,6,6	-	-	-		
89	OHX	2	2116	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4111	-	0,6,6	-	-	-		
89	OHX	5	3994	-	0,6,6	-	-	-		
89	OHX	1	4206	-	0,6,6	-	-	-		
89	OHX	6	2145	-	0,6,6	-	-	-		
89	OHX	4	223	-	0,6,6	-	-	-		
89	OHX	1	3905	-	0,6,6	-	-	-		
89	OHX	5	4227	88	0,6,6	-	-	-		
89	OHX	2	2032	-	0,6,6	-	-	-		
89	OHX	5	4051	88	0,6,6	-	-	-		
89	OHX	5	3937	88	0,6,6	-	-	-		
89	OHX	6	2154	-	0,6,6	-	-	-		
89	OHX	5	4134	-	0,6,6	-	-	-		
89	OHX	2	2143	88	0,6,6	-	-	-		
89	OHX	6	2064	-	0,6,6	-	-	-		
89	OHX	1	4126	-	0,6,6	-	-	-		
89	OHX	1	4059	-	0,6,6	-	-	-		
89	OHX	6	2059	-	0,6,6	-	-	-		
89	OHX	n3	204	-	0,6,6	-	-	-		
89	OHX	1	4207	-	0,6,6	-	-	-		
89	OHX	5	4053	-	0,6,6	-	-	-		
89	OHX	2	2114	-	0,6,6	-	-	-		
89	OHX	n3	203	-	0,6,6	-	-	-		
89	OHX	l3	405	-	0,6,6	-	-	-		
89	OHX	5	4257	-	0,6,6	-	-	-		
89	OHX	2	2042	-	0,6,6	-	-	-		
89	OHX	6	2115	-	0,6,6	-	-	-		
89	OHX	1	3987	-	0,6,6	-	-	-		
89	OHX	6	2078	-	0,6,6	-	-	-		
89	OHX	1	4164	-	0,6,6	-	-	-		
89	OHX	5	3947	-	0,6,6	-	-	-		
89	OHX	14	404	-	0,6,6	-	-	-		
89	OHX	1	4155	-	0,6,6	-	-	-		
89	OHX	1	3940	-	0,6,6	-	-	-		
89	OHX	1	3953	-	0,6,6	-	-	-		
89	OHX	1	4122	-	0,6,6	-	-	-		
89	OHX	5	4083	-	0,6,6	-	-	-		
89	OHX	5	4123	-	0,6,6	-	-	-		
89	OHX	1	3960	-	0,6,6	-	-	-		
89	OHX	5	3906	-	0,6,6	-	-	-		
89	OHX	5	4079	-	0,6,6	-	-	-		
89	OHX	2	2152	-	0,6,6	-	-	-		
89	OHX	1	4110	-	0,6,6	-	-	-		
89	OHX	5	4031	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	M7	206	88	0,6,6	-	-	-		
89	OHX	1	4002	-	0,6,6	-	-	-		
89	OHX	8	230	-	0,6,6	-	-	-		
89	OHX	2	2123	-	0,6,6	-	-	-		
89	OHX	6	2178	-	0,6,6	-	-	-		
89	OHX	5	4148	-	0,6,6	-	-	-		
89	OHX	1	4046	-	0,6,6	-	-	-		
89	OHX	2	2119	-	0,6,6	-	-	-		
89	OHX	1	3945	-	0,6,6	-	-	-		
89	OHX	6	2105	1	0,6,6	-	-	-		
89	OHX	1	4087	-	0,6,6	-	-	-		
89	OHX	C8	202	-	0,6,6	-	-	-		
89	OHX	2	2061	-	0,6,6	-	-	-		
89	OHX	4	226	-	0,6,6	-	-	-		
89	OHX	5	4057	-	0,6,6	-	-	-		
89	OHX	2	2070	-	0,6,6	-	-	-		
89	OHX	2	2060	-	0,6,6	-	-	-		
89	OHX	2	2067	-	0,6,6	-	-	-		
89	OHX	5	4151	88	0,6,6	-	-	-		
89	OHX	1	3964	-	0,6,6	-	-	-		
89	OHX	6	2068	-	0,6,6	-	-	-		
89	OHX	4	233	-	0,6,6	-	-	-		
89	OHX	2	2121	-	0,6,6	-	-	-		
89	OHX	1	4201	88	0,6,6	-	-	-		
89	OHX	2	2038	-	0,6,6	-	-	-		
89	OHX	2	2159	-	0,6,6	-	-	-		
89	OHX	1	4104	-	0,6,6	-	-	-		
89	OHX	6	2139	-	0,6,6	-	-	-		
89	OHX	5	3969	-	0,6,6	-	-	-		
89	OHX	3	225	-	0,6,6	-	-	-		
89	OHX	5	4074	-	0,6,6	-	-	-		
89	OHX	1	4139	-	0,6,6	-	-	-		
89	OHX	l5	305	-	0,6,6	-	-	-		
89	OHX	1	4204	-	0,6,6	-	-	-		
89	OHX	1	4212	-	0,6,6	-	-	-		
89	OHX	6	2106	-	0,6,6	-	-	-		
89	OHX	1	4088	-	0,6,6	-	-	-		
89	OHX	1	4095	-	0,6,6	-	-	-		
89	OHX	5	3981	-	0,6,6	-	-	-		
89	OHX	6	2181	-	0,6,6	-	-	-		
89	OHX	5	4102	-	0,6,6	-	-	-		
89	OHX	1	3946	-	0,6,6	-	-	-		
89	OHX	2	2169	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	6	2107	-	0,6,6	-	-	-		
89	OHX	d9	102	-	0,6,6	-	-	-		
89	OHX	5	4071	-	0,6,6	-	-	-		
89	OHX	1	4075	-	0,6,6	-	-	-		
89	OHX	2	2118	-	0,6,6	-	-	-		
89	OHX	2	2066	-	0,6,6	-	-	-		
89	OHX	1	4190	-	0,6,6	-	-	-		
89	OHX	M7	207	-	0,6,6	-	-	-		
89	OHX	3	215	-	0,6,6	-	-	-		
89	OHX	2	2155	-	0,6,6	-	-	-		
89	OHX	6	2083	-	0,6,6	-	-	-		
89	OHX	5	3927	-	0,6,6	-	-	-		
89	OHX	1	4068	-	0,6,6	-	-	-		
89	OHX	1	3907	-	0,6,6	-	-	-		
89	OHX	1	3877	-	0,6,6	-	-	-		
89	OHX	1	3932	88	0,6,6	-	-	-		
89	OHX	1	4034	-	0,6,6	-	-	-		
89	OHX	1	4187	-	0,6,6	-	-	-		
89	OHX	5	4009	-	0,6,6	-	-	-		
89	OHX	5	3940	-	0,6,6	-	-	-		
89	OHX	5	4244	-	0,6,6	-	-	-		
89	OHX	2	2035	-	0,6,6	-	-	-		
89	OHX	1	3901	-	0,6,6	-	-	-		
89	OHX	5	4122	-	0,6,6	-	-	-		
89	OHX	2	2030	-	0,6,6	-	-	-		
89	OHX	1	4047	-	0,6,6	-	-	-		
89	OHX	1	4219	-	0,6,6	-	-	-		
89	OHX	m0	302	-	0,6,6	-	-	-		
89	OHX	2	2120	-	0,6,6	-	-	-		
89	OHX	1	3919	-	0,6,6	-	-	-		
89	OHX	1	4189	-	0,6,6	-	-	-		
89	OHX	1	4191	-	0,6,6	-	-	-		
89	OHX	C3	201	-	0,6,6	-	-	-		
89	OHX	5	4211	-	0,6,6	-	-	-		
89	OHX	5	3914	-	0,6,6	-	-	-		
89	OHX	5	4115	-	0,6,6	-	-	-		
89	OHX	1	3934	88	0,6,6	-	-	-		
89	OHX	6	2190	-	0,6,6	-	-	-		
89	OHX	m0	301	-	0,6,6	-	-	-		
89	OHX	2	2027	-	0,6,6	-	-	-		
89	OHX	5	3961	88	0,6,6	-	-	-		
89	OHX	2	2088	-	0,6,6	-	-	-		
89	OHX	5	3911	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	8	223	-	0,6,6	-	-	-		
89	OHX	5	4208	-	0,6,6	-	-	-		
89	OHX	2	2104	-	0,6,6	-	-	-		
89	OHX	2	2131	-	0,6,6	-	-	-		
89	OHX	2	2026	-	0,6,6	-	-	-		
89	OHX	5	3999	-	0,6,6	-	-	-		
89	OHX	5	4082	-	0,6,6	-	-	-		
89	OHX	5	4062	-	0,6,6	-	-	-		
89	OHX	5	4157	-	0,6,6	-	-	-		
89	OHX	1	3910	-	0,6,6	-	-	-		
89	OHX	1	4173	-	0,6,6	-	-	-		
89	OHX	5	4016	88	0,6,6	-	-	-		
89	OHX	1	3935	-	0,6,6	-	-	-		
89	OHX	5	4066	-	0,6,6	-	-	-		
89	OHX	5	4146	-	0,6,6	-	-	-		
89	OHX	7	223	-	0,6,6	-	-	-		
89	OHX	2	2146	-	0,6,6	-	-	-		
89	OHX	1	4196	-	0,6,6	-	-	-		
89	OHX	2	2122	-	0,6,6	-	-	-		
89	OHX	1	4009	-	0,6,6	-	-	-		
89	OHX	5	4065	-	0,6,6	-	-	-		
89	OHX	5	4161	-	0,6,6	-	-	-		
89	OHX	1	4056	-	0,6,6	-	-	-		
89	OHX	6	2146	-	0,6,6	-	-	-		
89	OHX	5	3987	-	0,6,6	-	-	-		
89	OHX	2	2176	-	0,6,6	-	-	-		
89	OHX	2	2170	-	0,6,6	-	-	-		
89	OHX	1	3900	88	0,6,6	-	-	-		
89	OHX	6	2052	-	0,6,6	-	-	-		
89	OHX	1	4014	-	0,6,6	-	-	-		
89	OHX	1	4218	-	0,6,6	-	-	-		
89	OHX	2	2100	-	0,6,6	-	-	-		
89	OHX	6	2069	-	0,6,6	-	-	-		
89	OHX	6	2103	-	0,6,6	-	-	-		
89	OHX	2	2156	-	0,6,6	-	-	-		
89	OHX	6	2117	-	0,6,6	-	-	-		
89	OHX	5	4145	-	0,6,6	-	-	-		
89	OHX	5	3968	-	0,6,6	-	-	-		
89	OHX	5	4183	-	0,6,6	-	-	-		
89	OHX	5	4246	-	0,6,6	-	-	-		
89	OHX	5	4128	-	0,6,6	-	-	-		
89	OHX	2	2040	-	0,6,6	-	-	-		
89	OHX	6	2135	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	3922	-	0,6,6	-	-	-		
89	OHX	1	3937	-	0,6,6	-	-	-		
89	OHX	5	4214	-	0,6,6	-	-	-		
89	OHX	5	4021	-	0,6,6	-	-	-		
89	OHX	5	4180	88	0,6,6	-	-	-		
89	OHX	4	221	-	0,6,6	-	-	-		
89	OHX	1	4057	-	0,6,6	-	-	-		
89	OHX	1	4141	88	0,6,6	-	-	-		
89	OHX	6	2096	-	0,6,6	-	-	-		
89	OHX	1	3880	-	0,6,6	-	-	-		
89	OHX	5	4034	-	0,6,6	-	-	-		
89	OHX	1	4130	88	0,6,6	-	-	-		
89	OHX	2	2109	-	0,6,6	-	-	-		
89	OHX	1	4151	-	0,6,6	-	-	-		
89	OHX	s1	302	88	0,6,6	-	-	-		
89	OHX	2	2048	-	0,6,6	-	-	-		
89	OHX	1	4171	-	0,6,6	-	-	-		
89	OHX	5	3902	-	0,6,6	-	-	-		
89	OHX	4	231	-	0,6,6	-	-	-		
89	OHX	6	2089	-	0,6,6	-	-	-		
89	OHX	6	2054	-	0,6,6	-	-	-		
89	OHX	1	4184	-	0,6,6	-	-	-		
89	OHX	5	4046	-	0,6,6	-	-	-		
89	OHX	5	4250	-	0,6,6	-	-	-		
89	OHX	d4	202	-	0,6,6	-	-	-		
89	OHX	8	229	-	0,6,6	-	-	-		
89	OHX	1	4093	-	0,6,6	-	-	-		
89	OHX	1	4146	-	0,6,6	-	-	-		
89	OHX	5	3933	-	0,6,6	-	-	-		
89	OHX	5	4033	-	0,6,6	-	-	-		
89	OHX	5	4070	-	0,6,6	-	-	-		
89	OHX	6	2051	-	0,6,6	-	-	-		
89	OHX	1	3918	88	0,6,6	-	-	-		
89	OHX	1	3926	-	0,6,6	-	-	-		
89	OHX	5	4256	88	0,6,6	-	-	-		
89	OHX	5	3975	-	0,6,6	-	-	-		
89	OHX	1	4101	-	0,6,6	-	-	-		
89	OHX	D9	102	-	0,6,6	-	-	-		
89	OHX	5	4103	-	0,6,6	-	-	-		
89	OHX	5	4064	-	0,6,6	-	-	-		
89	OHX	5	4169	-	0,6,6	-	-	-		
89	OHX	2	2057	-	0,6,6	-	-	-		
89	OHX	2	2112	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	4129	-	0,6,6	-	-	-		
89	OHX	1	4185	-	0,6,6	-	-	-		
89	OHX	6	2133	-	0,6,6	-	-	-		
89	OHX	6	2144	-	0,6,6	-	-	-		
89	OHX	6	2057	-	0,6,6	-	-	-		
89	OHX	2	2145	-	0,6,6	-	-	-		
89	OHX	5	4137	-	0,6,6	-	-	-		
89	OHX	5	3909	-	0,6,6	-	-	-		
89	OHX	6	2119	88	0,6,6	-	-	-		
89	OHX	5	3952	-	0,6,6	-	-	-		
89	OHX	5	3990	-	0,6,6	-	-	-		
89	OHX	6	2168	-	0,6,6	-	-	-		
89	OHX	5	4020	-	0,6,6	-	-	-		
89	OHX	1	3928	-	0,6,6	-	-	-		
89	OHX	2	2028	88	0,6,6	-	-	-		
89	OHX	1	4097	-	0,6,6	-	-	-		
89	OHX	1	3883	-	0,6,6	-	-	-		
89	OHX	5	4054	88	0,6,6	-	-	-		
89	OHX	1	3963	-	0,6,6	-	-	-		
89	OHX	6	2174	-	0,6,6	-	-	-		
89	OHX	5	3920	88	0,6,6	-	-	-		
89	OHX	1	4193	-	0,6,6	-	-	-		
89	OHX	1	4037	-	0,6,6	-	-	-		
89	OHX	6	2183	-	0,6,6	-	-	-		
89	OHX	5	3901	-	0,6,6	-	-	-		
89	OHX	1	3976	-	0,6,6	-	-	-		
89	OHX	6	2100	-	0,6,6	-	-	-		
89	OHX	5	3931	-	0,6,6	-	-	-		
89	OHX	1	4220	-	0,6,6	-	-	-		
89	OHX	6	2055	-	0,6,6	-	-	-		
89	OHX	6	2192	88	0,6,6	-	-	-		
89	OHX	5	3919	-	0,6,6	-	-	-		
89	OHX	5	4195	-	0,6,6	-	-	-		
89	OHX	6	2094	-	0,6,6	-	-	-		
89	OHX	2	2179	-	0,6,6	-	-	-		
89	OHX	5	4178	-	0,6,6	-	-	-		
89	OHX	1	4136	88	0,6,6	-	-	-		
89	OHX	5	3970	-	0,6,6	-	-	-		
89	OHX	5	4028	88	0,6,6	-	-	-		
89	OHX	5	4245	-	0,6,6	-	-	-		
89	OHX	1	4177	-	0,6,6	-	-	-		
89	OHX	5	3939	-	0,6,6	-	-	-		
89	OHX	1	4012	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	2	2101	-	0,6,6	-	-	-		
89	OHX	5	4078	-	0,6,6	-	-	-		
89	OHX	7	226	-	0,6,6	-	-	-		
89	OHX	5	3996	88	0,6,6	-	-	-		
89	OHX	1	4128	-	0,6,6	-	-	-		
89	OHX	6	2162	-	0,6,6	-	-	-		
89	OHX	8	222	-	0,6,6	-	-	-		
89	OHX	6	2125	-	0,6,6	-	-	-		
89	OHX	6	2170	-	0,6,6	-	-	-		
89	OHX	6	2046	-	0,6,6	-	-	-		
89	OHX	1	4226	-	0,6,6	-	-	-		
89	OHX	1	3947	-	0,6,6	-	-	-		
89	OHX	1	3978	-	0,6,6	-	-	-		
89	OHX	5	3992	-	0,6,6	-	-	-		
89	OHX	1	4077	-	0,6,6	-	-	-		
89	OHX	6	2184	-	0,6,6	-	-	-		
89	OHX	5	4210	-	0,6,6	-	-	-		
89	OHX	1	4084	88	0,6,6	-	-	-		
89	OHX	5	4002	-	0,6,6	-	-	-		
89	OHX	5	4116	88	0,6,6	-	-	-		
89	OHX	2	2064	88	0,6,6	-	-	-		
89	OHX	1	3904	-	0,6,6	-	-	-		
89	OHX	6	2063	-	0,6,6	-	-	-		
89	OHX	1	3903	88	0,6,6	-	-	-		
89	OHX	M0	303	-	0,6,6	-	-	-		
89	OHX	2	2059	-	0,6,6	-	-	-		
89	OHX	2	2133	88	0,6,6	-	-	-		
89	OHX	5	3991	88	0,6,6	-	-	-		
89	OHX	5	4207	-	0,6,6	-	-	-		
89	OHX	1	3970	-	0,6,6	-	-	-		
89	OHX	1	4137	-	0,6,6	-	-	-		
89	OHX	1	4066	88	0,6,6	-	-	-		
89	OHX	5	4097	-	0,6,6	-	-	-		
89	OHX	3	217	88	0,6,6	-	-	-		
89	OHX	2	2115	-	0,6,6	-	-	-		
89	OHX	1	4085	88	0,6,6	-	-	-		
89	OHX	2	2078	-	0,6,6	-	-	-		
89	OHX	2	2076	-	0,6,6	-	-	-		
89	OHX	1	4221	-	0,6,6	-	-	-		
89	OHX	8	218	-	0,6,6	-	-	-		
89	OHX	8	225	-	0,6,6	-	-	-		
89	OHX	6	2056	-	0,6,6	-	-	-		
89	OHX	5	4037	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	5	4202	-	0,6,6	-	-	-		
89	OHX	4	225	88	0,6,6	-	-	-		
89	OHX	5	4026	88	0,6,6	-	-	-		
89	OHX	1	4076	-	0,6,6	-	-	-		
89	OHX	1	3908	-	0,6,6	-	-	-		
89	OHX	1	4200	-	0,6,6	-	-	-		
89	OHX	2	2098	-	0,6,6	-	-	-		
89	OHX	sR	401	-	0,6,6	-	-	-		
89	OHX	1	4125	88	0,6,6	-	-	-		
89	OHX	5	3965	-	0,6,6	-	-	-		
89	OHX	1	4149	-	0,6,6	-	-	-		
89	OHX	5	4095	-	0,6,6	-	-	-		
89	OHX	5	4035	-	0,6,6	-	-	-		
89	OHX	1	3952	-	0,6,6	-	-	-		
89	OHX	1	3990	-	0,6,6	-	-	-		
89	OHX	M9	203	-	0,6,6	-	-	-		
89	OHX	4	227	-	0,6,6	-	-	-		
89	OHX	6	2126	-	0,6,6	-	-	-		
89	OHX	5	3926	-	0,6,6	-	-	-		
89	OHX	5	3946	-	0,6,6	-	-	-		
89	OHX	2	2105	-	0,6,6	-	-	-		
89	OHX	6	2122	-	0,6,6	-	-	-		
89	OHX	5	4159	-	0,6,6	-	-	-		
89	OHX	5	4225	-	0,6,6	-	-	-		
89	OHX	1	3973	-	0,6,6	-	-	-		
89	OHX	2	2140	-	0,6,6	-	-	-		
89	OHX	m1	202	-	0,6,6	-	-	-		
89	OHX	6	2099	-	0,6,6	-	-	-		
89	OHX	1	4091	-	0,6,6	-	-	-		
89	OHX	2	2138	-	0,6,6	-	-	-		
89	OHX	5	4173	-	0,6,6	-	-	-		
89	OHX	1	4033	-	0,6,6	-	-	-		
89	OHX	5	4008	-	0,6,6	-	-	-		
89	OHX	5	4248	-	0,6,6	-	-	-		
89	OHX	5	3943	88	0,6,6	-	-	-		
89	OHX	5	3945	-	0,6,6	-	-	-		
89	OHX	2	2139	-	0,6,6	-	-	-		
89	OHX	5	3959	-	0,6,6	-	-	-		
89	OHX	2	2168	-	0,6,6	-	-	-		
89	OHX	1	4156	-	0,6,6	-	-	-		
89	OHX	2	2087	-	0,6,6	-	-	-		
89	OHX	5	4041	-	0,6,6	-	-	-		
89	OHX	5	4110	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	1	4026	-	0,6,6	-	-	-		
89	OHX	8	226	-	0,6,6	-	-	-		
89	OHX	5	3904	-	0,6,6	-	-	-		
89	OHX	2	2106	-	0,6,6	-	-	-		
89	OHX	5	4043	-	0,6,6	-	-	-		
89	OHX	6	2049	-	0,6,6	-	-	-		
89	OHX	2	2080	-	0,6,6	-	-	-		
89	OHX	5	4109	-	0,6,6	-	-	-		
89	OHX	2	2107	-	0,6,6	-	-	-		
89	OHX	1	3906	-	0,6,6	-	-	-		
89	OHX	5	4138	-	0,6,6	-	-	-		
89	OHX	1	3977	-	0,6,6	-	-	-		
89	OHX	5	4223	-	0,6,6	-	-	-		
89	OHX	6	2086	-	0,6,6	-	-	-		
89	OHX	5	4004	-	0,6,6	-	-	-		
89	OHX	5	4030	-	0,6,6	-	-	-		
89	OHX	1	4225	88	0,6,6	-	-	-		
89	OHX	1	4165	-	0,6,6	-	-	-		
89	OHX	1	4186	-	0,6,6	-	-	-		
89	OHX	1	4036	-	0,6,6	-	-	-		
89	OHX	1	3881	-	0,6,6	-	-	-		
89	OHX	1	3998	-	0,6,6	-	-	-		
89	OHX	14	403	-	0,6,6	-	-	-		
89	OHX	5	4003	-	0,6,6	-	-	-		
89	OHX	6	2058	-	0,6,6	-	-	-		
89	OHX	5	4206	-	0,6,6	-	-	-		
89	OHX	6	2202	-	0,6,6	-	-	-		
89	OHX	7	220	-	0,6,6	-	-	-		
89	OHX	m5	305	-	0,6,6	-	-	-		
89	OHX	5	4196	88	0,6,6	-	-	-		
89	OHX	2	2096	-	0,6,6	-	-	-		
89	OHX	5	4040	-	0,6,6	-	-	-		
89	OHX	1	4103	-	0,6,6	-	-	-		
89	OHX	5	4252	-	0,6,6	-	-	-		
89	OHX	1	4210	-	0,6,6	-	-	-		
89	OHX	1	4072	-	0,6,6	-	-	-		
89	OHX	5	3924	-	0,6,6	-	-	-		
89	OHX	6	2065	-	0,6,6	-	-	-		
89	OHX	5	4019	-	0,6,6	-	-	-		
89	OHX	6	2198	-	0,6,6	-	-	-		
89	OHX	6	2085	-	0,6,6	-	-	-		
89	OHX	1	4174	-	0,6,6	-	-	-		
89	OHX	1	4001	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
89	OHX	2	2102	-	0,6,6	-	-	-		
89	OHX	2	2054	-	0,6,6	-	-	-		
89	OHX	1	3999	88	0,6,6	-	-	-		
89	OHX	6	2050	-	0,6,6	-	-	-		
89	OHX	5	4050	-	0,6,6	-	-	-		
89	OHX	6	2185	-	0,6,6	-	-	-		
89	OHX	5	3995	88	0,6,6	-	-	-		
89	OHX	5	4251	88	0,6,6	-	-	-		
89	OHX	6	2188	-	0,6,6	-	-	-		
89	OHX	6	2091	-	0,6,6	-	-	-		
89	OHX	1	3994	-	0,6,6	-	-	-		
89	OHX	1	3888	-	0,6,6	-	-	-		
89	OHX	2	2144	-	0,6,6	-	-	-		
89	OHX	1	4025	-	0,6,6	-	-	-		
89	OHX	1	4035	-	0,6,6	-	-	-		
89	OHX	5	4013	-	0,6,6	-	-	-		
89	OHX	5	4096	-	0,6,6	-	-	-		
89	OHX	5	4124	-	0,6,6	-	-	-		
89	OHX	6	2124	-	0,6,6	-	-	-		
89	OHX	1	4152	-	0,6,6	-	-	-		
89	OHX	O7	103	88	0,6,6	-	-	-		
89	OHX	6	2067	88	0,6,6	-	-	-		
89	OHX	c3	201	-	0,6,6	-	-	-		
89	OHX	5	3972	-	0,6,6	-	-	-		
89	OHX	6	2163	-	0,6,6	-	-	-		
89	OHX	5	4084	-	0,6,6	-	-	-		
89	OHX	1	3941	-	0,6,6	-	-	-		
89	OHX	5	4203	-	0,6,6	-	-	-		
89	OHX	1	3873	-	0,6,6	-	-	-		
89	OHX	O7	104	-	0,6,6	-	-	-		
89	OHX	5	3986	-	0,6,6	-	-	-		

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

375 monomers are involved in 497 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	5	4133	OHX	1	0
89	6	2147	OHX	1	0
89	1	3967	OHX	1	0
89	5	3998	OHX	1	0
89	2	2089	OHX	1	0
89	1	4157	OHX	2	0
89	5	4108	OHX	1	0
89	L4	402	OHX	3	0
89	2	2041	OHX	1	0
89	5	4150	OHX	1	0
89	q2	502	OHX	2	0
89	s8	303	OHX	1	0
89	1	4061	OHX	1	0
89	S8	302	OHX	1	0
89	1	4098	OHX	2	0
89	1	3916	OHX	1	0
89	C5	201	OHX	2	0
89	5	3923	OHX	1	0
89	5	4186	OHX	1	0
89	5	4241	OHX	1	0
89	7	218	OHX	2	0
89	5	4024	OHX	1	0
89	2	2031	OHX	1	0
89	1	4027	OHX	1	0
89	5	3997	OHX	1	0
89	5	4099	OHX	1	0
89	1	4022	OHX	1	0
89	1	3892	OHX	2	0
89	5	4015	OHX	2	0
89	5	4188	OHX	1	0
89	6	2077	OHX	1	0
89	1	4108	OHX	1	0
89	6	2084	OHX	1	0
89	2	2044	OHX	6	0
89	5	4117	OHX	1	0
89	5	4231	OHX	1	0
89	1	3985	OHX	2	0
89	5	4022	OHX	6	0
89	5	4090	OHX	1	0
89	6	2152	OHX	1	0
89	o3	202	OHX	1	0
89	5	4141	OHX	2	0
89	5	3985	OHX	2	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	2	2099	OHX	7	0
89	5	4114	OHX	1	0
89	2	2036	OHX	3	0
89	1	3957	OHX	1	0
89	2	2051	OHX	1	0
89	8	227	OHX	1	0
89	1	4194	OHX	1	0
89	1	4053	OHX	1	0
89	6	2187	OHX	2	0
89	5	4068	OHX	3	0
89	1	3893	OHX	1	0
89	1	4161	OHX	1	0
89	6	2060	OHX	1	0
89	1	4073	OHX	1	0
89	1	4015	OHX	4	0
89	3	220	OHX	1	0
89	5	4185	OHX	1	0
89	5	4005	OHX	1	0
89	5	4105	OHX	2	0
89	1	3887	OHX	2	0
89	2	2034	OHX	1	0
89	6	2098	OHX	3	0
89	c1	202	OHX	1	0
89	1	3942	OHX	3	0
89	5	3900	OHX	1	0
89	5	4253	OHX	1	0
89	6	2150	OHX	2	0
89	1	3956	OHX	1	0
89	1	3969	OHX	1	0
89	1	4109	OHX	1	0
89	5	3984	OHX	1	0
89	5	4221	OHX	6	0
89	5	4193	OHX	2	0
89	6	2112	OHX	1	0
89	2	2111	OHX	2	0
89	5	3955	OHX	1	0
89	1	3915	OHX	1	0
89	5	4162	OHX	1	0
89	1	3924	OHX	1	0
89	5	4232	OHX	1	0
89	5	4233	OHX	1	0
89	6	2073	OHX	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	6	2101	OHX	1	0
89	5	3918	OHX	2	0
89	6	2172	OHX	1	0
89	1	4013	OHX	1	0
89	6	2200	OHX	1	0
89	6	2177	OHX	1	0
89	6	2071	OHX	2	0
89	6	2193	OHX	1	0
89	5	4198	OHX	1	0
89	5	3921	OHX	1	0
89	1	4179	OHX	1	0
89	5	3908	OHX	2	0
89	8	228	OHX	1	0
89	6	2134	OHX	1	0
89	6	2194	OHX	1	0
89	5	4230	OHX	3	0
89	6	2175	OHX	1	0
89	4	229	OHX	2	0
89	5	3941	OHX	1	0
89	2	2082	OHX	1	0
89	1	4060	OHX	2	0
89	1	4170	OHX	6	0
89	5	3917	OHX	1	0
89	1	3979	OHX	1	0
89	1	3895	OHX	1	0
89	2	2130	OHX	1	0
89	7	216	OHX	1	0
89	1	3995	OHX	1	0
89	1	4071	OHX	1	0
89	o7	502	OHX	1	0
89	1	4079	OHX	1	0
89	5	4144	OHX	1	0
89	2	2154	OHX	2	0
89	1	4158	OHX	1	0
89	5	4201	OHX	1	0
89	5	4218	OHX	1	0
89	1	3909	OHX	1	0
89	5	4165	OHX	1	0
89	1	4183	OHX	1	0
89	2	2148	OHX	1	0
89	2	2053	OHX	1	0
89	5	4132	OHX	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	2	2129	OHX	1	0
89	1	3921	OHX	1	0
89	2	2084	OHX	2	0
89	1	4160	OHX	1	0
89	6	2142	OHX	1	0
89	5	4081	OHX	1	0
89	1	3997	OHX	2	0
89	2	2165	OHX	1	0
89	6	2110	OHX	1	0
89	1	3993	OHX	1	0
89	5	4025	OHX	1	0
89	1	4145	OHX	1	0
89	8	220	OHX	1	0
89	1	3950	OHX	1	0
89	7	225	OHX	1	0
89	2	2141	OHX	1	0
89	1	4048	OHX	2	0
89	2	2095	OHX	1	0
89	2	2039	OHX	1	0
89	5	3980	OHX	6	0
89	5	3964	OHX	3	0
89	1	4069	OHX	2	0
89	5	4242	OHX	1	0
89	1	3936	OHX	1	0
89	6	2140	OHX	1	0
89	5	4199	OHX	2	0
89	1	4020	OHX	1	0
89	5	4213	OHX	1	0
89	1	3982	OHX	6	0
89	6	2072	OHX	1	0
89	5	4171	OHX	1	0
89	1	3878	OHX	1	0
89	6	2116	OHX	2	0
89	5	3989	OHX	1	0
89	2	2166	OHX	1	0
89	2	2086	OHX	1	0
89	2	2092	OHX	1	0
89	1	4178	OHX	3	0
89	1	4217	OHX	1	0
89	5	4113	OHX	1	0
89	5	3971	OHX	1	0
89	6	2143	OHX	4	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	5	3974	OHX	1	0
89	2	2074	OHX	2	0
89	1	4005	OHX	1	0
89	1	4112	OHX	1	0
89	L3	406	OHX	1	0
89	5	4238	OHX	3	0
89	6	2120	OHX	1	0
89	8	219	OHX	5	0
89	5	4163	OHX	1	0
89	6	2047	OHX	2	0
89	5	4093	OHX	1	0
89	1	4044	OHX	2	0
89	1	3992	OHX	1	0
89	2	2157	OHX	2	0
89	5	3960	OHX	1	0
89	1	4182	OHX	1	0
89	2	2073	OHX	1	0
89	6	2081	OHX	1	0
89	1	4213	OHX	1	0
89	5	3944	OHX	2	0
89	5	4052	OHX	1	0
89	1	4051	OHX	2	0
89	1	3988	OHX	1	0
89	5	4076	OHX	1	0
89	1	3951	OHX	1	0
89	6	2066	OHX	1	0
89	6	2180	OHX	1	0
89	1	4148	OHX	1	0
89	4	222	OHX	1	0
89	5	3905	OHX	1	0
89	6	2118	OHX	1	0
89	2	2097	OHX	2	0
89	6	2109	OHX	1	0
89	5	4247	OHX	4	0
89	c5	201	OHX	3	0
89	5	3962	OHX	1	0
89	1	3894	OHX	1	0
89	5	3956	OHX	1	0
89	1	4138	OHX	1	0
89	6	2186	OHX	1	0
89	5	3958	OHX	1	0
89	2	2132	OHX	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	1	3968	OHX	3	0
89	5	3993	OHX	2	0
89	5	4204	OHX	7	0
89	2	2149	OHX	1	0
89	M5	305	OHX	1	0
89	1	4133	OHX	1	0
89	1	3890	OHX	2	0
89	5	4155	OHX	1	0
89	1	4195	OHX	3	0
89	1	4131	OHX	1	0
89	1	3943	OHX	1	0
89	1	3983	OHX	1	0
89	1	3972	OHX	1	0
89	5	4189	OHX	1	0
89	2	2045	OHX	1	0
89	6	2155	OHX	1	0
89	6	2132	OHX	1	0
89	5	4197	OHX	1	0
89	1	4100	OHX	1	0
89	2	2047	OHX	1	0
89	1	4031	OHX	2	0
89	1	3891	OHX	2	0
89	1	3898	OHX	1	0
89	2	2110	OHX	1	0
89	1	4111	OHX	1	0
89	6	2145	OHX	1	0
89	4	223	OHX	1	0
89	2	2032	OHX	1	0
89	5	4051	OHX	1	0
89	5	4134	OHX	1	0
89	6	2064	OHX	1	0
89	6	2059	OHX	1	0
89	5	4053	OHX	1	0
89	l3	405	OHX	1	0
89	2	2042	OHX	1	0
89	1	4164	OHX	1	0
89	5	3947	OHX	1	0
89	1	4155	OHX	1	0
89	1	3940	OHX	2	0
89	1	4122	OHX	1	0
89	5	3906	OHX	2	0
89	2	2123	OHX	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	1	4046	OHX	1	0
89	6	2105	OHX	4	0
89	1	4087	OHX	1	0
89	2	2067	OHX	1	0
89	6	2068	OHX	1	0
89	2	2121	OHX	2	0
89	2	2038	OHX	1	0
89	2	2159	OHX	1	0
89	5	4074	OHX	1	0
89	1	4212	OHX	1	0
89	6	2106	OHX	1	0
89	1	4088	OHX	1	0
89	1	4095	OHX	1	0
89	5	3981	OHX	1	0
89	5	4102	OHX	1	0
89	6	2107	OHX	1	0
89	2	2066	OHX	1	0
89	M7	207	OHX	1	0
89	2	2155	OHX	1	0
89	1	3877	OHX	1	0
89	5	4009	OHX	1	0
89	5	3940	OHX	1	0
89	1	3901	OHX	1	0
89	5	4122	OHX	1	0
89	5	3914	OHX	2	0
89	1	3934	OHX	1	0
89	m0	301	OHX	1	0
89	2	2027	OHX	1	0
89	5	3961	OHX	1	0
89	5	4208	OHX	1	0
89	2	2104	OHX	1	0
89	2	2131	OHX	2	0
89	2	2026	OHX	1	0
89	1	3910	OHX	1	0
89	5	4146	OHX	2	0
89	1	4009	OHX	1	0
89	1	4056	OHX	3	0
89	6	2146	OHX	1	0
89	1	3900	OHX	1	0
89	6	2052	OHX	1	0
89	2	2156	OHX	1	0
89	6	2117	OHX	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	1	4057	OHX	3	0
