



# wwPDB X-ray Structure Validation Summary Report ⓘ

Jan 2, 2024 – 09:00 pm GMT

PDB ID : 4WR6  
Title : Complex of 70S ribosome with tRNA-Tyr and mRNA with A-A mismatch in the first position in the A-site.  
Authors : Rozov, A.; Demeshkina, N.; Yusupov, M.; Yusupova, G.  
Deposited on : 2014-10-23  
Resolution : 3.05 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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>.

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

MolProbity : 4.02b-467  
Mogul : 1.8.4, CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.36  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.36

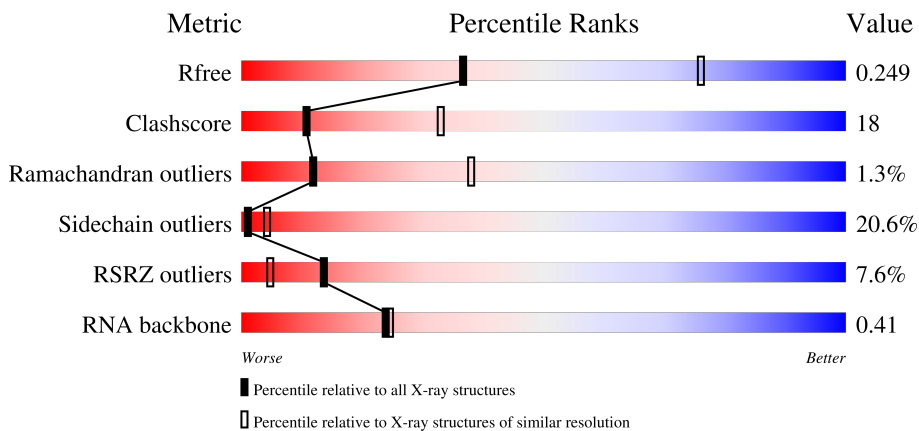
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

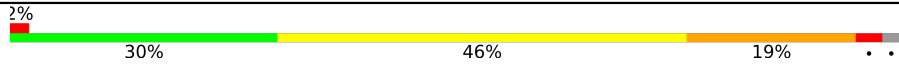

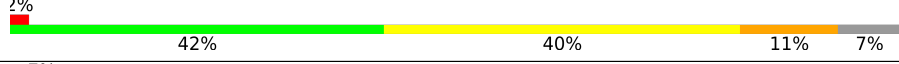
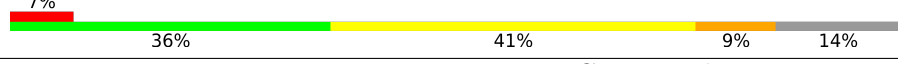
The reported resolution of this entry is 3.05 Å.

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.






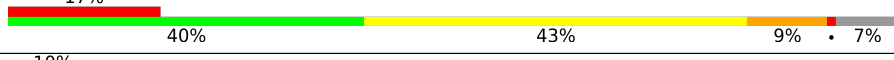

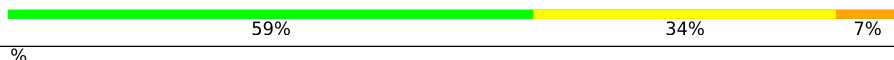

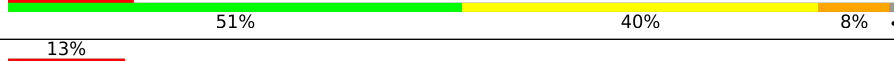

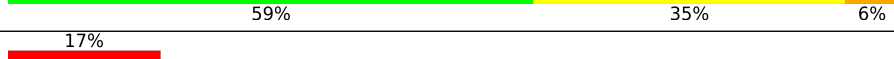

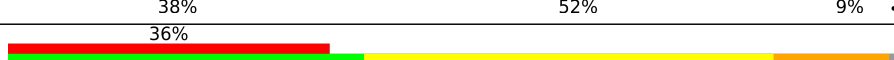
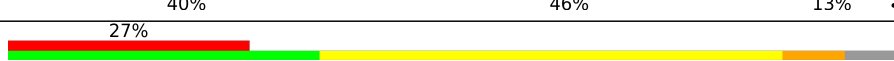
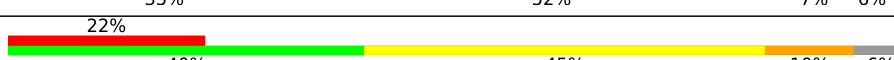


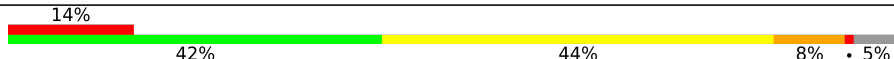
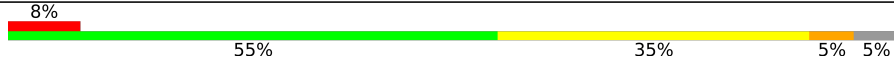



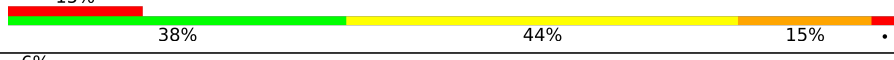
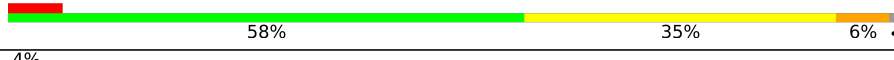
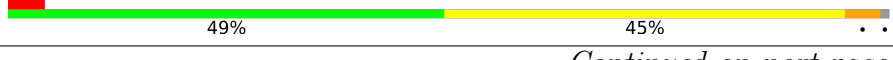

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1754 (3.10-3.02)
Clashscore	141614	1864 (3.10-3.02)
Ramachandran outliers	138981	1794 (3.10-3.02)
Sidechain outliers	138945	1793 (3.10-3.02)
RSRZ outliers	127900	1713 (3.10-3.02)
RNA backbone	3102	1036 (3.32-2.80)

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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	13	1522	
2	12	256	
2	1E	256	
3	22	239	

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Mol	Chain	Length	Quality of chain
3	2E	239	
4	32	209	
4	3E	209	
5	42	162	
5	4E	162	
6	52	101	
6	5E	101	
7	62	156	
7	6E	156	
8	72	138	
8	7E	138	
9	82	128	
9	8E	128	
10	1A	105	
10	1I	105	
11	2A	129	
11	2I	129	
12	3A	132	
12	3I	132	
13	4A	126	
13	4I	126	
14	5A	61	
14	5I	61	
15	6A	89	
15	6I	89	

