Full wwPDB X-ray Structure Validation Report (i)

Nov 14, 2024 – 03:31 PM EST

PDB ID	:	9D0J
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with BT-33, mRNA, deacylated A-site tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.50A resolution
Authors	:	Aleksandrova, E.V.; Tresco, B.I.C.; Wu, K.J.Y.; Ramkissoon, A.; Purdy, M.; See, D.N.Y.; Liu, R.Y.; Myers, A.G.; Polikanov, Y.S.
Deposited on	:	2024-08-07
Resolution	:	2.50 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 (i) 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 (1)) were used in the production of this report:

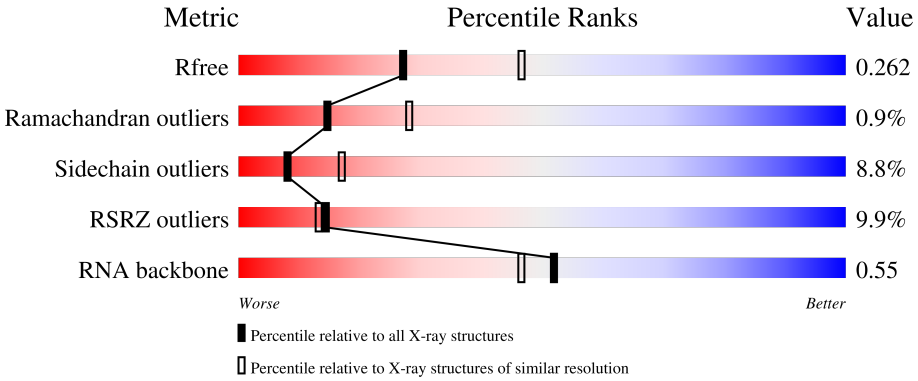
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 2.50 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	5504 (2.50-2.50)
Ramachandran outliers	177936	6191 (2.50-2.50)
Sidechain outliers	177891	6193 (2.50-2.50)
RSRZ outliers	164620	5504 (2.50-2.50)
RNA backbone	3690	1181 (2.80-2.20)

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	5% 82% 16%
1	2A	2915	4% 80% 16%
2	1B	121	91% 8%
2	2B	121	4% 76% 23%
3	1D	276	% 95% 5%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	2D	276	2% 95% 5%
4	1E	206	93% 6%
4	2E	206	% 92% 7%
5	1F	210	% 89% 8%
5	2F	210	4% 90% 7%
6	1G	182	7% 91% 8%
6	2G	182	32% 84% 14%
7	1H	180	2% 89% 7%
7	2H	180	27% 88% 9%
8	1I	148	9% 86% 12%
8	2I	148	12% 87% 11%
9	1N	140	% 96%
9	2N	140	7% 92% 8%
10	1O	122	98%
10	2O	122	% 97%
11	1P	150	3% 93% 7%
11	2P	150	7% 89% 10%
12	1Q	141	% 96%
12	2Q	141	20% 96%
13	1R	118	92% 8%
13	2R	118	97%
14	1S	112	% 93% 5%
14	2S	112	16% 88% 10%
15	1T	146	3% 84% 5% 10%
15	2T	146	3% 84% 6% 10%

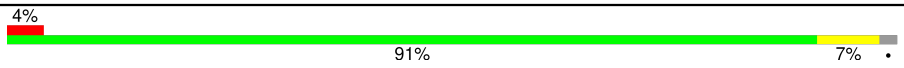
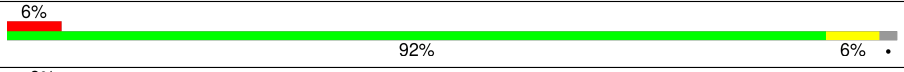
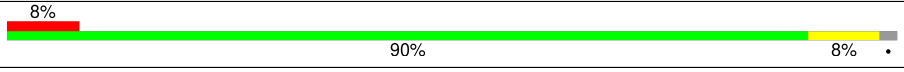
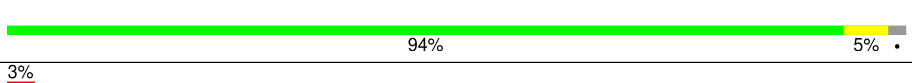
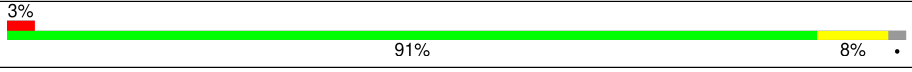
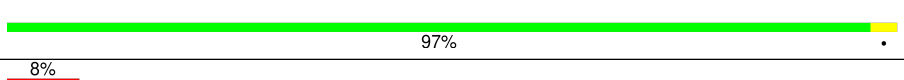
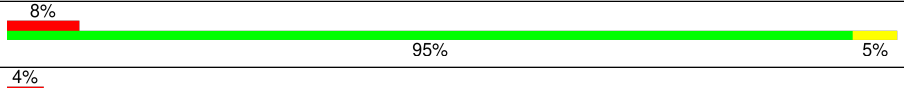
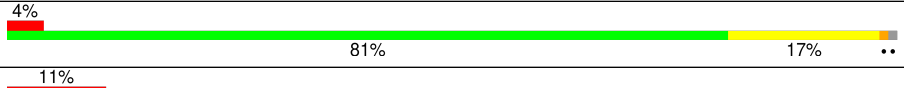
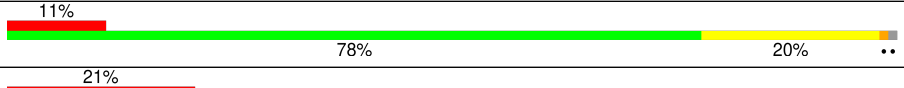
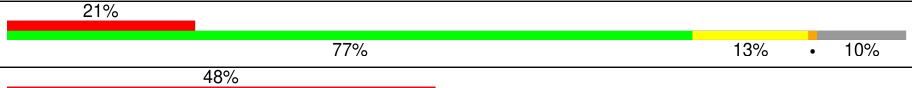
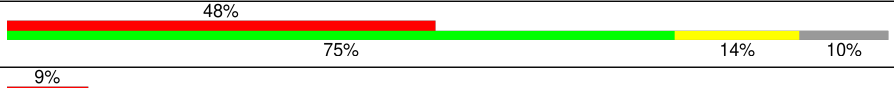
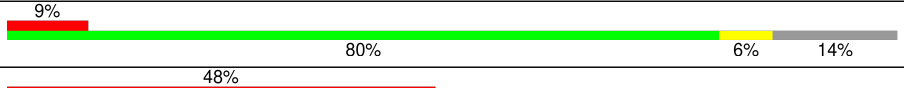
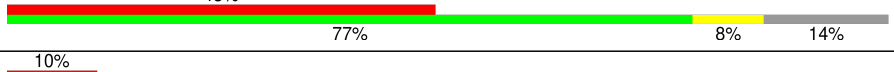
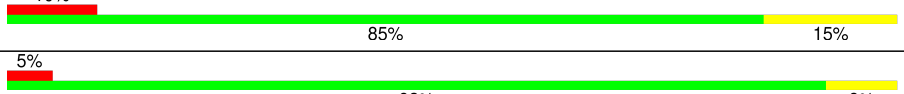
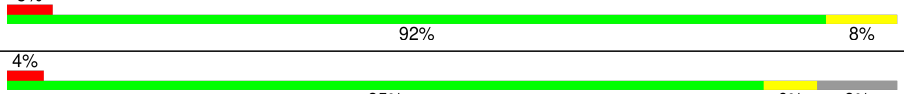
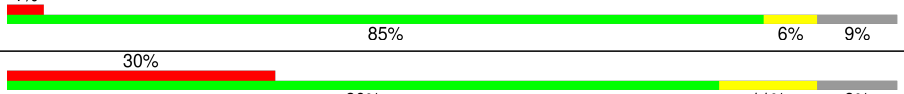
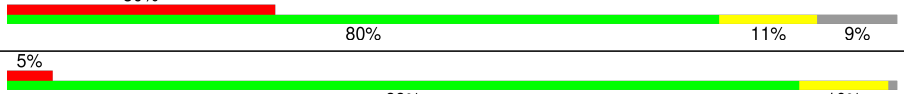
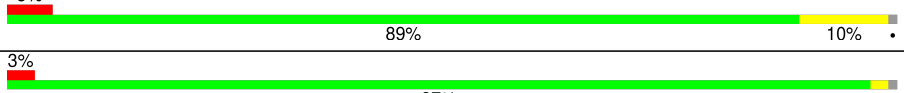
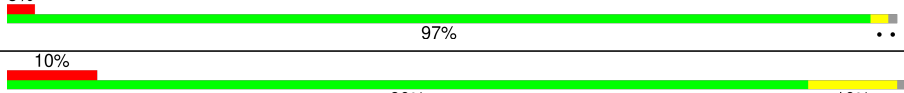
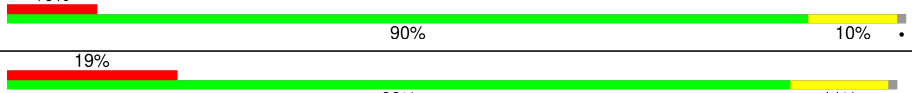
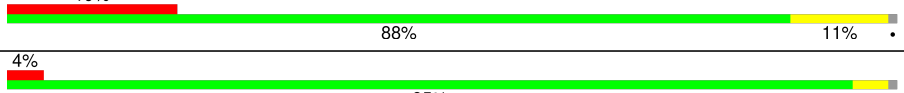
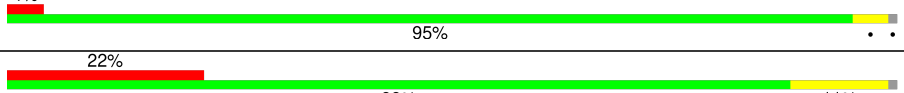
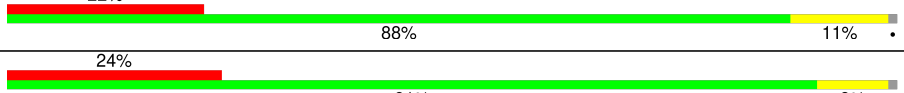
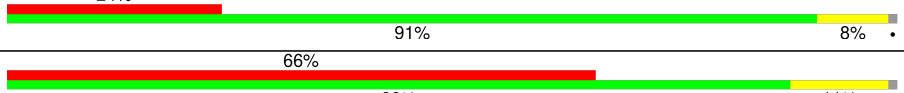
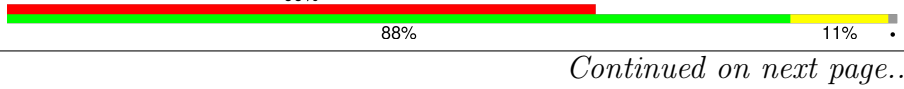
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
16	1U	118	94%
16	2U	118	2% 93% 5%
17	1V	101	% 95%
17	2V	101	2% 92% 7%
18	1W	113	% 95%
18	2W	113	3% 95%
19	1X	96	% 95%
19	2X	96	5% 96%
20	1Y	110	2% 89% 8%
20	2Y	110	15% 87% 10%
21	1Z	206	9% 68% 6% 25%
21	2Z	206	27% 68% 9% 22%
22	10	85	2% 85% 6% 9%
22	20	85	22% 91% 7%
23	11	98	% 95%
23	21	98	3% 95%
24	12	72	93%
24	22	72	92% 6%
25	13	60	3% 93% 5%
25	23	60	3% 93% 5%
26	14	71	20% 83% 13%
26	24	71	45% 80% 17%
27	15	60	2% 93% 5%
27	25	60	2% 95%
28	16	54	91% 7%

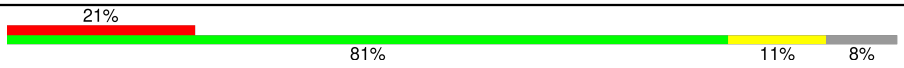
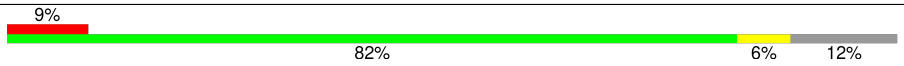
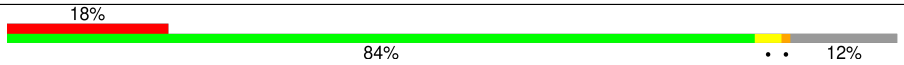
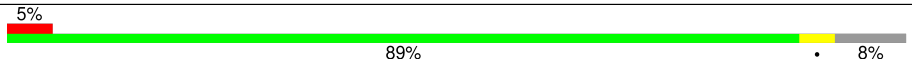
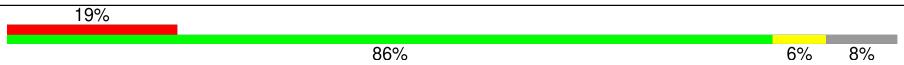
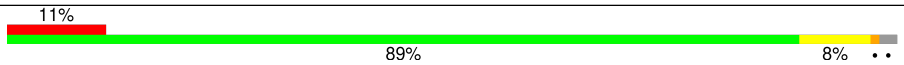
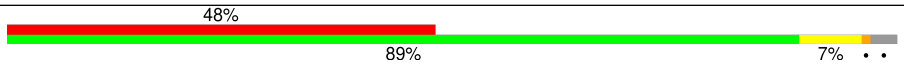
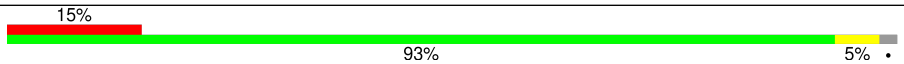
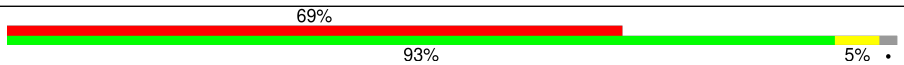
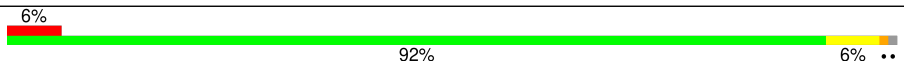
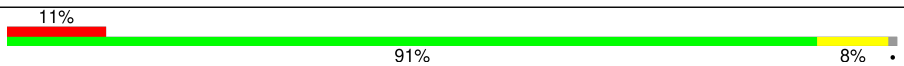
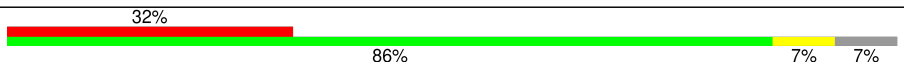
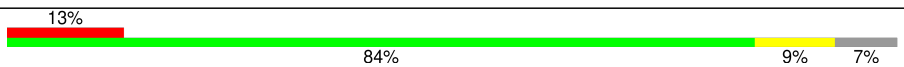
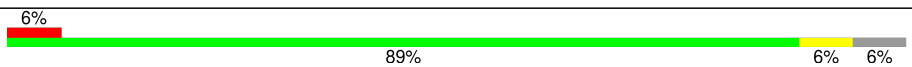
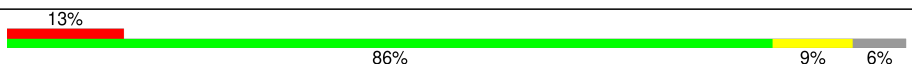
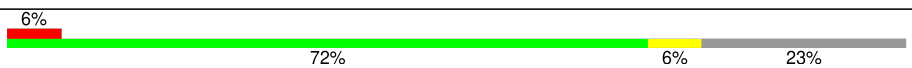
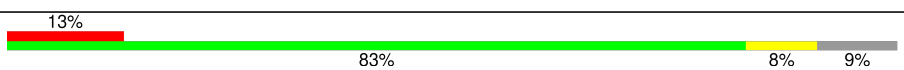
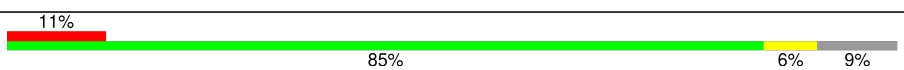
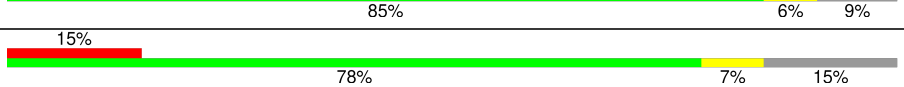
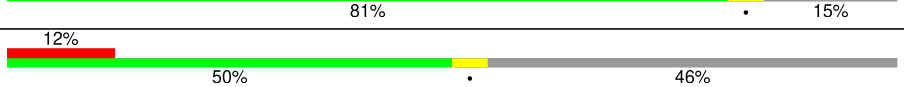
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
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	
40	1i	128	
40	2i	128	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	
53	1v	24	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	2v	24	17% 46% 8% 46%
54	1w	76	7% 58% 32% 7%
54	1y	76	11% 55% 39%
54	2w	76	22% 51% 37% 9%
54	2y	76	14% 51% 42%
55	1x	77	% 75% 21%
55	2x	77	4% 74% 22%

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	MG	1A	3386	-	-	-	X
56	MG	1A	3391	-	-	-	X
56	MG	1x	111	-	-	-	X
56	MG	2A	3410	-	-	-	X
56	MG	2a	1606	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 299293 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
			61852	27531	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60322	26848	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	202	Total	C	N	O	S	0	0	0
			1583	1009	297	275	2			
5	2F	202	Total	C	N	O	S	0	0	0
			1579	1007	296	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	C	N	O	S	0	0	0
			933	588	171	170	4			

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

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

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

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

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

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

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

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

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

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

- 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	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	79	Total	C	N	O	S	0	0	0
			620	383	131	105	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 A-site and E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	71	Total	C	N	O	P	S	0	0	0
			1530	685	274	498	71	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	69	Total	C	N	O	P	S	0	0	0
			1482	662	267	482	69	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			

- Molecule 56 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1059	Total	Mg	0	0
			1059	1059		
56	1B	39	Total	Mg	0	0
			39	39		
56	1D	12	Total	Mg	0	0
			12	12		
56	1E	16	Total	Mg	0	0
			16	16		
56	1F	14	Total	Mg	0	0
			14	14		
56	1G	4	Total	Mg	0	0
			4	4		
56	1I	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1N	6	Total Mg 6 6	0	0
56	1O	6	Total Mg 6 6	0	0
56	1P	6	Total Mg 6 6	0	0
56	1Q	7	Total Mg 7 7	0	0
56	1R	3	Total Mg 3 3	0	0
56	1S	3	Total Mg 3 3	0	0
56	1T	2	Total Mg 2 2	0	0
56	1U	7	Total Mg 7 7	0	0
56	1V	6	Total Mg 6 6	0	0
56	1W	6	Total Mg 6 6	0	0
56	1X	6	Total Mg 6 6	0	0
56	1Y	3	Total Mg 3 3	0	0
56	1Z	3	Total Mg 3 3	0	0
56	10	7	Total Mg 7 7	0	0
56	11	5	Total Mg 5 5	0	0
56	12	2	Total Mg 2 2	0	0
56	13	2	Total Mg 2 2	0	0
56	14	1	Total Mg 1 1	0	0
56	15	8	Total Mg 8 8	0	0
56	16	3	Total Mg 3 3	0	0
56	17	5	Total Mg 5 5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	18	4	Total Mg 4 4	0	0
56	19	1	Total Mg 1 1	0	0
56	1a	198	Total Mg 198 198	0	0
56	1b	1	Total Mg 1 1	0	0
56	1d	1	Total Mg 1 1	0	0
56	1e	2	Total Mg 2 2	0	0
56	1f	2	Total Mg 2 2	0	0
56	1l	2	Total Mg 2 2	0	0
56	1m	2	Total Mg 2 2	0	0
56	1n	2	Total Mg 2 2	0	0
56	1t	1	Total Mg 1 1	0	0
56	1u	1	Total Mg 1 1	0	0
56	1w	4	Total Mg 4 4	0	0
56	1x	12	Total Mg 12 12	0	0
56	2A	782	Total Mg 782 782	0	0
56	2B	18	Total Mg 18 18	0	0
56	2D	8	Total Mg 8 8	0	0
56	2E	9	Total Mg 9 9	0	0
56	2F	6	Total Mg 6 6	0	0
56	2G	1	Total Mg 1 1	0	0
56	2N	1	Total Mg 1 1	0	0

Continued on next page...

Continued from previous page...

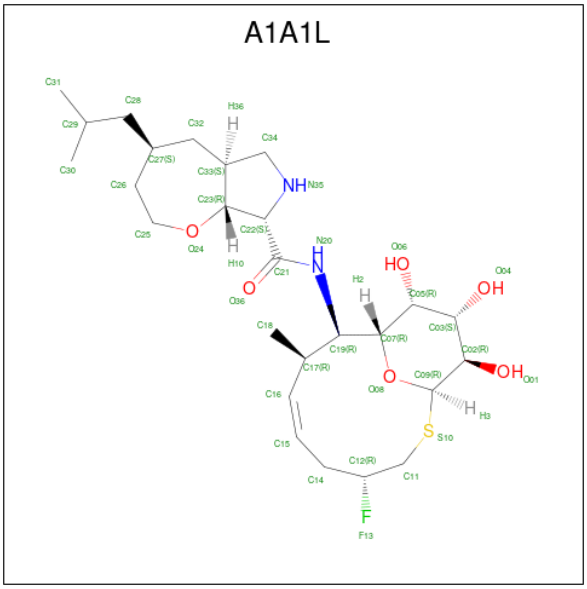
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2O	2	Total Mg 2 2	0	0
56	2P	2	Total Mg 2 2	0	0
56	2Q	2	Total Mg 2 2	0	0
56	2R	2	Total Mg 2 2	0	0
56	2T	5	Total Mg 5 5	0	0
56	2U	1	Total Mg 1 1	0	0
56	2V	2	Total Mg 2 2	0	0
56	2W	1	Total Mg 1 1	0	0
56	2X	2	Total Mg 2 2	0	0
56	2Y	1	Total Mg 1 1	0	0
56	2Z	2	Total Mg 2 2	0	0
56	20	1	Total Mg 1 1	0	0
56	21	1	Total Mg 1 1	0	0
56	23	1	Total Mg 1 1	0	0
56	25	5	Total Mg 5 5	0	0
56	27	4	Total Mg 4 4	0	0
56	28	2	Total Mg 2 2	0	0
56	2a	202	Total Mg 202 202	0	0
56	2d	1	Total Mg 1 1	0	0
56	2e	1	Total Mg 1 1	0	0
56	2f	1	Total Mg 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2j	1	Total Mg 1 1	0	0
56	2k	1	Total Mg 1 1	0	0
56	2l	5	Total Mg 5 5	0	0
56	2q	2	Total Mg 2 2	0	0
56	2r	2	Total Mg 2 2	0	0
56	2t	2	Total Mg 2 2	0	0
56	2v	1	Total Mg 1 1	0	0
56	2w	3	Total Mg 3 3	0	0
56	2x	6	Total Mg 6 6	0	0

- Molecule 57 is (4S,5aS,8S,8aR)-N-[(1R,4R,6Z,8R,9R,10R,11R,12S,13R)-4-fluoro-11,12,13-trihydroxy-8-methyl-14-oxa-2-thiabicyclo[8.3.1]tetradec-6-en-9-yl]-4-(2-methylpropyl)octahydro-2H-oxepino[2,3-c]pyrrole-8-carboxamide (non-preferred name) (three-letter code: A1A1L) (formula: $C_{26}H_{43}FN_2O_6S$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1A	1	Total C F N O S 36 26 1 2 6 1	0	0

Continued on next page...

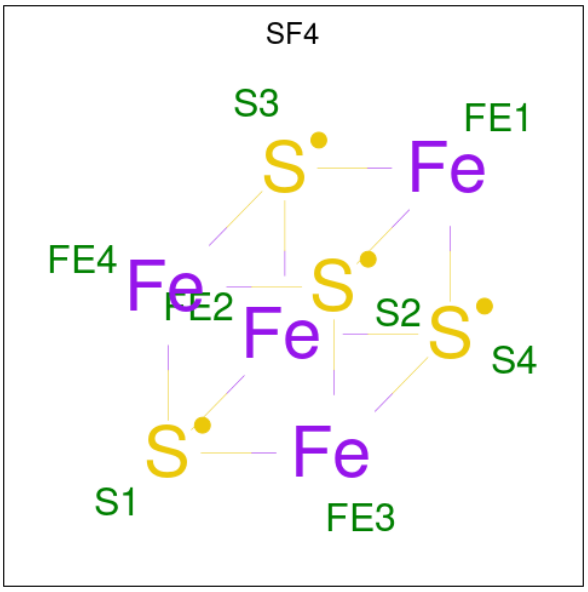
Continued from previous page...

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
57	2A	1	Total	C	F	N	O	S	0	0
			36	26	1	2	6	1		

- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1Y	1	Total	Zn	0	0
			1	1		
58	14	1	Total	Zn	0	0
			1	1		
58	15	1	Total	Zn	0	0
			1	1		
58	16	1	Total	Zn	0	0
			1	1		
58	19	1	Total	Zn	0	0
			1	1		
58	1n	1	Total	Zn	0	0
			1	1		
58	2Y	1	Total	Zn	0	0
			1	1		
58	24	1	Total	Zn	0	0
			1	1		
58	25	1	Total	Zn	0	0
			1	1		
58	26	1	Total	Zn	0	0
			1	1		
58	29	1	Total	Zn	0	0
			1	1		
58	2n	1	Total	Zn	0	0
			1	1		

- Molecule 59 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1d	1	Total Fe S 8 4 4	0	0
59	2d	1	Total Fe S 8 4 4	0	0

- Molecule 60 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	2x	1	Total K 1 1	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	1902	Total O 1902 1902	0	0
61	1B	59	Total O 59 59	0	0
61	1D	27	Total O 27 27	0	0
61	1E	31	Total O 31 31	0	0
61	1F	20	Total O 20 20	0	0
61	1G	2	Total O 2 2	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1H	2	Total O 2 2	0	0
61	1N	6	Total O 6 6	0	0
61	1O	6	Total O 6 6	0	0
61	1P	18	Total O 18 18	0	0
61	1Q	8	Total O 8 8	0	0
61	1R	11	Total O 11 11	0	0
61	1S	5	Total O 5 5	0	0
61	1T	7	Total O 7 7	0	0
61	1U	15	Total O 15 15	0	0
61	1V	8	Total O 8 8	0	0
61	1W	8	Total O 8 8	0	0
61	1X	7	Total O 7 7	0	0
61	1Y	3	Total O 3 3	0	0
61	1Z	1	Total O 1 1	0	0
61	10	8	Total O 8 8	0	0
61	11	7	Total O 7 7	0	0
61	12	4	Total O 4 4	0	0
61	13	4	Total O 4 4	0	0
61	14	1	Total O 1 1	0	0
61	15	7	Total O 7 7	0	0
61	16	1	Total O 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	17	8	Total O 8 8	0	0
61	18	13	Total O 13 13	0	0
61	1a	298	Total O 298 298	0	0
61	1b	1	Total O 1 1	0	0
61	1l	5	Total O 5 5	0	0
61	1m	1	Total O 1 1	0	0
61	1o	1	Total O 1 1	0	0
61	1q	2	Total O 2 2	0	0
61	1t	1	Total O 1 1	0	0
61	1v	5	Total O 5 5	0	0
61	1w	4	Total O 4 4	0	0
61	1x	9	Total O 9 9	0	0
61	1y	1	Total O 1 1	0	0
61	2A	1002	Total O 1002 1002	0	0
61	2B	16	Total O 16 16	0	0
61	2D	23	Total O 23 23	0	0
61	2E	16	Total O 16 16	0	0
61	2F	14	Total O 14 14	0	0
61	2O	1	Total O 1 1	0	0
61	2P	9	Total O 9 9	0	0
61	2Q	1	Total O 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2R	3	Total O 3 3	0	0
61	2T	6	Total O 6 6	0	0
61	2U	3	Total O 3 3	0	0
61	2V	1	Total O 1 1	0	0
61	2W	2	Total O 2 2	0	0
61	2X	3	Total O 3 3	0	0
61	20	2	Total O 2 2	0	0
61	21	3	Total O 3 3	0	0
61	23	3	Total O 3 3	0	0
61	25	2	Total O 2 2	0	0
61	27	4	Total O 4 4	0	0
61	28	3	Total O 3 3	0	0
61	29	1	Total O 1 1	0	0
61	2a	168	Total O 168 168	0	0
61	2e	1	Total O 1 1	0	0
61	2j	2	Total O 2 2	0	0
61	2l	3	Total O 3 3	0	0
61	2p	1	Total O 1 1	0	0
61	2t	1	Total O 1 1	0	0
61	2v	1	Total O 1 1	0	0
61	2w	1	Total O 1 1	0	0

Continued on next page...

Continued from previous page...

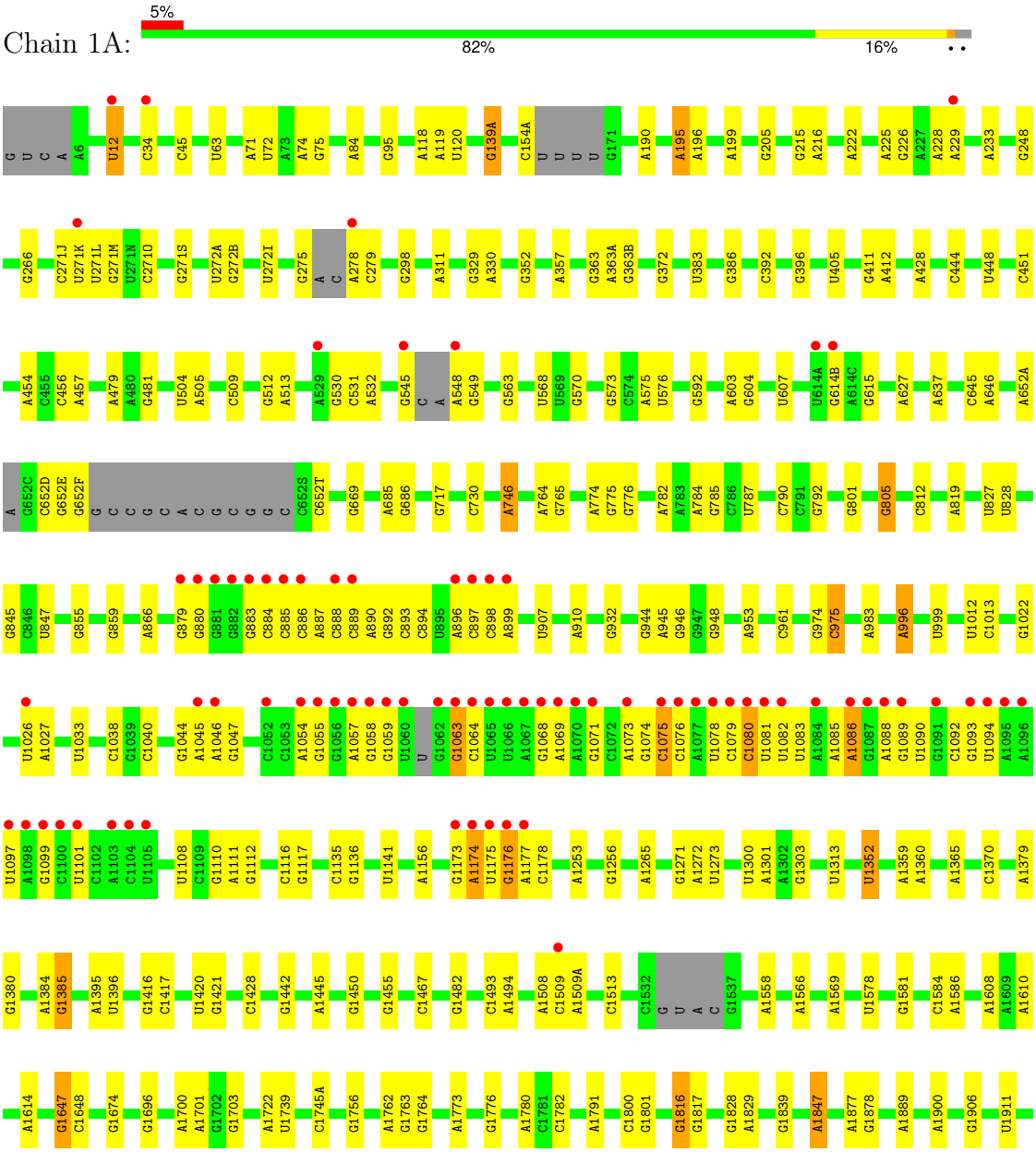
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2x	4	Total	O	0	0
			4	4		

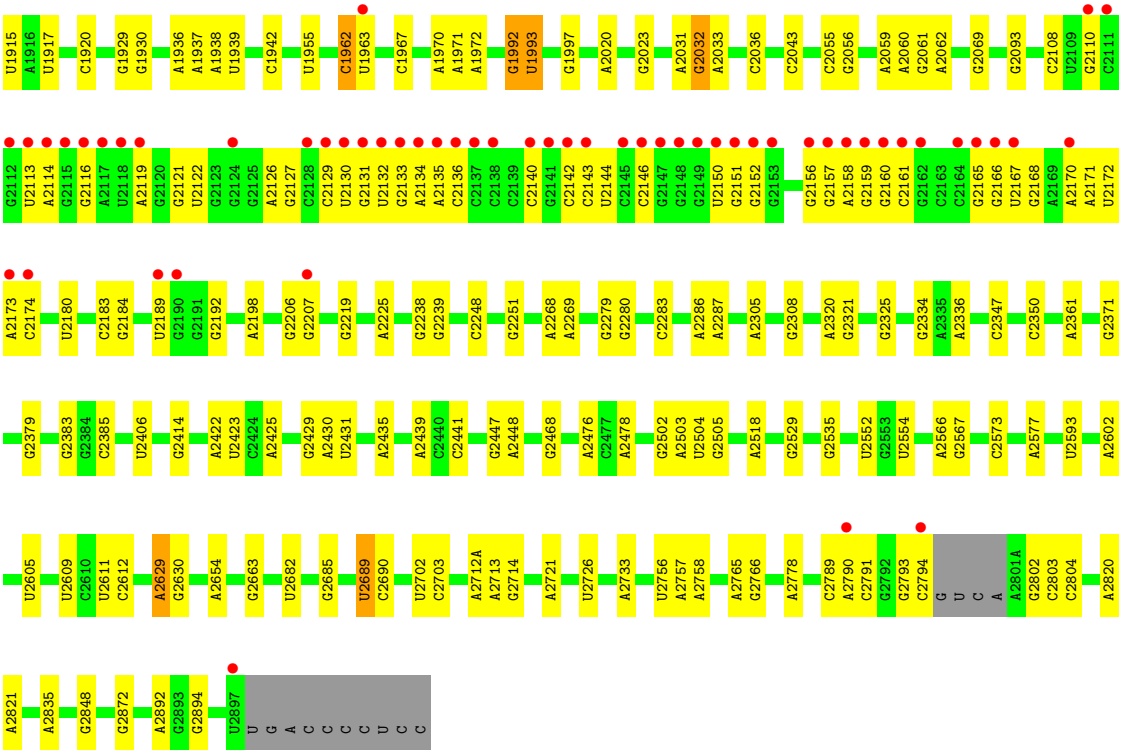
3 Residue-property plots (i)

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

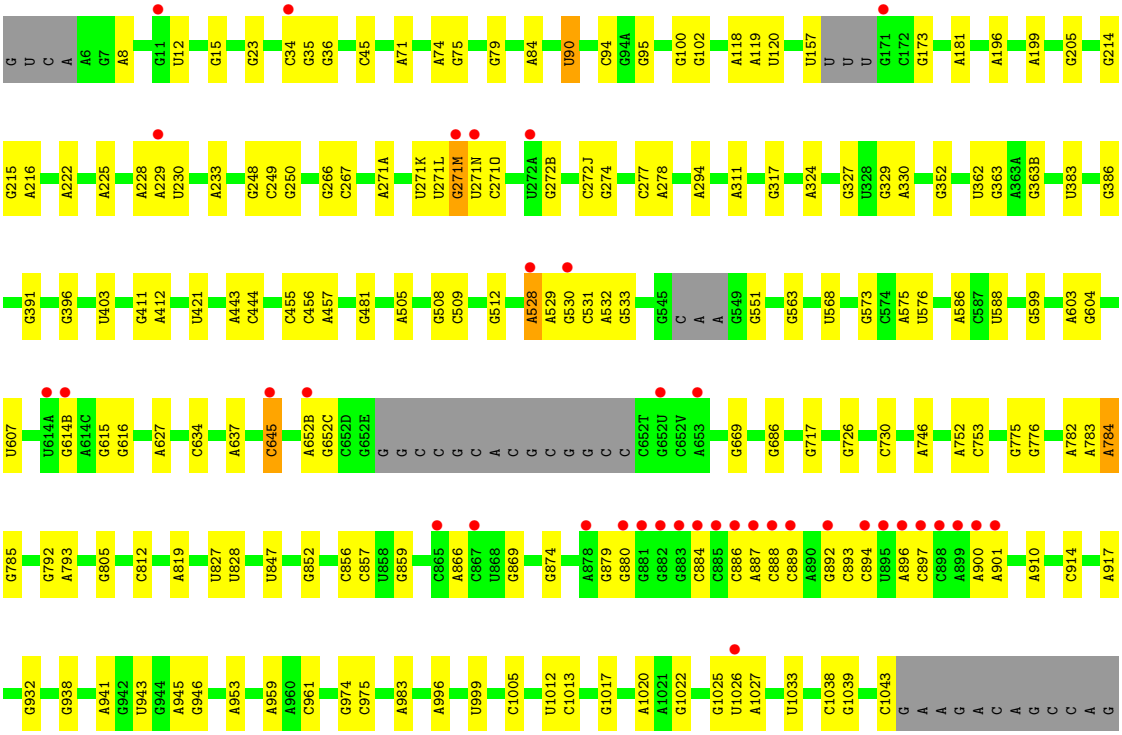
Chain 1A:

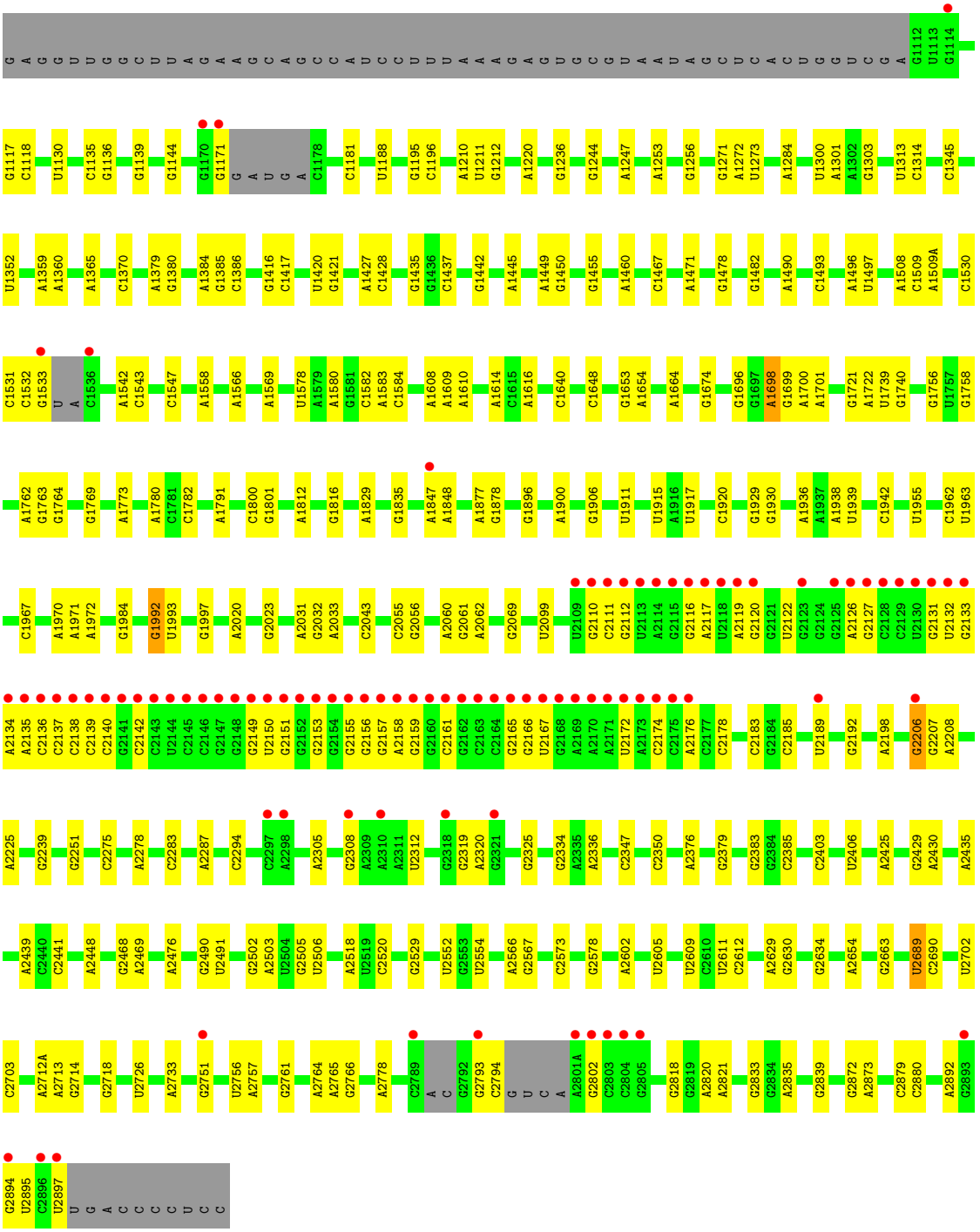




• Molecule 1: 23S Ribosomal RNA

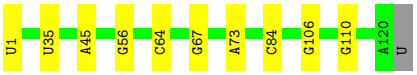
Chain 2A:





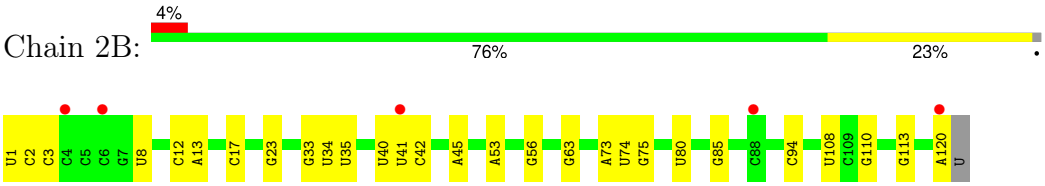
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



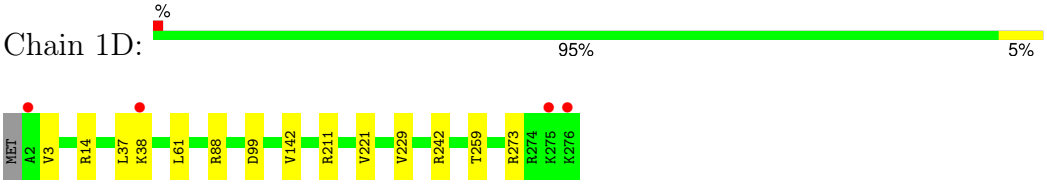
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



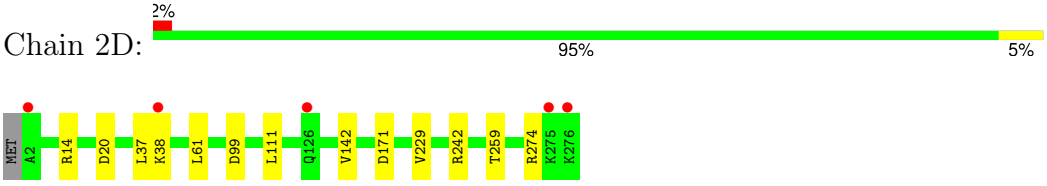
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



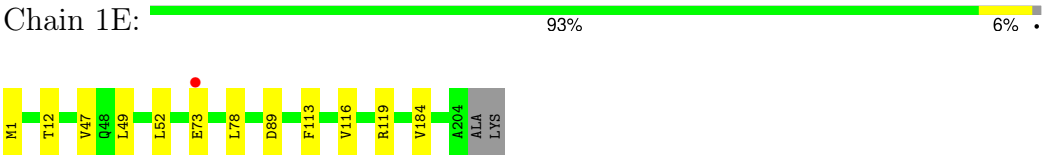
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



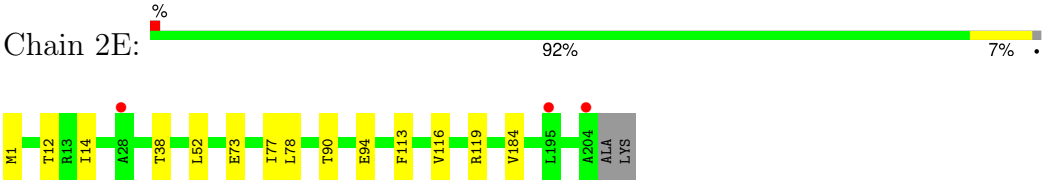
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



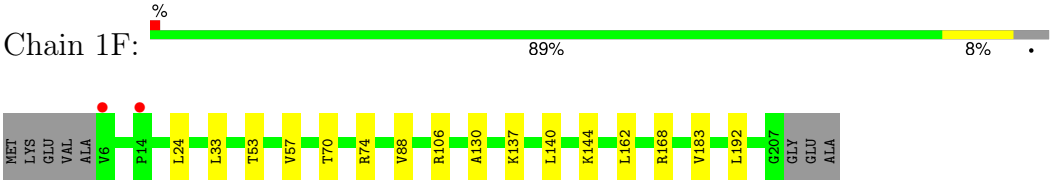
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



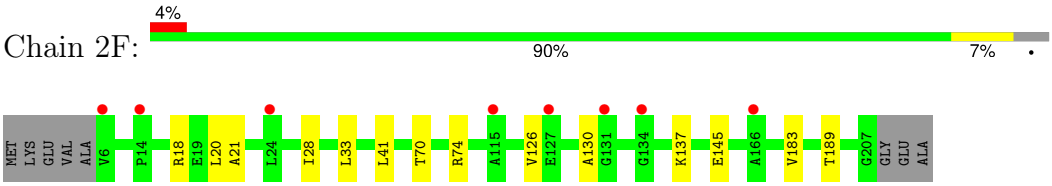
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



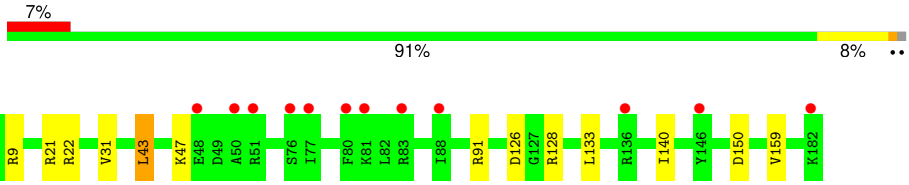
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



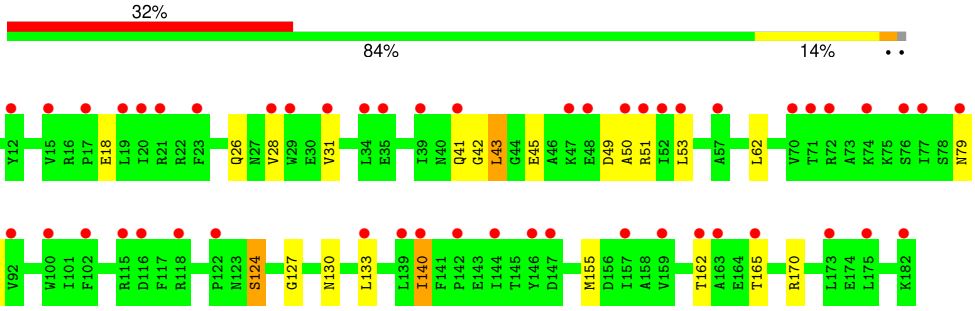
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



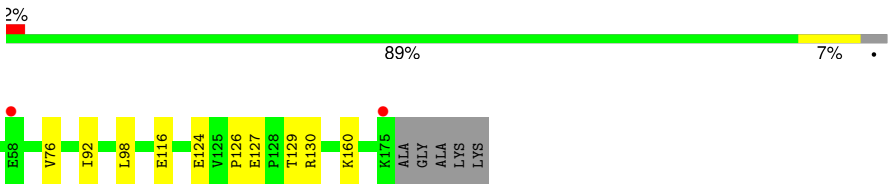
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



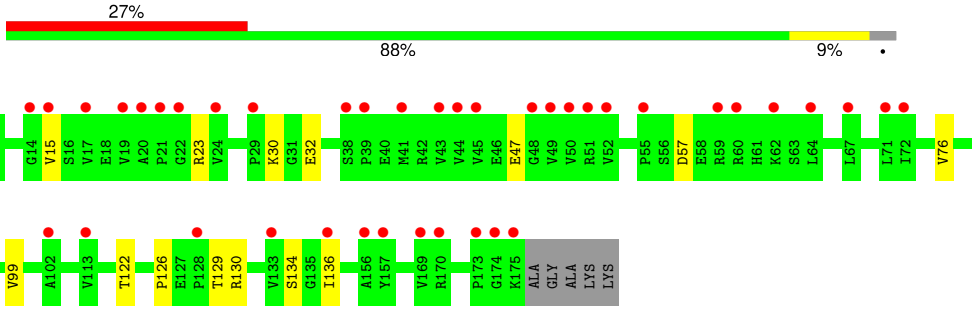
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



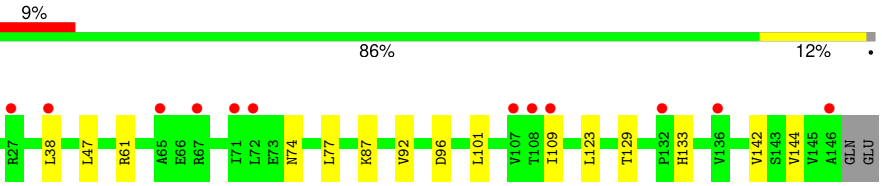
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



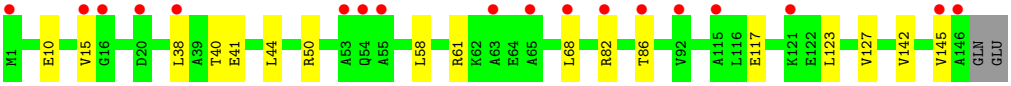
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



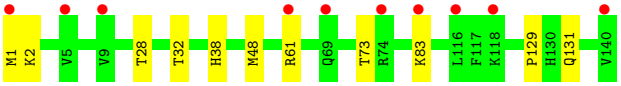
• Molecule 8: 50S ribosomal protein L9

Chain 2I:

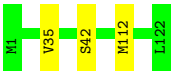


• Molecule 9: 50S ribosomal protein L13

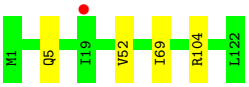
• Molecule 9: 50S ribosomal protein L13



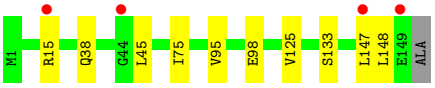
• Molecule 10: 50S ribosomal protein L14



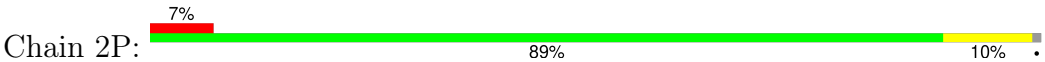
• Molecule 10: 50S ribosomal protein L14

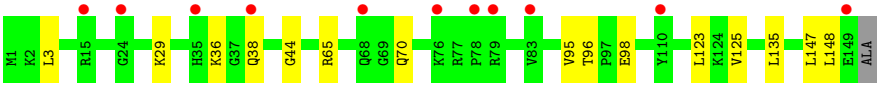


• Molecule 11: 50S ribosomal protein L15



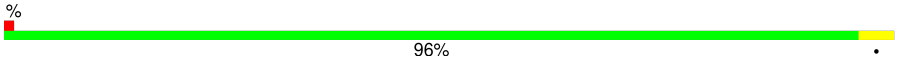
• Molecule 11: 50S ribosomal protein L15

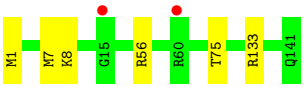




• Molecule 12: 50S ribosomal protein L16

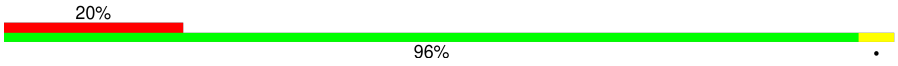
Chain 1Q:

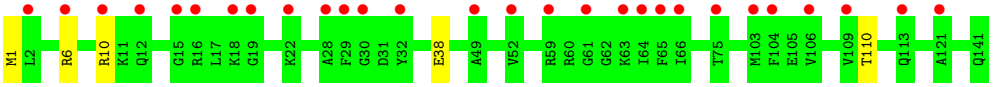




• Molecule 12: 50S ribosomal protein L16

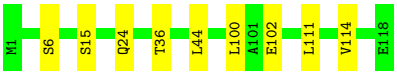
Chain 2Q:





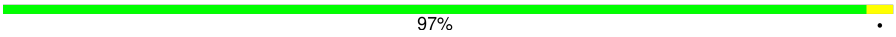
• Molecule 13: 50S ribosomal protein L17

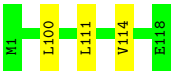
Chain 1R:



• Molecule 13: 50S ribosomal protein L17

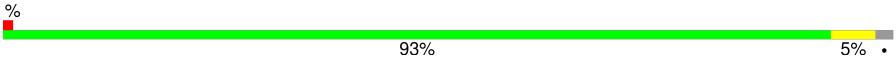
Chain 2R:





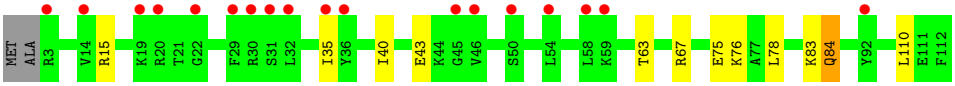
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



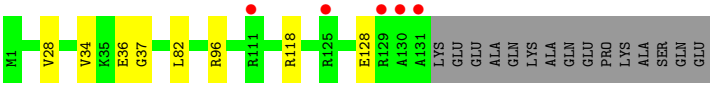
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



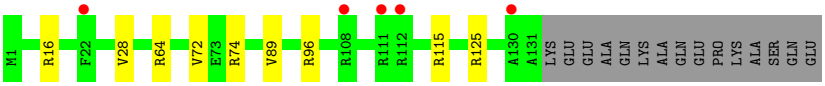
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



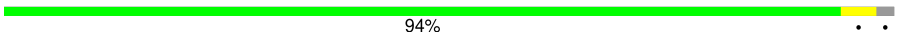
• Molecule 15: 50S ribosomal protein L19

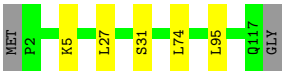
Chain 2T:



• Molecule 16: 50S ribosomal protein L20

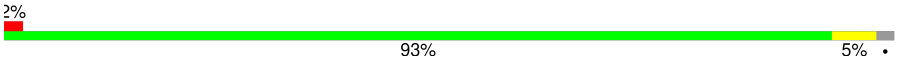
Chain 1U:

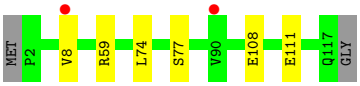




• Molecule 16: 50S ribosomal protein L20

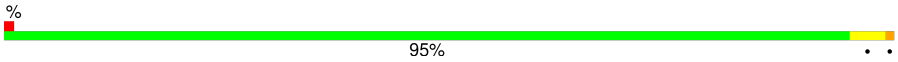
Chain 2U:

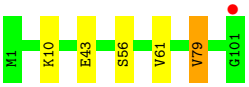




• Molecule 17: 50S ribosomal protein L21

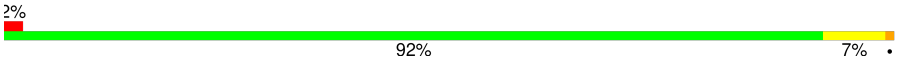
Chain 1V:

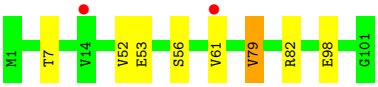




• Molecule 17: 50S ribosomal protein L21

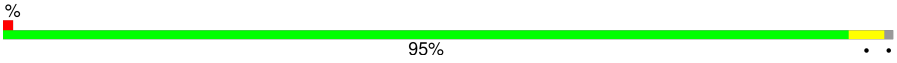
Chain 2V:

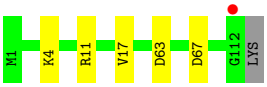




• Molecule 18: 50S ribosomal protein L22

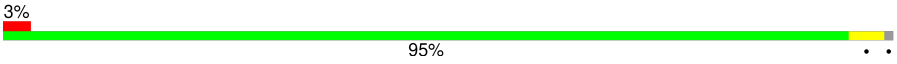
Chain 1W:





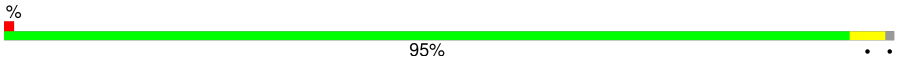
• Molecule 18: 50S ribosomal protein L22

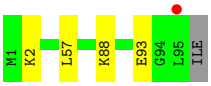
Chain 2W:



• Molecule 19: 50S ribosomal protein L23

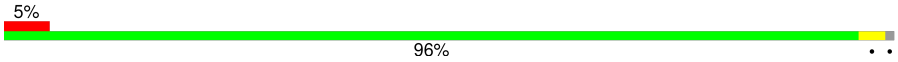
Chain 1X:

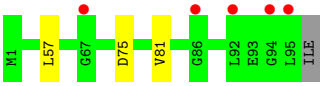




• Molecule 19: 50S ribosomal protein L23

Chain 2X:



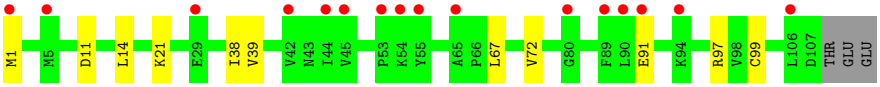


• Molecule 20: 50S ribosomal protein L24

Chain 1Y:

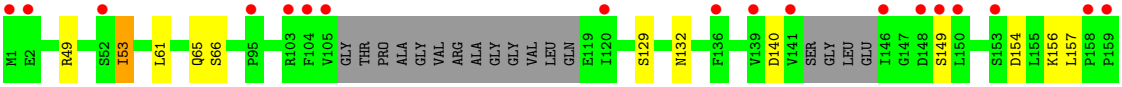
• Molecule 20: 50S ribosomal protein L24

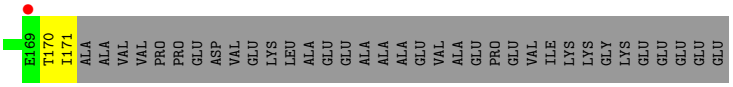
Chain 2Y:



• Molecule 21: 50S ribosomal protein L25

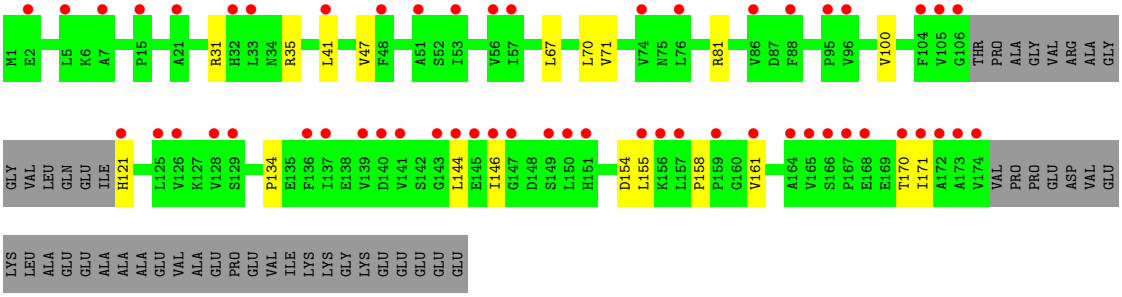
Chain 1Z:



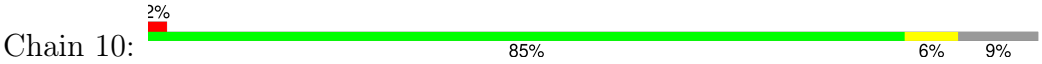


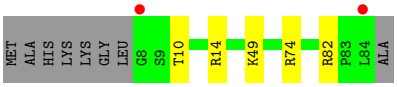
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:

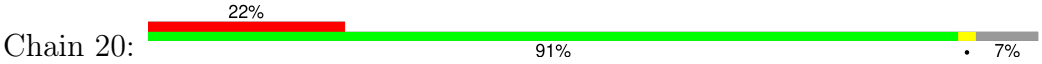


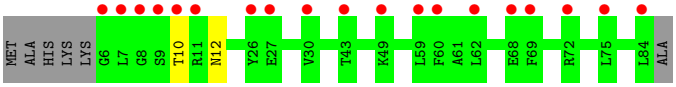
• Molecule 22: 50S ribosomal protein L27



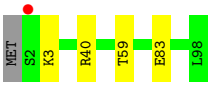


• Molecule 22: 50S ribosomal protein L27

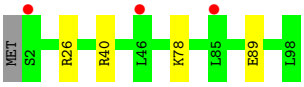




• Molecule 23: 50S ribosomal protein L28

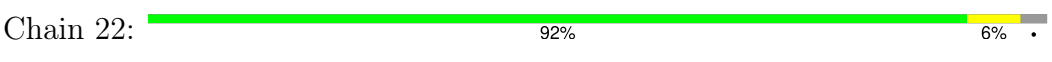


• Molecule 23: 50S ribosomal protein L28



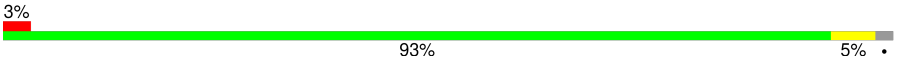
• Molecule 24: 50S ribosomal protein L29

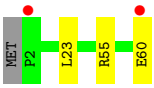
• Molecule 24: 50S ribosomal protein L29



• Molecule 25: 50S ribosomal protein L30

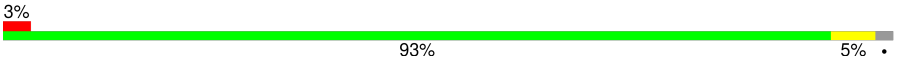
Chain 13:

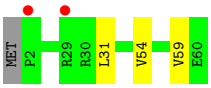




• Molecule 25: 50S ribosomal protein L30

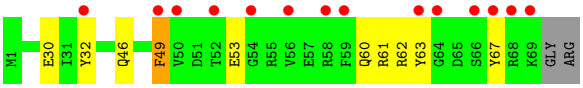
Chain 23:





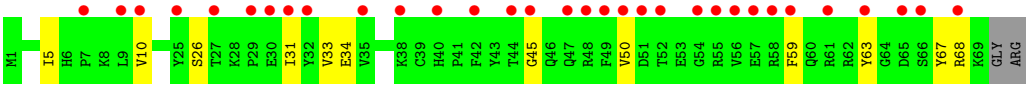
• Molecule 26: 50S ribosomal protein L31

Chain 14:



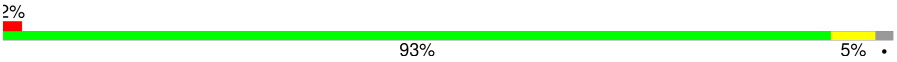
• Molecule 26: 50S ribosomal protein L31

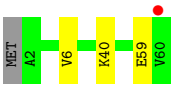
Chain 24:



• Molecule 27: 50S ribosomal protein L32

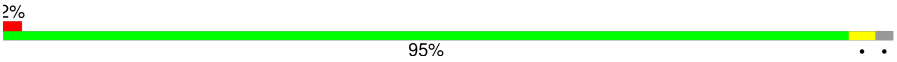
Chain 15:

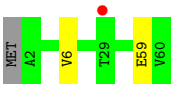




• Molecule 27: 50S ribosomal protein L32

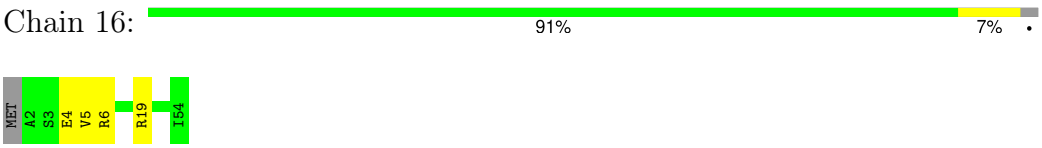
Chain 25:





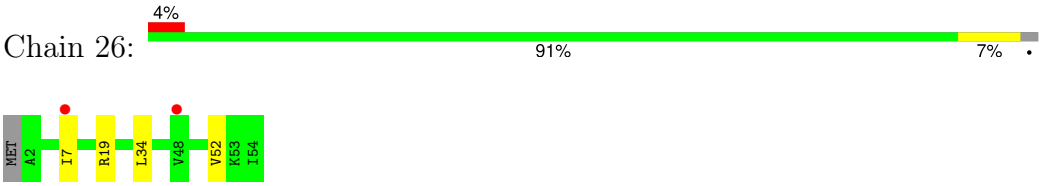
• Molecule 28: 50S ribosomal protein L33

Chain 16:



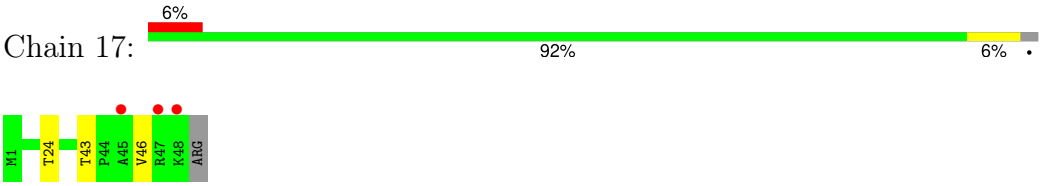
• Molecule 28: 50S ribosomal protein L33

Chain 26:



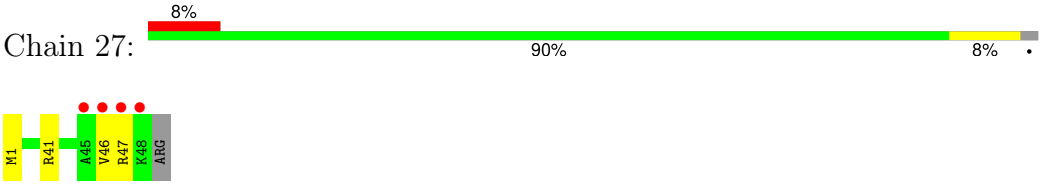
• Molecule 29: 50S ribosomal protein L34