89	1	4141	OHX	1	0
89	6	2096	OHX	1	0
89	1	3880	OHX	1	0
89	s1	302	OHX	1	0
89	2	2048	OHX	1	0
89	5	3902	OHX	1	0
89	4	231	OHX	1	0
89	1	4093	OHX	1	0
89	1	4146	OHX	1	0
89	5	4033	OHX	1	0
89	5	4070	OHX	1	0
89	5	3975	OHX	3	0
89	1	4101	OHX	1	0
89	2	2057	OHX	1	0
89	6	2133	OHX	1	0
89	6	2057	OHX	3	0
89	2	2145	OHX	2	0
89	5	3990	OHX	1	0
89	6	2168	OHX	2	0
89	5	4020	OHX	1	0
89	1	4097	OHX	1	0
89	1	3883	OHX	1	0
89	5	4054	OHX	1	0
89	1	3976	OHX	1	0
89	6	2100	OHX	1	0
89	1	4220	OHX	1	0
89	6	2055	OHX	1	0
89	5	4195	OHX	2	0
89	6	2094	OHX	1	0
89	8	222	OHX	1	0
89	6	2184	OHX	1	0
89	2	2064	OHX	1	0
89	6	2063	OHX	1	0
89	5	3991	OHX	1	0
89	1	3970	OHX	1	0
89	2	2115	OHX	1	0
89	2	2078	OHX	1	0
89	2	2076	OHX	1	0
89	1	4221	OHX	1	0
89	8	218	OHX	1	0
89	5	4202	OHX	9	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
89	4	225	OHX	1	0
89	5	4026	OHX	2	0
89	6	2126	OHX	2	0
89	5	3926	OHX	3	0
89	2	2105	OHX	1	0
89	6	2122	OHX	1	0
89	m1	202	OHX	1	0
89	5	4248	OHX	1	0
89	5	3943	OHX	1	0
89	5	3959	OHX	2	0
89	5	4110	OHX	1	0
89	8	226	OHX	6	0
89	2	2106	OHX	1	0
89	5	4043	OHX	2	0
89	5	4004	OHX	3	0
89	1	4186	OHX	4	0
89	1	3881	OHX	2	0
89	14	403	OHX	1	0
89	5	4003	OHX	1	0
89	6	2202	OHX	1	0
89	7	220	OHX	1	0
89	5	4196	OHX	1	0
89	1	4210	OHX	1	0
89	5	3924	OHX	2	0
89	5	4019	OHX	1	0
89	1	4174	OHX	1	0
89	2	2102	OHX	1	0
89	6	2091	OHX	1	0
89	1	3888	OHX	1	0
89	2	2144	OHX	1	0
89	1	4025	OHX	1	0
89	5	4013	OHX	6	0
89	5	4096	OHX	1	0
89	6	2124	OHX	1	0
89	1	4152	OHX	3	0
89	O7	103	OHX	2	0
89	c3	201	OHX	1	0
89	1	3873	OHX	1	0

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
83	m2	2

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	m2	23:UNK	C	28:UNK	N	3.58
1	m2	52:UNK	C	54:UNK	N	3.06

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	2	1750/1800 (97%)	-0.21	15 (0%) 81 68	41, 78, 197, 349	0
1	6	1795/1800 (99%)	-0.35	19 (1%) 77 63	32, 61, 204, 344	0
2	S0	206/251 (82%)	0.07	6 (2%) 54 38	76, 100, 158, 210	0
2	s0	206/251 (82%)	-0.21	3 (1%) 71 56	61, 79, 124, 217	0
3	S1	214/254 (84%)	0.33	6 (2%) 55 39	67, 120, 182, 222	0
3	s1	216/254 (85%)	-0.36	0 100 100	46, 68, 110, 185	0
4	S2	217/253 (85%)	-0.13	2 (0%) 81 68	54, 83, 116, 182	0
4	s2	217/253 (85%)	-0.18	9 (4%) 42 28	41, 64, 119, 179	0
5	S3	223/239 (93%)	-0.12	2 (0%) 81 68	60, 84, 140, 236	0
5	s3	223/239 (93%)	-0.18	2 (0%) 81 68	45, 85, 143, 177	0
6	S4	260/260 (100%)	-0.20	3 (1%) 76 61	60, 79, 120, 181	0
6	s4	260/260 (100%)	-0.50	0 100 100	44, 62, 100, 176	0
7	S5	206/224 (91%)	0.05	2 (0%) 79 66	65, 104, 159, 238	0
7	s5	206/224 (91%)	-0.18	2 (0%) 79 66	46, 78, 134, 205	0
8	S6	226/236 (95%)	0.02	6 (2%) 56 40	50, 89, 148, 187	0
8	s6	218/236 (92%)	-0.32	0 100 100	41, 70, 119, 221	0
9	S7	184/189 (97%)	-0.01	3 (1%) 70 55	69, 106, 164, 214	0
9	s7	186/189 (98%)	-0.16	1 (0%) 87 78	55, 91, 155, 206	0
10	S8	188/200 (94%)	-0.13	4 (2%) 63 47	41, 62, 120, 183	0
10	s8	188/200 (94%)	-0.27	1 (0%) 87 78	30, 57, 109, 136	0
11	S9	185/196 (94%)	0.15	8 (4%) 40 27	66, 92, 140, 223	0
11	s9	185/196 (94%)	-0.14	2 (1%) 77 63	49, 69, 132, 176	0
12	C0	96/105 (91%)	0.19	1 (1%) 79 66	64, 97, 146, 220	0
13	C1	155/155 (100%)	0.03	9 (5%) 30 20	41, 63, 169, 234	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	c1	146/155 (94%)	-0.20	3 (2%) 63 47	33, 51, 124, 195	0
14	C2	124/142 (87%)	0.37	5 (4%) 43 29	92, 132, 206, 244	0
14	c2	124/142 (87%)	0.83	11 (8%) 17 12	137, 181, 244, 299	0
15	C3	150/150 (100%)	-0.13	2 (1%) 74 60	48, 78, 119, 191	0
15	c3	150/150 (100%)	-0.36	0 100 100	37, 60, 94, 127	0
16	C4	127/136 (93%)	0.63	10 (7%) 20 14	57, 121, 166, 204	0
16	c4	128/136 (94%)	-0.23	1 (0%) 82 70	44, 71, 97, 130	0
17	C5	124/141 (87%)	0.03	5 (4%) 43 29	61, 84, 159, 203	0
17	c5	135/141 (95%)	0.06	4 (2%) 52 37	51, 85, 161, 201	0
18	C6	141/142 (99%)	0.09	2 (1%) 73 58	74, 90, 121, 198	0
18	c6	142/142 (100%)	0.03	3 (2%) 63 47	51, 71, 116, 160	0
19	C7	120/136 (88%)	0.23	3 (2%) 58 42	68, 95, 174, 194	0
19	c7	117/136 (86%)	0.13	4 (3%) 48 34	55, 78, 134, 204	0
20	C8	145/145 (100%)	-0.01	1 (0%) 84 73	59, 93, 139, 156	0
20	c8	145/145 (100%)	-0.23	3 (2%) 63 47	54, 73, 119, 147	0
21	C9	143/143 (100%)	0.21	7 (4%) 36 25	76, 94, 136, 178	0
21	c9	143/143 (100%)	-0.28	0 100 100	44, 66, 109, 166	0
22	D0	107/120 (89%)	0.26	4 (3%) 45 31	66, 92, 178, 217	0
22	d0	110/120 (91%)	0.17	2 (1%) 67 52	49, 86, 182, 238	0
23	D1	87/87 (100%)	-0.20	1 (1%) 77 63	83, 95, 132, 169	0
23	d1	87/87 (100%)	-0.54	0 100 100	56, 69, 102, 179	0
24	D2	129/129 (100%)	-0.29	0 100 100	58, 74, 98, 108	0
24	d2	129/129 (100%)	-0.52	0 100 100	36, 50, 70, 90	0
25	D3	144/144 (100%)	-0.21	2 (1%) 73 58	37, 57, 90, 136	0
25	d3	144/144 (100%)	-0.52	0 100 100	30, 40, 69, 138	0
26	D4	134/134 (100%)	0.06	3 (2%) 62 46	56, 96, 146, 223	0
26	d4	134/134 (100%)	-0.20	2 (1%) 71 56	43, 71, 118, 198	0
27	D5	70/107 (65%)	0.20	3 (4%) 40 27	89, 121, 178, 209	0
27	d5	69/107 (64%)	-0.01	0 100 100	67, 95, 152, 160	0
28	D6	97/97 (100%)	0.27	3 (3%) 51 36	58, 94, 181, 235	0
28	d6	97/97 (100%)	-0.11	0 100 100	41, 65, 113, 159	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
29	D7	81/81 (100%)	0.15	2 (2%) 58 42	71, 95, 164, 222	0
29	d7	81/81 (100%)	-0.22	0 100 100	50, 71, 154, 206	0
30	D8	63/66 (95%)	0.31	3 (4%) 36 25	77, 118, 179, 231	0
30	d8	63/66 (95%)	0.13	0 100 100	69, 100, 144, 166	0
31	D9	53/55 (96%)	0.06	3 (5%) 30 20	64, 71, 100, 146	0
31	d9	53/55 (96%)	0.13	1 (1%) 66 50	51, 64, 97, 161	0
32	E0	60/60 (100%)	0.11	1 (1%) 69 53	53, 93, 160, 200	0
33	E1	71/76 (93%)	0.60	7 (9%) 14 10	89, 119, 186, 212	0
34	SR	318/318 (100%)	-0.05	5 (1%) 70 55	81, 106, 156, 226	0
34	sR	318/318 (100%)	-0.07	2 (0%) 85 76	70, 99, 155, 211	0
35	SM	159/273 (58%)	0.22	5 (3%) 51 36	50, 93, 168, 196	0
35	sM	104/273 (38%)	0.45	11 (10%) 13 9	60, 105, 190, 220	0
36	1	3149/3396 (92%)	-0.59	21 (0%) 84 73	26, 44, 162, 334	0
36	5	3150/3396 (92%)	-0.64	21 (0%) 84 73	24, 42, 142, 343	0
37	3	121/121 (100%)	-0.77	0 100 100	32, 60, 82, 126	0
37	7	121/121 (100%)	-0.79	0 100 100	25, 47, 61, 125	0
38	4	158/158 (100%)	-0.70	1 (0%) 85 76	29, 47, 96, 203	0
38	8	158/158 (100%)	-0.63	1 (0%) 85 76	32, 53, 121, 197	0
39	L2	252/253 (99%)	-0.55	2 (0%) 82 70	29, 42, 71, 140	0
39	l2	252/253 (99%)	-0.42	7 (2%) 55 39	24, 42, 74, 143	0
40	L3	386/386 (100%)	-0.50	1 (0%) 90 84	27, 49, 80, 169	0
40	l3	386/386 (100%)	-0.70	0 100 100	21, 34, 60, 126	0
41	L4	361/361 (100%)	-0.59	2 (0%) 85 76	24, 41, 72, 119	0
41	l4	361/361 (100%)	-0.57	0 100 100	28, 44, 75, 122	0
42	L5	296/296 (100%)	-0.28	2 (0%) 84 73	42, 68, 118, 173	0
42	l5	294/296 (99%)	-0.46	2 (0%) 84 73	30, 49, 96, 193	0
43	L6	156/175 (89%)	-0.67	0 100 100	31, 43, 80, 134	0
43	l6	157/175 (89%)	-0.54	0 100 100	31, 44, 93, 154	0
44	L7	222/243 (91%)	-0.73	0 100 100	21, 34, 79, 196	0
44	l7	223/243 (91%)	-0.70	0 100 100	22, 33, 80, 178	0
45	L8	233/255 (91%)	-0.31	1 (0%) 89 81	42, 63, 133, 225	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	l8	231/255 (90%)	-0.14	5 (2%) 62 46	51, 72, 118, 185	0
46	L9	191/191 (100%)	-0.42	1 (0%) 87 78	42, 58, 87, 163	0
46	l9	191/191 (100%)	-0.73	1 (0%) 87 78	26, 37, 76, 194	0
47	M0	211/220 (95%)	-0.37	9 (4%) 40 27	33, 50, 118, 262	0
47	m0	213/220 (96%)	-0.42	5 (2%) 61 44	34, 52, 102, 205	0
48	M1	169/173 (97%)	-0.25	1 (0%) 85 76	49, 73, 110, 143	0
48	m1	169/173 (97%)	-0.50	1 (0%) 85 76	37, 51, 84, 139	0
49	M3	193/198 (97%)	-0.44	2 (1%) 79 66	26, 48, 115, 223	0
49	m3	194/198 (97%)	-0.38	2 (1%) 79 66	34, 56, 114, 166	0
50	M4	136/137 (99%)	-0.57	1 (0%) 84 73	35, 45, 81, 125	0
50	m4	137/137 (100%)	-0.65	1 (0%) 84 73	26, 38, 75, 153	0
51	M5	203/203 (100%)	-0.51	1 (0%) 87 78	27, 39, 55, 81	0
51	m5	203/203 (100%)	-0.34	1 (0%) 87 78	30, 48, 63, 88	0
52	M6	197/198 (99%)	-0.57	1 (0%) 87 78	26, 37, 67, 132	0
52	m6	197/198 (99%)	-0.73	1 (0%) 87 78	19, 26, 65, 146	0
53	M7	183/183 (100%)	-0.33	6 (3%) 49 34	27, 39, 150, 209	0
53	m7	155/183 (84%)	-0.64	1 (0%) 85 76	21, 34, 61, 156	0
54	M8	185/185 (100%)	-0.60	1 (0%) 87 78	27, 38, 52, 79	0
54	m8	185/185 (100%)	-0.60	0 100 100	31, 42, 60, 112	0
55	M9	188/188 (100%)	-0.17	2 (1%) 77 63	43, 60, 162, 210	0
55	m9	188/188 (100%)	-0.36	1 (0%) 87 78	36, 51, 137, 218	0
56	N0	172/172 (100%)	-0.61	1 (0%) 85 76	33, 43, 75, 150	0
56	n0	172/172 (100%)	-0.71	2 (1%) 76 61	23, 33, 61, 127	0
57	N1	159/159 (100%)	-0.47	0 100 100	29, 42, 93, 164	0
57	n1	159/159 (100%)	-0.49	0 100 100	28, 37, 91, 153	0
58	N2	100/120 (83%)	-0.03	1 (1%) 79 66	62, 91, 143, 184	0
58	n2	98/120 (81%)	-0.03	0 100 100	56, 80, 117, 161	0
59	N3	136/136 (100%)	-0.54	2 (1%) 71 56	29, 46, 84, 164	0
59	n3	136/136 (100%)	-0.64	2 (1%) 71 56	22, 33, 68, 140	0
60	N4	98/155 (63%)	0.26	9 (9%) 16 11	39, 63, 228, 293	0
60	n4	135/155 (87%)	-0.05	3 (2%) 62 46	30, 80, 169, 219	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
61	N5	121/141 (85%)	-0.30	2 (1%) 69 53	39, 56, 88, 144	0
61	n5	120/141 (85%)	-0.33	1 (0%) 82 70	40, 55, 99, 123	0
62	N6	126/126 (100%)	-0.48	0 100 100	33, 51, 82, 112	0
62	n6	126/126 (100%)	-0.32	2 (1%) 70 55	41, 53, 87, 149	0
63	N7	135/135 (100%)	-0.33	0 100 100	55, 74, 112, 152	0
63	n7	135/135 (100%)	0.05	2 (1%) 71 56	61, 85, 131, 164	0
64	N8	148/148 (100%)	-0.58	0 100 100	25, 37, 72, 164	0
64	n8	148/148 (100%)	-0.54	0 100 100	25, 44, 77, 118	0
65	N9	58/58 (100%)	-0.11	1 (1%) 69 53	27, 46, 114, 158	0
65	n9	58/58 (100%)	-0.16	3 (5%) 34 23	29, 50, 103, 130	0
66	O0	97/104 (93%)	-0.32	0 100 100	58, 75, 124, 140	0
66	o0	100/104 (96%)	-0.23	1 (1%) 79 66	52, 72, 129, 173	0
67	O1	109/112 (97%)	-0.24	1 (0%) 81 68	31, 56, 132, 172	0
67	o1	109/112 (97%)	-0.44	1 (0%) 81 68	29, 45, 118, 181	0
68	O2	127/129 (98%)	-0.55	2 (1%) 70 55	20, 34, 64, 138	0
68	o2	127/129 (98%)	-0.49	4 (3%) 51 36	19, 38, 68, 128	0
69	O3	106/106 (100%)	-0.58	1 (0%) 81 68	26, 34, 62, 144	0
69	o3	106/106 (100%)	-0.63	0 100 100	23, 31, 60, 141	0
70	O4	112/120 (93%)	-0.11	0 100 100	41, 56, 119, 212	0
70	o4	112/120 (93%)	-0.20	0 100 100	34, 55, 108, 175	0
71	O5	119/119 (100%)	-0.27	0 100 100	36, 57, 88, 130	0
71	o5	119/119 (100%)	-0.20	2 (1%) 69 53	44, 62, 94, 134	0
72	O6	99/99 (100%)	-0.28	1 (1%) 79 66	44, 57, 102, 178	0
72	o6	99/99 (100%)	-0.22	1 (1%) 79 66	50, 62, 108, 159	0
73	O7	87/87 (100%)	-0.34	3 (3%) 48 34	27, 38, 64, 197	0
73	o7	87/87 (100%)	-0.40	2 (2%) 61 44	29, 38, 76, 175	0
74	O8	77/77 (100%)	-0.17	0 100 100	59, 82, 116, 161	0
74	o8	77/77 (100%)	-0.12	1 (1%) 74 60	59, 80, 129, 144	0
75	O9	50/50 (100%)	-0.16	1 (2%) 64 49	40, 46, 66, 89	0
75	o9	50/50 (100%)	-0.23	1 (2%) 64 49	41, 46, 71, 103	0
76	Q0	52/52 (100%)	-0.28	1 (1%) 66 50	42, 51, 75, 109	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
76	q0	52/52 (100%)	-0.51	1 (1%) 66 50	26, 32, 63, 145	0
77	Q1	25/25 (100%)	-0.12	0 100 100	45, 49, 68, 83	0
77	q1	25/25 (100%)	-0.15	0 100 100	34, 42, 60, 73	0
78	Q2	105/105 (100%)	-0.42	1 (0%) 79 66	28, 45, 83, 170	0
78	q2	105/105 (100%)	-0.50	0 100 100	30, 46, 83, 174	0
79	Q3	91/91 (100%)	-0.49	0 100 100	31, 49, 85, 117	0
79	q3	91/91 (100%)	-0.47	1 (1%) 77 63	24, 47, 79, 97	0
80	c0	96/105 (91%)	0.45	4 (4%) 41 28	68, 108, 166, 240	0
81	e0	62/62 (100%)	-0.09	1 (1%) 70 55	53, 69, 167, 247	0
82	e1	76/76 (100%)	0.96	15 (19%) 3 3	112, 154, 206, 247	0
83	m2	0/160	-	-	-	-
84	p0	143/311 (45%)	0.33	6 (4%) 41 28	62, 102, 177, 269	0
85	p1	0/47	-	-	-	-
86	p2	0/46	-	-	-	-
87	A	3/3 (100%)	0.88	0 100 100	28, 28, 51, 115	0
87	B	3/3 (100%)	0.38	0 100 100	33, 33, 50, 120	0
All	All	33069/35352 (93%)	-0.34	418 (1%) 74 60	19, 60, 147, 349	0

All (418) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
16	C4	15	GLY	6.0
4	s2	90	THR	5.8
39	l2	248	GLY	5.8
4	s2	93	GLY	5.7
4	s2	92	ALA	5.6
76	q0	77	ILE	5.6
47	M0	112	GLN	5.3
11	S9	2	PRO	5.0
52	M6	3	VAL	4.7
28	D6	6	ALA	4.6
73	o7	88	ALA	4.6
32	E0	2	ALA	4.5
53	M7	182	ILE	4.5
53	M7	184	ALA	4.5
84	p0	192	ASP	4.5
22	D0	19	ILE	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
82	e1	78	LYS	4.3
82	e1	77	ALA	4.3
65	N9	25	LYS	4.3
82	e1	79	LYS	4.2
39	l2	247	ARG	4.2
17	c5	4	ALA	4.2
39	l2	252	THR	4.2
13	C1	2	SER	4.1
11	S9	16	LYS	4.1
42	l5	270	LYS	4.1
36	1	1103	A	4.0
13	c1	5	LEU	4.0
47	m0	195	ALA	4.0
25	D3	3	LYS	3.9
36	1	2404	A	3.9
60	N4	86	SER	3.9
82	e1	80	ARG	3.9
18	C6	132	LYS	3.9
10	S8	8	ARG	3.8
7	S5	37	GLN	3.8
1	2	320	U	3.8
46	l9	191	LEU	3.8
33	E1	87	THR	3.8
73	O7	87	SER	3.7
10	S8	21	PHE	3.7
65	n9	22	LYS	3.7
4	s2	89	GLN	3.7
17	C5	53	PRO	3.6
7	s5	37	GLN	3.6
13	c1	144	ALA	3.6
60	N4	84	GLY	3.6
4	s2	96	THR	3.5
36	5	437	G	3.5
82	e1	145	HIS	3.5
18	c6	3	ALA	3.5
26	D4	134	ALA	3.5
73	O7	88	ALA	3.5
11	s9	2	PRO	3.4
56	N0	1	MET	3.4
39	l2	213	GLY	3.4
59	n3	3	GLY	3.4
4	s2	91	ARG	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	5	3275	U	3.4
13	C1	145	ALA	3.4
47	M0	102	MET	3.4
5	s3	145	ALA	3.4
55	m9	183	ALA	3.4
16	C4	124	ASP	3.4
47	M0	220	GLN	3.4
34	sR	121	MET	3.3
1	6	1537	C	3.3
16	C4	41	ARG	3.3
1	6	678	A	3.3
36	5	2971	A	3.3
60	N4	89	LEU	3.3
36	5	2873	U	3.3
19	c7	104	ASN	3.3
29	D7	38	PRO	3.3
16	C4	37	GLU	3.2
39	l2	246	LEU	3.2
4	S2	93	GLY	3.2
31	d9	6	VAL	3.2
36	1	1820	U	3.2
12	C0	89	ALA	3.2
36	5	1582	C	3.2
19	C7	97	ASN	3.2
14	c2	123	VAL	3.2
16	C4	40	ALA	3.2
17	c5	138	PHE	3.2
35	sM	66	ALA	3.2
8	S6	78	THR	3.2
16	C4	39	ILE	3.2
1	6	663	U	3.1
68	O2	26	HIS	3.1
36	5	1192	C	3.1
5	S3	179	GLN	3.1
8	S6	80	ASN	3.1
35	sM	40	PRO	3.1
61	N5	23	ALA	3.1
21	C9	85	SER	3.1
11	S9	5	PRO	3.1
50	m4	9	ALA	3.1
59	n3	4	ASN	3.0
36	1	1349	G	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	S0	32	HIS	3.0
60	N4	83	THR	3.0
60	N4	76	VAL	3.0
35	sM	119	ALA	3.0
53	M7	165	VAL	3.0
68	o2	128	LEU	3.0
80	c0	25	LYS	3.0
3	S1	46	THR	3.0
36	1	1574	C	3.0
1	6	794	U	3.0
21	C9	87	GLY	3.0
36	1	979	U	3.0
62	n6	127	GLU	3.0
1	2	238	U	2.9
1	2	261	U	2.9
63	n7	2	ALA	2.9
22	D0	120	SER	2.9
39	l2	249	SER	2.9
20	c8	17	LEU	2.9
39	l2	253	GLN	2.9
42	l5	4	GLN	2.9
14	c2	126	TRP	2.9
1	2	1657	U	2.8
1	6	1285	U	2.8
36	1	1581	C	2.8
60	N4	75	THR	2.8
45	l8	124	ASP	2.8
49	M3	130	GLY	2.8
10	S8	152	ILE	2.8
36	1	1955	U	2.8
30	D8	17	GLY	2.8
13	C1	156	PHE	2.8
19	c7	103	ASP	2.8
48	M1	11	ASP	2.8
2	s0	204	TYR	2.8
35	sM	50	ASN	2.8
50	M4	9	ALA	2.8
26	d4	127	LYS	2.8
47	m0	103	LEU	2.8
47	m0	221	ALA	2.8
16	C4	29	HIS	2.7
2	S0	204	TYR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
60	N4	88	ASP	2.7
46	L9	191	LEU	2.7
80	c0	84	GLU	2.7
63	n7	128	GLN	2.7
1	6	656	G	2.7
74	o8	2	ALA	2.7
36	5	3154	C	2.7
56	n0	1	MET	2.7
82	e1	147	VAL	2.7
36	5	3276	G	2.7
16	C4	27	PHE	2.7
2	S0	207	PRO	2.7
47	M0	221	ALA	2.7
34	SR	102	ARG	2.7
47	M0	114	GLY	2.7
5	s3	148	LYS	2.7
45	l8	25	PRO	2.7
71	o5	120	ALA	2.7
84	p0	107	ALA	2.7
69	O3	60	ARG	2.7
35	sM	120	GLU	2.6
61	N5	22	LYS	2.6
8	S6	219	ARG	2.6
82	e1	102	VAL	2.6
36	1	2522	G	2.6
19	c7	97	ASN	2.6
53	M7	161	ALA	2.6
84	p0	106	ALA	2.6
14	c2	37	VAL	2.6
16	C4	121	VAL	2.6
47	M0	113	GLN	2.6
2	S0	2	SER	2.6
41	L4	310	THR	2.6
14	C2	117	GLY	2.6
14	c2	21	GLU	2.6
4	S2	90	THR	2.6
80	c0	22	VAL	2.6
1	2	656	G	2.6
40	L3	387	LEU	2.6
1	6	320	U	2.6
11	S9	130	THR	2.6
14	c2	107	ASP	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	c7	96	SER	2.6
8	S6	190	GLN	2.5
9	S7	108	GLN	2.5
3	S1	47	LEU	2.5
20	c8	3	LEU	2.5
47	m0	111	LEU	2.5
82	e1	85	TYR	2.5
21	C9	72	GLY	2.5
1	6	720	G	2.5
68	o2	26	HIS	2.5
35	sM	124	GLN	2.5
18	c6	68	ARG	2.5
34	SR	162	ALA	2.5
68	o2	127	ALA	2.5
36	5	1581	C	2.5
1	6	1708	U	2.5
23	D1	34	ILE	2.5
36	5	2205	U	2.5
1	6	677	G	2.5
36	1	1952	G	2.5
6	S4	4	GLY	2.5
75	o9	36	ARG	2.5
11	S9	181	ALA	2.5
9	S7	8	ILE	2.5
8	S6	154	ARG	2.5
11	S9	171	ARG	2.5
13	C1	152	GLN	2.5
13	C1	70	ILE	2.5
3	S1	25	THR	2.5
51	M5	2	GLY	2.5
1	6	662	U	2.5
31	D9	6	VAL	2.5
9	S7	4	PRO	2.5
54	M8	74	GLU	2.5
8	S6	226	ILE	2.4
58	N2	89	LEU	2.4
27	D5	97	LYS	2.4
45	l8	120	LYS	2.4
17	C5	129	GLY	2.4
11	s9	167	ALA	2.4
16	c4	125	SER	2.4
75	O9	2	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	SM	19	VAL	2.4
36	5	1103	A	2.4
53	M7	166	VAL	2.4
1	2	241	U	2.4
36	1	2772	C	2.4
21	C9	32	GLY	2.4
13	C1	147	ALA	2.4
49	m3	195	ALA	2.4
55	M9	2	ALA	2.4
73	O7	86	ALA	2.4
1	2	234	G	2.4
36	5	237	G	2.4
20	C8	17	LEU	2.4
1	6	1707	A	2.4
36	5	2404	A	2.4
1	2	1370	U	2.4
36	5	2506	U	2.4
28	D6	16	GLY	2.4
47	m0	112	GLN	2.4
30	D8	21	SER	2.4
2	S0	190	ASP	2.4
49	M3	132	ALA	2.4
82	e1	152	ALA	2.4
2	S0	29	VAL	2.4
33	E1	98	VAL	2.4
36	1	1192	C	2.4
36	5	439	C	2.4
35	sM	52	PRO	2.4
6	S4	203	GLY	2.4
27	D5	36	ALA	2.4
47	M0	218	ALA	2.4
47	M0	219	ALA	2.4
14	c2	108	ARG	2.4
36	1	2100	A	2.4
36	5	981	U	2.4
36	5	3279	A	2.4
2	s0	207	PRO	2.3
14	c2	59	LEU	2.3
18	c6	44	LEU	2.3
33	E1	85	TYR	2.3
13	c1	2	SER	2.3
39	L2	13	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
67	O1	79	ARG	2.3
34	SR	118	LYS	2.3
36	1	2205	U	2.3
36	1	1576	G	2.3
14	c2	111	ASN	2.3
1	2	239	C	2.3
7	s5	154	ALA	2.3
68	O2	2	ALA	2.3
79	q3	2	ALA	2.3
82	e1	95	HIS	2.3
34	SR	62	LYS	2.3
31	D9	28	THR	2.3
38	4	82	U	2.3
38	8	81	U	2.3
49	m3	74	GLY	2.3
61	n5	23	ALA	2.3
25	D3	110	LYS	2.3
33	E1	93	HIS	2.3
78	Q2	78	LYS	2.3
14	c2	23	THR	2.3
45	l8	113	ALA	2.3
53	M7	183	ALA	2.3
66	o0	32	LYS	2.3
82	e1	90	LYS	2.3
31	D9	7	TRP	2.3
36	1	2207	A	2.3
13	C1	3	THR	2.3
17	C5	104	GLN	2.3
80	c0	13	GLN	2.3
36	1	1556	C	2.3
11	S9	3	ARG	2.3
30	D8	15	VAL	2.3
68	o2	16	LYS	2.3
73	o7	87	SER	2.3
82	e1	91	ILE	2.2
1	2	137	U	2.2
2	s0	193	GLN	2.2
47	M0	203	LYS	2.2
67	o1	4	LEU	2.2
81	e0	49	LEU	2.2
1	6	651	G	2.2
76	Q0	78	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	sM	158	GLN	2.2
34	SR	81	LEU	2.2
16	C4	97	GLY	2.2
59	N3	3	GLY	2.2
21	C9	36	ILE	2.2
10	s8	187	GLU	2.2
48	m1	174	LYS	2.2
3	S1	60	ALA	2.2
71	o5	3	GLY	2.2
51	m5	147	ARG	2.2
72	o6	36	ARG	2.2
82	e1	146	SER	2.2
84	p0	199	SER	2.2
42	L5	279	LYS	2.2
82	e1	87	THR	2.2
82	e1	125	THR	2.2
1	6	25	C	2.2
52	m6	183	ALA	2.2
28	D6	9	GLY	2.2
1	2	75	U	2.2
1	2	280	U	2.2
10	S8	22	ARG	2.2
11	S9	6	ARG	2.2
17	C5	52	LYS	2.2
17	C5	59	LYS	2.2
1	2	1371	A	2.2
6	S4	24	SER	2.2
14	c2	31	VAL	2.2
4	s2	94	GLN	2.2
22	d0	64	LYS	2.1
35	sM	83	LYS	2.1
45	l8	246	MET	2.1
29	D7	41	LEU	2.1
72	O6	79	SER	2.1
14	C2	104	ALA	2.1
42	L5	151	GLN	2.1
60	n4	121	ALA	2.1
3	S1	140	ILE	2.1
84	p0	184	GLY	2.1
4	s2	97	ARG	2.1
60	N4	92	GLU	2.1
36	5	1562	C	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	C2	88	LEU	2.1
1	6	241	U	2.1
1	6	679	U	2.1
59	N3	2	SER	2.1
3	S1	98	THR	2.1
13	C1	146	ALA	2.1
18	C6	18	ALA	2.1
22	D0	107	THR	2.1
53	m7	156	ALA	2.1
15	C3	151	ASN	2.1
34	sR	136	ILE	2.1
65	n9	27	TYR	2.1
1	6	676	G	2.1
1	6	722	G	2.1
15	C3	10	GLY	2.1
35	SM	152	GLN	2.1
36	1	1577	G	2.1
36	1	3286	G	2.1
65	n9	25	LYS	2.1
55	M9	177	VAL	2.1
36	1	1582	C	2.1
45	L8	256	ALA	2.1
19	C7	96	SER	2.1
33	E1	91	ILE	2.1
60	n4	72	SER	2.1
19	C7	95	ARG	2.1
35	SM	158	GLN	2.1
35	SM	153	ASP	2.1
84	p0	86	PHE	2.1
33	E1	145	HIS	2.1
1	6	579	A	2.1
5	S3	88	ALA	2.1
14	c2	20	ALA	2.1
22	D0	20	ILE	2.1
27	D5	88	ILE	2.1
60	N4	90	ILE	2.1
22	d0	54	GLY	2.1
4	s2	199	GLN	2.1
35	sM	155	LEU	2.1
14	C2	115	VAL	2.1
7	S5	36	ALA	2.0
1	2	913	G	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	d4	67	GLY	2.0
36	5	1025	A	2.0
39	L2	253	GLN	2.0
20	c8	18	LEU	2.0
35	SM	134	ASP	2.0
9	s7	109	VAL	2.0
36	5	252	U	2.0
36	5	1579	C	2.0
21	C9	92	LYS	2.0
33	E1	86	THR	2.0
56	n0	138	GLN	2.0
60	n4	109	LEU	2.0
62	n6	126	LEU	2.0
14	C2	116	VAL	2.0
17	c5	126	VAL	2.0
21	C9	35	ASP	2.0
26	D4	100	VAL	2.0
35	sM	167	PRO	2.0
13	C1	151	LYS	2.0
