Full wwPDB X-ray Structure Validation Report ⓘ

Jul 18, 2023 – 12:21 AM EDT

PDB ID	:	8FC5
Title	:	Crystal structure of the A2058-N6-dimethylated Thermus thermophilus 70S ribosome in complex with protein Y, hygromycin A, and azithromycin at 2.65A resolution
Authors	:	Chen, C.-W.; Syroegin, E.A.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on	:	2022-12-01
Resolution	:	2.65 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:

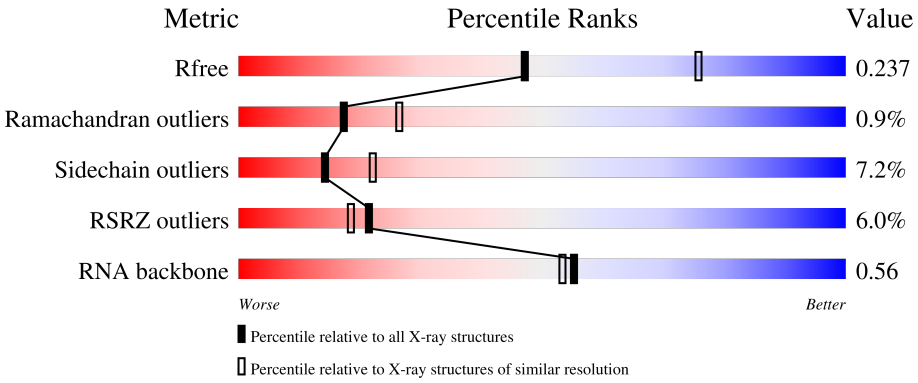
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.34
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.34

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 2.65 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	1332 (2.68-2.64)
Ramachandran outliers	138981	1349 (2.68-2.64)
Sidechain outliers	138945	1349 (2.68-2.64)
RSRZ outliers	127900	1318 (2.68-2.64)
RNA backbone	3102	1010 (2.96-2.36)

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	2% 83% 15%
1	2A	2915	3% 81% 17%
2	1B	121	88% 12%
2	2B	121	87% 12%

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Mol	Chain	Length	Quality of chain
3	1D	276	94% 6%
3	2D	276	6% 94% 6%
4	1E	206	95%
4	2E	206	3% 94% 5%
5	1F	210	92%
5	2F	210	91% 6%
6	1G	182	89% 10%
6	2G	182	27% 88% 12%
7	1H	180	92%
7	2H	180	11% 86% 9%
8	1I	148	93% 7%
8	2I	148	7% 89% 9%
9	1N	140	91% 9%
9	2N	140	91% 9%
10	1O	122	98%
10	2O	122	97%
11	1P	150	92% 7%
11	2P	150	5% 95% 5%
12	1Q	141	94% 6%
12	2Q	141	6% 94% 6%
13	1R	118	94% 6%
13	2R	118	93% 7%
14	1S	112	90% 8%
14	2S	112	16% 91% 7%
15	1T	146	86% 10%

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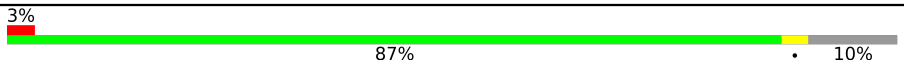
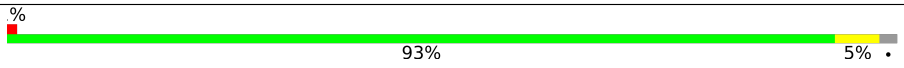
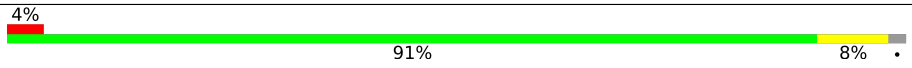
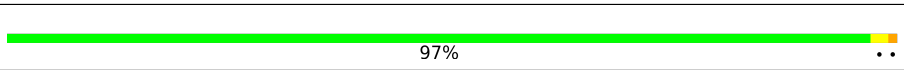
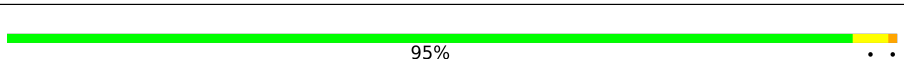
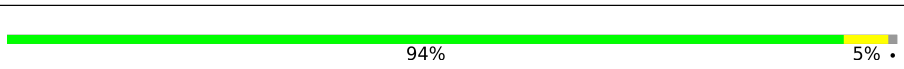
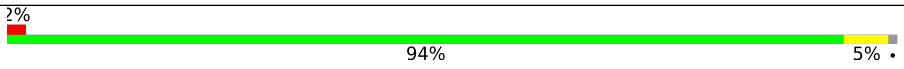
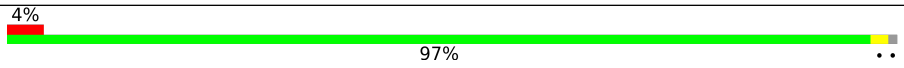
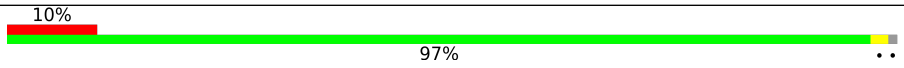
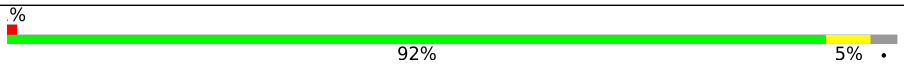
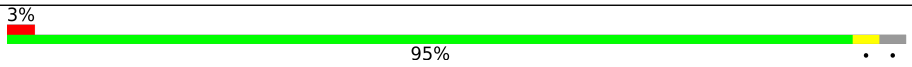
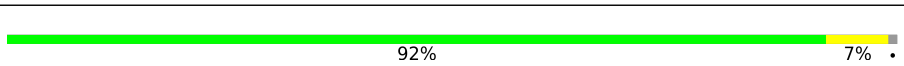
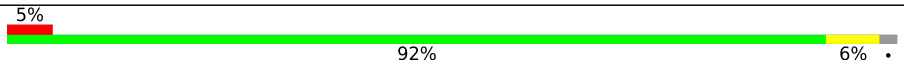
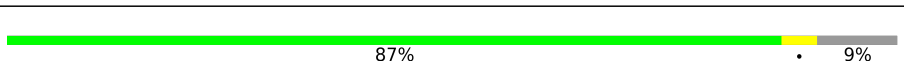
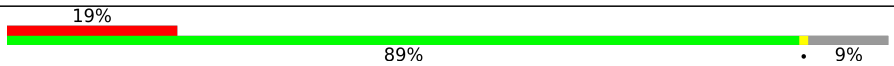
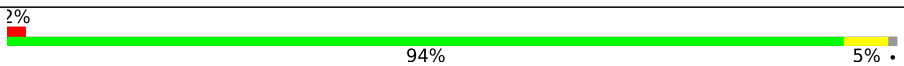
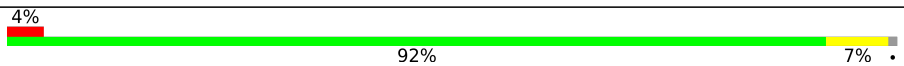
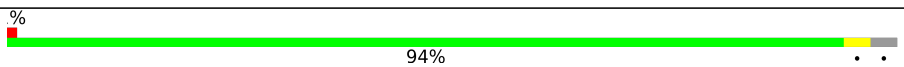
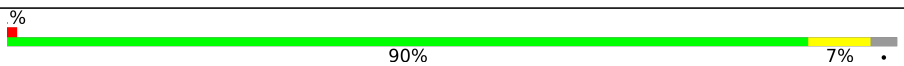
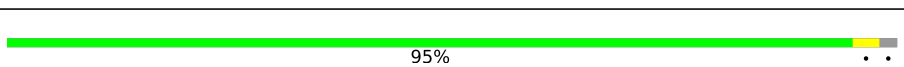
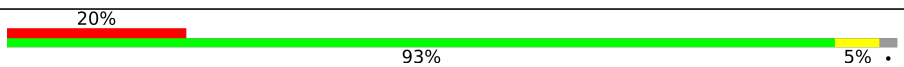
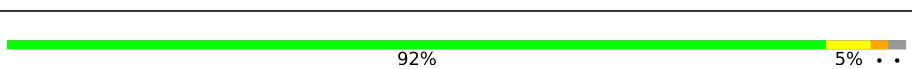
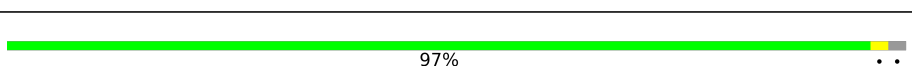
Mol	Chain	Length	Quality of chain
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	
27	25	60	

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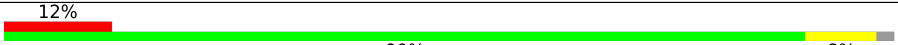
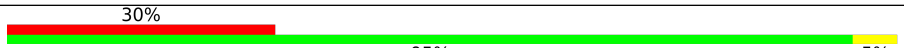
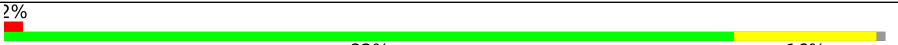
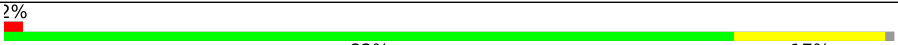
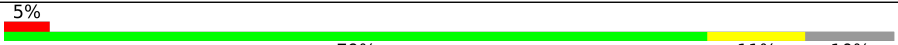
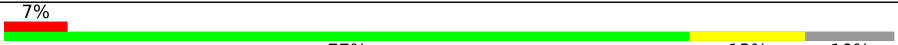
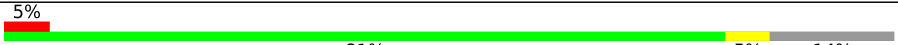
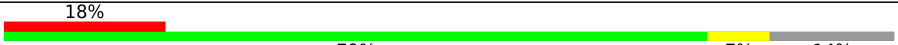
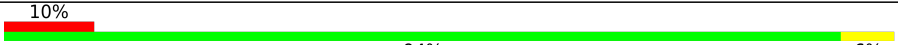
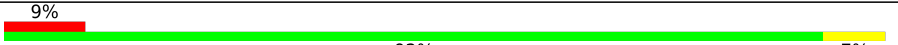
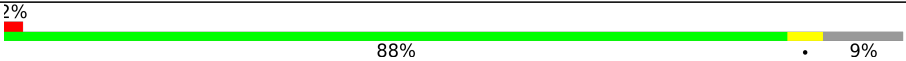
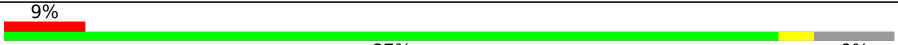
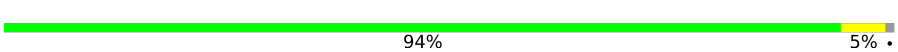
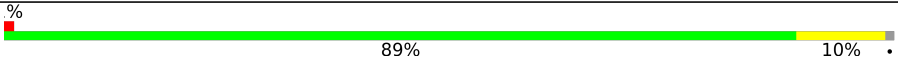
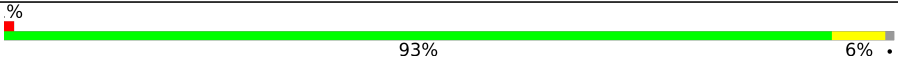
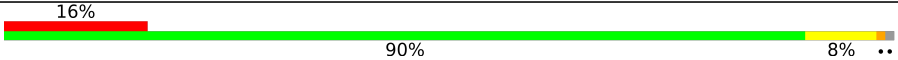
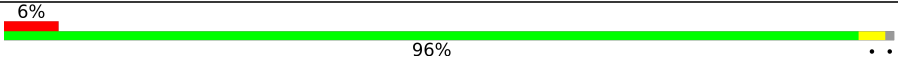
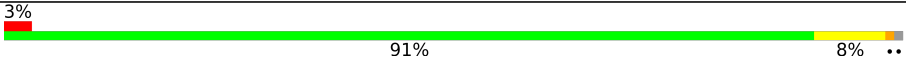
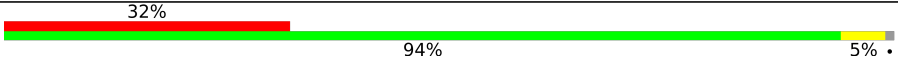
Mol	Chain	Length	Quality of chain
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	

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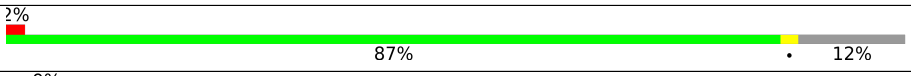
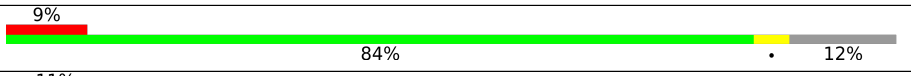
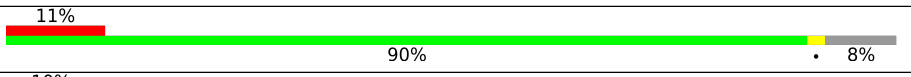
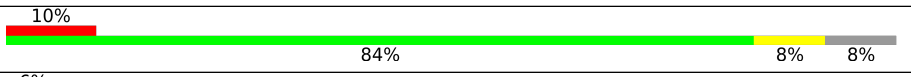
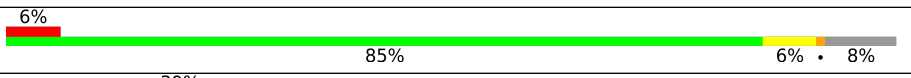
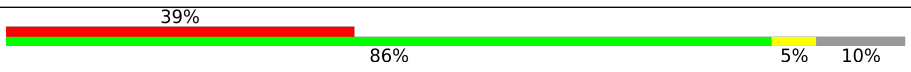
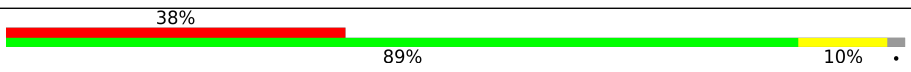
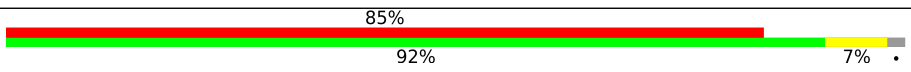
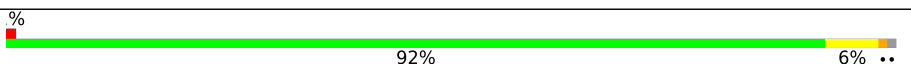
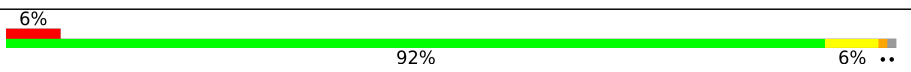
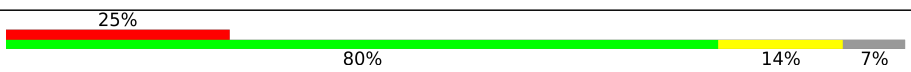
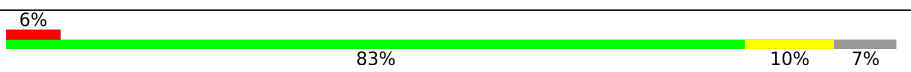
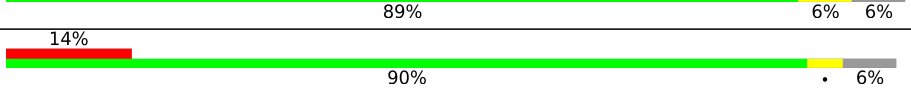
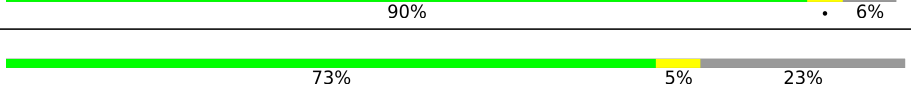
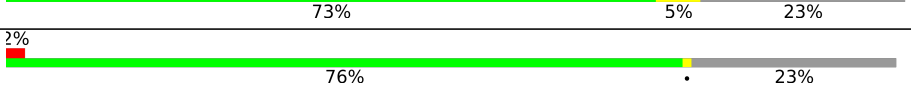
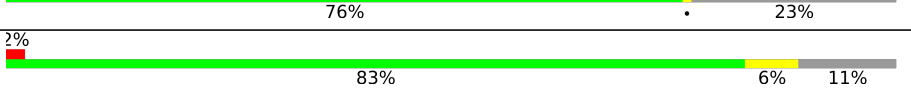
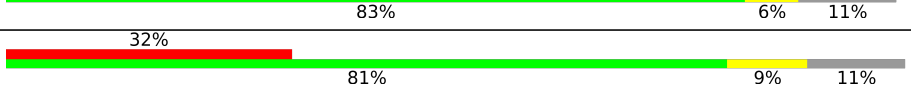
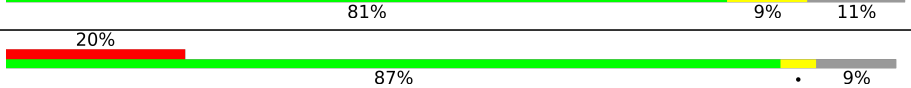
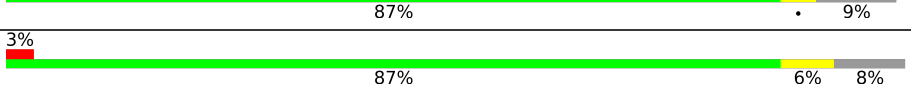
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	

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Mol	Chain	Length	Quality of chain
53	1y	113	9% 85% 14%
53	2y	113	53% 78% 7% 15%

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	3241	-	-	-	X
54	MG	1A	3313	-	-	-	X
54	MG	1A	3318	-	-	-	X
54	MG	1A	3319	-	-	-	X
54	MG	1A	3601	-	-	-	X
54	MG	1A	3631	-	-	-	X
54	MG	1A	3659	-	-	-	X
54	MG	1A	3680	-	-	-	X
54	MG	1A	3685	-	-	-	X
54	MG	1A	3797	-	-	-	X
54	MG	1a	1657	-	-	-	X
54	MG	1a	1685	-	-	-	X
54	MG	1a	1869	-	-	-	X
54	MG	2A	3012	-	-	-	X
54	MG	2A	3162	-	-	-	X
54	MG	2A	3187	-	-	-	X
54	MG	2A	3203	-	-	-	X
54	MG	2A	3234	-	-	-	X
54	MG	2a	3056	-	-	-	X
54	MG	2a	3085	-	-	-	X
54	MG	2a	3113	-	-	-	X

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 296864 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
			61871	27542	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61759	27492	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	1031	Total 1031	Mg 1031	0	0
54	1B	29	Total 29	Mg 29	0	0
54	1D	18	Total 18	Mg 18	0	0
54	1E	10	Total 10	Mg 10	0	0
54	1F	18	Total 18	Mg 18	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	7	Total 7	Mg 7	0	0
54	1Q	5	Total 5	Mg 5	0	0
54	1R	5	Total 5	Mg 5	0	0
54	1S	1	Total 1	Mg 1	0	0
54	1T	6	Total 6	Mg 6	0	0
54	1U	7	Total 7	Mg 7	0	0
54	1V	4	Total 4	Mg 4	0	0
54	1W	4	Total 4	Mg 4	0	0
54	1X	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1Y	1	Total Mg 1 1	0	0
54	1Z	1	Total Mg 1 1	0	0
54	10	6	Total Mg 6 6	0	0
54	11	5	Total Mg 5 5	0	0
54	13	3	Total Mg 3 3	0	0
54	15	8	Total Mg 8 8	0	0
54	17	7	Total Mg 7 7	0	0
54	18	2	Total Mg 2 2	0	0
54	19	3	Total Mg 3 3	0	0
54	1a	281	Total Mg 281 281	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	2	Total Mg 2 2	0	0
54	1e	3	Total Mg 3 3	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	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	3	Total Mg 3 3	0	0
54	1o	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1t	1	Total Mg 1 1	0	0
54	1u	1	Total Mg 1 1	0	0
54	1y	3	Total Mg 3 3	0	0
54	2A	711	Total Mg 711 711	0	0
54	2B	18	Total Mg 18 18	0	0
54	2D	9	Total Mg 9 9	0	0
54	2E	5	Total Mg 5 5	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	2	Total Mg 2 2	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	1	Total Mg 1 1	0	0
54	2Q	3	Total Mg 3 3	0	0
54	2R	1	Total Mg 1 1	0	0
54	2T	3	Total Mg 3 3	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	2Y	1	Total Mg 1 1	0	0
54	20	1	Total Mg 1 1	0	0

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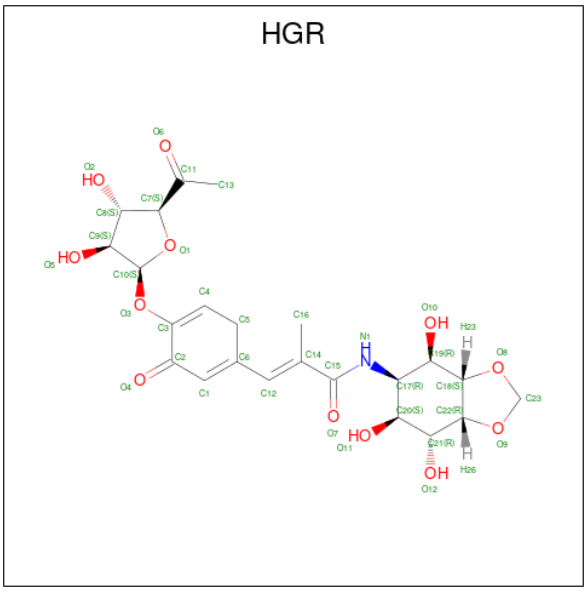
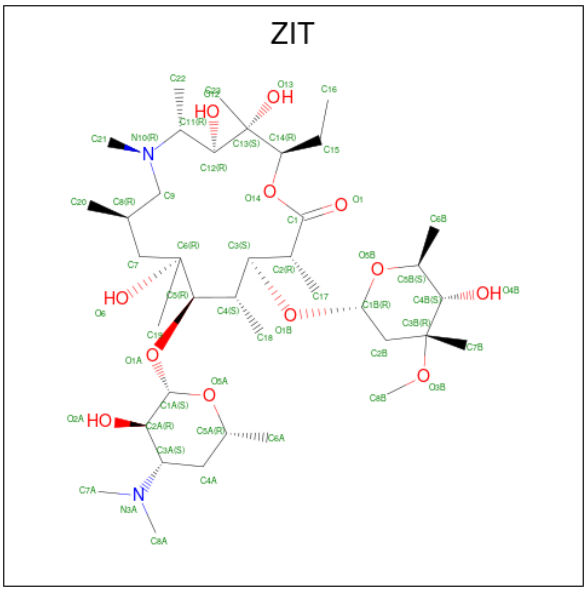
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	21	1	Total Mg 1 1	0	0
54	23	1	Total Mg 1 1	0	0
54	25	1	Total Mg 1 1	0	0
54	27	1	Total Mg 1 1	0	0
54	28	2	Total Mg 2 2	0	0
54	2a	182	Total Mg 182 182	0	0
54	2e	2	Total Mg 2 2	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2l	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

- 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 AZITHROMYCIN (three-letter code: ZIT) (formula: $C_{38}H_{72}N_2O_{12}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
56	1A	1	Total	C	N	O	0	0
			52	38	2	12		

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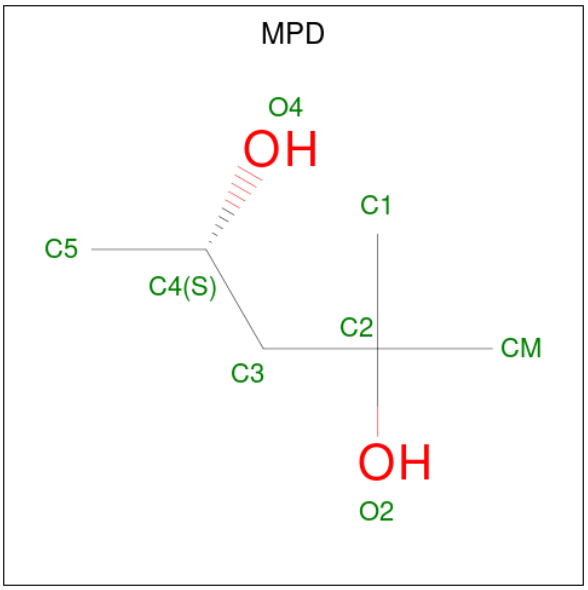
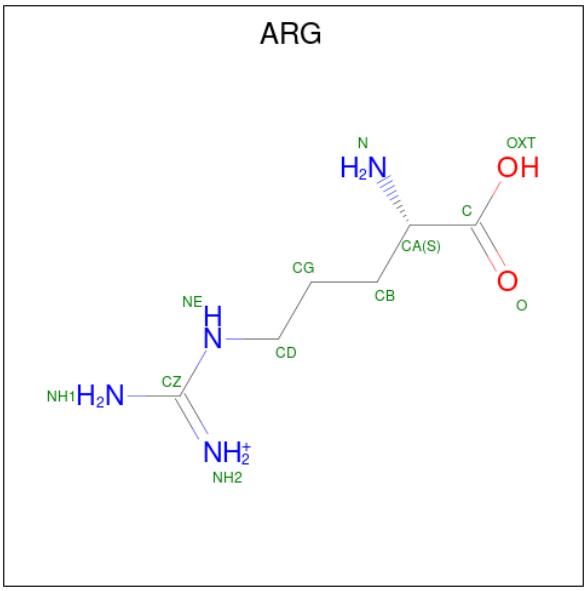
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
56	2A	1	Total	C	N	O	0	0
			52	38	2	12		

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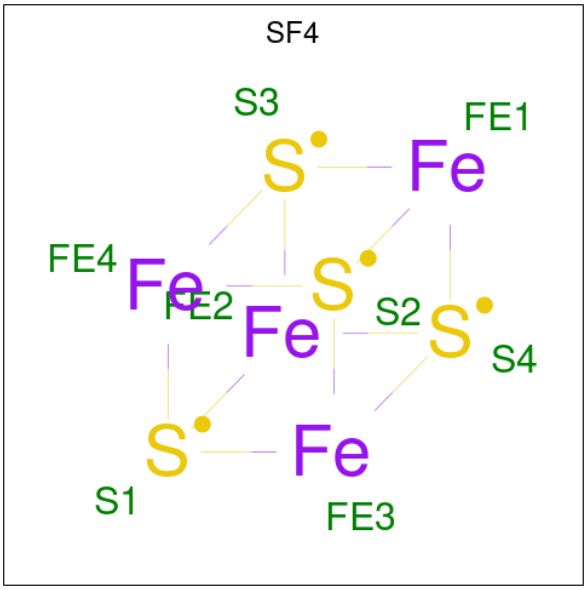
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- 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	3571	Total O 3571 3571	0	0
61	1B	89	Total O 89 89	0	0
61	1D	109	Total O 109 109	0	0
61	1E	68	Total O 68 68	0	0
61	1F	61	Total O 61 61	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	10	Total O 10 10	0	0
61	1H	15	Total O 15 15	0	0
61	1I	4	Total O 4 4	0	0
61	1N	46	Total O 46 46	0	0
61	1O	17	Total O 17 17	0	0
61	1P	53	Total O 53 53	0	0
61	1Q	30	Total O 30 30	0	0
61	1R	29	Total O 29 29	0	0
61	1S	7	Total O 7 7	0	0
61	1T	32	Total O 32 32	0	0
61	1U	38	Total O 38 38	0	0
61	1V	26	Total O 26 26	0	0
61	1W	28	Total O 28 28	0	0
61	1X	23	Total O 23 23	0	0
61	1Y	13	Total O 13 13	0	0
61	1Z	9	Total O 9 9	0	0
61	10	19	Total O 19 19	0	0
61	11	17	Total O 17 17	0	0
61	12	11	Total O 11 11	0	0
61	13	20	Total O 20 20	0	0
61	15	28	Total O 28 28	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	16	12	Total O 12 12	0	0
61	17	12	Total O 12 12	0	0
61	18	24	Total O 24 24	0	0
61	19	3	Total O 3 3	0	0
61	1a	388	Total O 388 388	0	0
61	1d	9	Total O 9 9	0	0
61	1f	1	Total O 1 1	0	0
61	1h	2	Total O 2 2	0	0
61	1j	1	Total O 1 1	0	0
61	1l	2	Total O 2 2	0	0
61	1m	1	Total O 1 1	0	0
61	1n	2	Total O 2 2	0	0
61	1o	1	Total O 1 1	0	0
61	1p	3	Total O 3 3	0	0
61	1u	1	Total O 1 1	0	0
61	1y	3	Total O 3 3	0	0
61	2A	2161	Total O 2161 2161	0	0
61	2B	48	Total O 48 48	0	0
61	2D	43	Total O 43 43	0	0
61	2E	22	Total O 22 22	0	0
61	2F	25	Total O 25 25	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2G	1	Total O 1 1	0	0
61	2H	1	Total O 1 1	0	0
61	2I	1	Total O 1 1	0	0
61	2N	5	Total O 5 5	0	0
61	2O	17	Total O 17 17	0	0
61	2P	20	Total O 20 20	0	0
61	2Q	19	Total O 19 19	0	0
61	2R	15	Total O 15 15	0	0
61	2S	4	Total O 4 4	0	0
61	2T	11	Total O 11 11	0	0
61	2U	15	Total O 15 15	0	0
61	2V	3	Total O 3 3	0	0
61	2W	16	Total O 16 16	0	0
61	2X	6	Total O 6 6	0	0
61	2Y	2	Total O 2 2	0	0
61	2Z	6	Total O 6 6	0	0
61	20	5	Total O 5 5	0	0
61	21	14	Total O 14 14	0	0
61	23	3	Total O 3 3	0	0
61	25	8	Total O 8 8	0	0
61	26	3	Total O 3 3	0	0

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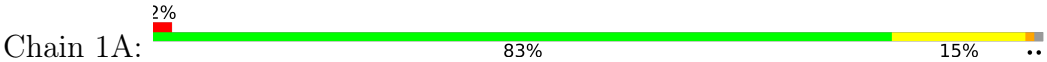
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	27	5	Total O 5 5	0	0
61	28	8	Total O 8 8	0	0
61	29	1	Total O 1 1	0	0
61	2a	394	Total O 394 394	0	0
61	2d	4	Total O 4 4	0	0
61	2e	2	Total O 2 2	0	0
61	2f	1	Total O 1 1	0	0
61	2j	2	Total O 2 2	0	0
61	2l	4	Total O 4 4	0	0
61	2n	1	Total O 1 1	0	0
61	2o	3	Total O 3 3	0	0
61	2p	3	Total O 3 3	0	0
61	2q	1	Total O 1 1	0	0
61	2r	5	Total O 5 5	0	0
61	2t	2	Total O 2 2	0	0
61	2y	2	Total O 2 2	0	0

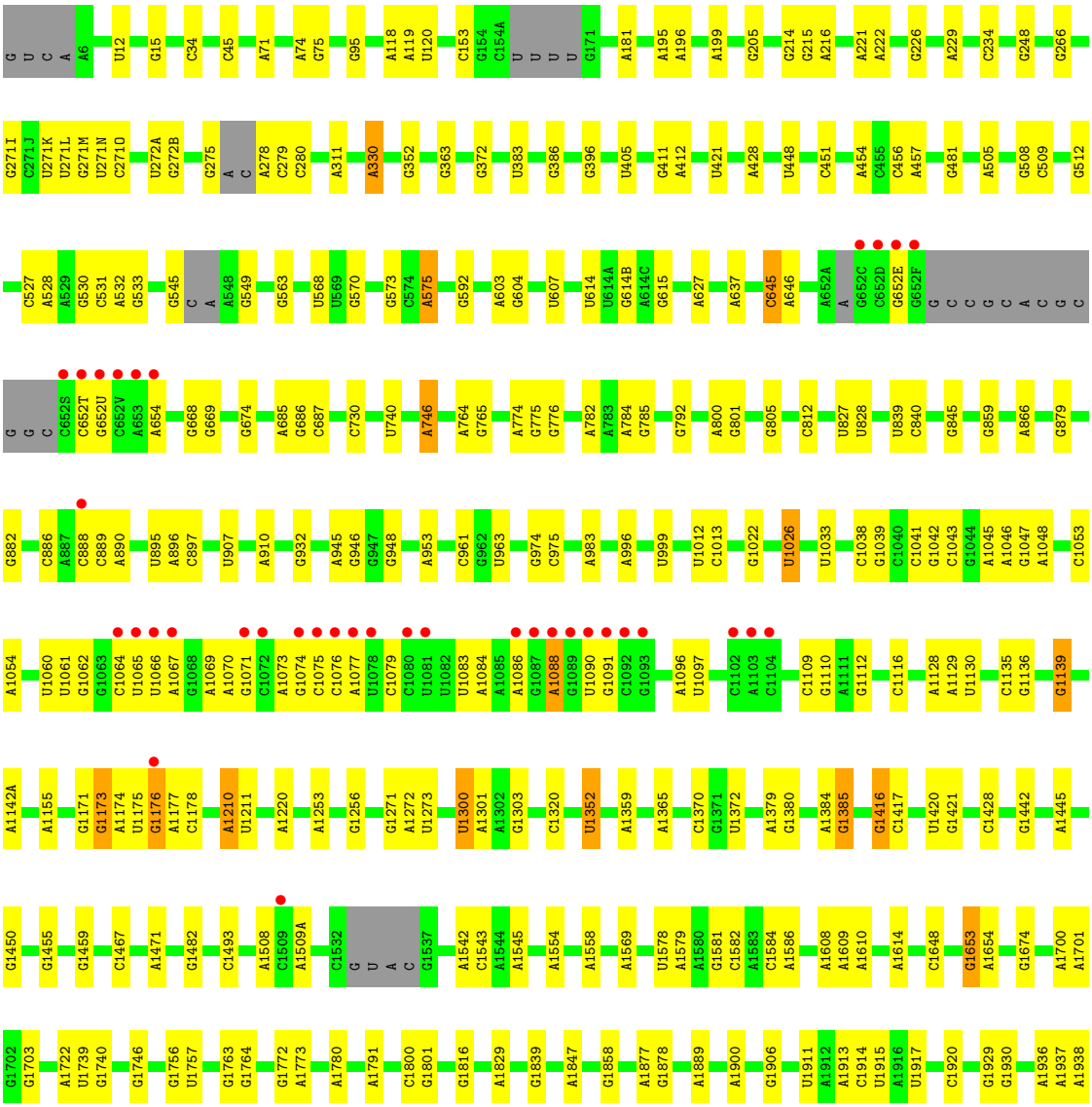
3 Residue-property plots (i)

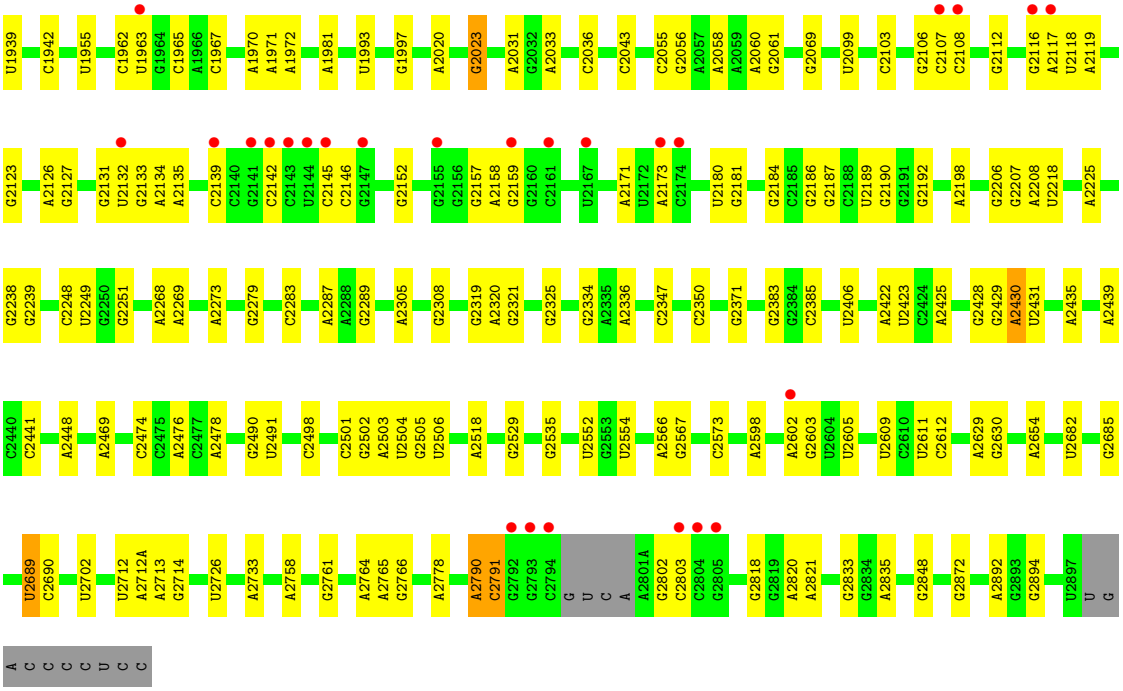
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

• Molecule 1: 23S Ribosomal RNA

Chain 1A:

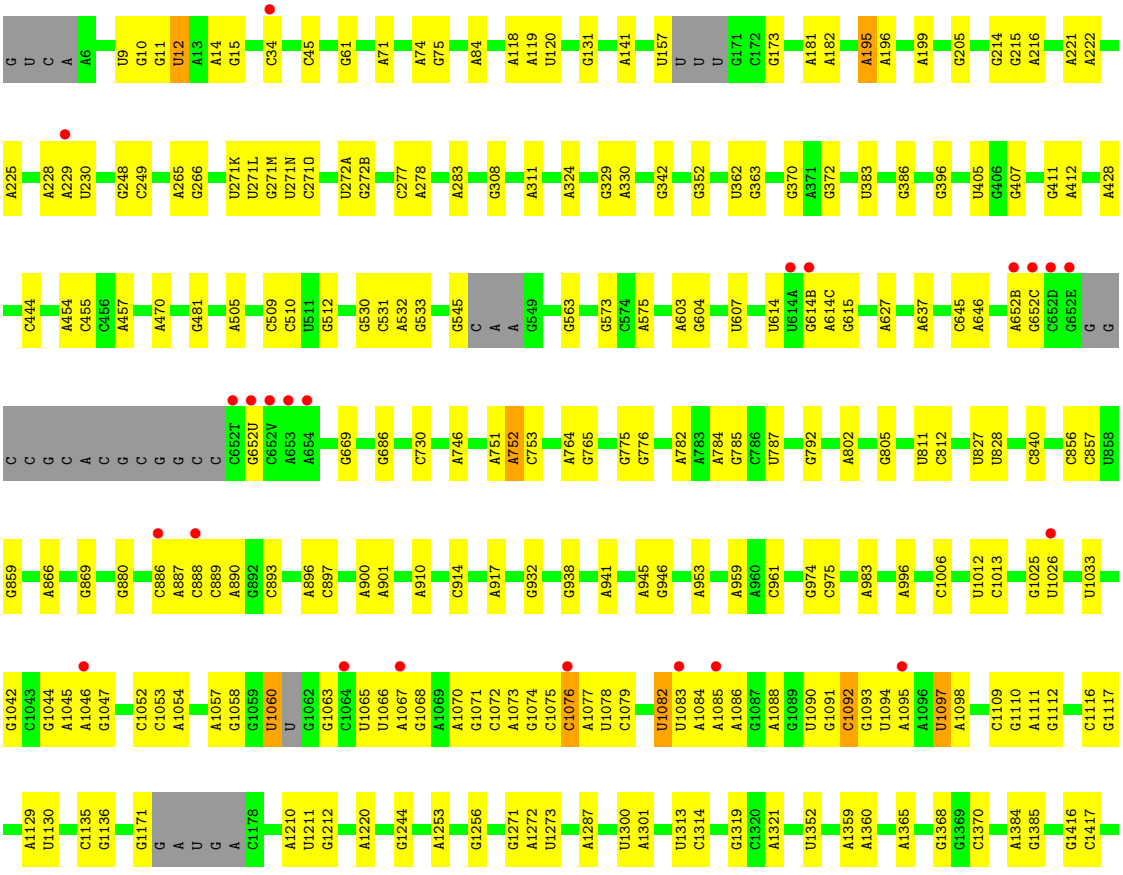


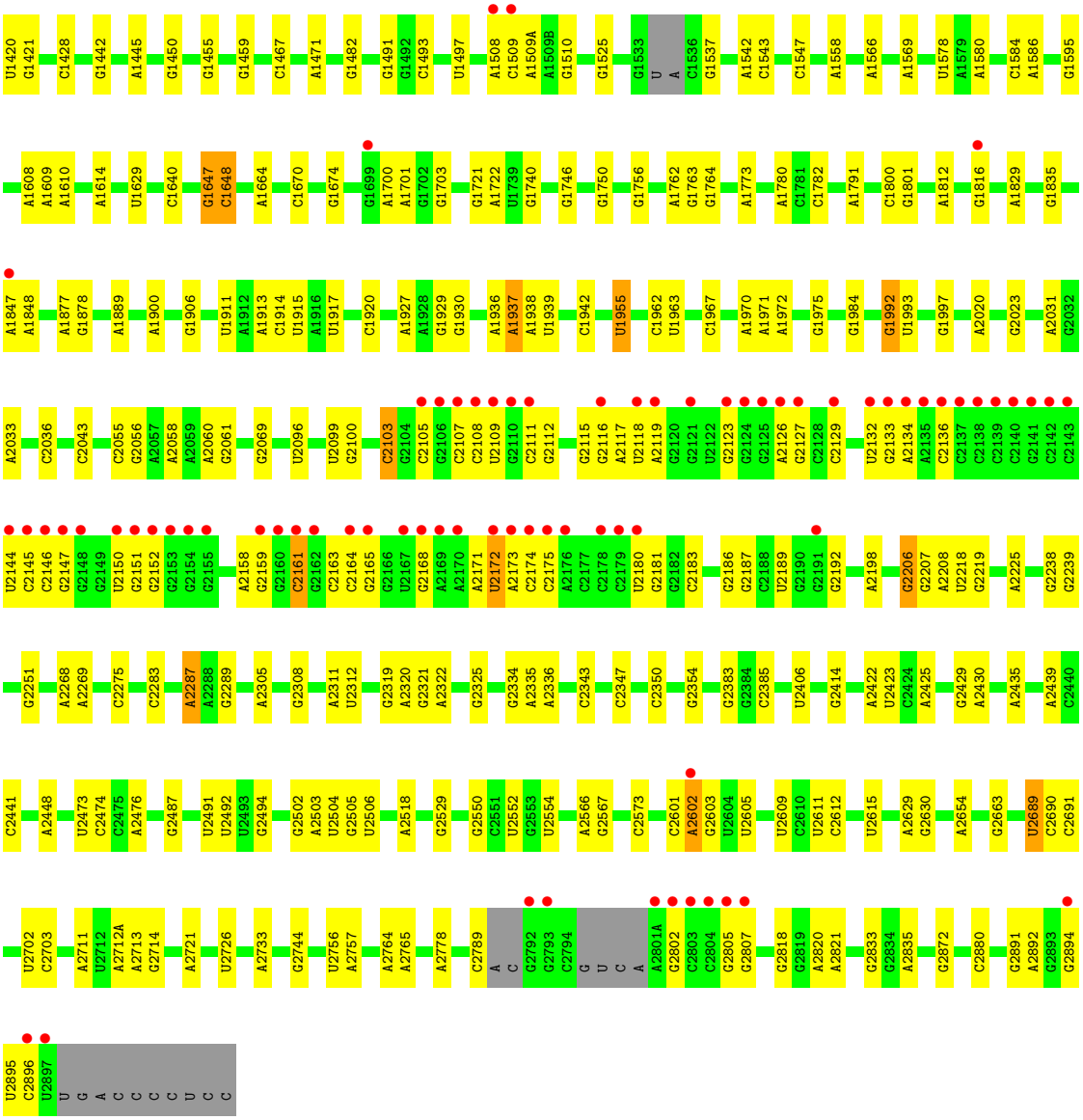




• Molecule 1: 23S Ribosomal RNA

Chain 2A:





• Molecule 2: 5S Ribosomal RNA

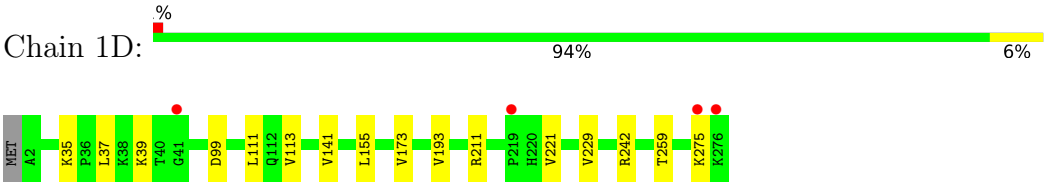
Chain 1B:

• Molecule 2: 5S Ribosomal RNA

Chain 2B:

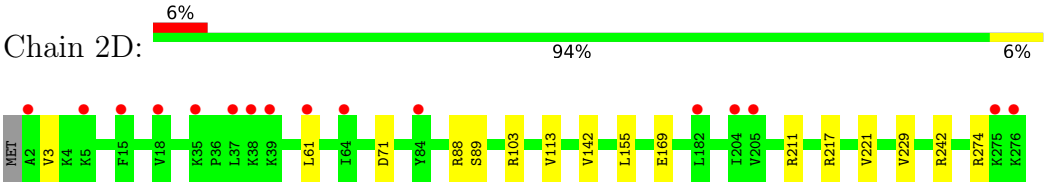
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



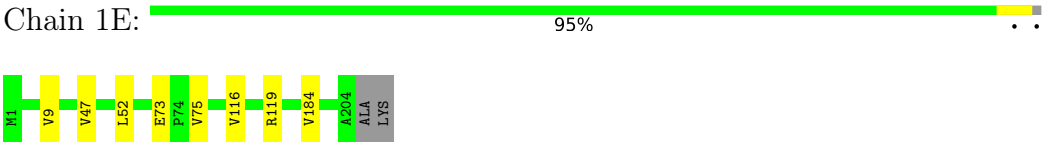
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



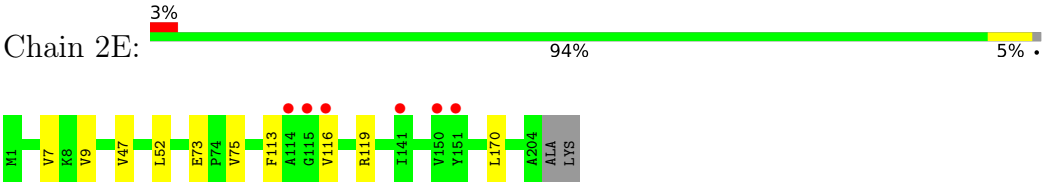
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



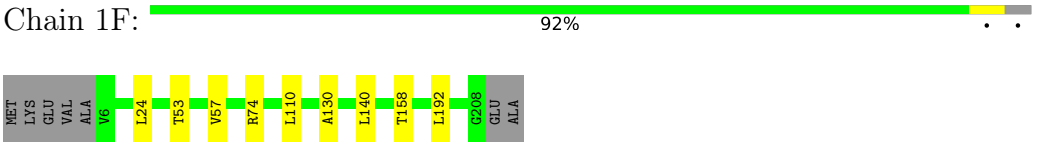
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



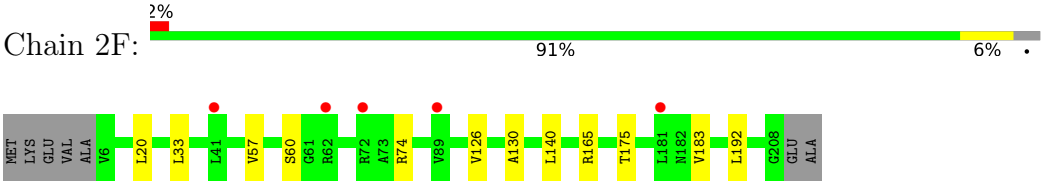
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



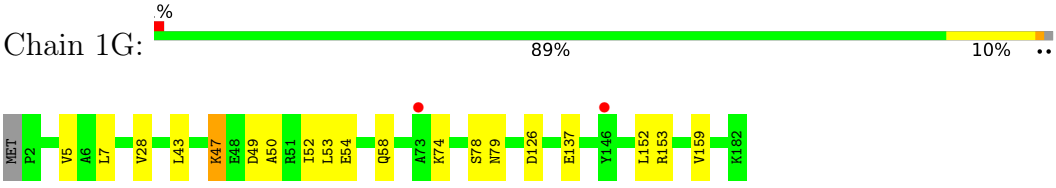
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



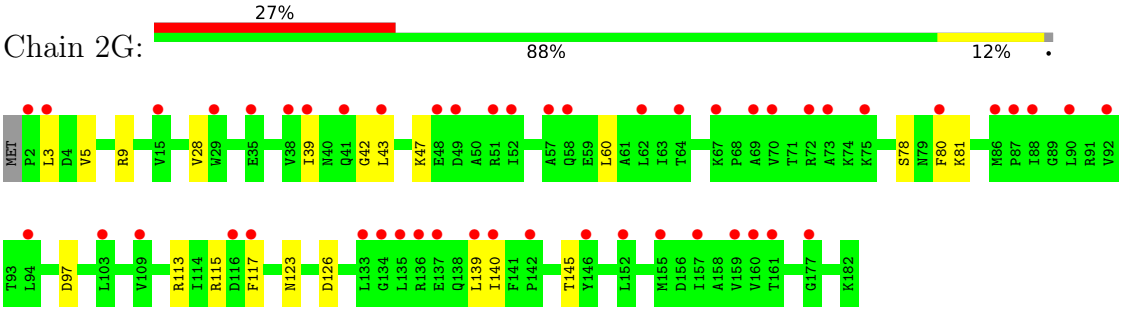
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



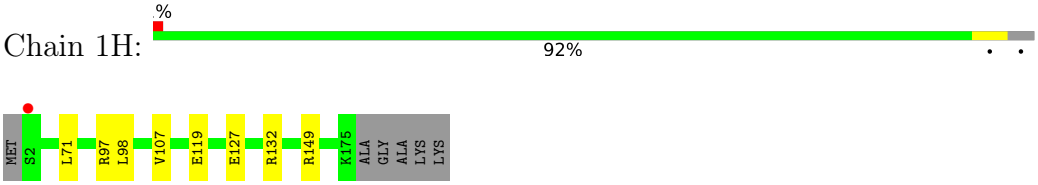
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



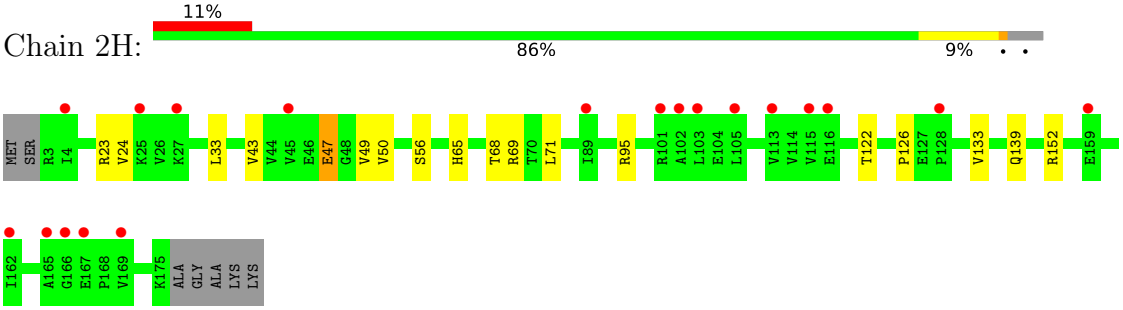
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



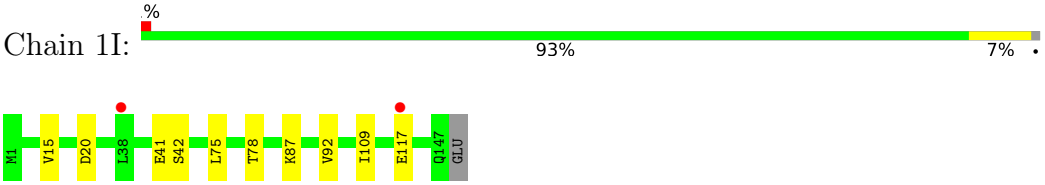
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



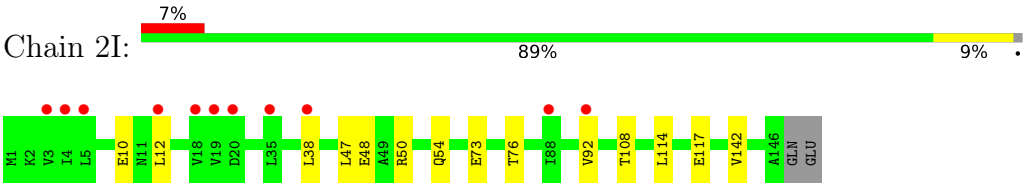
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



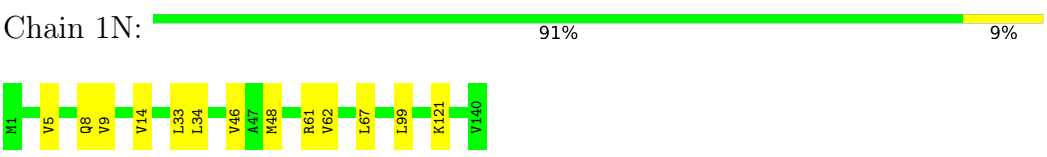
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



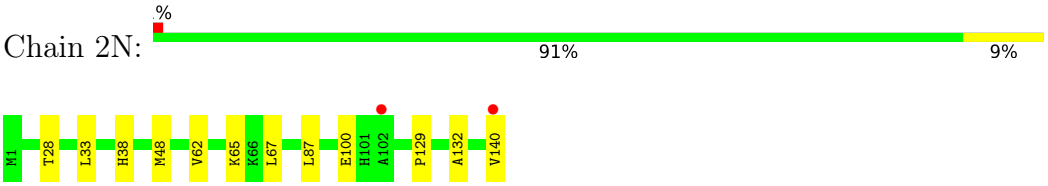
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



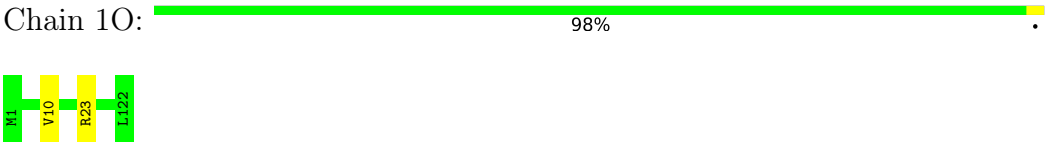
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



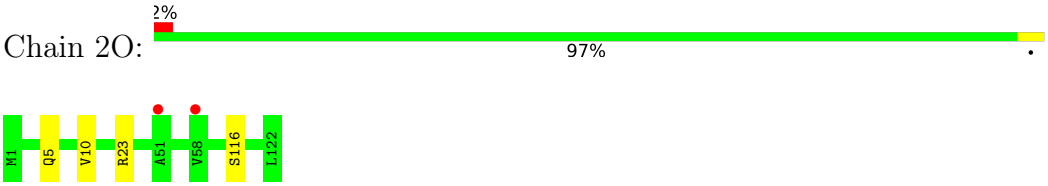
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



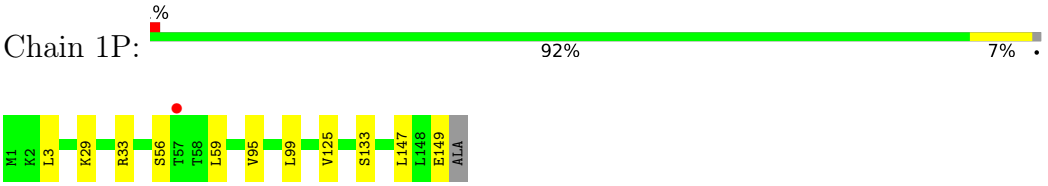
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



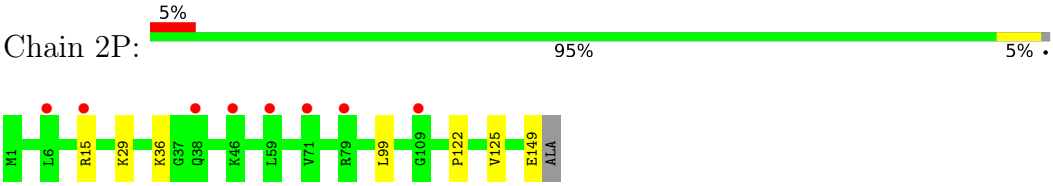
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



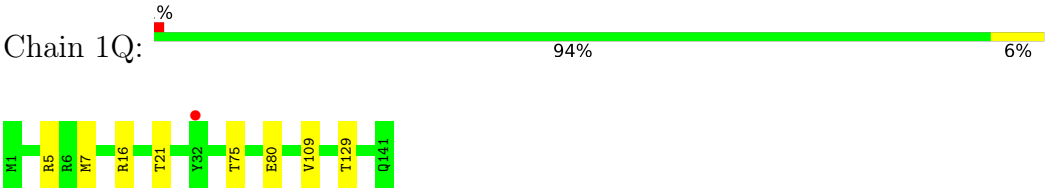
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



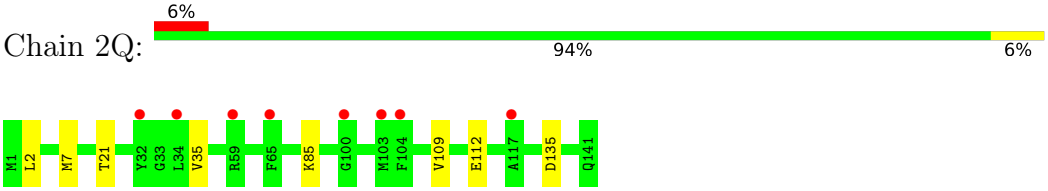
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



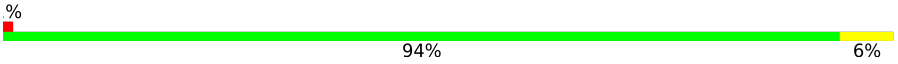
• Molecule 12: 50S ribosomal protein L16

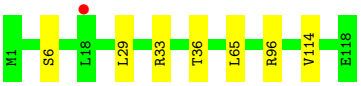
Chain 2Q:



• Molecule 13: 50S ribosomal protein L17

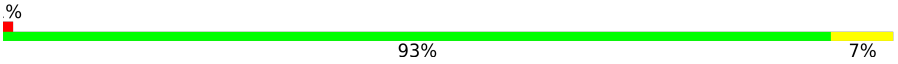
Chain 1R:

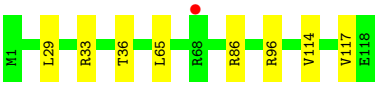




• Molecule 13: 50S ribosomal protein L17

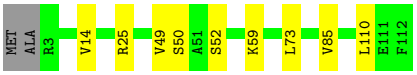
Chain 2R:





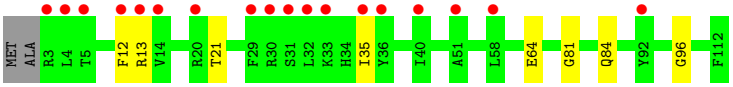
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



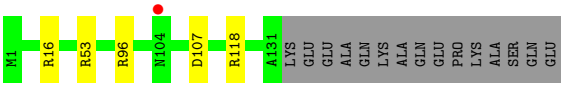
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



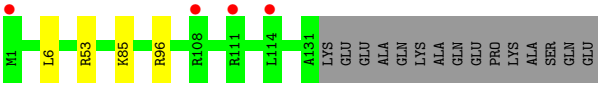
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



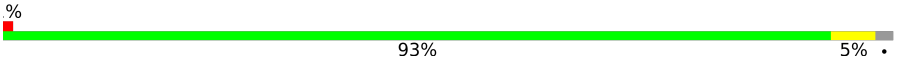
• Molecule 15: 50S ribosomal protein L19

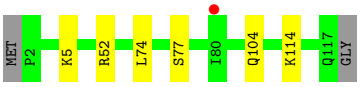
Chain 2T:



• Molecule 16: 50S ribosomal protein L20

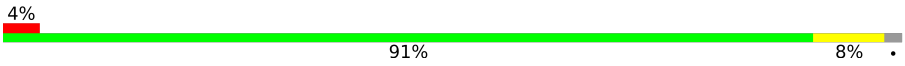
Chain 1U:

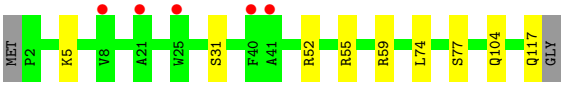




• Molecule 16: 50S ribosomal protein L20

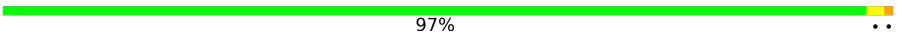
Chain 2U:

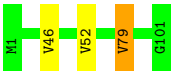




• Molecule 17: 50S ribosomal protein L21

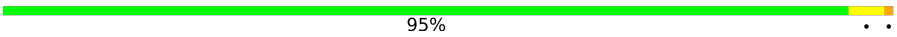
Chain 1V:

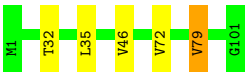




• Molecule 17: 50S ribosomal protein L21

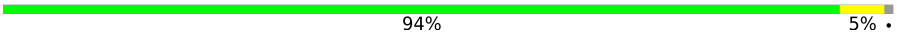
Chain 2V:





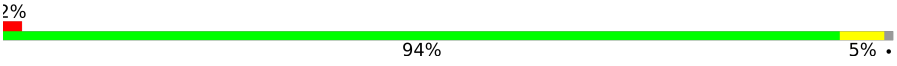
• Molecule 18: 50S ribosomal protein L22

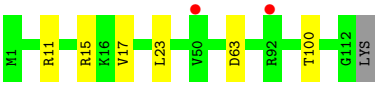
Chain 1W:



• Molecule 18: 50S ribosomal protein L22

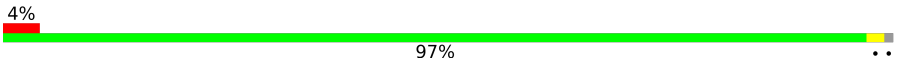
Chain 2W:

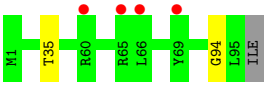




• Molecule 19: 50S ribosomal protein L23

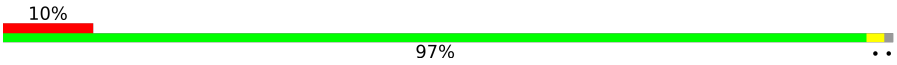
Chain 1X:

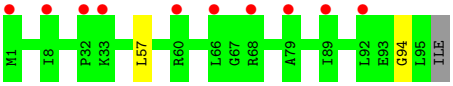




• Molecule 19: 50S ribosomal protein L23

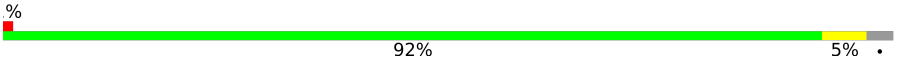
Chain 2X:





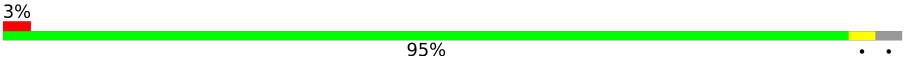
• Molecule 20: 50S ribosomal protein L24

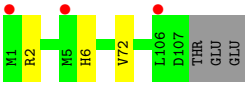
Chain 1Y:



• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



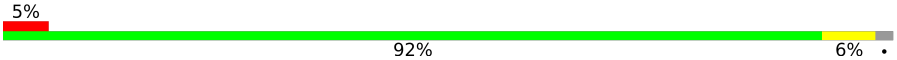


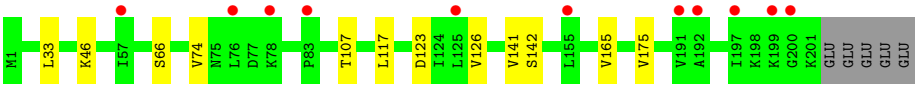
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:

• Molecule 21: 50S ribosomal protein L25

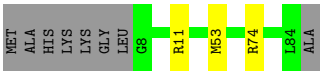
Chain 2Z:





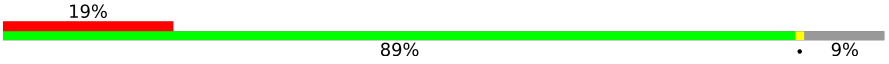
• Molecule 22: 50S ribosomal protein L27

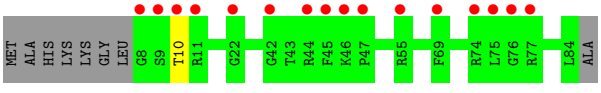
Chain 10:



• Molecule 22: 50S ribosomal protein L27

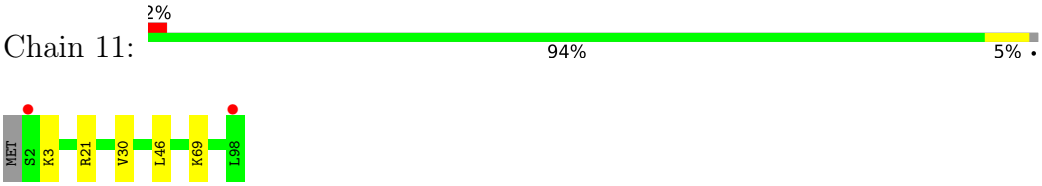
Chain 20:





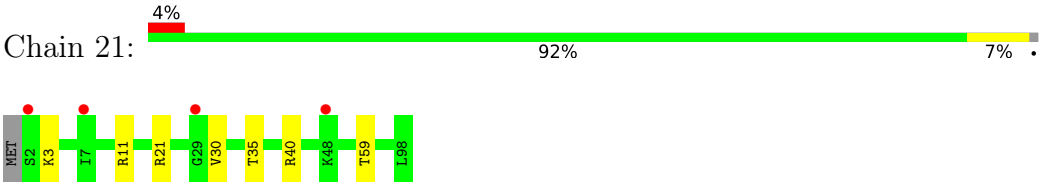
• Molecule 23: 50S ribosomal protein L28

Chain 11:



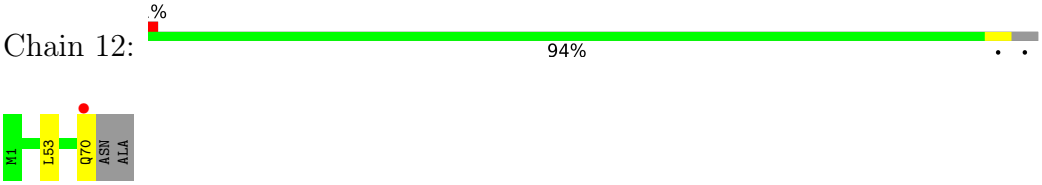
• Molecule 23: 50S ribosomal protein L28

Chain 21:



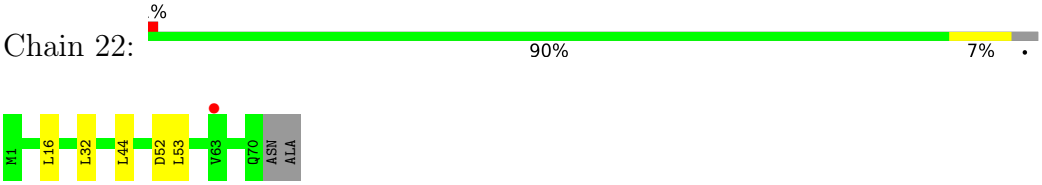
• Molecule 24: 50S ribosomal protein L29

Chain 12:



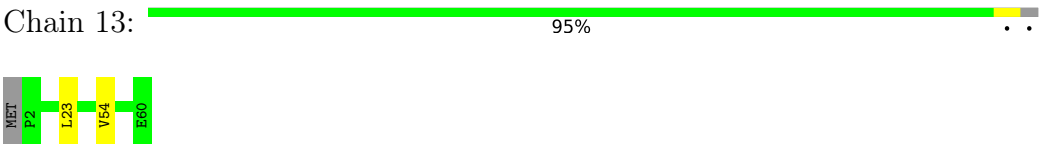
• Molecule 24: 50S ribosomal protein L29

Chain 22:



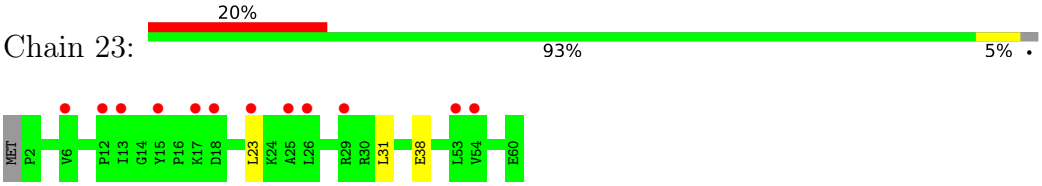
• Molecule 25: 50S ribosomal protein L30

Chain 13:



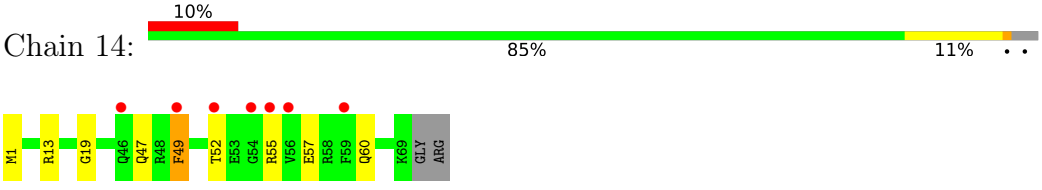
• Molecule 25: 50S ribosomal protein L30

Chain 23:



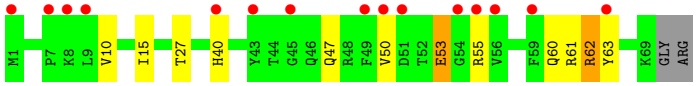
• Molecule 26: 50S ribosomal protein L31

Chain 14:



• Molecule 26: 50S ribosomal protein L31

Chain 24:

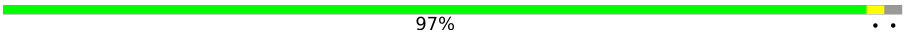


• Molecule 27: 50S ribosomal protein L32

Chain 15:

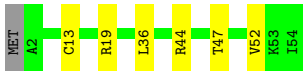
• Molecule 27: 50S ribosomal protein L32

Chain 25:



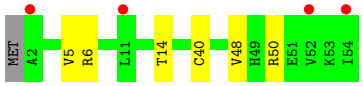
• Molecule 28: 50S ribosomal protein L33

Chain 16:



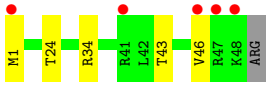
• Molecule 28: 50S ribosomal protein L33

Chain 26:



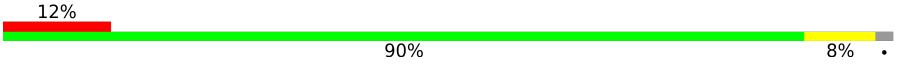
• Molecule 29: 50S ribosomal protein L34

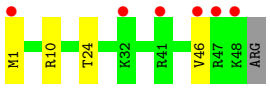
Chain 17:



• Molecule 29: 50S ribosomal protein L34

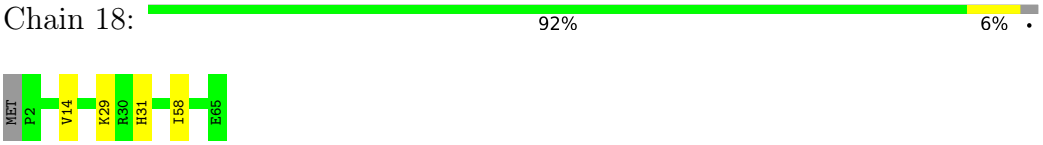
Chain 27:





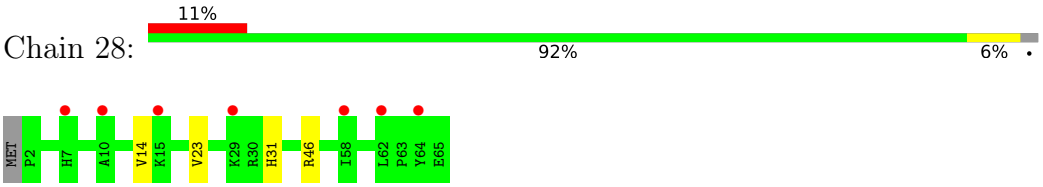
• Molecule 30: 50S ribosomal protein L35

Chain 18:



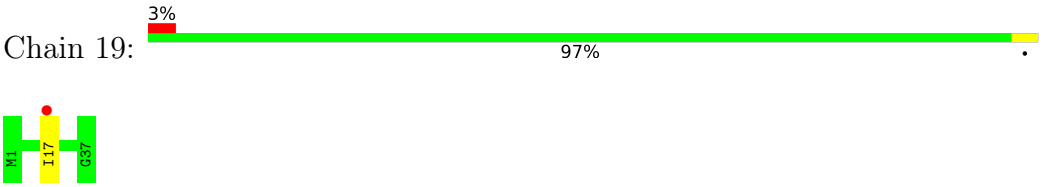
• Molecule 30: 50S ribosomal protein L35

Chain 28:



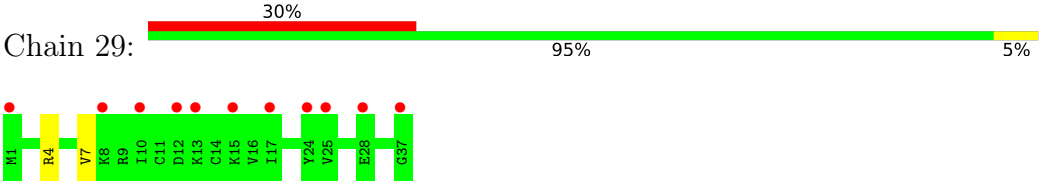
• Molecule 31: 50S ribosomal protein L36

Chain 19:



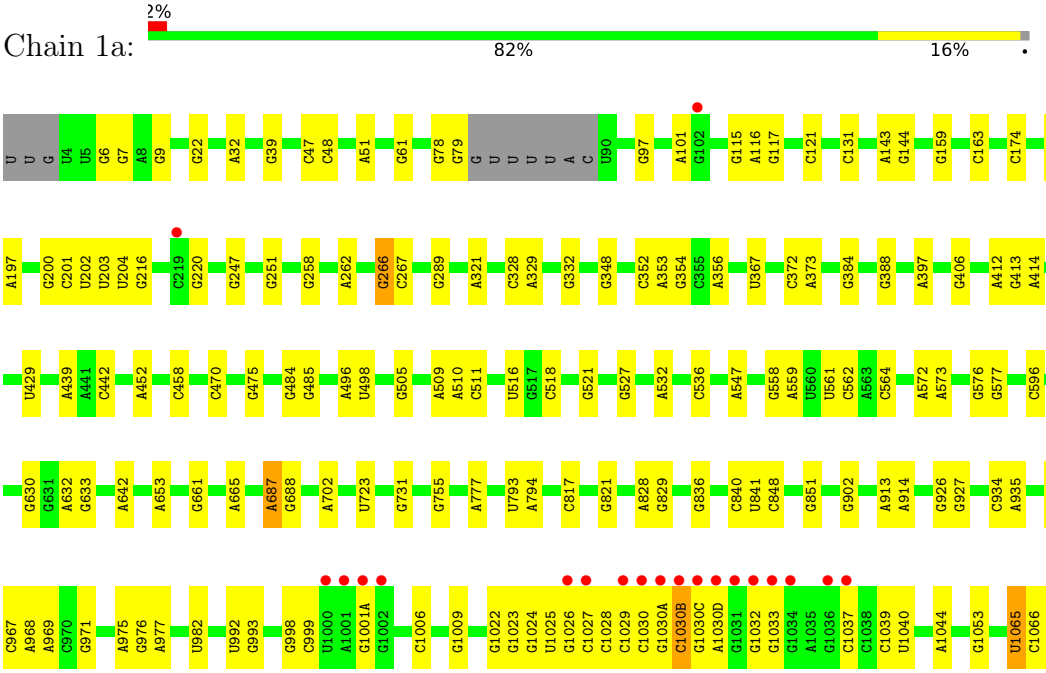
• Molecule 31: 50S ribosomal protein L36

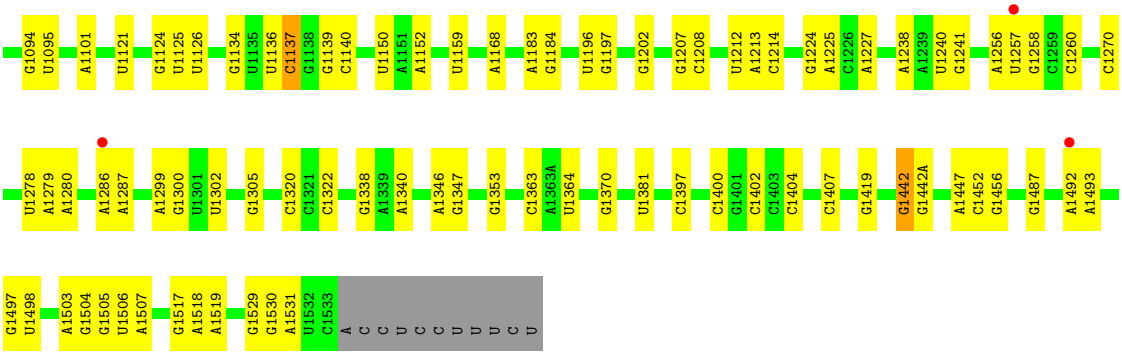
Chain 29:



• Molecule 32: 16S Ribosomal RNA

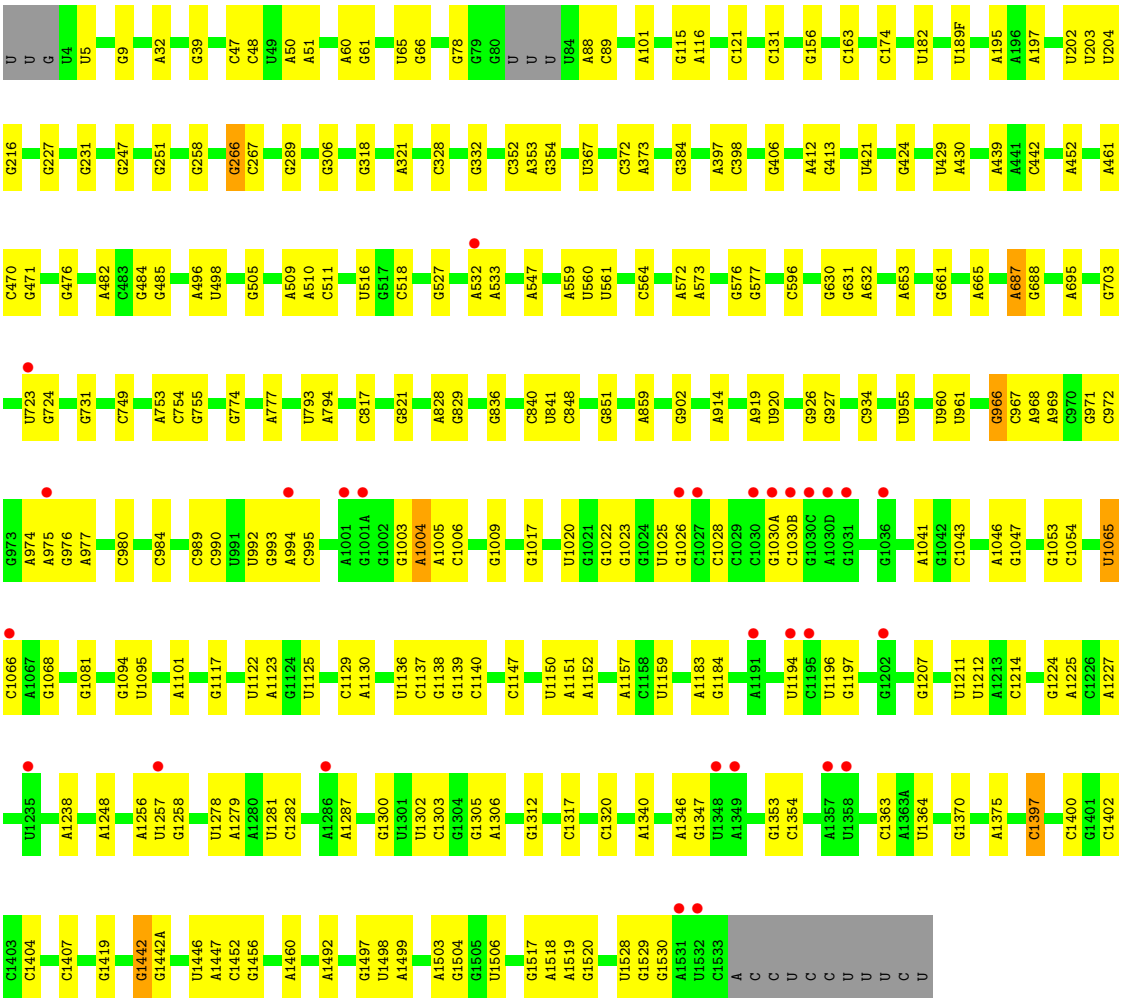
Chain 1a:





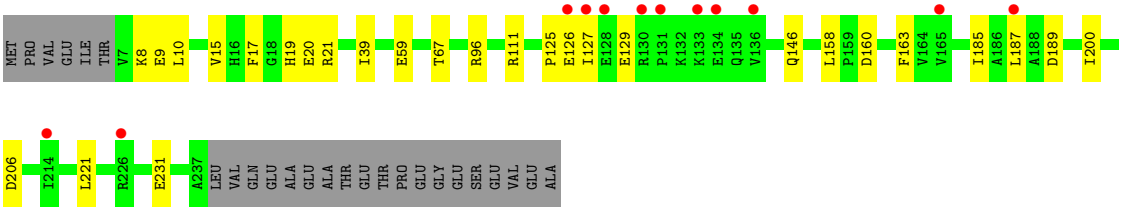
• Molecule 32: 16S Ribosomal RNA

Chain 2a:

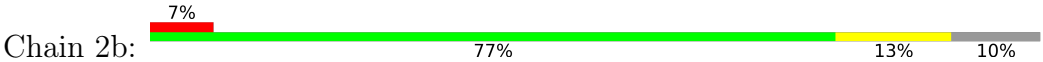


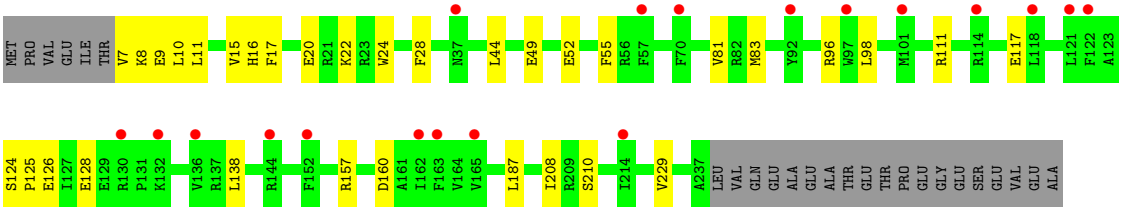
• Molecule 33: 30S ribosomal protein S2

Chain 1b:

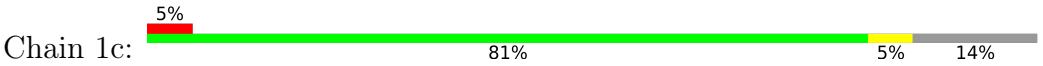


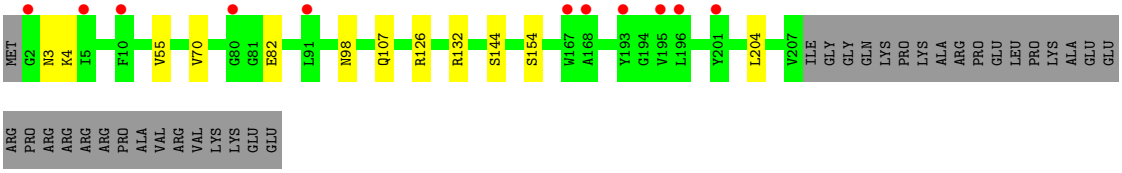
• Molecule 33: 30S ribosomal protein S2



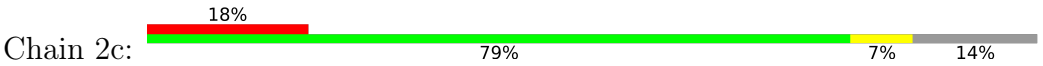


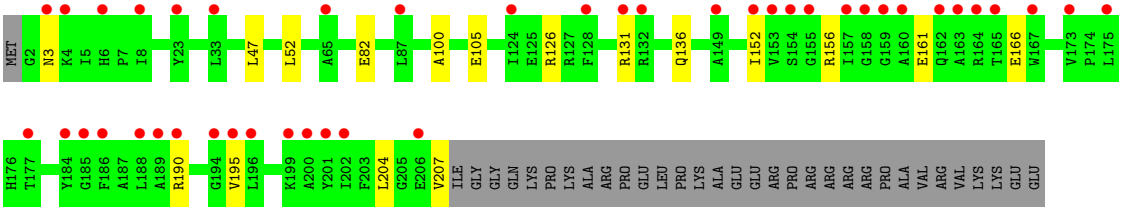
• Molecule 34: 30S ribosomal protein S3



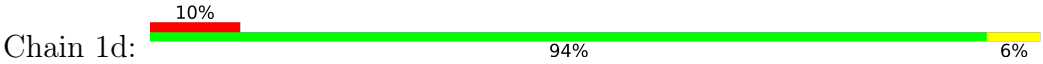


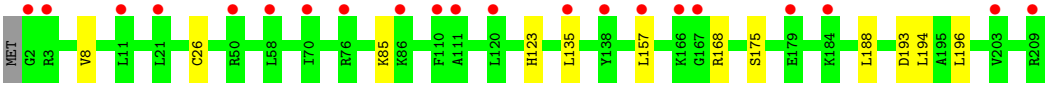
• Molecule 34: 30S ribosomal protein S3



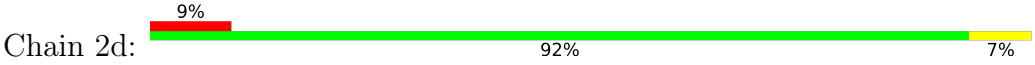


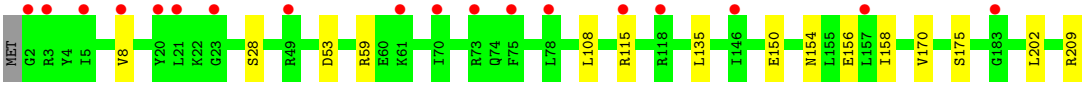
• Molecule 35: 30S ribosomal protein S4



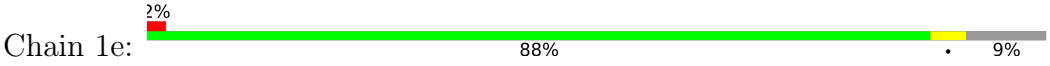


• Molecule 35: 30S ribosomal protein S4

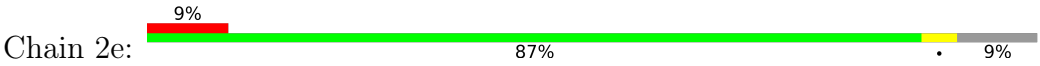




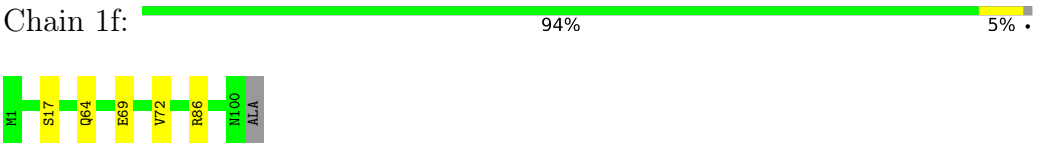
• Molecule 36: 30S ribosomal protein S5



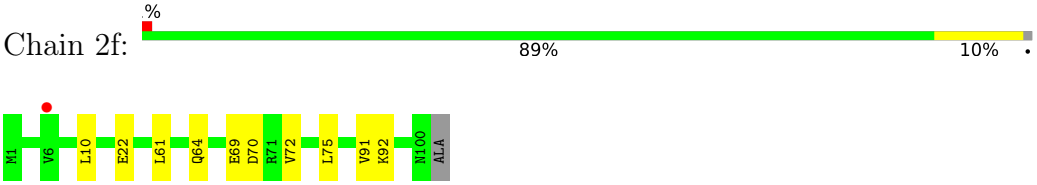
• Molecule 36: 30S ribosomal protein S5



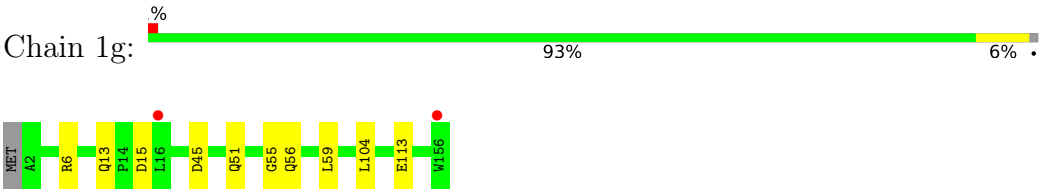
• Molecule 37: 30S ribosomal protein S6



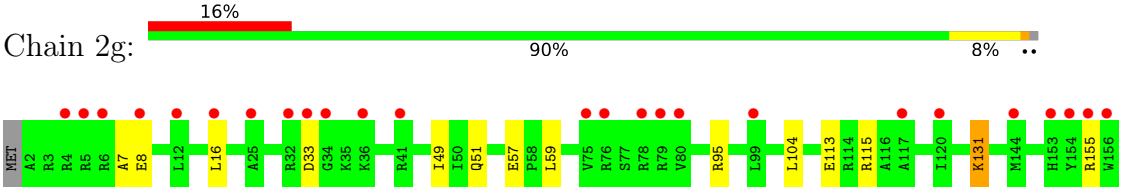
• Molecule 37: 30S ribosomal protein S6



• Molecule 38: 30S ribosomal protein S7

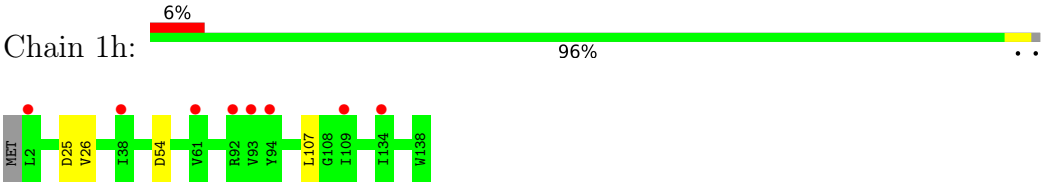


• Molecule 38: 30S ribosomal protein S7



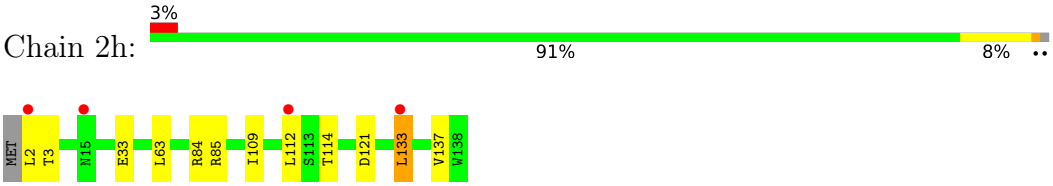
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



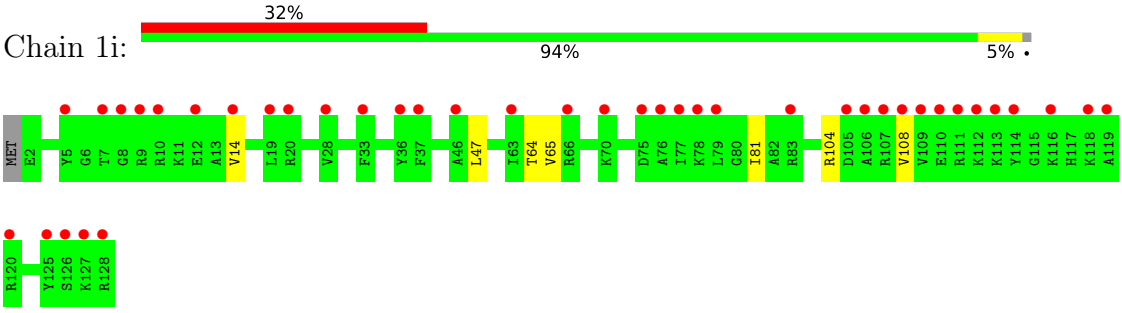
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



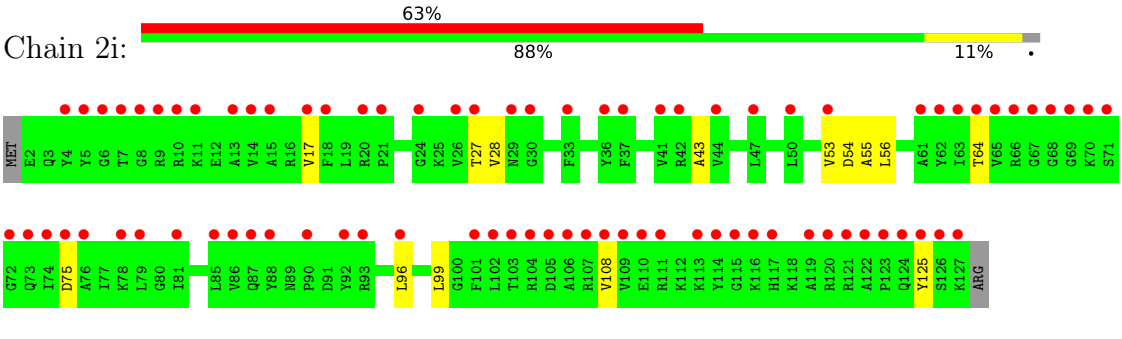
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



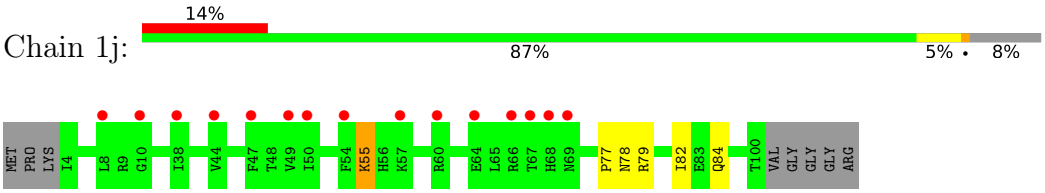
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



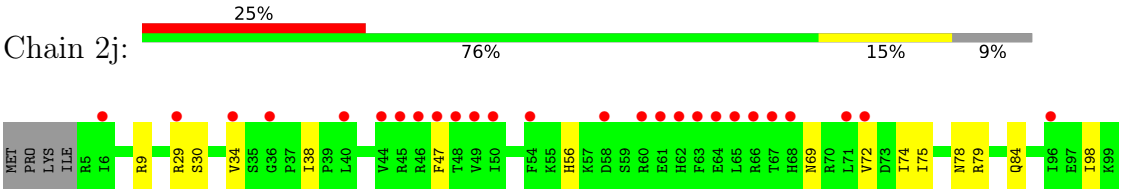
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



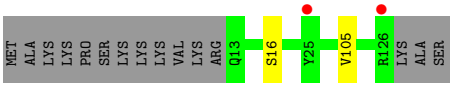
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



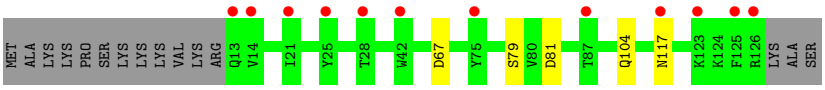
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



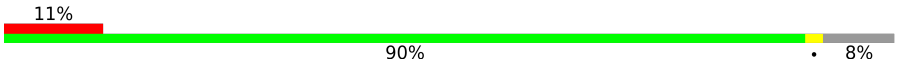
• Molecule 42: 30S ribosomal protein S11

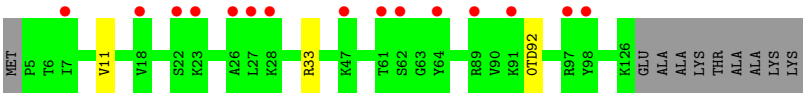
Chain 2k:



• Molecule 43: 30S ribosomal protein S12

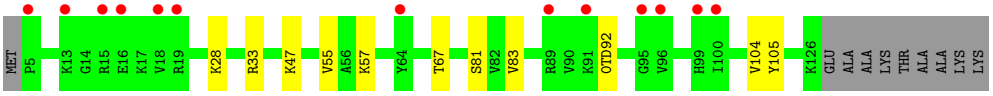
Chain 1l:





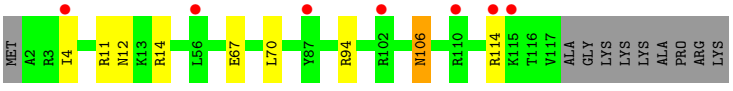
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



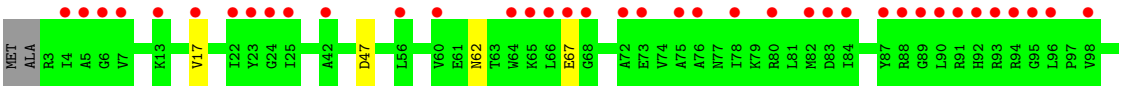
• Molecule 44: 30S ribosomal protein S13

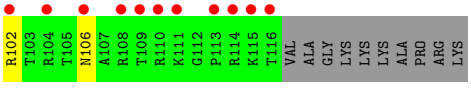
Chain 1m:



• Molecule 44: 30S ribosomal protein S13

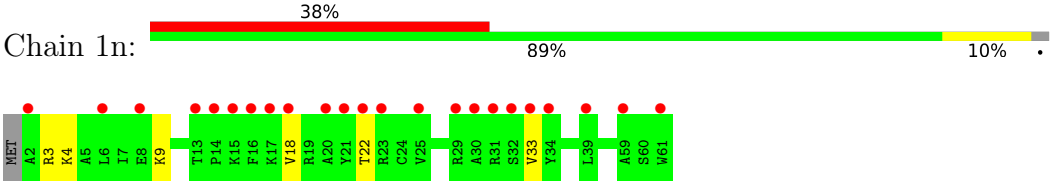
Chain 2m:





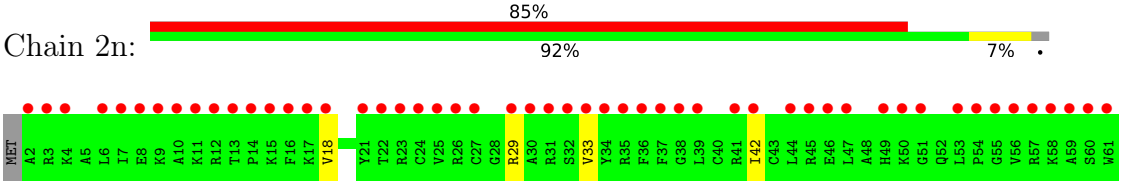
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



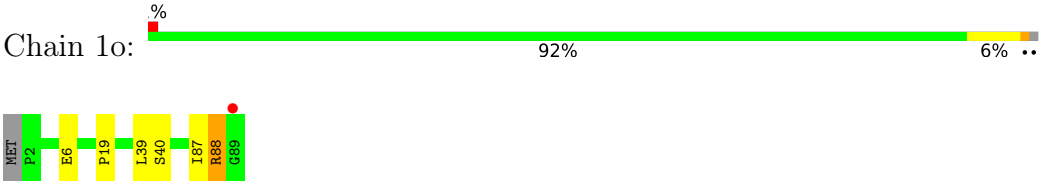
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



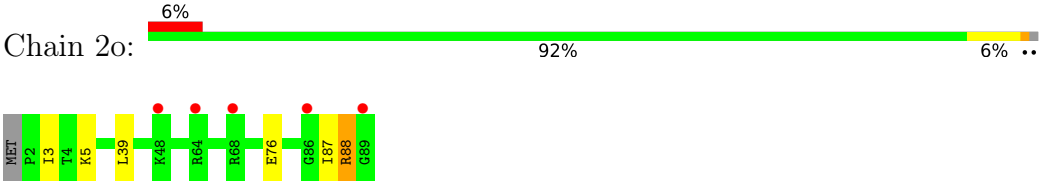
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



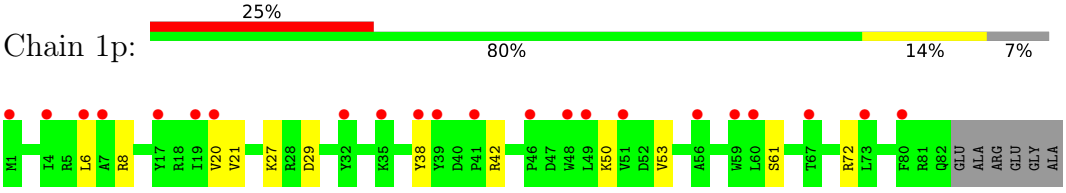
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



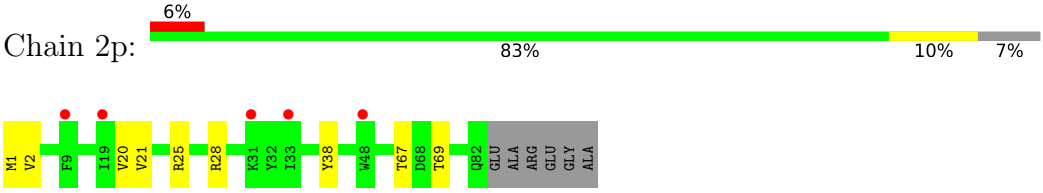
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



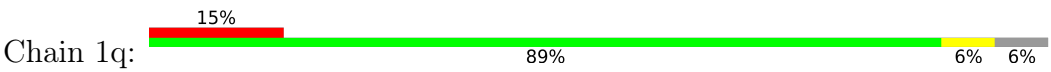
• Molecule 47: 30S ribosomal protein S16

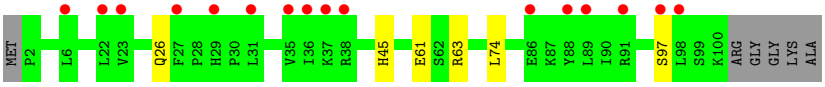
Chain 2p:



• Molecule 48: 30S ribosomal protein S17

Chain 1q:





• Molecule 48: 30S ribosomal protein S17

Chain 2q:

• Molecule 49: 30S ribosomal protein S18

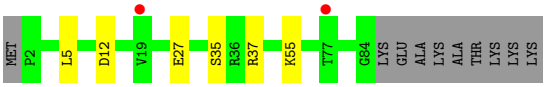
Chain 1r:

• Molecule 49: 30S ribosomal protein S18

Chain 2r:

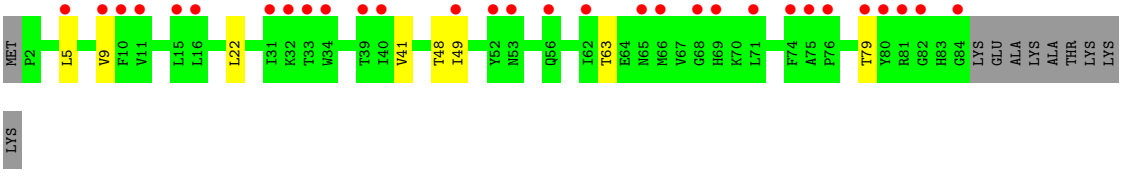
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



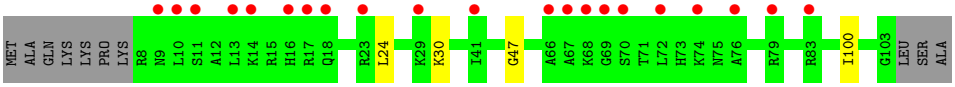
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



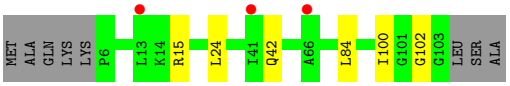
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



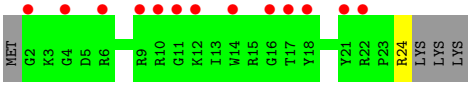
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



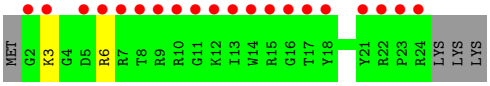
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



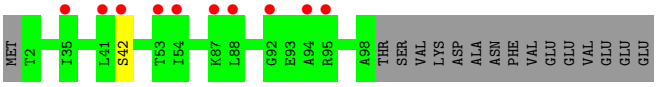
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



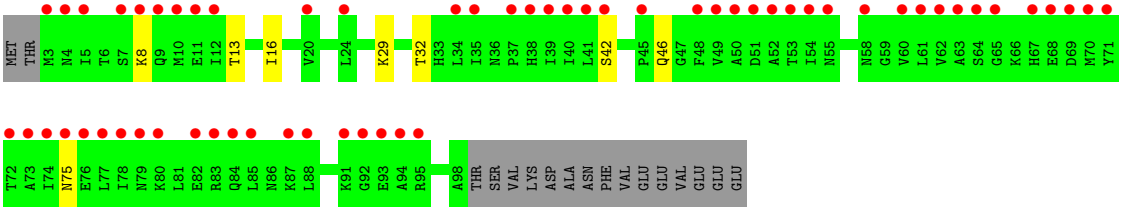
• Molecule 53: Ribosome-associated inhibitor A

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	209.55Å 449.77Å 619.46Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	153.31 – 2.65 224.88 – 2.65	Depositor EDS
% Data completeness (in resolution range)	99.8 (153.31-2.65) 99.8 (224.88-2.65)	Depositor EDS
R_{merge}	0.20	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.26 (at 2.65Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.194 , 0.236 0.196 , 0.237	Depositor DCC
R_{free} test set	83721 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	59.1	Xtriage
Anisotropy	0.194	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 52.6	EDS
L-test for twinning[2]	$< \|L\| > = 0.46$, $< L^2 > = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	296864	wwPDB-VP
Average B, all atoms (Å^2)	62.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.63% 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: 4OC, 2MG, G7M, 5MC, MA6, 2MA, M2G, OMC, OMG, PSU, ZN, 5MU, MG, SF4, OMU, UR3, MPD, ZIT, HGR, 0TD

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	0.54	2/69005 (0.0%)	0.97	78/107711 (0.1%)
1	2A	0.43	0/68875	0.89	55/107505 (0.1%)
2	1B	0.40	0/2876	0.87	1/4486 (0.0%)
2	2B	0.35	0/2878	0.80	0/4490
3	1D	0.36	0/2181	0.58	0/2940
3	2D	0.33	0/2186	0.54	0/2944
4	1E	0.34	0/1592	0.55	0/2149
4	2E	0.30	0/1592	0.51	0/2149
5	1F	0.34	0/1619	0.55	0/2193
5	2F	0.31	0/1615	0.52	0/2188
6	1G	0.29	0/1451	0.47	0/1961
6	2G	0.30	0/1449	0.47	1/1957 (0.1%)
7	1H	0.32	0/1356	0.49	0/1834
7	2H	0.28	0/1350	0.47	0/1826
8	1I	0.29	0/1109	0.50	0/1512
8	2I	0.29	0/1091	0.49	0/1490
9	1N	0.34	0/1148	0.52	0/1547
9	2N	0.29	0/1144	0.47	0/1543
10	1O	0.36	0/943	0.57	0/1269
10	2O	0.33	0/943	0.54	0/1269
11	1P	0.33	0/1152	0.59	1/1533 (0.1%)
11	2P	0.32	0/1152	0.53	0/1533
12	1Q	0.35	0/1143	0.53	0/1527
12	2Q	0.30	0/1143	0.46	0/1527
13	1R	0.33	0/982	0.56	0/1312
13	2R	0.29	0/982	0.52	0/1312
14	1S	0.32	0/887	0.53	0/1180
14	2S	0.31	0/880	0.49	0/1172
15	1T	0.33	0/1105	0.52	0/1477
15	2T	0.31	0/1097	0.49	0/1468
16	1U	0.37	0/977	0.52	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.29	0/977	0.45	0/1301
17	1V	0.35	0/786	0.54	0/1053
17	2V	0.31	0/782	0.52	0/1049
18	1W	0.35	0/897	0.52	0/1205
18	2W	0.32	0/897	0.49	0/1205
19	1X	0.34	0/764	0.53	0/1025
19	2X	0.29	0/764	0.49	0/1025
20	1Y	0.36	0/823	0.52	0/1099
20	2Y	0.31	0/823	0.51	0/1100
21	1Z	0.31	0/1620	0.48	0/2200
21	2Z	0.29	0/1590	0.48	0/2162
22	10	0.36	0/616	0.56	0/821
22	20	0.30	0/616	0.50	0/821
23	11	0.32	0/761	0.54	0/1013
23	21	0.33	0/766	0.52	0/1018
24	12	0.32	0/590	0.49	0/781
24	22	0.29	0/594	0.44	0/785
25	13	0.33	0/474	0.52	0/635
25	23	0.27	0/469	0.49	0/630
26	14	0.32	0/559	0.56	0/754
26	24	0.34	0/549	0.57	0/741
27	15	0.37	0/473	0.62	1/639 (0.2%)
27	25	0.30	0/469	0.53	0/635
28	16	0.35	0/460	0.55	0/613
28	26	0.29	0/456	0.49	0/608
29	17	0.34	0/426	0.58	0/561
29	27	0.30	0/426	0.50	0/561
30	18	0.34	0/525	0.53	0/691
30	28	0.31	0/525	0.49	0/691
31	19	0.35	0/310	0.53	0/407
31	29	0.30	0/310	0.52	0/407
32	1a	0.37	0/35795	0.86	18/55864 (0.0%)
32	2a	0.36	0/35890	0.85	24/56012 (0.0%)
33	1b	0.30	0/1876	0.47	0/2533
33	2b	0.31	0/1860	0.48	0/2518
34	1c	0.28	0/1582	0.46	0/2137
34	2c	0.30	0/1566	0.47	0/2119
35	1d	0.30	0/1695	0.47	0/2274
35	2d	0.29	0/1698	0.45	0/2277
36	1e	0.29	0/1149	0.51	0/1548
36	2e	0.29	0/1149	0.49	0/1548
37	1f	0.31	0/827	0.50	0/1120
37	2f	0.29	0/829	0.49	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.28	0/1254	0.42	0/1683
38	2g	0.29	0/1248	0.42	0/1676
39	1h	0.28	0/1118	0.47	0/1506
39	2h	0.28	0/1108	0.48	0/1494
40	1i	0.30	0/1005	0.48	0/1351
40	2i	0.30	0/985	0.47	0/1329
41	1j	0.30	0/732	0.48	0/993
41	2j	0.29	0/723	0.50	0/984
42	1k	0.29	0/849	0.49	0/1150
42	2k	0.30	0/848	0.52	0/1149
43	1l	0.29	0/937	0.50	0/1260
43	2l	0.28	0/937	0.50	0/1260
44	1m	0.27	0/924	0.46	0/1242
44	2m	0.30	0/905	0.46	0/1217
45	1n	0.30	0/501	0.49	0/664
45	2n	0.30	0/501	0.46	0/664
46	1o	0.29	0/739	0.45	0/985
46	2o	0.28	0/739	0.45	0/985
47	1p	0.29	0/697	0.53	0/939
47	2p	0.28	0/693	0.48	0/935
48	1q	0.29	0/836	0.47	0/1117
48	2q	0.30	0/836	0.46	0/1117
49	1r	0.28	0/560	0.47	0/746
49	2r	0.30	0/560	0.46	0/746
50	1s	0.27	0/663	0.51	0/895
50	2s	0.28	0/660	0.49	0/893
51	1t	0.27	0/734	0.41	0/969
51	2t	0.27	0/736	0.41	0/976
52	1u	0.27	0/203	0.47	0/266
52	2u	0.26	0/203	0.47	0/266
53	1y	0.28	0/776	0.47	0/1048
53	2y	0.27	0/761	0.45	0/1030
All	All	0.41	2/309887 (0.0%)	0.81	179/463149 (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
26	14	0	1
33	1b	0	1
All	All	0	2

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	330	A	N9-C4	-6.17	1.34	1.37
1	1A	2790	A	N9-C4	5.11	1.41	1.37

All (179) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	801	G	O5'-P-OP2	-10.98	95.81	105.70
1	2A	1092	C	N1-C2-O2	9.46	124.57	118.90
1	1A	2036	C	O5'-P-OP1	-9.13	97.48	105.70
1	2A	1092	C	C2-N1-C1'	9.00	128.70	118.80
32	1a	1030(B)	C	C2-N1-C1'	8.86	128.55	118.80
1	1A	963	U	O5'-P-OP2	-8.76	97.82	105.70
1	1A	330	A	C2-N3-C4	-8.65	106.28	110.60
32	1a	1030(B)	C	N1-C2-O2	8.57	124.04	118.90
1	1A	512	G	O4'-C1'-N9	8.54	115.03	108.20
1	1A	1653	G	C8-N9-C4	-8.33	103.07	106.40
32	2a	1003	G	N3-C4-C5	-8.27	124.46	128.60
1	1A	1352	U	O5'-P-OP1	-8.26	98.27	105.70
1	1A	570	G	C5-C6-O6	-8.19	123.69	128.60
1	2A	2721	A	O5'-P-OP1	-8.15	98.36	105.70
1	1A	999	U	O5'-P-OP2	-8.00	98.50	105.70
32	2a	1004	A	O4'-C1'-N9	7.88	114.51	108.20
1	1A	527	C	N1-C2-O2	-7.78	114.23	118.90
1	2A	2550	G	O5'-P-OP1	-7.74	98.73	105.70
1	2A	512	G	O4'-C1'-N9	7.70	114.36	108.20
1	1A	2682	U	O5'-P-OP2	-7.64	98.83	105.70
1	2A	1092	C	N3-C2-O2	-7.55	116.61	121.90
1	2A	787	U	O5'-P-OP1	-7.49	98.96	105.70
1	1A	570	G	C5-C6-N1	7.23	115.11	111.50
1	1A	645	C	N1-C2-O2	7.12	123.17	118.90
1	1A	2848	G	O4'-C1'-N9	7.09	113.87	108.20
1	1A	2685	G	N1-C6-O6	-7.06	115.67	119.90
1	1A	2023	G	O5'-P-OP1	-7.05	99.35	105.70
32	2a	1003	G	N3-C4-N9	6.99	130.20	126.00
1	1A	1372	U	C5-C4-O4	-6.96	121.72	125.90
1	2A	1097	U	C2-N1-C1'	6.93	126.01	117.70
32	1a	1030(B)	C	N3-C2-O2	-6.88	117.08	121.90
1	2A	1092	C	C6-N1-C2	-6.87	117.55	120.30
1	2A	2711	A	O5'-P-OP1	-6.86	99.52	105.70
1	1A	1416	G	O4'-C1'-N9	6.85	113.68	108.20
1	1A	1064	C	N1-C2-O2	6.85	123.01	118.90
32	2a	1225	A	C5-C6-N6	6.84	129.17	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	266	G	P-O3'-C3'	6.83	127.90	119.70
32	1a	1030(B)	C	C6-N1-C2	-6.80	117.58	120.30
1	2A	2152	G	C4-N9-C1'	-6.79	117.67	126.50
1	1A	845	G	O4'-C1'-N9	6.79	113.63	108.20
1	1A	645	C	C2-N1-C1'	6.74	126.21	118.80
1	1A	1075	C	N1-C2-O2	6.71	122.93	118.90
1	2A	2152	G	C8-N9-C1'	6.71	135.72	127.00
1	1A	330	A	N1-C2-N3	6.70	132.65	129.30
1	1A	746	A	O4'-C1'-N9	6.60	113.48	108.20
1	1A	1300	U	P-O3'-C3'	6.58	127.59	119.70
1	2A	1075	C	N1-C2-O2	6.55	122.83	118.90
32	2a	1397	C	C2-N1-C1'	6.48	125.93	118.80
1	1A	1026	U	C2-N1-C1'	6.46	125.45	117.70
1	1A	568	U	N3-C4-C5	6.38	118.43	114.60
1	1A	948	G	O5'-P-OP1	-6.35	99.98	105.70
1	1A	226	G	O4'-C1'-N9	6.34	113.28	108.20
1	1A	1075	C	C2-N3-C4	6.32	123.06	119.90
1	2A	1076	C	OP1-P-O3'	6.24	118.93	105.20
1	1A	1372	U	N3-C4-O4	6.23	123.76	119.40
32	2a	754	C	C2-N1-C1'	6.22	125.65	118.80
1	2A	1648	C	O5'-P-OP1	-6.22	100.10	105.70
1	1A	774	A	C8-N9-C4	-6.19	103.33	105.80
1	1A	1176	G	OP1-P-O3'	6.16	118.75	105.20
1	1A	1936	A	O4'-C1'-N9	6.15	113.12	108.20
1	1A	800	A	O5'-P-OP1	-6.14	100.17	105.70
1	2A	2036	C	O5'-P-OP1	-6.14	100.17	105.70
1	1A	570	G	N3-C4-N9	6.11	129.67	126.00
1	1A	1026	U	N1-C2-O2	6.11	127.08	122.80
1	1A	1086	A	N1-C6-N6	-6.07	114.96	118.60
32	2a	1150	U	C5-C4-O4	6.04	129.53	125.90
1	2A	2103	C	C2-N3-C4	6.02	122.91	119.90
1	2A	383	U	O4'-C1'-N1	6.02	113.02	108.20
32	2a	1225	A	N1-C6-N6	-6.01	115.00	118.60
1	2A	2161	C	C5-C4-N4	6.00	124.40	120.20
1	1A	2430	A	O5'-P-OP2	-5.99	100.31	105.70
2	1B	57	A	N9-C4-C5	-5.94	103.42	105.80
1	1A	2598	A	O5'-P-OP1	-5.92	100.38	105.70
1	1A	575	A	O5'-P-OP1	-5.89	100.40	105.70
1	2A	1092	C	C6-N1-C1'	-5.88	113.74	120.80
1	2A	1992	G	P-O3'-C3'	5.87	126.75	119.70
32	2a	1003	G	C2-N3-C4	5.87	114.83	111.90
32	1a	1030(B)	C	C6-N1-C1'	-5.86	113.77	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1653	G	N3-C4-C5	-5.82	125.69	128.60
1	2A	2152	G	O4'-C1'-N9	5.82	112.86	108.20
1	1A	1210	A	P-O3'-C3'	5.82	126.68	119.70
1	2A	214	G	O4'-C1'-N9	5.81	112.84	108.20
32	2a	1123	A	C5-C6-N6	5.80	128.34	123.70
1	1A	2791	C	C6-N1-C2	-5.74	118.00	120.30
11	1P	33	ARG	C-N-CA	-5.73	110.27	122.30
1	2A	1614	A	O5'-P-OP1	-5.71	100.56	105.70
1	2A	1936	A	O4'-C1'-N9	5.68	112.75	108.20
1	1A	2689	U	P-O3'-C3'	5.66	126.49	119.70
1	1A	2371	G	C5-C6-N1	5.62	114.31	111.50
32	2a	1065	U	P-O3'-C3'	5.62	126.45	119.70
1	1A	674	G	C5-C6-O6	-5.62	125.23	128.60
32	1a	266	G	N3-C4-C5	-5.60	125.80	128.60
1	2A	1937	A	O4'-C1'-N9	5.60	112.68	108.20
1	2A	1082	U	C2-N1-C1'	5.59	124.41	117.70
1	1A	1385	G	O4'-C1'-N9	5.57	112.66	108.20
1	2A	2689	U	N3-C2-O2	-5.56	118.31	122.20
32	2a	955	U	C2-N3-C4	5.56	130.34	127.00
1	2A	1092	C	C5-C6-N1	5.55	123.78	121.00
1	1A	372	G	O4'-C1'-N9	5.52	112.62	108.20
1	1A	614	U	N3-C2-O2	-5.51	118.34	122.20
32	1a	266	G	P-O3'-C3'	5.51	126.32	119.70
32	2a	687	A	P-O3'-C3'	5.51	126.31	119.70
1	2A	1075	C	C2-N1-C1'	5.51	124.86	118.80
32	2a	115	G	P-O3'-C3'	5.47	126.27	119.70
1	1A	568	U	C5-C4-O4	-5.47	122.62	125.90
1	2A	1313	U	C2-N1-C1'	5.46	124.25	117.70
32	2a	754	C	N1-C2-O2	5.46	122.17	118.90
1	1A	512	G	C5-N7-C8	5.45	107.03	104.30
1	1A	570	G	C4-C5-N7	5.45	112.98	110.80
32	1a	115	G	P-O3'-C3'	5.44	126.22	119.70
32	2a	1442	G	N3-C4-N9	5.44	129.26	126.00
1	1A	330	A	C5-N7-C8	-5.42	101.19	103.90
32	1a	558	G	O5'-P-OP1	-5.41	100.83	105.70
32	2a	65	U	P-O3'-C3'	5.40	126.18	119.70
1	1A	2790	A	C2-N3-C4	5.39	113.29	110.60
1	2A	2287	A	O4'-C1'-N9	5.37	112.50	108.20
1	2A	2152	G	C6-C5-N7	5.37	133.62	130.40
32	2a	1003	G	C4-N9-C1'	5.34	133.45	126.50
32	2a	1397	C	N1-C2-O2	5.34	122.11	118.90
1	1A	2501	C	C2-N1-C1'	-5.34	112.92	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	746	A	O4'-C1'-N9	5.34	112.47	108.20
32	1a	1137	C	C6-N1-C2	-5.32	118.17	120.30
32	1a	1067	A	P-O3'-C3'	5.31	126.08	119.70
32	1a	1030(B)	C	C5-C6-N1	5.29	123.65	121.00
1	1A	1088	A	O4'-C1'-N9	5.29	112.43	108.20
1	1A	383	U	O4'-C1'-N1	5.29	112.43	108.20
1	1A	2248	C	O5'-P-OP2	-5.28	100.94	105.70
1	1A	570	G	N9-C4-C5	-5.28	103.29	105.40
1	2A	195	A	P-O3'-C3'	5.28	126.03	119.70
1	2A	2152	G	N3-C4-N9	-5.27	122.84	126.00
32	1a	913	A	P-O3'-C3'	5.27	126.02	119.70
32	2a	1150	U	C2-N3-C4	5.26	130.16	127.00
32	1a	1150	U	C5-C4-O4	5.24	129.05	125.90
1	2A	2172	U	P-O3'-C3'	5.23	125.97	119.70
1	1A	570	G	C2-N3-C4	5.22	114.51	111.90
32	2a	560	U	C2-N1-C1'	5.22	123.96	117.70
1	1A	1139	G	O5'-P-OP2	-5.21	101.01	105.70
1	1A	2689	U	N3-C2-O2	-5.21	118.55	122.20
27	15	58	LEU	CA-CB-CG	5.21	127.28	115.30
1	2A	1955	U	C2-N1-C1'	-5.21	111.45	117.70
1	2A	2103	C	C5-C4-N4	5.21	123.84	120.20
1	1A	2490	G	C8-N9-C4	5.20	108.48	106.40
1	2A	1060	U	C2-N1-C1'	5.19	123.92	117.70
1	2A	752	A	P-O3'-C3'	5.18	125.92	119.70
1	2A	1082	U	N1-C2-O2	5.18	126.43	122.80
1	2A	2206	G	C4-N9-C1'	-5.17	119.78	126.50
1	1A	2712	U	O4'-C1'-N1	5.17	112.34	108.20
32	2a	1003	G	C5-N7-C8	5.17	106.89	104.30
1	1A	645	C	N3-C2-O2	-5.17	118.28	121.90
1	1A	1614	A	O5'-P-OP1	-5.17	101.05	105.70
1	1A	1653	G	P-O3'-C3'	5.17	125.90	119.70
1	1A	195	A	P-O3'-C3'	5.16	125.89	119.70
1	1A	330	A	N3-C4-N9	-5.16	123.27	127.40
1	1A	1173	G	O4'-C1'-N9	5.14	112.31	108.20
1	2A	1076	C	P-O3'-C3'	5.13	125.86	119.70
1	2A	2602	A	P-O3'-C3'	5.13	125.86	119.70
1	1A	1772	G	N1-C6-O6	-5.12	116.83	119.90
32	1a	1442	G	P-O3'-C3'	5.12	125.84	119.70
32	1a	1065	U	P-O3'-C3'	5.12	125.84	119.70
1	2A	1647	G	O4'-C1'-N9	-5.12	104.11	108.20
1	2A	1075	C	N3-C2-O2	-5.11	118.32	121.90
1	2A	2807	G	N3-C4-N9	-5.11	122.94	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2249	U	N3-C4-O4	-5.10	115.83	119.40
1	1A	2319	G	N3-C2-N2	-5.10	116.33	119.90
1	1A	687	C	C6-N1-C2	-5.08	118.27	120.30
1	2A	12	U	C2-N1-C1'	5.07	123.78	117.70
1	2A	510	C	N1-C2-O2	5.07	121.94	118.90
1	2A	2805	G	O4'-C1'-N9	5.07	112.25	108.20
32	2a	1442	G	N3-C4-C5	-5.06	126.07	128.60
1	2A	614	U	N3-C2-O2	-5.05	118.67	122.20
32	1a	687	A	P-O3'-C3'	5.04	125.75	119.70
1	2A	2172	U	OP1-P-O3'	5.03	116.27	105.20
1	1A	234	C	N1-C2-O2	5.03	121.92	118.90
1	2A	2161	C	C2-N3-C4	5.03	122.41	119.90
6	2G	140	ILE	C-N-CA	5.02	134.25	121.70
1	1A	234	C	N3-C2-O2	-5.02	118.39	121.90
32	1a	1442	G	N3-C4-C5	-5.01	126.09	128.60
1	1A	2490	G	C5-C6-O6	-5.01	125.59	128.60
1	2A	614	U	C2-N1-C1'	5.00	123.70	117.70