Chain 17:



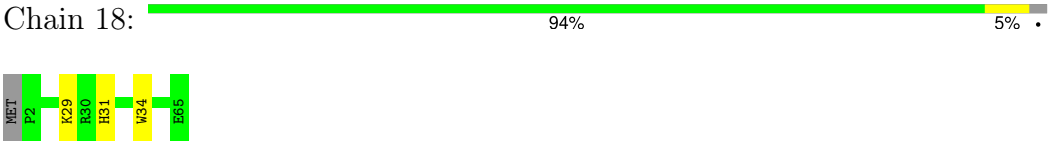
• Molecule 29: 50S ribosomal protein L34

Chain 27:



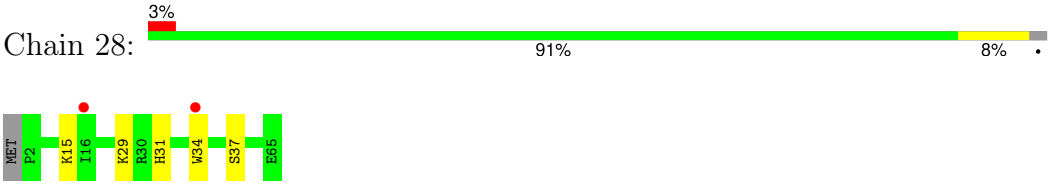
• Molecule 30: 50S ribosomal protein L35

Chain 18:



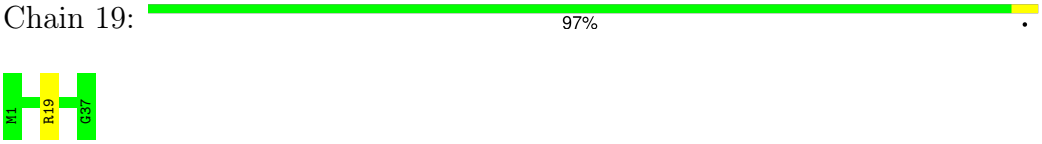
• Molecule 30: 50S ribosomal protein L35

Chain 28:



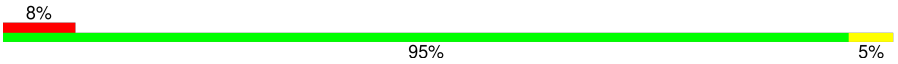
• Molecule 31: 50S ribosomal protein L36

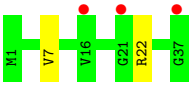
Chain 19:



• Molecule 31: 50S ribosomal protein L36

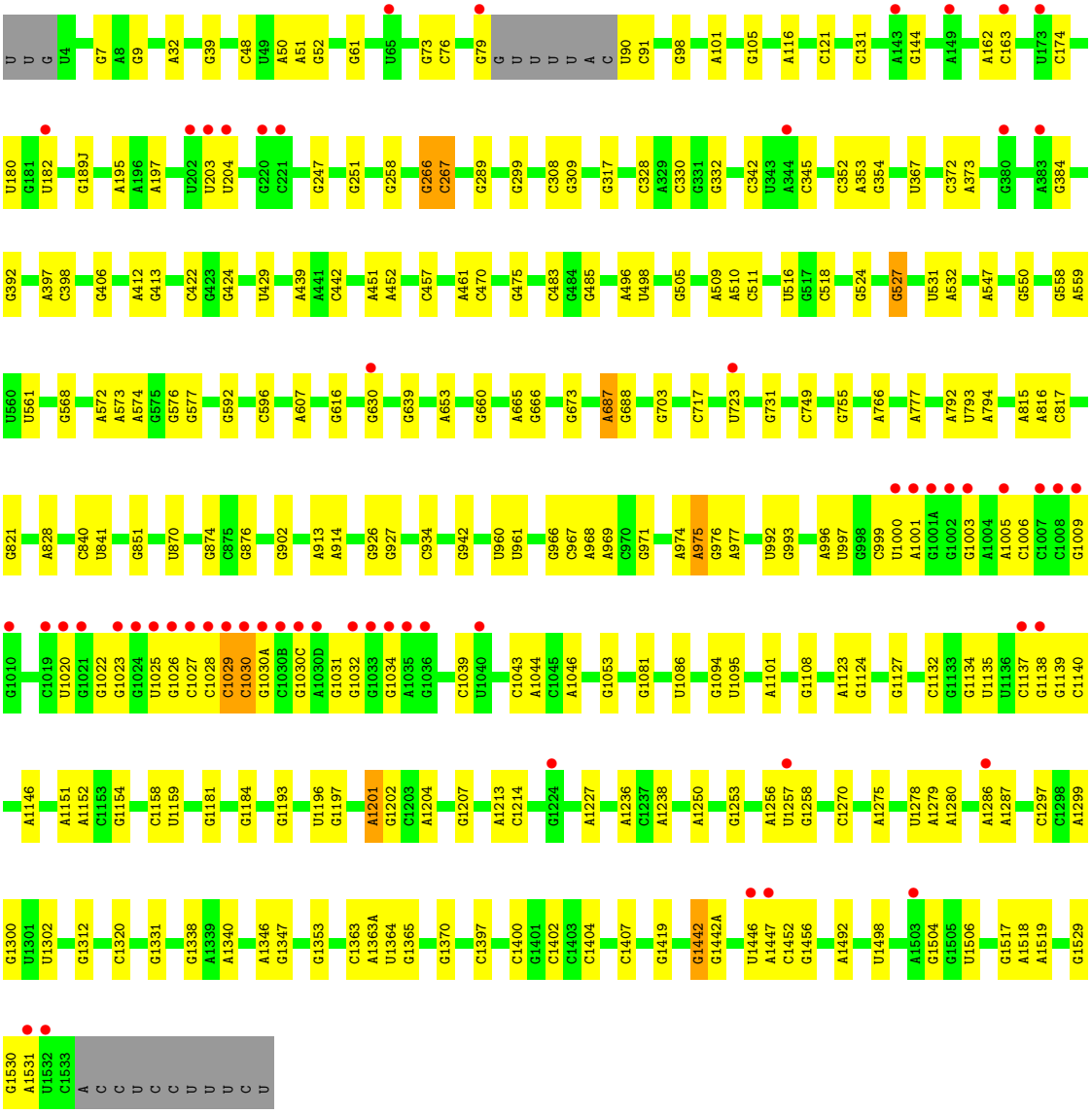
Chain 29:





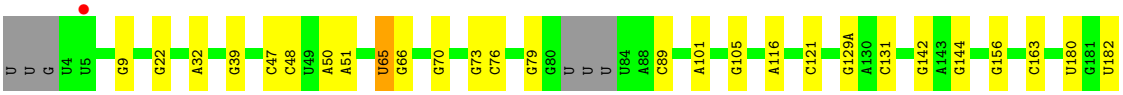
• Molecule 32: 16S Ribosomal RNA

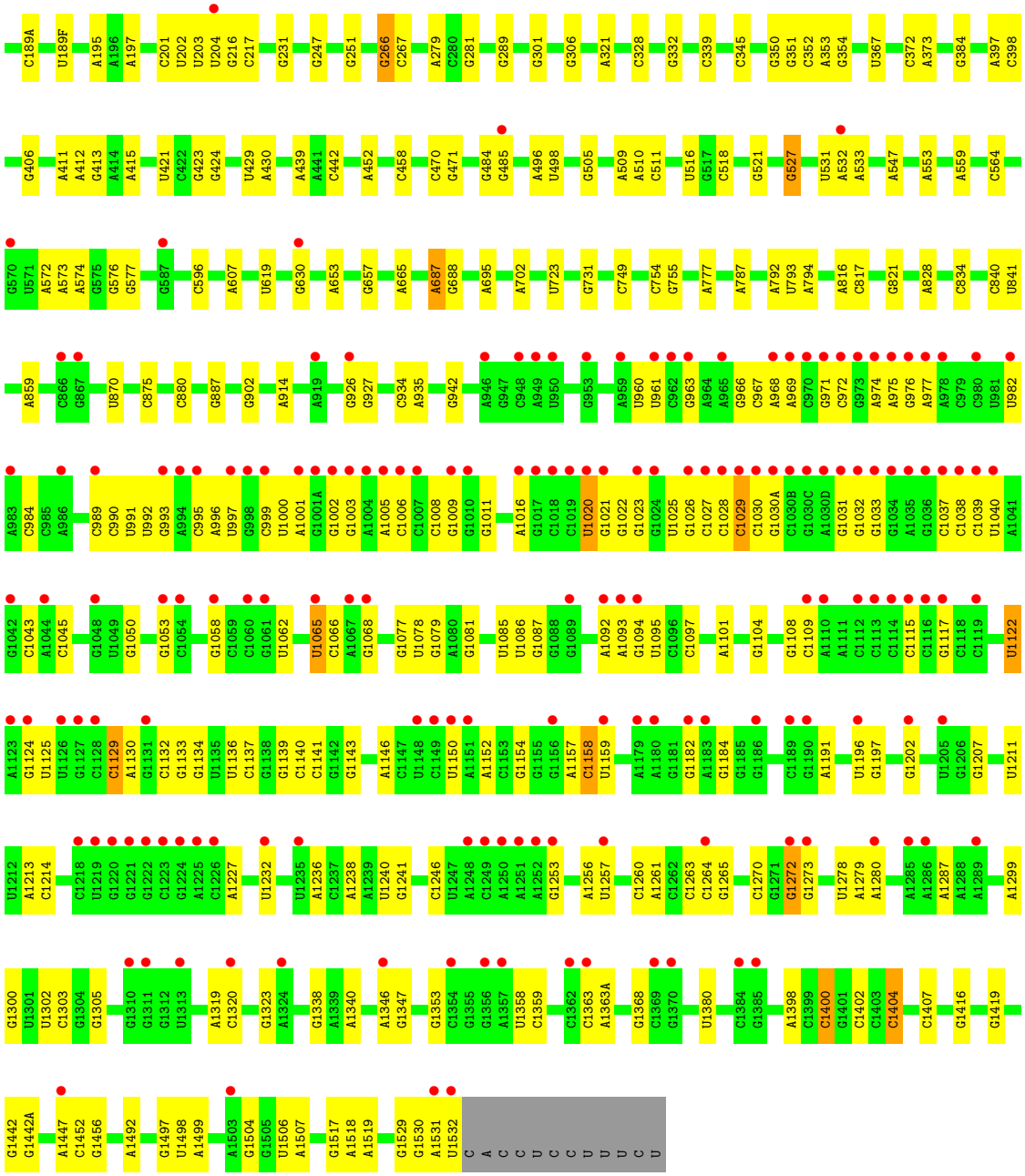
Chain 1a:



• Molecule 32: 16S Ribosomal RNA

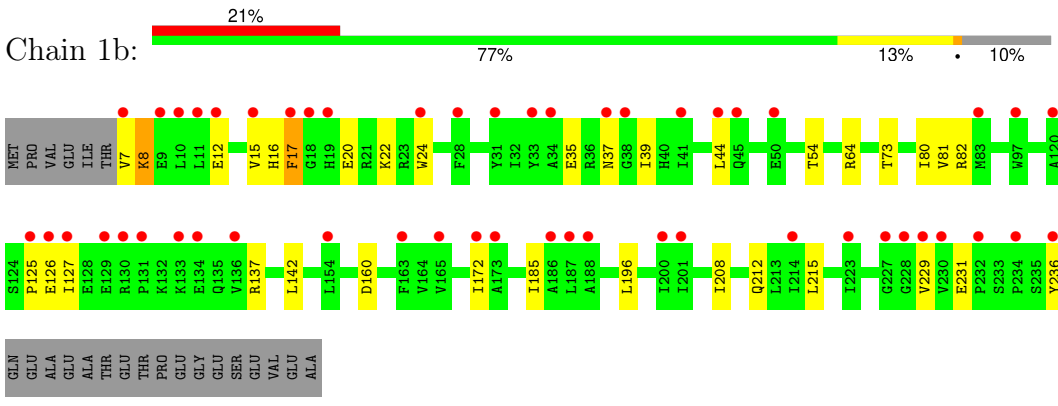
Chain 2a:





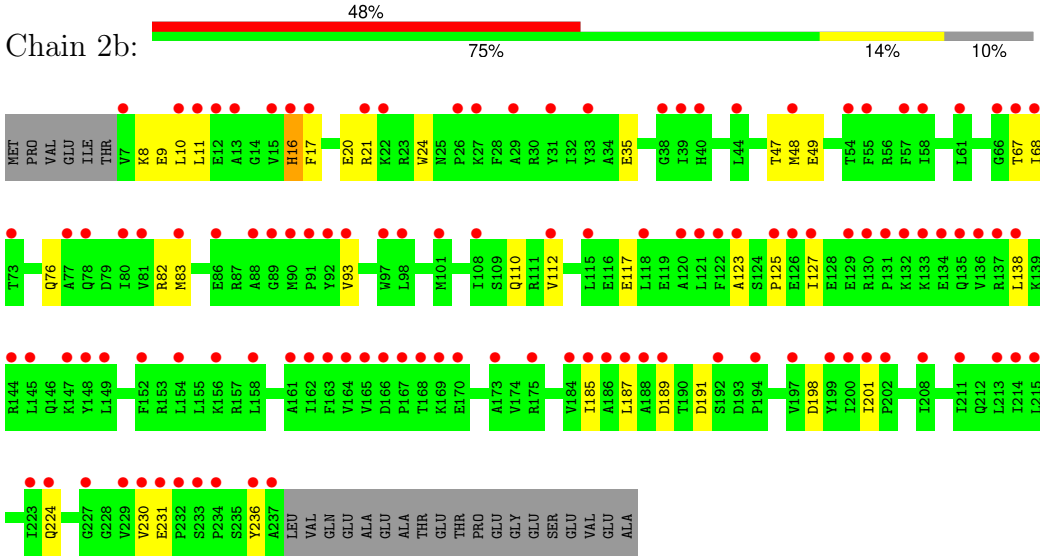
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



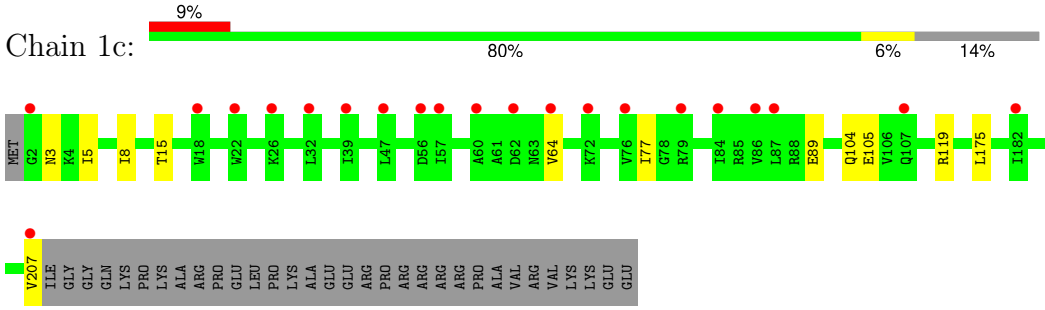
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



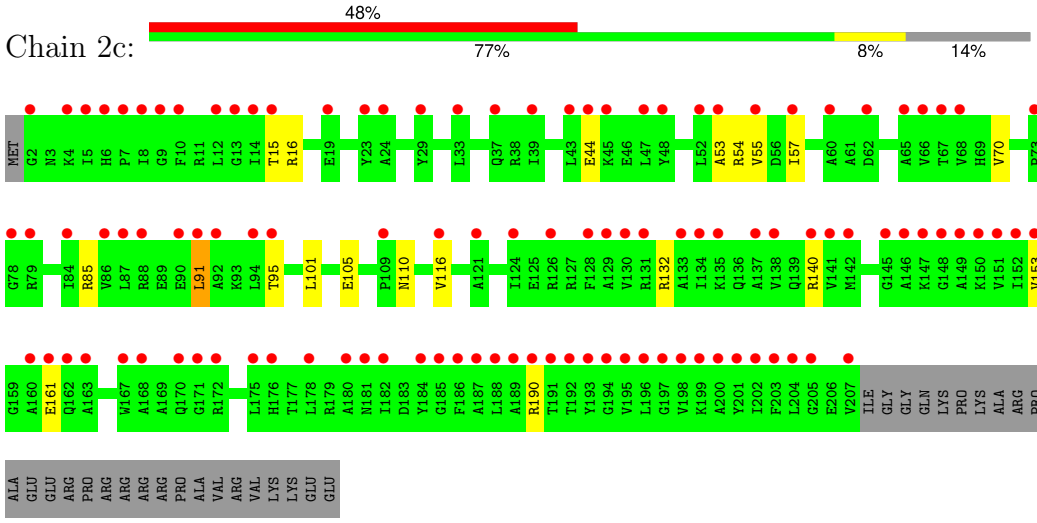
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



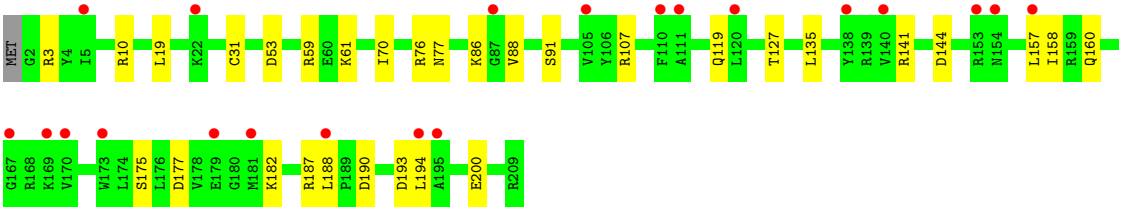
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



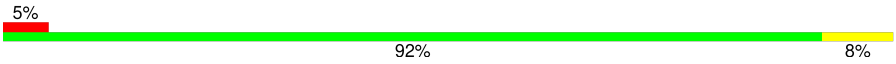
• Molecule 35: 30S ribosomal protein S4

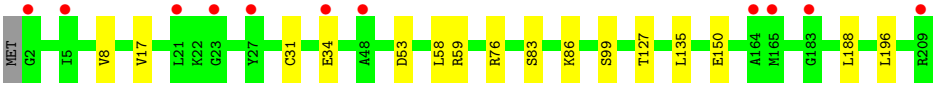
Chain 1d:



• Molecule 35: 30S ribosomal protein S4

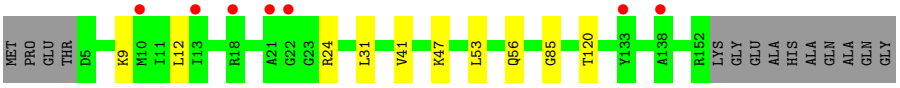
Chain 2d:





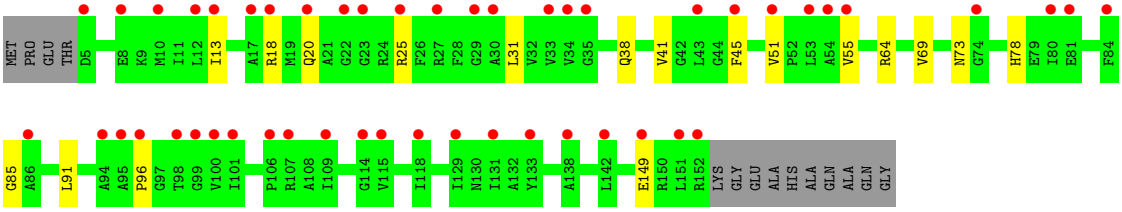
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



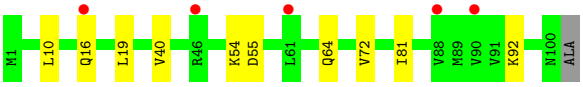
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



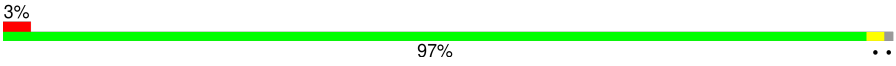
• Molecule 37: 30S ribosomal protein S6

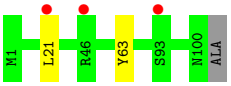
Chain 1f:



• Molecule 37: 30S ribosomal protein S6

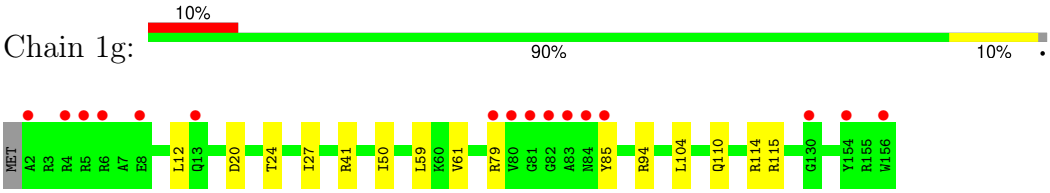
Chain 2f:





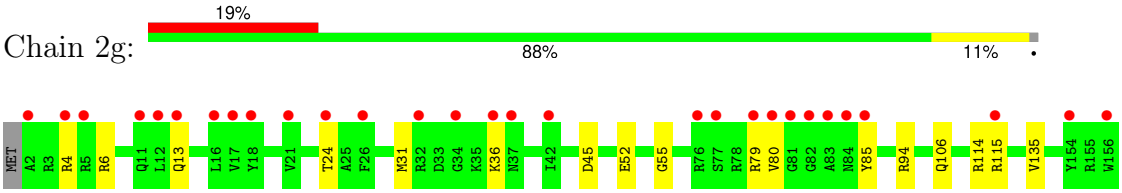
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



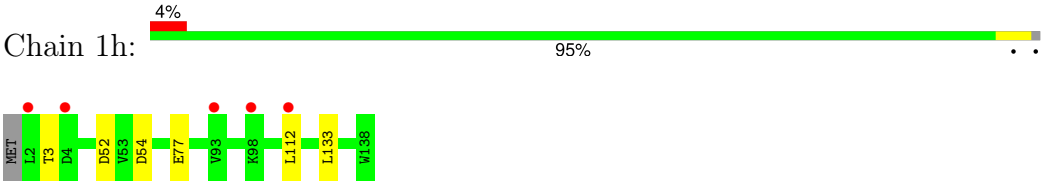
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



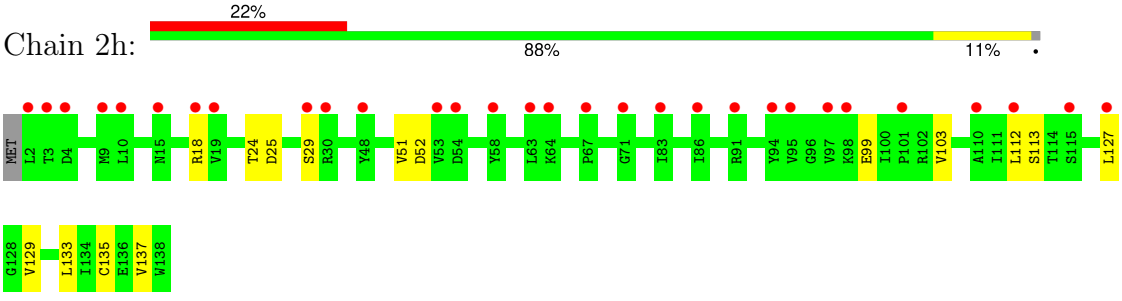
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



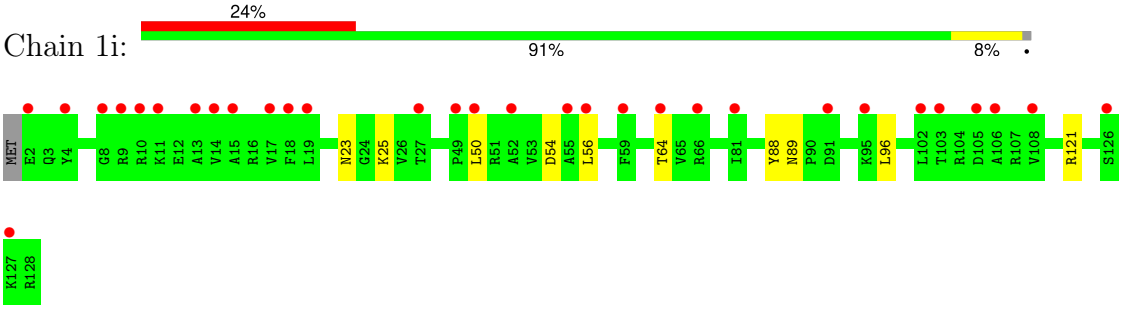
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



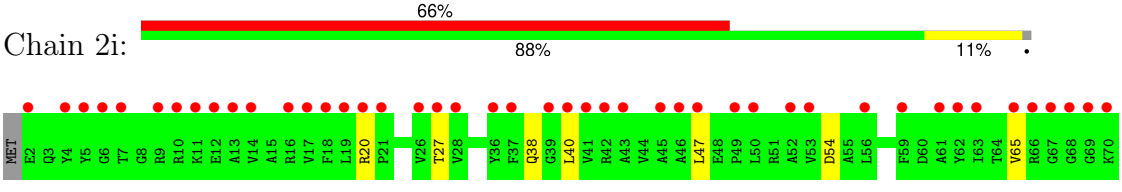
• Molecule 40: 30S ribosomal protein S9

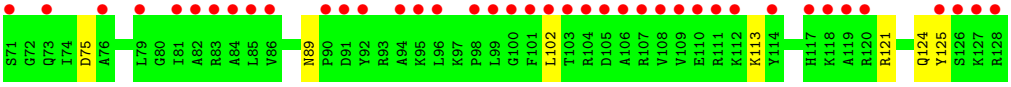
Chain 1i:



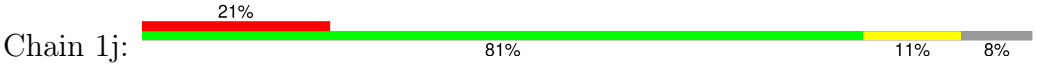
• Molecule 40: 30S ribosomal protein S9

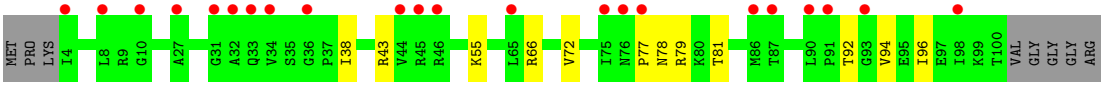
Chain 2i:



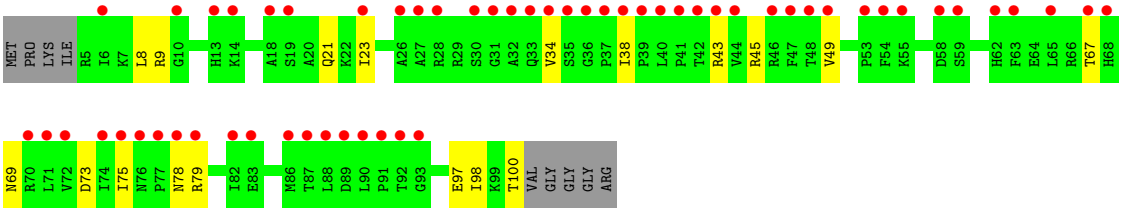


• Molecule 41: 30S ribosomal protein S10

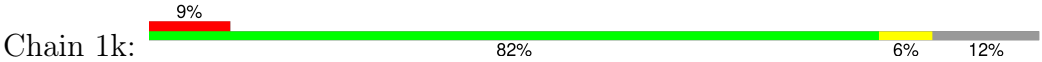


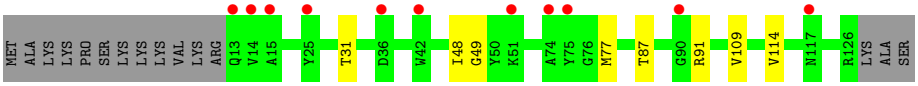


• Molecule 41: 30S ribosomal protein S10

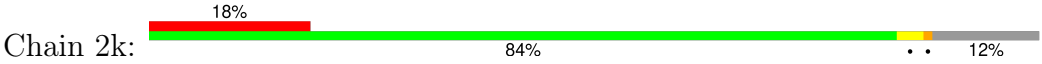


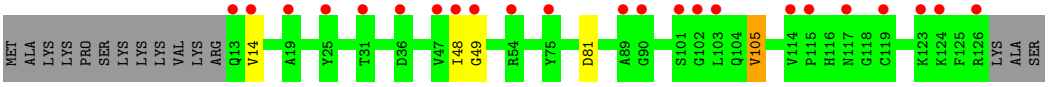
• Molecule 42: 30S ribosomal protein S11



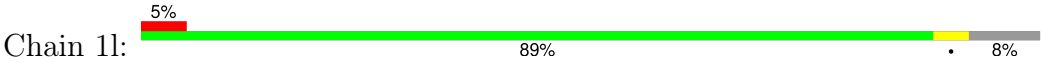


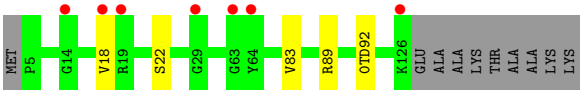
• Molecule 42: 30S ribosomal protein S11



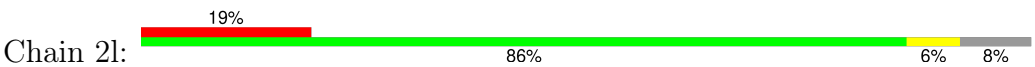


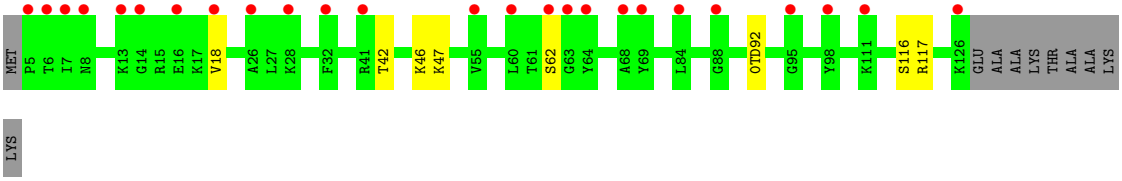
• Molecule 43: 30S ribosomal protein S12





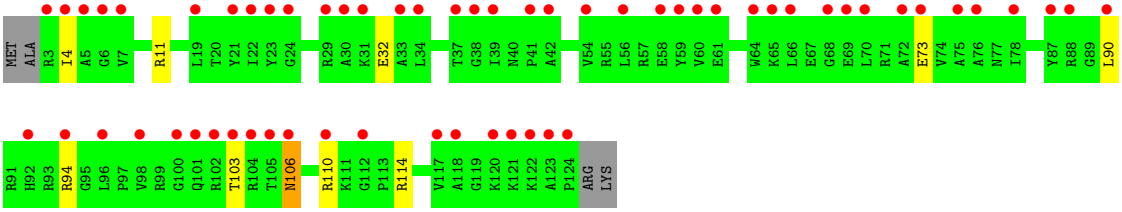
• Molecule 43: 30S ribosomal protein S12



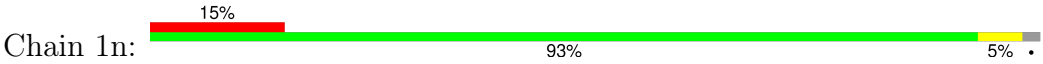


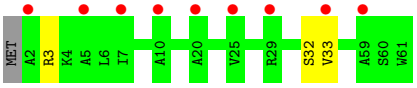
• Molecule 44: 30S ribosomal protein S13

• Molecule 44: 30S ribosomal protein S13

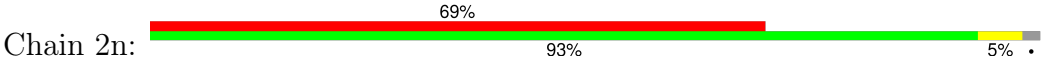


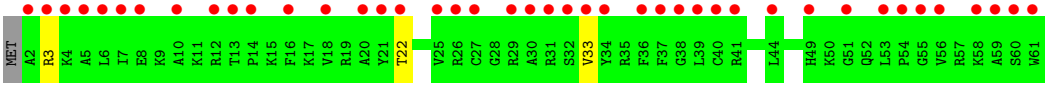
• Molecule 45: 30S ribosomal protein S14 type Z



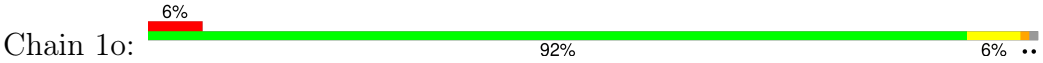


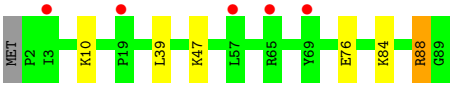
• Molecule 45: 30S ribosomal protein S14 type Z



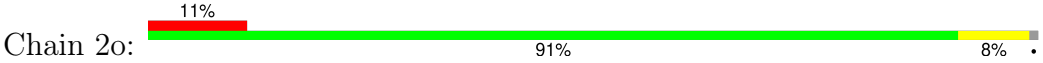


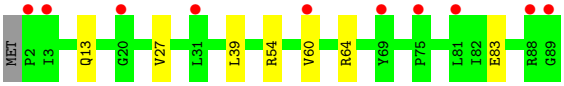
• Molecule 46: 30S ribosomal protein S15





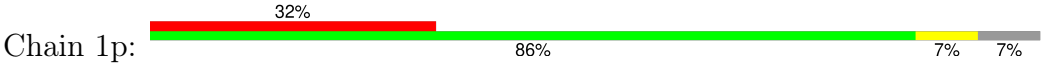
• Molecule 46: 30S ribosomal protein S15

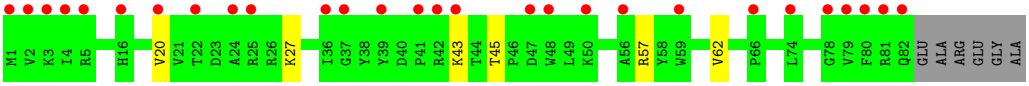




• Molecule 47: 30S ribosomal protein S16

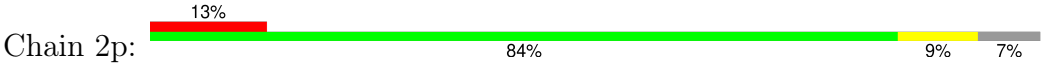
Chain 1p:

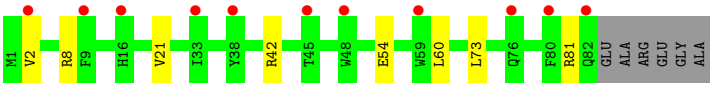




• Molecule 47: 30S ribosomal protein S16

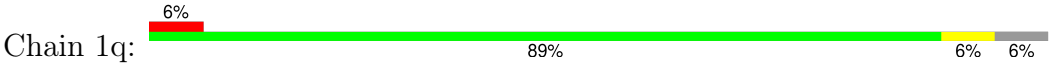
Chain 2p:

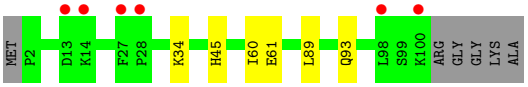




• Molecule 48: 30S ribosomal protein S17

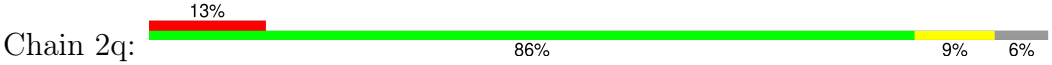
Chain 1q:

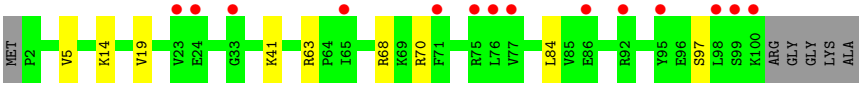




• Molecule 48: 30S ribosomal protein S17

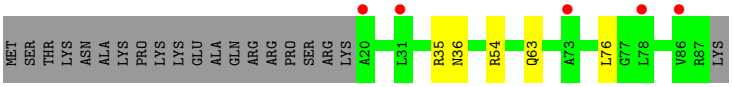
Chain 2q:





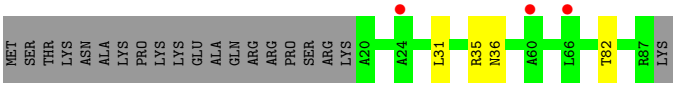
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



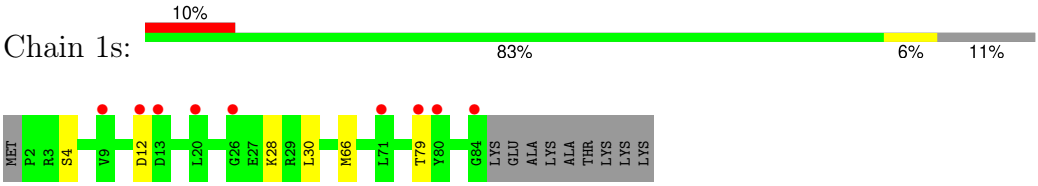
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



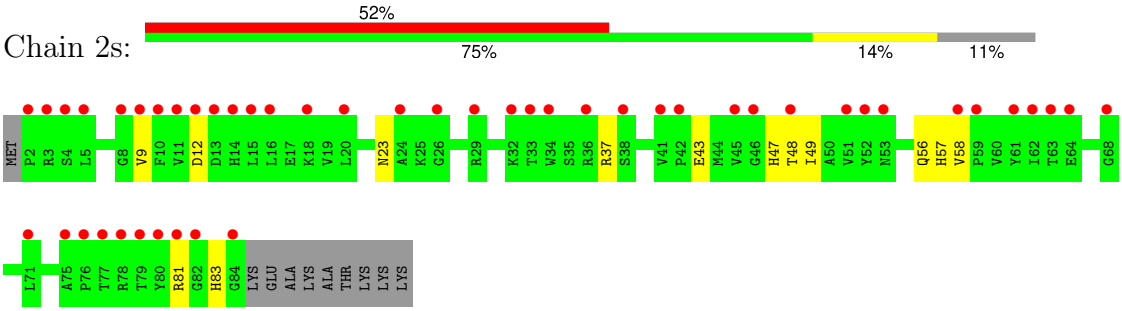
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



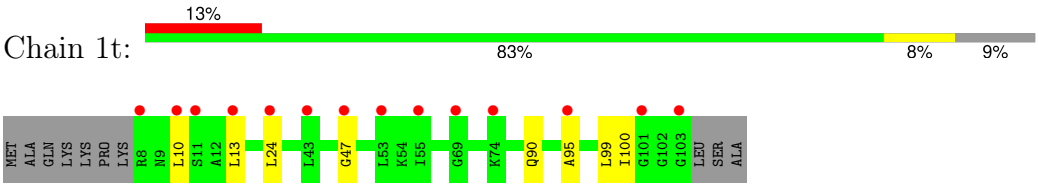
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



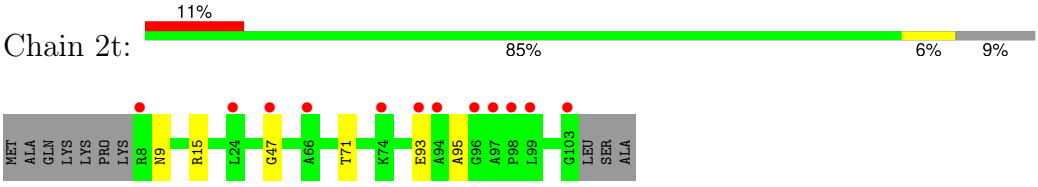
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



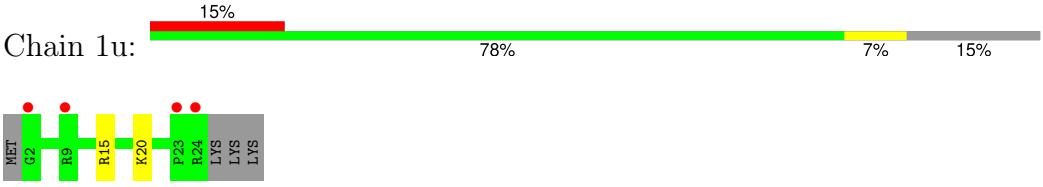
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



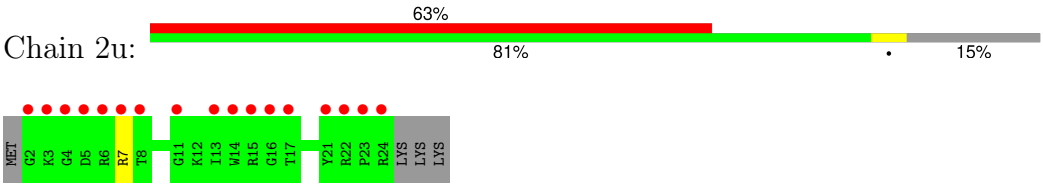
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



• Molecule 52: 30S ribosomal protein Thx

Chain 2u:

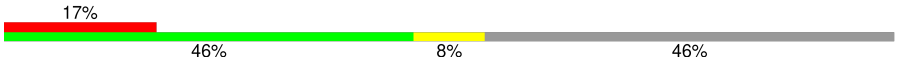


• Molecule 53: MF-mRNA

Chain 1v:

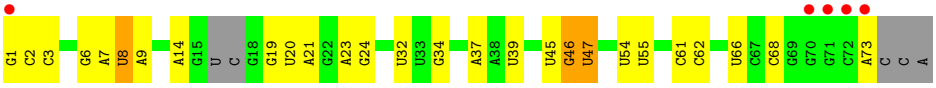
• Molecule 53: MF-mRNA

Chain 2v:



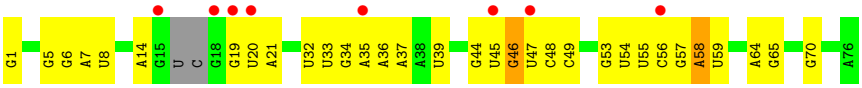
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 1w:



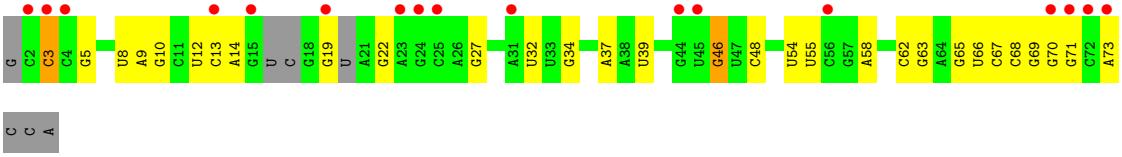
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 1y:



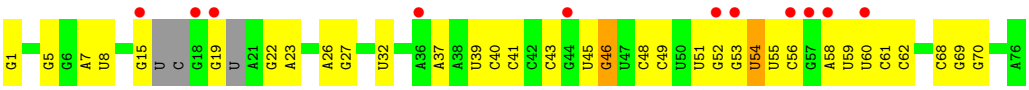
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 2w:



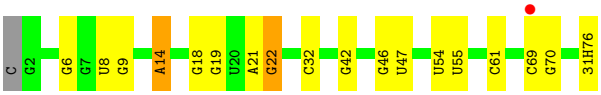
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 2y:



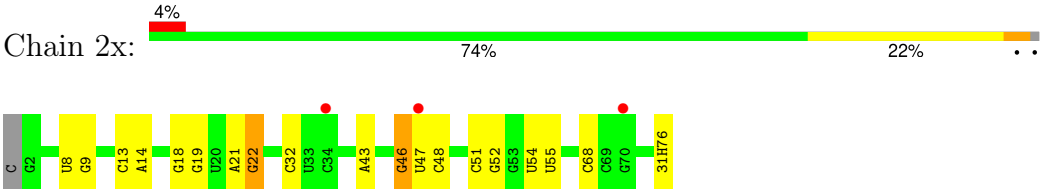
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 1x:



• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 2x:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.26Å 449.69Å 619.83Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	121.86 – 2.50 121.86 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.3 (121.86-2.50) 99.3 (121.86-2.50)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.25 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.218 , 0.260 0.220 , 0.262	Depositor DCC
R_{free} test set	99654 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	53.1	Xtriage
Anisotropy	0.094	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.31 , 51.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.44$, $< L^2 > = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	299293	wwPDB-VP
Average B, all atoms (Å^2)	61.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.60% 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MA6, 5MU, 4SU, G7M, 5MC, OMU, 31H, UR3, 0TD, 2MG, OMC, OMG, M2G, ZN, PSU, K, 2MA, MIA, A1A1L, MG, 4OC, SF4

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	0.51	0/69011	0.96	79/107720 (0.1%)
1	2A	0.38	0/67295	0.85	26/105042 (0.0%)
2	1B	0.44	1/2882 (0.0%)	0.84	0/4494
2	2B	0.40	1/2879 (0.0%)	0.83	2/4487 (0.0%)
3	1D	0.36	0/2186	0.56	0/2944
3	2D	0.32	0/2186	0.52	0/2944
4	1E	0.35	0/1592	0.56	0/2149
4	2E	0.30	0/1592	0.51	0/2149
5	1F	0.34	0/1618	0.57	0/2191
5	2F	0.30	0/1614	0.50	0/2186
6	1G	0.30	0/1448	0.49	0/1957
6	2G	0.29	0/1453	0.48	1/1963 (0.1%)
7	1H	0.31	0/1356	0.49	0/1834
7	2H	0.29	0/1356	0.46	0/1834
8	1I	0.28	0/1112	0.50	0/1514
8	2I	0.27	0/1079	0.50	0/1475
9	1N	0.33	0/1144	0.50	0/1543
9	2N	0.29	0/1144	0.46	0/1543
10	1O	0.34	0/943	0.54	0/1269
10	2O	0.31	0/943	0.51	0/1269
11	1P	0.34	0/1152	0.60	0/1533
11	2P	0.30	0/1152	0.51	0/1533
12	1Q	0.36	0/1143	0.54	0/1527
12	2Q	0.30	0/1143	0.50	0/1527
13	1R	0.32	0/982	0.55	0/1312
13	2R	0.26	0/982	0.48	0/1312
14	1S	0.32	0/883	0.53	0/1176
14	2S	0.29	0/880	0.48	0/1172
15	1T	0.32	0/1105	0.50	0/1477
15	2T	0.29	0/1097	0.49	0/1468
16	1U	0.35	0/977	0.54	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.30	0/977	0.46	0/1301
17	1V	0.34	0/782	0.58	0/1049
17	2V	0.30	0/782	0.51	0/1049
18	1W	0.34	0/897	0.52	0/1205
18	2W	0.30	0/897	0.50	0/1205
19	1X	0.36	0/764	0.55	0/1025
19	2X	0.31	0/764	0.56	0/1025
20	1Y	0.33	0/819	0.52	0/1095
20	2Y	0.32	0/819	0.50	0/1095
21	1Z	0.29	0/1267	0.51	0/1717
21	2Z	0.30	0/1299	0.52	0/1763
22	10	0.34	0/616	0.53	0/821
22	20	0.30	0/628	0.50	0/837
23	11	0.34	0/762	0.51	0/1014
23	21	0.33	0/762	0.50	0/1014
24	12	0.30	0/590	0.44	0/781
24	22	0.28	0/590	0.41	0/781
25	13	0.32	0/474	0.53	0/635
25	23	0.28	0/469	0.46	0/630
26	14	0.34	0/565	0.53	0/761
26	24	0.32	0/545	0.49	0/737
27	15	0.31	0/469	0.54	0/635
27	25	0.32	0/469	0.48	0/635
28	16	0.33	0/460	0.52	0/613
28	26	0.29	0/456	0.47	0/608
29	17	0.34	0/426	0.58	0/561
29	27	0.28	0/426	0.49	0/561
30	18	0.32	0/525	0.53	0/691
30	28	0.31	0/525	0.50	0/691
31	19	0.36	0/310	0.53	0/407
31	29	0.28	0/310	0.52	0/407
32	1a	0.36	0/35795	0.86	23/55864 (0.0%)
32	2a	0.36	3/35886 (0.0%)	0.89	37/56005 (0.1%)
33	1b	0.29	0/1881	0.49	0/2542
33	2b	0.31	0/1860	0.48	0/2518
34	1c	0.28	0/1572	0.46	0/2126
34	2c	0.29	0/1566	0.49	0/2119
35	1d	0.29	0/1685	0.46	0/2262
35	2d	0.28	0/1704	0.47	0/2284
36	1e	0.29	0/1145	0.50	0/1543
36	2e	0.29	0/1149	0.50	0/1548
37	1f	0.29	0/823	0.48	0/1115
37	2f	0.29	0/829	0.48	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.27	0/1250	0.43	0/1679
38	2g	0.28	0/1254	0.45	0/1683
39	1h	0.27	0/1108	0.46	0/1494
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.31	0/1002	0.50	0/1346
40	2i	0.30	0/997	0.49	0/1343
41	1j	0.27	0/722	0.49	0/982
41	2j	0.29	0/727	0.53	0/988
42	1k	0.29	0/844	0.50	0/1145
42	2k	0.28	0/848	0.47	0/1149
43	1l	0.28	0/937	0.51	0/1260
43	2l	0.28	0/937	0.50	0/1260
44	1m	0.29	0/969	0.49	0/1302
44	2m	0.27	0/961	0.46	0/1291
45	1n	0.30	0/501	0.47	0/664
45	2n	0.29	0/501	0.48	0/664
46	1o	0.27	0/739	0.41	0/985
46	2o	0.27	0/739	0.43	0/985
47	1p	0.28	0/697	0.51	0/939
47	2p	0.27	0/693	0.53	0/935
48	1q	0.28	0/836	0.47	0/1117
48	2q	0.27	0/836	0.47	0/1117
49	1r	0.28	0/560	0.49	0/746
49	2r	0.27	0/560	0.47	0/746
50	1s	0.27	0/667	0.52	0/900
50	2s	0.30	0/661	0.56	0/893
51	1t	0.27	0/730	0.43	0/965
51	2t	0.27	0/729	0.44	0/965
52	1u	0.26	0/203	0.45	0/266
52	2u	0.31	0/203	0.50	0/266
53	1v	0.43	0/310	0.94	0/480
53	2v	0.42	0/310	0.89	0/480
54	1w	0.48	1/1537 (0.1%)	0.96	1/2390 (0.0%)
54	1y	0.49	1/1606 (0.1%)	1.03	5/2497 (0.2%)
54	2w	0.47	0/1487	1.04	3/2311 (0.1%)
54	2y	0.49	1/1583 (0.1%)	0.99	3/2459 (0.1%)
55	1x	0.51	1/1700 (0.1%)	1.05	14/2650 (0.5%)
55	2x	0.45	0/1700	1.04	6/2650 (0.2%)
All	All	0.39	9/316420 (0.0%)	0.81	200/473729 (0.0%)

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

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
3	2D	0	1
33	1b	0	1
51	1t	0	1
All	All	0	3

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	1B	1	U	OP3-P	-10.32	1.48	1.61
54	1y	1	G	OP3-P	-10.22	1.48	1.61
2	2B	1	U	OP3-P	-10.13	1.49	1.61
54	2y	1	G	OP3-P	-10.13	1.49	1.61
54	1w	1	G	OP3-P	-9.98	1.49	1.61
32	2a	1272	G	N1-C2	-9.50	1.30	1.37
32	2a	1272	G	C6-N1	-9.08	1.33	1.39
32	2a	1263	C	N3-C4	-6.04	1.29	1.33
55	1x	14	A	C8-N7	-5.35	1.27	1.31

All (200) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1263	C	N1-C2-O2	26.39	134.73	118.90
32	2a	1272	G	N3-C2-N2	22.30	135.51	119.90
32	2a	1272	G	C5-C6-O6	21.33	141.40	128.60
32	2a	1272	G	N1-C2-N2	-19.18	98.94	116.20
32	2a	1263	C	C2-N3-C4	15.50	127.65	119.90
32	2a	1263	C	N3-C2-O2	-15.24	111.23	121.90
32	2a	1272	G	C6-N1-C2	12.83	132.80	125.10
32	2a	1272	G	N1-C6-O6	-12.51	112.39	119.90
32	2a	1263	C	C5-C6-N1	11.63	126.81	121.00
1	1A	1086	A	N1-C6-N6	-11.32	111.81	118.60
32	2a	1272	G	C5-C6-N1	-10.66	106.17	111.50
1	1A	512	G	O4'-C1'-N9	9.67	115.94	108.20
55	1x	46	G	C6-N1-C2	-9.39	119.47	125.10
1	2A	2136	C	N1-C2-O2	9.14	124.39	118.90
32	2a	1272	G	C2-N3-C4	-9.03	107.39	111.90
32	1a	1025	U	N1-C2-O2	9.01	129.11	122.80
32	2a	1263	C	C5-C4-N4	8.99	126.49	120.20
1	1A	1075	C	N1-C2-O2	8.98	124.29	118.90
55	1x	14	A	C4-C5-C6	8.93	121.47	117.00
1	1A	2248	C	O5'-P-OP2	-8.84	97.75	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1263	C	C4-C5-C6	-8.84	112.98	117.40
55	1x	14	A	C5-N7-C8	8.83	108.32	103.90
32	2a	1263	C	C2-N1-C1'	8.82	128.50	118.80
1	1A	999	U	O5'-P-OP2	-8.70	97.87	105.70
1	1A	2682	U	O5'-P-OP2	-8.52	98.03	105.70
32	2a	1263	C	N3-C4-N4	-8.52	112.04	118.00
32	2a	1263	C	C6-N1-C2	-8.51	116.90	120.30
55	2x	46	G	C6-N1-C2	-8.39	120.06	125.10
1	1A	787	U	O5'-P-OP1	-8.38	98.16	105.70
1	1A	1075	C	C2-N3-C4	8.32	124.06	119.90
2	2B	80	U	O4'-C1'-N1	8.27	114.81	108.20
32	1a	1029	C	C2-N3-C4	8.10	123.95	119.90
1	1A	2167	U	C2-N1-C1'	8.08	127.40	117.70
1	1A	576	U	O5'-P-OP1	-7.88	98.61	105.70
55	1x	22	G	C5-N7-C8	-7.82	100.39	104.30
1	1A	948	G	O5'-P-OP1	-7.71	98.76	105.70
1	1A	1352	U	O5'-P-OP1	-7.63	98.83	105.70
1	1A	1063	G	C5-C6-O6	7.57	133.14	128.60
1	1A	975	C	N1-C2-O2	-7.54	114.38	118.90
54	1y	33	U	C2-N1-C1'	7.49	126.69	117.70
1	1A	801	G	O5'-P-OP2	-7.47	98.97	105.70
55	2x	14	A	C4-C5-C6	7.43	120.72	117.00
32	2a	1263	C	N1-C2-N3	-7.42	114.00	119.20
1	1A	2167	U	N1-C2-O2	7.32	127.92	122.80
55	2x	14	A	C5-N7-C8	7.21	107.50	103.90
1	1A	2167	U	N3-C2-O2	-7.19	117.17	122.20
1	1A	226	G	O4'-C1'-N9	7.07	113.86	108.20
55	1x	14	A	C5-C6-N1	-7.01	114.20	117.70
55	2x	22	G	C5-N7-C8	-6.89	100.85	104.30
1	1A	1082	U	N3-C4-O4	-6.88	114.58	119.40
1	1A	2036	C	O5'-P-OP1	-6.87	99.52	105.70
1	1A	1614	A	O5'-P-OP1	-6.86	99.53	105.70
1	2A	1614	A	O5'-P-OP1	-6.84	99.54	105.70
32	2a	754	C	C2-N1-C1'	6.81	126.29	118.80
32	1a	558	G	O5'-P-OP1	-6.70	99.67	105.70
55	2x	46	G	N3-C2-N2	-6.69	115.22	119.90
1	1A	975	C	C2-N1-C1'	-6.66	111.47	118.80
1	1A	1816	G	O5'-P-OP1	-6.66	99.71	105.70
1	1A	1265	A	O5'-P-OP2	-6.65	99.72	105.70
32	1a	1032	G	C6-N1-C2	6.56	129.03	125.10
1	1A	1063	G	C6-N1-C2	6.52	129.01	125.10
32	1a	1030	C	N1-C2-O2	6.42	122.75	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1029	C	N1-C2-O2	6.41	122.75	118.90
1	1A	2848	G	O4'-C1'-N9	6.39	113.31	108.20
1	1A	392	C	O5'-P-OP1	-6.38	99.96	105.70
32	2a	1272	G	C8-N9-C1'	-6.37	118.71	127.00
1	1A	1080	C	C2-N3-C4	6.34	123.07	119.90
54	1y	33	U	N1-C2-O2	6.33	127.23	122.80
32	2a	1272	G	C4-N9-C1'	6.32	134.72	126.50
1	1A	1936	A	O4'-C1'-N9	6.32	113.25	108.20
1	1A	2685	G	N1-C6-O6	-6.28	116.13	119.90
1	1A	1992	G	P-O3'-C3'	6.22	127.17	119.70
55	1x	46	G	N3-C2-N2	-6.22	115.55	119.90
1	2A	2155	G	C6-N1-C2	6.21	128.82	125.10
32	2a	754	C	N1-C2-O2	6.17	122.60	118.90
6	2G	140	ILE	C-N-CA	6.09	136.93	121.70
32	1a	299	G	C5-C6-O6	-6.08	124.95	128.60
1	1A	1080	C	N1-C2-O2	6.07	122.54	118.90
55	1x	46	G	C5-C6-N1	6.06	114.53	111.50
1	2A	2155	G	N3-C2-N2	6.05	124.13	119.90
1	1A	1776	G	O5'-P-OP2	-6.05	100.26	105.70
1	1A	2629	A	P-O3'-C3'	6.01	126.92	119.70
1	1A	2129	C	C2-N1-C1'	5.99	125.39	118.80
54	1w	47	U	C2-N1-C1'	5.99	124.89	117.70
1	2A	383	U	O4'-C1'-N1	5.93	112.95	108.20
1	1A	1313	U	N3-C2-O2	-5.91	118.06	122.20
32	1a	1025	U	C2-N1-C1'	5.90	124.78	117.70
1	1A	2269	A	O5'-P-OP1	-5.87	100.42	105.70
32	2a	1129	C	C2-N1-C1'	-5.87	112.34	118.80
1	1A	2689	U	N3-C2-O2	-5.87	118.09	122.20
1	2A	271(M)	G	OP1-P-O3'	5.87	118.11	105.20
1	1A	568	U	C5-C4-O4	-5.85	122.39	125.90
55	1x	22	G	C4-C5-C6	-5.85	115.29	118.80
1	1A	805	G	N9-C4-C5	-5.84	103.06	105.40
1	2A	1992	G	P-O3'-C3'	5.84	126.71	119.70
55	2x	14	A	C5-C6-N1	-5.82	114.79	117.70
32	1a	90	U	C2-N1-C1'	5.77	124.62	117.70
1	1A	1075	C	C5-C4-N4	5.76	124.23	120.20
32	2a	1043	C	N1-C2-O2	5.76	122.35	118.90
32	2a	1158	C	C2-N1-C1'	5.74	125.12	118.80
1	2A	847	U	C2-N1-C1'	5.74	124.58	117.70
1	1A	975	C	C5-C6-N1	-5.73	118.14	121.00
54	2w	3	C	C2-N3-C4	5.72	122.76	119.90
1	2A	2689	U	P-O3'-C3'	5.72	126.56	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	746	A	O4'-C1'-N9	5.71	112.77	108.20
1	2A	784	A	O4'-C1'-N9	5.70	112.76	108.20
32	2a	266	G	P-O3'-C3'	5.68	126.52	119.70
32	1a	266	G	P-O3'-C3'	5.68	126.52	119.70
1	2A	271(M)	G	P-O3'-C3'	5.67	126.51	119.70
54	1y	58	A	OP1-P-O3'	5.67	117.67	105.20
2	2B	1	U	C2-N1-C1'	5.67	124.50	117.70
1	2A	1313	U	C2-N1-C1'	5.67	124.50	117.70
1	2A	512	G	O4'-C1'-N9	5.64	112.71	108.20
32	2a	1122	U	C5-C4-O4	5.64	129.28	125.90
1	1A	190	A	O5'-P-OP2	-5.61	100.65	105.70
1	1A	845	G	O4'-C1'-N9	5.61	112.69	108.20
32	2a	1058	G	C5-C6-O6	-5.57	125.26	128.60
1	2A	645	C	C2-N1-C1'	5.55	124.91	118.80
1	2A	2206	G	C4-N9-C1'	-5.53	119.32	126.50
32	1a	1158	C	C2-N1-C1'	5.52	124.87	118.80
1	1A	975	C	C2-N3-C4	-5.51	117.14	119.90
1	1A	1174	A	P-O3'-C3'	5.51	126.32	119.70
1	1A	1063	G	N3-C2-N2	5.50	123.75	119.90
54	2y	51	U	N1-C2-O2	-5.50	118.95	122.80
1	1A	1086	A	C5-C6-N6	5.47	128.08	123.70
32	1a	1442	G	N3-C4-C5	-5.47	125.86	128.60
55	1x	22	G	N7-C8-N9	5.47	115.83	113.10
32	1a	1029	C	C5-C4-N4	5.46	124.02	120.20
1	1A	383	U	C2-N1-C1'	-5.43	111.18	117.70
1	1A	2577	A	O5'-P-OP1	-5.43	100.81	105.70
55	1x	14	A	C8-N9-C1'	-5.42	117.94	127.70
54	2w	10	G	N3-C2-N2	-5.42	116.10	119.90
32	2a	1158	C	N1-C2-O2	5.42	122.15	118.90
32	1a	1029	C	N1-C2-O2	5.41	122.15	118.90
1	1A	746	A	O4'-C1'-N9	5.39	112.51	108.20
1	1A	975	C	C6-N1-C1'	5.38	127.26	120.80
54	2w	67	C	C5-C4-N4	5.37	123.96	120.20
1	1A	195	A	P-O3'-C3'	5.37	126.15	119.70
55	1x	14	A	C4-N9-C1'	5.37	135.96	126.30
32	2a	1150	U	C5-C4-O4	5.35	129.11	125.90
1	2A	90	U	N3-C2-O2	-5.35	118.46	122.20
1	1A	1993	U	O5'-P-OP1	-5.34	100.90	105.70
1	1A	1082	U	N3-C4-C5	5.34	117.80	114.60
1	2A	1698	A	O4'-C1'-N9	5.32	112.46	108.20
54	1y	33	U	C6-N1-C1'	-5.32	113.76	121.20
1	1A	1313	U	C2-N1-C1'	5.31	124.07	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2789	C	C2-N1-C1'	-5.31	112.96	118.80
32	1a	1034	G	C6-N1-C2	5.29	128.28	125.10
1	2A	576	U	O5'-P-OP1	-5.29	100.94	105.70
32	1a	267	C	O5'-P-OP1	-5.28	100.94	105.70
1	1A	2447	G	C8-N9-C4	5.28	108.51	106.40
32	2a	1263	C	C6-N1-C1'	-5.27	114.47	120.80
1	2A	2136	C	C2-N3-C4	5.27	122.53	119.90
1	1A	2059	A	O4'-C1'-N9	5.26	112.41	108.20
1	2A	943	U	O5'-P-OP2	-5.25	100.97	105.70
1	1A	2593	U	N3-C4-O4	-5.25	115.73	119.40
1	1A	570	G	C5-C6-O6	-5.24	125.46	128.60
1	1A	944	G	C4-N9-C1'	5.24	133.31	126.50
32	1a	1032	G	C5-C6-O6	5.24	131.74	128.60
32	2a	1020	U	N1-C2-O2	5.23	126.46	122.80
1	2A	2136	C	N3-C2-O2	-5.23	118.24	121.90
1	2A	783	A	C2-N3-C4	5.22	113.21	110.60
1	1A	1156	A	O5'-P-OP2	-5.21	101.01	105.70
32	2a	1065	U	P-O3'-C3'	5.21	125.95	119.70
32	1a	687	A	P-O3'-C3'	5.20	125.94	119.70
32	2a	65	U	P-O3'-C3'	5.20	125.94	119.70
1	2A	2689	U	N3-C2-O2	-5.19	118.57	122.20
1	1A	139(A)	G	C5-N7-C8	5.18	106.89	104.30
32	1a	975	A	O4'-C1'-N9	-5.17	104.07	108.20
1	1A	298	G	C5-N7-C8	5.16	106.88	104.30
1	1A	1847	A	O4'-C1'-N9	5.16	112.32	108.20
1	1A	1385	G	O4'-C1'-N9	5.15	112.32	108.20
32	1a	1025	U	C6-N1-C1'	-5.15	113.99	121.20
1	1A	847	U	C2-N1-C1'	5.15	123.88	117.70
32	1a	1201	A	P-O3'-C3'	5.14	125.87	119.70
1	1A	1174	A	OP1-P-O3'	5.13	116.49	105.20
1	1A	2032	G	C5-N7-C8	5.12	106.86	104.30
54	1y	58	A	P-O3'-C3'	5.12	125.85	119.70
1	1A	2371	G	C5-C6-N1	5.12	114.06	111.50
1	1A	805	G	C4-C5-N7	5.11	112.84	110.80
1	1A	996	A	O5'-P-OP1	-5.11	101.10	105.70
55	1x	22	G	N3-C4-N9	-5.11	122.94	126.00
1	1A	1176	G	OP1-P-O3'	5.10	116.42	105.20
1	1A	383	U	O4'-C1'-N1	5.10	112.28	108.20
55	1x	22	G	C8-N9-C1'	5.09	133.62	127.00
1	1A	12	U	N3-C2-O2	-5.09	118.64	122.20
54	2y	22	G	C4-N9-C1'	5.09	133.11	126.50
55	1x	14	A	C4-C5-N7	-5.08	108.16	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2167	U	C5-C6-N1	5.08	125.24	122.70
32	1a	1030	C	N3-C2-O2	-5.08	118.35	121.90
54	2y	22	G	C8-N9-C1'	-5.06	120.43	127.00
32	2a	687	A	P-O3'-C3'	5.06	125.77	119.70
1	1A	372	G	O4'-C1'-N9	5.05	112.24	108.20
1	1A	1647	G	O4'-C1'-N9	-5.05	104.16	108.20
32	2a	754	C	C6-N1-C1'	-5.04	114.75	120.80
32	1a	1025	U	N3-C2-O2	-5.02	118.69	122.20
32	1a	1442	G	N3-C4-N9	5.02	129.01	126.00
1	2A	528	A	P-O3'-C3'	5.01	125.71	119.70
1	2A	645	C	N1-C2-O2	5.01	121.90	118.90
32	2a	1129	C	C6-N1-C1'	5.01	126.81	120.80

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
33	1b	122	PHE	Peptide
51	1t	99	LEU	Peptide
3	2D	274	ARG	Peptide

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100
3	2D	273/276 (99%)	255 (93%)	18 (7%)	0	100	100
4	1E	202/206 (98%)	194 (96%)	7 (4%)	1 (0%)	25	44

