Full wwPDB X-ray Structure Validation Report ⓘ

Jul 29, 2024 – 11:45 PM EDT

PDB ID	:	8VTX
Title	:	Crystal structure of the A2058-N6-dimethylated Thermus thermophilus 70S ribosome in complex with macrolone MCX-128, mRNA, aminoacylated A-site Phe-tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.40A resolution
Authors	:	Aleksandrova, E.V.; Ma, C.-X.; Klepacki, D.; Alizadeh, F.; Vazquez-Laslop, N.; Liang, J.-H.; Polikanov, Y.S.; Mankin, A.S.
Deposited on	:	2024-01-27
Resolution	:	2.40 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:

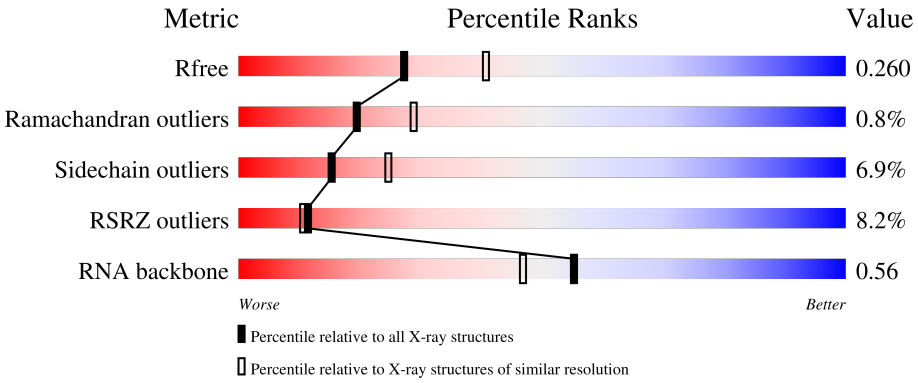
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.37.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.40 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	3907 (2.40-2.40)
Ramachandran outliers	138981	4318 (2.40-2.40)
Sidechain outliers	138945	4319 (2.40-2.40)
RSRZ outliers	127900	3811 (2.40-2.40)
RNA backbone	3102	1174 (2.80-2.00)

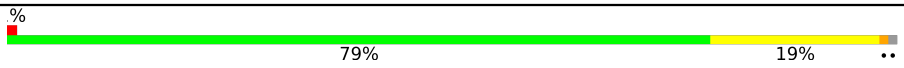
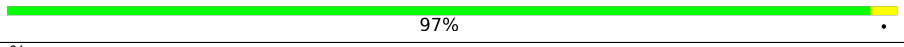
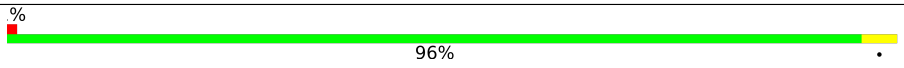
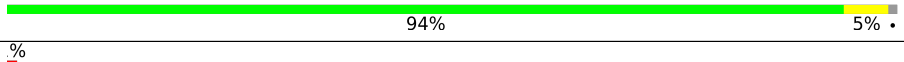
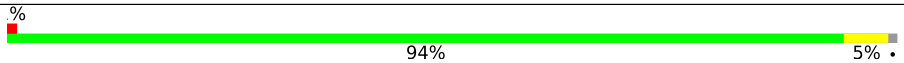
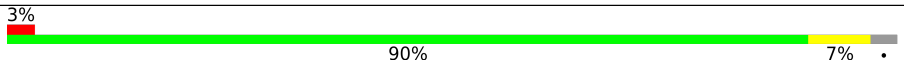
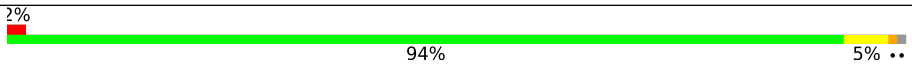
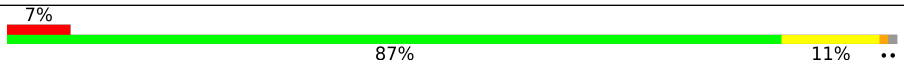
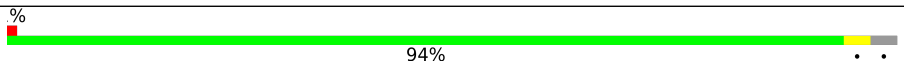
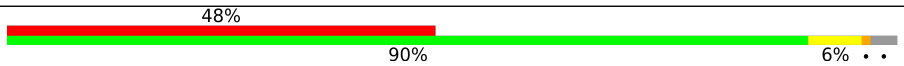
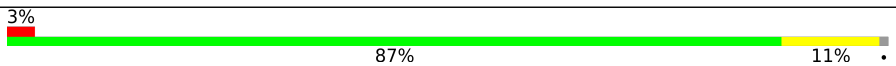
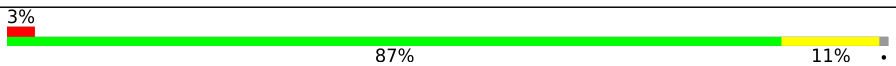
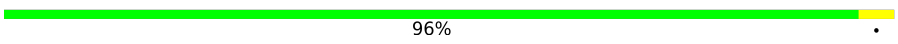
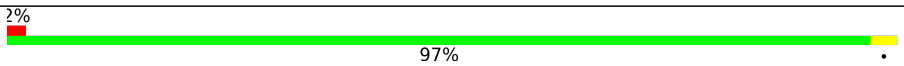
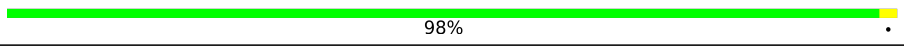
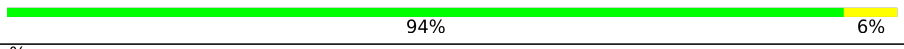
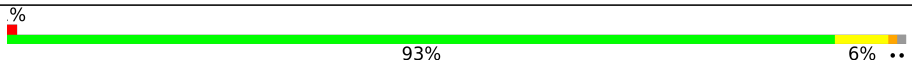
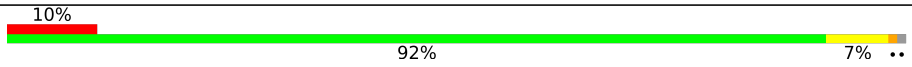
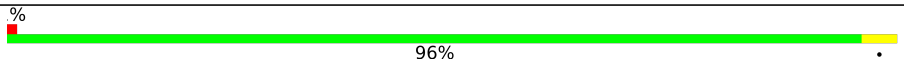
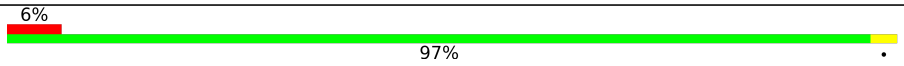
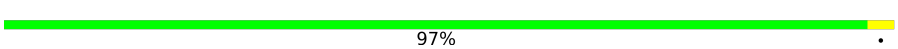
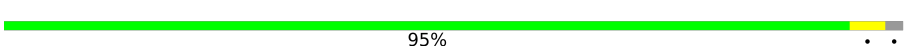
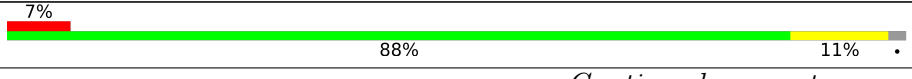
The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. 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 <=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	1A	2915	6% 82% 16%
1	2A	2915	5% 79% 16%
2	1B	121	89% 10%

Continued on next page...

Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.37.1

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	

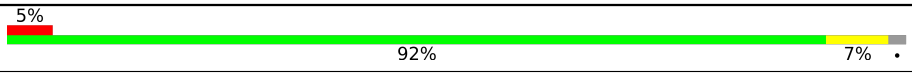
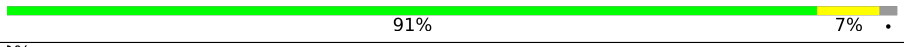
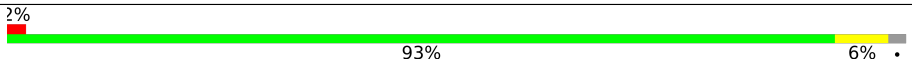
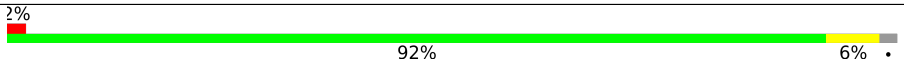
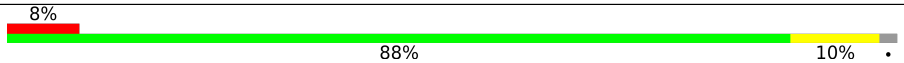
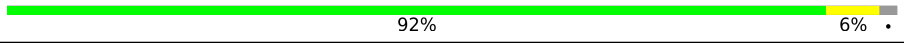
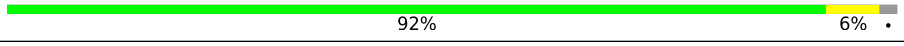
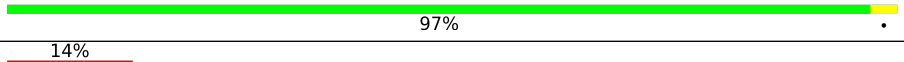
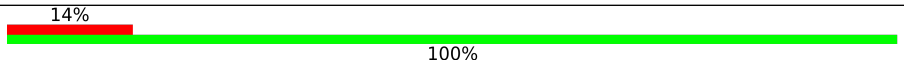
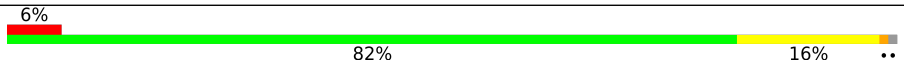
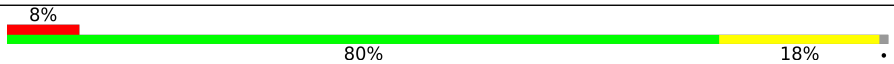
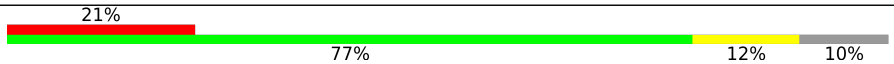
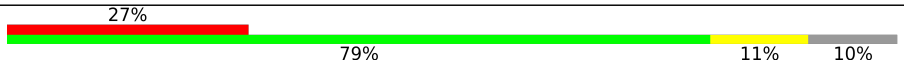
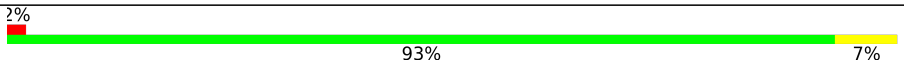
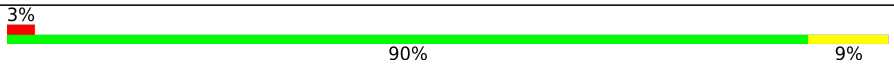
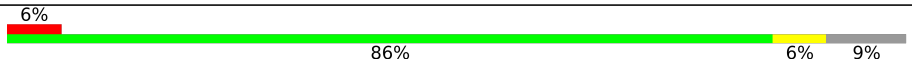
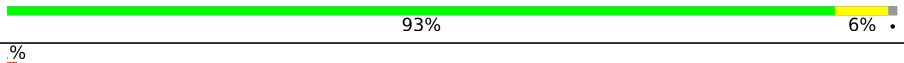
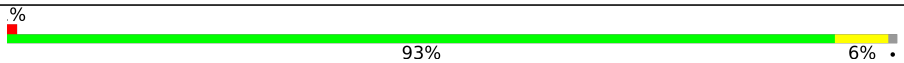
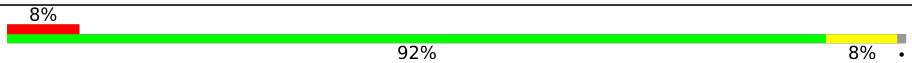
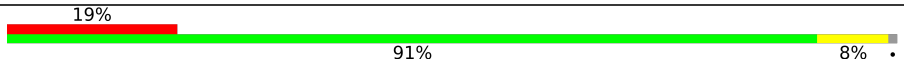
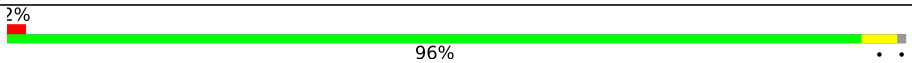
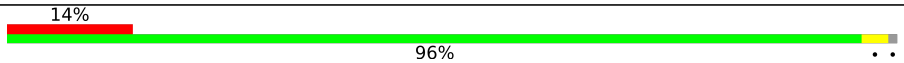
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	1T	146	87% 10%
15	2T	146	5% 88% 10%
16	1U	118	96%
16	2U	118	97%
17	1V	101	92% 7%
17	2V	101	93% 6%
18	1W	113	96%
18	2W	113	96%
19	1X	96	97%
19	2X	96	3% 96%
20	1Y	110	92% 5%
20	2Y	110	7% 92% 5%
21	1Z	206	9% 68% 6% 25%
21	2Z	206	22% 70% 7% 22%
22	10	85	96%
22	20	85	98%
23	11	98	96%
23	21	98	3% 95%
24	12	72	92% 6%
24	22	72	6% 93%
25	13	60	93% 5%
25	23	60	95%
26	14	71	21% 77% 17%
26	24	71	35% 83% 11%
27	15	60	95%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

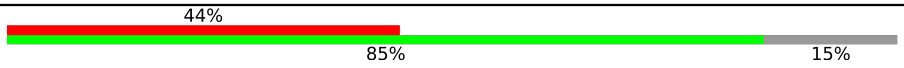
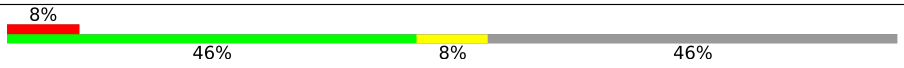
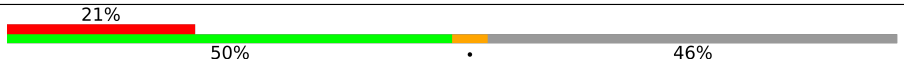
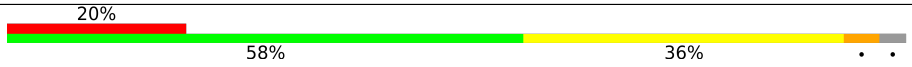
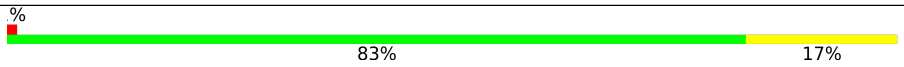
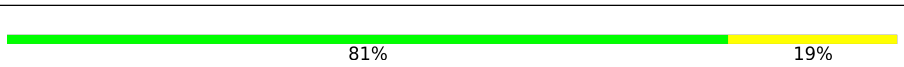
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	1i	128	27% 91% 9%
40	2i	128	59% 88% 11%
41	1j	105	27% 85% 8% 8%
41	2j	105	50% 81% 10% 9%
42	1k	129	2% 81% 8% 12%
42	2k	129	2% 82% 6% 12%
43	1l	132	90% 8%
43	2l	132	% 88% 5% 8%
44	1m	126	3% 90% 6%
44	2m	126	18% 87% 10%
45	1n	61	10% 87% 11%
45	2n	61	66% 92% 7%
46	1o	89	% 93% 6%
46	2o	89	3% 94%
47	1p	88	11% 85% 8% 7%
47	2p	88	11% 85% 8% 7%
48	1q	105	9% 90% 6%
48	2q	105	10% 90% 5% 6%
49	1r	88	2% 75% 23%
49	2r	88	74% 23%
50	1s	93	10% 83% 6% 11%
50	2s	93	32% 78% 11% 11%
51	1t	106	21% 86% 5% 9%
51	2t	106	18% 87% 9%
52	1u	27	7% 74% 11% 15%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	2w	76	
55	1x	77	
55	2x	77	
56	1y	76	
56	2y	76	

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
56	MIA	1y	37	-	-	-	X
56	PSU	1y	55	-	-	-	X
56	MIA	2y	37	-	-	-	X
56	5MU	2y	54	-	-	-	X
56	PSU	2y	55	-	-	-	X
57	MG	10	108	-	-	-	X
57	MG	1A	3324	-	-	-	X
57	MG	1A	3406	-	-	-	X
57	MG	1A	3918	-	-	-	X
57	MG	1U	209	-	-	-	X
57	MG	2A	3183	-	-	-	X
57	MG	2A	3362	-	-	-	X
57	MG	2A	3386	-	-	-	X
57	MG	2A	3400	-	-	-	X
57	MG	2a	1633	-	-	-	X
57	MG	2x	105	-	-	-	X

2 Entry composition

There are 64 unique types of molecules in this entry. The entry contains 300319 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 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2871	Total	C	N	O	P	0	0	0
			61854	27533	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60324	26850	11284	19390	2800			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2577	1146	476	835	120			
2	2B	120	Total	C	N	O	P	0	0	0
			2575	1146	476	833	120			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1423	913	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1428	913	258	253	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	146	Total	C	N	O	S	0	0	0
			1097	701	191	204	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1064	681	186	196	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0
11	2P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
12	2Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0
13	2R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 873	C 550	N 174	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total 1091	C 680	N 225	O 185	S 1	0	0	0
15	2T	131	Total 1083	C 675	N 224	O 183	S 1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	154	Total	C	N	O	S	0	0	0
			1240	795	222	220	3			
21	2Z	160	Total	C	N	O	S	0	0	0
			1271	814	228	227	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
23	21	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			552	349	99	99	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1503	Total	C	N	O	P	0	0	0
			32327	14396	5990	10438	1503			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1846	1179	331	331	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1548	973	301	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1655	1038	326	284	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1674	1050	333	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1129	714	213	198	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			810	514	144	149	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1231	766	243	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			983	623	193	167			
40	2i	127	Total	C	N	O	0	0	0
			978	619	190	169			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			709	440	138	131			
41	2j	96	Total	C	N	O	0	0	0
			714	445	138	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			829	516	155	155	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O	0	0	0
			555	355	108	92			
49	2r	68	Total	C	N	O	0	0	0
			555	355	108	92			

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
50	2s	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
51	2t	96	Total	C	N	O	S	0	0	0
			727	446	155	124	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a RNA chain called MF-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
53	2v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			

- Molecule 54 is a RNA chain called Aminoacylated Phe-tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1592	713	286	517	74	2			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1544	690	279	501	72	2			

- Molecule 55 is a RNA chain called Aminoacylated fMet-tRNAmet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			

- Molecule 56 is a RNA chain called Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
56	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
56	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 57 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1A	1093	Total	Mg	0	0
			1093	1093		
57	1B	36	Total	Mg	0	0
			36	36		
57	1D	14	Total	Mg	0	0
			14	14		
57	1E	16	Total	Mg	0	0
			16	16		
57	1F	14	Total	Mg	0	0
			14	14		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1G	4	Total Mg 4 4	0	0
57	1H	1	Total Mg 1 1	0	0
57	1I	1	Total Mg 1 1	0	0
57	1N	7	Total Mg 7 7	0	0
57	1O	6	Total Mg 6 6	0	0
57	1P	6	Total Mg 6 6	0	0
57	1Q	8	Total Mg 8 8	0	0
57	1R	3	Total Mg 3 3	0	0
57	1S	3	Total Mg 3 3	0	0
57	1T	4	Total Mg 4 4	0	0
57	1U	9	Total Mg 9 9	0	0
57	1V	8	Total Mg 8 8	0	0
57	1W	6	Total Mg 6 6	0	0
57	1X	7	Total Mg 7 7	0	0
57	1Y	2	Total Mg 2 2	0	0
57	1Z	3	Total Mg 3 3	0	0
57	10	11	Total Mg 11 11	0	0
57	11	6	Total Mg 6 6	0	0
57	12	2	Total Mg 2 2	0	0
57	13	4	Total Mg 4 4	0	0
57	14	1	Total Mg 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	15	7	Total Mg 7 7	0	0
57	16	1	Total Mg 1 1	0	0
57	17	7	Total Mg 7 7	0	0
57	18	6	Total Mg 6 6	0	0
57	19	1	Total Mg 1 1	0	0
57	1a	214	Total Mg 214 214	0	0
57	1b	1	Total Mg 1 1	0	0
57	1d	1	Total Mg 1 1	0	0
57	1e	2	Total Mg 2 2	0	0
57	1f	1	Total Mg 1 1	0	0
57	1h	1	Total Mg 1 1	0	0
57	1k	1	Total Mg 1 1	0	0
57	1l	2	Total Mg 2 2	0	0
57	1m	1	Total Mg 1 1	0	0
57	1n	2	Total Mg 2 2	0	0
57	1r	1	Total Mg 1 1	0	0
57	1t	1	Total Mg 1 1	0	0
57	1v	1	Total Mg 1 1	0	0
57	1w	8	Total Mg 8 8	0	0
57	1x	14	Total Mg 14 14	0	0
57	2A	854	Total Mg 854 854	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	2B	18	Total Mg 18 18	0	0
57	2D	8	Total Mg 8 8	0	0
57	2E	11	Total Mg 11 11	0	0
57	2F	5	Total Mg 5 5	0	0
57	2G	1	Total Mg 1 1	0	0
57	2N	1	Total Mg 1 1	0	0
57	2O	1	Total Mg 1 1	0	0
57	2P	2	Total Mg 2 2	0	0
57	2Q	2	Total Mg 2 2	0	0
57	2R	2	Total Mg 2 2	0	0
57	2T	3	Total Mg 3 3	0	0
57	2U	1	Total Mg 1 1	0	0
57	2V	2	Total Mg 2 2	0	0
57	2W	1	Total Mg 1 1	0	0
57	2X	2	Total Mg 2 2	0	0
57	2Y	1	Total Mg 1 1	0	0
57	2Z	1	Total Mg 1 1	0	0
57	20	4	Total Mg 4 4	0	0
57	21	1	Total Mg 1 1	0	0
57	23	3	Total Mg 3 3	0	0
57	25	5	Total Mg 5 5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	26	1	Total Mg 1 1	0	0
57	27	3	Total Mg 3 3	0	0
57	28	3	Total Mg 3 3	0	0
57	29	1	Total Mg 1 1	0	0
57	2a	210	Total Mg 210 210	0	0
57	2d	2	Total Mg 2 2	0	0
57	2e	1	Total Mg 1 1	0	0
57	2f	2	Total Mg 2 2	0	0
57	2g	1	Total Mg 1 1	0	0
57	2j	1	Total Mg 1 1	0	0
57	2l	5	Total Mg 5 5	0	0
57	2q	2	Total Mg 2 2	0	0
57	2r	1	Total Mg 1 1	0	0
57	2t	1	Total Mg 1 1	0	0
57	2v	3	Total Mg 3 3	0	0
57	2w	7	Total Mg 7 7	0	0
57	2x	7	Total Mg 7 7	0	0
57	2y	5	Total Mg 5 5	0	0

- Molecule 58 is POTASSIUM ION (three-letter code: K) (formula: K).

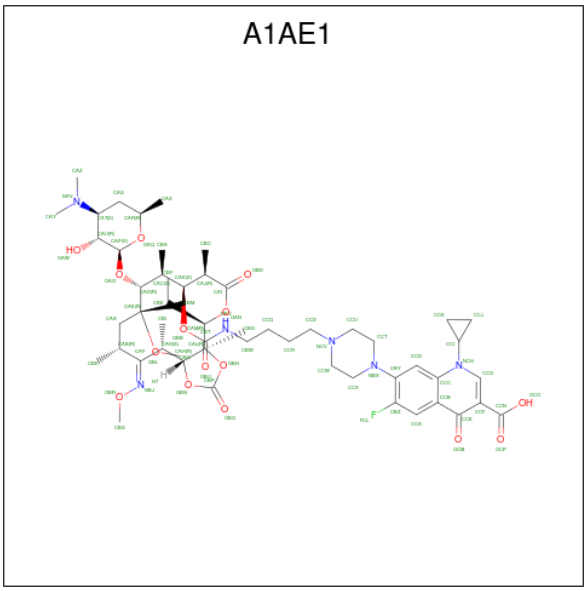
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total K 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	2A	1	Total K 1 1	0	0

- Molecule 59 is 1-cyclopropyl-7-(4-{4-[({[(3aR,4R,7R,8S,9S,10R,11R,13R,14E,15S,15aR)-10-{[(2S,3R,4S,6R)-4-(dimethylamino)-3-hydroxy-6-methyloxan-2-yl]oxy}-4-ethyl-11-methoxy-14-(methoxyimino)-3a,7,9,11,13,15-hexamethyl-2,6-dioxododecahydro-2H,4H-[1,3]dioxolo[4,5-c]oxacyclotetradecin-8-yl]oxy}carbonyl)amino]butyl}piperazin-1-yl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (non-preferred name) (three-letter code: A1AE1) (formula: $C_{54}H_{81}FN_6O_{15}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total C F N O 76 54 1 6 15	0	0
59	2A	1	Total C F N O 76 54 1 6 15	0	0

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

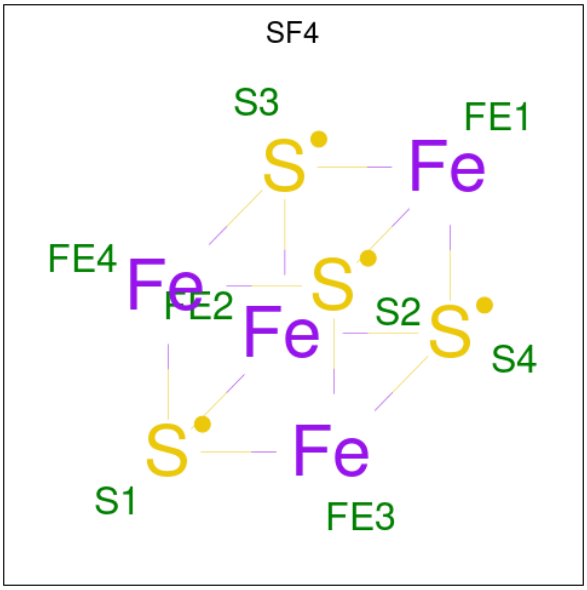
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0

Continued on next page...

Continued from previous page...

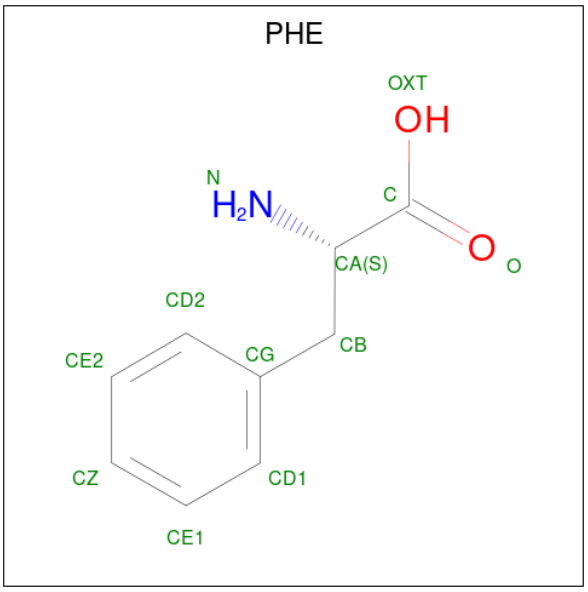
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0
60	2Y	1	Total Zn 1 1	0	0
60	24	1	Total Zn 1 1	0	0
60	25	1	Total Zn 1 1	0	0
60	26	1	Total Zn 1 1	0	0
60	29	1	Total Zn 1 1	0	0
60	2n	1	Total Zn 1 1	0	0

- Molecule 61 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



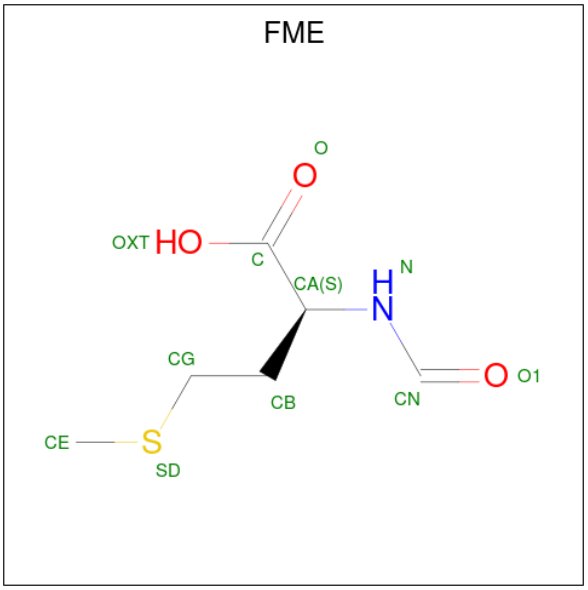
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1d	1	Total Fe S 8 4 4	0	0
61	2d	1	Total Fe S 8 4 4	0	0

- Molecule 62 is PHENYLALANINE (three-letter code: PHE) (formula: $C_9H_{11}NO_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1w	1	Total C N O 11 9 1 1	0	0
62	2w	1	Total C N O 11 9 1 1	0	0

- Molecule 63 is N-FORMYLMETHIONINE (three-letter code: FME) (formula: $C_6H_{11}NO_3S$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
63	1x	1	Total C N O S 10 6 1 2 1	0	0
63	2x	1	Total C N O S 10 6 1 2 1	0	0

- Molecule 64 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
64	1A	2061	Total O 2061 2061	0	0
64	1B	60	Total O 60 60	0	0
64	1D	29	Total O 29 29	0	0
64	1E	27	Total O 27 27	0	0
64	1F	16	Total O 16 16	0	0
64	1G	1	Total O 1 1	0	0
64	1H	1	Total O 1 1	0	0
64	1N	5	Total O 5 5	0	0
64	1O	6	Total O 6 6	0	0
64	1P	22	Total O 22 22	0	0
64	1Q	9	Total O 9 9	0	0
64	1R	10	Total O 10 10	0	0
64	1S	4	Total O 4 4	0	0
64	1T	8	Total O 8 8	0	0
64	1U	10	Total O 10 10	0	0
64	1V	8	Total O 8 8	0	0
64	1W	9	Total O 9 9	0	0
64	1X	6	Total O 6 6	0	0
64	1Y	3	Total O 3 3	0	0
64	1Z	1	Total O 1 1	0	0
64	10	12	Total O 12 12	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
64	11	11	Total O 11 11	0	0
64	12	3	Total O 3 3	0	0
64	13	5	Total O 5 5	0	0
64	14	1	Total O 1 1	0	0
64	15	9	Total O 9 9	0	0
64	16	1	Total O 1 1	0	0
64	17	11	Total O 11 11	0	0
64	18	11	Total O 11 11	0	0
64	1a	388	Total O 388 388	0	0
64	1b	1	Total O 1 1	0	0
64	1c	2	Total O 2 2	0	0
64	1d	2	Total O 2 2	0	0
64	1e	3	Total O 3 3	0	0
64	1f	1	Total O 1 1	0	0
64	1g	1	Total O 1 1	0	0
64	1i	1	Total O 1 1	0	0
64	1j	2	Total O 2 2	0	0
64	1l	7	Total O 7 7	0	0
64	1m	1	Total O 1 1	0	0
64	1n	2	Total O 2 2	0	0
64	1o	1	Total O 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
64	1p	1	Total O 1 1	0	0
64	1q	2	Total O 2 2	0	0
64	1u	1	Total O 1 1	0	0
64	1v	5	Total O 5 5	0	0
64	1w	14	Total O 14 14	0	0
64	1x	15	Total O 15 15	0	0
64	1y	1	Total O 1 1	0	0
64	2A	1142	Total O 1142 1142	0	0
64	2B	19	Total O 19 19	0	0
64	2D	23	Total O 23 23	0	0
64	2E	12	Total O 12 12	0	0
64	2F	12	Total O 12 12	0	0
64	2I	2	Total O 2 2	0	0
64	2O	2	Total O 2 2	0	0
64	2P	11	Total O 11 11	0	0
64	2Q	2	Total O 2 2	0	0
64	2R	3	Total O 3 3	0	0
64	2T	5	Total O 5 5	0	0
64	2U	3	Total O 3 3	0	0
64	2V	1	Total O 1 1	0	0
64	2X	3	Total O 3 3	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
64	2Y	1	Total O 1 1	0	0
64	2Z	1	Total O 1 1	0	0
64	20	3	Total O 3 3	0	0
64	21	11	Total O 11 11	0	0
64	23	2	Total O 2 2	0	0
64	25	2	Total O 2 2	0	0
64	27	5	Total O 5 5	0	0
64	28	3	Total O 3 3	0	0
64	29	1	Total O 1 1	0	0
64	2a	221	Total O 221 221	0	0
64	2c	1	Total O 1 1	0	0
64	2d	2	Total O 2 2	0	0
64	2g	1	Total O 1 1	0	0
64	2j	3	Total O 3 3	0	0
64	2l	4	Total O 4 4	0	0
64	2p	2	Total O 2 2	0	0
64	2q	1	Total O 1 1	0	0
64	2r	1	Total O 1 1	0	0
64	2t	1	Total O 1 1	0	0
64	2v	2	Total O 2 2	0	0
64	2w	3	Total O 3 3	0	0

Continued on next page...

Continued from previous page...

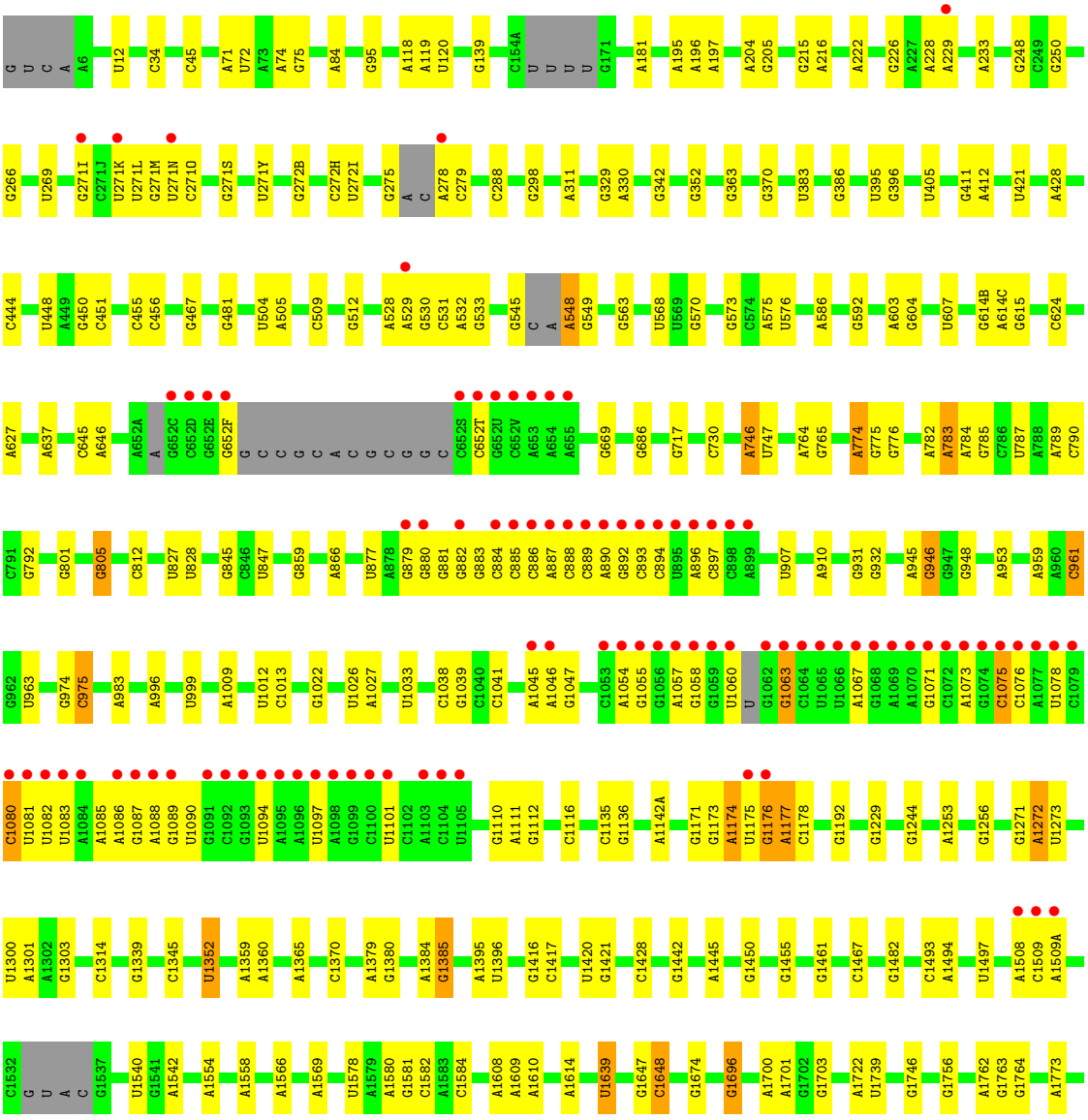
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
64	2x	7	Total O 7 7	0	0
64	2y	2	Total O 2 2	0	0

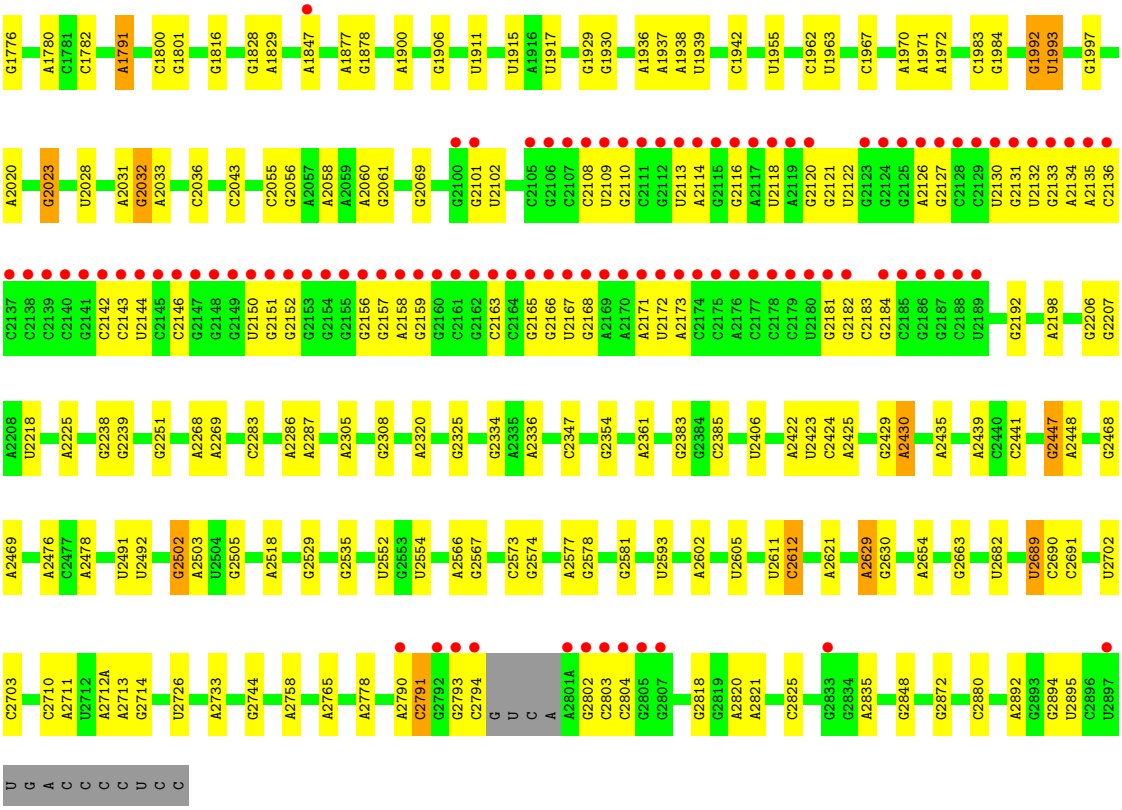
3 Residue-property plots (i)

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

- Molecule 1: 23S Ribosomal RNA

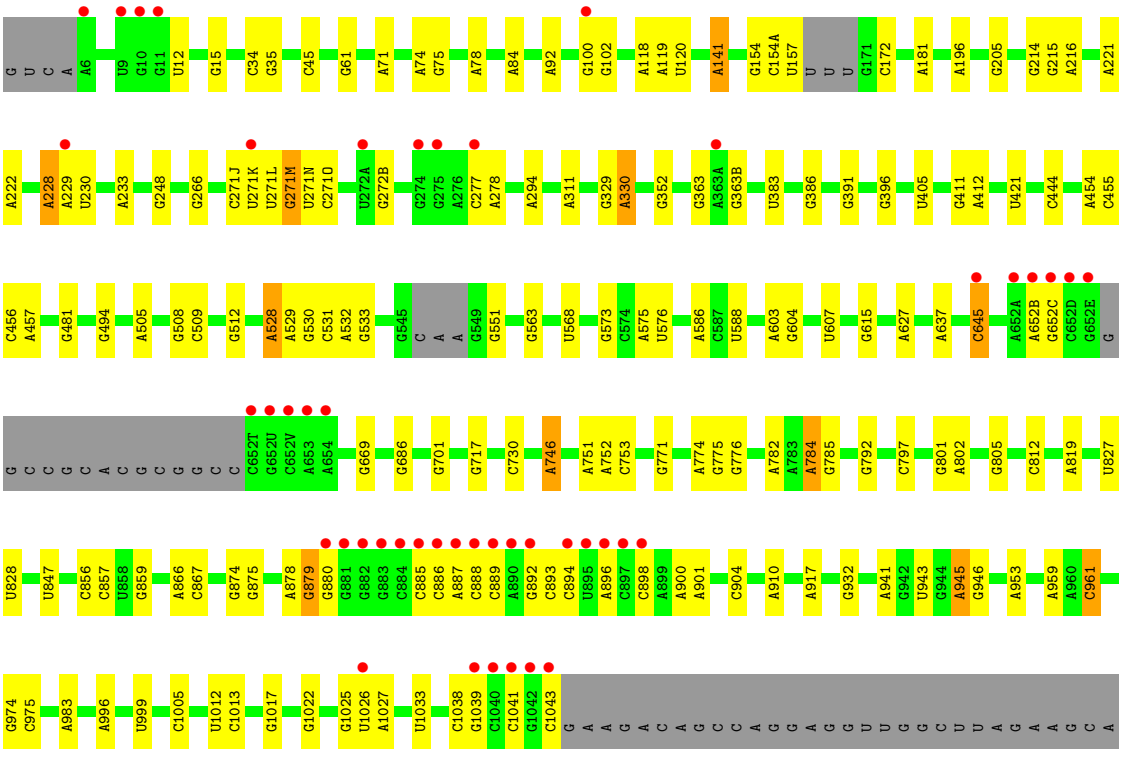
Chain 1A:

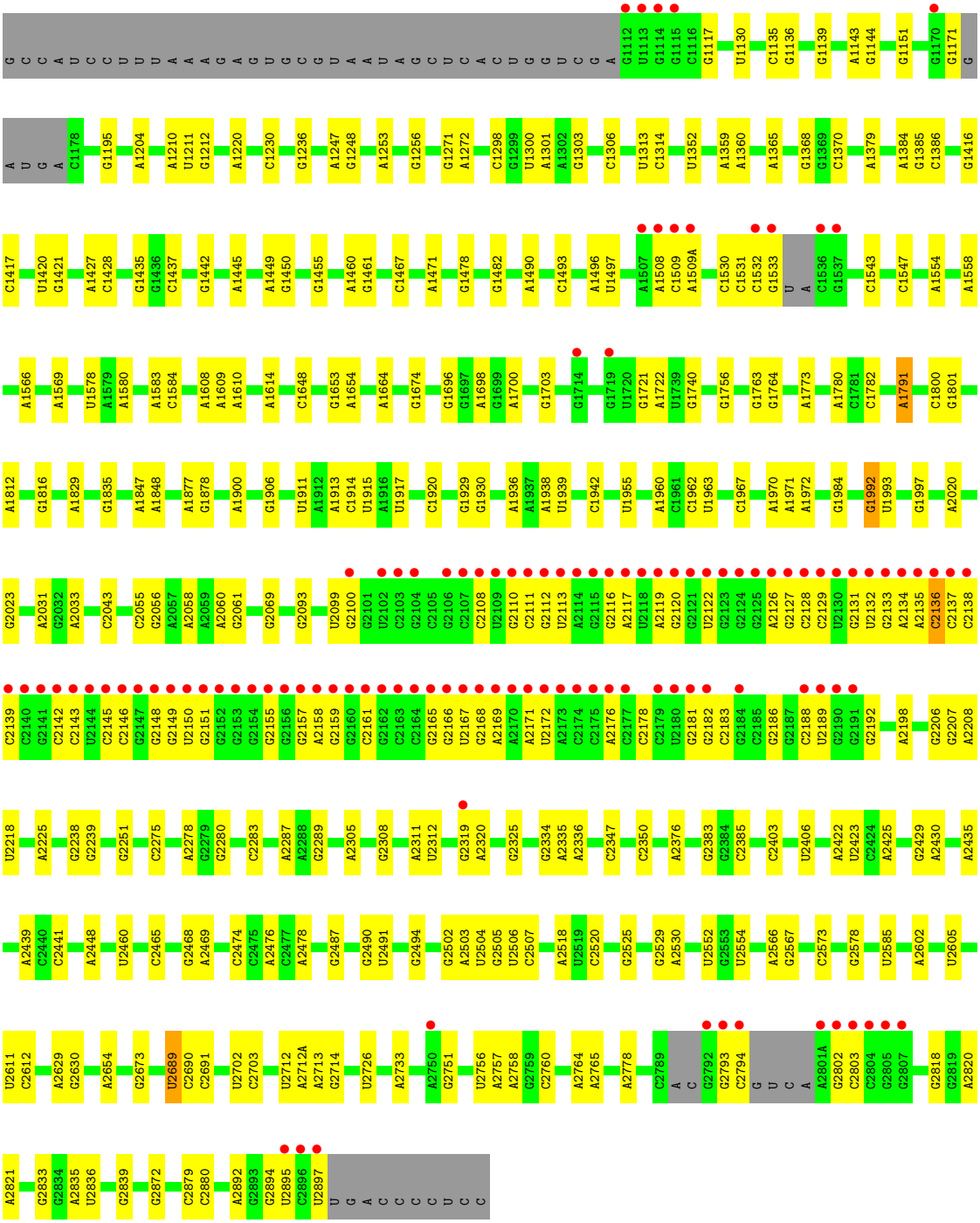




• Molecule 1: 23S Ribosomal RNA

Chain 2A:



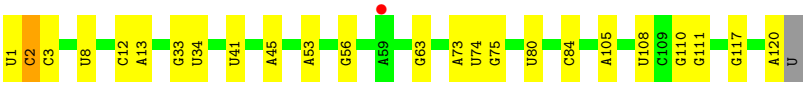


• Molecule 2: 5S Ribosomal RNA

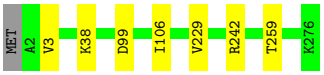
Chain 1B:

• Molecule 2: 5S Ribosomal RNA

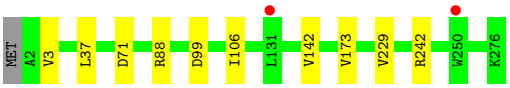
Chain 2B:



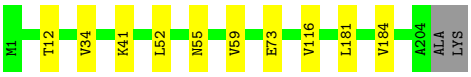
• Molecule 3: 50S ribosomal protein L2



• Molecule 3: 50S ribosomal protein L2



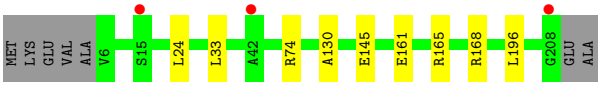
• Molecule 4: 50S ribosomal protein L3



• Molecule 4: 50S ribosomal protein L3

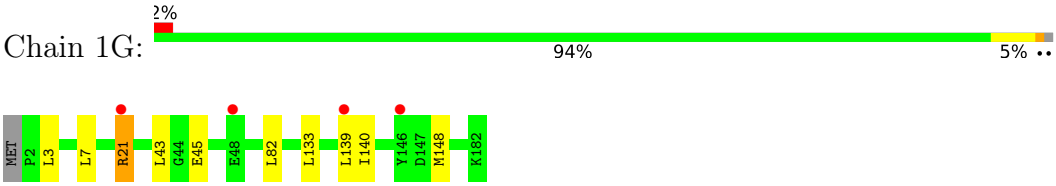
• Molecule 5: 50S ribosomal protein L4

• Molecule 5: 50S ribosomal protein L4



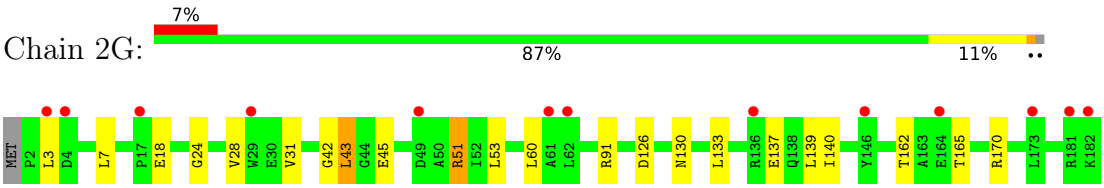
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



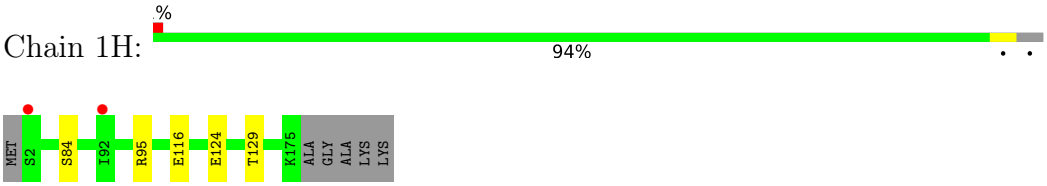
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



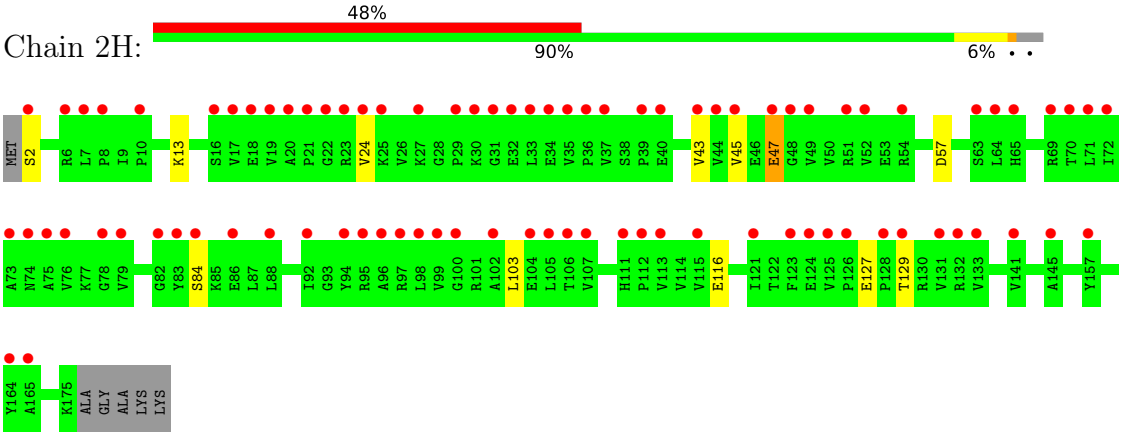
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



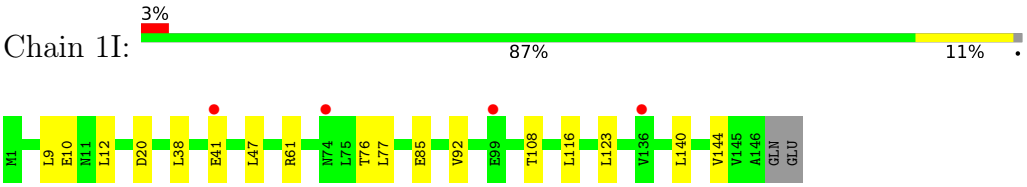
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



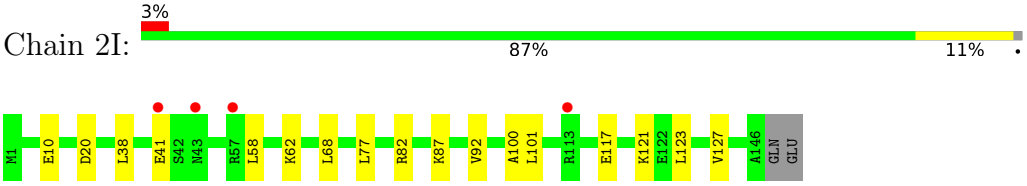
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



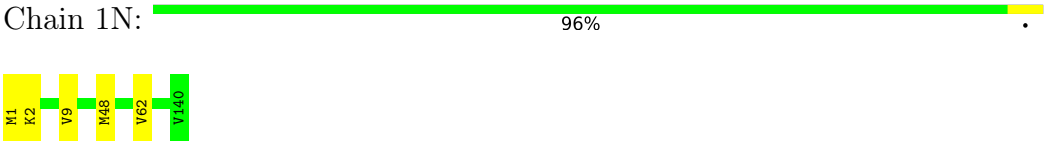
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



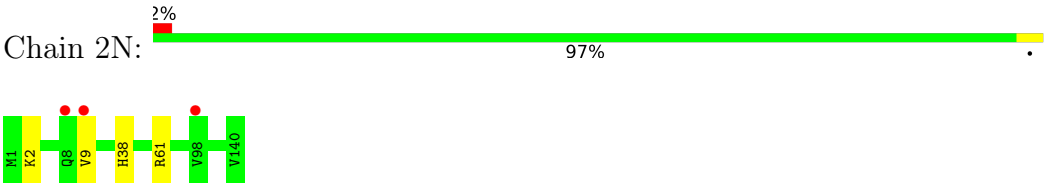
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



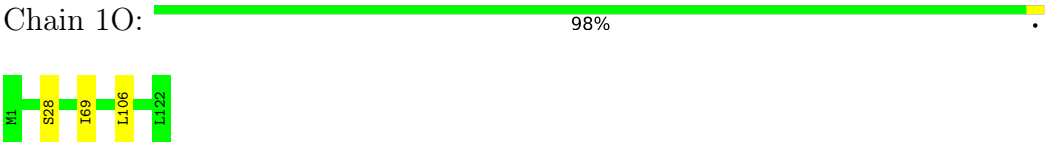
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



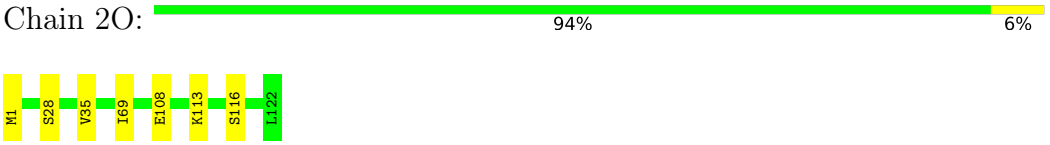
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



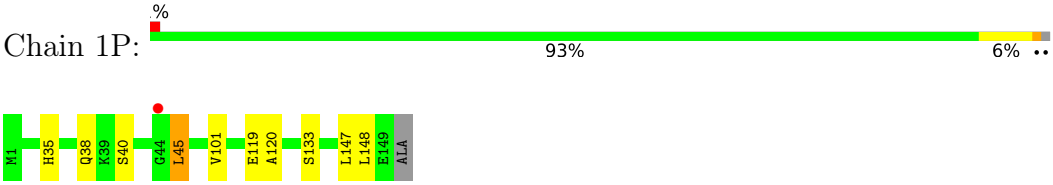
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



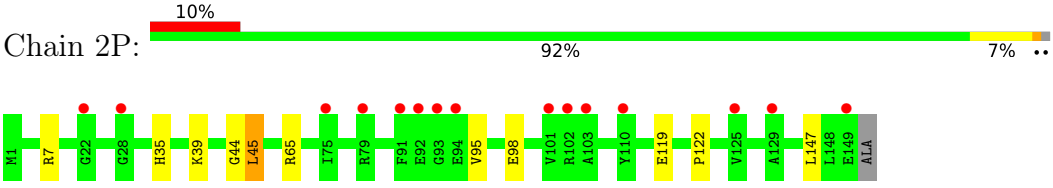
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



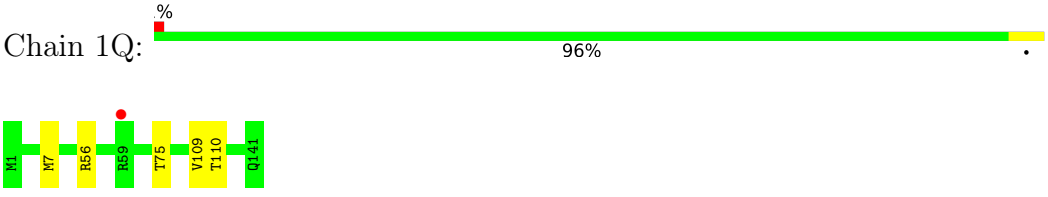
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



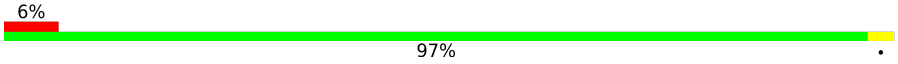
• Molecule 12: 50S ribosomal protein L16

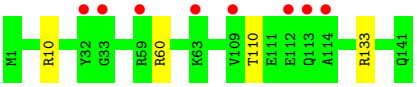
Chain 1Q:



• Molecule 12: 50S ribosomal protein L16

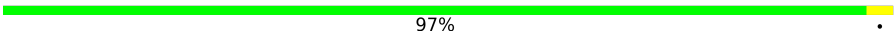
Chain 2Q:

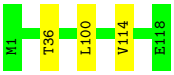




• Molecule 13: 50S ribosomal protein L17

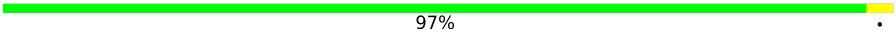
Chain 1R:





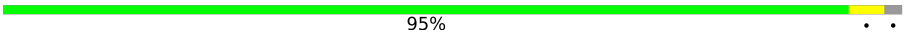
• Molecule 13: 50S ribosomal protein L17

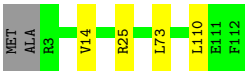
Chain 2R:



• Molecule 14: 50S ribosomal protein L18

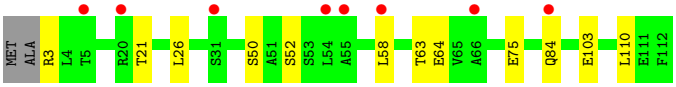
Chain 1S:





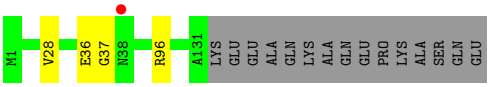
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



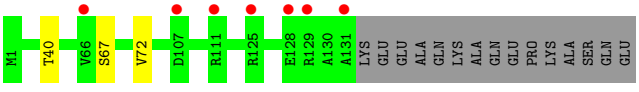
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



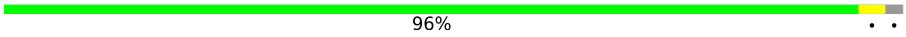
• Molecule 15: 50S ribosomal protein L19

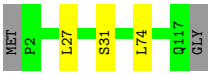
Chain 2T:



• Molecule 16: 50S ribosomal protein L20

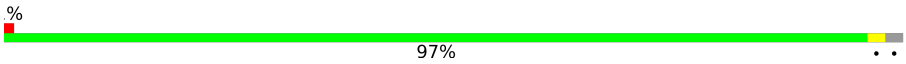
Chain 1U:

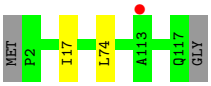




• Molecule 16: 50S ribosomal protein L20

Chain 2U:



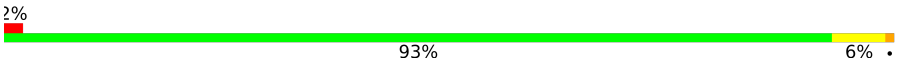


• Molecule 17: 50S ribosomal protein L21

Chain 1V:

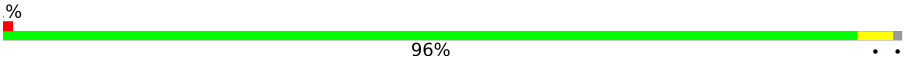
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



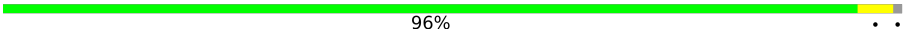
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



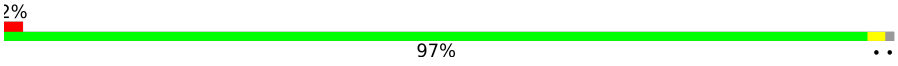
• Molecule 18: 50S ribosomal protein L22

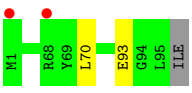
Chain 2W:



• Molecule 19: 50S ribosomal protein L23

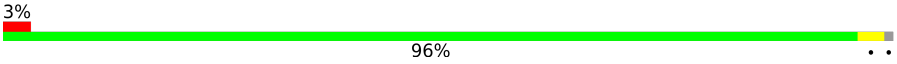
Chain 1X:

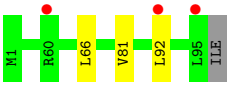




• Molecule 19: 50S ribosomal protein L23

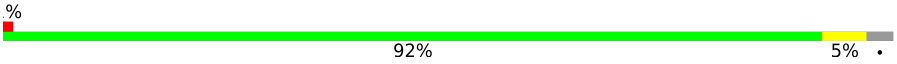
Chain 2X:





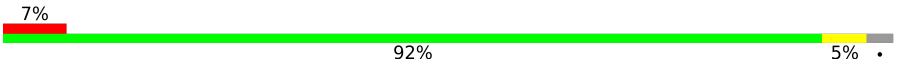
• Molecule 20: 50S ribosomal protein L24

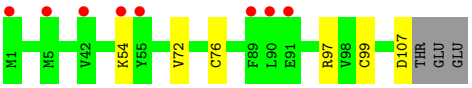
Chain 1Y:



• Molecule 20: 50S ribosomal protein L24

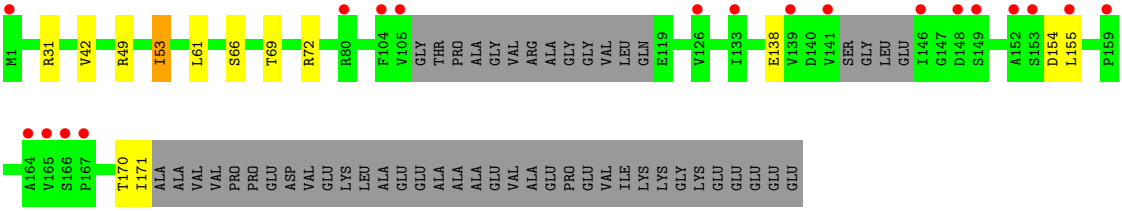
Chain 2Y:





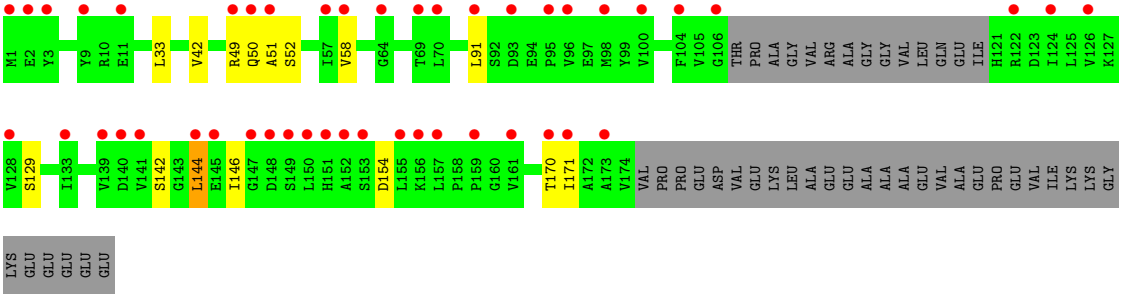
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



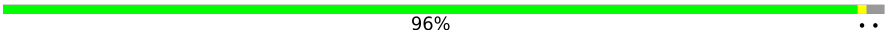
• Molecule 21: 50S ribosomal protein L25

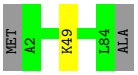
Chain 2Z:



• Molecule 22: 50S ribosomal protein L27

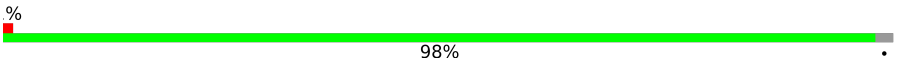
Chain 10:

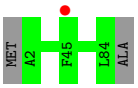




• Molecule 22: 50S ribosomal protein L27

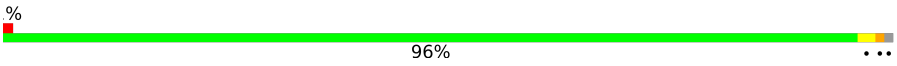
Chain 20:





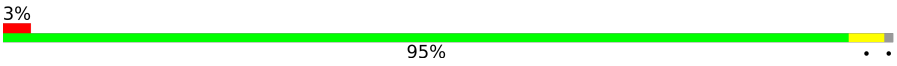
• Molecule 23: 50S ribosomal protein L28

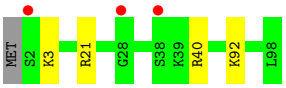
Chain 11:



• Molecule 23: 50S ribosomal protein L28

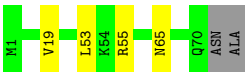
Chain 21:





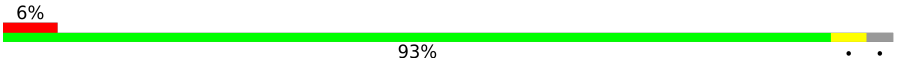
• Molecule 24: 50S ribosomal protein L29

Chain 12:



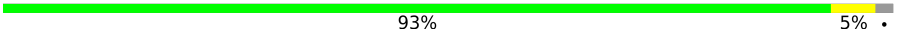
• Molecule 24: 50S ribosomal protein L29

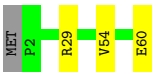
Chain 22:



• Molecule 25: 50S ribosomal protein L30

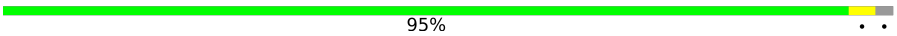
Chain 13:

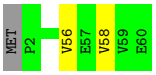




• Molecule 25: 50S ribosomal protein L30

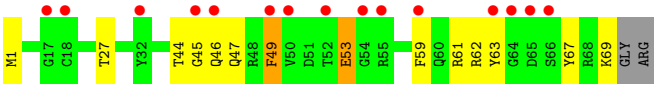
Chain 23:





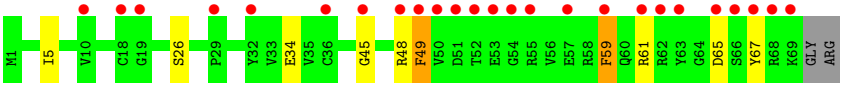
• Molecule 26: 50S ribosomal protein L31

Chain 14:



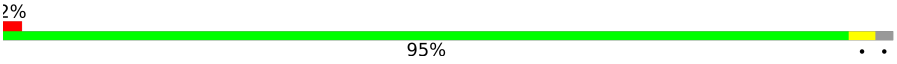
• Molecule 26: 50S ribosomal protein L31

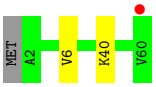
Chain 24:



• Molecule 27: 50S ribosomal protein L32

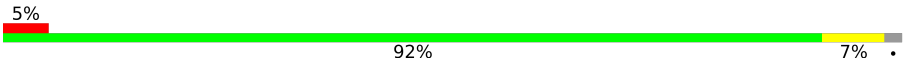
Chain 15:

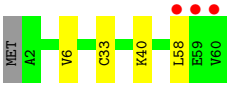




• Molecule 27: 50S ribosomal protein L32

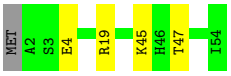
Chain 25:





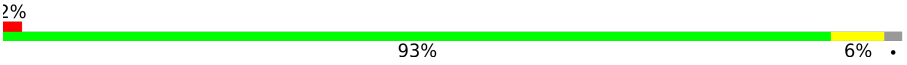
• Molecule 28: 50S ribosomal protein L33

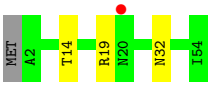
Chain 16:



• Molecule 28: 50S ribosomal protein L33

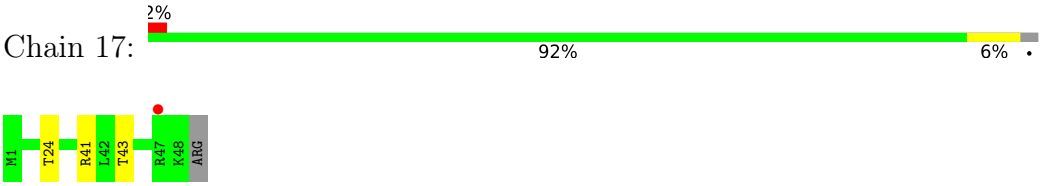
Chain 26:





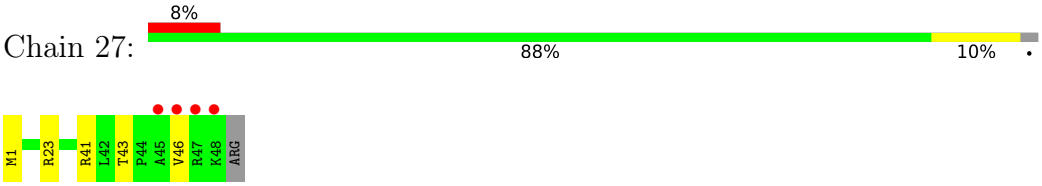
• Molecule 29: 50S ribosomal protein L34

Chain 17:



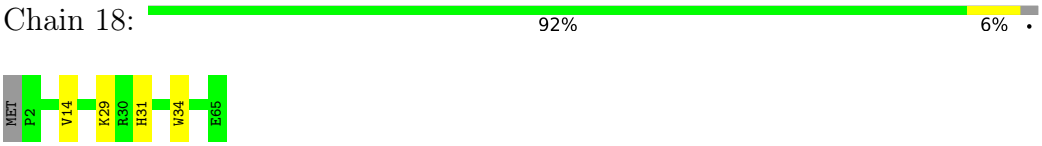
• Molecule 29: 50S ribosomal protein L34

Chain 27:



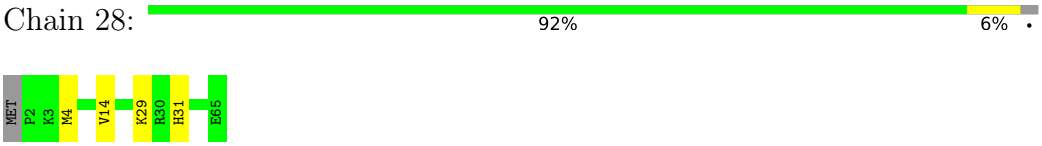
• Molecule 30: 50S ribosomal protein L35

Chain 18:



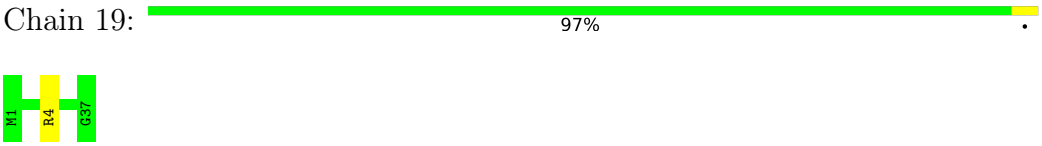
• Molecule 30: 50S ribosomal protein L35

Chain 28:



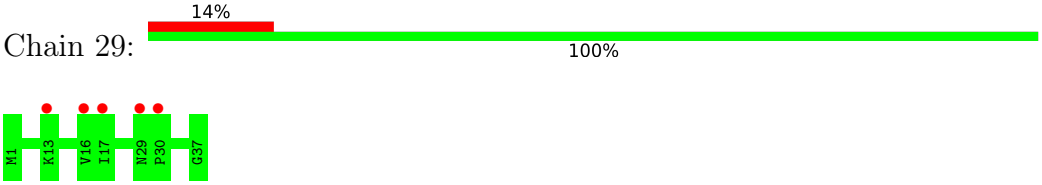
• Molecule 31: 50S ribosomal protein L36

Chain 19:



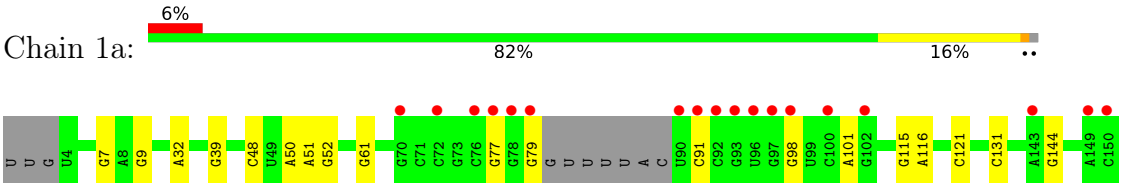
• Molecule 31: 50S ribosomal protein L36

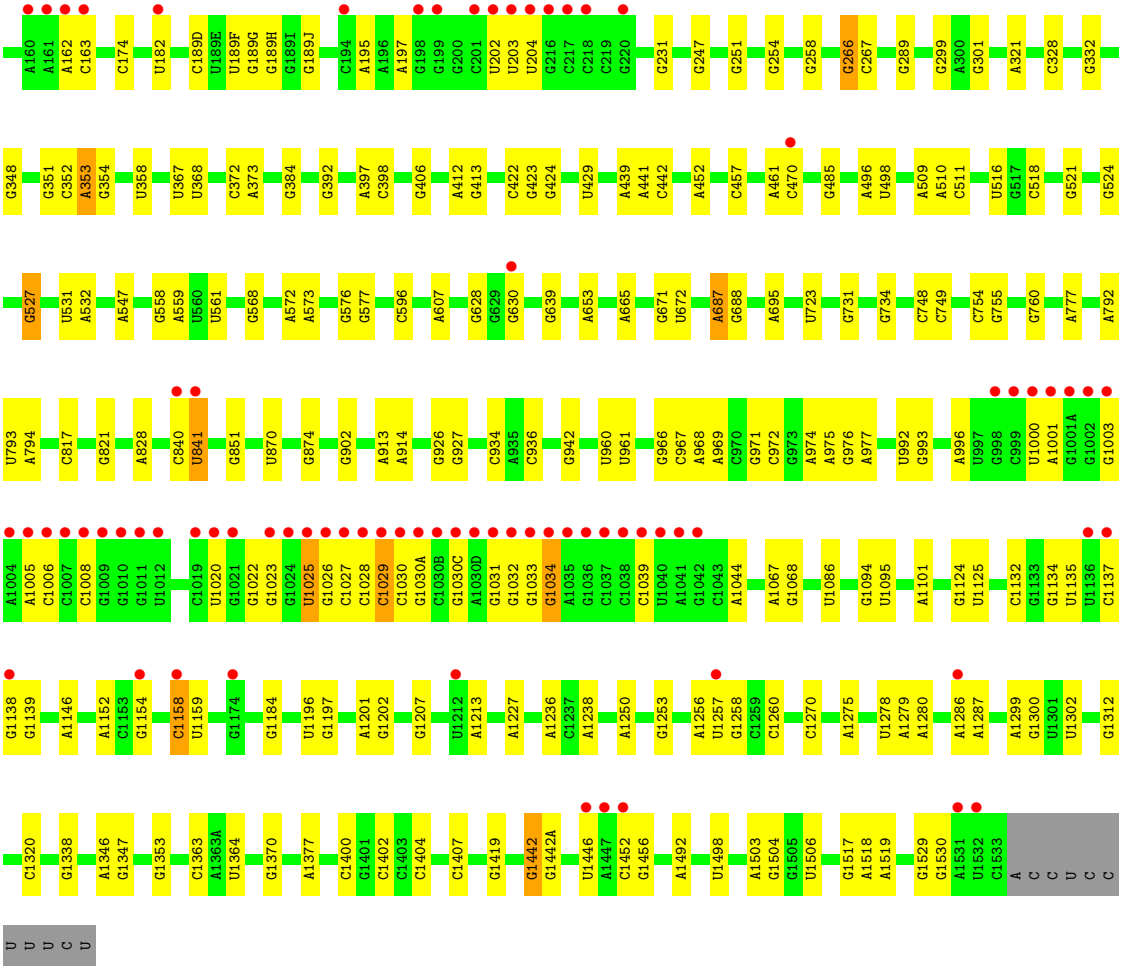
Chain 29:



• Molecule 32: 16S Ribosomal RNA

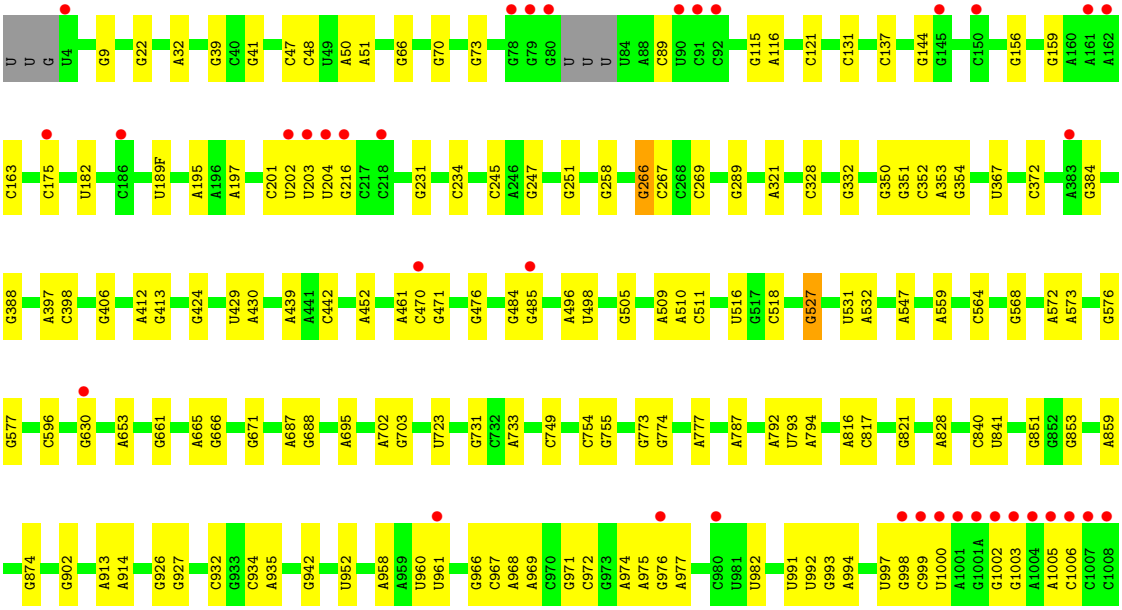
Chain 1a:

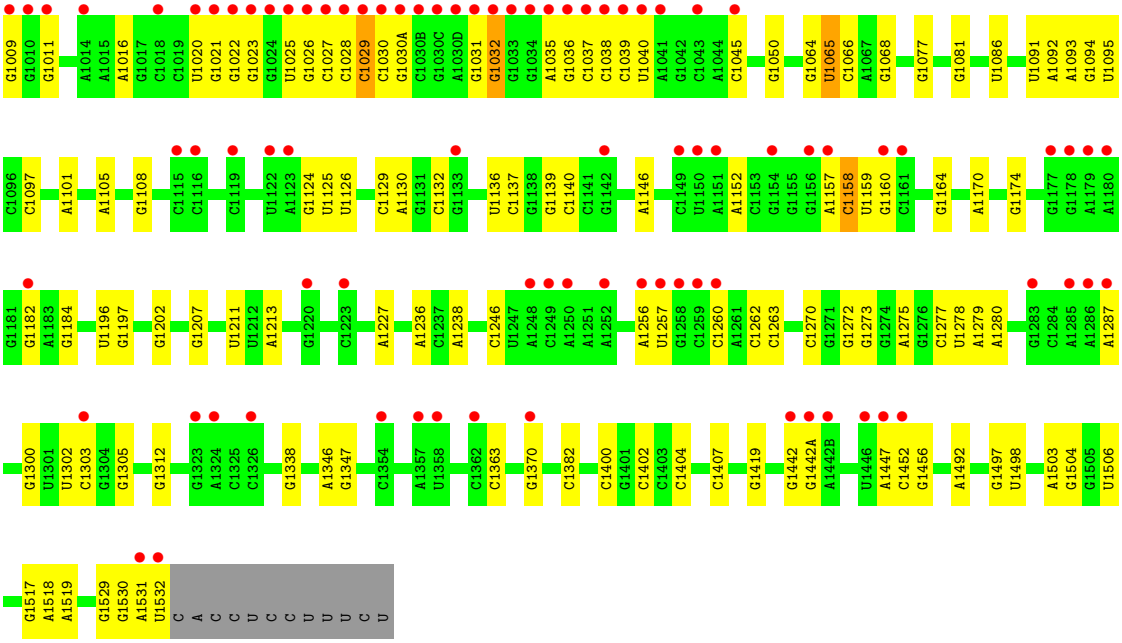




• Molecule 32: 16S Ribosomal RNA

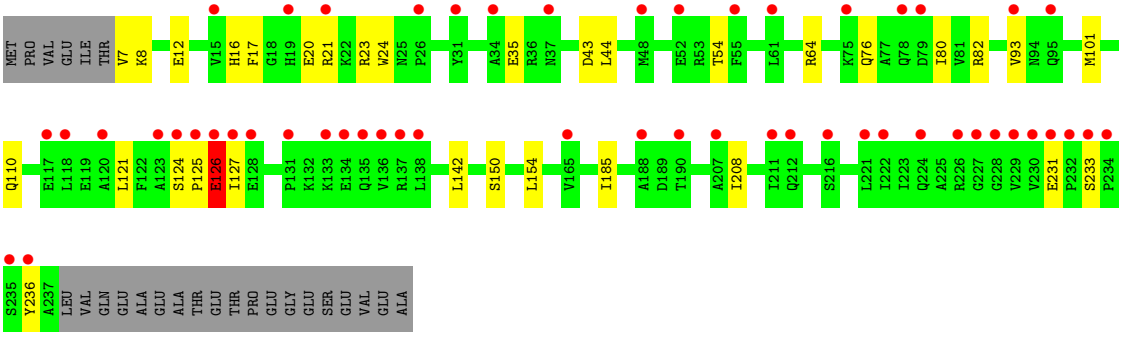
Chain 2a:





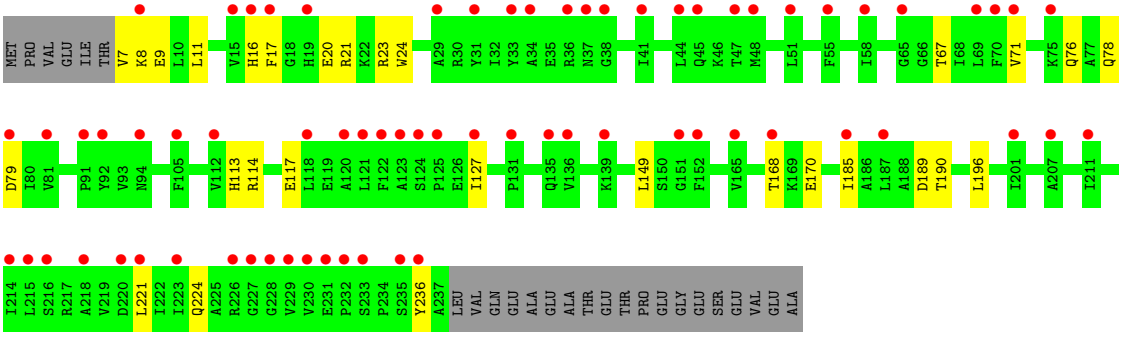
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



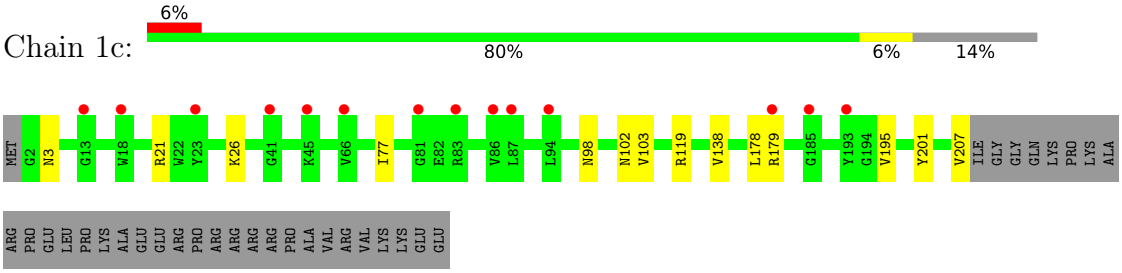
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



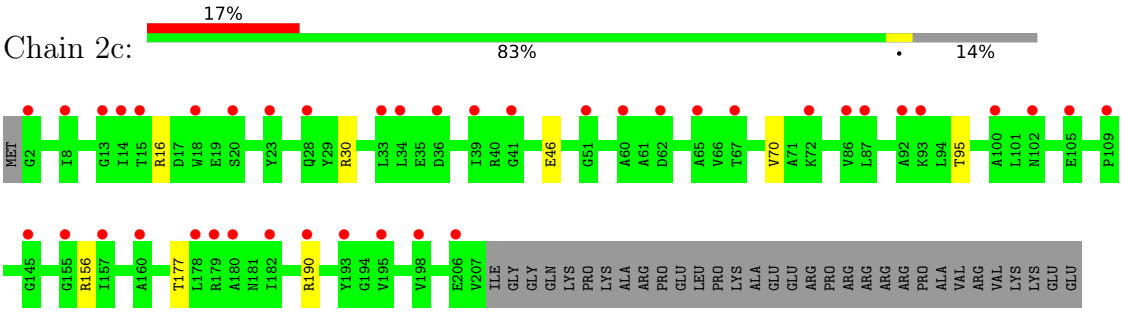
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



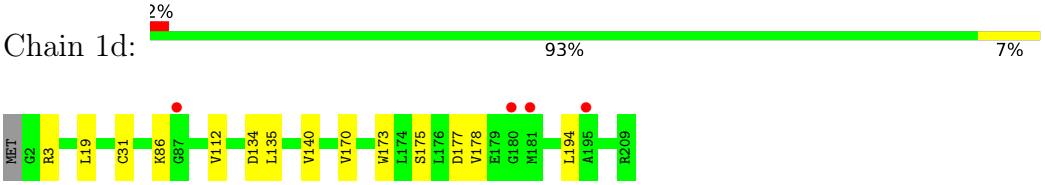
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



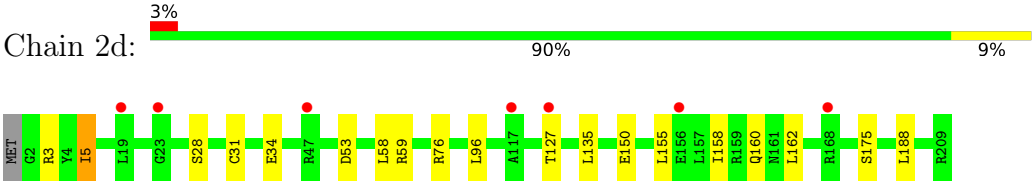
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



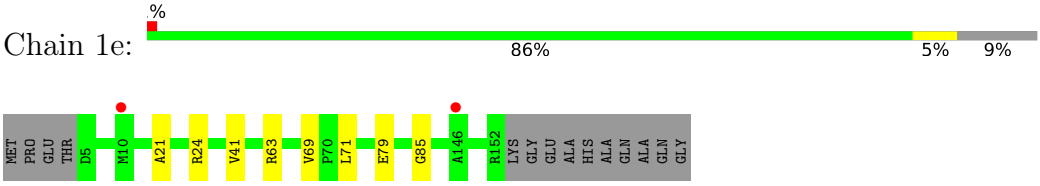
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



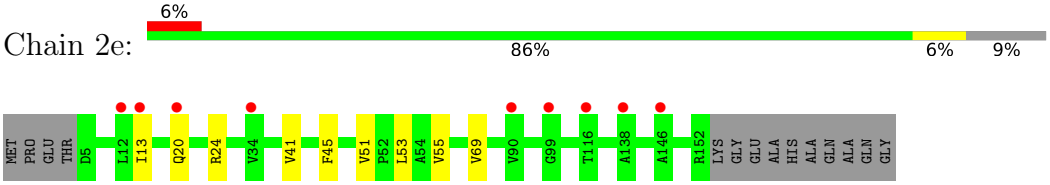
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



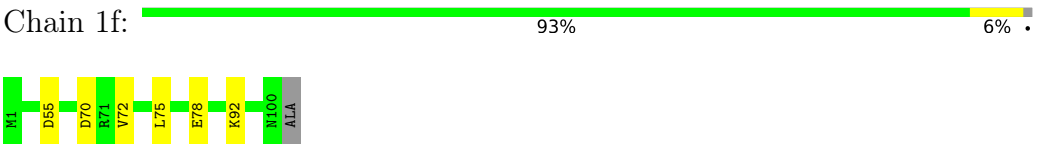
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



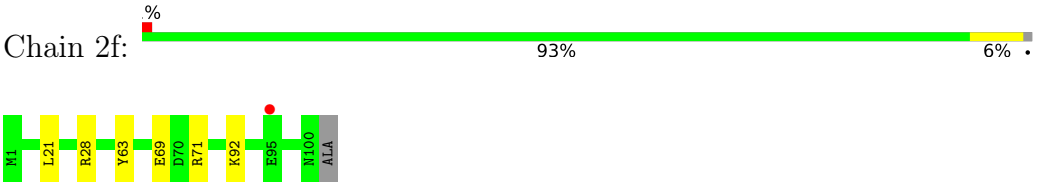
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



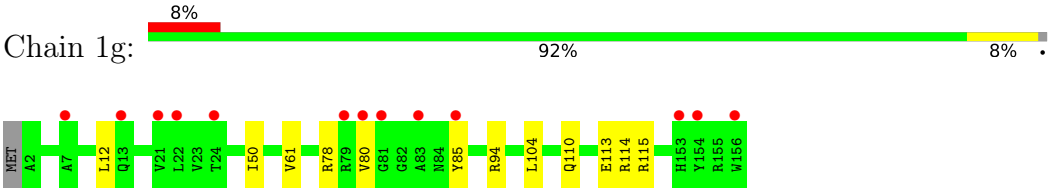
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



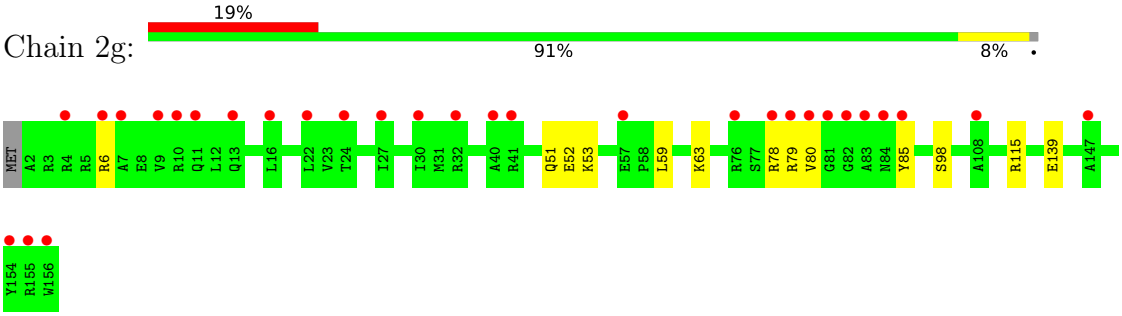
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



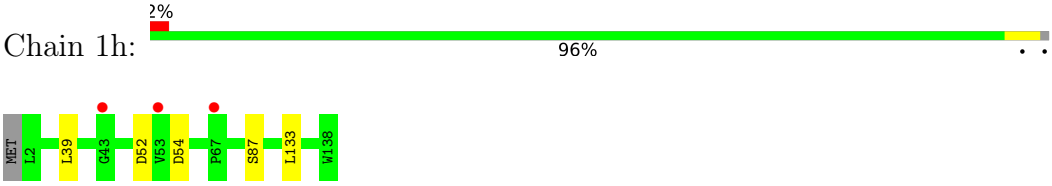
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



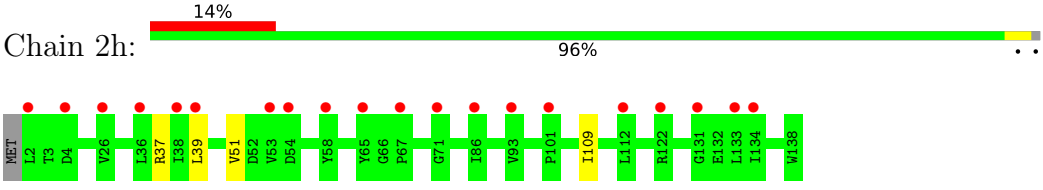
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



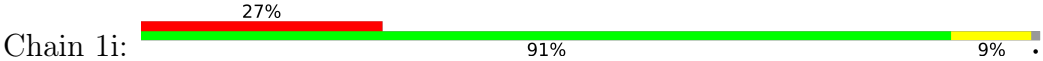
• Molecule 39: 30S ribosomal protein S8

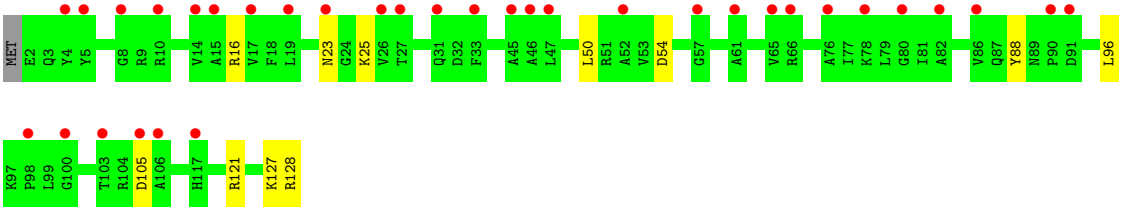
Chain 2h:



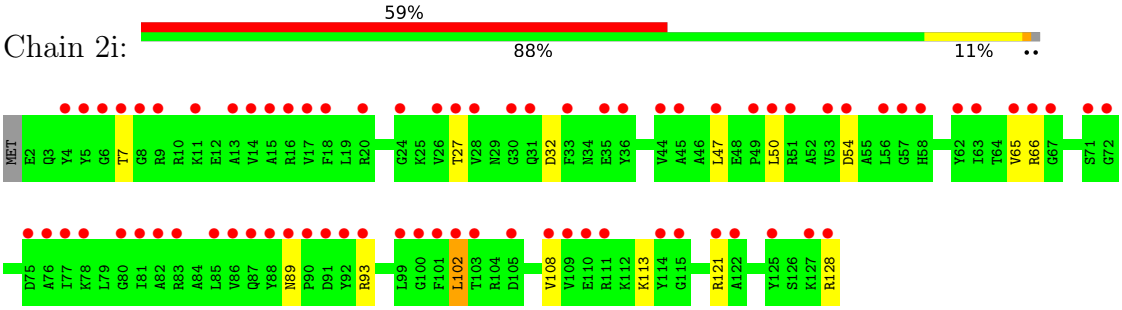
• Molecule 40: 30S ribosomal protein S9

Chain 1i:

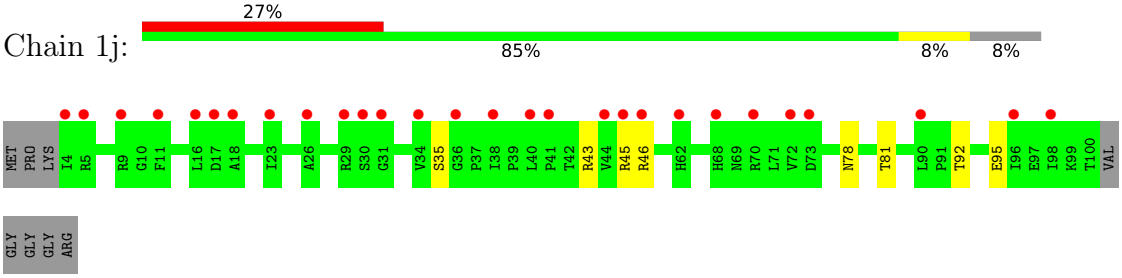




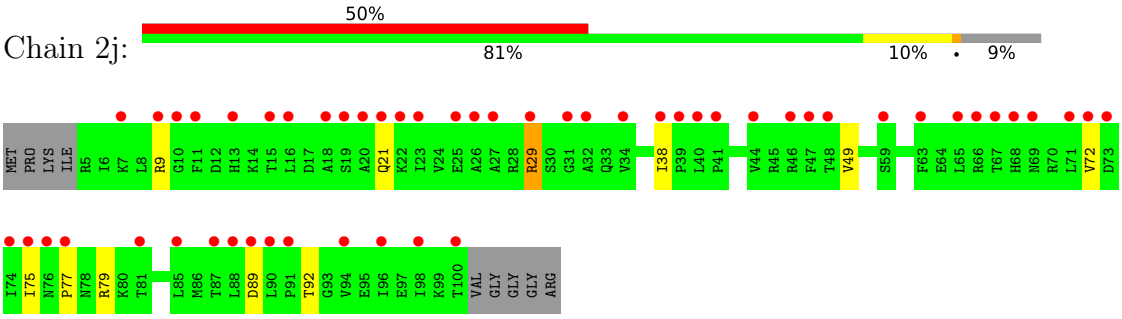
• Molecule 40: 30S ribosomal protein S9



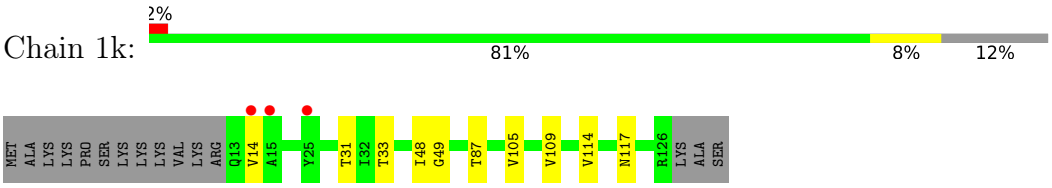
• Molecule 41: 30S ribosomal protein S10



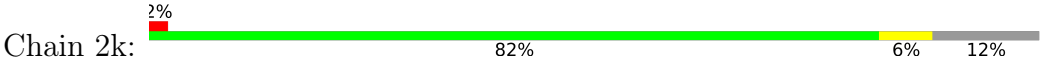
• Molecule 41: 30S ribosomal protein S10

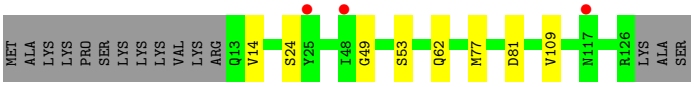


• Molecule 42: 30S ribosomal protein S11



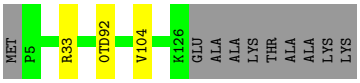
• Molecule 42: 30S ribosomal protein S11





• Molecule 43: 30S ribosomal protein S12

Chain 1l:

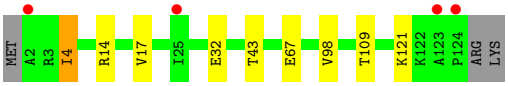


• Molecule 43: 30S ribosomal protein S12

Chain 2l:

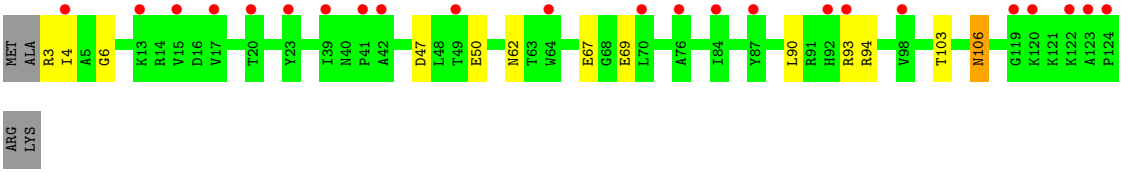
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



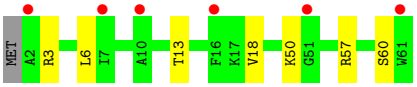
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



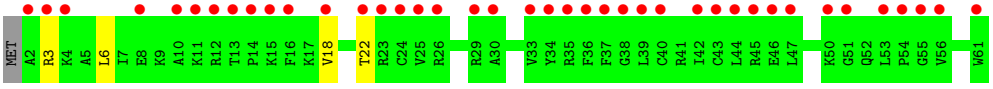
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



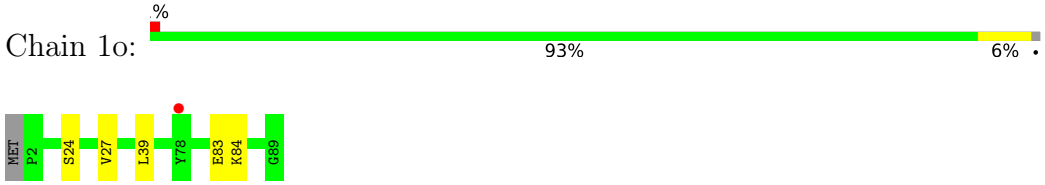
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



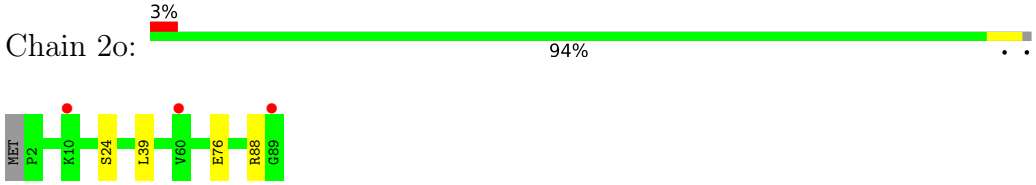
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



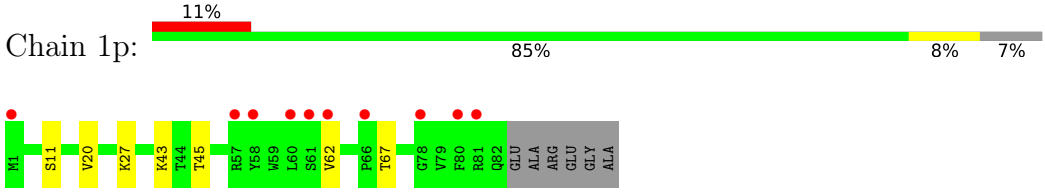
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



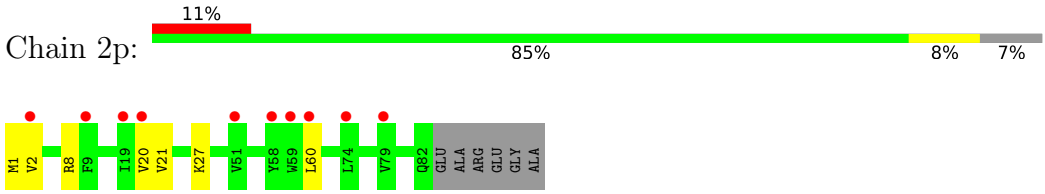
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



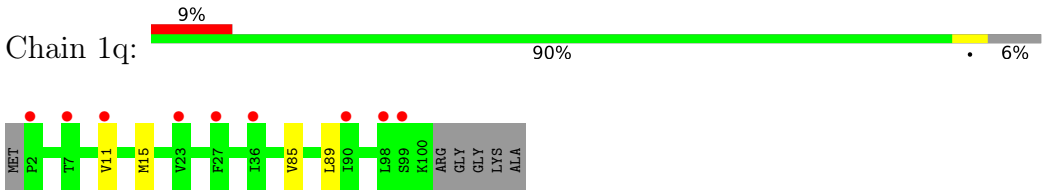
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



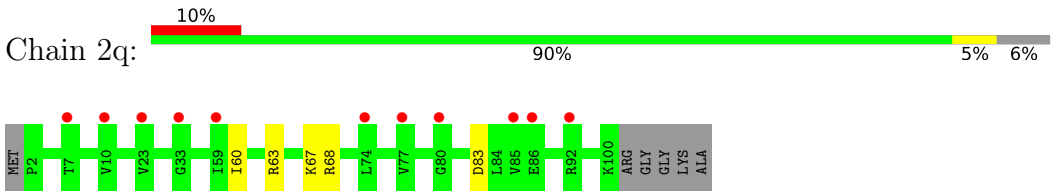
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



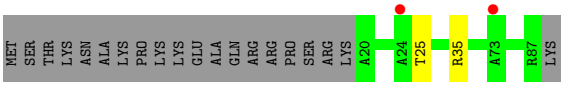
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



• Molecule 49: 30S ribosomal protein S18

Chain 1r:

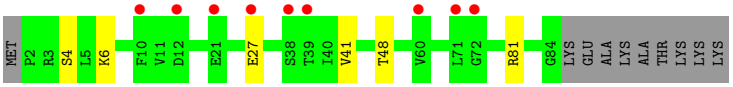


• Molecule 49: 30S ribosomal protein S18

Chain 2r:

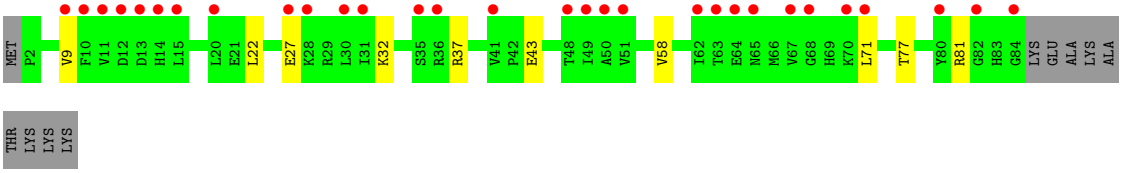
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



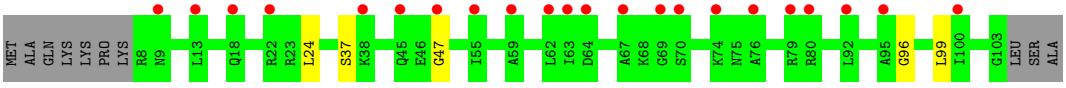
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



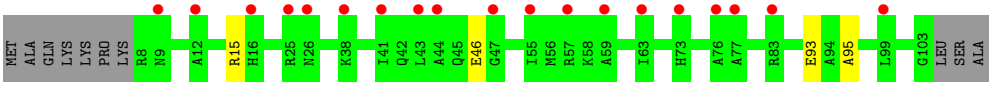
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



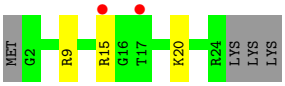
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



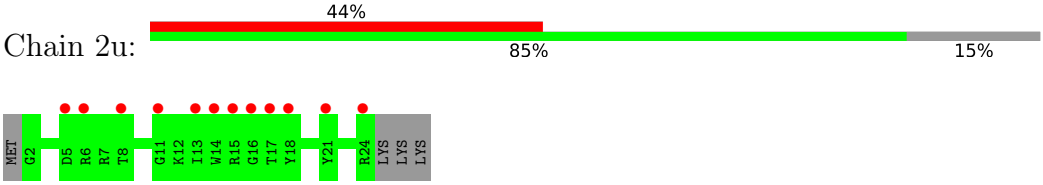
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



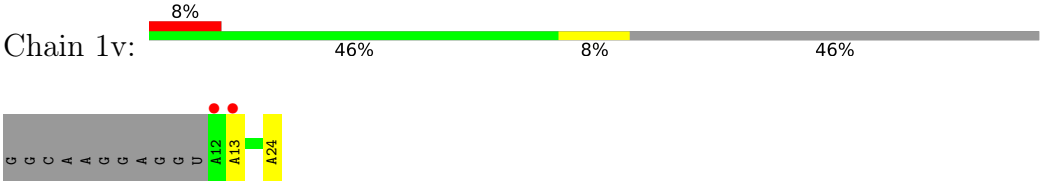
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



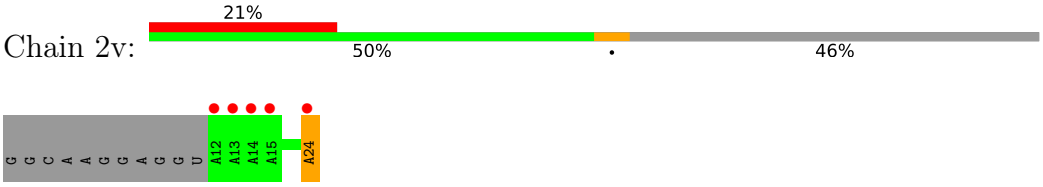
• Molecule 53: MF-mRNA

Chain 1v:



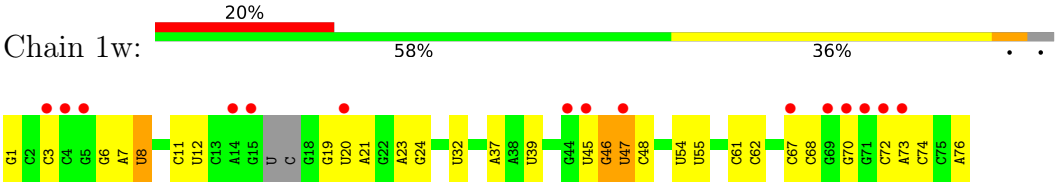
• Molecule 53: MF-mRNA

Chain 2v:



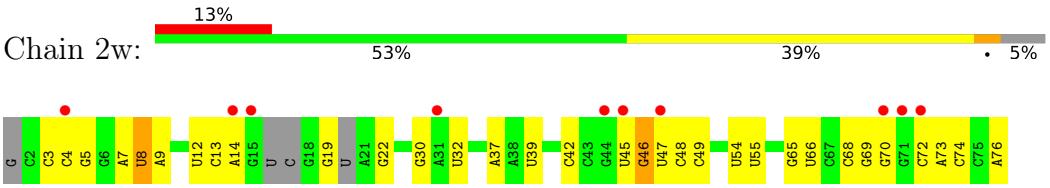
• Molecule 54: Aminoacylated Phe-tRNAphe

Chain 1w:



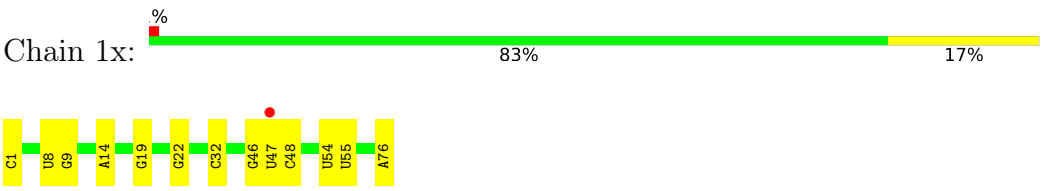
• Molecule 54: Aminoacylated Phe-tRNAphe

Chain 2w:



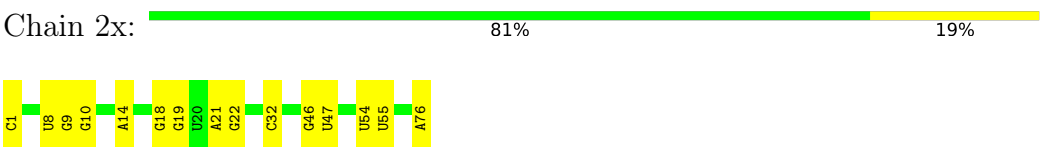
• Molecule 55: Aminoacylated fMet-tRNAmet

Chain 1x:



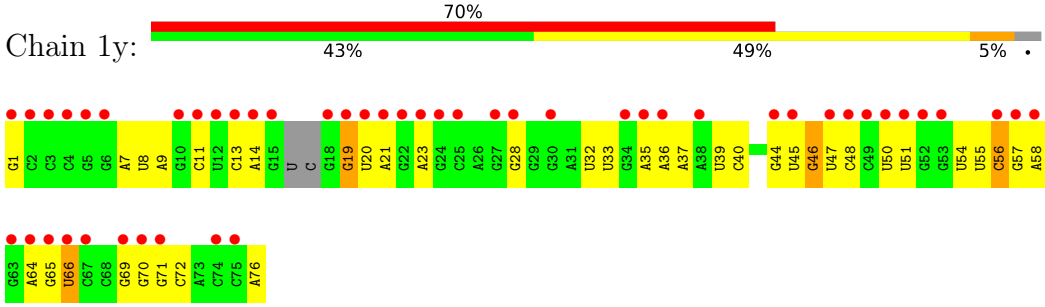
• Molecule 55: Aminoacylated fMet-tRNAmet

Chain 2x:



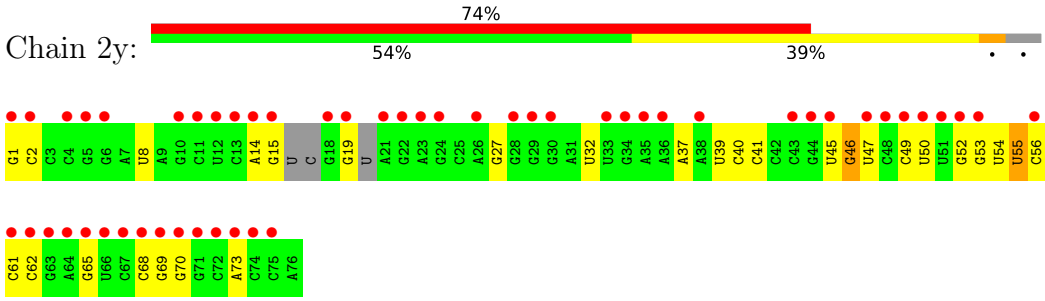
• Molecule 56: Deacylated tRNAphe

Chain 1y:



• Molecule 56: Deacylated tRNAphe

Chain 2y:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.54Å 448.51Å 620.52Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	147.20 – 2.40 173.65 – 2.40	Depositor EDS
% Data completeness (in resolution range)	99.3 (147.20-2.40) 99.3 (173.65-2.40)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.22 (at 2.40Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.220 , 0.260 0.220 , 0.260	Depositor DCC
R_{free} test set	111821 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	47.8	Xtriage
Anisotropy	0.085	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 47.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.41$, $< L^2 > = 0.23$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	300319	wwPDB-VP
Average B, all atoms (Å^2)	57.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.54% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: G7M, MG, OMG, 4SU, OMC, MA6, UR3, M2G, 2MG, PSU, SF4, 4OC, ZN, OMU, 5MU, FME, 8AN, 0TD, 2MA, MIA, 5MC, A1AE1, K

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	1A	0.56	1/68985 (0.0%)	1.04	105/107677 (0.1%)
1	2A	0.43	0/67269	0.91	44/104999 (0.0%)
2	1B	0.48	1/2882 (0.0%)	0.93	1/4494 (0.0%)
2	2B	0.41	1/2879 (0.0%)	0.87	3/4487 (0.1%)
3	1D	0.38	0/2186	0.58	0/2944
3	2D	0.32	0/2186	0.54	0/2944
4	1E	0.36	0/1592	0.58	0/2149
4	2E	0.31	0/1592	0.52	0/2149
5	1F	0.35	0/1619	0.59	0/2193
5	2F	0.31	0/1615	0.51	0/2188
6	1G	0.32	0/1448	0.56	1/1957 (0.1%)
6	2G	0.28	0/1453	0.48	0/1963
7	1H	0.32	0/1356	0.51	0/1834
7	2H	0.29	0/1356	0.45	0/1834
8	1I	0.30	0/1112	0.51	0/1514
8	2I	0.29	0/1079	0.49	0/1475
9	1N	0.36	0/1144	0.52	0/1543
9	2N	0.30	0/1144	0.48	0/1543
10	1O	0.37	0/943	0.57	0/1269
10	2O	0.33	0/943	0.52	0/1269
11	1P	0.34	0/1152	0.64	1/1533 (0.1%)
11	2P	0.31	0/1152	0.53	0/1533
12	1Q	0.36	0/1143	0.58	0/1527
12	2Q	0.31	0/1143	0.48	0/1527
13	1R	0.36	0/982	0.57	0/1312
13	2R	0.29	0/982	0.51	0/1312
14	1S	0.31	0/883	0.53	0/1176
14	2S	0.30	0/880	0.51	0/1172
15	1T	0.34	0/1105	0.54	0/1477
15	2T	0.30	0/1097	0.48	0/1468
16	1U	0.38	0/977	0.56	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.31	0/977	0.47	0/1301
17	1V	0.36	0/782	0.56	0/1049
17	2V	0.31	0/782	0.50	0/1049
18	1W	0.38	0/897	0.57	0/1205
18	2W	0.32	0/897	0.50	0/1205
19	1X	0.38	0/764	0.58	0/1025
19	2X	0.31	0/764	0.55	0/1025
20	1Y	0.35	0/819	0.54	0/1095
20	2Y	0.31	0/819	0.51	0/1095
21	1Z	0.31	0/1267	0.51	0/1717
21	2Z	0.31	0/1299	0.50	0/1763
22	10	0.37	0/662	0.54	0/881
22	20	0.31	0/662	0.50	0/881
23	11	0.35	0/762	0.53	0/1014
23	21	0.34	0/762	0.52	0/1014
24	12	0.33	0/590	0.50	0/781
24	22	0.29	0/590	0.41	0/781
25	13	0.34	0/474	0.53	0/635
25	23	0.29	0/469	0.47	0/630
26	14	0.33	0/565	0.55	0/761
26	24	0.32	0/545	0.55	0/737
27	15	0.36	0/469	0.61	0/635
27	25	0.32	0/469	0.51	0/635
28	16	0.36	0/460	0.55	0/613
28	26	0.33	0/456	0.51	0/608
29	17	0.37	0/426	0.55	0/561
29	27	0.31	0/426	0.53	0/561
30	18	0.33	0/525	0.54	0/691
30	28	0.30	0/525	0.51	0/691
31	19	0.35	0/310	0.57	0/407
31	29	0.28	0/310	0.52	0/407
32	1a	0.40	0/35795	0.89	27/55864 (0.0%)
32	2a	0.38	3/35886 (0.0%)	0.90	32/56005 (0.1%)
33	1b	0.30	0/1881	0.48	0/2542
33	2b	0.31	0/1860	0.50	0/2518
34	1c	0.30	0/1572	0.47	0/2126
34	2c	0.30	0/1566	0.48	0/2119
35	1d	0.30	0/1685	0.47	0/2262
35	2d	0.29	0/1704	0.47	0/2284
36	1e	0.30	0/1145	0.51	0/1543
36	2e	0.31	0/1149	0.52	0/1548
37	1f	0.30	0/823	0.50	0/1115
37	2f	0.32	0/829	0.48	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.28	0/1250	0.44	0/1679
38	2g	0.28	0/1254	0.45	0/1683
39	1h	0.28	0/1108	0.47	0/1494
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.30	0/1002	0.51	0/1346
40	2i	0.30	0/997	0.52	1/1343 (0.1%)
41	1j	0.30	0/722	0.49	0/982
41	2j	0.30	0/727	0.48	0/988
42	1k	0.29	0/844	0.50	0/1145
42	2k	0.28	0/848	0.48	0/1149
43	1l	0.34	0/937	0.53	0/1260
43	2l	0.30	0/937	0.51	0/1260
44	1m	0.30	0/969	0.50	0/1302
44	2m	0.28	0/961	0.47	0/1291
45	1n	0.32	0/501	0.47	0/664
45	2n	0.31	0/501	0.48	0/664
46	1o	0.29	0/739	0.45	0/985
46	2o	0.28	0/739	0.43	0/985
47	1p	0.29	0/697	0.50	0/939
47	2p	0.29	0/693	0.51	0/935
48	1q	0.30	0/836	0.49	0/1117
48	2q	0.29	0/836	0.48	0/1117
49	1r	0.29	0/560	0.49	0/746
49	2r	0.27	0/560	0.48	0/746
50	1s	0.28	0/667	0.53	0/900
50	2s	0.29	0/661	0.56	0/893
51	1t	0.28	0/730	0.43	0/965
51	2t	0.30	0/729	0.44	0/965
52	1u	0.29	0/203	0.48	0/266
52	2u	0.34	0/203	0.51	0/266
53	1v	0.42	0/310	0.94	0/480
53	2v	0.37	0/310	0.87	1/480 (0.2%)
54	1w	0.56	1/1581 (0.1%)	1.04	2/2458 (0.1%)
54	2w	0.45	0/1531	1.01	0/2379
55	1x	0.66	6/1723 (0.3%)	1.19	20/2684 (0.7%)
55	2x	0.56	1/1723 (0.1%)	1.09	19/2684 (0.7%)
56	1y	0.64	1/1606 (0.1%)	1.23	13/2497 (0.5%)
56	2y	0.60	1/1583 (0.1%)	1.06	0/2459
All	All	0.43	16/316584 (0.0%)	0.86	270/473955 (0.1%)

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

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
11	1P	0	1
11	2P	0	1
26	24	0	1
33	1b	0	1
51	1t	0	1
All	All	0	5

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	1	C	OP3-P	-10.56	1.48	1.61
55	2x	1	C	OP3-P	-10.14	1.49	1.61
54	1w	1	G	OP3-P	-10.10	1.49	1.61
2	1B	1	U	OP3-P	-10.09	1.49	1.61
56	1y	1	G	OP3-P	-10.01	1.49	1.61
2	2B	1	U	OP3-P	-9.92	1.49	1.61
56	2y	1	G	OP3-P	-9.91	1.49	1.61
32	2a	1272	G	N1-C2	-9.13	1.30	1.37
32	2a	1272	G	C6-N1	-8.63	1.33	1.39
55	1x	14	A	N7-C5	-6.59	1.35	1.39
55	1x	22	G	N7-C5	6.20	1.43	1.39
32	2a	1263	C	N3-C4	-5.75	1.29	1.33
55	1x	22	G	C8-N7	5.72	1.34	1.30
1	1A	570	G	C6-O6	-5.59	1.19	1.24
55	1x	46	G	C6-N1	5.55	1.43	1.39
55	1x	14	A	C8-N7	-5.41	1.27	1.31

All (270) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1263	C	N1-C2-O2	26.45	134.77	118.90
32	2a	1272	G	N3-C2-N2	21.84	135.19	119.90
32	2a	1272	G	C5-C6-O6	20.60	140.96	128.60
32	2a	1272	G	N1-C2-N2	-19.31	98.82	116.20
32	2a	1263	C	C2-N3-C4	16.00	127.90	119.90
32	2a	1263	C	N3-C2-O2	-14.86	111.50	121.90
55	1x	46	G	C6-N1-C2	-13.62	116.93	125.10
55	2x	46	G	C6-N1-C2	-12.09	117.85	125.10
1	2A	2136	C	N1-C2-O2	11.88	126.03	118.90
32	2a	1272	G	N1-C6-O6	-11.85	112.79	119.90
1	1A	975	C	N1-C2-O2	-11.81	111.81	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1272	G	C6-N1-C2	11.77	132.16	125.10
55	1x	22	G	C5-N7-C8	-11.72	98.44	104.30
1	1A	1063	G	C5-C6-O6	11.39	135.43	128.60
1	1A	2682	U	O5'-P-OP2	-10.82	95.96	105.70
32	2a	1263	C	C5-C6-N1	10.80	126.40	121.00
1	1A	512	G	O4'-C1'-N9	10.73	116.79	108.20
32	2a	1272	G	C5-C6-N1	-10.58	106.21	111.50
55	1x	14	A	C4-C5-C6	10.53	122.27	117.00
1	1A	1075	C	N1-C2-O2	10.28	125.07	118.90
1	2A	801	G	O5'-P-OP2	-9.76	96.92	105.70
1	1A	1075	C	C2-N3-C4	9.63	124.72	119.90
55	2x	14	A	C5-N7-C8	9.63	108.72	103.90
1	1A	1086	A	N1-C6-N6	-9.40	112.96	118.60
55	2x	22	G	C5-N7-C8	-9.26	99.67	104.30
55	1x	14	A	C5-N7-C8	9.16	108.48	103.90
1	1A	948	G	O5'-P-OP1	-9.04	97.56	105.70
32	2a	1263	C	C2-N1-C1'	8.95	128.65	118.80
32	2a	1272	G	C2-N3-C4	-8.94	107.43	111.90
1	1A	1352	U	O5'-P-OP1	-8.79	97.79	105.70
2	2B	80	U	O4'-C1'-N1	8.78	115.22	108.20
32	2a	1263	C	C5-C4-N4	8.75	126.32	120.20
55	2x	14	A	C4-C5-C6	8.66	121.33	117.00
55	1x	46	G	C5-C6-N1	8.52	115.76	111.50
55	1x	46	G	N3-C2-N2	-8.47	113.97	119.90
1	2A	1614	A	O5'-P-OP1	-8.19	98.33	105.70
32	2a	1263	C	C4-C5-C6	-8.11	113.34	117.40
55	1x	22	G	C4-C5-N7	8.05	114.02	110.80
56	1y	56	C	C2-N3-C4	7.98	123.89	119.90
32	2a	1263	C	N3-C4-N4	-7.98	112.41	118.00
1	1A	999	U	O5'-P-OP2	-7.97	98.53	105.70
55	1x	22	G	C4-C5-C6	-7.88	114.07	118.80
1	1A	1063	G	C6-N1-C2	7.88	129.82	125.10
32	2a	1263	C	N1-C2-N3	-7.85	113.71	119.20
56	1y	33	U	N3-C2-O2	-7.83	116.72	122.20
56	1y	33	U	N1-C2-O2	7.78	128.25	122.80
56	1y	33	U	C2-N1-C1'	7.77	127.03	117.70
55	2x	46	G	N3-C2-N2	-7.75	114.48	119.90
1	1A	1063	G	N1-C6-O6	-7.75	115.25	119.90
32	1a	1025	U	N1-C2-O2	7.68	128.18	122.80
1	1A	2028	U	N3-C4-O4	-7.63	114.06	119.40
32	2a	1263	C	C6-N1-C2	-7.59	117.26	120.30
32	1a	1034	G	C6-N1-C2	7.52	129.61	125.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1029	C	C2-N3-C4	7.49	123.64	119.90
55	1x	22	G	C5-C6-N1	7.48	115.24	111.50
1	1A	570	G	C5-C6-O6	-7.44	124.14	128.60
55	1x	46	G	C5-C6-O6	-7.41	124.15	128.60
1	2A	2136	C	N3-C2-O2	-7.41	116.72	121.90
1	1A	2167	U	C2-N1-C1'	7.38	126.56	117.70
1	1A	250	G	C8-N9-C4	-7.37	103.45	106.40
55	1x	14	A	C5-C6-N1	-7.32	114.04	117.70
32	2a	1272	G	C4-N9-C1'	7.30	135.99	126.50
55	2x	22	G	N1-C6-O6	-7.30	115.52	119.90
1	1A	1063	G	N3-C2-N2	7.26	124.98	119.90
55	1x	22	G	N7-C8-N9	7.24	116.72	113.10
1	1A	2825	C	C6-N1-C2	-7.20	117.42	120.30
56	1y	56	C	N1-C2-O2	7.19	123.22	118.90
1	2A	512	G	O4'-C1'-N9	7.15	113.92	108.20
32	2a	754	C	C2-N1-C1'	7.11	126.62	118.80
1	1A	2167	U	N1-C2-O2	7.07	127.75	122.80
32	2a	1272	G	C8-N9-C1'	-7.07	117.81	127.00
32	1a	1067	A	P-O3'-C3'	7.03	128.14	119.70
1	1A	2577	A	O5'-P-OP1	-6.96	99.44	105.70
55	2x	22	G	C5-C6-N1	6.96	114.98	111.50
55	2x	46	G	N1-C2-N3	6.94	128.07	123.90
32	1a	254	G	O5'-P-OP1	-6.92	99.47	105.70
55	2x	14	A	C5-C6-N1	-6.91	114.24	117.70
1	1A	2032	G	C5-N7-C8	6.89	107.74	104.30
1	1A	1075	C	C5-C4-N4	6.89	125.02	120.20
1	1A	2689	U	P-O3'-C3'	6.82	127.88	119.70
55	2x	22	G	N7-C8-N9	6.82	116.51	113.10
1	2A	1204	A	O4'-C1'-N9	6.80	113.64	108.20
1	1A	570	G	C5-C6-N1	6.80	114.90	111.50
1	1A	1075	C	N3-C2-O2	-6.78	117.15	121.90
1	1A	1648	C	O5'-P-OP1	-6.78	99.60	105.70
1	2A	2136	C	C2-N1-C1'	6.78	126.25	118.80
1	2A	141	A	C8-N9-C4	-6.74	103.10	105.80
32	1a	558	G	O5'-P-OP1	-6.73	99.64	105.70
1	1A	1992	G	P-O3'-C3'	6.73	127.78	119.70
1	1A	2167	U	N3-C2-O2	-6.72	117.50	122.20
1	1A	2036	C	O5'-P-OP1	-6.70	99.67	105.70
55	2x	22	G	C4-C5-C6	-6.66	114.81	118.80
1	1A	2621	A	C8-N9-C4	6.62	108.45	105.80
1	2A	141	A	N7-C8-N9	6.61	117.11	113.80
1	1A	975	C	C2-N1-C1'	-6.60	111.54	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1791	A	O5'-P-OP1	-6.60	99.76	105.70
55	2x	46	G	C5-C6-N1	6.57	114.78	111.50
32	1a	1029	C	N1-C2-O2	6.53	122.82	118.90
1	1A	746	A	O4'-C1'-N9	6.53	113.42	108.20
1	1A	1614	A	O5'-P-OP1	-6.51	99.84	105.70
1	2A	802	A	O5'-P-OP1	-6.51	99.84	105.70
32	1a	841	U	C5-C6-N1	6.45	125.93	122.70
1	1A	576	U	O5'-P-OP1	-6.39	99.95	105.70
1	2A	1698	A	O4'-C1'-N9	6.35	113.28	108.20
56	1y	56	C	N3-C4-C5	-6.34	119.36	121.90
32	1a	266	G	P-O3'-C3'	6.34	127.31	119.70
1	1A	963	U	O5'-P-OP2	-6.33	100.00	105.70
1	2A	943	U	O5'-P-OP2	-6.33	100.00	105.70
1	1A	467	G	C4-C5-N7	-6.30	108.28	110.80
2	2B	1	U	C2-N1-C1'	6.29	125.25	117.70
1	1A	2492	U	O5'-P-OP1	-6.28	100.05	105.70
1	1A	2581	G	O4'-C1'-N9	6.26	113.21	108.20
1	1A	2593	U	N3-C4-C5	6.23	118.34	114.60
55	2x	46	G	C4-C5-N7	-6.18	108.33	110.80
1	1A	975	C	C6-N1-C1'	6.14	128.17	120.80
1	2A	847	U	C2-N1-C1'	6.14	125.07	117.70
1	1A	1080	C	N1-C2-O2	6.13	122.58	118.90
32	2a	754	C	N1-C2-O2	6.13	122.58	118.90
1	2A	751	A	O5'-P-OP1	-6.12	100.19	105.70
1	1A	1075	C	N3-C4-C5	-6.12	119.45	121.90
1	1A	1936	A	O4'-C1'-N9	6.11	113.09	108.20
32	1a	1034	G	C5-C6-O6	6.07	132.24	128.60
1	1A	1696	G	O5'-P-OP2	-6.03	100.27	105.70
1	1A	1639	U	O5'-P-OP2	-6.02	100.28	105.70
1	2A	1664	A	O5'-P-OP2	-6.02	100.28	105.70
6	1G	21	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	1A	2744	G	O5'-P-OP2	-5.97	100.32	105.70
32	1a	368	U	O4'-C1'-N1	5.97	112.98	108.20
55	2x	14	A	C4-C5-N7	-5.97	107.71	110.70
1	1A	2629	A	P-O3'-C3'	5.97	126.86	119.70
1	1A	1776	G	O5'-P-OP2	-5.96	100.33	105.70
55	2x	46	G	N9-C4-C5	5.96	107.78	105.40
55	1x	46	G	N1-C2-N3	5.95	127.47	123.90
1	2A	2689	U	P-O3'-C3'	5.95	126.83	119.70
1	2A	2155	G	C6-N1-C2	5.94	128.66	125.10
56	1y	7	A	C6-N1-C2	-5.94	115.04	118.60
1	1A	2023	G	O5'-P-OP1	-5.93	100.36	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1158	C	C2-N1-C1'	5.91	125.30	118.80
1	1A	2028	U	N1-C2-O2	5.89	126.92	122.80
55	1x	14	A	C4-N9-C1'	5.89	136.90	126.30
32	2a	1032	G	C6-N1-C2	5.88	128.63	125.10
55	1x	14	A	C8-N9-C1'	-5.86	117.14	127.70
1	1A	1009	A	OP1-P-OP2	-5.86	110.81	119.60
32	1a	1032	G	C5-C6-O6	5.85	132.11	128.60
32	2a	952	U	C5-C4-O4	5.84	129.41	125.90
1	1A	961	C	O5'-P-OP2	-5.84	100.44	105.70
1	1A	2593	U	N3-C4-O4	-5.84	115.31	119.40
1	1A	568	U	N3-C4-C5	5.83	118.10	114.60
1	1A	195	A	C5-N7-C8	5.82	106.81	103.90
1	1A	1791	A	O5'-P-OP1	-5.81	100.47	105.70
32	2a	1158	C	C2-N1-C1'	5.81	125.19	118.80
1	2A	2155	G	N3-C2-N2	5.80	123.96	119.90
56	1y	66	U	C2-N3-C4	-5.80	123.52	127.00
32	2a	1029	C	N1-C2-O2	5.79	122.38	118.90
32	2a	1262	C	N1-C2-O2	5.79	122.38	118.90
1	1A	568	U	C5-C4-O4	-5.79	122.43	125.90
1	2A	945	A	C2-N3-C4	-5.79	107.71	110.60
1	1A	2848	G	O4'-C1'-N9	5.78	112.83	108.20
1	1A	395	U	O4'-C1'-N1	5.78	112.82	108.20
1	1A	845	G	O4'-C1'-N9	5.77	112.82	108.20
55	2x	22	G	C4-C5-N7	5.76	113.11	110.80
1	2A	2136	C	C6-N1-C1'	-5.72	113.93	120.80
1	1A	1075	C	C6-N1-C2	-5.72	118.01	120.30
32	2a	266	G	P-O3'-C3'	5.71	126.55	119.70
1	1A	226	G	O4'-C1'-N9	5.71	112.77	108.20
1	1A	2502	G	O5'-P-OP2	-5.70	100.57	105.70
1	1A	1647	G	O4'-C1'-N9	-5.68	103.66	108.20
1	2A	1992	G	P-O3'-C3'	5.67	126.51	119.70
1	1A	975	C	C2-N3-C4	-5.67	117.06	119.90
1	1A	975	C	N1-C2-N3	5.66	123.16	119.20
32	2a	1263	C	C6-N1-C1'	-5.66	114.01	120.80
32	1a	299	G	C5-C6-O6	-5.65	125.21	128.60
32	1a	1032	G	C6-N1-C2	5.64	128.49	125.10
55	1x	22	G	N1-C6-O6	-5.63	116.52	119.90
55	1x	46	G	N9-C4-C5	5.62	107.65	105.40
1	2A	528	A	P-O3'-C3'	5.59	126.41	119.70
1	1A	1385	G	O4'-C1'-N9	5.59	112.67	108.20
32	2a	913	A	P-O3'-C3'	5.58	126.39	119.70
1	1A	1174	A	P-O3'-C3'	5.57	126.39	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	204	A	C8-N9-C4	5.54	108.01	105.80
1	1A	271(Y)	U	O4'-C1'-N1	5.53	112.62	108.20
1	1A	847	U	C2-N1-C1'	5.53	124.33	117.70
1	1A	2167	U	C5-C6-N1	5.53	125.46	122.70
54	1w	47	U	N1-C2-O2	5.52	126.66	122.80
1	1A	1176	G	OP1-P-O3'	5.50	117.30	105.20
1	1A	2791	C	C6-N1-C2	-5.50	118.10	120.30
1	2A	383	U	O4'-C1'-N1	5.49	112.59	108.20
56	1y	19	G	C6-N1-C2	5.49	128.39	125.10
32	1a	1025	U	N3-C2-O2	-5.48	118.36	122.20
32	2a	1065	U	P-O3'-C3'	5.46	126.26	119.70
56	1y	50	U	C5-C4-O4	5.45	129.17	125.90
1	1A	1082	U	N3-C4-O4	-5.43	115.60	119.40
1	1A	787	U	O5'-P-OP1	-5.42	100.82	105.70
1	1A	1993	U	O5'-P-OP1	-5.41	100.83	105.70
1	2A	945	A	C5-N7-C8	-5.41	101.20	103.90
1	2A	576	U	O5'-P-OP1	-5.39	100.85	105.70
55	1x	46	G	N3-C4-C5	-5.39	125.91	128.60
1	1A	1086	A	C5-C6-N1	5.38	120.39	117.70
1	1A	2430	A	O4'-C1'-N9	5.37	112.50	108.20
1	1A	2612	C	O5'-P-OP2	-5.36	100.88	105.70
32	2a	1158	C	N1-C2-O2	5.35	122.11	118.90
32	1a	687	A	P-O3'-C3'	5.33	126.10	119.70
1	2A	528	A	C2-N3-C4	-5.33	107.93	110.60
1	2A	1298	C	O5'-P-OP2	-5.33	100.90	105.70
1	1A	298	G	C5-N7-C8	5.33	106.96	104.30
32	1a	754	C	C2-N1-C1'	5.31	124.64	118.80
55	1x	46	G	C4-C5-N7	-5.30	108.68	110.80
1	2A	2136	C	C2-N3-C4	5.30	122.55	119.90
1	1A	801	G	O5'-P-OP2	-5.29	100.94	105.70
1	1A	805	G	N9-C4-C5	-5.29	103.28	105.40
1	1A	881	G	N7-C8-N9	5.29	115.74	113.10
56	1y	50	U	C2-N3-C4	5.29	130.17	127.00
56	1y	64	A	C6-N1-C2	5.28	121.77	118.60
11	1P	120	ALA	C-N-CA	5.28	134.90	121.70
32	1a	748	C	P-O3'-C3'	5.28	126.03	119.70
1	1A	548	A	P-O3'-C3'	5.28	126.03	119.70
32	2a	754	C	C6-N1-C1'	-5.28	114.47	120.80
1	1A	1177	A	O5'-P-OP1	-5.28	100.95	105.70
1	1A	1080	C	C2-N3-C4	5.27	122.53	119.90
1	2A	879	G	C4-N9-C1'	5.26	133.34	126.50
1	1A	195	A	P-O3'-C3'	5.26	126.01	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1992	G	C8-N9-C4	-5.24	104.30	106.40
40	2i	102	LEU	CA-CB-CG	5.24	127.36	115.30
55	1x	22	G	C8-N9-C1'	5.24	133.81	127.00
1	2A	228	A	P-O3'-C3'	5.23	125.97	119.70
1	1A	2711	A	O5'-P-OP2	-5.22	101.00	105.70
1	1A	2032	G	O4'-C1'-N9	-5.21	104.03	108.20
1	2A	879	G	N3-C4-N9	5.21	129.12	126.00
2	1B	41	U	C5-C6-N1	-5.21	120.10	122.70
1	1A	1174	A	OP1-P-O3'	5.20	116.64	105.20
1	1A	383	U	O4'-C1'-N1	5.20	112.36	108.20
32	1a	1442	G	N3-C4-C5	-5.19	126.00	128.60
1	1A	1272	A	O5'-P-OP2	-5.17	101.04	105.70
1	2A	1313	U	C2-N1-C1'	5.15	123.88	117.70
53	2v	24	A	O4'-C1'-N9	5.14	112.32	108.20
1	1A	1983	C	OP2-P-O3'	5.14	116.51	105.20
1	1A	1314	C	C2-N1-C1'	5.14	124.45	118.80
32	1a	1158	C	N1-C2-O2	5.14	121.98	118.90
32	1a	913	A	P-O3'-C3'	5.12	125.84	119.70
32	1a	1442	G	C2-N3-C4	5.11	114.46	111.90
1	2A	746	A	O4'-C1'-N9	5.11	112.29	108.20
1	2A	271(M)	G	P-O3'-C3'	5.11	125.83	119.70
1	1A	624	C	O5'-P-OP1	-5.10	101.11	105.70
1	1A	946	G	O5'-P-OP1	-5.10	101.11	105.70
55	2x	14	A	C8-N9-C1'	-5.10	118.53	127.70
1	2A	797	C	C6-N1-C2	-5.09	118.26	120.30
2	2B	2	C	C6-N1-C2	-5.09	118.26	120.30
1	2A	784	A	OP1-P-O3'	5.09	116.40	105.20
1	1A	2447	G	OP2-P-O3'	5.09	116.39	105.20
1	1A	774	A	C2-N3-C4	5.08	113.14	110.60
1	2A	214	G	O4'-C1'-N9	5.08	112.27	108.20
1	1A	450	G	N1-C6-O6	-5.08	116.85	119.90
1	2A	961	C	C6-N1-C2	5.08	122.33	120.30
32	1a	299	G	N9-C4-C5	-5.08	103.37	105.40
56	1y	19	G	C5-C6-O6	5.07	131.64	128.60
55	2x	46	G	C5-C6-O6	-5.07	125.56	128.60
1	1A	2710	C	O5'-P-OP1	-5.06	101.14	105.70
1	2A	2712	U	O4'-C1'-N1	5.06	112.25	108.20
1	2A	1204	A	C2-N3-C4	-5.06	108.07	110.60
54	1w	1	G	N3-C4-N9	5.05	129.03	126.00
1	1A	1192	G	N7-C8-N9	-5.04	110.58	113.10
1	1A	1339	G	C5-C6-O6	-5.04	125.58	128.60
32	1a	1032	G	N3-C2-N2	5.03	123.42	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	353	A	OP2-P-O3'	5.03	116.27	105.20
1	2A	898	C	C6-N1-C2	-5.03	118.29	120.30
1	2A	330	A	C2-N3-C4	-5.02	108.09	110.60
1	2A	645	C	N1-C2-O2	5.01	121.91	118.90
1	1A	783	A	C2-N3-C4	5.00	113.10	110.60
32	1a	115	G	P-O3'-C3'	5.00	125.70	119.70
55	2x	14	A	C4-N9-C1'	5.00	135.30	126.30