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	52	THR	Peptide
33	1b	231	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%)	260 (95%)	13 (5%)	0	100	100
3	2D	273/276 (99%)	260 (95%)	13 (5%)	0	100	100
4	1E	202/206 (98%)	195 (96%)	6 (3%)	1 (0%)	29	43
4	2E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	29	43
5	1F	201/210 (96%)	193 (96%)	7 (4%)	1 (0%)	29	43
5	2F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29	43
6	1G	179/182 (98%)	161 (90%)	12 (7%)	6 (3%)	3	4
6	2G	179/182 (98%)	159 (89%)	15 (8%)	5 (3%)	5	6
7	1H	172/180 (96%)	161 (94%)	11 (6%)	0	100	100
7	2H	171/180 (95%)	152 (89%)	16 (9%)	3 (2%)	8	12
8	1I	145/148 (98%)	131 (90%)	14 (10%)	0	100	100
8	2I	144/148 (97%)	132 (92%)	10 (7%)	2 (1%)	11	16
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100	100
9	2N	138/140 (99%)	134 (97%)	2 (1%)	2 (1%)	11	16
10	1O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
10	2O	120/122 (98%)	112 (93%)	7 (6%)	1 (1%)	19	29
11	1P	147/150 (98%)	137 (93%)	9 (6%)	1 (1%)	22	33
11	2P	147/150 (98%)	138 (94%)	6 (4%)	3 (2%)	7	10
12	1Q	139/141 (99%)	134 (96%)	5 (4%)	0	100	100
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%)	113 (97%)	3 (3%)	0	100	100
14	1S	108/112 (96%)	102 (94%)	6 (6%)	0	100	100
14	2S	108/112 (96%)	104 (96%)	2 (2%)	2 (2%)	8	11
15	1T	129/146 (88%)	122 (95%)	7 (5%)	0	100	100
15	2T	129/146 (88%)	122 (95%)	7 (5%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
17	1V	99/101 (98%)	95 (96%)	3 (3%)	1 (1%)	15	23
17	2V	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	15	23
18	1W	110/113 (97%)	108 (98%)	2 (2%)	0	100	100
18	2W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	14 21
19	2X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	14 21
20	1Y	105/110 (96%)	96 (91%)	9 (9%)	0	100 100
20	2Y	105/110 (96%)	96 (91%)	9 (9%)	0	100 100
21	1Z	201/206 (98%)	185 (92%)	14 (7%)	2 (1%)	15 23
21	2Z	199/206 (97%)	179 (90%)	20 (10%)	0	100 100
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%)	1 (1%)	1 (1%)	14 21
23	21	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14 21
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
26	14	67/71 (94%)	53 (79%)	9 (13%)	5 (8%)	1 0
26	24	67/71 (94%)	41 (61%)	21 (31%)	5 (8%)	1 0
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	60 (97%)	2 (3%)	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%)	197 (86%)	25 (11%)	7 (3%)	4 5
33	2b	229/256 (90%)	197 (86%)	26 (11%)	6 (3%)	5 7
34	1c	204/239 (85%)	184 (90%)	19 (9%)	1 (0%)	29 43
34	2c	204/239 (85%)	169 (83%)	33 (16%)	2 (1%)	15 23
35	1d	206/209 (99%)	197 (96%)	8 (4%)	1 (0%)	29 43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
35	2d	206/209 (99%)	195 (95%)	9 (4%)	2 (1%)	15 23
36	1e	146/162 (90%)	141 (97%)	5 (3%)	0	100 100
36	2e	146/162 (90%)	142 (97%)	4 (3%)	0	100 100
37	1f	98/101 (97%)	93 (95%)	5 (5%)	0	100 100
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100 100
38	1g	153/156 (98%)	145 (95%)	7 (5%)	1 (1%)	22 33
38	2g	153/156 (98%)	141 (92%)	9 (6%)	3 (2%)	7 10
39	1h	135/138 (98%)	126 (93%)	9 (7%)	0	100 100
39	2h	135/138 (98%)	126 (93%)	8 (6%)	1 (1%)	22 33
40	1i	125/128 (98%)	109 (87%)	16 (13%)	0	100 100
40	2i	124/128 (97%)	106 (86%)	14 (11%)	4 (3%)	4 5
41	1j	95/105 (90%)	83 (87%)	7 (7%)	5 (5%)	2 1
41	2j	94/105 (90%)	77 (82%)	12 (13%)	5 (5%)	2 1
42	1k	112/129 (87%)	101 (90%)	10 (9%)	1 (1%)	17 26
42	2k	112/129 (87%)	100 (89%)	12 (11%)	0	100 100
43	1l	119/132 (90%)	114 (96%)	5 (4%)	0	100 100
43	2l	119/132 (90%)	109 (92%)	9 (8%)	1 (1%)	19 29
44	1m	114/126 (90%)	106 (93%)	5 (4%)	3 (3%)	5 7
44	2m	112/126 (89%)	96 (86%)	14 (12%)	2 (2%)	8 12
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
45	2n	58/61 (95%)	54 (93%)	4 (7%)	0	100 100
46	1o	86/89 (97%)	79 (92%)	4 (5%)	3 (4%)	3 4
46	2o	86/89 (97%)	80 (93%)	4 (5%)	2 (2%)	6 8
47	1p	80/88 (91%)	73 (91%)	7 (9%)	0	100 100
47	2p	80/88 (91%)	72 (90%)	8 (10%)	0	100 100
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
48	2q	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
49	1r	66/88 (75%)	65 (98%)	1 (2%)	0	100 100
49	2r	66/88 (75%)	61 (92%)	5 (8%)	0	100 100
50	1s	81/93 (87%)	70 (86%)	9 (11%)	2 (2%)	5 7
50	2s	81/93 (87%)	71 (88%)	9 (11%)	1 (1%)	13 19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
51	1t	94/106 (89%)	84 (89%)	8 (8%)	2 (2%)	7 10
51	2t	96/106 (91%)	88 (92%)	6 (6%)	2 (2%)	7 10
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
52	2u	21/27 (78%)	19 (90%)	1 (5%)	1 (5%)	2 2
53	1y	95/113 (84%)	93 (98%)	2 (2%)	0	100 100
53	2y	94/113 (83%)	93 (99%)	1 (1%)	0	100 100
All	All	11629/12354 (94%)	10830 (93%)	694 (6%)	105 (1%)	17 26

All (105) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	47	LYS
21	1Z	53	ILE
26	14	55	ARG
33	1b	17	PHE
33	1b	21	ARG
33	1b	129	GLU
44	1m	67	GLU
8	2I	10	GLU
11	2P	36	LYS
26	24	60	GLN
33	2b	17	PHE
40	2i	43	ALA
40	2i	55	ALA
41	2j	56	HIS
41	2j	79	ARG
6	1G	126	ASP
19	1X	94	GLY
26	14	47	GLN
26	14	49	PHE
26	14	57	GLU
33	1b	8	LYS
41	1j	55	LYS
44	1m	106	ASN
51	1t	47	GLY
5	2F	130	ALA
6	2G	78	SER
6	2G	81	LYS
6	2G	117	PHE

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Mol	Chain	Res	Type
7	2H	126	PRO
14	2S	81	GLY
17	2V	79	VAL
19	2X	94	GLY
23	21	3	LYS
26	24	62	ARG
33	2b	125	PRO
34	2c	100	ALA
40	2i	54	ASP
44	2m	106	ASN
46	2o	88	ARG
6	1G	54	GLU
21	1Z	52	SER
34	1c	107	GLN
35	1d	85	LYS
41	1j	77	PRO
41	1j	79	ARG
46	1o	88	ARG
50	1s	12	ASP
50	1s	27	GLU
6	2G	42	GLY
6	2G	47	LYS
7	2H	65	HIS
8	2I	117	GLU
10	2O	5	GLN
11	2P	29	LYS
14	2S	96	GLY
26	24	47	GLN
33	2b	10	LEU
33	2b	22	LYS
34	2c	156	ARG
35	2d	156	GLU
38	2g	7	ALA
41	2j	78	ASN
51	2t	100	ILE
4	1E	52	LEU
6	1G	50	ALA
17	1V	79	VAL
23	11	3	LYS
33	1b	20	GLU
44	1m	12	ASN
46	1o	87	ILE

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Mol	Chain	Res	Type
4	2E	52	LEU
7	2H	47	GLU
9	2N	132	ALA
26	24	55	ARG
38	2g	33	ASP
43	2l	105	TYR
6	1G	49	ASP
26	24	53	GLU
33	2b	9	GLU
33	2b	20	GLU
38	2g	131	LYS
39	2h	133	LEU
40	2i	96	LEU
41	2j	29	ARG
44	2m	67	GLU
52	2u	3	LYS
6	1G	74	LYS
11	1P	29	LYS
33	1b	127	ILE
41	1j	78	ASN
35	2d	154	ASN
38	1g	55	GLY
41	1j	82	ILE
51	1t	100	ILE
46	2o	87	ILE
50	2s	9	VAL
26	14	19	GLY
42	1k	105	VAL
46	1o	19	PRO
9	2N	129	PRO
41	2j	75	ILE
11	2P	122	PRO
51	2t	102	GLY
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%)	198 (92%)	16 (8%)	13 21
3	2D	215/218 (99%)	199 (93%)	16 (7%)	13 21
4	1E	164/166 (99%)	157 (96%)	7 (4%)	29 44
4	2E	164/166 (99%)	155 (94%)	9 (6%)	21 33
5	1F	160/166 (96%)	152 (95%)	8 (5%)	24 38
5	2F	159/166 (96%)	148 (93%)	11 (7%)	15 24
6	1G	144/156 (92%)	130 (90%)	14 (10%)	8 11
6	2G	142/156 (91%)	127 (89%)	15 (11%)	6 10
7	1H	144/148 (97%)	136 (94%)	8 (6%)	21 33
7	2H	143/148 (97%)	127 (89%)	16 (11%)	6 8
8	1I	111/124 (90%)	101 (91%)	10 (9%)	9 14
8	2I	108/124 (87%)	96 (89%)	12 (11%)	6 8
9	1N	119/119 (100%)	106 (89%)	13 (11%)	6 9
9	2N	118/119 (99%)	108 (92%)	10 (8%)	10 15
10	1O	100/100 (100%)	98 (98%)	2 (2%)	55 73
10	2O	100/100 (100%)	97 (97%)	3 (3%)	41 59
11	1P	115/116 (99%)	106 (92%)	9 (8%)	12 20
11	2P	115/116 (99%)	111 (96%)	4 (4%)	36 52
12	1Q	111/111 (100%)	103 (93%)	8 (7%)	14 22
12	2Q	111/111 (100%)	103 (93%)	8 (7%)	14 22
13	1R	101/101 (100%)	94 (93%)	7 (7%)	15 24
13	2R	101/101 (100%)	93 (92%)	8 (8%)	12 19
14	1S	87/88 (99%)	78 (90%)	9 (10%)	7 10
14	2S	85/88 (97%)	79 (93%)	6 (7%)	14 22
15	1T	115/127 (91%)	110 (96%)	5 (4%)	29 44
15	2T	113/127 (89%)	109 (96%)	4 (4%)	36 52
16	1U	93/94 (99%)	87 (94%)	6 (6%)	17 26
16	2U	93/94 (99%)	84 (90%)	9 (10%)	8 11
17	1V	81/82 (99%)	78 (96%)	3 (4%)	34 50
17	2V	80/82 (98%)	75 (94%)	5 (6%)	18 28
18	1W	90/92 (98%)	84 (93%)	6 (7%)	16 25
18	2W	90/92 (98%)	84 (93%)	6 (7%)	16 25

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
19	1X	77/78 (99%)	76 (99%)	1 (1%)	69 82
19	2X	77/78 (99%)	76 (99%)	1 (1%)	69 82
20	1Y	86/91 (94%)	80 (93%)	6 (7%)	15 23
20	2Y	86/91 (94%)	83 (96%)	3 (4%)	36 52
21	1Z	169/179 (94%)	157 (93%)	12 (7%)	14 22
21	2Z	165/179 (92%)	153 (93%)	12 (7%)	14 21
22	10	61/67 (91%)	58 (95%)	3 (5%)	25 38
22	20	61/67 (91%)	60 (98%)	1 (2%)	62 78
23	11	79/83 (95%)	75 (95%)	4 (5%)	24 37
23	21	81/83 (98%)	75 (93%)	6 (7%)	13 21
24	12	65/67 (97%)	63 (97%)	2 (3%)	40 57
24	22	66/67 (98%)	61 (92%)	5 (8%)	13 21
25	13	51/52 (98%)	49 (96%)	2 (4%)	32 48
25	23	50/52 (96%)	47 (94%)	3 (6%)	19 30
26	14	58/63 (92%)	54 (93%)	4 (7%)	15 24
26	24	54/63 (86%)	45 (83%)	9 (17%)	2 2
27	15	51/52 (98%)	47 (92%)	4 (8%)	12 20
27	25	50/52 (96%)	49 (98%)	1 (2%)	55 73
28	16	51/52 (98%)	45 (88%)	6 (12%)	5 7
28	26	50/52 (96%)	44 (88%)	6 (12%)	5 7
29	17	41/42 (98%)	36 (88%)	5 (12%)	5 6
29	27	41/42 (98%)	37 (90%)	4 (10%)	8 11
30	18	54/55 (98%)	50 (93%)	4 (7%)	13 21
30	28	54/55 (98%)	50 (93%)	4 (7%)	13 21
31	19	34/34 (100%)	33 (97%)	1 (3%)	42 60
31	29	34/34 (100%)	32 (94%)	2 (6%)	19 30
33	1b	191/220 (87%)	171 (90%)	20 (10%)	7 10
33	2b	187/220 (85%)	160 (86%)	27 (14%)	3 3
34	1c	144/188 (77%)	133 (92%)	11 (8%)	13 21
34	2c	140/188 (74%)	125 (89%)	15 (11%)	6 9
35	1d	171/181 (94%)	160 (94%)	11 (6%)	17 27

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
35	2d	172/181 (95%)	159 (92%)	13 (8%)	13 21
36	1e	114/123 (93%)	108 (95%)	6 (5%)	22 35
36	2e	114/123 (93%)	107 (94%)	7 (6%)	18 29
37	1f	85/90 (94%)	80 (94%)	5 (6%)	19 30
37	2f	85/90 (94%)	75 (88%)	10 (12%)	5 7
38	1g	120/127 (94%)	111 (92%)	9 (8%)	13 21
38	2g	119/127 (94%)	107 (90%)	12 (10%)	7 10
39	1h	116/119 (98%)	112 (97%)	4 (3%)	37 53
39	2h	114/119 (96%)	102 (90%)	12 (10%)	7 10
40	1i	91/99 (92%)	84 (92%)	7 (8%)	13 20
40	2i	88/99 (89%)	78 (89%)	10 (11%)	5 8
41	1j	68/92 (74%)	66 (97%)	2 (3%)	42 60
41	2j	68/92 (74%)	57 (84%)	11 (16%)	2 2
42	1k	83/99 (84%)	82 (99%)	1 (1%)	71 84
42	2k	83/99 (84%)	78 (94%)	5 (6%)	19 30
43	1l	96/108 (89%)	94 (98%)	2 (2%)	53 72
43	2l	96/108 (89%)	87 (91%)	9 (9%)	8 13
44	1m	90/101 (89%)	83 (92%)	7 (8%)	12 20
44	2m	87/101 (86%)	83 (95%)	4 (5%)	27 41
45	1n	49/50 (98%)	43 (88%)	6 (12%)	5 6
45	2n	49/50 (98%)	45 (92%)	4 (8%)	11 17
46	1o	78/80 (98%)	74 (95%)	4 (5%)	24 37
46	2o	78/80 (98%)	73 (94%)	5 (6%)	17 27
47	1p	69/74 (93%)	57 (83%)	12 (17%)	2 1
47	2p	68/74 (92%)	59 (87%)	9 (13%)	4 5
48	1q	94/97 (97%)	88 (94%)	6 (6%)	17 27
48	2q	94/97 (97%)	90 (96%)	4 (4%)	29 44
49	1r	59/77 (77%)	55 (93%)	4 (7%)	16 24
49	2r	59/77 (77%)	58 (98%)	1 (2%)	60 77
50	1s	68/80 (85%)	64 (94%)	4 (6%)	19 30
50	2s	67/80 (84%)	60 (90%)	7 (10%)	7 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
51	1t	71/82 (87%)	69 (97%)	2 (3%)	43 61
51	2t	70/82 (85%)	66 (94%)	4 (6%)	20 31
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21 33
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21 33
53	1y	82/98 (84%)	81 (99%)	1 (1%)	71 84
53	2y	79/98 (81%)	71 (90%)	8 (10%)	7 10
All	All	9524/10260 (93%)	8837 (93%)	687 (7%)	14 22

All (687) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	35	LYS
3	1D	37	LEU
3	1D	39	LYS
3	1D	99	ASP
3	1D	111	LEU
3	1D	113	VAL
3	1D	141	VAL
3	1D	155	LEU
3	1D	173	VAL
3	1D	193	VAL
3	1D	211	ARG
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	275	LYS
4	1E	9	VAL
4	1E	47	VAL
4	1E	73	GLU
4	1E	75	VAL
4	1E	116	VAL
4	1E	119	ARG
4	1E	184	VAL
5	1F	24	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	110	LEU
5	1F	140	LEU

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Mol	Chain	Res	Type
5	1F	158	THR
5	1F	192	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	28	VAL
6	1G	43	LEU
6	1G	47	LYS
6	1G	52	ILE
6	1G	53	LEU
6	1G	58	GLN
6	1G	78	SER
6	1G	79	ASN
6	1G	137	GLU
6	1G	152	LEU
6	1G	153	ARG
6	1G	159	VAL
7	1H	71	LEU
7	1H	97	ARG
7	1H	98	LEU
7	1H	107	VAL
7	1H	119	GLU
7	1H	127	GLU
7	1H	132	ARG
7	1H	149	ARG
8	1I	15	VAL
8	1I	20	ASP
8	1I	41	GLU
8	1I	42	SER
8	1I	75	LEU
8	1I	78	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	109	ILE
8	1I	117	GLU
9	1N	5	VAL
9	1N	8	GLN
9	1N	9	VAL
9	1N	14	VAL
9	1N	33	LEU
9	1N	34	LEU
9	1N	46	VAL
9	1N	48	MET

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Mol	Chain	Res	Type
9	1N	61	ARG
9	1N	62	VAL
9	1N	67	LEU
9	1N	99	LEU
9	1N	121	LYS
10	1O	10	VAL
10	1O	23	ARG
11	1P	3	LEU
11	1P	56	SER
11	1P	59	LEU
11	1P	95	VAL
11	1P	99	LEU
11	1P	125	VAL
11	1P	133	SER
11	1P	147	LEU
11	1P	149	GLU
12	1Q	5	ARG
12	1Q	7	MET
12	1Q	16	ARG
12	1Q	21	THR
12	1Q	75	THR
12	1Q	80	GLU
12	1Q	109	VAL
12	1Q	129	THR
13	1R	6	SER
13	1R	29	LEU
13	1R	33	ARG
13	1R	36	THR
13	1R	65	LEU
13	1R	96	ARG
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	49	VAL
14	1S	50	SER
14	1S	52	SER
14	1S	59	LYS
14	1S	73	LEU
14	1S	85	VAL
14	1S	110	LEU
15	1T	16	ARG
15	1T	53	ARG

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Mol	Chain	Res	Type
15	1T	96	ARG
15	1T	107	ASP
15	1T	118	ARG
16	1U	5	LYS
16	1U	52	ARG
16	1U	74	LEU
16	1U	77	SER
16	1U	104	GLN
16	1U	114	LYS
17	1V	46	VAL
17	1V	52	VAL
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	23	LEU
18	1W	82	LEU
18	1W	100	THR
19	1X	35	THR
20	1Y	23	ARG
20	1Y	43	ASN
20	1Y	72	VAL
20	1Y	99	CYS
20	1Y	106	LEU
20	1Y	107	ASP
21	1Z	31	ARG
21	1Z	76	LEU
21	1Z	86	VAL
21	1Z	93	ASP
21	1Z	94	GLU
21	1Z	119	GLU
21	1Z	126	VAL
21	1Z	138	GLU
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	191	VAL
21	1Z	203	GLU
22	10	11	ARG
22	10	53	MET
22	10	74	ARG
23	11	21	ARG
23	11	30	VAL

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Mol	Chain	Res	Type
23	11	46	LEU
23	11	69	LYS
24	12	53	LEU
24	12	70	GLN
25	13	23	LEU
25	13	54	VAL
26	14	1	MET
26	14	13	ARG
26	14	49	PHE
26	14	60	GLN
27	15	6	VAL
27	15	16	ARG
27	15	40	LYS
27	15	58	LEU
28	16	13	CYS
28	16	19	ARG
28	16	36	LEU
28	16	44	ARG
28	16	47	THR
28	16	52	VAL
29	17	1	MET
29	17	24	THR
29	17	34	ARG
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	29	LYS
30	18	31	HIS
30	18	58	ILE
31	19	17	ILE
33	1b	9	GLU
33	1b	10	LEU
33	1b	15	VAL
33	1b	19	HIS
33	1b	39	ILE
33	1b	59	GLU
33	1b	67	THR
33	1b	96	ARG
33	1b	111	ARG
33	1b	126	GLU
33	1b	146	GLN
33	1b	158	LEU

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Mol	Chain	Res	Type
33	1b	160	ASP
33	1b	163	PHE
33	1b	185	ILE
33	1b	187	LEU
33	1b	189	ASP
33	1b	200	ILE
33	1b	206	ASP
33	1b	221	LEU
34	1c	3	ASN
34	1c	4	LYS
34	1c	55	VAL
34	1c	70	VAL
34	1c	82	GLU
34	1c	98	ASN
34	1c	126	ARG
34	1c	132	ARG
34	1c	144	SER
34	1c	154	SER
34	1c	204	LEU
35	1d	8	VAL
35	1d	26	CYS
35	1d	123	HIS
35	1d	135	LEU
35	1d	157	LEU
35	1d	168	ARG
35	1d	175	SER
35	1d	188	LEU
35	1d	193	ASP
35	1d	194	LEU
35	1d	196	LEU
36	1e	34	VAL
36	1e	41	VAL
36	1e	68	GLU
36	1e	69	VAL
36	1e	101	ILE
36	1e	147	ASP
37	1f	17	SER
37	1f	64	GLN
37	1f	69	GLU
37	1f	72	VAL
37	1f	86	ARG
38	1g	6	ARG

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Mol	Chain	Res	Type
38	1g	13	GLN
38	1g	15	ASP
38	1g	45	ASP
38	1g	51	GLN
38	1g	56	GLN
38	1g	59	LEU
38	1g	104	LEU
38	1g	113	GLU
39	1h	25	ASP
39	1h	26	VAL
39	1h	54	ASP
39	1h	107	LEU
40	1i	14	VAL
40	1i	47	LEU
40	1i	64	THR
40	1i	65	VAL
40	1i	81	ILE
40	1i	104	ARG
40	1i	108	VAL
41	1j	55	LYS
41	1j	84	GLN
42	1k	16	SER
43	1l	11	VAL
43	1l	33	ARG
44	1m	4	ILE
44	1m	11	ARG
44	1m	14	ARG
44	1m	70	LEU
44	1m	94	ARG
44	1m	106	ASN
44	1m	114	ARG
45	1n	3	ARG
45	1n	4	LYS
45	1n	9	LYS
45	1n	18	VAL
45	1n	22	THR
45	1n	33	VAL
46	1o	6	GLU
46	1o	39	LEU
46	1o	40	SER
46	1o	88	ARG
47	1p	6	LEU

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Mol	Chain	Res	Type
47	1p	8	ARG
47	1p	20	VAL
47	1p	21	VAL
47	1p	27	LYS
47	1p	29	ASP
47	1p	38	TYR
47	1p	42	ARG
47	1p	50	LYS
47	1p	53	VAL
47	1p	61	SER
47	1p	72	ARG
48	1q	26	GLN
48	1q	45	HIS
48	1q	61	GLU
48	1q	63	ARG
48	1q	74	LEU
48	1q	97	SER
49	1r	25	THR
49	1r	26	LEU
49	1r	28	GLU
49	1r	82	THR
50	1s	5	LEU
50	1s	35	SER
50	1s	37	ARG
50	1s	55	LYS
51	1t	24	LEU
51	1t	30	LYS
52	1u	24	ARG
53	1y	42	SER
3	2D	3	VAL
3	2D	61	LEU
3	2D	71	ASP
3	2D	88	ARG
3	2D	89	SER
3	2D	103	ARG
3	2D	113	VAL
3	2D	142	VAL
3	2D	155	LEU
3	2D	169	GLU
3	2D	211	ARG
3	2D	217	ARG
3	2D	221	VAL

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Mol	Chain	Res	Type
3	2D	229	VAL
3	2D	242	ARG
3	2D	274	ARG
4	2E	7	VAL
4	2E	9	VAL
4	2E	47	VAL
4	2E	73	GLU
4	2E	75	VAL
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	170	LEU
5	2F	20	LEU
5	2F	33	LEU
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	126	VAL
5	2F	140	LEU
5	2F	165	ARG
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
6	2G	3	LEU
6	2G	5	VAL
6	2G	9	ARG
6	2G	28	VAL
6	2G	39	ILE
6	2G	43	LEU
6	2G	60	LEU
6	2G	80	PHE
6	2G	97	ASP
6	2G	113	ARG
6	2G	115	ARG
6	2G	123	ASN
6	2G	126	ASP
6	2G	139	LEU
6	2G	145	THR
7	2H	23	ARG
7	2H	24	VAL
7	2H	33	LEU
7	2H	43	VAL

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Mol	Chain	Res	Type
7	2H	47	GLU
7	2H	49	VAL
7	2H	50	VAL
7	2H	56	SER
7	2H	68	THR
7	2H	69	ARG
7	2H	71	LEU
7	2H	95	ARG
7	2H	122	THR
7	2H	133	VAL
7	2H	139	GLN
7	2H	152	ARG
8	2I	12	LEU
8	2I	38	LEU
8	2I	47	LEU
8	2I	48	GLU
8	2I	50	ARG
8	2I	54	GLN
8	2I	73	GLU
8	2I	76	THR
8	2I	92	VAL
8	2I	108	THR
8	2I	114	LEU
8	2I	142	VAL
9	2N	28	THR
9	2N	33	LEU
9	2N	38	HIS
9	2N	48	MET
9	2N	62	VAL
9	2N	65	LYS
9	2N	67	LEU
9	2N	87	LEU
9	2N	100	GLU
9	2N	140	VAL
10	2O	10	VAL
10	2O	23	ARG
10	2O	116	SER
11	2P	15	ARG
11	2P	99	LEU
11	2P	125	VAL
11	2P	149	GLU
12	2Q	2	LEU

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Mol	Chain	Res	Type
12	2Q	7	MET
12	2Q	21	THR
12	2Q	35	VAL
12	2Q	85	LYS
12	2Q	109	VAL
12	2Q	112	GLU
12	2Q	135	ASP
13	2R	29	LEU
13	2R	33	ARG
13	2R	36	THR
13	2R	65	LEU
13	2R	86	ARG
13	2R	96	ARG
13	2R	114	VAL
13	2R	117	VAL
14	2S	12	PHE
14	2S	13	ARG
14	2S	21	THR
14	2S	35	ILE
14	2S	64	GLU
14	2S	84	GLN
15	2T	6	LEU
15	2T	53	ARG
15	2T	85	LYS
15	2T	96	ARG
16	2U	5	LYS
16	2U	31	SER
16	2U	52	ARG
16	2U	55	ARG
16	2U	59	ARG
16	2U	74	LEU
16	2U	77	SER
16	2U	104	GLN
16	2U	117	GLN
17	2V	32	THR
17	2V	35	LEU
17	2V	46	VAL
17	2V	72	VAL
17	2V	79	VAL
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL

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Mol	Chain	Res	Type
18	2W	23	LEU
18	2W	63	ASP
18	2W	100	THR
19	2X	57	LEU
20	2Y	2	ARG
20	2Y	6	HIS
20	2Y	72	VAL
21	2Z	33	LEU
21	2Z	46	LYS
21	2Z	66	SER
21	2Z	74	VAL
21	2Z	107	THR
21	2Z	117	LEU
21	2Z	123	ASP
21	2Z	126	VAL
21	2Z	141	VAL
21	2Z	142	SER
21	2Z	165	VAL
21	2Z	175	VAL
22	20	10	THR
23	21	11	ARG
23	21	21	ARG
23	21	30	VAL
23	21	35	THR
23	21	40	ARG
23	21	59	THR
24	22	16	LEU
24	22	32	LEU
24	22	44	LEU
24	22	52	ASP
24	22	53	LEU
25	23	23	LEU
25	23	31	LEU
25	23	38	GLU
26	24	10	VAL
26	24	15	ILE
26	24	27	THR
26	24	40	HIS
26	24	50	VAL
26	24	53	GLU
26	24	61	ARG
26	24	62	ARG

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Mol	Chain	Res	Type
26	24	63	TYR
27	25	6	VAL
28	26	5	VAL
28	26	6	ARG
28	26	14	THR
28	26	40	CYS
28	26	48	VAL
28	26	50	ARG
29	27	1	MET
29	27	10	ARG
29	27	24	THR
29	27	46	VAL
30	28	14	VAL
30	28	23	VAL
30	28	31	HIS
30	28	46	ARG
31	29	4	ARG
31	29	7	VAL
33	2b	7	VAL
33	2b	8	LYS
33	2b	11	LEU
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	52	GLU
33	2b	55	PHE
33	2b	81	VAL
33	2b	83	MET
33	2b	96	ARG
33	2b	98	LEU
33	2b	111	ARG
33	2b	117	GLU
33	2b	124	SER
33	2b	126	GLU
33	2b	128	GLU
33	2b	138	LEU
33	2b	157	ARG
33	2b	160	ASP
33	2b	187	LEU

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Mol	Chain	Res	Type
33	2b	208	ILE
33	2b	210	SER
33	2b	229	VAL
34	2c	3	ASN
34	2c	47	LEU
34	2c	52	LEU
34	2c	82	GLU
34	2c	105	GLU
34	2c	126	ARG
34	2c	131	ARG
34	2c	136	GLN
34	2c	152	ILE
34	2c	161	GLU
34	2c	166	GLU
34	2c	190	ARG
34	2c	195	VAL
34	2c	204	LEU
34	2c	207	VAL
35	2d	8	VAL
35	2d	28	SER
35	2d	53	ASP
35	2d	59	ARG
35	2d	108	LEU
35	2d	115	ARG
35	2d	135	LEU
35	2d	150	GLU
35	2d	158	ILE
35	2d	170	VAL
35	2d	175	SER
35	2d	202	LEU
35	2d	209	ARG
36	2e	16	THR
36	2e	34	VAL
36	2e	41	VAL
36	2e	68	GLU
36	2e	69	VAL
36	2e	75	THR
36	2e	79	GLU
37	2f	10	LEU
37	2f	22	GLU
37	2f	61	LEU
37	2f	64	GLN

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Mol	Chain	Res	Type
37	2f	69	GLU
37	2f	70	ASP
37	2f	72	VAL
37	2f	75	LEU
37	2f	91	VAL
37	2f	92	LYS
38	2g	8	GLU
38	2g	16	LEU
38	2g	49	ILE
38	2g	51	GLN
38	2g	57	GLU
38	2g	59	LEU
38	2g	95	ARG
38	2g	104	LEU
38	2g	113	GLU
38	2g	115	ARG
38	2g	131	LYS
38	2g	155	ARG
39	2h	2	LEU
39	2h	3	THR
39	2h	33	GLU
39	2h	63	LEU
39	2h	84	ARG
39	2h	85	ARG
39	2h	109	ILE
39	2h	112	LEU
39	2h	114	THR
39	2h	121	ASP
39	2h	133	LEU
39	2h	137	VAL
40	2i	17	VAL
40	2i	27	THR
40	2i	28	VAL
40	2i	53	VAL
40	2i	56	LEU
40	2i	64	THR
40	2i	75	ASP
40	2i	99	LEU
40	2i	108	VAL
40	2i	125	TYR
41	2j	9	ARG
41	2j	30	SER

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Mol	Chain	Res	Type
41	2j	34	VAL
41	2j	38	ILE
41	2j	47	PHE
41	2j	69	ASN
41	2j	72	VAL
41	2j	74	ILE
41	2j	84	GLN
41	2j	98	ILE
41	2j	100	THR
42	2k	67	ASP
42	2k	79	SER
42	2k	81	ASP
42	2k	104	GLN
42	2k	117	ASN
43	2l	28	LYS
43	2l	33	ARG
43	2l	47	LYS
43	2l	55	VAL
43	2l	57	LYS
43	2l	67	THR
43	2l	81	SER
43	2l	83	VAL
43	2l	104	VAL
44	2m	17	VAL
44	2m	47	ASP
44	2m	62	ASN
44	2m	102	ARG
45	2n	18	VAL
45	2n	29	ARG
45	2n	33	VAL
45	2n	42	ILE
46	2o	3	ILE
46	2o	5	LYS
46	2o	39	LEU
46	2o	76	GLU
46	2o	88	ARG
47	2p	1	MET
47	2p	2	VAL
47	2p	20	VAL
47	2p	21	VAL
47	2p	25	ARG
47	2p	28	ARG

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Mol	Chain	Res	Type
47	2p	38	TYR
47	2p	67	THR
47	2p	69	THR
48	2q	16	GLN
48	2q	53	LEU
48	2q	85	VAL
48	2q	99	SER
49	2r	25	THR
50	2s	5	LEU
50	2s	22	LEU
50	2s	41	VAL
50	2s	48	THR
50	2s	49	ILE
50	2s	63	THR
50	2s	79	THR
51	2t	15	ARG
51	2t	24	LEU
51	2t	42	GLN
51	2t	84	LEU
52	2u	6	ARG
53	2y	8	LYS
53	2y	13	THR
53	2y	16	ILE
53	2y	29	LYS
53	2y	32	THR
53	2y	42	SER
53	2y	46	GLN
53	2y	75	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (111) such sidechains are listed below:

Mol	Chain	Res	Type
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	8	GLN
10	1O	3	GLN
14	1S	68	GLN

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Mol	Chain	Res	Type
15	1T	58	ASN
15	1T	123	GLN
16	1U	81	HIS
17	1V	80	GLN
19	1X	31	HIS
19	1X	82	GLN
21	1Z	73	GLN
21	1Z	151	HIS
22	10	35	ASN
23	11	56	GLN
25	13	32	GLN
26	14	60	GLN
33	1b	40	HIS
33	1b	76	GLN
33	1b	135	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	102	ASN
34	1c	104	GLN
34	1c	108	ASN
35	1d	45	GLN
35	1d	77	ASN
35	1d	119	GLN
35	1d	123	HIS
35	1d	129	ASN
36	1e	38	GLN
36	1e	56	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
40	1i	3	GLN
40	1i	73	GLN
40	1i	87	GLN
41	1j	56	HIS
41	1j	84	GLN
43	1l	80	HIS
43	1l	99	HIS
44	1m	40	ASN
46	1o	13	GLN
46	1o	28	GLN
47	1p	16	HIS
48	1q	16	GLN

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Mol	Chain	Res	Type
48	1q	26	GLN
50	1s	83	HIS
51	1t	16	HIS
53	1y	38	HIS
3	2D	126	GLN
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	203	GLN
8	2I	43	ASN
8	2I	104	GLN
8	2I	105	HIS
9	2N	133	GLN
10	2O	3	GLN
15	2T	58	ASN
15	2T	123	GLN
17	2V	64	HIS
19	2X	31	HIS
19	2X	82	GLN
21	2Z	50	GLN
21	2Z	73	GLN
21	2Z	132	ASN
25	23	32	GLN
33	2b	40	HIS
33	2b	135	GLN
33	2b	212	GLN
34	2c	6	HIS
34	2c	28	GLN
34	2c	37	GLN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	161	ASN
35	2d	201	GLN
36	2e	38	GLN
36	2e	56	GLN
36	2e	65	ASN
38	2g	13	GLN
40	2i	31	GLN
40	2i	117	HIS

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Mol	Chain	Res	Type
41	2j	68	HIS
41	2j	84	GLN
42	2k	99	GLN
43	2l	99	HIS
44	2m	12	ASN
44	2m	62	ASN
44	2m	92	HIS
46	2o	9	GLN
46	2o	13	GLN
46	2o	28	GLN
48	2q	16	GLN
48	2q	26	GLN
50	2s	83	HIS
53	2y	4	ASN
53	2y	38	HIS
53	2y	75	ASN
53	2y	79	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	398 (13%)	33 (1%)
1	2A	2856/2915 (97%)	464 (16%)	35 (1%)
2	1B	119/121 (98%)	13 (10%)	0
2	2B	119/121 (98%)	15 (12%)	0
32	1a	1494/1521 (98%)	240 (16%)	0
32	2a	1498/1521 (98%)	240 (16%)	0
All	All	8949/9114 (98%)	1370 (15%)	68 (0%)

All (1370) 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

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Mol	Chain	Res	Type
1	1A	119	A
1	1A	120	U
1	1A	153	C
1	1A	181	A
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
1	1A	222	A
1	1A	229	A
1	1A	248	G
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	275	G
1	1A	279	C
1	1A	280	C
1	1A	311	A
1	1A	330	A
1	1A	352	G
1	1A	363	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	421	U
1	1A	428	A
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G

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Mol	Chain	Res	Type
1	1A	505	A
1	1A	508	G
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
1	1A	573	G
1	1A	575	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	654	A
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	740	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	792	G
1	1A	805	G
1	1A	812	C
1	1A	827	U

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Mol	Chain	Res	Type
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	882	G
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	896	A
1	1A	897	C
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1053	C
1	1A	1054	A
1	1A	1060	U
1	1A	1061	U
1	1A	1062	G
1	1A	1065	U

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Mol	Chain	Res	Type
1	1A	1066	U
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1076	C
1	1A	1077	A
1	1A	1079	C
1	1A	1083	U
1	1A	1084	A
1	1A	1088	A
1	1A	1090	U
1	1A	1091	G
1	1A	1096	A
1	1A	1097	U
1	1A	1109	C
1	1A	1110	G
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	1139	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	1220	A
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U

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Mol	Chain	Res	Type
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1320	C
1	1A	1352	U
1	1A	1359	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
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	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(A)	A
1	1A	1542	A
1	1A	1543	C
1	1A	1545	A
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	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C

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Mol	Chain	Res	Type
1	1A	1654	A
1	1A	1674	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1740	G
1	1A	1746	G
1	1A	1756	G
1	1A	1757	U
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1858	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1914	C
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	1981	A

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Mol	Chain	Res	Type
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2099	U
1	1A	2103	C
1	1A	2106	G
1	1A	2107	C
1	1A	2108	C
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2118	U
1	1A	2119	A
1	1A	2123	G
1	1A	2126	A
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2139	C
1	1A	2142	C
1	1A	2145	C
1	1A	2146	C
1	1A	2152	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2171	A
1	1A	2173	A
1	1A	2180	U
1	1A	2181	G

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Mol	Chain	Res	Type
1	1A	2184	G
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	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2273	A
1	1A	2279	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	2321	G
1	1A	2325	G
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	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A

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Mol	Chain	Res	Type
1	1A	2441	C
1	1A	2448	A
1	1A	2469	A
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2498	C
1	1A	2502	G
1	1A	2504	U
1	1A	2505	G
1	1A	2506	U
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	2689	U
1	1A	2690	C
1	1A	2702	U
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	2761	G
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A

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Mol	Chain	Res	Type
1	1A	2791	C
1	1A	2802	G
1	1A	2803	C
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	15	A
2	1B	42	C
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	84	C
2	1B	106	G
2	1B	110	G
32	1a	6	G
32	1a	7	G
32	1a	9	G
32	1a	22	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	61	G
32	1a	78	G
32	1a	79	G
32	1a	97	G
32	1a	101	A
32	1a	116	A
32	1a	117	G
32	1a	121	C
32	1a	131	C

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Mol	Chain	Res	Type
32	1a	143	A
32	1a	144	G
32	1a	159	G
32	1a	163	C
32	1a	174	C
32	1a	182	U
32	1a	195	A
32	1a	197	A
32	1a	200	G
32	1a	201	C
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	262	A
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	332	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	388	G
32	1a	397	A
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	414	A
32	1a	422	C

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Mol	Chain	Res	Type
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	458	C
32	1a	470	C
32	1a	475	G
32	1a	484	G
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	521	G
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	559	A
32	1a	561	U
32	1a	562	C
32	1a	564	C
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	619	U
32	1a	630	G
32	1a	632	A
32	1a	633	G
32	1a	642	A
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	687	A
32	1a	688	G

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Mol	Chain	Res	Type
32	1a	702	A
32	1a	723	U
32	1a	731	G
32	1a	755	G
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	840	C
32	1a	841	U
32	1a	848	C
32	1a	851	G
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	960	U
32	1a	961	U
32	1a	966	M2G
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	982	U
32	1a	992	U
32	1a	993	G
32	1a	998	G
32	1a	999	C
32	1a	1001(A)	G
32	1a	1006	C
32	1a	1009	G
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G

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Mol	Chain	Res	Type
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	1039	C
32	1a	1040	U
32	1a	1044	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1121	U
32	1a	1124	G
32	1a	1125	U
32	1a	1126	U
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C
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

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Mol	Chain	Res	Type
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1224	G
32	1a	1225	A
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	1260	C
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
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1320	C
32	1a	1322	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
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	1452	C
32	1a	1456	G
32	1a	1487	G

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Mol	Chain	Res	Type
32	1a	1492	A
32	1a	1493	A
32	1a	1497	G
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1507	A
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	9	U
1	2A	10	G
1	2A	11	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	118	A
1	2A	119	A
1	2A	120	U
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	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	225	A

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Mol	Chain	Res	Type
1	2A	228	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	283	A
1	2A	308	G
1	2A	311	A
1	2A	324	A
1	2A	329	G
1	2A	330	A
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
1	2A	405	U
1	2A	407	G
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	505	A
1	2A	509	C
1	2A	530	G

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Mol	Chain	Res	Type
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	563	G
1	2A	573	G
1	2A	575	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	627	A
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	669	G
1	2A	686	G
1	2A	730	C
1	2A	751	A
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	802	A
1	2A	805	G
1	2A	811	U
1	2A	812	C
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G
1	2A	866	A

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Mol	Chain	Res	Type
1	2A	869	G
1	2A	880	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	897	C
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1025	G
1	2A	1026	U
1	2A	1033	U
1	2A	1042	G
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1052	C
1	2A	1053	C
1	2A	1054	A
1	2A	1058	G

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Mol	Chain	Res	Type
1	2A	1060	U
1	2A	1063	G
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
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	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1094	U
1	2A	1095	A
1	2A	1097	U
1	2A	1098	A
1	2A	1109	C
1	2A	1110	G
1	2A	1111	A
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

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Mol	Chain	Res	Type
1	2A	1220	A
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1314	C
1	2A	1319	G
1	2A	1321	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1384	A
1	2A	1385	G
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1510	G
1	2A	1525	G
1	2A	1537	G
1	2A	1542	A

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Mol	Chain	Res	Type
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	1584	C
1	2A	1586	A
1	2A	1595	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1629	U
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1664	A
1	2A	1670	C
1	2A	1674	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1750	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1829	A
1	2A	1835	G

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Mol	Chain	Res	Type
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
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
1	2A	1972	A
1	2A	1975	G
1	2A	1984	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	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	2103	C
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C

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Mol	Chain	Res	Type
1	2A	2109	U
1	2A	2111	C
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2136	C
1	2A	2144	U
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2150	U
1	2A	2151	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2168	G
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C
1	2A	2175	C
1	2A	2180	U
1	2A	2181	G
1	2A	2183	C
1	2A	2186	G
1	2A	2187	G
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G

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Mol	Chain	Res	Type
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2383	G
1	2A	2385	C
1	2A	2406	U
1	2A	2414	G
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

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Mol	Chain	Res	Type
1	2A	2473	U
1	2A	2474	C
1	2A	2476	A
1	2A	2487	G
1	2A	2491	U
1	2A	2492	U
1	2A	2494	G
1	2A	2502	G
1	2A	2504	U
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
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	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2744	G
1	2A	2757	A
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A

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Mol	Chain	Res	Type
1	2A	2789	C
1	2A	2802	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2872	G
1	2A	2880	C
1	2A	2891	G
1	2A	2892	A
1	2A	2894	G
1	2A	2895	U
1	2A	2896	C
2	2B	2	C
2	2B	8	U
2	2B	9	G
2	2B	13	A
2	2B	30	C
2	2B	32	C
2	2B	35	U
2	2B	45	A
2	2B	51	G
2	2B	56	G
2	2B	73	A
2	2B	84	C
2	2B	106	G
2	2B	109	C
2	2B	110	G
32	2a	5	U
32	2a	9	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	60	A
32	2a	61	G
32	2a	66	G
32	2a	78	G
32	2a	88	A

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Mol	Chain	Res	Type
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	156	G
32	2a	163	C
32	2a	174	C
32	2a	182	U
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	227	G
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	306	G
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U

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Mol	Chain	Res	Type
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	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	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	577	G
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	632	A
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	695	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	774	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	836	G
32	2a	840	C
32	2a	841	U
32	2a	848	C
32	2a	851	G
32	2a	859	A
32	2a	902	G
32	2a	914	A
32	2a	919	A
32	2a	920	U
32	2a	926	G
32	2a	927	G
32	2a	934	C
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	980	C
32	2a	984	C
32	2a	989	C
32	2a	990	C
32	2a	992	U

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Mol	Chain	Res	Type
32	2a	993	G
32	2a	994	A
32	2a	995	C
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1017	G
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1028	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1041	A
32	2a	1043	C
32	2a	1046	A
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
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	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1147	C
32	2a	1151	A
32	2a	1152	A

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Mol	Chain	Res	Type
32	2a	1157	A
32	2a	1159	U
32	2a	1183	A
32	2a	1184	G
32	2a	1194	U
32	2a	1196	U
32	2a	1197	G
32	2a	1211	U
32	2a	1212	U
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1238	A
32	2a	1248	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1278	U
32	2a	1279	A
32	2a	1281	U
32	2a	1282	C
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1306	A
32	2a	1312	G
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	1354	C
32	2a	1363	C
32	2a	1364	U
32	2a	1370	G
32	2a	1375	A
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G

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Mol	Chain	Res	Type
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1460	A
32	2a	1492	A
32	2a	1497	G
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	1528	U
32	2a	1529	G
32	2a	1530	G

All (68) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	839	U
1	1A	840	C
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1067	A
1	1A	1142(A)	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1300	U
1	1A	1301	A

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Mol	Chain	Res	Type
1	1A	1379	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	2116	G
1	1A	2126	A
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2602	A
1	1A	2689	U
1	2A	9	U
1	2A	195	A
1	2A	196	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
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	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1608	A
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A
1	2A	2172	U
1	2A	2321	G
1	2A	2406	U

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Mol	Chain	Res	Type
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)

50 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	4OC	2a	1402	32	20,23,24	0.76	1 (5%)	26,32,35	0.96	1 (3%)
43	0TD	1l	92	43	7,9,10	4.70	1 (14%)	6,11,13	5.87	3 (50%)
1	PSU	1A	2605	1	18,21,22	1.34	3 (16%)	22,30,33	1.92	4 (18%)
1	5MU	1A	1939	1	19,22,23	1.42	5 (26%)	28,32,35	2.17	6 (21%)
1	PSU	1A	1911	1	18,21,22	1.34	2 (11%)	22,30,33	1.97	3 (13%)
1	2MA	1A	2503	54,1	17,25,26	1.00	1 (5%)	17,37,40	1.17	3 (17%)
32	5MC	2a	1404	32	18,22,23	0.95	2 (11%)	26,32,35	1.23	4 (15%)
1	OMC	1A	1920	54,1	19,22,23	0.82	0	26,31,34	0.91	1 (3%)
43	0TD	2l	92	43	7,9,10	4.65	1 (14%)	6,11,13	2.30	3 (50%)
32	2MG	1a	1207	32	18,26,27	1.01	1 (5%)	16,38,41	1.56	4 (25%)
1	PSU	2A	1911	1	18,21,22	1.39	2 (11%)	22,30,33	1.90	4 (18%)
32	5MC	2a	1400	32	18,22,23	0.95	2 (11%)	26,32,35	1.21	3 (11%)
1	PSU	1A	1917	1	18,21,22	1.35	2 (11%)	22,30,33	1.73	3 (13%)
1	OMC	2A	1920	1	19,22,23	0.82	0	26,31,34	0.95	1 (3%)
1	5MC	1A	1942	54,1	18,22,23	0.98	2 (11%)	26,32,35	1.14	3 (11%)
32	5MC	1a	967	32	18,22,23	0.92	2 (11%)	26,32,35	1.07	2 (7%)
1	OMU	2A	2552	54,1	19,22,23	1.29	2 (10%)	26,31,34	1.79	6 (23%)
32	PSU	2a	516	54,32	18,21,22	1.32	2 (11%)	22,30,33	1.93	5 (22%)
32	MA6	1a	1518	32	19,26,27	0.82	0	18,38,41	1.48	2 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	2a	1407	32	18,22,23	0.96	2 (11%)	26,32,35	1.09	3 (11%)
1	5MU	2A	1915	1	19,22,23	1.48	4 (21%)	28,32,35	2.23	9 (32%)
1	5MU	2A	1939	54,1	19,22,23	1.47	6 (31%)	28,32,35	2.28	6 (21%)
1	5MU	1A	1915	54,1	19,22,23	1.46	5 (26%)	28,32,35	2.25	8 (28%)
32	5MC	1a	1407	32	18,22,23	0.95	2 (11%)	26,32,35	1.17	4 (15%)
1	OMU	1A	2552	54,1	19,22,23	1.31	3 (15%)	26,31,34	1.72	5 (19%)
1	MA6	1A	2058	54,1	19,26,27	0.79	0	18,38,41	1.54	2 (11%)
1	OMG	1A	2251	54,1	18,26,27	0.99	1 (5%)	19,38,41	1.17	3 (15%)
1	5MC	2A	1962	54,1	18,22,23	0.91	2 (11%)	26,32,35	1.11	2 (7%)
1	PSU	2A	2605	1	18,21,22	1.34	3 (16%)	22,30,33	2.01	4 (18%)
1	MA6	2A	2058	1	19,26,27	0.75	0	18,38,41	1.42	2 (11%)
32	2MG	2a	1207	32	18,26,27	0.89	1 (5%)	16,38,41	1.11	3 (18%)
32	MA6	2a	1519	32	19,26,27	0.84	0	18,38,41	1.48	2 (11%)
32	5MC	1a	1400	32	18,22,23	0.98	2 (11%)	26,32,35	1.17	2 (7%)
32	UR3	2a	1498	32	19,22,23	0.99	1 (5%)	26,32,35	1.45	2 (7%)
32	G7M	1a	527	54,32	20,26,27	2.57	4 (20%)	17,39,42	1.00	1 (5%)
1	PSU	2A	1917	1	18,21,22	1.33	2 (11%)	22,30,33	1.87	3 (13%)
32	M2G	1a	966	32	20,27,28	1.43	3 (15%)	22,40,43	0.94	2 (9%)
32	4OC	1a	1402	32	20,23,24	0.75	1 (5%)	26,32,35	1.01	1 (3%)
1	2MA	2A	2503	54,1	17,25,26	1.01	1 (5%)	17,37,40	1.06	2 (11%)
1	5MC	2A	1942	1	18,22,23	0.96	2 (11%)	26,32,35	1.30	3 (11%)
1	5MC	1A	1962	1	18,22,23	1.03	2 (11%)	26,32,35	1.07	2 (7%)
32	PSU	1a	516	54,32	18,21,22	1.33	2 (11%)	22,30,33	1.83	3 (13%)
32	MA6	2a	1518	32	19,26,27	0.81	0	18,38,41	1.48	2 (11%)
32	5MC	1a	1404	32	18,22,23	0.94	2 (11%)	26,32,35	1.16	2 (7%)
32	G7M	2a	527	32	20,26,27	2.69	4 (20%)	17,39,42	0.96	1 (5%)
32	M2G	2a	966	54,32	20,27,28	1.36	3 (15%)	22,40,43	1.00	2 (9%)
1	OMG	2A	2251	54,1	18,26,27	0.99	1 (5%)	19,38,41	1.08	2 (10%)
32	MA6	1a	1519	32	19,26,27	0.84	0	18,38,41	1.41	2 (11%)
32	5MC	2a	967	32	18,22,23	1.03	2 (11%)	26,32,35	1.16	3 (11%)
32	UR3	1a	1498	32	19,22,23	0.94	1 (5%)	26,32,35	1.51	2 (7%)

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	4OC	2a	1402	32	-	2/9/29/30	0/2/2/2
43	0TD	1l	92	43	-	2/7/12/14	-
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	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	2a	1404	32	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	54,1	-	2/9/27/28	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	2/9/27/28	0/2/2/2
1	5MC	1A	1942	54,1	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
32	PSU	2a	516	54,32	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MU	2A	1939	54,1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	54,1	-	2/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	54,1	-	0/9/27/28	0/2/2/2
1	MA6	1A	2058	54,1	-	0/7/29/30	0/3/3/3
1	OMG	1A	2251	54,1	-	0/5/27/28	0/3/3/3
1	5MC	2A	1962	54,1	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	MA6	2A	2058	1	-	0/7/29/30	0/3/3/3
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	MA6	2a	1519	32	-	1/7/29/30	0/3/3/3
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	54,32	-	1/3/25/26	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	4OC	1a	1402	32	-	1/9/29/30	0/2/2/2
1	2MA	2A	2503	54,1	-	2/3/25/26	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32	-	0/3/25/26	0/3/3/3
32	M2G	2a	966	54,32	-	0/7/29/30	0/3/3/3
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
32	MA6	1a	1519	32	-	1/7/29/30	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2

All (93) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.01	1.70	1.82
43	2l	92	0TD	CB-SB	-11.97	1.70	1.82
32	2a	527	G7M	C8-N9	7.82	1.47	1.33
32	1a	527	G7M	C8-N9	7.42	1.46	1.33
32	2a	527	G7M	C8-N7	7.22	1.46	1.33
32	1a	527	G7M	C8-N7	6.80	1.45	1.33
32	1a	966	M2G	C2-N3	4.40	1.36	1.30
32	1a	527	G7M	C5-C4	4.29	1.47	1.39
32	2a	527	G7M	C5-C4	4.28	1.47	1.39
32	2a	966	M2G	C2-N3	4.25	1.35	1.30
1	1A	1917	PSU	C6-C5	3.29	1.39	1.35
32	2a	516	PSU	C6-C5	3.28	1.39	1.35
1	1A	1911	PSU	C6-C5	3.26	1.39	1.35
1	2A	1911	PSU	C6-C5	3.23	1.39	1.35
1	2A	1915	5MU	C2-N1	3.23	1.43	1.38
32	2a	967	5MC	C6-C5	3.13	1.39	1.34
32	1a	516	PSU	C6-C5	3.12	1.39	1.35
1	2A	1917	PSU	C6-C5	3.09	1.38	1.35
1	1A	1915	5MU	C2-N1	3.07	1.43	1.38
1	1A	1939	5MU	C4-N3	-2.96	1.33	1.38
1	1A	1939	5MU	C6-C5	2.93	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.92	1.33	1.38
32	1a	966	M2G	C6-N1	-2.91	1.33	1.37
32	1a	1400	5MC	C6-C5	2.86	1.39	1.34
1	2A	1915	5MU	C6-C5	2.86	1.39	1.34
1	2A	2251	OMG	C6-N1	-2.84	1.33	1.37
1	2A	2605	PSU	C6-C5	2.83	1.38	1.35
1	2A	2552	OMU	C4-N3	-2.81	1.33	1.38
32	1a	1404	5MC	C6-C5	2.80	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1400	5MC	C6-C5	2.80	1.39	1.34
32	2a	1407	5MC	C6-C5	2.79	1.39	1.34
1	2A	1939	5MU	C6-C5	2.75	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.74	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.74	1.33	1.38
1	1A	2605	PSU	C4-N3	-2.73	1.33	1.38
1	1A	2251	OMG	C6-N1	-2.72	1.33	1.37
1	2A	1942	5MC	C6-C5	2.71	1.39	1.34
1	1A	2552	OMU	C4-N3	-2.70	1.33	1.38
1	1A	1962	5MC	C6-C5	2.68	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.68	1.33	1.38
32	2a	1404	5MC	C6-C5	2.66	1.39	1.34
1	1A	1942	5MC	C6-N1	-2.65	1.33	1.38
1	1A	1917	PSU	C4-N3	-2.64	1.33	1.38
1	2A	1962	5MC	C6-C5	2.63	1.38	1.34
1	2A	2605	PSU	C4-N3	-2.60	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.59	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.58	1.34	1.38
1	1A	1915	5MU	C6-C5	2.57	1.38	1.34
32	1a	966	M2G	C2-N2	2.56	1.40	1.35
32	2a	966	M2G	C2-N2	2.56	1.40	1.35
32	1a	1407	5MC	C6-C5	2.56	1.38	1.34
32	1a	967	5MC	C6-C5	2.53	1.38	1.34
1	1A	1911	PSU	C4-N3	-2.52	1.34	1.38
1	2A	1939	5MU	C4-C5	2.50	1.48	1.44
32	1a	1207	2MG	C6-N1	-2.50	1.34	1.37
32	2a	516	PSU	C4-N3	-2.49	1.34	1.38
32	1a	516	PSU	C4-N3	-2.48	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.47	1.33	1.38
1	1A	1942	5MC	C6-C5	2.45	1.38	1.34
1	1A	1939	5MU	C6-N1	-2.44	1.33	1.38
1	1A	2552	OMU	C2-N3	-2.39	1.33	1.38
1	2A	1915	5MU	C4-C5	2.38	1.48	1.44
1	2A	2552	OMU	C2-N3	-2.37	1.33	1.38
1	2A	1939	5MU	C6-N1	-2.35	1.34	1.38
32	1a	1400	5MC	C6-N1	-2.32	1.34	1.38
32	2a	527	G7M	C6-N1	-2.31	1.34	1.37
1	1A	2552	OMU	C5-C4	2.27	1.48	1.43
1	1A	1915	5MU	C4-C5	2.26	1.48	1.44
1	1A	2605	PSU	C6-C5	2.24	1.37	1.35
1	1A	1939	5MU	C2-N3	-2.24	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.23	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1207	2MG	C6-N1	-2.23	1.34	1.37
32	2a	966	M2G	C6-N1	-2.19	1.34	1.37
32	1a	1407	5MC	C6-N1	-2.17	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.17	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.16	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.16	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.15	1.34	1.38
1	1A	1939	5MU	C4-C5	2.12	1.48	1.44
32	1a	1498	UR3	C6-C5	2.12	1.39	1.35
32	1a	527	G7M	C6-N1	-2.11	1.34	1.37
32	1a	967	5MC	C6-N1	-2.11	1.34	1.38
32	2a	1498	UR3	C6-C5	2.10	1.39	1.35
32	1a	1402	4OC	C6-C5	2.10	1.39	1.35
1	2A	2605	PSU	C2-N3	-2.10	1.33	1.37
1	1A	2503	2MA	C2-N3	2.07	1.35	1.31
32	2a	967	5MC	C6-N1	-2.07	1.34	1.38
1	2A	2503	2MA	C2-N3	2.05	1.35	1.31
1	2A	1939	5MU	C2-N1	2.05	1.41	1.38
32	2a	1402	4OC	C6-C5	2.02	1.39	1.35
1	1A	2605	PSU	C2-N1	-2.02	1.34	1.36
32	2a	1407	5MC	C6-N1	-2.01	1.34	1.38
1	1A	1915	5MU	C2-N3	-2.00	1.34	1.38

