



Full wwPDB X-ray Structure Validation Report ⓘ

Oct 20, 2022 – 06:18 pm BST

PDB ID : 5FCI
Title : Structure of the vacant uL3 W255C mutant 80S yeast ribosome
Authors : Mailliot, J.; Garreau de Loubresse, N.; Yusupova, G.; Dinman, J.D.; Yusupov, M.
Deposited on : 2015-12-15
Resolution : 3.40 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 : 4.02b-467
Mogul : 1.8.4, CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.31.2
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0267
CCP4 : 7.1.010 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

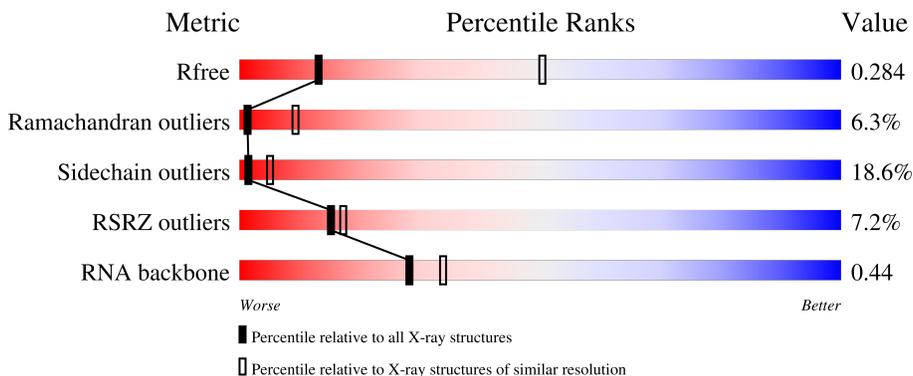
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.40 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}	130704	1026 (3.48-3.32)
Ramachandran outliers	138981	1038 (3.48-3.32)
Sidechain outliers	138945	1038 (3.48-3.32)
RSRZ outliers	127900	2173 (3.50-3.30)
RNA backbone	3102	1006 (3.84-2.96)

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	 9% 67% 29% . .
1	6	1800	 8% 69% 28% .
2	S0	251	 15% 64% 16% . 18%
2	s0	251	 4% 62% 19% . 18%
3	S1	254	 25% 62% 21% . 16%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	s1	254	9% 64% 19% 15%
4	S2	253	3% 66% 18% 14%
4	s2	253	7% 65% 20% 14%
5	S3	239	10% 75% 17% 7%
5	s3	239	10% 75% 17% 7%
6	S4	260	11% 81% 18% .
6	s4	260	4% 79% 20% .
7	S5	224	12% 75% 16% 8%
7	s5	224	6% 74% 17% 8%
8	S6	236	12% 80% 14% .
8	s6	236	7% 73% 17% 8%
9	S7	189	16% 77% 20% .
9	s7	189	10% 75% 22% .
10	S8	200	8% 78% 15% 6%
10	s8	200	6% 78% 16% 6%
11	S9	196	14% 72% 20% 6%
11	s9	196	5% 77% 17% 6%
12	C0	105	7% 73% 16% 9%
13	C1	155	5% 85% 15% .
13	c1	155	6% 77% 17% 6%
14	C2	142	32% 68% 18% 13%
14	c2	142	46% 68% 18% 13%
15	C3	150	5% 84% 15% .
15	c3	150	% 76% 21% .
16	C4	136	21% 72% 18% 7%

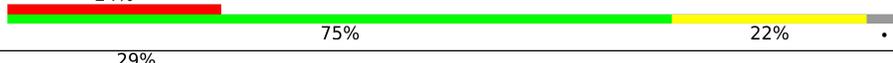
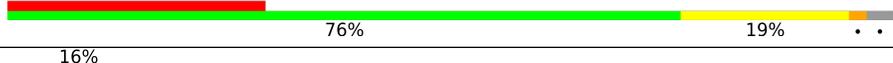
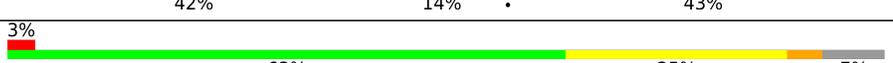
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
16	c4	136	4% 75% 17% 6%
17	C5	141	4% 69% 16% 12%
17	c5	141	16% 71% 22% •
18	C6	142	13% 81% 18% ••
18	c6	142	15% 79% 20% •
19	C7	136	17% 65% 22% • 12%
19	c7	136	26% 71% 14% • 14%
20	C8	145	25% 79% 19% •
20	c8	145	9% 79% 19% •
21	C9	143	13% 78% 21% •
21	c9	143	% 85% 13% •
22	D0	120	23% 74% 15% 11%
22	d0	120	26% 66% 24% • 8%
23	D1	87	75% 24% •
23	d1	87	% 79% 21%
24	D2	129	5% 76% 22% •
24	d2	129	% 82% 17% •
25	D3	144	7% 78% 19% •
25	d3	144	% 80% 19% •
26	D4	134	19% 81% 17% •
26	d4	134	12% 79% 20% •
27	D5	107	12% 43% 21% • 35%
27	d5	107	10% 50% 13% • 36%
28	D6	97	33% 70% 20% 10%
28	d6	97	3% 77% 22% •

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
29	D7	81	
29	d7	81	
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	62	
32	e0	62	
33	E1	76	
33	e1	76	
34	SR	318	
34	sR	318	
35	SM	182	
35	sM	182	
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	

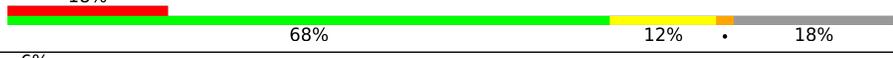
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	l4	361	80% 19%
42	L5	296	76% 22%
42	l5	296	77% 21%
43	L6	175	75% 13% 11%
43	l6	175	73% 16% 10%
44	L7	243	79% 11% 9%
44	l7	243	77% 13% 8%
45	L8	255	75% 16% 9%
45	l8	255	69% 20% 9%
46	L9	191	76% 23%
46	l9	191	79% 20%
47	M0	220	78% 17%
47	m0	220	73% 23%
48	M1	173	71% 24%
48	m1	173	76% 19%
49	M3	198	74% 22%
49	m3	198	76% 21%
50	M4	137	81% 16%
50	m4	137	77% 23%
51	M5	203	83% 16%
51	m5	203	82% 18%
52	M6	198	84% 15%
52	m6	198	80% 19%
53	M7	183	77% 22%
53	m7	183	68% 16% 15%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
54	M8	185	 87% 13%
54	m8	185	 81% 18%
55	M9	188	 84% 15% 6%
55	m9	188	 82% 18% 5%
56	N0	172	 83% 15%
56	n0	172	 74% 26%
57	N1	159	 79% 19% 3%
57	n1	159	 81% 18% 3%
58	N2	120	 65% 18% 19%
58	n2	120	 68% 12% 18%
59	N3	136	 77% 22% 6%
59	n3	136	 87% 13%
60	N4	155	 50% 14% 21%
60	n4	155	 68% 17% 15%
61	N5	141	 65% 19% 6%
61	n5	141	 63% 21% 8%
62	N6	126	 81% 19% 3%
62	n6	126	 79% 21% 2%
63	N7	135	 78% 20% 7%
63	n7	135	 76% 22% 4%
64	N8	148	 78% 20%
64	n8	148	 80% 20%
65	N9	58	 81% 17% 9%
65	n9	58	 81% 16% 3%
66	O0	104	 77% 16% 7%

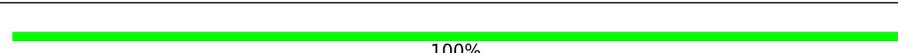
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
66	o0	104	6% 71% 24% . .
67	O1	112	10% 80% 14% . .
67	o1	112	4% 78% 18% . .
68	O2	129	2% 86% 12% .
68	o2	129	2% 79% 17% . .
69	O3	106	% 82% 16% .
69	o3	106	85% 14% .
70	O4	120	6% 75% 18% . 7%
70	o4	120	8% 77% 16% . 7%
71	O5	119	3% 85% 13% . .
71	o5	119	4% 78% 22%
72	O6	99	14% 68% 29% .
72	o6	99	7% 71% 27% .
73	O7	87	% 79% 20% .
73	o7	87	6% 76% 21% .
74	O8	77	6% 77% 23%
74	o8	77	19% 78% 22%
75	O9	50	82% 18%
75	o9	50	82% 18%
76	Q0	52	81% 15% .
76	q0	52	81% 19%
77	Q1	25	12% 80% 20%
77	q1	25	72% 28%
78	Q2	105	14% 76% 24%
78	q2	105	17% 79% 20% .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
79	Q3	91	
79	q3	91	
80	c0	96	
81	m2	150	
82	p0	311	
83	p1	47	
84	p2	46	

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
86	MG	1	3742	-	-	-	X
86	MG	1	3749	-	-	-	X
86	MG	1	3759	-	-	-	X
86	MG	1	3761	-	-	-	X
86	MG	1	3773	-	-	-	X
86	MG	1	3775	-	-	-	X
86	MG	1	3783	-	-	-	X
86	MG	1	3786	-	-	-	X
86	MG	1	3805	-	-	-	X
86	MG	1	3811	-	-	-	X
86	MG	1	3829	-	-	-	X
86	MG	1	3841	-	-	-	X
86	MG	1	3850	-	-	-	X
86	MG	1	3866	-	-	-	X
86	MG	1	3877	-	-	-	X
86	MG	1	3919	-	-	-	X
86	MG	1	3925	-	-	-	X
86	MG	1	3927	-	-	-	X
86	MG	1	3942	-	-	-	X
86	MG	1	3944	-	-	-	X
86	MG	1	3949	-	-	-	X
86	MG	1	3950	-	-	-	X
86	MG	1	3957	-	-	-	X
86	MG	1	3960	-	-	-	X
86	MG	1	3975	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	MG	1	3978	-	-	-	X
86	MG	1	3984	-	-	-	X
86	MG	1	3985	-	-	-	X
86	MG	1	3988	-	-	-	X
86	MG	1	3989	-	-	-	X
86	MG	1	3993	-	-	-	X
86	MG	1	4005	-	-	-	X
86	MG	1	4008	-	-	-	X
86	MG	1	4010	-	-	-	X
86	MG	1	4012	-	-	-	X
86	MG	1	4018	-	-	-	X
86	MG	1	4026	-	-	-	X
86	MG	1	4037	-	-	-	X
86	MG	1	4041	-	-	-	X
86	MG	1	4048	-	-	-	X
86	MG	1	4054	-	-	-	X
86	MG	1	4058	-	-	-	X
86	MG	1	4065	-	-	-	X
86	MG	1	4076	-	-	-	X
86	MG	1	4082	-	-	-	X
86	MG	1	4087	-	-	-	X
86	MG	1	4089	-	-	-	X
86	MG	1	4090	-	-	-	X
86	MG	1	4091	-	-	-	X
86	MG	1	4093	-	-	-	X
86	MG	1	4094	-	-	-	X
86	MG	1	4095	-	-	-	X
86	MG	1	4097	-	-	-	X
86	MG	1	4101	-	-	-	X
86	MG	1	4102	-	-	-	X
86	MG	1	4103	-	-	-	X
86	MG	1	4105	-	-	-	X
86	MG	1	4106	-	-	-	X
86	MG	1	4107	-	-	-	X
86	MG	1	4108	-	-	-	X
86	MG	1	4111	-	-	-	X
86	MG	1	4116	-	-	-	X
86	MG	1	4120	-	-	-	X
86	MG	1	4121	-	-	-	X
86	MG	1	4126	-	-	-	X
86	MG	2	2048	-	-	-	X
86	MG	2	2051	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	MG	2	2059	-	-	-	X
86	MG	2	2060	-	-	-	X
86	MG	2	2063	-	-	-	X
86	MG	2	2065	-	-	-	X
86	MG	2	2071	-	-	-	X
86	MG	2	2072	-	-	-	X
86	MG	2	2075	-	-	-	X
86	MG	2	2078	-	-	-	X
86	MG	2	2081	-	-	-	X
86	MG	2	2085	-	-	-	X
86	MG	2	2090	-	-	-	X
86	MG	2	2092	-	-	-	X
86	MG	2	2095	-	-	-	X
86	MG	2	2097	-	-	-	X
86	MG	2	2098	-	-	-	X
86	MG	2	2101	-	-	-	X
86	MG	2	2108	-	-	-	X
86	MG	2	2111	-	-	-	X
86	MG	2	2112	-	-	-	X
86	MG	2	2114	-	-	-	X
86	MG	2	2120	-	-	-	X
86	MG	2	2124	-	-	-	X
86	MG	2	2127	-	-	-	X
86	MG	2	2128	-	-	-	X
86	MG	2	2131	-	-	-	X
86	MG	2	2133	-	-	-	X
86	MG	3	217	-	-	-	X
86	MG	4	218	-	-	-	X
86	MG	5	3797	-	-	-	X
86	MG	5	3798	-	-	-	X
86	MG	5	3801	-	-	-	X
86	MG	5	3806	-	-	-	X
86	MG	5	3812	-	-	-	X
86	MG	5	3829	-	-	-	X
86	MG	5	3833	-	-	-	X
86	MG	5	3840	-	-	-	X
86	MG	5	3851	-	-	-	X
86	MG	5	3857	-	-	-	X
86	MG	5	3881	-	-	-	X
86	MG	5	3950	-	-	-	X
86	MG	5	3953	-	-	-	X
86	MG	5	3965	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	MG	5	3970	-	-	-	X
86	MG	5	3972	-	-	-	X
86	MG	5	3974	-	-	-	X
86	MG	5	3980	-	-	-	X
86	MG	5	3982	-	-	-	X
86	MG	5	3984	-	-	-	X
86	MG	5	3994	-	-	-	X
86	MG	5	3995	-	-	-	X
86	MG	5	4000	-	-	-	X
86	MG	5	4018	-	-	-	X
86	MG	5	4025	-	-	-	X
86	MG	5	4032	-	-	-	X
86	MG	5	4035	-	-	-	X
86	MG	5	4038	-	-	-	X
86	MG	5	4042	-	-	-	X
86	MG	5	4044	-	-	-	X
86	MG	5	4059	-	-	-	X
86	MG	5	4065	-	-	-	X
86	MG	5	4082	-	-	-	X
86	MG	5	4090	-	-	-	X
86	MG	5	4093	-	-	-	X
86	MG	5	4097	-	-	-	X
86	MG	5	4101	-	-	-	X
86	MG	5	4104	-	-	-	X
86	MG	5	4115	-	-	-	X
86	MG	5	4116	-	-	-	X
86	MG	5	4133	-	-	-	X
86	MG	5	4134	-	-	-	X
86	MG	5	4136	-	-	-	X
86	MG	5	4139	-	-	-	X
86	MG	5	4143	-	-	-	X
86	MG	5	4149	-	-	-	X
86	MG	5	4155	-	-	-	X
86	MG	5	4158	-	-	-	X
86	MG	5	4162	-	-	-	X
86	MG	5	4167	-	-	-	X
86	MG	6	2074	-	-	-	X
86	MG	6	2078	-	-	-	X
86	MG	6	2080	-	-	-	X
86	MG	6	2092	-	-	-	X
86	MG	6	2094	-	-	-	X
86	MG	6	2096	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	MG	6	2098	-	-	-	X
86	MG	6	2104	-	-	-	X
86	MG	6	2120	-	-	-	X
86	MG	6	2122	-	-	-	X
86	MG	6	2123	-	-	-	X
86	MG	6	2127	-	-	-	X
86	MG	6	2128	-	-	-	X
86	MG	6	2147	-	-	-	X
86	MG	6	2154	-	-	-	X
86	MG	6	2156	-	-	-	X
86	MG	6	2161	-	-	-	X
86	MG	6	2173	-	-	-	X
86	MG	6	2175	-	-	-	X
86	MG	6	2178	-	-	-	X
86	MG	6	2179	-	-	-	X
86	MG	6	2184	-	-	-	X
86	MG	7	213	-	-	-	X
86	MG	7	214	-	-	-	X
86	MG	7	219	-	-	-	X
86	MG	8	222	-	-	-	X
86	MG	8	227	-	-	-	X
86	MG	C2	201	-	-	-	X
86	MG	C2	202	-	-	-	X
86	MG	C2	203	-	-	-	X
86	MG	C2	204	-	-	-	X
86	MG	C2	205	-	-	-	X
86	MG	C2	206	-	-	-	X
86	MG	C2	207	-	-	-	X
86	MG	C2	208	-	-	-	X
86	MG	C9	201	-	-	-	X
86	MG	L2	302	-	-	-	X
86	MG	L3	404	-	-	-	X
86	MG	M1	201	-	-	-	X
86	MG	M3	201	-	-	-	X
86	MG	M7	206	-	-	-	X
86	MG	MG	2196	-	-	-	X
86	MG	MG	2207	-	-	-	X
86	MG	MG	2215	-	-	-	X
86	MG	MG	2217	-	-	-	X
86	MG	MG	2222	-	-	-	X
86	MG	MG	2224	-	-	-	X
86	MG	N4	201	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	MG	N8	201	-	-	-	X
86	MG	O2	201	-	-	-	X
86	MG	O5	201	-	-	-	X
86	MG	Q1	101	-	-	-	X
86	MG	S4	301	-	-	-	X
86	MG	S8	302	-	-	-	X
86	MG	SM	301	-	-	-	X
86	MG	I4	403	-	-	-	X
86	MG	n0	204	-	-	-	X
86	MG	n6	201	-	-	-	X
86	MG	n6	202	-	-	-	X
86	MG	n9	103	-	-	-	X
87	ZN	D7	101	-	-	-	X

2 Entry composition [i](#)

There are 87 unique types of molecules in this entry. The entry contains 411776 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
			Total	C	N	O	P			
1	2	1781	Total	C	N	O	P	0	1	0
			37970	16975	6720	12493	1782			
1	6	1795	Total	C	N	O	P	0	1	0
			38260	17105	6763	12596	1796			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	S0	206	Total	C	N	O	S	0	0	0
			1612	1034	285	291	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1612	1034	285	291	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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
			Total	C	N	O	S			
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
			1820	1142	350	325	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
			1492	957	267	268			

- 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
			772	499	126	145	2			

- Molecule 13 is a protein called 40S ribosomal protein S11-A,40S ribosomal protein S11-A (uS17).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	C1	155	Total	C	N	O	S	0	0	0
			1213	774	230	206	3			
13	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

- 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			
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

- 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
			965	603	183	177	2			
19	c7	117	Total	C	N	O	S	0	0	0
			944	591	179	172	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			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
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-A.

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			
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
			443	275	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			443	275	92	72	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	E0	60	Total 475	C 299	N 98	O 77	S 1	0	0	0
32	e0	62	Total 491	C 309	N 101	O 80	S 1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	E1	71	Total 566	C 362	N 106	O 94	S 4	0	0	0
33	e1	76	Total 608	C 388	N 117	O 99	S 4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	SR	318	Total 2441	C 1543	N 418	O 472	S 8	0	0	0
34	sR	318	Total 2445	C 1546	N 419	O 472	S 8	0	0	0

- Molecule 35 is a protein called Suppressor protein STM1,Suppressor protein STM1.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
36	1	3149	Total 67355	C 30086	N 12142	O 21978	P 3149	0	0	0
36	5	3150	Total 67377	C 30095	N 12145	O 21987	P 3150	0	0	0

- 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
			1918	1193	389	335	1			
39	l2	252	Total	C	N	O	S	0	0	0
			1918	1193	389	335	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
			3073	1948	583	533	9			
40	l3	386	Total	C	N	O	S	0	0	0
			3073	1948	583	533	9			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
L3	255	CYS	TRP	engineered mutation	UNP P14126
l3	255	CYS	TRP	engineered mutation	UNP P14126

- 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
			2749	1730	522	494	3			
41	l4	361	Total	C	N	O	S	0	0	0
			2749	1730	522	494	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	L5	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	15	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
			Total	C	N	O	S			
43	L6	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	16	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
			Total	C	N	O	S			
44	L7	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
44	17	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
			Total	C	N	O	S			
45	L8	233	Total	C	N	O	S	0	0	0
			1817	1159	326	329	3			
45	18	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
			Total	C	N	O	S			
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	19	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
			Total	C	N	O	S			
47	M0	211	Total 1717	C 1089	N 325	O 297	S 6	0	0	0
47	m0	213	Total 1733	C 1101	N 327	O 299	S 6	0	0	0

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

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

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

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

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

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

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

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

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

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

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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
			Total	C	N	O			
53	M7	183	Total	C	N	O	0	0	0
			1442	896	287	259			
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
			Total	C	N	O	S			
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
			Total	C	N	O			
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
			Total	C	N	O	S			
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
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	
			Total	C	N	O				
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
			Total	C	N	O			
58	N2	100	796	516	131	149	0	0	0
58	n2	98	778	505	127	146	0	0	0

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
60	N4	98	800	508	159	132	1	0	0	0
60	n4	135	1089	682	219	187	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
61	N5	121	968	623	170	173	2	0	0	0
61	n5	120	959	617	168	172	2	0	0	0

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

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

- 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
			890	565	168	156	1			
67	o1	109	Total	C	N	O	S	0	0	0
			890	565	168	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			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
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 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			881	546	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			881	546	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
			969	615	186	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			
72	o6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	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	0	0	0
			612	391	115	106			
74	o8	77	Total	C	N	O	0	0	0
			612	391	115	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
			Total	C	N	O	S			
79	Q3	91	694	429	138	121	6	0	0	0
79	q3	91	694	429	138	121	6	0	0	0

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

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

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
c0	87	UNK	-	expression tag	UNP Q08745
c0	88	UNK	-	expression tag	UNP Q08745
c0	89	UNK	-	expression tag	UNP Q08745
c0	90	UNK	-	expression tag	UNP Q08745
c0	91	UNK	-	expression tag	UNP Q08745
c0	92	UNK	-	expression tag	UNP Q08745
c0	93	UNK	-	expression tag	UNP Q08745
c0	94	UNK	-	expression tag	UNP Q08745
c0	95	UNK	-	expression tag	UNP Q08745
c0	96	UNK	-	expression tag	UNP Q08745
c0	97	UNK	-	expression tag	UNP Q08745
c0	98	UNK	-	expression tag	UNP Q08745

- Molecule 81 is a protein called 60S ribosomal protein L12-A (uL11).

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

- Molecule 82 is a protein called 60S acidic ribosomal protein P0.

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

- Molecule 83 is a protein called 60S ribosomal protein P1 alpha.

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	2	1	7	6	1	0	0
85	S6	1	7	6	1	0	0
85	S8	1	7	6	1	0	0
85	S9	1	7	6	1	0	0
85	C3	1	7	6	1	0	0
85	C5	1	7	6	1	0	0
85	C8	1	7	6	1	0	0
85	D9	1	7	6	1	0	0
85	SR	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	1	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	3	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0
85	4	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	L3	1	7	6	1	0	0
85	L3	1	7	6	1	0	0
85	L4	1	7	6	1	0	0
85	M0	1	7	6	1	0	0
85	M5	1	7	6	1	0	0
85	M5	1	7	6	1	0	0
85	M7	1	7	6	1	0	0
85	M7	1	7	6	1	0	0
85	M9	1	7	6	1	0	0
85	N1	1	7	6	1	0	0
85	N9	1	7	6	1	0	0
85	O3	1	7	6	1	0	0
85	O4	1	7	6	1	0	0
85	O7	1	7	6	1	0	0
85	O7	1	7	6	1	0	0
85	Q2	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	6	1	7	6	1	0	0
85	s1	1	7	6	1	0	0
85	s1	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	s4	1	7	6	1	0	0
85	s8	1	7	6	1	0	0
85	s9	1	7	6	1	0	0
85	c1	1	7	6	1	0	0
85	c3	1	7	6	1	0	0
85	c5	1	7	6	1	0	0
85	c8	1	7	6	1	0	0
85	d4	1	7	6	1	0	0
85	d9	1	7	6	1	0	0
85	sR	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0
85	5	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	8	1	7	6	1	0	0
85	13	1	7	6	1	0	0
85	13	1	7	6	1	0	0
85	14	1	7	6	1	0	0
85	14	1	7	6	1	0	0
85	15	1	7	6	1	0	0
85	15	1	7	6	1	0	0
85	15	1	7	6	1	0	0
85	15	1	7	6	1	0	0
85	19	1	7	6	1	0	0
85	m0	1	7	6	1	0	0
85	m0	1	7	6	1	0	0
85	m0	1	7	6	1	0	0
85	m1	1	7	6	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	m4	1	Total	N	Os	0	0
			7	6	1		
85	m5	1	Total	N	Os	0	0
			7	6	1		
85	n3	1	Total	N	Os	0	0
			7	6	1		
85	n5	1	Total	N	Os	0	0
			7	6	1		
85	n9	1	Total	N	Os	0	0
			7	6	1		
85	o2	1	Total	N	Os	0	0
			7	6	1		
85	o3	1	Total	N	Os	0	0
			7	6	1		
85	o4	1	Total	N	Os	0	0
			7	6	1		
85	o7	1	Total	N	Os	0	0
			7	6	1		
85	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 86 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	2	92	Total	Mg	0	0
			92	92		
86	S4	1	Total	Mg	0	0
			1	1		
86	S8	1	Total	Mg	0	0
			1	1		
86	C2	8	Total	Mg	0	0
			8	8		
86	C9	1	Total	Mg	0	0
			1	1		
86	D1	1	Total	Mg	0	0
			1	1		
86	D3	1	Total	Mg	0	0
			1	1		
86	D9	2	Total	Mg	0	0
			2	2		
86	SM	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	1	395	Total 395	Mg 395	0	0
86	3	8	Total 8	Mg 8	0	0
86	4	16	Total 16	Mg 16	0	0
86	L2	2	Total 2	Mg 2	0	0
86	L3	2	Total 2	Mg 2	0	0
86	L4	2	Total 2	Mg 2	0	0
86	L5	1	Total 1	Mg 1	0	0
86	L7	1	Total 1	Mg 1	0	0
86	L9	1	Total 1	Mg 1	0	0
86	M0	1	Total 1	Mg 1	0	0
86	M1	1	Total 1	Mg 1	0	0
86	M3	1	Total 1	Mg 1	0	0
86	M4	1	Total 1	Mg 1	0	0
86	M5	1	Total 1	Mg 1	0	0
86	M6	2	Total 2	Mg 2	0	0
86	M7	6	Total 6	Mg 6	0	0
86	M8	1	Total 1	Mg 1	0	0
86	M9	1	Total 1	Mg 1	0	0
86	N0	1	Total 1	Mg 1	0	0
86	N3	2	Total 2	Mg 2	0	0
86	N4	1	Total 1	Mg 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	N6	1	Total Mg 1 1	0	0
86	N8	1	Total Mg 1 1	0	0
86	N9	1	Total Mg 1 1	0	0
86	O1	1	Total Mg 1 1	0	0
86	O2	1	Total Mg 1 1	0	0
86	O5	1	Total Mg 1 1	0	0
86	O7	2	Total Mg 2 2	0	0
86	Q1	1	Total Mg 1 1	0	0
86	Q2	2	Total Mg 2 2	0	0
86	6	136	Total Mg 136 136	0	0
86	s4	1	Total Mg 1 1	0	0
86	s6	1	Total Mg 1 1	0	0
86	c1	1	Total Mg 1 1	0	0
86	c8	1	Total Mg 1 1	0	0
86	sM	2	Total Mg 2 2	0	0
86	5	428	Total Mg 428 428	0	0
86	7	11	Total Mg 11 11	0	0
86	8	10	Total Mg 10 10	0	0
86	13	5	Total Mg 5 5	0	0
86	14	1	Total Mg 1 1	0	0
86	17	1	Total Mg 1 1	0	0

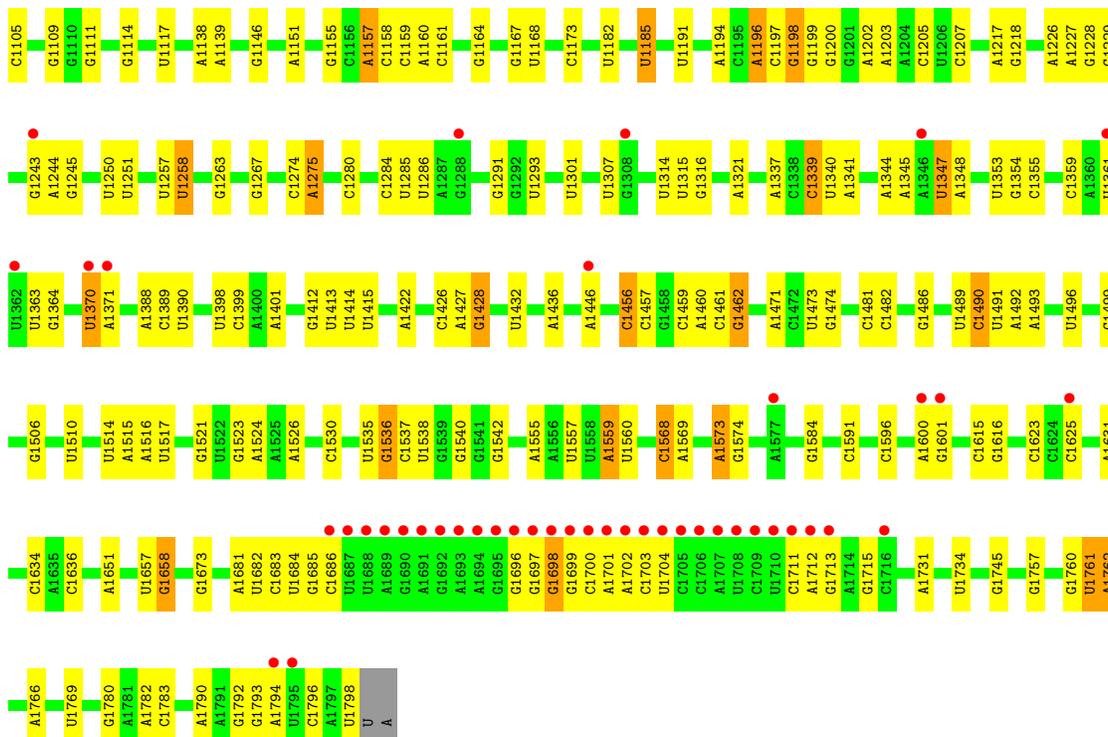
Continued on next page...

Continued from previous page...

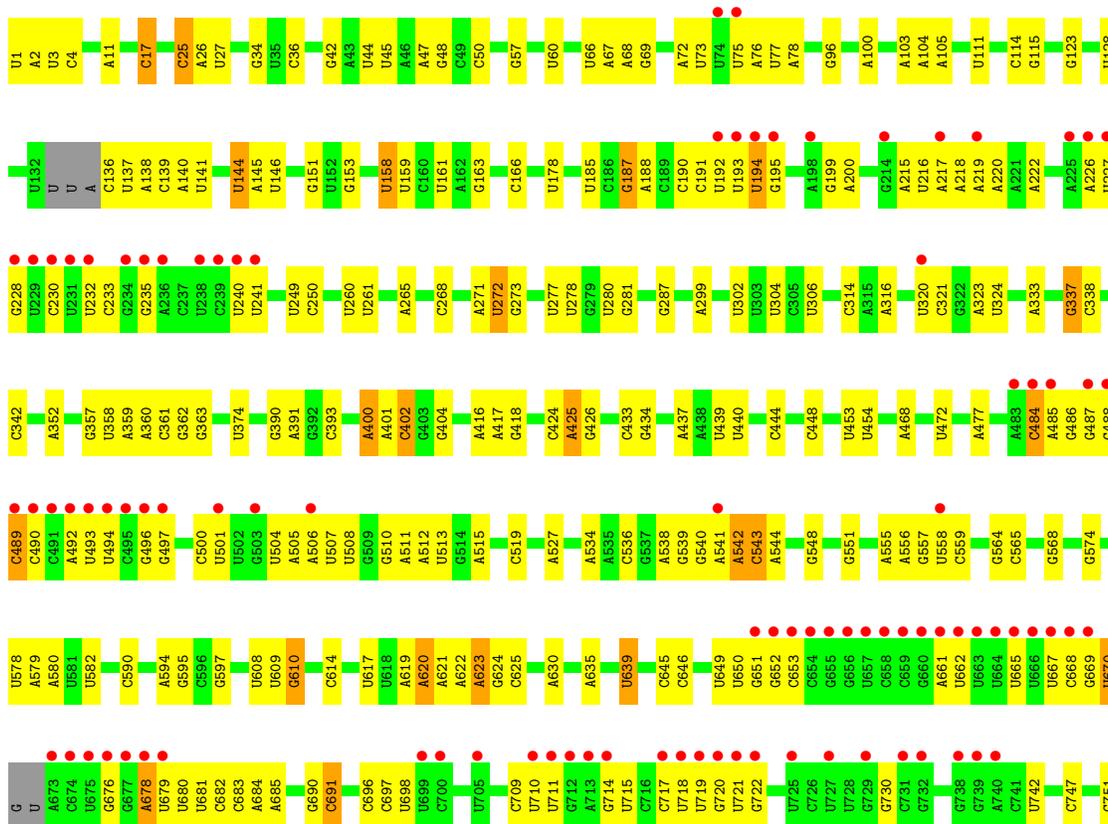
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	l9	1	Total Mg 1 1	0	0
86	m0	2	Total Mg 2 2	0	0
86	m1	1	Total Mg 1 1	0	0
86	m3	1	Total Mg 1 1	0	0
86	m4	1	Total Mg 1 1	0	0
86	m6	4	Total Mg 4 4	0	0
86	m7	1	Total Mg 1 1	0	0
86	n0	4	Total Mg 4 4	0	0
86	n3	1	Total Mg 1 1	0	0
86	n6	2	Total Mg 2 2	0	0
86	n8	1	Total Mg 1 1	0	0
86	n9	2	Total Mg 2 2	0	0
86	o1	1	Total Mg 1 1	0	0
86	o2	1	Total Mg 1 1	0	0
86	o3	1	Total Mg 1 1	0	0
86	o4	1	Total Mg 1 1	0	0
86	q0	1	Total Mg 1 1	0	0
86	q1	1	Total Mg 1 1	0	0
86	p0	1	Total Mg 1 1	0	0
86	MG	6	Total Mg 6 6	0	0

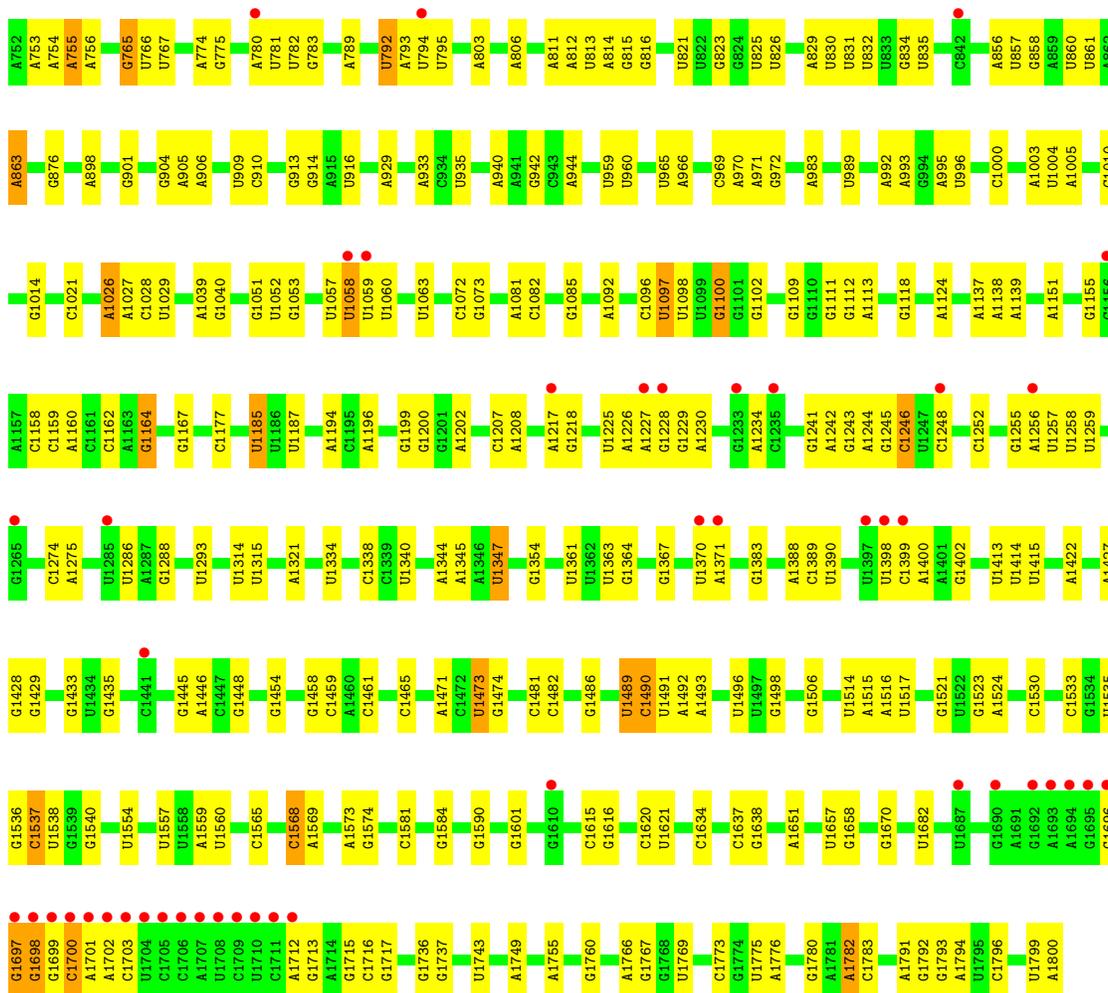
- Molecule 87 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
87	D6	1	Total 1	Zn 1	0	0
87	D7	1	Total 1	Zn 1	0	0
87	D9	1	Total 1	Zn 1	0	0
87	E1	1	Total 1	Zn 1	0	0
87	O7	1	Total 1	Zn 1	0	0
87	Q0	1	Total 1	Zn 1	0	0
87	Q2	1	Total 1	Zn 1	0	0
87	Q3	1	Total 1	Zn 1	0	0
87	d6	1	Total 1	Zn 1	0	0
87	d7	1	Total 1	Zn 1	0	0
87	d9	1	Total 1	Zn 1	0	0
87	e1	1	Total 1	Zn 1	0	0
87	o7	1	Total 1	Zn 1	0	0
87	q0	1	Total 1	Zn 1	0	0
87	q2	1	Total 1	Zn 1	0	0
87	q3	1	Total 1	Zn 1	0	0

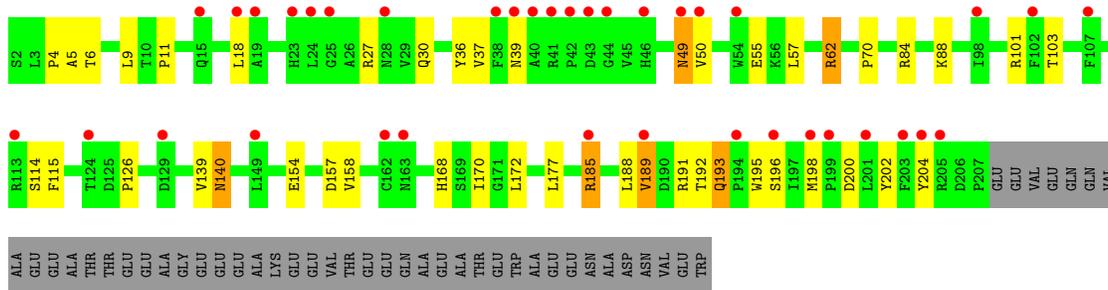


• Molecule 1: 18S ribosomal RNA





• Molecule 2: 40S ribosomal protein S0-A

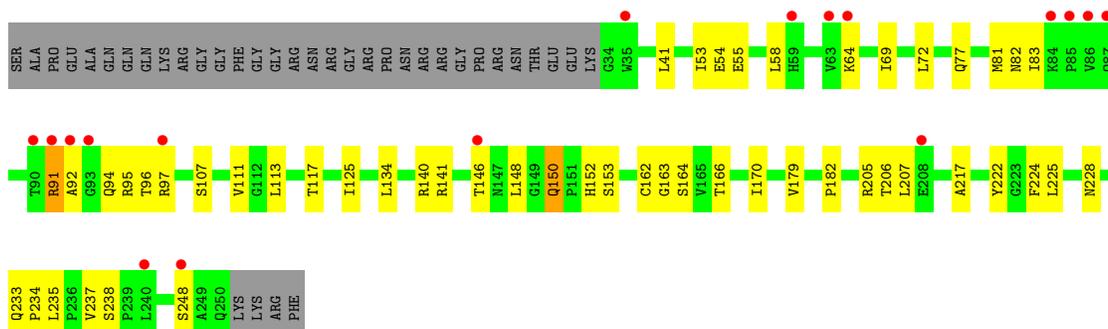


• Molecule 2: 40S ribosomal protein S0-A

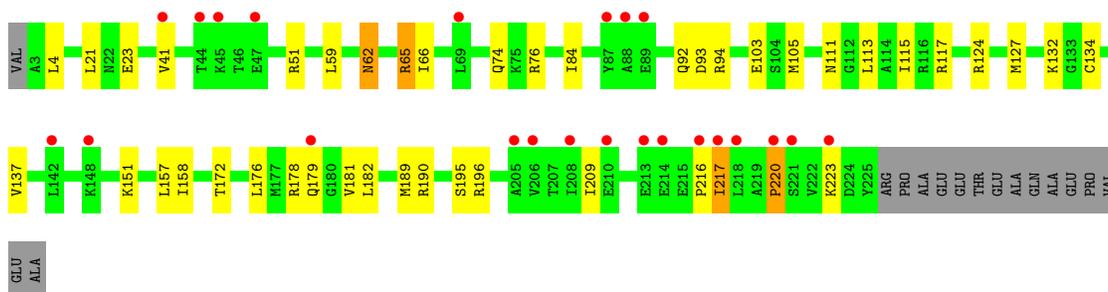
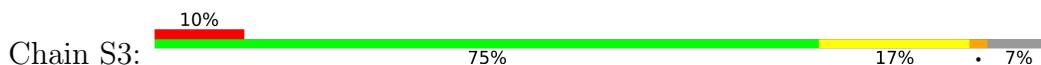




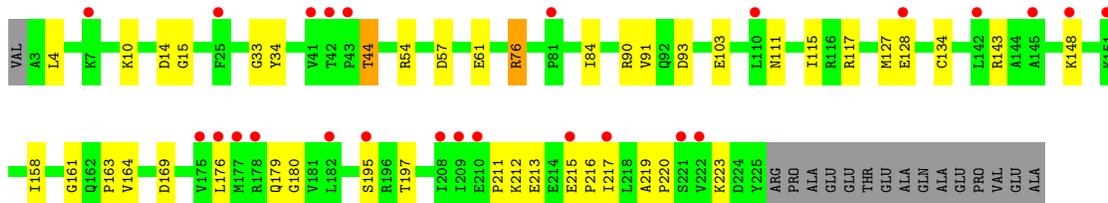
- Molecule 4: 40S ribosomal protein S2



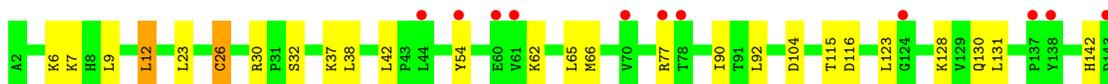
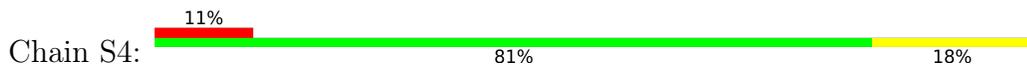
- Molecule 5: 40S ribosomal protein S3

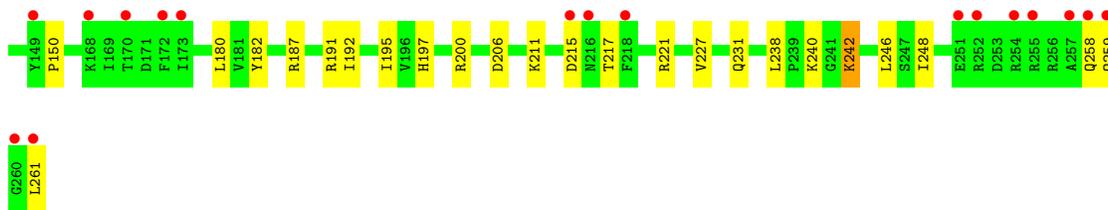


- Molecule 5: 40S ribosomal protein S3

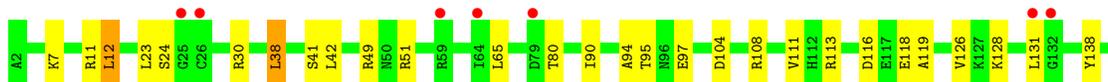
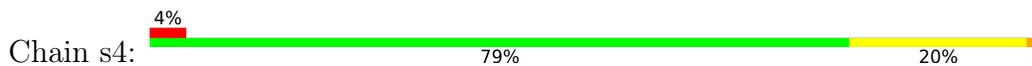


- Molecule 6: 40S ribosomal protein S4-A

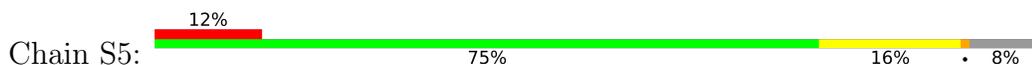




• Molecule 6: 40S ribosomal protein S4-A



• Molecule 7: 40S ribosomal protein S5



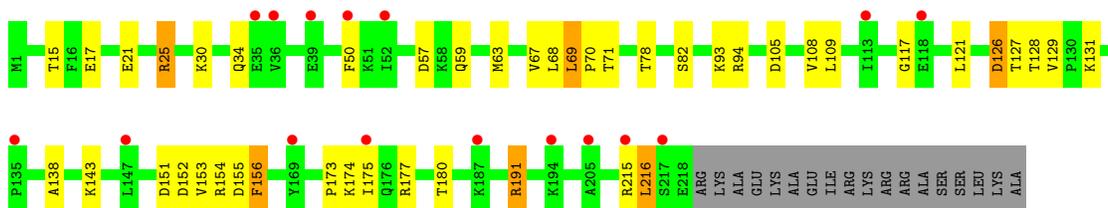
• Molecule 7: 40S ribosomal protein S5



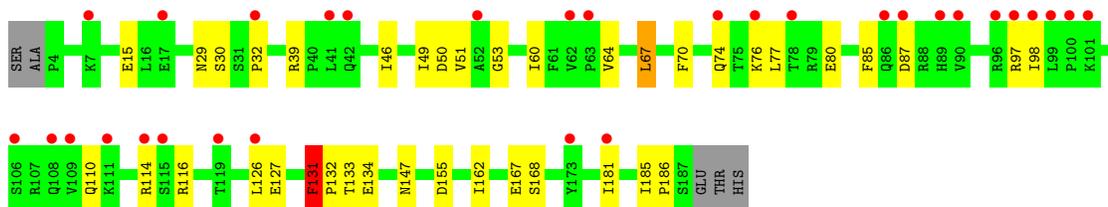
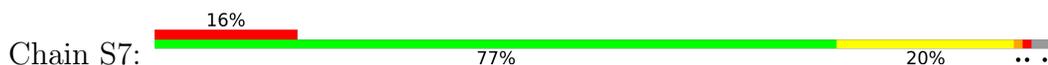
• Molecule 8: 40S ribosomal protein S6-A



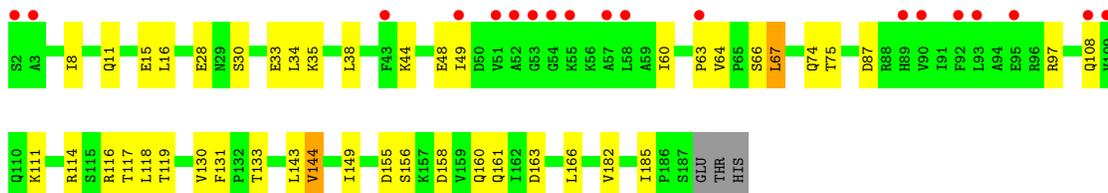
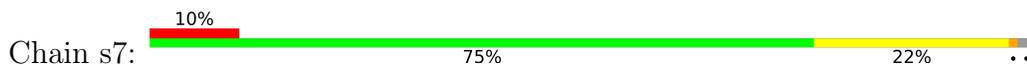
- Molecule 8: 40S ribosomal protein S6-A



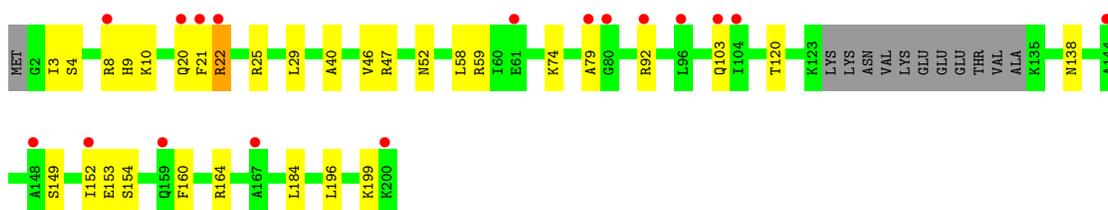
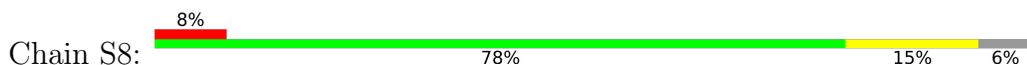
- Molecule 9: 40S ribosomal protein S7-A



- Molecule 9: 40S ribosomal protein S7-A



- Molecule 10: 40S ribosomal protein S8-A

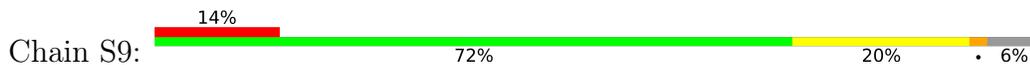


- Molecule 10: 40S ribosomal protein S8-A

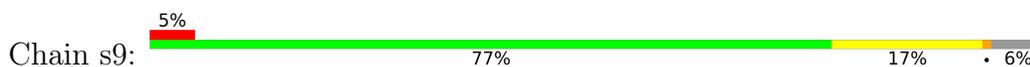




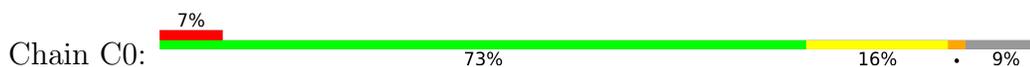
- Molecule 11: 40S ribosomal protein S9-A



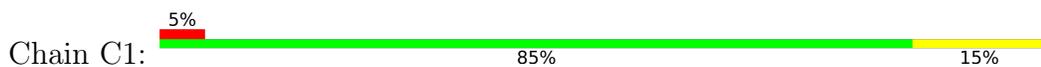
- Molecule 11: 40S ribosomal protein S9-A



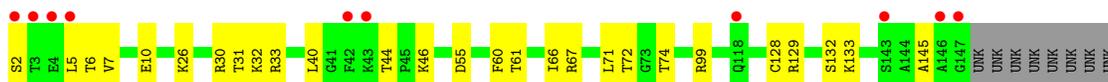
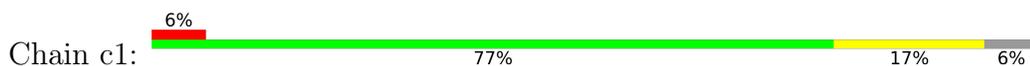
- Molecule 12: 40S ribosomal protein S10-A



- Molecule 13: 40S ribosomal protein S11-A,40S ribosomal protein S11-A (uS17)

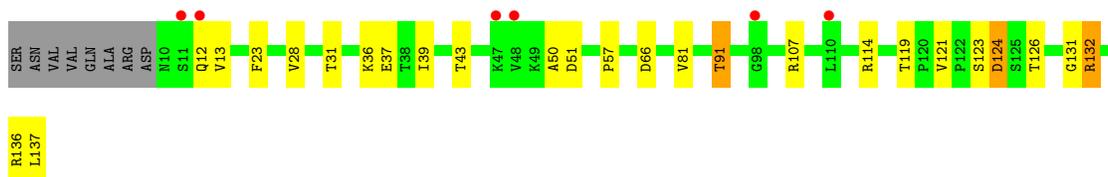
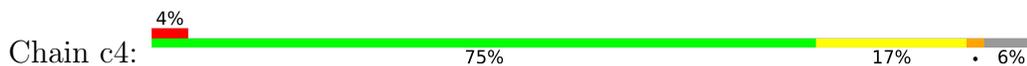


- Molecule 13: 40S ribosomal protein S11-A,40S ribosomal protein S11-A (uS17)

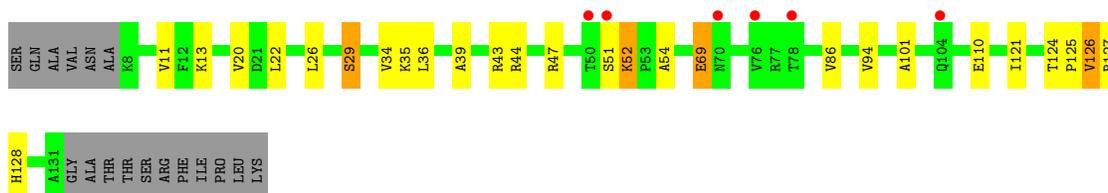
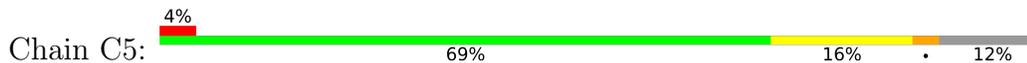


UNK

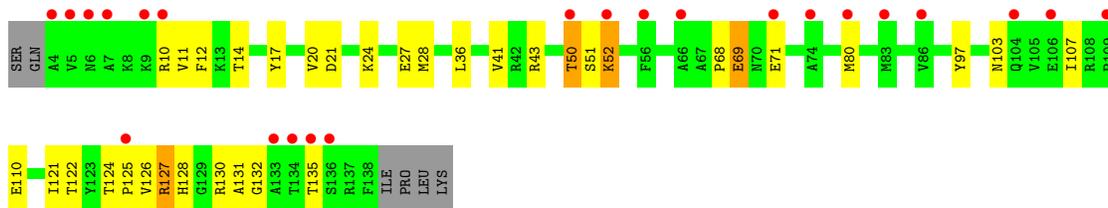
• Molecule 16: 40S ribosomal protein S14-A



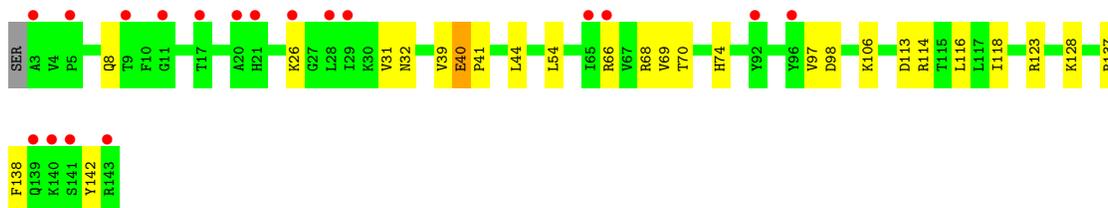
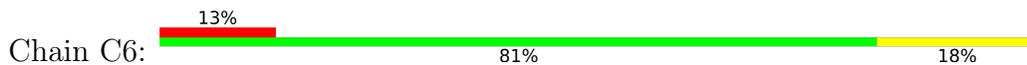
• Molecule 17: 40S ribosomal protein S15



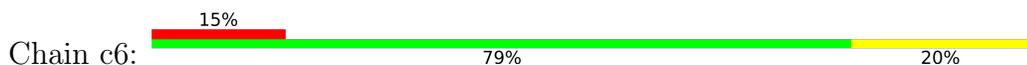
• Molecule 17: 40S ribosomal protein S15



• Molecule 18: 40S ribosomal protein S16-A

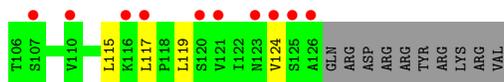


• Molecule 18: 40S ribosomal protein S16-A





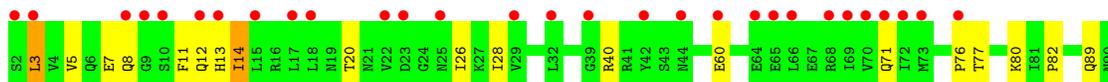
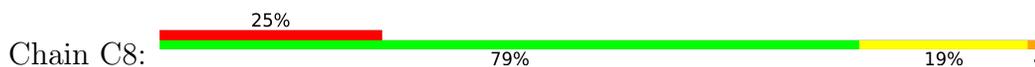
- Molecule 19: 40S ribosomal protein S17-A



- Molecule 19: 40S ribosomal protein S17-A



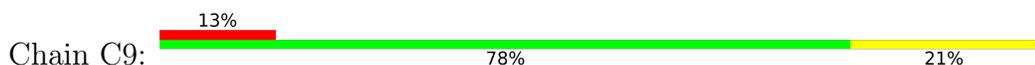
- Molecule 20: 40S ribosomal protein S18-A



- Molecule 20: 40S ribosomal protein S18-A

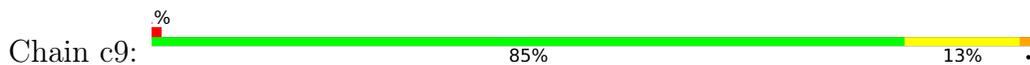


- Molecule 21: 40S ribosomal protein S19-A

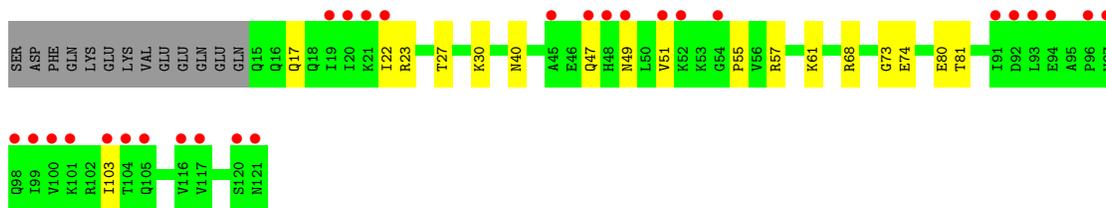
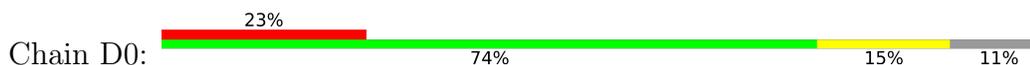




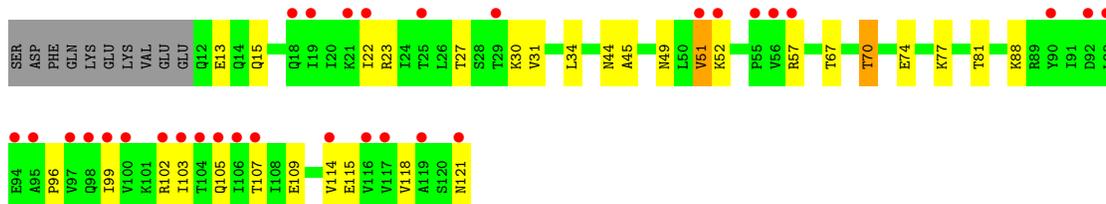
- Molecule 21: 40S ribosomal protein S19-A



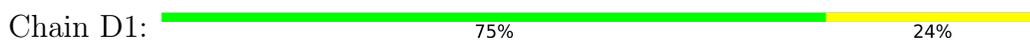
- Molecule 22: 40S ribosomal protein S20



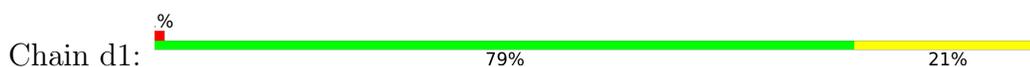
- Molecule 22: 40S ribosomal protein S20



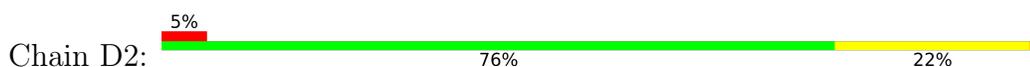
- Molecule 23: 40S ribosomal protein S21-A

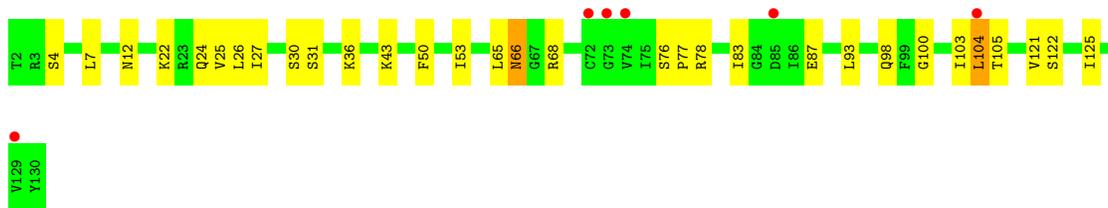


- Molecule 23: 40S ribosomal protein S21-A

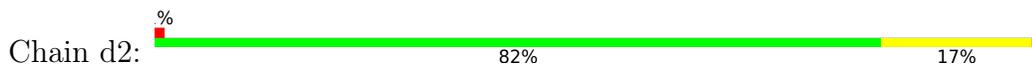


- Molecule 24: 40S ribosomal protein S22-A

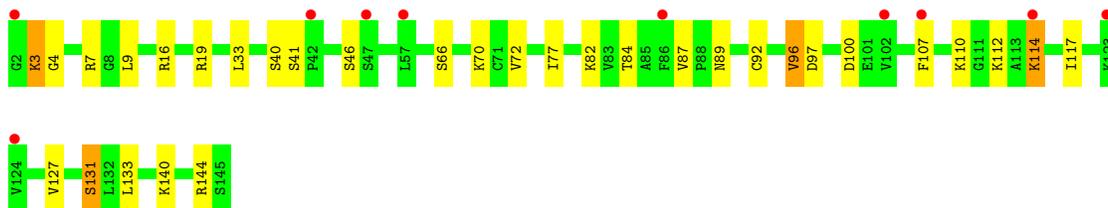
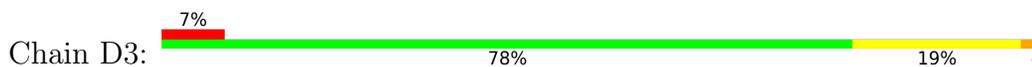




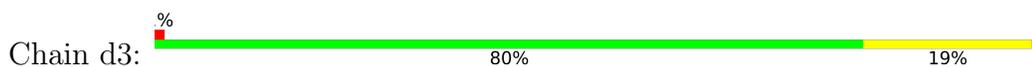
• Molecule 24: 40S ribosomal protein S22-A



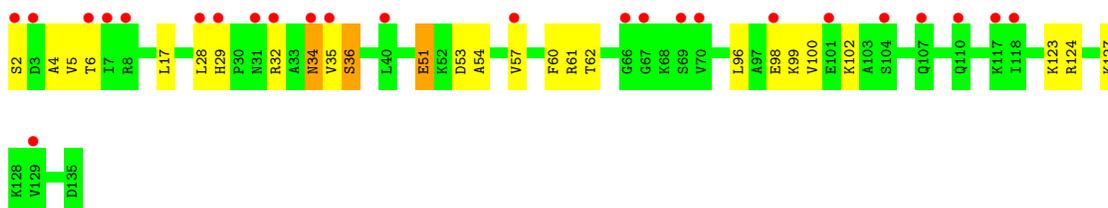
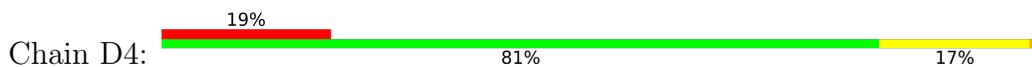
• Molecule 25: 40S ribosomal protein S23-A



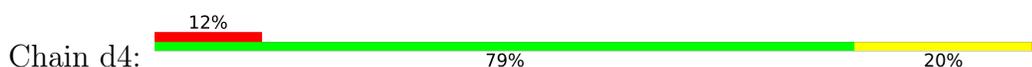
• Molecule 25: 40S ribosomal protein S23-A



• Molecule 26: 40S ribosomal protein S24-A



• Molecule 26: 40S ribosomal protein S24-A

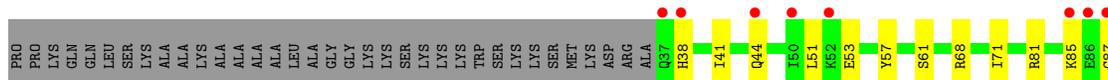




- Molecule 27: 40S ribosomal protein S25-A



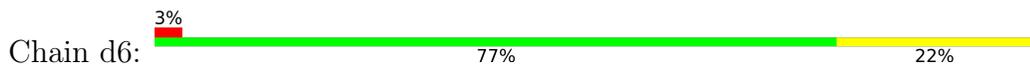
- Molecule 27: 40S ribosomal protein S25-A



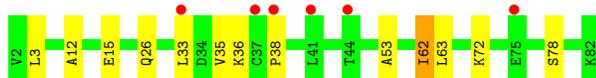
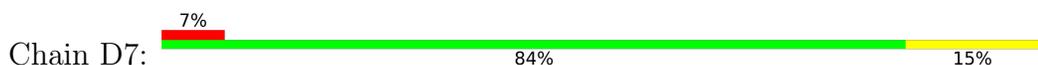
- Molecule 28: 40S ribosomal protein S26-A



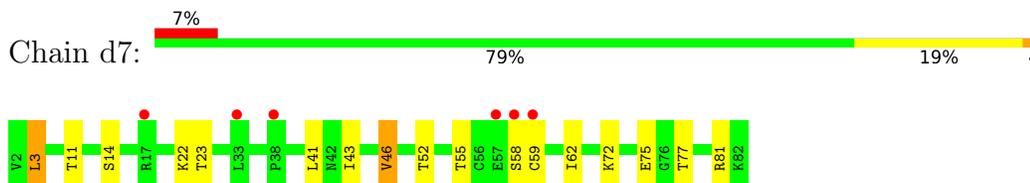
- Molecule 28: 40S ribosomal protein S26-A



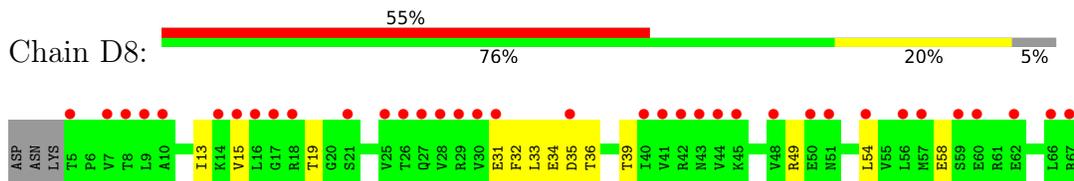
- Molecule 29: 40S ribosomal protein S27-A



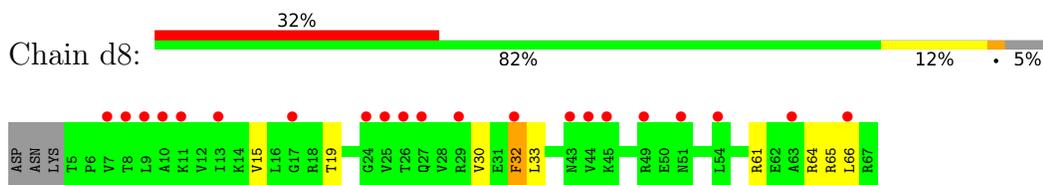
- Molecule 29: 40S ribosomal protein S27-A



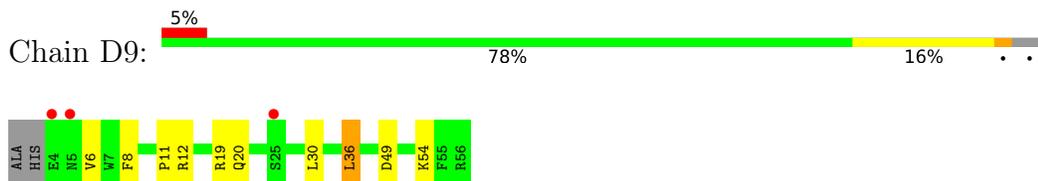
- Molecule 30: 40S ribosomal protein S28-A



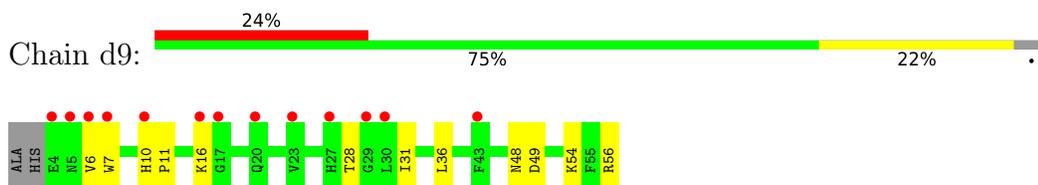
- Molecule 30: 40S ribosomal protein S28-A



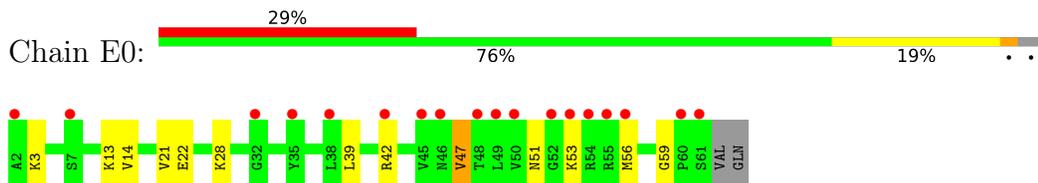
- Molecule 31: 40S ribosomal protein S29-A



- Molecule 31: 40S ribosomal protein S29-A



- Molecule 32: 40S ribosomal protein S30-A



- Molecule 32: 40S ribosomal protein S30-A





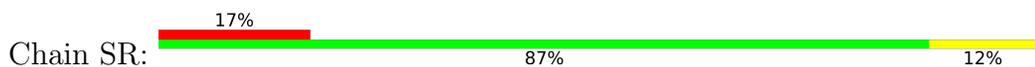
- Molecule 33: 40S ribosomal protein S31



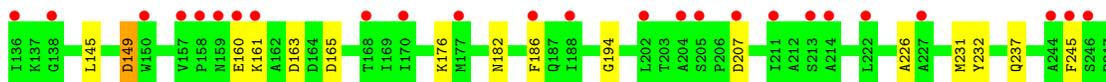
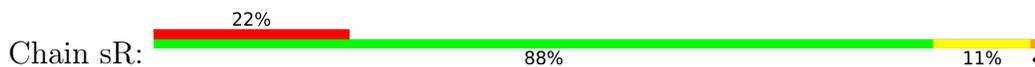
- Molecule 33: 40S ribosomal protein S31



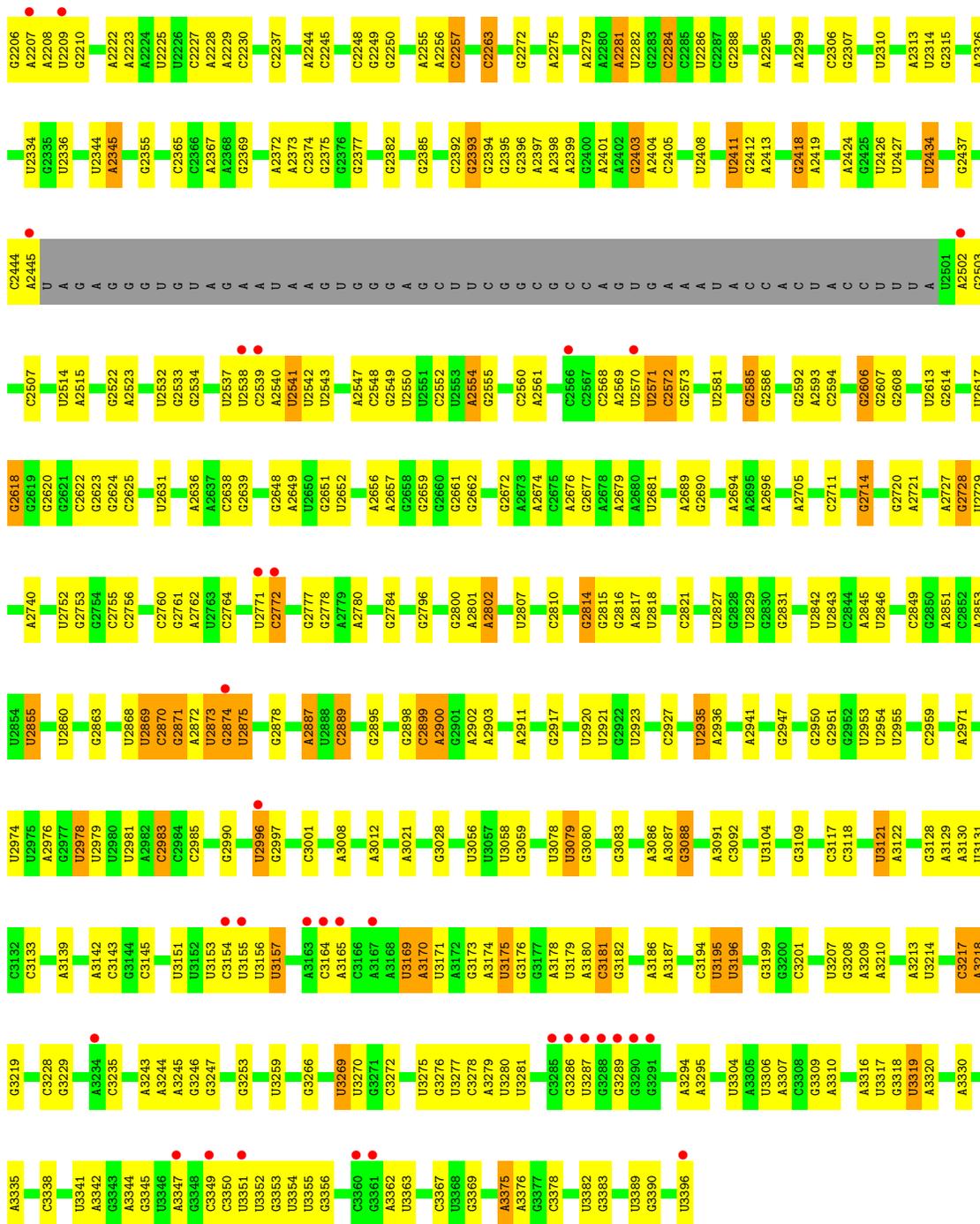
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein



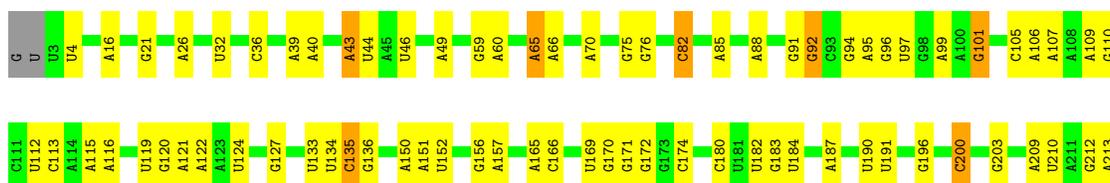
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

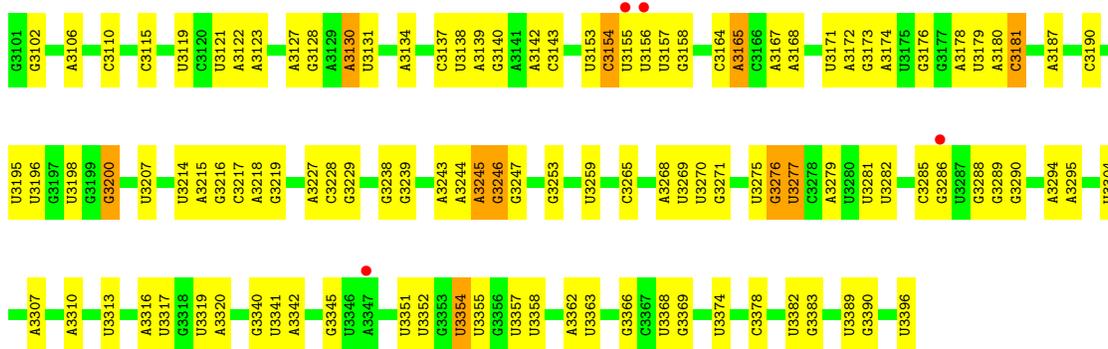


G	A1839	G1736	U1569	C1451	G1354	U1258	A1182	G1087	G968	G859	A690	A578
C	U1840	A1741	U1570	A1452	A1355	A1259	A1190	A1093	G974	C860	A691	G579
U	A1841	U1742	A1571	U1455	G1357	G1260	U1191	U1094	A699	C861	A699	C580
C	A1842	G1743	G1572	U1462	C1360	A1263	C1192	U1095	U979	U873	C702	G588
U	G1845	G1744	G1573	A1469	U1364	A1264	C1196	U1096	U981	U874	A705	A592
A	C1846	C1745	G1576	C1469	C1364	U1265	A1197	A1098	C882	U879	A705	A592
U	C1849	A1750	G1577	A1477	G1365	G1266	C1198	A1099	A983	G708	A705	G604
C	A1850	U1751	C1578	A1477	A1366	U1267	C1199	A1099	G984	G709	A708	U605
A	G1851	G1751	U1494	A1481	A1367	U1268	A1200	U1100	G984	A709	A708	C606
C	G1852	C1759	U1495	A1481	U1368	U1269	C1201	U1100	G993	A883	A709	C606
U	C1582	A1760	G1483	A1482	U1368	A1270	C1201	U1100	G994	C886	G712	G609
G	A1583	G1761	U1484	G1483	G1370	A1271	A1202	G1104	G994	G887	G712	G610
C	A1587	C1762	G1485	U1484	G1371	C1272	A1205	U1110	G1001	U888	A715	A611
A	A1588	A1588	A1491	A1491	G1377	A1273	G1206	U1110	A1002	U889	A716	A612
C	A1589	G1492	G1492	A1491	G1377	A1274	G1207	U1110	A716	C890	A716	A612
U	G1592	G1493	U1494	A1491	G1380	G1277	G1208	U1114	U1006	U719	U719	A619
C	C1596	U1494	U1494	A1491	A1386	A1278	G1209	G1115	A1009	A895	U719	U620
U	U1495	U1495	U1495	A1491	G1387	C1279	U1210	G1116	A1009	A896	G725	A621
G	C1496	U1496	U1496	A1491	U1388	C1280	U1211	G1117	G1010	A901	G725	A622
U	C1497	U1497	U1497	A1491	U1388	C1281	U1212	G1118	A746	G907	A746	C634
A	G1604	U1497	U1497	A1491	U1388	C1282	U1213	G1119	C1016	G907	C753	G635
C	A1605	C1390	U1497	A1491	U1388	C1283	G1213	G1119	C1017	G908	C753	G635
U	U1606	C1391	U1497	A1491	U1388	C1284	G1216	U1124	C1018	G908	C753	G635
C	U1607	C1391	U1497	A1491	U1388	C1285	A1216	U1124	C1019	G908	C753	G635
A	U1607	C1391	U1497	A1491	U1388	C1286	A1217	U1124	G1020	A914	G763	C637
U	U1620	A1508	U1620	C1508	A1399	A1287	A1221	U1128	U1034	A915	U764	C638
C	A1621	U1511	U1511	U1511	G1400	A1287	G1222	A1129	U1034	A915	U764	C638
U	U1629	U1515	U1515	U1515	G1404	G1295	G1227	A1130	U1034	A915	U764	C638
C	G1634	C1516	C1516	U1516	A1406	U1305	G1228	A1131	U1034	A915	U764	C638
U	C1639	G1519	G1520	U1519	A1407	U1306	G1229	A1131	U1034	A915	U764	C638
A	A1642	U1520	U1520	U1520	G1414	G1307	G1230	A1131	U1034	A915	U764	C638
U	A1643	G1528	U1528	U1528	G1417	U1308	G1231	A1131	U1034	A915	U764	C638
C	C1644	A1643	U1528	U1528	A1418	U1309	G1232	A1131	U1034	A915	U764	C638
U	U1645	C1531	U1531	U1531	A1419	U1309	G1233	A1131	U1034	A915	U764	C638
C	A1655	A1535	U1535	U1535	G1421	U1309	G1234	A1131	U1034	A915	U764	C638
U	A1655	G1541	U1541	U1541	U1425	U1309	G1235	A1131	U1034	A915	U764	C638
C	C1657	U1548	U1548	U1548	U1429	U1309	G1242	A1131	U1034	A915	U764	C638
U	A1683	U1549	U1549	U1549	G1430	U1309	G1243	A1131	U1034	A915	U764	C638
C	A1715	C1556	U1556	U1556	G1431	U1309	G1244	A1131	U1034	A915	U764	C638
A	U1716	A1557	U1557	U1557	C1432	U1309	G1245	A1131	U1034	A915	U764	C638
C	U1717	A1557	U1557	U1557	A1433	U1309	G1246	A1131	U1034	A915	U764	C638
U	U1720	G1560	U1560	U1560	G1434	U1309	G1247	A1131	U1034	A915	U764	C638
C	U1724	G1561	U1561	U1561	U1436	U1309	G1248	A1131	U1034	A915	U764	C638
C	C1725	C1562	U1562	U1562	C1437	U1309	G1249	A1131	U1034	A915	U764	C638
U	G1726	U1563	U1563	U1563	U1445	U1309	G1250	A1131	U1034	A915	U764	C638
A	U1727	G1565	U1565	U1565	A1446	U1309	G1251	A1131	U1034	A915	U764	C638
C	G1728	A1566	U1566	U1566	U1449	U1309	G1252	A1131	U1034	A915	U764	C638
U	A1729	U1567	U1567	U1567	A1449	U1309	G1253	A1131	U1034	A915	U764	C638
C	U1729	U1568	U1568	U1568	A1450	U1309	G1254	A1131	U1034	A915	U764	C638
U	U1814	U1815	U1815	U1815	U1451	U1309	G1255	A1131	U1034	A915	U764	C638
C	A1815	U1816	U1816	U1816	U1452	U1309	G1256	A1131	U1034	A915	U764	C638
U	G1817	U1817	U1817	U1817	U1453	U1309	G1257	A1131	U1034	A915	U764	C638
C	U1818	U1818	U1818	U1818	U1454	U1309	G1258	A1131	U1034	A915	U764	C638
A	U1819	U1819	U1819	U1819	U1455	U1309	G1259	A1131	U1034	A915	U764	C638
C	U1820	U1820	U1820	U1820	U1456	U1309	G1260	A1131	U1034	A915	U764	C638
U	C1822	C1822	U1822	U1822	U1457	U1309	G1261	A1131	U1034	A915	U764	C638
C	G1832	U1832	U1832	U1832	U1458	U1309	G1262	A1131	U1034	A915	U764	C638
U	C1833	U1833	U1833	U1833	U1459	U1309	G1263	A1131	U1034	A915	U764	C638
C	U1834	U1834	U1834	U1834	U1460	U1309	G1264	A1131	U1034	A915	U764	C638
U	A1835	U1835	U1835	U1835	U1461	U1309	G1265	A1131	U1034	A915	U764	C638
C	U1836	U1836	U1836	U1836	U1462	U1309	G1266	A1131	U1034	A915	U764	C638
U	U1837	U1837	U1837	U1837	U1463	U1309	G1267	A1131	U1034	A915	U764	C638
C	U1838	U1838	U1838	U1838	U1464	U1309	G1268	A1131	U1034	A915	U764	C638
U	U1839	U1839	U1839	U1839	U1465	U1309	G1269	A1131	U1034	A915	U764	C638
C	U1840	U1840	U1840	U1840	U1466	U1309	G1270	A1131	U1034	A915	U764	C638
U	U1841	U1841	U1841	U1841	U1467	U1309	G1271	A1131	U1034	A915	U764	C638
C	U1842	U1842	U1842	U1842	U1468	U1309	G1272	A1131	U1034	A915	U764	C638
U	G1843	U1843	U1843	U1843	U1469	U1309	G1273	A1131	U1034	A915	U764	C638
C	U1844	U1844	U1844	U1844	U1470	U1309	G1274	A1131	U1034	A915	U764	C638
U	U1845	U1845	U1845	U1845	U1471	U1309	G1275	A1131	U1034	A915	U764	C638
C	U1846	U1846	U1846	U1846	U1472	U1309	G1276	A1131	U1034	A915	U764	C638
U	C1847	U1847	U1847	U1847	U1473	U1309	G1277	A1131	U1034	A915	U764	C638
C	U1848	U1848	U1848	U1848	U1474	U1309	G1278	A1131	U1034	A915	U764	C638
U	C1849	U1849	U1849	U1849	U1475	U1309	G1279	A1131	U1034	A915	U764	C638
A	A1850	U1850	U1850	U1850	U1476	U1309	G1280	A1131	U1034	A915	U764	C638
C	G1851	U1851	U1851	U1851	U1477	U1309	G1281	A1131	U1034	A915	U764	C638
U	G1852	U1852	U1852	U1852	U1478	U1309	G1282	A1131	U1034	A915	U764	C638
C	C1853	U1853	U1853	U1853	U1479	U1309	G1283	A1131	U1034	A915	U764	C638
U	A1854	U1854	U1854	U1854	U1480	U1309	G1284	A1131	U1034	A915	U764	C638
C	U1855	U1855	U1855	U1855	U1481	U1309	G1285	A1131	U1034	A915	U764	C638
U	A1856	U1856	U1856	U1856	U1482	U1309	G1286	A1131	U1034	A915	U764	C638
C	C1857	U1857	U1857	U1857	U1483	U1309	G1287	A1131	U1034	A915	U764	C638
U	A1858	U1858	U1858	U1858	U1484	U1309	G1288	A1131	U1034	A915	U764	C638
C	C1859	U1859	U1859	U1859	U1485	U1309	G1289	A1131	U1034	A915	U764	C638
U	A1860	U1860	U1860	U1860	U1486	U1309	G1290	A1131	U1034	A915	U764	C638
C	G1861	U1861	U1861	U1861	U1487	U1309	G1291	A1131	U1034	A915	U764	C638
U	C1862	U1862	U1862	U1862	U1488	U1309	G1292	A1131	U1034	A915	U764	C638
C	U1863	U1863	U1863	U1863	U1489	U1309	G1293	A1131	U1034	A915	U764	C638
U	A1864	U1864	U1864	U1864	U1490	U1309	G1294	A1131	U1034	A915	U764	C638
C	C1865	U1865	U1865	U1865	U1491	U1309	G1295	A1131	U1034	A915	U764	C638
U	A1866	U1866	U1866	U1866	U1492	U1309	G1296	A1131	U1034	A915	U764	C638
C	C1867	U1867	U1867	U1867	U1493	U1309	G1297	A1131	U1034	A915	U764	C638
U	A1868	U1868	U1868	U1868	U1494	U1309	G1298	A1131	U1034	A915	U764	C638
C	U1869	U1869	U1869	U1869	U1495	U1309	G1299	A1131	U1034	A915	U764	C638
U	A1870	U1870	U1870	U1870	U1496	U1309	G1300	A1131	U1034	A915	U764	C638
C	C1871	U1871	U1871	U1871	U1497	U1309	G1301	A1131	U1034	A915	U764	C638
U	A1872	U1872	U1872	U1872	U1498	U1309	G1302	A1131	U1034	A915	U764	C638
C	C1873	U1873	U1873	U1873	U1499	U1309	G1303	A1131	U1034	A915	U764	C638
U	A1874	U1874	U1874	U1874	U1500	U1309	G1304	A1131	U1034	A915	U764	C638
C	C1875	U1875	U1875	U1875	U1501	U1309	G1305	A1131	U1034	A915	U764	C638
U	A1876	U1876	U1876	U1876	U1502	U1309	G1306	A1131	U1034	A915	U764	C63

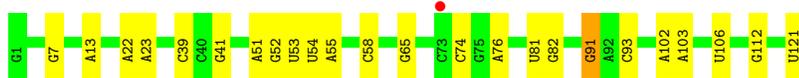


• Molecule 36: 25S ribosomal RNA

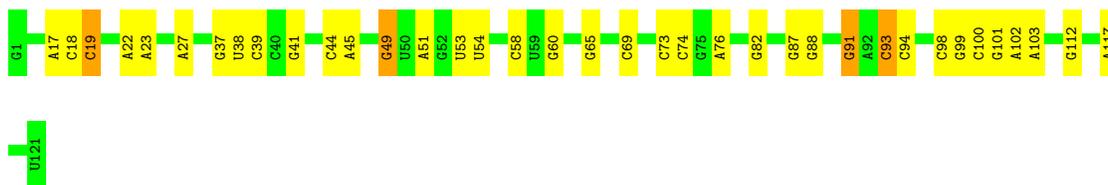




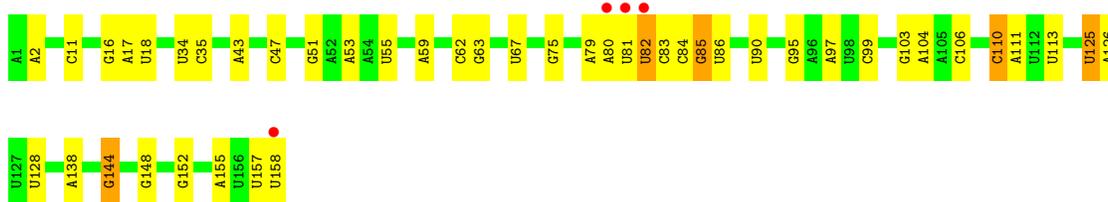
- Molecule 37: 5S ribosomal RNA



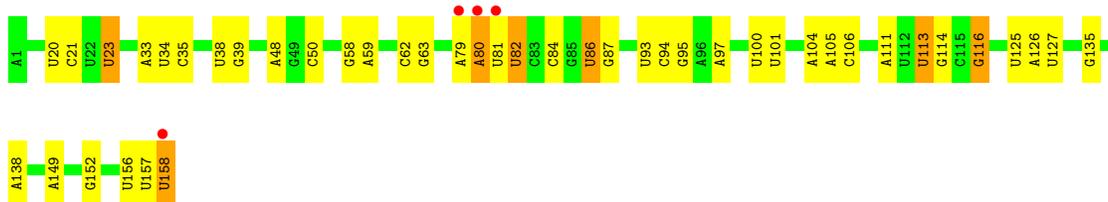
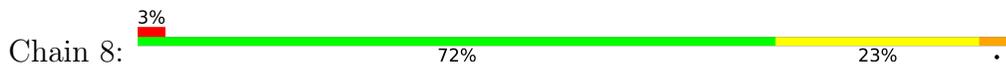
- Molecule 37: 5S ribosomal RNA



- Molecule 38: 5.8S ribosomal RNA



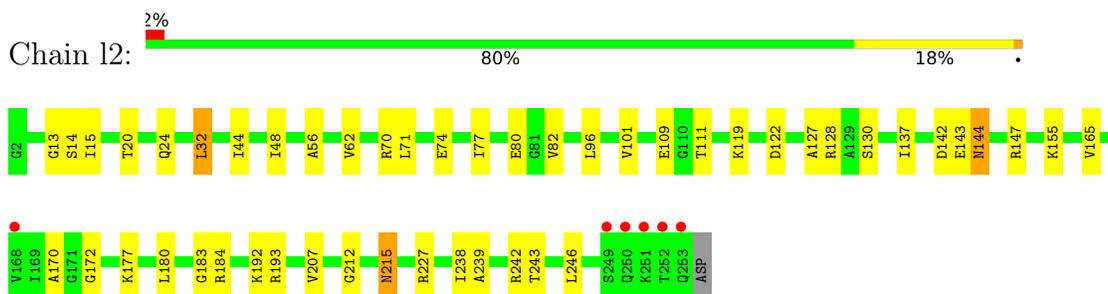
- Molecule 38: 5.8S ribosomal RNA



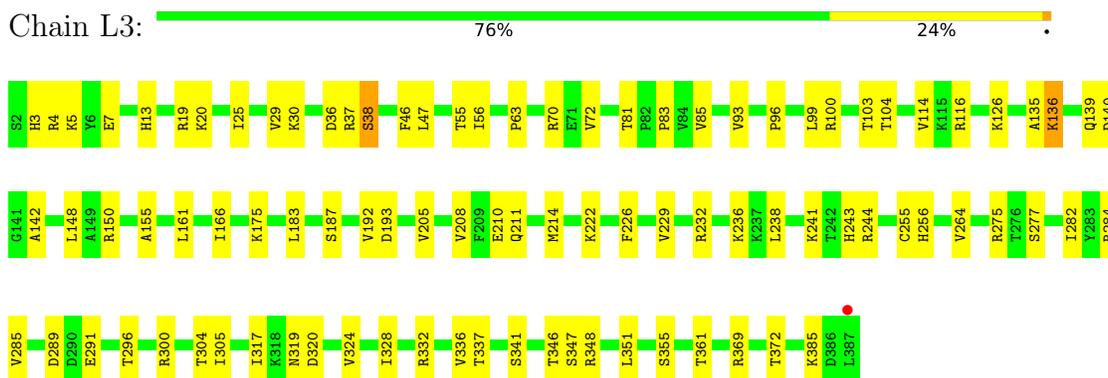
- Molecule 39: 60S ribosomal protein L2-A



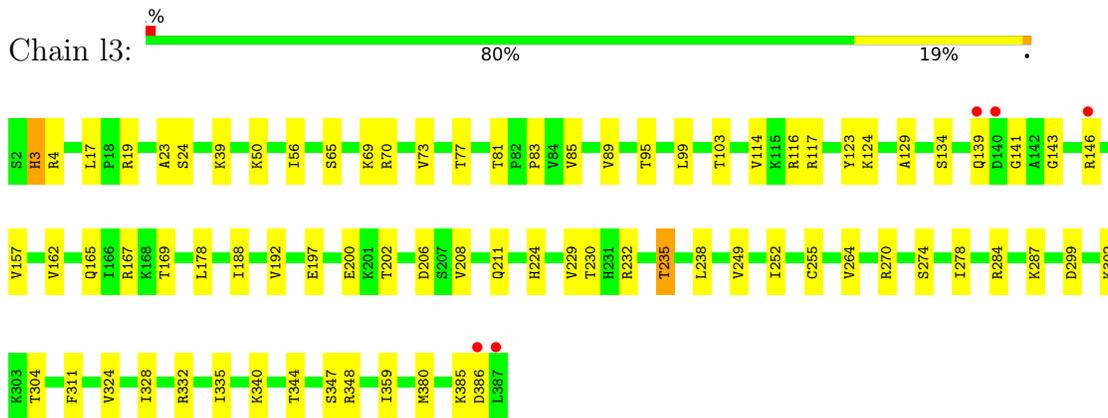
- Molecule 39: 60S ribosomal protein L2-A



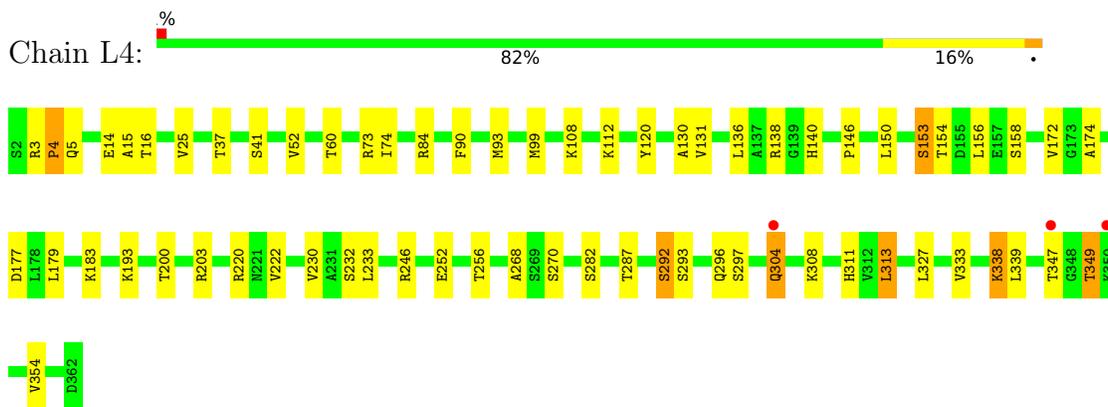
- Molecule 40: 60S ribosomal protein L3



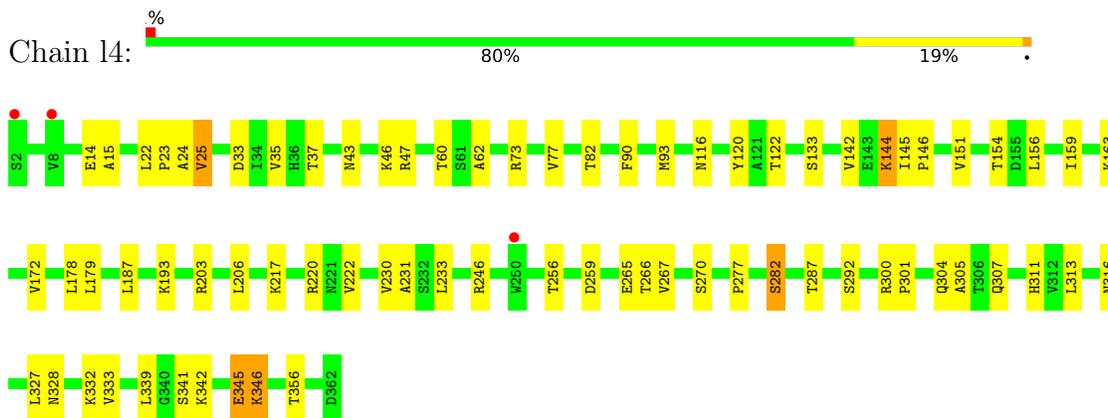
- Molecule 40: 60S ribosomal protein L3



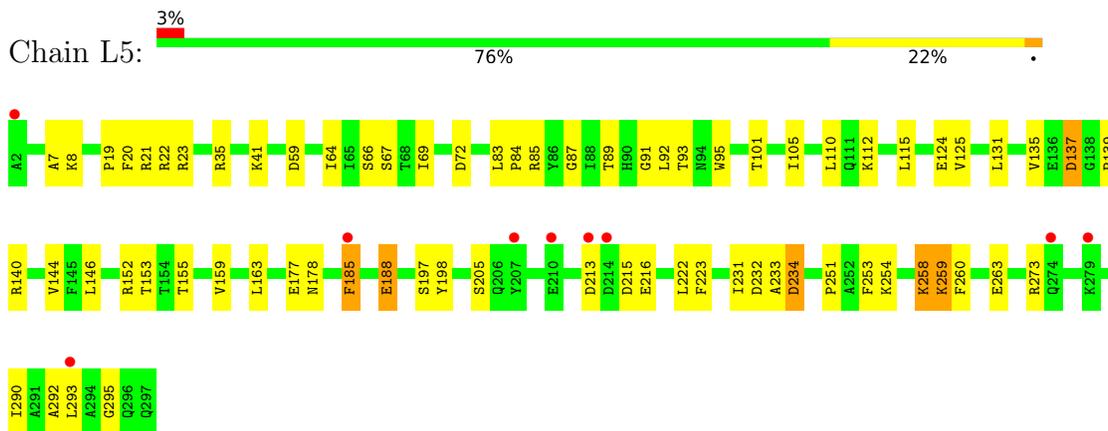
- Molecule 41: 60S ribosomal protein L4-A



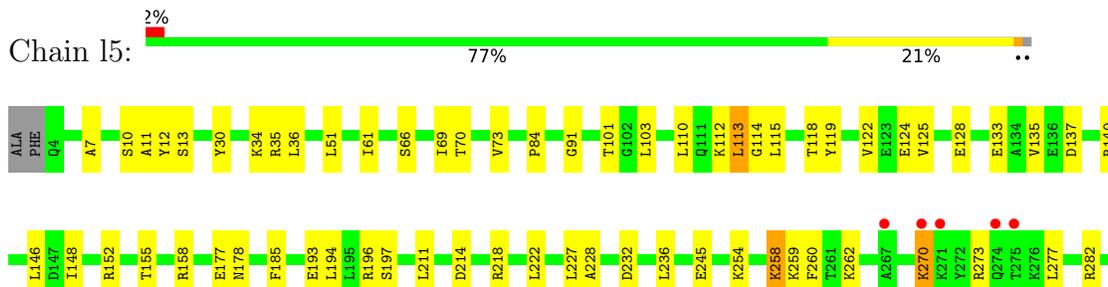
- Molecule 41: 60S ribosomal protein L4-A



- Molecule 42: 60S ribosomal protein L5

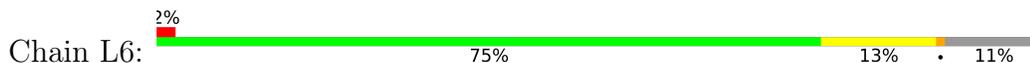


- Molecule 42: 60S ribosomal protein L5





- Molecule 43: 60S ribosomal protein L6-A



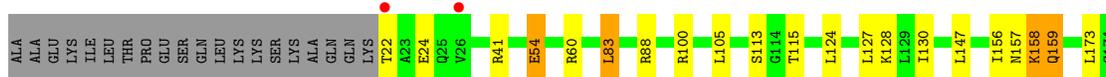
- Molecule 43: 60S ribosomal protein L6-A



- Molecule 44: 60S ribosomal protein L7-A

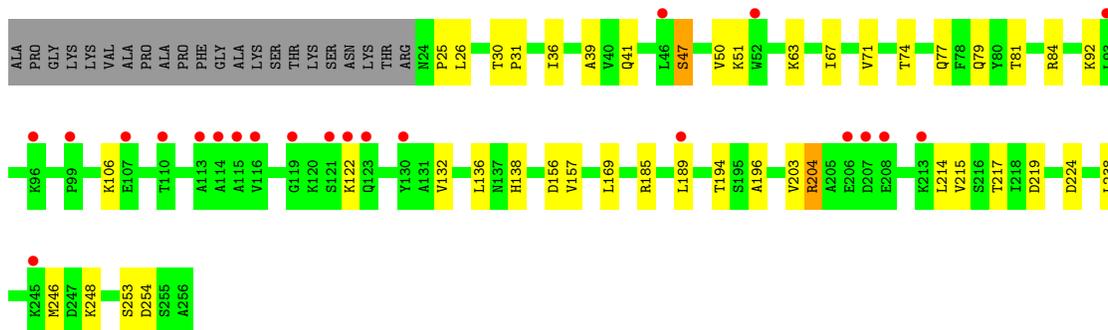


- Molecule 44: 60S ribosomal protein L7-A

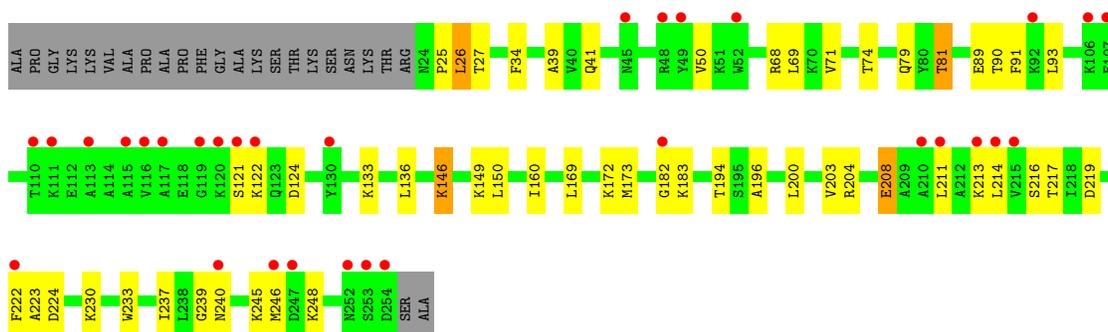


- Molecule 45: 60S ribosomal protein L8-A

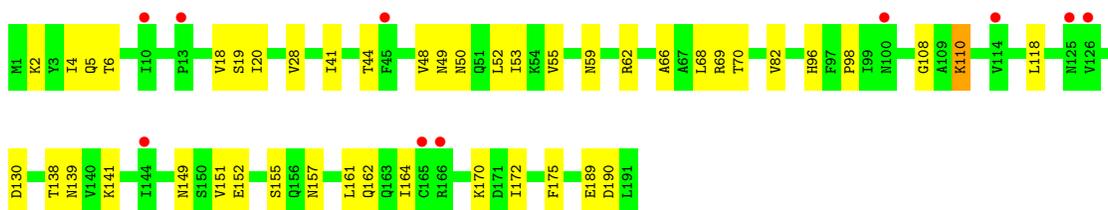
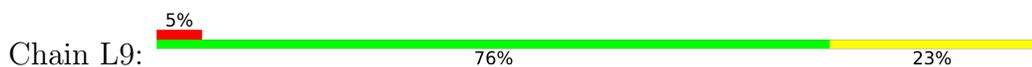