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Mol	Chain	Length	Quality of chain
16	7A	88	
16	7I	88	
17	8A	105	
17	8I	105	
18	9A	88	
18	9I	88	
19	AA	93	
19	AI	93	
20	BA	106	
20	BI	106	
21	1B	27	
21	1F	27	
22	1K	85	
22	3K	85	
23	2K	77	
24	4K	27	
25	14	2917	
25	1H	2917	
26	16	122	
26	1J	122	
27	11	276	
27	19	276	
28	21	206	
28	29	206	
29	31	210	

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Mol	Chain	Length	Quality of chain
29	39	210	4% 37% 50% 11% ..
30	41	182	5% 41% 49% 9% .
30	49	182	10% 44% 46% 10% .
31	51	180	4% 39% 47% 10% ..
31	59	180	37% 35% 50% 9% . 5%
32	61	148	4% 37% 47% 14% .
32	69	148	9% 40% 43% 15% ..
33	15	140	19% 54% 34% 11% .
33	58	140	4% 45% 44% 9% ..
34	25	122	5% 49% 39% 11%
34	68	122	2% 64% 31% 5%
35	35	150	19% 36% 43% 19% .
35	78	150	4% 38% 39% 21% .
36	45	141	37% 43% 45% 10% .
36	88	141	3% 48% 40% 10% .
37	55	118	12% 51% 38% 10% .
37	98	118	6% 46% 41% 14%
38	65	112	15% 35% 50% 13% ..
38	A8	112	4% 40% 46% 12% ..
39	75	146	5% 38% 47% 9% . 6%
39	B8	146	% 42% 40% 10% . 7%
40	85	118	13% 50% 40% 9% .
40	C8	118	10% 52% 39% 6% ..
41	95	101	16% 49% 40% 12%
41	D8	101	4% 50% 36% 12% .

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Mol	Chain	Length	Quality of chain
42	A5	113	
42	E8	113	
43	B5	96	
43	F8	96	
44	C5	110	
44	G8	110	
45	D5	206	
45	H8	206	
46	E5	85	
46	I8	85	
47	F5	98	
47	J8	98	
48	G5	72	
48	K8	72	
49	H5	60	
49	L8	60	
50	I5	71	
50	M8	71	
51	J5	60	
51	N8	60	
52	L5	49	
52	P8	49	
53	M5	65	
53	Q8	65	
54	1G	1522	

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Mol	Chain	Length	Quality of chain
55	1L	85	
55	3L	85	
56	2L	77	
57	4L	27	

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
58	MG	14	3064	-	-	-	X
58	MG	14	3146	-	-	-	X
58	MG	14	3187	-	-	-	X
58	MG	14	3229	-	-	-	X
58	MG	14	3289	-	-	-	X
58	MG	14	3298	-	-	-	X
58	MG	14	3308	-	-	-	X
58	MG	1H	3313	-	-	-	X
58	MG	1H	3359	-	-	-	X
58	MG	1H	3365	-	-	-	X
58	MG	1H	3366	-	-	-	X
58	MG	1H	3367	-	-	-	X
58	MG	1H	3370	-	-	-	X
58	MG	1H	3373	-	-	-	X

## 2 Entry composition [i](#)

There are 60 unique types of molecules in this entry. The entry contains 299318 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 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	13	1498	32207	14334	5973	10402	1498	0	0	0

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	1E	237	1924	1228	344	347	5	0	0	0
2	12	237	1924	1228	344	347	5	0	0	0

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	2E	205	1605	1011	313	280	1	0	0	0
3	22	206	1612	1016	314	281	1	0	0	0

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	3E	208	1702	1066	339	290	7	0	0	0
4	32	208	1702	1066	339	290	7	0	0	0

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	4E	151	1155	729	218	204	4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	42	151	1155	729	218	204	4	0	0	0

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	5E	101	842	531	155	153	3	0	0	0
6	52	101	842	531	155	153	3	0	0	0

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	6E	155	1256	781	252	217	6	0	0	0
7	62	155	1256	781	252	217	6	0	0	0

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	7E	138	1115	705	215	192	3	0	0	0
8	72	138	1115	705	215	192	3	0	0	0

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
9	8E	127	1009	639	197	173	0	0	0
9	82	127	1009	639	197	173	0	0	0

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	1I	99	801	504	157	139	1	0	0	0
10	1A	99	801	504	157	139	1	0	0	0

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	2I	116	Total	C	N	O	S	0	0	0
			864	537	164	160	3			
11	2A	119	Total	C	N	O	S	0	0	0
			884	549	168	164	3			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	3I	125	Total	C	N	O	S	0	0	0
			975	614	196	164	1			
12	3A	125	Total	C	N	O	S	0	0	0
			975	614	196	164	1			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	4I	116	Total	C	N	O	S	0	0	0
			928	574	191	161	2			
13	4A	117	Total	C	N	O	S	0	0	0
			933	577	192	162	2			

- Molecule 14 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	5I	61	Total	C	N	O	S	0	0	0
			498	316	105	72	5			
14	5A	58	Total	C	N	O	S	0	0	0
			475	303	99	69	4			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	6I	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			
15	6A	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	72	Total	C	N	O	0	0	0
			590	376	117	97			
18	9A	69	Total	C	N	O	0	0	0
			564	361	110	93			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	83	Total	C	N	O	S	0	0	0
			665	424	124	115	2			
19	AA	82	Total	C	N	O	S	0	0	0
			640	407	118	113	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			
20	BA	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			

- Molecule 21 is a protein called 30S ribosomal protein THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	1F	22	Total	C	N	O	0	0	0
			188	116	44	28			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
21	1B	25	217	134	52	31	0	0	0

- Molecule 22 is a RNA chain called tRNA-Tyr.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
22	1K	85	1825	822	323	593	85	2	0	0	0
22	3K	85	1825	822	323	593	85	2	0	0	0

- Molecule 23 is a RNA chain called tRNA-fMet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
23	2K	77	1646	735	298	535	77	1	0	0	0

- Molecule 24 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
24	4K	15	349	158	75	100	16	0	1	0