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
11	1P	35	HIS	Peptide
33	1b	126	GLU	Peptide
51	1t	99	LEU	Peptide
26	24	59	PHE	Peptide
11	2P	35	HIS	Peptide

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	260 (95%)	13 (5%)	0	100	100
3	2D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100
4	1E	202/206 (98%)	190 (94%)	11 (5%)	1 (0%)	29	41
4	2E	202/206 (98%)	190 (94%)	11 (5%)	1 (0%)	29	41
5	1F	201/210 (96%)	197 (98%)	3 (2%)	1 (0%)	29	41

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
5	2F	201/210 (96%)	192 (96%)	8 (4%)	1 (0%)	29 41
6	1G	179/182 (98%)	168 (94%)	11 (6%)	0	100 100
6	2G	179/182 (98%)	156 (87%)	18 (10%)	5 (3%)	5 4
7	1H	172/180 (96%)	165 (96%)	7 (4%)	0	100 100
7	2H	172/180 (96%)	153 (89%)	18 (10%)	1 (1%)	25 36
8	1I	144/148 (97%)	134 (93%)	10 (7%)	0	100 100
8	2I	144/148 (97%)	123 (85%)	18 (12%)	3 (2%)	7 8
9	1N	138/140 (99%)	133 (96%)	5 (4%)	0	100 100
9	2N	138/140 (99%)	129 (94%)	8 (6%)	1 (1%)	22 32
10	1O	120/122 (98%)	113 (94%)	7 (6%)	0	100 100
10	2O	120/122 (98%)	115 (96%)	5 (4%)	0	100 100
11	1P	147/150 (98%)	130 (88%)	15 (10%)	2 (1%)	11 15
11	2P	147/150 (98%)	132 (90%)	12 (8%)	3 (2%)	7 9
12	1Q	139/141 (99%)	134 (96%)	5 (4%)	0	100 100
12	2Q	139/141 (99%)	132 (95%)	7 (5%)	0	100 100
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100 100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100 100
14	1S	108/112 (96%)	102 (94%)	6 (6%)	0	100 100
14	2S	108/112 (96%)	101 (94%)	6 (6%)	1 (1%)	17 25
15	1T	129/146 (88%)	124 (96%)	4 (3%)	1 (1%)	19 29
15	2T	129/146 (88%)	121 (94%)	8 (6%)	0	100 100
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	113 (99%)	1 (1%)	0	100 100
17	1V	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	15 23
17	2V	99/101 (98%)	92 (93%)	6 (6%)	1 (1%)	15 23
18	1W	110/113 (97%)	110 (100%)	0	0	100 100
18	2W	110/113 (97%)	108 (98%)	2 (2%)	0	100 100
19	1X	93/96 (97%)	89 (96%)	3 (3%)	1 (1%)	14 20
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100 100
20	1Y	105/110 (96%)	98 (93%)	6 (6%)	1 (1%)	15 23
20	2Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	15 23

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
21	1Z	148/206 (72%)	136 (92%)	11 (7%)	1 (1%)	22 32
21	2Z	156/206 (76%)	131 (84%)	20 (13%)	5 (3%)	4 3
22	10	81/85 (95%)	80 (99%)	1 (1%)	0	100 100
22	20	81/85 (95%)	79 (98%)	2 (2%)	0	100 100
23	11	95/98 (97%)	94 (99%)	0	1 (1%)	14 20
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14 20
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	68 (100%)	0	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
26	14	67/71 (94%)	57 (85%)	4 (6%)	6 (9%)	1 0
26	24	67/71 (94%)	49 (73%)	14 (21%)	4 (6%)	1 0
27	15	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
27	25	57/60 (95%)	57 (100%)	0	0	100 100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
30	28	62/65 (95%)	62 (100%)	0	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	196 (86%)	26 (11%)	7 (3%)	4 3
33	2b	229/256 (90%)	194 (85%)	30 (13%)	5 (2%)	6 7
34	1c	204/239 (85%)	193 (95%)	11 (5%)	0	100 100
34	2c	204/239 (85%)	178 (87%)	23 (11%)	3 (2%)	10 14
35	1d	206/209 (99%)	195 (95%)	10 (5%)	1 (0%)	29 41
35	2d	206/209 (99%)	192 (93%)	12 (6%)	2 (1%)	15 23
36	1e	146/162 (90%)	137 (94%)	6 (4%)	3 (2%)	7 8
36	2e	146/162 (90%)	133 (91%)	12 (8%)	1 (1%)	22 32
37	1f	98/101 (97%)	93 (95%)	5 (5%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
38	1g	153/156 (98%)	142 (93%)	11 (7%)	0	100 100
38	2g	153/156 (98%)	137 (90%)	15 (10%)	1 (1%)	22 32
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	125 (93%)	10 (7%)	0	100 100
40	1i	125/128 (98%)	109 (87%)	14 (11%)	2 (2%)	9 13
40	2i	125/128 (98%)	109 (87%)	15 (12%)	1 (1%)	19 29
41	1j	95/105 (90%)	84 (88%)	10 (10%)	1 (1%)	14 20
41	2j	94/105 (90%)	77 (82%)	13 (14%)	4 (4%)	2 2
42	1k	112/129 (87%)	100 (89%)	10 (9%)	2 (2%)	8 10
42	2k	112/129 (87%)	102 (91%)	9 (8%)	1 (1%)	17 25
43	1l	119/132 (90%)	114 (96%)	5 (4%)	0	100 100
43	2l	119/132 (90%)	109 (92%)	9 (8%)	1 (1%)	19 29
44	1m	121/126 (96%)	110 (91%)	9 (7%)	2 (2%)	9 11
44	2m	120/126 (95%)	103 (86%)	14 (12%)	3 (2%)	5 6
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100 100
45	2n	58/61 (95%)	53 (91%)	5 (9%)	0	100 100
46	1o	86/89 (97%)	81 (94%)	5 (6%)	0	100 100
46	2o	86/89 (97%)	84 (98%)	1 (1%)	1 (1%)	13 19
47	1p	80/88 (91%)	73 (91%)	7 (9%)	0	100 100
47	2p	80/88 (91%)	73 (91%)	7 (9%)	0	100 100
48	1q	97/105 (92%)	91 (94%)	6 (6%)	0	100 100
48	2q	97/105 (92%)	91 (94%)	4 (4%)	2 (2%)	7 8
49	1r	66/88 (75%)	61 (92%)	5 (8%)	0	100 100
49	2r	66/88 (75%)	64 (97%)	2 (3%)	0	100 100
50	1s	81/93 (87%)	74 (91%)	6 (7%)	1 (1%)	13 19
50	2s	81/93 (87%)	66 (82%)	13 (16%)	2 (2%)	5 6
51	1t	94/106 (89%)	82 (87%)	10 (11%)	2 (2%)	7 8
51	2t	94/106 (89%)	84 (89%)	9 (10%)	1 (1%)	14 20
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
52	2u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
All	All	11370/12128 (94%)	10564 (93%)	713 (6%)	93 (1%)	19 29

All (93) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	45	LEU
40	1i	54	ASP
44	1m	67	GLU
5	2F	130	ALA
6	2G	51	ARG
11	2P	45	LEU
21	2Z	52	SER
33	2b	17	PHE
38	2g	80	VAL
41	2j	79	ARG
43	2l	91	LYS
44	2m	67	GLU
5	1F	130	ALA
20	1Y	54	LYS
21	1Z	53	ILE
23	11	3	LYS
26	14	47	GLN
26	14	49	PHE
26	14	62	ARG
33	1b	8	LYS
33	1b	126	GLU
42	1k	49	GLY
42	1k	105	VAL
51	1t	47	GLY
51	1t	96	GLY
6	2G	42	GLY
6	2G	126	ASP
7	2H	47	GLU
11	2P	44	GLY
21	2Z	51	ALA
21	2Z	146	ILE
23	21	3	LYS
26	24	45	GLY
35	2d	5	ILE
42	2k	49	GLY
44	2m	106	ASN
48	2q	68	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	2s	27	GLU
11	1P	38	GLN
26	14	45	GLY
33	1b	17	PHE
6	2G	43	LEU
8	2I	41	GLU
14	2S	84	GLN
33	2b	20	GLU
33	2b	21	ARG
34	2c	95	THR
34	2c	156	ARG
40	2i	121	ARG
46	2o	88	ARG
48	2q	67	LYS
50	2s	9	VAL
4	1E	52	LEU
19	1X	93	GLU
26	14	53	GLU
33	1b	20	GLU
36	1e	21	ALA
36	1e	85	GLY
40	1i	127	LYS
41	1j	78	ASN
50	1s	27	GLU
4	2E	52	LEU
8	2I	10	GLU
9	2N	2	LYS
21	2Z	142	SER
21	2Z	144	LEU
26	24	48	ARG
26	24	49	PHE
33	2b	78	GLN
34	2c	177	THR
41	2j	29	ARG
51	2t	95	ALA
17	1V	79	VAL
33	1b	124	SER
33	1b	231	GLU
35	1d	173	TRP
8	2I	100	ALA
20	2Y	54	LYS
26	24	65	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	2b	9	GLU
35	2d	3	ARG
26	14	44	THR
41	2j	75	ILE
36	1e	69	VAL
36	2e	69	VAL
41	2j	77	PRO
17	2V	79	VAL
44	2m	6	GLY
15	1T	37	GLY
44	1m	4	ILE
6	2G	24	GLY
11	2P	122	PRO
33	1b	125	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
3	1D	215/218 (99%)	208 (97%)	7 (3%)	38 57
3	2D	215/218 (99%)	205 (95%)	10 (5%)	26 42
4	1E	164/166 (99%)	155 (94%)	9 (6%)	21 35
4	2E	164/166 (99%)	154 (94%)	10 (6%)	18 30
5	1F	160/166 (96%)	147 (92%)	13 (8%)	11 18
5	2F	159/166 (96%)	151 (95%)	8 (5%)	24 40
6	1G	143/156 (92%)	133 (93%)	10 (7%)	15 24
6	2G	143/156 (92%)	124 (87%)	19 (13%)	4 4
7	1H	144/148 (97%)	139 (96%)	5 (4%)	36 55
7	2H	144/148 (97%)	132 (92%)	12 (8%)	11 17
8	1I	113/124 (91%)	96 (85%)	17 (15%)	3 3
8	2I	105/124 (85%)	92 (88%)	13 (12%)	4 5
9	1N	118/119 (99%)	113 (96%)	5 (4%)	30 47

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	2N	118/119 (99%)	115 (98%)	3 (2%)	47 67
10	1O	100/100 (100%)	97 (97%)	3 (3%)	41 61
10	2O	100/100 (100%)	93 (93%)	7 (7%)	15 24
11	1P	115/116 (99%)	108 (94%)	7 (6%)	18 30
11	2P	115/116 (99%)	107 (93%)	8 (7%)	15 24
12	1Q	111/111 (100%)	106 (96%)	5 (4%)	27 44
12	2Q	111/111 (100%)	107 (96%)	4 (4%)	35 54
13	1R	101/101 (100%)	98 (97%)	3 (3%)	41 61
13	2R	101/101 (100%)	97 (96%)	4 (4%)	31 49
14	1S	86/88 (98%)	82 (95%)	4 (5%)	26 42
14	2S	85/88 (97%)	74 (87%)	11 (13%)	4 5
15	1T	115/127 (91%)	112 (97%)	3 (3%)	46 66
15	2T	113/127 (89%)	110 (97%)	3 (3%)	44 65
16	1U	93/94 (99%)	90 (97%)	3 (3%)	39 59
16	2U	93/94 (99%)	91 (98%)	2 (2%)	52 71
17	1V	80/82 (98%)	72 (90%)	8 (10%)	7 11
17	2V	80/82 (98%)	73 (91%)	7 (9%)	10 15
18	1W	90/92 (98%)	86 (96%)	4 (4%)	28 45
18	2W	90/92 (98%)	86 (96%)	4 (4%)	28 45
19	1X	77/78 (99%)	76 (99%)	1 (1%)	69 84
19	2X	77/78 (99%)	74 (96%)	3 (4%)	32 50
20	1Y	85/91 (93%)	80 (94%)	5 (6%)	19 32
20	2Y	85/91 (93%)	80 (94%)	5 (6%)	19 32
21	1Z	135/179 (75%)	122 (90%)	13 (10%)	8 12
21	2Z	137/179 (76%)	126 (92%)	11 (8%)	12 18
22	10	65/67 (97%)	64 (98%)	1 (2%)	65 80
22	20	65/67 (97%)	65 (100%)	0	100 100
23	11	80/83 (96%)	77 (96%)	3 (4%)	33 51
23	21	80/83 (96%)	77 (96%)	3 (4%)	33 51
24	12	65/67 (97%)	61 (94%)	4 (6%)	18 29
24	22	65/67 (97%)	62 (95%)	3 (5%)	27 43

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
25	13	51/52 (98%)	48 (94%)	3 (6%)	19 32
25	23	50/52 (96%)	48 (96%)	2 (4%)	31 49
26	14	59/63 (94%)	49 (83%)	10 (17%)	2 2
26	24	53/63 (84%)	46 (87%)	7 (13%)	4 4
27	15	50/52 (96%)	48 (96%)	2 (4%)	31 49
27	25	50/52 (96%)	46 (92%)	4 (8%)	12 18
28	16	51/52 (98%)	47 (92%)	4 (8%)	12 19
28	26	50/52 (96%)	47 (94%)	3 (6%)	19 31
29	17	41/42 (98%)	38 (93%)	3 (7%)	14 22
29	27	41/42 (98%)	36 (88%)	5 (12%)	5 6
30	18	54/55 (98%)	50 (93%)	4 (7%)	13 22
30	28	54/55 (98%)	50 (93%)	4 (7%)	13 22
31	19	34/34 (100%)	33 (97%)	1 (3%)	42 62
31	29	34/34 (100%)	34 (100%)	0	100 100
33	1b	192/220 (87%)	165 (86%)	27 (14%)	3 4
33	2b	187/220 (85%)	163 (87%)	24 (13%)	4 5
34	1c	142/188 (76%)	128 (90%)	14 (10%)	8 11
34	2c	140/188 (74%)	135 (96%)	5 (4%)	35 54
35	1d	169/181 (93%)	156 (92%)	13 (8%)	13 20
35	2d	173/181 (96%)	155 (90%)	18 (10%)	7 10
36	1e	113/123 (92%)	108 (96%)	5 (4%)	28 45
36	2e	114/123 (93%)	106 (93%)	8 (7%)	15 24
37	1f	84/90 (93%)	78 (93%)	6 (7%)	14 23
37	2f	85/90 (94%)	79 (93%)	6 (7%)	14 23
38	1g	119/127 (94%)	107 (90%)	12 (10%)	7 11
38	2g	120/127 (94%)	108 (90%)	12 (10%)	7 11
39	1h	114/119 (96%)	109 (96%)	5 (4%)	28 45
39	2h	114/119 (96%)	110 (96%)	4 (4%)	36 55
40	1i	90/99 (91%)	81 (90%)	9 (10%)	7 11
40	2i	89/99 (90%)	75 (84%)	14 (16%)	2 3
41	1j	66/92 (72%)	59 (89%)	7 (11%)	6 9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
41	2j	69/92 (75%)	61 (88%)	8 (12%)	5 7
42	1k	82/99 (83%)	74 (90%)	8 (10%)	8 11
42	2k	83/99 (84%)	76 (92%)	7 (8%)	11 16
43	1l	96/108 (89%)	94 (98%)	2 (2%)	53 72
43	2l	96/108 (89%)	92 (96%)	4 (4%)	30 47
44	1m	93/101 (92%)	85 (91%)	8 (9%)	10 16
44	2m	92/101 (91%)	81 (88%)	11 (12%)	5 6
45	1n	49/50 (98%)	42 (86%)	7 (14%)	3 4
45	2n	49/50 (98%)	45 (92%)	4 (8%)	11 17
46	1o	78/80 (98%)	73 (94%)	5 (6%)	17 28
46	2o	78/80 (98%)	75 (96%)	3 (4%)	33 51
47	1p	69/74 (93%)	62 (90%)	7 (10%)	7 11
47	2p	68/74 (92%)	61 (90%)	7 (10%)	7 10
48	1q	94/97 (97%)	90 (96%)	4 (4%)	29 46
48	2q	94/97 (97%)	91 (97%)	3 (3%)	39 59
49	1r	59/77 (77%)	57 (97%)	2 (3%)	37 56
49	2r	59/77 (77%)	56 (95%)	3 (5%)	24 39
50	1s	69/80 (86%)	64 (93%)	5 (7%)	14 23
50	2s	67/80 (84%)	59 (88%)	8 (12%)	5 6
51	1t	70/82 (85%)	68 (97%)	2 (3%)	42 62
51	2t	70/82 (85%)	67 (96%)	3 (4%)	29 46
52	1u	18/22 (82%)	15 (83%)	3 (17%)	2 2
52	2u	18/22 (82%)	18 (100%)	0	100 100
All	All	9303/10064 (92%)	8665 (93%)	638 (7%)	15 25

All (638) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	38	LYS
3	1D	99	ASP
3	1D	106	ILE
3	1D	229	VAL
3	1D	242	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	1D	259	THR
4	1E	12	THR
4	1E	34	VAL
4	1E	41	LYS
4	1E	55	ASN
4	1E	59	VAL
4	1E	73	GLU
4	1E	116	VAL
4	1E	181	LEU
4	1E	184	VAL
5	1F	24	LEU
5	1F	28	ILE
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	132	VAL
5	1F	140	LEU
5	1F	144	LYS
5	1F	162	LEU
5	1F	168	ARG
5	1F	175	THR
5	1F	192	LEU
6	1G	3	LEU
6	1G	7	LEU
6	1G	21	ARG
6	1G	43	LEU
6	1G	45	GLU
6	1G	82	LEU
6	1G	133	LEU
6	1G	139	LEU
6	1G	140	ILE
6	1G	148	MET
7	1H	84	SER
7	1H	95	ARG
7	1H	116	GLU
7	1H	124	GLU
7	1H	129	THR
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	20	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	1I	38	LEU
8	1I	41	GLU
8	1I	47	LEU
8	1I	61	ARG
8	1I	76	THR
8	1I	77	LEU
8	1I	85	GLU
8	1I	92	VAL
8	1I	108	THR
8	1I	116	LEU
8	1I	123	LEU
8	1I	140	LEU
8	1I	144	VAL
9	1N	1	MET
9	1N	2	LYS
9	1N	9	VAL
9	1N	48	MET
9	1N	62	VAL
10	1O	28	SER
10	1O	69	ILE
10	1O	106	LEU
11	1P	40	SER
11	1P	45	LEU
11	1P	101	VAL
11	1P	119	GLU
11	1P	133	SER
11	1P	147	LEU
11	1P	148	LEU
12	1Q	7	MET
12	1Q	56	ARG
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	110	THR
13	1R	36	THR
13	1R	100	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	73	LEU
14	1S	110	LEU
15	1T	28	VAL
15	1T	36	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	1T	96	ARG
16	1U	27	LEU
16	1U	31	SER
16	1U	74	LEU
17	1V	28	GLU
17	1V	45	THR
17	1V	46	VAL
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
17	1V	82	ARG
17	1V	85	LYS
18	1W	4	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	67	ASP
19	1X	70	LEU
20	1Y	43	ASN
20	1Y	55	TYR
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	99	CYS
21	1Z	31	ARG
21	1Z	42	VAL
21	1Z	49	ARG
21	1Z	53	ILE
21	1Z	61	LEU
21	1Z	66	SER
21	1Z	69	THR
21	1Z	72	ARG
21	1Z	138	GLU
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	170	THR
21	1Z	171	ILE
22	10	49	LYS
23	11	3	LYS
23	11	37	ILE
23	11	59	THR
24	12	19	VAL
24	12	53	LEU
24	12	55	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	12	65	ASN
25	13	29	ARG
25	13	54	VAL
25	13	60	GLU
26	14	1	MET
26	14	27	THR
26	14	46	GLN
26	14	49	PHE
26	14	53	GLU
26	14	59	PHE
26	14	61	ARG
26	14	63	TYR
26	14	67	TYR
26	14	69	LYS
27	15	6	VAL
27	15	40	LYS
28	16	4	GLU
28	16	19	ARG
28	16	45	LYS
28	16	47	THR
29	17	24	THR
29	17	41	ARG
29	17	43	THR
30	18	14	VAL
30	18	29	LYS
30	18	31	HIS
30	18	34	TRP
31	19	4	ARG
33	1b	7	VAL
33	1b	12	GLU
33	1b	16	HIS
33	1b	21	ARG
33	1b	23	ARG
33	1b	24	TRP
33	1b	35	GLU
33	1b	43	ASP
33	1b	44	LEU
33	1b	54	THR
33	1b	64	ARG
33	1b	76	GLN
33	1b	80	ILE
33	1b	82	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	1b	93	VAL
33	1b	101	MET
33	1b	110	GLN
33	1b	121	LEU
33	1b	126	GLU
33	1b	127	ILE
33	1b	142	LEU
33	1b	150	SER
33	1b	154	LEU
33	1b	185	ILE
33	1b	208	ILE
33	1b	233	SER
33	1b	236	TYR
34	1c	3	ASN
34	1c	21	ARG
34	1c	26	LYS
34	1c	77	ILE
34	1c	98	ASN
34	1c	102	ASN
34	1c	103	VAL
34	1c	119	ARG
34	1c	138	VAL
34	1c	178	LEU
34	1c	179	ARG
34	1c	195	VAL
34	1c	201	TYR
34	1c	207	VAL
35	1d	3	ARG
35	1d	19	LEU
35	1d	31	CYS
35	1d	86	LYS
35	1d	112	VAL
35	1d	134	ASP
35	1d	135	LEU
35	1d	140	VAL
35	1d	170	VAL
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	194	LEU
36	1e	24	ARG
36	1e	41	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1e	63	ARG
36	1e	71	LEU
36	1e	79	GLU
37	1f	55	ASP
37	1f	70	ASP
37	1f	72	VAL
37	1f	75	LEU
37	1f	78	GLU
37	1f	92	LYS
38	1g	12	LEU
38	1g	50	ILE
38	1g	61	VAL
38	1g	78	ARG
38	1g	80	VAL
38	1g	85	TYR
38	1g	94	ARG
38	1g	104	LEU
38	1g	110	GLN
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
39	1h	39	LEU
39	1h	52	ASP
39	1h	54	ASP
39	1h	87	SER
39	1h	133	LEU
40	1i	16	ARG
40	1i	23	ASN
40	1i	25	LYS
40	1i	50	LEU
40	1i	88	TYR
40	1i	96	LEU
40	1i	105	ASP
40	1i	121	ARG
40	1i	128	ARG
41	1j	35	SER
41	1j	43	ARG
41	1j	45	ARG
41	1j	46	ARG
41	1j	81	THR
41	1j	92	THR
41	1j	95	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	1k	14	VAL
42	1k	31	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	87	THR
42	1k	109	VAL
42	1k	114	VAL
42	1k	117	ASN
43	1l	33	ARG
43	1l	104	VAL
44	1m	4	ILE
44	1m	14	ARG
44	1m	17	VAL
44	1m	32	GLU
44	1m	43	THR
44	1m	98	VAL
44	1m	109	THR
44	1m	121	LYS
45	1n	3	ARG
45	1n	6	LEU
45	1n	13	THR
45	1n	18	VAL
45	1n	50	LYS
45	1n	57	ARG
45	1n	60	SER
46	1o	24	SER
46	1o	27	VAL
46	1o	39	LEU
46	1o	83	GLU
46	1o	84	LYS
47	1p	11	SER
47	1p	20	VAL
47	1p	27	LYS
47	1p	43	LYS
47	1p	45	THR
47	1p	62	VAL
47	1p	67	THR
48	1q	11	VAL
48	1q	15	MET
48	1q	85	VAL
48	1q	89	LEU
49	1r	25	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	1r	35	ARG
50	1s	4	SER
50	1s	6	LYS
50	1s	41	VAL
50	1s	48	THR
50	1s	81	ARG
51	1t	24	LEU
51	1t	37	SER
52	1u	9	ARG
52	1u	15	ARG
52	1u	20	LYS
3	2D	3	VAL
3	2D	37	LEU
3	2D	71	ASP
3	2D	88	ARG
3	2D	99	ASP
3	2D	106	ILE
3	2D	142	VAL
3	2D	173	VAL
3	2D	229	VAL
3	2D	242	ARG
4	2E	12	THR
4	2E	34	VAL
4	2E	42	ASP
4	2E	55	ASN
4	2E	73	GLU
4	2E	77	ILE
4	2E	116	VAL
4	2E	119	ARG
4	2E	181	LEU
4	2E	184	VAL
5	2F	24	LEU
5	2F	33	LEU
5	2F	74	ARG
5	2F	145	GLU
5	2F	161	GLU
5	2F	165	ARG
5	2F	168	ARG
5	2F	196	LEU
6	2G	3	LEU
6	2G	7	LEU
6	2G	18	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	2G	28	VAL
6	2G	31	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	51	ARG
6	2G	53	LEU
6	2G	60	LEU
6	2G	91	ARG
6	2G	130	ASN
6	2G	133	LEU
6	2G	137	GLU
6	2G	139	LEU
6	2G	140	ILE
6	2G	162	THR
6	2G	165	THR
6	2G	170	ARG
7	2H	2	SER
7	2H	13	LYS
7	2H	24	VAL
7	2H	43	VAL
7	2H	45	VAL
7	2H	47	GLU
7	2H	57	ASP
7	2H	84	SER
7	2H	103	LEU
7	2H	116	GLU
7	2H	127	GLU
7	2H	129	THR
8	2I	20	ASP
8	2I	38	LEU
8	2I	58	LEU
8	2I	62	LYS
8	2I	68	LEU
8	2I	77	LEU
8	2I	82	ARG
8	2I	87	LYS
8	2I	92	VAL
8	2I	101	LEU
8	2I	117	GLU
8	2I	123	LEU
8	2I	127	VAL
9	2N	9	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	2N	38	HIS
9	2N	61	ARG
10	2O	1	MET
10	2O	28	SER
10	2O	35	VAL
10	2O	69	ILE
10	2O	108	GLU
10	2O	113	LYS
10	2O	116	SER
11	2P	7	ARG
11	2P	39	LYS
11	2P	45	LEU
11	2P	65	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	119	GLU
11	2P	147	LEU
12	2Q	10	ARG
12	2Q	60	ARG
12	2Q	110	THR
12	2Q	133	ARG
13	2R	36	THR
13	2R	100	LEU
13	2R	102	GLU
13	2R	114	VAL
14	2S	3	ARG
14	2S	21	THR
14	2S	26	LEU
14	2S	50	SER
14	2S	52	SER
14	2S	58	LEU
14	2S	63	THR
14	2S	64	GLU
14	2S	75	GLU
14	2S	103	GLU
14	2S	110	LEU
15	2T	40	THR
15	2T	67	SER
15	2T	72	VAL
16	2U	17	ILE
16	2U	74	LEU
17	2V	1	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	2V	7	THR
17	2V	38	LEU
17	2V	46	VAL
17	2V	61	VAL
17	2V	76	LYS
17	2V	79	VAL
18	2W	11	ARG
18	2W	17	VAL
18	2W	67	ASP
18	2W	92	ARG
19	2X	66	LEU
19	2X	81	VAL
19	2X	92	LEU
20	2Y	72	VAL
20	2Y	76	CYS
20	2Y	97	ARG
20	2Y	99	CYS
20	2Y	107	ASP
21	2Z	33	LEU
21	2Z	42	VAL
21	2Z	49	ARG
21	2Z	50	GLN
21	2Z	58	VAL
21	2Z	91	LEU
21	2Z	129	SER
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	170	THR
21	2Z	171	ILE
23	21	21	ARG
23	21	40	ARG
23	21	92	LYS
24	22	28	LYS
24	22	55	ARG
24	22	70	GLN
25	23	56	VAL
25	23	58	VAL
26	24	5	ILE
26	24	26	SER
26	24	34	GLU
26	24	49	PHE
26	24	59	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	24	61	ARG
26	24	67	TYR
27	25	6	VAL
27	25	33	CYS
27	25	40	LYS
27	25	58	LEU
28	26	14	THR
28	26	19	ARG
28	26	32	ASN
29	27	1	MET
29	27	23	ARG
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
30	28	4	MET
30	28	14	VAL
30	28	29	LYS
30	28	31	HIS
33	2b	7	VAL
33	2b	8	LYS
33	2b	11	LEU
33	2b	16	HIS
33	2b	23	ARG
33	2b	24	TRP
33	2b	67	THR
33	2b	71	VAL
33	2b	76	GLN
33	2b	79	ASP
33	2b	113	HIS
33	2b	114	ARG
33	2b	117	GLU
33	2b	127	ILE
33	2b	149	LEU
33	2b	168	THR
33	2b	170	GLU
33	2b	185	ILE
33	2b	189	ASP
33	2b	190	THR
33	2b	196	LEU
33	2b	221	LEU
33	2b	224	GLN
33	2b	236	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	2c	16	ARG
34	2c	30	ARG
34	2c	46	GLU
34	2c	70	VAL
34	2c	190	ARG
35	2d	5	ILE
35	2d	28	SER
35	2d	31	CYS
35	2d	34	GLU
35	2d	53	ASP
35	2d	58	LEU
35	2d	59	ARG
35	2d	76	ARG
35	2d	96	LEU
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	155	LEU
35	2d	158	ILE
35	2d	160	GLN
35	2d	162	LEU
35	2d	175	SER
35	2d	188	LEU
36	2e	13	ILE
36	2e	20	GLN
36	2e	24	ARG
36	2e	41	VAL
36	2e	45	PHE
36	2e	51	VAL
36	2e	53	LEU
36	2e	55	VAL
37	2f	21	LEU
37	2f	28	ARG
37	2f	63	TYR
37	2f	69	GLU
37	2f	71	ARG
37	2f	92	LYS
38	2g	6	ARG
38	2g	51	GLN
38	2g	52	GLU
38	2g	53	LYS
38	2g	59	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	2g	63	LYS
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	98	SER
38	2g	115	ARG
38	2g	139	GLU
39	2h	37	ARG
39	2h	39	LEU
39	2h	51	VAL
39	2h	109	ILE
40	2i	7	THR
40	2i	27	THR
40	2i	32	ASP
40	2i	47	LEU
40	2i	50	LEU
40	2i	54	ASP
40	2i	65	VAL
40	2i	66	ARG
40	2i	89	ASN
40	2i	93	ARG
40	2i	102	LEU
40	2i	108	VAL
40	2i	113	LYS
40	2i	128	ARG
41	2j	9	ARG
41	2j	21	GLN
41	2j	29	ARG
41	2j	38	ILE
41	2j	49	VAL
41	2j	72	VAL
41	2j	89	ASP
41	2j	92	THR
42	2k	14	VAL
42	2k	24	SER
42	2k	53	SER
42	2k	62	GLN
42	2k	77	MET
42	2k	81	ASP
42	2k	109	VAL
43	2l	13	LYS
43	2l	33	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	2l	40	VAL
43	2l	62	SER
44	2m	3	ARG
44	2m	4	ILE
44	2m	47	ASP
44	2m	50	GLU
44	2m	62	ASN
44	2m	69	GLU
44	2m	90	LEU
44	2m	93	ARG
44	2m	94	ARG
44	2m	103	THR
44	2m	106	ASN
45	2n	3	ARG
45	2n	6	LEU
45	2n	18	VAL
45	2n	22	THR
46	2o	24	SER
46	2o	39	LEU
46	2o	76	GLU
47	2p	1	MET
47	2p	2	VAL
47	2p	8	ARG
47	2p	20	VAL
47	2p	21	VAL
47	2p	27	LYS
47	2p	60	LEU
48	2q	60	ILE
48	2q	63	ARG
48	2q	83	ASP
49	2r	31	LEU
49	2r	46	GLU
49	2r	82	THR
50	2s	22	LEU
50	2s	32	LYS
50	2s	37	ARG
50	2s	43	GLU
50	2s	58	VAL
50	2s	71	LEU
50	2s	77	THR
50	2s	81	ARG
51	2t	15	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	2t	46	GLU
51	2t	93	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (107) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	126	GLN
4	1E	48	GLN
4	1E	55	ASN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
9	1N	8	GLN
10	1O	3	GLN
14	1S	68	GLN
16	1U	81	HIS
19	1X	31	HIS
19	1X	82	GLN
21	1Z	73	GLN
21	1Z	151	HIS
22	10	35	ASN
22	10	50	ASN
25	13	32	GLN
26	14	46	GLN
34	1c	6	HIS
34	1c	162	GLN
35	1d	116	GLN
35	1d	123	HIS
36	1e	20	GLN
36	1e	73	ASN
36	1e	78	HIS
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	64	GLN
39	1h	15	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	38	GLN
40	1i	89	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	1i	124	GLN
41	1j	56	HIS
43	1l	99	HIS
44	1m	92	HIS
46	1o	9	GLN
48	1q	26	GLN
49	1r	63	GLN
50	1s	23	ASN
50	1s	47	HIS
50	1s	83	HIS
51	1t	42	GLN
51	1t	90	GLN
3	2D	87	ASN
4	2E	48	GLN
4	2E	55	ASN
4	2E	143	ASN
5	2F	69	HIS
5	2F	75	HIS
6	2G	121	ASN
8	2I	104	GLN
9	2N	8	GLN
10	2O	5	GLN
11	2P	27	HIS
12	2Q	123	HIS
14	2S	38	GLN
15	2T	43	GLN
16	2U	94	ASN
19	2X	31	HIS
20	2Y	43	ASN
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	151	HIS
25	23	32	GLN
31	29	20	HIS
33	2b	37	ASN
33	2b	40	HIS
33	2b	76	GLN
33	2b	135	GLN
33	2b	140	HIS
33	2b	224	GLN
34	2c	6	HIS
34	2c	162	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	201	GLN
36	2e	20	GLN
36	2e	73	ASN
36	2e	141	GLN
37	2f	100	ASN
38	2g	28	ASN
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	89	ASN
40	2i	117	HIS
41	2j	13	HIS
41	2j	21	GLN
41	2j	68	HIS
42	2k	62	GLN
42	2k	117	ASN
43	2l	99	HIS
44	2m	77	ASN
45	2n	49	HIS
47	2p	16	HIS
49	2r	63	GLN
50	2s	69	HIS
50	2s	83	HIS
51	2t	16	HIS
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2862/2915 (98%)	420 (14%)	30 (1%)
1	2A	2789/2915 (95%)	450 (16%)	25 (0%)
2	1B	119/121 (98%)	10 (8%)	0
2	2B	118/121 (97%)	22 (18%)	0
32	1a	1494/1521 (98%)	227 (15%)	0
32	2a	1498/1521 (98%)	263 (17%)	0
53	1v	12/24 (50%)	2 (16%)	0
53	2v	12/24 (50%)	1 (8%)	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
54	1w	70/76 (92%)	23 (32%)	0
54	2w	67/76 (88%)	26 (38%)	0
55	1x	75/77 (97%)	4 (5%)	0
55	2x	75/77 (97%)	6 (8%)	0
56	1y	71/76 (93%)	30 (42%)	0
56	2y	69/76 (90%)	26 (37%)	0
All	All	9331/9620 (96%)	1510 (16%)	55 (0%)

All (1510) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	34	C
1	1A	45	C
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	139	G
1	1A	181	A
1	1A	196	A
1	1A	197	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	271(S)	G
1	1A	272(B)	G
1	1A	272(H)	C
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	288	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	342	G
1	1A	352	G
1	1A	363	G
1	1A	370	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	421	U
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	455	C
1	1A	456	C
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	528	A
1	1A	529	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	614(C)	A
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	783	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	877	U
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	892	G
1	1A	893	C
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	907	U
1	1A	910	A
1	1A	931	G
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1039	G
1	1A	1041	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1054	A
1	1A	1055	G
1	1A	1057	A
1	1A	1058	G
1	1A	1060	U
1	1A	1063	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1080	C
1	1A	1081	U
1	1A	1083	U
1	1A	1085	A
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1094	U
1	1A	1097	U
1	1A	1101	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1116	C
1	1A	1135	C
1	1A	1136	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1229	G
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1461	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1540	U
1	1A	1542	A
1	1A	1554	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1639	U
1	1A	1648	C
1	1A	1674	G
1	1A	1696	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1746	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1828	G
1	1A	1829	A
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1900	A
1	1A	1906	G
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1984	G
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2101	G
1	1A	2102	U
1	1A	2108	C
1	1A	2109	U
1	1A	2110	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2118	U
1	1A	2120	G
1	1A	2121	G
1	1A	2122	U
1	1A	2126	A
1	1A	2127	G
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2152	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2163	C
1	1A	2165	G
1	1A	2166	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2181	G
1	1A	2182	G
1	1A	2184	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2218	U
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2354	G
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2447	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2448	A
1	1A	2468	G
1	1A	2469	A
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
1	1A	2578	G
1	1A	2602	A
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2663	G
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2765	A
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2803	C
1	1A	2804	C
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2872	G
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	13	A
2	1B	35	U
2	1B	45	A
2	1B	56	G
2	1B	57	A
2	1B	67	G
2	1B	73	A
2	1B	106	G
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	162	A
32	1a	163	C
32	1a	174	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	182	U
32	1a	189(D)	C
32	1a	189(F)	U
32	1a	189(G)	G
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	231	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	301	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	392	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	441	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	521	G
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	559	A
32	1a	561	U
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	628	G
32	1a	630	G
32	1a	639	G
32	1a	653	A
32	1a	665	A
32	1a	671	G
32	1a	672	U
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	749	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	755	G
32	1a	760	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	870	U
32	1a	874	G
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	936	C
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	996	A
32	1a	1000	U
32	1a	1001	A
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
32	1a	1020	U
32	1a	1022	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1033	G
32	1a	1034	G
32	1a	1039	C
32	1a	1044	A
32	1a	1068	G
32	1a	1086	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1124	G
32	1a	1125	U
32	1a	1132	C
32	1a	1134	G
32	1a	1135	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G
32	1a	1158	C
32	1a	1159	U
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1213	A
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1250	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1377	A
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	24	A
54	1w	3	C
54	1w	6	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	1w	7	A
54	1w	8	4SU
54	1w	11	C
54	1w	12	U
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	61	C
54	1w	62	C
54	1w	67	C
54	1w	68	C
54	1w	70	G
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	9	G
55	1x	19	G
55	1x	47	U
55	1x	48	C
56	1y	9	A
56	1y	11	C
56	1y	13	C
56	1y	14	A
56	1y	19	G
56	1y	20	U
56	1y	21	A
56	1y	23	A
56	1y	28	G
56	1y	35	A
56	1y	36	A
56	1y	40	C
56	1y	44	G
56	1y	45	U
56	1y	46	G7M
56	1y	47	U
56	1y	48	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	1y	51	U
56	1y	56	C
56	1y	57	G
56	1y	58	A
56	1y	59	U
56	1y	61	C
56	1y	65	G
56	1y	66	U
56	1y	69	G
56	1y	70	G
56	1y	71	G
56	1y	72	C
56	1y	76	A
1	2A	12	U
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	84	A
1	2A	92	A
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	154	G
1	2A	154(A)	C
1	2A	157	U
1	2A	172	C
1	2A	181	A
1	2A	196	A
1	2A	205	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	294	A
1	2A	311	A
1	2A	329	G
1	2A	330	A
1	2A	352	G
1	2A	363	G
1	2A	363(B)	G
1	2A	386	G
1	2A	391	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	615	G
1	2A	627	A
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	867	C
1	2A	874	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	875	G
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	885	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1043	C
1	2A	1117	G
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1143	A
1	2A	1144	G
1	2A	1151	G
1	2A	1171	G
1	2A	1195	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1230	C
1	2A	1236	G
1	2A	1247	A
1	2A	1248	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1306	C
1	2A	1314	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1379	A
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1421	G
1	2A	1427	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1428	C
1	2A	1435	G
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1478	G
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1543	C
1	2A	1547	C
1	2A	1554	A
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1648	C
1	2A	1654	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1703	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1756	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1829	A
1	2A	1835	G
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
1	2A	1960	A
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2100	G
1	2A	2108	C
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2142	C
1	2A	2143	C
1	2A	2145	C
1	2A	2146	C
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2157	G
1	2A	2158	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2159	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2171	A
1	2A	2172	U
1	2A	2176	A
1	2A	2178	C
1	2A	2181	G
1	2A	2182	G
1	2A	2183	C
1	2A	2186	G
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2347	C
1	2A	2350	C
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2403	C
1	2A	2406	U
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2448	A
1	2A	2460	U
1	2A	2465	C
1	2A	2468	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2504	U
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2530	A
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2585	U
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2673	G
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2751	G
1	2A	2757	A
1	2A	2758	A
1	2A	2760	C
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G
1	2A	2879	C
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2895	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	8	U
2	2B	12	C
2	2B	13	A
2	2B	33	G
2	2B	34	U
2	2B	41	U
2	2B	45	A
2	2B	53	A
2	2B	56	G
2	2B	63	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	84	C
2	2B	105	A
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	117	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	66	G
32	2a	70	G
32	2a	73	G
32	2a	89	C
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	137	C
32	2a	144	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	156	G
32	2a	159	G
32	2a	163	C
32	2a	175	C
32	2a	182	U
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	231	G
32	2a	234	C
32	2a	245	C
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	269	C
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	350	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	384	G
32	2a	388	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	424	G
32	2a	429	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	476	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	630	G
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	703	G
32	2a	723	U
32	2a	731	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	733	A
32	2a	749	C
32	2a	755	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	787	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	853	G
32	2a	859	A
32	2a	874	G
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	932	C
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	991	U
32	2a	992	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	993	G
32	2a	994	A
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1000	U
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1038	C
32	2a	1039	C
32	2a	1040	U
32	2a	1045	C
32	2a	1050	G
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1081	G
32	2a	1086	U
32	2a	1091	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1105	A
32	2a	1108	G
32	2a	1124	G
32	2a	1125	U
32	2a	1126	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1160	G
32	2a	1164	G
32	2a	1170	A
32	2a	1174	G
32	2a	1182	G
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1211	U
32	2a	1213	A
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1246	C
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1270	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1273	G
32	2a	1275	A
32	2a	1277	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1312	G
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1363	C
32	2a	1370	G
32	2a	1382	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A
32	2a	1497	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	24	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	7	A
54	2w	8	4SU
54	2w	9	A
54	2w	12	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	30	G
54	2w	42	C
54	2w	45	U
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	49	C
54	2w	65	G
54	2w	66	U
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	9	G
55	2x	10	G
55	2x	18	G
55	2x	19	G
55	2x	21	A
55	2x	47	U
56	2y	2	C
56	2y	14	A
56	2y	15	G
56	2y	19	G
56	2y	27	G
56	2y	40	C
56	2y	41	C
56	2y	45	U
56	2y	46	G7M
56	2y	47	U
56	2y	49	C
56	2y	50	U
56	2y	52	G
56	2y	53	G
56	2y	55	PSU
56	2y	56	C
56	2y	57	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	2y	58	A
56	2y	59	U
56	2y	61	C
56	2y	62	C
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G
56	2y	73	A

All (55) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	573	G
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	776	G
1	1A	827	U
1	1A	974	G
1	1A	1067	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1379	A
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1992	G
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2439	A
1	1A	2611	U
1	1A	2629	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2689	U
1	2A	196	A
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	746	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	1026	U
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2439	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains (i)

90 non-standard protein/DNA/RNA residues are modelled in this entry.

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	$\#\|Z\| > 2$
56	4SU	2y	8	56	18,21,22	1.66	4 (22%)	26,30,33	2.24	5 (19%)
32	G7M	2a	527	57,32	20,26,27	1.29	2 (10%)	17,39,42	0.56	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
1	5MU	1A	1939	57,1	19,22,23	1.54	6 (31%)	28,32,35	2.19	6 (21%)
1	PSU	2A	2605	1	18,21,22	1.23	1 (5%)	22,30,33	1.91	4 (18%)
54	MIA	1w	37	54	24,31,32	2.21	3 (12%)	26,44,47	2.47	10 (38%)
54	8AN	1w	76	1,62,54	19,24,25	1.46	5 (26%)	13,35,38	1.73	1 (7%)
32	2MG	1a	1207	32	18,26,27	0.98	1 (5%)	16,38,41	1.12	2 (12%)
55	5MU	2x	54	55	19,22,23	1.40	5 (26%)	28,32,35	2.15	6 (21%)
1	PSU	2A	1917	1	18,21,22	1.35	2 (11%)	22,30,33	1.81	3 (13%)
1	OMU	1A	2552	57,1	19,22,23	1.18	2 (10%)	26,31,34	1.72	5 (19%)
55	4SU	2x	8	57,55	18,21,22	2.07	5 (27%)	26,30,33	1.44	5 (19%)
54	PSU	1w	39	54	18,21,22	1.41	3 (16%)	22,30,33	1.51	3 (13%)
54	4SU	1w	8	54	18,21,22	1.64	5 (27%)	26,30,33	1.74	4 (15%)
54	G7M	1w	46	54	20,26,27	1.21	2 (10%)	17,39,42	0.63	0
1	5MC	2A	1962	57,1	18,22,23	0.99	2 (11%)	26,32,35	1.16	3 (11%)
32	5MC	1a	967	32	18,22,23	0.91	2 (11%)	26,32,35	1.05	1 (3%)
54	PSU	1w	32	57,54	18,21,22	1.31	2 (11%)	22,30,33	1.78	3 (13%)
55	8AN	1x	76	57,55,63	19,24,25	1.31	3 (15%)	13,35,38	2.01	3 (23%)
32	M2G	2a	966	32	20,27,28	1.41	3 (15%)	22,40,43	1.01	1 (4%)
32	PSU	2a	516	32	18,21,22	1.31	2 (11%)	22,30,33	1.93	4 (18%)
1	OMG	1A	2251	57,55,1	18,26,27	0.98	1 (5%)	19,38,41	1.09	2 (10%)
1	OMG	2A	2251	55,1	18,26,27	0.92	1 (5%)	19,38,41	1.11	3 (15%)
1	MA6	1A	2058	57,1	18,26,27	0.80	0	19,38,41	1.44	2 (10%)
1	2MA	2A	2503	57,1	17,25,26	1.02	1 (5%)	17,37,40	0.99	2 (11%)
54	4SU	2w	8	54	18,21,22	1.65	3 (16%)	26,30,33	2.66	5 (19%)
56	G7M	2y	46	56	20,26,27	1.38	2 (10%)	17,39,42	0.73	0
54	PSU	2w	55	54	18,21,22	1.37	2 (11%)	22,30,33	1.91	3 (13%)
56	PSU	2y	32	56	18,21,22	1.32	2 (11%)	22,30,33	1.80	3 (13%)
56	PSU	2y	39	56	18,21,22	1.36	2 (11%)	22,30,33	1.65	2 (9%)
55	5MU	1x	54	57,55	19,22,23	1.42	4 (21%)	28,32,35	2.14	6 (21%)
32	M2G	1a	966	32	20,27,28	1.41	3 (15%)	22,40,43	0.98	2 (9%)
32	5MC	1a	1407	32	18,22,23	0.87	1 (5%)	26,32,35	1.16	3 (11%)
32	UR3	2a	1498	32	19,22,23	1.09	1 (5%)	26,32,35	1.54	2 (7%)
32	UR3	1a	1498	32	19,22,23	1.01	1 (5%)	26,32,35	1.57	3 (11%)
56	PSU	1y	32	56	18,21,22	1.34	2 (11%)	22,30,33	1.80	4 (18%)
32	5MC	2a	1404	32	18,22,23	0.99	2 (11%)	26,32,35	1.19	3 (11%)
32	4OC	1a	1402	32	20,23,24	0.76	0	26,32,35	1.05	1 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	G7M	1a	527	57,32	20,26,27	1.19	2 (10%)	17,39,42	0.66	0
56	PSU	2y	55	56	18,21,22	1.39	2 (11%)	22,30,33	1.85	4 (18%)
1	OMU	2A	2552	57,1	19,22,23	1.11	2 (10%)	26,31,34	1.71	5 (19%)
1	5MC	1A	1962	57,1	18,22,23	0.90	2 (11%)	26,32,35	1.12	3 (11%)
32	5MC	2a	967	32	18,22,23	0.96	2 (11%)	26,32,35	1.04	2 (7%)
43	0TD	2l	92	43	7,9,10	4.76	1 (14%)	6,11,13	4.84	2 (33%)
55	5MC	2x	32	55	18,22,23	0.98	2 (11%)	26,32,35	1.25	2 (7%)
55	5MC	1x	32	55	18,22,23	1.00	2 (11%)	26,32,35	1.28	3 (11%)
56	4SU	1y	8	56	18,21,22	1.71	6 (33%)	26,30,33	1.84	5 (19%)
54	8AN	2w	76	1,62,54	19,24,25	1.45	5 (26%)	13,35,38	1.67	1 (7%)
56	5MU	2y	54	56	19,22,23	1.46	5 (26%)	28,32,35	1.76	6 (21%)
55	8AN	2x	76	57,55,63	19,24,25	1.26	3 (15%)	13,35,38	1.78	2 (15%)
1	5MU	2A	1915	1	19,22,23	1.44	5 (26%)	28,32,35	2.27	6 (21%)
55	PSU	2x	55	55	18,21,22	1.36	2 (11%)	22,30,33	1.98	4 (18%)
56	G7M	1y	46	56	20,26,27	1.37	2 (10%)	17,39,42	0.55	0
32	5MC	2a	1407	57,32	18,22,23	0.97	2 (11%)	26,32,35	1.12	2 (7%)
32	MA6	2a	1518	32	18,26,27	0.80	0	19,38,41	1.41	2 (10%)
32	MA6	1a	1518	32	18,26,27	0.82	0	19,38,41	1.44	2 (10%)
32	4OC	2a	1402	32	20,23,24	0.77	0	26,32,35	1.06	3 (11%)
54	5MU	1w	54	54	19,22,23	1.33	3 (15%)	28,32,35	2.14	6 (21%)
1	MA6	2A	2058	1	18,26,27	0.74	0	19,38,41	1.52	3 (15%)
1	2MA	1A	2503	57,1	17,25,26	0.96	1 (5%)	17,37,40	1.04	2 (11%)
56	PSU	1y	39	56	18,21,22	1.42	2 (11%)	22,30,33	1.59	2 (9%)
1	PSU	1A	2605	57,1	18,21,22	1.50	3 (16%)	22,30,33	1.87	4 (18%)
32	5MC	1a	1404	32	18,22,23	1.03	2 (11%)	26,32,35	1.23	4 (15%)
32	2MG	2a	1207	32	18,26,27	0.94	1 (5%)	16,38,41	1.02	1 (6%)
1	OMC	1A	1920	1	19,22,23	0.83	0	26,31,34	0.88	0
54	5MU	2w	54	54	19,22,23	1.34	3 (15%)	28,32,35	1.80	6 (21%)
32	MA6	2a	1519	32	18,26,27	0.79	0	19,38,41	1.50	2 (10%)
32	5MC	2a	1400	32	18,22,23	0.96	2 (11%)	26,32,35	1.30	3 (11%)
54	PSU	1w	55	54	18,21,22	1.31	2 (11%)	22,30,33	1.86	3 (13%)
1	PSU	2A	1911	1	18,21,22	1.37	2 (11%)	22,30,33	1.81	3 (13%)
1	PSU	1A	1917	1	18,21,22	1.35	2 (11%)	22,30,33	1.93	3 (13%)
56	MIA	1y	37	56	18,24,32	1.18	2 (11%)	18,35,47	1.25	2 (11%)
1	5MU	2A	1939	1	19,22,23	1.45	6 (31%)	28,32,35	2.31	6 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	1a	1400	32	18,22,23	0.97	2 (11%)	26,32,35	1.20	2 (7%)
1	5MU	1A	1915	1	19,22,23	1.44	6 (31%)	28,32,35	2.12	8 (28%)
32	PSU	1a	516	32	18,21,22	1.32	2 (11%)	22,30,33	1.76	4 (18%)
56	5MU	1y	54	56	19,22,23	1.46	5 (26%)	28,32,35	2.04	6 (21%)
1	5MC	1A	1942	1	18,22,23	1.02	2 (11%)	26,32,35	1.33	3 (11%)
55	4SU	1x	8	55	18,21,22	2.22	5 (27%)	26,30,33	1.70	6 (23%)
1	OMC	2A	1920	1	19,22,23	0.84	0	26,31,34	0.95	1 (3%)
54	MIA	2w	37	53,54	20,27,32	1.82	3 (15%)	22,39,47	1.76	7 (31%)
55	PSU	1x	55	57,55	18,21,22	1.37	2 (11%)	22,30,33	1.85	3 (13%)
1	5MC	2A	1942	1	18,22,23	0.92	1 (5%)	26,32,35	1.10	2 (7%)
54	PSU	2w	39	54	18,21,22	1.32	2 (11%)	22,30,33	1.74	3 (13%)
54	G7M	2w	46	54	20,26,27	1.21	1 (5%)	17,39,42	0.70	0
43	0TD	1l	92	43	7,9,10	4.62	3 (42%)	6,11,13	7.26	2 (33%)
56	MIA	2y	37	56	18,24,32	1.17	2 (11%)	18,35,47	1.24	2 (11%)
56	PSU	1y	55	56	18,21,22	1.31	2 (11%)	22,30,33	1.92	4 (18%)
54	PSU	2w	32	54	18,21,22	1.35	2 (11%)	22,30,33	1.78	3 (13%)
1	PSU	1A	1911	1	18,21,22	1.34	2 (11%)	22,30,33	1.97	4 (18%)
32	MA6	1a	1519	32	18,26,27	0.83	0	19,38,41	1.53	2 (10%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	4SU	2y	8	56	-	1/7/25/26	0/2/2/2
32	G7M	2a	527	57,32	-	3/3/25/26	0/3/3/3
1	5MU	1A	1939	57,1	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	2/11/33/34	0/3/3/3
54	8AN	1w	76	1,62,54	-	0/3/25/26	0/3/3/3
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	57,1	-	0/9/27/28	0/2/2/2
55	4SU	2x	8	57,55	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	5MC	2A	1962	57,1	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	57,54	-	0/7/25/26	0/2/2/2
55	8AN	1x	76	57,55,63	-	3/3/25/26	0/3/3/3
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	57,55,1	-	0/5/27/28	0/3/3/3
1	OMG	2A	2251	55,1	-	0/5/27/28	0/3/3/3
1	MA6	1A	2058	57,1	-	0/7/29/30	0/3/3/3
1	2MA	2A	2503	57,1	-	1/3/25/26	0/3/3/3
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
56	G7M	2y	46	56	-	2/3/25/26	0/3/3/3
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
56	PSU	2y	32	56	-	0/7/25/26	0/2/2/2
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	57,55	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
32	G7M	1a	527	57,32	-	3/3/25/26	0/3/3/3
56	PSU	2y	55	56	-	2/7/25/26	0/2/2/2
1	OMU	2A	2552	57,1	-	0/9/27/28	0/2/2/2
1	5MC	1A	1962	57,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
56	4SU	1y	8	56	-	2/7/25/26	0/2/2/2
54	8AN	2w	76	1,62,54	-	0/3/25/26	0/3/3/3
56	5MU	2y	54	56	-	0/7/25/26	0/2/2/2
55	8AN	2x	76	57,55,63	-	3/3/25/26	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
56	G7M	1y	46	56	-	1/3/25/26	0/3/3/3
32	5MC	2a	1407	57,32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	MA6	2A	2058	1	-	0/7/29/30	0/3/3/3
1	2MA	1A	2503	57,1	-	2/3/25/26	0/3/3/3
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	57,1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/3/25/34	0/3/3/3
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
56	5MU	1y	54	56	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
54	MIA	2w	37	53,54	-	4/7/29/34	0/3/3/3
55	PSU	1x	55	57,55	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	1/3/25/26	0/3/3/3
43	0TD	1l	92	43	-	3/7/12/14	-
56	MIA	2y	37	56	-	0/3/25/34	0/3/3/3
56	PSU	1y	55	56	-	2/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3

All (206) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.26	1.69	1.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-11.62	1.70	1.82
54	1w	37	MIA	C13-C14	7.26	1.53	1.32
54	2w	37	MIA	C2-S10	-6.62	1.70	1.75
54	1w	37	MIA	C2-S10	-6.60	1.70	1.75
55	1x	8	4SU	C4-N3	-5.86	1.31	1.37
55	2x	8	4SU	C4-N3	-5.15	1.32	1.37
32	2a	966	M2G	C2-N3	4.61	1.36	1.30
54	2w	8	4SU	C4-S4	-4.59	1.59	1.68
56	2y	8	4SU	C4-S4	-4.47	1.59	1.68
32	1a	966	M2G	C2-N3	4.29	1.35	1.30
56	2y	46	G7M	C5-C4	4.23	1.47	1.39
56	1y	46	G7M	C5-C4	4.15	1.47	1.39
55	1x	8	4SU	C2-N3	-4.10	1.30	1.38
56	1y	8	4SU	C4-S4	-4.05	1.60	1.68
56	1y	39	PSU	C6-C5	4.01	1.40	1.35
54	1w	8	4SU	C4-S4	-3.96	1.60	1.68
32	2a	527	G7M	C5-C4	3.93	1.46	1.39
55	2x	8	4SU	C4-S4	-3.90	1.61	1.68
54	2w	46	G7M	C5-C4	3.87	1.46	1.39
55	1x	8	4SU	C4-S4	-3.85	1.61	1.68
56	1y	32	PSU	C6-C5	3.79	1.39	1.35
54	2w	32	PSU	C6-C5	3.78	1.39	1.35
56	2y	39	PSU	C6-C5	3.72	1.39	1.35
32	1a	527	G7M	C5-C4	3.64	1.46	1.39
54	1w	46	G7M	C5-C4	3.62	1.46	1.39
56	1y	55	PSU	C6-C5	3.60	1.39	1.35
55	1x	55	PSU	C6-C5	3.60	1.39	1.35
54	2w	39	PSU	C6-C5	3.58	1.39	1.35
1	1A	2605	PSU	C4-N3	-3.56	1.32	1.38
56	2y	32	PSU	C6-C5	3.55	1.39	1.35
54	2w	55	PSU	C6-C5	3.54	1.39	1.35
56	2y	55	PSU	C6-C5	3.50	1.39	1.35
1	2A	1911	PSU	C6-C5	3.47	1.39	1.35
1	1A	1917	PSU	C6-C5	3.46	1.39	1.35
1	1A	1911	PSU	C6-C5	3.45	1.39	1.35
54	1w	8	4SU	C4-N3	-3.37	1.34	1.37
54	1w	39	PSU	C6-C5	3.36	1.39	1.35
55	2x	8	4SU	C2-N3	-3.36	1.32	1.38
55	2x	55	PSU	C6-C5	3.36	1.39	1.35
54	1w	55	PSU	C6-C5	3.35	1.39	1.35
1	2A	2605	PSU	C6-C5	3.34	1.39	1.35
32	2a	516	PSU	C6-C5	3.34	1.39	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	32	PSU	C6-C5	3.32	1.39	1.35
32	1a	516	PSU	C6-C5	3.32	1.39	1.35
1	2A	1917	PSU	C6-C5	3.32	1.39	1.35
54	1w	76	8AN	O4'-C1'	3.31	1.45	1.41
56	1y	8	4SU	C4-N3	-3.31	1.34	1.37
55	1x	8	4SU	C5-C4	-3.15	1.38	1.42
54	1w	39	PSU	C4-N3	-3.08	1.33	1.38
55	2x	76	8AN	C5-C4	-3.06	1.32	1.40
55	2x	8	4SU	C5-C4	-3.02	1.38	1.42
54	2w	76	8AN	O4'-C1'	3.01	1.45	1.41
32	1a	966	M2G	C2-N2	3.00	1.40	1.35
55	1x	54	5MU	C6-C5	2.97	1.39	1.34
56	2y	54	5MU	C6-C5	2.95	1.39	1.34
1	1A	1942	5MC	C6-C5	2.95	1.39	1.34
56	1y	37	MIA	C5-C4	2.95	1.48	1.40
1	2A	1915	5MU	C6-C5	2.94	1.39	1.34
54	2w	8	4SU	C4-N3	-2.93	1.34	1.37
1	2A	1942	5MC	C6-C5	2.93	1.39	1.34
1	1A	2605	PSU	C6-C5	2.92	1.38	1.35
1	1A	1939	5MU	C6-C5	2.88	1.39	1.34
54	2w	54	5MU	C6-C5	2.88	1.39	1.34
55	1x	76	8AN	C6-C5	-2.85	1.32	1.43
55	2x	54	5MU	C6-C5	2.84	1.39	1.34
32	2a	1404	5MC	C6-C5	2.84	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.82	1.33	1.38
56	1y	54	5MU	C4-C5	2.81	1.49	1.44
32	1a	1404	5MC	C6-C5	2.80	1.39	1.34
32	2a	1400	5MC	C6-C5	2.79	1.39	1.34
56	2y	37	MIA	C5-C4	2.79	1.48	1.40
1	2A	1917	PSU	C4-N3	-2.78	1.33	1.38
32	1a	1400	5MC	C6-C5	2.78	1.39	1.34
32	1a	1207	2MG	C6-N1	-2.77	1.33	1.37
54	2w	37	MIA	C5-C4	2.77	1.48	1.40
56	1y	54	5MU	C6-C5	2.77	1.39	1.34
56	2y	37	MIA	C2-N3	2.76	1.36	1.32
56	1y	37	MIA	C2-N3	2.76	1.36	1.32
32	2a	967	5MC	C6-C5	2.75	1.39	1.34
1	2A	1939	5MU	C6-C5	2.74	1.39	1.34
54	2w	76	8AN	C5-C4	-2.74	1.33	1.40
54	1w	76	8AN	C5-C4	-2.73	1.33	1.40
56	2y	8	4SU	C4-N3	-2.73	1.34	1.37
1	1A	1939	5MU	C2-N3	-2.72	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C4-N3	-2.71	1.33	1.38
54	2w	55	PSU	C4-N3	-2.70	1.33	1.38
55	2x	32	5MC	C6-C5	2.69	1.39	1.34
1	2A	1962	5MC	C6-C5	2.67	1.39	1.34
55	2x	55	PSU	C4-N3	-2.67	1.33	1.38
55	1x	32	5MC	C6-C5	2.67	1.39	1.34
54	1w	54	5MU	C6-C5	2.65	1.39	1.34
54	1w	54	5MU	C2-N1	2.65	1.42	1.38
55	1x	32	5MC	C6-N1	-2.64	1.33	1.38
32	2a	1407	5MC	C6-C5	2.63	1.38	1.34
1	1A	1911	PSU	C4-N3	-2.62	1.34	1.38
55	1x	54	5MU	C4-N3	-2.62	1.34	1.38
1	1A	1915	5MU	C6-C5	2.62	1.38	1.34
1	1A	2251	OMG	C6-N1	-2.61	1.34	1.37
56	2y	55	PSU	C4-N3	-2.60	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.59	1.33	1.38
56	1y	54	5MU	C2-N1	2.59	1.42	1.38
54	1w	32	PSU	C4-N3	-2.58	1.34	1.38
32	1a	1407	5MC	C6-C5	2.58	1.38	1.34
56	2y	54	5MU	C4-N3	-2.58	1.34	1.38
1	2A	1911	PSU	C4-N3	-2.57	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.57	1.34	1.38
1	2A	2251	OMG	C6-N1	-2.57	1.34	1.37
56	2y	39	PSU	C4-N3	-2.56	1.34	1.38
54	1w	37	MIA	C5-C4	2.55	1.47	1.40
32	1a	967	5MC	C6-C5	2.55	1.38	1.34
1	1A	1939	5MU	C4-N3	-2.55	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.55	1.33	1.37
54	2w	37	MIA	C2-N3	2.53	1.37	1.34
1	1A	1915	5MU	C2-N1	2.53	1.42	1.38
1	2A	1915	5MU	C2-N1	2.53	1.42	1.38
56	1y	8	4SU	C2-N1	2.52	1.42	1.38
54	2w	76	8AN	C6-C5	-2.52	1.33	1.43
1	1A	1939	5MU	C4-C5	2.51	1.49	1.44
32	1a	516	PSU	C4-N3	-2.51	1.34	1.38
56	2y	54	5MU	C4-C5	2.51	1.49	1.44
56	2y	8	4SU	C5-C4	-2.51	1.39	1.42
54	1w	8	4SU	C2-N3	-2.50	1.33	1.38
32	2a	1498	UR3	C2-N1	2.49	1.42	1.38
54	1w	76	8AN	C6-C5	-2.49	1.34	1.43
56	1y	39	PSU	C4-N3	-2.48	1.34	1.38
32	2a	516	PSU	C4-N3	-2.48	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C4-C5	2.47	1.48	1.44
1	2A	1915	5MU	C4-C5	2.47	1.48	1.44
55	2x	54	5MU	C4-N3	-2.46	1.34	1.38
1	1A	1939	5MU	C6-N1	-2.44	1.33	1.38
1	2A	1915	5MU	C4-N3	-2.43	1.34	1.38
32	2a	966	M2G	C2-N2	2.43	1.39	1.35
55	2x	54	5MU	C4-C5	2.42	1.48	1.44
1	2A	1939	5MU	C6-N1	-2.42	1.33	1.38
1	2A	1939	5MU	C4-C5	2.41	1.48	1.44
54	1w	76	8AN	C2'-C3'	-2.40	1.50	1.53
55	1x	54	5MU	C4-C5	2.40	1.48	1.44
54	2w	39	PSU	C4-N3	-2.38	1.34	1.38
32	2a	527	G7M	C6-N1	-2.38	1.34	1.37
56	2y	54	5MU	C2-N1	2.38	1.42	1.38
32	2a	1404	5MC	C6-N1	-2.37	1.34	1.38
1	1A	1962	5MC	C6-C5	2.36	1.38	1.34
54	1w	55	PSU	C4-N3	-2.35	1.34	1.38
54	2w	54	5MU	C4-N3	-2.34	1.34	1.38
55	2x	32	5MC	C6-N1	-2.34	1.34	1.38
32	1a	966	M2G	C6-N1	-2.34	1.34	1.37
32	1a	1400	5MC	C6-N1	-2.33	1.34	1.38
32	1a	1498	UR3	C2-N1	2.33	1.41	1.38
1	1A	1939	5MU	C2-N1	2.33	1.42	1.38
1	2A	2503	2MA	C2-N3	2.32	1.36	1.31
32	2a	1407	5MC	C6-N1	-2.32	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.31	1.34	1.38
55	2x	76	8AN	C6-C5	-2.30	1.34	1.43
56	1y	55	PSU	C4-N3	-2.29	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.29	1.34	1.38
56	1y	32	PSU	C4-N3	-2.29	1.34	1.38
55	1x	55	PSU	C4-N3	-2.28	1.34	1.38
55	1x	54	5MU	C2-N1	2.28	1.42	1.38
56	2y	46	G7M	C6-N1	-2.27	1.34	1.37
55	2x	8	4SU	O2-C2	2.27	1.27	1.23
56	1y	8	4SU	C5-C4	-2.27	1.39	1.42
32	2a	1207	2MG	C6-N1	-2.26	1.34	1.37
54	2w	8	4SU	C5-C4	-2.24	1.39	1.42
32	2a	1400	5MC	C6-N1	-2.24	1.34	1.38
54	2w	54	5MU	C4-C5	2.24	1.48	1.44
56	1y	54	5MU	C4-N3	-2.23	1.34	1.38
43	1l	92	0TD	CSB-SB	-2.23	1.75	1.79
54	2w	76	8AN	C2'-C3'	-2.23	1.50	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	527	G7M	C6-N1	-2.22	1.34	1.37
55	2x	76	8AN	C5-N7	-2.22	1.31	1.39
1	1A	1962	5MC	C6-N1	-2.22	1.34	1.38
54	1w	46	G7M	C6-N1	-2.20	1.34	1.37
1	1A	2552	OMU	C5-C4	-2.20	1.38	1.43
54	1w	54	5MU	C4-N3	-2.20	1.34	1.38
55	1x	8	4SU	O2-C2	2.20	1.27	1.23
1	1A	2552	OMU	C4-N3	-2.20	1.34	1.38
55	2x	54	5MU	C2-N1	2.19	1.42	1.38
1	1A	1915	5MU	C6-N1	-2.18	1.34	1.38
56	2y	32	PSU	C4-N3	-2.17	1.34	1.38
54	2w	76	8AN	C5-N7	-2.17	1.31	1.39
1	2A	1939	5MU	C2-N1	2.17	1.41	1.38
1	2A	1915	5MU	C6-N1	-2.17	1.34	1.38
54	1w	76	8AN	C5-N7	-2.14	1.32	1.39
55	1x	76	8AN	O4'-C1'	2.13	1.44	1.41
56	1y	54	5MU	C6-N1	-2.13	1.34	1.38
55	1x	76	8AN	C5-C4	-2.12	1.35	1.40
32	2a	966	M2G	C6-N1	-2.12	1.34	1.37
54	2w	32	PSU	C4-N3	-2.11	1.34	1.38
55	2x	54	5MU	C6-N1	-2.10	1.34	1.38
43	1l	92	0TD	CB-CG	2.09	1.55	1.52
56	2y	8	4SU	C2-N1	2.08	1.41	1.38
56	2y	54	5MU	C2-N3	-2.08	1.34	1.38
1	1A	1915	5MU	C2-N3	-2.07	1.34	1.38
54	1w	8	4SU	C5-C4	-2.07	1.39	1.42
1	2A	1939	5MU	C2-N3	-2.06	1.34	1.38
54	1w	39	PSU	C2-N3	-2.05	1.34	1.37
56	1y	8	4SU	C6-C5	2.04	1.39	1.35
1	2A	2552	OMU	C4-N3	-2.04	1.34	1.38
56	1y	46	G7M	C6-N1	-2.04	1.34	1.37
56	1y	8	4SU	C2-N3	-2.03	1.34	1.38
32	1a	967	5MC	C6-N1	-2.03	1.34	1.38
54	1w	8	4SU	C6-C5	2.02	1.39	1.35
1	1A	2503	2MA	C2-N3	2.02	1.35	1.31
32	2a	967	5MC	C6-N1	-2.01	1.34	1.38
1	2A	2552	OMU	C6-C5	2.00	1.39	1.35

