Full wwPDB X-ray Structure Validation Report ⓘ

Nov 6, 2023 – 01:02 PM EST

PDB ID	:	8FC3
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with protein Y, hygromycin A, and telithromycin at 2.60A resolution
Authors	:	Chen, C.-W.; Syroegin, E.A.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on	:	2022-12-01
Resolution	:	2.60 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

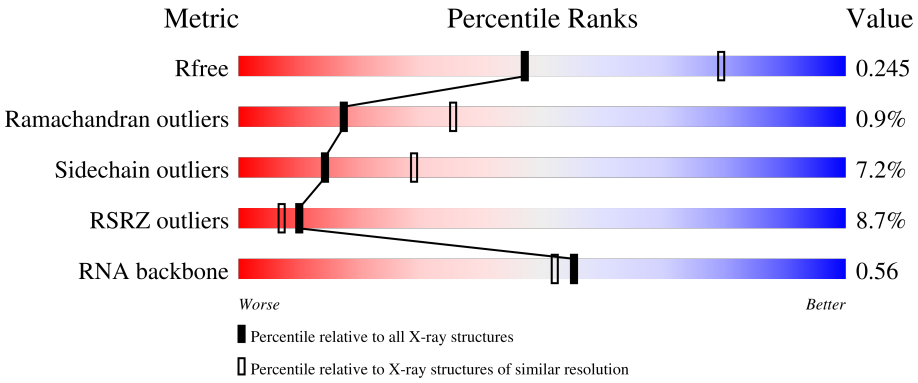
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

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 2.60 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	3163 (2.60-2.60)
Ramachandran outliers	138981	3455 (2.60-2.60)
Sidechain outliers	138945	3455 (2.60-2.60)
RSRZ outliers	127900	3104 (2.60-2.60)
RNA backbone	3102	1040 (2.90-2.30)

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	4% 83% 15%
1	2A	2915	5% 80% 17%
2	1B	121	88% 11%
2	2B	121	86% 13%
3	1D	276	94% 5%

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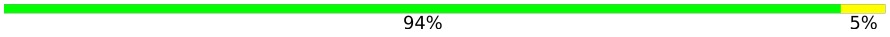
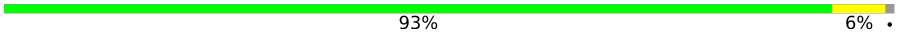
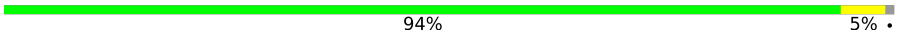
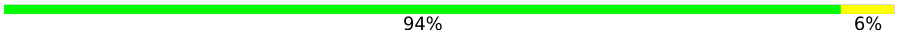
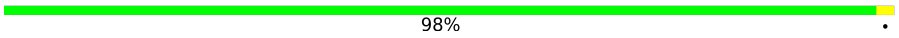
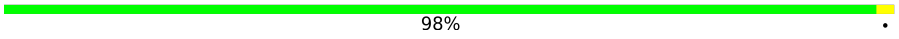
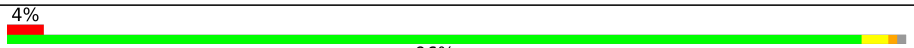
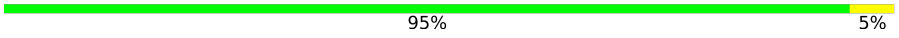
Mol	Chain	Length	Quality of chain
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	
15	1T	146	
15	2T	146	

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Mol	Chain	Length	Quality of chain
16	1U	118	95%
16	2U	118	94%
17	1V	101	96%
17	2V	101	93% 6%
18	1W	113	94% 5%
18	2W	113	92% 7%
19	1X	96	96%
19	2X	96	3% 97%
20	1Y	110	93% 5%
20	2Y	110	5% 89% 8%
21	1Z	206	91% 8%
21	2Z	206	89% 9%
22	10	85	88% 9%
22	20	85	14% 89% 9%
23	11	98	3% 96%
23	21	98	92% 7%
24	12	72	92% 6%
24	22	72	3% 92% 6%
25	13	60	97%
25	23	60	92% 7%
26	14	71	17% 85% 11%
26	24	71	28% 82% 14%
27	15	60	92% 7%
27	25	60	97%
28	16	54	93% 6%

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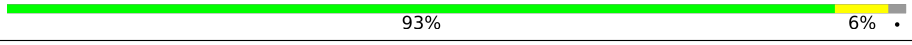
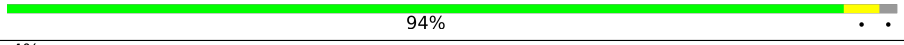
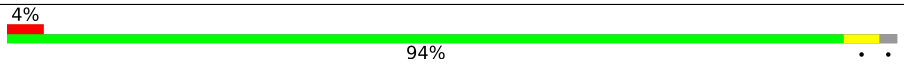
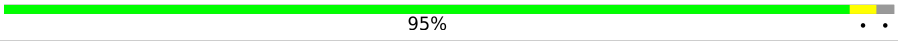
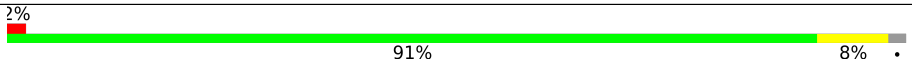
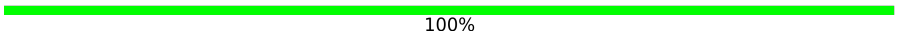
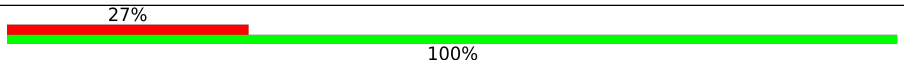
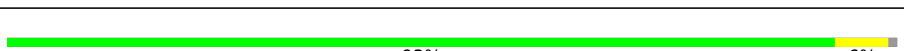
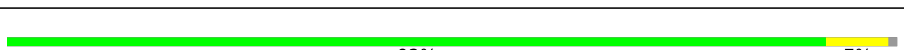
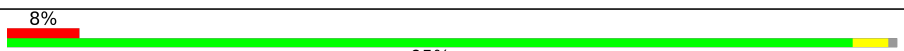
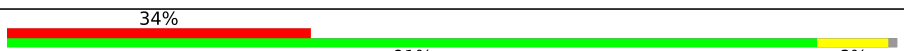
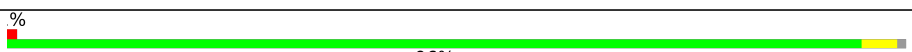
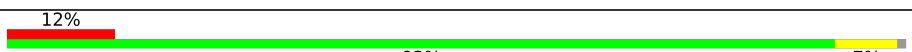
Mol	Chain	Length	Quality of chain
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	
40	2i	128	

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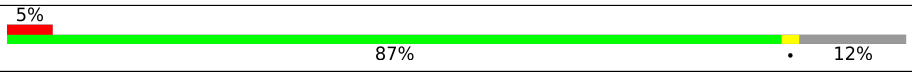
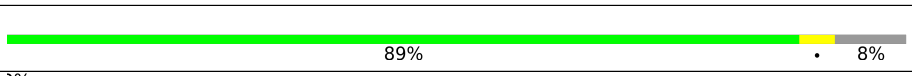
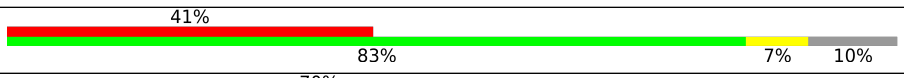
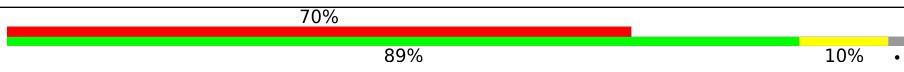
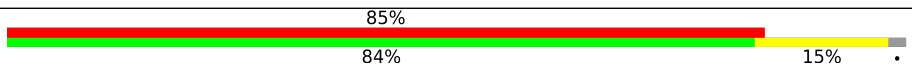
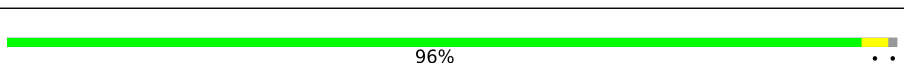
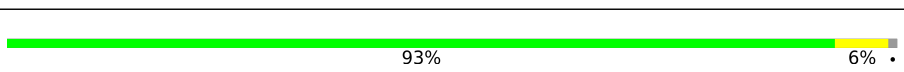
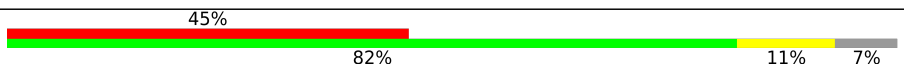
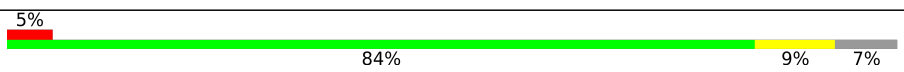
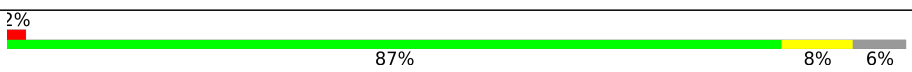
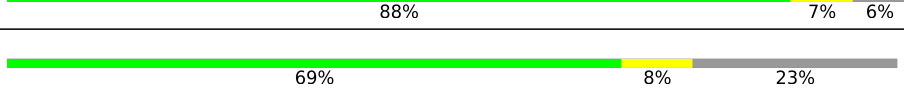
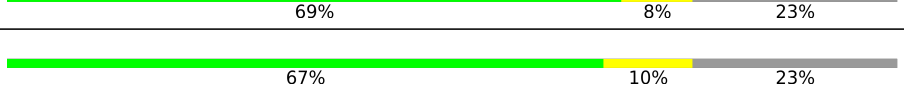
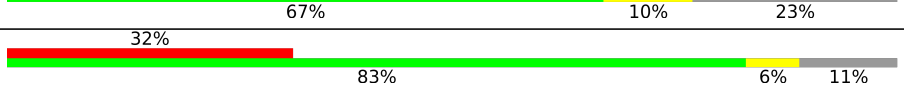
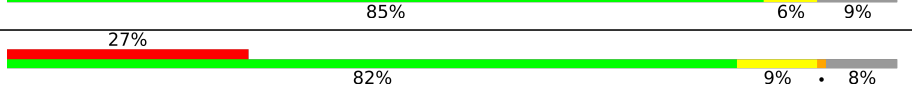
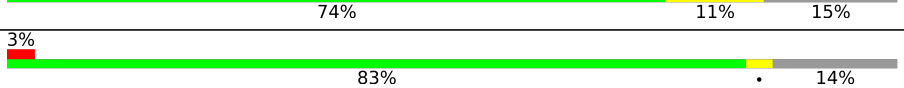
Mol	Chain	Length	Quality of chain
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	
53	1y	113	

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Mol	Chain	Length	Quality of chain
53	2y	113	

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
54	MG	1A	3591	-	-	-	X
54	MG	1A	3646	-	-	-	X
54	MG	1A	3749	-	-	-	X
54	MG	1a	3027	-	-	-	X
54	MG	2A	3211	-	-	-	X
54	MG	2A	3213	-	-	-	X
54	MG	2A	3251	-	-	-	X
54	MG	2A	3289	-	-	-	X
54	MG	2a	3024	-	-	-	X
54	MG	2a	3068	-	-	-	X
54	MG	2a	3161	-	-	-	X

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 297096 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	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- 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
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- 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
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1426	916	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1424	912	259	249	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	173	Total	C	N	O	S	0	0	0
			1324	842	247	234	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	147	Total	C	N	O	S	0	0	0
			1094	699	191	203	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1076	687	186	202	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
			1121	722	208	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			

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 877	C 553	N 175	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			775	498	141	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
			810	520	153	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			810	519	153	132	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	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	77	Total	C	N	O	S	0	0	0
			608	375	129	103	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
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	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
			592	368	119	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
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	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
			459	288	90	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	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- 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
			1842	1175	330	332	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
			1558	979	305	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
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	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
			1133	716	214	199	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
			814	516	144	151	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
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	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
			1098	694	210	192	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
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- 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
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	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
			834	520	156	155	3			

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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	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	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
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	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
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	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 protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total 764	C 478	N 144	O 139	S 3	0	0	0
53	2y	96	Total 749	C 468	N 141	O 137	S 3	0	0	0

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1017	Total 1017	Mg 1017	0	0
54	1B	29	Total 29	Mg 29	0	0
54	1D	17	Total 17	Mg 17	0	0
54	1E	9	Total 9	Mg 9	0	0
54	1F	20	Total 20	Mg 20	0	0
54	1G	4	Total 4	Mg 4	0	0
54	1H	2	Total 2	Mg 2	0	0
54	1N	4	Total 4	Mg 4	0	0
54	1O	1	Total 1	Mg 1	0	0
54	1P	5	Total 5	Mg 5	0	0
54	1Q	5	Total 5	Mg 5	0	0
54	1R	6	Total 6	Mg 6	0	0
54	1T	4	Total 4	Mg 4	0	0
54	1U	9	Total 9	Mg 9	0	0
54	1V	7	Total 7	Mg 7	0	0
54	1W	4	Total 4	Mg 4	0	0
54	1X	2	Total 2	Mg 2	0	0
54	1Y	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1Z	1	Total Mg 1 1	0	0
54	10	7	Total Mg 7 7	0	0
54	11	5	Total Mg 5 5	0	0
54	13	3	Total Mg 3 3	0	0
54	14	1	Total Mg 1 1	0	0
54	15	8	Total Mg 8 8	0	0
54	17	6	Total Mg 6 6	0	0
54	18	2	Total Mg 2 2	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	276	Total Mg 276 276	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	6	Total Mg 6 6	0	0
54	1e	2	Total Mg 2 2	0	0
54	1f	2	Total Mg 2 2	0	0
54	1g	3	Total Mg 3 3	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1k	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	2	Total Mg 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1o	1	Total Mg 1 1	0	0
54	1t	1	Total Mg 1 1	0	0
54	1y	4	Total Mg 4 4	0	0
54	2A	737	Total Mg 737 737	0	0
54	2B	19	Total Mg 19 19	0	0
54	2D	11	Total Mg 11 11	0	0
54	2E	6	Total Mg 6 6	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	3	Total Mg 3 3	0	0
54	2I	1	Total Mg 1 1	0	0
54	2N	1	Total Mg 1 1	0	0
54	2O	2	Total Mg 2 2	0	0
54	2P	4	Total Mg 4 4	0	0
54	2Q	4	Total Mg 4 4	0	0
54	2R	2	Total Mg 2 2	0	0
54	2T	4	Total Mg 4 4	0	0
54	2V	3	Total Mg 3 3	0	0
54	2W	3	Total Mg 3 3	0	0
54	2X	1	Total Mg 1 1	0	0
54	20	2	Total Mg 2 2	0	0
54	21	2	Total Mg 2 2	0	0

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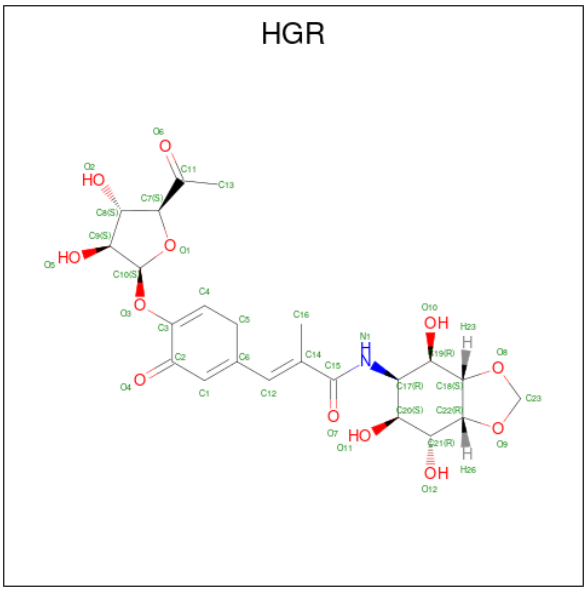
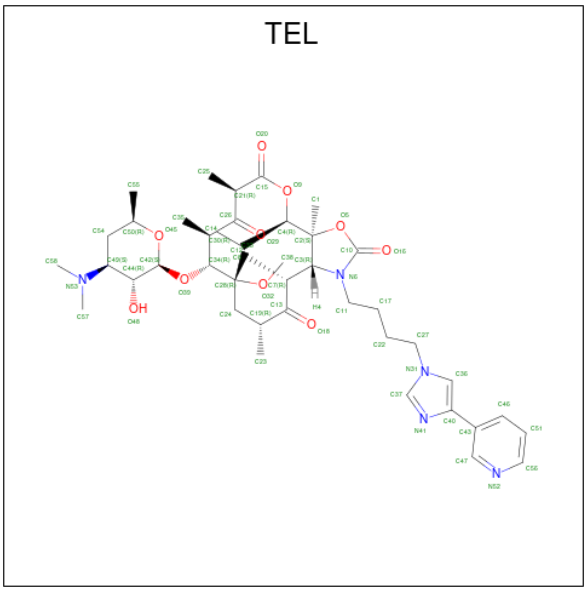
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	23	2	Total Mg 2 2	0	0
54	25	4	Total Mg 4 4	0	0
54	27	1	Total Mg 1 1	0	0
54	28	2	Total Mg 2 2	0	0
54	2a	184	Total Mg 184 184	0	0
54	2e	2	Total Mg 2 2	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2l	1	Total Mg 1 1	0	0
54	2n	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0
54	2y	1	Total Mg 1 1	0	0

- Molecule 55 is Hygromycin A (three-letter code: HGR) (formula: $C_{23}H_{29}NO_{12}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
55	1A	1	Total	C	N	O	0	0
			36	23	1	12		
55	2A	1	Total	C	N	O	0	0
			36	23	1	12		

- Molecule 56 is TELITHROMYCIN (three-letter code: TEL) (formula: $C_{43}H_{65}N_5O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
56	1A	1	Total	C	N	O	0	0
			58	43	5	10		

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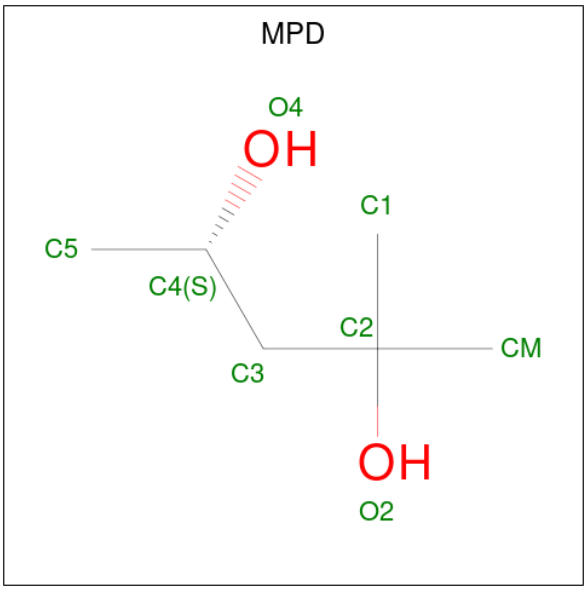
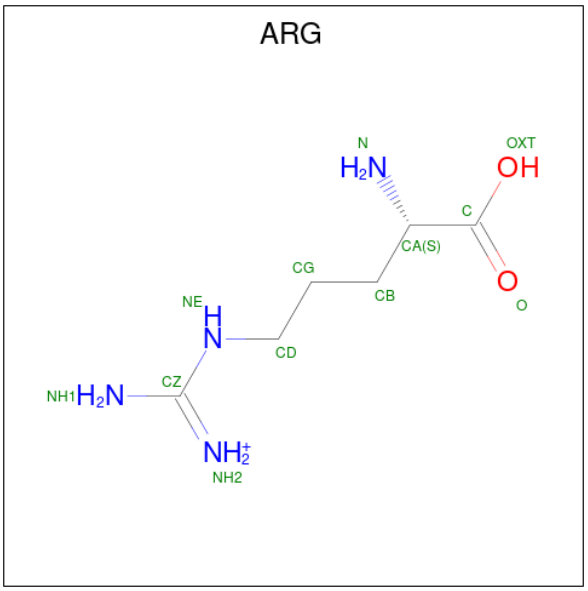
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
56	2A	1	Total	C	N	O	0	0
			58	43	5	10		

- Molecule 57 is (4S)-2-METHYL-2,4-PENTANEDIOL (three-letter code: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
57	1A	1	Total	C	O		0	0
			8	6	2			
57	1T	1	Total	C	O		0	0
			8	6	2			
57	18	1	Total	C	O		0	0
			8	6	2			
57	1a	1	Total	C	O		0	0
			8	6	2			
57	2A	1	Total	C	O		0	0
			8	6	2			
57	2A	1	Total	C	O		0	0
			8	6	2			
57	2B	1	Total	C	O		0	0
			8	6	2			

- Molecule 58 is ARGININE (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	1	Total C N O 12 6 4 2	0	0
58	1F	1	Total C N O 12 6 4 2	0	0

- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1Y	1	Total Zn 1 1	0	0
59	14	1	Total Zn 1 1	0	0
59	15	1	Total Zn 1 1	0	0
59	16	1	Total Zn 1 1	0	0
59	19	1	Total Zn 1 1	0	0
59	1n	1	Total Zn 1 1	0	0
59	2Y	1	Total Zn 1 1	0	0
59	24	1	Total Zn 1 1	0	0
59	25	1	Total Zn 1 1	0	0
59	26	1	Total Zn 1 1	0	0

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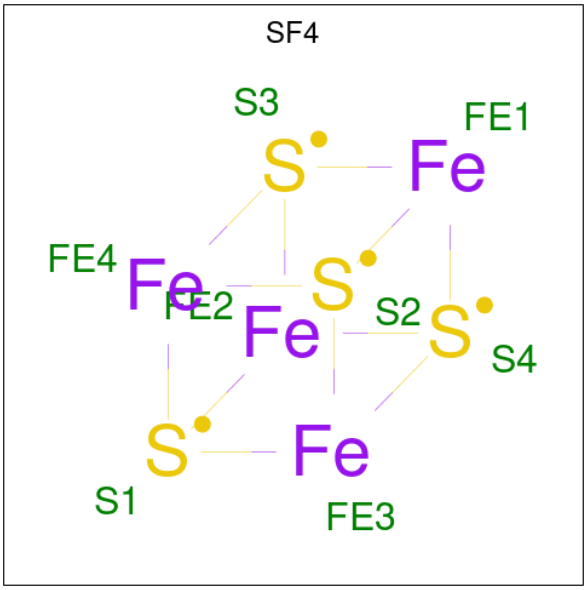
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1d	1	Total Fe S 8 4 4	0	0
60	2d	1	Total Fe S 8 4 4	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	3818	Total O 3818 3818	0	0
61	1B	94	Total O 94 94	0	0
61	1D	110	Total O 110 110	0	0
61	1E	67	Total O 67 67	0	0
61	1F	62	Total O 62 62	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	15	Total O 15 15	0	0
61	1H	17	Total O 17 17	0	0
61	1I	7	Total O 7 7	0	0
61	1N	45	Total O 45 45	0	0
61	1O	24	Total O 24 24	0	0
61	1P	57	Total O 57 57	0	0
61	1Q	36	Total O 36 36	0	0
61	1R	32	Total O 32 32	0	0
61	1S	10	Total O 10 10	0	0
61	1T	35	Total O 35 35	0	0
61	1U	44	Total O 44 44	0	0
61	1V	34	Total O 34 34	0	0
61	1W	22	Total O 22 22	0	0
61	1X	25	Total O 25 25	0	0
61	1Y	13	Total O 13 13	0	0
61	1Z	12	Total O 12 12	0	0
61	10	25	Total O 25 25	0	0
61	11	20	Total O 20 20	0	0
61	12	15	Total O 15 15	0	0
61	13	20	Total O 20 20	0	0
61	14	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	15	25	Total O 25 25	0	0
61	16	16	Total O 16 16	0	0
61	17	15	Total O 15 15	0	0
61	18	24	Total O 24 24	0	0
61	19	2	Total O 2 2	0	0
61	1a	406	Total O 406 406	0	0
61	1d	7	Total O 7 7	0	0
61	1e	5	Total O 5 5	0	0
61	1f	2	Total O 2 2	0	0
61	1h	1	Total O 1 1	0	0
61	1i	1	Total O 1 1	0	0
61	1j	1	Total O 1 1	0	0
61	1k	1	Total O 1 1	0	0
61	1l	4	Total O 4 4	0	0
61	1o	3	Total O 3 3	0	0
61	1p	2	Total O 2 2	0	0
61	1q	2	Total O 2 2	0	0
61	1u	1	Total O 1 1	0	0
61	1y	2	Total O 2 2	0	0
61	2A	2123	Total O 2123 2123	0	0
61	2B	44	Total O 44 44	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2D	53	Total O 53 53	0	0
61	2E	23	Total O 23 23	0	0
61	2F	18	Total O 18 18	0	0
61	2G	3	Total O 3 3	0	0
61	2H	2	Total O 2 2	0	0
61	2I	2	Total O 2 2	0	0
61	2N	3	Total O 3 3	0	0
61	2O	18	Total O 18 18	0	0
61	2P	21	Total O 21 21	0	0
61	2Q	17	Total O 17 17	0	0
61	2R	18	Total O 18 18	0	0
61	2S	2	Total O 2 2	0	0
61	2T	8	Total O 8 8	0	0
61	2U	13	Total O 13 13	0	0
61	2V	6	Total O 6 6	0	0
61	2W	18	Total O 18 18	0	0
61	2X	8	Total O 8 8	0	0
61	2Y	4	Total O 4 4	0	0
61	2Z	8	Total O 8 8	0	0
61	20	11	Total O 11 11	0	0
61	21	16	Total O 16 16	0	0

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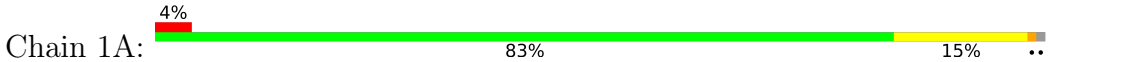
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	22	1	Total O 1 1	0	0
61	23	3	Total O 3 3	0	0
61	24	1	Total O 1 1	0	0
61	25	10	Total O 10 10	0	0
61	26	5	Total O 5 5	0	0
61	27	6	Total O 6 6	0	0
61	28	10	Total O 10 10	0	0
61	29	1	Total O 1 1	0	0
61	2a	264	Total O 264 264	0	0
61	2d	2	Total O 2 2	0	0
61	2e	1	Total O 1 1	0	0
61	2f	3	Total O 3 3	0	0
61	2j	1	Total O 1 1	0	0
61	2l	2	Total O 2 2	0	0
61	2n	1	Total O 1 1	0	0
61	2o	2	Total O 2 2	0	0
61	2p	1	Total O 1 1	0	0
61	2q	1	Total O 1 1	0	0
61	2r	3	Total O 3 3	0	0
61	2t	1	Total O 1 1	0	0
61	2y	1	Total O 1 1	0	0

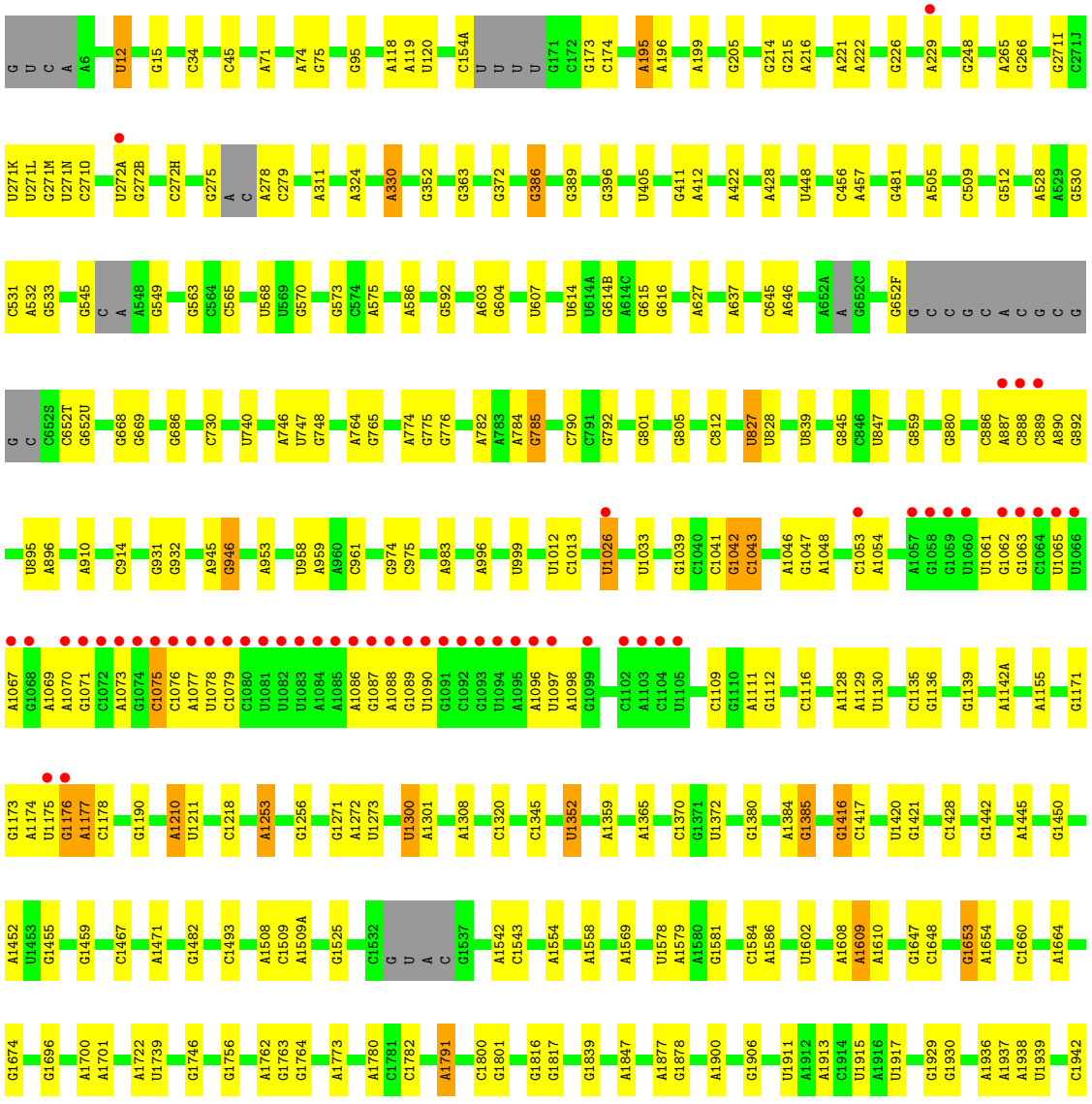
3 Residue-property plots (i)

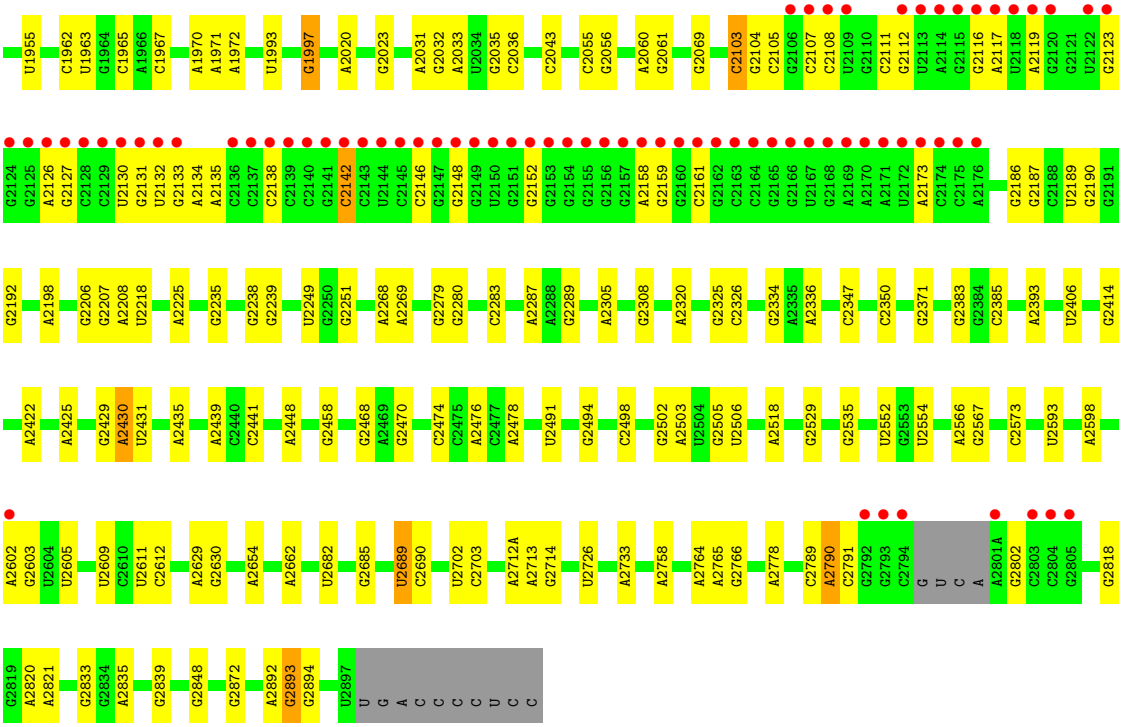
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

- Molecule 1: 23S Ribosomal RNA

Chain 1A:

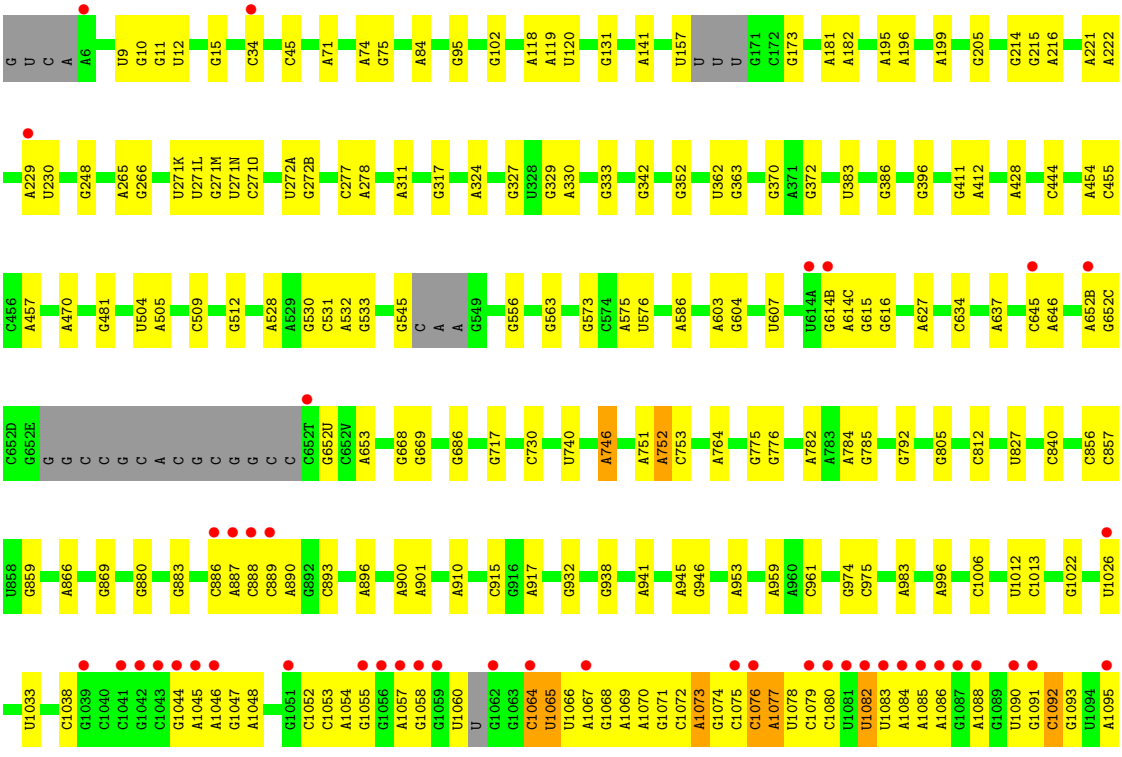


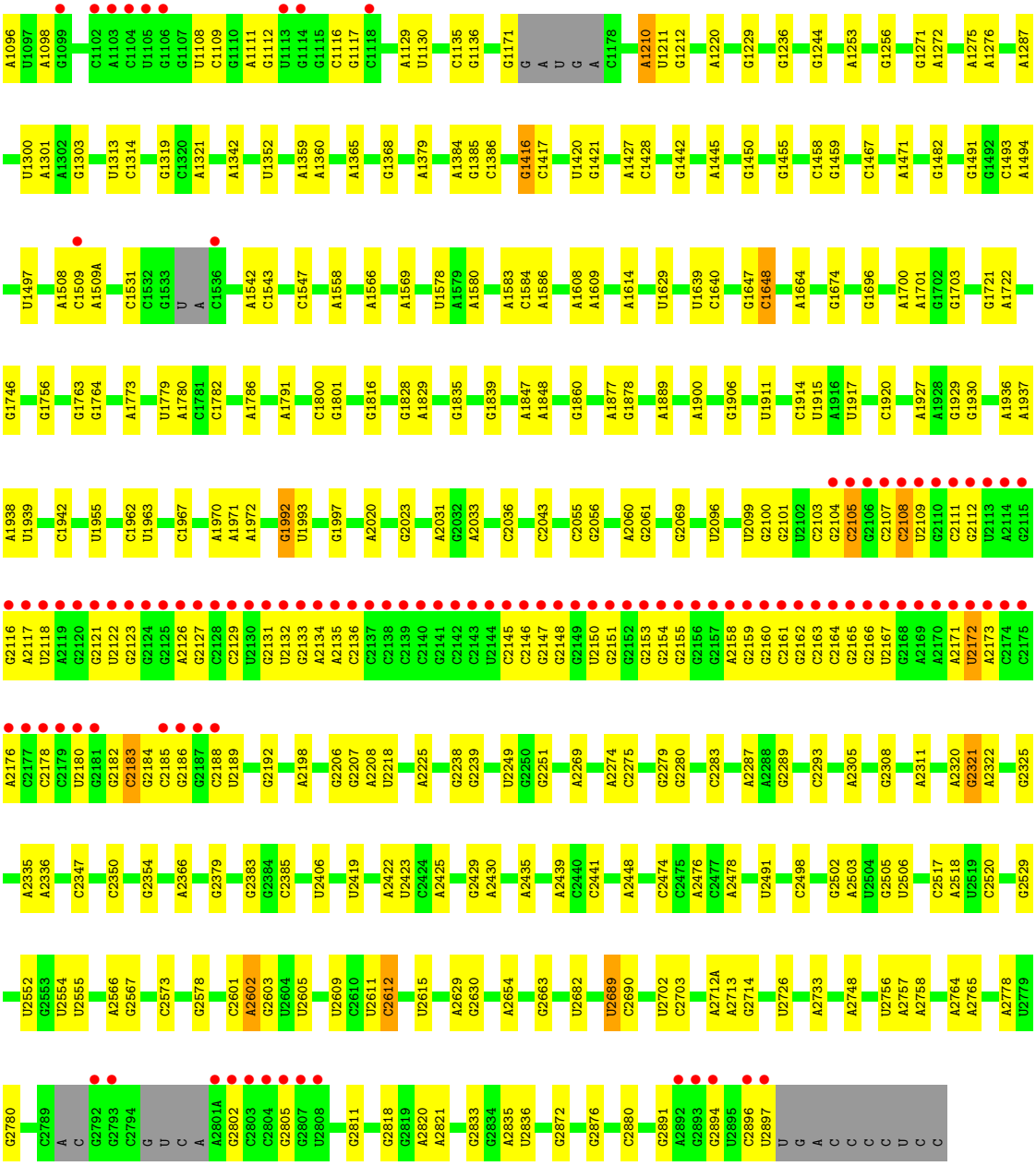




• Molecule 1: 23S Ribosomal RNA

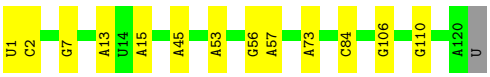
Chain 2A:





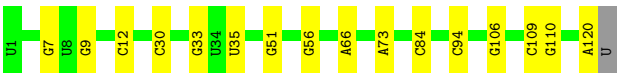
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



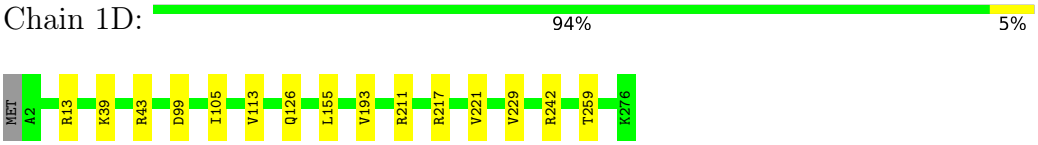
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



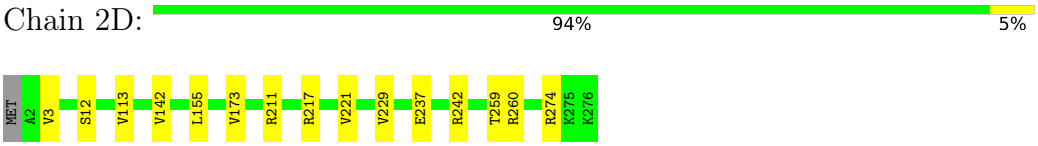
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



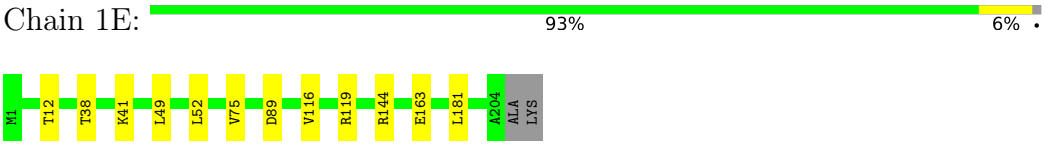
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



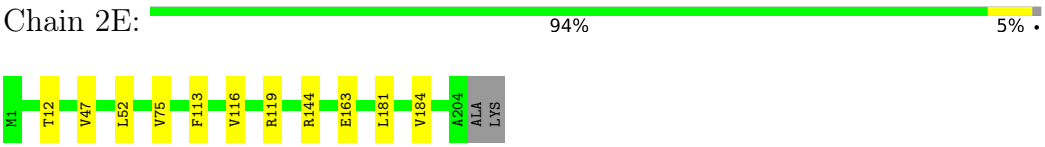
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



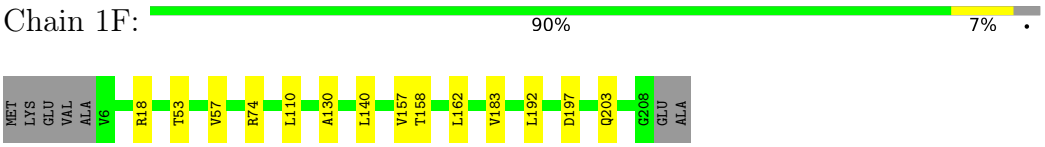
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



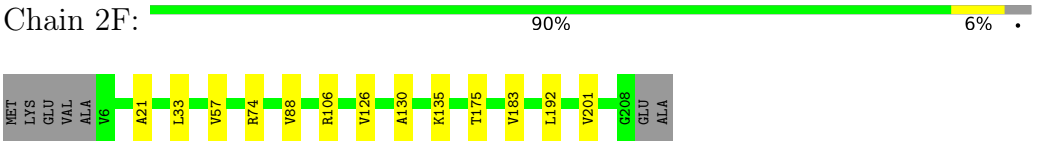
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



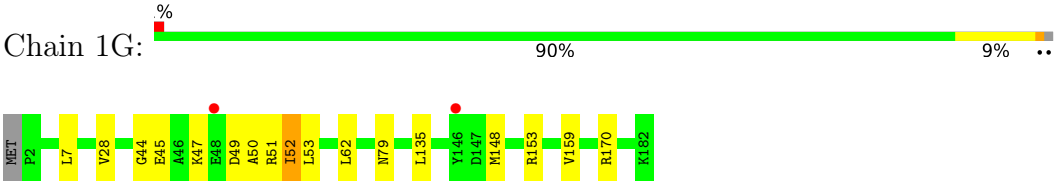
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



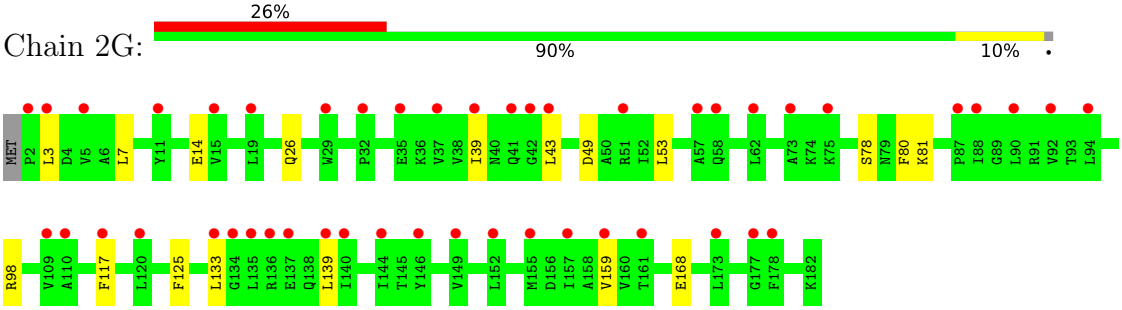
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



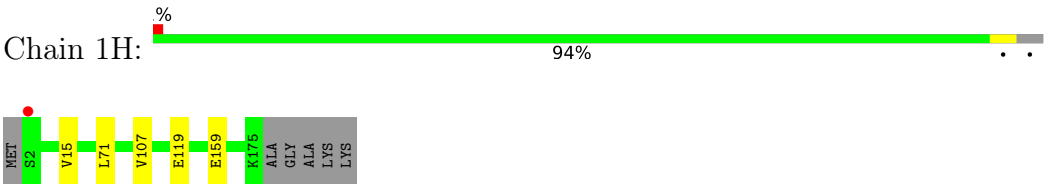
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



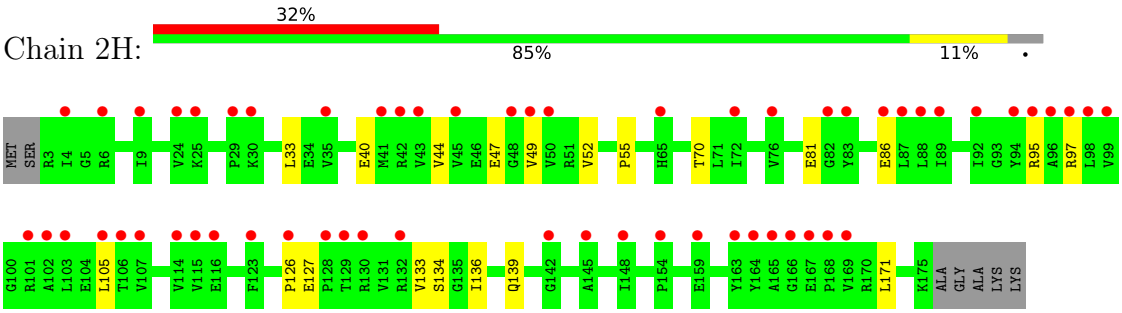
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



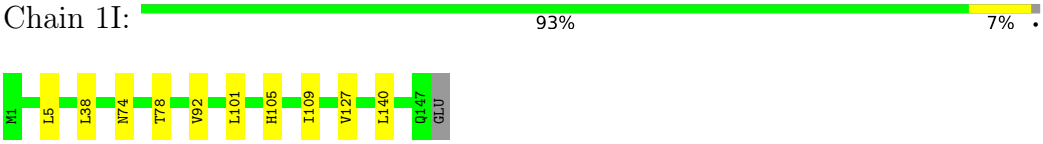
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



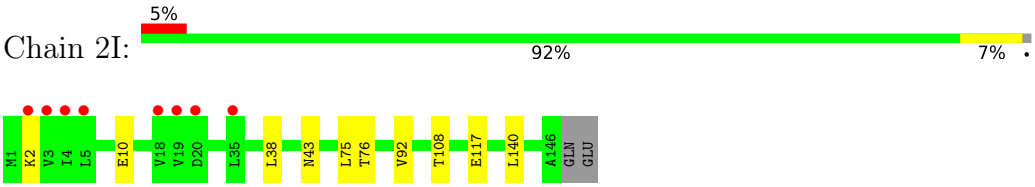
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



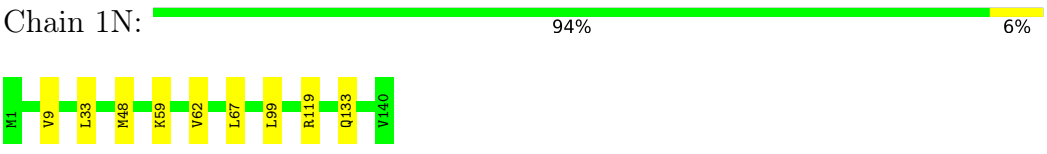
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



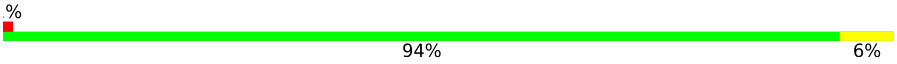
• Molecule 9: 50S ribosomal protein L13

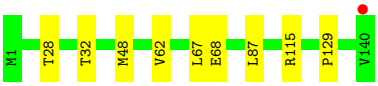
Chain 1N:



• Molecule 9: 50S ribosomal protein L13

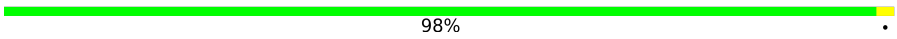
Chain 2N:





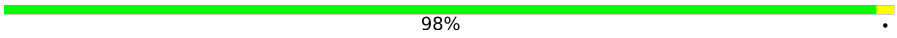
• Molecule 10: 50S ribosomal protein L14

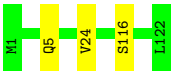
Chain 1O:



• Molecule 10: 50S ribosomal protein L14

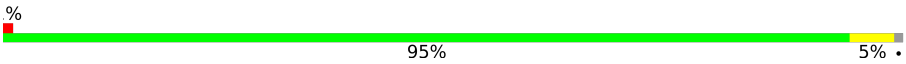
Chain 2O:

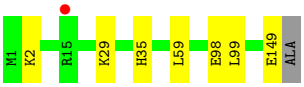




• Molecule 11: 50S ribosomal protein L15

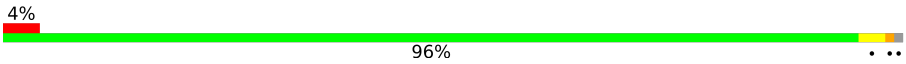
Chain 1P:

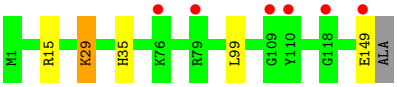




• Molecule 11: 50S ribosomal protein L15

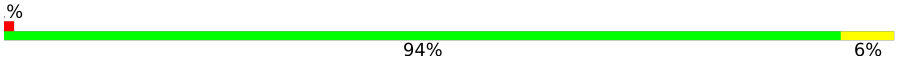
Chain 2P:

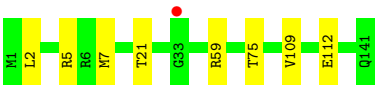




• Molecule 12: 50S ribosomal protein L16

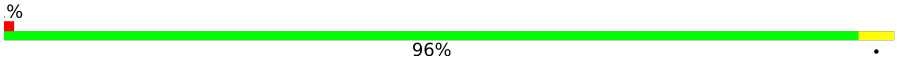
Chain 1Q:

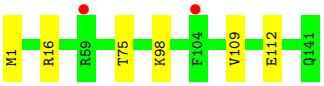




• Molecule 12: 50S ribosomal protein L16

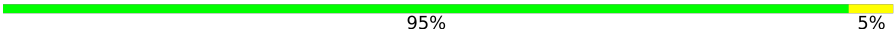
Chain 2Q:





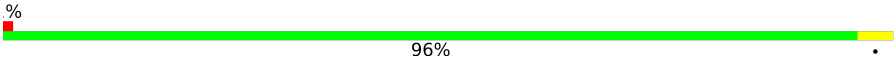
• Molecule 13: 50S ribosomal protein L17

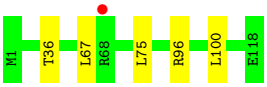
Chain 1R:



• Molecule 13: 50S ribosomal protein L17

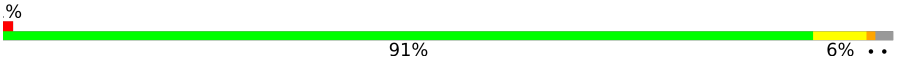
Chain 2R:

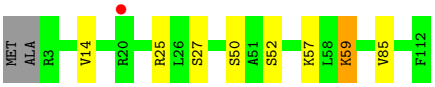




• Molecule 14: 50S ribosomal protein L18

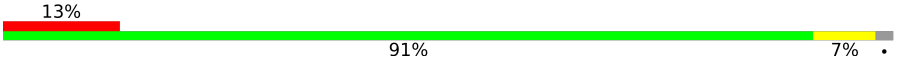
Chain 1S:

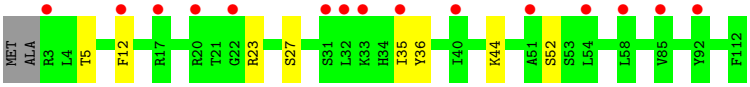




• Molecule 14: 50S ribosomal protein L18

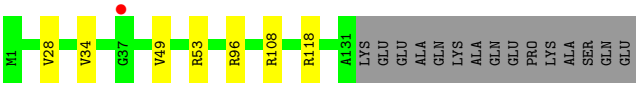
Chain 2S:





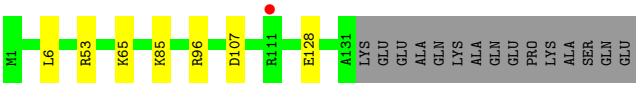
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



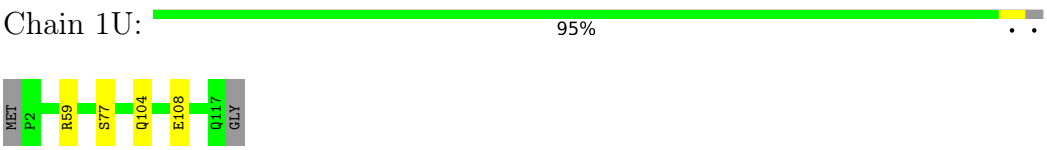
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



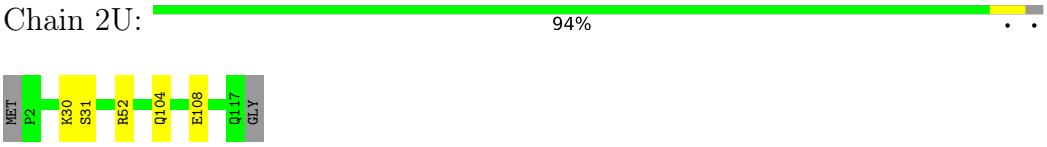
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



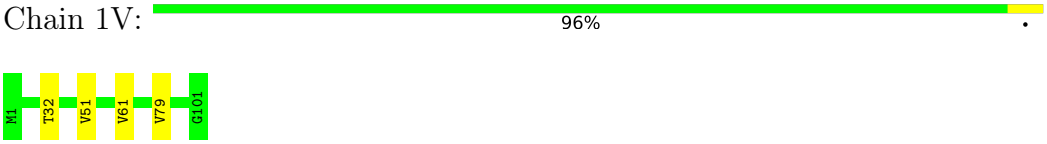
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



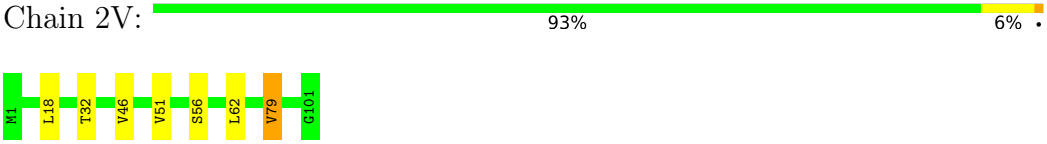
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



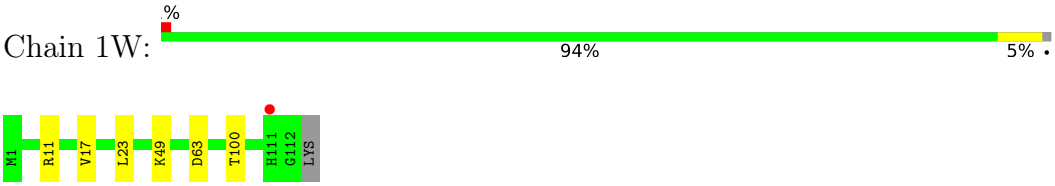
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



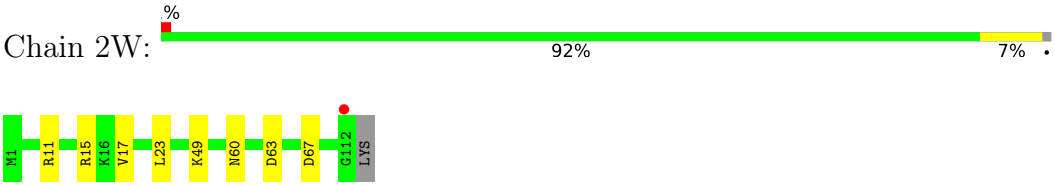
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



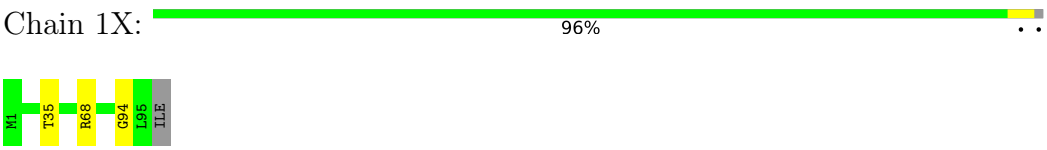
• Molecule 18: 50S ribosomal protein L22

Chain 2W:



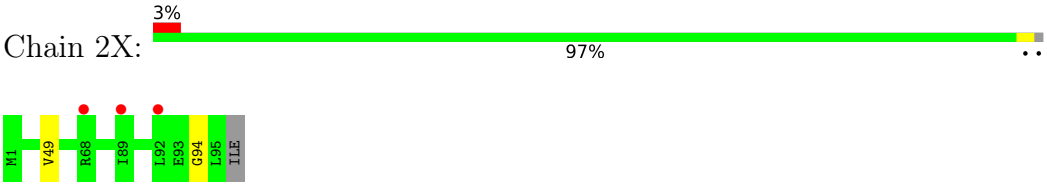
• Molecule 19: 50S ribosomal protein L23

Chain 1X:



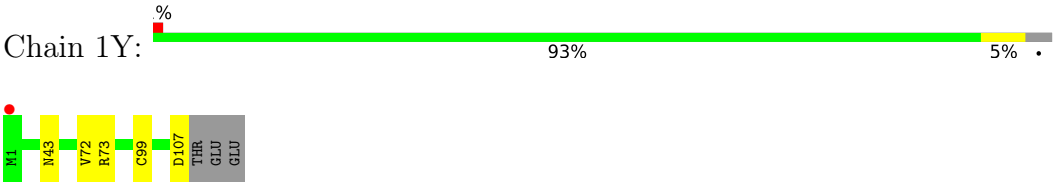
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



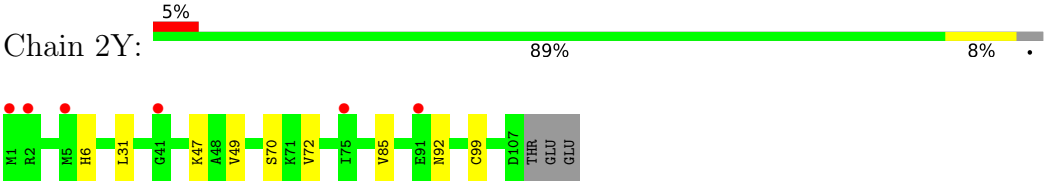
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



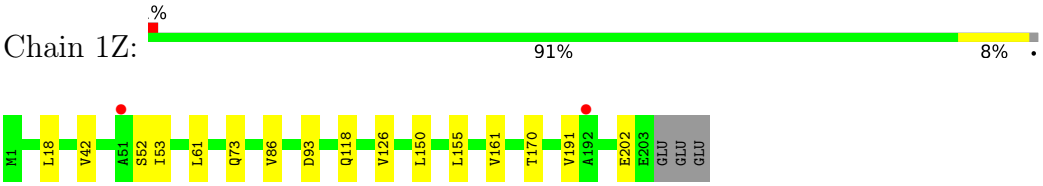
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



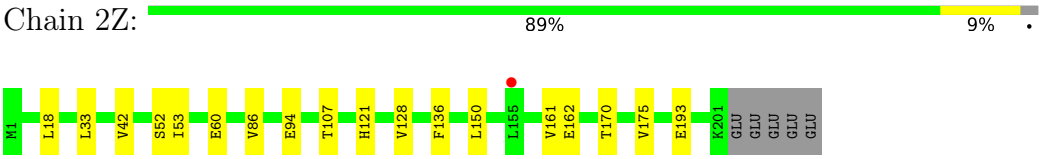
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



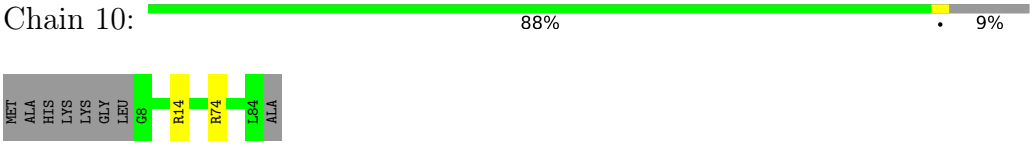
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



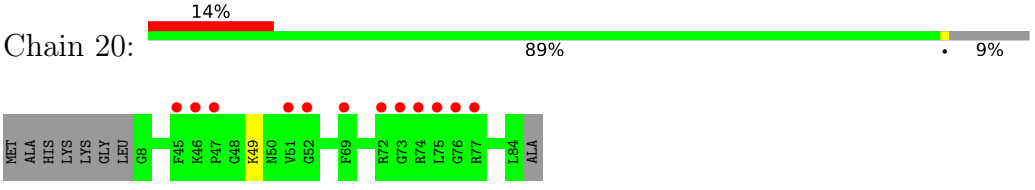
• Molecule 22: 50S ribosomal protein L27

Chain 10:



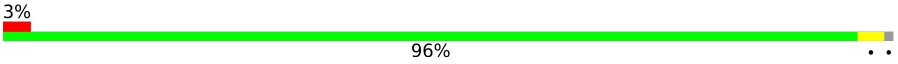
• Molecule 22: 50S ribosomal protein L27

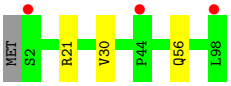
Chain 20:



• Molecule 23: 50S ribosomal protein L28

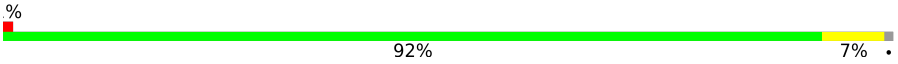
Chain 11:

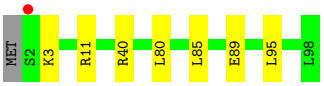




• Molecule 23: 50S ribosomal protein L28

Chain 21:



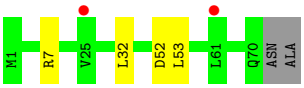


• Molecule 24: 50S ribosomal protein L29

Chain 12:

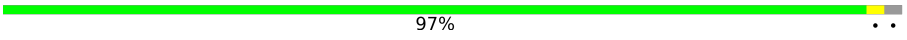
• Molecule 24: 50S ribosomal protein L29

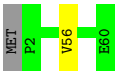
Chain 22:



• Molecule 25: 50S ribosomal protein L30

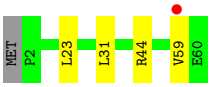
Chain 13:





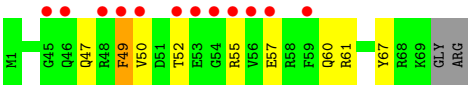
• Molecule 25: 50S ribosomal protein L30

Chain 23:



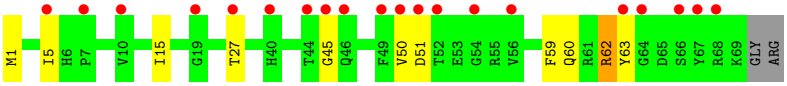
• Molecule 26: 50S ribosomal protein L31

Chain 14:



• Molecule 26: 50S ribosomal protein L31

Chain 24:

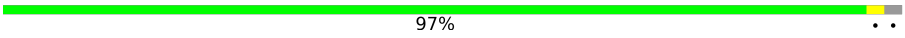


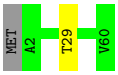
• Molecule 27: 50S ribosomal protein L32

Chain 15:

• Molecule 27: 50S ribosomal protein L32

Chain 25:



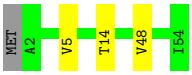


• Molecule 28: 50S ribosomal protein L33

Chain 16:

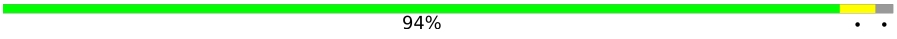
• Molecule 28: 50S ribosomal protein L33

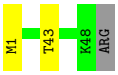
Chain 26:



• Molecule 29: 50S ribosomal protein L34

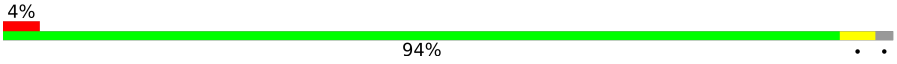
Chain 17:

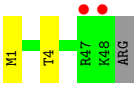




• Molecule 29: 50S ribosomal protein L34

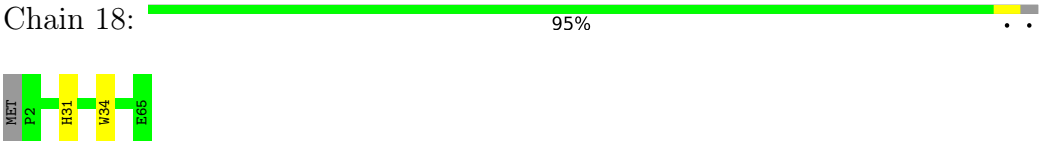
Chain 27:





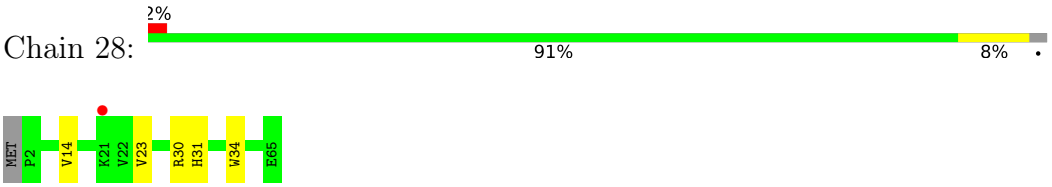
• Molecule 30: 50S ribosomal protein L35

Chain 18:



• Molecule 30: 50S ribosomal protein L35

Chain 28:



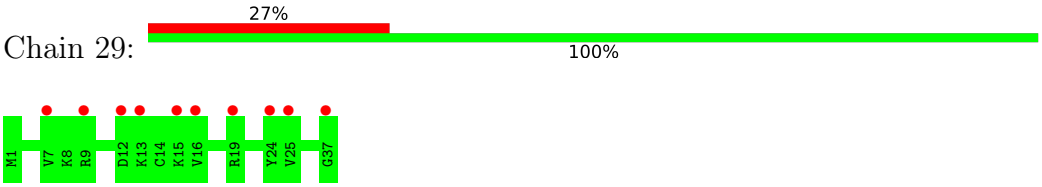
• Molecule 31: 50S ribosomal protein L36

Chain 19:

There are no outlier residues recorded for this chain.