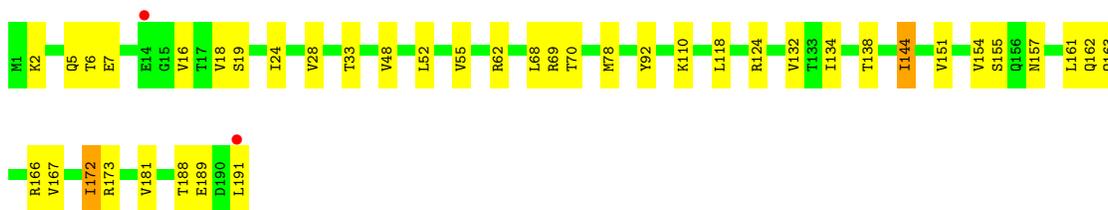
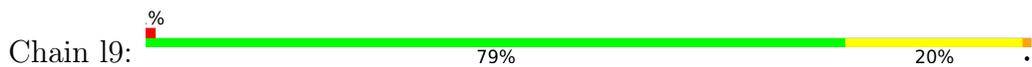
• Molecule 45: 60S ribosomal protein L8-A



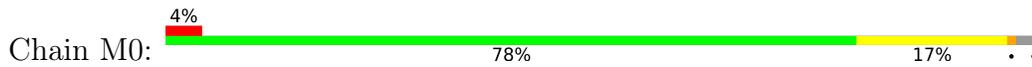
• Molecule 46: 60S ribosomal protein L9-A



• Molecule 46: 60S ribosomal protein L9-A

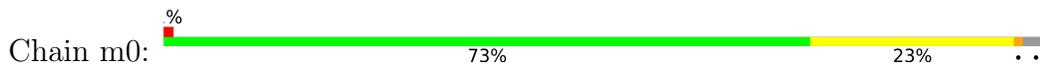


• Molecule 47: 60S ribosomal protein L10

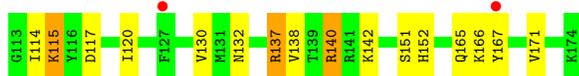
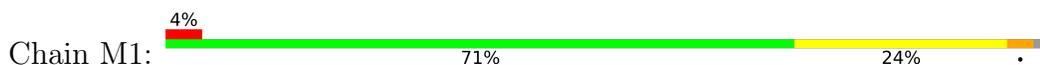




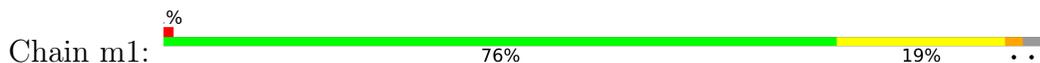
- Molecule 47: 60S ribosomal protein L10



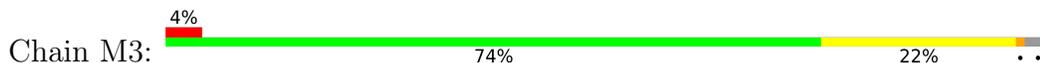
- Molecule 48: 60S ribosomal protein L11-A



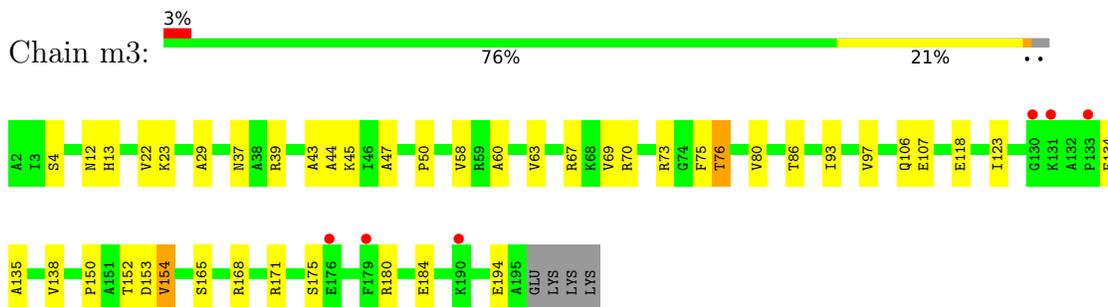
- Molecule 48: 60S ribosomal protein L11-A



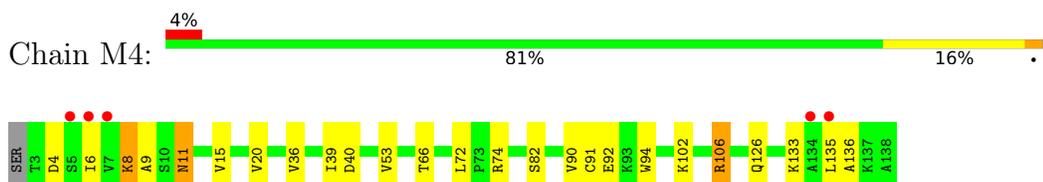
- Molecule 49: 60S ribosomal protein L13-A



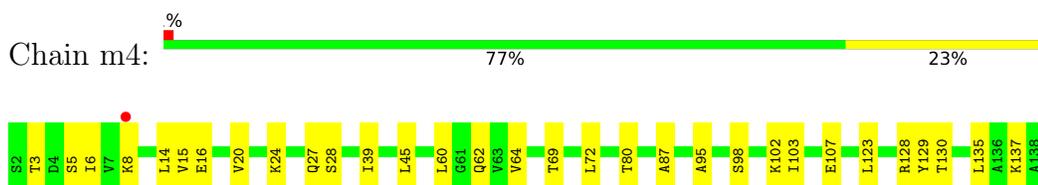
- Molecule 49: 60S ribosomal protein L13-A



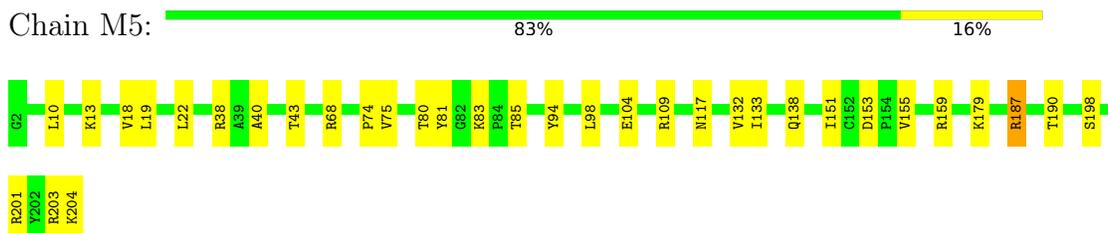
- Molecule 50: 60S ribosomal protein L14-A



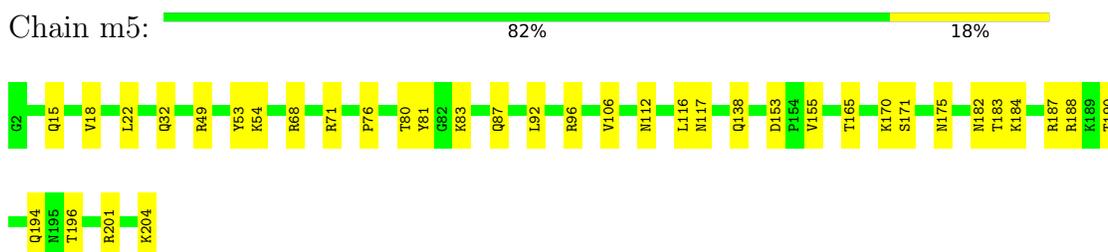
- Molecule 50: 60S ribosomal protein L14-A



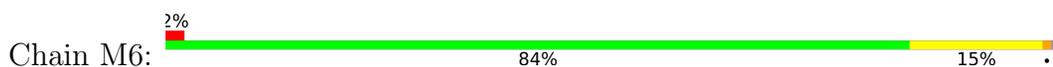
- Molecule 51: 60S ribosomal protein L15-A

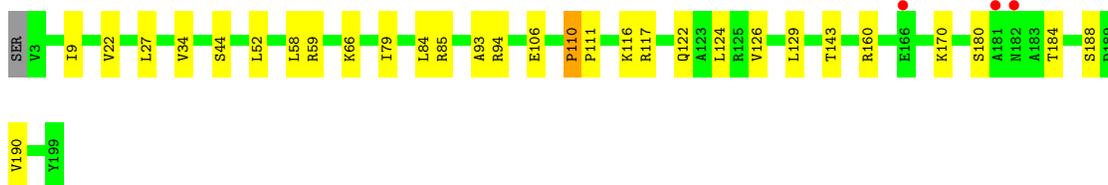


- Molecule 51: 60S ribosomal protein L15-A

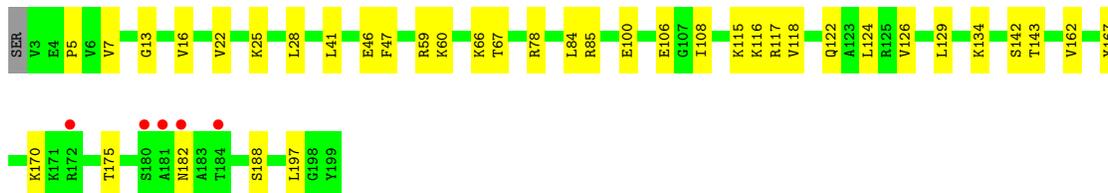
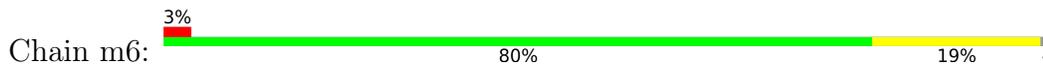


- Molecule 52: 60S ribosomal protein L16-A

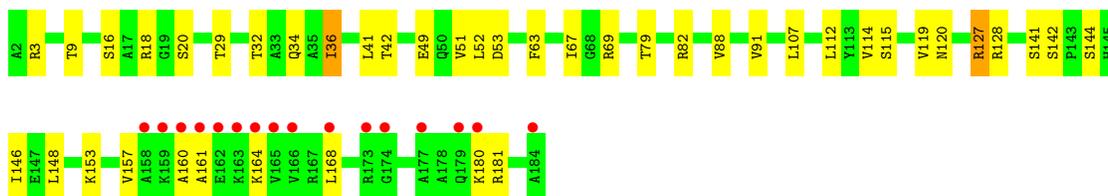
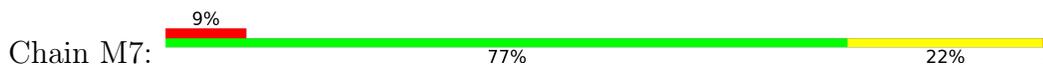




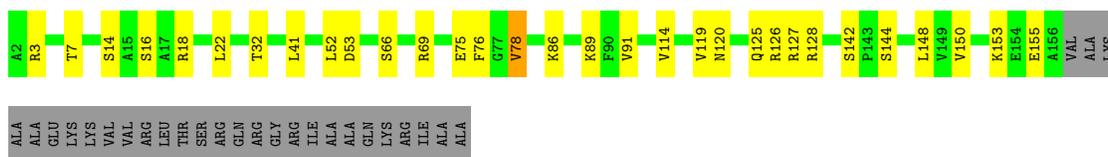
- Molecule 52: 60S ribosomal protein L16-A



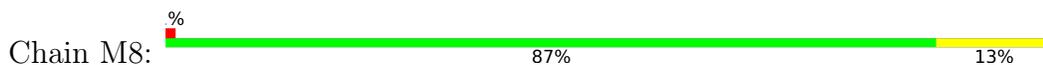
- Molecule 53: 60S ribosomal protein L17-A



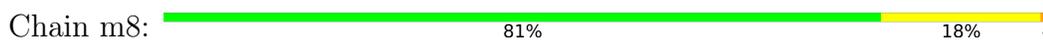
- Molecule 53: 60S ribosomal protein L17-A

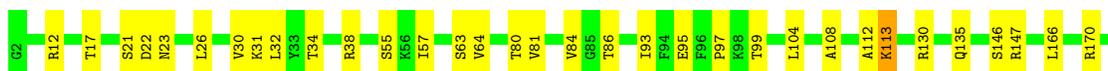


- Molecule 54: 60S ribosomal protein L18-A

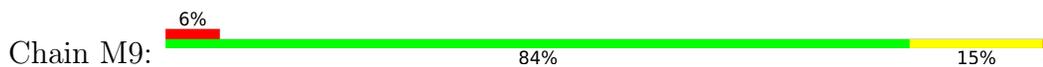


- Molecule 54: 60S ribosomal protein L18-A

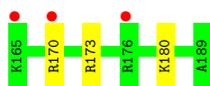
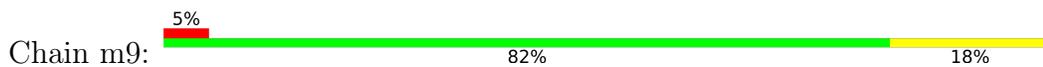




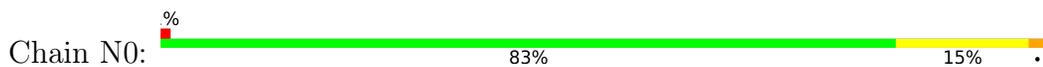
- Molecule 55: 60S ribosomal protein L19-A



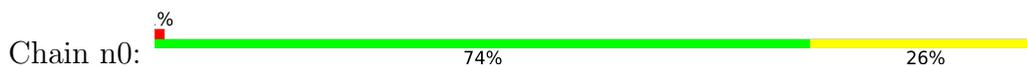
- Molecule 55: 60S ribosomal protein L19-A



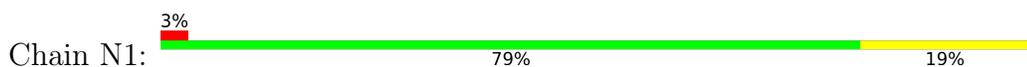
- Molecule 56: 60S ribosomal protein L20-A

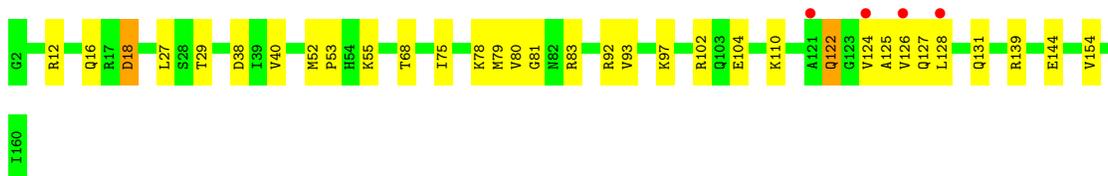


- Molecule 56: 60S ribosomal protein L20-A

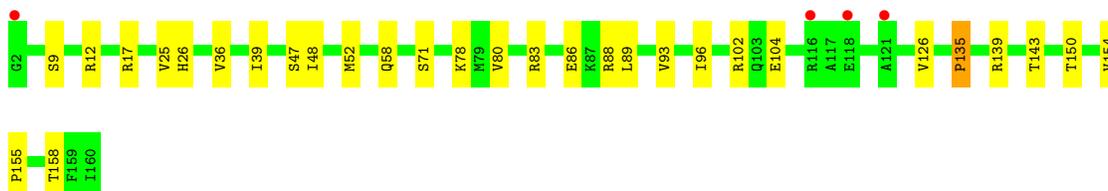
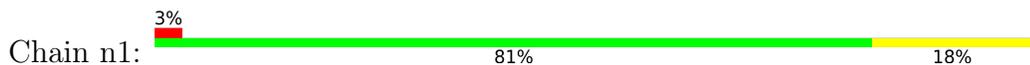


- Molecule 57: 60S ribosomal protein L21-A





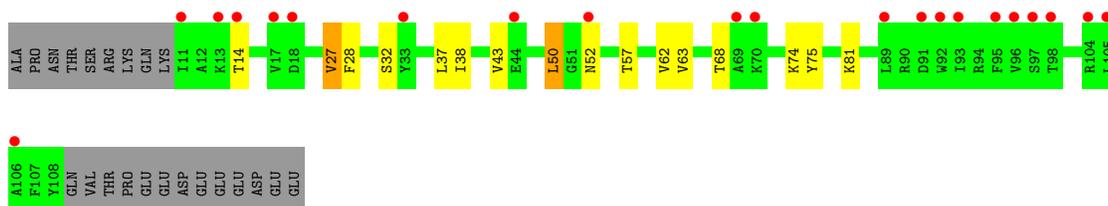
- Molecule 57: 60S ribosomal protein L21-A



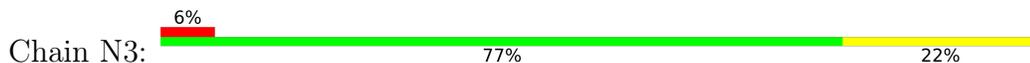
- Molecule 58: 60S ribosomal protein L22-A



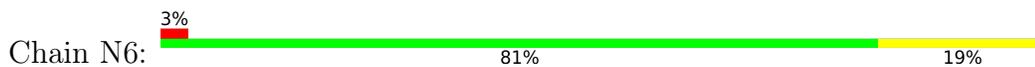
- Molecule 58: 60S ribosomal protein L22-A



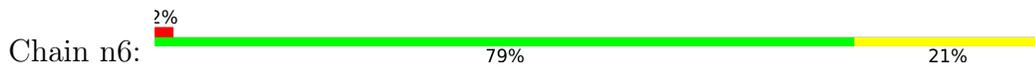
- Molecule 59: 60S ribosomal protein L23-A



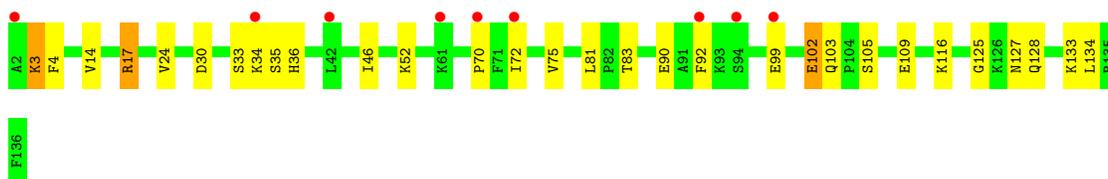
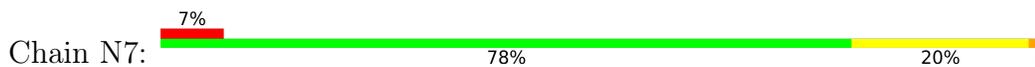
- Molecule 59: 60S ribosomal protein L23-A



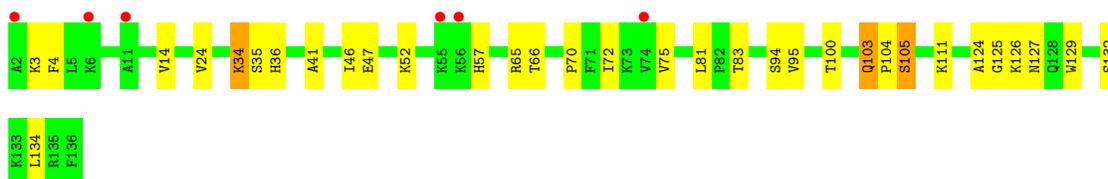
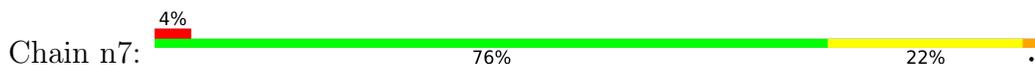
- Molecule 62: 60S ribosomal protein L26-A



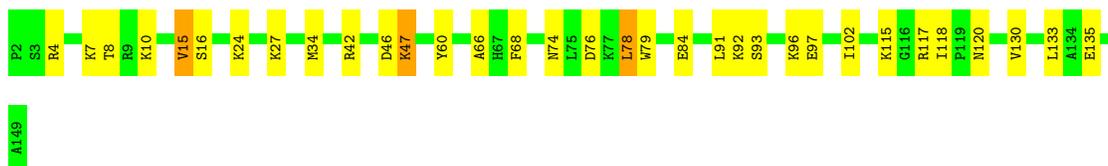
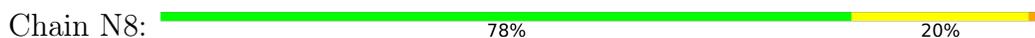
- Molecule 63: 60S ribosomal protein L27-A



- Molecule 63: 60S ribosomal protein L27-A



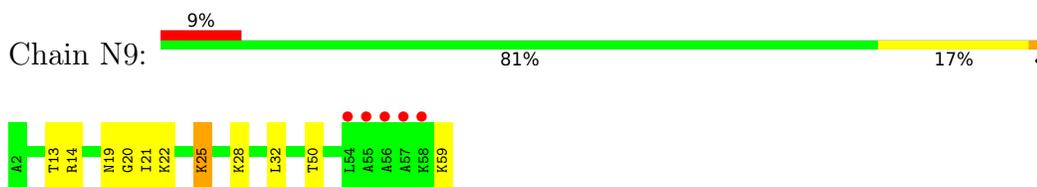
- Molecule 64: 60S ribosomal protein L28



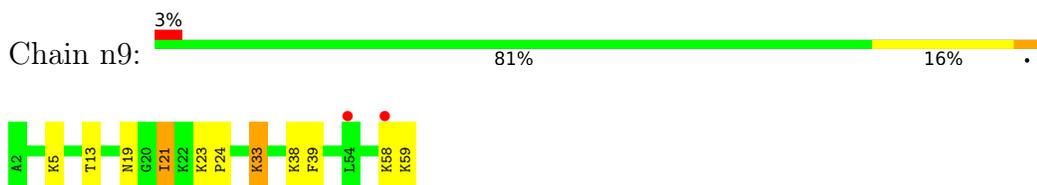
- Molecule 64: 60S ribosomal protein L28



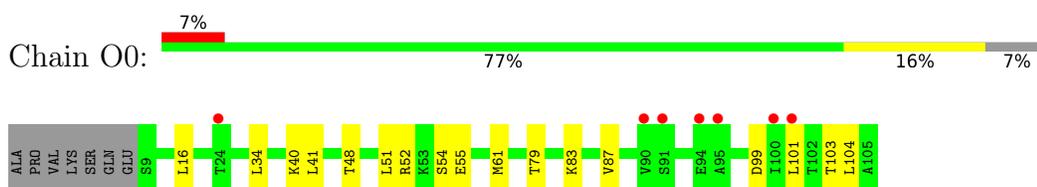
- Molecule 65: 60S ribosomal protein L29



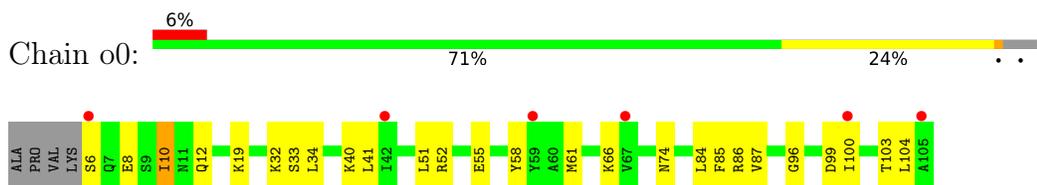
- Molecule 65: 60S ribosomal protein L29



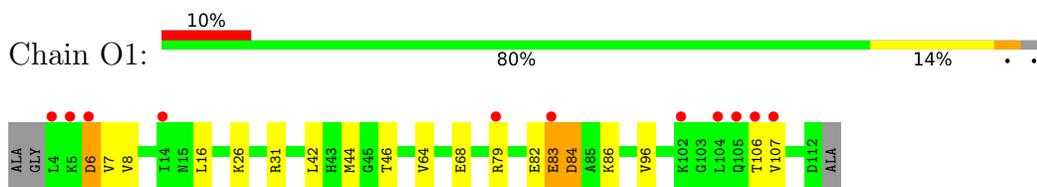
- Molecule 66: 60S ribosomal protein L30



- Molecule 66: 60S ribosomal protein L30



- Molecule 67: 60S ribosomal protein L31-A

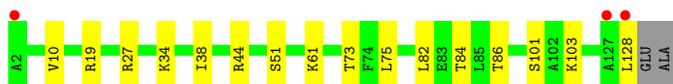


- Molecule 67: 60S ribosomal protein L31-A

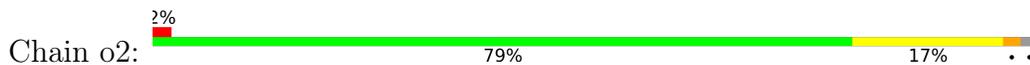


- Molecule 68: 60S ribosomal protein L32

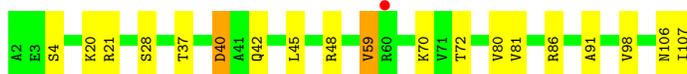
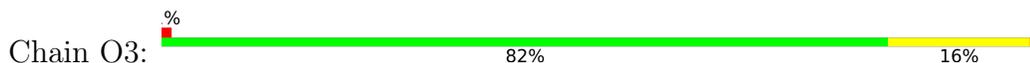




- Molecule 68: 60S ribosomal protein L32



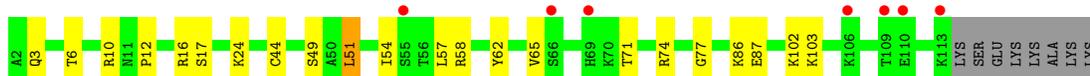
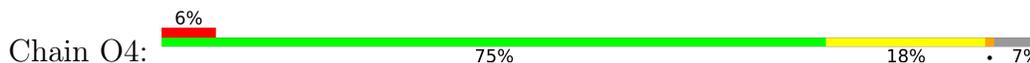
- Molecule 69: 60S ribosomal protein L33-A



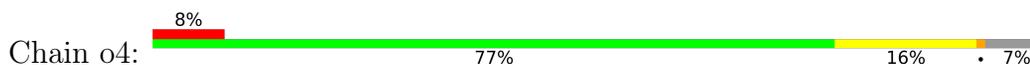
- Molecule 69: 60S ribosomal protein L33-A



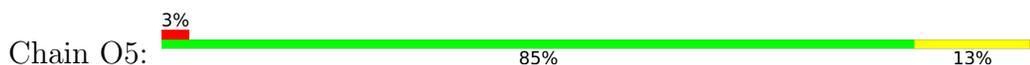
- Molecule 70: 60S ribosomal protein L34-A



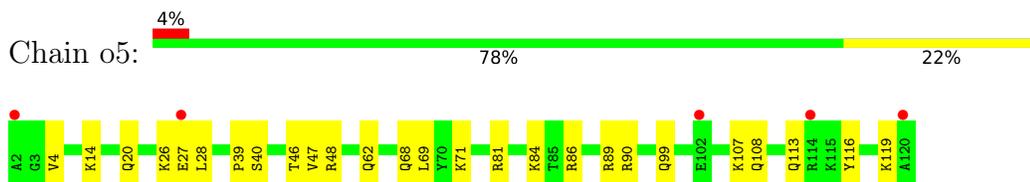
- Molecule 70: 60S ribosomal protein L34-A



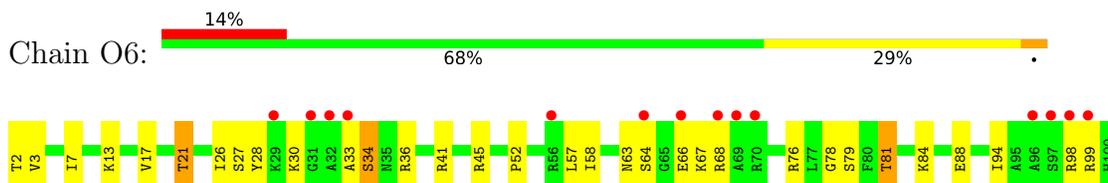
- Molecule 71: 60S ribosomal protein L35-A



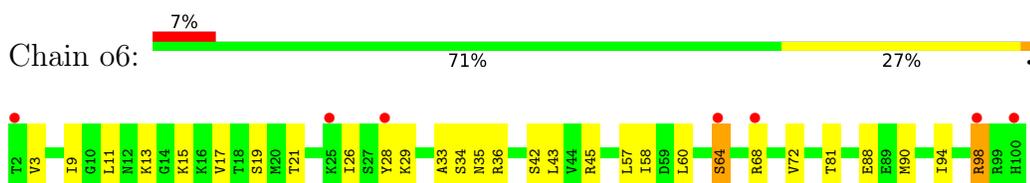
- Molecule 71: 60S ribosomal protein L35-A



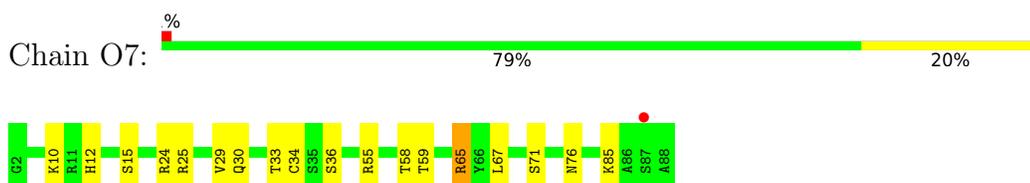
- Molecule 72: 60S ribosomal protein L36-A



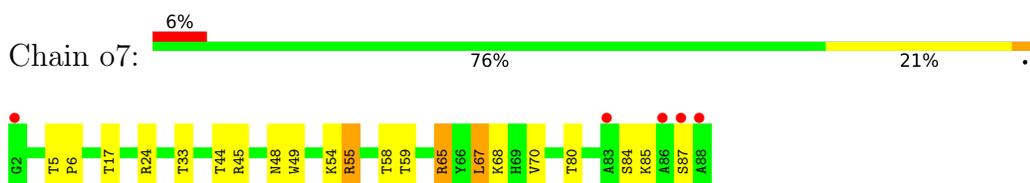
- Molecule 72: 60S ribosomal protein L36-A



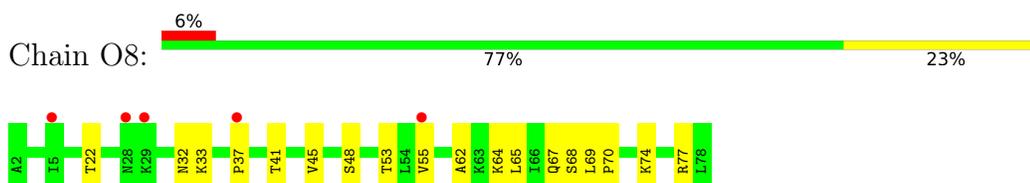
- Molecule 73: 60S ribosomal protein L37-A



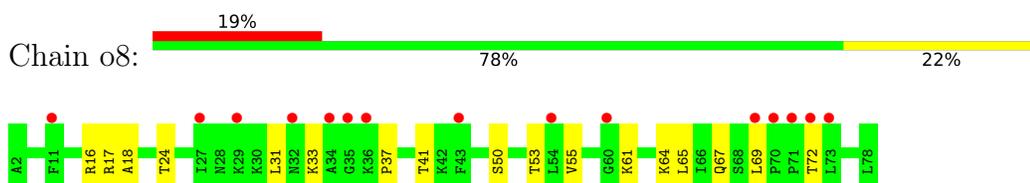
- Molecule 73: 60S ribosomal protein L37-A



- Molecule 74: 60S ribosomal protein L38



- Molecule 74: 60S ribosomal protein L38



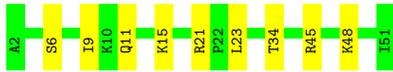
- Molecule 75: 60S ribosomal protein L39

Chain O9:  82% 18%



- Molecule 75: 60S ribosomal protein L39

Chain o9:  82% 18%



- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  81% 15%



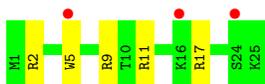
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  81% 19%



- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  12% 80% 20%



- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  72% 28%



- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  14% 76% 24%



ALA ALA THR SER ALA ALA SER GLY ASP ALA ALA PRO ALA GLU GLU ALA ALA GLU GLU GLU GLU SER ASP ASP MET GLY PHE GLY LEU PHE ASP

- Molecule 83: 60S ribosomal protein P1 alpha

Chain p1:  100%

There are no outlier residues recorded for this chain.

- Molecule 84: 60S ribosomal protein P2 beta

Chain p2:  100%

There are no outlier residues recorded for this chain.

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	435.45Å 287.66Å 303.76Å 90.00° 98.92° 90.00°	Depositor
Resolution (Å)	49.99 – 3.40 49.99 – 3.40	Depositor EDS
% Data completeness (in resolution range)	97.7 (49.99-3.40) 84.7 (49.99-3.40)	Depositor EDS
R_{merge}	0.35	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.57 (at 3.40Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.234 , 0.284 0.236 , 0.284	Depositor DCC
R_{free} test set	19813 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å ²)	67.8	Xtriage
Anisotropy	0.230	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	(Not available) , (Not available)	EDS
L-test for twinning ²	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.86	EDS
Total number of atoms	411776	wwPDB-VP
Average B, all atoms (Å ²)	78.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% 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 [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: MG, OHX, 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	0.57	0/42468	1.13	127/66173 (0.2%)
1	6	0.68	1/42790 (0.0%)	1.19	169/66673 (0.3%)
2	S0	0.35	0/1653	0.57	0/2261
2	s0	0.39	0/1653	0.60	0/2261
3	S1	0.33	0/1735	0.60	2/2335 (0.1%)
3	s1	0.42	0/1748	0.61	0/2352
4	S2	0.40	0/1665	0.61	0/2263
4	s2	0.48	0/1665	0.67	0/2263
5	S3	0.40	0/1759	0.59	0/2368
5	s3	0.38	0/1759	0.58	0/2368
6	S4	0.39	0/2109	0.64	1/2839 (0.0%)
6	s4	0.45	0/2109	0.67	1/2839 (0.0%)
7	S5	0.36	0/1629	0.58	0/2202
7	s5	0.38	0/1629	0.59	0/2202
8	S6	0.35	0/1844	0.54	0/2464
8	s6	0.47	0/1779	0.63	0/2379
9	S7	0.40	0/1506	0.63	0/2028
9	s7	0.39	0/1517	0.62	0/2044
10	S8	0.43	0/1514	0.61	0/2021
10	s8	0.47	0/1514	0.62	0/2021
11	S9	0.38	0/1519	0.59	0/2035
11	s9	0.44	0/1519	0.62	0/2035
12	C0	0.38	0/789	0.61	1/1067 (0.1%)
13	C1	0.45	0/1194	0.60	0/1610
13	c1	0.52	0/1194	0.66	0/1610
14	C2	0.37	0/824	0.60	0/1116
14	c2	0.27	0/824	0.54	0/1116
15	C3	0.43	0/1215	0.59	1/1638 (0.1%)
15	c3	0.42	0/1215	0.59	0/1638
16	C4	0.33	0/901	0.61	0/1217
16	c4	0.41	0/960	0.64	0/1290
17	C5	0.39	0/998	0.63	0/1341

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	c5	0.44	0/1060	0.64	0/1426
18	C6	0.40	0/1125	0.63	1/1510 (0.1%)
18	c6	0.38	0/1131	0.62	0/1518
19	C7	0.38	0/974	0.58	0/1304
19	c7	0.37	0/953	0.58	0/1275
20	C8	0.41	0/1211	0.61	1/1628 (0.1%)
20	c8	0.43	0/1211	0.63	1/1628 (0.1%)
21	C9	0.37	0/1130	0.57	0/1517
21	c9	0.40	0/1130	0.59	0/1517
22	D0	0.40	0/865	0.60	0/1169
22	d0	0.40	0/892	0.58	0/1205
23	D1	0.36	0/693	0.58	0/935
23	d1	0.40	0/693	0.56	0/935
24	D2	0.41	0/1038	0.67	2/1395 (0.1%)
24	d2	0.52	0/1038	0.69	1/1395 (0.1%)
25	D3	0.50	0/1139	0.67	0/1518
25	d3	0.56	0/1139	0.69	0/1518
26	D4	0.39	0/1087	0.56	0/1449
26	d4	0.43	0/1087	0.67	0/1449
27	D5	0.37	0/571	0.71	0/768
27	d5	0.37	0/566	0.58	0/761
28	D6	0.37	0/782	0.59	0/1047
28	d6	0.46	0/782	0.60	0/1047
29	D7	0.37	0/620	0.61	0/838
29	d7	0.41	0/620	0.63	0/838
30	D8	0.34	0/499	0.56	0/670
30	d8	0.38	0/499	0.62	0/670
31	D9	0.44	0/453	0.63	1/602 (0.2%)
31	d9	0.46	0/453	0.53	0/602
32	E0	0.37	0/483	0.57	0/643
32	e0	0.46	0/499	0.65	0/665
33	E1	0.38	0/577	0.69	0/770
33	e1	0.36	0/619	0.69	1/822 (0.1%)
34	SR	0.33	0/2494	0.56	0/3394
34	sR	0.33	0/2498	0.53	0/3398
35	SM	0.43	0/984	0.63	0/1323
35	sM	0.46	0/480	0.65	0/642
36	1	0.85	14/75394 (0.0%)	1.36	645/117545 (0.5%)
36	5	0.91	26/75418 (0.0%)	1.40	755/117583 (0.6%)
37	3	0.77	0/2883	1.23	10/4491 (0.2%)
37	7	0.85	0/2883	1.36	23/4491 (0.5%)
38	4	0.82	0/3746	1.32	18/5832 (0.3%)
38	8	0.78	0/3746	1.28	17/5832 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	L2	0.56	0/1952	0.69	0/2622
39	l2	0.54	0/1952	0.73	0/2622
40	L3	0.56	0/3142	0.68	0/4224
40	l3	0.63	1/3142 (0.0%)	0.71	0/4224
41	L4	0.59	0/2801	0.75	1/3792 (0.0%)
41	l4	0.59	0/2801	0.73	1/3792 (0.0%)
42	L5	0.47	0/2425	0.65	0/3271
42	l5	0.58	0/2408	0.71	0/3248
43	L6	0.58	0/1260	0.72	0/1694
43	l6	0.58	0/1269	0.71	0/1705
44	L7	0.63	0/1821	0.72	0/2451
44	l7	0.66	0/1828	0.75	2/2461 (0.1%)
45	L8	0.43	0/1849	0.59	0/2495
45	l8	0.46	0/1795	0.61	0/2429
46	L9	0.54	0/1539	0.67	0/2073
46	l9	0.59	0/1539	0.69	0/2073
47	M0	0.57	0/1753	0.68	0/2350
47	m0	0.62	0/1769	0.74	0/2372
48	M1	0.44	0/1374	0.61	0/1842
48	m1	0.55	0/1374	0.68	1/1842 (0.1%)
49	M3	0.56	0/1568	0.74	1/2106 (0.0%)
49	m3	0.54	0/1573	0.73	0/2113
50	M4	0.60	0/1068	0.71	0/1438
50	m4	0.61	0/1074	0.71	0/1446
51	M5	0.56	0/1757	0.70	0/2354
51	m5	0.50	0/1757	0.64	0/2354
52	M6	0.66	0/1585	0.72	0/2128
52	m6	0.73	0/1585	0.75	0/2128
53	M7	0.55	0/1465	0.67	0/1968
53	m7	0.68	0/1250	0.76	1/1683 (0.1%)
54	M8	0.59	0/1465	0.75	1/1965 (0.1%)
54	m8	0.59	0/1465	0.75	1/1965 (0.1%)
55	M9	0.45	0/1538	0.56	0/2050
55	m9	0.50	0/1538	0.62	0/2050
56	N0	0.61	0/1481	0.73	0/1990
56	n0	0.67	0/1481	0.71	0/1990
57	N1	0.58	0/1300	0.66	0/1743
57	n1	0.61	0/1300	0.69	0/1743
58	N2	0.39	0/812	0.54	0/1099
58	n2	0.43	0/794	0.63	0/1076
59	N3	0.56	0/1018	0.71	1/1369 (0.1%)
59	n3	0.67	0/1018	0.76	0/1369
60	N4	0.43	0/814	0.65	0/1081

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
60	n4	0.50	0/1103	0.65	0/1458
61	N5	0.49	0/983	0.72	2/1325 (0.2%)
61	n5	0.50	0/974	0.70	0/1314
62	N6	0.50	0/1004	0.70	0/1341
62	n6	0.53	0/1004	0.74	0/1341
63	N7	0.44	0/1118	0.60	0/1497
63	n7	0.40	0/1118	0.59	0/1497
64	N8	0.55	0/1204	0.75	0/1612
64	n8	0.56	0/1204	0.71	0/1612
65	N9	0.52	0/473	0.72	1/629 (0.2%)
65	n9	0.57	0/473	0.79	0/629
66	O0	0.39	0/751	0.56	0/1008
66	o0	0.43	0/775	0.65	0/1040
67	O1	0.51	0/904	0.65	0/1213
67	o1	0.60	0/904	0.70	0/1213
68	O2	0.63	0/1041	0.70	0/1394
68	o2	0.61	0/1041	0.73	0/1394
69	O3	0.68	0/868	0.72	0/1168
69	o3	0.65	0/868	0.73	0/1168
70	O4	0.47	0/891	0.62	1/1191 (0.1%)
70	o4	0.47	0/891	0.73	1/1191 (0.1%)
71	O5	0.51	0/978	0.69	1/1301 (0.1%)
71	o5	0.49	0/978	0.59	0/1301
72	O6	0.50	0/778	0.67	0/1034
72	o6	0.49	0/778	0.62	0/1034
73	O7	0.53	0/696	0.75	1/923 (0.1%)
73	o7	0.57	0/696	0.83	1/923 (0.1%)
74	O8	0.44	0/618	0.61	0/826
74	o8	0.39	0/618	0.57	0/826
75	O9	0.56	0/443	0.77	0/588
75	o9	0.54	0/443	0.65	0/588
76	Q0	0.54	0/423	0.71	0/562
76	q0	0.67	0/423	0.76	0/562
77	Q1	0.45	0/234	0.66	0/300
77	q1	0.50	0/234	0.65	0/300
78	Q2	0.63	1/860 (0.1%)	0.69	0/1136
78	q2	0.67	1/860 (0.1%)	0.69	2/1136 (0.2%)
79	Q3	0.56	0/701	0.72	0/934
79	q3	0.59	0/701	0.68	0/934
80	c0	0.34	0/718	0.60	1/968 (0.1%)
82	p0	0.42	0/977	0.60	0/1313
All	All	0.69	44/430590 (0.0%)	1.10	1799/632148 (0.3%)

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
7	s5	0	1
9	S7	0	1
9	s7	0	1
18	c6	0	1
19	C7	0	1
22	d0	0	1
26	d4	0	1
27	D5	0	1
39	L2	0	2
42	l5	0	1
44	L7	0	1
44	l7	0	2
52	M6	0	1
56	n0	0	1
64	N8	0	1
64	n8	0	1
65	N9	0	1
All	All	0	19

All (44) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	q2	17	CYS	CB-SG	11.01	2.00	1.82
78	Q2	17	CYS	CB-SG	10.91	2.00	1.82
36	5	1152	G	N9-C4	-7.21	1.32	1.38
36	5	706	A	N9-C4	-6.86	1.33	1.37
36	5	2214	A	N9-C4	-6.78	1.33	1.37
36	1	1103	A	N3-C4	6.66	1.38	1.34
36	5	1192	C	N1-C2	6.49	1.46	1.40
36	1	942	U	C4-O4	6.49	1.28	1.23
36	1	1589	A	N9-C4	-6.19	1.34	1.37
36	1	1103	A	N7-C5	6.11	1.43	1.39
36	1	1103	A	N9-C4	6.03	1.41	1.37
36	5	3040	A	N9-C4	-5.89	1.34	1.37
36	1	2874	G	N7-C5	5.85	1.42	1.39
36	5	2881	C	N1-C6	-5.75	1.33	1.37
36	1	213	A	N9-C4	-5.63	1.34	1.37
36	5	1307	G	P-O5'	-5.59	1.54	1.59
36	5	3000	A	N9-C4	-5.47	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1449	A	N9-C4	5.46	1.41	1.37
36	5	3106	A	N9-C4	-5.46	1.34	1.37
36	5	2639	G	N7-C5	-5.44	1.35	1.39
36	5	1332	A	N7-C5	-5.38	1.36	1.39
36	1	1452	A	N9-C4	-5.34	1.34	1.37
40	13	255	CYS	CB-SG	-5.33	1.73	1.81
36	1	2160	G	N9-C4	5.30	1.42	1.38
36	5	39	A	N9-C4	-5.27	1.34	1.37
36	5	818	C	N1-C6	-5.27	1.33	1.37
36	5	2375	G	N7-C5	-5.22	1.36	1.39
36	5	646	A	C6-N1	-5.21	1.31	1.35
36	5	3011	A	N9-C4	-5.21	1.34	1.37
36	5	2640	A	N9-C4	-5.19	1.34	1.37
36	1	2326	A	N9-C4	-5.19	1.34	1.37
36	5	3106	A	N7-C5	-5.19	1.36	1.39
36	1	2618	G	C6-N1	-5.17	1.35	1.39
36	5	2811	A	N9-C4	-5.14	1.34	1.37
1	6	1124	A	N9-C4	-5.12	1.34	1.37
36	5	3138	U	N1-C2	-5.12	1.33	1.38
36	5	402	A	N7-C5	-5.12	1.36	1.39
36	1	1140	G	C6-N1	-5.12	1.35	1.39
36	5	408	A	N3-C4	-5.12	1.31	1.34
36	5	2819	A	N3-C4	-5.12	1.31	1.34
36	1	2207	A	N9-C4	5.11	1.41	1.37
36	5	2172	A	N9-C4	-5.01	1.34	1.37
36	5	2643	A	N9-C4	-5.01	1.34	1.37
36	5	2971	A	N9-C4	5.01	1.40	1.37