All (281) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-17.47	70.83	102.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	CSB-SB-CB	-11.44	81.75	102.44
54	2w	8	4SU	C4-N3-C2	-8.76	118.83	127.34
54	1w	37	MIA	C12-C13-C14	-7.79	111.98	127.14
56	2y	8	4SU	C4-N3-C2	-6.62	120.91	127.34
54	2w	8	4SU	C5-C4-N3	6.50	120.72	114.69
32	1a	1498	UR3	C4-N3-C2	-6.28	118.65	124.56
55	2x	55	PSU	N1-C2-N3	6.19	122.14	115.13
32	2a	1498	UR3	C4-N3-C2	-6.17	118.75	124.56
1	1A	2605	PSU	N1-C2-N3	6.11	122.05	115.13
56	1y	55	PSU	N1-C2-N3	6.09	122.03	115.13
32	2a	516	PSU	N1-C2-N3	6.08	122.02	115.13
1	1A	1911	PSU	N1-C2-N3	6.06	121.99	115.13
55	1x	55	PSU	N1-C2-N3	5.96	121.88	115.13
1	1A	1917	PSU	N1-C2-N3	5.95	121.87	115.13
54	2w	55	PSU	N1-C2-N3	5.90	121.81	115.13
55	1x	76	8AN	N3-C2-N1	-5.84	119.55	128.68
1	2A	1939	5MU	C4-N3-C2	-5.83	119.81	127.35
56	2y	8	4SU	C5-C4-N3	5.77	120.04	114.69
1	2A	1917	PSU	N1-C2-N3	5.74	121.64	115.13
1	2A	1915	5MU	C4-N3-C2	-5.74	119.92	127.35
54	1w	54	5MU	O4-C4-C5	-5.74	118.25	124.90
1	2A	1911	PSU	N1-C2-N3	5.69	121.57	115.13
1	2A	1939	5MU	C5-C4-N3	5.67	120.15	115.31
54	2w	76	8AN	N3-C2-N1	-5.63	119.87	128.68
56	2y	32	PSU	N1-C2-N3	5.62	121.50	115.13
56	2y	55	PSU	N1-C2-N3	5.61	121.49	115.13
54	1w	76	8AN	N3-C2-N1	-5.61	119.91	128.68
54	1w	55	PSU	N1-C2-N3	5.58	121.45	115.13
54	2w	32	PSU	N1-C2-N3	5.57	121.44	115.13
55	2x	76	8AN	N3-C2-N1	-5.53	120.04	128.68
1	2A	2605	PSU	N1-C2-N3	5.51	121.37	115.13
54	1w	32	PSU	N1-C2-N3	5.47	121.32	115.13
55	2x	54	5MU	C4-N3-C2	-5.39	120.38	127.35
55	2x	54	5MU	N3-C2-N1	5.39	122.04	114.89
55	1x	54	5MU	C4-N3-C2	-5.38	120.39	127.35
54	2w	39	PSU	N1-C2-N3	5.36	121.20	115.13
32	1a	516	PSU	N1-C2-N3	5.36	121.20	115.13
56	1y	32	PSU	N1-C2-N3	5.35	121.20	115.13
55	1x	54	5MU	N3-C2-N1	5.35	121.99	114.89
1	1A	1939	5MU	C5-C4-N3	5.31	119.84	115.31
1	1A	1915	5MU	C4-N3-C2	-5.29	120.50	127.35
1	1A	1939	5MU	C4-N3-C2	-5.29	120.50	127.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1915	5MU	N3-C2-N1	5.27	121.89	114.89
54	2w	8	4SU	N3-C2-N1	5.24	121.85	114.89
56	2y	39	PSU	N1-C2-N3	5.24	121.06	115.13
1	2A	2058	MA6	N3-C2-N1	-5.23	120.50	128.68
1	1A	1915	5MU	N3-C2-N1	5.20	121.80	114.89
56	1y	54	5MU	C4-N3-C2	-5.19	120.64	127.35
56	1y	39	PSU	N1-C2-N3	5.14	120.95	115.13
32	1a	1518	MA6	N3-C2-N1	-5.13	120.66	128.68
54	1w	8	4SU	C4-N3-C2	-5.10	122.39	127.34
56	1y	8	4SU	C4-N3-C2	-5.05	122.43	127.34
54	1w	54	5MU	C4-N3-C2	-5.03	120.84	127.35
1	1A	1939	5MU	C5-C6-N1	-5.00	118.19	123.34
32	2a	1518	MA6	N3-C2-N1	-4.98	120.89	128.68
1	2A	1915	5MU	C5-C4-N3	4.94	119.53	115.31
56	1y	54	5MU	N3-C2-N1	4.92	121.42	114.89
1	2A	1939	5MU	N3-C2-N1	4.87	121.36	114.89
32	2a	1519	MA6	N3-C2-N1	-4.86	121.08	128.68
54	1w	39	PSU	N1-C2-N3	4.86	120.63	115.13
32	1a	1519	MA6	N3-C2-N1	-4.85	121.09	128.68
1	2A	1915	5MU	O4-C4-C5	-4.79	119.35	124.90
54	1w	8	4SU	C5-C4-N3	4.77	119.12	114.69
1	1A	2058	MA6	N3-C2-N1	-4.69	121.34	128.68
54	1w	54	5MU	C5-C4-N3	4.69	119.31	115.31
54	1w	54	5MU	N3-C2-N1	4.68	121.10	114.89
1	1A	1915	5MU	C5-C4-N3	4.65	119.28	115.31
56	1y	8	4SU	C5-C4-N3	4.64	119.00	114.69
1	2A	2552	OMU	C4-N3-C2	-4.45	120.70	126.58
55	2x	55	PSU	C4-N3-C2	-4.43	119.95	126.34
1	2A	1939	5MU	O4-C4-C5	-4.41	119.79	124.90
1	2A	1939	5MU	C5-C6-N1	-4.32	118.89	123.34
55	1x	54	5MU	C5-C4-N3	4.31	118.99	115.31
1	1A	1942	5MC	C5-C6-N1	-4.30	118.92	123.34
1	1A	1939	5MU	N3-C2-N1	4.29	120.59	114.89
55	1x	8	4SU	S4-C4-N3	-4.28	115.99	120.21
54	2w	37	MIA	C5-C6-N1	-4.27	117.27	120.81
56	1y	54	5MU	C5-C4-N3	4.24	118.93	115.31
1	1A	1911	PSU	C4-N3-C2	-4.22	120.26	126.34
55	2x	54	5MU	C5-C4-N3	4.20	118.90	115.31
54	1w	37	MIA	C15-C14-C13	-4.18	110.55	122.65
54	2w	54	5MU	N3-C2-N1	4.17	120.42	114.89
54	2w	54	5MU	C4-N3-C2	-4.15	121.98	127.35
55	1x	32	5MC	C5-C6-N1	-4.15	119.07	123.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	2y	54	5MU	C4-N3-C2	-4.14	121.99	127.35
56	2y	54	5MU	N3-C2-N1	4.14	120.38	114.89
1	1A	2552	OMU	C4-N3-C2	-4.13	121.13	126.58
56	2y	54	5MU	C5-C4-N3	4.13	118.83	115.31
1	2A	2605	PSU	C4-N3-C2	-4.12	120.40	126.34
56	2y	8	4SU	C5-C4-S4	-4.10	119.19	124.47
1	2A	2552	OMU	N3-C2-N1	4.09	120.32	114.89
56	2y	8	4SU	N3-C2-N1	4.05	120.26	114.89
54	2w	54	5MU	O4-C4-C5	-4.02	120.24	124.90
55	2x	32	5MC	C5-C6-N1	-4.01	119.21	123.34
55	2x	54	5MU	O4-C4-C5	-4.00	120.27	124.90
54	2w	55	PSU	C4-N3-C2	-3.98	120.60	126.34
1	1A	1917	PSU	C4-N3-C2	-3.98	120.60	126.34
1	2A	1915	5MU	C5-C6-N1	-3.98	119.25	123.34
32	2a	1404	5MC	C5-C6-N1	-3.97	119.25	123.34
54	1w	37	MIA	C2-N3-C4	3.96	120.78	115.32
1	1A	2552	OMU	N3-C2-N1	3.95	120.13	114.89
54	2w	8	4SU	C5-C4-S4	-3.94	119.39	124.47
55	1x	54	5MU	O4-C4-C5	-3.94	120.34	124.90
1	1A	1939	5MU	O4-C4-C5	-3.91	120.36	124.90
32	2a	516	PSU	C4-N3-C2	-3.91	120.71	126.34
55	1x	54	5MU	C5-C6-N1	-3.90	119.33	123.34
32	1a	516	PSU	C4-N3-C2	-3.88	120.75	126.34
32	1a	1400	5MC	C5-C6-N1	-3.87	119.36	123.34
1	1A	1911	PSU	O2-C2-N1	-3.86	118.54	122.79
56	2y	32	PSU	O2-C2-N1	-3.85	118.56	122.79
54	1w	32	PSU	C4-N3-C2	-3.80	120.86	126.34
1	2A	1911	PSU	C4-N3-C2	-3.79	120.87	126.34
1	2A	1917	PSU	C4-N3-C2	-3.78	120.89	126.34
56	1y	55	PSU	O2-C2-N1	-3.77	118.64	122.79
1	1A	2605	PSU	C4-N3-C2	-3.77	120.91	126.34
55	1x	8	4SU	O2-C2-N1	3.74	127.75	122.79
54	1w	55	PSU	C4-N3-C2	-3.72	120.97	126.34
56	1y	55	PSU	C4-N3-C2	-3.72	120.98	126.34
55	1x	8	4SU	C6-C5-C4	-3.72	116.73	119.95
54	1w	55	PSU	O2-C2-N1	-3.71	118.70	122.79
54	2w	32	PSU	C4-N3-C2	-3.71	120.99	126.34
54	2w	54	5MU	C5-C4-N3	3.71	118.48	115.31
1	2A	1942	5MC	C5-C6-N1	-3.70	119.53	123.34
56	1y	8	4SU	N3-C2-N1	3.68	119.78	114.89
32	2a	1400	5MC	C5-C6-N1	-3.68	119.55	123.34
32	1a	967	5MC	C5-C6-N1	-3.66	119.57	123.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1x	55	PSU	C4-N3-C2	-3.66	121.06	126.34
54	1w	37	MIA	C16-C14-C13	-3.65	112.09	122.65
54	1w	8	4SU	N3-C2-N1	3.62	119.70	114.89
56	1y	54	5MU	C5-C6-N1	-3.62	119.61	123.34
54	2w	39	PSU	C4-N3-C2	-3.62	121.12	126.34
32	2a	516	PSU	O2-C2-N1	-3.60	118.83	122.79
54	2w	37	MIA	C2-N3-C4	3.59	120.27	115.32
55	2x	54	5MU	C5-C6-N1	-3.58	119.65	123.34
1	1A	1915	5MU	O4-C4-C5	-3.57	120.77	124.90
56	1y	54	5MU	O4-C4-C5	-3.56	120.78	124.90
56	2y	37	MIA	N3-C2-N1	-3.54	123.14	128.68
56	1y	32	PSU	C4-N3-C2	-3.53	121.25	126.34
1	2A	2605	PSU	O2-C2-N1	-3.50	118.94	122.79
1	1A	2552	OMU	O4-C4-C5	-3.50	119.01	125.16
54	2w	8	4SU	O2-C2-N1	-3.46	118.19	122.79
56	2y	55	PSU	O2-C2-N1	-3.44	119.01	122.79
1	1A	1917	PSU	O2-C2-N1	-3.42	119.02	122.79
32	1a	1404	5MC	C5-C4-N3	-3.41	118.00	121.67
56	2y	32	PSU	C4-N3-C2	-3.40	121.44	126.34
54	1w	37	MIA	C5-C6-N1	-3.39	118.00	120.81
1	2A	2552	OMU	O2-C2-N1	-3.38	118.29	122.79
1	2A	2552	OMU	C5-C4-N3	3.38	119.89	114.84
32	1a	1407	5MC	C5-C6-N1	-3.37	119.87	123.34
55	1x	55	PSU	O2-C2-N1	-3.37	119.08	122.79
56	2y	55	PSU	C4-N3-C2	-3.35	121.51	126.34
32	2a	1407	5MC	C5-C6-N1	-3.35	119.89	123.34
32	2a	1519	MA6	C4-C5-N7	-3.30	105.96	109.40
56	1y	32	PSU	O2-C2-N1	-3.29	119.17	122.79
55	2x	8	4SU	C6-C5-C4	-3.26	117.13	119.95
55	1x	54	5MU	O2-C2-N1	-3.24	118.47	122.79
32	2a	967	5MC	C5-C6-N1	-3.24	120.00	123.34
56	2y	39	PSU	C4-N3-C2	-3.22	121.70	126.34
56	2y	54	5MU	O4-C4-C5	-3.21	121.18	124.90
1	1A	1942	5MC	C5-C4-N3	-3.20	118.22	121.67
56	1y	8	4SU	C1'-N1-C2	3.20	123.36	117.57
1	1A	1915	5MU	C5-C6-N1	-3.20	120.05	123.34
1	2A	1962	5MC	C5-C6-N1	-3.18	120.06	123.34
56	1y	37	MIA	N3-C2-N1	-3.15	123.75	128.68
32	1a	1404	5MC	C5-C6-N1	-3.14	120.10	123.34
54	2w	54	5MU	C5-C6-N1	-3.10	120.15	123.34
1	1A	2552	OMU	O2-C2-N1	-3.09	118.68	122.79
1	1A	2552	OMU	C5-C4-N3	3.08	119.44	114.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	2y	54	5MU	C5-C6-N1	-3.08	120.17	123.34
54	2w	55	PSU	O2-C2-N1	-3.07	119.41	122.79
32	2a	1407	5MC	C5-C4-N3	-3.05	118.39	121.67
32	1a	1519	MA6	C4-C5-N7	-3.02	106.25	109.40
55	2x	54	5MU	O2-C2-N1	-3.02	118.77	122.79
1	2A	1911	PSU	O2-C2-N1	-3.01	119.48	122.79
54	1w	32	PSU	O2-C2-N1	-3.01	119.48	122.79
1	2A	1917	PSU	O2-C2-N1	-3.00	119.49	122.79
32	1a	1402	4OC	C6-C5-C4	3.00	120.63	116.96
54	2w	32	PSU	O2-C2-N1	-2.99	119.50	122.79
55	2x	8	4SU	O2-C2-N1	2.97	126.73	122.79
54	1w	54	5MU	C5-C6-N1	-2.95	120.30	123.34
1	2A	2552	OMU	O4-C4-C5	-2.95	119.98	125.16
56	1y	39	PSU	C4-N3-C2	-2.92	122.13	126.34
56	2y	55	PSU	C6-C5-C4	-2.82	116.22	118.20
55	2x	55	PSU	O2-C2-N1	-2.82	119.69	122.79
55	2x	8	4SU	C5-C4-N3	2.82	117.31	114.69
55	1x	32	5MC	C5-C4-N3	-2.81	118.64	121.67
54	2w	39	PSU	O2-C2-N1	-2.78	119.73	122.79
54	1w	37	MIA	C12-N6-C6	-2.77	118.44	122.55
54	1w	37	MIA	C11-S10-C2	-2.76	100.20	102.27
1	1A	2605	PSU	O2-C2-N3	-2.75	116.62	121.82
1	1A	1962	5MC	C5-C4-N3	-2.75	118.71	121.67
1	1A	1962	5MC	C5-C6-N1	-2.74	120.52	123.34
55	2x	32	5MC	C5-C4-N3	-2.72	118.74	121.67
55	2x	76	8AN	O4'-C1'-C2'	-2.71	102.96	106.93
32	2a	1518	MA6	C4-C5-N7	-2.71	106.57	109.40
55	2x	8	4SU	S4-C4-N3	-2.71	117.54	120.21
55	1x	76	8AN	C4-C5-N7	-2.67	106.61	109.40
54	1w	37	MIA	C2-N1-C6	2.67	121.97	117.19
1	2A	1962	5MC	C5-C4-N3	-2.67	118.80	121.67
1	1A	2058	MA6	C4-C5-N7	-2.66	106.63	109.40
54	1w	39	PSU	C4-N3-C2	-2.65	122.52	126.34
55	1x	8	4SU	C5-C4-N3	2.64	117.14	114.69
1	1A	2503	2MA	C8-N7-C5	2.61	107.97	102.99
1	2A	1915	5MU	O2-C2-N1	-2.60	119.33	122.79
54	2w	37	MIA	C1'-N9-C4	2.59	131.20	126.64
32	2a	1400	5MC	O2-C2-N3	-2.59	118.12	122.33
55	2x	8	4SU	C1'-N1-C2	2.58	122.24	117.57
32	1a	1400	5MC	C5-C4-N3	-2.57	118.90	121.67
1	2A	2251	OMG	C5-C6-N1	2.57	118.49	113.95
1	2A	2503	2MA	C5-C6-N1	2.56	118.44	114.02

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1402	4OC	C6-C5-C4	2.55	120.08	116.96
54	1w	37	MIA	C4-C5-N7	-2.53	106.76	109.40
32	1a	1407	5MC	O2-C2-N3	-2.53	118.22	122.33
32	1a	1207	2MG	C8-N7-C5	2.52	107.79	102.99
1	1A	1962	5MC	CM5-C5-C6	-2.51	119.49	122.85
32	2a	1400	5MC	C5-C4-N3	-2.48	119.00	121.67
32	2a	966	M2G	C8-N7-C5	2.47	107.70	102.99
54	2w	37	MIA	N6-C6-N1	2.46	121.57	118.50
54	2w	37	MIA	C2-N1-C6	2.45	121.58	117.19
1	1A	1915	5MU	C5M-C5-C4	2.45	121.46	118.77
56	2y	37	MIA	C4-C5-N7	-2.45	106.85	109.40
1	1A	2605	PSU	C5-C6-N1	-2.45	118.44	122.11
1	2A	2503	2MA	C8-N7-C5	2.45	107.65	102.99
43	1l	92	0TD	OD2-CG-CB	2.44	118.43	113.15
1	1A	1942	5MC	CM5-C5-C6	-2.44	119.58	122.85
56	1y	8	4SU	C5-C4-S4	-2.44	121.32	124.47
32	1a	1207	2MG	C5-C6-N1	2.44	118.26	113.95
32	1a	966	M2G	C8-N7-C5	2.44	107.63	102.99
1	2A	1939	5MU	O2-C2-N1	-2.43	119.55	122.79
1	1A	2251	OMG	C5-C6-N1	2.43	118.24	113.95
32	1a	1518	MA6	C4-C5-N7	-2.42	106.88	109.40
54	2w	54	5MU	O2-C2-N1	-2.42	119.57	122.79
56	1y	32	PSU	C6-C5-C4	-2.42	116.51	118.20
55	1x	8	4SU	C4-N3-C2	2.42	129.69	127.34
32	1a	966	M2G	C5-C6-N1	2.39	118.17	113.95
32	2a	1404	5MC	C5-C4-N3	-2.38	119.10	121.67
32	1a	1407	5MC	C5-C4-N3	-2.34	119.15	121.67
43	2l	92	0TD	OD2-CG-CB	2.32	118.16	113.15
56	2y	8	4SU	O2-C2-N1	-2.31	119.71	122.79
55	1x	76	8AN	O4'-C1'-C2'	-2.31	103.55	106.93
54	2w	37	MIA	C12-N6-C6	-2.30	120.89	122.87
1	2A	1942	5MC	C5-C4-N3	-2.27	119.22	121.67
1	1A	2251	OMG	C8-N7-C5	2.26	107.29	102.99
32	1a	516	PSU	O2-C2-N1	-2.26	120.31	122.79
32	2a	1207	2MG	C8-N7-C5	2.26	107.29	102.99
1	2A	1962	5MC	CM5-C5-C6	-2.25	119.84	122.85
55	2x	55	PSU	C5-C6-N1	-2.25	118.73	122.11
1	1A	2503	2MA	C5-C6-N1	2.25	117.89	114.02
54	1w	54	5MU	O2-C2-N1	-2.24	119.80	122.79
32	1a	1404	5MC	O2-C2-N3	-2.24	118.68	122.33
1	2A	1920	OMC	O2-C2-N3	-2.24	118.68	122.33
1	2A	2058	MA6	C4-C5-N7	-2.24	107.06	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2251	OMG	C8-N7-C5	2.24	107.25	102.99
55	1x	32	5MC	O2-C2-N3	-2.23	118.71	122.33
32	2a	967	5MC	C5-C4-N3	-2.19	119.31	121.67
32	2a	1404	5MC	O2-C2-N3	-2.15	118.83	122.33
32	1a	1498	UR3	C1'-N1-C2	2.15	120.62	116.99
32	2a	1402	4OC	CM4-N4-C4	-2.14	118.27	122.45
1	2A	2058	MA6	C9-N6-C6	2.12	125.94	119.51
56	1y	54	5MU	O2-C2-N1	-2.12	119.97	122.79
1	2A	2251	OMG	O6-C6-C5	-2.11	120.25	124.37
56	2y	54	5MU	C5M-C5-C4	2.11	121.08	118.77
32	1a	1404	5MC	CM5-C5-C6	-2.09	120.05	122.85
32	2a	1402	4OC	O2-C2-N3	-2.09	118.94	122.33
32	1a	1498	UR3	C3U-N3-C4	2.08	120.87	117.89
54	2w	37	MIA	C4-C5-N7	-2.08	107.23	109.40
54	1w	37	MIA	N3-C2-N1	-2.07	123.17	126.98
1	1A	1915	5MU	O2-C2-N3	-2.06	117.66	121.50
54	1w	39	PSU	O2-C2-N3	-2.06	117.93	121.82
55	1x	8	4SU	O2-C2-N3	-2.05	117.68	121.50
32	2a	1498	UR3	C1'-N1-C2	2.05	120.44	116.99
32	2a	516	PSU	O4'-C1'-C2'	2.05	108.03	105.14
32	1a	516	PSU	O4'-C1'-C2'	2.04	108.03	105.14
54	1w	8	4SU	O2-C2-N1	-2.03	120.08	122.79
1	2A	2605	PSU	O4-C4-C5	-2.02	118.77	124.05
1	1A	1911	PSU	C5-C6-N1	-2.02	119.08	122.11
56	1y	37	MIA	C4-C5-N7	-2.02	107.30	109.40
1	1A	1915	5MU	C5M-C5-C6	-2.01	120.16	122.85
1	1A	1939	5MU	C5M-C5-C4	2.01	120.98	118.77
56	1y	55	PSU	O4'-C1'-C2'	2.01	107.98	105.14

There are no chirality outliers.

All (47) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	8AN	C3'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
56	1y	46	G7M	C4'-C5'-O5'-P

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2w	37	MIA	N1-C6-N6-C12
54	2w	37	MIA	N1-C2-S10-C11
54	2w	37	MIA	N3-C2-S10-C11
55	2x	76	8AN	O4'-C4'-C5'-O5'
55	2x	76	8AN	C3'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
55	1x	76	8AN	O4'-C4'-C5'-O5'
54	2w	46	G7M	C4'-C5'-O5'-P
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
56	2y	46	G7M	O4'-C4'-C5'-O5'
54	2w	37	MIA	C5-C6-N6-C12
55	2x	76	8AN	C4'-C5'-O5'-P
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
56	2y	55	PSU	C3'-C4'-C5'-O5'
55	1x	76	8AN	C4'-C5'-O5'-P
32	1a	527	G7M	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	527	G7M	C4'-C5'-O5'-P
56	2y	46	G7M	C3'-C4'-C5'-O5'
56	1y	55	PSU	O4'-C1'-C5-C4
56	2y	55	PSU	O4'-C1'-C5-C4
32	2a	1519	MA6	C4'-C5'-O5'-P
1	1A	1920	OMC	C2'-C1'-N1-C2
1	1A	2503	2MA	C4'-C5'-O5'-P
56	1y	55	PSU	O4'-C1'-C5-C6
43	2l	92	0TD	CG-CB-SB-CSB
56	1y	8	4SU	C2'-C1'-N1-C2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
56	2y	8	4SU	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'
56	1y	8	4SU	C2'-C1'-N1-C6

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2755 ligands modelled in this entry, 2747 are monoatomic - leaving 8 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	$\#\|Z\| > 2$
62	PHE	1w	109	54	10,11,12	1.52	1 (10%)	10,13,15	1.04	1 (10%)
59	A1AE1	2A	3855	57	82,82,82	2.13	13 (15%)	114,122,122	1.87	30 (26%)
61	SF4	1d	302	35	0,12,12	-	-	-		
63	FME	1x	115	55	8,9,10	0.46	0	7,9,11	1.70	2 (28%)
62	PHE	2w	108	54	10,11,12	1.59	1 (10%)	10,13,15	0.89	1 (10%)
63	FME	2x	108	55	8,9,10	0.40	0	7,9,11	1.38	2 (28%)
59	A1AE1	1A	4094	57	82,82,82	2.22	12 (14%)	114,122,122	1.88	32 (28%)
61	SF4	2d	303	35	0,12,12	-	-	-		

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
62	PHE	1w	109	54	-	1/5/6/8	0/1/1/1
59	A1AE1	2A	3855	57	-	14/89/132/132	0/7/7/7
63	FME	1x	115	55	-	1/7/9/11	-
61	SF4	1d	302	35	-	-	0/6/5/5
62	PHE	2w	108	54	-	3/5/6/8	0/1/1/1
63	FME	2x	108	55	-	0/7/9/11	-
59	A1AE1	1A	4094	57	-	13/89/132/132	0/7/7/7
61	SF4	2d	303	35	-	-	0/6/5/5

All (27) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	1A	4094	A1AE1	CAG-CAF	-11.85	1.41	1.53
59	2A	3855	A1AE1	CAG-CAF	-10.85	1.42	1.53
59	2A	3855	A1AE1	CAB-CAF	-6.70	1.40	1.52
59	1A	4094	A1AE1	CAB-CAF	-6.47	1.40	1.52
59	1A	4094	A1AE1	OBR-NBJ	5.85	1.54	1.40
59	2A	3855	A1AE1	CAJ-CAI	-5.57	1.39	1.51
59	1A	4094	A1AE1	CAJ-CAI	-4.99	1.40	1.51
62	2w	108	PHE	CB-CG	-4.84	1.39	1.51
59	1A	4094	A1AE1	CCC-NCH	-4.76	1.34	1.40
62	1w	109	PHE	CB-CG	-4.57	1.40	1.51
59	2A	3855	A1AE1	CCF-CCN	-4.52	1.41	1.48
59	2A	3855	A1AE1	CCG-NCH	4.51	1.41	1.34
59	1A	4094	A1AE1	CCB-CCE	-4.49	1.39	1.48
59	2A	3855	A1AE1	CCB-CCE	-4.23	1.40	1.48
59	1A	4094	A1AE1	CCF-CCN	-4.22	1.41	1.48
59	1A	4094	A1AE1	CCG-NCH	4.19	1.41	1.34
59	2A	3855	A1AE1	CCC-NCH	-4.16	1.35	1.40
59	2A	3855	A1AE1	OBR-NBJ	3.97	1.50	1.40
59	1A	4094	A1AE1	CAF-NBJ	3.62	1.34	1.27
59	2A	3855	A1AE1	CAF-NBJ	3.57	1.33	1.27
59	1A	4094	A1AE1	CAG-CAH	2.87	1.58	1.54
59	2A	3855	A1AE1	CAG-CAH	2.85	1.58	1.54
59	2A	3855	A1AE1	CBY-NBX	-2.79	1.35	1.41
59	2A	3855	A1AE1	OBH-CAL	-2.51	1.43	1.47
59	1A	4094	A1AE1	CBY-NBX	-2.47	1.35	1.41
59	1A	4094	A1AE1	CAA-CAE	2.21	1.55	1.52
59	2A	3855	A1AE1	OBH-CBP	2.17	1.37	1.34

All (68) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	1A	4094	A1AE1	OBB-CBT-NBV	6.25	122.08	111.11
59	2A	3855	A1AE1	OBB-CBT-NBV	5.83	121.34	111.11
59	1A	4094	A1AE1	CAK-OBB-CBT	-5.80	108.58	117.11
59	2A	3855	A1AE1	CAK-OBB-CBT	-5.70	108.73	117.11
59	1A	4094	A1AE1	OBU-CBT-NBV	-4.62	117.88	124.96
59	2A	3855	A1AE1	CCA-CBZ-CBY	-4.59	119.54	123.34
59	2A	3855	A1AE1	CCX-NBX-CCT	4.40	121.24	111.52
59	2A	3855	A1AE1	CAB-CAF-CAG	4.24	124.24	119.43
59	1A	4094	A1AE1	OBH-CAL-CBG	4.23	114.37	106.93
59	1A	4094	A1AE1	CBE-CAM-CAL	-4.20	109.43	115.23
59	2A	3855	A1AE1	OBU-CBT-NBV	-4.20	118.52	124.96
59	1A	4094	A1AE1	CCK-CCI-NCH	-3.82	113.10	118.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	1A	4094	A1AE1	CCA-CBZ-CBY	-3.72	120.27	123.34
59	2A	3855	A1AE1	CBE-CAM-CAL	-3.71	110.12	115.23
59	1A	4094	A1AE1	FCL-CBZ-CBY	3.70	121.79	118.42
59	1A	4094	A1AE1	CAB-CAF-CAG	3.65	123.57	119.43
59	2A	3855	A1AE1	CCF-CCG-NCH	-3.57	120.49	124.49
59	2A	3855	A1AE1	CCB-CCE-CCF	3.49	120.02	115.59
59	1A	4094	A1AE1	CCX-NBX-CCT	3.40	119.02	111.52
63	1x	115	FME	CA-N-CN	-3.37	117.63	122.82
59	2A	3855	A1AE1	OBH-CAL-CBG	3.32	112.77	106.93
59	2A	3855	A1AE1	CAE-CAD-CAC	-3.14	108.81	113.61
59	2A	3855	A1AE1	CAM-OAN-CAI	-3.08	112.70	118.18
59	1A	4094	A1AE1	CCG-CCF-CCE	-3.08	117.59	119.88
59	1A	4094	A1AE1	CCB-CCE-CCF	3.07	119.49	115.59
59	2A	3855	A1AE1	CAL-OBH-CBP	-3.02	103.34	109.55
59	1A	4094	A1AE1	OBB-CBT-OBU	-2.98	120.04	124.53
59	1A	4094	A1AE1	CAL-OBH-CBP	-2.98	103.41	109.55
59	1A	4094	A1AE1	CCD-CBY-NBX	-2.97	118.13	122.52
59	1A	4094	A1AE1	OBL-CAE-CAA	2.92	112.13	105.71
59	2A	3855	A1AE1	OBB-CBT-OBU	-2.92	120.13	124.53
62	1w	109	PHE	CB-CA-C	-2.91	106.01	111.47
59	1A	4094	A1AE1	CBO-OBL-CAE	-2.85	111.59	117.55
59	2A	3855	A1AE1	CAX-CAR-CAS	-2.85	108.93	113.40
59	2A	3855	A1AE1	CCD-CBY-CBZ	2.79	119.20	116.48
59	2A	3855	A1AE1	OAN-CAM-CBE	2.77	112.68	107.40
59	1A	4094	A1AE1	CCF-CCG-NCH	-2.70	121.46	124.49
59	2A	3855	A1AE1	OBL-CAE-CAA	2.65	111.54	105.71
59	1A	4094	A1AE1	OAO-CAD-CAE	2.60	112.63	106.40
59	2A	3855	A1AE1	FCL-CBZ-CBY	2.60	120.78	118.42
59	1A	4094	A1AE1	OCO-CCN-OCP	-2.56	117.74	123.61
63	1x	115	FME	O1-CN-N	-2.56	118.52	125.27
59	2A	3855	A1AE1	CBI-CAG-CAH	2.52	116.38	112.90
59	1A	4094	A1AE1	CBI-CAG-CAH	2.49	116.34	112.90
59	1A	4094	A1AE1	OCM-CCE-CCB	-2.49	117.53	121.56
59	2A	3855	A1AE1	CBO-OBL-CAE	-2.48	112.38	117.55
59	1A	4094	A1AE1	CCN-CCF-CCE	2.46	125.31	121.56
59	1A	4094	A1AE1	CCD-CBY-CBZ	2.45	118.86	116.48
59	2A	3855	A1AE1	CCD-CBY-NBX	-2.44	118.91	122.52
59	1A	4094	A1AE1	CAX-CAR-CAS	-2.35	109.70	113.40
59	1A	4094	A1AE1	CAE-CAD-CAC	-2.34	110.03	113.61
59	2A	3855	A1AE1	CCG-CCF-CCE	-2.33	118.16	119.88
59	2A	3855	A1AE1	CAH-OBN-CBP	-2.32	105.72	109.66
59	2A	3855	A1AE1	OAN-CAI-CAJ	2.29	116.58	111.56

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	1A	4094	A1AE1	CBG-CAL-CAM	-2.29	108.29	112.36
59	1A	4094	A1AE1	CAA-CAB-CAF	-2.28	110.17	113.13
59	2A	3855	A1AE1	CBC-CAJ-CAK	-2.27	107.77	112.92
62	2w	108	PHE	CB-CA-C	-2.25	107.25	111.47
59	2A	3855	A1AE1	CAA-CAB-CAF	-2.24	110.23	113.13
63	2x	108	FME	CA-N-CN	-2.23	119.40	122.82
59	2A	3855	A1AE1	OCO-CCN-OCP	-2.21	118.56	123.61
59	1A	4094	A1AE1	CBZ-CBY-NBX	2.14	123.01	120.47
63	2x	108	FME	O1-CN-N	-2.12	119.67	125.27
59	2A	3855	A1AE1	CCK-CCI-NCH	-2.09	115.71	118.84
59	1A	4094	A1AE1	CAH-OBN-CBP	-2.07	106.15	109.66
59	2A	3855	A1AE1	OBH-CAL-CAM	2.06	110.20	105.63
59	1A	4094	A1AE1	CCT-NBX-CBY	2.06	121.16	116.27
59	1A	4094	A1AE1	OBH-CAL-CAM	2.04	110.15	105.63

There are no chirality outliers.

All (32) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
62	1w	109	PHE	O-C-CA-CB
62	2w	108	PHE	O-C-CA-CB
59	1A	4094	A1AE1	CBZ-CBY-NBX-CCX
59	2A	3855	A1AE1	CBZ-CBY-NBX-CCX
59	1A	4094	A1AE1	OBB-CBT-NBV-CBW
59	2A	3855	A1AE1	OBB-CBT-NBV-CBW
59	1A	4094	A1AE1	CCJ-CCI-NCH-CCG
59	2A	3855	A1AE1	CCJ-CCI-NCH-CCG
63	1x	115	FME	CB-CG-SD-CE
59	1A	4094	A1AE1	OBU-CBT-NBV-CBW
59	2A	3855	A1AE1	OBU-CBT-NBV-CBW
59	2A	3855	A1AE1	CBW-CCQ-CCR-CCS
59	1A	4094	A1AE1	CCJ-CCI-NCH-CCC
59	2A	3855	A1AE1	CCJ-CCI-NCH-CCC
59	1A	4094	A1AE1	CBW-CCQ-CCR-CCS
59	1A	4094	A1AE1	CCD-CBY-NBX-CCX
59	2A	3855	A1AE1	CCK-CCI-NCH-CCG
59	2A	3855	A1AE1	CCD-CBY-NBX-CCX
59	1A	4094	A1AE1	CCK-CCI-NCH-CCG
59	1A	4094	A1AE1	CBK-CAB-CAF-NBJ
59	2A	3855	A1AE1	CBK-CAB-CAF-NBJ
59	1A	4094	A1AE1	NBV-CBW-CCQ-CCR
62	2w	108	PHE	N-CA-CB-CG

Continued on next page...

Continued from previous page...

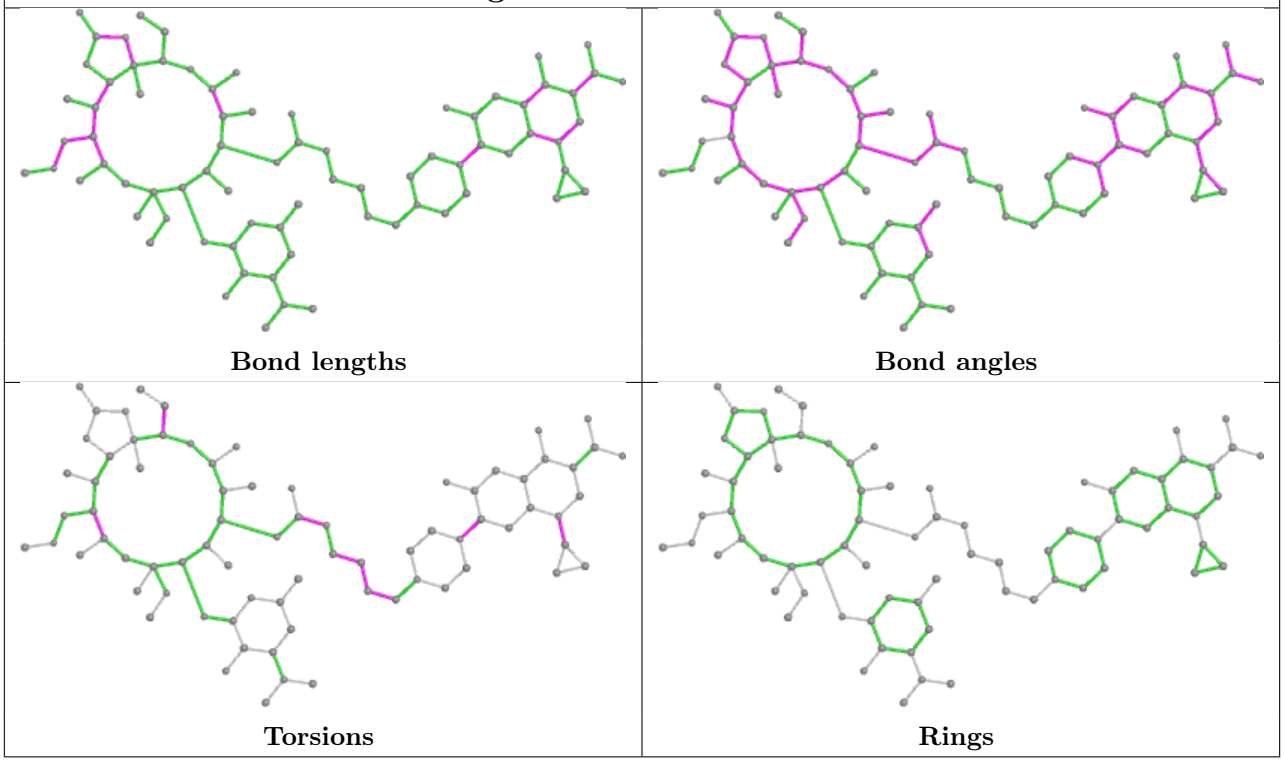
Mol	Chain	Res	Type	Atoms
59	2A	3855	A1AE1	NBV-CBW-CCQ-CCR
59	2A	3855	A1AE1	OAN-CAM-CBE-CBF
59	1A	4094	A1AE1	CAU-CAP-OAO-CAD
59	1A	4094	A1AE1	OAQ-CAP-OAO-CAD
59	2A	3855	A1AE1	CCK-CCI-NCH-CCC
62	2w	108	PHE	C-CA-CB-CG
59	2A	3855	A1AE1	CAL-CAM-CBE-CBF
59	1A	4094	A1AE1	CCK-CCI-NCH-CCC
59	2A	3855	A1AE1	CCQ-CCR-CCS-NCV

There are no ring outliers.

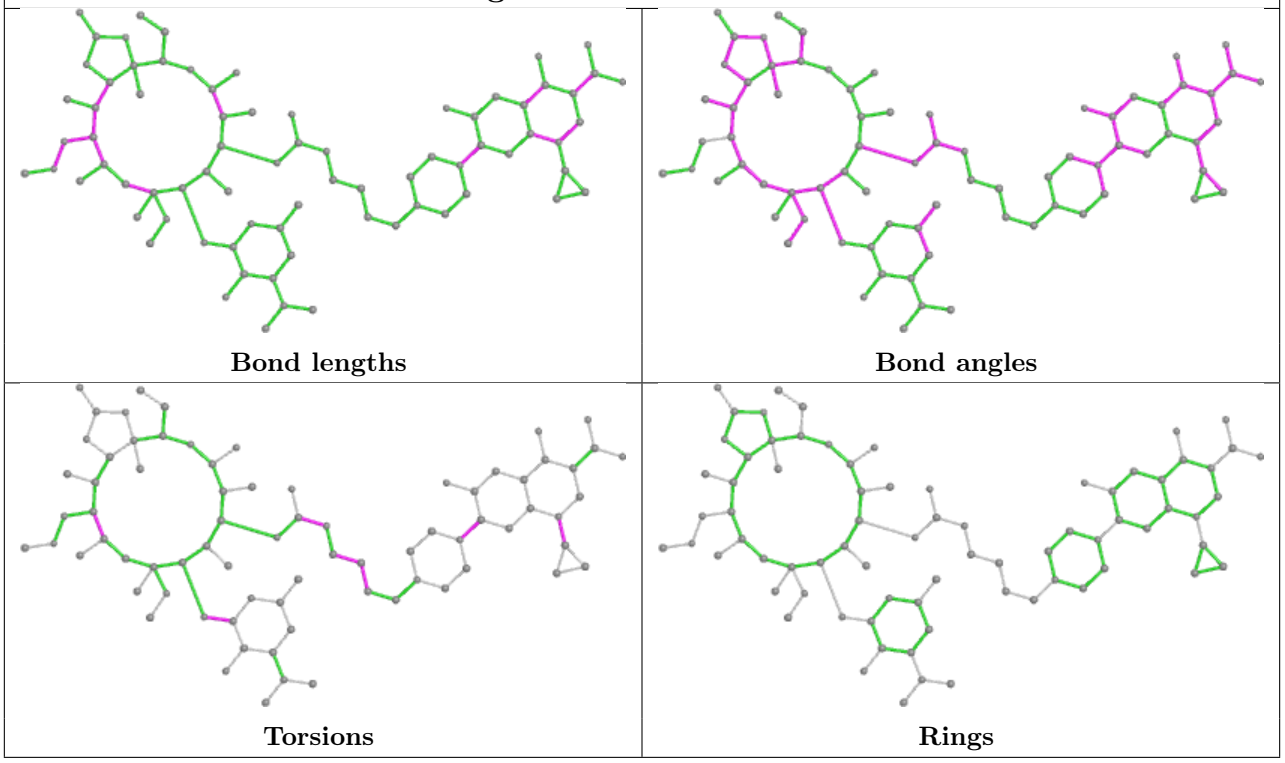
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand A1AE1 2A 3855



Ligand A1AE1 1A 4094



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} 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	1A	2859/2915 (98%)	0.55	188 (6%) 18 17	20, 37, 89, 98	0
1	2A	2788/2915 (95%)	0.48	160 (5%) 23 22	33, 55, 87, 97	0
2	1B	120/121 (99%)	-0.02	0 100 100	34, 50, 65, 81	0
2	2B	120/121 (99%)	0.02	1 (0%) 86 84	58, 69, 77, 84	0
3	1D	275/276 (99%)	0.56	0 100 100	24, 38, 52, 72	0
3	2D	275/276 (99%)	0.74	2 (0%) 87 86	30, 48, 59, 81	0
4	1E	204/206 (99%)	0.51	0 100 100	21, 40, 58, 72	0
4	2E	204/206 (99%)	0.38	2 (0%) 82 80	36, 57, 68, 75	0
5	1F	203/210 (96%)	0.40	6 (2%) 50 49	20, 43, 66, 77	0
5	2F	203/210 (96%)	0.44	3 (1%) 73 72	33, 62, 75, 79	0
6	1G	181/182 (99%)	0.18	4 (2%) 62 60	42, 56, 69, 78	0
6	2G	181/182 (99%)	0.58	13 (7%) 15 14	58, 71, 79, 84	0
7	1H	174/180 (96%)	0.12	2 (1%) 80 79	40, 52, 64, 72	0
7	2H	174/180 (96%)	2.29	86 (49%) 0 0	65, 77, 83, 88	0
8	1I	146/148 (98%)	0.35	4 (2%) 54 52	46, 67, 76, 80	0
8	2I	146/148 (98%)	0.34	4 (2%) 54 52	50, 68, 76, 80	0
9	1N	140/140 (100%)	0.36	0 100 100	26, 39, 60, 69	0
9	2N	140/140 (100%)	0.38	3 (2%) 63 61	46, 61, 73, 82	0
10	1O	122/122 (100%)	0.43	0 100 100	29, 40, 58, 62	0
10	2O	122/122 (100%)	0.39	0 100 100	47, 57, 67, 72	0
11	1P	149/150 (99%)	0.35	1 (0%) 87 86	22, 49, 67, 71	0
11	2P	149/150 (99%)	0.78	15 (10%) 7 6	37, 63, 77, 80	0
12	1Q	141/141 (100%)	0.45	1 (0%) 87 86	25, 41, 56, 69	0
12	2Q	141/141 (100%)	0.63	8 (5%) 23 22	44, 62, 71, 77	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.23	0 100 100	26, 35, 48, 56	0
13	2R	118/118 (100%)	0.30	0 100 100	41, 52, 62, 68	0
14	1S	110/112 (98%)	0.29	0 100 100	39, 50, 61, 65	0
14	2S	110/112 (98%)	0.67	8 (7%) 15 13	58, 65, 73, 78	0
15	1T	131/146 (89%)	0.23	1 (0%) 86 84	33, 45, 66, 74	0
15	2T	131/146 (89%)	0.57	7 (5%) 26 25	50, 60, 71, 77	0
16	1U	116/118 (98%)	0.42	0 100 100	23, 31, 47, 62	0
16	2U	116/118 (98%)	0.44	1 (0%) 84 82	43, 58, 69, 74	0
17	1V	101/101 (100%)	0.18	0 100 100	25, 39, 55, 65	0
17	2V	101/101 (100%)	0.28	2 (1%) 65 63	42, 66, 73, 80	0
18	1W	112/113 (99%)	0.36	1 (0%) 84 82	26, 33, 50, 77	0
18	2W	112/113 (99%)	0.40	0 100 100	41, 49, 62, 82	0
19	1X	95/96 (98%)	0.36	2 (2%) 63 61	30, 41, 63, 77	0
19	2X	95/96 (98%)	0.39	3 (3%) 47 46	45, 57, 71, 78	0
20	1Y	107/110 (97%)	0.18	1 (0%) 84 82	39, 51, 63, 73	0
20	2Y	107/110 (97%)	0.68	8 (7%) 14 13	54, 66, 76, 80	0
21	1Z	154/206 (74%)	0.69	19 (12%) 4 3	41, 62, 78, 82	0
21	2Z	160/206 (77%)	1.61	46 (28%) 0 0	63, 75, 82, 88	0
22	10	83/85 (97%)	0.44	0 100 100	28, 37, 51, 64	0
22	20	83/85 (97%)	0.49	1 (1%) 79 77	38, 58, 66, 75	0
23	11	97/98 (98%)	0.34	1 (1%) 82 80	30, 50, 69, 75	0
23	21	97/98 (98%)	0.37	3 (3%) 49 47	40, 54, 69, 75	0
24	12	70/72 (97%)	0.32	0 100 100	35, 49, 59, 68	0
24	22	70/72 (97%)	0.46	4 (5%) 23 22	58, 66, 74, 75	0
25	13	59/60 (98%)	0.30	0 100 100	25, 36, 60, 72	0
25	23	59/60 (98%)	0.31	0 100 100	51, 61, 71, 77	0
26	14	69/71 (97%)	0.89	15 (21%) 0 0	49, 71, 81, 85	0
26	24	69/71 (97%)	1.73	25 (36%) 0 0	70, 77, 84, 87	0
27	15	59/60 (98%)	0.43	1 (1%) 70 68	22, 34, 53, 58	0
27	25	59/60 (98%)	0.50	3 (5%) 28 26	38, 49, 64, 75	0
28	16	53/54 (98%)	0.27	0 100 100	33, 44, 56, 61	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.30	1 (1%) 66 64	47, 57, 63, 66	0
29	17	48/49 (97%)	0.53	1 (2%) 63 61	21, 29, 55, 62	0
29	27	48/49 (97%)	0.82	4 (8%) 11 10	32, 41, 61, 69	0
30	18	64/65 (98%)	0.33	0 100 100	28, 36, 43, 57	0
30	28	64/65 (98%)	0.30	0 100 100	44, 51, 58, 63	0
31	19	37/37 (100%)	0.39	0 100 100	31, 39, 51, 58	0
31	29	37/37 (100%)	0.99	5 (13%) 3 2	58, 64, 72, 77	0
32	1a	1488/1521 (97%)	0.42	95 (6%) 19 18	36, 62, 85, 97	0
32	2a	1491/1521 (98%)	0.54	122 (8%) 11 10	45, 69, 86, 97	0
33	1b	231/256 (90%)	1.12	53 (22%) 0 0	60, 73, 80, 84	0
33	2b	231/256 (90%)	1.57	70 (30%) 0 0	64, 76, 81, 86	0
34	1c	206/239 (86%)	0.54	14 (6%) 17 15	56, 67, 77, 81	0
34	2c	206/239 (86%)	1.17	41 (19%) 1 0	65, 74, 81, 86	0
35	1d	208/209 (99%)	0.38	4 (1%) 66 64	53, 65, 72, 80	0
35	2d	208/209 (99%)	0.37	7 (3%) 45 44	55, 65, 73, 79	0
36	1e	148/162 (91%)	0.33	2 (1%) 75 73	48, 61, 69, 73	0
36	2e	148/162 (91%)	0.64	9 (6%) 21 20	59, 68, 74, 80	0
37	1f	100/101 (99%)	0.19	0 100 100	54, 64, 70, 73	0
37	2f	100/101 (99%)	0.28	1 (1%) 82 80	55, 63, 71, 75	0
38	1g	155/156 (99%)	0.78	13 (8%) 11 10	57, 66, 78, 81	0
38	2g	155/156 (99%)	1.06	30 (19%) 1 0	65, 72, 78, 82	0
39	1h	137/138 (99%)	0.34	3 (2%) 62 60	51, 63, 70, 73	0
39	2h	137/138 (99%)	0.82	20 (14%) 2 2	60, 69, 75, 78	0
40	1i	127/128 (99%)	1.52	34 (26%) 0 0	51, 71, 77, 80	0
40	2i	127/128 (99%)	2.53	75 (59%) 0 0	62, 75, 81, 83	0
41	1j	97/105 (92%)	1.38	28 (28%) 0 0	53, 71, 81, 85	0
41	2j	96/105 (91%)	2.38	53 (55%) 0 0	66, 77, 83, 85	0
42	1k	114/129 (88%)	0.52	3 (2%) 56 54	42, 63, 71, 78	0
42	2k	114/129 (88%)	0.36	3 (2%) 56 54	54, 67, 74, 76	0
43	1l	121/132 (91%)	0.41	0 100 100	42, 50, 61, 69	0
43	2l	121/132 (91%)	0.36	1 (0%) 86 84	53, 60, 68, 72	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	0.52	4 (3%) 46 45	50, 65, 72, 84	0
44	2m	122/126 (96%)	1.04	23 (18%) 1 1	65, 74, 78, 82	0
45	1n	60/61 (98%)	0.89	6 (10%) 7 6	55, 62, 68, 71	0
45	2n	60/61 (98%)	3.04	40 (66%) 0 0	68, 75, 79, 83	0
46	1o	88/89 (98%)	0.33	1 (1%) 80 79	45, 62, 70, 74	0
46	2o	88/89 (98%)	0.45	3 (3%) 45 44	56, 66, 75, 80	0
47	1p	82/88 (93%)	0.82	10 (12%) 4 3	54, 66, 71, 79	0
47	2p	82/88 (93%)	0.91	10 (12%) 4 3	56, 65, 72, 75	0
48	1q	99/105 (94%)	0.68	9 (9%) 9 8	55, 63, 71, 74	0
48	2q	99/105 (94%)	0.77	11 (11%) 5 4	59, 67, 74, 78	0
49	1r	68/88 (77%)	0.29	2 (2%) 51 50	52, 63, 72, 74	0
49	2r	68/88 (77%)	0.17	0 100 100	58, 65, 73, 77	0
50	1s	83/93 (89%)	0.81	9 (10%) 5 5	60, 67, 74, 78	0
50	2s	83/93 (89%)	1.62	30 (36%) 0 0	71, 77, 81, 88	0
51	1t	96/106 (90%)	1.25	22 (22%) 0 0	57, 65, 74, 78	0
51	2t	96/106 (90%)	1.28	19 (19%) 1 0	57, 65, 75, 78	0
52	1u	23/27 (85%)	1.03	2 (8%) 10 9	54, 62, 66, 68	0
52	2u	23/27 (85%)	2.21	12 (52%) 0 0	66, 72, 75, 78	0
53	1v	13/24 (54%)	0.86	2 (15%) 2 1	47, 52, 82, 85	0
53	2v	13/24 (54%)	1.46	5 (38%) 0 0	57, 66, 86, 93	0
54	1w	66/76 (86%)	0.99	15 (22%) 0 0	29, 80, 90, 92	0
54	2w	64/76 (84%)	0.95	10 (15%) 2 1	45, 85, 90, 94	0
55	1x	72/77 (93%)	0.19	1 (1%) 75 73	25, 56, 75, 83	0
55	2x	72/77 (93%)	0.09	0 100 100	39, 69, 80, 89	0
56	1y	67/76 (88%)	3.68	53 (79%) 0 0	61, 90, 95, 97	0
56	2y	66/76 (86%)	4.13	56 (84%) 0 0	67, 91, 94, 96	0
All	All	20871/21748 (95%)	0.61	1702 (8%) 11 10	20, 60, 82, 98	0