17	c5	52	LYS	2.0
41	L4	311	HIS	2.0
26	D4	101	GLU	2.0
1	2	697	C	2.0
36	1	1563	C	2.0

6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3869	1/1	0.50	0.17	158,158,158,158	0
90	ZN	D7	101	1/1	0.62	0.10	328,328,328,328	0
90	ZN	d7	101	1/1	0.64	0.16	285,285,285,285	0
88	MG	6	2004	1/1	0.67	0.26	54,54,54,54	0
89	OHX	5	4245	7/7	0.67	0.16	318,318,318,318	0
88	MG	3	214	1/1	0.68	0.16	43,43,43,43	0
88	MG	1	3674	1/1	0.68	0.45	80,80,80,80	0
89	OHX	2	2146	7/7	0.68	0.22	358,358,358,358	0
88	MG	6	1999	1/1	0.70	0.17	46,46,46,46	0
89	OHX	1	4183	7/7	0.70	0.12	350,350,350,350	0
89	OHX	4	230	7/7	0.70	0.22	283,283,283,283	0
89	OHX	1	4200	7/7	0.72	0.15	340,340,340,340	0
88	MG	5	3799	1/1	0.72	0.22	79,79,79,79	0
88	MG	6	1920	1/1	0.72	0.42	66,66,66,66	0
89	OHX	2	2159	7/7	0.72	0.16	293,293,293,293	0
88	MG	5	3695	1/1	0.72	0.33	54,54,54,54	0
89	OHX	5	4239	7/7	0.73	0.19	306,306,306,306	0
89	OHX	1	4189	7/7	0.73	0.15	282,282,282,282	0
89	OHX	l5	305	7/7	0.73	0.23	286,286,286,286	0
89	OHX	1	4140	7/7	0.73	0.15	298,298,298,298	0
89	OHX	2	2163	7/7	0.73	0.14	279,279,279,279	0
89	OHX	6	2144	7/7	0.74	0.24	243,243,243,243	0
88	MG	6	1934	1/1	0.74	0.23	60,60,60,60	0
89	OHX	2	2164	7/7	0.75	0.23	306,306,306,306	0
89	OHX	6	2183	7/7	0.75	0.16	256,256,256,256	0
89	OHX	l5	306	7/7	0.75	0.15	382,382,382,382	0
89	OHX	5	4235	7/7	0.75	0.18	262,262,262,262	0
88	MG	2	2002	1/1	0.75	0.35	177,177,177,177	0
89	OHX	2	2172	7/7	0.76	0.17	331,331,331,331	0
88	MG	5	3714	1/1	0.76	0.39	65,65,65,65	0
89	OHX	6	2186	7/7	0.76	0.21	295,295,295,295	0
89	OHX	5	4145	7/7	0.76	0.17	243,243,243,243	0
89	OHX	5	4226	7/7	0.76	0.17	277,277,277,277	0
88	MG	6	1970	1/1	0.76	0.24	67,67,67,67	0
89	OHX	6	2181	7/7	0.77	0.18	247,247,247,247	0
88	MG	2	1928	1/1	0.77	0.24	53,53,53,53	0
89	OHX	7	226	7/7	0.77	0.16	254,254,254,254	0
89	OHX	1	4203	7/7	0.77	0.22	364,364,364,364	0
89	OHX	2	2165	7/7	0.77	0.11	306,306,306,306	0
88	MG	1	3407	1/1	0.77	0.27	41,41,41,41	0
89	OHX	6	2176	7/7	0.77	0.16	277,277,277,277	0
89	OHX	l4	404	7/7	0.78	0.13	286,286,286,286	0
88	MG	5	3800	1/1	0.78	0.30	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	o1	201	1/1	0.78	0.27	87,87,87,87	0
89	OHX	5	4209	7/7	0.78	0.18	304,304,304,304	0
89	OHX	1	4201	7/7	0.78	0.15	282,282,282,282	0
89	OHX	1	4124	7/7	0.79	0.17	277,277,277,277	0
88	MG	8	212	1/1	0.79	0.14	37,37,37,37	0
89	OHX	5	4168	7/7	0.79	0.20	244,244,244,244	0
88	MG	l5	302	1/1	0.79	0.11	49,49,49,49	0
88	MG	m5	302	1/1	0.79	0.22	51,51,51,51	0
89	OHX	5	4233	7/7	0.79	0.23	318,318,318,318	0
88	MG	1	3765	1/1	0.79	0.24	62,62,62,62	0
89	OHX	2	2116	7/7	0.79	0.16	280,280,280,280	0
88	MG	1	3771	1/1	0.79	0.22	68,68,68,68	0
89	OHX	1	4206	7/7	0.79	0.13	275,275,275,275	0
88	MG	1	3861	1/1	0.79	0.15	79,79,79,79	0
88	MG	2	1905	1/1	0.79	0.38	60,60,60,60	0
88	MG	2	1949	1/1	0.79	0.23	57,57,57,57	0
88	MG	1	3445	1/1	0.79	0.28	53,53,53,53	0
88	MG	2	1955	1/1	0.79	0.20	66,66,66,66	0
88	MG	1	3421	1/1	0.80	0.20	43,43,43,43	0
89	OHX	5	4183	7/7	0.80	0.13	295,295,295,295	0
89	OHX	1	4208	7/7	0.80	0.11	288,288,288,288	0
89	OHX	5	4211	7/7	0.80	0.21	270,270,270,270	0
89	OHX	1	4210	7/7	0.80	0.16	277,277,277,277	0
89	OHX	5	4228	7/7	0.80	0.23	370,370,370,370	0
89	OHX	1	4212	7/7	0.80	0.12	364,364,364,364	0
89	OHX	2	2149	7/7	0.80	0.13	256,256,256,256	0
89	OHX	1	4173	7/7	0.80	0.13	264,264,264,264	0
88	MG	2	1954	1/1	0.80	0.14	65,65,65,65	0
88	MG	5	3687	1/1	0.80	0.33	48,48,48,48	0
89	OHX	6	2182	7/7	0.80	0.23	264,264,264,264	0
88	MG	6	1933	1/1	0.80	0.24	35,35,35,35	0
88	MG	1	3504	1/1	0.80	0.29	28,28,28,28	0
89	OHX	6	2194	7/7	0.80	0.15	263,263,263,263	0
88	MG	2	1953	1/1	0.80	0.16	70,70,70,70	0
89	OHX	1	4113	7/7	0.81	0.13	243,243,243,243	0
88	MG	1	3556	1/1	0.81	0.15	45,45,45,45	0
88	MG	1	3847	1/1	0.81	0.31	50,50,50,50	0
89	OHX	2	2100	7/7	0.81	0.20	241,241,241,241	0
89	OHX	6	2187	7/7	0.81	0.13	317,317,317,317	0
89	OHX	6	2191	7/7	0.81	0.13	282,282,282,282	0
89	OHX	1	4174	7/7	0.81	0.14	279,279,279,279	0
89	OHX	1	4177	7/7	0.81	0.12	322,322,322,322	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3632	1/1	0.81	0.12	76,76,76,76	0
89	OHX	5	4175	7/7	0.81	0.17	250,250,250,250	0
88	MG	5	3721	1/1	0.81	0.24	50,50,50,50	0
89	OHX	5	4199	7/7	0.81	0.18	263,263,263,263	0
89	OHX	5	4206	7/7	0.81	0.13	273,273,273,273	0
89	OHX	5	4208	7/7	0.81	0.14	258,258,258,258	0
89	OHX	1	4193	7/7	0.81	0.17	290,290,290,290	0
88	MG	5	3793	1/1	0.81	0.13	45,45,45,45	0
89	OHX	5	4223	7/7	0.81	0.19	288,288,288,288	0
89	OHX	2	2150	7/7	0.81	0.14	273,273,273,273	0
89	OHX	2	2153	7/7	0.81	0.13	256,256,256,256	0
89	OHX	2	2156	7/7	0.81	0.12	290,290,290,290	0
88	MG	2	1973	1/1	0.81	0.23	47,47,47,47	0
89	OHX	1	4209	7/7	0.81	0.14	272,272,272,272	0
89	OHX	5	4244	7/7	0.81	0.17	275,275,275,275	0
88	MG	2	1959	1/1	0.81	0.22	44,44,44,44	0
89	OHX	5	4252	7/7	0.81	0.17	256,256,256,256	0
88	MG	5	3813	1/1	0.81	0.12	96,96,96,96	0
88	MG	O5	201	1/1	0.81	0.14	48,48,48,48	0
89	OHX	4	233	7/7	0.81	0.18	275,275,275,275	0
88	MG	5	3465	1/1	0.81	0.14	33,33,33,33	0
89	OHX	2	2180	7/7	0.81	0.12	300,300,300,300	0
89	OHX	6	2178	7/7	0.81	0.19	262,262,262,262	0
89	OHX	2	2178	7/7	0.82	0.14	277,277,277,277	0
88	MG	1	3548	1/1	0.82	0.19	43,43,43,43	0
89	OHX	1	4110	7/7	0.82	0.15	233,233,233,233	0
89	OHX	2	2151	7/7	0.82	0.14	262,262,262,262	0
88	MG	6	2042	1/1	0.82	0.26	51,51,51,51	0
88	MG	M1	201	1/1	0.82	0.14	64,64,64,64	0
89	OHX	1	4151	7/7	0.82	0.15	259,259,259,259	0
89	OHX	1	4155	7/7	0.82	0.18	280,280,280,280	0
89	OHX	5	4217	7/7	0.82	0.21	255,255,255,255	0
89	OHX	M7	207	7/7	0.82	0.14	282,282,282,282	0
89	OHX	M9	203	7/7	0.82	0.11	285,285,285,285	0
88	MG	5	3489	1/1	0.82	0.25	53,53,53,53	0
89	OHX	6	2167	7/7	0.82	0.13	236,236,236,236	0
89	OHX	2	2162	7/7	0.82	0.17	256,256,256,256	0
88	MG	5	3655	1/1	0.82	0.12	34,34,34,34	0
89	OHX	1	4179	7/7	0.82	0.12	283,283,283,283	0
89	OHX	1	4182	7/7	0.82	0.14	253,253,253,253	0
89	OHX	2	2133	7/7	0.82	0.16	238,238,238,238	0
88	MG	2	1910	1/1	0.82	0.26	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	8	228	7/7	0.82	0.18	233,233,233,233	0
88	MG	2	1951	1/1	0.82	0.26	50,50,50,50	0
89	OHX	6	2190	7/7	0.82	0.13	304,304,304,304	0
89	OHX	1	4196	7/7	0.82	0.17	262,262,262,262	0
89	OHX	2	2176	7/7	0.82	0.15	252,252,252,252	0
89	OHX	2	2177	7/7	0.82	0.12	275,275,275,275	0
88	MG	4	209	1/1	0.83	0.18	51,51,51,51	0
89	OHX	5	4200	7/7	0.83	0.15	232,232,232,232	0
88	MG	5	3875	1/1	0.83	0.25	31,31,31,31	0
88	MG	5	3889	1/1	0.83	0.21	49,49,49,49	0
88	MG	2	1999	1/1	0.83	0.12	85,85,85,85	0
88	MG	5	3454	1/1	0.83	0.14	34,34,34,34	0
89	OHX	5	4215	7/7	0.83	0.24	253,253,253,253	0
88	MG	6	1935	1/1	0.83	0.17	41,41,41,41	0
88	MG	2	1976	1/1	0.83	0.43	63,63,63,63	0
88	MG	5	3795	1/1	0.83	0.24	40,40,40,40	0
88	MG	5	3636	1/1	0.83	0.14	36,36,36,36	0
89	OHX	6	2188	7/7	0.83	0.17	265,265,265,265	0
89	OHX	2	2127	7/7	0.83	0.14	239,239,239,239	0
89	OHX	5	4236	7/7	0.83	0.18	259,259,259,259	0
89	OHX	2	2129	7/7	0.83	0.12	299,299,299,299	0
89	OHX	3	223	7/7	0.83	0.16	235,235,235,235	0
89	OHX	6	2196	7/7	0.83	0.15	293,293,293,293	0
89	OHX	6	2198	7/7	0.83	0.18	241,241,241,241	0
89	OHX	5	4255	7/7	0.83	0.12	254,254,254,254	0
89	OHX	s1	303	7/7	0.83	0.14	259,259,259,259	0
89	OHX	2	2131	7/7	0.83	0.17	317,317,317,317	0
89	OHX	14	403	7/7	0.83	0.10	317,317,317,317	0
89	OHX	5	4151	7/7	0.83	0.18	260,260,260,260	0
88	MG	1	3737	1/1	0.83	0.10	49,49,49,49	0
89	OHX	5	4174	7/7	0.83	0.14	243,243,243,243	0
89	OHX	m4	201	7/7	0.83	0.10	290,290,290,290	0
89	OHX	2	2140	7/7	0.83	0.15	273,273,273,273	0
89	OHX	1	4185	7/7	0.83	0.19	302,302,302,302	0
89	OHX	6	2170	7/7	0.84	0.20	255,255,255,255	0
88	MG	5	3848	1/1	0.84	0.12	30,30,30,30	0
89	OHX	2	2174	7/7	0.84	0.15	232,232,232,232	0
89	OHX	2	2136	7/7	0.84	0.15	238,238,238,238	0
89	OHX	5	4210	7/7	0.84	0.19	277,277,277,277	0
89	OHX	2	2137	7/7	0.84	0.14	271,271,271,271	0
88	MG	2	2014	1/1	0.84	0.21	46,46,46,46	0
89	OHX	6	2184	7/7	0.84	0.16	259,259,259,259	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4198	7/7	0.84	0.18	275,275,275,275	0
88	MG	6	2031	1/1	0.84	0.20	52,52,52,52	0
88	MG	5	3898	1/1	0.84	0.27	147,147,147,147	0
89	OHX	5	4231	7/7	0.84	0.14	234,234,234,234	0
88	MG	6	2037	1/1	0.84	0.30	52,52,52,52	0
88	MG	1	3544	1/1	0.84	0.23	32,32,32,32	0
89	OHX	6	2192	7/7	0.84	0.12	303,303,303,303	0
89	OHX	5	4238	7/7	0.84	0.21	313,313,313,313	0
88	MG	5	3784	1/1	0.84	0.10	36,36,36,36	0
89	OHX	5	4241	7/7	0.84	0.15	365,365,365,365	0
89	OHX	1	4142	7/7	0.84	0.16	250,250,250,250	0
88	MG	1	3676	1/1	0.84	0.26	53,53,53,53	0
89	OHX	5	4250	7/7	0.84	0.18	243,243,243,243	0
89	OHX	6	2202	7/7	0.84	0.15	266,266,266,266	0
89	OHX	5	4253	7/7	0.84	0.12	269,269,269,269	0
88	MG	2	1981	1/1	0.84	0.12	39,39,39,39	0
89	OHX	5	4256	7/7	0.84	0.11	289,289,289,289	0
89	OHX	c3	201	7/7	0.84	0.13	248,248,248,248	0
89	OHX	1	4162	7/7	0.84	0.16	224,224,224,224	0
89	OHX	1	4172	7/7	0.84	0.17	232,232,232,232	0
89	OHX	2	2160	7/7	0.84	0.19	246,246,246,246	0
88	MG	5	3798	1/1	0.84	0.20	44,44,44,44	0
88	MG	1	3739	1/1	0.84	0.18	40,40,40,40	0
89	OHX	5	4180	7/7	0.84	0.19	219,219,219,219	0
88	MG	1	3753	1/1	0.84	0.40	54,54,54,54	0
88	MG	1	3502	1/1	0.84	0.18	58,58,58,58	0
88	MG	6	1984	1/1	0.85	0.23	56,56,56,56	0
89	OHX	1	4163	7/7	0.85	0.12	255,255,255,255	0
88	MG	6	1986	1/1	0.85	0.14	45,45,45,45	0
88	MG	5	3662	1/1	0.85	0.23	59,59,59,59	0
89	OHX	5	4185	7/7	0.85	0.13	242,242,242,242	0
89	OHX	5	4192	7/7	0.85	0.12	264,264,264,264	0
88	MG	6	1987	1/1	0.85	0.12	43,43,43,43	0
89	OHX	2	2135	7/7	0.85	0.15	215,215,215,215	0
89	OHX	6	2156	7/7	0.85	0.15	235,235,235,235	0
89	OHX	6	2166	7/7	0.85	0.15	235,235,235,235	0
88	MG	N5	201	1/1	0.85	0.15	49,49,49,49	0
89	OHX	6	2168	7/7	0.85	0.21	346,346,346,346	0
88	MG	1	3701	1/1	0.85	0.14	42,42,42,42	0
89	OHX	6	2175	7/7	0.85	0.20	241,241,241,241	0
89	OHX	2	2138	7/7	0.85	0.17	203,203,203,203	0
89	OHX	5	4222	7/7	0.85	0.12	256,256,256,256	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
89	OHX	6	2177	7/7	0.85	0.14	227,227,227,227	0
89	OHX	5	4224	7/7	0.85	0.11	269,269,269,269	0
89	OHX	5	4225	7/7	0.85	0.15	297,297,297,297	0
88	MG	7	214	1/1	0.85	0.22	55,55,55,55	0
89	OHX	5	4227	7/7	0.85	0.13	251,251,251,251	0
89	OHX	6	2180	7/7	0.85	0.14	279,279,279,279	0
88	MG	6	1907	1/1	0.85	0.20	35,35,35,35	0
89	OHX	5	4232	7/7	0.85	0.11	270,270,270,270	0
89	OHX	1	4048	7/7	0.85	0.18	216,216,216,216	0
89	OHX	1	4094	7/7	0.85	0.15	212,212,212,212	0
89	OHX	1	4108	7/7	0.85	0.15	210,210,210,210	0
88	MG	1	3550	1/1	0.85	0.23	44,44,44,44	0
88	MG	1	3655	1/1	0.85	0.23	56,56,56,56	0
88	MG	n8	202	1/1	0.85	0.19	38,38,38,38	0
89	OHX	5	4242	7/7	0.85	0.17	180,180,180,180	0
89	OHX	6	2189	7/7	0.85	0.15	266,266,266,266	0
89	OHX	1	4204	7/7	0.85	0.17	246,246,246,246	0
88	MG	1	3772	1/1	0.85	0.10	43,43,43,43	0
88	MG	1	3794	1/1	0.85	0.20	51,51,51,51	0
89	OHX	6	2193	7/7	0.85	0.14	244,244,244,244	0
88	MG	1	3811	1/1	0.85	0.15	55,55,55,55	0
89	OHX	1	4154	7/7	0.85	0.17	287,287,287,287	0
89	OHX	6	2197	7/7	0.85	0.21	220,220,220,220	0
89	OHX	1	4211	7/7	0.85	0.16	276,276,276,276	0
89	OHX	8	231	7/7	0.85	0.15	267,267,267,267	0
89	OHX	2	2120	7/7	0.85	0.18	230,230,230,230	0
89	OHX	1	4214	7/7	0.85	0.18	241,241,241,241	0
89	OHX	1	4216	7/7	0.85	0.19	285,285,285,285	0
89	OHX	1	4217	7/7	0.85	0.13	287,287,287,287	0
89	OHX	1	4219	7/7	0.85	0.15	225,225,225,225	0
89	OHX	5	4164	7/7	0.85	0.15	236,236,236,236	0
89	OHX	1	4220	7/7	0.85	0.15	239,239,239,239	0
89	OHX	5	4197	7/7	0.86	0.17	241,241,241,241	0
88	MG	L8	301	1/1	0.86	0.17	47,47,47,47	0
89	OHX	1	4187	7/7	0.86	0.12	250,250,250,250	0
88	MG	6	2203	1/1	0.86	0.32	73,73,73,73	0
89	OHX	5	4207	7/7	0.86	0.15	304,304,304,304	0
89	OHX	6	2172	7/7	0.86	0.12	240,240,240,240	0
89	OHX	1	4190	7/7	0.86	0.21	270,270,270,270	0
88	MG	2	1979	1/1	0.86	0.14	57,57,57,57	0
89	OHX	1	4194	7/7	0.86	0.15	293,293,293,293	0
88	MG	5	3458	1/1	0.86	0.17	31,31,31,31	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	D3	201	7/7	0.86	0.18	201,201,201,201	0
89	OHX	5	4218	7/7	0.86	0.19	289,289,289,289	0
88	MG	6	1972	1/1	0.86	0.25	57,57,57,57	0
88	MG	5	3474	1/1	0.86	0.07	38,38,38,38	0
88	MG	6	1980	1/1	0.86	0.12	61,61,61,61	0
89	OHX	2	2143	7/7	0.86	0.20	260,260,260,260	0
88	MG	5	3530	1/1	0.86	0.16	21,21,21,21	0
89	OHX	2	2148	7/7	0.86	0.16	225,225,225,225	0
88	MG	5	3608	1/1	0.86	0.09	22,22,22,22	0
89	OHX	5	4229	7/7	0.86	0.14	270,270,270,270	0
88	MG	M6	201	1/1	0.86	0.09	43,43,43,43	0
88	MG	1	3724	1/1	0.86	0.19	41,41,41,41	0
88	MG	1	3867	1/1	0.86	0.22	98,98,98,98	0
88	MG	1	3778	1/1	0.86	0.17	47,47,47,47	0
89	OHX	1	4160	7/7	0.86	0.12	288,288,288,288	0
89	OHX	2	2158	7/7	0.86	0.09	307,307,307,307	0
89	OHX	1	4218	7/7	0.86	0.18	259,259,259,259	0
88	MG	1	3761	1/1	0.86	0.14	33,33,33,33	0
88	MG	o3	201	1/1	0.86	0.23	61,61,61,61	0
89	OHX	5	4243	7/7	0.86	0.12	280,280,280,280	0
89	OHX	1	4221	7/7	0.86	0.19	266,266,266,266	0
88	MG	6	2015	1/1	0.86	0.25	44,44,44,44	0
88	MG	2	2006	1/1	0.86	0.08	41,41,41,41	0
89	OHX	1	4176	7/7	0.86	0.14	247,247,247,247	0
88	MG	6	2035	1/1	0.86	0.25	38,38,38,38	0
89	OHX	5	4156	7/7	0.86	0.24	207,207,207,207	0
88	MG	4	215	1/1	0.86	0.17	32,32,32,32	0
89	OHX	7	224	7/7	0.86	0.20	201,201,201,201	0
89	OHX	6	2104	7/7	0.86	0.16	184,184,184,184	0
89	OHX	5	4169	7/7	0.86	0.20	247,247,247,247	0
89	OHX	6	2139	7/7	0.86	0.13	242,242,242,242	0
89	OHX	2	2128	7/7	0.86	0.15	221,221,221,221	0
88	MG	6	2039	1/1	0.86	0.26	47,47,47,47	0
89	OHX	6	2160	7/7	0.86	0.13	233,233,233,233	0
89	OHX	6	2161	7/7	0.86	0.14	251,251,251,251	0
89	OHX	5	4187	7/7	0.86	0.12	244,244,244,244	0
89	OHX	5	4191	7/7	0.86	0.22	301,301,301,301	0
89	OHX	1	4184	7/7	0.86	0.17	238,238,238,238	0
88	MG	5	3431	1/1	0.87	0.25	49,49,49,49	0
89	OHX	L4	402	7/7	0.87	0.10	252,252,252,252	0
88	MG	5	3852	1/1	0.87	0.20	47,47,47,47	0
89	OHX	5	4189	7/7	0.87	0.15	208,208,208,208	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4159	7/7	0.87	0.16	233,233,233,233	0
88	MG	1	3712	1/1	0.87	0.12	41,41,41,41	0
89	OHX	6	2132	7/7	0.87	0.18	196,196,196,196	0
88	MG	1	3841	1/1	0.87	0.25	41,41,41,41	0
88	MG	1	3714	1/1	0.87	0.33	52,52,52,52	0
88	MG	7	213	1/1	0.87	0.25	47,47,47,47	0
88	MG	2	1993	1/1	0.87	0.25	64,64,64,64	0
88	MG	1	3587	1/1	0.87	0.23	28,28,28,28	0
88	MG	15	301	1/1	0.87	0.15	56,56,56,56	0
88	MG	1	3615	1/1	0.87	0.14	51,51,51,51	0
89	OHX	1	4178	7/7	0.87	0.13	276,276,276,276	0
89	OHX	6	2169	7/7	0.87	0.13	219,219,219,219	0
88	MG	3	209	1/1	0.87	0.21	47,47,47,47	0
88	MG	1	3629	1/1	0.87	0.18	45,45,45,45	0
88	MG	1	3756	1/1	0.87	0.19	44,44,44,44	0
89	OHX	2	2171	7/7	0.87	0.14	254,254,254,254	0
88	MG	2	1994	1/1	0.87	0.16	51,51,51,51	0
88	MG	1	3641	1/1	0.87	0.08	36,36,36,36	0
88	MG	6	2005	1/1	0.87	0.09	41,41,41,41	0
88	MG	5	3697	1/1	0.87	0.27	69,69,69,69	0
88	MG	5	3706	1/1	0.87	0.07	51,51,51,51	0
88	MG	2	1966	1/1	0.87	0.24	44,44,44,44	0
89	OHX	5	4230	7/7	0.87	0.12	285,285,285,285	0
89	OHX	1	4195	7/7	0.87	0.20	259,259,259,259	0
89	OHX	C5	201	7/7	0.87	0.11	254,254,254,254	0
88	MG	6	2018	1/1	0.87	0.19	88,88,88,88	0
89	OHX	1	4199	7/7	0.87	0.16	242,242,242,242	0
89	OHX	D9	102	7/7	0.87	0.14	234,234,234,234	0
88	MG	5	3722	1/1	0.87	0.17	69,69,69,69	0
89	OHX	1	4075	7/7	0.87	0.16	235,235,235,235	0
89	OHX	1	4076	7/7	0.87	0.15	226,226,226,226	0
88	MG	6	2028	1/1	0.87	0.17	57,57,57,57	0
88	MG	1	3482	1/1	0.87	0.20	64,64,64,64	0
88	MG	1	3549	1/1	0.87	0.22	44,44,44,44	0
88	MG	1	3495	1/1	0.87	0.15	50,50,50,50	0
89	OHX	1	4120	7/7	0.87	0.12	230,230,230,230	0
89	OHX	5	4251	7/7	0.87	0.18	237,237,237,237	0
89	OHX	6	2199	7/7	0.87	0.19	255,255,255,255	0
89	OHX	6	2201	7/7	0.87	0.19	244,244,244,244	0
88	MG	1	3795	1/1	0.87	0.30	65,65,65,65	0
89	OHX	1	4126	7/7	0.87	0.12	251,251,251,251	0
89	OHX	1	4130	7/7	0.87	0.18	209,209,209,209	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	1915	1/1	0.87	0.19	56,56,56,56	0
89	OHX	8	227	7/7	0.87	0.12	259,259,259,259	0
88	MG	5	3811	1/1	0.87	0.14	39,39,39,39	0
89	OHX	1	4143	7/7	0.87	0.17	239,239,239,239	0
89	OHX	5	4157	7/7	0.87	0.20	253,253,253,253	0
89	OHX	1	4144	7/7	0.87	0.10	273,273,273,273	0
89	OHX	1	4145	7/7	0.87	0.15	256,256,256,256	0
89	OHX	1	4224	7/7	0.87	0.11	281,281,281,281	0
89	OHX	1	4225	7/7	0.87	0.19	304,304,304,304	0
88	MG	1	3806	1/1	0.87	0.16	59,59,59,59	0
89	OHX	1	4153	7/7	0.87	0.14	244,244,244,244	0
89	OHX	1	4156	7/7	0.88	0.11	234,234,234,234	0
89	OHX	5	4161	7/7	0.88	0.16	208,208,208,208	0
89	OHX	1	4226	7/7	0.88	0.14	250,250,250,250	0
89	OHX	5	4167	7/7	0.88	0.17	229,229,229,229	0
88	MG	1	3855	1/1	0.88	0.15	33,33,33,33	0
89	OHX	3	224	7/7	0.88	0.16	248,248,248,248	0
88	MG	6	1930	1/1	0.88	0.15	35,35,35,35	0
89	OHX	2	2166	7/7	0.88	0.11	273,273,273,273	0
89	OHX	L3	407	7/7	0.88	0.12	237,237,237,237	0
89	OHX	2	2169	7/7	0.88	0.18	221,221,221,221	0
89	OHX	M7	206	7/7	0.88	0.23	351,351,351,351	0
88	MG	2	2011	1/1	0.88	0.25	40,40,40,40	0
89	OHX	5	4188	7/7	0.88	0.13	222,222,222,222	0
88	MG	2	1901	1/1	0.88	0.15	39,39,39,39	0
89	OHX	2	2173	7/7	0.88	0.14	237,237,237,237	0
88	MG	1	3710	1/1	0.88	0.17	47,47,47,47	0
89	OHX	5	4196	7/7	0.88	0.16	315,315,315,315	0
88	MG	1	3594	1/1	0.88	0.26	37,37,37,37	0
89	OHX	6	2140	7/7	0.88	0.14	205,205,205,205	0
88	MG	5	3429	1/1	0.88	0.07	22,22,22,22	0
89	OHX	6	2148	7/7	0.88	0.16	212,212,212,212	0
89	OHX	6	2152	7/7	0.88	0.11	257,257,257,257	0
89	OHX	6	2155	7/7	0.88	0.14	215,215,215,215	0
88	MG	2	2018	1/1	0.88	0.20	46,46,46,46	0
89	OHX	1	4180	7/7	0.88	0.24	315,315,315,315	0
89	OHX	1	4181	7/7	0.88	0.14	252,252,252,252	0
89	OHX	5	4214	7/7	0.88	0.17	220,220,220,220	0
89	OHX	6	2163	7/7	0.88	0.10	239,239,239,239	0
88	MG	2	1977	1/1	0.88	0.21	44,44,44,44	0
88	MG	1	3728	1/1	0.88	0.09	33,33,33,33	0
88	MG	L3	404	1/1	0.88	0.15	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3467	1/1	0.88	0.21	46,46,46,46	0
88	MG	5	3812	1/1	0.88	0.13	51,51,51,51	0
89	OHX	6	2171	7/7	0.88	0.18	274,274,274,274	0
89	OHX	1	4188	7/7	0.88	0.11	258,258,258,258	0
89	OHX	6	2173	7/7	0.88	0.17	193,193,193,193	0
88	MG	5	3473	1/1	0.88	0.15	43,43,43,43	0
88	MG	2	2005	1/1	0.88	0.18	44,44,44,44	0
89	OHX	1	4191	7/7	0.88	0.14	245,245,245,245	0
89	OHX	1	4192	7/7	0.88	0.09	270,270,270,270	0
89	OHX	2	2139	7/7	0.88	0.22	238,238,238,238	0
89	OHX	1	4105	7/7	0.88	0.13	221,221,221,221	0
89	OHX	1	4107	7/7	0.88	0.14	228,228,228,228	0
88	MG	6	1993	1/1	0.88	0.18	56,56,56,56	0
89	OHX	5	4237	7/7	0.88	0.12	228,228,228,228	0
88	MG	1	3427	1/1	0.88	0.19	54,54,54,54	0
89	OHX	6	2185	7/7	0.88	0.12	244,244,244,244	0
89	OHX	5	4240	7/7	0.88	0.16	258,258,258,258	0
88	MG	6	2001	1/1	0.88	0.16	54,54,54,54	0
89	OHX	2	2147	7/7	0.88	0.12	238,238,238,238	0
88	MG	5	3891	1/1	0.88	0.14	24,24,24,24	0
89	OHX	1	4202	7/7	0.88	0.15	269,269,269,269	0
89	OHX	1	4125	7/7	0.88	0.21	244,244,244,244	0
88	MG	1	3819	1/1	0.88	0.28	56,56,56,56	0
88	MG	1	3828	1/1	0.88	0.10	40,40,40,40	0
89	OHX	1	4134	7/7	0.88	0.13	231,231,231,231	0
88	MG	5	3656	1/1	0.88	0.17	39,39,39,39	0
89	OHX	5	4254	7/7	0.88	0.12	249,249,249,249	0
88	MG	8	208	1/1	0.88	0.10	41,41,41,41	0
88	MG	2	1938	1/1	0.88	0.26	31,31,31,31	0
89	OHX	5	4257	7/7	0.88	0.13	245,245,245,245	0
89	OHX	2	2157	7/7	0.88	0.18	251,251,251,251	0
88	MG	1	3466	1/1	0.88	0.07	21,21,21,21	0
89	OHX	1	4148	7/7	0.88	0.16	209,209,209,209	0
89	OHX	1	4150	7/7	0.88	0.15	205,205,205,205	0