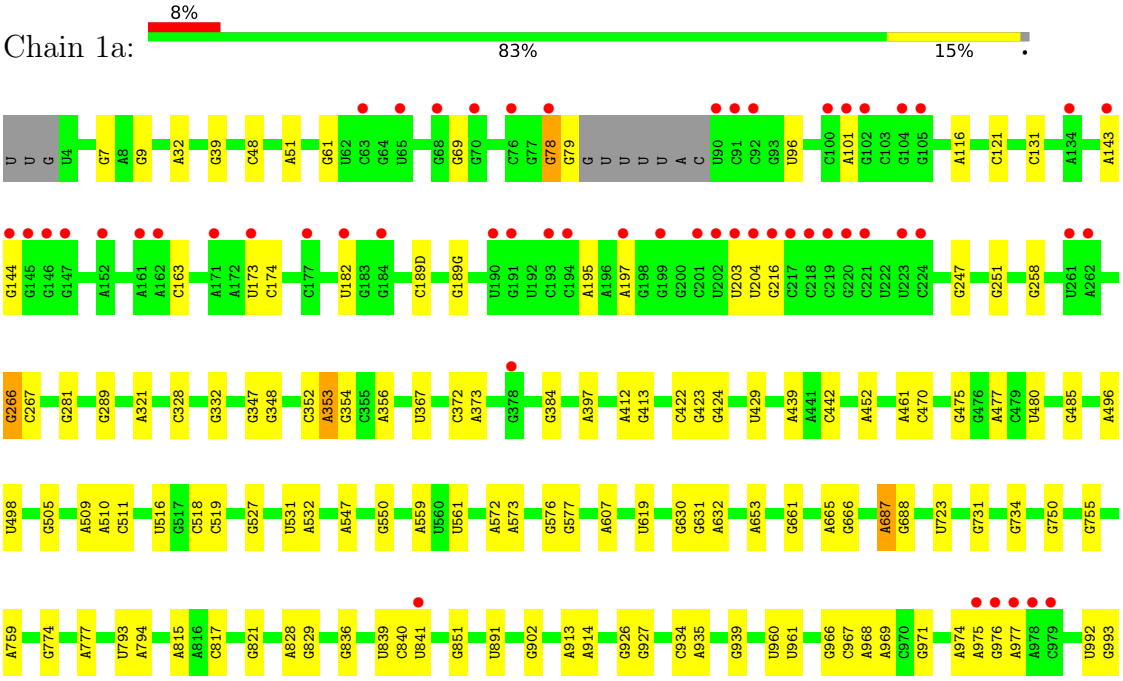
• Molecule 31: 50S ribosomal protein L36

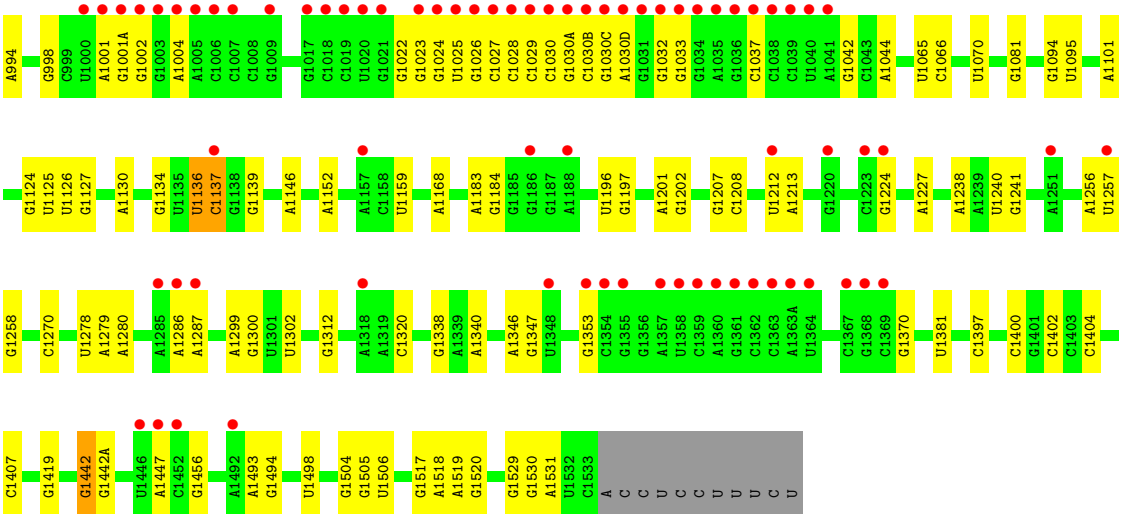
Chain 29:



• Molecule 32: 16S Ribosomal RNA

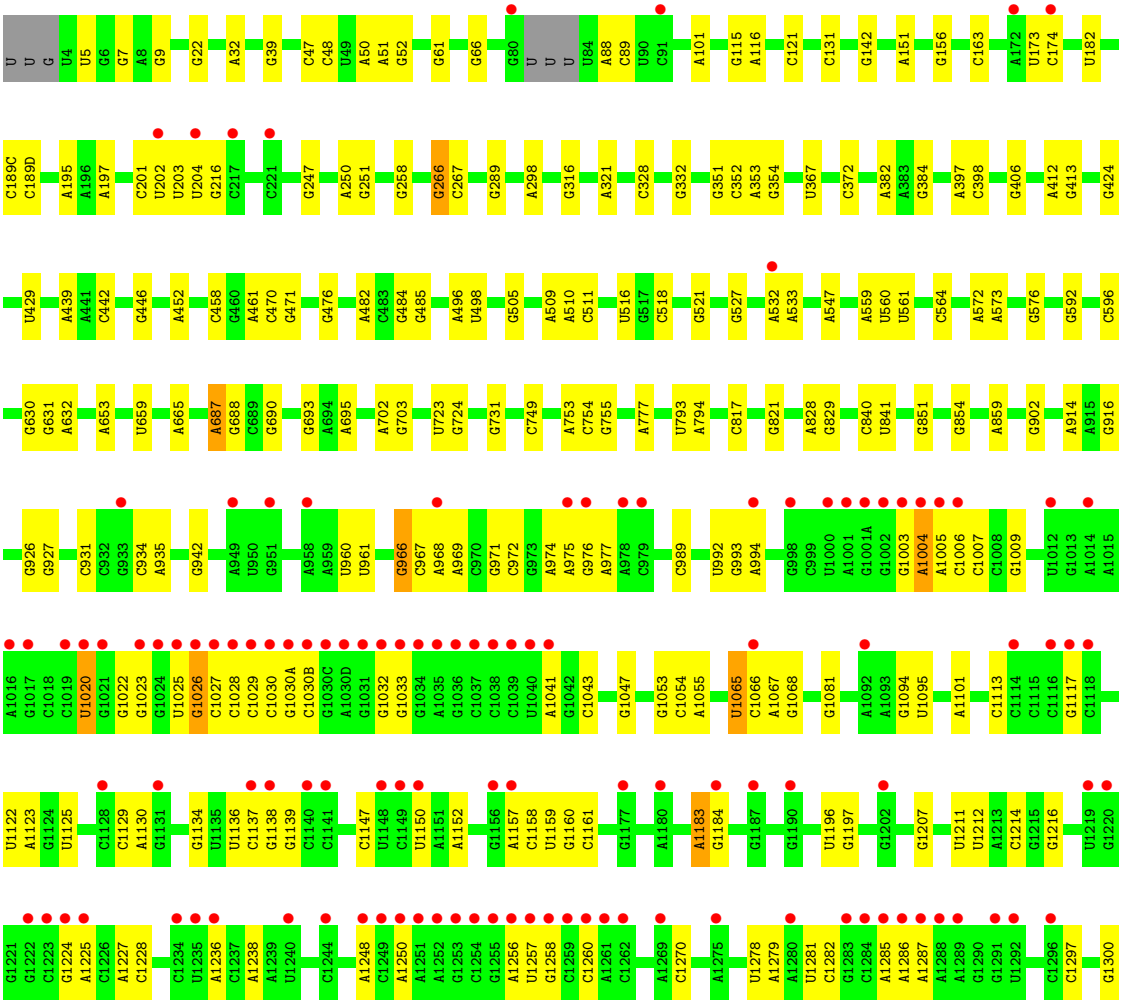
Chain 1a:

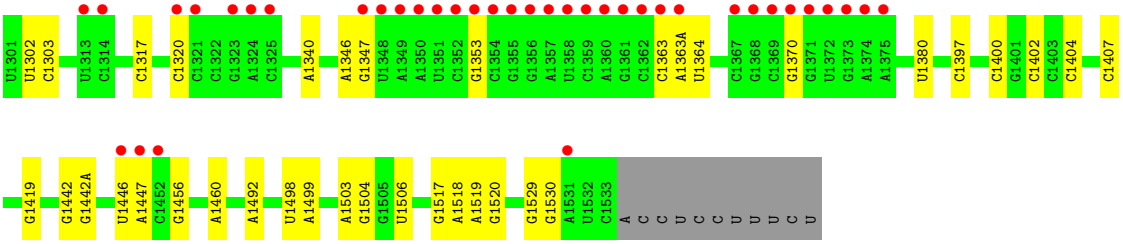




• Molecule 32: 16S Ribosomal RNA

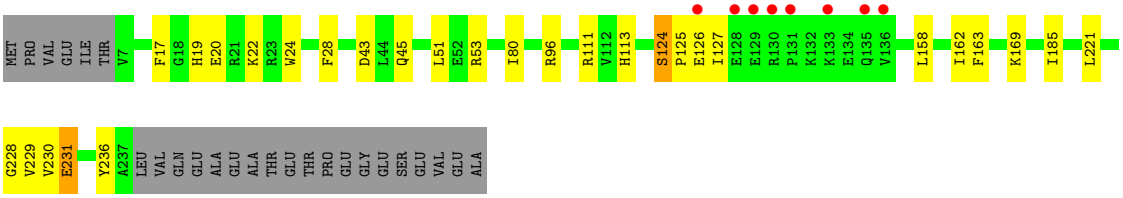
Chain 2a:





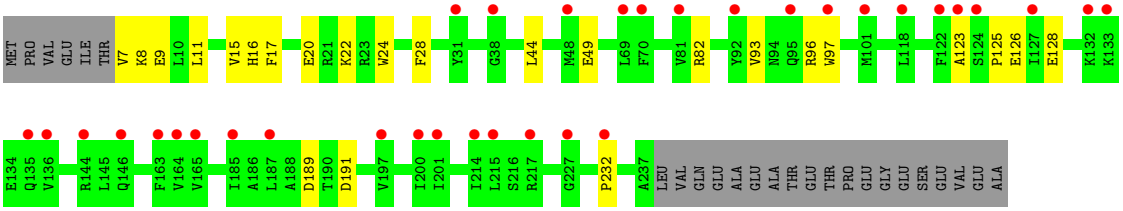
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



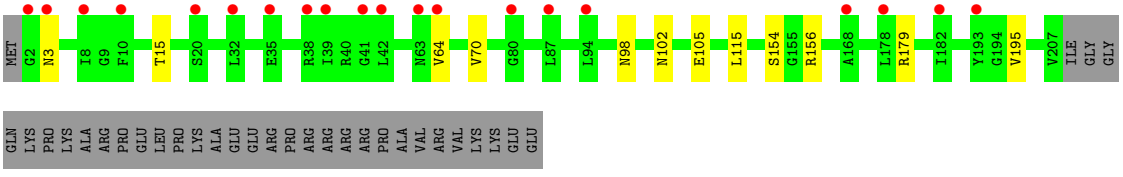
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



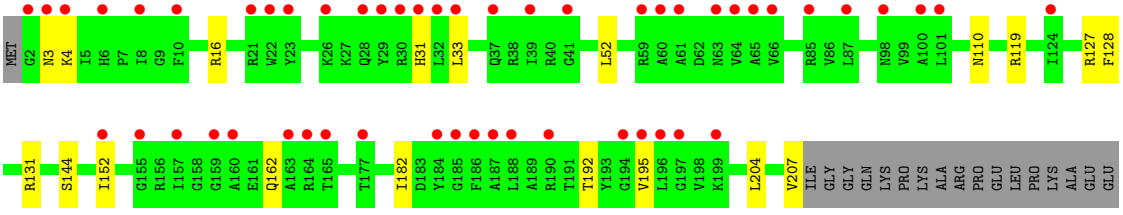
• Molecule 34: 30S ribosomal protein S3

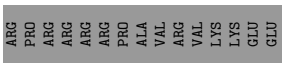
Chain 1c:



• Molecule 34: 30S ribosomal protein S3

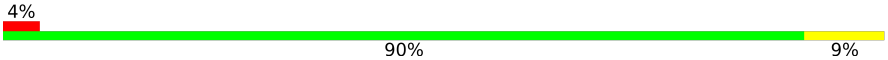
Chain 2c:

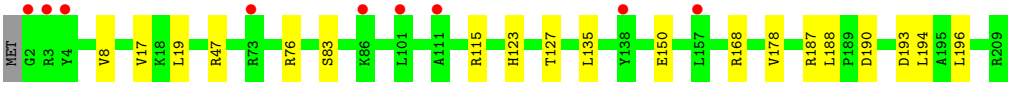




• Molecule 35: 30S ribosomal protein S4

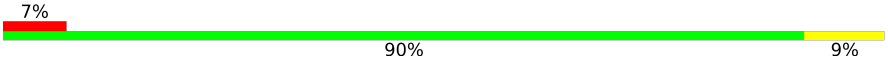
Chain 1d:





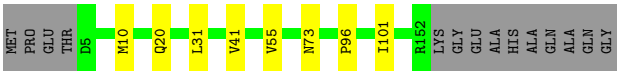
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



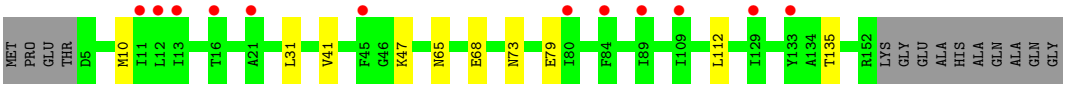
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



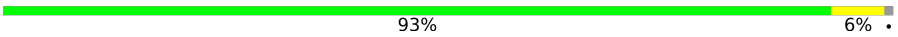
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



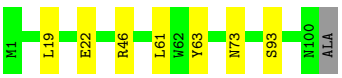
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



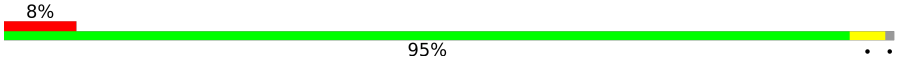
• Molecule 37: 30S ribosomal protein S6

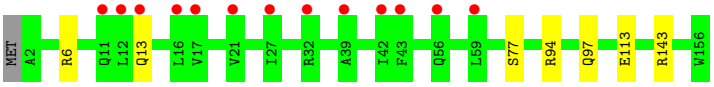
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

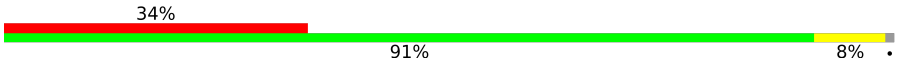
Chain 1g:

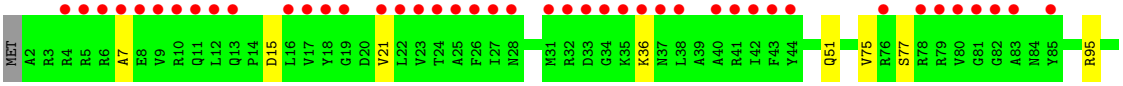


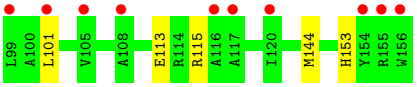


• Molecule 38: 30S ribosomal protein S7

Chain 2g:

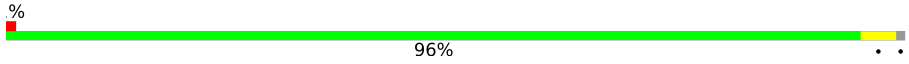


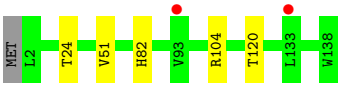




• Molecule 39: 30S ribosomal protein S8

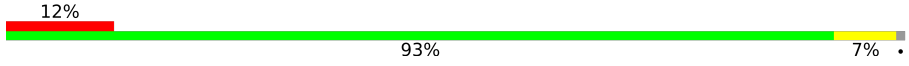
Chain 1h:

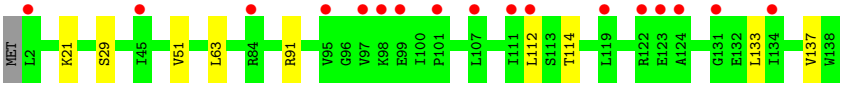




• Molecule 39: 30S ribosomal protein S8

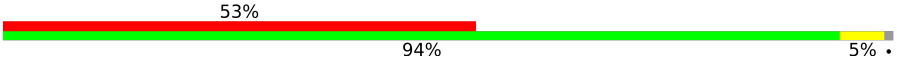
Chain 2h:

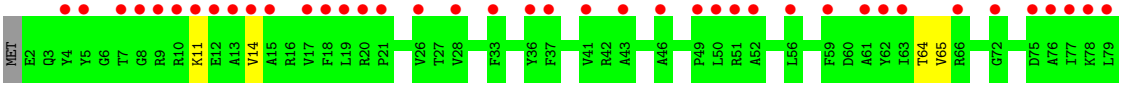


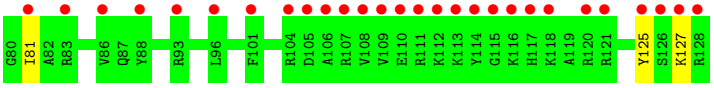


• Molecule 40: 30S ribosomal protein S9

Chain 1i:

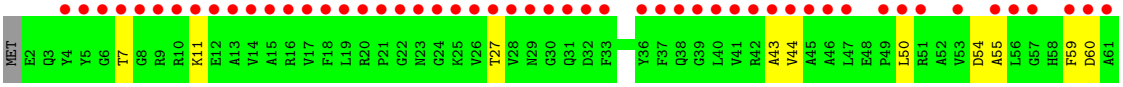


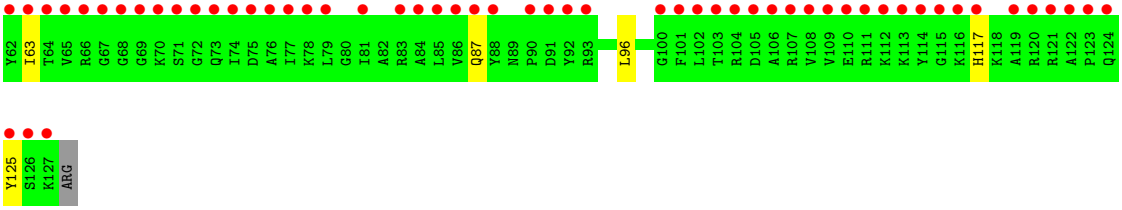




• Molecule 40: 30S ribosomal protein S9

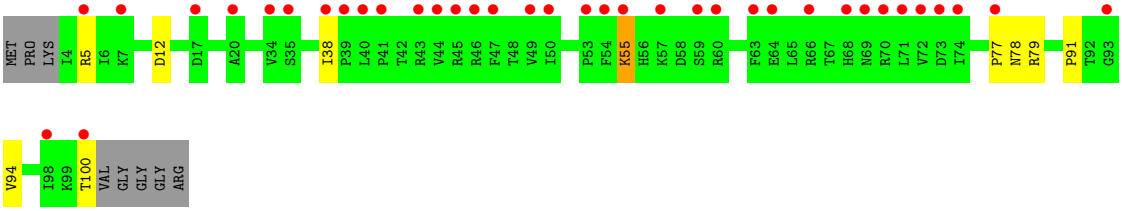
Chain 2i:





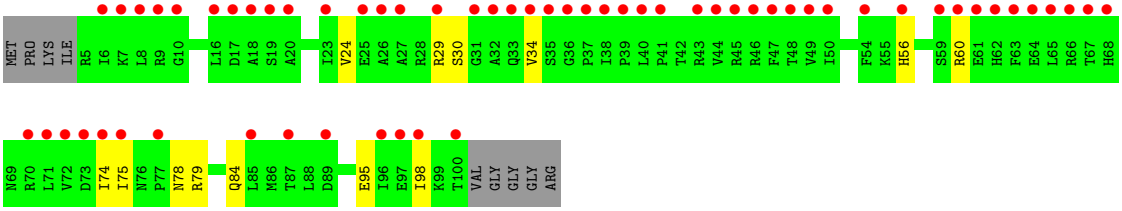
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



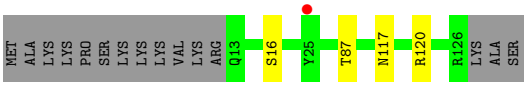
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



• Molecule 42: 30S ribosomal protein S11

Chain 1k:



• Molecule 42: 30S ribosomal protein S11

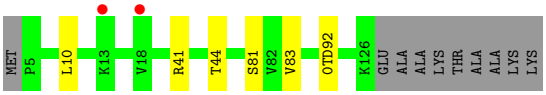
Chain 2k:

• Molecule 43: 30S ribosomal protein S12

Chain 1l:

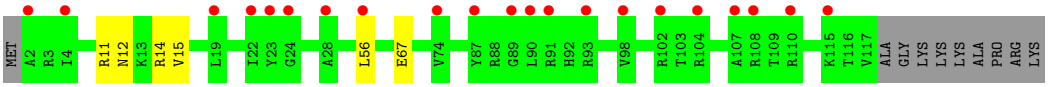
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



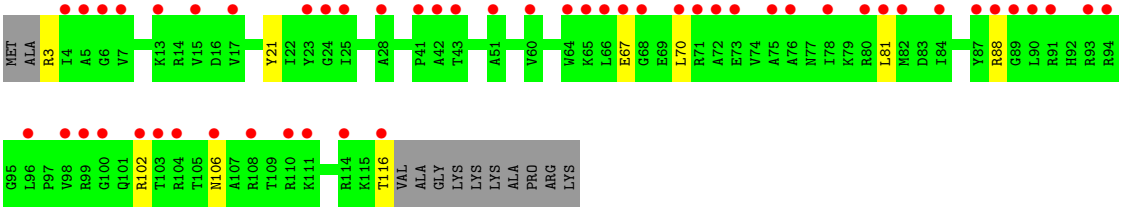
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



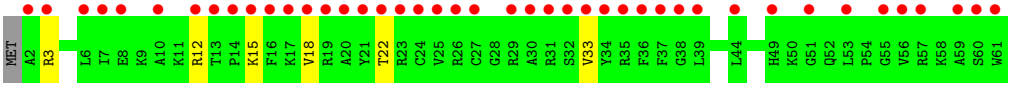
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



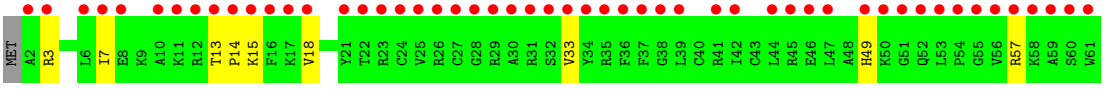
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



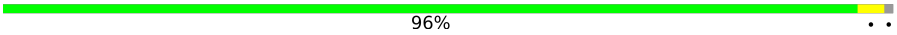
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



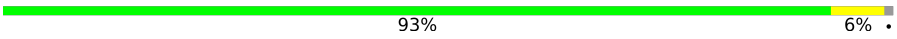
• Molecule 46: 30S ribosomal protein S15

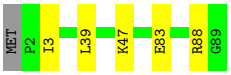
Chain 1o:



• Molecule 46: 30S ribosomal protein S15

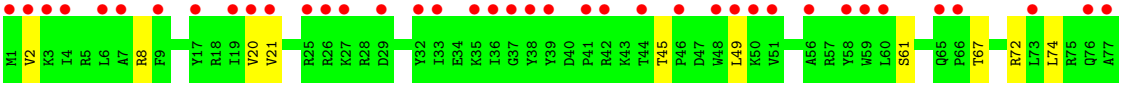
Chain 2o:

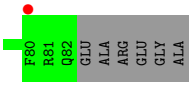




• Molecule 47: 30S ribosomal protein S16

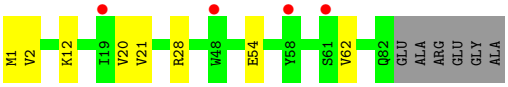
Chain 1p:





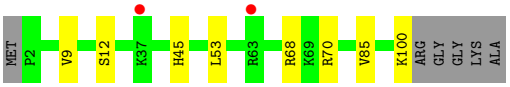
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



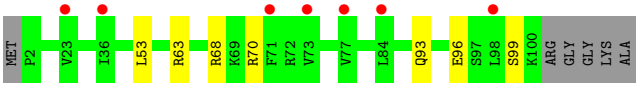
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



• Molecule 48: 30S ribosomal protein S17

Chain 2q:

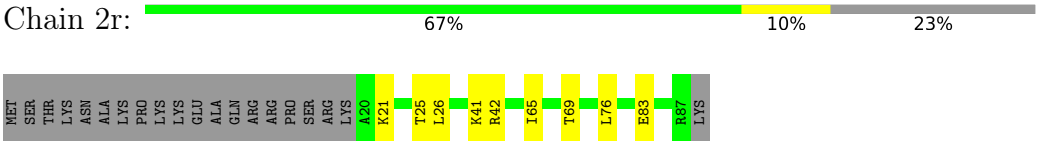


• Molecule 49: 30S ribosomal protein S18

Chain 1r:

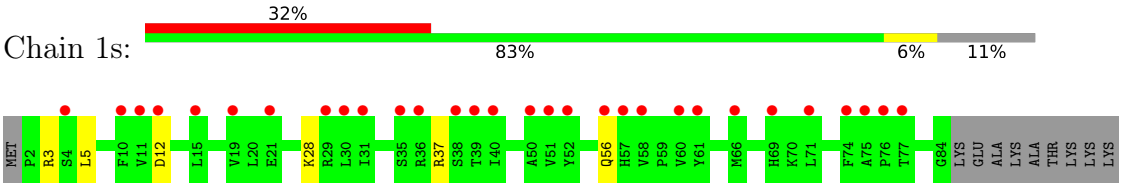
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



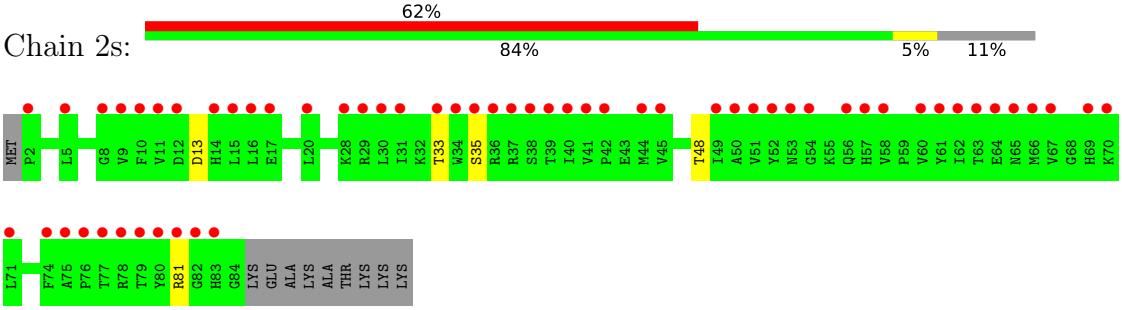
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



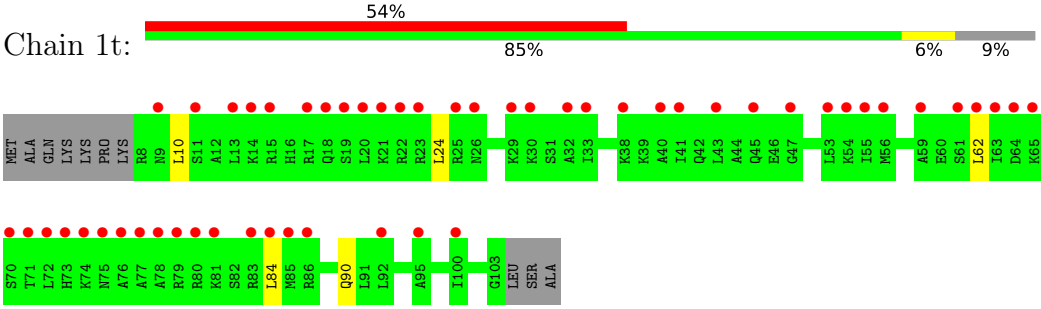
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



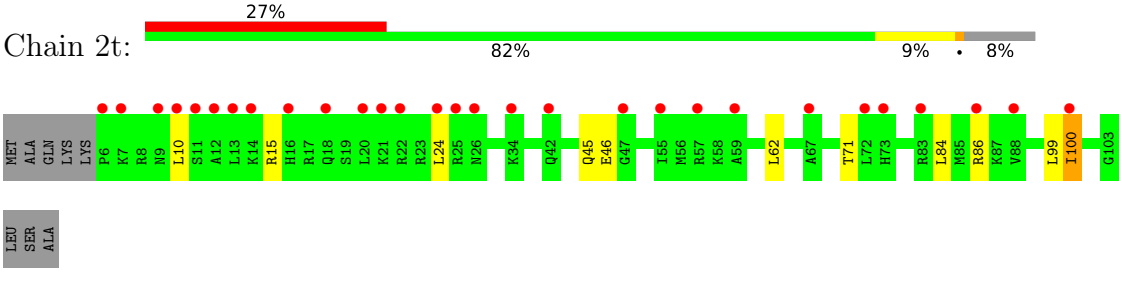
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



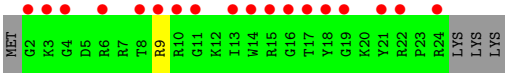
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



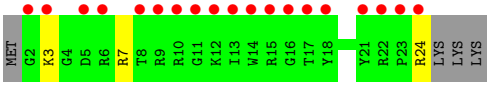
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



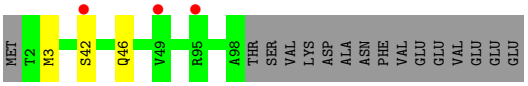
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



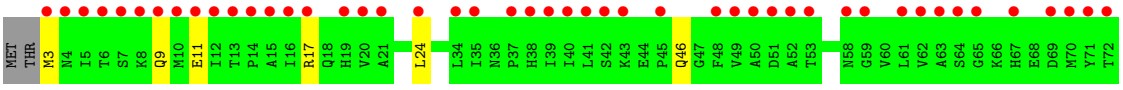
• Molecule 53: Ribosome-associated inhibitor A

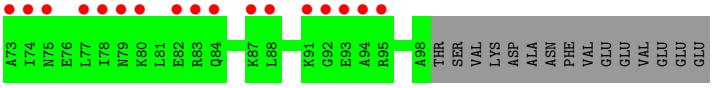
Chain 1y:



• Molecule 53: Ribosome-associated inhibitor A

Chain 2y:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.12Å 449.23Å 619.30Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	151.99 – 2.60 151.99 – 2.60	Depositor EDS
% Data completeness (in resolution range)	100.0 (151.99-2.60) 100.0 (151.99-2.60)	Depositor EDS
R_{merge}	0.24	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.26 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.201 , 0.245 0.201 , 0.245	Depositor DCC
R_{free} test set	88487 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	50.4	Xtriage
Anisotropy	0.251	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 54.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	297096	wwPDB-VP
Average B, all atoms (Å^2)	54.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.50% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: M2G, 5MC, HGR, 2MA, MG, SF4, OMC, 4OC, 0TD, ZN, 5MU, MPD, MA6, G7M, 2MG, UR3, PSU, OMG, 2MU, TEL

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	0.52	2/69030 (0.0%)	0.98	77/107750 (0.1%)
1	2A	0.43	2/68902 (0.0%)	0.90	67/107548 (0.1%)
2	1B	0.42	0/2876	0.91	3/4486 (0.1%)
2	2B	0.36	0/2878	0.83	0/4490
3	1D	0.36	0/2181	0.58	0/2940
3	2D	0.32	0/2186	0.54	0/2944
4	1E	0.34	0/1592	0.55	0/2149
4	2E	0.32	0/1592	0.52	0/2149
5	1F	0.35	0/1619	0.54	0/2193
5	2F	0.30	0/1615	0.50	0/2188
6	1G	0.30	0/1451	0.47	0/1961
6	2G	0.30	0/1449	0.46	0/1957
7	1H	0.32	0/1356	0.50	0/1834
7	2H	0.29	0/1350	0.45	0/1826
8	1I	0.28	0/1109	0.49	0/1512
8	2I	0.28	0/1091	0.49	0/1490
9	1N	0.35	0/1148	0.54	0/1547
9	2N	0.29	0/1144	0.46	0/1543
10	1O	0.37	0/943	0.53	0/1269
10	2O	0.34	0/943	0.54	0/1269
11	1P	0.34	0/1152	0.57	0/1533
11	2P	0.30	0/1152	0.52	0/1533
12	1Q	0.36	0/1143	0.52	0/1527
12	2Q	0.30	0/1143	0.47	0/1527
13	1R	0.34	0/982	0.54	0/1312
13	2R	0.30	0/982	0.52	0/1312
14	1S	0.31	0/887	0.52	0/1180
14	2S	0.30	0/880	0.48	0/1172
15	1T	0.35	0/1105	0.54	0/1477
15	2T	0.32	0/1097	0.50	0/1468
16	1U	0.36	0/977	0.53	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.30	0/977	0.43	0/1301
17	1V	0.33	0/786	0.53	0/1053
17	2V	0.31	0/782	0.53	0/1049
18	1W	0.34	0/897	0.50	0/1205
18	2W	0.32	0/897	0.49	0/1205
19	1X	0.38	0/764	0.55	0/1025
19	2X	0.31	0/764	0.49	0/1025
20	1Y	0.36	0/823	0.54	0/1099
20	2Y	0.31	0/823	0.51	0/1100
21	1Z	0.31	0/1620	0.49	0/2200
21	2Z	0.29	0/1590	0.47	0/2162
22	10	0.36	0/616	0.54	0/821
22	20	0.31	0/616	0.49	0/821
23	11	0.32	0/761	0.54	0/1013
23	21	0.32	0/766	0.53	0/1018
24	12	0.30	0/590	0.50	0/781
24	22	0.28	0/594	0.44	0/785
25	13	0.33	0/474	0.48	0/635
25	23	0.28	0/469	0.48	0/630
26	14	0.31	0/559	0.55	0/754
26	24	0.39	0/549	0.55	0/741
27	15	0.37	0/473	0.60	0/639
27	25	0.33	0/469	0.53	0/635
28	16	0.32	0/460	0.56	0/613
28	26	0.29	0/456	0.48	0/608
29	17	0.38	0/426	0.58	0/561
29	27	0.30	0/426	0.52	0/561
30	18	0.37	0/525	0.55	0/691
30	28	0.31	0/525	0.47	0/691
31	19	0.36	0/310	0.58	0/407
31	29	0.29	0/310	0.50	0/407
32	1a	0.37	0/35795	0.86	11/55864 (0.0%)
32	2a	0.37	0/35890	0.87	29/56012 (0.1%)
33	1b	0.31	0/1876	0.48	0/2533
33	2b	0.31	0/1860	0.52	1/2518 (0.0%)
34	1c	0.29	0/1582	0.46	0/2137
34	2c	0.29	0/1566	0.47	0/2119
35	1d	0.30	0/1695	0.48	0/2274
35	2d	0.28	0/1698	0.44	0/2277
36	1e	0.30	0/1149	0.54	0/1548
36	2e	0.30	0/1149	0.49	0/1548
37	1f	0.30	0/827	0.47	0/1120
37	2f	0.29	0/829	0.48	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.29	0/1254	0.42	0/1683
38	2g	0.27	0/1248	0.41	0/1676
39	1h	0.28	0/1118	0.47	0/1506
39	2h	0.27	0/1108	0.48	0/1494
40	1i	0.30	0/1005	0.48	0/1351
40	2i	0.30	0/985	0.48	0/1329
41	1j	0.27	0/732	0.48	0/993
41	2j	0.29	0/723	0.47	0/984
42	1k	0.29	0/849	0.48	0/1150
42	2k	0.28	0/848	0.50	0/1149
43	1l	0.29	0/937	0.52	0/1260
43	2l	0.28	0/937	0.50	0/1260
44	1m	0.27	0/924	0.49	0/1242
44	2m	0.28	0/905	0.47	0/1217
45	1n	0.29	0/501	0.45	0/664
45	2n	0.30	0/501	0.45	0/664
46	1o	0.28	0/739	0.43	0/985
46	2o	0.27	0/739	0.44	0/985
47	1p	0.28	0/697	0.53	0/939
47	2p	0.29	0/693	0.50	0/935
48	1q	0.28	0/836	0.48	0/1117
48	2q	0.29	0/836	0.49	0/1117
49	1r	0.29	0/560	0.51	0/746
49	2r	0.30	0/560	0.45	0/746
50	1s	0.26	0/663	0.48	0/895
50	2s	0.28	0/660	0.47	0/893
51	1t	0.28	0/734	0.48	0/969
51	2t	0.27	0/736	0.42	0/976
52	1u	0.27	0/203	0.47	0/266
52	2u	0.26	0/203	0.49	0/266
53	1y	0.27	0/776	0.46	0/1048
53	2y	0.30	0/761	0.46	0/1030
All	All	0.41	4/309939 (0.0%)	0.82	188/463231 (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
11	1P	0	1
11	2P	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
26	14	0	1
33	1b	0	1
33	2b	0	1
All	All	0	5

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2104	G	N1-C2	-6.08	1.32	1.37
1	1A	330	A	N9-C4	-5.68	1.34	1.37
1	1A	2790	A	N9-C4	5.19	1.41	1.37
1	2A	2185	C	N3-C4	-5.09	1.30	1.33

All (188) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2185	C	N1-C2-O2	14.48	127.59	118.90
1	2A	2104	G	C5-C6-O6	13.85	136.91	128.60
1	2A	2104	G	N3-C2-N2	13.39	129.27	119.90
1	1A	1042	G	OP1-P-O3'	-12.03	78.73	105.20
1	2A	2104	G	N1-C2-N2	-11.35	105.99	116.20
1	2A	2185	C	C2-N3-C4	10.45	125.12	119.90
33	2b	232	PRO	C-N-CA	10.42	147.74	121.70
1	2A	1092	C	N1-C2-O2	9.75	124.75	118.90
1	2A	2104	G	C6-N1-C2	9.75	130.95	125.10
1	2A	2104	G	C5-C6-N1	-8.97	107.02	111.50
1	1A	999	U	O5'-P-OP2	-8.60	97.96	105.70
1	1A	1372	U	C5-C4-O4	-8.49	120.81	125.90
32	2a	1158	C	C2-N1-C1'	8.34	127.97	118.80
1	1A	512	G	O4'-C1'-N9	8.00	114.60	108.20
1	1A	330	A	N1-C2-N3	7.92	133.26	129.30
1	1A	1043	C	OP1-P-OP2	7.90	131.44	119.60
1	1A	1372	U	N3-C4-O4	7.85	124.89	119.40
32	2a	1158	C	N1-C2-O2	7.80	123.58	118.90
1	2A	1092	C	N3-C2-O2	-7.76	116.47	121.90
1	2A	1092	C	C2-N1-C1'	7.72	127.30	118.80
1	2A	2185	C	N3-C4-N4	-7.67	112.63	118.00
1	1A	330	A	C2-N3-C4	-7.50	106.85	110.60
1	1A	1139	G	O5'-P-OP2	-7.45	98.99	105.70
1	1A	2036	C	O5'-P-OP1	-7.43	99.01	105.70
1	1A	1086	A	N1-C6-N6	-7.20	114.28	118.60
1	1A	1042	G	OP2-P-O3'	-7.14	89.49	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2249	U	N3-C4-O4	-7.14	114.40	119.40
1	2A	2682	U	O5'-P-OP2	-7.10	99.31	105.70
1	2A	2185	C	C5-C4-N4	7.10	125.17	120.20
32	2a	1030	C	N1-C2-O2	7.08	123.15	118.90
1	2A	2185	C	C5-C6-N1	7.05	124.53	121.00
1	2A	512	G	O4'-C1'-N9	6.99	113.79	108.20
32	2a	1003	G	N3-C4-C5	-6.98	125.11	128.60
1	1A	1176	G	OP1-P-O3'	6.98	120.55	105.20
1	1A	1300	U	P-O3'-C3'	6.93	128.02	119.70
1	2A	2105	C	C5-C6-N1	6.93	124.47	121.00
32	2a	266	G	P-O3'-C3'	6.92	128.00	119.70
32	2a	1158	C	C6-N1-C2	-6.78	117.59	120.30
2	1B	1	U	C2-N1-C1'	6.74	125.79	117.70
32	2a	1003	G	C8-N9-C4	-6.73	103.71	106.40
1	1A	1177	A	O5'-P-OP1	-6.73	99.64	105.70
1	1A	570	G	N9-C4-C5	-6.72	102.71	105.40
1	1A	801	G	O5'-P-OP2	-6.69	99.68	105.70
1	2A	1075	C	N1-C2-O2	6.65	122.89	118.90
1	2A	2185	C	C4-C5-C6	-6.64	114.08	117.40
1	2A	1639	U	O5'-P-OP2	-6.61	99.75	105.70
1	2A	1082	U	N3-C2-O2	-6.60	117.58	122.20
1	2A	2185	C	N3-C2-O2	-6.60	117.28	121.90
32	2a	1183	A	P-O3'-C3'	6.49	127.49	119.70
1	1A	2685	G	N1-C6-O6	-6.44	116.03	119.90
1	1A	570	G	C4-C5-N7	6.41	113.36	110.80
1	2A	2104	G	N1-C6-O6	-6.39	116.06	119.90
2	1B	57	A	N9-C4-C5	-6.36	103.26	105.80
1	2A	1092	C	C6-N1-C2	-6.35	117.76	120.30
1	2A	752	A	P-O3'-C3'	6.35	127.32	119.70
1	1A	1026	U	N1-C2-O2	6.34	127.24	122.80
32	2a	1004	A	O4'-C1'-N9	6.27	113.22	108.20
1	1A	568	U	C5-C4-O4	-6.26	122.14	125.90
32	2a	1158	C	N3-C2-O2	-6.24	117.53	121.90
1	2A	2036	C	O5'-P-OP1	-6.22	100.10	105.70
1	1A	946	G	O5'-P-OP1	-6.14	100.17	105.70
1	2A	1076	C	OP1-P-O3'	6.10	118.62	105.20
1	2A	576	U	O5'-P-OP1	-6.09	100.22	105.70
1	1A	2249	U	N3-C4-C5	6.07	118.24	114.60
1	1A	1653	G	C8-N9-C4	-6.05	103.98	106.40
1	1A	2598	A	O5'-P-OP1	-6.00	100.30	105.70
1	2A	1111	A	O4'-C1'-N9	5.98	112.98	108.20
1	2A	2689	U	N3-C2-O2	-5.95	118.03	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1779	U	O4'-C1'-N1	5.94	112.95	108.20
1	1A	195	A	P-O3'-C3'	5.90	126.78	119.70
1	2A	1648	C	O5'-P-OP1	-5.89	100.40	105.70
1	1A	845	G	O4'-C1'-N9	5.89	112.91	108.20
1	2A	2108	C	C2-N3-C4	5.89	122.84	119.90
1	1A	1416	G	O4'-C1'-N9	5.87	112.90	108.20
1	1A	2848	G	O4'-C1'-N9	5.86	112.89	108.20
32	2a	687	A	P-O3'-C3'	5.85	126.72	119.70
1	1A	1026	U	N3-C2-O2	-5.85	118.11	122.20
1	2A	2154	G	C6-N1-C2	5.84	128.60	125.10
32	2a	1003	G	C2-N3-C4	5.83	114.82	111.90
1	1A	1647	G	O4'-C1'-N9	-5.83	103.54	108.20
1	1A	2682	U	O5'-P-OP2	-5.83	100.45	105.70
1	1A	2789	C	C2-N1-C1'	-5.82	112.40	118.80
1	2A	2185	C	N1-C2-N3	-5.82	115.13	119.20
32	2a	1183	A	OP1-P-O3'	5.82	117.99	105.20
1	1A	847	U	C2-N1-C1'	5.81	124.67	117.70
1	2A	1075	C	N3-C2-O2	-5.78	117.86	121.90
1	2A	1077	A	O5'-P-OP1	-5.78	100.50	105.70
1	1A	570	G	C5-C6-O6	-5.75	125.15	128.60
1	1A	2103	C	C2-N3-C4	5.73	122.77	119.90
1	1A	12	U	C2-N1-C1'	5.71	124.55	117.70
1	2A	1992	G	P-O3'-C3'	5.71	126.55	119.70
1	1A	1253	A	C5-N7-C8	5.70	106.75	103.90
1	1A	1791	A	O5'-P-OP1	-5.68	100.59	105.70
1	2A	2612	C	C6-N1-C2	5.67	122.57	120.30
1	1A	668	G	OP2-P-O3'	5.67	117.67	105.20
1	1A	1210	A	P-O3'-C3'	5.66	126.49	119.70
1	1A	1609	A	C8-N9-C4	5.65	108.06	105.80
1	2A	1065	U	P-O3'-C3'	5.65	126.48	119.70
1	2A	1082	U	N1-C2-O2	5.63	126.74	122.80
1	1A	2103	C	N1-C2-O2	5.62	122.27	118.90
1	1A	827	U	C5-C4-O4	5.59	129.26	125.90
1	2A	1313	U	C2-N1-C1'	5.59	124.41	117.70
1	1A	2689	U	P-O3'-C3'	5.57	126.38	119.70
32	1a	1442	G	C2-N3-C4	5.57	114.68	111.90
1	2A	2602	A	P-O3'-C3'	5.56	126.38	119.70
1	2A	2122	U	C5-C4-O4	5.52	129.21	125.90
1	1A	1385	G	O4'-C1'-N9	5.50	112.60	108.20
1	1A	2593	U	N3-C4-O4	-5.49	115.55	119.40
1	2A	2104	G	C2-N3-C4	-5.49	109.15	111.90
1	1A	570	G	C5-C6-N1	5.49	114.24	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1442	G	N3-C4-C5	-5.49	125.86	128.60
1	2A	746	A	O4'-C1'-N9	5.48	112.59	108.20
1	2A	2105	C	C6-N1-C2	-5.48	118.11	120.30
1	2A	2517	C	O5'-P-OP2	-5.47	100.78	105.70
1	1A	2371	G	C5-C6-N1	5.46	114.23	111.50
1	1A	1653	G	P-O3'-C3'	5.46	126.25	119.70
1	2A	2321	G	C4-N9-C1'	5.45	133.58	126.50
32	1a	913	A	P-O3'-C3'	5.44	126.23	119.70
32	2a	266	G	OP2-P-O3'	5.43	117.14	105.20
32	2a	1150	U	C5-C4-O4	5.41	129.15	125.90
1	2A	2689	U	P-O3'-C3'	5.39	126.17	119.70
1	1A	226	G	O4'-C1'-N9	5.39	112.52	108.20
1	1A	1997	G	C5'-C4'-O4'	5.39	115.56	109.10
1	2A	2172	U	P-O3'-C3'	5.39	126.17	119.70
32	2a	1158	C	C6-N1-C1'	-5.38	114.34	120.80
1	2A	2805	G	O4'-C1'-N9	5.38	112.50	108.20
1	2A	1082	U	C2-N1-C1'	5.38	124.15	117.70
32	1a	687	A	P-O3'-C3'	5.38	126.15	119.70
1	2A	2249	U	N3-C4-O4	-5.37	115.64	119.40
1	1A	1190	G	C5-N7-C8	5.36	106.98	104.30
1	1A	2458	G	N3-C4-C5	-5.35	125.92	128.60
32	2a	1225	A	C5-C6-N6	5.35	127.98	123.70
1	2A	2183	C	C2-N3-C4	5.35	122.57	119.90
32	1a	266	G	P-O3'-C3'	5.34	126.11	119.70
1	1A	2790	A	C2-N3-C4	5.34	113.27	110.60
32	2a	1026	G	C4-N9-C1'	5.33	133.43	126.50
2	1B	1	U	N1-C2-O2	5.31	126.52	122.80
1	1A	565	C	C6-N1-C2	-5.31	118.18	120.30
1	2A	1064	C	C6-N1-C2	-5.30	118.18	120.30
32	1a	78	G	O4'-C1'-N9	5.30	112.44	108.20
1	2A	1064	C	C2-N1-C1'	5.29	124.62	118.80
1	1A	1660	C	C2-N1-C1'	-5.29	112.98	118.80
1	1A	372	G	O4'-C1'-N9	5.29	112.43	108.20
1	1A	1086	A	C2-N3-C4	5.29	113.24	110.60
1	1A	1352	U	O5'-P-OP1	-5.29	100.94	105.70
32	2a	1158	C	C5-C6-N1	5.27	123.64	121.00
1	1A	2430	A	O5'-P-OP2	-5.27	100.96	105.70
32	2a	1123	A	C5-C6-N6	5.26	127.91	123.70
1	1A	386	G	O4'-C1'-N9	5.25	112.40	108.20
32	2a	754	C	C2-N1-C1'	5.25	124.57	118.80
32	1a	1137	C	C6-N1-C2	-5.23	118.21	120.30
1	1A	1936	A	O4'-C1'-N9	5.23	112.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2893	G	P-O3'-C3'	5.21	125.96	119.70
1	1A	1602	U	N3-C4-O4	-5.21	115.75	119.40
1	2A	1075	C	C2-N1-C1'	5.20	124.52	118.80
1	1A	774	A	C8-N9-C4	-5.18	103.73	105.80
1	1A	2593	U	N3-C4-C5	5.18	117.71	114.60
32	2a	1020	U	N1-C2-O2	5.15	126.41	122.80
1	1A	2035	G	O4'-C1'-N9	5.14	112.31	108.20
1	1A	1075	C	N1-C2-O2	5.14	121.98	118.90
1	2A	383	U	O4'-C1'-N1	5.13	112.31	108.20
1	2A	1936	A	O4'-C1'-N9	5.13	112.31	108.20
32	1a	353	A	OP2-P-O3'	5.13	116.48	105.20
1	1A	785	G	O5'-P-OP2	-5.12	101.09	105.70
32	1a	1136	U	C2-N1-C1'	5.12	123.84	117.70
32	2a	115	G	P-O3'-C3'	5.12	125.84	119.70
32	1a	1136	U	N1-C2-O2	5.12	126.38	122.80
1	1A	2142	C	N1-C2-O2	5.11	121.97	118.90
1	2A	1416	G	O4'-C1'-N9	5.11	112.29	108.20
1	1A	614	U	N3-C2-O2	-5.11	118.62	122.20
32	2a	1150	U	C2-N3-C4	5.10	130.06	127.00
1	1A	740	U	O5'-P-OP2	-5.09	101.11	105.70
32	2a	1123	A	N1-C6-N6	-5.09	115.55	118.60
1	1A	748	G	C8-N9-C1'	5.09	133.61	127.00
32	2a	560	U	C2-N1-C1'	5.09	123.81	117.70
1	2A	1614	A	O5'-P-OP1	-5.08	101.13	105.70
32	2a	1067	A	P-O3'-C3'	5.08	125.80	119.70
1	1A	570	G	N3-C4-N9	5.08	129.05	126.00
1	2A	1647	G	O4'-C1'-N9	-5.08	104.14	108.20
32	2a	1003	G	C4-N9-C1'	5.08	133.10	126.50
32	2a	1065	U	P-O3'-C3'	5.07	125.79	119.70
32	1a	1201	A	P-O3'-C3'	5.06	125.78	119.70
1	1A	1176	G	P-O3'-C3'	5.04	125.75	119.70
1	2A	1210	A	P-O3'-C3'	5.03	125.73	119.70
1	2A	1073	A	P-O3'-C3'	5.02	125.73	119.70
1	2A	668	G	OP2-P-O3'	5.02	116.24	105.20
1	2A	2172	U	OP1-P-O3'	5.01	116.22	105.20
1	2A	1076	C	P-O3'-C3'	5.00	125.70	119.70

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	67	TYR	Peptide

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Mol	Chain	Res	Type	Group
11	1P	35	HIS	Peptide
33	1b	231	GLU	Peptide
11	2P	35	HIS	Peptide
33	2b	126	GLU	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%)	257 (94%)	16 (6%)	0	100 100
3	2D	273/276 (99%)	256 (94%)	17 (6%)	0	100 100
4	1E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	29 52
4	2E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	29 52
5	1F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29 52
5	2F	201/210 (96%)	194 (96%)	5 (2%)	2 (1%)	15 32
6	1G	179/182 (98%)	164 (92%)	10 (6%)	5 (3%)	5 7
6	2G	179/182 (98%)	160 (89%)	16 (9%)	3 (2%)	9 18
7	1H	172/180 (96%)	163 (95%)	8 (5%)	1 (1%)	25 47
7	2H	171/180 (95%)	150 (88%)	18 (10%)	3 (2%)	8 16
8	1I	145/148 (98%)	128 (88%)	16 (11%)	1 (1%)	22 43
8	2I	144/148 (97%)	131 (91%)	11 (8%)	2 (1%)	11 22
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100 100
9	2N	138/140 (99%)	133 (96%)	4 (3%)	1 (1%)	22 43
10	1O	120/122 (98%)	114 (95%)	6 (5%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	2O	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	19	39
11	1P	147/150 (98%)	137 (93%)	9 (6%)	1 (1%)	22	43
11	2P	147/150 (98%)	138 (94%)	8 (5%)	1 (1%)	22	43
12	1Q	139/141 (99%)	132 (95%)	6 (4%)	1 (1%)	22	43
12	2Q	139/141 (99%)	131 (94%)	8 (6%)	0	100	100
13	1R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
13	2R	116/118 (98%)	114 (98%)	2 (2%)	0	100	100
14	1S	108/112 (96%)	100 (93%)	7 (6%)	1 (1%)	17	35
14	2S	108/112 (96%)	104 (96%)	3 (3%)	1 (1%)	17	35
15	1T	129/146 (88%)	123 (95%)	6 (5%)	0	100	100
15	2T	129/146 (88%)	121 (94%)	7 (5%)	1 (1%)	19	39
16	1U	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
16	2U	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
17	1V	99/101 (98%)	92 (93%)	6 (6%)	1 (1%)	15	32
17	2V	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	15	32
18	1W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
18	2W	110/113 (97%)	110 (100%)	0	0	100	100
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	14	30
19	2X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	14	30
20	1Y	105/110 (96%)	94 (90%)	11 (10%)	0	100	100
20	2Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
21	1Z	201/206 (98%)	191 (95%)	8 (4%)	2 (1%)	15	32
21	2Z	199/206 (97%)	179 (90%)	17 (8%)	3 (2%)	10	21
22	10	75/85 (88%)	71 (95%)	4 (5%)	0	100	100
22	20	75/85 (88%)	71 (95%)	4 (5%)	0	100	100
23	11	95/98 (97%)	93 (98%)	2 (2%)	0	100	100
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14	30
24	12	68/72 (94%)	68 (100%)	0	0	100	100
24	22	68/72 (94%)	65 (96%)	3 (4%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
26	14	67/71 (94%)	55 (82%)	7 (10%)	5 (8%)	1 1
26	24	67/71 (94%)	47 (70%)	16 (24%)	4 (6%)	1 1
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
27	25	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	50 (98%)	1 (2%)	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	62 (100%)	0	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	195 (85%)	26 (11%)	8 (4%)	3 5
33	2b	229/256 (90%)	192 (84%)	31 (14%)	6 (3%)	5 9
34	1c	204/239 (85%)	192 (94%)	11 (5%)	1 (0%)	29 52
34	2c	204/239 (85%)	177 (87%)	24 (12%)	3 (2%)	10 21
35	1d	206/209 (99%)	196 (95%)	10 (5%)	0	100 100
35	2d	206/209 (99%)	190 (92%)	13 (6%)	3 (2%)	10 21
36	1e	146/162 (90%)	140 (96%)	5 (3%)	1 (1%)	22 43
36	2e	146/162 (90%)	135 (92%)	11 (8%)	0	100 100
37	1f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
38	1g	153/156 (98%)	143 (94%)	10 (6%)	0	100 100
38	2g	153/156 (98%)	141 (92%)	11 (7%)	1 (1%)	22 43
39	1h	135/138 (98%)	130 (96%)	5 (4%)	0	100 100
39	2h	135/138 (98%)	121 (90%)	12 (9%)	2 (2%)	10 21
40	1i	125/128 (98%)	113 (90%)	11 (9%)	1 (1%)	19 39
40	2i	124/128 (97%)	105 (85%)	13 (10%)	6 (5%)	2 2
41	1j	95/105 (90%)	80 (84%)	10 (10%)	5 (5%)	2 2
41	2j	94/105 (90%)	77 (82%)	12 (13%)	5 (5%)	2 2
42	1k	112/129 (87%)	102 (91%)	10 (9%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
42	2k	112/129 (87%)	100 (89%)	11 (10%)	1 (1%)	17 35
43	1l	119/132 (90%)	114 (96%)	5 (4%)	0	100 100
43	2l	119/132 (90%)	111 (93%)	8 (7%)	0	100 100
44	1m	114/126 (90%)	104 (91%)	8 (7%)	2 (2%)	8 16
44	2m	112/126 (89%)	98 (88%)	12 (11%)	2 (2%)	8 16
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
45	2n	58/61 (95%)	53 (91%)	4 (7%)	1 (2%)	9 18
46	1o	86/89 (97%)	81 (94%)	4 (5%)	1 (1%)	13 27
46	2o	86/89 (97%)	82 (95%)	3 (4%)	1 (1%)	13 27
47	1p	80/88 (91%)	72 (90%)	8 (10%)	0	100 100
47	2p	80/88 (91%)	65 (81%)	15 (19%)	0	100 100
48	1q	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	15 32
48	2q	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	15 32
49	1r	66/88 (75%)	64 (97%)	2 (3%)	0	100 100
49	2r	66/88 (75%)	64 (97%)	2 (3%)	0	100 100
50	1s	81/93 (87%)	73 (90%)	7 (9%)	1 (1%)	13 27
50	2s	81/93 (87%)	72 (89%)	9 (11%)	0	100 100
51	1t	94/106 (89%)	86 (92%)	8 (8%)	0	100 100
51	2t	96/106 (91%)	88 (92%)	7 (7%)	1 (1%)	15 32
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
52	2u	21/27 (78%)	18 (86%)	1 (5%)	2 (10%)	0 0
53	1y	95/113 (84%)	94 (99%)	1 (1%)	0	100 100
53	2y	94/113 (83%)	91 (97%)	3 (3%)	0	100 100
All	All	11629/12354 (94%)	10823 (93%)	703 (6%)	103 (1%)	17 35