All (1702) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1A	652(C)	G	15.6
1	2A	652(V)	C	14.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	652(U)	G	13.4
1	1A	653	A	12.4
44	1m	124	PRO	12.3
1	1A	652(U)	G	11.6
26	24	63	TYR	11.3
1	2A	652(C)	G	11.3
21	2Z	106	GLY	11.3
1	2A	2802	G	11.0
1	1A	652(T)	C	10.9
1	1A	652(V)	C	10.6
1	2A	653	A	10.5
1	1A	2131	G	10.5
1	2A	652(T)	C	9.8
44	2m	124	PRO	9.7
56	2y	36	A	9.7
1	1A	652(S)	C	9.6
1	2A	883	G	9.5
56	2y	57	G	9.4
1	1A	2159	G	9.3
1	2A	2146	C	9.2
56	1y	35	A	9.1
1	2A	884	C	8.9
21	2Z	153	SER	8.9
32	2a	1001(A)	G	8.8
32	2a	1030(A)	G	8.7
44	2m	123	ALA	8.7
1	1A	1509	C	8.7
1	1A	654	A	8.6
20	2Y	1	MET	8.6
45	2n	38	GLY	8.6
41	2j	72	VAL	8.5
56	1y	36	A	8.4
56	2y	19	G	8.4
1	2A	2127	G	8.4
54	2w	71	G	8.3
1	2A	654	A	8.2
1	2A	2160	G	8.1
50	2s	50	ALA	8.1
1	1A	884	C	8.1
56	1y	34	G	8.0
1	2A	1509	C	8.0
45	2n	39	LEU	8.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	1030(B)	C	7.8
32	2a	1033	G	7.7
38	1g	156	TRP	7.6
56	2y	21	A	7.6
1	2A	2128	C	7.6
54	1w	70	G	7.5
21	2Z	149	SER	7.4
45	2n	25	VAL	7.4
56	1y	24	G	7.4
32	1a	1030(C)	G	7.3
1	2A	2145	C	7.3
1	1A	1095	A	7.3
21	2Z	144	LEU	7.2
1	1A	2129	C	7.2
1	1A	2140	C	7.2
56	1y	13	C	7.2
40	2i	14	VAL	7.1
1	2A	2168	G	7.1
26	24	19	GLY	7.1
1	2A	892	G	7.0
1	1A	1096	A	7.0
1	2A	2133	G	7.0
1	2A	888	C	6.9
32	1a	1003	G	6.9
1	2A	652(D)	C	6.9
1	2A	2125	G	6.9
7	2H	35	VAL	6.9
33	2b	127	ILE	6.9
32	1a	1030(A)	G	6.8
1	2A	2141	G	6.8
32	2a	1030(C)	G	6.8
7	2H	128	PRO	6.7
26	24	51	ASP	6.7
1	1A	2161	C	6.7
1	2A	2801(A)	A	6.7
1	1A	1059	G	6.7
56	1y	47	U	6.7
56	1y	5	G	6.6
32	1a	1001(A)	G	6.6
32	1a	1032	G	6.6
56	2y	1	G	6.6
32	1a	1025	U	6.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	48	MET	6.6
1	2A	2159	G	6.6
1	2A	2174	C	6.6
11	2P	101	VAL	6.6
1	2A	2113	U	6.5
56	2y	62	C	6.5
1	1A	2166	G	6.5
56	2y	74	C	6.5
32	1a	1034	G	6.5
44	1m	123	ALA	6.5
56	1y	75	C	6.4
1	1A	2151	G	6.4
1	2A	2140	C	6.4
45	2n	12	ARG	6.4
33	2b	81	VAL	6.4
54	2w	70	G	6.4
33	1b	227	GLY	6.4
1	2A	885	C	6.4
1	2A	2793	G	6.4
1	1A	652(F)	G	6.3
1	2A	2129	C	6.3
32	2a	1003	G	6.3
56	2y	5	G	6.3
1	1A	2132	U	6.3
1	2A	2147	G	6.3
1	2A	2792	G	6.3
21	1Z	133	ILE	6.3
32	2a	1002	G	6.3
38	2g	156	TRP	6.2
1	1A	2162	G	6.2
1	2A	2116	G	6.2
40	2i	65	VAL	6.2
26	24	49	PHE	6.2
56	2y	66	U	6.2
56	2y	29	G	6.2
1	1A	2130	U	6.2
1	1A	897	C	6.2
1	2A	2138	C	6.2
21	2Z	156	LYS	6.2
1	1A	2148	G	6.2
1	1A	2181	G	6.2
1	1A	2128	C	6.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1030(B)	C	6.2
21	2Z	141	VAL	6.1
32	2a	1027	C	6.1
1	1A	2146	C	6.1
1	1A	2160	G	6.1
56	2y	6	G	6.1
32	1a	204	U	6.1
41	2j	47	PHE	6.0
32	1a	1028	C	6.0
1	1A	2141	G	6.0
56	2y	56	C	6.0
44	1m	2	ALA	6.0
56	2y	18	G	6.0
1	2A	2161	C	6.0
45	2n	51	GLY	6.0
1	2A	2112	G	6.0
1	2A	2126	A	6.0
1	2A	2115	G	6.0
32	2a	1257	U	6.0
7	2H	44	VAL	5.9
56	2y	63	G	5.9
54	2w	72	C	5.9
1	1A	271(K)	U	5.9
32	1a	1001	A	5.9
56	2y	58	A	5.9
21	2Z	147	GLY	5.9
1	1A	652(E)	G	5.9
32	1a	1257	U	5.9
1	1A	887	A	5.9
56	1y	19	G	5.9
56	1y	71	G	5.9
40	2i	82	ALA	5.9
32	1a	1031	G	5.8
32	1a	1033	G	5.8
32	2a	1032	G	5.8
32	1a	1035	A	5.8
1	2A	2154	G	5.8
7	2H	6	ARG	5.8
7	2H	98	LEU	5.8
21	2Z	139	VAL	5.8
7	2H	52	VAL	5.8
1	1A	2145	C	5.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2803	C	5.8
33	2b	122	PHE	5.8
32	2a	1031	G	5.8
32	1a	1029	C	5.8
40	2i	109	VAL	5.7
32	2a	1024	G	5.7
56	1y	22	G	5.7
32	1a	1447	A	5.7
32	2a	1035	A	5.7
1	2A	2123	G	5.7
56	2y	35	A	5.7
1	1A	2116	G	5.7
32	1a	1026	G	5.7
32	2a	1030(D)	A	5.7
7	2H	43	VAL	5.7
1	1A	2175	C	5.6
1	2A	2120	G	5.6
56	1y	1	G	5.6
1	1A	2174	C	5.6
33	2b	34	ALA	5.6
7	2H	92	ILE	5.6
1	1A	1094	U	5.6
40	2i	49	PRO	5.6
1	2A	2124	G	5.6
1	1A	652(D)	C	5.6
1	1A	2133	G	5.6
45	2n	34	TYR	5.5
1	1A	889	C	5.5
33	2b	17	PHE	5.5
56	2y	64	A	5.5
21	2Z	170	THR	5.5
1	2A	2110	G	5.5
32	1a	841	U	5.5
40	1i	15	ALA	5.5
52	2u	16	GLY	5.5
32	1a	1027	C	5.5
40	1i	14	VAL	5.5
1	1A	1064	C	5.5
56	2y	52	G	5.5
56	2y	65	G	5.5
32	2a	1036	G	5.4
7	2H	20	ALA	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2127	G	5.4
56	2y	15	G	5.4
32	2a	1039	C	5.4
33	2b	92	TYR	5.4
21	1Z	165	VAL	5.4
1	1A	888	C	5.4
32	2a	1030	C	5.4
1	1A	2168	G	5.4
1	1A	1098	A	5.4
1	2A	2117	A	5.4
1	2A	2173	A	5.4
32	1a	1030(D)	A	5.4
1	2A	2152	G	5.4
41	2j	38	ILE	5.4
1	2A	229	A	5.3
41	2j	98	ILE	5.3
45	2n	61	TRP	5.3
41	2j	74	ILE	5.3
1	1A	2117	A	5.3
33	2b	121	LEU	5.3
1	1A	1077	A	5.3
1	2A	2144	U	5.3
51	1t	95	ALA	5.3
26	14	55	ARG	5.3
1	2A	2155	G	5.3
56	2y	53	G	5.3
38	1g	80	VAL	5.2
1	1A	1057	A	5.2
1	1A	2158	A	5.2
32	1a	1002	G	5.2
1	1A	2134	A	5.2
1	2A	2162	G	5.2
1	1A	1076	C	5.2
33	1b	233	SER	5.1
56	2y	14	A	5.1
54	1w	71	G	5.1
38	1g	79	ARG	5.1
50	2s	80	TYR	5.1
1	1A	1068	G	5.1
32	1a	1446	U	5.1
32	1a	1023	G	5.1
32	1a	1036	G	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	2H	96	ALA	5.1
7	2H	48	GLY	5.1
41	2j	85	LEU	5.0
1	1A	1060	U	5.0
1	1A	2165	G	5.0
1	2A	2167	U	5.0
56	1y	12	U	5.0
33	1b	229	VAL	5.0
1	1A	2155	G	5.0
40	2i	63	ILE	5.0
40	2i	103	THR	5.0
1	1A	1080	C	5.0
1	1A	1054	A	5.0
32	2a	1034	G	5.0
7	2H	72	ILE	5.0
1	1A	1175	U	5.0
1	1A	1092	C	5.0
40	2i	27	THR	5.0
32	2a	1532	U	5.0
1	1A	2147	G	4.9
7	2H	47	GLU	4.9
32	2a	1026	G	4.9
26	24	18	CYS	4.9
38	2g	154	TYR	4.9
32	2a	1447	A	4.9
1	1A	1066	U	4.9
56	1y	20	U	4.9
1	2A	652(E)	G	4.9
1	2A	2149	G	4.9
1	2A	2804	C	4.9
32	2a	1452	C	4.9
1	1A	1099	G	4.9
54	1w	44	G	4.9
45	2n	37	PHE	4.9
32	1a	1037	C	4.9
7	2H	105	LEU	4.9
1	1A	1063	G	4.9
1	1A	1093	G	4.9
1	1A	2152	G	4.9
1	2A	2143	C	4.9
40	2i	53	VAL	4.9
45	2n	43	CYS	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2142	C	4.9
1	1A	1069	A	4.9
53	2v	12	A	4.9
41	2j	26	ALA	4.9
54	1w	20	U	4.8
41	2j	44	VAL	4.8
1	1A	1508	A	4.8
1	2A	2158	A	4.8
40	2i	93	ARG	4.8
1	1A	2108	C	4.8
1	2A	896	A	4.8
45	2n	13	THR	4.8
1	1A	1176	G	4.8
32	1a	1024	G	4.8
40	2i	90	PRO	4.8
34	2c	145	GLY	4.8
1	2A	2135	A	4.8
1	2A	2170	A	4.8
56	1y	15	G	4.8
56	2y	34	G	4.8
7	2H	19	VAL	4.8
1	2A	2139	C	4.8
45	2n	24	CYS	4.7
45	2n	55	GLY	4.7
1	2A	1043	C	4.7
1	2A	2136	C	4.7
1	1A	885	C	4.7
1	1A	2188	C	4.7
1	1A	2164	C	4.7
40	2i	114	TYR	4.7
1	1A	1067	A	4.7
32	2a	1446	U	4.7
1	2A	887	A	4.7
1	2A	2114	A	4.7
1	2A	2157	G	4.7
1	2A	2169	A	4.6
1	1A	1082	U	4.6
1	1A	1056	G	4.6
32	2a	1023	G	4.6
7	2H	2	SER	4.6
56	2y	70	G	4.6
21	2Z	140	ASP	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	2n	2	ALA	4.6
1	1A	1072	C	4.6
1	1A	2111	C	4.6
56	1y	56	C	4.6
1	1A	2792	G	4.6
7	2H	132	ARG	4.6
1	1A	2115	G	4.6
40	2i	88	TYR	4.6
32	1a	1030	C	4.5
33	1b	232	PRO	4.5
41	2j	39	PRO	4.5
33	2b	207	ALA	4.5
1	2A	882	G	4.5
32	2a	998	G	4.5
33	2b	37	ASN	4.5
38	1g	85	TYR	4.5
56	1y	57	G	4.5
45	2n	36	PHE	4.5
56	1y	38	A	4.5
1	1A	882	G	4.5
1	2A	2181	G	4.5
1	2A	2175	C	4.5
34	2c	87	LEU	4.5
38	2g	32	ARG	4.5
56	2y	68	C	4.5
7	2H	78	GLY	4.5
33	1b	211	ILE	4.5
33	2b	201	ILE	4.5
38	1g	81	GLY	4.5
1	2A	894	C	4.5
1	2A	2164	C	4.5
1	1A	2106	G	4.4
40	2i	5	TYR	4.4
1	2A	2130	U	4.4
1	2A	2172	U	4.4
56	1y	21	A	4.4
1	2A	1041	C	4.4
1	1A	896	A	4.4
32	1a	1137	C	4.4
1	1A	1087	G	4.4
41	2j	88	LEU	4.4
40	2i	9	ARG	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1058	G	4.4
1	2A	2156	G	4.4
1	1A	1097	U	4.4
1	1A	2170	A	4.3
7	2H	36	PRO	4.3
1	1A	2794	C	4.3
21	2Z	155	LEU	4.3
40	1i	19	LEU	4.3
32	1a	78	G	4.3
26	14	65	ASP	4.3
1	1A	2107	C	4.3
1	1A	2143	C	4.3
21	2Z	96	VAL	4.3
14	2S	20	ARG	4.3
41	2j	15	THR	4.3
32	2a	1150	U	4.3
1	1A	2120	G	4.3
32	2a	1021	G	4.3
38	2g	80	VAL	4.3
1	2A	1508	A	4.3
1	1A	2139	C	4.3
7	2H	95	ARG	4.3
56	1y	18	G	4.3
26	24	52	THR	4.3
56	1y	14	A	4.3
50	2s	31	ILE	4.3
56	1y	59	U	4.3
50	2s	63	THR	4.3
7	2H	123	PHE	4.3
32	1a	79	G	4.3
1	1A	1084	A	4.2
56	1y	23	A	4.2
7	2H	16	SER	4.2
1	1A	1065	U	4.2
1	2A	2119	A	4.2
32	2a	1004	A	4.2
56	2y	38	A	4.2
40	2i	62	TYR	4.2
1	1A	890	A	4.2
1	1A	2803	C	4.2
7	2H	7	LEU	4.2
32	2a	1041	A	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	2y	45	U	4.2
54	2w	44	G	4.2
38	2g	83	ALA	4.2
40	1i	98	PRO	4.2
45	2n	42	ILE	4.2
1	2A	2166	G	4.2
45	2n	35	ARG	4.2
1	2A	889	C	4.2
1	2A	2142	C	4.2
41	2j	10	GLY	4.2
1	2A	2165	G	4.2
56	2y	67	C	4.2
20	2Y	55	TYR	4.2
1	1A	2110	G	4.1
1	1A	2156	G	4.1
1	2A	1533	G	4.1
33	1b	135	GLN	4.1
40	2i	75	ASP	4.1
45	2n	44	LEU	4.1
40	1i	8	GLY	4.1
52	2u	24	ARG	4.1
32	1a	216	G	4.1
34	1c	87	LEU	4.1
40	2i	76	ALA	4.1
1	2A	886	C	4.1
32	1a	999	C	4.1
56	2y	2	C	4.1
1	1A	2167	U	4.1
40	2i	66	ARG	4.1
7	2H	125	VAL	4.1
32	1a	93	G	4.1
33	1b	228	GLY	4.1
33	2b	223	ILE	4.1
41	1j	38	ILE	4.1
39	2h	58	TYR	4.1
40	2i	102	LEU	4.1
23	21	2	SER	4.1
52	2u	5	ASP	4.1
33	1b	230	VAL	4.1
38	2g	81	GLY	4.1
1	2A	2805	G	4.1
56	1y	70	G	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	2y	69	G	4.1
26	24	29	PRO	4.1
52	2u	21	TYR	4.1
38	2g	40	ALA	4.1
48	2q	23	VAL	4.1
1	1A	2125	G	4.0
1	1A	2154	G	4.0
19	2X	92	LEU	4.0
56	2y	12	U	4.0
21	1Z	104	PHE	4.0
7	2H	29	PRO	4.0
1	1A	892	G	4.0
1	2A	2182	G	4.0
32	2a	1028	C	4.0
33	2b	227	GLY	4.0
54	1w	72	C	4.0
7	2H	113	VAL	4.0
1	1A	2109	U	4.0
39	2h	71	GLY	4.0
48	2q	80	GLY	4.0
1	2A	2177	C	4.0
32	2a	1040	U	4.0
45	1n	2	ALA	4.0
1	1A	886	C	4.0
1	2A	2121	G	4.0
1	2A	2148	G	4.0
51	2t	41	ILE	4.0
1	1A	2118	U	4.0
1	2A	2137	C	4.0
7	2H	126	PRO	4.0
32	2a	1260	C	4.0
33	2b	214	ILE	4.0
1	1A	2144	U	4.0
21	2Z	148	ASP	3.9
45	2n	26	ARG	3.9
1	1A	2169	A	3.9
1	2A	652(B)	A	3.9
1	2A	2132	U	3.9
32	2a	1022	G	3.9
47	1p	66	PRO	3.9
7	2H	51	ARG	3.9
32	1a	72	C	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2113	U	3.9
40	2i	13	ALA	3.9
1	2A	2151	G	3.9
56	1y	6	G	3.9
44	2m	87	TYR	3.9
33	1b	165	VAL	3.9
40	2i	86	VAL	3.9
33	2b	187	LEU	3.9
1	1A	1078	U	3.9
51	2t	77	ALA	3.9
56	1y	50	U	3.9
32	1a	1286	A	3.9
56	1y	30	G	3.9
56	1y	52	G	3.9
41	2j	63	PHE	3.9
1	2A	11	G	3.9
1	1A	1081	U	3.9
33	1b	207	ALA	3.9
50	2s	13	ASP	3.9
1	1A	1079	C	3.9
32	2a	91	C	3.9
56	1y	67	C	3.9
26	24	50	VAL	3.9
6	2G	164	GLU	3.9
40	1i	76	ALA	3.9
7	2H	45	VAL	3.9
1	1A	2112	G	3.8
1	1A	2157	G	3.8
56	2y	44	G	3.8
33	1b	136	VAL	3.8
34	1c	81	GLY	3.8
1	1A	1509(A)	A	3.8
1	2A	2171	A	3.8
1	2A	2109	U	3.8
33	2b	232	PRO	3.8
1	1A	2123	G	3.8
32	2a	80	G	3.8
7	2H	79	VAL	3.8
33	2b	19	HIS	3.8
41	2j	76	ASN	3.8
26	24	68	ARG	3.8
56	2y	51	U	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	15	60	VAL	3.8
40	2i	108	VAL	3.8
32	2a	1154	G	3.8
32	1a	217	C	3.8
32	2a	470	C	3.8
56	2y	61	C	3.8
56	2y	50	U	3.8
7	2H	31	GLY	3.8
40	2i	6	GLY	3.8
40	2i	8	GLY	3.8
1	2A	2100	G	3.8
32	2a	216	G	3.8
40	2i	45	ALA	3.8
41	2j	31	GLY	3.8
1	1A	2119	A	3.8
7	2H	131	VAL	3.8
12	2Q	109	VAL	3.8
33	2b	165	VAL	3.8
21	1Z	167	PRO	3.8
32	1a	92	C	3.8
56	2y	4	C	3.8
41	2j	9	ARG	3.8
56	1y	44	G	3.8
56	1y	65	G	3.8
52	2u	14	TRP	3.8
7	2H	34	GLU	3.8
40	1i	26	VAL	3.8
1	2A	1113	U	3.7
1	1A	2793	G	3.7
40	2i	56	LEU	3.7
1	1A	229	A	3.7
11	2P	103	ALA	3.7
47	2p	58	TYR	3.7
56	1y	51	U	3.7
56	2y	47	U	3.7
32	2a	1006	C	3.7
40	2i	105	ASP	3.7
21	2Z	150	LEU	3.7
26	24	48	ARG	3.7
32	1a	1021	G	3.7
1	1A	2171	A	3.7
45	2n	40	CYS	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2136	C	3.7
1	2A	645	C	3.7
56	1y	62	C	3.7
32	2a	79	G	3.7
34	2c	60	ALA	3.7
1	1A	2790	A	3.7
33	2b	220	ASP	3.7
1	2A	2111	C	3.7
1	2A	1112	G	3.7
32	2a	1531	A	3.7
41	2j	40	LEU	3.7
1	2A	2794	C	3.7
50	2s	9	VAL	3.7
21	2Z	93	ASP	3.7
1	2A	2895	U	3.7
40	2i	17	VAL	3.7
41	2j	13	HIS	3.7
6	1G	146	TYR	3.6
7	2H	84	SER	3.6
1	1A	2149	G	3.6
1	1A	1100	C	3.6
1	2A	2107	C	3.6
51	1t	45	GLN	3.6
1	2A	277	C	3.6
21	2Z	124	ILE	3.6
26	14	64	GLY	3.6
51	2t	12	ALA	3.6
32	2a	1287	A	3.6
45	2n	4	LYS	3.6
32	1a	98	G	3.6
33	2b	152	PHE	3.6
51	2t	63	ILE	3.6
32	1a	201	C	3.6
38	2g	79	ARG	3.6
1	1A	1070	A	3.6
31	29	29	ASN	3.6
34	2c	39	ILE	3.6
32	2a	1037	C	3.6
32	2a	1149	C	3.6
56	2y	71	G	3.6
33	2b	33	TYR	3.6
21	1Z	1	MET	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	13	GLY	3.6
1	1A	2126	A	3.6
7	2H	54	ARG	3.6
32	2a	1122	U	3.6
32	2a	980	C	3.6
32	2a	1007	C	3.6
1	2A	2131	G	3.6
26	24	54	GLY	3.6
40	1i	10	ARG	3.5
40	2i	51	ARG	3.5
34	2c	182	ILE	3.5
1	1A	1083	U	3.5
34	2c	33	LEU	3.5
1	1A	1053	C	3.5
1	1A	2138	C	3.5
7	2H	106	THR	3.5
50	2s	84	GLY	3.5
56	1y	61	C	3.5
56	2y	75	C	3.5
33	1b	188	ALA	3.5
8	1I	136	VAL	3.5
41	2j	23	ILE	3.5
33	1b	61	LEU	3.5
46	2o	89	GLY	3.5
40	2i	7	THR	3.5
1	2A	2104	G	3.5
38	2g	27	ILE	3.5
32	1a	162	A	3.5
38	1g	153	HIS	3.5
21	2Z	159	PRO	3.5
33	2b	31	TYR	3.5
41	2j	75	ILE	3.5
1	2A	1114	G	3.5
33	1b	117	GLU	3.5
54	2w	45	U	3.5
56	1y	63	G	3.5
56	2y	24	G	3.5
21	2Z	157	LEU	3.5
44	2m	122	LYS	3.5
56	1y	58	A	3.5
41	2j	34	VAL	3.5
51	1t	64	ASP	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	1i	33	PHE	3.5
40	2i	101	PHE	3.5
32	1a	202	U	3.5
32	1a	1040	U	3.5
1	2A	1042	G	3.5
1	2A	2106	G	3.5
33	1b	120	ALA	3.5
5	1F	15	SER	3.5
1	1A	2114	A	3.5
1	1A	893	C	3.5
56	1y	11	C	3.5
56	1y	66	U	3.5
32	2a	485	G	3.5
56	1y	53	G	3.5
21	2Z	128	VAL	3.5
33	2b	230	VAL	3.5
33	1b	133	LYS	3.5
1	1A	2135	A	3.4
38	2g	24	THR	3.4
40	1i	61	ALA	3.4
41	1j	18	ALA	3.4
26	24	66	SER	3.4
7	2H	24	VAL	3.4
26	24	59	PHE	3.4
54	1w	67	C	3.4
56	1y	74	C	3.4
51	2t	47	GLY	3.4
42	1k	14	VAL	3.4
1	2A	2134	A	3.4
32	2a	1001	A	3.4
32	2a	1256	A	3.4
1	1A	2177	C	3.4
23	11	2	SER	3.4
32	2a	1018	C	3.4
33	1b	75	LYS	3.4
45	2n	56	VAL	3.4
33	1b	221	LEU	3.4
33	2b	51	LEU	3.4
51	1t	13	LEU	3.4
56	2y	33	U	3.4
1	1A	879	G	3.4
1	2A	652(A)	A	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	2Z	152	ALA	3.4
33	2b	216	SER	3.4
1	2A	2179	C	3.4
7	2H	39	PRO	3.4
40	2i	127	LYS	3.4
41	2j	22	LYS	3.4
40	2i	28	VAL	3.4
12	2Q	32	TYR	3.4
26	24	45	GLY	3.4
40	1i	80	GLY	3.4
38	2g	147	ALA	3.4
51	2t	76	ALA	3.4
1	1A	2176	A	3.4
32	2a	1009	G	3.4
50	2s	67	VAL	3.4
1	2A	895	U	3.4
33	1b	234	PRO	3.4
32	2a	1286	A	3.4
56	2y	26	A	3.4
1	1A	1055	G	3.4
47	1p	78	GLY	3.3
50	2s	68	GLY	3.3
32	1a	1532	U	3.3
47	1p	60	LEU	3.3
1	1A	2185	C	3.3
38	2g	84	ASN	3.3
1	2A	881	G	3.3
6	2G	3	LEU	3.3
26	14	59	PHE	3.3
32	1a	1020	U	3.3
41	2j	91	PRO	3.3
41	2j	21	GLN	3.3
7	2H	74	ASN	3.3
51	2t	26	ASN	3.3
6	2G	182	LYS	3.3
47	2p	19	ILE	3.3
1	1A	1074	G	3.3
40	2i	4	TYR	3.3
40	2i	36	TYR	3.3
44	2m	23	TYR	3.3
34	2c	20	SER	3.3
50	1s	38	SER	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	2e	12	LEU	3.3
1	2A	2118	U	3.3
20	2Y	91	GLU	3.3
56	1y	25	C	3.3
1	1A	2182	G	3.3
41	2j	89	ASP	3.3
33	1b	137	ARG	3.3
41	1j	34	VAL	3.3
1	1A	1105	U	3.3
32	1a	161	A	3.3
7	2H	17	VAL	3.3
21	1Z	153	SER	3.3
47	2p	2	VAL	3.3
45	2n	11	LYS	3.3
45	2n	53	LEU	3.3
1	2A	271(K)	U	3.3
33	2b	218	ALA	3.3
1	1A	2173	A	3.3
32	1a	1005	A	3.3
6	2G	29	TRP	3.3
7	2H	65	HIS	3.2
38	1g	24	THR	3.2
21	1Z	80	ARG	3.2
32	2a	204	U	3.2
32	2a	1029	C	3.2
21	1Z	166	SER	3.2
33	2b	229	VAL	3.2
14	2S	58	LEU	3.2
39	2h	131	GLY	3.2
40	2i	50	LEU	3.2
34	2c	180	ALA	3.2
41	1j	36	GLY	3.2
1	1A	1075	C	3.2
1	1A	2163	C	3.2
32	2a	1357	A	3.2
40	1i	90	PRO	3.2
40	1i	47	LEU	3.2
33	2b	120	ALA	3.2
40	2i	31	GLN	3.2
21	1Z	149	SER	3.2
32	2a	1115	C	3.2
53	1v	12	A	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	1i	45	ALA	3.2
33	2b	211	ILE	3.2
1	2A	2190	G	3.2
11	2P	110	TYR	3.2
34	2c	198	VAL	3.2
20	2Y	90	LEU	3.2
7	2H	102	ALA	3.2
24	22	58	ALA	3.2
42	1k	15	ALA	3.2
1	1A	2150	U	3.2
7	2H	63	SER	3.2
7	2H	112	PRO	3.2
41	2j	68	HIS	3.2
32	1a	1006	C	3.2
32	1a	1452	C	3.2
52	2u	17	THR	3.2
56	1y	48	C	3.2
56	2y	48	C	3.2
33	2b	231	GLU	3.2
51	1t	9	ASN	3.2
12	1Q	59	ARG	3.2
21	1Z	141	VAL	3.2
33	1b	236	TYR	3.1
34	2c	193	TYR	3.1
40	2i	15	ALA	3.1
41	2j	27	ALA	3.1
41	2j	32	ALA	3.1
32	1a	163	C	3.1
53	1v	13	A	3.1
54	1w	45	U	3.1
11	2P	93	GLY	3.1
23	21	28	GLY	3.1
41	2j	25	GLU	3.1
41	2j	48	THR	3.1
41	2j	90	LEU	3.1
45	2n	33	VAL	3.1
40	1i	82	ALA	3.1
7	2H	94	TYR	3.1
1	1A	2804	C	3.1
41	1j	96	ILE	3.1
51	2t	38	LYS	3.1
7	2H	99	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	1Z	164	ALA	3.1
40	1i	100	GLY	3.1
6	2G	181	ARG	3.1
32	2a	90	U	3.1
40	2i	58	HIS	3.1
5	1F	21	ALA	3.1
40	1i	106	ALA	3.1
7	2H	82	GLY	3.1
33	1b	124	SER	3.1
35	2d	168	ARG	3.1
20	2Y	5	MET	3.1
32	1a	470	C	3.1
32	2a	1005	A	3.1
32	2a	1180	A	3.1
32	1a	70	G	3.1
34	2c	105	GLU	3.1
38	2g	155	ARG	3.1
18	1W	112	GLY	3.1
1	1A	2172	U	3.1
54	1w	4	C	3.1
56	1y	49	C	3.1
1	1A	278	A	3.1
33	1b	123	ALA	3.1
40	2i	99	LEU	3.1
41	2j	81	THR	3.1
50	2s	41	VAL	3.1
32	1a	97	G	3.1
56	1y	45	U	3.1
51	1t	79	ARG	3.1
1	2A	1040	C	3.1
32	1a	840	C	3.1
15	2T	125	ARG	3.0
32	1a	77	G	3.0
32	1a	1138	G	3.0
40	2i	33	PHE	3.0
7	2H	100	GLY	3.0
33	2b	124	SER	3.0
51	2t	44	ALA	3.0
56	2y	43	C	3.0
1	2A	2180	U	3.0
41	1j	4	ILE	3.0
26	14	63	TYR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1062	G	3.0
1	1A	2805	G	3.0
5	2F	208	GLY	3.0
50	2s	35	SER	3.0
34	2c	93	LYS	3.0
50	2s	12	ASP	3.0
32	1a	218	C	3.0
32	1a	1007	C	3.0
45	2n	14	PRO	3.0
32	1a	1041	A	3.0
32	2a	1324	A	3.0
7	2H	18	GLU	3.0
41	2j	29	ARG	3.0
38	1g	21	VAL	3.0
1	1A	2178	C	3.0
20	2Y	42	VAL	3.0
40	2i	115	GLY	3.0
45	2n	15	LYS	3.0
36	2e	13	ILE	3.0
56	2y	59	U	3.0
41	2j	73	ASP	3.0
1	1A	1088	A	3.0
12	2Q	114	ALA	3.0
34	2c	51	GLY	3.0
1	1A	1091	G	3.0
1	1A	2187	G	3.0
1	2A	880	G	3.0
1	2A	897	C	3.0
1	2A	1026	U	3.0
41	1j	30	SER	3.0
14	2S	55	ALA	3.0
44	2m	20	THR	3.0
21	2Z	126	VAL	2.9
21	2Z	171	ILE	2.9
34	2c	157	ILE	2.9
1	2A	2108	C	2.9
32	1a	1008	C	2.9
11	2P	79	ARG	2.9
14	2S	54	LEU	2.9
21	1Z	155	LEU	2.9
50	2s	64	GLU	2.9
7	2H	49	VAL	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	2p	59	TRP	2.9
48	2q	85	VAL	2.9
51	1t	18	GLN	2.9
7	2H	70	THR	2.9
33	2b	228	GLY	2.9
36	2e	138	ALA	2.9
40	2i	30	GLY	2.9
40	2i	72	GLY	2.9
41	2j	77	PRO	2.9
50	2s	15	LEU	2.9
50	2s	30	LEU	2.9
1	2A	890	A	2.9
21	1Z	139	VAL	2.9
47	1p	1	MET	2.9
32	1a	1000	U	2.9
32	2a	1020	U	2.9
45	2n	3	ARG	2.9
40	2i	80	GLY	2.9
7	2H	21	PRO	2.9
33	2b	29	ALA	2.9
34	2c	65	ALA	2.9
56	2y	13	C	2.9
40	1i	4	TYR	2.9
1	1A	2153	G	2.9
50	2s	14	HIS	2.9
21	2Z	1	MET	2.9
48	1q	23	VAL	2.9
40	2i	81	ILE	2.9
11	1P	44	GLY	2.9
34	1c	13	GLY	2.9
52	2u	11	GLY	2.9
1	2A	2896	C	2.9
26	24	55	ARG	2.9
33	1b	95	GLN	2.9
20	2Y	54	LYS	2.9
32	2a	78	G	2.9
32	2a	1142	G	2.9
40	2i	67	GLY	2.9
45	1n	51	GLY	2.9
56	2y	73	A	2.9
40	2i	85	LEU	2.9
41	2j	100	THR	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	2q	7	THR	2.9
40	2i	87	GLN	2.9
33	2b	236	TYR	2.9
36	2e	90	VAL	2.9
7	1H	2	SER	2.9
7	2H	71	LEU	2.9
26	24	32	TYR	2.9
46	2o	60	VAL	2.8
7	2H	23	ARG	2.8
38	2g	4	ARG	2.8
1	1A	2189	U	2.8
7	2H	121	ILE	2.8
6	2G	62	LEU	2.8
32	2a	1157	A	2.8
41	2j	65	LEU	2.8
36	1e	10	MET	2.8
45	2n	18	VAL	2.8
32	2a	1116	C	2.8
54	2w	4	C	2.8
56	2y	72	C	2.8
32	1a	1136	U	2.8
32	2a	202	U	2.8
44	2m	39	ILE	2.8
21	2Z	173	ALA	2.8
1	1A	2124	G	2.8
1	2A	1719	G	2.8
41	2j	46	ARG	2.8
52	1u	15	ARG	2.8
33	2b	136	VAL	2.8
1	2A	2150	U	2.8
32	2a	1043	C	2.8
48	1q	2	PRO	2.8
51	1t	100	ILE	2.8
54	1w	47	U	2.8
56	2y	11	C	2.8
7	2H	30	LYS	2.8
40	2i	20	ARG	2.8
40	2i	54	ASP	2.8
47	2p	74	LEU	2.8
15	2T	129	ARG	2.8
7	2H	141	VAL	2.8
41	1j	44	VAL	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	1b	222	ILE	2.8
27	25	58	LEU	2.8
33	2b	118	LEU	2.8
51	2t	99	LEU	2.8
33	1b	216	SER	2.8
19	1X	1	MET	2.8
31	29	30	PRO	2.8
40	1i	86	VAL	2.8
51	2t	73	HIS	2.8
1	2A	2153	G	2.8
34	2c	36	ASP	2.8
56	1y	60	U	2.8
56	1y	69	G	2.8
11	2P	91	PHE	2.8
21	2Z	104	PHE	2.8
41	2j	20	ALA	2.8
26	14	54	GLY	2.8
32	2a	1038	C	2.8
38	2g	16	LEU	2.8
41	1j	16	LEU	2.8
56	2y	49	C	2.8
29	27	47	ARG	2.8
48	2q	92	ARG	2.8
21	2Z	161	VAL	2.8
36	2e	34	VAL	2.8
1	1A	1086	A	2.8
21	2Z	57	ILE	2.8
21	2Z	133	ILE	2.8
32	1a	96	U	2.8
41	2j	69	ASN	2.8
52	2u	13	ILE	2.8
41	2j	87	THR	2.8
6	1G	139	LEU	2.8
32	1a	198	G	2.8
32	1a	194	C	2.8
45	2n	54	PRO	2.8
21	2Z	58	VAL	2.7
1	2A	2189	U	2.7
45	2n	10	ALA	2.7
34	1c	94	LEU	2.7
29	17	47	ARG	2.7
41	1j	9	ARG	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	1039	G	2.7
1	2A	2191	G	2.7
33	2b	91	PRO	2.7
7	2H	37	VAL	2.7
9	2N	9	VAL	2.7
33	2b	71	VAL	2.7
51	1t	59	ALA	2.7
54	2w	47	U	2.7
41	2j	66	ARG	2.7
48	1q	7	THR	2.7
14	2S	31	SER	2.7
33	1b	128	GLU	2.7
1	1A	2105	C	2.7
1	2A	2188	C	2.7
54	2w	15	G	2.7
7	2H	115	VAL	2.7
42	1k	25	TYR	2.7
45	1n	7	ILE	2.7
49	1r	24	ALA	2.7
38	1g	22	LEU	2.7
33	1b	125	PRO	2.7
26	14	45	GLY	2.7
32	1a	76	C	2.7
7	2H	145	ALA	2.7
41	1j	26	ALA	2.7
33	1b	127	ILE	2.7
38	1g	154	TYR	2.7
33	1b	52	GLU	2.7
34	2c	41	GLY	2.7
47	1p	81	ARG	2.7
1	2A	272(A)	U	2.7
33	2b	123	ALA	2.7
1	2A	2807	G	2.7
7	2H	88	LEU	2.7
32	2a	1442	G	2.7
7	2H	111	HIS	2.7
7	2H	8	PRO	2.7
35	1d	87	GLY	2.7
50	1s	12	ASP	2.7
1	2A	2163	C	2.7
15	2T	111	ARG	2.7
20	1Y	1	MET	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	1509(A)	A	2.6
38	2g	6	ARG	2.6
1	2A	2122	U	2.6
33	2b	16	HIS	2.6
45	2n	50	LYS	2.6
32	2a	1008	C	2.6
33	2b	221	LEU	2.6
34	2c	8	ILE	2.6
39	2h	133	LEU	2.6
48	2q	59	ILE	2.6
33	2b	125	PRO	2.6
15	2T	128	GLU	2.6
54	1w	5	G	2.6
26	14	66	SER	2.6
33	2b	235	SER	2.6
44	2m	64	TRP	2.6
50	1s	60	VAL	2.6
53	2v	24	A	2.6
56	2y	23	A	2.6
1	1A	2180	U	2.6
33	2b	65	GLY	2.6
44	2m	70	LEU	2.6
45	2n	47	LEU	2.6
48	1q	98	LEU	2.6
50	2s	65	ASN	2.6
34	2c	62	ASP	2.6
33	2b	139	LYS	2.6
51	1t	38	LYS	2.6
1	2A	1170	G	2.6
41	2j	59	SER	2.6
44	2m	15	VAL	2.6
34	2c	155	GLY	2.6
1	1A	655	A	2.6
51	1t	62	LEU	2.6
47	2p	9	PHE	2.6
21	2Z	49	ARG	2.6
26	14	18	CYS	2.6
26	24	36	CYS	2.6
33	2b	75	LYS	2.6
40	2i	16	ARG	2.6
7	2H	164	TYR	2.6
9	2N	98	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	2P	129	ALA	2.6
33	2b	47	THR	2.6
33	2b	112	VAL	2.6
43	2l	18	VAL	2.6
48	2q	33	GLY	2.6
1	2A	1115	G	2.6
40	2i	91	ASP	2.6
6	2G	17	PRO	2.6
7	2H	69	ARG	2.6
8	2I	57	ARG	2.6
34	2c	190	ARG	2.6
56	2y	10	G	2.6
45	2n	16	PHE	2.6
48	1q	90	ILE	2.6
51	1t	55	ILE	2.6
1	1A	2801(A)	A	2.6
21	2Z	11	GLU	2.6
32	2a	1161	C	2.6
50	2s	27	GLU	2.6
5	1F	13	SER	2.6
41	2j	19	SER	2.6
34	1c	41	GLY	2.6
4	2E	196	VAL	2.6
19	1X	68	ARG	2.6
29	27	45	ALA	2.6
40	1i	65	VAL	2.6
41	2j	71	LEU	2.6
1	1A	2802	G	2.6
56	1y	64	A	2.6
40	1i	5	TYR	2.6
33	2b	36	ARG	2.6
40	2i	121	ARG	2.6
51	2t	57	ARG	2.6
31	29	17	ILE	2.6
40	2i	18	PHE	2.6
41	1j	98	ILE	2.6
44	2m	4	ILE	2.6
44	2m	120	LYS	2.6
32	1a	220	G	2.6
32	2a	145	G	2.6
32	2a	383	A	2.6
51	1t	22	ARG	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	42	ALA	2.5
56	1y	2	C	2.6
7	2H	129	THR	2.5
41	2j	94	VAL	2.5
39	2h	39	LEU	2.5
41	1j	40	LEU	2.5
12	2Q	113	GLN	2.5
21	1Z	146	ILE	2.5
40	2i	77	ILE	2.5
41	2j	96	ILE	2.5
33	1b	19	HIS	2.5
41	1j	62	HIS	2.5
1	2A	2184	G	2.5
32	2a	1178	G	2.5
33	2b	8	LYS	2.5
1	1A	1104	C	2.5
14	2S	5	THR	2.5
35	1d	195	ALA	2.5
50	1s	71	LEU	2.5
33	1b	55	PHE	2.5
41	1j	23	ILE	2.5
33	2b	151	GLY	2.5
21	2Z	98	MET	2.5
7	2H	165	ALA	2.5
32	2a	161	A	2.5
32	2a	1250	A	2.5
34	2c	67	THR	2.5
36	2e	146	ALA	2.5
41	2j	67	THR	2.5
51	2t	59	ALA	2.5
7	2H	33	LEU	2.5
38	2g	78	ARG	2.5
39	2h	93	VAL	2.5
32	2a	1259	C	2.5
33	2b	185	ILE	2.5
52	2u	15	ARG	2.5
32	1a	1531	A	2.5
33	2b	215	LEU	2.5
50	2s	71	LEU	2.5
32	1a	90	U	2.5
56	2y	60	U	2.5
1	1A	1071	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2101	G	2.5
1	1A	2184	G	2.5
56	2y	28	G	2.5
33	1b	224	GLN	2.5
7	2H	124	GLU	2.5
11	2P	149	GLU	2.5
50	2s	36	ARG	2.5
29	27	48	LYS	2.5
6	2G	49	ASP	2.5
39	1h	53	VAL	2.5
39	2h	65	TYR	2.5
40	2i	47	LEU	2.5
41	1j	90	LEU	2.5
1	1A	1103	A	2.5
1	2A	898	C	2.5
14	2S	84	GLN	2.5
33	1b	78	GLN	2.5
1	2A	274	G	2.5
21	2Z	51	ALA	2.5
41	1j	73	ASP	2.5
26	14	52	THR	2.5
21	2Z	64	GLY	2.5
7	2H	86	GLU	2.5
8	1I	41	GLU	2.5
15	2T	66	VAL	2.5
34	1c	23	TYR	2.5
34	2c	18	TRP	2.5
26	24	53	GLU	2.5
47	1p	62	VAL	2.5
47	2p	51	VAL	2.5
50	2s	49	ILE	2.5
53	2v	13	A	2.5
1	2A	1536	C	2.5
32	2a	150	C	2.5
32	2a	1362	C	2.5
32	2a	1156	G	2.5
41	2j	18	ALA	2.5
56	2y	30	G	2.5
21	2Z	100	VAL	2.4
29	27	46	VAL	2.4
44	2m	98	VAL	2.4
34	2c	14	ILE	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	899	A	2.4
33	1b	79	ASP	2.4
33	2b	226	ARG	2.4
38	2g	13	GLN	2.4
40	1i	66	ARG	2.4
1	1A	2807	G	2.4
32	1a	102	G	2.4
32	2a	1442(A)	G	2.4
33	2b	44	LEU	2.4
34	2c	34	LEU	2.4
48	2q	10	VAL	2.4
47	1p	58	TYR	2.4
41	2j	11	PHE	2.4
12	2Q	33	GLY	2.4
32	2a	1285	A	2.4
38	1g	13	GLN	2.4
53	2v	15	A	2.4
54	2w	31	A	2.4
34	2c	92	ALA	2.4
44	2m	92	HIS	2.4
26	14	50	VAL	2.4
33	1b	15	VAL	2.4
38	2g	57	GLU	2.4
45	2n	46	GLU	2.4
1	2A	275	G	2.4
32	2a	1258	G	2.4
34	2c	23	TYR	2.4
33	2b	70	PHE	2.4
34	1c	179	ARG	2.4
51	1t	69	GLY	2.4
1	2A	1532	C	2.4
1	2A	2750	A	2.4
11	2P	92	GLU	2.4
27	25	59	GLU	2.4
32	1a	1004	A	2.4
34	2c	15	THR	2.4
32	2a	999	C	2.4
7	2H	27	LYS	2.4
50	2s	11	VAL	2.4
47	1p	57	ARG	2.4
15	1T	38	ASN	2.4
38	2g	30	ILE	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	2k	48	ILE	2.4
50	2s	82	GLY	2.4
7	2H	104	GLU	2.4
15	2T	131	ALA	2.4
45	2n	22	THR	2.4
21	2Z	70	LEU	2.4
6	2G	136	ARG	2.4
32	2a	1014	A	2.4
32	2a	1179	A	2.4
7	2H	133	VAL	2.4
40	1i	31	GLN	2.4
47	2p	79	VAL	2.4
32	1a	203	U	2.4
39	2h	86	ILE	2.4
40	2i	35	GLU	2.4
20	2Y	89	PHE	2.4
1	2A	1537	G	2.4
6	2G	4	ASP	2.4
34	2c	100	ALA	2.4
56	1y	28	G	2.4
40	2i	71	SER	2.4
7	2H	22	GLY	2.4
32	2a	1119	C	2.4
40	2i	24	GLY	2.4
40	2i	26	VAL	2.4
40	2i	110	GLU	2.4
1	1A	895	U	2.4
40	1i	78	LYS	2.4
41	2j	7	LYS	2.4
26	24	67	TYR	2.4
34	1c	193	TYR	2.4
40	2i	125	TYR	2.4
5	2F	15	SER	2.4
32	1a	998	G	2.3
32	2a	1323	G	2.3
40	1i	57	GLY	2.3
32	2a	1123	A	2.3
21	1Z	159	PRO	2.3
33	1b	26	PRO	2.3
33	1b	134	GLU	2.3
40	1i	46	ALA	2.3
48	1q	99	SER	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	102	ASN	2.3
21	1Z	126	VAL	2.3
31	29	16	VAL	2.3
32	1a	1042	G	2.3
32	2a	1133	G	2.3
26	24	65	ASP	2.3
33	2b	131	PRO	2.3
40	1i	91	ASP	2.3
51	1t	80	ARG	2.3
51	2t	25	ARG	2.3
32	1a	1038	C	2.3
32	2a	162	A	2.3
32	2a	1249	C	2.3
33	2b	105	PHE	2.3
50	2s	10	PHE	2.3
26	14	17	GLY	2.3
51	2t	9	ASN	2.3
26	24	62	ARG	2.3
11	2P	94	GLU	2.3
41	1j	17	ASP	2.3
9	2N	8	GLN	2.3
22	20	45	PHE	2.3
32	1a	1009	G	2.3
32	1a	1011	G	2.3
32	2a	1010	G	2.3
39	2h	134	ILE	2.3
44	1m	25	ILE	2.3
5	2F	42	ALA	2.3
32	2a	1151	A	2.3
8	2I	43	ASN	2.3
38	2g	7	ALA	2.3
51	1t	76	ALA	2.3
35	2d	23	GLY	2.3
7	2H	25	LYS	2.3
40	2i	78	LYS	2.3
44	2m	17	VAL	2.3
32	1a	182	U	2.3
33	1b	235	SER	2.3
38	2g	108	ALA	2.3
40	1i	23	ASN	2.3
32	1a	150	C	2.3
32	2a	1223	C	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2176	A	2.3
32	2a	1283	G	2.3
47	2p	20	VAL	2.3
48	2q	77	VAL	2.3
50	2s	51	VAL	2.3
1	1A	2897	U	2.3
32	1a	1212	U	2.3
32	2a	1000	U	2.3
35	2d	156	GLU	2.3
45	1n	61	TRP	2.3
52	2u	6	ARG	2.3
26	14	49	PHE	2.3
34	2c	160	ALA	2.3
40	2i	122	ALA	2.3
41	1j	11	PHE	2.3
50	2s	70	LYS	2.3
21	2Z	3	TYR	2.3
38	2g	85	TYR	2.3
1	1A	1073	A	2.3
47	2p	60	LEU	2.3
32	2a	1160	G	2.3
56	1y	10	G	2.3
56	2y	22	G	2.3
41	1j	41	PRO	2.3
44	2m	41	PRO	2.3
1	2A	2102	U	2.3
32	1a	1012	U	2.3
38	2g	76	ARG	2.3
45	2n	45	ARG	2.3
34	1c	45	LYS	2.3
40	2i	11	LYS	2.3
41	1j	31	GLY	2.3
44	2m	49	THR	2.3
1	1A	898	C	2.3
6	1G	48	GLU	2.3
6	2G	173	LEU	2.3
32	2a	175	C	2.3
32	2a	1045	C	2.3
33	2b	69	LEU	2.3
41	2j	16	LEU	2.3
1	1A	1045	A	2.2
21	2Z	95	PRO	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	630	G	2.2
54	1w	69	G	2.2
1	1A	1101	U	2.2
1	2A	9	U	2.2
1	2A	2897	U	2.2
33	2b	135	GLN	2.2
36	2e	99	GLY	2.2
7	2H	73	ALA	2.2
16	2U	113	ALA	2.2
6	1G	21	ARG	2.2
21	2Z	9	TYR	2.2
24	22	7	ARG	2.2
34	2c	178	LEU	2.2
32	1a	1039	C	2.2
32	1a	1158	C	2.2
32	2a	218	C	2.2
54	1w	3	C	2.2
56	1y	3	C	2.2
26	24	10	VAL	2.2
1	1A	2833	G	2.2
7	1H	92	ILE	2.2
33	1b	34	ALA	2.2
38	1g	7	ALA	2.2
44	2m	76	ALA	2.2
40	1i	117	HIS	2.2
46	2o	10	LYS	2.2
48	1q	27	PHE	2.2
12	2Q	59	ARG	2.2
51	2t	83	ARG	2.2
39	2h	36	LEU	2.2
39	2h	112	LEU	2.2
33	1b	31	TYR	2.2
34	2c	2	GLY	2.2
26	24	57	GLU	2.2
26	24	69	LYS	2.2
53	2v	14	A	2.2
41	1j	70	ARG	2.2
45	2n	30	ALA	2.2
33	1b	190	THR	2.2
36	2e	116	THR	2.2
56	1y	27	G	2.2
33	1b	138	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	109	PRO	2.2
34	2c	206	GLU	2.2
39	1h	67	PRO	2.2
5	1F	16	GLY	2.2
39	1h	43	GLY	2.2
39	2h	4	ASP	2.2
52	2u	18	TYR	2.2
21	2Z	122	ARG	2.2
39	2h	122	ARG	2.2
45	2n	29	ARG	2.2
7	2H	75	ALA	2.2
21	1Z	152	ALA	2.2
21	2Z	69	THR	2.2
39	2h	38	ILE	2.2
50	2s	62	ILE	2.2
54	1w	14	A	2.2
7	2H	32	GLU	2.2
33	1b	126	GLU	2.2
34	2c	28	GLN	2.2
47	1p	80	PHE	2.2
33	1b	118	LEU	2.2
42	2k	117	ASN	2.2
1	2A	100	G	2.2
11	2P	28	GLY	2.2
50	2s	28	LYS	2.2
32	1a	1010	G	2.2
7	2H	83	TYR	2.2
7	2H	157	TYR	2.2
26	24	61	ARG	2.2
42	2k	25	TYR	2.2
34	2c	195	VAL	2.2
31	29	13	LYS	2.2
15	2T	107	ASP	2.2
32	1a	143	A	2.2
39	2h	67	PRO	2.2
7	2H	97	ARG	2.2
45	2n	23	ARG	2.2
1	1A	2186	G	2.2
21	2Z	145	GLU	2.2
32	2a	630	G	2.2
24	22	9	GLN	2.2
33	1b	48	MET	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	4	U	2.2
32	2a	1025	U	2.2
34	1c	66	VAL	2.2
51	1t	74	LYS	2.2
51	1t	67	ALA	2.2
4	2E	176	ILE	2.2
8	1I	74	ASN	2.2
17	2V	92	THR	2.2
21	1Z	148	ASP	2.2
32	2a	92	C	2.2
33	2b	55	PHE	2.2
38	2g	10	ARG	2.2
38	2g	41	ARG	2.2
40	2i	57	GLY	2.2
39	2h	101	PRO	2.2
40	2i	111	ARG	2.2
41	1j	45	ARG	2.2
44	2m	119	GLY	2.2
21	2Z	91	LEU	2.2
32	1a	149	A	2.2
51	1t	92	LEU	2.2
12	2Q	112	GLU	2.2
48	2q	86	GLU	2.2
21	2Z	151	HIS	2.1
1	1A	271(I)	G	2.1
33	2b	79	ASP	2.1
5	1F	17	ARG	2.1
41	1j	5	ARG	2.1
50	1s	39	THR	2.1
51	1t	63	ILE	2.1
2	2B	59	A	2.1
32	2a	1442(B)	A	2.1
8	2I	113	ARG	2.1
11	2P	125	VAL	2.1
35	2d	47	ARG	2.1
41	1j	72	VAL	2.1
33	1b	231	GLU	2.1
34	1c	18	TRP	2.1
34	1c	185	GLY	2.1
50	2s	48	THR	2.1
1	1A	1089	G	2.1
32	2a	1182	G	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	1q	36	ILE	2.1
51	2t	55	ILE	2.1
5	1F	20	LEU	2.1
7	2H	64	LEU	2.1
50	2s	20	LEU	2.1
1	1A	2179	C	2.1
56	1y	4	C	2.1
1	1A	1847	A	2.1
1	2A	6	A	2.1
33	1b	21	ARG	2.1
33	1b	226	ARG	2.1
33	1b	37	ASN	2.1
45	2n	8	GLU	2.1
7	2H	76	VAL	2.1
35	2d	117	ALA	2.1
36	1e	146	ALA	2.1
38	2g	9	VAL	2.1
33	1b	131	PRO	2.1
44	2m	84	ILE	2.1
38	2g	22	LEU	2.1
39	2h	2	LEU	2.1
1	2A	1714	G	2.1
32	2a	1177	G	2.1
21	2Z	2	GLU	2.1
32	1a	1019	C	2.1
32	2a	1303	C	2.1
32	2a	1326	C	2.1
40	2i	128	ARG	2.1
50	1s	72	GLY	2.1
1	1A	1046	A	2.1
54	1w	73	A	2.1
7	2H	107	VAL	2.1
32	2a	961	U	2.1
33	1b	93	VAL	2.1
34	1c	86	VAL	2.1
39	2h	26	VAL	2.1
39	2h	53	VAL	2.1
40	1i	17	VAL	2.1
48	1q	11	VAL	2.1
7	2H	10	PRO	2.1
41	2j	41	PRO	2.1
33	2b	58	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	1j	29	ARG	2.1
44	2m	93	ARG	2.1
51	2t	16	HIS	2.1
40	2i	89	ASN	2.1
1	2A	2319	G	2.1
32	1a	199	G	2.1
32	2a	976	G	2.1
32	2a	1354	C	2.1
35	1d	180	GLY	2.1
51	1t	47	GLY	2.1
35	1d	181	MET	2.1
49	1r	73	ALA	2.1
1	2A	1507	A	2.1
8	2I	41	GLU	2.1
37	2f	95	GLU	2.1
50	1s	21	GLU	2.1
19	2X	60	ARG	2.1
40	2i	83	ARG	2.1
41	1j	46	ARG	2.1
41	1j	68	HIS	2.1
45	1n	16	PHE	2.1
51	2t	43	LEU	2.1
7	2H	40	GLU	2.1
8	1I	99	GLU	2.1
24	22	1	MET	2.1
32	1a	100	C	2.1
32	1a	1154	G	2.1
32	2a	1011	G	2.1
44	2m	13	LYS	2.1
54	1w	15	G	2.1
21	1Z	105	VAL	2.1
27	25	60	VAL	2.1
32	2a	1358	U	2.1
33	2b	15	VAL	2.1
33	2b	168	THR	2.1
34	2c	86	VAL	2.1
55	1x	47	U	2.1
40	2i	92	TYR	2.1
19	2X	95	LEU	2.1
47	1p	61	SER	2.1
36	2e	20	GLN	2.1
11	2P	102	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2103	C	2.0
14	2S	66	ALA	2.0
45	1n	10	ALA	2.0
32	2a	203	U	2.0
35	2d	127	THR	2.0
1	1A	2100	G	2.0
6	2G	146	TYR	2.0
32	2a	1220	G	2.0
32	2a	1370	G	2.0
1	2A	363(A)	A	2.0
11	2P	22	GLY	2.0
32	2a	1252	A	2.0
38	2g	82	GLY	2.0
12	2Q	63	LYS	2.0
3	2D	250	TRP	2.0
1	1A	271(N)	U	2.0
40	1i	103	THR	2.0
52	1u	17	THR	2.0
52	2u	8	THR	2.0
1	1A	2137	C	2.0
21	2Z	50	GLN	2.0
32	1a	91	C	2.0
32	2a	186	C	2.0
28	26	20	ASN	2.0
33	2b	94	ASN	2.0
3	2D	131	LEU	2.0
11	2P	75	ILE	2.0
26	14	32	TYR	2.0
40	2i	100	GLY	2.0
34	2c	179	ARG	2.0
1	1A	529	A	2.0
32	2a	1248	A	2.0
54	2w	14	A	2.0
50	1s	27	GLU	2.0
6	2G	61	ALA	2.0
33	1b	212	GLN	2.0
34	2c	72	LYS	2.0
38	1g	83	ALA	2.0
40	1i	52	ALA	2.0
40	1i	27	THR	2.0
17	2V	73	SER	2.0
23	21	38	SER	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	38	GLY	2.0
33	2b	233	SER	2.0
40	2i	44	VAL	2.0
34	1c	83	ARG	2.0
51	1t	70	SER	2.0
1	1A	894	C	2.0
33	2b	41	ILE	2.0
35	2d	19	LEU	2.0
48	2q	74	LEU	2.0
46	1o	78	TYR	2.0
50	1s	10	PHE	2.0
39	2h	54	ASP	2.0
40	1i	105	ASP	2.0
1	1A	880	G	2.0
1	2A	10	G	2.0
32	1a	160	A	2.0
32	1a	1174	G	2.0
26	14	46	GLN	2.0
33	2b	45	GLN	2.0
38	2g	11	GLN	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (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, 95^{th} 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
56	4SU	2y	8	20/21	0.55	0.38	89,98,103,117	0
56	G7M	2y	46	24/25	0.58	0.26	80,89,97,113	0
56	G7M	1y	46	24/25	0.60	0.34	86,91,98,109	0
56	MIA	2y	37	22/30	0.69	0.47	80,87,99,111	0
56	PSU	1y	55	20/21	0.69	0.41	85,89,96,106	0
56	5MU	2y	54	21/22	0.70	0.46	83,89,100,110	0
56	5MU	1y	54	21/22	0.73	0.38	80,86,92,104	0
56	4SU	1y	8	20/21	0.76	0.29	87,92,102,110	0
54	G7M	2w	46	24/25	0.76	0.27	79,88,97,115	0
56	PSU	2y	32	20/21	0.77	0.36	78,83,93,103	0
54	G7M	1w	46	24/25	0.78	0.23	67,79,94,112	0
56	MIA	1y	37	22/30	0.79	0.45	81,86,92,99	0
56	PSU	2y	39	20/21	0.79	0.33	82,86,95,101	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	PSU	2y	55	20/21	0.79	0.45	86,91,95,96	0
56	PSU	1y	39	20/21	0.80	0.39	78,84,91,95	0
54	4SU	2w	8	20/21	0.81	0.20	82,87,99,99	0
54	MIA	2w	37	25/30	0.85	0.25	59,70,78,93	0
56	PSU	1y	32	20/21	0.86	0.32	74,84,96,96	0
54	4SU	1w	8	20/21	0.88	0.20	75,79,87,88	0
32	2MG	2a	1207	24/25	0.88	0.21	64,78,80,81	0
54	PSU	2w	55	20/21	0.89	0.14	65,77,83,87	0
55	PSU	2x	55	20/21	0.89	0.15	63,71,77,82	0
54	PSU	1w	55	20/21	0.89	0.17	49,68,71,73	0
55	4SU	2x	8	20/21	0.90	0.16	65,70,73,74	0
54	5MU	2w	54	21/22	0.90	0.15	68,73,77,80	0
32	5MC	2a	967	21/22	0.90	0.18	58,64,70,74	0
43	0TD	1l	92	10/11	0.91	0.19	40,48,50,65	0
43	0TD	2l	92	10/11	0.91	0.19	57,60,71,78	0
32	G7M	2a	527	24/25	0.91	0.20	55,60,65,72	0
54	MIA	1w	37	29/30	0.91	0.26	44,53,68,84	0
54	PSU	2w	39	20/21	0.92	0.24	63,73,79,79	0
55	5MU	2x	54	21/22	0.92	0.22	64,74,77,78	0
55	PSU	1x	55	20/21	0.92	0.19	57,59,70,74	0
54	PSU	1w	32	20/21	0.92	0.17	56,61,67,68	0
32	PSU	2a	516	20/21	0.92	0.16	56,65,70,71	0
55	4SU	1x	8	20/21	0.93	0.18	54,60,69,71	0
32	M2G	2a	966	25/26	0.93	0.21	55,62,73,76	0
54	PSU	2w	32	20/21	0.93	0.20	64,77,81,82	0
1	PSU	2A	1911	20/21	0.94	0.19	49,59,65,65	0
32	5MC	1a	967	21/22	0.94	0.18	43,52,56,61	0
55	5MU	1x	54	21/22	0.94	0.14	58,63,68,72	0
32	4OC	2a	1402	22/23	0.94	0.17	50,55,59,64	0
32	MA6	2a	1518	24/25	0.94	0.20	50,58,62,63	0
32	MA6	2a	1519	24/25	0.94	0.24	52,58,61,63	0
55	5MC	2x	32	21/22	0.95	0.18	59,64,69,77	0
1	5MU	1A	1915	21/22	0.95	0.20	41,50,55,55	0
54	PSU	1w	39	20/21	0.95	0.21	51,59,64,74	0
32	M2G	1a	966	25/26	0.95	0.16	43,50,54,56	0
54	5MU	1w	54	21/22	0.95	0.17	39,55,65,68	0
1	5MU	2A	1915	21/22	0.95	0.17	57,63,68,68	0
1	PSU	2A	1917	20/21	0.95	0.17	51,58,67,68	0
32	5MC	2a	1407	21/22	0.95	0.20	44,51,55,58	0
1	OMC	2A	1920	21/22	0.95	0.20	49,56,60,64	0
1	5MC	2A	1962	21/22	0.95	0.22	41,49,52,65	0
32	MA6	1a	1519	24/25	0.96	0.20	35,44,48,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	PSU	1a	516	20/21	0.96	0.16	41,53,57,58	0
32	5MC	2a	1400	21/22	0.96	0.21	55,62,69,73	0
32	G7M	1a	527	24/25	0.96	0.19	36,42,48,50	0
32	5MC	2a	1404	21/22	0.96	0.18	45,50,54,58	0
1	PSU	1A	1911	20/21	0.96	0.19	41,45,50,52	0
32	UR3	2a	1498	21/22	0.96	0.21	49,55,57,59	0
55	8AN	2x	76	22/23	0.96	0.24	33,39,45,58	0
1	PSU	1A	1917	20/21	0.96	0.18	40,47,51,53	0
32	2MG	1a	1207	24/25	0.96	0.14	60,65,68,69	0
1	OMU	2A	2552	21/22	0.96	0.23	38,44,48,54	0
1	PSU	2A	2605	20/21	0.96	0.21	34,40,42,43	0
32	5MC	1a	1400	21/22	0.96	0.17	42,48,50,52	0
32	4OC	1a	1402	22/23	0.96	0.19	39,43,46,47	0
32	5MC	1a	1404	21/22	0.96	0.20	29,39,42,44	0
1	5MC	1A	1942	21/22	0.97	0.21	27,39,43,54	0
55	8AN	1x	76	22/23	0.97	0.23	20,25,30,37	0
1	5MC	1A	1962	21/22	0.97	0.19	26,34,41,42	0
1	2MA	1A	2503	23/24	0.97	0.21	18,24,26,29	0
32	MA6	1a	1518	24/25	0.97	0.22	33,41,44,45	0
55	5MC	1x	32	21/22	0.97	0.17	45,51,57,63	0
1	5MU	2A	1939	21/22	0.97	0.23	28,39,44,46	0
1	5MC	2A	1942	21/22	0.97	0.21	44,51,56,61	0
1	OMC	1A	1920	21/22	0.97	0.19	37,43,47,50	0
1	MA6	2A	2058	24/25	0.97	0.22	31,40,49,56	0
1	OMG	2A	2251	24/25	0.97	0.22	36,42,44,46	0
54	8AN	2w	76	22/23	0.97	0.22	35,40,43,47	0
1	2MA	2A	2503	23/24	0.98	0.22	29,40,43,47	0
1	PSU	1A	2605	20/21	0.98	0.21	24,28,31,34	0
1	MA6	1A	2058	24/25	0.98	0.22	15,26,33,36	0
54	8AN	1w	76	22/23	0.98	0.22	19,25,26,27	0
1	OMG	1A	2251	24/25	0.98	0.23	21,24,27,28	0
1	5MU	1A	1939	21/22	0.98	0.21	21,28,32,33	0
32	5MC	1a	1407	21/22	0.98	0.20	33,38,44,46	0
32	UR3	1a	1498	21/22	0.98	0.20	36,41,43,44	0
1	OMU	1A	2552	21/22	0.98	0.21	25,28,31,34	0