88	MG	5	3694	1/1	0.88	0.14	56,56,56,56	0
89	OHX	1	4152	7/7	0.88	0.23	276,276,276,276	0
89	OHX	5	4104	7/7	0.88	0.16	188,188,188,188	0
89	OHX	5	4140	7/7	0.88	0.19	227,227,227,227	0
89	OHX	5	4144	7/7	0.88	0.18	216,216,216,216	0
88	MG	m5	301	1/1	0.88	0.21	49,49,49,49	0
88	MG	1	3854	1/1	0.88	0.23	43,43,43,43	0
88	MG	n3	202	1/1	0.88	0.15	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	4102	7/7	0.89	0.18	191,191,191,191	0
89	OHX	1	4114	7/7	0.89	0.14	205,205,205,205	0
89	OHX	5	4111	7/7	0.89	0.13	225,225,225,225	0
89	OHX	5	4125	7/7	0.89	0.12	228,228,228,228	0
89	OHX	5	4135	7/7	0.89	0.12	242,242,242,242	0
89	OHX	1	4117	7/7	0.89	0.17	213,213,213,213	0
89	OHX	5	4141	7/7	0.89	0.11	223,223,223,223	0
89	OHX	5	4142	7/7	0.89	0.16	243,243,243,243	0
88	MG	5	3689	1/1	0.89	0.11	31,31,31,31	0
89	OHX	1	4122	7/7	0.89	0.11	235,235,235,235	0
89	OHX	1	4123	7/7	0.89	0.19	224,224,224,224	0
88	MG	1	3405	1/1	0.89	0.16	39,39,39,39	0
88	MG	4	211	1/1	0.89	0.12	34,34,34,34	0
88	MG	1	3584	1/1	0.89	0.11	29,29,29,29	0
89	OHX	1	4222	7/7	0.89	0.19	268,268,268,268	0
88	MG	2	1934	1/1	0.89	0.23	61,61,61,61	0
88	MG	1	3708	1/1	0.89	0.21	30,30,30,30	0
89	OHX	1	4138	7/7	0.89	0.19	223,223,223,223	0
89	OHX	5	4171	7/7	0.89	0.10	236,236,236,236	0
89	OHX	5	4172	7/7	0.89	0.17	260,260,260,260	0
89	OHX	3	222	7/7	0.89	0.15	228,228,228,228	0
88	MG	6	2016	1/1	0.89	0.11	52,52,52,52	0
89	OHX	5	4176	7/7	0.89	0.26	273,273,273,273	0
89	OHX	5	4178	7/7	0.89	0.21	218,218,218,218	0
89	OHX	5	4179	7/7	0.89	0.20	273,273,273,273	0
88	MG	1	3797	1/1	0.89	0.11	75,75,75,75	0
89	OHX	5	4181	7/7	0.89	0.13	212,212,212,212	0
89	OHX	4	229	7/7	0.89	0.16	206,206,206,206	0
88	MG	5	3732	1/1	0.89	0.20	43,43,43,43	0
89	OHX	4	231	7/7	0.89	0.16	237,237,237,237	0
88	MG	5	3760	1/1	0.89	0.15	42,42,42,42	0
88	MG	5	3780	1/1	0.89	0.10	39,39,39,39	0
89	OHX	5	4190	7/7	0.89	0.13	225,225,225,225	0
89	OHX	1	4146	7/7	0.89	0.17	302,302,302,302	0
88	MG	1	3800	1/1	0.89	0.08	37,37,37,37	0
89	OHX	5	4194	7/7	0.89	0.15	230,230,230,230	0
88	MG	M7	203	1/1	0.89	0.28	34,34,34,34	0
89	OHX	2	2144	7/7	0.89	0.11	222,222,222,222	0
89	OHX	5	4198	7/7	0.89	0.12	244,244,244,244	0
88	MG	5	3794	1/1	0.89	0.12	42,42,42,42	0
89	OHX	6	2114	7/7	0.89	0.16	209,209,209,209	0
89	OHX	5	4205	7/7	0.89	0.15	224,224,224,224	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	6	2131	7/7	0.89	0.17	202,202,202,202	0
88	MG	1	3590	1/1	0.89	0.33	28,28,28,28	0
88	MG	1	3593	1/1	0.89	0.33	21,21,21,21	0
88	MG	2	1904	1/1	0.89	0.13	30,30,30,30	0
88	MG	6	1908	1/1	0.89	0.16	34,34,34,34	0
89	OHX	1	4157	7/7	0.89	0.17	213,213,213,213	0
88	MG	5	3802	1/1	0.89	0.18	43,43,43,43	0
88	MG	6	1909	1/1	0.89	0.23	41,41,41,41	0
89	OHX	2	2154	7/7	0.89	0.11	244,244,244,244	0
89	OHX	6	2158	7/7	0.89	0.16	193,193,193,193	0
89	OHX	6	2159	7/7	0.89	0.13	215,215,215,215	0
88	MG	s8	301	1/1	0.89	0.18	38,38,38,38	0
89	OHX	1	4166	7/7	0.89	0.13	234,234,234,234	0
89	OHX	1	4171	7/7	0.89	0.11	247,247,247,247	0
88	MG	c9	201	1/1	0.89	0.14	44,44,44,44	0
88	MG	5	3818	1/1	0.89	0.09	53,53,53,53	0
88	MG	5	3846	1/1	0.89	0.23	39,39,39,39	0
88	MG	5	3403	1/1	0.89	0.31	47,47,47,47	0
88	MG	1	3824	1/1	0.89	0.12	58,58,58,58	0
88	MG	2	1944	1/1	0.89	0.19	49,49,49,49	0
88	MG	5	3886	1/1	0.89	0.12	34,34,34,34	0
88	MG	1	3621	1/1	0.89	0.14	35,35,35,35	0
88	MG	5	3890	1/1	0.89	0.39	56,56,56,56	0
88	MG	2	1931	1/1	0.89	0.25	51,51,51,51	0
89	OHX	2	2170	7/7	0.89	0.16	196,196,196,196	0
88	MG	1	3853	1/1	0.89	0.24	45,45,45,45	0
89	OHX	6	2179	7/7	0.89	0.17	254,254,254,254	0
88	MG	1	3456	1/1	0.89	0.19	33,33,33,33	0
88	MG	6	1963	1/1	0.89	0.21	57,57,57,57	0
88	MG	2	2019	1/1	0.89	0.23	32,32,32,32	0
89	OHX	2	2175	7/7	0.89	0.14	250,250,250,250	0
88	MG	1	3643	1/1	0.89	0.24	44,44,44,44	0
88	MG	8	216	1/1	0.89	0.21	43,43,43,43	0
89	OHX	5	4247	7/7	0.89	0.16	238,238,238,238	0
89	OHX	5	4248	7/7	0.89	0.12	254,254,254,254	0
89	OHX	5	4249	7/7	0.89	0.17	233,233,233,233	0
88	MG	5	3491	1/1	0.89	0.14	12,12,12,12	0
88	MG	5	3498	1/1	0.89	0.12	27,27,27,27	0
88	MG	6	1975	1/1	0.89	0.17	47,47,47,47	0
88	MG	1	3646	1/1	0.89	0.30	44,44,44,44	0
88	MG	1	3468	1/1	0.89	0.09	40,40,40,40	0
89	OHX	1	4028	7/7	0.89	0.14	177,177,177,177	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4039	7/7	0.89	0.17	226,226,226,226	0
88	MG	3	208	1/1	0.89	0.17	54,54,54,54	0
89	OHX	1	4074	7/7	0.89	0.10	255,255,255,255	0
89	OHX	7	225	7/7	0.89	0.18	270,270,270,270	0
88	MG	1	3767	1/1	0.89	0.20	53,53,53,53	0
88	MG	6	1991	1/1	0.89	0.10	35,35,35,35	0
88	MG	q3	502	1/1	0.89	0.08	48,48,48,48	0
89	OHX	2	2093	7/7	0.89	0.16	196,196,196,196	0
88	MG	5	3685	1/1	0.89	0.10	35,35,35,35	0
89	OHX	2	2103	7/7	0.89	0.13	215,215,215,215	0
89	OHX	2	2108	7/7	0.89	0.16	199,199,199,199	0
88	MG	1	3660	1/1	0.89	0.18	29,29,29,29	0
89	OHX	m0	302	7/7	0.89	0.13	232,232,232,232	0
89	OHX	m1	202	7/7	0.89	0.09	259,259,259,259	0
89	OHX	d4	202	7/7	0.89	0.11	213,213,213,213	0
89	OHX	5	4093	7/7	0.89	0.24	227,227,227,227	0
89	OHX	5	4099	7/7	0.89	0.12	210,210,210,210	0
88	MG	1	3492	1/1	0.90	0.13	36,36,36,36	0
89	OHX	5	4159	7/7	0.90	0.14	231,231,231,231	0
88	MG	S8	301	1/1	0.90	0.19	47,47,47,47	0
89	OHX	5	4163	7/7	0.90	0.15	233,233,233,233	0
88	MG	5	3836	1/1	0.90	0.23	58,58,58,58	0
89	OHX	5	4165	7/7	0.90	0.16	204,204,204,204	0
88	MG	6	1979	1/1	0.90	0.23	40,40,40,40	0
88	MG	5	3487	1/1	0.90	0.15	49,49,49,49	0
89	OHX	2	2155	7/7	0.90	0.12	229,229,229,229	0
88	MG	2	1947	1/1	0.90	0.06	30,30,30,30	0
88	MG	5	3857	1/1	0.90	0.20	56,56,56,56	0
88	MG	5	3868	1/1	0.90	0.10	38,38,38,38	0
88	MG	2	1924	1/1	0.90	0.29	50,50,50,50	0
88	MG	4	208	1/1	0.90	0.09	44,44,44,44	0
88	MG	5	3506	1/1	0.90	0.24	22,22,22,22	0
89	OHX	6	2146	7/7	0.90	0.14	219,219,219,219	0
88	MG	1	3530	1/1	0.90	0.34	25,25,25,25	0
89	OHX	6	2149	7/7	0.90	0.14	207,207,207,207	0
89	OHX	5	4182	7/7	0.90	0.18	224,224,224,224	0
89	OHX	6	2150	7/7	0.90	0.12	206,206,206,206	0
88	MG	5	3539	1/1	0.90	0.32	36,36,36,36	0
89	OHX	5	4186	7/7	0.90	0.11	237,237,237,237	0
89	OHX	6	2153	7/7	0.90	0.21	241,241,241,241	0
88	MG	5	3894	1/1	0.90	0.17	41,41,41,41	0
88	MG	5	3574	1/1	0.90	0.23	21,21,21,21	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	6	2157	7/7	0.90	0.12	197,197,197,197	0
88	MG	7	208	1/1	0.90	0.25	47,47,47,47	0
88	MG	5	3590	1/1	0.90	0.16	23,23,23,23	0
88	MG	1	3773	1/1	0.90	0.12	35,35,35,35	0
89	OHX	5	4195	7/7	0.90	0.13	208,208,208,208	0
88	MG	8	202	1/1	0.90	0.16	37,37,37,37	0
88	MG	5	3627	1/1	0.90	0.16	35,35,35,35	0
88	MG	1	3414	1/1	0.90	0.30	39,39,39,39	0
88	MG	1	3789	1/1	0.90	0.19	50,50,50,50	0
88	MG	L7	303	1/1	0.90	0.14	56,56,56,56	0
89	OHX	5	4203	7/7	0.90	0.16	227,227,227,227	0
88	MG	2	2003	1/1	0.90	0.15	50,50,50,50	0
88	MG	5	3671	1/1	0.90	0.18	30,30,30,30	0
89	OHX	2	2179	7/7	0.90	0.15	267,267,267,267	0
88	MG	5	3684	1/1	0.90	0.12	43,43,43,43	0
89	OHX	S8	302	7/7	0.90	0.09	247,247,247,247	0
88	MG	1	3668	1/1	0.90	0.17	43,43,43,43	0
88	MG	n8	201	1/1	0.90	0.08	21,21,21,21	0
88	MG	2	1958	1/1	0.90	0.09	30,30,30,30	0
88	MG	1	3443	1/1	0.90	0.22	19,19,19,19	0
89	OHX	5	4216	7/7	0.90	0.12	217,217,217,217	0
88	MG	5	3690	1/1	0.90	0.18	54,54,54,54	0
88	MG	1	3700	1/1	0.90	0.14	49,49,49,49	0
89	OHX	5	4219	7/7	0.90	0.10	248,248,248,248	0
89	OHX	2	2081	7/7	0.90	0.14	191,191,191,191	0
88	MG	2	1906	1/1	0.90	0.15	31,31,31,31	0
89	OHX	1	4197	7/7	0.90	0.12	233,233,233,233	0
88	MG	6	1902	1/1	0.90	0.26	44,44,44,44	0
89	OHX	1	4080	7/7	0.90	0.15	216,216,216,216	0
89	OHX	1	4085	7/7	0.90	0.18	241,241,241,241	0
89	OHX	1	4093	7/7	0.90	0.13	227,227,227,227	0
88	MG	5	3699	1/1	0.90	0.11	51,51,51,51	0
89	OHX	2	2105	7/7	0.90	0.14	193,193,193,193	0
88	MG	1	3561	1/1	0.90	0.27	31,31,31,31	0
89	OHX	2	2112	7/7	0.90	0.10	235,235,235,235	0
88	MG	1	3568	1/1	0.90	0.12	25,25,25,25	0
89	OHX	5	4234	7/7	0.90	0.08	249,249,249,249	0
88	MG	1	3454	1/1	0.90	0.23	47,47,47,47	0
88	MG	2	1915	1/1	0.90	0.21	36,36,36,36	0
89	OHX	6	2195	7/7	0.90	0.13	231,231,231,231	0
88	MG	5	3724	1/1	0.90	0.09	37,37,37,37	0
88	MG	6	1918	1/1	0.90	0.18	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3459	1/1	0.90	0.19	24,24,24,24	0
89	OHX	1	4215	7/7	0.90	0.13	272,272,272,272	0
88	MG	c1	201	1/1	0.90	0.12	31,31,31,31	0
89	OHX	2	2134	7/7	0.90	0.15	213,213,213,213	0
88	MG	c7	201	1/1	0.90	0.31	64,64,64,64	0
89	OHX	s8	303	7/7	0.90	0.10	255,255,255,255	0
88	MG	6	1924	1/1	0.90	0.15	41,41,41,41	0
88	MG	2	1991	1/1	0.90	0.20	42,42,42,42	0
89	OHX	d9	102	7/7	0.90	0.13	235,235,235,235	0
89	OHX	5	4065	7/7	0.90	0.17	178,178,178,178	0
89	OHX	5	4090	7/7	0.90	0.17	188,188,188,188	0
89	OHX	1	4131	7/7	0.90	0.12	227,227,227,227	0
89	OHX	5	4096	7/7	0.90	0.17	175,175,175,175	0
88	MG	5	3423	1/1	0.90	0.19	34,34,34,34	0
88	MG	2	1967	1/1	0.90	0.08	50,50,50,50	0
89	OHX	1	4139	7/7	0.90	0.12	213,213,213,213	0
88	MG	5	3430	1/1	0.90	0.24	53,53,53,53	0
89	OHX	5	4112	7/7	0.90	0.13	242,242,242,242	0
89	OHX	1	4141	7/7	0.90	0.10	229,229,229,229	0
89	OHX	5	4131	7/7	0.90	0.15	195,195,195,195	0
88	MG	1	3595	1/1	0.90	0.23	28,28,28,28	0
88	MG	1	3480	1/1	0.90	0.21	30,30,30,30	0
89	OHX	3	225	7/7	0.90	0.12	271,271,271,271	0
89	OHX	2	2145	7/7	0.90	0.12	226,226,226,226	0
88	MG	5	3804	1/1	0.90	0.13	45,45,45,45	0
89	OHX	l5	304	7/7	0.90	0.11	239,239,239,239	0
88	MG	1	3864	1/1	0.90	0.24	28,28,28,28	0
89	OHX	5	4147	7/7	0.90	0.12	208,208,208,208	0
89	OHX	5	4150	7/7	0.90	0.17	215,215,215,215	0
89	OHX	4	232	7/7	0.90	0.13	249,249,249,249	0
89	OHX	5	4153	7/7	0.90	0.14	245,245,245,245	0
89	OHX	5	4154	7/7	0.90	0.14	220,220,220,220	0
88	MG	2	1969	1/1	0.90	0.31	61,61,61,61	0
88	MG	1	3725	1/1	0.91	0.06	21,21,21,21	0
89	OHX	sR	401	7/7	0.91	0.11	220,220,220,220	0
89	OHX	5	4019	7/7	0.91	0.16	171,171,171,171	0
89	OHX	5	4028	7/7	0.91	0.19	179,179,179,179	0
88	MG	1	3625	1/1	0.91	0.16	60,60,60,60	0
88	MG	3	210	1/1	0.91	0.12	48,48,48,48	0
88	MG	1	3417	1/1	0.91	0.19	32,32,32,32	0
88	MG	5	3716	1/1	0.91	0.08	38,38,38,38	0
88	MG	6	2012	1/1	0.91	0.16	33,33,33,33	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	4101	7/7	0.91	0.17	191,191,191,191	0
88	MG	6	2014	1/1	0.91	0.06	34,34,34,34	0
89	OHX	5	4103	7/7	0.91	0.14	197,197,197,197	0
88	MG	4	205	1/1	0.91	0.15	19,19,19,19	0
89	OHX	5	4106	7/7	0.91	0.13	187,187,187,187	0
88	MG	2	1926	1/1	0.91	0.17	46,46,46,46	0
88	MG	5	3734	1/1	0.91	0.11	40,40,40,40	0
89	OHX	5	4114	7/7	0.91	0.12	204,204,204,204	0
89	OHX	5	4119	7/7	0.91	0.11	199,199,199,199	0
88	MG	5	3735	1/1	0.91	0.15	49,49,49,49	0
89	OHX	5	4127	7/7	0.91	0.14	206,206,206,206	0
88	MG	1	3639	1/1	0.91	0.13	26,26,26,26	0
88	MG	5	3764	1/1	0.91	0.20	49,49,49,49	0
88	MG	5	3773	1/1	0.91	0.06	56,56,56,56	0
88	MG	6	2025	1/1	0.91	0.27	43,43,43,43	0
88	MG	6	2026	1/1	0.91	0.24	45,45,45,45	0
88	MG	1	3472	1/1	0.91	0.08	28,28,28,28	0
89	OHX	2	2161	7/7	0.91	0.11	312,312,312,312	0
88	MG	2	1988	1/1	0.91	0.25	60,60,60,60	0
89	OHX	5	4148	7/7	0.91	0.17	210,210,210,210	0
89	OHX	5	4149	7/7	0.91	0.16	216,216,216,216	0
88	MG	2	1948	1/1	0.91	0.21	31,31,31,31	0
88	MG	1	3647	1/1	0.91	0.09	35,35,35,35	0
89	OHX	5	4152	7/7	0.91	0.13	217,217,217,217	0
88	MG	L7	304	1/1	0.91	0.15	44,44,44,44	0
88	MG	1	3651	1/1	0.91	0.19	33,33,33,33	0
89	OHX	2	2167	7/7	0.91	0.10	254,254,254,254	0
88	MG	6	2043	1/1	0.91	0.16	35,35,35,35	0
88	MG	2	1943	1/1	0.91	0.10	33,33,33,33	0
89	OHX	5	4160	7/7	0.91	0.12	231,231,231,231	0
88	MG	M3	202	1/1	0.91	0.19	50,50,50,50	0
88	MG	1	3656	1/1	0.91	0.12	59,59,59,59	0
88	MG	1	3658	1/1	0.91	0.20	27,27,27,27	0
88	MG	5	3816	1/1	0.91	0.06	48,48,48,48	0
89	OHX	5	4166	7/7	0.91	0.14	189,189,189,189	0
89	OHX	1	4213	7/7	0.91	0.16	202,202,202,202	0
88	MG	M9	201	1/1	0.91	0.09	83,83,83,83	0
88	MG	1	3782	1/1	0.91	0.09	36,36,36,36	0
89	OHX	5	4170	7/7	0.91	0.16	208,208,208,208	0
88	MG	N8	201	1/1	0.91	0.14	30,30,30,30	0
88	MG	N8	202	1/1	0.91	0.08	16,16,16,16	0
89	OHX	5	4173	7/7	0.91	0.14	228,228,228,228	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3849	1/1	0.91	0.08	50,50,50,50	0
88	MG	N8	204	1/1	0.91	0.18	43,43,43,43	0
88	MG	1	3787	1/1	0.91	0.17	27,27,27,27	0
89	OHX	C3	201	7/7	0.91	0.10	238,238,238,238	0
88	MG	5	3444	1/1	0.91	0.08	24,24,24,24	0
88	MG	5	3448	1/1	0.91	0.12	53,53,53,53	0
88	MG	5	3878	1/1	0.91	0.18	25,25,25,25	0
88	MG	5	3451	1/1	0.91	0.27	38,38,38,38	0
88	MG	5	3887	1/1	0.91	0.15	33,33,33,33	0
88	MG	1	3450	1/1	0.91	0.13	32,32,32,32	0
88	MG	5	3456	1/1	0.91	0.07	44,44,44,44	0
88	MG	1	3666	1/1	0.91	0.24	60,60,60,60	0
88	MG	5	3892	1/1	0.91	0.08	17,17,17,17	0
88	MG	1	3667	1/1	0.91	0.10	51,51,51,51	0
89	OHX	1	4082	7/7	0.91	0.17	213,213,213,213	0
89	OHX	1	4084	7/7	0.91	0.14	231,231,231,231	0
88	MG	1	3451	1/1	0.91	0.13	14,14,14,14	0
89	OHX	1	4090	7/7	0.91	0.14	220,220,220,220	0
88	MG	5	4259	1/1	0.91	0.17	51,51,51,51	0
88	MG	1	3798	1/1	0.91	0.11	54,54,54,54	0
89	OHX	1	4095	7/7	0.91	0.15	207,207,207,207	0
89	OHX	1	4096	7/7	0.91	0.15	191,191,191,191	0
89	OHX	O3	201	7/7	0.91	0.17	178,178,178,178	0
89	OHX	1	4102	7/7	0.91	0.12	213,213,213,213	0
88	MG	2	1923	1/1	0.91	0.18	31,31,31,31	0
89	OHX	6	2121	7/7	0.91	0.15	213,213,213,213	0
89	OHX	6	2128	7/7	0.91	0.20	183,183,183,183	0
89	OHX	6	2129	7/7	0.91	0.15	191,191,191,191	0
88	MG	5	3480	1/1	0.91	0.18	48,48,48,48	0
88	MG	2	2008	1/1	0.91	0.31	33,33,33,33	0
89	OHX	6	2136	7/7	0.91	0.13	206,206,206,206	0
88	MG	1	3682	1/1	0.91	0.17	46,46,46,46	0
89	OHX	5	4213	7/7	0.91	0.16	281,281,281,281	0
88	MG	6	1928	1/1	0.91	0.27	51,51,51,51	0
88	MG	1	3685	1/1	0.91	0.15	49,49,49,49	0
89	OHX	1	4115	7/7	0.91	0.15	215,215,215,215	0
89	OHX	1	4116	7/7	0.91	0.14	209,209,209,209	0
88	MG	5	3500	1/1	0.91	0.23	33,33,33,33	0
88	MG	1	3689	1/1	0.91	0.20	47,47,47,47	0
89	OHX	5	4220	7/7	0.91	0.15	256,256,256,256	0
88	MG	l7	302	1/1	0.91	0.22	38,38,38,38	0
88	MG	m1	201	1/1	0.91	0.12	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	6	2154	7/7	0.91	0.12	209,209,209,209	0
88	MG	1	3693	1/1	0.91	0.36	65,65,65,65	0
88	MG	5	3535	1/1	0.91	0.19	23,23,23,23	0
88	MG	n0	201	1/1	0.91	0.09	42,42,42,42	0
89	OHX	1	4128	7/7	0.91	0.11	222,222,222,222	0
88	MG	1	3833	1/1	0.91	0.09	47,47,47,47	0
88	MG	5	3553	1/1	0.91	0.21	12,12,12,12	0
89	OHX	1	4132	7/7	0.91	0.19	180,180,180,180	0
89	OHX	1	4133	7/7	0.91	0.16	208,208,208,208	0
88	MG	5	3557	1/1	0.91	0.23	32,32,32,32	0
89	OHX	1	4135	7/7	0.91	0.19	232,232,232,232	0
88	MG	6	1952	1/1	0.91	0.19	29,29,29,29	0
88	MG	5	3576	1/1	0.91	0.25	12,12,12,12	0
88	MG	o4	201	1/1	0.91	0.20	48,48,48,48	0
88	MG	5	3580	1/1	0.91	0.25	19,19,19,19	0
88	MG	5	3585	1/1	0.91	0.23	24,24,24,24	0
89	OHX	2	2091	7/7	0.91	0.13	192,192,192,192	0
89	OHX	6	2174	7/7	0.91	0.17	223,223,223,223	0
88	MG	6	1958	1/1	0.91	0.24	31,31,31,31	0
88	MG	5	3596	1/1	0.91	0.24	23,23,23,23	0
88	MG	1	3697	1/1	0.91	0.22	52,52,52,52	0
89	OHX	1	4147	7/7	0.91	0.16	166,166,166,166	0
88	MG	5	3609	1/1	0.91	0.21	45,45,45,45	0
88	MG	6	1967	1/1	0.91	0.08	29,29,29,29	0
88	MG	5	3634	1/1	0.91	0.16	26,26,26,26	0
88	MG	1	3538	1/1	0.91	0.22	40,40,40,40	0
89	OHX	2	2119	7/7	0.91	0.12	205,205,205,205	0
88	MG	5	3645	1/1	0.91	0.18	40,40,40,40	0
89	OHX	2	2121	7/7	0.91	0.12	237,237,237,237	0
89	OHX	2	2122	7/7	0.91	0.11	222,222,222,222	0
88	MG	1	3851	1/1	0.91	0.21	42,42,42,42	0
89	OHX	1	4158	7/7	0.91	0.10	257,257,257,257	0
88	MG	1	3602	1/1	0.91	0.29	26,26,26,26	0
88	MG	5	3657	1/1	0.91	0.14	42,42,42,42	0
89	OHX	1	4161	7/7	0.91	0.10	216,216,216,216	0
88	MG	1	3610	1/1	0.91	0.15	54,54,54,54	0
89	OHX	2	2132	7/7	0.91	0.13	211,211,211,211	0
89	OHX	1	4165	7/7	0.91	0.17	204,204,204,204	0
88	MG	1	3457	1/1	0.91	0.25	28,28,28,28	0
89	OHX	1	4168	7/7	0.91	0.16	257,257,257,257	0
89	OHX	1	4170	7/7	0.91	0.14	188,188,188,188	0
88	MG	1	3617	1/1	0.91	0.20	25,25,25,25	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3620	1/1	0.91	0.28	42,42,42,42	0
88	MG	1	3722	1/1	0.91	0.15	38,38,38,38	0
88	MG	6	1988	1/1	0.91	0.09	47,47,47,47	0
88	MG	6	1989	1/1	0.91	0.15	37,37,37,37	0
88	MG	2	1996	1/1	0.91	0.23	32,32,32,32	0
88	MG	1	3871	1/1	0.91	0.21	62,62,62,62	0
90	ZN	Q2	501	1/1	0.91	0.19	305,305,305,305	0
89	OHX	2	2142	7/7	0.91	0.17	172,172,172,172	0
89	OHX	5	4072	7/7	0.92	0.16	183,183,183,183	0
89	OHX	5	4081	7/7	0.92	0.13	194,194,194,194	0
88	MG	5	3449	1/1	0.92	0.08	31,31,31,31	0
88	MG	1	3843	1/1	0.92	0.40	50,50,50,50	0
89	OHX	5	4094	7/7	0.92	0.17	177,177,177,177	0
88	MG	6	1925	1/1	0.92	0.29	20,20,20,20	0
88	MG	1	3627	1/1	0.92	0.14	30,30,30,30	0
89	OHX	5	4100	7/7	0.92	0.12	197,197,197,197	0
88	MG	2	1985	1/1	0.92	0.07	53,53,53,53	0
88	MG	5	3809	1/1	0.92	0.09	33,33,33,33	0
88	MG	2	1914	1/1	0.92	0.20	33,33,33,33	0
88	MG	5	3466	1/1	0.92	0.24	50,50,50,50	0
88	MG	1	3634	1/1	0.92	0.08	21,21,21,21	0
88	MG	2	2010	1/1	0.92	0.33	46,46,46,46	0
88	MG	6	1941	1/1	0.92	0.18	25,25,25,25	0
88	MG	5	3825	1/1	0.92	0.08	33,33,33,33	0
88	MG	6	1944	1/1	0.92	0.23	29,29,29,29	0
89	OHX	5	4122	7/7	0.92	0.14	192,192,192,192	0
89	OHX	5	4123	7/7	0.92	0.12	185,185,185,185	0
89	OHX	2	2168	7/7	0.92	0.14	198,198,198,198	0
88	MG	5	3483	1/1	0.92	0.20	21,21,21,21	0
88	MG	5	3484	1/1	0.92	0.23	42,42,42,42	0
88	MG	1	3858	1/1	0.92	0.28	61,61,61,61	0
88	MG	1	3727	1/1	0.92	0.08	42,42,42,42	0
88	MG	1	3446	1/1	0.92	0.14	27,27,27,27	0
88	MG	1	3734	1/1	0.92	0.20	44,44,44,44	0
89	OHX	1	4205	7/7	0.92	0.12	220,220,220,220	0
88	MG	1	3868	1/1	0.92	0.09	46,46,46,46	0
88	MG	6	1971	1/1	0.92	0.10	22,22,22,22	0
88	MG	5	3881	1/1	0.92	0.23	28,28,28,28	0
88	MG	5	3885	1/1	0.92	0.21	25,25,25,25	0
88	MG	1	3736	1/1	0.92	0.07	65,65,65,65	0
88	MG	1	3870	1/1	0.92	0.22	43,43,43,43	0
88	MG	2	1933	1/1	0.92	0.12	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	2	2013	1/1	0.92	0.18	47,47,47,47	0
88	MG	5	3554	1/1	0.92	0.10	23,23,23,23	0
89	OHX	5	4155	7/7	0.92	0.12	203,203,203,203	0
88	MG	2	1992	1/1	0.92	0.13	53,53,53,53	0
88	MG	5	3562	1/1	0.92	0.28	28,28,28,28	0
89	OHX	1	3963	7/7	0.92	0.21	137,137,137,137	0
88	MG	5	3895	1/1	0.92	0.11	114,114,114,114	0
88	MG	5	3897	1/1	0.92	0.12	32,32,32,32	0
89	OHX	5	4162	7/7	0.92	0.15	236,236,236,236	0
88	MG	1	3560	1/1	0.92	0.15	55,55,55,55	0
89	OHX	1	4049	7/7	0.92	0.15	174,174,174,174	0
89	OHX	1	4223	7/7	0.92	0.18	222,222,222,222	0
89	OHX	1	4057	7/7	0.92	0.14	193,193,193,193	0
89	OHX	1	4058	7/7	0.92	0.16	174,174,174,174	0
88	MG	5	3899	1/1	0.92	0.10	26,26,26,26	0
88	MG	3	211	1/1	0.92	0.08	47,47,47,47	0
88	MG	5	4261	1/1	0.92	0.13	48,48,48,48	0
89	OHX	1	4079	7/7	0.92	0.13	183,183,183,183	0
88	MG	3	212	1/1	0.92	0.10	87,87,87,87	0
89	OHX	4	227	7/7	0.92	0.11	186,186,186,186	0
88	MG	7	211	1/1	0.92	0.08	55,55,55,55	0
88	MG	7	212	1/1	0.92	0.06	41,41,41,41	0
88	MG	2	2017	1/1	0.92	0.33	49,49,49,49	0
89	OHX	1	4089	7/7	0.92	0.14	187,187,187,187	0
88	MG	1	3563	1/1	0.92	0.21	17,17,17,17	0
89	OHX	1	4092	7/7	0.92	0.14	205,205,205,205	0
88	MG	2	1971	1/1	0.92	0.07	26,26,26,26	0
89	OHX	M0	303	7/7	0.92	0.15	153,153,153,153	0
88	MG	1	3577	1/1	0.92	0.25	22,22,22,22	0
88	MG	2	1972	1/1	0.92	0.14	36,36,36,36	0
88	MG	2	1995	1/1	0.92	0.09	38,38,38,38	0
89	OHX	1	4099	7/7	0.92	0.15	193,193,193,193	0
89	OHX	6	2102	7/7	0.92	0.17	166,166,166,166	0
88	MG	5	3628	1/1	0.92	0.09	12,12,12,12	0
88	MG	5	3631	1/1	0.92	0.22	60,60,60,60	0
88	MG	17	301	1/1	0.92	0.10	36,36,36,36	0
89	OHX	6	2123	7/7	0.92	0.13	188,188,188,188	0
89	OHX	6	2124	7/7	0.92	0.13	218,218,218,218	0