All (151) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	13.53	126.92	102.44
32	1a	1498	UR3	C4-N3-C2	-6.37	118.57	124.56
1	1A	1911	PSU	N1-C2-N3	6.30	122.27	115.13
1	2A	2605	PSU	N1-C2-N3	6.20	122.16	115.13
1	2A	1911	PSU	N1-C2-N3	6.17	122.12	115.13
32	2a	1498	UR3	C4-N3-C2	-6.09	118.83	124.56
1	2A	1917	PSU	N1-C2-N3	5.88	121.79	115.13
32	2a	516	PSU	N1-C2-N3	5.85	121.76	115.13
1	1A	2605	PSU	N1-C2-N3	5.84	121.75	115.13
1	2A	1939	5MU	C4-N3-C2	-5.83	119.80	127.35
32	1a	516	PSU	N1-C2-N3	5.67	121.56	115.13
1	2A	1939	5MU	N3-C2-N1	5.42	122.09	114.89
1	1A	1939	5MU	C4-N3-C2	-5.37	120.40	127.35
1	1A	1917	PSU	N1-C2-N3	5.23	121.05	115.13
1	1A	2058	MA6	N3-C2-N1	-5.17	120.60	128.68
1	1A	1939	5MU	N3-C2-N1	5.15	121.72	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1939	5MU	C5-C4-N3	4.93	119.52	115.31
1	2A	1939	5MU	C5-C6-N1	-4.92	118.28	123.34
1	2A	1915	5MU	N3-C2-N1	4.90	121.39	114.89
1	1A	2552	OMU	N3-C2-N1	4.89	121.39	114.89
1	2A	2552	OMU	N3-C2-N1	4.84	121.31	114.89
1	1A	1915	5MU	C4-N3-C2	-4.83	121.10	127.35
1	1A	1915	5MU	N3-C2-N1	4.82	121.29	114.89
1	1A	1939	5MU	C5-C4-N3	4.80	119.41	115.31
32	1a	1518	MA6	N3-C2-N1	-4.69	121.34	128.68
32	2a	1518	MA6	N3-C2-N1	-4.66	121.39	128.68
1	2A	1915	5MU	C4-N3-C2	-4.62	121.37	127.35
32	1a	1519	MA6	N3-C2-N1	-4.60	121.49	128.68
1	1A	1915	5MU	C5-C4-N3	4.59	119.23	115.31
32	2a	1519	MA6	N3-C2-N1	-4.58	121.52	128.68
1	2A	2058	MA6	N3-C2-N1	-4.50	121.65	128.68
1	2A	2552	OMU	C4-N3-C2	-4.45	120.71	126.58
1	2A	1915	5MU	C1'-N1-C2	4.41	125.55	117.57
1	2A	2605	PSU	C4-N3-C2	-4.29	120.15	126.34
1	1A	1915	5MU	C1'-N1-C2	4.29	125.33	117.57
1	2A	1942	5MC	C5-C6-N1	-4.23	118.98	123.34
1	1A	2605	PSU	C4-N3-C2	-4.21	120.27	126.34
1	1A	1939	5MU	O4-C4-C5	-4.16	120.08	124.90
43	2l	92	0TD	CSB-SB-CB	4.15	109.94	102.44
1	1A	1911	PSU	C4-N3-C2	-4.10	120.44	126.34
32	2a	516	PSU	C4-N3-C2	-4.07	120.48	126.34
1	1A	1939	5MU	C5-C6-N1	-3.99	119.24	123.34
32	1a	1400	5MC	C5-C6-N1	-3.96	119.27	123.34
32	1a	1404	5MC	C5-C6-N1	-3.94	119.28	123.34
32	2a	967	5MC	C5-C6-N1	-3.94	119.28	123.34
32	2a	1400	5MC	C5-C6-N1	-3.93	119.30	123.34
1	2A	1915	5MU	C5-C4-N3	3.93	118.66	115.31
32	1a	516	PSU	C4-N3-C2	-3.89	120.73	126.34
1	2A	1917	PSU	C4-N3-C2	-3.80	120.87	126.34
1	2A	1911	PSU	C4-N3-C2	-3.79	120.88	126.34
1	2A	1915	5MU	O4-C4-C5	-3.72	120.59	124.90
43	1l	92	0TD	OD2-CG-CB	3.72	121.18	113.15
1	2A	1962	5MC	C5-C6-N1	-3.70	119.53	123.34
1	1A	1915	5MU	O4-C4-C5	-3.69	120.62	124.90
1	1A	2605	PSU	O2-C2-N1	-3.68	118.74	122.79
1	1A	2552	OMU	C4-N3-C2	-3.65	121.77	126.58
1	1A	1915	5MU	C1'-N1-C6	-3.62	115.09	121.12
1	1A	1962	5MC	C5-C6-N1	-3.61	119.62	123.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1942	5MC	C5-C6-N1	-3.57	119.67	123.34
1	2A	1915	5MU	C1'-N1-C6	-3.56	115.20	121.12
1	2A	1917	PSU	O2-C2-N1	-3.55	118.88	122.79
32	2a	1519	MA6	C4-C5-N7	-3.53	105.72	109.40
1	1A	1917	PSU	C4-N3-C2	-3.52	121.27	126.34
1	1A	1911	PSU	O2-C2-N1	-3.51	118.92	122.79
32	1a	967	5MC	C5-C6-N1	-3.46	119.78	123.34
1	2A	1939	5MU	O4-C4-C5	-3.42	120.94	124.90
1	2A	1911	PSU	O2-C2-N1	-3.38	119.07	122.79
32	2a	516	PSU	O2-C2-N1	-3.28	119.18	122.79
32	2a	1404	5MC	C5-C6-N1	-3.22	120.02	123.34
32	2a	1407	5MC	C5-C6-N1	-3.22	120.03	123.34
1	1A	2552	OMU	C2'-C1'-N1	-3.19	108.04	114.22
32	2a	1518	MA6	C4-C5-N7	-3.18	106.09	109.40
1	2A	2605	PSU	O2-C2-N1	-3.12	119.36	122.79
32	1a	1407	5MC	C5-C6-N1	-3.10	120.15	123.34
1	1A	1939	5MU	O2-C2-N1	-3.09	118.67	122.79
32	1a	1519	MA6	C4-C5-N7	-3.06	106.20	109.40
32	1a	516	PSU	O2-C2-N1	-3.02	119.47	122.79
1	2A	2552	OMU	C5-C4-N3	3.01	119.34	114.84
1	1A	1917	PSU	O2-C2-N1	-2.96	119.53	122.79
43	2l	92	0TD	OD2-CG-CB	2.87	119.34	113.15
32	1a	1402	4OC	C6-C5-C4	2.84	120.44	116.96
1	2A	2552	OMU	C2'-C1'-N1	-2.84	108.70	114.22
32	1a	1518	MA6	C4-C5-N7	-2.81	106.47	109.40
1	1A	1915	5MU	O2-C2-N3	-2.78	116.33	121.50
32	2a	527	G7M	CN7-N7-C8	-2.76	112.13	125.43
32	1a	527	G7M	CN7-N7-C8	-2.76	112.16	125.43
1	1A	1915	5MU	C5-C6-N1	-2.74	120.52	123.34
1	2A	2058	MA6	C4-C5-N7	-2.74	106.55	109.40
1	2A	2503	2MA	C8-N7-C5	2.72	108.17	102.99
32	2a	1404	5MC	C5-C4-N3	-2.70	118.76	121.67
1	1A	2503	2MA	C8-N7-C5	2.64	108.01	102.99
1	2A	1939	5MU	O2-C2-N1	-2.60	119.33	122.79
1	2A	1942	5MC	O2-C2-N3	-2.58	118.14	122.33
32	1a	1407	5MC	C5-C4-N3	-2.57	118.90	121.67
1	2A	1915	5MU	C5-C6-N1	-2.56	120.70	123.34
32	1a	1207	2MG	CM2-N2-C2	-2.53	118.27	123.86
1	2A	2552	OMU	O2-C2-N1	-2.52	119.43	122.79
32	1a	1498	UR3	C3U-N3-C2	2.51	121.70	117.31
1	1A	1920	OMC	O2-C2-N3	-2.50	118.27	122.33
1	2A	1915	5MU	O2-C2-N3	-2.49	116.86	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1400	5MC	C5-C4-N3	-2.48	119.00	121.67
1	1A	2503	2MA	C5-C6-N1	2.48	118.30	114.02
32	1a	1400	5MC	C5-C4-N3	-2.47	119.00	121.67
32	1a	1207	2MG	C8-N7-C5	2.47	107.69	102.99
32	1a	1407	5MC	CM5-C5-C6	-2.47	119.55	122.85
1	2A	2605	PSU	C5-C6-N1	-2.47	118.41	122.11
43	1l	92	0TD	OD1-CG-CB	-2.47	117.27	122.44
32	2a	1402	4OC	C6-C5-C4	2.45	119.96	116.96
32	2a	1407	5MC	C5-C4-N3	-2.45	119.03	121.67
1	2A	2503	2MA	C5-C6-N1	2.45	118.24	114.02
32	2a	516	PSU	O4'-C1'-C2'	2.44	108.58	105.14
32	2a	1404	5MC	O2-C2-N3	-2.43	118.37	122.33
32	2a	967	5MC	C5-C4-N3	-2.43	119.05	121.67
32	1a	1207	2MG	O3'-C3'-C2'	2.42	119.66	111.82
1	1A	2058	MA6	C4-C5-N7	-2.42	106.88	109.40
1	1A	1942	5MC	C5-C4-N3	-2.41	119.08	121.67
1	2A	2552	OMU	O4-C4-C5	-2.40	120.93	125.16
1	1A	2251	OMG	C8-N7-C5	2.38	107.53	102.99
32	1a	1207	2MG	C5-C6-N1	2.38	118.15	113.95
1	2A	1942	5MC	C5-C4-N3	-2.33	119.16	121.67
32	2a	1207	2MG	C8-N7-C5	2.32	107.42	102.99
32	2a	1404	5MC	CM5-C5-C6	-2.32	119.74	122.85
32	1a	966	M2G	C5-C6-N1	2.30	118.02	113.95
1	2A	2251	OMG	C8-N7-C5	2.30	107.36	102.99
1	1A	2552	OMU	C5-C4-N3	2.29	118.27	114.84
32	1a	967	5MC	C5-C4-N3	-2.28	119.21	121.67
1	1A	2503	2MA	CM2-C2-N1	2.28	121.29	116.23
1	1A	2251	OMG	C5-C6-N1	2.27	117.96	113.95
32	1a	1407	5MC	O2-C2-N3	-2.26	118.65	122.33
1	2A	2251	OMG	C5-C6-N1	2.24	117.90	113.95
32	2a	966	M2G	C8-N7-C5	2.23	107.24	102.99
1	2A	1920	OMC	O2-C2-N3	-2.23	118.71	122.33
32	2a	1400	5MC	O2-C2-N3	-2.20	118.75	122.33
32	1a	1404	5MC	C5-C4-N3	-2.19	119.31	121.67
1	1A	2605	PSU	C5-C6-N1	-2.19	118.82	122.11
32	2a	1407	5MC	O2-C2-N3	-2.16	118.82	122.33
1	1A	1942	5MC	CM5-C5-C6	-2.15	119.98	122.85
32	2a	966	M2G	C5-C6-N1	2.11	117.68	113.95
1	1A	2552	OMU	O4-C4-C5	-2.09	121.48	125.16
32	1a	966	M2G	C8-N7-C5	2.08	106.96	102.99
1	1A	2251	OMG	O6-C6-C5	-2.06	120.35	124.37
43	2l	92	0TD	OD1-CG-CB	-2.05	118.14	122.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1915	5MU	C6-N1-C2	-2.05	119.22	121.30
32	2a	1207	2MG	CM2-N2-C2	-2.05	119.34	123.86
1	2A	1962	5MC	C5-C4-N3	-2.04	119.47	121.67
1	1A	1962	5MC	C5-C4-N3	-2.04	119.47	121.67
32	2a	516	PSU	C5-C6-N1	-2.04	119.05	122.11
32	2a	1207	2MG	C5-C6-N1	2.04	117.55	113.95
1	2A	1911	PSU	O4'-C1'-C2'	2.03	108.01	105.14
32	2a	1498	UR3	C3U-N3-C2	2.03	120.86	117.31
32	2a	967	5MC	CM5-C5-C6	-2.03	120.14	122.85

There are no chirality outliers.

All (22) 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
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	CG-CB-SB-CSB
32	2a	1402	4OC	C1'-C2'-O2'-CM2
1	1A	2503	2MA	C4'-C5'-O5'-P
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
1	2A	1920	OMC	C3'-C2'-O2'-CM2
32	2a	1402	4OC	C3'-C2'-O2'-CM2
43	1l	92	0TD	CA-CB-SB-CSB
43	2l	92	0TD	CA-CB-SB-CSB
32	1a	1519	MA6	O4'-C4'-C5'-O5'
1	2A	1920	OMC	C2'-C1'-N1-C2
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	1920	OMC	C1'-C2'-O2'-CM2
1	1A	1920	OMC	C3'-C2'-O2'-CM2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	2503	2MA	C3'-C4'-C5'-O5'

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 2493 ligands modelled in this entry, 2478 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	$\#\|Z\| > 2$
57	MPD	1A	4034	-	7,7,7	0.33	0	9,10,10	0.37	0
57	MPD	18	103	-	7,7,7	0.29	0	9,10,10	0.37	0
57	MPD	2A	3714	-	7,7,7	0.34	0	9,10,10	0.34	0
57	MPD	1T	207	-	7,7,7	0.32	0	9,10,10	0.29	0
58	ARG	1B	230	-	10,11,11	0.74	1 (10%)	11,13,13	1.29	2 (18%)
57	MPD	2A	3715	-	7,7,7	0.29	0	9,10,10	0.23	0
56	ZIT	1A	4033	-	54,54,54	0.88	1 (1%)	82,83,83	1.43	11 (13%)
55	HGR	1A	4032	-	39,39,39	2.43	9 (23%)	50,58,58	1.74	14 (28%)
57	MPD	1a	1882	-	7,7,7	0.38	0	9,10,10	0.58	0
57	MPD	2B	219	-	7,7,7	0.32	0	9,10,10	0.22	0
58	ARG	1F	319	54	10,11,11	0.69	0	11,13,13	1.15	2 (18%)
56	ZIT	2A	3713	-	54,54,54	0.89	1 (1%)	82,83,83	1.62	14 (17%)
60	SF4	1d	303	35	0,12,12	-	-	-		
60	SF4	2d	501	35	0,12,12	-	-	-		
55	HGR	2A	3712	-	39,39,39	2.40	9 (23%)	50,58,58	1.68	14 (28%)

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
57	MPD	1A	4034	-	-	2/5/5/5	-
57	MPD	18	103	-	-	1/5/5/5	-
57	MPD	2A	3714	-	-	0/5/5/5	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	MPD	1T	207	-	-	2/5/5/5	-
58	ARG	1B	230	-	-	5/11/11/11	-
57	MPD	2A	3715	-	-	4/5/5/5	-
56	ZIT	1A	4033	-	-	9/72/107/107	0/3/3/3
55	HGR	1A	4032	-	-	5/20/79/79	0/4/4/4
57	MPD	1a	1882	-	-	2/5/5/5	-
57	MPD	2B	219	-	-	4/5/5/5	-
58	ARG	1F	319	54	-	5/11/11/11	-
56	ZIT	2A	3713	-	-	14/72/107/107	0/3/3/3
60	SF4	1d	303	35	-	-	0/6/5/5
60	SF4	2d	501	35	-	-	0/6/5/5
55	HGR	2A	3712	-	-	5/20/79/79	0/4/4/4

All (21) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1A	4032	HGR	C12-C14	9.18	1.55	1.33
55	2A	3712	HGR	C12-C14	9.10	1.54	1.33
55	1A	4032	HGR	C5-C6	-5.37	1.39	1.50
55	2A	3712	HGR	C5-C6	-5.35	1.39	1.50
55	1A	4032	HGR	C5-C4	-5.27	1.39	1.49
55	2A	3712	HGR	C5-C4	-5.26	1.39	1.49
56	2A	3713	ZIT	O14-C1	5.24	1.46	1.34
56	1A	4033	ZIT	O14-C1	5.17	1.46	1.34
55	2A	3712	HGR	C3-C2	-4.75	1.39	1.48
55	1A	4032	HGR	C3-C2	-4.52	1.39	1.48
55	1A	4032	HGR	O4-C2	4.42	1.36	1.24
55	2A	3712	HGR	O4-C2	4.26	1.35	1.24
55	1A	4032	HGR	C1-C6	2.80	1.39	1.35
55	2A	3712	HGR	C1-C6	2.80	1.39	1.35
55	1A	4032	HGR	O8-C23	2.75	1.46	1.41
55	1A	4032	HGR	C8-C7	-2.65	1.50	1.53
55	2A	3712	HGR	O8-C23	2.29	1.45	1.41
55	2A	3712	HGR	O1-C10	2.15	1.45	1.41
55	1A	4032	HGR	O1-C10	2.14	1.45	1.41
58	1B	230	ARG	OXT-C	-2.08	1.23	1.30
55	2A	3712	HGR	C8-C7	-2.04	1.51	1.53

All (57) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1A	4033	ZIT	O1A-C5-C6	4.66	112.14	106.39
56	2A	3713	ZIT	O3B-C3B-C2B	-4.30	106.07	112.96
55	2A	3712	HGR	C4-C5-C6	4.27	121.56	112.36
55	1A	4032	HGR	C4-C5-C6	4.26	121.53	112.36
56	1A	4033	ZIT	O3B-C3B-C4B	4.21	110.05	103.81
55	1A	4032	HGR	C23-O9-C22	-4.00	100.21	106.31
56	2A	3713	ZIT	O3B-C3B-C4B	3.84	109.50	103.81
56	2A	3713	ZIT	C4A-C3A-N3A	-3.79	104.95	115.67
55	1A	4032	HGR	C8-C7-C11	-3.75	107.09	113.67
56	2A	3713	ZIT	C2B-C3B-C4B	3.66	114.23	107.67
55	2A	3712	HGR	C8-C7-C11	-3.42	107.67	113.67
56	2A	3713	ZIT	O1A-C5-C6	3.41	110.60	106.39
56	1A	4033	ZIT	O14-C1-C2	3.37	118.96	111.56
56	1A	4033	ZIT	C14-O14-C1	-3.22	112.46	118.18
56	1A	4033	ZIT	C8B-O3B-C3B	3.18	124.19	117.55
58	1B	230	ARG	OXT-C-O	-3.17	116.90	124.09
55	2A	3712	HGR	C12-C6-C1	-3.10	116.45	119.31
56	2A	3713	ZIT	C15-C14-C13	-3.09	109.34	115.20
55	1A	4032	HGR	C4-C3-C2	-3.09	118.99	121.83
56	2A	3713	ZIT	O14-C1-C2	3.08	118.33	111.56
55	1A	4032	HGR	C12-C6-C1	-3.05	116.50	119.31
56	2A	3713	ZIT	C6-C5-C4	-3.00	109.80	114.05
55	2A	3712	HGR	O1-C10-C9	-2.96	101.17	104.98
55	2A	3712	HGR	O9-C22-C18	-2.88	99.51	105.97
58	1F	319	ARG	OXT-C-O	-2.85	117.62	124.09
55	2A	3712	HGR	O4-C2-C3	-2.84	116.85	121.30
56	1A	4033	ZIT	O3B-C3B-C2B	-2.84	108.41	112.96
56	2A	3713	ZIT	O1B-C3-C4	2.83	111.63	108.22
55	2A	3712	HGR	C4-C3-C2	-2.80	119.25	121.83
55	2A	3712	HGR	O8-C18-C22	-2.79	99.71	105.97
55	1A	4032	HGR	O1-C10-C9	-2.77	101.41	104.98
56	2A	3713	ZIT	C3B-C4B-C5B	2.75	115.36	111.14
55	1A	4032	HGR	O3-C3-C2	2.72	117.74	112.56
58	1B	230	ARG	OXT-C-CA	2.71	122.62	113.38
55	1A	4032	HGR	O3-C10-C9	2.71	111.36	106.78
56	2A	3713	ZIT	C6A-C5A-C4A	-2.69	109.18	113.40
55	1A	4032	HGR	C10-C9-C8	-2.67	98.91	102.30
55	2A	3712	HGR	C10-C9-C8	-2.62	98.97	102.30
56	2A	3713	ZIT	O5B-C5B-C6B	2.62	112.36	106.70
55	1A	4032	HGR	C1-C2-C3	2.56	120.93	115.99
55	2A	3712	HGR	O3-C10-C9	2.56	111.11	106.78
55	2A	3712	HGR	C1-C2-C3	2.54	120.88	115.99
56	1A	4033	ZIT	O1B-C3-C4	2.48	111.21	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1A	4032	HGR	O9-C22-C18	-2.46	100.45	105.97
56	2A	3713	ZIT	C1B-O5B-C5B	2.45	120.43	113.84
56	1A	4033	ZIT	O5B-C5B-C4B	2.44	114.38	110.03
55	2A	3712	HGR	O3-C3-C2	2.40	117.14	112.56
56	1A	4033	ZIT	C9-N10-C11	-2.39	107.99	112.05
55	2A	3712	HGR	C23-O9-C22	-2.37	102.70	106.31
58	1F	319	ARG	OXT-C-CA	2.37	121.46	113.38
55	1A	4032	HGR	O4-C2-C3	-2.31	117.69	121.30
55	1A	4032	HGR	C19-C17-N1	2.21	114.78	110.62
56	1A	4033	ZIT	C6-C5-C4	-2.19	110.94	114.05
55	1A	4032	HGR	O8-C18-C22	-2.12	101.23	105.97
55	2A	3712	HGR	C10-O3-C3	-2.02	110.78	115.36
56	1A	4033	ZIT	C4A-C3A-N3A	-2.02	109.97	115.67
56	2A	3713	ZIT	O14-C1-O1	-2.01	120.18	123.94

There are no chirality outliers.

All (58) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4032	HGR	C2-C3-O3-C10
55	2A	3712	HGR	C2-C3-O3-C10
56	1A	4033	ZIT	C19-C6-C7-C8
56	1A	4033	ZIT	O6-C6-C7-C8
56	1A	4033	ZIT	C12-C11-N10-C21
56	1A	4033	ZIT	C22-C11-N10-C21
56	1A	4033	ZIT	C4B-C3B-O3B-C8B
56	2A	3713	ZIT	C7-C8-C9-N10
56	2A	3713	ZIT	C20-C8-C9-N10
56	2A	3713	ZIT	C2B-C3B-O3B-C8B
56	2A	3713	ZIT	C4B-C3B-O3B-C8B
56	2A	3713	ZIT	C7B-C3B-O3B-C8B
57	1a	1882	MPD	C2-C3-C4-O4
57	1a	1882	MPD	C2-C3-C4-C5
57	2A	3715	MPD	O2-C2-C3-C4
57	2A	3715	MPD	C2-C3-C4-O4
58	1B	230	ARG	NE-CD-CG-CB
58	1F	319	ARG	NE-CD-CG-CB
58	1F	319	ARG	OXT-C-CA-CB
58	1F	319	ARG	O-C-CA-CB
56	1A	4033	ZIT	C2B-C3B-O3B-C8B
58	1B	230	ARG	CA-CB-CG-CD
58	1F	319	ARG	OXT-C-CA-N

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Mol	Chain	Res	Type	Atoms
56	1A	4033	ZIT	O1A-C5-C6-C7
56	1A	4033	ZIT	C4-C5-C6-O6
56	2A	3713	ZIT	C22-C11-C12-C13
58	1B	230	ARG	O-C-CA-N
58	1F	319	ARG	O-C-CA-N
56	2A	3713	ZIT	C22-C11-C12-O12
58	1B	230	ARG	C-CA-CB-CG
57	2B	219	MPD	C2-C3-C4-C5
55	1A	4032	HGR	C12-C14-C15-O7
55	2A	3712	HGR	C12-C14-C15-O7
55	2A	3712	HGR	C12-C14-C15-N1
57	2B	219	MPD	C2-C3-C4-O4
57	2A	3715	MPD	C1-C2-C3-C4
57	2A	3715	MPD	CM-C2-C3-C4
57	2B	219	MPD	CM-C2-C3-C4
56	2A	3713	ZIT	O12-C12-C13-O13
56	1A	4033	ZIT	C2A-C3A-N3A-C8A
55	1A	4032	HGR	C16-C14-C15-O7
55	2A	3712	HGR	C16-C14-C15-O7
55	2A	3712	HGR	C16-C14-C15-N1
55	1A	4032	HGR	C12-C14-C15-N1
56	2A	3713	ZIT	C19-C6-C7-C8
57	18	103	MPD	O2-C2-C3-C4
57	2B	219	MPD	O2-C2-C3-C4
56	2A	3713	ZIT	O14-C14-C15-C16
56	2A	3713	ZIT	O12-C12-C13-C14
58	1B	230	ARG	OXT-C-CA-N
55	1A	4032	HGR	C16-C14-C15-N1
57	1A	4034	MPD	C2-C3-C4-C5
57	1T	207	MPD	C2-C3-C4-C5
56	2A	3713	ZIT	C12-C11-N10-C9
56	2A	3713	ZIT	N10-C11-C12-C13
56	2A	3713	ZIT	N10-C11-C12-O12
57	1A	4034	MPD	C2-C3-C4-O4
57	1T	207	MPD	C2-C3-C4-O4

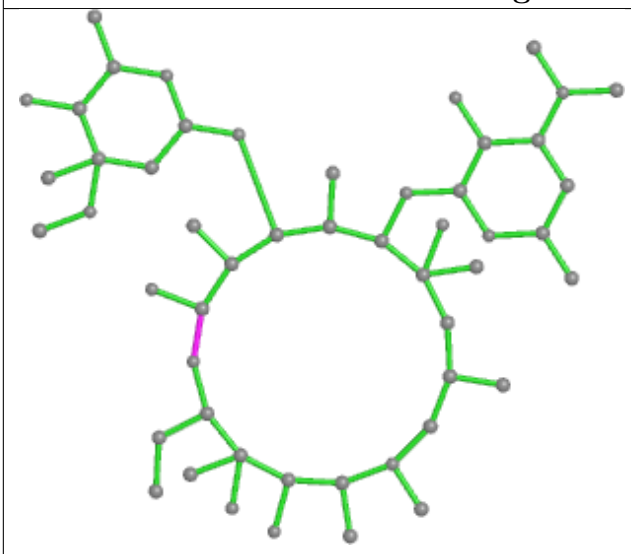
There are no ring outliers.

No monomer is involved in short contacts.

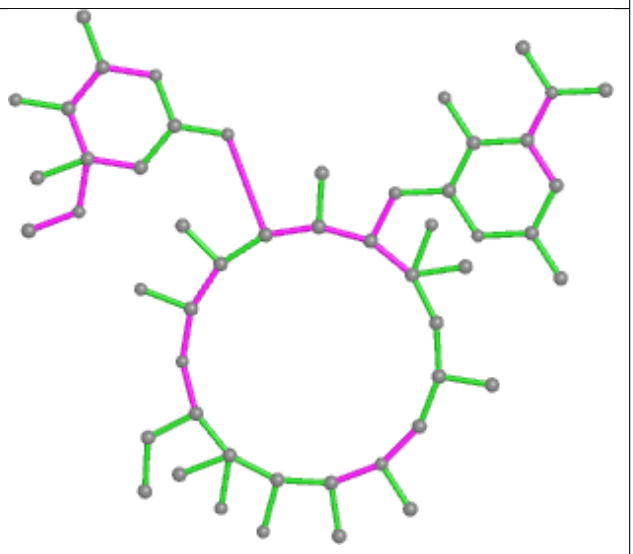
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

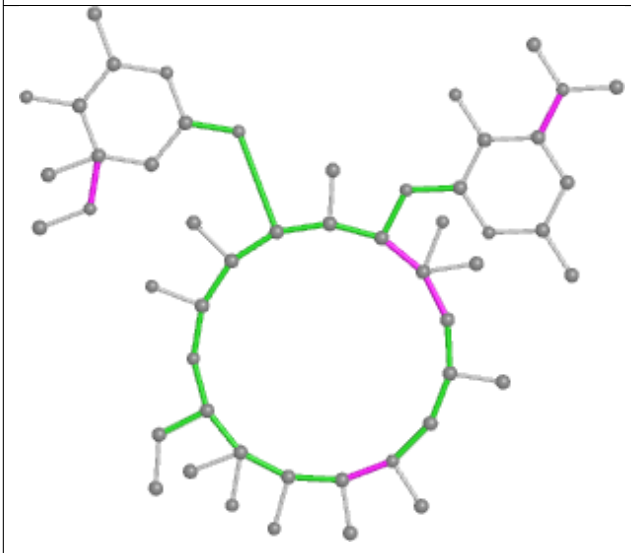
Ligand ZIT 1A 4033



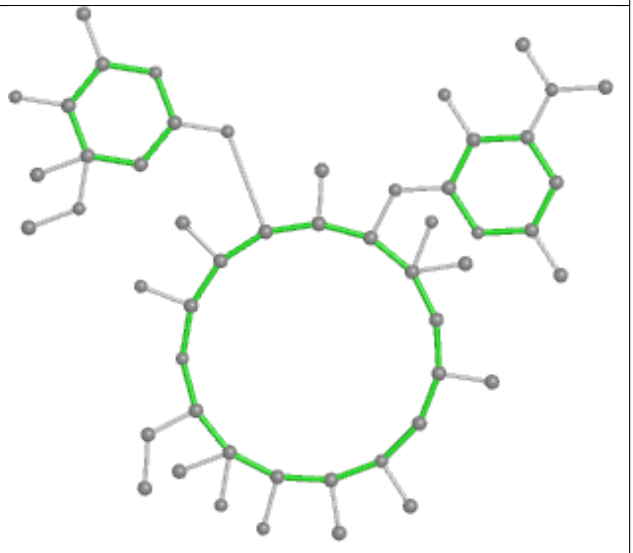
Bond lengths



Bond angles

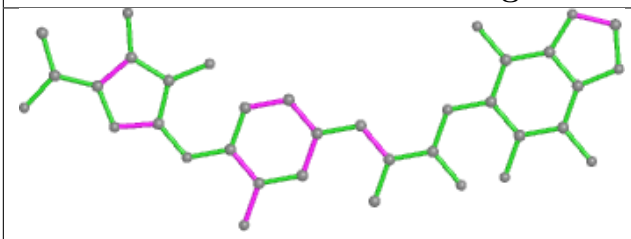


Torsions

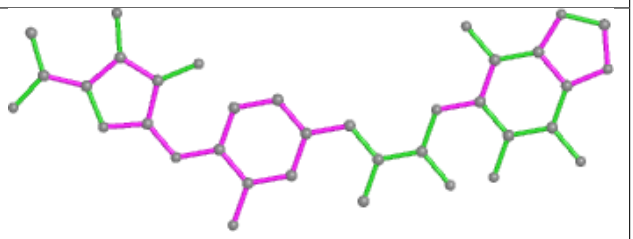


Rings

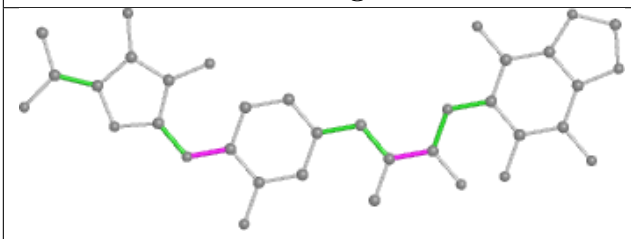
Ligand HGR 1A 4032



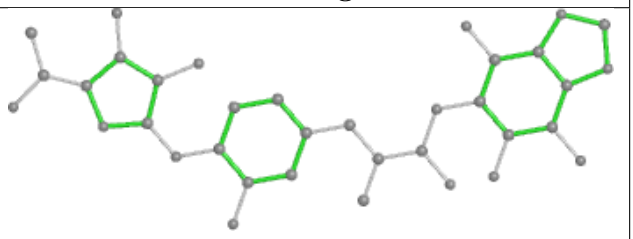
Bond lengths



Bond angles

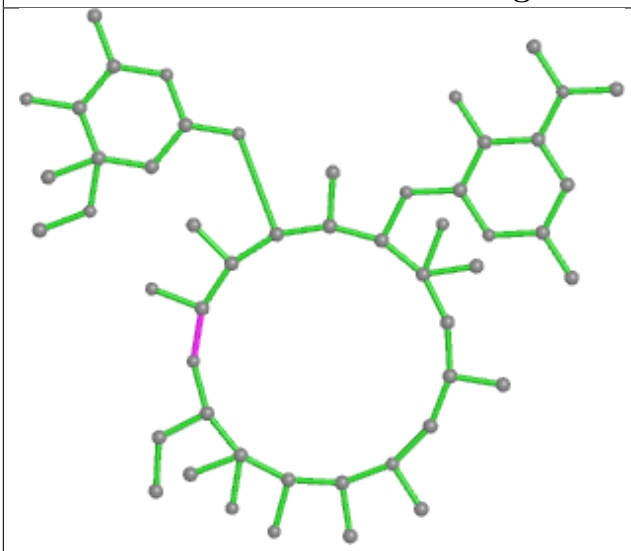


Torsions

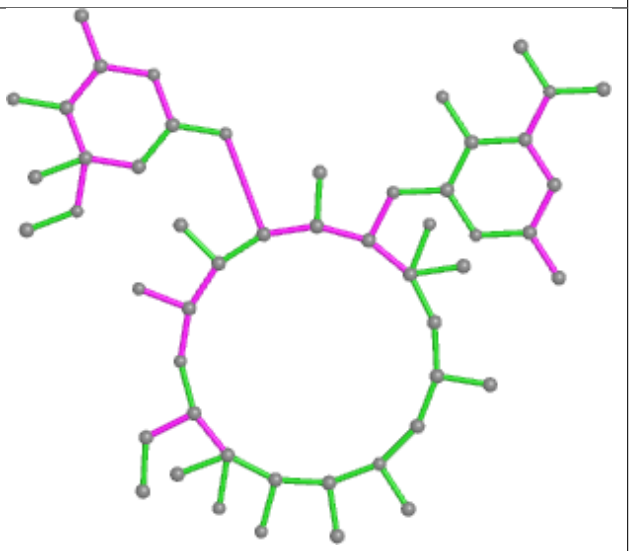


Rings

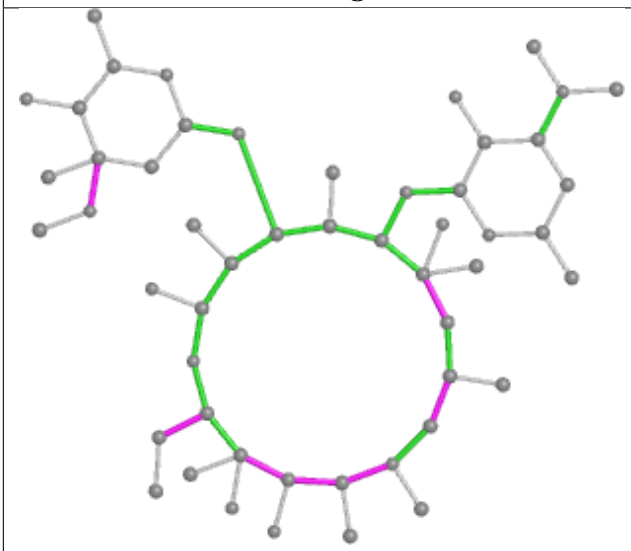
Ligand ZIT 2A 3713



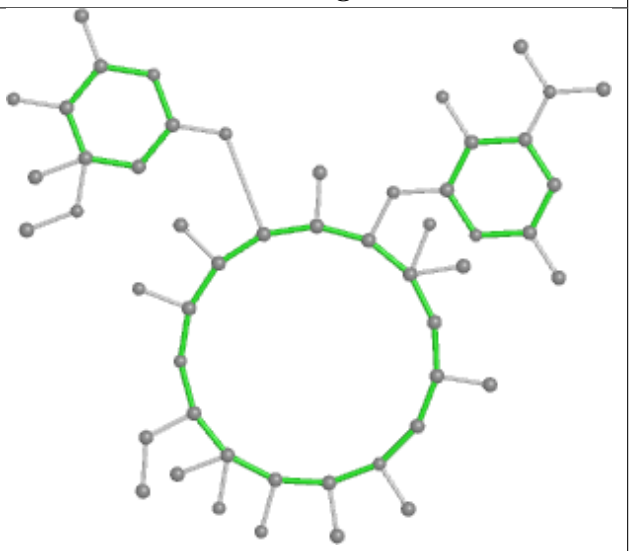
Bond lengths



Bond angles

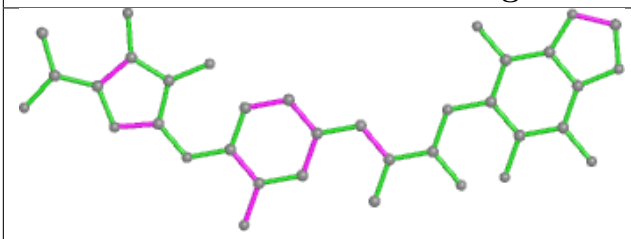


Torsions

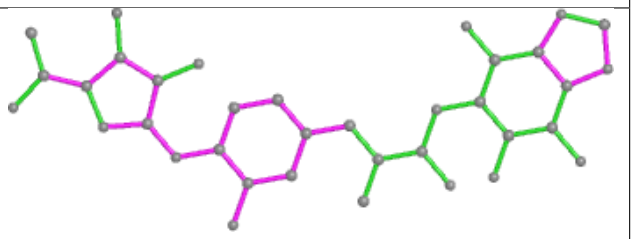


Rings

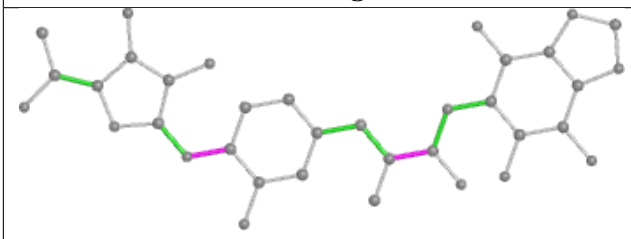
Ligand HGR 2A 3712



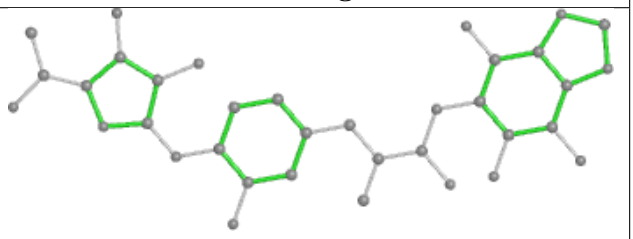
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2860/2915 (98%)	0.45	63 (2%) 62 57	24, 40, 101, 113	0
1	2A	2855/2915 (97%)	0.27	99 (3%) 44 40	34, 57, 103, 114	0
2	1B	120/121 (99%)	0.02	0 100 100	36, 56, 70, 89	0
2	2B	120/121 (99%)	-0.32	0 100 100	63, 82, 90, 100	0
3	1D	275/276 (99%)	0.58	4 (1%) 73 71	24, 40, 55, 81	0
3	2D	275/276 (99%)	0.74	16 (5%) 23 19	32, 51, 64, 87	0
4	1E	204/206 (99%)	0.48	0 100 100	23, 43, 66, 79	0
4	2E	204/206 (99%)	0.42	6 (2%) 51 48	34, 57, 74, 86	0
5	1F	203/210 (96%)	0.39	0 100 100	24, 46, 72, 89	0
5	2F	203/210 (96%)	0.36	5 (2%) 57 53	35, 68, 82, 91	0
6	1G	181/182 (99%)	0.05	2 (1%) 80 79	54, 73, 85, 93	0
6	2G	181/182 (99%)	1.39	50 (27%) 0 0	77, 89, 96, 99	0
7	1H	174/180 (96%)	0.22	1 (0%) 89 89	39, 56, 70, 75	0
7	2H	173/180 (96%)	0.84	19 (10%) 5 4	71, 84, 91, 95	0
8	1I	147/148 (99%)	0.02	2 (1%) 75 73	46, 74, 84, 90	0
8	2I	146/148 (98%)	0.24	11 (7%) 14 11	58, 77, 88, 92	0
9	1N	140/140 (100%)	0.43	0 100 100	30, 43, 65, 81	0
9	2N	140/140 (100%)	0.54	2 (1%) 75 73	47, 65, 78, 87	0
10	1O	122/122 (100%)	0.48	0 100 100	33, 43, 63, 69	0
10	2O	122/122 (100%)	0.49	2 (1%) 72 69	45, 57, 70, 77	0
11	1P	149/150 (99%)	0.36	1 (0%) 87 87	25, 50, 70, 88	0
11	2P	149/150 (99%)	0.49	8 (5%) 25 23	40, 68, 84, 91	0
12	1Q	141/141 (100%)	0.48	1 (0%) 87 87	30, 44, 56, 71	0
12	2Q	141/141 (100%)	0.80	8 (5%) 23 20	48, 67, 79, 83	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.55	1 (0%) 86 85	30, 40, 57, 65	0
13	2R	118/118 (100%)	0.57	1 (0%) 86 85	39, 53, 66, 71	0
14	1S	110/112 (98%)	0.22	0 100 100	45, 57, 71, 75	0
14	2S	110/112 (98%)	0.84	18 (16%) 1 1	66, 77, 84, 87	0
15	1T	131/146 (89%)	0.30	1 (0%) 86 85	36, 48, 71, 86	0
15	2T	131/146 (89%)	0.34	4 (3%) 49 45	50, 60, 78, 86	0
16	1U	116/118 (98%)	0.59	1 (0%) 84 83	28, 35, 52, 67	0
16	2U	116/118 (98%)	0.50	5 (4%) 35 31	42, 61, 76, 85	0
17	1V	101/101 (100%)	0.41	0 100 100	25, 46, 62, 76	0
17	2V	101/101 (100%)	0.27	0 100 100	43, 73, 81, 87	0
18	1W	112/113 (99%)	0.51	0 100 100	28, 36, 56, 86	0
18	2W	112/113 (99%)	0.54	2 (1%) 68 65	39, 51, 71, 93	0
19	1X	95/96 (98%)	0.56	4 (4%) 36 33	33, 45, 70, 78	0
19	2X	95/96 (98%)	0.79	10 (10%) 6 4	46, 62, 77, 85	0
20	1Y	107/110 (97%)	0.32	1 (0%) 84 83	40, 53, 69, 78	0
20	2Y	107/110 (97%)	0.46	3 (2%) 53 49	59, 71, 82, 87	0
21	1Z	203/206 (98%)	0.16	1 (0%) 91 91	47, 63, 77, 87	0
21	2Z	201/206 (97%)	0.37	11 (5%) 25 21	66, 79, 88, 94	0
22	10	77/85 (90%)	0.43	0 100 100	34, 42, 62, 69	0
22	20	77/85 (90%)	1.01	16 (20%) 1 1	53, 66, 77, 81	0
23	11	97/98 (98%)	0.69	2 (2%) 63 59	31, 50, 74, 84	0
23	21	97/98 (98%)	0.67	4 (4%) 37 33	43, 56, 75, 84	0
24	12	70/72 (97%)	0.28	1 (1%) 75 73	41, 53, 65, 89	0
24	22	70/72 (97%)	0.18	1 (1%) 75 73	61, 72, 79, 80	0
25	13	59/60 (98%)	0.38	0 100 100	32, 41, 68, 76	0
25	23	59/60 (98%)	0.81	12 (20%) 1 1	53, 64, 78, 85	0
26	14	69/71 (97%)	0.13	7 (10%) 7 4	66, 85, 95, 98	0
26	24	69/71 (97%)	1.19	15 (21%) 0 0	86, 95, 100, 103	0
27	15	59/60 (98%)	0.47	0 100 100	27, 39, 61, 71	0
27	25	59/60 (98%)	0.33	0 100 100	36, 53, 70, 77	0
28	16	53/54 (98%)	0.32	0 100 100	37, 47, 61, 65	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.52	4 (7%) 14 11	53, 62, 73, 77	0
29	17	48/49 (97%)	0.89	5 (10%) 6 4	26, 33, 57, 66	0
29	27	48/49 (97%)	1.03	6 (12%) 3 2	36, 41, 64, 75	0
30	18	64/65 (98%)	0.78	0 100 100	33, 40, 46, 60	0
30	28	64/65 (98%)	1.14	7 (10%) 5 4	48, 57, 64, 71	0
31	19	37/37 (100%)	0.75	1 (2%) 54 50	36, 45, 63, 64	0
31	29	37/37 (100%)	1.56	11 (29%) 0 0	59, 70, 78, 80	0
32	1a	1488/1521 (97%)	0.04	23 (1%) 73 71	39, 73, 98, 112	0
32	2a	1492/1521 (98%)	0.08	29 (1%) 66 63	47, 78, 101, 113	0
33	1b	231/256 (90%)	0.10	12 (5%) 27 24	69, 83, 92, 96	0
33	2b	231/256 (90%)	0.52	19 (8%) 11 9	77, 87, 94, 98	0
34	1c	206/239 (86%)	0.49	11 (5%) 26 23	65, 78, 89, 94	0
34	2c	206/239 (86%)	1.11	43 (20%) 1 1	77, 88, 93, 97	0
35	1d	208/209 (99%)	0.83	21 (10%) 7 4	57, 73, 82, 92	0
35	2d	208/209 (99%)	0.67	18 (8%) 10 8	61, 74, 82, 87	0
36	1e	148/162 (91%)	0.47	3 (2%) 65 60	49, 67, 77, 91	0
36	2e	148/162 (91%)	0.58	14 (9%) 8 6	60, 75, 85, 92	0
37	1f	100/101 (99%)	0.01	0 100 100	53, 70, 79, 85	0
37	2f	100/101 (99%)	0.08	1 (1%) 82 81	58, 71, 81, 85	0
38	1g	155/156 (99%)	0.13	2 (1%) 77 75	70, 78, 85, 90	0
38	2g	155/156 (99%)	0.72	25 (16%) 1 1	78, 85, 90, 94	0
39	1h	137/138 (99%)	0.51	8 (5%) 23 19	57, 70, 78, 83	0
39	2h	137/138 (99%)	0.45	4 (2%) 51 48	65, 76, 82, 87	0
40	1i	127/128 (99%)	1.42	41 (32%) 0 0	70, 85, 91, 93	0
40	2i	126/128 (98%)	2.84	81 (64%) 0 0	80, 90, 95, 97	0
41	1j	97/105 (92%)	0.68	15 (15%) 2 1	68, 85, 91, 95	0
41	2j	96/105 (91%)	1.61	26 (27%) 0 0	81, 90, 95, 97	0
42	1k	114/129 (88%)	0.24	2 (1%) 68 65	46, 67, 78, 85	0
42	2k	114/129 (88%)	0.62	12 (10%) 6 4	59, 75, 84, 88	0
43	1l	121/132 (91%)	0.73	15 (12%) 4 2	49, 62, 74, 80	0
43	2l	121/132 (91%)	0.78	13 (10%) 6 4	57, 68, 76, 81	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.26	7 (6%) 21 18	66, 80, 86, 90	0
44	2m	114/126 (90%)	1.68	49 (42%) 0 0	82, 90, 95, 98	0
45	1n	60/61 (98%)	1.68	23 (38%) 0 0	71, 76, 85, 89	0
45	2n	60/61 (98%)	3.66	52 (86%) 0 0	82, 89, 94, 99	0
46	1o	88/89 (98%)	0.31	1 (1%) 80 79	49, 70, 81, 86	0
46	2o	88/89 (98%)	0.44	5 (5%) 23 20	60, 74, 82, 89	0
47	1p	82/88 (93%)	1.45	22 (26%) 0 0	63, 74, 83, 88	0
47	2p	82/88 (93%)	0.62	5 (6%) 21 18	63, 72, 82, 88	0
48	1q	99/105 (94%)	1.16	16 (16%) 1 1	55, 71, 81, 84	0
48	2q	99/105 (94%)	0.95	15 (15%) 2 1	59, 73, 81, 87	0
49	1r	68/88 (77%)	0.11	0 100 100	61, 68, 83, 87	0
49	2r	68/88 (77%)	0.52	2 (2%) 51 48	65, 73, 83, 86	0
50	1s	83/93 (89%)	0.44	2 (2%) 59 54	74, 82, 89, 92	0
50	2s	83/93 (89%)	1.50	30 (36%) 0 0	84, 92, 96, 100	0
51	1t	96/106 (90%)	1.01	21 (21%) 0 0	65, 75, 87, 92	0
51	2t	98/106 (92%)	0.43	3 (3%) 49 45	59, 73, 84, 86	0
52	1u	23/27 (85%)	1.94	13 (56%) 0 0	77, 79, 83, 84	0
52	2u	23/27 (85%)	3.63	20 (86%) 0 0	84, 88, 91, 93	0
53	1y	97/113 (85%)	0.87	10 (10%) 6 4	59, 69, 79, 82	0
53	2y	96/113 (84%)	2.80	60 (62%) 0 0	70, 83, 90, 92	0
All	All	20764/21468 (96%)	0.47	1249 (6%) 21 18	23, 66, 93, 114	0

All (1249) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	653	A	13.8
1	1A	652(C)	G	12.4
1	1A	653	A	12.2
1	2A	652(C)	G	10.7
1	2A	652(T)	C	10.5
40	2i	127	LYS	10.2
1	2A	652(V)	C	9.8
1	2A	652(U)	G	9.5
1	2A	654	A	9.5
1	1A	652(V)	C	9.3

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Mol	Chain	Res	Type	RSRZ
1	2A	1509	C	9.1
26	24	49	PHE	8.6
45	2n	34	TYR	8.6
1	1A	652(U)	G	8.2
1	1A	652(D)	C	8.1
1	1A	1076	C	7.8
40	2i	109	VAL	7.7
1	1A	1509	C	7.7
1	1A	652(E)	G	7.7
1	1A	654	A	7.6
6	2G	152	LEU	7.4
1	2A	652(E)	G	7.3
45	2n	38	GLY	7.2
1	2A	652(D)	C	7.1
45	2n	2	ALA	7.1
1	1A	652(S)	C	7.1
20	2Y	1	MET	6.9
1	2A	2139	C	6.8
32	2a	1030(A)	G	6.8
1	1A	1087	G	6.8
41	2j	62	HIS	6.8
32	2a	1030(B)	C	6.8
53	2y	9	GLN	6.7
40	2i	66	ARG	6.7
40	2i	79	LEU	6.7
53	2y	73	ALA	6.6
40	2i	75	ASP	6.5
1	1A	1091	G	6.5
40	2i	76	ALA	6.4
1	1A	652(T)	C	6.4
1	2A	2793	G	6.4
1	2A	2602	A	6.3
45	2n	15	LYS	6.3
53	2y	10	MET	6.3
40	2i	10	ARG	6.3
53	2y	12	ILE	6.3
40	2i	102	LEU	6.2
53	2y	77	LEU	6.2
40	2i	18	PHE	6.2
40	1i	106	ALA	6.2
52	2u	6	ARG	6.2
1	1A	652(F)	G	6.2

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Mol	Chain	Res	Type	RSRZ
1	2A	2802	G	6.1
32	1a	1030(B)	C	6.1
44	2m	116	THR	6.1
45	2n	25	VAL	6.1
35	1d	2	GLY	6.1
40	2i	106	ALA	6.0
38	2g	154	TYR	6.0
40	2i	65	VAL	6.0
45	2n	29	ARG	6.0
40	2i	110	GLU	6.0
41	2j	65	LEU	5.9
45	2n	61	TRP	5.9
29	27	48	LYS	5.9
53	2y	80	LYS	5.9
6	2G	155	MET	5.9
34	2c	196	LEU	5.9
52	2u	16	GLY	5.9
32	2a	1257	U	5.9
41	2j	45	ARG	5.9
35	1d	157	LEU	5.8
41	2j	47	PHE	5.8
45	2n	42	ILE	5.8
45	2n	59	ALA	5.8
12	2Q	104	PHE	5.7
53	2y	41	LEU	5.7
1	1A	1090	U	5.7
1	2A	2174	C	5.7
40	2i	63	ILE	5.6
41	2j	64	GLU	5.6
1	2A	2153	G	5.6
34	2c	4	LYS	5.6
53	2y	8	LYS	5.6
1	2A	1046	A	5.6
40	2i	88	TYR	5.5
22	20	8	GLY	5.5
1	2A	2124	G	5.5
52	2u	14	TRP	5.4
53	2y	40	ILE	5.4
1	1A	2805	G	5.4
23	11	2	SER	5.4
44	2m	23	TYR	5.4
34	2c	152	ILE	5.4

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Mol	Chain	Res	Type	RSRZ
45	2n	13	THR	5.4
53	2y	5	ILE	5.4
40	2i	126	SER	5.4
34	2c	159	GLY	5.3
23	21	2	SER	5.3
40	2i	105	ASP	5.3
1	2A	2147	G	5.3
40	2i	115	GLY	5.3
40	1i	19	LEU	5.3
40	1i	125	TYR	5.2
40	2i	7	THR	5.2
3	2D	276	LYS	5.2
45	2n	35	ARG	5.2
6	2G	39	ILE	5.2
41	2j	44	VAL	5.2
1	2A	2169	A	5.2
53	2y	38	HIS	5.2
52	2u	15	ARG	5.1
6	2G	62	LEU	5.1
34	2c	160	ALA	5.1
45	2n	36	PHE	5.1
6	2G	157	ILE	5.1
1	2A	2155	G	5.0
6	2G	136	ARG	5.0
1	2A	2146	C	5.0
6	2G	92	VAL	5.0
1	1A	1066	U	5.0
52	2u	5	ASP	5.0
45	2n	6	LEU	5.0
45	2n	10	ALA	4.9
34	2c	124	ILE	4.9
14	2S	35	ILE	4.9
45	2n	37	PHE	4.9
53	2y	39	ILE	4.9
32	1a	1036	G	4.9
32	1a	1257	U	4.9
34	2c	163	ALA	4.9
45	2n	3	ARG	4.9
1	2A	2140	C	4.9
40	2i	36	TYR	4.9
45	1n	18	VAL	4.9
35	1d	166	LYS	4.8

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Mol	Chain	Res	Type	RSRZ
41	2j	54	PHE	4.8
1	2A	2125	G	4.8
53	2y	62	VAL	4.8
50	2s	82	GLY	4.8
1	2A	888	C	4.8
47	1p	19	ILE	4.8
34	2c	157	ILE	4.7
40	2i	125	TYR	4.7
40	2i	108	VAL	4.7
45	2n	39	LEU	4.7
1	2A	2162	G	4.7
45	2n	12	ARG	4.7
41	2j	63	PHE	4.7
40	2i	104	ARG	4.7
38	2g	156	TRP	4.7
36	2e	13	ILE	4.6
43	1l	64	TYR	4.6
1	2A	2897	U	4.6
40	2i	114	TYR	4.6
41	2j	67	THR	4.6
53	1y	94	ALA	4.6
51	1t	9	ASN	4.6
52	2u	12	LYS	4.6
53	2y	49	VAL	4.6
6	2G	87	PRO	4.6
40	1i	126	SER	4.5
1	2A	2154	G	4.5
40	1i	10	ARG	4.5
36	2e	22	GLY	4.5
53	2y	95	ARG	4.5
6	2G	90	LEU	4.5
35	1d	167	GLY	4.5
53	2y	92	GLY	4.5
1	2A	2805	G	4.5
6	2G	135	LEU	4.5
7	2H	115	VAL	4.5
40	1i	128	ARG	4.5
52	2u	18	TYR	4.5
45	2n	33	VAL	4.5
1	1A	1075	C	4.4
41	2j	46	ARG	4.4
45	2n	21	TYR	4.4

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Mol	Chain	Res	Type	RSRZ
44	2m	65	LYS	4.4
1	2A	2107	C	4.4
41	1j	44	VAL	4.4
12	2Q	65	PHE	4.4
40	2i	85	LEU	4.4
1	2A	2142	C	4.4
53	2y	7	SER	4.4
33	1b	131	PRO	4.4
40	1i	5	TYR	4.4
52	1u	16	GLY	4.3
34	2c	177	THR	4.3
40	1i	46	ALA	4.3
40	2i	81	ILE	4.3
40	2i	69	GLY	4.3
44	2m	7	VAL	4.3
45	2n	53	LEU	4.3
44	1m	115	LYS	4.3
6	2G	3	LEU	4.3
36	2e	21	ALA	4.3
52	2u	17	THR	4.3
39	2h	2	LEU	4.3
38	2g	32	ARG	4.3
1	2A	2168	G	4.3
32	2a	1202	G	4.3
1	1A	2804	C	4.3
26	14	49	PHE	4.3
34	2c	33	LEU	4.2
1	1A	2793	G	4.2
1	2A	2106	G	4.2
1	2A	2173	A	4.2
40	2i	37	PHE	4.2
53	1y	35	ILE	4.2
53	2y	51	ASP	4.2
1	2A	2803	C	4.2
51	1t	74	LYS	4.2
1	2A	2138	C	4.2
1	2A	2804	C	4.2
4	2E	115	GLY	4.2
6	2G	137	GLU	4.2
44	2m	66	LEU	4.2
1	2A	2152	G	4.1
34	2c	199	LYS	4.1

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Mol	Chain	Res	Type	RSRZ
51	1t	76	ALA	4.1
41	2j	48	THR	4.1
32	1a	1030	C	4.1
51	1t	72	LEU	4.1
47	1p	1	MET	4.1
34	2c	158	GLY	4.1
44	2m	6	GLY	4.1
1	1A	1089	G	4.1
45	2n	49	HIS	4.1
14	2S	32	LEU	4.1
32	2a	1001(A)	G	4.1
1	2A	2132	U	4.1
52	2u	13	ILE	4.1
40	2i	5	TYR	4.1
1	2A	2151	G	4.1
40	1i	79	LEU	4.0
39	1h	93	VAL	4.0
45	1n	61	TRP	4.0
53	1y	95	ARG	4.0
41	2j	6	ILE	4.0
1	1A	1064	C	4.0
6	2G	146	TYR	4.0
52	2u	10	ARG	4.0
1	2A	2116	G	4.0
53	2y	71	TYR	4.0
22	20	75	LEU	4.0
41	2j	66	ARG	4.0
35	2d	70	ILE	4.0
1	1A	2794	C	4.0
1	2A	2145	C	4.0
38	2g	33	ASP	4.0
21	2Z	197	ILE	4.0
34	2c	8	ILE	4.0
53	2y	48	PHE	4.0
34	2c	206	GLU	4.0
38	2g	155	ARG	4.0
40	2i	123	PRO	4.0
6	2G	134	GLY	3.9
8	2I	12	LEU	3.9
40	2i	72	GLY	3.9
29	17	1	MET	3.9
41	2j	40	LEU	3.9