All (103) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	47	LYS
6	1G	50	ALA
26	14	55	ARG
33	1b	124	SER
33	1b	231	GLU

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Mol	Chain	Res	Type
40	1i	11	LYS
44	1m	67	GLU
5	2F	130	ALA
26	24	45	GLY
35	2d	5	ILE
40	2i	43	ALA
41	2j	56	HIS
7	1H	159	GLU
19	1X	94	GLY
21	1Z	52	SER
26	14	47	GLN
26	14	57	GLU
41	1j	79	ARG
6	2G	78	SER
6	2G	81	LYS
7	2H	126	PRO
19	2X	94	GLY
33	2b	22	LYS
34	2c	4	LYS
38	2g	7	ALA
40	2i	44	VAL
40	2i	54	ASP
40	2i	55	ALA
51	2t	100	ILE
52	2u	3	LYS
6	1G	44	GLY
14	1S	59	LYS
26	14	49	PHE
41	1j	55	LYS
41	1j	77	PRO
41	1j	78	ASN
46	1o	19	PRO
48	1q	68	ARG
50	1s	12	ASP
6	2G	117	PHE
8	2I	117	GLU
10	2O	5	GLN
11	2P	29	LYS
21	2Z	60	GLU
23	21	3	LYS
26	24	62	ARG
33	2b	11	LEU

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Mol	Chain	Res	Type
34	2c	144	SER
39	2h	133	LEU
41	2j	78	ASN
44	2m	67	GLU
4	1E	52	LEU
12	1Q	59	ARG
33	1b	17	PHE
33	1b	22	LYS
33	1b	228	GLY
34	1c	156	ARG
44	1m	12	ASN
4	2E	52	LEU
8	2I	10	GLU
26	24	51	ASP
33	2b	20	GLU
35	2d	156	GLU
40	2i	96	LEU
41	2j	79	ARG
17	1V	79	VAL
33	1b	20	GLU
33	1b	127	ILE
5	2F	21	ALA
7	2H	47	GLU
9	2N	129	PRO
15	2T	128	GLU
21	2Z	52	SER
26	24	60	GLN
33	2b	125	PRO
35	2d	22	LYS
44	2m	21	TYR
46	2o	88	ARG
6	1G	51	ARG
8	1I	105	HIS
11	1P	29	LYS
26	14	61	ARG
14	2S	35	ILE
33	2b	17	PHE
33	2b	123	ALA
34	2c	204	LEU
40	2i	11	LYS
48	2q	68	ARG
52	2u	7	ARG

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Mol	Chain	Res	Type
36	1e	96	PRO
17	2V	79	VAL
41	2j	24	VAL
41	2j	75	ILE
42	2k	105	VAL
41	1j	91	PRO
21	2Z	128	VAL
39	2h	51	VAL
6	1G	52	ILE
21	1Z	53	ILE
7	2H	55	PRO
45	2n	14	PRO
33	1b	125	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	214/218 (98%)	199 (93%)	15 (7%)	15 30
3	2D	215/218 (99%)	200 (93%)	15 (7%)	15 30
4	1E	164/166 (99%)	153 (93%)	11 (7%)	16 33
4	2E	164/166 (99%)	154 (94%)	10 (6%)	18 38
5	1F	160/166 (96%)	147 (92%)	13 (8%)	11 23
5	2F	159/166 (96%)	148 (93%)	11 (7%)	15 31
6	1G	144/156 (92%)	131 (91%)	13 (9%)	9 18
6	2G	142/156 (91%)	127 (89%)	15 (11%)	6 12
7	1H	144/148 (97%)	140 (97%)	4 (3%)	43 69
7	2H	143/148 (97%)	126 (88%)	17 (12%)	5 9
8	1I	111/124 (90%)	102 (92%)	9 (8%)	11 23
8	2I	108/124 (87%)	100 (93%)	8 (7%)	13 28
9	1N	119/119 (100%)	110 (92%)	9 (8%)	13 26
9	2N	118/119 (99%)	110 (93%)	8 (7%)	16 32

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
10	1O	100/100 (100%)	98 (98%)	2 (2%)	55 78
10	2O	100/100 (100%)	98 (98%)	2 (2%)	55 78
11	1P	115/116 (99%)	110 (96%)	5 (4%)	29 54
11	2P	115/116 (99%)	111 (96%)	4 (4%)	36 62
12	1Q	111/111 (100%)	104 (94%)	7 (6%)	18 36
12	2Q	111/111 (100%)	105 (95%)	6 (5%)	22 44
13	1R	101/101 (100%)	95 (94%)	6 (6%)	19 39
13	2R	101/101 (100%)	96 (95%)	5 (5%)	24 47
14	1S	87/88 (99%)	79 (91%)	8 (9%)	9 17
14	2S	85/88 (97%)	78 (92%)	7 (8%)	11 22
15	1T	115/127 (91%)	108 (94%)	7 (6%)	18 38
15	2T	113/127 (89%)	107 (95%)	6 (5%)	22 45
16	1U	93/94 (99%)	89 (96%)	4 (4%)	29 54
16	2U	93/94 (99%)	88 (95%)	5 (5%)	22 44
17	1V	81/82 (99%)	78 (96%)	3 (4%)	34 60
17	2V	80/82 (98%)	73 (91%)	7 (9%)	10 19
18	1W	90/92 (98%)	84 (93%)	6 (7%)	16 33
18	2W	90/92 (98%)	82 (91%)	8 (9%)	9 19
19	1X	77/78 (99%)	75 (97%)	2 (3%)	46 72
19	2X	77/78 (99%)	76 (99%)	1 (1%)	69 86
20	1Y	86/91 (94%)	81 (94%)	5 (6%)	20 40
20	2Y	86/91 (94%)	77 (90%)	9 (10%)	7 13
21	1Z	169/179 (94%)	155 (92%)	14 (8%)	11 22
21	2Z	165/179 (92%)	150 (91%)	15 (9%)	9 18
22	10	61/67 (91%)	59 (97%)	2 (3%)	38 64
22	20	61/67 (91%)	60 (98%)	1 (2%)	62 82
23	11	79/83 (95%)	76 (96%)	3 (4%)	33 59
23	21	81/83 (98%)	75 (93%)	6 (7%)	13 28
24	12	65/67 (97%)	61 (94%)	4 (6%)	18 37
24	22	66/67 (98%)	62 (94%)	4 (6%)	18 38
25	13	51/52 (98%)	50 (98%)	1 (2%)	55 78

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
25	23	50/52 (96%)	46 (92%)	4 (8%)	12 24
26	14	58/63 (92%)	54 (93%)	4 (7%)	15 31
26	24	54/63 (86%)	46 (85%)	8 (15%)	3 5
27	15	51/52 (98%)	47 (92%)	4 (8%)	12 25
27	25	50/52 (96%)	49 (98%)	1 (2%)	55 78
28	16	51/52 (98%)	48 (94%)	3 (6%)	19 39
28	26	50/52 (96%)	47 (94%)	3 (6%)	19 39
29	17	41/42 (98%)	39 (95%)	2 (5%)	25 48
29	27	41/42 (98%)	39 (95%)	2 (5%)	25 48
30	18	54/55 (98%)	52 (96%)	2 (4%)	34 60
30	28	54/55 (98%)	49 (91%)	5 (9%)	9 17
31	19	34/34 (100%)	34 (100%)	0	100 100
31	29	34/34 (100%)	34 (100%)	0	100 100
33	1b	191/220 (87%)	169 (88%)	22 (12%)	5 10
33	2b	187/220 (85%)	171 (91%)	16 (9%)	10 20
34	1c	144/188 (77%)	133 (92%)	11 (8%)	13 26
34	2c	140/188 (74%)	124 (89%)	16 (11%)	5 10
35	1d	171/181 (94%)	152 (89%)	19 (11%)	6 11
35	2d	172/181 (95%)	155 (90%)	17 (10%)	8 15
36	1e	114/123 (93%)	107 (94%)	7 (6%)	18 38
36	2e	114/123 (93%)	104 (91%)	10 (9%)	10 19
37	1f	85/90 (94%)	79 (93%)	6 (7%)	14 29
37	2f	85/90 (94%)	78 (92%)	7 (8%)	11 22
38	1g	120/127 (94%)	113 (94%)	7 (6%)	20 40
38	2g	119/127 (94%)	107 (90%)	12 (10%)	7 14
39	1h	116/119 (98%)	111 (96%)	5 (4%)	29 54
39	2h	114/119 (96%)	107 (94%)	7 (6%)	18 38
40	1i	91/99 (92%)	85 (93%)	6 (7%)	16 33
40	2i	88/99 (89%)	79 (90%)	9 (10%)	7 14
41	1j	68/92 (74%)	62 (91%)	6 (9%)	10 19
41	2j	68/92 (74%)	60 (88%)	8 (12%)	5 9

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
42	1k	83/99 (84%)	79 (95%)	4 (5%)	25 49
42	2k	83/99 (84%)	82 (99%)	1 (1%)	71 87
43	1l	96/108 (89%)	92 (96%)	4 (4%)	30 55
43	2l	96/108 (89%)	91 (95%)	5 (5%)	23 46
44	1m	90/101 (89%)	86 (96%)	4 (4%)	28 53
44	2m	87/101 (86%)	80 (92%)	7 (8%)	12 24
45	1n	49/50 (98%)	43 (88%)	6 (12%)	5 9
45	2n	49/50 (98%)	41 (84%)	8 (16%)	2 3
46	1o	78/80 (98%)	76 (97%)	2 (3%)	46 72
46	2o	78/80 (98%)	74 (95%)	4 (5%)	24 46
47	1p	69/74 (93%)	59 (86%)	10 (14%)	3 5
47	2p	68/74 (92%)	60 (88%)	8 (12%)	5 9
48	1q	94/97 (97%)	87 (93%)	7 (7%)	13 28
48	2q	94/97 (97%)	88 (94%)	6 (6%)	17 35
49	1r	59/77 (77%)	52 (88%)	7 (12%)	5 9
49	2r	59/77 (77%)	50 (85%)	9 (15%)	2 4
50	1s	68/80 (85%)	63 (93%)	5 (7%)	13 28
50	2s	67/80 (84%)	62 (92%)	5 (8%)	13 27
51	1t	71/82 (87%)	65 (92%)	6 (8%)	10 21
51	2t	70/82 (85%)	59 (84%)	11 (16%)	2 4
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21 42
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21 42
53	1y	82/98 (84%)	79 (96%)	3 (4%)	34 60
53	2y	79/98 (81%)	73 (92%)	6 (8%)	13 26
All	All	9524/10260 (93%)	8842 (93%)	682 (7%)	14 29

All (682) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	13	ARG
3	1D	39	LYS
3	1D	43	ARG
3	1D	99	ASP
3	1D	105	ILE

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Mol	Chain	Res	Type
3	1D	113	VAL
3	1D	126	GLN
3	1D	155	LEU
3	1D	193	VAL
3	1D	211	ARG
3	1D	217	ARG
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	12	THR
4	1E	38	THR
4	1E	41	LYS
4	1E	49	LEU
4	1E	75	VAL
4	1E	89	ASP
4	1E	116	VAL
4	1E	119	ARG
4	1E	144	ARG
4	1E	163	GLU
4	1E	181	LEU
5	1F	18	ARG
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	110	LEU
5	1F	140	LEU
5	1F	157	VAL
5	1F	158	THR
5	1F	162	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	197	ASP
5	1F	203	GLN
6	1G	7	LEU
6	1G	28	VAL
6	1G	45	GLU
6	1G	49	ASP
6	1G	52	ILE
6	1G	53	LEU
6	1G	62	LEU
6	1G	79	ASN

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Mol	Chain	Res	Type
6	1G	135	LEU
6	1G	148	MET
6	1G	153	ARG
6	1G	159	VAL
6	1G	170	ARG
7	1H	15	VAL
7	1H	71	LEU
7	1H	107	VAL
7	1H	119	GLU
8	1I	5	LEU
8	1I	38	LEU
8	1I	74	ASN
8	1I	78	THR
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
8	1I	127	VAL
8	1I	140	LEU
9	1N	9	VAL
9	1N	33	LEU
9	1N	48	MET
9	1N	59	LYS
9	1N	62	VAL
9	1N	67	LEU
9	1N	99	LEU
9	1N	119	ARG
9	1N	133	GLN
10	1O	24	VAL
10	1O	98	VAL
11	1P	2	LYS
11	1P	59	LEU
11	1P	98	GLU
11	1P	99	LEU
11	1P	149	GLU
12	1Q	2	LEU
12	1Q	5	ARG
12	1Q	7	MET
12	1Q	21	THR
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	112	GLU
13	1R	36	THR

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Mol	Chain	Res	Type
13	1R	67	LEU
13	1R	75	LEU
13	1R	96	ARG
13	1R	100	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	27	SER
14	1S	50	SER
14	1S	52	SER
14	1S	57	LYS
14	1S	59	LYS
14	1S	85	VAL
15	1T	28	VAL
15	1T	34	VAL
15	1T	49	VAL
15	1T	53	ARG
15	1T	96	ARG
15	1T	108	ARG
15	1T	118	ARG
16	1U	59	ARG
16	1U	77	SER
16	1U	104	GLN
16	1U	108	GLU
17	1V	32	THR
17	1V	51	VAL
17	1V	61	VAL
18	1W	11	ARG
18	1W	17	VAL
18	1W	23	LEU
18	1W	49	LYS
18	1W	63	ASP
18	1W	100	THR
19	1X	35	THR
19	1X	68	ARG
20	1Y	43	ASN
20	1Y	72	VAL
20	1Y	73	ARG
20	1Y	99	CYS
20	1Y	107	ASP
21	1Z	18	LEU
21	1Z	42	VAL

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Mol	Chain	Res	Type
21	1Z	61	LEU
21	1Z	73	GLN
21	1Z	86	VAL
21	1Z	93	ASP
21	1Z	118	GLN
21	1Z	126	VAL
21	1Z	150	LEU
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	191	VAL
21	1Z	202	GLU
22	10	14	ARG
22	10	74	ARG
23	11	21	ARG
23	11	30	VAL
23	11	56	GLN
24	12	30	ARG
24	12	53	LEU
24	12	55	ARG
24	12	70	GLN
25	13	56	VAL
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	60	GLN
27	15	40	LYS
27	15	55	ARG
27	15	58	LEU
27	15	60	VAL
28	16	6	ARG
28	16	47	THR
28	16	52	VAL
29	17	1	MET
29	17	43	THR
30	18	31	HIS
30	18	34	TRP
33	1b	19	HIS
33	1b	24	TRP
33	1b	28	PHE
33	1b	43	ASP
33	1b	45	GLN

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Mol	Chain	Res	Type
33	1b	51	LEU
33	1b	53	ARG
33	1b	80	ILE
33	1b	96	ARG
33	1b	111	ARG
33	1b	113	HIS
33	1b	124	SER
33	1b	126	GLU
33	1b	158	LEU
33	1b	162	ILE
33	1b	163	PHE
33	1b	169	LYS
33	1b	185	ILE
33	1b	221	LEU
33	1b	229	VAL
33	1b	230	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	15	THR
34	1c	64	VAL
34	1c	70	VAL
34	1c	98	ASN
34	1c	102	ASN
34	1c	105	GLU
34	1c	115	LEU
34	1c	154	SER
34	1c	179	ARG
34	1c	195	VAL
35	1d	8	VAL
35	1d	17	VAL
35	1d	19	LEU
35	1d	47	ARG
35	1d	76	ARG
35	1d	83	SER
35	1d	115	ARG
35	1d	123	HIS
35	1d	127	THR
35	1d	135	LEU
35	1d	150	GLU
35	1d	168	ARG
35	1d	178	VAL
35	1d	187	ARG

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Mol	Chain	Res	Type
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP
35	1d	194	LEU
35	1d	196	LEU
36	1e	10	MET
36	1e	20	GLN
36	1e	31	LEU
36	1e	41	VAL
36	1e	55	VAL
36	1e	73	ASN
36	1e	101	ILE
37	1f	17	SER
37	1f	19	LEU
37	1f	57	GLN
37	1f	69	GLU
37	1f	78	GLU
37	1f	86	ARG
38	1g	6	ARG
38	1g	13	GLN
38	1g	77	SER
38	1g	94	ARG
38	1g	97	GLN
38	1g	113	GLU
38	1g	143	ARG
39	1h	24	THR
39	1h	51	VAL
39	1h	82	HIS
39	1h	104	ARG
39	1h	120	THR
40	1i	14	VAL
40	1i	64	THR
40	1i	65	VAL
40	1i	81	ILE
40	1i	125	TYR
40	1i	127	LYS
41	1j	5	ARG
41	1j	12	ASP
41	1j	38	ILE
41	1j	55	LYS
41	1j	94	VAL
41	1j	100	THR

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Mol	Chain	Res	Type
42	1k	16	SER
42	1k	87	THR
42	1k	117	ASN
42	1k	120	ARG
43	1l	18	VAL
43	1l	54	LYS
43	1l	83	VAL
43	1l	117	ARG
44	1m	11	ARG
44	1m	14	ARG
44	1m	15	VAL
44	1m	56	LEU
45	1n	3	ARG
45	1n	12	ARG
45	1n	15	LYS
45	1n	18	VAL
45	1n	22	THR
45	1n	33	VAL
46	1o	39	LEU
46	1o	83	GLU
47	1p	2	VAL
47	1p	8	ARG
47	1p	20	VAL
47	1p	21	VAL
47	1p	45	THR
47	1p	49	LEU
47	1p	61	SER
47	1p	67	THR
47	1p	72	ARG
47	1p	74	LEU
48	1q	9	VAL
48	1q	12	SER
48	1q	45	HIS
48	1q	53	LEU
48	1q	70	ARG
48	1q	85	VAL
48	1q	100	LYS
49	1r	21	LYS
49	1r	25	THR
49	1r	26	LEU
49	1r	42	ARG
49	1r	76	LEU

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Mol	Chain	Res	Type
49	1r	82	THR
49	1r	83	GLU
50	1s	3	ARG
50	1s	5	LEU
50	1s	28	LYS
50	1s	37	ARG
50	1s	56	GLN
51	1t	10	LEU
51	1t	24	LEU
51	1t	62	LEU
51	1t	68	LYS
51	1t	84	LEU
51	1t	90	GLN
52	1u	9	ARG
53	1y	3	MET
53	1y	42	SER
53	1y	46	GLN
3	2D	3	VAL
3	2D	12	SER
3	2D	113	VAL
3	2D	142	VAL
3	2D	155	LEU
3	2D	173	VAL
3	2D	211	ARG
3	2D	217	ARG
3	2D	221	VAL
3	2D	229	VAL
3	2D	237	GLU
3	2D	242	ARG
3	2D	259	THR
3	2D	260	ARG
3	2D	274	ARG
4	2E	12	THR
4	2E	47	VAL
4	2E	75	VAL
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	144	ARG
4	2E	163	GLU
4	2E	181	LEU
4	2E	184	VAL

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Mol	Chain	Res	Type
5	2F	33	LEU
5	2F	57	VAL
5	2F	74	ARG
5	2F	88	VAL
5	2F	106	ARG
5	2F	126	VAL
5	2F	135	LYS
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	201	VAL
6	2G	3	LEU
6	2G	7	LEU
6	2G	14	GLU
6	2G	26	GLN
6	2G	39	ILE
6	2G	43	LEU
6	2G	49	ASP
6	2G	53	LEU
6	2G	80	PHE
6	2G	98	ARG
6	2G	125	PHE
6	2G	133	LEU
6	2G	139	LEU
6	2G	159	VAL
6	2G	168	GLU
7	2H	33	LEU
7	2H	40	GLU
7	2H	44	VAL
7	2H	49	VAL
7	2H	52	VAL
7	2H	70	THR
7	2H	81	GLU
7	2H	86	GLU
7	2H	95	ARG
7	2H	97	ARG
7	2H	105	LEU
7	2H	127	GLU
7	2H	133	VAL
7	2H	134	SER
7	2H	136	ILE
7	2H	139	GLN

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Mol	Chain	Res	Type
7	2H	171	LEU
8	2I	2	LYS
8	2I	38	LEU
8	2I	43	ASN
8	2I	75	LEU
8	2I	76	THR
8	2I	92	VAL
8	2I	108	THR
8	2I	140	LEU
9	2N	28	THR
9	2N	32	THR
9	2N	48	MET
9	2N	62	VAL
9	2N	67	LEU
9	2N	68	GLU
9	2N	87	LEU
9	2N	115	ARG
10	2O	24	VAL
10	2O	116	SER
11	2P	15	ARG
11	2P	29	LYS
11	2P	99	LEU
11	2P	149	GLU
12	2Q	1	MET
12	2Q	16	ARG
12	2Q	75	THR
12	2Q	98	LYS
12	2Q	109	VAL
12	2Q	112	GLU
13	2R	36	THR
13	2R	67	LEU
13	2R	75	LEU
13	2R	96	ARG
13	2R	100	LEU
14	2S	5	THR
14	2S	12	PHE
14	2S	23	ARG
14	2S	27	SER
14	2S	36	TYR
14	2S	44	LYS
14	2S	52	SER
15	2T	6	LEU

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Mol	Chain	Res	Type
15	2T	53	ARG
15	2T	65	LYS
15	2T	85	LYS
15	2T	96	ARG
15	2T	107	ASP
16	2U	30	LYS
16	2U	31	SER
16	2U	52	ARG
16	2U	104	GLN
16	2U	108	GLU
17	2V	18	LEU
17	2V	32	THR
17	2V	46	VAL
17	2V	51	VAL
17	2V	56	SER
17	2V	62	LEU
17	2V	79	VAL
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	23	LEU
18	2W	49	LYS
18	2W	60	ASN
18	2W	63	ASP
18	2W	67	ASP
19	2X	49	VAL
20	2Y	6	HIS
20	2Y	31	LEU
20	2Y	47	LYS
20	2Y	49	VAL
20	2Y	70	SER
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	92	ASN
20	2Y	99	CYS
21	2Z	18	LEU
21	2Z	33	LEU
21	2Z	42	VAL
21	2Z	53	ILE
21	2Z	86	VAL
21	2Z	94	GLU
21	2Z	107	THR

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Mol	Chain	Res	Type
21	2Z	121	HIS
21	2Z	136	PHE
21	2Z	150	LEU
21	2Z	161	VAL
21	2Z	162	GLU
21	2Z	170	THR
21	2Z	175	VAL
21	2Z	193	GLU
22	20	49	LYS
23	21	11	ARG
23	21	40	ARG
23	21	80	LEU
23	21	85	LEU
23	21	89	GLU
23	21	95	LEU
24	22	7	ARG
24	22	32	LEU
24	22	52	ASP
24	22	53	LEU
25	23	23	LEU
25	23	31	LEU
25	23	44	ARG
25	23	59	VAL
26	24	1	MET
26	24	5	ILE
26	24	15	ILE
26	24	27	THR
26	24	50	VAL
26	24	59	PHE
26	24	62	ARG
26	24	63	TYR
27	25	29	THR
28	26	5	VAL
28	26	14	THR
28	26	48	VAL
29	27	1	MET
29	27	4	THR
30	28	14	VAL
30	28	23	VAL
30	28	30	ARG
30	28	31	HIS
30	28	34	TRP

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Mol	Chain	Res	Type
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	15	VAL
33	2b	16	HIS
33	2b	24	TRP
33	2b	28	PHE
33	2b	44	LEU
33	2b	49	GLU
33	2b	82	ARG
33	2b	93	VAL
33	2b	96	ARG
33	2b	97	TRP
33	2b	128	GLU
33	2b	189	ASP
33	2b	191	ASP
34	2c	3	ASN
34	2c	16	ARG
34	2c	31	HIS
34	2c	33	LEU
34	2c	52	LEU
34	2c	110	ASN
34	2c	119	ARG
34	2c	127	ARG
34	2c	128	PHE
34	2c	131	ARG
34	2c	152	ILE
34	2c	162	GLN
34	2c	182	ILE
34	2c	192	THR
34	2c	195	VAL
34	2c	207	VAL
35	2d	5	ILE
35	2d	8	VAL
35	2d	28	SER
35	2d	31	CYS
35	2d	34	GLU
35	2d	59	ARG
35	2d	80	GLU
35	2d	83	SER
35	2d	96	LEU
35	2d	108	LEU

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Mol	Chain	Res	Type
35	2d	122	ARG
35	2d	135	LEU
35	2d	150	GLU
35	2d	175	SER
35	2d	194	LEU
35	2d	201	GLN
35	2d	209	ARG
36	2e	10	MET
36	2e	31	LEU
36	2e	41	VAL
36	2e	47	LYS
36	2e	65	ASN
36	2e	68	GLU
36	2e	73	ASN
36	2e	79	GLU
36	2e	112	LEU
36	2e	135	THR
37	2f	19	LEU
37	2f	22	GLU
37	2f	46	ARG
37	2f	61	LEU
37	2f	63	TYR
37	2f	73	ASN
37	2f	93	SER
38	2g	15	ASP
38	2g	21	VAL
38	2g	36	LYS
38	2g	51	GLN
38	2g	75	VAL
38	2g	77	SER
38	2g	95	ARG
38	2g	101	LEU
38	2g	113	GLU
38	2g	115	ARG
38	2g	144	MET
38	2g	153	HIS
39	2h	21	LYS
39	2h	29	SER
39	2h	63	LEU
39	2h	91	ARG
39	2h	112	LEU
39	2h	114	THR

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Mol	Chain	Res	Type
39	2h	137	VAL
40	2i	7	THR
40	2i	27	THR
40	2i	50	LEU
40	2i	59	PHE
40	2i	60	ASP
40	2i	63	ILE
40	2i	87	GLN
40	2i	117	HIS
40	2i	125	TYR
41	2j	29	ARG
41	2j	30	SER
41	2j	34	VAL
41	2j	60	ARG
41	2j	74	ILE
41	2j	84	GLN
41	2j	95	GLU
41	2j	98	ILE
42	2k	53	SER
43	2l	10	LEU
43	2l	41	ARG
43	2l	44	THR
43	2l	81	SER
43	2l	83	VAL
44	2m	3	ARG
44	2m	70	LEU
44	2m	81	LEU
44	2m	88	ARG
44	2m	102	ARG
44	2m	106	ASN
44	2m	116	THR
45	2n	3	ARG
45	2n	7	ILE
45	2n	13	THR
45	2n	15	LYS
45	2n	18	VAL
45	2n	33	VAL
45	2n	49	HIS
45	2n	57	ARG
46	2o	3	ILE
46	2o	39	LEU
46	2o	47	LYS

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Mol	Chain	Res	Type
46	2o	83	GLU
47	2p	1	MET
47	2p	2	VAL
47	2p	12	LYS
47	2p	20	VAL
47	2p	21	VAL
47	2p	28	ARG
47	2p	54	GLU
47	2p	62	VAL
48	2q	53	LEU
48	2q	63	ARG
48	2q	70	ARG
48	2q	93	GLN
48	2q	96	GLU
48	2q	99	SER
49	2r	21	LYS
49	2r	25	THR
49	2r	26	LEU
49	2r	41	LYS
49	2r	42	ARG
49	2r	65	ILE
49	2r	69	THR
49	2r	76	LEU
49	2r	83	GLU
50	2s	13	ASP
50	2s	33	THR
50	2s	35	SER
50	2s	48	THR
50	2s	81	ARG
51	2t	10	LEU
51	2t	15	ARG
51	2t	24	LEU
51	2t	45	GLN
51	2t	46	GLU
51	2t	62	LEU
51	2t	71	THR
51	2t	84	LEU
51	2t	86	ARG
51	2t	99	LEU
51	2t	100	ILE
52	2u	24	ARG
53	2y	3	MET

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Mol	Chain	Res	Type
53	2y	9	GLN
53	2y	11	GLU
53	2y	17	ARG
53	2y	24	LEU
53	2y	46	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (122) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	112	GLN
3	1D	253	GLN
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
8	1I	104	GLN
9	1N	94	HIS
9	1N	133	GLN
10	1O	3	GLN
11	1P	84	ASN
13	1R	71	GLN
15	1T	58	ASN
15	1T	123	GLN
16	1U	104	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	43	ASN
20	1Y	92	ASN
21	1Z	50	GLN
21	1Z	73	GLN
21	1Z	151	HIS
22	10	35	ASN
23	11	56	GLN
25	13	32	GLN
31	19	34	GLN
33	1b	19	HIS
33	1b	40	HIS
34	1c	6	HIS
34	1c	63	ASN
34	1c	69	HIS

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Mol	Chain	Res	Type
34	1c	98	ASN
34	1c	102	ASN
34	1c	104	GLN
35	1d	119	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	129	ASN
36	1e	73	ASN
37	1f	73	ASN
38	1g	28	ASN
38	1g	56	GLN
38	1g	64	GLN
38	1g	148	ASN
39	1h	82	HIS
40	1i	3	GLN
40	1i	31	GLN
40	1i	73	GLN
40	1i	87	GLN
41	1j	13	HIS
41	1j	56	HIS
41	1j	84	GLN
42	1k	93	GLN
43	1l	99	HIS
44	1m	77	ASN
45	1n	49	HIS
46	1o	28	GLN
46	1o	71	GLN
47	1p	16	HIS
48	1q	16	GLN
50	1s	57	HIS
50	1s	69	HIS
50	1s	83	HIS
53	1y	38	HIS
3	2D	87	ASN
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	133	ASN
6	2G	41	GLN
7	2H	139	GLN
8	2I	43	ASN
10	2O	88	ASN

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Mol	Chain	Res	Type
13	2R	13	HIS
13	2R	31	HIS
17	2V	64	HIS
19	2X	31	HIS
20	2Y	92	ASN
21	2Z	34	ASN
21	2Z	73	GLN
21	2Z	151	HIS
25	23	32	GLN
30	28	35	GLN
31	29	34	GLN
33	2b	40	HIS
33	2b	76	GLN
33	2b	94	ASN
33	2b	135	GLN
33	2b	212	GLN
34	2c	6	HIS
34	2c	28	GLN
34	2c	31	HIS
34	2c	37	GLN
34	2c	170	GLN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
35	2d	161	ASN
35	2d	201	GLN
37	2f	73	ASN
40	2i	3	GLN
41	2j	69	ASN
42	2k	99	GLN
42	2k	117	ASN
43	2l	99	HIS
44	2m	62	ASN
46	2o	71	GLN
47	2p	16	HIS
48	2q	16	GLN
50	2s	14	HIS
50	2s	69	HIS

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Mol	Chain	Res	Type
50	2s	83	HIS
51	2t	90	GLN
53	2y	4	ASN
53	2y	36	ASN
53	2y	46	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	399 (13%)	32 (1%)
1	2A	2856/2915 (97%)	480 (16%)	35 (1%)
2	1B	119/121 (98%)	11 (9%)	0
2	2B	119/121 (98%)	16 (13%)	0
32	1a	1494/1521 (98%)	226 (15%)	0
32	2a	1498/1521 (98%)	254 (16%)	0
All	All	8949/9114 (98%)	1386 (15%)	67 (0%)

All (1386) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	15	G
1	1A	34	C
1	1A	45	C
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	154(A)	C
1	1A	173	G
1	1A	174	C
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A

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Mol	Chain	Res	Type
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	265	A
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(H)	C
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	324	A
1	1A	330	A
1	1A	352	G
1	1A	363	G
1	1A	386	G
1	1A	389	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	422	A
1	1A	428	A
1	1A	448	U
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	505	A
1	1A	509	C
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G

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Mol	Chain	Res	Type
1	1A	573	G
1	1A	575	A
1	1A	586	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	616	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
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	827	U
1	1A	828	U
1	1A	859	G
1	1A	880	G
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	892	G

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Mol	Chain	Res	Type
1	1A	896	A
1	1A	910	A
1	1A	914	C
1	1A	931	G
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	958	U
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1053	C
1	1A	1054	A
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G
1	1A	1065	U
1	1A	1067	A
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C

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Mol	Chain	Res	Type
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1096	A
1	1A	1097	U
1	1A	1098	A
1	1A	1109	C
1	1A	1111	A
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A
1	1A	1129	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1155	A
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1210	A
1	1A	1211	U
1	1A	1218	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	1308	A
1	1A	1320	C
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G

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Mol	Chain	Res	Type
1	1A	1384	A
1	1A	1385	G
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1452	A
1	1A	1455	G
1	1A	1459	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1493	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1525	G
1	1A	1542	A
1	1A	1543	C
1	1A	1554	A
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1722	A
1	1A	1739	U

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Mol	Chain	Res	Type
1	1A	1746	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1817	G
1	1A	1839	G
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
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

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Mol	Chain	Res	Type
1	1A	2061	G
1	1A	2069	G
1	1A	2103	C
1	1A	2104	G
1	1A	2105	C
1	1A	2107	C
1	1A	2108	C
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2123	G
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	2138	C
1	1A	2142	C
1	1A	2146	C
1	1A	2148	G
1	1A	2152	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2173	A
1	1A	2186	G
1	1A	2187	G
1	1A	2189	U
1	1A	2190	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2218	U
1	1A	2225	A
1	1A	2235	G
1	1A	2238	G

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Mol	Chain	Res	Type
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2326	C
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2383	G
1	1A	2385	C
1	1A	2393	A
1	1A	2406	U
1	1A	2414	G
1	1A	2422	A
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	2470	G
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2494	G
1	1A	2498	C
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U

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Mol	Chain	Res	Type
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2603	G
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	2662	A
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	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G

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Mol	Chain	Res	Type
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	15	A
2	1B	45	A
2	1B	53	A
2	1B	56	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	51	A
32	1a	61	G
32	1a	69	G
32	1a	78	G
32	1a	79	G
32	1a	96	U
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	144	G
32	1a	163	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(D)	C
32	1a	189(G)	G
32	1a	195	A
32	1a	197	A
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	247	G
32	1a	251	G
32	1a	258	G

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Mol	Chain	Res	Type
32	1a	266	G
32	1a	267	C
32	1a	281	G
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	347	G
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	397	A
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	477	A
32	1a	480	U
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
32	1a	518	C
32	1a	519	C
32	1a	531	U

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Mol	Chain	Res	Type
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	607	A
32	1a	619	U
32	1a	630	G
32	1a	631	G
32	1a	632	A
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	666	G
32	1a	687	A
32	1a	688	G
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	750	G
32	1a	755	G
32	1a	759	A
32	1a	774	G
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	891	U
32	1a	902	G

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Mol	Chain	Res	Type
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	939	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	994	A
32	1a	998	G
32	1a	1001	A
32	1a	1001(A)	G
32	1a	1002	G
32	1a	1004	A
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(C)	G
32	1a	1030(D)	A
32	1a	1032	G
32	1a	1033	G
32	1a	1037	C
32	1a	1042	G
32	1a	1044	A
32	1a	1065	U

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Mol	Chain	Res	Type
32	1a	1066	C
32	1a	1070	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1124	G
32	1a	1125	U
32	1a	1126	U
32	1a	1127	G
32	1a	1130	A
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1159	U
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1208	C
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1240	U
32	1a	1241	G
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A

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Mol	Chain	Res	Type
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1370	G
32	1a	1381	U
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1447	A
32	1a	1456	G
32	1a	1493	A
32	1a	1494	G
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	10	G
1	2A	11	G
1	2A	12	U
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	95	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U

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Mol	Chain	Res	Type
1	2A	131	G
1	2A	141	A
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	182	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	221	A
1	2A	222	A
1	2A	229	A
1	2A	230	U
1	2A	248	G
1	2A	265	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(A)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	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	333	G
1	2A	342	G
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	370	G
1	2A	372	G
1	2A	386	G
1	2A	396	G

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Mol	Chain	Res	Type
1	2A	411	G
1	2A	412	A
1	2A	428	A
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	504	U
1	2A	505	A
1	2A	509	C
1	2A	528	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	556	G
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	614(C)	A
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	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	669	G
1	2A	686	G
1	2A	717	G

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Mol	Chain	Res	Type
1	2A	730	C
1	2A	740	U
1	2A	751	A
1	2A	752	A
1	2A	753	C
1	2A	764	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	827	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	880	G
1	2A	883	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	915	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G

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Mol	Chain	Res	Type
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1022	G
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1048	A
1	2A	1052	C
1	2A	1053	C
1	2A	1054	A
1	2A	1055	G
1	2A	1058	G
1	2A	1060	U
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1069	A
1	2A	1070	A
1	2A	1071	G
1	2A	1072	C
1	2A	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1080	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A

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Mol	Chain	Res	Type
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1095	A
1	2A	1096	A
1	2A	1098	A
1	2A	1108	U
1	2A	1109	C
1	2A	1112	G
1	2A	1116	C
1	2A	1117	G
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1171	G
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1229	G
1	2A	1236	G
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1276	A
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1319	G
1	2A	1321	A
1	2A	1342	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G

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Mol	Chain	Res	Type
1	2A	1379	A
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1445	A
1	2A	1450	G
1	2A	1455	G
1	2A	1458	C
1	2A	1459	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
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	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1608	A
1	2A	1609	A
1	2A	1629	U
1	2A	1640	C
1	2A	1648	C
1	2A	1664	A

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Mol	Chain	Res	Type
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1746	G
1	2A	1756	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1786	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1860	G
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1937	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

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Mol	Chain	Res	Type
1	2A	1972	A
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2096	U
1	2A	2099	U
1	2A	2100	G
1	2A	2101	G
1	2A	2103	C
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2111	C
1	2A	2112	G
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2121	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G

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Mol	Chain	Res	Type
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2155	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2162	G
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2171	A
1	2A	2172	U
1	2A	2173	A
1	2A	2176	A
1	2A	2178	C
1	2A	2180	U
1	2A	2182	G
1	2A	2183	C
1	2A	2184	G
1	2A	2186	G
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2269	A
1	2A	2274	A
1	2A	2275	C
1	2A	2279	G
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A

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Mol	Chain	Res	Type
1	2A	2289	G
1	2A	2293	C
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2335	A
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2366	A
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2406	U
1	2A	2419	U
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2448	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2491	U
1	2A	2498	C
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	2555	U

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Mol	Chain	Res	Type
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2603	G
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	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	2726	U
1	2A	2733	A
1	2A	2748	A
1	2A	2757	A
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2780	G
1	2A	2802	G
1	2A	2811	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2872	G
1	2A	2876	G
1	2A	2880	C
1	2A	2891	G

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Mol	Chain	Res	Type
1	2A	2894	G
1	2A	2896	C
1	2A	2897	U
2	2B	7	G
2	2B	9	G
2	2B	12	C
2	2B	30	C
2	2B	33	G
2	2B	35	U
2	2B	51	G
2	2B	56	G
2	2B	66	A
2	2B	73	A
2	2B	84	C
2	2B	94	C
2	2B	106	G
2	2B	109	C
2	2B	110	G
2	2B	120	A
32	2a	5	U
32	2a	7	G
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	52	G
32	2a	61	G
32	2a	66	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	151	A
32	2a	156	G
32	2a	163	C

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Mol	Chain	Res	Type
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(C)	C
32	2a	189(D)	C
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	247	G
32	2a	250	A
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	298	A
32	2a	316	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	382	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	424	G
32	2a	429	U
32	2a	439	A
32	2a	442	C
32	2a	446	G

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Mol	Chain	Res	Type
32	2a	452	A
32	2a	458	C
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	476	G
32	2a	482	A
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	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	592	G
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	632	A
32	2a	653	A
32	2a	659	U
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	690	G
32	2a	693	G
32	2a	695	A
32	2a	702	A
32	2a	703	G
32	2a	723	U

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Mol	Chain	Res	Type
32	2a	724	G
32	2a	731	G
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	777	A
32	2a	793	U
32	2a	794	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	829	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	854	G
32	2a	859	A
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	960	U
32	2a	961	U
32	2a	966	M2G
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	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	1004	A

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Mol	Chain	Res	Type
32	2a	1005	A
32	2a	1006	C
32	2a	1007	C
32	2a	1009	G
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1032	G
32	2a	1033	G
32	2a	1041	A
32	2a	1043	C
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1113	C
32	2a	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1147	C
32	2a	1152	A

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Mol	Chain	Res	Type
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1161	C
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1211	U
32	2a	1212	U
32	2a	1214	C
32	2a	1216	G
32	2a	1224	G
32	2a	1227	A
32	2a	1228	C
32	2a	1236	A
32	2a	1238	A
32	2a	1248	A
32	2a	1250	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1281	U
32	2a	1282	C
32	2a	1285	A
32	2a	1286	A
32	2a	1287	A
32	2a	1297	C
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1317	C
32	2a	1320	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C

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Mol	Chain	Res	Type
32	2a	1363(A)	A
32	2a	1364	U
32	2a	1370	G
32	2a	1380	U
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1460	A
32	2a	1492	A
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G

All (67) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	266	G
1	1A	278	A
1	1A	746	A
1	1A	764	A
1	1A	839	U
1	1A	888	C
1	1A	895	U
1	1A	958	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1142(A)	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A

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Mol	Chain	Res	Type
1	1A	1300	U
1	1A	1301	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	1997	G
1	1A	2111	C
1	1A	2126	A
1	1A	2406	U
1	1A	2430	A
1	1A	2439	A
1	1A	2602	A
1	1A	2611	U
1	1A	2689	U
1	1A	2893	G
1	2A	9	U
1	2A	195	A
1	2A	196	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	746	A
1	2A	752	A
1	2A	764	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
1	2A	1053	C
1	2A	1057	A
1	2A	1065	U
1	2A	1067	A
1	2A	1073	A
1	2A	1076	C
1	2A	1210	A
1	2A	1275	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A

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Mol	Chain	Res	Type
1	2A	2172	U
1	2A	2321	G
1	2A	2406	U
1	2A	2439	A
1	2A	2601	C
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

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

48 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	$\#\|Z\| > 2$
32	PSU	2a	516	54,32	18,21,22	1.35	2 (11%)	22,30,33	1.90	4 (18%)
1	5MC	2A	1962	54,1	18,22,23	0.95	2 (11%)	26,32,35	1.18	2 (7%)
1	5MU	1A	1939	54,1	19,22,23	1.32	4 (21%)	28,32,35	2.34	6 (21%)
32	5MC	2a	1407	32	18,22,23	0.93	2 (11%)	26,32,35	1.14	3 (11%)
43	0TD	1l	92	43	7,9,10	4.94	1 (14%)	6,11,13	5.23	3 (50%)
32	UR3	2a	1498	32	19,22,23	0.99	1 (5%)	26,32,35	1.40	2 (7%)
32	PSU	1a	516	54,32	18,21,22	1.35	2 (11%)	22,30,33	1.85	4 (18%)
1	PSU	2A	2605	1	18,21,22	1.39	3 (16%)	22,30,33	1.93	5 (22%)
32	4OC	1a	1402	32	20,23,24	0.74	1 (5%)	26,32,35	1.11	1 (3%)
32	2MG	1a	1207	32	18,26,27	1.00	1 (5%)	16,38,41	1.53	4 (25%)
32	5MC	1a	1407	32	18,22,23	0.94	1 (5%)	26,32,35	1.09	3 (11%)
1	PSU	2A	1917	1	18,21,22	1.37	2 (11%)	22,30,33	1.79	3 (13%)
1	OMC	2A	1920	1	19,22,23	0.82	0	26,31,34	1.01	1 (3%)
1	OMG	2A	2251	54,1	18,26,27	0.98	1 (5%)	19,38,41	1.04	2 (10%)
32	UR3	1a	1498	32	19,22,23	0.98	1 (5%)	26,32,35	1.65	3 (11%)
32	5MC	2a	967	32	18,22,23	0.96	2 (11%)	26,32,35	1.09	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	MA6	1a	1518	32	19,26,27	0.79	0	18,38,41	1.34	2 (11%)
32	MA6	1a	1519	32	19,26,27	0.82	0	18,38,41	1.49	2 (11%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	22,30,33	1.91	4 (18%)
1	2MA	1A	2503	54,1	17,25,26	0.98	1 (5%)	17,37,40	1.00	2 (11%)
32	5MC	1a	1404	32	18,22,23	0.94	1 (5%)	26,32,35	1.19	3 (11%)
1	5MU	1A	1915	1	19,22,23	1.44	4 (21%)	28,32,35	2.19	10 (35%)
1	5MU	2A	1939	1	19,22,23	1.41	4 (21%)	28,32,35	2.36	8 (28%)
32	M2G	1a	966	32	20,27,28	1.37	3 (15%)	22,40,43	1.04	2 (9%)
1	5MC	1A	1962	1	18,22,23	0.93	2 (11%)	26,32,35	1.13	2 (7%)
1	2MU	2A	2552	54,1	19,22,24	1.26	3 (15%)	26,31,36	1.68	6 (23%)
1	PSU	1A	1917	1	18,21,22	1.32	2 (11%)	22,30,33	1.73	4 (18%)
32	G7M	2a	527	32	20,26,27	2.68	4 (20%)	17,39,42	0.90	1 (5%)
1	2MA	2A	2503	54,1	17,25,26	1.03	2 (11%)	17,37,40	1.00	2 (11%)
1	PSU	1A	1911	1	18,21,22	1.31	2 (11%)	22,30,33	1.92	4 (18%)
1	5MU	2A	1915	1	19,22,23	1.50	4 (21%)	28,32,35	2.13	9 (32%)
1	5MC	1A	1942	54,1	18,22,23	0.96	2 (11%)	26,32,35	1.07	2 (7%)
1	OMC	1A	1920	54,1	19,22,23	0.84	0	26,31,34	0.89	0
1	2MU	1A	2552	54,1	19,22,24	1.27	3 (15%)	26,31,36	1.81	6 (23%)
32	G7M	1a	527	32	20,26,27	2.61	4 (20%)	17,39,42	0.95	1 (5%)
32	5MC	2a	1404	32	18,22,23	1.01	2 (11%)	26,32,35	1.17	2 (7%)
32	MA6	2a	1519	32	19,26,27	0.81	0	18,38,41	1.48	2 (11%)
32	MA6	2a	1518	32	19,26,27	0.77	0	18,38,41	1.44	2 (11%)
43	0TD	2l	92	43	7,9,10	4.62	1 (14%)	6,11,13	8.25	2 (33%)
32	5MC	2a	1400	32	18,22,23	0.94	2 (11%)	26,32,35	1.16	2 (7%)
32	M2G	2a	966	32	20,27,28	1.31	3 (15%)	22,40,43	1.07	3 (13%)
1	5MC	2A	1942	1	18,22,23	0.98	2 (11%)	26,32,35	1.21	2 (7%)
1	OMG	1A	2251	54,1	18,26,27	0.96	1 (5%)	19,38,41	1.05	2 (10%)
32	5MC	1a	967	32	18,22,23	0.99	2 (11%)	26,32,35	1.06	2 (7%)
32	4OC	2a	1402	32	20,23,24	0.76	0	26,32,35	0.99	1 (3%)
32	2MG	2a	1207	32	18,26,27	0.88	0	16,38,41	1.04	2 (12%)
32	5MC	1a	1400	32	18,22,23	1.01	2 (11%)	26,32,35	1.19	2 (7%)
1	PSU	1A	2605	54,1	18,21,22	1.41	3 (16%)	22,30,33	1.99	3 (13%)

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
32	PSU	2a	516	54,32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	54,1	-	2/7/25/26	0/2/2/2
1	5MU	1A	1939	54,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	2/7/12/14	-
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	1/9/29/30	0/2/2/2
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	1/9/27/28	0/2/2/2
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	54,1	-	2/3/25/26	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
1	5MC	1A	1962	1	-	2/7/25/26	0/2/2/2
1	2MU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32	-	2/3/25/26	0/3/3/3
1	2MA	2A	2503	54,1	-	1/3/25/26	0/3/3/3
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MC	1A	1942	54,1	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	54,1	-	1/9/27/28	0/2/2/2
1	2MU	1A	2552	54,1	-	0/9/27/28	0/2/2/2
32	G7M	1a	527	32	-	2/3/25/26	0/3/3/3
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
43	0TD	2l	92	43	-	3/7/12/14	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	54,1	-	1/5/27/28	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
1	PSU	1A	2605	54,1	-	0/7/25/26	0/2/2/2

All (87) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.64	1.69	1.82
43	2l	92	0TD	CB-SB	-11.87	1.70	1.82
32	1a	527	G7M	C8-N9	7.62	1.47	1.33
32	2a	527	G7M	C8-N9	7.61	1.47	1.33
32	2a	527	G7M	C8-N7	7.29	1.46	1.33
32	1a	527	G7M	C8-N7	6.99	1.45	1.33
32	1a	966	M2G	C2-N3	4.26	1.35	1.30
32	2a	527	G7M	C5-C4	4.23	1.47	1.39
32	1a	527	G7M	C5-C4	4.19	1.47	1.39
32	2a	966	M2G	C2-N3	3.93	1.35	1.30
32	1a	516	PSU	C6-C5	3.36	1.39	1.35
1	2A	1911	PSU	C6-C5	3.30	1.39	1.35
1	2A	1915	5MU	C6-C5	3.18	1.39	1.34
1	2A	2605	PSU	C6-C5	3.17	1.39	1.35
1	1A	1911	PSU	C6-C5	3.16	1.39	1.35
1	1A	1917	PSU	C6-C5	3.13	1.39	1.35
1	1A	2605	PSU	C6-C5	3.11	1.38	1.35
32	2a	516	PSU	C6-C5	3.09	1.38	1.35
1	2A	1917	PSU	C6-C5	3.06	1.38	1.35
1	2A	1915	5MU	C2-N1	2.99	1.43	1.38
1	1A	2605	PSU	C4-N3	-2.98	1.33	1.38
1	1A	1915	5MU	C2-N1	2.92	1.43	1.38
32	2a	1404	5MC	C6-C5	2.90	1.39	1.34
32	1a	967	5MC	C6-C5	2.88	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.85	1.33	1.38
1	2A	1939	5MU	C4-C5	2.84	1.49	1.44
1	2A	2251	OMG	C6-N1	-2.83	1.33	1.37
32	1a	1404	5MC	C6-C5	2.83	1.39	1.34
1	1A	1915	5MU	C6-C5	2.82	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1939	5MU	C6-C5	2.81	1.39	1.34
32	1a	1400	5MC	C6-C5	2.80	1.39	1.34
1	2A	2605	PSU	C4-N3	-2.78	1.33	1.38
32	1a	1407	5MC	C6-C5	2.77	1.39	1.34
32	2a	1400	5MC	C6-C5	2.76	1.39	1.34
1	2A	1962	5MC	C6-C5	2.75	1.39	1.34
1	2A	2552	2MU	C4-N3	-2.75	1.33	1.38
1	2A	1915	5MU	C4-N3	-2.73	1.33	1.38
32	2a	967	5MC	C6-C5	2.73	1.39	1.34
1	2A	1917	PSU	C4-N3	-2.68	1.33	1.38
32	2a	1407	5MC	C6-C5	2.66	1.39	1.34
1	1A	1942	5MC	C6-C5	2.63	1.38	1.34
1	1A	1939	5MU	C4-N3	-2.61	1.34	1.38
32	2a	966	M2G	C2-N2	2.60	1.40	1.35
32	1a	1400	5MC	C6-N1	-2.58	1.33	1.38
1	1A	2552	2MU	C4-N3	-2.57	1.34	1.38
1	2A	1942	5MC	C6-C5	2.57	1.38	1.34
1	2A	1939	5MU	C6-N1	-2.55	1.33	1.38
32	1a	966	M2G	C6-N1	-2.55	1.34	1.37
1	2A	1911	PSU	C4-N3	-2.55	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.51	1.33	1.38
1	1A	2251	OMG	C6-N1	-2.50	1.34	1.37
1	1A	1911	PSU	C4-N3	-2.48	1.34	1.38
32	2a	516	PSU	C4-N3	-2.48	1.34	1.38
1	2A	1939	5MU	C6-C5	2.47	1.38	1.34
1	1A	1915	5MU	C4-N3	-2.47	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.46	1.34	1.37
1	1A	1939	5MU	C6-N1	-2.43	1.33	1.38
1	1A	1942	5MC	C6-N1	-2.41	1.33	1.38
32	1a	516	PSU	C4-N3	-2.41	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.40	1.33	1.37
32	2a	527	G7M	C6-N1	-2.40	1.34	1.37
1	1A	1917	PSU	C4-N3	-2.39	1.34	1.38
1	1A	1962	5MC	C6-C5	2.39	1.38	1.34
1	1A	1915	5MU	C4-C5	2.37	1.48	1.44
1	2A	1942	5MC	C6-N1	-2.35	1.34	1.38
1	2A	1915	5MU	C4-C5	2.33	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.33	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.31	1.34	1.38
32	1a	966	M2G	C2-N2	2.31	1.39	1.35
32	2a	1404	5MC	C6-N1	-2.28	1.34	1.38
1	1A	2503	2MA	C2-N3	2.26	1.36	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2552	2MU	C5-C4	2.26	1.48	1.43
1	2A	2503	2MA	C2-N3	2.24	1.36	1.31
32	2a	1498	UR3	C6-C5	2.24	1.40	1.35
32	2a	1407	5MC	C6-N1	-2.15	1.34	1.38
32	1a	967	5MC	C6-N1	-2.15	1.34	1.38
32	2a	967	5MC	C6-N1	-2.12	1.34	1.38
1	1A	2552	2MU	C2-N3	-2.10	1.34	1.38
1	2A	2503	2MA	C6-N1	-2.08	1.33	1.38
32	1a	527	G7M	C6-N1	-2.07	1.34	1.37
32	2a	966	M2G	C6-N1	-2.07	1.34	1.37
32	1a	1498	UR3	C6-C5	2.07	1.39	1.35
1	1A	1939	5MU	C4-C5	2.06	1.48	1.44
1	2A	2552	2MU	C2-N3	-2.06	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.04	1.34	1.37
1	2A	2552	2MU	C5-C4	2.02	1.48	1.43
32	1a	1402	4OC	C6-C5	2.01	1.39	1.35

All (146) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	CSB-SB-CB	-19.86	66.52	102.44
43	1l	92	0TD	CSB-SB-CB	-11.94	80.85	102.44
32	1a	1498	UR3	C4-N3-C2	-6.66	118.29	124.56
1	1A	2605	PSU	N1-C2-N3	6.39	122.37	115.13
1	2A	1911	PSU	N1-C2-N3	6.17	122.12	115.13
1	2A	2605	PSU	N1-C2-N3	6.13	122.07	115.13
1	1A	1911	PSU	N1-C2-N3	6.05	121.99	115.13
1	2A	1939	5MU	C4-N3-C2	-5.98	119.61	127.35
32	2a	516	PSU	N1-C2-N3	5.93	121.85	115.13
32	2a	1498	UR3	C4-N3-C2	-5.91	119.00	124.56
1	1A	1939	5MU	C4-N3-C2	-5.80	119.84	127.35
1	2A	1917	PSU	N1-C2-N3	5.61	121.48	115.13
32	1a	516	PSU	N1-C2-N3	5.60	121.47	115.13
1	2A	1939	5MU	N3-C2-N1	5.50	122.19	114.89
1	2A	1915	5MU	N3-C2-N1	5.32	121.95	114.89
1	1A	1939	5MU	N3-C2-N1	5.31	121.94	114.89
1	1A	1917	PSU	N1-C2-N3	5.21	121.03	115.13
1	1A	2552	2MU	N3-C2-N1	5.01	121.55	114.89
1	1A	1915	5MU	N3-C2-N1	4.83	121.30	114.89
1	1A	1939	5MU	C5-C4-N3	4.79	119.40	115.31
1	2A	1915	5MU	C4-N3-C2	-4.76	121.18	127.35
32	1a	1519	MA6	N3-C2-N1	-4.73	121.29	128.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1518	MA6	N3-C2-N1	-4.68	121.36	128.68
1	1A	1939	5MU	O4-C4-C5	-4.67	119.49	124.90
1	2A	1939	5MU	C5-C4-N3	4.63	119.26	115.31
32	2a	1519	MA6	N3-C2-N1	-4.62	121.45	128.68
1	2A	2552	2MU	N3-C2-N1	4.58	120.97	114.89
32	1a	1518	MA6	N3-C2-N1	-4.52	121.62	128.68
1	2A	1939	5MU	C5-C6-N1	-4.52	118.69	123.34
1	1A	1915	5MU	C1'-N1-C2	4.49	125.69	117.57
1	1A	1915	5MU	C4-N3-C2	-4.48	121.55	127.35
32	1a	1404	5MC	C5-C6-N1	-4.29	118.93	123.34
1	1A	1939	5MU	C5-C6-N1	-4.26	118.95	123.34
1	2A	2552	2MU	C4-N3-C2	-4.23	121.01	126.58
1	2A	2605	PSU	C4-N3-C2	-4.18	120.31	126.34
1	1A	2552	2MU	C4-N3-C2	-4.13	121.13	126.58
1	2A	1915	5MU	C5-C4-N3	4.10	118.81	115.31
1	1A	2605	PSU	C4-N3-C2	-4.08	120.46	126.34
1	1A	1939	5MU	O2-C2-N1	-4.07	117.37	122.79
32	1a	1400	5MC	C5-C6-N1	-4.05	119.17	123.34
1	1A	1915	5MU	C5-C4-N3	4.01	118.73	115.31
1	1A	1911	PSU	C4-N3-C2	-3.96	120.63	126.34
32	2a	516	PSU	C4-N3-C2	-3.95	120.65	126.34
1	2A	1911	PSU	C4-N3-C2	-3.93	120.67	126.34
32	2a	1400	5MC	C5-C6-N1	-3.85	119.38	123.34
1	2A	1962	5MC	C5-C6-N1	-3.74	119.49	123.34
1	2A	1939	5MU	O2-C2-N1	-3.74	117.82	122.79
32	2a	516	PSU	O2-C2-N1	-3.70	118.71	122.79
1	1A	1962	5MC	C5-C6-N1	-3.68	119.55	123.34
1	1A	1911	PSU	O2-C2-N1	-3.68	118.74	122.79
32	1a	967	5MC	C5-C6-N1	-3.66	119.57	123.34
32	1a	516	PSU	C4-N3-C2	-3.66	121.07	126.34
1	2A	1917	PSU	O2-C2-N1	-3.66	118.76	122.79
1	1A	1915	5MU	O4-C4-C5	-3.65	120.67	124.90
32	2a	967	5MC	C5-C6-N1	-3.65	119.58	123.34
32	1a	516	PSU	O2-C2-N1	-3.61	118.82	122.79
43	1l	92	0TD	OD2-CG-CB	3.61	120.94	113.15
1	1A	2552	2MU	C2'-C1'-N1	-3.60	107.22	114.22
1	1A	1915	5MU	C1'-N1-C6	-3.60	115.12	121.12
1	1A	1942	5MC	C5-C6-N1	-3.57	119.66	123.34
32	2a	1404	5MC	C5-C6-N1	-3.48	119.75	123.34
1	1A	2605	PSU	O2-C2-N1	-3.43	119.01	122.79
1	1A	1917	PSU	C4-N3-C2	-3.43	121.40	126.34
1	2A	1917	PSU	C4-N3-C2	-3.37	121.48	126.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1911	PSU	O2-C2-N1	-3.36	119.09	122.79
1	2A	1939	5MU	O4-C4-C5	-3.35	121.02	124.90
1	2A	1915	5MU	C1'-N1-C2	3.34	123.61	117.57
1	2A	1942	5MC	C5-C6-N1	-3.32	119.92	123.34
1	1A	1917	PSU	O2-C2-N1	-3.29	119.17	122.79
1	2A	1915	5MU	O4-C4-C5	-3.27	121.11	124.90
32	2a	1404	5MC	C5-C4-N3	-3.24	118.17	121.67
32	2a	1519	MA6	C4-C5-N7	-3.22	106.04	109.40
32	1a	1498	UR3	C3U-N3-C2	3.21	122.94	117.31
32	1a	1519	MA6	C4-C5-N7	-3.07	106.20	109.40
32	2a	1407	5MC	C5-C6-N1	-3.00	120.25	123.34
1	2A	1915	5MU	C5-C6-N1	-2.95	120.30	123.34
32	2a	1518	MA6	C4-C5-N7	-2.92	106.36	109.40
1	1A	2552	2MU	O2-C2-N1	-2.89	118.94	122.79
43	2l	92	0TD	OD2-CG-CB	2.84	119.29	113.15
1	2A	1942	5MC	C5-C4-N3	-2.81	118.64	121.67
32	1a	1402	4OC	C6-C5-C4	2.80	120.39	116.96
32	1a	1407	5MC	C5-C6-N1	-2.80	120.46	123.34
32	1a	1400	5MC	C5-C4-N3	-2.80	118.66	121.67
1	2A	2552	2MU	C5-C4-N3	2.77	118.98	114.84
1	2A	1920	OMC	O2-C2-N3	-2.72	117.90	122.33
1	2A	1939	5MU	C5M-C5-C4	2.71	121.75	118.77
32	1a	527	G7M	CN7-N7-C8	-2.69	112.50	125.43
1	2A	1939	5MU	C5M-C5-C6	-2.68	119.27	122.85
32	2a	527	G7M	CN7-N7-C8	-2.66	112.62	125.43
1	2A	1915	5MU	O2-C2-N3	-2.62	116.63	121.50
32	2a	1407	5MC	C5-C4-N3	-2.59	118.88	121.67
32	1a	1207	2MG	CM2-N2-C2	-2.59	118.14	123.86
32	1a	1518	MA6	C4-C5-N7	-2.56	106.73	109.40
1	2A	2552	2MU	O4-C4-C5	-2.56	120.66	125.16
32	1a	1407	5MC	C5-C4-N3	-2.56	118.91	121.67
1	2A	2605	PSU	O2-C2-N1	-2.55	119.98	122.79
1	1A	1915	5MU	O2-C2-N3	-2.54	116.77	121.50
1	1A	2552	2MU	O4-C4-C5	-2.53	120.71	125.16
1	2A	2251	OMG	C5-C6-N1	2.53	118.42	113.95
1	2A	2503	2MA	C5-C6-N1	2.50	118.33	114.02
32	1a	1207	2MG	C8-N7-C5	2.49	107.74	102.99
1	1A	1962	5MC	CM5-C5-C6	-2.48	119.53	122.85
1	1A	2552	2MU	C5-C4-N3	2.48	118.55	114.84
1	2A	2503	2MA	C8-N7-C5	2.45	107.65	102.99
1	2A	2552	2MU	O2-C2-N1	-2.43	119.56	122.79
32	2a	1407	5MC	O2-C2-N3	-2.41	118.41	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C5-C6-N1	2.40	118.17	114.02
1	1A	2251	OMG	C5-C6-N1	2.39	118.17	113.95
1	1A	1942	5MC	C5-C4-N3	-2.39	119.10	121.67
1	1A	2251	OMG	C8-N7-C5	2.37	107.50	102.99
32	1a	1207	2MG	O3'-C3'-C2'	2.33	119.35	111.82
32	2a	1207	2MG	C8-N7-C5	2.33	107.42	102.99
32	1a	1207	2MG	C5-C6-N1	2.32	118.06	113.95
32	1a	1407	5MC	CM5-C5-C6	-2.32	119.75	122.85
32	1a	1498	UR3	C6-N1-C2	-2.32	119.71	121.79
32	1a	967	5MC	C5-C4-N3	-2.31	119.19	121.67
1	2A	1915	5MU	C1'-N1-C6	-2.30	117.29	121.12
1	2A	2605	PSU	C5-C6-N1	-2.30	118.66	122.11
32	2a	1402	4OC	C6-C5-C4	2.30	119.77	116.96
32	2a	966	M2G	N1-C2-N2	2.26	119.96	118.04
32	2a	966	M2G	C8-N7-C5	2.25	107.28	102.99
32	1a	1404	5MC	CM5-C5-C6	-2.25	119.84	122.85
43	1l	92	0TD	OD1-CG-CB	-2.22	117.78	122.44
32	1a	966	M2G	C8-N7-C5	2.22	107.22	102.99
1	2A	1915	5MU	C6-N1-C2	-2.21	119.06	121.30
32	2a	1400	5MC	C5-C4-N3	-2.21	119.29	121.67
1	1A	1915	5MU	C5-C6-N1	-2.17	121.11	123.34
1	2A	2251	OMG	C8-N7-C5	2.16	107.10	102.99
32	1a	966	M2G	C5-C6-N1	2.15	117.76	113.95
32	2a	1207	2MG	CM2-N2-C2	-2.15	119.12	123.86
32	2a	966	M2G	C5-C6-N1	2.14	117.74	113.95
1	2A	1962	5MC	C5-C4-N3	-2.14	119.36	121.67
1	2A	2552	2MU	C2'-C1'-N1	-2.14	110.07	114.22
32	2a	967	5MC	C5-C4-N3	-2.12	119.39	121.67
1	1A	1917	PSU	C6-C5-C4	-2.11	116.72	118.20
32	1a	1404	5MC	C5-C4-N3	-2.11	119.40	121.67
1	1A	1911	PSU	O4'-C1'-C2'	2.10	108.11	105.14
32	2a	516	PSU	O4'-C1'-C2'	2.10	108.11	105.14
1	1A	1915	5MU	C6-N1-C2	-2.09	119.18	121.30
1	1A	2503	2MA	C8-N7-C5	2.08	106.96	102.99
32	1a	516	PSU	C6-C5-C4	-2.07	116.75	118.20
32	2a	1498	UR3	C3U-N3-C2	2.07	120.93	117.31
1	2A	2605	PSU	O2-C2-N3	-2.05	117.95	121.82
1	1A	1915	5MU	C5M-C5-C4	2.04	121.02	118.77
1	2A	1911	PSU	C5-C6-N1	-2.04	119.05	122.11
32	2a	967	5MC	CM5-C5-C6	-2.03	120.14	122.85

There are no chirality outliers.