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
4	2E	202/206 (98%)	194 (96%)	7 (4%)	1 (0%)	25 44
5	1F	200/210 (95%)	194 (97%)	5 (2%)	1 (0%)	25 44
5	2F	200/210 (95%)	187 (94%)	10 (5%)	3 (2%)	8 16
6	1G	179/182 (98%)	163 (91%)	14 (8%)	2 (1%)	12 23
6	2G	179/182 (98%)	149 (83%)	24 (13%)	6 (3%)	3 4
7	1H	172/180 (96%)	163 (95%)	8 (5%)	1 (1%)	22 39
7	2H	172/180 (96%)	155 (90%)	15 (9%)	2 (1%)	11 21
8	1I	144/148 (97%)	130 (90%)	14 (10%)	0	100 100
8	2I	144/148 (97%)	126 (88%)	15 (10%)	3 (2%)	5 10
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100 100
9	2N	138/140 (99%)	132 (96%)	4 (3%)	2 (1%)	9 17
10	1O	120/122 (98%)	114 (95%)	6 (5%)	0	100 100
10	2O	120/122 (98%)	111 (92%)	8 (7%)	1 (1%)	16 31
11	1P	147/150 (98%)	133 (90%)	12 (8%)	2 (1%)	9 17
11	2P	147/150 (98%)	132 (90%)	11 (8%)	4 (3%)	4 6
12	1Q	139/141 (99%)	135 (97%)	4 (3%)	0	100 100
12	2Q	139/141 (99%)	127 (91%)	12 (9%)	0	100 100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100 100
13	2R	116/118 (98%)	110 (95%)	6 (5%)	0	100 100
14	1S	108/112 (96%)	103 (95%)	5 (5%)	0	100 100
14	2S	108/112 (96%)	97 (90%)	10 (9%)	1 (1%)	14 28
15	1T	129/146 (88%)	123 (95%)	5 (4%)	1 (1%)	16 31
15	2T	129/146 (88%)	123 (95%)	6 (5%)	0	100 100
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	111 (97%)	3 (3%)	0	100 100
17	1V	99/101 (98%)	94 (95%)	3 (3%)	2 (2%)	6 11
17	2V	99/101 (98%)	91 (92%)	7 (7%)	1 (1%)	13 25
18	1W	110/113 (97%)	110 (100%)	0	0	100 100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100 100
19	1X	93/96 (97%)	89 (96%)	2 (2%)	2 (2%)	5 9
19	2X	93/96 (97%)	87 (94%)	6 (6%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
20	1Y	105/110 (96%)	99 (94%)	5 (5%)	1 (1%)	13 25
20	2Y	105/110 (96%)	97 (92%)	8 (8%)	0	100 100
21	1Z	148/206 (72%)	136 (92%)	9 (6%)	3 (2%)	6 11
21	2Z	156/206 (76%)	128 (82%)	24 (15%)	4 (3%)	4 7
22	10	75/85 (88%)	71 (95%)	4 (5%)	0	100 100
22	20	77/85 (91%)	71 (92%)	5 (6%)	1 (1%)	10 19
23	11	95/98 (97%)	90 (95%)	4 (4%)	1 (1%)	12 23
23	21	95/98 (97%)	90 (95%)	5 (5%)	0	100 100
24	12	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	55 (96%)	1 (2%)	1 (2%)	7 12
26	14	67/71 (94%)	54 (81%)	11 (16%)	2 (3%)	3 5
26	24	67/71 (94%)	54 (81%)	12 (18%)	1 (2%)	8 16
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
28	16	51/54 (94%)	51 (100%)	0	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
31	19	35/37 (95%)	34 (97%)	1 (3%)	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%)	3 5
33	2b	229/256 (90%)	178 (78%)	44 (19%)	7 (3%)	3 5
34	1c	204/239 (85%)	190 (93%)	14 (7%)	0	100 100
34	2c	204/239 (85%)	171 (84%)	28 (14%)	5 (2%)	4 7
35	1d	206/209 (99%)	194 (94%)	12 (6%)	0	100 100
35	2d	206/209 (99%)	189 (92%)	17 (8%)	0	100 100
36	1e	146/162 (90%)	133 (91%)	12 (8%)	1 (1%)	19 35

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
36	2e	146/162 (90%)	129 (88%)	14 (10%)	3 (2%)	5 10
37	1f	98/101 (97%)	97 (99%)	0	1 (1%)	13 25
37	2f	98/101 (97%)	96 (98%)	2 (2%)	0	100 100
38	1g	153/156 (98%)	143 (94%)	9 (6%)	1 (1%)	19 35
38	2g	153/156 (98%)	138 (90%)	11 (7%)	4 (3%)	4 7
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	122 (90%)	13 (10%)	0	100 100
40	1i	125/128 (98%)	110 (88%)	14 (11%)	1 (1%)	16 31
40	2i	125/128 (98%)	107 (86%)	17 (14%)	1 (1%)	16 31
41	1j	95/105 (90%)	80 (84%)	11 (12%)	4 (4%)	2 3
41	2j	94/105 (90%)	78 (83%)	13 (14%)	3 (3%)	3 4
42	1k	112/129 (87%)	105 (94%)	6 (5%)	1 (1%)	14 28
42	2k	112/129 (87%)	95 (85%)	15 (13%)	2 (2%)	7 12
43	1l	119/132 (90%)	114 (96%)	5 (4%)	0	100 100
43	2l	119/132 (90%)	110 (92%)	9 (8%)	0	100 100
44	1m	121/126 (96%)	104 (86%)	15 (12%)	2 (2%)	7 14
44	2m	120/126 (95%)	105 (88%)	14 (12%)	1 (1%)	16 31
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
45	2n	58/61 (95%)	47 (81%)	11 (19%)	0	100 100
46	1o	86/89 (97%)	81 (94%)	4 (5%)	1 (1%)	11 21
46	2o	86/89 (97%)	79 (92%)	7 (8%)	0	100 100
47	1p	80/88 (91%)	72 (90%)	8 (10%)	0	100 100
47	2p	80/88 (91%)	74 (92%)	5 (6%)	1 (1%)	10 19
48	1q	97/105 (92%)	90 (93%)	6 (6%)	1 (1%)	13 25
48	2q	97/105 (92%)	89 (92%)	7 (7%)	1 (1%)	13 25
49	1r	66/88 (75%)	62 (94%)	4 (6%)	0	100 100
49	2r	66/88 (75%)	63 (96%)	2 (3%)	1 (2%)	8 16
50	1s	81/93 (87%)	72 (89%)	9 (11%)	0	100 100
50	2s	81/93 (87%)	64 (79%)	15 (18%)	2 (2%)	4 7
51	1t	94/106 (89%)	83 (88%)	8 (8%)	3 (3%)	3 4
51	2t	94/106 (89%)	87 (93%)	5 (5%)	2 (2%)	5 10

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
52	1u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100
52	2u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
All	All	11358/12128 (94%)	10454 (92%)	798 (7%)	106 (1%)	14 28

All (106) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
7	1H	126	PRO
11	1P	38	GLN
11	1P	45	LEU
17	1V	43	GLU
19	1X	93	GLU
21	1Z	53	ILE
23	11	3	LYS
33	1b	17	PHE
33	1b	22	LYS
40	1i	54	ASP
44	1m	67	GLU
5	2F	130	ALA
8	2I	10	GLU
11	2P	36	LYS
26	24	45	GLY
33	2b	17	PHE
33	2b	123	ALA
34	2c	156	ARG
38	2g	55	GLY
38	2g	80	VAL
6	1G	43	LEU
15	1T	37	GLY
17	1V	79	VAL
20	1Y	54	LYS
21	1Z	156	LYS
26	14	49	PHE
26	14	62	ARG
33	1b	126	GLU
38	1g	79	ARG
41	1j	79	ARG
51	1t	47	GLY
6	2G	42	GLY
6	2G	124	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	2H	47	GLU
7	2H	126	PRO
10	2O	5	GLN
17	2V	79	VAL
21	2Z	144	LEU
34	2c	91	LEU
36	2e	85	GLY
40	2i	121	ARG
41	2j	75	ILE
44	2m	106	ASN
48	2q	68	ARG
19	1X	2	LYS
33	1b	8	LYS
48	1q	61	GLU
4	2E	52	LEU
5	2F	18	ARG
6	2G	84	LYS
11	2P	38	GLN
11	2P	44	GLY
33	2b	16	HIS
33	2b	20	GLU
33	2b	21	ARG
34	2c	95	THR
38	2g	4	ARG
38	2g	52	GLU
41	2j	79	ARG
49	2r	36	ASN
50	2s	81	ARG
51	2t	95	ALA
4	1E	52	LEU
6	1G	150	ASP
41	1j	55	LYS
41	1j	77	PRO
41	1j	78	ASN
44	1m	106	ASN
46	1o	88	ARG
6	2G	50	ALA
8	2I	41	GLU
9	2N	2	LYS
14	2S	84	GLN
34	2c	110	ASN
41	2j	78	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	2p	81	ARG
33	1b	125	PRO
36	1e	85	GLY
51	1t	95	ALA
5	2F	21	ALA
8	2I	40	THR
11	2P	29	LYS
34	2c	53	ALA
36	2e	96	PRO
33	1b	16	HIS
37	1f	40	VAL
6	2G	43	LEU
6	2G	127	GLY
21	2Z	134	PRO
22	20	12	ASN
25	23	59	VAL
36	2e	69	VAL
42	2k	49	GLY
50	2s	9	VAL
33	1b	231	GLU
21	2Z	158	PRO
42	1k	49	GLY
51	1t	100	ILE
9	2N	129	PRO
21	2Z	146	ILE
51	2t	47	GLY
33	2b	125	PRO
33	2b	231	GLU
42	2k	105	VAL
21	1Z	157	LEU

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%)	201 (94%)	14 (6%)	14 29

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	2D	215/218 (99%)	203 (94%)	12 (6%)	17 36
4	1E	164/166 (99%)	153 (93%)	11 (7%)	13 28
4	2E	164/166 (99%)	151 (92%)	13 (8%)	10 21
5	1F	160/166 (96%)	145 (91%)	15 (9%)	7 15
5	2F	159/166 (96%)	148 (93%)	11 (7%)	13 26
6	1G	143/156 (92%)	128 (90%)	15 (10%)	5 11
6	2G	143/156 (92%)	119 (83%)	24 (17%)	1 3
7	1H	144/148 (97%)	132 (92%)	12 (8%)	9 19
7	2H	144/148 (97%)	130 (90%)	14 (10%)	6 14
8	1I	113/124 (91%)	95 (84%)	18 (16%)	2 4
8	2I	105/124 (85%)	91 (87%)	14 (13%)	3 6
9	1N	118/119 (99%)	112 (95%)	6 (5%)	20 40
9	2N	118/119 (99%)	109 (92%)	9 (8%)	11 22
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36 63
10	2O	100/100 (100%)	97 (97%)	3 (3%)	36 63
11	1P	115/116 (99%)	107 (93%)	8 (7%)	12 26
11	2P	115/116 (99%)	104 (90%)	11 (10%)	7 14
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	18 37
12	2Q	111/111 (100%)	106 (96%)	5 (4%)	23 46
13	1R	101/101 (100%)	92 (91%)	9 (9%)	8 17
13	2R	101/101 (100%)	98 (97%)	3 (3%)	36 63
14	1S	86/88 (98%)	80 (93%)	6 (7%)	12 26
14	2S	85/88 (97%)	73 (86%)	12 (14%)	3 5
15	1T	115/127 (91%)	108 (94%)	7 (6%)	15 32
15	2T	113/127 (89%)	104 (92%)	9 (8%)	10 20
16	1U	93/94 (99%)	88 (95%)	5 (5%)	18 37
16	2U	93/94 (99%)	87 (94%)	6 (6%)	14 29
17	1V	80/82 (98%)	76 (95%)	4 (5%)	20 41
17	2V	80/82 (98%)	72 (90%)	8 (10%)	6 13
18	1W	90/92 (98%)	85 (94%)	5 (6%)	17 36
18	2W	90/92 (98%)	85 (94%)	5 (6%)	17 36

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
19	1X	77/78 (99%)	75 (97%)	2 (3%)	41 68
19	2X	77/78 (99%)	74 (96%)	3 (4%)	27 52
20	1Y	85/91 (93%)	77 (91%)	8 (9%)	7 15
20	2Y	85/91 (93%)	74 (87%)	11 (13%)	3 7
21	1Z	135/179 (75%)	123 (91%)	12 (9%)	8 17
21	2Z	137/179 (76%)	122 (89%)	15 (11%)	5 10
22	10	61/67 (91%)	56 (92%)	5 (8%)	9 19
22	20	62/67 (92%)	61 (98%)	1 (2%)	58 80
23	11	80/83 (96%)	77 (96%)	3 (4%)	28 53
23	21	80/83 (96%)	76 (95%)	4 (5%)	20 41
24	12	65/67 (97%)	62 (95%)	3 (5%)	23 45
24	22	65/67 (97%)	61 (94%)	4 (6%)	15 31
25	13	51/52 (98%)	48 (94%)	3 (6%)	16 33
25	23	50/52 (96%)	48 (96%)	2 (4%)	27 51
26	14	59/63 (94%)	50 (85%)	9 (15%)	2 4
26	24	53/63 (84%)	42 (79%)	11 (21%)	1 1
27	15	50/52 (96%)	47 (94%)	3 (6%)	16 33
27	25	50/52 (96%)	48 (96%)	2 (4%)	27 51
28	16	51/52 (98%)	47 (92%)	4 (8%)	10 21
28	26	50/52 (96%)	46 (92%)	4 (8%)	10 20
29	17	41/42 (98%)	38 (93%)	3 (7%)	11 24
29	27	41/42 (98%)	37 (90%)	4 (10%)	6 13
30	18	54/55 (98%)	51 (94%)	3 (6%)	17 36
30	28	54/55 (98%)	49 (91%)	5 (9%)	7 15
31	19	34/34 (100%)	33 (97%)	1 (3%)	37 64
31	29	34/34 (100%)	32 (94%)	2 (6%)	16 33
33	1b	192/220 (87%)	163 (85%)	29 (15%)	2 4
33	2b	187/220 (85%)	155 (83%)	32 (17%)	1 3
34	1c	142/188 (76%)	128 (90%)	14 (10%)	6 13
34	2c	140/188 (74%)	123 (88%)	17 (12%)	4 8
35	1d	169/181 (93%)	138 (82%)	31 (18%)	1 2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
35	2d	173/181 (96%)	157 (91%)	16 (9%)	7 15
36	1e	113/123 (92%)	104 (92%)	9 (8%)	10 20
36	2e	114/123 (93%)	99 (87%)	15 (13%)	3 6
37	1f	84/90 (93%)	75 (89%)	9 (11%)	5 11
37	2f	85/90 (94%)	83 (98%)	2 (2%)	44 70
38	1g	119/127 (94%)	105 (88%)	14 (12%)	4 9
38	2g	120/127 (94%)	107 (89%)	13 (11%)	5 11
39	1h	114/119 (96%)	108 (95%)	6 (5%)	19 38
39	2h	114/119 (96%)	99 (87%)	15 (13%)	3 6
40	1i	90/99 (91%)	81 (90%)	9 (10%)	6 13
40	2i	89/99 (90%)	76 (85%)	13 (15%)	2 5
41	1j	66/92 (72%)	58 (88%)	8 (12%)	4 8
41	2j	69/92 (75%)	54 (78%)	15 (22%)	1 1
42	1k	82/99 (83%)	75 (92%)	7 (8%)	8 18
42	2k	83/99 (84%)	79 (95%)	4 (5%)	21 43
43	1l	96/108 (89%)	92 (96%)	4 (4%)	25 49
43	2l	96/108 (89%)	89 (93%)	7 (7%)	11 24
44	1m	93/101 (92%)	83 (89%)	10 (11%)	5 11
44	2m	92/101 (91%)	82 (89%)	10 (11%)	5 10
45	1n	49/50 (98%)	46 (94%)	3 (6%)	15 32
45	2n	49/50 (98%)	46 (94%)	3 (6%)	15 32
46	1o	78/80 (98%)	72 (92%)	6 (8%)	10 22
46	2o	78/80 (98%)	71 (91%)	7 (9%)	8 16
47	1p	69/74 (93%)	63 (91%)	6 (9%)	8 17
47	2p	68/74 (92%)	61 (90%)	7 (10%)	6 12
48	1q	94/97 (97%)	89 (95%)	5 (5%)	19 38
48	2q	94/97 (97%)	86 (92%)	8 (8%)	8 18
49	1r	59/77 (77%)	54 (92%)	5 (8%)	8 18
49	2r	59/77 (77%)	56 (95%)	3 (5%)	20 40
50	1s	69/80 (86%)	63 (91%)	6 (9%)	8 17
50	2s	67/80 (84%)	56 (84%)	11 (16%)	2 3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
51	1t	70/82 (85%)	66 (94%)	4 (6%)	17 35
51	2t	70/82 (85%)	66 (94%)	4 (6%)	17 35
52	1u	18/22 (82%)	16 (89%)	2 (11%)	5 10
52	2u	18/22 (82%)	17 (94%)	1 (6%)	17 36
All	All	9296/10064 (92%)	8476 (91%)	820 (9%)	8 17

All (820) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	14	ARG
3	1D	37	LEU
3	1D	38	LYS
3	1D	61	LEU
3	1D	88	ARG
3	1D	99	ASP
3	1D	142	VAL
3	1D	211	ARG
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	1	MET
4	1E	12	THR
4	1E	47	VAL
4	1E	49	LEU
4	1E	73	GLU
4	1E	78	LEU
4	1E	89	ASP
4	1E	113	PHE
4	1E	116	VAL
4	1E	119	ARG
4	1E	184	VAL
5	1F	24	LEU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	1F	106	ARG
5	1F	137	LYS
5	1F	140	LEU
5	1F	144	LYS
5	1F	162	LEU
5	1F	168	ARG
5	1F	183	VAL
5	1F	192	LEU
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	9	ARG
6	1G	21	ARG
6	1G	22	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	47	LYS
6	1G	91	ARG
6	1G	126	ASP
6	1G	128	ARG
6	1G	133	LEU
6	1G	140	ILE
6	1G	159	VAL
7	1H	13	LYS
7	1H	23	ARG
7	1H	24	VAL
7	1H	76	VAL
7	1H	92	ILE
7	1H	98	LEU
7	1H	116	GLU
7	1H	124	GLU
7	1H	127	GLU
7	1H	129	THR
7	1H	130	ARG
7	1H	160	LYS
8	1I	5	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	38	LEU
8	1I	47	LEU
8	1I	61	ARG
8	1I	74	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	1I	77	LEU
8	1I	87	LYS
8	1I	92	VAL
8	1I	96	ASP
8	1I	101	LEU
8	1I	109	ILE
8	1I	123	LEU
8	1I	129	THR
8	1I	133	HIS
8	1I	142	VAL
8	1I	144	VAL
9	1N	8	GLN
9	1N	10	GLU
9	1N	28	THR
9	1N	48	MET
9	1N	61	ARG
9	1N	62	VAL
10	1O	35	VAL
10	1O	42	SER
10	1O	112	MET
11	1P	15	ARG
11	1P	75	ILE
11	1P	95	VAL
11	1P	98	GLU
11	1P	125	VAL
11	1P	133	SER
11	1P	147	LEU
11	1P	148	LEU
12	1Q	1	MET
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	56	ARG
12	1Q	75	THR
12	1Q	133	ARG
13	1R	6	SER
13	1R	15	SER
13	1R	24	GLN
13	1R	36	THR
13	1R	44	LEU
13	1R	100	LEU
13	1R	102	GLU
13	1R	111	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	1R	114	VAL
14	1S	3	ARG
14	1S	14	VAL
14	1S	25	ARG
14	1S	46	VAL
14	1S	69	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	34	VAL
15	1T	36	GLU
15	1T	82	LEU
15	1T	96	ARG
15	1T	118	ARG
15	1T	128	GLU
16	1U	5	LYS
16	1U	27	LEU
16	1U	31	SER
16	1U	74	LEU
16	1U	95	LEU
17	1V	10	LYS
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
18	1W	4	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	63	ASP
18	1W	67	ASP
19	1X	57	LEU
19	1X	88	LYS
20	1Y	1	MET
20	1Y	8	LYS
20	1Y	31	LEU
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	92	ASN
20	1Y	99	CYS
21	1Z	49	ARG
21	1Z	53	ILE
21	1Z	61	LEU
21	1Z	65	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	1Z	66	SER
21	1Z	129	SER
21	1Z	132	ASN
21	1Z	140	ASP
21	1Z	149	SER
21	1Z	154	ASP
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	14	ARG
22	10	49	LYS
22	10	74	ARG
22	10	82	ARG
23	11	40	ARG
23	11	59	THR
23	11	83	GLU
24	12	24	LEU
24	12	38	GLN
24	12	55	ARG
25	13	23	LEU
25	13	55	ARG
25	13	60	GLU
26	14	30	GLU
26	14	32	TYR
26	14	46	GLN
26	14	49	PHE
26	14	53	GLU
26	14	60	GLN
26	14	61	ARG
26	14	63	TYR
26	14	67	TYR
27	15	6	VAL
27	15	40	LYS
27	15	59	GLU
28	16	4	GLU
28	16	5	VAL
28	16	6	ARG
28	16	19	ARG
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	29	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	18	31	HIS
30	18	34	TRP
31	19	19	ARG
33	1b	7	VAL
33	1b	8	LYS
33	1b	12	GLU
33	1b	15	VAL
33	1b	17	PHE
33	1b	20	GLU
33	1b	24	TRP
33	1b	35	GLU
33	1b	37	ASN
33	1b	39	ILE
33	1b	44	LEU
33	1b	54	THR
33	1b	64	ARG
33	1b	73	THR
33	1b	80	ILE
33	1b	81	VAL
33	1b	82	ARG
33	1b	127	ILE
33	1b	137	ARG
33	1b	142	LEU
33	1b	160	ASP
33	1b	172	ILE
33	1b	185	ILE
33	1b	196	LEU
33	1b	208	ILE
33	1b	212	GLN
33	1b	215	LEU
33	1b	229	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	5	ILE
34	1c	8	ILE
34	1c	15	THR
34	1c	64	VAL
34	1c	77	ILE
34	1c	89	GLU
34	1c	104	GLN
34	1c	105	GLU
34	1c	119	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	1c	175	LEU
34	1c	195	VAL
34	1c	196	LEU
34	1c	207	VAL
35	1d	3	ARG
35	1d	10	ARG
35	1d	19	LEU
35	1d	31	CYS
35	1d	53	ASP
35	1d	59	ARG
35	1d	61	LYS
35	1d	70	ILE
35	1d	76	ARG
35	1d	77	ASN
35	1d	86	LYS
35	1d	88	VAL
35	1d	91	SER
35	1d	107	ARG
35	1d	119	GLN
35	1d	127	THR
35	1d	135	LEU
35	1d	141	ARG
35	1d	144	ASP
35	1d	157	LEU
35	1d	158	ILE
35	1d	160	GLN
35	1d	175	SER
35	1d	177	ASP
35	1d	182	LYS
35	1d	187	ARG
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP
35	1d	194	LEU
35	1d	200	GLU
36	1e	9	LYS
36	1e	12	LEU
36	1e	24	ARG
36	1e	31	LEU
36	1e	41	VAL
36	1e	47	LYS
36	1e	53	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	1e	56	GLN
36	1e	120	THR
37	1f	10	LEU
37	1f	16	GLN
37	1f	19	LEU
37	1f	54	LYS
37	1f	55	ASP
37	1f	64	GLN
37	1f	72	VAL
37	1f	81	ILE
37	1f	92	LYS
38	1g	12	LEU
38	1g	20	ASP
38	1g	24	THR
38	1g	27	ILE
38	1g	41	ARG
38	1g	50	ILE
38	1g	59	LEU
38	1g	61	VAL
38	1g	85	TYR
38	1g	94	ARG
38	1g	104	LEU
38	1g	110	GLN
38	1g	114	ARG
38	1g	115	ARG
39	1h	3	THR
39	1h	52	ASP
39	1h	54	ASP
39	1h	77	GLU
39	1h	112	LEU
39	1h	133	LEU
40	1i	23	ASN
40	1i	25	LYS
40	1i	50	LEU
40	1i	56	LEU
40	1i	64	THR
40	1i	88	TYR
40	1i	89	ASN
40	1i	96	LEU
40	1i	121	ARG
41	1j	38	ILE
41	1j	43	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	1j	66	ARG
41	1j	72	VAL
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
41	1j	96	ILE
42	1k	31	THR
42	1k	48	ILE
42	1k	77	MET
42	1k	87	THR
42	1k	91	ARG
42	1k	109	VAL
42	1k	114	VAL
43	1l	18	VAL
43	1l	22	SER
43	1l	83	VAL
43	1l	89	ARG
44	1m	3	ARG
44	1m	4	ILE
44	1m	11	ARG
44	1m	43	THR
44	1m	49	THR
44	1m	64	TRP
44	1m	70	LEU
44	1m	78	ILE
44	1m	98	VAL
44	1m	106	ASN
45	1n	3	ARG
45	1n	32	SER
45	1n	33	VAL
46	1o	10	LYS
46	1o	39	LEU
46	1o	47	LYS
46	1o	76	GLU
46	1o	84	LYS
46	1o	88	ARG
47	1p	20	VAL
47	1p	27	LYS
47	1p	43	LYS
47	1p	45	THR
47	1p	57	ARG
47	1p	62	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	1q	34	LYS
48	1q	45	HIS
48	1q	60	ILE
48	1q	89	LEU
48	1q	93	GLN
49	1r	35	ARG
49	1r	36	ASN
49	1r	54	ARG
49	1r	63	GLN
49	1r	76	LEU
50	1s	4	SER
50	1s	12	ASP
50	1s	28	LYS
50	1s	30	LEU
50	1s	66	MET
50	1s	79	THR
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	90	GLN
52	1u	15	ARG
52	1u	20	LYS
3	2D	14	ARG
3	2D	20	ASP
3	2D	37	LEU
3	2D	38	LYS
3	2D	61	LEU
3	2D	99	ASP
3	2D	111	LEU
3	2D	142	VAL
3	2D	171	ASP
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
4	2E	1	MET
4	2E	12	THR
4	2E	14	ILE
4	2E	38	THR
4	2E	73	GLU
4	2E	77	ILE
4	2E	78	LEU
4	2E	90	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2E	94	GLU
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	184	VAL
5	2F	20	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	41	LEU
5	2F	70	THR
5	2F	74	ARG
5	2F	126	VAL
5	2F	137	LYS
5	2F	145	GLU
5	2F	183	VAL
5	2F	189	THR
6	2G	3	LEU
6	2G	5	VAL
6	2G	7	LEU
6	2G	18	GLU
6	2G	26	GLN
6	2G	28	VAL
6	2G	31	VAL
6	2G	41	GLN
6	2G	43	LEU
6	2G	45	GLU
6	2G	49	ASP
6	2G	51	ARG
6	2G	53	LEU
6	2G	62	LEU
6	2G	79	ASN
6	2G	91	ARG
6	2G	124	SER
6	2G	130	ASN
6	2G	133	LEU
6	2G	140	ILE
6	2G	155	MET
6	2G	162	THR
6	2G	165	THR
6	2G	170	ARG
7	2H	7	LEU
7	2H	15	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	2H	23	ARG
7	2H	30	LYS
7	2H	32	GLU
7	2H	57	ASP
7	2H	76	VAL
7	2H	84	SER
7	2H	99	VAL
7	2H	122	THR
7	2H	129	THR
7	2H	130	ARG
7	2H	134	SER
7	2H	136	ILE
8	2I	15	VAL
8	2I	38	LEU
8	2I	44	LEU
8	2I	50	ARG
8	2I	58	LEU
8	2I	61	ARG
8	2I	68	LEU
8	2I	82	ARG
8	2I	86	THR
8	2I	117	GLU
8	2I	123	LEU
8	2I	127	VAL
8	2I	142	VAL
8	2I	145	VAL
9	2N	1	MET
9	2N	28	THR
9	2N	32	THR
9	2N	38	HIS
9	2N	48	MET
9	2N	61	ARG
9	2N	73	THR
9	2N	83	LYS
9	2N	131	GLN
10	2O	52	VAL
10	2O	69	ILE
10	2O	104	ARG
11	2P	3	LEU
11	2P	65	ARG
11	2P	70	GLN
11	2P	95	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	2P	96	THR
11	2P	98	GLU
11	2P	123	LEU
11	2P	125	VAL
11	2P	135	LEU
11	2P	147	LEU
11	2P	148	LEU
12	2Q	1	MET
12	2Q	6	ARG
12	2Q	10	ARG
12	2Q	38	GLU
12	2Q	110	THR
13	2R	100	LEU
13	2R	111	LEU
13	2R	114	VAL
14	2S	15	ARG
14	2S	35	ILE
14	2S	40	ILE
14	2S	43	GLU
14	2S	63	THR
14	2S	67	ARG
14	2S	75	GLU
14	2S	76	LYS
14	2S	78	LEU
14	2S	83	LYS
14	2S	84	GLN
14	2S	110	LEU
15	2T	16	ARG
15	2T	28	VAL
15	2T	64	ARG
15	2T	72	VAL
15	2T	74	ARG
15	2T	89	VAL
15	2T	96	ARG
15	2T	115	ARG
15	2T	125	ARG
16	2U	8	VAL
16	2U	59	ARG
16	2U	74	LEU
16	2U	77	SER
16	2U	108	GLU
16	2U	111	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	2V	7	THR
17	2V	52	VAL
17	2V	53	GLU
17	2V	56	SER
17	2V	61	VAL
17	2V	79	VAL
17	2V	82	ARG
17	2V	98	GLU
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	67	ASP
18	2W	92	ARG
19	2X	57	LEU
19	2X	75	ASP
19	2X	81	VAL
20	2Y	1	MET
20	2Y	11	ASP
20	2Y	14	LEU
20	2Y	21	LYS
20	2Y	38	ILE
20	2Y	39	VAL
20	2Y	67	LEU
20	2Y	72	VAL
20	2Y	91	GLU
20	2Y	97	ARG
20	2Y	99	CYS
21	2Z	31	ARG
21	2Z	35	ARG
21	2Z	41	LEU
21	2Z	47	VAL
21	2Z	67	LEU
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	81	ARG
21	2Z	100	VAL
21	2Z	121	HIS
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	161	VAL
21	2Z	170	THR
21	2Z	171	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	20	10	THR
23	21	26	ARG
23	21	40	ARG
23	21	78	LYS
23	21	89	GLU
24	22	30	ARG
24	22	35	LEU
24	22	62	THR
24	22	70	GLN
25	23	31	LEU
25	23	54	VAL
26	24	5	ILE
26	24	10	VAL
26	24	26	SER
26	24	31	ILE
26	24	33	VAL
26	24	34	GLU
26	24	50	VAL
26	24	59	PHE
26	24	63	TYR
26	24	67	TYR
26	24	68	ARG
27	25	6	VAL
27	25	59	GLU
28	26	7	ILE
28	26	19	ARG
28	26	34	LEU
28	26	52	VAL
29	27	1	MET
29	27	41	ARG
29	27	46	VAL
29	27	47	ARG
30	28	15	LYS
30	28	29	LYS
30	28	31	HIS
30	28	34	TRP
30	28	37	SER
31	29	7	VAL
31	29	22	ARG
33	2b	8	LYS
33	2b	9	GLU
33	2b	10	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	2b	11	LEU
33	2b	16	HIS
33	2b	24	TRP
33	2b	35	GLU
33	2b	47	THR
33	2b	48	MET
33	2b	49	GLU
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	76	GLN
33	2b	82	ARG
33	2b	83	MET
33	2b	93	VAL
33	2b	110	GLN
33	2b	112	VAL
33	2b	117	GLU
33	2b	127	ILE
33	2b	138	LEU
33	2b	142	LEU
33	2b	185	ILE
33	2b	187	LEU
33	2b	189	ASP
33	2b	191	ASP
33	2b	198	ASP
33	2b	201	ILE
33	2b	224	GLN
33	2b	230	VAL
33	2b	236	TYR
34	2c	15	THR
34	2c	16	ARG
34	2c	44	GLU
34	2c	54	ARG
34	2c	55	VAL
34	2c	57	ILE
34	2c	70	VAL
34	2c	85	ARG
34	2c	91	LEU
34	2c	101	LEU
34	2c	105	GLU
34	2c	116	VAL
34	2c	132	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	2c	140	ARG
34	2c	153	VAL
34	2c	161	GLU
34	2c	190	ARG
35	2d	8	VAL
35	2d	17	VAL
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	83	SER
35	2d	86	LYS
35	2d	99	SER
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	188	LEU
35	2d	196	LEU
36	2e	13	ILE
36	2e	18	ARG
36	2e	20	GLN
36	2e	25	ARG
36	2e	31	LEU
36	2e	38	GLN
36	2e	41	VAL
36	2e	45	PHE
36	2e	51	VAL
36	2e	55	VAL
36	2e	64	ARG
36	2e	73	ASN
36	2e	78	HIS
36	2e	91	LEU
36	2e	149	GLU
37	2f	21	LEU
37	2f	63	TYR
38	2g	6	ARG
38	2g	13	GLN
38	2g	24	THR
38	2g	31	MET
38	2g	36	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	2g	45	ASP
38	2g	79	ARG
38	2g	85	TYR
38	2g	94	ARG
38	2g	106	GLN
38	2g	114	ARG
38	2g	115	ARG
38	2g	135	VAL
39	2h	18	ARG
39	2h	24	THR
39	2h	25	ASP
39	2h	29	SER
39	2h	51	VAL
39	2h	52	ASP
39	2h	99	GLU
39	2h	103	VAL
39	2h	112	LEU
39	2h	113	SER
39	2h	127	LEU
39	2h	129	VAL
39	2h	133	LEU
39	2h	135	CYS
39	2h	137	VAL
40	2i	20	ARG
40	2i	27	THR
40	2i	38	GLN
40	2i	40	LEU
40	2i	47	LEU
40	2i	54	ASP
40	2i	65	VAL
40	2i	75	ASP
40	2i	89	ASN
40	2i	102	LEU
40	2i	113	LYS
40	2i	124	GLN
40	2i	125	TYR
41	2j	8	LEU
41	2j	9	ARG
41	2j	21	GLN
41	2j	23	ILE
41	2j	34	VAL
41	2j	38	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	2j	43	ARG
41	2j	45	ARG
41	2j	49	VAL
41	2j	67	THR
41	2j	69	ASN
41	2j	73	ASP
41	2j	97	GLU
41	2j	98	ILE
41	2j	100	THR
42	2k	14	VAL
42	2k	48	ILE
42	2k	81	ASP
42	2k	105	VAL
43	2l	18	VAL
43	2l	42	THR
43	2l	46	LYS
43	2l	47	LYS
43	2l	62	SER
43	2l	116	SER
43	2l	117	ARG
44	2m	4	ILE
44	2m	11	ARG
44	2m	32	GLU
44	2m	73	GLU
44	2m	90	LEU
44	2m	94	ARG
44	2m	103	THR
44	2m	106	ASN
44	2m	110	ARG
44	2m	114	ARG
45	2n	3	ARG
45	2n	22	THR
45	2n	33	VAL
46	2o	13	GLN
46	2o	27	VAL
46	2o	39	LEU
46	2o	54	ARG
46	2o	60	VAL
46	2o	64	ARG
46	2o	83	GLU
47	2p	2	VAL
47	2p	8	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	2p	21	VAL
47	2p	42	ARG
47	2p	54	GLU
47	2p	60	LEU
47	2p	73	LEU
48	2q	5	VAL
48	2q	14	LYS
48	2q	19	VAL
48	2q	41	LYS
48	2q	63	ARG
48	2q	70	ARG
48	2q	84	LEU
48	2q	97	SER
49	2r	31	LEU
49	2r	35	ARG
49	2r	82	THR
50	2s	12	ASP
50	2s	23	ASN
50	2s	37	ARG
50	2s	43	GLU
50	2s	47	HIS
50	2s	48	THR
50	2s	49	ILE
50	2s	56	GLN
50	2s	57	HIS
50	2s	58	VAL
50	2s	83	HIS
51	2t	9	ASN
51	2t	15	ARG
51	2t	71	THR
51	2t	93	GLU
52	2u	7	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (108) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	116	GLN
4	1E	48	GLN
5	1F	8	GLN
5	1F	203	GLN
6	1G	26	GLN
10	1O	3	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	1Q	12	GLN
13	1R	71	GLN
14	1S	95	HIS
16	1U	81	HIS
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	92	ASN
21	1Z	54	HIS
21	1Z	73	GLN
22	10	35	ASN
24	12	46	GLN
25	13	32	GLN
33	1b	40	HIS
34	1c	6	HIS
34	1c	162	GLN
34	1c	170	GLN
34	1c	181	ASN
35	1d	116	GLN
35	1d	123	HIS
36	1e	20	GLN
36	1e	78	HIS
36	1e	141	GLN
37	1f	57	GLN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	86	GLN
39	1h	15	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	58	HIS
40	1i	124	GLN
41	1j	56	HIS
46	1o	46	HIS
47	1p	13	HIS
48	1q	93	GLN
49	1r	63	GLN
50	1s	47	HIS
50	1s	83	HIS
51	1t	90	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2D	87	ASN
4	2E	48	GLN
4	2E	180	ASN
5	2F	69	HIS
6	2G	108	ASN
6	2G	132	ASN
7	2H	139	GLN
7	2H	143	GLN
7	2H	147	ASN
8	2I	105	HIS
10	2O	3	GLN
10	2O	5	GLN
11	2P	70	GLN
12	2Q	12	GLN
12	2Q	13	GLN
14	2S	38	GLN
15	2T	43	GLN
16	2U	81	HIS
16	2U	94	ASN
18	2W	60	ASN
19	2X	31	HIS
21	2Z	34	ASN
21	2Z	55	HIS
21	2Z	73	GLN
23	21	56	GLN
24	22	70	GLN
25	23	32	GLN
33	2b	95	GLN
33	2b	135	GLN
34	2c	98	ASN
34	2c	162	GLN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
36	2e	38	GLN
36	2e	72	GLN
36	2e	130	ASN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	2g	86	GLN
38	2g	106	GLN
39	2h	78	GLN
40	2i	3	GLN
40	2i	31	GLN
40	2i	89	ASN
41	2j	21	GLN
42	2k	117	ASN
43	2l	99	HIS
44	2m	40	ASN
44	2m	62	ASN
44	2m	77	ASN
46	2o	62	GLN
49	2r	63	GLN
50	2s	57	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	75	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	420 (14%)	29 (1%)
1	2A	2790/2915 (95%)	446 (15%)	28 (1%)
2	1B	119/121 (98%)	9 (7%)	0
2	2B	118/121 (97%)	26 (22%)	0
32	1a	1494/1521 (98%)	247 (16%)	0
32	2a	1498/1521 (98%)	306 (20%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	2 (16%)	0
54	1w	68/76 (89%)	21 (30%)	0
54	1y	71/76 (93%)	24 (33%)	0
54	2w	65/76 (85%)	22 (33%)	0
54	2y	69/76 (90%)	26 (37%)	0
55	1x	74/77 (96%)	12 (16%)	0
55	2x	74/77 (96%)	13 (17%)	0
All	All	9327/9620 (96%)	1575 (16%)	57 (0%)

All (1575) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	34	C
1	1A	45	C
1	1A	63	U
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(A)	G
1	1A	154(A)	C
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(A)	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	363(B)	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	479	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	513	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(A)	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	764	A
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	855	G
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	880	G
1	1A	883	G
1	1A	884	C
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	898	C
1	1A	899	A
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	946	G
1	1A	953	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	1040	C
1	1A	1044	G
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	1059	G
1	1A	1063	G
1	1A	1064	C
1	1A	1068	G
1	1A	1069	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1080	C
1	1A	1081	U
1	1A	1083	U
1	1A	1085	A
1	1A	1086	A
1	1A	1088	A
1	1A	1089	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1090	U
1	1A	1092	C
1	1A	1093	G
1	1A	1094	U
1	1A	1097	U
1	1A	1099	G
1	1A	1101	U
1	1A	1108	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1116	C
1	1A	1117	G
1	1A	1135	C
1	1A	1136	G
1	1A	1141	U
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	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	1352	U
1	1A	1359	A
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1513	C
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1745(A)	C
1	1A	1756	G
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1816	G
1	1A	1817	G
1	1A	1828	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
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	1962	5MC
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
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
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	2062	A
1	1A	2069	G
1	1A	2093	G
1	1A	2108	C
1	1A	2110	G
1	1A	2113	U
1	1A	2114	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2116	G
1	1A	2119	A
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	2140	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	2160	G
1	1A	2161	C
1	1A	2165	G
1	1A	2166	G
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2180	U
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2219	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2279	G
1	1A	2280	G
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	2321	G
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2379	G
1	1A	2383	G
1	1A	2385	C
1	1A	2406	U
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2502	G
1	1A	2504	U
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2609	U
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	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2721	A
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2804	C
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	35	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	1B	45	A
2	1B	56	G
2	1B	64	C
2	1B	67	G
2	1B	73	A
2	1B	84	C
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	73	G
32	1a	76	C
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	105	G
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
32	1a	180	U
32	1a	182	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	203	U
32	1a	204	U
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	267	C
32	1a	289	G
32	1a	308	C
32	1a	309	G
32	1a	317	G
32	1a	328	C
32	1a	330	C
32	1a	332	G
32	1a	342	C
32	1a	345	C
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	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	451	A
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	483	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	518	C
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	574	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	596	C
32	1a	607	A
32	1a	616	G
32	1a	630	G
32	1a	639	G
32	1a	653	A
32	1a	660	G
32	1a	665	A
32	1a	666	G
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	703	G
32	1a	717	C
32	1a	723	U
32	1a	731	G
32	1a	749	C
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	816	A
32	1a	817	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	876	G
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	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	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	997	U
32	1a	999	C
32	1a	1000	U
32	1a	1001	A
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1046	A
32	1a	1053	G
32	1a	1081	G
32	1a	1086	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G
32	1a	1123	A
32	1a	1124	G
32	1a	1127	G
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	1140	C
32	1a	1146	A
32	1a	1151	A
32	1a	1152	A
32	1a	1154	G
32	1a	1159	U
32	1a	1181	G
32	1a	1184	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1204	A
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1236	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1238	A
32	1a	1250	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
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	1297	C
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1331	G
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1364	U
32	1a	1365	G
32	1a	1370	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
53	1v	13	A
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	9	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	34	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	61	C
54	1w	62	C
54	1w	66	U
54	1w	68	C
54	1w	73	A
55	1x	6	G
55	1x	9	G
55	1x	14	A
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	22	G
55	1x	42	G
55	1x	47	U
55	1x	61	C
55	1x	69	C
55	1x	70	G
54	1y	5	G
54	1y	6	G
54	1y	7	A
54	1y	14	A
54	1y	19	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	1y	20	U
54	1y	21	A
54	1y	34	G
54	1y	35	A
54	1y	36	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	49	C
54	1y	53	G
54	1y	56	C
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	64	A
54	1y	65	G
54	1y	70	G
1	2A	8	A
1	2A	12	U
1	2A	15	G
1	2A	23	G
1	2A	34	C
1	2A	35	G
1	2A	36	G
1	2A	45	C
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	79	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	95	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	157	U
1	2A	173	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	250	G
1	2A	266	G
1	2A	267	C
1	2A	271(A)	A
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	272(J)	C
1	2A	274	G
1	2A	277	C
1	2A	278	A
1	2A	294	A
1	2A	311	A
1	2A	317	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	363(B)	G
1	2A	386	G
1	2A	391	G
1	2A	396	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	403	U
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	443	A
1	2A	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	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
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	599	G
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
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	717	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	726	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
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	793	A
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	852	G
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	874	G
1	2A	879	G
1	2A	880	G
1	2A	884	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	897	C
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1043	C
1	2A	1117	G
1	2A	1118	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1144	G
1	2A	1171	G
1	2A	1181	C
1	2A	1188	U
1	2A	1195	G
1	2A	1196	C
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1236	G
1	2A	1244	G
1	2A	1247	A
1	2A	1253	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1284	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1370	C
1	2A	1380	G
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
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	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1582	C
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1616	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1699	G
1	2A	1700	A
1	2A	1701	A
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1756	G
1	2A	1758	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1769	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	1896	G
1	2A	1900	A
1	2A	1906	G
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
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
1	2A	2032	G
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	2062	A
1	2A	2069	G
1	2A	2099	U
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2140	C
1	2A	2142	C
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2172	U
1	2A	2174	C
1	2A	2176	A
1	2A	2178	C
1	2A	2183	C
1	2A	2185	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	2225	A
1	2A	2239	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2275	C
1	2A	2278	A
1	2A	2283	C
1	2A	2287	A
1	2A	2294	C
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2376	A
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2403	C
1	2A	2406	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	2468	G
1	2A	2469	A
1	2A	2476	A
1	2A	2490	G
1	2A	2491	U
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2634	G
1	2A	2654	A
1	2A	2663	G
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2718	G
1	2A	2726	U
1	2A	2733	A
1	2A	2751	G
1	2A	2757	A
1	2A	2761	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2879	C
1	2A	2880	C
1	2A	2892	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2894	G
1	2A	2895	U
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	17	C
2	2B	23	G
2	2B	33	G
2	2B	34	U
2	2B	35	U
2	2B	40	U
2	2B	41	U
2	2B	42	C
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	85	G
2	2B	94	C
2	2B	108	U
2	2B	110	G
2	2B	113	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	65	U
32	2a	66	G
32	2a	70	G
32	2a	73	G
32	2a	76	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	79	G
32	2a	89	C
32	2a	101	A
32	2a	105	G
32	2a	116	A
32	2a	121	C
32	2a	129(A)	G
32	2a	131	C
32	2a	142	G
32	2a	144	G
32	2a	156	G
32	2a	163	C
32	2a	180	U
32	2a	182	U
32	2a	189(A)	C
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	217	C
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	279	A
32	2a	281	G
32	2a	289	G
32	2a	301	G
32	2a	306	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	339	C
32	2a	345	C
32	2a	350	G
32	2a	351	G
32	2a	352	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	411	A
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	458	C
32	2a	470	C
32	2a	471	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	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	553	A
32	2a	559	A
32	2a	564	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	607	A
32	2a	619	U
32	2a	630	G
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	755	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	834	C
32	2a	840	C
32	2a	841	U
32	2a	859	A
32	2a	870	U
32	2a	875	C
32	2a	880	C
32	2a	887	G
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	934	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	935	A
32	2a	942	G
32	2a	960	U
32	2a	961	U
32	2a	963	G
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	984	C
32	2a	989	C
32	2a	990	C
32	2a	991	U
32	2a	992	U
32	2a	993	G
32	2a	995	C
32	2a	996	A
32	2a	997	U
32	2a	999	C
32	2a	1000	U
32	2a	1001	A
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1008	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1033	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	1053	G
32	2a	1062	U
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1078	U
32	2a	1079	G
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1087	G
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	1104	G
32	2a	1108	G
32	2a	1109	C
32	2a	1115	C
32	2a	1117	G
32	2a	1122	U
32	2a	1124	G
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1133	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1143	G
32	2a	1146	A
32	2a	1152	A
32	2a	1154	G
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1182	G
32	2a	1184	G
32	2a	1191	A
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1232	U
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1246	C
32	2a	1253	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1261	A
32	2a	1264	C
32	2a	1265	G
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1287	A
32	2a	1299	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1319	A
32	2a	1320	C
32	2a	1323	G
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1358	U
32	2a	1359	C
32	2a	1363	C
32	2a	1363(A)	A
32	2a	1368	G
32	2a	1380	U
32	2a	1398	A
32	2a	1400	5MC
32	2a	1404	5MC
32	2a	1416	G
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	1499	A
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	2v	14	A
54	2w	3	C
54	2w	5	G
54	2w	9	A
54	2w	12	U
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	27	G
54	2w	34	G
54	2w	46	G7M
54	2w	48	C
54	2w	58	A
54	2w	62	C
54	2w	63	G
54	2w	65	G
54	2w	66	U
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	71	G
54	2w	73	A
55	2x	9	G
55	2x	13	C
55	2x	18	G
55	2x	19	G
55	2x	21	A
55	2x	22	G
55	2x	43	A
55	2x	46	G
55	2x	47	U
55	2x	48	C
55	2x	51	C
55	2x	52	G
55	2x	68	C
54	2y	5	G
54	2y	7	A
54	2y	15	G
54	2y	19	G
54	2y	23	A
54	2y	26	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	2y	27	G
54	2y	40	C
54	2y	41	C
54	2y	43	C
54	2y	45	U
54	2y	46	G7M
54	2y	48	C
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	54	5MU
54	2y	56	C
54	2y	58	A
54	2y	59	U
54	2y	60	U
54	2y	61	C
54	2y	62	C
54	2y	68	C
54	2y	69	G
54	2y	70	G

All (57) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	266	G
1	1A	271(J)	C
1	1A	278	A
1	1A	548	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	974	G
1	1A	1174	A
1	1A	1176	G
1	1A	1379	A
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1762	A
1	1A	1992	G
1	1A	2170	A
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	196	A
1	2A	228	A
1	2A	229	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	752	A
1	2A	827	U
1	2A	856	C
1	2A	896	A
1	2A	900	A
1	2A	1026	U
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1497	U
1	2A	1530	C
1	2A	1653	G
1	2A	1698	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2406	U
1	2A	2689	U
1	2A	2756	U

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

86 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	$\#\|Z\| > 2$
1	5MC	2A	1942	1	19,22,23	1.68	3 (15%)	26,32,35	1.09	2 (7%)
54	PSU	1w	32	56,54	18,21,22	1.39	2 (11%)	21,30,33	1.97	4 (19%)
32	G7M	2a	527	56,32	20,26,27	1.24	2 (10%)	16,39,42	0.52	0
1	OMG	1A	2251	55,1,56	19,26,27	0.88	1 (5%)	21,38,41	1.06	2 (9%)
1	PSU	1A	2605	1,56	18,21,22	1.45	3 (16%)	21,30,33	2.18	5 (23%)
32	MA6	2a	1518	32	19,26,27	1.01	2 (10%)	18,38,41	1.91	3 (16%)
32	5MC	1a	967	32	19,22,23	1.62	2 (10%)	26,32,35	1.07	2 (7%)
32	5MC	1a	1407	32	19,22,23	1.55	2 (10%)	26,32,35	1.12	2 (7%)
54	PSU	2w	55	54	18,21,22	1.39	2 (11%)	21,30,33	2.02	3 (14%)
1	2MA	1A	2503	1,56	17,25,26	1.05	2 (11%)	16,37,40	1.40	2 (12%)
32	2MG	2a	1207	32	18,26,27	0.91	1 (5%)	16,38,41	1.48	4 (25%)
32	4OC	1a	1402	32	20,23,24	0.71	0	25,32,35	1.00	1 (4%)
54	PSU	1w	39	54	18,21,22	1.31	2 (11%)	21,30,33	2.12	4 (19%)
32	UR3	1a	1498	32	19,22,23	1.02	1 (5%)	26,32,35	1.76	4 (15%)
1	5MU	1A	1915	1	19,22,23	1.43	5 (26%)	27,32,35	2.12	6 (22%)
32	5MC	2a	1407	32	19,22,23	1.63	3 (15%)	26,32,35	1.20	3 (11%)
32	4OC	2a	1402	32	20,23,24	0.77	0	25,32,35	1.01	2 (8%)
32	5MC	1a	1404	32	19,22,23	1.72	3 (15%)	26,32,35	1.22	4 (15%)
54	5MU	2y	54	54	19,22,23	1.52	5 (26%)	27,32,35	1.79	8 (29%)
54	PSU	2y	39	54	18,21,22	1.37	2 (11%)	21,30,33	1.84	3 (14%)
55	5MU	2x	54	55	19,22,23	1.42	5 (26%)	27,32,35	2.07	8 (29%)
54	PSU	1w	55	54	18,21,22	1.37	2 (11%)	21,30,33	1.97	3 (14%)
54	4SU	2y	8	54	18,21,22	1.76	4 (22%)	25,30,33	2.07	4 (16%)
55	31H	2x	76	55,56	27,34,35	0.94	1 (3%)	22,47,50	3.42	6 (27%)
55	5MC	1x	32	55	19,22,23	1.66	3 (15%)	26,32,35	1.15	3 (11%)
55	4SU	2x	8	55,56	18,21,22	2.03	6 (33%)	25,30,33	1.42	4 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	4SU	1y	8	54	18,21,22	1.81	6 (33%)	25,30,33	1.78	5 (20%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	21,30,33	1.89	3 (14%)
54	MIA	1y	37	54	17,24,32	0.96	1 (5%)	16,35,47	1.32	2 (12%)
1	5MU	1A	1939	1,56	19,22,23	1.46	5 (26%)	27,32,35	2.27	7 (25%)
54	G7M	1w	46	54	20,26,27	1.26	2 (10%)	16,39,42	0.66	0
1	5MU	2A	1915	1	19,22,23	1.47	4 (21%)	27,32,35	2.08	6 (22%)
43	0TD	2l	92	43	8,9,10	4.58	2 (25%)	6,11,13	1.46	1 (16%)
54	MIA	2y	37	54	17,24,32	1.01	1 (5%)	16,35,47	1.31	2 (12%)
54	PSU	2w	39	54	18,21,22	1.36	2 (11%)	21,30,33	1.89	3 (14%)
1	OMG	2A	2251	55,1,56	19,26,27	0.91	1 (5%)	21,38,41	1.11	2 (9%)
32	MA6	1a	1519	32	19,26,27	1.04	2 (10%)	18,38,41	2.01	3 (16%)
32	UR3	2a	1498	56,32	19,22,23	1.04	2 (10%)	26,32,35	1.77	4 (15%)
1	PSU	1A	1917	1	18,21,22	1.37	2 (11%)	21,30,33	2.07	4 (19%)
54	PSU	1y	55	54	18,21,22	1.40	2 (11%)	21,30,33	2.06	3 (14%)
1	OMU	1A	2552	1,56	19,22,23	1.23	3 (15%)	25,31,34	1.91	5 (20%)
54	G7M	2y	46	54	20,26,27	1.33	2 (10%)	16,39,42	0.67	0
1	5MC	2A	1962	1,56	19,22,23	1.77	3 (15%)	26,32,35	1.14	3 (11%)
1	OMU	2A	2552	1,56	19,22,23	1.15	3 (15%)	25,31,34	1.87	6 (24%)
55	PSU	2x	55	55	18,21,22	1.35	2 (11%)	21,30,33	2.01	4 (19%)
54	PSU	2y	32	54	18,21,22	1.36	2 (11%)	21,30,33	1.89	3 (14%)
54	G7M	1y	46	54	20,26,27	1.32	2 (10%)	16,39,42	0.46	0
32	5MC	2a	1400	32	19,22,23	1.70	3 (15%)	26,32,35	1.20	3 (11%)
55	PSU	1x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.01	4 (19%)
54	5MU	2w	54	54	19,22,23	1.37	4 (21%)	27,32,35	1.73	6 (22%)
54	PSU	1y	32	54	18,21,22	1.34	2 (11%)	21,30,33	1.91	3 (14%)
1	5MU	2A	1939	1,56	19,22,23	1.39	5 (26%)	27,32,35	2.33	6 (22%)
1	5MC	1A	1942	1,56	19,22,23	1.61	3 (15%)	26,32,35	1.22	2 (7%)
1	PSU	2A	2605	1	18,21,22	1.35	3 (16%)	21,30,33	2.07	4 (19%)
1	2MA	2A	2503	1,56	17,25,26	1.06	1 (5%)	16,37,40	1.45	3 (18%)
32	PSU	1a	516	32	18,21,22	1.40	2 (11%)	21,30,33	1.96	4 (19%)
55	5MC	2x	32	55	19,22,23	1.77	3 (15%)	26,32,35	1.21	3 (11%)
32	M2G	1a	966	32	20,27,28	1.39	3 (15%)	19,40,43	1.07	3 (15%)
54	5MU	1y	54	54	19,22,23	1.44	6 (31%)	27,32,35	1.92	6 (22%)
54	MIA	1w	37	54	24,31,32	2.28	3 (12%)	22,44,47	2.61	6 (27%)
32	MA6	2a	1519	32	19,26,27	1.01	2 (10%)	18,38,41	1.99	3 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	PSU	2w	32	54	18,21,22	1.36	2 (11%)	21,30,33	1.92	3 (14%)
1	5MC	1A	1962	1,56	19,22,23	1.62	3 (15%)	26,32,35	1.17	4 (15%)
32	5MC	1a	1400	32	19,22,23	1.62	3 (15%)	26,32,35	1.16	3 (11%)
1	OMC	1A	1920	1	19,22,23	0.83	0	25,31,34	0.99	1 (4%)
32	5MC	2a	1404	32	19,22,23	1.61	3 (15%)	26,32,35	1.15	3 (11%)
54	5MU	1w	54	54	19,22,23	1.36	4 (21%)	27,32,35	2.08	6 (22%)
55	31H	1x	76	55,56	27,34,35	1.02	3 (11%)	22,47,50	2.19	4 (18%)
32	5MC	2a	967	32	19,22,23	1.80	3 (15%)	26,32,35	1.11	3 (11%)
54	PSU	1y	39	54	18,21,22	1.42	3 (16%)	21,30,33	1.77	3 (14%)
32	PSU	2a	516	32	18,21,22	1.33	2 (11%)	21,30,33	2.09	5 (23%)
32	M2G	2a	966	32	20,27,28	1.32	3 (15%)	19,40,43	1.05	1 (5%)
54	4SU	1w	8	54	18,21,22	1.79	4 (22%)	25,30,33	1.94	5 (20%)
55	4SU	1x	8	55	18,21,22	2.23	6 (33%)	25,30,33	1.64	6 (24%)
54	PSU	2y	55	54	18,21,22	1.39	2 (11%)	21,30,33	1.91	5 (23%)
55	5MU	1x	54	55	19,22,23	1.48	5 (26%)	27,32,35	1.78	5 (18%)
32	G7M	1a	527	56,32	20,26,27	1.19	1 (5%)	16,39,42	0.64	0
1	PSU	2A	1917	1	18,21,22	1.37	2 (11%)	21,30,33	2.05	4 (19%)
32	MA6	1a	1518	32	19,26,27	1.03	2 (10%)	18,38,41	1.97	3 (16%)
54	G7M	2w	46	54	20,26,27	1.21	1 (5%)	16,39,42	0.83	0
43	0TD	1l	92	43	8,9,10	4.56	1 (12%)	6,11,13	6.66	2 (33%)
54	MIA	2w	37	54	19,27,32	1.73	3 (15%)	18,39,47	1.40	4 (22%)
1	OMC	2A	1920	1	19,22,23	0.77	0	25,31,34	0.97	1 (4%)
1	PSU	1A	1911	1	18,21,22	1.41	2 (11%)	21,30,33	2.02	3 (14%)
54	4SU	2w	8	54	18,21,22	1.87	4 (22%)	25,30,33	2.10	5 (20%)
32	2MG	1a	1207	32	18,26,27	0.93	1 (5%)	16,38,41	1.56	5 (31%)

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
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	56,54	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	56,32	-	2/3/25/26	0/3/3/3
1	OMG	1A	2251	55,1,56	-	0/5/27/28	0/3/3/3
1	PSU	1A	2605	1,56	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	1,56	-	0/3/25/26	0/3/3/3
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	4OC	1a	1402	32	-	1/9/29/30	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	1/9/29/30	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	2/7/25/26	0/2/2/2
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
55	31H	2x	76	55,56	-	6/18/40/41	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55,56	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
54	MIA	1y	37	54	-	0/3/25/34	0/3/3/3
1	5MU	1A	1939	1,56	-	0/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
54	MIA	2y	37	54	-	0/3/25/34	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	55,1,56	-	0/5/27/28	0/3/3/3
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
32	UR3	2a	1498	56,32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	2/7/25/26	0/2/2/2
1	OMU	1A	2552	1,56	-	0/9/27/28	0/2/2/2
54	G7M	2y	46	54	-	0/3/25/26	0/3/3/3
1	5MC	2A	1962	1,56	-	2/7/25/26	0/2/2/2
1	OMU	2A	2552	1,56	-	0/9/27/28	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
54	PSU	2y	32	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	1y	46	54	-	2/3/25/26	0/3/3/3
32	5MC	2a	1400	32	-	2/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1,56	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1,56	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,56	-	1/3/25/26	0/3/3/3
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
54	5MU	1y	54	54	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	3/11/33/34	0/3/3/3
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1,56	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	5MC	2a	1404	32	-	1/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	31H	1x	76	55,56	-	7/18/40/41	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
54	PSU	2y	55	54	-	1/7/25/26	0/2/2/2
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	56,32	-	3/3/25/26	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
54	G7M	2w	46	54	-	1/3/25/26	0/3/3/3
43	0TD	1l	92	43	-	4/7/12/14	-
54	MIA	2w	37	54	-	4/7/29/34	0/3/3/3
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3