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Mol	Chain	Res	Type	RSRZ
45	2n	11	LYS	3.9
53	2y	88	LEU	3.9
51	1t	14	LYS	3.9
1	1A	2602	A	3.9
40	2i	8	GLY	3.9
53	2y	20	VAL	3.9
48	2q	23	VAL	3.9
3	1D	276	LYS	3.9
11	2P	15	ARG	3.9
40	2i	9	ARG	3.9
34	1c	2	GLY	3.9
32	1a	1001	A	3.9
40	2i	14	VAL	3.8
43	2l	18	VAL	3.8
34	2c	162	GLN	3.8
14	2S	33	LYS	3.8
29	27	47	ARG	3.8
44	2m	84	ILE	3.8
1	1A	1092	C	3.8
32	2a	1031	G	3.8
45	2n	9	LYS	3.8
45	2n	55	GLY	3.8
34	1c	10	PHE	3.8
38	2g	6	ARG	3.8
53	2y	4	ASN	3.8
40	2i	111	ARG	3.8
50	2s	74	PHE	3.8
40	2i	67	GLY	3.8
1	1A	1088	A	3.8
1	2A	2801(A)	A	3.8
8	2I	3	VAL	3.8
47	1p	51	VAL	3.8
34	2c	188	LEU	3.7
45	1n	33	VAL	3.7
1	1A	2141	G	3.7
50	2s	81	ARG	3.7
33	2b	70	PHE	3.7
48	1q	98	LEU	3.7
40	1i	14	VAL	3.7
41	2j	34	VAL	3.7
1	1A	1078	U	3.7
44	2m	110	ARG	3.7

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Mol	Chain	Res	Type	RSRZ
52	2u	11	GLY	3.7
7	2H	165	ALA	3.7
50	2s	69	HIS	3.7
53	2y	35	ILE	3.7
40	2i	73	GLN	3.7
1	2A	1064	C	3.7
48	1q	36	ILE	3.7
1	2A	2133	G	3.7
50	2s	80	TYR	3.7
53	2y	54	ILE	3.7
50	2s	71	LEU	3.6
42	2k	25	TYR	3.6
45	1n	15	LYS	3.6
52	2u	9	ARG	3.6
33	2b	152	PHE	3.6
44	2m	90	LEU	3.6
48	1q	27	PHE	3.6
40	1i	63	ILE	3.6
45	2n	14	PRO	3.6
33	2b	122	PHE	3.6
44	2m	5	ALA	3.6
44	2m	24	GLY	3.6
7	2H	45	VAL	3.6
40	1i	78	LYS	3.6
40	1i	116	LYS	3.6
53	2y	11	GLU	3.6
32	2a	1357	A	3.6
52	2u	7	ARG	3.6
40	1i	127	LYS	3.6
45	2n	18	VAL	3.6
53	2y	76	GLU	3.6
35	1d	120	LEU	3.6
32	1a	1001(A)	G	3.6
43	2l	64	TYR	3.6
1	1A	1065	U	3.6
41	2j	68	HIS	3.6
1	2A	1067	A	3.6
14	2S	58	LEU	3.6
38	2g	78	ARG	3.5
38	2g	80	VAL	3.5
50	2s	34	TRP	3.5
53	2y	84	GLN	3.5

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Mol	Chain	Res	Type	RSRZ
45	2n	44	LEU	3.5
1	2A	1026	U	3.5
1	2A	2144	U	3.5
34	2c	167	TRP	3.5
45	2n	22	THR	3.5
6	2G	67	LYS	3.5
45	2n	16	PHE	3.5
47	1p	17	TYR	3.5
1	2A	2894	G	3.5
1	1A	1080	C	3.5
34	2c	3	ASN	3.5
53	2y	75	ASN	3.5
48	2q	98	LEU	3.5
53	2y	70	MET	3.5
52	2u	22	ARG	3.5
34	2c	194	GLY	3.5
53	2y	91	LYS	3.5
1	1A	2803	C	3.5
53	2y	24	LEU	3.5
34	2c	6	HIS	3.5
34	2c	184	TYR	3.5
40	1i	7	THR	3.5
7	2H	103	LEU	3.5
53	2y	34	LEU	3.5
42	2k	13	GLN	3.5
22	20	76	GLY	3.5
35	2d	2	GLY	3.5
1	2A	2896	C	3.4
34	2c	154	SER	3.4
22	20	42	GLY	3.4
1	1A	1103	A	3.4
45	1n	2	ALA	3.4
53	2y	50	ALA	3.4
26	14	52	THR	3.4
53	2y	67	HIS	3.4
34	2c	164	ARG	3.4
41	2j	61	GLU	3.4
53	2y	79	ASN	3.4
1	1A	2132	U	3.4
19	2X	89	ILE	3.4
43	2l	13	LYS	3.4
45	2n	31	ARG	3.4

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Mol	Chain	Res	Type	RSRZ
40	1i	76	ALA	3.4
40	2i	92	TYR	3.4
1	2A	2109	U	3.4
1	1A	1077	A	3.4
1	2A	229	A	3.4
32	1a	1286	A	3.4
8	2I	19	VAL	3.4
40	2i	17	VAL	3.4
1	2A	614(A)	U	3.4
40	2i	29	ASN	3.4
45	1n	20	ALA	3.4
32	1a	1037	C	3.4
26	24	63	TYR	3.4
32	1a	1492	A	3.4
45	1n	25	VAL	3.4
32	2a	1030(C)	G	3.3
40	2i	11	LYS	3.3
53	2y	87	LYS	3.3
1	1A	1102	C	3.3
3	2D	37	LEU	3.3
19	2X	68	ARG	3.3
40	2i	62	TYR	3.3
42	1k	25	TYR	3.3
48	2q	36	ILE	3.3
6	2G	29	TRP	3.3
38	1g	156	TRP	3.3
33	2b	118	LEU	3.3
50	2s	40	ILE	3.3
32	2a	1286	A	3.3
34	2c	149	ALA	3.3
28	26	11	LEU	3.3
41	2j	72	VAL	3.3
19	2X	60	ARG	3.3
34	2c	155	GLY	3.3
53	2y	52	ALA	3.3
19	2X	66	LEU	3.3
51	1t	70	SER	3.3
34	2c	190	ARG	3.3
40	2i	74	ILE	3.3
1	1A	2142	C	3.3
32	2a	1030	C	3.3
52	1u	14	TRP	3.3

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Mol	Chain	Res	Type	RSRZ
40	1i	109	VAL	3.3
13	2R	68	ARG	3.3
44	2m	102	ARG	3.3
6	2G	139	LEU	3.3
33	1b	128	GLU	3.3
1	2A	2118	U	3.3
22	20	9	SER	3.3
53	2y	64	SER	3.2
6	2G	117	PHE	3.2
3	2D	5	LYS	3.2
35	1d	70	ILE	3.2
6	2G	2	PRO	3.2
1	2A	2110	G	3.2
40	2i	4	TYR	3.2
52	2u	21	TYR	3.2
40	2i	116	LYS	3.2
53	2y	74	ILE	3.2
33	1b	133	LYS	3.2
50	2s	15	LEU	3.2
29	27	1	MET	3.2
40	2i	103	THR	3.2
41	1j	49	VAL	3.2
34	1c	201	TYR	3.2
41	1j	66	ARG	3.2
45	2n	8	GLU	3.2
50	2s	76	PRO	3.2
44	2m	64	TRP	3.2
29	17	47	ARG	3.2
53	2y	60	VAL	3.2
40	2i	6	GLY	3.2
40	2i	107	ARG	3.2
42	2k	126	ARG	3.2
33	1b	165	VAL	3.2
40	1i	8	GLY	3.2
53	1y	92	GLY	3.2
43	2l	19	ARG	3.2
40	1i	28	VAL	3.2
50	2s	9	VAL	3.2
1	2A	2165	G	3.2
31	29	10	ILE	3.2
3	2D	38	LYS	3.2
40	2i	47	LEU	3.2

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Mol	Chain	Res	Type	RSRZ
34	2c	186	PHE	3.1
45	2n	56	VAL	3.1
1	2A	2175	C	3.1
38	2g	120	ILE	3.1
43	2l	95	GLY	3.1
52	1u	6	ARG	3.1
40	2i	113	LYS	3.1
3	2D	2	ALA	3.1
3	2D	64	ILE	3.1
44	2m	108	ARG	3.1
26	24	50	VAL	3.1
40	1i	37	PHE	3.1
22	20	55	ARG	3.1
7	2H	116	GLU	3.1
19	2X	92	LEU	3.1
47	1p	6	LEU	3.1
45	1n	22	THR	3.1
32	2a	1036	G	3.1
46	1o	89	GLY	3.1
53	2y	58	ASN	3.1
53	2y	85	LEU	3.1
44	2m	93	ARG	3.1
44	2m	89	GLY	3.1
3	2D	182	LEU	3.1
6	2G	73	ALA	3.1
34	2c	200	ALA	3.1
49	2r	85	LEU	3.1
45	2n	26	ARG	3.1
1	2A	2176	A	3.1
45	2n	17	LYS	3.1
47	1p	80	PHE	3.1
44	2m	72	ALA	3.1
50	2s	62	ILE	3.1
7	2H	101	ARG	3.1
35	1d	50	ARG	3.1
38	2g	34	GLY	3.1
8	2I	18	VAL	3.1
40	2i	26	VAL	3.1
32	2a	1001	A	3.1
40	2i	119	ALA	3.1
41	2j	71	LEU	3.1
47	1p	7	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
53	2y	61	LEU	3.1
47	1p	41	PRO	3.1
40	1i	110	GLU	3.1
40	2i	78	LYS	3.1
34	2c	23	TYR	3.0
1	2A	2141	G	3.0
32	1a	1026	G	3.0
21	2Z	125	LEU	3.0
31	29	15	LYS	3.0
43	1l	89	ARG	3.0
1	2A	2108	C	3.0
1	1A	2117	A	3.0
14	2S	12	PHE	3.0
36	2e	45	PHE	3.0
53	2y	53	THR	3.0
26	24	56	VAL	3.0
50	2s	49	ILE	3.0
12	2Q	100	GLY	3.0
35	2d	20	TYR	3.0
35	1d	86	LYS	3.0
45	1n	16	PHE	3.0
52	2u	8	THR	3.0
6	2G	159	VAL	3.0
9	2N	140	VAL	3.0
30	28	10	ALA	3.0
32	1a	1030(A)	G	3.0
32	1a	1030(C)	G	3.0
22	20	45	PHE	3.0
40	1i	107	ARG	3.0
49	2r	87	ARG	3.0
6	2G	75	LYS	3.0
41	2j	60	ARG	3.0
52	1u	10	ARG	3.0
1	2A	614(B)	G	3.0
50	1s	77	THR	3.0
50	1s	19	VAL	3.0
50	2s	31	ILE	3.0
45	2n	57	ARG	3.0
34	2c	201	TYR	3.0
6	2G	70	VAL	3.0
35	1d	135	LEU	3.0
1	1A	1176	G	3.0

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Mol	Chain	Res	Type	RSRZ
35	1d	179	GLU	3.0
52	2u	2	GLY	3.0
45	2n	41	ARG	3.0
44	2m	87	TYR	3.0
41	2j	49	VAL	3.0
40	2i	121	ARG	3.0
51	1t	66	ALA	3.0
32	1a	1031	G	2.9
6	2G	94	LEU	2.9
7	2H	105	LEU	2.9
25	23	23	LEU	2.9
45	2n	47	LEU	2.9
44	2m	94	ARG	2.9
25	23	25	ALA	2.9
45	1n	17	LYS	2.9
45	2n	50	LYS	2.9
38	2g	79	ARG	2.9
44	1m	102	ARG	2.9
48	1q	23	VAL	2.9
53	2y	82	GLU	2.9
1	2A	2137	C	2.9
22	20	74	ARG	2.9
36	2e	121	LYS	2.9
43	1l	91	LYS	2.9
44	2m	114	ARG	2.9
44	2m	115	LYS	2.9
20	2Y	5	MET	2.9
48	1q	35	VAL	2.9
50	2s	11	VAL	2.9
1	2A	652(B)	A	2.9
31	29	12	ASP	2.9
53	2y	93	GLU	2.9
26	24	45	GLY	2.9
31	29	37	GLY	2.9
1	2A	2172	U	2.9
1	2A	2179	C	2.9
25	23	54	VAL	2.9
44	2m	98	VAL	2.9
53	2y	37	PRO	2.9
43	1l	23	LYS	2.9
33	2b	162	ILE	2.9
35	2d	5	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
41	2j	96	ILE	2.9
14	2S	29	PHE	2.9
26	24	7	PRO	2.9
1	2A	34	C	2.9
35	1d	110	PHE	2.9
34	2c	87	LEU	2.9
32	2a	994	A	2.9
34	2c	153	VAL	2.9
6	2G	51	ARG	2.9
7	2H	128	PRO	2.9
40	2i	122	ALA	2.9
50	2s	75	ALA	2.9
1	1A	1072	C	2.9
1	1A	2147	G	2.9
50	2s	66	MET	2.9
53	2y	63	ALA	2.9
1	2A	1085	A	2.8
1	1A	2143	C	2.8
35	1d	58	LEU	2.8
36	2e	12	LEU	2.8
35	2d	183	GLY	2.8
46	2o	86	GLY	2.8
31	29	17	ILE	2.8
32	2a	1194	U	2.8
33	1b	214	ILE	2.8
47	1p	73	LEU	2.8
26	24	51	ASP	2.8
25	23	17	LYS	2.8
33	2b	165	VAL	2.8
40	1i	12	GLU	2.8
43	1l	47	LYS	2.8
44	2m	106	ASN	2.8
34	1c	193	TYR	2.8
45	2n	51	GLY	2.8
7	2H	4	ILE	2.8
14	2S	3	ARG	2.8
38	2g	76	ARG	2.8
52	2u	24	ARG	2.8
32	1a	1030(D)	A	2.8
31	29	13	LYS	2.8
1	1A	2107	C	2.8
6	2G	177	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
7	2H	113	VAL	2.8
40	2i	120	ARG	2.8
48	1q	86	GLU	2.8
1	1A	1093	G	2.8
35	2d	8	VAL	2.8
53	2y	65	GLY	2.8
12	1Q	32	TYR	2.8
43	1l	62	SER	2.8
45	1n	34	TYR	2.8
4	2E	150	VAL	2.8
7	2H	169	VAL	2.8
21	2Z	191	VAL	2.8
38	2g	144	MET	2.8
32	2a	1195	C	2.8
34	1c	80	GLY	2.8
22	20	46	LYS	2.8
1	1A	1086	A	2.8
1	2A	2126	A	2.8
1	2A	2148	G	2.8
1	2A	2792	G	2.8
53	1y	54	ILE	2.8
1	2A	1076	C	2.8
40	2i	24	GLY	2.8
40	1i	120	ARG	2.8
51	1t	83	ARG	2.8
53	2y	83	ARG	2.8
40	2i	90	PRO	2.7
44	2m	75	ALA	2.7
52	2u	23	PRO	2.7
44	2m	78	ILE	2.7
50	2s	53	ASN	2.7
1	1A	2174	C	2.7
21	2Z	192	ALA	2.7
34	1c	168	ALA	2.7
34	2c	195	VAL	2.7
45	1n	59	ALA	2.7
52	1u	18	TYR	2.7
6	2G	72	ARG	2.7
33	1b	130	ARG	2.7
35	1d	3	ARG	2.7
40	2i	124	GLN	2.7
51	1t	18	GLN	2.7

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Mol	Chain	Res	Type	RSRZ
21	2Z	199	LYS	2.7
35	2d	157	LEU	2.7
40	1i	111	ARG	2.7
48	2q	71	PHE	2.7
40	2i	117	HIS	2.7
40	1i	20	ARG	2.7
52	1u	2	GLY	2.7
1	1A	2116	G	2.7
35	2d	78	LEU	2.7
40	1i	33	PHE	2.7
40	2i	50	LEU	2.7
42	2k	117	ASN	2.7
51	1t	68	LYS	2.7
45	2n	30	ALA	2.7
53	2y	42	SER	2.7
6	2G	160	VAL	2.7
11	2P	79	ARG	2.7
3	1D	275	LYS	2.7
48	1q	37	LYS	2.7
1	2A	1847	A	2.7
1	1A	1081	U	2.7
22	20	10	THR	2.7
40	2i	27	THR	2.7
51	1t	79	ARG	2.7
11	2P	59	LEU	2.7
26	14	59	PHE	2.7
41	1j	54	PHE	2.7
43	1l	27	LEU	2.7
33	2b	97	TRP	2.7
34	2c	165	THR	2.7
44	2m	109	THR	2.7
43	1l	28	LYS	2.7
40	2i	53	VAL	2.7
48	2q	9	VAL	2.7
8	2I	35	LEU	2.7
23	11	98	LEU	2.7
8	2I	4	ILE	2.7
12	2Q	32	TYR	2.7
1	1A	2139	C	2.6
32	2a	1358	U	2.6
51	1t	16	HIS	2.6
36	2e	10	MET	2.6

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Mol	Chain	Res	Type	RSRZ
44	1m	56	LEU	2.6
50	2s	16	LEU	2.6
51	1t	13	LEU	2.6
35	1d	209	ARG	2.6
44	2m	22	ILE	2.6
47	1p	46	PRO	2.6
1	1A	2144	U	2.6
1	2A	2180	U	2.6
44	2m	17	VAL	2.6
8	2I	5	LEU	2.6
1	2A	2170	A	2.6
19	1X	60	ARG	2.6
26	14	55	ARG	2.6
14	2S	92	TYR	2.6
34	1c	167	TRP	2.6
39	1h	134	ILE	2.6
41	1j	38	ILE	2.6
53	2y	45	PRO	2.6
44	2m	67	GLU	2.6
1	1A	888	C	2.6
26	14	54	GLY	2.6
30	28	58	ILE	2.6
45	1n	8	GLU	2.6
26	24	55	ARG	2.6
33	2b	136	VAL	2.6
1	1A	2145	C	2.6
1	2A	2105	C	2.6
1	2A	2161	C	2.6
31	29	28	GLU	2.6
44	1m	4	ILE	2.6
25	23	15	TYR	2.6
29	27	41	ARG	2.6
51	1t	67	ALA	2.6
6	2G	41	GLN	2.6
6	2G	43	LEU	2.6
44	2m	82	MET	2.6
53	1y	88	LEU	2.6
1	2A	2160	G	2.6
23	21	48	LYS	2.6
44	2m	13	LYS	2.6
25	23	12	PRO	2.6
34	2c	131	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
48	2q	60	ILE	2.6
29	27	46	VAL	2.6
31	29	25	VAL	2.6
21	2Z	155	LEU	2.6
32	2a	1030(D)	A	2.6
40	2i	96	LEU	2.6
47	1p	49	LEU	2.6
6	2G	48	GLU	2.6
33	1b	134	GLU	2.6
14	2S	13	ARG	2.6
14	2S	5	THR	2.6
47	2p	33	ILE	2.6
52	1u	17	THR	2.6
4	2E	151	TYR	2.6
14	2S	36	TYR	2.6
44	2m	76	ALA	2.6
1	2A	2136	C	2.6
40	1i	105	ASP	2.6
40	2i	86	VAL	2.6
8	1I	38	LEU	2.6
43	2l	16	GLU	2.6
44	2m	96	LEU	2.6
48	1q	89	LEU	2.6
53	2y	3	MET	2.6
7	1H	2	SER	2.6
40	2i	42	ARG	2.6
24	12	70	GLN	2.5
47	1p	48	TRP	2.5
50	2s	33	THR	2.5
21	2Z	200	GLY	2.5
32	1a	1027	C	2.5
29	17	48	LYS	2.5
21	2Z	83	PRO	2.5
40	1i	77	ILE	2.5
1	2A	2150	U	2.5
47	1p	59	TRP	2.5
44	1m	87	TYR	2.5
47	1p	39	TYR	2.5
12	2Q	103	MET	2.5
45	2n	60	SER	2.5
6	2G	88	ILE	2.5
6	2G	140	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
53	2y	78	ILE	2.5
1	1A	2167	U	2.5
1	2A	1508	A	2.5
1	2A	2135	A	2.5
1	2A	2167	U	2.5
10	2O	58	VAL	2.5
14	2S	20	ARG	2.5
19	1X	65	ARG	2.5
22	20	44	ARG	2.5
45	2n	45	ARG	2.5
44	1m	110	ARG	2.5
1	2A	2119	A	2.5
42	2k	123	LYS	2.5
43	2l	89	ARG	2.5
45	1n	14	PRO	2.5
45	2n	7	ILE	2.5
48	1q	31	LEU	2.5
4	2E	116	VAL	2.5
45	1n	32	SER	2.5
47	2p	9	PHE	2.5
51	1t	11	SER	2.5
52	1u	22	ARG	2.5
33	1b	136	VAL	2.5
1	2A	2159	G	2.5
40	2i	33	PHE	2.5
35	2d	49	ARG	2.5
44	1m	114	ARG	2.5
48	1q	91	ARG	2.5
38	1g	16	LEU	2.5
45	2n	58	LYS	2.5
24	22	63	VAL	2.5
44	2m	60	VAL	2.5
35	1d	138	TYR	2.5
40	2i	101	PHE	2.5
50	2s	52	TYR	2.5
1	2A	2807	G	2.5
52	1u	11	GLY	2.4
35	1d	184	LYS	2.4
40	1i	118	LYS	2.4
14	2S	40	ILE	2.4
43	2l	100	ILE	2.4
48	2q	19	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
51	1t	23	ARG	2.4
47	1p	38	TYR	2.4
44	2m	111	LYS	2.4
52	2u	3	LYS	2.4
1	1A	2792	G	2.4
43	2l	99	HIS	2.4
13	1R	18	LEU	2.4
6	2G	35	GLU	2.4
19	1X	69	TYR	2.4
47	1p	35	LYS	2.4
1	1A	2173	A	2.4
45	2n	54	PRO	2.4
48	1q	38	ARG	2.4
3	2D	275	LYS	2.4
34	2c	173	VAL	2.4
43	2l	96	VAL	2.4
36	2e	20	GLN	2.4
26	24	40	HIS	2.4
21	1Z	192	ALA	2.4
35	2d	3	ARG	2.4
38	2g	4	ARG	2.4
26	24	9	LEU	2.4
1	1A	2161	C	2.4
1	2A	2178	C	2.4
48	2q	10	VAL	2.4
50	2s	10	PHE	2.4
26	24	43	TYR	2.4
18	2W	92	ARG	2.4
41	2j	29	ARG	2.4
38	2g	8	GLU	2.4
45	2n	24	CYS	2.4
41	2j	50	ILE	2.4
50	2s	68	GLY	2.4
25	23	29	ARG	2.4
45	1n	23	ARG	2.4
1	2A	2127	G	2.4
7	2H	102	ALA	2.4
19	1X	66	LEU	2.4
38	2g	16	LEU	2.4
41	1j	8	LEU	2.4
53	1y	41	LEU	2.4
25	23	13	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
43	1l	7	ILE	2.4
44	2m	25	ILE	2.4
26	24	54	GLY	2.4
32	1a	1000	U	2.4
32	2a	975	A	2.4
35	2d	118	ARG	2.4
4	2E	141	ILE	2.4
34	2c	185	GLY	2.4
39	1h	109	ILE	2.4
6	2G	109	VAL	2.4
40	2i	21	PRO	2.3
48	2q	32	TYR	2.3
6	2G	133	LEU	2.3
50	2s	32	LYS	2.3
50	2s	79	THR	2.3
50	2s	84	GLY	2.3
47	2p	19	ILE	2.3
6	2G	80	PHE	2.3
26	14	56	VAL	2.3
1	1A	2155	G	2.3
1	2A	1816	G	2.3
1	2A	1095	A	2.3
14	2S	51	ALA	2.3
40	1i	119	ALA	2.3
36	2e	14	ARG	2.3
28	26	54	ILE	2.3
47	1p	20	VAL	2.3
19	2X	33	LYS	2.3
47	2p	31	LYS	2.3
6	2G	86	MET	2.3
5	2F	181	LEU	2.3
12	2Q	34	LEU	2.3
40	2i	71	SER	2.3
41	1j	64	GLU	2.3
43	1l	26	ALA	2.3
46	2o	64	ARG	2.3
53	2y	94	ALA	2.3
6	2G	52	ILE	2.3
7	2H	89	ILE	2.3
32	1a	1029	C	2.3
32	2a	532	A	2.3
28	26	52	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
36	1e	105	VAL	2.3
40	1i	112	LYS	2.3
33	2b	101	MET	2.3
40	1i	75	ASP	2.3
41	1j	68	HIS	2.3
45	1n	21	TYR	2.3
51	1t	69	GLY	2.3
36	2e	88	LYS	2.3
19	2X	8	ILE	2.3
36	2e	89	ILE	2.3
1	2A	2111	C	2.3
53	2y	68	GLU	2.3
25	23	18	ASP	2.3
35	2d	73	ARG	2.3
41	2j	58	ASP	2.3
40	2i	68	GLY	2.3
39	1h	94	TYR	2.3
51	1t	29	LYS	2.3
50	2s	56	GLN	2.3
1	2A	2121	G	2.3
6	2G	49	ASP	2.3
40	2i	20	ARG	2.3
1	2A	2143	C	2.3
42	2k	42	TRP	2.3
33	1b	187	LEU	2.3
38	2g	12	LEU	2.3
45	1n	39	LEU	2.3
38	2g	117	ALA	2.3
42	2k	125	PHE	2.3
38	2g	75	VAL	2.3
44	2m	83	ASP	2.3
44	2m	95	GLY	2.3
5	2F	41	LEU	2.3
11	2P	38	GLN	2.3
15	2T	1	MET	2.3
21	2Z	76	LEU	2.3
30	28	62	LEU	2.3
32	1a	1034	G	2.3
44	2m	56	LEU	2.3
6	1G	73	ALA	2.3
44	2m	42	ALA	2.3
31	29	24	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
41	1j	67	THR	2.3
52	1u	21	TYR	2.3
1	1A	1067	A	2.3
29	17	41	ARG	2.3
33	2b	130	ARG	2.3
30	28	29	LYS	2.3
35	2d	75	PHE	2.3
41	1j	60	ARG	2.3
43	1l	97	ARG	2.3
45	2n	23	ARG	2.3
52	1u	9	ARG	2.3
42	2k	14	VAL	2.3
45	2n	32	SER	2.2
15	2T	114	LEU	2.2
35	1d	11	LEU	2.2
53	2y	72	THR	2.2
32	2a	1027	C	2.2
32	2a	723	U	2.2
43	2l	5	PRO	2.2
48	1q	6	LEU	2.2
40	1i	66	ARG	2.2
1	2A	886	C	2.2
1	1A	2159	G	2.2
7	2H	162	ILE	2.2
32	1a	1002	G	2.2
40	2i	41	VAL	2.2
35	2d	115	ARG	2.2
40	1i	9	ARG	2.2
44	2m	91	ARG	2.2
40	2i	61	ALA	2.2
43	1l	61	THR	2.2
30	28	64	TYR	2.2
3	2D	15	PHE	2.2
6	2G	58	GLN	2.2
40	1i	36	TYR	2.2
42	2k	21	ILE	2.2
44	2m	73	GLU	2.2
29	27	32	LYS	2.2
40	2i	70	LYS	2.2
14	2S	31	SER	2.2
36	2e	130	ASN	2.2
34	2c	175	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
51	1t	17	ARG	2.2
1	2A	1083	U	2.2
32	2a	1191	A	2.2
32	2a	1349	A	2.2
8	2I	20	ASP	2.2
42	2k	28	THR	2.2
47	1p	67	THR	2.2
50	2s	39	THR	2.2
7	2H	159	GLU	2.2
6	1G	146	TYR	2.2
43	1l	98	TYR	2.2
3	2D	18	VAL	2.2
8	2I	92	VAL	2.2
34	1c	5	ILE	2.2
41	1j	50	ILE	2.2
47	1p	4	ILE	2.2
34	1c	196	LEU	2.2
44	2m	92	HIS	2.2
48	1q	29	HIS	2.2
16	2U	25	TRP	2.2
1	1A	1074	G	2.2
1	2A	2123	G	2.2
32	2a	1026	G	2.2
52	1u	4	GLY	2.2
33	2b	57	PHE	2.2
6	2G	15	VAL	2.2
6	2G	38	VAL	2.2
39	1h	38	ILE	2.2
47	1p	60	LEU	2.2
7	2H	27	LYS	2.2
42	2k	87	THR	2.2
32	2a	1348	U	2.2
33	2b	163	PHE	2.2
45	1n	31	ARG	2.2
48	1q	88	TYR	2.2
25	23	6	VAL	2.2
34	2c	202	ILE	2.2
7	2H	166	GLY	2.2
12	2Q	117	ALA	2.2
41	2j	36	GLY	2.2
26	24	1	MET	2.2
45	1n	30	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
53	1y	53	THR	2.2
46	2o	68	ARG	2.2
1	1A	1963	U	2.1
3	2D	39	LYS	2.1
3	2D	84	TYR	2.1
7	2H	25	LYS	2.1
47	1p	32	TYR	2.1
48	1q	97	SER	2.1
53	2y	55	ASN	2.1
3	2D	205	VAL	2.1
43	1l	18	VAL	2.1
51	2t	13	LEU	2.1
41	1j	10	GLY	2.1
14	2S	30	ARG	2.1
38	2g	25	ALA	2.1
33	2b	132	LYS	2.1
7	2H	167	GLU	2.1
22	20	69	PHE	2.1
5	2F	89	VAL	2.1
23	21	7	ILE	2.1
26	14	46	GLN	2.1
29	17	46	VAL	2.1
33	2b	92	TYR	2.1
35	1d	203	VAL	2.1
40	2i	44	VAL	2.1
33	2b	121	LEU	2.1
38	2g	99	LEU	2.1
22	20	22	GLY	2.1
43	2l	15	ARG	2.1
44	2m	88	ARG	2.1
6	2G	69	ALA	2.1
19	2X	1	MET	2.1
52	1u	12	LYS	2.1
53	1y	42	SER	2.1
21	2Z	57	ILE	2.1
40	1i	114	TYR	2.1
48	2q	42	TYR	2.1
48	2q	59	ILE	2.1
1	1A	1104	C	2.1
1	2A	2129	C	2.1
32	1a	219	C	2.1
40	1i	83	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
46	2o	48	LYS	2.1
8	1I	117	GLU	2.1
33	1b	126	GLU	2.1
36	1e	21	ALA	2.1
47	1p	56	ALA	2.1
34	2c	128	PHE	2.1
36	2e	26	PHE	2.1
1	1A	1071	G	2.1
6	2G	103	LEU	2.1
12	2Q	59	ARG	2.1
14	2S	4	LEU	2.1
15	2T	108	ARG	2.1
34	2c	132	ARG	2.1
35	2d	61	LYS	2.1
39	1h	92	ARG	2.1
42	2k	75	TYR	2.1
45	2n	4	LYS	2.1
51	1t	10	LEU	2.1
51	1t	41	ILE	2.1
22	20	47	PRO	2.1
1	2A	2164	C	2.1
45	2n	46	GLU	2.1
34	2c	65	ALA	2.1
40	2i	15	ALA	2.1
6	2G	161	THR	2.1
20	1Y	1	MET	2.1
11	2P	6	LEU	2.1
23	21	29	GLY	2.1
44	2m	104	ARG	2.1
45	1n	29	ARG	2.1
34	1c	91	LEU	2.1
45	1n	6	LEU	2.1
46	2o	89	GLY	2.1
6	2G	142	PRO	2.1
32	1a	1032	G	2.1
32	2a	1531	A	2.1
32	2a	1532	U	2.1
41	1j	69	ASN	2.1
47	2p	48	TRP	2.1
38	2g	5	ARG	2.1
3	1D	41	GLY	2.1
6	2G	116	ASP	2.1