All (31) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
43	2l	92	0TD	O-C-CA-CB
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	2a	1519	MA6	C4'-C5'-O5'-P
43	1l	92	0TD	CA-CB-SB-CSB
1	1A	2251	OMG	C4'-C5'-O5'-P
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1400	5MC	C3'-C4'-C5'-O5'
1	1A	1962	5MC	C2'-C1'-N1-C6
1	2A	1962	5MC	C2'-C1'-N1-C6
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	1920	OMC	C2'-C1'-N1-C2
32	1a	527	G7M	C4'-C5'-O5'-P
43	2l	92	0TD	SB-CB-CG-OD1
1	1A	1920	OMC	C2'-C1'-N1-C2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	1962	5MC	O4'-C1'-N1-C6
1	2A	1962	5MC	O4'-C1'-N1-C6

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2524 ligands modelled in this entry, 2509 are monoatomic - leaving 15 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	$\#\|Z\| > 2$
56	TEL	2A	3739	-	59,62,62	1.28	7 (11%)	77,92,92	1.90	15 (19%)
58	ARG	1B	230	54	10,11,11	0.73	1 (10%)	11,13,13	1.19	2 (18%)
55	HGR	1A	4018	-	39,39,39	2.43	9 (23%)	50,58,58	1.73	15 (30%)
56	TEL	1A	4019	-	59,62,62	1.28	5 (8%)	77,92,92	1.62	12 (15%)
57	MPD	18	103	-	7,7,7	0.24	0	9,10,10	0.42	0
57	MPD	1a	3277	32	7,7,7	0.36	0	9,10,10	0.66	0
57	MPD	2A	3741	-	7,7,7	0.28	0	9,10,10	0.28	0
58	ARG	1F	321	-	10,11,11	0.68	0	11,13,13	1.12	2 (18%)
60	SF4	1d	307	35	0,12,12	-	-	-		
55	HGR	2A	3738	-	39,39,39	2.42	11 (28%)	50,58,58	1.59	9 (18%)
57	MPD	2A	3740	-	7,7,7	0.32	0	9,10,10	0.22	0
57	MPD	1T	205	-	7,7,7	0.33	0	9,10,10	0.36	0
57	MPD	2B	220	-	7,7,7	0.29	0	9,10,10	0.16	0
60	SF4	2d	501	35	0,12,12	-	-	-		
57	MPD	1A	4020	-	7,7,7	0.34	0	9,10,10	0.46	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	TEL	2A	3739	-	-	6/73/108/108	0/4/5/5
58	ARG	1B	230	54	-	2/11/11/11	-
55	HGR	1A	4018	-	-	7/20/79/79	0/4/4/4
56	TEL	1A	4019	-	-	3/73/108/108	0/4/5/5
57	MPD	18	103	-	-	2/5/5/5	-
57	MPD	1a	3277	32	-	3/5/5/5	-
57	MPD	2A	3741	-	-	4/5/5/5	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
58	ARG	1F	321	-	-	1/11/11/11	-
60	SF4	1d	307	35	-	-	0/6/5/5
55	HGR	2A	3738	-	-	8/20/79/79	0/4/4/4
57	MPD	2A	3740	-	-	0/5/5/5	-
57	MPD	1T	205	-	-	2/5/5/5	-
57	MPD	2B	220	-	-	2/5/5/5	-
60	SF4	2d	501	35	-	-	0/6/5/5
57	MPD	1A	4020	-	-	2/5/5/5	-

All (33) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1A	4018	HGR	C12-C14	8.89	1.54	1.33
55	2A	3738	HGR	C12-C14	8.76	1.54	1.33
55	1A	4018	HGR	C5-C6	-5.45	1.39	1.50
55	2A	3738	HGR	C5-C6	-5.32	1.39	1.50
56	1A	4019	TEL	O5-C10	5.29	1.44	1.35
56	2A	3739	TEL	O5-C10	5.24	1.44	1.35
55	2A	3738	HGR	C5-C4	-5.20	1.39	1.49
55	1A	4018	HGR	C5-C4	-5.17	1.39	1.49
56	2A	3739	TEL	O9-C15	4.82	1.45	1.34
55	2A	3738	HGR	C3-C2	-4.72	1.39	1.48
55	1A	4018	HGR	O4-C2	4.54	1.36	1.24
55	1A	4018	HGR	C3-C2	-4.50	1.39	1.48
56	1A	4019	TEL	O9-C15	4.46	1.44	1.34
55	2A	3738	HGR	O4-C2	4.33	1.36	1.24
56	1A	4019	TEL	C36-N31	-3.27	1.33	1.38
56	2A	3739	TEL	O5-C2	-3.04	1.43	1.47
56	1A	4019	TEL	O5-C2	-3.01	1.43	1.47
56	1A	4019	TEL	O9-C4	-2.99	1.41	1.46
55	1A	4018	HGR	C1-C6	2.71	1.39	1.35
55	2A	3738	HGR	C1-C6	2.60	1.39	1.35
55	1A	4018	HGR	O8-C23	2.58	1.45	1.41
55	2A	3738	HGR	O9-C23	2.54	1.45	1.41
56	2A	3739	TEL	O9-C4	-2.47	1.42	1.46
56	2A	3739	TEL	C21-C26	-2.46	1.49	1.52
55	2A	3738	HGR	O8-C23	2.46	1.45	1.41
55	2A	3738	HGR	O1-C10	2.45	1.46	1.41
55	1A	4018	HGR	O1-C10	2.44	1.46	1.41
55	1A	4018	HGR	C8-C7	-2.32	1.50	1.53
56	2A	3739	TEL	C36-N31	-2.26	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2A	3738	HGR	C17-N1	2.18	1.49	1.45
56	2A	3739	TEL	C30-C26	-2.13	1.49	1.52
58	1B	230	ARG	OXT-C	-2.12	1.23	1.30
55	2A	3738	HGR	C1-C2	-2.10	1.39	1.44

All (55) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	2A	3739	TEL	O9-C15-C21	7.35	118.35	110.88
56	1A	4019	TEL	C17-C11-N6	-7.22	102.15	113.31
56	2A	3739	TEL	C17-C11-N6	-7.14	102.28	113.31
56	2A	3739	TEL	C11-N6-C10	5.72	129.47	122.25
56	1A	4019	TEL	O9-C15-C21	5.41	116.38	110.88
55	2A	3738	HGR	C12-C6-C1	-4.90	114.80	119.31
56	2A	3739	TEL	C4-O9-C15	-4.65	109.92	118.18
56	1A	4019	TEL	C11-N6-C10	4.45	127.86	122.25
55	1A	4018	HGR	C4-C5-C6	4.20	121.42	112.36
55	2A	3738	HGR	C4-C5-C6	4.16	121.32	112.36
55	1A	4018	HGR	C8-C7-C11	-3.73	107.11	113.67
55	1A	4018	HGR	C23-O9-C22	-3.72	100.64	106.31
56	2A	3739	TEL	O5-C2-C1	3.47	113.04	106.93
55	2A	3738	HGR	O8-C18-C22	-3.32	98.54	105.97
55	1A	4018	HGR	C4-C3-C2	-3.31	118.78	121.83
55	1A	4018	HGR	C12-C6-C1	-3.25	116.31	119.31
56	2A	3739	TEL	C8-C4-C2	-3.25	110.75	115.23
56	2A	3739	TEL	C28-C24-C19	-3.07	110.89	116.11
58	1B	230	ARG	OXT-C-O	-3.01	117.25	124.09
56	1A	4019	TEL	C38-O32-C28	2.99	123.80	117.55
58	1F	321	ARG	OXT-C-O	-2.83	117.66	124.09
55	1A	4018	HGR	O3-C10-C9	2.82	111.55	106.78
56	2A	3739	TEL	O18-C13-C19	-2.72	116.21	121.26
56	1A	4019	TEL	C4-O9-C15	-2.67	113.43	118.18
55	1A	4018	HGR	O9-C22-C18	-2.63	100.08	105.97
55	2A	3738	HGR	O4-C2-C3	-2.59	117.24	121.30
55	2A	3738	HGR	C1-C2-C3	2.55	120.90	115.99
55	1A	4018	HGR	C1-C2-C3	2.53	120.86	115.99
55	1A	4018	HGR	O3-C3-C2	2.51	117.35	112.56
56	1A	4019	TEL	O39-C34-C28	2.51	112.39	106.40
55	2A	3738	HGR	C8-C7-C11	-2.51	109.27	113.67
56	2A	3739	TEL	C19-C13-C7	2.50	123.46	119.10
55	2A	3738	HGR	O9-C22-C18	-2.46	100.47	105.97
56	1A	4019	TEL	C33-C28-C34	2.45	113.49	109.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1A	4019	TEL	C8-C4-C2	-2.44	111.86	115.23
56	1A	4019	TEL	C2-O5-C10	-2.41	107.38	109.29
58	1B	230	ARG	OXT-C-CA	2.39	121.54	113.38
56	2A	3739	TEL	O5-C2-C3	2.35	105.54	103.16
58	1F	321	ARG	OXT-C-CA	2.32	121.29	113.38
55	1A	4018	HGR	O4-C2-C3	-2.30	117.70	121.30
55	1A	4018	HGR	C10-C9-C8	-2.28	99.40	102.30
55	1A	4018	HGR	C9-C8-C7	-2.28	98.98	101.64
55	2A	3738	HGR	C4-C3-C2	-2.27	119.74	121.83
55	1A	4018	HGR	O1-C10-C9	-2.25	102.08	104.98
55	1A	4018	HGR	O8-C18-C22	-2.23	100.98	105.97
56	2A	3739	TEL	C38-O32-C28	2.22	122.19	117.55
56	2A	3739	TEL	O20-C15-C21	-2.22	121.85	124.77
55	2A	3738	HGR	C23-O9-C22	-2.22	102.93	106.31
56	2A	3739	TEL	O9-C15-O20	-2.22	119.80	123.94
56	1A	4019	TEL	C56-N52-C47	2.20	120.66	116.85
56	2A	3739	TEL	C1-C2-C3	-2.20	114.05	116.69
56	2A	3739	TEL	C56-N52-C47	2.17	120.60	116.85
56	1A	4019	TEL	C19-C13-C7	2.07	122.70	119.10
55	1A	4018	HGR	C20-C17-C19	-2.01	106.74	110.78
56	1A	4019	TEL	O5-C2-C1	2.01	110.46	106.93

There are no chirality outliers.

All (42) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4018	HGR	C2-C3-O3-C10
55	2A	3738	HGR	C2-C3-O3-C10
56	2A	3739	TEL	C24-C28-O32-C38
57	1a	3277	MPD	C2-C3-C4-O4
57	2B	220	MPD	C2-C3-C4-C5
58	1F	321	ARG	C-CA-CB-CG
58	1B	230	ARG	NE-CD-CG-CB
56	2A	3739	TEL	N6-C11-C17-C22
58	1B	230	ARG	CA-CB-CG-CD
56	1A	4019	TEL	C33-C28-O32-C38
56	2A	3739	TEL	C33-C28-O32-C38
56	1A	4019	TEL	C34-C28-O32-C38
56	2A	3739	TEL	C34-C28-O32-C38
57	18	103	MPD	C2-C3-C4-C5
55	1A	4018	HGR	C12-C14-C15-O7
55	1A	4018	HGR	C12-C14-C15-N1

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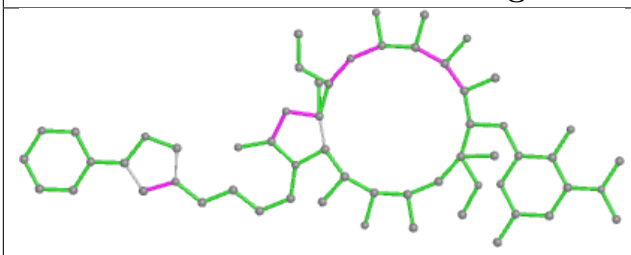
Mol	Chain	Res	Type	Atoms
55	2A	3738	HGR	C12-C14-C15-O7
55	2A	3738	HGR	C12-C14-C15-N1
55	2A	3738	HGR	O6-C11-C7-O1
57	18	103	MPD	C2-C3-C4-O4
57	1a	3277	MPD	C1-C2-C3-C4
57	2A	3741	MPD	C1-C2-C3-C4
55	1A	4018	HGR	C16-C14-C15-O7
55	1A	4018	HGR	C16-C14-C15-N1
55	2A	3738	HGR	C16-C14-C15-O7
55	2A	3738	HGR	C16-C14-C15-N1
56	1A	4019	TEL	C24-C28-O32-C38
56	2A	3739	TEL	O5-C2-C4-C8
57	1a	3277	MPD	O2-C2-C3-C4
57	2A	3741	MPD	O2-C2-C3-C4
55	2A	3738	HGR	C19-C17-N1-C15
55	1A	4018	HGR	C19-C17-N1-C15
57	1A	4020	MPD	C2-C3-C4-C5
57	1T	205	MPD	C2-C3-C4-C5
57	2A	3741	MPD	C2-C3-C4-C5
56	2A	3739	TEL	C1-C2-C4-C8
55	2A	3738	HGR	C14-C12-C6-C5
55	1A	4018	HGR	O6-C11-C7-O1
57	1A	4020	MPD	C2-C3-C4-O4
57	1T	205	MPD	C2-C3-C4-O4
57	2A	3741	MPD	C2-C3-C4-O4
57	2B	220	MPD	C2-C3-C4-O4

There are no ring outliers.

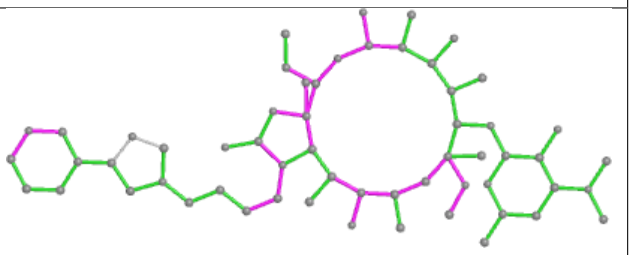
No monomer is involved in short contacts.

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.

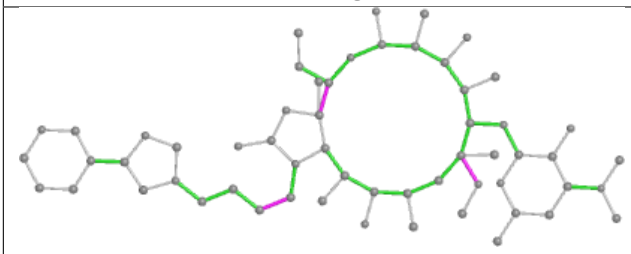
Ligand TEL 2A 3739



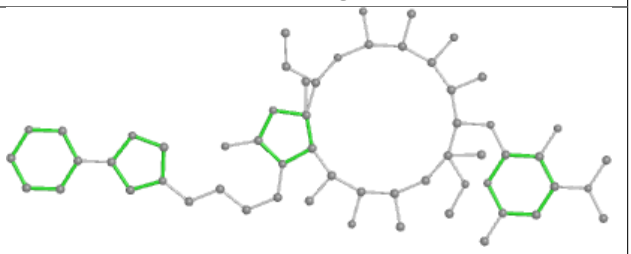
Bond lengths



Bond angles

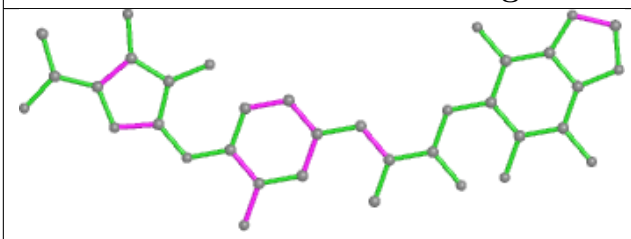


Torsions

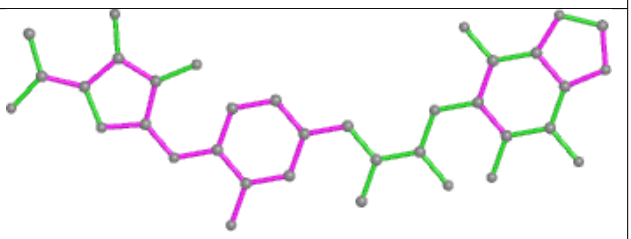


Rings

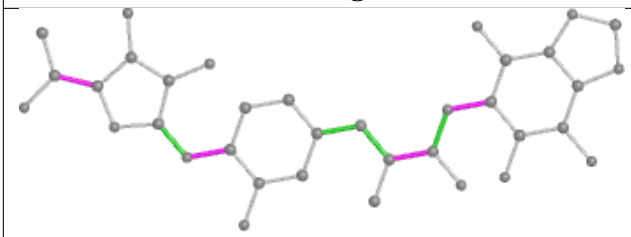
Ligand HGR 1A 4018



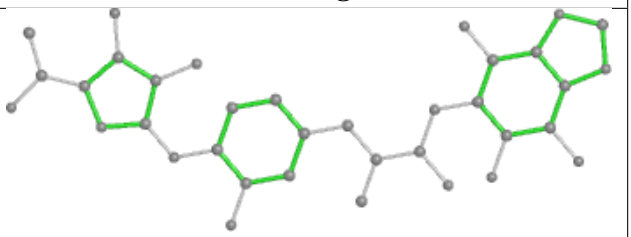
Bond lengths



Bond angles

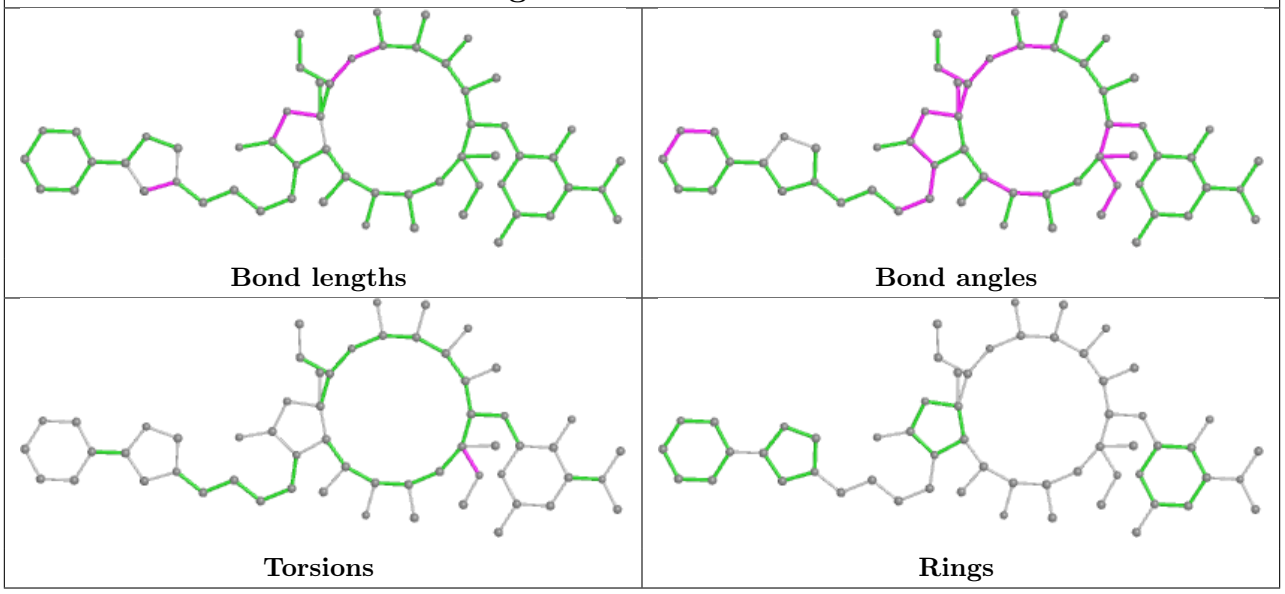


Torsions

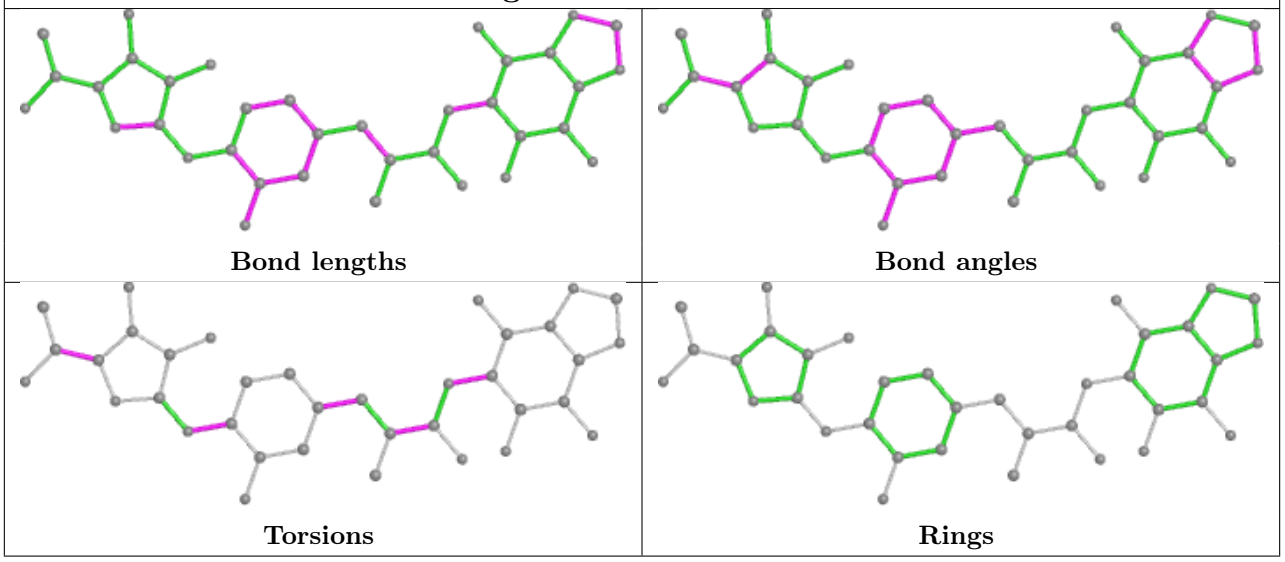


Rings

Ligand TEL 1A 4019



Ligand HGR 2A 3738



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2861/2915 (98%)	0.38	127 (4%) 34 27	18, 33, 89, 102	0
1	2A	2856/2915 (97%)	0.31	151 (5%) 26 20	27, 51, 91, 101	0
2	1B	120/121 (99%)	-0.24	0 100 100	27, 46, 60, 78	0
2	2B	120/121 (99%)	-0.02	0 100 100	55, 72, 80, 86	0
3	1D	275/276 (99%)	0.48	0 100 100	20, 34, 48, 71	0
3	2D	275/276 (99%)	0.39	0 100 100	26, 46, 58, 73	0
4	1E	204/206 (99%)	0.24	0 100 100	17, 36, 57, 67	0
4	2E	204/206 (99%)	0.09	0 100 100	29, 50, 64, 81	0
5	1F	203/210 (96%)	0.13	0 100 100	17, 37, 63, 79	0
5	2F	203/210 (96%)	0.15	0 100 100	30, 60, 74, 79	0
6	1G	181/182 (99%)	0.12	2 (1%) 80 78	43, 59, 72, 84	0
6	2G	181/182 (99%)	1.37	47 (25%) 0 0	68, 76, 82, 85	0
7	1H	174/180 (96%)	-0.02	1 (0%) 89 88	34, 49, 61, 68	0
7	2H	173/180 (96%)	1.68	58 (33%) 0 0	62, 73, 79, 86	0
8	1I	147/148 (99%)	0.07	0 100 100	40, 65, 75, 80	0
8	2I	146/148 (98%)	0.17	8 (5%) 25 19	50, 68, 77, 82	0
9	1N	140/140 (100%)	0.21	0 100 100	23, 35, 56, 69	0
9	2N	140/140 (100%)	0.25	1 (0%) 87 86	40, 56, 68, 74	0
10	1O	122/122 (100%)	0.21	0 100 100	27, 36, 52, 59	0
10	2O	122/122 (100%)	0.09	0 100 100	37, 48, 63, 69	0
11	1P	149/150 (99%)	0.13	1 (0%) 87 86	19, 42, 63, 76	0
11	2P	149/150 (99%)	0.59	6 (4%) 38 31	32, 60, 74, 79	0
12	1Q	141/141 (100%)	0.25	1 (0%) 87 86	26, 36, 48, 60	0
12	2Q	141/141 (100%)	0.23	2 (1%) 75 71	38, 57, 68, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.20	0 100 100	23, 31, 43, 56	0
13	2R	118/118 (100%)	0.25	1 (0%) 86 84	33, 46, 55, 63	0
14	1S	110/112 (98%)	0.14	1 (0%) 84 82	35, 45, 57, 64	0
14	2S	110/112 (98%)	0.84	15 (13%) 3 1	60, 68, 74, 77	0
15	1T	131/146 (89%)	0.10	1 (0%) 86 84	29, 41, 62, 76	0
15	2T	131/146 (89%)	0.25	1 (0%) 86 84	43, 52, 70, 77	0
16	1U	116/118 (98%)	0.25	0 100 100	19, 27, 40, 59	0
16	2U	116/118 (98%)	0.31	0 100 100	36, 52, 65, 73	0
17	1V	101/101 (100%)	0.07	0 100 100	20, 36, 53, 63	0
17	2V	101/101 (100%)	0.06	0 100 100	37, 62, 69, 77	0
18	1W	112/113 (99%)	0.27	1 (0%) 84 82	21, 28, 48, 79	0
18	2W	112/113 (99%)	0.24	1 (0%) 84 82	34, 43, 60, 84	0
19	1X	95/96 (98%)	0.20	0 100 100	24, 34, 54, 68	0
19	2X	95/96 (98%)	0.38	3 (3%) 47 40	39, 55, 68, 75	0
20	1Y	107/110 (97%)	0.06	1 (0%) 84 82	31, 43, 61, 70	0
20	2Y	107/110 (97%)	0.46	6 (5%) 24 19	51, 63, 73, 78	0
21	1Z	203/206 (98%)	0.02	2 (0%) 82 80	35, 53, 69, 76	0
21	2Z	201/206 (97%)	0.26	1 (0%) 91 89	59, 71, 78, 82	0
22	10	77/85 (90%)	0.23	0 100 100	25, 34, 48, 55	0
22	20	77/85 (90%)	0.95	12 (15%) 2 1	45, 57, 68, 71	0
23	11	97/98 (98%)	0.42	3 (3%) 49 42	25, 40, 61, 69	0
23	21	97/98 (98%)	0.29	1 (1%) 82 80	38, 50, 67, 73	0
24	12	70/72 (97%)	0.14	0 100 100	32, 44, 56, 73	0
24	22	70/72 (97%)	0.43	2 (2%) 51 45	55, 64, 70, 74	0
25	13	59/60 (98%)	0.08	0 100 100	23, 32, 58, 67	0
25	23	59/60 (98%)	0.51	1 (1%) 70 66	46, 57, 72, 78	0
26	14	69/71 (97%)	0.72	12 (17%) 1 0	52, 72, 84, 89	0
26	24	69/71 (97%)	1.57	20 (28%) 0 0	72, 82, 87, 91	0
27	15	59/60 (98%)	0.26	0 100 100	19, 30, 44, 56	0
27	25	59/60 (98%)	0.06	0 100 100	32, 45, 56, 65	0
28	16	53/54 (98%)	-0.11	0 100 100	30, 38, 52, 57	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.27	0 100 100	45, 54, 62, 67	0
29	17	48/49 (97%)	0.41	0 100 100	19, 25, 50, 57	0
29	27	48/49 (97%)	0.46	2 (4%) 36 29	29, 37, 57, 66	0
30	18	64/65 (98%)	0.33	0 100 100	24, 30, 39, 47	0
30	28	64/65 (98%)	0.48	1 (1%) 72 68	39, 48, 56, 60	0
31	19	37/37 (100%)	0.31	0 100 100	28, 37, 52, 54	0
31	29	37/37 (100%)	1.51	10 (27%) 0 0	53, 59, 67, 69	0
32	1a	1488/1521 (97%)	0.50	127 (8%) 10 7	34, 63, 86, 99	0
32	2a	1492/1521 (98%)	0.54	158 (10%) 6 4	42, 71, 89, 99	0
33	1b	231/256 (90%)	0.14	8 (3%) 44 36	61, 72, 81, 85	0
33	2b	231/256 (90%)	0.77	34 (14%) 2 1	67, 78, 85, 88	0
34	1c	206/239 (86%)	0.69	20 (9%) 7 5	56, 68, 77, 81	0
34	2c	206/239 (86%)	1.16	52 (25%) 0 0	70, 78, 83, 86	0
35	1d	208/209 (99%)	0.30	9 (4%) 35 28	52, 66, 74, 79	0
35	2d	208/209 (99%)	0.61	14 (6%) 17 13	59, 67, 74, 77	0
36	1e	148/162 (91%)	0.16	0 100 100	45, 61, 69, 81	0
36	2e	148/162 (91%)	0.56	12 (8%) 12 8	56, 67, 74, 79	0
37	1f	100/101 (99%)	-0.01	0 100 100	49, 60, 69, 72	0
37	2f	100/101 (99%)	-0.21	0 100 100	54, 63, 71, 77	0
38	1g	155/156 (99%)	0.47	13 (8%) 11 7	57, 67, 74, 80	0
38	2g	155/156 (99%)	1.51	53 (34%) 0 0	66, 75, 81, 85	0
39	1h	137/138 (99%)	0.21	2 (1%) 73 70	52, 62, 70, 75	0
39	2h	137/138 (99%)	0.95	17 (12%) 4 2	57, 68, 73, 78	0
40	1i	127/128 (99%)	2.16	68 (53%) 0 0	57, 71, 79, 82	0
40	2i	126/128 (98%)	3.66	108 (85%) 0 0	70, 79, 84, 86	0
41	1j	97/105 (92%)	1.75	37 (38%) 0 0	55, 73, 82, 84	0
41	2j	96/105 (91%)	2.85	60 (62%) 0 0	70, 80, 85, 87	0
42	1k	114/129 (88%)	0.08	1 (0%) 84 82	42, 59, 70, 74	0
42	2k	114/129 (88%)	0.32	6 (5%) 26 20	51, 67, 74, 79	0
43	1l	121/132 (91%)	0.18	0 100 100	46, 54, 67, 72	0
43	2l	121/132 (91%)	0.07	2 (1%) 70 66	46, 60, 68, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	1.10	21 (18%) 1 0	56, 69, 75, 77	0
44	2m	114/126 (90%)	1.89	52 (45%) 0 0	71, 78, 82, 84	0
45	1n	60/61 (98%)	2.72	43 (71%) 0 0	59, 65, 74, 75	0
45	2n	60/61 (98%)	3.58	52 (86%) 0 0	69, 78, 83, 86	0
46	1o	88/89 (98%)	0.09	0 100 100	44, 59, 71, 77	0
46	2o	88/89 (98%)	0.21	0 100 100	55, 66, 74, 82	0
47	1p	82/88 (93%)	2.12	40 (48%) 0 0	58, 66, 75, 79	0
47	2p	82/88 (93%)	0.74	4 (4%) 29 23	55, 63, 73, 78	0
48	1q	99/105 (94%)	0.48	2 (2%) 65 60	51, 63, 72, 75	0
48	2q	99/105 (94%)	0.75	7 (7%) 16 11	51, 64, 73, 78	0
49	1r	68/88 (77%)	-0.02	0 100 100	52, 60, 74, 75	0
49	2r	68/88 (77%)	0.01	0 100 100	58, 65, 75, 79	0
50	1s	83/93 (89%)	1.54	30 (36%) 0 0	60, 70, 76, 80	0
50	2s	83/93 (89%)	2.69	58 (69%) 0 0	71, 81, 85, 87	0
51	1t	96/106 (90%)	2.36	57 (59%) 0 0	55, 66, 75, 77	0
51	2t	98/106 (92%)	1.44	29 (29%) 0 0	52, 64, 76, 78	0
52	1u	23/27 (85%)	3.10	18 (78%) 0 0	64, 66, 71, 72	0
52	2u	23/27 (85%)	4.19	19 (82%) 0 0	73, 75, 79, 80	0
53	1y	97/113 (85%)	0.40	3 (3%) 49 42	51, 60, 70, 74	0
53	2y	96/113 (84%)	2.78	64 (66%) 0 0	66, 76, 81, 83	0
All	All	20766/21468 (96%)	0.51	1803 (8%) 10 7	17, 58, 82, 102	0

All (1803) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1A	1087	G	11.6
1	1A	1076	C	11.2
1	1A	1090	U	9.7
40	2i	109	VAL	9.3
1	1A	1089	G	9.0
1	1A	1064	C	8.9
32	2a	1030(B)	C	8.8
1	1A	1091	G	8.6
1	1A	1065	U	8.4
41	2j	44	VAL	8.4

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Mol	Chain	Res	Type	RSRZ
53	2y	40	ILE	8.4
32	2a	1030(A)	G	8.3
52	2u	14	TRP	8.3
1	1A	1074	G	8.3
1	1A	1077	A	8.1
52	2u	16	GLY	8.0
1	2A	2154	G	8.0
1	1A	1066	U	7.9
1	2A	2147	G	7.9
44	2m	102	ARG	7.9
1	1A	1080	C	7.8
1	1A	1075	C	7.7
1	2A	1046	A	7.7
1	2A	2153	G	7.6
1	1A	1078	U	7.6
1	1A	1088	A	7.6
1	2A	2169	A	7.6
1	2A	2155	G	7.5
26	24	49	PHE	7.5
32	1a	1001	A	7.4
53	2y	8	LYS	7.3
52	2u	13	ILE	7.3
52	1u	2	GLY	7.3
45	2n	34	TYR	7.2
1	1A	1067	A	7.2
32	1a	1036	G	7.2
40	2i	66	ARG	7.2
35	1d	2	GLY	7.0
1	2A	2146	C	7.0
40	2i	65	VAL	7.0
32	2a	1036	G	7.0
1	2A	2139	C	7.0
1	2A	1085	A	7.0
32	2a	1286	A	7.0
40	2i	10	ARG	6.9
1	2A	2125	G	6.9
6	2G	136	ARG	6.9
26	14	49	PHE	6.8
1	1A	1103	A	6.8
32	2a	1030	C	6.8
53	2y	4	ASN	6.7
40	2i	67	GLY	6.7

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Mol	Chain	Res	Type	RSRZ
1	1A	1072	C	6.7
32	1a	1030(B)	C	6.7
45	2n	2	ALA	6.7
41	2j	47	PHE	6.6
41	2j	67	THR	6.6
1	1A	1079	C	6.6
53	2y	42	SER	6.6
45	2n	35	ARG	6.6
1	2A	2142	C	6.5
1	2A	2124	G	6.4
1	2A	2173	A	6.4
1	2A	2162	G	6.4
1	2A	2138	C	6.4
32	1a	1257	U	6.4
1	2A	2168	G	6.3
41	2j	72	VAL	6.3
1	1A	1081	U	6.3
32	1a	1001(A)	G	6.3
1	1A	2116	G	6.2
1	2A	2174	C	6.2
53	2y	9	GLN	6.2
52	2u	2	GLY	6.2
38	2g	34	GLY	6.1
1	2A	1083	U	6.1
1	1A	2147	G	6.1
44	2m	6	GLY	6.1
1	1A	1071	G	6.1
40	2i	123	PRO	6.1
40	2i	127	LYS	6.0
40	2i	69	GLY	6.0
40	2i	108	VAL	6.0
41	2j	62	HIS	6.0
7	2H	165	ALA	6.0
45	1n	20	ALA	5.9
1	1A	1063	G	5.9
1	2A	2793	G	5.9
41	2j	46	ARG	5.9
40	2i	63	ILE	5.9
53	2y	10	MET	5.9
26	14	50	VAL	5.9
1	1A	1086	A	5.9
50	2s	30	LEU	5.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2132	U	5.9
41	2j	48	THR	5.9
1	2A	2165	G	5.8
1	1A	1102	C	5.8
40	2i	126	SER	5.8
1	2A	2116	G	5.8
53	2y	77	LEU	5.7
40	2i	14	VAL	5.7
1	2A	2132	U	5.7
32	2a	1028	C	5.7
32	2a	1001	A	5.7
32	1a	1031	G	5.7
1	1A	2794	C	5.7
1	2A	2140	C	5.7
38	2g	25	ALA	5.7
41	2j	45	ARG	5.7
52	2u	12	LYS	5.6
40	2i	18	PHE	5.6
41	2j	65	LEU	5.6
45	2n	33	VAL	5.6
53	2y	49	VAL	5.6
52	1u	14	TRP	5.6
23	11	2	SER	5.6
41	2j	38	ILE	5.6
1	1A	2166	G	5.6
52	1u	13	ILE	5.6
38	2g	154	TYR	5.6
40	2i	71	SER	5.6
1	1A	1082	U	5.6
41	2j	34	VAL	5.5
41	2j	68	HIS	5.6
32	2a	1034	G	5.5
47	1p	6	LEU	5.5
32	2a	1030(C)	G	5.5
40	2i	42	ARG	5.5
52	2u	6	ARG	5.5
1	1A	2117	A	5.5
1	2A	2126	A	5.5
40	2i	72	GLY	5.5
50	2s	49	ILE	5.5
45	2n	61	TRP	5.5
1	1A	888	C	5.5

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Mol	Chain	Res	Type	RSRZ
1	2A	2144	U	5.5
1	2A	2106	G	5.4
40	1i	14	VAL	5.4
38	2g	9	VAL	5.4
40	2i	75	ASP	5.4
1	1A	2168	G	5.4
32	2a	1001(A)	G	5.4
45	2n	31	ARG	5.4
40	2i	110	GLU	5.4
45	2n	57	ARG	5.4
1	1A	2115	G	5.4
1	2A	2172	U	5.4
44	1m	115	LYS	5.4
40	2i	4	TYR	5.4
53	2y	38	HIS	5.4
40	2i	115	GLY	5.4
32	2a	1257	U	5.3
50	2s	31	ILE	5.3
32	2a	1035	A	5.3
1	2A	2127	G	5.3
32	2a	1353	G	5.3
51	1t	73	HIS	5.3
40	1i	63	ILE	5.3
40	2i	21	PRO	5.3
53	2y	41	LEU	5.3
40	2i	5	TYR	5.3
1	2A	2804	C	5.3
32	2a	1249	C	5.3
34	2c	159	GLY	5.3
32	2a	1033	G	5.3
40	2i	36	TYR	5.3
23	21	2	SER	5.3
51	1t	67	ALA	5.3
1	2A	2107	C	5.2
32	2a	1027	C	5.2
1	2A	888	C	5.2
45	1n	14	PRO	5.2
32	2a	1030(D)	A	5.2
45	1n	18	VAL	5.2
52	2u	9	ARG	5.2
40	2i	102	LEU	5.2
1	2A	2137	C	5.1

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Mol	Chain	Res	Type	RSRZ
1	1A	2793	G	5.1
32	2a	1026	G	5.1
40	2i	74	ILE	5.1
1	1A	2167	U	5.1
50	2s	80	TYR	5.1
6	2G	39	ILE	5.1
40	1i	46	ALA	5.1
40	2i	90	PRO	5.1
1	2A	2152	G	5.1
1	1A	2145	C	5.1
1	1A	2161	C	5.1
1	2A	2145	C	5.1
1	2A	2805	G	5.1
53	2y	50	ALA	5.1
1	1A	1093	G	5.0
1	1A	2805	G	5.0
26	14	46	GLN	5.0
32	1a	204	U	5.0
44	2m	87	TYR	5.0
40	2i	76	ALA	5.0
6	2G	152	LEU	5.0
1	2A	2176	A	5.0
32	1a	1030(D)	A	5.0
40	2i	37	PHE	5.0
44	2m	89	GLY	5.0
51	1t	55	ILE	5.0
53	2y	12	ILE	5.0
45	1n	16	PHE	5.0
32	2a	1031	G	5.0
1	1A	1092	C	5.0
53	2y	63	ALA	5.0
40	2i	33	PHE	5.0
40	2i	113	LYS	5.0
40	2i	114	TYR	5.0
41	2j	6	ILE	4.9
50	2s	35	SER	4.9
40	2i	120	ARG	4.9
40	1i	125	TYR	4.9
38	2g	7	ALA	4.9
41	2j	66	ARG	4.9
40	2i	125	TYR	4.9
45	2n	29	ARG	4.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2803	C	4.9
6	2G	3	LEU	4.9
1	2A	2803	C	4.9
1	1A	1085	A	4.9
1	2A	2170	A	4.9
1	2A	2167	U	4.9
47	1p	60	LEU	4.9
44	2m	75	ALA	4.9
1	2A	2802	G	4.9
45	2n	39	LEU	4.9
40	2i	9	ARG	4.9
1	2A	2141	G	4.9
32	2a	1373	G	4.9
50	2s	71	LEU	4.9
40	2i	88	TYR	4.8
45	2n	44	LEU	4.8
1	1A	1057	A	4.8
1	2A	2148	G	4.8
52	2u	22	ARG	4.8
32	1a	1286	A	4.8
45	2n	37	PHE	4.8
1	2A	2164	C	4.8
50	2s	66	MET	4.8
40	1i	106	ALA	4.8
1	1A	2146	C	4.8
40	2i	105	ASP	4.8
40	2i	111	ARG	4.8
1	2A	2801(A)	A	4.8
53	2y	11	GLU	4.8
40	2i	73	GLN	4.8
41	2j	96	ILE	4.7
26	14	52	THR	4.7
45	2n	38	GLY	4.7
45	2n	25	VAL	4.7
40	2i	62	TYR	4.7
1	2A	1082	U	4.7
1	2A	2179	C	4.7
51	1t	70	SER	4.7
32	2a	1287	A	4.7
26	24	54	GLY	4.7
41	2j	63	PHE	4.7
45	2n	56	VAL	4.7

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Mol	Chain	Res	Type	RSRZ
53	2y	88	LEU	4.7
40	2i	81	ILE	4.7
53	2y	73	ALA	4.7
41	2j	40	LEU	4.7
50	1s	60	VAL	4.7
1	1A	1053	C	4.7
50	2s	52	TYR	4.7
1	2A	2175	C	4.6
1	2A	2120	G	4.6
32	1a	1002	G	4.6
7	2H	103	LEU	4.6
40	2i	40	LEU	4.6
40	2i	44	VAL	4.6
1	2A	2119	A	4.6
1	2A	1076	C	4.6
45	1n	33	VAL	4.6
1	2A	229	A	4.6
26	24	66	SER	4.6
45	2n	6	LEU	4.6
1	1A	2804	C	4.6
45	1n	15	LYS	4.6
52	2u	17	THR	4.6
51	1t	76	ALA	4.6
32	1a	1447	A	4.6
41	1j	44	VAL	4.6
38	2g	33	ASP	4.6
1	2A	2161	C	4.6
34	2c	23	TYR	4.6
34	2c	160	ALA	4.6
40	2i	8	GLY	4.6
42	2k	13	GLN	4.6
38	2g	32	ARG	4.6
51	1t	72	LEU	4.5
51	1t	69	GLY	4.5
32	1a	1030(C)	G	4.5
51	1t	66	ALA	4.5
47	1p	1	MET	4.5
52	1u	10	ARG	4.5
53	2y	39	ILE	4.5
45	2n	60	SER	4.5
34	2c	65	ALA	4.5
45	1n	34	TYR	4.5

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Mol	Chain	Res	Type	RSRZ
1	2A	2143	C	4.5
1	2A	2121	G	4.5
1	2A	2159	G	4.5
32	1a	1000	U	4.5
50	2s	15	LEU	4.5
1	2A	1067	A	4.5
38	2g	41	ARG	4.5
1	2A	2118	U	4.5
40	2i	70	LYS	4.5
1	2A	2133	G	4.5
32	2a	1032	G	4.5
40	2i	30	GLY	4.5
1	1A	2169	A	4.4
45	2n	41	ARG	4.4
6	2G	157	ILE	4.4
40	2i	7	THR	4.4
52	1u	17	THR	4.4
53	2y	7	SER	4.4
1	2A	2111	C	4.4
51	1t	68	LYS	4.4
1	2A	2110	G	4.4
40	1i	19	LEU	4.4
45	2n	13	THR	4.4
45	2n	12	ARG	4.4
50	2s	34	TRP	4.4
38	2g	36	LYS	4.4
1	1A	2173	A	4.4
38	2g	37	ASN	4.4
40	2i	47	LEU	4.4
32	2a	1149	C	4.4
1	2A	2171	A	4.4
1	2A	1104	C	4.4
26	24	46	GLN	4.4
32	2a	1248	A	4.4
45	1n	61	TRP	4.4
32	1a	1446	U	4.3
1	1A	2159	G	4.3
1	2A	2109	U	4.3
45	1n	21	TYR	4.3
41	2j	54	PHE	4.3
53	2y	51	ASP	4.3
1	2A	2123	G	4.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2114	A	4.3
1	1A	2125	G	4.3
1	1A	2126	A	4.3
1	1A	2113	U	4.3
1	2A	2896	C	4.3
32	1a	219	C	4.3
41	1j	72	VAL	4.3
31	29	37	GLY	4.2
51	1t	59	ALA	4.2
1	2A	2136	C	4.2
32	1a	1030	C	4.2
41	2j	16	LEU	4.2
40	2i	55	ALA	4.2
41	2j	27	ALA	4.2
32	2a	1002	G	4.2
6	2G	73	ALA	4.2
45	1n	59	ALA	4.2
1	2A	2160	G	4.2
1	2A	2792	G	4.2
45	2n	59	ALA	4.2
45	2n	24	CYS	4.2
6	1G	48	GLU	4.2
40	1i	109	VAL	4.2
41	2j	64	GLU	4.2
50	2s	9	VAL	4.2
40	1i	126	SER	4.2
40	2i	15	ALA	4.2
1	2A	2135	A	4.2
50	2s	39	THR	4.1
41	2j	10	GLY	4.1
52	2u	10	ARG	4.1
1	1A	1104	C	4.1
1	1A	2176	A	4.1
1	2A	2134	A	4.1
32	2a	1280	A	4.1
40	2i	17	VAL	4.1
38	2g	16	LEU	4.1
47	1p	19	ILE	4.1
51	1t	75	ASN	4.1
33	1b	131	PRO	4.1
7	2H	101	ARG	4.1
45	2n	3	ARG	4.1

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Mol	Chain	Res	Type	RSRZ
1	1A	1083	U	4.1
40	2i	124	GLN	4.1
1	1A	2129	C	4.1
32	2a	1354	C	4.1
32	2a	1285	A	4.1
40	2i	92	TYR	4.1
44	2m	5	ALA	4.1
53	2y	15	ALA	4.1
45	2n	53	LEU	4.1
22	20	52	GLY	4.1
41	1j	49	VAL	4.1
6	2G	29	TRP	4.1
45	2n	10	ALA	4.1
1	2A	2108	C	4.0
53	2y	78	ILE	4.0
51	1t	18	GLN	4.0
1	1A	1176	G	4.0
50	2s	16	LEU	4.0
40	2i	78	LYS	4.0
32	1a	1037	C	4.0
40	1i	118	LYS	4.0
38	2g	5	ARG	4.0
1	1A	2133	G	4.0
1	2A	2130	U	4.0
1	2A	2131	G	4.0
32	2a	1150	U	4.0
41	1j	46	ARG	4.0
32	2a	1202	G	4.0
41	2j	37	PRO	4.0
26	24	50	VAL	4.0
47	1p	73	LEU	3.9
41	2j	41	PRO	3.9
32	2a	1029	C	3.9
41	2j	74	ILE	3.9
40	1i	114	TYR	3.9
50	2s	62	ILE	3.9
32	1a	217	C	3.9
45	1n	30	ALA	3.9
51	1t	74	LYS	3.9
1	2A	1103	A	3.9
32	2a	1357	A	3.9
40	1i	37	PHE	3.9

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Mol	Chain	Res	Type	RSRZ
1	2A	2163	C	3.9
32	2a	1037	C	3.9
51	1t	62	LEU	3.9
45	2n	49	HIS	3.9
40	2i	11	LYS	3.9
26	14	59	PHE	3.9
1	2A	2114	A	3.9
47	1p	17	TYR	3.9
52	1u	18	TYR	3.9
44	1m	24	GLY	3.9
45	2n	42	ILE	3.9
1	1A	2155	G	3.9
1	2A	2166	G	3.9
32	2a	1355	G	3.9
35	1d	3	ARG	3.9
7	2H	82	GLY	3.9
32	2a	1447	A	3.9
1	1A	2174	C	3.9
8	2I	3	VAL	3.8
38	2g	6	ARG	3.8
38	2g	22	LEU	3.8
40	1i	128	ARG	3.8
7	2H	142	GLY	3.8
6	2G	146	TYR	3.8
7	2H	95	ARG	3.8
50	2s	40	ILE	3.8
33	2b	123	ALA	3.8
38	2g	24	THR	3.8
45	1n	22	THR	3.8
6	2G	155	MET	3.8
53	2y	70	MET	3.8
32	1a	1030(A)	G	3.8
40	1i	107	ARG	3.8
40	2i	45	ALA	3.8
44	2m	42	ALA	3.8
34	2c	8	ILE	3.8
44	2m	66	LEU	3.8
26	24	27	THR	3.8
1	1A	1070	A	3.8
1	2A	1064	C	3.8
1	2A	1079	C	3.8
50	2s	65	ASN	3.8

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Mol	Chain	Res	Type	RSRZ
26	24	63	TYR	3.8
50	1s	61	TYR	3.8
1	2A	2122	U	3.8
40	1i	112	LYS	3.8
51	2t	10	LEU	3.8
32	1a	1029	C	3.8
32	2a	975	A	3.8
51	1t	63	ILE	3.8
51	1t	9	ASN	3.8
1	2A	2156	G	3.8
40	1i	33	PHE	3.8
53	2y	48	PHE	3.8
34	1c	2	GLY	3.8
44	2m	84	ILE	3.8
1	2A	1081	U	3.8
1	2A	2150	U	3.8
26	24	56	VAL	3.8
45	1n	17	LYS	3.8
47	1p	32	TYR	3.7
53	2y	65	GLY	3.8
1	1A	2141	G	3.7
7	2H	166	GLY	3.7
51	1t	22	ARG	3.7
40	1i	5	TYR	3.7
38	2g	42	ILE	3.7
34	1c	64	VAL	3.7
40	1i	108	VAL	3.7
32	2a	1003	G	3.7
26	24	45	GLY	3.7
32	2a	1288	A	3.7
32	2a	1363(A)	A	3.7
38	2g	156	TRP	3.7
41	1j	68	HIS	3.7
44	1m	2	ALA	3.7
40	2i	41	VAL	3.7
50	1s	77	THR	3.7
52	2u	23	PRO	3.7
26	24	68	ARG	3.7
32	2a	1006	C	3.7
40	2i	59	PHE	3.7
50	1s	15	LEU	3.7
41	1j	98	ILE	3.7

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Mol	Chain	Res	Type	RSRZ
51	1t	79	ARG	3.7
32	1a	63	C	3.7
45	1n	39	LEU	3.7
1	1A	2127	G	3.7
32	2a	1220	G	3.7
7	2H	159	GLU	3.7
44	1m	87	TYR	3.7
53	2y	5	ILE	3.7
53	2y	58	ASN	3.7
32	2a	1250	A	3.7
1	1A	2144	U	3.7
51	1t	84	LEU	3.7
38	2g	10	ARG	3.7
39	2h	122	ARG	3.7
53	2y	62	VAL	3.7
1	1A	1058	G	3.7
7	2H	128	PRO	3.7
50	2s	33	THR	3.7
50	2s	79	THR	3.7
45	1n	60	SER	3.7
6	2G	137	GLU	3.7
40	2i	104	ARG	3.7
14	2S	40	ILE	3.7
44	2m	24	GLY	3.7
45	2n	18	VAL	3.7
50	2s	82	GLY	3.7
1	1A	1068	G	3.7
1	1A	2123	G	3.7
32	2a	1283	G	3.7
32	2a	1348	U	3.6
7	2H	163	TYR	3.6
34	2c	195	VAL	3.6
1	2A	2105	C	3.6
52	2u	5	ASP	3.6
45	2n	36	PHE	3.6
40	2i	29	ASN	3.6
40	2i	6	GLY	3.6
40	2i	122	ALA	3.6
45	2n	55	GLY	3.6
50	1s	75	ALA	3.6
1	2A	2151	G	3.6
45	2n	14	PRO	3.6

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Mol	Chain	Res	Type	RSRZ
45	2n	23	ARG	3.6
50	2s	78	ARG	3.6
52	1u	21	TYR	3.6
1	1A	2119	A	3.6
50	2s	28	LYS	3.6
6	2G	135	LEU	3.6
22	20	75	LEU	3.6
50	2s	10	PHE	3.6
1	1A	2107	C	3.6
38	2g	116	ALA	3.6
38	2g	27	ILE	3.6
50	2s	5	LEU	3.6
41	1j	20	ALA	3.6
45	2n	26	ARG	3.6
1	1A	2143	C	3.6
47	1p	48	TRP	3.6
44	2m	23	TYR	3.6
52	2u	8	THR	3.6
1	2A	2897	U	3.6
40	1i	79	LEU	3.6
53	2y	21	ALA	3.6
33	2b	185	ILE	3.6
36	2e	109	ILE	3.6
38	2g	120	ILE	3.6
39	2h	134	ILE	3.6
32	2a	1320	C	3.6
47	1p	37	GLY	3.6
50	1s	71	LEU	3.6
44	2m	93	ARG	3.6
51	2t	14	LYS	3.6
32	1a	1035	A	3.6
32	2a	994	A	3.6
40	1i	28	VAL	3.6
50	2s	51	VAL	3.6
32	2a	1219	U	3.5
1	1A	2792	G	3.5
1	2A	2149	G	3.5
26	24	19	GLY	3.5
51	1t	47	GLY	3.5
39	2h	112	LEU	3.5
45	2n	21	TYR	3.5
52	2u	18	TYR	3.5

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Mol	Chain	Res	Type	RSRZ
32	1a	1038	C	3.5
44	2m	60	VAL	3.5
52	1u	22	ARG	3.5
38	1g	12	LEU	3.5
52	2u	21	TYR	3.5
45	2n	16	PHE	3.5
1	1A	229	A	3.5
7	2H	102	ALA	3.5
6	2G	87	PRO	3.5
52	2u	11	GLY	3.5
53	2y	6	THR	3.5
6	2G	139	LEU	3.5
20	2Y	1	MET	3.5
1	2A	652(B)	A	3.5
1	2A	1056	G	3.5
1	1A	2140	C	3.5
45	1n	25	VAL	3.5
32	2a	1372	U	3.5
34	2c	177	THR	3.5
33	2b	118	LEU	3.5
53	2y	3	MET	3.5
1	1A	2171	A	3.5
34	2c	39	ILE	3.5
53	2y	64	SER	3.5
50	2s	41	VAL	3.5
1	2A	2113	U	3.5
32	1a	1003	G	3.5
38	2g	28	ASN	3.5
50	2s	53	ASN	3.5
6	2G	37	VAL	3.5
51	1t	41	ILE	3.5
7	2H	164	TYR	3.4
32	1a	1028	C	3.4
51	1t	77	ALA	3.4
44	2m	7	VAL	3.4
35	2d	146	ILE	3.4
44	2m	94	ARG	3.4
40	1i	76	ALA	3.4
34	2c	190	ARG	3.4
7	2H	105	LEU	3.4
39	2h	131	GLY	3.4
51	1t	80	ARG	3.4

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Mol	Chain	Res	Type	RSRZ
41	1j	64	GLU	3.4
40	2i	28	VAL	3.4
40	2i	85	LEU	3.4
50	2s	67	VAL	3.4
1	2A	1086	A	3.4
35	2d	158	ILE	3.4
32	2a	1255	G	3.4
47	1p	59	TRP	3.4
50	2s	8	GLY	3.4
41	2j	39	PRO	3.4
44	2m	103	THR	3.4
1	1A	2139	C	3.4
12	1Q	33	GLY	3.4
47	1p	4	ILE	3.4
1	1A	1073	A	3.4
1	2A	6	A	3.4
1	2A	1088	A	3.4
1	2A	2157	G	3.4
53	2y	52	ALA	3.4
50	2s	76	PRO	3.4
7	2H	92	ILE	3.4
41	2j	43	ARG	3.4
45	1n	23	ARG	3.4
1	1A	2163	C	3.4
1	2A	1084	A	3.4
1	2A	2117	A	3.4
40	1i	36	TYR	3.4
45	2n	15	LYS	3.4
45	1n	12	ARG	3.4
7	2H	145	ALA	3.4
36	2e	21	ALA	3.4
51	1t	95	ALA	3.4
34	1c	38	ARG	3.4
40	2i	53	VAL	3.4
44	2m	108	ARG	3.4
52	2u	15	ARG	3.4
40	2i	61	ALA	3.3
1	1A	2142	C	3.3
33	2b	92	TYR	3.3
40	1i	4	TYR	3.3
50	1s	56	GLN	3.3
40	2i	64	THR	3.3