- Molecule 25 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
25	1H	2912	62707	27911	11722	20163	2911	0	0	0
25	14	2907	62605	27865	11708	20126	2906	0	0	0

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	-	insertion	GB 48268
1H	493	G	-	insertion	GB 48268
1H	1228	G	-	insertion	GB 48268
14	161	U	-	insertion	GB 48268
14	493	G	-	insertion	GB 48268
14	1228	G	-	insertion	GB 48268

- Molecule 26 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
26	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 27 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	11	272	Total	C	N	O	S	0	0	0
			2115	1335	420	357	3			
27	19	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			

- Molecule 28 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	21	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			
28	29	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			

- Molecule 29 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
29	39	208	Total	C	N	O	S	0	0	0
			1627	1037	304	283	3			

- Molecule 30 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	41	181	Total	C	N	O	S	0	0	0
			1473	942	268	259	4			
30	49	181	Total	C	N	O	S	0	0	0
			1473	942	268	259	4			

- Molecule 31 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	51	174	Total	C	N	O	S	0	0	0
			1336	848	251	236	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	59	171	1316	835	247	233	1	0	0	0

- Molecule 32 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	61	146	1136	726	201	208	1	0	0	0
32	69	146	1136	726	201	208	1	0	0	0

- Molecule 33 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	58	138	1104	712	206	182	4	0	0	0
33	15	138	1104	712	206	182	4	0	0	0

- Molecule 34 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	68	122	932	588	171	169	4	0	0	0
34	25	122	932	588	171	169	4	0	0	0

- Molecule 35 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	78	150	1144	712	232	197	3	0	0	0
35	35	150	1144	712	232	197	3	0	0	0

- Molecule 36 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	88	141	1121	715	212	187	7	0	0	0
36	45	138	1098	702	208	181	7	0	0	0

- Molecule 37 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
37	55	117	Total	C	N	O		0	0	0
			959	599	202	158				

- Molecule 38 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
38	A8	111	Total	C	N	O	0	0	0
			881	556	176	149			
38	65	111	Total	C	N	O	0	0	0
			881	556	176	149			

- Molecule 39 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	B8	136	Total	C	N	O	0	0	0	
			1133	705	233	195				
39	75	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 40 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	C8	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			
40	85	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			

- Molecule 41 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	D8	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			
41	95	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			

- Molecule 42 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	E8	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			
42	A5	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			

- Molecule 43 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	F8	94	Total	C	N	O	S	0	0	0
			742	482	134	125	1			
43	B5	92	Total	C	N	O		0	0	0
			725	471	131	123				

- Molecule 44 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	G8	102	Total	C	N	O	S	0	0	0
			778	501	147	125	5			
44	C5	104	Total	C	N	O	S	0	0	0
			794	510	152	127	5			

- Molecule 45 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	H8	175	Total	C	N	O	S	0	0	0
			1397	892	251	251	3			
45	D5	179	Total	C	N	O	S	0	0	0
			1428	911	255	259	3			

- Molecule 46 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	I8	77	Total	C	N	O	S	0	0	0
			612	379	129	103	1			
46	E5	77	Total	C	N	O	S	0	0	0
			612	379	129	103	1			

- Molecule 47 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	J8	93	Total	C	N	O	S	0	0	0
			729	457	145	126	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	F5	97	762	481	150	130	1	0	0	0

- Molecule 48 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
48	K8	66	558	346	113	98	1	0	0	0
48	G5	66	558	346	113	98	1	0	0	0

- Molecule 49 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
49	L8	59	468	298	90	80		0	0	0
49	H5	59	468	298	90	80		0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
50	M8	66	533	335	96	97	5	0	0	0
50	I5	63	515	326	93	91	5	0	0	0

- Molecule 51 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
51	N8	49	374	232	76	61	5	0	0	0
51	J5	58	453	285	89	74	5	0	0	0

- Molecule 52 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
52	P8	45	391	240	97	52	2	0	0	0
52	L5	45	391	240	97	52	2	0	0	0

- Molecule 53 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	Q8	62	Total	C	N	O	S	0	0	0
			448	284	86	76	2			
53	M5	60	Total	C	N	O	S	0	0	0
			480	306	98	74	2			

- Molecule 54 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	1G	1498	Total	C	N	O	P	0	0	0
			32204	14334	5973	10400	1497			

- Molecule 55 is a RNA chain called tRNA-Tyr.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	1L	85	Total	C	N	O	P	0	0	0
			1807	807	323	592	85			
55	3L	85	Total	C	N	O	P	0	0	0
			1807	807	323	592	85			

- Molecule 56 is a RNA chain called tRNA-fMet.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace	
56	2L	77	Total	C	N	O	P	S	0	0	0
			1645	734	298	535	77	1			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
2L	18	C	U	conflict	GB 675817920

- Molecule 57 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	4L	16	Total	C	N	O	P	0	0	0
			349	158	75	100	16			

- Molecule 58 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	13	138	Total	Mg	0	0
			138	138		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	3E	1	Total Mg 1 1	0	0
58	4E	1	Total Mg 1 1	0	0
58	8E	1	Total Mg 1 1	0	0
58	3I	1	Total Mg 1 1	0	0
58	1K	1	Total Mg 1 1	0	0
58	2K	6	Total Mg 6 6	0	0
58	1H	475	Total Mg 475 475	0	0
58	16	13	Total Mg 13 13	0	0
58	11	1	Total Mg 1 1	0	0
58	21	2	Total Mg 2 2	0	0
58	31	4	Total Mg 4 4	0	0
58	78	1	Total Mg 1 1	0	0
58	98	2	Total Mg 2 2	0	0
58	I8	2	Total Mg 2 2	0	0
58	L8	2	Total Mg 2 2	0	0
58	P8	1	Total Mg 1 1	0	0
58	1G	90	Total Mg 90 90	0	0
58	1L	1	Total Mg 1 1	0	0
58	2L	3	Total Mg 3 3	0	0
58	3L	1	Total Mg 1 1	0	0
58	14	398	Total Mg 398 398	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1J	6	Total Mg 6 6	0	0
58	29	3	Total Mg 3 3	0	0
58	39	1	Total Mg 1 1	0	0
58	25	1	Total Mg 1 1	0	0
58	45	1	Total Mg 1 1	0	0
58	85	1	Total Mg 1 1	0	0
58	C5	1	Total Mg 1 1	0	0
58	L5	1	Total Mg 1 1	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	3E	1	Total Zn 1 1	0	0
59	5I	1	Total Zn 1 1	0	0
59	G8	1	Total Zn 1 1	0	0
59	32	1	Total Zn 1 1	0	0
59	5A	1	Total Zn 1 1	0	0
59	C5	1	Total Zn 1 1	0	0