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, 95^{th} 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
57	MG	1A	3884	1/1	-0.01	0.12	60,60,60,60	0
57	MG	20	102	1/1	0.10	0.35	69,69,69,69	0
57	MG	1A	3227	1/1	0.21	0.24	66,66,66,66	0
57	MG	2a	1716	1/1	0.24	0.17	79,79,79,79	0
57	MG	2A	3784	1/1	0.27	0.16	72,72,72,72	0
57	MG	1A	3980	1/1	0.33	0.16	48,48,48,48	0
57	MG	1A	3341	1/1	0.38	0.29	65,65,65,65	0
57	MG	1A	4011	1/1	0.38	0.14	63,63,63,63	0
57	MG	2A	3400	1/1	0.38	0.54	88,88,88,88	0
57	MG	2A	3183	1/1	0.41	0.47	80,80,80,80	0
57	MG	2a	1752	1/1	0.41	0.15	68,68,68,68	0
57	MG	1A	3164	1/1	0.43	0.11	73,73,73,73	0
57	MG	2a	1618	1/1	0.43	0.27	80,80,80,80	0
57	MG	1A	3964	1/1	0.44	0.19	59,59,59,59	0
57	MG	1a	1761	1/1	0.45	0.17	73,73,73,73	0
57	MG	1a	1659	1/1	0.46	0.28	73,73,73,73	0
57	MG	2v	103	1/1	0.48	0.19	78,78,78,78	0
57	MG	1a	1668	1/1	0.49	0.22	74,74,74,74	0
57	MG	2a	1784	1/1	0.50	0.18	77,77,77,77	0
57	MG	1A	3551	1/1	0.50	0.16	52,52,52,52	0
57	MG	1A	3481	1/1	0.51	0.33	59,59,59,59	0
57	MG	2A	3747	1/1	0.51	0.25	78,78,78,78	0
57	MG	1a	1748	1/1	0.51	0.11	69,69,69,69	0
57	MG	2A	3169	1/1	0.52	0.20	64,64,64,64	0
57	MG	2A	3271	1/1	0.53	0.27	70,70,70,70	0
57	MG	2a	1647	1/1	0.53	0.24	64,64,64,64	0
57	MG	2A	3420	1/1	0.54	0.31	70,70,70,70	0
57	MG	1A	3507	1/1	0.54	0.26	71,71,71,71	0
57	MG	2A	3853	1/1	0.55	0.33	67,67,67,67	0
57	MG	2A	3386	1/1	0.55	0.49	67,67,67,67	0
57	MG	1A	3929	1/1	0.56	0.19	40,40,40,40	0
57	MG	1a	1744	1/1	0.56	0.18	68,68,68,68	0
57	MG	1A	3918	1/1	0.57	0.46	74,74,74,74	0
57	MG	1A	3465	1/1	0.57	0.14	74,74,74,74	0
57	MG	2A	3277	1/1	0.58	0.23	79,79,79,79	0
57	MG	2A	3256	1/1	0.58	0.20	71,71,71,71	0
57	MG	1A	3961	1/1	0.58	0.19	73,73,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3818	1/1	0.58	0.36	73,73,73,73	0
57	MG	1A	3984	1/1	0.59	0.12	55,55,55,55	0
57	MG	1A	3898	1/1	0.59	0.14	53,53,53,53	0
57	MG	1a	1751	1/1	0.59	0.09	76,76,76,76	0
57	MG	1A	4058	1/1	0.59	0.16	64,64,64,64	0
57	MG	2A	3001	1/1	0.59	0.35	64,64,64,64	0
57	MG	1A	3714	1/1	0.59	0.21	38,38,38,38	0
57	MG	2A	3647	1/1	0.59	0.12	69,69,69,69	0
57	MG	1A	3305	1/1	0.59	0.16	61,61,61,61	0
57	MG	2A	3234	1/1	0.59	0.19	81,81,81,81	0
57	MG	2A	3348	1/1	0.60	0.13	67,67,67,67	0
57	MG	2a	1748	1/1	0.60	0.11	70,70,70,70	0
57	MG	2A	3235	1/1	0.60	0.36	76,76,76,76	0
57	MG	1A	3571	1/1	0.60	0.14	58,58,58,58	0
57	MG	2a	1651	1/1	0.60	0.19	74,74,74,74	0
57	MG	2w	107	1/1	0.60	0.14	79,79,79,79	0
57	MG	2x	103	1/1	0.60	0.38	69,69,69,69	0
57	MG	2A	3761	1/1	0.61	0.21	72,72,72,72	0
57	MG	2a	1614	1/1	0.61	0.17	67,67,67,67	0
57	MG	2A	3246	1/1	0.61	0.28	60,60,60,60	0
57	MG	2a	1698	1/1	0.62	0.14	72,72,72,72	0
57	MG	1A	3762	1/1	0.62	0.20	64,64,64,64	0
57	MG	2A	3804	1/1	0.62	0.18	45,45,45,45	0
57	MG	2A	3274	1/1	0.62	0.21	69,69,69,69	0
57	MG	2A	3345	1/1	0.63	0.15	77,77,77,77	0
57	MG	2a	1690	1/1	0.63	0.15	64,64,64,64	0
57	MG	2A	3629	1/1	0.63	0.12	60,60,60,60	0
57	MG	1A	3869	1/1	0.63	0.12	67,67,67,67	0
57	MG	2B	208	1/1	0.63	0.22	57,57,57,57	0
57	MG	2A	3802	1/1	0.64	0.21	74,74,74,74	0
57	MG	2A	3359	1/1	0.64	0.30	69,69,69,69	0
57	MG	2B	202	1/1	0.64	0.24	67,67,67,67	0
57	MG	2A	3578	1/1	0.65	0.26	37,37,37,37	0
57	MG	1A	3972	1/1	0.65	0.18	66,66,66,66	0
57	MG	2A	3272	1/1	0.65	0.20	71,71,71,71	0
57	MG	2A	3074	1/1	0.65	0.24	53,53,53,53	0
57	MG	2a	1666	1/1	0.65	0.18	68,68,68,68	0
57	MG	2A	3149	1/1	0.65	0.37	79,79,79,79	0
57	MG	2A	3310	1/1	0.65	0.22	68,68,68,68	0
57	MG	1A	3847	1/1	0.65	0.21	68,68,68,68	0
57	MG	1A	3406	1/1	0.65	0.55	71,71,71,71	0
57	MG	1A	4005	1/1	0.65	0.15	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3655	1/1	0.65	0.13	53,53,53,53	0
57	MG	1A	3812	1/1	0.65	0.21	57,57,57,57	0
57	MG	2A	3413	1/1	0.65	0.22	74,74,74,74	0
57	MG	1v	101	1/1	0.65	0.20	68,68,68,68	0
57	MG	1F	303	1/1	0.66	0.14	72,72,72,72	0
57	MG	2a	1706	1/1	0.66	0.14	76,76,76,76	0
57	MG	1A	3379	1/1	0.66	0.18	67,67,67,67	0
57	MG	2A	3341	1/1	0.66	0.39	62,62,62,62	0
57	MG	1A	3547	1/1	0.66	0.20	64,64,64,64	0
57	MG	1A	3976	1/1	0.66	0.33	60,60,60,60	0
57	MG	1A	3730	1/1	0.66	0.07	71,71,71,71	0
57	MG	2A	3635	1/1	0.66	0.24	62,62,62,62	0
57	MG	2A	3364	1/1	0.66	0.20	79,79,79,79	0
57	MG	1B	221	1/1	0.67	0.24	64,64,64,64	0
57	MG	1x	107	1/1	0.67	0.15	70,70,70,70	0
57	MG	2a	1611	1/1	0.67	0.19	71,71,71,71	0
57	MG	2A	3434	1/1	0.67	0.17	61,61,61,61	0
57	MG	2A	3276	1/1	0.67	0.10	72,72,72,72	0
57	MG	1A	3082	1/1	0.67	0.11	67,67,67,67	0
57	MG	2A	3636	1/1	0.68	0.28	60,60,60,60	0
57	MG	2A	3007	1/1	0.68	0.28	63,63,63,63	0
57	MG	2A	3680	1/1	0.68	0.25	64,64,64,64	0
57	MG	1A	3892	1/1	0.68	0.13	70,70,70,70	0
57	MG	1T	202	1/1	0.68	0.18	66,66,66,66	0
57	MG	2A	3763	1/1	0.68	0.15	64,64,64,64	0
57	MG	1a	1602	1/1	0.68	0.15	60,60,60,60	0
57	MG	1A	3894	1/1	0.68	0.07	66,66,66,66	0
57	MG	1A	3896	1/1	0.68	0.12	52,52,52,52	0
57	MG	1A	3985	1/1	0.68	0.17	59,59,59,59	0
60	ZN	24	501	1/1	0.68	0.11	118,118,118,118	0
57	MG	2A	3090	1/1	0.69	0.09	72,72,72,72	0
57	MG	1A	3375	1/1	0.69	0.24	68,68,68,68	0
57	MG	1A	3874	1/1	0.69	0.14	48,48,48,48	0
57	MG	2A	3556	1/1	0.69	0.17	78,78,78,78	0
57	MG	10	108	1/1	0.69	0.48	62,62,62,62	0
57	MG	2A	3362	1/1	0.69	0.54	66,66,66,66	0
57	MG	1A	3324	1/1	0.69	0.47	57,57,57,57	0
57	MG	1A	3736	1/1	0.69	0.15	76,76,76,76	0
57	MG	2a	1657	1/1	0.69	0.14	68,68,68,68	0
57	MG	2A	3079	1/1	0.69	0.29	60,60,60,60	0
57	MG	2a	1683	1/1	0.69	0.17	68,68,68,68	0
57	MG	1A	3574	1/1	0.70	0.14	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3171	1/1	0.70	0.19	50,50,50,50	0
57	MG	1A	3746	1/1	0.70	0.14	64,64,64,64	0
57	MG	2A	3642	1/1	0.70	0.23	66,66,66,66	0
57	MG	1A	3313	1/1	0.70	0.30	63,63,63,63	0
57	MG	2A	3663	1/1	0.70	0.13	84,84,84,84	0
57	MG	1a	1603	1/1	0.70	0.22	65,65,65,65	0
57	MG	2A	3243	1/1	0.70	0.31	65,65,65,65	0
57	MG	1A	3004	1/1	0.70	0.21	43,43,43,43	0
57	MG	1A	3424	1/1	0.70	0.37	59,59,59,59	0
57	MG	1a	1686	1/1	0.70	0.22	55,55,55,55	0
57	MG	1A	3734	1/1	0.70	0.10	39,39,39,39	0
57	MG	1A	3917	1/1	0.70	0.10	68,68,68,68	0
57	MG	2A	3101	1/1	0.70	0.17	73,73,73,73	0
57	MG	2A	3830	1/1	0.70	0.09	58,58,58,58	0
57	MG	2A	3450	1/1	0.70	0.40	76,76,76,76	0
57	MG	1a	1750	1/1	0.70	0.10	64,64,64,64	0
57	MG	2A	3278	1/1	0.70	0.19	73,73,73,73	0
57	MG	2x	105	1/1	0.70	0.41	67,67,67,67	0
57	MG	2y	105	1/1	0.70	0.13	82,82,82,82	0
57	MG	2A	3579	1/1	0.70	0.20	54,54,54,54	0
57	MG	1O	206	1/1	0.71	0.35	66,66,66,66	0
57	MG	2A	3054	1/1	0.71	0.26	66,66,66,66	0
57	MG	2A	3718	1/1	0.71	0.20	44,44,44,44	0
57	MG	1A	3429	1/1	0.71	0.38	68,68,68,68	0
57	MG	2A	3189	1/1	0.71	0.26	60,60,60,60	0
57	MG	1A	3431	1/1	0.71	0.27	65,65,65,65	0
57	MG	1a	1731	1/1	0.71	0.11	55,55,55,55	0
57	MG	2A	3370	1/1	0.71	0.12	68,68,68,68	0
57	MG	2A	3372	1/1	0.71	0.16	74,74,74,74	0
57	MG	1A	3664	1/1	0.71	0.13	53,53,53,53	0
57	MG	2A	3291	1/1	0.71	0.33	61,61,61,61	0
57	MG	1A	3806	1/1	0.71	0.11	42,42,42,42	0
57	MG	1B	209	1/1	0.72	0.18	49,49,49,49	0
57	MG	2a	1680	1/1	0.72	0.17	63,63,63,63	0
57	MG	1B	214	1/1	0.72	0.16	61,61,61,61	0
57	MG	1A	3327	1/1	0.72	0.29	46,46,46,46	0
57	MG	1B	236	1/1	0.72	0.17	42,42,42,42	0
57	MG	2A	3180	1/1	0.72	0.25	65,65,65,65	0
57	MG	1A	3868	1/1	0.72	0.11	54,54,54,54	0
57	MG	1A	3777	1/1	0.72	0.16	60,60,60,60	0
57	MG	2A	3279	1/1	0.72	0.12	62,62,62,62	0
57	MG	1Q	207	1/1	0.72	0.22	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3293	1/1	0.72	0.26	61,61,61,61	0
57	MG	2a	1617	1/1	0.72	0.19	69,69,69,69	0
57	MG	1A	3978	1/1	0.72	0.18	40,40,40,40	0
57	MG	1a	1749	1/1	0.72	0.15	70,70,70,70	0
57	MG	1A	3903	1/1	0.72	0.13	57,57,57,57	0
57	MG	2A	3571	1/1	0.72	0.20	70,70,70,70	0
57	MG	1B	230	1/1	0.73	0.07	73,73,73,73	0
57	MG	2A	3388	1/1	0.73	0.28	37,37,37,37	0
57	MG	1A	3294	1/1	0.73	0.14	47,47,47,47	0
57	MG	1U	209	1/1	0.73	0.45	64,64,64,64	0
57	MG	2A	3166	1/1	0.73	0.14	74,74,74,74	0
57	MG	2a	1637	1/1	0.73	0.21	71,71,71,71	0
57	MG	1V	208	1/1	0.73	0.13	59,59,59,59	0
57	MG	2A	3062	1/1	0.73	0.30	55,55,55,55	0
57	MG	1A	3589	1/1	0.73	0.11	76,76,76,76	0
57	MG	1A	3702	1/1	0.73	0.21	68,68,68,68	0
57	MG	2a	1669	1/1	0.73	0.37	63,63,63,63	0
57	MG	2A	3574	1/1	0.73	0.23	59,59,59,59	0
57	MG	2A	3741	1/1	0.73	0.36	67,67,67,67	0
57	MG	1A	3660	1/1	0.74	0.18	72,72,72,72	0
57	MG	2A	3257	1/1	0.74	0.20	59,59,59,59	0
57	MG	1a	1753	1/1	0.74	0.12	54,54,54,54	0
57	MG	2a	1677	1/1	0.74	0.17	64,64,64,64	0
57	MG	1A	4006	1/1	0.74	0.15	44,44,44,44	0
57	MG	2A	3073	1/1	0.74	0.18	57,57,57,57	0
57	MG	2A	3611	1/1	0.74	0.12	65,65,65,65	0
57	MG	1a	1809	1/1	0.74	0.13	64,64,64,64	0
57	MG	1A	3889	1/1	0.74	0.34	62,62,62,62	0
57	MG	2A	3231	1/1	0.74	0.26	70,70,70,70	0
57	MG	2a	1718	1/1	0.74	0.32	78,78,78,78	0
57	MG	1w	106	1/1	0.74	0.22	83,83,83,83	0
57	MG	1A	3464	1/1	0.74	0.20	53,53,53,53	0
57	MG	2A	3651	1/1	0.74	0.34	60,60,60,60	0
57	MG	2A	3660	1/1	0.74	0.20	64,64,64,64	0
57	MG	2A	3116	1/1	0.74	0.36	58,58,58,58	0
57	MG	2A	3304	1/1	0.74	0.13	63,63,63,63	0
57	MG	15	106	1/1	0.74	0.36	54,54,54,54	0
57	MG	2A	3319	1/1	0.74	0.14	78,78,78,78	0
57	MG	2A	3329	1/1	0.74	0.22	74,74,74,74	0
57	MG	2A	3563	1/1	0.75	0.20	60,60,60,60	0
57	MG	1a	1776	1/1	0.75	0.08	67,67,67,67	0
57	MG	1A	3973	1/1	0.75	0.16	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3241	1/1	0.75	0.22	68,68,68,68	0
57	MG	2A	3028	1/1	0.75	0.32	67,67,67,67	0
57	MG	2A	3591	1/1	0.75	0.11	66,66,66,66	0
57	MG	2A	3849	1/1	0.75	0.16	61,61,61,61	0
57	MG	1A	3904	1/1	0.75	0.13	36,36,36,36	0
57	MG	2w	102	1/1	0.75	0.21	78,78,78,78	0
57	MG	2A	3375	1/1	0.75	0.24	78,78,78,78	0
57	MG	2A	3502	1/1	0.75	0.27	57,57,57,57	0
57	MG	2A	3758	1/1	0.75	0.13	77,77,77,77	0
57	MG	1x	104	1/1	0.75	0.18	69,69,69,69	0
57	MG	2a	1613	1/1	0.75	0.12	70,70,70,70	0
57	MG	1A	3965	1/1	0.76	0.28	79,79,79,79	0
57	MG	1A	3316	1/1	0.76	0.19	62,62,62,62	0
57	MG	2A	3205	1/1	0.76	0.22	69,69,69,69	0
57	MG	2a	1728	1/1	0.76	0.13	68,68,68,68	0
57	MG	2A	3670	1/1	0.76	0.31	62,62,62,62	0
57	MG	2A	3832	1/1	0.76	0.37	64,64,64,64	0
57	MG	2A	3605	1/1	0.76	0.27	46,46,46,46	0
57	MG	2a	1805	1/1	0.76	0.18	68,68,68,68	0
57	MG	2j	201	1/1	0.76	0.20	76,76,76,76	0
57	MG	1B	207	1/1	0.76	0.20	69,69,69,69	0
57	MG	1A	3446	1/1	0.76	0.21	43,43,43,43	0
57	MG	1A	3907	1/1	0.76	0.17	50,50,50,50	0
57	MG	1a	1775	1/1	0.76	0.06	77,77,77,77	0
57	MG	1A	3575	1/1	0.76	0.14	44,44,44,44	0
57	MG	2A	3643	1/1	0.76	0.15	70,70,70,70	0
57	MG	2A	3254	1/1	0.76	0.18	66,66,66,66	0
57	MG	1A	4055	1/1	0.77	0.11	59,59,59,59	0
57	MG	2A	3249	1/1	0.77	0.22	77,77,77,77	0
57	MG	1A	3970	1/1	0.77	0.34	61,61,61,61	0
57	MG	2a	1621	1/1	0.77	0.09	74,74,74,74	0
57	MG	1A	3449	1/1	0.77	0.16	67,67,67,67	0
57	MG	2a	1643	1/1	0.77	0.17	84,84,84,84	0
57	MG	2A	3377	1/1	0.77	0.19	45,45,45,45	0
57	MG	1A	3352	1/1	0.77	0.16	59,59,59,59	0
57	MG	2A	3261	1/1	0.77	0.18	66,66,66,66	0
57	MG	2A	3093	1/1	0.77	0.26	60,60,60,60	0
57	MG	2A	3696	1/1	0.77	0.13	69,69,69,69	0
57	MG	2A	3403	1/1	0.77	0.20	70,70,70,70	0
57	MG	1a	1762	1/1	0.77	0.17	47,47,47,47	0
57	MG	1A	3336	1/1	0.77	0.37	45,45,45,45	0
57	MG	1A	3276	1/1	0.77	0.27	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1654	1/1	0.77	0.18	57,57,57,57	0
57	MG	1A	3891	1/1	0.77	0.10	45,45,45,45	0
57	MG	2A	3765	1/1	0.77	0.13	83,83,83,83	0
57	MG	1A	3386	1/1	0.77	0.19	62,62,62,62	0
57	MG	2a	1722	1/1	0.77	0.08	75,75,75,75	0
57	MG	2A	3791	1/1	0.77	0.19	60,60,60,60	0
57	MG	2a	1730	1/1	0.77	0.13	64,64,64,64	0
57	MG	1a	1670	1/1	0.77	0.10	62,62,62,62	0
57	MG	1a	1674	1/1	0.77	0.13	65,65,65,65	0
57	MG	1A	3956	1/1	0.77	0.10	41,41,41,41	0
57	MG	2a	1793	1/1	0.77	0.16	73,73,73,73	0
57	MG	2A	3577	1/1	0.77	0.18	44,44,44,44	0
57	MG	1F	310	1/1	0.77	0.16	54,54,54,54	0
57	MG	2A	3206	1/1	0.77	0.26	74,74,74,74	0
57	MG	2A	3230	1/1	0.77	0.23	51,51,51,51	0
57	MG	1A	3643	1/1	0.77	0.15	40,40,40,40	0
57	MG	1A	3867	1/1	0.77	0.10	48,48,48,48	0
57	MG	1A	3401	1/1	0.77	0.28	43,43,43,43	0
57	MG	2A	3065	1/1	0.77	0.22	65,65,65,65	0
57	MG	2A	3245	1/1	0.77	0.30	62,62,62,62	0
57	MG	2A	3709	1/1	0.78	0.23	76,76,76,76	0
57	MG	2A	3712	1/1	0.78	0.31	39,39,39,39	0
57	MG	1A	3267	1/1	0.78	0.20	66,66,66,66	0
57	MG	2E	309	1/1	0.78	0.22	56,56,56,56	0
57	MG	2A	3730	1/1	0.78	0.20	57,57,57,57	0
57	MG	1a	1660	1/1	0.78	0.16	63,63,63,63	0
57	MG	1A	3409	1/1	0.78	0.24	66,66,66,66	0
57	MG	2A	3451	1/1	0.78	0.15	57,57,57,57	0
57	MG	1A	4004	1/1	0.78	0.11	37,37,37,37	0
57	MG	2A	3641	1/1	0.78	0.27	65,65,65,65	0
57	MG	1A	3369	1/1	0.78	0.27	65,65,65,65	0
57	MG	2a	1772	1/1	0.78	0.20	60,60,60,60	0
57	MG	2a	1633	1/1	0.78	0.48	62,62,62,62	0
57	MG	1A	3975	1/1	0.78	0.17	50,50,50,50	0
57	MG	2a	1798	1/1	0.78	0.29	68,68,68,68	0
57	MG	14	101	1/1	0.78	0.07	71,71,71,71	0
57	MG	2a	1645	1/1	0.78	0.08	80,80,80,80	0
57	MG	1A	3535	1/1	0.78	0.29	65,65,65,65	0
57	MG	16	101	1/1	0.78	0.14	59,59,59,59	0
57	MG	1A	3579	1/1	0.78	0.15	55,55,55,55	0
57	MG	1A	3404	1/1	0.78	0.20	67,67,67,67	0
57	MG	2A	3588	1/1	0.78	0.20	73,73,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2y	103	1/1	0.78	0.22	80,80,80,80	0
57	MG	2A	3845	1/1	0.78	0.10	61,61,61,61	0
57	MG	1A	4060	1/1	0.78	0.18	47,47,47,47	0
57	MG	1A	3528	1/1	0.79	0.27	47,47,47,47	0
57	MG	2A	3693	1/1	0.79	0.16	71,71,71,71	0
57	MG	1A	3630	1/1	0.79	0.18	40,40,40,40	0
57	MG	2a	1641	1/1	0.79	0.13	67,67,67,67	0
57	MG	1A	4069	1/1	0.79	0.09	55,55,55,55	0
57	MG	1A	4088	1/1	0.79	0.10	71,71,71,71	0
57	MG	2A	3224	1/1	0.79	0.30	59,59,59,59	0
57	MG	10	102	1/1	0.79	0.14	58,58,58,58	0
57	MG	2A	3733	1/1	0.79	0.08	71,71,71,71	0
57	MG	1A	3902	1/1	0.79	0.15	38,38,38,38	0
57	MG	1A	3962	1/1	0.79	0.14	73,73,73,73	0
57	MG	2A	3751	1/1	0.79	0.13	50,50,50,50	0
57	MG	2a	1679	1/1	0.79	0.23	55,55,55,55	0
57	MG	1B	212	1/1	0.79	0.30	63,63,63,63	0
57	MG	2A	3336	1/1	0.79	0.20	73,73,73,73	0
57	MG	2a	1688	1/1	0.79	0.16	72,72,72,72	0
57	MG	2A	3241	1/1	0.79	0.18	48,48,48,48	0
57	MG	2a	1695	1/1	0.79	0.19	68,68,68,68	0
57	MG	2a	1696	1/1	0.79	0.10	67,67,67,67	0
57	MG	2A	3242	1/1	0.79	0.19	61,61,61,61	0
57	MG	2A	3584	1/1	0.79	0.11	67,67,67,67	0
57	MG	1A	3636	1/1	0.79	0.21	34,34,34,34	0
57	MG	2A	3351	1/1	0.79	0.35	65,65,65,65	0
57	MG	1A	3637	1/1	0.79	0.17	27,27,27,27	0
57	MG	2A	3085	1/1	0.79	0.35	60,60,60,60	0
57	MG	2A	3614	1/1	0.79	0.33	67,67,67,67	0
57	MG	2A	3627	1/1	0.79	0.27	67,67,67,67	0
57	MG	1B	222	1/1	0.79	0.23	54,54,54,54	0
57	MG	1A	3427	1/1	0.79	0.24	66,66,66,66	0
57	MG	1A	3912	1/1	0.79	0.19	57,57,57,57	0
57	MG	1A	3302	1/1	0.79	0.20	52,52,52,52	0
57	MG	1a	1810	1/1	0.79	0.10	54,54,54,54	0
57	MG	2A	3264	1/1	0.79	0.21	62,62,62,62	0
57	MG	2a	1806	1/1	0.79	0.12	67,67,67,67	0
57	MG	1a	1664	1/1	0.79	0.26	60,60,60,60	0
57	MG	2a	1602	1/1	0.79	0.15	79,79,79,79	0
57	MG	2a	1605	1/1	0.79	0.08	72,72,72,72	0
57	MG	2A	3649	1/1	0.79	0.12	58,58,58,58	0
57	MG	2A	3392	1/1	0.79	0.21	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
57	MG	1A	3248	1/1	0.79	0.18	53,53,53,53	0
57	MG	1w	107	1/1	0.79	0.13	79,79,79,79	0
57	MG	2y	104	1/1	0.79	0.23	82,82,82,82	0
57	MG	1A	4056	1/1	0.79	0.15	49,49,49,49	0
57	MG	2a	1619	1/1	0.79	0.13	68,68,68,68	0
57	MG	1A	3585	1/1	0.80	0.15	56,56,56,56	0
57	MG	2A	3547	1/1	0.80	0.24	61,61,61,61	0
57	MG	1A	3698	1/1	0.80	0.19	41,41,41,41	0
57	MG	1A	3094	1/1	0.80	0.32	36,36,36,36	0
57	MG	2A	3226	1/1	0.80	0.29	63,63,63,63	0
57	MG	1A	3610	1/1	0.80	0.14	43,43,43,43	0
57	MG	2A	3326	1/1	0.80	0.38	69,69,69,69	0
57	MG	1A	3054	1/1	0.80	0.23	44,44,44,44	0
57	MG	1A	3320	1/1	0.80	0.19	61,61,61,61	0
57	MG	1A	3351	1/1	0.80	0.18	47,47,47,47	0
57	MG	2A	3778	1/1	0.80	0.21	39,39,39,39	0
57	MG	2A	3343	1/1	0.80	0.25	81,81,81,81	0
57	MG	1A	3247	1/1	0.80	0.18	47,47,47,47	0
57	MG	1X	106	1/1	0.80	0.10	45,45,45,45	0
57	MG	2A	3803	1/1	0.80	0.14	57,57,57,57	0
57	MG	1A	3885	1/1	0.80	0.09	48,48,48,48	0
57	MG	1A	3981	1/1	0.80	0.17	51,51,51,51	0
57	MG	11	103	1/1	0.80	0.12	62,62,62,62	0
57	MG	12	102	1/1	0.80	0.23	49,49,49,49	0
57	MG	2A	3252	1/1	0.80	0.15	52,52,52,52	0
57	MG	1A	3748	1/1	0.80	0.13	52,52,52,52	0
57	MG	1A	3362	1/1	0.80	0.27	52,52,52,52	0
57	MG	1A	3997	1/1	0.80	0.19	59,59,59,59	0
57	MG	1A	3438	1/1	0.80	0.24	63,63,63,63	0
57	MG	2a	1750	1/1	0.80	0.09	78,78,78,78	0
57	MG	2B	216	1/1	0.80	0.15	61,61,61,61	0
57	MG	2a	1753	1/1	0.80	0.11	67,67,67,67	0
57	MG	1A	3791	1/1	0.80	0.13	52,52,52,52	0
57	MG	2F	3302	1/1	0.80	0.23	56,56,56,56	0
57	MG	1a	1799	1/1	0.80	0.14	71,71,71,71	0
57	MG	1a	1605	1/1	0.80	0.10	61,61,61,61	0
57	MG	2a	1604	1/1	0.80	0.17	60,60,60,60	0
57	MG	2A	3657	1/1	0.80	0.20	61,61,61,61	0
57	MG	2A	3401	1/1	0.80	0.33	56,56,56,56	0
57	MG	1a	1610	1/1	0.80	0.16	52,52,52,52	0
57	MG	2A	3172	1/1	0.80	0.17	69,69,69,69	0
57	MG	2A	3677	1/1	0.80	0.19	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1b	301	1/1	0.80	0.13	63,63,63,63	0
57	MG	1a	1632	1/1	0.80	0.20	67,67,67,67	0
57	MG	2y	101	1/1	0.80	0.12	80,80,80,80	0
57	MG	2A	3448	1/1	0.80	0.19	75,75,75,75	0
57	MG	1B	234	1/1	0.80	0.21	70,70,70,70	0
57	MG	2a	1635	1/1	0.80	0.12	70,70,70,70	0
57	MG	2A	3281	1/1	0.80	0.29	62,62,62,62	0
57	MG	2A	3720	1/1	0.81	0.15	60,60,60,60	0
57	MG	1A	3966	1/1	0.81	0.16	66,66,66,66	0
57	MG	2A	3031	1/1	0.81	0.25	44,44,44,44	0
57	MG	2A	3046	1/1	0.81	0.13	68,68,68,68	0
57	MG	2A	3569	1/1	0.81	0.12	71,71,71,71	0
57	MG	2a	1649	1/1	0.81	0.11	70,70,70,70	0
57	MG	1A	3704	1/1	0.81	0.27	53,53,53,53	0
57	MG	2A	3755	1/1	0.81	0.17	47,47,47,47	0
57	MG	2A	3335	1/1	0.81	0.16	70,70,70,70	0
57	MG	2a	1667	1/1	0.81	0.09	77,77,77,77	0
57	MG	1A	3303	1/1	0.81	0.17	61,61,61,61	0
57	MG	1A	4028	1/1	0.81	0.17	76,76,76,76	0
57	MG	1A	4051	1/1	0.81	0.16	74,74,74,74	0
57	MG	2A	3777	1/1	0.81	0.12	61,61,61,61	0
57	MG	1E	313	1/1	0.81	0.20	66,66,66,66	0
57	MG	1a	1604	1/1	0.81	0.14	60,60,60,60	0
57	MG	1A	3070	1/1	0.81	0.24	40,40,40,40	0
57	MG	2A	3247	1/1	0.81	0.23	67,67,67,67	0
57	MG	2A	3248	1/1	0.81	0.23	68,68,68,68	0
57	MG	1A	3417	1/1	0.81	0.32	70,70,70,70	0
57	MG	2A	3621	1/1	0.81	0.13	69,69,69,69	0
57	MG	2A	3823	1/1	0.81	0.21	68,68,68,68	0
57	MG	2A	3365	1/1	0.81	0.10	75,75,75,75	0
57	MG	1A	3593	1/1	0.81	0.26	39,39,39,39	0
57	MG	2A	3097	1/1	0.81	0.13	61,61,61,61	0
57	MG	1a	1649	1/1	0.81	0.21	68,68,68,68	0
57	MG	2a	1744	1/1	0.81	0.12	68,68,68,68	0
57	MG	2a	1746	1/1	0.81	0.07	76,76,76,76	0
57	MG	1A	3745	1/1	0.81	0.15	40,40,40,40	0
57	MG	2B	201	1/1	0.81	0.21	67,67,67,67	0
57	MG	2A	3122	1/1	0.81	0.29	57,57,57,57	0
57	MG	2A	3133	1/1	0.81	0.25	43,43,43,43	0
57	MG	1A	3949	1/1	0.81	0.22	52,52,52,52	0
57	MG	2A	3393	1/1	0.81	0.32	64,64,64,64	0
57	MG	1A	4073	1/1	0.81	0.06	73,73,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2P	202	1/1	0.81	0.12	62,62,62,62	0
57	MG	2a	1804	1/1	0.81	0.18	65,65,65,65	0
57	MG	1A	3069	1/1	0.81	0.21	59,59,59,59	0
57	MG	1A	3897	1/1	0.81	0.27	59,59,59,59	0
57	MG	1A	3426	1/1	0.81	0.25	67,67,67,67	0
57	MG	2l	205	1/1	0.81	0.24	72,72,72,72	0
57	MG	2A	3665	1/1	0.81	0.18	67,67,67,67	0
57	MG	1a	1672	1/1	0.81	0.41	65,65,65,65	0
57	MG	1A	3447	1/1	0.81	0.17	47,47,47,47	0
57	MG	1a	1678	1/1	0.81	0.18	55,55,55,55	0
57	MG	2A	3690	1/1	0.81	0.23	64,64,64,64	0
57	MG	1A	3877	1/1	0.81	0.13	72,72,72,72	0
57	MG	2A	3004	1/1	0.81	0.15	63,63,63,63	0
57	MG	1a	1706	1/1	0.81	0.14	65,65,65,65	0
57	MG	2A	3533	1/1	0.81	0.14	45,45,45,45	0
57	MG	2A	3540	1/1	0.81	0.31	45,45,45,45	0
57	MG	2A	3318	1/1	0.82	0.16	78,78,78,78	0
57	MG	2A	3822	1/1	0.82	0.23	58,58,58,58	0
57	MG	1A	3418	1/1	0.82	0.20	75,75,75,75	0
57	MG	1a	1714	1/1	0.82	0.14	68,68,68,68	0
57	MG	2A	3497	1/1	0.82	0.32	76,76,76,76	0
57	MG	2A	3100	1/1	0.82	0.30	69,69,69,69	0
57	MG	2A	3330	1/1	0.82	0.16	79,79,79,79	0
57	MG	1a	1725	1/1	0.82	0.16	61,61,61,61	0
57	MG	2A	3672	1/1	0.82	0.08	62,62,62,62	0
57	MG	2A	3544	1/1	0.82	0.13	57,57,57,57	0
57	MG	2a	1699	1/1	0.82	0.38	62,62,62,62	0
57	MG	2a	1703	1/1	0.82	0.08	70,70,70,70	0
57	MG	2A	3679	1/1	0.82	0.17	50,50,50,50	0
57	MG	2a	1709	1/1	0.82	0.26	48,48,48,48	0
57	MG	2A	3110	1/1	0.82	0.11	73,73,73,73	0
57	MG	2A	3682	1/1	0.82	0.14	49,49,49,49	0
57	MG	2a	1721	1/1	0.82	0.14	75,75,75,75	0
57	MG	1A	3486	1/1	0.82	0.28	50,50,50,50	0
57	MG	2N	201	1/1	0.82	0.27	76,76,76,76	0
57	MG	1x	105	1/1	0.82	0.22	56,56,56,56	0
57	MG	2a	1740	1/1	0.82	0.17	50,50,50,50	0
57	MG	2V	202	1/1	0.82	0.27	62,62,62,62	0
57	MG	1a	1614	1/1	0.82	0.19	61,61,61,61	0
57	MG	1x	111	1/1	0.82	0.35	71,71,71,71	0
57	MG	2A	3153	1/1	0.82	0.13	61,61,61,61	0
57	MG	1A	3319	1/1	0.82	0.13	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3003	1/1	0.82	0.40	55,55,55,55	0
57	MG	1A	3948	1/1	0.82	0.18	68,68,68,68	0
57	MG	1A	4030	1/1	0.82	0.14	63,63,63,63	0
57	MG	2a	1789	1/1	0.82	0.16	61,61,61,61	0
57	MG	2A	3179	1/1	0.82	0.21	47,47,47,47	0
57	MG	1A	4033	1/1	0.82	0.13	55,55,55,55	0
57	MG	2A	3598	1/1	0.82	0.30	51,51,51,51	0
57	MG	1A	3365	1/1	0.82	0.19	70,70,70,70	0
57	MG	1a	1759	1/1	0.82	0.12	62,62,62,62	0
57	MG	2g	201	1/1	0.82	0.12	77,77,77,77	0
57	MG	1A	3366	1/1	0.82	0.15	70,70,70,70	0
57	MG	1A	3794	1/1	0.82	0.10	53,53,53,53	0
57	MG	1A	3411	1/1	0.82	0.23	50,50,50,50	0
57	MG	1A	3077	1/1	0.82	0.34	38,38,38,38	0
57	MG	1A	3890	1/1	0.82	0.10	53,53,53,53	0
57	MG	1A	3601	1/1	0.82	0.23	49,49,49,49	0
57	MG	1A	3967	1/1	0.82	0.10	54,54,54,54	0
57	MG	2x	106	1/1	0.82	0.28	40,40,40,40	0
57	MG	2A	3307	1/1	0.82	0.35	66,66,66,66	0
57	MG	2a	1652	1/1	0.82	0.10	75,75,75,75	0
57	MG	1a	1697	1/1	0.82	0.23	63,63,63,63	0
57	MG	2A	3312	1/1	0.82	0.25	60,60,60,60	0
57	MG	2A	3810	1/1	0.82	0.27	41,41,41,41	0
57	MG	2A	3531	1/1	0.83	0.18	41,41,41,41	0
57	MG	2A	3669	1/1	0.83	0.24	77,77,77,77	0
57	MG	2a	1691	1/1	0.83	0.29	62,62,62,62	0
57	MG	2A	3852	1/1	0.83	0.11	69,69,69,69	0
57	MG	1x	110	1/1	0.83	0.22	27,27,27,27	0
57	MG	2A	3671	1/1	0.83	0.26	67,67,67,67	0
57	MG	2A	3539	1/1	0.83	0.16	59,59,59,59	0
57	MG	1A	3545	1/1	0.83	0.23	56,56,56,56	0
57	MG	2A	3251	1/1	0.83	0.35	64,64,64,64	0
57	MG	1x	114	1/1	0.83	0.09	62,62,62,62	0
57	MG	2a	1710	1/1	0.83	0.27	64,64,64,64	0
57	MG	2A	3347	1/1	0.83	0.18	72,72,72,72	0
57	MG	1A	3298	1/1	0.83	0.28	52,52,52,52	0
57	MG	2A	3162	1/1	0.83	0.15	67,67,67,67	0
57	MG	2T	203	1/1	0.83	0.20	69,69,69,69	0
57	MG	1A	3813	1/1	0.83	0.13	43,43,43,43	0
57	MG	1a	1662	1/1	0.83	0.14	58,58,58,58	0
57	MG	2a	1735	1/1	0.83	0.10	85,85,85,85	0
57	MG	28	102	1/1	0.83	0.14	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3827	1/1	0.83	0.16	37,37,37,37	0
57	MG	2A	3017	1/1	0.83	0.19	59,59,59,59	0
57	MG	1A	3999	1/1	0.83	0.19	56,56,56,56	0
57	MG	2A	3371	1/1	0.83	0.14	69,69,69,69	0
57	MG	1A	3072	1/1	0.83	0.21	42,42,42,42	0
57	MG	2A	3045	1/1	0.83	0.15	56,56,56,56	0
57	MG	1A	3694	1/1	0.83	0.14	69,69,69,69	0
57	MG	2A	3379	1/1	0.83	0.36	53,53,53,53	0
57	MG	2A	3193	1/1	0.83	0.18	66,66,66,66	0
57	MG	18	106	1/1	0.83	0.25	62,62,62,62	0
57	MG	1G	203	1/1	0.83	0.17	67,67,67,67	0
57	MG	2A	3623	1/1	0.83	0.25	66,66,66,66	0
57	MG	1a	1680	1/1	0.83	0.18	57,57,57,57	0
57	MG	1A	3161	1/1	0.83	0.14	45,45,45,45	0
57	MG	2A	3631	1/1	0.83	0.33	58,58,58,58	0
57	MG	1A	3282	1/1	0.83	0.20	36,36,36,36	0
57	MG	1a	1814	1/1	0.83	0.14	58,58,58,58	0
57	MG	2A	3797	1/1	0.83	0.07	56,56,56,56	0
57	MG	1A	3388	1/1	0.83	0.30	54,54,54,54	0
57	MG	1h	201	1/1	0.83	0.11	72,72,72,72	0
57	MG	1A	3306	1/1	0.83	0.32	71,71,71,71	0
57	MG	1a	1715	1/1	0.83	0.19	60,60,60,60	0
57	MG	2A	3812	1/1	0.83	0.28	54,54,54,54	0
57	MG	2x	107	1/1	0.83	0.26	53,53,53,53	0
57	MG	1A	4031	1/1	0.83	0.11	54,54,54,54	0
57	MG	1A	3232	1/1	0.83	0.11	64,64,64,64	0
57	MG	1a	1742	1/1	0.83	0.09	66,66,66,66	0
57	MG	1Y	201	1/1	0.83	0.13	56,56,56,56	0
57	MG	2A	3522	1/1	0.83	0.32	44,44,44,44	0
57	MG	2A	3581	1/1	0.84	0.33	62,62,62,62	0
57	MG	1A	3350	1/1	0.84	0.20	56,56,56,56	0
57	MG	1A	3555	1/1	0.84	0.12	58,58,58,58	0
57	MG	2A	3259	1/1	0.84	0.13	68,68,68,68	0
57	MG	1A	3979	1/1	0.84	0.07	59,59,59,59	0
57	MG	1a	1623	1/1	0.84	0.17	63,63,63,63	0
57	MG	2A	3609	1/1	0.84	0.19	68,68,68,68	0
57	MG	2A	3266	1/1	0.84	0.20	68,68,68,68	0
57	MG	2A	3373	1/1	0.84	0.19	64,64,64,64	0
57	MG	2A	3798	1/1	0.84	0.12	57,57,57,57	0
57	MG	2A	3268	1/1	0.84	0.28	64,64,64,64	0
57	MG	1a	1627	1/1	0.84	0.27	61,61,61,61	0
57	MG	1A	3477	1/1	0.84	0.14	74,74,74,74	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3807	1/1	0.84	0.19	40,40,40,40	0
57	MG	1A	3932	1/1	0.84	0.18	29,29,29,29	0
57	MG	1A	3983	1/1	0.84	0.30	55,55,55,55	0
57	MG	2a	1693	1/1	0.84	0.14	67,67,67,67	0
57	MG	2A	3389	1/1	0.84	0.29	49,49,49,49	0
57	MG	1a	1657	1/1	0.84	0.14	74,74,74,74	0
57	MG	1A	3206	1/1	0.84	0.23	51,51,51,51	0
57	MG	1A	3188	1/1	0.84	0.14	74,74,74,74	0
57	MG	1A	3814	1/1	0.84	0.23	45,45,45,45	0
57	MG	2A	3835	1/1	0.84	0.18	67,67,67,67	0
57	MG	2A	3844	1/1	0.84	0.15	61,61,61,61	0
57	MG	2A	3290	1/1	0.84	0.25	71,71,71,71	0
57	MG	2a	1713	1/1	0.84	0.19	72,72,72,72	0
57	MG	2a	1714	1/1	0.84	0.28	46,46,46,46	0
57	MG	2a	1715	1/1	0.84	0.19	61,61,61,61	0
57	MG	2A	3412	1/1	0.84	0.25	50,50,50,50	0
57	MG	1a	1770	1/1	0.84	0.09	68,68,68,68	0
57	MG	2A	3207	1/1	0.84	0.26	47,47,47,47	0
57	MG	2A	3856	1/1	0.84	0.17	69,69,69,69	0
57	MG	2A	3428	1/1	0.84	0.36	71,71,71,71	0
57	MG	10	105	1/1	0.84	0.32	61,61,61,61	0
57	MG	2a	1731	1/1	0.84	0.15	62,62,62,62	0
57	MG	2A	3664	1/1	0.84	0.19	69,69,69,69	0
57	MG	2B	210	1/1	0.84	0.28	82,82,82,82	0
57	MG	1A	3385	1/1	0.84	0.18	57,57,57,57	0
57	MG	2A	3666	1/1	0.84	0.17	61,61,61,61	0
57	MG	1a	1791	1/1	0.84	0.14	56,56,56,56	0
57	MG	10	110	1/1	0.84	0.18	54,54,54,54	0
57	MG	1A	3193	1/1	0.84	0.27	56,56,56,56	0
57	MG	1A	3850	1/1	0.84	0.24	41,41,41,41	0
57	MG	2a	1754	1/1	0.84	0.13	69,69,69,69	0
57	MG	2A	3676	1/1	0.84	0.19	37,37,37,37	0
57	MG	20	101	1/1	0.84	0.15	58,58,58,58	0
57	MG	2a	1787	1/1	0.84	0.23	62,62,62,62	0
57	MG	2A	3503	1/1	0.84	0.43	61,61,61,61	0
57	MG	2A	3320	1/1	0.84	0.10	62,62,62,62	0
57	MG	2A	3238	1/1	0.84	0.11	73,73,73,73	0
57	MG	2a	1603	1/1	0.84	0.14	76,76,76,76	0
57	MG	1A	3854	1/1	0.84	0.16	45,45,45,45	0
57	MG	1A	3387	1/1	0.84	0.18	53,53,53,53	0
57	MG	1A	3235	1/1	0.84	0.17	37,37,37,37	0
57	MG	1l	3200	1/1	0.84	0.09	73,73,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1693	1/1	0.84	0.21	64,64,64,64	0
57	MG	2A	3555	1/1	0.84	0.12	68,68,68,68	0
57	MG	2A	3342	1/1	0.84	0.10	70,70,70,70	0
57	MG	2A	3109	1/1	0.84	0.17	41,41,41,41	0
57	MG	1A	3696	1/1	0.84	0.19	45,45,45,45	0
57	MG	2x	104	1/1	0.84	0.24	53,53,53,53	0
57	MG	2a	1624	1/1	0.84	0.35	71,71,71,71	0
57	MG	1a	1702	1/1	0.84	0.11	76,76,76,76	0
57	MG	1A	3238	1/1	0.84	0.11	56,56,56,56	0
57	MG	2a	1636	1/1	0.84	0.12	70,70,70,70	0
57	MG	1A	3783	1/1	0.84	0.11	57,57,57,57	0
57	MG	2A	3354	1/1	0.84	0.23	74,74,74,74	0
57	MG	1A	3914	1/1	0.84	0.24	65,65,65,65	0
57	MG	2a	1644	1/1	0.84	0.13	81,81,81,81	0
57	MG	2a	1626	1/1	0.85	0.26	68,68,68,68	0
57	MG	2a	1627	1/1	0.85	0.30	58,58,58,58	0
57	MG	2a	1628	1/1	0.85	0.23	67,67,67,67	0
57	MG	15	107	1/1	0.85	0.28	63,63,63,63	0
57	MG	2A	3512	1/1	0.85	0.20	53,53,53,53	0
57	MG	1A	3391	1/1	0.85	0.23	50,50,50,50	0
57	MG	2A	3528	1/1	0.85	0.17	36,36,36,36	0
57	MG	1a	1711	1/1	0.85	0.26	46,46,46,46	0
57	MG	1A	3930	1/1	0.85	0.26	38,38,38,38	0
57	MG	2A	3738	1/1	0.85	0.09	71,71,71,71	0
57	MG	1A	3994	1/1	0.85	0.15	60,60,60,60	0
57	MG	2A	3743	1/1	0.85	0.16	63,63,63,63	0
57	MG	1A	3275	1/1	0.85	0.26	59,59,59,59	0
57	MG	1A	3934	1/1	0.85	0.23	55,55,55,55	0
57	MG	2A	3753	1/1	0.85	0.10	65,65,65,65	0
57	MG	2A	3192	1/1	0.85	0.19	62,62,62,62	0
57	MG	1a	1738	1/1	0.85	0.07	72,72,72,72	0
57	MG	2A	3321	1/1	0.85	0.17	62,62,62,62	0
57	MG	2A	3762	1/1	0.85	0.15	74,74,74,74	0
57	MG	2a	1674	1/1	0.85	0.12	70,70,70,70	0
57	MG	1A	3880	1/1	0.85	0.16	43,43,43,43	0
57	MG	1A	3764	1/1	0.85	0.18	53,53,53,53	0
57	MG	2A	3767	1/1	0.85	0.07	48,48,48,48	0
57	MG	2A	3774	1/1	0.85	0.14	53,53,53,53	0
57	MG	2a	1684	1/1	0.85	0.10	69,69,69,69	0
57	MG	1A	3435	1/1	0.85	0.19	52,52,52,52	0
57	MG	2A	3572	1/1	0.85	0.11	68,68,68,68	0
57	MG	2A	3781	1/1	0.85	0.07	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3022	1/1	0.85	0.08	74,74,74,74	0
57	MG	2A	3787	1/1	0.85	0.13	58,58,58,58	0
57	MG	1A	3782	1/1	0.85	0.11	44,44,44,44	0
57	MG	2A	3228	1/1	0.85	0.33	60,60,60,60	0
57	MG	1A	3229	1/1	0.85	0.23	65,65,65,65	0
57	MG	2A	3044	1/1	0.85	0.10	67,67,67,67	0
57	MG	1A	3789	1/1	0.85	0.09	61,61,61,61	0
57	MG	1a	1640	1/1	0.85	0.34	67,67,67,67	0
57	MG	2A	3237	1/1	0.85	0.25	65,65,65,65	0
57	MG	2A	3595	1/1	0.85	0.18	54,54,54,54	0
57	MG	2A	3349	1/1	0.85	0.14	57,57,57,57	0
57	MG	1A	3328	1/1	0.85	0.20	39,39,39,39	0
57	MG	2A	3057	1/1	0.85	0.23	71,71,71,71	0
57	MG	2A	3058	1/1	0.85	0.26	60,60,60,60	0
57	MG	2A	3826	1/1	0.85	0.24	68,68,68,68	0
57	MG	1A	3665	1/1	0.85	0.32	50,50,50,50	0
57	MG	1A	3115	1/1	0.85	0.22	50,50,50,50	0
57	MG	1A	3212	1/1	0.85	0.23	71,71,71,71	0
57	MG	2A	3839	1/1	0.85	0.16	67,67,67,67	0
57	MG	1W	206	1/1	0.85	0.20	47,47,47,47	0
57	MG	1A	3346	1/1	0.85	0.23	44,44,44,44	0
57	MG	1a	1779	1/1	0.85	0.17	67,67,67,67	0
57	MG	2A	3851	1/1	0.85	0.19	65,65,65,65	0
57	MG	2A	3086	1/1	0.85	0.16	56,56,56,56	0
57	MG	1A	3297	1/1	0.85	0.36	60,60,60,60	0
57	MG	2A	3091	1/1	0.85	0.17	74,74,74,74	0
57	MG	2A	3255	1/1	0.85	0.14	68,68,68,68	0
57	MG	1Z	301	1/1	0.85	0.21	63,63,63,63	0
57	MG	2A	3387	1/1	0.85	0.21	58,58,58,58	0
57	MG	2a	1780	1/1	0.85	0.09	76,76,76,76	0
57	MG	2a	1782	1/1	0.85	0.13	73,73,73,73	0
57	MG	1a	1807	1/1	0.85	0.07	78,78,78,78	0
57	MG	1a	1808	1/1	0.85	0.20	59,59,59,59	0
57	MG	1A	3470	1/1	0.85	0.19	61,61,61,61	0
57	MG	2a	1791	1/1	0.85	0.19	62,62,62,62	0
57	MG	2A	3262	1/1	0.85	0.30	50,50,50,50	0
57	MG	2A	3399	1/1	0.85	0.41	52,52,52,52	0
57	MG	2A	3104	1/1	0.85	0.16	61,61,61,61	0
57	MG	2A	3105	1/1	0.85	0.14	66,66,66,66	0
57	MG	1A	3262	1/1	0.85	0.11	58,58,58,58	0
57	MG	1A	3425	1/1	0.85	0.33	72,72,72,72	0
57	MG	1A	4077	1/1	0.85	0.10	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1e	202	1/1	0.85	0.14	53,53,53,53	0
57	MG	2r	101	1/1	0.85	0.18	72,72,72,72	0
57	MG	1A	3197	1/1	0.85	0.22	49,49,49,49	0
57	MG	2A	3138	1/1	0.85	0.23	65,65,65,65	0
57	MG	2w	106	1/1	0.85	0.20	64,64,64,64	0
57	MG	1A	3495	1/1	0.85	0.12	61,61,61,61	0
57	MG	2x	101	1/1	0.85	0.29	41,41,41,41	0
57	MG	1a	1692	1/1	0.85	0.12	65,65,65,65	0
57	MG	2a	1608	1/1	0.85	0.07	64,64,64,64	0
57	MG	1A	3353	1/1	0.85	0.22	38,38,38,38	0
57	MG	2A	3473	1/1	0.85	0.09	62,62,62,62	0
57	MG	2A	3689	1/1	0.85	0.24	57,57,57,57	0
57	MG	2A	3286	1/1	0.85	0.18	69,69,69,69	0
57	MG	2A	3500	1/1	0.85	0.16	74,74,74,74	0
57	MG	2A	3695	1/1	0.85	0.14	69,69,69,69	0
57	MG	1A	3428	1/1	0.85	0.16	66,66,66,66	0
59	A1AE1	2A	3855	76/76	0.85	0.28	46,60,66,71	0
57	MG	2A	3701	1/1	0.85	0.10	73,73,73,73	0
57	MG	2A	3308	1/1	0.86	0.19	61,61,61,61	0
57	MG	2A	3760	1/1	0.86	0.33	76,76,76,76	0
57	MG	1A	3277	1/1	0.86	0.16	59,59,59,59	0
57	MG	1A	4010	1/1	0.86	0.07	69,69,69,69	0
57	MG	1A	3467	1/1	0.86	0.21	34,34,34,34	0
57	MG	1A	4013	1/1	0.86	0.10	56,56,56,56	0
57	MG	1A	3583	1/1	0.86	0.13	54,54,54,54	0
57	MG	2a	1653	1/1	0.86	0.14	68,68,68,68	0
57	MG	2A	3768	1/1	0.86	0.14	49,49,49,49	0
57	MG	2a	1661	1/1	0.86	0.26	52,52,52,52	0
57	MG	2a	1662	1/1	0.86	0.21	58,58,58,58	0
57	MG	1a	1689	1/1	0.86	0.40	64,64,64,64	0
57	MG	1A	3146	1/1	0.86	0.18	57,57,57,57	0
57	MG	1A	3284	1/1	0.86	0.19	49,49,49,49	0
57	MG	1a	1696	1/1	0.86	0.30	60,60,60,60	0
57	MG	1A	3291	1/1	0.86	0.23	60,60,60,60	0
57	MG	1A	4034	1/1	0.86	0.23	68,68,68,68	0
57	MG	2A	3202	1/1	0.86	0.18	51,51,51,51	0
57	MG	2A	3203	1/1	0.86	0.24	64,64,64,64	0
57	MG	1A	3599	1/1	0.86	0.30	52,52,52,52	0
57	MG	2A	3799	1/1	0.86	0.17	64,64,64,64	0
57	MG	2a	1689	1/1	0.86	0.39	67,67,67,67	0
57	MG	1A	3888	1/1	0.86	0.24	65,65,65,65	0
57	MG	1A	3485	1/1	0.86	0.18	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
57	MG	2A	3214	1/1	0.86	0.16	62,62,62,62	0
57	MG	2A	3607	1/1	0.86	0.25	46,46,46,46	0
57	MG	2A	3014	1/1	0.86	0.15	39,39,39,39	0
57	MG	2A	3016	1/1	0.86	0.39	49,49,49,49	0
57	MG	1A	3205	1/1	0.86	0.22	49,49,49,49	0
57	MG	2a	1700	1/1	0.86	0.25	64,64,64,64	0
57	MG	2A	3819	1/1	0.86	0.17	68,68,68,68	0
57	MG	1a	1716	1/1	0.86	0.25	60,60,60,60	0
57	MG	2a	1708	1/1	0.86	0.10	75,75,75,75	0
57	MG	2A	3023	1/1	0.86	0.23	56,56,56,56	0
57	MG	1A	3612	1/1	0.86	0.19	35,35,35,35	0
57	MG	13	103	1/1	0.86	0.12	59,59,59,59	0
57	MG	1a	1737	1/1	0.86	0.14	60,60,60,60	0
57	MG	2A	3834	1/1	0.86	0.26	73,73,73,73	0
57	MG	1A	4061	1/1	0.86	0.17	53,53,53,53	0
57	MG	2A	3239	1/1	0.86	0.38	61,61,61,61	0
57	MG	2a	1719	1/1	0.86	0.25	58,58,58,58	0
57	MG	1A	3250	1/1	0.86	0.17	38,38,38,38	0
57	MG	2A	3047	1/1	0.86	0.17	52,52,52,52	0
57	MG	1A	4072	1/1	0.86	0.26	58,58,58,58	0
57	MG	1a	1745	1/1	0.86	0.20	56,56,56,56	0
57	MG	1a	1747	1/1	0.86	0.13	65,65,65,65	0
57	MG	2A	3061	1/1	0.86	0.21	43,43,43,43	0
57	MG	1A	3496	1/1	0.86	0.09	66,66,66,66	0
57	MG	1A	3497	1/1	0.86	0.21	57,57,57,57	0
57	MG	1A	3394	1/1	0.86	0.19	58,58,58,58	0
57	MG	1A	4093	1/1	0.86	0.40	53,53,53,53	0
57	MG	1B	202	1/1	0.86	0.34	64,64,64,64	0
57	MG	2B	214	1/1	0.86	0.20	70,70,70,70	0
57	MG	2B	215	1/1	0.86	0.16	72,72,72,72	0
57	MG	2A	3084	1/1	0.86	0.26	46,46,46,46	0
57	MG	2a	1767	1/1	0.86	0.11	70,70,70,70	0
57	MG	2E	301	1/1	0.86	0.15	59,59,59,59	0
57	MG	2a	1773	1/1	0.86	0.14	70,70,70,70	0
57	MG	2E	306	1/1	0.86	0.23	56,56,56,56	0
57	MG	1A	3654	1/1	0.86	0.25	40,40,40,40	0
57	MG	1A	3977	1/1	0.86	0.11	58,58,58,58	0
57	MG	1A	3509	1/1	0.86	0.18	50,50,50,50	0
57	MG	1A	3165	1/1	0.86	0.21	44,44,44,44	0
57	MG	1B	215	1/1	0.86	0.13	59,59,59,59	0
57	MG	2A	3096	1/1	0.86	0.24	58,58,58,58	0
57	MG	2A	3678	1/1	0.86	0.20	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3138	1/1	0.86	0.27	36,36,36,36	0
57	MG	2A	3437	1/1	0.86	0.32	71,71,71,71	0
57	MG	1A	3367	1/1	0.86	0.19	68,68,68,68	0
57	MG	2a	1809	1/1	0.86	0.30	57,57,57,57	0
57	MG	1a	1641	1/1	0.86	0.18	64,64,64,64	0
57	MG	1B	229	1/1	0.86	0.17	74,74,74,74	0
57	MG	2A	3692	1/1	0.86	0.26	55,55,55,55	0
57	MG	2A	3468	1/1	0.86	0.15	62,62,62,62	0
57	MG	2A	3469	1/1	0.86	0.23	78,78,78,78	0
57	MG	1a	1800	1/1	0.86	0.22	67,67,67,67	0
57	MG	2A	3479	1/1	0.86	0.18	53,53,53,53	0
57	MG	1A	3818	1/1	0.86	0.16	38,38,38,38	0
57	MG	1A	3441	1/1	0.86	0.20	52,52,52,52	0
57	MG	2A	3115	1/1	0.86	0.24	65,65,65,65	0
57	MG	1A	3368	1/1	0.86	0.18	56,56,56,56	0
57	MG	1A	3410	1/1	0.86	0.26	59,59,59,59	0
57	MG	1A	3921	1/1	0.86	0.08	67,67,67,67	0
57	MG	2A	3523	1/1	0.86	0.11	50,50,50,50	0
57	MG	1A	3923	1/1	0.86	0.16	75,75,75,75	0
57	MG	2A	3141	1/1	0.86	0.25	58,58,58,58	0
57	MG	1A	3163	1/1	0.86	0.16	67,67,67,67	0
57	MG	2A	3299	1/1	0.86	0.24	71,71,71,71	0
57	MG	1A	3245	1/1	0.86	0.32	49,49,49,49	0
57	MG	2A	3161	1/1	0.86	0.12	51,51,51,51	0
57	MG	1A	3754	1/1	0.87	0.14	58,58,58,58	0
57	MG	1A	3756	1/1	0.87	0.12	42,42,42,42	0
57	MG	1a	1788	1/1	0.87	0.08	75,75,75,75	0
57	MG	2A	3337	1/1	0.87	0.13	60,60,60,60	0
57	MG	2A	3561	1/1	0.87	0.24	53,53,53,53	0
57	MG	2A	3340	1/1	0.87	0.46	53,53,53,53	0
57	MG	2A	3565	1/1	0.87	0.26	39,39,39,39	0
57	MG	1W	205	1/1	0.87	0.15	43,43,43,43	0
57	MG	1A	3909	1/1	0.87	0.23	26,26,26,26	0
57	MG	2A	3232	1/1	0.87	0.28	64,64,64,64	0
57	MG	2A	3233	1/1	0.87	0.16	59,59,59,59	0
57	MG	2A	3346	1/1	0.87	0.22	67,67,67,67	0
57	MG	2A	3789	1/1	0.87	0.18	61,61,61,61	0
57	MG	1X	105	1/1	0.87	0.13	51,51,51,51	0
57	MG	2A	3080	1/1	0.87	0.16	44,44,44,44	0
57	MG	1A	3856	1/1	0.87	0.19	37,37,37,37	0
57	MG	1A	3862	1/1	0.87	0.19	37,37,37,37	0
57	MG	2A	3800	1/1	0.87	0.12	68,68,68,68	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3678	1/1	0.87	0.17	27,27,27,27	0
57	MG	1A	3680	1/1	0.87	0.12	60,60,60,60	0
57	MG	2A	3360	1/1	0.87	0.17	62,62,62,62	0
57	MG	2A	3361	1/1	0.87	0.14	64,64,64,64	0
57	MG	1a	1688	1/1	0.87	0.17	71,71,71,71	0
57	MG	1A	4084	1/1	0.87	0.16	57,57,57,57	0
57	MG	1A	3920	1/1	0.87	0.14	73,73,73,73	0
57	MG	2A	3610	1/1	0.87	0.38	54,54,54,54	0
57	MG	2A	3820	1/1	0.87	0.17	60,60,60,60	0
57	MG	1A	3773	1/1	0.87	0.18	52,52,52,52	0
57	MG	1A	4095	1/1	0.87	0.16	42,42,42,42	0
57	MG	1A	3693	1/1	0.87	0.08	62,62,62,62	0
57	MG	1w	101	1/1	0.87	0.19	51,51,51,51	0
57	MG	1A	3780	1/1	0.87	0.12	44,44,44,44	0
57	MG	1A	3271	1/1	0.87	0.22	28,28,28,28	0
57	MG	1A	3372	1/1	0.87	0.11	55,55,55,55	0
57	MG	2A	3385	1/1	0.87	0.46	58,58,58,58	0
57	MG	2A	3113	1/1	0.87	0.20	72,72,72,72	0
57	MG	1A	3788	1/1	0.87	0.23	73,73,73,73	0
57	MG	1A	3938	1/1	0.87	0.22	47,47,47,47	0
57	MG	1A	3939	1/1	0.87	0.11	52,52,52,52	0
57	MG	2A	3390	1/1	0.87	0.19	67,67,67,67	0
57	MG	1A	3627	1/1	0.87	0.14	29,29,29,29	0
57	MG	1a	1726	1/1	0.87	0.20	54,54,54,54	0
57	MG	2A	3398	1/1	0.87	0.33	55,55,55,55	0
57	MG	2A	3263	1/1	0.87	0.29	73,73,73,73	0
57	MG	2B	205	1/1	0.87	0.12	63,63,63,63	0
57	MG	2a	1742	1/1	0.87	0.14	59,59,59,59	0
57	MG	2B	207	1/1	0.87	0.12	69,69,69,69	0
57	MG	1A	3246	1/1	0.87	0.10	38,38,38,38	0
57	MG	1a	1733	1/1	0.87	0.11	74,74,74,74	0
57	MG	2B	211	1/1	0.87	0.11	68,68,68,68	0
57	MG	1A	3529	1/1	0.87	0.28	40,40,40,40	0
57	MG	2A	3405	1/1	0.87	0.27	46,46,46,46	0
57	MG	2A	3154	1/1	0.87	0.19	67,67,67,67	0
57	MG	2a	1761	1/1	0.87	0.17	71,71,71,71	0
57	MG	2A	3159	1/1	0.87	0.29	59,59,59,59	0
57	MG	2A	3419	1/1	0.87	0.18	63,63,63,63	0
57	MG	2A	3005	1/1	0.87	0.17	60,60,60,60	0
57	MG	1A	3376	1/1	0.87	0.22	53,53,53,53	0
57	MG	1B	235	1/1	0.87	0.13	48,48,48,48	0
57	MG	2A	3168	1/1	0.87	0.23	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3441	1/1	0.87	0.32	53,53,53,53	0
57	MG	2A	3447	1/1	0.87	0.20	59,59,59,59	0
57	MG	1A	3452	1/1	0.87	0.13	33,33,33,33	0
57	MG	1A	3290	1/1	0.87	0.27	37,37,37,37	0
57	MG	2A	3282	1/1	0.87	0.19	68,68,68,68	0
57	MG	2a	1799	1/1	0.87	0.23	67,67,67,67	0
57	MG	2A	3456	1/1	0.87	0.21	47,47,47,47	0
57	MG	2A	3462	1/1	0.87	0.15	68,68,68,68	0
57	MG	1A	3210	1/1	0.87	0.23	49,49,49,49	0
57	MG	2A	3173	1/1	0.87	0.15	66,66,66,66	0
57	MG	1A	3269	1/1	0.87	0.43	64,64,64,64	0
57	MG	2A	3703	1/1	0.87	0.26	59,59,59,59	0
57	MG	1G	202	1/1	0.87	0.20	62,62,62,62	0
57	MG	2A	3030	1/1	0.87	0.16	54,54,54,54	0
57	MG	2A	3716	1/1	0.87	0.23	60,60,60,60	0
57	MG	2A	3185	1/1	0.87	0.50	75,75,75,75	0
57	MG	2w	103	1/1	0.87	0.24	75,75,75,75	0
57	MG	1A	3556	1/1	0.87	0.17	32,32,32,32	0
57	MG	1a	1648	1/1	0.87	0.18	51,51,51,51	0
57	MG	1I	201	1/1	0.87	0.14	52,52,52,52	0
57	MG	1a	1650	1/1	0.87	0.21	59,59,59,59	0
57	MG	2A	3740	1/1	0.87	0.12	56,56,56,56	0
57	MG	1O	203	1/1	0.87	0.31	59,59,59,59	0
57	MG	2A	3525	1/1	0.87	0.36	52,52,52,52	0
57	MG	2A	3527	1/1	0.87	0.20	60,60,60,60	0
57	MG	2A	3749	1/1	0.87	0.14	67,67,67,67	0
57	MG	1A	3968	1/1	0.87	0.15	65,65,65,65	0
57	MG	1A	3828	1/1	0.87	0.19	46,46,46,46	0
57	MG	1A	3609	1/1	0.87	0.11	55,55,55,55	0
57	MG	2A	3210	1/1	0.87	0.32	53,53,53,53	0
57	MG	2A	3059	1/1	0.87	0.25	61,61,61,61	0
57	MG	1A	3415	1/1	0.88	0.20	37,37,37,37	0
57	MG	1A	3454	1/1	0.88	0.14	53,53,53,53	0
57	MG	1A	3457	1/1	0.88	0.18	66,66,66,66	0
57	MG	1F	314	1/1	0.88	0.16	42,42,42,42	0
57	MG	2A	3395	1/1	0.88	0.21	62,62,62,62	0
57	MG	2A	3397	1/1	0.88	0.64	62,62,62,62	0
57	MG	1A	3377	1/1	0.88	0.10	49,49,49,49	0
57	MG	1A	3987	1/1	0.88	0.27	36,36,36,36	0
57	MG	2a	1615	1/1	0.88	0.33	56,56,56,56	0
57	MG	2A	3681	1/1	0.88	0.12	66,66,66,66	0
57	MG	1A	3048	1/1	0.88	0.15	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1694	1/1	0.88	0.16	47,47,47,47	0
57	MG	1N	201	1/1	0.88	0.18	47,47,47,47	0
57	MG	2a	1622	1/1	0.88	0.34	72,72,72,72	0
57	MG	1A	3105	1/1	0.88	0.16	36,36,36,36	0
57	MG	2A	3409	1/1	0.88	0.44	51,51,51,51	0
57	MG	2A	3410	1/1	0.88	0.31	69,69,69,69	0
57	MG	1A	3244	1/1	0.88	0.25	63,63,63,63	0
57	MG	1A	4001	1/1	0.88	0.15	37,37,37,37	0
57	MG	2a	1634	1/1	0.88	0.19	63,63,63,63	0
57	MG	1a	1709	1/1	0.88	0.14	52,52,52,52	0
57	MG	1A	3682	1/1	0.88	0.15	53,53,53,53	0
57	MG	1A	3690	1/1	0.88	0.23	27,27,27,27	0
57	MG	1A	3810	1/1	0.88	0.14	70,70,70,70	0
57	MG	1A	3474	1/1	0.88	0.19	46,46,46,46	0
57	MG	2A	3719	1/1	0.88	0.39	61,61,61,61	0
57	MG	1A	3915	1/1	0.88	0.24	58,58,58,58	0
57	MG	1A	3022	1/1	0.88	0.18	34,34,34,34	0
57	MG	1A	4020	1/1	0.88	0.20	28,28,28,28	0
57	MG	2A	3734	1/1	0.88	0.13	49,49,49,49	0
57	MG	1X	107	1/1	0.88	0.18	56,56,56,56	0
57	MG	1A	3480	1/1	0.88	0.17	53,53,53,53	0
57	MG	2a	1655	1/1	0.88	0.09	64,64,64,64	0
57	MG	1A	3364	1/1	0.88	0.18	47,47,47,47	0
57	MG	1Z	302	1/1	0.88	0.22	59,59,59,59	0
57	MG	2A	3745	1/1	0.88	0.20	72,72,72,72	0
57	MG	1A	3822	1/1	0.88	0.17	40,40,40,40	0
57	MG	2A	3265	1/1	0.88	0.21	56,56,56,56	0
57	MG	2A	3470	1/1	0.88	0.22	66,66,66,66	0
57	MG	1A	3389	1/1	0.88	0.18	42,42,42,42	0
57	MG	2a	1676	1/1	0.88	0.16	62,62,62,62	0
57	MG	2A	3475	1/1	0.88	0.30	41,41,41,41	0
57	MG	1a	1746	1/1	0.88	0.22	57,57,57,57	0
57	MG	2A	3270	1/1	0.88	0.17	65,65,65,65	0
57	MG	2a	1681	1/1	0.88	0.22	53,53,53,53	0
57	MG	1A	3927	1/1	0.88	0.22	48,48,48,48	0
57	MG	1A	4042	1/1	0.88	0.14	66,66,66,66	0
57	MG	2a	1685	1/1	0.88	0.44	57,57,57,57	0
57	MG	11	102	1/1	0.88	0.23	62,62,62,62	0
57	MG	1A	3065	1/1	0.88	0.39	62,62,62,62	0
57	MG	2A	3766	1/1	0.88	0.19	54,54,54,54	0
57	MG	1A	3842	1/1	0.88	0.19	41,41,41,41	0