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Mol	Chain	Res	Type	RSRZ
41	2j	100	THR	3.3
33	2b	122	PHE	3.3
1	1A	1094	U	3.3
1	2A	1090	U	3.3
45	1n	29	ARG	3.3
52	1u	16	GLY	3.3
32	2a	1289	A	3.3
40	2i	119	ALA	3.3
7	2H	130	ARG	3.3
12	2Q	59	ARG	3.3
26	14	48	ARG	3.3
40	2i	107	ARG	3.3
50	2s	36	ARG	3.3
52	2u	24	ARG	3.3
41	2j	77	PRO	3.3
1	1A	1099	G	3.3
32	1a	78	G	3.3
34	2c	33	LEU	3.3
33	2b	164	VAL	3.3
40	1i	105	ASP	3.3
34	1c	3	ASN	3.3
34	2c	124	ILE	3.3
32	2a	1369	C	3.3
41	2j	60	ARG	3.3
32	2a	1446	U	3.3
44	1m	56	LEU	3.3
7	2H	76	VAL	3.3
44	2m	110	ARG	3.3
1	1A	2175	C	3.3
32	1a	1019	C	3.3
38	2g	101	LEU	3.3
41	2j	89	ASP	3.3
44	2m	111	LYS	3.3
40	1i	7	THR	3.3
41	2j	35	SER	3.3
1	2A	2187	G	3.3
32	1a	1361	G	3.3
38	2g	117	ALA	3.3
40	2i	13	ALA	3.3
6	2G	62	LEU	3.3
32	2a	1254	C	3.3
38	2g	8	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
40	1i	11	LYS	3.3
33	2b	70	PHE	3.3
18	2W	112	GLY	3.3
8	2I	20	ASP	3.3
40	2i	49	PRO	3.3
44	2m	90	LEU	3.3
1	2A	1043	C	3.2
26	24	40	HIS	3.2
50	2s	69	HIS	3.2
45	2n	11	LYS	3.2
22	20	74	ARG	3.2
51	1t	17	ARG	3.2
40	2i	116	LYS	3.2
50	2s	63	THR	3.2
47	1p	38	TYR	3.2
34	2c	157	ILE	3.2
45	1n	3	ARG	3.2
34	2c	87	LEU	3.2
41	1j	39	PRO	3.2
47	1p	49	LEU	3.2
53	2y	87	LYS	3.2
1	1A	2154	G	3.2
1	2A	2894	G	3.2
32	2a	1116	C	3.2
1	1A	2130	U	3.2
34	2c	21	ARG	3.2
34	2c	60	ALA	3.2
20	2Y	5	MET	3.2
26	14	45	GLY	3.2
32	2a	1531	A	3.2
42	1k	25	TYR	3.2
42	2k	25	TYR	3.2
1	1A	2164	C	3.2
1	2A	1075	C	3.2
19	2X	92	LEU	3.2
26	24	7	PRO	3.2
40	2i	79	LEU	3.2
51	1t	20	LEU	3.2
38	1g	21	VAL	3.2
14	2S	35	ILE	3.2
32	2a	1251	A	3.2
32	2a	1374	A	3.2

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Mol	Chain	Res	Type	RSRZ
33	1b	126	GLU	3.2
53	2y	37	PRO	3.2
53	2y	79	ASN	3.2
1	1A	1062	G	3.2
1	1A	2165	G	3.2
1	2A	2807	G	3.2
40	1i	113	LYS	3.2
31	29	16	VAL	3.2
47	1p	58	TYR	3.2
1	1A	1084	A	3.2
41	1j	45	ARG	3.2
1	2A	2129	C	3.2
32	1a	194	C	3.2
32	2a	1021	G	3.2
32	2a	1224	G	3.2
21	2Z	155	LEU	3.2
34	2c	196	LEU	3.2
40	2i	50	LEU	3.2
7	2H	129	THR	3.1
41	1j	54	PHE	3.1
1	2A	1509	C	3.1
32	1a	218	C	3.1
6	2G	57	ALA	3.1
1	1A	2112	G	3.1
1	2A	1042	G	3.1
6	2G	58	GLN	3.1
51	2t	9	ASN	3.1
53	2y	17	ARG	3.1
26	24	52	THR	3.1
7	2H	30	LYS	3.1
32	2a	1235	U	3.1
47	1p	51	VAL	3.1
32	2a	1041	A	3.1
14	2S	20	ARG	3.1
26	14	54	GLY	3.1
33	2b	214	ILE	3.1
50	1s	52	TYR	3.1
50	2s	75	ALA	3.1
1	1A	2162	G	3.1
32	1a	1026	G	3.1
40	2i	101	PHE	3.1
32	1a	1020	U	3.1

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Mol	Chain	Res	Type	RSRZ
41	2j	25	GLU	3.1
53	2y	74	ILE	3.1
53	2y	94	ALA	3.1
38	2g	31	MET	3.1
40	2i	117	HIS	3.1
41	1j	60	ARG	3.1
1	1A	2124	G	3.1
1	2A	2112	G	3.1
41	2j	31	GLY	3.1
41	2j	97	GLU	3.1
6	2G	43	LEU	3.1
7	2H	4	ILE	3.1
23	11	98	LEU	3.1
32	1a	1040	U	3.1
41	1j	57	LYS	3.1
53	2y	24	LEU	3.1
7	2H	29	PRO	3.1
44	2m	41	PRO	3.1
1	2A	1095	A	3.1
32	1a	1004	A	3.1
32	2a	1005	A	3.1
7	2H	167	GLU	3.1
45	2n	22	THR	3.1
51	1t	29	LYS	3.1
40	2i	84	ALA	3.1
38	2g	85	TYR	3.1
40	2i	38	GLN	3.1
47	1p	25	ARG	3.1
1	2A	887	A	3.1
1	2A	2178	C	3.1
6	2G	75	LYS	3.1
32	1a	1039	C	3.1
40	2i	57	GLY	3.1
34	1c	63	ASN	3.1
51	1t	11	SER	3.1
51	2t	11	SER	3.1
53	1y	42	SER	3.1
53	2y	14	PRO	3.1
41	2j	70	ARG	3.1
45	1n	8	GLU	3.1
32	2a	1361	G	3.1
45	2n	58	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
38	2g	82	GLY	3.1
44	2m	17	VAL	3.1
38	1g	16	LEU	3.1
40	2i	106	ALA	3.1
41	2j	19	SER	3.1
45	1n	10	ALA	3.1
7	2H	9	ILE	3.1
53	2y	16	ILE	3.1
1	1A	2172	U	3.0
18	1W	111	HIS	3.0
32	2a	1025	U	3.0
40	2i	68	GLY	3.0
34	2c	66	VAL	3.0
35	2d	78	LEU	3.0
41	2j	32	ALA	3.0
50	1s	30	LEU	3.0
53	2y	61	LEU	3.0
32	1a	203	U	3.0
32	1a	1212	U	3.0
50	1s	74	PHE	3.0
34	2c	4	LYS	3.0
40	1i	50	LEU	3.0
45	2n	8	GLU	3.0
45	2n	30	ALA	3.0
53	2y	84	GLN	3.0
32	1a	1034	G	3.0
32	2a	1368	G	3.0
32	1a	1357	A	3.0
51	1t	65	LYS	3.0
45	1n	57	ARG	3.0
51	1t	71	THR	3.0
50	2s	60	VAL	3.0
44	1m	90	LEU	3.0
35	2d	5	ILE	3.0
51	2t	100	ILE	3.0
40	2i	121	ARG	3.0
44	2m	99	ARG	3.0
47	1p	42	ARG	3.0
47	1p	80	PHE	3.0
40	2i	27	THR	3.0
1	1A	2170	A	3.0
32	1a	134	A	3.0

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Mol	Chain	Res	Type	RSRZ
33	2b	97	TRP	3.0
32	2a	1020	U	3.0
14	2S	22	GLY	3.0
41	1j	77	PRO	3.0
52	1u	15	ARG	3.0
1	2A	2104	G	3.0
7	2H	107	VAL	3.0
25	23	59	VAL	3.0
44	2m	100	GLY	3.0
11	2P	79	ARG	3.0
45	2n	45	ARG	3.0
45	1n	13	THR	3.0
51	1t	61	SER	3.0
7	2H	35	VAL	3.0
7	2H	49	VAL	3.0
34	2c	32	LEU	3.0
40	2i	56	LEU	3.0
45	1n	24	CYS	3.0
32	2a	1253	G	3.0
33	1b	128	GLU	3.0
36	2e	13	ILE	3.0
36	2e	80	ILE	3.0
40	1i	104	ARG	3.0
34	2c	3	ASN	3.0
22	20	46	LYS	3.0
41	2j	8	LEU	3.0
1	1A	889	C	2.9
32	1a	202	U	2.9
32	1a	1021	G	2.9
32	2a	1024	G	2.9
32	2a	1258	G	2.9
51	1t	81	LYS	2.9
32	2a	1014	A	2.9
32	2a	1256	A	2.9
7	2H	24	VAL	2.9
44	2m	82	MET	2.9
41	2j	9	ARG	2.9
47	1p	2	VAL	2.9
51	2t	16	HIS	2.9
33	2b	124	SER	2.9
50	2s	38	SER	2.9
1	1A	2106	G	2.9

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Mol	Chain	Res	Type	RSRZ
32	1a	1032	G	2.9
7	2H	88	LEU	2.9
44	2m	70	LEU	2.9
32	1a	1285	A	2.9
50	1s	69	HIS	2.9
7	1H	2	SER	2.9
34	2c	41	GLY	2.9
38	2g	35	LYS	2.9
41	2j	29	ARG	2.9
45	2n	28	GLY	2.9
33	2b	215	LEU	2.9
7	2H	169	VAL	2.9
50	2s	58	VAL	2.9
1	1A	2149	G	2.9
1	2A	1099	G	2.9
32	1a	220	G	2.9
32	1a	1033	G	2.9
32	2a	1371	G	2.9
40	1i	15	ALA	2.9
45	2n	7	ILE	2.9
31	29	19	ARG	2.9
53	2y	80	LYS	2.9
45	2n	52	GLN	2.9
6	2G	173	LEU	2.9
7	2H	115	VAL	2.9
32	1a	1223	C	2.9
32	2a	1452	C	2.9
40	1i	17	VAL	2.9
41	2j	18	ALA	2.9
41	2j	26	ALA	2.9
44	2m	64	TRP	2.9
40	1i	116	LYS	2.9
44	2m	106	ASN	2.9
32	1a	146	G	2.9
32	2a	1347	G	2.9
44	1m	4	ILE	2.9
32	2a	1236	A	2.9
6	2G	161	THR	2.9
34	2c	188	LEU	2.9
44	1m	23	TYR	2.9
41	1j	69	ASN	2.9
34	1c	80	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
45	1n	55	GLY	2.9
50	1s	4	SER	2.9
6	2G	133	LEU	2.9
32	1a	70	G	2.9
44	2m	43	THR	2.9
50	2s	77	THR	2.9
33	2b	81	VAL	2.9
34	2c	61	ALA	2.9
51	1t	64	ASP	2.9
45	2n	51	GLY	2.9
12	2Q	104	PHE	2.9
8	2I	5	LEU	2.9
39	2h	2	LEU	2.9
40	2i	103	THR	2.9
1	2A	1091	G	2.9
32	1a	102	G	2.9
32	1a	1023	G	2.9
32	1a	1024	G	2.9
38	1g	32	ARG	2.9
41	1j	73	ASP	2.9
44	2m	72	ALA	2.9
47	1p	7	ALA	2.9
47	1p	29	ASP	2.9
50	2s	81	ARG	2.9
1	1A	2158	A	2.8
47	1p	76	GLN	2.8
7	2H	116	GLU	2.8
6	2G	140	ILE	2.8
32	2a	1141	C	2.8
32	2a	1362	C	2.8
32	2a	1367	C	2.8
38	2g	43	PHE	2.8
41	1j	40	LEU	2.8
40	1i	75	ASP	2.8
45	1n	35	ARG	2.8
40	1i	43	ALA	2.8
41	2j	20	ALA	2.8
47	1p	39	TYR	2.8
32	1a	145	G	2.8
32	2a	998	G	2.8
32	2a	1358	U	2.8
6	2G	117	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
6	2G	90	LEU	2.8
40	1i	10	ARG	2.8
52	1u	9	ARG	2.8
50	2s	56	GLN	2.8
51	2t	26	ASN	2.8
15	1T	37	GLY	2.8
41	2j	36	GLY	2.8
40	1i	117	HIS	2.8
6	2G	51	ARG	2.8
32	2a	1370	G	2.8
35	2d	120	LEU	2.8
47	1p	35	LYS	2.8
1	2A	645	C	2.8
32	1a	1369	C	2.8
32	2a	1325	C	2.8
34	2c	185	GLY	2.8
38	2g	23	VAL	2.8
41	1j	47	PHE	2.8
50	2s	20	LEU	2.8
51	1t	13	LEU	2.8
32	1a	1358	U	2.8
1	1A	2157	G	2.8
1	1A	2160	G	2.8
32	2a	1157	A	2.8
32	2a	1252	A	2.8
40	2i	22	GLY	2.8
32	1a	91	C	2.8
32	2a	1137	C	2.8
40	1i	88	TYR	2.8
34	2c	199	LYS	2.8
51	2t	13	LEU	2.8
6	2G	92	VAL	2.8
51	2t	25	ARG	2.8
1	1A	2153	G	2.8
34	2c	31	HIS	2.8
34	2c	184	TYR	2.8
32	2a	1019	C	2.8
34	2c	194	GLY	2.8
31	29	9	ARG	2.8
32	1a	1025	U	2.8
7	2H	41	MET	2.8
33	2b	165	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
48	1q	63	ARG	2.8
38	1g	11	GLN	2.8
31	29	24	TYR	2.8
32	1a	144	G	2.8
32	1a	1224	G	2.8
35	1d	157	LEU	2.8
51	1t	43	LEU	2.8
51	2t	24	LEU	2.8
1	2A	1080	C	2.8
32	1a	100	C	2.8
32	2a	1260	C	2.8
38	2g	19	GLY	2.8
41	1j	43	ARG	2.8
41	1j	66	ARG	2.8
44	2m	28	ALA	2.7
45	1n	2	ALA	2.7
47	1p	21	VAL	2.7
50	2s	70	LYS	2.7
53	2y	92	GLY	2.7
32	2a	1261	A	2.7
32	2a	1038	C	2.7
6	2G	149	VAL	2.7
8	2I	18	VAL	2.7
40	1i	86	VAL	2.7
6	2G	19	LEU	2.7
40	1i	93	ARG	2.7
51	1t	86	ARG	2.7
40	2i	77	ILE	2.7
32	1a	977	A	2.7
51	1t	19	SER	2.7
32	2a	1284	C	2.7
1	2A	1044	G	2.7
32	2a	1156	G	2.7
7	2H	98	LEU	2.7
15	2T	111	ARG	2.7
44	2m	91	ARG	2.7
34	2c	186	PHE	2.7
50	2s	61	TYR	2.7
53	2y	72	THR	2.7
47	1p	46	PRO	2.7
26	14	55	ARG	2.7
1	2A	2128	C	2.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1180	A	2.7
1	2A	1105	U	2.7
32	2a	1017	G	2.7
34	2c	37	GLN	2.7
51	2t	20	LEU	2.7
6	2G	144	ILE	2.7
35	2d	70	ILE	2.7
41	2j	59	SER	2.7
6	2G	109	VAL	2.7
6	2G	159	VAL	2.7
35	1d	73	ARG	2.7
7	2H	48	GLY	2.7
40	2i	24	GLY	2.7
45	1n	51	GLY	2.7
34	1c	10	PHE	2.7
34	2c	26	LYS	2.7
40	1i	56	LEU	2.7
32	2a	174	C	2.7
32	2a	1223	C	2.7
1	1A	2602	A	2.7
32	2a	1349	A	2.7
53	2y	71	TYR	2.7
1	1A	1059	G	2.7
32	1a	1368	G	2.7
7	2H	6	ARG	2.7
35	1d	111	ALA	2.7
40	1i	83	ARG	2.7
41	2j	49	VAL	2.7
38	2g	38	LEU	2.7
34	1c	39	ILE	2.7
47	1p	44	THR	2.7
50	1s	39	THR	2.7
1	1A	1095	A	2.7
1	2A	1057	A	2.7
1	1A	2156	G	2.7
6	2G	35	GLU	2.7
11	2P	149	GLU	2.7
7	2H	132	ARG	2.7
38	1g	42	ILE	2.7
47	2p	61	SER	2.7
51	1t	38	LYS	2.7
7	2H	154	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
40	1i	8	GLY	2.6
45	1n	38	GLY	2.6
47	1p	66	PRO	2.6
50	2s	2	PRO	2.6
1	1A	1105	U	2.6
1	1A	2118	U	2.6
1	1A	2128	C	2.6
32	1a	1452	C	2.6
47	1p	20	VAL	2.6
32	2a	1275	A	2.6
34	2c	98	ASN	2.6
36	2e	12	LEU	2.6
1	1A	2131	G	2.6
32	2a	1187	G	2.6
41	1j	63	PHE	2.6
40	2i	51	ARG	2.6
51	1t	15	ARG	2.6
35	2d	4	TYR	2.6
41	2j	50	ILE	2.6
41	2j	98	ILE	2.6
45	1n	7	ILE	2.6
51	1t	100	ILE	2.6
33	2b	232	PRO	2.6
33	2b	48	MET	2.6
44	1m	19	LEU	2.6
1	2A	2158	A	2.6
40	1i	18	PHE	2.6
40	1i	120	ARG	2.6
50	1s	29	ARG	2.6
26	24	51	ASP	2.6
35	2d	20	TYR	2.6
38	2g	18	TYR	2.6
51	2t	6	PRO	2.6
50	1s	19	VAL	2.6
53	2y	19	HIS	2.6
8	2I	2	LYS	2.6
40	1i	78	LYS	2.6
52	2u	3	LYS	2.6
32	2a	1040	U	2.6
40	1i	9	ARG	2.6
44	1m	110	ARG	2.6
50	2s	29	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
1	2A	1102	C	2.6
32	2a	1259	C	2.6
36	2e	84	PHE	2.6
32	1a	101	A	2.6
26	24	44	THR	2.6
51	2t	55	ILE	2.6
34	1c	168	ALA	2.6
38	2g	40	ALA	2.6
7	2H	97	ARG	2.6
7	2H	99	VAL	2.6
44	1m	74	VAL	2.6
48	2q	23	VAL	2.6
51	1t	83	ARG	2.6
51	2t	86	ARG	2.6
53	2y	20	VAL	2.6
45	1n	6	LEU	2.6
1	2A	614(A)	U	2.6
38	1g	43	PHE	2.6
11	2P	109	GLY	2.6
32	2a	1363	C	2.6
45	1n	32	SER	2.6
40	2i	12	GLU	2.6
41	1j	50	ILE	2.6
50	1s	31	ILE	2.6
32	2a	1092	A	2.6
32	1a	1017	G	2.6
45	1n	36	PHE	2.6
41	1j	59	SER	2.6
38	2g	44	TYR	2.6
40	1i	49	PRO	2.6
40	1i	111	ARG	2.6
47	1p	41	PRO	2.6
38	2g	80	VAL	2.6
44	2m	15	VAL	2.6
32	1a	262	A	2.6
32	2a	1360	A	2.6
51	2t	72	LEU	2.6
50	1s	35	SER	2.6
32	2a	951	G	2.6
32	2a	1000	U	2.6
51	1t	78	ALA	2.6
53	2y	67	HIS	2.6

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Mol	Chain	Res	Type	RSRZ
38	2g	99	LEU	2.6
40	1i	12	GLU	2.6
22	20	45	PHE	2.6
1	1A	1096	A	2.6
32	2a	1324	A	2.6
6	2G	2	PRO	2.5
41	1j	100	THR	2.5
50	2s	42	PRO	2.5
6	2G	110	ALA	2.5
38	2g	83	ALA	2.5
51	1t	32	ALA	2.5
1	2A	1114	G	2.5
1	1A	2138	C	2.5
13	2R	68	ARG	2.5
14	2S	3	ARG	2.5
22	20	72	ARG	2.5
44	1m	102	ARG	2.5
14	2S	33	LYS	2.5
38	1g	56	GLN	2.5
1	2A	2892	A	2.5
22	20	47	PRO	2.5
40	2i	23	ASN	2.5
26	14	57	GLU	2.5
33	2b	197	VAL	2.5
39	2h	95	VAL	2.5
45	1n	31	ARG	2.5
50	2s	74	PHE	2.5
32	1a	1007	C	2.5
32	1a	1018	C	2.5
32	2a	91	C	2.5
50	2s	57	HIS	2.5
26	14	56	VAL	2.5
32	1a	171	A	2.5
32	2a	1148	U	2.5
34	2c	2	GLY	2.5
41	1j	71	LEU	2.5
48	2q	98	LEU	2.5
50	2s	11	VAL	2.5
39	2h	99	GLU	2.5
33	2b	201	ILE	2.5
41	2j	56	HIS	2.5
45	2n	50	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
47	1p	36	ILE	2.5
52	1u	8	THR	2.5
51	2t	83	ARG	2.5
6	1G	146	TYR	2.5
50	1s	51	VAL	2.5
51	2t	88	VAL	2.5
32	2a	1004	A	2.5
44	2m	13	LYS	2.5
22	20	77	ARG	2.5
35	2d	23	GLY	2.5
35	2d	149	ALA	2.5
51	2t	57	ARG	2.5
1	2A	2177	C	2.5
6	2G	42	GLY	2.5
32	2a	979	C	2.5
34	1c	8	ILE	2.5
38	2g	81	GLY	2.5
52	1u	11	GLY	2.5
6	2G	120	LEU	2.5
41	2j	33	GLN	2.5
1	1A	2109	U	2.5
7	2H	123	PHE	2.5
41	1j	35	SER	2.5
51	1t	14	LYS	2.5
32	2a	958	A	2.5
34	2c	164	ARG	2.5
40	2i	91	ASP	2.5
41	2j	17	ASP	2.5
33	2b	38	GLY	2.5
40	1i	72	GLY	2.5
41	2j	75	ILE	2.5
50	1s	57	HIS	2.5
51	1t	40	ALA	2.5
1	1A	2137	C	2.5
1	2A	2181	G	2.5
32	1a	1009	G	2.5
32	2a	1356	G	2.5
47	1p	50	LYS	2.5
1	1A	2150	U	2.5
1	2A	1026	U	2.5
32	1a	173	U	2.5
32	2a	1240	U	2.5

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Mol	Chain	Res	Type	RSRZ
50	2s	37	ARG	2.5
7	2H	72	ILE	2.5
6	2G	15	VAL	2.5
34	2c	29	TYR	2.5
40	1i	62	TYR	2.5
44	1m	91	ARG	2.5
51	2t	18	GLN	2.4
40	2i	25	LYS	2.4
40	2i	46	ALA	2.4
40	2i	112	LYS	2.4
44	2m	116	THR	2.4
47	1p	3	LYS	2.4
51	1t	21	LYS	2.4
6	2G	5	VAL	2.4
44	2m	114	ARG	2.4
34	2c	28	GLN	2.4
40	2i	39	GLY	2.4
41	1j	93	GLY	2.4
1	1A	2148	G	2.4
32	2a	1117	G	2.4
34	2c	187	ALA	2.4
19	2X	89	ILE	2.4
45	1n	56	VAL	2.4
41	1j	17	ASP	2.4
42	2k	75	TYR	2.4
32	1a	1318	A	2.4
50	1s	50	ALA	2.4
33	1b	130	ARG	2.4
34	2c	152	ILE	2.4
40	1i	96	LEU	2.4
11	2P	76	LYS	2.4
32	2a	1023	G	2.4
34	2c	22	TRP	2.4
40	2i	26	VAL	2.4
45	2n	17	LYS	2.4
33	2b	31	TYR	2.4
53	2y	45	PRO	2.4
14	2S	51	ALA	2.4
39	2h	124	ALA	2.4
53	2y	83	ARG	2.4
8	2I	4	ILE	2.4
32	1a	1362	C	2.4

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Mol	Chain	Res	Type	RSRZ
33	2b	127	ILE	2.4
33	2b	133	LYS	2.4
1	1A	2122	U	2.4
1	2A	2180	U	2.4
32	2a	1351	U	2.4
53	2y	69	ASP	2.4
1	2A	1058	G	2.4
26	24	67	TYR	2.4
32	1a	147	G	2.4
32	1a	191	G	2.4
32	1a	976	G	2.4
11	1P	15	ARG	2.4
34	2c	85	ARG	2.4
41	1j	70	ARG	2.4
26	14	53	GLU	2.4
34	1c	32	LEU	2.4
35	2d	11	LEU	2.4
38	2g	12	LEU	2.4
39	2h	119	LEU	2.4
41	2j	71	LEU	2.4
53	2y	53	THR	2.4
32	1a	197	A	2.4
32	2a	1016	A	2.4
44	2m	25	ILE	2.4
1	1A	272(A)	U	2.4
1	2A	1118	C	2.4
1	2A	2808	U	2.4
14	2S	85	VAL	2.4
32	1a	1137	C	2.4
40	2i	86	VAL	2.4
34	1c	193	TYR	2.4
51	1t	85	MET	2.4
32	2a	933	G	2.4
6	2G	41	GLN	2.4
38	1g	27	ILE	2.4
40	2i	60	ASP	2.4
44	2m	98	VAL	2.4
14	2S	17	ARG	2.4
32	1a	182	U	2.4
32	1a	201	C	2.4
32	2a	204	U	2.4
51	2t	21	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
53	2y	43	LYS	2.4
32	2a	1321	C	2.4
41	2j	61	GLU	2.4
53	2y	93	GLU	2.4
33	2b	187	LEU	2.4
1	2A	1055	G	2.4
1	2A	1059	G	2.4
33	1b	133	LYS	2.4
44	2m	4	ILE	2.4
44	2m	65	LYS	2.4
51	1t	54	LYS	2.4
38	2g	17	VAL	2.4
40	1i	66	ARG	2.4
40	2i	20	ARG	2.4
41	1j	5	ARG	2.4
32	1a	90	U	2.3
1	2A	652(T)	C	2.3
32	2a	1375	A	2.3
6	2G	134	GLY	2.3
34	2c	155	GLY	2.3
35	2d	69	GLY	2.3
41	1j	7	LYS	2.3
7	2H	89	ILE	2.3
39	2h	111	ILE	2.3
31	29	25	VAL	2.3
45	1n	27	CYS	2.3
45	2n	27	CYS	2.3
32	1a	105	G	2.3
32	1a	1220	G	2.3
32	2a	1138	G	2.3
1	1A	1097	U	2.3
32	1a	162	A	2.3
32	2a	1114	C	2.3
36	2e	16	THR	2.3
33	2b	144	ARG	2.3
40	1i	110	GLU	2.3
51	1t	26	ASN	2.3
50	1s	10	PHE	2.3
33	1b	135	GLN	2.3
32	2a	1131	G	2.3
45	1n	49	HIS	2.3
29	27	47	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
32	1a	841	U	2.3
38	2g	155	ARG	2.3
39	1h	133	LEU	2.3
40	1i	13	ALA	2.3
40	1i	121	ARG	2.3
44	2m	88	ARG	2.3
52	1u	4	GLY	2.3
32	1a	1006	C	2.3
32	1a	1027	C	2.3
32	2a	1350	A	2.3
26	24	10	VAL	2.3
38	2g	26	PHE	2.3
7	2H	87	LEU	2.3
41	2j	85	LEU	2.3
44	1m	107	ALA	2.3
32	1a	65	U	2.3
32	2a	202	U	2.3
1	1A	2151	G	2.3
1	2A	614(B)	G	2.3
1	2A	2893	G	2.3
32	1a	378	G	2.3
47	1p	65	GLN	2.3
33	2b	200	ILE	2.3
7	2H	45	VAL	2.3
22	20	69	PHE	2.3
41	1j	74	ILE	2.3
32	1a	224	C	2.3
32	1a	979	C	2.3
32	2a	1039	C	2.3
50	1s	36	ARG	2.3
34	2c	197	GLY	2.3
6	2G	94	LEU	2.3
20	1Y	1	MET	2.3
40	2i	19	LEU	2.3
6	2G	11	TYR	2.3
11	2P	110	TYR	2.3
14	2S	92	TYR	2.3
52	1u	3	LYS	2.3
40	2i	87	GLN	2.3
42	2k	104	GLN	2.3
51	2t	42	GLN	2.3
51	1t	33	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
34	2c	64	VAL	2.3
40	1i	26	VAL	2.3
43	2l	18	VAL	2.3
44	2m	67	GLU	2.3
1	1A	2152	G	2.3
1	2A	2115	G	2.3
51	1t	25	ARG	2.3
51	2t	22	ARG	2.3
32	1a	92	C	2.3
32	1a	221	C	2.3
32	1a	1359	C	2.3
32	2a	1128	C	2.3
8	2I	35	LEU	2.3
32	1a	1157	A	2.3
32	2a	978	A	2.3
51	1t	92	LEU	2.3
7	2H	83	TYR	2.3
33	2b	146	GLN	2.3
50	2s	64	GLU	2.3
41	1j	38	ILE	2.3
7	2H	50	VAL	2.3
35	1d	86	LYS	2.3
41	2j	73	ASP	2.3
50	2s	54	GLY	2.3
32	2a	1291	G	2.3
1	2A	886	C	2.3
32	1a	1360	A	2.3
38	2g	78	ARG	2.3
44	1m	93	ARG	2.3
51	1t	23	ARG	2.3
52	1u	24	ARG	2.3
8	2I	19	VAL	2.3
35	1d	101	LEU	2.2
41	1j	41	PRO	2.2
45	1n	53	LEU	2.2
47	1p	56	ALA	2.2
1	2A	889	C	2.2
31	29	15	LYS	2.2
32	1a	177	C	2.2
32	1a	1355	G	2.2
32	2a	1140	C	2.2
32	2a	1177	G	2.2

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Mol	Chain	Res	Type	RSRZ
32	2a	1296	C	2.2
39	2h	84	ARG	2.2
39	2h	98	LYS	2.2
1	1A	887	A	2.2
7	2H	148	ILE	2.2
40	2i	32	ASP	2.2
32	1a	152	A	2.2
32	1a	1005	A	2.2
32	2a	949	A	2.2
39	2h	97	VAL	2.2
44	1m	22	ILE	2.2
44	1m	98	VAL	2.2
51	2t	47	GLY	2.2
52	1u	19	GLY	2.2
38	2g	11	GLN	2.2
40	2i	31	GLN	2.2
32	1a	190	U	2.2
14	2S	32	LEU	2.2
14	2S	54	LEU	2.2
14	2S	58	LEU	2.2
45	2n	54	PRO	2.2
53	2y	34	LEU	2.2
44	2m	76	ALA	2.2
47	1p	27	LYS	2.2
41	2j	87	THR	2.2
45	1n	26	ARG	2.2
47	2p	58	TYR	2.2
1	1A	2136	C	2.2
32	2a	80	G	2.2
38	1g	13	GLN	2.2
40	1i	77	ILE	2.2
50	2s	45	VAL	2.2
50	1s	38	SER	2.2
1	2A	1045	A	2.2
35	2d	21	LEU	2.2
39	2h	101	PRO	2.2
44	2m	81	LEU	2.2
44	2m	80	ARG	2.2
7	2H	96	ALA	2.2
44	2m	51	ALA	2.2
7	2H	106	THR	2.2
14	2S	12	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
39	2h	123	GLU	2.2
44	2m	78	ILE	2.2
53	2y	82	GLU	2.2
51	1t	30	LYS	2.2
1	1A	2108	C	2.2
1	2A	34	C	2.2
7	2H	42	ARG	2.2
32	1a	216	G	2.2
44	2m	104	ARG	2.2
50	2s	83	HIS	2.2
1	1A	2801(A)	A	2.2
32	1a	161	A	2.2
32	1a	1041	A	2.2
32	1a	1188	A	2.2
40	1i	52	ALA	2.2
50	2s	50	ALA	2.2
38	2g	13	GLN	2.2
51	1t	45	GLN	2.2
36	2e	133	TYR	2.2
7	2H	114	VAL	2.2
20	2Y	75	ILE	2.2
36	2e	89	ILE	2.2
38	2g	76	ARG	2.2
53	2y	75	ASN	2.2
41	1j	53	PRO	2.2
45	1n	44	LEU	2.2
51	1t	53	LEU	2.2
32	2a	1359	C	2.2
1	1A	2120	G	2.2
30	28	21	LYS	2.2
33	2b	95	GLN	2.2
48	1q	37	LYS	2.2
50	2s	12	ASP	2.2
51	2t	12	ALA	2.2
32	1a	1353	G	2.2
32	2a	1190	G	2.2
40	1i	115	GLY	2.2
51	2t	34	LYS	2.2
6	2G	178	PHE	2.2
38	2g	4	ARG	2.2
34	1c	20	SER	2.2
20	2Y	91	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
41	2j	7	LYS	2.2
50	2s	17	GLU	2.2
1	2A	1041	C	2.2
22	20	76	GLY	2.2
32	1a	1354	C	2.2
34	2c	100	ALA	2.2
40	2i	100	GLY	2.2
1	2A	1113	U	2.2
32	1a	261	U	2.2
32	1a	1364	U	2.2
32	2a	1292	U	2.2
36	2e	45	PHE	2.2
40	1i	20	ARG	2.2
32	1a	68	G	2.2
38	1g	17	VAL	2.2
47	1p	33	ILE	2.2
40	2i	43	ALA	2.2
44	2m	68	GLY	2.2
50	2s	44	MET	2.2
51	2t	67	ALA	2.2
32	1a	1367	C	2.2
32	2a	221	C	2.2
32	2a	1314	C	2.2
32	1a	223	U	2.1
35	2d	161	ASN	2.1
7	2H	86	GLU	2.1
9	2N	140	VAL	2.1
40	1i	81	ILE	2.1
45	2n	47	LEU	2.1
48	2q	84	LEU	2.1
1	2A	1039	G	2.1
1	2A	1087	G	2.1
1	2A	1106	G	2.1
32	1a	104	G	2.1
32	2a	1184	G	2.1
22	20	73	GLY	2.1
26	24	64	GLY	2.1
42	2k	89	ALA	2.1
51	2t	59	ALA	2.1
51	1t	56	MET	2.1
33	2b	132	LYS	2.1
34	1c	35	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
44	2m	73	GLU	2.1
1	2A	2188	C	2.1
6	2G	88	ILE	2.1
24	22	25	VAL	2.1
26	24	5	ILE	2.1
36	2e	129	ILE	2.1
39	1h	93	VAL	2.1
34	2c	101	LEU	2.1
34	1c	41	GLY	2.1
40	2i	16	ARG	2.1
38	1g	39	ALA	2.1
33	2b	101	MET	2.1
32	1a	975	A	2.1
33	1b	129	GLU	2.1
33	2b	163	PHE	2.1
40	1i	59	PHE	2.1
7	2H	43	VAL	2.1
34	1c	182	ILE	2.1
48	2q	36	ILE	2.1
50	1s	58	VAL	2.1
7	2H	126	PRO	2.1
33	2b	217	ARG	2.1
47	2p	48	TRP	2.1
53	2y	13	THR	2.1
33	2b	135	GLN	2.1
45	1n	37	PHE	2.1
32	1a	978	A	2.1
6	2G	177	GLY	2.1
31	29	7	VAL	2.1
31	29	12	ASP	2.1
34	1c	94	LEU	2.1
34	2c	30	ARG	2.1
39	2h	45	ILE	2.1
40	1i	41	VAL	2.1
41	1j	55	LYS	2.1
41	2j	23	ILE	2.1
50	1s	11	VAL	2.1
53	1y	49	VAL	2.1
50	1s	76	PRO	2.1
1	1A	1026	U	2.1
1	2A	2185	C	2.1
32	2a	1118	C	2.1

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Mol	Chain	Res	Type	RSRZ
50	1s	21	GLU	2.1
43	2l	13	LYS	2.1
53	2y	91	LYS	2.1
14	1S	20	ARG	2.1
20	2Y	2	ARG	2.1
38	2g	79	ARG	2.1
33	1b	136	VAL	2.1
36	2e	11	ILE	2.1
38	2g	105	VAL	2.1
42	2k	109	VAL	2.1
44	1m	89	GLY	2.1
6	2G	32	PRO	2.1
34	2c	6	HIS	2.1
32	1a	143	A	2.1
32	1a	1186	G	2.1
32	2a	1269	A	2.1
40	1i	21	PRO	2.1
21	1Z	192	ALA	2.1
32	1a	1348	U	2.1
32	2a	1012	U	2.1
44	1m	28	ALA	2.1
32	2a	1352	C	2.1
34	2c	63	ASN	2.1
50	1s	66	MET	2.1
40	1i	101	PHE	2.1
44	1m	108	ARG	2.1
11	2P	118	GLY	2.1
7	2H	65	HIS	2.1
34	1c	178	LEU	2.1
51	2t	73	HIS	2.1
1	2A	2186	G	2.1
29	27	48	LYS	2.1
31	29	13	LYS	2.1
32	1a	1287	A	2.1
32	1a	1363(A)	A	2.1
32	1a	1492	A	2.1
32	2a	172	A	2.1
32	2a	968	A	2.1
40	1i	61	ALA	2.1
32	2a	1313	U	2.1
40	2i	83	ARG	2.1
32	2a	217	C	2.1