All (1799) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-N9	-14.54	117.27	126.00
36	5	1152	G	N3-C4-C5	13.47	135.34	128.60
36	5	1152	G	C2-N3-C4	-13.26	105.27	111.90
36	1	2874	G	C4-N9-C1'	-11.98	110.93	126.50
36	1	2618	G	N1-C6-O6	-11.78	112.83	119.90
36	5	1178	G	C8-N9-C4	-11.71	101.72	106.40
36	1	1192	C	N1-C2-O2	11.67	125.90	118.90
36	5	1897	G	N1-C6-O6	11.30	126.68	119.90
36	5	638	C	C6-N1-C2	-10.99	115.90	120.30
36	5	1192	C	N1-C2-O2	10.84	125.40	118.90
36	5	2403	G	C5-C6-N1	-10.77	106.11	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3278	C	N1-C2-O2	10.64	125.28	118.90
36	5	283	G	C4-C5-N7	10.62	115.05	110.80
36	1	1175	C	C6-N1-C2	10.28	124.41	120.30
36	1	2874	G	C8-N9-C1'	10.21	140.27	127.00
36	1	1149	G	N1-C6-O6	10.15	125.99	119.90
36	1	2160	G	C2-N3-C4	10.11	116.95	111.90
36	5	2403	G	N1-C6-O6	10.03	125.92	119.90
36	1	3278	C	N3-C2-O2	-9.57	115.20	121.90
36	1	2996	U	N1-C2-O2	9.38	129.37	122.80
36	1	2889	C	N3-C2-O2	-9.33	115.37	121.90
1	6	1	U	C2-N1-C1'	9.32	128.89	117.70
36	1	1104	G	O5'-P-OP1	-9.14	97.48	105.70
36	5	3154	C	N1-C2-O2	9.09	124.35	118.90
36	5	942	U	N3-C4-C5	-9.04	109.17	114.60
36	5	1200	A	N1-C6-N6	9.00	124.00	118.60
36	1	2618	G	C5-C6-O6	8.98	133.99	128.60
36	1	860	G	N1-C6-O6	8.90	125.24	119.90
36	5	1152	G	C8-N9-C1'	8.89	138.55	127.00
36	5	2572	C	N1-C2-O2	8.88	124.23	118.90
36	1	860	G	C5-C6-O6	-8.82	123.31	128.60
36	1	2306	C	N1-C2-O2	8.77	124.16	118.90
36	5	1192	C	C2-N1-C1'	8.76	128.44	118.80
36	5	2379	U	N1-C2-O2	-8.75	116.68	122.80
36	1	1897	G	N1-C6-O6	8.73	125.14	119.90
36	5	283	G	C5-C6-O6	-8.69	123.39	128.60
36	5	1149	G	N1-C6-O6	8.64	125.08	119.90
36	5	1420	C	C6-N1-C2	8.62	123.75	120.30
36	5	1367	G	C5-C6-N1	-8.61	107.19	111.50
1	6	453	U	N1-C2-O2	8.59	128.81	122.80
1	6	163	G	N3-C4-N9	-8.57	120.86	126.00
36	5	2395	G	C5-C6-O6	-8.56	123.46	128.60
36	1	1469	C	N1-C2-O2	8.54	124.02	118.90
36	1	2714	G	N3-C4-N9	-8.54	120.88	126.00
36	1	1377	G	C5-C6-O6	-8.53	123.48	128.60
36	1	2874	G	C6-C5-N7	8.52	135.51	130.40
36	1	282	G	C8-N9-C4	-8.50	103.00	106.40
36	1	2996	U	N3-C2-O2	-8.49	116.25	122.20
1	6	1389	C	C2-N1-C1'	8.47	128.12	118.80
36	1	23	A	N1-C6-N6	8.45	123.67	118.60
36	5	1300	G	N1-C6-O6	8.41	124.94	119.90
36	1	2369	G	C8-N9-C4	-8.40	103.04	106.40
36	5	2395	G	N1-C6-O6	8.38	124.93	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1192	C	N3-C2-O2	-8.38	116.04	121.90
36	5	2888	U	C5-C4-O4	-8.37	120.88	125.90
36	5	964	G	C8-N9-C4	-8.36	103.06	106.40
36	5	3154	C	C2-N1-C1'	8.35	127.98	118.80
36	1	3217	C	C2-N1-C1'	8.32	127.95	118.80
1	2	830	U	N3-C2-O2	-8.31	116.38	122.20
36	5	3078	U	N3-C2-O2	-8.31	116.38	122.20
1	6	1581	C	C6-N1-C2	8.31	123.62	120.30
36	5	1085	A	O5'-P-OP1	-8.26	98.27	105.70
36	5	1152	G	N1-C6-O6	8.25	124.85	119.90
36	5	1152	G	C5-N7-C8	-8.24	100.18	104.30
36	5	1156	C	C6-N1-C2	-8.21	117.01	120.30
36	5	2403	G	C4-C5-C6	8.21	123.73	118.80
36	1	2403	G	N1-C6-O6	8.20	124.82	119.90
36	5	2147	A	N1-C6-N6	8.19	123.51	118.60
36	5	2704	A	O5'-P-OP1	-8.19	98.33	105.70
1	2	1182	U	N3-C2-O2	-8.18	116.47	122.20
36	5	3245	A	C5-N7-C8	-8.15	99.83	103.90
36	5	1178	G	N9-C4-C5	8.12	108.65	105.40
36	1	979	U	C6-N1-C2	-8.10	116.14	121.00
36	5	1316	C	N1-C2-O2	-8.10	114.04	118.90
36	1	2679	A	O4'-C1'-N9	8.10	114.68	108.20
36	5	1149	G	C6-C5-N7	-8.05	125.57	130.40
1	6	1185	U	N1-C2-O2	8.04	128.43	122.80
36	1	968	G	N3-C4-C5	-8.03	124.58	128.60
36	5	2874	G	N3-C4-C5	8.02	132.61	128.60
1	2	830	U	N1-C2-O2	8.02	128.41	122.80
36	1	1437	C	C6-N1-C2	-8.00	117.10	120.30
36	5	3093	C	C6-N1-C2	7.98	123.49	120.30
36	5	3245	A	C2-N3-C4	-7.98	106.61	110.60
36	5	3276	G	O4'-C1'-N9	7.97	114.58	108.20
1	6	1000	C	C2-N1-C1'	7.95	127.55	118.80
36	5	2869	U	N1-C2-O2	7.95	128.36	122.80
36	1	2728	G	N3-C4-N9	7.94	130.76	126.00
36	5	2871	G	N1-C6-O6	-7.94	115.14	119.90
36	5	1161	G	N3-C4-C5	-7.93	124.63	128.60
36	5	3245	A	N7-C8-N9	7.93	117.76	113.80
36	5	2315	G	O5'-P-OP1	-7.92	98.57	105.70
36	1	1165	A	C8-N9-C4	7.91	108.97	105.80
36	5	936	A	O5'-P-OP2	-7.91	98.58	105.70
36	1	2257	C	C2-N1-C1'	7.91	127.50	118.80
36	5	640	U	N1-C2-O2	-7.90	117.27	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3278	C	C2-N1-C1'	7.89	127.48	118.80
36	1	1351	U	C2-N1-C1'	7.87	127.14	117.70
36	5	2843	U	N3-C2-O2	-7.86	116.70	122.20
36	1	2978	U	O4'-C1'-N1	7.85	114.48	108.20
36	5	942	U	C6-N1-C2	-7.82	116.31	121.00
36	1	942	U	N3-C4-O4	7.81	124.87	119.40
36	1	1192	C	N3-C2-O2	-7.80	116.44	121.90
36	1	1175	C	C5-C6-N1	-7.80	117.10	121.00
36	5	2830	G	N1-C2-N3	7.80	128.58	123.90
1	2	73	U	O4'-C1'-N1	7.78	114.42	108.20
36	5	985	U	C6-N1-C2	7.77	125.66	121.00
36	5	2572	C	C2-N1-C1'	7.76	127.34	118.80
36	1	2306	C	C2-N1-C1'	7.74	127.32	118.80
36	1	640	U	N1-C2-O2	-7.74	117.39	122.80
36	1	1556	C	C6-N1-C2	-7.72	117.21	120.30
36	5	1149	G	C4-C5-C6	7.70	123.42	118.80
36	5	1368	U	O5'-P-OP1	-7.70	98.77	105.70
36	1	2257	C	C6-N1-C2	-7.68	117.23	120.30
36	5	363	G	C5-C6-O6	-7.66	124.00	128.60
1	2	959	U	N3-C2-O2	-7.62	116.87	122.20
36	5	1854	C	C6-N1-C2	-7.62	117.25	120.30
36	1	2889	C	N1-C2-O2	7.61	123.47	118.90
38	4	99	C	C6-N1-C2	7.61	123.34	120.30
36	1	2286	U	O5'-P-OP2	-7.60	98.86	105.70
36	1	2617	U	C5-C4-O4	7.60	130.46	125.90
36	5	1191	U	N3-C2-O2	7.60	127.52	122.20
36	5	919	U	O5'-P-OP1	7.59	119.81	110.70
36	1	1368	U	O5'-P-OP1	-7.58	98.88	105.70
36	1	2874	G	N3-C4-N9	-7.58	121.45	126.00
36	5	1148	G	C5-C6-O6	-7.58	124.05	128.60
36	5	1151	U	N3-C4-C5	-7.58	110.05	114.60
37	7	69	C	C6-N1-C2	7.58	123.33	120.30
36	1	53	G	N1-C6-O6	-7.58	115.35	119.90
36	1	2572	C	N1-C2-O2	7.57	123.44	118.90
36	5	586	C	C6-N1-C2	7.56	123.33	120.30
36	1	640	U	N3-C2-O2	7.56	127.49	122.20
36	1	1435	A	C8-N9-C4	-7.55	102.78	105.80
36	1	1207	G	C5-C6-O6	-7.55	124.07	128.60
1	6	194	U	C2-N1-C1'	7.54	126.75	117.70
1	6	621	A	O5'-P-OP1	-7.54	98.92	105.70
36	1	344	A	N1-C6-N6	-7.54	114.08	118.60
36	1	2996	U	C2-N1-C1'	7.53	126.74	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1274	C	C6-N1-C2	-7.53	117.29	120.30
36	5	646	A	C8-N9-C4	-7.53	102.79	105.80
36	5	664	U	N3-C2-O2	-7.47	116.97	122.20
36	1	2874	G	N3-C4-C5	7.47	132.33	128.60
36	5	1433	A	C8-N9-C4	-7.47	102.81	105.80
36	5	2913	C	N1-C2-O2	-7.47	114.42	118.90
36	1	2624	G	N1-C6-O6	7.47	124.38	119.90
36	1	1201	C	C5-C6-N1	7.46	124.73	121.00
36	1	1449	A	C2-N3-C4	7.46	114.33	110.60
36	1	1377	G	C4-C5-N7	7.46	113.78	110.80
36	5	406	G	N3-C4-N9	-7.45	121.53	126.00
36	5	2395	G	C4-C5-N7	7.45	113.78	110.80
36	1	2827	U	C5-C4-O4	7.43	130.36	125.90
38	4	125	U	N1-C2-O2	7.43	128.00	122.80
1	2	959	U	N1-C2-O2	7.42	128.00	122.80
36	5	2389	C	N3-C4-C5	7.42	124.87	121.90
36	5	2411	U	C5-C6-N1	-7.41	118.99	122.70
36	5	2843	U	C2-N1-C1'	7.41	126.59	117.70
36	5	1161	G	C2-N3-C4	7.40	115.60	111.90
36	5	2272	G	O4'-C1'-N9	7.40	114.12	108.20
1	2	639	U	N1-C2-O2	7.39	127.98	122.80
36	5	644	G	C5-C6-O6	7.38	133.03	128.60
38	4	103	G	N3-C4-C5	-7.38	124.91	128.60
36	1	979	U	P-O3'-C3'	7.36	128.53	119.70
36	1	1114	U	O5'-P-OP2	-7.36	99.08	105.70
36	1	1556	C	N3-C2-O2	-7.36	116.75	121.90
36	1	2160	G	N3-C4-C5	-7.36	124.92	128.60
36	5	2843	U	N1-C2-O2	7.35	127.94	122.80
36	5	3245	A	N1-C6-N6	7.35	123.01	118.60
36	1	645	A	C6-N1-C2	-7.34	114.20	118.60
36	5	3216	G	C6-C5-N7	-7.34	126.00	130.40
36	5	2964	G	C4-C5-N7	-7.33	107.87	110.80
36	1	1351	U	N1-C2-O2	7.33	127.93	122.80
36	1	1205	A	C8-N9-C4	7.32	108.73	105.80
1	6	1164	G	C4-C5-N7	7.32	113.73	110.80
36	1	1897	G	C6-C5-N7	-7.32	126.01	130.40
36	1	2714	G	N3-C4-C5	7.31	132.26	128.60
1	2	553	G	N1-C6-O6	7.31	124.28	119.90
36	1	363	G	N1-C6-O6	7.30	124.28	119.90
36	5	1437	C	C2-N1-C1'	7.30	126.83	118.80
36	5	3245	A	C6-C5-N7	-7.30	127.19	132.30
36	5	2966	G	C8-N9-C4	-7.29	103.48	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3269	U	N3-C2-O2	-7.29	117.09	122.20
36	1	2382	G	C8-N9-C4	7.29	109.31	106.40
36	1	3307	A	N1-C6-N6	7.28	122.97	118.60
36	1	2761	G	C4-C5-N7	-7.28	107.89	110.80
36	1	2355	G	C5-C6-N1	-7.28	107.86	111.50
36	5	1854	C	N1-C2-O2	7.27	123.26	118.90
36	1	921	A	N1-C6-N6	-7.24	114.26	118.60
37	7	88	G	N3-C4-C5	-7.24	124.98	128.60
36	5	718	G	C4-N9-C1'	7.23	135.90	126.50
36	5	1149	G	C5-C6-N1	-7.22	107.89	111.50
37	3	91	G	C8-N9-C4	-7.22	103.51	106.40
36	1	1308	A	N7-C8-N9	7.21	117.41	113.80
36	5	2964	G	N1-C6-O6	-7.21	115.57	119.90
36	1	2572	C	C6-N1-C2	-7.21	117.42	120.30
36	5	135	C	C6-N1-C2	-7.21	117.42	120.30
1	6	144	U	N3-C2-O2	-7.20	117.16	122.20
36	1	2816	G	N1-C6-O6	7.20	124.22	119.90
36	1	968	G	N3-C4-N9	7.19	130.31	126.00
36	5	2392	C	C6-N1-C2	7.18	123.17	120.30
36	5	776	U	C5-C4-O4	7.17	130.20	125.90
36	1	676	G	C8-N9-C4	-7.17	103.53	106.40
36	5	1434	G	C4-C5-N7	7.17	113.67	110.80
36	5	1161	G	N3-C4-N9	7.17	130.30	126.00
36	1	1308	A	C8-N9-C4	-7.16	102.94	105.80
1	6	813	U	C2-N1-C1'	7.16	126.29	117.70
36	1	1425	U	N3-C2-O2	-7.16	117.19	122.20
1	2	1428	G	O5'-P-OP1	-7.14	99.27	105.70
36	1	1496	C	C2-N1-C1'	7.13	126.65	118.80
36	5	921	A	N1-C6-N6	-7.13	114.32	118.60
36	1	1175	C	C2-N3-C4	-7.13	116.34	119.90
36	1	2636	A	C8-N9-C4	-7.12	102.95	105.80
36	1	942	U	N3-C4-C5	-7.12	110.33	114.60
36	1	3278	C	C6-N1-C2	-7.12	117.45	120.30
36	5	1434	G	N1-C6-O6	7.11	124.17	119.90
36	5	2874	G	C4-N9-C1'	-7.11	117.26	126.50
1	6	194	U	N1-C2-O2	7.11	127.78	122.80
1	2	1052	U	C2-N1-C1'	7.11	126.23	117.70
1	6	194	U	N3-C2-O2	-7.11	117.23	122.20
36	5	2928	C	C6-N1-C2	-7.10	117.46	120.30
36	5	1152	G	C5-C6-N1	-7.10	107.95	111.50
36	1	2875	U	P-O3'-C3'	-7.08	111.21	119.70
36	5	1152	G	N3-C2-N2	-7.07	114.95	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2971	A	C2-N3-C4	7.07	114.14	110.60
36	1	1484	U	P-O3'-C3'	7.07	128.18	119.70
36	5	341	G	C8-N9-C4	-7.06	103.58	106.40
36	5	2572	C	N3-C2-O2	-7.06	116.96	121.90
36	5	3154	C	N3-C2-O2	-7.06	116.96	121.90
1	2	830	U	C2-N1-C1'	7.06	126.17	117.70
1	6	453	U	C2-N1-C1'	7.05	126.17	117.70
1	6	1177	C	C6-N1-C2	7.05	123.12	120.30
36	1	2617	U	N3-C2-O2	-7.05	117.27	122.20
36	5	1307	G	O5'-P-OP1	-7.05	99.36	105.70
36	1	2572	C	N3-C2-O2	-7.05	116.97	121.90
36	5	2869	U	N3-C2-O2	-7.05	117.27	122.20
36	1	979	U	N3-C2-O2	-7.04	117.27	122.20
36	5	358	G	N3-C4-C5	7.04	132.12	128.60
36	5	1161	G	C5-C6-N1	7.04	115.02	111.50
36	5	3181	C	N3-C2-O2	-7.03	116.98	121.90
1	2	728	U	C2-N1-C1'	7.03	126.13	117.70
36	1	1175	C	N3-C4-C5	7.03	124.71	121.90
36	1	859	G	N3-C4-N9	7.03	130.22	126.00
36	1	2816	G	C5-C6-O6	-7.02	124.39	128.60
1	6	1164	G	C5-C6-O6	-7.02	124.39	128.60
36	1	934	G	C4-N9-C1'	7.01	135.61	126.50
36	1	1192	C	C2-N1-C1'	7.00	126.51	118.80
1	2	1370	U	P-O3'-C3'	7.00	128.10	119.70
36	5	1448	U	C5-C6-N1	-7.00	119.20	122.70
36	5	1380	G	C8-N9-C4	6.99	109.20	106.40
36	5	2943	G	C6-C5-N7	-6.99	126.21	130.40
1	2	959	U	C2-N1-C1'	6.98	126.08	117.70
36	5	378	A	C8-N9-C4	6.97	108.59	105.80
36	1	1437	C	C2-N1-C1'	6.97	126.47	118.80
1	6	36	C	C2-N3-C4	-6.96	116.42	119.90
36	5	938	C	N3-C4-C5	6.96	124.68	121.90
1	2	736	C	C5-C6-N1	6.95	124.47	121.00
36	5	2526	C	N1-C2-O2	6.94	123.07	118.90
36	1	2365	C	C6-N1-C2	6.94	123.08	120.30
1	6	151	G	N3-C4-N9	-6.94	121.84	126.00
36	5	1178	G	N7-C8-N9	6.93	116.57	113.10
36	1	186	U	N1-C2-O2	6.92	127.65	122.80
36	5	1300	G	C5-C6-O6	-6.92	124.45	128.60
36	5	2375	G	O4'-C1'-N9	6.92	113.73	108.20
36	1	2571	U	N3-C2-O2	-6.91	117.36	122.20
36	5	1604	G	C4-N9-C1'	6.91	135.49	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1331	U	N3-C2-O2	6.91	127.03	122.20
36	5	1897	G	N3-C2-N2	-6.90	115.07	119.90
36	1	3186	A	N1-C6-N6	-6.90	114.46	118.60
36	1	3310	A	C8-N9-C4	6.89	108.56	105.80
36	5	1152	G	C4-N9-C1'	-6.88	117.55	126.50
36	1	1897	G	C5-C6-O6	-6.87	124.48	128.60
36	5	1495	U	C6-N1-C2	-6.87	116.88	121.00
36	5	1519	G	N1-C6-O6	6.86	124.02	119.90
1	2	12	U	N3-C2-O2	-6.86	117.40	122.20
36	5	880	G	C4-C5-N7	-6.85	108.06	110.80
36	5	2400	G	C5-C6-O6	-6.85	124.49	128.60
36	1	2137	U	N1-C2-O2	6.85	127.60	122.80
36	5	2942	C	C5-C6-N1	6.85	124.42	121.00
36	1	1503	A	C8-N9-C4	6.84	108.54	105.80
36	1	94	G	C8-N9-C4	6.84	109.14	106.40
1	6	863	A	N1-C6-N6	6.83	122.70	118.60
36	1	1331	U	N3-C4-O4	6.82	124.18	119.40
36	1	1581	C	N1-C2-O2	6.82	122.99	118.90
36	5	958	C	C6-N1-C2	-6.81	117.58	120.30
1	2	1157	A	C8-N9-C4	-6.80	103.08	105.80
1	6	151	G	N9-C4-C5	6.80	108.12	105.40
36	5	1184	A	N1-C6-N6	-6.80	114.52	118.60
36	5	2821	C	N3-C4-C5	-6.80	119.18	121.90
36	1	328	U	N3-C2-O2	-6.80	117.44	122.20
36	1	1377	G	N9-C4-C5	-6.79	102.69	105.40
80	c0	83	PRO	N-CA-CB	6.78	111.44	103.30
1	6	1185	U	N3-C2-O2	-6.78	117.46	122.20
36	5	1854	C	N3-C2-O2	-6.77	117.16	121.90
36	5	1434	G	C6-C5-N7	-6.77	126.34	130.40
36	5	776	U	N1-C2-N3	6.77	118.96	114.90
36	1	2868	U	N1-C2-O2	6.77	127.54	122.80
36	5	101	G	O5'-P-OP1	6.76	118.81	110.70
36	1	2851	A	C5-C6-N6	6.76	129.11	123.70
36	5	1495	U	C2-N1-C1'	6.76	125.81	117.70
36	1	53	G	C4-C5-N7	-6.75	108.10	110.80
36	1	1269	U	C2-N1-C1'	6.75	125.80	117.70
36	5	1196	C	C6-N1-C2	6.75	123.00	120.30
36	5	1897	G	C5-C6-O6	-6.75	124.55	128.60
36	5	2981	U	N1-C2-N3	6.75	118.95	114.90
36	1	33	G	O5'-P-OP1	-6.73	99.64	105.70
36	1	1414	G	N1-C6-O6	6.73	123.94	119.90
1	2	507	U	C2-N1-C1'	6.73	125.77	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	942	U	N3-C4-O4	6.72	124.11	119.40
36	5	1437	C	C6-N1-C2	-6.72	117.61	120.30
36	5	2531	C	N1-C2-O2	6.72	122.93	118.90
36	1	54	C	C6-N1-C2	6.71	122.98	120.30
1	2	75	U	C2-N1-C1'	6.71	125.75	117.70
36	1	1520	G	N3-C4-C5	-6.70	125.25	128.60
38	8	38	U	N3-C2-O2	-6.70	117.51	122.20
1	6	813	U	N1-C2-O2	6.70	127.49	122.80
36	5	2403	G	C6-C5-N7	-6.70	126.38	130.40
36	5	2811	A	C8-N9-C4	6.70	108.48	105.80
36	5	2181	C	C6-N1-C2	6.69	122.98	120.30
36	1	213	A	C2-N3-C4	-6.69	107.25	110.60
36	1	1495	U	C5-C6-N1	-6.69	119.35	122.70
36	1	2661	G	N1-C6-O6	6.69	123.91	119.90
36	5	2366	C	C6-N1-C2	6.68	122.97	120.30
36	1	3028	G	N3-C4-N9	6.68	130.01	126.00
36	5	2660	G	N1-C6-O6	6.68	123.91	119.90
1	2	1082	C	N1-C2-O2	6.68	122.91	118.90
36	5	523	A	N1-C6-N6	-6.68	114.59	118.60
36	1	3306	U	C5-C4-O4	6.67	129.90	125.90
36	1	2571	U	C2-N1-C1'	6.67	125.70	117.70
36	5	2289	U	N3-C2-O2	-6.67	117.53	122.20
36	1	1587	A	N1-C6-N6	-6.67	114.60	118.60
36	1	676	G	C6-C5-N7	-6.66	126.40	130.40
36	5	2874	G	N3-C4-N9	-6.66	122.00	126.00
36	5	644	G	C4-C5-N7	-6.66	108.14	110.80
36	1	2571	U	N1-C2-O2	6.66	127.46	122.80
36	5	283	G	C6-C5-N7	-6.66	126.41	130.40
36	5	716	A	N1-C6-N6	6.65	122.59	118.60
36	5	2199	G	N1-C6-O6	6.65	123.89	119.90
38	8	80	A	N7-C8-N9	6.65	117.12	113.80
1	6	1	U	C5-C6-N1	6.65	126.03	122.70
1	6	36	C	N3-C4-C5	6.65	124.56	121.90
1	2	554	C	N1-C2-O2	6.64	122.89	118.90
1	2	934	C	C2-N1-C1'	6.64	126.10	118.80
36	5	1901	A	C5-C6-N1	6.64	121.02	117.70
1	6	1473	U	N3-C2-O2	-6.63	117.56	122.20
36	5	640	U	N3-C2-O2	6.63	126.84	122.20
36	5	968	G	N1-C6-O6	6.63	123.88	119.90
1	6	858	G	O4'-C1'-N9	6.63	113.51	108.20
36	1	646	A	N1-C6-N6	-6.63	114.62	118.60
1	6	1058	U	OP1-P-O3'	6.63	119.79	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	125	U	C2-N1-C1'	6.63	125.65	117.70
36	1	3344	A	O4'-C1'-N9	6.62	113.50	108.20
12	C0	88	PRO	N-CA-CB	6.62	111.25	103.30
36	1	776	U	C4-C5-C6	6.62	123.67	119.70
37	3	82	G	N1-C6-O6	-6.62	115.93	119.90
36	5	2991	A	N1-C6-N6	-6.62	114.63	118.60
1	6	1187	U	C6-N1-C2	-6.62	117.03	121.00
36	5	2327	U	C6-N1-C2	6.62	124.97	121.00
36	5	1433	A	N9-C4-C5	6.61	108.44	105.80
1	2	624	G	N1-C6-O6	-6.61	115.94	119.90
36	1	2355	G	N1-C6-O6	6.60	123.86	119.90
36	5	1114	U	N3-C4-C5	-6.60	110.64	114.60
36	5	2816	G	O4'-C1'-N9	6.60	113.48	108.20
36	1	1508	C	C6-N1-C2	-6.60	117.66	120.30
36	5	816	A	N1-C6-N6	-6.60	114.64	118.60
36	5	3040	A	C8-N9-C4	6.60	108.44	105.80
36	1	883	A	N1-C6-N6	-6.59	114.64	118.60
1	2	1490	C	C6-N1-C2	-6.59	117.66	120.30
36	5	1391	C	C6-N1-C2	6.59	122.94	120.30
36	1	1269	U	N1-C2-O2	6.58	127.41	122.80
1	2	1698	G	P-O3'-C3'	6.57	127.58	119.70
36	1	661	G	C4-C5-N7	6.56	113.42	110.80
36	1	968	G	C5-C6-N1	6.56	114.78	111.50
36	1	1556	C	C2-N1-C1'	6.56	126.01	118.80
36	5	1339	C	C6-N1-C2	-6.55	117.68	120.30
1	2	1761	U	N3-C2-O2	-6.55	117.61	122.20
36	1	1307	G	P-O3'-C3'	6.54	127.55	119.70
36	5	966	U	N3-C2-O2	-6.53	117.63	122.20
36	1	3217	C	C6-N1-C2	-6.53	117.69	120.30
36	1	3217	C	N3-C2-O2	-6.53	117.33	121.90
1	6	25	C	P-O3'-C3'	6.52	127.53	119.70
36	1	924	G	N3-C4-N9	6.52	129.91	126.00
36	1	1380	G	C2-N3-C4	-6.52	108.64	111.90
36	1	1495	U	C4-C5-C6	6.51	123.61	119.70
36	5	646	A	N1-C6-N6	-6.51	114.69	118.60
1	6	1537	C	C6-N1-C2	-6.51	117.70	120.30
36	1	70	A	N1-C6-N6	6.50	122.50	118.60
36	1	2411	U	O5'-P-OP2	-6.50	99.85	105.70
1	2	256	A	C8-N9-C4	-6.50	103.20	105.80
36	1	1556	C	N1-C2-O2	6.50	122.80	118.90
36	1	1788	C	C6-N1-C2	-6.49	117.70	120.30
36	5	1317	A	C4-C5-N7	6.49	113.94	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	406	G	N3-C4-C5	6.49	131.84	128.60
36	5	776	U	N3-C2-O2	-6.48	117.66	122.20
36	1	2284	C	N3-C2-O2	-6.48	117.36	121.90
36	5	3093	C	C5-C6-N1	-6.48	117.76	121.00
54	M8	138	LEU	CA-CB-CG	6.47	130.19	115.30
37	7	19	C	O5'-P-OP2	-6.47	99.87	105.70
36	5	363	G	N1-C6-O6	6.47	123.78	119.90
36	5	1300	G	C6-C5-N7	-6.47	126.52	130.40
36	5	2379	U	O5'-P-OP2	-6.47	99.88	105.70
1	6	453	U	N3-C2-O2	-6.47	117.67	122.20
36	5	2648	G	N3-C4-C5	6.47	131.83	128.60
38	4	53	A	N1-C6-N6	-6.46	114.72	118.60
36	1	1201	C	C5-C4-N4	-6.46	115.68	120.20
73	o7	65	ARG	NE-CZ-NH1	6.46	123.53	120.30
36	5	1152	G	C8-N9-C4	-6.46	103.82	106.40
1	2	542	A	O4'-C1'-N9	6.46	113.37	108.20
36	5	2683	U	C2-N1-C1'	6.46	125.45	117.70
36	5	646	A	C5-C6-N6	6.46	128.87	123.70
70	o4	58	ARG	NE-CZ-NH1	6.46	123.53	120.30
38	4	85	G	N7-C8-N9	6.45	116.33	113.10
36	1	1519	G	O5'-P-OP2	-6.45	99.90	105.70
36	5	967	A	N1-C6-N6	-6.45	114.73	118.60
36	1	2651	G	C8-N9-C4	6.43	108.97	106.40
36	5	587	U	C6-N1-C2	6.43	124.86	121.00
36	1	3214	U	N3-C2-O2	-6.43	117.70	122.20
36	1	3008	A	C2-N3-C4	-6.42	107.39	110.60
36	5	3354	U	N3-C2-O2	-6.42	117.70	122.20
36	1	363	G	C5-C6-O6	-6.42	124.75	128.60
36	5	3099	C	C6-N1-C2	6.42	122.87	120.30
36	1	1094	U	C5-C6-N1	6.42	125.91	122.70
70	O4	51	LEU	CA-CB-CG	6.41	130.05	115.30
36	1	942	U	C4-C5-C6	6.41	123.55	119.70
36	1	2412	G	C5-C6-N1	6.41	114.70	111.50
36	1	1180	A	N9-C4-C5	6.40	108.36	105.80
36	5	21	G	C8-N9-C4	6.40	108.96	106.40
36	5	1114	U	O5'-P-OP2	-6.40	99.94	105.70
36	1	684	G	N1-C6-O6	6.40	123.74	119.90
36	5	2887	A	C2-N3-C4	6.40	113.80	110.60
36	5	283	G	N9-C4-C5	-6.39	102.84	105.40
38	8	23	U	C5-C6-N1	-6.39	119.50	122.70
1	2	992	A	N1-C2-N3	6.38	132.49	129.30
37	3	58	C	C6-N1-C2	-6.38	117.75	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1360	C	C6-N1-C2	6.38	122.85	120.30
36	1	1325	U	O5'-P-OP2	-6.38	99.96	105.70
36	5	3138	U	N1-C2-O2	-6.38	118.33	122.80
36	1	343	U	N1-C2-N3	6.38	118.72	114.90
1	6	342	C	N3-C2-O2	-6.37	117.44	121.90
36	5	360	G	C4-C5-C6	6.37	122.62	118.80
36	5	2990	G	C8-N9-C4	6.37	108.95	106.40
36	1	1308	A	C5-N7-C8	-6.37	100.71	103.90
1	2	1347	U	N1-C2-O2	-6.37	118.34	122.80
36	1	2821	C	C5-C6-N1	-6.36	117.82	121.00
61	N5	34	LEU	CA-CB-CG	6.36	129.94	115.30
36	5	2293	C	N3-C4-N4	6.36	122.45	118.00
1	2	553	G	C6-C5-N7	-6.36	126.58	130.40
1	2	1117	U	N3-C4-O4	6.36	123.85	119.40
36	1	2369	G	N7-C8-N9	6.36	116.28	113.10
36	1	646	A	C5-C6-N6	6.36	128.79	123.70
1	6	400	A	N1-C6-N6	6.35	122.41	118.60
1	6	153	G	N1-C6-O6	6.35	123.71	119.90
1	2	864	U	N3-C2-O2	-6.35	117.75	122.20
36	5	1143	A	C8-N9-C4	6.35	108.34	105.80
1	6	1000	C	C6-N1-C2	-6.34	117.76	120.30
36	5	1342	C	C6-N1-C2	6.34	122.84	120.30
1	2	704	C	N1-C2-O2	6.34	122.70	118.90
36	1	332	C	C6-N1-C2	6.34	122.84	120.30
36	5	2900	A	N1-C6-N6	-6.34	114.80	118.60
36	5	642	U	O5'-P-OP2	-6.34	100.00	105.70
36	1	917	A	N1-C6-N6	-6.34	114.80	118.60
36	5	1317	A	C5-N7-C8	-6.33	100.73	103.90
36	1	984	G	N3-C4-C5	-6.33	125.43	128.60
1	6	1	U	C6-N1-C1'	-6.33	112.34	121.20
36	1	1131	G	C5-C6-O6	-6.33	124.80	128.60
36	1	2618	G	N3-C4-C5	-6.33	125.44	128.60
36	1	92	G	C4-C5-N7	6.33	113.33	110.80
36	1	1140	G	N1-C2-N2	-6.33	110.51	116.20
36	1	1377	G	C8-N9-C4	6.33	108.93	106.40
36	5	2147	A	C6-C5-N7	-6.32	127.87	132.30
36	1	53	G	C5-C6-O6	6.32	132.39	128.60
36	5	3092	C	C6-N1-C2	6.32	122.83	120.30
36	1	914	A	N1-C6-N6	-6.32	114.81	118.60
36	5	708	G	C8-N9-C4	-6.32	103.87	106.40
36	5	1845	G	N3-C4-C5	-6.32	125.44	128.60
36	5	3140	G	N1-C6-O6	6.32	123.69	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	49	G	C5-C6-N1	-6.32	108.34	111.50
36	5	1178	G	C5-C6-O6	6.31	132.39	128.60
36	5	1316	C	N3-C4-C5	-6.31	119.38	121.90
36	1	934	G	C8-N9-C1'	-6.30	118.81	127.00
37	7	39	C	C6-N1-C2	-6.30	117.78	120.30
36	1	85	A	C2-N3-C4	-6.30	107.45	110.60
36	1	2846	U	N3-C2-O2	-6.30	117.79	122.20
36	5	964	G	N7-C8-N9	6.30	116.25	113.10
36	5	2231	C	O4'-C1'-N1	6.30	113.24	108.20
36	1	1604	G	C4-N9-C1'	6.29	134.68	126.50
36	1	3319	U	P-O3'-C3'	6.29	127.25	119.70
36	5	1200	A	C5-C6-N6	-6.29	118.67	123.70
36	1	2355	G	C6-C5-N7	-6.29	126.62	130.40
1	6	1102	G	N3-C4-C5	6.29	131.75	128.60
1	2	1280	C	C6-N1-C2	-6.28	117.79	120.30
1	2	1591	C	C6-N1-C2	-6.28	117.79	120.30
36	5	3245	A	C4-C5-N7	6.28	113.84	110.70
36	1	2851	A	N1-C6-N6	-6.28	114.83	118.60
36	5	1017	C	C5-C6-N1	6.28	124.14	121.00
36	1	80	G	C8-N9-C4	6.27	108.91	106.40
36	5	2379	U	N1-C2-N3	6.27	118.66	114.90
36	5	283	G	C5-N7-C8	-6.27	101.16	104.30
36	5	824	C	N3-C2-O2	-6.27	117.51	121.90
1	6	1187	U	C5-C6-N1	6.27	125.83	122.70
1	2	1052	U	N1-C2-O2	6.26	127.19	122.80
36	5	2816	G	N3-C4-C5	6.26	131.73	128.60
36	5	3050	U	N3-C4-O4	-6.26	115.02	119.40
36	5	788	C	C6-N1-C2	-6.25	117.80	120.30
1	6	1473	U	C2-N1-C1'	6.25	125.20	117.70
36	5	646	A	N1-C2-N3	6.24	132.42	129.30
36	1	2572	C	C2-N1-C1'	6.24	125.67	118.80
36	5	1548	C	N3-C2-O2	6.24	126.27	121.90
1	6	608	U	N3-C2-O2	-6.24	117.83	122.20
36	1	92	G	C5-C6-O6	-6.23	124.86	128.60
36	1	1309	U	N3-C2-O2	-6.23	117.84	122.20
36	1	874	U	O5'-P-OP1	-6.22	100.10	105.70
36	5	586	C	N3-C2-O2	6.22	126.25	121.90
36	5	3366	G	N3-C4-C5	-6.22	125.49	128.60
36	5	1142	G	C8-N9-C4	-6.22	103.91	106.40
1	2	1039	A	O4'-C1'-N9	6.21	113.17	108.20
36	1	1198	C	C6-N1-C2	-6.21	117.81	120.30
18	C6	40	GLU	C-N-CD	-6.21	106.93	120.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2816	G	C8-N9-C1'	6.21	135.07	127.00
37	7	93	C	O5'-P-OP2	-6.20	100.12	105.70
37	7	100	C	C6-N1-C2	6.20	122.78	120.30
1	2	1105	C	C6-N1-C2	-6.20	117.82	120.30
36	1	2624	G	C6-C5-N7	-6.20	126.68	130.40
36	5	2836	C	C4-C5-C6	6.20	120.50	117.40
38	8	80	A	C8-N9-C4	-6.20	103.32	105.80
1	2	639	U	N3-C2-O2	-6.20	117.86	122.20
36	1	1421	G	N3-C4-N9	6.20	129.72	126.00
36	1	2160	G	C4-C5-N7	-6.20	108.32	110.80
36	1	2257	C	O4'-C1'-N1	6.20	113.16	108.20
36	1	228	U	N3-C2-O2	-6.19	117.86	122.20
36	5	1199	C	C6-N1-C2	6.19	122.78	120.30
36	1	2728	G	N3-C4-C5	-6.19	125.50	128.60
36	5	1239	C	C5-C6-N1	6.19	124.09	121.00
36	1	1904	C	C6-N1-C2	-6.19	117.83	120.30
36	5	921	A	N9-C4-C5	6.18	108.27	105.80
36	1	2392	C	C6-N1-C2	6.18	122.77	120.30
36	1	3306	U	N3-C4-O4	-6.18	115.08	119.40
36	5	1169	A	N1-C6-N6	-6.18	114.89	118.60
36	1	1389	G	C4-C5-N7	6.17	113.27	110.80
36	5	718	G	C8-N9-C1'	-6.17	118.98	127.00
36	5	2231	C	N3-C4-C5	-6.17	119.43	121.90
36	5	3374	U	C5-C4-O4	6.17	129.60	125.90
36	1	3001	C	C6-N1-C2	6.17	122.77	120.30
36	5	390	G	C8-N9-C4	-6.16	103.94	106.40
36	1	1407	A	C5-N7-C8	6.16	106.98	103.90
36	5	798	G	C8-N9-C4	-6.15	103.94	106.40
36	5	2379	U	C5-C6-N1	-6.15	119.62	122.70
36	1	1835	A	N1-C6-N6	-6.15	114.91	118.60
36	1	1820	U	P-O3'-C3'	6.15	127.08	119.70
36	1	3344	A	N7-C8-N9	6.15	116.88	113.80
36	5	776	U	N3-C4-O4	-6.15	115.09	119.40
36	5	934	G	N3-C4-N9	6.15	129.69	126.00
1	6	1164	G	N9-C4-C5	-6.14	102.94	105.40
38	8	38	U	C2-N1-C1'	6.14	125.07	117.70
36	1	1380	G	N1-C6-O6	6.14	123.58	119.90
36	5	3050	U	C5-C4-O4	6.14	129.58	125.90
36	1	2434	U	N1-C2-O2	6.13	127.09	122.80
36	5	1004	U	N3-C4-O4	6.13	123.69	119.40
36	5	958	C	N3-C2-O2	-6.13	117.61	121.90
1	2	507	U	N3-C2-O2	-6.12	117.91	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	636	C	N3-C4-C5	6.12	124.35	121.90
36	5	2337	C	N1-C2-O2	6.12	122.57	118.90
1	2	736	C	C2-N1-C1'	6.12	125.53	118.80
36	1	2624	G	C8-N9-C4	-6.12	103.95	106.40
36	1	273	A	C8-N9-C4	6.12	108.25	105.80
36	5	1790	G	N1-C6-O6	6.12	123.57	119.90
36	1	1634	G	C8-N9-C4	-6.12	103.95	106.40
36	5	716	A	N9-C4-C5	-6.12	103.35	105.80
1	6	1698	G	P-O3'-C3'	6.11	127.03	119.70
36	1	1897	G	C4-C5-N7	6.11	113.24	110.80
1	2	421	A	C8-N9-C4	6.10	108.24	105.80
36	5	2964	G	C5-C6-O6	6.10	132.26	128.60
36	1	676	G	C4-N9-C1'	6.10	134.43	126.50
36	1	676	G	N3-C4-C5	-6.09	125.56	128.60
36	1	1140	G	N1-C2-N3	6.09	127.55	123.90
36	5	2996	U	N1-C2-O2	6.08	127.06	122.80
36	1	2816	G	C8-N9-C4	6.08	108.83	106.40
36	5	2385	G	C2-N3-C4	-6.08	108.86	111.90
36	1	1604	G	N3-C4-C5	-6.08	125.56	128.60
36	5	1192	C	C6-N1-C1'	-6.08	113.51	120.80
1	2	1051	G	P-O3'-C3'	6.07	126.99	119.70
36	5	2400	G	C4-C5-N7	6.07	113.23	110.80
36	5	2648	G	C2-N3-C4	-6.07	108.86	111.90
36	1	1365	G	C8-N9-C4	-6.07	103.97	106.40
36	1	2815	G	O5'-P-OP2	-6.07	100.24	105.70
36	5	776	U	C5-C6-N1	-6.07	119.67	122.70
36	1	2874	G	N7-C8-N9	-6.07	110.07	113.10
36	1	3028	G	C4-N9-C1'	6.07	134.39	126.50
38	4	125	U	N3-C2-O2	-6.07	117.95	122.20
36	1	2821	C	C6-N1-C2	6.07	122.73	120.30
36	5	1191	U	C2-N1-C1'	-6.06	110.42	117.70
36	1	2137	U	N3-C2-O2	-6.06	117.96	122.20
36	5	718	G	C6-C5-N7	-6.06	126.76	130.40
36	5	2403	G	C4-N9-C1'	6.06	134.38	126.50
36	1	2814	G	O5'-P-OP1	-6.06	100.25	105.70
36	5	82	C	C4-C5-C6	6.06	120.43	117.40
1	2	428	A	C8-N9-C4	-6.06	103.38	105.80
38	8	82	U	C5-C4-O4	6.06	129.53	125.90
36	5	393	U	C6-N1-C2	-6.05	117.37	121.00
1	6	1389	C	C6-N1-C1'	-6.05	113.54	120.80
36	1	282	G	N7-C8-N9	6.05	116.12	113.10
36	5	882	A	C6-N1-C2	-6.05	114.97	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2403	G	C6-C5-N7	-6.04	126.77	130.40
1	2	610	G	C4-N9-C1'	6.04	134.36	126.50
36	5	2819	A	O5'-P-OP2	-6.04	100.26	105.70
36	5	2992	U	O5'-P-OP2	-6.04	100.26	105.70
53	m7	3	ARG	NE-CZ-NH2	-6.04	117.28	120.30
36	5	2968	G	N1-C6-O6	-6.04	116.28	119.90
36	1	350	C	N1-C2-O2	6.03	122.52	118.90
1	6	1490	C	O5'-P-OP1	-6.03	100.27	105.70
36	1	3170	A	C8-N9-C4	-6.03	103.39	105.80
37	7	101	G	C6-C5-N7	-6.03	126.78	130.40
1	2	73	U	P-O3'-C3'	6.03	126.93	119.70
36	1	684	G	C4-C5-N7	6.03	113.21	110.80
36	5	2164	A	C8-N9-C4	-6.03	103.39	105.80
36	5	2825	C	C6-N1-C2	6.03	122.71	120.30
36	1	3209	A	N1-C6-N6	6.02	122.21	118.60
36	1	2831	G	N1-C6-O6	6.02	123.51	119.90
36	1	29	C	C6-N1-C2	6.01	122.71	120.30
44	17	83	LEU	CA-CB-CG	6.01	129.13	115.30
36	5	1152	G	N7-C8-N9	6.01	116.10	113.10
36	1	2245	C	C6-N1-C2	-6.01	117.90	120.30
36	5	2935	U	O5'-P-OP2	-6.01	100.30	105.70
1	6	1347	U	N1-C2-O2	-6.00	118.60	122.80
36	5	2362	C	N3-C4-N4	-6.00	113.80	118.00
1	6	163	G	N9-C4-C5	6.00	107.80	105.40
1	6	1000	C	N3-C2-O2	-6.00	117.70	121.90
36	5	1604	G	C8-N9-C1'	-6.00	119.20	127.00
1	2	1198	G	C8-N9-C4	-6.00	104.00	106.40
36	1	2899	C	N3-C2-O2	-6.00	117.70	121.90
36	1	2434	U	N3-C2-O2	-5.99	118.00	122.20
36	5	942	U	C5-C6-N1	5.99	125.70	122.70
36	1	1201	C	N3-C4-N4	5.99	122.19	118.00
36	5	406	G	O4'-C1'-N9	5.99	112.99	108.20
1	2	507	U	N1-C2-O2	5.99	126.99	122.80
1	6	151	G	N3-C2-N2	-5.99	115.71	119.90
36	5	630	A	C2-N3-C4	-5.99	107.61	110.60
36	1	2903	A	C8-N9-C4	5.98	108.19	105.80
36	1	3028	G	C8-N9-C1'	-5.98	119.22	127.00
36	5	1366	A	N1-C6-N6	-5.98	115.01	118.60
36	5	2552	C	N1-C2-O2	5.98	122.49	118.90
36	5	2643	A	C8-N9-C4	5.98	108.19	105.80
36	1	1835	A	P-O3'-C3'	5.98	126.87	119.70
36	1	2344	U	C5-C6-N1	-5.97	119.72	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3277	U	N3-C2-O2	-5.97	118.02	122.20
1	6	472	U	C2-N3-C4	-5.97	123.42	127.00
1	6	1010	C	C6-N1-C2	-5.97	117.91	120.30
36	5	3052	G	N3-C4-N9	-5.96	122.42	126.00
36	5	3000	A	C8-N9-C4	5.96	108.18	105.80
36	5	36	C	C6-N1-C2	-5.96	117.92	120.30
36	5	1914	G	C8-N9-C4	-5.96	104.02	106.40
1	6	363	G	N1-C6-O6	5.96	123.47	119.90
36	5	2941	A	C6-N1-C2	-5.95	115.03	118.60
36	1	1790	G	N1-C6-O6	5.95	123.47	119.90
1	6	472	U	N1-C2-N3	5.95	118.47	114.90
1	2	386	G	N1-C6-O6	-5.95	116.33	119.90
1	6	1537	C	C6-N1-C1'	5.95	127.94	120.80
36	1	1407	A	N7-C8-N9	-5.95	110.83	113.80
36	5	2825	C	C5-C4-N4	-5.95	116.04	120.20
37	7	49	G	C4-C5-C6	5.95	122.37	118.80
1	2	1761	U	C6-N1-C2	-5.94	117.44	121.00
36	5	2899	C	C2-N1-C1'	5.94	125.34	118.80
1	2	1762	A	C2-N3-C4	-5.94	107.63	110.60
36	1	2711	C	N3-C4-C5	-5.93	119.53	121.90
36	5	277	G	C8-N9-C4	5.93	108.77	106.40
36	1	981	U	C5-C6-N1	5.93	125.66	122.70
36	5	1592	G	C5-C6-N1	-5.93	108.53	111.50
48	m1	112	LEU	CA-CB-CG	5.93	128.94	115.30
38	4	85	G	C8-N9-C4	-5.93	104.03	106.40
36	5	648	C	C2-N1-C1'	5.93	125.32	118.80
36	5	2199	G	C5-C6-N1	-5.93	108.54	111.50
36	5	2822	U	N3-C4-O4	5.93	123.55	119.40
36	1	651	G	N3-C4-C5	-5.92	125.64	128.60
36	1	2827	U	N3-C4-O4	-5.92	115.25	119.40
36	5	358	G	N3-C4-N9	-5.92	122.44	126.00
36	5	1116	G	N3-C4-C5	-5.92	125.64	128.60
1	2	1568	C	P-O3'-C3'	5.92	126.81	119.70
36	5	107	A	N1-C6-N6	-5.92	115.05	118.60
36	1	2871	G	C8-N9-C1'	5.92	134.69	127.00
36	5	2859	U	C6-N1-C2	5.92	124.55	121.00
36	1	2427	U	N3-C4-O4	-5.92	115.26	119.40
36	5	425	G	C8-N9-C4	5.92	108.77	106.40
1	6	402	C	O5'-P-OP2	-5.91	100.38	105.70
36	5	1222	G	P-O3'-C3'	5.91	126.80	119.70
36	5	91	G	N1-C6-O6	5.91	123.44	119.90
36	5	2395	G	C5-N7-C8	-5.91	101.35	104.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2629	U	N3-C2-O2	5.90	126.33	122.20
36	5	329	U	N3-C2-O2	-5.90	118.07	122.20
36	5	2506	U	C5-C6-N1	5.90	125.65	122.70
36	1	343	U	C4-C5-C6	5.90	123.24	119.70
36	1	2160	G	C8-N9-C4	-5.90	104.04	106.40
1	2	720	G	OP1-P-O3'	5.90	118.17	105.20
36	5	406	G	C4-N9-C1'	-5.90	118.83	126.50
36	5	1115	G	C4-N9-C1'	5.89	134.16	126.50
36	5	2395	G	N3-C4-C5	5.89	131.55	128.60
36	1	2871	G	N3-C4-C5	5.89	131.55	128.60
36	5	1371	G	O5'-P-OP2	-5.89	100.40	105.70
36	5	3045	G	N1-C6-O6	5.89	123.44	119.90
36	1	2871	G	N3-C4-N9	-5.89	122.47	126.00
36	5	2128	C	N3-C4-C5	5.89	124.26	121.90
36	1	2855	U	C5-C6-N1	-5.89	119.76	122.70
36	5	919	U	C5-C6-N1	-5.89	119.76	122.70
36	5	2281	A	O4'-C1'-N9	5.89	112.91	108.20
36	5	2356	A	C2-N3-C4	-5.89	107.66	110.60
36	5	2617	U	O5'-P-OP2	-5.89	100.40	105.70
36	5	2392	C	N3-C4-C5	5.88	124.25	121.90
36	5	344	A	O5'-P-OP1	-5.88	100.41	105.70
36	5	2874	G	P-O3'-C3'	5.88	126.76	119.70
36	5	2663	G	C4-C5-N7	5.88	113.15	110.80
1	6	765	G	C8-N9-C4	5.88	108.75	106.40
1	2	610	G	C8-N9-C1'	-5.88	119.36	127.00
1	2	1389	C	C2-N1-C1'	5.87	125.26	118.80
36	5	2377	G	C5-C6-N1	5.87	114.44	111.50
36	1	2874	G	C8-N9-C4	5.87	108.75	106.40
1	6	747	C	C6-N1-C2	-5.87	117.95	120.30
36	5	884	A	C2-N3-C4	-5.87	107.67	110.60
1	6	620	A	N9-C4-C5	5.87	108.15	105.80
36	5	2584	G	C4-N9-C1'	5.87	134.13	126.50
36	5	1211	U	N3-C4-C5	5.87	118.12	114.60
36	1	2624	G	C5-C6-O6	-5.87	125.08	128.60
1	2	730	G	C4-N9-C1'	5.86	134.12	126.50
36	1	320	G	C4-N9-C1'	-5.86	118.88	126.50
36	1	1346	G	C2-N3-C4	-5.86	108.97	111.90
36	5	1604	G	N3-C4-C5	-5.86	125.67	128.60
36	1	1450	G	C5-N7-C8	-5.86	101.37	104.30
36	1	2651	G	N7-C8-N9	-5.86	110.17	113.10
36	5	2816	G	N3-C4-N9	-5.86	122.49	126.00
36	5	2915	U	C6-N1-C2	5.86	124.52	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1720	U	C5-C4-O4	5.86	129.41	125.90
36	1	2870	C	C2-N1-C1'	-5.85	112.36	118.80
36	1	859	G	C6-C5-N7	-5.85	126.89	130.40
36	1	2206	G	N1-C6-O6	5.85	123.41	119.90
36	1	2275	A	O5'-P-OP1	-5.85	100.43	105.70
36	5	3245	A	C5-C6-N1	-5.85	114.78	117.70
36	1	672	A	N3-C4-C5	5.85	130.89	126.80
36	1	1899	G	N1-C6-O6	-5.85	116.39	119.90
36	5	1004	U	N3-C4-C5	-5.85	111.09	114.60
36	1	888	A	C8-N9-C4	5.84	108.14	105.80
36	5	2293	C	C5-C4-N4	-5.84	116.11	120.20
1	2	1600	A	N1-C2-N3	5.84	132.22	129.30
36	1	1165	A	N7-C8-N9	-5.83	110.88	113.80
1	2	75	U	N1-C2-O2	5.83	126.88	122.80
36	1	2874	G	N9-C1'-C2'	5.83	121.58	114.00
36	1	2121	G	N1-C6-O6	-5.83	116.40	119.90
36	5	3036	G	N1-C2-N3	5.83	127.40	123.90
36	1	2764	C	N3-C4-N4	5.83	122.08	118.00
1	6	1581	C	N3-C4-C5	5.83	124.23	121.90
36	5	919	U	OP1-P-OP2	-5.83	110.86	119.60
36	1	2613	U	O5'-P-OP2	-5.82	100.46	105.70
36	5	1392	G	C8-N9-C4	5.82	108.73	106.40
36	5	1433	A	N1-C6-N6	-5.82	115.11	118.60
36	5	788	C	N3-C4-C5	-5.82	119.57	121.90
36	5	1016	C	O5'-P-OP1	-5.82	100.46	105.70
36	1	2623	G	C2-N3-C4	-5.82	108.99	111.90
36	1	2344	U	O5'-P-OP2	-5.82	100.47	105.70
1	6	1700	C	C2-N1-C1'	5.82	125.20	118.80
36	1	901	G	N1-C6-O6	5.81	123.39	119.90
36	1	2620	G	N1-C6-O6	5.81	123.39	119.90
36	5	1046	A	O5'-P-OP1	-5.81	100.47	105.70
36	5	1188	U	N1-C2-N3	5.81	118.39	114.90
36	5	2355	G	C2-N3-C4	-5.81	108.99	111.90
36	5	1364	C	OP2-P-O3'	5.81	117.99	105.20
36	5	2899	C	N3-C2-O2	-5.81	117.83	121.90
15	C3	22	ALA	C-N-CD	-5.81	107.82	120.60
36	1	23	A	C5-C6-N6	-5.81	119.05	123.70
36	5	1496	C	C2-N1-C1'	5.81	125.19	118.80
36	5	2305	G	C8-N9-C4	-5.81	104.08	106.40
36	5	2951	G	O5'-P-OP1	-5.80	100.48	105.70
36	1	1139	G	C5-C6-N1	-5.80	108.60	111.50
36	1	2831	G	C5-C6-N1	-5.80	108.60	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	358	U	O5'-P-OP1	-5.80	100.48	105.70
36	1	324	A	N1-C2-N3	5.80	132.20	129.30
36	1	1191	U	C2-N1-C1'	-5.80	110.74	117.70
36	5	2411	U	C6-N1-C2	5.80	124.48	121.00
36	5	2373	A	C2-N3-C4	5.80	113.50	110.60
36	1	24	G	C8-N9-C1'	-5.80	119.46	127.00
36	1	2367	A	C5-C6-N6	-5.80	119.06	123.70
36	5	1766	G	C4-C5-N7	5.79	113.12	110.80
36	5	2753	G	C4-C5-N7	5.79	113.12	110.80
36	5	2950	G	C8-N9-C4	-5.79	104.08	106.40
36	1	2784	G	N1-C6-O6	-5.79	116.43	119.90
36	5	1177	G	N1-C6-O6	-5.79	116.43	119.90
36	1	3214	U	C2-N1-C1'	5.79	124.65	117.70
36	1	3217	C	N1-C2-O2	5.79	122.37	118.90
36	5	1437	C	C5-C6-N1	5.79	123.89	121.00
36	1	3306	U	N3-C2-O2	-5.79	118.15	122.20
37	3	93	C	N1-C2-O2	5.78	122.37	118.90
36	5	46	U	C5-C4-O4	-5.78	122.43	125.90
36	5	824	C	N1-C2-O2	5.78	122.37	118.90
36	5	2403	G	O5'-P-OP2	-5.78	100.50	105.70
36	5	2608	G	N1-C6-O6	5.78	123.37	119.90
36	1	406	G	O4'-C1'-N9	5.78	112.83	108.20
36	1	1167	U	C5-C6-N1	-5.78	119.81	122.70
36	1	28	C	C6-N1-C2	5.78	122.61	120.30
36	5	2797	C	C6-N1-C2	-5.78	117.99	120.30
36	5	92	G	C5-C6-N1	5.78	114.39	111.50
36	1	1201	C	C6-N1-C2	-5.78	117.99	120.30
36	5	216	G	N1-C6-O6	5.78	123.37	119.90
36	5	880	G	N7-C8-N9	-5.78	110.21	113.10
36	1	1115	G	N7-C8-N9	5.77	115.99	113.10
36	1	634	C	C6-N1-C2	5.77	122.61	120.30
36	1	3269	U	N1-C2-O2	5.77	126.84	122.80
36	5	200	C	N3-C4-N4	5.77	122.04	118.00
36	1	1404	G	N3-C4-N9	-5.77	122.54	126.00
36	1	2618	G	N9-C4-C5	5.77	107.71	105.40
36	5	929	A	O5'-P-OP2	-5.77	100.51	105.70
36	5	2192	C	C6-N1-C2	-5.77	117.99	120.30
36	5	1149	G	C4-N9-C1'	5.77	134.00	126.50
36	1	1793	C	N1-C2-O2	5.76	122.36	118.90
36	5	2289	U	N1-C2-O2	5.76	126.83	122.80
36	1	702	C	N3-C2-O2	-5.76	117.87	121.90
36	1	1320	C	C6-N1-C2	-5.76	118.00	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	440	U	N1-C2-N3	5.76	118.36	114.90
1	6	1389	C	C5-C6-N1	5.76	123.88	121.00
36	1	1269	U	N3-C2-O2	-5.76	118.17	122.20
36	5	3214	U	N3-C2-O2	-5.76	118.17	122.20
36	1	1351	U	C5-C6-N1	5.76	125.58	122.70
36	1	1592	G	C5-C6-N1	-5.76	108.62	111.50
36	1	1868	G	N3-C4-C5	-5.76	125.72	128.60
36	5	32	U	N1-C2-N3	5.75	118.35	114.90
36	5	360	G	N3-C4-C5	-5.75	125.72	128.60
36	5	364	G	N9-C4-C5	-5.75	103.10	105.40
36	1	1838	G	C5-C6-O6	-5.75	125.15	128.60
36	1	1119	C	C6-N1-C2	5.75	122.60	120.30
36	5	2526	C	N3-C2-O2	-5.75	117.88	121.90
36	1	676	G	N7-C8-N9	5.75	115.97	113.10
36	5	1901	A	N1-C6-N6	-5.75	115.15	118.60
36	5	3216	G	N3-C4-N9	5.75	129.45	126.00
36	1	350	C	N3-C2-O2	-5.75	117.88	121.90
36	1	1469	C	N3-C2-O2	-5.75	117.88	121.90
36	1	2661	G	C6-C5-N7	-5.74	126.95	130.40
1	6	609	U	C5-C6-N1	-5.74	119.83	122.70
36	1	187	A	C8-N9-C4	-5.74	103.50	105.80
1	6	610	G	C8-N9-C1'	-5.74	119.54	127.00
36	5	948	C	N3-C4-C5	5.74	124.20	121.90
24	D2	93	LEU	CA-CB-CG	5.74	128.50	115.30
36	1	1421	G	N9-C4-C5	-5.74	103.11	105.40
41	L4	327	LEU	CA-CB-CG	5.74	128.50	115.30
36	1	937	G	C2-N3-C4	-5.74	109.03	111.90
36	5	1307	G	P-O3'-C3'	5.74	126.58	119.70
1	2	728	U	N1-C2-O2	5.73	126.81	122.80
36	5	383	G	N1-C6-O6	5.73	123.34	119.90
1	6	1027	A	C2-N3-C4	-5.73	107.73	110.60
36	5	1367	G	C4-C5-C6	5.73	122.24	118.80
36	1	2418	G	N9-C4-C5	-5.73	103.11	105.40
36	1	2983	C	C5-C4-N4	5.73	124.21	120.20
36	5	2852	C	C6-N1-C2	5.73	122.59	120.30
36	5	3000	A	N1-C6-N6	5.73	122.04	118.60
38	8	135	G	C8-N9-C4	5.73	108.69	106.40
36	5	2936	A	C2-N3-C4	5.73	113.46	110.60
1	2	694	U	C2-N1-C1'	5.72	124.57	117.70
36	5	3246	G	C4-N9-C1'	5.72	133.94	126.50
1	2	1280	C	N3-C4-C5	-5.72	119.61	121.90
36	5	3154	C	C6-N1-C1'	-5.72	113.93	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	661	G	C6-C5-N7	-5.72	126.97	130.40
36	1	1110	U	C5-C4-O4	-5.72	122.47	125.90
36	5	3362	A	O4'-C1'-N9	5.72	112.77	108.20
1	2	1600	A	O4'-C1'-N9	5.72	112.77	108.20
36	1	636	C	N1-C2-O2	5.72	122.33	118.90
36	1	2541	U	P-O3'-C3'	5.71	126.56	119.70
36	5	888	A	N1-C6-N6	5.71	122.03	118.60
36	5	2283	G	N1-C6-O6	5.71	123.33	119.90
36	5	2648	G	N3-C4-N9	-5.71	122.57	126.00
36	5	2405	C	N3-C2-O2	-5.71	117.90	121.90
1	6	1773	C	N3-C4-C5	-5.71	119.62	121.90
36	5	561	C	C6-N1-C2	-5.71	118.02	120.30
36	5	1178	G	N3-C4-C5	-5.71	125.75	128.60
36	5	1396	C	C6-N1-C2	5.71	122.58	120.30
36	5	1481	A	C8-N9-C4	-5.71	103.52	105.80
36	5	364	G	C4-C5-N7	5.71	113.08	110.80
36	5	1927	G	C6-C5-N7	-5.71	126.98	130.40
36	1	2284	C	N1-C2-O2	5.70	122.32	118.90
36	5	1116	G	O5'-P-OP1	-5.70	100.57	105.70
36	5	2816	G	N1-C6-O6	5.70	123.32	119.90
1	6	25	C	OP2-P-O3'	5.70	117.73	105.20
36	1	105	C	C6-N1-C2	5.70	122.58	120.30
36	5	3246	G	C8-N9-C1'	-5.69	119.60	127.00
36	1	1838	G	C4-C5-N7	5.69	113.08	110.80
36	1	2137	U	C2-N1-C1'	5.69	124.53	117.70
1	6	1389	C	N1-C2-O2	5.69	122.31	118.90
36	5	2287	C	C6-N1-C2	-5.69	118.02	120.30
1	2	1456	C	C2-N1-C1'	5.69	125.06	118.80
36	1	2194	G	N1-C6-O6	5.69	123.31	119.90
36	5	43	A	O4'-C1'-N9	5.69	112.75	108.20
36	1	2306	C	N3-C2-O2	-5.69	117.92	121.90
36	1	1404	G	N3-C4-C5	5.69	131.44	128.60
3	S1	181	LEU	CA-CB-CG	5.68	128.38	115.30
36	1	684	G	C5-C6-O6	-5.68	125.19	128.60
36	1	917	A	O5'-P-OP2	-5.68	100.59	105.70
36	5	2816	G	C4-N9-C1'	-5.68	119.11	126.50
1	6	1560	U	N3-C2-O2	-5.68	118.22	122.20
36	1	1496	C	N1-C2-O2	5.68	122.31	118.90
36	1	947	G	C5-C6-N1	-5.68	108.66	111.50
36	1	1508	C	N3-C4-C5	-5.68	119.63	121.90
1	6	1097	U	P-O3'-C3'	5.68	126.51	119.70
37	7	101	G	N1-C6-O6	5.68	123.31	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2341	A	C8-N9-C4	5.68	108.07	105.80
36	5	3128	G	C4-C5-N7	5.68	113.07	110.80
36	1	2618	G	C4-C5-N7	-5.67	108.53	110.80
36	5	2552	C	C2-N1-C1'	5.67	125.04	118.80
36	5	2996	U	N1-C2-N3	-5.67	111.50	114.90
36	5	1438	U	C6-N1-C2	-5.67	117.60	121.00
38	8	158	U	O4'-C1'-N1	5.67	112.74	108.20
36	1	640	U	N3-C4-O4	5.67	123.37	119.40
36	5	112	U	O4'-C1'-N1	5.67	112.73	108.20
36	5	1434	G	C5-C6-O6	-5.67	125.20	128.60
36	5	2156	C	C6-N1-C2	5.67	122.57	120.30
36	5	2847	A	C8-N9-C4	5.67	108.07	105.80
61	N5	38	LEU	CA-CB-CG	5.67	128.33	115.30
1	6	123	G	C8-N9-C4	-5.66	104.14	106.40
6	s4	38	LEU	CA-CB-CG	5.66	128.32	115.30
1	6	1340	U	N3-C2-O2	-5.66	118.24	122.20
1	2	158	U	P-O3'-C3'	5.66	126.49	119.70
36	5	3181	C	N1-C2-O2	5.66	122.29	118.90
36	1	386	A	N1-C6-N6	5.65	121.99	118.60
1	6	1782	A	C8-N9-C4	-5.65	103.54	105.80
36	5	46	U	N3-C4-O4	5.65	123.36	119.40
36	5	2355	G	C6-C5-N7	-5.65	127.01	130.40
36	5	2699	G	N9-C4-C5	-5.65	103.14	105.40
1	2	1761	U	P-O3'-C3'	5.65	126.48	119.70
49	M3	172	LEU	CA-CB-CG	-5.65	102.31	115.30
36	1	2902	A	C8-N9-C4	5.64	108.06	105.80
1	6	617	U	C6-N1-C2	-5.64	117.61	121.00
36	5	940	G	N1-C6-O6	-5.64	116.51	119.90
36	5	2825	C	N3-C2-O2	5.64	125.85	121.90
36	5	2764	C	C5-C4-N4	-5.64	116.25	120.20
36	5	3214	U	C2-N1-C1'	5.64	124.47	117.70
36	1	2874	G	C4-C5-C6	-5.64	115.42	118.80
36	1	2871	G	C5-N7-C8	-5.64	101.48	104.30
36	1	2426	U	C5-C4-O4	5.63	129.28	125.90
1	6	1102	G	C4-N9-C1'	-5.63	119.18	126.50
36	5	3154	C	C6-N1-C2	-5.63	118.05	120.30
36	1	1205	A	N7-C8-N9	-5.63	110.98	113.80
36	1	2761	G	C5-N7-C8	5.63	107.11	104.30
20	c8	15	LEU	CA-CB-CG	5.63	128.25	115.30
36	1	1305	U	C5-C6-N1	-5.62	119.89	122.70
1	6	96	G	C8-N9-C4	-5.62	104.15	106.40
37	7	41	G	N1-C6-O6	5.62	123.27	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	374	U	O5'-P-OP2	-5.62	100.64	105.70
36	5	1192	C	C6-N1-C2	-5.62	118.05	120.30
36	1	2935	U	C5-C6-N1	5.62	125.51	122.70
1	6	904	G	N3-C4-C5	-5.62	125.79	128.60
36	1	776	U	C5-C6-N1	-5.62	119.89	122.70
36	5	1295	G	C2-N3-C4	-5.62	109.09	111.90
36	1	1655	G	C8-N9-C4	5.61	108.64	106.40
36	5	646	A	N9-C4-C5	5.61	108.05	105.80
36	1	1794	G	N1-C6-O6	5.61	123.27	119.90
36	5	1317	A	C5-C6-N6	-5.61	119.21	123.70
1	6	1185	U	C2-N1-C1'	5.61	124.43	117.70
36	1	1062	A	N1-C6-N6	5.61	121.96	118.60
36	5	767	U	O4'-C1'-N1	5.61	112.69	108.20
36	5	1157	G	O5'-P-OP1	-5.61	100.65	105.70
36	1	2377	G	C6-N1-C2	-5.61	121.74	125.10
36	5	1390	A	N1-C6-N6	-5.61	115.24	118.60
36	5	1931	U	C5-C6-N1	-5.61	119.90	122.70
36	1	1716	U	P-O3'-C3'	5.60	126.42	119.70
36	1	3194	C	C6-N1-C2	-5.60	118.06	120.30
1	6	144	U	C6-N1-C2	-5.60	117.64	121.00
36	5	330	G	C8-N9-C4	5.60	108.64	106.40
36	1	936	A	C2-N3-C4	-5.60	107.80	110.60
36	5	2683	U	C5-C4-O4	-5.60	122.54	125.90
41	14	339	LEU	CA-CB-CG	5.60	128.18	115.30
36	5	816	A	N9-C4-C5	5.60	108.04	105.80
36	5	2954	U	O4'-C1'-N1	5.60	112.68	108.20
36	1	1352	A	P-O3'-C3'	5.59	126.41	119.70
36	1	2802	A	OP2-P-O3'	5.59	117.51	105.20
1	6	646	C	C6-N1-C2	-5.59	118.06	120.30
36	5	1142	G	N1-C6-O6	-5.59	116.54	119.90
36	5	248	U	C2-N1-C1'	5.59	124.41	117.70
36	5	1117	G	C8-N9-C4	5.59	108.64	106.40
36	1	343	U	C5-C6-N1	-5.59	119.90	122.70
36	1	2281	A	O4'-C1'-N9	5.59	112.67	108.20
36	5	65	A	P-O3'-C3'	5.59	126.41	119.70
36	5	1420	C	C2-N1-C1'	-5.59	112.65	118.80
36	5	1434	G	C5-N7-C8	-5.59	101.51	104.30
36	5	2572	C	C6-N1-C1'	-5.59	114.09	120.80
1	2	75	U	N3-C2-O2	-5.59	118.29	122.20
36	5	718	G	O4'-C1'-N9	5.58	112.67	108.20
36	5	1362	G	N1-C6-O6	-5.58	116.55	119.90
1	6	1670	G	N3-C4-C5	-5.58	125.81	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	859	G	C5-C6-O6	-5.58	125.25	128.60
37	7	117	A	C8-N9-C4	5.58	108.03	105.80
36	5	2842	U	N3-C2-O2	-5.58	118.29	122.20
36	1	981	U	C6-N1-C2	-5.58	117.65	121.00
36	1	1174	G	C4-N9-C1'	5.58	133.75	126.50
1	6	1776	A	C8-N9-C4	-5.58	103.57	105.80
36	5	2679	A	C8-N9-C4	5.58	108.03	105.80
36	5	1770	G	C4-N9-C1'	5.57	133.74	126.50
36	5	2147	A	C5-C6-N6	-5.57	119.24	123.70
36	1	1432	C	N1-C2-O2	-5.57	115.56	118.90
1	6	3	U	C5-C6-N1	-5.57	119.92	122.70
36	5	1495	U	O4'-C1'-N1	5.57	112.65	108.20
37	7	87	G	N1-C6-O6	5.57	123.24	119.90
1	2	1274	C	C2-N1-C1'	5.56	124.92	118.80
36	5	964	G	N3-C4-C5	-5.56	125.82	128.60
36	5	1151	U	N3-C4-O4	5.56	123.30	119.40
36	5	1202	A	N7-C8-N9	5.56	116.58	113.80
1	2	734	A	OP1-P-O3'	5.56	117.44	105.20
36	1	3338	C	C5-C6-N1	5.56	123.78	121.00
36	1	2900	A	C8-N9-C4	5.56	108.02	105.80
36	5	3354	U	N1-C2-O2	5.56	126.69	122.80
1	2	1651	A	C2-N3-C4	-5.56	107.82	110.60
36	1	924	G	N3-C2-N2	5.56	123.79	119.90
1	2	734	A	P-O3'-C3'	5.55	126.36	119.70
36	1	2870	C	C6-N1-C1'	5.55	127.47	120.80
36	5	966	U	C6-N1-C2	-5.55	117.67	121.00
78	q2	17	CYS	CA-CB-SG	5.55	124.00	114.00
36	5	2899	C	C4-C5-C6	5.55	120.18	117.40
36	1	2355	G	C4-C5-C6	5.55	122.13	118.80
36	5	95	A	N1-C6-N6	-5.55	115.27	118.60
36	5	2874	G	C8-N9-C1'	5.55	134.21	127.00
1	2	1114	G	C4-C5-N7	5.55	113.02	110.80
36	1	646	A	O5'-P-OP2	-5.55	100.71	105.70
1	6	813	U	C6-N1-C1'	-5.55	113.43	121.20
36	1	3344	A	C8-N9-C4	-5.55	103.58	105.80
36	5	2282	U	C5-C6-N1	-5.55	119.93	122.70
36	1	1124	U	N3-C4-O4	-5.54	115.52	119.40
36	1	1149	G	C5-C6-N1	-5.54	108.73	111.50
36	1	924	G	N3-C4-C5	-5.54	125.83	128.60
36	1	946	U	O5'-P-OP2	-5.54	100.71	105.70
36	5	1156	C	C2-N1-C1'	5.54	124.89	118.80
36	5	1488	G	C8-N9-C4	-5.54	104.18	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2152	A	N1-C6-N6	-5.54	115.28	118.60
1	6	568	G	N1-C6-O6	-5.54	116.58	119.90
36	5	1878	G	C4-N9-C1'	5.54	133.70	126.50
36	5	2288	G	C6-C5-N7	-5.54	127.08	130.40
36	5	2985	C	N1-C2-O2	-5.54	115.58	118.90
36	1	1883	A	C6-N1-C2	-5.54	115.28	118.60
36	1	1905	G	C5-C6-N1	-5.54	108.73	111.50
36	5	742	G	N3-C4-N9	5.54	129.32	126.00
36	5	1328	C	C6-N1-C2	-5.53	118.09	120.30
36	1	1838	G	N1-C6-O6	5.53	123.22	119.90
36	1	3195	U	P-O3'-C3'	5.53	126.34	119.70
36	1	1149	G	C5-C6-O6	-5.53	125.28	128.60
1	2	356	G	N1-C6-O6	5.53	123.22	119.90
36	1	611	A	N1-C6-N6	5.53	121.92	118.60
36	5	1112	A	OP1-P-OP2	-5.52	111.31	119.60
36	5	3216	G	C8-N9-C1'	-5.52	119.82	127.00
1	6	1085	G	N3-C4-N9	-5.52	122.69	126.00
36	1	2756	C	N1-C2-O2	-5.52	115.59	118.90
36	1	702	C	C6-N1-C2	-5.52	118.09	120.30
36	1	2679	A	N1-C2-N3	5.52	132.06	129.30
1	6	36	C	C6-N1-C2	5.51	122.50	120.30
36	5	1481	A	P-O3'-C3'	5.51	126.32	119.70
1	2	1456	C	O4'-C1'-N1	5.51	112.61	108.20
36	1	672	A	C2-N3-C4	-5.51	107.84	110.60
1	6	1164	G	N1-C6-O6	5.51	123.21	119.90
36	5	1856	C	C6-N1-C2	-5.51	118.09	120.30
36	5	1548	C	N1-C2-O2	-5.51	115.59	118.90
36	1	124	U	N3-C2-O2	-5.51	118.34	122.20
36	1	2306	C	C5-C6-N1	5.51	123.75	121.00
36	5	88	A	C2-N3-C4	-5.51	107.85	110.60
36	1	2711	C	C6-N1-C2	-5.51	118.10	120.30
36	5	1507	G	C2-N3-C4	-5.51	109.15	111.90
36	5	1367	G	C4-N9-C1'	5.50	133.66	126.50
1	2	1573	A	P-O3'-C3'	5.50	126.30	119.70
36	1	2424	A	C8-N9-C4	5.50	108.00	105.80
36	1	588	G	C8-N9-C4	-5.50	104.20	106.40
36	1	1062	A	C6-C5-N7	-5.50	128.45	132.30
36	5	716	A	C5-C6-N6	-5.50	119.30	123.70
36	1	606	C	C5-C6-N1	-5.50	118.25	121.00
36	1	1196	C	N1-C2-O2	5.50	122.20	118.90
1	6	158	U	P-O3'-C3'	5.50	126.29	119.70
36	1	2631	U	N3-C2-O2	-5.49	118.36	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3169	U	P-O3'-C3'	5.49	126.29	119.70
36	5	2231	C	C2-N1-C1'	5.49	124.84	118.80
38	4	53	A	C2-N3-C4	5.49	113.34	110.60
36	5	2164	A	N9-C4-C5	5.49	108.00	105.80
36	1	895	A	N1-C6-N6	5.49	121.89	118.60
36	1	2807	U	N1-C2-O2	-5.49	118.96	122.80
36	5	1554	U	N1-C2-O2	5.49	126.64	122.80
36	5	1897	G	C5-C6-N1	-5.49	108.76	111.50
36	5	3028	G	N3-C4-N9	5.49	129.29	126.00
36	5	3190	C	C6-N1-C2	-5.49	118.11	120.30
38	8	33	A	N1-C2-N3	-5.49	126.56	129.30
36	1	746	A	C8-N9-C4	-5.48	103.61	105.80
36	1	2345	A	O5'-P-OP2	-5.48	100.77	105.70
36	5	636	C	C6-N1-C2	5.48	122.49	120.30
36	5	106	A	C8-N9-C4	5.48	107.99	105.80
36	5	2957	G	N1-C2-N2	-5.48	111.27	116.20
36	5	912	G	N1-C6-O6	-5.48	116.61	119.90
36	5	2874	G	OP1-P-O3'	5.48	117.25	105.20
36	1	685	G	C5-C6-N1	-5.48	108.76	111.50
36	1	2981	U	C5-C4-O4	-5.48	122.61	125.90
1	6	163	G	N3-C4-C5	5.48	131.34	128.60
36	1	340	C	C6-N1-C2	-5.47	118.11	120.30
1	6	904	G	N3-C4-N9	5.47	129.28	126.00
36	1	699	A	C5-N7-C8	-5.47	101.16	103.90
36	1	819	U	C5-C6-N1	-5.47	119.96	122.70
36	1	1515	A	N1-C6-N6	5.47	121.88	118.60
38	4	82	U	C5-C6-N1	5.47	125.44	122.70
36	5	3277	U	C5-C6-N1	5.47	125.44	122.70
36	1	1604	G	C8-N9-C4	-5.47	104.21	106.40
36	5	2156	C	C5-C6-N1	-5.47	118.26	121.00
36	5	2325	G	C4-C5-N7	5.47	112.99	110.80
36	1	2197	C	C6-N1-C2	5.47	122.49	120.30
36	1	2623	G	C4-C5-N7	5.47	112.99	110.80
36	5	1449	A	N1-C6-N6	5.46	121.88	118.60
36	1	59	G	C8-N9-C4	-5.46	104.22	106.40
36	1	952	A	C8-N9-C4	5.46	107.98	105.80
36	1	3175	U	N1-C2-O2	5.46	126.62	122.80
36	5	1495	U	OP1-P-O3'	5.46	117.21	105.20
36	1	2623	G	N1-C6-O6	5.46	123.17	119.90
36	5	1300	G	C4-C5-N7	5.46	112.98	110.80
36	5	2624	G	N1-C6-O6	5.46	123.17	119.90
1	6	1743	U	C6-N1-C2	-5.46	117.73	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1600	A	C2-N3-C4	-5.46	107.87	110.60
36	5	425	G	C2-N3-C4	-5.46	109.17	111.90
36	5	2354	C	N1-C2-O2	-5.46	115.63	118.90
36	1	1838	G	C6-C5-N7	-5.45	127.13	130.40
36	1	1838	G	N9-C4-C5	-5.45	103.22	105.40
36	1	2625	C	N3-C4-C5	5.45	124.08	121.90
1	6	17	C	C6-N1-C2	-5.45	118.12	120.30
36	5	1004	U	C6-N1-C2	-5.45	117.73	121.00
36	5	1852	G	C8-N9-C4	-5.45	104.22	106.40
1	2	371	G	C5-C6-N1	-5.45	108.78	111.50
36	5	959	C	O4'-C1'-N1	5.45	112.56	108.20
36	5	969	C	C5-C6-N1	-5.45	118.28	121.00
36	5	1141	C	N3-C4-C5	5.45	124.08	121.90
36	5	2991	A	C8-N9-C4	-5.45	103.62	105.80
36	1	328	U	N1-C2-O2	5.45	126.61	122.80
1	6	363	G	C5-C6-O6	-5.45	125.33	128.60
36	5	46	U	N3-C2-O2	5.44	126.01	122.20
36	5	901	G	C8-N9-C4	5.44	108.58	106.40
37	7	88	G	N3-C4-N9	5.44	129.27	126.00
36	1	206	G	C5-C6-N1	5.44	114.22	111.50
36	1	816	A	N1-C6-N6	-5.44	115.33	118.60
36	5	636	C	O5'-P-OP2	-5.44	100.80	105.70
36	1	609	G	C5-C6-N1	5.44	114.22	111.50
36	1	2623	G	C6-C5-N7	-5.44	127.14	130.40
36	5	1481	A	N7-C8-N9	5.44	116.52	113.80
36	5	2772	C	P-O3'-C3'	5.44	126.23	119.70
36	5	3140	G	C4-C5-N7	5.44	112.98	110.80
1	2	386	G	C5-C6-O6	5.44	131.86	128.60
36	5	2242	A	C6-N1-C2	-5.44	115.34	118.60
1	2	704	C	C2-N1-C1'	5.44	124.78	118.80
36	1	2263	C	C5-C6-N1	5.44	123.72	121.00
36	1	2550	U	N3-C2-O2	-5.44	118.39	122.20
36	5	921	A	OP2-P-O3'	5.44	117.16	105.20
1	6	1	U	N1-C2-O2	5.44	126.61	122.80
36	5	1185	C	C6-N1-C2	-5.44	118.13	120.30
36	1	3213	A	N1-C2-N3	5.43	132.02	129.30
1	6	610	G	C4-N9-C1'	5.43	133.56	126.50
1	6	863	A	C5-C6-N6	-5.43	119.35	123.70
36	5	1047	A	N1-C6-N6	5.43	121.86	118.60
36	1	1331	U	N1-C2-O2	-5.43	119.00	122.80
36	1	1391	C	C6-N1-C2	5.43	122.47	120.30
1	6	337	G	N3-C2-N2	5.43	123.70	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	608	U	N1-C2-N3	5.43	118.16	114.90
36	5	742	G	N3-C4-C5	-5.43	125.89	128.60
36	1	1116	G	OP2-P-O3'	5.43	117.14	105.20
36	1	2434	U	C2-N1-C1'	5.43	124.21	117.70
36	1	2622	C	C6-N1-C2	-5.43	118.13	120.30
36	1	2153	U	N1-C2-N3	5.42	118.15	114.90
36	5	1191	U	N1-C2-O2	-5.42	119.00	122.80
36	5	1212	A	C8-N9-C4	-5.42	103.63	105.80
36	5	1710	C	N3-C4-C5	5.42	124.07	121.90
36	5	3057	U	N1-C2-N3	-5.42	111.64	114.90
36	1	1192	C	C6-N1-C1'	-5.42	114.29	120.80
1	2	1600	A	C5-C6-N1	-5.42	114.99	117.70
36	1	888	A	N1-C6-N6	5.42	121.85	118.60
36	1	1002	A	C8-N9-C4	5.42	107.97	105.80
36	1	1207	G	C4-C5-N7	5.42	112.97	110.80
1	6	1697	G	N3-C4-C5	-5.42	125.89	128.60
36	5	2943	G	N1-C6-O6	5.42	123.15	119.90
36	1	671	U	O5'-P-OP2	-5.42	100.82	105.70
36	1	2237	C	N1-C2-O2	5.42	122.15	118.90
36	5	3362	A	C2-N3-C4	-5.42	107.89	110.60
36	1	2306	C	C6-N1-C1'	-5.41	114.30	120.80
1	6	1773	C	N1-C2-O2	-5.41	115.65	118.90
38	8	38	U	N1-C2-O2	5.41	126.59	122.80
36	1	2941	A	C8-N9-C4	5.41	107.97	105.80
36	1	3266	G	N9-C4-C5	5.41	107.56	105.40
36	5	360	G	C6-C5-N7	-5.41	127.15	130.40
38	4	11	C	C6-N1-C2	5.41	122.46	120.30
36	5	2663	G	C5-N7-C8	-5.41	101.59	104.30
37	7	100	C	C5-C6-N1	-5.41	118.30	121.00
36	5	101	G	O5'-P-OP2	-5.41	100.83	105.70
36	1	283	G	O4'-C1'-N9	-5.41	103.88	108.20
36	5	196	G	C4-N9-C1'	-5.41	119.47	126.50
36	5	283	G	N1-C6-O6	5.41	123.14	119.90
36	5	2409	G	C5-C6-O6	-5.41	125.36	128.60
1	2	942	G	N3-C4-C5	-5.40	125.90	128.60
36	1	1794	G	C6-C5-N7	-5.40	127.16	130.40
36	5	421	G	C6-C5-N7	-5.40	127.16	130.40
36	5	1147	G	O5'-P-OP1	-5.40	100.84	105.70
36	5	3054	U	C5-C4-O4	5.40	129.14	125.90
1	2	1274	C	N3-C2-O2	-5.40	118.12	121.90
36	1	669	U	C5-C4-O4	-5.40	122.66	125.90
36	1	2760	C	C6-N1-C2	5.40	122.46	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3277	U	N1-C2-O2	5.40	126.58	122.80
36	5	2300	G	C5-C6-N1	5.40	114.20	111.50
36	5	1306	G	C4-C5-N7	5.40	112.96	110.80
36	5	2917	G	C5-C6-O6	-5.40	125.36	128.60
36	1	1435	A	C5-C6-N1	5.40	120.40	117.70
36	1	1329	U	P-O3'-C3'	5.39	126.17	119.70
36	1	1496	C	C6-N1-C1'	-5.39	114.33	120.80
36	5	1159	A	C8-N9-C4	-5.39	103.64	105.80
36	5	1420	C	C5-C6-N1	-5.39	118.30	121.00
36	1	1425	U	N1-C2-N3	5.39	118.14	114.90
1	6	433	C	C6-N1-C2	5.39	122.46	120.30
38	8	113	U	N1-C2-O2	5.39	126.57	122.80
73	O7	65	ARG	NE-CZ-NH1	5.39	123.00	120.30
36	5	1858	A	C8-N9-C4	-5.39	103.64	105.80
36	1	1355	A	P-O3'-C3'	5.39	126.16	119.70
36	1	1445	U	N1-C2-O2	-5.39	119.03	122.80
1	6	625	C	N3-C4-N4	5.39	121.77	118.00
36	5	424	G	C5-C6-O6	-5.39	125.37	128.60
36	5	1348	U	C5-C6-N1	5.38	125.39	122.70
36	5	2800	G	N3-C4-C5	-5.38	125.91	128.60
36	5	1710	C	C6-N1-C2	5.38	122.45	120.30
54	m8	104	LEU	CA-CB-CG	5.38	127.68	115.30
36	1	2585	G	C8-N9-C4	-5.38	104.25	106.40
36	1	3196	U	C2-N1-C1'	5.38	124.16	117.70
36	1	1832	C	O5'-P-OP2	-5.38	100.86	105.70
36	1	3217	C	C6-N1-C1'	-5.38	114.35	120.80
1	6	1058	U	P-O3'-C3'	5.38	126.15	119.70
36	5	2643	A	N9-C4-C5	-5.38	103.65	105.80
36	5	2976	A	N1-C6-N6	-5.38	115.37	118.60
36	1	776	U	C5-C4-O4	5.38	129.13	125.90
36	1	1140	G	C2-N3-C4	-5.38	109.21	111.90
36	1	1351	U	N3-C2-O2	-5.38	118.44	122.20
36	1	31	C	N3-C4-C5	5.38	124.05	121.90
36	5	2122	G	C4-C5-N7	5.37	112.95	110.80
36	5	283	G	C4-N9-C1'	5.37	133.48	126.50
36	5	2814	G	C4-C5-N7	-5.37	108.65	110.80
36	1	2953	U	N3-C4-C5	-5.37	111.38	114.60
36	5	1370	G	N1-C2-N2	-5.37	111.37	116.20
36	5	119	U	C5-C4-O4	5.37	129.12	125.90
36	5	923	C	C6-N1-C2	5.37	122.45	120.30
1	6	590	C	C6-N1-C2	-5.37	118.15	120.30
1	2	1052	U	N3-C2-O2	-5.37	118.44	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1100	U	C5-C6-N1	-5.37	120.02	122.70
36	1	1435	A	O5'-P-OP2	5.37	117.14	110.70
1	6	1465	C	C6-N1-C2	-5.37	118.15	120.30
36	5	2369	G	N3-C4-C5	-5.37	125.92	128.60
1	2	720	G	P-O3'-C3'	5.36	126.14	119.70
36	5	1306	G	C5-C6-O6	-5.36	125.38	128.60
36	5	2950	G	N7-C8-N9	5.36	115.78	113.10
36	5	3310	A	N1-C6-N6	-5.36	115.38	118.60
36	1	637	C	N1-C2-O2	5.36	122.12	118.90
36	5	3200	G	N1-C6-O6	5.36	123.12	119.90
36	5	2385	G	N3-C4-C5	5.36	131.28	128.60
36	5	2796	G	C8-N9-C1'	-5.36	120.03	127.00
36	5	2387	A	N3-C4-C5	-5.36	123.05	126.80
36	1	895	A	N7-C8-N9	5.36	116.48	113.80
36	5	2400	G	C5-N7-C8	-5.36	101.62	104.30
36	1	1140	G	C5-C6-O6	5.35	131.81	128.60
36	5	2608	G	C5-C6-N1	-5.35	108.82	111.50
36	5	2824	G	C6-C5-N7	-5.35	127.19	130.40
1	6	1651	A	C2-N3-C4	-5.35	107.92	110.60
36	1	207	U	N1-C2-O2	-5.35	119.06	122.80
36	1	776	U	N1-C2-N3	5.35	118.11	114.90
36	1	1115	G	C5-N7-C8	-5.35	101.62	104.30
36	5	3067	C	C5-C6-N1	-5.35	118.33	121.00
36	5	718	G	N3-C4-N9	5.35	129.21	126.00
36	5	2199	G	C4-C5-C6	5.35	122.01	118.80
36	5	2541	U	C2-N1-C1'	5.35	124.12	117.70
36	5	3110	C	C6-N1-C2	5.35	122.44	120.30
36	1	2606	G	N3-C4-C5	-5.35	125.93	128.60
36	5	1592	G	C8-N9-C4	-5.35	104.26	106.40
36	1	1868	G	N3-C4-N9	5.34	129.21	126.00
36	5	985	U	C5-C6-N1	-5.34	120.03	122.70
36	5	2964	G	C6-C5-N7	5.34	133.61	130.40
36	5	668	G	C8-N9-C4	5.34	108.54	106.40
36	5	1878	G	C8-N9-C1'	-5.34	120.06	127.00
36	5	2117	A	C6-N1-C2	-5.34	115.39	118.60
36	1	512	U	N3-C4-C5	-5.34	111.40	114.60
1	6	1010	C	N3-C2-O2	-5.34	118.16	121.90
1	6	1698	G	C5-C6-O6	5.34	131.80	128.60
36	1	388	G	C8-N9-C4	-5.34	104.27	106.40
36	5	124	U	N3-C2-O2	-5.34	118.46	122.20
36	5	1483	G	O4'-C1'-N9	5.33	112.47	108.20
36	1	230	U	C2-N3-C4	-5.33	123.80	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2554	A	C8-N9-C4	5.33	107.93	105.80
38	4	144	G	C4-C5-N7	-5.33	108.67	110.80
36	5	2383	C	C6-N1-C2	-5.33	118.17	120.30
36	1	2853	A	N1-C6-N6	5.33	121.80	118.60
1	6	363	G	C6-C5-N7	-5.33	127.20	130.40
36	1	3181	C	C6-N1-C2	-5.33	118.17	120.30
36	1	675	C	C6-N1-C2	-5.33	118.17	120.30
36	1	2959	C	N1-C2-O2	-5.33	115.70	118.90
36	5	2830	G	C6-N1-C2	-5.33	121.90	125.10
36	5	3200	G	C6-C5-N7	-5.32	127.21	130.40
36	1	916	G	P-O3'-C3'	5.32	126.08	119.70
1	6	1568	C	P-O3'-C3'	5.32	126.08	119.70
36	5	2652	U	N1-C2-O2	-5.32	119.08	122.80
36	1	802	C	N3-C2-O2	-5.32	118.18	121.90
36	1	2869	U	O5'-P-OP1	-5.32	100.91	105.70
1	6	1560	U	C2-N1-C1'	5.32	124.08	117.70
36	5	1863	G	N1-C6-O6	-5.32	116.71	119.90
36	5	2199	G	C6-C5-N7	-5.32	127.21	130.40
38	8	93	U	N3-C2-O2	-5.32	118.48	122.20
36	1	1076	C	C6-N1-C2	5.32	122.43	120.30
36	1	1128	U	C5-C6-N1	-5.31	120.04	122.70
36	1	24	G	N1-C2-N2	-5.31	111.42	116.20
36	1	1852	G	N1-C6-O6	5.31	123.09	119.90
36	5	2827	U	N3-C2-O2	-5.31	118.48	122.20
36	1	198	A	C8-N9-C4	-5.31	103.68	105.80
36	1	426	G	N3-C4-N9	5.31	129.19	126.00
36	1	661	G	C5-C6-O6	-5.31	125.41	128.60
36	1	1437	C	N3-C2-O2	-5.31	118.18	121.90
1	6	337	G	N7-C8-N9	5.31	115.75	113.10
36	5	406	G	C8-N9-C1'	5.31	133.90	127.00
36	5	952	A	N9-C4-C5	-5.31	103.68	105.80
36	5	2992	U	N1-C2-N3	-5.31	111.72	114.90
36	1	2399	A	C5-C6-N1	5.31	120.35	117.70
38	8	100	U	C2-N1-C1'	5.31	124.07	117.70
36	1	2985	C	C6-N1-C2	-5.31	118.18	120.30
36	1	1495	U	N1-C2-N3	5.30	118.08	114.90
36	5	2616	C	C4-C5-C6	-5.30	114.75	117.40
36	1	638	C	C6-N1-C2	-5.30	118.18	120.30
36	5	1002	A	N1-C6-N6	-5.30	115.42	118.60
36	1	3362	A	N7-C8-N9	5.30	116.45	113.80
1	6	543	C	N1-C2-O2	5.30	122.08	118.90
36	1	1520	G	N1-C6-O6	-5.30	116.72	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2153	U	C5-C4-O4	5.30	129.08	125.90
36	5	1239	C	C2-N1-C1'	5.30	124.63	118.80
36	5	2377	G	C6-C5-N7	5.30	133.58	130.40
36	5	2816	G	C2-N3-C4	-5.30	109.25	111.90
36	1	3182	G	N1-C2-N3	5.29	127.08	123.90
36	5	506	U	C2-N1-C1'	-5.29	111.35	117.70
36	5	609	G	N1-C6-O6	5.29	123.08	119.90
36	5	1919	G	C8-N9-C4	-5.29	104.28	106.40
1	2	736	C	C2-N3-C4	5.29	122.55	119.90
36	1	1491	A	C8-N9-C4	5.29	107.92	105.80
1	6	620	A	N1-C6-N6	-5.29	115.42	118.60
36	5	1202	A	C5-N7-C8	-5.29	101.25	103.90
36	5	2959	C	O5'-P-OP1	-5.29	100.94	105.70
36	1	931	C	C2-N3-C4	-5.29	117.25	119.90
36	1	65	A	P-O3'-C3'	5.29	126.05	119.70
36	5	1047	A	C8-N9-C4	-5.29	103.69	105.80
36	5	1137	C	C6-N1-C2	5.29	122.42	120.30
36	5	2899	C	C6-N1-C2	-5.29	118.18	120.30
36	1	3266	G	C5-C6-O6	5.29	131.77	128.60
36	1	1371	G	C8-N9-C4	5.29	108.51	106.40
36	1	2160	G	N1-C6-O6	-5.29	116.73	119.90
36	5	1881	A	C2-N3-C4	5.29	113.24	110.60
36	5	3216	G	C4-N9-C1'	5.29	133.37	126.50
36	1	935	U	N3-C4-O4	5.28	123.10	119.40
36	1	1114	U	C6-N1-C2	-5.28	117.83	121.00
36	1	1165	A	C2-N3-C4	-5.28	107.96	110.60
36	1	2395	G	N1-C6-O6	5.28	123.07	119.90
36	5	590	G	C5-C6-O6	-5.28	125.43	128.60
36	5	1113	G	C2-N3-C4	-5.28	109.26	111.90
1	2	694	U	N3-C2-O2	-5.28	118.50	122.20
38	4	55	U	N1-C2-N3	5.28	118.07	114.90
36	5	1483	G	C2-N3-C4	5.28	114.54	111.90
36	5	1519	G	C6-C5-N7	-5.28	127.23	130.40
36	1	111	C	C5-C4-N4	-5.28	116.50	120.20
1	6	542	A	O4'-C1'-N9	5.28	112.42	108.20
36	5	1047	A	C5-C6-N6	-5.28	119.48	123.70
36	5	2507	C	C5-C6-N1	5.28	123.64	121.00
24	D2	104	LEU	CA-CB-CG	5.28	127.44	115.30
36	5	1914	G	C4-N9-C1'	5.28	133.36	126.50
36	1	1364	C	OP2-P-O3'	5.28	116.81	105.20
1	6	425	A	OP2-P-O3'	5.28	116.81	105.20
36	5	818	C	C6-N1-C2	5.28	122.41	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1495	U	N1-C2-O2	-5.27	119.11	122.80
36	1	1716	U	OP1-P-O3'	5.27	116.80	105.20
36	1	2871	G	C4-N9-C1'	-5.27	119.64	126.50
1	2	541	A	O4'-C1'-N9	5.27	112.42	108.20
36	5	2607	G	OP2-P-O3'	5.27	116.79	105.20
33	e1	100	LEU	CA-CB-CG	5.27	127.42	115.30
36	1	661	G	N9-C4-C5	-5.27	103.29	105.40
36	1	2659	G	N1-C6-O6	5.26	123.06	119.90
36	5	283	G	C8-N9-C1'	-5.26	120.16	127.00
36	5	1012	G	C8-N9-C4	5.26	108.50	106.40
1	6	1560	U	N1-C2-O2	5.26	126.48	122.80
36	5	880	G	C5-N7-C8	5.26	106.93	104.30
36	5	1507	G	N1-C2-N3	5.26	127.06	123.90
36	5	2249	G	C8-N9-C4	-5.26	104.30	106.40
36	1	2160	G	C5-C6-O6	5.26	131.76	128.60
36	1	2870	C	N1-C2-O2	-5.26	115.75	118.90
36	5	1314	C	C6-N1-C2	-5.26	118.20	120.30
36	5	2770	G	N3-C4-C5	-5.26	125.97	128.60
36	5	2842	U	N1-C2-O2	5.26	126.48	122.80
36	1	2112	U	P-O3'-C3'	5.26	126.01	119.70
36	1	2585	G	N3-C4-C5	-5.26	125.97	128.60
36	5	1126	G	C8-N9-C4	-5.26	104.30	106.40
1	2	1096	C	C2-N1-C1'	5.25	124.58	118.80
38	4	97	A	C8-N9-C4	-5.25	103.70	105.80
36	5	2954	U	N1-C2-O2	5.25	126.48	122.80
36	5	1834	U	N3-C4-C5	-5.25	111.45	114.60
36	5	2663	G	N1-C6-O6	5.25	123.05	119.90
36	5	3134	A	O5'-P-OP2	-5.25	100.97	105.70
36	1	645	A	C5-C6-N1	5.25	120.33	117.70
1	6	1498	G	N3-C4-N9	5.25	129.15	126.00
36	5	913	A	N1-C6-N6	5.25	121.75	118.60
36	5	1443	G	C8-N9-C1'	-5.25	120.18	127.00
36	1	942	U	OP1-P-OP2	-5.25	111.73	119.60
36	1	1357	G	C6-C5-N7	-5.25	127.25	130.40
36	5	1150	A	O5'-P-OP2	-5.25	100.98	105.70
36	5	2871	G	C5-C6-O6	5.25	131.75	128.60
36	5	943	U	N1-C2-O2	-5.24	119.13	122.80
1	2	1651	A	C5-C6-N1	-5.24	115.08	117.70
1	6	1340	U	N1-C2-O2	5.24	126.47	122.80
36	5	2375	G	C6-N1-C2	-5.24	121.95	125.10
36	5	2660	G	C5-C6-O6	-5.24	125.45	128.60
36	1	98	G	C2-N3-C4	-5.24	109.28	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1432	U	O4'-C1'-N1	5.24	112.39	108.20
36	1	1421	G	C8-N9-C1'	-5.24	120.19	127.00
36	1	2344	U	C6-N1-C2	5.24	124.14	121.00
36	1	3028	G	N3-C4-C5	-5.24	125.98	128.60
38	4	82	U	C5-C4-O4	-5.24	122.76	125.90
36	5	3106	A	C2-N3-C4	-5.24	107.98	110.60
36	5	3214	U	O4'-C1'-N1	5.24	112.39	108.20
1	2	1596	C	N3-C2-O2	-5.24	118.23	121.90
36	1	228	U	N1-C2-O2	5.24	126.46	122.80
36	1	1725	C	C5-C6-N1	-5.24	118.38	121.00
36	5	343	U	N1-C2-N3	5.24	118.04	114.90
36	5	835	G	O4'-C1'-N9	5.24	112.39	108.20
36	1	2377	G	C5-C6-N1	5.23	114.12	111.50
36	1	3201	C	C6-N1-C2	-5.23	118.21	120.30
36	1	1434	G	N1-C6-O6	5.23	123.04	119.90
36	5	2278	C	N3-C4-C5	5.23	123.99	121.90
36	5	2875	U	N3-C2-O2	5.23	125.86	122.20
36	5	3190	C	N3-C4-C5	-5.23	119.81	121.90
36	5	2874	G	C8-N9-C4	5.23	108.49	106.40
36	5	2949	U	C5-C4-O4	5.23	129.04	125.90
1	2	1591	C	N3-C2-O2	-5.23	118.24	121.90
37	3	91	G	C4-N9-C1'	5.23	133.29	126.50
36	5	1793	C	O5'-P-OP1	-5.23	100.99	105.70
36	1	896	A	C8-N9-C4	-5.23	103.71	105.80
1	2	1559	A	O4'-C1'-N9	5.22	112.38	108.20
36	1	25	U	N3-C4-C5	-5.22	111.47	114.60
36	1	3157	U	O4'-C1'-N1	-5.22	104.02	108.20
37	3	82	G	N3-C4-C5	-5.22	125.99	128.60
1	6	489	C	C2-N1-C1'	5.22	124.55	118.80
36	5	957	C	N3-C2-O2	-5.22	118.24	121.90
36	5	1151	U	C6-N1-C2	-5.22	117.87	121.00
36	5	2403	G	C8-N9-C1'	-5.22	120.21	127.00
37	7	44	C	C6-N1-C2	5.22	122.39	120.30
36	1	895	A	C5-N7-C8	-5.22	101.29	103.90
36	1	1520	G	N3-C4-N9	5.22	129.13	126.00
36	1	2950	G	C8-N9-C4	-5.22	104.31	106.40
36	5	1901	A	C2-N3-C4	5.22	113.21	110.60
36	5	2649	A	N7-C8-N9	5.22	116.41	113.80
1	6	1473	U	N1-C2-O2	5.22	126.45	122.80
36	1	1174	G	C6-C5-N7	-5.22	127.27	130.40
36	5	2404	A	C5-C6-N1	-5.22	115.09	117.70
36	5	2909	U	N3-C2-O2	5.22	125.85	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2636	A	N7-C8-N9	5.22	116.41	113.80
36	5	283	G	N3-C4-N9	5.22	129.13	126.00
36	1	688	G	N3-C4-C5	-5.21	125.99	128.60
36	1	712	G	N1-C6-O6	5.21	123.03	119.90
38	8	39	G	C8-N9-C4	-5.21	104.31	106.40
1	2	1012	U	C2-N3-C4	5.21	130.13	127.00
36	1	33	G	C4-C5-N7	-5.21	108.72	110.80
36	1	2618	G	N1-C2-N2	-5.21	111.51	116.20
1	6	272	U	P-O3'-C3'	5.21	125.95	119.70
36	5	1931	U	C6-N1-C2	5.21	124.13	121.00
36	5	3042	U	C5-C6-N1	-5.21	120.09	122.70
36	5	952	A	C8-N9-C4	5.21	107.88	105.80
36	5	1914	G	N3-C4-C5	-5.21	126.00	128.60
36	5	2320	A	C2-N3-C4	-5.21	108.00	110.60
36	1	92	G	C6-C5-N7	-5.21	127.28	130.40
24	d2	93	LEU	CA-CB-CG	5.21	127.28	115.30
36	1	965	A	C8-N9-C4	-5.21	103.72	105.80
36	5	1367	G	C6-C5-N7	-5.20	127.28	130.40
36	5	1505	C	C6-N1-C2	-5.20	118.22	120.30
36	5	2122	G	C5-C6-O6	-5.20	125.48	128.60
36	5	2891	U	C5-C6-N1	-5.20	120.10	122.70
1	2	992	A	C2-N3-C4	-5.20	108.00	110.60
36	1	2369	G	N3-C4-C5	-5.20	126.00	128.60
36	5	1766	G	C5-C6-O6	-5.20	125.48	128.60
36	5	2913	C	N3-C2-O2	5.20	125.54	121.90
36	1	426	G	N3-C4-C5	-5.20	126.00	128.60
36	1	2985	C	N3-C2-O2	-5.20	118.26	121.90
36	5	1115	G	C8-N9-C1'	-5.20	120.24	127.00
36	5	3178	A	O5'-P-OP1	-5.20	101.02	105.70
36	1	2160	G	N9-C4-C5	5.20	107.48	105.40
1	6	151	G	C4-C5-N7	-5.20	108.72	110.80
1	6	1791	A	N1-C6-N6	5.20	121.72	118.60
36	5	3040	A	N7-C8-N9	-5.20	111.20	113.80
36	1	35	A	N1-C6-N6	5.19	121.72	118.60
36	1	80	G	N7-C8-N9	-5.19	110.50	113.10
36	1	2408	U	O5'-P-OP1	-5.19	101.03	105.70
36	5	70	A	C8-N9-C4	-5.19	103.72	105.80
36	5	1300	G	N9-C4-C5	-5.19	103.32	105.40
36	5	2827	U	N1-C2-O2	5.19	126.43	122.80
37	7	17	A	C8-N9-C4	5.19	107.88	105.80
36	1	1351	U	C6-N1-C1'	-5.19	113.93	121.20
36	5	3028	G	N3-C2-N2	5.19	123.53	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1497	C	N3-C4-C5	-5.19	119.83	121.90
36	5	1897	G	C6-C5-N7	-5.19	127.29	130.40
1	6	1533	C	C6-N1-C2	-5.19	118.22	120.30
3	S1	218	LEU	CA-CB-CG	5.18	127.23	115.30
36	5	1884	A	N1-C6-N6	5.18	121.71	118.60
36	1	2618	G	C8-N9-C4	-5.18	104.33	106.40
36	5	2728	G	O5'-P-OP2	-5.18	101.04	105.70
36	5	3140	G	C6-C5-N7	-5.18	127.29	130.40
36	5	341	G	N7-C8-N9	5.18	115.69	113.10
36	5	3245	A	C8-N9-C4	-5.18	103.73	105.80
37	7	49	G	N1-C6-O6	5.18	123.01	119.90
1	2	864	U	C5-C4-O4	5.18	129.00	125.90
36	1	1331	U	C5-C4-O4	-5.18	122.79	125.90
44	17	229	PHE	CB-CG-CD1	5.18	124.42	120.80
1	2	901	G	C4-N9-C1'	5.17	133.23	126.50
36	5	429	U	C6-N1-C2	5.17	124.10	121.00
36	5	1200	A	C6-C5-N7	-5.17	128.68	132.30
36	1	1097	G	P-O3'-C3'	5.17	125.91	119.70
36	1	359	U	C6-N1-C2	-5.17	117.90	121.00
36	1	2608	G	N1-C6-O6	5.17	123.00	119.90
36	1	3218	A	C8-N9-C4	-5.17	103.73	105.80
1	6	639	U	C2-N1-C1'	5.17	123.90	117.70
36	5	1129	A	O5'-P-OP2	-5.17	101.05	105.70
1	6	678	A	P-O3'-C3'	5.17	125.90	119.70
1	6	1274	C	C5-C6-N1	5.17	123.58	121.00
36	5	2941	A	N1-C6-N6	-5.17	115.50	118.60
36	5	914	A	N3-C4-C5	5.17	130.41	126.80
36	5	938	C	C6-N1-C2	5.17	122.37	120.30
1	6	393	C	N3-C4-C5	5.16	123.97	121.90
36	1	3178	A	C2-N3-C4	-5.16	108.02	110.60
1	2	113	U	OP2-P-O3'	5.16	116.55	105.20
36	1	1139	G	C2-N3-C4	-5.16	109.32	111.90
36	1	1846	C	N1-C2-O2	-5.16	115.81	118.90
36	5	2691	A	N1-C6-N6	5.16	121.69	118.60
36	1	2720	G	C4-N9-C1'	5.16	133.20	126.50
1	2	95	G	N1-C6-O6	-5.15	116.81	119.90
36	1	2996	U	C6-N1-C1'	-5.15	113.99	121.20
36	1	3375	A	C8-N9-C4	-5.15	103.74	105.80
1	6	691	C	N1-C2-O2	5.15	121.99	118.90
1	6	620	A	C8-N9-C4	-5.15	103.74	105.80
36	5	668	G	N7-C8-N9	-5.15	110.53	113.10
36	5	941	G	OP1-P-O3'	5.15	116.53	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3190	C	C4-C5-C6	5.15	119.97	117.40
36	5	965	A	N1-C6-N6	5.15	121.69	118.60
36	1	1452	A	N3-C4-C5	5.14	130.40	126.80
1	6	1743	U	N3-C4-C5	-5.14	111.51	114.60
1	2	1196	A	P-O3'-C3'	5.14	125.87	119.70
36	1	335	G	C4-C5-N7	5.14	112.86	110.80
36	1	2887	A	C2-N3-C4	5.14	113.17	110.60
1	6	484	C	C5-C6-N1	5.14	123.57	121.00
1	6	1112	G	N1-C6-O6	-5.14	116.81	119.90
36	5	2683	U	C6-N1-C1'	-5.14	114.00	121.20
36	5	2727	A	N1-C6-N6	-5.14	115.51	118.60
1	2	1389	C	N1-C2-O2	5.14	121.98	118.90
36	1	3307	A	C6-C5-N7	-5.14	128.70	132.30
38	4	47	C	N3-C2-O2	-5.14	118.30	121.90
1	6	858	G	C4-N9-C1'	5.14	133.18	126.50
36	5	1494	U	C5-C6-N1	-5.14	120.13	122.70
36	5	1307	G	C4-C5-N7	5.14	112.85	110.80
36	5	1853	U	N1-C2-N3	5.14	117.98	114.90
1	2	1182	U	N1-C2-O2	5.13	126.39	122.80
36	1	223	U	O5'-P-OP2	-5.13	101.08	105.70
36	5	1012	G	N3-C4-C5	5.13	131.17	128.60
36	5	2907	G	C2-N3-C4	-5.13	109.33	111.90
36	1	1851	G	C6-C5-N7	-5.13	127.32	130.40
36	1	1369	A	C2-N3-C4	-5.13	108.03	110.60
38	4	110	C	N1-C2-O2	-5.13	115.82	118.90
1	6	792	U	C5-C4-O4	5.13	128.98	125.90
36	5	922	U	C5-C6-N1	-5.13	120.13	122.70
36	5	360	G	C4-N9-C1'	5.13	133.17	126.50
1	2	1258	U	C2-N1-C1'	5.13	123.85	117.70
36	1	1117	G	N3-C4-C5	5.13	131.16	128.60
36	1	1304	A	O5'-P-OP1	-5.13	101.08	105.70
36	1	3028	G	C6-C5-N7	-5.13	127.32	130.40
6	S4	12	LEU	CA-CB-CG	5.13	127.09	115.30
36	5	1604	G	N3-C4-N9	5.13	129.08	126.00
36	5	1047	A	C6-C5-N7	-5.12	128.71	132.30
36	5	2866	U	OP1-P-OP2	-5.12	111.91	119.60
38	4	67	U	N1-C2-N3	5.12	117.97	114.90
36	5	1880	U	C5-C6-N1	-5.12	120.14	122.70
36	5	2890	A	N9-C4-C5	5.12	107.85	105.80
1	6	1000	C	C6-N1-C1'	-5.12	114.66	120.80
36	5	1133	A	OP2-P-O3'	5.12	116.47	105.20
36	5	981	U	C6-N1-C2	-5.12	117.93	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1194	G	C5-C6-N1	5.12	114.06	111.50
36	5	2794	G	C8-N9-C4	5.12	108.45	106.40
36	1	1901	A	N1-C6-N6	-5.12	115.53	118.60
36	5	757	C	C6-N1-C2	5.12	122.35	120.30
36	5	2843	U	C6-N1-C1'	-5.12	114.04	121.20
38	8	86	U	C5-C6-N1	5.12	125.26	122.70
36	5	567	G	C6-C5-N7	-5.11	127.33	130.40
36	1	358	G	C5-C6-O6	-5.11	125.53	128.60
36	5	815	G	C8-N9-C4	5.11	108.44	106.40
36	5	1010	G	O5'-P-OP2	-5.11	101.10	105.70
36	5	1142	G	N9-C4-C5	5.11	107.44	105.40
36	5	2888	U	OP1-P-O3'	5.11	116.44	105.20
36	5	2954	U	C6-N1-C1'	-5.11	114.05	121.20
36	5	2342	U	C5-C6-N1	-5.11	120.15	122.70
36	1	159	A	C8-N9-C4	5.11	107.84	105.80
36	1	1919	G	C8-N9-C4	-5.11	104.36	106.40
36	1	2393	G	C5-C6-O6	-5.11	125.53	128.60
36	5	1924	U	N3-C2-O2	-5.11	118.62	122.20
36	5	2181	C	N3-C4-C5	5.11	123.94	121.90
36	5	2708	C	N1-C2-O2	-5.11	115.83	118.90
36	1	1286	A	C8-N9-C4	5.11	107.84	105.80
1	6	858	G	C6-C5-N7	-5.11	127.34	130.40
36	5	1446	A	C2-N3-C4	5.11	113.15	110.60
36	5	2741	C	N1-C2-O2	-5.11	115.84	118.90
1	2	966	A	N1-C6-N6	5.10	121.66	118.60
1	2	1033	C	N3-C2-O2	-5.10	118.33	121.90
36	1	54	C	N1-C2-O2	-5.10	115.84	118.90
36	5	1764	U	C5-C6-N1	5.10	125.25	122.70
36	1	3214	U	O4'-C1'-N1	5.10	112.28	108.20
36	5	209	A	N1-C6-N6	5.10	121.66	118.60
36	5	2875	U	C5-C4-O4	-5.10	122.84	125.90
36	1	1198	C	N3-C4-C5	-5.10	119.86	121.90
37	3	91	G	N3-C4-C5	-5.10	126.05	128.60
36	5	2708	C	N3-C2-O2	5.10	125.47	121.90
36	5	2827	U	C2-N1-C1'	5.10	123.82	117.70
1	2	694	U	N1-C2-O2	5.10	126.37	122.80
36	1	2679	A	C5'-C4'-O4'	5.10	115.22	109.10
1	6	1026	A	N7-C8-N9	-5.10	111.25	113.80
36	5	1482	A	O5'-P-OP2	-5.10	101.11	105.70
36	5	2199	G	C4-N9-C1'	5.10	133.13	126.50
37	7	82	G	C8-N9-C4	-5.10	104.36	106.40
36	1	917	A	C5-C6-N6	5.10	127.78	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3088	G	C6-C5-N7	-5.10	127.34	130.40
36	5	420	G	C8-N9-C1'	-5.10	120.37	127.00
36	1	89	A	N1-C6-N6	-5.10	115.54	118.60
36	5	986	U	N3-C2-O2	-5.10	118.63	122.20
36	5	1923	C	C6-N1-C2	-5.10	118.26	120.30
1	2	501	U	OP1-P-O3'	5.09	116.41	105.20
1	2	1536	G	C4-N9-C1'	5.09	133.12	126.50
36	1	417	A	C2-N3-C4	-5.09	108.05	110.60
36	1	1606	U	C2-N1-C1'	-5.09	111.59	117.70
1	6	755	A	P-O3'-C3'	5.09	125.81	119.70
36	5	788	C	C4-C5-C6	5.09	119.95	117.40
36	5	1047	A	C4-C5-N7	5.09	113.25	110.70
36	1	2639	G	N1-C2-N3	5.09	126.96	123.90
36	1	2853	A	C6-C5-N7	-5.09	128.74	132.30
1	6	187	G	OP1-P-O3'	5.09	116.41	105.20
1	6	1026	A	C8-N9-C4	5.09	107.84	105.80
36	5	3215	A	C5-C6-N1	-5.09	115.15	117.70
36	1	1148	G	C5-C6-O6	-5.09	125.55	128.60
36	1	1430	U	C5-C6-N1	-5.09	120.16	122.70
1	6	1737	G	N1-C6-O6	5.09	122.95	119.90
36	5	1158	A	C2-N3-C4	-5.09	108.06	110.60
36	5	2231	C	C6-N1-C2	-5.09	118.26	120.30
36	5	2764	C	N3-C4-N4	5.09	121.56	118.00
36	5	2799	A	OP1-P-OP2	5.09	127.23	119.60
71	O5	89	ARG	NE-CZ-NH1	5.09	122.84	120.30
1	6	542	A	P-O3'-C3'	5.09	125.81	119.70
1	2	1745	G	N3-C4-N9	5.09	129.05	126.00
36	1	895	A	C4-C5-N7	5.09	113.24	110.70
36	1	2921	U	N3-C2-O2	-5.09	118.64	122.20
36	1	3133	C	C5-C4-N4	-5.09	116.64	120.20
1	6	623	A	N1-C6-N6	5.09	121.65	118.60
36	5	963	G	N1-C6-O6	-5.09	116.85	119.90
36	5	1209	G	O5'-P-OP1	-5.09	101.12	105.70
36	5	1313	G	N1-C6-O6	5.09	122.95	119.90
1	2	1658	G	C4-C5-N7	5.08	112.83	110.80
36	5	506	U	C6-N1-C2	5.08	124.05	121.00
36	1	1149	G	C6-C5-N7	-5.08	127.35	130.40
37	3	81	U	N3-C2-O2	-5.08	118.64	122.20
36	5	2643	A	C4-C5-N7	5.08	113.24	110.70
36	1	3079	U	C2-N1-C1'	-5.08	111.60	117.70
1	6	625	C	C5-C4-N4	-5.08	116.64	120.20
36	5	3057	U	C5-C4-O4	-5.08	122.85	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2772	C	O4'-C1'-N1	5.08	112.26	108.20
37	7	98	C	C6-N1-C2	5.08	122.33	120.30
1	2	1462	G	N9-C4-C5	-5.08	103.37	105.40
31	D9	36	LEU	CA-CB-CG	5.08	126.98	115.30
36	1	859	G	C8-N9-C1'	-5.08	120.40	127.00
36	1	1103	A	OP1-P-O3'	5.08	116.37	105.20
36	1	636	C	N3-C2-O2	-5.08	118.35	121.90
36	5	2279	A	N1-C6-N6	-5.08	115.56	118.60
1	2	613	G	C4-C5-N7	5.07	112.83	110.80
1	2	1185	U	C2-N1-C1'	5.07	123.79	117.70
1	6	1775	U	N1-C2-N3	5.07	117.94	114.90
1	2	499	U	OP1-P-O3'	5.07	116.36	105.20
36	1	1103	A	P-O3'-C3'	5.07	125.79	119.70
36	1	1196	C	C6-N1-C2	5.07	122.33	120.30
36	1	2101	C	P-O3'-C3'	5.07	125.79	119.70
36	5	2223	A	C8-N9-C4	-5.07	103.77	105.80
36	1	1151	U	C6-N1-C2	-5.07	117.96	121.00
1	6	795	U	N3-C2-O2	-5.07	118.65	122.20
1	6	1100	G	N3-C4-C5	-5.07	126.06	128.60
36	5	1383	G	C6-C5-N7	-5.07	127.36	130.40
36	5	2825	C	C4-C5-C6	-5.07	114.86	117.40
36	1	3367	C	C6-N1-C2	5.07	122.33	120.30
37	3	82	G	C4-C5-N7	-5.07	108.77	110.80
1	6	187	G	P-O3'-C3'	5.07	125.78	119.70
36	5	1852	G	O5'-P-OP1	-5.07	101.14	105.70
1	2	971	A	C4-C5-C6	5.07	119.53	117.00
1	2	1185	U	N1-C2-O2	5.07	126.35	122.80
36	1	580	C	N1-C2-O2	-5.07	115.86	118.90
1	2	728	U	C6-N1-C1'	-5.07	114.11	121.20
1	2	1060	U	N3-C2-O2	-5.07	118.65	122.20
36	1	929	A	OP1-P-O3'	5.07	116.34	105.20
36	1	1404	G	C2-N3-C4	-5.07	109.37	111.90
36	1	2617	U	N1-C2-O2	5.07	126.34	122.80
1	6	1246	C	C2-N1-C1'	5.07	124.37	118.80
36	5	1047	A	C5-N7-C8	-5.07	101.37	103.90
1	6	536	C	C2-N1-C1'	5.06	124.37	118.80
1	6	614	C	N1-C2-O2	5.06	121.94	118.90
36	5	353	G	C4-N9-C1'	-5.06	119.92	126.50
36	5	2980	U	N1-C2-O2	-5.06	119.26	122.80
36	5	3137	C	C2-N3-C4	-5.06	117.37	119.90
1	2	730	G	N3-C4-N9	5.06	129.04	126.00
36	1	1822	C	C6-N1-C2	-5.06	118.28	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3196	U	N3-C2-O2	-5.06	118.66	122.20
36	5	630	A	C5-C6-N1	-5.06	115.17	117.70
36	5	1199	C	C4-C5-C6	-5.06	114.87	117.40
36	5	2526	C	C2-N1-C1'	5.06	124.37	118.80
36	1	1305	U	N1-C2-N3	5.06	117.94	114.90
65	N9	20	GLY	N-CA-C	5.06	125.75	113.10
1	6	36	C	C5-C4-N4	-5.06	116.66	120.20
36	5	3138	U	N3-C2-O2	5.06	125.74	122.20
37	7	91	G	C8-N9-C4	-5.06	104.38	106.40
36	5	968	G	C5-C6-N1	-5.06	108.97	111.50
36	1	101	G	O4'-C1'-N9	5.05	112.24	108.20
1	6	323	A	O5'-P-OP2	-5.05	101.15	105.70
36	1	2624	G	N7-C8-N9	5.05	115.62	113.10
36	1	3128	G	C6-C5-N7	-5.05	127.37	130.40
1	6	1530	C	C6-N1-C2	-5.05	118.28	120.30
36	5	349	A	C2-N3-C4	5.05	113.12	110.60
37	7	49	G	C6-C5-N7	-5.05	127.37	130.40
59	N3	48	ARG	NE-CZ-NH1	5.05	122.82	120.30
1	2	501	U	P-O3'-C3'	5.04	125.75	119.70
36	1	1406	A	O5'-P-OP2	5.04	116.75	110.70
36	5	2375	G	N3-C4-C5	-5.04	126.08	128.60
38	8	20	U	N1-C2-O2	-5.04	119.27	122.80
36	1	432	G	C5-C6-N1	-5.04	108.98	111.50
36	1	612	U	N1-C2-N3	5.04	117.93	114.90
1	6	1737	G	N3-C4-C5	5.04	131.12	128.60
36	5	2584	G	N7-C8-N9	5.04	115.62	113.10
36	5	1306	G	C6-C5-N7	-5.04	127.38	130.40
1	2	542	A	C4-N9-C1'	5.04	135.37	126.30
36	1	993	G	N1-C6-O6	-5.04	116.88	119.90
36	1	1435	A	O5'-P-OP1	-5.04	101.17	105.70
1	6	362	G	N3-C4-N9	5.04	129.02	126.00
1	6	1565	C	N3-C4-C5	5.04	123.92	121.90
36	5	907	G	C5-C6-O6	-5.04	125.58	128.60
36	5	2167	A	N9-C4-C5	5.04	107.82	105.80
36	1	109	A	OP1-P-O3'	5.04	116.28	105.20
36	5	1721	U	C5-C6-N1	5.04	125.22	122.70
36	5	1790	G	C5-C6-N1	-5.04	108.98	111.50
36	1	1367	G	C5-C6-N1	-5.04	108.98	111.50
36	1	1548	C	C5-C6-N1	5.03	123.52	121.00
36	1	329	U	C6-N1-C2	-5.03	117.98	121.00
1	6	1776	A	N7-C8-N9	5.03	116.32	113.80
36	5	1317	A	N1-C6-N6	5.03	121.62	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	94	C	N3-C4-C5	5.03	123.91	121.90
36	1	676	G	N3-C4-N9	5.03	129.02	126.00
1	6	901	G	C5-C6-O6	-5.03	125.58	128.60
36	5	948	C	C6-N1-C2	5.03	122.31	120.30
36	5	2794	G	C5-C6-O6	-5.03	125.58	128.60
1	2	1596	C	N1-C2-O2	5.03	121.92	118.90
36	1	374	A	O4'-C1'-N9	5.03	112.22	108.20
36	5	2987	A	C5-C6-N1	-5.03	115.19	117.70
36	5	3130	A	C6-N1-C2	-5.03	115.58	118.60
36	1	994	G	N1-C6-O6	-5.03	116.88	119.90
36	5	808	A	C2-N3-C4	5.03	113.11	110.60
36	5	1193	A	C5-C6-N1	-5.03	115.19	117.70
36	5	2334	U	N3-C2-O2	-5.03	118.68	122.20
36	5	3018	C	C6-N1-C2	-5.03	118.29	120.30
36	5	3121	U	OP1-P-O3'	5.03	116.25	105.20
78	q2	93	LEU	CA-CB-CG	5.03	126.86	115.30
36	1	2920	U	C5-C6-N1	-5.02	120.19	122.70
36	5	932	U	N3-C4-O4	5.02	122.92	119.40
36	5	1370	G	N1-C6-O6	-5.02	116.89	119.90
1	2	553	G	C5-C6-O6	-5.02	125.59	128.60
1	2	1275	A	O5'-P-OP2	-5.02	101.18	105.70
1	2	1339	C	OP2-P-O3'	5.02	116.25	105.20
36	1	2874	G	P-O3'-C3'	5.02	125.73	119.70
1	6	1698	G	N1-C6-O6	-5.02	116.89	119.90
36	5	969	C	OP1-P-O3'	5.02	116.25	105.20
36	5	1164	G	C8-N9-C4	5.02	108.41	106.40
36	1	91	G	C8-N9-C4	5.02	108.41	106.40
36	1	1117	G	O5'-P-OP1	-5.02	101.18	105.70
36	1	324	A	C2-N3-C4	-5.02	108.09	110.60
36	1	851	C	C5-C6-N1	5.02	123.51	121.00
36	5	2382	G	O5'-P-OP2	-5.02	101.18	105.70
36	1	1429	G	C5-C6-N1	5.02	114.01	111.50
36	1	3121	U	OP1-P-O3'	5.02	116.24	105.20
1	6	670	U	C2-N1-C1'	5.02	123.72	117.70
36	5	1046	A	C2-N3-C4	-5.02	108.09	110.60
36	5	1202	A	C8-N9-C4	-5.02	103.79	105.80
36	5	2944	U	N1-C2-O2	5.02	126.31	122.80
20	C8	3	LEU	CA-CB-CG	5.02	126.84	115.30
36	5	2758	A	N1-C6-N6	5.02	121.61	118.60
36	1	680	G	C8-N9-C4	5.01	108.41	106.40
36	1	1336	U	O5'-P-OP1	-5.01	101.19	105.70
37	3	39	C	N3-C2-O2	-5.01	118.39	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	963	G	C5-C6-N1	5.01	114.01	111.50
36	5	1534	A	C8-N9-C4	-5.01	103.80	105.80
38	8	116	G	C6-C5-N7	-5.01	127.39	130.40
36	1	2721	A	C8-N9-C4	-5.01	103.80	105.80
36	5	1329	U	P-O3'-C3'	5.01	125.71	119.70
1	6	1489	U	C2-N1-C1'	5.01	123.71	117.70
36	5	1049	C	C6-N1-C2	-5.01	118.30	120.30
36	5	1434	G	C2-N3-C4	-5.01	109.39	111.90
36	1	2176	U	N3-C2-O2	-5.01	118.69	122.20
36	1	2873	U	N3-C2-O2	5.01	125.70	122.20
36	5	587	U	N1-C2-N3	-5.01	111.90	114.90
36	5	2608	G	OP2-P-O3'	5.01	116.22	105.20
36	5	3374	U	O5'-P-OP2	-5.01	101.19	105.70
36	1	439	C	N1-C2-O2	5.00	121.90	118.90
36	1	2413	A	N1-C6-N6	-5.00	115.60	118.60
1	2	632	U	N3-C4-C5	5.00	117.60	114.60
1	6	1	U	N3-C4-O4	5.00	122.90	119.40
1	2	1636	C	C6-N1-C2	-5.00	118.30	120.30
36	1	415	G	C4-C5-N7	5.00	112.80	110.80
36	1	650	C	N3-C4-C5	-5.00	119.90	121.90
36	1	2284	C	C2-N1-C1'	5.00	124.30	118.80
36	1	2427	U	N1-C2-O2	5.00	126.30	122.80
36	5	2513	U	OP1-P-O3'	5.00	116.20	105.20
36	5	3216	G	C4-C5-C6	5.00	121.80	118.80

There are no chirality outliers.

All (19) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
19	C7	85	VAL	Peptide
27	D5	94	LYS	Peptide
39	L2	142	ASP	Peptide
39	L2	19	HIS	Peptide
44	L7	157	ASN	Peptide
52	M6	110	PRO	Peptide
64	N8	15	VAL	Peptide
65	N9	19	ASN	Peptide
9	S7	131	PHE	Peptide
18	c6	40	GLU	Peptide
22	d0	70	THR	Peptide
26	d4	29	HIS	Peptide
42	l5	270	LYS	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
44	l7	192	GLY	Peptide
44	l7	226	GLY	Peptide
56	n0	133	ALA	Peptide
64	n8	66	ALA	Peptide
7	s5	44	ASN	Peptide
9	s7	130	VAL	Peptide

5.2 Too-close contacts [i](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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%)	151 (74%)	32 (16%)	21 (10%)	0	3
2	s0	204/251 (81%)	148 (72%)	36 (18%)	20 (10%)	0	4
3	S1	212/254 (84%)	145 (68%)	39 (18%)	28 (13%)	0	1
3	s1	214/254 (84%)	162 (76%)	36 (17%)	16 (8%)	1	7
4	S2	215/253 (85%)	182 (85%)	16 (7%)	17 (8%)	1	6
4	s2	215/253 (85%)	169 (79%)	35 (16%)	11 (5%)	2	14
5	S3	221/239 (92%)	174 (79%)	36 (16%)	11 (5%)	2	14
5	s3	221/239 (92%)	168 (76%)	36 (16%)	17 (8%)	1	6
6	S4	258/260 (99%)	199 (77%)	49 (19%)	10 (4%)	3	19
6	s4	258/260 (99%)	200 (78%)	35 (14%)	23 (9%)	1	5
7	S5	204/224 (91%)	156 (76%)	34 (17%)	14 (7%)	1	8
7	s5	204/224 (91%)	140 (69%)	50 (24%)	14 (7%)	1	8
8	S6	224/236 (95%)	185 (83%)	26 (12%)	13 (6%)	1	11
8	s6	216/236 (92%)	179 (83%)	21 (10%)	16 (7%)	1	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	S7	182/189 (96%)	131 (72%)	35 (19%)	16 (9%)	1	5
9	s7	184/189 (97%)	135 (73%)	34 (18%)	15 (8%)	1	5
10	S8	184/200 (92%)	153 (83%)	21 (11%)	10 (5%)	2	13
10	s8	184/200 (92%)	155 (84%)	18 (10%)	11 (6%)	1	10
11	S9	183/196 (93%)	138 (75%)	29 (16%)	16 (9%)	1	5
11	s9	183/196 (93%)	133 (73%)	41 (22%)	9 (5%)	2	14
12	C0	94/105 (90%)	68 (72%)	16 (17%)	10 (11%)	0	3
13	C1	145/155 (94%)	117 (81%)	18 (12%)	10 (7%)	1	8
13	c1	144/155 (93%)	116 (81%)	21 (15%)	7 (5%)	2	14
14	C2	108/142 (76%)	67 (62%)	28 (26%)	13 (12%)	0	3
14	c2	108/142 (76%)	66 (61%)	29 (27%)	13 (12%)	0	3
15	C3	148/150 (99%)	122 (82%)	20 (14%)	6 (4%)	3	18
15	c3	148/150 (99%)	108 (73%)	29 (20%)	11 (7%)	1	7
16	C4	125/136 (92%)	88 (70%)	22 (18%)	15 (12%)	0	3
16	c4	126/136 (93%)	96 (76%)	19 (15%)	11 (9%)	1	5
17	C5	122/141 (86%)	93 (76%)	19 (16%)	10 (8%)	1	5
17	c5	133/141 (94%)	93 (70%)	23 (17%)	17 (13%)	0	2
18	C6	139/142 (98%)	110 (79%)	22 (16%)	7 (5%)	2	14
18	c6	140/142 (99%)	113 (81%)	19 (14%)	8 (6%)	1	12
19	C7	116/136 (85%)	91 (78%)	17 (15%)	8 (7%)	1	8
19	c7	113/136 (83%)	91 (80%)	16 (14%)	6 (5%)	2	13
20	C8	143/145 (99%)	110 (77%)	24 (17%)	9 (6%)	1	9
20	c8	143/145 (99%)	111 (78%)	21 (15%)	11 (8%)	1	6
21	C9	141/143 (99%)	114 (81%)	19 (14%)	8 (6%)	1	12
21	c9	141/143 (99%)	117 (83%)	18 (13%)	6 (4%)	2	17
22	D0	105/120 (88%)	88 (84%)	13 (12%)	4 (4%)	3	19
22	d0	108/120 (90%)	83 (77%)	17 (16%)	8 (7%)	1	7
23	D1	85/87 (98%)	56 (66%)	19 (22%)	10 (12%)	0	3
23	d1	85/87 (98%)	66 (78%)	16 (19%)	3 (4%)	3	21
24	D2	127/129 (98%)	108 (85%)	12 (9%)	7 (6%)	2	12
24	d2	127/129 (98%)	99 (78%)	25 (20%)	3 (2%)	6	28

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
25	D3	142/144 (99%)	105 (74%)	26 (18%)	11 (8%)	1	6
25	d3	142/144 (99%)	120 (84%)	17 (12%)	5 (4%)	3	21
26	D4	132/134 (98%)	103 (78%)	18 (14%)	11 (8%)	1	5
26	d4	132/134 (98%)	103 (78%)	19 (14%)	10 (8%)	1	6
27	D5	68/107 (64%)	45 (66%)	13 (19%)	10 (15%)	0	1
27	d5	67/107 (63%)	54 (81%)	7 (10%)	6 (9%)	1	4
28	D6	95/97 (98%)	58 (61%)	19 (20%)	18 (19%)	0	0
28	d6	95/97 (98%)	71 (75%)	18 (19%)	6 (6%)	1	9
29	D7	79/81 (98%)	59 (75%)	15 (19%)	5 (6%)	1	9
29	d7	79/81 (98%)	61 (77%)	12 (15%)	6 (8%)	1	6
30	D8	61/66 (92%)	47 (77%)	13 (21%)	1 (2%)	9	34
30	d8	61/66 (92%)	46 (75%)	13 (21%)	2 (3%)	4	22
31	D9	51/55 (93%)	36 (71%)	11 (22%)	4 (8%)	1	6
31	d9	51/55 (93%)	44 (86%)	4 (8%)	3 (6%)	1	11
32	E0	58/62 (94%)	47 (81%)	7 (12%)	4 (7%)	1	8
32	e0	60/62 (97%)	46 (77%)	8 (13%)	6 (10%)	0	4
33	E1	69/76 (91%)	35 (51%)	13 (19%)	21 (30%)	0	0
33	e1	74/76 (97%)	35 (47%)	18 (24%)	21 (28%)	0	0
34	SR	316/318 (99%)	261 (83%)	44 (14%)	11 (4%)	3	21
34	sR	316/318 (99%)	260 (82%)	40 (13%)	16 (5%)	2	14
35	SM	131/182 (72%)	95 (72%)	18 (14%)	18 (14%)	0	1
35	sM	61/182 (34%)	34 (56%)	15 (25%)	12 (20%)	0	0
39	L2	250/253 (99%)	203 (81%)	36 (14%)	11 (4%)	2	16
39	l2	250/253 (99%)	204 (82%)	28 (11%)	18 (7%)	1	7
40	L3	384/386 (100%)	311 (81%)	54 (14%)	19 (5%)	2	14
40	l3	384/386 (100%)	331 (86%)	39 (10%)	14 (4%)	3	21
41	L4	359/361 (99%)	286 (80%)	49 (14%)	24 (7%)	1	8
41	l4	359/361 (99%)	280 (78%)	54 (15%)	25 (7%)	1	7
42	L5	294/296 (99%)	225 (76%)	37 (13%)	32 (11%)	0	3
42	l5	292/296 (99%)	235 (80%)	40 (14%)	17 (6%)	1	11
43	L6	152/175 (87%)	132 (87%)	16 (10%)	4 (3%)	5	26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
43	l6	153/175 (87%)	116 (76%)	29 (19%)	8 (5%)	2	13
44	L7	220/243 (90%)	186 (84%)	24 (11%)	10 (4%)	2	16
44	l7	221/243 (91%)	183 (83%)	28 (13%)	10 (4%)	2	16
45	L8	231/255 (91%)	183 (79%)	37 (16%)	11 (5%)	2	15
45	l8	229/255 (90%)	171 (75%)	37 (16%)	21 (9%)	1	4
46	L9	189/191 (99%)	151 (80%)	28 (15%)	10 (5%)	2	13
46	l9	189/191 (99%)	162 (86%)	22 (12%)	5 (3%)	5	26
47	M0	207/220 (94%)	165 (80%)	34 (16%)	8 (4%)	3	19
47	m0	209/220 (95%)	168 (80%)	26 (12%)	15 (7%)	1	7
48	M1	167/173 (96%)	125 (75%)	24 (14%)	18 (11%)	0	3
48	m1	167/173 (96%)	136 (81%)	15 (9%)	16 (10%)	0	4
49	M3	191/198 (96%)	136 (71%)	40 (21%)	15 (8%)	1	6
49	m3	192/198 (97%)	146 (76%)	31 (16%)	15 (8%)	1	6
50	M4	134/137 (98%)	111 (83%)	13 (10%)	10 (8%)	1	7
50	m4	135/137 (98%)	109 (81%)	20 (15%)	6 (4%)	2	16
51	M5	201/203 (99%)	172 (86%)	21 (10%)	8 (4%)	3	18
51	m5	201/203 (99%)	169 (84%)	25 (12%)	7 (4%)	3	21
52	M6	195/198 (98%)	172 (88%)	18 (9%)	5 (3%)	5	26
52	m6	195/198 (98%)	180 (92%)	9 (5%)	6 (3%)	4	23
53	M7	181/183 (99%)	137 (76%)	34 (19%)	10 (6%)	2	12
53	m7	153/183 (84%)	125 (82%)	24 (16%)	4 (3%)	5	26
54	M8	183/185 (99%)	151 (82%)	30 (16%)	2 (1%)	14	44
54	m8	183/185 (99%)	148 (81%)	25 (14%)	10 (6%)	2	12
55	M9	186/188 (99%)	157 (84%)	24 (13%)	5 (3%)	5	26
55	m9	186/188 (99%)	157 (84%)	21 (11%)	8 (4%)	2	17
56	N0	170/172 (99%)	147 (86%)	18 (11%)	5 (3%)	4	24
56	n0	170/172 (99%)	153 (90%)	14 (8%)	3 (2%)	8	32
57	N1	157/159 (99%)	127 (81%)	23 (15%)	7 (4%)	2	16
57	n1	157/159 (99%)	134 (85%)	20 (13%)	3 (2%)	8	31
58	N2	98/120 (82%)	74 (76%)	17 (17%)	7 (7%)	1	7
58	n2	96/120 (80%)	77 (80%)	17 (18%)	2 (2%)	7	30

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
59	N3	134/136 (98%)	114 (85%)	17 (13%)	3 (2%)	6	29
59	n3	134/136 (98%)	120 (90%)	10 (8%)	4 (3%)	4	23
60	N4	96/155 (62%)	77 (80%)	12 (12%)	7 (7%)	1	7
60	n4	133/155 (86%)	94 (71%)	28 (21%)	11 (8%)	1	5
61	N5	119/141 (84%)	101 (85%)	17 (14%)	1 (1%)	19	51
61	n5	118/141 (84%)	83 (70%)	24 (20%)	11 (9%)	0	4
62	N6	124/126 (98%)	105 (85%)	14 (11%)	5 (4%)	3	18
62	n6	124/126 (98%)	106 (86%)	12 (10%)	6 (5%)	2	15
63	N7	133/135 (98%)	101 (76%)	19 (14%)	13 (10%)	0	4
63	n7	133/135 (98%)	101 (76%)	18 (14%)	14 (10%)	0	3
64	N8	146/148 (99%)	110 (75%)	25 (17%)	11 (8%)	1	7
64	n8	146/148 (99%)	114 (78%)	26 (18%)	6 (4%)	3	18
65	N9	56/58 (97%)	42 (75%)	11 (20%)	3 (5%)	2	13
65	n9	56/58 (97%)	42 (75%)	9 (16%)	5 (9%)	1	5
66	O0	95/104 (91%)	84 (88%)	11 (12%)	0	100	100
66	o0	98/104 (94%)	78 (80%)	12 (12%)	8 (8%)	1	5
67	O1	107/112 (96%)	92 (86%)	11 (10%)	4 (4%)	3	20
67	o1	107/112 (96%)	82 (77%)	18 (17%)	7 (6%)	1	8
68	O2	125/129 (97%)	109 (87%)	15 (12%)	1 (1%)	19	51
68	o2	125/129 (97%)	106 (85%)	13 (10%)	6 (5%)	2	15
69	O3	104/106 (98%)	93 (89%)	8 (8%)	3 (3%)	4	24
69	o3	104/106 (98%)	88 (85%)	13 (12%)	3 (3%)	4	24
70	O4	110/120 (92%)	94 (86%)	12 (11%)	4 (4%)	3	21
70	o4	110/120 (92%)	93 (84%)	11 (10%)	6 (6%)	2	12
71	O5	117/119 (98%)	99 (85%)	13 (11%)	5 (4%)	2	17
71	o5	117/119 (98%)	94 (80%)	18 (15%)	5 (4%)	2	17
72	O6	97/99 (98%)	65 (67%)	20 (21%)	12 (12%)	0	2
72	o6	97/99 (98%)	79 (81%)	13 (13%)	5 (5%)	2	13
73	O7	85/87 (98%)	64 (75%)	19 (22%)	2 (2%)	6	28
73	o7	85/87 (98%)	61 (72%)	16 (19%)	8 (9%)	0	4
74	O8	75/77 (97%)	59 (79%)	11 (15%)	5 (7%)	1	8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
74	o8	75/77 (97%)	56 (75%)	16 (21%)	3 (4%)	3	18
75	O9	48/50 (96%)	40 (83%)	6 (12%)	2 (4%)	3	18
75	o9	48/50 (96%)	40 (83%)	8 (17%)	0	100	100
76	Q0	50/52 (96%)	42 (84%)	5 (10%)	3 (6%)	1	10
76	q0	50/52 (96%)	43 (86%)	6 (12%)	1 (2%)	7	30
77	Q1	23/25 (92%)	21 (91%)	2 (9%)	0	100	100
77	q1	23/25 (92%)	23 (100%)	0	0	100	100
78	Q2	103/105 (98%)	78 (76%)	19 (18%)	6 (6%)	1	11
78	q2	103/105 (98%)	90 (87%)	11 (11%)	2 (2%)	8	31
79	Q3	89/91 (98%)	74 (83%)	12 (14%)	3 (3%)	3	21
79	q3	89/91 (98%)	64 (72%)	21 (24%)	4 (4%)	2	16
80	c0	82/96 (85%)	62 (76%)	10 (12%)	10 (12%)	0	2
82	p0	117/311 (38%)	96 (82%)	16 (14%)	5 (4%)	2	17
All	All	22204/23954 (93%)	17573 (79%)	3238 (15%)	1393 (6%)	1	9