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Mol	Chain	Res	Type	RSRZ
3	2D	61	LEU	2.1
3	2D	204	ILE	2.1
8	2I	88	ILE	2.1
11	2P	71	VAL	2.1
18	2W	50	VAL	2.1
33	1b	127	ILE	2.1
6	2G	57	ALA	2.1
9	2N	102	ALA	2.1
35	1d	111	ALA	2.1
40	2i	13	ALA	2.1
41	1j	57	LYS	2.1
43	2l	91	LYS	2.1
6	2G	64	THR	2.1
15	1T	104	ASN	2.1
33	2b	37	ASN	2.1
40	2i	64	THR	2.1
42	1k	126	ARG	2.1
26	24	59	PHE	2.1
41	1j	47	PHE	2.1
1	1A	2108	C	2.1
25	23	53	LEU	2.1
31	19	17	ILE	2.1
34	1c	195	VAL	2.1
35	2d	21	LEU	2.1
39	1h	61	VAL	2.1
48	2q	6	LEU	2.1
51	2t	41	ILE	2.1
38	2g	36	LYS	2.1
45	2n	27	CYS	2.1
16	2U	21	ALA	2.1
28	26	2	ALA	2.1
34	2c	189	ALA	2.1
35	1d	76	ARG	2.1
39	2h	15	ASN	2.1
50	2s	65	ASN	2.1
31	29	1	MET	2.1
1	2A	1699	G	2.0
1	2A	2134	A	2.1
32	1a	102	G	2.0
40	2i	30	GLY	2.1
44	2m	68	GLY	2.1
8	2I	38	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
11	2P	46	LYS	2.0
26	24	8	LYS	2.0
32	2a	1066	C	2.0
40	1i	70	LYS	2.0
53	1y	87	LYS	2.0
3	1D	219	PRO	2.0
14	2S	14	VAL	2.0
16	1U	80	ILE	2.0
19	2X	32	PRO	2.0
33	2b	214	ILE	2.0
4	2E	114	ALA	2.0
10	2O	51	ALA	2.0
16	2U	41	ALA	2.0
22	20	11	ARG	2.0
33	1b	226	ARG	2.0
33	2b	114	ARG	2.0
36	2e	94	ALA	2.0
51	2t	66	ALA	2.0
11	2P	109	GLY	2.0
53	2y	69	ASP	2.0
3	2D	35	LYS	2.0
16	2U	40	PHE	2.0
40	2i	87	GLN	2.0
39	2h	112	LEU	2.0
48	2q	22	LEU	2.0
50	2s	5	LEU	2.0
1	2A	2191	G	2.0
32	1a	1033	G	2.0
37	2f	6	VAL	2.0
5	2F	72	ARG	2.0
15	2T	111	ARG	2.0
40	2i	93	ARG	2.0
48	2q	65	ILE	2.0
19	2X	79	ALA	2.0
11	1P	57	THR	2.0
21	2Z	78	LYS	2.0
35	2d	23	GLY	2.0
40	1i	113	LYS	2.0
45	1n	13	THR	2.0
20	2Y	106	LEU	2.0
35	1d	21	LEU	2.0
39	1h	2	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
39	2h	133	LEU	2.0
48	1q	22	LEU	2.0
5	2F	62	ARG	2.0
32	2a	1235	U	2.0
38	2g	41	ARG	2.0
38	2g	153	HIS	2.0
44	2m	80	ARG	2.0
44	2m	113	PRO	2.0
35	2d	146	ILE	2.0
44	2m	4	ILE	2.0
30	28	15	LYS	2.0
31	29	8	LYS	2.0
43	1l	22	SER	2.0
22	20	77	ARG	2.0
25	23	26	LEU	2.0
30	28	7	HIS	2.0
33	2b	144	ARG	2.0
48	2q	84	LEU	2.0
16	2U	8	VAL	2.0
36	1e	77	PRO	2.0
40	1i	108	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
1	5MU	2A	1915	21/22	0.89	0.11	82,90,98,107	0
32	2MG	2a	1207	24/25	0.90	0.22	88,95,99,101	0
32	5MC	2a	967	21/22	0.92	0.22	75,79,87,92	0
1	5MU	1A	1915	21/22	0.92	0.14	75,82,90,97	0
32	M2G	2a	966	25/26	0.93	0.19	72,77,93,104	0
1	PSU	1A	1917	20/21	0.93	0.15	68,76,83,84	0
1	PSU	2A	1917	20/21	0.93	0.13	77,83,93,95	0
43	0TD	2l	92	10/11	0.93	0.20	66,69,72,88	0
1	PSU	2A	1911	20/21	0.94	0.13	72,77,88,89	0
1	PSU	1A	1911	20/21	0.95	0.14	65,71,77,77	0
32	PSU	2a	516	20/21	0.95	0.12	79,82,86,86	0
32	5MC	2a	1404	21/22	0.95	0.21	61,65,69,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	MA6	2a	1518	24/25	0.95	0.23	57,70,75,76	0
32	2MG	1a	1207	24/25	0.95	0.17	71,78,82,89	0
32	4OC	2a	1402	22/23	0.96	0.21	63,70,73,79	0
32	5MC	1a	967	21/22	0.96	0.19	65,73,82,86	0
32	5MC	2a	1407	21/22	0.96	0.17	61,67,72,78	0
1	OMC	2A	1920	21/22	0.96	0.15	69,73,78,82	0
32	MA6	2a	1519	24/25	0.96	0.28	58,67,72,75	0
32	5MC	2a	1400	21/22	0.96	0.30	71,78,80,84	0
32	M2G	1a	966	25/26	0.97	0.20	61,67,71,75	0
32	PSU	1a	516	20/21	0.97	0.15	64,68,72,78	0
32	G7M	1a	527	24/25	0.97	0.19	48,57,62,71	0
32	4OC	1a	1402	22/23	0.97	0.24	52,58,61,71	0
32	5MC	1a	1404	21/22	0.97	0.19	48,51,55,58	0
32	UR3	2a	1498	21/22	0.97	0.21	56,62,68,71	0
32	G7M	2a	527	24/25	0.97	0.19	64,74,76,79	0
32	MA6	1a	1518	24/25	0.97	0.22	46,49,56,56	0
43	0TD	1l	92	10/11	0.97	0.19	53,60,63,71	0
1	OMG	2A	2251	24/25	0.98	0.25	39,43,46,49	0
1	2MA	2A	2503	23/24	0.98	0.23	34,38,40,43	0
1	OMU	2A	2552	21/22	0.98	0.21	38,43,49,51	0
1	PSU	2A	2605	20/21	0.98	0.20	35,41,46,46	0
32	5MC	1a	1407	21/22	0.98	0.22	47,54,61,64	0
32	UR3	1a	1498	21/22	0.98	0.19	47,51,55,64	0
1	5MC	1A	1962	21/22	0.98	0.19	28,36,42,49	0
32	MA6	1a	1519	24/25	0.98	0.21	42,52,56,57	0
1	MA6	1A	2058	24/25	0.98	0.21	19,27,36,43	0
1	PSU	1A	2605	20/21	0.98	0.19	28,32,35,37	0
32	5MC	1a	1400	21/22	0.98	0.23	47,58,62,67	0
1	OMC	1A	1920	21/22	0.98	0.21	49,61,65,67	0
1	5MC	1A	1942	21/22	0.98	0.20	36,42,47,48	0
1	5MU	2A	1939	21/22	0.98	0.20	36,41,45,48	0
1	5MC	2A	1942	21/22	0.98	0.18	51,55,60,64	0
1	5MC	2A	1962	21/22	0.98	0.18	44,49,54,68	0
1	MA6	2A	2058	24/25	0.98	0.25	33,40,45,49	0
1	OMU	1A	2552	21/22	0.99	0.23	30,34,38,43	0
1	5MU	1A	1939	21/22	0.99	0.21	28,33,37,38	0
1	OMG	1A	2251	24/25	0.99	0.23	23,29,31,33	0
1	2MA	1A	2503	23/24	0.99	0.22	21,28,31,32	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	2A	3632	1/1	0.17	0.17	87,87,87,87	0
54	MG	2A	3489	1/1	0.18	0.16	83,83,83,83	0
54	MG	1A	3165	1/1	0.27	0.34	62,62,62,62	0
54	MG	2A	3206	1/1	0.36	0.29	81,81,81,81	0
54	MG	2A	3693	1/1	0.38	0.25	80,80,80,80	0
54	MG	2A	3414	1/1	0.41	0.18	82,82,82,82	0
54	MG	1A	3260	1/1	0.45	0.19	66,66,66,66	0
54	MG	1a	1872	1/1	0.47	0.16	89,89,89,89	0
54	MG	1A	3272	1/1	0.49	0.13	57,57,57,57	0
54	MG	1A	3797	1/1	0.51	0.41	73,73,73,73	0
54	MG	1A	3685	1/1	0.52	0.50	74,74,74,74	0
54	MG	2a	3008	1/1	0.52	0.30	81,81,81,81	0
54	MG	2A	3409	1/1	0.53	0.17	85,85,85,85	0
54	MG	2A	3234	1/1	0.53	0.61	73,73,73,73	0
54	MG	2a	3121	1/1	0.53	0.13	76,76,76,76	0
54	MG	1A	3854	1/1	0.54	0.22	76,76,76,76	0
54	MG	1A	3983	1/1	0.54	0.15	61,61,61,61	0
54	MG	2A	3449	1/1	0.55	0.37	75,75,75,75	0
54	MG	1a	1660	1/1	0.55	0.22	79,79,79,79	0
54	MG	2A	3362	1/1	0.55	0.12	69,69,69,69	0
54	MG	2A	3108	1/1	0.56	0.16	78,78,78,78	0
54	MG	1a	1813	1/1	0.56	0.33	80,80,80,80	0
54	MG	1a	1685	1/1	0.56	0.79	76,76,76,76	0
54	MG	1n	103	1/1	0.56	0.09	85,85,85,85	0
54	MG	2a	3033	1/1	0.57	0.25	84,84,84,84	0
54	MG	1A	3984	1/1	0.57	0.19	41,41,41,41	0
54	MG	2A	3526	1/1	0.58	0.07	83,83,83,83	0
54	MG	1A	3875	1/1	0.58	0.18	76,76,76,76	0
54	MG	1A	3843	1/1	0.59	0.12	54,54,54,54	0
54	MG	1A	3556	1/1	0.59	0.29	43,43,43,43	0
54	MG	1A	3806	1/1	0.59	0.10	77,77,77,77	0
54	MG	1A	3845	1/1	0.60	0.17	53,53,53,53	0
54	MG	2A	3644	1/1	0.60	0.16	79,79,79,79	0
54	MG	1a	1628	1/1	0.60	0.22	70,70,70,70	0
54	MG	1a	1821	1/1	0.61	0.20	88,88,88,88	0
54	MG	2A	3187	1/1	0.61	0.46	74,74,74,74	0
54	MG	2a	3045	1/1	0.62	0.22	91,91,91,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3311	1/1	0.63	0.21	59,59,59,59	0
54	MG	2B	204	1/1	0.63	0.12	85,85,85,85	0
54	MG	2A	3704	1/1	0.64	0.09	49,49,49,49	0
54	MG	1a	1871	1/1	0.64	0.10	76,76,76,76	0
54	MG	2a	3085	1/1	0.64	1.66	97,97,97,97	0
54	MG	1A	3867	1/1	0.64	0.10	47,47,47,47	0
54	MG	2a	3156	1/1	0.64	0.11	84,84,84,84	0
54	MG	1a	1657	1/1	0.65	0.54	84,84,84,84	0
54	MG	1A	3645	1/1	0.65	0.22	40,40,40,40	0
54	MG	1A	3639	1/1	0.65	0.13	66,66,66,66	0
54	MG	2A	3190	1/1	0.65	0.17	67,67,67,67	0
54	MG	1a	1706	1/1	0.65	0.25	81,81,81,81	0
54	MG	2A	3219	1/1	0.65	0.36	70,70,70,70	0
54	MG	2A	3242	1/1	0.66	0.17	71,71,71,71	0
54	MG	2A	3572	1/1	0.67	0.13	59,59,59,59	0
54	MG	2A	3192	1/1	0.67	0.20	60,60,60,60	0
54	MG	2A	3470	1/1	0.67	0.09	70,70,70,70	0
54	MG	1A	3336	1/1	0.68	0.20	63,63,63,63	0
54	MG	1A	3656	1/1	0.68	0.22	85,85,85,85	0
54	MG	1A	3027	1/1	0.68	0.17	75,75,75,75	0
54	MG	2A	3371	1/1	0.68	0.21	51,51,51,51	0
54	MG	2A	3627	1/1	0.68	0.14	88,88,88,88	0
54	MG	1A	3036	1/1	0.68	0.16	51,51,51,51	0
54	MG	2a	3114	1/1	0.68	0.22	75,75,75,75	0
54	MG	1A	4023	1/1	0.68	0.14	60,60,60,60	0
54	MG	2a	3142	1/1	0.68	0.16	83,83,83,83	0
54	MG	2A	3017	1/1	0.68	0.26	60,60,60,60	0
54	MG	2a	3163	1/1	0.68	0.08	83,83,83,83	0
54	MG	1A	3810	1/1	0.69	0.12	65,65,65,65	0
54	MG	1a	1869	1/1	0.69	0.46	84,84,84,84	0
54	MG	1A	3400	1/1	0.69	0.20	56,56,56,56	0
54	MG	2Q	202	1/1	0.69	0.09	65,65,65,65	0
54	MG	1A	3600	1/1	0.69	0.22	65,65,65,65	0
54	MG	1B	205	1/1	0.69	0.17	53,53,53,53	0
54	MG	1G	201	1/1	0.69	0.11	79,79,79,79	0
54	MG	2a	3080	1/1	0.69	0.11	70,70,70,70	0
54	MG	2A	3549	1/1	0.69	0.12	41,41,41,41	0
54	MG	2A	3057	1/1	0.69	0.24	70,70,70,70	0
54	MG	2a	3117	1/1	0.69	0.14	74,74,74,74	0
54	MG	2A	3584	1/1	0.69	0.12	53,53,53,53	0
54	MG	2A	3334	1/1	0.69	0.09	83,83,83,83	0
54	MG	15	106	1/1	0.69	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	2A	3185	1/1	0.69	0.16	84,84,84,84	0
54	MG	2a	3020	1/1	0.70	0.18	66,66,66,66	0
54	MG	1f	201	1/1	0.70	0.14	74,74,74,74	0
54	MG	1a	1863	1/1	0.70	0.18	64,64,64,64	0
54	MG	2a	3066	1/1	0.70	0.14	81,81,81,81	0
54	MG	2A	3671	1/1	0.70	0.23	67,67,67,67	0
54	MG	2A	3472	1/1	0.70	0.19	65,65,65,65	0
54	MG	1A	3787	1/1	0.71	0.23	24,24,24,24	0
54	MG	1y	202	1/1	0.71	0.17	68,68,68,68	0
54	MG	1A	3339	1/1	0.71	0.24	53,53,53,53	0
54	MG	1B	202	1/1	0.71	0.19	77,77,77,77	0
54	MG	1A	3191	1/1	0.71	0.30	65,65,65,65	0
54	MG	2A	3691	1/1	0.71	0.16	83,83,83,83	0
54	MG	1A	3455	1/1	0.71	0.20	34,34,34,34	0
54	MG	2A	3354	1/1	0.71	0.11	71,71,71,71	0
54	MG	1A	3751	1/1	0.71	0.14	55,55,55,55	0
54	MG	2A	3552	1/1	0.71	0.17	44,44,44,44	0
54	MG	1l	202	1/1	0.71	0.18	79,79,79,79	0
54	MG	2a	3161	1/1	0.71	0.10	68,68,68,68	0
54	MG	2a	3016	1/1	0.71	0.08	94,94,94,94	0
54	MG	2a	3169	1/1	0.71	0.09	79,79,79,79	0
54	MG	2a	3049	1/1	0.72	0.20	69,69,69,69	0
54	MG	1a	1618	1/1	0.72	0.09	66,66,66,66	0
54	MG	1A	3694	1/1	0.72	0.35	78,78,78,78	0
54	MG	2B	213	1/1	0.72	0.27	77,77,77,77	0
54	MG	2a	3087	1/1	0.72	0.12	73,73,73,73	0
54	MG	2G	202	1/1	0.72	0.17	88,88,88,88	0
54	MG	1A	3675	1/1	0.72	0.20	34,34,34,34	0
54	MG	1A	3631	1/1	0.72	0.52	53,53,53,53	0
54	MG	2a	3129	1/1	0.72	0.06	61,61,61,61	0
54	MG	1B	227	1/1	0.72	0.12	79,79,79,79	0
54	MG	1A	3863	1/1	0.72	0.16	76,76,76,76	0
54	MG	1A	4020	1/1	0.72	0.17	79,79,79,79	0
54	MG	2a	3044	1/1	0.72	0.15	80,80,80,80	0
54	MG	1a	1615	1/1	0.72	0.11	79,79,79,79	0
54	MG	2a	3056	1/1	0.73	0.50	74,74,74,74	0
54	MG	2a	3065	1/1	0.73	0.18	78,78,78,78	0
54	MG	2A	3205	1/1	0.73	0.15	74,74,74,74	0
54	MG	1a	1804	1/1	0.73	0.16	69,69,69,69	0
54	MG	1A	3323	1/1	0.73	0.22	67,67,67,67	0
54	MG	1A	3528	1/1	0.73	0.14	51,51,51,51	0
54	MG	2A	3052	1/1	0.73	0.19	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	3947	1/1	0.73	0.21	48,48,48,48	0
54	MG	1a	1639	1/1	0.73	0.16	82,82,82,82	0
54	MG	2A	3355	1/1	0.73	0.14	92,92,92,92	0
54	MG	2a	3137	1/1	0.73	0.09	46,46,46,46	0
54	MG	2A	3174	1/1	0.73	0.38	63,63,63,63	0
54	MG	1B	206	1/1	0.73	0.35	67,67,67,67	0
54	MG	2a	3158	1/1	0.73	0.23	88,88,88,88	0
54	MG	1A	3216	1/1	0.73	0.27	62,62,62,62	0
54	MG	1A	3034	1/1	0.73	0.22	52,52,52,52	0
54	MG	2a	3164	1/1	0.73	0.36	97,97,97,97	0
54	MG	1A	3318	1/1	0.73	1.03	69,69,69,69	0
54	MG	2A	3099	1/1	0.74	0.14	55,55,55,55	0
54	MG	2B	214	1/1	0.74	0.25	76,76,76,76	0
54	MG	1A	3707	1/1	0.74	0.19	70,70,70,70	0
54	MG	2A	3109	1/1	0.74	0.12	67,67,67,67	0
54	MG	1a	1640	1/1	0.74	0.11	74,74,74,74	0
54	MG	1A	3325	1/1	0.74	0.13	66,66,66,66	0
54	MG	2a	3127	1/1	0.74	0.16	74,74,74,74	0
54	MG	1A	3427	1/1	0.74	0.16	33,33,33,33	0
54	MG	2a	3022	1/1	0.74	0.18	60,60,60,60	0
54	MG	2A	3382	1/1	0.74	0.09	73,73,73,73	0
54	MG	2A	3005	1/1	0.74	0.23	65,65,65,65	0
54	MG	1A	3992	1/1	0.74	0.40	55,55,55,55	0
54	MG	2A	3034	1/1	0.74	0.15	77,77,77,77	0
54	MG	1A	3659	1/1	0.74	0.49	42,42,42,42	0
54	MG	1a	1723	1/1	0.74	0.18	79,79,79,79	0
54	MG	2A	3084	1/1	0.74	0.16	80,80,80,80	0
54	MG	1A	4008	1/1	0.75	0.22	61,61,61,61	0
54	MG	2a	3134	1/1	0.75	0.12	80,80,80,80	0
54	MG	2a	3030	1/1	0.75	0.18	72,72,72,72	0
54	MG	2A	3651	1/1	0.75	0.11	59,59,59,59	0
54	MG	2a	3148	1/1	0.75	0.10	68,68,68,68	0
54	MG	2A	3441	1/1	0.75	0.15	68,68,68,68	0
54	MG	2a	3088	1/1	0.75	0.28	76,76,76,76	0
54	MG	2A	3524	1/1	0.75	0.07	58,58,58,58	0
54	MG	2A	3605	1/1	0.75	0.23	48,48,48,48	0
54	MG	2A	3012	1/1	0.75	0.48	71,71,71,71	0
54	MG	1A	3799	1/1	0.75	0.23	34,34,34,34	0
54	MG	1V	204	1/1	0.76	0.39	59,59,59,59	0
54	MG	1A	3241	1/1	0.76	0.57	63,63,63,63	0
54	MG	1A	3591	1/1	0.76	0.17	76,76,76,76	0
54	MG	2A	3064	1/1	0.76	0.26	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	2A	3638	1/1	0.76	0.17	49,49,49,49	0
54	MG	1A	3342	1/1	0.76	0.15	56,56,56,56	0
54	MG	1a	1866	1/1	0.76	0.15	57,57,57,57	0
54	MG	1A	4024	1/1	0.76	0.27	61,61,61,61	0
54	MG	2A	3402	1/1	0.76	0.20	71,71,71,71	0
54	MG	1A	3189	1/1	0.76	0.27	76,76,76,76	0
54	MG	1A	3954	1/1	0.76	0.10	30,30,30,30	0
54	MG	2A	3439	1/1	0.76	0.29	65,65,65,65	0
54	MG	2a	3123	1/1	0.76	0.14	79,79,79,79	0
54	MG	1A	3731	1/1	0.76	0.14	48,48,48,48	0
54	MG	1B	209	1/1	0.76	0.15	61,61,61,61	0
54	MG	1B	211	1/1	0.76	0.16	64,64,64,64	0
54	MG	1a	1690	1/1	0.76	0.22	69,69,69,69	0
54	MG	1A	3665	1/1	0.76	0.12	42,42,42,42	0
54	MG	2A	3009	1/1	0.76	0.28	40,40,40,40	0
54	MG	2a	3018	1/1	0.76	0.11	74,74,74,74	0
54	MG	2A	3209	1/1	0.76	0.15	80,80,80,80	0
54	MG	2A	3531	1/1	0.76	0.28	87,87,87,87	0
54	MG	2A	3212	1/1	0.76	0.15	53,53,53,53	0
54	MG	1A	3674	1/1	0.76	0.38	69,69,69,69	0
54	MG	1a	1762	1/1	0.76	0.09	63,63,63,63	0
59	ZN	14	501	1/1	0.76	0.10	140,140,140,140	0
54	MG	1B	203	1/1	0.77	0.34	67,67,67,67	0
54	MG	1A	3237	1/1	0.77	0.36	79,79,79,79	0
54	MG	1A	3386	1/1	0.77	0.18	42,42,42,42	0
54	MG	1A	3129	1/1	0.77	0.14	67,67,67,67	0
54	MG	1A	3988	1/1	0.77	0.17	82,82,82,82	0
54	MG	1A	3315	1/1	0.77	0.19	62,62,62,62	0
54	MG	1A	3601	1/1	0.77	0.85	50,50,50,50	0
54	MG	2A	3679	1/1	0.77	0.11	69,69,69,69	0
54	MG	1a	1697	1/1	0.77	0.17	67,67,67,67	0
54	MG	1u	101	1/1	0.77	0.39	76,76,76,76	0
54	MG	1a	1703	1/1	0.77	0.15	78,78,78,78	0
54	MG	2A	3462	1/1	0.77	0.23	56,56,56,56	0
54	MG	2B	206	1/1	0.77	0.10	85,85,85,85	0
54	MG	1T	204	1/1	0.77	0.14	67,67,67,67	0
54	MG	1a	1719	1/1	0.77	0.12	75,75,75,75	0
54	MG	1a	1722	1/1	0.77	0.11	64,64,64,64	0
54	MG	2A	3492	1/1	0.77	0.08	71,71,71,71	0
54	MG	20	101	1/1	0.77	0.23	78,78,78,78	0
54	MG	1A	3150	1/1	0.77	0.17	76,76,76,76	0
54	MG	2a	3149	1/1	0.77	0.12	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	3227	1/1	0.77	0.23	65,65,65,65	0
54	MG	1A	3680	1/1	0.77	0.56	37,37,37,37	0
54	MG	2A	3239	1/1	0.77	0.09	61,61,61,61	0
54	MG	1a	1604	1/1	0.77	0.14	78,78,78,78	0
54	MG	2A	3560	1/1	0.77	0.16	54,54,54,54	0
54	MG	1A	3910	1/1	0.77	0.14	61,61,61,61	0
54	MG	1A	3476	1/1	0.77	0.16	58,58,58,58	0
54	MG	1a	1714	1/1	0.78	0.10	81,81,81,81	0
54	MG	1A	3491	1/1	0.78	0.13	60,60,60,60	0
54	MG	2A	3203	1/1	0.78	0.52	72,72,72,72	0
54	MG	2A	3041	1/1	0.78	0.10	50,50,50,50	0
54	MG	1A	3319	1/1	0.78	0.45	74,74,74,74	0
54	MG	1a	1877	1/1	0.78	0.11	90,90,90,90	0
54	MG	1A	3346	1/1	0.78	0.22	76,76,76,76	0
54	MG	2A	3424	1/1	0.78	0.18	56,56,56,56	0
54	MG	1a	1750	1/1	0.78	0.18	73,73,73,73	0
54	MG	1A	3889	1/1	0.78	0.13	25,25,25,25	0
54	MG	2A	3229	1/1	0.78	0.20	63,63,63,63	0
54	MG	1a	1607	1/1	0.78	0.08	73,73,73,73	0
54	MG	1A	3405	1/1	0.78	0.24	51,51,51,51	0
54	MG	1F	318	1/1	0.78	0.18	67,67,67,67	0
54	MG	2A	3327	1/1	0.78	0.17	57,57,57,57	0
54	MG	2A	3692	1/1	0.78	0.12	89,89,89,89	0
54	MG	1A	3942	1/1	0.78	0.14	63,63,63,63	0
54	MG	2A	3512	1/1	0.78	0.07	79,79,79,79	0
54	MG	2A	3345	1/1	0.78	0.17	81,81,81,81	0
54	MG	2a	3177	1/1	0.78	0.18	80,80,80,80	0
54	MG	1a	1630	1/1	0.78	0.38	63,63,63,63	0
54	MG	2a	3096	1/1	0.79	0.07	63,63,63,63	0
54	MG	2a	3113	1/1	0.79	0.47	79,79,79,79	0
54	MG	2A	3587	1/1	0.79	0.11	71,71,71,71	0
54	MG	2A	3593	1/1	0.79	0.14	50,50,50,50	0
54	MG	2A	3043	1/1	0.79	0.17	80,80,80,80	0
54	MG	1V	203	1/1	0.79	0.22	61,61,61,61	0
54	MG	1a	1692	1/1	0.79	0.11	62,62,62,62	0
54	MG	1A	3281	1/1	0.79	0.09	78,78,78,78	0
54	MG	1E	308	1/1	0.79	0.22	63,63,63,63	0
54	MG	1A	3981	1/1	0.79	0.23	59,59,59,59	0
54	MG	1A	3794	1/1	0.79	0.09	49,49,49,49	0
54	MG	1S	201	1/1	0.79	0.19	68,68,68,68	0
54	MG	2A	3162	1/1	0.79	0.82	68,68,68,68	0
54	MG	1a	1666	1/1	0.79	0.29	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	2A	3551	1/1	0.79	0.12	51,51,51,51	0
54	MG	1a	1668	1/1	0.79	0.20	82,82,82,82	0
54	MG	2A	3240	1/1	0.79	0.22	72,72,72,72	0
54	MG	1a	1876	1/1	0.79	0.10	76,76,76,76	0
54	MG	2a	3167	1/1	0.79	0.21	89,89,89,89	0
54	MG	2A	3576	1/1	0.79	0.09	73,73,73,73	0
54	MG	1A	3803	1/1	0.79	0.14	69,69,69,69	0
54	MG	2A	3586	1/1	0.79	0.11	79,79,79,79	0
54	MG	2A	3357	1/1	0.80	0.14	35,35,35,35	0
54	MG	1a	1788	1/1	0.80	0.19	86,86,86,86	0
54	MG	1A	3238	1/1	0.80	0.18	64,64,64,64	0
54	MG	2a	3052	1/1	0.80	0.17	59,59,59,59	0
54	MG	2A	3591	1/1	0.80	0.21	55,55,55,55	0
54	MG	2A	3375	1/1	0.80	0.17	60,60,60,60	0
54	MG	2A	3191	1/1	0.80	0.11	74,74,74,74	0
54	MG	2a	3067	1/1	0.80	0.12	80,80,80,80	0
54	MG	2a	3068	1/1	0.80	0.27	68,68,68,68	0
54	MG	1A	3113	1/1	0.80	0.16	52,52,52,52	0
54	MG	1A	3484	1/1	0.80	0.16	58,58,58,58	0
54	MG	1a	1830	1/1	0.80	0.12	75,75,75,75	0
54	MG	1a	1834	1/1	0.80	0.15	84,84,84,84	0
54	MG	1a	1836	1/1	0.80	0.29	74,74,74,74	0
54	MG	2a	3103	1/1	0.80	0.25	73,73,73,73	0
54	MG	2A	3661	1/1	0.80	0.08	59,59,59,59	0
54	MG	1A	3608	1/1	0.80	0.17	55,55,55,55	0
54	MG	1a	1635	1/1	0.80	0.12	76,76,76,76	0
54	MG	2A	3456	1/1	0.80	0.30	74,74,74,74	0
54	MG	1A	3313	1/1	0.80	0.56	62,62,62,62	0
54	MG	1a	1709	1/1	0.80	0.11	75,75,75,75	0
54	MG	1A	3492	1/1	0.80	0.16	56,56,56,56	0
54	MG	1a	1874	1/1	0.80	0.10	79,79,79,79	0
54	MG	1a	1642	1/1	0.80	0.22	76,76,76,76	0
54	MG	1A	3686	1/1	0.80	0.12	50,50,50,50	0
54	MG	2A	3267	1/1	0.80	0.11	66,66,66,66	0
54	MG	2A	3280	1/1	0.80	0.16	43,43,43,43	0
54	MG	1a	1879	1/1	0.80	0.08	90,90,90,90	0
54	MG	2A	3536	1/1	0.80	0.12	60,60,60,60	0
54	MG	2A	3153	1/1	0.80	0.12	77,77,77,77	0
54	MG	2A	3335	1/1	0.80	0.10	39,39,39,39	0
54	MG	2A	3343	1/1	0.80	0.32	59,59,59,59	0
54	MG	2A	3556	1/1	0.80	0.18	68,68,68,68	0
54	MG	1B	210	1/1	0.80	0.75	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	3412	1/1	0.80	0.19	34,34,34,34	0
58	ARG	1F	319	12/12	0.80	0.29	60,72,89,89	0
54	MG	1A	3385	1/1	0.80	0.17	70,70,70,70	0
54	MG	2A	3568	1/1	0.81	0.06	71,71,71,71	0
54	MG	1A	3513	1/1	0.81	0.10	44,44,44,44	0
54	MG	1A	3651	1/1	0.81	0.52	36,36,36,36	0
54	MG	1a	1694	1/1	0.81	0.22	75,75,75,75	0
54	MG	2A	3134	1/1	0.81	0.32	55,55,55,55	0
54	MG	2a	3054	1/1	0.81	0.11	72,72,72,72	0
54	MG	1A	3328	1/1	0.81	0.50	49,49,49,49	0
54	MG	2A	3160	1/1	0.81	0.11	72,72,72,72	0
54	MG	1A	3530	1/1	0.81	0.10	79,79,79,79	0
54	MG	1a	1875	1/1	0.81	0.10	82,82,82,82	0
54	MG	2A	3183	1/1	0.81	0.56	60,60,60,60	0
54	MG	1A	3363	1/1	0.81	0.17	71,71,71,71	0
54	MG	1A	3557	1/1	0.81	0.24	59,59,59,59	0
54	MG	1A	3445	1/1	0.81	0.08	78,78,78,78	0
54	MG	1a	1881	1/1	0.81	0.28	60,60,60,60	0
54	MG	1a	1716	1/1	0.81	0.34	65,65,65,65	0
54	MG	1A	3805	1/1	0.81	0.22	63,63,63,63	0
54	MG	2A	3674	1/1	0.81	0.10	46,46,46,46	0
54	MG	1A	3972	1/1	0.81	0.10	51,51,51,51	0
54	MG	2A	3680	1/1	0.81	0.08	64,64,64,64	0
54	MG	1A	3332	1/1	0.81	0.14	61,61,61,61	0
54	MG	2A	3457	1/1	0.81	0.08	63,63,63,63	0
54	MG	1B	221	1/1	0.81	0.08	59,59,59,59	0
54	MG	1A	3168	1/1	0.81	0.17	63,63,63,63	0
54	MG	2A	3217	1/1	0.81	0.48	52,52,52,52	0
54	MG	1A	3814	1/1	0.81	0.22	68,68,68,68	0
54	MG	1a	1794	1/1	0.81	0.20	79,79,79,79	0
54	MG	1A	3396	1/1	0.81	0.17	71,71,71,71	0
54	MG	1a	1812	1/1	0.81	0.20	77,77,77,77	0
54	MG	1A	3039	1/1	0.81	0.20	69,69,69,69	0
54	MG	1N	203	1/1	0.81	0.13	70,70,70,70	0
54	MG	21	101	1/1	0.81	0.08	88,88,88,88	0
54	MG	2A	3051	1/1	0.81	0.13	68,68,68,68	0
54	MG	2a	3013	1/1	0.81	0.09	61,61,61,61	0
54	MG	1N	204	1/1	0.81	0.35	60,60,60,60	0
54	MG	1R	205	1/1	0.81	0.24	49,49,49,49	0
54	MG	1a	1679	1/1	0.81	0.21	71,71,71,71	0
54	MG	2A	3076	1/1	0.81	0.44	63,63,63,63	0
54	MG	1A	3271	1/1	0.81	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3361	1/1	0.82	0.12	69,69,69,69	0
54	MG	1A	3922	1/1	0.82	0.09	45,45,45,45	0
54	MG	2A	3573	1/1	0.82	0.09	46,46,46,46	0
54	MG	2A	3202	1/1	0.82	0.16	63,63,63,63	0
54	MG	1A	3728	1/1	0.82	0.11	67,67,67,67	0
54	MG	1A	3603	1/1	0.82	0.21	67,67,67,67	0
54	MG	1A	3838	1/1	0.82	0.33	68,68,68,68	0
54	MG	1A	3108	1/1	0.82	0.26	47,47,47,47	0
54	MG	1A	3217	1/1	0.82	0.55	46,46,46,46	0
54	MG	2A	3597	1/1	0.82	0.20	48,48,48,48	0
54	MG	2A	3213	1/1	0.82	0.37	72,72,72,72	0
54	MG	2A	3429	1/1	0.82	0.13	62,62,62,62	0
54	MG	1d	301	1/1	0.82	0.13	74,74,74,74	0
54	MG	1e	201	1/1	0.82	0.13	72,72,72,72	0
54	MG	2A	3448	1/1	0.82	0.11	67,67,67,67	0
54	MG	1A	3478	1/1	0.82	0.12	44,44,44,44	0
54	MG	1g	202	1/1	0.82	0.11	69,69,69,69	0
54	MG	2A	3665	1/1	0.82	0.17	83,83,83,83	0
54	MG	2A	3669	1/1	0.82	0.29	74,74,74,74	0
54	MG	1A	3856	1/1	0.82	0.15	61,61,61,61	0
54	MG	2A	3459	1/1	0.82	0.09	63,63,63,63	0
54	MG	2A	3124	1/1	0.82	0.10	76,76,76,76	0
54	MG	2A	3125	1/1	0.82	0.20	51,51,51,51	0
54	MG	1A	3335	1/1	0.82	0.29	50,50,50,50	0
54	MG	1A	3866	1/1	0.82	0.16	56,56,56,56	0
54	MG	1A	3377	1/1	0.82	0.16	61,61,61,61	0
54	MG	2A	3505	1/1	0.82	0.10	69,69,69,69	0
54	MG	2A	3711	1/1	0.82	0.13	55,55,55,55	0
54	MG	2A	3291	1/1	0.82	0.32	59,59,59,59	0
54	MG	1A	3008	1/1	0.82	0.16	50,50,50,50	0
54	MG	1A	3883	1/1	0.82	0.20	60,60,60,60	0
54	MG	2A	3179	1/1	0.82	0.10	82,82,82,82	0
54	MG	1A	3198	1/1	0.82	0.23	61,61,61,61	0
54	MG	2A	3548	1/1	0.82	0.19	37,37,37,37	0
54	MG	1A	3719	1/1	0.82	0.14	60,60,60,60	0
54	MG	2A	3347	1/1	0.82	0.15	82,82,82,82	0
54	MG	2a	3004	1/1	0.82	0.12	59,59,59,59	0
54	MG	2A	3023	1/1	0.82	0.16	62,62,62,62	0
54	MG	2a	3011	1/1	0.82	0.26	77,77,77,77	0
54	MG	2A	3033	1/1	0.82	0.19	57,57,57,57	0
54	MG	2e	202	1/1	0.82	0.38	79,79,79,79	0
54	MG	2A	3557	1/1	0.82	0.12	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1T	202	1/1	0.82	0.16	59,59,59,59	0
59	ZN	24	501	1/1	0.82	0.17	146,146,146,146	0
54	MG	1A	3413	1/1	0.83	0.16	37,37,37,37	0
54	MG	1A	3131	1/1	0.83	0.24	45,45,45,45	0
54	MG	2A	3494	1/1	0.83	0.13	69,69,69,69	0
54	MG	2A	3050	1/1	0.83	0.10	45,45,45,45	0
54	MG	1A	3116	1/1	0.83	0.50	47,47,47,47	0
54	MG	2a	3006	1/1	0.83	0.16	79,79,79,79	0
54	MG	1O	201	1/1	0.83	0.21	63,63,63,63	0
54	MG	2A	3237	1/1	0.83	0.34	56,56,56,56	0
54	MG	1A	3344	1/1	0.83	0.68	51,51,51,51	0
54	MG	2A	3059	1/1	0.83	0.50	58,58,58,58	0
54	MG	1a	1865	1/1	0.83	0.06	85,85,85,85	0
54	MG	2A	3075	1/1	0.83	0.60	63,63,63,63	0
54	MG	1A	3457	1/1	0.83	0.17	53,53,53,53	0
54	MG	2a	3023	1/1	0.83	0.12	74,74,74,74	0
54	MG	1a	1689	1/1	0.83	0.19	70,70,70,70	0
54	MG	2A	3292	1/1	0.83	0.10	65,65,65,65	0
54	MG	2A	3090	1/1	0.83	0.28	75,75,75,75	0
54	MG	2A	3330	1/1	0.83	0.13	39,39,39,39	0
54	MG	1A	3161	1/1	0.83	0.29	64,64,64,64	0
54	MG	1A	3722	1/1	0.83	0.11	52,52,52,52	0
54	MG	2A	3340	1/1	0.83	0.21	50,50,50,50	0
54	MG	2a	3055	1/1	0.83	0.14	89,89,89,89	0
54	MG	1A	3626	1/1	0.83	0.14	85,85,85,85	0
54	MG	2a	3058	1/1	0.83	0.18	92,92,92,92	0
54	MG	2A	3120	1/1	0.83	0.09	63,63,63,63	0
54	MG	1A	3275	1/1	0.83	0.37	59,59,59,59	0
54	MG	1a	1699	1/1	0.83	0.18	70,70,70,70	0
54	MG	1A	3042	1/1	0.83	0.22	60,60,60,60	0
54	MG	2A	3152	1/1	0.83	0.63	66,66,66,66	0
54	MG	19	102	1/1	0.83	0.21	65,65,65,65	0
54	MG	2A	3599	1/1	0.83	0.15	39,39,39,39	0
54	MG	1a	1708	1/1	0.83	0.14	98,98,98,98	0
54	MG	2A	3615	1/1	0.83	0.05	82,82,82,82	0
54	MG	1A	3776	1/1	0.83	0.16	65,65,65,65	0
54	MG	1A	3783	1/1	0.83	0.20	45,45,45,45	0
54	MG	2A	3178	1/1	0.83	0.12	75,75,75,75	0
54	MG	1A	3324	1/1	0.83	0.19	58,58,58,58	0
54	MG	2A	3646	1/1	0.83	0.15	78,78,78,78	0
54	MG	2A	3647	1/1	0.83	0.10	69,69,69,69	0
54	MG	2A	3182	1/1	0.83	0.46	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	3413	1/1	0.83	0.34	86,86,86,86	0
54	MG	1A	3895	1/1	0.83	0.16	64,64,64,64	0
54	MG	1A	3284	1/1	0.83	0.20	74,74,74,74	0
54	MG	1n	101	1/1	0.83	0.10	72,72,72,72	0
54	MG	1A	3509	1/1	0.83	0.17	29,29,29,29	0
54	MG	1a	1726	1/1	0.83	0.15	73,73,73,73	0
54	MG	2a	3155	1/1	0.83	0.12	72,72,72,72	0
54	MG	1a	1727	1/1	0.83	0.23	70,70,70,70	0
54	MG	1A	3298	1/1	0.83	0.21	74,74,74,74	0
54	MG	1A	3302	1/1	0.83	0.40	42,42,42,42	0
54	MG	1A	3309	1/1	0.83	0.93	51,51,51,51	0
54	MG	1A	3201	1/1	0.83	0.23	62,62,62,62	0
54	MG	1a	1651	1/1	0.83	0.21	65,65,65,65	0
54	MG	1a	1652	1/1	0.83	0.15	81,81,81,81	0
54	MG	2A	3471	1/1	0.83	0.11	84,84,84,84	0
54	MG	2B	212	1/1	0.83	0.23	97,97,97,97	0
57	MPD	2A	3714	8/8	0.83	0.56	49,56,62,62	0
57	MPD	2B	219	8/8	0.83	0.19	70,79,82,82	0
54	MG	1a	1653	1/1	0.83	0.14	70,70,70,70	0
54	MG	2A	3485	1/1	0.83	0.19	63,63,63,63	0
54	MG	2D	307	1/1	0.83	0.14	63,63,63,63	0
54	MG	1A	3148	1/1	0.84	0.08	58,58,58,58	0
54	MG	1a	1662	1/1	0.84	0.36	70,70,70,70	0
54	MG	1A	3860	1/1	0.84	0.11	66,66,66,66	0
54	MG	2A	3528	1/1	0.84	0.12	66,66,66,66	0
54	MG	1A	3687	1/1	0.84	0.09	60,60,60,60	0
54	MG	1a	1676	1/1	0.84	0.21	75,75,75,75	0
54	MG	2A	3537	1/1	0.84	0.06	79,79,79,79	0
54	MG	2A	3255	1/1	0.84	0.16	61,61,61,61	0
54	MG	1a	1678	1/1	0.84	0.15	54,54,54,54	0
54	MG	1a	1856	1/1	0.84	0.09	61,61,61,61	0
54	MG	1A	3184	1/1	0.84	0.16	52,52,52,52	0
54	MG	1A	3041	1/1	0.84	0.23	47,47,47,47	0
54	MG	2A	3089	1/1	0.84	0.10	80,80,80,80	0
54	MG	2A	3558	1/1	0.84	0.08	78,78,78,78	0
54	MG	1A	4013	1/1	0.84	0.13	36,36,36,36	0
54	MG	2a	3035	1/1	0.84	0.26	74,74,74,74	0
54	MG	2A	3561	1/1	0.84	0.11	50,50,50,50	0
54	MG	1A	4019	1/1	0.84	0.17	66,66,66,66	0
54	MG	1A	3870	1/1	0.84	0.43	45,45,45,45	0
54	MG	1A	3657	1/1	0.84	0.24	74,74,74,74	0
54	MG	1A	3219	1/1	0.84	1.12	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	17	107	1/1	0.84	0.14	59,59,59,59	0
54	MG	1A	4027	1/1	0.84	0.33	69,69,69,69	0
54	MG	1a	1704	1/1	0.84	0.37	74,74,74,74	0
54	MG	1A	3887	1/1	0.84	0.16	64,64,64,64	0
54	MG	1A	3076	1/1	0.84	0.42	47,47,47,47	0
54	MG	1a	1612	1/1	0.84	0.14	79,79,79,79	0
54	MG	1a	1712	1/1	0.84	0.11	80,80,80,80	0
54	MG	2A	3167	1/1	0.84	0.17	61,61,61,61	0
54	MG	1a	1713	1/1	0.84	0.23	72,72,72,72	0
54	MG	2A	3616	1/1	0.84	0.14	59,59,59,59	0
54	MG	2A	3177	1/1	0.84	0.31	70,70,70,70	0
54	MG	2A	3629	1/1	0.84	0.11	57,57,57,57	0
54	MG	2a	3102	1/1	0.84	0.08	67,67,67,67	0
54	MG	2A	3631	1/1	0.84	0.12	53,53,53,53	0
54	MG	1A	3544	1/1	0.84	0.24	43,43,43,43	0
54	MG	1i	3100	1/1	0.84	0.19	80,80,80,80	0
54	MG	2A	3639	1/1	0.84	0.14	37,37,37,37	0
54	MG	1A	3749	1/1	0.84	0.20	59,59,59,59	0
54	MG	1A	3419	1/1	0.84	0.26	34,34,34,34	0
54	MG	2A	3418	1/1	0.84	0.26	67,67,67,67	0
54	MG	1A	3940	1/1	0.84	0.05	63,63,63,63	0
54	MG	1A	3842	1/1	0.84	0.14	53,53,53,53	0
54	MG	1y	201	1/1	0.84	0.30	72,72,72,72	0
54	MG	1a	1724	1/1	0.84	0.25	64,64,64,64	0
54	MG	1A	3768	1/1	0.84	0.11	55,55,55,55	0
54	MG	1B	224	1/1	0.84	0.15	64,64,64,64	0
54	MG	2A	3452	1/1	0.84	0.22	70,70,70,70	0
54	MG	1A	3635	1/1	0.84	0.22	24,24,24,24	0
54	MG	2A	3016	1/1	0.84	0.15	74,74,74,74	0
54	MG	2a	3160	1/1	0.84	0.09	78,78,78,78	0
54	MG	1a	1754	1/1	0.84	0.15	65,65,65,65	0
54	MG	1E	304	1/1	0.84	0.18	27,27,27,27	0
54	MG	1A	3851	1/1	0.84	0.17	53,53,53,53	0
54	MG	1A	3979	1/1	0.84	0.14	74,74,74,74	0
54	MG	2A	3215	1/1	0.84	0.13	58,58,58,58	0
54	MG	2A	3216	1/1	0.84	0.61	71,71,71,71	0
54	MG	2A	3036	1/1	0.84	0.59	57,57,57,57	0
54	MG	1a	1799	1/1	0.84	0.12	73,73,73,73	0
54	MG	1A	3114	1/1	0.84	0.48	45,45,45,45	0
54	MG	2B	217	1/1	0.84	0.09	75,75,75,75	0
54	MG	2A	3046	1/1	0.84	0.07	65,65,65,65	0
54	MG	2A	3510	1/1	0.84	0.11	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3322	1/1	0.85	0.14	60,60,60,60	0
54	MG	2A	3298	1/1	0.85	0.25	64,64,64,64	0
54	MG	2a	3003	1/1	0.85	0.15	77,77,77,77	0
54	MG	2A	3545	1/1	0.85	0.16	65,65,65,65	0
54	MG	2A	3320	1/1	0.85	0.15	50,50,50,50	0
54	MG	1A	3824	1/1	0.85	0.18	51,51,51,51	0
54	MG	1A	3926	1/1	0.85	0.25	30,30,30,30	0
54	MG	1A	3938	1/1	0.85	0.10	47,47,47,47	0
54	MG	2A	3137	1/1	0.85	0.53	58,58,58,58	0
54	MG	1A	3300	1/1	0.85	0.08	93,93,93,93	0
54	MG	1A	3841	1/1	0.85	0.20	51,51,51,51	0
54	MG	1a	1717	1/1	0.85	0.10	80,80,80,80	0
54	MG	1A	3944	1/1	0.85	0.13	68,68,68,68	0
54	MG	2A	3563	1/1	0.85	0.09	52,52,52,52	0
54	MG	1a	1720	1/1	0.85	0.14	77,77,77,77	0
54	MG	1a	1632	1/1	0.85	0.22	79,79,79,79	0
54	MG	1B	217	1/1	0.85	0.19	47,47,47,47	0
54	MG	1a	1637	1/1	0.85	0.11	48,48,48,48	0
54	MG	1A	3536	1/1	0.85	0.20	28,28,28,28	0
54	MG	2A	3366	1/1	0.85	0.15	38,38,38,38	0
54	MG	2a	3053	1/1	0.85	0.09	64,64,64,64	0
54	MG	1A	3432	1/1	0.85	0.16	71,71,71,71	0
54	MG	1a	1742	1/1	0.85	0.11	65,65,65,65	0
54	MG	2A	3376	1/1	0.85	0.17	60,60,60,60	0
54	MG	2A	3184	1/1	0.85	0.61	66,66,66,66	0
54	MG	2a	3061	1/1	0.85	0.08	91,91,91,91	0
54	MG	1B	226	1/1	0.85	0.16	78,78,78,78	0
54	MG	1A	3967	1/1	0.85	0.24	76,76,76,76	0
54	MG	2A	3610	1/1	0.85	0.11	78,78,78,78	0
54	MG	1A	3100	1/1	0.85	0.39	57,57,57,57	0
54	MG	2a	3076	1/1	0.85	0.15	74,74,74,74	0
54	MG	1a	1773	1/1	0.85	0.13	64,64,64,64	0
54	MG	1a	1787	1/1	0.85	0.05	71,71,71,71	0
54	MG	2A	3027	1/1	0.85	0.41	59,59,59,59	0
54	MG	1A	3978	1/1	0.85	0.23	67,67,67,67	0
54	MG	2a	3092	1/1	0.85	0.09	89,89,89,89	0
54	MG	1A	3765	1/1	0.85	0.15	60,60,60,60	0
54	MG	2a	3098	1/1	0.85	0.16	66,66,66,66	0
54	MG	1A	3035	1/1	0.85	0.27	68,68,68,68	0
54	MG	2A	3445	1/1	0.85	0.18	84,84,84,84	0
54	MG	1G	203	1/1	0.85	0.18	63,63,63,63	0
54	MG	2A	3210	1/1	0.85	0.27	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	1A	3769	1/1	0.85	0.18	50,50,50,50	0
54	MG	2a	3119	1/1	0.85	0.14	65,65,65,65	0
54	MG	1A	3380	1/1	0.85	0.16	36,36,36,36	0
54	MG	2A	3652	1/1	0.85	0.09	72,72,72,72	0
54	MG	1A	3310	1/1	0.85	0.83	49,49,49,49	0
54	MG	1A	3010	1/1	0.85	0.17	62,62,62,62	0
54	MG	1A	3998	1/1	0.85	1.05	66,66,66,66	0
54	MG	2a	3136	1/1	0.85	0.11	73,73,73,73	0
54	MG	2A	3465	1/1	0.85	0.35	80,80,80,80	0
54	MG	2A	3467	1/1	0.85	0.14	43,43,43,43	0
54	MG	1a	1684	1/1	0.85	0.15	76,76,76,76	0
54	MG	2A	3220	1/1	0.85	1.05	60,60,60,60	0
54	MG	1A	3196	1/1	0.85	0.33	57,57,57,57	0
54	MG	1A	3486	1/1	0.85	0.19	58,58,58,58	0
54	MG	1A	3180	1/1	0.85	0.20	67,67,67,67	0
54	MG	2A	3491	1/1	0.85	0.10	76,76,76,76	0
54	MG	2A	3706	1/1	0.85	0.14	40,40,40,40	0
54	MG	1A	3181	1/1	0.85	0.68	50,50,50,50	0
54	MG	2B	202	1/1	0.85	0.12	73,73,73,73	0
54	MG	11	102	1/1	0.85	0.95	63,63,63,63	0
54	MG	11	104	1/1	0.85	0.10	55,55,55,55	0
54	MG	2a	3171	1/1	0.85	0.21	83,83,83,83	0
54	MG	1A	3696	1/1	0.85	0.12	71,71,71,71	0
54	MG	17	102	1/1	0.85	0.18	55,55,55,55	0
54	MG	2A	3520	1/1	0.85	0.12	34,34,34,34	0
54	MG	2A	3259	1/1	0.85	0.57	57,57,57,57	0
54	MG	1A	3340	1/1	0.85	0.11	48,48,48,48	0
54	MG	1A	3249	1/1	0.85	0.13	62,62,62,62	0
54	MG	2A	3116	1/1	0.85	0.15	76,76,76,76	0
54	MG	1A	3652	1/1	0.86	0.18	59,59,59,59	0
54	MG	2A	3135	1/1	0.86	0.22	68,68,68,68	0
54	MG	1A	3388	1/1	0.86	0.18	47,47,47,47	0
54	MG	2a	3015	1/1	0.86	0.21	64,64,64,64	0
54	MG	2A	3338	1/1	0.86	0.08	45,45,45,45	0
54	MG	1A	3341	1/1	0.86	0.21	49,49,49,49	0
54	MG	2a	3019	1/1	0.86	0.20	54,54,54,54	0
54	MG	1h	201	1/1	0.86	0.14	71,71,71,71	0
54	MG	1A	3956	1/1	0.86	0.18	55,55,55,55	0
54	MG	1A	3961	1/1	0.86	0.12	57,57,57,57	0
54	MG	2A	3353	1/1	0.86	0.17	66,66,66,66	0
54	MG	1A	3243	1/1	0.86	0.19	47,47,47,47	0
54	MG	2A	3171	1/1	0.86	0.24	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3043	1/1	0.86	0.23	70,70,70,70	0
54	MG	1A	3152	1/1	0.86	0.20	50,50,50,50	0
54	MG	1A	3672	1/1	0.86	0.12	45,45,45,45	0
54	MG	1a	1739	1/1	0.86	0.11	74,74,74,74	0
54	MG	1F	312	1/1	0.86	0.17	50,50,50,50	0
54	MG	1a	1744	1/1	0.86	0.06	97,97,97,97	0
54	MG	1A	3331	1/1	0.86	0.37	81,81,81,81	0
54	MG	1A	3779	1/1	0.86	0.16	64,64,64,64	0
54	MG	1A	3348	1/1	0.86	0.18	39,39,39,39	0
54	MG	2a	3057	1/1	0.86	0.10	86,86,86,86	0
54	MG	2A	3394	1/1	0.86	0.09	51,51,51,51	0
54	MG	1A	3351	1/1	0.86	0.19	70,70,70,70	0
54	MG	1a	1664	1/1	0.86	0.21	67,67,67,67	0
54	MG	2A	3026	1/1	0.86	0.08	55,55,55,55	0
54	MG	1A	3985	1/1	0.86	0.16	54,54,54,54	0
54	MG	2A	3199	1/1	0.86	0.34	71,71,71,71	0
54	MG	2a	3070	1/1	0.86	0.10	61,61,61,61	0
54	MG	1A	3611	1/1	0.86	0.22	60,60,60,60	0
54	MG	1P	207	1/1	0.86	0.30	64,64,64,64	0
54	MG	2A	3204	1/1	0.86	0.54	67,67,67,67	0
54	MG	1A	3614	1/1	0.86	0.25	75,75,75,75	0
54	MG	1A	3994	1/1	0.86	0.47	43,43,43,43	0
54	MG	2A	3641	1/1	0.86	0.14	49,49,49,49	0
54	MG	2A	3207	1/1	0.86	0.16	65,65,65,65	0
54	MG	1A	3621	1/1	0.86	0.14	46,46,46,46	0
54	MG	1A	3277	1/1	0.86	0.66	35,35,35,35	0
54	MG	2A	3048	1/1	0.86	0.16	76,76,76,76	0
54	MG	1A	4009	1/1	0.86	0.22	84,84,84,84	0
54	MG	1A	3525	1/1	0.86	0.12	66,66,66,66	0
54	MG	1A	3893	1/1	0.86	0.11	49,49,49,49	0
54	MG	2A	3053	1/1	0.86	0.16	69,69,69,69	0
54	MG	1a	1850	1/1	0.86	0.14	86,86,86,86	0
54	MG	1a	1693	1/1	0.86	0.09	79,79,79,79	0
54	MG	2A	3060	1/1	0.86	0.19	52,52,52,52	0
54	MG	1A	3894	1/1	0.86	0.18	53,53,53,53	0
54	MG	2A	3686	1/1	0.86	0.26	82,82,82,82	0
54	MG	1A	3705	1/1	0.86	0.08	58,58,58,58	0
54	MG	1A	3304	1/1	0.86	0.21	51,51,51,51	0
54	MG	1A	3708	1/1	0.86	0.14	53,53,53,53	0
54	MG	1A	4030	1/1	0.86	0.53	64,64,64,64	0
54	MG	1A	3924	1/1	0.86	0.11	42,42,42,42	0
54	MG	2a	3151	1/1	0.86	0.06	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3498	1/1	0.86	0.18	46,46,46,46	0
54	MG	2A	3504	1/1	0.86	0.38	59,59,59,59	0
54	MG	2A	3251	1/1	0.86	0.39	58,58,58,58	0
54	MG	1A	3925	1/1	0.86	0.08	51,51,51,51	0
54	MG	2A	3101	1/1	0.86	0.13	61,61,61,61	0
54	MG	2A	3518	1/1	0.86	0.26	67,67,67,67	0
54	MG	1A	3052	1/1	0.86	0.65	44,44,44,44	0
54	MG	1a	1710	1/1	0.86	0.08	71,71,71,71	0
54	MG	2A	3525	1/1	0.86	0.12	53,53,53,53	0
54	MG	2G	201	1/1	0.86	0.09	90,90,90,90	0
54	MG	2A	3288	1/1	0.86	0.12	37,37,37,37	0
54	MG	2a	3180	1/1	0.86	0.17	86,86,86,86	0
54	MG	2e	201	1/1	0.86	0.14	75,75,75,75	0
54	MG	1A	3834	1/1	0.86	0.30	47,47,47,47	0
54	MG	1A	3146	1/1	0.86	0.19	34,34,34,34	0
54	MG	1a	1623	1/1	0.86	0.08	56,56,56,56	0
54	MG	1A	3289	1/1	0.86	0.17	57,57,57,57	0
54	MG	2A	3321	1/1	0.86	0.19	35,35,35,35	0
54	MG	2A	3133	1/1	0.86	0.12	62,62,62,62	0
54	MG	1A	3624	1/1	0.87	0.21	38,38,38,38	0
54	MG	1V	201	1/1	0.87	0.64	34,34,34,34	0
54	MG	1A	3438	1/1	0.87	0.14	36,36,36,36	0
54	MG	1A	3820	1/1	0.87	0.22	41,41,41,41	0
54	MG	2A	3406	1/1	0.87	0.10	92,92,92,92	0
54	MG	1A	3058	1/1	0.87	0.18	59,59,59,59	0
54	MG	2a	3039	1/1	0.87	0.10	80,80,80,80	0
54	MG	1A	3182	1/1	0.87	0.39	42,42,42,42	0
54	MG	15	103	1/1	0.87	0.73	46,46,46,46	0
54	MG	1A	3638	1/1	0.87	0.20	42,42,42,42	0
54	MG	1A	3537	1/1	0.87	0.12	38,38,38,38	0
54	MG	2a	3050	1/1	0.87	0.14	64,64,64,64	0
54	MG	2A	3600	1/1	0.87	0.12	50,50,50,50	0
54	MG	17	106	1/1	0.87	0.38	61,61,61,61	0
54	MG	2A	3430	1/1	0.87	0.12	77,77,77,77	0
54	MG	2A	3435	1/1	0.87	0.14	66,66,66,66	0
54	MG	1a	1867	1/1	0.87	0.07	87,87,87,87	0
54	MG	1A	3541	1/1	0.87	0.06	53,53,53,53	0
54	MG	1A	3648	1/1	0.87	0.11	55,55,55,55	0
54	MG	2a	3059	1/1	0.87	0.16	85,85,85,85	0
54	MG	2A	3085	1/1	0.87	0.26	79,79,79,79	0
54	MG	1a	1603	1/1	0.87	0.14	77,77,77,77	0
54	MG	1A	3392	1/1	0.87	0.09	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	3132	1/1	0.87	0.20	45,45,45,45	0
54	MG	1a	1611	1/1	0.87	0.18	71,71,71,71	0
54	MG	2A	3106	1/1	0.87	0.34	62,62,62,62	0
54	MG	2a	3072	1/1	0.87	0.17	67,67,67,67	0
54	MG	1A	3014	1/1	0.87	0.21	68,68,68,68	0
54	MG	1A	3558	1/1	0.87	0.17	58,58,58,58	0
54	MG	1A	3127	1/1	0.87	0.13	52,52,52,52	0
54	MG	1A	3596	1/1	0.87	0.14	31,31,31,31	0
54	MG	2A	3256	1/1	0.87	0.31	66,66,66,66	0
54	MG	2a	3089	1/1	0.87	0.04	77,77,77,77	0
54	MG	1a	1626	1/1	0.87	0.22	66,66,66,66	0
54	MG	2A	3473	1/1	0.87	0.09	42,42,42,42	0
54	MG	2A	3262	1/1	0.87	0.25	63,63,63,63	0
54	MG	2A	3672	1/1	0.87	0.12	59,59,59,59	0
54	MG	2A	3263	1/1	0.87	0.14	72,72,72,72	0
54	MG	1A	3975	1/1	0.87	0.54	63,63,63,63	0
54	MG	1g	201	1/1	0.87	0.24	69,69,69,69	0
54	MG	1A	3408	1/1	0.87	0.26	68,68,68,68	0
54	MG	1a	1631	1/1	0.87	0.15	54,54,54,54	0
54	MG	1A	3314	1/1	0.87	0.29	47,47,47,47	0
54	MG	1A	3297	1/1	0.87	0.30	53,53,53,53	0
54	MG	2a	3125	1/1	0.87	0.14	81,81,81,81	0
54	MG	2A	3319	1/1	0.87	0.09	48,48,48,48	0
54	MG	1A	3982	1/1	0.87	0.12	68,68,68,68	0
54	MG	1A	3501	1/1	0.87	0.15	36,36,36,36	0
54	MG	1F	317	1/1	0.87	0.47	52,52,52,52	0
54	MG	2A	3329	1/1	0.87	0.15	44,44,44,44	0
54	MG	1A	3261	1/1	0.87	0.28	81,81,81,81	0
54	MG	2B	211	1/1	0.87	0.16	74,74,74,74	0
54	MG	1A	3232	1/1	0.87	0.88	47,47,47,47	0
54	MG	1a	1749	1/1	0.87	0.05	65,65,65,65	0
54	MG	2A	3529	1/1	0.87	0.08	77,77,77,77	0
54	MG	2A	3337	1/1	0.87	0.18	37,37,37,37	0
54	MG	2A	3533	1/1	0.87	0.08	88,88,88,88	0
54	MG	2D	309	1/1	0.87	0.15	55,55,55,55	0
54	MG	1G	202	1/1	0.87	0.13	69,69,69,69	0
54	MG	1A	3098	1/1	0.87	0.10	63,63,63,63	0
54	MG	1A	3990	1/1	0.87	0.09	22,22,22,22	0
54	MG	2A	3547	1/1	0.87	0.14	59,59,59,59	0
54	MG	1a	1770	1/1	0.87	0.17	68,68,68,68	0
54	MG	2A	3019	1/1	0.87	0.92	52,52,52,52	0
54	MG	1A	3890	1/1	0.87	0.07	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	3892	1/1	0.87	0.10	53,53,53,53	0
54	MG	1P	206	1/1	0.87	0.16	71,71,71,71	0
54	MG	1A	3690	1/1	0.87	0.10	59,59,59,59	0
54	MG	2n	3101	1/1	0.87	0.09	88,88,88,88	0
54	MG	1a	1795	1/1	0.87	0.08	66,66,66,66	0
57	MPD	2A	3715	8/8	0.87	0.32	68,71,77,78	0
54	MG	1A	3692	1/1	0.87	0.12	59,59,59,59	0
54	MG	1A	3693	1/1	0.87	0.16	79,79,79,79	0
54	MG	2A	3201	1/1	0.87	0.14	74,74,74,74	0
54	MG	1A	3903	1/1	0.87	0.16	59,59,59,59	0
54	MG	2A	3538	1/1	0.88	0.16	44,44,44,44	0
54	MG	1a	1752	1/1	0.88	0.16	71,71,71,71	0
54	MG	1A	3763	1/1	0.88	0.25	43,43,43,43	0
54	MG	1A	3269	1/1	0.88	0.17	58,58,58,58	0
54	MG	1A	3004	1/1	0.88	0.25	44,44,44,44	0
54	MG	1a	1669	1/1	0.88	0.15	68,68,68,68	0
54	MG	1a	1774	1/1	0.88	0.12	73,73,73,73	0
54	MG	2A	3181	1/1	0.88	0.24	54,54,54,54	0
54	MG	1a	1673	1/1	0.88	0.14	61,61,61,61	0
54	MG	1A	3859	1/1	0.88	0.21	54,54,54,54	0
54	MG	1A	3368	1/1	0.88	0.23	46,46,46,46	0
54	MG	1A	3227	1/1	0.88	0.14	61,61,61,61	0
54	MG	1a	1681	1/1	0.88	0.20	62,62,62,62	0
54	MG	2A	3567	1/1	0.88	0.15	48,48,48,48	0
54	MG	2A	3188	1/1	0.88	0.12	48,48,48,48	0
54	MG	2A	3031	1/1	0.88	0.18	68,68,68,68	0
54	MG	2a	3041	1/1	0.88	0.15	65,65,65,65	0
54	MG	1A	3155	1/1	0.88	0.36	47,47,47,47	0
54	MG	1a	1805	1/1	0.88	0.15	79,79,79,79	0
54	MG	2A	3388	1/1	0.88	0.13	71,71,71,71	0
54	MG	2a	3048	1/1	0.88	0.19	56,56,56,56	0
54	MG	1a	1806	1/1	0.88	0.17	70,70,70,70	0
54	MG	2A	3039	1/1	0.88	0.20	64,64,64,64	0
54	MG	1A	3088	1/1	0.88	0.49	52,52,52,52	0
54	MG	1B	215	1/1	0.88	0.26	50,50,50,50	0
54	MG	2A	3044	1/1	0.88	0.10	53,53,53,53	0
54	MG	1A	3137	1/1	0.88	0.22	53,53,53,53	0
54	MG	1a	1825	1/1	0.88	0.13	72,72,72,72	0
54	MG	2A	3601	1/1	0.88	0.10	88,88,88,88	0
54	MG	2A	3423	1/1	0.88	0.30	69,69,69,69	0
54	MG	2A	3609	1/1	0.88	0.08	55,55,55,55	0
54	MG	2a	3060	1/1	0.88	0.09	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3792	1/1	0.88	0.13	45,45,45,45	0
54	MG	2A	3208	1/1	0.88	0.21	65,65,65,65	0
54	MG	1A	3282	1/1	0.88	0.13	91,91,91,91	0
54	MG	2A	3620	1/1	0.88	0.08	71,71,71,71	0
54	MG	2A	3431	1/1	0.88	0.33	66,66,66,66	0
54	MG	1B	225	1/1	0.88	0.20	72,72,72,72	0
54	MG	1A	3465	1/1	0.88	0.12	52,52,52,52	0
54	MG	1a	1854	1/1	0.88	0.13	58,58,58,58	0
54	MG	1A	3145	1/1	0.88	0.18	69,69,69,69	0
54	MG	1D	318	1/1	0.88	0.20	68,68,68,68	0
54	MG	2A	3061	1/1	0.88	0.17	46,46,46,46	0
54	MG	1a	1614	1/1	0.88	0.12	60,60,60,60	0
54	MG	2A	3455	1/1	0.88	0.12	35,35,35,35	0
54	MG	1A	3697	1/1	0.88	0.11	78,78,78,78	0
54	MG	2A	3225	1/1	0.88	0.13	66,66,66,66	0
54	MG	1a	1616	1/1	0.88	0.12	80,80,80,80	0
54	MG	2A	3461	1/1	0.88	0.09	71,71,71,71	0
54	MG	1A	3040	1/1	0.88	0.29	53,53,53,53	0
54	MG	1A	3398	1/1	0.88	0.18	53,53,53,53	0
54	MG	2A	3086	1/1	0.88	0.24	50,50,50,50	0
54	MG	2a	3116	1/1	0.88	0.10	82,82,82,82	0
54	MG	1F	315	1/1	0.88	1.44	55,55,55,55	0
54	MG	1A	3293	1/1	0.88	0.45	50,50,50,50	0
54	MG	2A	3091	1/1	0.88	0.14	58,58,58,58	0
54	MG	1A	3709	1/1	0.88	0.57	44,44,44,44	0
54	MG	2A	3682	1/1	0.88	0.12	64,64,64,64	0
54	MG	2A	3684	1/1	0.88	0.08	67,67,67,67	0
54	MG	2A	3482	1/1	0.88	0.14	65,65,65,65	0
54	MG	2A	3690	1/1	0.88	0.07	85,85,85,85	0
54	MG	1A	3204	1/1	0.88	0.26	64,64,64,64	0
54	MG	1A	3406	1/1	0.88	0.16	47,47,47,47	0
54	MG	2a	3140	1/1	0.88	0.21	77,77,77,77	0
54	MG	1A	4006	1/1	0.88	0.16	58,58,58,58	0
54	MG	1A	3832	1/1	0.88	0.19	66,66,66,66	0
54	MG	1A	3065	1/1	0.88	0.16	69,69,69,69	0
54	MG	2A	3118	1/1	0.88	0.57	47,47,47,47	0
54	MG	2a	3154	1/1	0.88	0.20	71,71,71,71	0
54	MG	1A	3606	1/1	0.88	0.15	54,54,54,54	0
54	MG	1a	1641	1/1	0.88	0.16	79,79,79,79	0
54	MG	2B	205	1/1	0.88	0.11	64,64,64,64	0
54	MG	1P	203	1/1	0.88	0.39	40,40,40,40	0
54	MG	2A	3131	1/1	0.88	0.10	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	2A	3514	1/1	0.88	0.11	63,63,63,63	0
54	MG	2A	3293	1/1	0.88	0.17	56,56,56,56	0
54	MG	1A	4014	1/1	0.88	0.21	38,38,38,38	0
54	MG	1A	3736	1/1	0.88	0.13	74,74,74,74	0
54	MG	1a	1741	1/1	0.88	0.28	77,77,77,77	0
54	MG	2a	3173	1/1	0.88	0.14	72,72,72,72	0
54	MG	1A	3928	1/1	0.88	0.12	73,73,73,73	0
54	MG	2a	3178	1/1	0.88	0.30	81,81,81,81	0
54	MG	2F	302	1/1	0.88	0.15	47,47,47,47	0
54	MG	2F	303	1/1	0.88	0.27	52,52,52,52	0
54	MG	2A	3140	1/1	0.88	0.83	61,61,61,61	0
54	MG	1m	201	1/1	0.88	0.05	81,81,81,81	0
57	MPD	1T	207	8/8	0.88	0.18	73,77,81,82	0
54	MG	2I	201	1/1	0.88	0.13	80,80,80,80	0
54	MG	1A	3737	1/1	0.88	0.23	45,45,45,45	0
54	MG	1A	3072	1/1	0.88	0.13	45,45,45,45	0
54	MG	1A	3610	1/1	0.88	0.19	74,74,74,74	0
54	MG	2a	3001	1/1	0.88	0.36	46,46,46,46	0
54	MG	2A	3163	1/1	0.88	0.10	62,62,62,62	0
54	MG	1a	1683	1/1	0.89	0.08	67,67,67,67	0
54	MG	1a	1801	1/1	0.89	0.14	85,85,85,85	0
54	MG	1A	3964	1/1	0.89	0.12	70,70,70,70	0
54	MG	1A	3091	1/1	0.89	0.12	48,48,48,48	0
54	MG	1B	216	1/1	0.89	0.13	61,61,61,61	0
54	MG	1A	3578	1/1	0.89	0.19	39,39,39,39	0
54	MG	1A	3221	1/1	0.89	0.45	52,52,52,52	0
54	MG	1a	1816	1/1	0.89	0.09	76,76,76,76	0
54	MG	2A	3045	1/1	0.89	0.14	67,67,67,67	0
54	MG	1A	3647	1/1	0.89	0.14	69,69,69,69	0
54	MG	2A	3575	1/1	0.89	0.11	63,63,63,63	0
54	MG	1A	3248	1/1	0.89	0.18	54,54,54,54	0
54	MG	2A	3582	1/1	0.89	0.15	64,64,64,64	0
54	MG	1A	3873	1/1	0.89	0.10	48,48,48,48	0
54	MG	2A	3400	1/1	0.89	0.04	54,54,54,54	0
54	MG	1A	3303	1/1	0.89	0.52	38,38,38,38	0
54	MG	1a	1701	1/1	0.89	0.19	64,64,64,64	0
54	MG	2A	3592	1/1	0.89	0.10	65,65,65,65	0
54	MG	1a	1846	1/1	0.89	0.14	67,67,67,67	0
54	MG	1a	1702	1/1	0.89	0.18	71,71,71,71	0
54	MG	1D	314	1/1	0.89	0.20	63,63,63,63	0
54	MG	2A	3416	1/1	0.89	0.12	74,74,74,74	0
54	MG	1A	3798	1/1	0.89	0.45	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	2A	3604	1/1	0.89	0.15	41,41,41,41	0
54	MG	1a	1705	1/1	0.89	0.11	75,75,75,75	0
54	MG	2A	3062	1/1	0.89	0.14	60,60,60,60	0
54	MG	1A	3087	1/1	0.89	0.20	59,59,59,59	0
54	MG	1A	3602	1/1	0.89	0.28	58,58,58,58	0
54	MG	1A	3250	1/1	0.89	0.28	68,68,68,68	0
54	MG	2A	3617	1/1	0.89	0.09	64,64,64,64	0
54	MG	2A	3082	1/1	0.89	0.44	50,50,50,50	0
54	MG	1a	1621	1/1	0.89	0.15	65,65,65,65	0
54	MG	2A	3628	1/1	0.89	0.08	48,48,48,48	0
54	MG	1a	1870	1/1	0.89	0.12	69,69,69,69	0
54	MG	1A	3712	1/1	0.89	0.53	58,58,58,58	0
54	MG	1A	3658	1/1	0.89	0.30	58,58,58,58	0
54	MG	1A	3813	1/1	0.89	0.24	71,71,71,71	0
54	MG	2a	3074	1/1	0.89	0.10	75,75,75,75	0
54	MG	2a	3075	1/1	0.89	0.09	57,57,57,57	0
54	MG	1A	3520	1/1	0.89	0.20	30,30,30,30	0
54	MG	1A	4000	1/1	0.89	0.30	83,83,83,83	0
54	MG	2A	3231	1/1	0.89	0.25	67,67,67,67	0
54	MG	2A	3100	1/1	0.89	0.13	71,71,71,71	0
54	MG	1A	3662	1/1	0.89	0.19	39,39,39,39	0
54	MG	1H	201	1/1	0.89	0.19	76,76,76,76	0
54	MG	1A	3447	1/1	0.89	0.20	31,31,31,31	0
54	MG	2A	3653	1/1	0.89	0.13	70,70,70,70	0
54	MG	2A	3658	1/1	0.89	0.12	52,52,52,52	0
54	MG	2A	3464	1/1	0.89	0.14	66,66,66,66	0
54	MG	1A	3916	1/1	0.89	0.14	35,35,35,35	0
54	MG	2a	3112	1/1	0.89	0.07	71,71,71,71	0
54	MG	2A	3249	1/1	0.89	0.43	48,48,48,48	0
54	MG	2A	3110	1/1	0.89	0.23	67,67,67,67	0
54	MG	2A	3254	1/1	0.89	0.33	59,59,59,59	0
54	MG	1A	3917	1/1	0.89	0.11	33,33,33,33	0
54	MG	1A	3826	1/1	0.89	0.20	51,51,51,51	0
54	MG	2a	3120	1/1	0.89	0.26	77,77,77,77	0
54	MG	2A	3476	1/1	0.89	0.07	74,74,74,74	0
54	MG	1A	3666	1/1	0.89	0.17	54,54,54,54	0
54	MG	2A	3260	1/1	0.89	0.19	68,68,68,68	0
54	MG	2a	3126	1/1	0.89	0.06	71,71,71,71	0
54	MG	1a	1644	1/1	0.89	0.13	68,68,68,68	0
54	MG	1A	3253	1/1	0.89	0.17	52,52,52,52	0
54	MG	2A	3266	1/1	0.89	0.13	49,49,49,49	0
54	MG	2A	3128	1/1	0.89	0.33	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	2A	3269	1/1	0.89	0.20	39,39,39,39	0
54	MG	1Q	205	1/1	0.89	0.15	56,56,56,56	0
54	MG	1a	1743	1/1	0.89	0.11	63,63,63,63	0
54	MG	2A	3707	1/1	0.89	0.45	73,73,73,73	0
54	MG	1A	3835	1/1	0.89	0.17	32,32,32,32	0
54	MG	1a	1745	1/1	0.89	0.15	68,68,68,68	0
54	MG	1A	3456	1/1	0.89	0.16	32,32,32,32	0
54	MG	1A	3154	1/1	0.89	0.43	47,47,47,47	0
54	MG	1A	3758	1/1	0.89	0.19	63,63,63,63	0
54	MG	1A	3352	1/1	0.89	0.21	25,25,25,25	0
54	MG	2A	3154	1/1	0.89	0.32	62,62,62,62	0
54	MG	2A	3157	1/1	0.89	0.79	57,57,57,57	0
54	MG	1A	3764	1/1	0.89	0.31	56,56,56,56	0
54	MG	1A	3075	1/1	0.89	0.16	38,38,38,38	0
54	MG	2a	3165	1/1	0.89	0.10	68,68,68,68	0
54	MG	1Z	301	1/1	0.89	0.14	68,68,68,68	0
54	MG	2A	3164	1/1	0.89	0.93	56,56,56,56	0
54	MG	10	104	1/1	0.89	0.09	58,58,58,58	0
54	MG	2A	3170	1/1	0.89	0.15	62,62,62,62	0
54	MG	2A	3339	1/1	0.89	0.10	36,36,36,36	0
54	MG	1A	3267	1/1	0.89	0.61	55,55,55,55	0
54	MG	2A	3546	1/1	0.89	0.16	73,73,73,73	0
54	MG	2a	3182	1/1	0.89	0.07	75,75,75,75	0
54	MG	2N	201	1/1	0.89	0.09	75,75,75,75	0
54	MG	1A	3479	1/1	0.89	0.16	50,50,50,50	0
54	MG	1a	1793	1/1	0.89	0.07	71,71,71,71	0
54	MG	1A	3160	1/1	0.89	0.22	62,62,62,62	0
54	MG	28	101	1/1	0.89	0.12	63,63,63,63	0
54	MG	2A	3550	1/1	0.89	0.18	64,64,64,64	0
54	MG	2a	3002	1/1	0.89	0.39	66,66,66,66	0
54	MG	2A	3352	1/1	0.89	0.09	57,57,57,57	0
54	MG	15	105	1/1	0.89	0.37	36,36,36,36	0
54	MG	2A	3555	1/1	0.89	0.08	58,58,58,58	0
54	MG	2A	3159	1/1	0.90	1.06	71,71,71,71	0
54	MG	1A	3811	1/1	0.90	0.14	39,39,39,39	0
54	MG	2A	3006	1/1	0.90	0.10	71,71,71,71	0
54	MG	1A	3718	1/1	0.90	0.69	63,63,63,63	0
54	MG	2A	3011	1/1	0.90	0.25	40,40,40,40	0
54	MG	1a	1755	1/1	0.90	0.13	61,61,61,61	0
54	MG	1a	1663	1/1	0.90	0.15	75,75,75,75	0
54	MG	1A	4015	1/1	0.90	0.18	28,28,28,28	0
54	MG	1A	3031	1/1	0.90	0.09	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3919	1/1	0.90	0.22	26,26,26,26	0
54	MG	2A	3024	1/1	0.90	0.51	77,77,77,77	0
54	MG	1A	3819	1/1	0.90	0.28	50,50,50,50	0
54	MG	2a	3017	1/1	0.90	0.17	57,57,57,57	0
54	MG	1a	1671	1/1	0.90	0.06	81,81,81,81	0
54	MG	1a	1791	1/1	0.90	0.06	80,80,80,80	0
54	MG	1A	3464	1/1	0.90	0.12	54,54,54,54	0
54	MG	1A	3244	1/1	0.90	0.32	46,46,46,46	0
54	MG	1A	4029	1/1	0.90	0.08	61,61,61,61	0
54	MG	2A	3038	1/1	0.90	0.13	56,56,56,56	0
54	MG	1a	1796	1/1	0.90	0.24	90,90,90,90	0
54	MG	2A	3579	1/1	0.90	0.04	70,70,70,70	0
54	MG	1A	3140	1/1	0.90	0.17	36,36,36,36	0
54	MG	2A	3583	1/1	0.90	0.13	38,38,38,38	0
54	MG	2A	3384	1/1	0.90	0.16	37,37,37,37	0
54	MG	1A	3540	1/1	0.90	0.12	66,66,66,66	0
54	MG	2A	3390	1/1	0.90	0.11	74,74,74,74	0
54	MG	2A	3588	1/1	0.90	0.12	70,70,70,70	0
54	MG	2A	3392	1/1	0.90	0.15	78,78,78,78	0
54	MG	1A	3667	1/1	0.90	0.50	65,65,65,65	0
54	MG	1A	3739	1/1	0.90	0.22	46,46,46,46	0
54	MG	2A	3200	1/1	0.90	0.12	64,64,64,64	0
54	MG	1A	3941	1/1	0.90	0.51	53,53,53,53	0
54	MG	1a	1807	1/1	0.90	0.19	73,73,73,73	0
54	MG	1a	1687	1/1	0.90	0.10	55,55,55,55	0
54	MG	1a	1688	1/1	0.90	0.13	64,64,64,64	0
54	MG	1a	1814	1/1	0.90	0.12	81,81,81,81	0
54	MG	2A	3606	1/1	0.90	0.13	60,60,60,60	0
54	MG	1A	3836	1/1	0.90	0.07	26,26,26,26	0
54	MG	2A	3421	1/1	0.90	0.06	63,63,63,63	0
54	MG	2A	3054	1/1	0.90	0.15	64,64,64,64	0
54	MG	2A	3056	1/1	0.90	0.12	60,60,60,60	0
54	MG	1A	3164	1/1	0.90	0.13	38,38,38,38	0
54	MG	2A	3618	1/1	0.90	0.24	64,64,64,64	0
54	MG	1a	1822	1/1	0.90	0.11	55,55,55,55	0
54	MG	1A	3619	1/1	0.90	0.20	41,41,41,41	0
54	MG	2A	3432	1/1	0.90	0.20	69,69,69,69	0
54	MG	1A	3948	1/1	0.90	0.23	56,56,56,56	0
54	MG	1A	3542	1/1	0.90	0.12	66,66,66,66	0
54	MG	1a	1695	1/1	0.90	0.23	82,82,82,82	0
54	MG	1A	3677	1/1	0.90	0.18	29,29,29,29	0
54	MG	1a	1605	1/1	0.90	0.13	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	3543	1/1	0.90	0.14	26,26,26,26	0
54	MG	1a	1608	1/1	0.90	0.24	72,72,72,72	0
54	MG	2A	3454	1/1	0.90	0.14	77,77,77,77	0
54	MG	2a	3094	1/1	0.90	0.31	74,74,74,74	0
54	MG	1A	3234	1/1	0.90	0.39	39,39,39,39	0
54	MG	1A	3766	1/1	0.90	0.27	62,62,62,62	0
54	MG	1a	1613	1/1	0.90	0.17	30,30,30,30	0
54	MG	1A	3971	1/1	0.90	0.09	32,32,32,32	0
54	MG	2a	3104	1/1	0.90	0.11	85,85,85,85	0
54	MG	2A	3656	1/1	0.90	0.17	78,78,78,78	0
54	MG	1A	3548	1/1	0.90	0.12	45,45,45,45	0
54	MG	2A	3097	1/1	0.90	0.24	63,63,63,63	0
54	MG	1D	308	1/1	0.90	0.21	46,46,46,46	0
54	MG	1A	3279	1/1	0.90	0.12	65,65,65,65	0
54	MG	2A	3670	1/1	0.90	0.45	73,73,73,73	0
54	MG	2A	3243	1/1	0.90	0.12	63,63,63,63	0
54	MG	1a	1619	1/1	0.90	0.16	51,51,51,51	0
54	MG	1A	3775	1/1	0.90	0.20	50,50,50,50	0
54	MG	2A	3676	1/1	0.90	0.26	70,70,70,70	0
54	MG	2A	3107	1/1	0.90	0.10	62,62,62,62	0
54	MG	1A	3236	1/1	0.90	0.36	74,74,74,74	0
54	MG	2a	3128	1/1	0.90	0.17	79,79,79,79	0
54	MG	1A	3192	1/1	0.90	0.28	67,67,67,67	0
54	MG	1A	3642	1/1	0.90	0.11	68,68,68,68	0
54	MG	2A	3115	1/1	0.90	0.93	57,57,57,57	0
54	MG	2A	3687	1/1	0.90	0.33	62,62,62,62	0
54	MG	1A	3577	1/1	0.90	0.21	55,55,55,55	0
54	MG	2A	3117	1/1	0.90	0.13	57,57,57,57	0
54	MG	2a	3145	1/1	0.90	0.24	88,88,88,88	0
54	MG	1A	3788	1/1	0.90	0.15	54,54,54,54	0
54	MG	1A	3790	1/1	0.90	0.21	30,30,30,30	0
54	MG	2A	3695	1/1	0.90	0.21	74,74,74,74	0
54	MG	1A	3444	1/1	0.90	0.20	28,28,28,28	0
54	MG	2A	3278	1/1	0.90	0.10	56,56,56,56	0
54	MG	1a	1636	1/1	0.90	0.18	67,67,67,67	0
54	MG	2A	3506	1/1	0.90	0.11	92,92,92,92	0
54	MG	1A	3283	1/1	0.90	0.14	41,41,41,41	0
54	MG	2A	3511	1/1	0.90	0.05	73,73,73,73	0
54	MG	1A	3991	1/1	0.90	0.26	46,46,46,46	0
54	MG	1A	3649	1/1	0.90	0.17	59,59,59,59	0
54	MG	2A	3517	1/1	0.90	0.08	61,61,61,61	0
54	MG	1A	3195	1/1	0.90	0.55	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	2A	3297	1/1	0.90	0.12	82,82,82,82	0
54	MG	1A	3448	1/1	0.90	0.27	44,44,44,44	0
54	MG	2A	3309	1/1	0.90	0.16	38,38,38,38	0
54	MG	2D	305	1/1	0.90	0.50	49,49,49,49	0
54	MG	2A	3317	1/1	0.90	0.16	59,59,59,59	0
54	MG	1A	3118	1/1	0.90	0.21	46,46,46,46	0
54	MG	1A	4005	1/1	0.90	0.08	41,41,41,41	0
54	MG	2A	3150	1/1	0.90	0.12	61,61,61,61	0
54	MG	1A	3353	1/1	0.90	0.10	57,57,57,57	0
54	MG	2l	201	1/1	0.90	0.06	68,68,68,68	0
54	MG	2A	3328	1/1	0.90	0.14	69,69,69,69	0
56	ZIT	2A	3713	52/52	0.90	0.76	43,67,78,85	0
54	MG	1a	1747	1/1	0.90	0.20	78,78,78,78	0
54	MG	1A	3714	1/1	0.90	0.44	46,46,46,46	0
54	MG	2P	201	1/1	0.90	0.15	72,72,72,72	0
54	MG	2A	3333	1/1	0.90	0.16	36,36,36,36	0
54	MG	2T	201	1/1	0.90	0.16	72,72,72,72	0
54	MG	2T	203	1/1	0.90	0.09	61,61,61,61	0
54	MG	1A	3716	1/1	0.90	0.58	45,45,45,45	0
54	MG	1A	3911	1/1	0.91	0.53	41,41,41,41	0
54	MG	1A	3461	1/1	0.91	0.29	74,74,74,74	0
54	MG	1A	3584	1/1	0.91	0.14	62,62,62,62	0
54	MG	2A	3458	1/1	0.91	0.06	75,75,75,75	0
54	MG	1A	3590	1/1	0.91	0.19	50,50,50,50	0
54	MG	1A	3679	1/1	0.91	0.09	56,56,56,56	0
54	MG	2A	3030	1/1	0.91	0.16	36,36,36,36	0
54	MG	2B	207	1/1	0.91	0.17	73,73,73,73	0
54	MG	2B	208	1/1	0.91	0.12	85,85,85,85	0
54	MG	1A	3057	1/1	0.91	0.51	56,56,56,56	0
54	MG	1a	1633	1/1	0.91	0.10	41,41,41,41	0
54	MG	2A	3466	1/1	0.91	0.21	33,33,33,33	0
54	MG	1A	3395	1/1	0.91	0.18	40,40,40,40	0
54	MG	2B	215	1/1	0.91	0.16	66,66,66,66	0
54	MG	1B	223	1/1	0.91	0.09	68,68,68,68	0
54	MG	1a	1765	1/1	0.91	0.11	67,67,67,67	0
54	MG	1A	3468	1/1	0.91	0.14	56,56,56,56	0
54	MG	2A	3040	1/1	0.91	0.13	61,61,61,61	0
54	MG	2F	301	1/1	0.91	0.66	50,50,50,50	0
54	MG	1A	3927	1/1	0.91	0.08	47,47,47,47	0
54	MG	2A	3479	1/1	0.91	0.18	71,71,71,71	0
54	MG	1A	3002	1/1	0.91	0.26	55,55,55,55	0
54	MG	1a	1776	1/1	0.91	0.16	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	1a	1777	1/1	0.91	0.16	69,69,69,69	0
54	MG	1a	1778	1/1	0.91	0.26	72,72,72,72	0
54	MG	2A	3228	1/1	0.91	0.41	66,66,66,66	0
54	MG	1a	1783	1/1	0.91	0.13	77,77,77,77	0
54	MG	2A	3495	1/1	0.91	0.20	65,65,65,65	0
54	MG	1A	3133	1/1	0.91	0.54	37,37,37,37	0
54	MG	2Y	201	1/1	0.91	0.32	69,69,69,69	0
54	MG	1A	3167	1/1	0.91	0.21	54,54,54,54	0
54	MG	1a	1789	1/1	0.91	0.39	83,83,83,83	0
54	MG	2A	3238	1/1	0.91	0.35	60,60,60,60	0
54	MG	1A	3809	1/1	0.91	0.31	59,59,59,59	0
54	MG	1a	1792	1/1	0.91	0.10	73,73,73,73	0
54	MG	1a	1647	1/1	0.91	0.17	71,71,71,71	0
54	MG	2A	3513	1/1	0.91	0.10	67,67,67,67	0
54	MG	1A	3605	1/1	0.91	0.18	49,49,49,49	0
54	MG	2a	3007	1/1	0.91	0.12	72,72,72,72	0
54	MG	2A	3515	1/1	0.91	0.42	82,82,82,82	0
54	MG	2a	3009	1/1	0.91	0.17	59,59,59,59	0
54	MG	2A	3516	1/1	0.91	0.23	75,75,75,75	0
54	MG	1A	3401	1/1	0.91	0.10	75,75,75,75	0
54	MG	2A	3250	1/1	0.91	0.15	37,37,37,37	0
54	MG	1E	305	1/1	0.91	0.12	39,39,39,39	0
54	MG	2A	3252	1/1	0.91	0.76	54,54,54,54	0
54	MG	1A	3607	1/1	0.91	0.24	52,52,52,52	0
54	MG	1a	1659	1/1	0.91	0.61	47,47,47,47	0
54	MG	2A	3527	1/1	0.91	0.07	65,65,65,65	0
54	MG	1A	3402	1/1	0.91	0.14	72,72,72,72	0
54	MG	2A	3257	1/1	0.91	0.13	55,55,55,55	0
54	MG	2A	3067	1/1	0.91	0.44	51,51,51,51	0
54	MG	2A	3070	1/1	0.91	0.18	65,65,65,65	0
54	MG	2A	3072	1/1	0.91	0.70	62,62,62,62	0
54	MG	2a	3037	1/1	0.91	0.17	73,73,73,73	0
54	MG	2a	3038	1/1	0.91	0.22	67,67,67,67	0
54	MG	2A	3073	1/1	0.91	0.80	65,65,65,65	0
54	MG	2A	3264	1/1	0.91	0.12	75,75,75,75	0
54	MG	1A	3950	1/1	0.91	0.16	45,45,45,45	0
54	MG	1A	3818	1/1	0.91	0.24	33,33,33,33	0
54	MG	2A	3077	1/1	0.91	0.17	59,59,59,59	0
54	MG	2a	3047	1/1	0.91	0.30	72,72,72,72	0
54	MG	1A	3699	1/1	0.91	0.18	41,41,41,41	0
54	MG	1a	1808	1/1	0.91	0.09	70,70,70,70	0
54	MG	2A	3281	1/1	0.91	0.14	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	2A	3284	1/1	0.91	0.07	58,58,58,58	0
54	MG	2A	3286	1/1	0.91	0.12	42,42,42,42	0
54	MG	1A	3489	1/1	0.91	0.21	64,64,64,64	0
54	MG	1A	3134	1/1	0.91	0.09	57,57,57,57	0
54	MG	1A	3172	1/1	0.91	0.75	38,38,38,38	0
54	MG	1A	3615	1/1	0.91	0.15	37,37,37,37	0
54	MG	1a	1818	1/1	0.91	0.11	72,72,72,72	0
54	MG	2A	3092	1/1	0.91	0.07	74,74,74,74	0
54	MG	2A	3302	1/1	0.91	0.09	68,68,68,68	0
54	MG	1a	1672	1/1	0.91	0.15	62,62,62,62	0
54	MG	1A	3173	1/1	0.91	0.15	52,52,52,52	0
54	MG	1A	3973	1/1	0.91	0.07	61,61,61,61	0
54	MG	1A	3713	1/1	0.91	0.64	54,54,54,54	0
54	MG	1a	1832	1/1	0.91	0.14	68,68,68,68	0
54	MG	1A	3503	1/1	0.91	0.10	33,33,33,33	0
54	MG	2a	3071	1/1	0.91	0.21	65,65,65,65	0
54	MG	1a	1835	1/1	0.91	0.20	63,63,63,63	0
54	MG	1P	205	1/1	0.91	0.31	54,54,54,54	0
54	MG	1A	3504	1/1	0.91	0.23	33,33,33,33	0
54	MG	1A	3153	1/1	0.91	0.13	72,72,72,72	0
54	MG	1A	3350	1/1	0.91	0.14	54,54,54,54	0
54	MG	1R	203	1/1	0.91	0.28	66,66,66,66	0
54	MG	1A	3720	1/1	0.91	0.06	50,50,50,50	0
54	MG	1A	3417	1/1	0.91	0.20	28,28,28,28	0
54	MG	1A	3636	1/1	0.91	0.19	29,29,29,29	0
54	MG	1A	3853	1/1	0.91	0.33	50,50,50,50	0
54	MG	2A	3342	1/1	0.91	0.10	71,71,71,71	0
54	MG	2A	3598	1/1	0.91	0.13	61,61,61,61	0
54	MG	1A	3022	1/1	0.91	0.14	45,45,45,45	0
54	MG	1A	3733	1/1	0.91	0.18	68,68,68,68	0
54	MG	1A	3857	1/1	0.91	0.23	40,40,40,40	0
54	MG	2A	3603	1/1	0.91	0.13	89,89,89,89	0
54	MG	1A	3526	1/1	0.91	0.11	54,54,54,54	0
54	MG	10	103	1/1	0.91	0.13	60,60,60,60	0
54	MG	2A	3136	1/1	0.91	0.42	47,47,47,47	0
54	MG	1A	3425	1/1	0.91	0.18	30,30,30,30	0
54	MG	1A	3321	1/1	0.91	0.14	66,66,66,66	0
54	MG	2A	3359	1/1	0.91	0.24	71,71,71,71	0
54	MG	2A	3142	1/1	0.91	0.47	42,42,42,42	0
54	MG	1A	4004	1/1	0.91	0.33	67,67,67,67	0
54	MG	1A	3430	1/1	0.91	0.19	54,54,54,54	0
54	MG	2A	3619	1/1	0.91	0.07	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	1a	1880	1/1	0.91	0.10	67,67,67,67	0
54	MG	2A	3625	1/1	0.91	0.10	60,60,60,60	0
54	MG	2A	3626	1/1	0.91	0.12	59,59,59,59	0
54	MG	2A	3374	1/1	0.91	0.20	46,46,46,46	0
54	MG	2a	3130	1/1	0.91	0.07	80,80,80,80	0
54	MG	2a	3132	1/1	0.91	0.12	75,75,75,75	0
54	MG	1A	3012	1/1	0.91	0.17	40,40,40,40	0
54	MG	1A	4007	1/1	0.91	0.10	53,53,53,53	0
54	MG	1A	3291	1/1	0.91	0.21	43,43,43,43	0
54	MG	1e	202	1/1	0.91	0.30	63,63,63,63	0
54	MG	2A	3386	1/1	0.91	0.10	57,57,57,57	0
54	MG	1A	3439	1/1	0.91	0.21	49,49,49,49	0
54	MG	2a	3147	1/1	0.91	0.07	76,76,76,76	0
54	MG	1A	3442	1/1	0.91	0.23	27,27,27,27	0
54	MG	18	102	1/1	0.91	0.55	47,47,47,47	0
54	MG	1A	3220	1/1	0.91	0.31	48,48,48,48	0
54	MG	2A	3397	1/1	0.91	0.15	51,51,51,51	0
54	MG	2A	3168	1/1	0.91	0.20	55,55,55,55	0
54	MG	1A	3156	1/1	0.91	0.49	38,38,38,38	0
54	MG	1l	201	1/1	0.91	0.18	62,62,62,62	0
54	MG	1A	3225	1/1	0.91	0.37	34,34,34,34	0
54	MG	1A	3382	1/1	0.91	0.22	33,33,33,33	0
54	MG	1A	3891	1/1	0.91	0.09	38,38,38,38	0
54	MG	1A	3771	1/1	0.91	0.17	46,46,46,46	0
54	MG	2A	3180	1/1	0.91	0.14	71,71,71,71	0
54	MG	2A	3419	1/1	0.91	0.38	64,64,64,64	0
54	MG	1o	101	1/1	0.91	0.19	58,58,58,58	0
54	MG	1t	201	1/1	0.91	0.37	70,70,70,70	0
54	MG	2A	3673	1/1	0.91	0.10	53,53,53,53	0
54	MG	2a	3174	1/1	0.91	0.05	64,64,64,64	0
54	MG	1A	4025	1/1	0.91	0.23	82,82,82,82	0
54	MG	2A	3675	1/1	0.91	0.44	55,55,55,55	0
54	MG	1A	3265	1/1	0.91	0.29	67,67,67,67	0
54	MG	2a	3181	1/1	0.91	0.21	96,96,96,96	0
54	MG	1A	3188	1/1	0.91	0.80	53,53,53,53	0
54	MG	2A	3002	1/1	0.91	0.10	58,58,58,58	0
54	MG	1A	3565	1/1	0.91	0.14	47,47,47,47	0
54	MG	2f	201	1/1	0.91	0.15	57,57,57,57	0
54	MG	1B	201	1/1	0.91	0.26	54,54,54,54	0
54	MG	1a	1732	1/1	0.91	0.11	61,61,61,61	0
54	MG	1A	3896	1/1	0.91	0.16	64,64,64,64	0
54	MG	2A	3194	1/1	0.91	0.56	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	2A	3195	1/1	0.91	0.29	67,67,67,67	0
54	MG	1A	3898	1/1	0.91	0.60	40,40,40,40	0
54	MG	2A	3450	1/1	0.91	0.21	69,69,69,69	0
54	MG	1A	3570	1/1	0.91	0.13	44,44,44,44	0
54	MG	2A	3699	1/1	0.91	0.14	49,49,49,49	0
54	MG	1A	3090	1/1	0.91	0.12	43,43,43,43	0
54	MG	1A	3111	1/1	0.92	0.67	33,33,33,33	0
54	MG	1A	3943	1/1	0.92	0.10	51,51,51,51	0
54	MG	1A	3593	1/1	0.92	0.17	61,61,61,61	0
54	MG	1a	1878	1/1	0.92	0.11	68,68,68,68	0
54	MG	1A	3301	1/1	0.92	0.27	47,47,47,47	0
54	MG	2A	3127	1/1	0.92	0.13	58,58,58,58	0
54	MG	1a	1721	1/1	0.92	0.13	75,75,75,75	0
54	MG	1A	3597	1/1	0.92	0.28	55,55,55,55	0
54	MG	2O	202	1/1	0.92	0.20	76,76,76,76	0
54	MG	2A	3306	1/1	0.92	0.11	48,48,48,48	0
54	MG	2A	3307	1/1	0.92	0.14	54,54,54,54	0
54	MG	1A	3745	1/1	0.92	0.21	63,63,63,63	0
54	MG	2A	3310	1/1	0.92	0.14	52,52,52,52	0
54	MG	1d	302	1/1	0.92	0.10	74,74,74,74	0
54	MG	2A	3318	1/1	0.92	0.14	42,42,42,42	0
54	MG	1A	3060	1/1	0.92	0.17	49,49,49,49	0
54	MG	1A	3522	1/1	0.92	0.14	43,43,43,43	0
54	MG	28	102	1/1	0.92	0.22	68,68,68,68	0
54	MG	1A	3957	1/1	0.92	0.11	50,50,50,50	0
54	MG	2A	3322	1/1	0.92	0.12	39,39,39,39	0
54	MG	2A	3544	1/1	0.92	0.10	64,64,64,64	0
54	MG	2A	3325	1/1	0.92	0.16	32,32,32,32	0
54	MG	1f	202	1/1	0.92	0.17	49,49,49,49	0
54	MG	1a	1627	1/1	0.92	0.15	56,56,56,56	0
54	MG	2A	3143	1/1	0.92	0.14	42,42,42,42	0
54	MG	1B	229	1/1	0.92	0.11	60,60,60,60	0
54	MG	1A	3959	1/1	0.92	0.16	66,66,66,66	0
54	MG	1A	3960	1/1	0.92	0.09	76,76,76,76	0
54	MG	1D	316	1/1	0.92	0.38	63,63,63,63	0
54	MG	1A	3523	1/1	0.92	0.12	42,42,42,42	0
54	MG	1A	3963	1/1	0.92	0.23	72,72,72,72	0
54	MG	1A	3759	1/1	0.92	0.17	70,70,70,70	0
54	MG	1n	102	1/1	0.92	0.22	71,71,71,71	0
54	MG	2A	3559	1/1	0.92	0.22	58,58,58,58	0
54	MG	2A	3341	1/1	0.92	0.13	77,77,77,77	0
54	MG	1A	3673	1/1	0.92	0.12	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	2a	3024	1/1	0.92	0.16	66,66,66,66	0
54	MG	2a	3025	1/1	0.92	0.10	67,67,67,67	0
54	MG	1A	3327	1/1	0.92	0.33	51,51,51,51	0
54	MG	1A	3230	1/1	0.92	0.61	44,44,44,44	0
54	MG	1A	3093	1/1	0.92	0.64	39,39,39,39	0
54	MG	1A	3858	1/1	0.92	0.18	42,42,42,42	0
54	MG	1a	1756	1/1	0.92	0.19	84,84,84,84	0
54	MG	1a	1761	1/1	0.92	0.18	51,51,51,51	0
54	MG	2A	3176	1/1	0.92	0.07	71,71,71,71	0
54	MG	1A	3376	1/1	0.92	0.12	43,43,43,43	0
54	MG	1A	3203	1/1	0.92	0.82	47,47,47,47	0
54	MG	1a	1768	1/1	0.92	0.15	67,67,67,67	0
54	MG	2A	3010	1/1	0.92	0.12	73,73,73,73	0
54	MG	1A	3770	1/1	0.92	0.15	58,58,58,58	0
54	MG	2A	3370	1/1	0.92	0.12	44,44,44,44	0
54	MG	1A	3471	1/1	0.92	0.23	59,59,59,59	0
54	MG	1A	3538	1/1	0.92	0.12	62,62,62,62	0
54	MG	1A	3185	1/1	0.92	0.16	71,71,71,71	0
54	MG	1A	3689	1/1	0.92	0.16	68,68,68,68	0
54	MG	2A	3380	1/1	0.92	0.13	43,43,43,43	0
54	MG	2A	3381	1/1	0.92	0.13	35,35,35,35	0
54	MG	1A	3262	1/1	0.92	1.13	55,55,55,55	0
54	MG	1a	1781	1/1	0.92	0.12	63,63,63,63	0
54	MG	1A	3876	1/1	0.92	0.16	46,46,46,46	0
54	MG	1A	3881	1/1	0.92	0.29	31,31,31,31	0
54	MG	1A	3384	1/1	0.92	0.10	48,48,48,48	0
54	MG	2A	3193	1/1	0.92	0.10	49,49,49,49	0
54	MG	2A	3393	1/1	0.92	0.17	56,56,56,56	0
54	MG	1A	3620	1/1	0.92	0.10	39,39,39,39	0
54	MG	1A	3483	1/1	0.92	0.23	27,27,27,27	0
54	MG	2A	3612	1/1	0.92	0.15	72,72,72,72	0
54	MG	2A	3613	1/1	0.92	0.12	81,81,81,81	0
54	MG	1A	3695	1/1	0.92	0.14	65,65,65,65	0
54	MG	1A	3285	1/1	0.92	0.16	66,66,66,66	0
54	MG	1A	3795	1/1	0.92	0.17	54,54,54,54	0
54	MG	1A	3288	1/1	0.92	0.40	49,49,49,49	0
54	MG	2A	3411	1/1	0.92	0.14	40,40,40,40	0
54	MG	2a	3081	1/1	0.92	0.17	63,63,63,63	0
54	MG	2a	3083	1/1	0.92	0.08	71,71,71,71	0
54	MG	2A	3412	1/1	0.92	0.16	57,57,57,57	0
54	MG	1A	3552	1/1	0.92	0.26	63,63,63,63	0
54	MG	1a	1798	1/1	0.92	0.24	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	1A	3487	1/1	0.92	0.27	49,49,49,49	0
54	MG	1A	3802	1/1	0.92	0.07	73,73,73,73	0
54	MG	2a	3093	1/1	0.92	0.11	70,70,70,70	0
54	MG	1a	1803	1/1	0.92	0.18	80,80,80,80	0
54	MG	1Y	201	1/1	0.92	0.27	68,68,68,68	0
54	MG	1a	1682	1/1	0.92	0.36	69,69,69,69	0
54	MG	2A	3633	1/1	0.92	0.10	58,58,58,58	0
54	MG	1A	3011	1/1	0.92	0.19	64,64,64,64	0
54	MG	1A	3020	1/1	0.92	0.54	43,43,43,43	0
54	MG	2a	3105	1/1	0.92	0.12	71,71,71,71	0
54	MG	2a	3108	1/1	0.92	0.11	61,61,61,61	0
54	MG	2a	3111	1/1	0.92	0.24	75,75,75,75	0
54	MG	1A	3559	1/1	0.92	0.09	58,58,58,58	0
54	MG	1a	1686	1/1	0.92	0.15	65,65,65,65	0
54	MG	1A	3807	1/1	0.92	0.11	48,48,48,48	0
54	MG	2A	3055	1/1	0.92	0.33	41,41,41,41	0
54	MG	2A	3436	1/1	0.92	0.15	44,44,44,44	0
54	MG	2A	3218	1/1	0.92	0.90	65,65,65,65	0
54	MG	1A	3563	1/1	0.92	0.11	26,26,26,26	0
54	MG	13	102	1/1	0.92	0.18	67,67,67,67	0
54	MG	2a	3122	1/1	0.92	0.11	56,56,56,56	0
54	MG	2A	3223	1/1	0.92	1.42	56,56,56,56	0
54	MG	1a	1817	1/1	0.92	0.09	61,61,61,61	0
54	MG	1A	3343	1/1	0.92	0.38	33,33,33,33	0
54	MG	2A	3666	1/1	0.92	0.12	44,44,44,44	0
54	MG	2A	3451	1/1	0.92	0.10	67,67,67,67	0
54	MG	1a	1820	1/1	0.92	0.12	71,71,71,71	0
54	MG	1A	3918	1/1	0.92	0.20	25,25,25,25	0
54	MG	1A	3120	1/1	0.92	0.39	35,35,35,35	0
54	MG	2A	3232	1/1	0.92	0.98	47,47,47,47	0
54	MG	1a	1824	1/1	0.92	0.15	63,63,63,63	0
54	MG	17	101	1/1	0.92	0.23	45,45,45,45	0
54	MG	1A	3502	1/1	0.92	0.17	31,31,31,31	0
54	MG	2A	3677	1/1	0.92	0.06	57,57,57,57	0
54	MG	2a	3144	1/1	0.92	0.18	64,64,64,64	0
54	MG	1a	1831	1/1	0.92	0.19	62,62,62,62	0
54	MG	1a	1696	1/1	0.92	0.22	55,55,55,55	0
54	MG	1a	1833	1/1	0.92	0.07	77,77,77,77	0
54	MG	2A	3683	1/1	0.92	0.19	61,61,61,61	0
54	MG	1A	3107	1/1	0.92	0.27	36,36,36,36	0
54	MG	2A	3247	1/1	0.92	0.11	23,23,23,23	0
54	MG	2A	3081	1/1	0.92	1.10	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	3816	1/1	0.92	0.58	49,49,49,49	0
54	MG	1A	3051	1/1	0.92	0.40	51,51,51,51	0
54	MG	1a	1837	1/1	0.92	0.45	82,82,82,82	0
54	MG	19	101	1/1	0.92	0.21	57,57,57,57	0
54	MG	2a	3162	1/1	0.92	0.11	56,56,56,56	0
54	MG	2A	3474	1/1	0.92	0.11	67,67,67,67	0
54	MG	2A	3696	1/1	0.92	0.09	55,55,55,55	0
54	MG	2A	3697	1/1	0.92	0.13	35,35,35,35	0
54	MG	1a	1849	1/1	0.92	0.07	66,66,66,66	0
54	MG	1A	3586	1/1	0.92	0.11	61,61,61,61	0
54	MG	1a	1853	1/1	0.92	0.10	61,61,61,61	0
54	MG	1a	1601	1/1	0.92	0.14	89,89,89,89	0
54	MG	2A	3708	1/1	0.92	0.21	64,64,64,64	0
54	MG	1a	1602	1/1	0.92	0.10	81,81,81,81	0
54	MG	2B	201	1/1	0.92	0.16	82,82,82,82	0
54	MG	1a	1861	1/1	0.92	0.11	73,73,73,73	0
54	MG	1A	3653	1/1	0.92	0.38	33,33,33,33	0
54	MG	1a	1707	1/1	0.92	0.15	75,75,75,75	0
54	MG	1A	3930	1/1	0.92	0.17	48,48,48,48	0
54	MG	1A	3931	1/1	0.92	0.09	64,64,64,64	0
54	MG	2A	3500	1/1	0.92	0.43	74,74,74,74	0
54	MG	2B	209	1/1	0.92	0.15	80,80,80,80	0
54	MG	2A	3501	1/1	0.92	0.10	43,43,43,43	0
54	MG	2A	3503	1/1	0.92	0.58	49,49,49,49	0
57	MPD	1A	4034	8/8	0.92	0.15	54,59,62,65	0
54	MG	1A	3725	1/1	0.92	0.23	26,26,26,26	0
57	MPD	1a	1882	8/8	0.92	0.13	54,70,76,81	0
54	MG	2A	3271	1/1	0.92	0.10	39,39,39,39	0
54	MG	1A	3589	1/1	0.92	0.18	23,23,23,23	0
54	MG	1A	3508	1/1	0.92	0.17	33,33,33,33	0
54	MG	1B	214	1/1	0.92	0.11	69,69,69,69	0
54	MG	2D	306	1/1	0.92	0.76	55,55,55,55	0
59	ZN	2Y	202	1/1	0.92	0.15	93,93,93,93	0
54	MG	1a	1715	1/1	0.92	0.54	52,52,52,52	0
59	ZN	2n	3102	1/1	0.92	0.08	103,103,103,103	0
54	MG	1A	3500	1/1	0.93	0.19	24,24,24,24	0
54	MG	1A	3431	1/1	0.93	0.19	31,31,31,31	0
54	MG	15	108	1/1	0.93	0.10	76,76,76,76	0
54	MG	2A	3530	1/1	0.93	0.12	68,68,68,68	0
54	MG	1A	3879	1/1	0.93	0.18	31,31,31,31	0
54	MG	1A	3063	1/1	0.93	0.16	40,40,40,40	0
54	MG	2R	201	1/1	0.93	0.10	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	17	103	1/1	0.93	0.17	41,41,41,41	0
54	MG	1A	3587	1/1	0.93	0.14	57,57,57,57	0
54	MG	1A	3588	1/1	0.93	0.51	51,51,51,51	0
54	MG	2A	3543	1/1	0.93	0.06	80,80,80,80	0
54	MG	1b	301	1/1	0.93	0.09	84,84,84,84	0
54	MG	1A	3669	1/1	0.93	0.19	56,56,56,56	0
54	MG	1A	3434	1/1	0.93	0.14	42,42,42,42	0
54	MG	1A	3333	1/1	0.93	0.23	48,48,48,48	0
54	MG	1A	3506	1/1	0.93	0.16	40,40,40,40	0
54	MG	1A	4018	1/1	0.93	0.18	63,63,63,63	0
54	MG	2A	3336	1/1	0.93	0.11	72,72,72,72	0
54	MG	1A	3054	1/1	0.93	0.38	38,38,38,38	0
54	MG	1A	3441	1/1	0.93	0.20	28,28,28,28	0
54	MG	1a	1730	1/1	0.93	0.25	71,71,71,71	0
54	MG	1A	3785	1/1	0.93	0.10	47,47,47,47	0
54	MG	1a	1738	1/1	0.93	0.13	47,47,47,47	0
54	MG	1A	3512	1/1	0.93	0.18	27,27,27,27	0
54	MG	1A	3080	1/1	0.93	0.57	45,45,45,45	0
54	MG	1a	1610	1/1	0.93	0.18	60,60,60,60	0
54	MG	1A	3899	1/1	0.93	0.12	58,58,58,58	0
54	MG	1A	3683	1/1	0.93	0.15	64,64,64,64	0
54	MG	2A	3566	1/1	0.93	0.06	57,57,57,57	0
54	MG	1A	3905	1/1	0.93	0.18	29,29,29,29	0
54	MG	1A	3907	1/1	0.93	0.09	65,65,65,65	0
54	MG	1A	3791	1/1	0.93	0.32	48,48,48,48	0
54	MG	1A	3095	1/1	0.93	0.47	43,43,43,43	0
54	MG	1A	3912	1/1	0.93	0.11	20,20,20,20	0
54	MG	1A	3081	1/1	0.93	0.59	49,49,49,49	0
54	MG	2a	3032	1/1	0.93	0.23	74,74,74,74	0
54	MG	1y	203	1/1	0.93	0.22	75,75,75,75	0
54	MG	2a	3034	1/1	0.93	0.16	92,92,92,92	0
54	MG	2A	3581	1/1	0.93	0.11	41,41,41,41	0
54	MG	1A	3312	1/1	0.93	0.36	40,40,40,40	0
54	MG	2A	3368	1/1	0.93	0.13	64,64,64,64	0
54	MG	2A	3003	1/1	0.93	0.14	65,65,65,65	0
54	MG	1A	3688	1/1	0.93	0.36	41,41,41,41	0
54	MG	1a	1624	1/1	0.93	0.13	60,60,60,60	0
54	MG	1A	3257	1/1	0.93	0.80	45,45,45,45	0
54	MG	2A	3186	1/1	0.93	0.32	59,59,59,59	0
54	MG	1a	1763	1/1	0.93	0.11	64,64,64,64	0
54	MG	1a	1764	1/1	0.93	0.13	77,77,77,77	0
54	MG	2A	3594	1/1	0.93	0.12	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	3258	1/1	0.93	0.47	40,40,40,40	0
54	MG	2A	3013	1/1	0.93	0.10	26,26,26,26	0
54	MG	1A	3923	1/1	0.93	0.66	46,46,46,46	0
54	MG	1A	3691	1/1	0.93	0.12	55,55,55,55	0
54	MG	1A	3082	1/1	0.93	0.29	34,34,34,34	0
54	MG	2A	3020	1/1	0.93	0.48	47,47,47,47	0
54	MG	1A	3529	1/1	0.93	0.18	30,30,30,30	0
54	MG	1A	3084	1/1	0.93	0.83	44,44,44,44	0
54	MG	2A	3025	1/1	0.93	0.10	62,62,62,62	0
54	MG	2A	3607	1/1	0.93	0.11	80,80,80,80	0
54	MG	2A	3398	1/1	0.93	0.40	70,70,70,70	0
54	MG	2a	3063	1/1	0.93	0.17	70,70,70,70	0
54	MG	1A	3532	1/1	0.93	0.08	55,55,55,55	0
54	MG	1A	3929	1/1	0.93	0.06	59,59,59,59	0
54	MG	2A	3404	1/1	0.93	0.26	60,60,60,60	0
54	MG	1A	3175	1/1	0.93	0.15	63,63,63,63	0
54	MG	2A	3408	1/1	0.93	0.14	59,59,59,59	0
54	MG	1a	1782	1/1	0.93	0.09	76,76,76,76	0
54	MG	1A	3085	1/1	0.93	0.87	47,47,47,47	0
54	MG	1a	1785	1/1	0.93	0.15	52,52,52,52	0
54	MG	1A	3934	1/1	0.93	0.24	42,42,42,42	0
54	MG	1D	301	1/1	0.93	0.14	57,57,57,57	0
54	MG	1A	3935	1/1	0.93	0.05	50,50,50,50	0
54	MG	2A	3211	1/1	0.93	0.07	70,70,70,70	0
54	MG	1A	3295	1/1	0.93	0.13	48,48,48,48	0
54	MG	2A	3420	1/1	0.93	0.10	44,44,44,44	0
54	MG	2a	3086	1/1	0.93	0.15	81,81,81,81	0
54	MG	1A	3700	1/1	0.93	0.18	46,46,46,46	0
54	MG	1A	3539	1/1	0.93	0.19	26,26,26,26	0
54	MG	1A	3296	1/1	0.93	0.43	40,40,40,40	0
54	MG	2a	3090	1/1	0.93	0.13	82,82,82,82	0
54	MG	2A	3634	1/1	0.93	0.08	54,54,54,54	0
54	MG	2A	3636	1/1	0.93	0.13	59,59,59,59	0
54	MG	2A	3426	1/1	0.93	0.06	55,55,55,55	0
54	MG	2A	3428	1/1	0.93	0.05	61,61,61,61	0
54	MG	1A	3469	1/1	0.93	0.15	64,64,64,64	0
54	MG	2a	3099	1/1	0.93	0.07	78,78,78,78	0
54	MG	1A	3066	1/1	0.93	0.39	57,57,57,57	0
54	MG	2A	3047	1/1	0.93	0.31	68,68,68,68	0
54	MG	1F	303	1/1	0.93	0.49	38,38,38,38	0
54	MG	2A	3049	1/1	0.93	0.12	52,52,52,52	0
54	MG	2a	3107	1/1	0.93	0.19	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1F	307	1/1	0.93	0.09	43,43,43,43	0
54	MG	1a	1800	1/1	0.93	0.19	66,66,66,66	0
54	MG	1F	311	1/1	0.93	0.14	40,40,40,40	0
54	MG	1A	3629	1/1	0.93	0.20	44,44,44,44	0
54	MG	1A	3411	1/1	0.93	0.17	34,34,34,34	0
54	MG	2A	3664	1/1	0.93	0.09	82,82,82,82	0
54	MG	1A	3632	1/1	0.93	0.21	33,33,33,33	0
54	MG	1a	1667	1/1	0.93	0.26	78,78,78,78	0
54	MG	2A	3235	1/1	0.93	0.62	47,47,47,47	0
54	MG	1A	3633	1/1	0.93	0.15	65,65,65,65	0
54	MG	1A	3354	1/1	0.93	0.17	27,27,27,27	0
54	MG	1a	1670	1/1	0.93	0.71	61,61,61,61	0
54	MG	1A	3356	1/1	0.93	0.21	49,49,49,49	0
54	MG	1A	3551	1/1	0.93	0.25	62,62,62,62	0
54	MG	1A	3837	1/1	0.93	0.12	54,54,54,54	0
54	MG	1A	3414	1/1	0.93	0.20	44,44,44,44	0
54	MG	1A	3839	1/1	0.93	0.22	59,59,59,59	0
54	MG	1A	3840	1/1	0.93	0.14	61,61,61,61	0
54	MG	1A	3965	1/1	0.93	0.19	57,57,57,57	0
54	MG	1A	3724	1/1	0.93	0.17	39,39,39,39	0
54	MG	2A	3253	1/1	0.93	0.69	50,50,50,50	0
54	MG	1A	3112	1/1	0.93	0.53	37,37,37,37	0
54	MG	1A	3643	1/1	0.93	0.16	62,62,62,62	0
54	MG	1Q	203	1/1	0.93	0.08	41,41,41,41	0
54	MG	1A	3729	1/1	0.93	0.60	41,41,41,41	0
54	MG	1A	3418	1/1	0.93	0.18	25,25,25,25	0
54	MG	1A	3732	1/1	0.93	0.15	32,32,32,32	0
54	MG	2A	3261	1/1	0.93	0.31	74,74,74,74	0
54	MG	1A	3367	1/1	0.93	0.19	33,33,33,33	0
54	MG	2A	3088	1/1	0.93	0.09	77,77,77,77	0
54	MG	2a	3152	1/1	0.93	0.14	79,79,79,79	0
54	MG	1T	201	1/1	0.93	0.10	42,42,42,42	0
54	MG	2A	3486	1/1	0.93	0.12	74,74,74,74	0
54	MG	2A	3700	1/1	0.93	0.16	63,63,63,63	0
54	MG	1A	3206	1/1	0.93	0.75	54,54,54,54	0
54	MG	2A	3705	1/1	0.93	0.13	46,46,46,46	0
54	MG	1A	3562	1/1	0.93	0.24	58,58,58,58	0
54	MG	1a	1839	1/1	0.93	0.14	52,52,52,52	0
54	MG	2A	3493	1/1	0.93	0.23	74,74,74,74	0
54	MG	2A	3709	1/1	0.93	0.23	64,64,64,64	0
54	MG	2A	3094	1/1	0.93	0.40	55,55,55,55	0
54	MG	1U	203	1/1	0.93	0.70	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	1848	1/1	0.93	0.11	65,65,65,65	0
54	MG	2a	3170	1/1	0.93	0.09	71,71,71,71	0
54	MG	2B	203	1/1	0.93	0.17	74,74,74,74	0
54	MG	1A	3210	1/1	0.93	0.36	77,77,77,77	0
54	MG	1A	3741	1/1	0.93	0.20	36,36,36,36	0
54	MG	2a	3175	1/1	0.93	0.15	79,79,79,79	0
54	MG	2a	3176	1/1	0.93	0.07	67,67,67,67	0
54	MG	2A	3285	1/1	0.93	0.06	42,42,42,42	0
54	MG	1A	3037	1/1	0.93	0.18	40,40,40,40	0
54	MG	1a	1698	1/1	0.93	0.08	78,78,78,78	0
54	MG	2A	3289	1/1	0.93	0.15	42,42,42,42	0
54	MG	2B	210	1/1	0.93	0.09	71,71,71,71	0
54	MG	2A	3290	1/1	0.93	0.10	64,64,64,64	0
54	MG	1W	203	1/1	0.93	0.13	57,57,57,57	0
54	MG	1A	3986	1/1	0.93	0.10	75,75,75,75	0
54	MG	2j	201	1/1	0.93	0.13	84,84,84,84	0
54	MG	1A	3569	1/1	0.93	0.11	34,34,34,34	0
54	MG	1A	3654	1/1	0.93	0.19	52,52,52,52	0
54	MG	2t	201	1/1	0.93	0.13	58,58,58,58	0
54	MG	2B	216	1/1	0.93	0.07	84,84,84,84	0
54	MG	1A	3496	1/1	0.93	0.17	55,55,55,55	0
54	MG	1A	3869	1/1	0.93	0.19	45,45,45,45	0
54	MG	2A	3303	1/1	0.93	0.14	69,69,69,69	0
54	MG	2A	3304	1/1	0.93	0.15	69,69,69,69	0
54	MG	2D	308	1/1	0.93	0.16	37,37,37,37	0
54	MG	1A	3574	1/1	0.93	0.41	46,46,46,46	0
54	MG	2E	302	1/1	0.93	0.11	45,45,45,45	0
54	MG	2A	3522	1/1	0.93	0.14	37,37,37,37	0
54	MG	1A	3995	1/1	0.93	0.14	89,89,89,89	0
54	MG	15	101	1/1	0.93	0.41	41,41,41,41	0
54	MG	1A	3498	1/1	0.93	0.19	23,23,23,23	0
54	MG	1a	1674	1/1	0.94	0.20	66,66,66,66	0
54	MG	1A	3583	1/1	0.94	0.10	63,63,63,63	0
54	MG	1a	1677	1/1	0.94	0.16	58,58,58,58	0
54	MG	1A	3801	1/1	0.94	0.17	40,40,40,40	0
54	MG	1F	304	1/1	0.94	0.55	40,40,40,40	0
54	MG	1A	3933	1/1	0.94	0.29	61,61,61,61	0
54	MG	1A	3211	1/1	0.94	0.87	46,46,46,46	0
54	MG	1A	3682	1/1	0.94	0.12	50,50,50,50	0
54	MG	1a	1873	1/1	0.94	0.11	54,54,54,54	0
54	MG	1F	313	1/1	0.94	0.13	33,33,33,33	0
54	MG	1A	3214	1/1	0.94	0.52	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	1A	3171	1/1	0.94	0.62	51,51,51,51	0
54	MG	2A	3446	1/1	0.94	0.12	69,69,69,69	0
54	MG	1A	3049	1/1	0.94	0.10	27,27,27,27	0
54	MG	1A	3808	1/1	0.94	0.17	33,33,33,33	0
54	MG	1A	3274	1/1	0.94	0.13	44,44,44,44	0
54	MG	1A	3326	1/1	0.94	0.47	38,38,38,38	0
54	MG	1A	3495	1/1	0.94	0.21	61,61,61,61	0
54	MG	1N	201	1/1	0.94	0.39	49,49,49,49	0
54	MG	1A	3592	1/1	0.94	0.26	52,52,52,52	0
54	MG	1A	3218	1/1	0.94	0.29	51,51,51,51	0
54	MG	1A	3951	1/1	0.94	0.17	74,74,74,74	0
54	MG	1A	3101	1/1	0.94	0.46	47,47,47,47	0
54	MG	1e	203	1/1	0.94	0.43	66,66,66,66	0
54	MG	1A	3955	1/1	0.94	0.16	62,62,62,62	0
54	MG	1A	3329	1/1	0.94	0.10	40,40,40,40	0
54	MG	1a	1700	1/1	0.94	0.25	78,78,78,78	0
54	MG	2D	301	1/1	0.94	0.69	49,49,49,49	0
54	MG	1A	3106	1/1	0.94	0.43	41,41,41,41	0
54	MG	1A	3055	1/1	0.94	0.96	36,36,36,36	0
54	MG	1A	3822	1/1	0.94	0.11	45,45,45,45	0
54	MG	1A	3223	1/1	0.94	0.93	44,44,44,44	0
54	MG	1A	3962	1/1	0.94	0.29	65,65,65,65	0
54	MG	1A	3224	1/1	0.94	0.72	42,42,42,42	0
54	MG	2E	303	1/1	0.94	0.13	32,32,32,32	0
54	MG	1A	3830	1/1	0.94	0.49	44,44,44,44	0
54	MG	1A	3056	1/1	0.94	0.21	51,51,51,51	0
54	MG	1T	203	1/1	0.94	0.11	57,57,57,57	0
54	MG	1A	3507	1/1	0.94	0.17	32,32,32,32	0
54	MG	2A	3481	1/1	0.94	0.33	60,60,60,60	0
54	MG	1a	1711	1/1	0.94	0.20	71,71,71,71	0
54	MG	2A	3483	1/1	0.94	0.06	61,61,61,61	0
54	MG	2O	201	1/1	0.94	0.13	68,68,68,68	0
54	MG	2A	3484	1/1	0.94	0.13	60,60,60,60	0
54	MG	1T	206	1/1	0.94	0.20	57,57,57,57	0
54	MG	2Q	201	1/1	0.94	0.17	63,63,63,63	0
54	MG	1U	201	1/1	0.94	0.40	44,44,44,44	0
54	MG	2A	3488	1/1	0.94	0.10	64,64,64,64	0
54	MG	1U	202	1/1	0.94	0.25	36,36,36,36	0
54	MG	2T	202	1/1	0.94	0.12	70,70,70,70	0
54	MG	2A	3224	1/1	0.94	0.12	74,74,74,74	0
54	MG	2V	203	1/1	0.94	0.19	71,71,71,71	0
54	MG	2X	101	1/1	0.94	0.11	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	3970	1/1	0.94	0.21	51,51,51,51	0
54	MG	2A	3001	1/1	0.94	0.21	61,61,61,61	0
54	MG	1U	204	1/1	0.94	0.23	48,48,48,48	0
54	MG	27	101	1/1	0.94	0.69	46,46,46,46	0
54	MG	1U	206	1/1	0.94	0.36	42,42,42,42	0
54	MG	1a	1718	1/1	0.94	0.32	72,72,72,72	0
54	MG	1A	3701	1/1	0.94	0.10	74,74,74,74	0
54	MG	1A	3703	1/1	0.94	0.16	50,50,50,50	0
54	MG	1A	3338	1/1	0.94	0.22	41,41,41,41	0
54	MG	1A	3974	1/1	0.94	0.13	59,59,59,59	0
54	MG	2a	3005	1/1	0.94	0.21	61,61,61,61	0
54	MG	1A	3110	1/1	0.94	0.28	70,70,70,70	0
54	MG	1A	3609	1/1	0.94	0.12	58,58,58,58	0
54	MG	2A	3507	1/1	0.94	0.08	68,68,68,68	0
54	MG	2A	3509	1/1	0.94	0.07	60,60,60,60	0
54	MG	1A	3422	1/1	0.94	0.19	23,23,23,23	0
54	MG	2a	3012	1/1	0.94	0.21	67,67,67,67	0
54	MG	1A	3423	1/1	0.94	0.20	28,28,28,28	0
54	MG	10	106	1/1	0.94	0.09	65,65,65,65	0
54	MG	2A	3246	1/1	0.94	0.57	60,60,60,60	0
54	MG	11	101	1/1	0.94	0.37	48,48,48,48	0
54	MG	1A	3518	1/1	0.94	0.10	54,54,54,54	0
54	MG	1A	3228	1/1	0.94	0.42	36,36,36,36	0
54	MG	11	105	1/1	0.94	0.14	48,48,48,48	0
54	MG	2a	3021	1/1	0.94	0.08	76,76,76,76	0
54	MG	1A	3616	1/1	0.94	0.09	45,45,45,45	0
54	MG	2A	3519	1/1	0.94	0.15	59,59,59,59	0
54	MG	1A	3068	1/1	0.94	0.48	45,45,45,45	0
54	MG	2A	3028	1/1	0.94	0.17	44,44,44,44	0
54	MG	2a	3026	1/1	0.94	0.18	60,60,60,60	0
54	MG	2a	3029	1/1	0.94	0.28	64,64,64,64	0
54	MG	1A	3005	1/1	0.94	0.18	22,22,22,22	0
54	MG	1A	3292	1/1	0.94	0.20	49,49,49,49	0
54	MG	1a	1746	1/1	0.94	0.22	43,43,43,43	0
54	MG	1A	3186	1/1	0.94	0.48	41,41,41,41	0
54	MG	2A	3035	1/1	0.94	0.18	65,65,65,65	0
54	MG	1A	3074	1/1	0.94	0.30	36,36,36,36	0
54	MG	1A	3437	1/1	0.94	0.21	76,76,76,76	0
54	MG	1A	3993	1/1	0.94	0.07	63,63,63,63	0
54	MG	2a	3040	1/1	0.94	0.09	84,84,84,84	0
54	MG	1A	3727	1/1	0.94	0.60	57,57,57,57	0
54	MG	2A	3535	1/1	0.94	0.10	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	17	104	1/1	0.94	0.61	45,45,45,45	0
54	MG	1A	3630	1/1	0.94	0.28	38,38,38,38	0
54	MG	1a	1758	1/1	0.94	0.16	55,55,55,55	0
54	MG	1a	1759	1/1	0.94	0.10	68,68,68,68	0
54	MG	2A	3272	1/1	0.94	0.15	51,51,51,51	0
54	MG	1a	1760	1/1	0.94	0.14	81,81,81,81	0
54	MG	2A	3279	1/1	0.94	0.15	73,73,73,73	0
54	MG	1A	3997	1/1	0.94	0.11	69,69,69,69	0
54	MG	1A	3862	1/1	0.94	0.15	26,26,26,26	0
54	MG	2A	3282	1/1	0.94	0.09	61,61,61,61	0
54	MG	2A	3283	1/1	0.94	0.14	57,57,57,57	0
54	MG	1A	3046	1/1	0.94	0.45	33,33,33,33	0
54	MG	1A	3865	1/1	0.94	0.18	52,52,52,52	0
54	MG	2A	3553	1/1	0.94	0.10	60,60,60,60	0
54	MG	1A	3190	1/1	0.94	0.22	61,61,61,61	0
54	MG	1A	3239	1/1	0.94	0.47	39,39,39,39	0
54	MG	1A	3634	1/1	0.94	0.08	44,44,44,44	0
54	MG	1a	1771	1/1	0.94	0.09	82,82,82,82	0
54	MG	1A	3299	1/1	0.94	0.55	50,50,50,50	0
54	MG	1A	3053	1/1	0.94	0.52	44,44,44,44	0
54	MG	1a	1775	1/1	0.94	0.12	68,68,68,68	0
54	MG	2a	3069	1/1	0.94	0.22	50,50,50,50	0
54	MG	1a	1606	1/1	0.94	0.11	58,58,58,58	0
54	MG	2A	3565	1/1	0.94	0.24	49,49,49,49	0
54	MG	1A	4011	1/1	0.94	0.44	50,50,50,50	0
54	MG	1A	4012	1/1	0.94	0.07	63,63,63,63	0
54	MG	1a	1780	1/1	0.94	0.21	78,78,78,78	0
54	MG	1A	3092	1/1	0.94	0.53	36,36,36,36	0
54	MG	2a	3079	1/1	0.94	0.39	59,59,59,59	0
54	MG	1A	3740	1/1	0.94	0.20	70,70,70,70	0
54	MG	1A	3193	1/1	0.94	0.28	55,55,55,55	0
54	MG	2a	3082	1/1	0.94	0.09	70,70,70,70	0
54	MG	2A	3071	1/1	0.94	0.73	53,53,53,53	0
54	MG	2a	3084	1/1	0.94	0.11	69,69,69,69	0
54	MG	2A	3577	1/1	0.94	0.07	74,74,74,74	0
54	MG	2A	3578	1/1	0.94	0.07	61,61,61,61	0
54	MG	1A	4016	1/1	0.94	0.10	48,48,48,48	0
54	MG	1a	1786	1/1	0.94	0.16	63,63,63,63	0
54	MG	1A	3880	1/1	0.94	0.21	50,50,50,50	0
54	MG	1A	3640	1/1	0.94	0.24	55,55,55,55	0
54	MG	1A	3246	1/1	0.94	0.33	45,45,45,45	0
54	MG	2A	3585	1/1	0.94	0.08	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	1790	1/1	0.94	0.14	76,76,76,76	0
54	MG	1a	1617	1/1	0.94	0.12	75,75,75,75	0
54	MG	1A	4022	1/1	0.94	0.32	66,66,66,66	0
54	MG	1A	3885	1/1	0.94	0.20	43,43,43,43	0
54	MG	1a	1620	1/1	0.94	0.12	65,65,65,65	0
54	MG	2A	3087	1/1	0.94	0.61	55,55,55,55	0
54	MG	1A	3453	1/1	0.94	0.17	36,36,36,36	0
54	MG	1a	1622	1/1	0.94	0.17	55,55,55,55	0
54	MG	2a	3106	1/1	0.94	0.13	67,67,67,67	0
54	MG	1A	3454	1/1	0.94	0.20	65,65,65,65	0
54	MG	1A	3119	1/1	0.94	0.25	34,34,34,34	0
54	MG	2a	3110	1/1	0.94	0.07	75,75,75,75	0
54	MG	1A	3760	1/1	0.94	0.19	56,56,56,56	0
54	MG	1A	3078	1/1	0.94	0.52	45,45,45,45	0
54	MG	2A	3096	1/1	0.94	0.18	56,56,56,56	0
54	MG	1a	1802	1/1	0.94	0.10	58,58,58,58	0
54	MG	2A	3098	1/1	0.94	0.20	62,62,62,62	0
54	MG	1A	3550	1/1	0.94	0.52	37,37,37,37	0
54	MG	2a	3118	1/1	0.94	0.11	61,61,61,61	0
54	MG	1A	3079	1/1	0.94	0.54	60,60,60,60	0
54	MG	1A	3459	1/1	0.94	0.26	53,53,53,53	0
54	MG	1A	3767	1/1	0.94	0.13	44,44,44,44	0
54	MG	2A	3346	1/1	0.94	0.15	57,57,57,57	0
54	MG	1A	3553	1/1	0.94	0.14	32,32,32,32	0
54	MG	1B	207	1/1	0.94	0.46	65,65,65,65	0
54	MG	1a	1809	1/1	0.94	0.08	74,74,74,74	0
54	MG	1a	1810	1/1	0.94	0.16	71,71,71,71	0
54	MG	2A	3112	1/1	0.94	0.17	73,73,73,73	0
54	MG	1A	3460	1/1	0.94	0.12	61,61,61,61	0
54	MG	2A	3358	1/1	0.94	0.09	65,65,65,65	0
54	MG	2A	3622	1/1	0.94	0.06	66,66,66,66	0
54	MG	2A	3624	1/1	0.94	0.13	40,40,40,40	0
54	MG	1A	3901	1/1	0.94	0.13	55,55,55,55	0
54	MG	1A	3097	1/1	0.94	0.17	54,54,54,54	0
54	MG	1A	3463	1/1	0.94	0.11	62,62,62,62	0
54	MG	1A	3773	1/1	0.94	0.12	49,49,49,49	0
54	MG	2A	3367	1/1	0.94	0.15	42,42,42,42	0
54	MG	2A	3122	1/1	0.94	0.77	49,49,49,49	0
54	MG	1A	3130	1/1	0.94	0.12	37,37,37,37	0
54	MG	1a	1819	1/1	0.94	0.19	68,68,68,68	0
54	MG	1A	3560	1/1	0.94	0.13	60,60,60,60	0
54	MG	1B	219	1/1	0.94	0.23	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	2A	3129	1/1	0.94	0.16	63,63,63,63	0
54	MG	2A	3378	1/1	0.94	0.07	65,65,65,65	0
54	MG	1B	220	1/1	0.94	0.18	78,78,78,78	0
54	MG	2A	3643	1/1	0.94	0.08	31,31,31,31	0
54	MG	2a	3157	1/1	0.94	0.19	69,69,69,69	0
54	MG	1A	3660	1/1	0.94	0.50	70,70,70,70	0
54	MG	1A	3913	1/1	0.94	0.19	26,26,26,26	0
54	MG	1a	1827	1/1	0.94	0.19	88,88,88,88	0
54	MG	1a	1655	1/1	0.94	0.18	58,58,58,58	0
54	MG	1a	1656	1/1	0.94	0.18	61,61,61,61	0
54	MG	2A	3389	1/1	0.94	0.13	60,60,60,60	0
54	MG	1A	3781	1/1	0.94	0.11	32,32,32,32	0
54	MG	2A	3657	1/1	0.94	0.15	62,62,62,62	0
54	MG	2A	3391	1/1	0.94	0.14	41,41,41,41	0
54	MG	1A	3561	1/1	0.94	0.17	59,59,59,59	0
54	MG	2A	3663	1/1	0.94	0.28	75,75,75,75	0
54	MG	1A	3381	1/1	0.94	0.18	20,20,20,20	0
54	MG	2A	3147	1/1	0.94	0.12	55,55,55,55	0
54	MG	2A	3149	1/1	0.94	0.13	35,35,35,35	0
54	MG	2A	3668	1/1	0.94	0.49	69,69,69,69	0
54	MG	1a	1661	1/1	0.94	0.52	68,68,68,68	0
54	MG	2A	3399	1/1	0.94	0.10	67,67,67,67	0
54	MG	1A	3061	1/1	0.94	0.29	64,64,64,64	0
54	MG	2A	3401	1/1	0.94	0.12	69,69,69,69	0
54	MG	1A	3099	1/1	0.94	0.27	38,38,38,38	0
54	MG	2A	3403	1/1	0.94	0.75	56,56,56,56	0
54	MG	1A	3207	1/1	0.94	0.49	42,42,42,42	0
54	MG	1a	1844	1/1	0.94	0.08	61,61,61,61	0
54	MG	1A	3671	1/1	0.94	0.17	41,41,41,41	0
54	MG	2A	3678	1/1	0.94	0.14	65,65,65,65	0
54	MG	1D	313	1/1	0.94	0.51	49,49,49,49	0
54	MG	1A	3316	1/1	0.94	0.28	61,61,61,61	0
56	ZIT	1A	4033	52/52	0.94	0.49	35,56,72,82	0
54	MG	1A	3208	1/1	0.94	0.40	48,48,48,48	0
54	MG	1a	1852	1/1	0.94	0.09	47,47,47,47	0
54	MG	1A	3169	1/1	0.94	0.17	41,41,41,41	0
54	MG	2A	3415	1/1	0.94	0.10	71,71,71,71	0
54	MG	1E	301	1/1	0.94	0.50	38,38,38,38	0
54	MG	2A	3689	1/1	0.94	0.67	70,70,70,70	0
54	MG	1A	3394	1/1	0.94	0.14	35,35,35,35	0
58	ARG	1B	230	12/12	0.94	0.19	33,49,59,61	0
54	MG	1a	1858	1/1	0.94	0.13	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3173	1/1	0.94	0.11	62,62,62,62	0
54	MG	1a	1859	1/1	0.94	0.18	57,57,57,57	0
54	MG	2A	3422	1/1	0.94	0.09	48,48,48,48	0
54	MG	1A	3582	1/1	0.94	0.14	62,62,62,62	0
54	MG	1A	3848	1/1	0.95	0.22	50,50,50,50	0
54	MG	2E	301	1/1	0.95	0.69	49,49,49,49	0
54	MG	1Q	204	1/1	0.95	0.22	56,56,56,56	0
54	MG	1A	3849	1/1	0.95	0.10	41,41,41,41	0
54	MG	1a	1838	1/1	0.95	0.18	72,72,72,72	0
54	MG	1R	201	1/1	0.95	0.31	46,46,46,46	0
54	MG	2A	3105	1/1	0.95	0.38	58,58,58,58	0
54	MG	2F	304	1/1	0.95	0.69	50,50,50,50	0
54	MG	2A	3300	1/1	0.95	0.24	63,63,63,63	0
54	MG	1a	1842	1/1	0.95	0.08	78,78,78,78	0
54	MG	1A	3850	1/1	0.95	0.42	54,54,54,54	0
54	MG	1R	204	1/1	0.95	0.11	49,49,49,49	0
54	MG	2A	3305	1/1	0.95	0.13	46,46,46,46	0
54	MG	1A	3571	1/1	0.95	0.18	40,40,40,40	0
54	MG	1A	3977	1/1	0.95	0.15	35,35,35,35	0
54	MG	1A	3573	1/1	0.95	0.24	60,60,60,60	0
54	MG	1A	3209	1/1	0.95	0.83	48,48,48,48	0
54	MG	2A	3313	1/1	0.95	0.19	47,47,47,47	0
54	MG	2A	3315	1/1	0.95	0.13	32,32,32,32	0
54	MG	1A	3855	1/1	0.95	0.11	51,51,51,51	0
54	MG	2A	3534	1/1	0.95	0.33	58,58,58,58	0
54	MG	2V	202	1/1	0.95	0.51	56,56,56,56	0
54	MG	1A	3435	1/1	0.95	0.28	54,54,54,54	0
54	MG	2W	203	1/1	0.95	0.11	73,73,73,73	0
54	MG	1A	3270	1/1	0.95	0.37	63,63,63,63	0
54	MG	1a	1857	1/1	0.95	0.19	72,72,72,72	0
54	MG	1A	3579	1/1	0.95	0.17	64,64,64,64	0
54	MG	2A	3540	1/1	0.95	0.10	27,27,27,27	0
54	MG	1A	3742	1/1	0.95	0.14	56,56,56,56	0
54	MG	2A	3324	1/1	0.95	0.10	65,65,65,65	0
54	MG	1A	3580	1/1	0.95	0.12	50,50,50,50	0
54	MG	1A	3987	1/1	0.95	0.13	50,50,50,50	0
54	MG	1a	1864	1/1	0.95	0.14	59,59,59,59	0
54	MG	1A	3746	1/1	0.95	0.09	49,49,49,49	0
54	MG	1U	207	1/1	0.95	0.37	45,45,45,45	0
54	MG	2A	3332	1/1	0.95	0.14	53,53,53,53	0
54	MG	1A	3138	1/1	0.95	0.16	53,53,53,53	0
54	MG	1a	1868	1/1	0.95	0.19	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	3864	1/1	0.95	0.08	39,39,39,39	0
54	MG	1A	3187	1/1	0.95	0.37	42,42,42,42	0
54	MG	1A	3757	1/1	0.95	0.14	64,64,64,64	0
54	MG	1W	204	1/1	0.95	0.22	49,49,49,49	0
54	MG	1A	3440	1/1	0.95	0.17	28,28,28,28	0
54	MG	2a	3014	1/1	0.95	0.18	61,61,61,61	0
54	MG	1A	3661	1/1	0.95	0.15	42,42,42,42	0
54	MG	2A	3145	1/1	0.95	0.14	48,48,48,48	0
54	MG	10	102	1/1	0.95	0.54	47,47,47,47	0
54	MG	1A	3139	1/1	0.95	0.60	51,51,51,51	0
54	MG	1A	3872	1/1	0.95	0.22	32,32,32,32	0
54	MG	10	105	1/1	0.95	0.16	55,55,55,55	0
54	MG	1A	3663	1/1	0.95	0.27	49,49,49,49	0
54	MG	1A	3511	1/1	0.95	0.16	27,27,27,27	0
54	MG	2A	3571	1/1	0.95	0.13	42,42,42,42	0
54	MG	1A	3069	1/1	0.95	0.49	41,41,41,41	0
54	MG	2A	3158	1/1	0.95	0.39	46,46,46,46	0
54	MG	2A	3574	1/1	0.95	0.10	41,41,41,41	0
54	MG	2a	3027	1/1	0.95	0.15	77,77,77,77	0
54	MG	1A	3878	1/1	0.95	0.15	74,74,74,74	0
54	MG	1A	3387	1/1	0.95	0.15	15,15,15,15	0
54	MG	2a	3031	1/1	0.95	0.11	46,46,46,46	0
54	MG	2A	3161	1/1	0.95	0.13	83,83,83,83	0
54	MG	1A	3276	1/1	0.95	0.27	32,32,32,32	0
54	MG	13	103	1/1	0.95	0.13	39,39,39,39	0
54	MG	1A	3519	1/1	0.95	0.10	53,53,53,53	0
54	MG	1A	3391	1/1	0.95	0.26	75,75,75,75	0
54	MG	1A	3144	1/1	0.95	0.20	40,40,40,40	0
54	MG	1A	3449	1/1	0.95	0.25	29,29,29,29	0
54	MG	1A	3393	1/1	0.95	0.19	35,35,35,35	0
54	MG	1A	3676	1/1	0.95	0.07	49,49,49,49	0
54	MG	1g	203	1/1	0.95	0.17	69,69,69,69	0
54	MG	2A	3175	1/1	0.95	0.15	52,52,52,52	0
54	MG	2A	3589	1/1	0.95	0.14	44,44,44,44	0
54	MG	2a	3046	1/1	0.95	0.26	75,75,75,75	0
54	MG	1A	3599	1/1	0.95	0.19	47,47,47,47	0
54	MG	1a	1731	1/1	0.95	0.13	60,60,60,60	0
54	MG	1A	3777	1/1	0.95	0.14	53,53,53,53	0
54	MG	1A	3125	1/1	0.95	0.24	55,55,55,55	0
54	MG	2A	3596	1/1	0.95	0.11	37,37,37,37	0
54	MG	1A	3245	1/1	0.95	0.99	49,49,49,49	0
54	MG	2A	3383	1/1	0.95	0.15	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	1a	1740	1/1	0.95	0.10	58,58,58,58	0
54	MG	1A	3681	1/1	0.95	0.11	71,71,71,71	0
54	MG	1A	3784	1/1	0.95	0.14	35,35,35,35	0
54	MG	1A	3126	1/1	0.95	0.26	53,53,53,53	0
54	MG	1A	3070	1/1	0.95	0.45	37,37,37,37	0
54	MG	19	103	1/1	0.95	0.04	67,67,67,67	0
54	MG	1A	3604	1/1	0.95	0.05	43,43,43,43	0
54	MG	1A	3902	1/1	0.95	0.20	49,49,49,49	0
54	MG	2A	3608	1/1	0.95	0.12	65,65,65,65	0
54	MG	2A	3189	1/1	0.95	0.23	72,72,72,72	0
54	MG	2A	3396	1/1	0.95	0.89	73,73,73,73	0
54	MG	1A	3149	1/1	0.95	0.24	49,49,49,49	0
54	MG	1A	3533	1/1	0.95	0.21	25,25,25,25	0
54	MG	2A	3614	1/1	0.95	0.16	73,73,73,73	0
54	MG	1A	3089	1/1	0.95	0.30	41,41,41,41	0
54	MG	1A	3793	1/1	0.95	0.12	43,43,43,43	0
54	MG	2a	3073	1/1	0.95	0.07	68,68,68,68	0
54	MG	1A	3317	1/1	0.95	0.39	47,47,47,47	0
54	MG	1A	3403	1/1	0.95	0.16	37,37,37,37	0
54	MG	2A	3198	1/1	0.95	0.20	52,52,52,52	0
54	MG	2a	3077	1/1	0.95	0.24	61,61,61,61	0
54	MG	2a	3078	1/1	0.95	0.26	71,71,71,71	0
54	MG	2A	3008	1/1	0.95	0.28	43,43,43,43	0
54	MG	1a	1609	1/1	0.95	0.22	64,64,64,64	0
54	MG	2A	3407	1/1	0.95	0.33	50,50,50,50	0
54	MG	1A	3404	1/1	0.95	0.08	55,55,55,55	0
54	MG	1B	208	1/1	0.95	0.12	55,55,55,55	0
54	MG	1A	3914	1/1	0.95	0.19	39,39,39,39	0
54	MG	1A	3915	1/1	0.95	0.12	55,55,55,55	0
54	MG	1A	3071	1/1	0.95	0.48	38,38,38,38	0
54	MG	2A	3630	1/1	0.95	0.21	57,57,57,57	0
54	MG	1A	3255	1/1	0.95	0.32	54,54,54,54	0
54	MG	1A	3800	1/1	0.95	0.18	63,63,63,63	0
54	MG	1A	3320	1/1	0.95	0.27	45,45,45,45	0
54	MG	1A	3921	1/1	0.95	0.11	21,21,21,21	0
54	MG	1B	218	1/1	0.95	0.22	35,35,35,35	0
54	MG	1A	3470	1/1	0.95	0.40	74,74,74,74	0
54	MG	1A	3618	1/1	0.95	0.18	49,49,49,49	0
54	MG	2a	3097	1/1	0.95	0.11	58,58,58,58	0
54	MG	2A	3640	1/1	0.95	0.20	33,33,33,33	0
54	MG	1A	3290	1/1	0.95	0.09	52,52,52,52	0
54	MG	2a	3100	1/1	0.95	0.11	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3101	1/1	0.95	0.15	71,71,71,71	0
54	MG	2A	3642	1/1	0.95	0.07	42,42,42,42	0
54	MG	1B	222	1/1	0.95	0.08	55,55,55,55	0
54	MG	1A	3698	1/1	0.95	0.13	58,58,58,58	0
54	MG	1A	3545	1/1	0.95	0.10	64,64,64,64	0
54	MG	2A	3427	1/1	0.95	0.12	66,66,66,66	0
54	MG	2A	3649	1/1	0.95	0.09	60,60,60,60	0
54	MG	2A	3650	1/1	0.95	0.08	44,44,44,44	0
54	MG	2A	3032	1/1	0.95	0.83	60,60,60,60	0
54	MG	1A	3547	1/1	0.95	0.19	62,62,62,62	0
54	MG	1A	3622	1/1	0.95	0.08	52,52,52,52	0
54	MG	2A	3654	1/1	0.95	0.11	42,42,42,42	0
54	MG	2A	3655	1/1	0.95	0.13	37,37,37,37	0
54	MG	1A	3623	1/1	0.95	0.14	58,58,58,58	0
54	MG	1A	3178	1/1	0.95	0.54	42,42,42,42	0
54	MG	1a	1784	1/1	0.95	0.29	61,61,61,61	0
54	MG	2A	3226	1/1	0.95	0.19	65,65,65,65	0
54	MG	2A	3438	1/1	0.95	0.15	64,64,64,64	0
54	MG	1A	3355	1/1	0.95	0.22	27,27,27,27	0
54	MG	1D	304	1/1	0.95	0.40	40,40,40,40	0
54	MG	2A	3443	1/1	0.95	0.10	60,60,60,60	0
54	MG	1a	1634	1/1	0.95	0.12	48,48,48,48	0
54	MG	1A	3048	1/1	0.95	0.34	56,56,56,56	0
54	MG	1D	309	1/1	0.95	0.36	36,36,36,36	0
54	MG	1D	310	1/1	0.95	0.48	44,44,44,44	0
54	MG	1D	311	1/1	0.95	0.07	64,64,64,64	0
54	MG	1A	3815	1/1	0.95	0.13	59,59,59,59	0
54	MG	2a	3131	1/1	0.95	0.07	83,83,83,83	0
54	MG	1A	3416	1/1	0.95	0.17	30,30,30,30	0
54	MG	1A	3936	1/1	0.95	0.26	64,64,64,64	0
54	MG	1a	1643	1/1	0.95	0.24	62,62,62,62	0
54	MG	2A	3241	1/1	0.95	0.16	70,70,70,70	0
54	MG	1A	3710	1/1	0.95	0.48	39,39,39,39	0
54	MG	2a	3141	1/1	0.95	0.12	72,72,72,72	0
54	MG	1a	1646	1/1	0.95	0.18	61,61,61,61	0
54	MG	2A	3245	1/1	0.95	0.09	46,46,46,46	0
54	MG	1A	3357	1/1	0.95	0.14	25,25,25,25	0
54	MG	1A	3358	1/1	0.95	0.19	24,24,24,24	0
54	MG	2A	3463	1/1	0.95	0.15	37,37,37,37	0
54	MG	2A	3685	1/1	0.95	0.42	57,57,57,57	0
54	MG	2A	3248	1/1	0.95	0.85	48,48,48,48	0
54	MG	1A	3821	1/1	0.95	0.40	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	3153	1/1	0.95	0.14	69,69,69,69	0
54	MG	1E	307	1/1	0.95	0.19	25,25,25,25	0
54	MG	1A	3115	1/1	0.95	0.19	36,36,36,36	0
54	MG	2A	3469	1/1	0.95	0.07	50,50,50,50	0
54	MG	1E	309	1/1	0.95	0.15	32,32,32,32	0
54	MG	1A	3715	1/1	0.95	0.19	57,57,57,57	0
54	MG	2a	3159	1/1	0.95	0.07	64,64,64,64	0
54	MG	2A	3694	1/1	0.95	0.16	63,63,63,63	0
54	MG	1A	3825	1/1	0.95	0.12	53,53,53,53	0
54	MG	1A	3026	1/1	0.95	0.69	37,37,37,37	0
54	MG	1A	3949	1/1	0.95	0.11	51,51,51,51	0
54	MG	2A	3698	1/1	0.95	0.62	73,73,73,73	0
54	MG	1A	3827	1/1	0.95	0.17	73,73,73,73	0
54	MG	1A	3828	1/1	0.95	0.22	28,28,28,28	0
54	MG	2A	3701	1/1	0.95	0.09	59,59,59,59	0
54	MG	2A	3702	1/1	0.95	0.19	69,69,69,69	0
54	MG	1A	3953	1/1	0.95	0.13	31,31,31,31	0
54	MG	2a	3172	1/1	0.95	0.11	79,79,79,79	0
54	MG	1a	1665	1/1	0.95	0.12	76,76,76,76	0
54	MG	1A	3231	1/1	0.95	0.48	35,35,35,35	0
54	MG	2A	3074	1/1	0.95	0.17	47,47,47,47	0
54	MG	1a	1815	1/1	0.95	0.13	70,70,70,70	0
54	MG	1A	3831	1/1	0.95	0.57	42,42,42,42	0
54	MG	2A	3487	1/1	0.95	0.10	43,43,43,43	0
54	MG	2a	3179	1/1	0.95	0.18	81,81,81,81	0
54	MG	1A	3369	1/1	0.95	0.09	47,47,47,47	0
54	MG	2A	3268	1/1	0.95	0.12	78,78,78,78	0
54	MG	1A	3637	1/1	0.95	0.21	32,32,32,32	0
54	MG	1A	3493	1/1	0.95	0.16	32,32,32,32	0
54	MG	1A	3723	1/1	0.95	0.10	36,36,36,36	0
54	MG	2A	3274	1/1	0.95	0.18	51,51,51,51	0
54	MG	2A	3275	1/1	0.95	0.15	49,49,49,49	0
54	MG	2A	3496	1/1	0.95	0.74	66,66,66,66	0
54	MG	2A	3497	1/1	0.95	0.13	62,62,62,62	0
54	MG	2A	3277	1/1	0.95	0.08	51,51,51,51	0
54	MG	2A	3499	1/1	0.95	0.09	67,67,67,67	0
54	MG	1A	3370	1/1	0.95	0.13	51,51,51,51	0
54	MG	1A	3375	1/1	0.95	0.12	36,36,36,36	0
54	MG	1A	3726	1/1	0.95	0.21	49,49,49,49	0
54	MG	1A	3564	1/1	0.95	0.14	33,33,33,33	0
54	MG	1P	201	1/1	0.95	0.55	39,39,39,39	0
54	MG	1A	3009	1/1	0.95	0.23	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3568	1/1	0.95	0.18	48,48,48,48	0
54	MG	2D	303	1/1	0.95	1.09	48,48,48,48	0
54	MG	2D	304	1/1	0.95	1.00	43,43,43,43	0
54	MG	1a	1680	1/1	0.95	0.09	86,86,86,86	0
54	MG	2A	3093	1/1	0.95	0.07	64,64,64,64	0
54	MG	1A	3016	1/1	0.95	0.55	40,40,40,40	0
54	MG	1A	3433	1/1	0.95	0.17	25,25,25,25	0
54	MG	1A	3753	1/1	0.96	0.17	58,58,58,58	0
54	MG	2A	3265	1/1	0.96	0.11	60,60,60,60	0
54	MG	1A	3754	1/1	0.96	0.12	53,53,53,53	0
54	MG	2A	3502	1/1	0.96	0.27	51,51,51,51	0
54	MG	1A	3755	1/1	0.96	0.11	46,46,46,46	0
54	MG	1A	3362	1/1	0.96	0.18	38,38,38,38	0
54	MG	1A	3976	1/1	0.96	0.14	26,26,26,26	0
54	MG	2A	3270	1/1	0.96	0.16	60,60,60,60	0
54	MG	2E	305	1/1	0.96	0.19	62,62,62,62	0
54	MG	1A	3162	1/1	0.96	0.21	38,38,38,38	0
54	MG	1P	204	1/1	0.96	0.26	67,67,67,67	0
54	MG	2A	3079	1/1	0.96	0.28	67,67,67,67	0
54	MG	2A	3080	1/1	0.96	0.38	47,47,47,47	0
54	MG	1A	3366	1/1	0.96	0.14	32,32,32,32	0
54	MG	1A	3505	1/1	0.96	0.21	48,48,48,48	0
54	MG	2A	3083	1/1	0.96	0.28	45,45,45,45	0
54	MG	1A	3980	1/1	0.96	0.21	53,53,53,53	0
54	MG	1a	1823	1/1	0.96	0.10	74,74,74,74	0
54	MG	1Q	201	1/1	0.96	0.35	43,43,43,43	0
54	MG	1A	3163	1/1	0.96	0.14	50,50,50,50	0
54	MG	1a	1675	1/1	0.96	0.19	53,53,53,53	0
54	MG	1a	1829	1/1	0.96	0.15	74,74,74,74	0
54	MG	2Q	203	1/1	0.96	0.10	75,75,75,75	0
54	MG	2A	3521	1/1	0.96	0.11	48,48,48,48	0
54	MG	1A	3664	1/1	0.96	0.10	60,60,60,60	0
54	MG	1A	3585	1/1	0.96	0.25	68,68,68,68	0
54	MG	1A	3226	1/1	0.96	0.57	37,37,37,37	0
54	MG	2V	201	1/1	0.96	0.24	70,70,70,70	0
54	MG	1R	202	1/1	0.96	0.34	45,45,45,45	0
54	MG	1A	3103	1/1	0.96	0.22	57,57,57,57	0
54	MG	2W	202	1/1	0.96	0.82	55,55,55,55	0
54	MG	2A	3095	1/1	0.96	0.14	45,45,45,45	0
54	MG	1A	3871	1/1	0.96	0.11	60,60,60,60	0
54	MG	2A	3295	1/1	0.96	0.09	34,34,34,34	0
54	MG	1A	3104	1/1	0.96	0.27	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	3532	1/1	0.96	0.15	67,67,67,67	0
54	MG	1A	3371	1/1	0.96	0.20	58,58,58,58	0
54	MG	1A	3874	1/1	0.96	0.12	39,39,39,39	0
54	MG	1A	3374	1/1	0.96	0.16	56,56,56,56	0
54	MG	1a	1840	1/1	0.96	0.21	51,51,51,51	0
54	MG	2A	3102	1/1	0.96	0.10	33,33,33,33	0
54	MG	2A	3104	1/1	0.96	0.52	56,56,56,56	0
54	MG	1A	3032	1/1	0.96	0.13	24,24,24,24	0
54	MG	2A	3541	1/1	0.96	0.10	61,61,61,61	0
54	MG	2A	3542	1/1	0.96	0.13	65,65,65,65	0
54	MG	1A	3514	1/1	0.96	0.10	72,72,72,72	0
54	MG	1a	1845	1/1	0.96	0.24	66,66,66,66	0
54	MG	1T	205	1/1	0.96	0.11	73,73,73,73	0
54	MG	2A	3311	1/1	0.96	0.16	62,62,62,62	0
54	MG	1a	1847	1/1	0.96	0.19	57,57,57,57	0
54	MG	2A	3314	1/1	0.96	0.19	37,37,37,37	0
54	MG	1A	3517	1/1	0.96	0.17	35,35,35,35	0
54	MG	1A	3594	1/1	0.96	0.14	70,70,70,70	0
54	MG	2A	3113	1/1	0.96	0.17	67,67,67,67	0
54	MG	2A	3114	1/1	0.96	0.17	54,54,54,54	0
54	MG	1A	3595	1/1	0.96	0.11	66,66,66,66	0
54	MG	1A	3678	1/1	0.96	0.21	48,48,48,48	0
54	MG	1A	3780	1/1	0.96	0.27	61,61,61,61	0
54	MG	1A	4001	1/1	0.96	0.62	45,45,45,45	0
54	MG	2A	3119	1/1	0.96	0.21	42,42,42,42	0
54	MG	1a	1855	1/1	0.96	0.11	74,74,74,74	0
54	MG	1A	3142	1/1	0.96	0.10	43,43,43,43	0
54	MG	2A	3123	1/1	0.96	0.38	44,44,44,44	0
54	MG	1A	3888	1/1	0.96	0.18	43,43,43,43	0
54	MG	2A	3564	1/1	0.96	0.15	58,58,58,58	0
54	MG	2A	3331	1/1	0.96	0.12	76,76,76,76	0
54	MG	1V	202	1/1	0.96	0.41	38,38,38,38	0
54	MG	2A	3126	1/1	0.96	0.21	67,67,67,67	0
54	MG	1A	3782	1/1	0.96	0.16	43,43,43,43	0
54	MG	1a	1860	1/1	0.96	0.15	56,56,56,56	0
54	MG	1A	3197	1/1	0.96	0.11	47,47,47,47	0
54	MG	1W	201	1/1	0.96	0.20	51,51,51,51	0
54	MG	2a	3036	1/1	0.96	0.23	67,67,67,67	0
54	MG	2A	3132	1/1	0.96	0.16	69,69,69,69	0
54	MG	1W	202	1/1	0.96	0.38	39,39,39,39	0
54	MG	1A	3378	1/1	0.96	0.14	37,37,37,37	0
54	MG	1A	3379	1/1	0.96	0.15	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1X	101	1/1	0.96	0.24	43,43,43,43	0
54	MG	2a	3042	1/1	0.96	0.12	66,66,66,66	0
54	MG	1A	3278	1/1	0.96	0.83	47,47,47,47	0
54	MG	2A	3580	1/1	0.96	0.06	47,47,47,47	0
54	MG	2A	3138	1/1	0.96	0.27	49,49,49,49	0
54	MG	2A	3139	1/1	0.96	0.27	42,42,42,42	0
54	MG	1A	3524	1/1	0.96	0.22	56,56,56,56	0
54	MG	2A	3348	1/1	0.96	0.11	38,38,38,38	0
54	MG	2A	3350	1/1	0.96	0.11	62,62,62,62	0
54	MG	1A	3789	1/1	0.96	0.19	44,44,44,44	0
54	MG	2a	3051	1/1	0.96	0.19	83,83,83,83	0
54	MG	1A	3233	1/1	0.96	0.45	42,42,42,42	0
54	MG	2A	3144	1/1	0.96	0.25	58,58,58,58	0
54	MG	1A	3280	1/1	0.96	0.71	52,52,52,52	0
54	MG	2A	3356	1/1	0.96	0.22	64,64,64,64	0
54	MG	1A	3123	1/1	0.96	0.22	38,38,38,38	0
54	MG	2A	3148	1/1	0.96	0.22	57,57,57,57	0
54	MG	1A	4017	1/1	0.96	0.14	71,71,71,71	0
54	MG	1A	3900	1/1	0.96	0.14	27,27,27,27	0
54	MG	1A	3450	1/1	0.96	0.19	30,30,30,30	0
54	MG	2A	3364	1/1	0.96	0.09	62,62,62,62	0
54	MG	1A	3199	1/1	0.96	0.55	51,51,51,51	0
54	MG	1A	4021	1/1	0.96	0.12	60,60,60,60	0
54	MG	2A	3155	1/1	0.96	0.13	73,73,73,73	0
54	MG	2A	3602	1/1	0.96	0.15	64,64,64,64	0
54	MG	1A	3200	1/1	0.96	0.48	53,53,53,53	0
54	MG	1A	3904	1/1	0.96	0.19	48,48,48,48	0
54	MG	2A	3372	1/1	0.96	0.16	57,57,57,57	0
54	MG	1A	3170	1/1	0.96	0.27	39,39,39,39	0
54	MG	1A	3064	1/1	0.96	0.26	34,34,34,34	0
54	MG	1A	4026	1/1	0.96	0.14	84,84,84,84	0
54	MG	2A	3377	1/1	0.96	0.14	39,39,39,39	0
54	MG	1A	3909	1/1	0.96	0.15	52,52,52,52	0
54	MG	2A	3611	1/1	0.96	0.22	64,64,64,64	0
54	MG	15	107	1/1	0.96	0.10	51,51,51,51	0
54	MG	1A	4028	1/1	0.96	0.20	63,63,63,63	0
54	MG	2A	3165	1/1	0.96	0.13	46,46,46,46	0
54	MG	2A	3166	1/1	0.96	0.15	61,61,61,61	0
54	MG	1A	3240	1/1	0.96	0.39	36,36,36,36	0
54	MG	1A	3613	1/1	0.96	0.21	51,51,51,51	0
54	MG	2A	3387	1/1	0.96	0.13	36,36,36,36	0
54	MG	2A	3169	1/1	0.96	0.15	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	1729	1/1	0.96	0.11	74,74,74,74	0
54	MG	1A	3083	1/1	0.96	0.64	38,38,38,38	0
54	MG	2A	3623	1/1	0.96	0.13	35,35,35,35	0
54	MG	2A	3172	1/1	0.96	0.33	49,49,49,49	0
54	MG	1A	3021	1/1	0.96	0.55	45,45,45,45	0
54	MG	1A	3128	1/1	0.96	0.33	66,66,66,66	0
54	MG	2a	3091	1/1	0.96	0.11	41,41,41,41	0
54	MG	1a	1735	1/1	0.96	0.17	49,49,49,49	0
54	MG	1h	202	1/1	0.96	0.08	64,64,64,64	0
54	MG	1B	204	1/1	0.96	0.15	51,51,51,51	0
54	MG	18	101	1/1	0.96	0.18	58,58,58,58	0
54	MG	1A	3804	1/1	0.96	0.20	60,60,60,60	0
54	MG	1A	3617	1/1	0.96	0.21	62,62,62,62	0
54	MG	1A	3015	1/1	0.96	0.33	38,38,38,38	0
54	MG	1A	3337	1/1	0.96	0.49	68,68,68,68	0
54	MG	2A	3635	1/1	0.96	0.09	55,55,55,55	0
54	MG	1A	3179	1/1	0.96	0.93	42,42,42,42	0
54	MG	2A	3637	1/1	0.96	0.13	82,82,82,82	0
54	MG	1A	3920	1/1	0.96	0.17	45,45,45,45	0
54	MG	2A	3405	1/1	0.96	0.16	57,57,57,57	0
54	MG	1A	3704	1/1	0.96	0.20	57,57,57,57	0
54	MG	1A	3294	1/1	0.96	0.45	47,47,47,47	0
54	MG	1A	3151	1/1	0.96	0.30	58,58,58,58	0
54	MG	1A	3812	1/1	0.96	0.62	40,40,40,40	0
54	MG	2A	3410	1/1	0.96	0.12	58,58,58,58	0
54	MG	1a	1751	1/1	0.96	0.12	59,59,59,59	0
54	MG	1A	3067	1/1	0.96	0.22	41,41,41,41	0
54	MG	1A	3029	1/1	0.96	0.29	40,40,40,40	0
54	MG	1A	3625	1/1	0.96	0.57	39,39,39,39	0
54	MG	2A	3004	1/1	0.96	0.16	43,43,43,43	0
54	MG	1A	3711	1/1	0.96	0.36	55,55,55,55	0
54	MG	1A	3549	1/1	0.96	0.15	33,33,33,33	0
54	MG	1A	3627	1/1	0.96	0.29	42,42,42,42	0
54	MG	1A	3474	1/1	0.96	0.17	27,27,27,27	0
54	MG	1A	3215	1/1	0.96	0.31	78,78,78,78	0
54	MG	1A	3254	1/1	0.96	0.16	72,72,72,72	0
54	MG	1A	3823	1/1	0.96	0.08	42,42,42,42	0
54	MG	1A	3717	1/1	0.96	0.06	44,44,44,44	0
54	MG	2A	3425	1/1	0.96	0.11	58,58,58,58	0
54	MG	1A	3183	1/1	0.96	0.17	62,62,62,62	0
54	MG	1A	3554	1/1	0.96	0.13	57,57,57,57	0
54	MG	2A	3018	1/1	0.96	0.95	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	1769	1/1	0.96	0.08	63,63,63,63	0
54	MG	1A	3555	1/1	0.96	0.11	61,61,61,61	0
54	MG	2a	3133	1/1	0.96	0.07	80,80,80,80	0
54	MG	2A	3021	1/1	0.96	0.09	44,44,44,44	0
54	MG	1D	305	1/1	0.96	0.36	44,44,44,44	0
54	MG	1D	306	1/1	0.96	0.42	44,44,44,44	0
54	MG	2a	3138	1/1	0.96	0.11	52,52,52,52	0
54	MG	2a	3139	1/1	0.96	0.13	78,78,78,78	0
54	MG	1A	3480	1/1	0.96	0.09	63,63,63,63	0
54	MG	1A	3481	1/1	0.96	0.21	50,50,50,50	0
54	MG	2A	3214	1/1	0.96	0.16	67,67,67,67	0
54	MG	2A	3440	1/1	0.96	0.12	39,39,39,39	0
54	MG	1a	1625	1/1	0.96	0.12	56,56,56,56	0
54	MG	1A	3347	1/1	0.96	0.18	30,30,30,30	0
54	MG	2A	3029	1/1	0.96	0.35	47,47,47,47	0
54	MG	1A	3945	1/1	0.96	0.12	75,75,75,75	0
54	MG	2a	3150	1/1	0.96	0.13	54,54,54,54	0
54	MG	2A	3681	1/1	0.96	0.07	60,60,60,60	0
54	MG	1A	3946	1/1	0.96	0.14	34,34,34,34	0
54	MG	1A	3045	1/1	0.96	0.38	34,34,34,34	0
54	MG	2A	3221	1/1	0.96	0.73	48,48,48,48	0
54	MG	2A	3222	1/1	0.96	0.58	53,53,53,53	0
54	MG	1D	315	1/1	0.96	0.21	74,74,74,74	0
54	MG	2A	3453	1/1	0.96	0.19	65,65,65,65	0
54	MG	2A	3688	1/1	0.96	0.08	52,52,52,52	0
54	MG	1A	3349	1/1	0.96	0.24	40,40,40,40	0
54	MG	1A	3023	1/1	0.96	0.33	36,36,36,36	0
54	MG	1A	3641	1/1	0.96	0.19	25,25,25,25	0
54	MG	2A	3037	1/1	0.96	0.12	74,74,74,74	0
54	MG	1A	3488	1/1	0.96	0.12	57,57,57,57	0
54	MG	1A	3259	1/1	0.96	0.18	34,34,34,34	0
54	MG	2A	3460	1/1	0.96	0.14	74,74,74,74	0
54	MG	2A	3230	1/1	0.96	0.40	43,43,43,43	0
54	MG	1E	306	1/1	0.96	0.09	53,53,53,53	0
54	MG	1A	3102	1/1	0.96	0.64	38,38,38,38	0
54	MG	2A	3233	1/1	0.96	0.67	44,44,44,44	0
54	MG	1A	3646	1/1	0.96	0.20	30,30,30,30	0
54	MG	1A	3734	1/1	0.96	0.13	39,39,39,39	0
54	MG	1A	3305	1/1	0.96	0.19	25,25,25,25	0
54	MG	2A	3703	1/1	0.96	0.15	52,52,52,52	0
54	MG	2A	3468	1/1	0.96	0.20	65,65,65,65	0
54	MG	1A	3158	1/1	0.96	0.42	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	1F	305	1/1	0.96	0.33	43,43,43,43	0
54	MG	1a	1645	1/1	0.96	0.18	53,53,53,53	0
54	MG	1A	3494	1/1	0.96	0.15	35,35,35,35	0
54	MG	1a	1797	1/1	0.96	0.23	68,68,68,68	0
54	MG	1A	3135	1/1	0.96	0.34	35,35,35,35	0
54	MG	1a	1648	1/1	0.96	0.26	61,61,61,61	0
54	MG	1a	1649	1/1	0.96	0.13	48,48,48,48	0
54	MG	1A	3222	1/1	0.96	0.15	41,41,41,41	0
54	MG	1A	3572	1/1	0.96	0.13	56,56,56,56	0
54	MG	1A	3743	1/1	0.96	0.10	35,35,35,35	0
54	MG	1F	316	1/1	0.96	0.24	63,63,63,63	0
54	MG	2A	3058	1/1	0.96	0.12	50,50,50,50	0
55	HGR	2A	3712	36/36	0.96	0.27	38,43,49,51	0
54	MG	1A	3497	1/1	0.96	0.22	59,59,59,59	0
54	MG	1A	3266	1/1	0.96	0.36	71,71,71,71	0
54	MG	1a	1658	1/1	0.96	0.08	81,81,81,81	0
54	MG	1A	3968	1/1	0.96	0.33	58,58,58,58	0
57	MPD	18	103	8/8	0.96	0.34	32,41,48,49	0
54	MG	2A	3490	1/1	0.96	0.15	59,59,59,59	0
54	MG	2A	3063	1/1	0.96	0.55	52,52,52,52	0
54	MG	1A	3969	1/1	0.96	0.26	57,57,57,57	0
54	MG	2A	3258	1/1	0.96	0.16	51,51,51,51	0
54	MG	2A	3066	1/1	0.96	0.79	46,46,46,46	0
54	MG	1A	3424	1/1	0.96	0.22	21,21,21,21	0
54	MG	2B	218	1/1	0.96	0.13	66,66,66,66	0
54	MG	2A	3068	1/1	0.96	0.10	33,33,33,33	0
54	MG	2A	3069	1/1	0.96	0.80	52,52,52,52	0
54	MG	1A	3117	1/1	0.96	0.46	40,40,40,40	0
54	MG	2A	3196	1/1	0.97	0.48	51,51,51,51	0
54	MG	1a	1737	1/1	0.97	0.10	55,55,55,55	0
54	MG	1A	3833	1/1	0.97	0.12	20,20,20,20	0
54	MG	1H	202	1/1	0.97	0.14	58,58,58,58	0
54	MG	1A	3443	1/1	0.97	0.34	82,82,82,82	0
54	MG	2A	3648	1/1	0.97	0.19	71,71,71,71	0
54	MG	1a	1629	1/1	0.97	0.13	72,72,72,72	0
54	MG	1A	3397	1/1	0.97	0.16	53,53,53,53	0
54	MG	1A	3761	1/1	0.97	0.06	26,26,26,26	0
54	MG	1A	4010	1/1	0.97	0.11	66,66,66,66	0
54	MG	2A	3078	1/1	0.97	0.10	56,56,56,56	0
54	MG	1A	3762	1/1	0.97	0.25	38,38,38,38	0
54	MG	1P	202	1/1	0.97	0.37	36,36,36,36	0
54	MG	1A	3038	1/1	0.97	0.23	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	3446	1/1	0.97	0.21	31,31,31,31	0
54	MG	1A	3399	1/1	0.97	0.09	29,29,29,29	0
54	MG	2A	3660	1/1	0.97	0.06	68,68,68,68	0
54	MG	2A	3349	1/1	0.97	0.14	44,44,44,44	0
54	MG	1a	1638	1/1	0.97	0.26	72,72,72,72	0
54	MG	2A	3351	1/1	0.97	0.18	52,52,52,52	0
54	MG	1A	3566	1/1	0.97	0.18	36,36,36,36	0
54	MG	1A	3628	1/1	0.97	0.40	40,40,40,40	0
54	MG	2A	3667	1/1	0.97	0.14	46,46,46,46	0
54	MG	1A	3086	1/1	0.97	0.68	49,49,49,49	0
54	MG	1A	3359	1/1	0.97	0.17	33,33,33,33	0
54	MG	1a	1757	1/1	0.97	0.14	50,50,50,50	0
54	MG	1A	3846	1/1	0.97	0.23	51,51,51,51	0
54	MG	1A	3932	1/1	0.97	0.13	54,54,54,54	0
54	MG	2a	3062	1/1	0.97	0.09	75,75,75,75	0
54	MG	1A	3847	1/1	0.97	0.14	34,34,34,34	0
54	MG	2a	3064	1/1	0.97	0.28	69,69,69,69	0
54	MG	2A	3360	1/1	0.97	0.10	48,48,48,48	0
54	MG	1A	3077	1/1	0.97	0.50	37,37,37,37	0
54	MG	1A	3451	1/1	0.97	0.17	29,29,29,29	0
54	MG	1A	3772	1/1	0.97	0.55	43,43,43,43	0
54	MG	2A	3365	1/1	0.97	0.07	65,65,65,65	0
54	MG	1A	3937	1/1	0.97	0.16	47,47,47,47	0
54	MG	1A	3019	1/1	0.97	0.29	36,36,36,36	0
54	MG	1a	1766	1/1	0.97	0.14	57,57,57,57	0
54	MG	1a	1767	1/1	0.97	0.09	53,53,53,53	0
54	MG	1A	3939	1/1	0.97	0.17	57,57,57,57	0
54	MG	2A	3523	1/1	0.97	0.12	34,34,34,34	0
54	MG	1A	3364	1/1	0.97	0.23	29,29,29,29	0
54	MG	2A	3373	1/1	0.97	0.12	49,49,49,49	0
54	MG	1A	3330	1/1	0.97	0.23	21,21,21,21	0
54	MG	1A	3576	1/1	0.97	0.25	62,62,62,62	0
54	MG	1a	1772	1/1	0.97	0.15	62,62,62,62	0
54	MG	1A	4031	1/1	0.97	0.15	57,57,57,57	0
54	MG	1A	3778	1/1	0.97	0.17	37,37,37,37	0
54	MG	2A	3379	1/1	0.97	0.20	78,78,78,78	0
54	MG	1A	3202	1/1	0.97	0.45	39,39,39,39	0
54	MG	2A	3236	1/1	0.97	0.14	64,64,64,64	0
54	MG	1A	3247	1/1	0.97	0.27	47,47,47,47	0
54	MG	1A	3515	1/1	0.97	0.14	33,33,33,33	0
54	MG	2A	3111	1/1	0.97	0.08	45,45,45,45	0
54	MG	1A	3458	1/1	0.97	0.16	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1779	1/1	0.97	0.07	72,72,72,72	0
54	MG	1A	3581	1/1	0.97	0.14	48,48,48,48	0
54	MG	1A	3409	1/1	0.97	0.16	42,42,42,42	0
54	MG	2A	3244	1/1	0.97	0.49	46,46,46,46	0
54	MG	1A	3147	1/1	0.97	0.76	42,42,42,42	0
54	MG	2a	3095	1/1	0.97	0.10	53,53,53,53	0
54	MG	1A	3786	1/1	0.97	0.16	36,36,36,36	0
54	MG	1A	3952	1/1	0.97	0.11	31,31,31,31	0
54	MG	1A	3033	1/1	0.97	0.07	58,58,58,58	0
54	MG	2A	3395	1/1	0.97	0.10	37,37,37,37	0
54	MG	1B	212	1/1	0.97	0.22	47,47,47,47	0
54	MG	2A	3121	1/1	0.97	0.17	70,70,70,70	0
54	MG	1B	213	1/1	0.97	0.17	42,42,42,42	0
54	MG	1A	3462	1/1	0.97	0.15	19,19,19,19	0
54	MG	1A	3868	1/1	0.97	0.07	54,54,54,54	0
54	MG	1A	3028	1/1	0.97	0.72	38,38,38,38	0
54	MG	2A	3554	1/1	0.97	0.13	35,35,35,35	0
54	MG	1A	3373	1/1	0.97	0.08	54,54,54,54	0
54	MG	1A	3307	1/1	0.97	0.74	43,43,43,43	0
54	MG	1A	3650	1/1	0.97	0.20	50,50,50,50	0
54	MG	1A	3466	1/1	0.97	0.13	57,57,57,57	0
54	MG	1A	3527	1/1	0.97	0.16	58,58,58,58	0
54	MG	1A	3308	1/1	0.97	0.24	49,49,49,49	0
54	MG	1A	3252	1/1	0.97	0.53	33,33,33,33	0
54	MG	2a	3115	1/1	0.97	0.14	71,71,71,71	0
54	MG	2A	3562	1/1	0.97	0.49	74,74,74,74	0
54	MG	1A	3721	1/1	0.97	0.14	61,61,61,61	0
54	MG	1A	3013	1/1	0.97	0.28	29,29,29,29	0
54	MG	11	103	1/1	0.97	0.13	53,53,53,53	0
54	MG	1A	3420	1/1	0.97	0.12	35,35,35,35	0
54	MG	2A	3014	1/1	0.97	0.18	51,51,51,51	0
54	MG	1A	3472	1/1	0.97	0.14	50,50,50,50	0
54	MG	2A	3569	1/1	0.97	0.05	53,53,53,53	0
54	MG	2A	3570	1/1	0.97	0.15	47,47,47,47	0
54	MG	1A	3044	1/1	0.97	0.17	22,22,22,22	0
54	MG	1A	3475	1/1	0.97	0.17	32,32,32,32	0
54	MG	2A	3417	1/1	0.97	0.12	42,42,42,42	0
54	MG	1D	302	1/1	0.97	0.24	60,60,60,60	0
54	MG	15	102	1/1	0.97	0.58	33,33,33,33	0
54	MG	1A	3030	1/1	0.97	0.14	39,39,39,39	0
54	MG	2A	3273	1/1	0.97	0.15	20,20,20,20	0
54	MG	2A	3022	1/1	0.97	0.62	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3256	1/1	0.97	0.20	41,41,41,41	0
54	MG	2a	3135	1/1	0.97	0.07	72,72,72,72	0
54	MG	1A	3094	1/1	0.97	0.19	40,40,40,40	0
54	MG	1D	307	1/1	0.97	0.10	19,19,19,19	0
54	MG	2A	3151	1/1	0.97	0.15	64,64,64,64	0
54	MG	1a	1811	1/1	0.97	0.18	63,63,63,63	0
54	MG	1A	3426	1/1	0.97	0.15	24,24,24,24	0
54	MG	1A	3345	1/1	0.97	0.30	43,43,43,43	0
54	MG	1A	3482	1/1	0.97	0.10	47,47,47,47	0
54	MG	1A	3428	1/1	0.97	0.16	27,27,27,27	0
54	MG	1D	312	1/1	0.97	0.36	30,30,30,30	0
54	MG	2a	3146	1/1	0.97	0.28	78,78,78,78	0
54	MG	2A	3433	1/1	0.97	0.06	64,64,64,64	0
54	MG	2A	3590	1/1	0.97	0.13	37,37,37,37	0
54	MG	2A	3434	1/1	0.97	0.33	73,73,73,73	0
54	MG	1A	3429	1/1	0.97	0.24	54,54,54,54	0
54	MG	2A	3287	1/1	0.97	0.11	38,38,38,38	0
54	MG	2A	3437	1/1	0.97	0.11	56,56,56,56	0
54	MG	2A	3595	1/1	0.97	0.15	57,57,57,57	0
54	MG	1A	3485	1/1	0.97	0.19	63,63,63,63	0
54	MG	1A	3738	1/1	0.97	0.08	52,52,52,52	0
54	MG	1A	3121	1/1	0.97	0.18	27,27,27,27	0
54	MG	1A	3287	1/1	0.97	0.16	17,17,17,17	0
54	MG	2A	3442	1/1	0.97	0.16	58,58,58,58	0
54	MG	1A	3212	1/1	0.97	0.13	55,55,55,55	0
54	MG	2W	201	1/1	0.97	0.92	51,51,51,51	0
54	MG	1A	3817	1/1	0.97	0.22	77,77,77,77	0
54	MG	1A	3213	1/1	0.97	0.25	32,32,32,32	0
54	MG	2A	3447	1/1	0.97	0.18	57,57,57,57	0
54	MG	2A	3296	1/1	0.97	0.13	62,62,62,62	0
54	MG	1A	3612	1/1	0.97	0.17	27,27,27,27	0
54	MG	1A	3490	1/1	0.97	0.09	49,49,49,49	0
54	MG	2a	3168	1/1	0.97	0.09	69,69,69,69	0
54	MG	23	101	1/1	0.97	0.39	57,57,57,57	0
54	MG	25	101	1/1	0.97	1.48	49,49,49,49	0
54	MG	1A	3989	1/1	0.97	0.08	57,57,57,57	0
54	MG	2A	3301	1/1	0.97	0.15	48,48,48,48	0
54	MG	1A	3007	1/1	0.97	0.14	44,44,44,44	0
54	MG	1E	310	1/1	0.97	0.15	60,60,60,60	0
54	MG	1F	301	1/1	0.97	0.15	31,31,31,31	0
54	MG	1A	3747	1/1	0.97	0.35	45,45,45,45	0
54	MG	1A	3748	1/1	0.97	0.14	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	1A	3389	1/1	0.97	0.20	21,21,21,21	0
54	MG	2A	3308	1/1	0.97	0.18	50,50,50,50	0
54	MG	1A	3750	1/1	0.97	0.15	39,39,39,39	0
54	MG	1F	309	1/1	0.97	0.38	35,35,35,35	0
54	MG	1F	310	1/1	0.97	0.18	59,59,59,59	0
54	MG	2A	3312	1/1	0.97	0.14	46,46,46,46	0
54	MG	2A	3621	1/1	0.97	0.05	66,66,66,66	0
54	MG	1A	3124	1/1	0.97	0.45	39,39,39,39	0
54	MG	1A	3996	1/1	0.97	0.05	55,55,55,55	0
54	MG	1A	3264	1/1	0.97	0.69	37,37,37,37	0
54	MG	1a	1843	1/1	0.97	0.17	85,85,85,85	0
54	MG	1F	314	1/1	0.97	0.79	51,51,51,51	0
55	HGR	1A	4032	36/36	0.97	0.25	25,29,35,40	0
54	MG	1A	3177	1/1	0.97	0.26	32,32,32,32	0
54	MG	1a	1725	1/1	0.97	0.12	71,71,71,71	0
54	MG	1A	3999	1/1	0.97	0.17	58,58,58,58	0
54	MG	1A	3829	1/1	0.97	0.55	43,43,43,43	0
54	MG	2A	3323	1/1	0.97	0.25	61,61,61,61	0
54	MG	1A	3096	1/1	0.97	0.18	24,24,24,24	0
54	MG	1A	4003	1/1	0.97	0.14	58,58,58,58	0
54	MG	2A	3477	1/1	0.97	0.08	75,75,75,75	0
54	MG	1a	1851	1/1	0.97	0.12	71,71,71,71	0
54	MG	2A	3480	1/1	0.97	0.10	42,42,42,42	0
54	MG	2a	3028	1/1	0.97	0.09	87,87,87,87	0
54	MG	2A	3065	1/1	0.97	0.53	65,65,65,65	0
54	MG	1A	3159	1/1	0.97	0.42	40,40,40,40	0
59	ZN	1n	104	1/1	0.97	0.12	74,74,74,74	0
54	MG	1A	3268	1/1	0.97	0.35	43,43,43,43	0
54	MG	1a	1733	1/1	0.97	0.20	56,56,56,56	0
59	ZN	29	501	1/1	0.97	0.12	73,73,73,73	0
54	MG	1G	204	1/1	0.97	0.13	56,56,56,56	0
54	MG	1A	3006	1/1	0.98	0.17	29,29,29,29	0
54	MG	2A	3508	1/1	0.98	0.06	66,66,66,66	0
54	MG	2E	304	1/1	0.98	0.15	30,30,30,30	0
54	MG	1A	3510	1/1	0.98	0.14	50,50,50,50	0
54	MG	1A	3017	1/1	0.98	0.59	39,39,39,39	0
54	MG	1A	3242	1/1	0.98	0.57	34,34,34,34	0
54	MG	1A	3844	1/1	0.98	0.19	36,36,36,36	0
54	MG	1B	228	1/1	0.98	0.20	71,71,71,71	0
54	MG	1A	3047	1/1	0.98	0.19	16,16,16,16	0
54	MG	1A	3018	1/1	0.98	0.50	32,32,32,32	0
54	MG	1A	3473	1/1	0.98	0.07	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	3294	1/1	0.98	0.12	47,47,47,47	0
54	MG	1A	3516	1/1	0.98	0.17	28,28,28,28	0
54	MG	1A	3273	1/1	0.98	0.52	39,39,39,39	0
54	MG	1A	3668	1/1	0.98	0.15	50,50,50,50	0
54	MG	1U	205	1/1	0.98	0.60	36,36,36,36	0
54	MG	2A	3299	1/1	0.98	0.16	42,42,42,42	0
54	MG	1A	3194	1/1	0.98	0.43	39,39,39,39	0
54	MG	2A	3197	1/1	0.98	0.10	54,54,54,54	0
54	MG	1A	3852	1/1	0.98	0.18	23,23,23,23	0
54	MG	1A	3567	1/1	0.98	0.10	38,38,38,38	0
54	MG	1A	3436	1/1	0.98	0.14	30,30,30,30	0
54	MG	1A	3477	1/1	0.98	0.10	65,65,65,65	0
54	MG	1A	3730	1/1	0.98	0.32	41,41,41,41	0
54	MG	1A	3521	1/1	0.98	0.21	69,69,69,69	0
54	MG	2A	3645	1/1	0.98	0.07	47,47,47,47	0
54	MG	2A	3103	1/1	0.98	0.13	68,68,68,68	0
54	MG	1A	3365	1/1	0.98	0.17	51,51,51,51	0
54	MG	1A	3105	1/1	0.98	0.55	35,35,35,35	0
54	MG	1a	1734	1/1	0.98	0.14	34,34,34,34	0
54	MG	1A	3796	1/1	0.98	0.10	40,40,40,40	0
54	MG	1a	1736	1/1	0.98	0.11	74,74,74,74	0
54	MG	1a	1826	1/1	0.98	0.12	63,63,63,63	0
54	MG	1D	317	1/1	0.98	0.28	47,47,47,47	0
54	MG	2A	3539	1/1	0.98	0.06	76,76,76,76	0
54	MG	2A	3316	1/1	0.98	0.19	32,32,32,32	0
54	MG	2A	3015	1/1	0.98	0.50	41,41,41,41	0
54	MG	1a	1828	1/1	0.98	0.15	71,71,71,71	0
54	MG	2a	3124	1/1	0.98	0.04	60,60,60,60	0
54	MG	1A	3861	1/1	0.98	0.27	45,45,45,45	0
54	MG	2A	3659	1/1	0.98	0.10	74,74,74,74	0
54	MG	1A	3334	1/1	0.98	0.17	33,33,33,33	0
54	MG	10	101	1/1	0.98	0.23	46,46,46,46	0
54	MG	2A	3662	1/1	0.98	0.14	46,46,46,46	0
54	MG	1E	302	1/1	0.98	0.57	44,44,44,44	0
54	MG	1a	1654	1/1	0.98	0.16	47,47,47,47	0
54	MG	1E	303	1/1	0.98	0.38	43,43,43,43	0
54	MG	1A	3735	1/1	0.98	0.12	46,46,46,46	0
54	MG	2A	3326	1/1	0.98	0.13	33,33,33,33	0
54	MG	1A	3001	1/1	0.98	0.17	41,41,41,41	0
54	MG	1A	3575	1/1	0.98	0.19	36,36,36,36	0
54	MG	1A	3306	1/1	0.98	0.32	40,40,40,40	0
54	MG	1a	1748	1/1	0.98	0.19	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	1A	3174	1/1	0.98	0.22	34,34,34,34	0
54	MG	1a	1841	1/1	0.98	0.14	79,79,79,79	0
54	MG	1A	3136	1/1	0.98	0.66	33,33,33,33	0
54	MG	2A	3444	1/1	0.98	0.12	69,69,69,69	0
54	MG	2a	3143	1/1	0.98	0.27	70,70,70,70	0
54	MG	1A	3372	1/1	0.98	0.22	31,31,31,31	0
54	MG	1A	3684	1/1	0.98	0.37	48,48,48,48	0
54	MG	1a	1753	1/1	0.98	0.12	53,53,53,53	0
54	MG	2A	3130	1/1	0.98	0.22	36,36,36,36	0
54	MG	1F	302	1/1	0.98	0.30	40,40,40,40	0
54	MG	1A	3176	1/1	0.98	0.63	41,41,41,41	0
54	MG	1A	3744	1/1	0.98	0.15	41,41,41,41	0
54	MG	1A	3531	1/1	0.98	0.13	50,50,50,50	0
54	MG	1F	306	1/1	0.98	0.25	35,35,35,35	0
54	MG	15	104	1/1	0.98	0.30	29,29,29,29	0
54	MG	1A	3251	1/1	0.98	0.14	51,51,51,51	0
54	MG	1F	308	1/1	0.98	0.31	30,30,30,30	0
54	MG	2A	3042	1/1	0.98	0.08	29,29,29,29	0
54	MG	1A	3410	1/1	0.98	0.16	34,34,34,34	0
54	MG	2A	3141	1/1	0.98	0.10	59,59,59,59	0
54	MG	1A	3534	1/1	0.98	0.19	31,31,31,31	0
54	MG	1A	3877	1/1	0.98	0.15	38,38,38,38	0
54	MG	1A	3535	1/1	0.98	0.16	24,24,24,24	0
54	MG	1A	3059	1/1	0.98	0.16	21,21,21,21	0
54	MG	2A	3146	1/1	0.98	0.15	76,76,76,76	0
54	MG	1A	3122	1/1	0.98	0.16	29,29,29,29	0
54	MG	17	105	1/1	0.98	0.46	42,42,42,42	0
54	MG	2a	3166	1/1	0.98	0.16	55,55,55,55	0
54	MG	1A	3752	1/1	0.98	0.24	26,26,26,26	0
54	MG	1a	1862	1/1	0.98	0.14	44,44,44,44	0
54	MG	1A	3157	1/1	0.98	0.67	37,37,37,37	0
54	MG	1A	3884	1/1	0.98	0.16	43,43,43,43	0
54	MG	1A	3050	1/1	0.98	0.43	55,55,55,55	0
54	MG	1A	3452	1/1	0.98	0.18	19,19,19,19	0
54	MG	2A	3363	1/1	0.98	0.09	66,66,66,66	0
54	MG	1A	3958	1/1	0.98	0.12	58,58,58,58	0
54	MG	2A	3475	1/1	0.98	0.14	57,57,57,57	0
54	MG	2A	3156	1/1	0.98	0.40	48,48,48,48	0
54	MG	1A	3415	1/1	0.98	0.15	33,33,33,33	0
54	MG	2A	3478	1/1	0.98	0.13	30,30,30,30	0
54	MG	2A	3710	1/1	0.98	0.14	64,64,64,64	0
54	MG	1A	3109	1/1	0.98	0.35	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	3229	1/1	0.98	0.54	39,39,39,39	0
54	MG	2A	3369	1/1	0.98	0.15	70,70,70,70	0
54	MG	1A	3644	1/1	0.98	0.16	28,28,28,28	0
54	MG	1A	3205	1/1	0.98	0.49	41,41,41,41	0
54	MG	1N	202	1/1	0.98	0.28	49,49,49,49	0
54	MG	1a	1691	1/1	0.98	0.17	45,45,45,45	0
54	MG	2k	201	1/1	0.98	0.10	57,57,57,57	0
54	MG	1A	3141	1/1	0.98	0.18	26,26,26,26	0
54	MG	1A	3702	1/1	0.98	0.18	71,71,71,71	0
54	MG	1A	3499	1/1	0.98	0.20	49,49,49,49	0
54	MG	1A	3383	1/1	0.98	0.09	26,26,26,26	0
54	MG	1A	3598	1/1	0.98	0.24	32,32,32,32	0
54	MG	1A	3706	1/1	0.98	0.27	55,55,55,55	0
54	MG	1A	3421	1/1	0.98	0.26	43,43,43,43	0
54	MG	1A	3024	1/1	0.98	0.17	24,24,24,24	0
54	MG	1A	3143	1/1	0.98	0.21	31,31,31,31	0
54	MG	1A	3073	1/1	0.98	0.16	41,41,41,41	0
54	MG	1A	3062	1/1	0.98	0.30	34,34,34,34	0
54	MG	2A	3385	1/1	0.98	0.18	64,64,64,64	0
54	MG	2A	3276	1/1	0.98	0.13	42,42,42,42	0
54	MG	2D	302	1/1	0.98	0.48	52,52,52,52	0
54	MG	1Q	202	1/1	0.98	0.30	45,45,45,45	0
54	MG	1A	3655	1/1	0.98	0.31	42,42,42,42	0
54	MG	1A	3906	1/1	0.98	0.15	42,42,42,42	0
59	ZN	16	501	1/1	0.98	0.26	47,47,47,47	0
54	MG	1A	3774	1/1	0.98	0.36	54,54,54,54	0
54	MG	1A	3908	1/1	0.98	0.10	73,73,73,73	0
54	MG	1A	3043	1/1	0.98	0.16	36,36,36,36	0
59	ZN	25	102	1/1	0.98	0.18	68,68,68,68	0
54	MG	1A	3166	1/1	0.98	0.37	36,36,36,36	0
54	MG	1A	3025	1/1	0.98	0.62	48,48,48,48	0
54	MG	1A	3235	1/1	0.99	0.32	31,31,31,31	0
54	MG	1A	3756	1/1	0.99	0.29	61,61,61,61	0
54	MG	1A	3966	1/1	0.99	0.09	49,49,49,49	0
54	MG	1A	3286	1/1	0.99	0.18	22,22,22,22	0
54	MG	1A	3467	1/1	0.99	0.14	27,27,27,27	0
54	MG	1A	3670	1/1	0.99	0.85	55,55,55,55	0
54	MG	1A	4002	1/1	0.99	0.17	18,18,18,18	0
54	MG	2A	3007	1/1	0.99	0.19	45,45,45,45	0
54	MG	1A	3003	1/1	0.99	0.14	27,27,27,27	0
54	MG	1A	3390	1/1	0.99	0.11	19,19,19,19	0
54	MG	1A	3882	1/1	0.99	0.23	33,33,33,33	0