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Mol	Chain	Res	Type	RSRZ
45	2n	46	GLU	2.1
33	2b	136	VAL	2.1
34	1c	87	LEU	2.1
41	1j	34	VAL	2.1
7	2H	168	PRO	2.1
50	1s	40	ILE	2.1
53	2y	35	ILE	2.1
7	2H	94	TYR	2.1
51	2t	7	LYS	2.1
34	2c	163	ALA	2.1
44	1m	104	ARG	2.1
45	1n	19	ARG	2.1
14	2S	31	SER	2.1
45	2n	32	SER	2.1
1	2A	1062	G	2.0
20	2Y	41	GLY	2.1
32	1a	199	G	2.0
32	1a	1251	A	2.1
32	1a	1363	C	2.0
32	2a	1066	C	2.0
33	2b	69	LEU	2.0
38	1g	59	LEU	2.0
50	2s	14	HIS	2.0
35	1d	4	TYR	2.0
35	1d	138	TYR	2.0
34	2c	59	ARG	2.0
40	1i	51	ARG	2.0
40	2i	93	ARG	2.0
47	1p	26	ARG	2.0
48	2q	71	PHE	2.0
1	1A	1175	U	2.0
32	2a	532	A	2.0
1	2A	1051	G	2.0
32	1a	184	G	2.0
32	2a	976	G	2.0
32	2a	1222	G	2.0
44	2m	71	ARG	2.0
47	2p	19	ILE	2.0
32	1a	193	C	2.0
32	2a	1262	C	2.0
53	2y	95	ARG	2.0
38	2g	108	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
7	2H	25	LYS	2.0
34	2c	165	THR	2.0
53	2y	59	GLY	2.0
47	1p	9	PHE	2.0
34	1c	42	LEU	2.0
39	2h	107	LEU	2.0
44	2m	96	LEU	2.0
1	1A	1060	U	2.0
22	20	51	VAL	2.0
23	11	44	PRO	2.0
48	2q	73	VAL	2.0
48	2q	77	VAL	2.0
53	1y	95	ARG	2.0
32	2a	1225	A	2.0
1	2A	1536	C	2.0
21	1Z	51	ALA	2.0
40	1i	127	LYS	2.0
32	1a	76	C	2.0
32	2a	1234	C	2.0
32	2a	1244	C	2.0
32	2a	1323	G	2.0
33	2b	227	GLY	2.0
47	1p	77	ALA	2.0
50	1s	12	ASP	2.0
34	2c	10	PHE	2.0
19	2X	68	ARG	2.0
24	22	61	LEU	2.0
52	1u	6	ARG	2.0
38	2g	21	VAL	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
32	2MG	2a	1207	24/25	0.87	0.21	76,82,86,94	0
1	5MU	2A	1915	21/22	0.89	0.15	76,82,86,102	0
1	PSU	2A	1911	20/21	0.92	0.18	62,67,73,79	0
1	5MU	1A	1915	21/22	0.92	0.15	61,70,75,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	M2G	2a	966	25/26	0.92	0.19	59,66,81,90	0
1	PSU	1A	1917	20/21	0.92	0.19	58,66,80,83	0
43	0TD	2l	92	10/11	0.92	0.16	59,62,65,79	0
1	PSU	2A	1917	20/21	0.93	0.18	67,75,82,84	0
32	5MC	1a	967	21/22	0.94	0.16	55,63,70,75	0
32	5MC	2a	967	21/22	0.94	0.21	64,69,72,79	0
32	2MG	1a	1207	24/25	0.94	0.18	56,69,72,72	0
32	5MC	2a	1404	21/22	0.94	0.21	47,55,61,63	0
43	0TD	1l	92	10/11	0.94	0.18	48,52,56,68	0
1	OMC	2A	1920	21/22	0.95	0.18	60,65,69,71	0
32	4OC	2a	1402	22/23	0.95	0.17	52,62,67,70	0
1	PSU	1A	1911	20/21	0.96	0.16	54,62,65,67	0
32	PSU	1a	516	20/21	0.96	0.17	54,59,62,62	0
32	5MC	2a	1400	21/22	0.96	0.29	62,67,72,74	0
32	G7M	1a	527	24/25	0.96	0.19	42,50,55,57	0
32	PSU	2a	516	20/21	0.96	0.12	67,73,76,77	0
32	5MC	2a	1407	21/22	0.96	0.19	53,63,67,68	0
32	MA6	2a	1518	24/25	0.96	0.19	52,60,65,66	0
32	M2G	1a	966	25/26	0.96	0.19	50,56,61,63	0
32	5MC	1a	1404	21/22	0.97	0.19	40,44,50,54	0
32	5MC	1a	1407	21/22	0.97	0.20	39,51,54,55	0
32	MA6	1a	1518	24/25	0.97	0.22	41,46,51,54	0
32	MA6	1a	1519	24/25	0.97	0.21	38,46,50,51	0
32	G7M	2a	527	24/25	0.97	0.15	54,62,67,72	0
32	UR3	2a	1498	21/22	0.97	0.19	52,55,59,63	0
32	5MC	1a	1400	21/22	0.97	0.18	41,50,55,58	0
32	MA6	2a	1519	24/25	0.97	0.23	53,60,64,64	0
32	4OC	1a	1402	22/23	0.97	0.20	46,49,52,55	0
1	2MU	2A	2552	21/23	0.98	0.20	32,36,41,42	0
1	PSU	2A	2605	20/21	0.98	0.21	27,31,36,40	0
32	UR3	1a	1498	21/22	0.98	0.20	40,43,49,58	0
1	5MC	1A	1962	21/22	0.98	0.21	27,31,37,38	0
1	OMG	1A	2251	24/25	0.98	0.21	20,23,27,31	0
1	2MA	1A	2503	23/24	0.98	0.22	16,20,25,26	0
1	2MU	1A	2552	21/23	0.98	0.22	22,28,30,33	0
1	PSU	1A	2605	20/21	0.98	0.23	24,27,29,32	0
1	OMC	1A	1920	21/22	0.98	0.20	41,52,57,57	0
1	5MC	1A	1942	21/22	0.98	0.22	27,32,39,46	0
1	5MU	2A	1939	21/22	0.98	0.22	30,35,39,42	0
1	5MC	2A	1942	21/22	0.98	0.21	40,48,52,55	0
1	5MC	2A	1962	21/22	0.98	0.22	38,44,51,56	0
1	OMG	2A	2251	24/25	0.98	0.22	31,35,40,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	2MA	2A	2503	23/24	0.98	0.23	26,30,33,37	0
1	5MU	1A	1939	21/22	0.99	0.24	19,25,31,33	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2O	202	1/1	0.10	0.31	79,79,79,79	0
54	MG	1A	3653	1/1	0.36	0.38	60,60,60,60	0
54	MG	2a	3010	1/1	0.39	0.36	71,71,71,71	0
54	MG	2A	3196	1/1	0.46	0.22	74,74,74,74	0
54	MG	1A	3573	1/1	0.50	0.10	62,62,62,62	0
54	MG	1A	3273	1/1	0.50	0.30	72,72,72,72	0
54	MG	2A	3176	1/1	0.50	0.28	71,71,71,71	0
54	MG	2G	203	1/1	0.52	0.12	69,69,69,69	0
54	MG	1a	3113	1/1	0.52	0.28	74,74,74,74	0
54	MG	2A	3401	1/1	0.52	0.23	49,49,49,49	0
54	MG	1A	3948	1/1	0.54	0.36	75,75,75,75	0
54	MG	2A	3299	1/1	0.54	0.21	73,73,73,73	0
54	MG	2a	3052	1/1	0.54	0.18	65,65,65,65	0
54	MG	1A	3887	1/1	0.56	0.10	44,44,44,44	0
54	MG	1a	3267	1/1	0.58	0.18	76,76,76,76	0
54	MG	2A	3708	1/1	0.58	0.10	67,67,67,67	0
54	MG	1A	3708	1/1	0.58	0.14	30,30,30,30	0
54	MG	1A	3889	1/1	0.59	0.30	58,58,58,58	0
54	MG	1A	3220	1/1	0.59	0.32	37,37,37,37	0
54	MG	2A	3497	1/1	0.59	0.26	67,67,67,67	0
54	MG	1A	3667	1/1	0.59	0.13	41,41,41,41	0
54	MG	2A	3235	1/1	0.60	0.11	73,73,73,73	0
54	MG	1A	3265	1/1	0.60	0.17	68,68,68,68	0
54	MG	2A	3024	1/1	0.60	0.21	54,54,54,54	0
54	MG	2A	3545	1/1	0.61	0.11	54,54,54,54	0
54	MG	1d	301	1/1	0.61	0.24	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3068	1/1	0.61	0.49	63,63,63,63	0
54	MG	1A	3702	1/1	0.62	0.35	47,47,47,47	0
54	MG	1A	3749	1/1	0.62	0.42	63,63,63,63	0
54	MG	1A	3857	1/1	0.63	0.11	58,58,58,58	0
54	MG	1A	3726	1/1	0.63	0.07	69,69,69,69	0
54	MG	1A	3285	1/1	0.63	0.21	72,72,72,72	0
54	MG	1a	3078	1/1	0.64	0.34	72,72,72,72	0
54	MG	2A	3058	1/1	0.64	0.28	57,57,57,57	0
54	MG	1a	3053	1/1	0.64	0.32	60,60,60,60	0
54	MG	2A	3229	1/1	0.65	0.28	65,65,65,65	0
54	MG	1A	3306	1/1	0.65	0.33	48,48,48,48	0
54	MG	2A	3220	1/1	0.65	0.15	59,59,59,59	0
54	MG	1A	3655	1/1	0.66	0.27	58,58,58,58	0
54	MG	1a	3116	1/1	0.66	0.13	73,73,73,73	0
54	MG	2A	3213	1/1	0.66	0.96	58,58,58,58	0
54	MG	2A	3427	1/1	0.66	0.19	41,41,41,41	0
54	MG	2a	3024	1/1	0.66	0.47	70,70,70,70	0
54	MG	1a	3027	1/1	0.66	0.40	56,56,56,56	0
54	MG	2A	3112	1/1	0.66	0.21	69,69,69,69	0
54	MG	2a	3082	1/1	0.66	0.13	62,62,62,62	0
54	MG	1A	3034	1/1	0.67	0.17	56,56,56,56	0
54	MG	2A	3290	1/1	0.67	0.27	80,80,80,80	0
54	MG	1a	3138	1/1	0.67	0.26	59,59,59,59	0
54	MG	1T	201	1/1	0.67	0.22	70,70,70,70	0
54	MG	1A	3144	1/1	0.67	0.20	73,73,73,73	0
54	MG	2A	3659	1/1	0.68	0.19	78,78,78,78	0
54	MG	2A	3517	1/1	0.68	0.08	68,68,68,68	0
54	MG	2A	3513	1/1	0.68	0.10	68,68,68,68	0
54	MG	2A	3416	1/1	0.69	0.13	54,54,54,54	0
54	MG	2a	3016	1/1	0.69	0.19	72,72,72,72	0
54	MG	1A	3869	1/1	0.69	0.18	65,65,65,65	0
54	MG	2a	3026	1/1	0.69	0.16	70,70,70,70	0
54	MG	1A	3217	1/1	0.69	0.11	71,71,71,71	0
54	MG	2a	3053	1/1	0.69	0.18	65,65,65,65	0
54	MG	1b	301	1/1	0.69	0.12	76,76,76,76	0
54	MG	1A	3980	1/1	0.69	0.21	75,75,75,75	0
54	MG	2a	3112	1/1	0.69	0.14	65,65,65,65	0
54	MG	2a	3123	1/1	0.69	0.30	66,66,66,66	0
54	MG	1a	3060	1/1	0.70	0.24	62,62,62,62	0
54	MG	1A	3730	1/1	0.70	0.19	63,63,63,63	0
54	MG	2A	3429	1/1	0.70	0.14	59,59,59,59	0
54	MG	2B	204	1/1	0.70	0.13	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3694	1/1	0.70	0.16	69,69,69,69	0
54	MG	1A	3789	1/1	0.70	0.20	47,47,47,47	0
54	MG	2A	3514	1/1	0.70	0.20	69,69,69,69	0
54	MG	1A	3503	1/1	0.70	0.07	69,69,69,69	0
54	MG	2a	3147	1/1	0.70	0.15	52,52,52,52	0
54	MG	2B	209	1/1	0.71	0.21	73,73,73,73	0
54	MG	2A	3258	1/1	0.71	0.15	65,65,65,65	0
54	MG	2A	3165	1/1	0.71	0.17	63,63,63,63	0
54	MG	2a	3080	1/1	0.71	0.20	70,70,70,70	0
54	MG	2A	3166	1/1	0.71	0.13	67,67,67,67	0
54	MG	2A	3683	1/1	0.71	0.15	58,58,58,58	0
54	MG	1a	3106	1/1	0.71	0.22	65,65,65,65	0
54	MG	1a	3091	1/1	0.71	0.15	49,49,49,49	0
54	MG	2k	201	1/1	0.71	0.29	71,71,71,71	0
54	MG	1A	3747	1/1	0.72	0.09	71,71,71,71	0
54	MG	2A	3575	1/1	0.72	0.23	37,37,37,37	0
54	MG	2A	3605	1/1	0.72	0.23	64,64,64,64	0
54	MG	2A	3655	1/1	0.72	0.13	54,54,54,54	0
54	MG	2A	3422	1/1	0.72	0.17	80,80,80,80	0
54	MG	2A	3135	1/1	0.72	0.16	58,58,58,58	0
54	MG	1A	3990	1/1	0.72	0.19	52,52,52,52	0
54	MG	1A	3516	1/1	0.72	0.10	44,44,44,44	0
54	MG	1y	202	1/1	0.72	0.22	61,61,61,61	0
54	MG	1A	3975	1/1	0.72	0.19	55,55,55,55	0
54	MG	1a	3174	1/1	0.72	0.19	45,45,45,45	0
54	MG	2A	3526	1/1	0.72	0.29	35,35,35,35	0
59	ZN	24	501	1/1	0.72	0.07	124,124,124,124	0
54	MG	2A	3602	1/1	0.73	0.16	62,62,62,62	0
54	MG	1A	3636	1/1	0.73	0.15	57,57,57,57	0
54	MG	1A	3334	1/1	0.73	0.15	74,74,74,74	0
54	MG	2A	3443	1/1	0.73	0.13	69,69,69,69	0
54	MG	1A	3302	1/1	0.73	0.21	43,43,43,43	0
54	MG	2A	3501	1/1	0.73	0.17	51,51,51,51	0
54	MG	1A	3832	1/1	0.73	0.12	50,50,50,50	0
54	MG	1A	3998	1/1	0.73	0.12	59,59,59,59	0
54	MG	1a	3079	1/1	0.73	0.13	74,74,74,74	0
54	MG	1a	3089	1/1	0.73	0.27	60,60,60,60	0
54	MG	1A	4001	1/1	0.73	0.09	88,88,88,88	0
54	MG	1a	3104	1/1	0.73	0.23	61,61,61,61	0
54	MG	2A	3571	1/1	0.74	0.22	63,63,63,63	0
54	MG	1A	3941	1/1	0.74	0.12	41,41,41,41	0
54	MG	1A	3331	1/1	0.74	0.16	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3684	1/1	0.74	0.07	54,54,54,54	0
54	MG	2A	3642	1/1	0.74	0.14	81,81,81,81	0
54	MG	1a	3237	1/1	0.74	0.16	69,69,69,69	0
54	MG	2A	3285	1/1	0.74	0.33	52,52,52,52	0
54	MG	2A	3678	1/1	0.74	0.15	61,61,61,61	0
54	MG	1a	3095	1/1	0.74	0.21	68,68,68,68	0
54	MG	2A	3686	1/1	0.74	0.16	51,51,51,51	0
54	MG	1A	3713	1/1	0.74	0.14	53,53,53,53	0
54	MG	2A	3735	1/1	0.74	0.17	70,70,70,70	0
54	MG	1A	3758	1/1	0.74	0.08	43,43,43,43	0
54	MG	2a	3161	1/1	0.74	0.44	85,85,85,85	0
54	MG	1y	201	1/1	0.74	0.24	63,63,63,63	0
54	MG	1A	3448	1/1	0.74	0.16	42,42,42,42	0
54	MG	1a	3005	1/1	0.75	0.21	59,59,59,59	0
54	MG	1a	3269	1/1	0.75	0.12	61,61,61,61	0
54	MG	2A	3256	1/1	0.75	0.18	66,66,66,66	0
54	MG	1a	3187	1/1	0.75	0.14	79,79,79,79	0
54	MG	2a	3122	1/1	0.75	0.27	73,73,73,73	0
54	MG	2B	212	1/1	0.75	0.19	70,70,70,70	0
54	MG	2a	3047	1/1	0.75	0.13	65,65,65,65	0
54	MG	2B	214	1/1	0.75	0.13	64,64,64,64	0
54	MG	1a	3002	1/1	0.75	0.15	56,56,56,56	0
58	ARG	1F	321	12/12	0.75	0.27	52,67,79,82	0
54	MG	2a	3062	1/1	0.75	0.20	76,76,76,76	0
54	MG	1A	3591	1/1	0.76	0.75	43,43,43,43	0
54	MG	2A	3129	1/1	0.76	0.17	54,54,54,54	0
54	MG	1E	307	1/1	0.76	0.19	50,50,50,50	0
54	MG	2A	3734	1/1	0.76	0.18	65,65,65,65	0
54	MG	1P	204	1/1	0.76	0.13	61,61,61,61	0
54	MG	1A	3498	1/1	0.76	0.21	22,22,22,22	0
54	MG	2A	3585	1/1	0.76	0.16	53,53,53,53	0
54	MG	2a	3103	1/1	0.76	0.14	70,70,70,70	0
54	MG	2A	3459	1/1	0.76	0.18	58,58,58,58	0
54	MG	2A	3471	1/1	0.76	0.12	72,72,72,72	0
54	MG	2A	3628	1/1	0.76	0.22	44,44,44,44	0
54	MG	2A	3638	1/1	0.76	0.29	49,49,49,49	0
54	MG	1A	3011	1/1	0.76	0.20	38,38,38,38	0
54	MG	2A	3181	1/1	0.76	0.28	65,65,65,65	0
54	MG	1A	3786	1/1	0.76	0.10	36,36,36,36	0
54	MG	2A	3094	1/1	0.76	0.12	74,74,74,74	0
54	MG	1A	3395	1/1	0.77	0.21	43,43,43,43	0
54	MG	1A	3539	1/1	0.77	0.14	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3132	1/1	0.77	0.10	68,68,68,68	0
54	MG	1A	3992	1/1	0.77	0.24	59,59,59,59	0
54	MG	1A	3671	1/1	0.77	0.15	46,46,46,46	0
54	MG	1A	3792	1/1	0.77	0.20	56,56,56,56	0
54	MG	2A	3454	1/1	0.77	0.17	55,55,55,55	0
54	MG	2A	3553	1/1	0.77	0.09	63,63,63,63	0
54	MG	2A	3211	1/1	0.77	0.44	57,57,57,57	0
54	MG	2A	3131	1/1	0.77	0.14	60,60,60,60	0
54	MG	2A	3729	1/1	0.77	0.19	76,76,76,76	0
54	MG	2A	3487	1/1	0.77	0.17	67,67,67,67	0
54	MG	2A	3492	1/1	0.77	0.25	48,48,48,48	0
54	MG	2A	3552	1/1	0.78	0.17	44,44,44,44	0
54	MG	2B	215	1/1	0.78	0.17	72,72,72,72	0
54	MG	2A	3364	1/1	0.78	0.17	30,30,30,30	0
54	MG	2A	3387	1/1	0.78	0.21	30,30,30,30	0
54	MG	1a	3250	1/1	0.78	0.14	61,61,61,61	0
54	MG	2A	3584	1/1	0.78	0.20	51,51,51,51	0
54	MG	1a	3252	1/1	0.78	0.15	60,60,60,60	0
54	MG	1A	3010	1/1	0.78	0.13	46,46,46,46	0
54	MG	2a	3036	1/1	0.78	0.23	74,74,74,74	0
54	MG	1A	3962	1/1	0.78	0.13	63,63,63,63	0
54	MG	1a	3102	1/1	0.78	0.34	51,51,51,51	0
54	MG	1A	3041	1/1	0.78	0.19	50,50,50,50	0
54	MG	1A	3704	1/1	0.78	0.29	38,38,38,38	0
54	MG	1A	3286	1/1	0.78	0.24	67,67,67,67	0
54	MG	1A	3877	1/1	0.78	0.13	47,47,47,47	0
54	MG	1a	3058	1/1	0.78	0.29	58,58,58,58	0
54	MG	2A	3242	1/1	0.78	0.14	66,66,66,66	0
54	MG	2A	3251	1/1	0.78	0.57	47,47,47,47	0
54	MG	1A	3781	1/1	0.78	0.27	24,24,24,24	0
54	MG	1A	3633	1/1	0.78	0.16	61,61,61,61	0
54	MG	2A	3265	1/1	0.78	0.22	49,49,49,49	0
54	MG	1A	3528	1/1	0.78	0.25	60,60,60,60	0
54	MG	1a	3207	1/1	0.78	0.14	65,65,65,65	0
54	MG	2A	3530	1/1	0.78	0.25	51,51,51,51	0
54	MG	1P	203	1/1	0.78	0.35	38,38,38,38	0
54	MG	2A	3607	1/1	0.79	0.18	46,46,46,46	0
54	MG	1a	3146	1/1	0.79	0.18	67,67,67,67	0
54	MG	2A	3637	1/1	0.79	0.15	63,63,63,63	0
54	MG	1a	3152	1/1	0.79	0.15	70,70,70,70	0
54	MG	1n	101	1/1	0.79	0.14	59,59,59,59	0
54	MG	2a	3038	1/1	0.79	0.13	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3289	1/1	0.79	0.43	62,62,62,62	0
54	MG	2A	3168	1/1	0.79	0.15	58,58,58,58	0
54	MG	1E	305	1/1	0.79	0.17	48,48,48,48	0
54	MG	2a	3057	1/1	0.79	0.15	73,73,73,73	0
54	MG	2a	3061	1/1	0.79	0.19	80,80,80,80	0
54	MG	1A	3861	1/1	0.79	0.18	48,48,48,48	0
54	MG	2A	3519	1/1	0.79	0.16	74,74,74,74	0
54	MG	2a	3074	1/1	0.79	0.20	63,63,63,63	0
54	MG	2A	3186	1/1	0.79	0.22	69,69,69,69	0
54	MG	2A	3017	1/1	0.79	0.15	54,54,54,54	0
54	MG	1H	201	1/1	0.79	0.19	58,58,58,58	0
54	MG	2a	3105	1/1	0.79	0.16	51,51,51,51	0
54	MG	2A	3043	1/1	0.79	0.18	43,43,43,43	0
54	MG	1A	3890	1/1	0.79	0.14	51,51,51,51	0
54	MG	1A	3918	1/1	0.79	0.16	48,48,48,48	0
54	MG	2a	3141	1/1	0.79	0.18	39,39,39,39	0
54	MG	1A	3468	1/1	0.79	0.13	43,43,43,43	0
54	MG	2A	3120	1/1	0.79	0.29	73,73,73,73	0
54	MG	1A	3323	1/1	0.79	0.16	70,70,70,70	0
57	MPD	1a	3277	8/8	0.79	0.21	49,62,67,72	0
54	MG	2A	3470	1/1	0.79	0.10	75,75,75,75	0
54	MG	1A	3646	1/1	0.79	0.63	40,40,40,40	0
54	MG	1A	3703	1/1	0.80	0.47	43,43,43,43	0
54	MG	1A	3647	1/1	0.80	0.22	57,57,57,57	0
54	MG	1A	3288	1/1	0.80	0.14	70,70,70,70	0
54	MG	1A	3710	1/1	0.80	0.44	53,53,53,53	0
54	MG	1A	3474	1/1	0.80	0.13	37,37,37,37	0
54	MG	1A	3846	1/1	0.80	0.11	56,56,56,56	0
54	MG	2A	3474	1/1	0.80	0.12	55,55,55,55	0
54	MG	1A	3979	1/1	0.80	0.10	51,51,51,51	0
54	MG	1a	3049	1/1	0.80	0.12	60,60,60,60	0
54	MG	1A	3849	1/1	0.80	0.22	39,39,39,39	0
54	MG	2F	302	1/1	0.80	0.19	36,36,36,36	0
54	MG	1A	3981	1/1	0.80	0.09	52,52,52,52	0
54	MG	1A	3982	1/1	0.80	0.22	31,31,31,31	0
54	MG	2P	201	1/1	0.80	0.19	52,52,52,52	0
54	MG	1a	3069	1/1	0.80	0.27	57,57,57,57	0
54	MG	2a	3013	1/1	0.80	0.11	70,70,70,70	0
54	MG	1A	3027	1/1	0.80	0.31	66,66,66,66	0
54	MG	1A	3607	1/1	0.80	0.15	51,51,51,51	0
54	MG	1A	3107	1/1	0.80	0.22	35,35,35,35	0
54	MG	1A	3004	1/1	0.80	0.16	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3092	1/1	0.80	0.13	66,66,66,66	0
54	MG	1a	3094	1/1	0.80	0.30	68,68,68,68	0
54	MG	2A	3003	1/1	0.80	0.33	51,51,51,51	0
54	MG	2A	3563	1/1	0.80	0.21	62,62,62,62	0
54	MG	1B	226	1/1	0.80	0.22	68,68,68,68	0
54	MG	1A	3450	1/1	0.80	0.31	58,58,58,58	0
54	MG	2A	3278	1/1	0.80	0.15	58,58,58,58	0
54	MG	2A	3031	1/1	0.80	0.23	69,69,69,69	0
54	MG	2A	3034	1/1	0.80	0.15	71,71,71,71	0
54	MG	1A	3778	1/1	0.80	0.21	21,21,21,21	0
54	MG	2A	3045	1/1	0.80	0.17	54,54,54,54	0
54	MG	2A	3611	1/1	0.80	0.15	61,61,61,61	0
54	MG	1F	319	1/1	0.80	0.23	54,54,54,54	0
54	MG	2A	3367	1/1	0.80	0.26	40,40,40,40	0
54	MG	2A	3373	1/1	0.80	0.13	56,56,56,56	0
54	MG	2A	3065	1/1	0.80	0.24	42,42,42,42	0
54	MG	2a	3124	1/1	0.80	0.10	62,62,62,62	0
54	MG	2a	3139	1/1	0.80	0.19	61,61,61,61	0
54	MG	2A	3643	1/1	0.80	0.10	67,67,67,67	0
54	MG	2A	3652	1/1	0.80	0.11	56,56,56,56	0
54	MG	2A	3069	1/1	0.80	0.45	59,59,59,59	0
54	MG	2A	3089	1/1	0.80	0.15	59,59,59,59	0
54	MG	2A	3670	1/1	0.80	0.07	66,66,66,66	0
54	MG	1a	3112	1/1	0.80	0.17	60,60,60,60	0
54	MG	1G	201	1/1	0.80	0.09	62,62,62,62	0
54	MG	2A	3277	1/1	0.81	0.14	56,56,56,56	0
54	MG	1A	3585	1/1	0.81	0.12	54,54,54,54	0
54	MG	2A	3556	1/1	0.81	0.07	63,63,63,63	0
54	MG	1A	3400	1/1	0.81	0.19	18,18,18,18	0
54	MG	2Q	202	1/1	0.81	0.31	50,50,50,50	0
54	MG	1A	3851	1/1	0.81	0.22	50,50,50,50	0
54	MG	1A	3856	1/1	0.81	0.19	30,30,30,30	0
54	MG	1a	3180	1/1	0.81	0.53	58,58,58,58	0
54	MG	2A	3103	1/1	0.81	0.23	60,60,60,60	0
54	MG	1A	3984	1/1	0.81	0.07	64,64,64,64	0
54	MG	2A	3113	1/1	0.81	0.18	63,63,63,63	0
54	MG	1A	3604	1/1	0.81	0.15	62,62,62,62	0
54	MG	2a	3045	1/1	0.81	0.23	64,64,64,64	0
54	MG	1A	3689	1/1	0.81	0.19	62,62,62,62	0
54	MG	2A	3626	1/1	0.81	0.12	73,73,73,73	0
54	MG	1A	3755	1/1	0.81	0.14	62,62,62,62	0
54	MG	1A	3446	1/1	0.81	0.22	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3254	1/1	0.81	0.17	53,53,53,53	0
54	MG	1B	208	1/1	0.81	0.26	50,50,50,50	0
54	MG	2a	3066	1/1	0.81	0.14	63,63,63,63	0
54	MG	1a	3090	1/1	0.81	0.21	63,63,63,63	0
54	MG	1B	222	1/1	0.81	0.18	68,68,68,68	0
54	MG	2a	3079	1/1	0.81	0.24	61,61,61,61	0
54	MG	1A	3885	1/1	0.81	0.11	26,26,26,26	0
54	MG	1d	306	1/1	0.81	0.13	81,81,81,81	0
54	MG	1A	3777	1/1	0.81	0.11	34,34,34,34	0
54	MG	2A	3197	1/1	0.81	0.29	56,56,56,56	0
54	MG	1A	3328	1/1	0.81	0.30	53,53,53,53	0
54	MG	1A	3197	1/1	0.81	0.22	50,50,50,50	0
54	MG	2A	3699	1/1	0.81	0.09	42,42,42,42	0
54	MG	1A	3310	1/1	0.81	0.76	43,43,43,43	0
54	MG	1A	3920	1/1	0.81	0.19	28,28,28,28	0
54	MG	1A	3542	1/1	0.81	0.12	40,40,40,40	0
54	MG	1A	3791	1/1	0.81	0.19	26,26,26,26	0
54	MG	2a	3154	1/1	0.81	0.08	55,55,55,55	0
54	MG	2A	3033	1/1	0.81	0.22	47,47,47,47	0
54	MG	1a	3115	1/1	0.81	0.14	66,66,66,66	0
54	MG	1A	3253	1/1	0.81	0.19	52,52,52,52	0
54	MG	1A	3580	1/1	0.81	0.16	68,68,68,68	0
54	MG	2A	3272	1/1	0.81	0.17	68,68,68,68	0
54	MG	2A	3184	1/1	0.82	0.14	50,50,50,50	0
54	MG	2A	3424	1/1	0.82	0.17	35,35,35,35	0
54	MG	1A	3675	1/1	0.82	0.28	30,30,30,30	0
54	MG	2A	3612	1/1	0.82	0.13	45,45,45,45	0
54	MG	1a	3183	1/1	0.82	0.15	70,70,70,70	0
54	MG	2a	3033	1/1	0.82	0.15	65,65,65,65	0
54	MG	1A	3760	1/1	0.82	0.24	66,66,66,66	0
54	MG	1a	3192	1/1	0.82	0.07	73,73,73,73	0
54	MG	2A	3035	1/1	0.82	0.14	57,57,57,57	0
54	MG	1A	3546	1/1	0.82	0.18	48,48,48,48	0
54	MG	1a	3214	1/1	0.82	0.17	69,69,69,69	0
54	MG	2A	3055	1/1	0.82	0.18	57,57,57,57	0
54	MG	1a	3224	1/1	0.82	0.08	64,64,64,64	0
54	MG	1a	3233	1/1	0.82	0.27	69,69,69,69	0
54	MG	2A	3669	1/1	0.82	0.13	20,20,20,20	0
54	MG	2a	3064	1/1	0.82	0.16	72,72,72,72	0
54	MG	2A	3254	1/1	0.82	0.34	61,61,61,61	0
54	MG	2A	3066	1/1	0.82	0.23	55,55,55,55	0
54	MG	1A	3803	1/1	0.82	0.09	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3059	1/1	0.82	0.12	66,66,66,66	0
54	MG	1A	3518	1/1	0.82	0.09	65,65,65,65	0
54	MG	1a	3065	1/1	0.82	0.37	53,53,53,53	0
54	MG	2a	3091	1/1	0.82	0.15	73,73,73,73	0
54	MG	1A	3940	1/1	0.82	0.09	55,55,55,55	0
54	MG	1a	3071	1/1	0.82	0.42	61,61,61,61	0
54	MG	1a	3276	1/1	0.82	0.09	65,65,65,65	0
54	MG	2a	3118	1/1	0.82	0.25	72,72,72,72	0
54	MG	1a	3074	1/1	0.82	0.14	67,67,67,67	0
54	MG	1a	3127	1/1	0.82	0.11	55,55,55,55	0
54	MG	1T	203	1/1	0.82	0.12	61,61,61,61	0
54	MG	11	102	1/1	0.82	0.49	55,55,55,55	0
54	MG	11	104	1/1	0.82	0.17	57,57,57,57	0
54	MG	2A	3385	1/1	0.82	0.17	81,81,81,81	0
54	MG	1A	3210	1/1	0.82	0.45	38,38,38,38	0
54	MG	1a	3156	1/1	0.82	0.09	70,70,70,70	0
54	MG	2A	3587	1/1	0.82	0.17	45,45,45,45	0
54	MG	1A	3582	1/1	0.82	0.21	39,39,39,39	0
54	MG	2a	3005	1/1	0.82	0.24	69,69,69,69	0
54	MG	2a	3006	1/1	0.82	0.08	65,65,65,65	0
54	MG	1A	3700	1/1	0.83	0.17	47,47,47,47	0
54	MG	1A	3938	1/1	0.83	0.23	55,55,55,55	0
54	MG	2A	3128	1/1	0.83	0.09	66,66,66,66	0
54	MG	2A	3483	1/1	0.83	0.17	64,64,64,64	0
54	MG	1a	3204	1/1	0.83	0.20	64,64,64,64	0
54	MG	1A	3810	1/1	0.83	0.47	37,37,37,37	0
54	MG	2a	3049	1/1	0.83	0.22	49,49,49,49	0
54	MG	1A	3240	1/1	0.83	0.22	64,64,64,64	0
54	MG	2A	3499	1/1	0.83	0.17	52,52,52,52	0
54	MG	1A	3946	1/1	0.83	0.35	51,51,51,51	0
54	MG	1A	3882	1/1	0.83	0.18	37,37,37,37	0
54	MG	1A	3409	1/1	0.83	0.17	26,26,26,26	0
54	MG	1U	202	1/1	0.83	0.15	35,35,35,35	0
54	MG	2A	3180	1/1	0.83	0.11	57,57,57,57	0
54	MG	2A	3330	1/1	0.83	0.22	62,62,62,62	0
54	MG	10	102	1/1	0.83	0.65	41,41,41,41	0
54	MG	2A	3535	1/1	0.83	0.29	68,68,68,68	0
54	MG	1A	3427	1/1	0.83	0.22	57,57,57,57	0
54	MG	1A	3435	1/1	0.83	0.14	57,57,57,57	0
54	MG	2A	3375	1/1	0.83	0.09	77,77,77,77	0
54	MG	2A	3382	1/1	0.83	0.14	57,57,57,57	0
54	MG	2A	3194	1/1	0.83	0.17	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3061	1/1	0.83	0.15	66,66,66,66	0
54	MG	2a	3113	1/1	0.83	0.15	53,53,53,53	0
54	MG	1a	3085	1/1	0.83	0.17	56,56,56,56	0
54	MG	2D	308	1/1	0.83	0.19	36,36,36,36	0
54	MG	1D	316	1/1	0.83	0.32	46,46,46,46	0
54	MG	1a	3003	1/1	0.83	0.14	51,51,51,51	0
54	MG	2a	3136	1/1	0.83	0.22	72,72,72,72	0
54	MG	1A	3133	1/1	0.83	0.10	43,43,43,43	0
54	MG	2A	3591	1/1	0.83	0.14	50,50,50,50	0
54	MG	2A	3225	1/1	0.83	0.23	66,66,66,66	0
54	MG	1a	3175	1/1	0.83	0.17	63,63,63,63	0
54	MG	1a	3009	1/1	0.83	0.13	60,60,60,60	0
54	MG	2a	3184	1/1	0.83	0.26	57,57,57,57	0
54	MG	2A	3450	1/1	0.83	0.21	38,38,38,38	0
54	MG	2A	3111	1/1	0.83	0.10	60,60,60,60	0
54	MG	2A	3620	1/1	0.83	0.38	53,53,53,53	0
54	MG	1A	3229	1/1	0.83	0.14	49,49,49,49	0
54	MG	1A	3972	1/1	0.84	0.26	59,59,59,59	0
54	MG	1V	204	1/1	0.84	0.21	52,52,52,52	0
54	MG	2B	203	1/1	0.84	0.12	68,68,68,68	0
54	MG	2A	3480	1/1	0.84	0.12	64,64,64,64	0
54	MG	2A	3482	1/1	0.84	0.20	58,58,58,58	0
54	MG	1A	3239	1/1	0.84	0.12	65,65,65,65	0
54	MG	1l	202	1/1	0.84	0.12	70,70,70,70	0
54	MG	1A	3327	1/1	0.84	0.27	48,48,48,48	0
54	MG	1A	3606	1/1	0.84	0.13	34,34,34,34	0
54	MG	19	102	1/1	0.84	0.32	58,58,58,58	0
54	MG	2A	3500	1/1	0.84	0.19	62,62,62,62	0
54	MG	2I	201	1/1	0.84	0.11	71,71,71,71	0
54	MG	2A	3218	1/1	0.84	0.32	74,74,74,74	0
54	MG	2A	3508	1/1	0.84	0.23	59,59,59,59	0
54	MG	1A	3767	1/1	0.84	0.09	59,59,59,59	0
54	MG	1A	3059	1/1	0.84	0.10	43,43,43,43	0
54	MG	2A	3227	1/1	0.84	0.26	46,46,46,46	0
54	MG	1A	3529	1/1	0.84	0.08	51,51,51,51	0
54	MG	1A	3530	1/1	0.84	0.12	55,55,55,55	0
54	MG	1a	3023	1/1	0.84	0.11	59,59,59,59	0
54	MG	2A	3249	1/1	0.84	0.11	64,64,64,64	0
54	MG	2A	3539	1/1	0.84	0.20	59,59,59,59	0
54	MG	2A	3250	1/1	0.84	0.33	56,56,56,56	0
54	MG	1A	3639	1/1	0.84	0.20	23,23,23,23	0
54	MG	1a	3039	1/1	0.84	0.36	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3042	1/1	0.84	0.44	66,66,66,66	0
54	MG	1A	3993	1/1	0.84	0.09	52,52,52,52	0
54	MG	1A	3788	1/1	0.84	0.15	33,33,33,33	0
54	MG	1A	3888	1/1	0.84	0.19	38,38,38,38	0
54	MG	1A	4009	1/1	0.84	0.65	48,48,48,48	0
54	MG	1A	3165	1/1	0.84	0.35	46,46,46,46	0
54	MG	1a	3184	1/1	0.84	0.13	66,66,66,66	0
54	MG	2A	3589	1/1	0.84	0.23	39,39,39,39	0
54	MG	2A	3590	1/1	0.84	0.13	56,56,56,56	0
54	MG	1A	3191	1/1	0.84	0.19	52,52,52,52	0
54	MG	2A	3068	1/1	0.84	0.47	51,51,51,51	0
54	MG	1a	3189	1/1	0.84	0.14	64,64,64,64	0
54	MG	2A	3314	1/1	0.84	0.14	58,58,58,58	0
54	MG	1A	3463	1/1	0.84	0.11	43,43,43,43	0
54	MG	1A	3799	1/1	0.84	0.14	59,59,59,59	0
54	MG	1A	3375	1/1	0.84	0.14	62,62,62,62	0
54	MG	2a	3093	1/1	0.84	0.19	60,60,60,60	0
54	MG	1A	3136	1/1	0.84	0.18	46,46,46,46	0
54	MG	1A	3738	1/1	0.84	0.10	48,48,48,48	0
54	MG	1a	3229	1/1	0.84	0.24	61,61,61,61	0
54	MG	1a	3083	1/1	0.84	0.17	59,59,59,59	0
54	MG	1a	3234	1/1	0.84	0.28	74,74,74,74	0
54	MG	1A	3842	1/1	0.84	0.28	59,59,59,59	0
54	MG	2A	3405	1/1	0.84	0.11	48,48,48,48	0
54	MG	1a	3238	1/1	0.84	0.08	72,72,72,72	0
54	MG	2a	3129	1/1	0.84	0.26	68,68,68,68	0
54	MG	1A	3275	1/1	0.84	0.20	40,40,40,40	0
54	MG	1A	3955	1/1	0.84	0.16	42,42,42,42	0
54	MG	1A	3314	1/1	0.84	0.15	32,32,32,32	0
54	MG	1a	3266	1/1	0.84	0.28	59,59,59,59	0
54	MG	2A	3173	1/1	0.84	0.25	50,50,50,50	0
54	MG	1A	3967	1/1	0.84	0.20	56,56,56,56	0
54	MG	1a	3093	1/1	0.84	0.15	60,60,60,60	0
54	MG	2e	202	1/1	0.84	0.37	67,67,67,67	0
54	MG	2f	201	1/1	0.84	0.24	52,52,52,52	0
54	MG	1A	3970	1/1	0.84	0.11	53,53,53,53	0
57	MPD	1T	205	8/8	0.84	0.23	51,61,67,77	0
54	MG	2A	3716	1/1	0.84	0.17	73,73,73,73	0
54	MG	2A	3183	1/1	0.84	0.17	64,64,64,64	0
54	MG	2A	3731	1/1	0.84	0.18	58,58,58,58	0
54	MG	2A	3188	1/1	0.85	0.17	60,60,60,60	0
54	MG	2A	3047	1/1	0.85	0.40	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3824	1/1	0.85	0.47	69,69,69,69	0
54	MG	1a	3246	1/1	0.85	0.22	66,66,66,66	0
54	MG	2A	3200	1/1	0.85	0.10	42,42,42,42	0
54	MG	2A	3202	1/1	0.85	0.26	53,53,53,53	0
54	MG	1A	3343	1/1	0.85	0.16	55,55,55,55	0
54	MG	2a	3017	1/1	0.85	0.15	45,45,45,45	0
54	MG	1A	3469	1/1	0.85	0.15	45,45,45,45	0
54	MG	1A	3361	1/1	0.85	0.17	48,48,48,48	0
54	MG	1a	3149	1/1	0.85	0.19	49,49,49,49	0
54	MG	2A	3436	1/1	0.85	0.12	75,75,75,75	0
54	MG	2A	3440	1/1	0.85	0.15	50,50,50,50	0
54	MG	2A	3222	1/1	0.85	0.23	59,59,59,59	0
54	MG	2A	3614	1/1	0.85	0.26	43,43,43,43	0
54	MG	2a	3048	1/1	0.85	0.12	65,65,65,65	0
54	MG	1a	3081	1/1	0.85	0.15	62,62,62,62	0
54	MG	2A	3073	1/1	0.85	0.24	47,47,47,47	0
54	MG	1A	3947	1/1	0.85	0.23	56,56,56,56	0
54	MG	2A	3633	1/1	0.85	0.14	55,55,55,55	0
54	MG	2a	3058	1/1	0.85	0.19	67,67,67,67	0
54	MG	1a	3272	1/1	0.85	0.23	61,61,61,61	0
54	MG	2A	3238	1/1	0.85	0.21	44,44,44,44	0
54	MG	2A	3095	1/1	0.85	0.28	51,51,51,51	0
54	MG	2A	3245	1/1	0.85	0.28	39,39,39,39	0
54	MG	1a	3157	1/1	0.85	0.32	60,60,60,60	0
54	MG	2A	3654	1/1	0.85	0.12	49,49,49,49	0
54	MG	1A	3983	1/1	0.85	0.14	39,39,39,39	0
54	MG	1A	3691	1/1	0.85	0.13	40,40,40,40	0
54	MG	1a	3178	1/1	0.85	0.26	58,58,58,58	0
54	MG	1A	3987	1/1	0.85	0.15	21,21,21,21	0
54	MG	1a	3018	1/1	0.85	0.22	55,55,55,55	0
54	MG	1A	3954	1/1	0.85	0.18	47,47,47,47	0
54	MG	1N	203	1/1	0.85	0.12	54,54,54,54	0
54	MG	2A	3697	1/1	0.85	0.14	52,52,52,52	0
54	MG	2A	3505	1/1	0.85	0.11	57,57,57,57	0
54	MG	1A	3850	1/1	0.85	0.18	39,39,39,39	0
54	MG	2A	3141	1/1	0.85	0.17	58,58,58,58	0
54	MG	2A	3280	1/1	0.85	0.21	54,54,54,54	0
54	MG	2A	3009	1/1	0.85	0.21	39,39,39,39	0
54	MG	1a	3045	1/1	0.85	0.20	62,62,62,62	0
54	MG	1A	3160	1/1	0.85	0.29	40,40,40,40	0
54	MG	2A	3737	1/1	0.85	0.18	54,54,54,54	0
54	MG	2A	3528	1/1	0.85	0.25	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3628	1/1	0.85	0.10	40,40,40,40	0
54	MG	2a	3148	1/1	0.85	0.20	48,48,48,48	0
54	MG	1A	3079	1/1	0.85	0.49	55,55,55,55	0
54	MG	1A	3510	1/1	0.85	0.07	45,45,45,45	0
54	MG	2B	213	1/1	0.85	0.12	64,64,64,64	0
54	MG	2A	3543	1/1	0.85	0.12	74,74,74,74	0
54	MG	1U	204	1/1	0.85	0.32	57,57,57,57	0
54	MG	2A	3549	1/1	0.85	0.20	32,32,32,32	0
54	MG	2A	3366	1/1	0.85	0.15	43,43,43,43	0
54	MG	1B	207	1/1	0.85	0.15	57,57,57,57	0
57	MPD	2B	220	8/8	0.85	0.19	59,68,69,75	0
54	MG	1V	205	1/1	0.85	0.19	52,52,52,52	0
59	ZN	14	102	1/1	0.85	0.06	110,110,110,110	0
54	MG	1a	3117	1/1	0.85	0.35	66,66,66,66	0
54	MG	1A	3076	1/1	0.86	0.64	41,41,41,41	0
54	MG	1A	3629	1/1	0.86	0.23	21,21,21,21	0
54	MG	1A	3038	1/1	0.86	0.18	45,45,45,45	0
54	MG	1a	3271	1/1	0.86	0.12	67,67,67,67	0
54	MG	2A	3522	1/1	0.86	0.14	71,71,71,71	0
54	MG	2D	311	1/1	0.86	0.22	68,68,68,68	0
54	MG	1a	3145	1/1	0.86	0.14	63,63,63,63	0
54	MG	2G	201	1/1	0.86	0.21	76,76,76,76	0
54	MG	1A	3315	1/1	0.86	0.17	36,36,36,36	0
54	MG	1A	3317	1/1	0.86	0.20	43,43,43,43	0
54	MG	2A	3284	1/1	0.86	0.18	62,62,62,62	0
54	MG	1a	3150	1/1	0.86	0.11	51,51,51,51	0
54	MG	1A	3478	1/1	0.86	0.17	47,47,47,47	0
54	MG	2T	204	1/1	0.86	0.14	47,47,47,47	0
54	MG	1A	3318	1/1	0.86	0.34	61,61,61,61	0
54	MG	1m	201	1/1	0.86	0.11	66,66,66,66	0
54	MG	1A	3719	1/1	0.86	0.21	57,57,57,57	0
54	MG	2a	3011	1/1	0.86	0.24	55,55,55,55	0
54	MG	1U	201	1/1	0.86	0.45	36,36,36,36	0
54	MG	2A	3337	1/1	0.86	0.15	46,46,46,46	0
54	MG	2A	3341	1/1	0.86	0.10	52,52,52,52	0
54	MG	2a	3022	1/1	0.86	0.14	45,45,45,45	0
54	MG	2a	3023	1/1	0.86	0.40	64,64,64,64	0
54	MG	2A	3348	1/1	0.86	0.12	39,39,39,39	0
54	MG	1A	3909	1/1	0.86	0.18	25,25,25,25	0
54	MG	1A	3989	1/1	0.86	0.16	39,39,39,39	0
54	MG	1A	3083	1/1	0.86	0.26	42,42,42,42	0
54	MG	2A	3012	1/1	0.86	0.35	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3182	1/1	0.86	0.20	63,63,63,63	0
54	MG	2A	3380	1/1	0.86	0.12	57,57,57,57	0
54	MG	1A	3819	1/1	0.86	0.20	27,27,27,27	0
54	MG	1A	3326	1/1	0.86	0.26	37,37,37,37	0
54	MG	10	105	1/1	0.86	0.14	50,50,50,50	0
54	MG	10	107	1/1	0.86	0.17	55,55,55,55	0
54	MG	2A	3193	1/1	0.86	0.23	57,57,57,57	0
54	MG	2A	3415	1/1	0.86	0.10	51,51,51,51	0
54	MG	1A	3659	1/1	0.86	0.09	61,61,61,61	0
54	MG	1A	3587	1/1	0.86	0.19	33,33,33,33	0
54	MG	1a	3205	1/1	0.86	0.15	72,72,72,72	0
54	MG	2A	3198	1/1	0.86	0.17	56,56,56,56	0
54	MG	2A	3631	1/1	0.86	0.14	55,55,55,55	0
54	MG	17	106	1/1	0.86	0.19	47,47,47,47	0
54	MG	1A	3843	1/1	0.86	0.18	56,56,56,56	0
54	MG	1a	3221	1/1	0.86	0.05	57,57,57,57	0
54	MG	2A	3639	1/1	0.86	0.15	67,67,67,67	0
54	MG	2A	3054	1/1	0.86	0.15	65,65,65,65	0
54	MG	2A	3216	1/1	0.86	0.34	53,53,53,53	0
54	MG	2a	3100	1/1	0.86	0.10	67,67,67,67	0
54	MG	2a	3102	1/1	0.86	0.25	41,41,41,41	0
54	MG	2A	3646	1/1	0.86	0.09	42,42,42,42	0
54	MG	2A	3451	1/1	0.86	0.10	56,56,56,56	0
54	MG	2a	3110	1/1	0.86	0.12	74,74,74,74	0
54	MG	1A	3185	1/1	0.86	0.18	51,51,51,51	0
54	MG	2A	3455	1/1	0.86	0.13	65,65,65,65	0
54	MG	2a	3116	1/1	0.86	0.10	60,60,60,60	0
54	MG	1A	3002	1/1	0.86	0.17	39,39,39,39	0
54	MG	2A	3462	1/1	0.86	0.10	49,49,49,49	0
54	MG	2A	3464	1/1	0.86	0.15	56,56,56,56	0
54	MG	2A	3672	1/1	0.86	0.08	59,59,59,59	0
54	MG	2A	3677	1/1	0.86	0.21	60,60,60,60	0
54	MG	1a	3232	1/1	0.86	0.10	74,74,74,74	0
54	MG	1B	216	1/1	0.86	0.21	44,44,44,44	0
54	MG	1a	3105	1/1	0.86	0.20	67,67,67,67	0
54	MG	2A	3691	1/1	0.86	0.19	43,43,43,43	0
54	MG	1B	219	1/1	0.86	0.14	42,42,42,42	0
54	MG	2a	3153	1/1	0.86	0.14	63,63,63,63	0
54	MG	1A	3678	1/1	0.86	0.12	59,59,59,59	0
54	MG	1A	3605	1/1	0.86	0.23	40,40,40,40	0
54	MG	2a	3183	1/1	0.86	0.29	54,54,54,54	0
54	MG	2A	3714	1/1	0.86	0.24	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3240	1/1	0.86	0.20	59,59,59,59	0
54	MG	2A	3241	1/1	0.86	0.15	62,62,62,62	0
54	MG	2A	3494	1/1	0.86	0.14	64,64,64,64	0
54	MG	2y	201	1/1	0.86	0.23	60,60,60,60	0
54	MG	2A	3084	1/1	0.86	0.20	46,46,46,46	0
54	MG	1A	3035	1/1	0.86	0.19	44,44,44,44	0
54	MG	1A	3072	1/1	0.86	0.19	45,45,45,45	0
54	MG	1A	3627	1/1	0.86	0.10	58,58,58,58	0
54	MG	2A	3096	1/1	0.86	0.18	51,51,51,51	0
54	MG	2A	3102	1/1	0.86	0.17	49,49,49,49	0
54	MG	1A	3221	1/1	0.87	0.42	41,41,41,41	0
54	MG	1A	3227	1/1	0.87	0.19	31,31,31,31	0
54	MG	2A	3732	1/1	0.87	0.25	49,49,49,49	0
54	MG	1A	3837	1/1	0.87	0.12	53,53,53,53	0
54	MG	2A	3467	1/1	0.87	0.13	40,40,40,40	0
54	MG	1g	202	1/1	0.87	0.19	70,70,70,70	0
54	MG	1A	3289	1/1	0.87	0.32	58,58,58,58	0
54	MG	1A	3131	1/1	0.87	0.48	31,31,31,31	0
54	MG	2B	207	1/1	0.87	0.13	73,73,73,73	0
54	MG	1A	3545	1/1	0.87	0.46	55,55,55,55	0
54	MG	1A	3052	1/1	0.87	0.28	39,39,39,39	0
54	MG	2A	3204	1/1	0.87	0.14	59,59,59,59	0
54	MG	1A	3644	1/1	0.87	0.17	38,38,38,38	0
54	MG	2A	3001	1/1	0.87	0.19	58,58,58,58	0
54	MG	2A	3214	1/1	0.87	0.19	49,49,49,49	0
54	MG	1A	3733	1/1	0.87	0.16	26,26,26,26	0
54	MG	1a	3121	1/1	0.87	0.18	57,57,57,57	0
54	MG	1A	3087	1/1	0.87	0.17	52,52,52,52	0
54	MG	1A	3574	1/1	0.87	0.21	46,46,46,46	0
54	MG	11	105	1/1	0.87	0.14	35,35,35,35	0
54	MG	1A	3748	1/1	0.87	0.10	57,57,57,57	0
54	MG	1A	3865	1/1	0.87	0.07	60,60,60,60	0
54	MG	1A	3366	1/1	0.87	0.20	41,41,41,41	0
54	MG	2R	202	1/1	0.87	0.16	46,46,46,46	0
54	MG	1A	3205	1/1	0.87	0.24	45,45,45,45	0
54	MG	1A	3991	1/1	0.87	0.14	54,54,54,54	0
54	MG	1A	3881	1/1	0.87	0.13	68,68,68,68	0
54	MG	1a	3010	1/1	0.87	0.28	74,74,74,74	0
54	MG	1a	3016	1/1	0.87	0.20	54,54,54,54	0
54	MG	2A	3049	1/1	0.87	0.22	52,52,52,52	0
54	MG	2a	3015	1/1	0.87	0.13	60,60,60,60	0
54	MG	1A	3487	1/1	0.87	0.25	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3660	1/1	0.87	0.15	37,37,37,37	0
54	MG	2a	3018	1/1	0.87	0.33	56,56,56,56	0
54	MG	1A	3661	1/1	0.87	0.28	51,51,51,51	0
54	MG	1a	3030	1/1	0.87	0.25	57,57,57,57	0
54	MG	1A	4003	1/1	0.87	0.35	41,41,41,41	0
54	MG	1a	3185	1/1	0.87	0.16	59,59,59,59	0
54	MG	1A	3665	1/1	0.87	0.52	48,48,48,48	0
54	MG	2A	3554	1/1	0.87	0.10	63,63,63,63	0
54	MG	1B	201	1/1	0.87	0.16	58,58,58,58	0
54	MG	2A	3558	1/1	0.87	0.19	65,65,65,65	0
54	MG	1a	3052	1/1	0.87	0.39	57,57,57,57	0
54	MG	1a	3196	1/1	0.87	0.15	69,69,69,69	0
54	MG	2A	3085	1/1	0.87	0.99	52,52,52,52	0
54	MG	1A	3378	1/1	0.87	0.08	45,45,45,45	0
54	MG	1A	3779	1/1	0.87	0.23	43,43,43,43	0
54	MG	2A	3586	1/1	0.87	0.35	67,67,67,67	0
54	MG	1A	3897	1/1	0.87	0.14	53,53,53,53	0
54	MG	2A	3293	1/1	0.87	0.25	58,58,58,58	0
54	MG	1a	3210	1/1	0.87	0.19	55,55,55,55	0
54	MG	2A	3303	1/1	0.87	0.17	43,43,43,43	0
54	MG	2A	3598	1/1	0.87	0.13	53,53,53,53	0
54	MG	2a	3067	1/1	0.87	0.18	66,66,66,66	0
54	MG	1A	3906	1/1	0.87	0.27	23,23,23,23	0
54	MG	1A	3590	1/1	0.87	0.19	52,52,52,52	0
54	MG	2A	3104	1/1	0.87	0.19	53,53,53,53	0
54	MG	1a	3223	1/1	0.87	0.06	59,59,59,59	0
54	MG	1A	3206	1/1	0.87	0.48	51,51,51,51	0
54	MG	2a	3090	1/1	0.87	0.14	57,57,57,57	0
54	MG	2A	3349	1/1	0.87	0.12	42,42,42,42	0
54	MG	2A	3615	1/1	0.87	0.10	49,49,49,49	0
54	MG	1D	314	1/1	0.87	0.24	56,56,56,56	0
54	MG	2a	3101	1/1	0.87	0.16	67,67,67,67	0
54	MG	1A	3919	1/1	0.87	0.10	47,47,47,47	0
54	MG	2A	3121	1/1	0.87	0.17	47,47,47,47	0
54	MG	2A	3125	1/1	0.87	0.12	61,61,61,61	0
54	MG	1E	303	1/1	0.87	0.25	22,22,22,22	0
54	MG	1A	3593	1/1	0.87	0.10	44,44,44,44	0
54	MG	2A	3381	1/1	0.87	0.24	52,52,52,52	0
54	MG	1A	3931	1/1	0.87	0.10	51,51,51,51	0
54	MG	1a	3082	1/1	0.87	0.13	59,59,59,59	0
54	MG	2A	3139	1/1	0.87	0.15	64,64,64,64	0
54	MG	2A	3389	1/1	0.87	0.19	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1F	309	1/1	0.87	0.37	27,27,27,27	0
54	MG	2A	3149	1/1	0.87	0.13	39,39,39,39	0
54	MG	1a	3247	1/1	0.87	0.12	67,67,67,67	0
54	MG	1a	3084	1/1	0.87	0.27	68,68,68,68	0
54	MG	1A	3594	1/1	0.87	0.09	44,44,44,44	0
54	MG	2A	3171	1/1	0.87	0.22	56,56,56,56	0
54	MG	2A	3671	1/1	0.87	0.16	49,49,49,49	0
54	MG	2a	3149	1/1	0.87	0.21	45,45,45,45	0
54	MG	2A	3172	1/1	0.87	0.33	51,51,51,51	0
54	MG	2A	3674	1/1	0.87	0.09	63,63,63,63	0
54	MG	2a	3156	1/1	0.87	0.24	65,65,65,65	0
54	MG	1A	3598	1/1	0.87	0.15	53,53,53,53	0
54	MG	2A	3430	1/1	0.87	0.09	53,53,53,53	0
54	MG	1A	3054	1/1	0.87	0.60	33,33,33,33	0
54	MG	1H	202	1/1	0.87	0.14	44,44,44,44	0
54	MG	2A	3689	1/1	0.87	0.15	69,69,69,69	0
54	MG	1A	3274	1/1	0.87	0.17	62,62,62,62	0
54	MG	2l	201	1/1	0.87	0.22	61,61,61,61	0
54	MG	1A	3125	1/1	0.87	0.24	38,38,38,38	0
54	MG	1A	3127	1/1	0.87	0.08	62,62,62,62	0
54	MG	2A	3704	1/1	0.87	0.18	49,49,49,49	0
54	MG	2A	3453	1/1	0.87	0.22	67,67,67,67	0
54	MG	2A	3712	1/1	0.87	0.73	51,51,51,51	0
54	MG	1a	3273	1/1	0.87	0.21	63,63,63,63	0
54	MG	1A	3608	1/1	0.87	0.20	41,41,41,41	0
54	MG	1a	3219	1/1	0.88	0.15	69,69,69,69	0
54	MG	1a	3088	1/1	0.88	0.27	59,59,59,59	0
54	MG	1A	3055	1/1	0.88	0.12	39,39,39,39	0
54	MG	1A	3682	1/1	0.88	0.12	54,54,54,54	0
54	MG	2A	3262	1/1	0.88	0.32	55,55,55,55	0
54	MG	2F	303	1/1	0.88	0.26	54,54,54,54	0
54	MG	1a	3227	1/1	0.88	0.14	54,54,54,54	0
54	MG	1a	3228	1/1	0.88	0.09	60,60,60,60	0
54	MG	1A	3293	1/1	0.88	0.50	29,29,29,29	0
54	MG	1A	3436	1/1	0.88	0.25	25,25,25,25	0
54	MG	1A	3445	1/1	0.88	0.14	53,53,53,53	0
54	MG	2P	202	1/1	0.88	0.16	56,56,56,56	0
54	MG	2A	3098	1/1	0.88	0.16	53,53,53,53	0
54	MG	1A	3617	1/1	0.88	0.12	65,65,65,65	0
54	MG	1A	3695	1/1	0.88	0.21	36,36,36,36	0
54	MG	2a	3003	1/1	0.88	0.12	59,59,59,59	0
54	MG	1A	3625	1/1	0.88	0.26	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3243	1/1	0.88	0.27	57,57,57,57	0
54	MG	1A	3248	1/1	0.88	0.15	32,32,32,32	0
54	MG	1A	4006	1/1	0.88	0.14	39,39,39,39	0
54	MG	1A	3030	1/1	0.88	0.14	30,30,30,30	0
54	MG	1a	3108	1/1	0.88	0.14	67,67,67,67	0
54	MG	2A	3578	1/1	0.88	0.15	50,50,50,50	0
54	MG	2A	3331	1/1	0.88	0.15	53,53,53,53	0
54	MG	1A	4012	1/1	0.88	0.20	43,43,43,43	0
54	MG	1a	3259	1/1	0.88	0.19	61,61,61,61	0
54	MG	1A	4015	1/1	0.88	0.23	51,51,51,51	0
54	MG	1A	3543	1/1	0.88	0.19	53,53,53,53	0
54	MG	2a	3025	1/1	0.88	0.15	64,64,64,64	0
54	MG	1A	3809	1/1	0.88	0.21	67,67,67,67	0
54	MG	1A	3705	1/1	0.88	0.37	35,35,35,35	0
54	MG	1a	3015	1/1	0.88	0.16	56,56,56,56	0
54	MG	1a	3124	1/1	0.88	0.21	64,64,64,64	0
54	MG	2A	3150	1/1	0.88	0.19	55,55,55,55	0
54	MG	2A	3155	1/1	0.88	0.11	38,38,38,38	0
54	MG	1a	3275	1/1	0.88	0.20	46,46,46,46	0
54	MG	1A	3340	1/1	0.88	0.14	37,37,37,37	0
54	MG	1B	217	1/1	0.88	0.39	60,60,60,60	0
54	MG	2A	3169	1/1	0.88	0.22	46,46,46,46	0
54	MG	1a	3136	1/1	0.88	0.20	56,56,56,56	0
54	MG	2A	3397	1/1	0.88	0.17	34,34,34,34	0
54	MG	1d	304	1/1	0.88	0.25	57,57,57,57	0
54	MG	1A	3461	1/1	0.88	0.14	62,62,62,62	0
54	MG	2A	3413	1/1	0.88	0.28	51,51,51,51	0
54	MG	1a	3139	1/1	0.88	0.17	55,55,55,55	0
54	MG	1g	203	1/1	0.88	0.13	52,52,52,52	0
54	MG	1A	3830	1/1	0.88	0.16	53,53,53,53	0
54	MG	1A	3307	1/1	0.88	0.23	42,42,42,42	0
54	MG	2a	3077	1/1	0.88	0.57	60,60,60,60	0
54	MG	1a	3033	1/1	0.88	0.08	57,57,57,57	0
54	MG	1t	201	1/1	0.88	0.45	58,58,58,58	0
54	MG	1A	3834	1/1	0.88	0.16	46,46,46,46	0
54	MG	2A	3434	1/1	0.88	0.23	49,49,49,49	0
54	MG	1A	3348	1/1	0.88	0.25	20,20,20,20	0
54	MG	1y	203	1/1	0.88	0.10	60,60,60,60	0
54	MG	2a	3099	1/1	0.88	0.20	53,53,53,53	0
54	MG	1y	204	1/1	0.88	0.23	74,74,74,74	0
54	MG	1A	3163	1/1	0.88	0.25	48,48,48,48	0
54	MG	1A	3130	1/1	0.88	0.21	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3036	1/1	0.88	0.23	38,38,38,38	0
54	MG	1A	3481	1/1	0.88	0.18	41,41,41,41	0
54	MG	2a	3107	1/1	0.88	0.20	52,52,52,52	0
54	MG	2A	3016	1/1	0.88	0.12	56,56,56,56	0
54	MG	1A	3965	1/1	0.88	0.14	67,67,67,67	0
54	MG	2A	3682	1/1	0.88	0.08	65,65,65,65	0
54	MG	1a	3179	1/1	0.88	0.16	66,66,66,66	0
54	MG	2A	3463	1/1	0.88	0.21	49,49,49,49	0
54	MG	2A	3025	1/1	0.88	0.22	43,43,43,43	0
54	MG	1A	3008	1/1	0.88	0.14	33,33,33,33	0
54	MG	1A	3383	1/1	0.88	0.16	30,30,30,30	0
54	MG	1A	3192	1/1	0.88	0.19	51,51,51,51	0
54	MG	2A	3700	1/1	0.88	0.45	45,45,45,45	0
54	MG	2a	3138	1/1	0.88	0.07	73,73,73,73	0
54	MG	2A	3702	1/1	0.88	0.15	40,40,40,40	0
54	MG	1A	3193	1/1	0.88	0.23	63,63,63,63	0
54	MG	1O	201	1/1	0.88	0.25	53,53,53,53	0
54	MG	1a	3077	1/1	0.88	0.53	71,71,71,71	0
54	MG	2A	3226	1/1	0.88	0.25	61,61,61,61	0
54	MG	1A	3514	1/1	0.88	0.13	44,44,44,44	0
54	MG	2A	3722	1/1	0.88	0.17	46,46,46,46	0
54	MG	2A	3727	1/1	0.88	0.17	64,64,64,64	0
54	MG	2A	3488	1/1	0.88	0.09	61,61,61,61	0
54	MG	1A	3600	1/1	0.88	0.17	63,63,63,63	0
54	MG	1a	3203	1/1	0.88	0.15	73,73,73,73	0
54	MG	2A	3495	1/1	0.88	0.28	27,27,27,27	0
54	MG	1R	203	1/1	0.88	0.43	39,39,39,39	0
54	MG	2j	201	1/1	0.88	0.13	71,71,71,71	0
54	MG	1A	3112	1/1	0.88	0.15	47,47,47,47	0
54	MG	1A	3870	1/1	0.88	0.07	37,37,37,37	0
54	MG	2n	101	1/1	0.88	0.11	65,65,65,65	0
54	MG	2A	3060	1/1	0.88	0.16	56,56,56,56	0
54	MG	2B	206	1/1	0.88	0.24	67,67,67,67	0
54	MG	1a	3209	1/1	0.88	0.14	55,55,55,55	0
54	MG	2A	3247	1/1	0.88	0.20	58,58,58,58	0
54	MG	2B	210	1/1	0.88	0.21	58,58,58,58	0
54	MG	1A	3872	1/1	0.88	0.22	49,49,49,49	0
54	MG	1A	3769	1/1	0.88	0.17	31,31,31,31	0
54	MG	1A	3711	1/1	0.89	0.16	47,47,47,47	0
54	MG	2A	3119	1/1	0.89	0.72	54,54,54,54	0
54	MG	1A	3320	1/1	0.89	0.27	41,41,41,41	0
54	MG	1B	211	1/1	0.89	0.16	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3930	1/1	0.89	0.11	56,56,56,56	0
54	MG	1a	3135	1/1	0.89	0.10	66,66,66,66	0
54	MG	2A	3533	1/1	0.89	0.11	58,58,58,58	0
54	MG	1A	3821	1/1	0.89	0.18	31,31,31,31	0
54	MG	2A	3537	1/1	0.89	0.16	58,58,58,58	0
54	MG	1B	218	1/1	0.89	0.12	52,52,52,52	0
54	MG	1a	3026	1/1	0.89	0.10	60,60,60,60	0
54	MG	1A	3714	1/1	0.89	0.14	36,36,36,36	0
54	MG	1A	3392	1/1	0.89	0.15	57,57,57,57	0
54	MG	2A	3143	1/1	0.89	0.32	55,55,55,55	0
54	MG	1A	3488	1/1	0.89	0.20	38,38,38,38	0
54	MG	2A	3334	1/1	0.89	0.20	67,67,67,67	0
54	MG	1a	3038	1/1	0.89	0.17	60,60,60,60	0
54	MG	2A	3557	1/1	0.89	0.09	55,55,55,55	0
54	MG	2A	3338	1/1	0.89	0.21	46,46,46,46	0
54	MG	2a	3007	1/1	0.89	0.14	48,48,48,48	0
54	MG	2A	3339	1/1	0.89	0.22	39,39,39,39	0
54	MG	2A	3340	1/1	0.89	0.18	37,37,37,37	0
54	MG	1a	3151	1/1	0.89	0.15	58,58,58,58	0
54	MG	2A	3158	1/1	0.89	0.23	53,53,53,53	0
54	MG	2A	3580	1/1	0.89	0.13	59,59,59,59	0
54	MG	2A	3583	1/1	0.89	0.12	42,42,42,42	0
54	MG	1h	201	1/1	0.89	0.20	44,44,44,44	0
54	MG	2a	3020	1/1	0.89	0.10	48,48,48,48	0
54	MG	1i	201	1/1	0.89	0.08	61,61,61,61	0
54	MG	1D	302	1/1	0.89	0.47	41,41,41,41	0
54	MG	1a	3041	1/1	0.89	0.13	48,48,48,48	0
54	MG	2A	3368	1/1	0.89	0.14	30,30,30,30	0
54	MG	1a	3042	1/1	0.89	0.14	53,53,53,53	0
54	MG	1a	3158	1/1	0.89	0.15	47,47,47,47	0
54	MG	2A	3592	1/1	0.89	0.06	54,54,54,54	0
54	MG	1a	3164	1/1	0.89	0.19	59,59,59,59	0
54	MG	2a	3042	1/1	0.89	0.04	65,65,65,65	0
54	MG	1a	3166	1/1	0.89	0.18	58,58,58,58	0
54	MG	2A	3604	1/1	0.89	0.17	32,32,32,32	0
54	MG	1a	3170	1/1	0.89	0.27	54,54,54,54	0
54	MG	1A	3493	1/1	0.89	0.20	26,26,26,26	0
54	MG	1A	3494	1/1	0.89	0.14	36,36,36,36	0
54	MG	1A	3839	1/1	0.89	0.12	30,30,30,30	0
54	MG	1A	3162	1/1	0.89	0.24	58,58,58,58	0
54	MG	2A	3185	1/1	0.89	0.20	43,43,43,43	0
54	MG	1A	3664	1/1	0.89	0.17	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3407	1/1	0.89	0.15	43,43,43,43	0
54	MG	1A	3218	1/1	0.89	0.26	54,54,54,54	0
54	MG	2A	3189	1/1	0.89	0.20	58,58,58,58	0
54	MG	1A	3404	1/1	0.89	0.14	38,38,38,38	0
54	MG	2A	3420	1/1	0.89	0.12	71,71,71,71	0
54	MG	1a	3064	1/1	0.89	0.21	64,64,64,64	0
54	MG	1A	3255	1/1	0.89	0.17	44,44,44,44	0
54	MG	1A	3969	1/1	0.89	0.13	28,28,28,28	0
54	MG	1A	3756	1/1	0.89	0.26	55,55,55,55	0
54	MG	1A	3297	1/1	0.89	0.15	37,37,37,37	0
54	MG	2a	3085	1/1	0.89	0.14	64,64,64,64	0
54	MG	2A	3432	1/1	0.89	0.11	66,66,66,66	0
54	MG	1A	3430	1/1	0.89	0.25	24,24,24,24	0
54	MG	2A	3038	1/1	0.89	0.17	52,52,52,52	0
54	MG	2A	3438	1/1	0.89	0.11	45,45,45,45	0
54	MG	2A	3663	1/1	0.89	0.15	48,48,48,48	0
54	MG	2A	3665	1/1	0.89	0.21	29,29,29,29	0
54	MG	1A	3858	1/1	0.89	0.11	31,31,31,31	0
54	MG	2A	3212	1/1	0.89	0.13	51,51,51,51	0
54	MG	1A	3300	1/1	0.89	0.22	33,33,33,33	0
54	MG	1A	3258	1/1	0.89	0.09	71,71,71,71	0
54	MG	1A	3123	1/1	0.89	0.26	53,53,53,53	0
54	MG	2a	3111	1/1	0.89	0.15	58,58,58,58	0
54	MG	1A	3624	1/1	0.89	0.29	30,30,30,30	0
54	MG	1A	3194	1/1	0.89	0.15	55,55,55,55	0
54	MG	2A	3221	1/1	0.89	0.22	44,44,44,44	0
54	MG	1A	3873	1/1	0.89	0.16	24,24,24,24	0
54	MG	2a	3119	1/1	0.89	0.19	57,57,57,57	0
54	MG	1A	3874	1/1	0.89	0.11	36,36,36,36	0
54	MG	1U	207	1/1	0.89	0.52	40,40,40,40	0
54	MG	1A	3346	1/1	0.89	0.28	41,41,41,41	0
54	MG	1a	3226	1/1	0.89	0.11	78,78,78,78	0
54	MG	2a	3130	1/1	0.89	0.13	68,68,68,68	0
54	MG	2a	3131	1/1	0.89	0.16	60,60,60,60	0
54	MG	1A	3782	1/1	0.89	0.38	43,43,43,43	0
54	MG	1A	3696	1/1	0.89	0.13	47,47,47,47	0
54	MG	2A	3239	1/1	0.89	0.14	58,58,58,58	0
54	MG	2A	3481	1/1	0.89	0.22	56,56,56,56	0
54	MG	1A	3014	1/1	0.89	0.16	51,51,51,51	0
54	MG	2A	3710	1/1	0.89	0.25	68,68,68,68	0
54	MG	1A	3357	1/1	0.89	0.15	31,31,31,31	0
54	MG	2A	3485	1/1	0.89	0.20	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3182	1/1	0.89	0.35	53,53,53,53	0
54	MG	2A	3719	1/1	0.89	0.17	35,35,35,35	0
54	MG	1a	3099	1/1	0.89	0.18	50,50,50,50	0
54	MG	2a	3164	1/1	0.89	0.10	59,59,59,59	0
54	MG	1A	3284	1/1	0.89	0.20	39,39,39,39	0
54	MG	1A	3794	1/1	0.89	0.62	60,60,60,60	0
54	MG	1A	3149	1/1	0.89	0.20	63,63,63,63	0
54	MG	2A	3496	1/1	0.89	0.18	36,36,36,36	0
54	MG	19	101	1/1	0.89	0.17	54,54,54,54	0
54	MG	1A	3376	1/1	0.89	0.15	39,39,39,39	0
54	MG	2A	3255	1/1	0.89	0.11	57,57,57,57	0
54	MG	1A	3805	1/1	0.89	0.17	56,56,56,56	0
54	MG	2A	3503	1/1	0.89	0.17	71,71,71,71	0
54	MG	1A	3075	1/1	0.89	0.16	42,42,42,42	0
54	MG	1B	203	1/1	0.89	0.30	62,62,62,62	0
54	MG	1a	3006	1/1	0.89	0.21	57,57,57,57	0
54	MG	1a	3007	1/1	0.89	0.25	54,54,54,54	0
54	MG	2B	211	1/1	0.89	0.15	69,69,69,69	0
59	ZN	2Y	501	1/1	0.89	0.12	86,86,86,86	0
54	MG	2A	3516	1/1	0.89	0.09	57,57,57,57	0
54	MG	2A	3723	1/1	0.90	0.15	59,59,59,59	0
54	MG	1A	3283	1/1	0.90	0.17	48,48,48,48	0
54	MG	1a	3141	1/1	0.90	0.50	71,71,71,71	0
54	MG	2A	3473	1/1	0.90	0.22	52,52,52,52	0
54	MG	1A	3750	1/1	0.90	0.32	45,45,45,45	0
54	MG	1A	3753	1/1	0.90	0.20	21,21,21,21	0
54	MG	1A	3754	1/1	0.90	0.34	41,41,41,41	0
54	MG	1A	3219	1/1	0.90	0.28	33,33,33,33	0
54	MG	1A	3547	1/1	0.90	0.19	51,51,51,51	0
54	MG	1A	4002	1/1	0.90	0.10	54,54,54,54	0
54	MG	2A	3486	1/1	0.90	0.19	28,28,28,28	0
54	MG	1A	3559	1/1	0.90	0.25	47,47,47,47	0
54	MG	1A	3050	1/1	0.90	0.28	41,41,41,41	0
54	MG	1A	3761	1/1	0.90	0.18	36,36,36,36	0
54	MG	2A	3032	1/1	0.90	0.81	60,60,60,60	0
54	MG	1A	3764	1/1	0.90	0.15	48,48,48,48	0
54	MG	1a	3165	1/1	0.90	0.15	56,56,56,56	0
54	MG	1A	3186	1/1	0.90	0.18	46,46,46,46	0
54	MG	2A	3232	1/1	0.90	0.34	52,52,52,52	0
54	MG	2B	216	1/1	0.90	0.21	58,58,58,58	0
54	MG	1A	4016	1/1	0.90	0.46	61,61,61,61	0
54	MG	1a	3031	1/1	0.90	0.22	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3502	1/1	0.90	0.12	30,30,30,30	0
54	MG	1a	3032	1/1	0.90	0.08	45,45,45,45	0
54	MG	1A	3768	1/1	0.90	0.18	39,39,39,39	0
54	MG	1a	3037	1/1	0.90	0.10	68,68,68,68	0
54	MG	2A	3511	1/1	0.90	0.12	67,67,67,67	0
54	MG	1A	3222	1/1	0.90	0.12	39,39,39,39	0
54	MG	2A	3244	1/1	0.90	0.53	40,40,40,40	0
54	MG	1A	3771	1/1	0.90	0.15	51,51,51,51	0
54	MG	1A	3455	1/1	0.90	0.16	48,48,48,48	0
54	MG	2Q	204	1/1	0.90	0.31	57,57,57,57	0
54	MG	1A	3335	1/1	0.90	0.47	50,50,50,50	0
54	MG	2T	201	1/1	0.90	0.18	54,54,54,54	0
54	MG	2A	3520	1/1	0.90	0.16	62,62,62,62	0
54	MG	21	3802	1/1	0.90	0.22	56,56,56,56	0
54	MG	1A	3188	1/1	0.90	0.29	31,31,31,31	0
54	MG	2A	3523	1/1	0.90	0.11	49,49,49,49	0
54	MG	1A	3464	1/1	0.90	0.16	49,49,49,49	0
54	MG	2A	3063	1/1	0.90	0.34	47,47,47,47	0
54	MG	1A	3680	1/1	0.90	0.15	41,41,41,41	0
54	MG	1A	3292	1/1	0.90	0.43	42,42,42,42	0
54	MG	2A	3067	1/1	0.90	0.29	45,45,45,45	0
54	MG	2A	3260	1/1	0.90	0.15	45,45,45,45	0
54	MG	1a	3056	1/1	0.90	0.27	60,60,60,60	0
54	MG	2A	3542	1/1	0.90	0.26	63,63,63,63	0
54	MG	1A	3148	1/1	0.90	0.21	39,39,39,39	0
54	MG	2A	3267	1/1	0.90	0.15	53,53,53,53	0
54	MG	1A	3910	1/1	0.90	0.12	34,34,34,34	0
54	MG	2A	3079	1/1	0.90	0.27	52,52,52,52	0
54	MG	2A	3080	1/1	0.90	0.24	60,60,60,60	0
54	MG	1B	228	1/1	0.90	0.15	58,58,58,58	0
54	MG	2A	3555	1/1	0.90	0.11	56,56,56,56	0
54	MG	2a	3029	1/1	0.90	0.12	54,54,54,54	0
54	MG	1a	3061	1/1	0.90	0.13	68,68,68,68	0
54	MG	1A	3687	1/1	0.90	0.15	47,47,47,47	0
54	MG	1A	3790	1/1	0.90	0.20	53,53,53,53	0
54	MG	1a	3216	1/1	0.90	0.11	70,70,70,70	0
54	MG	1D	315	1/1	0.90	0.17	53,53,53,53	0
54	MG	1A	3294	1/1	0.90	0.17	42,42,42,42	0
54	MG	2A	3577	1/1	0.90	0.23	39,39,39,39	0
54	MG	2A	3301	1/1	0.90	0.21	52,52,52,52	0
54	MG	1A	3923	1/1	0.90	0.10	51,51,51,51	0
54	MG	1a	3076	1/1	0.90	0.32	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3320	1/1	0.90	0.20	59,59,59,59	0
54	MG	1A	3926	1/1	0.90	0.17	47,47,47,47	0
54	MG	1A	3094	1/1	0.90	0.20	37,37,37,37	0
54	MG	1A	3299	1/1	0.90	0.10	43,43,43,43	0
54	MG	1A	3936	1/1	0.90	0.25	49,49,49,49	0
54	MG	2A	3115	1/1	0.90	0.30	49,49,49,49	0
54	MG	1A	3796	1/1	0.90	0.21	53,53,53,53	0
54	MG	1A	3797	1/1	0.90	0.17	58,58,58,58	0
54	MG	1A	3486	1/1	0.90	0.22	55,55,55,55	0
54	MG	1A	3153	1/1	0.90	0.21	54,54,54,54	0
54	MG	1a	3087	1/1	0.90	0.24	52,52,52,52	0
54	MG	2A	3353	1/1	0.90	0.19	54,54,54,54	0
54	MG	2A	3354	1/1	0.90	0.26	31,31,31,31	0
54	MG	2A	3360	1/1	0.90	0.14	70,70,70,70	0
54	MG	1A	3372	1/1	0.90	0.20	24,24,24,24	0
54	MG	1A	3097	1/1	0.90	0.31	52,52,52,52	0
54	MG	2A	3132	1/1	0.90	0.13	63,63,63,63	0
54	MG	2A	3616	1/1	0.90	0.16	32,32,32,32	0
54	MG	2A	3133	1/1	0.90	0.25	54,54,54,54	0
54	MG	2A	3622	1/1	0.90	0.33	42,42,42,42	0
54	MG	1A	3951	1/1	0.90	0.15	23,23,23,23	0
54	MG	2A	3136	1/1	0.90	0.08	59,59,59,59	0
54	MG	2A	3630	1/1	0.90	0.13	79,79,79,79	0
54	MG	1A	3304	1/1	0.90	0.15	47,47,47,47	0
54	MG	1A	3614	1/1	0.90	0.18	57,57,57,57	0
54	MG	1A	3958	1/1	0.90	0.11	70,70,70,70	0
54	MG	1A	3960	1/1	0.90	0.26	60,60,60,60	0
54	MG	1a	3264	1/1	0.90	0.18	39,39,39,39	0
54	MG	1a	3265	1/1	0.90	0.10	43,43,43,43	0
54	MG	1A	3100	1/1	0.90	0.37	30,30,30,30	0
54	MG	2A	3400	1/1	0.90	0.23	43,43,43,43	0
54	MG	1a	3096	1/1	0.90	0.26	57,57,57,57	0
54	MG	1A	3254	1/1	0.90	0.13	61,61,61,61	0
54	MG	2A	3167	1/1	0.90	0.16	82,82,82,82	0
54	MG	2A	3657	1/1	0.90	0.16	47,47,47,47	0
54	MG	2A	3409	1/1	0.90	0.17	62,62,62,62	0
54	MG	2A	3660	1/1	0.90	0.12	45,45,45,45	0
54	MG	1a	3100	1/1	0.90	0.12	60,60,60,60	0
54	MG	1a	3101	1/1	0.90	0.10	51,51,51,51	0
54	MG	2A	3668	1/1	0.90	0.12	35,35,35,35	0
54	MG	1A	3388	1/1	0.90	0.30	41,41,41,41	0
54	MG	1U	209	1/1	0.90	0.19	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3012	1/1	0.90	0.24	35,35,35,35	0
54	MG	1A	3833	1/1	0.90	0.12	46,46,46,46	0
54	MG	2A	3179	1/1	0.90	0.28	50,50,50,50	0
54	MG	2A	3428	1/1	0.90	0.21	65,65,65,65	0
54	MG	1V	207	1/1	0.90	0.32	72,72,72,72	0
54	MG	2A	3680	1/1	0.90	0.24	36,36,36,36	0
54	MG	1W	201	1/1	0.90	0.34	43,43,43,43	0
54	MG	1X	102	1/1	0.90	0.16	30,30,30,30	0
54	MG	1e	201	1/1	0.90	0.30	56,56,56,56	0
54	MG	2e	201	1/1	0.90	0.21	79,79,79,79	0
54	MG	1A	3084	1/1	0.90	0.83	47,47,47,47	0
54	MG	1A	3170	1/1	0.90	0.31	50,50,50,50	0
54	MG	1A	3631	1/1	0.90	0.18	25,25,25,25	0
54	MG	1A	3316	1/1	0.90	0.15	33,33,33,33	0
54	MG	1k	201	1/1	0.90	0.17	49,49,49,49	0
54	MG	2A	3190	1/1	0.90	0.29	60,60,60,60	0
54	MG	2A	3191	1/1	0.90	0.17	67,67,67,67	0
55	HGR	2A	3738	36/36	0.90	0.28	32,45,55,69	0
54	MG	1A	3270	1/1	0.90	0.26	59,59,59,59	0
54	MG	1A	3214	1/1	0.90	0.17	42,42,42,42	0
57	MPD	2A	3740	8/8	0.90	0.27	42,45,51,55	0
57	MPD	2A	3741	8/8	0.90	0.19	57,59,64,67	0
54	MG	1A	3428	1/1	0.90	0.16	27,27,27,27	0
54	MG	1A	3175	1/1	0.90	0.21	51,51,51,51	0
54	MG	1A	3113	1/1	0.90	0.23	32,32,32,32	0
54	MG	1A	3852	1/1	0.90	0.14	37,37,37,37	0
54	MG	2A	3201	1/1	0.90	0.50	62,62,62,62	0
54	MG	2A	3518	1/1	0.91	0.10	56,56,56,56	0
54	MG	1A	3718	1/1	0.91	0.28	46,46,46,46	0
54	MG	1e	202	1/1	0.91	0.21	55,55,55,55	0
54	MG	2A	3521	1/1	0.91	0.14	67,67,67,67	0
54	MG	2A	3315	1/1	0.91	0.09	33,33,33,33	0
54	MG	1A	3454	1/1	0.91	0.17	50,50,50,50	0
54	MG	2A	3524	1/1	0.91	0.28	58,58,58,58	0
54	MG	2A	3327	1/1	0.91	0.18	61,61,61,61	0
54	MG	1A	3883	1/1	0.91	0.21	22,22,22,22	0
54	MG	2B	218	1/1	0.91	0.09	59,59,59,59	0
54	MG	2A	3152	1/1	0.91	0.14	68,68,68,68	0
54	MG	2A	3531	1/1	0.91	0.40	42,42,42,42	0
54	MG	2A	3532	1/1	0.91	0.12	63,63,63,63	0
54	MG	1A	3262	1/1	0.91	0.33	38,38,38,38	0
54	MG	1Q	204	1/1	0.91	0.24	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3161	1/1	0.91	0.15	52,52,52,52	0
54	MG	1A	3526	1/1	0.91	0.22	54,54,54,54	0
54	MG	1A	3988	1/1	0.91	0.55	42,42,42,42	0
54	MG	1a	3062	1/1	0.91	0.59	58,58,58,58	0
54	MG	1A	3800	1/1	0.91	0.12	41,41,41,41	0
54	MG	2Q	201	1/1	0.91	0.09	50,50,50,50	0
54	MG	2A	3547	1/1	0.91	0.16	29,29,29,29	0
54	MG	1a	3171	1/1	0.91	0.13	63,63,63,63	0
54	MG	1A	3732	1/1	0.91	0.12	64,64,64,64	0
54	MG	1a	3067	1/1	0.91	0.14	70,70,70,70	0
54	MG	2A	3356	1/1	0.91	0.15	42,42,42,42	0
54	MG	20	102	1/1	0.91	0.23	50,50,50,50	0
54	MG	2A	3359	1/1	0.91	0.15	37,37,37,37	0
54	MG	28	102	1/1	0.91	0.27	48,48,48,48	0
54	MG	2a	3001	1/1	0.91	0.20	41,41,41,41	0
54	MG	1A	3603	1/1	0.91	0.19	45,45,45,45	0
54	MG	2a	3004	1/1	0.91	0.71	62,62,62,62	0
54	MG	2A	3363	1/1	0.91	0.19	78,78,78,78	0
54	MG	1A	3333	1/1	0.91	0.21	44,44,44,44	0
54	MG	2A	3562	1/1	0.91	0.19	57,57,57,57	0
54	MG	2a	3009	1/1	0.91	0.10	59,59,59,59	0
54	MG	1A	3745	1/1	0.91	0.17	44,44,44,44	0
54	MG	1A	3996	1/1	0.91	0.08	55,55,55,55	0
54	MG	2A	3572	1/1	0.91	0.15	56,56,56,56	0
54	MG	1A	3264	1/1	0.91	0.12	43,43,43,43	0
54	MG	2A	3014	1/1	0.91	0.20	48,48,48,48	0
54	MG	1A	3416	1/1	0.91	0.21	19,19,19,19	0
54	MG	1V	206	1/1	0.91	0.40	54,54,54,54	0
54	MG	2A	3581	1/1	0.91	0.24	55,55,55,55	0
54	MG	2A	3019	1/1	0.91	1.06	46,46,46,46	0
54	MG	1A	3672	1/1	0.91	0.27	23,23,23,23	0
54	MG	1A	3826	1/1	0.91	0.38	31,31,31,31	0
54	MG	1A	3673	1/1	0.91	0.12	39,39,39,39	0
54	MG	1A	3420	1/1	0.91	0.14	42,42,42,42	0
54	MG	2A	3392	1/1	0.91	0.15	60,60,60,60	0
54	MG	2A	3394	1/1	0.91	0.07	61,61,61,61	0
54	MG	2a	3035	1/1	0.91	0.07	61,61,61,61	0
54	MG	1A	3424	1/1	0.91	0.12	36,36,36,36	0
54	MG	1a	3086	1/1	0.91	0.14	50,50,50,50	0
54	MG	2A	3593	1/1	0.91	0.18	46,46,46,46	0
54	MG	2A	3595	1/1	0.91	0.24	45,45,45,45	0
54	MG	1A	4014	1/1	0.91	0.17	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3599	1/1	0.91	0.06	65,65,65,65	0
54	MG	2A	3036	1/1	0.91	0.24	66,66,66,66	0
54	MG	1A	3610	1/1	0.91	0.16	34,34,34,34	0
54	MG	1A	3835	1/1	0.91	0.15	63,63,63,63	0
54	MG	2a	3054	1/1	0.91	0.07	58,58,58,58	0
54	MG	1a	3213	1/1	0.91	0.18	77,77,77,77	0
54	MG	2A	3414	1/1	0.91	0.20	30,30,30,30	0
54	MG	2a	3060	1/1	0.91	0.20	65,65,65,65	0
54	MG	1A	3933	1/1	0.91	0.09	40,40,40,40	0
54	MG	2A	3046	1/1	0.91	0.19	54,54,54,54	0
54	MG	2A	3205	1/1	0.91	0.11	55,55,55,55	0
54	MG	2a	3065	1/1	0.91	0.12	59,59,59,59	0
54	MG	14	101	1/1	0.91	0.16	74,74,74,74	0
54	MG	2A	3618	1/1	0.91	0.14	42,42,42,42	0
54	MG	1A	3167	1/1	0.91	0.13	54,54,54,54	0
54	MG	2a	3073	1/1	0.91	0.23	70,70,70,70	0
54	MG	1A	3021	1/1	0.91	0.19	36,36,36,36	0
54	MG	1A	3685	1/1	0.91	0.22	45,45,45,45	0
54	MG	2A	3627	1/1	0.91	0.27	33,33,33,33	0
54	MG	1A	3341	1/1	0.91	0.10	63,63,63,63	0
54	MG	2a	3081	1/1	0.91	0.08	59,59,59,59	0
54	MG	1B	214	1/1	0.91	0.13	41,41,41,41	0
54	MG	2A	3431	1/1	0.91	0.13	61,61,61,61	0
54	MG	2a	3087	1/1	0.91	0.14	73,73,73,73	0
54	MG	2A	3632	1/1	0.91	0.11	44,44,44,44	0
54	MG	1A	3434	1/1	0.91	0.18	23,23,23,23	0
54	MG	1A	3690	1/1	0.91	0.07	78,78,78,78	0
54	MG	2A	3064	1/1	0.91	0.13	48,48,48,48	0
54	MG	2A	3223	1/1	0.91	0.22	62,62,62,62	0
54	MG	1A	3187	1/1	0.91	0.09	60,60,60,60	0
54	MG	1a	3230	1/1	0.91	0.22	62,62,62,62	0
54	MG	2A	3447	1/1	0.91	0.20	53,53,53,53	0
54	MG	1A	3565	1/1	0.91	0.25	48,48,48,48	0
54	MG	1A	3567	1/1	0.91	0.14	36,36,36,36	0
54	MG	2a	3109	1/1	0.91	0.13	72,72,72,72	0
54	MG	2A	3452	1/1	0.91	0.21	47,47,47,47	0
54	MG	1a	3014	1/1	0.91	0.09	58,58,58,58	0
54	MG	2A	3233	1/1	0.91	0.55	40,40,40,40	0
54	MG	1B	224	1/1	0.91	0.21	56,56,56,56	0
54	MG	1A	3312	1/1	0.91	0.12	50,50,50,50	0
54	MG	1a	3239	1/1	0.91	0.20	68,68,68,68	0
54	MG	1a	3240	1/1	0.91	0.23	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	3111	1/1	0.91	0.23	61,61,61,61	0
54	MG	1a	3244	1/1	0.91	0.17	55,55,55,55	0
54	MG	1A	3957	1/1	0.91	0.11	51,51,51,51	0
54	MG	1a	3020	1/1	0.91	0.19	52,52,52,52	0
54	MG	1a	3248	1/1	0.91	0.22	57,57,57,57	0
54	MG	1a	3114	1/1	0.91	0.13	48,48,48,48	0
54	MG	2a	3135	1/1	0.91	0.13	55,55,55,55	0
54	MG	2A	3476	1/1	0.91	0.10	72,72,72,72	0
54	MG	2A	3679	1/1	0.91	0.12	53,53,53,53	0
54	MG	2A	3101	1/1	0.91	0.12	54,54,54,54	0
54	MG	1A	3489	1/1	0.91	0.19	16,16,16,16	0
54	MG	2a	3142	1/1	0.91	0.31	42,42,42,42	0
54	MG	1A	3959	1/1	0.91	0.10	38,38,38,38	0
54	MG	1a	3256	1/1	0.91	0.16	62,62,62,62	0
54	MG	1A	3437	1/1	0.91	0.19	27,27,27,27	0
54	MG	1a	3262	1/1	0.91	0.10	58,58,58,58	0
54	MG	1A	3637	1/1	0.91	0.18	42,42,42,42	0
54	MG	2A	3114	1/1	0.91	0.22	49,49,49,49	0
54	MG	2A	3489	1/1	0.91	0.09	72,72,72,72	0
54	MG	2A	3490	1/1	0.91	0.11	57,57,57,57	0
54	MG	2a	3168	1/1	0.91	0.10	70,70,70,70	0
54	MG	2a	3172	1/1	0.91	0.15	56,56,56,56	0
54	MG	2a	3178	1/1	0.91	0.12	61,61,61,61	0
54	MG	2A	3491	1/1	0.91	0.07	59,59,59,59	0
54	MG	2A	3706	1/1	0.91	0.11	48,48,48,48	0
54	MG	1A	3439	1/1	0.91	0.25	33,33,33,33	0
54	MG	2A	3493	1/1	0.91	0.17	58,58,58,58	0
54	MG	1a	3125	1/1	0.91	0.25	53,53,53,53	0
54	MG	2A	3270	1/1	0.91	0.36	55,55,55,55	0
54	MG	1A	3391	1/1	0.91	0.12	64,64,64,64	0
54	MG	2A	3274	1/1	0.91	0.23	49,49,49,49	0
54	MG	1A	3502	1/1	0.91	0.09	32,32,32,32	0
54	MG	1a	3035	1/1	0.91	0.23	43,43,43,43	0
54	MG	1F	303	1/1	0.91	0.40	31,31,31,31	0
57	MPD	1A	4020	8/8	0.91	0.20	42,47,52,52	0
54	MG	1F	308	1/1	0.91	0.19	33,33,33,33	0
54	MG	1A	3287	1/1	0.91	0.18	32,32,32,32	0
54	MG	2A	3286	1/1	0.91	0.32	60,60,60,60	0
54	MG	1a	3040	1/1	0.91	0.14	60,60,60,60	0
54	MG	1A	3649	1/1	0.91	0.15	38,38,38,38	0
54	MG	2A	3292	1/1	0.91	0.42	66,66,66,66	0
54	MG	1A	3212	1/1	0.91	0.38	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3875	1/1	0.91	0.20	31,31,31,31	0
54	MG	1A	3397	1/1	0.91	0.19	52,52,52,52	0
54	MG	2A	3536	1/1	0.92	0.24	57,57,57,57	0
54	MG	2A	3151	1/1	0.92	0.25	38,38,38,38	0
54	MG	2F	301	1/1	0.92	0.82	47,47,47,47	0
54	MG	1A	3943	1/1	0.92	0.21	41,41,41,41	0
54	MG	1A	3370	1/1	0.92	0.12	33,33,33,33	0
54	MG	2A	3157	1/1	0.92	0.43	49,49,49,49	0
54	MG	2G	202	1/1	0.92	0.10	77,77,77,77	0
54	MG	1B	225	1/1	0.92	0.08	39,39,39,39	0
54	MG	2A	3546	1/1	0.92	0.14	46,46,46,46	0
54	MG	2A	3162	1/1	0.92	0.43	47,47,47,47	0
54	MG	2A	3163	1/1	0.92	0.31	44,44,44,44	0
54	MG	1f	201	1/1	0.92	0.38	66,66,66,66	0
54	MG	1A	3425	1/1	0.92	0.23	49,49,49,49	0
54	MG	1A	3611	1/1	0.92	0.17	42,42,42,42	0
54	MG	1A	3471	1/1	0.92	0.11	46,46,46,46	0
54	MG	1A	3201	1/1	0.92	0.14	49,49,49,49	0
54	MG	1A	3763	1/1	0.92	0.14	56,56,56,56	0
54	MG	1a	3154	1/1	0.92	0.17	47,47,47,47	0
54	MG	2X	101	1/1	0.92	0.09	50,50,50,50	0
54	MG	1A	3623	1/1	0.92	0.21	30,30,30,30	0
54	MG	2A	3174	1/1	0.92	0.09	46,46,46,46	0
54	MG	25	102	1/1	0.92	0.32	33,33,33,33	0
54	MG	2A	3568	1/1	0.92	0.19	47,47,47,47	0
54	MG	1A	3765	1/1	0.92	0.13	41,41,41,41	0
54	MG	1A	3329	1/1	0.92	0.35	46,46,46,46	0
54	MG	1A	3251	1/1	0.92	0.22	36,36,36,36	0
54	MG	2A	3576	1/1	0.92	0.16	39,39,39,39	0
54	MG	1a	3162	1/1	0.92	0.11	53,53,53,53	0
54	MG	1A	3057	1/1	0.92	0.12	46,46,46,46	0
54	MG	2A	3384	1/1	0.92	0.15	58,58,58,58	0
54	MG	1F	306	1/1	0.92	0.41	31,31,31,31	0
54	MG	2A	3582	1/1	0.92	0.10	45,45,45,45	0
54	MG	1A	3963	1/1	0.92	0.12	45,45,45,45	0
54	MG	2a	3014	1/1	0.92	0.11	60,60,60,60	0
54	MG	1a	3167	1/1	0.92	0.36	60,60,60,60	0
54	MG	2A	3391	1/1	0.92	0.17	61,61,61,61	0
54	MG	1a	3051	1/1	0.92	0.18	56,56,56,56	0
54	MG	1A	3121	1/1	0.92	0.15	37,37,37,37	0
54	MG	1A	3386	1/1	0.92	0.08	65,65,65,65	0
54	MG	1A	3862	1/1	0.92	0.07	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3566	1/1	0.92	0.22	45,45,45,45	0
54	MG	2A	3402	1/1	0.92	0.19	46,46,46,46	0
54	MG	1A	3971	1/1	0.92	0.30	49,49,49,49	0
54	MG	1A	3278	1/1	0.92	0.28	47,47,47,47	0
54	MG	2a	3028	1/1	0.92	0.22	59,59,59,59	0
54	MG	2A	3596	1/1	0.92	0.07	49,49,49,49	0
54	MG	1N	204	1/1	0.92	0.26	45,45,45,45	0
54	MG	1A	3635	1/1	0.92	0.18	18,18,18,18	0
54	MG	1A	3568	1/1	0.92	0.16	57,57,57,57	0
54	MG	2a	3037	1/1	0.92	0.08	81,81,81,81	0
54	MG	1A	3783	1/1	0.92	0.23	38,38,38,38	0
54	MG	1a	3188	1/1	0.92	0.12	85,85,85,85	0
54	MG	2a	3043	1/1	0.92	0.07	77,77,77,77	0
54	MG	2A	3606	1/1	0.92	0.32	29,29,29,29	0
54	MG	1a	3066	1/1	0.92	0.63	57,57,57,57	0
54	MG	1a	3190	1/1	0.92	0.08	69,69,69,69	0
54	MG	1A	3490	1/1	0.92	0.14	25,25,25,25	0
54	MG	2A	3426	1/1	0.92	0.26	59,59,59,59	0
54	MG	2A	3210	1/1	0.92	0.22	57,57,57,57	0
54	MG	1A	3339	1/1	0.92	0.19	35,35,35,35	0
54	MG	2a	3056	1/1	0.92	0.10	65,65,65,65	0
54	MG	1a	3070	1/1	0.92	0.34	54,54,54,54	0
54	MG	1R	204	1/1	0.92	0.32	35,35,35,35	0
54	MG	1R	205	1/1	0.92	0.20	42,42,42,42	0
54	MG	2A	3623	1/1	0.92	0.11	58,58,58,58	0
54	MG	2A	3215	1/1	0.92	0.26	64,64,64,64	0
54	MG	2a	3063	1/1	0.92	0.08	70,70,70,70	0
54	MG	1a	3075	1/1	0.92	0.31	48,48,48,48	0
54	MG	1A	3295	1/1	0.92	0.11	39,39,39,39	0
54	MG	2A	3437	1/1	0.92	0.13	42,42,42,42	0
54	MG	2A	3050	1/1	0.92	0.12	47,47,47,47	0
54	MG	1T	202	1/1	0.92	0.11	51,51,51,51	0
54	MG	2a	3069	1/1	0.92	0.33	46,46,46,46	0
54	MG	2a	3071	1/1	0.92	0.18	63,63,63,63	0
54	MG	1A	3393	1/1	0.92	0.19	30,30,30,30	0
54	MG	2A	3445	1/1	0.92	0.19	57,57,57,57	0
54	MG	2a	3076	1/1	0.92	0.12	61,61,61,61	0
54	MG	1A	3499	1/1	0.92	0.07	58,58,58,58	0
54	MG	2a	3078	1/1	0.92	0.17	64,64,64,64	0
54	MG	2A	3224	1/1	0.92	0.16	43,43,43,43	0
54	MG	2A	3641	1/1	0.92	0.10	60,60,60,60	0
54	MG	1a	3080	1/1	0.92	0.53	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3281	1/1	0.92	0.59	33,33,33,33	0
54	MG	2a	3084	1/1	0.92	0.13	60,60,60,60	0
54	MG	2A	3644	1/1	0.92	0.13	56,56,56,56	0
54	MG	1A	3884	1/1	0.92	0.09	54,54,54,54	0
54	MG	2A	3647	1/1	0.92	0.07	56,56,56,56	0
54	MG	1A	3650	1/1	0.92	0.19	33,33,33,33	0
54	MG	1A	3716	1/1	0.92	0.08	23,23,23,23	0
54	MG	2a	3095	1/1	0.92	0.41	57,57,57,57	0
54	MG	1A	3652	1/1	0.92	0.25	62,62,62,62	0
54	MG	2A	3234	1/1	0.92	0.46	44,44,44,44	0
54	MG	1A	3049	1/1	0.92	0.35	35,35,35,35	0
54	MG	1A	3506	1/1	0.92	0.26	29,29,29,29	0
54	MG	1A	3896	1/1	0.92	0.18	38,38,38,38	0
54	MG	2A	3664	1/1	0.92	0.12	40,40,40,40	0
54	MG	2a	3106	1/1	0.92	0.17	51,51,51,51	0
54	MG	2A	3468	1/1	0.92	0.11	51,51,51,51	0
54	MG	1A	3999	1/1	0.92	0.25	55,55,55,55	0
54	MG	1A	3656	1/1	0.92	0.19	37,37,37,37	0
54	MG	2A	3472	1/1	0.92	0.24	38,38,38,38	0
54	MG	1Z	301	1/1	0.92	0.09	55,55,55,55	0
54	MG	2A	3083	1/1	0.92	0.20	46,46,46,46	0
54	MG	1A	3452	1/1	0.92	0.14	68,68,68,68	0
54	MG	1A	3908	1/1	0.92	0.08	39,39,39,39	0
54	MG	1A	4004	1/1	0.92	0.54	54,54,54,54	0
54	MG	2a	3120	1/1	0.92	0.17	66,66,66,66	0
54	MG	2A	3093	1/1	0.92	0.20	62,62,62,62	0
54	MG	1A	3807	1/1	0.92	0.11	46,46,46,46	0
54	MG	2A	3253	1/1	0.92	0.22	59,59,59,59	0
54	MG	2a	3126	1/1	0.92	0.17	77,77,77,77	0
54	MG	1A	3808	1/1	0.92	0.31	45,45,45,45	0
54	MG	1a	3242	1/1	0.92	0.18	56,56,56,56	0
54	MG	1A	3512	1/1	0.92	0.14	48,48,48,48	0
54	MG	2A	3257	1/1	0.92	0.09	56,56,56,56	0
54	MG	2A	3099	1/1	0.92	0.15	44,44,44,44	0
54	MG	13	102	1/1	0.92	0.10	60,60,60,60	0
54	MG	1A	3595	1/1	0.92	0.10	61,61,61,61	0
54	MG	2a	3140	1/1	0.92	0.10	64,64,64,64	0
54	MG	2A	3701	1/1	0.92	0.23	61,61,61,61	0
54	MG	15	105	1/1	0.92	0.22	26,26,26,26	0
54	MG	2a	3143	1/1	0.92	0.10	50,50,50,50	0
54	MG	15	106	1/1	0.92	0.28	39,39,39,39	0
54	MG	2A	3110	1/1	0.92	0.18	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	17	105	1/1	0.92	0.14	52,52,52,52	0
54	MG	2A	3273	1/1	0.92	0.15	58,58,58,58	0
54	MG	1A	3739	1/1	0.92	0.20	50,50,50,50	0
54	MG	1A	3155	1/1	0.92	0.93	42,42,42,42	0
54	MG	1A	3822	1/1	0.92	0.23	38,38,38,38	0
54	MG	1a	3001	1/1	0.92	0.13	71,71,71,71	0
54	MG	2a	3166	1/1	0.92	0.12	51,51,51,51	0
54	MG	1B	202	1/1	0.92	0.14	54,54,54,54	0
54	MG	1A	3928	1/1	0.92	0.28	61,61,61,61	0
54	MG	2a	3174	1/1	0.92	0.17	73,73,73,73	0
54	MG	2A	3725	1/1	0.92	0.15	43,43,43,43	0
54	MG	2a	3180	1/1	0.92	0.13	50,50,50,50	0
54	MG	1B	206	1/1	0.92	0.16	45,45,45,45	0
54	MG	2A	3728	1/1	0.92	0.14	57,57,57,57	0
54	MG	2A	3287	1/1	0.92	0.34	62,62,62,62	0
54	MG	2A	3123	1/1	0.92	0.15	34,34,34,34	0
54	MG	1A	3929	1/1	0.92	0.13	36,36,36,36	0
54	MG	1A	3321	1/1	0.92	0.14	59,59,59,59	0
54	MG	1a	3118	1/1	0.92	0.16	51,51,51,51	0
54	MG	2A	3294	1/1	0.92	0.16	57,57,57,57	0
54	MG	2A	3295	1/1	0.92	0.28	57,57,57,57	0
54	MG	1a	3270	1/1	0.92	0.14	53,53,53,53	0
54	MG	1B	209	1/1	0.92	0.12	34,34,34,34	0
54	MG	1A	3459	1/1	0.92	0.19	32,32,32,32	0
54	MG	1A	3520	1/1	0.92	0.25	48,48,48,48	0
54	MG	1A	3061	1/1	0.92	0.25	31,31,31,31	0
54	MG	1A	3752	1/1	0.92	0.21	26,26,26,26	0
54	MG	1A	3070	1/1	0.92	0.34	28,28,28,28	0
54	MG	1A	3147	1/1	0.92	0.16	42,42,42,42	0
54	MG	2A	3147	1/1	0.92	0.27	61,61,61,61	0
54	MG	2A	3332	1/1	0.92	0.28	61,61,61,61	0
54	MG	1d	303	1/1	0.92	0.30	64,64,64,64	0
54	MG	1B	221	1/1	0.92	0.15	37,37,37,37	0
54	MG	2A	3736	1/1	0.93	0.20	61,61,61,61	0
54	MG	1D	308	1/1	0.93	0.20	47,47,47,47	0
54	MG	2B	202	1/1	0.93	0.06	72,72,72,72	0
54	MG	1A	3706	1/1	0.93	0.17	50,50,50,50	0
54	MG	1A	3385	1/1	0.93	0.17	29,29,29,29	0
54	MG	1A	3709	1/1	0.93	0.29	42,42,42,42	0
54	MG	1a	3199	1/1	0.93	0.20	61,61,61,61	0
54	MG	2A	3498	1/1	0.93	0.13	42,42,42,42	0
54	MG	1A	3124	1/1	0.93	0.31	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3074	1/1	0.93	0.30	69,69,69,69	0
54	MG	1E	304	1/1	0.93	0.07	38,38,38,38	0
54	MG	1A	3935	1/1	0.93	0.13	55,55,55,55	0
54	MG	1A	3534	1/1	0.93	0.25	25,25,25,25	0
54	MG	2A	3261	1/1	0.93	0.48	40,40,40,40	0
54	MG	2A	3506	1/1	0.93	0.25	66,66,66,66	0
54	MG	1E	308	1/1	0.93	0.16	28,28,28,28	0
54	MG	2D	305	1/1	0.93	0.15	36,36,36,36	0
54	MG	1A	3022	1/1	0.93	0.15	39,39,39,39	0
54	MG	1A	3812	1/1	0.93	0.17	30,30,30,30	0
54	MG	2E	301	1/1	0.93	0.32	37,37,37,37	0
54	MG	2A	3091	1/1	0.93	0.22	41,41,41,41	0
54	MG	2A	3271	1/1	0.93	0.08	50,50,50,50	0
54	MG	1F	307	1/1	0.93	0.35	31,31,31,31	0
54	MG	1A	3056	1/1	0.93	0.21	40,40,40,40	0
54	MG	1A	3632	1/1	0.93	0.22	21,21,21,21	0
54	MG	2A	3275	1/1	0.93	0.12	53,53,53,53	0
54	MG	1F	310	1/1	0.93	0.40	34,34,34,34	0
54	MG	1F	316	1/1	0.93	0.17	45,45,45,45	0
54	MG	1F	317	1/1	0.93	0.29	59,59,59,59	0
54	MG	2A	3282	1/1	0.93	0.21	43,43,43,43	0
54	MG	2A	3283	1/1	0.93	0.53	51,51,51,51	0
54	MG	2A	3527	1/1	0.93	0.07	46,46,46,46	0
54	MG	1a	3072	1/1	0.93	0.15	64,64,64,64	0
54	MG	2A	3529	1/1	0.93	0.16	30,30,30,30	0
54	MG	1A	3099	1/1	0.93	0.20	40,40,40,40	0
54	MG	1A	3465	1/1	0.93	0.21	20,20,20,20	0
54	MG	2V	202	1/1	0.93	0.37	41,41,41,41	0
54	MG	2V	203	1/1	0.93	0.12	62,62,62,62	0
54	MG	1G	202	1/1	0.93	0.11	57,57,57,57	0
54	MG	2A	3105	1/1	0.93	0.20	45,45,45,45	0
54	MG	21	3801	1/1	0.93	0.15	77,77,77,77	0
54	MG	2A	3109	1/1	0.93	0.16	44,44,44,44	0
54	MG	1A	3724	1/1	0.93	0.15	28,28,28,28	0
54	MG	1a	3231	1/1	0.93	0.08	71,71,71,71	0
54	MG	1A	3950	1/1	0.93	0.18	26,26,26,26	0
54	MG	2a	3002	1/1	0.93	0.49	58,58,58,58	0
54	MG	1A	3829	1/1	0.93	0.07	46,46,46,46	0
54	MG	1A	3330	1/1	0.93	0.27	30,30,30,30	0
54	MG	2A	3300	1/1	0.93	0.21	35,35,35,35	0
54	MG	1A	3831	1/1	0.93	0.12	49,49,49,49	0
54	MG	1A	3394	1/1	0.93	0.21	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3307	1/1	0.93	0.14	39,39,39,39	0
54	MG	1A	3009	1/1	0.93	0.17	25,25,25,25	0
54	MG	1A	3563	1/1	0.93	0.14	33,33,33,33	0
54	MG	2A	3319	1/1	0.93	0.13	33,33,33,33	0
54	MG	1a	3241	1/1	0.93	0.12	70,70,70,70	0
54	MG	2A	3321	1/1	0.93	0.20	60,60,60,60	0
54	MG	2A	3124	1/1	0.93	0.18	53,53,53,53	0
54	MG	2A	3329	1/1	0.93	0.33	35,35,35,35	0
54	MG	2A	3559	1/1	0.93	0.12	61,61,61,61	0
54	MG	2A	3561	1/1	0.93	0.27	53,53,53,53	0
54	MG	1A	3735	1/1	0.93	0.11	58,58,58,58	0
54	MG	1A	3836	1/1	0.93	0.18	27,27,27,27	0
54	MG	2A	3564	1/1	0.93	0.13	36,36,36,36	0
54	MG	2A	3567	1/1	0.93	0.23	46,46,46,46	0
54	MG	1A	3101	1/1	0.93	0.29	29,29,29,29	0
54	MG	2A	3569	1/1	0.93	0.17	65,65,65,65	0
54	MG	1A	3103	1/1	0.93	0.32	29,29,29,29	0
54	MG	2A	3335	1/1	0.93	0.18	48,48,48,48	0
54	MG	2A	3574	1/1	0.93	0.21	37,37,37,37	0
54	MG	1A	3040	1/1	0.93	0.15	39,39,39,39	0
54	MG	1A	3483	1/1	0.93	0.16	27,27,27,27	0
54	MG	1A	3651	1/1	0.93	0.12	64,64,64,64	0
54	MG	2a	3041	1/1	0.93	0.19	55,55,55,55	0
54	MG	1A	3847	1/1	0.93	0.06	37,37,37,37	0
54	MG	1A	3848	1/1	0.93	0.09	36,36,36,36	0
54	MG	2A	3140	1/1	0.93	0.28	44,44,44,44	0
54	MG	1A	3572	1/1	0.93	0.14	56,56,56,56	0
54	MG	2A	3350	1/1	0.93	0.20	26,26,26,26	0
54	MG	1A	3485	1/1	0.93	0.23	42,42,42,42	0
54	MG	2a	3051	1/1	0.93	0.10	55,55,55,55	0
54	MG	1A	3303	1/1	0.93	0.11	57,57,57,57	0
54	MG	1A	3577	1/1	0.93	0.13	46,46,46,46	0
54	MG	2A	3357	1/1	0.93	0.11	61,61,61,61	0
54	MG	1A	3028	1/1	0.93	0.20	25,25,25,25	0
54	MG	1A	3062	1/1	0.93	0.16	30,30,30,30	0
54	MG	1A	3115	1/1	0.93	0.20	33,33,33,33	0
54	MG	1a	3103	1/1	0.93	0.17	59,59,59,59	0
54	MG	2A	3156	1/1	0.93	0.17	48,48,48,48	0
54	MG	1X	101	1/1	0.93	0.13	52,52,52,52	0
54	MG	1A	3859	1/1	0.93	0.20	41,41,41,41	0
54	MG	2A	3370	1/1	0.93	0.18	45,45,45,45	0
54	MG	2A	3160	1/1	0.93	0.15	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3344	1/1	0.93	0.24	24,24,24,24	0
54	MG	2A	3377	1/1	0.93	0.12	45,45,45,45	0
54	MG	1a	3107	1/1	0.93	0.28	58,58,58,58	0
54	MG	1A	3759	1/1	0.93	0.19	35,35,35,35	0
54	MG	1a	3109	1/1	0.93	0.12	60,60,60,60	0
54	MG	10	103	1/1	0.93	0.12	45,45,45,45	0
54	MG	1A	3492	1/1	0.93	0.19	21,21,21,21	0
54	MG	1A	3867	1/1	0.93	0.12	29,29,29,29	0
54	MG	2A	3170	1/1	0.93	0.29	45,45,45,45	0
54	MG	1A	3277	1/1	0.93	0.28	41,41,41,41	0
54	MG	1A	3190	1/1	0.93	0.22	33,33,33,33	0
54	MG	2A	3619	1/1	0.93	0.15	23,23,23,23	0
54	MG	2A	3393	1/1	0.93	0.13	56,56,56,56	0
54	MG	1A	3351	1/1	0.93	0.11	36,36,36,36	0
54	MG	2a	3083	1/1	0.93	0.22	53,53,53,53	0
54	MG	2A	3395	1/1	0.93	0.13	60,60,60,60	0
54	MG	1A	3431	1/1	0.93	0.23	21,21,21,21	0
54	MG	1A	3596	1/1	0.93	0.22	46,46,46,46	0
54	MG	1f	202	1/1	0.93	0.26	45,45,45,45	0
54	MG	1a	3120	1/1	0.93	0.20	58,58,58,58	0
54	MG	1A	3355	1/1	0.93	0.16	40,40,40,40	0
54	MG	1A	3313	1/1	0.93	0.21	43,43,43,43	0
54	MG	2A	3408	1/1	0.93	0.08	72,72,72,72	0
54	MG	2A	3634	1/1	0.93	0.16	72,72,72,72	0
54	MG	2A	3635	1/1	0.93	0.11	45,45,45,45	0
54	MG	17	102	1/1	0.93	0.18	38,38,38,38	0
54	MG	1A	3681	1/1	0.93	0.09	35,35,35,35	0
54	MG	2a	3104	1/1	0.93	0.15	58,58,58,58	0
54	MG	1a	3128	1/1	0.93	0.20	66,66,66,66	0
54	MG	1A	3601	1/1	0.93	0.10	41,41,41,41	0
54	MG	2A	3187	1/1	0.93	0.17	54,54,54,54	0
54	MG	1A	3150	1/1	0.93	0.14	43,43,43,43	0
54	MG	1A	3507	1/1	0.93	0.18	53,53,53,53	0
54	MG	1A	4010	1/1	0.93	0.30	39,39,39,39	0
54	MG	1A	3116	1/1	0.93	0.54	36,36,36,36	0
54	MG	2A	3649	1/1	0.93	0.11	50,50,50,50	0
54	MG	1a	3140	1/1	0.93	0.17	60,60,60,60	0
54	MG	1A	3064	1/1	0.93	0.16	27,27,27,27	0
54	MG	1A	3371	1/1	0.93	0.26	19,19,19,19	0
54	MG	2A	3656	1/1	0.93	0.18	54,54,54,54	0
54	MG	1A	3785	1/1	0.93	0.24	33,33,33,33	0
54	MG	2A	3005	1/1	0.93	0.32	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3199	1/1	0.93	0.13	46,46,46,46	0
54	MG	1A	3515	1/1	0.93	0.18	45,45,45,45	0
54	MG	1a	3008	1/1	0.93	0.24	51,51,51,51	0
54	MG	1A	3893	1/1	0.93	0.20	38,38,38,38	0
54	MG	1A	3692	1/1	0.93	0.18	36,36,36,36	0
54	MG	2a	3134	1/1	0.93	0.10	58,58,58,58	0
54	MG	1a	3011	1/1	0.93	0.28	28,28,28,28	0
54	MG	2A	3207	1/1	0.93	0.22	46,46,46,46	0
54	MG	2A	3208	1/1	0.93	0.22	52,52,52,52	0
54	MG	1a	3155	1/1	0.93	0.26	54,54,54,54	0
54	MG	2A	3448	1/1	0.93	0.25	59,59,59,59	0
54	MG	1A	3609	1/1	0.93	0.19	41,41,41,41	0
54	MG	1A	3899	1/1	0.93	0.15	29,29,29,29	0
54	MG	1A	3903	1/1	0.93	0.21	46,46,46,46	0
54	MG	2a	3145	1/1	0.93	0.14	63,63,63,63	0
54	MG	1a	3017	1/1	0.93	0.27	61,61,61,61	0
54	MG	1A	3904	1/1	0.93	0.16	51,51,51,51	0
54	MG	1B	210	1/1	0.93	0.14	52,52,52,52	0
54	MG	2A	3684	1/1	0.93	0.17	42,42,42,42	0
54	MG	1A	3156	1/1	0.93	0.23	41,41,41,41	0
54	MG	2A	3461	1/1	0.93	0.10	61,61,61,61	0
54	MG	2a	3159	1/1	0.93	0.13	63,63,63,63	0
54	MG	2A	3219	1/1	0.93	0.20	53,53,53,53	0
54	MG	2a	3162	1/1	0.93	0.07	60,60,60,60	0
54	MG	2A	3692	1/1	0.93	0.16	63,63,63,63	0
54	MG	1B	212	1/1	0.93	0.08	45,45,45,45	0
54	MG	1A	3242	1/1	0.93	0.47	34,34,34,34	0
54	MG	2a	3169	1/1	0.93	0.16	54,54,54,54	0
54	MG	2A	3465	1/1	0.93	0.18	63,63,63,63	0
54	MG	2A	3040	1/1	0.93	0.18	42,42,42,42	0
54	MG	1a	3168	1/1	0.93	0.07	67,67,67,67	0
54	MG	1A	3699	1/1	0.93	0.18	60,60,60,60	0
54	MG	2A	3705	1/1	0.93	0.09	55,55,55,55	0
54	MG	2A	3044	1/1	0.93	0.17	55,55,55,55	0
54	MG	1A	3243	1/1	0.93	0.26	33,33,33,33	0
54	MG	1A	3912	1/1	0.93	0.23	46,46,46,46	0
54	MG	1A	3616	1/1	0.93	0.37	29,29,29,29	0
54	MG	2A	3048	1/1	0.93	0.13	55,55,55,55	0
54	MG	1a	3177	1/1	0.93	0.10	56,56,56,56	0
54	MG	1A	3521	1/1	0.93	0.20	20,20,20,20	0
54	MG	2A	3720	1/1	0.93	0.23	59,59,59,59	0
54	MG	2A	3051	1/1	0.93	0.11	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3798	1/1	0.93	0.15	55,55,55,55	0
54	MG	1A	3921	1/1	0.93	0.09	40,40,40,40	0
54	MG	2A	3726	1/1	0.93	0.22	43,43,43,43	0
54	MG	1A	3066	1/1	0.93	0.26	44,44,44,44	0
54	MG	2A	3059	1/1	0.93	0.16	51,51,51,51	0
54	MG	1A	3925	1/1	0.93	0.18	38,38,38,38	0
54	MG	2A	3730	1/1	0.93	0.21	47,47,47,47	0
54	MG	2A	3243	1/1	0.93	0.16	52,52,52,52	0
54	MG	1A	3200	1/1	0.93	0.24	54,54,54,54	0
54	MG	1A	3802	1/1	0.93	0.17	48,48,48,48	0
54	MG	1D	306	1/1	0.93	0.19	38,38,38,38	0
54	MG	1a	3025	1/1	0.94	0.46	69,69,69,69	0
54	MG	1A	3922	1/1	0.94	0.08	54,54,54,54	0
54	MG	2A	3236	1/1	0.94	0.17	54,54,54,54	0
54	MG	1A	3552	1/1	0.94	0.14	27,27,27,27	0
54	MG	1a	3028	1/1	0.94	0.17	40,40,40,40	0
54	MG	1a	3029	1/1	0.94	0.10	60,60,60,60	0
54	MG	1A	3924	1/1	0.94	0.09	60,60,60,60	0
54	MG	1A	3813	1/1	0.94	0.15	47,47,47,47	0
54	MG	2B	205	1/1	0.94	0.14	55,55,55,55	0
54	MG	1A	3818	1/1	0.94	0.13	59,59,59,59	0
54	MG	1a	3176	1/1	0.94	0.06	59,59,59,59	0
54	MG	1A	3476	1/1	0.94	0.14	39,39,39,39	0
54	MG	2A	3052	1/1	0.94	0.20	47,47,47,47	0
54	MG	2A	3248	1/1	0.94	0.23	32,32,32,32	0
54	MG	2A	3053	1/1	0.94	0.16	59,59,59,59	0
54	MG	1a	3034	1/1	0.94	0.18	53,53,53,53	0
54	MG	1A	3820	1/1	0.94	0.29	34,34,34,34	0
54	MG	2A	3252	1/1	0.94	0.19	49,49,49,49	0
54	MG	1A	3091	1/1	0.94	0.12	46,46,46,46	0
54	MG	1a	3181	1/1	0.94	0.33	50,50,50,50	0
54	MG	2D	303	1/1	0.94	0.51	50,50,50,50	0
54	MG	2D	304	1/1	0.94	0.40	35,35,35,35	0
54	MG	1a	3182	1/1	0.94	0.17	64,64,64,64	0
54	MG	1A	3642	1/1	0.94	0.17	34,34,34,34	0
54	MG	2D	309	1/1	0.94	0.18	35,35,35,35	0
54	MG	1A	3729	1/1	0.94	0.21	38,38,38,38	0
54	MG	2A	3512	1/1	0.94	0.12	53,53,53,53	0
54	MG	1D	311	1/1	0.94	0.24	47,47,47,47	0
54	MG	1A	3934	1/1	0.94	0.08	50,50,50,50	0
54	MG	1A	3411	1/1	0.94	0.19	35,35,35,35	0
54	MG	1a	3043	1/1	0.94	0.18	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3264	1/1	0.94	0.38	40,40,40,40	0
54	MG	1A	3128	1/1	0.94	0.10	27,27,27,27	0
54	MG	1a	3191	1/1	0.94	0.22	68,68,68,68	0
54	MG	2A	3071	1/1	0.94	0.24	47,47,47,47	0
54	MG	1a	3048	1/1	0.94	0.25	70,70,70,70	0
54	MG	1a	3193	1/1	0.94	0.07	63,63,63,63	0
54	MG	2P	203	1/1	0.94	0.08	62,62,62,62	0
54	MG	1A	3937	1/1	0.94	0.10	33,33,33,33	0
54	MG	1a	3198	1/1	0.94	0.13	69,69,69,69	0
54	MG	2Q	203	1/1	0.94	0.46	51,51,51,51	0
54	MG	1A	3417	1/1	0.94	0.21	23,23,23,23	0
54	MG	1a	3202	1/1	0.94	0.24	61,61,61,61	0
54	MG	1A	3259	1/1	0.94	0.18	45,45,45,45	0
54	MG	2T	203	1/1	0.94	0.09	59,59,59,59	0
54	MG	2A	3086	1/1	0.94	0.23	40,40,40,40	0
54	MG	2A	3087	1/1	0.94	0.15	67,67,67,67	0
54	MG	1E	306	1/1	0.94	0.20	22,22,22,22	0
54	MG	2A	3090	1/1	0.94	0.23	70,70,70,70	0
54	MG	1A	3570	1/1	0.94	0.15	59,59,59,59	0
54	MG	2A	3092	1/1	0.94	0.66	49,49,49,49	0
54	MG	1A	3017	1/1	0.94	0.28	31,31,31,31	0
54	MG	2A	3538	1/1	0.94	0.11	64,64,64,64	0
54	MG	25	103	1/1	0.94	0.18	53,53,53,53	0
54	MG	1A	3741	1/1	0.94	0.15	50,50,50,50	0
54	MG	1A	3033	1/1	0.94	0.23	40,40,40,40	0
54	MG	1A	3349	1/1	0.94	0.17	29,29,29,29	0
54	MG	2A	3544	1/1	0.94	0.17	55,55,55,55	0
54	MG	1A	3654	1/1	0.94	0.28	30,30,30,30	0
54	MG	1a	3215	1/1	0.94	0.15	53,53,53,53	0
54	MG	2A	3100	1/1	0.94	0.14	41,41,41,41	0
54	MG	2A	3297	1/1	0.94	0.19	36,36,36,36	0
54	MG	2A	3550	1/1	0.94	0.26	28,28,28,28	0
54	MG	2A	3551	1/1	0.94	0.23	59,59,59,59	0
54	MG	1A	3098	1/1	0.94	0.21	26,26,26,26	0
54	MG	1A	3952	1/1	0.94	0.25	26,26,26,26	0
54	MG	1a	3220	1/1	0.94	0.13	56,56,56,56	0
54	MG	1F	313	1/1	0.94	0.83	47,47,47,47	0
54	MG	1a	3222	1/1	0.94	0.09	67,67,67,67	0
54	MG	2A	3313	1/1	0.94	0.18	52,52,52,52	0
54	MG	1F	314	1/1	0.94	0.18	29,29,29,29	0
54	MG	1a	3068	1/1	0.94	0.14	59,59,59,59	0
54	MG	2A	3560	1/1	0.94	0.16	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3316	1/1	0.94	0.17	28,28,28,28	0
54	MG	1A	3840	1/1	0.94	0.18	39,39,39,39	0
54	MG	1A	3841	1/1	0.94	0.22	40,40,40,40	0
54	MG	1A	3269	1/1	0.94	0.14	51,51,51,51	0
54	MG	2A	3322	1/1	0.94	0.14	61,61,61,61	0
54	MG	1A	3657	1/1	0.94	0.25	29,29,29,29	0
54	MG	2A	3328	1/1	0.94	0.23	46,46,46,46	0
54	MG	1A	3080	1/1	0.94	0.82	42,42,42,42	0
54	MG	2A	3116	1/1	0.94	0.20	52,52,52,52	0
54	MG	2A	3118	1/1	0.94	0.23	56,56,56,56	0
54	MG	1G	204	1/1	0.94	0.08	46,46,46,46	0
54	MG	2a	3040	1/1	0.94	0.21	59,59,59,59	0
54	MG	1A	3583	1/1	0.94	0.17	41,41,41,41	0
54	MG	1A	3164	1/1	0.94	0.17	29,29,29,29	0
54	MG	1A	3663	1/1	0.94	0.32	41,41,41,41	0
54	MG	2a	3044	1/1	0.94	0.22	59,59,59,59	0
54	MG	1a	3236	1/1	0.94	0.25	45,45,45,45	0
54	MG	1A	3757	1/1	0.94	0.13	41,41,41,41	0
54	MG	1A	3364	1/1	0.94	0.15	46,46,46,46	0
54	MG	1P	201	1/1	0.94	0.69	32,32,32,32	0
54	MG	2A	3342	1/1	0.94	0.14	38,38,38,38	0
54	MG	2A	3130	1/1	0.94	0.19	56,56,56,56	0
54	MG	1P	202	1/1	0.94	0.31	30,30,30,30	0
54	MG	1A	3589	1/1	0.94	0.17	31,31,31,31	0
54	MG	2A	3588	1/1	0.94	0.10	44,44,44,44	0
54	MG	1A	3853	1/1	0.94	0.07	44,44,44,44	0
54	MG	1A	3071	1/1	0.94	0.22	26,26,26,26	0
54	MG	2a	3059	1/1	0.94	0.11	72,72,72,72	0
54	MG	2A	3355	1/1	0.94	0.22	29,29,29,29	0
54	MG	1A	3668	1/1	0.94	0.18	22,22,22,22	0
54	MG	1a	3245	1/1	0.94	0.16	53,53,53,53	0
54	MG	1A	3973	1/1	0.94	0.17	17,17,17,17	0
54	MG	1A	3501	1/1	0.94	0.17	21,21,21,21	0
54	MG	2A	3361	1/1	0.94	0.18	37,37,37,37	0
54	MG	1A	3223	1/1	0.94	0.39	39,39,39,39	0
54	MG	2A	3601	1/1	0.94	0.10	50,50,50,50	0
54	MG	2A	3145	1/1	0.94	0.38	48,48,48,48	0
54	MG	2A	3603	1/1	0.94	0.10	49,49,49,49	0
54	MG	2A	3146	1/1	0.94	0.09	67,67,67,67	0
54	MG	1A	3860	1/1	0.94	0.07	48,48,48,48	0
54	MG	1a	3251	1/1	0.94	0.28	75,75,75,75	0
54	MG	1A	3166	1/1	0.94	0.14	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3372	1/1	0.94	0.21	49,49,49,49	0
54	MG	1A	3766	1/1	0.94	0.13	23,23,23,23	0
54	MG	2A	3613	1/1	0.94	0.15	36,36,36,36	0
54	MG	1A	3444	1/1	0.94	0.13	27,27,27,27	0
54	MG	1A	3866	1/1	0.94	0.19	26,26,26,26	0
54	MG	1A	3985	1/1	0.94	0.11	46,46,46,46	0
54	MG	1A	3986	1/1	0.94	0.10	47,47,47,47	0
54	MG	1a	3097	1/1	0.94	0.22	57,57,57,57	0
54	MG	1a	3098	1/1	0.94	0.13	54,54,54,54	0
54	MG	2a	3086	1/1	0.94	0.17	46,46,46,46	0
54	MG	1A	3196	1/1	0.94	0.24	39,39,39,39	0
54	MG	1A	3508	1/1	0.94	0.22	50,50,50,50	0
54	MG	2A	3624	1/1	0.94	0.06	69,69,69,69	0
54	MG	2A	3388	1/1	0.94	0.16	54,54,54,54	0
54	MG	2A	3164	1/1	0.94	0.53	54,54,54,54	0
54	MG	2a	3098	1/1	0.94	0.08	63,63,63,63	0
54	MG	2A	3390	1/1	0.94	0.24	38,38,38,38	0
54	MG	1A	3230	1/1	0.94	0.27	30,30,30,30	0
54	MG	1A	3775	1/1	0.94	0.09	31,31,31,31	0
54	MG	1A	3235	1/1	0.94	0.22	36,36,36,36	0
54	MG	1A	3602	1/1	0.94	0.23	20,20,20,20	0
54	MG	1A	3449	1/1	0.94	0.20	58,58,58,58	0
54	MG	1A	3994	1/1	0.94	0.28	33,33,33,33	0
54	MG	2A	3636	1/1	0.94	0.22	59,59,59,59	0
54	MG	2A	3398	1/1	0.94	0.12	50,50,50,50	0
54	MG	1A	3995	1/1	0.94	0.07	67,67,67,67	0
54	MG	1A	3046	1/1	0.94	0.28	47,47,47,47	0
54	MG	1d	302	1/1	0.94	0.19	59,59,59,59	0
54	MG	1A	3997	1/1	0.94	0.11	51,51,51,51	0
54	MG	2A	3406	1/1	0.94	0.20	51,51,51,51	0
54	MG	2a	3115	1/1	0.94	0.14	70,70,70,70	0
54	MG	2A	3175	1/1	0.94	0.20	52,52,52,52	0
54	MG	1A	3169	1/1	0.94	0.27	40,40,40,40	0
54	MG	2A	3177	1/1	0.94	0.13	46,46,46,46	0
54	MG	2A	3412	1/1	0.94	0.15	66,66,66,66	0
54	MG	2A	3650	1/1	0.94	0.17	33,33,33,33	0
54	MG	1A	3241	1/1	0.94	0.34	50,50,50,50	0
54	MG	1A	4000	1/1	0.94	0.18	46,46,46,46	0
54	MG	1A	3053	1/1	0.94	0.48	28,28,28,28	0
54	MG	1A	3456	1/1	0.94	0.10	48,48,48,48	0
54	MG	1A	3693	1/1	0.94	0.06	38,38,38,38	0
54	MG	1g	201	1/1	0.94	0.18	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	15	103	1/1	0.94	0.34	32,32,32,32	0
54	MG	1A	3524	1/1	0.94	0.18	19,19,19,19	0
54	MG	1A	3202	1/1	0.94	0.49	43,43,43,43	0
54	MG	1h	202	1/1	0.94	0.21	57,57,57,57	0
54	MG	15	108	1/1	0.94	0.18	60,60,60,60	0
54	MG	1A	4007	1/1	0.94	0.51	38,38,38,38	0
54	MG	17	104	1/1	0.94	0.25	31,31,31,31	0
54	MG	1A	3244	1/1	0.94	0.18	53,53,53,53	0
54	MG	1A	3613	1/1	0.94	0.09	40,40,40,40	0
54	MG	1A	3462	1/1	0.94	0.16	52,52,52,52	0
54	MG	1a	3133	1/1	0.94	0.23	51,51,51,51	0
54	MG	1A	3895	1/1	0.94	0.16	41,41,41,41	0
54	MG	1A	3795	1/1	0.94	0.17	48,48,48,48	0
54	MG	1a	3137	1/1	0.94	0.12	58,58,58,58	0
54	MG	1A	3246	1/1	0.94	0.13	46,46,46,46	0
54	MG	2A	3002	1/1	0.94	0.09	42,42,42,42	0
54	MG	1A	3531	1/1	0.94	0.15	17,17,17,17	0
54	MG	1A	3173	1/1	0.94	0.32	44,44,44,44	0
54	MG	2A	3688	1/1	0.94	0.17	64,64,64,64	0
54	MG	2A	3206	1/1	0.94	0.40	48,48,48,48	0
54	MG	1A	3537	1/1	0.94	0.19	19,19,19,19	0
54	MG	2a	3167	1/1	0.94	0.16	62,62,62,62	0
54	MG	2A	3011	1/1	0.94	0.17	30,30,30,30	0
54	MG	2A	3209	1/1	0.94	0.34	65,65,65,65	0
54	MG	2a	3170	1/1	0.94	0.19	60,60,60,60	0
54	MG	2a	3171	1/1	0.94	0.14	65,65,65,65	0
54	MG	1A	3905	1/1	0.94	0.14	22,22,22,22	0
54	MG	1A	3249	1/1	0.94	0.30	41,41,41,41	0
54	MG	2a	3175	1/1	0.94	0.15	81,81,81,81	0
54	MG	2A	3460	1/1	0.94	0.07	57,57,57,57	0
54	MG	1A	3541	1/1	0.94	0.16	18,18,18,18	0
54	MG	2A	3703	1/1	0.94	0.10	54,54,54,54	0
54	MG	1A	3106	1/1	0.94	0.29	34,34,34,34	0
54	MG	1A	3296	1/1	0.94	0.15	30,30,30,30	0
54	MG	2A	3023	1/1	0.94	0.22	53,53,53,53	0
54	MG	1a	3013	1/1	0.94	0.16	56,56,56,56	0
54	MG	1A	3544	1/1	0.94	0.17	29,29,29,29	0
54	MG	2A	3026	1/1	0.94	0.15	43,43,43,43	0
54	MG	2A	3469	1/1	0.94	0.22	42,42,42,42	0
54	MG	2A	3028	1/1	0.94	0.26	47,47,47,47	0
54	MG	2A	3718	1/1	0.94	0.13	59,59,59,59	0
54	MG	1A	3914	1/1	0.94	0.11	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3209	1/1	0.94	0.27	40,40,40,40	0
54	MG	1B	215	1/1	0.94	0.08	43,43,43,43	0
54	MG	1A	3472	1/1	0.94	0.14	35,35,35,35	0
54	MG	1A	3126	1/1	0.94	0.12	45,45,45,45	0
54	MG	2A	3479	1/1	0.94	0.13	57,57,57,57	0
54	MG	1a	3021	1/1	0.94	0.23	48,48,48,48	0
58	ARG	1B	230	12/12	0.94	0.24	27,40,55,59	0
54	MG	2A	3037	1/1	0.94	0.19	44,44,44,44	0
54	MG	1a	3163	1/1	0.94	0.28	50,50,50,50	0
54	MG	2A	3039	1/1	0.94	0.18	53,53,53,53	0
54	MG	1A	3811	1/1	0.94	0.16	41,41,41,41	0
59	ZN	29	501	1/1	0.94	0.10	60,60,60,60	0
59	ZN	2n	102	1/1	0.94	0.05	86,86,86,86	0
54	MG	1A	3298	1/1	0.95	0.53	43,43,43,43	0
54	MG	2D	306	1/1	0.95	0.45	47,47,47,47	0
54	MG	2D	307	1/1	0.95	0.35	46,46,46,46	0
54	MG	2A	3534	1/1	0.95	0.10	72,72,72,72	0
54	MG	2A	3134	1/1	0.95	0.36	28,28,28,28	0
54	MG	1A	3063	1/1	0.95	0.17	41,41,41,41	0
54	MG	1A	3421	1/1	0.95	0.23	22,22,22,22	0
54	MG	2A	3137	1/1	0.95	0.17	51,51,51,51	0
54	MG	1A	3891	1/1	0.95	0.16	32,32,32,32	0
54	MG	2A	3541	1/1	0.95	0.17	51,51,51,51	0
54	MG	1A	3892	1/1	0.95	0.43	33,33,33,33	0
54	MG	1A	3019	1/1	0.95	0.58	30,30,30,30	0
54	MG	15	101	1/1	0.95	0.22	38,38,38,38	0
54	MG	2A	3144	1/1	0.95	0.17	33,33,33,33	0
54	MG	2O	201	1/1	0.95	0.19	49,49,49,49	0
54	MG	1A	3345	1/1	0.95	0.18	23,23,23,23	0
54	MG	1A	3138	1/1	0.95	0.23	39,39,39,39	0
54	MG	2A	3548	1/1	0.95	0.12	35,35,35,35	0
54	MG	1a	3274	1/1	0.95	0.16	61,61,61,61	0
54	MG	1A	3263	1/1	0.95	0.16	35,35,35,35	0
54	MG	15	107	1/1	0.95	0.13	42,42,42,42	0
54	MG	1A	3504	1/1	0.95	0.25	26,26,26,26	0
54	MG	17	101	1/1	0.95	0.17	31,31,31,31	0
54	MG	2R	201	1/1	0.95	0.21	41,41,41,41	0
54	MG	2A	3347	1/1	0.95	0.21	30,30,30,30	0
54	MG	1A	3900	1/1	0.95	0.16	34,34,34,34	0
54	MG	17	103	1/1	0.95	0.19	33,33,33,33	0
54	MG	1a	3122	1/1	0.95	0.23	61,61,61,61	0
54	MG	2A	3351	1/1	0.95	0.31	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3352	1/1	0.95	0.18	50,50,50,50	0
54	MG	1d	305	1/1	0.95	0.10	63,63,63,63	0
54	MG	20	101	1/1	0.95	0.15	53,53,53,53	0
54	MG	1A	3688	1/1	0.95	0.07	61,61,61,61	0
54	MG	2A	3161	1/1	0.95	0.30	40,40,40,40	0
54	MG	1A	3429	1/1	0.95	0.16	27,27,27,27	0
54	MG	23	101	1/1	0.95	0.67	57,57,57,57	0
54	MG	1a	3126	1/1	0.95	0.21	54,54,54,54	0
54	MG	2A	3565	1/1	0.95	0.26	50,50,50,50	0
54	MG	28	101	1/1	0.95	0.11	60,60,60,60	0
54	MG	1A	3224	1/1	0.95	0.27	36,36,36,36	0
54	MG	18	101	1/1	0.95	0.14	36,36,36,36	0
54	MG	1a	3130	1/1	0.95	0.20	31,31,31,31	0
54	MG	2A	3362	1/1	0.95	0.23	35,35,35,35	0
54	MG	18	102	1/1	0.95	0.25	37,37,37,37	0
54	MG	1A	3305	1/1	0.95	0.21	37,37,37,37	0
54	MG	1A	3225	1/1	0.95	0.57	37,37,37,37	0
54	MG	1A	3356	1/1	0.95	0.12	34,34,34,34	0
54	MG	1A	3513	1/1	0.95	0.13	54,54,54,54	0
54	MG	1A	3911	1/1	0.95	0.14	13,13,13,13	0
54	MG	1A	3117	1/1	0.95	0.23	28,28,28,28	0
54	MG	2a	3012	1/1	0.95	0.12	51,51,51,51	0
54	MG	1A	3308	1/1	0.95	0.16	24,24,24,24	0
54	MG	1A	3438	1/1	0.95	0.24	42,42,42,42	0
54	MG	1a	3142	1/1	0.95	0.19	38,38,38,38	0
54	MG	2A	3378	1/1	0.95	0.14	26,26,26,26	0
54	MG	1A	3363	1/1	0.95	0.25	48,48,48,48	0
54	MG	1A	3519	1/1	0.95	0.21	49,49,49,49	0
54	MG	1a	3147	1/1	0.95	0.14	60,60,60,60	0
54	MG	1A	3145	1/1	0.95	0.21	32,32,32,32	0
54	MG	1A	3365	1/1	0.95	0.15	21,21,21,21	0
54	MG	2A	3386	1/1	0.95	0.15	62,62,62,62	0
54	MG	1B	220	1/1	0.95	0.13	25,25,25,25	0
54	MG	1A	3612	1/1	0.95	0.21	36,36,36,36	0
54	MG	2a	3027	1/1	0.95	0.18	58,58,58,58	0
54	MG	1a	3153	1/1	0.95	0.20	44,44,44,44	0
54	MG	1A	3271	1/1	0.95	0.48	42,42,42,42	0
54	MG	2a	3030	1/1	0.95	0.17	68,68,68,68	0
54	MG	2a	3031	1/1	0.95	0.12	66,66,66,66	0
54	MG	1B	223	1/1	0.95	0.05	49,49,49,49	0
54	MG	2A	3597	1/1	0.95	0.25	28,28,28,28	0
54	MG	1A	3707	1/1	0.95	0.43	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3525	1/1	0.95	0.11	36,36,36,36	0
54	MG	2A	3600	1/1	0.95	0.12	63,63,63,63	0
54	MG	2a	3039	1/1	0.95	0.07	71,71,71,71	0
54	MG	1A	3615	1/1	0.95	0.23	26,26,26,26	0
54	MG	1a	3159	1/1	0.95	0.16	44,44,44,44	0
54	MG	2A	3396	1/1	0.95	0.25	30,30,30,30	0
54	MG	2A	3192	1/1	0.95	0.29	47,47,47,47	0
54	MG	2A	3018	1/1	0.95	0.53	43,43,43,43	0
54	MG	1a	3160	1/1	0.95	0.11	66,66,66,66	0
54	MG	1B	227	1/1	0.95	0.11	62,62,62,62	0
54	MG	2A	3608	1/1	0.95	0.15	31,31,31,31	0
54	MG	1A	3816	1/1	0.95	0.13	39,39,39,39	0
54	MG	2a	3050	1/1	0.95	0.12	53,53,53,53	0
54	MG	2A	3404	1/1	0.95	0.24	36,36,36,36	0
54	MG	1a	3024	1/1	0.95	0.12	47,47,47,47	0
54	MG	1A	3817	1/1	0.95	0.20	46,46,46,46	0
54	MG	1D	305	1/1	0.95	0.17	37,37,37,37	0
54	MG	2a	3055	1/1	0.95	0.09	50,50,50,50	0
54	MG	1A	3367	1/1	0.95	0.12	49,49,49,49	0
54	MG	1A	3272	1/1	0.95	0.19	30,30,30,30	0
54	MG	1A	3618	1/1	0.95	0.20	56,56,56,56	0
54	MG	1a	3169	1/1	0.95	0.13	54,54,54,54	0
54	MG	2A	3621	1/1	0.95	0.05	58,58,58,58	0
54	MG	1D	312	1/1	0.95	0.32	47,47,47,47	0
54	MG	1D	313	1/1	0.95	0.11	59,59,59,59	0
54	MG	1a	3173	1/1	0.95	0.12	60,60,60,60	0
54	MG	2A	3417	1/1	0.95	0.22	28,28,28,28	0
54	MG	2A	3419	1/1	0.95	0.17	44,44,44,44	0
54	MG	1A	3020	1/1	0.95	0.64	41,41,41,41	0
54	MG	1A	3199	1/1	0.95	0.11	41,41,41,41	0
54	MG	1A	3717	1/1	0.95	0.20	46,46,46,46	0
54	MG	1A	3236	1/1	0.95	0.19	33,33,33,33	0
54	MG	1a	3036	1/1	0.95	0.18	68,68,68,68	0
54	MG	1A	3939	1/1	0.95	0.10	55,55,55,55	0
54	MG	1A	3532	1/1	0.95	0.37	42,42,42,42	0
54	MG	2a	3075	1/1	0.95	0.19	50,50,50,50	0
54	MG	1A	3723	1/1	0.95	0.30	44,44,44,44	0
54	MG	2A	3217	1/1	0.95	0.18	56,56,56,56	0
54	MG	1A	3237	1/1	0.95	0.49	33,33,33,33	0
54	MG	2A	3433	1/1	0.95	0.22	38,38,38,38	0
54	MG	2A	3640	1/1	0.95	0.08	54,54,54,54	0
54	MG	1A	3536	1/1	0.95	0.06	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1E	309	1/1	0.95	0.14	49,49,49,49	0
54	MG	1A	3728	1/1	0.95	0.13	46,46,46,46	0
54	MG	1a	3044	1/1	0.95	0.29	54,54,54,54	0
54	MG	1A	3037	1/1	0.95	0.13	46,46,46,46	0
54	MG	1a	3047	1/1	0.95	0.08	49,49,49,49	0
54	MG	2A	3648	1/1	0.95	0.07	50,50,50,50	0
54	MG	2A	3444	1/1	0.95	0.09	63,63,63,63	0
54	MG	1A	3538	1/1	0.95	0.38	29,29,29,29	0
54	MG	2a	3092	1/1	0.95	0.26	55,55,55,55	0
54	MG	2A	3446	1/1	0.95	0.13	38,38,38,38	0
54	MG	1A	3382	1/1	0.95	0.08	39,39,39,39	0
54	MG	2a	3097	1/1	0.95	0.30	61,61,61,61	0
54	MG	1A	3634	1/1	0.95	0.23	50,50,50,50	0
54	MG	1A	3540	1/1	0.95	0.17	34,34,34,34	0
54	MG	2A	3230	1/1	0.95	0.30	47,47,47,47	0
54	MG	2A	3658	1/1	0.95	0.10	64,64,64,64	0
54	MG	1a	3194	1/1	0.95	0.19	54,54,54,54	0
54	MG	1A	3736	1/1	0.95	0.10	44,44,44,44	0
54	MG	2A	3661	1/1	0.95	0.17	52,52,52,52	0
54	MG	2A	3062	1/1	0.95	0.12	32,32,32,32	0
54	MG	1A	3319	1/1	0.95	0.38	51,51,51,51	0
54	MG	1a	3057	1/1	0.95	0.51	59,59,59,59	0
54	MG	2A	3667	1/1	0.95	0.11	30,30,30,30	0
54	MG	1a	3200	1/1	0.95	0.13	54,54,54,54	0
54	MG	1A	3060	1/1	0.95	0.18	47,47,47,47	0
54	MG	1A	3174	1/1	0.95	0.33	30,30,30,30	0
54	MG	1F	318	1/1	0.95	0.36	39,39,39,39	0
54	MG	1A	3845	1/1	0.95	0.16	42,42,42,42	0
54	MG	1A	3744	1/1	0.95	0.22	40,40,40,40	0
54	MG	1A	3048	1/1	0.95	0.40	48,48,48,48	0
54	MG	1G	203	1/1	0.95	0.07	47,47,47,47	0
54	MG	2A	3075	1/1	0.95	0.64	47,47,47,47	0
54	MG	2A	3076	1/1	0.95	0.19	52,52,52,52	0
54	MG	2A	3077	1/1	0.95	0.20	52,52,52,52	0
54	MG	2A	3078	1/1	0.95	0.10	50,50,50,50	0
54	MG	2a	3125	1/1	0.95	0.15	68,68,68,68	0
54	MG	1A	3643	1/1	0.95	0.19	49,49,49,49	0
54	MG	2a	3127	1/1	0.95	0.13	56,56,56,56	0
54	MG	2A	3685	1/1	0.95	0.05	73,73,73,73	0
54	MG	1A	3966	1/1	0.95	0.22	39,39,39,39	0
54	MG	2A	3687	1/1	0.95	0.15	35,35,35,35	0
54	MG	2A	3475	1/1	0.95	0.26	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3390	1/1	0.95	0.20	39,39,39,39	0
54	MG	1A	3176	1/1	0.95	0.25	33,33,33,33	0
54	MG	2a	3137	1/1	0.95	0.09	61,61,61,61	0
54	MG	1a	3217	1/1	0.95	0.19	56,56,56,56	0
54	MG	1A	3177	1/1	0.95	0.11	51,51,51,51	0
54	MG	1A	3178	1/1	0.95	0.32	37,37,37,37	0
54	MG	1A	3553	1/1	0.95	0.18	27,27,27,27	0
54	MG	2A	3484	1/1	0.95	0.26	50,50,50,50	0
54	MG	1a	3073	1/1	0.95	0.37	50,50,50,50	0
54	MG	2a	3144	1/1	0.95	0.19	53,53,53,53	0
54	MG	1A	3854	1/1	0.95	0.07	51,51,51,51	0
54	MG	2a	3146	1/1	0.95	0.12	69,69,69,69	0
54	MG	1A	3088	1/1	0.95	0.23	38,38,38,38	0
54	MG	1A	3473	1/1	0.95	0.20	19,19,19,19	0
54	MG	1Q	202	1/1	0.95	0.21	28,28,28,28	0
54	MG	2A	3266	1/1	0.95	0.21	23,23,23,23	0
54	MG	1A	3564	1/1	0.95	0.20	54,54,54,54	0
54	MG	2A	3711	1/1	0.95	0.39	64,64,64,64	0
54	MG	2a	3157	1/1	0.95	0.17	46,46,46,46	0
54	MG	2A	3268	1/1	0.95	0.56	44,44,44,44	0
54	MG	1Q	205	1/1	0.95	0.26	42,42,42,42	0
54	MG	1A	3089	1/1	0.95	0.16	41,41,41,41	0
54	MG	1A	3111	1/1	0.95	0.41	26,26,26,26	0
54	MG	2a	3165	1/1	0.95	0.04	65,65,65,65	0
54	MG	1A	3252	1/1	0.95	0.14	38,38,38,38	0
54	MG	1A	3480	1/1	0.95	0.07	49,49,49,49	0
54	MG	1A	3864	1/1	0.95	0.15	33,33,33,33	0
54	MG	1A	3401	1/1	0.95	0.19	16,16,16,16	0
54	MG	2A	3724	1/1	0.95	0.16	63,63,63,63	0
54	MG	1A	3402	1/1	0.95	0.20	25,25,25,25	0
54	MG	1A	3403	1/1	0.95	0.19	34,34,34,34	0
54	MG	2a	3173	1/1	0.95	0.19	69,69,69,69	0
54	MG	2A	3106	1/1	0.95	0.16	30,30,30,30	0
54	MG	2A	3108	1/1	0.95	0.21	47,47,47,47	0
54	MG	2a	3176	1/1	0.95	0.07	77,77,77,77	0
54	MG	1U	203	1/1	0.95	0.19	30,30,30,30	0
54	MG	1A	3662	1/1	0.95	0.12	45,45,45,45	0
54	MG	2a	3181	1/1	0.95	0.20	55,55,55,55	0
54	MG	2A	3507	1/1	0.95	0.13	27,27,27,27	0
54	MG	1A	3157	1/1	0.95	0.39	29,29,29,29	0
54	MG	2A	3510	1/1	0.95	0.13	50,50,50,50	0
54	MG	1A	3406	1/1	0.95	0.19	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3288	1/1	0.95	0.38	49,49,49,49	0
54	MG	1A	3578	1/1	0.95	0.17	37,37,37,37	0
54	MG	2B	201	1/1	0.95	0.16	75,75,75,75	0
54	MG	1A	3073	1/1	0.95	0.12	32,32,32,32	0
54	MG	1A	3770	1/1	0.95	0.23	51,51,51,51	0
54	MG	1A	3016	1/1	0.95	0.39	28,28,28,28	0
55	HGR	1A	4018	36/36	0.95	0.23	22,26,37,38	0
54	MG	1A	3879	1/1	0.95	0.25	27,27,27,27	0
54	MG	1W	202	1/1	0.95	0.29	42,42,42,42	0
54	MG	1a	3249	1/1	0.95	0.19	44,44,44,44	0
57	MPD	18	103	8/8	0.95	0.29	24,31,35,44	0
54	MG	1A	3772	1/1	0.95	0.14	28,28,28,28	0
54	MG	2A	3122	1/1	0.95	0.14	40,40,40,40	0
54	MG	1A	3774	1/1	0.95	0.17	41,41,41,41	0
54	MG	2A	3302	1/1	0.95	0.18	26,26,26,26	0
54	MG	1Y	201	1/1	0.95	0.06	52,52,52,52	0
54	MG	1A	3414	1/1	0.95	0.22	17,17,17,17	0
54	MG	1a	3255	1/1	0.95	0.08	47,47,47,47	0
54	MG	1A	3584	1/1	0.95	0.15	57,57,57,57	0
54	MG	1A	3257	1/1	0.95	0.10	37,37,37,37	0
54	MG	1A	3674	1/1	0.95	0.11	55,55,55,55	0
54	MG	1a	3263	1/1	0.95	0.18	66,66,66,66	0
54	MG	1A	3475	1/1	0.96	0.21	61,61,61,61	0
54	MG	2A	3383	1/1	0.96	0.17	51,51,51,51	0
54	MG	1A	3065	1/1	0.96	0.14	55,55,55,55	0
54	MG	1A	3549	1/1	0.96	0.22	58,58,58,58	0
54	MG	1A	3550	1/1	0.96	0.22	31,31,31,31	0
54	MG	2V	201	1/1	0.96	0.29	65,65,65,65	0
54	MG	2A	3195	1/1	0.96	0.25	62,62,62,62	0
54	MG	1F	311	1/1	0.96	0.18	39,39,39,39	0
54	MG	1A	3551	1/1	0.96	0.18	19,19,19,19	0
54	MG	1A	3734	1/1	0.96	0.13	33,33,33,33	0
54	MG	1F	315	1/1	0.96	0.74	37,37,37,37	0
54	MG	1a	3186	1/1	0.96	0.11	62,62,62,62	0
54	MG	1a	3050	1/1	0.96	0.18	45,45,45,45	0
54	MG	1A	3638	1/1	0.96	0.16	25,25,25,25	0
54	MG	23	102	1/1	0.96	0.14	42,42,42,42	0
54	MG	2A	3203	1/1	0.96	0.19	47,47,47,47	0
54	MG	1A	3410	1/1	0.96	0.12	34,34,34,34	0
54	MG	27	101	1/1	0.96	0.61	46,46,46,46	0
54	MG	1A	3737	1/1	0.96	0.22	33,33,33,33	0
54	MG	1a	3055	1/1	0.96	0.31	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3594	1/1	0.96	0.27	42,42,42,42	0
54	MG	1A	3640	1/1	0.96	0.16	24,24,24,24	0
54	MG	1A	3641	1/1	0.96	0.15	64,64,64,64	0
54	MG	1A	3740	1/1	0.96	0.14	31,31,31,31	0
54	MG	2A	3403	1/1	0.96	0.17	47,47,47,47	0
54	MG	1A	3266	1/1	0.96	0.35	41,41,41,41	0
54	MG	1a	3197	1/1	0.96	0.09	52,52,52,52	0
54	MG	1A	3742	1/1	0.96	0.17	24,24,24,24	0
54	MG	1A	3554	1/1	0.96	0.23	36,36,36,36	0
54	MG	1A	3413	1/1	0.96	0.25	18,18,18,18	0
54	MG	1a	3201	1/1	0.96	0.06	77,77,77,77	0
54	MG	2A	3410	1/1	0.96	0.25	26,26,26,26	0
54	MG	1A	3645	1/1	0.96	0.27	53,53,53,53	0
54	MG	1A	3561	1/1	0.96	0.16	51,51,51,51	0
54	MG	1A	3562	1/1	0.96	0.23	37,37,37,37	0
54	MG	2A	3610	1/1	0.96	0.22	62,62,62,62	0
54	MG	1A	3855	1/1	0.96	0.26	38,38,38,38	0
54	MG	1a	3206	1/1	0.96	0.26	61,61,61,61	0
54	MG	2a	3021	1/1	0.96	0.07	60,60,60,60	0
54	MG	1A	3007	1/1	0.96	0.15	30,30,30,30	0
54	MG	1A	3415	1/1	0.96	0.18	17,17,17,17	0
54	MG	1A	3977	1/1	0.96	0.12	46,46,46,46	0
54	MG	1a	3211	1/1	0.96	0.22	68,68,68,68	0
54	MG	1a	3212	1/1	0.96	0.11	55,55,55,55	0
54	MG	1P	205	1/1	0.96	0.06	25,25,25,25	0
54	MG	1A	3198	1/1	0.96	0.17	47,47,47,47	0
54	MG	2A	3228	1/1	0.96	0.10	46,46,46,46	0
54	MG	1A	3232	1/1	0.96	0.22	33,33,33,33	0
54	MG	1A	3419	1/1	0.96	0.14	50,50,50,50	0
54	MG	1R	202	1/1	0.96	0.25	36,36,36,36	0
54	MG	1a	3218	1/1	0.96	0.16	65,65,65,65	0
54	MG	1A	3360	1/1	0.96	0.15	48,48,48,48	0
54	MG	1A	3569	1/1	0.96	0.26	55,55,55,55	0
54	MG	2A	3435	1/1	0.96	0.32	47,47,47,47	0
54	MG	1A	3129	1/1	0.96	0.20	31,31,31,31	0
54	MG	1R	206	1/1	0.96	0.17	40,40,40,40	0
54	MG	1A	3571	1/1	0.96	0.12	33,33,33,33	0
54	MG	2A	3082	1/1	0.96	0.13	50,50,50,50	0
54	MG	2A	3442	1/1	0.96	0.24	50,50,50,50	0
54	MG	1A	3491	1/1	0.96	0.14	22,22,22,22	0
54	MG	1A	3423	1/1	0.96	0.21	19,19,19,19	0
54	MG	2a	3046	1/1	0.96	0.11	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3868	1/1	0.96	0.12	40,40,40,40	0
54	MG	1A	3152	1/1	0.96	0.20	30,30,30,30	0
54	MG	1A	3067	1/1	0.96	0.30	37,37,37,37	0
54	MG	2A	3246	1/1	0.96	0.32	58,58,58,58	0
54	MG	2A	3088	1/1	0.96	0.28	37,37,37,37	0
54	MG	1A	3497	1/1	0.96	0.19	28,28,28,28	0
54	MG	1U	205	1/1	0.96	0.54	40,40,40,40	0
54	MG	2A	3645	1/1	0.96	0.20	50,50,50,50	0
54	MG	1A	3579	1/1	0.96	0.27	20,20,20,20	0
54	MG	1U	208	1/1	0.96	0.27	35,35,35,35	0
54	MG	1A	3102	1/1	0.96	0.38	55,55,55,55	0
54	MG	2A	3457	1/1	0.96	0.09	53,53,53,53	0
54	MG	1A	3581	1/1	0.96	0.19	39,39,39,39	0
54	MG	1A	3876	1/1	0.96	0.21	29,29,29,29	0
54	MG	2A	3653	1/1	0.96	0.18	48,48,48,48	0
54	MG	1A	3203	1/1	0.96	0.35	45,45,45,45	0
54	MG	1A	3669	1/1	0.96	0.06	55,55,55,55	0
54	MG	1A	3670	1/1	0.96	0.14	17,17,17,17	0
54	MG	1A	3078	1/1	0.96	0.23	33,33,33,33	0
54	MG	2A	3259	1/1	0.96	0.15	38,38,38,38	0
54	MG	1W	204	1/1	0.96	0.16	54,54,54,54	0
54	MG	1A	3773	1/1	0.96	0.20	38,38,38,38	0
54	MG	1A	3280	1/1	0.96	0.18	31,31,31,31	0
54	MG	2a	3070	1/1	0.96	0.36	56,56,56,56	0
54	MG	1A	3181	1/1	0.96	0.67	40,40,40,40	0
54	MG	1A	3886	1/1	0.96	0.18	42,42,42,42	0
54	MG	1A	3776	1/1	0.96	0.13	36,36,36,36	0
54	MG	2A	3666	1/1	0.96	0.17	26,26,26,26	0
54	MG	1A	4005	1/1	0.96	0.08	37,37,37,37	0
54	MG	1A	3586	1/1	0.96	0.27	18,18,18,18	0
54	MG	2A	3269	1/1	0.96	0.35	58,58,58,58	0
54	MG	10	106	1/1	0.96	0.10	42,42,42,42	0
54	MG	1A	3432	1/1	0.96	0.26	21,21,21,21	0
54	MG	11	101	1/1	0.96	0.50	42,42,42,42	0
54	MG	2A	3673	1/1	0.96	0.13	69,69,69,69	0
54	MG	1A	3676	1/1	0.96	0.10	51,51,51,51	0
54	MG	1A	3505	1/1	0.96	0.22	23,23,23,23	0
54	MG	1a	3110	1/1	0.96	0.48	49,49,49,49	0
54	MG	2A	3276	1/1	0.96	0.29	47,47,47,47	0
54	MG	1a	3258	1/1	0.96	0.25	49,49,49,49	0
54	MG	2A	3681	1/1	0.96	0.25	35,35,35,35	0
54	MG	2A	3117	1/1	0.96	0.12	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3433	1/1	0.96	0.17	68,68,68,68	0
54	MG	1a	3261	1/1	0.96	0.16	64,64,64,64	0
54	MG	1A	4013	1/1	0.96	0.24	45,45,45,45	0
54	MG	1A	3207	1/1	0.96	0.20	39,39,39,39	0
54	MG	1A	3894	1/1	0.96	0.21	32,32,32,32	0
54	MG	15	102	1/1	0.96	0.26	27,27,27,27	0
54	MG	1A	3208	1/1	0.96	0.20	38,38,38,38	0
54	MG	1A	4017	1/1	0.96	0.12	48,48,48,48	0
54	MG	2A	3126	1/1	0.96	0.53	42,42,42,42	0
54	MG	2A	3694	1/1	0.96	0.18	58,58,58,58	0
54	MG	2A	3695	1/1	0.96	0.27	51,51,51,51	0
54	MG	1A	3509	1/1	0.96	0.24	19,19,19,19	0
54	MG	2A	3698	1/1	0.96	0.20	49,49,49,49	0
54	MG	1a	3119	1/1	0.96	0.21	51,51,51,51	0
54	MG	1A	3245	1/1	0.96	0.27	31,31,31,31	0
54	MG	1A	3898	1/1	0.96	0.16	41,41,41,41	0
54	MG	1A	3686	1/1	0.96	0.09	58,58,58,58	0
54	MG	1A	3511	1/1	0.96	0.22	38,38,38,38	0
54	MG	2A	3298	1/1	0.96	0.17	56,56,56,56	0
54	MG	1A	3902	1/1	0.96	0.08	59,59,59,59	0
54	MG	2A	3504	1/1	0.96	0.12	44,44,44,44	0
54	MG	1A	3597	1/1	0.96	0.16	37,37,37,37	0
54	MG	1A	3134	1/1	0.96	0.45	27,27,27,27	0
54	MG	1A	3793	1/1	0.96	0.10	28,28,28,28	0
54	MG	2a	3121	1/1	0.96	0.10	65,65,65,65	0
54	MG	2A	3138	1/1	0.96	0.14	42,42,42,42	0
54	MG	2A	3713	1/1	0.96	0.07	65,65,65,65	0
54	MG	1A	3599	1/1	0.96	0.19	58,58,58,58	0
54	MG	2A	3311	1/1	0.96	0.24	57,57,57,57	0
54	MG	2A	3312	1/1	0.96	0.25	50,50,50,50	0
54	MG	1B	213	1/1	0.96	0.15	35,35,35,35	0
54	MG	1A	3381	1/1	0.96	0.30	65,65,65,65	0
54	MG	2A	3142	1/1	0.96	0.40	40,40,40,40	0
54	MG	1A	3247	1/1	0.96	0.35	41,41,41,41	0
54	MG	2a	3132	1/1	0.96	0.12	58,58,58,58	0
54	MG	2A	3317	1/1	0.96	0.15	37,37,37,37	0
54	MG	1A	3441	1/1	0.96	0.21	23,23,23,23	0
54	MG	1A	3183	1/1	0.96	0.33	35,35,35,35	0
54	MG	1A	3384	1/1	0.96	0.11	22,22,22,22	0
54	MG	1A	3913	1/1	0.96	0.28	24,24,24,24	0
54	MG	2A	3323	1/1	0.96	0.23	48,48,48,48	0
54	MG	2A	3324	1/1	0.96	0.20	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3148	1/1	0.96	0.32	42,42,42,42	0
54	MG	1A	3184	1/1	0.96	0.29	35,35,35,35	0
54	MG	2A	3733	1/1	0.96	0.17	64,64,64,64	0
54	MG	1A	3916	1/1	0.96	0.14	31,31,31,31	0
54	MG	1A	3447	1/1	0.96	0.21	31,31,31,31	0
54	MG	1A	3159	1/1	0.96	0.46	29,29,29,29	0
54	MG	2A	3153	1/1	0.96	0.15	49,49,49,49	0
54	MG	2A	3154	1/1	0.96	0.20	58,58,58,58	0
54	MG	1A	3387	1/1	0.96	0.31	48,48,48,48	0
54	MG	2a	3150	1/1	0.96	0.12	69,69,69,69	0
54	MG	2a	3152	1/1	0.96	0.24	62,62,62,62	0
54	MG	2A	3336	1/1	0.96	0.22	23,23,23,23	0
54	MG	1A	3215	1/1	0.96	0.22	28,28,28,28	0
54	MG	2a	3155	1/1	0.96	0.21	59,59,59,59	0
54	MG	1a	3012	1/1	0.96	0.10	56,56,56,56	0
54	MG	1A	3451	1/1	0.96	0.05	55,55,55,55	0
54	MG	2a	3158	1/1	0.96	0.18	58,58,58,58	0
54	MG	2A	3159	1/1	0.96	0.18	59,59,59,59	0
54	MG	2B	208	1/1	0.96	0.07	65,65,65,65	0
54	MG	1l	201	1/1	0.96	0.35	55,55,55,55	0
54	MG	1A	3122	1/1	0.96	0.22	30,30,30,30	0
54	MG	2A	3345	1/1	0.96	0.24	28,28,28,28	0
54	MG	1A	3137	1/1	0.96	0.17	39,39,39,39	0
54	MG	1B	229	1/1	0.96	0.16	64,64,64,64	0
54	MG	1n	102	1/1	0.96	0.12	60,60,60,60	0
54	MG	1o	101	1/1	0.96	0.29	49,49,49,49	0
54	MG	1D	301	1/1	0.96	0.24	27,27,27,27	0
54	MG	2B	217	1/1	0.96	0.14	65,65,65,65	0
54	MG	1A	3025	1/1	0.96	0.53	40,40,40,40	0
54	MG	2B	219	1/1	0.96	0.16	60,60,60,60	0
54	MG	2D	302	1/1	0.96	0.23	45,45,45,45	0
54	MG	1A	3337	1/1	0.96	0.16	25,25,25,25	0
54	MG	1A	3338	1/1	0.96	0.10	30,30,30,30	0
54	MG	1a	3022	1/1	0.96	0.19	53,53,53,53	0
54	MG	2a	3179	1/1	0.96	0.25	54,54,54,54	0
54	MG	1A	3189	1/1	0.96	0.31	41,41,41,41	0
54	MG	1A	3396	1/1	0.96	0.24	43,43,43,43	0
54	MG	1A	3139	1/1	0.96	0.20	35,35,35,35	0
54	MG	1A	3399	1/1	0.96	0.15	28,28,28,28	0
54	MG	2D	310	1/1	0.96	0.32	51,51,51,51	0
54	MG	2A	3008	1/1	0.96	0.14	37,37,37,37	0
54	MG	1A	3715	1/1	0.96	0.21	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2E	303	1/1	0.96	0.22	31,31,31,31	0
54	MG	2E	305	1/1	0.96	0.20	28,28,28,28	0
54	MG	1A	3141	1/1	0.96	0.08	35,35,35,35	0
54	MG	1A	3261	1/1	0.96	0.46	35,35,35,35	0
54	MG	2t	201	1/1	0.96	0.09	40,40,40,40	0
54	MG	1D	317	1/1	0.96	0.30	57,57,57,57	0
54	MG	2F	304	1/1	0.96	0.58	43,43,43,43	0
54	MG	1A	3301	1/1	0.96	0.24	30,30,30,30	0
54	MG	1A	3026	1/1	0.96	0.23	29,29,29,29	0
54	MG	2A	3369	1/1	0.96	0.13	32,32,32,32	0
54	MG	1A	3720	1/1	0.96	0.30	30,30,30,30	0
54	MG	2N	201	1/1	0.96	0.15	62,62,62,62	0
54	MG	2A	3371	1/1	0.96	0.10	68,68,68,68	0
54	MG	1A	3722	1/1	0.96	0.10	21,21,21,21	0
54	MG	1A	3082	1/1	0.96	0.27	28,28,28,28	0
54	MG	1A	3942	1/1	0.96	0.13	20,20,20,20	0
54	MG	2A	3570	1/1	0.96	0.21	57,57,57,57	0
59	ZN	1Y	202	1/1	0.96	0.15	51,51,51,51	0
54	MG	2P	204	1/1	0.96	0.08	58,58,58,58	0
54	MG	1A	3405	1/1	0.96	0.18	28,28,28,28	0
54	MG	1A	3945	1/1	0.96	0.14	44,44,44,44	0
54	MG	1F	305	1/1	0.96	0.47	35,35,35,35	0
54	MG	1A	3051	1/1	0.96	0.31	39,39,39,39	0
54	MG	2A	3318	1/1	0.97	0.28	32,32,32,32	0
54	MG	1A	3915	1/1	0.97	0.12	11,11,11,11	0
54	MG	2a	3019	1/1	0.97	0.05	72,72,72,72	0
54	MG	1A	3533	1/1	0.97	0.06	57,57,57,57	0
54	MG	1V	202	1/1	0.97	0.35	28,28,28,28	0
54	MG	1A	3917	1/1	0.97	0.36	27,27,27,27	0
54	MG	1A	3828	1/1	0.97	0.13	22,22,22,22	0
54	MG	1A	3743	1/1	0.97	0.07	42,42,42,42	0
54	MG	2A	3326	1/1	0.97	0.27	64,64,64,64	0
54	MG	1A	3279	1/1	0.97	0.19	20,20,20,20	0
54	MG	1B	204	1/1	0.97	0.13	45,45,45,45	0
54	MG	2A	3178	1/1	0.97	0.28	42,42,42,42	0
54	MG	1B	205	1/1	0.97	0.35	37,37,37,37	0
54	MG	1W	203	1/1	0.97	0.21	31,31,31,31	0
54	MG	1A	3535	1/1	0.97	0.13	54,54,54,54	0
54	MG	2A	3333	1/1	0.97	0.17	43,43,43,43	0
54	MG	2a	3034	1/1	0.97	0.17	37,37,37,37	0
54	MG	1A	3085	1/1	0.97	0.30	35,35,35,35	0
54	MG	1A	3143	1/1	0.97	0.25	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3369	1/1	0.97	0.17	19,19,19,19	0
54	MG	1A	3479	1/1	0.97	0.14	40,40,40,40	0
54	MG	10	101	1/1	0.97	0.24	39,39,39,39	0
54	MG	1A	3751	1/1	0.97	0.12	26,26,26,26	0
54	MG	1A	3927	1/1	0.97	0.10	37,37,37,37	0
54	MG	2A	3675	1/1	0.97	0.23	49,49,49,49	0
54	MG	10	104	1/1	0.97	0.14	51,51,51,51	0
54	MG	1A	3282	1/1	0.97	0.24	36,36,36,36	0
54	MG	1A	3838	1/1	0.97	0.20	42,42,42,42	0
54	MG	2A	3509	1/1	0.97	0.21	41,41,41,41	0
54	MG	1A	3168	1/1	0.97	0.20	31,31,31,31	0
54	MG	1A	3482	1/1	0.97	0.16	24,24,24,24	0
54	MG	1A	3932	1/1	0.97	0.14	32,32,32,32	0
54	MG	2A	3056	1/1	0.97	0.16	54,54,54,54	0
54	MG	2A	3057	1/1	0.97	0.17	32,32,32,32	0
54	MG	1A	3322	1/1	0.97	0.21	19,19,19,19	0
54	MG	1A	3679	1/1	0.97	0.27	43,43,43,43	0
54	MG	1a	3225	1/1	0.97	0.15	64,64,64,64	0
54	MG	13	101	1/1	0.97	0.20	30,30,30,30	0
54	MG	2A	3690	1/1	0.97	0.19	35,35,35,35	0
54	MG	1A	3484	1/1	0.97	0.20	52,52,52,52	0
54	MG	1A	3426	1/1	0.97	0.13	19,19,19,19	0
54	MG	2A	3693	1/1	0.97	0.24	49,49,49,49	0
54	MG	1A	3069	1/1	0.97	0.56	40,40,40,40	0
54	MG	1A	3683	1/1	0.97	0.16	31,31,31,31	0
54	MG	2A	3696	1/1	0.97	0.11	45,45,45,45	0
54	MG	1A	3325	1/1	0.97	0.20	24,24,24,24	0
54	MG	2A	3525	1/1	0.97	0.12	53,53,53,53	0
54	MG	1A	3548	1/1	0.97	0.21	49,49,49,49	0
54	MG	1A	3250	1/1	0.97	0.35	35,35,35,35	0
54	MG	1A	3077	1/1	0.97	0.36	33,33,33,33	0
54	MG	2A	3365	1/1	0.97	0.14	67,67,67,67	0
54	MG	1A	3195	1/1	0.97	0.44	33,33,33,33	0
54	MG	1A	3031	1/1	0.97	0.17	16,16,16,16	0
54	MG	1A	3039	1/1	0.97	0.23	50,50,50,50	0
54	MG	2a	3072	1/1	0.97	0.05	63,63,63,63	0
54	MG	1A	3619	1/1	0.97	0.17	32,32,32,32	0
54	MG	1D	304	1/1	0.97	0.15	32,32,32,32	0
54	MG	2A	3709	1/1	0.97	0.33	62,62,62,62	0
54	MG	1A	3621	1/1	0.97	0.29	33,33,33,33	0
54	MG	1A	3949	1/1	0.97	0.11	26,26,26,26	0
54	MG	1A	3108	1/1	0.97	0.32	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1D	310	1/1	0.97	0.41	32,32,32,32	0
54	MG	2A	3081	1/1	0.97	0.16	43,43,43,43	0
54	MG	2A	3715	1/1	0.97	0.11	74,74,74,74	0
54	MG	2A	3540	1/1	0.97	0.07	56,56,56,56	0
54	MG	1A	3556	1/1	0.97	0.35	40,40,40,40	0
54	MG	2A	3379	1/1	0.97	0.17	32,32,32,32	0
54	MG	1A	3557	1/1	0.97	0.15	29,29,29,29	0
54	MG	1A	3953	1/1	0.97	0.19	50,50,50,50	0
54	MG	1A	3626	1/1	0.97	0.27	32,32,32,32	0
54	MG	2a	3088	1/1	0.97	0.25	56,56,56,56	0
54	MG	2a	3089	1/1	0.97	0.24	47,47,47,47	0
54	MG	1A	3697	1/1	0.97	0.07	44,44,44,44	0
54	MG	1A	3956	1/1	0.97	0.10	54,54,54,54	0
54	MG	1A	3109	1/1	0.97	0.12	48,48,48,48	0
54	MG	1E	302	1/1	0.97	0.34	29,29,29,29	0
54	MG	1A	3863	1/1	0.97	0.14	34,34,34,34	0
54	MG	1A	3495	1/1	0.97	0.14	26,26,26,26	0
54	MG	1A	3701	1/1	0.97	0.34	27,27,27,27	0
54	MG	1a	3257	1/1	0.97	0.11	64,64,64,64	0
54	MG	2A	3231	1/1	0.97	0.24	35,35,35,35	0
54	MG	1a	3129	1/1	0.97	0.19	42,42,42,42	0
54	MG	1A	3496	1/1	0.97	0.16	27,27,27,27	0
54	MG	1a	3260	1/1	0.97	0.23	51,51,51,51	0
54	MG	1A	3780	1/1	0.97	0.18	37,37,37,37	0
54	MG	1A	3226	1/1	0.97	0.49	36,36,36,36	0
54	MG	2A	3237	1/1	0.97	0.26	61,61,61,61	0
54	MG	1A	3110	1/1	0.97	0.26	25,25,25,25	0
54	MG	2a	3108	1/1	0.97	0.13	61,61,61,61	0
54	MG	2A	3399	1/1	0.97	0.19	59,59,59,59	0
54	MG	1F	301	1/1	0.97	0.20	26,26,26,26	0
54	MG	1F	302	1/1	0.97	0.16	30,30,30,30	0
54	MG	1A	3260	1/1	0.97	0.21	40,40,40,40	0
54	MG	1A	3968	1/1	0.97	0.20	41,41,41,41	0
54	MG	1a	3268	1/1	0.97	0.21	63,63,63,63	0
54	MG	1a	3019	1/1	0.97	0.09	43,43,43,43	0
54	MG	1A	3871	1/1	0.97	0.13	33,33,33,33	0
54	MG	1A	3784	1/1	0.97	0.27	39,39,39,39	0
54	MG	1a	3143	1/1	0.97	0.15	66,66,66,66	0
54	MG	1A	3093	1/1	0.97	0.23	24,24,24,24	0
54	MG	1A	3179	1/1	0.97	0.24	32,32,32,32	0
54	MG	2A	3411	1/1	0.97	0.24	32,32,32,32	0
54	MG	1A	3787	1/1	0.97	0.17	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3442	1/1	0.97	0.18	23,23,23,23	0
54	MG	2A	3579	1/1	0.97	0.22	30,30,30,30	0
54	MG	1F	312	1/1	0.97	0.14	35,35,35,35	0
54	MG	2a	3128	1/1	0.97	0.16	48,48,48,48	0
54	MG	2D	301	1/1	0.97	0.29	39,39,39,39	0
54	MG	1A	3976	1/1	0.97	0.14	52,52,52,52	0
54	MG	1A	3443	1/1	0.97	0.14	13,13,13,13	0
54	MG	1A	3978	1/1	0.97	0.18	44,44,44,44	0
54	MG	2A	3418	1/1	0.97	0.18	62,62,62,62	0
54	MG	1A	3001	1/1	0.97	0.12	33,33,33,33	0
54	MG	1A	3233	1/1	0.97	0.22	28,28,28,28	0
54	MG	2A	3421	1/1	0.97	0.17	29,29,29,29	0
54	MG	1A	3712	1/1	0.97	0.23	38,38,38,38	0
54	MG	2A	3423	1/1	0.97	0.17	48,48,48,48	0
54	MG	1A	3342	1/1	0.97	0.27	18,18,18,18	0
54	MG	2A	3425	1/1	0.97	0.10	29,29,29,29	0
54	MG	2E	302	1/1	0.97	0.13	42,42,42,42	0
54	MG	1F	320	1/1	0.97	0.11	35,35,35,35	0
54	MG	2E	304	1/1	0.97	0.08	43,43,43,43	0
54	MG	1A	3234	1/1	0.97	0.47	40,40,40,40	0
54	MG	1A	3081	1/1	0.97	0.20	34,34,34,34	0
54	MG	1A	3575	1/1	0.97	0.21	35,35,35,35	0
54	MG	2A	3127	1/1	0.97	0.35	39,39,39,39	0
54	MG	1A	3576	1/1	0.97	0.17	48,48,48,48	0
54	MG	1A	3398	1/1	0.97	0.18	33,33,33,33	0
54	MG	1A	3267	1/1	0.97	0.22	30,30,30,30	0
54	MG	1N	201	1/1	0.97	0.32	40,40,40,40	0
54	MG	1N	202	1/1	0.97	0.35	37,37,37,37	0
54	MG	1A	3268	1/1	0.97	0.32	32,32,32,32	0
54	MG	1A	3801	1/1	0.97	0.16	28,28,28,28	0
54	MG	1A	3721	1/1	0.97	0.39	37,37,37,37	0
54	MG	2A	3439	1/1	0.97	0.08	79,79,79,79	0
54	MG	1a	3046	1/1	0.97	0.19	37,37,37,37	0
54	MG	2a	3160	1/1	0.97	0.13	50,50,50,50	0
54	MG	2A	3441	1/1	0.97	0.23	33,33,33,33	0
54	MG	1A	3648	1/1	0.97	0.23	26,26,26,26	0
54	MG	1A	3804	1/1	0.97	0.52	41,41,41,41	0
54	MG	1A	3132	1/1	0.97	0.30	34,34,34,34	0
54	MG	1A	3005	1/1	0.97	0.16	18,18,18,18	0
54	MG	1A	3074	1/1	0.97	0.17	30,30,30,30	0
54	MG	2A	3281	1/1	0.97	0.33	44,44,44,44	0
54	MG	1Q	201	1/1	0.97	0.12	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3353	1/1	0.97	0.06	52,52,52,52	0
54	MG	2T	202	1/1	0.97	0.05	61,61,61,61	0
54	MG	2A	3617	1/1	0.97	0.17	37,37,37,37	0
54	MG	1a	3054	1/1	0.97	0.10	61,61,61,61	0
54	MG	1Q	203	1/1	0.97	0.27	48,48,48,48	0
54	MG	1A	3457	1/1	0.97	0.19	48,48,48,48	0
54	MG	1A	3068	1/1	0.97	0.25	36,36,36,36	0
54	MG	2a	3177	1/1	0.97	0.21	43,43,43,43	0
54	MG	2W	202	1/1	0.97	0.33	43,43,43,43	0
54	MG	2W	203	1/1	0.97	0.13	50,50,50,50	0
54	MG	1A	3901	1/1	0.97	0.08	57,57,57,57	0
54	MG	2A	3006	1/1	0.97	0.13	47,47,47,47	0
54	MG	2a	3182	1/1	0.97	0.23	54,54,54,54	0
54	MG	1A	3118	1/1	0.97	0.37	31,31,31,31	0
54	MG	1A	3408	1/1	0.97	0.19	17,17,17,17	0
54	MG	1A	3815	1/1	0.97	0.13	30,30,30,30	0
54	MG	1A	3211	1/1	0.97	0.35	37,37,37,37	0
54	MG	2A	3013	1/1	0.97	0.18	21,21,21,21	0
54	MG	25	101	1/1	0.97	0.72	43,43,43,43	0
54	MG	2A	3296	1/1	0.97	0.14	60,60,60,60	0
54	MG	1A	3358	1/1	0.97	0.13	36,36,36,36	0
54	MG	25	104	1/1	0.97	0.20	55,55,55,55	0
54	MG	2A	3466	1/1	0.97	0.17	61,61,61,61	0
54	MG	2A	3015	1/1	0.97	0.21	26,26,26,26	0
54	MG	1A	3359	1/1	0.97	0.09	35,35,35,35	0
54	MG	1A	3412	1/1	0.97	0.26	21,21,21,21	0
56	TEL	2A	3739	58/58	0.97	0.23	24,30,39,43	0
54	MG	1A	4008	1/1	0.97	0.19	47,47,47,47	0
54	MG	1A	3119	1/1	0.97	0.18	15,15,15,15	0
54	MG	2A	3020	1/1	0.97	0.46	40,40,40,40	0
54	MG	2A	3021	1/1	0.97	0.13	39,39,39,39	0
54	MG	2A	3310	1/1	0.97	0.16	33,33,33,33	0
54	MG	2A	3022	1/1	0.97	0.31	43,43,43,43	0
54	MG	2a	3008	1/1	0.97	0.07	61,61,61,61	0
54	MG	1A	3276	1/1	0.97	0.35	38,38,38,38	0
54	MG	2A	3477	1/1	0.97	0.20	55,55,55,55	0
54	MG	2A	3478	1/1	0.97	0.30	55,55,55,55	0
54	MG	1A	3213	1/1	0.97	0.32	34,34,34,34	0
54	MG	1a	3195	1/1	0.97	0.07	66,66,66,66	0
54	MG	1A	3823	1/1	0.97	0.36	26,26,26,26	0
54	MG	2A	3027	1/1	0.97	0.18	28,28,28,28	0
54	MG	1A	3120	1/1	0.97	0.18	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3746	1/1	0.98	0.24	50,50,50,50	0
54	MG	1A	3154	1/1	0.98	0.27	40,40,40,40	0
54	MG	1A	3024	1/1	0.98	0.15	14,14,14,14	0
54	MG	2A	3107	1/1	0.98	0.13	64,64,64,64	0
54	MG	2A	3343	1/1	0.98	0.18	40,40,40,40	0
54	MG	2A	3344	1/1	0.98	0.21	27,27,27,27	0
54	MG	1A	3090	1/1	0.98	0.25	35,35,35,35	0
54	MG	2A	3346	1/1	0.98	0.27	26,26,26,26	0
54	MG	1A	3827	1/1	0.98	0.16	20,20,20,20	0
54	MG	1A	3907	1/1	0.98	0.15	21,21,21,21	0
54	MG	2A	3609	1/1	0.98	0.05	60,60,60,60	0
54	MG	1A	3677	1/1	0.98	0.08	49,49,49,49	0
54	MG	1A	3216	1/1	0.98	0.22	24,24,24,24	0
54	MG	1A	3047	1/1	0.98	0.14	15,15,15,15	0
54	MG	1A	3422	1/1	0.98	0.20	59,59,59,59	0
54	MG	1A	3158	1/1	0.98	0.31	31,31,31,31	0
54	MG	1A	3324	1/1	0.98	0.20	35,35,35,35	0
54	MG	1A	3092	1/1	0.98	0.28	32,32,32,32	0
54	MG	1A	3018	1/1	0.98	0.24	25,25,25,25	0
54	MG	2A	3004	1/1	0.98	0.19	34,34,34,34	0
54	MG	2A	3358	1/1	0.98	0.15	35,35,35,35	0
54	MG	1a	3004	1/1	0.98	0.09	52,52,52,52	0
54	MG	1A	3374	1/1	0.98	0.09	46,46,46,46	0
54	MG	1A	3161	1/1	0.98	0.25	30,30,30,30	0
54	MG	1A	3135	1/1	0.98	0.24	25,25,25,25	0
54	MG	2A	3010	1/1	0.98	0.09	57,57,57,57	0
54	MG	2A	3625	1/1	0.98	0.09	52,52,52,52	0
54	MG	1a	3208	1/1	0.98	0.19	56,56,56,56	0
54	MG	1A	3377	1/1	0.98	0.19	9,9,9,9	0
54	MG	1A	3762	1/1	0.98	0.34	30,30,30,30	0
54	MG	1A	3291	1/1	0.98	0.21	13,13,13,13	0
54	MG	2a	3094	1/1	0.98	0.31	53,53,53,53	0
54	MG	1A	3379	1/1	0.98	0.18	19,19,19,19	0
54	MG	2a	3096	1/1	0.98	0.47	58,58,58,58	0
54	MG	1A	3620	1/1	0.98	0.20	28,28,28,28	0
54	MG	1A	3844	1/1	0.98	0.21	18,18,18,18	0
54	MG	2E	306	1/1	0.98	0.28	57,57,57,57	0
54	MG	1A	3380	1/1	0.98	0.16	13,13,13,13	0
54	MG	1A	3256	1/1	0.98	0.34	31,31,31,31	0
54	MG	1A	4011	1/1	0.98	0.26	38,38,38,38	0
54	MG	2A	3374	1/1	0.98	0.19	36,36,36,36	0
54	MG	1A	3555	1/1	0.98	0.12	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3003	1/1	0.98	0.21	20,20,20,20	0
54	MG	1A	3332	1/1	0.98	0.15	24,24,24,24	0
54	MG	1A	3558	1/1	0.98	0.09	32,32,32,32	0
54	MG	1A	3698	1/1	0.98	0.24	37,37,37,37	0
54	MG	1A	3095	1/1	0.98	0.18	26,26,26,26	0
54	MG	1A	3015	1/1	0.98	0.17	27,27,27,27	0
54	MG	1A	3630	1/1	0.98	0.17	19,19,19,19	0
54	MG	2A	3029	1/1	0.98	0.23	39,39,39,39	0
54	MG	2A	3030	1/1	0.98	0.20	36,36,36,36	0
54	MG	2a	3114	1/1	0.98	0.17	69,69,69,69	0
54	MG	1A	3006	1/1	0.98	0.16	21,21,21,21	0
54	MG	2A	3515	1/1	0.98	0.16	37,37,37,37	0
54	MG	2a	3117	1/1	0.98	0.12	54,54,54,54	0
54	MG	1a	3123	1/1	0.98	0.20	55,55,55,55	0
54	MG	2A	3651	1/1	0.98	0.18	26,26,26,26	0
54	MG	1A	3440	1/1	0.98	0.20	19,19,19,19	0
54	MG	1A	3336	1/1	0.98	0.24	9,9,9,9	0
54	MG	1A	3500	1/1	0.98	0.22	23,23,23,23	0
54	MG	1A	3140	1/1	0.98	0.13	18,18,18,18	0
54	MG	1R	201	1/1	0.98	0.20	34,34,34,34	0
54	MG	1A	3228	1/1	0.98	0.24	30,30,30,30	0
54	MG	1A	3029	1/1	0.98	0.22	37,37,37,37	0
54	MG	1a	3235	1/1	0.98	0.20	51,51,51,51	0
54	MG	2A	3041	1/1	0.98	0.20	25,25,25,25	0
54	MG	1A	3142	1/1	0.98	0.11	31,31,31,31	0
54	MG	2W	201	1/1	0.98	0.78	47,47,47,47	0
54	MG	2A	3662	1/1	0.98	0.16	50,50,50,50	0
54	MG	1A	3231	1/1	0.98	0.30	30,30,30,30	0
54	MG	2a	3133	1/1	0.98	0.09	62,62,62,62	0
54	MG	1a	3134	1/1	0.98	0.16	36,36,36,36	0
54	MG	1A	3944	1/1	0.98	0.19	40,40,40,40	0
54	MG	1A	3013	1/1	0.98	0.23	20,20,20,20	0
54	MG	1A	3171	1/1	0.98	0.11	36,36,36,36	0
54	MG	1A	3023	1/1	0.98	0.26	27,27,27,27	0
54	MG	1A	3032	1/1	0.98	0.19	48,48,48,48	0
54	MG	1A	3204	1/1	0.98	0.21	31,31,31,31	0
54	MG	2A	3279	1/1	0.98	0.29	51,51,51,51	0
54	MG	1A	3347	1/1	0.98	0.21	18,18,18,18	0
54	MG	1A	3453	1/1	0.98	0.20	12,12,12,12	0
54	MG	1A	3146	1/1	0.98	0.52	28,28,28,28	0
54	MG	1a	3144	1/1	0.98	0.24	34,34,34,34	0
54	MG	2A	3676	1/1	0.98	0.14	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1U	206	1/1	0.98	0.44	26,26,26,26	0
54	MG	1A	3238	1/1	0.98	0.24	24,24,24,24	0
54	MG	1A	3350	1/1	0.98	0.22	11,11,11,11	0
54	MG	1a	3148	1/1	0.98	0.24	45,45,45,45	0
54	MG	2a	3151	1/1	0.98	0.12	51,51,51,51	0
54	MG	1a	3253	1/1	0.98	0.19	50,50,50,50	0
54	MG	1A	3309	1/1	0.98	0.23	27,27,27,27	0
54	MG	1V	201	1/1	0.98	0.53	26,26,26,26	0
54	MG	2A	3291	1/1	0.98	0.34	49,49,49,49	0
54	MG	1A	3517	1/1	0.98	0.17	25,25,25,25	0
54	MG	1V	203	1/1	0.98	0.21	37,37,37,37	0
54	MG	1A	3458	1/1	0.98	0.17	23,23,23,23	0
54	MG	1A	3352	1/1	0.98	0.16	28,28,28,28	0
54	MG	1A	3878	1/1	0.98	0.12	40,40,40,40	0
54	MG	1A	3725	1/1	0.98	0.12	36,36,36,36	0
54	MG	1A	3880	1/1	0.98	0.24	22,22,22,22	0
54	MG	2a	3163	1/1	0.98	0.15	53,53,53,53	0
54	MG	1A	3460	1/1	0.98	0.22	46,46,46,46	0
54	MG	2A	3070	1/1	0.98	0.22	30,30,30,30	0
54	MG	1A	3964	1/1	0.98	0.10	42,42,42,42	0
54	MG	1D	303	1/1	0.98	0.17	45,45,45,45	0
54	MG	1A	3727	1/1	0.98	0.11	26,26,26,26	0
54	MG	2A	3304	1/1	0.98	0.26	20,20,20,20	0
54	MG	2A	3305	1/1	0.98	0.16	47,47,47,47	0
54	MG	2A	3306	1/1	0.98	0.23	30,30,30,30	0
54	MG	1A	3042	1/1	0.98	0.14	20,20,20,20	0
54	MG	2A	3308	1/1	0.98	0.10	39,39,39,39	0
54	MG	2A	3309	1/1	0.98	0.13	61,61,61,61	0
54	MG	2A	3566	1/1	0.98	0.20	24,24,24,24	0
54	MG	1A	3522	1/1	0.98	0.20	18,18,18,18	0
54	MG	1D	307	1/1	0.98	0.20	9,9,9,9	0
54	MG	1a	3063	1/1	0.98	0.25	64,64,64,64	0
54	MG	2A	3707	1/1	0.98	0.30	51,51,51,51	0
54	MG	1A	3523	1/1	0.98	0.20	19,19,19,19	0
54	MG	2a	3032	1/1	0.98	0.28	54,54,54,54	0
54	MG	1D	309	1/1	0.98	0.14	27,27,27,27	0
54	MG	1A	3731	1/1	0.98	0.17	26,26,26,26	0
54	MG	2A	3573	1/1	0.98	0.09	55,55,55,55	0
54	MG	1A	3806	1/1	0.98	0.14	48,48,48,48	0
54	MG	1A	3354	1/1	0.98	0.28	29,29,29,29	0
54	MG	1A	3311	1/1	0.98	0.38	38,38,38,38	0
54	MG	1a	3172	1/1	0.98	0.10	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3592	1/1	0.98	0.19	50,50,50,50	0
54	MG	2A	3717	1/1	0.98	0.07	70,70,70,70	0
54	MG	1A	3974	1/1	0.98	0.15	27,27,27,27	0
54	MG	2A	3449	1/1	0.98	0.14	33,33,33,33	0
54	MG	1A	3104	1/1	0.98	0.32	28,28,28,28	0
54	MG	2A	3721	1/1	0.98	0.17	38,38,38,38	0
54	MG	11	103	1/1	0.98	0.16	46,46,46,46	0
56	TEL	1A	4019	58/58	0.98	0.22	12,21,26,26	0
54	MG	1A	3527	1/1	0.98	0.17	14,14,14,14	0
54	MG	1E	301	1/1	0.98	0.34	36,36,36,36	0
54	MG	1A	3043	1/1	0.98	0.17	16,16,16,16	0
54	MG	1A	3466	1/1	0.98	0.16	19,19,19,19	0
54	MG	2A	3456	1/1	0.98	0.12	49,49,49,49	0
54	MG	13	103	1/1	0.98	0.18	37,37,37,37	0
54	MG	2A	3458	1/1	0.98	0.13	56,56,56,56	0
54	MG	1A	3467	1/1	0.98	0.14	53,53,53,53	0
54	MG	1A	3086	1/1	0.98	0.53	38,38,38,38	0
54	MG	2A	3097	1/1	0.98	0.07	59,59,59,59	0
54	MG	1A	3151	1/1	0.98	0.52	37,37,37,37	0
54	MG	1A	3470	1/1	0.98	0.14	37,37,37,37	0
59	ZN	15	109	1/1	0.98	0.17	32,32,32,32	0
59	ZN	1n	103	1/1	0.98	0.08	66,66,66,66	0
54	MG	15	104	1/1	0.98	0.26	27,27,27,27	0
54	MG	1A	3058	1/1	0.98	0.28	21,21,21,21	0
59	ZN	25	105	1/1	0.98	0.18	48,48,48,48	0
54	MG	1A	3044	1/1	0.98	0.27	22,22,22,22	0
54	MG	1A	3362	1/1	0.98	0.17	19,19,19,19	0
60	SF4	1d	307	8/8	0.98	0.15	58,61,69,69	0
54	MG	2A	3629	1/1	0.99	0.14	47,47,47,47	0
54	MG	1T	204	1/1	0.99	0.13	42,42,42,42	0
54	MG	1A	3407	1/1	0.99	0.20	19,19,19,19	0
54	MG	1A	3961	1/1	0.99	0.12	61,61,61,61	0
54	MG	2A	3325	1/1	0.99	0.17	27,27,27,27	0
54	MG	2A	3072	1/1	0.99	0.18	23,23,23,23	0
54	MG	1A	3418	1/1	0.99	0.23	22,22,22,22	0
54	MG	1A	3389	1/1	0.99	0.19	19,19,19,19	0
54	MG	1A	3658	1/1	0.99	0.15	56,56,56,56	0
54	MG	1A	3373	1/1	0.99	0.11	21,21,21,21	0
54	MG	1A	3560	1/1	0.99	0.07	46,46,46,46	0
54	MG	1A	3814	1/1	0.99	0.12	39,39,39,39	0
54	MG	1A	3105	1/1	0.99	0.23	30,30,30,30	0
54	MG	2A	3007	1/1	0.99	0.22	40,40,40,40	0