All (1393) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	36	TYR
2	S0	158	VAL
3	S1	37	THR
3	S1	49	ASN
3	S1	58	SER
3	S1	132	ASP
3	S1	158	SER
3	S1	177	GLN
3	S1	181	LEU
3	S1	182	ALA
3	S1	206	PRO
3	S1	213	ARG
3	S1	221	PRO
4	S2	91	ARG
4	S2	95	ARG
4	S2	148	LEU
5	S3	62	ASN
5	S3	65	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	S3	220	PRO
6	S4	142	HIS
7	S5	26	ALA
7	S5	35	GLN
7	S5	39	GLU
7	S5	51	VAL
7	S5	63	GLN
7	S5	153	GLY
8	S6	132	ARG
8	S6	154	ARG
8	S6	173	PRO
9	S7	30	SER
9	S7	64	VAL
9	S7	74	GLN
9	S7	116	ARG
9	S7	131	PHE
9	S7	134	GLU
10	S8	52	ASN
10	S8	149	SER
11	S9	93	LEU
11	S9	134	ILE
12	C0	60	SER
12	C0	81	ASN
12	C0	87	VAL
12	C0	88	PRO
13	C1	7	VAL
14	C2	91	VAL
14	C2	127	GLY
15	C3	22	ALA
16	C4	39	ILE
16	C4	51	ASP
16	C4	124	ASP
16	C4	126	THR
17	C5	39	ALA
17	C5	125	PRO
17	C5	126	VAL
18	C6	40	GLU
18	C6	41	PRO
19	C7	23	LYS
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	14	ILE
20	C8	82	PRO
20	C8	91	ASP
20	C8	92	ILE
21	C9	31	PRO
21	C9	53	TRP
23	D1	2	GLU
23	D1	6	GLY
24	D2	78	ARG
24	D2	83	ILE
25	D3	70	LYS
25	D3	92	CYS
26	D4	6	THR
27	D5	41	ILE
27	D5	43	ASP
27	D5	44	GLN
27	D5	71	ILE
27	D5	97	LYS
28	D6	3	LYS
28	D6	45	VAL
28	D6	65	PRO
28	D6	82	ARG
28	D6	84	VAL
28	D6	85	ARG
28	D6	86	VAL
29	D7	62	ILE
32	E0	47	VAL
33	E1	105	TYR
33	E1	111	GLU
34	SR	161	LYS
34	SR	238	ASP
34	SR	318	ALA
35	SM	42	ALA
35	SM	140	ASP
40	L3	3	HIS
40	L3	4	ARG
40	L3	136	LYS
40	L3	140	ASP
40	L3	142	ALA
40	L3	155	ALA
40	L3	187	SER
41	L4	4	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	15	ALA
41	L4	90	PHE
41	L4	130	ALA
41	L4	131	VAL
41	L4	146	PRO
41	L4	270	SER
41	L4	311	HIS
41	L4	339	LEU
42	L5	59	ASP
42	L5	85	ARG
42	L5	233	ALA
42	L5	234	ASP
42	L5	253	PHE
42	L5	295	GLY
43	L6	98	VAL
44	L7	26	VAL
44	L7	55	TYR
45	L8	25	PRO
45	L8	31	PRO
46	L9	50	ASN
47	M0	142	ASP
47	M0	145	LYS
47	M0	194	GLY
47	M0	218	ALA
48	M1	8	PRO
48	M1	11	ASP
48	M1	115	LYS
48	M1	138	VAL
48	M1	140	ARG
48	M1	165	GLN
49	M3	47	ALA
49	M3	50	PRO
49	M3	51	LEU
49	M3	129	ASN
49	M3	165	SER
50	M4	8	LYS
50	M4	9	ALA
50	M4	136	ALA
51	M5	74	PRO
51	M5	75	VAL
51	M5	187	ARG
52	M6	93	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	M6	94	ARG
52	M6	111	PRO
53	M7	127	ARG
53	M7	157	VAL
55	M9	128	LYS
56	N0	167	ARG
58	N2	31	ALA
60	N4	64	THR
60	N4	81	PRO
63	N7	17	ARG
63	N7	30	ASP
63	N7	125	GLY
64	N8	27	LYS
64	N8	66	ALA
67	O1	83	GLU
71	O5	119	LYS
72	O6	27	SER
72	O6	28	TYR
72	O6	33	ALA
75	O9	3	ALA
76	Q0	78	ILE
76	Q0	79	GLU
78	Q2	30	ALA
78	Q2	100	LYS
2	s0	4	PRO
2	s0	92	HIS
2	s0	111	ILE
2	s0	164	ASN
2	s0	189	VAL
2	s0	206	ASP
3	s1	206	PRO
3	s1	210	ILE
3	s1	223	PHE
4	s2	92	ALA
4	s2	107	SER
5	s3	61	GLU
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
5	s3	220	PRO
6	s4	94	ALA
6	s4	104	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	s4	118	GLU
6	s4	163	ASP
6	s4	205	PHE
7	s5	28	PRO
7	s5	36	ALA
7	s5	43	PHE
7	s5	184	PHE
8	s6	126	ASP
8	s6	153	VAL
8	s6	154	ARG
8	s6	173	PRO
8	s6	174	LYS
9	s7	30	SER
9	s7	64	VAL
9	s7	66	SER
9	s7	67	LEU
9	s7	131	PHE
10	s8	101	ILE
80	c0	2	LEU
80	c0	83	PRO
13	c1	40	LEU
13	c1	133	LYS
13	c1	145	ALA
15	c3	12	SER
15	c3	60	VAL
15	c3	66	ILE
15	c3	137	PRO
16	c4	51	ASP
16	c4	126	THR
17	c5	11	VAL
17	c5	17	TYR
17	c5	50	THR
17	c5	51	SER
17	c5	52	LYS
17	c5	126	VAL
17	c5	127	ARG
17	c5	131	ALA
17	c5	132	GLY
18	c6	42	GLU
18	c6	116	LEU
19	c7	88	VAL
19	c7	103	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	c8	18	LEU
21	c9	29	GLU
21	c9	33	TYR
21	c9	34	VAL
22	d0	15	GLN
22	d0	51	VAL
22	d0	118	VAL
24	d2	56	HIS
26	d4	30	PRO
26	d4	33	ALA
26	d4	35	VAL
26	d4	53	ASP
27	d5	87	GLY
27	d5	104	ALA
29	d7	59	CYS
29	d7	75	GLU
30	d8	32	PHE
31	d9	7	TRP
32	e0	60	PRO
33	e1	79	LYS
33	e1	83	LYS
33	e1	84	VAL
33	e1	87	THR
33	e1	92	LYS
33	e1	98	VAL
33	e1	102	VAL
33	e1	103	LEU
33	e1	106	TYR
34	sR	163	ASP
34	sR	165	ASP
34	sR	318	ALA
39	l2	13	GLY
39	l2	14	SER
39	l2	130	SER
39	l2	144	ASN
39	l2	239	ALA
40	l3	129	ALA
40	l3	200	GLU
41	l4	25	VAL
41	l4	142	VAL
41	l4	146	PRO
41	l4	301	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	l4	311	HIS
42	l5	113	LEU
42	l5	178	ASN
42	l5	258	LYS
42	l5	260	PHE
42	l5	270	LYS
43	l6	45	GLY
43	l6	98	VAL
44	l7	54	GLU
45	l8	25	PRO
45	l8	34	PHE
45	l8	122	LYS
45	l8	124	ASP
45	l8	133	LYS
45	l8	240	ASN
47	m0	82	ARG
47	m0	207	GLU
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
48	m1	94	ARG
48	m1	111	ASP
48	m1	145	LYS
48	m1	173	ASP
49	m3	44	ALA
49	m3	45	LYS
49	m3	47	ALA
49	m3	76	THR
49	m3	134	GLU
49	m3	150	PRO
50	m4	27	GLN
50	m4	137	LYS
51	m5	184	LYS
53	m7	66	SER
54	m8	112	ALA
55	m9	36	ASN
55	m9	112	ALA
57	n1	135	PRO
58	n2	50	LEU
60	n4	25	ASP
60	n4	64	THR
60	n4	134	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
61	n5	40	LEU
61	n5	44	PRO
61	n5	45	LYS
61	n5	136	ALA
62	n6	84	LYS
62	n6	125	LYS
63	n7	4	PHE
63	n7	125	GLY
64	n8	28	HIS
64	n8	94	ALA
65	n9	21	ILE
66	o0	85	PHE
66	o0	104	LEU
67	o1	26	LYS
67	o1	82	GLU
67	o1	83	GLU
67	o1	84	ASP
69	o3	60	ARG
71	o5	119	LYS
72	o6	13	LYS
72	o6	33	ALA
73	o7	55	ARG
73	o7	70	VAL
73	o7	85	LYS
74	o8	18	ALA
76	q0	78	ILE
79	q3	61	LYS
82	p0	68	SER
82	p0	93	LEU
2	S0	5	ALA
2	S0	140	ASN
2	S0	192	THR
2	S0	202	TYR
3	S1	62	LYS
3	S1	63	GLY
3	S1	147	ALA
3	S1	223	PHE
4	S2	92	ALA
4	S2	106	ASP
4	S2	107	SER
4	S2	229	LEU
4	S2	247	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	S3	93	ASP
5	S3	195	SER
6	S4	104	ASP
6	S4	242	LYS
7	S5	33	VAL
7	S5	43	PHE
7	S5	150	GLY
8	S6	25	ARG
8	S6	149	LYS
8	S6	152	ASP
9	S7	29	ASN
9	S7	32	PRO
9	S7	67	LEU
10	S8	22	ARG
10	S8	79	ALA
10	S8	120	THR
10	S8	152	ILE
10	S8	154	SER
11	S9	9	SER
11	S9	18	PRO
11	S9	98	ALA
11	S9	118	LEU
13	C1	3	THR
13	C1	4	GLU
13	C1	30	ARG
13	C1	55	ASP
13	C1	75	VAL
14	C2	25	GLU
14	C2	42	ALA
14	C2	83	GLU
14	C2	89	ILE
14	C2	125	ASN
14	C2	126	TRP
15	C3	68	GLY
15	C3	138	ASN
16	C4	38	THR
16	C4	42	VAL
16	C4	125	SER
18	C6	32	ASN
19	C7	9	VAL
19	C7	124	VAL
20	C8	60	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	76	PRO
22	D0	49	ASN
23	D1	15	ARG
25	D3	3	LYS
25	D3	96	VAL
25	D3	112	LYS
26	D4	4	ALA
26	D4	36	SER
26	D4	53	ASP
27	D5	39	ALA
27	D5	88	ILE
28	D6	18	VAL
28	D6	35	ALA
28	D6	36	ILE
28	D6	47	ALA
29	D7	38	PRO
29	D7	63	LEU
31	D9	20	GLN
32	E0	13	LYS
33	E1	83	LYS
33	E1	84	VAL
33	E1	96	LYS
33	E1	106	TYR
33	E1	128	ALA
33	E1	138	ARG
34	SR	98	GLU
34	SR	194	GLY
34	SR	237	GLN
35	SM	39	PRO
35	SM	87	THR
35	SM	99	LYS
35	SM	100	THR
35	SM	139	GLU
39	L2	13	GLY
39	L2	47	GLN
39	L2	78	ALA
40	L3	5	LYS
40	L3	38	SER
40	L3	317	ILE
41	L4	5	GLN
41	L4	233	LEU
41	L4	292	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	338	LYS
41	L4	349	THR
42	L5	7	ALA
42	L5	72	ASP
42	L5	110	LEU
42	L5	137	ASP
42	L5	178	ASN
42	L5	188	GLU
42	L5	215	ASP
42	L5	258	LYS
42	L5	292	ALA
44	L7	91	GLY
44	L7	158	LYS
44	L7	159	GLN
44	L7	163	LEU
45	L8	36	ILE
45	L8	204	ARG
45	L8	254	ASP
46	L9	2	LYS
46	L9	59	ASN
47	M0	207	GLU
48	M1	24	GLY
48	M1	95	ASN
48	M1	108	GLU
48	M1	114	ILE
48	M1	137	ARG
48	M1	152	HIS
49	M3	88	ALA
49	M3	141	ALA
49	M3	166	ALA
49	M3	193	ALA
50	M4	36	VAL
50	M4	135	LEU
51	M5	81	TYR
51	M5	83	LYS
51	M5	179	LYS
52	M6	66	LYS
53	M7	53	ASP
54	M8	41	ASP
54	M8	98	LYS
55	M9	53	LYS
55	M9	111	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	N0	142	GLN
57	N1	122	GLN
57	N1	125	ALA
58	N2	11	ILE
58	N2	59	ASP
58	N2	60	GLY
59	N3	131	SER
61	N5	62	VAL
62	N6	84	LYS
63	N7	35	SER
64	N8	47	LYS
64	N8	76	ASP
64	N8	97	GLU
64	N8	117	ARG
67	O1	6	ASP
67	O1	84	ASP
71	O5	89	ARG
72	O6	64	SER
74	O8	33	LYS
78	Q2	15	LYS
78	Q2	18	ARG
79	Q3	51	ALA
2	s0	8	ASP
3	s1	21	VAL
3	s1	39	GLU
3	s1	82	ARG
3	s1	93	GLY
3	s1	147	ALA
3	s1	218	LEU
4	s2	163	GLY
4	s2	225	LEU
4	s2	234	PRO
5	s3	179	GLN
6	s4	11	ARG
6	s4	12	LEU
6	s4	24	SER
6	s4	119	ALA
6	s4	195	ILE
6	s4	196	VAL
7	s5	39	GLU
7	s5	98	MET
7	s5	101	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	s6	68	LEU
8	s6	131	LYS
9	s7	15	GLU
9	s7	34	LEU
9	s7	74	GLN
9	s7	144	VAL
9	s7	158	ASP
10	s8	122	GLY
10	s8	136	SER
11	s9	22	SER
11	s9	91	LYS
11	s9	99	LEU
80	c0	69	THR
80	c0	82	LEU
13	c1	7	VAL
13	c1	128	CYS
14	c2	101	ALA
15	c3	29	SER
15	c3	108	ASP
15	c3	139	TRP
16	c4	91	THR
17	c5	68	PRO
17	c5	69	GLU
17	c5	125	PRO
18	c6	39	VAL
18	c6	40	GLU
19	c7	99	VAL
20	c8	14	ILE
20	c8	65	GLU
20	c8	135	GLY
21	c9	100	ILE
22	d0	49	ASN
22	d0	52	LYS
22	d0	96	PRO
25	d3	27	ASN
26	d4	78	SER
27	d5	38	HIS
27	d5	85	LYS
28	d6	8	ASN
28	d6	13	LYS
28	d6	28	LYS
28	d6	34	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	d7	3	LEU
31	d9	6	VAL
32	e0	6	GLY
33	e1	85	TYR
33	e1	100	LEU
33	e1	127	GLY
33	e1	136	LYS
33	e1	137	ASP
34	sR	145	LEU
34	sR	160	GLU
34	sR	237	GLN
35	sM	36	ASP
39	l2	24	GLN
39	l2	142	ASP
39	l2	143	GLU
39	l2	212	GLY
40	l3	3	HIS
40	l3	302	LYS
40	l3	386	ASP
41	l4	15	ALA
41	l4	154	THR
41	l4	231	ALA
41	l4	233	LEU
41	l4	305	ALA
42	l5	12	TYR
42	l5	30	TYR
43	l6	93	VAL
43	l6	172	HIS
44	l7	158	LYS
44	l7	217	PRO
44	l7	223	PHE
45	l8	26	LEU
45	l8	81	THR
45	l8	121	SER
45	l8	146	LYS
45	l8	208	GLU
45	l8	223	ALA
45	l8	237	ILE
45	l8	239	GLY
46	l9	144	ILE
47	m0	3	ARG
47	m0	25	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	m0	145	LYS
47	m0	156	ARG
47	m0	175	ASN
47	m0	195	ALA
47	m0	196	PHE
48	m1	95	ASN
49	m3	37	ASN
49	m3	50	PRO
50	m4	28	SER
51	m5	76	PRO
51	m5	155	VAL
51	m5	183	THR
52	m6	5	PRO
52	m6	16	VAL
54	m8	30	VAL
54	m8	31	LYS
54	m8	84	VAL
54	m8	95	GLU
54	m8	97	PRO
54	m8	99	THR
54	m8	113	LYS
55	m9	5	ARG
56	n0	118	PHE
56	n0	139	TYR
60	n4	7	SER
60	n4	26	SER
60	n4	63	ILE
60	n4	83	THR
61	n5	38	LEU
61	n5	47	ALA
61	n5	77	GLU
62	n6	126	LEU
63	n7	34	LYS
63	n7	41	ALA
63	n7	70	PRO
63	n7	104	PRO
63	n7	129	TRP
64	n8	47	LYS
64	n8	129	PHE
65	n9	33	LYS
66	o0	52	ARG
66	o0	100	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
68	o2	5	PRO
68	o2	125	ARG
69	o3	61	GLY
70	o4	79	SER
71	o5	99	GLN
72	o6	98	ARG
73	o7	54	LYS
73	o7	87	SER
74	o8	17	ARG
78	q2	77	CYS
2	S0	27	ARG
2	S0	30	GLN
2	S0	39	ASN
2	S0	49	ASN
2	S0	185	ARG
3	S1	26	ARG
3	S1	35	PRO
3	S1	54	LEU
3	S1	148	ASN
3	S1	209	ASN
4	S2	35	TRP
4	S2	39	THR
5	S3	196	ARG
5	S3	216	PRO
6	S4	26	CYS
6	S4	66	MET
6	S4	195	ILE
7	S5	58	LEU
8	S6	69	LEU
8	S6	138	ALA
8	S6	146	GLY
8	S6	148	SER
8	S6	174	LYS
9	S7	155	ASP
10	S8	153	GLU
11	S9	15	PRO
11	S9	16	LYS
11	S9	164	PHE
11	S9	169	PRO
12	C0	64	TYR
13	C1	51	GLY
13	C1	145	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	C1	146	ALA
14	C2	101	ALA
14	C2	119	SER
14	C2	131	ASP
15	C3	27	LYS
15	C3	28	LEU
16	C4	18	ARG
16	C4	92	LYS
17	C5	29	SER
17	C5	51	SER
17	C5	52	LYS
17	C5	54	ALA
17	C5	101	ALA
17	C5	127	ARG
20	C8	144	ARG
21	C9	24	ARG
21	C9	28	LEU
21	C9	39	THR
21	C9	130	ARG
22	D0	17	GLN
23	D1	7	GLN
23	D1	18	SER
23	D1	42	GLU
23	D1	44	ARG
24	D2	30	SER
24	D2	66	ASN
24	D2	100	GLY
25	D3	40	SER
25	D3	114	LYS
26	D4	34	ASN
26	D4	35	VAL
26	D4	60	PHE
28	D6	46	GLU
28	D6	63	ALA
28	D6	66	LYS
30	D8	36	THR
31	D9	8	PHE
31	D9	11	PRO
32	E0	51	ASN
33	E1	98	VAL
33	E1	148	TYR
34	SR	146	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	SM	52	PRO
35	SM	64	LYS
35	SM	86	ASN
35	SM	111	GLY
39	L2	143	GLU
39	L2	152	SER
40	L3	96	PRO
41	L4	14	GLU
41	L4	16	THR
41	L4	268	ALA
41	L4	304	GLN
42	L5	20	PHE
42	L5	21	ARG
42	L5	84	PRO
42	L5	139	PRO
42	L5	259	LYS
43	L6	151	LYS
45	L8	39	ALA
45	L8	47	SER
45	L8	122	LYS
45	L8	196	ALA
46	L9	66	ALA
46	L9	96	HIS
46	L9	110	LYS
47	M0	82	ARG
47	M0	195	ALA
48	M1	12	LEU
49	M3	76	THR
49	M3	131	LYS
49	M3	133	PRO
50	M4	11	ASN
51	M5	94	TYR
53	M7	3	ARG
53	M7	63	PHE
53	M7	160	ALA
53	M7	164	LYS
56	N0	107	TYR
57	N1	16	GLN
58	N2	50	LEU
59	N3	82	ALA
60	N4	77	LYS
60	N4	97	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
62	N6	19	TYR
62	N6	125	LYS
63	N7	3	LYS
63	N7	102	GLU
63	N7	103	GLN
63	N7	105	SER
64	N8	78	LEU
64	N8	79	TRP
65	N9	25	LYS
69	O3	40	ASP
69	O3	91	ALA
70	O4	17	SER
70	O4	62	TYR
72	O6	21	THR
72	O6	34	SER
72	O6	52	PRO
72	O6	98	ARG
74	O8	62	ALA
78	Q2	34	SER
79	Q3	28	LYS
2	s0	30	GLN
2	s0	95	ALA
2	s0	124	THR
3	s1	106	THR
3	s1	129	THR
3	s1	209	ASN
4	s2	182	PRO
4	s2	238	SER
5	s3	33	GLY
5	s3	76	ARG
5	s3	90	ARG
5	s3	161	GLY
6	s4	95	THR
6	s4	164	LEU
6	s4	214	LEU
7	s5	55	ASP
7	s5	56	ALA
7	s5	204	GLY
8	s6	25	ARG
8	s6	117	GLY
8	s6	138	ALA
8	s6	152	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	s6	216	LEU
9	s7	111	LYS
9	s7	133	THR
9	s7	155	ASP
11	s9	167	ALA
80	c0	30	ALA
14	c2	39	ASP
14	c2	58	LEU
14	c2	66	VAL
14	c2	89	ILE
14	c2	119	SER
14	c2	131	ASP
15	c3	140	LYS
16	c4	50	ALA
17	c5	10	ARG
17	c5	130	ARG
17	c5	135	THR
18	c6	142	TYR
19	c7	86	PRO
19	c7	96	SER
19	c7	98	GLY
20	c8	55	HIS
20	c8	61	LEU
20	c8	85	PHE
21	c9	28	LEU
21	c9	49	ASP
22	d0	45	ALA
23	d1	42	GLU
25	d3	13	ARG
25	d3	101	GLU
26	d4	36	SER
27	d5	44	GLN
29	d7	58	SER
33	e1	81	LYS
33	e1	145	HIS
34	sR	16	HIS
34	sR	47	LEU
34	sR	96	THR
34	sR	149	ASP
34	sR	161	LYS
34	sR	186	PHE
35	sM	47	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	sM	50	ASN
35	sM	65	THR
39	l2	32	LEU
39	l2	172	GLY
39	l2	215	ASN
40	l3	117	ARG
41	l4	14	GLU
41	l4	24	ALA
41	l4	90	PHE
41	l4	341	SER
42	l5	11	ALA
42	l5	228	ALA
42	l5	245	GLU
43	l6	10	TYR
44	l7	128	LYS
44	l7	159	GLN
44	l7	191	VAL
45	l8	39	ALA
45	l8	196	ALA
45	l8	203	VAL
45	l8	233	TRP
46	l9	189	GLU
47	m0	170	LYS
48	m1	39	GLN
48	m1	114	ILE
48	m1	165	GLN
49	m3	43	ALA
49	m3	152	THR
50	m4	87	ALA
51	m5	81	TYR
51	m5	165	THR
52	m6	28	LEU
52	m6	47	PHE
54	m8	23	ASN
55	m9	155	LEU
55	m9	161	ALA
59	n3	54	LEU
60	n4	76	VAL
60	n4	133	THR
63	n7	103	GLN
63	n7	105	SER
63	n7	124	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
63	n7	127	ASN
64	n8	76	ASP
65	n9	24	PRO
65	n9	39	PHE
68	o2	6	HIS
68	o2	124	GLY
70	o4	51	LEU
70	o4	82	ALA
70	o4	100	ILE
71	o5	14	LYS
72	o6	28	TYR
73	o7	84	SER
2	S0	62	ARG
2	S0	103	THR
2	S0	115	PHE
2	S0	189	VAL
3	S1	81	PHE
4	S2	145	GLY
4	S2	150	GLN
5	S3	51	ARG
5	S3	217	ILE
6	S4	23	LEU
6	S4	200	ARG
7	S5	64	VAL
7	S5	127	GLN
8	S6	20	ASP
8	S6	79	LYS
9	S7	53	GLY
9	S7	98	ILE
10	S8	40	ALA
10	S8	59	ARG
11	S9	147	MET
11	S9	162	SER
15	C3	137	PRO
16	C4	40	ALA
16	C4	50	ALA
16	C4	75	GLY
17	C5	69	GLU
18	C6	113	ASP
18	C6	142	TYR
19	C7	87	GLU
20	C8	142	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	C9	86	ARG
23	D1	16	LYS
23	D1	26	ALA
25	D3	41	SER
25	D3	131	SER
26	D4	5	VAL
26	D4	54	ALA
27	D5	94	LYS
28	D6	11	ASN
28	D6	62	TYR
28	D6	64	LEU
29	D7	12	ALA
29	D7	53	ALA
31	D9	6	VAL
33	E1	85	TYR
33	E1	86	THR
33	E1	87	THR
33	E1	102	VAL
33	E1	137	ASP
35	SM	81	THR
35	SM	82	THR
35	SM	88	ARG
35	SM	101	ASP
39	L2	15	ILE
39	L2	130	SER
39	L2	153	GLY
39	L2	217	GLN
40	L3	29	VAL
40	L3	175	LYS
40	L3	255	CYS
40	L3	385	LYS
41	L4	140	HIS
41	L4	153	SER
41	L4	183	LYS
41	L4	313	LEU
42	L5	19	PRO
42	L5	185	PHE
42	L5	213	ASP
42	L5	260	PHE
43	L6	97	ASN
44	L7	24	GLU
44	L7	25	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	L7	191	VAL
46	L9	49	ASN
46	L9	98	PRO
47	M0	77	THR
48	M1	117	ASP
48	M1	132	ASN
48	M1	151	SER
49	M3	136	GLU
50	M4	106	ARG
51	M5	40	ALA
53	M7	161	ALA
56	N0	24	LEU
56	N0	106	LEU
57	N1	124	VAL
58	N2	51	GLY
59	N3	67	PRO
60	N4	46	PRO
63	N7	4	PHE
63	N7	36	HIS
63	N7	128	GLN
64	N8	96	LYS
70	O4	77	GLY
71	O5	109	ILE
72	O6	78	GLY
72	O6	81	THR
76	Q0	97	ARG
2	s0	68	PRO
2	s0	152	PRO
2	s0	191	ARG
2	s0	200	ASP
3	s1	55	LYS
3	s1	179	SER
4	s2	217	ALA
5	s3	44	THR
5	s3	93	ASP
5	s3	219	ALA
6	s4	80	THR
6	s4	142	HIS
6	s4	166	SER
6	s4	168	LYS
6	s4	242	LYS
7	s5	42	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	s5	126	ASP
10	s8	94	ASN
10	s8	100	ALA
10	s8	114	GLU
11	s9	162	SER
80	c0	23	ALA
80	c0	31	LYS
80	c0	35	ILE
14	c2	40	GLY
14	c2	90	LYS
15	c3	27	LYS
16	c4	12	GLN
16	c4	37	GLU
16	c4	124	ASP
17	c5	14	THR
17	c5	80	MET
18	c6	99	GLU
20	c8	33	THR
20	c8	145	ARG
23	d1	10	GLU
23	d1	77	GLY
24	d2	99	PHE
25	d3	65	ASN
25	d3	70	LYS
26	d4	58	PHE
26	d4	68	LYS
28	d6	35	ALA
30	d8	61	ARG
32	e0	61	SER
33	e1	112	GLY
33	e1	128	ALA
33	e1	146	SER
33	e1	148	TYR
34	sR	226	ALA
35	sM	64	LYS
35	sM	84	LYS
39	l2	80	GLU
39	l2	96	LEU
39	l2	127	ALA
39	l2	170	ALA
40	l3	23	ALA
40	l3	224	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	l3	235	THR
40	l3	385	LYS
41	l4	23	PRO
41	l4	282	SER
41	l4	328	ASN
41	l4	345	GLU
41	l4	346	LYS
42	l5	7	ALA
42	l5	103	LEU
42	l5	114	GLY
42	l5	119	TYR
43	l6	171	PRO
47	m0	12	GLN
47	m0	219	ALA
48	m1	108	GLU
49	m3	60	ALA
49	m3	93	ILE
49	m3	135	ALA
50	m4	129	TYR
54	m8	108	ALA
59	n3	68	GLU
61	n5	48	SER
61	n5	62	VAL
62	n6	6	LEU
62	n6	49	PRO
63	n7	14	VAL
63	n7	134	LEU
66	o0	51	LEU
66	o0	96	GLY
69	o3	59	VAL
70	o4	59	PRO
71	o5	39	PRO
73	o7	67	LEU
74	o8	37	PRO
79	q3	20	SER
82	p0	33	VAL
82	p0	71	PRO
2	S0	126	PRO
2	S0	195	TRP
3	S1	38	PHE
3	S1	60	ALA
3	S1	82	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	S1	210	ILE
4	S2	215	PHE
4	S2	235	LEU
5	S3	59	LEU
5	S3	74	GLN
6	S4	150	PRO
7	S5	65	ARG
9	S7	132	PRO
9	S7	133	THR
9	S7	186	PRO
11	S9	99	LEU
11	S9	167	ALA
12	C0	89	GLY
12	C0	93	GLN
14	C2	130	THR
16	C4	73	GLU
16	C4	96	PRO
16	C4	114	ARG
20	C8	7	GLU
21	C9	29	GLU
22	D0	55	PRO
22	D0	73	GLY
23	D1	85	TYR
24	D2	22	LYS
25	D3	97	ASP
26	D4	100	VAL
27	D5	54	VAL
27	D5	62	VAL
28	D6	5	ARG
32	E0	59	GLY
33	E1	100	LEU
33	E1	110	ALA
33	E1	118	ARG
33	E1	144	CYS
34	SR	15	GLY
34	SR	163	ASP
35	SM	90	ALA
39	L2	127	ALA
39	L2	251	LYS
40	L3	83	PRO
40	L3	135	ALA
40	L3	300	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	232	SER
42	L5	91	GLY
42	L5	153	THR
42	L5	251	PRO
45	L8	157	VAL
46	L9	175	PHE
48	M1	74	PRO
48	M1	167	TYR
52	M6	110	PRO
53	M7	36	ILE
55	M9	130	ASN
62	N6	58	VAL
62	N6	101	PRO
63	N7	133	LYS
64	N8	24	LYS
65	N9	21	ILE
65	N9	32	LEU
68	O2	101	SER
69	O3	59	VAL
70	O4	12	PRO
71	O5	75	TYR
71	O5	98	SER
73	O7	71	SER
74	O8	74	LYS
75	O9	36	ARG
78	Q2	77	CYS
79	Q3	7	LYS
2	s0	10	THR
2	s0	80	THR
2	s0	81	PHE
2	s0	109	ASN
2	s0	140	ASN
3	s1	22	ASP
3	s1	35	PRO
4	s2	91	ARG
4	s2	150	GLN
4	s2	235	LEU
5	s3	195	SER
6	s4	90	ILE
6	s4	215	ASP
6	s4	245	LYS
7	s5	29	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	s8	78	ILE
10	s8	105	ASP
11	s9	6	ARG
11	s9	147	MET
80	c0	32	HIS
13	c1	55	ASP
13	c1	61	THR
14	c2	82	PRO
14	c2	87	PRO
22	d0	13	GLU
26	d4	51	GLU
32	e0	47	VAL
32	e0	54	ARG
34	sR	17	ASN
35	sM	43	ASP
35	sM	63	ASP
35	sM	67	GLY
40	l3	206	ASP
41	l4	62	ALA
41	l4	144	LYS
41	l4	270	SER
41	l4	342	LYS
42	l5	277	LEU
43	l6	138	GLN
43	l6	147	ALA
44	l7	127	LEU
45	l8	69	LEU
46	l9	167	VAL
47	m0	119	TRP
47	m0	176	LEU
48	m1	117	ASP
48	m1	152	HIS
48	m1	153	LYS
49	m3	29	ALA
50	m4	95	ALA
51	m5	187	ARG
52	m6	13	GLY
53	m7	75	GLU
53	m7	86	LYS
55	m9	28	GLU
56	n0	57	GLU
57	n1	58	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
61	n5	93	TYR
62	n6	83	ASP
64	n8	110	GLY
65	n9	23	LYS
67	o1	42	LEU
67	o1	86	LYS
67	o1	88	PRO
68	o2	4	LEU
68	o2	40	SER
72	o6	64	SER
78	q2	78	LYS
79	q3	17	ARG
79	q3	51	ALA
2	S0	11	PRO
2	S0	193	GLN
3	S1	51	SER
6	S4	32	SER
7	S5	54	LYS
11	S9	163	PRO
12	C0	27	PHE
14	C2	87	PRO
18	C6	97	VAL
19	C7	63	LYS
25	D3	4	GLY
26	D4	51	GLU
33	E1	90	LYS
35	SM	12	VAL
40	L3	63	PRO
41	L4	174	ALA
42	L5	198	TYR
42	L5	223	PHE
44	L7	178	ILE
45	L8	30	THR
50	M4	4	ASP
50	M4	6	ILE
53	M7	88	VAL
57	N1	18	ASP
67	O1	7	VAL
72	O6	3	VAL
74	O8	37	PRO
6	s4	30	ARG
7	s5	60	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	s6	70	PRO
8	s6	156	PHE
8	s6	191	ARG
9	s7	163	ASP
10	s8	62	THR
11	s9	88	GLU
14	c2	26	ASP
15	c3	133	ALA
16	c4	132	ARG
20	c8	115	ARG
26	d4	84	LYS
33	e1	131	PHE
34	sR	231	MET
35	sM	42	ALA
35	sM	46	LYS
39	l2	56	ALA
41	l4	159	ILE
44	l7	229	PHE
45	l8	216	SER
46	l9	110	LYS
48	m1	167	TYR
52	m6	162	VAL
66	o0	84	LEU
70	o4	74	ARG
71	o5	84	LYS
3	S1	176	VAL
4	S2	163	GLY
4	S2	223	GLY
9	S7	162	ILE
12	C0	92	ILE
18	C6	39	VAL
34	SR	28	GLY
43	L6	6	ALA
64	N8	15	VAL
2	s0	194	PRO
9	s7	63	PRO
10	s8	186	GLY
11	s9	168	ARG
80	c0	3	MET
14	c2	115	VAL
15	c3	22	ALA
16	c4	57	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	d2	6	VAL
27	d5	92	ILE
28	d6	59	TYR
29	d7	62	ILE
31	d9	11	PRO
39	l2	183	GLY
41	l4	277	PRO
44	l7	178	ILE
53	m7	78	VAL
57	n1	155	PRO
59	n3	16	GLY
59	n3	134	GLY
4	S2	151	PRO
11	S9	137	GLY
12	C0	35	ILE
24	D2	77	PRO
33	E1	127	GLY
34	SR	105	GLY
42	L5	87	GLY
42	L5	125	VAL
49	M3	58	VAL
57	N1	81	GLY
60	N4	82	ILE
74	O8	70	PRO
5	s3	15	GLY
8	s6	69	LEU
10	s8	108	PRO
18	c6	4	VAL
20	c8	76	PRO
32	e0	45	VAL
34	sR	194	GLY
46	l9	172	ILE
13	C1	44	THR
35	SM	53	ARG
42	L5	83	LEU
50	M4	39	ILE
58	N2	22	PRO
60	N4	76	VAL
63	N7	70	PRO
72	O6	94	ILE
73	O7	29	VAL
5	s3	163	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	s3	180	GLY
16	c4	39	ILE
18	c6	97	VAL
29	d7	46	VAL
35	sM	56	GLY
40	l3	141	GLY
42	l5	91	GLY
42	l5	125	VAL
60	n4	132	GLY
73	o7	6	PRO
2	S0	70	PRO
3	S1	48	VAL
46	L9	108	GLY
55	M9	55	VAL
16	c4	131	GLY
40	l3	83	PRO
40	l3	143	GLY
47	m0	47	PRO
49	m3	154	VAL
60	n4	15	PRO
63	n7	75	VAL
66	o0	10	ILE
82	p0	100	ILE
49	M3	130	GLY
57	N1	53	PRO
45	l8	182	GLY
55	m9	73	GLY
55	m9	113	GLY
58	n2	27	VAL
61	n5	52	PRO

5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	173/209 (83%)	143 (83%)	30 (17%)	2 7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	s0	173/209 (83%)	139 (80%)	34 (20%)	1	4
3	S1	191/223 (86%)	159 (83%)	32 (17%)	2	8
3	s1	192/223 (86%)	150 (78%)	42 (22%)	1	3
4	S2	176/204 (86%)	140 (80%)	36 (20%)	1	3
4	s2	176/204 (86%)	133 (76%)	43 (24%)	0	2
5	S3	182/194 (94%)	145 (80%)	37 (20%)	1	3
5	s3	182/194 (94%)	154 (85%)	28 (15%)	2	11
6	S4	221/221 (100%)	179 (81%)	42 (19%)	1	4
6	s4	221/221 (100%)	186 (84%)	35 (16%)	2	10
7	S5	173/190 (91%)	146 (84%)	27 (16%)	2	11
7	s5	173/190 (91%)	147 (85%)	26 (15%)	3	12
8	S6	193/201 (96%)	163 (84%)	30 (16%)	2	11
8	s6	187/201 (93%)	152 (81%)	35 (19%)	1	5
9	S7	165/169 (98%)	140 (85%)	25 (15%)	3	11
9	s7	166/169 (98%)	136 (82%)	30 (18%)	1	6
10	S8	150/161 (93%)	128 (85%)	22 (15%)	3	12
10	s8	150/161 (93%)	130 (87%)	20 (13%)	4	15
11	S9	158/165 (96%)	127 (80%)	31 (20%)	1	4
11	s9	158/165 (96%)	132 (84%)	26 (16%)	2	9
12	C0	77/98 (79%)	67 (87%)	10 (13%)	4	16
13	C1	129/129 (100%)	114 (88%)	15 (12%)	5	20
13	c1	129/129 (100%)	109 (84%)	20 (16%)	2	11
14	C2	88/106 (83%)	70 (80%)	18 (20%)	1	3
14	c2	88/106 (83%)	70 (80%)	18 (20%)	1	3
15	C3	127/127 (100%)	108 (85%)	19 (15%)	3	12
15	c3	127/127 (100%)	98 (77%)	29 (23%)	1	2
16	C4	81/104 (78%)	63 (78%)	18 (22%)	1	2
16	c4	97/104 (93%)	79 (81%)	18 (19%)	1	5
17	C5	101/117 (86%)	80 (79%)	21 (21%)	1	3
17	c5	103/117 (88%)	81 (79%)	22 (21%)	1	3
18	C6	117/118 (99%)	98 (84%)	19 (16%)	2	9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	c6	118/118 (100%)	96 (81%)	22 (19%)	1	5
19	C7	109/124 (88%)	84 (77%)	25 (23%)	1	2
19	c7	106/124 (86%)	89 (84%)	17 (16%)	2	10
20	C8	128/128 (100%)	104 (81%)	24 (19%)	1	4
20	c8	128/128 (100%)	108 (84%)	20 (16%)	2	11
21	C9	115/115 (100%)	89 (77%)	26 (23%)	1	2
21	c9	115/115 (100%)	96 (84%)	19 (16%)	2	9
22	D0	100/113 (88%)	86 (86%)	14 (14%)	3	13
22	d0	103/113 (91%)	79 (77%)	24 (23%)	1	2
23	D1	74/74 (100%)	61 (82%)	13 (18%)	2	6
23	d1	74/74 (100%)	59 (80%)	15 (20%)	1	3
24	D2	110/110 (100%)	86 (78%)	24 (22%)	1	3
24	d2	110/110 (100%)	90 (82%)	20 (18%)	1	6
25	D3	119/119 (100%)	94 (79%)	25 (21%)	1	3
25	d3	119/119 (100%)	94 (79%)	25 (21%)	1	3
26	D4	112/112 (100%)	94 (84%)	18 (16%)	2	10
26	d4	112/112 (100%)	94 (84%)	18 (16%)	2	10
27	D5	61/88 (69%)	46 (75%)	15 (25%)	0	2
27	d5	61/88 (69%)	51 (84%)	10 (16%)	2	9
28	D6	83/83 (100%)	62 (75%)	21 (25%)	0	2
28	d6	83/83 (100%)	66 (80%)	17 (20%)	1	3
29	D7	70/70 (100%)	61 (87%)	9 (13%)	4	16
29	d7	70/70 (100%)	57 (81%)	13 (19%)	1	5
30	D8	56/59 (95%)	44 (79%)	12 (21%)	1	3
30	d8	56/59 (95%)	48 (86%)	8 (14%)	3	13
31	D9	47/48 (98%)	41 (87%)	6 (13%)	4	16
31	d9	47/48 (98%)	38 (81%)	9 (19%)	1	4
32	E0	51/53 (96%)	41 (80%)	10 (20%)	1	4
32	e0	53/53 (100%)	39 (74%)	14 (26%)	0	1
33	E1	62/66 (94%)	49 (79%)	13 (21%)	1	3
33	e1	66/66 (100%)	49 (74%)	17 (26%)	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
34	SR	260/261 (100%)	230 (88%)	30 (12%)	5	20
34	sR	261/261 (100%)	237 (91%)	24 (9%)	9	31
35	SM	97/115 (84%)	80 (82%)	17 (18%)	2	7
35	sM	54/115 (47%)	37 (68%)	17 (32%)	0	1
39	L2	194/195 (100%)	155 (80%)	39 (20%)	1	3
39	l2	194/195 (100%)	160 (82%)	34 (18%)	2	7
40	L3	322/322 (100%)	246 (76%)	76 (24%)	1	2
40	l3	322/322 (100%)	258 (80%)	64 (20%)	1	4
41	L4	288/288 (100%)	240 (83%)	48 (17%)	2	8
41	l4	288/288 (100%)	235 (82%)	53 (18%)	1	5
42	L5	244/244 (100%)	199 (82%)	45 (18%)	1	5
42	l5	243/244 (100%)	192 (79%)	51 (21%)	1	3
43	L6	134/152 (88%)	113 (84%)	21 (16%)	2	10
43	l6	135/152 (89%)	113 (84%)	22 (16%)	2	9
44	L7	186/204 (91%)	166 (89%)	20 (11%)	6	24
44	l7	187/204 (92%)	158 (84%)	29 (16%)	2	11
45	L8	191/207 (92%)	157 (82%)	34 (18%)	2	6
45	l8	177/207 (86%)	140 (79%)	37 (21%)	1	3
46	L9	171/171 (100%)	135 (79%)	36 (21%)	1	3
46	l9	171/171 (100%)	133 (78%)	38 (22%)	1	2
47	M0	180/186 (97%)	147 (82%)	33 (18%)	1	5
47	m0	182/186 (98%)	141 (78%)	41 (22%)	1	2
48	M1	147/149 (99%)	114 (78%)	33 (22%)	1	2
48	m1	147/149 (99%)	123 (84%)	24 (16%)	2	9
49	M3	154/158 (98%)	122 (79%)	32 (21%)	1	3
49	m3	154/158 (98%)	123 (80%)	31 (20%)	1	3
50	M4	107/108 (99%)	89 (83%)	18 (17%)	2	8
50	m4	108/108 (100%)	83 (77%)	25 (23%)	1	2
51	M5	175/175 (100%)	148 (85%)	27 (15%)	2	11
51	m5	175/175 (100%)	145 (83%)	30 (17%)	2	8
52	M6	160/161 (99%)	135 (84%)	25 (16%)	2	11

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
52	m6	160/161 (99%)	128 (80%)	32 (20%)	1	3
53	M7	145/145 (100%)	110 (76%)	35 (24%)	0	2
53	m7	125/145 (86%)	98 (78%)	27 (22%)	1	3
54	M8	150/150 (100%)	129 (86%)	21 (14%)	3	13
54	m8	150/150 (100%)	125 (83%)	25 (17%)	2	8
55	M9	153/153 (100%)	127 (83%)	26 (17%)	2	8
55	m9	153/153 (100%)	126 (82%)	27 (18%)	2	6
56	N0	156/156 (100%)	129 (83%)	27 (17%)	2	7
56	n0	156/156 (100%)	116 (74%)	40 (26%)	0	2
57	N1	136/136 (100%)	108 (79%)	28 (21%)	1	3
57	n1	136/136 (100%)	108 (79%)	28 (21%)	1	3
58	N2	87/106 (82%)	72 (83%)	15 (17%)	2	8
58	n2	85/106 (80%)	69 (81%)	16 (19%)	1	4
59	N3	104/104 (100%)	76 (73%)	28 (27%)	0	1
59	n3	104/104 (100%)	90 (86%)	14 (14%)	4	14
60	N4	86/129 (67%)	72 (84%)	14 (16%)	2	9
60	n4	114/129 (88%)	94 (82%)	20 (18%)	2	7
61	N5	105/117 (90%)	77 (73%)	28 (27%)	0	1
61	n5	104/117 (89%)	82 (79%)	22 (21%)	1	3
62	N6	109/109 (100%)	90 (83%)	19 (17%)	2	7
62	n6	109/109 (100%)	89 (82%)	20 (18%)	1	5
63	N7	115/115 (100%)	95 (83%)	20 (17%)	2	7
63	n7	115/115 (100%)	93 (81%)	22 (19%)	1	4
64	N8	118/118 (100%)	94 (80%)	24 (20%)	1	3
64	n8	118/118 (100%)	94 (80%)	24 (20%)	1	3
65	N9	46/46 (100%)	39 (85%)	7 (15%)	3	11
65	n9	46/46 (100%)	38 (83%)	8 (17%)	2	7
66	O0	81/87 (93%)	64 (79%)	17 (21%)	1	3
66	o0	84/87 (97%)	65 (77%)	19 (23%)	1	2
67	O1	96/96 (100%)	78 (81%)	18 (19%)	1	4
67	o1	96/96 (100%)	79 (82%)	17 (18%)	2	6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
68	O2	109/110 (99%)	94 (86%)	15 (14%)	3	14
68	o2	109/110 (99%)	87 (80%)	22 (20%)	1	3
69	O3	90/90 (100%)	72 (80%)	18 (20%)	1	3
69	o3	90/90 (100%)	76 (84%)	14 (16%)	2	11
70	O4	95/102 (93%)	77 (81%)	18 (19%)	1	4
70	o4	95/102 (93%)	81 (85%)	14 (15%)	3	12
71	O5	104/104 (100%)	89 (86%)	15 (14%)	3	13
71	o5	104/104 (100%)	83 (80%)	21 (20%)	1	3
72	O6	81/81 (100%)	58 (72%)	23 (28%)	0	1
72	o6	81/81 (100%)	55 (68%)	26 (32%)	0	1
73	O7	70/70 (100%)	54 (77%)	16 (23%)	1	2
73	o7	70/70 (100%)	55 (79%)	15 (21%)	1	3
74	O8	68/68 (100%)	55 (81%)	13 (19%)	1	4
74	o8	68/68 (100%)	54 (79%)	14 (21%)	1	3
75	O9	45/45 (100%)	38 (84%)	7 (16%)	2	11
75	o9	45/45 (100%)	36 (80%)	9 (20%)	1	3
76	Q0	47/47 (100%)	38 (81%)	9 (19%)	1	4
76	q0	47/47 (100%)	38 (81%)	9 (19%)	1	4
77	Q1	23/23 (100%)	18 (78%)	5 (22%)	1	3
77	q1	23/23 (100%)	16 (70%)	7 (30%)	0	1
78	Q2	90/90 (100%)	72 (80%)	18 (20%)	1	3
78	q2	90/90 (100%)	71 (79%)	19 (21%)	1	3
79	Q3	71/71 (100%)	63 (89%)	8 (11%)	6	21
79	q3	71/71 (100%)	55 (78%)	16 (22%)	1	2
80	c0	73/78 (94%)	64 (88%)	9 (12%)	4	17
82	p0	105/232 (45%)	88 (84%)	17 (16%)	2	9
All	All	18856/19936 (95%)	15356 (81%)	3500 (19%)	1	5

All (3500) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	6	THR
2	S0	9	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	S0	18	LEU
2	S0	37	VAL
2	S0	49	ASN
2	S0	50	VAL
2	S0	55	GLU
2	S0	57	LEU
2	S0	62	ARG
2	S0	84	ARG
2	S0	88	LYS
2	S0	101	ARG
2	S0	114	SER
2	S0	139	VAL
2	S0	140	ASN
2	S0	154	GLU
2	S0	157	ASP
2	S0	168	HIS
2	S0	170	ILE
2	S0	172	LEU
2	S0	177	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	189	VAL
2	S0	191	ARG
2	S0	193	GLN
2	S0	196	SER
2	S0	198	MET
2	S0	200	ASP
2	S0	204	TYR
3	S1	21	VAL
3	S1	25	THR
3	S1	29	TRP
3	S1	30	PHE
3	S1	31	ASP
3	S1	36	SER
3	S1	46	THR
3	S1	61	LEU
3	S1	70	LEU
3	S1	73	LEU
3	S1	78	ASP
3	S1	81	PHE
3	S1	96	LEU
3	S1	97	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	S1	103	MET
3	S1	105	PHE
3	S1	110	LEU
3	S1	111	ARG
3	S1	112	SER
3	S1	154	SER
3	S1	167	VAL
3	S1	180	THR
3	S1	181	LEU
3	S1	193	ILE
3	S1	198	GLU
3	S1	202	LYS
3	S1	212	VAL
3	S1	214	LYS
3	S1	218	LEU
3	S1	220	GLN
3	S1	223	PHE
3	S1	225	VAL
4	S2	41	LEU
4	S2	58	LEU
4	S2	69	ILE
4	S2	70	ASP
4	S2	72	LEU
4	S2	73	LEU
4	S2	77	GLN
4	S2	86	VAL
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	96	THR
4	S2	97	ARG
4	S2	111	VAL
4	S2	113	LEU
4	S2	117	THR
4	S2	134	LEU
4	S2	140	ARG
4	S2	141	ARG
4	S2	148	LEU
4	S2	158	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	S2	159	THR
4	S2	166	THR
4	S2	168	ARG
4	S2	169	LEU
4	S2	207	LEU
4	S2	222	TYR
4	S2	225	LEU
4	S2	226	THR
4	S2	235	LEU
4	S2	242	ILE
4	S2	244	SER
4	S2	245	ASP
5	S3	4	LEU
5	S3	21	LEU
5	S3	23	GLU
5	S3	41	VAL
5	S3	62	ASN
5	S3	65	ARG
5	S3	66	ILE
5	S3	76	ARG
5	S3	84	ILE
5	S3	92	GLN
5	S3	94	ARG
5	S3	103	GLU
5	S3	105	MET
5	S3	111	ASN
5	S3	113	LEU
5	S3	115	ILE
5	S3	117	ARG
5	S3	124	ARG
5	S3	127	MET
5	S3	132	LYS
5	S3	134	CYS
5	S3	137	VAL
5	S3	151	LYS
5	S3	157	LEU
5	S3	158	ILE
5	S3	172	THR
5	S3	176	LEU
5	S3	178	ARG
5	S3	179	GLN
5	S3	181	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	S3	182	LEU
5	S3	189	MET
5	S3	190	ARG
5	S3	209	ILE
5	S3	217	ILE
5	S3	220	PRO
5	S3	223	LYS
6	S4	6	LYS
6	S4	7	LYS
6	S4	9	LEU
6	S4	12	LEU
6	S4	26	CYS
6	S4	30	ARG
6	S4	37	LYS
6	S4	38	LEU
6	S4	42	LEU
6	S4	54	TYR
6	S4	62	LYS
6	S4	65	LEU
6	S4	77	ARG
6	S4	90	ILE
6	S4	92	LEU
6	S4	115	THR
6	S4	116	ASP
6	S4	123	LEU
6	S4	128	LYS
6	S4	130	GLN
6	S4	131	LEU
6	S4	180	LEU
6	S4	182	TYR
6	S4	187	ARG
6	S4	191	ARG
6	S4	192	ILE
6	S4	197	HIS
6	S4	206	ASP
6	S4	211	LYS
6	S4	215	ASP
6	S4	217	THR
6	S4	221	ARG
6	S4	227	VAL
6	S4	231	GLN
6	S4	238	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	S4	240	LYS
6	S4	242	LYS
6	S4	246	LEU
6	S4	248	ILE
6	S4	258	GLN
6	S4	259	GLN
6	S4	261	LEU
7	S5	25	LEU
7	S5	38	THR
7	S5	40	ILE
7	S5	41	LYS
7	S5	43	PHE
7	S5	45	LYS
7	S5	47	SER
7	S5	53	VAL
7	S5	59	VAL
7	S5	63	GLN
7	S5	65	ARG
7	S5	69	PHE
7	S5	76	ARG
7	S5	79	ASN
7	S5	89	ILE
7	S5	94	THR
7	S5	96	SER
7	S5	97	LEU
7	S5	108	LEU
7	S5	146	THR
7	S5	156	ARG
7	S5	157	ARG
7	S5	162	VAL
7	S5	163	SER
7	S5	166	ARG
7	S5	216	GLU
7	S5	225	ARG
8	S6	13	GLN
8	S6	25	ARG
8	S6	51	LYS
8	S6	58	LYS
8	S6	59	GLN
8	S6	65	GLN
8	S6	69	LEU
8	S6	76	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	S6	78	THR
8	S6	79	LYS
8	S6	82	SER
8	S6	87	ARG
8	S6	114	VAL
8	S6	120	GLU
8	S6	125	THR
8	S6	126	ASP
8	S6	128	THR
8	S6	132	ARG
8	S6	133	LEU
8	S6	137	ARG
8	S6	144	PHE
8	S6	154	ARG
8	S6	170	THR
8	S6	175	ILE
8	S6	177	ARG
8	S6	180	THR
8	S6	182	GLN
8	S6	211	LEU
8	S6	216	LEU
8	S6	223	LYS
9	S7	15	GLU
9	S7	39	ARG
9	S7	46	ILE
9	S7	49	ILE
9	S7	50	ASP
9	S7	51	VAL
9	S7	60	ILE
9	S7	67	LEU
9	S7	70	PHE
9	S7	76	LYS
9	S7	77	LEU
9	S7	80	GLU
9	S7	85	PHE
9	S7	87	ASP
9	S7	97	ARG
9	S7	110	GLN
9	S7	114	ARG
9	S7	126	LEU
9	S7	127	GLU
9	S7	131	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	S7	147	ASN
9	S7	167	GLU
9	S7	168	SER
9	S7	181	ILE
9	S7	185	ILE
10	S8	3	ILE
10	S8	4	SER
10	S8	8	ARG
10	S8	9	HIS
10	S8	10	LYS
10	S8	20	GLN
10	S8	21	PHE
10	S8	22	ARG
10	S8	25	ARG
10	S8	29	LEU
10	S8	46	VAL
10	S8	47	ARG
10	S8	58	LEU
10	S8	74	LYS
10	S8	92	ARG
10	S8	103	GLN
10	S8	138	ASN
10	S8	160	PHE
10	S8	164	ARG
10	S8	184	LEU
10	S8	196	LEU
10	S8	199	LYS
11	S9	3	ARG
11	S9	14	THR
11	S9	28	LEU
11	S9	37	LYS
11	S9	39	LYS
11	S9	46	SER
11	S9	57	ARG
11	S9	60	LEU
11	S9	64	GLU
11	S9	78	ARG
11	S9	79	ARG
11	S9	80	LEU
11	S9	82	ARG
11	S9	88	GLU
11	S9	92	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	S9	93	LEU
11	S9	97	LEU
11	S9	99	LEU
11	S9	104	PHE
11	S9	118	LEU
11	S9	130	THR
11	S9	134	ILE
11	S9	138	LYS
11	S9	149	ARG
11	S9	157	ASP
11	S9	161	THR
11	S9	171	ARG
11	S9	172	VAL
11	S9	174	ARG
11	S9	175	ARG
11	S9	186	GLU
12	C0	1	MET
12	C0	20	VAL
12	C0	25	LYS
12	C0	27	PHE
12	C0	29	GLN
12	C0	46	LEU
12	C0	55	VAL
12	C0	56	LYS
12	C0	76	LEU
12	C0	82	LEU
13	C1	10	GLU
13	C1	21	ASN
13	C1	29	LYS
13	C1	44	THR
13	C1	56	LYS
13	C1	63	LEU
13	C1	67	ARG
13	C1	69	LYS
13	C1	74	THR
13	C1	83	THR
13	C1	111	VAL
13	C1	118	GLN
13	C1	123	VAL
13	C1	140	VAL
13	C1	141	LYS
14	C2	28	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	C2	33	ARG
14	C2	41	LEU
14	C2	43	ARG
14	C2	45	LEU
14	C2	50	LYS
14	C2	61	VAL
14	C2	66	VAL
14	C2	71	ILE
14	C2	74	LEU
14	C2	83	GLU
14	C2	86	VAL
14	C2	89	ILE
14	C2	103	LEU
14	C2	126	TRP
14	C2	132	GLU
14	C2	138	GLU
14	C2	139	HIS
15	C3	3	ARG
15	C3	6	SER
15	C3	9	LYS
15	C3	27	LYS
15	C3	32	SER
15	C3	39	LYS
15	C3	45	LEU
15	C3	61	THR
15	C3	64	ARG
15	C3	66	ILE
15	C3	67	THR
15	C3	83	GLU
15	C3	88	LEU
15	C3	102	LEU
15	C3	125	LEU
15	C3	132	VAL
15	C3	134	VAL
15	C3	140	LYS
15	C3	142	GLU
16	C4	13	VAL
16	C4	14	PHE
16	C4	16	VAL
16	C4	24	ASN
16	C4	26	THR
16	C4	29	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	C4	39	ILE
16	C4	42	VAL
16	C4	76	ILE
16	C4	86	THR
16	C4	92	LYS
16	C4	93	THR
16	C4	99	GLN
16	C4	103	ARG
16	C4	108	SER
16	C4	124	ASP
16	C4	132	ARG
16	C4	137	LEU
17	C5	11	VAL
17	C5	13	LYS
17	C5	20	VAL
17	C5	22	LEU
17	C5	26	LEU
17	C5	29	SER
17	C5	34	VAL
17	C5	35	LYS
17	C5	36	LEU
17	C5	43	ARG
17	C5	44	ARG
17	C5	47	ARG
17	C5	52	LYS
17	C5	69	GLU
17	C5	86	VAL
17	C5	94	VAL
17	C5	110	GLU
17	C5	121	ILE
17	C5	124	THR
17	C5	126	VAL
17	C5	128	HIS
18	C6	8	GLN
18	C6	26	LYS
18	C6	31	VAL
18	C6	44	LEU
18	C6	54	LEU
18	C6	66	ARG
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	74	HIS
18	C6	98	ASP
18	C6	106	LYS
18	C6	114	ARG
18	C6	116	LEU
18	C6	118	ILE
18	C6	123	ARG
18	C6	128	LYS
18	C6	137	ARG
18	C6	138	PHE
19	C7	5	ARG
19	C7	6	THR
19	C7	8	THR
19	C7	26	LEU
19	C7	29	GLN
19	C7	38	ILE
19	C7	46	LEU
19	C7	49	LYS
19	C7	58	MET
19	C7	62	GLN
19	C7	69	ILE
19	C7	71	PHE
19	C7	72	LYS
19	C7	78	ARG
19	C7	83	GLN
19	C7	84	TYR
19	C7	88	VAL
19	C7	96	SER
19	C7	101	ASN
19	C7	102	VAL
19	C7	103	ASP
19	C7	104	ASN
19	C7	115	LEU
19	C7	117	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	5	VAL
20	C8	8	GLN
20	C8	11	PHE
20	C8	12	GLN
20	C8	13	HIS
20	C8	14	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	C8	20	THR
20	C8	26	ILE
20	C8	28	ILE
20	C8	40	ARG
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS
20	C8	89	GLN
20	C8	92	ILE
20	C8	93	THR
20	C8	97	ASP
20	C8	104	ASN
20	C8	132	ARG
20	C8	133	VAL
20	C8	136	GLN
20	C8	141	THR
20	C8	143	ARG
21	C9	4	VAL
21	C9	6	VAL
21	C9	18	TYR
21	C9	22	LEU
21	C9	28	LEU
21	C9	30	VAL
21	C9	33	TYR
21	C9	34	VAL
21	C9	35	ASP
21	C9	36	ILE
21	C9	38	LYS
21	C9	57	ARG
21	C9	67	MET
21	C9	68	ARG
21	C9	70	GLN
21	C9	71	VAL
21	C9	104	VAL
21	C9	122	ARG
21	C9	125	SER
21	C9	130	ARG
21	C9	131	ASP
21	C9	132	LEU
21	C9	134	ARG
21	C9	140	LEU
21	C9	143	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	C9	144	GLU
22	D0	22	ILE
22	D0	23	ARG
22	D0	27	THR
22	D0	30	LYS
22	D0	40	ASN
22	D0	47	GLN
22	D0	51	VAL
22	D0	57	ARG
22	D0	61	LYS
22	D0	68	ARG
22	D0	74	GLU
22	D0	80	GLU
22	D0	81	THR
22	D0	103	ILE
23	D1	5	LYS
23	D1	7	GLN
23	D1	11	LEU
23	D1	32	VAL
23	D1	41	GLU
23	D1	52	THR
23	D1	68	SER
23	D1	69	LEU
23	D1	75	ASN
23	D1	78	LEU
23	D1	79	LEU
23	D1	80	LYS
23	D1	87	ARG
24	D2	4	SER
24	D2	7	LEU
24	D2	12	ASN
24	D2	24	GLN
24	D2	25	VAL
24	D2	26	LEU
24	D2	27	ILE
24	D2	31	SER
24	D2	36	LYS
24	D2	43	LYS
24	D2	50	PHE
24	D2	53	ILE
24	D2	65	LEU
24	D2	66	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	D2	68	ARG
24	D2	76	SER
24	D2	87	GLU
24	D2	98	GLN
24	D2	103	ILE
24	D2	104	LEU
24	D2	105	THR
24	D2	121	VAL
24	D2	122	SER
24	D2	125	ILE
25	D3	3	LYS
25	D3	7	ARG
25	D3	9	LEU
25	D3	16	ARG
25	D3	19	ARG
25	D3	33	LEU
25	D3	46	SER
25	D3	66	SER
25	D3	72	VAL
25	D3	77	ILE
25	D3	82	LYS
25	D3	84	THR
25	D3	87	VAL
25	D3	89	ASN
25	D3	96	VAL
25	D3	100	ASP
25	D3	107	PHE
25	D3	110	LYS
25	D3	114	LYS
25	D3	117	ILE
25	D3	127	VAL
25	D3	131	SER
25	D3	133	LEU
25	D3	140	LYS
25	D3	144	ARG
26	D4	2	SER
26	D4	17	LEU
26	D4	28	LEU
26	D4	29	HIS
26	D4	32	ARG
26	D4	34	ASN
26	D4	36	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	D4	51	GLU
26	D4	57	VAL
26	D4	61	ARG
26	D4	62	THR
26	D4	96	LEU
26	D4	98	GLU
26	D4	99	LYS
26	D4	102	LYS
26	D4	123	LYS
26	D4	124	ARG
26	D4	127	LYS
27	D5	42	LEU
27	D5	58	ARG
27	D5	59	TYR
27	D5	60	VAL
27	D5	63	SER
27	D5	65	LEU
27	D5	67	ASP
27	D5	68	ARG
27	D5	69	LEU
27	D5	71	ILE
27	D5	75	LEU
27	D5	85	LYS
27	D5	95	HIS
27	D5	100	ILE
27	D5	103	ARG
28	D6	4	LYS
28	D6	5	ARG
28	D6	18	VAL
28	D6	36	ILE
28	D6	38	ARG
28	D6	39	MET
28	D6	41	ILE
28	D6	44	ILE
28	D6	45	VAL
28	D6	46	GLU
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	68	TYR
28	D6	69	ASN
28	D6	71	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	D6	82	ARG
28	D6	85	ARG
28	D6	86	VAL
28	D6	90	GLU
28	D6	95	ARG
29	D7	3	LEU
29	D7	15	GLU
29	D7	26	GLN
29	D7	33	LEU
29	D7	35	VAL
29	D7	36	LYS
29	D7	62	ILE
29	D7	72	LYS
29	D7	78	SER
30	D8	13	ILE
30	D8	15	VAL
30	D8	19	THR
30	D8	31	GLU
30	D8	32	PHE
30	D8	33	LEU
30	D8	34	GLU
30	D8	35	ASP
30	D8	39	THR
30	D8	49	ARG
30	D8	54	LEU
30	D8	58	GLU
31	D9	12	ARG
31	D9	19	ARG
31	D9	30	LEU
31	D9	36	LEU
31	D9	49	ASP
31	D9	54	LYS
32	E0	3	LYS
32	E0	14	VAL
32	E0	21	VAL
32	E0	22	GLU
32	E0	28	LYS
32	E0	39	LEU
32	E0	42	ARG
32	E0	47	VAL
32	E0	53	LYS
32	E0	56	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	E1	83	LYS
33	E1	84	VAL
33	E1	86	THR
33	E1	91	ILE
33	E1	97	LYS
33	E1	100	LEU
33	E1	108	VAL
33	E1	113	LYS
33	E1	120	GLU
33	E1	130	VAL
33	E1	139	LEU
33	E1	140	TYR
33	E1	151	ASN
34	SR	6	VAL
34	SR	10	ARG
34	SR	17	ASN
34	SR	46	LYS
34	SR	50	ASP
34	SR	52	GLN
34	SR	59	ARG
34	SR	66	HIS
34	SR	76	ASP
34	SR	106	HIS
34	SR	117	LYS
34	SR	127	ARG
34	SR	134	TRP
34	SR	136	ILE
34	SR	140	CYS
34	SR	141	LEU
34	SR	144	LEU
34	SR	149	ASP
34	SR	153	GLN
34	SR	165	ASP
34	SR	166	SER
34	SR	191	ASP
34	SR	196	ASN
34	SR	233	THR
34	SR	238	ASP
34	SR	258	THR
34	SR	268	GLN
34	SR	290	VAL
34	SR	300	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	SR	317	THR
35	SM	28	SER
35	SM	34	LYS
35	SM	46	LYS
35	SM	48	ARG
35	SM	49	LYS
35	SM	64	LYS
35	SM	68	ARG
35	SM	69	ARG
35	SM	75	ASP
35	SM	77	THR
35	SM	84	LYS
35	SM	89	ARG
35	SM	91	THR
35	SM	102	THR
35	SM	104	LYS
35	SM	130	GLU
35	SM	140	ASP
39	L2	14	SER
39	L2	20	THR
39	L2	22	LEU
39	L2	32	LEU
39	L2	44	ILE
39	L2	45	VAL
39	L2	49	VAL
39	L2	62	VAL
39	L2	64	ARG
39	L2	70	ARG
39	L2	72	ARG
39	L2	74	GLU
39	L2	88	ILE
39	L2	95	SER
39	L2	96	LEU
39	L2	97	ASN
39	L2	98	VAL
39	L2	101	VAL
39	L2	107	VAL
39	L2	109	GLU
39	L2	111	THR
39	L2	116	VAL
39	L2	132	ASN
39	L2	139	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	L2	142	ASP
39	L2	157	VAL
39	L2	159	SER
39	L2	165	VAL
39	L2	176	ASP
39	L2	179	LEU
39	L2	180	LEU
39	L2	192	LYS
39	L2	204	MET
39	L2	207	VAL
39	L2	227	ARG
39	L2	231	SER
39	L2	243	THR
39	L2	245	LEU
39	L2	247	ARG
40	L3	7	GLU
40	L3	13	HIS
40	L3	19	ARG
40	L3	20	LYS
40	L3	25	ILE
40	L3	30	LYS
40	L3	36	ASP
40	L3	37	ARG
40	L3	38	SER
40	L3	46	PHE
40	L3	47	LEU
40	L3	55	THR
40	L3	56	ILE
40	L3	70	ARG
40	L3	72	VAL
40	L3	81	THR
40	L3	85	VAL
40	L3	93	VAL
40	L3	99	LEU
40	L3	100	ARG
40	L3	103	THR
40	L3	104	THR
40	L3	114	VAL
40	L3	116	ARG
40	L3	126	LYS
40	L3	136	LYS
40	L3	139	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	L3	148	LEU
40	L3	150	ARG
40	L3	161	LEU
40	L3	166	ILE
40	L3	183	LEU
40	L3	192	VAL
40	L3	193	ASP
40	L3	205	VAL
40	L3	208	VAL
40	L3	210	GLU
40	L3	211	GLN
40	L3	214	MET
40	L3	222	LYS
40	L3	226	PHE
40	L3	229	VAL
40	L3	232	ARG
40	L3	236	LYS
40	L3	238	LEU
40	L3	241	LYS
40	L3	243	HIS
40	L3	244	ARG
40	L3	256	HIS
40	L3	264	VAL
40	L3	275	ARG
40	L3	277	SER
40	L3	282	ILE
40	L3	284	ARG
40	L3	285	VAL
40	L3	289	ASP
40	L3	291	GLU
40	L3	296	THR
40	L3	304	THR
40	L3	305	ILE
40	L3	319	ASN
40	L3	320	ASP
40	L3	324	VAL
40	L3	328	ILE
40	L3	332	ARG
40	L3	336	VAL
40	L3	337	THR
40	L3	341	SER
40	L3	346	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	L3	347	SER
40	L3	348	ARG
40	L3	351	LEU
40	L3	355	SER
40	L3	361	THR
40	L3	369	ARG
40	L3	372	THR
41	L4	3	ARG
41	L4	4	PRO
41	L4	25	VAL
41	L4	37	THR
41	L4	41	SER
41	L4	52	VAL
41	L4	60	THR
41	L4	73	ARG
41	L4	74	ILE
41	L4	84	ARG
41	L4	93	MET
41	L4	99	MET
41	L4	108	LYS
41	L4	112	LYS
41	L4	120	TYR
41	L4	136	LEU
41	L4	138	ARG
41	L4	150	LEU
41	L4	153	SER
41	L4	154	THR
41	L4	156	LEU
41	L4	158	SER
41	L4	172	VAL
41	L4	177	ASP
41	L4	179	LEU
41	L4	193	LYS
41	L4	200	THR
41	L4	203	ARG
41	L4	220	ARG
41	L4	222	VAL
41	L4	230	VAL
41	L4	246	ARG
41	L4	252	GLU
41	L4	256	THR
41	L4	282	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	L4	287	THR
41	L4	292	SER
41	L4	293	SER
41	L4	296	GLN
41	L4	297	SER
41	L4	304	GLN
41	L4	308	LYS
41	L4	313	LEU
41	L4	333	VAL
41	L4	338	LYS
41	L4	347	THR
41	L4	349	THR
41	L4	354	VAL
42	L5	8	LYS
42	L5	22	ARG
42	L5	23	ARG
42	L5	35	ARG
42	L5	41	LYS
42	L5	64	ILE
42	L5	66	SER
42	L5	67	SER
42	L5	69	ILE
42	L5	89	THR
42	L5	92	LEU
42	L5	93	THR
42	L5	95	TRP
42	L5	101	THR
42	L5	105	ILE
42	L5	112	LYS
42	L5	115	LEU
42	L5	124	GLU
42	L5	131	LEU
42	L5	135	VAL
42	L5	137	ASP
42	L5	140	ARG
42	L5	144	VAL
42	L5	146	LEU
42	L5	152	ARG
42	L5	155	THR
42	L5	159	VAL
42	L5	163	LEU
42	L5	177	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	L5	185	PHE
42	L5	188	GLU
42	L5	197	SER
42	L5	205	SER
42	L5	216	GLU
42	L5	222	LEU
42	L5	231	ILE
42	L5	232	ASP
42	L5	234	ASP
42	L5	254	LYS
42	L5	258	LYS
42	L5	259	LYS
42	L5	263	GLU
42	L5	273	ARG
42	L5	290	ILE
42	L5	293	LEU
43	L6	5	LYS
43	L6	15	VAL
43	L6	21	THR
43	L6	30	LEU
43	L6	31	ARG
43	L6	38	THR
43	L6	46	ARG
43	L6	62	THR
43	L6	64	LEU
43	L6	78	ARG
43	L6	79	VAL
43	L6	89	THR
43	L6	98	VAL
43	L6	109	GLU
43	L6	129	GLU
43	L6	134	ARG
43	L6	141	VAL
43	L6	149	ILE
43	L6	155	LEU
43	L6	156	LYS
43	L6	164	SER
44	L7	25	GLN
44	L7	26	VAL
44	L7	38	LYS
44	L7	45	LEU
44	L7	80	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	L7	82	LYS
44	L7	83	LEU
44	L7	109	THR
44	L7	110	ARG
44	L7	128	LYS
44	L7	134	VAL
44	L7	164	SER
44	L7	175	LYS
44	L7	179	LEU
44	L7	180	SER
44	L7	182	ASP
44	L7	184	LEU
44	L7	234	GLU
44	L7	239	LEU
44	L7	241	LYS
45	L8	26	LEU
45	L8	41	GLN
45	L8	47	SER
45	L8	50	VAL
45	L8	51	LYS
45	L8	63	LYS
45	L8	67	ILE
45	L8	71	VAL
45	L8	74	THR
45	L8	77	GLN
45	L8	79	GLN
45	L8	81	THR
45	L8	84	ARG
45	L8	92	LYS
45	L8	106	LYS
45	L8	132	VAL
45	L8	136	LEU
45	L8	138	HIS
45	L8	156	ASP
45	L8	169	LEU
45	L8	185	ARG
45	L8	189	LEU
45	L8	194	THR
45	L8	203	VAL
45	L8	204	ARG
45	L8	214	LEU
45	L8	215	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	L8	217	THR
45	L8	219	ASP
45	L8	224	ASP
45	L8	238	LEU
45	L8	246	MET
45	L8	248	LYS
45	L8	253	SER
46	L9	4	ILE
46	L9	5	GLN
46	L9	6	THR
46	L9	18	VAL
46	L9	19	SER
46	L9	20	ILE
46	L9	28	VAL
46	L9	41	ILE
46	L9	44	THR
46	L9	48	VAL
46	L9	52	LEU
46	L9	53	ILE
46	L9	55	VAL
46	L9	62	ARG
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	82	VAL
46	L9	110	LYS
46	L9	118	LEU
46	L9	130	ASP
46	L9	138	THR
46	L9	139	ASN
46	L9	141	LYS
46	L9	149	ASN
46	L9	151	VAL
46	L9	152	GLU
46	L9	155	SER
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	164	ILE
46	L9	170	LYS
46	L9	172	ILE
46	L9	189	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	L9	190	ASP
47	M0	3	ARG
47	M0	30	LYS
47	M0	32	ARG
47	M0	33	ILE
47	M0	35	ASP
47	M0	39	LYS
47	M0	42	THR
47	M0	48	LEU
47	M0	52	LEU
47	M0	61	SER
47	M0	62	SER
47	M0	90	ARG
47	M0	91	VAL
47	M0	102	MET
47	M0	115	MET
47	M0	121	LYS
47	M0	130	ASP
47	M0	138	VAL
47	M0	139	ARG
47	M0	142	ASP
47	M0	145	LYS
47	M0	146	ASP
47	M0	156	ARG
47	M0	163	GLN
47	M0	165	ILE
47	M0	167	LEU
47	M0	169	LYS
47	M0	175	ASN
47	M0	177	ASP
47	M0	185	ARG
47	M0	203	LYS
47	M0	208	ASN
47	M0	215	GLU
48	M1	6	GLN
48	M1	7	ASN
48	M1	9	MET
48	M1	10	ARG
48	M1	11	ASP
48	M1	12	LEU
48	M1	13	LYS
48	M1	19	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	M1	20	ASN
48	M1	29	ARG
48	M1	31	THR
48	M1	34	SER
48	M1	46	VAL
48	M1	51	ARG
48	M1	56	THR
48	M1	65	ILE
48	M1	70	THR
48	M1	72	ARG
48	M1	77	GLU
48	M1	80	LEU
48	M1	82	ARG
48	M1	94	ARG
48	M1	106	ILE
48	M1	107	ASP
48	M1	112	LEU
48	M1	115	LYS
48	M1	120	ILE
48	M1	130	VAL
48	M1	137	ARG
48	M1	140	ARG
48	M1	142	LYS
48	M1	166	LYS
48	M1	171	VAL
49	M3	11	LYS
49	M3	16	LYS
49	M3	22	VAL
49	M3	23	LYS
49	M3	24	VAL
49	M3	33	VAL
49	M3	54	LEU
49	M3	55	ARG
49	M3	57	VAL
49	M3	59	ARG
49	M3	67	ARG
49	M3	69	VAL
49	M3	70	ARG
49	M3	73	ARG
49	M3	85	LEU
49	M3	104	ARG
49	M3	108	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	M3	114	GLN
49	M3	116	LEU
49	M3	117	LYS
49	M3	121	SER
49	M3	124	ILE
49	M3	131	LYS
49	M3	136	GLU
49	M3	139	LEU
49	M3	154	VAL
49	M3	157	ARG
49	M3	168	ARG
49	M3	169	THR
49	M3	175	SER
49	M3	190	LYS
49	M3	194	GLU
50	M4	8	LYS
50	M4	11	ASN
50	M4	15	VAL
50	M4	20	VAL
50	M4	40	ASP
50	M4	53	VAL
50	M4	66	THR
50	M4	72	LEU
50	M4	74	ARG
50	M4	82	SER
50	M4	90	VAL
50	M4	91	CYS
50	M4	92	GLU
50	M4	94	TRP
50	M4	102	LYS
50	M4	106	ARG
50	M4	126	GLN
50	M4	133	LYS
51	M5	10	LEU
51	M5	13	LYS
51	M5	18	VAL
51	M5	19	LEU
51	M5	22	LEU
51	M5	38	ARG
51	M5	43	THR
51	M5	68	ARG
51	M5	80	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	M5	85	THR
51	M5	98	LEU
51	M5	104	GLU
51	M5	109	ARG
51	M5	117	ASN
51	M5	132	VAL
51	M5	133	ILE
51	M5	138	GLN
51	M5	151	ILE
51	M5	153	ASP
51	M5	155	VAL
51	M5	159	ARG
51	M5	187	ARG
51	M5	190	THR
51	M5	198	SER
51	M5	201	ARG
51	M5	203	ARG
51	M5	204	LYS
52	M6	9	ILE
52	M6	22	VAL
52	M6	27	LEU
52	M6	34	VAL
52	M6	44	SER
52	M6	52	LEU
52	M6	58	LEU
52	M6	59	ARG
52	M6	79	ILE
52	M6	84	LEU
52	M6	85	ARG
52	M6	106	GLU
52	M6	116	LYS
52	M6	117	ARG
52	M6	122	GLN
52	M6	124	LEU
52	M6	126	VAL
52	M6	129	LEU
52	M6	143	THR
52	M6	160	ARG
52	M6	170	LYS
52	M6	180	SER
52	M6	184	THR
52	M6	188	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	M6	190	VAL
53	M7	9	THR
53	M7	16	SER
53	M7	18	ARG
53	M7	20	SER
53	M7	29	THR
53	M7	32	THR
53	M7	34	GLN
53	M7	36	ILE
53	M7	41	LEU
53	M7	42	THR
53	M7	49	GLU
53	M7	51	VAL
53	M7	52	LEU
53	M7	67	ILE
53	M7	69	ARG
53	M7	79	THR
53	M7	82	ARG
53	M7	91	VAL
53	M7	107	LEU
53	M7	112	LEU
53	M7	114	VAL
53	M7	115	SER
53	M7	119	VAL
53	M7	120	ASN
53	M7	127	ARG
53	M7	128	ARG
53	M7	141	SER
53	M7	142	SER
53	M7	144	SER
53	M7	146	ILE
53	M7	148	LEU
53	M7	153	LYS
53	M7	168	LEU
53	M7	180	LYS
53	M7	181	ARG
54	M8	7	SER
54	M8	13	SER
54	M8	23	ASN
54	M8	24	VAL
54	M8	26	LEU
54	M8	32	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	M8	39	ARG
54	M8	40	THR
54	M8	50	LYS
54	M8	66	ARG
54	M8	69	ARG
54	M8	73	GLN
54	M8	84	VAL
54	M8	86	THR
54	M8	95	GLU
54	M8	100	THR
54	M8	111	ARG
54	M8	122	ILE
54	M8	135	GLN
54	M8	168	THR
54	M8	179	ARG
55	M9	5	ARG
55	M9	6	THR
55	M9	17	VAL
55	M9	25	ASP
55	M9	31	GLU
55	M9	43	LYS
55	M9	44	LEU
55	M9	46	LYS
55	M9	52	LYS
55	M9	55	VAL
55	M9	69	SER
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	99	LEU
55	M9	104	ARG
55	M9	105	LEU
55	M9	116	ASP
55	M9	127	SER
55	M9	156	ASN
55	M9	164	LEU
55	M9	175	GLN
55	M9	180	LYS
56	N0	13	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	N0	16	THR
56	N0	49	HIS
56	N0	50	LYS
56	N0	53	LYS
56	N0	58	ILE
56	N0	70	THR
56	N0	71	LYS
56	N0	79	VAL
56	N0	80	ARG
56	N0	87	THR
56	N0	100	VAL
56	N0	103	VAL
56	N0	106	LEU
56	N0	117	ARG
56	N0	122	HIS
56	N0	132	THR
56	N0	137	ARG
56	N0	138	GLN
56	N0	142	GLN
56	N0	145	THR
56	N0	148	LEU
56	N0	155	ARG
56	N0	162	THR
56	N0	166	LYS
56	N0	167	ARG
56	N0	172	TYR
57	N1	12	ARG
57	N1	18	ASP
57	N1	27	LEU
57	N1	29	THR
57	N1	38	ASP
57	N1	40	VAL
57	N1	52	MET
57	N1	55	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	92	ARG
57	N1	93	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	N1	97	LYS
57	N1	102	ARG
57	N1	104	GLU
57	N1	110	LYS
57	N1	122	GLN
57	N1	126	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	131	GLN
57	N1	139	ARG
57	N1	144	GLU
57	N1	154	VAL
58	N2	10	LYS
58	N2	14	THR
58	N2	16	THR
58	N2	32	SER
58	N2	38	ILE
58	N2	42	LYS
58	N2	43	VAL
58	N2	52	ASN
58	N2	54	VAL
58	N2	58	GLU
58	N2	66	VAL
58	N2	67	SER
58	N2	88	GLN
58	N2	91	ASP
58	N2	100	THR
59	N3	9	THR
59	N3	13	ILE
59	N3	14	SER
59	N3	29	SER
59	N3	32	ARG
59	N3	35	TYR
59	N3	44	SER
59	N3	45	ARG
59	N3	46	LEU
59	N3	48	ARG
59	N3	54	LEU
59	N3	59	MET
59	N3	64	LYS
59	N3	69	LEU
59	N3	71	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	N3	73	VAL
59	N3	74	MET
59	N3	83	LYS
59	N3	87	ARG
59	N3	88	ARG
59	N3	91	VAL
59	N3	101	VAL
59	N3	102	ILE
59	N3	104	ASN
59	N3	120	LYS
59	N3	133	SER
59	N3	135	VAL
59	N3	137	VAL
60	N4	1	MET
60	N4	4	GLU
60	N4	5	ILE
60	N4	19	THR
60	N4	28	ILE
60	N4	34	SER
60	N4	39	LEU
60	N4	43	ARG
60	N4	47	ARG
60	N4	52	THR
60	N4	80	ARG
60	N4	87	LEU
60	N4	90	ILE
60	N4	96	LEU
61	N5	26	VAL
61	N5	27	ARG
61	N5	34	LEU
61	N5	38	LEU
61	N5	39	LYS
61	N5	45	LYS
61	N5	49	LYS
61	N5	57	LEU
61	N5	63	ILE
61	N5	71	THR
61	N5	73	MET
61	N5	85	GLN
61	N5	87	SER
61	N5	92	LYS
61	N5	108	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
61	N5	112	THR
61	N5	113	LEU
61	N5	114	VAL
61	N5	115	ARG
61	N5	124	VAL
61	N5	125	ARG
61	N5	130	TYR
61	N5	133	LEU
61	N5	134	ASP
61	N5	135	ILE
61	N5	137	ASN
61	N5	139	ILE
61	N5	142	ILE
62	N6	3	LYS
62	N6	5	SER
62	N6	10	SER
62	N6	13	ARG
62	N6	17	LYS
62	N6	37	LYS
62	N6	42	GLN
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	70	ILE
62	N6	74	TYR
62	N6	83	ASP
62	N6	111	LEU
62	N6	112	ASP
62	N6	115	ARG
63	N7	3	LYS
63	N7	14	VAL
63	N7	17	ARG
63	N7	24	VAL
63	N7	33	SER
63	N7	34	LYS
63	N7	46	ILE
63	N7	52	LYS
63	N7	72	ILE
63	N7	75	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
63	N7	81	LEU
63	N7	83	THR
63	N7	90	GLU
63	N7	92	PHE
63	N7	99	GLU
63	N7	102	GLU
63	N7	109	GLU
63	N7	116	LYS
63	N7	127	ASN
63	N7	134	LEU
64	N8	4	ARG
64	N8	7	LYS
64	N8	8	THR
64	N8	10	LYS
64	N8	16	SER
64	N8	34	MET
64	N8	42	ARG
64	N8	46	ASP
64	N8	47	LYS
64	N8	60	TYR
64	N8	68	PHE
64	N8	74	ASN
64	N8	78	LEU
64	N8	84	GLU
64	N8	91	LEU
64	N8	92	LYS
64	N8	93	SER
64	N8	102	ILE
64	N8	115	LYS
64	N8	118	ILE
64	N8	120	ASN
64	N8	130	VAL
64	N8	133	LEU
64	N8	135	GLU
65	N9	13	THR
65	N9	14	ARG
65	N9	22	LYS
65	N9	25	LYS
65	N9	28	LYS
65	N9	50	THR
65	N9	59	LYS
66	O0	16	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	O0	34	LEU
66	O0	40	LYS
66	O0	41	LEU
66	O0	48	THR
66	O0	51	LEU
66	O0	52	ARG
66	O0	54	SER
66	O0	55	GLU
66	O0	61	MET
66	O0	79	THR
66	O0	83	LYS
66	O0	87	VAL
66	O0	99	ASP
66	O0	101	LEU
66	O0	103	THR
66	O0	104	LEU
67	O1	6	ASP
67	O1	8	VAL
67	O1	16	LEU
67	O1	26	LYS
67	O1	31	ARG
67	O1	42	LEU
67	O1	44	MET
67	O1	46	THR
67	O1	64	VAL
67	O1	68	GLU
67	O1	79	ARG
67	O1	82	GLU
67	O1	83	GLU
67	O1	84	ASP
67	O1	86	LYS
67	O1	96	VAL
67	O1	106	THR
67	O1	107	VAL
68	O2	10	VAL
68	O2	19	ARG
68	O2	27	ARG
68	O2	34	LYS
68	O2	38	ILE
68	O2	44	ARG
68	O2	51	SER
68	O2	61	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
68	O2	73	THR
68	O2	75	LEU
68	O2	82	LEU
68	O2	84	THR
68	O2	86	THR
68	O2	103	LYS
68	O2	128	LEU
69	O3	4	SER
69	O3	20	LYS
69	O3	21	ARG
69	O3	28	SER
69	O3	37	THR
69	O3	40	ASP
69	O3	42	GLN
69	O3	45	LEU
69	O3	48	ARG
69	O3	59	VAL
69	O3	70	LYS
69	O3	72	THR
69	O3	80	VAL
69	O3	81	VAL
69	O3	86	ARG
69	O3	98	VAL
69	O3	106	ASN
69	O3	107	ILE
70	O4	3	GLN
70	O4	6	THR
70	O4	10	ARG
70	O4	16	ARG
70	O4	24	LYS
70	O4	44	CYS
70	O4	49	SER
70	O4	51	LEU
70	O4	54	ILE
70	O4	57	LEU
70	O4	58	ARG
70	O4	65	VAL
70	O4	71	THR
70	O4	74	ARG
70	O4	86	LYS
70	O4	87	GLU
70	O4	102	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
70	O4	103	LYS
71	O5	4	VAL
71	O5	15	GLU
71	O5	21	LEU
71	O5	27	GLU
71	O5	41	LEU
71	O5	46	THR
71	O5	47	VAL
71	O5	48	ARG
71	O5	49	LYS
71	O5	64	GLU
71	O5	68	GLN
71	O5	89	ARG
71	O5	90	ARG
71	O5	101	THR
71	O5	119	LYS
72	O6	2	THR
72	O6	7	ILE
72	O6	13	LYS
72	O6	17	VAL
72	O6	21	THR
72	O6	26	ILE
72	O6	30	LYS
72	O6	34	SER
72	O6	36	ARG
72	O6	41	ARG
72	O6	45	ARG
72	O6	57	LEU
72	O6	58	ILE
72	O6	63	ASN
72	O6	66	GLU
72	O6	67	LYS
72	O6	68	ARG
72	O6	76	ARG
72	O6	79	SER
72	O6	81	THR
72	O6	84	LYS
72	O6	88	GLU
72	O6	99	ARG
73	O7	10	LYS
73	O7	12	HIS
73	O7	15	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
73	O7	24	ARG
73	O7	25	ARG
73	O7	30	GLN
73	O7	33	THR
73	O7	34	CYS
73	O7	36	SER
73	O7	55	ARG
73	O7	58	THR
73	O7	59	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	76	ASN
73	O7	85	LYS
74	O8	22	THR
74	O8	32	ASN
74	O8	41	THR
74	O8	45	VAL
74	O8	48	SER
74	O8	53	THR
74	O8	55	VAL
74	O8	64	LYS
74	O8	65	LEU
74	O8	67	GLN
74	O8	68	SER
74	O8	69	LEU
74	O8	77	ARG
75	O9	5	LYS
75	O9	10	LYS
75	O9	21	ARG
75	O9	29	LEU
75	O9	34	THR
75	O9	45	ARG
75	O9	51	ILE
76	Q0	77	ILE
76	Q0	78	ILE
76	Q0	79	GLU
76	Q0	98	LYS
76	Q0	106	ARG
76	Q0	112	LYS
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	127	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
77	Q1	2	ARG
77	Q1	5	TRP
77	Q1	9	ARG
77	Q1	11	ARG
77	Q1	17	ARG
78	Q2	2	VAL
78	Q2	4	VAL
78	Q2	8	ARG
78	Q2	13	LYS
78	Q2	21	THR
78	Q2	23	HIS
78	Q2	29	LYS
78	Q2	35	LEU
78	Q2	47	GLN
78	Q2	60	LYS
78	Q2	71	ARG
78	Q2	73	GLU
78	Q2	78	LYS
78	Q2	83	LEU
78	Q2	84	THR
78	Q2	85	LEU
78	Q2	92	GLU
78	Q2	104	LEU
79	Q3	11	THR
79	Q3	16	VAL
79	Q3	24	ARG
79	Q3	25	GLN
79	Q3	31	ILE
79	Q3	45	LYS
79	Q3	49	ARG
79	Q3	59	CYS
2	s0	6	THR
2	s0	30	GLN
2	s0	31	VAL
2	s0	32	HIS
2	s0	41	ARG
2	s0	45	VAL
2	s0	50	VAL
2	s0	57	LEU
2	s0	59	LEU
2	s0	87	LEU
2	s0	88	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	s0	101	ARG
2	s0	106	SER
2	s0	110	TYR
2	s0	111	ILE
2	s0	113	ARG
2	s0	131	GLN
2	s0	135	GLU
2	s0	144	ILE
2	s0	153	SER
2	s0	154	GLU
2	s0	157	ASP
2	s0	158	VAL
2	s0	162	CYS
2	s0	172	LEU
2	s0	179	ARG
2	s0	180	GLU
2	s0	183	ARG
2	s0	185	ARG
2	s0	188	LEU
2	s0	189	VAL
2	s0	190	ASP
2	s0	198	MET
2	s0	205	ARG
3	s1	21	VAL
3	s1	25	THR
3	s1	31	ASP
3	s1	37	THR
3	s1	40	ASN
3	s1	47	LEU
3	s1	51	SER
3	s1	62	LYS
3	s1	68	VAL
3	s1	70	LEU
3	s1	74	GLN
3	s1	81	PHE
3	s1	83	LYS
3	s1	87	ARG
3	s1	104	ASP
3	s1	105	PHE
3	s1	110	LEU
3	s1	115	ARG
3	s1	122	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	s1	124	ASN
3	s1	125	VAL
3	s1	126	THR
3	s1	129	THR
3	s1	137	ILE
3	s1	159	SER
3	s1	175	GLU
3	s1	177	GLN
3	s1	179	SER
3	s1	180	THR
3	s1	181	LEU
3	s1	184	LEU
3	s1	185	THR
3	s1	193	ILE
3	s1	194	ASN
3	s1	204	ILE
3	s1	206	PRO
3	s1	212	VAL
3	s1	213	ARG
3	s1	222	LYS
3	s1	223	PHE
3	s1	232	HIS
3	s1	234	GLU
4	s2	41	LEU
4	s2	53	ILE
4	s2	54	GLU
4	s2	55	GLU
4	s2	58	LEU
4	s2	64	LYS
4	s2	69	ILE
4	s2	72	LEU
4	s2	77	GLN
4	s2	81	MET
4	s2	82	ASN
4	s2	83	ILE
4	s2	91	ARG
4	s2	94	GLN
4	s2	95	ARG
4	s2	96	THR
4	s2	97	ARG
4	s2	111	VAL
4	s2	113	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	s2	117	THR
4	s2	125	ILE
4	s2	134	LEU
4	s2	140	ARG
4	s2	141	ARG
4	s2	146	THR
4	s2	148	LEU
4	s2	150	GLN
4	s2	152	HIS
4	s2	153	SER
4	s2	162	CYS
4	s2	164	SER
4	s2	166	THR
4	s2	170	ILE
4	s2	179	VAL
4	s2	205	ARG
4	s2	206	THR
4	s2	207	LEU
4	s2	222	TYR
4	s2	224	PHE
4	s2	228	ASN
4	s2	233	GLN
4	s2	237	VAL
4	s2	248	SER
5	s3	4	LEU
5	s3	10	LYS
5	s3	14	ASP
5	s3	34	TYR
5	s3	44	THR
5	s3	54	ARG
5	s3	57	ASP
5	s3	76	ARG
5	s3	84	ILE
5	s3	91	VAL
5	s3	103	GLU
5	s3	111	ASN
5	s3	115	ILE
5	s3	117	ARG
5	s3	127	MET
5	s3	128	GLU
5	s3	134	CYS
5	s3	143	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	s3	148	LYS
5	s3	158	ILE
5	s3	164	VAL
5	s3	169	ASP
5	s3	176	LEU
5	s3	197	THR
5	s3	212	LYS
5	s3	213	GLU
5	s3	215	GLU
5	s3	223	LYS
6	s4	7	LYS
6	s4	12	LEU
6	s4	23	LEU
6	s4	38	LEU
6	s4	41	SER
6	s4	42	LEU
6	s4	49	ARG
6	s4	51	ARG
6	s4	65	LEU
6	s4	97	GLU
6	s4	108	ARG
6	s4	111	VAL
6	s4	113	ARG
6	s4	116	ASP
6	s4	126	VAL
6	s4	128	LYS
6	s4	131	LEU
6	s4	138	TYR
6	s4	146	THR
6	s4	147	ILE
6	s4	148	ARG
6	s4	156	VAL
6	s4	176	ASP
6	s4	180	LEU
6	s4	181	VAL
6	s4	182	TYR
6	s4	191	ARG
6	s4	196	VAL
6	s4	214	LEU
6	s4	219	VAL
6	s4	222	LEU
6	s4	223	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	s4	227	VAL
6	s4	236	ILE
6	s4	246	LEU
7	s5	25	LEU
7	s5	27	THR
7	s5	31	GLU
7	s5	38	THR
7	s5	39	GLU
7	s5	59	VAL
7	s5	63	GLN
7	s5	64	VAL
7	s5	68	ILE
7	s5	73	THR
7	s5	76	ARG
7	s5	83	ARG
7	s5	89	ILE
7	s5	93	LEU
7	s5	125	THR
7	s5	146	THR
7	s5	147	THR
7	s5	148	ARG
7	s5	149	VAL
7	s5	157	ARG
7	s5	166	ARG
7	s5	170	GLN
7	s5	194	LEU
7	s5	203	LYS
7	s5	213	LYS
7	s5	216	GLU
8	s6	15	THR
8	s6	17	GLU
8	s6	21	GLU
8	s6	25	ARG
8	s6	30	LYS
8	s6	34	GLN
8	s6	50	PHE
8	s6	57	ASP
8	s6	59	GLN
8	s6	63	MET
8	s6	67	VAL
8	s6	69	LEU
8	s6	71	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	s6	78	THR
8	s6	82	SER
8	s6	93	LYS
8	s6	94	ARG
8	s6	105	ASP
8	s6	108	VAL
8	s6	109	LEU
8	s6	121	LEU
8	s6	126	ASP
8	s6	127	THR
8	s6	128	THR
8	s6	129	VAL
8	s6	143	LYS
8	s6	151	ASP
8	s6	155	ASP
8	s6	156	PHE
8	s6	175	ILE
8	s6	177	ARG
8	s6	180	THR
8	s6	191	ARG
8	s6	215	ARG
8	s6	216	LEU
9	s7	8	ILE
9	s7	11	GLN
9	s7	16	LEU
9	s7	28	GLU
9	s7	33	GLU
9	s7	35	LYS
9	s7	38	LEU
9	s7	44	LYS
9	s7	48	GLU
9	s7	49	ILE
9	s7	60	ILE
9	s7	67	LEU
9	s7	75	THR
9	s7	87	ASP
9	s7	97	ARG
9	s7	108	GLN
9	s7	114	ARG
9	s7	116	ARG
9	s7	117	THR
9	s7	118	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	s7	119	THR
9	s7	143	LEU
9	s7	144	VAL
9	s7	149	ILE
9	s7	156	SER
9	s7	160	GLN
9	s7	161	GLN
9	s7	166	LEU
9	s7	182	VAL
9	s7	185	ILE
10	s8	7	SER
10	s8	20	GLN
10	s8	22	ARG
10	s8	25	ARG
10	s8	29	LEU
10	s8	45	SER
10	s8	46	VAL
10	s8	66	SER
10	s8	69	SER
10	s8	74	LYS
10	s8	76	THR
10	s8	82	VAL
10	s8	111	GLN
10	s8	120	THR
10	s8	135	LYS
10	s8	138	ASN
10	s8	152	ILE
10	s8	155	SER
10	s8	175	GLN
10	s8	184	LEU
11	s9	3	ARG
11	s9	7	THR
11	s9	9	SER
11	s9	14	THR
11	s9	21	SER
11	s9	28	LEU
11	s9	30	LEU
11	s9	39	LYS
11	s9	40	LYS
11	s9	49	LEU
11	s9	78	ARG
11	s9	82	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	s9	109	LEU
11	s9	126	ARG
11	s9	130	THR
11	s9	134	ILE
11	s9	143	ILE
11	s9	151	ASP
11	s9	154	LYS
11	s9	161	THR
11	s9	168	ARG
11	s9	171	ARG
11	s9	172	VAL
11	s9	175	ARG
11	s9	180	LYS
11	s9	182	GLU
80	c0	2	LEU
80	c0	3	MET
80	c0	5	LYS
80	c0	15	LEU
80	c0	20	VAL
80	c0	28	ASN
80	c0	55	VAL
80	c0	57	THR
80	c0	71	GLU
13	c1	2	SER
13	c1	5	LEU
13	c1	6	THR
13	c1	10	GLU
13	c1	26	LYS
13	c1	30	ARG
13	c1	31	THR
13	c1	32	LYS
13	c1	33	ARG
13	c1	44	THR
13	c1	46	LYS
13	c1	60	PHE
13	c1	66	ILE
13	c1	67	ARG
13	c1	71	LEU
13	c1	72	THR
13	c1	74	THR
13	c1	99	ARG
13	c1	129	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	c1	132	SER
14	c2	28	LEU
14	c2	39	ASP
14	c2	43	ARG
14	c2	50	LYS
14	c2	53	THR
14	c2	58	LEU
14	c2	61	VAL
14	c2	62	LEU
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	89	ILE
14	c2	103	LEU
14	c2	121	VAL
14	c2	132	GLU
14	c2	139	HIS
14	c2	140	PHE
15	c3	6	SER
15	c3	12	SER
15	c3	16	ILE
15	c3	19	SER
15	c3	21	ASN
15	c3	29	SER
15	c3	33	VAL
15	c3	36	GLN
15	c3	43	LYS
15	c3	46	THR
15	c3	52	VAL
15	c3	58	HIS
15	c3	60	VAL
15	c3	62	GLN
15	c3	64	ARG
15	c3	66	ILE
15	c3	70	LYS
15	c3	73	ARG
15	c3	80	LEU
15	c3	84	ILE
15	c3	87	ASP
15	c3	97	SER
15	c3	103	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	c3	121	ARG
15	c3	125	LEU
15	c3	127	ARG
15	c3	132	VAL
15	c3	134	VAL
15	c3	138	ASN
16	c4	13	VAL
16	c4	23	PHE
16	c4	28	VAL
16	c4	31	THR
16	c4	36	LYS
16	c4	43	THR
16	c4	66	ASP
16	c4	81	VAL
16	c4	91	THR
16	c4	107	ARG
16	c4	114	ARG
16	c4	119	THR
16	c4	121	VAL
16	c4	123	SER
16	c4	124	ASP
16	c4	132	ARG
16	c4	136	ARG
16	c4	137	LEU
17	c5	12	PHE
17	c5	20	VAL
17	c5	21	ASP
17	c5	24	LYS
17	c5	27	GLU
17	c5	28	MET
17	c5	36	LEU
17	c5	41	VAL
17	c5	43	ARG
17	c5	50	THR
17	c5	52	LYS
17	c5	69	GLU
17	c5	71	GLU
17	c5	97	TYR
17	c5	103	ASN
17	c5	107	ILE
17	c5	110	GLU
17	c5	121	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	c5	122	THR
17	c5	124	THR
17	c5	127	ARG
17	c5	128	HIS
18	c6	23	LYS
18	c6	28	LEU
18	c6	37	THR
18	c6	43	ILE
18	c6	53	LEU
18	c6	54	LEU
18	c6	57	LEU
18	c6	58	ASP
18	c6	63	ILE
18	c6	68	ARG
18	c6	69	VAL
18	c6	70	THR
18	c6	76	SER
18	c6	82	ARG
18	c6	100	GLN
18	c6	111	SER
18	c6	114	ARG
18	c6	115	THR
18	c6	118	ILE
18	c6	128	LYS
18	c6	136	SER
18	c6	137	ARG
19	c7	3	ARG
19	c7	5	ARG
19	c7	6	THR
19	c7	25	THR
19	c7	29	GLN
19	c7	34	LEU
19	c7	46	LEU
19	c7	69	ILE
19	c7	83	GLN
19	c7	85	VAL
19	c7	88	VAL
19	c7	100	LEU
19	c7	102	VAL
19	c7	103	ASP
19	c7	105	GLN
19	c7	106	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	c7	121	VAL
20	c8	2	SER
20	c8	3	LEU
20	c8	4	VAL
20	c8	5	VAL
20	c8	6	GLN
20	c8	13	HIS
20	c8	15	LEU
20	c8	16	ARG
20	c8	28	ILE
20	c8	36	LYS
20	c8	40	ARG
20	c8	61	LEU
20	c8	63	GLN
20	c8	74	GLN
20	c8	77	THR
20	c8	94	ASP
20	c8	127	HIS
20	c8	138	THR
20	c8	143	ARG
20	c8	144	ARG
21	c9	6	VAL
21	c9	27	LYS
21	c9	28	LEU
21	c9	29	GLU
21	c9	34	VAL
21	c9	37	VAL
21	c9	57	ARG
21	c9	68	ARG
21	c9	71	VAL
21	c9	88	VAL
21	c9	91	TYR
21	c9	99	SER
21	c9	110	LYS
21	c9	123	ARG
21	c9	126	GLU
21	c9	131	ASP
21	c9	139	THR
21	c9	140	LEU
21	c9	141	GLU
22	d0	22	ILE
22	d0	23	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	d0	27	THR
22	d0	30	LYS
22	d0	31	VAL
22	d0	34	LEU
22	d0	44	ASN
22	d0	51	VAL
22	d0	57	ARG
22	d0	67	THR
22	d0	70	THR
22	d0	74	GLU
22	d0	77	LYS
22	d0	81	THR
22	d0	88	LYS
22	d0	99	ILE
22	d0	102	ARG
22	d0	103	ILE
22	d0	105	GLN
22	d0	107	THR
22	d0	109	GLU
22	d0	114	VAL
22	d0	115	GLU
22	d0	121	ASN
23	d1	2	GLU
23	d1	5	LYS
23	d1	8	LEU
23	d1	11	LEU
23	d1	12	TYR
23	d1	17	CYS
23	d1	24	ILE
23	d1	32	VAL
23	d1	38	LYS
23	d1	50	TYR
23	d1	61	SER
23	d1	68	SER
23	d1	78	LEU
23	d1	85	TYR
23	d1	87	ARG
24	d2	2	THR
24	d2	15	ASN
24	d2	22	LYS
24	d2	23	ARG
24	d2	25	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	d2	28	ARG
24	d2	31	SER
24	d2	37	PHE
24	d2	43	LYS
24	d2	65	LEU
24	d2	68	ARG
24	d2	76	SER
24	d2	81	VAL
24	d2	88	LYS
24	d2	93	LEU
24	d2	98	GLN
24	d2	103	ILE
24	d2	117	ARG
24	d2	125	ILE
24	d2	126	LEU
25	d3	9	LEU
25	d3	11	SER
25	d3	13	ARG
25	d3	16	ARG
25	d3	19	ARG
25	d3	33	LEU
25	d3	36	THR
25	d3	46	SER
25	d3	52	ILE
25	d3	66	SER
25	d3	72	VAL
25	d3	73	ARG
25	d3	74	VAL
25	d3	83	VAL
25	d3	84	THR
25	d3	96	VAL
25	d3	99	ASN
25	d3	100	ASP
25	d3	103	LEU
25	d3	107	PHE
25	d3	109	ARG
25	d3	125	VAL
25	d3	132	LEU
25	d3	133	LEU
25	d3	144	ARG
26	d4	10	ARG
26	d4	13	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	d4	26	ASP
26	d4	34	ASN
26	d4	42	GLU
26	d4	43	LYS
26	d4	44	LEU
26	d4	47	VAL
26	d4	49	LYS
26	d4	51	GLU
26	d4	62	THR
26	d4	88	THR
26	d4	91	LEU
26	d4	92	VAL
26	d4	118	ILE
26	d4	121	THR
26	d4	125	LEU
26	d4	132	ARG
27	d5	41	ILE
27	d5	51	LEU
27	d5	53	GLU
27	d5	57	TYR
27	d5	61	SER
27	d5	68	ARG
27	d5	71	ILE
27	d5	81	ARG
27	d5	88	ILE
27	d5	92	ILE
28	d6	10	ARG
28	d6	18	VAL
28	d6	24	VAL
28	d6	28	LYS
28	d6	30	ILE
28	d6	39	MET
28	d6	41	ILE
28	d6	42	ARG
28	d6	46	GLU
28	d6	51	ARG
28	d6	53	LEU
28	d6	67	THR
28	d6	77	CYS
28	d6	82	ARG
28	d6	85	ARG
28	d6	89	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	d6	90	GLU
29	d7	3	LEU
29	d7	11	THR
29	d7	14	SER
29	d7	22	LYS
29	d7	23	THR
29	d7	41	LEU
29	d7	43	ILE
29	d7	46	VAL
29	d7	52	THR
29	d7	55	THR
29	d7	72	LYS
29	d7	77	THR
29	d7	81	ARG
30	d8	15	VAL
30	d8	19	THR
30	d8	30	VAL
30	d8	32	PHE
30	d8	33	LEU
30	d8	64	ARG
30	d8	65	ARG
30	d8	66	LEU
31	d9	10	HIS
31	d9	16	LYS
31	d9	28	THR
31	d9	31	ILE
31	d9	36	LEU
31	d9	48	ASN
31	d9	49	ASP
31	d9	54	LYS
31	d9	56	ARG
32	e0	13	LYS
32	e0	18	THR
32	e0	22	GLU
32	e0	26	LYS
32	e0	27	PRO
32	e0	28	LYS
32	e0	29	LYS
32	e0	41	THR
32	e0	42	ARG
32	e0	44	PHE
32	e0	45	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	e0	46	ASN
32	e0	49	LEU
32	e0	62	VAL
33	e1	80	ARG
33	e1	84	VAL
33	e1	86	THR
33	e1	90	LYS
33	e1	95	HIS
33	e1	96	LYS
33	e1	98	VAL
33	e1	100	LEU
33	e1	102	VAL
33	e1	106	TYR
33	e1	109	ASP
33	e1	113	LYS
33	e1	118	ARG
33	e1	119	ARG
33	e1	122	SER
33	e1	135	HIS
33	e1	149	LYS
34	sR	25	THR
34	sR	48	THR
34	sR	52	GLN
34	sR	58	VAL
34	sR	59	ARG
34	sR	60	SER
34	sR	64	HIS
34	sR	66	HIS
34	sR	76	ASP
34	sR	96	THR
34	sR	106	HIS
34	sR	149	ASP
34	sR	176	LYS
34	sR	182	ASN
34	sR	207	ASP
34	sR	232	TYR
34	sR	245	PHE
34	sR	256	THR
34	sR	258	THR
34	sR	266	ASP
34	sR	286	GLU
34	sR	297	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	sR	309	VAL
34	sR	314	GLN
35	sM	23	LYS
35	sM	24	GLU
35	sM	30	THR
35	sM	41	SER
35	sM	43	ASP
35	sM	46	LYS
35	sM	48	ARG
35	sM	49	LYS
35	sM	53	ARG
35	sM	61	ILE
35	sM	62	ARG
35	sM	68	ARG
35	sM	71	ASN
35	sM	74	LYS
35	sM	75	ASP
35	sM	77	THR
35	sM	78	ASP
39	l2	15	ILE
39	l2	20	THR
39	l2	32	LEU
39	l2	44	ILE
39	l2	48	ILE
39	l2	62	VAL
39	l2	70	ARG
39	l2	71	LEU
39	l2	74	GLU
39	l2	77	ILE
39	l2	82	VAL
39	l2	101	VAL
39	l2	109	GLU
39	l2	111	THR
39	l2	119	LYS
39	l2	122	ASP
39	l2	128	ARG
39	l2	137	ILE
39	l2	144	ASN
39	l2	147	ARG
39	l2	155	LYS
39	l2	165	VAL
39	l2	177	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	12	180	LEU
39	12	184	ARG
39	12	192	LYS
39	12	193	ARG
39	12	207	VAL
39	12	215	ASN
39	12	227	ARG
39	12	238	ILE
39	12	242	ARG
39	12	243	THR
39	12	246	LEU
40	13	3	HIS
40	13	4	ARG
40	13	17	LEU
40	13	19	ARG
40	13	24	SER
40	13	39	LYS
40	13	50	LYS
40	13	56	ILE
40	13	65	SER
40	13	69	LYS
40	13	70	ARG
40	13	73	VAL
40	13	77	THR
40	13	81	THR
40	13	85	VAL
40	13	89	VAL
40	13	95	THR
40	13	99	LEU
40	13	103	THR
40	13	114	VAL
40	13	116	ARG
40	13	123	TYR
40	13	124	LYS
40	13	134	SER
40	13	139	GLN
40	13	146	ARG
40	13	157	VAL
40	13	162	VAL
40	13	165	GLN
40	13	167	ARG
40	13	169	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	13	178	LEU
40	13	188	ILE
40	13	192	VAL
40	13	197	GLU
40	13	202	THR
40	13	208	VAL
40	13	211	GLN
40	13	229	VAL
40	13	230	THR
40	13	232	ARG
40	13	235	THR
40	13	238	LEU
40	13	249	VAL
40	13	252	ILE
40	13	264	VAL
40	13	270	ARG
40	13	274	SER
40	13	278	ILE
40	13	284	ARG
40	13	287	LYS
40	13	299	ASP
40	13	304	THR
40	13	311	PHE
40	13	324	VAL
40	13	328	ILE
40	13	332	ARG
40	13	335	ILE
40	13	340	LYS
40	13	344	THR
40	13	347	SER
40	13	348	ARG
40	13	359	ILE
40	13	380	MET
41	14	22	LEU
41	14	25	VAL
41	14	33	ASP
41	14	35	VAL
41	14	37	THR
41	14	43	ASN
41	14	46	LYS
41	14	47	ARG
41	14	60	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	14	73	ARG
41	14	77	VAL
41	14	82	THR
41	14	93	MET
41	14	116	ASN
41	14	120	TYR
41	14	122	THR
41	14	133	SER
41	14	144	LYS
41	14	145	ILE
41	14	151	VAL
41	14	156	LEU
41	14	163	LYS
41	14	172	VAL
41	14	178	LEU
41	14	179	LEU
41	14	187	LEU
41	14	193	LYS
41	14	203	ARG
41	14	206	LEU
41	14	217	LYS
41	14	220	ARG
41	14	222	VAL
41	14	230	VAL
41	14	246	ARG
41	14	256	THR
41	14	259	ASP
41	14	265	GLU
41	14	266	THR
41	14	267	VAL
41	14	282	SER
41	14	287	THR
41	14	292	SER
41	14	300	ARG
41	14	304	GLN
41	14	307	GLN
41	14	313	LEU
41	14	316	ASN
41	14	327	LEU
41	14	332	LYS
41	14	333	VAL
41	14	345	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	14	346	LYS
41	14	356	THR
42	15	10	SER
42	15	13	SER
42	15	34	LYS
42	15	35	ARG
42	15	36	LEU
42	15	51	LEU
42	15	61	ILE
42	15	66	SER
42	15	69	ILE
42	15	70	THR
42	15	73	VAL
42	15	84	PRO
42	15	101	THR
42	15	110	LEU
42	15	112	LYS
42	15	113	LEU
42	15	115	LEU
42	15	118	THR
42	15	122	VAL
42	15	124	GLU
42	15	128	GLU
42	15	133	GLU
42	15	135	VAL
42	15	137	ASP
42	15	140	ARG
42	15	146	LEU
42	15	148	ILE
42	15	152	ARG
42	15	155	THR
42	15	158	ARG
42	15	177	GLU
42	15	185	PHE
42	15	193	GLU
42	15	194	LEU
42	15	196	ARG
42	15	197	SER
42	15	211	LEU
42	15	214	ASP
42	15	218	ARG
42	15	222	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	15	227	LEU
42	15	232	ASP
42	15	236	LEU
42	15	254	LYS
42	15	258	LYS
42	15	259	LYS
42	15	262	LYS
42	15	273	ARG
42	15	282	ARG
42	15	293	LEU
42	15	297	GLN
43	16	4	GLN
43	16	14	ASP
43	16	15	VAL
43	16	21	THR
43	16	31	ARG
43	16	33	SER
43	16	50	LYS
43	16	64	LEU
43	16	65	ILE
43	16	74	VAL
43	16	76	LEU
43	16	78	ARG
43	16	87	THR
43	16	89	THR
43	16	91	VAL
43	16	98	VAL
43	16	108	LYS
43	16	109	GLU
43	16	131	LYS
43	16	152	THR
43	16	155	LEU
43	16	160	SER
44	17	22	THR
44	17	24	GLU
44	17	41	ARG
44	17	54	GLU
44	17	60	ARG
44	17	83	LEU
44	17	88	ARG
44	17	100	ARG
44	17	105	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	17	113	SER
44	17	115	THR
44	17	124	LEU
44	17	130	ILE
44	17	147	LEU
44	17	156	ILE
44	17	157	ASN
44	17	158	LYS
44	17	159	GLN
44	17	173	LEU
44	17	175	LYS
44	17	179	LEU
44	17	184	LEU
44	17	190	THR
44	17	207	LEU
44	17	216	VAL
44	17	219	LYS
44	17	229	PHE
44	17	234	GLU
44	17	239	LEU
45	18	26	LEU
45	18	27	THR
45	18	41	GLN
45	18	50	VAL
45	18	68	ARG
45	18	71	VAL
45	18	74	THR
45	18	79	GLN
45	18	81	THR
45	18	89	GLU
45	18	90	THR
45	18	91	PHE
45	18	93	LEU
45	18	136	LEU
45	18	146	LYS
45	18	149	LYS
45	18	150	LEU
45	18	160	ILE
45	18	169	LEU
45	18	172	LYS
45	18	173	MET
45	18	183	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	18	194	THR
45	18	200	LEU
45	18	204	ARG
45	18	208	GLU
45	18	211	LEU
45	18	213	LYS
45	18	214	LEU
45	18	217	THR
45	18	219	ASP
45	18	222	PHE
45	18	224	ASP
45	18	230	LYS
45	18	245	LYS
45	18	246	MET
45	18	248	LYS
46	19	2	LYS
46	19	5	GLN
46	19	6	THR
46	19	7	GLU
46	19	16	VAL
46	19	18	VAL
46	19	19	SER
46	19	24	ILE
46	19	28	VAL
46	19	33	THR
46	19	48	VAL
46	19	52	LEU
46	19	55	VAL
46	19	62	ARG
46	19	68	LEU
46	19	69	ARG
46	19	70	THR
46	19	78	MET
46	19	92	TYR
46	19	118	LEU
46	19	124	ARG
46	19	132	VAL
46	19	134	ILE
46	19	138	THR
46	19	144	ILE
46	19	151	VAL
46	19	154	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	l9	155	SER
46	l9	157	ASN
46	l9	161	LEU
46	l9	162	GLN
46	l9	163	GLN
46	l9	166	ARG
46	l9	172	ILE
46	l9	173	ARG
46	l9	181	VAL
46	l9	188	THR
46	l9	191	LEU
47	m0	3	ARG
47	m0	13	LYS
47	m0	15	LYS
47	m0	21	ARG
47	m0	22	TYR
47	m0	24	ARG
47	m0	26	VAL
47	m0	36	LEU
47	m0	39	LYS
47	m0	42	THR
47	m0	48	LEU
47	m0	52	LEU
47	m0	57	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	77	THR
47	m0	87	LEU
47	m0	95	HIS
47	m0	100	ASN
47	m0	112	GLN
47	m0	113	GLN
47	m0	139	ARG
47	m0	143	SER
47	m0	148	VAL
47	m0	154	ARG
47	m0	156	ARG
47	m0	169	LYS
47	m0	170	LYS
47	m0	177	ASP
47	m0	192	ASP
47	m0	197	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	m0	201	SER
47	m0	205	SER
47	m0	206	LEU
47	m0	208	ASN
47	m0	209	ASN
47	m0	210	ILE
47	m0	211	ARG
47	m0	215	GLU
47	m0	217	PHE
47	m0	220	GLN
48	m1	6	GLN
48	m1	10	ARG
48	m1	12	LEU
48	m1	28	ASP
48	m1	31	THR
48	m1	39	GLN
48	m1	43	GLN
48	m1	44	THR
48	m1	54	VAL
48	m1	67	VAL
48	m1	71	VAL
48	m1	77	GLU
48	m1	92	ARG
48	m1	112	LEU
48	m1	129	VAL
48	m1	130	VAL
48	m1	138	VAL
48	m1	140	ARG
48	m1	153	LYS
48	m1	155	THR
48	m1	157	GLU
48	m1	160	VAL
48	m1	161	SER
48	m1	166	LYS
49	m3	4	SER
49	m3	12	ASN
49	m3	13	HIS
49	m3	22	VAL
49	m3	23	LYS
49	m3	39	ARG
49	m3	58	VAL
49	m3	63	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	m3	67	ARG
49	m3	69	VAL
49	m3	70	ARG
49	m3	73	ARG
49	m3	75	PHE
49	m3	76	THR
49	m3	80	VAL
49	m3	86	THR
49	m3	97	VAL
49	m3	106	GLN
49	m3	107	GLU
49	m3	118	GLU
49	m3	123	ILE
49	m3	138	VAL
49	m3	153	ASP
49	m3	154	VAL
49	m3	165	SER
49	m3	168	ARG
49	m3	171	ARG
49	m3	175	SER
49	m3	180	ARG
49	m3	184	GLU
49	m3	194	GLU
50	m4	3	THR
50	m4	5	SER
50	m4	6	ILE
50	m4	8	LYS
50	m4	14	LEU
50	m4	15	VAL
50	m4	16	GLU
50	m4	20	VAL
50	m4	24	LYS
50	m4	39	ILE
50	m4	45	LEU
50	m4	60	LEU
50	m4	62	GLN
50	m4	64	VAL
50	m4	69	THR
50	m4	72	LEU
50	m4	80	THR
50	m4	98	SER
50	m4	102	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	m4	103	ILE
50	m4	107	GLU
50	m4	123	LEU
50	m4	128	ARG
50	m4	130	THR
50	m4	135	LEU
51	m5	15	GLN
51	m5	18	VAL
51	m5	22	LEU
51	m5	32	GLN
51	m5	49	ARG
51	m5	53	TYR
51	m5	54	LYS
51	m5	68	ARG
51	m5	71	ARG
51	m5	80	THR
51	m5	83	LYS
51	m5	87	GLN
51	m5	92	LEU
51	m5	96	ARG
51	m5	106	VAL
51	m5	112	ASN
51	m5	116	LEU
51	m5	117	ASN
51	m5	138	GLN
51	m5	153	ASP
51	m5	170	LYS
51	m5	171	SER
51	m5	175	ASN
51	m5	182	ASN
51	m5	188	ARG
51	m5	190	THR
51	m5	194	GLN
51	m5	196	THR
51	m5	201	ARG
51	m5	204	LYS
52	m6	7	VAL
52	m6	22	VAL
52	m6	25	LYS
52	m6	41	LEU
52	m6	46	GLU
52	m6	59	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	m6	60	LYS
52	m6	66	LYS
52	m6	67	THR
52	m6	78	ARG
52	m6	84	LEU
52	m6	85	ARG
52	m6	100	GLU
52	m6	106	GLU
52	m6	108	ILE
52	m6	115	LYS
52	m6	116	LYS
52	m6	117	ARG
52	m6	118	VAL
52	m6	122	GLN
52	m6	124	LEU
52	m6	126	VAL
52	m6	129	LEU
52	m6	134	LYS
52	m6	142	SER
52	m6	143	THR
52	m6	167	TYR
52	m6	170	LYS
52	m6	175	THR
52	m6	182	ASN
52	m6	188	SER
52	m6	197	LEU
53	m7	7	THR
53	m7	14	SER
53	m7	16	SER
53	m7	18	ARG
53	m7	22	LEU
53	m7	32	THR
53	m7	41	LEU
53	m7	52	LEU
53	m7	53	ASP
53	m7	69	ARG
53	m7	76	PHE
53	m7	78	VAL
53	m7	89	LYS
53	m7	91	VAL
53	m7	114	VAL
53	m7	119	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	m7	120	ASN
53	m7	125	GLN
53	m7	126	ARG
53	m7	127	ARG
53	m7	128	ARG
53	m7	142	SER
53	m7	144	SER
53	m7	148	LEU
53	m7	150	VAL
53	m7	153	LYS
53	m7	155	GLU
54	m8	12	ARG
54	m8	17	THR
54	m8	21	SER
54	m8	22	ASP
54	m8	26	LEU
54	m8	32	LEU
54	m8	34	THR
54	m8	38	ARG
54	m8	55	SER
54	m8	57	ILE
54	m8	63	SER
54	m8	64	VAL
54	m8	80	THR
54	m8	81	VAL
54	m8	86	THR
54	m8	93	ILE
54	m8	113	LYS
54	m8	130	ARG
54	m8	135	GLN
54	m8	146	SER
54	m8	147	ARG
54	m8	166	LEU
54	m8	170	ARG
54	m8	176	ARG
54	m8	178	ARG
55	m9	6	THR
55	m9	7	GLN
55	m9	10	LEU
55	m9	17	VAL
55	m9	20	ARG
55	m9	36	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	m9	41	ILE
55	m9	43	LYS
55	m9	49	THR
55	m9	57	VAL
55	m9	61	SER
55	m9	63	THR
55	m9	70	LYS
55	m9	88	ARG
55	m9	92	GLN
55	m9	99	LEU
55	m9	104	ARG
55	m9	110	ARG
55	m9	127	SER
55	m9	128	LYS
55	m9	152	GLU
55	m9	153	LYS
55	m9	156	ASN
55	m9	164	LEU
55	m9	170	ARG
55	m9	173	ARG
55	m9	180	LYS
56	n0	3	HIS
56	n0	13	ARG
56	n0	16	THR
56	n0	17	GLU
56	n0	18	SER
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	58	ILE
56	n0	60	SER
56	n0	61	ILE
56	n0	62	ASN
56	n0	70	THR
56	n0	73	LYS
56	n0	80	ARG
56	n0	87	THR
56	n0	88	HIS
56	n0	89	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	n0	96	ASP
56	n0	97	VAL
56	n0	99	ARG
56	n0	100	VAL
56	n0	107	TYR
56	n0	117	ARG
56	n0	120	SER
56	n0	123	ILE
56	n0	130	GLU
56	n0	132	THR
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	162	THR
56	n0	167	ARG
56	n0	172	TYR
57	n1	9	SER
57	n1	12	ARG
57	n1	17	ARG
57	n1	25	VAL
57	n1	26	HIS
57	n1	36	VAL
57	n1	39	ILE
57	n1	47	SER
57	n1	48	ILE
57	n1	52	MET
57	n1	71	SER
57	n1	78	LYS
57	n1	80	VAL
57	n1	83	ARG
57	n1	86	GLU
57	n1	88	ARG
57	n1	89	LEU
57	n1	93	VAL
57	n1	96	ILE
57	n1	102	ARG
57	n1	104	GLU
57	n1	126	VAL
57	n1	135	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	n1	139	ARG
57	n1	143	THR
57	n1	150	THR
57	n1	154	VAL
57	n1	158	THR
58	n2	14	THR
58	n2	27	VAL
58	n2	28	PHE
58	n2	32	SER
58	n2	37	LEU
58	n2	38	ILE
58	n2	43	VAL
58	n2	50	LEU
58	n2	52	ASN
58	n2	57	THR
58	n2	62	VAL
58	n2	63	VAL
58	n2	68	THR
58	n2	74	LYS
58	n2	75	TYR
58	n2	81	LYS
59	n3	7	GLN
59	n3	13	ILE
59	n3	14	SER
59	n3	22	ILE
59	n3	28	ASN
59	n3	45	ARG
59	n3	58	VAL
59	n3	61	THR
59	n3	66	LYS
59	n3	70	ARG
59	n3	72	LYS
59	n3	91	VAL
59	n3	125	LEU
59	n3	135	VAL
60	n4	1	MET
60	n4	4	GLU
60	n4	5	ILE
60	n4	25	ASP
60	n4	39	LEU
60	n4	57	LYS
60	n4	59	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
60	n4	63	ILE
60	n4	77	LYS
60	n4	82	ILE
60	n4	89	LEU
60	n4	95	SER
60	n4	96	LEU
60	n4	100	VAL
60	n4	105	ARG
60	n4	107	GLU
60	n4	123	ARG
60	n4	126	GLU
60	n4	127	LYS
60	n4	130	SER
61	n5	24	LEU
61	n5	27	ARG
61	n5	37	THR
61	n5	40	LEU
61	n5	52	PRO
61	n5	56	ARG
61	n5	59	SER
61	n5	61	LYS
61	n5	63	ILE
61	n5	71	THR
61	n5	73	MET
61	n5	78	ASP
61	n5	86	VAL
61	n5	87	SER
61	n5	88	MET
61	n5	109	LYS
61	n5	115	ARG
61	n5	124	VAL
61	n5	125	ARG
61	n5	133	LEU
61	n5	135	ILE
61	n5	142	ILE
62	n6	4	GLN
62	n6	8	VAL
62	n6	12	ARG
62	n6	13	ARG
62	n6	35	LEU
62	n6	36	SER
62	n6	37	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
62	n6	40	ARG
62	n6	45	ILE
62	n6	50	ILE
62	n6	56	VAL
62	n6	57	LEU
62	n6	66	GLN
62	n6	71	SER
62	n6	74	TYR
62	n6	80	VAL
62	n6	102	SER
62	n6	105	VAL
62	n6	108	LYS
62	n6	111	LEU
63	n7	3	LYS
63	n7	24	VAL
63	n7	34	LYS
63	n7	35	SER
63	n7	36	HIS
63	n7	46	ILE
63	n7	47	GLU
63	n7	52	LYS
63	n7	57	HIS
63	n7	65	ARG
63	n7	66	THR
63	n7	72	ILE
63	n7	81	LEU
63	n7	83	THR
63	n7	94	SER
63	n7	95	VAL
63	n7	100	THR
63	n7	103	GLN
63	n7	105	SER
63	n7	111	LYS
63	n7	126	LYS
63	n7	132	SER
64	n8	6	THR
64	n8	8	THR
64	n8	15	VAL
64	n8	27	LYS
64	n8	32	ARG
64	n8	42	ARG
64	n8	43	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
64	n8	44	ASN
64	n8	46	ASP
64	n8	47	LYS
64	n8	60	TYR
64	n8	67	HIS
64	n8	68	PHE
64	n8	70	LYS
64	n8	73	LEU
64	n8	82	ILE
64	n8	91	LEU
64	n8	93	SER
64	n8	96	LYS
64	n8	98	THR
64	n8	123	VAL
64	n8	132	LYS
64	n8	135	GLU
64	n8	144	VAL
65	n9	5	LYS
65	n9	13	THR
65	n9	19	ASN
65	n9	21	ILE
65	n9	33	LYS
65	n9	38	LYS
65	n9	58	LYS
65	n9	59	LYS
66	o0	6	SER
66	o0	8	GLU
66	o0	10	ILE
66	o0	12	GLN
66	o0	19	LYS
66	o0	32	LYS
66	o0	33	SER
66	o0	34	LEU
66	o0	40	LYS
66	o0	41	LEU
66	o0	55	GLU
66	o0	58	TYR
66	o0	61	MET
66	o0	66	LYS
66	o0	74	ASN
66	o0	86	ARG
66	o0	87	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	o0	99	ASP
66	o0	103	THR
67	o1	6	ASP
67	o1	10	ARG
67	o1	13	THR
67	o1	16	LEU
67	o1	24	SER
67	o1	26	LYS
67	o1	31	ARG
67	o1	44	MET
67	o1	46	THR
67	o1	47	ASP
67	o1	76	SER
67	o1	77	ARG
67	o1	84	ASP
67	o1	90	PHE
67	o1	102	LYS
67	o1	104	LEU
67	o1	106	THR
68	o2	4	LEU
68	o2	6	HIS
68	o2	9	ILE
68	o2	24	ARG
68	o2	27	ARG
68	o2	33	ARG
68	o2	41	VAL
68	o2	44	ARG
68	o2	45	ARG
68	o2	47	ARG
68	o2	51	SER
68	o2	54	LYS
68	o2	61	LYS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	89	THR
68	o2	91	THR
68	o2	106	VAL
68	o2	108	ILE
68	o2	125	ARG
68	o2	126	LEU
69	o3	4	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
69	o3	22	VAL
69	o3	31	LYS
69	o3	37	THR
69	o3	42	GLN
69	o3	48	ARG
69	o3	58	GLU
69	o3	60	ARG
69	o3	70	LYS
69	o3	81	VAL
69	o3	92	LYS
69	o3	98	VAL
69	o3	105	SER
69	o3	107	ILE
70	o4	20	ILE
70	o4	24	LYS
70	o4	25	THR
70	o4	38	LEU
70	o4	46	ASP
70	o4	47	CYS
70	o4	58	ARG
70	o4	64	THR
70	o4	65	VAL
70	o4	71	THR
70	o4	83	ASN
70	o4	98	GLN
70	o4	104	VAL
70	o4	109	THR
71	o5	4	VAL
71	o5	20	GLN
71	o5	26	LYS
71	o5	27	GLU
71	o5	28	LEU
71	o5	40	SER
71	o5	46	THR
71	o5	47	VAL
71	o5	48	ARG
71	o5	62	GLN
71	o5	68	GLN
71	o5	69	LEU
71	o5	71	LYS
71	o5	81	ARG
71	o5	86	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
71	o5	89	ARG
71	o5	90	ARG
71	o5	107	LYS
71	o5	108	GLN
71	o5	113	GLN
71	o5	116	TYR
72	o6	3	VAL
72	o6	9	ILE
72	o6	11	LEU
72	o6	15	LYS
72	o6	17	VAL
72	o6	19	SER
72	o6	21	THR
72	o6	26	ILE
72	o6	29	LYS
72	o6	34	SER
72	o6	35	ASN
72	o6	36	ARG
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	64	SER
72	o6	68	ARG
72	o6	72	VAL
72	o6	81	THR
72	o6	88	GLU
72	o6	90	MET
72	o6	94	ILE
72	o6	98	ARG
73	o7	5	THR
73	o7	17	THR
73	o7	24	ARG
73	o7	33	THR
73	o7	44	THR
73	o7	45	ARG
73	o7	48	ASN
73	o7	49	TRP
73	o7	55	ARG
73	o7	58	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
73	o7	59	THR
73	o7	65	ARG
73	o7	67	LEU
73	o7	68	LYS
73	o7	80	THR
74	o8	16	ARG
74	o8	24	THR
74	o8	31	LEU
74	o8	33	LYS
74	o8	41	THR
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	67	GLN
74	o8	69	LEU
74	o8	72	THR
75	o9	6	SER
75	o9	9	ILE
75	o9	11	GLN
75	o9	15	LYS
75	o9	21	ARG
75	o9	23	LEU
75	o9	34	THR
75	o9	45	ARG
75	o9	48	LYS
76	q0	79	GLU
76	q0	85	LEU
76	q0	87	SER
76	q0	88	LYS
76	q0	94	SER
76	q0	106	ARG
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
77	q1	2	ARG
77	q1	6	ARG
77	q1	9	ARG
77	q1	11	ARG
77	q1	13	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
77	q1	19	LYS
77	q1	21	ARG
78	q2	6	LYS
78	q2	7	THR
78	q2	8	ARG
78	q2	10	THR
78	q2	18	ARG
78	q2	24	LYS
78	q2	32	LYS
78	q2	35	LEU
78	q2	45	ARG
78	q2	48	SER
78	q2	61	LYS
78	q2	69	VAL
78	q2	72	LEU
78	q2	83	LEU
78	q2	84	THR
78	q2	85	LEU
78	q2	93	LEU
78	q2	100	LYS
78	q2	106	PHE
79	q3	3	LYS
79	q3	4	ARG
79	q3	8	VAL
79	q3	17	ARG
79	q3	33	GLN
79	q3	34	HIS
79	q3	41	PHE
79	q3	49	ARG
79	q3	54	ILE
79	q3	56	THR
79	q3	58	SER
79	q3	59	CYS
79	q3	70	THR
79	q3	79	VAL
79	q3	81	SER
79	q3	90	VAL
82	p0	4	ILE
82	p0	5	ARG
82	p0	10	GLU
82	p0	46	ARG
82	p0	48	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
82	p0	52	LEU
82	p0	67	LEU
82	p0	69	ASP
82	p0	70	LEU
82	p0	72	ASP
82	p0	76	LEU
82	p0	87	VAL
82	p0	93	LEU
82	p0	97	LYS
82	p0	104	ARG
82	p0	193	ASN
82	p0	196	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (75) such sidechains are listed below:

Mol	Chain	Res	Type
2	S0	15	GLN
2	S0	193	GLN
4	S2	189	GLN
7	S5	79	ASN
7	S5	104	ASN
8	S6	34	GLN
8	S6	59	GLN
9	S7	71	HIS
10	S8	9	HIS
10	S8	64	ASN
13	C1	104	HIS
19	C7	83	GLN
20	C8	136	GLN
22	D0	17	GLN
23	D1	74	GLN
24	D2	15	ASN
27	D5	95	HIS
40	L3	109	HIS
42	L5	63	GLN
44	L7	104	GLN
46	L9	156	GLN
46	L9	162	GLN
47	M0	100	ASN
48	M1	95	ASN
53	M7	10	ASN
56	N0	138	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	N3	98	ASN
59	N3	132	ASN
60	N4	45	ASN
61	N5	80	ASN
65	N9	45	HIS
67	O1	21	HIS
78	Q2	99	GLN
78	Q2	102	GLN
2	s0	131	GLN
3	s1	149	GLN
3	s1	157	GLN
3	s1	208	GLN
3	s1	209	ASN
7	s5	100	ASN
8	s6	190	GLN
9	s7	71	HIS
11	s9	123	HIS
80	c0	32	HIS
13	c1	110	HIS
15	c3	36	GLN
15	c3	78	ASN
20	c8	122	HIS
21	c9	101	ASN
22	d0	72	ASN
24	d2	56	HIS
31	d9	27	HIS
39	l2	38	HIS
40	l3	211	GLN
42	l5	264	GLN
44	l7	112	ASN
45	l8	24	ASN
45	l8	28	HIS
45	l8	38	GLN
46	l9	37	ASN
49	m3	99	HIS
51	m5	178	HIS
52	m6	193	GLN
53	m7	45	GLN
53	m7	137	ASN
55	m9	7	GLN
55	m9	92	GLN
56	n0	88	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	n1	134	GLN
60	n4	104	ASN
63	n7	128	GLN
64	n8	44	ASN
72	o6	35	ASN
78	q2	47	GLN
79	q3	33	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1777/1800 (98%)	519 (29%)	56 (3%)
1	6	1792/1800 (99%)	472 (26%)	47 (2%)
36	1	3145/3396 (92%)	710 (22%)	70 (2%)
36	5	3146/3396 (92%)	753 (23%)	72 (2%)
37	3	120/121 (99%)	18 (15%)	1 (0%)
37	7	120/121 (99%)	23 (19%)	1 (0%)
38	4	157/158 (99%)	37 (23%)	2 (1%)
38	8	157/158 (99%)	37 (23%)	1 (0%)
All	All	10414/10950 (95%)	2569 (24%)	250 (2%)

All (2569) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	3	U
1	2	4	C
1	2	13	C
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	45	U
1	2	46	A
1	2	47	A
1	2	49	C
1	2	50	C
1	2	57	G
1	2	60	U
1	2	68	A
1	2	69	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	72	A
1	2	73	U
1	2	74	U
1	2	75	U
1	2	104	A
1	2	114	C
1	2	117	U
1	2	128	U
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	153	G
1	2	158	U
1	2	159	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	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	200	A
1	2	204	G
1	2	215	A
1	2	218	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	219	A
1	2	226	A
1	2	227	U
1	2	228	G
1	2	229	U
1	2	231	U
1	2	233	C
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	261	U
1	2	262	U
1	2	265	A
1	2	270	C
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	288	A
1	2	290	G
1	2	299	A
1	2	302	U
1	2	308	C
1	2	309	C
1	2	314	C
1	2	316	A
1	2	319	U
1	2	320	U
1	2	321	C
1	2	322	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	324	U
1	2	333	A
1	2	337	G
1	2	338	C
1	2	352	A
1	2	359	A
1	2	360	A
1	2	361	C
1	2	363	G
1	2	378	A
1	2	380	U
1	2	387	A
1	2	390	G
1	2	393	C
1	2	397	A
1	2	400	A
1	2	401	A
1	2	402	C
1	2	404	G
1	2	409	C
1	2	416	A
1	2	418	G
1	2	419	G
1	2	423	G
1	2	424	C
1	2	425	A
1	2	426	G
1	2	428	A
1	2	431	C
1	2	434	G
1	2	437	A
1	2	439	U
1	2	444	C
1	2	448	C
1	2	454	U
1	2	455	C
1	2	462	G
1	2	468	A
1	2	475	A
1	2	477	A
1	2	480	G
1	2	484	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	485	A
1	2	486	G
1	2	488	G
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	503	G
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
1	2	512	A
1	2	513	U
1	2	514	G
1	2	515	A
1	2	516	G
1	2	519	C
1	2	520	A
1	2	527	A
1	2	532	U
1	2	536	C
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	546	U
1	2	548	G
1	2	554	C
1	2	555	A
1	2	556	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	557	G
1	2	558	U
1	2	559	C
1	2	565	C
1	2	578	U
1	2	579	A
1	2	580	A
1	2	582	U
1	2	583	C
1	2	594	A
1	2	595	G
1	2	609	U
1	2	611	U
1	2	619	A
1	2	620	A
1	2	621	A
1	2	622	A
1	2	623	A
1	2	624	G
1	2	630	A
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	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	692	C
1	2	694	U
1	2	696	C
1	2	697	C
1	2	698	U
1	2	700	C
1	2	701	U
1	2	702	G
1	2	703	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	704	C
1	2	705	U
1	2	706	A
1	2	707	A
1	2	709	C
1	2	710	U
1	2	711	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	731	C
1	2	732	G
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	745	U
1	2	754	A
1	2	755	A
1	2	756	A
1	2	759	U
1	2	765	G
1	2	766	U
1	2	774	A
1	2	775	G
1	2	778	G
1	2	779	U
1	2	781	U
1	2	783	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	784	C
1	2	789	A
1	2	793	A
1	2	794	U
1	2	795	U
1	2	801	G
1	2	803	A
1	2	806	A
1	2	812	A
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	824	G
1	2	829	A
1	2	830	U
1	2	831	U
1	2	833	U
1	2	846	G
1	2	848	C
1	2	856	A
1	2	860	U
1	2	863	A
1	2	865	A
1	2	876	G
1	2	886	U
1	2	896	U
1	2	898	A
1	2	912	U
1	2	913	G
1	2	914	G
1	2	916	U
1	2	921	U
1	2	926	A
1	2	933	A
1	2	935	U
1	2	942	G
1	2	944	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	951	A
1	2	952	A
1	2	959	U
1	2	960	U
1	2	966	A
1	2	971	A
1	2	991	G
1	2	992	A
1	2	993	A
1	2	1001	A
1	2	1002	G
1	2	1003	A
1	2	1004	U
1	2	1005	A
1	2	1024	U
1	2	1026	A
1	2	1027	A
1	2	1028	C
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	1074	G
1	2	1079	U
1	2	1080	U
1	2	1082	C
1	2	1083	G
1	2	1091	A
1	2	1092	A
1	2	1093	A
1	2	1096	C
1	2	1097	U
1	2	1100	G
1	2	1109	G
1	2	1111	G
1	2	1138	A
1	2	1139	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1146	G
1	2	1151	A
1	2	1155	G
1	2	1157	A
1	2	1158	C
1	2	1159	C
1	2	1160	A
1	2	1161	C
1	2	1164	G
1	2	1167	G
1	2	1168	U
1	2	1173	C
1	2	1185	U
1	2	1191	U
1	2	1194	A
1	2	1196	A
1	2	1197	C
1	2	1198	G
1	2	1199	G
1	2	1200	G
1	2	1202	A
1	2	1203	A
1	2	1205	C
1	2	1207	C
1	2	1217	A
1	2	1218	G
1	2	1227	A
1	2	1228	G
1	2	1229	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	1263	G
1	2	1267	G
1	2	1275	A
1	2	1284	C
1	2	1285	U
1	2	1286	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1291	G
1	2	1293	U
1	2	1301	U
1	2	1307	U
1	2	1314	U
1	2	1315	U
1	2	1316	G
1	2	1321	A
1	2	1337	A
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1347	U
1	2	1348	A
1	2	1354	G
1	2	1355	C
1	2	1359	C
1	2	1361	U
1	2	1363	U
1	2	1364	G
1	2	1370	U
1	2	1371	A
1	2	1388	A
1	2	1390	U
1	2	1398	U
1	2	1399	C
1	2	1401	A
1	2	1412	G
1	2	1413	U
1	2	1414	U
1	2	1415	U
1	2	1422	A
1	2	1426	C
1	2	1427	A
1	2	1428	G
1	2	1436	A
1	2	1446	A
1	2	1456	C
1	2	1457	C
1	2	1459	C
1	2	1460	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1461	C
1	2	1462	G
1	2	1471	A
1	2	1473	U
1	2	1474	G
1	2	1482	C
1	2	1486	G
1	2	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1496	U
1	2	1499	G
1	2	1506	G
1	2	1510	U
1	2	1514	U
1	2	1515	A
1	2	1516	A
1	2	1517	U
1	2	1521	G
1	2	1523	G
1	2	1524	A
1	2	1526	A
1	2	1530	C
1	2	1535	U
1	2	1536	G
1	2	1537	C
1	2	1538	U
1	2	1540	G
1	2	1542	G
1	2	1555	A
1	2	1557	U
1	2	1559	A
1	2	1560	U
1	2	1569	A
1	2	1573	A
1	2	1574	G
1	2	1584	G
1	2	1601	G
1	2	1616	G
1	2	1623	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1625	C
1	2	1631	A
1	2	1634	C
1	2	1657	U
1	2	1658	G
1	2	1673	G
1	2	1681	A
1	2	1682	U
1	2	1683	C
1	2	1684	U
1	2	1685	G
1	2	1686	C
1	2	1697	G
1	2	1698	G
1	2	1699	G
1	2	1700	C
1	2	1701	A
1	2	1702	A
1	2	1703	C
1	2	1704	U
1	2	1711	C
1	2	1712	A
1	2	1713	G
1	2	1715	G
1	2	1731	A
1	2	1734	U
1	2	1757	G
1	2	1760	G
1	2	1762	A
1	2	1766	A
1	2	1769	U
1	2	1780	G
1	2	1782	A
1	2	1783	C
1	2	1790	A
1	2	1792	G
1	2	1793	G
1	2	1794	A
1	2	1796	C
1	2	1798	U
36	1	26	A
36	1	40	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	43	A
36	1	45	A
36	1	49	A
36	1	52	A
36	1	59	G
36	1	60	A
36	1	65	A
36	1	66	A
36	1	73	C
36	1	75	G
36	1	76	G
36	1	85	A
36	1	92	G
36	1	93	C
36	1	94	G
36	1	102	C
36	1	109	A
36	1	110	G
36	1	111	C
36	1	113	C
36	1	116	A
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	148	G
36	1	156	G
36	1	157	A
36	1	166	C
36	1	169	U
36	1	170	G
36	1	187	A
36	1	190	U
36	1	191	U
36	1	192	C
36	1	200	C
36	1	201	A
36	1	210	U
36	1	213	A
36	1	218	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	219	A
36	1	235	A
36	1	240	U
36	1	241	G
36	1	243	G
36	1	249	U
36	1	251	G
36	1	252	U
36	1	269	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	315	C
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	362	U
36	1	366	A
36	1	368	G
36	1	374	A
36	1	375	A
36	1	376	G
36	1	398	A
36	1	399	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	404	G
36	1	421	G
36	1	422	A
36	1	439	C
36	1	440	A
36	1	495	G
36	1	520	U
36	1	521	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	532	A
36	1	535	G
36	1	536	U
36	1	544	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	552	G
36	1	555	U
36	1	557	A
36	1	558	U
36	1	559	A
36	1	560	G
36	1	569	A
36	1	578	A
36	1	579	G
36	1	592	A
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	622	A
36	1	636	C
36	1	640	U
36	1	649	A
36	1	658	G
36	1	660	A
36	1	662	U
36	1	670	C
36	1	671	U
36	1	677	A
36	1	681	U
36	1	689	U
36	1	691	A
36	1	705	A
36	1	708	G
36	1	709	A
36	1	712	G
36	1	715	A
36	1	716	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	719	U
36	1	725	G
36	1	758	C
36	1	764	U
36	1	766	U
36	1	767	U
36	1	768	C
36	1	776	U
36	1	777	U
36	1	780	A
36	1	781	G
36	1	785	G
36	1	786	A
36	1	792	G
36	1	806	A
36	1	817	A
36	1	830	A
36	1	837	A
36	1	849	C
36	1	861	C
36	1	872	U
36	1	874	U
36	1	879	U
36	1	886	C
36	1	890	C
36	1	895	A
36	1	896	A
36	1	907	G
36	1	908	G
36	1	914	A
36	1	916	G
36	1	917	A
36	1	920	A
36	1	924	G
36	1	929	A
36	1	937	G
36	1	943	U
36	1	944	C
36	1	953	G
36	1	959	C
36	1	960	U
36	1	974	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	1009	A
36	1	1010	G
36	1	1016	C
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	1034	U
36	1	1036	A
36	1	1037	C
36	1	1041	U
36	1	1047	A
36	1	1049	C
36	1	1052	U
36	1	1064	A
36	1	1065	A
36	1	1072	G
36	1	1079	A
36	1	1081	U
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1138	U
36	1	1143	A
36	1	1144	U
36	1	1153	A
36	1	1159	A
36	1	1160	C
36	1	1177	G
36	1	1178	G
36	1	1179	A
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1190	A
36	1	1191	U
36	1	1192	C
36	1	1200	A
36	1	1201	C
36	1	1202	A
36	1	1209	G
36	1	1211	U
36	1	1213	G
36	1	1216	C
36	1	1217	A
36	1	1221	A
36	1	1222	G
36	1	1227	C
36	1	1232	C
36	1	1234	G
36	1	1235	U
36	1	1236	G
36	1	1237	G
36	1	1241	U
36	1	1243	G
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	1262	G
36	1	1263	A
36	1	1264	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1265	U
36	1	1266	G
36	1	1267	U
36	1	1269	U
36	1	1270	A
36	1	1271	A
36	1	1272	C
36	1	1274	A
36	1	1278	A
36	1	1279	C
36	1	1280	C
36	1	1285	G
36	1	1287	A
36	1	1295	G
36	1	1305	U
36	1	1307	G
36	1	1308	A
36	1	1309	U
36	1	1313	G
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	1380	G
36	1	1386	A
36	1	1387	G
36	1	1399	A
36	1	1400	G
36	1	1417	G
36	1	1418	A
36	1	1419	A
36	1	1421	G
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	1435	A
36	1	1437	C
36	1	1446	A
36	1	1450	G
36	1	1452	A
36	1	1455	U
36	1	1462	A
36	1	1477	A
36	1	1481	A
36	1	1482	A
36	1	1485	G
36	1	1492	G
36	1	1494	U
36	1	1508	C
36	1	1511	U
36	1	1516	C
36	1	1528	G
36	1	1531	C
36	1	1535	A
36	1	1541	G
36	1	1549	U
36	1	1556	C
36	1	1557	A
36	1	1560	G
36	1	1561	G
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1566	A
36	1	1567	U
36	1	1568	U
36	1	1569	U
36	1	1570	U
36	1	1576	G
36	1	1578	C
36	1	1580	A
36	1	1582	C
36	1	1583	A
36	1	1587	A
36	1	1589	A
36	1	1596	C
36	1	1607	U

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	1639	C
36	1	1642	A
36	1	1643	A
36	1	1645	U
36	1	1657	C
36	1	1683	A
36	1	1715	A
36	1	1716	U
36	1	1717	U
36	1	1724	U
36	1	1725	C
36	1	1727	G
36	1	1729	A
36	1	1736	G
36	1	1741	A
36	1	1742	U
36	1	1743	G
36	1	1745	C
36	1	1750	A
36	1	1751	G
36	1	1760	A
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	1781	C
36	1	1787	A
36	1	1788	C
36	1	1797	A
36	1	1809	A
36	1	1810	A
36	1	1814	A
36	1	1815	U
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	1822	C
36	1	1834	U
36	1	1835	A
36	1	1839	A
36	1	1841	A
36	1	1842	A
36	1	1845	G
36	1	1846	C
36	1	1849	C
36	1	1850	A
36	1	1857	C
36	1	1858	A
36	1	1866	C
36	1	1879	A
36	1	1880	U
36	1	1881	A
36	1	1886	A
36	1	1900	A
36	1	1906	G
36	1	1931	U
36	1	1932	A
36	1	1935	G
36	1	1948	G
36	1	1950	U
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	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2134	G
36	1	2140	U
36	1	2144	A
36	1	2158	A
36	1	2168	A
36	1	2169	G
36	1	2170	U
36	1	2171	G
36	1	2185	G
36	1	2188	A
36	1	2198	A
36	1	2205	U
36	1	2208	A
36	1	2210	G
36	1	2222	A
36	1	2223	A
36	1	2225	U
36	1	2228	A
36	1	2229	A
36	1	2230	C
36	1	2244	A
36	1	2248	C
36	1	2250	G
36	1	2255	A
36	1	2256	A
36	1	2257	C
36	1	2263	C
36	1	2272	G
36	1	2279	A
36	1	2281	A
36	1	2282	U
36	1	2284	C
36	1	2288	G
36	1	2295	A
36	1	2299	A
36	1	2307	G
36	1	2310	U
36	1	2313	A
36	1	2314	U
36	1	2315	G
36	1	2334	U
36	1	2336	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2345	A
36	1	2372	A
36	1	2373	A
36	1	2374	C
36	1	2375	G
36	1	2385	G
36	1	2393	G
36	1	2394	G
36	1	2397	A
36	1	2398	A
36	1	2401	A
36	1	2403	G
36	1	2404	A
36	1	2405	C
36	1	2411	U
36	1	2418	G
36	1	2419	A
36	1	2434	U
36	1	2437	G
36	1	2444	C
36	1	2445	A
36	1	2502	A
36	1	2503	G
36	1	2507	C
36	1	2514	U
36	1	2515	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
36	1	2548	C
36	1	2549	G
36	1	2552	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	2581	U
36	1	2585	G
36	1	2586	G
36	1	2593	A
36	1	2594	C
36	1	2606	G
36	1	2607	G
36	1	2614	G
36	1	2618	G
36	1	2638	C
36	1	2648	G
36	1	2649	A
36	1	2652	U
36	1	2656	A
36	1	2657	A
36	1	2662	G
36	1	2672	G
36	1	2674	A
36	1	2676	A
36	1	2677	G
36	1	2681	U
36	1	2689	A
36	1	2690	G
36	1	2694	A
36	1	2696	A
36	1	2705	A
36	1	2714	G
36	1	2727	A
36	1	2728	G
36	1	2729	U
36	1	2740	A
36	1	2752	U
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	2771	U
36	1	2772	C
36	1	2777	G
36	1	2778	G
36	1	2780	A
36	1	2796	G
36	1	2800	G
36	1	2801	A
36	1	2802	A
36	1	2810	C
36	1	2814	G
36	1	2817	A
36	1	2818	U
36	1	2829	U
36	1	2842	U
36	1	2843	U
36	1	2845	A
36	1	2849	C
36	1	2855	U
36	1	2860	U
36	1	2863	G
36	1	2869	U
36	1	2870	C
36	1	2871	G
36	1	2872	A
36	1	2873	U
36	1	2874	G
36	1	2875	U
36	1	2878	G
36	1	2887	A
36	1	2889	C
36	1	2895	G
36	1	2898	G
36	1	2899	C
36	1	2900	A
36	1	2911	A
36	1	2917	G
36	1	2923	U
36	1	2927	C
36	1	2935	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	2936	A
36	1	2947	G
36	1	2951	G
36	1	2954	U
36	1	2955	U
36	1	2971	A
36	1	2974	U
36	1	2976	A
36	1	2978	U
36	1	2979	U
36	1	2983	C
36	1	2990	G
36	1	2996	U
36	1	2997	G
36	1	3012	A
36	1	3021	A
36	1	3056	U
36	1	3058	U
36	1	3059	G
36	1	3078	U
36	1	3079	U
36	1	3080	G
36	1	3083	G
36	1	3086	A
36	1	3087	A
36	1	3088	G
36	1	3091	A
36	1	3092	C
36	1	3104	U
36	1	3109	G
36	1	3117	C
36	1	3118	C
36	1	3122	A
36	1	3129	A
36	1	3130	A
36	1	3131	U
36	1	3139	A
36	1	3142	A
36	1	3143	C
36	1	3145	C
36	1	3151	U
36	1	3153	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	3169	U
36	1	3170	A
36	1	3171	U
36	1	3173	G
36	1	3174	A
36	1	3175	U
36	1	3176	G
36	1	3179	U
36	1	3180	A
36	1	3181	C
36	1	3187	A
36	1	3195	U
36	1	3196	U
36	1	3199	G
36	1	3207	U
36	1	3208	G
36	1	3210	A
36	1	3217	C
36	1	3218	A
36	1	3219	G
36	1	3228	C
36	1	3229	G
36	1	3235	C
36	1	3243	A
36	1	3244	A
36	1	3245	A
36	1	3246	G
36	1	3247	G
36	1	3253	G
36	1	3259	U
36	1	3270	U
36	1	3272	C
36	1	3276	G
36	1	3279	A
36	1	3280	U
36	1	3281	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	3286	G
36	1	3287	U
36	1	3289	G
36	1	3294	A
36	1	3295	A
36	1	3304	U
36	1	3309	G
36	1	3316	A
36	1	3317	U
36	1	3318	G
36	1	3319	U
36	1	3320	A
36	1	3330	A
36	1	3335	A
36	1	3341	U
36	1	3342	A
36	1	3345	G
36	1	3347	A
36	1	3349	C
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	3363	U
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	3390	G
36	1	3396	U
37	3	7	G
37	3	13	A
37	3	22	A
37	3	23	A
37	3	41	G
37	3	51	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	3	53	U
37	3	54	U
37	3	55	A
37	3	65	G
37	3	74	C
37	3	76	A
37	3	91	G
37	3	102	A
37	3	103	A
37	3	106	U
37	3	112	G
37	3	121	U
38	4	2	A
38	4	16	G
38	4	17	A
38	4	18	U
38	4	34	U
38	4	35	C
38	4	43	A
38	4	51	G
38	4	59	A
38	4	62	C
38	4	63	G
38	4	75	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	90	U
38	4	95	G
38	4	104	A
38	4	106	C
38	4	110	C
38	4	111	A
38	4	113	U
38	4	125	U
38	4	126	A
38	4	128	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	4	138	A
38	4	144	G
38	4	148	G
38	4	152	G
38	4	155	A
38	4	157	U
38	4	158	U
1	6	2	A
1	6	4	C
1	6	11	A
1	6	17	C
1	6	25	C
1	6	26	A
1	6	27	U
1	6	34	G
1	6	42	G
1	6	45	U
1	6	47	A
1	6	48	G
1	6	50	C
1	6	57	G
1	6	60	U
1	6	66	U
1	6	67	A
1	6	68	A
1	6	69	G
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	105	A
1	6	111	U
1	6	114	C
1	6	115	G
1	6	128	U
1	6	137	U
1	6	138	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	140	A
1	6	141	U
1	6	144	U
1	6	145	A
1	6	146	U
1	6	158	U
1	6	159	U
1	6	161	U
1	6	166	C
1	6	178	U
1	6	185	U
1	6	188	A
1	6	190	C
1	6	191	C
1	6	192	U
1	6	193	U
1	6	194	U
1	6	195	G
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	222	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	249	U
1	6	250	C
1	6	260	U
1	6	261	U
1	6	265	A
1	6	268	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	271	A
1	6	272	U
1	6	273	G
1	6	277	U
1	6	278	U
1	6	280	U
1	6	281	G
1	6	287	G
1	6	299	A
1	6	302	U
1	6	304	U
1	6	306	U
1	6	314	C
1	6	316	A
1	6	320	U
1	6	321	C
1	6	324	U
1	6	333	A
1	6	337	G
1	6	338	C
1	6	352	A
1	6	357	G
1	6	359	A
1	6	360	A
1	6	361	C
1	6	390	G
1	6	391	A
1	6	400	A
1	6	401	A
1	6	402	C
1	6	404	G
1	6	416	A
1	6	418	G
1	6	424	C
1	6	425	A
1	6	426	G
1	6	434	G
1	6	437	A
1	6	439	U
1	6	444	C
1	6	448	C
1	6	454	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	468	A
1	6	477	A
1	6	484	C
1	6	485	A
1	6	486	G
1	6	487	G
1	6	488	G
1	6	489	C
1	6	490	C
1	6	492	A
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	507	U
1	6	508	U
1	6	510	G
1	6	511	A
1	6	512	A
1	6	513	U
1	6	515	A
1	6	519	C
1	6	527	A
1	6	534	A
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	551	G
1	6	555	A
1	6	556	A
1	6	557	G
1	6	558	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	559	C
1	6	564	G
1	6	565	C
1	6	574	G
1	6	578	U
1	6	579	A
1	6	580	A
1	6	582	U
1	6	594	A
1	6	595	G
1	6	597	G
1	6	610	G
1	6	619	A
1	6	620	A
1	6	622	A
1	6	623	A
1	6	624	G
1	6	630	A
1	6	635	A
1	6	639	U
1	6	645	C
1	6	649	U
1	6	650	U
1	6	651	G
1	6	652	G
1	6	653	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	680	U
1	6	681	U
1	6	682	C
1	6	683	C
1	6	684	A
1	6	685	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	690	G
1	6	691	C
1	6	696	C
1	6	697	C
1	6	698	U
1	6	709	C
1	6	710	U
1	6	711	U
1	6	714	G
1	6	715	U
1	6	718	U
1	6	719	U
1	6	720	G
1	6	721	U
1	6	722	G
1	6	730	G
1	6	742	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	767	U
1	6	774	A
1	6	775	G
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	803	A
1	6	806	A
1	6	811	A
1	6	812	A
1	6	814	A
1	6	815	G
1	6	816	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	821	U
1	6	823	G
1	6	825	U
1	6	826	U
1	6	829	A
1	6	830	U
1	6	831	U
1	6	832	U
1	6	834	G
1	6	835	U
1	6	856	A
1	6	857	U
1	6	860	U
1	6	861	U
1	6	863	A
1	6	876	G
1	6	898	A
1	6	905	A
1	6	906	A
1	6	909	U
1	6	910	C
1	6	913	G
1	6	914	G
1	6	916	U
1	6	929	A
1	6	933	A
1	6	935	U
1	6	940	A
1	6	942	G
1	6	944	A
1	6	959	U
1	6	960	U
1	6	965	U
1	6	966	A
1	6	969	C
1	6	970	A
1	6	971	A
1	6	972	G
1	6	983	A
1	6	989	U
1	6	992	A
1	6	993	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	995	A
1	6	996	U
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1014	G
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	1063	U
1	6	1072	C
1	6	1073	G
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	1109	G
1	6	1111	G
1	6	1113	A
1	6	1118	G
1	6	1137	A
1	6	1138	A
1	6	1139	A
1	6	1151	A
1	6	1155	G
1	6	1158	C
1	6	1159	C
1	6	1160	A
1	6	1162	C
1	6	1164	G
1	6	1167	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1185	U
1	6	1194	A
1	6	1196	A
1	6	1199	G
1	6	1200	G
1	6	1202	A
1	6	1207	C
1	6	1208	A
1	6	1217	A
1	6	1218	G
1	6	1225	U
1	6	1226	A
1	6	1227	A
1	6	1228	G
1	6	1229	G
1	6	1230	A
1	6	1234	A
1	6	1241	G
1	6	1242	A
1	6	1243	G
1	6	1244	A
1	6	1245	G
1	6	1246	C
1	6	1248	C
1	6	1252	C
1	6	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	U
1	6	1259	U
1	6	1275	A
1	6	1286	U
1	6	1288	G
1	6	1293	U
1	6	1314	U
1	6	1315	U
1	6	1321	A
1	6	1334	U
1	6	1338	C
1	6	1344	A
1	6	1345	A
1	6	1347	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1354	G
1	6	1361	U
1	6	1363	U
1	6	1364	G
1	6	1367	G
1	6	1370	U
1	6	1371	A
1	6	1383	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
1	6	1414	U
1	6	1415	U
1	6	1422	A
1	6	1427	A
1	6	1428	G
1	6	1429	G
1	6	1433	G
1	6	1435	G
1	6	1445	G
1	6	1446	A
1	6	1448	G
1	6	1454	G
1	6	1458	G
1	6	1459	C
1	6	1461	C
1	6	1471	A
1	6	1473	U
1	6	1474	G
1	6	1481	C
1	6	1482	C
1	6	1486	G
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1496	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1506	G
1	6	1514	U
1	6	1515	A
1	6	1516	A
1	6	1517	U
1	6	1521	G
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	1540	G
1	6	1554	U
1	6	1557	U
1	6	1559	A
1	6	1569	A
1	6	1573	A
1	6	1574	G
1	6	1584	G
1	6	1590	G
1	6	1601	G
1	6	1616	G
1	6	1620	C
1	6	1621	U
1	6	1634	C
1	6	1637	C
1	6	1638	G
1	6	1657	U
1	6	1658	G
1	6	1682	U
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	1703	C
1	6	1712	A
1	6	1713	G
1	6	1715	G
1	6	1716	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1717	G
1	6	1736	G
1	6	1749	A
1	6	1755	A
1	6	1760	G
1	6	1766	A
1	6	1767	G
1	6	1769	U
1	6	1780	G
1	6	1782	A
1	6	1783	C
1	6	1792	G
1	6	1793	G
1	6	1794	A
1	6	1796	C
1	6	1799	U
1	6	1800	A
36	5	4	U
36	5	16	A
36	5	26	A
36	5	40	A
36	5	43	A
36	5	44	U
36	5	49	A
36	5	59	G
36	5	60	A
36	5	65	A
36	5	66	A
36	5	75	G
36	5	76	G
36	5	82	C
36	5	85	A
36	5	92	G
36	5	94	G
36	5	96	G
36	5	97	U
36	5	99	A
36	5	101	G
36	5	105	C
36	5	109	A
36	5	110	G
36	5	113	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	115	A
36	5	116	A
36	5	120	G
36	5	121	A
36	5	122	A
36	5	127	G
36	5	133	U
36	5	134	U
36	5	135	C
36	5	136	G
36	5	150	A
36	5	152	U
36	5	156	G
36	5	157	A
36	5	165	A
36	5	166	C
36	5	170	G
36	5	171	G
36	5	172	G
36	5	174	C
36	5	180	C
36	5	182	U
36	5	183	G
36	5	184	U
36	5	187	A
36	5	190	U
36	5	191	U
36	5	200	C
36	5	203	G
36	5	210	U
36	5	212	G
36	5	213	A
36	5	218	G
36	5	219	A
36	5	221	A
36	5	231	G
36	5	234	G
36	5	236	G
36	5	237	G
36	5	239	G
36	5	240	U
36	5	244	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	246	U
36	5	247	C
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	269	G
36	5	283	G
36	5	284	A
36	5	286	U
36	5	291	C
36	5	295	A
36	5	298	U
36	5	316	U
36	5	323	A
36	5	329	U
36	5	339	C
36	5	349	A
36	5	350	C
36	5	351	A
36	5	372	A
36	5	376	G
36	5	395	A
36	5	398	A
36	5	399	A
36	5	401	U
36	5	402	A
36	5	403	C
36	5	409	A
36	5	417	A
36	5	420	G
36	5	421	G
36	5	422	A
36	5	436	A
36	5	438	A
36	5	439	C
36	5	441	U
36	5	442	G
36	5	492	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	495	G
36	5	507	U
36	5	510	G
36	5	512	U
36	5	515	C
36	5	520	U
36	5	521	A
36	5	532	A
36	5	535	G
36	5	539	C
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	592	A
36	5	594	U
36	5	600	G
36	5	604	G
36	5	608	A
36	5	609	G
36	5	610	G
36	5	611	A
36	5	619	A
36	5	620	U
36	5	621	A
36	5	628	A
36	5	636	C
36	5	648	C
36	5	649	A
36	5	657	A
36	5	660	A
36	5	677	A
36	5	681	U
36	5	691	A
36	5	699	A
36	5	705	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	708	G
36	5	712	G
36	5	715	A
36	5	716	A
36	5	725	G
36	5	727	G
36	5	736	A
36	5	763	G
36	5	766	U
36	5	767	U
36	5	776	U
36	5	781	G
36	5	785	G
36	5	786	A
36	5	798	G
36	5	800	G
36	5	806	A
36	5	817	A
36	5	830	A
36	5	831	G
36	5	851	C
36	5	861	C
36	5	864	G
36	5	867	G
36	5	874	U
36	5	877	C
36	5	879	U
36	5	891	G
36	5	892	U
36	5	896	A
36	5	897	U
36	5	907	G
36	5	908	G
36	5	910	G
36	5	911	C
36	5	914	A
36	5	916	G
36	5	917	A
36	5	921	A
36	5	923	C
36	5	937	G
36	5	944	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	959	C
36	5	960	U
36	5	962	A
36	5	964	G
36	5	974	G
36	5	979	U
36	5	993	G
36	5	994	G
36	5	1000	C
36	5	1001	G
36	5	1002	A
36	5	1006	A
36	5	1010	G
36	5	1014	U
36	5	1015	U
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
36	5	1028	U
36	5	1029	G
36	5	1032	C
36	5	1033	U
36	5	1041	U
36	5	1047	A
36	5	1049	C
36	5	1051	U
36	5	1063	G
36	5	1064	A
36	5	1065	A
36	5	1071	U
36	5	1072	G
36	5	1079	A
36	5	1081	U
36	5	1082	U
36	5	1083	G
36	5	1085	A
36	5	1093	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	1112	A
36	5	1116	G
36	5	1117	G
36	5	1131	G
36	5	1143	A
36	5	1144	U
36	5	1152	G
36	5	1153	A
36	5	1159	A
36	5	1160	C
36	5	1161	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	1193	A
36	5	1197	A
36	5	1201	C
36	5	1202	A
36	5	1208	U
36	5	1209	G
36	5	1212	A
36	5	1213	G
36	5	1221	A
36	5	1222	G
36	5	1223	A
36	5	1225	A
36	5	1232	C
36	5	1235	U
36	5	1236	G
36	5	1237	G
36	5	1239	C
36	5	1241	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1242	G
36	5	1245	A
36	5	1246	G
36	5	1252	A
36	5	1253	U
36	5	1254	C
36	5	1258	U
36	5	1262	G
36	5	1263	A
36	5	1264	G
36	5	1266	G
36	5	1285	G
36	5	1286	A
36	5	1307	G
36	5	1308	A
36	5	1309	U
36	5	1311	G
36	5	1312	C
36	5	1324	U
36	5	1330	A
36	5	1348	U
36	5	1349	G
36	5	1350	A
36	5	1351	U
36	5	1352	A
36	5	1353	U
36	5	1355	A
36	5	1356	U
36	5	1357	G
36	5	1368	U
36	5	1370	G
36	5	1380	G
36	5	1385	C
36	5	1386	A
36	5	1387	G
36	5	1399	A
36	5	1400	G
36	5	1419	A
36	5	1428	A
36	5	1431	G
36	5	1433	A
36	5	1434	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1437	C
36	5	1443	G
36	5	1446	A
36	5	1450	G
36	5	1455	U
36	5	1465	A
36	5	1481	A
36	5	1482	A
36	5	1490	A
36	5	1502	C
36	5	1503	A
36	5	1508	C
36	5	1514	G
36	5	1519	G
36	5	1526	U
36	5	1527	C
36	5	1528	G
36	5	1533	U
36	5	1536	G
36	5	1541	G
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1557	A
36	5	1558	A
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1566	A
36	5	1567	U
36	5	1569	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	1583	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1587	A
36	5	1589	A
36	5	1593	A
36	5	1594	A
36	5	1605	A
36	5	1607	U
36	5	1619	A
36	5	1620	U
36	5	1623	G
36	5	1629	U
36	5	1630	U
36	5	1632	A
36	5	1639	C
36	5	1641	U
36	5	1643	A
36	5	1644	C
36	5	1645	U
36	5	1656	A
36	5	1675	G
36	5	1683	A
36	5	1686	U
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1736	G
36	5	1741	A
36	5	1750	A
36	5	1751	G
36	5	1753	G
36	5	1761	C
36	5	1762	C
36	5	1765	U
36	5	1766	G
36	5	1768	U
36	5	1770	G
36	5	1780	G
36	5	1793	C
36	5	1795	U
36	5	1797	A
36	5	1808	G
36	5	1810	A
36	5	1813	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	1814	A
36	5	1815	U
36	5	1816	A
36	5	1817	G
36	5	1818	U
36	5	1821	U
36	5	1834	U
36	5	1839	A
36	5	1841	A
36	5	1842	A
36	5	1846	C
36	5	1849	C
36	5	1850	A
36	5	1864	A
36	5	1866	C
36	5	1878	G
36	5	1879	A
36	5	1880	U
36	5	1888	U
36	5	1890	U
36	5	1893	A
36	5	1903	U
36	5	1906	G
36	5	1926	C
36	5	1932	A
36	5	1948	G
36	5	1953	G
36	5	2101	C
36	5	2102	U
36	5	2111	G
36	5	2112	U
36	5	2113	A
36	5	2116	G
36	5	2121	G
36	5	2122	G
36	5	2131	A
36	5	2134	G
36	5	2144	A
36	5	2158	A
36	5	2164	A
36	5	2169	G
36	5	2172	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2174	G
36	5	2176	U
36	5	2179	C
36	5	2184	U
36	5	2187	G
36	5	2188	A
36	5	2192	C
36	5	2195	C
36	5	2198	A
36	5	2205	U
36	5	2206	G
36	5	2208	A
36	5	2210	G
36	5	2215	A
36	5	2223	A
36	5	2225	U
36	5	2228	A
36	5	2229	A
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	2258	U
36	5	2273	G
36	5	2276	G
36	5	2279	A
36	5	2281	A
36	5	2282	U
36	5	2283	G
36	5	2288	G
36	5	2298	U
36	5	2307	G
36	5	2309	A
36	5	2310	U
36	5	2313	A
36	5	2315	G
36	5	2334	U
36	5	2335	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2336	U
36	5	2361	A
36	5	2362	C
36	5	2373	A
36	5	2374	C
36	5	2375	G
36	5	2379	U
36	5	2385	G
36	5	2392	C
36	5	2393	G
36	5	2394	G
36	5	2397	A
36	5	2398	A
36	5	2401	A
36	5	2403	G
36	5	2404	A
36	5	2411	U
36	5	2418	G
36	5	2435	G
36	5	2436	U
36	5	2438	A
36	5	2439	A
36	5	2441	A
36	5	2443	A
36	5	2505	U
36	5	2508	U
36	5	2510	U
36	5	2511	A
36	5	2514	U
36	5	2515	A
36	5	2523	A
36	5	2524	A
36	5	2525	G
36	5	2526	C
36	5	2530	G
36	5	2531	C
36	5	2532	U
36	5	2537	U
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2541	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2543	U
36	5	2549	G
36	5	2552	C
36	5	2555	G
36	5	2562	A
36	5	2565	U
36	5	2566	C
36	5	2567	C
36	5	2568	C
36	5	2569	A
36	5	2570	U
36	5	2571	U
36	5	2572	C
36	5	2573	G
36	5	2574	G
36	5	2584	G
36	5	2585	G
36	5	2589	G
36	5	2593	A
36	5	2600	C
36	5	2606	G
36	5	2607	G
36	5	2613	U
36	5	2614	G
36	5	2619	G
36	5	2620	G
36	5	2626	A
36	5	2642	A
36	5	2652	U
36	5	2656	A
36	5	2667	A
36	5	2674	A
36	5	2675	C
36	5	2676	A
36	5	2677	G
36	5	2681	U
36	5	2683	U
36	5	2689	A
36	5	2690	G
36	5	2691	A
36	5	2694	A
36	5	2696	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2705	A
36	5	2709	C
36	5	2714	G
36	5	2719	U
36	5	2727	A
36	5	2728	G
36	5	2729	U
36	5	2742	C
36	5	2752	U
36	5	2753	G
36	5	2771	U
36	5	2772	C
36	5	2773	C
36	5	2778	G
36	5	2779	A
36	5	2783	U
36	5	2786	G
36	5	2791	G
36	5	2792	A
36	5	2796	G
36	5	2798	C
36	5	2799	A
36	5	2800	G
36	5	2801	A
36	5	2810	C
36	5	2814	G
36	5	2817	A
36	5	2818	U
36	5	2834	G
36	5	2839	G
36	5	2840	C
36	5	2843	U
36	5	2845	A
36	5	2847	A
36	5	2849	C
36	5	2853	A
36	5	2858	U
36	5	2870	C
36	5	2871	G
36	5	2872	A
36	5	2873	U
36	5	2874	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2875	U
36	5	2880	U
36	5	2881	C
36	5	2886	U
36	5	2887	A
36	5	2889	C
36	5	2896	A
36	5	2899	C
36	5	2910	A
36	5	2911	A
36	5	2914	G
36	5	2922	G
36	5	2923	U
36	5	2935	U
36	5	2936	A
36	5	2942	C
36	5	2947	G
36	5	2954	U
36	5	2956	A
36	5	2957	G
36	5	2964	G
36	5	2970	C
36	5	2971	A
36	5	2972	G
36	5	2973	G
36	5	2980	U
36	5	2983	C
36	5	2990	G
36	5	2992	U
36	5	2993	G
36	5	2996	U
36	5	2997	G
36	5	3012	A
36	5	3021	A
36	5	3028	G
36	5	3030	G
36	5	3056	U
36	5	3057	U
36	5	3059	G
36	5	3061	G
36	5	3069	G
36	5	3070	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	3078	U
36	5	3079	U
36	5	3080	G
36	5	3086	A
36	5	3092	C
36	5	3100	U
36	5	3102	G
36	5	3115	C
36	5	3119	U
36	5	3122	A
36	5	3123	A
36	5	3127	A
36	5	3130	A
36	5	3131	U
36	5	3139	A
36	5	3142	A
36	5	3143	C
36	5	3153	U
36	5	3154	C
36	5	3155	U
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3164	C
36	5	3165	A
36	5	3167	A
36	5	3168	A
36	5	3171	U
36	5	3172	A
36	5	3173	G
36	5	3174	A
36	5	3176	G
36	5	3179	U
36	5	3180	A
36	5	3181	C
36	5	3187	A
36	5	3195	U
36	5	3196	U
36	5	3198	U
36	5	3200	G
36	5	3207	U
36	5	3217	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	3218	A
36	5	3219	G
36	5	3227	A
36	5	3228	C
36	5	3229	G
36	5	3238	G
36	5	3239	G
36	5	3243	A
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	3265	C
36	5	3268	A
36	5	3269	U
36	5	3270	U
36	5	3271	G
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	3285	C
36	5	3286	G
36	5	3288	G
36	5	3289	G
36	5	3290	G
36	5	3294	A
36	5	3295	A
36	5	3304	U
36	5	3307	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	3351	U
36	5	3352	U
36	5	3354	U
36	5	3355	U
36	5	3358	U
36	5	3363	U
36	5	3368	U
36	5	3369	G
36	5	3378	C
36	5	3382	U
36	5	3383	G
36	5	3389	U
36	5	3390	G
36	5	3396	U
37	7	18	C
37	7	19	C
37	7	22	A
37	7	23	A
37	7	27	A
37	7	37	G
37	7	38	U
37	7	45	A
37	7	51	A
37	7	53	U
37	7	54	U
37	7	58	C
37	7	60	G
37	7	65	G
37	7	73	C
37	7	74	C
37	7	76	A
37	7	91	G
37	7	93	C
37	7	99	G
37	7	102	A
37	7	103	A
37	7	112	G
38	8	21	C
38	8	23	U
38	8	34	U
38	8	35	C
38	8	48	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	8	50	C
38	8	58	G
38	8	59	A
38	8	62	C
38	8	63	G
38	8	79	A
38	8	80	A
38	8	81	U
38	8	82	U
38	8	84	C
38	8	86	U
38	8	87	G
38	8	94	C
38	8	95	G
38	8	97	A
38	8	101	U
38	8	104	A
38	8	105	A
38	8	106	C
38	8	111	A
38	8	113	U
38	8	114	G
38	8	116	G
38	8	125	U
38	8	126	A
38	8	127	U
38	8	138	A
38	8	149	A
38	8	152	G
38	8	156	U
38	8	157	U
38	8	158	U

All (250) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	2	25	C
1	2	68	A
1	2	73	U
1	2	74	U
1	2	103	A
1	2	130	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	131	C
1	2	139	C
1	2	158	U
1	2	192	U
1	2	217	A
1	2	218	A
1	2	240	U
1	2	278	U
1	2	280	U
1	2	417	A
1	2	484	C
1	2	497	G
1	2	499	U
1	2	501	U
1	2	503	G
1	2	512	A
1	2	555	A
1	2	558	U
1	2	685	A
1	2	704	C
1	2	720	G
1	2	721	U
1	2	734	A
1	2	755	A
1	2	782	U
1	2	794	U
1	2	811	A
1	2	829	A
1	2	913	G
1	2	1051	G
1	2	1058	U
1	2	1081	A
1	2	1157	A
1	2	1196	A
1	2	1226	A
1	2	1244	A
1	2	1250	U
1	2	1339	C
1	2	1344	A
1	2	1370	U
1	2	1481	C
1	2	1489	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2	1568	C
1	2	1573	A
1	2	1615	C
1	2	1657	U
1	2	1696	G
1	2	1698	G
1	2	1711	C
1	2	1761	U
36	1	40	A
36	1	65	A
36	1	169	U
36	1	199	A
36	1	217	U
36	1	239	G
36	1	282	G
36	1	547	G
36	1	588	G
36	1	619	A
36	1	763	G
36	1	916	G
36	1	979	U
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	1190	A
36	1	1196	C
36	1	1233	G
36	1	1273	A
36	1	1307	G
36	1	1317	A
36	1	1329	U
36	1	1331	U
36	1	1352	A
36	1	1355	A
36	1	1484	U
36	1	1562	C
36	1	1716	U
36	1	1816	A
36	1	1820	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1	1835	A
36	1	1858	A
36	1	1879	A
36	1	1931	U
36	1	2101	C
36	1	2112	U
36	1	2121	G
36	1	2209	U
36	1	2227	C
36	1	2249	G
36	1	2281	A
36	1	2372	A
36	1	2396	G
36	1	2537	U
36	1	2541	U
36	1	2554	A
36	1	2585	G
36	1	2592	G
36	1	2593	A
36	1	2818	U
36	1	2873	U
36	1	2874	G
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	3269	U
36	1	3275	U
36	1	3316	A
36	1	3319	U
36	1	3350	C
36	1	3351	U
36	1	3353	G
36	1	3375	A
37	3	52	G
38	4	85	G
38	4	125	U
1	6	25	C
1	6	44	U
1	6	66	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	75	U
1	6	76	A
1	6	136	C
1	6	139	C
1	6	158	U
1	6	187	G
1	6	192	U
1	6	217	A
1	6	240	U
1	6	272	U
1	6	277	U
1	6	352	A
1	6	400	A
1	6	417	A
1	6	512	A
1	6	542	A
1	6	555	A
1	6	558	U
1	6	651	G
1	6	697	C
1	6	717	C
1	6	720	G
1	6	755	A
1	6	829	A
1	6	834	G
1	6	1051	G
1	6	1058	U
1	6	1081	A
1	6	1097	U
1	6	1227	A
1	6	1244	A
1	6	1255	G
1	6	1344	A
1	6	1481	C
1	6	1489	U
1	6	1491	U
1	6	1568	C
1	6	1573	A
1	6	1615	C
1	6	1620	C
1	6	1657	U
1	6	1696	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	6	1698	G
1	6	1700	C
36	5	40	A
36	5	65	A
36	5	151	A
36	5	169	U
36	5	183	G
36	5	238	A
36	5	588	G
36	5	594	U
36	5	715	A
36	5	735	A
36	5	765	C
36	5	873	C
36	5	896	A
36	5	916	G
36	5	993	G
36	5	1027	A
36	5	1050	U
36	5	1064	A
36	5	1081	U
36	5	1152	G
36	5	1181	U
36	5	1222	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	1554	U
36	5	1560	G
36	5	1580	A
36	5	1716	U
36	5	1792	C
36	5	1816	A
36	5	1858	A
36	5	1878	G
36	5	2101	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	5	2112	U
36	5	2116	G
36	5	2204	C
36	5	2209	U
36	5	2249	G
36	5	2255	A
36	5	2257	C
36	5	2281	A
36	5	2282	U
36	5	2372	A
36	5	2373	A
36	5	2400	G
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2682	C
36	5	2728	G
36	5	2772	C
36	5	2801	A
36	5	2818	U
36	5	2874	G
36	5	2898	G
36	5	2971	A
36	5	3078	U
36	5	3154	C
36	5	3195	U
36	5	3228	C
36	5	3269	U
36	5	3289	G
36	5	3340	G
36	5	3341	U
36	5	3357	U
37	7	49	G
38	8	126	A

5.4 Non-standard residues in protein, DNA, RNA chains [\(i\)](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2303 ligands modelled in this entry, 1214 are monoatomic - leaving 1089 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
85	OHX	2	2002	-	0,6,6	-	-	-		
85	OHX	5	3432	-	0,6,6	-	-	-		
85	OHX	n3	201	-	0,6,6	-	-	-		
85	OHX	6	1983	-	0,6,6	-	-	-		
85	OHX	5	3555	-	0,6,6	-	-	-		
85	OHX	5	3737	-	0,6,6	-	-	-		
85	OHX	2	2038	-	0,6,6	-	-	-		
85	OHX	1	3653	-	0,6,6	-	-	-		
85	OHX	5	3588	-	0,6,6	-	-	-		
85	OHX	4	213	-	0,6,6	-	-	-		
85	OHX	5	3436	-	0,6,6	-	-	-		
85	OHX	1	3531	-	0,6,6	-	-	-		
85	OHX	6	1904	-	0,6,6	-	-	-		
85	OHX	1	3524	-	0,6,6	-	-	-		
85	OHX	5	3575	-	0,6,6	-	-	-		
85	OHX	2	2033	-	0,6,6	-	-	-		
85	OHX	1	3643	-	0,6,6	-	-	-		
85	OHX	1	3666	-	0,6,6	-	-	-		
85	OHX	5	3562	-	0,6,6	-	-	-		
85	OHX	2	2037	-	0,6,6	-	-	-		
85	OHX	5	3660	-	0,6,6	-	-	-		
85	OHX	5	3731	-	0,6,6	-	-	-		
85	OHX	1	3465	-	0,6,6	-	-	-		
85	OHX	6	1995	-	0,6,6	-	-	-		
85	OHX	1	3450	-	0,6,6	-	-	-		
85	OHX	2	1901	-	0,6,6	-	-	-		
85	OHX	1	3577	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	6	2005	-	0,6,6	-	-	-	-	-
85	OHX	2	2036	-	0,6,6	-	-	-	-	-
85	OHX	5	3583	-	0,6,6	-	-	-	-	-
85	OHX	1	3600	-	0,6,6	-	-	-	-	-
85	OHX	6	1957	-	0,6,6	-	-	-	-	-
85	OHX	1	3442	-	0,6,6	-	-	-	-	-
85	OHX	2	2017	-	0,6,6	-	-	-	-	-
85	OHX	1	3466	-	0,6,6	-	-	-	-	-
85	OHX	2	1986	-	0,6,6	-	-	-	-	-
85	OHX	6	1986	-	0,6,6	-	-	-	-	-
85	OHX	5	3597	-	0,6,6	-	-	-	-	-
85	OHX	1	3705	-	0,6,6	-	-	-	-	-
85	OHX	3	207	-	0,6,6	-	-	-	-	-
85	OHX	5	3510	-	0,6,6	-	-	-	-	-
85	OHX	1	3578	-	0,6,6	-	-	-	-	-
85	OHX	5	3482	-	0,6,6	-	-	-	-	-
85	OHX	5	3709	-	0,6,6	-	-	-	-	-
85	OHX	1	3435	-	0,6,6	-	-	-	-	-
85	OHX	5	3470	-	0,6,6	-	-	-	-	-
85	OHX	1	3422	-	0,6,6	-	-	-	-	-
85	OHX	2	1934	-	0,6,6	-	-	-	-	-
85	OHX	1	3708	-	0,6,6	-	-	-	-	-
85	OHX	o7	502	-	0,6,6	-	-	-	-	-
85	OHX	2	1927	-	0,6,6	-	-	-	-	-
85	OHX	1	3621	-	0,6,6	-	-	-	-	-
85	OHX	5	3638	-	0,6,6	-	-	-	-	-
85	OHX	1	3615	-	0,6,6	-	-	-	-	-
85	OHX	1	3703	-	0,6,6	-	-	-	-	-
85	OHX	6	1962	-	0,6,6	-	-	-	-	-
85	OHX	5	3723	-	0,6,6	-	-	-	-	-
85	OHX	1	3527	-	0,6,6	-	-	-	-	-
85	OHX	5	3497	-	0,6,6	-	-	-	-	-
85	OHX	2	2043	-	0,6,6	-	-	-	-	-
85	OHX	1	3464	-	0,6,6	-	-	-	-	-
85	OHX	1	3411	-	0,6,6	-	-	-	-	-
85	OHX	1	3573	-	0,6,6	-	-	-	-	-
85	OHX	m0	302	-	0,6,6	-	-	-	-	-
85	OHX	1	3437	-	0,6,6	-	-	-	-	-
85	OHX	6	1985	-	0,6,6	-	-	-	-	-
85	OHX	1	3720	-	0,6,6	-	-	-	-	-
85	OHX	1	3470	-	0,6,6	-	-	-	-	-
85	OHX	1	3549	-	0,6,6	-	-	-	-	-
85	OHX	5	3431	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	5	3540	-	0,6,6	-	-	-	-	-
85	OHX	5	3681	-	0,6,6	-	-	-	-	-
85	OHX	5	3474	-	0,6,6	-	-	-	-	-
85	OHX	5	3424	-	0,6,6	-	-	-	-	-
85	OHX	1	3532	-	0,6,6	-	-	-	-	-
85	OHX	L3	401	-	0,6,6	-	-	-	-	-
85	OHX	2	1973	-	0,6,6	-	-	-	-	-
85	OHX	c5	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3589	-	0,6,6	-	-	-	-	-
85	OHX	8	203	-	0,6,6	-	-	-	-	-
85	OHX	8	211	-	0,6,6	-	-	-	-	-
85	OHX	5	3522	-	0,6,6	-	-	-	-	-
85	OHX	1	3554	-	0,6,6	-	-	-	-	-
85	OHX	1	3680	-	0,6,6	-	-	-	-	-
85	OHX	5	3448	-	0,6,6	-	-	-	-	-
85	OHX	2	1971	-	0,6,6	-	-	-	-	-
85	OHX	2	2015	-	0,6,6	-	-	-	-	-
85	OHX	5	3700	-	0,6,6	-	-	-	-	-
85	OHX	1	3423	-	0,6,6	-	-	-	-	-
85	OHX	5	3412	-	0,6,6	-	-	-	-	-
85	OHX	n5	201	-	0,6,6	-	-	-	-	-
85	OHX	6	2034	-	0,6,6	-	-	-	-	-
85	OHX	1	3453	-	0,6,6	-	-	-	-	-
85	OHX	1	3418	-	0,6,6	-	-	-	-	-
85	OHX	1	3515	-	0,6,6	-	-	-	-	-
85	OHX	1	3667	-	0,6,6	-	-	-	-	-
85	OHX	5	3595	-	0,6,6	-	-	-	-	-
85	OHX	2	1920	-	0,6,6	-	-	-	-	-
85	OHX	1	3679	-	0,6,6	-	-	-	-	-
85	OHX	5	3477	-	0,6,6	-	-	-	-	-
85	OHX	1	3544	-	0,6,6	-	-	-	-	-
85	OHX	1	3496	-	0,6,6	-	-	-	-	-
85	OHX	2	2020	-	0,6,6	-	-	-	-	-
85	OHX	5	3560	-	0,6,6	-	-	-	-	-
85	OHX	1	3534	-	0,6,6	-	-	-	-	-
85	OHX	5	3440	-	0,6,6	-	-	-	-	-
85	OHX	M0	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3699	-	0,6,6	-	-	-	-	-
85	OHX	2	1964	-	0,6,6	-	-	-	-	-
85	OHX	5	3403	-	0,6,6	-	-	-	-	-
85	OHX	1	3562	-	0,6,6	-	-	-	-	-
85	OHX	6	1958	-	0,6,6	-	-	-	-	-
85	OHX	1	3619	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3565	-	0,6,6	-	-	-	-	-
85	OHX	5	3463	-	0,6,6	-	-	-	-	-
85	OHX	5	3441	-	0,6,6	-	-	-	-	-
85	OHX	5	3536	-	0,6,6	-	-	-	-	-
85	OHX	1	3559	-	0,6,6	-	-	-	-	-
85	OHX	O3	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3656	-	0,6,6	-	-	-	-	-
85	OHX	1	3569	-	0,6,6	-	-	-	-	-
85	OHX	5	3553	-	0,6,6	-	-	-	-	-
85	OHX	6	2017	-	0,6,6	-	-	-	-	-
85	OHX	2	1909	-	0,6,6	-	-	-	-	-
85	OHX	5	3650	-	0,6,6	-	-	-	-	-
85	OHX	5	3505	-	0,6,6	-	-	-	-	-
85	OHX	1	3406	-	0,6,6	-	-	-	-	-
85	OHX	1	3494	-	0,6,6	-	-	-	-	-
85	OHX	4	202	-	0,6,6	-	-	-	-	-
85	OHX	2	1982	-	0,6,6	-	-	-	-	-
85	OHX	5	3689	-	0,6,6	-	-	-	-	-
85	OHX	1	3597	-	0,6,6	-	-	-	-	-
85	OHX	2	1922	-	0,6,6	-	-	-	-	-
85	OHX	1	3541	-	0,6,6	-	-	-	-	-
85	OHX	6	1923	-	0,6,6	-	-	-	-	-
85	OHX	5	3714	-	0,6,6	-	-	-	-	-
85	OHX	5	3719	-	0,6,6	-	-	-	-	-
85	OHX	5	3488	-	0,6,6	-	-	-	-	-
85	OHX	15	301	-	0,6,6	-	-	-	-	-
85	OHX	1	3567	-	0,6,6	-	-	-	-	-
85	OHX	2	1943	-	0,6,6	-	-	-	-	-
85	OHX	1	3718	-	0,6,6	-	-	-	-	-
85	OHX	5	3610	-	0,6,6	-	-	-	-	-
85	OHX	2	1915	-	0,6,6	-	-	-	-	-
85	OHX	2	2041	-	0,6,6	-	-	-	-	-
85	OHX	1	3627	-	0,6,6	-	-	-	-	-
85	OHX	1	3637	-	0,6,6	-	-	-	-	-
85	OHX	6	1913	-	0,6,6	-	-	-	-	-
85	OHX	6	1980	-	0,6,6	-	-	-	-	-
85	OHX	2	1948	-	0,6,6	-	-	-	-	-
85	OHX	5	3485	-	0,6,6	-	-	-	-	-
85	OHX	5	3607	-	0,6,6	-	-	-	-	-
85	OHX	5	3430	-	0,6,6	-	-	-	-	-
85	OHX	m5	501	-	0,6,6	-	-	-	-	-
85	OHX	5	3503	-	0,6,6	-	-	-	-	-
85	OHX	5	3675	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	6	2043	-	0,6,6	-	-	-	-	-
85	OHX	5	3734	-	0,6,6	-	-	-	-	-
85	OHX	2	2019	-	0,6,6	-	-	-	-	-
85	OHX	6	1989	-	0,6,6	-	-	-	-	-
85	OHX	5	3704	-	0,6,6	-	-	-	-	-
85	OHX	1	3620	-	0,6,6	-	-	-	-	-
85	OHX	5	3629	-	0,6,6	-	-	-	-	-
85	OHX	6	1931	-	0,6,6	-	-	-	-	-
85	OHX	5	3668	-	0,6,6	-	-	-	-	-
85	OHX	7	205	-	0,6,6	-	-	-	-	-
85	OHX	6	1918	-	0,6,6	-	-	-	-	-
85	OHX	1	3683	-	0,6,6	-	-	-	-	-
85	OHX	1	3662	-	0,6,6	-	-	-	-	-
85	OHX	1	3467	-	0,6,6	-	-	-	-	-
85	OHX	1	3475	-	0,6,6	-	-	-	-	-
85	OHX	2	1979	-	0,6,6	-	-	-	-	-
85	OHX	1	3503	-	0,6,6	-	-	-	-	-
85	OHX	1	3613	-	0,6,6	-	-	-	-	-
85	OHX	4	211	-	0,6,6	-	-	-	-	-
85	OHX	6	1910	-	0,6,6	-	-	-	-	-
85	OHX	6	1925	-	0,6,6	-	-	-	-	-
85	OHX	6	1973	-	0,6,6	-	-	-	-	-
85	OHX	2	1941	-	0,6,6	-	-	-	-	-
85	OHX	6	2041	-	0,6,6	-	-	-	-	-
85	OHX	5	3698	-	0,6,6	-	-	-	-	-
85	OHX	1	3588	-	0,6,6	-	-	-	-	-
85	OHX	5	3509	-	0,6,6	-	-	-	-	-
85	OHX	2	1993	-	0,6,6	-	-	-	-	-
85	OHX	2	1933	-	0,6,6	-	-	-	-	-
85	OHX	6	1916	-	0,6,6	-	-	-	-	-
85	OHX	6	1955	-	0,6,6	-	-	-	-	-
85	OHX	5	3419	-	0,6,6	-	-	-	-	-
85	OHX	6	2027	-	0,6,6	-	-	-	-	-
85	OHX	5	3706	-	0,6,6	-	-	-	-	-
85	OHX	1	3473	-	0,6,6	-	-	-	-	-
85	OHX	5	3644	-	0,6,6	-	-	-	-	-
85	OHX	5	3645	-	0,6,6	-	-	-	-	-
85	OHX	1	3634	-	0,6,6	-	-	-	-	-
85	OHX	1	3671	-	0,6,6	-	-	-	-	-
85	OHX	6	1970	-	0,6,6	-	-	-	-	-
85	OHX	1	3416	-	0,6,6	-	-	-	-	-
85	OHX	O7	103	-	0,6,6	-	-	-	-	-
85	OHX	6	1903	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	2	1991	-	0,6,6	-	-	-	-	-
85	OHX	6	2029	-	0,6,6	-	-	-	-	-
85	OHX	6	1965	-	0,6,6	-	-	-	-	-
85	OHX	5	3642	-	0,6,6	-	-	-	-	-
85	OHX	5	3659	-	0,6,6	-	-	-	-	-
85	OHX	5	3743	-	0,6,6	-	-	-	-	-
85	OHX	2	1905	-	0,6,6	-	-	-	-	-
85	OHX	1	3441	-	0,6,6	-	-	-	-	-
85	OHX	C8	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3446	-	0,6,6	-	-	-	-	-
85	OHX	1	3553	-	0,6,6	-	-	-	-	-
85	OHX	1	3611	-	0,6,6	-	-	-	-	-
85	OHX	8	213	-	0,6,6	-	-	-	-	-
85	OHX	5	3418	-	0,6,6	-	-	-	-	-
85	OHX	2	1996	-	0,6,6	-	-	-	-	-
85	OHX	6	1936	-	0,6,6	-	-	-	-	-
85	OHX	5	3427	-	0,6,6	-	-	-	-	-
85	OHX	1	3566	-	0,6,6	-	-	-	-	-
85	OHX	1	3689	-	0,6,6	-	-	-	-	-
85	OHX	5	3487	-	0,6,6	-	-	-	-	-
85	OHX	5	3420	-	0,6,6	-	-	-	-	-
85	OHX	4	214	-	0,6,6	-	-	-	-	-
85	OHX	1	3681	-	0,6,6	-	-	-	-	-
85	OHX	2	1946	-	0,6,6	-	-	-	-	-
85	OHX	2	1944	-	0,6,6	-	-	-	-	-
85	OHX	2	2023	-	0,6,6	-	-	-	-	-
85	OHX	1	3407	-	0,6,6	-	-	-	-	-
85	OHX	1	3481	-	0,6,6	-	-	-	-	-
85	OHX	5	3552	-	0,6,6	-	-	-	-	-
85	OHX	2	2034	-	0,6,6	-	-	-	-	-
85	OHX	5	3622	-	0,6,6	-	-	-	-	-
85	OHX	1	3658	-	0,6,6	-	-	-	-	-
85	OHX	6	2019	-	0,6,6	-	-	-	-	-
85	OHX	2	1961	-	0,6,6	-	-	-	-	-
85	OHX	1	3492	-	0,6,6	-	-	-	-	-
85	OHX	5	3450	-	0,6,6	-	-	-	-	-
85	OHX	1	3605	-	0,6,6	-	-	-	-	-
85	OHX	5	3511	-	0,6,6	-	-	-	-	-
85	OHX	6	1905	-	0,6,6	-	-	-	-	-
85	OHX	1	3432	-	0,6,6	-	-	-	-	-
85	OHX	5	3726	-	0,6,6	-	-	-	-	-
85	OHX	5	3738	-	0,6,6	-	-	-	-	-
85	OHX	2	1998	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	5	3404	-	0,6,6	-	-	-	-	-
85	OHX	2	1919	-	0,6,6	-	-	-	-	-
85	OHX	1	3537	-	0,6,6	-	-	-	-	-
85	OHX	6	1968	-	0,6,6	-	-	-	-	-
85	OHX	1	3424	-	0,6,6	-	-	-	-	-
85	OHX	5	3691	-	0,6,6	-	-	-	-	-
85	OHX	1	3601	-	0,6,6	-	-	-	-	-
85	OHX	6	1996	-	0,6,6	-	-	-	-	-
85	OHX	6	2002	-	0,6,6	-	-	-	-	-
85	OHX	2	2011	-	0,6,6	-	-	-	-	-
85	OHX	1	3405	-	0,6,6	-	-	-	-	-
85	OHX	1	3519	-	0,6,6	-	-	-	-	-
85	OHX	2	1965	-	0,6,6	-	-	-	-	-
85	OHX	1	3522	-	0,6,6	-	-	-	-	-
85	OHX	1	3675	-	0,6,6	-	-	-	-	-
85	OHX	6	1944	-	0,6,6	-	-	-	-	-
85	OHX	5	3692	-	0,6,6	-	-	-	-	-
85	OHX	1	3636	-	0,6,6	-	-	-	-	-
85	OHX	2	1997	-	0,6,6	-	-	-	-	-
85	OHX	1	3700	-	0,6,6	-	-	-	-	-
85	OHX	5	3740	-	0,6,6	-	-	-	-	-
85	OHX	5	3623	-	0,6,6	-	-	-	-	-
85	OHX	1	3412	-	0,6,6	-	-	-	-	-
85	OHX	6	1979	-	0,6,6	-	-	-	-	-
85	OHX	1	3476	-	0,6,6	-	-	-	-	-
85	OHX	1	3640	-	0,6,6	-	-	-	-	-
85	OHX	5	3429	-	0,6,6	-	-	-	-	-
85	OHX	1	3701	-	0,6,6	-	-	-	-	-
85	OHX	4	207	-	0,6,6	-	-	-	-	-
85	OHX	5	3490	-	0,6,6	-	-	-	-	-
85	OHX	5	3499	-	0,6,6	-	-	-	-	-
85	OHX	5	3621	-	0,6,6	-	-	-	-	-
85	OHX	2	2000	-	0,6,6	-	-	-	-	-
85	OHX	7	201	-	0,6,6	-	-	-	-	-
85	OHX	L3	402	-	0,6,6	-	-	-	-	-
85	OHX	7	212	-	0,6,6	-	-	-	-	-
85	OHX	6	2040	-	0,6,6	-	-	-	-	-
85	OHX	1	3654	-	0,6,6	-	-	-	-	-
85	OHX	5	3459	-	0,6,6	-	-	-	-	-
85	OHX	15	303	-	0,6,6	-	-	-	-	-
85	OHX	D9	102	-	0,6,6	-	-	-	-	-
85	OHX	6	1901	-	0,6,6	-	-	-	-	-
85	OHX	1	3521	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	2	1960	-	0,6,6	-	-	-	-	-
85	OHX	6	1928	-	0,6,6	-	-	-	-	-
85	OHX	5	3592	-	0,6,6	-	-	-	-	-
85	OHX	5	3606	-	0,6,6	-	-	-	-	-
85	OHX	5	3608	-	0,6,6	-	-	-	-	-
85	OHX	1	3648	-	0,6,6	-	-	-	-	-
85	OHX	M7	202	-	0,6,6	-	-	-	-	-
85	OHX	7	211	-	0,6,6	-	-	-	-	-
85	OHX	5	3551	-	0,6,6	-	-	-	-	-
85	OHX	5	3447	-	0,6,6	-	-	-	-	-
85	OHX	5	3720	-	0,6,6	-	-	-	-	-
85	OHX	1	3644	-	0,6,6	-	-	-	-	-
85	OHX	1	3500	-	0,6,6	-	-	-	-	-
85	OHX	6	1997	-	0,6,6	-	-	-	-	-
85	OHX	5	3612	-	0,6,6	-	-	-	-	-
85	OHX	1	3472	-	0,6,6	-	-	-	-	-
85	OHX	1	3444	-	0,6,6	-	-	-	-	-
85	OHX	5	3479	-	0,6,6	-	-	-	-	-
85	OHX	5	3647	-	0,6,6	-	-	-	-	-
85	OHX	1	3730	-	0,6,6	-	-	-	-	-
85	OHX	6	1951	-	0,6,6	-	-	-	-	-
85	OHX	5	3564	-	0,6,6	-	-	-	-	-
85	OHX	5	3584	-	0,6,6	-	-	-	-	-
85	OHX	5	3661	-	0,6,6	-	-	-	-	-
85	OHX	5	3461	-	0,6,6	-	-	-	-	-
85	OHX	1	3429	-	0,6,6	-	-	-	-	-
85	OHX	1	3696	-	0,6,6	-	-	-	-	-
85	OHX	13	401	-	0,6,6	-	-	-	-	-
85	OHX	5	3533	-	0,6,6	-	-	-	-	-
85	OHX	5	3631	-	0,6,6	-	-	-	-	-
85	OHX	5	3651	-	0,6,6	-	-	-	-	-
85	OHX	5	3682	-	0,6,6	-	-	-	-	-
85	OHX	5	3727	-	0,6,6	-	-	-	-	-
85	OHX	1	3695	-	0,6,6	-	-	-	-	-
85	OHX	1	3716	-	0,6,6	-	-	-	-	-
85	OHX	5	3572	-	0,6,6	-	-	-	-	-
85	OHX	5	3712	-	0,6,6	-	-	-	-	-
85	OHX	1	3498	-	0,6,6	-	-	-	-	-
85	OHX	6	1917	-	0,6,6	-	-	-	-	-
85	OHX	1	3410	-	0,6,6	-	-	-	-	-
85	OHX	1	3626	-	0,6,6	-	-	-	-	-
85	OHX	1	3610	-	0,6,6	-	-	-	-	-
85	OHX	5	3530	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3520	-	0,6,6	-	-	-	-	-
85	OHX	1	3599	-	0,6,6	-	-	-	-	-
85	OHX	1	3428	-	0,6,6	-	-	-	-	-
85	OHX	1	3516	-	0,6,6	-	-	-	-	-
85	OHX	6	1926	-	0,6,6	-	-	-	-	-
85	OHX	5	3415	-	0,6,6	-	-	-	-	-
85	OHX	1	3724	-	0,6,6	-	-	-	-	-
85	OHX	8	202	-	0,6,6	-	-	-	-	-
85	OHX	2	2009	-	0,6,6	-	-	-	-	-
85	OHX	c1	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3404	-	0,6,6	-	-	-	-	-
85	OHX	1	3477	-	0,6,6	-	-	-	-	-
85	OHX	1	3438	-	0,6,6	-	-	-	-	-
85	OHX	1	3595	-	0,6,6	-	-	-	-	-
85	OHX	1	3489	-	0,6,6	-	-	-	-	-
85	OHX	1	3691	-	0,6,6	-	-	-	-	-
85	OHX	5	3439	-	0,6,6	-	-	-	-	-
85	OHX	1	3734	-	0,6,6	-	-	-	-	-
85	OHX	5	3525	-	0,6,6	-	-	-	-	-
85	OHX	1	3704	-	0,6,6	-	-	-	-	-
85	OHX	5	3528	-	0,6,6	-	-	-	-	-
85	OHX	1	3672	-	0,6,6	-	-	-	-	-
85	OHX	5	3507	-	0,6,6	-	-	-	-	-
85	OHX	8	216	-	0,6,6	-	-	-	-	-
85	OHX	6	2037	-	0,6,6	-	-	-	-	-
85	OHX	1	3403	-	0,6,6	-	-	-	-	-
85	OHX	1	3630	-	0,6,6	-	-	-	-	-
85	OHX	1	3706	-	0,6,6	-	-	-	-	-
85	OHX	1	3575	-	0,6,6	-	-	-	-	-
85	OHX	5	3402	-	0,6,6	-	-	-	-	-
85	OHX	5	3554	-	0,6,6	-	-	-	-	-
85	OHX	8	215	-	0,6,6	-	-	-	-	-
85	OHX	6	1976	-	0,6,6	-	-	-	-	-
85	OHX	6	1908	-	0,6,6	-	-	-	-	-
85	OHX	5	3502	-	0,6,6	-	-	-	-	-
85	OHX	1	3509	-	0,6,6	-	-	-	-	-
85	OHX	4	209	-	0,6,6	-	-	-	-	-
85	OHX	5	3535	-	0,6,6	-	-	-	-	-
85	OHX	1	3731	-	0,6,6	-	-	-	-	-
85	OHX	5	3515	-	0,6,6	-	-	-	-	-
85	OHX	6	2015	-	0,6,6	-	-	-	-	-
85	OHX	1	3556	-	0,6,6	-	-	-	-	-
85	OHX	2	1921	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	5	3570	-	0,6,6	-	-	-	-	-
85	OHX	6	2042	-	0,6,6	-	-	-	-	-
85	OHX	1	3663	-	0,6,6	-	-	-	-	-
85	OHX	1	3642	-	0,6,6	-	-	-	-	-
85	OHX	5	3582	-	0,6,6	-	-	-	-	-
85	OHX	5	3596	-	0,6,6	-	-	-	-	-
85	OHX	1	3445	-	0,6,6	-	-	-	-	-
85	OHX	1	3505	-	0,6,6	-	-	-	-	-
85	OHX	1	3538	-	0,6,6	-	-	-	-	-
85	OHX	1	3547	-	0,6,6	-	-	-	-	-
85	OHX	5	3678	-	0,6,6	-	-	-	-	-
85	OHX	1	3612	-	0,6,6	-	-	-	-	-
85	OHX	6	1920	-	0,6,6	-	-	-	-	-
85	OHX	5	3469	-	0,6,6	-	-	-	-	-
85	OHX	6	2007	-	0,6,6	-	-	-	-	-
85	OHX	5	3628	-	0,6,6	-	-	-	-	-
85	OHX	1	3482	-	0,6,6	-	-	-	-	-
85	OHX	5	3581	-	0,6,6	-	-	-	-	-
85	OHX	2	1954	-	0,6,6	-	-	-	-	-
85	OHX	5	3462	-	0,6,6	-	-	-	-	-
85	OHX	1	3487	-	0,6,6	-	-	-	-	-
85	OHX	2	1962	-	0,6,6	-	-	-	-	-
85	OHX	1	3622	-	0,6,6	-	-	-	-	-
85	OHX	1	3408	-	0,6,6	-	-	-	-	-
85	OHX	2	2012	-	0,6,6	-	-	-	-	-
85	OHX	6	1909	-	0,6,6	-	-	-	-	-
85	OHX	6	1949	-	0,6,6	-	-	-	-	-
85	OHX	2	1975	-	0,6,6	-	-	-	-	-
85	OHX	5	3578	-	0,6,6	-	-	-	-	-
85	OHX	1	3690	-	0,6,6	-	-	-	-	-
85	OHX	5	3617	-	0,6,6	-	-	-	-	-
85	OHX	n9	101	-	0,6,6	-	-	-	-	-
85	OHX	1	3649	-	0,6,6	-	-	-	-	-
85	OHX	1	3684	-	0,6,6	-	-	-	-	-
85	OHX	1	3514	-	0,6,6	-	-	-	-	-
85	OHX	1	3587	-	0,6,6	-	-	-	-	-
85	OHX	5	3504	-	0,6,6	-	-	-	-	-
85	OHX	1	3735	-	0,6,6	-	-	-	-	-
85	OHX	1	3471	-	0,6,6	-	-	-	-	-
85	OHX	6	1974	-	0,6,6	-	-	-	-	-
85	OHX	s1	302	-	0,6,6	-	-	-	-	-
85	OHX	5	3407	-	0,6,6	-	-	-	-	-
85	OHX	2	2008	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3474	-	0,6,6	-	-	-	-	-
85	OHX	1	3726	-	0,6,6	-	-	-	-	-
85	OHX	5	3652	-	0,6,6	-	-	-	-	-
85	OHX	5	3677	-	0,6,6	-	-	-	-	-
85	OHX	6	2028	-	0,6,6	-	-	-	-	-
85	OHX	5	3746	-	0,6,6	-	-	-	-	-
85	OHX	5	3625	-	0,6,6	-	-	-	-	-
85	OHX	2	1936	-	0,6,6	-	-	-	-	-
85	OHX	5	3568	-	0,6,6	-	-	-	-	-
85	OHX	2	1989	-	0,6,6	-	-	-	-	-
85	OHX	1	3692	-	0,6,6	-	-	-	-	-
85	OHX	2	1987	-	0,6,6	-	-	-	-	-
85	OHX	1	3525	-	0,6,6	-	-	-	-	-
85	OHX	2	1950	-	0,6,6	-	-	-	-	-
85	OHX	2	1983	-	0,6,6	-	-	-	-	-
85	OHX	5	3725	-	0,6,6	-	-	-	-	-
85	OHX	1	3421	-	0,6,6	-	-	-	-	-
85	OHX	1	3507	-	0,6,6	-	-	-	-	-
85	OHX	2	1925	-	0,6,6	-	-	-	-	-
85	OHX	3	209	-	0,6,6	-	-	-	-	-
85	OHX	6	1971	-	0,6,6	-	-	-	-	-
85	OHX	6	2011	-	0,6,6	-	-	-	-	-
85	OHX	3	206	-	0,6,6	-	-	-	-	-
85	OHX	5	3506	-	0,6,6	-	-	-	-	-
85	OHX	13	402	-	0,6,6	-	-	-	-	-
85	OHX	1	3659	-	0,6,6	-	-	-	-	-
85	OHX	1	3413	-	0,6,6	-	-	-	-	-
85	OHX	5	3455	-	0,6,6	-	-	-	-	-
85	OHX	5	3662	-	0,6,6	-	-	-	-	-
85	OHX	5	3475	-	0,6,6	-	-	-	-	-
85	OHX	1	3592	-	0,6,6	-	-	-	-	-
85	OHX	5	3478	-	0,6,6	-	-	-	-	-
85	OHX	2	2022	-	0,6,6	-	-	-	-	-
85	OHX	5	3486	-	0,6,6	-	-	-	-	-
85	OHX	2	1969	-	0,6,6	-	-	-	-	-
85	OHX	5	3544	-	0,6,6	-	-	-	-	-
85	OHX	6	1988	-	0,6,6	-	-	-	-	-
85	OHX	5	3501	-	0,6,6	-	-	-	-	-
85	OHX	5	3601	-	0,6,6	-	-	-	-	-
85	OHX	1	3536	-	0,6,6	-	-	-	-	-
85	OHX	2	2030	-	0,6,6	-	-	-	-	-
85	OHX	5	3666	-	0,6,6	-	-	-	-	-
85	OHX	1	3479	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	5	3426	-	0,6,6	-	-	-	-	-
85	OHX	2	2018	-	0,6,6	-	-	-	-	-
85	OHX	8	207	-	0,6,6	-	-	-	-	-
85	OHX	1	3598	-	0,6,6	-	-	-	-	-
85	OHX	2	1957	-	0,6,6	-	-	-	-	-
85	OHX	1	3707	-	0,6,6	-	-	-	-	-
85	OHX	1	3665	-	0,6,6	-	-	-	-	-
85	OHX	5	3451	-	0,6,6	-	-	-	-	-
85	OHX	1	3584	-	0,6,6	-	-	-	-	-
85	OHX	5	3609	-	0,6,6	-	-	-	-	-
85	OHX	6	1921	-	0,6,6	-	-	-	-	-
85	OHX	1	3461	-	0,6,6	-	-	-	-	-
85	OHX	5	3641	-	0,6,6	-	-	-	-	-
85	OHX	5	3664	-	0,6,6	-	-	-	-	-
85	OHX	1	3727	-	0,6,6	-	-	-	-	-
85	OHX	5	3640	-	0,6,6	-	-	-	-	-
85	OHX	1	3719	-	0,6,6	-	-	-	-	-
85	OHX	6	2021	-	0,6,6	-	-	-	-	-
85	OHX	m1	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3694	-	0,6,6	-	-	-	-	-
85	OHX	5	3673	-	0,6,6	-	-	-	-	-
85	OHX	2	1932	-	0,6,6	-	-	-	-	-
85	OHX	5	3687	-	0,6,6	-	-	-	-	-
85	OHX	2	1912	-	0,6,6	-	-	-	-	-
85	OHX	5	3685	-	0,6,6	-	-	-	-	-
85	OHX	1	3594	-	0,6,6	-	-	-	-	-
85	OHX	1	3460	-	0,6,6	-	-	-	-	-
85	OHX	1	3530	-	0,6,6	-	-	-	-	-
85	OHX	6	2008	-	0,6,6	-	-	-	-	-
85	OHX	2	1953	-	0,6,6	-	-	-	-	-
85	OHX	1	3607	-	0,6,6	-	-	-	-	-
85	OHX	m4	201	-	0,6,6	-	-	-	-	-
85	OHX	4	204	-	0,6,6	-	-	-	-	-
85	OHX	6	1943	-	0,6,6	-	-	-	-	-
85	OHX	6	2030	-	0,6,6	-	-	-	-	-
85	OHX	2	1908	-	0,6,6	-	-	-	-	-
85	OHX	6	2012	-	0,6,6	-	-	-	-	-
85	OHX	5	3492	-	0,6,6	-	-	-	-	-
85	OHX	5	3580	-	0,6,6	-	-	-	-	-
85	OHX	2	1956	-	0,6,6	-	-	-	-	-
85	OHX	5	3444	-	0,6,6	-	-	-	-	-
85	OHX	1	3457	-	0,6,6	-	-	-	-	-
85	OHX	6	1938	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3439	-	0,6,6	-	-	-	-	-
85	OHX	8	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3625	-	0,6,6	-	-	-	-	-
85	OHX	1	3497	-	0,6,6	-	-	-	-	-
85	OHX	1	3674	-	0,6,6	-	-	-	-	-
85	OHX	s1	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3433	-	0,6,6	-	-	-	-	-
85	OHX	1	3604	-	0,6,6	-	-	-	-	-
85	OHX	5	3423	-	0,6,6	-	-	-	-	-
85	OHX	1	3590	-	0,6,6	-	-	-	-	-
85	OHX	5	3409	-	0,6,6	-	-	-	-	-
85	OHX	7	207	-	0,6,6	-	-	-	-	-
85	OHX	1	3502	-	0,6,6	-	-	-	-	-
85	OHX	1	3732	-	0,6,6	-	-	-	-	-
85	OHX	5	3550	-	0,6,6	-	-	-	-	-
85	OHX	5	3579	-	0,6,6	-	-	-	-	-
85	OHX	5	3745	-	0,6,6	-	-	-	-	-
85	OHX	5	3517	-	0,6,6	-	-	-	-	-
85	OHX	6	1912	-	0,6,6	-	-	-	-	-
85	OHX	6	1950	-	0,6,6	-	-	-	-	-
85	OHX	5	3471	-	0,6,6	-	-	-	-	-
85	OHX	6	1977	-	0,6,6	-	-	-	-	-
85	OHX	7	204	-	0,6,6	-	-	-	-	-
85	OHX	15	304	-	0,6,6	-	-	-	-	-
85	OHX	6	1987	-	0,6,6	-	-	-	-	-
85	OHX	1	3558	-	0,6,6	-	-	-	-	-
85	OHX	5	3496	-	0,6,6	-	-	-	-	-
85	OHX	5	3520	-	0,6,6	-	-	-	-	-
85	OHX	1	3570	-	0,6,6	-	-	-	-	-
85	OHX	1	3555	-	0,6,6	-	-	-	-	-
85	OHX	1	3582	-	0,6,6	-	-	-	-	-
85	OHX	O7	102	-	0,6,6	-	-	-	-	-
85	OHX	5	3620	-	0,6,6	-	-	-	-	-
85	OHX	2	2014	-	0,6,6	-	-	-	-	-
85	OHX	5	3416	-	0,6,6	-	-	-	-	-
85	OHX	5	3655	-	0,6,6	-	-	-	-	-
85	OHX	5	3438	-	0,6,6	-	-	-	-	-
85	OHX	6	1978	-	0,6,6	-	-	-	-	-
85	OHX	5	3693	-	0,6,6	-	-	-	-	-
85	OHX	6	1934	-	0,6,6	-	-	-	-	-
85	OHX	1	3660	-	0,6,6	-	-	-	-	-
85	OHX	5	3657	-	0,6,6	-	-	-	-	-
85	OHX	1	3458	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3729	-	0,6,6	-	-	-	-	-
85	OHX	5	3561	-	0,6,6	-	-	-	-	-
85	OHX	2	1911	-	0,6,6	-	-	-	-	-
85	OHX	5	3480	-	0,6,6	-	-	-	-	-
85	OHX	1	3462	-	0,6,6	-	-	-	-	-
85	OHX	5	3406	-	0,6,6	-	-	-	-	-
85	OHX	1	3603	-	0,6,6	-	-	-	-	-
85	OHX	5	3680	-	0,6,6	-	-	-	-	-
85	OHX	5	3435	-	0,6,6	-	-	-	-	-
85	OHX	SR	401	-	0,6,6	-	-	-	-	-
85	OHX	5	3434	-	0,6,6	-	-	-	-	-
85	OHX	1	3617	-	0,6,6	-	-	-	-	-
85	OHX	2	1917	-	0,6,6	-	-	-	-	-
85	OHX	5	3541	-	0,6,6	-	-	-	-	-
85	OHX	2	1952	-	0,6,6	-	-	-	-	-
85	OHX	1	3694	-	0,6,6	-	-	-	-	-
85	OHX	C3	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3721	-	0,6,6	-	-	-	-	-
85	OHX	1	3650	-	0,6,6	-	-	-	-	-
85	OHX	1	3687	-	0,6,6	-	-	-	-	-
85	OHX	s9	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3605	-	0,6,6	-	-	-	-	-
85	OHX	M5	302	-	0,6,6	-	-	-	-	-
85	OHX	6	1981	-	0,6,6	-	-	-	-	-
85	OHX	5	3722	-	0,6,6	-	-	-	-	-
85	OHX	2	1984	-	0,6,6	-	-	-	-	-
85	OHX	1	3468	-	0,6,6	-	-	-	-	-
85	OHX	3	205	-	0,6,6	-	-	-	-	-
85	OHX	1	3638	-	0,6,6	-	-	-	-	-
85	OHX	6	2004	-	0,6,6	-	-	-	-	-
85	OHX	5	3545	-	0,6,6	-	-	-	-	-
85	OHX	5	3599	-	0,6,6	-	-	-	-	-
85	OHX	5	3653	-	0,6,6	-	-	-	-	-
85	OHX	5	3614	-	0,6,6	-	-	-	-	-
85	OHX	8	218	-	0,6,6	-	-	-	-	-
85	OHX	1	3571	-	0,6,6	-	-	-	-	-
85	OHX	6	1953	-	0,6,6	-	-	-	-	-
85	OHX	1	3713	-	0,6,6	-	-	-	-	-
85	OHX	1	3512	-	0,6,6	-	-	-	-	-
85	OHX	6	1991	-	0,6,6	-	-	-	-	-
85	OHX	1	3506	-	0,6,6	-	-	-	-	-
85	OHX	6	1960	-	0,6,6	-	-	-	-	-
85	OHX	5	3648	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	M9	201	-	0,6,6	-	-	-	-	-
85	OHX	N1	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3683	-	0,6,6	-	-	-	-	-
85	OHX	1	3452	-	0,6,6	-	-	-	-	-
85	OHX	1	3459	-	0,6,6	-	-	-	-	-
85	OHX	1	3402	-	0,6,6	-	-	-	-	-
85	OHX	5	3467	-	0,6,6	-	-	-	-	-
85	OHX	1	3510	-	0,6,6	-	-	-	-	-
85	OHX	M7	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3608	-	0,6,6	-	-	-	-	-
85	OHX	5	3632	-	0,6,6	-	-	-	-	-
85	OHX	1	3455	-	0,6,6	-	-	-	-	-
85	OHX	1	3550	-	0,6,6	-	-	-	-	-
85	OHX	6	1914	-	0,6,6	-	-	-	-	-
85	OHX	5	3667	-	0,6,6	-	-	-	-	-
85	OHX	1	3478	-	0,6,6	-	-	-	-	-
85	OHX	2	1924	-	0,6,6	-	-	-	-	-
85	OHX	2	1937	-	0,6,6	-	-	-	-	-
85	OHX	2	1967	-	0,6,6	-	-	-	-	-
85	OHX	1	3483	-	0,6,6	-	-	-	-	-
85	OHX	d9	102	-	0,6,6	-	-	-	-	-
85	OHX	5	3454	-	0,6,6	-	-	-	-	-
85	OHX	1	3552	-	0,6,6	-	-	-	-	-
85	OHX	1	3501	-	0,6,6	-	-	-	-	-
85	OHX	5	3534	-	0,6,6	-	-	-	-	-
85	OHX	5	3611	-	0,6,6	-	-	-	-	-
85	OHX	1	3709	-	0,6,6	-	-	-	-	-
85	OHX	6	2006	-	0,6,6	-	-	-	-	-
85	OHX	6	2014	-	0,6,6	-	-	-	-	-
85	OHX	C5	201	-	0,6,6	-	-	-	-	-
85	OHX	c3	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3557	-	0,6,6	-	-	-	-	-
85	OHX	1	3426	-	0,6,6	-	-	-	-	-
85	OHX	6	1982	-	0,6,6	-	-	-	-	-
85	OHX	5	3437	-	0,6,6	-	-	-	-	-
85	OHX	6	1993	-	0,6,6	-	-	-	-	-
85	OHX	5	3591	-	0,6,6	-	-	-	-	-
85	OHX	8	206	-	0,6,6	-	-	-	-	-
85	OHX	5	3733	-	0,6,6	-	-	-	-	-
85	OHX	8	210	-	0,6,6	-	-	-	-	-
85	OHX	1	3431	-	0,6,6	-	-	-	-	-
85	OHX	1	3737	-	0,6,6	-	-	-	-	-
85	OHX	5	3445	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3440	-	0,6,6	-	-	-	-	-
85	OHX	5	3532	-	0,6,6	-	-	-	-	-
85	OHX	6	1948	-	0,6,6	-	-	-	-	-
85	OHX	5	3417	-	0,6,6	-	-	-	-	-
85	OHX	1	3651	-	0,6,6	-	-	-	-	-
85	OHX	5	3512	-	0,6,6	-	-	-	-	-
85	OHX	1	3664	-	0,6,6	-	-	-	-	-
85	OHX	1	3436	-	0,6,6	-	-	-	-	-
85	OHX	1	3646	-	0,6,6	-	-	-	-	-
85	OHX	5	3702	-	0,6,6	-	-	-	-	-
85	OHX	5	3728	-	0,6,6	-	-	-	-	-
85	OHX	5	3466	-	0,6,6	-	-	-	-	-
85	OHX	5	3566	-	0,6,6	-	-	-	-	-
85	OHX	1	3576	-	0,6,6	-	-	-	-	-
85	OHX	2	1929	-	0,6,6	-	-	-	-	-
85	OHX	1	3623	-	0,6,6	-	-	-	-	-
85	OHX	5	3574	-	0,6,6	-	-	-	-	-
85	OHX	5	3658	-	0,6,6	-	-	-	-	-
85	OHX	2	1992	-	0,6,6	-	-	-	-	-
85	OHX	5	3713	-	0,6,6	-	-	-	-	-
85	OHX	1	3721	-	0,6,6	-	-	-	-	-
85	OHX	5	3690	-	0,6,6	-	-	-	-	-
85	OHX	1	3717	-	0,6,6	-	-	-	-	-
85	OHX	6	1975	-	0,6,6	-	-	-	-	-
85	OHX	1	3539	-	0,6,6	-	-	-	-	-
85	OHX	2	1916	-	0,6,6	-	-	-	-	-
85	OHX	2	2028	-	0,6,6	-	-	-	-	-
85	OHX	5	3600	-	0,6,6	-	-	-	-	-
85	OHX	6	1945	-	0,6,6	-	-	-	-	-
85	OHX	5	3573	-	0,6,6	-	-	-	-	-
85	OHX	6	1952	-	0,6,6	-	-	-	-	-
85	OHX	2	1904	-	0,6,6	-	-	-	-	-
85	OHX	1	3699	-	0,6,6	-	-	-	-	-
85	OHX	o4	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3715	-	0,6,6	-	-	-	-	-
85	OHX	6	1933	-	0,6,6	-	-	-	-	-
85	OHX	1	3528	-	0,6,6	-	-	-	-	-
85	OHX	3	208	-	0,6,6	-	-	-	-	-
85	OHX	5	3558	-	0,6,6	-	-	-	-	-
85	OHX	5	3636	-	0,6,6	-	-	-	-	-
85	OHX	5	3742	-	0,6,6	-	-	-	-	-
85	OHX	5	3736	-	0,6,6	-	-	-	-	-
85	OHX	5	3744	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3430	-	0,6,6	-	-	-	-	-
85	OHX	5	3710	-	0,6,6	-	-	-	-	-
85	OHX	m0	303	-	0,6,6	-	-	-	-	-
85	OHX	6	2022	-	0,6,6	-	-	-	-	-
85	OHX	2	1928	-	0,6,6	-	-	-	-	-
85	OHX	1	3513	-	0,6,6	-	-	-	-	-
85	OHX	1	3661	-	0,6,6	-	-	-	-	-
85	OHX	5	3548	-	0,6,6	-	-	-	-	-
85	OHX	1	3579	-	0,6,6	-	-	-	-	-
85	OHX	5	3569	-	0,6,6	-	-	-	-	-
85	OHX	6	1906	-	0,6,6	-	-	-	-	-
85	OHX	1	3533	-	0,6,6	-	-	-	-	-
85	OHX	6	2045	-	0,6,6	-	-	-	-	-
85	OHX	1	3652	-	0,6,6	-	-	-	-	-
85	OHX	6	1935	-	0,6,6	-	-	-	-	-
85	OHX	2	2010	-	0,6,6	-	-	-	-	-
85	OHX	2	1939	-	0,6,6	-	-	-	-	-
85	OHX	5	3413	-	0,6,6	-	-	-	-	-
85	OHX	1	3596	-	0,6,6	-	-	-	-	-
85	OHX	5	3634	-	0,6,6	-	-	-	-	-
85	OHX	2	1994	-	0,6,6	-	-	-	-	-
85	OHX	1	3723	-	0,6,6	-	-	-	-	-
85	OHX	6	2018	-	0,6,6	-	-	-	-	-
85	OHX	1	3518	-	0,6,6	-	-	-	-	-
85	OHX	5	3500	-	0,6,6	-	-	-	-	-
85	OHX	2	1959	-	0,6,6	-	-	-	-	-
85	OHX	5	3472	-	0,6,6	-	-	-	-	-
85	OHX	1	3591	-	0,6,6	-	-	-	-	-
85	OHX	6	1937	-	0,6,6	-	-	-	-	-
85	OHX	1	3657	-	0,6,6	-	-	-	-	-
85	OHX	2	1945	-	0,6,6	-	-	-	-	-
85	OHX	1	3419	-	0,6,6	-	-	-	-	-
85	OHX	1	3685	-	0,6,6	-	-	-	-	-
85	OHX	2	2013	-	0,6,6	-	-	-	-	-
85	OHX	5	3718	-	0,6,6	-	-	-	-	-
85	OHX	1	3676	-	0,6,6	-	-	-	-	-
85	OHX	5	3674	-	0,6,6	-	-	-	-	-
85	OHX	6	1924	-	0,6,6	-	-	-	-	-
85	OHX	6	2048	-	0,6,6	-	-	-	-	-
85	OHX	5	3523	-	0,6,6	-	-	-	-	-
85	OHX	1	3669	-	0,6,6	-	-	-	-	-
85	OHX	5	3670	-	0,6,6	-	-	-	-	-
85	OHX	1	3702	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	6	2010	-	0,6,6	-	-	-	-	-
85	OHX	5	3590	-	0,6,6	-	-	-	-	-
85	OHX	2	2003	-	0,6,6	-	-	-	-	-
85	OHX	1	3583	-	0,6,6	-	-	-	-	-
85	OHX	5	3468	-	0,6,6	-	-	-	-	-
85	OHX	4	205	-	0,6,6	-	-	-	-	-
85	OHX	5	3732	-	0,6,6	-	-	-	-	-
85	OHX	5	3716	-	0,6,6	-	-	-	-	-
85	OHX	1	3504	-	0,6,6	-	-	-	-	-
85	OHX	6	1992	-	0,6,6	-	-	-	-	-
85	OHX	6	2020	-	0,6,6	-	-	-	-	-
85	OHX	1	3574	-	0,6,6	-	-	-	-	-
85	OHX	2	2035	-	0,6,6	-	-	-	-	-
85	OHX	1	3645	-	0,6,6	-	-	-	-	-
85	OHX	2	1958	-	0,6,6	-	-	-	-	-
85	OHX	5	3401	-	0,6,6	-	-	-	-	-
85	OHX	2	1980	-	0,6,6	-	-	-	-	-
85	OHX	s8	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3567	-	0,6,6	-	-	-	-	-
85	OHX	1	3631	-	0,6,6	-	-	-	-	-
85	OHX	5	3688	-	0,6,6	-	-	-	-	-
85	OHX	c8	201	-	0,6,6	-	-	-	-	-
85	OHX	14	402	-	0,6,6	-	-	-	-	-
85	OHX	5	3421	-	0,6,6	-	-	-	-	-
85	OHX	6	1956	-	0,6,6	-	-	-	-	-
85	OHX	6	2038	-	0,6,6	-	-	-	-	-
85	OHX	1	3545	-	0,6,6	-	-	-	-	-
85	OHX	1	3712	-	0,6,6	-	-	-	-	-
85	OHX	4	208	-	0,6,6	-	-	-	-	-
85	OHX	8	214	-	0,6,6	-	-	-	-	-
85	OHX	5	3542	-	0,6,6	-	-	-	-	-
85	OHX	1	3714	-	0,6,6	-	-	-	-	-
85	OHX	5	3703	-	0,6,6	-	-	-	-	-
85	OHX	sR	401	-	0,6,6	-	-	-	-	-
85	OHX	M5	303	-	0,6,6	-	-	-	-	-
85	OHX	2	2005	-	0,6,6	-	-	-	-	-
85	OHX	5	3697	-	0,6,6	-	-	-	-	-
85	OHX	5	3476	-	0,6,6	-	-	-	-	-
85	OHX	5	3529	-	0,6,6	-	-	-	-	-
85	OHX	o2	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3456	-	0,6,6	-	-	-	-	-
85	OHX	1	3710	-	0,6,6	-	-	-	-	-
85	OHX	q2	502	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3733	-	0,6,6	-	-	-	-	-
85	OHX	1	3548	-	0,6,6	-	-	-	-	-
85	OHX	d4	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3448	-	0,6,6	-	-	-	-	-
85	OHX	5	3425	-	0,6,6	-	-	-	-	-
85	OHX	1	3454	-	0,6,6	-	-	-	-	-
85	OHX	2	1913	-	0,6,6	-	-	-	-	-
85	OHX	4	203	-	0,6,6	-	-	-	-	-
85	OHX	6	1954	-	0,6,6	-	-	-	-	-
85	OHX	5	3452	-	0,6,6	-	-	-	-	-
85	OHX	6	1940	-	0,6,6	-	-	-	-	-
85	OHX	2	1963	-	0,6,6	-	-	-	-	-
85	OHX	2	2025	-	0,6,6	-	-	-	-	-
85	OHX	1	3647	-	0,6,6	-	-	-	-	-
85	OHX	5	3663	-	0,6,6	-	-	-	-	-
85	OHX	2	2024	-	0,6,6	-	-	-	-	-
85	OHX	5	3464	-	0,6,6	-	-	-	-	-
85	OHX	S8	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3587	-	0,6,6	-	-	-	-	-
85	OHX	2	1926	-	0,6,6	-	-	-	-	-
85	OHX	1	3606	-	0,6,6	-	-	-	-	-
85	OHX	5	3538	-	0,6,6	-	-	-	-	-
85	OHX	5	3671	-	0,6,6	-	-	-	-	-
85	OHX	Q2	502	-	0,6,6	-	-	-	-	-
85	OHX	5	3571	-	0,6,6	-	-	-	-	-
85	OHX	1	3417	-	0,6,6	-	-	-	-	-
85	OHX	5	3665	-	0,6,6	-	-	-	-	-
85	OHX	5	3422	-	0,6,6	-	-	-	-	-
85	OHX	4	206	-	0,6,6	-	-	-	-	-
85	OHX	3	210	-	0,6,6	-	-	-	-	-
85	OHX	6	2047	-	0,6,6	-	-	-	-	-
85	OHX	1	3682	-	0,6,6	-	-	-	-	-
85	OHX	6	2046	-	0,6,6	-	-	-	-	-
85	OHX	2	1990	-	0,6,6	-	-	-	-	-
85	OHX	5	3524	-	0,6,6	-	-	-	-	-
85	OHX	2	1955	-	0,6,6	-	-	-	-	-
85	OHX	8	208	-	0,6,6	-	-	-	-	-
85	OHX	1	3656	-	0,6,6	-	-	-	-	-
85	OHX	5	3519	-	0,6,6	-	-	-	-	-
85	OHX	5	3616	-	0,6,6	-	-	-	-	-
85	OHX	7	210	-	0,6,6	-	-	-	-	-
85	OHX	2	1976	-	0,6,6	-	-	-	-	-
85	OHX	2	2001	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3543	-	0,6,6	-	-	-	-	-
85	OHX	1	3551	-	0,6,6	-	-	-	-	-
85	OHX	2	2040	-	0,6,6	-	-	-	-	-
85	OHX	6	1964	-	0,6,6	-	-	-	-	-
85	OHX	6	2024	-	0,6,6	-	-	-	-	-
85	OHX	5	3649	-	0,6,6	-	-	-	-	-
85	OHX	2	1981	-	0,6,6	-	-	-	-	-
85	OHX	3	204	-	0,6,6	-	-	-	-	-
85	OHX	1	3581	-	0,6,6	-	-	-	-	-
85	OHX	5	3495	-	0,6,6	-	-	-	-	-
85	OHX	1	3535	-	0,6,6	-	-	-	-	-
85	OHX	6	2044	-	0,6,6	-	-	-	-	-
85	OHX	2	1940	-	0,6,6	-	-	-	-	-
85	OHX	5	3624	-	0,6,6	-	-	-	-	-
85	OHX	5	3654	-	0,6,6	-	-	-	-	-
85	OHX	7	209	-	0,6,6	-	-	-	-	-
85	OHX	1	3488	-	0,6,6	-	-	-	-	-
85	OHX	5	3696	-	0,6,6	-	-	-	-	-
85	OHX	5	3701	-	0,6,6	-	-	-	-	-
85	OHX	8	217	-	0,6,6	-	-	-	-	-
85	OHX	5	3537	-	0,6,6	-	-	-	-	-
85	OHX	1	3688	-	0,6,6	-	-	-	-	-
85	OHX	5	3672	-	0,6,6	-	-	-	-	-
85	OHX	2	1923	-	0,6,6	-	-	-	-	-
85	OHX	5	3619	-	0,6,6	-	-	-	-	-
85	OHX	5	3708	-	0,6,6	-	-	-	-	-
85	OHX	5	3669	-	0,6,6	-	-	-	-	-
85	OHX	1	3511	-	0,6,6	-	-	-	-	-
85	OHX	5	3405	-	0,6,6	-	-	-	-	-
85	OHX	5	3646	-	0,6,6	-	-	-	-	-
85	OHX	6	2023	-	0,6,6	-	-	-	-	-
85	OHX	5	3546	-	0,6,6	-	-	-	-	-
85	OHX	1	3609	-	0,6,6	-	-	-	-	-
85	OHX	2	2027	-	0,6,6	-	-	-	-	-
85	OHX	5	3414	-	0,6,6	-	-	-	-	-
85	OHX	5	3494	-	0,6,6	-	-	-	-	-
85	OHX	6	1972	-	0,6,6	-	-	-	-	-
85	OHX	2	1970	-	0,6,6	-	-	-	-	-
85	OHX	5	3549	-	0,6,6	-	-	-	-	-
85	OHX	5	3593	-	0,6,6	-	-	-	-	-
85	OHX	1	3526	-	0,6,6	-	-	-	-	-
85	OHX	1	3629	-	0,6,6	-	-	-	-	-
85	OHX	6	1963	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	6	1998	-	0,6,6	-	-	-	-	-
85	OHX	19	201	-	0,6,6	-	-	-	-	-
85	OHX	2	2031	-	0,6,6	-	-	-	-	-
85	OHX	2	1930	-	0,6,6	-	-	-	-	-
85	OHX	6	1999	-	0,6,6	-	-	-	-	-
85	OHX	5	3639	-	0,6,6	-	-	-	-	-
85	OHX	5	3602	-	0,6,6	-	-	-	-	-
85	OHX	1	3561	-	0,6,6	-	-	-	-	-
85	OHX	1	3655	-	0,6,6	-	-	-	-	-
85	OHX	1	3586	-	0,6,6	-	-	-	-	-
85	OHX	6	2036	-	0,6,6	-	-	-	-	-
85	OHX	5	3627	-	0,6,6	-	-	-	-	-
85	OHX	5	3508	-	0,6,6	-	-	-	-	-
85	OHX	2	2021	-	0,6,6	-	-	-	-	-
85	OHX	5	3516	-	0,6,6	-	-	-	-	-
85	OHX	5	3729	-	0,6,6	-	-	-	-	-
85	OHX	5	3491	-	0,6,6	-	-	-	-	-
85	OHX	1	3523	-	0,6,6	-	-	-	-	-
85	OHX	1	3480	-	0,6,6	-	-	-	-	-
85	OHX	6	2025	-	0,6,6	-	-	-	-	-
85	OHX	5	3484	-	0,6,6	-	-	-	-	-
85	OHX	2	2006	-	0,6,6	-	-	-	-	-
85	OHX	5	3518	-	0,6,6	-	-	-	-	-
85	OHX	5	3711	-	0,6,6	-	-	-	-	-
85	OHX	5	3585	-	0,6,6	-	-	-	-	-
85	OHX	5	3630	-	0,6,6	-	-	-	-	-
85	OHX	2	1931	-	0,6,6	-	-	-	-	-
85	OHX	6	1927	-	0,6,6	-	-	-	-	-
85	OHX	8	205	-	0,6,6	-	-	-	-	-
85	OHX	5	3565	-	0,6,6	-	-	-	-	-
85	OHX	1	3401	-	0,6,6	-	-	-	-	-
85	OHX	2	2026	-	0,6,6	-	-	-	-	-
85	OHX	1	3409	-	0,6,6	-	-	-	-	-
85	OHX	5	3576	-	0,6,6	-	-	-	-	-
85	OHX	1	3736	-	0,6,6	-	-	-	-	-
85	OHX	2	1935	-	0,6,6	-	-	-	-	-
85	OHX	4	212	-	0,6,6	-	-	-	-	-
85	OHX	5	3498	-	0,6,6	-	-	-	-	-
85	OHX	5	3613	-	0,6,6	-	-	-	-	-
85	OHX	5	3460	-	0,6,6	-	-	-	-	-
85	OHX	1	3529	-	0,6,6	-	-	-	-	-
85	OHX	1	3517	-	0,6,6	-	-	-	-	-
85	OHX	1	3420	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	L4	401	-	0,6,6	-	-	-	-	-
85	OHX	5	3676	-	0,6,6	-	-	-	-	-
85	OHX	6	1932	-	0,6,6	-	-	-	-	-
85	OHX	5	3717	-	0,6,6	-	-	-	-	-
85	OHX	6	1966	-	0,6,6	-	-	-	-	-
85	OHX	5	3695	-	0,6,6	-	-	-	-	-
85	OHX	6	1911	-	0,6,6	-	-	-	-	-
85	OHX	1	3677	-	0,6,6	-	-	-	-	-
85	OHX	6	1922	-	0,6,6	-	-	-	-	-
85	OHX	14	401	-	0,6,6	-	-	-	-	-
85	OHX	2	1907	-	0,6,6	-	-	-	-	-
85	OHX	2	1914	-	0,6,6	-	-	-	-	-
85	OHX	2	1988	-	0,6,6	-	-	-	-	-
85	OHX	1	3628	-	0,6,6	-	-	-	-	-
85	OHX	2	1977	-	0,6,6	-	-	-	-	-
85	OHX	6	1939	-	0,6,6	-	-	-	-	-
85	OHX	5	3428	-	0,6,6	-	-	-	-	-
85	OHX	1	3546	-	0,6,6	-	-	-	-	-
85	OHX	8	204	-	0,6,6	-	-	-	-	-
85	OHX	5	3618	-	0,6,6	-	-	-	-	-
85	OHX	1	3540	-	0,6,6	-	-	-	-	-
85	OHX	5	3637	-	0,6,6	-	-	-	-	-
85	OHX	5	3686	-	0,6,6	-	-	-	-	-
85	OHX	1	3425	-	0,6,6	-	-	-	-	-
85	OHX	5	3458	-	0,6,6	-	-	-	-	-
85	OHX	6	1994	-	0,6,6	-	-	-	-	-
85	OHX	1	3593	-	0,6,6	-	-	-	-	-
85	OHX	5	3635	-	0,6,6	-	-	-	-	-
85	OHX	6	1930	-	0,6,6	-	-	-	-	-
85	OHX	1	3434	-	0,6,6	-	-	-	-	-
85	OHX	1	3557	-	0,6,6	-	-	-	-	-
85	OHX	5	3684	-	0,6,6	-	-	-	-	-
85	OHX	5	3493	-	0,6,6	-	-	-	-	-
85	OHX	1	3485	-	0,6,6	-	-	-	-	-
85	OHX	1	3490	-	0,6,6	-	-	-	-	-
85	OHX	1	3499	-	0,6,6	-	-	-	-	-
85	OHX	5	3408	-	0,6,6	-	-	-	-	-
85	OHX	5	3633	-	0,6,6	-	-	-	-	-
85	OHX	2	1974	-	0,6,6	-	-	-	-	-
85	OHX	2	1951	-	0,6,6	-	-	-	-	-
85	OHX	2	2016	-	0,6,6	-	-	-	-	-
85	OHX	6	2001	-	0,6,6	-	-	-	-	-
85	OHX	1	3486	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3602	-	0,6,6	-	-	-	-	-
85	OHX	15	302	-	0,6,6	-	-	-	-	-
85	OHX	1	3728	-	0,6,6	-	-	-	-	-
85	OHX	2	1966	-	0,6,6	-	-	-	-	-
85	OHX	6	2000	-	0,6,6	-	-	-	-	-
85	OHX	2	2039	-	0,6,6	-	-	-	-	-
85	OHX	2	2029	-	0,6,6	-	-	-	-	-
85	OHX	5	3531	-	0,6,6	-	-	-	-	-
85	OHX	2	1902	-	0,6,6	-	-	-	-	-
85	OHX	5	3556	-	0,6,6	-	-	-	-	-
85	OHX	1	3484	-	0,6,6	-	-	-	-	-
85	OHX	4	201	-	0,6,6	-	-	-	-	-
85	OHX	5	3465	-	0,6,6	-	-	-	-	-
85	OHX	5	3473	-	0,6,6	-	-	-	-	-
85	OHX	5	3563	-	0,6,6	-	-	-	-	-
85	OHX	1	3451	-	0,6,6	-	-	-	-	-
85	OHX	5	3453	-	0,6,6	-	-	-	-	-
85	OHX	1	3616	-	0,6,6	-	-	-	-	-
85	OHX	5	3603	-	0,6,6	-	-	-	-	-
85	OHX	5	3577	-	0,6,6	-	-	-	-	-
85	OHX	6	2026	-	0,6,6	-	-	-	-	-
85	OHX	6	2013	-	0,6,6	-	-	-	-	-
85	OHX	O4	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3564	-	0,6,6	-	-	-	-	-
85	OHX	1	3446	-	0,6,6	-	-	-	-	-
85	OHX	S9	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3495	-	0,6,6	-	-	-	-	-
85	OHX	8	209	-	0,6,6	-	-	-	-	-
85	OHX	2	1906	-	0,6,6	-	-	-	-	-
85	OHX	5	3442	-	0,6,6	-	-	-	-	-
85	OHX	1	3447	-	0,6,6	-	-	-	-	-
85	OHX	2	1903	-	0,6,6	-	-	-	-	-
85	OHX	5	3521	-	0,6,6	-	-	-	-	-
85	OHX	1	3572	-	0,6,6	-	-	-	-	-
85	OHX	2	2042	-	0,6,6	-	-	-	-	-
85	OHX	1	3624	-	0,6,6	-	-	-	-	-
85	OHX	6	2039	-	0,6,6	-	-	-	-	-
85	OHX	N9	102	-	0,6,6	-	-	-	-	-
85	OHX	5	3457	-	0,6,6	-	-	-	-	-
85	OHX	2	2032	-	0,6,6	-	-	-	-	-
85	OHX	3	211	-	0,6,6	-	-	-	-	-
85	OHX	5	3543	-	0,6,6	-	-	-	-	-
85	OHX	5	3735	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	7	208	-	0,6,6	-	-	-	-	-
85	OHX	m0	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3615	-	0,6,6	-	-	-	-	-
85	OHX	5	3514	-	0,6,6	-	-	-	-	-
85	OHX	2	1978	-	0,6,6	-	-	-	-	-
85	OHX	1	3580	-	0,6,6	-	-	-	-	-
85	OHX	2	2004	-	0,6,6	-	-	-	-	-
85	OHX	S6	301	-	0,6,6	-	-	-	-	-
85	OHX	1	3560	-	0,6,6	-	-	-	-	-
85	OHX	4	210	-	0,6,6	-	-	-	-	-
85	OHX	1	3415	-	0,6,6	-	-	-	-	-
85	OHX	6	1902	-	0,6,6	-	-	-	-	-
85	OHX	5	3411	-	0,6,6	-	-	-	-	-
85	OHX	2	1942	-	0,6,6	-	-	-	-	-
85	OHX	1	3563	-	0,6,6	-	-	-	-	-
85	OHX	1	3641	-	0,6,6	-	-	-	-	-
85	OHX	6	1915	-	0,6,6	-	-	-	-	-
85	OHX	3	203	-	0,6,6	-	-	-	-	-
85	OHX	5	3598	-	0,6,6	-	-	-	-	-
85	OHX	5	3739	-	0,6,6	-	-	-	-	-
85	OHX	1	3463	-	0,6,6	-	-	-	-	-
85	OHX	1	3414	-	0,6,6	-	-	-	-	-
85	OHX	6	1967	-	0,6,6	-	-	-	-	-
85	OHX	6	1941	-	0,6,6	-	-	-	-	-
85	OHX	1	3686	-	0,6,6	-	-	-	-	-
85	OHX	2	1947	-	0,6,6	-	-	-	-	-
85	OHX	1	3433	-	0,6,6	-	-	-	-	-
85	OHX	2	1910	-	0,6,6	-	-	-	-	-
85	OHX	6	1984	-	0,6,6	-	-	-	-	-
85	OHX	6	2032	-	0,6,6	-	-	-	-	-
85	OHX	6	1907	-	0,6,6	-	-	-	-	-
85	OHX	6	2033	-	0,6,6	-	-	-	-	-
85	OHX	6	2050	-	0,6,6	-	-	-	-	-
85	OHX	5	3483	-	0,6,6	-	-	-	-	-
85	OHX	5	3707	-	0,6,6	-	-	-	-	-
85	OHX	7	203	-	0,6,6	-	-	-	-	-
85	OHX	3	202	-	0,6,6	-	-	-	-	-
85	OHX	o3	201	-	0,6,6	-	-	-	-	-
85	OHX	1	3639	-	0,6,6	-	-	-	-	-
85	OHX	5	3410	-	0,6,6	-	-	-	-	-
85	OHX	2	1918	-	0,6,6	-	-	-	-	-
85	OHX	5	3705	-	0,6,6	-	-	-	-	-
85	OHX	5	3526	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3632	-	0,6,6	-	-	-	-	-
85	OHX	2	1995	-	0,6,6	-	-	-	-	-
85	OHX	6	2031	-	0,6,6	-	-	-	-	-
85	OHX	5	3547	-	0,6,6	-	-	-	-	-
85	OHX	6	1942	-	0,6,6	-	-	-	-	-
85	OHX	6	2035	-	0,6,6	-	-	-	-	-
85	OHX	2	1938	-	0,6,6	-	-	-	-	-
85	OHX	5	3443	-	0,6,6	-	-	-	-	-
85	OHX	1	3508	-	0,6,6	-	-	-	-	-
85	OHX	6	1959	-	0,6,6	-	-	-	-	-
85	OHX	5	3679	-	0,6,6	-	-	-	-	-
85	OHX	1	3670	-	0,6,6	-	-	-	-	-
85	OHX	6	1919	-	0,6,6	-	-	-	-	-
85	OHX	7	202	-	0,6,6	-	-	-	-	-
85	OHX	1	3491	-	0,6,6	-	-	-	-	-
85	OHX	5	3456	-	0,6,6	-	-	-	-	-
85	OHX	5	3643	-	0,6,6	-	-	-	-	-
85	OHX	6	2016	-	0,6,6	-	-	-	-	-
85	OHX	1	3711	-	0,6,6	-	-	-	-	-
85	OHX	2	2007	-	0,6,6	-	-	-	-	-
85	OHX	5	3741	-	0,6,6	-	-	-	-	-
85	OHX	1	3693	-	0,6,6	-	-	-	-	-
85	OHX	6	1946	-	0,6,6	-	-	-	-	-
85	OHX	1	3678	-	0,6,6	-	-	-	-	-
85	OHX	6	1990	-	0,6,6	-	-	-	-	-
85	OHX	1	3469	-	0,6,6	-	-	-	-	-
85	OHX	7	206	-	0,6,6	-	-	-	-	-
85	OHX	6	1969	-	0,6,6	-	-	-	-	-
85	OHX	5	3559	-	0,6,6	-	-	-	-	-
85	OHX	6	2003	-	0,6,6	-	-	-	-	-
85	OHX	2	1972	-	0,6,6	-	-	-	-	-
85	OHX	2	1949	-	0,6,6	-	-	-	-	-
85	OHX	5	3449	-	0,6,6	-	-	-	-	-
85	OHX	1	3427	-	0,6,6	-	-	-	-	-
85	OHX	1	3668	-	0,6,6	-	-	-	-	-
85	OHX	5	3730	-	0,6,6	-	-	-	-	-
85	OHX	s4	301	-	0,6,6	-	-	-	-	-
85	OHX	5	3539	-	0,6,6	-	-	-	-	-
85	OHX	1	3542	-	0,6,6	-	-	-	-	-
85	OHX	2	1985	-	0,6,6	-	-	-	-	-
85	OHX	5	3586	-	0,6,6	-	-	-	-	-
85	OHX	1	3697	-	0,6,6	-	-	-	-	-
85	OHX	5	3527	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
85	OHX	1	3673	-	0,6,6	-	-	-		
85	OHX	6	2049	-	0,6,6	-	-	-		
85	OHX	5	3715	-	0,6,6	-	-	-		
85	OHX	1	3722	-	0,6,6	-	-	-		
85	OHX	5	3594	-	0,6,6	-	-	-		
85	OHX	1	3698	-	0,6,6	-	-	-		
85	OHX	8	212	-	0,6,6	-	-	-		
85	OHX	6	1929	-	0,6,6	-	-	-		
85	OHX	6	1961	-	0,6,6	-	-	-		
85	OHX	5	3626	-	0,6,6	-	-	-		
85	OHX	1	3614	-	0,6,6	-	-	-		
85	OHX	1	3618	-	0,6,6	-	-	-		
85	OHX	1	3568	-	0,6,6	-	-	-		
85	OHX	5	3513	-	0,6,6	-	-	-		
85	OHX	5	3589	-	0,6,6	-	-	-		
85	OHX	5	3604	-	0,6,6	-	-	-		
85	OHX	1	3449	-	0,6,6	-	-	-		
85	OHX	6	1947	-	0,6,6	-	-	-		
85	OHX	5	3724	-	0,6,6	-	-	-		
85	OHX	5	3481	-	0,6,6	-	-	-		
85	OHX	1	3443	-	0,6,6	-	-	-		
85	OHX	1	3635	-	0,6,6	-	-	-		
85	OHX	1	3725	-	0,6,6	-	-	-		
85	OHX	2	1999	-	0,6,6	-	-	-		
85	OHX	6	2009	-	0,6,6	-	-	-		
85	OHX	2	1968	-	0,6,6	-	-	-		
85	OHX	5	3489	-	0,6,6	-	-	-		
85	OHX	1	3493	-	0,6,6	-	-	-		
85	OHX	1	3633	-	0,6,6	-	-	-		
85	OHX	1	3585	-	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.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
81	m2	2
35	sM	1
35	SM	1
80	c0	1
1	2	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	sM	139:UNK	C	155:UNK	N	37.65
1	SM	141:ALA	C	151:UNK	N	26.56
1	c0	84:GLU	C	87:UNK	N	8.21
1	2	1716:C	O3'	1717:G	P	4.60
1	m2	23:UNK	C	28:UNK	N	4.05
1	m2	52:UNK	C	54:UNK	N	3.55