All (220) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.47	1.69	1.82
43	1l	92	0TD	CB-SB	-12.32	1.69	1.82
54	1w	37	MIA	C2-S10	-7.77	1.69	1.75
54	1w	37	MIA	C13-C14	6.79	1.52	1.32
32	2a	967	5MC	C5-C4	6.69	1.49	1.44
1	2A	1962	5MC	C5-C4	6.60	1.49	1.44
55	2x	32	5MC	C5-C4	6.50	1.49	1.44
32	2a	1400	5MC	C5-C4	6.15	1.48	1.44
1	2A	1942	5MC	C5-C4	6.14	1.48	1.44
32	1a	1404	5MC	C5-C4	6.12	1.48	1.44
55	1x	32	5MC	C5-C4	5.92	1.48	1.44
1	1A	1962	5MC	C5-C4	5.85	1.48	1.44
32	1a	967	5MC	C5-C4	5.85	1.48	1.44
54	2w	37	MIA	C2-S10	-5.84	1.70	1.75
32	1a	1407	5MC	C5-C4	5.75	1.48	1.44
32	2a	1404	5MC	C5-C4	5.74	1.48	1.44
32	1a	1400	5MC	C5-C4	5.74	1.48	1.44
1	1A	1942	5MC	C5-C4	5.73	1.48	1.44
32	2a	1407	5MC	C5-C4	5.69	1.48	1.44
55	1x	8	4SU	C4-N3	-5.31	1.32	1.37
54	2w	8	4SU	C4-S4	-5.00	1.59	1.68
54	1w	8	4SU	C4-S4	-4.77	1.60	1.68
54	2y	8	4SU	C4-S4	-4.68	1.60	1.68
55	2x	8	4SU	C4-N3	-4.67	1.32	1.37
55	1x	8	4SU	C4-S4	-4.50	1.60	1.68
54	1y	8	4SU	C4-S4	-4.50	1.60	1.68
55	2x	8	4SU	C4-S4	-4.45	1.60	1.68
32	1a	966	M2G	C2-N3	4.14	1.36	1.30
54	1y	55	PSU	C6-C5	4.07	1.39	1.35
54	1y	46	G7M	C5-C4	4.04	1.47	1.39
32	2a	966	M2G	C2-N3	4.00	1.36	1.30
54	1w	55	PSU	C6-C5	3.95	1.39	1.35
54	2y	39	PSU	C6-C5	3.94	1.39	1.35
54	2w	55	PSU	C6-C5	3.93	1.39	1.35
55	1x	8	4SU	C2-N3	-3.92	1.31	1.38
54	2y	46	G7M	C5-C4	3.92	1.46	1.39
54	1w	46	G7M	C5-C4	3.83	1.46	1.39
54	1y	32	PSU	C6-C5	3.79	1.39	1.35
54	1y	39	PSU	C6-C5	3.78	1.39	1.35
54	2y	32	PSU	C6-C5	3.78	1.39	1.35
54	2w	39	PSU	C6-C5	3.78	1.39	1.35
32	1a	527	G7M	C5-C4	3.76	1.46	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	32	PSU	C6-C5	3.75	1.39	1.35
32	1a	516	PSU	C6-C5	3.71	1.39	1.35
54	1w	32	PSU	C6-C5	3.70	1.39	1.35
32	2a	516	PSU	C6-C5	3.67	1.39	1.35
1	2A	1911	PSU	C6-C5	3.67	1.39	1.35
55	2x	55	PSU	C6-C5	3.65	1.39	1.35
32	2a	527	G7M	C5-C4	3.65	1.46	1.39
54	1y	8	4SU	C4-N3	-3.63	1.33	1.37
54	2w	46	G7M	C5-C4	3.61	1.46	1.39
54	2w	8	4SU	C4-N3	-3.59	1.33	1.37
1	2A	1917	PSU	C6-C5	3.57	1.39	1.35
1	1A	1917	PSU	C6-C5	3.52	1.39	1.35
1	2A	2605	PSU	C6-C5	3.49	1.39	1.35
1	1A	2605	PSU	C4-N3	-3.45	1.32	1.38
55	1x	55	PSU	C6-C5	3.40	1.39	1.35
54	2y	55	PSU	C6-C5	3.39	1.39	1.35
55	1x	8	4SU	C5-C4	-3.38	1.38	1.42
1	1A	1911	PSU	C6-C5	3.33	1.39	1.35
54	1w	39	PSU	C6-C5	3.32	1.39	1.35
32	1a	966	M2G	C2-N2	3.21	1.41	1.35
54	2y	8	4SU	C4-N3	-3.09	1.34	1.37
1	2A	1939	5MU	C6-C5	3.06	1.39	1.34
54	2y	54	5MU	C2-N1	3.04	1.43	1.38
54	1w	8	4SU	C4-N3	-3.03	1.34	1.37
1	1A	1942	5MC	C6-C5	2.96	1.39	1.34
1	2A	1915	5MU	C6-C5	2.95	1.39	1.34
55	1x	32	5MC	C6-C5	2.95	1.39	1.34
55	2x	8	4SU	C2-N3	-2.94	1.32	1.38
55	2x	8	4SU	C5-C4	-2.93	1.39	1.42
32	2a	1407	5MC	C6-C5	2.93	1.39	1.34
32	2a	1404	5MC	C6-C5	2.90	1.39	1.34
32	2a	967	5MC	C6-C5	2.89	1.39	1.34
32	1a	967	5MC	C6-C5	2.88	1.39	1.34
54	2y	54	5MU	C6-C5	2.88	1.39	1.34
1	2A	1942	5MC	C6-C5	2.86	1.39	1.34
55	2x	32	5MC	C6-C5	2.86	1.39	1.34
54	2w	54	5MU	C6-C5	2.86	1.39	1.34
32	2a	1400	5MC	C6-C5	2.85	1.39	1.34
32	1a	1404	5MC	C6-C5	2.84	1.39	1.34
1	1A	1939	5MU	C6-N1	-2.84	1.33	1.38
55	1x	54	5MU	C4-N3	-2.83	1.33	1.38
1	1A	2552	OMU	C4-N3	-2.83	1.33	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	54	5MU	C6-C5	2.82	1.39	1.34
55	1x	54	5MU	C6-C5	2.82	1.39	1.34
1	1A	1939	5MU	C4-N3	-2.81	1.33	1.38
32	1a	1400	5MC	C6-C5	2.81	1.39	1.34
54	2y	37	MIA	C2-N3	2.80	1.36	1.32
1	1A	1911	PSU	C4-N3	-2.79	1.33	1.38
54	2w	37	MIA	C6-C5	2.77	1.49	1.44
54	1y	39	PSU	C4-N3	-2.75	1.33	1.38
1	2A	1915	5MU	C4-C5	2.74	1.49	1.44
1	2A	1939	5MU	C4-N3	-2.73	1.33	1.38
32	2a	966	M2G	C2-N2	2.73	1.40	1.35
55	2x	54	5MU	C6-C5	2.73	1.39	1.34
1	2A	1915	5MU	C2-N1	2.71	1.42	1.38
54	1y	54	5MU	C4-N3	-2.69	1.33	1.38
1	1A	1915	5MU	C6-C5	2.69	1.39	1.34
1	1A	1915	5MU	C2-N1	2.69	1.42	1.38
54	1w	54	5MU	C6-C5	2.68	1.39	1.34
54	1y	37	MIA	C2-N3	2.68	1.36	1.32
54	2w	8	4SU	C5-C4	-2.67	1.39	1.42
54	1w	8	4SU	C5-C4	-2.66	1.39	1.42
55	1x	76	31H	C5-N7	-2.65	1.30	1.39
54	1w	32	PSU	C4-N3	-2.62	1.33	1.38
1	1A	1939	5MU	C6-C5	2.59	1.38	1.34
55	2x	76	31H	C6-C5	-2.58	1.33	1.43
54	2y	55	PSU	C4-N3	-2.58	1.34	1.38
1	1A	1939	5MU	C2-N3	-2.58	1.33	1.38
55	2x	54	5MU	C4-C5	2.57	1.49	1.44
54	2y	54	5MU	C4-C5	2.57	1.49	1.44
55	1x	54	5MU	C2-N1	2.57	1.42	1.38
1	2A	1962	5MC	C6-N1	-2.56	1.33	1.38
54	2w	54	5MU	C4-N3	-2.55	1.34	1.38
1	2A	1911	PSU	C4-N3	-2.55	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.55	1.33	1.37
1	2A	2552	OMU	C4-N3	-2.53	1.34	1.38
54	2y	54	5MU	C4-N3	-2.53	1.34	1.38
54	1w	54	5MU	C2-N1	2.53	1.42	1.38
1	1A	1915	5MU	C4-N3	-2.53	1.34	1.38
32	1a	1407	5MC	C6-C5	2.53	1.38	1.34
1	1A	2552	OMU	C2-N3	-2.52	1.33	1.38
54	2w	55	PSU	C4-N3	-2.51	1.34	1.38
1	1A	2605	PSU	C6-C5	2.51	1.38	1.35
55	2x	55	PSU	C4-N3	-2.51	1.34	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1498	UR3	C2-N1	2.51	1.42	1.38
32	1a	516	PSU	C4-N3	-2.50	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.50	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.49	1.33	1.38
1	2A	1915	5MU	C4-N3	-2.49	1.34	1.38
54	1y	8	4SU	C5-C4	-2.48	1.39	1.42
32	1a	1207	2MG	C6-N1	-2.47	1.34	1.37
32	1a	1404	5MC	C6-N1	-2.47	1.33	1.38
54	1y	54	5MU	C4-C5	2.47	1.48	1.44
55	2x	54	5MU	C4-N3	-2.47	1.34	1.38
54	2y	39	PSU	C4-N3	-2.46	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.45	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.45	1.34	1.38
55	1x	54	5MU	C4-C5	2.44	1.48	1.44
32	1a	1518	MA6	C6-C5	-2.43	1.41	1.44
54	2w	8	4SU	C2-N3	-2.43	1.33	1.38
1	2A	2251	OMG	C6-N1	-2.42	1.34	1.37
54	1w	39	PSU	C4-N3	-2.42	1.34	1.38
54	2y	8	4SU	C5-C4	-2.42	1.39	1.42
54	1w	37	MIA	C6-C5	2.42	1.48	1.44
55	2x	54	5MU	C2-N1	2.40	1.42	1.38
1	1A	1915	5MU	C4-C5	2.40	1.48	1.44
32	1a	1400	5MC	C6-N1	-2.40	1.33	1.38
32	2a	527	G7M	C6-N1	-2.39	1.34	1.37
54	1y	32	PSU	C4-N3	-2.38	1.34	1.38
32	2a	1518	MA6	C6-C5	-2.37	1.41	1.44
1	2A	1962	5MC	C6-C5	2.37	1.38	1.34
55	1x	55	PSU	C4-N3	-2.36	1.34	1.38
32	1a	1498	UR3	C2-N1	2.36	1.41	1.38
55	1x	32	5MC	C6-N1	-2.36	1.34	1.38
32	1a	1519	MA6	C6-C5	-2.34	1.41	1.44
54	2y	32	PSU	C4-N3	-2.34	1.34	1.38
1	1A	1962	5MC	C6-C5	2.33	1.38	1.34
54	2w	39	PSU	C4-N3	-2.33	1.34	1.38
54	2y	8	4SU	C2-N1	2.33	1.42	1.38
55	1x	76	31H	C6-C5	-2.33	1.34	1.43
54	1w	8	4SU	C2-N1	2.31	1.42	1.38
54	1w	54	5MU	C4-N3	-2.31	1.34	1.38
54	1w	55	PSU	C4-N3	-2.30	1.34	1.38
54	1y	55	PSU	C4-N3	-2.30	1.34	1.38
1	1A	1939	5MU	C4-C5	2.29	1.48	1.44
32	2a	1519	MA6	C6-C5	-2.28	1.41	1.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	32	PSU	C4-N3	-2.28	1.34	1.38
1	1A	2251	OMG	C6-N1	-2.27	1.34	1.37
1	2A	1939	5MU	C2-N3	-2.27	1.34	1.38
54	1y	54	5MU	C2-N1	2.27	1.42	1.38
54	2w	54	5MU	C4-C5	2.26	1.48	1.44
32	2a	516	PSU	C4-N3	-2.25	1.34	1.38
54	1w	54	5MU	C4-C5	2.25	1.48	1.44
54	2y	46	G7M	C6-N1	-2.24	1.34	1.37
55	2x	8	4SU	O2-C2	2.22	1.27	1.23
1	2A	2503	2MA	C2-N3	2.21	1.36	1.31
55	1x	76	31H	O4'-C1'	2.21	1.43	1.40
54	1y	46	G7M	C6-N1	-2.20	1.34	1.37
55	2x	54	5MU	C6-N1	-2.20	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.20	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.19	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.18	1.34	1.38
54	1y	8	4SU	C2-N1	2.18	1.41	1.38
55	1x	8	4SU	O2-C2	2.17	1.26	1.23
32	2a	1404	5MC	C6-N1	-2.16	1.34	1.38
54	1y	54	5MU	C2-N3	-2.16	1.34	1.38
1	2A	1939	5MU	C4-C5	2.16	1.48	1.44
54	1y	54	5MU	C6-N1	-2.16	1.34	1.38
54	2y	54	5MU	O2-C2	2.15	1.26	1.23
54	2w	37	MIA	C6-N1	2.15	1.35	1.33
54	1w	46	G7M	C6-N1	-2.15	1.34	1.37
32	2a	1207	2MG	C6-N1	-2.15	1.34	1.37
1	1A	2503	2MA	C6-N6	2.14	1.36	1.27
55	2x	32	5MC	C6-N1	-2.14	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.14	1.34	1.38
32	2a	966	M2G	C6-N1	-2.12	1.34	1.37
32	2a	1518	MA6	C6-N1	2.12	1.35	1.32
54	1y	8	4SU	C2-N3	-2.12	1.34	1.38
43	2l	92	0TD	CB-CA	2.10	1.55	1.54
1	2A	2552	OMU	C6-C5	2.10	1.39	1.35
55	1x	54	5MU	C2-N3	-2.09	1.34	1.38
55	2x	8	4SU	C2-N1	2.09	1.41	1.38
54	1y	8	4SU	C6-C5	2.08	1.39	1.35
32	1a	966	M2G	C6-N1	-2.07	1.34	1.37
32	1a	1519	MA6	C6-N1	2.06	1.35	1.32
1	1A	1915	5MU	C6-N1	-2.06	1.34	1.38
32	2a	1519	MA6	C6-N1	2.05	1.35	1.32
32	1a	1518	MA6	C6-N1	2.05	1.35	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1939	5MU	C6-N1	-2.04	1.34	1.38
54	2w	54	5MU	C2-N1	2.04	1.41	1.38
32	2a	1498	UR3	C6-C5	2.04	1.39	1.35
55	1x	8	4SU	C6-C5	2.03	1.39	1.35
1	1A	1942	5MC	C6-N1	-2.03	1.34	1.38
1	1A	2503	2MA	C2-N3	2.02	1.36	1.31
54	1y	39	PSU	C2-N3	-2.02	1.34	1.37
1	1A	2552	OMU	C6-C5	2.02	1.39	1.35
32	2a	967	5MC	C6-N1	-2.02	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.00	1.34	1.37

All (298) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-16.03	73.56	102.36
55	2x	76	31H	O4'-C1'-N9	11.04	123.39	108.75
54	1w	37	MIA	C12-C13-C14	-9.26	110.38	127.01
55	2x	76	31H	C4'-O4'-C1'	-8.18	102.43	109.92
55	1x	76	31H	C4'-O4'-C1'	-7.21	103.32	109.92
32	2a	1498	UR3	C4-N3-C2	-6.85	119.06	124.58
1	1A	2605	PSU	N1-C2-N3	6.82	122.36	115.17
55	2x	76	31H	N3-C2-N1	-6.73	119.54	128.67
54	1y	55	PSU	N1-C2-N3	6.67	122.21	115.17
1	2A	1917	PSU	N1-C2-N3	6.55	122.07	115.17
54	1w	39	PSU	N1-C2-N3	6.47	121.99	115.17
1	1A	1917	PSU	N1-C2-N3	6.42	121.94	115.17
32	1a	1498	UR3	C4-N3-C2	-6.37	119.46	124.58
54	2w	55	PSU	N1-C2-N3	6.36	121.88	115.17
32	2a	516	PSU	N1-C2-N3	6.33	121.85	115.17
55	2x	55	PSU	N1-C2-N3	6.32	121.83	115.17
1	1A	1911	PSU	N1-C2-N3	6.32	121.83	115.17
1	2A	2605	PSU	N1-C2-N3	6.22	121.72	115.17
55	1x	55	PSU	N1-C2-N3	6.19	121.69	115.17
54	1w	32	PSU	N1-C2-N3	6.12	121.62	115.17
54	1w	55	PSU	N1-C2-N3	6.08	121.58	115.17
32	1a	516	PSU	N1-C2-N3	6.05	121.55	115.17
55	1x	76	31H	N3-C2-N1	-6.04	120.47	128.67
54	2y	8	4SU	C4-N3-C2	-6.01	121.55	127.31
54	2w	8	4SU	C5-C4-N3	5.95	120.29	114.75
1	2A	1911	PSU	N1-C2-N3	5.94	121.43	115.17
54	2w	32	PSU	N1-C2-N3	5.92	121.42	115.17
54	2w	8	4SU	C4-N3-C2	-5.92	121.64	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2y	32	PSU	N1-C2-N3	5.90	121.39	115.17
54	2w	39	PSU	N1-C2-N3	5.87	121.36	115.17
54	1y	32	PSU	N1-C2-N3	5.83	121.32	115.17
1	2A	1939	5MU	C4-N3-C2	-5.81	119.72	127.34
54	2y	55	PSU	N1-C2-N3	5.75	121.23	115.17
54	2y	39	PSU	N1-C2-N3	5.70	121.18	115.17
54	1y	39	PSU	N1-C2-N3	5.61	121.08	115.17
1	1A	1939	5MU	C4-N3-C2	-5.61	119.99	127.34
32	2a	1519	MA6	N3-C2-N1	-5.58	121.09	128.67
32	1a	1519	MA6	N3-C2-N1	-5.57	121.11	128.67
1	2A	1939	5MU	N3-C2-N1	5.53	122.09	114.89
32	2a	1518	MA6	N3-C2-N1	-5.48	121.23	128.67
32	1a	1518	MA6	N3-C2-N1	-5.45	121.27	128.67
54	1w	8	4SU	C5-C4-N3	5.30	119.68	114.75
54	1w	8	4SU	C4-N3-C2	-5.29	122.24	127.31
54	2y	8	4SU	C5-C4-N3	5.24	119.62	114.75
1	2A	1939	5MU	C5-C4-N3	5.22	119.86	115.32
1	1A	1939	5MU	C5-C4-N3	5.15	119.80	115.32
1	1A	1915	5MU	C4-N3-C2	-5.13	120.62	127.34
55	2x	54	5MU	N3-C2-N1	5.12	121.56	114.89
1	1A	2552	OMU	C4-N3-C2	-5.12	120.26	126.61
1	2A	1915	5MU	C4-N3-C2	-5.09	120.66	127.34
1	1A	1915	5MU	N3-C2-N1	5.07	121.49	114.89
32	1a	1519	MA6	C2-N1-C6	5.04	121.78	116.84
54	1w	54	5MU	N3-C2-N1	5.00	121.40	114.89
54	1w	54	5MU	C4-N3-C2	-4.98	120.81	127.34
55	2x	54	5MU	C4-N3-C2	-4.97	120.83	127.34
54	1y	8	4SU	C4-N3-C2	-4.96	122.56	127.31
32	1a	1518	MA6	C2-N1-C6	4.95	121.70	116.84
1	2A	1915	5MU	N3-C2-N1	4.95	121.33	114.89
1	1A	2552	OMU	N3-C2-N1	4.92	121.29	114.89
1	2A	2552	OMU	C4-N3-C2	-4.88	120.56	126.61
1	1A	1939	5MU	N3-C2-N1	4.84	121.19	114.89
32	2a	1518	MA6	C2-N1-C6	4.81	121.56	116.84
32	2a	1519	MA6	C2-N1-C6	4.72	121.47	116.84
54	1y	54	5MU	N3-C2-N1	4.72	121.03	114.89
1	2A	1915	5MU	C5-C4-N3	4.53	119.26	115.32
1	1A	1915	5MU	C5-C4-N3	4.52	119.26	115.32
1	1A	2605	PSU	C4-N3-C2	-4.52	120.15	126.37
1	2A	1939	5MU	O4-C4-C5	-4.50	119.77	124.92
54	1w	54	5MU	O4-C4-C5	-4.49	119.78	124.92
1	2A	2605	PSU	C4-N3-C2	-4.47	120.21	126.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1y	54	5MU	C4-N3-C2	-4.44	121.52	127.34
1	1A	1939	5MU	C5-C6-N1	-4.43	118.50	123.31
1	2A	1939	5MU	C5-C6-N1	-4.35	118.59	123.31
1	2A	2552	OMU	N3-C2-N1	4.34	120.54	114.89
54	1w	39	PSU	C4-N3-C2	-4.34	120.40	126.37
54	1w	54	5MU	C5-C4-N3	4.31	119.07	115.32
54	1y	8	4SU	C5-C4-N3	4.30	118.75	114.75
55	1x	54	5MU	N3-C2-N1	4.28	120.46	114.89
1	1A	1917	PSU	C4-N3-C2	-4.26	120.51	126.37
32	2a	516	PSU	C4-N3-C2	-4.25	120.52	126.37
55	2x	55	PSU	C4-N3-C2	-4.21	120.57	126.37
54	1w	39	PSU	O2-C2-N1	-4.14	118.52	122.79
54	1w	37	MIA	C15-C14-C13	-4.14	110.23	122.66
54	2y	37	MIA	N3-C2-N1	-4.10	123.11	128.67
1	1A	1939	5MU	O4-C4-C5	-4.08	120.25	124.92
54	2y	54	5MU	C5-C4-N3	4.06	118.86	115.32
54	1y	37	MIA	N3-C2-N1	-4.02	123.22	128.67
32	1a	516	PSU	C4-N3-C2	-4.01	120.84	126.37
55	2x	54	5MU	C5-C4-N3	4.01	118.81	115.32
54	2y	8	4SU	N3-C2-N1	4.00	120.10	114.89
55	1x	54	5MU	C4-N3-C2	-4.00	122.10	127.34
1	2A	1917	PSU	C4-N3-C2	-3.95	120.93	126.37
1	1A	1915	5MU	O4-C4-C5	-3.92	120.43	124.92
54	1w	32	PSU	C4-N3-C2	-3.91	120.99	126.37
1	1A	1911	PSU	C4-N3-C2	-3.89	121.01	126.37
54	2w	32	PSU	C4-N3-C2	-3.88	121.02	126.37
54	1y	55	PSU	C4-N3-C2	-3.88	121.02	126.37
54	1y	8	4SU	N3-C2-N1	3.88	119.94	114.89
1	1A	1911	PSU	O2-C2-N1	-3.88	118.79	122.79
32	1a	1400	5MC	C5-C6-N1	-3.88	119.10	123.31
32	2a	1400	5MC	C5-C6-N1	-3.87	119.11	123.31
1	2A	1911	PSU	C4-N3-C2	-3.86	121.05	126.37
55	1x	55	PSU	C4-N3-C2	-3.85	121.07	126.37
54	2w	54	5MU	N3-C2-N1	3.83	119.88	114.89
54	2w	55	PSU	C4-N3-C2	-3.83	121.09	126.37
54	2w	54	5MU	C5-C4-N3	3.83	118.65	115.32
54	1y	54	5MU	C5-C4-N3	3.82	118.64	115.32
54	1y	32	PSU	C4-N3-C2	-3.81	121.12	126.37
54	1w	37	MIA	C16-C14-C13	-3.81	111.24	122.66
54	2w	55	PSU	O2-C2-N1	-3.80	118.87	122.79
55	1x	54	5MU	C5-C4-N3	3.77	118.60	115.32
54	2w	39	PSU	C4-N3-C2	-3.77	121.18	126.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	516	PSU	O2-C2-N1	-3.76	118.91	122.79
1	1A	2552	OMU	C5-C4-N3	3.76	120.06	114.80
1	2A	1915	5MU	O4-C4-C5	-3.74	120.63	124.92
1	2A	1917	PSU	O2-C2-N1	-3.74	118.93	122.79
55	1x	8	4SU	O2-C2-N1	3.73	127.65	122.80
54	2w	54	5MU	C4-N3-C2	-3.72	122.47	127.34
54	2y	54	5MU	C4-N3-C2	-3.71	122.47	127.34
54	1w	55	PSU	O2-C2-N1	-3.71	118.96	122.79
54	2y	55	PSU	C4-N3-C2	-3.71	121.26	126.37
1	2A	2552	OMU	C5-C4-N3	3.70	119.98	114.80
54	2y	32	PSU	C4-N3-C2	-3.68	121.31	126.37
54	1w	55	PSU	C4-N3-C2	-3.67	121.32	126.37
55	1x	55	PSU	O2-C2-N1	-3.66	119.01	122.79
54	2y	54	5MU	N3-C2-N1	3.62	119.61	114.89
54	2y	39	PSU	C4-N3-C2	-3.62	121.39	126.37
55	1x	8	4SU	C6-C5-C4	-3.60	116.83	119.95
54	2w	54	5MU	O4-C4-C5	-3.60	120.80	124.92
1	1A	1917	PSU	O2-C2-N1	-3.58	119.10	122.79
55	2x	54	5MU	O4-C4-C5	-3.58	120.82	124.92
54	1y	55	PSU	O2-C2-N1	-3.57	119.11	122.79
1	2A	2552	OMU	O2-C2-N1	-3.53	118.20	122.80
54	2y	55	PSU	O2-C2-N1	-3.53	119.15	122.79
32	1a	1404	5MC	C5-C6-N1	-3.51	119.50	123.31
54	1w	8	4SU	C5-C4-S4	-3.51	120.30	124.31
1	1A	1942	5MC	C5-C6-N1	-3.51	119.50	123.31
54	2w	8	4SU	N3-C2-N1	3.50	119.45	114.89
1	2A	1915	5MU	C5-C6-N1	-3.49	119.52	123.31
55	1x	32	5MC	C5-C6-N1	-3.47	119.54	123.31
1	2A	1942	5MC	C5-C6-N1	-3.47	119.55	123.31
1	1A	2503	2MA	C4-N3-C2	-3.45	120.65	123.30
55	2x	8	4SU	C5-C4-N3	3.43	117.94	114.75
1	1A	1942	5MC	C5-C4-N3	-3.43	118.24	121.75
55	2x	8	4SU	C1'-N1-C2	3.43	123.75	117.59
54	2w	8	4SU	C5-C4-S4	-3.39	120.44	124.31
1	2A	2503	2MA	C4-N3-C2	-3.37	120.72	123.30
54	2y	8	4SU	C5-C4-S4	-3.36	120.47	124.31
54	1y	54	5MU	O4-C4-C5	-3.34	121.09	124.92
54	2w	32	PSU	O2-C2-N1	-3.34	119.35	122.79
54	2y	54	5MU	O4-C4-C5	-3.31	121.12	124.92
32	2a	967	5MC	C5-C6-N1	-3.31	119.72	123.31
32	2a	1404	5MC	C5-C6-N1	-3.31	119.72	123.31
54	1y	39	PSU	C4-N3-C2	-3.31	121.81	126.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1962	5MC	C5-C6-N1	-3.30	119.73	123.31
55	2x	32	5MC	C5-C6-N1	-3.30	119.73	123.31
54	1w	8	4SU	N3-C2-N1	3.29	119.17	114.89
55	1x	54	5MU	O4-C4-C5	-3.29	121.16	124.92
32	2a	1407	5MC	C5-C6-N1	-3.28	119.75	123.31
54	2w	37	MIA	C12-N6-C6	-3.28	119.81	122.85
54	1y	32	PSU	O2-C2-N1	-3.27	119.42	122.79
54	2y	32	PSU	O2-C2-N1	-3.24	119.44	122.79
32	2a	1519	MA6	C4-C5-N7	-3.18	105.98	109.34
32	1a	1207	2MG	C8-N7-C5	3.17	107.95	102.55
32	1a	1407	5MC	C5-C6-N1	-3.17	119.87	123.31
32	2a	1498	UR3	C5-C4-N3	3.14	119.17	115.04
54	1y	54	5MU	C5-C6-N1	-3.12	119.93	123.31
1	1A	1915	5MU	C5-C6-N1	-3.12	119.93	123.31
32	1a	1207	2MG	N1-C2-N2	3.09	119.72	116.56
1	1A	2605	PSU	O2-C2-N1	-3.08	119.61	122.79
1	2A	2503	2MA	C8-N7-C5	3.08	107.80	102.55
32	1a	967	5MC	C5-C6-N1	-3.08	119.97	123.31
55	1x	54	5MU	C5-C6-N1	-3.07	119.98	123.31
1	2A	1939	5MU	O2-C2-N1	-3.07	118.80	122.80
32	1a	1498	UR3	C5-C4-N3	3.07	119.08	115.04
54	1w	37	MIA	C2-N1-C6	3.07	122.87	117.42
32	2a	1407	5MC	C5-C4-N3	-3.06	118.62	121.75
55	2x	54	5MU	C5-C6-N1	-3.04	120.02	123.31
55	1x	8	4SU	C5-C4-N3	3.02	117.56	114.75
1	1A	1962	5MC	C5-C6-N1	-3.01	120.04	123.31
1	1A	1939	5MU	O2-C2-N1	-3.01	118.88	122.80
32	1a	1519	MA6	C4-C5-N7	-2.98	106.19	109.34
55	1x	32	5MC	C5-C4-N3	-2.97	118.71	121.75
32	2a	966	M2G	C8-N7-C5	2.96	107.59	102.55
1	2A	2251	OMG	C8-N7-C5	2.95	107.57	102.55
55	2x	55	PSU	O2-C2-N1	-2.95	119.75	122.79
32	1a	1404	5MC	C5-C4-N3	-2.93	118.75	121.75
54	2w	39	PSU	O2-C2-N1	-2.91	119.78	122.79
32	2a	1207	2MG	C8-N7-C5	2.90	107.49	102.55
54	1w	32	PSU	O2-C2-N1	-2.90	119.80	122.79
1	2A	2605	PSU	O2-C2-N1	-2.88	119.81	122.79
1	2A	1942	5MC	C5-C4-N3	-2.83	118.85	121.75
1	1A	2552	OMU	O2-C2-N1	-2.83	119.11	122.80
55	2x	32	5MC	C5-C4-N3	-2.82	118.86	121.75
55	1x	8	4SU	S4-C4-N3	-2.81	117.26	120.20
32	1a	1518	MA6	C4-C5-N7	-2.81	106.36	109.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C8-N7-C5	2.81	107.34	102.55
1	2A	1911	PSU	O2-C2-N1	-2.80	119.90	122.79
32	2a	1207	2MG	N1-C2-N2	2.80	119.42	116.56
54	2y	54	5MU	C5-C6-N1	-2.79	120.28	123.31
32	1a	966	M2G	C8-N7-C5	2.79	107.30	102.55
32	1a	1402	4OC	C6-C5-C4	2.78	120.35	117.00
32	1a	516	PSU	O2-C2-N1	-2.76	119.94	122.79
55	1x	8	4SU	C1'-N1-C2	2.76	122.56	117.59
1	1A	2605	PSU	C5-C6-N1	-2.76	118.31	122.14
54	1y	37	MIA	C4-C5-N7	-2.74	106.44	109.34
32	2a	967	5MC	C5-C4-N3	-2.74	118.95	121.75
32	1a	1498	UR3	C1'-N1-C2	2.73	121.50	117.04
54	2w	54	5MU	C5-C6-N1	-2.69	120.39	123.31
32	2a	1207	2MG	N2-C2-N3	-2.69	117.08	120.51
54	2w	37	MIA	C4-C5-N7	-2.69	106.50	109.34
54	2w	37	MIA	C2-N1-C6	2.67	122.17	117.42
54	1w	54	5MU	C5-C6-N1	-2.67	120.42	123.31
32	2a	1518	MA6	C4-C5-N7	-2.65	106.54	109.34
32	2a	1404	5MC	C5-C4-N3	-2.64	119.05	121.75
55	1x	76	31H	CA-N-CN	-2.64	118.76	122.82
1	1A	2251	OMG	C8-N7-C5	2.64	107.05	102.55
32	1a	1207	2MG	N2-C2-N3	-2.64	117.15	120.51
54	2y	39	PSU	O2-C2-N1	-2.63	120.07	122.79
54	2w	37	MIA	N3-C2-N1	-2.62	122.23	127.03
1	2A	1962	5MC	C5-C4-N3	-2.61	119.08	121.75
32	1a	1400	5MC	C5-C4-N3	-2.59	119.10	121.75
32	1a	1498	UR3	C6-N1-C2	-2.56	119.70	121.80
55	2x	8	4SU	C6-C5-C4	-2.56	117.74	119.95
1	1A	2552	OMU	O4-C4-C5	-2.52	120.81	125.16
54	1w	37	MIA	C4-C5-N7	-2.52	106.67	109.34
32	2a	1400	5MC	O2-C2-N3	-2.52	118.36	122.33
1	2A	2605	PSU	C5-C6-N1	-2.51	118.66	122.14
32	1a	967	5MC	C5-C4-N3	-2.50	119.20	121.75
55	1x	8	4SU	O2-C2-N3	-2.49	116.89	121.49
54	2y	54	5MU	C5M-C5-C4	2.49	121.44	118.78
1	2A	2503	2MA	C5-C6-N1	2.49	118.76	114.12
54	1w	37	MIA	N3-C2-N1	-2.47	122.50	127.03
32	1a	1407	5MC	C5-C4-N3	-2.47	119.22	121.75
1	2A	2552	OMU	O4-C4-C5	-2.46	120.92	125.16
32	2a	1402	4OC	C6-C5-C4	2.44	119.94	117.00
55	2x	32	5MC	O2-C2-N3	-2.43	118.50	122.33
54	2y	37	MIA	C4-C5-N7	-2.43	106.77	109.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1962	5MC	CM5-C5-C6	-2.41	119.58	122.85
55	2x	54	5MU	C5M-C5-C4	2.41	121.36	118.78
43	2l	92	0TD	CSB-SB-CB	2.41	106.69	102.36
32	1a	1404	5MC	O2-C2-N3	-2.36	118.61	122.33
1	1A	1962	5MC	C5-C4-N3	-2.35	119.34	121.75
54	2w	8	4SU	C1'-N1-C2	2.33	121.78	117.59
1	1A	1962	5MC	CM5-C5-C6	-2.32	119.71	122.85
55	2x	54	5MU	O2-C2-N1	-2.31	119.78	122.80
55	1x	76	31H	OCN-CN-N	-2.31	119.35	125.32
54	1w	54	5MU	O2-C2-N1	-2.31	119.80	122.80
55	2x	8	4SU	O2-C2-N1	2.30	125.79	122.80
55	2x	76	31H	C6-C5-C4	2.28	122.34	117.90
32	2a	1407	5MC	O2-C2-N3	-2.28	118.73	122.33
43	1l	92	0TD	OD2-CG-CB	2.28	118.07	113.15
54	1y	8	4SU	C5-C4-S4	-2.28	121.71	124.31
54	2w	54	5MU	C5M-C5-C4	2.27	121.21	118.78
54	1w	8	4SU	C1'-N1-C2	2.27	121.67	117.59
1	1A	1962	5MC	C1'-N1-C6	-2.25	117.45	121.15
54	2y	54	5MU	C1'-N1-C2	2.24	121.62	117.59
32	2a	1498	UR3	C3U-N3-C4	2.23	120.97	117.87
55	2x	55	PSU	C5-C6-N1	-2.23	119.05	122.14
54	2y	54	5MU	C1'-N1-C6	-2.22	117.49	121.15
32	2a	1498	UR3	C6-N1-C2	-2.22	119.99	121.80
54	1y	8	4SU	C1'-N1-C2	2.21	121.56	117.59
55	1x	55	PSU	C5-C6-N1	-2.21	119.08	122.14
1	1A	1915	5MU	C5M-C5-C4	2.20	121.13	118.78
54	1w	39	PSU	C5-C6-N1	-2.19	119.09	122.14
54	1y	39	PSU	O2-C2-N1	-2.19	120.53	122.79
54	2y	55	PSU	O4'-C1'-C2'	2.18	108.17	105.15
32	1a	1207	2MG	CM2-N2-C2	-2.17	118.99	123.65
32	2a	516	PSU	O4'-C1'-C2'	2.17	108.15	105.15
1	1A	2605	PSU	O2-C2-N3	-2.16	118.03	121.86
1	1A	1939	5MU	C5M-C5-C4	2.15	121.08	118.78
32	1a	966	M2G	O6-C6-C5	-2.14	120.07	124.32
54	1w	32	PSU	C6-C5-C4	-2.14	116.73	118.17
54	2y	55	PSU	C6-C5-C4	-2.14	116.73	118.17
32	2a	1402	4OC	CM4-N4-C4	-2.13	118.28	122.45
55	2x	76	31H	OCN-CN-N	-2.12	119.84	125.32
1	1A	1920	OMC	O2-C2-N3	-2.12	118.99	122.33
1	2A	2251	OMG	C5-C6-N1	2.11	118.09	114.07
32	2a	1404	5MC	O2-C2-N3	-2.10	119.02	122.33
32	2a	1207	2MG	CM2-N2-C2	-2.10	119.14	123.65

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1y	54	5MU	C5M-C5-C4	2.09	121.01	118.78
32	1a	1207	2MG	C5-C6-N1	2.09	118.05	114.07
32	1a	1404	5MC	CM5-C5-C6	-2.08	120.04	122.85
1	2A	1917	PSU	C5-C6-N1	-2.08	119.26	122.14
1	2A	2552	OMU	C5-C6-N1	-2.06	118.48	121.84
32	1a	1400	5MC	O2-C2-N3	-2.06	119.08	122.33
32	2a	1400	5MC	C5-C4-N3	-2.06	119.64	121.75
32	2a	516	PSU	C5-C6-N1	-2.06	119.28	122.14
1	1A	2251	OMG	C5-C6-N1	2.06	118.00	114.07
55	1x	32	5MC	O2-C2-N3	-2.05	119.09	122.33
1	1A	1917	PSU	C5-C6-N1	-2.05	119.29	122.14
55	2x	54	5MU	C5M-C5-C6	-2.05	120.08	122.85
32	1a	966	M2G	C5-C6-N1	2.05	117.98	114.07
1	2A	1920	OMC	O2-C2-N3	-2.02	119.14	122.33
32	1a	516	PSU	O4'-C1'-C2'	2.01	107.93	105.15
1	2A	1915	5MU	C5M-C5-C4	2.00	120.92	118.78
32	2a	967	5MC	O2-C2-N3	-2.00	119.17	122.33
55	2x	76	31H	CA-N-CN	-2.00	119.74	122.82

There are no chirality outliers.

All (56) 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	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
54	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2w	37	MIA	N1-C2-S10-C11
54	2w	37	MIA	N3-C2-S10-C11
54	2y	54	5MU	O4'-C4'-C5'-O5'
55	1x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
55	1x	76	31H	N-CA-CB-CG
55	2x	76	31H	N-CA-CB-CG
55	1x	76	31H	CB-CG-SD-CE
55	2x	76	31H	CB-CG-SD-CE
1	2A	1962	5MC	O4'-C4'-C5'-O5'
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
55	1x	76	31H	C-CA-CB-CG
55	1x	76	31H	C4'-C5'-O5'-P
55	2x	76	31H	C4'-C5'-O5'-P
54	2w	46	G7M	C4'-C5'-O5'-P
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	2A	1962	5MC	C3'-C4'-C5'-O5'
55	1x	76	31H	CB-CA-N-CN
55	2x	76	31H	CB-CA-N-CN
43	2l	92	0TD	CG-CB-SB-CSB
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
32	2a	1402	4OC	O4'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
54	1y	55	PSU	O4'-C1'-C5-C4
54	1w	37	MIA	N6-C12-C13-C14
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C4'-C5'-O5'-P
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	1a	527	G7M	C4'-C5'-O5'-P
54	1y	46	G7M	C3'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
54	1y	55	PSU	O4'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
1	1A	1920	OMC	C2'-C1'-N1-C2

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2581 ligands modelled in this entry, 2577 are monoatomic - leaving 4 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	$\#\|Z\| > 2$
59	SF4	1d	302	35	0,12,12	-	-	-		
57	A1A1L	2A	3783	-	34,39,39	3.52	10 (29%)	33,56,56	1.41	5 (15%)
59	SF4	2d	302	35	0,12,12	-	-	-		
57	A1A1L	1A	4060	-	34,39,39	3.35	12 (35%)	33,56,56	1.50	6 (18%)

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
59	SF4	1d	302	35	-	-	0/6/5/5
57	A1A1L	2A	3783	-	-	6/30/74/74	0/3/4/4
59	SF4	2d	302	35	-	-	0/6/5/5
57	A1A1L	1A	4060	-	-	5/30/74/74	0/3/4/4

All (22) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	2A	3783	A1A1L	C23-C22	-11.84	1.35	1.53
57	1A	4060	A1A1L	C23-C22	-10.87	1.37	1.53
57	2A	3783	A1A1L	O24-C23	9.74	1.52	1.42
57	1A	4060	A1A1L	C21-N20	9.40	1.54	1.34
57	2A	3783	A1A1L	C21-N20	9.23	1.53	1.34
57	1A	4060	A1A1L	O24-C23	8.79	1.51	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	2A	3783	A1A1L	C34-N35	-4.56	1.32	1.47
57	1A	4060	A1A1L	C34-N35	-4.41	1.32	1.47
57	2A	3783	A1A1L	C11-S10	3.96	1.85	1.82
57	1A	4060	A1A1L	C11-S10	3.65	1.85	1.82
57	2A	3783	A1A1L	O08-C09	2.86	1.47	1.42
57	1A	4060	A1A1L	O08-C09	2.80	1.46	1.42
57	2A	3783	A1A1L	C07-C19	2.78	1.56	1.53
57	1A	4060	A1A1L	O36-C21	-2.76	1.18	1.23
57	2A	3783	A1A1L	O36-C21	-2.64	1.18	1.23
57	1A	4060	A1A1L	O08-C07	2.57	1.48	1.44
57	2A	3783	A1A1L	O08-C07	2.45	1.47	1.44
57	1A	4060	A1A1L	C05-C03	-2.24	1.46	1.52
57	1A	4060	A1A1L	C28-C27	2.23	1.56	1.53
57	1A	4060	A1A1L	O24-C25	-2.22	1.40	1.43
57	2A	3783	A1A1L	O24-C25	-2.03	1.40	1.43
57	1A	4060	A1A1L	C07-C19	2.02	1.55	1.53

All (11) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	2A	3783	A1A1L	C09-O08-C07	-3.99	108.94	114.17
57	1A	4060	A1A1L	C12-C14-C15	-3.64	104.92	114.51
57	2A	3783	A1A1L	C11-S10-C09	3.61	106.82	100.12
57	1A	4060	A1A1L	C09-O08-C07	-3.28	109.87	114.17
57	1A	4060	A1A1L	O08-C07-C05	2.86	111.98	107.94
57	2A	3783	A1A1L	O08-C07-C05	2.75	111.83	107.94
57	2A	3783	A1A1L	C12-C14-C15	-2.61	107.65	114.51
57	1A	4060	A1A1L	C11-S10-C09	2.39	104.55	100.12
57	1A	4060	A1A1L	O36-C21-N20	-2.35	118.76	122.96
57	2A	3783	A1A1L	C32-C27-C26	-2.17	110.55	113.78
57	1A	4060	A1A1L	C32-C27-C26	-2.06	110.71	113.78

There are no chirality outliers.

All (11) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
57	1A	4060	A1A1L	C11-C12-C14-C15
57	1A	4060	A1A1L	F13-C12-C14-C15
57	2A	3783	A1A1L	C11-C12-C14-C15
57	2A	3783	A1A1L	F13-C12-C14-C15
57	1A	4060	A1A1L	O36-C21-C22-C23
57	2A	3783	A1A1L	O36-C21-C22-C23

Continued on next page...

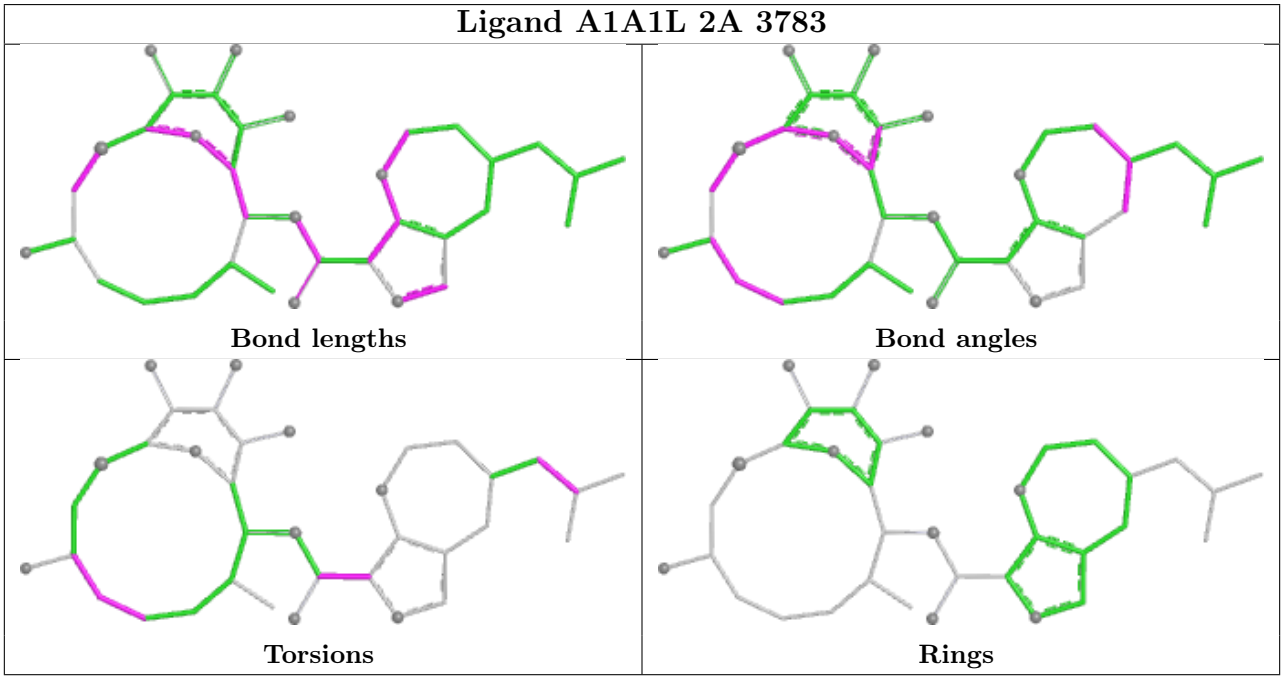
Continued from previous page...

Mol	Chain	Res	Type	Atoms
57	1A	4060	A1A1L	N20-C21-C22-C23
57	2A	3783	A1A1L	N20-C21-C22-C23
57	1A	4060	A1A1L	O36-C21-C22-N35
57	2A	3783	A1A1L	C12-C14-C15-C16
57	2A	3783	A1A1L	C27-C28-C29-C31

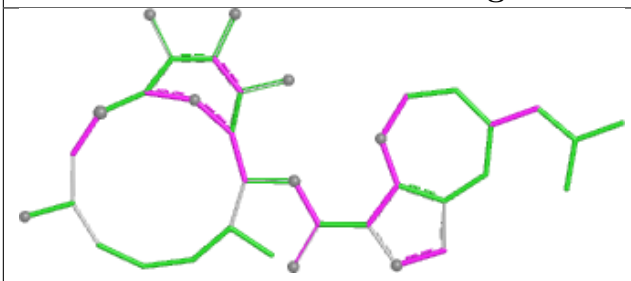
There are no ring outliers.

No monomer is involved in short contacts.

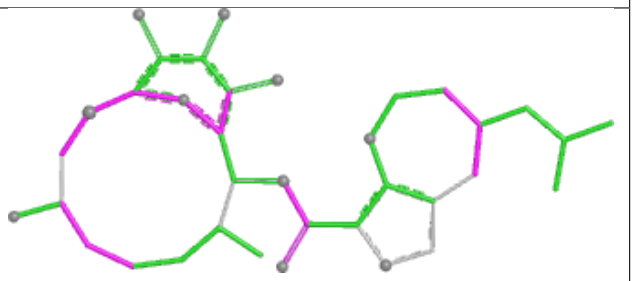
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.



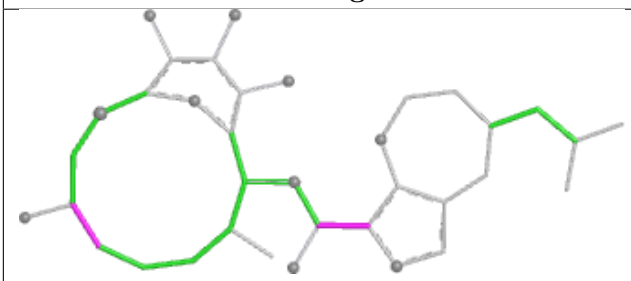
Ligand A1A1L 1A 4060



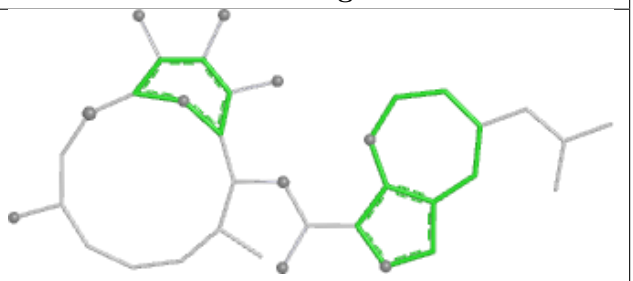
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

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	2860/2915 (98%)	-0.46	134 (4%) 37 34	22, 38, 92, 107	0
1	2A	2789/2915 (95%)	0.14	129 (4%) 38 35	34, 59, 92, 104	0
2	1B	120/121 (99%)	-0.29	0 100 100	32, 52, 65, 90	0
2	2B	120/121 (99%)	1.04	5 (4%) 41 38	64, 81, 88, 92	0
3	1D	275/276 (99%)	-0.18	4 (1%) 71 68	23, 38, 52, 76	0
3	2D	275/276 (99%)	0.29	5 (1%) 67 64	32, 52, 63, 80	0
4	1E	204/206 (99%)	-0.16	1 (0%) 87 85	22, 40, 60, 73	0
4	2E	204/206 (99%)	0.49	3 (1%) 71 68	38, 60, 71, 78	0
5	1F	202/210 (96%)	-0.01	2 (0%) 79 76	19, 43, 69, 84	0
5	2F	202/210 (96%)	0.68	8 (3%) 43 39	36, 68, 80, 86	0
6	1G	181/182 (99%)	0.67	12 (6%) 26 24	42, 62, 75, 88	0
6	2G	181/182 (99%)	1.68	58 (32%) 1 1	72, 81, 86, 91	0
7	1H	174/180 (96%)	0.23	3 (1%) 69 65	39, 54, 66, 72	0
7	2H	174/180 (96%)	1.58	49 (28%) 1 2	72, 82, 88, 92	0
8	1I	146/148 (98%)	0.97	13 (8%) 17 16	47, 74, 81, 84	0
8	2I	146/148 (98%)	1.22	18 (12%) 9 9	57, 73, 81, 85	0
9	1N	140/140 (100%)	-0.16	1 (0%) 84 81	28, 39, 61, 74	0
9	2N	140/140 (100%)	0.86	10 (7%) 23 22	49, 66, 78, 83	0
10	1O	122/122 (100%)	-0.02	0 100 100	30, 42, 59, 64	0
10	2O	122/122 (100%)	0.53	1 (0%) 82 79	48, 61, 71, 78	0
11	1P	149/150 (99%)	0.14	4 (2%) 56 52	23, 46, 67, 73	0
11	2P	149/150 (99%)	0.79	11 (7%) 22 20	39, 69, 81, 88	0
12	1Q	141/141 (100%)	0.02	2 (1%) 73 70	28, 43, 59, 75	0
12	2Q	141/141 (100%)	1.34	28 (19%) 3 4	50, 70, 78, 83	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%)	-0.27	0 100 100	26, 35, 50, 57	0
13	2R	118/118 (100%)	0.22	0 100 100	42, 54, 64, 70	0
14	1S	110/112 (98%)	0.27	1 (0%) 81 78	40, 52, 64, 66	0
14	2S	110/112 (98%)	1.43	18 (16%) 5 5	68, 75, 82, 84	0
15	1T	131/146 (89%)	0.14	5 (3%) 44 41	32, 45, 67, 74	0
15	2T	131/146 (89%)	0.67	5 (3%) 44 41	53, 62, 73, 78	0
16	1U	116/118 (98%)	-0.42	0 100 100	23, 31, 46, 64	0
16	2U	116/118 (98%)	0.65	2 (1%) 69 65	48, 63, 76, 81	0
17	1V	101/101 (100%)	-0.31	1 (0%) 79 76	23, 41, 55, 67	0
17	2V	101/101 (100%)	0.82	2 (1%) 64 62	44, 72, 78, 81	0
18	1W	112/113 (99%)	-0.14	1 (0%) 81 78	25, 33, 53, 80	0
18	2W	112/113 (99%)	0.45	3 (2%) 56 52	41, 51, 65, 91	0
19	1X	95/96 (98%)	0.07	1 (1%) 77 74	28, 40, 62, 73	0
19	2X	95/96 (98%)	0.78	5 (5%) 33 31	48, 60, 74, 78	0
20	1Y	107/110 (97%)	0.33	2 (1%) 66 63	36, 51, 67, 78	0
20	2Y	107/110 (97%)	1.28	16 (14%) 6 6	59, 71, 81, 86	0
21	1Z	154/206 (74%)	0.93	19 (12%) 9 9	38, 65, 86, 88	0
21	2Z	160/206 (77%)	1.92	55 (34%) 1 1	71, 83, 91, 95	0
22	10	77/85 (90%)	0.01	2 (2%) 57 54	30, 39, 54, 62	0
22	20	79/85 (92%)	1.60	19 (24%) 2 2	51, 68, 75, 80	0
23	11	97/98 (98%)	0.28	1 (1%) 79 76	28, 45, 69, 77	0
23	21	97/98 (98%)	0.51	3 (3%) 51 48	42, 56, 74, 78	0
24	12	70/72 (97%)	0.13	0 100 100	36, 50, 60, 68	0
24	22	70/72 (97%)	0.84	0 100 100	60, 70, 78, 78	0
25	13	59/60 (98%)	-0.16	2 (3%) 48 45	28, 37, 62, 79	0
25	23	59/60 (98%)	0.83	2 (3%) 48 45	56, 68, 77, 85	0
26	14	69/71 (97%)	1.07	14 (20%) 3 4	57, 75, 87, 91	0
26	24	69/71 (97%)	2.07	32 (46%) 0 1	80, 87, 92, 96	0
27	15	59/60 (98%)	-0.34	1 (1%) 69 65	22, 32, 52, 63	0
27	25	59/60 (98%)	0.32	1 (1%) 69 65	40, 52, 66, 76	0
28	16	53/54 (98%)	-0.07	0 100 100	35, 44, 58, 63	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%)	0.88	2 (3%) 44 41	55, 64, 71, 76	0
29	17	48/49 (97%)	-0.18	3 (6%) 27 25	22, 29, 55, 65	0
29	27	48/49 (97%)	0.24	4 (8%) 19 18	32, 43, 67, 71	0
30	18	64/65 (98%)	-0.26	0 100 100	27, 35, 42, 62	0
30	28	64/65 (98%)	0.70	2 (3%) 51 48	47, 58, 66, 67	0
31	19	37/37 (100%)	0.07	0 100 100	31, 41, 59, 60	0
31	29	37/37 (100%)	1.09	3 (8%) 19 18	64, 69, 76, 80	0
32	1a	1488/1521 (97%)	0.41	58 (3%) 44 40	37, 68, 92, 104	0
32	2a	1491/1521 (98%)	0.88	170 (11%) 11 10	50, 77, 95, 107	0
33	1b	231/256 (90%)	1.39	54 (23%) 2 3	66, 78, 87, 91	0
33	2b	231/256 (90%)	2.15	122 (52%) 0 0	73, 85, 89, 93	0
34	1c	206/239 (86%)	1.05	22 (10%) 12 12	62, 74, 83, 87	0
34	2c	206/239 (86%)	2.19	115 (55%) 0 0	74, 84, 88, 94	0
35	1d	208/209 (99%)	1.07	21 (10%) 14 13	57, 71, 80, 83	0
35	2d	208/209 (99%)	1.06	11 (5%) 33 31	61, 70, 78, 85	0
36	1e	148/162 (91%)	0.85	7 (4%) 37 34	53, 65, 75, 79	0
36	2e	148/162 (91%)	1.65	49 (33%) 1 1	63, 77, 84, 89	0
37	1f	100/101 (99%)	0.87	5 (5%) 35 32	58, 68, 77, 78	0
37	2f	100/101 (99%)	0.74	3 (3%) 52 49	59, 71, 78, 84	0
38	1g	155/156 (99%)	0.88	16 (10%) 13 12	59, 71, 83, 96	0
38	2g	155/156 (99%)	1.37	29 (18%) 4 4	69, 79, 86, 94	0
39	1h	137/138 (99%)	0.75	5 (3%) 46 43	57, 68, 73, 75	0
39	2h	137/138 (99%)	1.49	30 (21%) 3 3	68, 76, 82, 86	0
40	1i	127/128 (99%)	1.49	31 (24%) 2 2	57, 77, 84, 88	0
40	2i	127/128 (99%)	2.53	85 (66%) 0 0	73, 84, 88, 89	0
41	1j	97/105 (92%)	1.42	22 (22%) 3 3	62, 78, 85, 90	0
41	2j	96/105 (91%)	2.46	58 (60%) 0 0	77, 86, 91, 93	0
42	1k	114/129 (88%)	0.81	11 (9%) 15 14	46, 66, 76, 81	0
42	2k	114/129 (88%)	1.34	23 (20%) 3 4	57, 74, 81, 85	0
43	1l	121/132 (91%)	0.61	7 (5%) 30 28	46, 57, 68, 74	0
43	2l	121/132 (91%)	1.44	25 (20%) 3 3	57, 70, 77, 84	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%)	1.07	14 (11%) 11 10	56, 71, 79, 85	0
44	2m	122/126 (96%)	2.23	60 (49%) 0 0	75, 83, 87, 91	0
45	1n	60/61 (98%)	1.27	9 (15%) 6 6	62, 69, 75, 79	0
45	2n	60/61 (98%)	2.79	42 (70%) 0 0	79, 85, 89, 91	0
46	1o	88/89 (98%)	0.70	5 (5%) 30 28	49, 66, 74, 78	0
46	2o	88/89 (98%)	1.20	10 (11%) 11 10	62, 73, 81, 84	0
47	1p	82/88 (93%)	1.69	28 (34%) 1 1	58, 72, 77, 84	0
47	2p	82/88 (93%)	1.16	11 (13%) 8 8	60, 69, 77, 81	0
48	1q	99/105 (94%)	0.88	6 (6%) 28 26	54, 67, 77, 79	0
48	2q	99/105 (94%)	1.18	14 (14%) 7 7	63, 73, 80, 83	0
49	1r	68/88 (77%)	0.77	5 (7%) 22 20	58, 67, 76, 78	0
49	2r	68/88 (77%)	0.82	3 (4%) 39 36	64, 72, 81, 85	0
50	1s	83/93 (89%)	0.99	9 (10%) 12 11	64, 74, 81, 85	0
50	2s	83/93 (89%)	2.23	48 (57%) 0 0	81, 87, 91, 93	0
51	1t	96/106 (90%)	1.21	14 (14%) 7 7	63, 72, 80, 84	0
51	2t	96/106 (90%)	1.07	12 (12%) 9 9	58, 71, 80, 85	0
52	1u	23/27 (85%)	1.35	4 (17%) 5 5	64, 69, 72, 74	0
52	2u	23/27 (85%)	2.74	17 (73%) 0 0	74, 81, 85, 86	0
53	1v	13/24 (54%)	0.92	3 (23%) 2 3	51, 64, 86, 93	0
53	2v	13/24 (54%)	1.87	4 (30%) 1 1	72, 82, 93, 96	0
54	1w	64/76 (84%)	1.06	5 (7%) 20 19	63, 87, 96, 103	0
54	1y	67/76 (88%)	1.10	8 (11%) 10 9	38, 90, 98, 100	0
54	2w	62/76 (81%)	1.52	17 (27%) 2 2	82, 94, 100, 106	0
54	2y	66/76 (86%)	1.35	11 (16%) 5 5	56, 94, 99, 103	0
55	1x	71/77 (92%)	0.38	1 (1%) 73 70	29, 64, 85, 90	0
55	2x	71/77 (92%)	0.79	3 (4%) 41 38	48, 80, 90, 95	0
All	All	20855/21748 (95%)	0.55	2070 (9%) 14 13	19, 65, 89, 107	0