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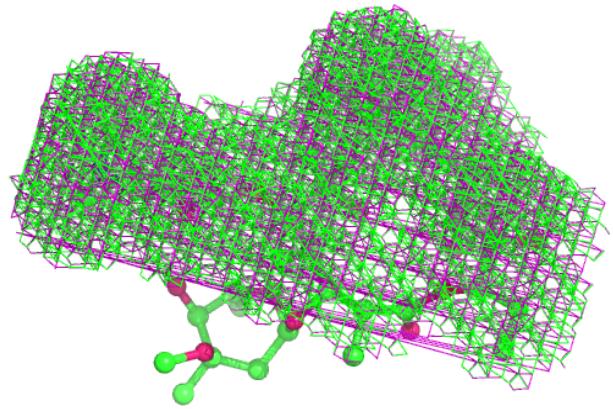
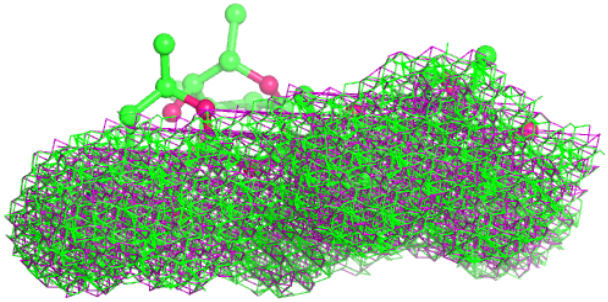
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1728	1/1	0.99	0.19	65,65,65,65	0
54	MG	1A	3897	1/1	0.99	0.33	39,39,39,39	0
54	MG	1A	3360	1/1	0.99	0.16	15,15,15,15	0
54	MG	2A	3344	1/1	0.99	0.09	36,36,36,36	0
54	MG	1a	1650	1/1	0.99	0.15	55,55,55,55	0
54	MG	1A	3361	1/1	0.99	0.21	36,36,36,36	0
59	ZN	1Y	202	1/1	0.99	0.20	62,62,62,62	0
54	MG	1A	3407	1/1	0.99	0.16	57,57,57,57	0
59	ZN	15	109	1/1	0.99	0.20	52,52,52,52	0
54	MG	1A	3886	1/1	0.99	0.20	28,28,28,28	0
59	ZN	19	104	1/1	0.99	0.27	65,65,65,65	0
54	MG	2a	3010	1/1	0.99	0.23	54,54,54,54	0
54	MG	1A	3263	1/1	0.99	0.29	34,34,34,34	0
54	MG	13	101	1/1	0.99	0.19	33,33,33,33	0
54	MG	2a	3109	1/1	0.99	0.05	75,75,75,75	0
59	ZN	26	501	1/1	0.99	0.19	65,65,65,65	0
54	MG	1D	303	1/1	0.99	0.30	40,40,40,40	0
54	MG	1A	3546	1/1	0.99	0.21	26,26,26,26	0
60	SF4	1d	303	8/8	0.99	0.18	60,65,70,78	0
60	SF4	2d	501	8/8	0.99	0.19	67,82,83,88	0