57	MG	1A	3709	1/1	0.88	0.12	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3770	1/1	0.88	0.24	61,61,61,61	0
57	MG	2A	3773	1/1	0.88	0.21	38,38,38,38	0
57	MG	1A	3712	1/1	0.88	0.15	33,33,33,33	0
57	MG	1A	3494	1/1	0.88	0.17	65,65,65,65	0
57	MG	1A	3716	1/1	0.88	0.20	34,34,34,34	0
57	MG	1A	3941	1/1	0.88	0.21	48,48,48,48	0
57	MG	2A	3289	1/1	0.88	0.17	70,70,70,70	0
57	MG	18	105	1/1	0.88	0.27	53,53,53,53	0
57	MG	1A	3947	1/1	0.88	0.08	69,69,69,69	0
57	MG	1A	3861	1/1	0.88	0.17	42,42,42,42	0
57	MG	2A	3794	1/1	0.88	0.29	50,50,50,50	0
57	MG	1A	3718	1/1	0.88	0.14	54,54,54,54	0
57	MG	1A	3863	1/1	0.88	0.18	62,62,62,62	0
57	MG	1a	1796	1/1	0.88	0.12	48,48,48,48	0
57	MG	2A	3560	1/1	0.88	0.19	64,64,64,64	0
57	MG	1A	3865	1/1	0.88	0.10	69,69,69,69	0
57	MG	1a	1607	1/1	0.88	0.33	66,66,66,66	0
57	MG	1a	1804	1/1	0.88	0.10	69,69,69,69	0
57	MG	2a	1724	1/1	0.88	0.09	77,77,77,77	0
57	MG	2a	1725	1/1	0.88	0.10	61,61,61,61	0
57	MG	2a	1727	1/1	0.88	0.09	60,60,60,60	0
57	MG	1A	3167	1/1	0.88	0.22	41,41,41,41	0
57	MG	2A	3156	1/1	0.88	0.33	58,58,58,58	0
57	MG	1A	3329	1/1	0.88	0.27	54,54,54,54	0
57	MG	2A	3816	1/1	0.88	0.15	56,56,56,56	0
57	MG	2a	1737	1/1	0.88	0.13	80,80,80,80	0
57	MG	1a	1617	1/1	0.88	0.11	53,53,53,53	0
57	MG	1A	3024	1/1	0.88	0.08	76,76,76,76	0
57	MG	1a	1812	1/1	0.88	0.14	55,55,55,55	0
57	MG	1A	3339	1/1	0.88	0.13	42,42,42,42	0
57	MG	1a	1630	1/1	0.88	0.26	66,66,66,66	0
57	MG	1B	208	1/1	0.88	0.12	71,71,71,71	0
57	MG	2A	3586	1/1	0.88	0.20	41,41,41,41	0
57	MG	2A	3831	1/1	0.88	0.18	53,53,53,53	0
57	MG	1A	3876	1/1	0.88	0.13	61,61,61,61	0
57	MG	2a	1760	1/1	0.88	0.23	54,54,54,54	0
57	MG	2A	3833	1/1	0.88	0.31	70,70,70,70	0
57	MG	1B	210	1/1	0.88	0.20	60,60,60,60	0
57	MG	2A	3175	1/1	0.88	0.17	59,59,59,59	0
57	MG	2A	3176	1/1	0.88	0.28	43,43,43,43	0
57	MG	2a	1776	1/1	0.88	0.32	72,72,72,72	0
57	MG	2a	1777	1/1	0.88	0.16	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
57	MG	1m	3001	1/1	0.88	0.08	56,56,56,56	0
57	MG	1A	3147	1/1	0.88	0.13	41,41,41,41	0
57	MG	1A	3515	1/1	0.88	0.15	40,40,40,40	0
57	MG	1A	3307	1/1	0.88	0.16	44,44,44,44	0
57	MG	2A	3188	1/1	0.88	0.57	61,61,61,61	0
57	MG	1B	220	1/1	0.88	0.20	68,68,68,68	0
57	MG	2A	3190	1/1	0.88	0.28	54,54,54,54	0
57	MG	1x	102	1/1	0.88	0.40	55,55,55,55	0
57	MG	1A	3755	1/1	0.88	0.16	43,43,43,43	0
57	MG	2a	1801	1/1	0.88	0.28	72,72,72,72	0
57	MG	2A	3195	1/1	0.88	0.18	68,68,68,68	0
57	MG	1A	3150	1/1	0.88	0.21	38,38,38,38	0
57	MG	1A	3642	1/1	0.88	0.09	43,43,43,43	0
57	MG	1x	108	1/1	0.88	0.31	67,67,67,67	0
57	MG	2A	3640	1/1	0.88	0.18	67,67,67,67	0
57	MG	1A	3450	1/1	0.88	0.52	56,56,56,56	0
57	MG	2l	201	1/1	0.88	0.33	65,65,65,65	0
57	MG	2l	203	1/1	0.88	0.17	71,71,71,71	0
57	MG	1A	3644	1/1	0.88	0.23	34,34,34,34	0
57	MG	2q	201	1/1	0.88	0.11	65,65,65,65	0
57	MG	1x	113	1/1	0.88	0.19	55,55,55,55	0
57	MG	2A	3213	1/1	0.88	0.65	61,61,61,61	0
57	MG	2E	303	1/1	0.88	0.12	65,65,65,65	0
57	MG	2A	3648	1/1	0.88	0.35	58,58,58,58	0
57	MG	2E	307	1/1	0.88	0.25	36,36,36,36	0
57	MG	1a	1667	1/1	0.88	0.13	68,68,68,68	0
57	MG	2F	3301	1/1	0.88	0.17	59,59,59,59	0
57	MG	2A	3217	1/1	0.88	0.13	67,67,67,67	0
57	MG	1A	3776	1/1	0.88	0.27	60,60,60,60	0
57	MG	1a	1669	1/1	0.88	0.11	68,68,68,68	0
57	MG	2Q	202	1/1	0.88	0.37	65,65,65,65	0
57	MG	2A	3383	1/1	0.88	0.36	39,39,39,39	0
57	MG	1A	3893	1/1	0.88	0.14	62,62,62,62	0
57	MG	1E	301	1/1	0.88	0.27	40,40,40,40	0
57	MG	1E	311	1/1	0.88	0.21	25,25,25,25	0
57	MG	26	101	1/1	0.88	0.15	64,64,64,64	0
59	A1AE1	1A	4094	76/76	0.88	0.24	29,49,58,64	0
57	MG	2A	3009	1/1	0.88	0.33	63,63,63,63	0
57	MG	2a	1601	1/1	0.88	0.27	55,55,55,55	0
57	MG	2A	3301	1/1	0.89	0.14	66,66,66,66	0
57	MG	2A	3513	1/1	0.89	0.18	46,46,46,46	0
57	MG	1A	3843	1/1	0.89	0.15	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1x	101	1/1	0.89	0.49	70,70,70,70	0
57	MG	1A	3722	1/1	0.89	0.11	67,67,67,67	0
57	MG	1a	1684	1/1	0.89	0.13	67,67,67,67	0
57	MG	1A	3723	1/1	0.89	0.18	40,40,40,40	0
57	MG	1V	203	1/1	0.89	0.18	45,45,45,45	0
57	MG	1A	3851	1/1	0.89	0.17	24,24,24,24	0
57	MG	1A	3933	1/1	0.89	0.16	36,36,36,36	0
57	MG	2a	1654	1/1	0.89	0.10	64,64,64,64	0
57	MG	1A	3513	1/1	0.89	0.30	53,53,53,53	0
57	MG	2A	3323	1/1	0.89	0.28	61,61,61,61	0
57	MG	1A	3081	1/1	0.89	0.14	61,61,61,61	0
57	MG	2A	3548	1/1	0.89	0.34	63,63,63,63	0
57	MG	2A	3553	1/1	0.89	0.09	63,63,63,63	0
57	MG	1A	3135	1/1	0.89	0.18	45,45,45,45	0
57	MG	1A	3739	1/1	0.89	0.18	51,51,51,51	0
57	MG	2a	1670	1/1	0.89	0.18	74,74,74,74	0
57	MG	2A	3332	1/1	0.89	0.08	68,68,68,68	0
57	MG	1A	3331	1/1	0.89	0.36	59,59,59,59	0
57	MG	1A	3304	1/1	0.89	0.22	65,65,65,65	0
57	MG	2A	3790	1/1	0.89	0.27	44,44,44,44	0
57	MG	1A	3544	1/1	0.89	0.28	56,56,56,56	0
57	MG	1A	3005	1/1	0.89	0.19	64,64,64,64	0
57	MG	1A	3412	1/1	0.89	0.17	54,54,54,54	0
57	MG	1A	3083	1/1	0.89	0.29	42,42,42,42	0
57	MG	1A	3761	1/1	0.89	0.21	31,31,31,31	0
57	MG	1A	3342	1/1	0.89	0.13	42,42,42,42	0
57	MG	1A	4090	1/1	0.89	0.23	60,60,60,60	0
57	MG	1a	1727	1/1	0.89	0.23	67,67,67,67	0
57	MG	1A	3168	1/1	0.89	0.13	46,46,46,46	0
57	MG	2a	1692	1/1	0.89	0.10	56,56,56,56	0
57	MG	1A	3881	1/1	0.89	0.08	58,58,58,58	0
57	MG	2A	3809	1/1	0.89	0.18	37,37,37,37	0
57	MG	1A	3768	1/1	0.89	0.23	29,29,29,29	0
57	MG	2a	1697	1/1	0.89	0.22	63,63,63,63	0
57	MG	2A	3035	1/1	0.89	0.21	56,56,56,56	0
57	MG	2A	3357	1/1	0.89	0.18	69,69,69,69	0
57	MG	2A	3358	1/1	0.89	0.11	70,70,70,70	0
57	MG	2A	3038	1/1	0.89	0.32	75,75,75,75	0
57	MG	1A	3312	1/1	0.89	0.27	54,54,54,54	0
57	MG	1a	1741	1/1	0.89	0.17	66,66,66,66	0
57	MG	1A	3887	1/1	0.89	0.16	32,32,32,32	0
57	MG	2A	3363	1/1	0.89	0.29	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
57	MG	1A	3666	1/1	0.89	0.17	49,49,49,49	0
57	MG	17	106	1/1	0.89	0.14	59,59,59,59	0
57	MG	1A	3573	1/1	0.89	0.09	52,52,52,52	0
57	MG	1A	3382	1/1	0.89	0.21	57,57,57,57	0
57	MG	2a	1717	1/1	0.89	0.24	68,68,68,68	0
57	MG	1A	3681	1/1	0.89	0.30	52,52,52,52	0
57	MG	1A	3288	1/1	0.89	0.16	44,44,44,44	0
57	MG	2A	3836	1/1	0.89	0.15	42,42,42,42	0
57	MG	2A	3837	1/1	0.89	0.07	59,59,59,59	0
57	MG	1A	3686	1/1	0.89	0.28	59,59,59,59	0
57	MG	2A	3236	1/1	0.89	0.33	56,56,56,56	0
57	MG	2A	3064	1/1	0.89	0.21	73,73,73,73	0
57	MG	1A	3182	1/1	0.89	0.14	44,44,44,44	0
57	MG	2a	1729	1/1	0.89	0.10	60,60,60,60	0
57	MG	1A	3032	1/1	0.89	0.14	48,48,48,48	0
57	MG	1B	227	1/1	0.89	0.20	40,40,40,40	0
57	MG	1a	1760	1/1	0.89	0.06	65,65,65,65	0
57	MG	2A	3645	1/1	0.89	0.22	48,48,48,48	0
57	MG	1A	3792	1/1	0.89	0.14	68,68,68,68	0
57	MG	1A	3359	1/1	0.89	0.19	51,51,51,51	0
57	MG	2B	203	1/1	0.89	0.14	68,68,68,68	0
57	MG	1B	232	1/1	0.89	0.15	44,44,44,44	0
57	MG	1a	1771	1/1	0.89	0.07	68,68,68,68	0
57	MG	2A	3088	1/1	0.89	0.26	76,76,76,76	0
57	MG	2a	1751	1/1	0.89	0.10	65,65,65,65	0
57	MG	1A	3799	1/1	0.89	0.09	65,65,65,65	0
57	MG	1A	3803	1/1	0.89	0.14	59,59,59,59	0
57	MG	1A	3192	1/1	0.89	0.12	48,48,48,48	0
57	MG	1a	1634	1/1	0.89	0.12	60,60,60,60	0
57	MG	1A	3363	1/1	0.89	0.23	61,61,61,61	0
57	MG	2D	307	1/1	0.89	0.20	60,60,60,60	0
57	MG	1a	1795	1/1	0.89	0.15	71,71,71,71	0
57	MG	2E	302	1/1	0.89	0.32	60,60,60,60	0
57	MG	1A	3699	1/1	0.89	0.17	54,54,54,54	0
57	MG	2A	3102	1/1	0.89	0.19	55,55,55,55	0
57	MG	1A	3597	1/1	0.89	0.21	34,34,34,34	0
57	MG	1E	315	1/1	0.89	0.23	58,58,58,58	0
57	MG	2A	3106	1/1	0.89	0.09	76,76,76,76	0
57	MG	1A	3101	1/1	0.89	0.14	46,46,46,46	0
57	MG	2A	3416	1/1	0.89	0.17	48,48,48,48	0
57	MG	1A	3440	1/1	0.89	0.15	46,46,46,46	0
57	MG	1A	3395	1/1	0.89	0.16	71,71,71,71	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3425	1/1	0.89	0.31	68,68,68,68	0
57	MG	2A	3687	1/1	0.89	0.22	75,75,75,75	0
57	MG	1A	3443	1/1	0.89	0.15	52,52,52,52	0
57	MG	2A	3431	1/1	0.89	0.15	47,47,47,47	0
57	MG	20	104	1/1	0.89	0.31	67,67,67,67	0
57	MG	25	104	1/1	0.89	0.14	50,50,50,50	0
57	MG	2A	3432	1/1	0.89	0.18	73,73,73,73	0
57	MG	1A	3002	1/1	0.89	0.32	48,48,48,48	0
57	MG	2A	3121	1/1	0.89	0.22	70,70,70,70	0
57	MG	2A	3440	1/1	0.89	0.22	46,46,46,46	0
57	MG	1A	3829	1/1	0.89	0.20	21,21,21,21	0
57	MG	2l	204	1/1	0.89	0.14	62,62,62,62	0
57	MG	2A	3443	1/1	0.89	0.36	35,35,35,35	0
57	MG	2A	3706	1/1	0.89	0.16	71,71,71,71	0
57	MG	2a	1607	1/1	0.89	0.28	68,68,68,68	0
57	MG	1a	1663	1/1	0.89	0.18	55,55,55,55	0
57	MG	1A	3617	1/1	0.89	0.19	42,42,42,42	0
57	MG	2A	3140	1/1	0.89	0.19	64,64,64,64	0
57	MG	1N	207	1/1	0.89	0.15	47,47,47,47	0
57	MG	2A	3146	1/1	0.89	0.17	69,69,69,69	0
57	MG	2A	3147	1/1	0.89	0.25	54,54,54,54	0
57	MG	2A	3724	1/1	0.89	0.25	55,55,55,55	0
57	MG	1O	201	1/1	0.89	0.22	68,68,68,68	0
57	MG	1A	4024	1/1	0.89	0.22	61,61,61,61	0
57	MG	2A	3288	1/1	0.89	0.21	62,62,62,62	0
57	MG	1A	3924	1/1	0.89	0.13	58,58,58,58	0
57	MG	1a	1671	1/1	0.89	0.25	69,69,69,69	0
57	MG	2A	3477	1/1	0.89	0.13	69,69,69,69	0
57	MG	2A	3157	1/1	0.89	0.13	47,47,47,47	0
57	MG	1Q	202	1/1	0.89	0.23	44,44,44,44	0
57	MG	2A	3294	1/1	0.89	0.28	59,59,59,59	0
57	MG	1Q	204	1/1	0.89	0.19	42,42,42,42	0
57	MG	2A	3300	1/1	0.89	0.17	62,62,62,62	0
57	MG	1A	3790	1/1	0.90	0.15	53,53,53,53	0
57	MG	2a	1642	1/1	0.90	0.20	54,54,54,54	0
57	MG	1a	1615	1/1	0.90	0.16	41,41,41,41	0
57	MG	1A	3393	1/1	0.90	0.40	57,57,57,57	0
57	MG	2A	3216	1/1	0.90	0.26	66,66,66,66	0
57	MG	1A	3711	1/1	0.90	0.13	36,36,36,36	0
57	MG	2A	3060	1/1	0.90	0.18	55,55,55,55	0
57	MG	1a	1624	1/1	0.90	0.14	60,60,60,60	0
57	MG	2A	3227	1/1	0.90	0.13	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1F	304	1/1	0.90	0.08	65,65,65,65	0
57	MG	1A	3886	1/1	0.90	0.17	30,30,30,30	0
57	MG	1A	3198	1/1	0.90	0.19	37,37,37,37	0
57	MG	2A	3573	1/1	0.90	0.29	45,45,45,45	0
57	MG	2A	3070	1/1	0.90	0.23	58,58,58,58	0
57	MG	1a	1633	1/1	0.90	0.16	63,63,63,63	0
57	MG	1a	1763	1/1	0.90	0.20	49,49,49,49	0
57	MG	2A	3076	1/1	0.90	0.32	41,41,41,41	0
57	MG	1a	1764	1/1	0.90	0.11	61,61,61,61	0
57	MG	1A	3797	1/1	0.90	0.21	53,53,53,53	0
57	MG	2A	3081	1/1	0.90	0.13	53,53,53,53	0
57	MG	2A	3368	1/1	0.90	0.22	67,67,67,67	0
57	MG	1A	3278	1/1	0.90	0.31	43,43,43,43	0
57	MG	1G	204	1/1	0.90	0.15	60,60,60,60	0
57	MG	1A	3400	1/1	0.90	0.14	40,40,40,40	0
57	MG	1A	4059	1/1	0.90	0.21	34,34,34,34	0
57	MG	1a	1784	1/1	0.90	0.08	51,51,51,51	0
57	MG	2A	3806	1/1	0.90	0.22	56,56,56,56	0
57	MG	1N	205	1/1	0.90	0.12	48,48,48,48	0
57	MG	2a	1687	1/1	0.90	0.17	73,73,73,73	0
57	MG	1A	3204	1/1	0.90	0.25	50,50,50,50	0
57	MG	1A	3546	1/1	0.90	0.32	54,54,54,54	0
57	MG	2A	3811	1/1	0.90	0.15	57,57,57,57	0
57	MG	1A	4064	1/1	0.90	0.15	39,39,39,39	0
57	MG	2A	3616	1/1	0.90	0.35	61,61,61,61	0
57	MG	1O	205	1/1	0.90	0.18	67,67,67,67	0
57	MG	1A	3641	1/1	0.90	0.31	45,45,45,45	0
57	MG	1A	3430	1/1	0.90	0.18	48,48,48,48	0
57	MG	1a	1806	1/1	0.90	0.13	54,54,54,54	0
57	MG	1A	3234	1/1	0.90	0.22	37,37,37,37	0
57	MG	1A	3817	1/1	0.90	0.08	39,39,39,39	0
57	MG	1A	4078	1/1	0.90	0.10	51,51,51,51	0
57	MG	1A	4081	1/1	0.90	0.20	43,43,43,43	0
57	MG	1A	3478	1/1	0.90	0.08	70,70,70,70	0
57	MG	2a	1707	1/1	0.90	0.22	60,60,60,60	0
57	MG	1A	3079	1/1	0.90	0.23	42,42,42,42	0
57	MG	1W	201	1/1	0.90	0.19	57,57,57,57	0
57	MG	2A	3117	1/1	0.90	0.15	60,60,60,60	0
57	MG	2A	3646	1/1	0.90	0.21	49,49,49,49	0
57	MG	1A	3743	1/1	0.90	0.21	25,25,25,25	0
57	MG	2A	3267	1/1	0.90	0.28	58,58,58,58	0
57	MG	2A	3843	1/1	0.90	0.06	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1677	1/1	0.90	0.24	59,59,59,59	0
57	MG	2A	3124	1/1	0.90	0.10	71,71,71,71	0
57	MG	2A	3652	1/1	0.90	0.14	58,58,58,58	0
57	MG	1A	3558	1/1	0.90	0.17	40,40,40,40	0
57	MG	1A	3026	1/1	0.90	0.14	34,34,34,34	0
57	MG	2A	3273	1/1	0.90	0.38	59,59,59,59	0
57	MG	2A	3415	1/1	0.90	0.27	64,64,64,64	0
57	MG	1a	1682	1/1	0.90	0.11	67,67,67,67	0
57	MG	1A	3747	1/1	0.90	0.12	45,45,45,45	0
57	MG	1B	203	1/1	0.90	0.19	46,46,46,46	0
57	MG	1A	3332	1/1	0.90	0.21	57,57,57,57	0
57	MG	1A	3846	1/1	0.90	0.06	49,49,49,49	0
57	MG	2A	3280	1/1	0.90	0.23	63,63,63,63	0
57	MG	2A	3674	1/1	0.90	0.26	35,35,35,35	0
57	MG	2a	1739	1/1	0.90	0.14	60,60,60,60	0
57	MG	1A	3333	1/1	0.90	0.29	46,46,46,46	0
57	MG	2B	212	1/1	0.90	0.15	71,71,71,71	0
57	MG	10	101	1/1	0.90	0.18	42,42,42,42	0
57	MG	2a	1745	1/1	0.90	0.10	61,61,61,61	0
57	MG	1A	3487	1/1	0.90	0.29	64,64,64,64	0
57	MG	2a	1747	1/1	0.90	0.23	50,50,50,50	0
57	MG	2A	3287	1/1	0.90	0.21	76,76,76,76	0
57	MG	2a	1749	1/1	0.90	0.21	68,68,68,68	0
57	MG	1a	1695	1/1	0.90	0.23	64,64,64,64	0
57	MG	1A	3335	1/1	0.90	0.13	45,45,45,45	0
57	MG	1A	3759	1/1	0.90	0.08	59,59,59,59	0
57	MG	2A	3683	1/1	0.90	0.29	52,52,52,52	0
57	MG	2A	3684	1/1	0.90	0.13	67,67,67,67	0
57	MG	2A	3685	1/1	0.90	0.18	42,42,42,42	0
57	MG	1A	3582	1/1	0.90	0.18	55,55,55,55	0
57	MG	1a	1705	1/1	0.90	0.29	66,66,66,66	0
57	MG	1A	3119	1/1	0.90	0.22	54,54,54,54	0
57	MG	2G	201	1/1	0.90	0.10	57,57,57,57	0
57	MG	1A	3416	1/1	0.90	0.22	64,64,64,64	0
57	MG	2A	3002	1/1	0.90	0.33	49,49,49,49	0
57	MG	2A	3467	1/1	0.90	0.24	60,60,60,60	0
57	MG	2T	202	1/1	0.90	0.11	65,65,65,65	0
57	MG	1a	1710	1/1	0.90	0.18	36,36,36,36	0
57	MG	2a	1786	1/1	0.90	0.21	68,68,68,68	0
57	MG	11	104	1/1	0.90	0.11	45,45,45,45	0
57	MG	1A	3926	1/1	0.90	0.12	73,73,73,73	0
57	MG	2A	3704	1/1	0.90	0.07	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1B	223	1/1	0.90	0.16	64,64,64,64	0
57	MG	2a	1797	1/1	0.90	0.17	74,74,74,74	0
57	MG	25	103	1/1	0.90	0.25	58,58,58,58	0
57	MG	1B	224	1/1	0.90	0.18	49,49,49,49	0
57	MG	2A	3710	1/1	0.90	0.12	68,68,68,68	0
57	MG	27	102	1/1	0.90	0.16	51,51,51,51	0
57	MG	1A	3128	1/1	0.90	0.17	39,39,39,39	0
57	MG	2A	3714	1/1	0.90	0.20	52,52,52,52	0
57	MG	1A	3225	1/1	0.90	0.15	47,47,47,47	0
57	MG	2e	201	1/1	0.90	0.09	63,63,63,63	0
57	MG	1A	3422	1/1	0.90	0.10	54,54,54,54	0
57	MG	2A	3499	1/1	0.90	0.16	64,64,64,64	0
57	MG	1a	1730	1/1	0.90	0.23	61,61,61,61	0
57	MG	2a	1606	1/1	0.90	0.20	70,70,70,70	0
57	MG	17	103	1/1	0.90	0.22	52,52,52,52	0
57	MG	1B	231	1/1	0.90	0.11	57,57,57,57	0
57	MG	2a	1610	1/1	0.90	0.33	70,70,70,70	0
57	MG	2A	3324	1/1	0.90	0.35	51,51,51,51	0
57	MG	1A	3453	1/1	0.90	0.18	48,48,48,48	0
57	MG	2A	3519	1/1	0.90	0.13	64,64,64,64	0
57	MG	1A	3050	1/1	0.90	0.11	47,47,47,47	0
57	MG	1A	3603	1/1	0.90	0.22	53,53,53,53	0
57	MG	2A	3196	1/1	0.90	0.19	63,63,63,63	0
57	MG	2A	3333	1/1	0.90	0.24	64,64,64,64	0
57	MG	2A	3746	1/1	0.90	0.19	66,66,66,66	0
57	MG	1A	3523	1/1	0.90	0.34	59,59,59,59	0
57	MG	2A	3748	1/1	0.90	0.15	48,48,48,48	0
57	MG	2a	1625	1/1	0.90	0.21	71,71,71,71	0
57	MG	1A	3524	1/1	0.90	0.19	59,59,59,59	0
57	MG	2A	3532	1/1	0.90	0.13	40,40,40,40	0
57	MG	1E	304	1/1	0.90	0.23	45,45,45,45	0
57	MG	2A	3338	1/1	0.90	0.19	58,58,58,58	0
57	MG	2A	3757	1/1	0.90	0.15	46,46,46,46	0
57	MG	2A	3339	1/1	0.90	0.17	73,73,73,73	0
57	MG	1E	308	1/1	0.90	0.25	52,52,52,52	0
57	MG	1A	3611	1/1	0.90	0.17	43,43,43,43	0
57	MG	2A	3322	1/1	0.91	0.47	55,55,55,55	0
57	MG	2A	3750	1/1	0.91	0.14	64,64,64,64	0
57	MG	2A	3524	1/1	0.91	0.29	33,33,33,33	0
57	MG	1A	3785	1/1	0.91	0.23	58,58,58,58	0
57	MG	2a	1638	1/1	0.91	0.16	65,65,65,65	0
57	MG	1A	3787	1/1	0.91	0.18	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3974	1/1	0.91	0.23	28,28,28,28	0
57	MG	1A	3023	1/1	0.91	0.19	54,54,54,54	0
57	MG	1A	3187	1/1	0.91	0.13	60,60,60,60	0
57	MG	1A	3337	1/1	0.91	0.10	59,59,59,59	0
57	MG	2A	3536	1/1	0.91	0.13	68,68,68,68	0
57	MG	1A	3584	1/1	0.91	0.19	39,39,39,39	0
57	MG	1B	219	1/1	0.91	0.18	36,36,36,36	0
57	MG	2A	3543	1/1	0.91	0.12	47,47,47,47	0
57	MG	1A	3214	1/1	0.91	0.23	47,47,47,47	0
57	MG	1A	3588	1/1	0.91	0.20	50,50,50,50	0
57	MG	2A	3194	1/1	0.91	0.19	45,45,45,45	0
57	MG	2A	3552	1/1	0.91	0.19	40,40,40,40	0
57	MG	2a	1659	1/1	0.91	0.37	68,68,68,68	0
57	MG	1A	3505	1/1	0.91	0.21	34,34,34,34	0
57	MG	1A	3506	1/1	0.91	0.07	67,67,67,67	0
57	MG	2A	3200	1/1	0.91	0.29	59,59,59,59	0
57	MG	1A	3215	1/1	0.91	0.20	56,56,56,56	0
57	MG	2A	3783	1/1	0.91	0.18	39,39,39,39	0
57	MG	1A	3151	1/1	0.91	0.25	61,61,61,61	0
57	MG	18	104	1/1	0.91	0.20	48,48,48,48	0
57	MG	1A	3343	1/1	0.91	0.25	65,65,65,65	0
57	MG	1A	3988	1/1	0.91	0.15	33,33,33,33	0
57	MG	2A	3208	1/1	0.91	0.18	58,58,58,58	0
57	MG	2A	3041	1/1	0.91	0.28	54,54,54,54	0
57	MG	1A	3602	1/1	0.91	0.18	44,44,44,44	0
57	MG	2A	3353	1/1	0.91	0.19	49,49,49,49	0
57	MG	1A	3995	1/1	0.91	0.14	53,53,53,53	0
57	MG	2A	3355	1/1	0.91	0.16	71,71,71,71	0
57	MG	1A	3015	1/1	0.91	0.15	47,47,47,47	0
57	MG	2A	3580	1/1	0.91	0.22	49,49,49,49	0
57	MG	1A	3998	1/1	0.91	0.10	52,52,52,52	0
57	MG	2A	3050	1/1	0.91	0.30	65,65,65,65	0
57	MG	1A	3131	1/1	0.91	0.20	51,51,51,51	0
57	MG	1a	1609	1/1	0.91	0.33	61,61,61,61	0
57	MG	1A	3455	1/1	0.91	0.18	55,55,55,55	0
57	MG	1a	1613	1/1	0.91	0.17	57,57,57,57	0
57	MG	1A	3525	1/1	0.91	0.21	49,49,49,49	0
57	MG	1A	3911	1/1	0.91	0.20	48,48,48,48	0
57	MG	2A	3606	1/1	0.91	0.17	48,48,48,48	0
57	MG	2A	3366	1/1	0.91	0.12	58,58,58,58	0
57	MG	1A	3264	1/1	0.91	0.20	58,58,58,58	0
57	MG	1a	1621	1/1	0.91	0.21	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1622	1/1	0.91	0.22	60,60,60,60	0
57	MG	2A	3067	1/1	0.91	0.12	71,71,71,71	0
57	MG	2A	3829	1/1	0.91	0.24	69,69,69,69	0
57	MG	2A	3068	1/1	0.91	0.33	56,56,56,56	0
57	MG	2A	3620	1/1	0.91	0.13	66,66,66,66	0
57	MG	1A	3825	1/1	0.91	0.12	66,66,66,66	0
57	MG	2A	3072	1/1	0.91	0.27	50,50,50,50	0
57	MG	2A	3378	1/1	0.91	0.21	56,56,56,56	0
57	MG	1A	3616	1/1	0.91	0.10	34,34,34,34	0
57	MG	2A	3381	1/1	0.91	0.38	50,50,50,50	0
57	MG	2A	3632	1/1	0.91	0.10	74,74,74,74	0
57	MG	1A	3295	1/1	0.91	0.16	53,53,53,53	0
57	MG	2A	3840	1/1	0.91	0.20	71,71,71,71	0
57	MG	2A	3841	1/1	0.91	0.06	68,68,68,68	0
57	MG	1A	3530	1/1	0.91	0.16	40,40,40,40	0
57	MG	2A	3077	1/1	0.91	0.16	43,43,43,43	0
57	MG	1A	4021	1/1	0.91	0.19	27,27,27,27	0
57	MG	1A	3835	1/1	0.91	0.10	44,44,44,44	0
57	MG	1A	4025	1/1	0.91	0.32	56,56,56,56	0
57	MG	2A	3644	1/1	0.91	0.11	72,72,72,72	0
57	MG	1A	3840	1/1	0.91	0.19	23,23,23,23	0
57	MG	2a	1732	1/1	0.91	0.18	67,67,67,67	0
57	MG	1A	3325	1/1	0.91	0.29	56,56,56,56	0
57	MG	2a	1736	1/1	0.91	0.09	60,60,60,60	0
57	MG	1A	3355	1/1	0.91	0.19	36,36,36,36	0
57	MG	2a	1738	1/1	0.91	0.14	66,66,66,66	0
57	MG	1A	3016	1/1	0.91	0.27	28,28,28,28	0
57	MG	1a	1787	1/1	0.91	0.35	56,56,56,56	0
57	MG	1A	3021	1/1	0.91	0.17	51,51,51,51	0
57	MG	1a	1653	1/1	0.91	0.12	61,61,61,61	0
57	MG	2A	3258	1/1	0.91	0.10	63,63,63,63	0
57	MG	1A	4039	1/1	0.91	0.19	41,41,41,41	0
57	MG	2A	3402	1/1	0.91	0.32	63,63,63,63	0
57	MG	1A	3300	1/1	0.91	0.22	55,55,55,55	0
57	MG	2A	3098	1/1	0.91	0.24	48,48,48,48	0
57	MG	2A	3407	1/1	0.91	0.26	50,50,50,50	0
57	MG	1a	1797	1/1	0.91	0.08	57,57,57,57	0
57	MG	2B	217	1/1	0.91	0.17	73,73,73,73	0
57	MG	1A	3549	1/1	0.91	0.18	23,23,23,23	0
57	MG	1O	204	1/1	0.91	0.21	45,45,45,45	0
57	MG	1A	3852	1/1	0.91	0.22	62,62,62,62	0
57	MG	1A	3330	1/1	0.91	0.22	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3675	1/1	0.91	0.29	38,38,38,38	0
57	MG	1P	205	1/1	0.91	0.22	58,58,58,58	0
57	MG	1a	1665	1/1	0.91	0.29	50,50,50,50	0
57	MG	1a	1666	1/1	0.91	0.15	63,63,63,63	0
57	MG	1A	3855	1/1	0.91	0.22	42,42,42,42	0
57	MG	1A	3398	1/1	0.91	0.12	61,61,61,61	0
57	MG	2A	3430	1/1	0.91	0.13	64,64,64,64	0
57	MG	1A	3113	1/1	0.91	0.21	43,43,43,43	0
57	MG	1A	3557	1/1	0.91	0.17	57,57,57,57	0
57	MG	1U	206	1/1	0.91	0.30	39,39,39,39	0
57	MG	1f	3101	1/1	0.91	0.28	48,48,48,48	0
57	MG	2A	3439	1/1	0.91	0.26	63,63,63,63	0
57	MG	1A	3006	1/1	0.91	0.14	34,34,34,34	0
57	MG	2A	3128	1/1	0.91	0.14	51,51,51,51	0
57	MG	1A	3559	1/1	0.91	0.22	50,50,50,50	0
57	MG	2A	3446	1/1	0.91	0.30	51,51,51,51	0
57	MG	1A	3562	1/1	0.91	0.17	32,32,32,32	0
57	MG	2A	3285	1/1	0.91	0.13	56,56,56,56	0
57	MG	1A	3953	1/1	0.91	0.18	40,40,40,40	0
57	MG	1A	3669	1/1	0.91	0.20	59,59,59,59	0
57	MG	2A	3453	1/1	0.91	0.19	44,44,44,44	0
57	MG	2a	1810	1/1	0.91	0.27	68,68,68,68	0
57	MG	2A	3705	1/1	0.91	0.20	67,67,67,67	0
57	MG	1w	105	1/1	0.91	0.15	71,71,71,71	0
57	MG	1A	3959	1/1	0.91	0.11	49,49,49,49	0
57	MG	1A	3770	1/1	0.91	0.13	38,38,38,38	0
57	MG	2A	3152	1/1	0.91	0.10	66,66,66,66	0
57	MG	1w	108	1/1	0.91	0.11	80,80,80,80	0
57	MG	1A	3439	1/1	0.91	0.17	58,58,58,58	0
57	MG	2a	1609	1/1	0.91	0.11	66,66,66,66	0
57	MG	1A	3679	1/1	0.91	0.17	74,74,74,74	0
57	MG	2v	102	1/1	0.91	0.20	68,68,68,68	0
57	MG	1A	3178	1/1	0.91	0.20	41,41,41,41	0
57	MG	2a	1612	1/1	0.91	0.23	63,63,63,63	0
57	MG	1a	1690	1/1	0.91	0.36	56,56,56,56	0
57	MG	2w	104	1/1	0.91	0.18	72,72,72,72	0
57	MG	1x	106	1/1	0.91	0.12	69,69,69,69	0
57	MG	2A	3496	1/1	0.91	0.10	57,57,57,57	0
57	MG	1a	1691	1/1	0.91	0.13	55,55,55,55	0
57	MG	1A	3878	1/1	0.91	0.19	36,36,36,36	0
57	MG	1x	109	1/1	0.91	0.27	66,66,66,66	0
57	MG	2a	1620	1/1	0.91	0.12	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
57	MG	2A	3311	1/1	0.91	0.24	55,55,55,55	0
57	MG	1A	3490	1/1	0.91	0.15	50,50,50,50	0
57	MG	2A	3742	1/1	0.91	0.12	65,65,65,65	0
57	MG	2A	3506	1/1	0.91	0.22	56,56,56,56	0
57	MG	1A	3491	1/1	0.91	0.10	47,47,47,47	0
57	MG	1x	112	1/1	0.91	0.16	69,69,69,69	0
57	MG	1A	3684	1/1	0.91	0.12	51,51,51,51	0
57	MG	2a	1632	1/1	0.91	0.32	48,48,48,48	0
60	ZN	14	102	1/1	0.91	0.13	107,107,107,107	0
60	ZN	2Y	202	1/1	0.91	0.07	90,90,90,90	0
57	MG	10	104	1/1	0.91	0.51	49,49,49,49	0
60	ZN	2n	501	1/1	0.91	0.06	81,81,81,81	0
57	MG	1A	3982	1/1	0.92	0.19	33,33,33,33	0
57	MG	1B	211	1/1	0.92	0.15	50,50,50,50	0
57	MG	1A	3190	1/1	0.92	0.13	44,44,44,44	0
57	MG	2A	3486	1/1	0.92	0.27	68,68,68,68	0
57	MG	2A	3722	1/1	0.92	0.24	56,56,56,56	0
57	MG	2A	3488	1/1	0.92	0.18	55,55,55,55	0
57	MG	2A	3728	1/1	0.92	0.30	42,42,42,42	0
57	MG	2a	1629	1/1	0.92	0.41	86,86,86,86	0
57	MG	2A	3729	1/1	0.92	0.20	42,42,42,42	0
57	MG	2A	3305	1/1	0.92	0.36	54,54,54,54	0
57	MG	2A	3306	1/1	0.92	0.17	53,53,53,53	0
57	MG	2A	3498	1/1	0.92	0.18	29,29,29,29	0
57	MG	1A	3419	1/1	0.92	0.13	49,49,49,49	0
57	MG	10	111	1/1	0.92	0.21	70,70,70,70	0
57	MG	2A	3501	1/1	0.92	0.35	55,55,55,55	0
57	MG	1A	3738	1/1	0.92	0.20	51,51,51,51	0
57	MG	1B	217	1/1	0.92	0.19	45,45,45,45	0
57	MG	1A	3420	1/1	0.92	0.13	42,42,42,42	0
57	MG	2A	3507	1/1	0.92	0.20	40,40,40,40	0
57	MG	2A	3316	1/1	0.92	0.24	56,56,56,56	0
57	MG	2A	3317	1/1	0.92	0.21	73,73,73,73	0
57	MG	1A	3560	1/1	0.92	0.20	44,44,44,44	0
57	MG	2A	3170	1/1	0.92	0.35	33,33,33,33	0
57	MG	1A	3286	1/1	0.92	0.13	35,35,35,35	0
57	MG	1A	3652	1/1	0.92	0.21	29,29,29,29	0
57	MG	2A	3754	1/1	0.92	0.22	59,59,59,59	0
57	MG	15	103	1/1	0.92	0.13	31,31,31,31	0
57	MG	15	105	1/1	0.92	0.28	47,47,47,47	0
57	MG	1A	3569	1/1	0.92	0.18	45,45,45,45	0
57	MG	2A	3759	1/1	0.92	0.16	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
57	MG	1A	3392	1/1	0.92	0.20	57,57,57,57	0
57	MG	2A	3327	1/1	0.92	0.21	68,68,68,68	0
57	MG	1A	3844	1/1	0.92	0.12	55,55,55,55	0
57	MG	1A	3845	1/1	0.92	0.23	31,31,31,31	0
57	MG	2A	3537	1/1	0.92	0.13	49,49,49,49	0
57	MG	2a	1673	1/1	0.92	0.20	61,61,61,61	0
57	MG	1a	1722	1/1	0.92	0.14	55,55,55,55	0
57	MG	1A	3133	1/1	0.92	0.24	41,41,41,41	0
57	MG	2A	3334	1/1	0.92	0.15	61,61,61,61	0
57	MG	2a	1678	1/1	0.92	0.23	53,53,53,53	0
57	MG	1A	3662	1/1	0.92	0.25	59,59,59,59	0
57	MG	1A	3087	1/1	0.92	0.14	45,45,45,45	0
57	MG	1A	3462	1/1	0.92	0.10	47,47,47,47	0
57	MG	1A	3512	1/1	0.92	0.23	47,47,47,47	0
57	MG	1A	3318	1/1	0.92	0.25	50,50,50,50	0
57	MG	2A	3554	1/1	0.92	0.20	65,65,65,65	0
57	MG	1a	1734	1/1	0.92	0.17	51,51,51,51	0
57	MG	2A	3033	1/1	0.92	0.11	50,50,50,50	0
57	MG	2A	3197	1/1	0.92	0.10	47,47,47,47	0
57	MG	2A	3199	1/1	0.92	0.14	56,56,56,56	0
57	MG	2A	3562	1/1	0.92	0.15	62,62,62,62	0
57	MG	2A	3034	1/1	0.92	0.21	39,39,39,39	0
57	MG	1A	4014	1/1	0.92	0.21	47,47,47,47	0
57	MG	1A	4019	1/1	0.92	0.15	54,54,54,54	0
57	MG	2A	3570	1/1	0.92	0.18	62,62,62,62	0
57	MG	2A	3204	1/1	0.92	0.17	55,55,55,55	0
57	MG	1a	1739	1/1	0.92	0.16	55,55,55,55	0
57	MG	2A	3350	1/1	0.92	0.29	38,38,38,38	0
57	MG	2A	3043	1/1	0.92	0.32	58,58,58,58	0
57	MG	2a	1701	1/1	0.92	0.11	63,63,63,63	0
57	MG	1A	3928	1/1	0.92	0.23	26,26,26,26	0
57	MG	1E	310	1/1	0.92	0.17	60,60,60,60	0
57	MG	1A	3673	1/1	0.92	0.14	60,60,60,60	0
57	MG	1A	3136	1/1	0.92	0.19	41,41,41,41	0
57	MG	1A	3859	1/1	0.92	0.16	34,34,34,34	0
57	MG	2A	3215	1/1	0.92	0.29	40,40,40,40	0
57	MG	2a	1712	1/1	0.92	0.25	53,53,53,53	0
57	MG	2A	3051	1/1	0.92	0.17	48,48,48,48	0
57	MG	1A	4026	1/1	0.92	0.26	67,67,67,67	0
57	MG	2A	3223	1/1	0.92	0.29	54,54,54,54	0
57	MG	2A	3592	1/1	0.92	0.38	41,41,41,41	0
57	MG	2A	3593	1/1	0.92	0.11	71,71,71,71	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3519	1/1	0.92	0.23	39,39,39,39	0
57	MG	2A	3596	1/1	0.92	0.30	58,58,58,58	0
57	MG	2A	3225	1/1	0.92	0.21	44,44,44,44	0
57	MG	2A	3604	1/1	0.92	0.27	61,61,61,61	0
57	MG	1A	3522	1/1	0.92	0.23	63,63,63,63	0
57	MG	1A	3088	1/1	0.92	0.14	31,31,31,31	0
57	MG	1A	3199	1/1	0.92	0.13	47,47,47,47	0
57	MG	1A	3940	1/1	0.92	0.13	49,49,49,49	0
57	MG	1a	1626	1/1	0.92	0.20	52,52,52,52	0
57	MG	1A	3473	1/1	0.92	0.12	60,60,60,60	0
57	MG	2A	3612	1/1	0.92	0.21	60,60,60,60	0
57	MG	1a	1629	1/1	0.92	0.31	48,48,48,48	0
57	MG	1A	3596	1/1	0.92	0.13	46,46,46,46	0
57	MG	2A	3617	1/1	0.92	0.17	63,63,63,63	0
57	MG	1A	3141	1/1	0.92	0.17	27,27,27,27	0
57	MG	1A	3872	1/1	0.92	0.19	40,40,40,40	0
57	MG	1A	3476	1/1	0.92	0.22	68,68,68,68	0
57	MG	2A	3626	1/1	0.92	0.23	58,58,58,58	0
57	MG	1a	1637	1/1	0.92	0.12	54,54,54,54	0
57	MG	1a	1639	1/1	0.92	0.16	61,61,61,61	0
57	MG	2A	3075	1/1	0.92	0.26	50,50,50,50	0
57	MG	1A	3060	1/1	0.92	0.18	24,24,24,24	0
57	MG	2A	3854	1/1	0.92	0.14	68,68,68,68	0
57	MG	1A	3958	1/1	0.92	0.21	39,39,39,39	0
57	MG	1a	1780	1/1	0.92	0.11	66,66,66,66	0
57	MG	2A	3637	1/1	0.92	0.10	58,58,58,58	0
57	MG	1a	1782	1/1	0.92	0.13	53,53,53,53	0
57	MG	1a	1646	1/1	0.92	0.19	49,49,49,49	0
57	MG	1a	1785	1/1	0.92	0.10	52,52,52,52	0
57	MG	1A	3534	1/1	0.92	0.25	40,40,40,40	0
57	MG	2a	1755	1/1	0.92	0.28	59,59,59,59	0
57	MG	2a	1758	1/1	0.92	0.27	50,50,50,50	0
57	MG	2A	3250	1/1	0.92	0.21	57,57,57,57	0
57	MG	1A	3273	1/1	0.92	0.31	54,54,54,54	0
57	MG	2a	1765	1/1	0.92	0.21	76,76,76,76	0
57	MG	1a	1789	1/1	0.92	0.07	69,69,69,69	0
57	MG	2a	1770	1/1	0.92	0.24	65,65,65,65	0
57	MG	1A	3604	1/1	0.92	0.16	31,31,31,31	0
57	MG	1A	4068	1/1	0.92	0.17	47,47,47,47	0
57	MG	1A	3540	1/1	0.92	0.35	44,44,44,44	0
57	MG	2A	3650	1/1	0.92	0.12	69,69,69,69	0
57	MG	2D	302	1/1	0.92	0.24	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
57	MG	2D	304	1/1	0.92	0.28	45,45,45,45	0
57	MG	2A	3095	1/1	0.92	0.33	49,49,49,49	0
57	MG	2D	308	1/1	0.92	0.19	27,27,27,27	0
57	MG	1A	3883	1/1	0.92	0.11	53,53,53,53	0
57	MG	2A	3653	1/1	0.92	0.17	45,45,45,45	0
57	MG	1Q	205	1/1	0.92	0.20	58,58,58,58	0
57	MG	1A	3240	1/1	0.92	0.29	56,56,56,56	0
57	MG	2a	1795	1/1	0.92	0.17	69,69,69,69	0
57	MG	1a	1801	1/1	0.92	0.21	49,49,49,49	0
57	MG	1a	1802	1/1	0.92	0.10	66,66,66,66	0
57	MG	1a	1661	1/1	0.92	0.20	69,69,69,69	0
57	MG	1T	201	1/1	0.92	0.14	57,57,57,57	0
57	MG	1A	4075	1/1	0.92	0.13	39,39,39,39	0
57	MG	1T	204	1/1	0.92	0.15	55,55,55,55	0
57	MG	2O	3900	1/1	0.92	0.23	60,60,60,60	0
57	MG	1A	3384	1/1	0.92	0.19	46,46,46,46	0
57	MG	1A	3127	1/1	0.92	0.09	52,52,52,52	0
57	MG	2A	3111	1/1	0.92	0.18	42,42,42,42	0
57	MG	2f	201	1/1	0.92	0.23	39,39,39,39	0
57	MG	2A	3426	1/1	0.92	0.34	59,59,59,59	0
57	MG	2A	3112	1/1	0.92	0.11	58,58,58,58	0
57	MG	1V	202	1/1	0.92	0.16	41,41,41,41	0
57	MG	1A	4079	1/1	0.92	0.12	39,39,39,39	0
57	MG	1V	206	1/1	0.92	0.23	57,57,57,57	0
57	MG	23	103	1/1	0.92	0.21	49,49,49,49	0
57	MG	1A	3615	1/1	0.92	0.16	31,31,31,31	0
57	MG	2A	3118	1/1	0.92	0.29	34,34,34,34	0
57	MG	2v	101	1/1	0.92	0.45	61,61,61,61	0
57	MG	1A	3713	1/1	0.92	0.23	34,34,34,34	0
57	MG	1A	3057	1/1	0.92	0.13	45,45,45,45	0
57	MG	2w	101	1/1	0.92	0.40	67,67,67,67	0
57	MG	1A	3808	1/1	0.92	0.18	57,57,57,57	0
57	MG	2A	3125	1/1	0.92	0.36	62,62,62,62	0
57	MG	2A	3283	1/1	0.92	0.11	56,56,56,56	0
57	MG	1A	3071	1/1	0.92	0.12	38,38,38,38	0
57	MG	1A	3489	1/1	0.92	0.22	22,22,22,22	0
57	MG	1a	1679	1/1	0.92	0.31	68,68,68,68	0
57	MG	2x	102	1/1	0.92	0.42	63,63,63,63	0
57	MG	1B	201	1/1	0.92	0.20	52,52,52,52	0
57	MG	1A	3153	1/1	0.92	0.16	64,64,64,64	0
57	MG	1A	3635	1/1	0.92	0.24	34,34,34,34	0
57	MG	2A	3457	1/1	0.92	0.20	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3702	1/1	0.92	0.23	63,63,63,63	0
57	MG	1A	3816	1/1	0.92	0.17	36,36,36,36	0
57	MG	2A	3466	1/1	0.92	0.04	69,69,69,69	0
57	MG	2A	3292	1/1	0.92	0.23	67,67,67,67	0
57	MG	1a	1687	1/1	0.92	0.16	53,53,53,53	0
57	MG	2A	3708	1/1	0.92	0.16	75,75,75,75	0
57	MG	2a	1616	1/1	0.92	0.20	60,60,60,60	0
57	MG	1A	3728	1/1	0.92	0.24	57,57,57,57	0
57	MG	2A	3296	1/1	0.92	0.25	69,69,69,69	0
57	MG	2A	3472	1/1	0.92	0.14	60,60,60,60	0
57	MG	1A	3448	1/1	0.92	0.28	69,69,69,69	0
57	MG	1A	3733	1/1	0.93	0.12	44,44,44,44	0
57	MG	1A	3356	1/1	0.93	0.14	37,37,37,37	0
57	MG	1A	3211	1/1	0.93	0.14	44,44,44,44	0
57	MG	2A	3756	1/1	0.93	0.21	40,40,40,40	0
57	MG	2a	1639	1/1	0.93	0.39	66,66,66,66	0
57	MG	2A	3201	1/1	0.93	0.11	76,76,76,76	0
57	MG	1A	3913	1/1	0.93	0.12	59,59,59,59	0
57	MG	1A	3561	1/1	0.93	0.24	24,24,24,24	0
57	MG	18	101	1/1	0.93	0.12	52,52,52,52	0
57	MG	2A	3039	1/1	0.93	0.25	51,51,51,51	0
57	MG	1B	225	1/1	0.93	0.20	57,57,57,57	0
57	MG	1A	4003	1/1	0.93	0.15	20,20,20,20	0
57	MG	2a	1650	1/1	0.93	0.15	60,60,60,60	0
57	MG	2A	3764	1/1	0.93	0.06	63,63,63,63	0
57	MG	1A	3321	1/1	0.93	0.19	57,57,57,57	0
57	MG	1A	3742	1/1	0.93	0.18	26,26,26,26	0
57	MG	2A	3212	1/1	0.93	0.15	63,63,63,63	0
57	MG	1a	1740	1/1	0.93	0.19	57,57,57,57	0
57	MG	2A	3769	1/1	0.93	0.18	62,62,62,62	0
57	MG	1A	3027	1/1	0.93	0.20	34,34,34,34	0
57	MG	2a	1660	1/1	0.93	0.11	70,70,70,70	0
57	MG	1A	4007	1/1	0.93	0.14	41,41,41,41	0
57	MG	1A	3442	1/1	0.93	0.18	55,55,55,55	0
57	MG	2a	1664	1/1	0.93	0.35	65,65,65,65	0
57	MG	2A	3053	1/1	0.93	0.10	60,60,60,60	0
57	MG	2A	3219	1/1	0.93	0.52	57,57,57,57	0
57	MG	2a	1668	1/1	0.93	0.24	61,61,61,61	0
57	MG	1A	3658	1/1	0.93	0.23	41,41,41,41	0
57	MG	1A	3922	1/1	0.93	0.18	42,42,42,42	0
57	MG	1D	310	1/1	0.93	0.14	51,51,51,51	0
57	MG	1a	1611	1/1	0.93	0.07	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2a	1675	1/1	0.93	0.20	67,67,67,67	0
57	MG	1D	312	1/1	0.93	0.25	50,50,50,50	0
57	MG	1D	314	1/1	0.93	0.19	37,37,37,37	0
57	MG	1A	3659	1/1	0.93	0.08	63,63,63,63	0
57	MG	2A	3793	1/1	0.93	0.24	56,56,56,56	0
57	MG	2A	3587	1/1	0.93	0.22	36,36,36,36	0
57	MG	1A	3213	1/1	0.93	0.17	51,51,51,51	0
57	MG	1a	1620	1/1	0.93	0.20	64,64,64,64	0
57	MG	1E	307	1/1	0.93	0.18	29,29,29,29	0
57	MG	1A	3155	1/1	0.93	0.18	28,28,28,28	0
57	MG	1A	3076	1/1	0.93	0.13	34,34,34,34	0
57	MG	2A	3071	1/1	0.93	0.18	49,49,49,49	0
57	MG	1A	4023	1/1	0.93	0.14	47,47,47,47	0
57	MG	1A	3408	1/1	0.93	0.11	40,40,40,40	0
57	MG	1A	3757	1/1	0.93	0.25	42,42,42,42	0
57	MG	1E	316	1/1	0.93	0.10	37,37,37,37	0
57	MG	1a	1773	1/1	0.93	0.33	64,64,64,64	0
57	MG	1A	3758	1/1	0.93	0.18	71,71,71,71	0
57	MG	2A	3244	1/1	0.93	0.20	58,58,58,58	0
57	MG	2A	3814	1/1	0.93	0.10	62,62,62,62	0
57	MG	2A	3815	1/1	0.93	0.33	52,52,52,52	0
57	MG	1A	3221	1/1	0.93	0.11	47,47,47,47	0
57	MG	1a	1778	1/1	0.93	0.15	63,63,63,63	0
57	MG	2A	3391	1/1	0.93	0.43	67,67,67,67	0
57	MG	2A	3615	1/1	0.93	0.22	70,70,70,70	0
57	MG	2a	1704	1/1	0.93	0.08	75,75,75,75	0
57	MG	2A	3821	1/1	0.93	0.10	72,72,72,72	0
57	MG	1A	3668	1/1	0.93	0.22	28,28,28,28	0
57	MG	2A	3083	1/1	0.93	0.18	48,48,48,48	0
57	MG	1A	3222	1/1	0.93	0.18	40,40,40,40	0
57	MG	2A	3828	1/1	0.93	0.22	54,54,54,54	0
57	MG	2a	1711	1/1	0.93	0.18	57,57,57,57	0
57	MG	1a	1635	1/1	0.93	0.18	62,62,62,62	0
57	MG	1a	1783	1/1	0.93	0.13	56,56,56,56	0
57	MG	2A	3624	1/1	0.93	0.09	62,62,62,62	0
57	MG	1A	3937	1/1	0.93	0.12	53,53,53,53	0
57	MG	1A	3224	1/1	0.93	0.10	68,68,68,68	0
57	MG	1A	4037	1/1	0.93	0.22	42,42,42,42	0
57	MG	1A	4038	1/1	0.93	0.16	32,32,32,32	0
57	MG	1a	1643	1/1	0.93	0.18	42,42,42,42	0
57	MG	2A	3404	1/1	0.93	0.40	62,62,62,62	0
57	MG	1a	1644	1/1	0.93	0.18	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3676	1/1	0.93	0.12	52,52,52,52	0
57	MG	1N	202	1/1	0.93	0.20	47,47,47,47	0
57	MG	1A	4041	1/1	0.93	0.11	48,48,48,48	0
57	MG	2A	3411	1/1	0.93	0.28	60,60,60,60	0
57	MG	1A	3371	1/1	0.93	0.09	66,66,66,66	0
57	MG	1A	4045	1/1	0.93	0.34	60,60,60,60	0
57	MG	2A	3850	1/1	0.93	0.15	56,56,56,56	0
57	MG	1A	4048	1/1	0.93	0.25	32,32,32,32	0
57	MG	1A	3414	1/1	0.93	0.34	56,56,56,56	0
57	MG	1A	3945	1/1	0.93	0.09	40,40,40,40	0
57	MG	1A	3518	1/1	0.93	0.08	51,51,51,51	0
57	MG	2A	3422	1/1	0.93	0.47	60,60,60,60	0
57	MG	1A	4057	1/1	0.93	0.28	58,58,58,58	0
57	MG	1A	3265	1/1	0.93	0.15	58,58,58,58	0
57	MG	1A	3870	1/1	0.93	0.17	28,28,28,28	0
57	MG	2B	204	1/1	0.93	0.08	73,73,73,73	0
57	MG	1A	3871	1/1	0.93	0.12	44,44,44,44	0
57	MG	2A	3654	1/1	0.93	0.20	48,48,48,48	0
57	MG	2A	3655	1/1	0.93	0.09	69,69,69,69	0
57	MG	1A	3299	1/1	0.93	0.18	44,44,44,44	0
57	MG	1S	3603	1/1	0.93	0.08	59,59,59,59	0
57	MG	1A	3458	1/1	0.93	0.20	44,44,44,44	0
57	MG	2B	213	1/1	0.93	0.25	61,61,61,61	0
57	MG	2A	3435	1/1	0.93	0.21	64,64,64,64	0
57	MG	1A	4066	1/1	0.93	0.12	50,50,50,50	0
57	MG	1A	3114	1/1	0.93	0.14	60,60,60,60	0
57	MG	1A	3960	1/1	0.93	0.07	54,54,54,54	0
57	MG	1A	4071	1/1	0.93	0.12	49,49,49,49	0
57	MG	2a	1759	1/1	0.93	0.23	52,52,52,52	0
57	MG	1A	3268	1/1	0.93	0.09	54,54,54,54	0
57	MG	1A	3084	1/1	0.93	0.18	28,28,28,28	0
57	MG	2A	3131	1/1	0.93	0.20	48,48,48,48	0
57	MG	1A	4074	1/1	0.93	0.09	49,49,49,49	0
57	MG	2A	3449	1/1	0.93	0.12	68,68,68,68	0
57	MG	1A	3879	1/1	0.93	0.16	29,29,29,29	0
57	MG	2E	304	1/1	0.93	0.11	63,63,63,63	0
57	MG	1A	3381	1/1	0.93	0.17	39,39,39,39	0
57	MG	1W	204	1/1	0.93	0.17	32,32,32,32	0
57	MG	2a	1779	1/1	0.93	0.27	70,70,70,70	0
57	MG	2A	3144	1/1	0.93	0.24	51,51,51,51	0
57	MG	2E	311	1/1	0.93	0.20	55,55,55,55	0
57	MG	1A	3041	1/1	0.93	0.19	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
57	MG	2A	3461	1/1	0.93	0.13	51,51,51,51	0
57	MG	2F	3304	1/1	0.93	0.16	42,42,42,42	0
57	MG	1A	3471	1/1	0.93	0.21	36,36,36,36	0
57	MG	1A	3122	1/1	0.93	0.20	41,41,41,41	0
57	MG	2a	1792	1/1	0.93	0.26	64,64,64,64	0
57	MG	1A	3051	1/1	0.93	0.24	35,35,35,35	0
57	MG	1A	4085	1/1	0.93	0.14	50,50,50,50	0
57	MG	2a	1796	1/1	0.93	0.17	68,68,68,68	0
57	MG	2A	3297	1/1	0.93	0.34	60,60,60,60	0
57	MG	1A	3169	1/1	0.93	0.29	41,41,41,41	0
57	MG	1A	3613	1/1	0.93	0.13	37,37,37,37	0
57	MG	1A	3798	1/1	0.93	0.16	65,65,65,65	0
57	MG	1A	3080	1/1	0.93	0.22	58,58,58,58	0
57	MG	2A	3160	1/1	0.93	0.24	37,37,37,37	0
57	MG	2A	3697	1/1	0.93	0.14	64,64,64,64	0
57	MG	2a	1807	1/1	0.93	0.08	78,78,78,78	0
57	MG	1A	3063	1/1	0.93	0.23	30,30,30,30	0
57	MG	10	103	1/1	0.93	0.22	45,45,45,45	0
57	MG	2A	3165	1/1	0.93	0.10	62,62,62,62	0
57	MG	2A	3491	1/1	0.93	0.18	40,40,40,40	0
57	MG	2f	202	1/1	0.93	0.27	75,75,75,75	0
57	MG	2A	3309	1/1	0.93	0.17	49,49,49,49	0
57	MG	1A	3479	1/1	0.93	0.18	49,49,49,49	0
57	MG	1A	3626	1/1	0.93	0.14	61,61,61,61	0
57	MG	1A	3279	1/1	0.93	0.24	62,62,62,62	0
57	MG	2A	3314	1/1	0.93	0.23	57,57,57,57	0
57	MG	2A	3315	1/1	0.93	0.08	69,69,69,69	0
57	MG	1A	3717	1/1	0.93	0.13	20,20,20,20	0
57	MG	2q	202	1/1	0.93	0.16	74,74,74,74	0
57	MG	1a	1704	1/1	0.93	0.21	58,58,58,58	0
57	MG	2t	201	1/1	0.93	0.07	57,57,57,57	0
57	MG	1A	3317	1/1	0.93	0.29	61,61,61,61	0
57	MG	1A	3719	1/1	0.93	0.20	21,21,21,21	0
57	MG	2A	3509	1/1	0.93	0.17	48,48,48,48	0
57	MG	2A	3174	1/1	0.93	0.21	52,52,52,52	0
57	MG	1a	1708	1/1	0.93	0.09	58,58,58,58	0
57	MG	2A	3725	1/1	0.93	0.13	52,52,52,52	0
57	MG	1A	3483	1/1	0.93	0.16	35,35,35,35	0
57	MG	2w	105	1/1	0.93	0.29	51,51,51,51	0
57	MG	2A	3178	1/1	0.93	0.09	64,64,64,64	0
57	MG	1A	3900	1/1	0.93	0.19	57,57,57,57	0
57	MG	1B	213	1/1	0.93	0.21	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3185	1/1	0.93	0.10	51,51,51,51	0
57	MG	2A	3736	1/1	0.93	0.06	67,67,67,67	0
57	MG	2A	3526	1/1	0.93	0.25	71,71,71,71	0
57	MG	2A	3739	1/1	0.93	0.12	51,51,51,51	0
57	MG	1A	3726	1/1	0.93	0.17	35,35,35,35	0
57	MG	2A	3186	1/1	0.93	0.36	69,69,69,69	0
57	MG	2A	3018	1/1	0.93	0.22	39,39,39,39	0
57	MG	2A	3019	1/1	0.93	0.08	59,59,59,59	0
57	MG	1A	3283	1/1	0.93	0.30	60,60,60,60	0
57	MG	1A	3436	1/1	0.93	0.18	43,43,43,43	0
57	MG	2A	3024	1/1	0.93	0.35	54,54,54,54	0
57	MG	2A	3027	1/1	0.93	0.24	55,55,55,55	0
57	MG	2a	1630	1/1	0.93	0.12	72,72,72,72	0
57	MG	1a	1723	1/1	0.93	0.17	67,67,67,67	0
57	MG	2A	3541	1/1	0.93	0.20	44,44,44,44	0
57	MG	2A	3029	1/1	0.93	0.15	42,42,42,42	0
57	MG	1A	4040	1/1	0.94	0.10	55,55,55,55	0
57	MG	1S	3601	1/1	0.94	0.34	46,46,46,46	0
57	MG	1A	3675	1/1	0.94	0.14	45,45,45,45	0
57	MG	2A	3032	1/1	0.94	0.25	43,43,43,43	0
57	MG	1A	3017	1/1	0.94	0.25	49,49,49,49	0
57	MG	1A	3564	1/1	0.94	0.13	34,34,34,34	0
57	MG	1A	3266	1/1	0.94	0.15	53,53,53,53	0
57	MG	1U	203	1/1	0.94	0.14	36,36,36,36	0
57	MG	1U	204	1/1	0.94	0.18	37,37,37,37	0
57	MG	1A	3807	1/1	0.94	0.23	44,44,44,44	0
57	MG	1A	3570	1/1	0.94	0.18	56,56,56,56	0
57	MG	1a	1701	1/1	0.94	0.14	56,56,56,56	0
57	MG	2A	3427	1/1	0.94	0.45	62,62,62,62	0
57	MG	1A	3925	1/1	0.94	0.12	74,74,74,74	0
57	MG	1A	3154	1/1	0.94	0.17	44,44,44,44	0
57	MG	1A	3106	1/1	0.94	0.15	45,45,45,45	0
57	MG	1A	3488	1/1	0.94	0.35	56,56,56,56	0
57	MG	2A	3433	1/1	0.94	0.13	55,55,55,55	0
57	MG	1A	3685	1/1	0.94	0.16	57,57,57,57	0
57	MG	2A	3052	1/1	0.94	0.14	69,69,69,69	0
57	MG	2A	3698	1/1	0.94	0.39	61,61,61,61	0
57	MG	2A	3699	1/1	0.94	0.09	58,58,58,58	0
57	MG	1A	3383	1/1	0.94	0.27	48,48,48,48	0
57	MG	1A	4062	1/1	0.94	0.16	41,41,41,41	0
57	MG	2A	3055	1/1	0.94	0.13	51,51,51,51	0
57	MG	1A	3109	1/1	0.94	0.34	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
57	MG	2A	3442	1/1	0.94	0.32	68,68,68,68	0
57	MG	2A	3253	1/1	0.94	0.21	62,62,62,62	0
57	MG	1A	3194	1/1	0.94	0.15	51,51,51,51	0
57	MG	1A	3492	1/1	0.94	0.34	61,61,61,61	0
57	MG	1A	3935	1/1	0.94	0.14	47,47,47,47	0
57	MG	1a	1718	1/1	0.94	0.24	55,55,55,55	0
57	MG	2A	3713	1/1	0.94	0.17	56,56,56,56	0
57	MG	1A	4070	1/1	0.94	0.10	61,61,61,61	0
57	MG	2A	3715	1/1	0.94	0.14	47,47,47,47	0
57	MG	2A	3063	1/1	0.94	0.36	69,69,69,69	0
57	MG	2A	3260	1/1	0.94	0.08	58,58,58,58	0
57	MG	1A	3493	1/1	0.94	0.21	48,48,48,48	0
57	MG	1A	3432	1/1	0.94	0.31	55,55,55,55	0
57	MG	2A	3721	1/1	0.94	0.16	62,62,62,62	0
57	MG	2a	1648	1/1	0.94	0.37	52,52,52,52	0
57	MG	1A	3272	1/1	0.94	0.37	48,48,48,48	0
57	MG	1A	3042	1/1	0.94	0.16	29,29,29,29	0
57	MG	2A	3463	1/1	0.94	0.29	49,49,49,49	0
57	MG	1A	3832	1/1	0.94	0.23	22,22,22,22	0
57	MG	1A	3591	1/1	0.94	0.17	31,31,31,31	0
57	MG	1A	3089	1/1	0.94	0.15	39,39,39,39	0
57	MG	2A	3731	1/1	0.94	0.14	71,71,71,71	0
57	MG	2a	1656	1/1	0.94	0.11	56,56,56,56	0
57	MG	10	107	1/1	0.94	0.16	41,41,41,41	0
57	MG	1A	3841	1/1	0.94	0.14	76,76,76,76	0
57	MG	1A	3710	1/1	0.94	0.15	30,30,30,30	0
57	MG	1A	3952	1/1	0.94	0.10	31,31,31,31	0
57	MG	11	101	1/1	0.94	0.23	42,42,42,42	0
57	MG	2a	1663	1/1	0.94	0.24	45,45,45,45	0
57	MG	2A	3476	1/1	0.94	0.28	53,53,53,53	0
57	MG	2a	1665	1/1	0.94	0.11	49,49,49,49	0
57	MG	1A	3594	1/1	0.94	0.14	30,30,30,30	0
57	MG	1A	3955	1/1	0.94	0.17	50,50,50,50	0
57	MG	2A	3484	1/1	0.94	0.14	62,62,62,62	0
57	MG	2A	3485	1/1	0.94	0.21	53,53,53,53	0
57	MG	1A	4089	1/1	0.94	0.17	64,64,64,64	0
57	MG	2A	3082	1/1	0.94	0.13	65,65,65,65	0
57	MG	12	101	1/1	0.94	0.25	49,49,49,49	0
57	MG	2A	3492	1/1	0.94	0.19	52,52,52,52	0
57	MG	1A	3498	1/1	0.94	0.16	36,36,36,36	0
57	MG	1A	4091	1/1	0.94	0.14	47,47,47,47	0
57	MG	1A	3500	1/1	0.94	0.15	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3598	1/1	0.94	0.15	41,41,41,41	0
57	MG	2A	3089	1/1	0.94	0.14	55,55,55,55	0
57	MG	1A	3348	1/1	0.94	0.06	50,50,50,50	0
57	MG	1A	3848	1/1	0.94	0.20	58,58,58,58	0
57	MG	1a	1752	1/1	0.94	0.11	75,75,75,75	0
57	MG	1A	3052	1/1	0.94	0.24	37,37,37,37	0
57	MG	1a	1755	1/1	0.94	0.17	47,47,47,47	0
57	MG	1a	1756	1/1	0.94	0.06	61,61,61,61	0
57	MG	1a	1757	1/1	0.94	0.12	72,72,72,72	0
57	MG	1B	205	1/1	0.94	0.12	51,51,51,51	0
57	MG	1B	206	1/1	0.94	0.10	52,52,52,52	0
57	MG	1A	3200	1/1	0.94	0.23	47,47,47,47	0
57	MG	2A	3103	1/1	0.94	0.22	28,28,28,28	0
57	MG	2a	1694	1/1	0.94	0.22	71,71,71,71	0
57	MG	1A	3314	1/1	0.94	0.19	54,54,54,54	0
57	MG	1A	3315	1/1	0.94	0.13	38,38,38,38	0
57	MG	1A	3605	1/1	0.94	0.15	30,30,30,30	0
57	MG	2A	3302	1/1	0.94	0.20	38,38,38,38	0
57	MG	1a	1765	1/1	0.94	0.07	51,51,51,51	0
57	MG	2A	3529	1/1	0.94	0.24	55,55,55,55	0
57	MG	1a	1768	1/1	0.94	0.32	60,60,60,60	0
57	MG	1A	3607	1/1	0.94	0.19	26,26,26,26	0
57	MG	2A	3779	1/1	0.94	0.17	41,41,41,41	0
57	MG	2a	1705	1/1	0.94	0.11	60,60,60,60	0
57	MG	2A	3780	1/1	0.94	0.46	60,60,60,60	0
57	MG	1a	1601	1/1	0.94	0.17	59,59,59,59	0
57	MG	1A	3727	1/1	0.94	0.18	57,57,57,57	0
57	MG	1a	1774	1/1	0.94	0.10	58,58,58,58	0
57	MG	2A	3785	1/1	0.94	0.08	53,53,53,53	0
57	MG	1A	3608	1/1	0.94	0.17	23,23,23,23	0
57	MG	1A	3140	1/1	0.94	0.21	49,49,49,49	0
57	MG	1A	3116	1/1	0.94	0.14	41,41,41,41	0
57	MG	1A	3516	1/1	0.94	0.15	33,33,33,33	0
57	MG	1A	3517	1/1	0.94	0.21	45,45,45,45	0
57	MG	2A	3545	1/1	0.94	0.15	71,71,71,71	0
57	MG	2A	3546	1/1	0.94	0.28	26,26,26,26	0