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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	1781/1800 (98%)	0.77	169 (9%) 8 10	61, 97, 186, 235	0
1	6	1795/1800 (99%)	0.54	138 (7%) 13 15	48, 82, 168, 218	0
2	S0	206/251 (82%)	0.96	37 (17%) 1 1	108, 147, 226, 316	0
2	s0	206/251 (82%)	0.41	10 (4%) 29 29	81, 112, 176, 255	0
3	S1	214/254 (84%)	1.49	63 (29%) 0 0	111, 136, 156, 161	0
3	s1	216/254 (85%)	0.60	22 (10%) 6 8	74, 87, 104, 112	0
4	S2	217/253 (85%)	0.37	8 (3%) 41 40	81, 93, 115, 123	0
4	s2	217/253 (85%)	0.42	17 (7%) 13 14	62, 74, 89, 98	0
5	S3	223/239 (93%)	0.56	23 (10%) 6 8	81, 94, 124, 132	0
5	s3	223/239 (93%)	0.65	25 (11%) 5 6	85, 109, 132, 140	0
6	S4	260/260 (100%)	0.79	28 (10%) 5 7	72, 98, 110, 122	0
6	s4	260/260 (100%)	0.29	11 (4%) 36 35	53, 79, 92, 115	0
7	S5	206/224 (91%)	0.78	28 (13%) 3 3	101, 117, 125, 131	0
7	s5	206/224 (91%)	0.63	14 (6%) 17 19	81, 101, 114, 117	0
8	S6	226/236 (95%)	0.88	29 (12%) 3 4	72, 126, 220, 365	0
8	s6	218/236 (92%)	0.65	16 (7%) 15 17	54, 87, 104, 115	0
9	S7	184/189 (97%)	0.92	31 (16%) 1 2	91, 117, 133, 136	0
9	s7	186/189 (98%)	0.70	19 (10%) 6 8	72, 103, 131, 195	0
10	S8	188/200 (94%)	0.74	17 (9%) 9 11	65, 84, 127, 136	0
10	s8	188/200 (94%)	0.66	12 (6%) 19 20	49, 74, 126, 145	0
11	S9	185/196 (94%)	0.89	27 (14%) 2 3	88, 103, 128, 145	0
11	s9	185/196 (94%)	0.51	10 (5%) 25 26	67, 85, 114, 132	0
12	C0	96/105 (91%)	0.63	7 (7%) 15 17	87, 106, 124, 135	0
13	C1	146/155 (94%)	0.46	8 (5%) 25 25	68, 82, 105, 119	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%)	0.51	10 (6%) 17 19	55, 69, 111, 187	0
14	C2	109/142 (76%)	2.01	45 (41%) 0 0	139, 144, 148, 151	0
14	c2	109/142 (76%)	3.00	65 (59%) 0 0	184, 196, 200, 201	0
15	C3	150/150 (100%)	0.47	8 (5%) 26 27	73, 92, 108, 111	0
15	c3	150/150 (100%)	0.32	2 (1%) 77 76	60, 77, 92, 103	0
16	C4	127/136 (93%)	1.36	28 (22%) 0 1	82, 139, 149, 152	0
16	c4	128/136 (94%)	0.44	6 (4%) 31 31	60, 88, 93, 97	0
17	C5	124/141 (87%)	0.49	6 (4%) 30 31	79, 96, 120, 131	0
17	c5	135/141 (95%)	0.84	23 (17%) 1 2	71, 98, 118, 128	0
18	C6	141/142 (99%)	0.92	18 (12%) 3 4	86, 109, 113, 116	0
18	c6	142/142 (100%)	0.95	22 (15%) 2 2	75, 97, 114, 131	0
19	C7	120/136 (88%)	1.33	23 (19%) 1 1	99, 112, 309, 332	0
19	c7	117/136 (86%)	1.30	35 (29%) 0 0	88, 102, 310, 364	0
20	C8	145/145 (100%)	1.21	36 (24%) 0 0	78, 103, 123, 127	0
20	c8	145/145 (100%)	0.72	13 (8%) 9 11	73, 92, 109, 115	0
21	C9	143/143 (100%)	0.84	19 (13%) 3 4	95, 103, 117, 124	0
21	c9	143/143 (100%)	0.30	1 (0%) 87 87	76, 88, 102, 109	0
22	D0	107/120 (89%)	1.47	28 (26%) 0 0	81, 109, 125, 128	0
22	d0	110/120 (91%)	1.62	31 (28%) 0 0	79, 113, 136, 142	0
23	D1	87/87 (100%)	0.44	0 100 100	102, 112, 163, 190	0
23	d1	87/87 (100%)	0.13	1 (1%) 80 79	74, 85, 129, 145	0
24	D2	129/129 (100%)	0.46	6 (4%) 31 31	76, 90, 98, 109	0
24	d2	129/129 (100%)	0.13	1 (0%) 86 85	58, 70, 79, 92	0
25	D3	144/144 (100%)	0.55	10 (6%) 16 18	63, 69, 77, 86	0
25	d3	144/144 (100%)	0.18	1 (0%) 87 87	48, 54, 64, 71	0
26	D4	134/134 (100%)	1.04	25 (18%) 1 1	86, 104, 115, 117	0
26	d4	134/134 (100%)	0.64	16 (11%) 4 5	62, 84, 97, 116	0
27	D5	70/107 (65%)	0.93	13 (18%) 1 1	116, 124, 128, 128	0
27	d5	69/107 (64%)	0.85	11 (15%) 1 2	92, 109, 115, 117	0
28	D6	97/97 (100%)	1.51	32 (32%) 0 0	85, 101, 146, 147	0
28	d6	97/97 (100%)	0.37	3 (3%) 49 48	63, 78, 96, 102	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%)	0.57	6 (7%) 14 16	93, 109, 126, 129	0
29	d7	81/81 (100%)	0.49	6 (7%) 14 16	74, 89, 114, 118	0
30	D8	63/66 (95%)	2.23	36 (57%) 0 0	108, 122, 128, 130	0
30	d8	63/66 (95%)	1.65	21 (33%) 0 0	96, 107, 115, 118	0
31	D9	53/55 (96%)	0.54	3 (5%) 23 24	84, 89, 106, 110	0
31	d9	53/55 (96%)	1.29	13 (24%) 0 0	82, 94, 123, 130	0
32	E0	60/62 (96%)	1.40	18 (30%) 0 0	69, 99, 123, 125	0
32	e0	62/62 (100%)	0.95	10 (16%) 1 2	57, 82, 104, 111	0
33	E1	71/76 (93%)	1.93	27 (38%) 0 0	96, 137, 146, 147	0
33	e1	76/76 (100%)	2.61	39 (51%) 0 0	111, 170, 192, 197	0
34	SR	318/318 (100%)	0.96	54 (16%) 1 2	110, 123, 140, 202	0
34	sR	318/318 (100%)	1.19	70 (22%) 0 1	112, 128, 142, 186	0
35	SM	133/182 (73%)	0.92	22 (16%) 1 2	57, 87, 146, 161	0
35	sM	63/182 (34%)	0.70	7 (11%) 5 6	45, 97, 104, 108	0
36	1	3149/3396 (92%)	0.20	117 (3%) 41 40	31, 57, 131, 226	0
36	5	3150/3396 (92%)	0.15	90 (2%) 51 50	30, 54, 119, 190	0
37	3	121/121 (100%)	0.10	1 (0%) 86 85	41, 71, 88, 91	0
37	7	121/121 (100%)	-0.06	0 100 100	36, 55, 70, 74	0
38	4	158/158 (100%)	0.07	4 (2%) 57 55	37, 60, 97, 140	0
38	8	158/158 (100%)	0.10	4 (2%) 57 55	41, 63, 100, 119	0
39	L2	252/253 (99%)	0.23	5 (1%) 65 64	41, 56, 73, 147	0
39	l2	252/253 (99%)	0.14	6 (2%) 59 57	39, 57, 78, 146	0
40	L3	386/386 (100%)	-0.06	1 (0%) 94 93	36, 58, 75, 93	0
40	l3	386/386 (100%)	-0.14	5 (1%) 77 76	30, 44, 62, 97	0
41	L4	361/361 (100%)	-0.14	3 (0%) 86 85	34, 48, 64, 76	0
41	l4	361/361 (100%)	-0.08	3 (0%) 86 85	36, 50, 68, 80	0
42	L5	296/296 (100%)	0.28	9 (3%) 50 49	52, 75, 96, 113	0
42	l5	294/296 (99%)	0.12	6 (2%) 65 64	40, 58, 85, 120	0
43	L6	156/175 (89%)	-0.10	3 (1%) 66 65	43, 50, 67, 83	0
43	l6	157/175 (89%)	-0.03	3 (1%) 66 65	41, 50, 70, 79	0
44	L7	222/243 (91%)	-0.28	1 (0%) 91 90	36, 42, 65, 87	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	l7	223/243 (91%)	-0.25	2 (0%) 84 83	33, 41, 72, 98	0
45	L8	233/255 (91%)	0.56	22 (9%) 8 10	61, 81, 173, 291	0
45	l8	231/255 (90%)	0.86	31 (13%) 3 4	68, 83, 110, 115	0
46	L9	191/191 (100%)	0.40	10 (5%) 27 27	48, 61, 73, 82	0
46	l9	191/191 (100%)	0.06	2 (1%) 82 81	40, 49, 64, 73	0
47	M0	211/220 (95%)	0.05	8 (3%) 40 39	40, 50, 87, 161	0
47	m0	213/220 (96%)	0.10	3 (1%) 75 74	35, 48, 82, 172	0
48	M1	169/173 (97%)	0.39	7 (4%) 37 36	65, 81, 94, 100	0
48	m1	169/173 (97%)	0.14	2 (1%) 79 77	46, 61, 70, 82	0
49	M3	193/198 (97%)	0.24	7 (3%) 42 42	37, 59, 96, 119	0
49	m3	194/198 (97%)	0.28	6 (3%) 49 48	38, 64, 96, 112	0
50	M4	136/137 (99%)	-0.04	5 (3%) 41 40	45, 50, 63, 71	0
50	m4	137/137 (100%)	-0.23	1 (0%) 87 87	39, 45, 68, 80	0
51	M5	203/203 (100%)	-0.08	0 100 100	37, 53, 63, 68	0
51	m5	203/203 (100%)	0.10	0 100 100	41, 58, 69, 73	0
52	M6	197/198 (99%)	-0.18	3 (1%) 73 72	35, 41, 60, 63	0
52	m6	197/198 (99%)	-0.21	5 (2%) 57 55	31, 35, 58, 62	0
53	M7	183/183 (100%)	0.31	16 (8%) 10 12	39, 50, 170, 329	0
53	m7	155/183 (84%)	-0.00	0 100 100	35, 42, 53, 67	0
54	M8	185/185 (100%)	-0.09	2 (1%) 80 79	38, 50, 66, 85	0
54	m8	185/185 (100%)	-0.10	0 100 100	36, 52, 64, 70	0
55	M9	188/188 (100%)	0.60	12 (6%) 19 20	64, 76, 138, 144	0
55	m9	188/188 (100%)	0.46	9 (4%) 30 31	55, 64, 120, 135	0
56	N0	172/172 (100%)	-0.12	1 (0%) 89 89	39, 48, 61, 64	0
56	n0	172/172 (100%)	-0.16	1 (0%) 89 89	35, 40, 51, 61	0
57	N1	159/159 (100%)	0.04	4 (2%) 57 55	41, 51, 87, 91	0
57	n1	159/159 (100%)	0.02	4 (2%) 57 55	38, 44, 80, 85	0
58	N2	100/120 (83%)	1.14	23 (23%) 0 1	91, 102, 109, 112	0
58	n2	98/120 (81%)	1.10	21 (21%) 0 1	75, 84, 92, 95	0
59	N3	136/136 (100%)	0.46	8 (5%) 22 23	43, 52, 61, 68	0
59	n3	136/136 (100%)	-0.11	1 (0%) 87 87	31, 41, 54, 58	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
60	N4	98/155 (63%)	2.33	32 (32%) 0 0	52, 74, 448, 489	0
60	n4	135/155 (87%)	0.83	23 (17%) 1 2	41, 94, 307, 436	0
61	N5	121/141 (85%)	0.42	9 (7%) 14 16	52, 64, 84, 149	0
61	n5	120/141 (85%)	0.58	11 (9%) 9 10	51, 67, 87, 95	0
62	N6	126/126 (100%)	0.18	4 (3%) 47 46	43, 59, 70, 76	0
62	n6	126/126 (100%)	0.24	3 (2%) 59 57	45, 60, 78, 83	0
63	N7	135/135 (100%)	0.71	9 (6%) 17 19	77, 89, 107, 114	0
63	n7	135/135 (100%)	0.37	6 (4%) 34 34	79, 90, 109, 117	0
64	N8	148/148 (100%)	-0.09	0 100 100	31, 52, 72, 81	0
64	n8	148/148 (100%)	-0.15	0 100 100	31, 53, 66, 70	0
65	N9	58/58 (100%)	0.49	5 (8%) 10 12	37, 56, 94, 104	0
65	n9	58/58 (100%)	0.28	2 (3%) 45 44	35, 53, 76, 80	0
66	O0	97/104 (93%)	0.71	7 (7%) 15 17	75, 83, 96, 98	0
66	o0	100/104 (96%)	0.36	6 (6%) 21 23	72, 80, 98, 104	0
67	O1	109/112 (97%)	0.65	11 (10%) 7 8	54, 72, 123, 237	0
67	o1	109/112 (97%)	0.36	5 (4%) 32 32	46, 58, 93, 168	0
68	O2	127/129 (98%)	-0.01	3 (2%) 59 57	31, 48, 57, 70	0
68	o2	127/129 (98%)	-0.05	2 (1%) 72 70	31, 50, 60, 70	0
69	O3	106/106 (100%)	-0.09	1 (0%) 84 83	36, 43, 68, 83	0
69	o3	106/106 (100%)	-0.09	0 100 100	35, 40, 65, 72	0
70	O4	112/120 (93%)	0.59	7 (6%) 20 21	55, 74, 101, 106	0
70	o4	112/120 (93%)	0.65	9 (8%) 12 13	53, 71, 100, 105	0
71	O5	119/119 (100%)	0.38	3 (2%) 57 55	51, 67, 75, 81	0
71	o5	119/119 (100%)	0.35	5 (4%) 36 35	58, 68, 82, 90	0
72	O6	99/99 (100%)	0.69	14 (14%) 2 3	57, 66, 91, 98	0
72	o6	99/99 (100%)	0.27	7 (7%) 16 18	61, 72, 86, 100	0
73	O7	87/87 (100%)	0.35	1 (1%) 80 79	39, 46, 70, 86	0
73	o7	87/87 (100%)	0.33	5 (5%) 23 24	38, 47, 81, 114	0
74	O8	77/77 (100%)	0.54	5 (6%) 18 20	84, 91, 99, 101	0
74	o8	77/77 (100%)	1.00	15 (19%) 1 1	83, 91, 111, 122	0
75	O9	50/50 (100%)	-0.19	0 100 100	48, 52, 60, 67	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
75	o9	50/50 (100%)	0.13	0 100 100	48, 51, 61, 77	0
76	Q0	52/52 (100%)	0.12	0 100 100	48, 55, 66, 71	0
76	q0	52/52 (100%)	-0.11	0 100 100	38, 41, 48, 54	0
77	Q1	25/25 (100%)	0.71	3 (12%) 4 5	67, 68, 72, 73	0
77	q1	25/25 (100%)	0.22	0 100 100	54, 57, 67, 72	0
78	Q2	105/105 (100%)	0.80	15 (14%) 2 3	44, 63, 74, 88	0
78	q2	105/105 (100%)	0.90	18 (17%) 1 2	44, 56, 70, 88	0
79	Q3	91/91 (100%)	0.14	2 (2%) 62 60	48, 58, 72, 82	0
79	q3	91/91 (100%)	0.05	2 (2%) 62 60	46, 55, 71, 78	0
80	c0	84/96 (87%)	1.11	19 (22%) 0 1	107, 133, 141, 144	0
81	m2	0/150	-	-	-	-
82	p0	120/311 (38%)	0.48	4 (3%) 46 45	86, 103, 118, 125	0
83	p1	0/47	-	-	-	-
84	p2	0/46	-	-	-	-
All	All	32953/35147 (93%)	0.43	2389 (7%) 15 17	30, 72, 139, 489	0