89	OHX	6	2127	7/7	0.92	0.13	190,190,190,190	0
88	MG	5	3633	1/1	0.92	0.11	39,39,39,39	0
89	OHX	1	4109	7/7	0.92	0.10	219,219,219,219	0
88	MG	1	3777	1/1	0.92	0.13	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	2008	1/1	0.92	0.19	56,56,56,56	0
89	OHX	6	2134	7/7	0.92	0.14	183,183,183,183	0
89	OHX	5	4201	7/7	0.92	0.11	220,220,220,220	0
88	MG	5	3638	1/1	0.92	0.16	40,40,40,40	0
88	MG	m7	204	1/1	0.92	0.13	33,33,33,33	0
88	MG	5	3639	1/1	0.92	0.13	38,38,38,38	0
88	MG	L5	301	1/1	0.92	0.09	32,32,32,32	0
88	MG	5	3647	1/1	0.92	0.14	58,58,58,58	0
88	MG	1	3401	1/1	0.92	0.10	32,32,32,32	0
88	MG	1	3670	1/1	0.92	0.20	39,39,39,39	0
88	MG	1	3671	1/1	0.92	0.18	45,45,45,45	0
89	OHX	5	4212	7/7	0.92	0.13	215,215,215,215	0
88	MG	5	3658	1/1	0.92	0.11	29,29,29,29	0
88	MG	q1	101	1/1	0.92	0.19	30,30,30,30	0
89	OHX	1	4127	7/7	0.92	0.17	208,208,208,208	0
88	MG	1	3403	1/1	0.92	0.22	35,35,35,35	0
89	OHX	1	4129	7/7	0.92	0.13	194,194,194,194	0
89	OHX	2	2075	7/7	0.92	0.13	209,209,209,209	0
89	OHX	2	2078	7/7	0.92	0.12	189,189,189,189	0
88	MG	5	3665	1/1	0.92	0.16	15,15,15,15	0
89	OHX	2	2084	7/7	0.92	0.14	208,208,208,208	0
89	OHX	2	2086	7/7	0.92	0.13	207,207,207,207	0
89	OHX	6	2162	7/7	0.92	0.12	210,210,210,210	0
88	MG	2	1902	1/1	0.92	0.15	16,16,16,16	0
89	OHX	1	4136	7/7	0.92	0.17	209,209,209,209	0
89	OHX	1	4137	7/7	0.92	0.12	207,207,207,207	0
88	MG	5	3677	1/1	0.92	0.08	33,33,33,33	0
88	MG	1	3677	1/1	0.92	0.21	32,32,32,32	0
88	MG	M7	202	1/1	0.92	0.25	35,35,35,35	0
89	OHX	2	2104	7/7	0.92	0.10	217,217,217,217	0
88	MG	1	3406	1/1	0.92	0.16	38,38,38,38	0
88	MG	5	3688	1/1	0.92	0.18	43,43,43,43	0
88	MG	1	3684	1/1	0.92	0.05	27,27,27,27	0
89	OHX	2	2113	7/7	0.92	0.11	194,194,194,194	0
89	OHX	2	2114	7/7	0.92	0.13	208,208,208,208	0
88	MG	6	2036	1/1	0.92	0.20	37,37,37,37	0
89	OHX	2	2118	7/7	0.92	0.12	206,206,206,206	0
88	MG	N0	201	1/1	0.92	0.22	35,35,35,35	0
88	MG	N3	203	1/1	0.92	0.13	34,34,34,34	0
88	MG	6	2040	1/1	0.92	0.21	51,51,51,51	0
88	MG	5	3698	1/1	0.92	0.19	38,38,38,38	0
89	OHX	2	2125	7/7	0.92	0.11	212,212,212,212	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3487	1/1	0.92	0.20	26,26,26,26	0
88	MG	5	3701	1/1	0.92	0.09	32,32,32,32	0
88	MG	5	3705	1/1	0.92	0.08	37,37,37,37	0
88	MG	1	3804	1/1	0.92	0.15	59,59,59,59	0
88	MG	5	3708	1/1	0.92	0.14	45,45,45,45	0
88	MG	2	1930	1/1	0.92	0.27	41,41,41,41	0
88	MG	1	3810	1/1	0.92	0.18	52,52,52,52	0
88	MG	1	3613	1/1	0.92	0.27	36,36,36,36	0
88	MG	2	1941	1/1	0.92	0.17	46,46,46,46	0
88	MG	6	1903	1/1	0.92	0.32	33,33,33,33	0
88	MG	5	3401	1/1	0.92	0.10	36,36,36,36	0
89	OHX	1	4167	7/7	0.92	0.13	221,221,221,221	0
88	MG	1	3500	1/1	0.92	0.27	27,27,27,27	0
88	MG	5	3407	1/1	0.92	0.10	30,30,30,30	0
88	MG	5	3739	1/1	0.92	0.16	55,55,55,55	0
88	MG	5	3741	1/1	0.92	0.21	40,40,40,40	0
88	MG	5	3410	1/1	0.92	0.19	41,41,41,41	0
88	MG	5	3411	1/1	0.92	0.18	20,20,20,20	0
89	OHX	8	230	7/7	0.92	0.12	219,219,219,219	0
89	OHX	1	4175	7/7	0.92	0.17	210,210,210,210	0
88	MG	2	1963	1/1	0.92	0.19	46,46,46,46	0
88	MG	5	3774	1/1	0.92	0.10	55,55,55,55	0
89	OHX	15	303	7/7	0.92	0.11	200,200,200,200	0
88	MG	1	3830	1/1	0.92	0.22	56,56,56,56	0
88	MG	5	3782	1/1	0.92	0.08	55,55,55,55	0
88	MG	1	3832	1/1	0.92	0.10	41,41,41,41	0
89	OHX	19	600	7/7	0.92	0.10	219,219,219,219	0
88	MG	6	1917	1/1	0.92	0.15	31,31,31,31	0
88	MG	2	1942	1/1	0.92	0.13	39,39,39,39	0
89	OHX	5	4029	7/7	0.92	0.18	142,142,142,142	0
89	OHX	5	4039	7/7	0.92	0.13	163,163,163,163	0
89	OHX	5	4044	7/7	0.92	0.14	166,166,166,166	0
88	MG	1	3520	1/1	0.92	0.24	8,8,8,8	0
89	OHX	5	4038	7/7	0.93	0.13	155,155,155,155	0
88	MG	5	3772	1/1	0.93	0.16	71,71,71,71	0
88	MG	5	3434	1/1	0.93	0.09	62,62,62,62	0
89	OHX	5	4064	7/7	0.93	0.16	167,167,167,167	0
88	MG	5	3436	1/1	0.93	0.12	19,19,19,19	0
88	MG	5	3777	1/1	0.93	0.08	48,48,48,48	0
89	OHX	5	4076	7/7	0.93	0.14	184,184,184,184	0
88	MG	5	3437	1/1	0.93	0.29	55,55,55,55	0
89	OHX	5	4084	7/7	0.93	0.14	173,173,173,173	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3440	1/1	0.93	0.19	28,28,28,28	0
88	MG	1	3812	1/1	0.93	0.12	43,43,43,43	0
88	MG	5	3785	1/1	0.93	0.06	49,49,49,49	0
89	OHX	5	4095	7/7	0.93	0.14	181,181,181,181	0
88	MG	6	1910	1/1	0.93	0.11	44,44,44,44	0
89	OHX	5	4098	7/7	0.93	0.13	172,172,172,172	0
88	MG	1	3686	1/1	0.93	0.11	37,37,37,37	0
88	MG	1	3823	1/1	0.93	0.16	44,44,44,44	0
88	MG	1	3687	1/1	0.93	0.10	28,28,28,28	0
88	MG	6	1919	1/1	0.93	0.21	21,21,21,21	0
88	MG	1	3826	1/1	0.93	0.21	52,52,52,52	0
88	MG	6	1923	1/1	0.93	0.18	39,39,39,39	0
89	OHX	5	4105	7/7	0.93	0.16	180,180,180,180	0
88	MG	1	3827	1/1	0.93	0.15	49,49,49,49	0
89	OHX	5	4108	7/7	0.93	0.14	167,167,167,167	0
89	OHX	5	4109	7/7	0.93	0.12	184,184,184,184	0
88	MG	5	3807	1/1	0.93	0.17	40,40,40,40	0
88	MG	1	3608	1/1	0.93	0.17	27,27,27,27	0
88	MG	1	3499	1/1	0.93	0.19	18,18,18,18	0
88	MG	2	1952	1/1	0.93	0.22	50,50,50,50	0
89	OHX	5	4120	7/7	0.93	0.15	187,187,187,187	0
88	MG	5	3476	1/1	0.93	0.14	36,36,36,36	0
88	MG	6	1932	1/1	0.93	0.18	29,29,29,29	0
89	OHX	5	4124	7/7	0.93	0.13	193,193,193,193	0
88	MG	2	2181	1/1	0.93	0.08	36,36,36,36	0
89	OHX	5	4126	7/7	0.93	0.13	201,201,201,201	0
88	MG	S4	302	1/1	0.93	0.27	53,53,53,53	0
89	OHX	5	4128	7/7	0.93	0.10	200,200,200,200	0
89	OHX	5	4130	7/7	0.93	0.12	193,193,193,193	0
88	MG	1	3703	1/1	0.93	0.12	12,12,12,12	0
89	OHX	5	4132	7/7	0.93	0.10	196,196,196,196	0
88	MG	1	3846	1/1	0.93	0.21	31,31,31,31	0
88	MG	5	3847	1/1	0.93	0.19	59,59,59,59	0
88	MG	1	3707	1/1	0.93	0.16	35,35,35,35	0
88	MG	5	3493	1/1	0.93	0.08	41,41,41,41	0
88	MG	5	3851	1/1	0.93	0.12	47,47,47,47	0
88	MG	6	1951	1/1	0.93	0.25	36,36,36,36	0
89	OHX	5	4146	7/7	0.93	0.12	225,225,225,225	0
88	MG	1	3517	1/1	0.93	0.25	10,10,10,10	0
89	OHX	1	4207	7/7	0.93	0.11	191,191,191,191	0
88	MG	5	3505	1/1	0.93	0.23	19,19,19,19	0
88	MG	5	3869	1/1	0.93	0.06	28,28,28,28	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3518	1/1	0.93	0.22	24,24,24,24	0
88	MG	5	3507	1/1	0.93	0.21	29,29,29,29	0
88	MG	5	3516	1/1	0.93	0.26	17,17,17,17	0
88	MG	1	3711	1/1	0.93	0.10	47,47,47,47	0
88	MG	6	1964	1/1	0.93	0.15	34,34,34,34	0
88	MG	1	3623	1/1	0.93	0.16	30,30,30,30	0
88	MG	5	3543	1/1	0.93	0.18	14,14,14,14	0
88	MG	6	1968	1/1	0.93	0.15	28,28,28,28	0
88	MG	1	3856	1/1	0.93	0.16	42,42,42,42	0
88	MG	5	3556	1/1	0.93	0.19	10,10,10,10	0
88	MG	5	3893	1/1	0.93	0.10	87,87,87,87	0
89	OHX	1	3976	7/7	0.93	0.12	144,144,144,144	0
89	OHX	1	4008	7/7	0.93	0.14	168,168,168,168	0
89	OHX	1	4015	7/7	0.93	0.12	202,202,202,202	0
89	OHX	1	4023	7/7	0.93	0.16	155,155,155,155	0
88	MG	S6	301	1/1	0.93	0.12	58,58,58,58	0
89	OHX	1	4029	7/7	0.93	0.12	180,180,180,180	0
89	OHX	3	221	7/7	0.93	0.12	180,180,180,180	0
89	OHX	1	4030	7/7	0.93	0.15	164,164,164,164	0
89	OHX	1	4032	7/7	0.93	0.16	163,163,163,163	0
88	MG	1	3715	1/1	0.93	0.07	49,49,49,49	0
88	MG	5	3569	1/1	0.93	0.23	10,10,10,10	0
88	MG	1	3526	1/1	0.93	0.17	12,12,12,12	0
88	MG	2	1940	1/1	0.93	0.16	39,39,39,39	0
88	MG	5	4258	1/1	0.93	0.22	54,54,54,54	0
89	OHX	1	4062	7/7	0.93	0.17	173,173,173,173	0
89	OHX	1	4066	7/7	0.93	0.15	195,195,195,195	0
88	MG	1	3531	1/1	0.93	0.15	11,11,11,11	0
88	MG	5	3582	1/1	0.93	0.21	26,26,26,26	0
88	MG	7	203	1/1	0.93	0.18	48,48,48,48	0
88	MG	7	207	1/1	0.93	0.13	54,54,54,54	0
88	MG	2	1960	1/1	0.93	0.24	54,54,54,54	0
88	MG	1	3635	1/1	0.93	0.17	48,48,48,48	0
89	OHX	1	4083	7/7	0.93	0.13	183,183,183,183	0
88	MG	1	3637	1/1	0.93	0.18	30,30,30,30	0
89	OHX	6	2082	7/7	0.93	0.15	136,136,136,136	0
89	OHX	6	2092	7/7	0.93	0.16	166,166,166,166	0
88	MG	1	3539	1/1	0.93	0.23	20,20,20,20	0
89	OHX	1	4087	7/7	0.93	0.12	188,188,188,188	0
89	OHX	5	4193	7/7	0.93	0.11	227,227,227,227	0
89	OHX	1	4088	7/7	0.93	0.15	187,187,187,187	0
88	MG	1	3542	1/1	0.93	0.20	15,15,15,15	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3620	1/1	0.93	0.20	44,44,44,44	0
88	MG	8	204	1/1	0.93	0.23	50,50,50,50	0
88	MG	1	3642	1/1	0.93	0.19	42,42,42,42	0
88	MG	6	1992	1/1	0.93	0.25	57,57,57,57	0
88	MG	1	3742	1/1	0.93	0.20	49,49,49,49	0
88	MG	12	301	1/1	0.93	0.20	30,30,30,30	0
89	OHX	1	4097	7/7	0.93	0.12	227,227,227,227	0
89	OHX	5	4204	7/7	0.93	0.12	185,185,185,185	0
88	MG	13	404	1/1	0.93	0.10	59,59,59,59	0
88	MG	14	402	1/1	0.93	0.10	41,41,41,41	0
89	OHX	6	2137	7/7	0.93	0.11	212,212,212,212	0
89	OHX	1	4104	7/7	0.93	0.16	194,194,194,194	0
88	MG	1	3743	1/1	0.93	0.12	43,43,43,43	0
89	OHX	6	2142	7/7	0.93	0.13	185,185,185,185	0
89	OHX	6	2143	7/7	0.93	0.12	233,233,233,233	0
88	MG	1	3744	1/1	0.93	0.14	45,45,45,45	0
88	MG	5	3635	1/1	0.93	0.07	26,26,26,26	0
88	MG	1	3752	1/1	0.93	0.17	46,46,46,46	0
88	MG	4	207	1/1	0.93	0.20	42,42,42,42	0
89	OHX	1	4112	7/7	0.93	0.11	198,198,198,198	0
88	MG	1	3452	1/1	0.93	0.20	27,27,27,27	0
88	MG	5	3640	1/1	0.93	0.20	35,35,35,35	0
88	MG	m5	304	1/1	0.93	0.07	39,39,39,39	0
88	MG	5	3644	1/1	0.93	0.06	30,30,30,30	0
88	MG	2	1980	1/1	0.93	0.15	24,24,24,24	0
89	OHX	1	4118	7/7	0.93	0.12	179,179,179,179	0
88	MG	1	3404	1/1	0.93	0.17	30,30,30,30	0
88	MG	n6	202	1/1	0.93	0.15	26,26,26,26	0
88	MG	1	3763	1/1	0.93	0.06	29,29,29,29	0
88	MG	L3	403	1/1	0.93	0.09	53,53,53,53	0
88	MG	1	3648	1/1	0.93	0.17	33,33,33,33	0
88	MG	6	2020	1/1	0.93	0.15	46,46,46,46	0
88	MG	5	3659	1/1	0.93	0.19	55,55,55,55	0
88	MG	6	2022	1/1	0.93	0.07	50,50,50,50	0
88	MG	5	3664	1/1	0.93	0.21	42,42,42,42	0
88	MG	2	1920	1/1	0.93	0.07	23,23,23,23	0
88	MG	L7	301	1/1	0.93	0.07	32,32,32,32	0
89	OHX	2	2080	7/7	0.93	0.11	174,174,174,174	0
88	MG	L7	302	1/1	0.93	0.10	49,49,49,49	0
88	MG	6	2029	1/1	0.93	0.17	49,49,49,49	0
88	MG	1	3653	1/1	0.93	0.09	30,30,30,30	0
89	OHX	2	2088	7/7	0.93	0.14	184,184,184,184	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	2033	1/1	0.93	0.11	46,46,46,46	0
88	MG	1	3458	1/1	0.93	0.14	3,3,3,3	0
88	MG	2	1916	1/1	0.93	0.20	37,37,37,37	0
89	OHX	2	2101	7/7	0.93	0.11	199,199,199,199	0
89	OHX	2	2102	7/7	0.93	0.13	174,174,174,174	0
88	MG	1	3465	1/1	0.93	0.15	38,38,38,38	0
88	MG	2	1974	1/1	0.93	0.14	55,55,55,55	0
88	MG	1	3661	1/1	0.93	0.11	22,22,22,22	0
89	OHX	2	2106	7/7	0.93	0.13	196,196,196,196	0
88	MG	6	2041	1/1	0.93	0.08	21,21,21,21	0
89	OHX	2	2109	7/7	0.93	0.11	213,213,213,213	0
88	MG	1	3785	1/1	0.93	0.10	43,43,43,43	0
88	MG	1	3566	1/1	0.93	0.20	29,29,29,29	0
88	MG	1	3409	1/1	0.93	0.16	7,7,7,7	0
88	MG	1	3574	1/1	0.93	0.22	20,20,20,20	0
88	MG	s8	302	1/1	0.93	0.14	34,34,34,34	0
88	MG	1	3411	1/1	0.93	0.15	20,20,20,20	0
89	OHX	7	222	7/7	0.93	0.13	170,170,170,170	0
89	OHX	7	223	7/7	0.93	0.13	204,204,204,204	0
88	MG	2	2016	1/1	0.93	0.11	37,37,37,37	0
88	MG	c8	201	1/1	0.93	0.15	41,41,41,41	0
88	MG	5	3719	1/1	0.93	0.09	36,36,36,36	0
89	OHX	8	226	7/7	0.93	0.13	222,222,222,222	0
88	MG	2	1975	1/1	0.93	0.20	66,66,66,66	0
89	OHX	2	2126	7/7	0.93	0.13	205,205,205,205	0
89	OHX	8	229	7/7	0.93	0.11	204,204,204,204	0
88	MG	1	3419	1/1	0.93	0.23	36,36,36,36	0
88	MG	1	3801	1/1	0.93	0.35	29,29,29,29	0
89	OHX	6	2200	7/7	0.93	0.09	237,237,237,237	0
88	MG	5	3730	1/1	0.93	0.06	37,37,37,37	0
88	MG	1	3803	1/1	0.93	0.18	54,54,54,54	0
89	OHX	1	4164	7/7	0.93	0.11	201,201,201,201	0
88	MG	2	2004	1/1	0.93	0.21	59,59,59,59	0
88	MG	1	3426	1/1	0.93	0.09	14,14,14,14	0
89	OHX	c5	201	7/7	0.93	0.09	215,215,215,215	0
88	MG	6	1904	1/1	0.93	0.15	27,27,27,27	0
88	MG	5	3740	1/1	0.93	0.12	24,24,24,24	0
88	MG	6	1906	1/1	0.93	0.21	27,27,27,27	0
88	MG	5	3751	1/1	0.93	0.19	4,4,4,4	0
88	MG	1	3496	1/1	0.93	0.12	33,33,33,33	0
88	MG	1	3497	1/1	0.93	0.17	41,41,41,41	0
88	MG	C8	201	1/1	0.94	0.11	86,86,86,86	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
88	MG	6	2032	1/1	0.94	0.13	50,50,50,50	0
88	MG	M7	201	1/1	0.94	0.21	15,15,15,15	0
88	MG	1	3537	1/1	0.94	0.16	8,8,8,8	0
88	MG	1	3616	1/1	0.94	0.06	36,36,36,36	0
88	MG	1	3469	1/1	0.94	0.28	33,33,33,33	0
88	MG	5	3663	1/1	0.94	0.13	15,15,15,15	0
88	MG	6	2038	1/1	0.94	0.21	39,39,39,39	0
88	MG	1	3619	1/1	0.94	0.18	40,40,40,40	0
88	MG	5	3667	1/1	0.94	0.20	45,45,45,45	0
88	MG	5	3670	1/1	0.94	0.05	10,10,10,10	0
89	OHX	c1	202	7/7	0.94	0.12	216,216,216,216	0
89	OHX	2	2057	7/7	0.94	0.12	171,171,171,171	0
89	OHX	2	2067	7/7	0.94	0.12	171,171,171,171	0
89	OHX	c8	202	7/7	0.94	0.11	186,186,186,186	0
89	OHX	2	2068	7/7	0.94	0.11	200,200,200,200	0
88	MG	N3	202	1/1	0.94	0.18	55,55,55,55	0
88	MG	2	1984	1/1	0.94	0.09	37,37,37,37	0
89	OHX	5	4008	7/7	0.94	0.17	141,141,141,141	0
88	MG	5	3679	1/1	0.94	0.04	51,51,51,51	0
89	OHX	5	4022	7/7	0.94	0.12	177,177,177,177	0
88	MG	5	3683	1/1	0.94	0.25	42,42,42,42	0
89	OHX	2	2082	7/7	0.94	0.09	195,195,195,195	0
88	MG	1	3477	1/1	0.94	0.19	21,21,21,21	0
89	OHX	1	4149	7/7	0.94	0.19	144,144,144,144	0
89	OHX	2	2085	7/7	0.94	0.11	198,198,198,198	0
89	OHX	5	4055	7/7	0.94	0.18	166,166,166,166	0
89	OHX	5	4062	7/7	0.94	0.14	178,178,178,178	0
88	MG	1	3622	1/1	0.94	0.05	36,36,36,36	0
88	MG	1	3479	1/1	0.94	0.18	24,24,24,24	0
89	OHX	5	4066	7/7	0.94	0.11	181,181,181,181	0
88	MG	1	3706	1/1	0.94	0.32	55,55,55,55	0
89	OHX	5	4073	7/7	0.94	0.17	183,183,183,183	0
89	OHX	5	4074	7/7	0.94	0.13	171,171,171,171	0
88	MG	N8	205	1/1	0.94	0.13	45,45,45,45	0
89	OHX	5	4078	7/7	0.94	0.12	194,194,194,194	0
89	OHX	5	4079	7/7	0.94	0.12	165,165,165,165	0
88	MG	O4	201	1/1	0.94	0.12	42,42,42,42	0
89	OHX	5	4082	7/7	0.94	0.14	159,159,159,159	0
88	MG	5	3691	1/1	0.94	0.16	42,42,42,42	0
89	OHX	5	4085	7/7	0.94	0.13	145,145,145,145	0
89	OHX	5	4086	7/7	0.94	0.12	172,172,172,172	0
89	OHX	5	4087	7/7	0.94	0.10	178,178,178,178	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
89	OHX	5	4089	7/7	0.94	0.12	175,175,175,175	0
88	MG	1	3546	1/1	0.94	0.23	15,15,15,15	0
88	MG	1	3814	1/1	0.94	0.20	47,47,47,47	0
88	MG	1	3430	1/1	0.94	0.43	39,39,39,39	0
88	MG	d3	201	1/1	0.94	0.12	60,60,60,60	0
88	MG	1	3435	1/1	0.94	0.05	23,23,23,23	0
88	MG	1	3440	1/1	0.94	0.26	27,27,27,27	0
88	MG	5	3704	1/1	0.94	0.05	50,50,50,50	0
89	OHX	2	2110	7/7	0.94	0.10	203,203,203,203	0
88	MG	1	3551	1/1	0.94	0.18	34,34,34,34	0
88	MG	1	3555	1/1	0.94	0.21	11,11,11,11	0
88	MG	1	3402	1/1	0.94	0.15	23,23,23,23	0
88	MG	5	3712	1/1	0.94	0.43	62,62,62,62	0
88	MG	5	3416	1/1	0.94	0.14	31,31,31,31	0
88	MG	5	3417	1/1	0.94	0.11	5,5,5,5	0
89	OHX	5	4107	7/7	0.94	0.15	182,182,182,182	0
88	MG	5	3717	1/1	0.94	0.33	73,73,73,73	0
88	MG	5	3718	1/1	0.94	0.24	50,50,50,50	0
89	OHX	5	4110	7/7	0.94	0.12	168,168,168,168	0
88	MG	5	3418	1/1	0.94	0.23	12,12,12,12	0
89	OHX	2	2124	7/7	0.94	0.14	213,213,213,213	0
88	MG	1	3557	1/1	0.94	0.16	13,13,13,13	0
89	OHX	5	4115	7/7	0.94	0.16	164,164,164,164	0
89	OHX	5	4117	7/7	0.94	0.15	193,193,193,193	0
89	OHX	5	4118	7/7	0.94	0.15	167,167,167,167	0
88	MG	5	3424	1/1	0.94	0.23	42,42,42,42	0
88	MG	5	3723	1/1	0.94	0.14	47,47,47,47	0
88	MG	5	3427	1/1	0.94	0.23	30,30,30,30	0
88	MG	6	1912	1/1	0.94	0.17	44,44,44,44	0
88	MG	5	3731	1/1	0.94	0.23	15,15,15,15	0
88	MG	1	3831	1/1	0.94	0.24	54,54,54,54	0
88	MG	6	1916	1/1	0.94	0.21	38,38,38,38	0
88	MG	2	1939	1/1	0.94	0.15	29,29,29,29	0
88	MG	5	3737	1/1	0.94	0.23	47,47,47,47	0
89	OHX	5	4129	7/7	0.94	0.09	209,209,209,209	0
88	MG	2	2015	1/1	0.94	0.35	57,57,57,57	0
88	MG	2	1965	1/1	0.94	0.08	42,42,42,42	0
88	MG	2	1950	1/1	0.94	0.07	29,29,29,29	0
89	OHX	5	4133	7/7	0.94	0.11	185,185,185,185	0
89	OHX	5	4134	7/7	0.94	0.13	167,167,167,167	0
88	MG	5	3742	1/1	0.94	0.23	31,31,31,31	0
89	OHX	5	4138	7/7	0.94	0.13	198,198,198,198	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	1922	1/1	0.94	0.21	28,28,28,28	0
89	OHX	2	2141	7/7	0.94	0.10	222,222,222,222	0
88	MG	5	3753	1/1	0.94	0.14	54,54,54,54	0
89	OHX	5	4143	7/7	0.94	0.09	222,222,222,222	0
88	MG	5	3754	1/1	0.94	0.19	45,45,45,45	0
88	MG	5	3755	1/1	0.94	0.16	38,38,38,38	0
88	MG	5	3758	1/1	0.94	0.10	41,41,41,41	0
88	MG	5	3446	1/1	0.94	0.19	44,44,44,44	0
88	MG	5	3762	1/1	0.94	0.05	31,31,31,31	0
88	MG	1	3567	1/1	0.94	0.10	21,21,21,21	0
88	MG	5	3767	1/1	0.94	0.13	49,49,49,49	0
88	MG	1	3735	1/1	0.94	0.17	92,92,92,92	0
88	MG	2	1957	1/1	0.94	0.20	35,35,35,35	0
89	OHX	2	2152	7/7	0.94	0.10	239,239,239,239	0
88	MG	6	1926	1/1	0.94	0.26	40,40,40,40	0
88	MG	5	3455	1/1	0.94	0.06	21,21,21,21	0
88	MG	1	3852	1/1	0.94	0.15	20,20,20,20	0
88	MG	2	1935	1/1	0.94	0.17	27,27,27,27	0
88	MG	1	3503	1/1	0.94	0.24	11,11,11,11	0
88	MG	1	3741	1/1	0.94	0.20	53,53,53,53	0
88	MG	5	3787	1/1	0.94	0.13	50,50,50,50	0
88	MG	5	3792	1/1	0.94	0.10	17,17,17,17	0
88	MG	1	3580	1/1	0.94	0.06	10,10,10,10	0
88	MG	1	3581	1/1	0.94	0.20	13,13,13,13	0
88	MG	6	1938	1/1	0.94	0.23	33,33,33,33	0
88	MG	5	3796	1/1	0.94	0.10	41,41,41,41	0
88	MG	5	3475	1/1	0.94	0.15	26,26,26,26	0
88	MG	1	3860	1/1	0.94	0.23	101,101,101,101	0
88	MG	2	2022	1/1	0.94	0.10	69,69,69,69	0
88	MG	6	1949	1/1	0.94	0.29	35,35,35,35	0
88	MG	5	3803	1/1	0.94	0.15	64,64,64,64	0
88	MG	6	1950	1/1	0.94	0.17	14,14,14,14	0
88	MG	5	3806	1/1	0.94	0.06	35,35,35,35	0
88	MG	1	3863	1/1	0.94	0.12	73,73,73,73	0
88	MG	5	3808	1/1	0.94	0.07	70,70,70,70	0
88	MG	1	3748	1/1	0.94	0.14	40,40,40,40	0
89	OHX	5	4177	7/7	0.94	0.15	194,194,194,194	0
88	MG	6	1955	1/1	0.94	0.20	8,8,8,8	0
89	OHX	3	220	7/7	0.94	0.12	196,196,196,196	0
88	MG	1	3866	1/1	0.94	0.26	34,34,34,34	0
88	MG	5	3494	1/1	0.94	0.15	29,29,29,29	0
88	MG	5	3815	1/1	0.94	0.12	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3496	1/1	0.94	0.09	32,32,32,32	0
89	OHX	5	4184	7/7	0.94	0.09	207,207,207,207	0
88	MG	5	3817	1/1	0.94	0.06	42,42,42,42	0
88	MG	6	1960	1/1	0.94	0.21	11,11,11,11	0
88	MG	1	3751	1/1	0.94	0.07	33,33,33,33	0
88	MG	5	3831	1/1	0.94	0.12	35,35,35,35	0
88	MG	5	3834	1/1	0.94	0.06	60,60,60,60	0
88	MG	5	3502	1/1	0.94	0.18	15,15,15,15	0
88	MG	5	3844	1/1	0.94	0.23	53,53,53,53	0
88	MG	5	3504	1/1	0.94	0.20	45,45,45,45	0
88	MG	1	3585	1/1	0.94	0.15	7,7,7,7	0
89	OHX	1	4012	7/7	0.94	0.12	172,172,172,172	0
89	OHX	1	4014	7/7	0.94	0.13	166,166,166,166	0
88	MG	6	1965	1/1	0.94	0.10	26,26,26,26	0
89	OHX	M8	201	7/7	0.94	0.14	164,164,164,164	0
89	OHX	1	4016	7/7	0.94	0.13	175,175,175,175	0
88	MG	1	3508	1/1	0.94	0.25	24,24,24,24	0
89	OHX	1	4027	7/7	0.94	0.13	159,159,159,159	0
88	MG	5	3512	1/1	0.94	0.21	10,10,10,10	0
89	OHX	6	2095	7/7	0.94	0.14	146,146,146,146	0
89	OHX	6	2096	7/7	0.94	0.12	164,164,164,164	0
89	OHX	6	2097	7/7	0.94	0.14	153,153,153,153	0
88	MG	1	3754	1/1	0.94	0.21	46,46,46,46	0
88	MG	5	3856	1/1	0.94	0.11	80,80,80,80	0
89	OHX	6	2105	7/7	0.94	0.14	196,196,196,196	0
88	MG	5	3520	1/1	0.94	0.24	7,7,7,7	0
89	OHX	6	2117	7/7	0.94	0.14	186,186,186,186	0
89	OHX	6	2118	7/7	0.94	0.11	181,181,181,181	0
89	OHX	6	2119	7/7	0.94	0.13	187,187,187,187	0
89	OHX	1	4034	7/7	0.94	0.10	184,184,184,184	0
89	OHX	1	4038	7/7	0.94	0.12	165,165,165,165	0
88	MG	5	3861	1/1	0.94	0.15	33,33,33,33	0
89	OHX	6	2126	7/7	0.94	0.15	177,177,177,177	0
89	OHX	1	4041	7/7	0.94	0.12	169,169,169,169	0
88	MG	5	3526	1/1	0.94	0.13	5,5,5,5	0
88	MG	1	3755	1/1	0.94	0.15	40,40,40,40	0
89	OHX	6	2130	7/7	0.94	0.11	179,179,179,179	0
89	OHX	1	4054	7/7	0.94	0.12	168,168,168,168	0
88	MG	3	201	1/1	0.94	0.14	30,30,30,30	0
88	MG	5	3876	1/1	0.94	0.24	35,35,35,35	0
88	MG	3	202	1/1	0.94	0.29	58,58,58,58	0
88	MG	3	207	1/1	0.94	0.15	33,33,33,33	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4069	7/7	0.94	0.14	169,169,169,169	0
89	OHX	1	4070	7/7	0.94	0.10	216,216,216,216	0
89	OHX	6	2141	7/7	0.94	0.14	181,181,181,181	0
89	OHX	1	4072	7/7	0.94	0.12	169,169,169,169	0