All (2070) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	1m	124	PRO	7.8
40	2i	11	LYS	7.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	124	PRO	7.3
40	2i	102	LEU	7.1
44	1m	2	ALA	7.0
45	2n	2	ALA	6.9
33	2b	165	VAL	6.8
38	2g	82	GLY	6.5
54	1w	73	A	6.5
33	2b	71	VAL	6.3
44	1m	122	LYS	6.3
21	2Z	174	VAL	6.3
32	2a	1033	G	6.2
21	2Z	173	ALA	6.2
44	1m	123	ALA	6.1
41	2j	32	ALA	6.1
22	20	7	LEU	6.0
23	11	2	SER	6.0
45	1n	2	ALA	6.0
44	2m	102	ARG	6.0
21	1Z	141	VAL	5.9
1	2A	2155	G	5.9
15	1T	131	ALA	5.8
38	1g	81	GLY	5.8
44	2m	123	ALA	5.8
23	21	2	SER	5.7
45	2n	25	VAL	5.6
21	2Z	146	ILE	5.6
38	2g	16	LEU	5.5
45	2n	34	TYR	5.5
44	2m	6	GLY	5.5
21	1Z	146	ILE	5.4
45	2n	39	LEU	5.4
26	24	51	ASP	5.4
41	2j	47	PHE	5.3
1	2A	1536	C	5.2
34	2c	189	ALA	5.2
1	2A	2125	G	5.2
43	2l	64	TYR	5.2
33	2b	237	ALA	5.1
38	2g	83	ALA	5.1
40	2i	14	VAL	5.0
33	2b	236	TYR	5.0
44	2m	104	ARG	5.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	1g	83	ALA	4.9
50	2s	84	GLY	4.9
33	2b	121	LEU	4.9
54	1w	71	G	4.9
41	2j	63	PHE	4.8
32	2a	1149	C	4.8
8	2I	146	ALA	4.8
41	2j	65	LEU	4.7
45	2n	6	LEU	4.7
38	2g	84	ASN	4.7
1	1A	1057	A	4.7
20	2Y	90	LEU	4.7
40	2i	9	ARG	4.7
33	2b	70	PHE	4.7
20	2Y	1	MET	4.7
53	2v	12	A	4.7
54	2w	73	A	4.7
42	1k	14	VAL	4.7
43	1l	18	VAL	4.6
38	1g	80	VAL	4.6
40	1i	15	ALA	4.6
34	2c	188	LEU	4.6
44	2m	100	GLY	4.6
1	1A	1081	U	4.6
32	2a	1219	U	4.6
38	2g	154	TYR	4.6
41	2j	76	ASN	4.6
38	2g	85	TYR	4.5
7	1H	2	SER	4.5
34	1c	207	VAL	4.5
41	2j	36	GLY	4.5
40	2i	7	THR	4.5
38	2g	80	VAL	4.5
50	2s	9	VAL	4.5
33	2b	187	LEU	4.5
40	2i	5	TYR	4.5
45	2n	38	GLY	4.5
52	2u	2	GLY	4.5
1	1A	1087	G	4.4
26	24	49	PHE	4.4
34	2c	195	VAL	4.4
38	1g	82	GLY	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	896	A	4.4
26	24	50	VAL	4.4
33	1b	237	ALA	4.4
1	2A	2154	G	4.4
41	2j	10	GLY	4.4
40	2i	10	ARG	4.4
41	2j	74	ILE	4.3
44	2m	65	LYS	4.3
44	2m	72	ALA	4.3
1	1A	885	C	4.3
32	2a	1503	A	4.3
22	20	8	GLY	4.3
52	2u	24	ARG	4.3
32	2a	1224	G	4.3
50	2s	80	TYR	4.3
52	2u	23	PRO	4.3
33	1b	230	VAL	4.3
34	2c	149	ALA	4.3
45	2n	3	ARG	4.3
51	1t	103	GLY	4.3
34	1c	2	GLY	4.3
6	1G	48	GLU	4.2
33	2b	7	VAL	4.2
34	2c	198	VAL	4.2
40	2i	126	SER	4.2
34	2c	129	ALA	4.2
33	2b	201	ILE	4.2
41	2j	38	ILE	4.2
34	2c	201	TYR	4.2
32	2a	1030	C	4.2
15	1T	130	ALA	4.2
40	2i	67	GLY	4.2
32	1a	630	G	4.2
32	2a	1532	U	4.2
1	2A	2138	C	4.2
1	2A	2146	C	4.2
21	2Z	150	LEU	4.1
34	2c	182	ILE	4.1
32	1a	1001(A)	G	4.1
40	2i	36	TYR	4.1
12	2Q	15	GLY	4.1
1	1A	1064	C	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	185	ILE	4.1
45	2n	37	PHE	4.1
32	2a	1036	G	4.1
21	2Z	144	LEU	4.1
33	2b	80	ILE	4.1
34	2c	128	PHE	4.1
44	1m	121	LYS	4.1
52	2u	14	TRP	4.1
33	1b	229	VAL	4.1
33	1b	33	TYR	4.1
18	1W	112	GLY	4.1
1	1A	1094	U	4.1
6	2G	140	ILE	4.1
1	1A	1096	A	4.1
1	2A	2126	A	4.1
44	2m	122	LYS	4.1
1	2A	2156	G	4.0
1	2A	1026	U	4.0
34	2c	8	ILE	4.0
44	2m	7	VAL	4.0
21	2Z	149	SER	4.0
3	2D	275	LYS	4.0
1	2A	2113	U	4.0
1	1A	1058	G	4.0
32	2a	1030(A)	G	4.0
32	2a	1034	G	4.0
33	2b	152	PHE	4.0
26	24	56	VAL	4.0
32	1a	1027	C	4.0
42	2k	117	ASN	4.0
44	2m	70	LEU	4.0
41	2j	41	PRO	4.0
41	2j	91	PRO	4.0
12	2Q	121	ALA	4.0
39	2h	2	LEU	4.0
50	2s	2	PRO	4.0
32	1a	1532	U	4.0
33	2b	122	PHE	4.0
29	27	45	ALA	3.9
18	2W	112	GLY	3.9
32	2a	1002	G	3.9
54	2y	57	G	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2145	C	3.9
50	2s	79	THR	3.9
50	2s	45	VAL	3.9
40	2i	104	ARG	3.9
33	1b	133	LYS	3.9
34	2c	87	LEU	3.9
39	1h	98	LYS	3.9
21	2Z	121	HIS	3.9
41	2j	78	ASN	3.9
6	2G	20	ILE	3.9
1	2A	2111	C	3.9
40	2i	92	TYR	3.9
1	2A	2112	G	3.9
34	2c	187	ALA	3.9
40	2i	13	ALA	3.9
1	2A	11	G	3.8
32	2a	1116	C	3.8
51	1t	13	LEU	3.8
40	2i	94	ALA	3.8
33	2b	234	PRO	3.8
34	2c	79	ARG	3.8
7	2H	52	VAL	3.8
40	2i	17	VAL	3.8
40	2i	41	VAL	3.8
45	2n	33	VAL	3.8
32	1a	1035	A	3.8
34	2c	137	ALA	3.8
53	2v	13	A	3.8
1	1A	1078	U	3.8
26	24	32	TYR	3.8
33	2b	11	LEU	3.8
33	2b	120	ALA	3.8
40	2i	91	ASP	3.8
41	1j	32	ALA	3.8
44	2m	5	ALA	3.8
51	2t	103	GLY	3.8
32	2a	1035	A	3.8
1	2A	883	G	3.8
1	2A	2802	G	3.8
32	1a	1021	G	3.8
32	2a	1220	G	3.8
33	1b	11	LEU	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	1i	19	LEU	3.8
26	14	56	VAL	3.8
7	2H	39	PRO	3.8
44	2m	68	GLY	3.8
50	2s	13	ASP	3.8
1	2A	2170	A	3.8
54	1w	72	C	3.8
41	2j	40	LEU	3.7
33	1b	7	VAL	3.7
33	2b	211	ILE	3.7
52	2u	13	ILE	3.7
39	2h	15	ASN	3.7
1	1A	899	A	3.7
1	2A	2136	C	3.7
1	2A	2133	G	3.7
32	2a	1001(A)	G	3.7
40	2i	27	THR	3.7
34	2c	2	GLY	3.7
33	2b	123	ALA	3.7
21	2Z	171	ILE	3.7
33	2b	97	TRP	3.7
38	1g	85	TYR	3.7
14	2S	46	VAL	3.7
33	2b	132	LYS	3.7
44	2m	75	ALA	3.7
26	24	65	ASP	3.7
41	2j	75	ILE	3.7
26	24	9	LEU	3.7
1	1A	2111	C	3.7
1	2A	2137	C	3.7
26	24	63	TYR	3.7
40	1i	2	GLU	3.7
43	1l	64	TYR	3.7
45	2n	61	TRP	3.7
47	1p	82	GLN	3.7
7	2H	7	LEU	3.6
40	2i	96	LEU	3.6
45	2n	18	VAL	3.6
34	2c	124	ILE	3.6
34	2c	157	ILE	3.6
1	2A	2157	G	3.6
32	2a	1117	G	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	48	MET	3.6
51	2t	98	PRO	3.6
14	2S	20	ARG	3.6
32	1a	1257	U	3.6
34	2c	194	GLY	3.6
38	1g	4	ARG	3.6
1	1A	2119	A	3.6
32	1a	1447	A	3.6
32	2a	1030(B)	C	3.6
1	2A	2166	G	3.6
32	2a	1032	G	3.6
7	2H	19	VAL	3.6
7	2H	45	VAL	3.6
7	2H	50	VAL	3.6
52	2u	15	ARG	3.6
40	2i	103	THR	3.6
1	1A	1082	U	3.6
34	2c	133	ALA	3.6
1	1A	896	A	3.6
1	2A	885	C	3.6
20	2Y	54	LYS	3.6
32	2a	1249	C	3.6
51	2t	74	LYS	3.6
6	2G	17	PRO	3.6
50	2s	76	PRO	3.6
40	2i	101	PHE	3.6
1	1A	2159	G	3.6
32	1a	1030(A)	G	3.6
35	1d	167	GLY	3.6
35	1d	170	VAL	3.6
51	1t	69	GLY	3.6
12	2Q	22	LYS	3.5
19	1X	95	LEU	3.5
1	2A	2145	C	3.5
33	2b	21	ARG	3.5
40	2i	128	ARG	3.5
27	15	60	VAL	3.5
33	2b	197	VAL	3.5
38	2g	81	GLY	3.5
40	2i	28	VAL	3.5
52	2u	11	GLY	3.5
21	2Z	172	ALA	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	886	C	3.5
1	1A	2138	C	3.5
34	2c	78	GLY	3.5
6	2G	15	VAL	3.5
33	2b	136	VAL	3.5
33	2b	230	VAL	3.5
6	2G	163	ALA	3.5
33	2b	223	ILE	3.5
9	2N	118	LYS	3.5
34	2c	6	HIS	3.5
6	1G	146	TYR	3.5
42	2k	75	TYR	3.5
1	1A	879	G	3.5
40	2i	99	LEU	3.5
1	1A	2117	A	3.5
31	29	37	GLY	3.5
34	2c	9	GLY	3.5
7	2H	15	VAL	3.5
34	2c	152	ILE	3.5
44	2m	4	ILE	3.5
45	2n	7	ILE	3.5
42	1k	75	TYR	3.5
32	1a	1025	U	3.5
34	2c	73	PRO	3.5
41	2j	77	PRO	3.5
45	2n	31	ARG	3.5
1	1A	1056	G	3.5
1	2A	2127	G	3.5
50	1s	9	VAL	3.5
3	2D	2	ALA	3.5
33	1b	200	ILE	3.5
1	2A	2139	C	3.4
33	1b	10	LEU	3.4
51	1t	10	LEU	3.4
8	2I	82	ARG	3.4
34	2c	190	ARG	3.4
38	2g	5	ARG	3.4
1	2A	2159	G	3.4
33	2b	83	MET	3.4
44	2m	101	GLN	3.4
34	2c	138	VAL	3.4
21	2Z	51	ALA	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	1b	172	ILE	3.4
1	1A	2135	A	3.4
1	2A	2134	A	3.4
44	2m	66	LEU	3.4
26	24	25	TYR	3.4
33	2b	92	TYR	3.4
39	2h	58	TYR	3.4
45	2n	14	PRO	3.4
33	1b	134	GLU	3.4
22	20	69	PHE	3.4
33	2b	163	PHE	3.4
22	20	9	SER	3.4
41	2j	44	VAL	3.4
33	2b	131	PRO	3.4
41	2j	37	PRO	3.4
32	2a	999	C	3.4
54	2w	3	C	3.4
54	2w	72	C	3.4
44	2m	64	TRP	3.4
1	1A	1065	U	3.4
12	2Q	104	PHE	3.4
33	2b	112	VAL	3.4
33	2b	200	ILE	3.4
29	17	45	ALA	3.4
22	20	84	LEU	3.4
44	2m	96	LEU	3.4
48	1q	98	LEU	3.4
38	1g	79	ARG	3.4
40	1i	66	ARG	3.4
40	2i	66	ARG	3.4
1	2A	2169	A	3.4
33	1b	129	GLU	3.4
14	2S	29	PHE	3.4
1	1A	2118	U	3.4
33	2b	140	HIS	3.4
7	2H	44	VAL	3.4
41	1j	4	ILE	3.4
5	2F	166	ALA	3.3
33	2b	188	ALA	3.3
34	2c	65	ALA	3.3
6	2G	3	LEU	3.3
1	1A	880	G	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1034	G	3.3
40	2i	105	ASP	3.3
33	2b	31	TYR	3.3
33	2b	148	TYR	3.3
47	2p	82	GLN	3.3
21	2Z	147	GLY	3.3
34	2c	158	GLY	3.3
12	2Q	109	VAL	3.3
26	14	50	VAL	3.3
32	2a	1150	U	3.3
34	2c	207	VAL	3.3
36	2e	109	ILE	3.3
8	1I	146	ALA	3.3
25	13	2	PRO	3.3
33	1b	125	PRO	3.3
50	1s	13	ASP	3.3
1	1A	1068	G	3.3
1	2A	899	A	3.3
32	1a	1286	A	3.3
1	2A	888	C	3.3
6	1G	50	ALA	3.3
21	2Z	164	ALA	3.3
32	1a	204	U	3.3
32	1a	1028	C	3.3
44	2m	90	LEU	3.3
41	2j	59	SER	3.3
44	2m	105	THR	3.3
45	2n	30	ALA	3.3
33	2b	133	LYS	3.3
7	2H	10	PRO	3.3
52	1u	23	PRO	3.3
45	2n	55	GLY	3.3
47	1p	78	GLY	3.3
21	2Z	141	VAL	3.3
34	2c	151	VAL	3.3
42	2k	126	ARG	3.3
43	2l	18	VAL	3.3
21	2Z	76	LEU	3.3
32	1a	1023	G	3.3
32	1a	1024	G	3.3
50	2s	63	THR	3.3
1	2A	2803	C	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	23	2	PRO	3.3
33	2b	91	PRO	3.3
40	2i	63	ILE	3.2
43	2l	126	LYS	3.2
45	2n	13	THR	3.2
1	1A	2150	U	3.2
1	1A	2152	G	3.2
1	2A	2893	G	3.2
32	1a	1036	G	3.2
54	2y	18	G	3.2
33	2b	86	GLU	3.2
1	1A	898	C	3.2
32	2a	1018	C	3.2
40	2i	81	ILE	3.2
20	2Y	106	LEU	3.2
34	2c	196	LEU	3.2
44	2m	60	VAL	3.2
15	2T	130	ALA	3.2
33	2b	88	ALA	3.2
35	1d	195	ALA	3.2
40	1i	106	ALA	3.2
41	2j	27	ALA	3.2
21	2Z	95	PRO	3.2
21	2Z	129	SER	3.2
54	1y	20	U	3.2
1	2A	2147	G	3.2
1	2A	884	C	3.2
21	2Z	88	PHE	3.2
3	2D	38	LYS	3.2
34	2c	77	ILE	3.2
47	1p	4	ILE	3.2
8	2I	38	LEU	3.2
36	2e	12	LEU	3.2
38	1g	84	ASN	3.2
36	2e	51	VAL	3.2
40	2i	62	TYR	3.2
34	2c	53	ALA	3.2
1	1A	1098	A	3.2
32	1a	1531	A	3.2
32	2a	1531	A	3.2
42	1k	13	GLN	3.2
12	2Q	59	ARG	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2115	G	3.2
3	1D	276	LYS	3.2
1	2A	2128	C	3.2
8	1I	38	LEU	3.2
40	2i	79	LEU	3.2
47	1p	1	MET	3.2
50	2s	15	LEU	3.2
50	2s	16	LEU	3.2
41	2j	49	VAL	3.2
26	14	63	TYR	3.2
33	2b	77	ALA	3.2
21	2Z	167	PRO	3.2
46	1o	19	PRO	3.2
1	1A	2113	U	3.2
1	2A	2173	A	3.2
32	2a	1286	A	3.2
33	1b	17	PHE	3.2
26	14	54	GLY	3.1
39	2h	4	ASP	3.1
6	2G	52	ILE	3.1
14	2S	35	ILE	3.1
33	2b	215	LEU	3.1
34	2c	202	ILE	3.1
41	2j	23	ILE	3.1
1	1A	1059	G	3.1
32	2a	1038	C	3.1
32	2a	1114	C	3.1
54	1w	1	G	3.1
54	1y	18	G	3.1
36	2e	34	VAL	3.1
6	2G	142	PRO	3.1
6	2G	146	TYR	3.1
34	2c	168	ALA	3.1
34	2c	184	TYR	3.1
40	2i	114	TYR	3.1
41	2j	42	THR	3.1
40	2i	110	GLU	3.1
34	2c	167	TRP	3.1
3	1D	275	LYS	3.1
52	2u	6	ARG	3.1
33	2b	17	PHE	3.1
33	2b	101	MET	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	2j	31	GLY	3.1
1	1A	2114	A	3.1
1	2A	2158	A	3.1
6	2G	92	VAL	3.1
31	29	16	VAL	3.1
33	1b	136	VAL	3.1
33	2b	93	VAL	3.1
41	2j	72	VAL	3.1
45	2n	10	ALA	3.1
1	2A	886	C	3.1
32	1a	1003	G	3.1
40	2i	125	TYR	3.1
20	2Y	94	LYS	3.1
43	2l	41	ARG	3.1
52	1u	24	ARG	3.1
6	2G	39	ILE	3.1
21	2Z	157	LEU	3.1
1	2A	2119	A	3.1
7	2H	49	VAL	3.1
33	1b	236	TYR	3.1
42	2k	25	TYR	3.1
1	2A	889	C	3.1
2	2B	4	C	3.1
50	2s	14	HIS	3.1
42	2k	13	GLN	3.1
1	1A	2156	G	3.1
32	2a	1094	G	3.1
21	2Z	106	GLY	3.1
26	24	54	GLY	3.1
33	2b	154	LEU	3.1
41	2j	71	LEU	3.1
43	1l	63	GLY	3.1
7	2H	17	VAL	3.1
7	2H	43	VAL	3.1
1	2A	2801(A)	A	3.1
32	1a	1503	A	3.1
32	2a	1250	A	3.1
33	2b	169	LYS	3.1
52	2u	8	THR	3.1
34	2c	48	TYR	3.1
34	2c	170	GLN	3.1
50	2s	78	ARG	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1076	C	3.1
1	2A	2140	C	3.1
54	2y	56	C	3.1
1	1A	1063	G	3.0
1	1A	2151	G	3.0
1	2A	2153	G	3.0
35	1d	194	LEU	3.0
46	1o	57	LEU	3.0
1	2A	2167	U	3.0
33	1b	234	PRO	3.0
41	2j	34	VAL	3.0
29	27	48	LYS	3.0
34	2c	4	LYS	3.0
40	2i	2	GLU	3.0
33	2b	67	THR	3.0
45	2n	29	ARG	3.0
32	1a	1030(D)	A	3.0
32	2a	983	A	3.0
32	2a	1092	A	3.0
6	1G	76	SER	3.0
5	2F	24	LEU	3.0
1	1A	2136	C	3.0
1	2A	2896	C	3.0
32	1a	1008	C	3.0
33	1b	97	TRP	3.0
34	1c	182	ILE	3.0
36	2e	29	GLY	3.0
52	2u	16	GLY	3.0
1	1A	1176	G	3.0
1	2A	1533	G	3.0
1	2A	2131	G	3.0
32	2a	1021	G	3.0
8	2I	145	VAL	3.0
40	2i	65	VAL	3.0
32	2a	1148	U	3.0
32	2a	1257	U	3.0
12	2Q	10	ARG	3.0
22	20	43	THR	3.0
45	2n	22	THR	3.0
40	2i	4	TYR	3.0
1	1A	229	A	3.0
1	1A	1069	A	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	1Z	149	SER	3.0
41	2j	35	SER	3.0
43	2l	62	SER	3.0
6	2G	175	LEU	3.0
50	2s	5	LEU	3.0
50	2s	71	LEU	3.0
7	2H	72	ILE	3.0
48	2q	65	ILE	3.0
50	2s	68	GLY	3.0
32	2a	1115	C	3.0
21	1Z	105	VAL	3.0
1	1A	2112	G	3.0
1	2A	2110	G	3.0
32	2a	1127	G	3.0
38	1g	2	ALA	3.0
36	1e	10	MET	3.0
45	2n	27	CYS	3.0
6	2G	139	LEU	3.0
40	2i	56	LEU	3.0
1	1A	1086	A	3.0
32	1a	1001	A	3.0
32	2a	1030(D)	A	3.0
32	2a	1225	A	3.0
36	2e	74	GLY	3.0
3	2D	276	LYS	3.0
42	2k	124	LYS	3.0
44	2m	121	LYS	3.0
40	2i	90	PRO	3.0
34	2c	62	ASP	3.0
36	2e	100	VAL	3.0
40	2i	42	ARG	3.0
41	2j	28	ARG	3.0
44	2m	58	GLU	3.0
33	1b	15	VAL	3.0
40	2i	117	HIS	3.0
46	2o	60	VAL	3.0
38	2g	2	ALA	3.0
35	1d	181	MET	3.0
34	2c	67	THR	3.0
1	1A	1089	G	3.0
34	2c	52	LEU	2.9
45	2n	21	TYR	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	2Z	136	PHE	2.9
32	2a	1001	A	2.9
32	2a	1447	A	2.9
33	1b	131	PRO	2.9
43	2l	5	PRO	2.9
47	1p	48	TRP	2.9
54	2w	31	A	2.9
34	2c	55	VAL	2.9
34	2c	141	VAL	2.9
36	2e	55	VAL	2.9
7	2H	156	ALA	2.9
33	2b	161	ALA	2.9
1	1A	1075	C	2.9
1	1A	2161	C	2.9
1	1A	2132	U	2.9
33	1b	187	LEU	2.9
33	2b	10	LEU	2.9
33	2b	44	LEU	2.9
34	2c	12	LEU	2.9
6	2G	74	LYS	2.9
21	2Z	156	LYS	2.9
1	1A	2141	G	2.9
32	2a	1003	G	2.9
32	2a	1031	G	2.9
33	2b	33	TYR	2.9
41	2j	14	LYS	2.9
45	2n	4	LYS	2.9
7	2H	14	GLY	2.9
33	2b	214	ILE	2.9
41	2j	93	GLY	2.9
46	2o	89	GLY	2.9
40	2i	49	PRO	2.9
9	2N	61	ARG	2.9
1	1A	2134	A	2.9
1	1A	2158	A	2.9
1	2A	652(B)	A	2.9
1	2A	2310	A	2.9
33	2b	184	VAL	2.9
34	2c	66	VAL	2.9
40	1i	14	VAL	2.9
53	1v	13	A	2.9
38	2g	13	GLN	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	52	THR	2.9
34	2c	15	THR	2.9
1	2A	614(A)	U	2.9
41	1j	90	LEU	2.9
45	2n	44	LEU	2.9
7	2H	2	SER	2.9
33	1b	127	ILE	2.9
42	2k	48	ILE	2.9
12	2Q	61	GLY	2.9
34	2c	171	GLY	2.9
44	2m	23	TYR	2.9
50	1s	84	GLY	2.9
6	2G	21	ARG	2.9
26	14	58	ARG	2.9
33	2b	137	ARG	2.9
38	2g	32	ARG	2.9
50	2s	81	ARG	2.9
1	1A	2160	G	2.9
1	2A	2308	G	2.9
41	2j	13	HIS	2.9
54	2w	71	G	2.9
29	27	46	VAL	2.9
49	1r	86	VAL	2.9
1	1A	1095	A	2.9
32	2a	1357	A	2.9
44	2m	103	THR	2.9
34	2c	204	LEU	2.9
1	1A	2137	C	2.9
1	1A	2794	C	2.9
32	2a	962	C	2.9
43	2l	7	ILE	2.9
21	2Z	104	PHE	2.9
21	1Z	1	MET	2.9
12	2Q	12	GLN	2.9
34	2c	162	GLN	2.9
37	1f	88	VAL	2.9
1	1A	2149	G	2.9
1	2A	882	G	2.9
1	2A	2116	G	2.9
32	1a	1002	G	2.9
36	2e	30	ALA	2.9
40	2i	82	ALA	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	106	ALA	2.9
32	2a	974	A	2.8
32	2a	977	A	2.8
34	2c	5	ILE	2.8
40	1i	81	ILE	2.8
45	1n	7	ILE	2.8
1	1A	1060	U	2.8
21	2Z	143	GLY	2.8
21	1Z	136	PHE	2.8
21	2Z	48	PHE	2.8
34	2c	7	PRO	2.8
45	2n	32	SER	2.8
50	2s	10	PHE	2.8
1	1A	888	C	2.8
20	1Y	1	MET	2.8
32	2a	1037	C	2.8
41	2j	83	GLU	2.8
6	2G	28	VAL	2.8
26	24	10	VAL	2.8
34	2c	68	VAL	2.8
29	17	48	LYS	2.8
1	2A	2751	G	2.8
32	2a	1202	G	2.8
33	1b	154	LEU	2.8
54	2w	44	G	2.8
1	1A	1046	A	2.8
25	23	29	ARG	2.8
34	2c	14	ILE	2.8
44	2m	88	ARG	2.8
6	2G	102	PHE	2.8
20	2Y	5	MET	2.8
33	1b	228	GLY	2.8
33	2b	125	PRO	2.8
35	1d	87	GLY	2.8
44	2m	92	HIS	2.8
50	2s	42	PRO	2.8
44	1m	87	TYR	2.8
44	2m	59	TYR	2.8
32	2a	1223	C	2.8
6	2G	159	VAL	2.8
21	1Z	139	VAL	2.8
38	2g	36	LYS	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	108	VAL	2.8
33	1b	120	ALA	2.8
33	1b	123	ALA	2.8
34	2c	163	ALA	2.8
44	2m	118	ALA	2.8
6	2G	19	LEU	2.8
8	1I	72	LEU	2.8
21	2Z	125	LEU	2.8
26	24	52	THR	2.8
38	2g	37	ASN	2.8
52	2u	17	THR	2.8
1	2A	2115	G	2.8
32	2a	1222	G	2.8
32	2a	1253	G	2.8
36	2e	10	MET	2.8
36	2e	13	ILE	2.8
39	2h	86	ILE	2.8
41	1j	86	MET	2.8
44	2m	78	ILE	2.8
33	1b	19	HIS	2.8
34	2c	74	GLY	2.8
36	2e	22	GLY	2.8
40	2i	98	PRO	2.8
43	2l	63	GLY	2.8
1	2A	887	A	2.8
32	2a	1016	A	2.8
32	2a	1248	A	2.8
40	2i	37	PHE	2.8
44	2m	69	GLU	2.8
7	2H	157	TYR	2.8
26	14	67	TYR	2.8
48	2q	100	LYS	2.8
33	2b	164	VAL	2.8
1	2A	2174	C	2.8
32	1a	1019	C	2.8
33	1b	188	ALA	2.8
44	2m	42	ALA	2.8
11	1P	147	LEU	2.8
29	17	47	ARG	2.8
29	27	47	ARG	2.8
51	2t	8	ARG	2.8
36	2e	118	ILE	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	24	29	PRO	2.8
40	2i	68	GLY	2.8
6	2G	80	PHE	2.8
38	2g	26	PHE	2.8
40	2i	18	PHE	2.8
47	1p	80	PHE	2.8
1	2A	2793	G	2.8
32	2a	1190	G	2.8
54	2y	19	G	2.8
32	1a	344	A	2.8
43	2l	13	LYS	2.8
1	1A	1066	U	2.8
44	2m	21	TYR	2.8
9	2N	140	VAL	2.8
34	2c	116	VAL	2.8
39	2h	53	VAL	2.8
36	1e	21	ALA	2.8
41	2j	26	ALA	2.8
21	2Z	140	ASP	2.7
33	2b	98	LEU	2.7
38	2g	12	LEU	2.7
45	2n	53	LEU	2.7
48	2q	98	LEU	2.7
1	1A	884	C	2.7
22	20	11	ARG	2.7
32	1a	1030	C	2.7
38	2g	76	ARG	2.7
51	1t	8	ARG	2.7
39	2h	9	MET	2.7
11	2P	35	HIS	2.7
33	1b	41	ILE	2.7
33	2b	127	ILE	2.7
41	1j	77	PRO	2.7
14	2S	22	GLY	2.7
7	1H	175	LYS	2.7
40	2i	95	LYS	2.7
33	1b	45	GLN	2.7
1	1A	1093	G	2.7
1	1A	2190	G	2.7
1	2A	878	A	2.7
1	2A	2135	A	2.7
1	2A	2144	U	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	24	35	VAL	2.7
32	2a	1183	A	2.7
53	1v	12	A	2.7
54	2y	15	G	2.7
6	2G	34	LEU	2.7
34	2c	178	LEU	2.7
36	2e	138	ALA	2.7
43	2l	68	ALA	2.7
49	1r	78	LEU	2.7
15	2T	112	ARG	2.7
33	1b	130	ARG	2.7
33	2b	130	ARG	2.7
6	2G	157	ILE	2.7
34	1c	39	ILE	2.7
54	2w	4	C	2.7
21	2Z	168	GLU	2.7
33	1b	9	GLU	2.7
36	2e	23	GLY	2.7
42	1k	90	GLY	2.7
6	1G	80	PHE	2.7
33	2b	135	GLN	2.7
26	24	66	SER	2.7
7	2H	79	VAL	2.7
8	1I	136	VAL	2.7
40	2i	26	VAL	2.7
44	2m	76	ALA	2.7
50	1s	20	LEU	2.7
50	1s	71	LEU	2.7
32	2a	1110	A	2.7
36	2e	18	ARG	2.7
1	1A	2162	G	2.7
1	2A	2165	G	2.7
32	2a	1310	G	2.7
34	2c	142	MET	2.7
39	2h	3	THR	2.7
44	2m	37	THR	2.7
50	2s	77	THR	2.7
7	2H	9	ILE	2.7
36	2e	101	ILE	2.7
3	1D	38	LYS	2.7
44	2m	120	LYS	2.7
47	1p	43	LYS	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	1b	227	GLY	2.7
33	2b	89	GLY	2.7
34	2c	185	GLY	2.7
40	2i	12	GLU	2.7
50	2s	46	GLY	2.7
1	2A	2297	C	2.7
32	2a	1054	C	2.7
32	2a	1226	C	2.7
3	2D	126	GLN	2.7
21	1Z	52	SER	2.7
34	2c	76	VAL	2.7
41	1j	44	VAL	2.7
42	2k	114	VAL	2.7
50	2s	11	VAL	2.7
38	1g	5	ARG	2.7
33	2b	29	ALA	2.7
45	2n	40	CYS	2.7
1	1A	548	A	2.7
1	1A	1073	A	2.7
1	2A	528	A	2.7
1	2A	2117	A	2.7
1	2A	2171	A	2.7
1	1A	2165	G	2.7
32	2a	1221	G	2.7
47	1p	66	PRO	2.7
22	20	68	GLU	2.7
12	2Q	29	PHE	2.7
35	1d	110	PHE	2.7
40	1i	59	PHE	2.7
1	1A	2146	C	2.7
32	2a	866	C	2.7
32	2a	1354	C	2.7
6	2G	70	VAL	2.6
33	2b	175	ARG	2.6
37	2f	21	LEU	2.6
41	1j	46	ARG	2.6
42	2k	14	VAL	2.6
50	2s	29	ARG	2.6
51	2t	99	LEU	2.6
34	2c	146	ALA	2.6
35	2d	164	ALA	2.6
40	1i	13	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	43	ALA	2.6
44	2m	33	ALA	2.6
48	2q	95	TYR	2.6
50	2s	52	TYR	2.6
14	2S	59	LYS	2.6
33	2b	189	ASP	2.6
34	2c	147	LYS	2.6
45	2n	49	HIS	2.6
45	2n	58	LYS	2.6
1	2A	2130	U	2.6
32	2a	1020	U	2.6
41	2j	67	THR	2.6
50	2s	33	THR	2.6
30	28	16	ILE	2.6
46	2o	75	PRO	2.6
26	24	57	GLU	2.6
32	2a	1004	A	2.6
32	2a	1251	A	2.6
33	2b	12	GLU	2.6
53	2v	24	A	2.6
14	2S	45	GLY	2.6
42	2k	49	GLY	2.6
51	2t	96	GLY	2.6
52	1u	2	GLY	2.6
1	1A	2131	G	2.6
32	2a	973	G	2.6
34	1c	18	TRP	2.6
45	2n	36	PHE	2.6
47	2p	48	TRP	2.6
54	1y	19	G	2.6
12	2Q	6	ARG	2.6
15	1T	129	ARG	2.6
22	20	72	ARG	2.6
1	1A	889	C	2.6
1	2A	894	C	2.6
6	2G	76	SER	2.6
7	2H	41	MET	2.6
32	1a	1029	C	2.6
32	2a	980	C	2.6
32	2a	1029	C	2.6
39	1h	2	LEU	2.6
41	1j	65	LEU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	19	LEU	2.6
34	2c	130	VAL	2.6
39	2h	97	VAL	2.6
34	2c	24	ALA	2.6
34	2c	92	ALA	2.6
34	2c	200	ALA	2.6
42	1k	74	ALA	2.6
35	1d	169	LYS	2.6
40	2i	112	LYS	2.6
22	20	26	TYR	2.6
44	2m	87	TYR	2.6
6	2G	4	ASP	2.6
21	1Z	159	PRO	2.6
27	25	29	THR	2.6
33	2b	162	ILE	2.6
11	1P	149	GLU	2.6
32	2a	982	U	2.6
41	1j	76	ASN	2.6
36	2e	114	GLY	2.6
1	1A	1103	A	2.6
36	2e	45	PHE	2.6
54	1y	35	A	2.6
7	2H	170	ARG	2.6
33	2b	144	ARG	2.6
40	2i	20	ARG	2.6
41	2j	79	ARG	2.6
45	1n	29	ARG	2.6
1	2A	652(U)	G	2.6
1	2A	1170	G	2.6
6	2G	7	LEU	2.6
32	2a	630	G	2.6
32	2a	1026	G	2.6
33	2b	213	LEU	2.6
34	1c	87	LEU	2.6
34	2c	33	LEU	2.6
50	2s	20	LEU	2.6
54	2w	15	G	2.6
7	2H	169	VAL	2.6
33	2b	229	VAL	2.6
40	1i	17	VAL	2.6
44	2m	98	VAL	2.6
40	2i	70	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1030(B)	C	2.6
43	2l	26	ALA	2.6
7	2H	8	PRO	2.6
47	1p	47	ASP	2.6
4	1E	73	GLU	2.6
26	24	30	GLU	2.6
34	2c	181	ASN	2.6
33	2b	38	GLY	2.6
37	1f	16	GLN	2.6
40	2i	69	GLY	2.6
43	1l	29	GLY	2.6
52	2u	4	GLY	2.6
54	2w	45	U	2.6
6	1G	51	ARG	2.6
1	1A	1070	A	2.6
32	2a	969	A	2.6
7	2H	67	LEU	2.6
34	1c	47	LEU	2.6
40	1i	102	LEU	2.6
9	2N	83	LYS	2.6
47	1p	3	LYS	2.6
36	2e	115	VAL	2.6
40	2i	86	VAL	2.6
1	1A	2133	G	2.6
8	1I	65	ALA	2.6
40	1i	52	ALA	2.6
40	2i	119	ALA	2.6
49	1r	20	ALA	2.6
33	1b	232	PRO	2.6
39	2h	67	PRO	2.6
41	2j	53	PRO	2.6
1	1A	897	C	2.6
1	2A	2175	C	2.6
20	2Y	55	TYR	2.6
32	2a	1109	C	2.6
21	2Z	2	GLU	2.6
22	20	10	THR	2.6
34	2c	19	GLU	2.6
34	2c	161	GLU	2.6
36	2e	80	ILE	2.6
41	2j	87	THR	2.6
42	1k	36	ASP	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	2s	12	ASP	2.6
8	2I	16	GLY	2.6
22	20	6	GLY	2.6
34	2c	37	GLN	2.6
44	2m	112	GLY	2.6
1	2A	2172	U	2.6
21	1Z	104	PHE	2.6
32	1a	65	U	2.6
36	2e	84	PHE	2.6
15	2T	111	ARG	2.6
36	2e	25	ARG	2.6
39	2h	30	ARG	2.6
6	2G	53	LEU	2.5
21	2Z	5	LEU	2.5
33	2b	27	LYS	2.5
34	2c	135	LYS	2.5
40	1i	50	LEU	2.5
6	2G	29	TRP	2.5
1	1A	1067	A	2.5
1	2A	2114	A	2.5
32	2a	949	A	2.5
32	2a	965	A	2.5
32	2a	1324	A	2.5
9	2N	5	VAL	2.5
20	2Y	45	VAL	2.5
7	2H	20	ALA	2.5
8	2I	115	ALA	2.5
33	2b	13	ALA	2.5
42	2k	89	ALA	2.5
50	2s	24	ALA	2.5
41	2j	39	PRO	2.5
12	2Q	66	ILE	2.5
26	24	31	ILE	2.5
35	1d	5	ILE	2.5
26	14	32	TYR	2.5
32	1a	1026	G	2.5
32	1a	1033	G	2.5
32	2a	1042	G	2.5
42	2k	36	ASP	2.5
1	2A	645	C	2.5
19	2X	86	GLY	2.5
19	2X	94	GLY	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	13	GLY	2.5
35	2d	2	GLY	2.5
51	1t	47	GLY	2.5
45	2n	12	ARG	2.5
52	2u	22	ARG	2.5
6	1G	182	LYS	2.5
51	1t	74	LYS	2.5
21	1Z	150	LEU	2.5
35	1d	120	LEU	2.5
5	2F	6	VAL	2.5
16	2U	90	VAL	2.5
33	2b	15	VAL	2.5
36	2e	33	VAL	2.5
39	1h	93	VAL	2.5
50	2s	58	VAL	2.5
1	2A	1847	A	2.5
32	2a	1093	A	2.5
33	2b	173	ALA	2.5
34	1c	60	ALA	2.5
40	2i	45	ALA	2.5
51	2t	94	ALA	2.5
45	2n	54	PRO	2.5
34	2c	134	ILE	2.5
36	2e	149	GLU	2.5
12	2Q	75	THR	2.5
40	1i	105	ASP	2.5
12	2Q	32	TYR	2.5
38	2g	34	GLY	2.5
40	2i	6	GLY	2.5
12	2Q	103	MET	2.5
1	2A	2149	G	2.5
1	2A	2321	G	2.5
32	2a	1024	G	2.5
32	2a	1311	G	2.5
32	2a	1039	C	2.5
50	2s	18	LYS	2.5
50	2s	32	LYS	2.5
33	2b	69	LEU	2.5
34	2c	91	LEU	2.5
34	2c	94	LEU	2.5
40	2i	40	LEU	2.5
41	2j	88	LEU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1026	U	2.5
1	1A	1175	U	2.5
32	2a	1065	U	2.5
55	2x	47	U	2.5
5	1F	14	PRO	2.5
6	2G	50	ALA	2.5
21	2Z	166	SER	2.5
36	2e	86	ALA	2.5
39	2h	115	SER	2.5
51	1t	11	SER	2.5
12	2Q	64	ILE	2.5
34	2c	84	ILE	2.5
35	2d	34	GLU	2.5
44	2m	73	GLU	2.5
1	1A	1077	A	2.5
33	2b	168	THR	2.5
40	1i	64	THR	2.5
6	2G	116	ASP	2.5
7	2H	174	GLY	2.5
8	2I	1	MET	2.5
21	1Z	103	ARG	2.5
26	14	64	GLY	2.5
26	24	55	ARG	2.5
33	2b	90	MET	2.5
40	2i	39	GLY	2.5
40	2i	83	ARG	2.5
46	2o	20	GLY	2.5
34	2c	45	LYS	2.5
43	2l	8	ASN	2.5
6	2G	133	LEU	2.5
39	2h	63	LEU	2.5
1	1A	1099	G	2.5
1	1A	1100	C	2.5
1	1A	2140	C	2.5
1	2A	2143	C	2.5
1	2A	2789	C	2.5
32	1a	1030(C)	G	2.5
32	2a	1182	G	2.5
32	2a	961	U	2.5
14	2S	14	VAL	2.5
21	2Z	96	VAL	2.5
33	2b	81	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	1d	105	VAL	2.5
48	2q	23	VAL	2.5
50	2s	41	VAL	2.5
36	2e	96	PRO	2.5
50	2s	34	TRP	2.5
8	1I	71	ILE	2.5
48	2q	24	GLU	2.5
6	2G	47	LYS	2.5
6	2G	71	THR	2.5
34	2c	199	LYS	2.5
39	2h	18	ARG	2.5
41	2j	46	ARG	2.5
1	1A	529	A	2.5
1	1A	1084	A	2.5
32	2a	1280	A	2.5
42	2k	102	GLY	2.5
53	2v	14	A	2.5
6	2G	23	PHE	2.5
41	2j	54	PHE	2.5
7	2H	71	LEU	2.4
14	2S	54	LEU	2.4
34	2c	175	LEU	2.4
40	2i	85	LEU	2.4
26	24	40	HIS	2.4
1	1A	12	U	2.4
1	2A	2142	C	2.4
1	2A	2163	C	2.4
32	2a	948	C	2.4
32	2a	1007	C	2.4
32	2a	1027	C	2.4
32	2a	1119	C	2.4
1	1A	2116	G	2.4
1	2A	614(B)	G	2.4
1	2A	2151	G	2.4
1	2A	2162	G	2.4
32	1a	79	G	2.4
32	1a	1009	G	2.4
32	2a	204	U	2.4
44	2m	117	VAL	2.4
45	2n	56	VAL	2.4
47	1p	20	VAL	2.4
32	2a	867	G	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	993	G	2.4
32	2a	1124	G	2.4
32	2a	1356	G	2.4
7	2H	92	ILE	2.4
33	2b	216	SER	2.4
38	2g	77	SER	2.4
46	2o	3	ILE	2.4
47	1p	59	TRP	2.4
33	2b	147	LYS	2.4
39	2h	98	LYS	2.4
43	2l	28	LYS	2.4
44	2m	110	ARG	2.4
50	1s	79	THR	2.4
22	10	8	GLY	2.4
41	1j	10	GLY	2.4
52	2u	5	ASP	2.4
1	1A	1088	A	2.4
1	1A	2790	A	2.4
1	2A	2298	A	2.4
26	14	59	PHE	2.4
32	2a	1252	A	2.4
33	2b	55	PHE	2.4
34	2c	23	TYR	2.4
34	2c	43	LEU	2.4
39	1h	112	LEU	2.4
40	1i	56	LEU	2.4
43	2l	69	TYR	2.4
51	1t	24	LEU	2.4
54	2y	58	A	2.4
20	2Y	42	VAL	2.4
40	1i	108	VAL	2.4
47	1p	2	VAL	2.4
1	1A	614(A)	U	2.4
32	1a	1040	U	2.4
32	2a	1235	U	2.4
36	1e	138	ALA	2.4
40	2i	52	ALA	2.4
1	1A	1080	C	2.4
1	1A	1509	C	2.4
1	1A	2129	C	2.4
1	2A	897	C	2.4
9	2N	1	MET	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	2P	68	GLN	2.4
34	1c	22	TRP	2.4
36	2e	107	ARG	2.4
40	1i	127	LYS	2.4
40	2i	73	GLN	2.4
1	2A	2148	G	2.4
32	1a	380	G	2.4
32	2a	1053	G	2.4
32	2a	1370	G	2.4
33	1b	24	TRP	2.4
40	2i	107	ARG	2.4
46	2o	88	ARG	2.4
47	1p	81	ARG	2.4
50	2s	4	SER	2.4
54	2y	52	G	2.4
5	2F	131	GLY	2.4
7	2H	22	GLY	2.4
12	2Q	30	GLY	2.4
41	2j	48	THR	2.4
43	2l	6	THR	2.4
47	2p	45	THR	2.4
50	2s	48	THR	2.4
21	1Z	148	ASP	2.4
7	2H	64	LEU	2.4
12	2Q	65	PHE	2.4
33	1b	163	PHE	2.4
33	2b	61	LEU	2.4
34	2c	47	LEU	2.4
40	2i	59	PHE	2.4
42	2k	103	LEU	2.4
33	1b	31	TYR	2.4
46	1o	69	TYR	2.4
46	2o	69	TYR	2.4
47	2p	38	TYR	2.4
32	1a	143	A	2.4
32	2a	968	A	2.4
6	2G	2	PRO	2.4
21	2Z	86	VAL	2.4
33	2b	26	PRO	2.4
33	2b	194	PRO	2.4
7	2H	102	ALA	2.4
14	2S	19	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
15	1T	111	ARG	2.4
21	2Z	21	ALA	2.4
25	13	60	GLU	2.4
33	2b	126	GLU	2.4
36	2e	81	GLU	2.4
33	1b	214	ILE	2.4
36	2e	27	ARG	2.4
42	2k	54	ARG	2.4
1	2A	2150	U	2.4
32	2a	1159	U	2.4
40	2i	71	SER	2.4
1	2A	898	C	2.4
34	2c	197	GLY	2.4
1	2A	2318	G	2.4
1	2A	2805	G	2.4
12	2Q	2	LEU	2.4
32	2a	976	G	2.4
32	2a	998	G	2.4
33	2b	149	LEU	2.4
47	1p	74	LEU	2.4
26	14	49	PHE	2.4
42	1k	117	ASN	2.4
34	2c	193	TYR	2.4
39	2h	48	TYR	2.4
39	2h	94	TYR	2.4
50	2s	61	TYR	2.4
1	1A	1174	A	2.4
32	2a	1285	A	2.4
7	2H	133	VAL	2.4
12	2Q	106	VAL	2.4
17	2V	14	VAL	2.4
21	2Z	139	VAL	2.4
26	24	38	LYS	2.4
28	26	48	VAL	2.4
33	1b	165	VAL	2.4
40	2i	127	LYS	2.4
40	2i	111	ARG	2.4
45	2n	41	ARG	2.4
34	2c	160	ALA	2.4
36	2e	17	ALA	2.4
41	1j	27	ALA	2.4
45	1n	10	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
51	2t	97	ALA	2.4
32	1a	1020	U	2.4
32	2a	997	U	2.4
34	2c	191	THR	2.4
40	1i	103	THR	2.4
47	1p	37	GLY	2.4
1	1A	1052	C	2.3
1	1A	1079	C	2.3
1	1A	1104	C	2.3
32	2a	970	C	2.3
32	2a	1028	C	2.3
32	2a	1189	C	2.3
40	2i	19	LEU	2.3
33	2b	166	ASP	2.3
40	1i	91	ASP	2.3
43	2l	32	PHE	2.3
47	1p	16	HIS	2.3
48	1q	13	ASP	2.3
6	2G	79	ASN	2.3
50	2s	53	ASN	2.3
1	1A	1173	G	2.3
1	1A	2157	G	2.3
32	2a	1009	G	2.3
32	2a	1030(C)	G	2.3
32	2a	1068	G	2.3
14	2S	36	TYR	2.3
33	2b	199	TYR	2.3
44	2m	41	PRO	2.3
6	2G	31	VAL	2.3
11	2P	79	ARG	2.3
37	1f	90	VAL	2.3
38	1g	8	GLU	2.3
39	2h	19	VAL	2.3
43	2l	55	VAL	2.3
44	2m	29	ARG	2.3
1	1A	278	A	2.3
1	1A	1045	A	2.3
1	1A	2170	A	2.3
5	2F	115	ALA	2.3
6	2G	41	GLN	2.3
32	1a	149	A	2.3
32	2a	532	A	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	919	A	2.3
33	2b	39	ILE	2.3
34	2c	60	ALA	2.3
34	2c	121	ALA	2.3
1	2A	2109	U	2.3
36	2e	99	GLY	2.3
45	2n	51	GLY	2.3
34	2c	176	HIS	2.3
35	1d	188	LEU	2.3
38	2g	156	TRP	2.3
39	2h	10	LEU	2.3
41	2j	62	HIS	2.3
8	2I	20	ASP	2.3
36	2e	5	ASP	2.3
44	2m	106	ASN	2.3
1	2A	2164	C	2.3
32	2a	1362	C	2.3
32	2a	1369	C	2.3
40	2i	118	LYS	2.3
7	2H	21	PRO	2.3
21	1Z	95	PRO	2.3
21	2Z	15	PRO	2.3
48	1q	28	PRO	2.3
52	2u	21	TYR	2.3
37	1f	46	ARG	2.3
1	1A	881	G	2.3
1	1A	2110	G	2.3
1	2A	880	G	2.3
1	2A	1171	G	2.3
32	1a	220	G	2.3
32	1a	1032	G	2.3
32	2a	953	G	2.3
32	2a	1023	G	2.3
9	1N	9	VAL	2.3
9	2N	9	VAL	2.3
11	2P	149	GLU	2.3
12	2Q	52	VAL	2.3
16	2U	8	VAL	2.3
35	1d	179	GLU	2.3
26	24	47	GLN	2.3
41	2j	33	GLN	2.3
34	1c	57	ILE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	2d	48	ALA	2.3
40	1i	55	ALA	2.3
32	2a	946	A	2.3
32	2a	1180	A	2.3
34	2c	205	GLY	2.3
42	2k	101	SER	2.3
8	2I	86	THR	2.3
14	2S	32	LEU	2.3
14	2S	58	LEU	2.3
21	2Z	170	THR	2.3
37	1f	61	LEU	2.3
41	2j	92	THR	2.3
43	2l	60	LEU	2.3
48	2q	76	LEU	2.3
49	2r	66	LEU	2.3
1	2A	2132	U	2.3
1	2A	2897	U	2.3
32	2a	1040	U	2.3
45	2n	16	PHE	2.3
6	2G	147	ASP	2.3
22	20	49	LYS	2.3
41	2j	55	LYS	2.3
1	2A	2129	C	2.3
6	2G	12	TYR	2.3
32	1a	163	C	2.3
40	1i	9	ARG	2.3
40	2i	16	ARG	2.3
50	2s	3	ARG	2.3
8	1I	10	GLU	2.3
14	2S	92	TYR	2.3
34	1c	193	TYR	2.3
35	1d	138	TYR	2.3
54	1y	56	C	2.3
34	2c	153	VAL	2.3
33	1b	201	ILE	2.3
33	2b	58	ILE	2.3
47	2p	33	ILE	2.3
50	2s	75	ALA	2.3
1	1A	2153	G	2.3
1	1A	2166	G	2.3
1	1A	2207	G	2.3
1	2A	2141	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2168	G	2.3
32	2a	485	G	2.3
11	1P	44	GLY	2.3
12	2Q	19	GLY	2.3
17	1V	101	GLY	2.3
19	2X	67	GLY	2.3
40	1i	8	GLY	2.3
41	1j	36	GLY	2.3
41	2j	19	SER	2.3
41	2j	90	LEU	2.3
43	2l	84	LEU	2.3
50	2s	8	GLY	2.3
1	1A	1054	A	2.3
1	1A	2173	A	2.3
32	2a	975	A	2.3
36	2e	98	THR	2.3
6	2G	84	LYS	2.3
12	2Q	18	LYS	2.3
26	14	69	LYS	2.3
1	1A	271(K)	U	2.3
1	1A	1097	U	2.3
32	1a	1000	U	2.3
33	2b	57	PHE	2.3
39	2h	54	ASP	2.3
6	2G	118	ARG	2.3
36	1e	18	ARG	2.3
38	2g	79	ARG	2.3
40	2i	120	ARG	2.3
41	2j	43	ARG	2.3
52	1u	9	ARG	2.3
33	2b	232	PRO	2.3
21	1Z	2	GLU	2.3
1	1A	34	C	2.3
1	1A	2142	C	2.3
6	1G	88	ILE	2.3
22	20	30	VAL	2.3
34	1c	76	VAL	2.3
47	1p	79	VAL	2.3
50	2s	51	VAL	2.3
55	1x	69	C	2.3
36	2e	54	ALA	2.3
40	2i	61	ALA	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	2n	59	ALA	2.3
49	2r	24	ALA	2.3
51	1t	95	ALA	2.3
21	2Z	33	LEU	2.2
33	1b	44	LEU	2.2
36	2e	53	LEU	2.2
40	2i	47	LEU	2.2
40	2i	50	LEU	2.2
41	2j	68	HIS	2.2
1	1A	614(B)	G	2.2
1	1A	1055	G	2.2
1	2A	1114	G	2.2
7	2H	38	SER	2.2
32	1a	1224	G	2.2
37	2f	93	SER	2.2
50	2s	38	SER	2.2
15	2T	22	PHE	2.2
1	2A	2176	A	2.2
32	2a	1151	A	2.2
1	1A	2189	U	2.2
1	1A	2897	U	2.2
1	2A	272(A)	U	2.2
2	2B	41	U	2.2
14	1S	3	ARG	2.2
26	14	68	ARG	2.2
33	2b	220	ASP	2.2
35	1d	153	ARG	2.2
41	2j	70	ARG	2.2
47	1p	42	ARG	2.2
48	2q	92	ARG	2.2
40	1i	49	PRO	2.2
8	2I	54	GLN	2.2
7	2H	24	VAL	2.2
21	2Z	126	VAL	2.2
21	2Z	165	VAL	2.2
28	26	7	ILE	2.2
36	2e	131	ILE	2.2
39	2h	83	ILE	2.2
40	2i	53	VAL	2.2
47	2p	2	VAL	2.2
4	2E	28	ALA	2.2
4	2E	204	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	2e	94	ALA	2.2
36	2e	95	ALA	2.2
44	1m	118	ALA	2.2
45	1n	5	ALA	2.2
49	1r	73	ALA	2.2
1	1A	2128	C	2.2
1	1A	2143	C	2.2
1	1A	2164	C	2.2
33	2b	40	HIS	2.2
54	2w	13	C	2.2
7	2H	175	LYS	2.2
8	2I	121	LYS	2.2
11	2P	24	GLY	2.2
26	24	45	GLY	2.2
33	1b	38	GLY	2.2
34	1c	72	LYS	2.2
38	1g	130	GLY	2.2
42	1k	51	LYS	2.2
43	2l	88	GLY	2.2
45	2n	60	SER	2.2
47	1p	22	THR	2.2
34	2c	186	PHE	2.2
40	1i	18	PHE	2.2
7	2H	51	ARG	2.2
7	2H	60	ARG	2.2
26	24	68	ARG	2.2
1	1A	1091	G	2.2
32	2a	1017	G	2.2
41	2j	58	ASP	2.2
54	1y	15	G	2.2
55	2x	70	G	2.2
1	2A	901	A	2.2
32	2a	994	A	2.2
44	1m	106	ASN	2.2
33	2b	129	GLU	2.2
43	2l	16	GLU	2.2
47	2p	76	GLN	2.2
8	1I	107	VAL	2.2
11	2P	83	VAL	2.2
17	2V	61	VAL	2.2
21	1Z	120	ILE	2.2
33	2b	208	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	57	ILE	2.2
35	2d	5	ILE	2.2
40	2i	109	VAL	2.2
41	1j	34	VAL	2.2
41	1j	98	ILE	2.2
44	2m	22	ILE	2.2
8	2I	53	ALA	2.2
34	2c	29	TYR	2.2
40	2i	76	ALA	2.2
42	1k	25	TYR	2.2
47	1p	24	ALA	2.2
21	2Z	32	HIS	2.2
19	2X	92	LEU	2.2
44	1m	56	LEU	2.2
48	1q	14	LYS	2.2
44	2m	24	GLY	2.2
32	2a	1019	C	2.2
6	2G	165	THR	2.2
26	14	66	SER	2.2
33	2b	192	SER	2.2
48	2q	99	SER	2.2
6	1G	83	ARG	2.2
22	20	60	PHE	2.2
26	24	48	ARG	2.2
26	24	59	PHE	2.2
34	2c	88	ARG	2.2
34	2c	140	ARG	2.2
38	2g	4	ARG	2.2
47	2p	80	PHE	2.2
7	2H	29	PRO	2.2
46	2o	2	PRO	2.2
47	1p	41	PRO	2.2
5	2F	127	GLU	2.2
20	1Y	91	GLU	2.2
42	1k	42	TRP	2.2
1	1A	545	G	2.2
1	1A	1062	G	2.2
1	1A	1101	U	2.2
1	1A	2130	U	2.2
1	2A	530	G	2.2
2	2B	120	A	2.2
32	1a	383	A	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1138	G	2.2
32	2a	5	U	2.2
32	2a	1156	G	2.2
32	2a	1196	U	2.2
54	2w	19	G	2.2
54	2y	36	A	2.2
8	2I	15	VAL	2.2
42	2k	47	VAL	2.2
48	2q	77	VAL	2.2
12	2Q	49	ALA	2.2
33	2b	22	LYS	2.2
42	1k	15	ALA	2.2
47	1p	39	TYR	2.2
47	1p	56	ALA	2.2
49	2r	60	ALA	2.2
19	2X	95	LEU	2.2
21	2Z	155	LEU	2.2
33	2b	138	LEU	2.2
36	2e	151	LEU	2.2
39	2h	112	LEU	2.2
44	2m	56	LEU	2.2
33	2b	66	GLY	2.2
43	1l	14	GLY	2.2
44	1m	24	GLY	2.2
48	2q	33	GLY	2.2
12	2Q	16	ARG	2.2
33	2b	73	THR	2.2
42	2k	31	THR	2.2
32	2a	1006	C	2.2
32	2a	1113	C	2.2
33	1b	28	PHE	2.2
33	2b	233	SER	2.2
48	1q	27	PHE	2.2
48	2q	71	PHE	2.2
6	2G	122	PRO	2.2
7	2H	55	PRO	2.2
33	2b	202	PRO	2.2
7	1H	58	GLU	2.2
33	1b	126	GLU	2.2
34	1c	62	ASP	2.2
34	1c	107	GLN	2.2
34	2c	90	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	1g	156	TRP	2.2
1	1A	1105	U	2.2
1	1A	2167	U	2.2
6	1G	81	LYS	2.2
12	2Q	63	LYS	2.2
21	2Z	105	VAL	2.2
32	1a	182	U	2.2
32	2a	1126	U	2.2
32	2a	1205	U	2.2
33	1b	223	ILE	2.2
44	1m	4	ILE	2.2
51	1t	55	ILE	2.2
34	1c	86	VAL	2.2
39	2h	95	VAL	2.2
1	1A	1177	A	2.2
1	2A	2206	G	2.2
8	2I	65	ALA	2.2
32	1a	1010	G	2.2
32	2a	570	G	2.2
32	2a	963	G	2.2
32	2a	1010	G	2.2
32	2a	1044	A	2.2
32	2a	1048	G	2.2
32	2a	1058	G	2.2
32	2a	1067	A	2.2
32	2a	1123	A	2.2
33	1b	186	ALA	2.2
44	2m	30	ALA	2.2
45	2n	20	ALA	2.2
9	2N	116	LEU	2.1
21	2Z	41	LEU	2.1
22	20	62	LEU	2.1
23	21	85	LEU	2.1
36	2e	43	LEU	2.1
38	1g	154	TYR	2.1
51	1t	43	LEU	2.1
31	29	21	GLY	2.1
41	1j	31	GLY	2.1
43	2l	95	GLY	2.1
6	2G	72	ARG	2.1
8	1I	67	ARG	2.1
26	24	61	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	131	ARG	2.1
44	1m	102	ARG	2.1
20	2Y	89	PHE	2.1
5	2F	14	PRO	2.1
7	2H	128	PRO	2.1
9	2N	69	GLN	2.1
20	2Y	91	GLU	2.1
32	1a	1007	C	2.1
32	2a	1112	C	2.1
45	2n	8	GLU	2.1
50	1s	12	ASP	2.1
54	2w	25	C	2.1
6	2G	88	ILE	2.1
8	1I	109	ILE	2.1
10	2O	19	ILE	2.1
11	2P	76	LYS	2.1
21	2Z	57	ILE	2.1
33	2b	108	ILE	2.1
34	1c	84	ILE	2.1
40	1i	95	LYS	2.1
44	2m	39	ILE	2.1
52	2u	3	LYS	2.1
6	2G	100	TRP	2.1
21	2Z	56	VAL	2.1
21	2Z	74	VAL	2.1
21	2Z	161	VAL	2.1
45	1n	33	VAL	2.1
1	1A	1963	U	2.1
32	1a	203	U	2.1
33	2b	145	LEU	2.1
40	2i	46	ALA	2.1
54	1y	45	U	2.1
22	10	84	LEU	2.1
44	2m	34	LEU	2.1
1	2A	229	A	2.1
32	2a	1179	A	2.1
6	2G	51	ARG	2.1
7	2H	59	ARG	2.1
12	1Q	15	GLY	2.1
38	1g	6	ARG	2.1
40	1i	10	ARG	2.1
41	1j	93	GLY	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	2l	98	TYR	2.1
15	1T	125	ARG	2.1
44	2m	94	ARG	2.1
47	1p	5	ARG	2.1
52	2u	7	ARG	2.1
1	1A	2147	G	2.1
1	2A	2120	G	2.1
1	2A	2123	G	2.1
32	2a	971	G	2.1
32	2a	1061	G	2.1
32	2a	1089	G	2.1
32	2a	1131	G	2.1
33	2b	54	THR	2.1
34	2c	192	THR	2.1
34	2c	203	PHE	2.1
14	2S	31	SER	2.1
26	24	7	PRO	2.1
40	1i	126	SER	2.1
20	2Y	29	GLU	2.1
22	20	27	GLU	2.1
33	1b	12	GLU	2.1
33	2b	224	GLN	2.1
50	2s	64	GLU	2.1
7	2H	62	LYS	2.1
33	2b	156	LYS	2.1
34	1c	56	ASP	2.1
34	2c	150	LYS	2.1
35	1d	154	ASN	2.1
48	1q	100	LYS	2.1
1	1A	2174	C	2.1
1	2A	865	C	2.1
1	2A	2804	C	2.1
2	2B	6	C	2.1
7	2H	136	ILE	2.1
32	2a	995	C	2.1
32	2a	1128	C	2.1
33	2b	68	ILE	2.1
21	2Z	128	VAL	2.1
35	1d	140	VAL	2.1
22	20	75	LEU	2.1
33	1b	83	MET	2.1
33	1b	34	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	1d	111	ALA	2.1
40	2i	84	ALA	2.1
41	2j	18	ALA	2.1
14	2S	3	ARG	2.1
32	1a	723	U	2.1
34	1c	79	ARG	2.1
36	2e	152	ARG	2.1
43	1l	19	ARG	2.1
48	2q	75	ARG	2.1
54	2y	60	U	2.1
20	2Y	80	GLY	2.1
33	1b	18	GLY	2.1
35	2d	183	GLY	2.1
40	2i	100	GLY	2.1
42	2k	90	GLY	2.1
43	2l	14	GLY	2.1
50	2s	82	GLY	2.1
11	2P	110	TYR	2.1
35	2d	27	TYR	2.1
32	2a	1346	A	2.1
53	1v	24	A	2.1
34	2c	95	THR	2.1
7	2H	173	PRO	2.1
20	2Y	53	PRO	2.1
1	1A	1071	G	2.1
1	1A	2148	G	2.1
1	2A	171	G	2.1
1	2A	2152	G	2.1
41	2j	30	SER	2.1
54	1w	70	G	2.1
6	2G	35	GLU	2.1
33	2b	78	GLN	2.1
33	2b	170	GLU	2.1
44	2m	61	GLU	2.1
6	2G	182	LYS	2.1
42	2k	119	CYS	2.1
39	1h	4	ASP	2.1
34	2c	39	ILE	2.1
38	2g	42	ILE	2.1
41	1j	75	ILE	2.1
5	1F	6	VAL	2.1
7	2H	113	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	20	59	LEU	2.1
34	1c	32	LEU	2.1
35	2d	21	LEU	2.1
36	2e	142	LEU	2.1
44	2m	54	VAL	2.1
46	2o	81	LEU	2.1
1	2A	34	C	2.1
1	2A	2161	C	2.1
32	2a	972	C	2.1
32	2a	1264	C	2.1
32	2a	1320	C	2.1
32	2a	1384	C	2.1
12	1Q	60	ARG	2.1
14	2S	30	ARG	2.1
18	2W	37	ARG	2.1
20	2Y	65	ALA	2.1
21	2Z	7	ALA	2.1
35	1d	173	TRP	2.1
44	2m	3	ARG	2.1
45	2n	5	ALA	2.1
47	2p	59	TRP	2.1
54	2w	2	C	2.1
55	2x	34	C	2.1
37	2f	46	ARG	2.1
38	2g	115	ARG	2.1
39	2h	91	ARG	2.1
46	1o	65	ARG	2.1
50	2s	36	ARG	2.1
5	2F	134	GLY	2.1
32	1a	173	U	2.1
32	2a	1232	U	2.1
34	2c	145	GLY	2.1
36	1e	22	GLY	2.1
36	2e	35	GLY	2.1
39	2h	71	GLY	2.1
50	1s	26	GLY	2.1
50	2s	26	GLY	2.1
51	1t	101	GLY	2.1
54	1y	47	U	2.1
50	1s	80	TYR	2.1
6	2G	162	THR	2.1
33	1b	122	PHE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	10	PHE	2.1
36	2e	106	PRO	2.1
39	2h	101	PRO	2.1
1	2A	900	A	2.1
32	1a	1005	A	2.1
32	2a	959	A	2.1
32	2a	978	A	2.1
34	1c	26	LYS	2.1
35	1d	22	LYS	2.1
39	2h	64	LYS	2.1
40	1i	11	LYS	2.1
41	1j	33	GLN	2.1
44	2m	31	LYS	2.1
47	1p	50	LYS	2.1
48	2q	86	GLU	2.1
1	1A	882	G	2.1
1	1A	883	G	2.1
1	1A	2124	G	2.1
1	2A	271(M)	G	2.1
1	2A	2160	G	2.1
18	2W	111	HIS	2.1
32	2a	587	G	2.1
32	2a	1272	G	2.1
54	2w	24	G	2.1
54	2w	70	G	2.1
54	2y	44	G	2.1
54	2y	53	G	2.1
46	1o	3	ILE	2.1
50	2s	62	ILE	2.1
4	2E	195	LEU	2.0
6	2G	173	LEU	2.0
7	2H	88	LEU	2.0
23	21	46	LEU	2.0
33	2b	115	LEU	2.0
33	2b	219	VAL	2.0
34	1c	64	VAL	2.0
34	2c	86	VAL	2.0
38	2g	17	VAL	2.0
38	2g	21	VAL	2.0
39	2h	127	LEU	2.0
41	1j	8	LEU	2.0
46	2o	31	LEU	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
49	1r	31	LEU	2.0
51	1t	53	LEU	2.0
51	2t	24	LEU	2.0
9	2N	74	ARG	2.0
11	2P	15	ARG	2.0
34	2c	126	ARG	2.0
34	2c	172	ARG	2.0
47	1p	25	ARG	2.0
3	1D	2	ALA	2.0
6	2G	57	ALA	2.0
8	2I	63	ALA	2.0
12	2Q	28	ALA	2.0
42	2k	19	ALA	2.0
45	1n	59	ALA	2.0
51	2t	66	ALA	2.0
1	2A	867	C	2.0
2	2B	88	C	2.0
7	2H	48	GLY	2.0
32	1a	221	C	2.0
32	1a	1137	C	2.0
32	2a	1060	C	2.0
33	2b	227	GLY	2.0
44	1m	100	GLY	2.0
44	2m	38	GLY	2.0
51	2t	47	GLY	2.0
54	2w	56	C	2.0
1	2A	2189	U	2.0
32	1a	202	U	2.0
32	2a	950	U	2.0
32	2a	1313	U	2.0
8	1I	108	THR	2.0
11	2P	78	PRO	2.0
21	1Z	158	PRO	2.0
21	2Z	159	PRO	2.0
36	2e	133	TYR	2.0
40	1i	4	TYR	2.0
38	2g	24	THR	2.0
41	1j	91	PRO	2.0
43	2l	111	LYS	2.0
50	2s	59	PRO	2.0
26	24	42	PHE	2.0
47	2p	9	PHE	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	2P	38	GLN	2.0
12	2Q	113	GLN	2.0
21	1Z	169	GLU	2.0
33	2b	134	GLU	2.0
36	2e	20	GLN	2.0
21	1Z	153	SER	2.0
1	2A	653	A	2.0
21	2Z	151	HIS	2.0
32	2a	986	A	2.0
32	2a	1005	A	2.0
32	2a	1289	A	2.0
54	2w	23	A	2.0
6	2G	77	ILE	2.0
6	2G	144	ILE	2.0
35	2d	165	MET	2.0
36	1e	13	ILE	2.0
41	2j	6	ILE	2.0
41	2j	86	MET	2.0
33	1b	37	ASN	2.0
41	2j	89	ASP	2.0
7	2H	6	ARG	2.0
8	1I	27	ARG	2.0
8	2I	68	LEU	2.0
8	2I	92	VAL	2.0
11	1P	15	ARG	2.0
15	2T	108	ARG	2.0
26	24	58	ARG	2.0
33	2b	118	LEU	2.0
33	2b	158	LEU	2.0
35	1d	157	LEU	2.0
41	1j	45	ARG	2.0
45	1n	25	VAL	2.0
45	2n	26	ARG	2.0
1	2A	881	G	2.0
1	2A	892	G	2.0
1	2A	2894	G	2.0
32	2a	926	G	2.0
32	2a	1186	G	2.0
32	2a	1273	G	2.0
32	2a	1385	G	2.0
8	2I	55	ALA	2.0
33	1b	173	ALA	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	2b	186	ALA	2.0
34	2c	180	ALA	2.0
39	2h	110	ALA	2.0
44	1m	18	ALA	2.0
45	1n	20	ALA	2.0
34	2c	148	GLY	2.0
35	2d	23	GLY	2.0
30	28	34	TRP	2.0
42	2k	123	LYS	2.0
43	1l	126	LYS	2.0
6	2G	87	PRO	2.0
8	1I	132	PRO	2.0
1	2A	271(N)	U	2.0
1	2A	895	U	2.0
1	2A	2118	U	2.0
32	2a	989	C	2.0
32	2a	1218	C	2.0
32	2a	1363	C	2.0
33	2b	167	PRO	2.0
34	2c	109	PRO	2.0
40	2i	21	PRO	2.0
42	2k	115	PRO	2.0
6	2G	48	GLU	2.0
21	2Z	145	GLU	2.0
26	24	27	THR	2.0
26	24	44	THR	2.0
32	1a	1446	U	2.0
33	1b	50	GLU	2.0
33	2b	231	GLU	2.0
34	2c	44	GLU	2.0
36	1e	133	TYR	2.0
36	2e	8	GLU	2.0
38	2g	18	TYR	2.0
38	1g	13	GLN	2.0
38	2g	11	GLN	2.0
40	1i	27	THR	2.0
41	1j	87	THR	2.0
51	2t	93	GLU	2.0
14	2S	50	SER	2.0
33	2b	16	HIS	2.0
39	2h	29	SER	2.0
47	2p	16	HIS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	1G	77	ILE	2.0
20	2Y	44	ILE	2.0
21	2Z	53	ILE	2.0
21	2Z	137	ILE	2.0
36	2e	129	ILE	2.0
41	2j	82	ILE	2.0
47	1p	36	ILE	2.0
6	1G	136	ARG	2.0
6	2G	115	ARG	2.0
35	2d	209	ARG	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
54	G7M	2w	46	24/25	0.48	0.18	86,95,105,115	0
54	PSU	2y	55	20/21	0.56	0.17	92,100,112,113	0
54	G7M	1w	46	24/25	0.57	0.14	81,88,102,122	0
54	5MU	2y	54	21/22	0.59	0.18	90,96,105,123	0
54	G7M	1y	46	24/25	0.63	0.16	87,94,102,112	0
54	G7M	2y	46	24/25	0.63	0.15	91,94,99,119	0
54	MIA	2y	37	22/30	0.66	0.16	75,86,98,113	0
54	4SU	2w	8	20/21	0.69	0.14	93,96,104,114	0
54	PSU	1y	55	20/21	0.71	0.16	85,93,101,110	0
54	4SU	2y	8	20/21	0.71	0.13	89,94,101,109	0
54	5MU	1y	54	21/22	0.73	0.17	83,87,96,107	0
54	4SU	1y	8	20/21	0.77	0.12	88,90,99,100	0
54	PSU	2y	39	20/21	0.78	0.13	81,85,94,99	0
54	5MU	2w	54	21/22	0.79	0.13	74,84,90,94	0
54	PSU	2w	55	20/21	0.79	0.12	86,92,97,100	0
54	MIA	1y	37	22/30	0.80	0.13	72,79,86,96	0
32	2MG	2a	1207	24/25	0.82	0.14	81,88,93,96	0
54	PSU	2y	32	20/21	0.83	0.13	76,90,96,97	0
55	4SU	2x	8	20/21	0.83	0.13	79,85,89,89	0
55	5MU	2x	54	21/22	0.84	0.14	74,85,89,90	0
54	PSU	1w	55	20/21	0.84	0.12	63,83,88,89	0