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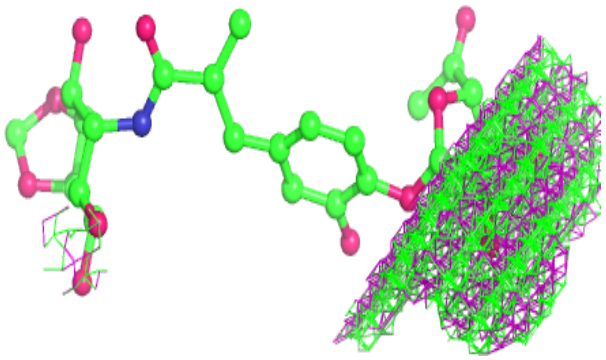
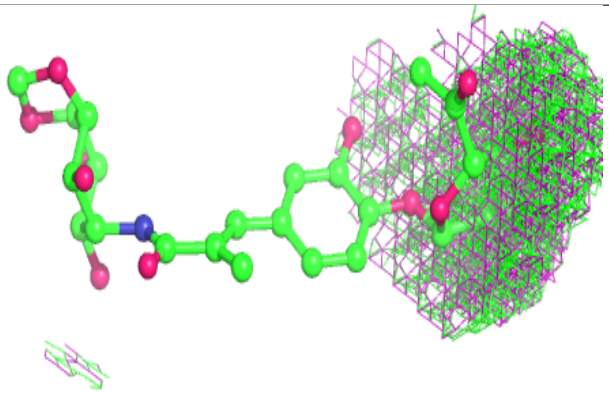
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3588	1/1	0.99	0.18	22,22,22,22	0
54	MG	1A	3477	1/1	0.99	0.14	34,34,34,34	0
54	MG	1A	3114	1/1	0.99	0.31	27,27,27,27	0
54	MG	1a	3131	1/1	0.99	0.25	37,37,37,37	0
54	MG	1A	3368	1/1	0.99	0.12	29,29,29,29	0
54	MG	1A	3666	1/1	0.99	0.09	32,32,32,32	0
54	MG	1A	3290	1/1	0.99	0.18	17,17,17,17	0
54	MG	2A	3263	1/1	0.99	0.27	19,19,19,19	0
59	ZN	16	501	1/1	0.99	0.22	41,41,41,41	0
59	ZN	19	103	1/1	0.99	0.18	40,40,40,40	0
54	MG	1A	3180	1/1	0.99	0.20	30,30,30,30	0
54	MG	1F	304	1/1	0.99	0.39	33,33,33,33	0
54	MG	1A	3622	1/1	0.99	0.27	25,25,25,25	0
54	MG	1A	3172	1/1	0.99	0.31	29,29,29,29	0
59	ZN	26	501	1/1	0.99	0.13	56,56,56,56	0
54	MG	1A	3825	1/1	0.99	0.17	19,19,19,19	0
54	MG	1A	3096	1/1	0.99	0.23	15,15,15,15	0
54	MG	2A	3376	1/1	0.99	0.18	43,43,43,43	0
60	SF4	2d	501	8/8	0.99	0.13	65,70,82,82	0
54	MG	1A	3045	1/1	1.00	0.16	8,8,8,8	0