89	OHX	1	4073	7/7	0.94	0.11	181,181,181,181	0
88	MG	5	3882	1/1	0.94	0.10	21,21,21,21	0
88	MG	6	1976	1/1	0.94	0.13	28,28,28,28	0
89	OHX	6	2147	7/7	0.94	0.14	184,184,184,184	0
88	MG	1	3662	1/1	0.94	0.13	24,24,24,24	0
88	MG	5	3555	1/1	0.94	0.24	27,27,27,27	0
88	MG	1	3663	1/1	0.94	0.11	39,39,39,39	0
89	OHX	6	2151	7/7	0.94	0.14	181,181,181,181	0
88	MG	1	3762	1/1	0.94	0.13	28,28,28,28	0
88	MG	5	3558	1/1	0.94	0.26	39,39,39,39	0
88	MG	1	3588	1/1	0.94	0.22	26,26,26,26	0
88	MG	1	3764	1/1	0.94	0.29	56,56,56,56	0
88	MG	5	3572	1/1	0.94	0.19	6,6,6,6	0
88	MG	1	3509	1/1	0.94	0.20	6,6,6,6	0
88	MG	4	201	1/1	0.94	0.33	48,48,48,48	0
89	OHX	5	4246	7/7	0.94	0.14	172,172,172,172	0
88	MG	5	3579	1/1	0.94	0.17	20,20,20,20	0
88	MG	6	1990	1/1	0.94	0.12	35,35,35,35	0
88	MG	4	203	1/1	0.94	0.17	33,33,33,33	0
88	MG	5	3584	1/1	0.94	0.18	17,17,17,17	0
88	MG	1	3413	1/1	0.94	0.16	24,24,24,24	0
89	OHX	6	2164	7/7	0.94	0.11	211,211,211,211	0
89	OHX	6	2165	7/7	0.94	0.14	226,226,226,226	0
88	MG	1	3770	1/1	0.94	0.09	41,41,41,41	0
88	MG	5	3592	1/1	0.94	0.16	11,11,11,11	0
89	OHX	1	4098	7/7	0.94	0.09	210,210,210,210	0
88	MG	2	1970	1/1	0.94	0.10	65,65,65,65	0
89	OHX	1	4100	7/7	0.94	0.13	204,204,204,204	0
88	MG	5	3601	1/1	0.94	0.06	24,24,24,24	0
89	OHX	1	4103	7/7	0.94	0.09	204,204,204,204	0
88	MG	2	2009	1/1	0.94	0.24	35,35,35,35	0
88	MG	1	3525	1/1	0.94	0.09	42,42,42,42	0
89	OHX	8	222	7/7	0.94	0.12	157,157,157,157	0
88	MG	5	3616	1/1	0.94	0.07	25,25,25,25	0
88	MG	4	214	1/1	0.94	0.08	46,46,46,46	0
88	MG	8	203	1/1	0.94	0.26	40,40,40,40	0
88	MG	5	3622	1/1	0.94	0.04	20,20,20,20	0
88	MG	1	3775	1/1	0.94	0.10	34,34,34,34	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	2009	1/1	0.94	0.17	33,33,33,33	0
89	OHX	l3	407	7/7	0.94	0.10	200,200,200,200	0
88	MG	5	3629	1/1	0.94	0.09	37,37,37,37	0
88	MG	4	218	1/1	0.94	0.18	36,36,36,36	0
88	MG	1	3675	1/1	0.94	0.19	48,48,48,48	0
88	MG	1	3605	1/1	0.94	0.18	21,21,21,21	0
88	MG	1	3779	1/1	0.94	0.10	40,40,40,40	0
88	MG	2	1937	1/1	0.94	0.23	23,23,23,23	0
88	MG	1	3784	1/1	0.94	0.18	42,42,42,42	0
88	MG	1	3678	1/1	0.94	0.10	5,5,5,5	0
88	MG	1	3609	1/1	0.94	0.16	30,30,30,30	0
88	MG	1	3683	1/1	0.94	0.06	21,21,21,21	0
88	MG	1	3792	1/1	0.94	0.27	53,53,53,53	0
88	MG	2	1917	1/1	0.94	0.21	25,25,25,25	0
88	MG	m7	201	1/1	0.94	0.19	9,9,9,9	0
90	ZN	q2	501	1/1	0.94	0.11	200,200,200,200	0
89	OHX	2	2098	7/7	0.95	0.11	186,186,186,186	0
89	OHX	2	2099	7/7	0.95	0.11	208,208,208,208	0
88	MG	5	3546	1/1	0.95	0.22	36,36,36,36	0
88	MG	5	3757	1/1	0.95	0.07	55,55,55,55	0
88	MG	5	3549	1/1	0.95	0.27	39,39,39,39	0
88	MG	5	3552	1/1	0.95	0.21	25,25,25,25	0
89	OHX	5	3997	7/7	0.95	0.16	130,130,130,130	0
89	OHX	5	4001	7/7	0.95	0.14	123,123,123,123	0
89	OHX	5	4005	7/7	0.95	0.14	145,145,145,145	0
88	MG	3	204	1/1	0.95	0.18	18,18,18,18	0
89	OHX	5	4015	7/7	0.95	0.11	153,153,153,153	0
88	MG	3	205	1/1	0.95	0.18	23,23,23,23	0
88	MG	5	3766	1/1	0.95	0.05	15,15,15,15	0
89	OHX	5	4025	7/7	0.95	0.10	157,157,157,157	0
89	OHX	2	2107	7/7	0.95	0.14	174,174,174,174	0
88	MG	3	206	1/1	0.95	0.19	11,11,11,11	0
89	OHX	5	4031	7/7	0.95	0.14	140,140,140,140	0
89	OHX	5	4032	7/7	0.95	0.17	162,162,162,162	0
89	OHX	5	4034	7/7	0.95	0.14	139,139,139,139	0
88	MG	5	3770	1/1	0.95	0.07	24,24,24,24	0
88	MG	5	3771	1/1	0.95	0.06	18,18,18,18	0
89	OHX	5	4042	7/7	0.95	0.13	163,163,163,163	0
89	OHX	2	2111	7/7	0.95	0.11	197,197,197,197	0
89	OHX	5	4045	7/7	0.95	0.17	160,160,160,160	0
89	OHX	5	4051	7/7	0.95	0.12	155,155,155,155	0
89	OHX	5	4053	7/7	0.95	0.12	156,156,156,156	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3498	1/1	0.95	0.13	20,20,20,20	0
89	OHX	5	4058	7/7	0.95	0.14	158,158,158,158	0
89	OHX	5	4059	7/7	0.95	0.11	181,181,181,181	0
88	MG	1	3636	1/1	0.95	0.19	49,49,49,49	0
89	OHX	5	4063	7/7	0.95	0.15	157,157,157,157	0
88	MG	2	2021	1/1	0.95	0.15	127,127,127,127	0
88	MG	5	3775	1/1	0.95	0.08	50,50,50,50	0
89	OHX	2	2117	7/7	0.95	0.12	205,205,205,205	0
88	MG	s4	301	1/1	0.95	0.20	46,46,46,46	0
88	MG	1	3638	1/1	0.95	0.09	40,40,40,40	0
88	MG	5	3781	1/1	0.95	0.10	45,45,45,45	0
88	MG	5	3571	1/1	0.95	0.22	19,19,19,19	0
88	MG	1	3793	1/1	0.95	0.06	44,44,44,44	0
89	OHX	2	2123	7/7	0.95	0.10	212,212,212,212	0
88	MG	5	3573	1/1	0.95	0.24	8,8,8,8	0
88	MG	2	1912	1/1	0.95	0.10	24,24,24,24	0
88	MG	5	3789	1/1	0.95	0.05	26,26,26,26	0
88	MG	5	3575	1/1	0.95	0.19	12,12,12,12	0
88	MG	6	1936	1/1	0.95	0.16	35,35,35,35	0
88	MG	c7	202	1/1	0.95	0.12	35,35,35,35	0
88	MG	1	3640	1/1	0.95	0.23	49,49,49,49	0
88	MG	1	3501	1/1	0.95	0.21	54,54,54,54	0
89	OHX	5	4091	7/7	0.95	0.15	211,211,211,211	0
88	MG	1	3569	1/1	0.95	0.20	8,8,8,8	0
88	MG	d6	102	1/1	0.95	0.17	33,33,33,33	0
88	MG	5	3589	1/1	0.95	0.20	16,16,16,16	0
88	MG	5	3801	1/1	0.95	0.13	56,56,56,56	0
89	OHX	5	4097	7/7	0.95	0.11	178,178,178,178	0
88	MG	6	1946	1/1	0.95	0.32	44,44,44,44	0
88	MG	1	3453	1/1	0.95	0.13	22,22,22,22	0
88	MG	1	3719	1/1	0.95	0.23	66,66,66,66	0
88	MG	5	3409	1/1	0.95	0.22	28,28,28,28	0
88	MG	2	1909	1/1	0.95	0.20	43,43,43,43	0
88	MG	1	3579	1/1	0.95	0.20	16,16,16,16	0
88	MG	5	3613	1/1	0.95	0.14	21,21,21,21	0
88	MG	S4	301	1/1	0.95	0.10	41,41,41,41	0
88	MG	5	3618	1/1	0.95	0.17	39,39,39,39	0
88	MG	1	3507	1/1	0.95	0.15	26,26,26,26	0
88	MG	5	3621	1/1	0.95	0.22	45,45,45,45	0
88	MG	1	3415	1/1	0.95	0.14	11,11,11,11	0
89	OHX	1	4186	7/7	0.95	0.11	171,171,171,171	0
88	MG	5	3624	1/1	0.95	0.18	24,24,24,24	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3421	1/1	0.95	0.18	10,10,10,10	0
88	MG	5	3824	1/1	0.95	0.08	32,32,32,32	0
88	MG	2	1925	1/1	0.95	0.23	41,41,41,41	0
89	OHX	5	4116	7/7	0.95	0.14	172,172,172,172	0
88	MG	5	3830	1/1	0.95	0.16	10,10,10,10	0
88	MG	1	3813	1/1	0.95	0.09	23,23,23,23	0
88	MG	5	3426	1/1	0.95	0.14	16,16,16,16	0
88	MG	5	3632	1/1	0.95	0.14	20,20,20,20	0
89	OHX	5	4121	7/7	0.95	0.14	150,150,150,150	0
88	MG	5	3837	1/1	0.95	0.14	33,33,33,33	0
88	MG	2	1983	1/1	0.95	0.22	58,58,58,58	0
88	MG	1	3461	1/1	0.95	0.17	6,6,6,6	0
88	MG	2	1946	1/1	0.95	0.13	31,31,31,31	0
88	MG	2	1998	1/1	0.95	0.07	40,40,40,40	0
88	MG	5	3432	1/1	0.95	0.14	27,27,27,27	0
88	MG	2	1908	1/1	0.95	0.12	40,40,40,40	0
88	MG	1	3429	1/1	0.95	0.10	41,41,41,41	0
88	MG	5	3643	1/1	0.95	0.20	51,51,51,51	0
88	MG	6	1974	1/1	0.95	0.20	54,54,54,54	0
88	MG	1	3597	1/1	0.95	0.15	1,1,1,1	0
88	MG	5	3863	1/1	0.95	0.06	37,37,37,37	0
88	MG	5	3867	1/1	0.95	0.17	42,42,42,42	0
88	MG	5	3646	1/1	0.95	0.15	43,43,43,43	0
89	OHX	5	4136	7/7	0.95	0.12	171,171,171,171	0
89	OHX	5	4137	7/7	0.95	0.12	180,180,180,180	0
88	MG	1	3829	1/1	0.95	0.06	37,37,37,37	0
89	OHX	5	4139	7/7	0.95	0.11	179,179,179,179	0
88	MG	5	3649	1/1	0.95	0.20	32,32,32,32	0
88	MG	5	3653	1/1	0.95	0.21	47,47,47,47	0
88	MG	M3	201	1/1	0.95	0.05	36,36,36,36	0
88	MG	5	3880	1/1	0.95	0.14	7,7,7,7	0
88	MG	1	3470	1/1	0.95	0.13	36,36,36,36	0
88	MG	6	1983	1/1	0.95	0.09	42,42,42,42	0
88	MG	1	3533	1/1	0.95	0.15	28,28,28,28	0
88	MG	1	3669	1/1	0.95	0.21	37,37,37,37	0
88	MG	1	3471	1/1	0.95	0.19	33,33,33,33	0
88	MG	1	3836	1/1	0.95	0.26	46,46,46,46	0
88	MG	1	3840	1/1	0.95	0.16	1,1,1,1	0
88	MG	5	3460	1/1	0.95	0.14	15,15,15,15	0
88	MG	5	3461	1/1	0.95	0.11	18,18,18,18	0
88	MG	M9	202	1/1	0.95	0.05	58,58,58,58	0
89	OHX	SR	401	7/7	0.95	0.09	200,200,200,200	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	3937	7/7	0.95	0.14	107,107,107,107	0
89	OHX	1	3962	7/7	0.95	0.17	130,130,130,130	0
88	MG	2	2000	1/1	0.95	0.13	31,31,31,31	0
89	OHX	1	3973	7/7	0.95	0.14	129,129,129,129	0
88	MG	5	3675	1/1	0.95	0.05	38,38,38,38	0
89	OHX	1	3978	7/7	0.95	0.11	139,139,139,139	0
89	OHX	1	3991	7/7	0.95	0.15	162,162,162,162	0
89	OHX	1	3996	7/7	0.95	0.14	143,143,143,143	0
89	OHX	1	3997	7/7	0.95	0.14	146,146,146,146	0
89	OHX	1	4000	7/7	0.95	0.12	143,143,143,143	0
89	OHX	1	4004	7/7	0.95	0.13	160,160,160,160	0
88	MG	1	3842	1/1	0.95	0.20	20,20,20,20	0
89	OHX	1	4009	7/7	0.95	0.10	178,178,178,178	0
88	MG	5	3470	1/1	0.95	0.09	57,57,57,57	0
89	OHX	L3	405	7/7	0.95	0.11	157,157,157,157	0
88	MG	1	3476	1/1	0.95	0.18	43,43,43,43	0
88	MG	6	1995	1/1	0.95	0.14	47,47,47,47	0
88	MG	1	3612	1/1	0.95	0.17	46,46,46,46	0
89	OHX	M5	305	7/7	0.95	0.13	146,146,146,146	0
89	OHX	1	4017	7/7	0.95	0.12	152,152,152,152	0
89	OHX	1	4018	7/7	0.95	0.15	162,162,162,162	0
89	OHX	1	4020	7/7	0.95	0.15	173,173,173,173	0
89	OHX	1	4021	7/7	0.95	0.12	178,178,178,178	0
89	OHX	1	4022	7/7	0.95	0.13	180,180,180,180	0
89	OHX	O7	103	7/7	0.95	0.13	125,125,125,125	0
89	OHX	6	2074	7/7	0.95	0.18	123,123,123,123	0
88	MG	5	4260	1/1	0.95	0.12	24,24,24,24	0
89	OHX	6	2083	7/7	0.95	0.14	118,118,118,118	0
89	OHX	6	2088	7/7	0.95	0.13	176,176,176,176	0
89	OHX	1	4024	7/7	0.95	0.11	166,166,166,166	0
88	MG	1	3433	1/1	0.95	0.12	17,17,17,17	0
88	MG	7	202	1/1	0.95	0.15	9,9,9,9	0
88	MG	5	3478	1/1	0.95	0.16	9,9,9,9	0
88	MG	7	204	1/1	0.95	0.05	46,46,46,46	0
88	MG	5	3479	1/1	0.95	0.16	19,19,19,19	0
88	MG	1	3758	1/1	0.95	0.07	36,36,36,36	0
89	OHX	6	2108	7/7	0.95	0.15	158,158,158,158	0
89	OHX	6	2109	7/7	0.95	0.11	166,166,166,166	0
89	OHX	1	4035	7/7	0.95	0.10	189,189,189,189	0
89	OHX	1	4037	7/7	0.95	0.11	161,161,161,161	0
88	MG	5	3481	1/1	0.95	0.18	23,23,23,23	0
88	MG	5	3692	1/1	0.95	0.30	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	6	2120	7/7	0.95	0.14	148,148,148,148	0
89	OHX	1	4040	7/7	0.95	0.11	186,186,186,186	0
89	OHX	6	2122	7/7	0.95	0.15	209,209,209,209	0
88	MG	5	3693	1/1	0.95	0.13	34,34,34,34	0
89	OHX	1	4046	7/7	0.95	0.10	172,172,172,172	0
89	OHX	6	2125	7/7	0.95	0.14	177,177,177,177	0
88	MG	5	3482	1/1	0.95	0.19	37,37,37,37	0
88	MG	8	201	1/1	0.95	0.03	20,20,20,20	0
89	OHX	1	4051	7/7	0.95	0.11	184,184,184,184	0
88	MG	1	3760	1/1	0.95	0.11	54,54,54,54	0
89	OHX	1	4055	7/7	0.95	0.11	157,157,157,157	0
88	MG	6	2007	1/1	0.95	0.07	32,32,32,32	0
88	MG	5	3486	1/1	0.95	0.10	28,28,28,28	0
89	OHX	6	2133	7/7	0.95	0.13	194,194,194,194	0
88	MG	2	1921	1/1	0.95	0.17	26,26,26,26	0
89	OHX	6	2135	7/7	0.95	0.12	183,183,183,183	0
89	OHX	1	4065	7/7	0.95	0.11	180,180,180,180	0
88	MG	8	210	1/1	0.95	0.18	63,63,63,63	0
89	OHX	6	2138	7/7	0.95	0.11	187,187,187,187	0
89	OHX	1	4067	7/7	0.95	0.14	172,172,172,172	0
88	MG	5	3700	1/1	0.95	0.24	59,59,59,59	0
88	MG	5	3488	1/1	0.95	0.29	49,49,49,49	0
89	OHX	5	4221	7/7	0.95	0.10	181,181,181,181	0
89	OHX	1	4071	7/7	0.95	0.09	203,203,203,203	0
88	MG	8	217	1/1	0.95	0.15	14,14,14,14	0
88	MG	5	3702	1/1	0.95	0.07	46,46,46,46	0
88	MG	l3	402	1/1	0.95	0.22	4,4,4,4	0
88	MG	l3	403	1/1	0.95	0.27	69,69,69,69	0
88	MG	1	3436	1/1	0.95	0.10	33,33,33,33	0
89	OHX	1	4078	7/7	0.95	0.10	176,176,176,176	0
88	MG	2	1989	1/1	0.95	0.06	30,30,30,30	0
88	MG	5	3492	1/1	0.95	0.15	34,34,34,34	0
89	OHX	1	4081	7/7	0.95	0.16	187,187,187,187	0
88	MG	5	3707	1/1	0.95	0.07	44,44,44,44	0
88	MG	1	3486	1/1	0.95	0.09	37,37,37,37	0
88	MG	5	3709	1/1	0.95	0.13	27,27,27,27	0
88	MG	5	3710	1/1	0.95	0.17	29,29,29,29	0
89	OHX	1	4086	7/7	0.95	0.09	168,168,168,168	0
88	MG	5	3711	1/1	0.95	0.11	43,43,43,43	0
88	MG	2	1990	1/1	0.95	0.15	49,49,49,49	0
88	MG	5	3495	1/1	0.95	0.10	26,26,26,26	0
88	MG	m6	201	1/1	0.95	0.15	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4091	7/7	0.95	0.12	167,167,167,167	0
88	MG	5	3715	1/1	0.95	0.05	67,67,67,67	0
88	MG	1	3488	1/1	0.95	0.26	32,32,32,32	0
88	MG	1	3554	1/1	0.95	0.19	13,13,13,13	0
88	MG	1	3862	1/1	0.95	0.07	20,20,20,20	0
88	MG	1	3444	1/1	0.95	0.06	42,42,42,42	0
88	MG	5	3720	1/1	0.95	0.07	37,37,37,37	0
88	MG	5	3503	1/1	0.95	0.14	10,10,10,10	0
88	MG	1	3494	1/1	0.95	0.08	44,44,44,44	0
88	MG	1	3865	1/1	0.95	0.25	101,101,101,101	0
88	MG	2	1978	1/1	0.95	0.16	44,44,44,44	0
88	MG	5	3726	1/1	0.95	0.06	18,18,18,18	0
88	MG	1	3696	1/1	0.95	0.23	26,26,26,26	0
89	OHX	2	2040	7/7	0.95	0.15	108,108,108,108	0
89	OHX	1	4106	7/7	0.95	0.09	179,179,179,179	0
89	OHX	2	2053	7/7	0.95	0.12	147,147,147,147	0
89	OHX	2	2056	7/7	0.95	0.12	149,149,149,149	0
88	MG	1	3558	1/1	0.95	0.24	14,14,14,14	0
89	OHX	2	2062	7/7	0.95	0.13	169,169,169,169	0
89	OHX	1	4111	7/7	0.95	0.13	189,189,189,189	0
89	OHX	2	2063	7/7	0.95	0.10	165,165,165,165	0
89	OHX	2	2066	7/7	0.95	0.14	157,157,157,157	0
88	MG	1	3698	1/1	0.95	0.12	29,29,29,29	0
89	OHX	8	225	7/7	0.95	0.09	178,178,178,178	0
88	MG	2	2020	1/1	0.95	0.28	53,53,53,53	0
89	OHX	2	2073	7/7	0.95	0.10	169,169,169,169	0
88	MG	5	3523	1/1	0.95	0.23	30,30,30,30	0
89	OHX	2	2077	7/7	0.95	0.13	148,148,148,148	0
89	OHX	1	4119	7/7	0.95	0.10	190,190,190,190	0
88	MG	6	2034	1/1	0.95	0.20	47,47,47,47	0
89	OHX	1	4121	7/7	0.95	0.08	190,190,190,190	0
89	OHX	2	2079	7/7	0.95	0.14	194,194,194,194	0
88	MG	5	3527	1/1	0.95	0.20	8,8,8,8	0
88	MG	1	3780	1/1	0.95	0.23	74,74,74,74	0
88	MG	1	3872	1/1	0.95	0.10	28,28,28,28	0
89	OHX	2	2083	7/7	0.95	0.11	188,188,188,188	0
88	MG	5	3536	1/1	0.95	0.13	40,40,40,40	0
88	MG	5	3748	1/1	0.95	0.21	47,47,47,47	0
89	OHX	m0	301	7/7	0.95	0.12	148,148,148,148	0
88	MG	5	3750	1/1	0.95	0.05	25,25,25,25	0
88	MG	1	3408	1/1	0.95	0.09	17,17,17,17	0
88	MG	5	3541	1/1	0.95	0.29	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
89	OHX	n3	204	7/7	0.95	0.11	168,168,168,168	0
89	OHX	2	2092	7/7	0.95	0.13	206,206,206,206	0
88	MG	1	3702	1/1	0.95	0.14	32,32,32,32	0
89	OHX	2	2095	7/7	0.95	0.10	183,183,183,183	0
90	ZN	e1	501	1/1	0.95	0.06	160,160,160,160	0
89	OHX	2	2097	7/7	0.95	0.11	193,193,193,193	0
88	MG	5	3648	1/1	0.96	0.14	10,10,10,10	0
89	OHX	5	4021	7/7	0.96	0.12	152,152,152,152	0
88	MG	6	1985	1/1	0.96	0.13	47,47,47,47	0
89	OHX	5	4023	7/7	0.96	0.11	134,134,134,134	0
89	OHX	5	4024	7/7	0.96	0.11	139,139,139,139	0
88	MG	5	3652	1/1	0.96	0.05	52,52,52,52	0
89	OHX	5	4027	7/7	0.96	0.12	143,143,143,143	0
88	MG	5	3850	1/1	0.96	0.19	36,36,36,36	0
88	MG	1	3543	1/1	0.96	0.28	45,45,45,45	0
88	MG	M0	302	1/1	0.96	0.04	24,24,24,24	0
88	MG	5	3855	1/1	0.96	0.15	30,30,30,30	0
89	OHX	5	4033	7/7	0.96	0.12	140,140,140,140	0
88	MG	5	3468	1/1	0.96	0.06	12,12,12,12	0
89	OHX	5	4037	7/7	0.96	0.12	153,153,153,153	0
88	MG	5	3469	1/1	0.96	0.12	28,28,28,28	0
88	MG	1	3467	1/1	0.96	0.13	34,34,34,34	0
89	OHX	5	4040	7/7	0.96	0.09	154,154,154,154	0
88	MG	1	3604	1/1	0.96	0.12	14,14,14,14	0
89	OHX	5	4043	7/7	0.96	0.10	143,143,143,143	0
88	MG	5	3866	1/1	0.96	0.19	29,29,29,29	0
88	MG	5	3661	1/1	0.96	0.11	10,10,10,10	0
89	OHX	5	4046	7/7	0.96	0.13	163,163,163,163	0
89	OHX	5	4048	7/7	0.96	0.14	156,156,156,156	0
89	OHX	5	4049	7/7	0.96	0.12	151,151,151,151	0
89	OHX	5	4050	7/7	0.96	0.12	150,150,150,150	0
88	MG	1	3442	1/1	0.96	0.19	33,33,33,33	0
89	OHX	5	4052	7/7	0.96	0.11	159,159,159,159	0
88	MG	1	3740	1/1	0.96	0.04	15,15,15,15	0
89	OHX	5	4054	7/7	0.96	0.12	151,151,151,151	0
88	MG	5	3872	1/1	0.96	0.23	15,15,15,15	0
88	MG	1	3606	1/1	0.96	0.17	16,16,16,16	0
88	MG	1	3547	1/1	0.96	0.04	8,8,8,8	0
89	OHX	5	4060	7/7	0.96	0.13	169,169,169,169	0
89	OHX	5	4061	7/7	0.96	0.10	151,151,151,151	0
88	MG	6	1994	1/1	0.96	0.07	50,50,50,50	0
88	MG	5	3669	1/1	0.96	0.06	12,12,12,12	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	2	1918	1/1	0.96	0.23	26,26,26,26	0
88	MG	6	1998	1/1	0.96	0.07	57,57,57,57	0
88	MG	5	3673	1/1	0.96	0.16	29,29,29,29	0
89	OHX	5	4067	7/7	0.96	0.10	160,160,160,160	0
89	OHX	5	4068	7/7	0.96	0.10	163,163,163,163	0
89	OHX	5	4069	7/7	0.96	0.11	166,166,166,166	0
89	OHX	5	4070	7/7	0.96	0.14	151,151,151,151	0
89	OHX	5	4071	7/7	0.96	0.09	182,182,182,182	0
88	MG	5	3674	1/1	0.96	0.09	15,15,15,15	0
88	MG	2	1936	1/1	0.96	0.20	21,21,21,21	0
88	MG	5	3888	1/1	0.96	0.14	37,37,37,37	0
89	OHX	5	4075	7/7	0.96	0.09	167,167,167,167	0
88	MG	1	3837	1/1	0.96	0.05	21,21,21,21	0
89	OHX	5	4077	7/7	0.96	0.15	167,167,167,167	0
88	MG	1	3838	1/1	0.96	0.18	28,28,28,28	0
88	MG	5	3485	1/1	0.96	0.19	12,12,12,12	0
88	MG	2	2007	1/1	0.96	0.23	30,30,30,30	0
88	MG	6	2006	1/1	0.96	0.22	41,41,41,41	0
89	OHX	5	4083	7/7	0.96	0.14	150,150,150,150	0
88	MG	2	1961	1/1	0.96	0.15	38,38,38,38	0
88	MG	1	3614	1/1	0.96	0.05	30,30,30,30	0
88	MG	5	3490	1/1	0.96	0.16	1,1,1,1	0
88	MG	1	3672	1/1	0.96	0.10	28,28,28,28	0
89	OHX	5	4088	7/7	0.96	0.10	177,177,177,177	0
88	MG	1	3553	1/1	0.96	0.13	17,17,17,17	0
88	MG	1	3473	1/1	0.96	0.24	32,32,32,32	0
88	MG	1	3848	1/1	0.96	0.16	10,10,10,10	0
88	MG	O2	201	1/1	0.96	0.09	33,33,33,33	0
88	MG	1	3850	1/1	0.96	0.14	26,26,26,26	0
88	MG	5	3497	1/1	0.96	0.15	8,8,8,8	0
88	MG	1	3505	1/1	0.96	0.14	0,0,0,0	0
88	MG	1	3757	1/1	0.96	0.10	41,41,41,41	0
88	MG	1	3506	1/1	0.96	0.18	23,23,23,23	0
88	MG	1	3423	1/1	0.96	0.14	35,35,35,35	0
88	MG	7	209	1/1	0.96	0.13	10,10,10,10	0
88	MG	7	210	1/1	0.96	0.14	66,66,66,66	0
89	OHX	1	3919	7/7	0.96	0.18	100,100,100,100	0
89	OHX	1	3929	7/7	0.96	0.13	117,117,117,117	0
88	MG	6	2027	1/1	0.96	0.05	45,45,45,45	0
89	OHX	1	3944	7/7	0.96	0.14	125,125,125,125	0
89	OHX	1	3946	7/7	0.96	0.14	112,112,112,112	0
89	OHX	1	3948	7/7	0.96	0.12	122,122,122,122	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	3956	7/7	0.96	0.16	121,121,121,121	0
89	OHX	1	3960	7/7	0.96	0.13	118,118,118,118	0
88	MG	1	3424	1/1	0.96	0.27	34,34,34,34	0
88	MG	1	3425	1/1	0.96	0.11	30,30,30,30	0
89	OHX	1	3972	7/7	0.96	0.11	137,137,137,137	0
88	MG	6	2030	1/1	0.96	0.06	24,24,24,24	0
88	MG	5	3508	1/1	0.96	0.19	15,15,15,15	0
88	MG	5	3511	1/1	0.96	0.19	24,24,24,24	0
89	OHX	1	3979	7/7	0.96	0.11	129,129,129,129	0
89	OHX	1	3982	7/7	0.96	0.12	155,155,155,155	0
89	OHX	1	3983	7/7	0.96	0.10	140,140,140,140	0
89	OHX	1	3984	7/7	0.96	0.11	136,136,136,136	0
89	OHX	1	3988	7/7	0.96	0.14	130,130,130,130	0
89	OHX	1	3990	7/7	0.96	0.12	132,132,132,132	0
88	MG	1	3857	1/1	0.96	0.20	37,37,37,37	0
88	MG	1	3511	1/1	0.96	0.18	24,24,24,24	0
88	MG	8	205	1/1	0.96	0.20	29,29,29,29	0
89	OHX	1	3999	7/7	0.96	0.12	166,166,166,166	0
88	MG	8	207	1/1	0.96	0.05	39,39,39,39	0
89	OHX	1	4003	7/7	0.96	0.12	144,144,144,144	0
88	MG	5	3518	1/1	0.96	0.13	6,6,6,6	0
89	OHX	3	216	7/7	0.96	0.13	148,148,148,148	0
89	OHX	3	218	7/7	0.96	0.10	147,147,147,147	0
89	OHX	3	219	7/7	0.96	0.10	158,158,158,158	0
89	OHX	1	4006	7/7	0.96	0.10	160,160,160,160	0
89	OHX	1	4007	7/7	0.96	0.15	159,159,159,159	0
88	MG	8	209	1/1	0.96	0.06	42,42,42,42	0
88	MG	1	3515	1/1	0.96	0.16	3,3,3,3	0
89	OHX	1	4010	7/7	0.96	0.12	161,161,161,161	0
88	MG	8	211	1/1	0.96	0.05	12,12,12,12	0
89	OHX	4	226	7/7	0.96	0.11	150,150,150,150	0
89	OHX	1	4013	7/7	0.96	0.13	138,138,138,138	0
89	OHX	4	228	7/7	0.96	0.09	188,188,188,188	0
88	MG	1	3516	1/1	0.96	0.25	22,22,22,22	0
88	MG	8	213	1/1	0.96	0.18	65,65,65,65	0
88	MG	5	3524	1/1	0.96	0.18	8,8,8,8	0
88	MG	1	3628	1/1	0.96	0.25	44,44,44,44	0
88	MG	1	3768	1/1	0.96	0.13	46,46,46,46	0
88	MG	13	401	1/1	0.96	0.12	37,37,37,37	0
88	MG	5	3528	1/1	0.96	0.13	28,28,28,28	0
88	MG	1	3688	1/1	0.96	0.06	32,32,32,32	0
88	MG	5	3532	1/1	0.96	0.15	10,10,10,10	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	2	1986	1/1	0.96	0.11	43,43,43,43	0
88	MG	1	3690	1/1	0.96	0.06	29,29,29,29	0
88	MG	1	3691	1/1	0.96	0.21	42,42,42,42	0
88	MG	5	3540	1/1	0.96	0.16	10,10,10,10	0
88	MG	5	3725	1/1	0.96	0.07	24,24,24,24	0
88	MG	6	1921	1/1	0.96	0.22	21,21,21,21	0
89	OHX	1	4033	7/7	0.96	0.10	147,147,147,147	0
89	OHX	5	4158	7/7	0.96	0.11	178,178,178,178	0
89	OHX	6	2061	7/7	0.96	0.14	110,110,110,110	0
88	MG	5	3727	1/1	0.96	0.13	9,9,9,9	0
88	MG	1	3692	1/1	0.96	0.11	23,23,23,23	0
89	OHX	1	4036	7/7	0.96	0.11	161,161,161,161	0
88	MG	5	3544	1/1	0.96	0.17	6,6,6,6	0