All (2389) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
60	N4	75	THR	18.0
14	c2	30	VAL	13.9
19	C7	125	SER	12.7
60	N4	76	VAL	12.6
1	2	1709	C	12.2
14	c2	64	SER	11.8
16	C4	15	GLY	11.5
14	c2	123	VAL	11.2
1	2	1702	A	10.9
60	N4	74	LYS	10.8
34	sR	25	THR	10.3
60	N4	70	LYS	10.2
1	2	1694	A	10.2
60	N4	95	SER	9.9
1	2	194	U	9.9
11	S9	181	ALA	9.8
16	C4	16	VAL	9.7
1	2	1704	U	9.5
60	N4	78	ALA	9.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	1711	C	9.1
33	e1	111	GLU	9.0
33	e1	95	HIS	9.0
60	N4	90	ILE	8.9
19	C7	124	VAL	8.9
1	2	1708	U	8.8
3	S1	94	LYS	8.8
22	D0	120	SER	8.7
18	C6	20	ALA	8.6
1	6	662	U	8.6
53	M7	161	ALA	8.6
60	N4	81	PRO	8.5
1	2	1693	A	8.5
1	2	1699	G	8.5
1	2	1698	G	8.4
1	2	1690	G	8.4
14	c2	63	VAL	8.3
60	N4	85	ALA	8.3
60	N4	77	LYS	8.3
36	1	1234	G	8.3
60	n4	69	LYS	8.3
14	c2	27	ALA	8.3
9	s7	52	ALA	8.2
19	C7	123	ASN	8.2
53	M7	162	GLU	8.0
36	1	1955	U	8.0
1	2	1700	C	7.9
60	n4	68	ALA	7.8
53	M7	159	LYS	7.8
14	c2	124	LYS	7.8
45	l8	253	SER	7.6
22	D0	121	ASN	7.6
1	2	1692	G	7.6
14	C2	62	LEU	7.6
60	N4	84	GLY	7.6
16	C4	14	PHE	7.4
60	N4	94	ARG	7.4
60	N4	67	VAL	7.4
73	o7	87	SER	7.2
1	6	656	G	7.2
30	D8	44	VAL	7.2
17	c5	4	ALA	7.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	M7	163	LYS	7.2
60	N4	98	PRO	7.1
1	2	719	U	7.1
9	S7	100	PRO	7.1
7	s5	152	GLY	7.1
1	2	1710	U	7.1
1	2	1687	U	7.0
1	2	715	U	7.0
21	C9	5	SER	7.0
60	N4	73	ARG	6.9
33	e1	150	VAL	6.8
1	2	656	G	6.8
34	sR	26	SER	6.8
1	6	667	U	6.7
33	E1	152	ALA	6.7
36	1	1238	C	6.7
33	e1	102	VAL	6.7
1	2	492	A	6.7
45	l8	254	ASP	6.7
73	o7	88	ALA	6.7
33	e1	85	TYR	6.7
1	6	663	U	6.6
33	e1	145	HIS	6.6
1	2	238	U	6.6
18	c6	19	VAL	6.6
1	2	1705	C	6.6
1	6	1707	A	6.5
60	n4	132	GLY	6.5
1	2	1703	C	6.5
1	2	491	C	6.5
14	c2	126	TRP	6.5
45	L8	121	SER	6.4
53	M7	160	ALA	6.4
17	c5	135	THR	6.4
39	l2	253	GLN	6.4
36	1	1237	G	6.4
1	2	1707	A	6.3
2	S0	43	ASP	6.3
36	1	1952	G	6.3
2	S0	44	GLY	6.3
3	S1	96	LEU	6.2
1	6	718	U	6.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	S1	54	LEU	6.2
60	N4	96	LEU	6.2
1	2	493	U	6.2
14	c2	29	LYS	6.2
1	6	232	U	6.2
36	1	1764	U	6.2
3	S1	29	TRP	6.2
3	S1	28	GLU	6.2
45	l8	120	LYS	6.2
1	6	678	A	6.1
36	1	1568	U	6.1
7	S5	152	GLY	6.1
14	c2	28	LEU	6.1
36	1	1239	C	6.1
1	6	493	U	6.1
1	2	193	U	6.1
14	c2	75	VAL	6.0
1	2	718	U	6.0
39	L2	253	GLN	6.0
36	1	1349	G	6.0
60	N4	88	ASP	6.0
22	d0	18	GLN	6.0
60	N4	80	ARG	6.0
47	m0	112	GLN	6.0
22	D0	93	LEU	5.9
60	n4	67	VAL	5.9
47	m0	111	LEU	5.9
3	S1	91	VAL	5.9
14	c2	26	ASP	5.9
36	5	442	G	5.9
1	6	658	C	5.9
1	6	665	U	5.9
1	2	1691	A	5.9
1	6	664	U	5.9
30	D8	43	ASN	5.8
14	c2	84	ASN	5.8
19	C7	86	PRO	5.8
33	e1	80	ARG	5.8
26	D4	2	SER	5.8
14	c2	59	LEU	5.8
3	S1	25	THR	5.8
14	c2	132	GLU	5.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	5	1569	U	5.8
16	C4	78	ALA	5.7
1	6	1694	A	5.7
60	N4	71	ARG	5.7
1	6	1059	U	5.7
34	sR	205	SER	5.7
1	2	845	G	5.7
18	c6	142	TYR	5.7
20	c8	22	VAL	5.7
1	6	490	C	5.7
60	N4	82	ILE	5.7
1	6	676	G	5.6
2	S0	24	LEU	5.6
14	c2	121	VAL	5.6
1	6	495	C	5.6
39	l2	252	THR	5.6
1	6	194	U	5.6
1	2	235	G	5.5
14	C2	141	SER	5.5
18	C6	3	ALA	5.5
1	2	490	C	5.5
1	2	488	G	5.5
1	6	666	U	5.5
1	2	1697	G	5.5
1	2	1712	A	5.5
3	S1	93	GLY	5.5
5	S3	44	THR	5.5
22	d0	99	ILE	5.5
36	1	1243	G	5.5
32	e0	63	GLN	5.5
8	S6	1	MET	5.5
1	6	1702	A	5.5
53	M7	168	LEU	5.4
27	d5	37	GLN	5.4
33	e1	78	LYS	5.4
32	E0	49	LEU	5.4
55	M9	181	ARG	5.4
1	6	489	C	5.4
22	d0	121	ASN	5.4
1	6	1693	A	5.4
1	2	1696	G	5.4
19	c7	122	ILE	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	c7	53	TYR	5.3
34	sR	294	TRP	5.3
20	C8	23	ASP	5.3
7	s5	151	GLY	5.3
73	O7	87	SER	5.3
22	D0	19	ILE	5.3
61	n5	23	ALA	5.3
19	C7	126	ALA	5.3
34	sR	83	ALA	5.3
1	6	1710	U	5.3
14	C2	32	LEU	5.2
1	6	668	C	5.2
39	l2	250	GLN	5.2
14	c2	56	GLU	5.2
21	C9	71	VAL	5.2
11	S9	180	LYS	5.2
9	S7	108	GLN	5.2
1	2	506	A	5.1
45	l8	121	SER	5.1
19	c7	65	PRO	5.1
33	e1	134	ASN	5.1
3	S1	45	LYS	5.1
1	2	132	U	5.1
1	2	913	G	5.1
1	2	135	A	5.1
1	2	217	A	5.1
5	s3	175	VAL	5.1
3	S1	95	ASN	5.1
16	C4	41	ARG	5.1
5	s3	145	ALA	5.1
33	e1	90	LYS	5.1
36	5	1574	C	5.1
1	6	1217	A	5.1
34	sR	3	SER	5.1
1	2	134	U	5.1
36	1	1278	A	5.0
36	1	1259	A	5.0
43	l6	128	LYS	5.0
3	s1	20	VAL	5.0
1	2	720	G	5.0
1	2	1689	A	5.0
18	c6	8	GLN	5.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	c2	34	THR	5.0
1	2	1701	A	5.0
39	l2	249	SER	5.0
14	C2	49	THR	5.0
36	1	3289	G	5.0
14	C2	28	LEU	5.0
36	5	1567	U	5.0
14	C2	63	VAL	5.0
9	s7	2	SER	5.0
14	C2	88	LEU	5.0
1	2	713	A	5.0
32	E0	48	THR	5.0
60	n4	73	ARG	5.0
1	6	655	G	5.0
1	6	705	U	5.0
1	2	717	C	5.0
33	E1	86	THR	4.9
36	1	1236	G	4.9
14	C2	67	THR	4.9
36	5	1025	A	4.9
13	c1	146	ALA	4.9
1	2	721	U	4.9
1	2	830	U	4.9
7	S5	37	GLN	4.9
2	S0	196	SER	4.9
22	D0	51	VAL	4.9
3	S1	201	THR	4.9
33	E1	87	THR	4.9
36	5	2503	G	4.9
20	c8	18	LEU	4.9
1	6	659	C	4.9
14	c2	86	VAL	4.9
67	O1	4	LEU	4.9
31	d9	5	ASN	4.9
7	S5	161	ASP	4.8
14	c2	128	ALA	4.8
18	C6	92	TYR	4.8
1	6	229	U	4.8
14	c2	143	GLN	4.8
36	1	1569	U	4.8
15	C3	61	THR	4.8
30	d8	13	ILE	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	s7	93	LEU	4.8
1	2	725	U	4.8
20	C8	39	GLY	4.8
26	D4	67	GLY	4.8
1	2	722	G	4.8
1	6	1699	G	4.8
36	1	1567	U	4.8
35	SM	84	LYS	4.8
36	5	1562	C	4.8
60	n4	70	LYS	4.8
36	1	1571	A	4.8
22	D0	92	ASP	4.8
34	sR	168	THR	4.8
1	6	1712	A	4.8
36	5	1566	A	4.8
1	6	494	U	4.8
45	L8	122	LYS	4.8
34	SR	72	THR	4.7
34	SR	79	TYR	4.7
33	e1	77	GLY	4.7
1	2	658	C	4.7
30	D8	15	VAL	4.7
1	2	218	A	4.7
1	2	716	C	4.7
1	6	654	C	4.7
27	d5	105	THR	4.7
26	d4	18	LEU	4.7
20	C8	8	GLN	4.7
6	S4	259	GLN	4.7
30	d8	17	GLY	4.7
32	e0	62	VAL	4.7
58	N2	94	ARG	4.7
19	C7	85	VAL	4.7
36	1	1815	U	4.6
36	5	620	U	4.6
28	D6	9	GLY	4.6
20	C8	10	SER	4.6
18	c6	20	ALA	4.6
74	O8	5	ILE	4.6
13	c1	147	GLY	4.6
16	C4	75	GLY	4.6
32	e0	49	LEU	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	75	U	4.6
36	1	1570	U	4.6
21	C9	141	GLU	4.6
1	2	1686	C	4.6
60	N4	72	SER	4.6
32	E0	54	ARG	4.6
33	e1	79	LYS	4.6
80	c0	65	TYR	4.6
36	1	3287	U	4.6
72	O6	69	ALA	4.6
16	C4	29	HIS	4.6
36	5	1349	G	4.6
45	L8	114	ALA	4.6
59	N3	2	SER	4.6
28	D6	80	HIS	4.6
33	E1	137	ASP	4.6
1	6	217	A	4.6
2	S0	23	HIS	4.6
31	D9	4	GLU	4.6
59	N3	3	GLY	4.6
70	O4	110	GLU	4.6
33	E1	93	HIS	4.6
1	2	1370	U	4.6
26	d4	26	ASP	4.5
1	2	714	G	4.5
14	c2	76	GLU	4.5
36	1	1277	C	4.5
1	6	501	U	4.5
18	C6	11	GLY	4.5
79	q3	2	ALA	4.5
14	c2	80	ASN	4.5
19	C7	70	SER	4.5
8	S6	12	SER	4.5
1	2	234	G	4.5
1	2	183	U	4.5
36	1	1762	C	4.5
1	6	1711	C	4.5
13	C1	147	GLY	4.5
13	c1	4	GLU	4.5
1	2	192	U	4.5
36	5	1764	U	4.5
14	c2	125	ASN	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	D0	22	ILE	4.4
14	C2	41	LEU	4.4
34	sR	121	MET	4.4
1	6	492	A	4.4
26	D4	34	ASN	4.4
22	d0	100	VAL	4.4
60	N4	79	GLN	4.4
35	SM	87	THR	4.4
36	1	2539	C	4.4
3	S1	151	LYS	4.4
34	SR	81	LEU	4.4
33	E1	85	TYR	4.4
36	1	1260	A	4.4
45	l8	107	GLU	4.4
58	N2	27	VAL	4.4
35	SM	85	SER	4.4
1	2	723	G	4.4
36	5	1573	G	4.4
17	c5	50	THR	4.4
60	n4	66	GLU	4.4
19	C7	121	VAL	4.3
1	2	131	C	4.3
35	sM	84	LYS	4.3
36	1	1245	A	4.3
60	N4	68	ALA	4.3
28	D6	86	VAL	4.3
60	n4	75	THR	4.3
45	l8	252	ASN	4.3
1	2	1706	C	4.3
36	1	1228	C	4.3
29	D7	41	LEU	4.3
3	S1	92	GLN	4.3
60	N4	69	LYS	4.3
1	2	74	U	4.3
28	D6	8	ASN	4.3
65	N9	55	ALA	4.3
5	S3	208	ILE	4.3
17	c5	5	VAL	4.3
26	D4	107	GLN	4.3
34	SR	160	GLU	4.3
36	1	3286	G	4.3
36	5	443	G	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	C4	40	ALA	4.3
33	E1	124	PRO	4.3
63	n7	2	ALA	4.3
1	2	195	G	4.3
36	5	491	C	4.3
67	o1	112	ASP	4.3
14	c2	115	VAL	4.3
1	6	226	A	4.2
36	1	1951	C	4.2
14	C2	50	LYS	4.2
20	C8	71	GLN	4.2
26	d4	135	ASP	4.2
36	5	252	U	4.2
58	n2	98	THR	4.2
35	sM	83	LYS	4.2
58	n2	105	LEU	4.2
2	s0	186	GLY	4.2
20	C8	22	VAL	4.2
3	S1	23	PRO	4.2
18	c6	18	ALA	4.2
42	L5	213	ASP	4.2
78	Q2	99	GLN	4.2
30	D8	26	THR	4.2
21	C9	90	PRO	4.2
45	l8	246	MET	4.2
62	N6	127	GLU	4.2
78	Q2	104	LEU	4.2
36	1	1016	C	4.2
36	5	1350	A	4.2
11	S9	186	GLU	4.2
36	5	1572	U	4.2
53	M7	164	LYS	4.2
35	sM	49	LYS	4.2
22	D0	96	PRO	4.2
22	d0	107	THR	4.2
33	e1	124	PRO	4.2
58	N2	98	THR	4.2
34	SR	115	ILE	4.2
2	S0	40	ALA	4.2
1	6	700	C	4.1
33	E1	134	ASN	4.1
20	C8	101	LEU	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
61	N5	23	ALA	4.1
22	d0	93	LEU	4.1
1	2	75	U	4.1
4	s2	92	ALA	4.1
16	C4	13	VAL	4.1
65	N9	54	LEU	4.1
34	SR	212	ALA	4.1
1	6	651	G	4.1
34	SR	253	ALA	4.1
1	2	696	C	4.1
27	d5	89	ILE	4.1
36	1	1240	A	4.1
36	1	1028	U	4.1
11	S9	182	GLU	4.1
18	c6	29	ILE	4.1
29	d7	59	CYS	4.1
5	S3	88	ALA	4.1
1	6	679	U	4.1
26	d4	67	GLY	4.1
17	c5	134	THR	4.1
1	2	1713	G	4.1
30	d8	43	ASN	4.1
33	e1	148	TYR	4.1
36	1	1351	U	4.1
58	n2	97	SER	4.1
35	SM	88	ARG	4.1
36	5	1016	C	4.1
1	6	491	C	4.0
14	c2	131	ASP	4.0
3	S1	146	GLN	4.0
60	N4	87	LEU	4.0
30	D8	7	VAL	4.0
1	2	712	G	4.0
3	S1	46	THR	4.0
36	1	1350	A	4.0
36	1	1954	G	4.0
32	E0	53	LYS	4.0
36	1	1261	G	4.0
11	S9	64	GLU	4.0
22	d0	104	THR	4.0
36	1	1025	A	4.0
13	C1	145	ALA	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	E1	151	ASN	4.0
36	1	1229	G	4.0
22	D0	20	ILE	4.0
18	c6	4	VAL	4.0
13	C1	27	THR	4.0
38	8	81	U	4.0
1	2	489	C	4.0
60	N4	93	ARG	4.0
14	c2	122	VAL	4.0
21	C9	2	PRO	4.0
4	S2	90	THR	4.0
9	s7	3	ALA	4.0
11	S9	184	SER	4.0
34	sR	46	LYS	4.0
1	2	848	C	4.0
1	6	239	C	4.0
28	D6	52	ASP	4.0
26	d4	134	ALA	4.0
34	SR	96	THR	4.0
45	L8	115	ALA	4.0
33	E1	106	TYR	3.9
1	6	506	A	3.9
36	1	1027	A	3.9
1	6	231	U	3.9
10	S8	21	PHE	3.9
17	C5	50	THR	3.9
1	2	280	U	3.9
13	C1	26	LYS	3.9
14	C2	73	LYS	3.9
30	D8	48	VAL	3.9
3	S1	30	PHE	3.9
14	c2	47	GLU	3.9
36	5	1763	U	3.9
33	e1	112	GLY	3.9
21	C9	91	TYR	3.9
11	S9	35	GLY	3.9
59	N3	5	GLY	3.9
1	6	1687	U	3.9
36	1	1763	U	3.9
1	6	487	G	3.9
33	e1	104	SER	3.9
60	n4	131	ALA	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	C2	126	TRP	3.9
14	c2	82	PRO	3.9
18	C6	26	LYS	3.9
14	c2	43	ARG	3.9
1	6	721	U	3.9
40	l3	140	ASP	3.9
6	S4	261	LEU	3.9
19	C7	120	SER	3.9
58	N2	93	ILE	3.9
1	6	657	U	3.8
3	S1	20	VAL	3.8
17	c5	136	SER	3.8
30	D8	59	SER	3.8
3	S1	55	LYS	3.8
60	n4	128	ALA	3.8
1	2	133	U	3.8
36	1	1256	G	3.8
22	d0	98	GLN	3.8
1	6	240	U	3.8
1	2	1695	G	3.8
1	6	674	C	3.8
40	l3	387	LEU	3.8
67	o1	4	LEU	3.8
78	Q2	12	CYS	3.8
31	d9	4	GLU	3.8
19	c7	17	ILE	3.8
9	s7	108	GLN	3.8
33	e1	146	SER	3.8
42	l5	270	LYS	3.8
1	6	1695	G	3.8
68	O2	128	LEU	3.8
36	5	1580	A	3.8
1	6	669	G	3.8
1	6	1228	G	3.8
7	s5	129	PRO	3.8
34	sR	315	VAL	3.8
4	s2	93	GLY	3.8
13	c1	3	THR	3.8
14	C2	26	ASP	3.8
27	D5	48	ASP	3.8
36	1	2772	C	3.8
28	D6	60	PRO	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	D8	21	SER	3.8
1	6	675	U	3.8
34	sR	92	TRP	3.8
58	N2	80	THR	3.8
36	5	1028	U	3.8
9	s7	90	VAL	3.8
29	D7	38	PRO	3.8
28	D6	90	GLU	3.8
33	E1	100	LEU	3.8
19	c7	103	ASP	3.8
61	N5	30	ALA	3.8
36	5	2506	U	3.7
49	M3	98	ASP	3.7
66	o0	67	VAL	3.7
22	d0	94	GLU	3.7
14	c2	130	THR	3.7
20	C8	73	MET	3.7
36	1	1262	G	3.7
30	D8	56	LEU	3.7
59	N3	100	GLY	3.7
35	SM	141	ALA	3.7
60	N4	83	THR	3.7
36	1	3288	G	3.7
78	q2	79	THR	3.7
19	c7	67	ARG	3.7
36	1	1572	U	3.7
36	5	1261	G	3.7
9	S7	99	LEU	3.7
35	SM	19	VAL	3.7
1	2	1688	U	3.7
30	D8	9	LEU	3.7
57	N1	121	ALA	3.7
58	n2	106	ALA	3.7
1	6	719	U	3.7
16	C4	80	HIS	3.7
1	2	724	C	3.7
19	C7	71	PHE	3.7
33	e1	110	ALA	3.7
10	S8	200	LYS	3.7
19	C7	117	LEU	3.7
3	s1	153	HIS	3.7
1	6	661	A	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	E1	83	LYS	3.7
36	5	1563	C	3.7
1	2	657	U	3.6
55	M9	170	ARG	3.6
36	1	1270	A	3.6
38	8	80	A	3.6
33	e1	86	THR	3.6
8	S6	152	ASP	3.6
16	C4	110	LEU	3.6
36	1	1230	G	3.6
65	N9	57	ALA	3.6
72	O6	32	ALA	3.6
55	m9	113	GLY	3.6
1	2	677	G	3.6
44	L7	23	ALA	3.6
36	1	1263	A	3.6
45	L8	207	ASP	3.6
3	s1	91	VAL	3.6
1	2	829	A	3.6
14	c2	96	GLN	3.6
36	1	3163	A	3.6
33	e1	113	LYS	3.6
2	S0	41	ARG	3.6
70	o4	106	LYS	3.6
10	s8	67	TRP	3.6
45	L8	123	GLN	3.6
22	d0	95	ALA	3.6
53	M7	184	ALA	3.6
14	C2	74	LEU	3.6
14	c2	133	LEU	3.6
17	c5	6	ASN	3.6
16	C4	11	SER	3.6
34	SR	252	LEU	3.6
36	1	1280	C	3.6
36	5	1352	A	3.6
14	c2	136	ILE	3.6
26	d4	12	VAL	3.6
30	D8	25	VAL	3.6
3	S1	44	GLY	3.6
13	C1	3	THR	3.6
28	D6	56	ALA	3.6
30	D8	54	LEU	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	261	U	3.5
19	c7	119	LEU	3.5
30	D8	16	LEU	3.5
1	6	677	G	3.5
17	c5	133	ALA	3.5
9	s7	92	PHE	3.5
14	C2	27	ALA	3.5
36	5	2538	U	3.5
22	d0	56	VAL	3.5
28	D6	55	GLU	3.5
22	D0	21	LYS	3.5
33	E1	103	LEU	3.5
58	n2	92	TRP	3.5
36	1	1095	U	3.5
27	D5	58	ARG	3.5
20	c8	15	LEU	3.5
45	l8	115	ALA	3.5
38	4	158	U	3.5
59	N3	4	ASN	3.5
22	d0	57	ARG	3.5
1	2	678	A	3.5
34	SR	4	ASN	3.5
22	D0	116	VAL	3.5
18	c6	89	LEU	3.5
2	S0	107	PHE	3.5
36	1	1235	U	3.5
36	5	1564	U	3.5
38	4	81	U	3.5
39	L2	228	GLY	3.5
56	N0	1	MET	3.5
10	S8	20	GLN	3.5
14	c2	57	ALA	3.5
14	c2	65	SER	3.5
2	s0	24	LEU	3.5
16	C4	136	ARG	3.5
33	e1	127	GLY	3.5
47	M0	217	PHE	3.5
1	2	1059	U	3.5
34	SR	231	MET	3.5
19	C7	101	ASN	3.4
6	S4	54	TYR	3.4
36	5	1765	U	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	S6	156	PHE	3.4
3	S1	42	ASN	3.4
22	d0	92	ASP	3.4
20	c8	17	LEU	3.4
74	o8	69	LEU	3.4
1	2	730	G	3.4
36	1	3290	G	3.4
14	c2	104	ALA	3.4
34	sR	301	LEU	3.4
36	5	1571	A	3.4
65	N9	56	ALA	3.4
36	1	1269	U	3.4
22	D0	48	HIS	3.4
22	d0	90	TYR	3.4
34	SR	32	LEU	3.4
55	m9	115	ILE	3.4
33	E1	129	GLY	3.4
20	C8	141	THR	3.4
30	d8	26	THR	3.4
1	6	1708	U	3.4
3	S1	53	GLY	3.4
49	m3	131	LYS	3.4
1	2	649	U	3.4
7	S5	222	LYS	3.4
32	e0	55	ARG	3.4
49	M3	130	GLY	3.4
49	M3	129	ASN	3.4
13	c1	2	SER	3.4
22	d0	52	LYS	3.4
1	6	234	G	3.4
20	c8	19	ASN	3.4
30	D8	41	VAL	3.4
3	S1	142	PHE	3.4
8	S6	180	THR	3.4
6	s4	132	GLY	3.4
34	sR	266	ASP	3.4
36	5	1560	G	3.4
60	n4	76	VAL	3.4
22	d0	19	ILE	3.4
4	s2	87	GLN	3.4
19	c7	25	THR	3.4
26	d4	9	THR	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	c7	10	LYS	3.4
9	s7	58	LEU	3.4
36	5	249	U	3.4
45	l8	116	VAL	3.4
3	S1	130	SER	3.4
60	N4	92	GLU	3.4
74	O8	55	VAL	3.3
1	2	740	A	3.3
74	o8	34	ALA	3.3
22	d0	103	ILE	3.3
7	S5	41	LYS	3.3
26	d4	69	SER	3.3
45	l8	113	ALA	3.3
1	2	136	C	3.3
4	s2	84	LYS	3.3
28	D6	93	LYS	3.3
1	2	504	U	3.3
18	c6	139	GLN	3.3
31	d9	17	GLY	3.3
5	S3	179	GLN	3.3
14	C2	90	LYS	3.3
72	O6	99	ARG	3.3
1	2	236	A	3.3
5	s3	42	THR	3.3
14	C2	89	ILE	3.3
20	C8	2	SER	3.3
36	1	1566	A	3.3
53	M7	174	GLY	3.3
14	C2	104	ALA	3.3
47	M0	209	ASN	3.3
74	o8	72	THR	3.3
8	S6	16	PHE	3.3
36	5	1579	C	3.3
3	s1	28	GLU	3.3
58	n2	33	TYR	3.3
72	O6	31	GLY	3.3
74	O8	28	ASN	3.3
5	s3	43	PRO	3.3
58	n2	13	LYS	3.3
60	n4	133	THR	3.3
36	5	1565	G	3.3
1	2	708	C	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	710	U	3.3
11	S9	101	VAL	3.3
2	S0	25	GLY	3.3
10	s8	80	GLY	3.3
14	c2	85	LYS	3.3
30	D8	10	ALA	3.3
30	D8	60	GLU	3.3
33	e1	147	VAL	3.3
9	S7	98	ILE	3.3
10	S8	8	ARG	3.3
22	D0	99	ILE	3.3
5	s3	148	LYS	3.3
5	S3	213	GLU	3.3
9	S7	87	ASP	3.3
20	C8	9	GLY	3.3
33	e1	106	TYR	3.3
14	c2	31	VAL	3.3
7	s5	127	GLN	3.2
66	O0	94	GLU	3.2
34	sR	24	ALA	3.2
11	S9	86	LEU	3.2
30	D8	66	LEU	3.2
14	c2	142	GLN	3.2
22	D0	54	GLY	3.2
16	C4	102	LEU	3.2
34	sR	214	ALA	3.2
78	Q2	100	LYS	3.2
3	S1	148	ASN	3.2
31	D9	5	ASN	3.2
35	sM	85	SER	3.2
68	o2	127	ALA	3.2
1	2	232	U	3.2
78	Q2	11	TYR	3.2
18	C6	21	HIS	3.2
36	5	439	C	3.2
30	d8	9	LEU	3.2
74	o8	71	PRO	3.2
44	l7	22	THR	3.2
45	l8	247	ASP	3.2
1	2	191	C	3.2
1	2	682	C	3.2
1	6	230	C	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	729	G	3.2
1	6	225	A	3.2
20	C8	32	LEU	3.2
59	N3	6	ALA	3.2
6	S4	138	TYR	3.2
1	2	233	C	3.2
14	C2	37	VAL	3.2
30	D8	28	VAL	3.2
33	e1	143	LYS	3.2
5	s3	178	ARG	3.2
16	C4	103	ARG	3.2
7	s5	145	ASP	3.2
1	6	235	G	3.2
61	N5	24	LEU	3.2
14	c2	60	VAL	3.2
6	S4	254	ARG	3.2
34	sR	61	PHE	3.2
3	S1	144	ARG	3.2
14	c2	100	TRP	3.2
27	d5	86	GLU	3.2
36	5	1561	G	3.2
70	O4	66	SER	3.2
45	L8	110	THR	3.2
8	S6	186	ARG	3.2
29	d7	57	GLU	3.2
1	6	660	G	3.2
1	6	1696	G	3.2
52	m6	182	ASN	3.2
16	C4	79	VAL	3.2
34	sR	72	THR	3.2
72	O6	56	ARG	3.2
80	c0	50	THR	3.2
42	L5	207	TYR	3.2
45	l8	106	LYS	3.2
14	C2	33	ARG	3.2
27	D5	37	GLN	3.2
1	2	127	G	3.2
1	6	228	G	3.2
36	1	1352	A	3.2
19	c7	57	LEU	3.1
3	S1	100	PHE	3.1
67	O1	79	ARG	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	s5	128	ASN	3.1
22	d0	117	VAL	3.1
30	D8	45	LYS	3.1
45	L8	213	LYS	3.1
7	S5	164	PRO	3.1
42	L5	293	LEU	3.1
14	C2	136	ILE	3.1
1	2	846	G	3.1
3	S1	226	GLY	3.1
36	1	1274	A	3.1
28	D6	57	SER	3.1
14	C2	38	HIS	3.1
20	c8	32	LEU	3.1
40	l3	146	ARG	3.1
34	SR	192	PHE	3.1
34	sR	177	MET	3.1
32	E0	50	VAL	3.1
36	1	1265	U	3.1
19	C7	2	GLY	3.1
25	D3	42	PRO	3.1
61	n5	37	THR	3.1
3	S1	60	ALA	3.1
1	2	497	G	3.1
9	S7	115	SER	3.1
58	n2	52	ASN	3.1
4	s2	90	THR	3.1
14	c2	137	MET	3.1
44	l7	26	VAL	3.1
3	S1	99	ASN	3.1
3	S1	204	ILE	3.1
1	2	239	C	3.1
1	6	1227	A	3.1
70	O4	69	HIS	3.1
8	S6	154	ARG	3.1
1	6	496	G	3.1
36	1	1029	G	3.1
36	1	2874	G	3.1
3	S1	149	GLN	3.1
58	N2	77	LYS	3.1
32	E0	7	SER	3.1
33	E1	135	HIS	3.1
1	2	847	A	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	673	A	3.1
36	1	1232	C	3.1
1	6	1265	G	3.1
34	sR	159	ASN	3.1
36	1	252	U	3.1
3	S1	143	THR	3.1
30	D8	8	THR	3.1
33	E1	116	LYS	3.1
2	S0	38	PHE	3.1
7	S5	66	GLN	3.1
7	S5	153	GLY	3.1
80	c0	29	GLN	3.1
16	C4	74	VAL	3.1
55	M9	178	ALA	3.1
17	C5	78	THR	3.1
58	N2	16	THR	3.1
67	O1	105	GLN	3.1
36	5	1761	C	3.1
45	L8	245	LYS	3.1
3	S1	153	HIS	3.1
3	s1	30	PHE	3.1
14	C2	119	SER	3.1
19	C7	53	TYR	3.1
36	5	250	U	3.1
66	o0	59	TYR	3.1
34	SR	52	GLN	3.1
45	l8	110	THR	3.1
1	2	197	A	3.1
36	1	1273	A	3.1
36	5	2539	C	3.1
1	2	260	U	3.0
1	2	1056	U	3.0
19	C7	116	LYS	3.0
61	n5	142	ILE	3.0
58	n2	14	THR	3.0
1	6	653	C	3.0
28	D6	62	TYR	3.0
30	d8	32	PHE	3.0
66	o0	100	ILE	3.0
30	d8	27	GLN	3.0
58	n2	44	GLU	3.0
70	O4	55	SER	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	d0	116	VAL	3.0
1	6	738	G	3.0
11	S9	185	GLY	3.0
31	d9	23	VAL	3.0
53	M7	166	VAL	3.0
1	6	1397	U	3.0
11	s9	139	GLN	3.0
58	N2	62	VAL	3.0
67	O1	107	VAL	3.0
1	6	731	C	3.0
58	N2	89	LEU	3.0
46	L9	10	ILE	3.0
58	n2	96	VAL	3.0
35	SM	83	LYS	3.0
34	SR	3	SER	3.0
1	2	500	C	3.0
3	s1	52	THR	3.0
14	c2	40	GLY	3.0
33	e1	125	THR	3.0
34	SR	284	ALA	3.0
20	C8	69	ILE	3.0
29	D7	75	GLU	3.0
36	1	3154	C	3.0
10	s8	200	LYS	3.0
10	s8	111	GLN	3.0
49	m3	133	PRO	3.0
34	sR	313	TRP	3.0
45	l8	52	TRP	3.0
48	M1	60	ARG	3.0
60	N4	86	SER	3.0
3	S1	147	ALA	3.0
7	S5	36	ALA	3.0
11	S9	95	TYR	3.0
14	c2	83	GLU	3.0
19	c7	8	THR	3.0
30	D8	17	GLY	3.0
34	SR	199	ILE	3.0
34	sR	253	ALA	3.0
24	D2	74	VAL	3.0
36	1	1761	C	3.0
36	1	3360	C	3.0
14	c2	58	LEU	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	S4	260	GLY	3.0
13	C1	2	SER	3.0
5	S3	87	TYR	3.0
5	S3	217	ILE	3.0
14	c2	61	VAL	3.0
50	M4	7	VAL	3.0
18	C6	28	LEU	3.0
1	6	1235	C	3.0
36	1	1765	U	3.0
14	c2	135	MET	3.0
34	sR	251	TRP	3.0
10	S8	104	ILE	3.0
41	L4	304	GLN	3.0
36	1	2205	U	3.0
36	5	1820	U	3.0
6	S4	60	GLU	3.0
17	c5	74	ALA	3.0
45	L8	113	ALA	3.0
31	d9	6	VAL	3.0
20	c8	21	ASN	3.0
33	e1	122	SER	3.0
80	c0	9	ASN	3.0
36	1	1573	G	3.0
34	SR	106	HIS	3.0
18	c6	63	ILE	3.0
1	2	230	C	3.0
18	c6	7	VAL	3.0
19	c7	13	SER	3.0
32	E0	61	SER	3.0
9	S7	89	HIS	3.0
22	D0	105	GLN	3.0
22	d0	29	THR	3.0
13	C1	146	ALA	2.9
36	1	547	G	2.9
45	l8	49	TYR	2.9
78	q2	81	ALA	2.9
1	6	193	U	2.9
3	S1	47	LEU	2.9
49	m3	190	LYS	2.9
26	D4	104	SER	2.9
34	SR	147	HIS	2.9
35	SM	89	ARG	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	s7	51	VAL	2.9
3	S1	205	PHE	2.9
36	1	1241	U	2.9
36	5	1568	U	2.9
49	m3	179	PHE	2.9
14	C2	55	GLY	2.9
19	C7	41	ILE	2.9
13	c1	5	LEU	2.9
34	SR	36	ALA	2.9
18	c6	64	ASP	2.9
36	5	1570	U	2.9
1	6	1698	G	2.9
22	d0	55	PRO	2.9
36	1	1759	C	2.9
10	s8	117	TYR	2.9
17	c5	109	PRO	2.9
45	l8	210	ALA	2.9
1	6	714	G	2.9
36	1	3361	G	2.9
70	O4	109	THR	2.9
14	c2	95	LYS	2.9
14	C2	135	MET	2.9
26	d4	71	GLY	2.9
32	e0	56	MET	2.9
6	S4	258	GLN	2.9
1	2	494	U	2.9
1	6	794	U	2.9
34	SR	33	LEU	2.9
14	c2	79	ALA	2.9
36	1	1356	U	2.9
9	S7	101	LYS	2.9
22	D0	52	LYS	2.9
35	SM	49	LYS	2.9
36	5	244	G	2.9
70	o4	28	GLY	2.9
18	C6	66	ARG	2.9
1	2	844	A	2.9
66	O0	95	ALA	2.9
14	C2	130	THR	2.9
7	s5	153	GLY	2.9
3	s1	97	LEU	2.9
8	S6	5	ILE	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	C8	18	LEU	2.9
61	n5	33	ARG	2.9
36	1	1279	C	2.9
78	Q2	98	LYS	2.9
16	C4	27	PHE	2.9
36	1	3291	G	2.9
70	o4	62	TYR	2.9
1	2	1362	U	2.9
33	e1	123	ASN	2.9
49	M3	133	PRO	2.9
45	l8	117	ALA	2.9
55	M9	188	ASP	2.9
14	c2	87	PRO	2.9
36	5	1762	C	2.9
1	2	507	U	2.9
5	s3	110	LEU	2.9
36	1	1242	G	2.9
36	5	1354	G	2.9
18	C6	29	ILE	2.9
52	m6	184	THR	2.9
8	s6	50	PHE	2.9
34	SR	254	ALA	2.9
3	s1	31	ASP	2.9
30	D8	62	GLU	2.9
9	S7	109	VAL	2.9
20	C8	3	LEU	2.9
21	C9	85	SER	2.9
52	m6	180	SER	2.9
28	D6	79	ILE	2.9
36	5	2505	U	2.9
1	2	1371	A	2.9
1	2	1601	G	2.9
50	M4	135	LEU	2.9
22	D0	97	VAL	2.8
17	C5	70	ASN	2.8
26	D4	69	SER	2.8
1	2	495	C	2.8
1	2	1446	A	2.8
1	6	1371	A	2.8
8	S6	124	LEU	2.8
22	d0	102	ARG	2.8
30	d8	45	LYS	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	1700	C	2.8
36	1	3285	C	2.8
5	s3	176	LEU	2.8
30	D8	35	ASP	2.8
33	e1	137	ASP	2.8
60	n4	84	GLY	2.8
74	o8	35	GLY	2.8
5	s3	208	ILE	2.8
6	S4	137	PRO	2.8
30	D8	30	VAL	2.8
5	S3	148	LYS	2.8
9	S7	76	LYS	2.8
27	d5	85	LYS	2.8
67	O1	102	LYS	2.8
7	S5	181	GLU	2.8
12	C0	13	GLN	2.8
7	S5	151	GLY	2.8
16	c4	110	LEU	2.8
2	S0	185	ARG	2.8
36	1	1272	C	2.8
2	s0	19	ALA	2.8
45	L8	52	TRP	2.8
35	SM	50	ASN	2.8
12	C0	67	THR	2.8
14	c2	55	GLY	2.8
21	C9	89	ARG	2.8
33	e1	115	THR	2.8
26	d4	27	VAL	2.8
36	1	566	G	2.8
80	c0	76	LEU	2.8
1	2	499	U	2.8
1	2	828	U	2.8
1	2	1795	U	2.8
1	6	192	U	2.8
6	S4	143	ASP	2.8
29	D7	37	CYS	2.8
34	sR	316	MET	2.8
2	S0	163	ASN	2.8
11	s9	171	ARG	2.8
19	c7	11	ARG	2.8
20	C8	15	LEU	2.8
70	O4	113	LYS	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
72	o6	98	ARG	2.8
36	5	1278	A	2.8
26	D4	118	ILE	2.8
1	6	1370	U	2.8
17	c5	104	GLN	2.8
34	sR	150	TRP	2.8
66	O0	91	SER	2.8
34	SR	211	ILE	2.8
46	L9	45	PHE	2.8
35	sM	82	THR	2.8
38	4	80	A	2.8
6	S4	252	ARG	2.8
18	c6	21	HIS	2.8
26	D4	29	HIS	2.8
35	SM	135	ALA	2.8
49	M3	132	ALA	2.8
71	O5	120	ALA	2.8
1	2	228	G	2.8
1	6	1697	G	2.8
22	d0	105	GLN	2.8
31	d9	29	GLY	2.8
1	6	1703	C	2.8
22	D0	117	VAL	2.8
22	d0	97	VAL	2.8
57	n1	116	ARG	2.8
36	1	1271	A	2.8
45	L8	99	PRO	2.8
47	M0	200	LEU	2.8
58	N2	108	TYR	2.8
72	O6	33	ALA	2.8
14	c2	127	GLY	2.8
17	C5	104	GLN	2.8
45	L8	116	VAL	2.8
22	d0	106	ILE	2.8
36	1	1581	C	2.8
3	S1	133	TYR	2.8
14	C2	78	LEU	2.8
27	d5	104	ALA	2.8
30	d8	24	GLY	2.8
58	N2	46	ALA	2.8
20	C8	72	ILE	2.8
36	1	2538	U	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	M6	182	ASN	2.8
2	S0	19	ALA	2.8
10	S8	167	ALA	2.8
34	sR	48	THR	2.8
36	5	1017	C	2.8
1	2	824	G	2.8
4	s2	86	VAL	2.8
12	C0	12	HIS	2.8
18	c6	5	PRO	2.8
14	C2	30	VAL	2.8
27	D5	88	ILE	2.8
45	L8	206	GLU	2.8
36	5	1026	A	2.8
8	S6	172	ALA	2.8
14	C2	35	ALA	2.8
26	D4	66	GLY	2.8
1	6	1441	C	2.8
8	S6	36	VAL	2.8
13	c1	42	PHE	2.8
14	C2	91	VAL	2.8
34	sR	50	ASP	2.8
42	l5	274	GLN	2.7
9	S7	17	GLU	2.7
14	C2	129	GLU	2.7
33	E1	139	LEU	2.7
49	m3	130	GLY	2.7
52	m6	172	ARG	2.7
40	l3	386	ASP	2.7
8	S6	143	LYS	2.7
13	c1	43	LYS	2.7
34	sR	161	LYS	2.7
46	l9	191	LEU	2.7
1	6	712	G	2.7
21	C9	72	GLY	2.7
58	N2	63	VAL	2.7
72	O6	96	ALA	2.7
80	c0	45	ALA	2.7
2	S0	28	ASN	2.7
14	C2	68	GLU	2.7
11	S9	138	LYS	2.7
1	2	1060	U	2.7
13	C1	25	VAL	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	sR	244	ALA	2.7
48	M1	167	TYR	2.7
71	o5	120	ALA	2.7
14	c2	141	SER	2.7
30	D8	31	GLU	2.7
33	E1	82	LYS	2.7
20	C8	66	LEU	2.7
24	D2	73	GLY	2.7
34	SR	186	PHE	2.7
36	1	3396	U	2.7
2	s0	185	ARG	2.7
62	n6	62	SER	2.7
45	L8	46	LEU	2.7
55	m9	112	ALA	2.7
18	c6	26	LYS	2.7
27	d5	50	ILE	2.7
34	SR	46	LYS	2.7
61	n5	36	LYS	2.7
5	s3	221	SER	2.7
14	c2	74	LEU	2.7
19	c7	16	LEU	2.7
22	D0	98	GLN	2.7
33	E1	95	HIS	2.7
58	N2	76	LEU	2.7
2	S0	39	ASN	2.7
7	S5	54	LYS	2.7
27	D5	60	VAL	2.7
30	d8	44	VAL	2.7
16	C4	114	ARG	2.7
58	N2	12	ALA	2.7
72	O6	29	LYS	2.7
1	2	505	A	2.7
70	o4	61	GLN	2.7
1	2	697	C	2.7
1	2	1716	C	2.7
2	S0	203	PHE	2.7
31	d9	27	HIS	2.7
28	d6	11	ASN	2.7
36	1	545	U	2.7
9	s7	54	GLY	2.7
22	D0	104	THR	2.7
33	E1	115	THR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	s3	209	ILE	2.7
10	S8	152	ILE	2.7
74	o8	73	LEU	2.7
1	6	483	A	2.7
1	6	713	A	2.7
17	c5	80	MET	2.7
26	D4	117	LYS	2.7
46	L9	13	PRO	2.7
20	C8	142	GLY	2.7
63	N7	92	PHE	2.7
1	6	74	U	2.7
30	D8	40	ILE	2.7
32	E0	35	TYR	2.7
58	N2	41	ILE	2.7
73	o7	86	ALA	2.7
2	S0	201	LEU	2.7
3	S1	26	ARG	2.7
5	s3	151	LYS	2.7
63	N7	61	LYS	2.7
74	o8	11	PHE	2.7
66	o0	6	SER	2.7
78	Q2	14	GLY	2.7
7	S5	100	ASN	2.7
14	c2	92	ALA	2.7
34	SR	232	TYR	2.7
1	6	732	G	2.7
43	L6	8	LYS	2.7
16	C4	12	GLN	2.7
67	o1	109	VAL	2.7
2	s0	106	SER	2.7
9	S7	106	SER	2.7
18	C6	96	TYR	2.7
3	s1	89	ASP	2.7
5	S3	142	LEU	2.7
41	L4	350	LYS	2.7
6	s4	218	PHE	2.7
36	1	1283	C	2.7
63	n7	74	VAL	2.7
18	c6	3	ALA	2.7
34	SR	80	ALA	2.7
80	c0	48	SER	2.6
25	D3	86	PHE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	sR	49	GLY	2.6
43	L6	129	GLU	2.6
11	s9	179	ARG	2.6
14	c2	71	ILE	2.6
20	C8	146	ALA	2.6
21	C9	94	ILE	2.6
35	SM	22	PRO	2.6
63	n7	56	LYS	2.6
30	d8	54	LEU	2.6
72	o6	28	TYR	2.6
34	sR	213	SER	2.6
8	S6	155	ASP	2.6
17	c5	56	PHE	2.6
34	SR	263	PHE	2.6
14	C2	61	VAL	2.6
33	e1	98	VAL	2.6
36	5	492	U	2.6
19	c7	5	ARG	2.6
7	s5	154	ALA	2.6
8	s6	147	LEU	2.6
9	s7	49	ILE	2.6
45	l8	48	ARG	2.6
55	m9	176	ARG	2.6
4	s2	248	SER	2.6
9	s7	55	LYS	2.6
14	C2	80	ASN	2.6
58	N2	13	LYS	2.6
58	N2	52	ASN	2.6
26	D4	110	GLN	2.6
14	C2	52	LEU	2.6
53	M7	177	ALA	2.6
19	c7	28	PHE	2.6
4	s2	64	LYS	2.6
14	C2	56	GLU	2.6
19	c7	18	GLU	2.6
19	C7	105	GLN	2.6
20	c8	73	MET	2.6
45	l8	215	VAL	2.6
28	D6	25	ASN	2.6
5	S3	69	LEU	2.6
1	6	720	G	2.6
28	D6	49	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
68	O2	2	ALA	2.6
1	2	1065	A	2.6
1	6	1256	A	2.6
4	S2	111	VAL	2.6
8	S6	162	VAL	2.6
53	M7	179	GLN	2.6
8	s6	52	ILE	2.6
78	q2	72	LEU	2.6
79	q3	3	LYS	2.6
38	8	158	U	2.6
1	2	279	G	2.6
1	2	655	G	2.6
3	S1	90	GLU	2.6
72	O6	97	SER	2.6
6	S4	215	ASP	2.6
11	S9	36	LEU	2.6
22	d0	22	ILE	2.6
36	5	1093	A	2.6
40	L3	387	LEU	2.6
78	Q2	13	LYS	2.6
1	6	1156	C	2.6
7	S5	125	THR	2.6
48	M1	127	PHE	2.6
1	6	238	U	2.6
1	6	1398	U	2.6
20	C8	13	HIS	2.6
31	d9	10	HIS	2.6
70	o4	110	GLU	2.6
34	SR	92	TRP	2.6
21	C9	40	SER	2.6
36	1	2095	G	2.6
34	sR	4	ASN	2.6
20	C8	140	THR	2.6
30	D8	5	THR	2.6
36	1	2096	A	2.6
36	5	1027	A	2.6
78	Q2	10	THR	2.6
9	s7	89	HIS	2.6
36	1	3164	C	2.6
6	S4	168	LYS	2.6
30	D8	14	LYS	2.6
55	M9	175	GLN	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	sR	257	ALA	2.6
34	sR	296	ALA	2.6
72	O6	64	SER	2.6
9	S7	62	VAL	2.6
14	c2	129	GLU	2.6
3	S1	207	LEU	2.6
48	M1	79	ILE	2.6
61	n5	38	LEU	2.6
66	O0	101	LEU	2.6
31	d9	20	GLN	2.6
5	S3	221	SER	2.6
28	D6	88	SER	2.6
7	S5	53	VAL	2.6
11	s9	148	VAL	2.6
31	d9	16	LYS	2.6
60	n4	129	LYS	2.6
29	D7	44	THR	2.6
34	sR	59	ARG	2.6
34	sR	158	PRO	2.6
26	D4	28	LEU	2.6
34	sR	202	LEU	2.6
61	N5	31	THR	2.6
1	2	486	G	2.6
1	2	496	G	2.6
36	5	1951	C	2.6
55	M9	78	TYR	2.6
60	N4	50	ALA	2.6
4	S2	49	LYS	2.6
33	e1	94	LYS	2.6
9	S7	90	VAL	2.6
11	S9	141	VAL	2.6
14	c2	102	GLY	2.6
42	L5	210	GLU	2.6
24	D2	85	ASP	2.6
2	S0	162	CYS	2.6
28	D6	89	ARG	2.6
2	S0	198	MET	2.6
74	o8	54	LEU	2.6
14	c2	38	HIS	2.6
15	C3	66	ILE	2.6
3	S1	208	GLN	2.5
35	SM	136	ALA	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	l5	296	GLN	2.5
36	1	3351	U	2.5
61	n5	24	LEU	2.5
3	S1	35	PRO	2.5
20	C8	76	PRO	2.5
34	sR	117	LYS	2.5
34	sR	186	PHE	2.5
46	L9	125	ASN	2.5
7	S5	207	THR	2.5
5	s3	215	GLU	2.5
8	S6	177	ARG	2.5
11	S9	106	GLU	2.5
45	L8	130	TYR	2.5
45	l8	130	TYR	2.5
57	n1	118	GLU	2.5
1	6	1706	C	2.5
3	S1	132	ASP	2.5
28	D6	29	SER	2.5
72	o6	64	SER	2.5
1	2	651	G	2.5
3	S1	140	ILE	2.5
5	S3	216	PRO	2.5
18	C6	5	PRO	2.5
26	D4	7	ILE	2.5
28	D6	20	PRO	2.5
34	sR	245	PHE	2.5
3	s1	25	THR	2.5
3	s1	90	GLU	2.5
4	s2	208	GLU	2.5
7	S5	71	ALA	2.5
7	S5	209	TYR	2.5
11	S9	177	ALA	2.5
58	n2	69	ALA	2.5
45	L8	119	GLY	2.5
55	m9	165	LYS	2.5
1	2	681	U	2.5
8	S6	158	ILE	2.5
42	L5	214	ASP	2.5
50	M4	6	ILE	2.5
72	o6	68	ARG	2.5
8	S6	80	ASN	2.5
28	d6	94	ASN	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	1233	G	2.5
5	s3	41	VAL	2.5
80	c0	37	THR	2.5
25	D3	123	LYS	2.5
2	s0	173	ILE	2.5
3	S1	224	ASP	2.5
14	C2	43	ARG	2.5
82	p0	192	ASP	2.5
1	6	711	U	2.5
60	N4	66	GLU	2.5
7	S5	86	GLN	2.5
17	C5	76	VAL	2.5
22	D0	47	GLN	2.5
26	D4	129	VAL	2.5
47	m0	221	ALA	2.5
5	s3	177	MET	2.5
34	SR	61	PHE	2.5
36	1	568	G	2.5
58	N2	38	ILE	2.5
6	S4	124	GLY	2.5
8	S6	41	VAL	2.5
8	S6	149	LYS	2.5
8	s6	36	VAL	2.5
8	s6	194	LYS	2.5
9	S7	52	ALA	2.5
33	E1	114	VAL	2.5
50	M4	134	ALA	2.5
61	n5	26	VAL	2.5
65	N9	58	LYS	2.5
12	C0	39	ASN	2.5
42	l5	275	THR	2.5
36	1	2207	A	2.5
36	1	2502	A	2.5
36	5	1760	A	2.5
1	6	1692	G	2.5
21	C9	6	VAL	2.5
28	D6	2	PRO	2.5
63	N7	70	PRO	2.5
5	S3	218	LEU	2.5
20	C8	68	ARG	2.5
36	1	2209	U	2.5
55	M9	74	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
61	n5	40	LEU	2.5
70	o4	33	GLN	2.5
26	D4	31	ASN	2.5
33	e1	92	LYS	2.5
80	c0	10	LYS	2.5
1	6	717	C	2.5
36	1	546	C	2.5
36	5	2441	A	2.5
3	S1	31	ASP	2.5
6	S4	61	VAL	2.5
16	C4	30	VAL	2.5
19	C7	110	VAL	2.5
26	D4	3	ASP	2.5
7	S5	127	GLN	2.5
20	C8	12	GLN	2.5
1	6	1058	U	2.5
1	2	196	G	2.5
5	S3	45	LYS	2.5
33	E1	97	LYS	2.5
43	l6	129	GLU	2.5
5	s3	142	LEU	2.5
19	c7	64	GLY	2.5
22	d0	119	ALA	2.5
33	E1	88	PRO	2.5
45	L8	189	LEU	2.5
53	M7	158	ALA	2.5
57	n1	121	ALA	2.5
6	s4	26	CYS	2.5
13	c1	143	SER	2.5
14	C2	64	SER	2.5
27	d5	38	HIS	2.5
34	SR	117	LYS	2.5
8	s6	118	GLU	2.5
10	S8	61	GLU	2.5
19	c7	87	GLU	2.5
28	D6	61	GLU	2.5
60	n4	65	GLU	2.5
26	D4	32	ARG	2.5
7	S5	154	ALA	2.5
9	S7	126	LEU	2.5
29	d7	33	LEU	2.5
33	E1	130	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	sR	47	LEU	2.5
61	N5	34	LEU	2.5
24	d2	117	ARG	2.5
34	SR	59	ARG	2.5
1	2	241	U	2.5
4	s2	240	LEU	2.5
7	S5	70	VAL	2.5
34	SR	23	LEU	2.5
66	O0	24	THR	2.5
66	O0	90	VAL	2.5
5	S3	205	ALA	2.5
34	sR	303	ALA	2.5
42	l5	271	LYS	2.5
47	M0	202	LYS	2.5
6	s4	64	ILE	2.5
8	S6	175	ILE	2.5
9	S7	97	ARG	2.5
11	S9	63	ASP	2.5
15	c3	86	GLU	2.5
17	C5	51	SER	2.5
26	d4	2	SER	2.5
28	D6	7	SER	2.5
58	N2	104	ARG	2.5
3	S1	145	LYS	2.4
5	S3	206	VAL	2.4
10	S8	96	LEU	2.4
16	c4	48	VAL	2.4
18	c6	11	GLY	2.4
25	D3	114	LYS	2.4
29	D7	33	LEU	2.4
1	2	278	U	2.4
1	6	699	U	2.4
78	q2	16	THR	2.4
19	c7	3	ARG	2.4
50	M4	5	SER	2.4
72	o6	100	HIS	2.4
1	6	195	G	2.4
21	C9	81	GLY	2.4
34	SR	262	VAL	2.4
36	1	1017	C	2.4
74	o8	32	ASN	2.4
80	c0	64	TYR	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	1794	A	2.4
11	S9	61	THR	2.4
36	1	1252	A	2.4
41	L4	347	THR	2.4
5	S3	214	GLU	2.4
5	s3	217	ILE	2.4
14	C2	138	GLU	2.4
17	c5	83	MET	2.4
18	C6	141	SER	2.4
25	D3	57	LEU	2.4
45	l8	214	LEU	2.4
63	N7	42	LEU	2.4
68	o2	128	LEU	2.4
3	S1	41	ARG	2.4
22	D0	94	GLU	2.4
36	1	1255	C	2.4
49	M3	136	GLU	2.4
80	c0	74	GLU	2.4
36	5	1351	U	2.4
36	5	1813	A	2.4
6	s4	79	ASP	2.4
19	c7	56	HIS	2.4
34	SR	34	LEU	2.4
78	q2	91	PHE	2.4
27	D5	56	THR	2.4
7	s5	58	LEU	2.4
28	D6	5	ARG	2.4
36	5	1356	U	2.4
38	4	82	U	2.4
2	s0	41	ARG	2.4
3	S1	199	ASN	2.4
27	D5	103	ARG	2.4
30	D8	42	ARG	2.4
45	l8	45	ASN	2.4
5	s3	222	VAL	2.4
6	S4	70	VAL	2.4
20	C8	29	VAL	2.4
53	M7	173	ARG	2.4
24	D2	72	CYS	2.4
36	5	1238	C	2.4
36	5	3155	U	2.4
39	l2	251	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	M0	216	TYR	2.4
62	N6	112	ASP	2.4
78	Q2	15	LYS	2.4
20	c8	146	ALA	2.4
1	2	1243	G	2.4
1	6	729	G	2.4
26	D4	98	GLU	2.4
34	sR	123	ILE	2.4
11	S9	60	LEU	2.4
20	C8	17	LEU	2.4
27	d5	44	GLN	2.4
4	S2	158	THR	2.4
5	S3	220	PRO	2.4
26	D4	35	VAL	2.4
63	N7	34	LYS	2.4
34	sR	116	ASP	2.4
36	1	2996	U	2.4
45	L8	208	GLU	2.4
25	D3	47	SER	2.4
27	D5	89	ILE	2.4
34	sR	90	ARG	2.4
26	D4	57	VAL	2.4
32	E0	56	MET	2.4
57	N1	124	VAL	2.4
36	5	1024	G	2.4
46	L9	100	ASN	2.4
18	C6	143	ARG	2.4
27	D5	38	HIS	2.4
1	6	1704	U	2.4
36	5	1265	U	2.4
36	5	3156	U	2.4
7	s5	24	VAL	2.4
26	d4	14	SER	2.4
34	sR	94	VAL	2.4
34	sR	252	LEU	2.4
45	l8	211	LEU	2.4
57	N1	128	LEU	2.4
9	S7	86	GLN	2.4
19	c7	71	PHE	2.4
17	c5	106	GLU	2.4
28	d6	17	HIS	2.4
68	O2	127	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	648	G	2.4
4	s2	35	TRP	2.4
31	d9	7	TRP	2.4
14	c2	52	LEU	2.4
14	c2	103	LEU	2.4
9	S7	74	GLN	2.4
18	C6	139	GLN	2.4
78	q2	102	GLN	2.4
4	s2	85	PRO	2.4
16	C4	133	ARG	2.4
19	c7	35	CYS	2.4
26	D4	8	ARG	2.4
33	e1	87	THR	2.4
33	E1	145	HIS	2.4
36	1	3165	A	2.4
74	o8	27	ILE	2.4
2	S0	18	LEU	2.4
14	c2	39	ASP	2.4
67	O1	6	ASP	2.4
80	c0	46	LEU	2.4
2	S0	50	VAL	2.4
20	C8	70	VAL	2.4
1	6	227	U	2.4
36	1	1950	U	2.4
4	S2	162	CYS	2.4
5	s3	81	PRO	2.4
9	S7	63	PRO	2.4
1	6	1399	C	2.4
1	6	1705	C	2.4
10	S8	148	ALA	2.4
27	D5	36	ALA	2.4
34	SR	244	ALA	2.4
79	Q3	35	ALA	2.4
1	6	541	A	2.3
3	s1	132	ASP	2.3
12	C0	19	GLY	2.3
36	5	1103	A	2.3
9	S7	42	GLN	2.3
5	s3	7	LYS	2.3
11	S9	87	SER	2.3
72	O6	66	GLU	2.3
28	D6	48	ALA	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	C4	77	THR	2.3
26	D4	6	THR	2.3
10	s8	177	GLY	2.3
36	1	1579	C	2.3
1	6	236	A	2.3
10	S8	103	GLN	2.3
12	C0	25	LYS	2.3
60	n4	77	LYS	2.3
74	O8	29	LYS	2.3
8	s6	35	GLU	2.3
5	s3	195	SER	2.3
16	C4	17	ALA	2.3
26	d4	17	LEU	2.3
34	SR	78	ALA	2.3
34	sR	204	ALA	2.3
36	5	2537	U	2.3
52	M6	181	ALA	2.3
80	c0	79	TYR	2.3
19	c7	60	ARG	2.3
19	c7	66	VAL	2.3
1	2	1064	G	2.3
36	5	1576	G	2.3
58	N2	15	PHE	2.3
70	o4	27	GLY	2.3
74	o8	60	GLY	2.3
78	Q2	106	PHE	2.3
77	Q1	5	TRP	2.3
78	q2	59	HIS	2.3
1	6	484	C	2.3
7	S5	55	ASP	2.3
20	C8	65	GLU	2.3
78	Q2	102	GLN	2.3
58	n2	104	ARG	2.3
72	O6	98	ARG	2.3
1	2	695	U	2.3
14	c2	77	GLY	2.3
16	C4	134	GLY	2.3
28	D6	21	VAL	2.3
57	N1	126	VAL	2.3
6	S4	170	THR	2.3
9	S7	78	THR	2.3
19	C7	8	THR	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	SR	181	TRP	2.3
3	S1	131	ASP	2.3
58	N2	18	ASP	2.3
1	6	652	G	2.3
9	S7	181	ILE	2.3
31	d9	30	LEU	2.3
36	5	547	G	2.3
16	C4	81	VAL	2.3
26	D4	70	VAL	2.3
32	E0	45	VAL	2.3
36	1	2771	U	2.3
36	1	3155	U	2.3
45	l8	119	GLY	2.3
34	SR	121	MET	2.3
70	o4	68	THR	2.3
3	s1	54	LEU	2.3
5	S3	223	LYS	2.3
22	D0	91	ILE	2.3
42	L5	279	LYS	2.3
60	n4	96	LEU	2.3
61	N5	123	TYR	2.3
74	o8	36	LYS	2.3
1	2	653	C	2.3
28	D6	51	ARG	2.3
29	d7	17	ARG	2.3
1	2	485	A	2.3
15	C3	151	ASN	2.3
58	n2	70	LYS	2.3
82	p0	81	LYS	2.3
6	S4	173	ILE	2.3
22	D0	103	ILE	2.3
35	SM	75	ASP	2.3
4	S2	63	VAL	2.3
19	c7	4	VAL	2.3
2	S0	42	PRO	2.3
7	S5	67	PRO	2.3
11	s9	5	PRO	2.3
32	E0	55	ARG	2.3
41	l4	2	SER	2.3
47	M0	201	SER	2.3
60	n4	72	SER	2.3
1	2	1361	U	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	S1	101	HIS	2.3
53	M7	180	LYS	2.3
61	N5	25	LYS	2.3
2	S0	149	LEU	2.3
36	1	1094	U	2.3
36	5	246	U	2.3
2	S0	204	TYR	2.3
7	s5	48	PHE	2.3
9	s7	43	PHE	2.3
20	c8	23	ASP	2.3
22	D0	45	ALA	2.3
35	SM	81	THR	2.3
36	1	1026	A	2.3
36	1	2445	A	2.3
80	c0	41	TYR	2.3
16	c4	98	GLY	2.3
27	d5	87	GLY	2.3
30	d8	49	ARG	2.3
46	L9	166	ARG	2.3
35	SM	21	PRO	2.3
78	q2	15	LYS	2.3
10	S8	159	GLN	2.3
11	s9	93	LEU	2.3
78	q2	99	GLN	2.3
3	S1	156	ALA	2.3
27	D5	105	THR	2.3
32	E0	42	ARG	2.3
32	E0	46	ASN	2.3
55	m9	109	TYR	2.3
58	N2	95	PHE	2.3
6	S4	251	GLU	2.3
2	s0	3	LEU	2.3
34	sR	246	SER	2.3
34	SR	122	ILE	2.3
34	sR	52	GLN	2.3
56	n0	2	ALA	2.3
61	n5	60	TYR	2.3
80	c0	23	ALA	2.3
1	6	842	C	2.3
3	S1	102	GLY	2.3
6	S4	78	THR	2.3
9	S7	7	LYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	5	1581	C	2.3
8	S6	142	ARG	2.3
2	S0	54	TRP	2.3
6	S4	218	PHE	2.3
8	S6	157	VAL	2.3
30	d8	25	VAL	2.3
40	l3	139	GLN	2.3
3	s1	53	GLY	2.3
14	C2	25	GLU	2.3
34	sR	138	GLY	2.3
1	2	240	U	2.3
1	2	650	U	2.3
2	S0	49	ASN	2.3
6	S4	255	ARG	2.3
2	S0	98	ILE	2.3
3	s1	205	PHE	2.3
19	C7	7	LYS	2.3
33	e1	91	ILE	2.3
42	L5	185	PHE	2.3
58	n2	93	ILE	2.3
5	S3	41	VAL	2.3
17	c5	7	ALA	2.3
32	E0	52	GLY	2.2
34	SR	2	ALA	2.3
60	n4	130	SER	2.3
1	6	722	G	2.2
34	sR	71	CYS	2.2
5	s3	182	LEU	2.2
19	C7	100	LEU	2.2
26	D4	40	LEU	2.2
30	d8	29	ARG	2.2
55	M9	111	ASP	2.2
72	O6	68	ARG	2.2
72	o6	2	THR	2.2
9	S7	111	LYS	2.2
8	S6	50	PHE	2.2
18	C6	65	ILE	2.2
32	E0	60	PRO	2.2
63	N7	72	ILE	2.2
66	O0	100	ILE	2.2
20	c8	5	VAL	2.2
4	s2	59	HIS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	s3	128	GLU	2.2
67	o1	82	GLU	2.2
15	C3	28	LEU	2.2
26	d4	34	ASN	2.2
32	e0	48	THR	2.2
34	sR	207	ASP	2.2
55	m9	43	LYS	2.2
2	S0	194	PRO	2.2
11	S9	2	PRO	2.2
29	d7	38	PRO	2.2
1	2	184	C	2.2
5	s3	210	GLU	2.2
20	C8	102	ALA	2.2
34	sR	55	GLY	2.2
36	5	2507	C	2.2
63	n7	11	ALA	2.2
2	S0	205	ARG	2.2
34	SR	82	SER	2.2
30	d8	11	LYS	2.2
1	2	1346	A	2.2
1	6	740	A	2.2
1	6	780	A	2.2
58	n2	18	ASP	2.2
20	c8	76	PRO	2.2
78	q2	21	THR	2.2
1	2	652	G	2.2
1	2	1011	G	2.2
1	6	214	G	2.2
1	6	739	G	2.2
5	S3	89	GLU	2.2
10	s8	103	GLN	2.2
20	C8	64	GLU	2.2
32	E0	2	ALA	2.2
36	5	251	G	2.2
61	N5	27	ARG	2.2
62	n6	127	GLU	2.2
71	o5	27	GLU	2.2
19	c7	116	LYS	2.2
74	o8	29	LYS	2.2
11	s9	184	SER	2.2
34	sR	82	SER	2.2
36	1	3349	C	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	5	1031	C	2.2
41	l4	250	TRP	2.2
47	M0	213	PHE	2.2
1	6	198	A	2.2
2	s0	205	ARG	2.2
3	s1	224	ASP	2.2
10	s8	17	LYS	2.2
16	C4	109	GLY	2.2
17	c5	71	GLU	2.2
19	C7	60	ARG	2.2
19	c7	104	ASN	2.2
62	n6	114	ASP	2.2
26	D4	101	GLU	2.2
27	d5	52	LYS	2.2
34	sR	30	PRO	2.2
43	L6	109	GLU	2.2
47	M0	220	GLN	2.2
52	M6	166	GLU	2.2
72	O6	70	ARG	2.2
30	D8	27	GLN	2.2
60	n4	124	LYS	2.2
6	s4	131	LEU	2.2
33	e1	135	HIS	2.2
67	O1	104	LEU	2.2
36	5	2579	G	2.2
36	5	2874	G	2.2
60	n4	95	SER	2.2
3	s1	150	VAL	2.2
8	s6	113	ILE	2.2
18	c6	36	ILE	2.2
30	D8	18	ARG	2.2
55	m9	170	ARG	2.2
78	q2	75	VAL	2.2
6	S4	216	ASN	2.2
9	S7	173	TYR	2.2
34	sR	160	GLU	2.2
45	l8	213	LYS	2.2
18	c6	37	THR	2.2
33	e1	88	PRO	2.2
34	sR	292	LEU	2.2
58	n2	89	LEU	2.2
78	q2	17	CYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	S9	113	VAL	2.2
15	C3	27	LYS	2.2
25	d3	145	SER	2.2
28	D6	85	ARG	2.2
32	e0	50	VAL	2.2
66	o0	42	ILE	2.2
1	6	1610	G	2.2
8	s6	169	TYR	2.2
27	D5	67	ASP	2.2
34	SR	230	ALA	2.2
36	5	1262	G	2.2
78	q2	54	THR	2.2
25	D3	107	PHE	2.2
1	2	706	A	2.2
1	2	1055	U	2.2
48	M1	96	PHE	2.2
30	D8	50	GLU	2.2
32	e0	47	VAL	2.2
36	5	1575	A	2.2
34	SR	97	GLY	2.2
57	n1	2	GLY	2.2
4	S2	47	ALA	2.2
17	c5	66	ALA	2.2
34	sR	254	ALA	2.2
52	m6	181	ALA	2.2
36	5	2098	C	2.2
74	O8	37	PRO	2.2
78	q2	5	PRO	2.2
2	S0	124	THR	2.2
11	S9	65	LYS	2.2
16	c4	47	LYS	2.2
30	D8	67	ARG	2.2
50	m4	8	LYS	2.2
25	D3	102	VAL	2.2
48	m1	65	ILE	2.2
1	2	231	U	2.2
1	6	320	U	2.2
4	S2	164	SER	2.2
14	C2	40	GLY	2.2
36	5	2504	U	2.2
36	1	3347	A	2.2
80	c0	66	TYR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	c7	115	LEU	2.2
67	O1	5	LYS	2.2
5	s3	25	PHE	2.2
1	2	1066	C	2.2
18	C6	17	THR	2.2
33	e1	114	VAL	2.2
36	1	2566	C	2.2
34	sR	106	HIS	2.2
34	sR	136	ILE	2.2
36	5	2572	C	2.2
1	2	487	G	2.2
1	2	1308	G	2.2
10	S8	80	GLY	2.2
73	o7	2	GLY	2.2
34	sR	23	LEU	2.2
2	S0	129	ASP	2.2
2	S0	199	PRO	2.2
6	S4	172	PHE	2.2
35	SM	36	ASP	2.2
3	S1	198	GLU	2.2
1	2	237	C	2.2
1	2	1625	C	2.2
10	S8	22	ARG	2.2
3	s1	73	LEU	2.2
6	s4	207	LEU	2.2
45	L8	96	LYS	2.2
34	sR	124	SER	2.2
1	6	497	G	2.2
74	o8	43	PHE	2.2
1	6	485	A	2.2
3	S1	229	MET	2.2
34	sR	170	ILE	2.2
39	l2	168	VAL	2.2
9	S7	96	ARG	2.2
14	C2	124	LYS	2.2
16	C4	111	ARG	2.2
25	D3	2	GLY	2.2
45	l8	111	LYS	2.2
45	l8	182	GLY	2.2
78	Q2	79	THR	2.2
80	c0	44	LYS	2.2
11	s9	60	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	54	C	2.1
1	2	709	C	2.1
1	6	1248	C	2.1
42	L5	2	ALA	2.1
1	2	178	U	2.1
2	S0	15	GLN	2.1
3	S1	183	GLN	2.1
31	d9	43	PHE	2.1
63	N7	94	SER	2.1
3	S1	197	ILE	2.1
5	S3	47	GLU	2.1
25	D3	124	VAL	2.1
58	n2	91	ASP	2.1
1	6	503	G	2.1
8	S6	66	GLY	2.1
3	S1	209	ASN	2.1
36	5	2528	G	2.1
21	c9	80	TYR	2.1
27	D5	69	LEU	2.1
26	d4	4	ALA	2.1
34	sR	227	ALA	2.1
36	1	3167	A	2.1
38	8	79	A	2.1
32	e0	44	PHE	2.1
8	s6	175	ILE	2.1
8	s6	217	SER	2.1
9	s7	109	VAL	2.1
21	C9	41	SER	2.1
22	D0	100	VAL	2.1
36	1	1562	C	2.1
36	5	1582	C	2.1
67	O1	83	GLU	2.1
14	C2	39	ASP	2.1
36	1	1353	U	2.1
36	1	2570	U	2.1
36	5	1815	U	2.1
36	5	2097	U	2.1
11	S9	76	LEU	2.1
4	s2	146	THR	2.1
8	S6	140	ASN	2.1
22	d0	25	THR	2.1
78	q2	7	THR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	707	A	2.1
6	s4	59	ARG	2.1
28	D6	3	LYS	2.1
35	sM	23	LYS	2.1
36	5	3286	G	2.1
16	c4	12	GLN	2.1
45	l8	92	LYS	2.1
19	c7	89	SER	2.1
31	D9	25	SER	2.1
46	L9	144	ILE	2.1
19	c7	114	GLY	2.1
74	o8	70	PRO	2.1
77	Q1	24	SER	2.1
1	6	1285	U	2.1
65	n9	54	LEU	2.1
6	s4	149	TYR	2.1
3	s1	42	ASN	2.1
7	s5	155	ALA	2.1
9	s7	57	ALA	2.1
10	S8	92	ARG	2.1
55	M9	174	ALA	2.1
63	N7	2	ALA	2.1
46	L9	165	CYS	2.1
69	O3	60	ARG	2.1
3	S1	192	VAL	2.1
7	s5	23	VAL	2.1
22	d0	51	VAL	2.1
32	e0	45	VAL	2.1
1	6	488	G	2.1
18	c6	141	SER	2.1
36	1	621	A	2.1
1	2	701	U	2.1
1	2	840	U	2.1
1	2	1058	U	2.1
7	S5	182	ALA	2.1
8	S6	196	ARG	2.1
11	s9	175	ARG	2.1
19	c7	27	ASP	2.1
35	SM	46	LYS	2.1
55	M9	171	ASP	2.1
15	c3	15	ALA	2.1
71	o5	114	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	S0	189	VAL	2.1
21	C9	44	GLU	2.1
10	s8	60	ILE	2.1
15	C3	67	THR	2.1
26	d4	106	GLN	2.1
53	M7	165	VAL	2.1
67	O1	14	ILE	2.1
8	s6	135	PRO	2.1
9	s7	63	PRO	2.1
12	C0	40	LEU	2.1
15	C3	14	SER	2.1
16	c4	11	SER	2.1
55	M9	173	ARG	2.1
72	o6	25	LYS	2.1
6	S4	257	ALA	2.1
34	sR	70	ASP	2.1
1	2	727	U	2.1
1	6	558	U	2.1
36	5	236	G	2.1
9	s7	95	GLU	2.1
34	sR	157	VAL	2.1
36	1	1563	C	2.1
37	3	73	C	2.1
55	m9	152	GLU	2.1
14	C2	71	ILE	2.1
22	D0	101	LYS	2.1
33	e1	97	LYS	2.1
34	sR	222	LEU	2.1
35	SM	68	ARG	2.1
63	n7	55	LYS	2.1
19	C7	107	SER	2.1
33	e1	140	TYR	2.1
39	L2	226	SER	2.1
42	l5	267	ALA	2.1
14	c2	37	VAL	2.1
1	6	241	U	2.1
8	S6	31	ARG	2.1
20	C8	44	ASN	2.1
34	SR	146	GLY	2.1
34	sR	248	ASN	2.1
45	l8	240	ASN	2.1
59	N3	33	ASN	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
63	n7	6	LYS	2.1
80	c0	3	MET	2.1
6	s4	172	PHE	2.1
5	S3	210	GLU	2.1
10	S8	79	ALA	2.1
10	S8	144	ALA	2.1
14	c2	25	GLU	2.1
34	SR	246	SER	2.1
55	M9	72	GLU	2.1
17	c5	52	LYS	2.1
18	C6	140	LYS	2.1
28	D6	84	VAL	2.1
30	d8	7	VAL	2.1
43	l6	130	ILE	2.1
46	L9	126	VAL	2.1
62	N6	114	ASP	2.1
1	2	836	U	2.1
28	D6	53	LEU	2.1
30	d8	8	THR	2.1
35	sM	50	ASN	2.1
54	M8	17	THR	2.1
58	n2	95	PHE	2.1
78	q2	10	THR	2.1
1	2	143	G	2.1
1	6	1709	C	2.1
8	s6	205	ALA	2.1
34	SR	286	GLU	2.1
61	n5	25	LYS	2.1
71	o5	2	ALA	2.1
82	p0	18	TYR	2.1
18	c6	90	VAL	2.1
33	E1	146	SER	2.1
35	SM	17	VAL	2.1
45	l8	122	LYS	2.1
39	L2	158	ILE	2.1
11	S9	128	LEU	2.1
9	S7	32	PRO	2.1
36	1	1231	A	2.1
60	N4	97	LYS	2.1
70	o4	113	LYS	2.1
10	s8	46	VAL	2.1
24	D2	129	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	S1	32	ILE	2.1
18	c6	85	ILE	2.1
58	n2	11	ILE	2.1
1	2	1288	G	2.1
21	C9	120	GLY	2.1
36	5	1952	G	2.1
1	6	725	U	2.1
1	6	727	U	2.1
4	s2	91	ARG	2.1
4	s2	97	ARG	2.1
9	S7	114	ARG	2.1
20	C8	25	ASN	2.1
22	D0	49	ASN	2.1
23	d1	42	GLU	2.1
45	L8	107	GLU	2.1
48	M1	53	THR	2.1
61	N5	33	ARG	2.1
11	S9	183	ALA	2.1
71	O5	101	THR	2.1
21	C9	88	VAL	2.1
58	n2	17	VAL	2.1
73	o7	83	ALA	2.1
1	2	1600	A	2.1
6	S4	44	LEU	2.1
34	sR	211	ILE	2.1
1	2	700	C	2.1
36	5	539	C	2.1
36	5	1092	C	2.1
22	d0	21	LYS	2.0
45	l8	222	PHE	2.0
48	m1	174	LYS	2.0
78	q2	106	PHE	2.0
34	SR	71	CYS	2.0
58	N2	24	GLU	2.0
79	Q3	37	TYR	2.0
80	c0	78	GLU	2.0
4	s2	63	VAL	2.0
35	SM	18	VAL	2.0
9	s7	53	GLY	2.0
19	c7	68	GLY	2.0
24	D2	104	LEU	2.0
36	5	1950	U	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	SM	98	GLY	2.0
1	2	219	A	2.0
36	5	3347	A	2.0
42	L5	274	GLN	2.0
54	M8	13	SER	2.0
65	n9	58	LYS	2.0
78	q2	13	LYS	2.0
6	S4	77	ARG	2.0
17	c5	10	ARG	2.0
21	C9	86	ARG	2.0
8	s6	39	GLU	2.0
46	l9	14	GLU	2.0
63	N7	99	GLU	2.0
19	c7	51	ALA	2.0
46	L9	114	VAL	2.0
71	O5	2	ALA	2.0
15	C3	17	PRO	2.0
18	C6	9	THR	2.0
34	SR	158	PRO	2.0
60	n4	83	THR	2.0
67	O1	106	THR	2.0
82	p0	4	ILE	2.0
34	SR	261	LYS	2.0
78	Q2	101	GLY	2.0
8	s6	215	ARG	2.0
30	D8	29	ARG	2.0
71	o5	102	GLU	2.0
3	s1	60	ALA	2.0
20	C8	42	TYR	2.0
21	C9	80	TYR	2.0
22	d0	114	VAL	2.0
30	d8	10	ALA	2.0
59	N3	135	VAL	2.0
33	E1	117	LEU	2.0
62	N6	111	LEU	2.0
66	o0	105	ALA	2.0
6	s4	25	GLY	2.0
7	S5	150	GLY	2.0
8	s6	187	LYS	2.0
17	c5	125	PRO	2.0
32	E0	32	GLY	2.0
34	SR	283	LYS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2	498	G	2.0
1	6	1690	G	2.0
34	SR	69	GLN	2.0
67	o1	110	GLU	2.0
78	Q2	22	GLN	2.0
2	s0	46	HIS	2.0
10	s8	116	HIS	2.0
29	d7	58	SER	2.0
34	SR	45	TRP	2.0
3	s1	33	LYS	2.0
7	S5	61	TYR	2.0
11	s9	8	TYR	2.0
7	S5	180	ARG	2.0
11	S9	93	LEU	2.0
14	C2	59	LEU	2.0
17	c5	9	LYS	2.0
17	c5	86	VAL	2.0
20	c8	14	ILE	2.0
34	sR	188	ILE	2.0
20	C8	130	GLY	2.0
1	2	683	C	2.0
9	S7	119	THR	2.0
30	D8	57	MET	2.0
30	d8	51	ASN	2.0
20	C8	60	GLU	2.0
49	m3	176	GLU	2.0
2	S0	46	HIS	2.0
3	S1	225	VAL	2.0
2	S0	113	ARG	2.0
6	S4	149	TYR	2.0
7	s5	62	VAL	2.0
60	n4	110	LYS	2.0
8	S6	226	ILE	2.0
9	S7	41	LEU	2.0
28	D6	81	ALA	2.0
30	d8	63	ALA	2.0
30	d8	66	LEU	2.0
32	E0	38	LEU	2.0
45	L8	93	LEU	2.0
2	S0	102	PHE	2.0
36	5	2440	G	2.0
1	2	1577	A	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	6	219	A	2.0
1	6	1701	A	2.0
3	s1	234	GLU	2.0
10	s8	87	ASN	2.0
19	c7	55	THR	2.0
28	D6	19	LYS	2.0
30	D8	51	ASN	2.0
34	SR	319	ASN	2.0
36	1	3234	A	2.0
39	L2	252	THR	2.0
13	c1	118	GLN	2.0
48	M1	85	LYS	2.0
59	n3	66	LYS	2.0
70	O4	106	LYS	2.0
77	Q1	16	LYS	2.0
3	S1	120	LEU	2.0
41	l4	8	VAL	2.0
49	M3	138	VAL	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 monosaccharides 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(Å ²)	Q<0.9
86	MG	C2	205	1/1	-0.70	1.45	170,170,170,170	0
86	MG	C2	206	1/1	-0.39	2.39	170,170,170,170	0
86	MG	MG	2215	1/1	-0.32	0.41	126,126,126,126	0
86	MG	1	4097	1/1	-0.29	2.07	70,70,70,70	0
86	MG	5	4017	1/1	-0.21	0.27	131,131,131,131	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	MG	2224	1/1	-0.16	2.95	243,243,243,243	0
86	MG	C2	203	1/1	-0.12	1.10	132,132,132,132	0
86	MG	6	2161	1/1	-0.10	0.59	149,149,149,149	0
86	MG	1	4111	1/1	-0.06	0.86	145,145,145,145	0
86	MG	L2	302	1/1	-0.04	0.50	73,73,73,73	0
86	MG	N4	201	1/1	-0.04	0.62	142,142,142,142	0
86	MG	1	4090	1/1	0.02	0.84	129,129,129,129	0
86	MG	C2	201	1/1	0.03	1.08	78,78,78,78	0
86	MG	1	4087	1/1	0.05	0.97	84,84,84,84	0
86	MG	1	4095	1/1	0.05	0.68	70,70,70,70	0
86	MG	L5	301	1/1	0.07	0.35	110,110,110,110	0
86	MG	MG	2196	1/1	0.07	0.42	77,77,77,77	0
86	MG	MG	2207	1/1	0.11	1.38	109,109,109,109	0
86	MG	C2	204	1/1	0.12	0.99	69,69,69,69	0
86	MG	1	4021	1/1	0.15	0.33	77,77,77,77	0
86	MG	5	4143	1/1	0.19	1.02	55,55,55,55	0
86	MG	1	4070	1/1	0.21	0.15	203,203,203,203	0
86	MG	2	2123	1/1	0.25	0.35	97,97,97,97	0
86	MG	n0	204	1/1	0.26	1.50	42,42,42,42	0
86	MG	C9	201	1/1	0.27	0.69	95,95,95,95	0
86	MG	2	2098	1/1	0.28	0.46	135,135,135,135	0
86	MG	C2	207	1/1	0.28	0.72	105,105,105,105	0
86	MG	S8	302	1/1	0.28	0.67	69,69,69,69	0
86	MG	C2	208	1/1	0.31	1.32	88,88,88,88	0
86	MG	2	2111	1/1	0.31	0.45	77,77,77,77	0
86	MG	14	403	1/1	0.32	0.71	52,52,52,52	0
86	MG	1	3805	1/1	0.33	0.48	97,97,97,97	0
86	MG	1	4089	1/1	0.33	0.65	56,56,56,56	0
86	MG	2	2124	1/1	0.34	0.88	113,113,113,113	0
86	MG	1	3984	1/1	0.34	0.80	75,75,75,75	0
86	MG	5	4065	1/1	0.34	0.83	75,75,75,75	0
86	MG	3	217	1/1	0.34	0.74	66,66,66,66	0
86	MG	6	2132	1/1	0.34	0.36	65,65,65,65	0
86	MG	C2	202	1/1	0.36	0.93	88,88,88,88	0
86	MG	1	4050	1/1	0.36	0.27	92,92,92,92	0
86	MG	1	4120	1/1	0.37	0.67	76,76,76,76	0
86	MG	6	2154	1/1	0.37	0.51	92,92,92,92	0
86	MG	2	2078	1/1	0.38	0.90	77,77,77,77	0
86	MG	c8	202	1/1	0.39	0.33	94,94,94,94	0
86	MG	1	4045	1/1	0.40	0.32	106,106,106,106	0
86	MG	5	3812	1/1	0.41	0.47	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	2	2133	1/1	0.41	0.52	66,66,66,66	0
86	MG	MG	2217	1/1	0.43	0.41	77,77,77,77	0
86	MG	1	4107	1/1	0.44	0.54	44,44,44,44	0
86	MG	1	4054	1/1	0.44	0.74	86,86,86,86	0
86	MG	6	2178	1/1	0.44	0.65	56,56,56,56	0
87	ZN	D7	101	1/1	0.44	0.42	147,147,147,147	0
86	MG	2	2120	1/1	0.45	0.42	128,128,128,128	0
86	MG	1	4064	1/1	0.45	0.30	81,81,81,81	0
86	MG	1	4076	1/1	0.46	0.64	45,45,45,45	0
86	MG	5	4097	1/1	0.47	0.53	75,75,75,75	0
86	MG	5	3969	1/1	0.47	0.25	64,64,64,64	0
86	MG	5	4116	1/1	0.48	0.53	67,67,67,67	0
86	MG	2	2117	1/1	0.48	0.28	68,68,68,68	0
86	MG	MG	2222	1/1	0.49	1.21	136,136,136,136	0
86	MG	2	2063	1/1	0.49	0.53	70,70,70,70	0
86	MG	1	4079	1/1	0.49	0.27	82,82,82,82	0
86	MG	5	4039	1/1	0.50	0.40	52,52,52,52	0
86	MG	O5	201	1/1	0.50	1.58	144,144,144,144	0
86	MG	1	4101	1/1	0.51	0.85	95,95,95,95	0
86	MG	N3	202	1/1	0.51	0.24	59,59,59,59	0
86	MG	1	3783	1/1	0.52	0.92	65,65,65,65	0
86	MG	5	4025	1/1	0.52	0.51	56,56,56,56	0
86	MG	5	4167	1/1	0.53	0.65	65,65,65,65	0
86	MG	2	2131	1/1	0.53	0.81	80,80,80,80	0
86	MG	1	3989	1/1	0.54	0.42	47,47,47,47	0
86	MG	1	4082	1/1	0.54	0.51	53,53,53,53	0
86	MG	6	2175	1/1	0.54	0.43	84,84,84,84	0
86	MG	1	4037	1/1	0.55	0.46	104,104,104,104	0
86	MG	1	4114	1/1	0.55	0.38	41,41,41,41	0
86	MG	6	2151	1/1	0.55	0.27	140,140,140,140	0
86	MG	5	4073	1/1	0.56	0.23	72,72,72,72	0
86	MG	5	4149	1/1	0.56	0.66	51,51,51,51	0
86	MG	1	4102	1/1	0.56	0.43	77,77,77,77	0
86	MG	2	2114	1/1	0.56	0.66	67,67,67,67	0
86	MG	2	2128	1/1	0.57	0.73	56,56,56,56	0
86	MG	1	4093	1/1	0.57	1.21	78,78,78,78	0
86	MG	5	4035	1/1	0.57	0.77	66,66,66,66	0
86	MG	6	2180	1/1	0.57	0.40	88,88,88,88	0
86	MG	1	4126	1/1	0.58	1.11	87,87,87,87	0
86	MG	5	4032	1/1	0.58	0.73	70,70,70,70	0
86	MG	1	4048	1/1	0.58	0.57	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	O2	201	1/1	0.58	0.84	48,48,48,48	0
86	MG	1	4058	1/1	0.59	0.41	70,70,70,70	0
86	MG	1	3861	1/1	0.59	0.15	65,65,65,65	0
86	MG	1	4018	1/1	0.59	0.47	40,40,40,40	0
86	MG	6	2114	1/1	0.60	0.32	78,78,78,78	0
86	MG	1	4091	1/1	0.60	0.47	41,41,41,41	0
86	MG	1	3811	1/1	0.60	0.46	53,53,53,53	0
86	MG	6	2078	1/1	0.60	0.67	70,70,70,70	0
86	MG	2	2097	1/1	0.61	0.62	82,82,82,82	0
86	MG	2	2065	1/1	0.61	0.42	50,50,50,50	0
86	MG	2	2090	1/1	0.61	0.56	72,72,72,72	0
86	MG	1	3993	1/1	0.61	0.65	49,49,49,49	0
86	MG	n6	201	1/1	0.61	0.60	58,58,58,58	0
86	MG	1	3841	1/1	0.61	0.53	42,42,42,42	0
86	MG	5	3749	1/1	0.62	0.27	52,52,52,52	0
86	MG	1	4098	1/1	0.62	0.29	106,106,106,106	0
86	MG	1	3759	1/1	0.62	0.55	47,47,47,47	0
86	MG	6	2080	1/1	0.62	1.10	69,69,69,69	0
86	MG	5	4136	1/1	0.62	1.14	55,55,55,55	0
86	MG	5	4044	1/1	0.62	0.48	46,46,46,46	0
86	MG	6	2166	1/1	0.63	0.38	72,72,72,72	0
86	MG	5	4048	1/1	0.63	0.12	106,106,106,106	0
86	MG	5	4056	1/1	0.63	0.29	57,57,57,57	0
86	MG	5	4059	1/1	0.63	0.49	74,74,74,74	0
86	MG	5	4153	1/1	0.63	0.38	38,38,38,38	0
86	MG	6	2179	1/1	0.63	0.93	55,55,55,55	0
86	MG	6	2164	1/1	0.63	0.34	90,90,90,90	0
86	MG	5	4042	1/1	0.63	0.68	35,35,35,35	0
86	MG	1	3975	1/1	0.64	0.47	58,58,58,58	0
86	MG	5	3974	1/1	0.64	0.57	58,58,58,58	0
86	MG	4	218	1/1	0.64	0.71	49,49,49,49	0
86	MG	1	4108	1/1	0.64	0.65	66,66,66,66	0
86	MG	6	2186	1/1	0.64	0.14	87,87,87,87	0
86	MG	6	2122	1/1	0.64	0.56	105,105,105,105	0
86	MG	6	2127	1/1	0.64	0.51	57,57,57,57	0
86	MG	1	4077	1/1	0.64	0.23	88,88,88,88	0
86	MG	5	3881	1/1	0.64	0.42	49,49,49,49	0
86	MG	5	3950	1/1	0.64	0.50	38,38,38,38	0
86	MG	5	4155	1/1	0.64	0.85	62,62,62,62	0
86	MG	1	4065	1/1	0.65	0.43	47,47,47,47	0
86	MG	1	4127	1/1	0.65	0.39	113,113,113,113	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	3924	1/1	0.65	0.40	49,49,49,49	0
86	MG	M3	201	1/1	0.65	0.51	94,94,94,94	0
86	MG	1	4010	1/1	0.65	0.51	35,35,35,35	0
86	MG	2	2112	1/1	0.65	0.56	80,80,80,80	0
86	MG	5	4000	1/1	0.65	0.62	42,42,42,42	0
86	MG	5	3776	1/1	0.65	0.35	33,33,33,33	0
86	MG	5	4158	1/1	0.65	0.65	52,52,52,52	0
86	MG	5	3807	1/1	0.65	0.30	102,102,102,102	0
86	MG	5	3964	1/1	0.66	0.38	57,57,57,57	0
86	MG	1	4019	1/1	0.66	0.28	51,51,51,51	0
86	MG	1	4103	1/1	0.66	0.45	51,51,51,51	0
86	MG	5	3980	1/1	0.66	0.49	46,46,46,46	0
86	MG	5	3982	1/1	0.66	0.57	36,36,36,36	0
86	MG	6	2074	1/1	0.66	0.70	76,76,76,76	0
86	MG	2	2060	1/1	0.66	0.72	75,75,75,75	0
86	MG	6	2173	1/1	0.66	0.50	58,58,58,58	0
86	MG	SM	301	1/1	0.66	0.47	57,57,57,57	0
86	MG	l3	405	1/1	0.66	0.31	39,39,39,39	0
86	MG	1	4121	1/1	0.67	0.74	56,56,56,56	0
86	MG	6	2098	1/1	0.67	0.43	69,69,69,69	0
86	MG	1	4123	1/1	0.67	0.39	47,47,47,47	0
86	MG	1	3925	1/1	0.67	0.52	73,73,73,73	0
86	MG	5	3857	1/1	0.67	0.65	37,37,37,37	0
86	MG	1	3949	1/1	0.67	0.81	43,43,43,43	0
86	MG	5	3994	1/1	0.67	0.52	44,44,44,44	0
86	MG	1	3919	1/1	0.67	1.18	67,67,67,67	0
86	MG	D3	201	1/1	0.68	0.25	64,64,64,64	0
86	MG	5	4026	1/1	0.68	0.38	54,54,54,54	0
86	MG	2	2125	1/1	0.68	0.26	123,123,123,123	0
86	MG	1	3971	1/1	0.68	0.34	46,46,46,46	0
86	MG	5	3984	1/1	0.68	0.42	30,30,30,30	0
86	MG	5	3792	1/1	0.68	0.36	52,52,52,52	0
86	MG	2	2083	1/1	0.68	0.36	73,73,73,73	0
86	MG	1	4041	1/1	0.68	0.69	45,45,45,45	0
86	MG	Q1	101	1/1	0.69	0.47	66,66,66,66	0
86	MG	1	3766	1/1	0.69	0.27	39,39,39,39	0
86	MG	2	2075	1/1	0.69	0.57	72,72,72,72	0
86	MG	1	3972	1/1	0.69	0.38	49,49,49,49	0
86	MG	1	4017	1/1	0.69	0.40	50,50,50,50	0
86	MG	5	3995	1/1	0.69	0.47	47,47,47,47	0
86	MG	1	3932	1/1	0.69	0.20	78,78,78,78	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	5	3953	1/1	0.69	0.40	43,43,43,43	0
86	MG	1	3944	1/1	0.69	0.61	59,59,59,59	0
86	MG	1	4116	1/1	0.69	0.49	67,67,67,67	0
86	MG	1	4042	1/1	0.70	0.26	79,79,79,79	0
86	MG	5	4173	1/1	0.70	0.39	43,43,43,43	0
86	MG	7	213	1/1	0.70	0.88	49,49,49,49	0
86	MG	8	227	1/1	0.70	0.54	54,54,54,54	0
86	MG	5	4038	1/1	0.70	0.42	37,37,37,37	0
86	MG	5	4101	1/1	0.70	0.77	34,34,34,34	0
86	MG	1	3942	1/1	0.70	0.51	38,38,38,38	0
86	MG	5	4134	1/1	0.70	0.68	69,69,69,69	0
86	MG	n6	202	1/1	0.70	0.62	44,44,44,44	0
86	MG	n9	102	1/1	0.70	0.36	34,34,34,34	0
86	MG	1	3740	1/1	0.70	0.37	41,41,41,41	0
86	MG	5	4001	1/1	0.70	0.19	38,38,38,38	0
86	MG	2	2095	1/1	0.70	0.92	72,72,72,72	0
86	MG	6	2120	1/1	0.70	0.70	62,62,62,62	0
86	MG	1	3761	1/1	0.70	0.41	47,47,47,47	0
86	MG	5	3988	1/1	0.70	0.29	68,68,68,68	0
86	MG	5	4162	1/1	0.70	0.53	76,76,76,76	0
86	MG	6	2169	1/1	0.71	0.39	70,70,70,70	0
86	MG	6	2094	1/1	0.71	0.71	52,52,52,52	0
86	MG	1	3988	1/1	0.71	0.56	58,58,58,58	0
86	MG	1	3802	1/1	0.71	0.23	93,93,93,93	0
86	MG	5	4014	1/1	0.71	0.32	66,66,66,66	0
86	MG	5	3970	1/1	0.71	0.51	49,49,49,49	0
86	MG	6	2156	1/1	0.71	0.45	81,81,81,81	0
86	MG	5	3840	1/1	0.71	0.56	34,34,34,34	0
86	MG	5	4166	1/1	0.71	0.38	51,51,51,51	0
86	MG	1	3866	1/1	0.71	0.68	47,47,47,47	0
86	MG	N8	201	1/1	0.71	0.41	48,48,48,48	0
86	MG	2	2132	1/1	0.71	0.39	70,70,70,70	0
86	MG	5	4120	1/1	0.71	0.28	52,52,52,52	0
86	MG	1	4024	1/1	0.72	0.40	57,57,57,57	0
86	MG	6	2128	1/1	0.72	0.74	81,81,81,81	0
86	MG	1	4027	1/1	0.72	0.23	120,120,120,120	0
86	MG	2	2101	1/1	0.72	0.88	126,126,126,126	0
86	MG	1	4005	1/1	0.72	0.45	69,69,69,69	0
86	MG	5	4095	1/1	0.72	0.30	59,59,59,59	0
86	MG	5	3851	1/1	0.72	0.62	48,48,48,48	0
86	MG	N9	101	1/1	0.72	0.40	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	2	2059	1/1	0.72	0.64	70,70,70,70	0
86	MG	L3	404	1/1	0.72	0.58	71,71,71,71	0
86	MG	1	4011	1/1	0.72	0.33	41,41,41,41	0
86	MG	5	3750	1/1	0.72	0.38	34,34,34,34	0
86	MG	6	2126	1/1	0.73	0.30	82,82,82,82	0
86	MG	8	222	1/1	0.73	0.66	53,53,53,53	0
86	MG	1	3877	1/1	0.73	0.49	35,35,35,35	0
86	MG	5	3798	1/1	0.73	0.47	27,27,27,27	0
86	MG	1	3978	1/1	0.73	0.70	51,51,51,51	0
86	MG	2	2134	1/1	0.73	0.28	116,116,116,116	0
86	MG	5	4147	1/1	0.73	0.34	88,88,88,88	0
86	MG	2	2048	1/1	0.73	0.54	73,73,73,73	0
86	MG	5	4111	1/1	0.74	0.40	42,42,42,42	0
86	MG	5	4114	1/1	0.74	0.21	59,59,59,59	0
86	MG	5	3806	1/1	0.74	0.53	57,57,57,57	0
86	MG	5	4004	1/1	0.74	0.27	53,53,53,53	0
86	MG	6	2096	1/1	0.74	0.77	73,73,73,73	0
86	MG	5	4015	1/1	0.74	0.24	51,51,51,51	0
86	MG	5	4139	1/1	0.74	0.46	52,52,52,52	0
86	MG	1	4052	1/1	0.74	0.30	49,49,49,49	0
86	MG	5	4144	1/1	0.74	0.36	85,85,85,85	0
86	MG	5	4023	1/1	0.74	0.23	60,60,60,60	0
86	MG	6	2104	1/1	0.74	0.71	63,63,63,63	0
86	MG	6	2110	1/1	0.74	0.21	85,85,85,85	0
86	MG	5	4029	1/1	0.74	0.35	62,62,62,62	0
86	MG	5	4093	1/1	0.74	0.46	49,49,49,49	0
86	MG	5	4030	1/1	0.74	0.33	47,47,47,47	0
86	MG	1	3950	1/1	0.74	0.51	71,71,71,71	0
86	MG	1	3880	1/1	0.74	0.33	36,36,36,36	0
86	MG	5	3833	1/1	0.75	0.69	70,70,70,70	0
86	MG	2	2072	1/1	0.75	0.46	62,62,62,62	0
86	MG	2	2092	1/1	0.75	0.72	98,98,98,98	0
86	MG	1	3749	1/1	0.75	0.55	66,66,66,66	0
86	MG	5	4018	1/1	0.75	0.77	54,54,54,54	0
86	MG	5	4115	1/1	0.75	0.45	47,47,47,47	0
86	MG	5	3797	1/1	0.75	0.63	52,52,52,52	0
86	MG	1	4031	1/1	0.75	0.38	121,121,121,121	0
86	MG	5	4133	1/1	0.75	0.54	55,55,55,55	0
86	MG	2	2081	1/1	0.75	0.97	77,77,77,77	0
86	MG	S4	301	1/1	0.75	0.73	82,82,82,82	0
85	OHX	2	2037	7/7	0.75	0.18	242,242,242,242	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	3817	1/1	0.75	0.30	66,66,66,66	0
86	MG	1	3775	1/1	0.76	0.47	39,39,39,39	0
86	MG	1	3974	1/1	0.76	0.20	52,52,52,52	0
86	MG	6	2185	1/1	0.76	0.32	71,71,71,71	0
86	MG	1	3777	1/1	0.76	0.21	44,44,44,44	0
86	MG	7	214	1/1	0.76	0.47	27,27,27,27	0
86	MG	2	2127	1/1	0.76	0.86	60,60,60,60	0
86	MG	6	2158	1/1	0.76	0.33	46,46,46,46	0
86	MG	1	3960	1/1	0.76	0.41	46,46,46,46	0
86	MG	M0	302	1/1	0.76	0.25	40,40,40,40	0
86	MG	M1	201	1/1	0.76	0.54	74,74,74,74	0
86	MG	1	3985	1/1	0.76	0.76	61,61,61,61	0
86	MG	5	4140	1/1	0.76	0.30	34,34,34,34	0
86	MG	M6	201	1/1	0.76	0.24	39,39,39,39	0
86	MG	5	3965	1/1	0.76	0.57	56,56,56,56	0
86	MG	5	4072	1/1	0.76	0.30	60,60,60,60	0
86	MG	5	3801	1/1	0.76	0.42	35,35,35,35	0
86	MG	5	4082	1/1	0.76	0.48	66,66,66,66	0
86	MG	1	3943	1/1	0.76	0.27	73,73,73,73	0
86	MG	5	3973	1/1	0.76	0.26	65,65,65,65	0
86	MG	6	2131	1/1	0.76	0.19	102,102,102,102	0
86	MG	1	4073	1/1	0.77	0.38	47,47,47,47	0
86	MG	1	3991	1/1	0.77	0.27	48,48,48,48	0
86	MG	7	219	1/1	0.77	0.56	50,50,50,50	0
86	MG	2	2108	1/1	0.77	0.58	73,73,73,73	0
86	MG	6	2147	1/1	0.77	0.48	62,62,62,62	0
86	MG	1	3927	1/1	0.77	0.41	52,52,52,52	0
86	MG	5	4019	1/1	0.77	0.37	68,68,68,68	0
86	MG	6	2184	1/1	0.77	0.50	58,58,58,58	0
86	MG	1	4025	1/1	0.77	0.22	55,55,55,55	0
86	MG	1	3874	1/1	0.77	0.40	29,29,29,29	0
86	MG	1	4055	1/1	0.77	0.28	78,78,78,78	0
86	MG	6	2160	1/1	0.77	0.26	71,71,71,71	0
86	MG	5	3989	1/1	0.77	0.37	50,50,50,50	0
86	MG	5	4104	1/1	0.77	0.48	32,32,32,32	0
86	MG	2	2071	1/1	0.77	0.58	74,74,74,74	0
86	MG	1	4016	1/1	0.77	0.36	61,61,61,61	0
86	MG	2	2106	1/1	0.77	0.29	103,103,103,103	0
86	MG	1	3773	1/1	0.77	0.49	64,64,64,64	0
86	MG	6	2163	1/1	0.78	0.35	79,79,79,79	0
86	MG	1	4026	1/1	0.78	0.42	69,69,69,69	0
86	MG	1	3961	1/1	0.78	0.23	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	5	3878	1/1	0.78	0.36	37,37,37,37	0
86	MG	5	3752	1/1	0.78	0.21	46,46,46,46	0
86	MG	1	3850	1/1	0.78	0.47	35,35,35,35	0
86	MG	6	2143	1/1	0.78	0.35	82,82,82,82	0
86	MG	5	3793	1/1	0.78	0.37	46,46,46,46	0
85	OHX	1	3704	7/7	0.78	0.36	190,190,190,190	0
86	MG	1	4080	1/1	0.78	0.33	46,46,46,46	0
86	MG	1	4008	1/1	0.78	0.51	49,49,49,49	0
86	MG	1	3829	1/1	0.78	0.60	43,43,43,43	0
86	MG	n9	103	1/1	0.78	0.44	40,40,40,40	0
86	MG	5	3972	1/1	0.78	0.41	41,41,41,41	0
86	MG	6	2181	1/1	0.78	0.34	62,62,62,62	0
86	MG	1	3808	1/1	0.78	0.35	54,54,54,54	0
86	MG	1	4012	1/1	0.78	0.48	45,45,45,45	0
86	MG	5	3829	1/1	0.78	0.66	54,54,54,54	0
86	MG	5	4106	1/1	0.78	0.27	64,64,64,64	0
86	MG	M7	206	1/1	0.78	0.52	37,37,37,37	0
86	MG	5	3827	1/1	0.79	0.28	45,45,45,45	0
86	MG	5	3828	1/1	0.79	0.34	49,49,49,49	0
86	MG	8	226	1/1	0.79	0.38	55,55,55,55	0
86	MG	6	2123	1/1	0.79	0.59	83,83,83,83	0
86	MG	1	3817	1/1	0.79	0.40	53,53,53,53	0
86	MG	5	4090	1/1	0.79	0.60	37,37,37,37	0
86	MG	2	2085	1/1	0.79	0.56	97,97,97,97	0
86	MG	1	3929	1/1	0.79	0.36	42,42,42,42	0
86	MG	6	2092	1/1	0.79	0.44	58,58,58,58	0
86	MG	M7	207	1/1	0.79	0.40	56,56,56,56	0
86	MG	1	3957	1/1	0.79	0.45	55,55,55,55	0
86	MG	q0	202	1/1	0.79	0.28	43,43,43,43	0
86	MG	6	2146	1/1	0.79	0.29	55,55,55,55	0
85	OHX	1	3718	7/7	0.79	0.28	204,204,204,204	0
86	MG	1	3939	1/1	0.79	0.23	65,65,65,65	0
86	MG	1	4094	1/1	0.79	0.82	68,68,68,68	0
86	MG	2	2051	1/1	0.79	0.56	80,80,80,80	0
86	MG	1	3786	1/1	0.79	0.50	37,37,37,37	0
86	MG	1	4034	1/1	0.79	0.36	51,51,51,51	0
86	MG	5	4057	1/1	0.80	0.18	115,115,115,115	0
86	MG	5	4123	1/1	0.80	0.39	49,49,49,49	0
86	MG	5	4128	1/1	0.80	0.20	87,87,87,87	0
86	MG	2	2099	1/1	0.80	0.78	62,62,62,62	0
86	MG	4	224	1/1	0.80	0.31	50,50,50,50	0
86	MG	1	3986	1/1	0.80	0.44	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3987	1/1	0.80	0.23	70,70,70,70	0
86	MG	5	3799	1/1	0.80	0.39	43,43,43,43	0
85	OHX	2	2024	7/7	0.80	0.34	154,154,154,154	0
86	MG	1	3742	1/1	0.80	0.60	138,138,138,138	0
86	MG	6	2066	1/1	0.80	0.61	66,66,66,66	0
86	MG	5	4096	1/1	0.80	0.26	36,36,36,36	0
86	MG	2	2119	1/1	0.80	0.29	81,81,81,81	0
86	MG	1	3992	1/1	0.80	0.28	51,51,51,51	0
86	MG	5	4002	1/1	0.80	0.34	38,38,38,38	0
86	MG	1	4105	1/1	0.80	0.56	62,62,62,62	0
86	MG	1	4106	1/1	0.80	0.44	55,55,55,55	0
86	MG	1	4132	1/1	0.80	0.89	53,53,53,53	0
86	MG	5	4052	1/1	0.80	0.31	75,75,75,75	0
86	MG	2	2130	1/1	0.80	0.85	70,70,70,70	0
86	MG	5	3838	1/1	0.81	0.34	35,35,35,35	0
86	MG	5	4060	1/1	0.81	0.14	44,44,44,44	0
86	MG	1	3998	1/1	0.81	0.41	60,60,60,60	0
86	MG	5	4069	1/1	0.81	0.32	49,49,49,49	0
86	MG	5	3761	1/1	0.81	0.30	36,36,36,36	0
85	OHX	5	3730	7/7	0.81	0.39	158,158,158,158	0
86	MG	5	4003	1/1	0.81	0.27	33,33,33,33	0
86	MG	5	4086	1/1	0.81	0.22	92,92,92,92	0
86	MG	5	4087	1/1	0.81	0.91	50,50,50,50	0
86	MG	5	3779	1/1	0.81	0.23	103,103,103,103	0
86	MG	2	2046	1/1	0.81	0.84	84,84,84,84	0
86	MG	5	3882	1/1	0.81	0.31	44,44,44,44	0
86	MG	5	3887	1/1	0.81	0.39	49,49,49,49	0
86	MG	7	221	1/1	0.81	0.52	51,51,51,51	0
86	MG	1	3945	1/1	0.81	0.27	43,43,43,43	0
86	MG	5	4098	1/1	0.81	0.65	54,54,54,54	0
86	MG	5	3932	1/1	0.81	0.23	42,42,42,42	0
85	OHX	2	2035	7/7	0.81	0.19	223,223,223,223	0
86	MG	1	3799	1/1	0.81	0.42	50,50,50,50	0
86	MG	m4	202	1/1	0.81	0.28	42,42,42,42	0
85	OHX	4	212	7/7	0.81	0.56	135,135,135,135	0
86	MG	1	4074	1/1	0.81	0.27	48,48,48,48	0
86	MG	1	3855	1/1	0.81	0.39	29,29,29,29	0
86	MG	1	4124	1/1	0.81	0.43	59,59,59,59	0
86	MG	5	3808	1/1	0.81	0.23	114,114,114,114	0
86	MG	5	3811	1/1	0.81	0.24	39,39,39,39	0
85	OHX	6	2029	7/7	0.81	0.41	159,159,159,159	0
86	MG	1	3863	1/1	0.81	0.29	30,30,30,30	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3743	1/1	0.81	0.75	47,47,47,47	0
86	MG	1	3867	1/1	0.81	0.33	54,54,54,54	0
86	MG	6	2119	1/1	0.81	0.33	76,76,76,76	0
86	MG	5	3832	1/1	0.81	0.65	54,54,54,54	0
86	MG	4	216	1/1	0.81	0.61	55,55,55,55	0
86	MG	4	229	1/1	0.82	0.55	51,51,51,51	0
85	OHX	2	2031	7/7	0.82	0.46	147,147,147,147	0
86	MG	1	3782	1/1	0.82	0.38	35,35,35,35	0
86	MG	5	3803	1/1	0.82	0.33	44,44,44,44	0
86	MG	5	4091	1/1	0.82	0.55	73,73,73,73	0
86	MG	1	4071	1/1	0.82	0.35	38,38,38,38	0
86	MG	5	4171	1/1	0.82	0.80	35,35,35,35	0
86	MG	D9	103	1/1	0.82	0.42	88,88,88,88	0
86	MG	2	2096	1/1	0.82	0.53	66,66,66,66	0
86	MG	6	2138	1/1	0.82	0.33	67,67,67,67	0
86	MG	6	2087	1/1	0.82	0.38	45,45,45,45	0
86	MG	1	3793	1/1	0.82	0.47	46,46,46,46	0
86	MG	5	3824	1/1	0.82	0.42	51,51,51,51	0
86	MG	1	4099	1/1	0.82	0.14	52,52,52,52	0
86	MG	6	2148	1/1	0.82	0.28	65,65,65,65	0
86	MG	M7	203	1/1	0.82	0.78	65,65,65,65	0
86	MG	2	2089	1/1	0.82	0.55	102,102,102,102	0
86	MG	1	3997	1/1	0.82	0.41	58,58,58,58	0
86	MG	n0	202	1/1	0.82	0.31	36,36,36,36	0
86	MG	5	4045	1/1	0.82	0.27	42,42,42,42	0
86	MG	6	2109	1/1	0.82	0.56	65,65,65,65	0
86	MG	2	2064	1/1	0.82	0.58	83,83,83,83	0
86	MG	5	3849	1/1	0.82	0.72	62,62,62,62	0
86	MG	5	3998	1/1	0.82	0.40	76,76,76,76	0
86	MG	1	4001	1/1	0.82	0.20	51,51,51,51	0
86	MG	1	3921	1/1	0.82	0.40	50,50,50,50	0
86	MG	1	3859	1/1	0.82	0.31	48,48,48,48	0
86	MG	5	3794	1/1	0.82	0.34	56,56,56,56	0
86	MG	5	4070	1/1	0.82	0.29	68,68,68,68	0
85	OHX	5	3669	7/7	0.82	0.33	192,192,192,192	0
86	MG	5	4012	1/1	0.82	0.26	69,69,69,69	0
86	MG	5	4152	1/1	0.82	0.35	48,48,48,48	0
87	ZN	d7	101	1/1	0.82	0.43	133,133,133,133	0
86	MG	2	2084	1/1	0.83	0.85	59,59,59,59	0
86	MG	2	2077	1/1	0.83	0.57	71,71,71,71	0
86	MG	5	3755	1/1	0.83	0.17	52,52,52,52	0
86	MG	6	2115	1/1	0.83	0.40	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	O7	104	1/1	0.83	0.53	58,58,58,58	0
86	MG	5	4033	1/1	0.83	0.63	41,41,41,41	0
86	MG	1	3790	1/1	0.83	0.21	41,41,41,41	0
86	MG	5	4099	1/1	0.83	0.38	63,63,63,63	0
86	MG	1	4083	1/1	0.83	0.23	46,46,46,46	0
86	MG	5	4103	1/1	0.83	0.37	92,92,92,92	0
86	MG	5	3986	1/1	0.83	0.40	35,35,35,35	0
86	MG	5	4041	1/1	0.83	0.74	47,47,47,47	0
86	MG	5	4107	1/1	0.83	0.51	40,40,40,40	0
86	MG	6	2068	1/1	0.83	0.40	45,45,45,45	0
86	MG	1	3969	1/1	0.83	0.32	35,35,35,35	0
85	OHX	5	3674	7/7	0.83	0.25	178,178,178,178	0
86	MG	2	2079	1/1	0.83	0.39	154,154,154,154	0
86	MG	1	4047	1/1	0.83	0.24	75,75,75,75	0
86	MG	m6	201	1/1	0.83	0.32	40,40,40,40	0
86	MG	5	4122	1/1	0.83	0.30	53,53,53,53	0
86	MG	1	3973	1/1	0.83	0.29	55,55,55,55	0
86	MG	5	4124	1/1	0.83	0.41	86,86,86,86	0
86	MG	5	3883	1/1	0.83	0.43	48,48,48,48	0
86	MG	1	4049	1/1	0.83	0.38	41,41,41,41	0
86	MG	6	2141	1/1	0.83	0.75	59,59,59,59	0
86	MG	4	222	1/1	0.83	0.34	43,43,43,43	0
86	MG	5	3934	1/1	0.83	0.59	44,44,44,44	0
86	MG	4	223	1/1	0.83	0.32	65,65,65,65	0
86	MG	5	4141	1/1	0.83	0.36	28,28,28,28	0
85	OHX	1	3669	7/7	0.83	0.36	161,161,161,161	0
86	MG	5	3956	1/1	0.83	0.29	34,34,34,34	0
86	MG	6	2106	1/1	0.83	0.47	87,87,87,87	0
86	MG	6	2149	1/1	0.83	0.72	52,52,52,52	0
86	MG	2	2050	1/1	0.83	0.35	87,87,87,87	0
85	OHX	1	3725	7/7	0.84	0.47	178,178,178,178	0
86	MG	3	218	1/1	0.84	0.56	81,81,81,81	0
86	MG	1	3963	1/1	0.84	0.48	70,70,70,70	0
86	MG	1	3752	1/1	0.84	0.49	41,41,41,41	0
86	MG	1	3754	1/1	0.84	0.12	89,89,89,89	0
86	MG	5	3947	1/1	0.84	0.50	38,38,38,38	0
86	MG	5	4021	1/1	0.84	0.46	54,54,54,54	0
86	MG	5	4022	1/1	0.84	0.31	41,41,41,41	0
86	MG	1	4110	1/1	0.84	0.28	32,32,32,32	0
86	MG	1	4066	1/1	0.84	0.31	41,41,41,41	0
86	MG	5	3955	1/1	0.84	0.20	46,46,46,46	0
86	MG	6	2171	1/1	0.84	0.18	92,92,92,92	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	4112	1/1	0.84	0.27	54,54,54,54	0
86	MG	1	3837	1/1	0.84	0.34	37,37,37,37	0
86	MG	2	2093	1/1	0.84	0.62	125,125,125,125	0
86	MG	6	2069	1/1	0.84	0.52	71,71,71,71	0
86	MG	5	4037	1/1	0.84	0.43	39,39,39,39	0
86	MG	6	2073	1/1	0.84	0.80	53,53,53,53	0
86	MG	19	202	1/1	0.84	0.36	46,46,46,46	0
86	MG	L4	402	1/1	0.84	0.28	35,35,35,35	0
86	MG	6	2182	1/1	0.84	0.42	76,76,76,76	0
86	MG	2	2110	1/1	0.84	0.55	91,91,91,91	0
86	MG	2	2049	1/1	0.84	0.55	58,58,58,58	0
85	OHX	1	3726	7/7	0.84	0.41	140,140,140,140	0
86	MG	5	4047	1/1	0.84	0.29	35,35,35,35	0
86	MG	1	3980	1/1	0.84	0.28	58,58,58,58	0
86	MG	1	4051	1/1	0.84	0.58	44,44,44,44	0
86	MG	o3	202	1/1	0.84	0.35	40,40,40,40	0
86	MG	2	2105	1/1	0.84	0.38	90,90,90,90	0
86	MG	q1	101	1/1	0.84	0.51	52,52,52,52	0
86	MG	1	3748	1/1	0.84	0.37	40,40,40,40	0
86	MG	5	3841	1/1	0.84	0.28	53,53,53,53	0
86	MG	6	2099	1/1	0.84	0.37	57,57,57,57	0
86	MG	6	2101	1/1	0.84	0.73	53,53,53,53	0
86	MG	5	3771	1/1	0.84	0.33	50,50,50,50	0
86	MG	6	2102	1/1	0.84	1.79	68,68,68,68	0
86	MG	3	213	1/1	0.84	0.58	44,44,44,44	0
86	MG	5	3787	1/1	0.84	0.36	34,34,34,34	0
86	MG	6	2064	1/1	0.85	1.29	75,75,75,75	0
86	MG	5	3954	1/1	0.85	0.26	46,46,46,46	0
86	MG	2	2054	1/1	0.85	0.42	70,70,70,70	0
86	MG	1	3952	1/1	0.85	0.32	50,50,50,50	0
86	MG	5	4157	1/1	0.85	0.26	48,48,48,48	0
86	MG	5	3826	1/1	0.85	0.58	51,51,51,51	0
86	MG	5	4092	1/1	0.85	0.39	58,58,58,58	0
86	MG	1	3954	1/1	0.85	0.32	58,58,58,58	0
86	MG	1	3787	1/1	0.85	0.27	35,35,35,35	0
86	MG	1	3928	1/1	0.85	0.26	44,44,44,44	0
86	MG	6	2076	1/1	0.85	0.38	58,58,58,58	0
86	MG	5	3773	1/1	0.85	0.78	47,47,47,47	0
86	MG	1	3816	1/1	0.85	0.25	40,40,40,40	0
85	OHX	n5	201	7/7	0.85	0.33	193,193,193,193	0
86	MG	6	2082	1/1	0.85	0.28	70,70,70,70	0
86	MG	5	4036	1/1	0.85	0.21	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3966	1/1	0.85	0.60	64,64,64,64	0
86	MG	2	2070	1/1	0.85	0.51	62,62,62,62	0
86	MG	13	404	1/1	0.85	0.82	49,49,49,49	0
86	MG	5	3856	1/1	0.85	0.35	38,38,38,38	0
86	MG	5	4113	1/1	0.85	0.31	44,44,44,44	0
86	MG	1	3830	1/1	0.85	0.60	29,29,29,29	0
86	MG	m0	304	1/1	0.85	0.29	88,88,88,88	0
86	MG	5	3993	1/1	0.85	0.69	39,39,39,39	0
86	MG	5	3796	1/1	0.85	0.36	38,38,38,38	0
86	MG	m6	202	1/1	0.85	0.39	35,35,35,35	0
86	MG	6	2134	1/1	0.85	0.76	56,56,56,56	0
86	MG	5	4121	1/1	0.85	0.71	44,44,44,44	0
86	MG	5	3996	1/1	0.85	0.39	56,56,56,56	0
86	MG	5	3997	1/1	0.85	0.22	76,76,76,76	0
86	MG	5	4049	1/1	0.85	0.42	54,54,54,54	0
86	MG	1	3996	1/1	0.85	0.27	47,47,47,47	0
86	MG	o1	201	1/1	0.85	0.70	51,51,51,51	0
86	MG	5	4131	1/1	0.85	0.99	86,86,86,86	0
86	MG	5	3999	1/1	0.85	0.30	42,42,42,42	0
85	OHX	6	2050	7/7	0.85	0.29	173,173,173,173	0
86	MG	5	3885	1/1	0.85	0.90	49,49,49,49	0
86	MG	1	3801	1/1	0.85	0.40	43,43,43,43	0
86	MG	4	228	1/1	0.85	0.37	36,36,36,36	0
86	MG	6	2183	1/1	0.85	0.49	64,64,64,64	0
85	OHX	6	1987	7/7	0.85	0.42	156,156,156,156	0
86	MG	1	3946	1/1	0.85	0.37	52,52,52,52	0
86	MG	5	4146	1/1	0.85	0.44	31,31,31,31	0
86	MG	2	2116	1/1	0.85	0.30	82,82,82,82	0
86	MG	1	4072	1/1	0.86	0.25	44,44,44,44	0
86	MG	5	3791	1/1	0.86	0.62	29,29,29,29	0
86	MG	1	4035	1/1	0.86	0.28	49,49,49,49	0
86	MG	5	4076	1/1	0.86	0.41	36,36,36,36	0
85	OHX	1	3715	7/7	0.86	0.41	147,147,147,147	0
86	MG	6	2052	1/1	0.86	0.77	49,49,49,49	0
86	MG	5	4005	1/1	0.86	0.27	61,61,61,61	0
86	MG	5	4011	1/1	0.86	0.41	42,42,42,42	0
86	MG	6	2168	1/1	0.86	0.34	44,44,44,44	0
86	MG	6	2056	1/1	0.86	0.33	82,82,82,82	0
86	MG	5	3943	1/1	0.86	0.19	65,65,65,65	0
86	MG	1	3738	1/1	0.86	0.47	50,50,50,50	0
86	MG	5	3949	1/1	0.86	0.46	41,41,41,41	0
86	MG	1	3983	1/1	0.86	0.31	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	6	2174	1/1	0.86	0.91	62,62,62,62	0
86	MG	1	3762	1/1	0.86	0.47	44,44,44,44	0
86	MG	6	2177	1/1	0.86	0.32	99,99,99,99	0
86	MG	1	3739	1/1	0.86	0.54	52,52,52,52	0
86	MG	5	3958	1/1	0.86	0.29	56,56,56,56	0
86	MG	5	3961	1/1	0.86	0.26	38,38,38,38	0
85	OHX	2	2032	7/7	0.86	0.33	168,168,168,168	0
85	OHX	s9	201	7/7	0.86	0.55	126,126,126,126	0
86	MG	1	4085	1/1	0.86	0.34	47,47,47,47	0
86	MG	1	3934	1/1	0.86	0.23	44,44,44,44	0
86	MG	1	3806	1/1	0.86	0.16	56,56,56,56	0
86	MG	1	3990	1/1	0.86	0.46	47,47,47,47	0
86	MG	m6	204	1/1	0.86	0.15	43,43,43,43	0
85	OHX	5	3731	7/7	0.86	0.31	146,146,146,146	0
86	MG	5	3976	1/1	0.86	0.19	42,42,42,42	0
86	MG	1	4023	1/1	0.86	0.43	47,47,47,47	0
86	MG	5	3981	1/1	0.86	0.75	58,58,58,58	0
86	MG	1	4125	1/1	0.86	0.38	64,64,64,64	0
85	OHX	5	3746	7/7	0.86	0.33	172,172,172,172	0
86	MG	5	4129	1/1	0.86	0.53	66,66,66,66	0
85	OHX	l5	304	7/7	0.86	0.48	134,134,134,134	0
86	MG	o4	202	1/1	0.86	0.36	61,61,61,61	0
86	MG	5	3751	1/1	0.86	0.43	44,44,44,44	0
86	MG	1	4130	1/1	0.86	0.45	52,52,52,52	0
86	MG	6	2100	1/1	0.86	0.87	42,42,42,42	0
85	OHX	m4	201	7/7	0.86	0.44	181,181,181,181	0
86	MG	5	3766	1/1	0.86	0.26	88,88,88,88	0
86	MG	2	2107	1/1	0.86	0.79	65,65,65,65	0
86	MG	1	3788	1/1	0.86	0.40	32,32,32,32	0
86	MG	6	2159	1/1	0.86	0.26	81,81,81,81	0
86	MG	5	4066	1/1	0.86	0.36	64,64,64,64	0
86	MG	1	3999	1/1	0.86	0.27	66,66,66,66	0
86	MG	1	3882	1/1	0.87	0.38	31,31,31,31	0
86	MG	1	3904	1/1	0.87	0.39	51,51,51,51	0
85	OHX	1	3734	7/7	0.87	0.59	136,136,136,136	0
86	MG	1	3795	1/1	0.87	0.38	39,39,39,39	0
86	MG	2	2100	1/1	0.87	0.69	69,69,69,69	0
86	MG	5	3978	1/1	0.87	0.38	30,30,30,30	0
86	MG	5	3869	1/1	0.87	0.24	52,52,52,52	0
86	MG	5	4172	1/1	0.87	0.38	70,70,70,70	0
86	MG	5	3872	1/1	0.87	0.49	30,30,30,30	0
86	MG	1	4118	1/1	0.87	0.45	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	6	2039	7/7	0.87	0.35	166,166,166,166	0
86	MG	5	4102	1/1	0.87	0.46	42,42,42,42	0
86	MG	1	4069	1/1	0.87	0.93	69,69,69,69	0
86	MG	2	2104	1/1	0.87	0.38	68,68,68,68	0
86	MG	5	3884	1/1	0.87	0.66	47,47,47,47	0
86	MG	6	2108	1/1	0.87	0.73	77,77,77,77	0
86	MG	6	2065	1/1	0.87	0.67	60,60,60,60	0
86	MG	5	3901	1/1	0.87	0.34	40,40,40,40	0
86	MG	5	3909	1/1	0.87	0.45	25,25,25,25	0
86	MG	17	301	1/1	0.87	0.26	35,35,35,35	0
86	MG	1	4039	1/1	0.87	0.27	44,44,44,44	0
86	MG	1	3779	1/1	0.87	0.43	53,53,53,53	0
85	OHX	1	3683	7/7	0.87	0.29	153,153,153,153	0
85	OHX	1	3708	7/7	0.87	0.54	152,152,152,152	0
86	MG	1	3809	1/1	0.87	0.42	41,41,41,41	0
86	MG	1	3756	1/1	0.87	0.16	37,37,37,37	0
86	MG	5	3821	1/1	0.87	0.20	72,72,72,72	0
86	MG	M7	204	1/1	0.87	0.33	43,43,43,43	0
86	MG	6	2125	1/1	0.87	0.29	51,51,51,51	0
86	MG	5	4006	1/1	0.87	0.23	44,44,44,44	0
86	MG	5	4008	1/1	0.87	0.19	42,42,42,42	0
86	MG	5	4010	1/1	0.87	0.55	40,40,40,40	0
86	MG	6	2167	1/1	0.87	0.32	60,60,60,60	0
86	MG	5	4138	1/1	0.87	0.45	62,62,62,62	0
86	MG	2	2052	1/1	0.87	0.47	64,64,64,64	0
85	OHX	5	3738	7/7	0.87	0.27	160,160,160,160	0
86	MG	5	4074	1/1	0.87	0.38	51,51,51,51	0
86	MG	1	3995	1/1	0.87	0.29	39,39,39,39	0
86	MG	5	4077	1/1	0.87	0.17	79,79,79,79	0
86	MG	5	4078	1/1	0.87	0.18	32,32,32,32	0
86	MG	2	2121	1/1	0.87	0.57	88,88,88,88	0
86	MG	5	4085	1/1	0.87	0.13	36,36,36,36	0
86	MG	5	3783	1/1	0.87	0.36	57,57,57,57	0
86	MG	5	3786	1/1	0.87	0.16	37,37,37,37	0
86	MG	5	4154	1/1	0.87	0.24	40,40,40,40	0
86	MG	1	3751	1/1	0.88	0.23	59,59,59,59	0
86	MG	1	4043	1/1	0.88	0.39	52,52,52,52	0
86	MG	5	3759	1/1	0.88	0.56	36,36,36,36	0
86	MG	1	3862	1/1	0.88	0.39	40,40,40,40	0
85	OHX	5	3711	7/7	0.88	0.43	134,134,134,134	0
86	MG	5	4068	1/1	0.88	0.42	36,36,36,36	0
86	MG	1	3864	1/1	0.88	0.46	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3953	1/1	0.88	0.24	57,57,57,57	0
86	MG	6	2077	1/1	0.88	0.29	62,62,62,62	0
86	MG	5	3777	1/1	0.88	0.18	44,44,44,44	0
85	OHX	5	3719	7/7	0.88	0.21	181,181,181,181	0
86	MG	2	2102	1/1	0.88	0.46	79,79,79,79	0
86	MG	1	3757	1/1	0.88	0.32	42,42,42,42	0
86	MG	5	3898	1/1	0.88	0.82	30,30,30,30	0
86	MG	5	4081	1/1	0.88	0.26	49,49,49,49	0
86	MG	5	4163	1/1	0.88	0.68	54,54,54,54	0
85	OHX	1	3664	7/7	0.88	0.43	137,137,137,137	0
86	MG	5	3902	1/1	0.88	0.21	33,33,33,33	0
86	MG	5	4170	1/1	0.88	0.41	55,55,55,55	0
85	OHX	2	2020	7/7	0.88	0.22	172,172,172,172	0
86	MG	5	3916	1/1	0.88	0.98	52,52,52,52	0
86	MG	2	2056	1/1	0.88	0.51	57,57,57,57	0
86	MG	5	3925	1/1	0.88	0.47	26,26,26,26	0
86	MG	L9	201	1/1	0.88	0.42	57,57,57,57	0
86	MG	1	4060	1/1	0.88	0.33	35,35,35,35	0
85	OHX	6	2048	7/7	0.88	0.34	171,171,171,171	0
86	MG	1	3970	1/1	0.88	0.38	44,44,44,44	0
86	MG	8	223	1/1	0.88	0.50	50,50,50,50	0
86	MG	8	225	1/1	0.88	0.36	66,66,66,66	0
86	MG	1	3905	1/1	0.88	0.53	33,33,33,33	0
85	OHX	2	1946	7/7	0.88	0.27	170,170,170,170	0
86	MG	5	4020	1/1	0.88	0.25	62,62,62,62	0
86	MG	5	4100	1/1	0.88	0.22	40,40,40,40	0
86	MG	1	3812	1/1	0.88	0.41	40,40,40,40	0
86	MG	1	3924	1/1	0.88	0.20	79,79,79,79	0
85	OHX	s1	302	7/7	0.88	0.40	154,154,154,154	0
86	MG	N3	201	1/1	0.88	0.37	38,38,38,38	0
86	MG	m1	202	1/1	0.88	0.24	59,59,59,59	0
86	MG	5	3957	1/1	0.88	0.28	83,83,83,83	0
85	OHX	2	2041	7/7	0.88	0.36	159,159,159,159	0
86	MG	5	4110	1/1	0.88	0.27	34,34,34,34	0
86	MG	6	2112	1/1	0.88	0.64	71,71,71,71	0
86	MG	6	2113	1/1	0.88	0.76	50,50,50,50	0
86	MG	n0	203	1/1	0.88	0.24	40,40,40,40	0
85	OHX	1	3619	7/7	0.88	0.26	146,146,146,146	0
85	OHX	o4	201	7/7	0.88	0.52	126,126,126,126	0
86	MG	6	2118	1/1	0.88	0.29	59,59,59,59	0
86	MG	5	4117	1/1	0.88	0.56	48,48,48,48	0
86	MG	5	4118	1/1	0.88	0.40	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3831	1/1	0.88	0.55	30,30,30,30	0
86	MG	2	2045	1/1	0.88	0.83	53,53,53,53	0
86	MG	1	3936	1/1	0.88	0.35	66,66,66,66	0
86	MG	1	3840	1/1	0.88	0.43	34,34,34,34	0
85	OHX	5	3673	7/7	0.88	0.30	130,130,130,130	0
86	MG	p0	401	1/1	0.88	0.15	89,89,89,89	0
86	MG	1	3745	1/1	0.88	0.63	32,32,32,32	0
86	MG	1	4086	1/1	0.88	0.64	55,55,55,55	0
86	MG	6	2057	1/1	0.88	0.22	49,49,49,49	0
86	MG	5	4132	1/1	0.88	0.46	35,35,35,35	0
86	MG	5	3983	1/1	0.88	0.44	36,36,36,36	0
85	OHX	1	3649	7/7	0.88	0.54	118,118,118,118	0
86	MG	5	3985	1/1	0.88	0.40	44,44,44,44	0
85	OHX	5	3675	7/7	0.88	0.31	149,149,149,149	0
86	MG	5	3763	1/1	0.89	0.71	28,28,28,28	0
86	MG	5	4034	1/1	0.89	0.27	51,51,51,51	0
86	MG	6	2155	1/1	0.89	0.49	108,108,108,108	0