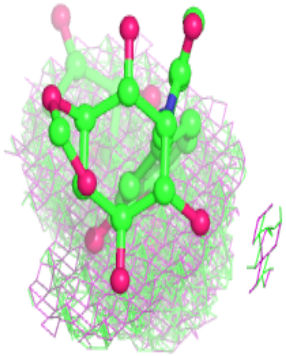
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around HGR 2A 3738:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

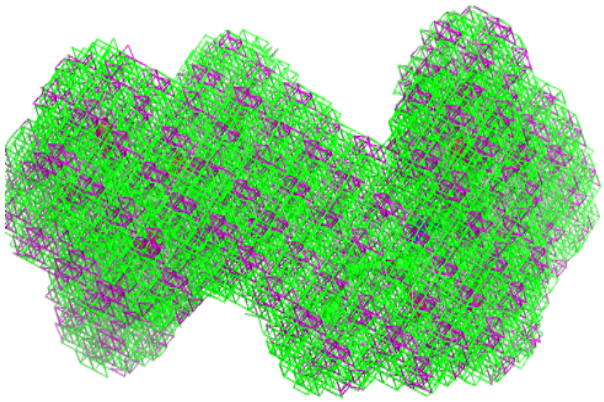


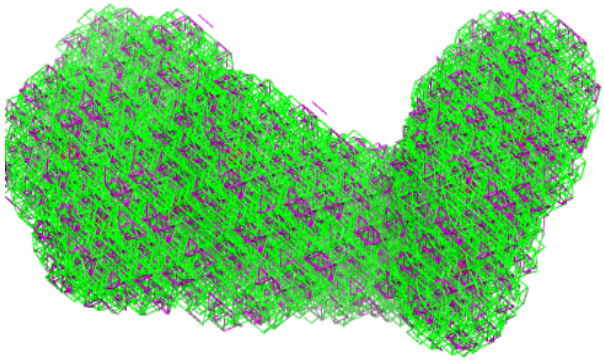


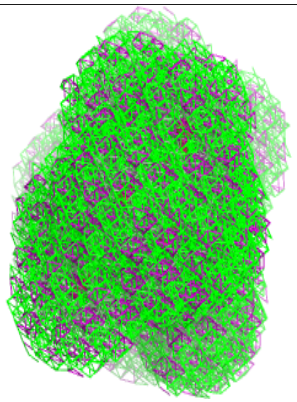


Electron density around HGR 1A 4018:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

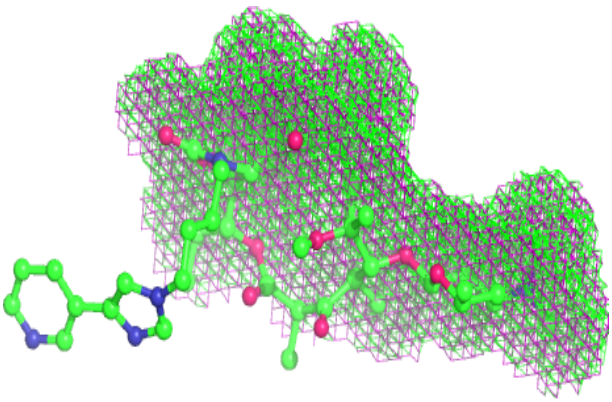


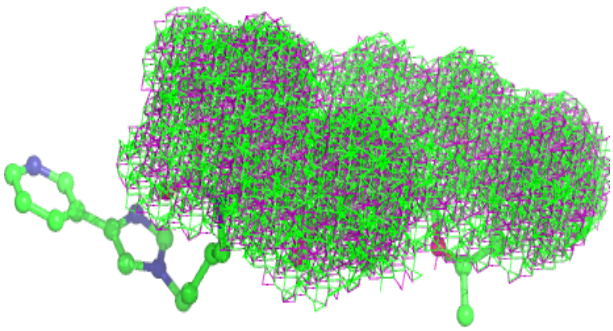


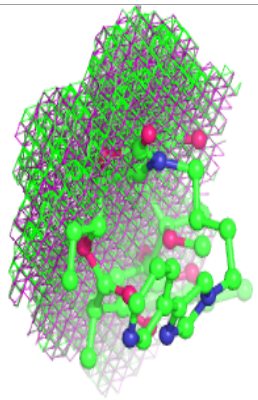


Electron density around TEL 2A 3739:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

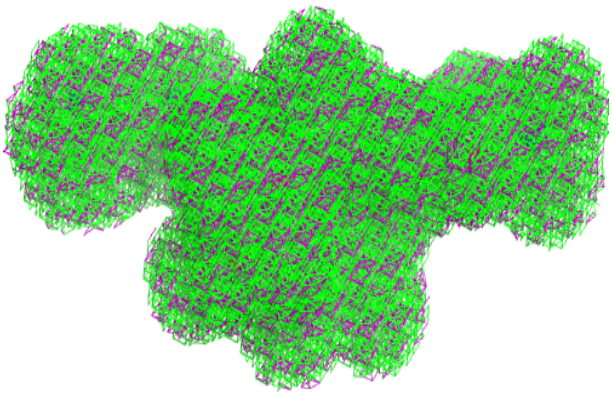


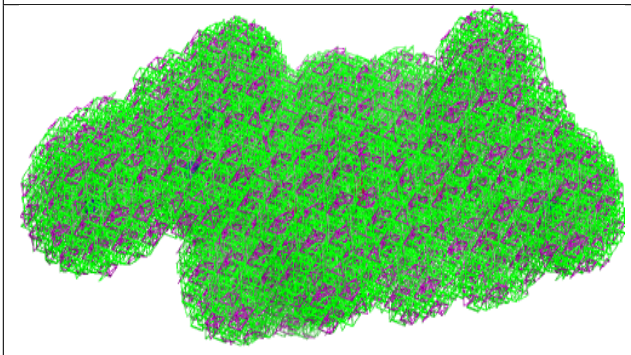


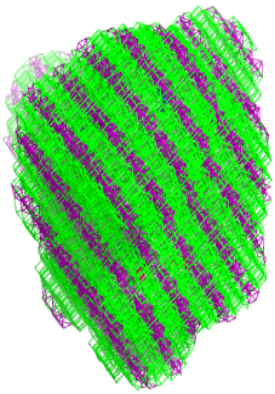


Electron density around TEL 1A 4019:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)







6.5 Other polymers (i)

There are no such residues in this entry.