- Molecule 60 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	13	100	Total O 100 100	0	0
60	3E	2	Total O 2 2	0	0
60	3I	2	Total O 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	5I	1	Total O 1 1	0	0
60	7I	1	Total O 1 1	0	0
60	1K	1	Total O 1 1	0	0
60	2K	6	Total O 6 6	0	0
60	4K	2	Total O 2 2	0	0
60	1H	538	Total O 538 538	0	0
60	16	11	Total O 11 11	0	0
60	11	4	Total O 4 4	0	0
60	21	2	Total O 2 2	0	0
60	31	4	Total O 4 4	0	0
60	78	4	Total O 4 4	0	0
60	D8	1	Total O 1 1	0	0
60	F8	1	Total O 1 1	0	0
60	L8	3	Total O 3 3	0	0
60	1G	51	Total O 51 51	0	0
60	32	1	Total O 1 1	0	0
60	BA	1	Total O 1 1	0	0
60	4L	1	Total O 1 1	0	0
60	14	409	Total O 409 409	0	0
60	19	7	Total O 7 7	0	0
60	29	2	Total O 2 2	0	0

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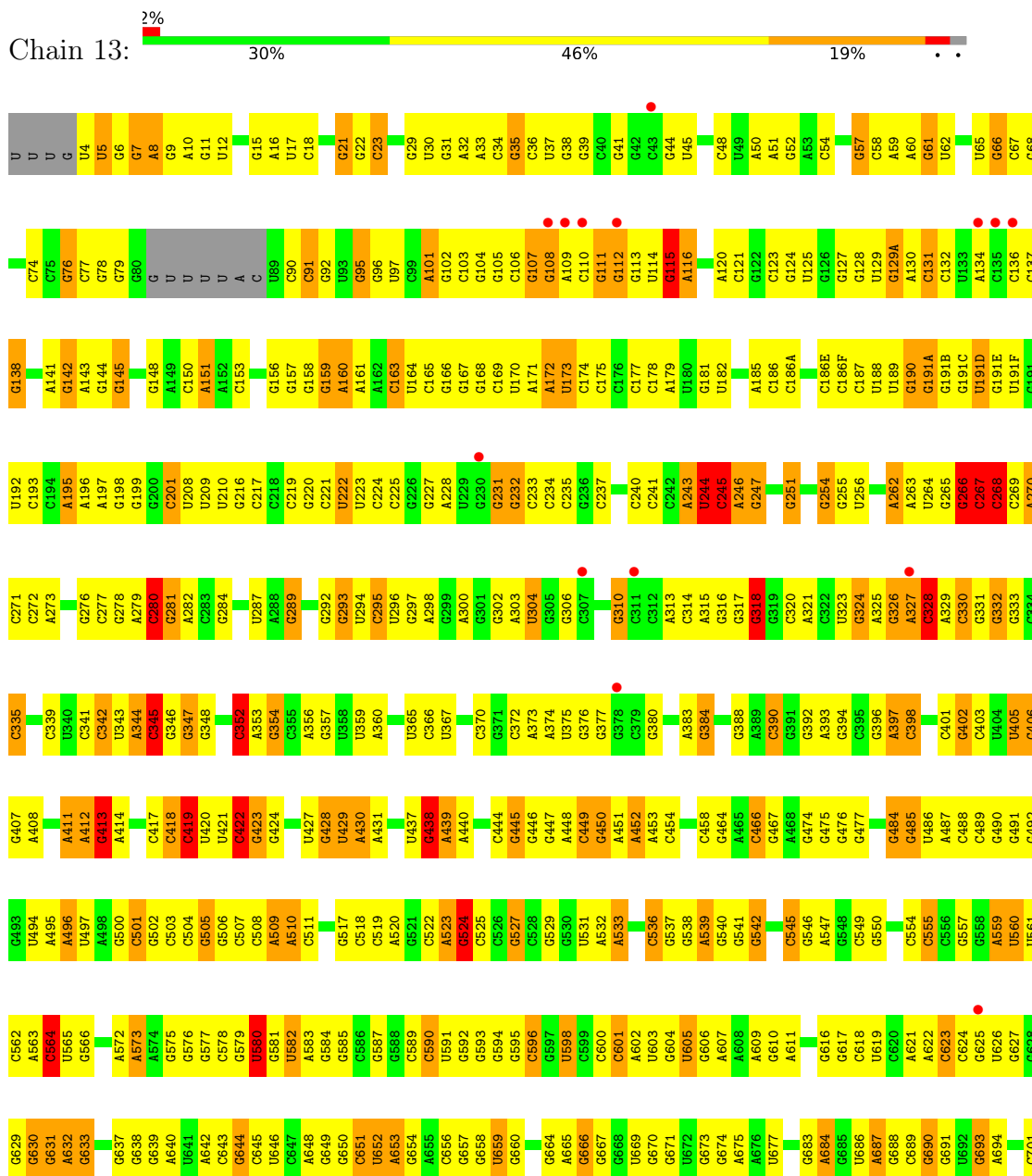
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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>	<b>ZeroOcc</b>	<b>AltConf</b>
60	39	4	Total O 4 4	0	0
60	35	1	Total O 1 1	0	0
60	55	1	Total O 1 1	0	0
60	75	1	Total O 1 1	0	0
60	85	1	Total O 1 1	0	0