88	MG	5	3545	1/1	0.96	0.09	1,1,1,1	0
89	OHX	6	2094	7/7	0.96	0.10	153,153,153,153	0
88	MG	1	3630	1/1	0.96	0.10	9,9,9,9	0
88	MG	m7	203	1/1	0.96	0.18	50,50,50,50	0
88	MG	2	1987	1/1	0.96	0.10	40,40,40,40	0
89	OHX	6	2100	7/7	0.96	0.14	170,170,170,170	0
89	OHX	6	2101	7/7	0.96	0.11	151,151,151,151	0
89	OHX	1	4042	7/7	0.96	0.10	160,160,160,160	0
89	OHX	6	2103	7/7	0.96	0.17	146,146,146,146	0
89	OHX	1	4043	7/7	0.96	0.12	170,170,170,170	0
89	OHX	1	4045	7/7	0.96	0.11	157,157,157,157	0
89	OHX	6	2106	7/7	0.96	0.10	158,158,158,158	0
88	MG	m7	205	1/1	0.96	0.09	45,45,45,45	0
89	OHX	1	4047	7/7	0.96	0.14	143,143,143,143	0
89	OHX	6	2111	7/7	0.96	0.13	163,163,163,163	0
89	OHX	6	2113	7/7	0.96	0.12	147,147,147,147	0
88	MG	1	3519	1/1	0.96	0.18	11,11,11,11	0
89	OHX	6	2115	7/7	0.96	0.13	152,152,152,152	0
88	MG	1	3570	1/1	0.96	0.17	16,16,16,16	0
88	MG	6	1927	1/1	0.96	0.14	23,23,23,23	0
89	OHX	1	4053	7/7	0.96	0.10	173,173,173,173	0
88	MG	1	3699	1/1	0.96	0.15	40,40,40,40	0
88	MG	1	3783	1/1	0.96	0.06	15,15,15,15	0
89	OHX	1	4056	7/7	0.96	0.12	175,175,175,175	0
88	MG	5	3744	1/1	0.96	0.28	39,39,39,39	0
88	MG	5	3747	1/1	0.96	0.12	17,17,17,17	0
89	OHX	1	4059	7/7	0.96	0.12	164,164,164,164	0
89	OHX	1	4060	7/7	0.96	0.10	188,188,188,188	0
88	MG	3	203	1/1	0.96	0.06	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	4063	7/7	0.96	0.14	158,158,158,158	0
89	OHX	1	4064	7/7	0.96	0.09	167,167,167,167	0
88	MG	1	3571	1/1	0.96	0.14	14,14,14,14	0
88	MG	5	3561	1/1	0.96	0.18	5,5,5,5	0
88	MG	q3	503	1/1	0.96	0.10	66,66,66,66	0
89	OHX	1	4068	7/7	0.96	0.08	205,205,205,205	0
88	MG	1	3484	1/1	0.96	0.08	0,0,0,0	0
89	OHX	2	2043	7/7	0.96	0.15	132,132,132,132	0
89	OHX	2	2049	7/7	0.96	0.12	135,135,135,135	0
88	MG	5	3563	1/1	0.96	0.17	10,10,10,10	0
89	OHX	2	2054	7/7	0.96	0.10	156,156,156,156	0
89	OHX	2	2055	7/7	0.96	0.12	150,150,150,150	0
88	MG	5	3566	1/1	0.96	0.21	6,6,6,6	0
88	MG	5	3568	1/1	0.96	0.20	18,18,18,18	0
89	OHX	1	4077	7/7	0.96	0.13	172,172,172,172	0
88	MG	1	3786	1/1	0.96	0.06	39,39,39,39	0
88	MG	d4	201	1/1	0.96	0.08	43,43,43,43	0
89	OHX	6	2145	7/7	0.96	0.13	176,176,176,176	0
89	OHX	2	2065	7/7	0.96	0.12	165,165,165,165	0
88	MG	1	3521	1/1	0.96	0.20	30,30,30,30	0
88	MG	sM	401	1/1	0.96	0.08	28,28,28,28	0
88	MG	5	3765	1/1	0.96	0.09	21,21,21,21	0
89	OHX	2	2069	7/7	0.96	0.12	154,154,154,154	0
89	OHX	2	2071	7/7	0.96	0.10	168,168,168,168	0
89	OHX	2	2072	7/7	0.96	0.10	158,158,158,158	0
88	MG	6	1937	1/1	0.96	0.13	18,18,18,18	0
88	MG	2	1962	1/1	0.96	0.15	21,21,21,21	0
89	OHX	2	2076	7/7	0.96	0.13	193,193,193,193	0
88	MG	5	3769	1/1	0.96	0.05	62,62,62,62	0
88	MG	5	3405	1/1	0.96	0.20	26,26,26,26	0
88	MG	5	3406	1/1	0.96	0.10	12,12,12,12	0
88	MG	6	1939	1/1	0.96	0.14	20,20,20,20	0
88	MG	1	3791	1/1	0.96	0.07	31,31,31,31	0
88	MG	1	3704	1/1	0.96	0.15	40,40,40,40	0
88	MG	6	1945	1/1	0.96	0.20	16,16,16,16	0
88	MG	2	2012	1/1	0.96	0.15	40,40,40,40	0
88	MG	5	3779	1/1	0.96	0.13	21,21,21,21	0
88	MG	6	1948	1/1	0.96	0.21	30,30,30,30	0
89	OHX	2	2087	7/7	0.96	0.16	161,161,161,161	0
88	MG	5	3591	1/1	0.96	0.17	2,2,2,2	0
89	OHX	2	2089	7/7	0.96	0.10	168,168,168,168	0
88	MG	1	3527	1/1	0.96	0.10	22,22,22,22	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3593	1/1	0.96	0.15	19,19,19,19	0
88	MG	5	3420	1/1	0.96	0.07	34,34,34,34	0
89	OHX	2	2094	7/7	0.96	0.09	175,175,175,175	0
88	MG	5	3597	1/1	0.96	0.19	6,6,6,6	0
88	MG	5	3600	1/1	0.96	0.27	9,9,9,9	0
88	MG	2	1945	1/1	0.96	0.09	36,36,36,36	0
88	MG	5	3603	1/1	0.96	0.05	19,19,19,19	0
88	MG	5	3604	1/1	0.96	0.08	48,48,48,48	0
88	MG	1	3489	1/1	0.96	0.19	26,26,26,26	0
88	MG	1	3645	1/1	0.96	0.17	35,35,35,35	0
88	MG	6	1954	1/1	0.96	0.12	11,11,11,11	0
88	MG	1	3799	1/1	0.96	0.09	45,45,45,45	0
88	MG	5	3617	1/1	0.96	0.09	22,22,22,22	0
88	MG	2	1907	1/1	0.96	0.19	26,26,26,26	0
88	MG	1	3536	1/1	0.96	0.10	36,36,36,36	0
88	MG	1	3589	1/1	0.96	0.23	28,28,28,28	0
88	MG	1	3649	1/1	0.96	0.10	38,38,38,38	0
88	MG	5	3805	1/1	0.96	0.07	34,34,34,34	0
88	MG	5	3623	1/1	0.96	0.25	41,41,41,41	0
88	MG	4	213	1/1	0.96	0.10	38,38,38,38	0
88	MG	6	1966	1/1	0.96	0.19	39,39,39,39	0
88	MG	1	3721	1/1	0.96	0.12	51,51,51,51	0
89	OHX	7	217	7/7	0.96	0.12	128,128,128,128	0
89	OHX	7	221	7/7	0.96	0.13	135,135,135,135	0
89	OHX	2	2115	7/7	0.96	0.12	184,184,184,184	0
88	MG	5	3810	1/1	0.96	0.10	48,48,48,48	0
88	MG	1	3460	1/1	0.96	0.35	70,70,70,70	0
88	MG	4	217	1/1	0.96	0.21	35,35,35,35	0
88	MG	5	3445	1/1	0.96	0.17	31,31,31,31	0
89	OHX	8	221	7/7	0.96	0.12	152,152,152,152	0
88	MG	1	3652	1/1	0.96	0.07	44,44,44,44	0
89	OHX	8	223	7/7	0.96	0.11	166,166,166,166	0
89	OHX	8	224	7/7	0.96	0.11	162,162,162,162	0
88	MG	5	3447	1/1	0.96	0.05	29,29,29,29	0
88	MG	2	1913	1/1	0.96	0.14	29,29,29,29	0
88	MG	1	3726	1/1	0.96	0.09	60,60,60,60	0
88	MG	5	3819	1/1	0.96	0.25	39,39,39,39	0
88	MG	5	3820	1/1	0.96	0.05	40,40,40,40	0
88	MG	5	3637	1/1	0.96	0.06	29,29,29,29	0
88	MG	L4	401	1/1	0.96	0.08	35,35,35,35	0
88	MG	5	3829	1/1	0.96	0.06	32,32,32,32	0
88	MG	1	3438	1/1	0.96	0.16	20,20,20,20	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	2	2130	7/7	0.96	0.13	188,188,188,188	0
88	MG	1	3818	1/1	0.96	0.14	38,38,38,38	0
88	MG	5	3833	1/1	0.96	0.05	37,37,37,37	0
88	MG	2	1982	1/1	0.96	0.21	40,40,40,40	0
88	MG	6	1981	1/1	0.96	0.15	29,29,29,29	0
89	OHX	5	3976	7/7	0.96	0.12	114,114,114,114	0
89	OHX	5	3979	7/7	0.96	0.13	114,114,114,114	0
89	OHX	5	3996	7/7	0.96	0.11	146,146,146,146	0
88	MG	1	3729	1/1	0.96	0.11	52,52,52,52	0
88	MG	5	3841	1/1	0.96	0.05	37,37,37,37	0
89	OHX	m5	305	7/7	0.96	0.11	160,160,160,160	0
88	MG	5	3842	1/1	0.96	0.13	93,93,93,93	0
89	OHX	o3	202	7/7	0.96	0.13	135,135,135,135	0
88	MG	1	3657	1/1	0.96	0.12	44,44,44,44	0
90	ZN	E1	501	1/1	0.96	0.04	102,102,102,102	0
88	MG	5	3464	1/1	0.96	0.18	33,33,33,33	0
89	OHX	5	4016	7/7	0.96	0.13	136,136,136,136	0
89	OHX	5	4017	7/7	0.96	0.12	143,143,143,143	0
89	OHX	5	4018	7/7	0.96	0.12	138,138,138,138	0
88	MG	6	1942	1/1	0.97	0.06	10,10,10,10	0
89	OHX	5	4020	7/7	0.97	0.10	126,126,126,126	0
88	MG	6	1943	1/1	0.97	0.21	17,17,17,17	0
88	MG	7	205	1/1	0.97	0.20	11,11,11,11	0
88	MG	1	3535	1/1	0.97	0.17	23,23,23,23	0
88	MG	1	3463	1/1	0.97	0.12	12,12,12,12	0
88	MG	1	3485	1/1	0.97	0.14	24,24,24,24	0
89	OHX	5	4026	7/7	0.97	0.12	132,132,132,132	0
88	MG	6	1947	1/1	0.97	0.16	28,28,28,28	0
88	MG	5	3548	1/1	0.97	0.32	27,27,27,27	0
88	MG	1	3431	1/1	0.97	0.21	23,23,23,23	0
89	OHX	5	4030	7/7	0.97	0.13	125,125,125,125	0
88	MG	5	3550	1/1	0.97	0.17	23,23,23,23	0
88	MG	5	3551	1/1	0.97	0.20	11,11,11,11	0
88	MG	5	3404	1/1	0.97	0.03	17,17,17,17	0
88	MG	1	3432	1/1	0.97	0.20	35,35,35,35	0
89	OHX	5	4035	7/7	0.97	0.10	162,162,162,162	0
88	MG	4	219	1/1	0.97	0.15	201,201,201,201	0
89	OHX	1	3905	7/7	0.97	0.14	84,84,84,84	0
88	MG	L2	301	1/1	0.97	0.06	5,5,5,5	0
89	OHX	1	3920	7/7	0.97	0.12	98,98,98,98	0
88	MG	5	3408	1/1	0.97	0.12	32,32,32,32	0
89	OHX	1	3930	7/7	0.97	0.12	95,95,95,95	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	8	206	1/1	0.97	0.13	23,23,23,23	0
89	OHX	1	3941	7/7	0.97	0.14	107,107,107,107	0
89	OHX	1	3943	7/7	0.97	0.12	173,173,173,173	0
88	MG	L2	302	1/1	0.97	0.14	41,41,41,41	0
89	OHX	1	3945	7/7	0.97	0.12	109,109,109,109	0
88	MG	6	1953	1/1	0.97	0.24	27,27,27,27	0
89	OHX	1	3947	7/7	0.97	0.13	115,115,115,115	0
88	MG	5	3559	1/1	0.97	0.23	19,19,19,19	0
89	OHX	1	3949	7/7	0.97	0.12	111,111,111,111	0
89	OHX	1	3955	7/7	0.97	0.13	117,117,117,117	0
88	MG	L3	401	1/1	0.97	0.03	42,42,42,42	0
89	OHX	5	4056	7/7	0.97	0.11	144,144,144,144	0
89	OHX	1	3957	7/7	0.97	0.11	124,124,124,124	0
89	OHX	1	3959	7/7	0.97	0.11	132,132,132,132	0
88	MG	5	3728	1/1	0.97	0.03	24,24,24,24	0
88	MG	5	3414	1/1	0.97	0.16	11,11,11,11	0
88	MG	5	3415	1/1	0.97	0.06	24,24,24,24	0
89	OHX	1	3964	7/7	0.97	0.17	114,114,114,114	0
89	OHX	1	3971	7/7	0.97	0.12	128,128,128,128	0
88	MG	8	214	1/1	0.97	0.12	30,30,30,30	0
88	MG	L3	402	1/1	0.97	0.14	11,11,11,11	0
88	MG	1	3575	1/1	0.97	0.12	7,7,7,7	0
89	OHX	1	3977	7/7	0.97	0.11	133,133,133,133	0
88	MG	6	1959	1/1	0.97	0.24	30,30,30,30	0
88	MG	5	3736	1/1	0.97	0.08	24,24,24,24	0
89	OHX	1	3981	7/7	0.97	0.12	166,166,166,166	0
88	MG	5	3419	1/1	0.97	0.03	31,31,31,31	0
88	MG	5	3738	1/1	0.97	0.24	42,42,42,42	0
88	MG	1	3541	1/1	0.97	0.20	35,35,35,35	0
89	OHX	1	3985	7/7	0.97	0.14	149,149,149,149	0
89	OHX	1	3987	7/7	0.97	0.11	149,149,149,149	0
88	MG	14	401	1/1	0.97	0.14	40,40,40,40	0
89	OHX	1	3989	7/7	0.97	0.12	147,147,147,147	0
88	MG	6	1961	1/1	0.97	0.14	35,35,35,35	0
88	MG	5	3422	1/1	0.97	0.04	25,25,25,25	0
89	OHX	1	3994	7/7	0.97	0.11	134,134,134,134	0
89	OHX	1	3995	7/7	0.97	0.12	140,140,140,140	0
88	MG	1	3422	1/1	0.97	0.21	25,25,25,25	0
88	MG	1	3510	1/1	0.97	0.17	5,5,5,5	0
88	MG	5	3746	1/1	0.97	0.06	29,29,29,29	0
88	MG	5	3577	1/1	0.97	0.14	6,6,6,6	0
89	OHX	1	4001	7/7	0.97	0.12	146,146,146,146	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
89	OHX	1	4002	7/7	0.97	0.11	143,143,143,143	0
88	MG	5	3578	1/1	0.97	0.18	29,29,29,29	0
88	MG	5	3425	1/1	0.97	0.06	4,4,4,4	0
89	OHX	5	4092	7/7	0.97	0.10	154,154,154,154	0
89	OHX	3	215	7/7	0.97	0.10	114,114,114,114	0
89	OHX	1	4005	7/7	0.97	0.12	162,162,162,162	0
89	OHX	3	217	7/7	0.97	0.10	133,133,133,133	0
88	MG	1	3835	1/1	0.97	0.07	6,6,6,6	0
88	MG	5	3581	1/1	0.97	0.09	8,8,8,8	0
88	MG	1	3624	1/1	0.97	0.15	34,34,34,34	0
88	MG	m7	202	1/1	0.97	0.06	14,14,14,14	0
88	MG	1	3434	1/1	0.97	0.29	37,37,37,37	0
89	OHX	1	4011	7/7	0.97	0.13	126,126,126,126	0
88	MG	1	3709	1/1	0.97	0.09	36,36,36,36	0
88	MG	6	1969	1/1	0.97	0.12	35,35,35,35	0
89	OHX	4	222	7/7	0.97	0.11	121,121,121,121	0
89	OHX	4	224	7/7	0.97	0.09	166,166,166,166	0
89	OHX	4	225	7/7	0.97	0.09	159,159,159,159	0
88	MG	1	3626	1/1	0.97	0.04	27,27,27,27	0
88	MG	n0	202	1/1	0.97	0.16	41,41,41,41	0
88	MG	5	3761	1/1	0.97	0.17	51,51,51,51	0
88	MG	n6	201	1/1	0.97	0.10	25,25,25,25	0
88	MG	M0	301	1/1	0.97	0.12	30,30,30,30	0
89	OHX	1	4019	7/7	0.97	0.09	149,149,149,149	0
88	MG	5	3435	1/1	0.97	0.11	9,9,9,9	0
88	MG	1	3583	1/1	0.97	0.19	13,13,13,13	0
88	MG	n8	203	1/1	0.97	0.06	23,23,23,23	0
89	OHX	L3	406	7/7	0.97	0.10	157,157,157,157	0
88	MG	5	3594	1/1	0.97	0.16	2,2,2,2	0
88	MG	5	3595	1/1	0.97	0.13	3,3,3,3	0
89	OHX	1	4025	7/7	0.97	0.10	160,160,160,160	0
89	OHX	1	4026	7/7	0.97	0.10	157,157,157,157	0
88	MG	5	3768	1/1	0.97	0.14	64,64,64,64	0
88	MG	6	1973	1/1	0.97	0.10	33,33,33,33	0
88	MG	5	3439	1/1	0.97	0.23	21,21,21,21	0
88	MG	1	3491	1/1	0.97	0.10	25,25,25,25	0
89	OHX	1	4031	7/7	0.97	0.09	176,176,176,176	0
89	OHX	2	2031	7/7	0.97	0.12	99,99,99,99	0
89	OHX	2	2035	7/7	0.97	0.14	111,111,111,111	0
89	OHX	6	2068	7/7	0.97	0.11	119,119,119,119	0
89	OHX	6	2071	7/7	0.97	0.10	133,133,133,133	0
88	MG	5	3443	1/1	0.97	0.12	7,7,7,7	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	6	2075	7/7	0.97	0.10	124,124,124,124	0
89	OHX	6	2078	7/7	0.97	0.13	116,116,116,116	0
89	OHX	6	2080	7/7	0.97	0.09	122,122,122,122	0
89	OHX	6	2081	7/7	0.97	0.13	142,142,142,142	0
88	MG	1	3713	1/1	0.97	0.32	34,34,34,34	0
89	OHX	2	2046	7/7	0.97	0.14	131,131,131,131	0
89	OHX	6	2085	7/7	0.97	0.10	128,128,128,128	0
89	OHX	6	2086	7/7	0.97	0.11	135,135,135,135	0
89	OHX	6	2087	7/7	0.97	0.12	131,131,131,131	0
88	MG	1	3845	1/1	0.97	0.18	11,11,11,11	0
89	OHX	6	2089	7/7	0.97	0.10	128,128,128,128	0
89	OHX	6	2091	7/7	0.97	0.09	139,139,139,139	0
89	OHX	2	2050	7/7	0.97	0.12	143,143,143,143	0
89	OHX	6	2093	7/7	0.97	0.10	132,132,132,132	0
89	OHX	2	2052	7/7	0.97	0.13	134,134,134,134	0
88	MG	5	3605	1/1	0.97	0.16	25,25,25,25	0
88	MG	5	3776	1/1	0.97	0.13	22,22,22,22	0
88	MG	5	3606	1/1	0.97	0.20	41,41,41,41	0
89	OHX	6	2098	7/7	0.97	0.09	154,154,154,154	0
88	MG	5	3607	1/1	0.97	0.08	21,21,21,21	0
89	OHX	1	4044	7/7	0.97	0.10	148,148,148,148	0
88	MG	6	1977	1/1	0.97	0.13	17,17,17,17	0
89	OHX	2	2059	7/7	0.97	0.12	146,146,146,146	0
89	OHX	2	2060	7/7	0.97	0.10	151,151,151,151	0
88	MG	6	1978	1/1	0.97	0.11	47,47,47,47	0
88	MG	M5	302	1/1	0.97	0.04	14,14,14,14	0
89	OHX	1	4050	7/7	0.97	0.10	140,140,140,140	0
89	OHX	2	2064	7/7	0.97	0.12	146,146,146,146	0
89	OHX	6	2110	7/7	0.97	0.10	134,134,134,134	0
88	MG	5	3783	1/1	0.97	0.10	48,48,48,48	0
89	OHX	6	2112	7/7	0.97	0.08	155,155,155,155	0
88	MG	2	1903	1/1	0.97	0.17	24,24,24,24	0
88	MG	2	1997	1/1	0.97	0.11	33,33,33,33	0
88	MG	5	3786	1/1	0.97	0.07	57,57,57,57	0
89	OHX	6	2116	7/7	0.97	0.10	146,146,146,146	0
88	MG	5	3452	1/1	0.97	0.10	28,28,28,28	0
89	OHX	2	2070	7/7	0.97	0.10	155,155,155,155	0
88	MG	5	3788	1/1	0.97	0.11	10,10,10,10	0
88	MG	6	1982	1/1	0.97	0.12	46,46,46,46	0
89	OHX	1	4061	7/7	0.97	0.07	180,180,180,180	0
88	MG	5	3791	1/1	0.97	0.10	40,40,40,40	0
89	OHX	2	2074	7/7	0.97	0.11	159,159,159,159	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3774	1/1	0.97	0.07	54,54,54,54	0
88	MG	1	3849	1/1	0.97	0.07	20,20,20,20	0
88	MG	M7	204	1/1	0.97	0.09	16,16,16,16	0
88	MG	5	3459	1/1	0.97	0.14	97,97,97,97	0
88	MG	5	3625	1/1	0.97	0.26	64,64,64,64	0
88	MG	5	3797	1/1	0.97	0.16	30,30,30,30	0
88	MG	M7	205	1/1	0.97	0.05	15,15,15,15	0
88	MG	1	3717	1/1	0.97	0.18	42,42,42,42	0
88	MG	5	3462	1/1	0.97	0.14	26,26,26,26	0
88	MG	5	3630	1/1	0.97	0.10	45,45,45,45	0
88	MG	1	3776	1/1	0.97	0.10	61,61,61,61	0
88	MG	1	3718	1/1	0.97	0.05	27,27,27,27	0
88	MG	N3	201	1/1	0.97	0.15	10,10,10,10	0
88	MG	1	3631	1/1	0.97	0.07	26,26,26,26	0
88	MG	1	3720	1/1	0.97	0.04	21,21,21,21	0
89	OHX	2	2090	7/7	0.97	0.11	170,170,170,170	0
88	MG	1	3673	1/1	0.97	0.04	61,61,61,61	0
88	MG	1	3781	1/1	0.97	0.04	37,37,37,37	0
88	MG	5	3471	1/1	0.97	0.22	36,36,36,36	0
88	MG	1	3437	1/1	0.97	0.14	26,26,26,26	0
88	MG	1	3723	1/1	0.97	0.35	48,48,48,48	0
89	OHX	2	2096	7/7	0.97	0.09	185,185,185,185	0
88	MG	5	3641	1/1	0.97	0.14	17,17,17,17	0
88	MG	5	3642	1/1	0.97	0.08	25,25,25,25	0
88	MG	1	3859	1/1	0.97	0.08	31,31,31,31	0
88	MG	6	2000	1/1	0.97	0.06	49,49,49,49	0
88	MG	1	3455	1/1	0.97	0.11	17,17,17,17	0
88	MG	2	1927	1/1	0.97	0.19	19,19,19,19	0
88	MG	1	3592	1/1	0.97	0.14	5,5,5,5	0
88	MG	O7	102	1/1	0.97	0.15	30,30,30,30	0
88	MG	5	3822	1/1	0.97	0.09	28,28,28,28	0
88	MG	1	3475	1/1	0.97	0.17	8,8,8,8	0
88	MG	5	3650	1/1	0.97	0.15	48,48,48,48	0
88	MG	5	3828	1/1	0.97	0.05	33,33,33,33	0
88	MG	5	3651	1/1	0.97	0.09	19,19,19,19	0
88	MG	1	3788	1/1	0.97	0.11	25,25,25,25	0
88	MG	1	3680	1/1	0.97	0.08	30,30,30,30	0
89	OHX	1	4101	7/7	0.97	0.11	136,136,136,136	0
88	MG	5	3654	1/1	0.97	0.10	11,11,11,11	0
88	MG	6	2011	1/1	0.97	0.03	46,46,46,46	0
88	MG	6	1905	1/1	0.97	0.27	37,37,37,37	0
88	MG	1	3681	1/1	0.97	0.17	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3839	1/1	0.97	0.04	12,12,12,12	0
88	MG	1	3730	1/1	0.97	0.16	42,42,42,42	0
88	MG	1	3732	1/1	0.97	0.08	41,41,41,41	0
88	MG	1	3733	1/1	0.97	0.14	15,15,15,15	0
88	MG	6	2019	1/1	0.97	0.19	39,39,39,39	0
88	MG	1	3522	1/1	0.97	0.05	21,21,21,21	0
88	MG	6	2021	1/1	0.97	0.09	31,31,31,31	0
88	MG	6	1911	1/1	0.97	0.21	26,26,26,26	0
88	MG	5	3666	1/1	0.97	0.13	34,34,34,34	0
88	MG	1	3523	1/1	0.97	0.08	45,45,45,45	0
88	MG	5	3668	1/1	0.97	0.17	30,30,30,30	0
88	MG	6	1914	1/1	0.97	0.14	7,7,7,7	0
88	MG	1	3524	1/1	0.97	0.18	5,5,5,5	0
88	MG	1	3439	1/1	0.97	0.14	34,34,34,34	0
88	MG	5	3858	1/1	0.97	0.11	38,38,38,38	0
88	MG	5	3859	1/1	0.97	0.15	33,33,33,33	0
88	MG	5	3860	1/1	0.97	0.04	53,53,53,53	0
88	MG	5	3672	1/1	0.97	0.09	25,25,25,25	0
88	MG	1	3738	1/1	0.97	0.04	16,16,16,16	0
88	MG	5	3864	1/1	0.97	0.19	54,54,54,54	0
88	MG	2	1956	1/1	0.97	0.13	33,33,33,33	0
88	MG	1	3802	1/1	0.97	0.10	16,16,16,16	0
88	MG	5	3676	1/1	0.97	0.23	33,33,33,33	0
88	MG	1	3559	1/1	0.97	0.17	7,7,7,7	0
88	MG	5	3870	1/1	0.97	0.05	18,18,18,18	0
88	MG	5	3871	1/1	0.97	0.19	29,29,29,29	0
88	MG	5	3678	1/1	0.97	0.09	38,38,38,38	0
88	MG	5	3873	1/1	0.97	0.14	15,15,15,15	0
88	MG	5	3874	1/1	0.97	0.23	18,18,18,18	0
88	MG	1	3478	1/1	0.97	0.20	39,39,39,39	0
88	MG	5	3681	1/1	0.97	0.07	28,28,28,28	0
88	MG	5	3682	1/1	0.97	0.06	21,21,21,21	0
88	MG	5	3879	1/1	0.97	0.33	36,36,36,36	0
88	MG	1	3805	1/1	0.97	0.06	30,30,30,30	0
88	MG	1	3418	1/1	0.97	0.12	4,4,4,4	0
88	MG	1	3562	1/1	0.97	0.14	11,11,11,11	0
88	MG	5	3884	1/1	0.97	0.17	38,38,38,38	0
88	MG	5	3509	1/1	0.97	0.20	6,6,6,6	0
88	MG	2	1932	1/1	0.97	0.29	33,33,33,33	0
88	MG	1	3745	1/1	0.97	0.08	34,34,34,34	0
88	MG	5	3513	1/1	0.97	0.23	9,9,9,9	0
89	OHX	7	216	7/7	0.97	0.13	103,103,103,103	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3747	1/1	0.97	0.05	25,25,25,25	0
88	MG	3	213	1/1	0.97	0.16	25,25,25,25	0
88	MG	6	1929	1/1	0.97	0.13	27,27,27,27	0
88	MG	5	3522	1/1	0.97	0.15	6,6,6,6	0
88	MG	2	1911	1/1	0.97	0.23	29,29,29,29	0
89	OHX	5	3928	7/7	0.97	0.14	77,77,77,77	0
89	OHX	5	3951	7/7	0.97	0.11	101,101,101,101	0
89	OHX	8	219	7/7	0.97	0.11	135,135,135,135	0
89	OHX	8	220	7/7	0.97	0.12	128,128,128,128	0
89	OHX	5	3957	7/7	0.97	0.12	100,100,100,100	0
89	OHX	5	3962	7/7	0.97	0.11	94,94,94,94	0
89	OHX	5	3965	7/7	0.97	0.12	108,108,108,108	0
88	MG	1	3816	1/1	0.97	0.10	19,19,19,19	0
89	OHX	5	3977	7/7	0.97	0.13	102,102,102,102	0
88	MG	4	202	1/1	0.97	0.17	17,17,17,17	0
89	OHX	5	3981	7/7	0.97	0.11	105,105,105,105	0
89	OHX	5	3983	7/7	0.97	0.13	113,113,113,113	0
89	OHX	5	3985	7/7	0.97	0.10	120,120,120,120	0
89	OHX	5	3986	7/7	0.97	0.15	113,113,113,113	0
89	OHX	5	3990	7/7	0.97	0.10	127,127,127,127	0
89	OHX	13	406	7/7	0.97	0.11	146,146,146,146	0
89	OHX	5	3991	7/7	0.97	0.12	156,156,156,156	0
89	OHX	5	3992	7/7	0.97	0.10	133,133,133,133	0
89	OHX	5	3994	7/7	0.97	0.11	115,115,115,115	0
88	MG	5	3896	1/1	0.97	0.14	22,22,22,22	0
88	MG	1	3750	1/1	0.97	0.07	32,32,32,32	0
89	OHX	5	3998	7/7	0.97	0.18	112,112,112,112	0
89	OHX	5	3999	7/7	0.97	0.10	134,134,134,134	0
88	MG	4	204	1/1	0.97	0.21	30,30,30,30	0
89	OHX	5	4002	7/7	0.97	0.12	134,134,134,134	0
89	OHX	5	4004	7/7	0.97	0.15	114,114,114,114	0
88	MG	1	3650	1/1	0.97	0.14	36,36,36,36	0
89	OHX	5	4006	7/7	0.97	0.13	113,113,113,113	0
88	MG	1	3820	1/1	0.97	0.07	39,39,39,39	0
89	OHX	5	4009	7/7	0.97	0.10	145,145,145,145	0
89	OHX	5	4012	7/7	0.97	0.09	129,129,129,129	0
89	OHX	5	4013	7/7	0.97	0.09	142,142,142,142	0
89	OHX	5	4014	7/7	0.97	0.11	144,144,144,144	0
88	MG	1	3821	1/1	0.97	0.17	40,40,40,40	0
88	MG	1	3822	1/1	0.97	0.12	21,21,21,21	0
88	MG	5	3537	1/1	0.97	0.19	20,20,20,20	0
88	MG	1	3534	1/1	0.97	0.12	13,13,13,13	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3477	1/1	0.98	0.07	39,39,39,39	0
89	OHX	1	3992	7/7	0.98	0.11	116,116,116,116	0
89	OHX	1	3993	7/7	0.98	0.12	141,141,141,141	0
88	MG	5	3570	1/1	0.98	0.12	0,0,0,0	0
88	MG	7	206	1/1	0.98	0.05	31,31,31,31	0
88	MG	1	3483	1/1	0.98	0.16	20,20,20,20	0
88	MG	1	3447	1/1	0.98	0.07	16,16,16,16	0
89	OHX	1	3998	7/7	0.98	0.11	141,141,141,141	0
88	MG	1	3448	1/1	0.98	0.11	23,23,23,23	0
88	MG	6	1997	1/1	0.98	0.13	30,30,30,30	0
88	MG	1	3449	1/1	0.98	0.13	33,33,33,33	0
88	MG	1	3591	1/1	0.98	0.21	15,15,15,15	0
88	MG	1	3664	1/1	0.98	0.04	19,19,19,19	0
88	MG	5	3680	1/1	0.98	0.11	21,21,21,21	0
88	MG	1	3665	1/1	0.98	0.13	34,34,34,34	0
88	MG	6	2002	1/1	0.98	0.03	21,21,21,21	0
88	MG	5	3412	1/1	0.98	0.18	20,20,20,20	0
89	OHX	1	4169	7/7	0.98	0.11	161,161,161,161	0
88	MG	5	3413	1/1	0.98	0.19	28,28,28,28	0
88	MG	6	2003	1/1	0.98	0.06	55,55,55,55	0
88	MG	5	3686	1/1	0.98	0.16	37,37,37,37	0
88	MG	1	3839	1/1	0.98	0.12	22,22,22,22	0
88	MG	1	3705	1/1	0.98	0.22	55,55,55,55	0
88	MG	5	3587	1/1	0.98	0.26	18,18,18,18	0