54	PSU	1y	32	20/21	0.85	0.11	77,82,87,90	0
54	PSU	2w	32	20/21	0.85	0.16	85,89,97,102	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	PSU	2x	55	20/21	0.87	0.11	75,82,88,89	0
32	5MC	2a	967	21/22	0.87	0.16	68,74,83,87	0
54	PSU	1y	39	20/21	0.88	0.10	76,80,85,88	0
54	PSU	1w	32	20/21	0.88	0.13	63,71,83,85	0
54	4SU	1w	8	20/21	0.88	0.10	77,82,89,94	0
55	PSU	1x	55	20/21	0.89	0.12	62,67,77,81	0
1	5MU	2A	1915	21/22	0.89	0.14	67,74,76,86	0
32	5MC	2a	1404	21/22	0.89	0.13	51,59,66,66	0
32	PSU	2a	516	20/21	0.89	0.12	73,77,81,83	0
32	G7M	2a	527	24/25	0.89	0.15	65,70,75,79	0
32	M2G	2a	966	25/26	0.89	0.17	66,73,85,86	0
32	4OC	2a	1402	22/23	0.90	0.13	50,68,76,76	0
1	PSU	2A	1917	20/21	0.90	0.11	63,70,78,81	0
54	MIA	2w	37	25/30	0.90	0.14	74,79,87,90	0
43	0TD	2l	92	10/11	0.90	0.12	67,71,75,87	0
32	5MC	2a	1400	21/22	0.91	0.15	72,75,78,82	0
55	5MU	1x	54	21/22	0.91	0.11	60,69,74,86	0
1	PSU	2A	1911	20/21	0.91	0.10	61,67,70,70	0
43	0TD	1l	92	10/11	0.91	0.12	48,54,57,75	0
32	2MG	1a	1207	24/25	0.92	0.11	71,74,78,79	0
54	PSU	2w	39	20/21	0.92	0.11	77,82,90,92	0
55	5MC	2x	32	21/22	0.92	0.14	66,75,81,82	0
32	UR3	2a	1498	21/22	0.93	0.12	59,64,65,70	0
55	4SU	1x	8	20/21	0.93	0.09	61,70,77,77	0
54	MIA	1w	37	29/30	0.93	0.13	55,63,68,76	0
54	PSU	1w	39	20/21	0.93	0.10	59,70,78,79	0
32	5MC	2a	1407	21/22	0.93	0.11	55,60,64,67	0
32	PSU	1a	516	20/21	0.94	0.09	57,63,68,68	0
1	5MU	1A	1915	21/22	0.94	0.10	50,59,61,63	0
55	5MC	1x	32	21/22	0.94	0.13	55,59,66,72	0
32	MA6	2a	1518	24/25	0.94	0.12	54,69,74,75	0
32	MA6	2a	1519	24/25	0.94	0.12	57,68,74,77	0
1	OMC	2A	1920	21/22	0.94	0.11	52,64,68,72	0
1	5MC	2A	1962	21/22	0.94	0.09	35,50,56,63	0
54	5MU	1w	54	21/22	0.94	0.09	61,75,81,81	0
32	G7M	1a	527	24/25	0.95	0.11	48,53,56,57	0
32	M2G	1a	966	25/26	0.95	0.11	48,55,62,63	0
32	5MC	1a	967	21/22	0.95	0.11	50,57,61,63	0
1	5MC	2A	1942	21/22	0.95	0.09	48,57,64,67	0
1	5MU	2A	1939	21/22	0.96	0.08	32,41,47,50	0
55	31H	1x	76	32/33	0.96	0.09	23,32,38,68	10
32	4OC	1a	1402	22/23	0.96	0.10	40,47,51,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	OMG	2A	2251	24/25	0.96	0.09	37,46,49,51	0
1	OMU	2A	2552	21/22	0.96	0.10	43,48,53,61	0
32	MA6	1a	1519	24/25	0.96	0.11	39,44,49,53	0
32	5MC	1a	1404	21/22	0.97	0.09	37,43,46,47	0
32	5MC	1a	1407	21/22	0.97	0.09	37,42,46,47	0
1	2MA	2A	2503	23/24	0.97	0.09	34,42,43,47	0
32	MA6	1a	1518	24/25	0.97	0.10	35,43,46,52	0
1	PSU	2A	2605	20/21	0.97	0.07	33,41,44,48	0
55	31H	2x	76	32/33	0.97	0.08	40,49,63,82	0
1	PSU	1A	1911	20/21	0.97	0.08	39,46,51,52	0
1	PSU	1A	1917	20/21	0.97	0.07	40,50,56,57	0
1	OMC	1A	1920	21/22	0.97	0.08	37,44,49,54	0
1	5MC	1A	1942	21/22	0.97	0.07	29,38,43,45	0
1	5MC	1A	1962	21/22	0.97	0.07	32,37,43,46	0
32	5MC	1a	1400	21/22	0.97	0.10	43,53,58,60	0
1	PSU	1A	2605	20/21	0.97	0.06	22,27,35,36	0
1	OMU	1A	2552	21/22	0.98	0.07	25,30,33,35	0
1	5MU	1A	1939	21/22	0.98	0.06	25,31,35,36	0
32	UR3	1a	1498	21/22	0.98	0.08	39,44,48,49	0
1	OMG	1A	2251	24/25	0.98	0.05	25,27,29,33	0
1	2MA	1A	2503	23/24	0.99	0.05	20,25,28,29	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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3939	1/1	0.47	0.20	83,83,83,83	0
56	MG	2G	201	1/1	0.53	0.26	84,84,84,84	0
56	MG	2a	1777	1/1	0.53	0.26	76,76,76,76	0
56	MG	1B	232	1/1	0.57	0.24	82,82,82,82	0
56	MG	2A	3615	1/1	0.61	0.21	86,86,86,86	0
56	MG	1A	3989	1/1	0.62	0.32	65,65,65,65	0
56	MG	2A	3665	1/1	0.63	0.29	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
56	MG	1A	3990	1/1	0.65	0.18	50,50,50,50	0
56	MG	1A	3758	1/1	0.67	0.26	95,95,95,95	0
56	MG	1A	3979	1/1	0.68	0.14	78,78,78,78	0
56	MG	2A	3166	1/1	0.68	0.27	76,76,76,76	0
56	MG	2A	3765	1/1	0.69	0.20	79,79,79,79	0
56	MG	2A	3100	1/1	0.69	0.24	71,71,71,71	0
56	MG	2a	1619	1/1	0.69	0.19	80,80,80,80	0
56	MG	1A	3768	1/1	0.69	0.18	67,67,67,67	0
56	MG	2A	3330	1/1	0.70	0.27	80,80,80,80	0
56	MG	2D	308	1/1	0.70	0.24	69,69,69,69	0
56	MG	2A	3091	1/1	0.70	0.26	69,69,69,69	0
56	MG	2a	1613	1/1	0.70	0.19	75,75,75,75	0
56	MG	2a	1614	1/1	0.70	0.26	78,78,78,78	0
56	MG	2A	3264	1/1	0.70	0.28	74,74,74,74	0
56	MG	2a	1767	1/1	0.70	0.21	76,76,76,76	0
56	MG	2A	3700	1/1	0.70	0.26	72,72,72,72	0
56	MG	1A	3800	1/1	0.71	0.25	69,69,69,69	0
56	MG	1A	3391	1/1	0.71	0.46	63,63,63,63	0
56	MG	1x	111	1/1	0.71	0.41	75,75,75,75	0
56	MG	2a	1620	1/1	0.71	0.38	77,77,77,77	0
56	MG	2A	3657	1/1	0.71	0.30	74,74,74,74	0
56	MG	2A	3659	1/1	0.71	0.18	45,45,45,45	0
56	MG	2A	3651	1/1	0.72	0.23	74,74,74,74	0
56	MG	1A	3924	1/1	0.72	0.21	64,64,64,64	0
56	MG	1A	3315	1/1	0.72	0.28	52,52,52,52	0
56	MG	1a	1782	1/1	0.72	0.29	72,72,72,72	0
56	MG	1A	3867	1/1	0.72	0.14	57,57,57,57	0
56	MG	2A	3752	1/1	0.72	0.31	67,67,67,67	0
56	MG	2a	1764	1/1	0.72	0.22	87,87,87,87	0
56	MG	1A	3918	1/1	0.72	0.22	52,52,52,52	0
56	MG	2D	303	1/1	0.72	0.25	70,70,70,70	0
56	MG	2A	3595	1/1	0.73	0.20	66,66,66,66	0
56	MG	1a	1741	1/1	0.73	0.23	76,76,76,76	0
56	MG	1a	1743	1/1	0.73	0.17	74,74,74,74	0
56	MG	2A	3048	1/1	0.73	0.28	69,69,69,69	0
56	MG	2a	1634	1/1	0.73	0.38	72,72,72,72	0
56	MG	2a	1643	1/1	0.73	0.30	68,68,68,68	0
56	MG	1a	1781	1/1	0.73	0.22	80,80,80,80	0
56	MG	2A	3331	1/1	0.73	0.25	75,75,75,75	0
56	MG	2a	1602	1/1	0.73	0.21	74,74,74,74	0
56	MG	1a	1656	1/1	0.74	0.27	79,79,79,79	0
56	MG	2A	3185	1/1	0.74	0.26	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
56	MG	2A	3255	1/1	0.74	0.40	77,77,77,77	0
56	MG	1a	1657	1/1	0.74	0.15	62,62,62,62	0
56	MG	2a	1698	1/1	0.74	0.28	75,75,75,75	0
56	MG	1B	225	1/1	0.74	0.24	66,66,66,66	0
56	MG	1A	3404	1/1	0.74	0.20	62,62,62,62	0
56	MG	1F	312	1/1	0.74	0.21	66,66,66,66	0
56	MG	2a	1787	1/1	0.74	0.20	80,80,80,80	0
56	MG	2l	202	1/1	0.74	0.24	67,67,67,67	0
56	MG	1B	233	1/1	0.75	0.13	79,79,79,79	0
56	MG	1A	3850	1/1	0.75	0.20	35,35,35,35	0
56	MG	1A	3492	1/1	0.75	0.17	83,83,83,83	0
56	MG	2A	3387	1/1	0.75	0.29	76,76,76,76	0
56	MG	2a	1766	1/1	0.75	0.27	75,75,75,75	0
56	MG	2A	3499	1/1	0.75	0.23	60,60,60,60	0
56	MG	2A	3722	1/1	0.75	0.23	65,65,65,65	0
56	MG	1A	3952	1/1	0.75	0.13	37,37,37,37	0
56	MG	1A	3805	1/1	0.75	0.21	62,62,62,62	0
56	MG	1O	206	1/1	0.76	0.21	66,66,66,66	0
56	MG	18	104	1/1	0.76	0.20	69,69,69,69	0
56	MG	2a	1689	1/1	0.76	0.25	70,70,70,70	0
56	MG	2A	3368	1/1	0.76	0.35	82,82,82,82	0
56	MG	1A	3369	1/1	0.76	0.19	69,69,69,69	0
56	MG	1A	3966	1/1	0.76	0.17	67,67,67,67	0
56	MG	2A	3579	1/1	0.76	0.15	72,72,72,72	0
56	MG	2a	1617	1/1	0.76	0.27	79,79,79,79	0
56	MG	2a	1780	1/1	0.76	0.18	78,78,78,78	0
56	MG	1A	3436	1/1	0.76	0.20	63,63,63,63	0
56	MG	2A	3090	1/1	0.76	0.22	75,75,75,75	0
56	MG	2A	3582	1/1	0.77	0.22	69,69,69,69	0
56	MG	1A	3677	1/1	0.77	0.16	43,43,43,43	0
56	MG	2A	3777	1/1	0.77	0.21	67,67,67,67	0
56	MG	2B	215	1/1	0.77	0.19	78,78,78,78	0
56	MG	1A	3443	1/1	0.77	0.17	60,60,60,60	0
56	MG	2a	1697	1/1	0.77	0.19	79,79,79,79	0
56	MG	1b	301	1/1	0.77	0.18	81,81,81,81	0
56	MG	1n	101	1/1	0.77	0.29	66,66,66,66	0
56	MG	2T	204	1/1	0.77	0.27	83,83,83,83	0
56	MG	1P	206	1/1	0.77	0.26	58,58,58,58	0
56	MG	2a	1607	1/1	0.77	0.28	75,75,75,75	0
56	MG	2A	3423	1/1	0.77	0.25	68,68,68,68	0
56	MG	2A	3207	1/1	0.77	0.29	66,66,66,66	0
56	MG	1A	3238	1/1	0.77	0.31	75,75,75,75	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3242	1/1	0.78	0.25	62,62,62,62	0
56	MG	1x	106	1/1	0.78	0.21	74,74,74,74	0
56	MG	2a	1702	1/1	0.78	0.36	73,73,73,73	0
56	MG	1A	3163	1/1	0.78	0.17	48,48,48,48	0
56	MG	2A	3612	1/1	0.78	0.19	70,70,70,70	0
56	MG	2A	3410	1/1	0.78	0.47	75,75,75,75	0
56	MG	2a	1629	1/1	0.78	0.36	79,79,79,79	0
56	MG	2A	3288	1/1	0.78	0.15	82,82,82,82	0
56	MG	2a	1606	1/1	0.78	0.41	79,79,79,79	0
56	MG	2a	1799	1/1	0.78	0.23	81,81,81,81	0
56	MG	2A	3156	1/1	0.78	0.19	64,64,64,64	0
56	MG	1A	3475	1/1	0.79	0.20	64,64,64,64	0
56	MG	2A	3603	1/1	0.79	0.29	62,62,62,62	0
56	MG	2A	3286	1/1	0.79	0.20	78,78,78,78	0
56	MG	1a	1666	1/1	0.79	0.22	78,78,78,78	0
56	MG	2A	3630	1/1	0.79	0.18	57,57,57,57	0
56	MG	2A	3647	1/1	0.79	0.21	76,76,76,76	0
56	MG	2A	3305	1/1	0.79	0.26	70,70,70,70	0
56	MG	2A	3317	1/1	0.79	0.26	73,73,73,73	0
56	MG	1a	1726	1/1	0.79	0.30	81,81,81,81	0
56	MG	1A	3386	1/1	0.79	0.60	82,82,82,82	0
56	MG	1E	313	1/1	0.79	0.17	60,60,60,60	0
56	MG	1a	1759	1/1	0.79	0.20	57,57,57,57	0
56	MG	1A	3557	1/1	0.79	0.27	47,47,47,47	0
56	MG	1A	3776	1/1	0.79	0.17	59,59,59,59	0
56	MG	2a	1709	1/1	0.79	0.25	87,87,87,87	0
56	MG	2A	3434	1/1	0.79	0.20	67,67,67,67	0
56	MG	2B	214	1/1	0.79	0.22	76,76,76,76	0
56	MG	2A	3441	1/1	0.79	0.28	58,58,58,58	0
56	MG	1A	4026	1/1	0.79	0.14	60,60,60,60	0
56	MG	2A	3523	1/1	0.79	0.17	50,50,50,50	0
56	MG	1A	4044	1/1	0.79	0.22	78,78,78,78	0
56	MG	1A	3954	1/1	0.79	0.17	61,61,61,61	0
56	MG	2A	3591	1/1	0.79	0.27	73,73,73,73	0
56	MG	2x	103	1/1	0.79	0.22	78,78,78,78	0
56	MG	2A	3643	1/1	0.80	0.21	75,75,75,75	0
56	MG	2A	3201	1/1	0.80	0.26	53,53,53,53	0
56	MG	2A	3379	1/1	0.80	0.20	57,57,57,57	0
56	MG	2A	3017	1/1	0.80	0.20	71,71,71,71	0
56	MG	2A	3238	1/1	0.80	0.25	64,64,64,64	0
56	MG	1A	3388	1/1	0.80	0.31	70,70,70,70	0
56	MG	2A	3691	1/1	0.80	0.22	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
56	MG	2A	3250	1/1	0.80	0.17	62,62,62,62	0
56	MG	2A	3713	1/1	0.80	0.22	58,58,58,58	0
56	MG	2a	1644	1/1	0.80	0.18	78,78,78,78	0
56	MG	1A	3770	1/1	0.80	0.23	63,63,63,63	0
56	MG	2A	3496	1/1	0.80	0.17	76,76,76,76	0
56	MG	2A	3258	1/1	0.80	0.35	69,69,69,69	0
56	MG	1A	3944	1/1	0.80	0.12	71,71,71,71	0
56	MG	2B	204	1/1	0.80	0.21	80,80,80,80	0
56	MG	2B	212	1/1	0.80	0.12	74,74,74,74	0
56	MG	1A	3694	1/1	0.80	0.16	66,66,66,66	0
56	MG	2A	3137	1/1	0.80	0.20	79,79,79,79	0
56	MG	2a	1776	1/1	0.80	0.18	78,78,78,78	0
56	MG	1A	3403	1/1	0.80	0.18	75,75,75,75	0
56	MG	1A	3959	1/1	0.80	0.17	31,31,31,31	0
56	MG	2A	3326	1/1	0.80	0.12	68,68,68,68	0
56	MG	2a	1798	1/1	0.80	0.32	74,74,74,74	0
56	MG	2A	3175	1/1	0.80	0.30	75,75,75,75	0
56	MG	1B	216	1/1	0.80	0.20	73,73,73,73	0
56	MG	2A	3343	1/1	0.80	0.21	59,59,59,59	0
56	MG	2A	3195	1/1	0.81	0.31	52,52,52,52	0
56	MG	2a	1621	1/1	0.81	0.39	78,78,78,78	0
56	MG	2a	1623	1/1	0.81	0.21	63,63,63,63	0
56	MG	2A	3309	1/1	0.81	0.21	76,76,76,76	0
56	MG	2A	3080	1/1	0.81	0.24	70,70,70,70	0
56	MG	2A	3587	1/1	0.81	0.18	78,78,78,78	0
56	MG	1A	3965	1/1	0.81	0.18	81,81,81,81	0
56	MG	2a	1646	1/1	0.81	0.29	71,71,71,71	0
56	MG	2a	1662	1/1	0.81	0.23	69,69,69,69	0
56	MG	2A	3219	1/1	0.81	0.26	77,77,77,77	0
56	MG	1a	1699	1/1	0.81	0.24	78,78,78,78	0
56	MG	1D	311	1/1	0.81	0.29	49,49,49,49	0
56	MG	2A	3344	1/1	0.81	0.22	63,63,63,63	0
56	MG	2A	3244	1/1	0.81	0.24	76,76,76,76	0
56	MG	2a	1729	1/1	0.81	0.27	75,75,75,75	0
56	MG	2a	1752	1/1	0.81	0.25	73,73,73,73	0
56	MG	2E	307	1/1	0.81	0.18	65,65,65,65	0
56	MG	1x	105	1/1	0.81	0.24	79,79,79,79	0
56	MG	2A	3153	1/1	0.81	0.17	86,86,86,86	0
56	MG	2Z	302	1/1	0.81	0.24	76,76,76,76	0
56	MG	1E	310	1/1	0.81	0.40	76,76,76,76	0
56	MG	2A	3261	1/1	0.81	0.34	59,59,59,59	0
56	MG	2a	1785	1/1	0.81	0.18	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
56	MG	1a	1629	1/1	0.81	0.30	73,73,73,73	0
56	MG	2a	1789	1/1	0.81	0.20	79,79,79,79	0
56	MG	2A	3265	1/1	0.81	0.20	68,68,68,68	0
56	MG	1A	3983	1/1	0.81	0.10	65,65,65,65	0
56	MG	1A	3483	1/1	0.81	0.16	66,66,66,66	0
56	MG	2A	3503	1/1	0.81	0.21	73,73,73,73	0
56	MG	1a	1780	1/1	0.82	0.36	82,82,82,82	0
56	MG	2A	3229	1/1	0.82	0.16	75,75,75,75	0
56	MG	2A	3485	1/1	0.82	0.24	56,56,56,56	0
56	MG	2A	3236	1/1	0.82	0.23	72,72,72,72	0
56	MG	1A	3875	1/1	0.82	0.19	62,62,62,62	0
56	MG	1F	314	1/1	0.82	0.29	55,55,55,55	0
56	MG	1A	3891	1/1	0.82	0.13	33,33,33,33	0
56	MG	2A	3549	1/1	0.82	0.18	65,65,65,65	0
56	MG	1A	3547	1/1	0.82	0.18	65,65,65,65	0
56	MG	2A	3580	1/1	0.82	0.20	75,75,75,75	0
56	MG	1Q	205	1/1	0.82	0.15	57,57,57,57	0
56	MG	1W	206	1/1	0.82	0.29	50,50,50,50	0
56	MG	2A	3589	1/1	0.82	0.22	63,63,63,63	0
56	MG	1A	4016	1/1	0.82	0.21	44,44,44,44	0
56	MG	1a	1614	1/1	0.82	0.21	69,69,69,69	0
56	MG	1a	1623	1/1	0.82	0.20	76,76,76,76	0
56	MG	2A	3269	1/1	0.82	0.23	71,71,71,71	0
56	MG	2A	3055	1/1	0.82	0.19	79,79,79,79	0
56	MG	2A	3623	1/1	0.82	0.29	64,64,64,64	0
56	MG	1A	3199	1/1	0.82	0.20	69,69,69,69	0
56	MG	2A	3298	1/1	0.82	0.24	66,66,66,66	0
56	MG	2A	3645	1/1	0.82	0.19	69,69,69,69	0
56	MG	1A	3642	1/1	0.82	0.08	21,21,21,21	0
56	MG	1A	3188	1/1	0.82	0.25	61,61,61,61	0
56	MG	2A	3652	1/1	0.82	0.22	62,62,62,62	0
56	MG	2A	3312	1/1	0.82	0.29	69,69,69,69	0
56	MG	2a	1700	1/1	0.82	0.24	85,85,85,85	0
56	MG	2a	1701	1/1	0.82	0.33	67,67,67,67	0
56	MG	1a	1662	1/1	0.82	0.30	68,68,68,68	0
56	MG	1A	3801	1/1	0.82	0.20	71,71,71,71	0
56	MG	2A	3670	1/1	0.82	0.21	70,70,70,70	0
56	MG	2A	3329	1/1	0.82	0.15	74,74,74,74	0
56	MG	2A	3697	1/1	0.82	0.18	59,59,59,59	0
56	MG	2a	1765	1/1	0.82	0.24	70,70,70,70	0
56	MG	1a	1692	1/1	0.82	0.36	70,70,70,70	0
56	MG	2A	3703	1/1	0.82	0.19	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
56	MG	1A	3679	1/1	0.82	0.17	63,63,63,63	0
56	MG	2A	3720	1/1	0.82	0.18	46,46,46,46	0
56	MG	1a	1721	1/1	0.82	0.31	71,71,71,71	0
56	MG	2a	1784	1/1	0.82	0.11	75,75,75,75	0
56	MG	2A	3174	1/1	0.82	0.38	76,76,76,76	0
56	MG	2A	3756	1/1	0.82	0.20	61,61,61,61	0
56	MG	1A	3806	1/1	0.82	0.23	67,67,67,67	0
56	MG	1a	1740	1/1	0.82	0.18	72,72,72,72	0
56	MG	1A	3821	1/1	0.82	0.16	67,67,67,67	0
56	MG	1A	3491	1/1	0.82	0.13	78,78,78,78	0
56	MG	2q	202	1/1	0.82	0.20	76,76,76,76	0
56	MG	1A	3246	1/1	0.82	0.15	69,69,69,69	0
56	MG	1G	203	1/1	0.83	0.13	71,71,71,71	0
56	MG	1a	1675	1/1	0.83	0.42	68,68,68,68	0
56	MG	2A	3365	1/1	0.83	0.39	70,70,70,70	0
56	MG	2A	3234	1/1	0.83	0.24	73,73,73,73	0
56	MG	2A	3023	1/1	0.83	0.23	70,70,70,70	0
56	MG	2a	1622	1/1	0.83	0.21	62,62,62,62	0
56	MG	2A	3385	1/1	0.83	0.21	75,75,75,75	0
56	MG	2A	3025	1/1	0.83	0.12	52,52,52,52	0
56	MG	1a	1679	1/1	0.83	0.18	57,57,57,57	0
56	MG	2A	3054	1/1	0.83	0.20	81,81,81,81	0
56	MG	2A	3429	1/1	0.83	0.23	65,65,65,65	0
56	MG	2A	3682	1/1	0.83	0.23	69,69,69,69	0
56	MG	1A	3907	1/1	0.83	0.14	34,34,34,34	0
56	MG	1A	4045	1/1	0.83	0.18	68,68,68,68	0
56	MG	2A	3467	1/1	0.83	0.11	44,44,44,44	0
56	MG	2A	3086	1/1	0.83	0.19	75,75,75,75	0
56	MG	1A	3493	1/1	0.83	0.24	77,77,77,77	0
56	MG	1V	206	1/1	0.83	0.15	58,58,58,58	0
56	MG	1A	3765	1/1	0.83	0.13	26,26,26,26	0
56	MG	2A	3521	1/1	0.83	0.20	64,64,64,64	0
56	MG	1Z	302	1/1	0.83	0.11	58,58,58,58	0
56	MG	2a	1750	1/1	0.83	0.17	67,67,67,67	0
56	MG	1A	3313	1/1	0.83	0.18	56,56,56,56	0
56	MG	2A	3569	1/1	0.83	0.26	70,70,70,70	0
56	MG	1A	3352	1/1	0.83	0.24	59,59,59,59	0
56	MG	1A	3603	1/1	0.83	0.21	65,65,65,65	0
56	MG	2A	3302	1/1	0.83	0.27	68,68,68,68	0
56	MG	2a	1774	1/1	0.83	0.19	74,74,74,74	0
56	MG	2A	3167	1/1	0.83	0.27	77,77,77,77	0
56	MG	1A	3993	1/1	0.83	0.22	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
56	MG	1a	1649	1/1	0.83	0.29	69,69,69,69	0
56	MG	1a	1655	1/1	0.83	0.25	60,60,60,60	0
56	MG	2A	3190	1/1	0.83	0.36	71,71,71,71	0
56	MG	1A	3695	1/1	0.83	0.17	51,51,51,51	0
56	MG	2a	1788	1/1	0.83	0.15	80,80,80,80	0
56	MG	2A	3613	1/1	0.83	0.14	66,66,66,66	0
56	MG	2a	1790	1/1	0.83	0.34	75,75,75,75	0
56	MG	1A	3708	1/1	0.83	0.15	56,56,56,56	0
56	MG	2a	1605	1/1	0.83	0.31	67,67,67,67	0
56	MG	2A	3620	1/1	0.83	0.23	71,71,71,71	0
56	MG	2A	3622	1/1	0.83	0.29	63,63,63,63	0
56	MG	2w	103	1/1	0.83	0.30	83,83,83,83	0
56	MG	1A	4033	1/1	0.83	0.14	53,53,53,53	0
56	MG	2A	3409	1/1	0.84	0.16	67,67,67,67	0
56	MG	2A	3247	1/1	0.84	0.15	74,74,74,74	0
56	MG	10	105	1/1	0.84	0.20	65,65,65,65	0
56	MG	1A	3571	1/1	0.84	0.16	43,43,43,43	0
56	MG	1a	1731	1/1	0.84	0.28	78,78,78,78	0
56	MG	2a	1632	1/1	0.84	0.18	79,79,79,79	0
56	MG	1a	1604	1/1	0.84	0.20	66,66,66,66	0
56	MG	2a	1639	1/1	0.84	0.32	75,75,75,75	0
56	MG	1A	3580	1/1	0.84	0.13	50,50,50,50	0
56	MG	1A	3402	1/1	0.84	0.31	69,69,69,69	0
56	MG	1A	3609	1/1	0.84	0.20	55,55,55,55	0
56	MG	2a	1652	1/1	0.84	0.31	68,68,68,68	0
56	MG	2A	3270	1/1	0.84	0.20	61,61,61,61	0
56	MG	2a	1668	1/1	0.84	0.21	68,68,68,68	0
56	MG	1a	1631	1/1	0.84	0.35	69,69,69,69	0
56	MG	2a	1695	1/1	0.84	0.22	80,80,80,80	0
56	MG	2A	3701	1/1	0.84	0.14	69,69,69,69	0
56	MG	2A	3164	1/1	0.84	0.25	72,72,72,72	0
56	MG	2A	3707	1/1	0.84	0.23	64,64,64,64	0
56	MG	1a	1637	1/1	0.84	0.42	73,73,73,73	0
56	MG	2A	3525	1/1	0.84	0.19	71,71,71,71	0
56	MG	2A	3536	1/1	0.84	0.12	38,38,38,38	0
56	MG	2a	1718	1/1	0.84	0.37	82,82,82,82	0
56	MG	1A	3053	1/1	0.84	0.14	56,56,56,56	0
56	MG	2A	3173	1/1	0.84	0.23	66,66,66,66	0
56	MG	1a	1790	1/1	0.84	0.24	65,65,65,65	0
56	MG	1a	1797	1/1	0.84	0.17	68,68,68,68	0
56	MG	1A	3309	1/1	0.84	0.21	57,57,57,57	0
56	MG	1A	3409	1/1	0.84	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
56	MG	1A	3434	1/1	0.84	0.37	64,64,64,64	0
56	MG	1a	1661	1/1	0.84	0.18	63,63,63,63	0
56	MG	2B	218	1/1	0.84	0.37	76,76,76,76	0
56	MG	1A	4034	1/1	0.84	0.14	59,59,59,59	0
56	MG	1A	3815	1/1	0.84	0.14	65,65,65,65	0
56	MG	2A	3611	1/1	0.84	0.17	58,58,58,58	0
56	MG	1a	1673	1/1	0.84	0.30	57,57,57,57	0
56	MG	2A	3356	1/1	0.84	0.35	70,70,70,70	0
56	MG	1A	3099	1/1	0.84	0.13	68,68,68,68	0
56	MG	2A	3616	1/1	0.84	0.21	68,68,68,68	0
56	MG	1A	4046	1/1	0.84	0.19	66,66,66,66	0
56	MG	2A	3374	1/1	0.84	0.20	64,64,64,64	0
56	MG	1A	3400	1/1	0.84	0.24	63,63,63,63	0
56	MG	1A	3562	1/1	0.84	0.33	69,69,69,69	0
56	MG	2l	205	1/1	0.84	0.16	71,71,71,71	0
56	MG	2A	3632	1/1	0.84	0.15	64,64,64,64	0
56	MG	2A	3058	1/1	0.84	0.32	69,69,69,69	0
56	MG	2A	3408	1/1	0.84	0.22	59,59,59,59	0
56	MG	1A	3682	1/1	0.85	0.21	67,67,67,67	0
56	MG	1a	1681	1/1	0.85	0.26	67,67,67,67	0
56	MG	1a	1689	1/1	0.85	0.15	67,67,67,67	0
56	MG	1a	1690	1/1	0.85	0.34	68,68,68,68	0
56	MG	2A	3565	1/1	0.85	0.18	57,57,57,57	0
56	MG	2A	3073	1/1	0.85	0.27	71,71,71,71	0
56	MG	2A	3571	1/1	0.85	0.36	75,75,75,75	0
56	MG	2Q	202	1/1	0.85	0.29	65,65,65,65	0
56	MG	1A	3804	1/1	0.85	0.14	56,56,56,56	0
56	MG	1A	3339	1/1	0.85	0.20	72,72,72,72	0
56	MG	25	105	1/1	0.85	0.17	67,67,67,67	0
56	MG	2A	3284	1/1	0.85	0.25	73,73,73,73	0
56	MG	2a	1603	1/1	0.85	0.30	66,66,66,66	0
56	MG	2A	3285	1/1	0.85	0.30	80,80,80,80	0
56	MG	2A	3089	1/1	0.85	0.37	76,76,76,76	0
56	MG	1a	1701	1/1	0.85	0.49	70,70,70,70	0
56	MG	14	101	1/1	0.85	0.25	77,77,77,77	0
56	MG	1a	1723	1/1	0.85	0.17	67,67,67,67	0
56	MG	2a	1615	1/1	0.85	0.26	66,66,66,66	0
56	MG	2a	1616	1/1	0.85	0.19	67,67,67,67	0
56	MG	2A	3101	1/1	0.85	0.36	69,69,69,69	0
56	MG	16	103	1/1	0.85	0.30	53,53,53,53	0
56	MG	2A	3151	1/1	0.85	0.13	80,80,80,80	0
56	MG	1B	212	1/1	0.85	0.16	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
56	MG	1A	3312	1/1	0.85	0.31	66,66,66,66	0
56	MG	1a	1613	1/1	0.85	0.16	69,69,69,69	0
56	MG	1A	3286	1/1	0.85	0.28	70,70,70,70	0
56	MG	1A	3747	1/1	0.85	0.14	45,45,45,45	0
56	MG	2A	3170	1/1	0.85	0.17	74,74,74,74	0
56	MG	1A	3024	1/1	0.85	0.25	57,57,57,57	0
56	MG	2A	3637	1/1	0.85	0.20	68,68,68,68	0
56	MG	1A	3495	1/1	0.85	0.16	76,76,76,76	0
56	MG	1A	3619	1/1	0.85	0.11	65,65,65,65	0
56	MG	2a	1647	1/1	0.85	0.15	75,75,75,75	0
56	MG	1a	1784	1/1	0.85	0.17	69,69,69,69	0
56	MG	1A	3505	1/1	0.85	0.31	55,55,55,55	0
56	MG	1a	1793	1/1	0.85	0.17	68,68,68,68	0
56	MG	2a	1686	1/1	0.85	0.40	77,77,77,77	0
56	MG	2A	3654	1/1	0.85	0.14	75,75,75,75	0
56	MG	1a	1652	1/1	0.85	0.26	65,65,65,65	0
56	MG	2A	3204	1/1	0.85	0.17	61,61,61,61	0
56	MG	2A	3661	1/1	0.85	0.15	60,60,60,60	0
56	MG	2A	3406	1/1	0.85	0.28	82,82,82,82	0
56	MG	2A	3205	1/1	0.85	0.19	66,66,66,66	0
56	MG	2A	3206	1/1	0.85	0.11	71,71,71,71	0
56	MG	1A	3458	1/1	0.85	0.15	47,47,47,47	0
56	MG	2a	1710	1/1	0.85	0.29	76,76,76,76	0
56	MG	1A	3999	1/1	0.85	0.18	50,50,50,50	0
56	MG	2A	3224	1/1	0.85	0.27	65,65,65,65	0
56	MG	2a	1731	1/1	0.85	0.16	79,79,79,79	0
56	MG	2a	1737	1/1	0.85	0.28	74,74,74,74	0
56	MG	2a	1748	1/1	0.85	0.14	80,80,80,80	0
56	MG	1A	3913	1/1	0.85	0.12	74,74,74,74	0
56	MG	2A	3435	1/1	0.85	0.18	38,38,38,38	0
56	MG	2a	1759	1/1	0.85	0.29	74,74,74,74	0
56	MG	2A	3706	1/1	0.85	0.14	65,65,65,65	0
56	MG	1O	205	1/1	0.85	0.15	67,67,67,67	0
56	MG	2A	3710	1/1	0.85	0.16	60,60,60,60	0
56	MG	2A	3456	1/1	0.85	0.39	77,77,77,77	0
56	MG	2A	3716	1/1	0.85	0.16	56,56,56,56	0
56	MG	1x	109	1/1	0.85	0.23	68,68,68,68	0
56	MG	2A	3721	1/1	0.85	0.17	50,50,50,50	0
56	MG	1A	4023	1/1	0.85	0.13	50,50,50,50	0
56	MG	2A	3739	1/1	0.85	0.16	63,63,63,63	0
56	MG	2A	3748	1/1	0.85	0.13	56,56,56,56	0
56	MG	2A	3002	1/1	0.85	0.32	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
56	MG	1A	3777	1/1	0.85	0.14	45,45,45,45	0
56	MG	2A	3759	1/1	0.85	0.13	64,64,64,64	0
56	MG	2A	3760	1/1	0.85	0.14	72,72,72,72	0
56	MG	2A	3502	1/1	0.85	0.18	50,50,50,50	0
56	MG	1A	3795	1/1	0.85	0.15	50,50,50,50	0
56	MG	2B	203	1/1	0.85	0.29	77,77,77,77	0
56	MG	2A	3518	1/1	0.85	0.20	73,73,73,73	0
56	MG	2B	208	1/1	0.85	0.35	73,73,73,73	0
56	MG	2B	209	1/1	0.85	0.25	71,71,71,71	0
56	MG	1A	3319	1/1	0.85	0.27	66,66,66,66	0
56	MG	1A	3530	1/1	0.86	0.38	71,71,71,71	0
56	MG	2X	101	1/1	0.86	0.17	69,69,69,69	0
56	MG	2A	3597	1/1	0.86	0.15	66,66,66,66	0
56	MG	1A	4019	1/1	0.86	0.12	55,55,55,55	0
56	MG	2A	3328	1/1	0.86	0.18	79,79,79,79	0
56	MG	1A	4020	1/1	0.86	0.10	34,34,34,34	0
56	MG	2a	1604	1/1	0.86	0.22	72,72,72,72	0
56	MG	2A	3189	1/1	0.86	0.18	58,58,58,58	0
56	MG	1A	3451	1/1	0.86	0.29	55,55,55,55	0
56	MG	2A	3334	1/1	0.86	0.13	71,71,71,71	0
56	MG	2A	3336	1/1	0.86	0.34	59,59,59,59	0
56	MG	1A	3717	1/1	0.86	0.13	48,48,48,48	0
56	MG	2A	3003	1/1	0.86	0.21	53,53,53,53	0
56	MG	2A	3350	1/1	0.86	0.40	65,65,65,65	0
56	MG	1A	3555	1/1	0.86	0.18	50,50,50,50	0
56	MG	2a	1618	1/1	0.86	0.17	76,76,76,76	0
56	MG	1A	3224	1/1	0.86	0.16	54,54,54,54	0
56	MG	1A	3466	1/1	0.86	0.20	61,61,61,61	0
56	MG	2A	3644	1/1	0.86	0.18	62,62,62,62	0
56	MG	1A	3050	1/1	0.86	0.20	40,40,40,40	0
56	MG	1A	3578	1/1	0.86	0.11	49,49,49,49	0
56	MG	1A	3579	1/1	0.86	0.13	34,34,34,34	0
56	MG	2A	3057	1/1	0.86	0.28	57,57,57,57	0
56	MG	2A	3398	1/1	0.86	0.34	76,76,76,76	0
56	MG	1A	3026	1/1	0.86	0.16	58,58,58,58	0
56	MG	2A	3070	1/1	0.86	0.20	55,55,55,55	0
56	MG	1B	218	1/1	0.86	0.12	55,55,55,55	0
56	MG	2a	1645	1/1	0.86	0.38	80,80,80,80	0
56	MG	1A	3247	1/1	0.86	0.14	76,76,76,76	0
56	MG	2A	3667	1/1	0.86	0.31	65,65,65,65	0
56	MG	1A	3316	1/1	0.86	0.25	58,58,58,58	0
56	MG	2a	1655	1/1	0.86	0.10	75,75,75,75	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1658	1/1	0.86	0.18	75,75,75,75	0
56	MG	2A	3427	1/1	0.86	0.23	61,61,61,61	0
56	MG	2A	3245	1/1	0.86	0.16	76,76,76,76	0
56	MG	2a	1685	1/1	0.86	0.20	72,72,72,72	0
56	MG	1A	3318	1/1	0.86	0.18	53,53,53,53	0
56	MG	2a	1688	1/1	0.86	0.29	66,66,66,66	0
56	MG	1a	1750	1/1	0.86	0.16	62,62,62,62	0
56	MG	2a	1691	1/1	0.86	0.37	66,66,66,66	0
56	MG	1A	3442	1/1	0.86	0.23	68,68,68,68	0
56	MG	2A	3257	1/1	0.86	0.18	63,63,63,63	0
56	MG	2A	3704	1/1	0.86	0.16	68,68,68,68	0
56	MG	2a	1699	1/1	0.86	0.19	72,72,72,72	0
56	MG	1a	1776	1/1	0.86	0.15	62,62,62,62	0
56	MG	2A	3472	1/1	0.86	0.16	50,50,50,50	0
56	MG	1A	3674	1/1	0.86	0.14	30,30,30,30	0
56	MG	1A	3027	1/1	0.86	0.19	82,82,82,82	0
56	MG	2A	3140	1/1	0.86	0.23	56,56,56,56	0
56	MG	1A	3985	1/1	0.86	0.12	79,79,79,79	0
56	MG	1A	3513	1/1	0.86	0.11	69,69,69,69	0
56	MG	2A	3512	1/1	0.86	0.20	70,70,70,70	0
56	MG	2A	3272	1/1	0.86	0.21	69,69,69,69	0
56	MG	2A	3274	1/1	0.86	0.35	77,77,77,77	0
56	MG	2A	3276	1/1	0.86	0.21	57,57,57,57	0
56	MG	2A	3279	1/1	0.86	0.23	70,70,70,70	0
56	MG	2A	3529	1/1	0.86	0.20	66,66,66,66	0
56	MG	2a	1762	1/1	0.86	0.25	77,77,77,77	0
56	MG	2A	3280	1/1	0.86	0.24	74,74,74,74	0
56	MG	2A	3539	1/1	0.86	0.20	49,49,49,49	0
56	MG	2A	3767	1/1	0.86	0.19	58,58,58,58	0
56	MG	2A	3768	1/1	0.86	0.13	66,66,66,66	0
56	MG	2a	1771	1/1	0.86	0.17	67,67,67,67	0
56	MG	1a	1788	1/1	0.86	0.31	74,74,74,74	0
56	MG	2A	3778	1/1	0.86	0.33	69,69,69,69	0
56	MG	2A	3556	1/1	0.86	0.23	47,47,47,47	0
56	MG	2A	3562	1/1	0.86	0.25	75,75,75,75	0
56	MG	2A	3563	1/1	0.86	0.18	47,47,47,47	0
56	MG	2A	3158	1/1	0.86	0.19	63,63,63,63	0
56	MG	1a	1660	1/1	0.86	0.24	69,69,69,69	0
56	MG	1A	3528	1/1	0.86	0.30	54,54,54,54	0
56	MG	2A	3293	1/1	0.86	0.13	67,67,67,67	0
56	MG	1A	3834	1/1	0.86	0.18	54,54,54,54	0
56	MG	2A	3169	1/1	0.86	0.34	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
56	MG	1a	1663	1/1	0.86	0.36	72,72,72,72	0
56	MG	2A	3171	1/1	0.86	0.27	70,70,70,70	0
56	MG	2F	306	1/1	0.86	0.21	67,67,67,67	0
56	MG	1A	3529	1/1	0.86	0.14	50,50,50,50	0
56	MG	2w	101	1/1	0.86	0.33	71,71,71,71	0
56	MG	2O	202	1/1	0.86	0.20	56,56,56,56	0
56	MG	2A	3593	1/1	0.86	0.14	61,61,61,61	0
56	MG	2A	3596	1/1	0.87	0.25	66,66,66,66	0
56	MG	1A	3566	1/1	0.87	0.34	70,70,70,70	0
56	MG	2A	3599	1/1	0.87	0.17	64,64,64,64	0
56	MG	2A	3181	1/1	0.87	0.16	60,60,60,60	0
56	MG	2A	3608	1/1	0.87	0.15	62,62,62,62	0
56	MG	1A	3342	1/1	0.87	0.15	59,59,59,59	0
56	MG	1u	101	1/1	0.87	0.23	70,70,70,70	0
56	MG	2a	1609	1/1	0.87	0.46	76,76,76,76	0
56	MG	2A	3339	1/1	0.87	0.24	47,47,47,47	0
56	MG	2A	3340	1/1	0.87	0.21	59,59,59,59	0
56	MG	1x	102	1/1	0.87	0.12	73,73,73,73	0
56	MG	2A	3617	1/1	0.87	0.11	68,68,68,68	0
56	MG	2A	3192	1/1	0.87	0.16	65,65,65,65	0
56	MG	2A	3349	1/1	0.87	0.19	67,67,67,67	0
56	MG	1x	104	1/1	0.87	0.19	66,66,66,66	0
56	MG	2A	3351	1/1	0.87	0.32	67,67,67,67	0
56	MG	2A	3200	1/1	0.87	0.13	57,57,57,57	0
56	MG	2A	3362	1/1	0.87	0.17	58,58,58,58	0
56	MG	1B	224	1/1	0.87	0.15	66,66,66,66	0
56	MG	2A	3202	1/1	0.87	0.40	51,51,51,51	0
56	MG	2A	3369	1/1	0.87	0.30	62,62,62,62	0
56	MG	2A	3370	1/1	0.87	0.32	61,61,61,61	0
56	MG	2a	1636	1/1	0.87	0.50	81,81,81,81	0
56	MG	1A	3261	1/1	0.87	0.31	68,68,68,68	0
56	MG	1A	3463	1/1	0.87	0.17	54,54,54,54	0
56	MG	1A	3807	1/1	0.87	0.15	57,57,57,57	0
56	MG	1A	3978	1/1	0.87	0.10	59,59,59,59	0
56	MG	2A	3391	1/1	0.87	0.22	64,64,64,64	0
56	MG	2A	3213	1/1	0.87	0.17	70,70,70,70	0
56	MG	2a	1649	1/1	0.87	0.26	80,80,80,80	0
56	MG	1A	3716	1/1	0.87	0.15	44,44,44,44	0
56	MG	2A	3014	1/1	0.87	0.21	67,67,67,67	0
56	MG	1A	3514	1/1	0.87	0.16	72,72,72,72	0
56	MG	1A	3831	1/1	0.87	0.15	47,47,47,47	0
56	MG	2A	3422	1/1	0.87	0.28	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
56	MG	2a	1673	1/1	0.87	0.23	72,72,72,72	0
56	MG	2a	1682	1/1	0.87	0.34	65,65,65,65	0
56	MG	1a	1678	1/1	0.87	0.29	67,67,67,67	0
56	MG	2A	3033	1/1	0.87	0.33	74,74,74,74	0
56	MG	1A	3729	1/1	0.87	0.12	23,23,23,23	0
56	MG	1A	3843	1/1	0.87	0.16	45,45,45,45	0
56	MG	1A	3595	1/1	0.87	0.21	59,59,59,59	0
56	MG	2a	1692	1/1	0.87	0.37	71,71,71,71	0
56	MG	2A	3437	1/1	0.87	0.23	81,81,81,81	0
56	MG	1A	3996	1/1	0.87	0.15	58,58,58,58	0
56	MG	1A	3354	1/1	0.87	0.28	52,52,52,52	0
56	MG	2A	3459	1/1	0.87	0.29	62,62,62,62	0
56	MG	1A	4010	1/1	0.87	0.12	66,66,66,66	0
56	MG	1A	3868	1/1	0.87	0.23	57,57,57,57	0
56	MG	2A	3479	1/1	0.87	0.14	69,69,69,69	0
56	MG	2a	1703	1/1	0.87	0.23	68,68,68,68	0
56	MG	1a	1717	1/1	0.87	0.19	76,76,76,76	0
56	MG	1A	3153	1/1	0.87	0.17	41,41,41,41	0
56	MG	2a	1714	1/1	0.87	0.24	69,69,69,69	0
56	MG	2a	1717	1/1	0.87	0.16	71,71,71,71	0
56	MG	1A	3162	1/1	0.87	0.13	40,40,40,40	0
56	MG	2a	1719	1/1	0.87	0.30	65,65,65,65	0
56	MG	1A	3895	1/1	0.87	0.10	54,54,54,54	0
56	MG	1A	3634	1/1	0.87	0.13	32,32,32,32	0
56	MG	2A	3099	1/1	0.87	0.17	57,57,57,57	0
56	MG	2A	3515	1/1	0.87	0.20	67,67,67,67	0
56	MG	2A	3763	1/1	0.87	0.22	62,62,62,62	0
56	MG	1a	1732	1/1	0.87	0.12	75,75,75,75	0
56	MG	2A	3273	1/1	0.87	0.15	72,72,72,72	0
56	MG	1A	3097	1/1	0.87	0.14	68,68,68,68	0
56	MG	2A	3776	1/1	0.87	0.20	72,72,72,72	0
56	MG	2A	3108	1/1	0.87	0.27	77,77,77,77	0
56	MG	2A	3124	1/1	0.87	0.13	63,63,63,63	0
56	MG	2A	3780	1/1	0.87	0.19	61,61,61,61	0
56	MG	2A	3126	1/1	0.87	0.20	57,57,57,57	0
56	MG	2a	1773	1/1	0.87	0.22	68,68,68,68	0
56	MG	1A	3338	1/1	0.87	0.21	56,56,56,56	0
56	MG	1A	4043	1/1	0.87	0.14	54,54,54,54	0
56	MG	1a	1607	1/1	0.87	0.29	65,65,65,65	0
56	MG	2a	1779	1/1	0.87	0.35	65,65,65,65	0
56	MG	1A	3781	1/1	0.87	0.15	61,61,61,61	0
56	MG	1a	1765	1/1	0.87	0.11	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
56	MG	1A	3925	1/1	0.87	0.10	31,31,31,31	0
56	MG	1A	3259	1/1	0.87	0.17	62,62,62,62	0
56	MG	1A	4049	1/1	0.87	0.30	52,52,52,52	0
56	MG	2D	307	1/1	0.87	0.18	67,67,67,67	0
56	MG	2A	3574	1/1	0.87	0.19	75,75,75,75	0
56	MG	2a	1792	1/1	0.87	0.23	64,64,64,64	0
56	MG	2A	3308	1/1	0.87	0.24	46,46,46,46	0
56	MG	1A	4050	1/1	0.87	0.16	62,62,62,62	0
56	MG	1B	203	1/1	0.87	0.32	64,64,64,64	0
56	MG	1A	3494	1/1	0.87	0.11	69,69,69,69	0
56	MG	1B	214	1/1	0.87	0.17	59,59,59,59	0
56	MG	2r	101	1/1	0.87	0.15	79,79,79,79	0
56	MG	2A	3327	1/1	0.87	0.19	69,69,69,69	0
56	MG	1a	1653	1/1	0.87	0.17	65,65,65,65	0
56	MG	1a	1654	1/1	0.87	0.13	68,68,68,68	0
56	MG	1A	3460	1/1	0.88	0.15	53,53,53,53	0
56	MG	2R	201	1/1	0.88	0.14	64,64,64,64	0
56	MG	1w	101	1/1	0.88	0.10	73,73,73,73	0
56	MG	2V	201	1/1	0.88	0.37	48,48,48,48	0
56	MG	1A	4011	1/1	0.88	0.22	72,72,72,72	0
56	MG	1A	4012	1/1	0.88	0.08	19,19,19,19	0
56	MG	20	101	1/1	0.88	0.17	72,72,72,72	0
56	MG	1A	3399	1/1	0.88	0.14	52,52,52,52	0
56	MG	1a	1674	1/1	0.88	0.21	42,42,42,42	0
56	MG	1x	107	1/1	0.88	0.19	74,74,74,74	0
56	MG	2A	3338	1/1	0.88	0.26	57,57,57,57	0
56	MG	2A	3193	1/1	0.88	0.30	70,70,70,70	0
56	MG	2A	3604	1/1	0.88	0.14	52,52,52,52	0
56	MG	1A	3664	1/1	0.88	0.14	47,47,47,47	0
56	MG	2A	3198	1/1	0.88	0.12	56,56,56,56	0
56	MG	2a	1610	1/1	0.88	0.25	67,67,67,67	0
56	MG	1x	110	1/1	0.88	0.11	62,62,62,62	0
56	MG	2A	3347	1/1	0.88	0.29	68,68,68,68	0
56	MG	1A	3670	1/1	0.88	0.08	27,27,27,27	0
56	MG	1x	112	1/1	0.88	0.24	62,62,62,62	0
56	MG	1A	3251	1/1	0.88	0.18	56,56,56,56	0
56	MG	2A	3619	1/1	0.88	0.12	35,35,35,35	0
56	MG	1A	3241	1/1	0.88	0.10	61,61,61,61	0
56	MG	2A	3360	1/1	0.88	0.28	55,55,55,55	0
56	MG	1A	3938	1/1	0.88	0.14	80,80,80,80	0
56	MG	1A	3341	1/1	0.88	0.20	60,60,60,60	0
56	MG	1A	3140	1/1	0.88	0.23	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
56	MG	2A	3635	1/1	0.88	0.10	63,63,63,63	0
56	MG	2A	3218	1/1	0.88	0.28	67,67,67,67	0
56	MG	2a	1633	1/1	0.88	0.26	67,67,67,67	0
56	MG	2A	3642	1/1	0.88	0.19	60,60,60,60	0
56	MG	1a	1695	1/1	0.88	0.20	68,68,68,68	0
56	MG	15	108	1/1	0.88	0.17	60,60,60,60	0
56	MG	2a	1641	1/1	0.88	0.15	56,56,56,56	0
56	MG	1A	3948	1/1	0.88	0.13	38,38,38,38	0
56	MG	2A	3053	1/1	0.88	0.12	53,53,53,53	0
56	MG	1a	1702	1/1	0.88	0.36	62,62,62,62	0
56	MG	2A	3389	1/1	0.88	0.26	61,61,61,61	0
56	MG	1A	3350	1/1	0.88	0.21	64,64,64,64	0
56	MG	2A	3239	1/1	0.88	0.27	74,74,74,74	0
56	MG	1A	3415	1/1	0.88	0.26	50,50,50,50	0
56	MG	1A	3955	1/1	0.88	0.11	54,54,54,54	0
56	MG	1A	3702	1/1	0.88	0.19	65,65,65,65	0
56	MG	1A	4051	1/1	0.88	0.20	51,51,51,51	0
56	MG	2a	1667	1/1	0.88	0.25	74,74,74,74	0
56	MG	2A	3249	1/1	0.88	0.36	64,64,64,64	0
56	MG	2A	3674	1/1	0.88	0.12	42,42,42,42	0
56	MG	2a	1681	1/1	0.88	0.19	62,62,62,62	0
56	MG	1A	3159	1/1	0.88	0.33	66,66,66,66	0
56	MG	2A	3251	1/1	0.88	0.22	62,62,62,62	0
56	MG	1a	1625	1/1	0.88	0.28	61,61,61,61	0
56	MG	1A	3294	1/1	0.88	0.20	63,63,63,63	0
56	MG	1A	3976	1/1	0.88	0.14	55,55,55,55	0
56	MG	2a	1690	1/1	0.88	0.12	77,77,77,77	0
56	MG	2A	3259	1/1	0.88	0.29	73,73,73,73	0
56	MG	2A	3438	1/1	0.88	0.10	37,37,37,37	0
56	MG	2a	1694	1/1	0.88	0.25	76,76,76,76	0
56	MG	2A	3705	1/1	0.88	0.20	75,75,75,75	0
56	MG	2a	1696	1/1	0.88	0.19	67,67,67,67	0
56	MG	1a	1635	1/1	0.88	0.24	58,58,58,58	0
56	MG	1a	1755	1/1	0.88	0.20	51,51,51,51	0
56	MG	1a	1758	1/1	0.88	0.14	62,62,62,62	0
56	MG	1A	3317	1/1	0.88	0.15	54,54,54,54	0
56	MG	1a	1638	1/1	0.88	0.26	66,66,66,66	0
56	MG	2A	3109	1/1	0.88	0.18	57,57,57,57	0
56	MG	1a	1642	1/1	0.88	0.18	64,64,64,64	0
56	MG	2A	3489	1/1	0.88	0.14	59,59,59,59	0
56	MG	2A	3736	1/1	0.88	0.16	52,52,52,52	0
56	MG	1A	3833	1/1	0.88	0.12	30,30,30,30	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3745	1/1	0.88	0.17	51,51,51,51	0
56	MG	2A	3131	1/1	0.88	0.53	68,68,68,68	0
56	MG	2A	3277	1/1	0.88	0.17	70,70,70,70	0
56	MG	2a	1720	1/1	0.88	0.25	62,62,62,62	0
56	MG	2a	1725	1/1	0.88	0.30	65,65,65,65	0
56	MG	1a	1650	1/1	0.88	0.15	58,58,58,58	0
56	MG	1A	3296	1/1	0.88	0.28	58,58,58,58	0
56	MG	2a	1736	1/1	0.88	0.13	68,68,68,68	0
56	MG	2A	3514	1/1	0.88	0.10	66,66,66,66	0
56	MG	2a	1738	1/1	0.88	0.16	68,68,68,68	0
56	MG	2a	1742	1/1	0.88	0.16	74,74,74,74	0
56	MG	2A	3761	1/1	0.88	0.16	66,66,66,66	0
56	MG	2A	3147	1/1	0.88	0.34	70,70,70,70	0
56	MG	1A	3308	1/1	0.88	0.18	59,59,59,59	0
56	MG	2A	3152	1/1	0.88	0.12	68,68,68,68	0
56	MG	2A	3287	1/1	0.88	0.21	82,82,82,82	0
56	MG	2A	3769	1/1	0.88	0.20	59,59,59,59	0
56	MG	2A	3773	1/1	0.88	0.10	52,52,52,52	0
56	MG	1A	3756	1/1	0.88	0.10	46,46,46,46	0
56	MG	2A	3527	1/1	0.88	0.16	65,65,65,65	0
56	MG	1a	1789	1/1	0.88	0.20	64,64,64,64	0
56	MG	2A	3779	1/1	0.88	0.21	71,71,71,71	0
56	MG	2A	3534	1/1	0.88	0.13	68,68,68,68	0
56	MG	2A	3781	1/1	0.88	0.45	69,69,69,69	0
56	MG	2B	202	1/1	0.88	0.12	64,64,64,64	0
56	MG	2A	3296	1/1	0.88	0.14	64,64,64,64	0
56	MG	1A	3606	1/1	0.88	0.15	65,65,65,65	0
56	MG	2a	1781	1/1	0.88	0.22	74,74,74,74	0
56	MG	2B	205	1/1	0.88	0.20	65,65,65,65	0
56	MG	2A	3543	1/1	0.88	0.18	65,65,65,65	0
56	MG	1A	3526	1/1	0.88	0.30	60,60,60,60	0
56	MG	2A	3303	1/1	0.88	0.15	66,66,66,66	0
56	MG	1A	3766	1/1	0.88	0.14	45,45,45,45	0
56	MG	1a	1798	1/1	0.88	0.19	67,67,67,67	0
56	MG	1A	3329	1/1	0.88	0.19	53,53,53,53	0
56	MG	2A	3310	1/1	0.88	0.15	68,68,68,68	0
56	MG	1l	202	1/1	0.88	0.16	60,60,60,60	0
56	MG	2a	1800	1/1	0.88	0.29	60,60,60,60	0
56	MG	2a	1801	1/1	0.88	0.13	74,74,74,74	0
56	MG	1m	3002	1/1	0.88	0.20	61,61,61,61	0
56	MG	2E	305	1/1	0.88	0.18	68,68,68,68	0
56	MG	2A	3578	1/1	0.88	0.18	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
56	MG	2A	3319	1/1	0.88	0.23	76,76,76,76	0
56	MG	2v	101	1/1	0.88	0.32	65,65,65,65	0
56	MG	2A	3323	1/1	0.88	0.14	70,70,70,70	0
56	MG	1A	4003	1/1	0.88	0.11	36,36,36,36	0
56	MG	2P	202	1/1	0.88	0.21	55,55,55,55	0
56	MG	1R	203	1/1	0.89	0.25	44,44,44,44	0
56	MG	1U	207	1/1	0.89	0.17	59,59,59,59	0
56	MG	2R	202	1/1	0.89	0.13	55,55,55,55	0
56	MG	1a	1738	1/1	0.89	0.24	63,63,63,63	0
56	MG	1A	3387	1/1	0.89	0.21	63,63,63,63	0
56	MG	2V	202	1/1	0.89	0.18	71,71,71,71	0
56	MG	1A	3817	1/1	0.89	0.12	55,55,55,55	0
56	MG	2A	3322	1/1	0.89	0.25	58,58,58,58	0
56	MG	1Y	201	1/1	0.89	0.17	67,67,67,67	0
56	MG	25	104	1/1	0.89	0.14	63,63,63,63	0
56	MG	1a	1746	1/1	0.89	0.18	63,63,63,63	0
56	MG	2a	1601	1/1	0.89	0.18	68,68,68,68	0
56	MG	1A	3820	1/1	0.89	0.16	46,46,46,46	0
56	MG	1A	3684	1/1	0.89	0.16	59,59,59,59	0
56	MG	10	106	1/1	0.89	0.11	56,56,56,56	0
56	MG	2A	3600	1/1	0.89	0.24	62,62,62,62	0
56	MG	1A	3825	1/1	0.89	0.12	61,61,61,61	0
56	MG	1A	3827	1/1	0.89	0.17	58,58,58,58	0
56	MG	1A	3693	1/1	0.89	0.19	59,59,59,59	0
56	MG	2A	3335	1/1	0.89	0.17	67,67,67,67	0
56	MG	1A	3554	1/1	0.89	0.25	46,46,46,46	0
56	MG	1a	1603	1/1	0.89	0.12	59,59,59,59	0
56	MG	2A	3614	1/1	0.89	0.16	76,76,76,76	0
56	MG	1A	3180	1/1	0.89	0.12	50,50,50,50	0
56	MG	2A	3178	1/1	0.89	0.15	64,64,64,64	0
56	MG	1a	1783	1/1	0.89	0.21	68,68,68,68	0
56	MG	1A	4013	1/1	0.89	0.19	63,63,63,63	0
56	MG	1a	1786	1/1	0.89	0.14	61,61,61,61	0
56	MG	1a	1787	1/1	0.89	0.19	51,51,51,51	0
56	MG	1A	4014	1/1	0.89	0.17	47,47,47,47	0
56	MG	2A	3628	1/1	0.89	0.15	60,60,60,60	0
56	MG	2a	1626	1/1	0.89	0.30	66,66,66,66	0
56	MG	2a	1628	1/1	0.89	0.11	88,88,88,88	0
56	MG	1A	3333	1/1	0.89	0.15	57,57,57,57	0
56	MG	2A	3194	1/1	0.89	0.21	69,69,69,69	0
56	MG	1A	3706	1/1	0.89	0.10	53,53,53,53	0
56	MG	1A	3862	1/1	0.89	0.17	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
56	MG	2A	3363	1/1	0.89	0.16	50,50,50,50	0
56	MG	2A	3364	1/1	0.89	0.23	64,64,64,64	0
56	MG	1a	1626	1/1	0.89	0.16	62,62,62,62	0
56	MG	1a	1627	1/1	0.89	0.24	70,70,70,70	0
56	MG	1A	3100	1/1	0.89	0.11	38,38,38,38	0
56	MG	1A	3472	1/1	0.89	0.12	46,46,46,46	0
56	MG	1a	1632	1/1	0.89	0.28	78,78,78,78	0
56	MG	1A	3873	1/1	0.89	0.09	50,50,50,50	0
56	MG	1A	3265	1/1	0.89	0.12	53,53,53,53	0
56	MG	1A	4035	1/1	0.89	0.14	24,24,24,24	0
56	MG	2a	1653	1/1	0.89	0.20	80,80,80,80	0
56	MG	2A	3660	1/1	0.89	0.16	62,62,62,62	0
56	MG	2A	3215	1/1	0.89	0.24	62,62,62,62	0
56	MG	1A	4036	1/1	0.89	0.14	43,43,43,43	0
56	MG	1a	1644	1/1	0.89	0.17	64,64,64,64	0
56	MG	2A	3400	1/1	0.89	0.19	67,67,67,67	0
56	MG	2A	3673	1/1	0.89	0.17	62,62,62,62	0
56	MG	2a	1674	1/1	0.89	0.23	71,71,71,71	0
56	MG	2a	1676	1/1	0.89	0.15	68,68,68,68	0
56	MG	2A	3221	1/1	0.89	0.25	73,73,73,73	0
56	MG	2A	3676	1/1	0.89	0.16	42,42,42,42	0
56	MG	2a	1683	1/1	0.89	0.25	65,65,65,65	0
56	MG	2A	3678	1/1	0.89	0.27	70,70,70,70	0
56	MG	1a	1645	1/1	0.89	0.27	60,60,60,60	0
56	MG	2A	3687	1/1	0.89	0.18	58,58,58,58	0
56	MG	1A	3284	1/1	0.89	0.09	39,39,39,39	0
56	MG	2A	3694	1/1	0.89	0.21	76,76,76,76	0
56	MG	2A	3696	1/1	0.89	0.16	78,78,78,78	0
56	MG	1A	3738	1/1	0.89	0.11	20,20,20,20	0
56	MG	2A	3418	1/1	0.89	0.12	70,70,70,70	0
56	MG	1a	1651	1/1	0.89	0.24	57,57,57,57	0
56	MG	1A	3897	1/1	0.89	0.14	63,63,63,63	0
56	MG	1A	3197	1/1	0.89	0.17	53,53,53,53	0
56	MG	1A	3072	1/1	0.89	0.27	63,63,63,63	0
56	MG	1A	3351	1/1	0.89	0.18	51,51,51,51	0
56	MG	1A	3759	1/1	0.89	0.20	61,61,61,61	0
56	MG	2A	3708	1/1	0.89	0.20	88,88,88,88	0
56	MG	2A	3246	1/1	0.89	0.20	68,68,68,68	0
56	MG	1B	201	1/1	0.89	0.10	49,49,49,49	0
56	MG	2a	1707	1/1	0.89	0.30	62,62,62,62	0
56	MG	1A	3092	1/1	0.89	0.13	59,59,59,59	0
56	MG	2A	3449	1/1	0.89	0.11	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
56	MG	2a	1712	1/1	0.89	0.24	65,65,65,65	0
56	MG	1A	3928	1/1	0.89	0.11	45,45,45,45	0
56	MG	1A	3433	1/1	0.89	0.31	68,68,68,68	0
56	MG	2A	3460	1/1	0.89	0.22	55,55,55,55	0
56	MG	2A	3252	1/1	0.89	0.39	73,73,73,73	0
56	MG	1A	3353	1/1	0.89	0.20	54,54,54,54	0
56	MG	2A	3746	1/1	0.89	0.18	66,66,66,66	0
56	MG	2a	1727	1/1	0.89	0.24	61,61,61,61	0
56	MG	2A	3036	1/1	0.89	0.16	63,63,63,63	0
56	MG	1A	3769	1/1	0.89	0.09	47,47,47,47	0
56	MG	2A	3754	1/1	0.89	0.12	61,61,61,61	0
56	MG	1A	3613	1/1	0.89	0.14	67,67,67,67	0
56	MG	1A	3507	1/1	0.89	0.31	59,59,59,59	0
56	MG	2A	3262	1/1	0.89	0.21	66,66,66,66	0
56	MG	1B	226	1/1	0.89	0.18	64,64,64,64	0
56	MG	2A	3762	1/1	0.89	0.24	74,74,74,74	0
56	MG	2a	1751	1/1	0.89	0.14	69,69,69,69	0
56	MG	1A	3631	1/1	0.89	0.11	60,60,60,60	0
56	MG	2a	1758	1/1	0.89	0.16	54,54,54,54	0
56	MG	2A	3504	1/1	0.89	0.19	78,78,78,78	0
56	MG	2A	3766	1/1	0.89	0.30	67,67,67,67	0
56	MG	2A	3506	1/1	0.89	0.13	63,63,63,63	0
56	MG	2A	3267	1/1	0.89	0.26	68,68,68,68	0
56	MG	1A	3253	1/1	0.89	0.23	71,71,71,71	0
56	MG	1A	3794	1/1	0.89	0.11	44,44,44,44	0
56	MG	1a	1683	1/1	0.89	0.27	60,60,60,60	0
56	MG	1a	1685	1/1	0.89	0.14	60,60,60,60	0
56	MG	1E	307	1/1	0.89	0.16	55,55,55,55	0
56	MG	2a	1775	1/1	0.89	0.26	70,70,70,70	0
56	MG	1A	3961	1/1	0.89	0.20	28,28,28,28	0
56	MG	2A	3526	1/1	0.89	0.26	74,74,74,74	0
56	MG	2a	1778	1/1	0.89	0.22	68,68,68,68	0
56	MG	1A	3322	1/1	0.89	0.23	55,55,55,55	0
56	MG	2A	3528	1/1	0.89	0.20	73,73,73,73	0
56	MG	1F	304	1/1	0.89	0.21	69,69,69,69	0
56	MG	2A	3532	1/1	0.89	0.13	60,60,60,60	0
56	MG	2A	3094	1/1	0.89	0.15	57,57,57,57	0
56	MG	1A	3654	1/1	0.89	0.15	57,57,57,57	0
56	MG	1A	3968	1/1	0.89	0.09	27,27,27,27	0
56	MG	2B	210	1/1	0.89	0.13	74,74,74,74	0
56	MG	2A	3542	1/1	0.89	0.17	68,68,68,68	0
56	MG	2a	1791	1/1	0.89	0.24	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
56	MG	1A	3372	1/1	0.89	0.15	61,61,61,61	0
56	MG	2a	1797	1/1	0.89	0.25	70,70,70,70	0
56	MG	2A	3544	1/1	0.89	0.20	71,71,71,71	0
56	MG	2B	216	1/1	0.89	0.11	84,84,84,84	0
56	MG	2A	3104	1/1	0.89	0.28	66,66,66,66	0
56	MG	1a	1706	1/1	0.89	0.21	68,68,68,68	0
56	MG	2e	201	1/1	0.89	0.09	76,76,76,76	0
56	MG	1A	3527	1/1	0.89	0.24	56,56,56,56	0
56	MG	2A	3111	1/1	0.89	0.13	74,74,74,74	0
56	MG	2A	3564	1/1	0.89	0.14	45,45,45,45	0
56	MG	1A	3446	1/1	0.89	0.18	57,57,57,57	0
56	MG	1A	3324	1/1	0.89	0.15	64,64,64,64	0
56	MG	2A	3129	1/1	0.89	0.30	76,76,76,76	0