### 3 Residue-property plots [i](#)

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

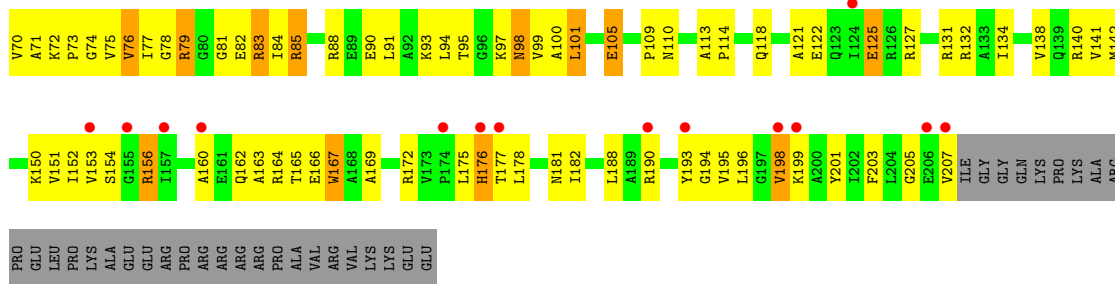
- Molecule 1: 16S ribosomal RNA



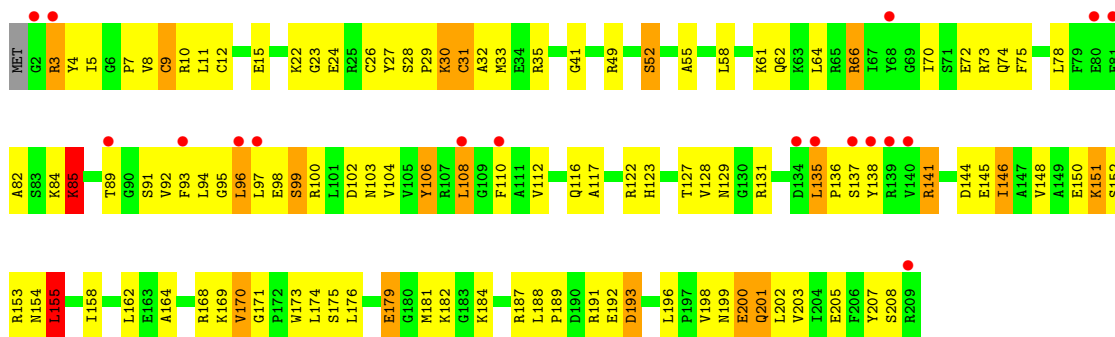




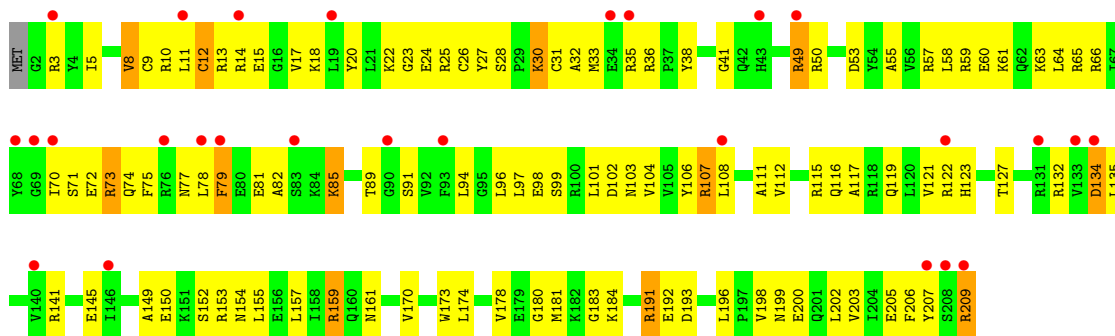




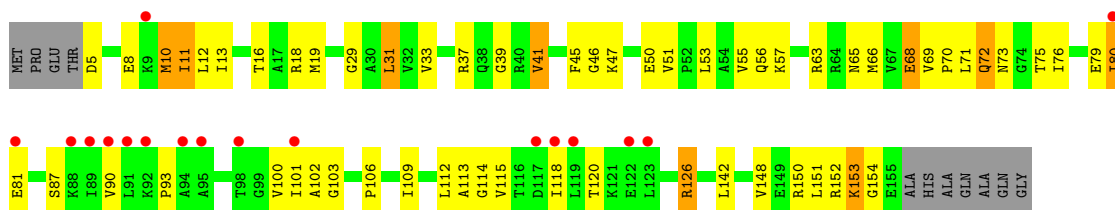
• Molecule 4: 30S ribosomal protein S4



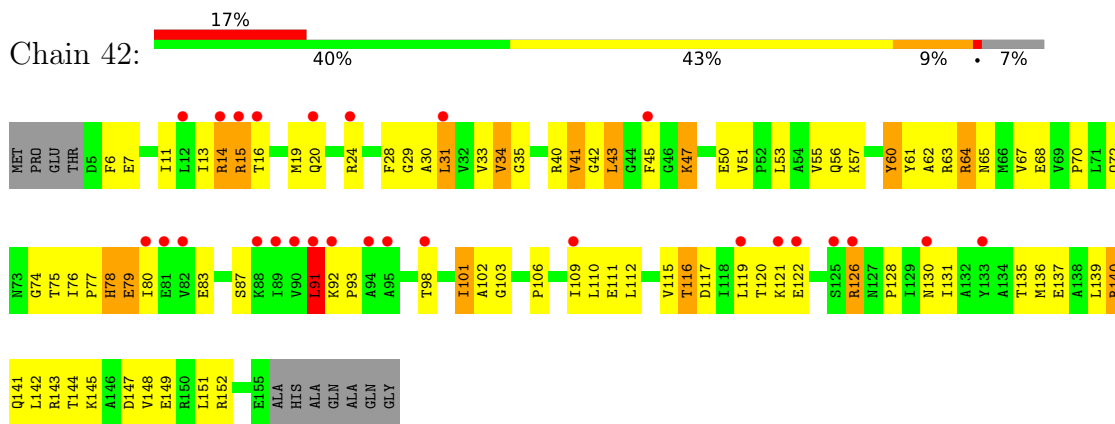
• Molecule 4: 30S ribosomal protein S4



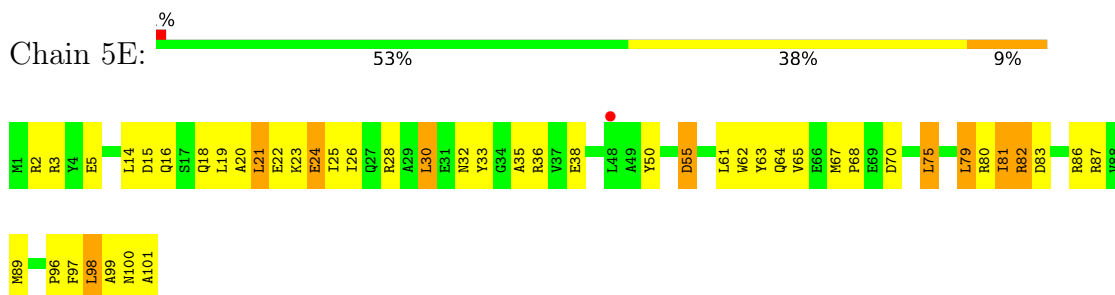