89	OHX	5	4113	7/7	0.98	0.10	132,132,132,132	0
88	MG	5	3588	1/1	0.98	0.27	6,6,6,6	0
88	MG	2	1968	1/1	0.98	0.18	27,27,27,27	0
88	MG	1	3412	1/1	0.98	0.12	19,19,19,19	0
88	MG	1	3565	1/1	0.98	0.20	7,7,7,7	0
88	MG	1	3474	1/1	0.98	0.10	5,5,5,5	0
88	MG	N8	203	1/1	0.98	0.11	66,66,66,66	0
88	MG	5	3696	1/1	0.98	0.06	55,55,55,55	0
88	MG	1	3462	1/1	0.98	0.12	3,3,3,3	0
88	MG	4	206	1/1	0.98	0.22	19,19,19,19	0
88	MG	5	3499	1/1	0.98	0.21	18,18,18,18	0
88	MG	1	3633	1/1	0.98	0.04	32,32,32,32	0
88	MG	5	3598	1/1	0.98	0.17	0,0,0,0	0
88	MG	5	3599	1/1	0.98	0.27	14,14,14,14	0
88	MG	5	3501	1/1	0.98	0.12	19,19,19,19	0
88	MG	1	3598	1/1	0.98	0.09	15,15,15,15	0
88	MG	5	3602	1/1	0.98	0.10	21,21,21,21	0
88	MG	1	3599	1/1	0.98	0.20	3,3,3,3	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	6	1956	1/1	0.98	0.31	29,29,29,29	0
88	MG	6	1957	1/1	0.98	0.14	17,17,17,17	0
88	MG	5	3823	1/1	0.98	0.07	39,39,39,39	0
88	MG	4	210	1/1	0.98	0.14	30,30,30,30	0
88	MG	m5	303	1/1	0.98	0.04	26,26,26,26	0
88	MG	1	3600	1/1	0.98	0.28	11,11,11,11	0
88	MG	5	3827	1/1	0.98	0.22	39,39,39,39	0
88	MG	m6	202	1/1	0.98	0.10	48,48,48,48	0
88	MG	6	2024	1/1	0.98	0.09	40,40,40,40	0
88	MG	5	3433	1/1	0.98	0.19	27,27,27,27	0
88	MG	5	3610	1/1	0.98	0.11	2,2,2,2	0
88	MG	5	3611	1/1	0.98	0.18	15,15,15,15	0
88	MG	5	3510	1/1	0.98	0.14	2,2,2,2	0
88	MG	5	3614	1/1	0.98	0.17	36,36,36,36	0
88	MG	4	212	1/1	0.98	0.06	36,36,36,36	0
88	MG	n3	201	1/1	0.98	0.19	3,3,3,3	0
88	MG	1	3545	1/1	0.98	0.15	17,17,17,17	0
88	MG	6	1962	1/1	0.98	0.11	26,26,26,26	0
88	MG	5	3514	1/1	0.98	0.06	12,12,12,12	0
88	MG	5	3515	1/1	0.98	0.12	27,27,27,27	0
88	MG	1	3603	1/1	0.98	0.19	7,7,7,7	0
89	OHX	1	4052	7/7	0.98	0.10	159,159,159,159	0
88	MG	5	3845	1/1	0.98	0.05	18,18,18,18	0
88	MG	5	3517	1/1	0.98	0.07	11,11,11,11	0
88	MG	5	3438	1/1	0.98	0.20	25,25,25,25	0
88	MG	1	3759	1/1	0.98	0.07	9,9,9,9	0
88	MG	5	3626	1/1	0.98	0.10	15,15,15,15	0
88	MG	4	216	1/1	0.98	0.05	23,23,23,23	0
88	MG	5	3441	1/1	0.98	0.11	1,1,1,1	0
89	OHX	2	2025	7/7	0.98	0.13	82,82,82,82	0
89	OHX	2	2029	7/7	0.98	0.10	100,100,100,100	0
89	OHX	2	2030	7/7	0.98	0.11	97,97,97,97	0
88	MG	2	1929	1/1	0.98	0.13	19,19,19,19	0
89	OHX	2	2033	7/7	0.98	0.12	109,109,109,109	0
88	MG	5	3854	1/1	0.98	0.07	59,59,59,59	0
89	OHX	2	2037	7/7	0.98	0.10	114,114,114,114	0
89	OHX	2	2038	7/7	0.98	0.11	113,113,113,113	0
89	OHX	2	2039	7/7	0.98	0.09	112,112,112,112	0
88	MG	5	3733	1/1	0.98	0.09	33,33,33,33	0
89	OHX	2	2041	7/7	0.98	0.10	102,102,102,102	0
88	MG	5	3525	1/1	0.98	0.29	27,27,27,27	0
89	OHX	5	3931	7/7	0.98	0.11	98,98,98,98	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	3942	7/7	0.98	0.12	96,96,96,96	0
89	OHX	5	3943	7/7	0.98	0.10	97,97,97,97	0
89	OHX	5	3946	7/7	0.98	0.11	89,89,89,89	0
89	OHX	5	3948	7/7	0.98	0.11	85,85,85,85	0
89	OHX	5	3949	7/7	0.98	0.11	97,97,97,97	0
89	OHX	2	2045	7/7	0.98	0.12	125,125,125,125	0
89	OHX	5	3952	7/7	0.98	0.11	89,89,89,89	0
89	OHX	5	3953	7/7	0.98	0.11	99,99,99,99	0
89	OHX	5	3954	7/7	0.98	0.11	107,107,107,107	0
88	MG	1	3493	1/1	0.98	0.16	16,16,16,16	0
89	OHX	5	3958	7/7	0.98	0.13	94,94,94,94	0
89	OHX	5	3960	7/7	0.98	0.12	109,109,109,109	0
89	OHX	2	2048	7/7	0.98	0.07	125,125,125,125	0
89	OHX	5	3963	7/7	0.98	0.11	98,98,98,98	0
88	MG	1	3464	1/1	0.98	0.14	10,10,10,10	0
89	OHX	5	3966	7/7	0.98	0.12	93,93,93,93	0
89	OHX	5	3968	7/7	0.98	0.10	102,102,102,102	0
89	OHX	5	3969	7/7	0.98	0.10	97,97,97,97	0
89	OHX	5	3971	7/7	0.98	0.10	101,101,101,101	0
89	OHX	5	3974	7/7	0.98	0.09	91,91,91,91	0
89	OHX	5	3975	7/7	0.98	0.12	110,110,110,110	0
88	MG	1	3808	1/1	0.98	0.07	70,70,70,70	0
89	OHX	4	223	7/7	0.98	0.08	142,142,142,142	0
89	OHX	2	2051	7/7	0.98	0.08	123,123,123,123	0
89	OHX	5	3980	7/7	0.98	0.10	110,110,110,110	0
88	MG	1	3572	1/1	0.98	0.19	6,6,6,6	0
89	OHX	5	3982	7/7	0.98	0.12	121,121,121,121	0
88	MG	5	3531	1/1	0.98	0.14	16,16,16,16	0
88	MG	1	3573	1/1	0.98	0.06	3,3,3,3	0
89	OHX	5	4202	7/7	0.98	0.11	143,143,143,143	0
88	MG	5	3534	1/1	0.98	0.16	27,27,27,27	0
89	OHX	5	3987	7/7	0.98	0.09	123,123,123,123	0
89	OHX	5	3988	7/7	0.98	0.14	105,105,105,105	0
89	OHX	C8	202	7/7	0.98	0.09	116,116,116,116	0
88	MG	1	3528	1/1	0.98	0.18	15,15,15,15	0
88	MG	5	3743	1/1	0.98	0.05	29,29,29,29	0
89	OHX	2	2058	7/7	0.98	0.10	137,137,137,137	0
89	OHX	5	3995	7/7	0.98	0.11	122,122,122,122	0
89	OHX	1	3904	7/7	0.98	0.12	97,97,97,97	0
88	MG	5	3450	1/1	0.98	0.10	7,7,7,7	0
89	OHX	1	3909	7/7	0.98	0.11	97,97,97,97	0
89	OHX	1	3915	7/7	0.98	0.11	98,98,98,98	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	4000	7/7	0.98	0.10	121,121,121,121	0
88	MG	5	3745	1/1	0.98	0.07	0,0,0,0	0
89	OHX	2	2061	7/7	0.98	0.10	145,145,145,145	0
89	OHX	1	3924	7/7	0.98	0.10	107,107,107,107	0
89	OHX	1	3925	7/7	0.98	0.11	102,102,102,102	0
89	OHX	1	3926	7/7	0.98	0.10	99,99,99,99	0
89	OHX	5	4007	7/7	0.98	0.10	138,138,138,138	0
88	MG	1	3766	1/1	0.98	0.10	40,40,40,40	0
88	MG	5	3538	1/1	0.98	0.24	22,22,22,22	0
89	OHX	5	4011	7/7	0.98	0.11	122,122,122,122	0
89	OHX	1	3932	7/7	0.98	0.12	102,102,102,102	0
89	OHX	1	3933	7/7	0.98	0.10	93,93,93,93	0
89	OHX	O7	104	7/7	0.98	0.09	126,126,126,126	0
89	OHX	6	2056	7/7	0.98	0.11	94,94,94,94	0
89	OHX	1	3934	7/7	0.98	0.12	92,92,92,92	0
89	OHX	6	2062	7/7	0.98	0.10	106,106,106,106	0
89	OHX	6	2063	7/7	0.98	0.12	100,100,100,100	0
89	OHX	6	2064	7/7	0.98	0.10	127,127,127,127	0
89	OHX	6	2065	7/7	0.98	0.13	104,104,104,104	0
89	OHX	6	2066	7/7	0.98	0.10	111,111,111,111	0
89	OHX	1	3935	7/7	0.98	0.11	105,105,105,105	0
89	OHX	6	2069	7/7	0.98	0.13	107,107,107,107	0
89	OHX	6	2070	7/7	0.98	0.09	126,126,126,126	0
88	MG	1	3529	1/1	0.98	0.12	3,3,3,3	0
89	OHX	6	2073	7/7	0.98	0.11	123,123,123,123	0
89	OHX	1	3938	7/7	0.98	0.10	115,115,115,115	0
89	OHX	1	3939	7/7	0.98	0.12	108,108,108,108	0
89	OHX	6	2076	7/7	0.98	0.10	125,125,125,125	0
89	OHX	6	2077	7/7	0.98	0.10	121,121,121,121	0
88	MG	5	3749	1/1	0.98	0.14	8,8,8,8	0
89	OHX	6	2079	7/7	0.98	0.09	112,112,112,112	0
88	MG	5	3453	1/1	0.98	0.18	17,17,17,17	0
88	MG	1	3420	1/1	0.98	0.10	35,35,35,35	0
88	MG	5	3542	1/1	0.98	0.14	0,0,0,0	0
89	OHX	5	4036	7/7	0.98	0.10	135,135,135,135	0
88	MG	1	3817	1/1	0.98	0.11	37,37,37,37	0
89	OHX	6	2084	7/7	0.98	0.10	129,129,129,129	0
88	MG	1	3552	1/1	0.98	0.14	19,19,19,19	0
88	MG	5	3756	1/1	0.98	0.15	37,37,37,37	0
89	OHX	5	4041	7/7	0.98	0.10	135,135,135,135	0
88	MG	2	1922	1/1	0.98	0.18	31,31,31,31	0
89	OHX	1	3950	7/7	0.98	0.11	111,111,111,111	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	1	3951	7/7	0.98	0.11	111,111,111,111	0
89	OHX	6	2090	7/7	0.98	0.10	135,135,135,135	0
89	OHX	1	3952	7/7	0.98	0.09	124,124,124,124	0
89	OHX	7	218	7/7	0.98	0.09	144,144,144,144	0
89	OHX	7	219	7/7	0.98	0.11	128,128,128,128	0
89	OHX	7	220	7/7	0.98	0.10	128,128,128,128	0
89	OHX	5	4047	7/7	0.98	0.09	147,147,147,147	0
89	OHX	1	3953	7/7	0.98	0.10	114,114,114,114	0
89	OHX	1	3954	7/7	0.98	0.10	112,112,112,112	0
88	MG	1	3532	1/1	0.98	0.15	11,11,11,11	0
88	MG	5	3759	1/1	0.98	0.05	34,34,34,34	0
88	MG	6	2204	1/1	0.98	0.08	38,38,38,38	0
89	OHX	1	3958	7/7	0.98	0.09	127,127,127,127	0
88	MG	1	3582	1/1	0.98	0.18	11,11,11,11	0
89	OHX	6	2099	7/7	0.98	0.10	135,135,135,135	0
88	MG	1	3618	1/1	0.98	0.11	17,17,17,17	0
89	OHX	1	3961	7/7	0.98	0.14	112,112,112,112	0
88	MG	5	3463	1/1	0.98	0.15	6,6,6,6	0
88	MG	1	3731	1/1	0.98	0.03	32,32,32,32	0
88	MG	1	3513	1/1	0.98	0.17	19,19,19,19	0
89	OHX	1	3965	7/7	0.98	0.11	104,104,104,104	0
89	OHX	1	3966	7/7	0.98	0.11	108,108,108,108	0
89	OHX	6	2107	7/7	0.98	0.07	143,143,143,143	0
89	OHX	1	3967	7/7	0.98	0.12	124,124,124,124	0
89	OHX	1	3968	7/7	0.98	0.12	110,110,110,110	0
89	OHX	13	405	7/7	0.98	0.09	126,126,126,126	0
89	OHX	1	3969	7/7	0.98	0.09	120,120,120,120	0
89	OHX	1	3970	7/7	0.98	0.09	140,140,140,140	0
88	MG	1	3825	1/1	0.98	0.05	32,32,32,32	0
88	MG	1	3654	1/1	0.98	0.03	29,29,29,29	0
88	MG	1	3410	1/1	0.98	0.10	10,10,10,10	0
89	OHX	1	3975	7/7	0.98	0.10	125,125,125,125	0
88	MG	1	3694	1/1	0.98	0.09	27,27,27,27	0
88	MG	6	1931	1/1	0.98	0.17	29,29,29,29	0
88	MG	M5	303	1/1	0.98	0.20	39,39,39,39	0
88	MG	5	3560	1/1	0.98	0.13	27,27,27,27	0
89	OHX	1	3980	7/7	0.98	0.10	118,118,118,118	0
88	MG	5	3472	1/1	0.98	0.13	7,7,7,7	0
88	MG	M5	304	1/1	0.98	0.20	40,40,40,40	0
89	OHX	5	4080	7/7	0.98	0.12	141,141,141,141	0
89	OHX	m6	203	7/7	0.98	0.12	117,117,117,117	0
88	MG	1	3416	1/1	0.98	0.04	20,20,20,20	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	5	3565	1/1	0.98	0.26	19,19,19,19	0
89	OHX	o7	502	7/7	0.98	0.10	123,123,123,123	0
89	OHX	q2	502	7/7	0.98	0.11	138,138,138,138	0
88	MG	5	3778	1/1	0.98	0.06	31,31,31,31	0
89	OHX	1	3986	7/7	0.98	0.10	155,155,155,155	0
88	MG	1	3586	1/1	0.98	0.14	10,10,10,10	0
88	MG	7	201	1/1	0.98	0.16	9,9,9,9	0
88	MG	5	3567	1/1	0.98	0.10	9,9,9,9	0
88	MG	5	3402	1/1	0.98	0.07	3,3,3,3	0
89	OHX	5	3956	7/7	0.99	0.09	102,102,102,102	0
88	MG	6	1996	1/1	0.99	0.04	24,24,24,24	0
88	MG	1	3769	1/1	0.99	0.15	38,38,38,38	0
89	OHX	5	3959	7/7	0.99	0.08	95,95,95,95	0
88	MG	5	3519	1/1	0.99	0.08	13,13,13,13	0
89	OHX	5	3961	7/7	0.99	0.09	78,78,78,78	0
88	MG	5	3752	1/1	0.99	0.11	41,41,41,41	0
88	MG	1	3601	1/1	0.99	0.13	1,1,1,1	0
89	OHX	5	3964	7/7	0.99	0.08	100,100,100,100	0
88	MG	5	3521	1/1	0.99	0.12	1,1,1,1	0
88	MG	5	3703	1/1	0.99	0.02	16,16,16,16	0
89	OHX	5	3967	7/7	0.99	0.08	98,98,98,98	0
88	MG	5	3564	1/1	0.99	0.21	9,9,9,9	0
88	MG	1	3749	1/1	0.99	0.06	4,4,4,4	0
89	OHX	5	3970	7/7	0.99	0.08	97,97,97,97	0
88	MG	5	3877	1/1	0.99	0.20	16,16,16,16	0
89	OHX	5	3972	7/7	0.99	0.09	103,103,103,103	0
89	OHX	5	3973	7/7	0.99	0.08	99,99,99,99	0
88	MG	1	3659	1/1	0.99	0.09	5,5,5,5	0
88	MG	1	3644	1/1	0.99	0.04	17,17,17,17	0
88	MG	5	3814	1/1	0.99	0.09	36,36,36,36	0
88	MG	5	3612	1/1	0.99	0.10	18,18,18,18	0
89	OHX	5	3978	7/7	0.99	0.08	108,108,108,108	0
88	MG	5	3660	1/1	0.99	0.17	41,41,41,41	0
88	MG	5	3883	1/1	0.99	0.16	34,34,34,34	0
88	MG	6	1913	1/1	0.99	0.18	24,24,24,24	0
88	MG	5	3763	1/1	0.99	0.04	20,20,20,20	0
88	MG	1	3441	1/1	0.99	0.26	30,30,30,30	0
89	OHX	5	3984	7/7	0.99	0.09	96,96,96,96	0
88	MG	5	3615	1/1	0.99	0.02	19,19,19,19	0
88	MG	5	3821	1/1	0.99	0.04	58,58,58,58	0
88	MG	5	3713	1/1	0.99	0.06	35,35,35,35	0
88	MG	1	3695	1/1	0.99	0.13	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	3989	7/7	0.99	0.09	119,119,119,119	0
88	MG	1	3481	1/1	0.99	0.02	20,20,20,20	0
88	MG	1	3679	1/1	0.99	0.04	33,33,33,33	0
88	MG	5	3619	1/1	0.99	0.12	21,21,21,21	0
89	OHX	5	3993	7/7	0.99	0.10	119,119,119,119	0
88	MG	1	3716	1/1	0.99	0.09	41,41,41,41	0
89	OHX	1	3974	7/7	0.99	0.09	89,89,89,89	0
88	MG	1	3490	1/1	0.99	0.05	5,5,5,5	0
88	MG	5	3533	1/1	0.99	0.17	1,1,1,1	0
88	MG	2	1919	1/1	0.99	0.15	25,25,25,25	0
88	MG	5	3832	1/1	0.99	0.05	45,45,45,45	0
88	MG	5	3457	1/1	0.99	0.17	18,18,18,18	0
88	MG	6	2010	1/1	0.99	0.04	45,45,45,45	0
88	MG	5	3835	1/1	0.99	0.10	28,28,28,28	0
89	OHX	5	4003	7/7	0.99	0.09	129,129,129,129	0
88	MG	1	3564	1/1	0.99	0.21	15,15,15,15	0
88	MG	1	3607	1/1	0.99	0.03	15,15,15,15	0
88	MG	5	3838	1/1	0.99	0.07	68,68,68,68	0
88	MG	q0	202	1/1	0.99	0.07	38,38,38,38	0
88	MG	6	2013	1/1	0.99	0.03	25,25,25,25	0
88	MG	5	3840	1/1	0.99	0.12	26,26,26,26	0
89	OHX	5	4010	7/7	0.99	0.09	88,88,88,88	0
88	MG	1	3807	1/1	0.99	0.04	30,30,30,30	0
89	OHX	2	2023	7/7	0.99	0.11	75,75,75,75	0
89	OHX	2	2024	7/7	0.99	0.11	81,81,81,81	0
88	MG	5	3583	1/1	0.99	0.20	17,17,17,17	0
89	OHX	2	2026	7/7	0.99	0.09	89,89,89,89	0
89	OHX	2	2028	7/7	0.99	0.09	99,99,99,99	0
88	MG	5	3843	1/1	0.99	0.07	44,44,44,44	0
88	MG	5	3729	1/1	0.99	0.14	43,43,43,43	0
88	MG	1	3540	1/1	0.99	0.30	19,19,19,19	0
89	OHX	2	2032	7/7	0.99	0.09	106,106,106,106	0
88	MG	1	3809	1/1	0.99	0.10	65,65,65,65	0
89	OHX	2	2034	7/7	0.99	0.10	99,99,99,99	0
88	MG	5	3586	1/1	0.99	0.22	10,10,10,10	0
89	OHX	1	3877	7/7	0.99	0.11	55,55,55,55	0
89	OHX	1	3879	7/7	0.99	0.11	59,59,59,59	0
89	OHX	1	3880	7/7	0.99	0.08	52,52,52,52	0
89	OHX	1	3881	7/7	0.99	0.09	63,63,63,63	0
89	OHX	1	3882	7/7	0.99	0.11	59,59,59,59	0
89	OHX	1	3883	7/7	0.99	0.10	62,62,62,62	0
89	OHX	1	3887	7/7	0.99	0.08	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	4	220	7/7	0.99	0.11	62,62,62,62	0
89	OHX	4	221	7/7	0.99	0.09	86,86,86,86	0
89	OHX	1	3888	7/7	0.99	0.10	63,63,63,63	0
89	OHX	1	3889	7/7	0.99	0.07	77,77,77,77	0
89	OHX	1	3890	7/7	0.99	0.10	76,76,76,76	0
89	OHX	1	3891	7/7	0.99	0.12	71,71,71,71	0
89	OHX	1	3893	7/7	0.99	0.10	74,74,74,74	0
89	OHX	1	3894	7/7	0.99	0.09	72,72,72,72	0
89	OHX	1	3896	7/7	0.99	0.08	74,74,74,74	0
89	OHX	1	3899	7/7	0.99	0.10	73,73,73,73	0
89	OHX	1	3900	7/7	0.99	0.09	78,78,78,78	0
89	OHX	1	3902	7/7	0.99	0.07	72,72,72,72	0
89	OHX	1	3903	7/7	0.99	0.09	82,82,82,82	0
89	OHX	2	2036	7/7	0.99	0.09	105,105,105,105	0
88	MG	5	3428	1/1	0.99	0.10	5,5,5,5	0
89	OHX	1	3906	7/7	0.99	0.11	81,81,81,81	0
89	OHX	1	3907	7/7	0.99	0.07	78,78,78,78	0
89	OHX	1	3908	7/7	0.99	0.11	83,83,83,83	0
88	MG	6	2017	1/1	0.99	0.03	52,52,52,52	0
89	OHX	1	3910	7/7	0.99	0.09	79,79,79,79	0
89	OHX	1	3911	7/7	0.99	0.08	83,83,83,83	0
89	OHX	1	3912	7/7	0.99	0.08	82,82,82,82	0
89	OHX	1	3913	7/7	0.99	0.10	89,89,89,89	0
89	OHX	1	3914	7/7	0.99	0.09	91,91,91,91	0
89	OHX	N9	101	7/7	0.99	0.11	67,67,67,67	0
88	MG	1	3596	1/1	0.99	0.04	25,25,25,25	0
89	OHX	5	4057	7/7	0.99	0.08	135,135,135,135	0
89	OHX	1	3916	7/7	0.99	0.09	88,88,88,88	0
89	OHX	1	3917	7/7	0.99	0.09	92,92,92,92	0
89	OHX	6	2045	7/7	0.99	0.11	67,67,67,67	0
89	OHX	6	2047	7/7	0.99	0.08	66,66,66,66	0
89	OHX	6	2048	7/7	0.99	0.10	70,70,70,70	0
89	OHX	6	2049	7/7	0.99	0.10	74,74,74,74	0
89	OHX	6	2050	7/7	0.99	0.10	70,70,70,70	0
89	OHX	6	2051	7/7	0.99	0.12	79,79,79,79	0
89	OHX	6	2052	7/7	0.99	0.11	83,83,83,83	0
89	OHX	6	2055	7/7	0.99	0.09	92,92,92,92	0
89	OHX	1	3918	7/7	0.99	0.07	80,80,80,80	0
89	OHX	6	2057	7/7	0.99	0.07	92,92,92,92	0
89	OHX	6	2058	7/7	0.99	0.08	86,86,86,86	0
89	OHX	6	2059	7/7	0.99	0.09	94,94,94,94	0
89	OHX	6	2060	7/7	0.99	0.08	88,88,88,88	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3512	1/1	0.99	0.12	13,13,13,13	0
88	MG	5	3790	1/1	0.99	0.06	37,37,37,37	0
89	OHX	1	3921	7/7	0.99	0.08	93,93,93,93	0
89	OHX	1	3922	7/7	0.99	0.09	99,99,99,99	0
89	OHX	1	3923	7/7	0.99	0.10	97,97,97,97	0
89	OHX	2	2042	7/7	0.99	0.09	108,108,108,108	0
89	OHX	6	2067	7/7	0.99	0.10	95,95,95,95	0
88	MG	5	3547	1/1	0.99	0.10	11,11,11,11	0
89	OHX	2	2044	7/7	0.99	0.08	121,121,121,121	0
89	OHX	7	215	7/7	0.99	0.11	89,89,89,89	0
89	OHX	1	3927	7/7	0.99	0.10	95,95,95,95	0
89	OHX	s1	302	7/7	0.99	0.09	78,78,78,78	0
89	OHX	1	3928	7/7	0.99	0.09	96,96,96,96	0
89	OHX	6	2072	7/7	0.99	0.08	108,108,108,108	0
88	MG	1	3611	1/1	0.99	0.18	26,26,26,26	0
88	MG	1	3576	1/1	0.99	0.12	0,0,0,0	0
89	OHX	1	3931	7/7	0.99	0.08	96,96,96,96	0
89	OHX	2	2047	7/7	0.99	0.07	135,135,135,135	0
88	MG	6	1901	1/1	0.99	0.18	18,18,18,18	0
88	MG	6	2023	1/1	0.99	0.03	61,61,61,61	0
88	MG	1	3428	1/1	0.99	0.10	18,18,18,18	0
89	OHX	5	3904	7/7	0.99	0.11	50,50,50,50	0
89	OHX	5	3907	7/7	0.99	0.11	64,64,64,64	0
89	OHX	5	3909	7/7	0.99	0.10	54,54,54,54	0
89	OHX	5	3911	7/7	0.99	0.12	64,64,64,64	0
89	OHX	5	3912	7/7	0.99	0.08	64,64,64,64	0
89	OHX	5	3913	7/7	0.99	0.08	62,62,62,62	0
89	OHX	5	3914	7/7	0.99	0.09	58,58,58,58	0
89	OHX	5	3916	7/7	0.99	0.11	67,67,67,67	0
89	OHX	5	3920	7/7	0.99	0.07	70,70,70,70	0
89	OHX	5	3922	7/7	0.99	0.07	63,63,63,63	0
89	OHX	5	3925	7/7	0.99	0.09	70,70,70,70	0
89	OHX	5	3926	7/7	0.99	0.08	72,72,72,72	0
89	OHX	5	3927	7/7	0.99	0.07	70,70,70,70	0
89	OHX	1	3936	7/7	0.99	0.09	103,103,103,103	0
89	OHX	5	3929	7/7	0.99	0.07	81,81,81,81	0
89	OHX	5	3930	7/7	0.99	0.08	82,82,82,82	0
88	MG	1	3815	1/1	0.99	0.07	59,59,59,59	0
89	OHX	5	3933	7/7	0.99	0.10	82,82,82,82	0
89	OHX	5	3934	7/7	0.99	0.11	83,83,83,83	0
89	OHX	5	3936	7/7	0.99	0.08	87,87,87,87	0
89	OHX	5	3937	7/7	0.99	0.07	83,83,83,83	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
89	OHX	5	3938	7/7	0.99	0.07	83,83,83,83	0
89	OHX	5	3939	7/7	0.99	0.09	78,78,78,78	0
89	OHX	5	3940	7/7	0.99	0.07	81,81,81,81	0
89	OHX	5	3941	7/7	0.99	0.08	92,92,92,92	0
88	MG	1	3746	1/1	0.99	0.03	32,32,32,32	0
88	MG	1	3844	1/1	0.99	0.12	7,7,7,7	0
89	OHX	5	3944	7/7	0.99	0.09	93,93,93,93	0
89	OHX	5	3945	7/7	0.99	0.12	88,88,88,88	0
89	OHX	n3	203	7/7	0.99	0.08	92,92,92,92	0
89	OHX	1	3940	7/7	0.99	0.08	94,94,94,94	0
89	OHX	n9	101	7/7	0.99	0.10	70,70,70,70	0
89	OHX	5	3947	7/7	0.99	0.06	80,80,80,80	0
88	MG	1	3790	1/1	0.99	0.14	48,48,48,48	0
89	OHX	1	3942	7/7	0.99	0.09	107,107,107,107	0
89	OHX	5	3950	7/7	0.99	0.11	105,105,105,105	0
88	MG	5	3865	1/1	0.99	0.08	35,35,35,35	0
88	MG	1	3514	1/1	0.99	0.21	9,9,9,9	0
88	MG	5	3442	1/1	0.99	0.13	20,20,20,20	0
88	MG	8	215	1/1	0.99	0.03	50,50,50,50	0
89	OHX	5	3955	7/7	0.99	0.09	95,95,95,95	0
89	OHX	5	3935	7/7	1.00	0.07	82,82,82,82	0
88	MG	M5	301	1/1	1.00	0.09	20,20,20,20	0
89	OHX	6	2053	7/7	1.00	0.09	73,73,73,73	0
89	OHX	6	2054	7/7	1.00	0.08	80,80,80,80	0
88	MG	1	3834	1/1	1.00	0.04	20,20,20,20	0
89	OHX	1	3884	7/7	1.00	0.08	63,63,63,63	0
89	OHX	8	218	7/7	1.00	0.10	59,59,59,59	0
89	OHX	1	3885	7/7	1.00	0.07	53,53,53,53	0
89	OHX	1	3886	7/7	1.00	0.07	65,65,65,65	0
88	MG	1	3578	1/1	1.00	0.14	0,0,0,0	0
88	MG	5	3826	1/1	1.00	0.05	5,5,5,5	0
89	OHX	2	2027	7/7	1.00	0.08	81,81,81,81	0
88	MG	5	3529	1/1	1.00	0.20	17,17,17,17	0
89	OHX	5	3900	7/7	1.00	0.09	43,43,43,43	0
89	OHX	5	3901	7/7	1.00	0.09	41,41,41,41	0
89	OHX	5	3902	7/7	1.00	0.09	43,43,43,43	0
89	OHX	5	3903	7/7	1.00	0.08	50,50,50,50	0
88	MG	2	1964	1/1	1.00	0.03	34,34,34,34	0
89	OHX	5	3905	7/7	1.00	0.11	51,51,51,51	0
89	OHX	5	3906	7/7	1.00	0.08	57,57,57,57	0
89	OHX	1	3892	7/7	1.00	0.07	68,68,68,68	0
89	OHX	5	3908	7/7	1.00	0.10	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
88	MG	1	3796	1/1	1.00	0.02	13,13,13,13	0
89	OHX	5	3910	7/7	1.00	0.08	49,49,49,49	0
88	MG	6	1940	1/1	1.00	0.08	17,17,17,17	0
89	OHX	1	3895	7/7	1.00	0.09	76,76,76,76	0
89	OHX	1	3873	7/7	1.00	0.10	43,43,43,43	0
89	OHX	1	3897	7/7	1.00	0.09	75,75,75,75	0
89	OHX	5	3915	7/7	1.00	0.08	62,62,62,62	0
89	OHX	1	3898	7/7	1.00	0.07	74,74,74,74	0
89	OHX	5	3917	7/7	1.00	0.09	70,70,70,70	0
89	OHX	5	3918	7/7	1.00	0.07	68,68,68,68	0
89	OHX	5	3919	7/7	1.00	0.07	65,65,65,65	0
89	OHX	1	3874	7/7	1.00	0.08	45,45,45,45	0
89	OHX	5	3921	7/7	1.00	0.08	68,68,68,68	0
89	OHX	1	3875	7/7	1.00	0.08	45,45,45,45	0
89	OHX	5	3923	7/7	1.00	0.08	60,60,60,60	0
89	OHX	5	3924	7/7	1.00	0.08	67,67,67,67	0
89	OHX	1	3901	7/7	1.00	0.07	75,75,75,75	0
89	OHX	6	2044	7/7	1.00	0.11	55,55,55,55	0
89	OHX	1	3876	7/7	1.00	0.09	52,52,52,52	0
89	OHX	6	2046	7/7	1.00	0.09	60,60,60,60	0
90	ZN	D6	500	1/1	1.00	0.01	77,77,77,77	0
88	MG	5	3862	1/1	1.00	0.03	22,22,22,22	0
90	ZN	D9	101	1/1	1.00	0.03	66,66,66,66	0
89	OHX	1	3878	7/7	1.00	0.08	52,52,52,52	0
90	ZN	O7	101	1/1	1.00	0.02	33,33,33,33	0
90	ZN	Q0	500	1/1	1.00	0.02	44,44,44,44	0
88	MG	s1	301	1/1	1.00	0.04	22,22,22,22	0
90	ZN	Q3	501	1/1	1.00	0.02	61,61,61,61	0
90	ZN	d6	101	1/1	1.00	0.02	55,55,55,55	0
89	OHX	5	3932	7/7	1.00	0.08	71,71,71,71	0
90	ZN	d9	101	1/1	1.00	0.01	61,61,61,61	0
88	MG	2	2001	1/1	1.00	0.05	33,33,33,33	0
90	ZN	o7	501	1/1	1.00	0.01	40,40,40,40	0
90	ZN	q0	201	1/1	1.00	0.01	41,41,41,41	0
88	MG	5	3853	1/1	1.00	0.03	2,2,2,2	0
90	ZN	q3	501	1/1	1.00	0.01	65,65,65,65	0

6.5 Other polymers

There are no such residues in this entry.