57	MG	2A	3123	1/1	0.94	0.08	54,54,54,54	0
57	MG	1A	3399	1/1	0.94	0.25	44,44,44,44	0
57	MG	2A	3549	1/1	0.94	0.16	55,55,55,55	0
57	MG	1A	3357	1/1	0.94	0.15	46,46,46,46	0
57	MG	1A	3741	1/1	0.94	0.20	27,27,27,27	0
57	MG	2A	3129	1/1	0.94	0.13	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3805	1/1	0.94	0.14	68,68,68,68	0
57	MG	1A	3358	1/1	0.94	0.13	46,46,46,46	0
57	MG	1A	3098	1/1	0.94	0.18	31,31,31,31	0
57	MG	2A	3808	1/1	0.94	0.16	49,49,49,49	0
57	MG	2A	3136	1/1	0.94	0.18	40,40,40,40	0
57	MG	1A	3620	1/1	0.94	0.20	20,20,20,20	0
57	MG	2A	3325	1/1	0.94	0.16	64,64,64,64	0
57	MG	1A	3405	1/1	0.94	0.09	37,37,37,37	0
57	MG	2A	3564	1/1	0.94	0.13	65,65,65,65	0
57	MG	1B	228	1/1	0.94	0.19	67,67,67,67	0
57	MG	2A	3567	1/1	0.94	0.22	61,61,61,61	0
57	MG	2A	3568	1/1	0.94	0.31	56,56,56,56	0
57	MG	2A	3328	1/1	0.94	0.18	67,67,67,67	0
57	MG	1A	3361	1/1	0.94	0.13	56,56,56,56	0
57	MG	1A	3407	1/1	0.94	0.16	58,58,58,58	0
57	MG	1A	3751	1/1	0.94	0.12	50,50,50,50	0
57	MG	1A	3632	1/1	0.94	0.13	66,66,66,66	0
57	MG	1A	3990	1/1	0.94	0.14	44,44,44,44	0
57	MG	1A	3991	1/1	0.94	0.14	54,54,54,54	0
57	MG	1A	3171	1/1	0.94	0.14	39,39,39,39	0
57	MG	1a	1803	1/1	0.94	0.13	62,62,62,62	0
57	MG	1a	1631	1/1	0.94	0.28	24,24,24,24	0
57	MG	1a	1805	1/1	0.94	0.07	70,70,70,70	0
57	MG	1A	3882	1/1	0.94	0.14	37,37,37,37	0
57	MG	2A	3585	1/1	0.94	0.11	62,62,62,62	0
57	MG	1D	311	1/1	0.94	0.20	28,28,28,28	0
57	MG	1A	3175	1/1	0.94	0.13	34,34,34,34	0
57	MG	1A	3460	1/1	0.94	0.19	55,55,55,55	0
57	MG	2A	3344	1/1	0.94	0.34	60,60,60,60	0
57	MG	2a	1763	1/1	0.94	0.27	59,59,59,59	0
57	MG	2a	1764	1/1	0.94	0.19	80,80,80,80	0
57	MG	1A	3639	1/1	0.94	0.10	52,52,52,52	0
57	MG	2a	1766	1/1	0.94	0.15	71,71,71,71	0
57	MG	1a	1638	1/1	0.94	0.15	58,58,58,58	0
57	MG	2a	1769	1/1	0.94	0.24	68,68,68,68	0
57	MG	1A	3461	1/1	0.94	0.12	25,25,25,25	0
57	MG	1A	3539	1/1	0.94	0.20	41,41,41,41	0
57	MG	1e	201	1/1	0.94	0.10	68,68,68,68	0
57	MG	1A	3285	1/1	0.94	0.24	34,34,34,34	0
57	MG	1a	1642	1/1	0.94	0.20	50,50,50,50	0
57	MG	2a	1778	1/1	0.94	0.14	55,55,55,55	0
57	MG	2A	3352	1/1	0.94	0.13	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
57	MG	1A	3322	1/1	0.94	0.18	52,52,52,52	0
57	MG	2A	3608	1/1	0.94	0.22	42,42,42,42	0
57	MG	1A	3766	1/1	0.94	0.17	26,26,26,26	0
57	MG	2a	1785	1/1	0.94	0.24	64,64,64,64	0
57	MG	1a	1645	1/1	0.94	0.30	67,67,67,67	0
57	MG	1A	3650	1/1	0.94	0.20	46,46,46,46	0
57	MG	1a	1647	1/1	0.94	0.10	54,54,54,54	0
57	MG	1w	104	1/1	0.94	0.19	72,72,72,72	0
57	MG	1A	3007	1/1	0.94	0.26	22,22,22,22	0
57	MG	1A	3413	1/1	0.94	0.28	53,53,53,53	0
57	MG	1F	301	1/1	0.94	0.16	39,39,39,39	0
57	MG	2A	3618	1/1	0.94	0.16	73,73,73,73	0
57	MG	2B	209	1/1	0.94	0.20	59,59,59,59	0
57	MG	2A	3619	1/1	0.94	0.13	52,52,52,52	0
57	MG	1a	1651	1/1	0.94	0.10	68,68,68,68	0
57	MG	1a	1652	1/1	0.94	0.18	56,56,56,56	0
57	MG	2A	3622	1/1	0.94	0.33	56,56,56,56	0
57	MG	1A	3180	1/1	0.94	0.21	42,42,42,42	0
57	MG	2A	3191	1/1	0.94	0.15	59,59,59,59	0
57	MG	1x	103	1/1	0.94	0.31	44,44,44,44	0
57	MG	1A	3656	1/1	0.94	0.12	57,57,57,57	0
57	MG	1a	1656	1/1	0.94	0.26	63,63,63,63	0
57	MG	2d	301	1/1	0.94	0.37	57,57,57,57	0
57	MG	1F	306	1/1	0.94	0.22	34,34,34,34	0
57	MG	2D	306	1/1	0.94	0.20	62,62,62,62	0
57	MG	1a	1658	1/1	0.94	0.30	64,64,64,64	0
57	MG	2A	3374	1/1	0.94	0.23	52,52,52,52	0
57	MG	1A	4017	1/1	0.94	0.25	39,39,39,39	0
57	MG	2A	3376	1/1	0.94	0.42	65,65,65,65	0
57	MG	2A	3639	1/1	0.94	0.29	57,57,57,57	0
57	MG	1F	311	1/1	0.94	0.09	54,54,54,54	0
57	MG	1F	313	1/1	0.94	0.16	52,52,52,52	0
57	MG	1A	4018	1/1	0.94	0.14	48,48,48,48	0
57	MG	1G	201	1/1	0.94	0.22	38,38,38,38	0
57	MG	1A	3779	1/1	0.94	0.14	55,55,55,55	0
57	MG	1A	3657	1/1	0.94	0.15	59,59,59,59	0
57	MG	1A	3548	1/1	0.94	0.29	51,51,51,51	0
57	MG	1A	4022	1/1	0.94	0.23	36,36,36,36	0
57	MG	1A	3249	1/1	0.94	0.17	47,47,47,47	0
57	MG	1A	3784	1/1	0.94	0.18	61,61,61,61	0
57	MG	1A	3149	1/1	0.94	0.21	34,34,34,34	0
57	MG	2P	201	1/1	0.94	0.23	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
57	MG	1A	3370	1/1	0.94	0.18	40,40,40,40	0
57	MG	2Q	201	1/1	0.94	0.19	58,58,58,58	0
57	MG	2A	3008	1/1	0.94	0.27	39,39,39,39	0
57	MG	2T	201	1/1	0.94	0.12	61,61,61,61	0
57	MG	1A	3908	1/1	0.94	0.09	43,43,43,43	0
57	MG	1A	4029	1/1	0.94	0.09	79,79,79,79	0
57	MG	1A	3292	1/1	0.94	0.28	54,54,54,54	0
57	MG	1A	3260	1/1	0.94	0.10	50,50,50,50	0
57	MG	2A	3659	1/1	0.94	0.21	56,56,56,56	0
57	MG	20	103	1/1	0.94	0.16	70,70,70,70	0
57	MG	1A	3374	1/1	0.94	0.27	51,51,51,51	0
57	MG	2A	3661	1/1	0.94	0.07	69,69,69,69	0
57	MG	2y	102	1/1	0.94	0.14	82,82,82,82	0
57	MG	2A	3220	1/1	0.94	0.16	43,43,43,43	0
57	MG	1A	3421	1/1	0.94	0.10	38,38,38,38	0
57	MG	1A	3123	1/1	0.94	0.15	51,51,51,51	0
57	MG	1A	3671	1/1	0.94	0.23	54,54,54,54	0
57	MG	1a	1685	1/1	0.94	0.13	58,58,58,58	0
57	MG	29	101	1/1	0.94	0.18	65,65,65,65	0
57	MG	1A	3104	1/1	0.94	0.38	47,47,47,47	0
57	MG	1Q	206	1/1	0.94	0.18	45,45,45,45	0
57	MG	2A	3408	1/1	0.94	0.34	42,42,42,42	0
57	MG	1R	202	1/1	0.95	0.16	40,40,40,40	0
57	MG	1A	3936	1/1	0.95	0.09	49,49,49,49	0
57	MG	1A	3837	1/1	0.95	0.17	27,27,27,27	0
57	MG	1A	3839	1/1	0.95	0.17	31,31,31,31	0
57	MG	1A	3628	1/1	0.95	0.24	70,70,70,70	0
57	MG	1A	3068	1/1	0.95	0.21	30,30,30,30	0
57	MG	2a	1640	1/1	0.95	0.07	65,65,65,65	0
57	MG	2A	3535	1/1	0.95	0.30	59,59,59,59	0
57	MG	1a	1673	1/1	0.95	0.25	62,62,62,62	0
57	MG	2A	3752	1/1	0.95	0.08	72,72,72,72	0
57	MG	2A	3331	1/1	0.95	0.10	63,63,63,63	0
57	MG	1U	202	1/1	0.95	0.24	41,41,41,41	0
57	MG	1a	1675	1/1	0.95	0.26	37,37,37,37	0
57	MG	1A	3043	1/1	0.95	0.16	31,31,31,31	0
57	MG	1A	3484	1/1	0.95	0.21	44,44,44,44	0
57	MG	1A	3044	1/1	0.95	0.18	32,32,32,32	0
57	MG	1U	207	1/1	0.95	0.12	46,46,46,46	0
57	MG	1A	3552	1/1	0.95	0.23	24,24,24,24	0
57	MG	1A	3219	1/1	0.95	0.22	28,28,28,28	0
57	MG	1A	3951	1/1	0.95	0.20	28,28,28,28	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3640	1/1	0.95	0.28	29,29,29,29	0
57	MG	1A	3434	1/1	0.95	0.20	35,35,35,35	0
57	MG	2A	3182	1/1	0.95	0.25	63,63,63,63	0
57	MG	1A	3737	1/1	0.95	0.23	58,58,58,58	0
57	MG	2A	3184	1/1	0.95	0.40	64,64,64,64	0
57	MG	1A	3310	1/1	0.95	0.14	36,36,36,36	0
57	MG	2A	3557	1/1	0.95	0.18	65,65,65,65	0
57	MG	1A	3311	1/1	0.95	0.12	47,47,47,47	0
57	MG	1A	3853	1/1	0.95	0.12	45,45,45,45	0
57	MG	1X	102	1/1	0.95	0.24	43,43,43,43	0
57	MG	1A	3110	1/1	0.95	0.29	38,38,38,38	0
57	MG	1A	3646	1/1	0.95	0.25	64,64,64,64	0
57	MG	1A	3648	1/1	0.95	0.13	33,33,33,33	0
57	MG	1A	3744	1/1	0.95	0.19	42,42,42,42	0
57	MG	1A	3860	1/1	0.95	0.23	25,25,25,25	0
57	MG	1A	3142	1/1	0.95	0.16	27,27,27,27	0
57	MG	2A	3356	1/1	0.95	0.14	65,65,65,65	0
57	MG	1A	3223	1/1	0.95	0.25	54,54,54,54	0
57	MG	1A	3181	1/1	0.95	0.17	29,29,29,29	0
57	MG	1A	3145	1/1	0.95	0.21	56,56,56,56	0
57	MG	1A	3866	1/1	0.95	0.06	39,39,39,39	0
57	MG	1A	3056	1/1	0.95	0.15	35,35,35,35	0
57	MG	1A	3445	1/1	0.95	0.15	45,45,45,45	0
57	MG	1A	3360	1/1	0.95	0.13	47,47,47,47	0
57	MG	1A	3186	1/1	0.95	0.27	35,35,35,35	0
57	MG	1A	3086	1/1	0.95	0.25	42,42,42,42	0
57	MG	1A	3503	1/1	0.95	0.17	38,38,38,38	0
57	MG	1A	3045	1/1	0.95	0.20	21,21,21,21	0
57	MG	2A	3369	1/1	0.95	0.14	62,62,62,62	0
57	MG	1a	1717	1/1	0.95	0.12	74,74,74,74	0
57	MG	1A	3760	1/1	0.95	0.22	70,70,70,70	0
57	MG	2A	3589	1/1	0.95	0.31	49,49,49,49	0
57	MG	1A	3189	1/1	0.95	0.15	41,41,41,41	0
57	MG	2A	3037	1/1	0.95	0.26	24,24,24,24	0
57	MG	11	106	1/1	0.95	0.15	53,53,53,53	0
57	MG	1A	3237	1/1	0.95	0.18	43,43,43,43	0
57	MG	1A	3667	1/1	0.95	0.26	41,41,41,41	0
57	MG	13	102	1/1	0.95	0.24	46,46,46,46	0
57	MG	2A	3601	1/1	0.95	0.20	43,43,43,43	0
57	MG	2A	3813	1/1	0.95	0.15	55,55,55,55	0
57	MG	1A	3075	1/1	0.95	0.34	31,31,31,31	0
57	MG	1A	3510	1/1	0.95	0.18	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3222	1/1	0.95	0.15	37,37,37,37	0
57	MG	1a	1732	1/1	0.95	0.14	72,72,72,72	0
57	MG	1B	216	1/1	0.95	0.16	50,50,50,50	0
57	MG	1A	3008	1/1	0.95	0.15	28,28,28,28	0
57	MG	1A	3772	1/1	0.95	0.15	43,43,43,43	0
57	MG	1A	3989	1/1	0.95	0.12	39,39,39,39	0
57	MG	1A	3672	1/1	0.95	0.10	67,67,67,67	0
57	MG	2A	3824	1/1	0.95	0.20	53,53,53,53	0
57	MG	2A	3825	1/1	0.95	0.30	49,49,49,49	0
57	MG	1A	3775	1/1	0.95	0.26	47,47,47,47	0
57	MG	1A	3993	1/1	0.95	0.25	26,26,26,26	0
57	MG	1A	3326	1/1	0.95	0.14	36,36,36,36	0
57	MG	1A	3514	1/1	0.95	0.31	46,46,46,46	0
57	MG	1A	3456	1/1	0.95	0.12	59,59,59,59	0
57	MG	1A	3091	1/1	0.95	0.17	35,35,35,35	0
57	MG	1A	3595	1/1	0.95	0.16	69,69,69,69	0
57	MG	1A	3092	1/1	0.95	0.14	21,21,21,21	0
57	MG	2a	1720	1/1	0.95	0.19	67,67,67,67	0
57	MG	1A	4002	1/1	0.95	0.08	39,39,39,39	0
57	MG	1A	3126	1/1	0.95	0.10	42,42,42,42	0
57	MG	2A	3240	1/1	0.95	0.21	67,67,67,67	0
57	MG	1A	3158	1/1	0.95	0.21	32,32,32,32	0
57	MG	2A	3066	1/1	0.95	0.37	58,58,58,58	0
57	MG	1a	1606	1/1	0.95	0.14	58,58,58,58	0
57	MG	1A	3786	1/1	0.95	0.10	40,40,40,40	0
57	MG	1a	1608	1/1	0.95	0.15	45,45,45,45	0
57	MG	1A	3521	1/1	0.95	0.18	40,40,40,40	0
57	MG	2A	3846	1/1	0.95	0.08	69,69,69,69	0
57	MG	2a	1734	1/1	0.95	0.12	65,65,65,65	0
57	MG	1D	302	1/1	0.95	0.34	60,60,60,60	0
57	MG	1D	306	1/1	0.95	0.34	38,38,38,38	0
57	MG	1a	1612	1/1	0.95	0.23	66,66,66,66	0
57	MG	1A	3373	1/1	0.95	0.24	58,58,58,58	0
57	MG	1A	4009	1/1	0.95	0.20	32,32,32,32	0
57	MG	1A	3061	1/1	0.95	0.21	48,48,48,48	0
57	MG	2A	3417	1/1	0.95	0.10	65,65,65,65	0
57	MG	2a	1743	1/1	0.95	0.06	60,60,60,60	0
57	MG	2A	3078	1/1	0.95	0.36	30,30,30,30	0
57	MG	1A	3899	1/1	0.95	0.09	46,46,46,46	0
57	MG	1a	1619	1/1	0.95	0.16	50,50,50,50	0
57	MG	1a	1767	1/1	0.95	0.05	63,63,63,63	0
57	MG	1A	3688	1/1	0.95	0.25	23,23,23,23	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1E	303	1/1	0.95	0.33	47,47,47,47	0
57	MG	1A	3162	1/1	0.95	0.19	55,55,55,55	0
57	MG	1E	305	1/1	0.95	0.16	34,34,34,34	0
57	MG	1A	4016	1/1	0.95	0.20	55,55,55,55	0
57	MG	1a	1625	1/1	0.95	0.31	53,53,53,53	0
57	MG	1A	3296	1/1	0.95	0.26	55,55,55,55	0
57	MG	1a	1777	1/1	0.95	0.12	71,71,71,71	0
57	MG	2a	1757	1/1	0.95	0.11	65,65,65,65	0
57	MG	1A	3334	1/1	0.95	0.44	47,47,47,47	0
57	MG	2A	3658	1/1	0.95	0.13	61,61,61,61	0
57	MG	1A	3906	1/1	0.95	0.10	67,67,67,67	0
57	MG	2A	3094	1/1	0.95	0.19	45,45,45,45	0
57	MG	2a	1762	1/1	0.95	0.21	58,58,58,58	0
57	MG	1A	3378	1/1	0.95	0.20	49,49,49,49	0
57	MG	2D	303	1/1	0.95	0.17	52,52,52,52	0
57	MG	1A	3697	1/1	0.95	0.14	62,62,62,62	0
57	MG	1A	3096	1/1	0.95	0.17	36,36,36,36	0
57	MG	1A	3423	1/1	0.95	0.24	59,59,59,59	0
57	MG	2A	3444	1/1	0.95	0.19	46,46,46,46	0
57	MG	2A	3668	1/1	0.95	0.16	32,32,32,32	0
57	MG	1A	3805	1/1	0.95	0.06	54,54,54,54	0
57	MG	1A	3700	1/1	0.95	0.21	28,28,28,28	0
57	MG	2a	1775	1/1	0.95	0.33	64,64,64,64	0
57	MG	2A	3275	1/1	0.95	0.32	63,63,63,63	0
57	MG	1a	1636	1/1	0.95	0.27	55,55,55,55	0
57	MG	1A	3701	1/1	0.95	0.21	29,29,29,29	0
57	MG	1A	3475	1/1	0.95	0.35	69,69,69,69	0
57	MG	2A	3452	1/1	0.95	0.14	45,45,45,45	0
57	MG	2a	1781	1/1	0.95	0.20	62,62,62,62	0
57	MG	1a	1793	1/1	0.95	0.15	70,70,70,70	0
57	MG	2a	1783	1/1	0.95	0.27	65,65,65,65	0
57	MG	2A	3455	1/1	0.95	0.25	57,57,57,57	0
57	MG	1A	3538	1/1	0.95	0.13	43,43,43,43	0
57	MG	1F	312	1/1	0.95	0.15	30,30,30,30	0
57	MG	1A	3811	1/1	0.95	0.24	25,25,25,25	0
57	MG	1a	1798	1/1	0.95	0.12	59,59,59,59	0
57	MG	2A	3284	1/1	0.95	0.23	49,49,49,49	0
57	MG	2A	3464	1/1	0.95	0.35	72,72,72,72	0
57	MG	1A	3919	1/1	0.95	0.19	49,49,49,49	0
57	MG	1A	3705	1/1	0.95	0.20	25,25,25,25	0
57	MG	2R	201	1/1	0.95	0.13	61,61,61,61	0
57	MG	1A	3707	1/1	0.95	0.20	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3078	1/1	0.95	0.18	41,41,41,41	0
57	MG	1A	3132	1/1	0.95	0.16	28,28,28,28	0
57	MG	1H	201	1/1	0.95	0.38	48,48,48,48	0
57	MG	2a	1803	1/1	0.95	0.22	56,56,56,56	0
57	MG	2W	201	1/1	0.95	0.27	46,46,46,46	0
57	MG	2Y	201	1/1	0.95	0.23	60,60,60,60	0
57	MG	2A	3694	1/1	0.95	0.20	51,51,51,51	0
57	MG	1A	3614	1/1	0.95	0.15	27,27,27,27	0
57	MG	1A	3541	1/1	0.95	0.18	44,44,44,44	0
57	MG	1A	3542	1/1	0.95	0.30	32,32,32,32	0
57	MG	1A	3543	1/1	0.95	0.20	28,28,28,28	0
57	MG	25	101	1/1	0.95	0.32	68,68,68,68	0
57	MG	2A	3295	1/1	0.95	0.17	65,65,65,65	0
57	MG	2A	3483	1/1	0.95	0.16	43,43,43,43	0
57	MG	25	105	1/1	0.95	0.09	63,63,63,63	0
57	MG	1A	4043	1/1	0.95	0.17	41,41,41,41	0
57	MG	27	101	1/1	0.95	0.31	60,60,60,60	0
57	MG	2l	202	1/1	0.95	0.14	65,65,65,65	0
57	MG	2A	3126	1/1	0.95	0.18	59,59,59,59	0
57	MG	1A	3826	1/1	0.95	0.12	34,34,34,34	0
57	MG	2A	3487	1/1	0.95	0.17	41,41,41,41	0
57	MG	1O	202	1/1	0.95	0.21	54,54,54,54	0
57	MG	2A	3130	1/1	0.95	0.15	67,67,67,67	0
57	MG	1A	4046	1/1	0.95	0.22	72,72,72,72	0
57	MG	2A	3493	1/1	0.95	0.15	36,36,36,36	0
57	MG	1A	3715	1/1	0.95	0.18	30,30,30,30	0
57	MG	2A	3135	1/1	0.95	0.21	38,38,38,38	0
57	MG	1d	301	1/1	0.95	0.16	59,59,59,59	0
57	MG	1A	4050	1/1	0.95	0.11	50,50,50,50	0
57	MG	1A	3619	1/1	0.95	0.19	27,27,27,27	0
57	MG	1A	4052	1/1	0.95	0.11	55,55,55,55	0
57	MG	2A	3143	1/1	0.95	0.28	35,35,35,35	0
57	MG	1A	4053	1/1	0.95	0.30	30,30,30,30	0
57	MG	2A	3504	1/1	0.95	0.26	53,53,53,53	0
57	MG	1Q	203	1/1	0.95	0.26	28,28,28,28	0
57	MG	2A	3723	1/1	0.95	0.14	57,57,57,57	0
57	MG	1A	3166	1/1	0.95	0.11	57,57,57,57	0
57	MG	2A	3508	1/1	0.95	0.16	48,48,48,48	0
57	MG	2A	3148	1/1	0.95	0.26	48,48,48,48	0
57	MG	2A	3511	1/1	0.95	0.31	54,54,54,54	0
57	MG	1r	101	1/1	0.95	0.35	58,58,58,58	0
57	MG	2A	3150	1/1	0.95	0.14	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3732	1/1	0.95	0.08	57,57,57,57	0
57	MG	2A	3515	1/1	0.95	0.26	46,46,46,46	0
57	MG	1A	3001	1/1	0.95	0.14	42,42,42,42	0
57	MG	2A	3735	1/1	0.95	0.19	52,52,52,52	0
57	MG	2A	3521	1/1	0.95	0.23	40,40,40,40	0
58	K	2A	3423	1/1	0.95	0.22	52,52,52,52	0
57	MG	1A	3834	1/1	0.95	0.21	45,45,45,45	0
57	MG	1w	102	1/1	0.95	0.21	50,50,50,50	0
57	MG	1w	103	1/1	0.95	0.32	63,63,63,63	0
57	MG	2a	1631	1/1	0.95	0.24	43,43,43,43	0
57	MG	1A	3019	1/1	0.95	0.17	42,42,42,42	0
57	MG	2A	3158	1/1	0.95	0.25	42,42,42,42	0
63	FME	2x	108	10/11	0.95	0.23	34,43,46,53	0
57	MG	15	102	1/1	0.96	0.10	35,35,35,35	0
57	MG	2A	3108	1/1	0.96	0.25	58,58,58,58	0
57	MG	1A	3568	1/1	0.96	0.18	31,31,31,31	0
57	MG	2A	3795	1/1	0.96	0.27	38,38,38,38	0
57	MG	2A	3796	1/1	0.96	0.13	75,75,75,75	0
57	MG	1A	3463	1/1	0.96	0.14	46,46,46,46	0
57	MG	1A	3957	1/1	0.96	0.16	47,47,47,47	0
57	MG	1l	3201	1/1	0.96	0.23	54,54,54,54	0
57	MG	1A	3174	1/1	0.96	0.16	29,29,29,29	0
57	MG	2A	3114	1/1	0.96	0.28	60,60,60,60	0
57	MG	2A	3414	1/1	0.96	0.39	53,53,53,53	0
57	MG	1n	101	1/1	0.96	0.31	65,65,65,65	0
57	MG	1A	3242	1/1	0.96	0.12	39,39,39,39	0
57	MG	17	101	1/1	0.96	0.18	30,30,30,30	0
57	MG	1A	3466	1/1	0.96	0.15	33,33,33,33	0
57	MG	2A	3120	1/1	0.96	0.15	71,71,71,71	0
57	MG	17	104	1/1	0.96	0.17	34,34,34,34	0
57	MG	2A	3269	1/1	0.96	0.16	55,55,55,55	0
57	MG	1a	1699	1/1	0.96	0.20	29,29,29,29	0
57	MG	1A	3793	1/1	0.96	0.13	50,50,50,50	0
57	MG	1A	3243	1/1	0.96	0.13	39,39,39,39	0
57	MG	1a	1703	1/1	0.96	0.19	59,59,59,59	0
57	MG	18	102	1/1	0.96	0.24	44,44,44,44	0
57	MG	2A	3127	1/1	0.96	0.18	49,49,49,49	0
57	MG	2A	3625	1/1	0.96	0.36	79,79,79,79	0
57	MG	18	103	1/1	0.96	0.19	44,44,44,44	0
57	MG	2a	1686	1/1	0.96	0.21	63,63,63,63	0
57	MG	1A	3963	1/1	0.96	0.11	53,53,53,53	0
57	MG	1A	3059	1/1	0.96	0.26	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
57	MG	1F	305	1/1	0.96	0.18	34,34,34,34	0
57	MG	2A	3132	1/1	0.96	0.18	40,40,40,40	0
57	MG	1A	3177	1/1	0.96	0.17	33,33,33,33	0
57	MG	2A	3134	1/1	0.96	0.24	69,69,69,69	0
57	MG	1A	3472	1/1	0.96	0.23	56,56,56,56	0
57	MG	2A	3827	1/1	0.96	0.16	57,57,57,57	0
57	MG	1A	3651	1/1	0.96	0.17	28,28,28,28	0
57	MG	1A	3287	1/1	0.96	0.25	53,53,53,53	0
57	MG	2A	3445	1/1	0.96	0.34	65,65,65,65	0
57	MG	2A	3139	1/1	0.96	0.23	47,47,47,47	0
57	MG	1A	3969	1/1	0.96	0.21	49,49,49,49	0
57	MG	1A	3107	1/1	0.96	0.21	37,37,37,37	0
57	MG	1A	4063	1/1	0.96	0.16	60,60,60,60	0
57	MG	1a	1719	1/1	0.96	0.18	46,46,46,46	0
57	MG	1a	1721	1/1	0.96	0.21	67,67,67,67	0
57	MG	1A	3971	1/1	0.96	0.12	39,39,39,39	0
57	MG	1A	3289	1/1	0.96	0.18	41,41,41,41	0
57	MG	2A	3454	1/1	0.96	0.24	36,36,36,36	0
57	MG	1a	1724	1/1	0.96	0.18	50,50,50,50	0
57	MG	1A	3433	1/1	0.96	0.12	51,51,51,51	0
57	MG	2A	3151	1/1	0.96	0.20	53,53,53,53	0
57	MG	2A	3459	1/1	0.96	0.26	45,45,45,45	0
57	MG	2A	3460	1/1	0.96	0.27	45,45,45,45	0
57	MG	1A	3037	1/1	0.96	0.19	31,31,31,31	0
57	MG	1A	3729	1/1	0.96	0.21	30,30,30,30	0
57	MG	1a	1729	1/1	0.96	0.17	49,49,49,49	0
57	MG	2A	3155	1/1	0.96	0.19	46,46,46,46	0
57	MG	2A	3006	1/1	0.96	0.14	45,45,45,45	0
57	MG	2A	3662	1/1	0.96	0.19	60,60,60,60	0
57	MG	1A	3527	1/1	0.96	0.29	50,50,50,50	0
57	MG	1A	3732	1/1	0.96	0.14	37,37,37,37	0
57	MG	1A	3592	1/1	0.96	0.20	31,31,31,31	0
57	MG	1a	1616	1/1	0.96	0.15	41,41,41,41	0
57	MG	2a	1723	1/1	0.96	0.10	63,63,63,63	0
57	MG	2A	3667	1/1	0.96	0.07	69,69,69,69	0
57	MG	2A	3471	1/1	0.96	0.24	45,45,45,45	0
57	MG	2a	1726	1/1	0.96	0.12	76,76,76,76	0
57	MG	2A	3015	1/1	0.96	0.15	67,67,67,67	0
57	MG	1A	3895	1/1	0.96	0.16	43,43,43,43	0
57	MG	2A	3164	1/1	0.96	0.15	69,69,69,69	0
57	MG	1a	1736	1/1	0.96	0.21	46,46,46,46	0
57	MG	2A	3673	1/1	0.96	0.17	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1618	1/1	0.96	0.31	48,48,48,48	0
57	MG	2A	3313	1/1	0.96	0.24	55,55,55,55	0
57	MG	2A	3481	1/1	0.96	0.36	55,55,55,55	0
57	MG	2A	3167	1/1	0.96	0.33	49,49,49,49	0
57	MG	1A	3815	1/1	0.96	0.24	34,34,34,34	0
57	MG	1A	3014	1/1	0.96	0.22	38,38,38,38	0
57	MG	1A	3112	1/1	0.96	0.27	49,49,49,49	0
57	MG	1A	3437	1/1	0.96	0.26	39,39,39,39	0
57	MG	1A	3821	1/1	0.96	0.20	34,34,34,34	0
57	MG	2D	305	1/1	0.96	0.23	45,45,45,45	0
57	MG	2A	3489	1/1	0.96	0.14	46,46,46,46	0
57	MG	2A	3490	1/1	0.96	0.09	62,62,62,62	0
57	MG	1a	1743	1/1	0.96	0.11	47,47,47,47	0
57	MG	1A	3901	1/1	0.96	0.14	42,42,42,42	0
57	MG	1P	201	1/1	0.96	0.15	36,36,36,36	0
57	MG	2A	3495	1/1	0.96	0.19	35,35,35,35	0
57	MG	2A	3691	1/1	0.96	0.15	42,42,42,42	0
57	MG	1P	202	1/1	0.96	0.16	30,30,30,30	0
57	MG	2A	3177	1/1	0.96	0.19	45,45,45,45	0
57	MG	2E	308	1/1	0.96	0.10	74,74,74,74	0
57	MG	1A	3533	1/1	0.96	0.18	54,54,54,54	0
57	MG	1A	4087	1/1	0.96	0.20	51,51,51,51	0
57	MG	2a	1756	1/1	0.96	0.16	53,53,53,53	0
57	MG	1A	3402	1/1	0.96	0.23	35,35,35,35	0
57	MG	1A	3073	1/1	0.96	0.24	38,38,38,38	0
57	MG	2F	3303	1/1	0.96	0.23	44,44,44,44	0
57	MG	2A	3036	1/1	0.96	0.31	43,43,43,43	0
57	MG	1A	3537	1/1	0.96	0.17	36,36,36,36	0
57	MG	1A	3074	1/1	0.96	0.15	33,33,33,33	0
57	MG	1A	3261	1/1	0.96	0.15	30,30,30,30	0
57	MG	2A	3187	1/1	0.96	0.13	70,70,70,70	0
57	MG	2A	3040	1/1	0.96	0.25	57,57,57,57	0
57	MG	1Q	208	1/1	0.96	0.11	37,37,37,37	0
57	MG	2A	3510	1/1	0.96	0.19	48,48,48,48	0
57	MG	2A	3707	1/1	0.96	0.18	43,43,43,43	0
57	MG	1A	3831	1/1	0.96	0.21	32,32,32,32	0
57	MG	1R	203	1/1	0.96	0.18	33,33,33,33	0
57	MG	1a	1758	1/1	0.96	0.15	55,55,55,55	0
57	MG	1A	3910	1/1	0.96	0.11	48,48,48,48	0
57	MG	1S	3602	1/1	0.96	0.12	51,51,51,51	0
57	MG	2X	101	1/1	0.96	0.14	57,57,57,57	0
57	MG	1A	3996	1/1	0.96	0.17	14,14,14,14	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2Z	301	1/1	0.96	0.11	67,67,67,67	0
57	MG	1A	3097	1/1	0.96	0.14	33,33,33,33	0
57	MG	1A	3263	1/1	0.96	0.19	40,40,40,40	0
57	MG	2A	3198	1/1	0.96	0.19	70,70,70,70	0
57	MG	1A	3137	1/1	0.96	0.30	44,44,44,44	0
57	MG	23	101	1/1	0.96	0.25	64,64,64,64	0
57	MG	1A	4000	1/1	0.96	0.18	48,48,48,48	0
57	MG	1a	1766	1/1	0.96	0.11	51,51,51,51	0
57	MG	2A	3056	1/1	0.96	0.09	64,64,64,64	0
57	MG	1A	3836	1/1	0.96	0.16	29,29,29,29	0
57	MG	1A	3606	1/1	0.96	0.18	28,28,28,28	0
57	MG	1a	1769	1/1	0.96	0.13	53,53,53,53	0
57	MG	2A	3727	1/1	0.96	0.23	39,39,39,39	0
57	MG	2a	1794	1/1	0.96	0.20	59,59,59,59	0
57	MG	1A	3916	1/1	0.96	0.14	66,66,66,66	0
57	MG	28	101	1/1	0.96	0.25	68,68,68,68	0
57	MG	2A	3534	1/1	0.96	0.17	41,41,41,41	0
57	MG	1A	3749	1/1	0.96	0.15	21,21,21,21	0
57	MG	1A	3046	1/1	0.96	0.27	24,24,24,24	0
57	MG	2A	3209	1/1	0.96	0.22	61,61,61,61	0
57	MG	2a	1802	1/1	0.96	0.14	68,68,68,68	0
57	MG	2A	3538	1/1	0.96	0.19	74,74,74,74	0
57	MG	1A	3117	1/1	0.96	0.19	38,38,38,38	0
57	MG	2A	3211	1/1	0.96	0.33	64,64,64,64	0
57	MG	1A	3028	1/1	0.96	0.15	35,35,35,35	0
57	MG	1A	3121	1/1	0.96	0.16	31,31,31,31	0
57	MG	1A	3010	1/1	0.96	0.20	52,52,52,52	0
57	MG	1A	3451	1/1	0.96	0.16	34,34,34,34	0
57	MG	1a	1655	1/1	0.96	0.06	64,64,64,64	0
57	MG	2d	302	1/1	0.96	0.16	62,62,62,62	0
57	MG	2A	3069	1/1	0.96	0.18	30,30,30,30	0
57	MG	1A	3270	1/1	0.96	0.15	40,40,40,40	0
57	MG	1a	1781	1/1	0.96	0.12	58,58,58,58	0
57	MG	1A	3550	1/1	0.96	0.14	30,30,30,30	0
57	MG	1A	4015	1/1	0.96	0.24	44,44,44,44	0
57	MG	1A	3230	1/1	0.96	0.17	47,47,47,47	0
57	MG	1A	3689	1/1	0.96	0.15	32,32,32,32	0
57	MG	1A	3380	1/1	0.96	0.15	38,38,38,38	0
57	MG	1A	3765	1/1	0.96	0.11	39,39,39,39	0
57	MG	1B	226	1/1	0.96	0.21	46,46,46,46	0
57	MG	2A	3229	1/1	0.96	0.28	53,53,53,53	0
57	MG	1a	1790	1/1	0.96	0.11	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3692	1/1	0.96	0.25	58,58,58,58	0
57	MG	1A	3553	1/1	0.96	0.22	39,39,39,39	0
57	MG	1A	3769	1/1	0.96	0.16	30,30,30,30	0
57	MG	1A	3058	1/1	0.96	0.16	35,35,35,35	0
57	MG	1A	3857	1/1	0.96	0.20	33,33,33,33	0
57	MG	1A	3233	1/1	0.96	0.11	72,72,72,72	0
57	MG	2A	3384	1/1	0.96	0.26	54,54,54,54	0
57	MG	1B	233	1/1	0.96	0.13	61,61,61,61	0
57	MG	10	106	1/1	0.96	0.21	44,44,44,44	0
57	MG	1A	3623	1/1	0.96	0.20	20,20,20,20	0
57	MG	1A	3124	1/1	0.96	0.17	32,32,32,32	0
57	MG	1A	3170	1/1	0.96	0.22	31,31,31,31	0
57	MG	2A	3092	1/1	0.96	0.15	37,37,37,37	0
57	MG	1A	3459	1/1	0.96	0.17	41,41,41,41	0
57	MG	1A	3148	1/1	0.96	0.21	38,38,38,38	0
57	MG	1D	309	1/1	0.96	0.18	45,45,45,45	0
57	MG	2A	3771	1/1	0.96	0.10	74,74,74,74	0
57	MG	2A	3583	1/1	0.96	0.29	47,47,47,47	0
57	MG	2A	3394	1/1	0.96	0.20	63,63,63,63	0
57	MG	1A	3201	1/1	0.96	0.28	44,44,44,44	0
57	MG	2A	3396	1/1	0.96	0.32	54,54,54,54	0
57	MG	1A	3946	1/1	0.96	0.11	61,61,61,61	0
57	MG	2a	1646	1/1	0.96	0.17	58,58,58,58	0
57	MG	1a	1681	1/1	0.96	0.25	57,57,57,57	0
57	MG	1A	3703	1/1	0.96	0.14	42,42,42,42	0
57	MG	1A	3173	1/1	0.96	0.28	38,38,38,38	0
57	MG	1A	3511	1/1	0.96	0.24	24,24,24,24	0
57	MG	1A	3706	1/1	0.96	0.21	44,44,44,44	0
60	ZN	1n	103	1/1	0.96	0.14	57,57,57,57	0
57	MG	2A	3786	1/1	0.96	0.18	60,60,60,60	0
57	MG	1A	3566	1/1	0.96	0.10	53,53,53,53	0
60	ZN	29	102	1/1	0.96	0.11	61,61,61,61	0
57	MG	1A	3638	1/1	0.96	0.16	30,30,30,30	0
62	PHE	1w	109	11/12	0.96	0.24	19,25,28,30	0
62	PHE	2w	108	11/12	0.96	0.28	35,38,45,45	0
63	FME	1x	115	10/11	0.96	0.29	21,25,29,39	10
57	MG	2A	3597	1/1	0.96	0.21	44,44,44,44	0
57	MG	2A	3013	1/1	0.97	0.15	44,44,44,44	0
57	MG	1A	3586	1/1	0.97	0.17	26,26,26,26	0
57	MG	1A	3724	1/1	0.97	0.14	28,28,28,28	0
57	MG	2A	3298	1/1	0.97	0.17	56,56,56,56	0
57	MG	1A	3809	1/1	0.97	0.24	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3102	1/1	0.97	0.21	32,32,32,32	0
57	MG	2a	1671	1/1	0.97	0.19	62,62,62,62	0
57	MG	1a	1735	1/1	0.97	0.17	47,47,47,47	0
57	MG	2A	3628	1/1	0.97	0.21	30,30,30,30	0
57	MG	1A	3396	1/1	0.97	0.14	39,39,39,39	0
57	MG	2A	3630	1/1	0.97	0.15	58,58,58,58	0
57	MG	1A	3482	1/1	0.97	0.12	39,39,39,39	0
57	MG	2A	3163	1/1	0.97	0.12	60,60,60,60	0
57	MG	2A	3634	1/1	0.97	0.15	61,61,61,61	0
57	MG	2A	3817	1/1	0.97	0.13	56,56,56,56	0
57	MG	1A	3397	1/1	0.97	0.15	40,40,40,40	0
57	MG	2a	1682	1/1	0.97	0.35	64,64,64,64	0
57	MG	1A	4076	1/1	0.97	0.10	58,58,58,58	0
57	MG	2A	3025	1/1	0.97	0.13	44,44,44,44	0
57	MG	2A	3638	1/1	0.97	0.26	35,35,35,35	0
57	MG	1A	3103	1/1	0.97	0.20	37,37,37,37	0
57	MG	1A	3280	1/1	0.97	0.33	55,55,55,55	0
57	MG	1A	3281	1/1	0.97	0.25	53,53,53,53	0
57	MG	1A	3047	1/1	0.97	0.31	29,29,29,29	0
57	MG	1A	4082	1/1	0.97	0.17	38,38,38,38	0
57	MG	2A	3465	1/1	0.97	0.19	48,48,48,48	0
57	MG	1A	3735	1/1	0.97	0.21	26,26,26,26	0
57	MG	1A	3663	1/1	0.97	0.10	34,34,34,34	0
57	MG	1A	4086	1/1	0.97	0.18	53,53,53,53	0
57	MG	1P	203	1/1	0.97	0.15	33,33,33,33	0
57	MG	1P	204	1/1	0.97	0.17	30,30,30,30	0
57	MG	1A	3118	1/1	0.97	0.13	32,32,32,32	0
57	MG	1a	1628	1/1	0.97	0.12	59,59,59,59	0
57	MG	1P	206	1/1	0.97	0.16	41,41,41,41	0
57	MG	2A	3474	1/1	0.97	0.15	46,46,46,46	0
57	MG	1A	3403	1/1	0.97	0.13	36,36,36,36	0
57	MG	1a	1754	1/1	0.97	0.13	58,58,58,58	0
57	MG	2A	3656	1/1	0.97	0.32	36,36,36,36	0
57	MG	2A	3042	1/1	0.97	0.09	65,65,65,65	0
57	MG	2A	3478	1/1	0.97	0.20	35,35,35,35	0
57	MG	1A	3992	1/1	0.97	0.16	53,53,53,53	0
57	MG	2A	3480	1/1	0.97	0.24	22,22,22,22	0
57	MG	1A	3039	1/1	0.97	0.16	32,32,32,32	0
57	MG	2A	3848	1/1	0.97	0.26	62,62,62,62	0
57	MG	2A	3482	1/1	0.97	0.27	38,38,38,38	0
57	MG	1A	3740	1/1	0.97	0.16	23,23,23,23	0
57	MG	1A	4092	1/1	0.97	0.40	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1A	3600	1/1	0.97	0.23	43,43,43,43	0
57	MG	2A	3049	1/1	0.97	0.17	41,41,41,41	0
57	MG	1A	3220	1/1	0.97	0.19	31,31,31,31	0
57	MG	1R	201	1/1	0.97	0.15	37,37,37,37	0
57	MG	1A	3830	1/1	0.97	0.17	28,28,28,28	0
57	MG	1A	3040	1/1	0.97	0.12	40,40,40,40	0
57	MG	1A	3064	1/1	0.97	0.20	15,15,15,15	0
57	MG	1B	204	1/1	0.97	0.29	56,56,56,56	0
57	MG	1A	3833	1/1	0.97	0.18	31,31,31,31	0
57	MG	2A	3494	1/1	0.97	0.18	43,43,43,43	0
57	MG	1A	3251	1/1	0.97	0.11	43,43,43,43	0
57	MG	1A	3252	1/1	0.97	0.14	42,42,42,42	0
57	MG	1T	203	1/1	0.97	0.15	63,63,63,63	0
57	MG	1A	3674	1/1	0.97	0.20	53,53,53,53	0
57	MG	1A	3256	1/1	0.97	0.16	31,31,31,31	0
57	MG	1A	3259	1/1	0.97	0.17	42,42,42,42	0
57	MG	1A	3677	1/1	0.97	0.14	28,28,28,28	0
57	MG	1U	205	1/1	0.97	0.21	30,30,30,30	0
57	MG	1A	3753	1/1	0.97	0.22	29,29,29,29	0
57	MG	1A	3195	1/1	0.97	0.18	37,37,37,37	0
57	MG	2D	301	1/1	0.97	0.23	37,37,37,37	0
57	MG	1A	3293	1/1	0.97	0.20	50,50,50,50	0
57	MG	1A	3196	1/1	0.97	0.12	34,34,34,34	0
57	MG	1A	3504	1/1	0.97	0.23	38,38,38,38	0
57	MG	1V	204	1/1	0.97	0.14	32,32,32,32	0
57	MG	1V	205	1/1	0.97	0.16	31,31,31,31	0
57	MG	2a	1741	1/1	0.97	0.20	57,57,57,57	0
57	MG	1A	3554	1/1	0.97	0.16	30,30,30,30	0
57	MG	1V	207	1/1	0.97	0.11	34,34,34,34	0
57	MG	1A	3683	1/1	0.97	0.10	50,50,50,50	0
57	MG	1a	1786	1/1	0.97	0.22	52,52,52,52	0
57	MG	2A	3516	1/1	0.97	0.22	32,32,32,32	0
57	MG	2A	3518	1/1	0.97	0.33	50,50,50,50	0
57	MG	2E	305	1/1	0.97	0.15	44,44,44,44	0
57	MG	1A	3139	1/1	0.97	0.25	37,37,37,37	0
57	MG	1W	202	1/1	0.97	0.15	36,36,36,36	0
57	MG	2A	3700	1/1	0.97	0.12	38,38,38,38	0
57	MG	2A	3218	1/1	0.97	0.15	45,45,45,45	0
57	MG	2E	310	1/1	0.97	0.28	45,45,45,45	0
57	MG	1A	3931	1/1	0.97	0.23	26,26,26,26	0
57	MG	1A	3226	1/1	0.97	0.17	34,34,34,34	0
57	MG	1A	3157	1/1	0.97	0.22	28,28,28,28	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1X	101	1/1	0.97	0.14	33,33,33,33	0
57	MG	1A	3055	1/1	0.97	0.29	48,48,48,48	0
57	MG	1X	103	1/1	0.97	0.20	50,50,50,50	0
57	MG	1A	3159	1/1	0.97	0.23	22,22,22,22	0
57	MG	2A	3530	1/1	0.97	0.28	38,38,38,38	0
57	MG	2A	3367	1/1	0.97	0.10	71,71,71,71	0
57	MG	2A	3711	1/1	0.97	0.25	60,60,60,60	0
57	MG	1A	3618	1/1	0.97	0.21	25,25,25,25	0
57	MG	1A	3231	1/1	0.97	0.20	24,24,24,24	0
57	MG	2A	3087	1/1	0.97	0.26	43,43,43,43	0
57	MG	1A	3338	1/1	0.97	0.19	51,51,51,51	0
57	MG	2a	1768	1/1	0.97	0.09	70,70,70,70	0
57	MG	1A	3301	1/1	0.97	0.11	55,55,55,55	0
57	MG	2A	3717	1/1	0.97	0.21	48,48,48,48	0
57	MG	2a	1771	1/1	0.97	0.31	67,67,67,67	0
57	MG	1A	3771	1/1	0.97	0.20	33,33,33,33	0
57	MG	1A	4027	1/1	0.97	0.13	36,36,36,36	0
57	MG	1A	3624	1/1	0.97	0.22	30,30,30,30	0
57	MG	1A	3944	1/1	0.97	0.18	27,27,27,27	0
57	MG	1A	3625	1/1	0.97	0.10	50,50,50,50	0
57	MG	2A	3542	1/1	0.97	0.29	33,33,33,33	0
57	MG	1A	3179	1/1	0.97	0.23	23,23,23,23	0
57	MG	1A	4032	1/1	0.97	0.17	55,55,55,55	0
57	MG	2A	3380	1/1	0.97	0.44	44,44,44,44	0
57	MG	1A	3565	1/1	0.97	0.14	35,35,35,35	0
57	MG	2A	3382	1/1	0.97	0.39	55,55,55,55	0
57	MG	1a	1683	1/1	0.97	0.29	55,55,55,55	0
57	MG	2A	3099	1/1	0.97	0.11	48,48,48,48	0
57	MG	2A	3550	1/1	0.97	0.35	57,57,57,57	0
57	MG	2A	3551	1/1	0.97	0.29	54,54,54,54	0
57	MG	2a	1788	1/1	0.97	0.14	58,58,58,58	0
57	MG	1a	1811	1/1	0.97	0.04	74,74,74,74	0
57	MG	2a	1790	1/1	0.97	0.23	56,56,56,56	0
57	MG	1D	303	1/1	0.97	0.20	42,42,42,42	0
57	MG	1a	1813	1/1	0.97	0.15	57,57,57,57	0
57	MG	27	103	1/1	0.97	0.18	55,55,55,55	0
57	MG	10	109	1/1	0.97	0.22	64,64,64,64	0
57	MG	1A	3202	1/1	0.97	0.11	39,39,39,39	0
57	MG	28	103	1/1	0.97	0.28	59,59,59,59	0
57	MG	1A	4035	1/1	0.97	0.16	51,51,51,51	0
57	MG	1A	3567	1/1	0.97	0.20	30,30,30,30	0
57	MG	2A	3107	1/1	0.97	0.13	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2a	1800	1/1	0.97	0.38	55,55,55,55	0
57	MG	1A	3950	1/1	0.97	0.19	30,30,30,30	0
57	MG	1A	3066	1/1	0.97	0.11	45,45,45,45	0
57	MG	1D	313	1/1	0.97	0.21	38,38,38,38	0
57	MG	11	105	1/1	0.97	0.09	76,76,76,76	0
57	MG	2A	3566	1/1	0.97	0.15	60,60,60,60	0
57	MG	1A	3781	1/1	0.97	0.13	36,36,36,36	0
57	MG	1A	3633	1/1	0.97	0.16	30,30,30,30	0
57	MG	2a	1808	1/1	0.97	0.40	54,54,54,54	0
57	MG	1A	3634	1/1	0.97	0.21	30,30,30,30	0
57	MG	1n	102	1/1	0.97	0.14	45,45,45,45	0
57	MG	13	101	1/1	0.97	0.17	34,34,34,34	0
57	MG	1t	201	1/1	0.97	0.08	51,51,51,51	0
57	MG	1A	3345	1/1	0.97	0.20	29,29,29,29	0
57	MG	1A	3099	1/1	0.97	0.15	32,32,32,32	0
57	MG	2A	3576	1/1	0.97	0.26	60,60,60,60	0
57	MG	1a	1700	1/1	0.97	0.13	59,59,59,59	0
57	MG	1E	306	1/1	0.97	0.18	27,27,27,27	0
57	MG	1A	3347	1/1	0.97	0.20	34,34,34,34	0
57	MG	1A	3708	1/1	0.97	0.25	25,25,25,25	0
57	MG	1E	309	1/1	0.97	0.26	28,28,28,28	0
57	MG	1A	3572	1/1	0.97	0.18	23,23,23,23	0
57	MG	1A	3144	1/1	0.97	0.22	34,34,34,34	0
57	MG	1a	1707	1/1	0.97	0.23	51,51,51,51	0
57	MG	1E	312	1/1	0.97	0.22	28,28,28,28	0
57	MG	1A	3349	1/1	0.97	0.25	36,36,36,36	0
57	MG	1A	3207	1/1	0.97	0.15	32,32,32,32	0
57	MG	1A	3577	1/1	0.97	0.16	30,30,30,30	0
57	MG	2A	3418	1/1	0.97	0.23	37,37,37,37	0
57	MG	1a	1712	1/1	0.97	0.17	44,44,44,44	0
57	MG	2A	3772	1/1	0.97	0.23	38,38,38,38	0
57	MG	1a	1713	1/1	0.97	0.13	51,51,51,51	0
57	MG	2A	3594	1/1	0.97	0.21	34,34,34,34	0
57	MG	2A	3775	1/1	0.97	0.29	43,43,43,43	0
57	MG	2A	3776	1/1	0.97	0.24	36,36,36,36	0
57	MG	1A	3274	1/1	0.97	0.21	31,31,31,31	0
57	MG	1F	302	1/1	0.97	0.14	33,33,33,33	0
57	MG	2A	3137	1/1	0.97	0.30	38,38,38,38	0
57	MG	1A	3581	1/1	0.97	0.16	24,24,24,24	0
57	MG	1A	3795	1/1	0.97	0.10	44,44,44,44	0
57	MG	2A	3782	1/1	0.97	0.20	40,40,40,40	0
57	MG	2A	3603	1/1	0.97	0.18	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3429	1/1	0.97	0.17	43,43,43,43	0
57	MG	1A	3209	1/1	0.97	0.14	29,29,29,29	0
57	MG	1A	3647	1/1	0.97	0.22	32,32,32,32	0
57	MG	1a	1720	1/1	0.97	0.18	44,44,44,44	0
57	MG	2A	3788	1/1	0.97	0.06	62,62,62,62	0
57	MG	1F	308	1/1	0.97	0.17	27,27,27,27	0
57	MG	2A	3145	1/1	0.97	0.19	55,55,55,55	0
58	K	1A	3508	1/1	0.97	0.20	36,36,36,36	0
57	MG	1F	309	1/1	0.97	0.15	31,31,31,31	0
57	MG	2A	3792	1/1	0.97	0.13	37,37,37,37	0
57	MG	2A	3436	1/1	0.97	0.25	25,25,25,25	0
57	MG	1A	3526	1/1	0.97	0.23	37,37,37,37	0
57	MG	2A	3613	1/1	0.97	0.21	47,47,47,47	0
57	MG	1A	3802	1/1	0.97	0.14	34,34,34,34	0
57	MG	1A	3100	1/1	0.97	0.32	38,38,38,38	0
60	ZN	25	106	1/1	0.97	0.15	57,57,57,57	0
57	MG	1A	3804	1/1	0.97	0.26	41,41,41,41	0
57	MG	1A	3721	1/1	0.97	0.09	40,40,40,40	0
61	SF4	2d	303	8/8	0.97	0.09	62,68,72,74	0
57	MG	1A	4067	1/1	0.97	0.10	64,64,64,64	0
57	MG	2A	3801	1/1	0.97	0.27	23,23,23,23	0
57	MG	1A	3067	1/1	0.97	0.18	37,37,37,37	0
57	MG	2A	3010	1/1	0.97	0.26	52,52,52,52	0
57	MG	1A	3134	1/1	0.98	0.17	33,33,33,33	0
57	MG	1A	3013	1/1	0.98	0.15	28,28,28,28	0
57	MG	2A	3221	1/1	0.98	0.31	51,51,51,51	0
57	MG	1A	3536	1/1	0.98	0.21	29,29,29,29	0
57	MG	2F	3305	1/1	0.98	0.16	43,43,43,43	0
57	MG	1A	3645	1/1	0.98	0.21	21,21,21,21	0
57	MG	1A	3184	1/1	0.98	0.20	33,33,33,33	0
57	MG	1A	3774	1/1	0.98	0.15	48,48,48,48	0
57	MG	1A	3029	1/1	0.98	0.15	22,22,22,22	0
57	MG	1A	4008	1/1	0.98	0.29	12,12,12,12	0
57	MG	1A	3849	1/1	0.98	0.20	35,35,35,35	0
57	MG	1A	3444	1/1	0.98	0.28	41,41,41,41	0
57	MG	1A	3160	1/1	0.98	0.18	32,32,32,32	0
57	MG	2R	202	1/1	0.98	0.20	41,41,41,41	0
57	MG	1A	3778	1/1	0.98	0.14	53,53,53,53	0
57	MG	1A	3031	1/1	0.98	0.33	31,31,31,31	0
57	MG	1A	3218	1/1	0.98	0.21	27,27,27,27	0
57	MG	2U	201	1/1	0.98	0.19	48,48,48,48	0
57	MG	2V	201	1/1	0.98	0.16	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1a	1728	1/1	0.98	0.26	40,40,40,40	0
57	MG	1A	3653	1/1	0.98	0.21	33,33,33,33	0
57	MG	1A	3049	1/1	0.98	0.15	50,50,50,50	0
57	MG	2X	102	1/1	0.98	0.15	51,51,51,51	0
57	MG	2a	1733	1/1	0.98	0.10	69,69,69,69	0
57	MG	1A	3090	1/1	0.98	0.07	48,48,48,48	0
57	MG	1A	3858	1/1	0.98	0.16	31,31,31,31	0
57	MG	1A	3253	1/1	0.98	0.18	23,23,23,23	0
57	MG	1A	3254	1/1	0.98	0.12	30,30,30,30	0
57	MG	1A	3255	1/1	0.98	0.18	35,35,35,35	0
57	MG	1B	218	1/1	0.98	0.34	47,47,47,47	0
57	MG	21	101	1/1	0.98	0.20	47,47,47,47	0
57	MG	1A	3120	1/1	0.98	0.15	28,28,28,28	0
57	MG	1A	3258	1/1	0.98	0.20	33,33,33,33	0
57	MG	1A	3942	1/1	0.98	0.18	12,12,12,12	0
57	MG	25	102	1/1	0.98	0.14	48,48,48,48	0
57	MG	1A	3943	1/1	0.98	0.13	25,25,25,25	0
57	MG	1A	3864	1/1	0.98	0.13	32,32,32,32	0
57	MG	1A	3661	1/1	0.98	0.20	13,13,13,13	0
57	MG	1A	3499	1/1	0.98	0.16	28,28,28,28	0
57	MG	1A	3191	1/1	0.98	0.16	30,30,30,30	0
57	MG	1A	3501	1/1	0.98	0.11	30,30,30,30	0
57	MG	1A	3009	1/1	0.98	0.24	25,25,25,25	0
57	MG	2A	3505	1/1	0.98	0.15	43,43,43,43	0
57	MG	1U	208	1/1	0.98	0.20	31,31,31,31	0
57	MG	2A	3011	1/1	0.98	0.15	40,40,40,40	0
57	MG	1A	3036	1/1	0.98	0.23	29,29,29,29	0
57	MG	1A	3093	1/1	0.98	0.11	37,37,37,37	0
57	MG	1A	3796	1/1	0.98	0.28	20,20,20,20	0
57	MG	1A	4036	1/1	0.98	0.27	41,41,41,41	0
57	MG	1A	3873	1/1	0.98	0.15	32,32,32,32	0
57	MG	1A	3954	1/1	0.98	0.17	26,26,26,26	0
57	MG	2A	3514	1/1	0.98	0.21	34,34,34,34	0
57	MG	1A	3731	1/1	0.98	0.17	40,40,40,40	0
57	MG	2A	3020	1/1	0.98	0.25	23,23,23,23	0
57	MG	2A	3021	1/1	0.98	0.20	45,45,45,45	0
57	MG	2A	3142	1/1	0.98	0.34	40,40,40,40	0
57	MG	1A	3108	1/1	0.98	0.17	35,35,35,35	0
57	MG	1A	3125	1/1	0.98	0.24	14,14,14,14	0
57	MG	1A	3800	1/1	0.98	0.22	20,20,20,20	0
57	MG	1W	203	1/1	0.98	0.17	45,45,45,45	0
57	MG	2A	3026	1/1	0.98	0.15	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
57	MG	1A	3228	1/1	0.98	0.23	49,49,49,49	0
57	MG	1D	307	1/1	0.98	0.15	31,31,31,31	0
57	MG	1D	308	1/1	0.98	0.19	36,36,36,36	0
57	MG	2a	1774	1/1	0.98	0.10	52,52,52,52	0
57	MG	1A	4044	1/1	0.98	0.32	39,39,39,39	0
57	MG	1A	3020	1/1	0.98	0.24	17,17,17,17	0
57	MG	1A	3340	1/1	0.98	0.17	23,23,23,23	0
57	MG	1X	104	1/1	0.98	0.16	41,41,41,41	0
57	MG	2a	1623	1/1	0.98	0.18	54,54,54,54	0
57	MG	1A	4047	1/1	0.98	0.11	26,26,26,26	0
57	MG	1A	3062	1/1	0.98	0.25	15,15,15,15	0
57	MG	1A	3172	1/1	0.98	0.17	31,31,31,31	0
57	MG	1A	3563	1/1	0.98	0.23	12,12,12,12	0
57	MG	1Y	202	1/1	0.98	0.37	47,47,47,47	0
57	MG	1E	302	1/1	0.98	0.15	29,29,29,29	0
57	MG	2A	3406	1/1	0.98	0.38	55,55,55,55	0
57	MG	1a	1772	1/1	0.98	0.08	53,53,53,53	0
57	MG	1A	3111	1/1	0.98	0.11	33,33,33,33	0
57	MG	1Z	303	1/1	0.98	0.22	53,53,53,53	0
57	MG	1A	3344	1/1	0.98	0.21	35,35,35,35	0
57	MG	1A	4054	1/1	0.98	0.18	61,61,61,61	0
57	MG	1A	3469	1/1	0.98	0.14	33,33,33,33	0
57	MG	1A	3621	1/1	0.98	0.20	19,19,19,19	0
57	MG	1A	3622	1/1	0.98	0.16	28,28,28,28	0
57	MG	2A	3686	1/1	0.98	0.21	44,44,44,44	0
57	MG	2A	3048	1/1	0.98	0.28	23,23,23,23	0
57	MG	2A	3688	1/1	0.98	0.20	34,34,34,34	0
57	MG	1A	3129	1/1	0.98	0.28	25,25,25,25	0
57	MG	1A	3130	1/1	0.98	0.26	35,35,35,35	0
57	MG	1A	3203	1/1	0.98	0.35	53,53,53,53	0
57	MG	1A	3520	1/1	0.98	0.18	32,32,32,32	0
57	MG	1A	3308	1/1	0.98	0.26	33,33,33,33	0
57	MG	2A	3421	1/1	0.98	0.14	48,48,48,48	0
57	MG	1E	314	1/1	0.98	0.14	40,40,40,40	0
57	MG	1A	3750	1/1	0.98	0.25	19,19,19,19	0
57	MG	1a	1676	1/1	0.98	0.26	52,52,52,52	0
57	MG	2A	3558	1/1	0.98	0.24	33,33,33,33	0
57	MG	2A	3838	1/1	0.98	0.28	51,51,51,51	0
57	MG	1A	3819	1/1	0.98	0.15	34,34,34,34	0
57	MG	1A	4065	1/1	0.98	0.14	46,46,46,46	0
57	MG	1A	3820	1/1	0.98	0.17	41,41,41,41	0
57	MG	2A	3842	1/1	0.98	0.25	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3303	1/1	0.98	0.48	66,66,66,66	0
57	MG	2A	3181	1/1	0.98	0.20	54,54,54,54	0
57	MG	1A	3687	1/1	0.98	0.10	47,47,47,47	0
57	MG	1a	1792	1/1	0.98	0.16	60,60,60,60	0
57	MG	2A	3847	1/1	0.98	0.06	66,66,66,66	0
57	MG	1A	3752	1/1	0.98	0.19	23,23,23,23	0
57	MG	1a	1794	1/1	0.98	0.25	25,25,25,25	0
57	MG	1A	3823	1/1	0.98	0.12	28,28,28,28	0
57	MG	1A	3824	1/1	0.98	0.11	31,31,31,31	0
57	MG	2A	3438	1/1	0.98	0.33	47,47,47,47	0
57	MG	1F	307	1/1	0.98	0.15	36,36,36,36	0
57	MG	1A	3309	1/1	0.98	0.20	32,32,32,32	0
57	MG	1A	3629	1/1	0.98	0.24	22,22,22,22	0
57	MG	2A	3575	1/1	0.98	0.17	55,55,55,55	0
57	MG	2a	1672	1/1	0.98	0.17	53,53,53,53	0
57	MG	13	104	1/1	0.98	0.18	50,50,50,50	0
57	MG	1A	3390	1/1	0.98	0.22	34,34,34,34	0
57	MG	1A	3905	1/1	0.98	0.11	64,64,64,64	0
57	MG	1A	3631	1/1	0.98	0.15	27,27,27,27	0
57	MG	2B	206	1/1	0.98	0.19	66,66,66,66	0
57	MG	15	104	1/1	0.98	0.21	32,32,32,32	0
57	MG	1A	3176	1/1	0.98	0.20	38,38,38,38	0
57	MG	2A	3582	1/1	0.98	0.17	40,40,40,40	0
57	MG	1A	3152	1/1	0.98	0.29	12,12,12,12	0
57	MG	1A	3576	1/1	0.98	0.20	24,24,24,24	0
57	MG	1A	3239	1/1	0.98	0.12	62,62,62,62	0
57	MG	1A	4080	1/1	0.98	0.11	48,48,48,48	0
57	MG	2A	3726	1/1	0.98	0.17	61,61,61,61	0
57	MG	1A	3053	1/1	0.98	0.15	21,21,21,21	0
57	MG	1a	1698	1/1	0.98	0.27	33,33,33,33	0
57	MG	1A	3354	1/1	0.98	0.19	31,31,31,31	0
57	MG	2B	218	1/1	0.98	0.21	68,68,68,68	0
57	MG	17	105	1/1	0.98	0.16	54,54,54,54	0
57	MG	1A	4083	1/1	0.98	0.15	42,42,42,42	0
57	MG	17	107	1/1	0.98	0.10	29,29,29,29	0
57	MG	2A	3458	1/1	0.98	0.43	54,54,54,54	0
57	MG	1A	3763	1/1	0.98	0.09	25,25,25,25	0
57	MG	1A	3038	1/1	0.98	0.15	30,30,30,30	0
57	MG	1N	203	1/1	0.98	0.28	41,41,41,41	0
57	MG	2A	3737	1/1	0.98	0.26	49,49,49,49	0
60	ZN	1Y	203	1/1	0.98	0.08	66,66,66,66	0
57	MG	1N	204	1/1	0.98	0.38	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	2A	3599	1/1	0.98	0.25	43,43,43,43	0
57	MG	1A	3208	1/1	0.98	0.14	27,27,27,27	0
57	MG	2A	3602	1/1	0.98	0.15	47,47,47,47	0
57	MG	2a	1702	1/1	0.98	0.10	67,67,67,67	0
57	MG	1k	201	1/1	0.98	0.25	45,45,45,45	0
57	MG	1N	206	1/1	0.98	0.24	46,46,46,46	0
57	MG	19	101	1/1	0.98	0.22	54,54,54,54	0
57	MG	1A	3838	1/1	0.98	0.22	24,24,24,24	0
57	MG	1A	3532	1/1	0.98	0.27	39,39,39,39	0
57	MG	1A	3767	1/1	0.98	0.20	30,30,30,30	0
57	MG	1A	3085	1/1	0.98	0.22	19,19,19,19	0
57	MG	1A	3003	1/1	0.99	0.29	27,27,27,27	0
57	MG	1A	3143	1/1	0.99	0.21	25,25,25,25	0
57	MG	1A	3587	1/1	0.99	0.19	14,14,14,14	0
57	MG	1A	4012	1/1	0.99	0.21	15,15,15,15	0
57	MG	1A	3720	1/1	0.99	0.15	33,33,33,33	0
57	MG	1A	4049	1/1	0.99	0.17	35,35,35,35	0
57	MG	1Q	201	1/1	0.99	0.21	35,35,35,35	0
57	MG	17	102	1/1	0.99	0.15	29,29,29,29	0
57	MG	1A	3691	1/1	0.99	0.20	14,14,14,14	0
57	MG	2A	3559	1/1	0.99	0.18	38,38,38,38	0
57	MG	1A	3030	1/1	0.99	0.23	34,34,34,34	0
57	MG	1A	3502	1/1	0.99	0.20	33,33,33,33	0
57	MG	1A	3590	1/1	0.99	0.21	22,22,22,22	0
57	MG	1A	3725	1/1	0.99	0.17	22,22,22,22	0
57	MG	1A	3695	1/1	0.99	0.22	41,41,41,41	0
57	MG	1A	3236	1/1	0.99	0.16	35,35,35,35	0
57	MG	2a	1658	1/1	0.99	0.10	59,59,59,59	0
57	MG	1A	3986	1/1	0.99	0.19	28,28,28,28	0
57	MG	2A	3517	1/1	0.99	0.25	35,35,35,35	0
57	MG	1A	3156	1/1	0.99	0.21	35,35,35,35	0
57	MG	2A	3424	1/1	0.99	0.27	21,21,21,21	0
57	MG	2A	3520	1/1	0.99	0.23	41,41,41,41	0
57	MG	1D	301	1/1	0.99	0.12	32,32,32,32	0
57	MG	2A	3012	1/1	0.99	0.12	35,35,35,35	0
57	MG	1A	3025	1/1	0.99	0.14	31,31,31,31	0
57	MG	1A	3670	1/1	0.99	0.12	48,48,48,48	0
57	MG	1D	304	1/1	0.99	0.19	39,39,39,39	0
57	MG	1D	305	1/1	0.99	0.30	21,21,21,21	0
57	MG	1A	3323	1/1	0.99	0.21	36,36,36,36	0
57	MG	1A	3468	1/1	0.99	0.24	36,36,36,36	0
57	MG	1A	3095	1/1	0.99	0.29	29,29,29,29	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MG	1U	201	1/1	0.99	0.20	33,33,33,33	0
57	MG	2A	3633	1/1	0.99	0.19	42,42,42,42	0
57	MG	1A	3183	1/1	0.99	0.29	22,22,22,22	0
57	MG	1A	3531	1/1	0.99	0.22	33,33,33,33	0
57	MG	1A	3649	1/1	0.99	0.17	14,14,14,14	0
57	MG	1A	3257	1/1	0.99	0.15	31,31,31,31	0
57	MG	2A	3744	1/1	0.99	0.14	40,40,40,40	0
57	MG	1A	3011	1/1	0.99	0.14	25,25,25,25	0
57	MG	1A	3801	1/1	0.99	0.24	25,25,25,25	0
57	MG	1A	3033	1/1	0.99	0.16	39,39,39,39	0
57	MG	1A	3034	1/1	0.99	0.20	22,22,22,22	0
57	MG	2A	3119	1/1	0.99	0.21	45,45,45,45	0
57	MG	2A	3590	1/1	0.99	0.15	40,40,40,40	0
57	MG	1V	201	1/1	0.99	0.17	26,26,26,26	0
60	ZN	15	108	1/1	0.99	0.15	41,41,41,41	0
60	ZN	19	102	1/1	0.99	0.17	40,40,40,40	0
57	MG	1A	3578	1/1	0.99	0.19	28,28,28,28	0
57	MG	1A	3035	1/1	0.99	0.15	28,28,28,28	0
57	MG	1A	3580	1/1	0.99	0.16	27,27,27,27	0
57	MG	1A	3018	1/1	0.99	0.17	22,22,22,22	0
60	ZN	26	102	1/1	0.99	0.12	51,51,51,51	0
57	MG	1A	3012	1/1	0.99	0.16	15,15,15,15	0
57	MG	1A	3216	1/1	0.99	0.26	37,37,37,37	0
61	SF4	1d	302	8/8	0.99	0.12	54,57,62,67	0
57	MG	1A	3217	1/1	0.99	0.15	30,30,30,30	0
57	MG	15	101	1/1	0.99	0.17	42,42,42,42	0
57	MG	2A	3600	1/1	0.99	0.17	38,38,38,38	0
57	MG	1A	3875	1/1	0.99	0.22	15,15,15,15	0
57	MG	23	102	1/1	0.99	0.20	47,47,47,47	0
60	ZN	16	102	1/1	1.00	0.17	42,42,42,42	0

6.5 Other polymers (i)

There are no such residues in this entry.