• Molecule 5: 30S ribosomal protein S5



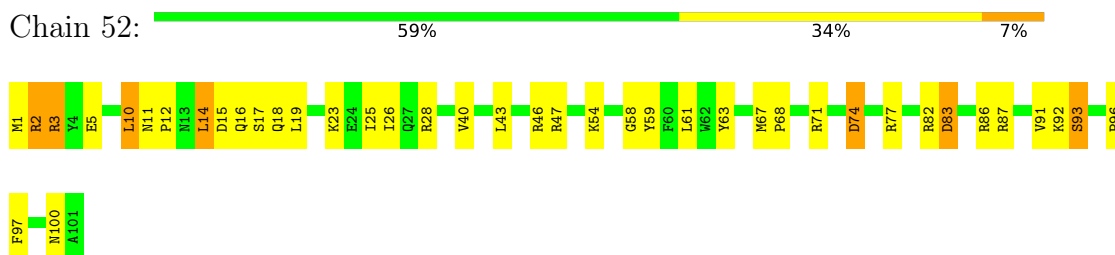
• Molecule 5: 30S ribosomal protein S5



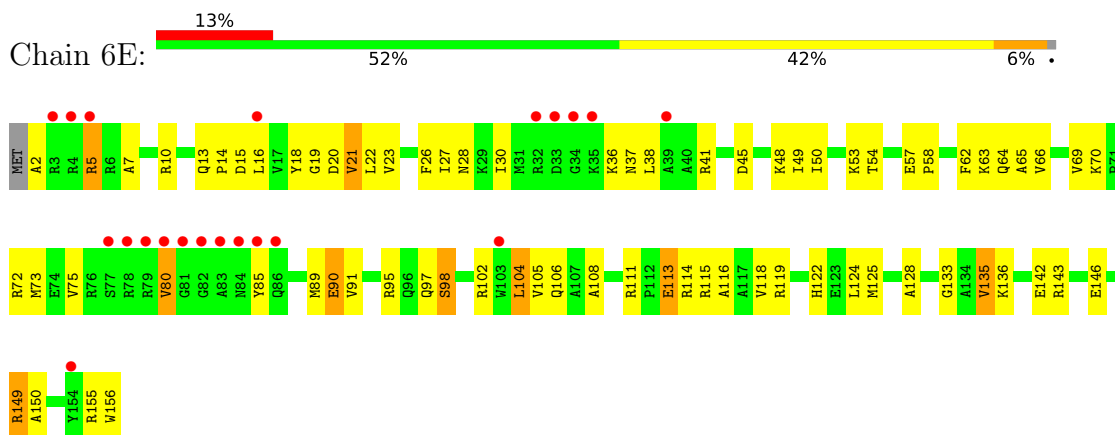
• Molecule 6: 30S ribosomal protein S6



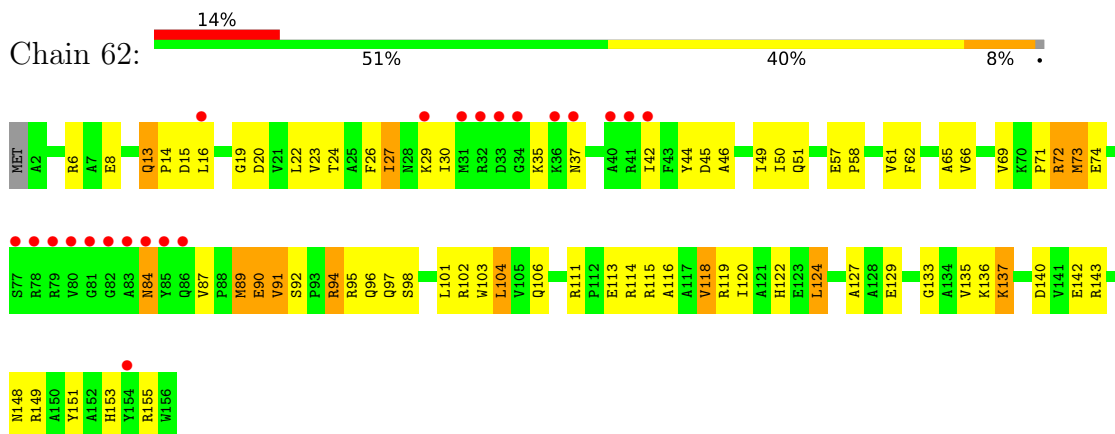
• Molecule 6: 30S ribosomal protein S6



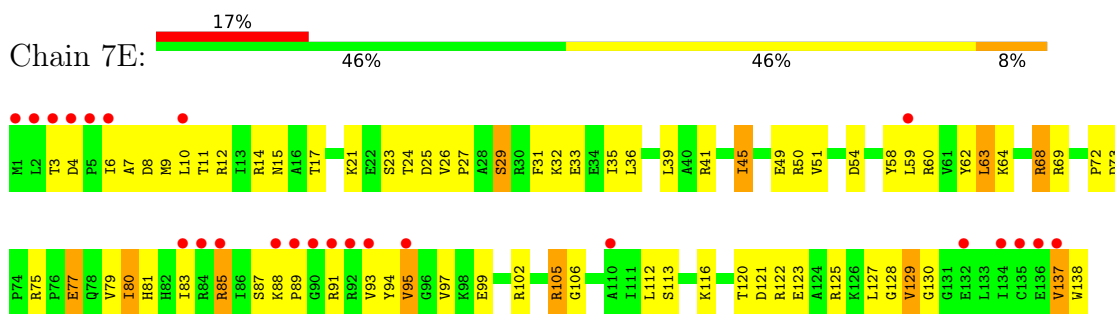
• Molecule 7: 30S ribosomal protein S7



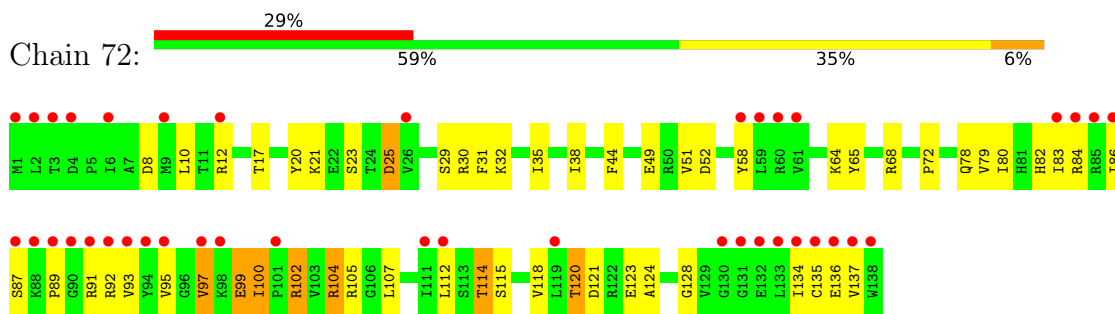
• Molecule 7: 30S ribosomal protein S7



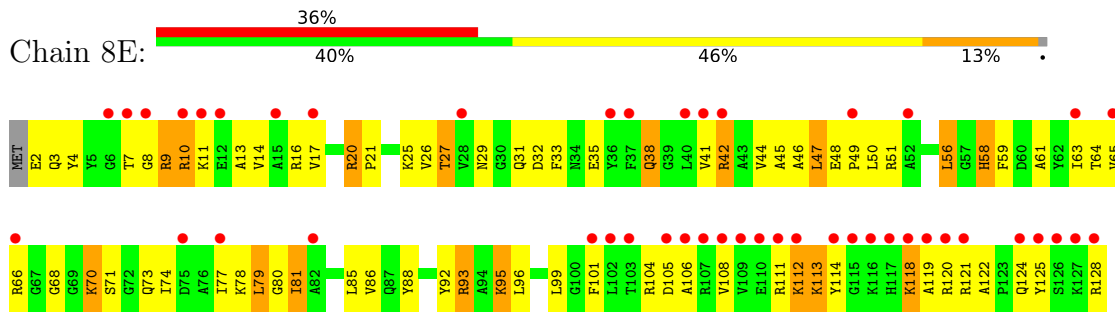