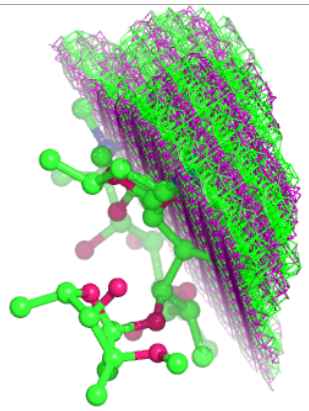
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around ZIT 2A 3713:

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

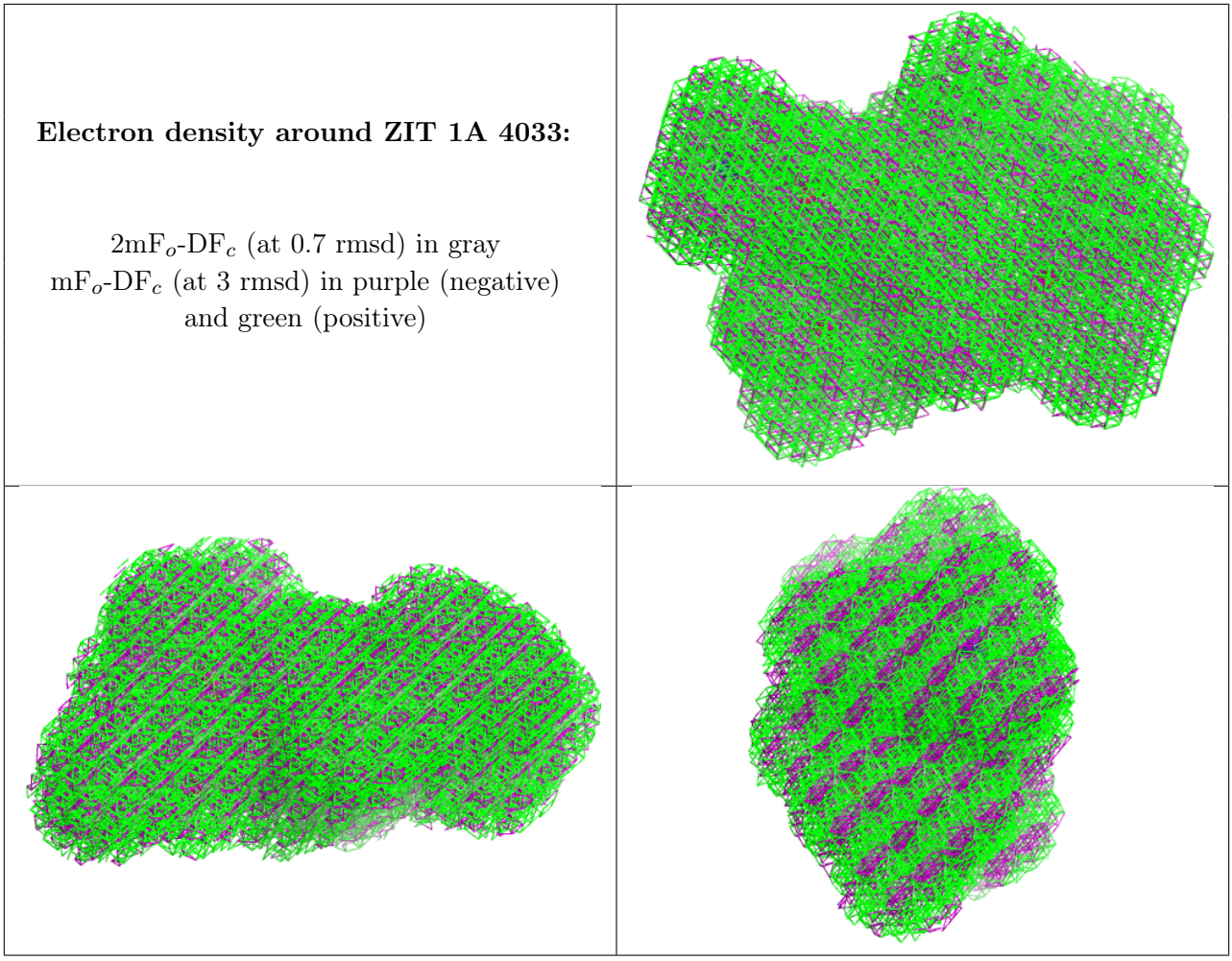






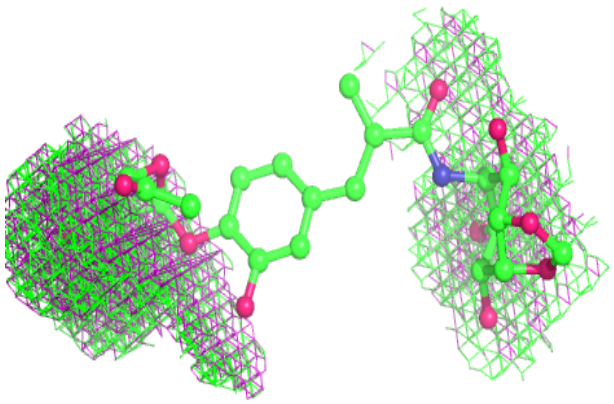
Electron density around ZIT 1A 4033:

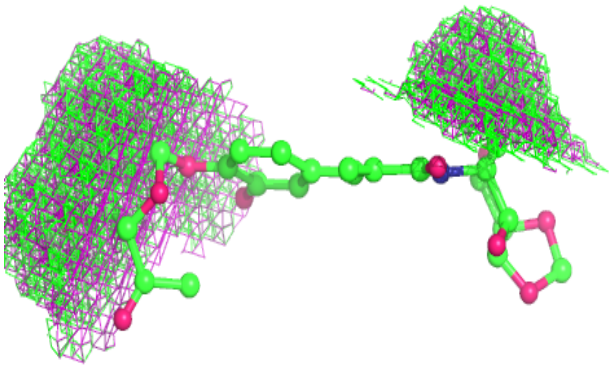
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

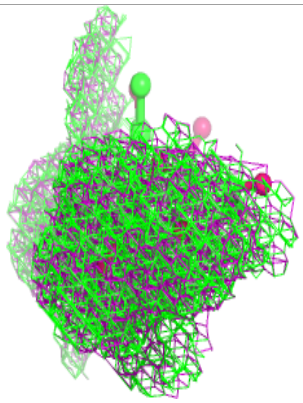


Electron density around HGR 2A 3712:

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

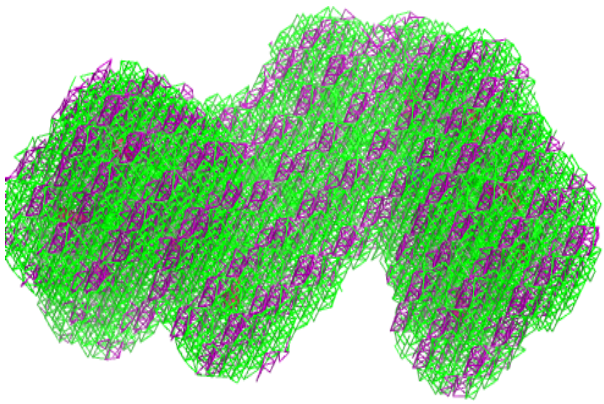


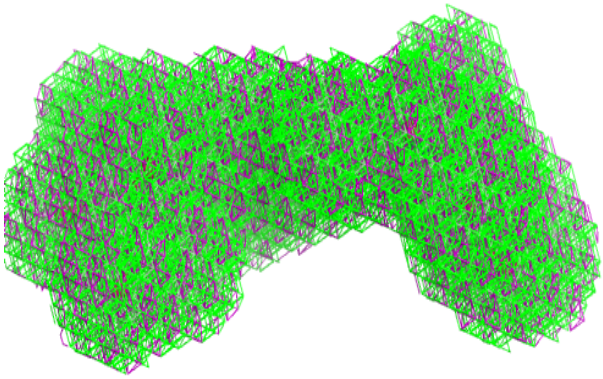


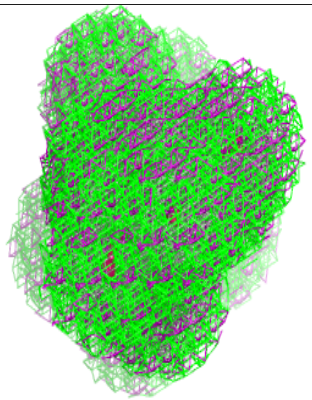


Electron density around HGR 1A 4032:

$2mF_o$-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.