56	MG	1A	3454	1/1	0.89	0.11	61,61,61,61	0
56	MG	1a	1730	1/1	0.89	0.10	61,61,61,61	0
56	MG	2x	104	1/1	0.89	0.18	70,70,70,70	0
56	MG	2A	3083	1/1	0.90	0.16	51,51,51,51	0
56	MG	1A	3508	1/1	0.90	0.28	54,54,54,54	0
56	MG	2A	3283	1/1	0.90	0.16	79,79,79,79	0
56	MG	2W	201	1/1	0.90	0.18	59,59,59,59	0
56	MG	1A	3381	1/1	0.90	0.30	61,61,61,61	0
56	MG	1A	3382	1/1	0.90	0.14	48,48,48,48	0
56	MG	1A	3799	1/1	0.90	0.17	52,52,52,52	0
56	MG	1A	3525	1/1	0.90	0.15	39,39,39,39	0
56	MG	1A	3249	1/1	0.90	0.07	39,39,39,39	0
56	MG	2A	3291	1/1	0.90	0.16	67,67,67,67	0
56	MG	1A	3802	1/1	0.90	0.14	34,34,34,34	0
56	MG	1A	3803	1/1	0.90	0.11	40,40,40,40	0
56	MG	2A	3592	1/1	0.90	0.17	44,44,44,44	0
56	MG	2A	3297	1/1	0.90	0.15	64,64,64,64	0
56	MG	1Q	203	1/1	0.90	0.15	62,62,62,62	0
56	MG	1A	3288	1/1	0.90	0.14	55,55,55,55	0
56	MG	1A	3237	1/1	0.90	0.19	67,67,67,67	0
56	MG	2A	3304	1/1	0.90	0.32	72,72,72,72	0
56	MG	2a	1612	1/1	0.90	0.22	60,60,60,60	0
56	MG	2A	3110	1/1	0.90	0.10	53,53,53,53	0
56	MG	1a	1722	1/1	0.90	0.18	71,71,71,71	0
56	MG	1T	201	1/1	0.90	0.23	59,59,59,59	0
56	MG	2A	3606	1/1	0.90	0.17	57,57,57,57	0
56	MG	1A	3390	1/1	0.90	0.17	73,73,73,73	0
56	MG	2A	3311	1/1	0.90	0.26	63,63,63,63	0
56	MG	1A	3456	1/1	0.90	0.13	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
56	MG	1A	3681	1/1	0.90	0.08	61,61,61,61	0
56	MG	2A	3134	1/1	0.90	0.19	58,58,58,58	0
56	MG	2A	3321	1/1	0.90	0.22	63,63,63,63	0
56	MG	1A	3349	1/1	0.90	0.19	47,47,47,47	0
56	MG	1a	1737	1/1	0.90	0.11	66,66,66,66	0
56	MG	2A	3143	1/1	0.90	0.14	60,60,60,60	0
56	MG	1A	3085	1/1	0.90	0.19	38,38,38,38	0
56	MG	2A	3148	1/1	0.90	0.28	62,62,62,62	0
56	MG	1A	3256	1/1	0.90	0.13	53,53,53,53	0
56	MG	1A	3091	1/1	0.90	0.15	60,60,60,60	0
56	MG	10	107	1/1	0.90	0.09	71,71,71,71	0
56	MG	2a	1638	1/1	0.90	0.17	63,63,63,63	0
56	MG	11	104	1/1	0.90	0.16	64,64,64,64	0
56	MG	1a	1748	1/1	0.90	0.12	64,64,64,64	0
56	MG	2A	3159	1/1	0.90	0.22	57,57,57,57	0
56	MG	2A	3639	1/1	0.90	0.13	49,49,49,49	0
56	MG	2A	3640	1/1	0.90	0.09	59,59,59,59	0
56	MG	2A	3337	1/1	0.90	0.21	47,47,47,47	0
56	MG	2A	3163	1/1	0.90	0.27	62,62,62,62	0
56	MG	1A	3243	1/1	0.90	0.10	67,67,67,67	0
56	MG	2a	1651	1/1	0.90	0.09	66,66,66,66	0
56	MG	1A	3474	1/1	0.90	0.15	60,60,60,60	0
56	MG	1A	3832	1/1	0.90	0.13	59,59,59,59	0
56	MG	2A	3649	1/1	0.90	0.13	60,60,60,60	0
56	MG	2a	1656	1/1	0.90	0.27	67,67,67,67	0
56	MG	2A	3168	1/1	0.90	0.11	63,63,63,63	0
56	MG	1A	3703	1/1	0.90	0.09	50,50,50,50	0
56	MG	19	101	1/1	0.90	0.22	60,60,60,60	0
56	MG	1a	1771	1/1	0.90	0.08	84,84,84,84	0
56	MG	2a	1672	1/1	0.90	0.22	68,68,68,68	0
56	MG	1a	1772	1/1	0.90	0.27	71,71,71,71	0
56	MG	1a	1601	1/1	0.90	0.27	62,62,62,62	0
56	MG	1A	3568	1/1	0.90	0.14	44,44,44,44	0
56	MG	2a	1680	1/1	0.90	0.17	75,75,75,75	0
56	MG	2A	3177	1/1	0.90	0.24	63,63,63,63	0
56	MG	1A	3707	1/1	0.90	0.11	49,49,49,49	0
56	MG	2A	3180	1/1	0.90	0.10	67,67,67,67	0
56	MG	2A	3672	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3846	1/1	0.90	0.13	65,65,65,65	0
56	MG	2a	1687	1/1	0.90	0.22	60,60,60,60	0
56	MG	2A	3182	1/1	0.90	0.12	62,62,62,62	0
56	MG	2A	3183	1/1	0.90	0.20	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
56	MG	2A	3184	1/1	0.90	0.32	75,75,75,75	0
56	MG	1a	1609	1/1	0.90	0.25	57,57,57,57	0
56	MG	2A	3187	1/1	0.90	0.23	52,52,52,52	0
56	MG	1A	3849	1/1	0.90	0.13	44,44,44,44	0
56	MG	1a	1785	1/1	0.90	0.32	67,67,67,67	0
56	MG	1A	3006	1/1	0.90	0.17	55,55,55,55	0
56	MG	1a	1621	1/1	0.90	0.14	64,64,64,64	0
56	MG	2A	3392	1/1	0.90	0.13	60,60,60,60	0
56	MG	1A	3574	1/1	0.90	0.14	53,53,53,53	0
56	MG	2A	3399	1/1	0.90	0.30	63,63,63,63	0
56	MG	1A	3577	1/1	0.90	0.09	27,27,27,27	0
56	MG	1A	3724	1/1	0.90	0.23	59,59,59,59	0
56	MG	1A	3870	1/1	0.90	0.14	39,39,39,39	0
56	MG	2a	1705	1/1	0.90	0.35	70,70,70,70	0
56	MG	1A	3725	1/1	0.90	0.13	55,55,55,55	0
56	MG	1A	3406	1/1	0.90	0.17	50,50,50,50	0
56	MG	2A	3414	1/1	0.90	0.23	71,71,71,71	0
56	MG	1A	3878	1/1	0.90	0.20	43,43,43,43	0
56	MG	1a	1634	1/1	0.90	0.19	57,57,57,57	0
56	MG	2a	1716	1/1	0.90	0.35	77,77,77,77	0
56	MG	1A	3735	1/1	0.90	0.11	38,38,38,38	0
56	MG	1A	3408	1/1	0.90	0.28	58,58,58,58	0
56	MG	1t	201	1/1	0.90	0.16	61,61,61,61	0
56	MG	2A	3726	1/1	0.90	0.11	68,68,68,68	0
56	MG	2A	3732	1/1	0.90	0.12	38,38,38,38	0
56	MG	1A	3355	1/1	0.90	0.10	52,52,52,52	0
56	MG	2A	3738	1/1	0.90	0.13	68,68,68,68	0
56	MG	1A	3357	1/1	0.90	0.14	50,50,50,50	0
56	MG	2a	1733	1/1	0.90	0.15	72,72,72,72	0
56	MG	1w	103	1/1	0.90	0.15	67,67,67,67	0
56	MG	1A	3912	1/1	0.90	0.09	59,59,59,59	0
56	MG	1A	3427	1/1	0.90	0.17	64,64,64,64	0
56	MG	2A	3225	1/1	0.90	0.14	56,56,56,56	0
56	MG	2A	3451	1/1	0.90	0.22	67,67,67,67	0
56	MG	2A	3452	1/1	0.90	0.09	40,40,40,40	0
56	MG	2A	3227	1/1	0.90	0.15	63,63,63,63	0
56	MG	1A	3431	1/1	0.90	0.25	47,47,47,47	0
56	MG	2A	3230	1/1	0.90	0.20	60,60,60,60	0
56	MG	2A	3231	1/1	0.90	0.39	75,75,75,75	0
56	MG	2A	3233	1/1	0.90	0.26	74,74,74,74	0
56	MG	2A	3478	1/1	0.90	0.17	49,49,49,49	0
56	MG	1A	3919	1/1	0.90	0.12	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3922	1/1	0.90	0.08	50,50,50,50	0
56	MG	1A	3923	1/1	0.90	0.07	39,39,39,39	0
56	MG	2a	1770	1/1	0.90	0.18	68,68,68,68	0
56	MG	1B	215	1/1	0.90	0.27	71,71,71,71	0
56	MG	1A	3764	1/1	0.90	0.11	28,28,28,28	0
56	MG	1A	3608	1/1	0.90	0.11	40,40,40,40	0
56	MG	1B	222	1/1	0.90	0.22	53,53,53,53	0
56	MG	1A	3501	1/1	0.90	0.08	67,67,67,67	0
56	MG	2A	3004	1/1	0.90	0.10	51,51,51,51	0
56	MG	1A	3937	1/1	0.90	0.09	64,64,64,64	0
56	MG	1A	3336	1/1	0.90	0.15	65,65,65,65	0
56	MG	2B	201	1/1	0.90	0.20	77,77,77,77	0
56	MG	1A	3076	1/1	0.90	0.10	29,29,29,29	0
56	MG	1A	3941	1/1	0.90	0.15	65,65,65,65	0
56	MG	2A	3253	1/1	0.90	0.19	64,64,64,64	0
56	MG	2A	3030	1/1	0.90	0.14	56,56,56,56	0
56	MG	1B	237	1/1	0.90	0.12	65,65,65,65	0
56	MG	1a	1671	1/1	0.90	0.09	63,63,63,63	0
56	MG	2A	3041	1/1	0.90	0.25	70,70,70,70	0
56	MG	2A	3260	1/1	0.90	0.21	53,53,53,53	0
56	MG	1B	238	1/1	0.90	0.13	49,49,49,49	0
56	MG	2A	3530	1/1	0.90	0.22	55,55,55,55	0
56	MG	2A	3049	1/1	0.90	0.26	63,63,63,63	0
56	MG	1A	3624	1/1	0.90	0.13	47,47,47,47	0
56	MG	2A	3535	1/1	0.90	0.09	39,39,39,39	0
56	MG	1D	312	1/1	0.90	0.19	39,39,39,39	0
56	MG	2d	301	1/1	0.90	0.11	65,65,65,65	0
56	MG	1a	1677	1/1	0.90	0.24	61,61,61,61	0
56	MG	2A	3056	1/1	0.90	0.35	70,70,70,70	0
56	MG	2l	204	1/1	0.90	0.16	79,79,79,79	0
56	MG	1E	301	1/1	0.90	0.14	38,38,38,38	0
56	MG	1A	3628	1/1	0.90	0.07	28,28,28,28	0
56	MG	2A	3547	1/1	0.90	0.21	62,62,62,62	0
56	MG	2A	3065	1/1	0.90	0.16	72,72,72,72	0
56	MG	1A	3630	1/1	0.90	0.07	21,21,21,21	0
56	MG	2A	3275	1/1	0.90	0.22	59,59,59,59	0
56	MG	2x	102	1/1	0.90	0.14	72,72,72,72	0
56	MG	1a	1682	1/1	0.90	0.32	67,67,67,67	0
56	MG	1E	311	1/1	0.90	0.12	26,26,26,26	0
56	MG	1A	3665	1/1	0.91	0.10	32,32,32,32	0
56	MG	1F	305	1/1	0.91	0.17	39,39,39,39	0
56	MG	1A	3666	1/1	0.91	0.12	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2P	201	1/1	0.91	0.14	67,67,67,67	0
56	MG	1A	3126	1/1	0.91	0.14	68,68,68,68	0
56	MG	1A	3448	1/1	0.91	0.16	48,48,48,48	0
56	MG	1G	204	1/1	0.91	0.17	62,62,62,62	0
56	MG	2A	3102	1/1	0.91	0.23	60,60,60,60	0
56	MG	2T	203	1/1	0.91	0.31	65,65,65,65	0
56	MG	2A	3568	1/1	0.91	0.14	57,57,57,57	0
56	MG	2T	205	1/1	0.91	0.10	65,65,65,65	0
56	MG	2A	3103	1/1	0.91	0.17	55,55,55,55	0
56	MG	1N	201	1/1	0.91	0.31	53,53,53,53	0
56	MG	1N	206	1/1	0.91	0.10	46,46,46,46	0
56	MG	2A	3292	1/1	0.91	0.25	63,63,63,63	0
56	MG	2Z	301	1/1	0.91	0.25	67,67,67,67	0
56	MG	1a	1708	1/1	0.91	0.11	66,66,66,66	0
56	MG	1a	1715	1/1	0.91	0.14	63,63,63,63	0
56	MG	1O	201	1/1	0.91	0.11	69,69,69,69	0
56	MG	2A	3113	1/1	0.91	0.14	61,61,61,61	0
56	MG	27	104	1/1	0.91	0.13	61,61,61,61	0
56	MG	28	102	1/1	0.91	0.29	52,52,52,52	0
56	MG	2A	3299	1/1	0.91	0.40	70,70,70,70	0
56	MG	1A	3344	1/1	0.91	0.24	56,56,56,56	0
56	MG	1A	3970	1/1	0.91	0.13	40,40,40,40	0
56	MG	1A	3394	1/1	0.91	0.22	55,55,55,55	0
56	MG	1A	3314	1/1	0.91	0.33	63,63,63,63	0
56	MG	1a	1729	1/1	0.91	0.21	66,66,66,66	0
56	MG	1A	3227	1/1	0.91	0.12	60,60,60,60	0
56	MG	2A	3138	1/1	0.91	0.15	67,67,67,67	0
56	MG	1A	3401	1/1	0.91	0.14	52,52,52,52	0
56	MG	2A	3602	1/1	0.91	0.18	74,74,74,74	0
56	MG	1S	202	1/1	0.91	0.16	53,53,53,53	0
56	MG	2A	3146	1/1	0.91	0.14	46,46,46,46	0
56	MG	2A	3605	1/1	0.91	0.14	59,59,59,59	0
56	MG	1a	1736	1/1	0.91	0.29	65,65,65,65	0
56	MG	2A	3607	1/1	0.91	0.08	70,70,70,70	0
56	MG	1S	203	1/1	0.91	0.08	62,62,62,62	0
56	MG	2A	3610	1/1	0.91	0.15	55,55,55,55	0
56	MG	2A	3149	1/1	0.91	0.17	51,51,51,51	0
56	MG	2A	3150	1/1	0.91	0.13	59,59,59,59	0
56	MG	2A	3325	1/1	0.91	0.25	64,64,64,64	0
56	MG	1A	3689	1/1	0.91	0.12	39,39,39,39	0
56	MG	1a	1739	1/1	0.91	0.13	67,67,67,67	0
56	MG	2a	1627	1/1	0.91	0.35	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
56	MG	1A	3692	1/1	0.91	0.17	50,50,50,50	0
56	MG	1A	3461	1/1	0.91	0.22	56,56,56,56	0
56	MG	1A	3234	1/1	0.91	0.33	46,46,46,46	0
56	MG	1A	3134	1/1	0.91	0.15	42,42,42,42	0
56	MG	1Z	301	1/1	0.91	0.17	69,69,69,69	0
56	MG	2a	1635	1/1	0.91	0.29	63,63,63,63	0
56	MG	1A	3997	1/1	0.91	0.10	49,49,49,49	0
56	MG	2A	3627	1/1	0.91	0.12	39,39,39,39	0
56	MG	1A	3471	1/1	0.91	0.15	45,45,45,45	0
56	MG	1A	3281	1/1	0.91	0.13	55,55,55,55	0
56	MG	2A	3631	1/1	0.91	0.16	62,62,62,62	0
56	MG	1A	3704	1/1	0.91	0.12	54,54,54,54	0
56	MG	2A	3634	1/1	0.91	0.16	50,50,50,50	0
56	MG	1A	3835	1/1	0.91	0.11	49,49,49,49	0
56	MG	1a	1766	1/1	0.91	0.12	49,49,49,49	0
56	MG	2A	3341	1/1	0.91	0.29	58,58,58,58	0
56	MG	2a	1650	1/1	0.91	0.28	65,65,65,65	0
56	MG	1A	3016	1/1	0.91	0.28	54,54,54,54	0
56	MG	1A	3320	1/1	0.91	0.20	60,60,60,60	0
56	MG	1A	3848	1/1	0.91	0.11	46,46,46,46	0
56	MG	1a	1778	1/1	0.91	0.25	63,63,63,63	0
56	MG	17	104	1/1	0.91	0.16	55,55,55,55	0
56	MG	1A	4015	1/1	0.91	0.15	53,53,53,53	0
56	MG	2A	3648	1/1	0.91	0.11	59,59,59,59	0
56	MG	2a	1665	1/1	0.91	0.26	60,60,60,60	0
56	MG	2A	3179	1/1	0.91	0.21	72,72,72,72	0
56	MG	2A	3358	1/1	0.91	0.26	60,60,60,60	0
56	MG	2a	1669	1/1	0.91	0.23	62,62,62,62	0
56	MG	2A	3359	1/1	0.91	0.16	71,71,71,71	0
56	MG	2A	3653	1/1	0.91	0.09	63,63,63,63	0
56	MG	1A	3478	1/1	0.91	0.16	54,54,54,54	0
56	MG	2A	3655	1/1	0.91	0.09	57,57,57,57	0
56	MG	2a	1679	1/1	0.91	0.33	72,72,72,72	0
56	MG	1A	3711	1/1	0.91	0.15	38,38,38,38	0
56	MG	1a	1602	1/1	0.91	0.26	69,69,69,69	0
56	MG	1A	3853	1/1	0.91	0.13	31,31,31,31	0
56	MG	1A	4021	1/1	0.91	0.15	63,63,63,63	0
56	MG	2a	1684	1/1	0.91	0.32	65,65,65,65	0
56	MG	2A	3662	1/1	0.91	0.10	41,41,41,41	0
56	MG	2A	3664	1/1	0.91	0.26	44,44,44,44	0
56	MG	2A	3366	1/1	0.91	0.34	62,62,62,62	0
56	MG	1A	3714	1/1	0.91	0.28	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
56	MG	2A	3668	1/1	0.91	0.13	56,56,56,56	0
56	MG	2A	3186	1/1	0.91	0.13	67,67,67,67	0
56	MG	1A	3479	1/1	0.91	0.15	51,51,51,51	0
56	MG	1A	4027	1/1	0.91	0.12	24,24,24,24	0
56	MG	1A	4029	1/1	0.91	0.10	48,48,48,48	0
56	MG	1A	3585	1/1	0.91	0.07	35,35,35,35	0
56	MG	1a	1622	1/1	0.91	0.27	58,58,58,58	0
56	MG	1A	3052	1/1	0.91	0.13	56,56,56,56	0
56	MG	1a	1624	1/1	0.91	0.27	60,60,60,60	0
56	MG	2A	3689	1/1	0.91	0.10	42,42,42,42	0
56	MG	2A	3196	1/1	0.91	0.14	59,59,59,59	0
56	MG	2A	3394	1/1	0.91	0.15	66,66,66,66	0
56	MG	1e	202	1/1	0.91	0.10	74,74,74,74	0
56	MG	1A	3367	1/1	0.91	0.33	31,31,31,31	0
56	MG	2A	3699	1/1	0.91	0.15	49,49,49,49	0
56	MG	2a	1706	1/1	0.91	0.23	60,60,60,60	0
56	MG	1A	3416	1/1	0.91	0.17	36,36,36,36	0
56	MG	1A	3421	1/1	0.91	0.12	45,45,45,45	0
56	MG	1a	1628	1/1	0.91	0.39	66,66,66,66	0
56	MG	1A	3881	1/1	0.91	0.12	25,25,25,25	0
56	MG	1A	3882	1/1	0.91	0.12	40,40,40,40	0
56	MG	2a	1715	1/1	0.91	0.24	63,63,63,63	0
56	MG	1A	3736	1/1	0.91	0.11	33,33,33,33	0
56	MG	1x	101	1/1	0.91	0.30	72,72,72,72	0
56	MG	1A	3422	1/1	0.91	0.11	61,61,61,61	0
56	MG	2A	3216	1/1	0.91	0.34	74,74,74,74	0
56	MG	2A	3711	1/1	0.91	0.10	65,65,65,65	0
56	MG	2a	1721	1/1	0.91	0.34	71,71,71,71	0
56	MG	2A	3217	1/1	0.91	0.32	74,74,74,74	0
56	MG	1A	3610	1/1	0.91	0.09	25,25,25,25	0
56	MG	2A	3430	1/1	0.91	0.20	73,73,73,73	0
56	MG	2a	1730	1/1	0.91	0.11	72,72,72,72	0
56	MG	2A	3432	1/1	0.91	0.13	77,77,77,77	0
56	MG	1a	1636	1/1	0.91	0.21	56,56,56,56	0
56	MG	2A	3220	1/1	0.91	0.10	69,69,69,69	0
56	MG	1A	3425	1/1	0.91	0.17	58,58,58,58	0
56	MG	1A	3616	1/1	0.91	0.08	28,28,28,28	0
56	MG	2a	1741	1/1	0.91	0.10	59,59,59,59	0
56	MG	1x	108	1/1	0.91	0.14	37,37,37,37	0
56	MG	2A	3442	1/1	0.91	0.18	52,52,52,52	0
56	MG	2a	1749	1/1	0.91	0.20	70,70,70,70	0
56	MG	2A	3744	1/1	0.91	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
56	MG	1a	1639	1/1	0.91	0.13	66,66,66,66	0
56	MG	1A	3287	1/1	0.91	0.18	65,65,65,65	0
56	MG	1B	208	1/1	0.91	0.18	66,66,66,66	0
56	MG	1A	3914	1/1	0.91	0.13	64,64,64,64	0
56	MG	1A	3622	1/1	0.91	0.13	49,49,49,49	0
56	MG	1A	3428	1/1	0.91	0.19	64,64,64,64	0
56	MG	1A	3625	1/1	0.91	0.12	50,50,50,50	0
56	MG	2A	3011	1/1	0.91	0.23	77,77,77,77	0
56	MG	1B	217	1/1	0.91	0.11	62,62,62,62	0
56	MG	2a	1769	1/1	0.91	0.25	71,71,71,71	0
56	MG	1A	3194	1/1	0.91	0.09	43,43,43,43	0
56	MG	2A	3482	1/1	0.91	0.18	43,43,43,43	0
56	MG	2A	3018	1/1	0.91	0.27	70,70,70,70	0
56	MG	1B	221	1/1	0.91	0.12	50,50,50,50	0
56	MG	1A	3093	1/1	0.91	0.19	38,38,38,38	0
56	MG	1A	3160	1/1	0.91	0.12	42,42,42,42	0
56	MG	2A	3248	1/1	0.91	0.39	69,69,69,69	0
56	MG	2A	3771	1/1	0.91	0.18	59,59,59,59	0
56	MG	1A	3204	1/1	0.91	0.10	47,47,47,47	0
56	MG	1A	3930	1/1	0.91	0.15	43,43,43,43	0
56	MG	2A	3038	1/1	0.91	0.24	63,63,63,63	0
56	MG	2A	3507	1/1	0.91	0.27	63,63,63,63	0
56	MG	2A	3040	1/1	0.91	0.17	37,37,37,37	0
56	MG	1B	229	1/1	0.91	0.13	55,55,55,55	0
56	MG	2A	3045	1/1	0.91	0.22	65,65,65,65	0
56	MG	1A	3440	1/1	0.91	0.13	61,61,61,61	0
56	MG	1A	3780	1/1	0.91	0.12	58,58,58,58	0
56	MG	1B	235	1/1	0.91	0.10	55,55,55,55	0
56	MG	1a	1668	1/1	0.91	0.09	64,64,64,64	0
56	MG	2a	1796	1/1	0.91	0.19	58,58,58,58	0
56	MG	1A	3650	1/1	0.91	0.13	54,54,54,54	0
56	MG	2B	206	1/1	0.91	0.21	74,74,74,74	0
56	MG	1A	3783	1/1	0.91	0.13	33,33,33,33	0
56	MG	1A	3788	1/1	0.91	0.08	27,27,27,27	0
56	MG	1A	3945	1/1	0.91	0.11	60,60,60,60	0
56	MG	2B	211	1/1	0.91	0.14	56,56,56,56	0
56	MG	2A	3266	1/1	0.91	0.16	71,71,71,71	0
56	MG	1A	3216	1/1	0.91	0.13	51,51,51,51	0
56	MG	1A	3658	1/1	0.91	0.17	30,30,30,30	0
56	MG	1E	309	1/1	0.91	0.17	49,49,49,49	0
56	MG	2A	3079	1/1	0.91	0.17	65,65,65,65	0
56	MG	2A	3537	1/1	0.91	0.13	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
56	MG	2r	102	1/1	0.91	0.09	81,81,81,81	0
56	MG	2t	201	1/1	0.91	0.14	74,74,74,74	0
56	MG	2t	202	1/1	0.91	0.18	52,52,52,52	0
56	MG	2D	305	1/1	0.91	0.38	45,45,45,45	0
56	MG	1A	3661	1/1	0.91	0.13	75,75,75,75	0
56	MG	1A	3217	1/1	0.91	0.16	45,45,45,45	0
56	MG	2E	302	1/1	0.91	0.14	67,67,67,67	0
56	MG	1A	3956	1/1	0.91	0.17	43,43,43,43	0
56	MG	1F	302	1/1	0.91	0.30	38,38,38,38	0
56	MG	2x	105	1/1	0.91	0.22	56,56,56,56	0
56	MG	1A	3691	1/1	0.92	0.12	68,68,68,68	0
56	MG	2A	3278	1/1	0.92	0.11	55,55,55,55	0
56	MG	1A	3986	1/1	0.92	0.11	48,48,48,48	0
56	MG	2A	3097	1/1	0.92	0.36	70,70,70,70	0
56	MG	2A	3098	1/1	0.92	0.20	48,48,48,48	0
56	MG	1O	204	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3040	1/1	0.92	0.19	64,64,64,64	0
56	MG	1a	1709	1/1	0.92	0.09	52,52,52,52	0
56	MG	1A	3410	1/1	0.92	0.14	63,63,63,63	0
56	MG	1a	1716	1/1	0.92	0.09	57,57,57,57	0
56	MG	1A	3830	1/1	0.92	0.14	48,48,48,48	0
56	MG	1a	1718	1/1	0.92	0.17	59,59,59,59	0
56	MG	2A	3570	1/1	0.92	0.20	46,46,46,46	0
56	MG	1A	3994	1/1	0.92	0.08	54,54,54,54	0
56	MG	2A	3294	1/1	0.92	0.35	75,75,75,75	0
56	MG	2A	3295	1/1	0.92	0.17	62,62,62,62	0
56	MG	1A	3414	1/1	0.92	0.17	59,59,59,59	0
56	MG	1Q	206	1/1	0.92	0.14	52,52,52,52	0
56	MG	2A	3581	1/1	0.92	0.16	68,68,68,68	0
56	MG	27	103	1/1	0.92	0.11	50,50,50,50	0
56	MG	1a	1724	1/1	0.92	0.10	56,56,56,56	0
56	MG	2A	3584	1/1	0.92	0.09	52,52,52,52	0
56	MG	2A	3114	1/1	0.92	0.13	53,53,53,53	0
56	MG	1A	3144	1/1	0.92	0.30	42,42,42,42	0
56	MG	2A	3590	1/1	0.92	0.12	58,58,58,58	0
56	MG	1A	3581	1/1	0.92	0.14	42,42,42,42	0
56	MG	1A	4000	1/1	0.92	0.09	57,57,57,57	0
56	MG	2A	3130	1/1	0.92	0.18	65,65,65,65	0
56	MG	1A	4001	1/1	0.92	0.12	48,48,48,48	0
56	MG	1A	3285	1/1	0.92	0.24	51,51,51,51	0
56	MG	2A	3136	1/1	0.92	0.25	56,56,56,56	0
56	MG	2a	1611	1/1	0.92	0.24	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
56	MG	1A	3586	1/1	0.92	0.12	18,18,18,18	0
56	MG	1A	3838	1/1	0.92	0.06	37,37,37,37	0
56	MG	2A	3314	1/1	0.92	0.22	63,63,63,63	0
56	MG	2A	3316	1/1	0.92	0.13	61,61,61,61	0
56	MG	1A	3588	1/1	0.92	0.12	37,37,37,37	0
56	MG	2A	3318	1/1	0.92	0.15	70,70,70,70	0
56	MG	1Y	202	1/1	0.92	0.11	71,71,71,71	0
56	MG	1A	3845	1/1	0.92	0.18	31,31,31,31	0
56	MG	1A	3358	1/1	0.92	0.11	44,44,44,44	0
56	MG	10	101	1/1	0.92	0.22	50,50,50,50	0
56	MG	2A	3324	1/1	0.92	0.11	63,63,63,63	0
56	MG	10	104	1/1	0.92	0.33	71,71,71,71	0
56	MG	1A	3362	1/1	0.92	0.12	42,42,42,42	0
56	MG	1A	3710	1/1	0.92	0.10	24,24,24,24	0
56	MG	1a	1753	1/1	0.92	0.09	68,68,68,68	0
56	MG	1a	1754	1/1	0.92	0.15	67,67,67,67	0
56	MG	2A	3154	1/1	0.92	0.16	59,59,59,59	0
56	MG	2A	3618	1/1	0.92	0.18	57,57,57,57	0
56	MG	1A	3077	1/1	0.92	0.13	54,54,54,54	0
56	MG	1A	3607	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3859	1/1	0.92	0.13	27,27,27,27	0
56	MG	2a	1637	1/1	0.92	0.22	70,70,70,70	0
56	MG	15	107	1/1	0.92	0.16	61,61,61,61	0
56	MG	1A	3244	1/1	0.92	0.19	53,53,53,53	0
56	MG	1A	3080	1/1	0.92	0.30	38,38,38,38	0
56	MG	1A	3377	1/1	0.92	0.16	43,43,43,43	0
56	MG	18	101	1/1	0.92	0.17	62,62,62,62	0
56	MG	1a	1777	1/1	0.92	0.08	56,56,56,56	0
56	MG	2A	3342	1/1	0.92	0.20	39,39,39,39	0
56	MG	18	103	1/1	0.92	0.10	44,44,44,44	0
56	MG	1A	4028	1/1	0.92	0.17	61,61,61,61	0
56	MG	1A	3611	1/1	0.92	0.08	20,20,20,20	0
56	MG	1A	3726	1/1	0.92	0.09	24,24,24,24	0
56	MG	1A	3727	1/1	0.92	0.18	59,59,59,59	0
56	MG	1A	3612	1/1	0.92	0.12	50,50,50,50	0
56	MG	1A	3503	1/1	0.92	0.20	48,48,48,48	0
56	MG	1a	1605	1/1	0.92	0.08	63,63,63,63	0
56	MG	1A	3432	1/1	0.92	0.10	53,53,53,53	0
56	MG	2a	1661	1/1	0.92	0.23	62,62,62,62	0
56	MG	1A	3885	1/1	0.92	0.10	34,34,34,34	0
56	MG	2a	1664	1/1	0.92	0.22	55,55,55,55	0
56	MG	2A	3361	1/1	0.92	0.14	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
56	MG	1A	3380	1/1	0.92	0.11	41,41,41,41	0
56	MG	1A	3893	1/1	0.92	0.16	54,54,54,54	0
56	MG	1A	4047	1/1	0.92	0.10	61,61,61,61	0
56	MG	1a	1794	1/1	0.92	0.13	55,55,55,55	0
56	MG	1A	4048	1/1	0.92	0.11	54,54,54,54	0
56	MG	2A	3367	1/1	0.92	0.30	64,64,64,64	0
56	MG	2a	1675	1/1	0.92	0.22	64,64,64,64	0
56	MG	1A	3326	1/1	0.92	0.19	53,53,53,53	0
56	MG	2a	1678	1/1	0.92	0.25	61,61,61,61	0
56	MG	1A	3751	1/1	0.92	0.07	74,74,74,74	0
56	MG	1A	3512	1/1	0.92	0.12	62,62,62,62	0
56	MG	2A	3371	1/1	0.92	0.12	49,49,49,49	0
56	MG	2A	3663	1/1	0.92	0.12	55,55,55,55	0
56	MG	1A	4055	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	4058	1/1	0.92	0.34	59,59,59,59	0
56	MG	1A	3908	1/1	0.92	0.11	62,62,62,62	0
56	MG	1A	3209	1/1	0.92	0.09	46,46,46,46	0
56	MG	2A	3669	1/1	0.92	0.15	67,67,67,67	0
56	MG	1A	3383	1/1	0.92	0.18	57,57,57,57	0
56	MG	1B	209	1/1	0.92	0.19	67,67,67,67	0
56	MG	1w	102	1/1	0.92	0.13	71,71,71,71	0
56	MG	1a	1633	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3395	1/1	0.92	0.28	69,69,69,69	0
56	MG	2A	3677	1/1	0.92	0.15	67,67,67,67	0
56	MG	1w	104	1/1	0.92	0.09	57,57,57,57	0
56	MG	1B	211	1/1	0.92	0.15	51,51,51,51	0
56	MG	2A	3686	1/1	0.92	0.21	63,63,63,63	0
56	MG	1A	3515	1/1	0.92	0.22	58,58,58,58	0
56	MG	1B	213	1/1	0.92	0.31	61,61,61,61	0
56	MG	1A	3917	1/1	0.92	0.10	58,58,58,58	0
56	MG	2A	3211	1/1	0.92	0.18	58,58,58,58	0
56	MG	1A	3049	1/1	0.92	0.26	42,42,42,42	0
56	MG	2A	3412	1/1	0.92	0.36	69,69,69,69	0
56	MG	2A	3413	1/1	0.92	0.23	61,61,61,61	0
56	MG	2A	3214	1/1	0.92	0.14	72,72,72,72	0
56	MG	1A	3298	1/1	0.92	0.19	57,57,57,57	0
56	MG	2a	1708	1/1	0.92	0.25	59,59,59,59	0
56	MG	1A	3303	1/1	0.92	0.13	60,60,60,60	0
56	MG	1A	3643	1/1	0.92	0.12	26,26,26,26	0
56	MG	2A	3425	1/1	0.92	0.23	62,62,62,62	0
56	MG	1A	3649	1/1	0.92	0.08	35,35,35,35	0
56	MG	1A	3306	1/1	0.92	0.18	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
56	MG	1A	3307	1/1	0.92	0.25	54,54,54,54	0
56	MG	2A	3709	1/1	0.92	0.13	61,61,61,61	0
56	MG	1A	3778	1/1	0.92	0.07	33,33,33,33	0
56	MG	2A	3433	1/1	0.92	0.13	59,59,59,59	0
56	MG	1A	3936	1/1	0.92	0.14	55,55,55,55	0
56	MG	1B	227	1/1	0.92	0.12	58,58,58,58	0
56	MG	2a	1724	1/1	0.92	0.33	58,58,58,58	0
56	MG	2A	3436	1/1	0.92	0.24	65,65,65,65	0
56	MG	2A	3007	1/1	0.92	0.16	61,61,61,61	0
56	MG	2A	3228	1/1	0.92	0.23	67,67,67,67	0
56	MG	2A	3723	1/1	0.92	0.10	57,57,57,57	0
56	MG	2A	3440	1/1	0.92	0.11	25,25,25,25	0
56	MG	2a	1732	1/1	0.92	0.09	76,76,76,76	0
56	MG	2A	3728	1/1	0.92	0.10	63,63,63,63	0
56	MG	2a	1734	1/1	0.92	0.16	74,74,74,74	0
56	MG	1A	3086	1/1	0.92	0.13	51,51,51,51	0
56	MG	2A	3733	1/1	0.92	0.11	56,56,56,56	0
56	MG	2A	3735	1/1	0.92	0.09	65,65,65,65	0
56	MG	1A	3659	1/1	0.92	0.11	26,26,26,26	0
56	MG	2A	3445	1/1	0.92	0.19	63,63,63,63	0
56	MG	2a	1744	1/1	0.92	0.26	70,70,70,70	0
56	MG	2a	1745	1/1	0.92	0.11	52,52,52,52	0
56	MG	2a	1747	1/1	0.92	0.18	74,74,74,74	0
56	MG	2A	3446	1/1	0.92	0.16	68,68,68,68	0
56	MG	1A	3782	1/1	0.92	0.16	59,59,59,59	0
56	MG	1B	234	1/1	0.92	0.12	67,67,67,67	0
56	MG	1a	1658	1/1	0.92	0.20	69,69,69,69	0
56	MG	2A	3747	1/1	0.92	0.09	44,44,44,44	0
56	MG	1A	3343	1/1	0.92	0.13	56,56,56,56	0
56	MG	2A	3751	1/1	0.92	0.09	61,61,61,61	0
56	MG	2a	1760	1/1	0.92	0.22	77,77,77,77	0
56	MG	2A	3458	1/1	0.92	0.14	77,77,77,77	0
56	MG	2A	3237	1/1	0.92	0.11	63,63,63,63	0
56	MG	2A	3029	1/1	0.92	0.12	41,41,41,41	0
56	MG	2A	3757	1/1	0.92	0.15	65,65,65,65	0
56	MG	2A	3462	1/1	0.92	0.23	61,61,61,61	0
56	MG	1B	236	1/1	0.92	0.10	68,68,68,68	0
56	MG	2A	3469	1/1	0.92	0.12	47,47,47,47	0
56	MG	1A	3548	1/1	0.92	0.11	47,47,47,47	0
56	MG	2A	3035	1/1	0.92	0.18	73,73,73,73	0
56	MG	1A	3550	1/1	0.92	0.12	44,44,44,44	0
56	MG	2A	3481	1/1	0.92	0.12	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
56	MG	1a	1665	1/1	0.92	0.35	60,60,60,60	0
56	MG	1D	302	1/1	0.92	0.16	43,43,43,43	0
56	MG	2A	3486	1/1	0.92	0.18	62,62,62,62	0
56	MG	2A	3488	1/1	0.92	0.10	38,38,38,38	0
56	MG	1A	3088	1/1	0.92	0.23	53,53,53,53	0
56	MG	2A	3042	1/1	0.92	0.10	54,54,54,54	0
56	MG	2A	3498	1/1	0.92	0.16	63,63,63,63	0
56	MG	1A	3667	1/1	0.92	0.07	22,22,22,22	0
56	MG	2A	3047	1/1	0.92	0.19	63,63,63,63	0
56	MG	1A	3953	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3668	1/1	0.92	0.24	64,64,64,64	0
56	MG	1A	3345	1/1	0.92	0.17	53,53,53,53	0
56	MG	2A	3256	1/1	0.92	0.13	58,58,58,58	0
56	MG	2A	3509	1/1	0.92	0.17	59,59,59,59	0
56	MG	2a	1794	1/1	0.92	0.20	65,65,65,65	0
56	MG	1A	3672	1/1	0.92	0.16	55,55,55,55	0
56	MG	1A	3255	1/1	0.92	0.09	47,47,47,47	0
56	MG	1A	3019	1/1	0.92	0.17	44,44,44,44	0
56	MG	1A	3678	1/1	0.92	0.16	61,61,61,61	0
56	MG	2A	3520	1/1	0.92	0.12	55,55,55,55	0
56	MG	1A	3230	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3062	1/1	0.92	0.17	55,55,55,55	0
56	MG	2A	3524	1/1	0.92	0.27	64,64,64,64	0
56	MG	2B	213	1/1	0.92	0.20	60,60,60,60	0
56	MG	2A	3263	1/1	0.92	0.10	58,58,58,58	0
56	MG	1A	3467	1/1	0.92	0.14	68,68,68,68	0
56	MG	1A	3811	1/1	0.92	0.09	73,73,73,73	0
56	MG	1a	1686	1/1	0.92	0.13	67,67,67,67	0
56	MG	1A	3570	1/1	0.92	0.10	57,57,57,57	0
56	MG	1A	3182	1/1	0.92	0.13	34,34,34,34	0
56	MG	2A	3082	1/1	0.92	0.30	53,53,53,53	0
56	MG	1A	3819	1/1	0.92	0.08	21,21,21,21	0
56	MG	2E	301	1/1	0.92	0.24	64,64,64,64	0
56	MG	2w	102	1/1	0.92	0.08	79,79,79,79	0
56	MG	1A	3139	1/1	0.92	0.11	46,46,46,46	0
56	MG	2A	3087	1/1	0.92	0.17	60,60,60,60	0
56	MG	1N	204	1/1	0.92	0.32	48,48,48,48	0
56	MG	2E	309	1/1	0.92	0.12	70,70,70,70	0
56	MG	1a	1700	1/1	0.92	0.28	66,66,66,66	0
56	MG	1A	3521	1/1	0.93	0.16	42,42,42,42	0
56	MG	1a	1687	1/1	0.93	0.18	53,53,53,53	0
56	MG	2A	3085	1/1	0.93	0.17	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
56	MG	2F	303	1/1	0.93	0.12	64,64,64,64	0
56	MG	2A	3533	1/1	0.93	0.15	63,63,63,63	0
56	MG	1a	1688	1/1	0.93	0.24	63,63,63,63	0
56	MG	2N	201	1/1	0.93	0.07	57,57,57,57	0
56	MG	2A	3282	1/1	0.93	0.10	56,56,56,56	0
56	MG	1A	3522	1/1	0.93	0.28	48,48,48,48	0
56	MG	1E	315	1/1	0.93	0.13	59,59,59,59	0
56	MG	2A	3538	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	3064	1/1	0.93	0.24	59,59,59,59	0
56	MG	1A	3797	1/1	0.93	0.22	50,50,50,50	0
56	MG	2T	201	1/1	0.93	0.11	62,62,62,62	0
56	MG	2T	202	1/1	0.93	0.22	62,62,62,62	0
56	MG	2A	3093	1/1	0.93	0.17	62,62,62,62	0
56	MG	1a	1697	1/1	0.93	0.21	49,49,49,49	0
56	MG	1A	3206	1/1	0.93	0.12	56,56,56,56	0
56	MG	1F	307	1/1	0.93	0.16	31,31,31,31	0
56	MG	1A	3254	1/1	0.93	0.40	69,69,69,69	0
56	MG	1A	3958	1/1	0.93	0.12	54,54,54,54	0
56	MG	1a	1703	1/1	0.93	0.16	61,61,61,61	0
56	MG	2Y	201	1/1	0.93	0.31	62,62,62,62	0
56	MG	1A	3370	1/1	0.93	0.61	48,48,48,48	0
56	MG	1A	3020	1/1	0.93	0.16	48,48,48,48	0
56	MG	1I	201	1/1	0.93	0.10	64,64,64,64	0
56	MG	21	101	1/1	0.93	0.25	56,56,56,56	0
56	MG	25	103	1/1	0.93	0.15	53,53,53,53	0
56	MG	1a	1713	1/1	0.93	0.14	55,55,55,55	0
56	MG	1A	3964	1/1	0.93	0.14	70,70,70,70	0
56	MG	1A	3215	1/1	0.93	0.15	47,47,47,47	0
56	MG	2A	3572	1/1	0.93	0.27	56,56,56,56	0
56	MG	2A	3573	1/1	0.93	0.09	67,67,67,67	0
56	MG	1A	3378	1/1	0.93	0.11	46,46,46,46	0
56	MG	1A	3154	1/1	0.93	0.08	51,51,51,51	0
56	MG	2A	3306	1/1	0.93	0.13	63,63,63,63	0
56	MG	1O	202	1/1	0.93	0.15	54,54,54,54	0
56	MG	2A	3117	1/1	0.93	0.19	74,74,74,74	0
56	MG	2A	3121	1/1	0.93	0.13	57,57,57,57	0
56	MG	1O	203	1/1	0.93	0.24	66,66,66,66	0
56	MG	2a	1608	1/1	0.93	0.24	63,63,63,63	0
56	MG	1A	3447	1/1	0.93	0.24	63,63,63,63	0
56	MG	1A	3974	1/1	0.93	0.11	50,50,50,50	0
56	MG	2A	3315	1/1	0.93	0.13	59,59,59,59	0
56	MG	1A	3553	1/1	0.93	0.19	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
56	MG	1P	205	1/1	0.93	0.08	46,46,46,46	0
56	MG	2A	3132	1/1	0.93	0.23	39,39,39,39	0
56	MG	1A	3808	1/1	0.93	0.06	36,36,36,36	0
56	MG	2A	3320	1/1	0.93	0.17	66,66,66,66	0
56	MG	1A	3105	1/1	0.93	0.34	39,39,39,39	0
56	MG	1A	3980	1/1	0.93	0.11	51,51,51,51	0
56	MG	1a	1735	1/1	0.93	0.14	60,60,60,60	0
56	MG	2A	3601	1/1	0.93	0.23	66,66,66,66	0
56	MG	2A	3139	1/1	0.93	0.16	59,59,59,59	0
56	MG	1A	3814	1/1	0.93	0.10	49,49,49,49	0
56	MG	1R	202	1/1	0.93	0.25	51,51,51,51	0
56	MG	2A	3144	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3321	1/1	0.93	0.12	39,39,39,39	0
56	MG	1S	201	1/1	0.93	0.29	51,51,51,51	0
56	MG	1A	3816	1/1	0.93	0.13	49,49,49,49	0
56	MG	2a	1631	1/1	0.93	0.29	56,56,56,56	0
56	MG	1A	3987	1/1	0.93	0.11	45,45,45,45	0
56	MG	2A	3332	1/1	0.93	0.16	67,67,67,67	0
56	MG	2A	3333	1/1	0.93	0.14	59,59,59,59	0
56	MG	1A	3680	1/1	0.93	0.15	49,49,49,49	0
56	MG	1a	1744	1/1	0.93	0.15	54,54,54,54	0
56	MG	1A	3556	1/1	0.93	0.08	38,38,38,38	0
56	MG	1a	1747	1/1	0.93	0.08	72,72,72,72	0
56	MG	1A	3263	1/1	0.93	0.15	50,50,50,50	0
56	MG	2a	1640	1/1	0.93	0.16	68,68,68,68	0
56	MG	2A	3155	1/1	0.93	0.31	61,61,61,61	0
56	MG	1a	1749	1/1	0.93	0.15	72,72,72,72	0
56	MG	1W	201	1/1	0.93	0.26	49,49,49,49	0
56	MG	1A	3559	1/1	0.93	0.34	61,61,61,61	0
56	MG	2A	3162	1/1	0.93	0.32	64,64,64,64	0
56	MG	2A	3624	1/1	0.93	0.13	58,58,58,58	0
56	MG	1A	3686	1/1	0.93	0.15	55,55,55,55	0
56	MG	2A	3346	1/1	0.93	0.42	71,71,71,71	0
56	MG	1A	3826	1/1	0.93	0.31	40,40,40,40	0
56	MG	2A	3348	1/1	0.93	0.28	61,61,61,61	0
56	MG	1A	3998	1/1	0.93	0.06	33,33,33,33	0
56	MG	1A	3561	1/1	0.93	0.30	59,59,59,59	0
56	MG	1A	3828	1/1	0.93	0.12	46,46,46,46	0
56	MG	2A	3352	1/1	0.93	0.37	66,66,66,66	0
56	MG	2A	3353	1/1	0.93	0.29	61,61,61,61	0
56	MG	2A	3354	1/1	0.93	0.20	55,55,55,55	0
56	MG	2A	3641	1/1	0.93	0.10	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	10	103	1/1	0.93	0.25	47,47,47,47	0
56	MG	2A	3357	1/1	0.93	0.30	58,58,58,58	0
56	MG	1A	3455	1/1	0.93	0.14	65,65,65,65	0
56	MG	1A	3384	1/1	0.93	0.12	40,40,40,40	0
56	MG	1a	1774	1/1	0.93	0.18	58,58,58,58	0
56	MG	1A	4004	1/1	0.93	0.10	34,34,34,34	0
56	MG	1A	4007	1/1	0.93	0.11	57,57,57,57	0
56	MG	1A	3220	1/1	0.93	0.18	28,28,28,28	0
56	MG	1A	3325	1/1	0.93	0.26	57,57,57,57	0
56	MG	2a	1677	1/1	0.93	0.19	70,70,70,70	0
56	MG	1A	3267	1/1	0.93	0.10	49,49,49,49	0
56	MG	1A	3698	1/1	0.93	0.09	49,49,49,49	0
56	MG	1A	3328	1/1	0.93	0.10	37,37,37,37	0
56	MG	1A	3575	1/1	0.93	0.11	30,30,30,30	0
56	MG	1A	3465	1/1	0.93	0.20	48,48,48,48	0
56	MG	1A	3117	1/1	0.93	0.09	42,42,42,42	0
56	MG	1A	3332	1/1	0.93	0.26	64,64,64,64	0
56	MG	1A	3396	1/1	0.93	0.10	49,49,49,49	0
56	MG	2A	3377	1/1	0.93	0.16	44,44,44,44	0
56	MG	1A	3225	1/1	0.93	0.15	52,52,52,52	0
56	MG	1A	3851	1/1	0.93	0.08	28,28,28,28	0
56	MG	2A	3666	1/1	0.93	0.18	63,63,63,63	0
56	MG	2A	3386	1/1	0.93	0.23	62,62,62,62	0
56	MG	1a	1792	1/1	0.93	0.13	52,52,52,52	0
56	MG	2A	3191	1/1	0.93	0.28	62,62,62,62	0
56	MG	2a	1693	1/1	0.93	0.08	76,76,76,76	0
56	MG	2A	3390	1/1	0.93	0.18	53,53,53,53	0
56	MG	2A	3671	1/1	0.93	0.14	63,63,63,63	0
56	MG	1A	3852	1/1	0.93	0.12	35,35,35,35	0
56	MG	1A	3118	1/1	0.93	0.34	51,51,51,51	0
56	MG	2A	3393	1/1	0.93	0.12	45,45,45,45	0
56	MG	1A	3856	1/1	0.93	0.07	37,37,37,37	0
56	MG	1A	4031	1/1	0.93	0.13	56,56,56,56	0
56	MG	2A	3397	1/1	0.93	0.09	57,57,57,57	0
56	MG	1A	3120	1/1	0.93	0.21	54,54,54,54	0
56	MG	2A	3197	1/1	0.93	0.14	47,47,47,47	0
56	MG	1A	3861	1/1	0.93	0.10	26,26,26,26	0
56	MG	2A	3403	1/1	0.93	0.11	59,59,59,59	0
56	MG	2A	3404	1/1	0.93	0.18	42,42,42,42	0
56	MG	2A	3199	1/1	0.93	0.10	47,47,47,47	0
56	MG	2A	3695	1/1	0.93	0.19	54,54,54,54	0
56	MG	1A	3476	1/1	0.93	0.11	62,62,62,62	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1711	1/1	0.93	0.26	58,58,58,58	0
56	MG	1a	1618	1/1	0.93	0.12	52,52,52,52	0
56	MG	2a	1713	1/1	0.93	0.10	70,70,70,70	0
56	MG	1A	3863	1/1	0.93	0.08	43,43,43,43	0
56	MG	2A	3411	1/1	0.93	0.14	50,50,50,50	0
56	MG	1n	102	1/1	0.93	0.17	58,58,58,58	0
56	MG	2A	3702	1/1	0.93	0.13	59,59,59,59	0
56	MG	1A	4039	1/1	0.93	0.14	51,51,51,51	0
56	MG	1A	4041	1/1	0.93	0.17	60,60,60,60	0
56	MG	2A	3417	1/1	0.93	0.27	57,57,57,57	0
56	MG	1A	3594	1/1	0.93	0.13	49,49,49,49	0
56	MG	2A	3421	1/1	0.93	0.33	68,68,68,68	0
56	MG	2A	3210	1/1	0.93	0.09	53,53,53,53	0
56	MG	1A	3722	1/1	0.93	0.08	42,42,42,42	0
56	MG	2A	3212	1/1	0.93	0.30	56,56,56,56	0
56	MG	1A	3477	1/1	0.93	0.18	49,49,49,49	0
56	MG	1A	3872	1/1	0.93	0.18	57,57,57,57	0
56	MG	1A	3166	1/1	0.93	0.30	42,42,42,42	0
56	MG	1A	3235	1/1	0.93	0.15	49,49,49,49	0
56	MG	1A	3877	1/1	0.93	0.12	42,42,42,42	0
56	MG	1A	3481	1/1	0.93	0.17	56,56,56,56	0
56	MG	1A	3291	1/1	0.93	0.12	34,34,34,34	0
56	MG	1A	4054	1/1	0.93	0.11	59,59,59,59	0
56	MG	2a	1739	1/1	0.93	0.09	53,53,53,53	0
56	MG	1A	3732	1/1	0.93	0.09	35,35,35,35	0
56	MG	2A	3731	1/1	0.93	0.25	69,69,69,69	0
56	MG	2A	3222	1/1	0.93	0.13	56,56,56,56	0
56	MG	1A	3485	1/1	0.93	0.20	39,39,39,39	0
56	MG	1A	3889	1/1	0.93	0.07	57,57,57,57	0
56	MG	1A	3487	1/1	0.93	0.31	44,44,44,44	0
56	MG	1A	3489	1/1	0.93	0.21	60,60,60,60	0
56	MG	1A	3740	1/1	0.93	0.08	23,23,23,23	0
56	MG	2A	3741	1/1	0.93	0.12	66,66,66,66	0
56	MG	2A	3743	1/1	0.93	0.09	71,71,71,71	0
56	MG	2a	1753	1/1	0.93	0.21	61,61,61,61	0
56	MG	2a	1755	1/1	0.93	0.14	58,58,58,58	0
56	MG	2A	3448	1/1	0.93	0.10	53,53,53,53	0
56	MG	1a	1643	1/1	0.93	0.16	57,57,57,57	0
56	MG	2A	3450	1/1	0.93	0.15	35,35,35,35	0
56	MG	1A	3405	1/1	0.93	0.09	51,51,51,51	0
56	MG	1A	3749	1/1	0.93	0.15	63,63,63,63	0
56	MG	2A	3453	1/1	0.93	0.10	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
56	MG	2A	3454	1/1	0.93	0.09	44,44,44,44	0
56	MG	2A	3753	1/1	0.93	0.14	50,50,50,50	0
56	MG	1A	3175	1/1	0.93	0.13	63,63,63,63	0
56	MG	1A	3753	1/1	0.93	0.09	35,35,35,35	0
56	MG	1A	3122	1/1	0.93	0.27	37,37,37,37	0
56	MG	2a	1772	1/1	0.93	0.17	60,60,60,60	0
56	MG	2A	3758	1/1	0.93	0.11	66,66,66,66	0
56	MG	1A	3297	1/1	0.93	0.13	44,44,44,44	0
56	MG	1A	3915	1/1	0.93	0.14	55,55,55,55	0
56	MG	2A	3463	1/1	0.93	0.12	56,56,56,56	0
56	MG	1A	3346	1/1	0.93	0.22	55,55,55,55	0
56	MG	2A	3027	1/1	0.93	0.12	53,53,53,53	0
56	MG	2A	3471	1/1	0.93	0.10	46,46,46,46	0
56	MG	1A	3124	1/1	0.93	0.20	55,55,55,55	0
56	MG	1A	3502	1/1	0.93	0.25	46,46,46,46	0
56	MG	2a	1783	1/1	0.93	0.32	70,70,70,70	0
56	MG	1A	3920	1/1	0.93	0.09	49,49,49,49	0
56	MG	1A	3921	1/1	0.93	0.16	50,50,50,50	0
56	MG	2a	1786	1/1	0.93	0.14	71,71,71,71	0
56	MG	1A	3300	1/1	0.93	0.10	56,56,56,56	0
56	MG	1A	3242	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	3184	1/1	0.93	0.15	51,51,51,51	0
56	MG	2A	3487	1/1	0.93	0.22	59,59,59,59	0
56	MG	1A	3632	1/1	0.93	0.08	44,44,44,44	0
56	MG	1A	3771	1/1	0.93	0.07	25,25,25,25	0
56	MG	2A	3492	1/1	0.93	0.11	37,37,37,37	0
56	MG	2A	3494	1/1	0.93	0.09	44,44,44,44	0
56	MG	2A	3254	1/1	0.93	0.18	64,64,64,64	0
56	MG	2A	3497	1/1	0.93	0.09	49,49,49,49	0
56	MG	2A	3044	1/1	0.93	0.18	66,66,66,66	0
56	MG	1A	3929	1/1	0.93	0.10	22,22,22,22	0
56	MG	1A	3045	1/1	0.93	0.08	35,35,35,35	0
56	MG	2a	1802	1/1	0.93	0.27	66,66,66,66	0
56	MG	1a	1670	1/1	0.93	0.21	65,65,65,65	0
56	MG	1A	3931	1/1	0.93	0.11	34,34,34,34	0
56	MG	2k	201	1/1	0.93	0.18	61,61,61,61	0
56	MG	2A	3051	1/1	0.93	0.13	57,57,57,57	0
56	MG	1A	3934	1/1	0.93	0.15	62,62,62,62	0
56	MG	1A	3509	1/1	0.93	0.10	55,55,55,55	0
56	MG	1D	301	1/1	0.93	0.17	55,55,55,55	0
56	MG	1a	1676	1/1	0.93	0.33	58,58,58,58	0
56	MG	1A	3002	1/1	0.93	0.11	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
56	MG	1A	3647	1/1	0.93	0.23	48,48,48,48	0
56	MG	2A	3059	1/1	0.93	0.22	55,55,55,55	0
56	MG	1A	3054	1/1	0.93	0.13	50,50,50,50	0
56	MG	1a	1680	1/1	0.93	0.42	75,75,75,75	0
56	MG	1A	3056	1/1	0.93	0.11	43,43,43,43	0
56	MG	2D	306	1/1	0.93	0.18	49,49,49,49	0
56	MG	2A	3071	1/1	0.93	0.26	60,60,60,60	0
56	MG	1A	3250	1/1	0.93	0.09	41,41,41,41	0
56	MG	1A	3786	1/1	0.93	0.07	40,40,40,40	0
56	MG	1A	3947	1/1	0.93	0.10	23,23,23,23	0
56	MG	2x	106	1/1	0.93	0.09	54,54,54,54	0
56	MG	1A	3652	1/1	0.94	0.11	41,41,41,41	0
56	MG	25	101	1/1	0.94	0.29	59,59,59,59	0
56	MG	1B	202	1/1	0.94	0.22	54,54,54,54	0
56	MG	1A	3187	1/1	0.94	0.24	39,39,39,39	0
56	MG	1d	301	1/1	0.94	0.34	64,64,64,64	0
56	MG	1B	204	1/1	0.94	0.15	48,48,48,48	0
56	MG	1f	3102	1/1	0.94	0.23	68,68,68,68	0
56	MG	1B	205	1/1	0.94	0.20	55,55,55,55	0
56	MG	1B	206	1/1	0.94	0.11	45,45,45,45	0
56	MG	2A	3188	1/1	0.94	0.21	51,51,51,51	0
56	MG	1A	3657	1/1	0.94	0.11	40,40,40,40	0
56	MG	1A	3112	1/1	0.94	0.17	45,45,45,45	0
56	MG	1B	210	1/1	0.94	0.11	45,45,45,45	0
56	MG	1A	3239	1/1	0.94	0.26	53,53,53,53	0
56	MG	1A	3534	1/1	0.94	0.11	50,50,50,50	0
56	MG	2A	3621	1/1	0.94	0.16	63,63,63,63	0
56	MG	1A	3542	1/1	0.94	0.60	42,42,42,42	0
56	MG	1A	3543	1/1	0.94	0.10	44,44,44,44	0
56	MG	1A	3385	1/1	0.94	0.34	64,64,64,64	0
56	MG	1a	1640	1/1	0.94	0.18	64,64,64,64	0
56	MG	1a	1641	1/1	0.94	0.10	57,57,57,57	0
56	MG	2A	3380	1/1	0.94	0.23	66,66,66,66	0
56	MG	2A	3384	1/1	0.94	0.16	69,69,69,69	0
56	MG	1x	103	1/1	0.94	0.12	56,56,56,56	0
56	MG	1A	3789	1/1	0.94	0.09	37,37,37,37	0
56	MG	1A	3926	1/1	0.94	0.12	69,69,69,69	0
56	MG	2A	3636	1/1	0.94	0.13	45,45,45,45	0
56	MG	1A	3790	1/1	0.94	0.09	33,33,33,33	0
56	MG	1A	3191	1/1	0.94	0.18	45,45,45,45	0
56	MG	1A	3335	1/1	0.94	0.18	38,38,38,38	0
56	MG	1A	3796	1/1	0.94	0.20	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
56	MG	2a	1625	1/1	0.94	0.11	66,66,66,66	0
56	MG	1A	3932	1/1	0.94	0.16	52,52,52,52	0
56	MG	2A	3209	1/1	0.94	0.21	53,53,53,53	0
56	MG	1A	3933	1/1	0.94	0.13	58,58,58,58	0
56	MG	1A	3669	1/1	0.94	0.10	32,32,32,32	0
56	MG	2A	3001	1/1	0.94	0.22	56,56,56,56	0
56	MG	1B	228	1/1	0.94	0.10	56,56,56,56	0
56	MG	1A	3798	1/1	0.94	0.20	56,56,56,56	0
56	MG	1A	3295	1/1	0.94	0.09	59,59,59,59	0
56	MG	1A	3389	1/1	0.94	0.14	44,44,44,44	0
56	MG	1A	3116	1/1	0.94	0.10	40,40,40,40	0
56	MG	1a	1659	1/1	0.94	0.14	62,62,62,62	0
56	MG	2A	3016	1/1	0.94	0.17	50,50,50,50	0
56	MG	1A	3940	1/1	0.94	0.09	49,49,49,49	0
56	MG	2A	3658	1/1	0.94	0.18	59,59,59,59	0
56	MG	1A	3022	1/1	0.94	0.09	42,42,42,42	0
56	MG	2A	3019	1/1	0.94	0.16	54,54,54,54	0
56	MG	2A	3223	1/1	0.94	0.09	61,61,61,61	0
56	MG	2A	3020	1/1	0.94	0.14	53,53,53,53	0
56	MG	1A	3393	1/1	0.94	0.13	52,52,52,52	0
56	MG	2A	3226	1/1	0.94	0.18	65,65,65,65	0
56	MG	2a	1648	1/1	0.94	0.12	68,68,68,68	0
56	MG	2A	3419	1/1	0.94	0.34	66,66,66,66	0
56	MG	1A	3198	1/1	0.94	0.10	37,37,37,37	0
56	MG	1a	1664	1/1	0.94	0.21	58,58,58,58	0
56	MG	2A	3028	1/1	0.94	0.10	52,52,52,52	0
56	MG	1A	3004	1/1	0.94	0.07	29,29,29,29	0
56	MG	1A	3200	1/1	0.94	0.06	54,54,54,54	0
56	MG	1D	305	1/1	0.94	0.07	37,37,37,37	0
56	MG	2a	1657	1/1	0.94	0.18	53,53,53,53	0
56	MG	2A	3034	1/1	0.94	0.31	64,64,64,64	0
56	MG	2A	3431	1/1	0.94	0.07	48,48,48,48	0
56	MG	1D	309	1/1	0.94	0.14	45,45,45,45	0
56	MG	2a	1663	1/1	0.94	0.21	65,65,65,65	0
56	MG	1A	3950	1/1	0.94	0.13	28,28,28,28	0
56	MG	1A	3048	1/1	0.94	0.07	19,19,19,19	0
56	MG	1A	3473	1/1	0.94	0.09	61,61,61,61	0
56	MG	2A	3681	1/1	0.94	0.09	50,50,50,50	0
56	MG	2A	3240	1/1	0.94	0.16	58,58,58,58	0
56	MG	2a	1670	1/1	0.94	0.12	71,71,71,71	0
56	MG	2a	1671	1/1	0.94	0.11	65,65,65,65	0
56	MG	2A	3683	1/1	0.94	0.13	76,76,76,76	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3241	1/1	0.94	0.10	49,49,49,49	0
56	MG	1A	3205	1/1	0.94	0.12	47,47,47,47	0
56	MG	2A	3439	1/1	0.94	0.15	57,57,57,57	0
56	MG	1A	3812	1/1	0.94	0.10	56,56,56,56	0
56	MG	2A	3692	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3693	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3813	1/1	0.94	0.17	58,58,58,58	0
56	MG	1A	3688	1/1	0.94	0.10	59,59,59,59	0
56	MG	2A	3444	1/1	0.94	0.14	59,59,59,59	0
56	MG	1A	3161	1/1	0.94	0.18	38,38,38,38	0
56	MG	1A	3348	1/1	0.94	0.13	53,53,53,53	0
56	MG	1A	3962	1/1	0.94	0.09	24,24,24,24	0
56	MG	2A	3050	1/1	0.94	0.18	55,55,55,55	0
56	MG	1A	3096	1/1	0.94	0.10	48,48,48,48	0
56	MG	1A	3310	1/1	0.94	0.10	45,45,45,45	0
56	MG	1a	1684	1/1	0.94	0.11	53,53,53,53	0
56	MG	1A	3311	1/1	0.94	0.08	54,54,54,54	0
56	MG	1A	3034	1/1	0.94	0.28	41,41,41,41	0
56	MG	1A	3482	1/1	0.94	0.17	52,52,52,52	0
56	MG	1A	3972	1/1	0.94	0.07	41,41,41,41	0
56	MG	1A	3165	1/1	0.94	0.10	48,48,48,48	0
56	MG	1A	3058	1/1	0.94	0.09	50,50,50,50	0
56	MG	2A	3063	1/1	0.94	0.08	55,55,55,55	0
56	MG	2A	3712	1/1	0.94	0.07	52,52,52,52	0
56	MG	1A	3131	1/1	0.94	0.16	46,46,46,46	0
56	MG	2A	3714	1/1	0.94	0.12	50,50,50,50	0
56	MG	2A	3465	1/1	0.94	0.12	61,61,61,61	0
56	MG	2A	3719	1/1	0.94	0.14	49,49,49,49	0
56	MG	1a	1694	1/1	0.94	0.23	51,51,51,51	0
56	MG	1A	3223	1/1	0.94	0.10	43,43,43,43	0
56	MG	1A	3590	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3075	1/1	0.94	0.09	53,53,53,53	0
56	MG	2A	3076	1/1	0.94	0.15	56,56,56,56	0
56	MG	2A	3077	1/1	0.94	0.11	57,57,57,57	0
56	MG	2A	3730	1/1	0.94	0.07	75,75,75,75	0
56	MG	2A	3078	1/1	0.94	0.11	54,54,54,54	0
56	MG	1A	3490	1/1	0.94	0.13	42,42,42,42	0
56	MG	1A	3984	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3176	1/1	0.94	0.11	70,70,70,70	0
56	MG	1A	3599	1/1	0.94	0.07	34,34,34,34	0
56	MG	2A	3084	1/1	0.94	0.12	45,45,45,45	0
56	MG	1A	3420	1/1	0.94	0.15	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
56	MG	2A	3740	1/1	0.94	0.12	70,70,70,70	0
56	MG	1A	3837	1/1	0.94	0.14	35,35,35,35	0
56	MG	1A	3361	1/1	0.94	0.29	40,40,40,40	0
56	MG	2A	3088	1/1	0.94	0.12	63,63,63,63	0
56	MG	1A	3841	1/1	0.94	0.29	34,34,34,34	0
56	MG	1A	3177	1/1	0.94	0.09	42,42,42,42	0
56	MG	1a	1714	1/1	0.94	0.12	62,62,62,62	0
56	MG	1A	3995	1/1	0.94	0.08	49,49,49,49	0
56	MG	1A	3718	1/1	0.94	0.10	53,53,53,53	0
56	MG	2A	3095	1/1	0.94	0.17	58,58,58,58	0
56	MG	1A	3720	1/1	0.94	0.11	36,36,36,36	0
56	MG	1A	3424	1/1	0.94	0.19	63,63,63,63	0
56	MG	2A	3289	1/1	0.94	0.12	59,59,59,59	0
56	MG	1A	3496	1/1	0.94	0.08	53,53,53,53	0
56	MG	1A	3498	1/1	0.94	0.18	44,44,44,44	0
56	MG	1A	3499	1/1	0.94	0.28	37,37,37,37	0