• Molecule 8: 30S ribosomal protein S8



• Molecule 8: 30S ribosomal protein S8

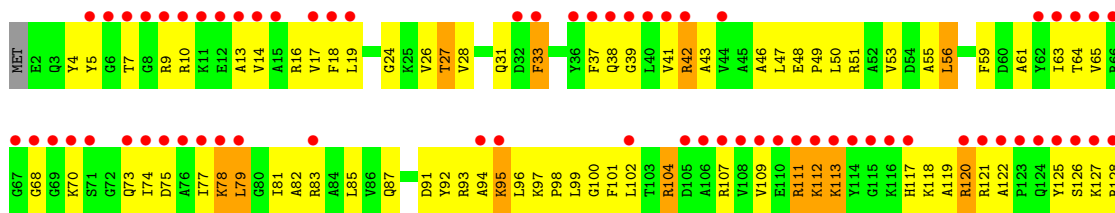


• Molecule 9: 30S ribosomal protein S9

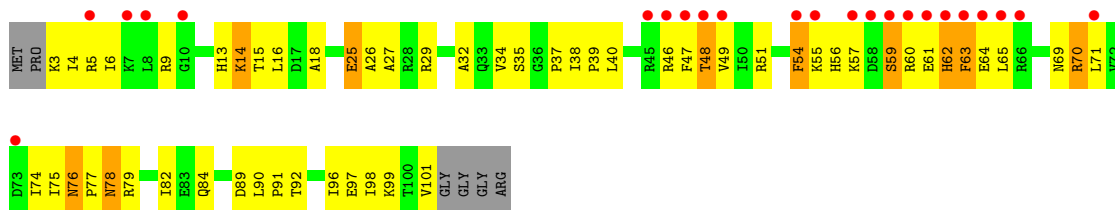


• Molecule 9: 30S ribosomal protein S9

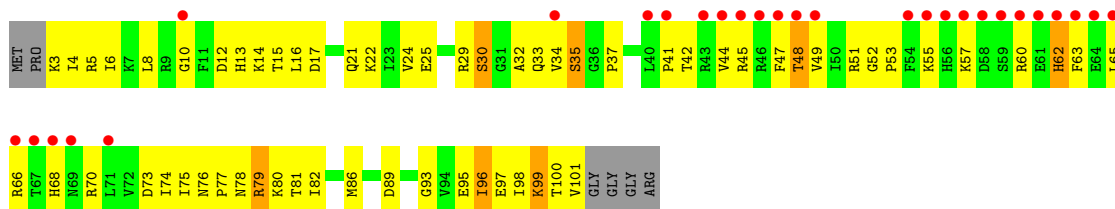




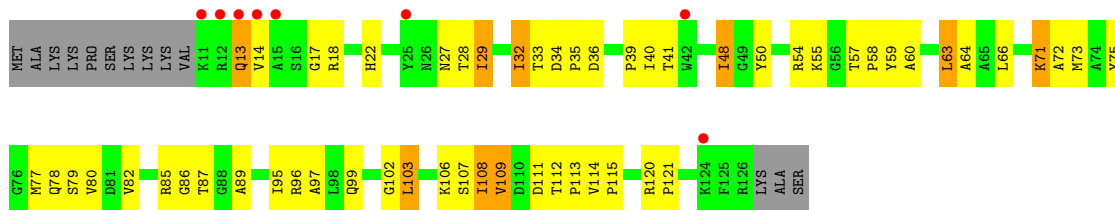
• Molecule 10: 30S ribosomal protein S10



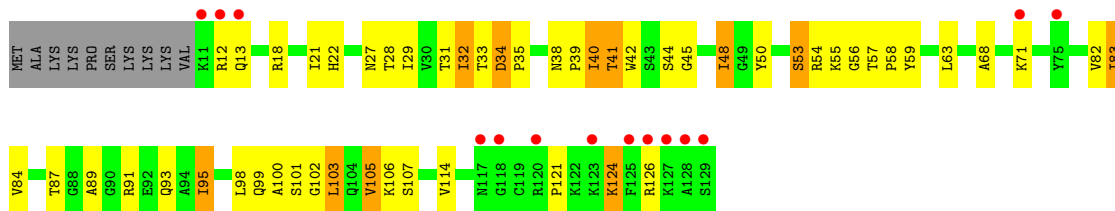
• Molecule 10: 30S ribosomal protein S10