86	MG	1	4046	1/1	0.89	0.61	55,55,55,55	0
86	MG	2	2135	1/1	0.89	0.13	101,101,101,101	0
85	OHX	2	2010	7/7	0.89	0.41	134,134,134,134	0
86	MG	5	3871	1/1	0.89	0.70	35,35,35,35	0
86	MG	1	4128	1/1	0.89	0.19	41,41,41,41	0
85	OHX	s8	301	7/7	0.89	0.34	155,155,155,155	0
86	MG	7	223	1/1	0.89	0.13	71,71,71,71	0
86	MG	1	3741	1/1	0.89	0.37	60,60,60,60	0
86	MG	5	3785	1/1	0.89	0.37	39,39,39,39	0
86	MG	1	3977	1/1	0.89	0.31	48,48,48,48	0
86	MG	3	216	1/1	0.89	0.40	71,71,71,71	0
86	MG	1	3940	1/1	0.89	0.29	65,65,65,65	0
86	MG	8	228	1/1	0.89	0.52	44,44,44,44	0
86	MG	1	4053	1/1	0.89	0.33	45,45,45,45	0
86	MG	5	3893	1/1	0.89	0.39	48,48,48,48	0
86	MG	4	215	1/1	0.89	0.60	51,51,51,51	0
85	OHX	5	3744	7/7	0.89	0.21	134,134,134,134	0
86	MG	6	2060	1/1	0.89	0.43	54,54,54,54	0
85	OHX	1	3685	7/7	0.89	0.35	128,128,128,128	0
85	OHX	7	210	7/7	0.89	0.34	140,140,140,140	0
86	MG	m3	201	1/1	0.89	0.24	35,35,35,35	0
86	MG	5	3917	1/1	0.89	0.58	41,41,41,41	0
86	MG	1	4020	1/1	0.89	0.62	39,39,39,39	0
86	MG	1	3815	1/1	0.89	0.28	54,54,54,54	0
85	OHX	5	3664	7/7	0.89	0.46	125,125,125,125	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	1	3688	7/7	0.89	0.38	146,146,146,146	0
86	MG	1	3824	1/1	0.89	0.54	40,40,40,40	0
86	MG	6	2130	1/1	0.89	0.46	82,82,82,82	0
86	MG	1	3888	1/1	0.89	0.39	31,31,31,31	0
86	MG	1	3889	1/1	0.89	0.22	36,36,36,36	0
86	MG	1	4029	1/1	0.89	0.28	73,73,73,73	0
86	MG	1	3825	1/1	0.89	0.37	38,38,38,38	0
86	MG	5	4083	1/1	0.89	0.30	44,44,44,44	0
86	MG	5	3823	1/1	0.89	0.60	50,50,50,50	0
86	MG	s4	302	1/1	0.89	0.62	62,62,62,62	0
86	MG	c1	202	1/1	0.89	0.34	52,52,52,52	0
85	OHX	2	2026	7/7	0.89	0.27	168,168,168,168	0
85	OHX	6	2021	7/7	0.89	0.33	169,169,169,169	0
85	OHX	2	2030	7/7	0.89	0.23	179,179,179,179	0
85	OHX	5	3701	7/7	0.89	0.39	126,126,126,126	0
85	OHX	2	2019	7/7	0.89	0.27	156,156,156,156	0
85	OHX	2	2003	7/7	0.89	0.40	144,144,144,144	0
86	MG	1	3800	1/1	0.89	0.66	51,51,51,51	0
85	OHX	2	2023	7/7	0.89	0.41	166,166,166,166	0
86	MG	5	4164	1/1	0.89	0.64	45,45,45,45	0
87	ZN	E1	501	1/1	0.89	0.05	134,134,134,134	0
86	MG	5	3845	1/1	0.89	0.79	44,44,44,44	0
87	ZN	q2	501	1/1	0.89	0.36	83,83,83,83	0
85	OHX	5	3710	7/7	0.90	0.48	137,137,137,137	0
86	MG	5	3809	1/1	0.90	0.60	38,38,38,38	0
86	MG	6	2176	1/1	0.90	0.26	54,54,54,54	0
86	MG	1	4009	1/1	0.90	0.27	65,65,65,65	0
86	MG	1	3798	1/1	0.90	0.29	41,41,41,41	0
86	MG	5	3820	1/1	0.90	0.44	28,28,28,28	0
85	OHX	1	3699	7/7	0.90	0.40	147,147,147,147	0
85	OHX	2	2039	7/7	0.90	0.51	153,153,153,153	0
86	MG	1	3876	1/1	0.90	0.31	48,48,48,48	0
85	OHX	5	3725	7/7	0.90	0.46	125,125,125,125	0
86	MG	5	4053	1/1	0.90	0.66	77,77,77,77	0
86	MG	2	2058	1/1	0.90	0.64	58,58,58,58	0
86	MG	1	3968	1/1	0.90	0.64	47,47,47,47	0
86	MG	5	3977	1/1	0.90	0.34	45,45,45,45	0
86	MG	5	4156	1/1	0.90	0.28	55,55,55,55	0
85	OHX	4	211	7/7	0.90	0.33	111,111,111,111	0
86	MG	5	4062	1/1	0.90	0.90	51,51,51,51	0
86	MG	5	4064	1/1	0.90	0.38	47,47,47,47	0
86	MG	5	3979	1/1	0.90	0.37	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	3831	1/1	0.90	0.60	32,32,32,32	0
86	MG	5	4067	1/1	0.90	0.77	39,39,39,39	0
86	MG	6	2054	1/1	0.90	0.74	58,58,58,58	0
85	OHX	2	2034	7/7	0.90	0.29	135,135,135,135	0
86	MG	2	2061	1/1	0.90	0.45	59,59,59,59	0
85	OHX	2	2043	7/7	0.90	0.26	179,179,179,179	0
86	MG	5	3747	1/1	0.90	0.30	34,34,34,34	0
86	MG	1	3810	1/1	0.90	0.16	41,41,41,41	0
86	MG	1	3909	1/1	0.90	0.61	36,36,36,36	0
86	MG	1	3912	1/1	0.90	0.42	34,34,34,34	0
86	MG	5	3990	1/1	0.90	0.19	36,36,36,36	0
86	MG	5	3991	1/1	0.90	0.27	47,47,47,47	0
85	OHX	5	3652	7/7	0.90	0.31	126,126,126,126	0
85	OHX	6	1990	7/7	0.90	0.34	129,129,129,129	0
86	MG	5	3861	1/1	0.90	0.48	33,33,33,33	0
86	MG	5	3864	1/1	0.90	0.20	34,34,34,34	0
85	OHX	2	2008	7/7	0.90	0.26	185,185,185,185	0
86	MG	5	3870	1/1	0.90	0.44	43,43,43,43	0
86	MG	6	2144	1/1	0.90	0.34	75,75,75,75	0
85	OHX	8	213	7/7	0.90	0.34	124,124,124,124	0
86	MG	1	4036	1/1	0.90	0.39	58,58,58,58	0
86	MG	5	3767	1/1	0.90	0.33	39,39,39,39	0
85	OHX	8	216	7/7	0.90	0.36	134,134,134,134	0
85	OHX	13	402	7/7	0.90	0.47	145,145,145,145	0
86	MG	5	3774	1/1	0.90	0.31	31,31,31,31	0
86	MG	2	2109	1/1	0.90	0.65	73,73,73,73	0
85	OHX	1	3723	7/7	0.90	0.44	115,115,115,115	0
86	MG	5	4009	1/1	0.90	0.18	49,49,49,49	0
86	MG	5	3888	1/1	0.90	0.55	43,43,43,43	0
85	OHX	6	2036	7/7	0.90	0.39	128,128,128,128	0
86	MG	1	3776	1/1	0.90	0.30	34,34,34,34	0
86	MG	1	3937	1/1	0.90	0.23	57,57,57,57	0
85	OHX	2	2022	7/7	0.90	0.62	127,127,127,127	0
85	OHX	5	3687	7/7	0.90	0.49	130,130,130,130	0
86	MG	5	3912	1/1	0.90	1.02	43,43,43,43	0
86	MG	5	3789	1/1	0.90	0.28	36,36,36,36	0
86	MG	2	2115	1/1	0.90	0.73	79,79,79,79	0
86	MG	6	2162	1/1	0.90	0.25	71,71,71,71	0
86	MG	1	3848	1/1	0.90	0.19	32,32,32,32	0
86	MG	5	3929	1/1	0.90	0.74	40,40,40,40	0
85	OHX	5	3691	7/7	0.90	0.50	110,110,110,110	0
85	OHX	5	3692	7/7	0.90	0.28	148,148,148,148	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	4028	1/1	0.90	0.26	41,41,41,41	0
86	MG	5	3941	1/1	0.90	0.31	40,40,40,40	0
86	MG	2	2118	1/1	0.90	0.61	51,51,51,51	0
86	MG	5	4031	1/1	0.90	0.25	62,62,62,62	0
86	MG	6	2105	1/1	0.90	0.57	42,42,42,42	0
85	OHX	5	3698	7/7	0.90	0.31	164,164,164,164	0
86	MG	5	4130	1/1	0.90	0.34	46,46,46,46	0
86	MG	6	2170	1/1	0.90	0.20	62,62,62,62	0
85	OHX	5	3700	7/7	0.90	0.37	136,136,136,136	0
85	OHX	6	2043	7/7	0.90	0.36	138,138,138,138	0
86	MG	M9	202	1/1	0.90	0.36	74,74,74,74	0
86	MG	5	3874	1/1	0.91	0.55	43,43,43,43	0
86	MG	5	4013	1/1	0.91	0.29	48,48,48,48	0
86	MG	2	2053	1/1	0.91	0.19	72,72,72,72	0
86	MG	1	3804	1/1	0.91	0.15	38,38,38,38	0
86	MG	1	3979	1/1	0.91	0.34	43,43,43,43	0
86	MG	3	214	1/1	0.91	0.69	68,68,68,68	0
86	MG	1	3892	1/1	0.91	0.38	44,44,44,44	0
86	MG	1	3895	1/1	0.91	0.29	29,29,29,29	0
86	MG	1	3903	1/1	0.91	0.82	43,43,43,43	0
85	OHX	1	3731	7/7	0.91	0.48	144,144,144,144	0
86	MG	2	2055	1/1	0.91	0.55	77,77,77,77	0
86	MG	1	3750	1/1	0.91	0.44	39,39,39,39	0
85	OHX	1	3549	7/7	0.91	0.20	139,139,139,139	0
86	MG	1	3914	1/1	0.91	0.25	43,43,43,43	0
86	MG	5	3904	1/1	0.91	0.35	35,35,35,35	0
86	MG	1	4067	1/1	0.91	0.36	58,58,58,58	0
85	OHX	1	3599	7/7	0.91	0.44	126,126,126,126	0
86	MG	5	3914	1/1	0.91	0.41	31,31,31,31	0
85	OHX	5	3579	7/7	0.91	0.38	122,122,122,122	0
85	OHX	5	3607	7/7	0.91	0.22	144,144,144,144	0
85	OHX	5	3643	7/7	0.91	0.24	133,133,133,133	0
86	MG	5	3775	1/1	0.91	0.32	34,34,34,34	0
86	MG	2	2062	1/1	0.91	0.23	74,74,74,74	0
86	MG	5	4151	1/1	0.91	0.17	99,99,99,99	0
85	OHX	5	3743	7/7	0.91	0.22	129,129,129,129	0
86	MG	5	3933	1/1	0.91	0.28	61,61,61,61	0
86	MG	L7	301	1/1	0.91	0.26	39,39,39,39	0
86	MG	5	3939	1/1	0.91	0.27	41,41,41,41	0
86	MG	5	3782	1/1	0.91	0.30	41,41,41,41	0
86	MG	1	3819	1/1	0.91	0.48	33,33,33,33	0
86	MG	5	3946	1/1	0.91	0.17	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	2	1982	7/7	0.91	0.23	193,193,193,193	0
86	MG	1	3933	1/1	0.91	0.22	43,43,43,43	0
85	OHX	5	3660	7/7	0.91	0.41	127,127,127,127	0
86	MG	1	4003	1/1	0.91	0.41	34,34,34,34	0
86	MG	5	4054	1/1	0.91	0.32	56,56,56,56	0
86	MG	1	3935	1/1	0.91	0.32	36,36,36,36	0
86	MG	1	3826	1/1	0.91	0.58	24,24,24,24	0
86	MG	5	4058	1/1	0.91	0.18	35,35,35,35	0
86	MG	6	2140	1/1	0.91	0.35	61,61,61,61	0
86	MG	1	3828	1/1	0.91	0.38	35,35,35,35	0
86	MG	6	2142	1/1	0.91	0.12	57,57,57,57	0
86	MG	1	3769	1/1	0.91	0.82	56,56,56,56	0
86	MG	1	4088	1/1	0.91	0.27	52,52,52,52	0
86	MG	1	3772	1/1	0.91	0.23	32,32,32,32	0
86	MG	2	2068	1/1	0.91	0.29	74,74,74,74	0
86	MG	1	4015	1/1	0.91	0.38	41,41,41,41	0
86	MG	8	224	1/1	0.91	0.25	61,61,61,61	0
85	OHX	2	2028	7/7	0.91	0.41	175,175,175,175	0
85	OHX	1	3650	7/7	0.91	0.23	158,158,158,158	0
85	OHX	1	3713	7/7	0.91	0.45	140,140,140,140	0
86	MG	1	3845	1/1	0.91	0.44	59,59,59,59	0
85	OHX	1	3661	7/7	0.91	0.28	132,132,132,132	0
86	MG	O7	105	1/1	0.91	0.21	69,69,69,69	0
86	MG	l3	406	1/1	0.91	0.35	44,44,44,44	0
86	MG	5	3813	1/1	0.91	0.81	48,48,48,48	0
86	MG	5	3816	1/1	0.91	0.24	37,37,37,37	0
86	MG	1	3781	1/1	0.91	0.23	45,45,45,45	0
86	MG	1	4022	1/1	0.91	0.28	56,56,56,56	0
86	MG	m0	305	1/1	0.91	0.29	39,39,39,39	0
86	MG	1	3852	1/1	0.91	0.38	37,37,37,37	0
86	MG	5	4084	1/1	0.91	0.14	143,143,143,143	0
85	OHX	6	2033	7/7	0.91	0.26	156,156,156,156	0
86	MG	1	4104	1/1	0.91	0.47	46,46,46,46	0
85	OHX	6	2035	7/7	0.91	0.46	144,144,144,144	0
86	MG	5	4089	1/1	0.91	0.35	67,67,67,67	0
86	MG	m7	201	1/1	0.91	0.40	32,32,32,32	0
86	MG	1	3956	1/1	0.91	0.49	81,81,81,81	0
86	MG	1	3860	1/1	0.91	0.27	45,45,45,45	0
86	MG	1	3959	1/1	0.91	0.18	74,74,74,74	0
85	OHX	2	2029	7/7	0.91	0.38	167,167,167,167	0
85	OHX	6	2037	7/7	0.91	0.49	146,146,146,146	0
86	MG	6	2072	1/1	0.91	0.52	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	3836	1/1	0.91	0.39	40,40,40,40	0
85	OHX	5	3696	7/7	0.91	0.38	114,114,114,114	0
86	MG	1	3964	1/1	0.91	0.37	51,51,51,51	0
86	MG	1	4115	1/1	0.91	0.56	29,29,29,29	0
86	MG	5	3843	1/1	0.91	0.73	37,37,37,37	0
85	OHX	1	3721	7/7	0.91	0.42	137,137,137,137	0
86	MG	1	3967	1/1	0.91	0.54	42,42,42,42	0
85	OHX	S6	301	7/7	0.91	0.30	167,167,167,167	0
85	OHX	1	3672	7/7	0.91	0.41	113,113,113,113	0
86	MG	1	3796	1/1	0.91	0.63	31,31,31,31	0
85	OHX	5	3707	7/7	0.91	0.41	135,135,135,135	0
85	OHX	5	3709	7/7	0.91	0.40	128,128,128,128	0
86	MG	5	4007	1/1	0.91	0.47	61,61,61,61	0
86	MG	6	2095	1/1	0.91	0.35	47,47,47,47	0
85	OHX	S8	301	7/7	0.91	0.26	165,165,165,165	0
86	MG	1	3744	1/1	0.91	0.35	36,36,36,36	0
86	MG	1	3887	1/1	0.91	0.59	27,27,27,27	0
86	MG	1	3820	1/1	0.92	1.09	54,54,54,54	0
86	MG	6	2121	1/1	0.92	0.28	68,68,68,68	0
85	OHX	6	2028	7/7	0.92	0.42	116,116,116,116	0
86	MG	1	3955	1/1	0.92	0.27	42,42,42,42	0
85	OHX	5	3722	7/7	0.92	0.40	131,131,131,131	0
85	OHX	2	2012	7/7	0.92	0.22	153,153,153,153	0
86	MG	5	3804	1/1	0.92	0.45	39,39,39,39	0
85	OHX	6	2032	7/7	0.92	0.33	140,140,140,140	0
85	OHX	1	3686	7/7	0.92	0.26	141,141,141,141	0
85	OHX	6	2034	7/7	0.92	0.43	129,129,129,129	0
85	OHX	2	2013	7/7	0.92	0.33	136,136,136,136	0
86	MG	5	4112	1/1	0.92	0.11	103,103,103,103	0
86	MG	1	3834	1/1	0.92	0.47	43,43,43,43	0
85	OHX	1	3560	7/7	0.92	0.21	145,145,145,145	0
86	MG	5	3992	1/1	0.92	0.25	29,29,29,29	0
86	MG	6	2137	1/1	0.92	0.52	66,66,66,66	0
85	OHX	1	3701	7/7	0.92	0.41	144,144,144,144	0
86	MG	L4	403	1/1	0.92	0.80	39,39,39,39	0
86	MG	5	4119	1/1	0.92	0.29	33,33,33,33	0
86	MG	5	3819	1/1	0.92	0.16	49,49,49,49	0
86	MG	1	3746	1/1	0.92	0.47	53,53,53,53	0
85	OHX	1	3565	7/7	0.92	0.28	138,138,138,138	0
85	OHX	8	211	7/7	0.92	0.27	120,120,120,120	0
85	OHX	1	3596	7/7	0.92	0.27	120,120,120,120	0
85	OHX	6	2044	7/7	0.92	0.40	123,123,123,123	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	6	2045	7/7	0.92	0.39	154,154,154,154	0
86	MG	M5	301	1/1	0.92	0.23	42,42,42,42	0
85	OHX	15	303	7/7	0.92	0.40	136,136,136,136	0
85	OHX	1	3712	7/7	0.92	0.31	170,170,170,170	0
85	OHX	2	1978	7/7	0.92	0.31	153,153,153,153	0
85	OHX	2	2033	7/7	0.92	0.31	138,138,138,138	0
86	MG	1	3760	1/1	0.92	0.43	47,47,47,47	0
86	MG	6	2157	1/1	0.92	0.60	49,49,49,49	0
85	OHX	1	3621	7/7	0.92	0.13	193,193,193,193	0
86	MG	2	2044	1/1	0.92	0.34	38,38,38,38	0
85	OHX	1	3623	7/7	0.92	0.26	120,120,120,120	0
86	MG	5	4142	1/1	0.92	0.32	53,53,53,53	0
86	MG	1	3873	1/1	0.92	0.61	32,32,32,32	0
86	MG	N6	201	1/1	0.92	0.27	45,45,45,45	0
86	MG	1	3768	1/1	0.92	0.40	37,37,37,37	0
86	MG	2	2113	1/1	0.92	0.36	105,105,105,105	0
86	MG	1	3771	1/1	0.92	0.40	37,37,37,37	0
86	MG	1	3879	1/1	0.92	0.51	30,30,30,30	0
85	OHX	c5	201	7/7	0.92	0.29	151,151,151,151	0
85	OHX	5	3520	7/7	0.92	0.15	131,131,131,131	0
85	OHX	2	1981	7/7	0.92	0.33	146,146,146,146	0
85	OHX	1	3724	7/7	0.92	0.44	136,136,136,136	0
85	OHX	5	3608	7/7	0.92	0.24	127,127,127,127	0
86	MG	5	3873	1/1	0.92	0.43	36,36,36,36	0
86	MG	5	4027	1/1	0.92	0.23	45,45,45,45	0
86	MG	1	3778	1/1	0.92	0.45	40,40,40,40	0
86	MG	5	3876	1/1	0.92	0.52	34,34,34,34	0
86	MG	1	3894	1/1	0.92	0.40	42,42,42,42	0
85	OHX	5	3611	7/7	0.92	0.35	110,110,110,110	0
86	MG	6	2061	1/1	0.92	0.33	88,88,88,88	0
86	MG	1	3897	1/1	0.92	0.99	57,57,57,57	0
85	OHX	5	3615	7/7	0.92	0.45	130,130,130,130	0
85	OHX	2	1959	7/7	0.92	0.21	133,133,133,133	0
85	OHX	1	3652	7/7	0.92	0.32	111,111,111,111	0
86	MG	1	4006	1/1	0.92	0.32	48,48,48,48	0
86	MG	5	3890	1/1	0.92	0.63	49,49,49,49	0
86	MG	7	218	1/1	0.92	0.26	35,35,35,35	0
85	OHX	5	3656	7/7	0.92	0.32	151,151,151,151	0
86	MG	5	4040	1/1	0.92	0.26	46,46,46,46	0
86	MG	7	222	1/1	0.92	0.24	48,48,48,48	0
85	OHX	2	1995	7/7	0.92	0.41	139,139,139,139	0
85	OHX	2	2002	7/7	0.92	0.27	149,149,149,149	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	3	211	7/7	0.92	0.36	165,165,165,165	0
86	MG	2	2129	1/1	0.92	0.81	80,80,80,80	0
86	MG	5	3907	1/1	0.92	0.49	33,33,33,33	0
86	MG	s6	301	1/1	0.92	0.41	105,105,105,105	0
86	MG	5	3911	1/1	0.92	0.47	30,30,30,30	0
85	OHX	2	1971	7/7	0.92	0.19	151,151,151,151	0
85	OHX	2	1972	7/7	0.92	0.14	151,151,151,151	0
86	MG	5	3915	1/1	0.92	0.52	38,38,38,38	0
86	MG	5	4055	1/1	0.92	0.33	47,47,47,47	0
86	MG	1	4109	1/1	0.92	0.55	36,36,36,36	0
86	MG	6	2083	1/1	0.92	0.52	43,43,43,43	0
86	MG	5	3921	1/1	0.92	0.35	28,28,28,28	0
86	MG	6	2085	1/1	0.92	0.44	74,74,74,74	0
85	OHX	4	213	7/7	0.92	0.42	137,137,137,137	0
86	MG	6	2089	1/1	0.92	0.84	84,84,84,84	0
85	OHX	5	3680	7/7	0.92	0.30	132,132,132,132	0
86	MG	6	2093	1/1	0.92	0.54	42,42,42,42	0
86	MG	5	3760	1/1	0.92	0.44	56,56,56,56	0
86	MG	5	3936	1/1	0.92	0.61	55,55,55,55	0
85	OHX	M7	202	7/7	0.92	0.39	127,127,127,127	0
86	MG	2	2066	1/1	0.92	0.80	98,98,98,98	0
86	MG	5	3765	1/1	0.92	0.38	68,68,68,68	0
85	OHX	M9	201	7/7	0.92	0.36	163,163,163,163	0
86	MG	1	3803	1/1	0.92	0.45	47,47,47,47	0
86	MG	n3	202	1/1	0.92	0.49	27,27,27,27	0
86	MG	2	2069	1/1	0.92	0.42	67,67,67,67	0
85	OHX	6	1971	7/7	0.92	0.40	138,138,138,138	0
85	OHX	5	3695	7/7	0.92	0.38	117,117,117,117	0
86	MG	1	3938	1/1	0.92	0.33	60,60,60,60	0
86	MG	5	4079	1/1	0.92	0.28	41,41,41,41	0
86	MG	o2	202	1/1	0.92	0.31	38,38,38,38	0
86	MG	1	3807	1/1	0.92	0.28	59,59,59,59	0
85	OHX	1	3673	7/7	0.92	0.38	116,116,116,116	0
86	MG	5	3778	1/1	0.92	0.51	53,53,53,53	0
85	OHX	2	1976	7/7	0.92	0.17	148,148,148,148	0
85	OHX	6	2005	7/7	0.92	0.38	117,117,117,117	0
85	OHX	6	2018	7/7	0.92	0.26	174,174,174,174	0
85	OHX	1	3684	7/7	0.92	0.30	139,139,139,139	0
85	OHX	6	2022	7/7	0.92	0.41	116,116,116,116	0
86	MG	3	212	1/1	0.92	0.35	78,78,78,78	0
86	MG	1	4038	1/1	0.92	0.25	60,60,60,60	0
85	OHX	6	2023	7/7	0.92	0.29	155,155,155,155	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	6	2116	1/1	0.92	0.29	57,57,57,57	0
86	MG	5	3975	1/1	0.92	0.15	40,40,40,40	0
87	ZN	d6	500	1/1	0.92	0.08	71,71,71,71	0
85	OHX	6	2024	7/7	0.92	0.39	142,142,142,142	0
85	OHX	5	3716	7/7	0.92	0.29	131,131,131,131	0
85	OHX	6	1995	7/7	0.93	0.28	162,162,162,162	0
85	OHX	6	1997	7/7	0.93	0.33	142,142,142,142	0
85	OHX	6	2002	7/7	0.93	0.26	125,125,125,125	0
85	OHX	6	2004	7/7	0.93	0.23	141,141,141,141	0
86	MG	5	3896	1/1	0.93	0.57	29,29,29,29	0
86	MG	1	4030	1/1	0.93	0.37	43,43,43,43	0
85	OHX	2	2021	7/7	0.93	0.22	133,133,133,133	0
86	MG	1	3898	1/1	0.93	0.98	53,53,53,53	0
86	MG	5	3903	1/1	0.93	0.57	37,37,37,37	0
86	MG	1	3764	1/1	0.93	0.18	37,37,37,37	0
85	OHX	6	2006	7/7	0.93	0.31	141,141,141,141	0
86	MG	1	3767	1/1	0.93	0.41	61,61,61,61	0
86	MG	5	3910	1/1	0.93	0.61	40,40,40,40	0
85	OHX	6	2010	7/7	0.93	0.35	146,146,146,146	0
86	MG	1	3910	1/1	0.93	0.51	17,17,17,17	0
85	OHX	1	3597	7/7	0.93	0.16	144,144,144,144	0
85	OHX	1	3598	7/7	0.93	0.47	142,142,142,142	0
86	MG	1	3915	1/1	0.93	0.28	45,45,45,45	0
85	OHX	2	1945	7/7	0.93	0.15	144,144,144,144	0
86	MG	1	3920	1/1	0.93	0.52	70,70,70,70	0
85	OHX	1	3691	7/7	0.93	0.35	129,129,129,129	0
85	OHX	5	3712	7/7	0.93	0.27	148,148,148,148	0
85	OHX	1	3693	7/7	0.93	0.28	123,123,123,123	0
86	MG	5	3930	1/1	0.93	0.54	32,32,32,32	0
85	OHX	5	3717	7/7	0.93	0.30	143,143,143,143	0
85	OHX	1	3698	7/7	0.93	0.47	148,148,148,148	0
85	OHX	1	3608	7/7	0.93	0.30	135,135,135,135	0
86	MG	5	3935	1/1	0.93	0.35	37,37,37,37	0
86	MG	Q2	504	1/1	0.93	0.22	52,52,52,52	0
86	MG	5	3937	1/1	0.93	0.40	34,34,34,34	0
86	MG	sM	402	1/1	0.93	0.54	44,44,44,44	0
85	OHX	2	2016	7/7	0.93	0.26	149,149,149,149	0
86	MG	6	2053	1/1	0.93	0.40	79,79,79,79	0
86	MG	5	3945	1/1	0.93	0.30	32,32,32,32	0
85	OHX	5	3727	7/7	0.93	0.33	136,136,136,136	0
85	OHX	2	2017	7/7	0.93	0.28	139,139,139,139	0
86	MG	1	3785	1/1	0.93	0.34	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	5	3753	1/1	0.93	0.16	35,35,35,35	0
86	MG	5	3951	1/1	0.93	0.20	41,41,41,41	0
86	MG	6	2059	1/1	0.93	0.47	80,80,80,80	0
86	MG	5	3756	1/1	0.93	0.61	46,46,46,46	0
85	OHX	1	3706	7/7	0.93	0.32	110,110,110,110	0
85	OHX	1	3707	7/7	0.93	0.33	113,113,113,113	0
85	OHX	2	2018	7/7	0.93	0.43	151,151,151,151	0
86	MG	5	3762	1/1	0.93	0.10	34,34,34,34	0
85	OHX	1	3709	7/7	0.93	0.45	166,166,166,166	0
86	MG	1	3791	1/1	0.93	0.53	37,37,37,37	0
85	OHX	1	3626	7/7	0.93	0.30	152,152,152,152	0
86	MG	5	3967	1/1	0.93	0.21	54,54,54,54	0
86	MG	5	3968	1/1	0.93	0.57	42,42,42,42	0
85	OHX	6	2040	7/7	0.93	0.34	137,137,137,137	0
86	MG	5	3768	1/1	0.93	0.22	43,43,43,43	0
86	MG	5	3971	1/1	0.93	0.21	38,38,38,38	0
86	MG	5	3770	1/1	0.93	0.21	37,37,37,37	0
85	OHX	7	212	7/7	0.93	0.30	138,138,138,138	0
85	OHX	1	3630	7/7	0.93	0.41	126,126,126,126	0
85	OHX	1	3631	7/7	0.93	0.29	135,135,135,135	0
86	MG	1	3948	1/1	0.93	0.33	41,41,41,41	0
86	MG	5	4135	1/1	0.93	0.21	83,83,83,83	0
85	OHX	1	3716	7/7	0.93	0.43	113,113,113,113	0
85	OHX	8	218	7/7	0.93	0.42	123,123,123,123	0
85	OHX	1	3644	7/7	0.93	0.34	126,126,126,126	0
85	OHX	14	402	7/7	0.93	0.54	134,134,134,134	0
86	MG	5	3780	1/1	0.93	0.21	41,41,41,41	0
85	OHX	15	302	7/7	0.93	0.33	134,134,134,134	0
85	OHX	6	2049	7/7	0.93	0.39	157,157,157,157	0
85	OHX	1	3720	7/7	0.93	0.28	96,96,96,96	0
86	MG	5	4145	1/1	0.93	0.23	38,38,38,38	0
86	MG	2	2126	1/1	0.93	0.38	82,82,82,82	0
86	MG	1	3958	1/1	0.93	0.68	42,42,42,42	0
86	MG	5	3788	1/1	0.93	0.32	31,31,31,31	0
85	OHX	m1	201	7/7	0.93	0.30	135,135,135,135	0
86	MG	5	3790	1/1	0.93	0.36	37,37,37,37	0
85	OHX	S9	201	7/7	0.93	0.56	127,127,127,127	0
85	OHX	s4	301	7/7	0.93	0.26	139,139,139,139	0
85	OHX	C3	201	7/7	0.93	0.19	150,150,150,150	0
86	MG	1	4092	1/1	0.93	0.47	44,44,44,44	0
86	MG	5	3795	1/1	0.93	0.30	36,36,36,36	0
85	OHX	D9	102	7/7	0.93	0.38	140,140,140,140	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	1	3813	1/1	0.93	0.35	33,33,33,33	0
85	OHX	c1	201	7/7	0.93	0.29	137,137,137,137	0
86	MG	1	4096	1/1	0.93	0.12	56,56,56,56	0
86	MG	6	2103	1/1	0.93	0.70	62,62,62,62	0
86	MG	5	3802	1/1	0.93	0.28	31,31,31,31	0
86	MG	5	4168	1/1	0.93	0.62	38,38,38,38	0
85	OHX	1	3657	7/7	0.93	0.43	110,110,110,110	0
86	MG	2	2047	1/1	0.93	0.58	65,65,65,65	0
85	OHX	d4	201	7/7	0.93	0.31	142,142,142,142	0
85	OHX	1	3659	7/7	0.93	0.27	145,145,145,145	0
85	OHX	1	3490	7/7	0.93	0.23	94,94,94,94	0
85	OHX	5	3603	7/7	0.93	0.41	134,134,134,134	0
86	MG	7	216	1/1	0.93	0.53	68,68,68,68	0
86	MG	5	3810	1/1	0.93	0.43	39,39,39,39	0
85	OHX	2	1975	7/7	0.93	0.14	161,161,161,161	0
85	OHX	1	3735	7/7	0.93	0.42	153,153,153,153	0
85	OHX	1	3667	7/7	0.93	0.31	154,154,154,154	0
86	MG	5	3815	1/1	0.93	0.42	29,29,29,29	0
86	MG	8	219	1/1	0.93	0.24	42,42,42,42	0
85	OHX	1	3555	7/7	0.93	0.26	135,135,135,135	0
85	OHX	5	3636	7/7	0.93	0.17	162,162,162,162	0
86	MG	1	3832	1/1	0.93	0.34	40,40,40,40	0
86	MG	1	3833	1/1	0.93	0.45	39,39,39,39	0
85	OHX	2	2036	7/7	0.93	0.44	112,112,112,112	0
86	MG	5	3822	1/1	0.93	0.30	50,50,50,50	0
86	MG	1	3835	1/1	0.93	0.53	38,38,38,38	0
85	OHX	5	3645	7/7	0.93	0.25	119,119,119,119	0
86	MG	1	3839	1/1	0.93	0.50	39,39,39,39	0
85	OHX	5	3647	7/7	0.93	0.35	117,117,117,117	0
86	MG	D1	101	1/1	0.93	0.32	109,109,109,109	0
86	MG	1	3844	1/1	0.93	0.55	33,33,33,33	0
85	OHX	1	3564	7/7	0.93	0.39	107,107,107,107	0
85	OHX	5	3654	7/7	0.93	0.46	134,134,134,134	0
86	MG	1	3849	1/1	0.93	0.50	42,42,42,42	0
86	MG	D9	104	1/1	0.93	0.32	89,89,89,89	0
85	OHX	4	214	7/7	0.93	0.29	130,130,130,130	0
86	MG	5	3839	1/1	0.93	0.32	47,47,47,47	0
86	MG	1	3853	1/1	0.93	0.88	38,38,38,38	0
85	OHX	5	3657	7/7	0.93	0.59	113,113,113,113	0
85	OHX	1	3676	7/7	0.93	0.37	128,128,128,128	0
86	MG	1	4000	1/1	0.93	0.32	58,58,58,58	0
85	OHX	5	3663	7/7	0.93	0.38	99,99,99,99	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	5	3850	1/1	0.93	0.53	27,27,27,27	0
85	OHX	1	3679	7/7	0.93	0.45	122,122,122,122	0
85	OHX	5	3665	7/7	0.93	0.37	114,114,114,114	0
85	OHX	O4	201	7/7	0.93	0.55	135,135,135,135	0
86	MG	5	3860	1/1	0.93	0.26	37,37,37,37	0
86	MG	5	4043	1/1	0.93	0.24	40,40,40,40	0
85	OHX	5	3670	7/7	0.93	0.34	126,126,126,126	0
85	OHX	1	3680	7/7	0.93	0.38	114,114,114,114	0
86	MG	5	3867	1/1	0.93	0.20	45,45,45,45	0
85	OHX	6	1973	7/7	0.93	0.19	138,138,138,138	0
86	MG	1	3868	1/1	0.93	0.35	37,37,37,37	0
86	MG	5	4051	1/1	0.93	0.34	67,67,67,67	0
86	MG	1	3747	1/1	0.93	0.38	40,40,40,40	0
85	OHX	6	1979	7/7	0.93	0.34	134,134,134,134	0
85	OHX	1	3682	7/7	0.93	0.25	109,109,109,109	0
85	OHX	5	3683	7/7	0.93	0.45	133,133,133,133	0
86	MG	2	2080	1/1	0.93	0.25	78,78,78,78	0
85	OHX	5	3685	7/7	0.93	0.42	133,133,133,133	0
86	MG	5	3880	1/1	0.93	0.66	54,54,54,54	0
86	MG	1	3881	1/1	0.93	0.50	31,31,31,31	0
86	MG	1	3753	1/1	0.93	0.42	49,49,49,49	0
86	MG	1	3886	1/1	0.93	0.61	41,41,41,41	0
86	MG	5	4063	1/1	0.93	0.66	37,37,37,37	0
86	MG	2	2082	1/1	0.93	1.07	104,104,104,104	0
87	ZN	e1	501	1/1	0.93	0.15	173,173,173,173	0
85	OHX	2	1994	7/7	0.93	0.36	152,152,152,152	0
85	OHX	1	3633	7/7	0.94	0.38	138,138,138,138	0
85	OHX	6	2026	7/7	0.94	0.31	158,158,158,158	0
85	OHX	1	3642	7/7	0.94	0.23	208,208,208,208	0
86	MG	5	3865	1/1	0.94	0.39	30,30,30,30	0
86	MG	6	2133	1/1	0.94	0.50	84,84,84,84	0
85	OHX	1	3541	7/7	0.94	0.29	119,119,119,119	0
86	MG	6	2135	1/1	0.94	0.17	76,76,76,76	0
85	OHX	1	3645	7/7	0.94	0.35	119,119,119,119	0
85	OHX	1	3648	7/7	0.94	0.42	137,137,137,137	0
85	OHX	2	2006	7/7	0.94	0.41	135,135,135,135	0
85	OHX	5	3720	7/7	0.94	0.45	128,128,128,128	0
86	MG	5	3875	1/1	0.94	0.36	20,20,20,20	0
85	OHX	2	1958	7/7	0.94	0.24	170,170,170,170	0
86	MG	1	4113	1/1	0.94	0.44	34,34,34,34	0
85	OHX	5	3724	7/7	0.94	0.46	175,175,175,175	0
85	OHX	1	3557	7/7	0.94	0.32	113,113,113,113	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	5	3726	7/7	0.94	0.43	151,151,151,151	0
86	MG	1	3818	1/1	0.94	0.32	38,38,38,38	0
85	OHX	1	3717	7/7	0.94	0.36	132,132,132,132	0
86	MG	6	2150	1/1	0.94	0.81	113,113,113,113	0
85	OHX	5	3728	7/7	0.94	0.31	115,115,115,115	0
86	MG	1	4122	1/1	0.94	0.25	46,46,46,46	0
85	OHX	6	2038	7/7	0.94	0.48	127,127,127,127	0
86	MG	1	3976	1/1	0.94	0.20	41,41,41,41	0
85	OHX	1	3653	7/7	0.94	0.38	119,119,119,119	0
85	OHX	5	3732	7/7	0.94	0.36	127,127,127,127	0
85	OHX	5	3736	7/7	0.94	0.38	141,141,141,141	0
85	OHX	1	3719	7/7	0.94	0.33	127,127,127,127	0
86	MG	1	3981	1/1	0.94	0.46	41,41,41,41	0
85	OHX	5	3740	7/7	0.94	0.42	134,134,134,134	0
85	OHX	5	3741	7/7	0.94	0.41	127,127,127,127	0
85	OHX	5	3742	7/7	0.94	0.34	127,127,127,127	0
85	OHX	6	2041	7/7	0.94	0.35	153,153,153,153	0
86	MG	3	215	1/1	0.94	0.28	39,39,39,39	0
85	OHX	6	2042	7/7	0.94	0.35	139,139,139,139	0
86	MG	5	3913	1/1	0.94	0.41	27,27,27,27	0
85	OHX	1	3656	7/7	0.94	0.38	99,99,99,99	0
85	OHX	2	1984	7/7	0.94	0.22	133,133,133,133	0
85	OHX	7	211	7/7	0.94	0.24	104,104,104,104	0
85	OHX	2	2011	7/7	0.94	0.21	161,161,161,161	0
86	MG	4	217	1/1	0.94	0.51	69,69,69,69	0
86	MG	5	3923	1/1	0.94	0.40	36,36,36,36	0
85	OHX	6	2047	7/7	0.94	0.37	168,168,168,168	0
86	MG	4	221	1/1	0.94	0.23	41,41,41,41	0
86	MG	5	3928	1/1	0.94	0.61	24,24,24,24	0
86	MG	1	3842	1/1	0.94	0.44	33,33,33,33	0
85	OHX	2	1932	7/7	0.94	0.26	128,128,128,128	0
85	OHX	1	3662	7/7	0.94	0.18	146,146,146,146	0
85	OHX	1	3575	7/7	0.94	0.29	110,110,110,110	0
85	OHX	1	3727	7/7	0.94	0.41	119,119,119,119	0
85	OHX	14	401	7/7	0.94	0.26	127,127,127,127	0
86	MG	1	3851	1/1	0.94	0.47	48,48,48,48	0
85	OHX	1	3729	7/7	0.94	0.29	134,134,134,134	0
85	OHX	1	3730	7/7	0.94	0.28	150,150,150,150	0
85	OHX	1	3584	7/7	0.94	0.33	127,127,127,127	0
86	MG	1	3856	1/1	0.94	0.43	32,32,32,32	0
86	MG	5	3944	1/1	0.94	0.23	39,39,39,39	0
85	OHX	1	3732	7/7	0.94	0.10	158,158,158,158	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	m0	303	7/7	0.94	0.33	119,119,119,119	0
85	OHX	c3	201	7/7	0.94	0.28	144,144,144,144	0
85	OHX	1	3668	7/7	0.94	0.33	148,148,148,148	0
85	OHX	1	3592	7/7	0.94	0.25	144,144,144,144	0
86	MG	5	3748	1/1	0.94	0.59	43,43,43,43	0
85	OHX	d9	102	7/7	0.94	0.42	153,153,153,153	0
86	MG	M6	202	1/1	0.94	0.29	42,42,42,42	0
85	OHX	1	3671	7/7	0.94	0.27	128,128,128,128	0
85	OHX	5	3541	7/7	0.94	0.24	114,114,114,114	0
85	OHX	5	3562	7/7	0.94	0.23	130,130,130,130	0
86	MG	1	3870	1/1	0.94	0.37	43,43,43,43	0
86	MG	5	3960	1/1	0.94	0.40	45,45,45,45	0
86	MG	1	3872	1/1	0.94	0.24	42,42,42,42	0
86	MG	5	4137	1/1	0.94	0.41	36,36,36,36	0
86	MG	5	3962	1/1	0.94	0.50	42,42,42,42	0
86	MG	5	3963	1/1	0.94	0.18	52,52,52,52	0
86	MG	5	3757	1/1	0.94	0.33	29,29,29,29	0
85	OHX	5	3566	7/7	0.94	0.30	121,121,121,121	0
85	OHX	5	3575	7/7	0.94	0.31	119,119,119,119	0
85	OHX	2	1953	7/7	0.94	0.41	141,141,141,141	0
85	OHX	5	3599	7/7	0.94	0.28	123,123,123,123	0
85	OHX	2	2015	7/7	0.94	0.44	128,128,128,128	0
85	OHX	5	3606	7/7	0.94	0.28	91,91,91,91	0
85	OHX	2	1998	7/7	0.94	0.27	138,138,138,138	0
85	OHX	1	3677	7/7	0.94	0.43	104,104,104,104	0
86	MG	1	3884	1/1	0.94	0.27	37,37,37,37	0
86	MG	1	3885	1/1	0.94	0.64	30,30,30,30	0
85	OHX	M0	301	7/7	0.94	0.18	104,104,104,104	0
85	OHX	5	3613	7/7	0.94	0.34	113,113,113,113	0
85	OHX	2	1999	7/7	0.94	0.31	144,144,144,144	0
85	OHX	5	3626	7/7	0.94	0.32	136,136,136,136	0
86	MG	1	3891	1/1	0.94	0.70	36,36,36,36	0
85	OHX	5	3631	7/7	0.94	0.41	113,113,113,113	0
86	MG	5	4159	1/1	0.94	0.40	52,52,52,52	0
86	MG	1	4040	1/1	0.94	0.46	61,61,61,61	0
85	OHX	5	3633	7/7	0.94	0.29	141,141,141,141	0
85	OHX	1	3601	7/7	0.94	0.30	97,97,97,97	0
85	OHX	5	3640	7/7	0.94	0.25	123,123,123,123	0
86	MG	1	3758	1/1	0.94	0.41	57,57,57,57	0
86	MG	1	3901	1/1	0.94	0.29	34,34,34,34	0
86	MG	5	4169	1/1	0.94	0.33	34,34,34,34	0
86	MG	1	3902	1/1	0.94	1.05	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	6	2067	1/1	0.94	0.44	42,42,42,42	0
85	OHX	5	3642	7/7	0.94	0.38	126,126,126,126	0
85	OHX	1	3602	7/7	0.94	0.14	137,137,137,137	0
86	MG	6	2071	1/1	0.94	0.32	73,73,73,73	0
85	OHX	6	1948	7/7	0.94	0.12	131,131,131,131	0
86	MG	7	215	1/1	0.94	0.46	61,61,61,61	0
86	MG	1	3906	1/1	0.94	0.52	24,24,24,24	0
86	MG	2	2067	1/1	0.94	0.62	71,71,71,71	0
85	OHX	5	3646	7/7	0.94	0.54	123,123,123,123	0
86	MG	7	220	1/1	0.94	0.77	44,44,44,44	0
85	OHX	6	1951	7/7	0.94	0.17	161,161,161,161	0
85	OHX	6	1953	7/7	0.94	0.14	155,155,155,155	0
86	MG	6	2079	1/1	0.94	0.18	48,48,48,48	0
85	OHX	1	3604	7/7	0.94	0.31	129,129,129,129	0
86	MG	1	3917	1/1	0.94	0.17	63,63,63,63	0
86	MG	5	3800	1/1	0.94	0.31	27,27,27,27	0
86	MG	1	4063	1/1	0.94	0.36	33,33,33,33	0
85	OHX	2	1979	7/7	0.94	0.17	156,156,156,156	0
86	MG	1	3770	1/1	0.94	0.48	36,36,36,36	0
86	MG	6	2088	1/1	0.94	0.27	45,45,45,45	0
85	OHX	1	3613	7/7	0.94	0.25	123,123,123,123	0
85	OHX	6	1985	7/7	0.94	0.23	143,143,143,143	0
85	OHX	2	1956	7/7	0.94	0.24	138,138,138,138	0
85	OHX	6	1989	7/7	0.94	0.20	137,137,137,137	0
85	OHX	SR	401	7/7	0.94	0.15	168,168,168,168	0
85	OHX	1	3456	7/7	0.94	0.14	112,112,112,112	0
86	MG	6	2097	1/1	0.94	0.34	76,76,76,76	0
86	MG	1	3930	1/1	0.94	0.44	51,51,51,51	0
86	MG	5	3814	1/1	0.94	0.41	45,45,45,45	0
85	OHX	1	3487	7/7	0.94	0.15	118,118,118,118	0
85	OHX	6	2000	7/7	0.94	0.25	131,131,131,131	0
86	MG	1	3780	1/1	0.94	0.50	42,42,42,42	0
86	MG	1	4078	1/1	0.94	0.16	84,84,84,84	0
85	OHX	6	2001	7/7	0.94	0.21	101,101,101,101	0
85	OHX	1	3696	7/7	0.94	0.53	139,139,139,139	0
85	OHX	5	3676	7/7	0.94	0.35	90,90,90,90	0
86	MG	n0	201	1/1	0.94	0.25	38,38,38,38	0
85	OHX	5	3679	7/7	0.94	0.47	136,136,136,136	0
85	OHX	1	3697	7/7	0.94	0.34	126,126,126,126	0
86	MG	5	3825	1/1	0.94	0.52	30,30,30,30	0
85	OHX	1	3628	7/7	0.94	0.24	146,146,146,146	0
85	OHX	5	3684	7/7	0.94	0.27	150,150,150,150	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3789	1/1	0.94	0.31	30,30,30,30	0
86	MG	n8	201	1/1	0.94	0.21	49,49,49,49	0
85	OHX	1	3629	7/7	0.94	0.21	144,144,144,144	0
86	MG	5	3830	1/1	0.94	0.29	32,32,32,32	0
85	OHX	1	3700	7/7	0.94	0.23	136,136,136,136	0
85	OHX	5	3688	7/7	0.94	0.39	111,111,111,111	0
86	MG	1	3947	1/1	0.94	0.23	34,34,34,34	0
85	OHX	6	2011	7/7	0.94	0.36	136,136,136,136	0
85	OHX	6	2017	7/7	0.94	0.34	122,122,122,122	0
85	OHX	2	2005	7/7	0.94	0.29	136,136,136,136	0
86	MG	1	3951	1/1	0.94	0.22	40,40,40,40	0
85	OHX	6	2019	7/7	0.94	0.35	139,139,139,139	0
86	MG	5	3842	1/1	0.94	0.44	33,33,33,33	0
86	MG	2	2103	1/1	0.94	0.33	93,93,93,93	0
86	MG	6	2124	1/1	0.94	0.37	54,54,54,54	0
86	MG	5	3846	1/1	0.94	0.86	38,38,38,38	0
85	OHX	6	2020	7/7	0.94	0.32	146,146,146,146	0
85	OHX	1	3702	7/7	0.94	0.30	157,157,157,157	0
85	OHX	1	3539	7/7	0.94	0.23	119,119,119,119	0
86	MG	5	4050	1/1	0.94	0.48	52,52,52,52	0
86	MG	5	3854	1/1	0.94	0.48	25,25,25,25	0
85	OHX	1	3705	7/7	0.94	0.33	109,109,109,109	0
86	MG	6	2129	1/1	0.94	0.32	54,54,54,54	0
87	ZN	q3	501	1/1	0.94	0.11	65,65,65,65	0
86	MG	1	3893	1/1	0.95	0.53	52,52,52,52	0
85	OHX	6	1954	7/7	0.95	0.11	164,164,164,164	0
86	MG	6	2107	1/1	0.95	0.18	48,48,48,48	0
85	OHX	7	209	7/7	0.95	0.29	102,102,102,102	0
86	MG	1	4068	1/1	0.95	0.39	34,34,34,34	0
86	MG	1	3896	1/1	0.95	0.80	47,47,47,47	0
86	MG	6	2111	1/1	0.95	0.42	86,86,86,86	0
85	OHX	5	3546	7/7	0.95	0.26	122,122,122,122	0
85	OHX	5	3555	7/7	0.95	0.45	104,104,104,104	0
86	MG	1	3900	1/1	0.95	0.53	27,27,27,27	0
85	OHX	5	3560	7/7	0.95	0.26	101,101,101,101	0
86	MG	5	3855	1/1	0.95	0.40	28,28,28,28	0
85	OHX	8	203	7/7	0.95	0.12	114,114,114,114	0
85	OHX	8	206	7/7	0.95	0.17	115,115,115,115	0
85	OHX	8	209	7/7	0.95	0.19	114,114,114,114	0
85	OHX	6	1957	7/7	0.95	0.20	104,104,104,104	0
85	OHX	6	1959	7/7	0.95	0.15	110,110,110,110	0
85	OHX	8	214	7/7	0.95	0.24	142,142,142,142	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	5	3567	7/7	0.95	0.20	119,119,119,119	0
85	OHX	6	1970	7/7	0.95	0.28	130,130,130,130	0
86	MG	1	3913	1/1	0.95	0.45	39,39,39,39	0
85	OHX	1	3551	7/7	0.95	0.25	128,128,128,128	0
85	OHX	5	3588	7/7	0.95	0.17	127,127,127,127	0
86	MG	1	3916	1/1	0.95	0.23	46,46,46,46	0
85	OHX	5	3590	7/7	0.95	0.32	124,124,124,124	0
86	MG	1	3918	1/1	0.95	0.77	47,47,47,47	0
85	OHX	5	3593	7/7	0.95	0.45	106,106,106,106	0
86	MG	1	3755	1/1	0.95	0.45	40,40,40,40	0
85	OHX	5	3598	7/7	0.95	0.35	130,130,130,130	0
86	MG	1	3922	1/1	0.95	0.57	55,55,55,55	0
85	OHX	1	3553	7/7	0.95	0.11	141,141,141,141	0
85	OHX	5	3600	7/7	0.95	0.28	147,147,147,147	0
85	OHX	5	3602	7/7	0.95	0.20	123,123,123,123	0
85	OHX	2	1992	7/7	0.95	0.24	153,153,153,153	0
86	MG	5	3886	1/1	0.95	0.50	31,31,31,31	0
85	OHX	5	3605	7/7	0.95	0.16	141,141,141,141	0
86	MG	1	4100	1/1	0.95	0.16	45,45,45,45	0
85	OHX	2	2009	7/7	0.95	0.26	112,112,112,112	0
86	MG	5	3892	1/1	0.95	0.34	29,29,29,29	0
86	MG	1	3763	1/1	0.95	0.65	44,44,44,44	0
85	OHX	07	502	7/7	0.95	0.42	116,116,116,116	0
86	MG	5	3897	1/1	0.95	0.79	25,25,25,25	0
85	OHX	1	3558	7/7	0.95	0.26	111,111,111,111	0
86	MG	5	3899	1/1	0.95	0.37	33,33,33,33	0
85	OHX	2	1954	7/7	0.95	0.19	115,115,115,115	0
85	OHX	1	3647	7/7	0.95	0.32	101,101,101,101	0
85	OHX	1	3562	7/7	0.95	0.22	122,122,122,122	0
85	OHX	2	1926	7/7	0.95	0.17	119,119,119,119	0
85	OHX	5	3622	7/7	0.95	0.27	132,132,132,132	0
86	MG	5	3908	1/1	0.95	0.77	41,41,41,41	0
85	OHX	5	3623	7/7	0.95	0.30	110,110,110,110	0
86	MG	1	3941	1/1	0.95	0.51	34,34,34,34	0
85	OHX	5	3625	7/7	0.95	0.34	146,146,146,146	0
86	MG	5	4105	1/1	0.95	0.14	47,47,47,47	0
86	MG	1	3774	1/1	0.95	0.17	53,53,53,53	0
85	OHX	6	1998	7/7	0.95	0.35	127,127,127,127	0
85	OHX	5	3627	7/7	0.95	0.29	127,127,127,127	0
85	OHX	5	3629	7/7	0.95	0.21	135,135,135,135	0
85	OHX	2	2027	7/7	0.95	0.39	117,117,117,117	0
85	OHX	1	3566	7/7	0.95	0.27	133,133,133,133	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	2	1996	7/7	0.95	0.15	144,144,144,144	0
85	OHX	5	3638	7/7	0.95	0.23	130,130,130,130	0
85	OHX	1	3710	7/7	0.95	0.49	123,123,123,123	0
85	OHX	2	1997	7/7	0.95	0.30	138,138,138,138	0
86	MG	5	3926	1/1	0.95	0.44	30,30,30,30	0
85	OHX	1	3585	7/7	0.95	0.20	129,129,129,129	0
85	OHX	6	2008	7/7	0.95	0.17	133,133,133,133	0
85	OHX	6	2009	7/7	0.95	0.23	103,103,103,103	0
85	OHX	1	3591	7/7	0.95	0.27	100,100,100,100	0
85	OHX	5	3649	7/7	0.95	0.27	129,129,129,129	0
85	OHX	5	3651	7/7	0.95	0.29	100,100,100,100	0
85	OHX	C5	201	7/7	0.95	0.24	153,153,153,153	0
85	OHX	6	2016	7/7	0.95	0.30	117,117,117,117	0
85	OHX	5	3655	7/7	0.95	0.42	100,100,100,100	0
85	OHX	1	3594	7/7	0.95	0.39	109,109,109,109	0
85	OHX	1	3663	7/7	0.95	0.43	107,107,107,107	0
86	MG	5	3942	1/1	0.95	0.17	31,31,31,31	0
86	MG	2	2074	1/1	0.95	0.53	66,66,66,66	0
85	OHX	2	2014	7/7	0.95	0.25	125,125,125,125	0
85	OHX	5	3661	7/7	0.95	0.29	122,122,122,122	0
85	OHX	1	3665	7/7	0.95	0.42	138,138,138,138	0
85	OHX	1	3666	7/7	0.95	0.33	115,115,115,115	0
85	OHX	2	1980	7/7	0.95	0.26	141,141,141,141	0
86	MG	4	220	1/1	0.95	0.24	36,36,36,36	0
85	OHX	2	1965	7/7	0.95	0.19	126,126,126,126	0
86	MG	5	3952	1/1	0.95	0.18	38,38,38,38	0
85	OHX	1	3464	7/7	0.95	0.13	102,102,102,102	0
85	OHX	5	3671	7/7	0.95	0.29	114,114,114,114	0
85	OHX	5	3672	7/7	0.95	0.23	143,143,143,143	0
85	OHX	6	2025	7/7	0.95	0.40	107,107,107,107	0
86	MG	2	2087	1/1	0.95	0.84	95,95,95,95	0
86	MG	5	4148	1/1	0.95	0.19	52,52,52,52	0
85	OHX	1	3670	7/7	0.95	0.29	110,110,110,110	0
86	MG	5	3959	1/1	0.95	0.43	54,54,54,54	0
86	MG	L3	403	1/1	0.95	0.18	38,38,38,38	0
85	OHX	6	2027	7/7	0.95	0.47	143,143,143,143	0
85	OHX	1	3600	7/7	0.95	0.30	118,118,118,118	0
86	MG	1	3814	1/1	0.95	0.25	50,50,50,50	0
85	OHX	1	3486	7/7	0.95	0.12	117,117,117,117	0
86	MG	2	2094	1/1	0.95	0.19	75,75,75,75	0
86	MG	5	3966	1/1	0.95	0.35	38,38,38,38	0
85	OHX	6	2030	7/7	0.95	0.29	98,98,98,98	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	5	4160	1/1	0.95	0.32	70,70,70,70	0
86	MG	5	4161	1/1	0.95	0.19	113,113,113,113	0
86	MG	5	3758	1/1	0.95	0.37	37,37,37,37	0
85	OHX	5	3681	7/7	0.95	0.27	117,117,117,117	0
85	OHX	5	3682	7/7	0.95	0.52	103,103,103,103	0
85	OHX	6	2031	7/7	0.95	0.42	106,106,106,106	0
86	MG	M4	201	1/1	0.95	0.34	49,49,49,49	0
86	MG	1	3822	1/1	0.95	0.30	56,56,56,56	0
86	MG	5	3764	1/1	0.95	0.39	38,38,38,38	0
86	MG	1	3823	1/1	0.95	0.17	40,40,40,40	0
85	OHX	2	2001	7/7	0.95	0.27	141,141,141,141	0
85	OHX	1	3675	7/7	0.95	0.27	122,122,122,122	0
85	OHX	2	1967	7/7	0.95	0.27	113,113,113,113	0
86	MG	1	3827	1/1	0.95	0.36	46,46,46,46	0
85	OHX	1	3733	7/7	0.95	0.45	119,119,119,119	0
85	OHX	5	3689	7/7	0.95	0.37	114,114,114,114	0
85	OHX	5	3690	7/7	0.95	0.37	120,120,120,120	0
85	OHX	1	3605	7/7	0.95	0.23	117,117,117,117	0
85	OHX	1	3678	7/7	0.95	0.33	116,116,116,116	0
85	OHX	5	3694	7/7	0.95	0.38	135,135,135,135	0
85	OHX	1	3736	7/7	0.95	0.40	119,119,119,119	0
85	OHX	1	3737	7/7	0.95	0.16	118,118,118,118	0
85	OHX	3	208	7/7	0.95	0.18	120,120,120,120	0
85	OHX	5	3699	7/7	0.95	0.37	115,115,115,115	0
86	MG	8	221	1/1	0.95	0.23	56,56,56,56	0
85	OHX	3	210	7/7	0.95	0.35	107,107,107,107	0
85	OHX	1	3506	7/7	0.95	0.18	107,107,107,107	0
85	OHX	5	3702	7/7	0.95	0.38	107,107,107,107	0
86	MG	Q2	503	1/1	0.95	0.36	68,68,68,68	0
85	OHX	5	3704	7/7	0.95	0.23	100,100,100,100	0
85	OHX	4	206	7/7	0.95	0.30	103,103,103,103	0
85	OHX	5	3708	7/7	0.95	0.43	122,122,122,122	0
85	OHX	1	3511	7/7	0.95	0.13	122,122,122,122	0
86	MG	6	2055	1/1	0.95	0.49	51,51,51,51	0
85	OHX	1	3617	7/7	0.95	0.44	129,129,129,129	0
85	OHX	6	2046	7/7	0.95	0.32	142,142,142,142	0
85	OHX	1	3533	7/7	0.95	0.09	155,155,155,155	0
86	MG	2	2122	1/1	0.95	0.38	74,74,74,74	0
86	MG	1	3854	1/1	0.95	0.37	43,43,43,43	0
86	MG	6	2062	1/1	0.95	0.64	46,46,46,46	0
85	OHX	5	3714	7/7	0.95	0.30	144,144,144,144	0
85	OHX	5	3715	7/7	0.95	0.28	92,92,92,92	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	3858	1/1	0.95	0.53	45,45,45,45	0
85	OHX	1	3620	7/7	0.95	0.17	124,124,124,124	0
85	OHX	2	1977	7/7	0.95	0.17	113,113,113,113	0
86	MG	m6	203	1/1	0.95	0.22	37,37,37,37	0
86	MG	1	4028	1/1	0.95	0.20	87,87,87,87	0
86	MG	5	3805	1/1	0.95	0.45	41,41,41,41	0
85	OHX	5	3718	7/7	0.95	0.33	109,109,109,109	0
85	OHX	M5	303	7/7	0.95	0.35	114,114,114,114	0
85	OHX	M7	201	7/7	0.95	0.50	100,100,100,100	0
85	OHX	2	1986	7/7	0.95	0.35	131,131,131,131	0
85	OHX	5	3723	7/7	0.95	0.41	128,128,128,128	0
85	OHX	1	3625	7/7	0.95	0.29	125,125,125,125	0
85	OHX	O3	201	7/7	0.95	0.30	105,105,105,105	0
86	MG	1	3869	1/1	0.95	0.47	31,31,31,31	0
85	OHX	1	3542	7/7	0.95	0.36	120,120,120,120	0
85	OHX	6	1931	7/7	0.95	0.15	109,109,109,109	0
85	OHX	1	3543	7/7	0.95	0.21	97,97,97,97	0
85	OHX	5	3729	7/7	0.95	0.29	135,135,135,135	0
85	OHX	6	1949	7/7	0.95	0.19	122,122,122,122	0
85	OHX	1	3694	7/7	0.95	0.23	98,98,98,98	0
85	OHX	sR	401	7/7	0.95	0.20	156,156,156,156	0
86	MG	6	2090	1/1	0.95	0.46	32,32,32,32	0
85	OHX	5	3733	7/7	0.95	0.31	148,148,148,148	0
85	OHX	5	3735	7/7	0.95	0.26	158,158,158,158	0
85	OHX	5	3476	7/7	0.95	0.12	104,104,104,104	0
86	MG	1	3883	1/1	0.95	0.65	51,51,51,51	0
85	OHX	5	3737	7/7	0.95	0.47	118,118,118,118	0
85	OHX	5	3496	7/7	0.95	0.31	100,100,100,100	0
85	OHX	5	3502	7/7	0.95	0.14	112,112,112,112	0
87	ZN	D6	500	1/1	0.95	0.04	93,93,93,93	0
85	OHX	2	1987	7/7	0.95	0.28	147,147,147,147	0
85	OHX	5	3533	7/7	0.95	0.24	84,84,84,84	0
87	ZN	Q2	501	1/1	0.95	0.30	83,83,83,83	0
85	OHX	5	3535	7/7	0.95	0.16	132,132,132,132	0
86	MG	1	3890	1/1	0.95	0.51	26,26,26,26	0
87	ZN	d9	101	1/1	0.95	0.08	97,97,97,97	0
86	MG	5	3834	1/1	0.95	0.20	39,39,39,39	0
85	OHX	5	3540	7/7	0.95	0.16	123,123,123,123	0
85	OHX	5	3745	7/7	0.95	0.40	139,139,139,139	0
85	OHX	2	1973	7/7	0.96	0.16	146,146,146,146	0
85	OHX	2	1947	7/7	0.96	0.27	111,111,111,111	0
85	OHX	3	209	7/7	0.96	0.25	132,132,132,132	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	1	3545	7/7	0.96	0.19	115,115,115,115	0
85	OHX	2	2004	7/7	0.96	0.30	126,126,126,126	0
85	OHX	4	203	7/7	0.96	0.21	95,95,95,95	0
86	MG	L2	301	1/1	0.96	0.23	41,41,41,41	0
86	MG	5	3784	1/1	0.96	0.17	31,31,31,31	0
85	OHX	5	3475	7/7	0.96	0.13	80,80,80,80	0
85	OHX	1	3651	7/7	0.96	0.38	119,119,119,119	0
85	OHX	5	3495	7/7	0.96	0.19	103,103,103,103	0
85	OHX	4	207	7/7	0.96	0.23	117,117,117,117	0
85	OHX	4	208	7/7	0.96	0.37	99,99,99,99	0
85	OHX	5	3504	7/7	0.96	0.33	98,98,98,98	0
85	OHX	5	3514	7/7	0.96	0.23	102,102,102,102	0
85	OHX	5	3517	7/7	0.96	0.23	90,90,90,90	0
85	OHX	4	209	7/7	0.96	0.16	140,140,140,140	0
85	OHX	5	3526	7/7	0.96	0.20	109,109,109,109	0
85	OHX	5	3527	7/7	0.96	0.27	102,102,102,102	0
85	OHX	5	3531	7/7	0.96	0.18	94,94,94,94	0
85	OHX	4	210	7/7	0.96	0.17	131,131,131,131	0
85	OHX	7	204	7/7	0.96	0.15	86,86,86,86	0
85	OHX	7	207	7/7	0.96	0.13	101,101,101,101	0
85	OHX	7	208	7/7	0.96	0.15	125,125,125,125	0
85	OHX	2	1951	7/7	0.96	0.17	148,148,148,148	0
86	MG	1	3965	1/1	0.96	0.23	44,44,44,44	0
85	OHX	5	3539	7/7	0.96	0.28	117,117,117,117	0
86	MG	M8	201	1/1	0.96	0.26	43,43,43,43	0
85	OHX	2	1952	7/7	0.96	0.32	119,119,119,119	0
86	MG	N0	201	1/1	0.96	0.36	47,47,47,47	0
85	OHX	1	3655	7/7	0.96	0.45	115,115,115,115	0
85	OHX	5	3542	7/7	0.96	0.14	127,127,127,127	0
85	OHX	5	3545	7/7	0.96	0.07	148,148,148,148	0
85	OHX	8	207	7/7	0.96	0.13	114,114,114,114	0
85	OHX	8	208	7/7	0.96	0.31	108,108,108,108	0
85	OHX	1	3554	7/7	0.96	0.20	109,109,109,109	0
85	OHX	5	3551	7/7	0.96	0.18	117,117,117,117	0
85	OHX	8	212	7/7	0.96	0.26	125,125,125,125	0
85	OHX	5	3552	7/7	0.96	0.21	108,108,108,108	0
86	MG	1	3784	1/1	0.96	0.33	32,32,32,32	0
85	OHX	L3	402	7/7	0.96	0.26	116,116,116,116	0
85	OHX	8	215	7/7	0.96	0.41	112,112,112,112	0
85	OHX	5	3556	7/7	0.96	0.29	94,94,94,94	0
85	OHX	8	217	7/7	0.96	0.42	113,113,113,113	0
86	MG	1	3982	1/1	0.96	0.27	32,32,32,32	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	5	3558	7/7	0.96	0.30	107,107,107,107	0
85	OHX	5	3559	7/7	0.96	0.22	98,98,98,98	0
85	OHX	2	1931	7/7	0.96	0.10	134,134,134,134	0
85	OHX	2	1921	7/7	0.96	0.12	112,112,112,112	0
86	MG	6	2058	1/1	0.96	0.45	109,109,109,109	0
86	MG	1	3794	1/1	0.96	0.37	29,29,29,29	0
85	OHX	15	301	7/7	0.96	0.17	127,127,127,127	0
85	OHX	5	3564	7/7	0.96	0.13	137,137,137,137	0
85	OHX	1	3660	7/7	0.96	0.35	98,98,98,98	0
85	OHX	2	2038	7/7	0.96	0.44	143,143,143,143	0
85	OHX	m0	302	7/7	0.96	0.22	116,116,116,116	0
85	OHX	5	3568	7/7	0.96	0.21	146,146,146,146	0
85	OHX	5	3573	7/7	0.96	0.28	131,131,131,131	0
86	MG	5	3837	1/1	0.96	0.34	35,35,35,35	0
86	MG	5	4075	1/1	0.96	0.26	37,37,37,37	0
85	OHX	1	3559	7/7	0.96	0.20	143,143,143,143	0
85	OHX	5	3576	7/7	0.96	0.32	117,117,117,117	0
86	MG	6	2070	1/1	0.96	0.25	59,59,59,59	0
85	OHX	2	1955	7/7	0.96	0.17	119,119,119,119	0
85	OHX	5	3583	7/7	0.96	0.25	113,113,113,113	0
85	OHX	2	1933	7/7	0.96	0.18	112,112,112,112	0
86	MG	5	3844	1/1	0.96	0.66	38,38,38,38	0
85	OHX	5	3589	7/7	0.96	0.25	115,115,115,115	0
85	OHX	O7	103	7/7	0.96	0.18	92,92,92,92	0
85	OHX	6	1925	7/7	0.96	0.11	105,105,105,105	0
85	OHX	5	3596	7/7	0.96	0.36	102,102,102,102	0
85	OHX	6	1927	7/7	0.96	0.11	128,128,128,128	0
85	OHX	2	2042	7/7	0.96	0.41	130,130,130,130	0
85	OHX	6	1939	7/7	0.96	0.10	135,135,135,135	0
85	OHX	6	1943	7/7	0.96	0.16	125,125,125,125	0
85	OHX	6	1945	7/7	0.96	0.16	110,110,110,110	0
86	MG	5	4094	1/1	0.96	0.12	35,35,35,35	0
86	MG	5	3859	1/1	0.96	0.56	37,37,37,37	0
86	MG	1	4014	1/1	0.96	0.25	32,32,32,32	0
85	OHX	5	3604	7/7	0.96	0.34	128,128,128,128	0
86	MG	5	3862	1/1	0.96	0.57	54,54,54,54	0
85	OHX	2	1957	7/7	0.96	0.29	117,117,117,117	0
85	OHX	2	1983	7/7	0.96	0.29	116,116,116,116	0
86	MG	5	3866	1/1	0.96	0.54	22,22,22,22	0
85	OHX	1	3567	7/7	0.96	0.32	104,104,104,104	0
86	MG	1	3821	1/1	0.96	0.43	33,33,33,33	0
85	OHX	1	3574	7/7	0.96	0.15	137,137,137,137	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	2	1934	7/7	0.96	0.15	124,124,124,124	0
85	OHX	5	3612	7/7	0.96	0.31	129,129,129,129	0
85	OHX	1	3578	7/7	0.96	0.25	134,134,134,134	0
86	MG	5	4108	1/1	0.96	0.41	29,29,29,29	0
86	MG	5	4109	1/1	0.96	0.23	31,31,31,31	0
85	OHX	1	3579	7/7	0.96	0.23	117,117,117,117	0
85	OHX	5	3616	7/7	0.96	0.27	111,111,111,111	0
85	OHX	5	3619	7/7	0.96	0.28	109,109,109,109	0
86	MG	5	3877	1/1	0.96	0.45	36,36,36,36	0
85	OHX	5	3620	7/7	0.96	0.32	138,138,138,138	0
86	MG	5	3879	1/1	0.96	0.14	37,37,37,37	0
85	OHX	6	1960	7/7	0.96	0.21	109,109,109,109	0
85	OHX	6	1965	7/7	0.96	0.21	125,125,125,125	0
85	OHX	5	3624	7/7	0.96	0.33	119,119,119,119	0
85	OHX	6	1966	7/7	0.96	0.24	122,122,122,122	0
85	OHX	6	1969	7/7	0.96	0.29	120,120,120,120	0
85	OHX	1	3583	7/7	0.96	0.35	107,107,107,107	0
85	OHX	1	3674	7/7	0.96	0.13	102,102,102,102	0
85	OHX	5	3630	7/7	0.96	0.39	132,132,132,132	0
86	MG	2	2076	1/1	0.96	0.36	75,75,75,75	0
86	MG	5	4126	1/1	0.96	0.46	49,49,49,49	0
85	OHX	2	1936	7/7	0.96	0.15	107,107,107,107	0
86	MG	5	3891	1/1	0.96	0.52	31,31,31,31	0
85	OHX	5	3632	7/7	0.96	0.38	132,132,132,132	0
85	OHX	6	1976	7/7	0.96	0.18	147,147,147,147	0
86	MG	5	3894	1/1	0.96	0.67	36,36,36,36	0
85	OHX	2	1960	7/7	0.96	0.13	149,149,149,149	0
86	MG	1	3846	1/1	0.96	0.97	31,31,31,31	0
85	OHX	5	3637	7/7	0.96	0.39	111,111,111,111	0
85	OHX	6	1980	7/7	0.96	0.32	99,99,99,99	0
85	OHX	5	3639	7/7	0.96	0.38	106,106,106,106	0
85	OHX	6	1981	7/7	0.96	0.29	114,114,114,114	0
85	OHX	6	1984	7/7	0.96	0.21	110,110,110,110	0
86	MG	2	2086	1/1	0.96	0.12	65,65,65,65	0
85	OHX	1	3588	7/7	0.96	0.30	135,135,135,135	0
86	MG	2	2088	1/1	0.96	0.51	101,101,101,101	0
85	OHX	5	3644	7/7	0.96	0.34	90,90,90,90	0
86	MG	1	3857	1/1	0.96	0.37	36,36,36,36	0
85	OHX	6	1986	7/7	0.96	0.35	127,127,127,127	0
85	OHX	1	3589	7/7	0.96	0.23	137,137,137,137	0
86	MG	1	4059	1/1	0.96	0.22	62,62,62,62	0
85	OHX	1	3590	7/7	0.96	0.18	131,131,131,131	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
86	MG	1	4062	1/1	0.96	0.94	37,37,37,37	0
86	MG	5	4150	1/1	0.96	0.18	79,79,79,79	0
85	OHX	2	1989	7/7	0.96	0.22	109,109,109,109	0
85	OHX	5	3650	7/7	0.96	0.36	117,117,117,117	0
86	MG	5	3918	1/1	0.96	0.51	29,29,29,29	0
85	OHX	6	1991	7/7	0.96	0.34	118,118,118,118	0
85	OHX	6	1993	7/7	0.96	0.22	142,142,142,142	0
86	MG	1	3865	1/1	0.96	0.59	39,39,39,39	0
85	OHX	5	3653	7/7	0.96	0.40	126,126,126,126	0
86	MG	6	2139	1/1	0.96	0.41	112,112,112,112	0
85	OHX	6	1994	7/7	0.96	0.29	127,127,127,127	0
85	OHX	1	3681	7/7	0.96	0.43	131,131,131,131	0
85	OHX	2	1990	7/7	0.96	0.21	169,169,169,169	0
86	MG	5	3931	1/1	0.96	0.24	48,48,48,48	0
85	OHX	1	3593	7/7	0.96	0.28	88,88,88,88	0
86	MG	1	3871	1/1	0.96	0.28	31,31,31,31	0
86	MG	6	2145	1/1	0.96	0.26	92,92,92,92	0
85	OHX	5	3658	7/7	0.96	0.43	97,97,97,97	0
85	OHX	6	1999	7/7	0.96	0.25	125,125,125,125	0
85	OHX	2	1991	7/7	0.96	0.33	136,136,136,136	0
86	MG	5	3938	1/1	0.96	0.24	33,33,33,33	0
85	OHX	5	3662	7/7	0.96	0.36	129,129,129,129	0
86	MG	5	3940	1/1	0.96	0.32	48,48,48,48	0
85	OHX	1	3595	7/7	0.96	0.23	159,159,159,159	0
86	MG	5	4174	1/1	0.96	0.17	48,48,48,48	0
86	MG	1	3878	1/1	0.96	0.51	31,31,31,31	0
86	MG	1	4081	1/1	0.96	0.53	53,53,53,53	0
85	OHX	1	3446	7/7	0.96	0.19	88,88,88,88	0
85	OHX	2	1961	7/7	0.96	0.23	135,135,135,135	0
86	MG	7	217	1/1	0.96	0.59	28,28,28,28	0
85	OHX	5	3668	7/7	0.96	0.26	138,138,138,138	0
85	OHX	1	3690	7/7	0.96	0.18	125,125,125,125	0
86	MG	5	3948	1/1	0.96	0.37	50,50,50,50	0
85	OHX	1	3462	7/7	0.96	0.12	121,121,121,121	0
85	OHX	1	3692	7/7	0.96	0.34	125,125,125,125	0
85	OHX	2	1993	7/7	0.96	0.26	119,119,119,119	0
85	OHX	1	3471	7/7	0.96	0.12	97,97,97,97	0
86	MG	8	220	1/1	0.96	0.21	41,41,41,41	0
85	OHX	1	3695	7/7	0.96	0.25	101,101,101,101	0
85	OHX	6	2013	7/7	0.96	0.24	103,103,103,103	0
86	MG	6	2165	1/1	0.96	0.49	70,70,70,70	0
85	OHX	6	2014	7/7	0.96	0.37	119,119,119,119	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	1	3482	7/7	0.96	0.11	114,114,114,114	0
85	OHX	1	3484	7/7	0.96	0.19	114,114,114,114	0
85	OHX	1	3603	7/7	0.96	0.36	103,103,103,103	0
85	OHX	2	1963	7/7	0.96	0.22	142,142,142,142	0
85	OHX	2	1937	7/7	0.96	0.13	123,123,123,123	0
85	OHX	1	3606	7/7	0.96	0.31	106,106,106,106	0
85	OHX	1	3607	7/7	0.96	0.25	130,130,130,130	0
86	MG	l3	407	1/1	0.96	0.22	31,31,31,31	0
85	OHX	5	3686	7/7	0.96	0.32	133,133,133,133	0
85	OHX	1	3489	7/7	0.96	0.11	109,109,109,109	0
86	MG	1	3899	1/1	0.96	0.71	43,43,43,43	0
85	OHX	1	3609	7/7	0.96	0.41	91,91,91,91	0
85	OHX	1	3610	7/7	0.96	0.19	114,114,114,114	0
85	OHX	2	1966	7/7	0.96	0.25	124,124,124,124	0
85	OHX	1	3614	7/7	0.96	0.41	110,110,110,110	0
85	OHX	1	3499	7/7	0.96	0.12	119,119,119,119	0
85	OHX	5	3693	7/7	0.96	0.43	116,116,116,116	0
85	OHX	1	3618	7/7	0.96	0.28	125,125,125,125	0
86	MG	1	3908	1/1	0.96	0.43	30,30,30,30	0
85	OHX	1	3711	7/7	0.96	0.22	100,100,100,100	0
85	OHX	1	3500	7/7	0.96	0.17	85,85,85,85	0
85	OHX	2	1944	7/7	0.96	0.14	142,142,142,142	0
85	OHX	1	3510	7/7	0.96	0.23	104,104,104,104	0
85	OHX	1	3622	7/7	0.96	0.33	119,119,119,119	0
86	MG	sM	401	1/1	0.96	0.15	44,44,44,44	0
85	OHX	2	1969	7/7	0.96	0.31	136,136,136,136	0
85	OHX	1	3522	7/7	0.96	0.33	98,98,98,98	0
85	OHX	1	3529	7/7	0.96	0.19	133,133,133,133	0
85	OHX	5	3705	7/7	0.96	0.29	114,114,114,114	0
85	OHX	1	3627	7/7	0.96	0.38	108,108,108,108	0
85	OHX	1	3530	7/7	0.96	0.17	124,124,124,124	0
85	OHX	1	3722	7/7	0.96	0.36	139,139,139,139	0
85	OHX	2	1915	7/7	0.96	0.13	142,142,142,142	0
86	MG	5	3754	1/1	0.96	0.26	47,47,47,47	0
86	MG	1	3923	1/1	0.96	0.38	40,40,40,40	0
85	OHX	1	3534	7/7	0.96	0.12	146,146,146,146	0
86	MG	1	4129	1/1	0.96	0.21	70,70,70,70	0
85	OHX	1	3535	7/7	0.96	0.26	106,106,106,106	0
85	OHX	5	3713	7/7	0.96	0.29	107,107,107,107	0
86	MG	3	201	1/1	0.96	0.53	33,33,33,33	0
85	OHX	1	3537	7/7	0.96	0.38	108,108,108,108	0
85	OHX	1	3634	7/7	0.96	0.33	112,112,112,112	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	1	3728	7/7	0.96	0.37	111,111,111,111	0
85	OHX	1	3635	7/7	0.96	0.30	111,111,111,111	0
85	OHX	1	3636	7/7	0.96	0.31	147,147,147,147	0
85	OHX	1	3638	7/7	0.96	0.18	126,126,126,126	0
85	OHX	1	3640	7/7	0.96	0.22	122,122,122,122	0
85	OHX	5	3721	7/7	0.96	0.25	95,95,95,95	0
87	ZN	Q3	501	1/1	0.96	0.05	68,68,68,68	0
86	MG	5	3769	1/1	0.96	0.35	59,59,59,59	0
85	OHX	1	3538	7/7	0.96	0.17	95,95,95,95	0
85	OHX	2	2000	7/7	0.96	0.29	140,140,140,140	0
85	OHX	2	1930	7/7	0.96	0.20	118,118,118,118	0
86	MG	4	219	1/1	0.96	0.47	38,38,38,38	0
85	OHX	1	3646	7/7	0.96	0.44	129,129,129,129	0
85	OHX	5	3536	7/7	0.97	0.29	104,104,104,104	0
85	OHX	5	3537	7/7	0.97	0.20	92,92,92,92	0
85	OHX	1	3452	7/7	0.97	0.15	87,87,87,87	0
85	OHX	6	1955	7/7	0.97	0.07	167,167,167,167	0
85	OHX	1	3454	7/7	0.97	0.12	99,99,99,99	0
85	OHX	5	3734	7/7	0.97	0.29	97,97,97,97	0
85	OHX	1	3611	7/7	0.97	0.36	113,113,113,113	0
86	MG	5	4024	1/1	0.97	0.14	33,33,33,33	0
86	MG	1	3765	1/1	0.97	0.14	51,51,51,51	0
86	MG	1	3962	1/1	0.97	0.15	46,46,46,46	0
85	OHX	1	3612	7/7	0.97	0.30	117,117,117,117	0
85	OHX	6	1961	7/7	0.97	0.26	125,125,125,125	0
85	OHX	5	3547	7/7	0.97	0.15	101,101,101,101	0
85	OHX	5	3549	7/7	0.97	0.26	109,109,109,109	0
86	MG	M7	208	1/1	0.97	0.06	50,50,50,50	0
85	OHX	6	1962	7/7	0.97	0.20	97,97,97,97	0
85	OHX	6	1963	7/7	0.97	0.20	116,116,116,116	0
85	OHX	5	3553	7/7	0.97	0.25	95,95,95,95	0
85	OHX	2	1949	7/7	0.97	0.20	127,127,127,127	0
85	OHX	1	3460	7/7	0.97	0.10	88,88,88,88	0
85	OHX	6	1967	7/7	0.97	0.29	102,102,102,102	0
85	OHX	7	203	7/7	0.97	0.16	95,95,95,95	0
85	OHX	6	1968	7/7	0.97	0.15	123,123,123,123	0
85	OHX	1	3616	7/7	0.97	0.46	111,111,111,111	0
85	OHX	5	3561	7/7	0.97	0.23	123,123,123,123	0
85	OHX	2	1911	7/7	0.97	0.11	116,116,116,116	0
85	OHX	5	3563	7/7	0.97	0.25	103,103,103,103	0
85	OHX	1	3540	7/7	0.97	0.20	101,101,101,101	0
85	OHX	6	1972	7/7	0.97	0.26	101,101,101,101	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	2	1962	7/7	0.97	0.23	114,114,114,114	0
85	OHX	8	205	7/7	0.97	0.17	101,101,101,101	0
86	MG	5	3818	1/1	0.97	0.48	51,51,51,51	0
86	MG	6	2051	1/1	0.97	0.36	52,52,52,52	0
85	OHX	6	1974	7/7	0.97	0.21	117,117,117,117	0
85	OHX	5	3569	7/7	0.97	0.28	106,106,106,106	0
85	OHX	5	3570	7/7	0.97	0.19	104,104,104,104	0
85	OHX	5	3571	7/7	0.97	0.13	113,113,113,113	0
85	OHX	8	210	7/7	0.97	0.13	139,139,139,139	0
85	OHX	5	3572	7/7	0.97	0.28	99,99,99,99	0
85	OHX	6	1975	7/7	0.97	0.46	109,109,109,109	0
85	OHX	5	3574	7/7	0.97	0.21	110,110,110,110	0
85	OHX	1	3468	7/7	0.97	0.12	100,100,100,100	0
85	OHX	6	1977	7/7	0.97	0.13	138,138,138,138	0
86	MG	5	4061	1/1	0.97	0.33	62,62,62,62	0
85	OHX	1	3469	7/7	0.97	0.09	100,100,100,100	0
86	MG	6	2063	1/1	0.97	0.43	42,42,42,42	0
86	MG	1	3994	1/1	0.97	0.20	43,43,43,43	0
85	OHX	5	3580	7/7	0.97	0.31	119,119,119,119	0
85	OHX	5	3581	7/7	0.97	0.10	150,150,150,150	0
85	OHX	1	3544	7/7	0.97	0.25	101,101,101,101	0
85	OHX	5	3584	7/7	0.97	0.12	116,116,116,116	0
85	OHX	5	3585	7/7	0.97	0.20	96,96,96,96	0
85	OHX	5	3587	7/7	0.97	0.21	108,108,108,108	0
85	OHX	1	3703	7/7	0.97	0.36	121,121,121,121	0
85	OHX	6	1982	7/7	0.97	0.26	137,137,137,137	0
85	OHX	6	1983	7/7	0.97	0.14	136,136,136,136	0
85	OHX	19	201	7/7	0.97	0.20	103,103,103,103	0
86	MG	6	2075	1/1	0.97	0.47	61,61,61,61	0
85	OHX	m0	301	7/7	0.97	0.11	118,118,118,118	0
85	OHX	2	2007	7/7	0.97	0.24	150,150,150,150	0
86	MG	5	3848	1/1	0.97	0.13	38,38,38,38	0
85	OHX	5	3594	7/7	0.97	0.26	93,93,93,93	0
85	OHX	1	3624	7/7	0.97	0.30	83,83,83,83	0
85	OHX	5	3597	7/7	0.97	0.29	107,107,107,107	0
86	MG	5	3852	1/1	0.97	0.34	32,32,32,32	0
86	MG	5	3853	1/1	0.97	0.37	43,43,43,43	0
86	MG	6	2081	1/1	0.97	0.45	85,85,85,85	0
85	OHX	1	3546	7/7	0.97	0.21	117,117,117,117	0
86	MG	5	4088	1/1	0.97	0.23	35,35,35,35	0
85	OHX	o3	201	7/7	0.97	0.20	101,101,101,101	0
85	OHX	1	3547	7/7	0.97	0.27	126,126,126,126	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	6	2086	1/1	0.97	0.34	61,61,61,61	0
85	OHX	6	1988	7/7	0.97	0.23	124,124,124,124	0
85	OHX	5	3601	7/7	0.97	0.27	112,112,112,112	0
85	OHX	1	3548	7/7	0.97	0.19	117,117,117,117	0
86	MG	5	3863	1/1	0.97	0.48	26,26,26,26	0
85	OHX	1	3473	7/7	0.97	0.12	89,89,89,89	0
86	MG	6	2091	1/1	0.97	0.56	77,77,77,77	0
85	OHX	1	3550	7/7	0.97	0.24	119,119,119,119	0
85	OHX	6	1992	7/7	0.97	0.20	117,117,117,117	0
86	MG	5	3868	1/1	0.97	0.56	31,31,31,31	0
85	OHX	1	3475	7/7	0.97	0.12	119,119,119,119	0
85	OHX	1	3552	7/7	0.97	0.21	104,104,104,104	0
85	OHX	1	3632	7/7	0.97	0.27	136,136,136,136	0
85	OHX	5	3609	7/7	0.97	0.31	99,99,99,99	0
85	OHX	5	3610	7/7	0.97	0.25	103,103,103,103	0
85	OHX	1	3714	7/7	0.97	0.38	95,95,95,95	0
85	OHX	1	3477	7/7	0.97	0.14	95,95,95,95	0
85	OHX	2	1939	7/7	0.97	0.12	123,123,123,123	0
85	OHX	2	2040	7/7	0.97	0.28	147,147,147,147	0
86	MG	1	4033	1/1	0.97	0.38	42,42,42,42	0
85	OHX	2	1964	7/7	0.97	0.29	120,120,120,120	0
85	OHX	5	3617	7/7	0.97	0.40	102,102,102,102	0
85	OHX	5	3618	7/7	0.97	0.20	103,103,103,103	0
85	OHX	1	3637	7/7	0.97	0.26	132,132,132,132	0
85	OHX	6	2003	7/7	0.97	0.24	103,103,103,103	0
86	MG	1	3838	1/1	0.97	0.22	38,38,38,38	0
85	OHX	5	3621	7/7	0.97	0.26	99,99,99,99	0
85	OHX	2	2025	7/7	0.97	0.23	126,126,126,126	0
85	OHX	1	3488	7/7	0.97	0.13	98,98,98,98	0
85	OHX	1	3641	7/7	0.97	0.29	135,135,135,135	0
86	MG	5	3889	1/1	0.97	0.35	33,33,33,33	0
86	MG	1	3843	1/1	0.97	0.28	30,30,30,30	0
85	OHX	6	2007	7/7	0.97	0.20	130,130,130,130	0
85	OHX	2	1940	7/7	0.97	0.20	120,120,120,120	0
86	MG	5	4125	1/1	0.97	0.42	35,35,35,35	0
86	MG	6	2117	1/1	0.97	0.18	50,50,50,50	0
85	OHX	1	3643	7/7	0.97	0.28	106,106,106,106	0
86	MG	1	3847	1/1	0.97	0.17	71,71,71,71	0
85	OHX	5	3628	7/7	0.97	0.27	139,139,139,139	0
85	OHX	1	3561	7/7	0.97	0.24	97,97,97,97	0
86	MG	2	2073	1/1	0.97	0.47	60,60,60,60	0
85	OHX	2	1943	7/7	0.97	0.18	104,104,104,104	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	6	2012	7/7	0.97	0.19	139,139,139,139	0
85	OHX	1	3491	7/7	0.97	0.18	95,95,95,95	0
85	OHX	1	3493	7/7	0.97	0.13	102,102,102,102	0
86	MG	5	3905	1/1	0.97	0.47	27,27,27,27	0
86	MG	5	3906	1/1	0.97	0.45	45,45,45,45	0
85	OHX	5	3634	7/7	0.97	0.16	139,139,139,139	0
85	OHX	5	3635	7/7	0.97	0.22	103,103,103,103	0
85	OHX	6	2015	7/7	0.97	0.32	119,119,119,119	0
85	OHX	1	3494	7/7	0.97	0.20	93,93,93,93	0
85	OHX	2	1903	7/7	0.97	0.15	89,89,89,89	0
85	OHX	1	3568	7/7	0.97	0.23	131,131,131,131	0
85	OHX	1	3571	7/7	0.97	0.15	143,143,143,143	0
85	OHX	5	3641	7/7	0.97	0.33	119,119,119,119	0
85	OHX	1	3572	7/7	0.97	0.21	85,85,85,85	0
85	OHX	1	3573	7/7	0.97	0.19	110,110,110,110	0
85	OHX	1	3654	7/7	0.97	0.19	116,116,116,116	0
85	OHX	2	1968	7/7	0.97	0.31	130,130,130,130	0
86	MG	5	3919	1/1	0.97	0.61	33,33,33,33	0
86	MG	5	3920	1/1	0.97	0.57	24,24,24,24	0
85	OHX	1	3503	7/7	0.97	0.13	109,109,109,109	0
86	MG	2	2091	1/1	0.97	0.25	74,74,74,74	0
85	OHX	3	203	7/7	0.97	0.21	112,112,112,112	0
85	OHX	5	3648	7/7	0.97	0.31	102,102,102,102	0
85	OHX	3	205	7/7	0.97	0.18	90,90,90,90	0
86	MG	5	3927	1/1	0.97	0.67	46,46,46,46	0
85	OHX	3	207	7/7	0.97	0.18	118,118,118,118	0
85	OHX	1	3577	7/7	0.97	0.21	102,102,102,102	0
85	OHX	1	3658	7/7	0.97	0.25	124,124,124,124	0
85	OHX	1	3504	7/7	0.97	0.20	88,88,88,88	0
85	OHX	1	3505	7/7	0.97	0.09	124,124,124,124	0
85	OHX	1	3580	7/7	0.97	0.22	96,96,96,96	0
85	OHX	4	204	7/7	0.97	0.12	108,108,108,108	0
86	MG	6	2153	1/1	0.97	0.24	97,97,97,97	0
85	OHX	2	1927	7/7	0.97	0.12	129,129,129,129	0
85	OHX	1	3507	7/7	0.97	0.13	106,106,106,106	0
85	OHX	1	3508	7/7	0.97	0.19	111,111,111,111	0
85	OHX	1	3586	7/7	0.97	0.23	98,98,98,98	0
85	OHX	1	3587	7/7	0.97	0.26	104,104,104,104	0
85	OHX	1	3509	7/7	0.97	0.23	94,94,94,94	0
85	OHX	2	1985	7/7	0.97	0.18	110,110,110,110	0
85	OHX	C8	201	7/7	0.97	0.09	112,112,112,112	0
85	OHX	5	3666	7/7	0.97	0.48	104,104,104,104	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	5	3667	7/7	0.97	0.32	100,100,100,100	0
85	OHX	1	3512	7/7	0.97	0.16	100,100,100,100	0
85	OHX	1	3514	7/7	0.97	0.18	83,83,83,83	0
85	OHX	L4	401	7/7	0.97	0.27	121,121,121,121	0
85	OHX	1	3515	7/7	0.97	0.30	86,86,86,86	0
85	OHX	M5	302	7/7	0.97	0.24	107,107,107,107	0
85	OHX	1	3516	7/7	0.97	0.20	106,106,106,106	0
85	OHX	1	3517	7/7	0.97	0.14	95,95,95,95	0
85	OHX	1	3519	7/7	0.97	0.13	120,120,120,120	0
85	OHX	1	3520	7/7	0.97	0.26	102,102,102,102	0
85	OHX	5	3678	7/7	0.97	0.24	110,110,110,110	0
85	OHX	1	3521	7/7	0.97	0.24	86,86,86,86	0
85	OHX	2	1928	7/7	0.97	0.15	114,114,114,114	0
85	OHX	1	3525	7/7	0.97	0.13	116,116,116,116	0
85	OHX	Q2	502	7/7	0.97	0.17	71,71,71,71	0
85	OHX	6	1918	7/7	0.97	0.12	95,95,95,95	0
85	OHX	6	1920	7/7	0.97	0.11	124,124,124,124	0
85	OHX	6	1924	7/7	0.97	0.19	91,91,91,91	0
85	OHX	1	3526	7/7	0.97	0.21	96,96,96,96	0
85	OHX	1	3527	7/7	0.97	0.29	109,109,109,109	0
85	OHX	6	1928	7/7	0.97	0.13	136,136,136,136	0
85	OHX	5	3459	7/7	0.97	0.12	80,80,80,80	0
86	MG	1	4117	1/1	0.97	0.48	36,36,36,36	0
85	OHX	5	3460	7/7	0.97	0.11	89,89,89,89	0
85	OHX	5	3471	7/7	0.97	0.11	91,91,91,91	0
85	OHX	5	3474	7/7	0.97	0.16	80,80,80,80	0
85	OHX	1	3528	7/7	0.97	0.31	102,102,102,102	0
85	OHX	6	1932	7/7	0.97	0.11	90,90,90,90	0
85	OHX	5	3477	7/7	0.97	0.11	90,90,90,90	0
85	OHX	5	3480	7/7	0.97	0.17	84,84,84,84	0
85	OHX	5	3697	7/7	0.97	0.34	111,111,111,111	0
85	OHX	5	3481	7/7	0.97	0.13	87,87,87,87	0
85	OHX	5	3482	7/7	0.97	0.12	93,93,93,93	0
85	OHX	5	3483	7/7	0.97	0.14	103,103,103,103	0
85	OHX	5	3484	7/7	0.97	0.18	91,91,91,91	0
86	MG	1	4131	1/1	0.97	0.38	34,34,34,34	0
85	OHX	5	3490	7/7	0.97	0.16	91,91,91,91	0
85	OHX	5	3703	7/7	0.97	0.19	83,83,83,83	0
85	OHX	5	3493	7/7	0.97	0.14	99,99,99,99	0
85	OHX	6	1935	7/7	0.97	0.15	98,98,98,98	0
85	OHX	5	3706	7/7	0.97	0.33	106,106,106,106	0
86	MG	1	3931	1/1	0.97	0.25	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	6	1937	7/7	0.97	0.09	113,113,113,113	0
85	OHX	5	3498	7/7	0.97	0.15	104,104,104,104	0
85	OHX	5	3500	7/7	0.97	0.11	117,117,117,117	0
85	OHX	2	1920	7/7	0.97	0.10	101,101,101,101	0
85	OHX	6	1940	7/7	0.97	0.15	102,102,102,102	0
85	OHX	5	3505	7/7	0.97	0.30	71,71,71,71	0
85	OHX	5	3506	7/7	0.97	0.13	104,104,104,104	0
85	OHX	5	3509	7/7	0.97	0.14	107,107,107,107	0
85	OHX	6	1942	7/7	0.97	0.13	112,112,112,112	0
85	OHX	5	3515	7/7	0.97	0.22	102,102,102,102	0
85	OHX	5	3516	7/7	0.97	0.07	141,141,141,141	0
85	OHX	1	3441	7/7	0.97	0.11	87,87,87,87	0
86	MG	5	3772	1/1	0.97	0.30	39,39,39,39	0
85	OHX	5	3518	7/7	0.97	0.20	103,103,103,103	0
86	MG	4	225	1/1	0.97	0.35	41,41,41,41	0
86	MG	4	226	1/1	0.97	0.19	56,56,56,56	0
86	MG	4	227	1/1	0.97	0.15	47,47,47,47	0
85	OHX	5	3519	7/7	0.97	0.16	105,105,105,105	0
85	OHX	1	3531	7/7	0.97	0.12	129,129,129,129	0
86	MG	4	230	1/1	0.97	0.15	51,51,51,51	0
85	OHX	6	1946	7/7	0.97	0.11	113,113,113,113	0
86	MG	5	3781	1/1	0.97	0.44	30,30,30,30	0
85	OHX	1	3532	7/7	0.97	0.23	99,99,99,99	0
85	OHX	5	3528	7/7	0.97	0.12	117,117,117,117	0
85	OHX	1	3687	7/7	0.97	0.32	140,140,140,140	0
85	OHX	2	1948	7/7	0.97	0.10	124,124,124,124	0
85	OHX	5	3534	7/7	0.97	0.15	110,110,110,110	0
85	OHX	1	3689	7/7	0.97	0.39	108,108,108,108	0
85	OHX	5	3538	7/7	0.98	0.11	108,108,108,108	0
85	OHX	1	3495	7/7	0.98	0.18	71,71,71,71	0
85	OHX	1	3496	7/7	0.98	0.13	108,108,108,108	0
85	OHX	1	3426	7/7	0.98	0.13	82,82,82,82	0
85	OHX	1	3427	7/7	0.98	0.11	70,70,70,70	0
85	OHX	5	3543	7/7	0.98	0.27	80,80,80,80	0
85	OHX	5	3544	7/7	0.98	0.22	114,114,114,114	0
85	OHX	1	3563	7/7	0.98	0.16	119,119,119,119	0
86	MG	5	3858	1/1	0.98	0.43	39,39,39,39	0
85	OHX	1	3502	7/7	0.98	0.15	98,98,98,98	0
85	OHX	1	3432	7/7	0.98	0.15	77,77,77,77	0
85	OHX	5	3548	7/7	0.98	0.24	86,86,86,86	0
85	OHX	1	3433	7/7	0.98	0.11	77,77,77,77	0
86	MG	1	4075	1/1	0.98	0.17	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	5	3550	7/7	0.98	0.26	94,94,94,94	0
85	OHX	O7	102	7/7	0.98	0.08	94,94,94,94	0
85	OHX	2	1912	7/7	0.98	0.09	110,110,110,110	0
85	OHX	1	3443	7/7	0.98	0.12	81,81,81,81	0
85	OHX	5	3554	7/7	0.98	0.13	130,130,130,130	0
85	OHX	6	1905	7/7	0.98	0.13	80,80,80,80	0
85	OHX	6	1906	7/7	0.98	0.11	71,71,71,71	0
85	OHX	5	3557	7/7	0.98	0.17	91,91,91,91	0
85	OHX	6	1907	7/7	0.98	0.12	82,82,82,82	0
85	OHX	6	1909	7/7	0.98	0.10	96,96,96,96	0
85	OHX	6	1912	7/7	0.98	0.11	87,87,87,87	0
85	OHX	6	1913	7/7	0.98	0.09	94,94,94,94	0
85	OHX	6	1914	7/7	0.98	0.08	83,83,83,83	0
85	OHX	6	1915	7/7	0.98	0.09	84,84,84,84	0
85	OHX	6	1917	7/7	0.98	0.12	86,86,86,86	0
85	OHX	5	3565	7/7	0.98	0.19	97,97,97,97	0
86	MG	1	3907	1/1	0.98	0.70	28,28,28,28	0
85	OHX	1	3569	7/7	0.98	0.26	98,98,98,98	0
86	MG	6	2136	1/1	0.98	0.13	76,76,76,76	0
85	OHX	1	3570	7/7	0.98	0.33	99,99,99,99	0
85	OHX	6	1922	7/7	0.98	0.20	90,90,90,90	0
86	MG	1	3911	1/1	0.98	0.27	46,46,46,46	0
85	OHX	6	1923	7/7	0.98	0.09	99,99,99,99	0
85	OHX	1	3444	7/7	0.98	0.10	92,92,92,92	0
85	OHX	1	3639	7/7	0.98	0.21	107,107,107,107	0
85	OHX	6	1926	7/7	0.98	0.21	87,87,87,87	0
85	OHX	1	3445	7/7	0.98	0.13	76,76,76,76	0
85	OHX	2	1929	7/7	0.98	0.23	116,116,116,116	0
85	OHX	6	1930	7/7	0.98	0.12	99,99,99,99	0
85	OHX	1	3449	7/7	0.98	0.09	82,82,82,82	0
85	OHX	5	3739	7/7	0.98	0.18	97,97,97,97	0
86	MG	5	3895	1/1	0.98	0.64	36,36,36,36	0
85	OHX	5	3577	7/7	0.98	0.33	105,105,105,105	0
85	OHX	5	3578	7/7	0.98	0.17	109,109,109,109	0
85	OHX	1	3450	7/7	0.98	0.08	90,90,90,90	0
86	MG	6	2152	1/1	0.98	0.10	70,70,70,70	0
86	MG	5	3900	1/1	0.98	0.27	29,29,29,29	0
85	OHX	6	1933	7/7	0.98	0.12	112,112,112,112	0
85	OHX	6	1934	7/7	0.98	0.17	101,101,101,101	0
86	MG	1	3926	1/1	0.98	0.18	48,48,48,48	0
85	OHX	5	3582	7/7	0.98	0.15	85,85,85,85	0
85	OHX	1	3576	7/7	0.98	0.31	110,110,110,110	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	1	3451	7/7	0.98	0.09	99,99,99,99	0
85	OHX	6	1938	7/7	0.98	0.10	110,110,110,110	0
85	OHX	7	205	7/7	0.98	0.16	93,93,93,93	0
85	OHX	7	206	7/7	0.98	0.12	100,100,100,100	0
86	MG	1	4119	1/1	0.98	0.44	31,31,31,31	0
85	OHX	5	3586	7/7	0.98	0.35	105,105,105,105	0
85	OHX	1	3513	7/7	0.98	0.20	101,101,101,101	0
85	OHX	2	1988	7/7	0.98	0.17	138,138,138,138	0
85	OHX	6	1941	7/7	0.98	0.18	111,111,111,111	0
85	OHX	1	3453	7/7	0.98	0.10	94,94,94,94	0
85	OHX	5	3591	7/7	0.98	0.26	118,118,118,118	0
85	OHX	5	3592	7/7	0.98	0.19	96,96,96,96	0
85	OHX	2	1913	7/7	0.98	0.09	106,106,106,106	0
85	OHX	6	1944	7/7	0.98	0.16	108,108,108,108	0
85	OHX	5	3595	7/7	0.98	0.31	99,99,99,99	0
85	OHX	1	3455	7/7	0.98	0.11	91,91,91,91	0
86	MG	5	3922	1/1	0.98	0.44	23,23,23,23	0
85	OHX	1	3518	7/7	0.98	0.16	76,76,76,76	0
85	OHX	6	1947	7/7	0.98	0.12	102,102,102,102	0
85	OHX	2	1906	7/7	0.98	0.13	103,103,103,103	0
85	OHX	1	3457	7/7	0.98	0.12	91,91,91,91	0
85	OHX	6	1950	7/7	0.98	0.12	123,123,123,123	0
86	MG	5	4127	1/1	0.98	0.20	61,61,61,61	0
85	OHX	1	3458	7/7	0.98	0.07	96,96,96,96	0
85	OHX	6	1952	7/7	0.98	0.12	114,114,114,114	0
85	OHX	1	3459	7/7	0.98	0.10	79,79,79,79	0
85	OHX	1	3524	7/7	0.98	0.20	109,109,109,109	0
85	OHX	2	1950	7/7	0.98	0.19	115,115,115,115	0
85	OHX	13	401	7/7	0.98	0.15	95,95,95,95	0
85	OHX	6	1956	7/7	0.98	0.15	112,112,112,112	0
85	OHX	1	3461	7/7	0.98	0.12	80,80,80,80	0
85	OHX	6	1958	7/7	0.98	0.16	120,120,120,120	0
85	OHX	c8	201	7/7	0.98	0.11	132,132,132,132	0
85	OHX	2	1970	7/7	0.98	0.18	107,107,107,107	0
85	OHX	1	3463	7/7	0.98	0.12	84,84,84,84	0
85	OHX	2	1916	7/7	0.98	0.10	107,107,107,107	0
85	OHX	5	3614	7/7	0.98	0.19	81,81,81,81	0
85	OHX	5	3419	7/7	0.98	0.11	61,61,61,61	0
85	OHX	5	3424	7/7	0.98	0.10	66,66,66,66	0
85	OHX	5	3435	7/7	0.98	0.12	90,90,90,90	0
85	OHX	5	3442	7/7	0.98	0.10	82,82,82,82	0
85	OHX	5	3443	7/7	0.98	0.09	81,81,81,81	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
86	MG	1	3792	1/1	0.98	0.31	60,60,60,60	0
85	OHX	m5	501	7/7	0.98	0.23	117,117,117,117	0
85	OHX	n3	201	7/7	0.98	0.11	85,85,85,85	0
85	OHX	5	3446	7/7	0.98	0.08	85,85,85,85	0
85	OHX	5	3449	7/7	0.98	0.11	88,88,88,88	0
85	OHX	5	3451	7/7	0.98	0.09	96,96,96,96	0
85	OHX	5	3452	7/7	0.98	0.10	84,84,84,84	0
85	OHX	q2	502	7/7	0.98	0.12	73,73,73,73	0
85	OHX	5	3453	7/7	0.98	0.10	111,111,111,111	0
85	OHX	5	3454	7/7	0.98	0.08	98,98,98,98	0
85	OHX	5	3456	7/7	0.98	0.09	91,91,91,91	0
85	OHX	5	3457	7/7	0.98	0.15	88,88,88,88	0
85	OHX	5	3458	7/7	0.98	0.09	92,92,92,92	0
85	OHX	1	3465	7/7	0.98	0.12	98,98,98,98	0
85	OHX	1	3466	7/7	0.98	0.17	95,95,95,95	0
85	OHX	5	3461	7/7	0.98	0.10	74,74,74,74	0
85	OHX	5	3463	7/7	0.98	0.09	90,90,90,90	0
85	OHX	5	3465	7/7	0.98	0.10	90,90,90,90	0
86	MG	5	4165	1/1	0.98	0.40	33,33,33,33	0
85	OHX	5	3466	7/7	0.98	0.15	84,84,84,84	0
85	OHX	5	3467	7/7	0.98	0.15	92,92,92,92	0
86	MG	M7	205	1/1	0.98	0.33	34,34,34,34	0
85	OHX	5	3468	7/7	0.98	0.10	99,99,99,99	0
86	MG	2	2057	1/1	0.98	0.49	57,57,57,57	0
85	OHX	5	3469	7/7	0.98	0.13	92,92,92,92	0
85	OHX	5	3470	7/7	0.98	0.10	87,87,87,87	0
85	OHX	6	1964	7/7	0.98	0.25	110,110,110,110	0
85	OHX	5	3472	7/7	0.98	0.08	99,99,99,99	0
85	OHX	5	3473	7/7	0.98	0.16	85,85,85,85	0
85	OHX	1	3467	7/7	0.98	0.11	87,87,87,87	0
85	OHX	2	1918	7/7	0.98	0.09	99,99,99,99	0
85	OHX	2	1907	7/7	0.98	0.09	101,101,101,101	0
85	OHX	2	1974	7/7	0.98	0.24	140,140,140,140	0
85	OHX	5	3478	7/7	0.98	0.12	96,96,96,96	0
86	MG	O1	201	1/1	0.98	0.45	75,75,75,75	0
85	OHX	5	3479	7/7	0.98	0.10	83,83,83,83	0
85	OHX	1	3536	7/7	0.98	0.14	83,83,83,83	0
85	OHX	1	3472	7/7	0.98	0.11	92,92,92,92	0
85	OHX	2	1935	7/7	0.98	0.21	134,134,134,134	0
85	OHX	1	3474	7/7	0.98	0.12	87,87,87,87	0
86	MG	1	4007	1/1	0.98	0.10	51,51,51,51	0
86	MG	5	3987	1/1	0.98	0.47	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	3	202	7/7	0.98	0.09	90,90,90,90	0
85	OHX	5	3486	7/7	0.98	0.22	99,99,99,99	0
85	OHX	5	3487	7/7	0.98	0.24	89,89,89,89	0
85	OHX	5	3489	7/7	0.98	0.20	86,86,86,86	0
85	OHX	2	1908	7/7	0.98	0.11	108,108,108,108	0
86	MG	1	4013	1/1	0.98	0.29	34,34,34,34	0
85	OHX	3	204	7/7	0.98	0.10	99,99,99,99	0
86	MG	13	403	1/1	0.98	0.51	27,27,27,27	0
86	MG	1	3836	1/1	0.98	0.71	30,30,30,30	0
85	OHX	5	3494	7/7	0.98	0.13	86,86,86,86	0
85	OHX	5	3659	7/7	0.98	0.21	112,112,112,112	0
85	OHX	1	3476	7/7	0.98	0.08	98,98,98,98	0
85	OHX	3	206	7/7	0.98	0.23	112,112,112,112	0
85	OHX	5	3497	7/7	0.98	0.16	116,116,116,116	0
85	OHX	6	1978	7/7	0.98	0.23	98,98,98,98	0
85	OHX	5	3499	7/7	0.98	0.26	97,97,97,97	0
85	OHX	2	1922	7/7	0.98	0.10	99,99,99,99	0
85	OHX	5	3501	7/7	0.98	0.14	106,106,106,106	0
85	OHX	1	3478	7/7	0.98	0.13	96,96,96,96	0
85	OHX	1	3480	7/7	0.98	0.15	105,105,105,105	0
85	OHX	1	3481	7/7	0.98	0.11	89,89,89,89	0
85	OHX	2	1938	7/7	0.98	0.19	104,104,104,104	0
85	OHX	5	3508	7/7	0.98	0.22	93,93,93,93	0
85	OHX	4	201	7/7	0.98	0.13	57,57,57,57	0
85	OHX	5	3512	7/7	0.98	0.15	90,90,90,90	0
86	MG	1	4032	1/1	0.98	0.21	70,70,70,70	0
85	OHX	5	3513	7/7	0.98	0.13	101,101,101,101	0
85	OHX	1	3483	7/7	0.98	0.20	89,89,89,89	0
85	OHX	2	1923	7/7	0.98	0.12	101,101,101,101	0
86	MG	5	4016	1/1	0.98	0.16	40,40,40,40	0
85	OHX	4	205	7/7	0.98	0.24	121,121,121,121	0
85	OHX	1	3615	7/7	0.98	0.21	119,119,119,119	0
85	OHX	1	3485	7/7	0.98	0.14	99,99,99,99	0
85	OHX	2	1924	7/7	0.98	0.12	117,117,117,117	0
85	OHX	2	1941	7/7	0.98	0.12	135,135,135,135	0
85	OHX	5	3521	7/7	0.98	0.09	119,119,119,119	0
86	MG	6	2084	1/1	0.98	0.41	48,48,48,48	0
85	OHX	5	3522	7/7	0.98	0.22	93,93,93,93	0
85	OHX	5	3523	7/7	0.98	0.27	116,116,116,116	0
86	MG	1	4044	1/1	0.98	0.14	77,77,77,77	0
85	OHX	5	3524	7/7	0.98	0.20	91,91,91,91	0
85	OHX	5	3525	7/7	0.98	0.13	108,108,108,108	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	2	1942	7/7	0.98	0.32	115,115,115,115	0
85	OHX	2	1925	7/7	0.98	0.14	133,133,133,133	0
86	MG	5	3835	1/1	0.98	0.30	37,37,37,37	0
85	OHX	2	1909	7/7	0.98	0.20	119,119,119,119	0
85	OHX	5	3529	7/7	0.98	0.11	102,102,102,102	0
85	OHX	5	3530	7/7	0.98	0.26	92,92,92,92	0
85	OHX	2	1904	7/7	0.98	0.08	89,89,89,89	0
85	OHX	5	3532	7/7	0.98	0.14	79,79,79,79	0
87	ZN	D9	101	1/1	0.98	0.09	89,89,89,89	0
85	OHX	6	1996	7/7	0.98	0.36	125,125,125,125	0
87	ZN	O7	101	1/1	0.98	0.04	45,45,45,45	0
85	OHX	1	3556	7/7	0.98	0.22	105,105,105,105	0
86	MG	1	4056	1/1	0.98	0.12	38,38,38,38	0
86	MG	1	4057	1/1	0.98	0.52	39,39,39,39	0
86	MG	1	3875	1/1	0.98	0.36	54,54,54,54	0
85	OHX	L3	401	7/7	0.98	0.33	117,117,117,117	0
86	MG	5	3847	1/1	0.98	0.49	27,27,27,27	0
87	ZN	o7	501	1/1	0.98	0.06	46,46,46,46	0
87	ZN	q0	201	1/1	0.98	0.08	37,37,37,37	0
85	OHX	1	3416	7/7	0.98	0.12	71,71,71,71	0
85	OHX	1	3424	7/7	0.98	0.11	76,76,76,76	0
85	OHX	7	201	7/7	0.99	0.08	80,80,80,80	0
85	OHX	7	202	7/7	0.99	0.11	88,88,88,88	0
85	OHX	1	3497	7/7	0.99	0.17	102,102,102,102	0
85	OHX	1	3498	7/7	0.99	0.18	94,94,94,94	0
85	OHX	5	3401	7/7	0.99	0.17	48,48,48,48	0
85	OHX	5	3403	7/7	0.99	0.10	42,42,42,42	0
85	OHX	5	3405	7/7	0.99	0.16	55,55,55,55	0
85	OHX	5	3408	7/7	0.99	0.13	59,59,59,59	0
85	OHX	5	3409	7/7	0.99	0.13	58,58,58,58	0
85	OHX	5	3410	7/7	0.99	0.12	59,59,59,59	0
85	OHX	5	3411	7/7	0.99	0.11	44,44,44,44	0
85	OHX	5	3412	7/7	0.99	0.15	68,68,68,68	0
85	OHX	8	201	7/7	0.99	0.11	57,57,57,57	0
86	MG	1	4084	1/1	0.99	0.23	35,35,35,35	0
85	OHX	8	202	7/7	0.99	0.11	74,74,74,74	0
85	OHX	5	3413	7/7	0.99	0.09	57,57,57,57	0
85	OHX	8	204	7/7	0.99	0.14	97,97,97,97	0
85	OHX	5	3414	7/7	0.99	0.10	61,61,61,61	0
85	OHX	5	3415	7/7	0.99	0.08	65,65,65,65	0
85	OHX	5	3416	7/7	0.99	0.10	65,65,65,65	0
85	OHX	5	3417	7/7	0.99	0.10	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	5	3418	7/7	0.99	0.07	69,69,69,69	0
85	OHX	1	3410	7/7	0.99	0.08	63,63,63,63	0
85	OHX	5	3420	7/7	0.99	0.10	62,62,62,62	0
85	OHX	5	3421	7/7	0.99	0.09	67,67,67,67	0
85	OHX	5	3422	7/7	0.99	0.10	70,70,70,70	0
85	OHX	5	3423	7/7	0.99	0.07	67,67,67,67	0
85	OHX	1	3411	7/7	0.99	0.10	59,59,59,59	0
85	OHX	5	3425	7/7	0.99	0.08	71,71,71,71	0
85	OHX	5	3426	7/7	0.99	0.11	70,70,70,70	0
85	OHX	5	3427	7/7	0.99	0.07	69,69,69,69	0
85	OHX	5	3428	7/7	0.99	0.07	60,60,60,60	0
85	OHX	5	3429	7/7	0.99	0.13	70,70,70,70	0
85	OHX	5	3430	7/7	0.99	0.06	77,77,77,77	0
85	OHX	5	3431	7/7	0.99	0.07	73,73,73,73	0
85	OHX	5	3432	7/7	0.99	0.09	67,67,67,67	0
85	OHX	5	3433	7/7	0.99	0.09	64,64,64,64	0
85	OHX	5	3434	7/7	0.99	0.08	68,68,68,68	0
85	OHX	6	1936	7/7	0.99	0.10	112,112,112,112	0
85	OHX	5	3436	7/7	0.99	0.07	66,66,66,66	0
85	OHX	5	3437	7/7	0.99	0.08	74,74,74,74	0
85	OHX	5	3438	7/7	0.99	0.09	76,76,76,76	0
85	OHX	5	3439	7/7	0.99	0.10	69,69,69,69	0
85	OHX	5	3440	7/7	0.99	0.11	83,83,83,83	0
85	OHX	5	3441	7/7	0.99	0.05	87,87,87,87	0
85	OHX	4	202	7/7	0.99	0.12	77,77,77,77	0
85	OHX	1	3501	7/7	0.99	0.10	70,70,70,70	0
85	OHX	5	3444	7/7	0.99	0.13	95,95,95,95	0
85	OHX	n9	101	7/7	0.99	0.10	64,64,64,64	0
85	OHX	o2	201	7/7	0.99	0.19	86,86,86,86	0
85	OHX	5	3445	7/7	0.99	0.08	79,79,79,79	0
85	OHX	1	3412	7/7	0.99	0.10	67,67,67,67	0
85	OHX	5	3447	7/7	0.99	0.09	73,73,73,73	0
85	OHX	5	3677	7/7	0.99	0.20	74,74,74,74	0
85	OHX	5	3448	7/7	0.99	0.08	69,69,69,69	0
86	MG	5	4046	1/1	0.99	0.16	33,33,33,33	0
85	OHX	1	3414	7/7	0.99	0.10	65,65,65,65	0
85	OHX	5	3450	7/7	0.99	0.05	91,91,91,91	0
85	OHX	1	3415	7/7	0.99	0.07	68,68,68,68	0
86	MG	1	4002	1/1	0.99	0.09	43,43,43,43	0
85	OHX	2	1919	7/7	0.99	0.07	94,94,94,94	0
86	MG	1	4004	1/1	0.99	0.11	42,42,42,42	0
85	OHX	1	3417	7/7	0.99	0.07	65,65,65,65	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
85	OHX	1	3418	7/7	0.99	0.12	72,72,72,72	0
85	OHX	5	3455	7/7	0.99	0.08	65,65,65,65	0
85	OHX	1	3419	7/7	0.99	0.11	70,70,70,70	0
85	OHX	1	3420	7/7	0.99	0.07	63,63,63,63	0
85	OHX	1	3422	7/7	0.99	0.10	73,73,73,73	0
85	OHX	1	3423	7/7	0.99	0.15	71,71,71,71	0
85	OHX	2	1901	7/7	0.99	0.15	79,79,79,79	0
85	OHX	1	3425	7/7	0.99	0.10	77,77,77,77	0
85	OHX	5	3462	7/7	0.99	0.08	73,73,73,73	0
85	OHX	2	1914	7/7	0.99	0.11	97,97,97,97	0
85	OHX	5	3464	7/7	0.99	0.08	87,87,87,87	0
85	OHX	2	1910	7/7	0.99	0.10	100,100,100,100	0
85	OHX	1	3428	7/7	0.99	0.09	68,68,68,68	0
85	OHX	1	3470	7/7	0.99	0.08	77,77,77,77	0
85	OHX	1	3429	7/7	0.99	0.08	72,72,72,72	0
85	OHX	1	3430	7/7	0.99	0.10	75,75,75,75	0
85	OHX	1	3431	7/7	0.99	0.09	70,70,70,70	0
85	OHX	2	1902	7/7	0.99	0.09	86,86,86,86	0
85	OHX	N1	201	7/7	0.99	0.09	68,68,68,68	0
85	OHX	N9	102	7/7	0.99	0.10	63,63,63,63	0
85	OHX	2	1917	7/7	0.99	0.11	95,95,95,95	0
85	OHX	1	3523	7/7	0.99	0.25	117,117,117,117	0
85	OHX	1	3434	7/7	0.99	0.07	82,82,82,82	0
85	OHX	1	3435	7/7	0.99	0.10	85,85,85,85	0
85	OHX	1	3436	7/7	0.99	0.07	83,83,83,83	0
86	MG	5	4080	1/1	0.99	0.31	33,33,33,33	0
85	OHX	6	1901	7/7	0.99	0.15	61,61,61,61	0
85	OHX	6	1902	7/7	0.99	0.18	79,79,79,79	0
85	OHX	6	1904	7/7	0.99	0.07	70,70,70,70	0
85	OHX	1	3479	7/7	0.99	0.20	85,85,85,85	0
85	OHX	1	3437	7/7	0.99	0.06	67,67,67,67	0
85	OHX	1	3438	7/7	0.99	0.08	76,76,76,76	0
85	OHX	5	3485	7/7	0.99	0.11	75,75,75,75	0
85	OHX	6	1908	7/7	0.99	0.13	80,80,80,80	0
85	OHX	1	3439	7/7	0.99	0.09	75,75,75,75	0
85	OHX	5	3488	7/7	0.99	0.14	83,83,83,83	0
85	OHX	6	1910	7/7	0.99	0.09	73,73,73,73	0
85	OHX	6	1911	7/7	0.99	0.07	78,78,78,78	0
85	OHX	5	3491	7/7	0.99	0.10	118,118,118,118	0
85	OHX	1	3440	7/7	0.99	0.07	68,68,68,68	0
86	MG	1	3797	1/1	0.99	0.26	38,38,38,38	0
85	OHX	2	1905	7/7	0.99	0.09	86,86,86,86	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
85	OHX	1	3581	7/7	0.99	0.15	101,101,101,101	0
85	OHX	1	3582	7/7	0.99	0.25	101,101,101,101	0
85	OHX	6	1916	7/7	0.99	0.08	88,88,88,88	0
85	OHX	1	3442	7/7	0.99	0.09	85,85,85,85	0
85	OHX	1	3402	7/7	0.99	0.10	53,53,53,53	0
85	OHX	6	1919	7/7	0.99	0.07	108,108,108,108	0
85	OHX	1	3403	7/7	0.99	0.10	45,45,45,45	0
85	OHX	6	1921	7/7	0.99	0.15	86,86,86,86	0
85	OHX	5	3503	7/7	0.99	0.09	102,102,102,102	0
85	OHX	1	3404	7/7	0.99	0.14	55,55,55,55	0
85	OHX	s1	301	7/7	0.99	0.12	81,81,81,81	0
85	OHX	1	3405	7/7	0.99	0.17	58,58,58,58	0
85	OHX	5	3507	7/7	0.99	0.12	87,87,87,87	0
85	OHX	1	3447	7/7	0.99	0.09	87,87,87,87	0
86	MG	1	4061	1/1	0.99	0.32	43,43,43,43	0
87	ZN	Q0	201	1/1	0.99	0.10	49,49,49,49	0
85	OHX	1	3448	7/7	0.99	0.08	86,86,86,86	0
86	MG	6	2172	1/1	0.99	0.38	74,74,74,74	0
85	OHX	5	3510	7/7	0.99	0.10	122,122,122,122	0
85	OHX	5	3511	7/7	0.99	0.10	63,63,63,63	0
85	OHX	1	3492	7/7	0.99	0.17	87,87,87,87	0
85	OHX	1	3406	7/7	0.99	0.10	54,54,54,54	0
85	OHX	1	3407	7/7	0.99	0.13	64,64,64,64	0
85	OHX	6	1929	7/7	0.99	0.13	81,81,81,81	0
85	OHX	1	3408	7/7	0.99	0.09	50,50,50,50	0
85	OHX	1	3409	7/7	0.99	0.11	64,64,64,64	0
85	OHX	5	3492	7/7	1.00	0.04	73,73,73,73	0
85	OHX	5	3404	7/7	1.00	0.08	51,51,51,51	0
85	OHX	1	3421	7/7	1.00	0.08	74,74,74,74	0
85	OHX	5	3406	7/7	1.00	0.06	55,55,55,55	0
85	OHX	5	3407	7/7	1.00	0.08	59,59,59,59	0
85	OHX	1	3413	7/7	1.00	0.04	66,66,66,66	0
85	OHX	6	1903	7/7	1.00	0.10	70,70,70,70	0
85	OHX	5	3402	7/7	1.00	0.15	43,43,43,43	0
86	MG	5	4071	1/1	1.00	0.07	53,53,53,53	0
85	OHX	1	3401	7/7	1.00	0.13	44,44,44,44	0

6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.