56	MG	1A	3364	1/1	0.94	0.13	58,58,58,58	0
56	MG	1a	1725	1/1	0.94	0.08	63,63,63,63	0
56	MG	1U	204	1/1	0.94	0.28	38,38,38,38	0
56	MG	2A	3522	1/1	0.94	0.14	55,55,55,55	0
56	MG	2A	3107	1/1	0.94	0.16	52,52,52,52	0
56	MG	2a	1743	1/1	0.94	0.09	69,69,69,69	0
56	MG	1a	1728	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3365	1/1	0.94	0.14	43,43,43,43	0
56	MG	1A	3730	1/1	0.94	0.06	37,37,37,37	0
56	MG	1A	3731	1/1	0.94	0.06	27,27,27,27	0
56	MG	1A	3860	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	3615	1/1	0.94	0.08	32,32,32,32	0
56	MG	2A	3774	1/1	0.94	0.10	47,47,47,47	0
56	MG	2A	3775	1/1	0.94	0.13	73,73,73,73	0
56	MG	2A	3116	1/1	0.94	0.09	60,60,60,60	0
56	MG	2A	3307	1/1	0.94	0.20	57,57,57,57	0
56	MG	2a	1757	1/1	0.94	0.15	60,60,60,60	0
56	MG	1A	3059	1/1	0.94	0.21	54,54,54,54	0
56	MG	1A	3504	1/1	0.94	0.16	42,42,42,42	0
56	MG	1A	3865	1/1	0.94	0.09	55,55,55,55	0
56	MG	1Z	303	1/1	0.94	0.13	53,53,53,53	0
56	MG	2A	3782	1/1	0.94	0.34	64,64,64,64	0
56	MG	1A	3620	1/1	0.94	0.12	57,57,57,57	0
56	MG	1A	3429	1/1	0.94	0.22	50,50,50,50	0
56	MG	1A	3743	1/1	0.94	0.13	66,66,66,66	0
56	MG	1A	3744	1/1	0.94	0.07	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3276	1/1	0.94	0.15	51,51,51,51	0
56	MG	2A	3135	1/1	0.94	0.24	54,54,54,54	0
56	MG	2B	207	1/1	0.94	0.14	63,63,63,63	0
56	MG	1A	3228	1/1	0.94	0.14	39,39,39,39	0
56	MG	11	103	1/1	0.94	0.11	44,44,44,44	0
56	MG	2A	3550	1/1	0.94	0.15	46,46,46,46	0
56	MG	1A	3750	1/1	0.94	0.10	25,25,25,25	0
56	MG	2A	3558	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3561	1/1	0.94	0.10	47,47,47,47	0
56	MG	11	105	1/1	0.94	0.10	54,54,54,54	0
56	MG	12	101	1/1	0.94	0.13	55,55,55,55	0
56	MG	1A	3283	1/1	0.94	0.19	34,34,34,34	0
56	MG	1A	3629	1/1	0.94	0.08	24,24,24,24	0
56	MG	2D	302	1/1	0.94	0.34	59,59,59,59	0
56	MG	2A	3567	1/1	0.94	0.13	52,52,52,52	0
56	MG	1a	1756	1/1	0.94	0.09	62,62,62,62	0
56	MG	1A	3373	1/1	0.94	0.10	53,53,53,53	0
56	MG	16	102	1/1	0.94	0.09	53,53,53,53	0
56	MG	1a	1762	1/1	0.94	0.11	54,54,54,54	0
56	MG	1A	3883	1/1	0.94	0.15	40,40,40,40	0
56	MG	1A	3884	1/1	0.94	0.19	60,60,60,60	0
56	MG	2E	303	1/1	0.94	0.08	52,52,52,52	0
56	MG	2a	1793	1/1	0.94	0.29	69,69,69,69	0
56	MG	1a	1767	1/1	0.94	0.14	69,69,69,69	0
56	MG	2a	1795	1/1	0.94	0.12	58,58,58,58	0
56	MG	2A	3576	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3577	1/1	0.94	0.15	65,65,65,65	0
56	MG	2F	302	1/1	0.94	0.08	43,43,43,43	0
56	MG	1A	3435	1/1	0.94	0.14	34,34,34,34	0
56	MG	1A	3323	1/1	0.94	0.20	48,48,48,48	0
56	MG	1A	4038	1/1	0.94	0.14	49,49,49,49	0
56	MG	1A	3760	1/1	0.94	0.09	49,49,49,49	0
56	MG	1A	3892	1/1	0.94	0.08	44,44,44,44	0
56	MG	1A	3439	1/1	0.94	0.10	50,50,50,50	0
56	MG	1A	3638	1/1	0.94	0.08	44,44,44,44	0
56	MG	1A	3181	1/1	0.94	0.19	41,41,41,41	0
56	MG	1A	3902	1/1	0.94	0.09	37,37,37,37	0
56	MG	1A	3906	1/1	0.94	0.09	27,27,27,27	0
56	MG	1A	3379	1/1	0.94	0.12	54,54,54,54	0
56	MG	1a	1612	1/1	0.94	0.09	72,72,72,72	0
56	MG	2A	3594	1/1	0.94	0.14	72,72,72,72	0
56	MG	2A	3345	1/1	0.94	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
56	MG	1A	3101	1/1	0.94	0.20	40,40,40,40	0
56	MG	2U	201	1/1	0.94	0.13	60,60,60,60	0
56	MG	1A	3909	1/1	0.94	0.13	64,64,64,64	0
56	MG	1a	1615	1/1	0.94	0.15	61,61,61,61	0
56	MG	1A	3910	1/1	0.94	0.07	52,52,52,52	0
56	MG	1A	3444	1/1	0.94	0.11	53,53,53,53	0
56	MG	1A	3035	1/1	0.94	0.08	45,45,45,45	0
56	MG	1A	4057	1/1	0.94	0.09	54,54,54,54	0
56	MG	1A	3772	1/1	0.94	0.07	26,26,26,26	0
56	MG	1a	1795	1/1	0.94	0.07	59,59,59,59	0
56	MG	2x	107	1/1	0.94	0.08	59,59,59,59	0
56	MG	2A	3119	1/1	0.95	0.22	49,49,49,49	0
56	MG	2A	3120	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	3847	1/1	0.95	0.06	35,35,35,35	0
56	MG	1W	205	1/1	0.95	0.13	31,31,31,31	0
56	MG	1A	3067	1/1	0.95	0.19	55,55,55,55	0
56	MG	2A	3127	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3128	1/1	0.95	0.24	55,55,55,55	0
56	MG	1a	1745	1/1	0.95	0.11	59,59,59,59	0
56	MG	2A	3585	1/1	0.95	0.08	57,57,57,57	0
56	MG	2A	3586	1/1	0.95	0.10	53,53,53,53	0
56	MG	1A	4006	1/1	0.95	0.13	51,51,51,51	0
56	MG	1A	3713	1/1	0.95	0.06	20,20,20,20	0
56	MG	1A	4008	1/1	0.95	0.07	47,47,47,47	0
56	MG	1A	3591	1/1	0.95	0.07	29,29,29,29	0
56	MG	1A	3593	1/1	0.95	0.09	42,42,42,42	0
56	MG	1A	3486	1/1	0.95	0.31	36,36,36,36	0
56	MG	1A	3046	1/1	0.95	0.07	37,37,37,37	0
56	MG	1A	3109	1/1	0.95	0.24	34,34,34,34	0
56	MG	1A	3857	1/1	0.95	0.07	26,26,26,26	0
56	MG	1A	3600	1/1	0.95	0.06	22,22,22,22	0
56	MG	27	102	1/1	0.95	0.23	59,59,59,59	0
56	MG	2A	3598	1/1	0.95	0.07	43,43,43,43	0
56	MG	2A	3141	1/1	0.95	0.19	43,43,43,43	0
56	MG	1A	4018	1/1	0.95	0.06	22,22,22,22	0
56	MG	11	102	1/1	0.95	0.11	45,45,45,45	0
56	MG	2A	3145	1/1	0.95	0.13	60,60,60,60	0
56	MG	1a	1764	1/1	0.95	0.13	58,58,58,58	0
56	MG	1A	3723	1/1	0.95	0.11	61,61,61,61	0
56	MG	1A	3602	1/1	0.95	0.09	25,25,25,25	0
56	MG	1A	3164	1/1	0.95	0.24	59,59,59,59	0
56	MG	1A	4022	1/1	0.95	0.07	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
56	MG	12	102	1/1	0.95	0.11	47,47,47,47	0
56	MG	1a	1773	1/1	0.95	0.07	67,67,67,67	0
56	MG	13	102	1/1	0.95	0.16	45,45,45,45	0
56	MG	1a	1775	1/1	0.95	0.08	57,57,57,57	0
56	MG	1A	3605	1/1	0.95	0.10	29,29,29,29	0
56	MG	1A	4024	1/1	0.95	0.09	18,18,18,18	0
56	MG	1A	3413	1/1	0.95	0.24	43,43,43,43	0
56	MG	1a	1779	1/1	0.95	0.29	66,66,66,66	0
56	MG	2A	3355	1/1	0.95	0.21	60,60,60,60	0
56	MG	2A	3160	1/1	0.95	0.14	52,52,52,52	0
56	MG	2A	3161	1/1	0.95	0.10	46,46,46,46	0
56	MG	1A	3866	1/1	0.95	0.09	32,32,32,32	0
56	MG	1A	3226	1/1	0.95	0.27	45,45,45,45	0
56	MG	17	101	1/1	0.95	0.10	34,34,34,34	0
56	MG	1A	3074	1/1	0.95	0.33	48,48,48,48	0
56	MG	17	105	1/1	0.95	0.10	52,52,52,52	0
56	MG	2a	1624	1/1	0.95	0.13	69,69,69,69	0
56	MG	2A	3626	1/1	0.95	0.15	35,35,35,35	0
56	MG	1A	3047	1/1	0.95	0.18	34,34,34,34	0
56	MG	1A	3417	1/1	0.95	0.22	44,44,44,44	0
56	MG	2A	3629	1/1	0.95	0.12	54,54,54,54	0
56	MG	1A	3733	1/1	0.95	0.09	27,27,27,27	0
56	MG	2a	1630	1/1	0.95	0.24	55,55,55,55	0
56	MG	1A	3419	1/1	0.95	0.14	37,37,37,37	0
56	MG	2A	3172	1/1	0.95	0.30	60,60,60,60	0
56	MG	1A	3174	1/1	0.95	0.15	33,33,33,33	0
56	MG	1A	3015	1/1	0.95	0.19	39,39,39,39	0
56	MG	1a	1791	1/1	0.95	0.08	40,40,40,40	0
56	MG	2A	3176	1/1	0.95	0.09	55,55,55,55	0
56	MG	1A	3029	1/1	0.95	0.11	35,35,35,35	0
56	MG	2A	3375	1/1	0.95	0.15	53,53,53,53	0
56	MG	1A	3299	1/1	0.95	0.13	49,49,49,49	0
56	MG	1A	4042	1/1	0.95	0.12	45,45,45,45	0
56	MG	1A	3084	1/1	0.95	0.28	34,34,34,34	0
56	MG	2a	1642	1/1	0.95	0.08	81,81,81,81	0
56	MG	2A	3382	1/1	0.95	0.16	47,47,47,47	0
56	MG	1a	1796	1/1	0.95	0.30	64,64,64,64	0
56	MG	2A	3646	1/1	0.95	0.12	51,51,51,51	0
56	MG	1A	3426	1/1	0.95	0.11	46,46,46,46	0
56	MG	1A	3748	1/1	0.95	0.08	52,52,52,52	0
56	MG	1A	3886	1/1	0.95	0.07	68,68,68,68	0
56	MG	2A	3650	1/1	0.95	0.18	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3388	1/1	0.95	0.14	53,53,53,53	0
56	MG	1A	3621	1/1	0.95	0.13	42,42,42,42	0
56	MG	1e	201	1/1	0.95	0.35	67,67,67,67	0
56	MG	1A	3890	1/1	0.95	0.10	57,57,57,57	0
56	MG	2a	1654	1/1	0.95	0.28	64,64,64,64	0
56	MG	1a	1617	1/1	0.95	0.09	60,60,60,60	0
56	MG	1l	201	1/1	0.95	0.05	74,74,74,74	0
56	MG	1A	3356	1/1	0.95	0.16	42,42,42,42	0
56	MG	1m	3001	1/1	0.95	0.09	62,62,62,62	0
56	MG	2a	1660	1/1	0.95	0.42	72,72,72,72	0
56	MG	1A	3506	1/1	0.95	0.09	25,25,25,25	0
56	MG	1A	3301	1/1	0.95	0.21	41,41,41,41	0
56	MG	1A	4052	1/1	0.95	0.15	55,55,55,55	0
56	MG	1A	3627	1/1	0.95	0.06	31,31,31,31	0
56	MG	2A	3402	1/1	0.95	0.13	44,44,44,44	0
56	MG	1A	3302	1/1	0.95	0.20	32,32,32,32	0
56	MG	1A	3899	1/1	0.95	0.08	39,39,39,39	0
56	MG	2A	3405	1/1	0.95	0.37	59,59,59,59	0
56	MG	1A	3030	1/1	0.95	0.22	32,32,32,32	0
56	MG	1A	4059	1/1	0.95	0.16	57,57,57,57	0
56	MG	1A	3510	1/1	0.95	0.25	60,60,60,60	0
56	MG	1A	3761	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3305	1/1	0.95	0.17	54,54,54,54	0
56	MG	2A	3203	1/1	0.95	0.25	51,51,51,51	0
56	MG	1A	3123	1/1	0.95	0.19	32,32,32,32	0
56	MG	1A	3240	1/1	0.95	0.16	43,43,43,43	0
56	MG	2A	3416	1/1	0.95	0.12	63,63,63,63	0
56	MG	1A	3767	1/1	0.95	0.09	48,48,48,48	0
56	MG	2A	3679	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3635	1/1	0.95	0.06	35,35,35,35	0
56	MG	1A	3637	1/1	0.95	0.09	31,31,31,31	0
56	MG	1A	3032	1/1	0.95	0.19	24,24,24,24	0
56	MG	2A	3684	1/1	0.95	0.06	55,55,55,55	0
56	MG	1A	3518	1/1	0.95	0.11	50,50,50,50	0
56	MG	1A	3520	1/1	0.95	0.15	37,37,37,37	0
56	MG	2A	3688	1/1	0.95	0.07	71,71,71,71	0
56	MG	1A	3645	1/1	0.95	0.05	24,24,24,24	0
56	MG	2A	3690	1/1	0.95	0.11	70,70,70,70	0
56	MG	1A	3368	1/1	0.95	0.16	30,30,30,30	0
56	MG	1A	3087	1/1	0.95	0.15	47,47,47,47	0
56	MG	1A	3779	1/1	0.95	0.15	56,56,56,56	0
56	MG	1A	3128	1/1	0.95	0.10	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
56	MG	1a	1647	1/1	0.95	0.16	56,56,56,56	0
56	MG	1A	3441	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	3001	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3012	1/1	0.95	0.16	44,44,44,44	0
56	MG	2A	3013	1/1	0.95	0.06	35,35,35,35	0
56	MG	1A	3190	1/1	0.95	0.27	40,40,40,40	0
56	MG	1A	3785	1/1	0.95	0.24	29,29,29,29	0
56	MG	1A	3132	1/1	0.95	0.17	33,33,33,33	0
56	MG	1A	3787	1/1	0.95	0.08	45,45,45,45	0
56	MG	1A	3445	1/1	0.95	0.12	49,49,49,49	0
56	MG	2a	1704	1/1	0.95	0.19	63,63,63,63	0
56	MG	1A	3660	1/1	0.95	0.08	26,26,26,26	0
56	MG	2A	3022	1/1	0.95	0.21	50,50,50,50	0
56	MG	1A	3248	1/1	0.95	0.21	31,31,31,31	0
56	MG	1B	231	1/1	0.95	0.07	35,35,35,35	0
56	MG	2A	3232	1/1	0.95	0.16	53,53,53,53	0
56	MG	2A	3026	1/1	0.95	0.14	52,52,52,52	0
56	MG	1A	3663	1/1	0.95	0.12	46,46,46,46	0
56	MG	2A	3235	1/1	0.95	0.10	64,64,64,64	0
56	MG	1A	3539	1/1	0.95	0.28	38,38,38,38	0
56	MG	1A	3017	1/1	0.95	0.15	70,70,70,70	0
56	MG	2A	3718	1/1	0.95	0.09	41,41,41,41	0
56	MG	1A	3055	1/1	0.95	0.11	37,37,37,37	0
56	MG	2A	3032	1/1	0.95	0.11	33,33,33,33	0
56	MG	2A	3457	1/1	0.95	0.06	33,33,33,33	0
56	MG	1A	3036	1/1	0.95	0.13	40,40,40,40	0
56	MG	1A	3142	1/1	0.95	0.27	35,35,35,35	0
56	MG	2A	3724	1/1	0.95	0.08	43,43,43,43	0
56	MG	2a	1722	1/1	0.95	0.31	66,66,66,66	0
56	MG	2a	1723	1/1	0.95	0.33	60,60,60,60	0
56	MG	1A	3025	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3146	1/1	0.95	0.22	37,37,37,37	0
56	MG	2a	1726	1/1	0.95	0.21	64,64,64,64	0
56	MG	1A	3147	1/1	0.95	0.12	39,39,39,39	0
56	MG	2a	1728	1/1	0.95	0.12	61,61,61,61	0
56	MG	1a	1669	1/1	0.95	0.28	57,57,57,57	0
56	MG	1A	3673	1/1	0.95	0.08	32,32,32,32	0
56	MG	1D	308	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3148	1/1	0.95	0.18	44,44,44,44	0
56	MG	1A	3949	1/1	0.95	0.14	37,37,37,37	0
56	MG	2A	3475	1/1	0.95	0.12	49,49,49,49	0
56	MG	1A	3676	1/1	0.95	0.09	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3260	1/1	0.95	0.32	53,53,53,53	0
56	MG	1E	303	1/1	0.95	0.18	50,50,50,50	0
56	MG	1A	3208	1/1	0.95	0.32	42,42,42,42	0
56	MG	2a	1740	1/1	0.95	0.24	55,55,55,55	0
56	MG	2A	3484	1/1	0.95	0.08	36,36,36,36	0
56	MG	1A	3464	1/1	0.95	0.12	50,50,50,50	0
56	MG	1A	3809	1/1	0.95	0.19	55,55,55,55	0
56	MG	1A	3560	1/1	0.95	0.27	47,47,47,47	0
56	MG	1E	312	1/1	0.95	0.12	27,27,27,27	0
56	MG	2A	3750	1/1	0.95	0.20	54,54,54,54	0
56	MG	1A	3262	1/1	0.95	0.10	45,45,45,45	0
56	MG	1A	3041	1/1	0.95	0.13	37,37,37,37	0
56	MG	1A	3960	1/1	0.95	0.09	19,19,19,19	0
56	MG	1A	3327	1/1	0.95	0.20	33,33,33,33	0
56	MG	2A	3061	1/1	0.95	0.18	61,61,61,61	0
56	MG	1A	3685	1/1	0.95	0.09	37,37,37,37	0
56	MG	1A	3210	1/1	0.95	0.15	34,34,34,34	0
56	MG	2A	3064	1/1	0.95	0.10	50,50,50,50	0
56	MG	1F	309	1/1	0.95	0.08	49,49,49,49	0
56	MG	1A	3687	1/1	0.95	0.16	46,46,46,46	0
56	MG	1A	3211	1/1	0.95	0.16	48,48,48,48	0
56	MG	2a	1761	1/1	0.95	0.09	58,58,58,58	0
56	MG	2A	3072	1/1	0.95	0.11	60,60,60,60	0
56	MG	2A	3508	1/1	0.95	0.14	64,64,64,64	0
56	MG	1a	1693	1/1	0.95	0.10	51,51,51,51	0
56	MG	2A	3510	1/1	0.95	0.18	60,60,60,60	0
56	MG	2A	3074	1/1	0.95	0.14	47,47,47,47	0
56	MG	1G	202	1/1	0.95	0.20	59,59,59,59	0
56	MG	1A	3395	1/1	0.95	0.11	51,51,51,51	0
56	MG	1a	1696	1/1	0.95	0.17	51,51,51,51	0
56	MG	2A	3519	1/1	0.95	0.16	55,55,55,55	0
56	MG	1A	3573	1/1	0.95	0.08	34,34,34,34	0
56	MG	1A	3822	1/1	0.95	0.14	23,23,23,23	0
56	MG	1A	3823	1/1	0.95	0.15	26,26,26,26	0
56	MG	2A	3281	1/1	0.95	0.12	61,61,61,61	0
56	MG	1N	202	1/1	0.95	0.09	50,50,50,50	0
56	MG	1A	3272	1/1	0.95	0.14	35,35,35,35	0
56	MG	1N	205	1/1	0.95	0.17	56,56,56,56	0
56	MG	1a	1705	1/1	0.95	0.16	58,58,58,58	0
56	MG	1A	3398	1/1	0.95	0.10	37,37,37,37	0
56	MG	2a	1782	1/1	0.95	0.30	58,58,58,58	0
56	MG	1A	3576	1/1	0.95	0.09	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3274	1/1	0.95	0.28	31,31,31,31	0
56	MG	1A	3981	1/1	0.95	0.09	44,44,44,44	0
56	MG	2A	3290	1/1	0.95	0.11	64,64,64,64	0
56	MG	1A	3829	1/1	0.95	0.08	52,52,52,52	0
56	MG	1A	3697	1/1	0.95	0.10	47,47,47,47	0
56	MG	1A	3098	1/1	0.95	0.08	46,46,46,46	0
56	MG	1P	203	1/1	0.95	0.20	30,30,30,30	0
56	MG	1A	3701	1/1	0.95	0.10	64,64,64,64	0
56	MG	2A	3096	1/1	0.95	0.17	48,48,48,48	0
56	MG	2A	3540	1/1	0.95	0.13	43,43,43,43	0
56	MG	1A	3279	1/1	0.95	0.17	54,54,54,54	0
56	MG	1A	3280	1/1	0.95	0.21	54,54,54,54	0
56	MG	1Q	204	1/1	0.95	0.13	53,53,53,53	0
56	MG	2A	3545	1/1	0.95	0.10	41,41,41,41	0
56	MG	2A	3546	1/1	0.95	0.07	35,35,35,35	0
56	MG	2A	3300	1/1	0.95	0.18	68,68,68,68	0
56	MG	1A	3480	1/1	0.95	0.21	36,36,36,36	0
56	MG	1A	3992	1/1	0.95	0.06	52,52,52,52	0
56	MG	2A	3551	1/1	0.95	0.11	62,62,62,62	0
56	MG	2A	3552	1/1	0.95	0.10	38,38,38,38	0
56	MG	1Q	207	1/1	0.95	0.10	42,42,42,42	0
56	MG	1A	3705	1/1	0.95	0.07	54,54,54,54	0
56	MG	2l	201	1/1	0.95	0.11	73,73,73,73	0
56	MG	2A	3560	1/1	0.95	0.12	51,51,51,51	0
56	MG	2l	203	1/1	0.95	0.13	67,67,67,67	0
56	MG	1A	3584	1/1	0.95	0.08	25,25,25,25	0
56	MG	2A	3106	1/1	0.95	0.10	46,46,46,46	0
56	MG	1A	3839	1/1	0.95	0.17	34,34,34,34	0
56	MG	2E	308	1/1	0.95	0.11	43,43,43,43	0
56	MG	1A	3062	1/1	0.95	0.43	60,60,60,60	0
56	MG	1A	3842	1/1	0.95	0.20	38,38,38,38	0
56	MG	2A	3566	1/1	0.95	0.11	38,38,38,38	0
56	MG	2F	304	1/1	0.95	0.15	44,44,44,44	0
56	MG	2F	305	1/1	0.95	0.17	48,48,48,48	0
56	MG	1A	3011	1/1	0.95	0.06	37,37,37,37	0
56	MG	1A	3844	1/1	0.95	0.20	37,37,37,37	0
56	MG	2A	3112	1/1	0.95	0.27	61,61,61,61	0
56	MG	1U	205	1/1	0.95	0.21	34,34,34,34	0
56	MG	1A	3709	1/1	0.95	0.09	49,49,49,49	0
56	MG	1V	202	1/1	0.95	0.38	35,35,35,35	0
56	MG	1A	3218	1/1	0.95	0.10	56,56,56,56	0
56	MG	2A	3118	1/1	0.95	0.10	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
58	ZN	14	102	1/1	0.95	0.12	118,118,118,118	0
58	ZN	24	501	1/1	0.95	0.17	126,126,126,126	0
60	K	2x	101	1/1	0.95	0.15	79,79,79,79	0
56	MG	1A	3916	1/1	0.96	0.07	46,46,46,46	0
56	MG	1A	3266	1/1	0.96	0.16	51,51,51,51	0
56	MG	1A	3143	1/1	0.96	0.09	42,42,42,42	0
56	MG	11	101	1/1	0.96	0.42	40,40,40,40	0
56	MG	1A	3270	1/1	0.96	0.21	36,36,36,36	0
56	MG	1A	3592	1/1	0.96	0.11	25,25,25,25	0
56	MG	1A	3371	1/1	0.96	0.26	36,36,36,36	0
56	MG	1A	3500	1/1	0.96	0.30	39,39,39,39	0
56	MG	1A	3271	1/1	0.96	0.44	47,47,47,47	0
56	MG	1A	3598	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3447	1/1	0.96	0.11	39,39,39,39	0
56	MG	1A	4056	1/1	0.96	0.12	39,39,39,39	0
56	MG	1A	3061	1/1	0.96	0.35	59,59,59,59	0
56	MG	15	101	1/1	0.96	0.26	29,29,29,29	0
56	MG	15	102	1/1	0.96	0.21	39,39,39,39	0
56	MG	15	103	1/1	0.96	0.21	35,35,35,35	0
56	MG	2A	3268	1/1	0.96	0.38	71,71,71,71	0
56	MG	15	105	1/1	0.96	0.26	35,35,35,35	0
56	MG	2A	3455	1/1	0.96	0.14	66,66,66,66	0
56	MG	1A	3376	1/1	0.96	0.18	35,35,35,35	0
56	MG	2A	3271	1/1	0.96	0.08	49,49,49,49	0
56	MG	2A	3675	1/1	0.96	0.13	40,40,40,40	0
56	MG	1A	3927	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3273	1/1	0.96	0.26	31,31,31,31	0
56	MG	1a	1757	1/1	0.96	0.06	71,71,71,71	0
56	MG	2A	3461	1/1	0.96	0.11	53,53,53,53	0
56	MG	2A	3680	1/1	0.96	0.15	70,70,70,70	0
56	MG	1A	3094	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3105	1/1	0.96	0.10	44,44,44,44	0
56	MG	1A	3438	1/1	0.96	0.13	42,42,42,42	0
56	MG	1A	3119	1/1	0.96	0.21	40,40,40,40	0
56	MG	2A	3468	1/1	0.96	0.06	52,52,52,52	0
56	MG	1a	1763	1/1	0.96	0.10	58,58,58,58	0
56	MG	1A	3277	1/1	0.96	0.15	49,49,49,49	0
56	MG	1A	3278	1/1	0.96	0.07	54,54,54,54	0
56	MG	2A	3473	1/1	0.96	0.11	47,47,47,47	0
56	MG	2A	3474	1/1	0.96	0.08	37,37,37,37	0
56	MG	18	102	1/1	0.96	0.08	43,43,43,43	0
56	MG	1B	207	1/1	0.96	0.15	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
56	MG	1a	1768	1/1	0.96	0.08	77,77,77,77	0
56	MG	1A	3189	1/1	0.96	0.07	44,44,44,44	0
56	MG	2a	1659	1/1	0.96	0.08	60,60,60,60	0
56	MG	2A	3115	1/1	0.96	0.10	49,49,49,49	0
56	MG	1A	3935	1/1	0.96	0.16	52,52,52,52	0
56	MG	2A	3698	1/1	0.96	0.13	51,51,51,51	0
56	MG	1A	3511	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	3232	1/1	0.96	0.07	31,31,31,31	0
56	MG	1A	3007	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3818	1/1	0.96	0.09	45,45,45,45	0
56	MG	1A	3712	1/1	0.96	0.06	47,47,47,47	0
56	MG	2A	3123	1/1	0.96	0.17	44,44,44,44	0
56	MG	2A	3493	1/1	0.96	0.07	43,43,43,43	0
56	MG	1a	1606	1/1	0.96	0.11	56,56,56,56	0
56	MG	2A	3495	1/1	0.96	0.24	58,58,58,58	0
56	MG	2A	3125	1/1	0.96	0.17	44,44,44,44	0
56	MG	1A	3282	1/1	0.96	0.08	50,50,50,50	0
56	MG	1a	1608	1/1	0.96	0.07	55,55,55,55	0
56	MG	1A	3942	1/1	0.96	0.08	66,66,66,66	0
56	MG	2A	3501	1/1	0.96	0.15	42,42,42,42	0
56	MG	1a	1611	1/1	0.96	0.09	58,58,58,58	0
56	MG	1A	3614	1/1	0.96	0.12	24,24,24,24	0
56	MG	2A	3301	1/1	0.96	0.26	66,66,66,66	0
56	MG	1A	3330	1/1	0.96	0.17	29,29,29,29	0
56	MG	1A	3946	1/1	0.96	0.12	50,50,50,50	0
56	MG	2A	3133	1/1	0.96	0.12	42,42,42,42	0
56	MG	1A	3517	1/1	0.96	0.11	33,33,33,33	0
56	MG	1B	223	1/1	0.96	0.07	36,36,36,36	0
56	MG	1A	3824	1/1	0.96	0.06	32,32,32,32	0
56	MG	1A	3331	1/1	0.96	0.08	40,40,40,40	0
56	MG	1A	3149	1/1	0.96	0.06	39,39,39,39	0
56	MG	1A	3450	1/1	0.96	0.10	47,47,47,47	0
56	MG	1A	3192	1/1	0.96	0.07	40,40,40,40	0
56	MG	1A	3623	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3142	1/1	0.96	0.09	55,55,55,55	0
56	MG	1A	3452	1/1	0.96	0.21	38,38,38,38	0
56	MG	1A	3334	1/1	0.96	0.15	68,68,68,68	0
56	MG	1A	3193	1/1	0.96	0.08	29,29,29,29	0
56	MG	1A	3151	1/1	0.96	0.15	41,41,41,41	0
56	MG	1A	3457	1/1	0.96	0.16	40,40,40,40	0
56	MG	1A	3337	1/1	0.96	0.14	61,61,61,61	0
56	MG	1A	3836	1/1	0.96	0.07	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3532	1/1	0.96	0.06	25,25,25,25	0
56	MG	1A	3459	1/1	0.96	0.07	49,49,49,49	0
56	MG	2A	3531	1/1	0.96	0.08	45,45,45,45	0
56	MG	1f	3101	1/1	0.96	0.15	52,52,52,52	0
56	MG	1A	3734	1/1	0.96	0.10	31,31,31,31	0
56	MG	1D	303	1/1	0.96	0.09	33,33,33,33	0
56	MG	1A	3535	1/1	0.96	0.22	51,51,51,51	0
56	MG	1D	307	1/1	0.96	0.12	43,43,43,43	0
56	MG	1A	3969	1/1	0.96	0.05	29,29,29,29	0
56	MG	1A	3081	1/1	0.96	0.15	40,40,40,40	0
56	MG	1D	310	1/1	0.96	0.13	26,26,26,26	0
56	MG	1A	3737	1/1	0.96	0.06	34,34,34,34	0
56	MG	2A	3541	1/1	0.96	0.09	47,47,47,47	0
56	MG	1A	3973	1/1	0.96	0.06	35,35,35,35	0
56	MG	1A	3636	1/1	0.96	0.05	24,24,24,24	0
56	MG	1A	3739	1/1	0.96	0.07	59,59,59,59	0
56	MG	1E	305	1/1	0.96	0.16	28,28,28,28	0
56	MG	1E	306	1/1	0.96	0.15	27,27,27,27	0
56	MG	1A	3540	1/1	0.96	0.20	43,43,43,43	0
56	MG	2A	3764	1/1	0.96	0.16	43,43,43,43	0
56	MG	2A	3548	1/1	0.96	0.06	45,45,45,45	0
56	MG	1A	3741	1/1	0.96	0.07	27,27,27,27	0
56	MG	1A	3042	1/1	0.96	0.17	32,32,32,32	0
56	MG	1A	3640	1/1	0.96	0.06	20,20,20,20	0
56	MG	1A	3745	1/1	0.96	0.06	32,32,32,32	0
56	MG	2A	3770	1/1	0.96	0.23	53,53,53,53	0
56	MG	2A	3554	1/1	0.96	0.14	68,68,68,68	0
56	MG	1A	3340	1/1	0.96	0.10	54,54,54,54	0
56	MG	2A	3557	1/1	0.96	0.18	57,57,57,57	0
56	MG	1E	314	1/1	0.96	0.16	44,44,44,44	0
56	MG	2A	3559	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3544	1/1	0.96	0.09	36,36,36,36	0
56	MG	1E	316	1/1	0.96	0.07	41,41,41,41	0
56	MG	1A	3158	1/1	0.96	0.18	50,50,50,50	0
56	MG	1A	3854	1/1	0.96	0.08	44,44,44,44	0
56	MG	2a	1735	1/1	0.96	0.07	65,65,65,65	0
56	MG	1A	3043	1/1	0.96	0.30	35,35,35,35	0
56	MG	1A	3202	1/1	0.96	0.18	38,38,38,38	0
56	MG	1A	3552	1/1	0.96	0.07	46,46,46,46	0
56	MG	1F	311	1/1	0.96	0.11	34,34,34,34	0
56	MG	1A	3754	1/1	0.96	0.06	53,53,53,53	0
56	MG	1a	1667	1/1	0.96	0.14	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
56	MG	2A	3008	1/1	0.96	0.06	44,44,44,44	0
56	MG	1A	3245	1/1	0.96	0.08	33,33,33,33	0
56	MG	1G	201	1/1	0.96	0.14	39,39,39,39	0
56	MG	1A	3468	1/1	0.96	0.15	51,51,51,51	0
56	MG	1A	3655	1/1	0.96	0.07	24,24,24,24	0
56	MG	2A	3575	1/1	0.96	0.10	48,48,48,48	0
56	MG	1A	3864	1/1	0.96	0.12	38,38,38,38	0
56	MG	1A	3469	1/1	0.96	0.11	38,38,38,38	0
56	MG	1A	3125	1/1	0.96	0.14	39,39,39,39	0
56	MG	1A	3762	1/1	0.96	0.06	23,23,23,23	0
56	MG	1A	3069	1/1	0.96	0.10	31,31,31,31	0
56	MG	2A	3021	1/1	0.96	0.06	43,43,43,43	0
56	MG	2a	1756	1/1	0.96	0.20	54,54,54,54	0
56	MG	2B	217	1/1	0.96	0.20	75,75,75,75	0
56	MG	1A	3127	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3871	1/1	0.96	0.20	24,24,24,24	0
56	MG	2A	3024	1/1	0.96	0.20	49,49,49,49	0
56	MG	1A	4005	1/1	0.96	0.06	43,43,43,43	0
56	MG	1A	3028	1/1	0.96	0.28	38,38,38,38	0
56	MG	2a	1763	1/1	0.96	0.20	49,49,49,49	0
56	MG	2A	3588	1/1	0.96	0.10	42,42,42,42	0
56	MG	1A	3407	1/1	0.96	0.17	41,41,41,41	0
56	MG	2A	3372	1/1	0.96	0.08	64,64,64,64	0
56	MG	2A	3373	1/1	0.96	0.22	42,42,42,42	0
56	MG	2a	1768	1/1	0.96	0.10	70,70,70,70	0
56	MG	1A	3102	1/1	0.96	0.07	37,37,37,37	0
56	MG	1A	3876	1/1	0.96	0.13	45,45,45,45	0
56	MG	2E	306	1/1	0.96	0.09	34,34,34,34	0
56	MG	2A	3376	1/1	0.96	0.41	53,53,53,53	0
56	MG	1A	3563	1/1	0.96	0.14	54,54,54,54	0
56	MG	1A	3564	1/1	0.96	0.26	57,57,57,57	0
56	MG	1A	3565	1/1	0.96	0.23	37,37,37,37	0
56	MG	2A	3381	1/1	0.96	0.27	48,48,48,48	0
56	MG	1A	3051	1/1	0.96	0.14	31,31,31,31	0
56	MG	2A	3383	1/1	0.96	0.10	54,54,54,54	0
56	MG	2A	3208	1/1	0.96	0.14	57,57,57,57	0
56	MG	1A	3775	1/1	0.96	0.34	29,29,29,29	0
56	MG	1A	3090	1/1	0.96	0.12	31,31,31,31	0
56	MG	1A	3411	1/1	0.96	0.07	56,56,56,56	0
56	MG	1A	3212	1/1	0.96	0.13	49,49,49,49	0
56	MG	1A	3167	1/1	0.96	0.11	41,41,41,41	0
56	MG	1A	3135	1/1	0.96	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
56	MG	2A	3043	1/1	0.96	0.19	67,67,67,67	0
56	MG	1A	3675	1/1	0.96	0.08	37,37,37,37	0
56	MG	1A	3257	1/1	0.96	0.13	40,40,40,40	0
56	MG	1A	3258	1/1	0.96	0.17	46,46,46,46	0
56	MG	1A	4025	1/1	0.96	0.12	36,36,36,36	0
56	MG	1A	3784	1/1	0.96	0.06	47,47,47,47	0
56	MG	1T	202	1/1	0.96	0.10	48,48,48,48	0
56	MG	1U	201	1/1	0.96	0.17	30,30,30,30	0
56	MG	1a	1704	1/1	0.96	0.21	66,66,66,66	0
56	MG	2A	3401	1/1	0.96	0.11	71,71,71,71	0
56	MG	1U	202	1/1	0.96	0.24	38,38,38,38	0
56	MG	1A	3136	1/1	0.96	0.12	33,33,33,33	0
56	MG	1A	3359	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	3900	1/1	0.96	0.07	36,36,36,36	0
56	MG	1a	1711	1/1	0.96	0.15	44,44,44,44	0
56	MG	1a	1712	1/1	0.96	0.12	40,40,40,40	0
56	MG	1A	3901	1/1	0.96	0.17	58,58,58,58	0
56	MG	1V	204	1/1	0.96	0.18	53,53,53,53	0
56	MG	1V	205	1/1	0.96	0.11	40,40,40,40	0
56	MG	2j	201	1/1	0.96	0.17	69,69,69,69	0
56	MG	1A	3138	1/1	0.96	0.10	49,49,49,49	0
56	MG	1A	3903	1/1	0.96	0.10	51,51,51,51	0
56	MG	2A	3066	1/1	0.96	0.12	48,48,48,48	0
56	MG	2A	3415	1/1	0.96	0.11	34,34,34,34	0
56	MG	2A	3067	1/1	0.96	0.16	50,50,50,50	0
56	MG	28	101	1/1	0.96	0.12	53,53,53,53	0
56	MG	2q	201	1/1	0.96	0.08	73,73,73,73	0
56	MG	2A	3068	1/1	0.96	0.07	52,52,52,52	0
56	MG	2A	3069	1/1	0.96	0.09	36,36,36,36	0
56	MG	1A	3075	1/1	0.96	0.15	36,36,36,36	0
56	MG	2A	3638	1/1	0.96	0.07	39,39,39,39	0
56	MG	2A	3420	1/1	0.96	0.21	47,47,47,47	0
56	MG	1A	3423	1/1	0.96	0.14	43,43,43,43	0
56	MG	1X	101	1/1	0.96	0.36	43,43,43,43	0
56	MG	1A	3582	1/1	0.96	0.09	43,43,43,43	0
56	MG	2A	3424	1/1	0.96	0.14	54,54,54,54	0
56	MG	1A	3791	1/1	0.96	0.06	36,36,36,36	0
56	MG	1Y	203	1/1	0.96	0.21	43,43,43,43	0
56	MG	1A	4040	1/1	0.96	0.16	50,50,50,50	0
56	MG	1A	3792	1/1	0.96	0.06	39,39,39,39	0
56	MG	1A	3793	1/1	0.96	0.05	33,33,33,33	0
56	MG	1A	3222	1/1	0.96	0.12	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	A1A1L	2A	3783	36/36	0.96	0.09	33,42,49,58	0
56	MG	1A	3114	1/1	0.96	0.19	34,34,34,34	0
56	MG	2A	3081	1/1	0.96	0.11	39,39,39,39	0
58	ZN	2n	501	1/1	0.96	0.07	89,89,89,89	0
56	MG	1A	3018	1/1	0.96	0.12	39,39,39,39	0
56	MG	1A	3618	1/1	0.97	0.04	26,26,26,26	0
56	MG	1A	3083	1/1	0.97	0.22	30,30,30,30	0
56	MG	1A	3430	1/1	0.97	0.24	56,56,56,56	0
56	MG	1W	202	1/1	0.97	0.19	48,48,48,48	0
56	MG	1A	3546	1/1	0.97	0.15	37,37,37,37	0
56	MG	2a	1666	1/1	0.97	0.09	52,52,52,52	0
56	MG	1A	3071	1/1	0.97	0.09	16,16,16,16	0
56	MG	1A	3484	1/1	0.97	0.16	27,27,27,27	0
56	MG	2A	3583	1/1	0.97	0.06	38,38,38,38	0
56	MG	1X	102	1/1	0.97	0.08	39,39,39,39	0
56	MG	1X	103	1/1	0.97	0.11	50,50,50,50	0
56	MG	1X	104	1/1	0.97	0.11	38,38,38,38	0
56	MG	1X	105	1/1	0.97	0.06	47,47,47,47	0
56	MG	1X	106	1/1	0.97	0.08	33,33,33,33	0
56	MG	1A	3977	1/1	0.97	0.07	62,62,62,62	0
56	MG	2A	3426	1/1	0.97	0.06	72,72,72,72	0
56	MG	1A	3172	1/1	0.97	0.06	18,18,18,18	0
56	MG	2A	3428	1/1	0.97	0.07	68,68,68,68	0
56	MG	1B	219	1/1	0.97	0.06	55,55,55,55	0
56	MG	1B	220	1/1	0.97	0.11	50,50,50,50	0
56	MG	1A	3252	1/1	0.97	0.08	50,50,50,50	0
56	MG	1A	3626	1/1	0.97	0.10	36,36,36,36	0
56	MG	1a	1691	1/1	0.97	0.15	47,47,47,47	0
56	MG	1A	3173	1/1	0.97	0.07	33,33,33,33	0
56	MG	10	102	1/1	0.97	0.07	48,48,48,48	0
56	MG	2A	3005	1/1	0.97	0.07	44,44,44,44	0
56	MG	2A	3006	1/1	0.97	0.18	61,61,61,61	0
56	MG	1A	3982	1/1	0.97	0.09	57,57,57,57	0
56	MG	1A	3488	1/1	0.97	0.09	33,33,33,33	0
56	MG	1A	3213	1/1	0.97	0.12	50,50,50,50	0
56	MG	1A	3715	1/1	0.97	0.08	52,52,52,52	0
56	MG	1a	1698	1/1	0.97	0.18	42,42,42,42	0
56	MG	2A	3443	1/1	0.97	0.10	43,43,43,43	0
56	MG	1A	3214	1/1	0.97	0.17	42,42,42,42	0
56	MG	2A	3157	1/1	0.97	0.13	38,38,38,38	0
56	MG	1A	3887	1/1	0.97	0.12	36,36,36,36	0
56	MG	1B	230	1/1	0.97	0.07	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3888	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3008	1/1	0.97	0.11	26,26,26,26	0
56	MG	1A	3141	1/1	0.97	0.14	25,25,25,25	0
56	MG	1A	3719	1/1	0.97	0.04	43,43,43,43	0
56	MG	1A	3063	1/1	0.97	0.10	34,34,34,34	0
56	MG	2A	3165	1/1	0.97	0.07	58,58,58,58	0
56	MG	1A	3033	1/1	0.97	0.27	31,31,31,31	0
56	MG	1A	3392	1/1	0.97	0.27	56,56,56,56	0
56	MG	1a	1710	1/1	0.97	0.05	39,39,39,39	0
56	MG	1A	3304	1/1	0.97	0.10	37,37,37,37	0
56	MG	1B	239	1/1	0.97	0.06	37,37,37,37	0
56	MG	1A	3497	1/1	0.97	0.09	54,54,54,54	0
56	MG	1A	3178	1/1	0.97	0.09	40,40,40,40	0
56	MG	15	106	1/1	0.97	0.08	34,34,34,34	0
56	MG	2A	3031	1/1	0.97	0.06	42,42,42,42	0
56	MG	2D	301	1/1	0.97	0.12	42,42,42,42	0
56	MG	1A	3810	1/1	0.97	0.07	41,41,41,41	0
56	MG	2A	3464	1/1	0.97	0.07	47,47,47,47	0
56	MG	2D	304	1/1	0.97	0.07	35,35,35,35	0
56	MG	1A	3066	1/1	0.97	0.07	32,32,32,32	0
56	MG	2A	3466	1/1	0.97	0.07	56,56,56,56	0
56	MG	16	101	1/1	0.97	0.13	51,51,51,51	0
56	MG	1a	1720	1/1	0.97	0.10	39,39,39,39	0
56	MG	1D	306	1/1	0.97	0.10	33,33,33,33	0
56	MG	2A	3470	1/1	0.97	0.07	48,48,48,48	0
56	MG	2A	3037	1/1	0.97	0.08	56,56,56,56	0
56	MG	2E	304	1/1	0.97	0.09	36,36,36,36	0
56	MG	1A	4002	1/1	0.97	0.11	26,26,26,26	0
56	MG	1A	3567	1/1	0.97	0.21	48,48,48,48	0
56	MG	1A	3904	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3145	1/1	0.97	0.19	28,28,28,28	0
56	MG	2A	3476	1/1	0.97	0.10	34,34,34,34	0
56	MG	2F	301	1/1	0.97	0.08	49,49,49,49	0
56	MG	1A	3646	1/1	0.97	0.05	32,32,32,32	0
56	MG	1a	1727	1/1	0.97	0.21	44,44,44,44	0
56	MG	2A	3480	1/1	0.97	0.09	48,48,48,48	0
56	MG	1A	3569	1/1	0.97	0.19	30,30,30,30	0
56	MG	2A	3046	1/1	0.97	0.08	58,58,58,58	0
56	MG	2A	3483	1/1	0.97	0.10	52,52,52,52	0
56	MG	1A	3089	1/1	0.97	0.15	56,56,56,56	0
56	MG	1A	4009	1/1	0.97	0.07	27,27,27,27	0
56	MG	1A	3060	1/1	0.97	0.06	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
56	MG	1A	3572	1/1	0.97	0.05	25,25,25,25	0
56	MG	2Q	201	1/1	0.97	0.12	64,64,64,64	0
56	MG	1a	1734	1/1	0.97	0.05	56,56,56,56	0
56	MG	2A	3052	1/1	0.97	0.06	53,53,53,53	0
56	MG	2A	3656	1/1	0.97	0.27	48,48,48,48	0
56	MG	2A	3490	1/1	0.97	0.06	41,41,41,41	0
56	MG	2A	3491	1/1	0.97	0.11	39,39,39,39	0
56	MG	1A	3103	1/1	0.97	0.07	30,30,30,30	0
56	MG	1E	308	1/1	0.97	0.12	35,35,35,35	0
56	MG	1A	3104	1/1	0.97	0.17	37,37,37,37	0
56	MG	1A	3268	1/1	0.97	0.14	39,39,39,39	0
56	MG	1A	3453	1/1	0.97	0.12	47,47,47,47	0
56	MG	1A	3269	1/1	0.97	0.07	23,23,23,23	0
56	MG	1A	4017	1/1	0.97	0.05	42,42,42,42	0
56	MG	1A	3150	1/1	0.97	0.08	34,34,34,34	0
56	MG	2X	102	1/1	0.97	0.09	50,50,50,50	0
56	MG	2A	3500	1/1	0.97	0.10	47,47,47,47	0
56	MG	1a	1610	1/1	0.97	0.11	31,31,31,31	0
56	MG	1A	3079	1/1	0.97	0.14	33,33,33,33	0
56	MG	1A	3662	1/1	0.97	0.07	29,29,29,29	0
56	MG	1F	301	1/1	0.97	0.17	38,38,38,38	0
56	MG	23	101	1/1	0.97	0.07	54,54,54,54	0
56	MG	1A	3152	1/1	0.97	0.23	30,30,30,30	0
56	MG	1A	3746	1/1	0.97	0.06	24,24,24,24	0
56	MG	1a	1616	1/1	0.97	0.07	46,46,46,46	0
56	MG	1a	1751	1/1	0.97	0.09	62,62,62,62	0
56	MG	1A	3233	1/1	0.97	0.26	35,35,35,35	0
56	MG	1F	306	1/1	0.97	0.07	41,41,41,41	0
56	MG	1a	1619	1/1	0.97	0.06	50,50,50,50	0
56	MG	1a	1620	1/1	0.97	0.34	63,63,63,63	0
56	MG	1A	3107	1/1	0.97	0.07	39,39,39,39	0
56	MG	1A	3583	1/1	0.97	0.09	57,57,57,57	0
56	MG	1F	310	1/1	0.97	0.07	47,47,47,47	0
56	MG	1a	1760	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3275	1/1	0.97	0.08	53,53,53,53	0
56	MG	2A	3685	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3363	1/1	0.97	0.11	49,49,49,49	0
56	MG	1F	313	1/1	0.97	0.14	51,51,51,51	0
56	MG	1A	3108	1/1	0.97	0.17	33,33,33,33	0
56	MG	1A	3587	1/1	0.97	0.06	34,34,34,34	0
56	MG	1A	3755	1/1	0.97	0.04	35,35,35,35	0
56	MG	1a	1630	1/1	0.97	0.16	26,26,26,26	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4032	1/1	0.97	0.13	54,54,54,54	0
56	MG	1A	3412	1/1	0.97	0.13	44,44,44,44	0
56	MG	1A	3757	1/1	0.97	0.08	20,20,20,20	0
56	MG	1A	3589	1/1	0.97	0.09	54,54,54,54	0
56	MG	1A	3840	1/1	0.97	0.14	33,33,33,33	0
56	MG	1A	3155	1/1	0.97	0.11	32,32,32,32	0
56	MG	1A	3366	1/1	0.97	0.41	30,30,30,30	0
56	MG	1A	3195	1/1	0.97	0.11	25,25,25,25	0
56	MG	1A	3196	1/1	0.97	0.11	32,32,32,32	0
56	MG	1A	3763	1/1	0.97	0.06	25,25,25,25	0
56	MG	2A	3378	1/1	0.97	0.09	21,21,21,21	0
56	MG	1A	3523	1/1	0.97	0.18	38,38,38,38	0
56	MG	1A	3524	1/1	0.97	0.15	44,44,44,44	0
56	MG	1A	3596	1/1	0.97	0.06	21,21,21,21	0
56	MG	1A	3156	1/1	0.97	0.17	35,35,35,35	0
56	MG	1P	202	1/1	0.97	0.19	34,34,34,34	0
56	MG	1a	1646	1/1	0.97	0.06	52,52,52,52	0
56	MG	1A	3470	1/1	0.97	0.14	36,36,36,36	0
56	MG	1A	3129	1/1	0.97	0.05	45,45,45,45	0
56	MG	1A	3130	1/1	0.97	0.06	37,37,37,37	0
56	MG	1A	3021	1/1	0.97	0.10	25,25,25,25	0
56	MG	2f	201	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3110	1/1	0.97	0.12	30,30,30,30	0
56	MG	1A	3855	1/1	0.97	0.10	54,54,54,54	0
56	MG	2A	3715	1/1	0.97	0.04	39,39,39,39	0
56	MG	1A	3951	1/1	0.97	0.09	31,31,31,31	0
56	MG	2A	3553	1/1	0.97	0.08	49,49,49,49	0
56	MG	1A	3531	1/1	0.97	0.17	35,35,35,35	0
56	MG	2A	3555	1/1	0.97	0.08	37,37,37,37	0
56	MG	1R	201	1/1	0.97	0.11	40,40,40,40	0
56	MG	1A	3374	1/1	0.97	0.19	34,34,34,34	0
56	MG	1A	3858	1/1	0.97	0.05	29,29,29,29	0
56	MG	2A	3396	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3533	1/1	0.97	0.17	36,36,36,36	0
56	MG	1A	3111	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3957	1/1	0.97	0.05	40,40,40,40	0
56	MG	1A	3070	1/1	0.97	0.26	33,33,33,33	0
56	MG	1A	3536	1/1	0.97	0.28	41,41,41,41	0
56	MG	1A	3538	1/1	0.97	0.20	40,40,40,40	0
56	MG	2A	3734	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3696	1/1	0.97	0.11	47,47,47,47	0
56	MG	1U	203	1/1	0.97	0.09	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
56	MG	1A	3113	1/1	0.97	0.16	43,43,43,43	0
56	MG	2A	3122	1/1	0.97	0.13	43,43,43,43	0
56	MG	2A	3407	1/1	0.97	0.14	50,50,50,50	0
57	A1A1L	1A	4060	36/36	0.97	0.08	19,28,35,44	0
56	MG	1A	3137	1/1	0.97	0.06	18,18,18,18	0
56	MG	1A	3541	1/1	0.97	0.15	35,35,35,35	0
56	MG	1A	3290	1/1	0.97	0.15	37,37,37,37	0
56	MG	1A	3869	1/1	0.97	0.07	39,39,39,39	0
56	MG	1a	1672	1/1	0.97	0.16	48,48,48,48	0
56	MG	1A	3078	1/1	0.98	0.09	38,38,38,38	0
56	MG	1a	1648	1/1	0.98	0.09	47,47,47,47	0
56	MG	2A	3505	1/1	0.98	0.06	32,32,32,32	0
56	MG	1A	3031	1/1	0.98	0.15	34,34,34,34	0
56	MG	1A	3157	1/1	0.98	0.14	28,28,28,28	0
56	MG	1A	3037	1/1	0.98	0.11	26,26,26,26	0
56	MG	2A	3243	1/1	0.98	0.20	51,51,51,51	0
56	MG	1A	3347	1/1	0.98	0.09	42,42,42,42	0
56	MG	1N	203	1/1	0.98	0.05	40,40,40,40	0
56	MG	2A	3513	1/1	0.98	0.07	66,66,66,66	0
56	MG	1A	3038	1/1	0.98	0.18	36,36,36,36	0
56	MG	1A	3894	1/1	0.98	0.06	44,44,44,44	0
56	MG	1A	3201	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3418	1/1	0.98	0.20	39,39,39,39	0
56	MG	2a	1746	1/1	0.98	0.12	80,80,80,80	0
56	MG	1A	3617	1/1	0.98	0.04	27,27,27,27	0
56	MG	15	104	1/1	0.98	0.20	27,27,27,27	0
56	MG	1A	3671	1/1	0.98	0.03	16,16,16,16	0
56	MG	1A	3179	1/1	0.98	0.07	40,40,40,40	0
56	MG	1A	3231	1/1	0.98	0.16	30,30,30,30	0
56	MG	1a	1742	1/1	0.98	0.07	55,55,55,55	0
56	MG	1A	3289	1/1	0.98	0.08	33,33,33,33	0
56	MG	2a	1754	1/1	0.98	0.08	59,59,59,59	0
56	MG	1P	201	1/1	0.98	0.30	33,33,33,33	0
56	MG	1A	3203	1/1	0.98	0.17	28,28,28,28	0
56	MG	1A	3082	1/1	0.98	0.13	31,31,31,31	0
56	MG	1P	204	1/1	0.98	0.25	33,33,33,33	0
56	MG	17	102	1/1	0.98	0.08	31,31,31,31	0
56	MG	2A	3717	1/1	0.98	0.10	45,45,45,45	0
56	MG	17	103	1/1	0.98	0.10	35,35,35,35	0
56	MG	1A	3292	1/1	0.98	0.11	41,41,41,41	0
56	MG	1A	4030	1/1	0.98	0.05	33,33,33,33	0
56	MG	2A	3092	1/1	0.98	0.05	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
56	MG	1Q	202	1/1	0.98	0.04	46,46,46,46	0
56	MG	1A	3967	1/1	0.98	0.07	32,32,32,32	0
56	MG	2A	3009	1/1	0.98	0.08	46,46,46,46	0
56	MG	2A	3725	1/1	0.98	0.07	39,39,39,39	0
56	MG	2O	201	1/1	0.98	0.10	55,55,55,55	0
56	MG	2A	3010	1/1	0.98	0.07	43,43,43,43	0
56	MG	1A	3537	1/1	0.98	0.13	41,41,41,41	0
56	MG	2A	3729	1/1	0.98	0.08	51,51,51,51	0
56	MG	1A	3293	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3106	1/1	0.98	0.23	30,30,30,30	0
56	MG	1A	3971	1/1	0.98	0.06	23,23,23,23	0
56	MG	2A	3015	1/1	0.98	0.06	27,27,27,27	0
56	MG	1A	3911	1/1	0.98	0.06	41,41,41,41	0
56	MG	1A	4037	1/1	0.98	0.07	30,30,30,30	0
56	MG	1a	1761	1/1	0.98	0.06	68,68,68,68	0
56	MG	2A	3737	1/1	0.98	0.04	36,36,36,36	0
56	MG	1A	3133	1/1	0.98	0.29	35,35,35,35	0
56	MG	1D	304	1/1	0.98	0.10	22,22,22,22	0
56	MG	1A	3236	1/1	0.98	0.07	45,45,45,45	0
56	MG	1A	3683	1/1	0.98	0.04	15,15,15,15	0
56	MG	2A	3742	1/1	0.98	0.08	27,27,27,27	0
56	MG	1A	3207	1/1	0.98	0.23	39,39,39,39	0
56	MG	1A	3183	1/1	0.98	0.17	39,39,39,39	0
56	MG	1A	3742	1/1	0.98	0.03	44,44,44,44	0
56	MG	1A	3013	1/1	0.98	0.17	29,29,29,29	0
56	MG	1A	3545	1/1	0.98	0.18	32,32,32,32	0
56	MG	1A	3397	1/1	0.98	0.16	39,39,39,39	0
56	MG	1A	3185	1/1	0.98	0.27	36,36,36,36	0
56	MG	1E	302	1/1	0.98	0.25	35,35,35,35	0
56	MG	1V	201	1/1	0.98	0.27	28,28,28,28	0
56	MG	25	102	1/1	0.98	0.21	47,47,47,47	0
56	MG	1A	3690	1/1	0.98	0.07	26,26,26,26	0
56	MG	1E	304	1/1	0.98	0.09	33,33,33,33	0
56	MG	2A	3755	1/1	0.98	0.04	54,54,54,54	0
56	MG	27	101	1/1	0.98	0.10	39,39,39,39	0
56	MG	1A	3186	1/1	0.98	0.26	26,26,26,26	0
56	MG	1A	3549	1/1	0.98	0.11	39,39,39,39	0
56	MG	1A	3121	1/1	0.98	0.17	34,34,34,34	0
56	MG	1A	3639	1/1	0.98	0.06	42,42,42,42	0
56	MG	1W	203	1/1	0.98	0.23	38,38,38,38	0
56	MG	2A	3039	1/1	0.98	0.12	50,50,50,50	0
56	MG	1W	204	1/1	0.98	0.10	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3752	1/1	0.98	0.09	51,51,51,51	0
56	MG	2A	3477	1/1	0.98	0.11	35,35,35,35	0
56	MG	1A	3073	1/1	0.98	0.09	31,31,31,31	0
56	MG	1A	3437	1/1	0.98	0.23	37,37,37,37	0
56	MG	1A	3010	1/1	0.98	0.10	31,31,31,31	0
56	MG	1A	3003	1/1	0.98	0.08	32,32,32,32	0
56	MG	1A	3700	1/1	0.98	0.03	26,26,26,26	0
56	MG	1a	1707	1/1	0.98	0.11	57,57,57,57	0
56	MG	1A	3597	1/1	0.98	0.06	52,52,52,52	0
56	MG	2A	3772	1/1	0.98	0.07	57,57,57,57	0
56	MG	1A	3168	1/1	0.98	0.14	42,42,42,42	0
56	MG	1A	3648	1/1	0.98	0.07	57,57,57,57	0
56	MG	1A	3169	1/1	0.98	0.10	31,31,31,31	0
56	MG	1A	3558	1/1	0.98	0.15	33,33,33,33	0
56	MG	1A	3651	1/1	0.98	0.07	24,24,24,24	0
56	MG	2A	3313	1/1	0.98	0.07	40,40,40,40	0
56	MG	1A	3601	1/1	0.98	0.05	26,26,26,26	0
56	MG	1A	3516	1/1	0.98	0.29	34,34,34,34	0
56	MG	1A	3170	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3656	1/1	0.98	0.09	28,28,28,28	0
56	MG	1A	3943	1/1	0.98	0.09	53,53,53,53	0
56	MG	1a	1719	1/1	0.98	0.05	45,45,45,45	0
56	MG	2A	3060	1/1	0.98	0.11	34,34,34,34	0
56	MG	1A	3604	1/1	0.98	0.11	28,28,28,28	0
56	MG	1A	3219	1/1	0.98	0.14	32,32,32,32	0
58	ZN	2Y	202	1/1	0.98	0.04	91,91,91,91	0
56	MG	1A	3012	1/1	0.98	0.04	30,30,30,30	0
58	ZN	29	501	1/1	0.98	0.05	74,74,74,74	0
56	MG	1A	3375	1/1	0.98	0.07	30,30,30,30	0
56	MG	1A	3068	1/1	0.98	0.10	19,19,19,19	0
56	MG	2A	3727	1/1	0.99	0.04	54,54,54,54	0
56	MG	2A	3625	1/1	0.99	0.05	34,34,34,34	0
56	MG	1A	3773	1/1	0.99	0.03	46,46,46,46	0
56	MG	1A	3721	1/1	0.99	0.04	30,30,30,30	0
56	MG	1a	1770	1/1	0.99	0.04	52,52,52,52	0
56	MG	1A	4053	1/1	0.99	0.03	37,37,37,37	0
56	MG	1Q	201	1/1	0.99	0.07	31,31,31,31	0
56	MG	1A	3221	1/1	0.99	0.14	33,33,33,33	0
56	MG	1A	3449	1/1	0.99	0.07	36,36,36,36	0
56	MG	2A	3633	1/1	0.99	0.05	60,60,60,60	0
56	MG	1A	3699	1/1	0.99	0.08	31,31,31,31	0
56	MG	1F	303	1/1	0.99	0.16	33,33,33,33	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3653	1/1	0.99	0.06	30,30,30,30	0
56	MG	1A	3057	1/1	0.99	0.07	25,25,25,25	0
56	MG	1a	1733	1/1	0.99	0.09	59,59,59,59	0
56	MG	1A	3988	1/1	0.99	0.04	40,40,40,40	0
56	MG	1A	3519	1/1	0.99	0.09	27,27,27,27	0
56	MG	1F	308	1/1	0.99	0.17	30,30,30,30	0
56	MG	1A	3728	1/1	0.99	0.08	37,37,37,37	0
56	MG	1A	3991	1/1	0.99	0.03	22,22,22,22	0
56	MG	1A	3633	1/1	0.99	0.04	37,37,37,37	0
56	MG	1A	3360	1/1	0.99	0.17	29,29,29,29	0
56	MG	2A	3749	1/1	0.99	0.05	44,44,44,44	0
56	MG	1A	3896	1/1	0.99	0.03	14,14,14,14	0
56	MG	1A	3065	1/1	0.99	0.12	30,30,30,30	0
56	MG	1A	3039	1/1	0.99	0.30	35,35,35,35	0
56	MG	1A	3264	1/1	0.99	0.15	28,28,28,28	0
56	MG	1A	3963	1/1	0.99	0.03	35,35,35,35	0
56	MG	13	101	1/1	0.99	0.07	33,33,33,33	0
56	MG	1A	3023	1/1	0.99	0.08	19,19,19,19	0
56	MG	1U	206	1/1	0.99	0.29	35,35,35,35	0
56	MG	1A	3014	1/1	0.99	0.07	32,32,32,32	0
56	MG	1A	3171	1/1	0.99	0.12	29,29,29,29	0
56	MG	1A	3641	1/1	0.99	0.06	24,24,24,24	0
56	MG	1a	1752	1/1	0.99	0.09	56,56,56,56	0
56	MG	2A	3511	1/1	0.99	0.08	43,43,43,43	0
56	MG	1V	203	1/1	0.99	0.15	29,29,29,29	0
56	MG	2A	3609	1/1	0.99	0.04	65,65,65,65	0
56	MG	1A	3905	1/1	0.99	0.04	42,42,42,42	0
56	MG	1A	3005	1/1	0.99	0.04	39,39,39,39	0
56	MG	1A	3229	1/1	0.99	0.18	32,32,32,32	0
56	MG	2A	3516	1/1	0.99	0.07	41,41,41,41	0
56	MG	2A	3517	1/1	0.99	0.03	41,41,41,41	0
56	MG	1A	3644	1/1	0.99	0.04	24,24,24,24	0
56	MG	1A	3009	1/1	0.99	0.03	23,23,23,23	0
56	MG	1A	3095	1/1	0.99	0.12	24,24,24,24	0
56	MG	1A	3879	1/1	0.99	0.03	24,24,24,24	0
58	ZN	1Y	204	1/1	0.99	0.03	65,65,65,65	0
56	MG	1A	3975	1/1	0.99	0.06	34,34,34,34	0
58	ZN	15	109	1/1	0.99	0.08	49,49,49,49	0
58	ZN	19	102	1/1	0.99	0.06	47,47,47,47	0
58	ZN	1n	103	1/1	0.99	0.03	66,66,66,66	0
56	MG	1A	3880	1/1	0.99	0.03	27,27,27,27	0
56	MG	1A	3462	1/1	0.99	0.09	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	ZN	25	106	1/1	0.99	0.04	54,54,54,54	0
58	ZN	26	501	1/1	0.99	0.05	66,66,66,66	0
56	MG	1A	3044	1/1	0.99	0.09	36,36,36,36	0
56	MG	1A	3551	1/1	0.99	0.05	36,36,36,36	0
59	SF4	1d	302	8/8	0.99	0.05	62,68,71,74	0
59	SF4	2d	302	8/8	0.99	0.05	62,71,81,82	0
56	MG	1A	3115	1/1	0.99	0.07	36,36,36,36	0
56	MG	1A	3874	1/1	1.00	0.07	39,39,39,39	0
56	MG	1a	1769	1/1	1.00	0.04	49,49,49,49	0
56	MG	1A	3774	1/1	1.00	0.04	26,26,26,26	0
58	ZN	16	104	1/1	1.00	0.04	46,46,46,46	0
56	MG	1A	3898	1/1	1.00	0.06	34,34,34,34	0

6.5 Other polymers (i)

There are no such residues in this entry.