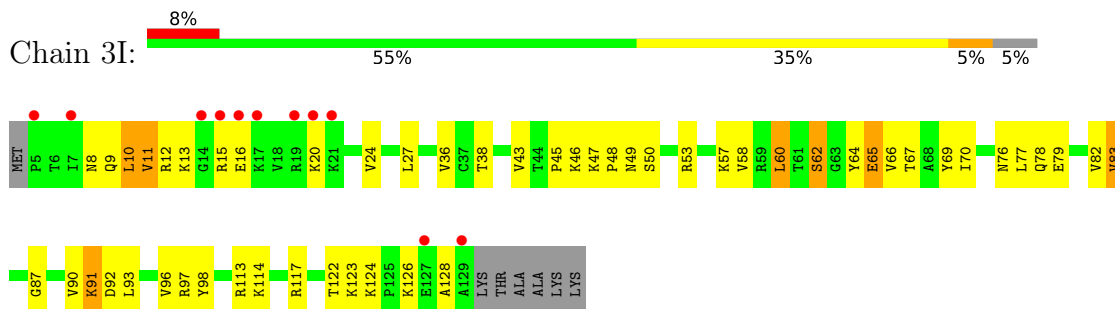
• Molecule 11: 30S ribosomal protein S11



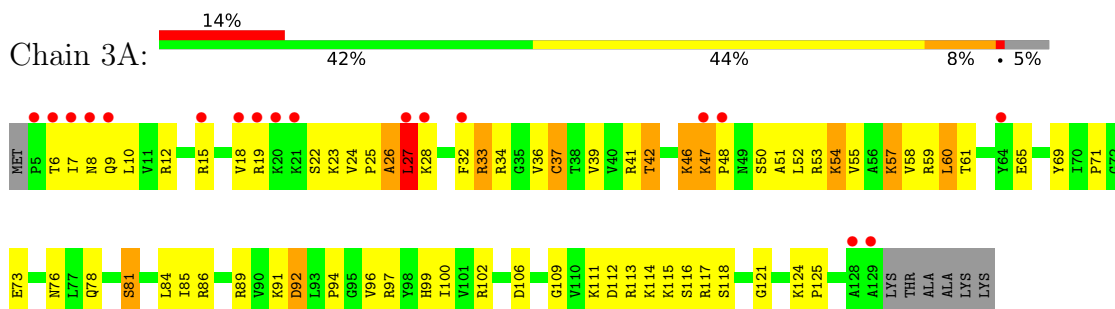
• Molecule 11: 30S ribosomal protein S11



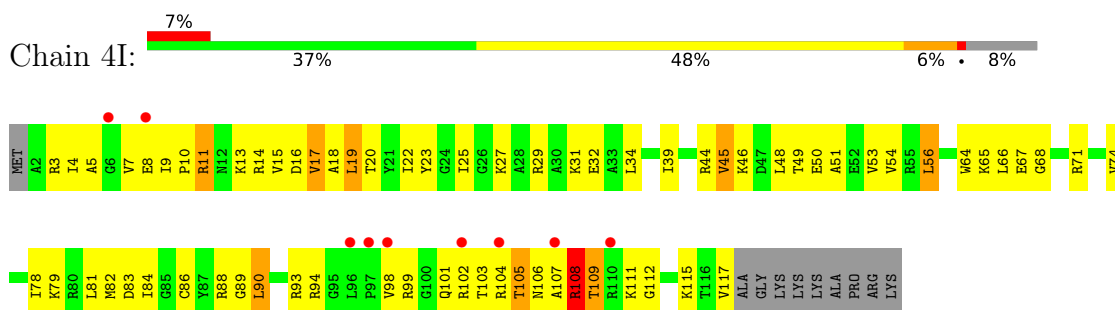
• Molecule 12: 30S ribosomal protein S12



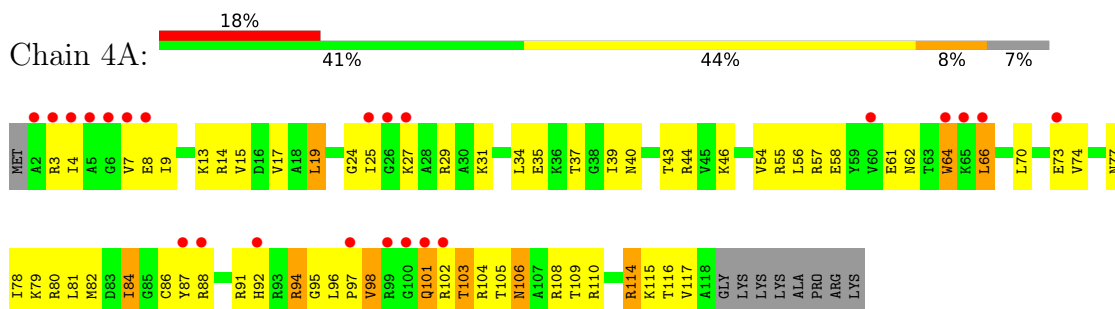
• Molecule 12: 30S ribosomal protein S12



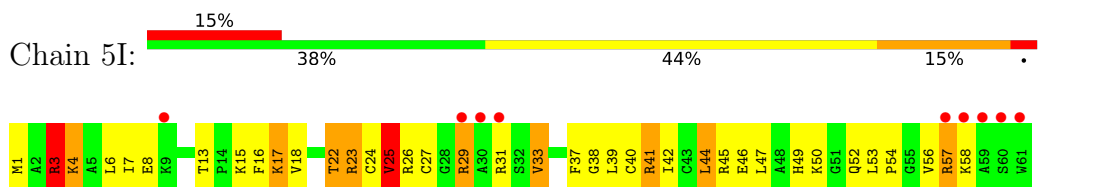
• Molecule 13: 30S ribosomal protein S13



• Molecule 13: 30S ribosomal protein S13



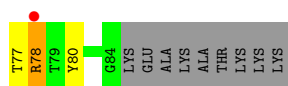
• Molecule 14: 30S ribosomal protein S14



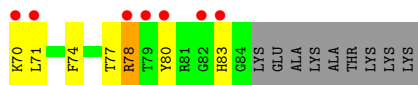
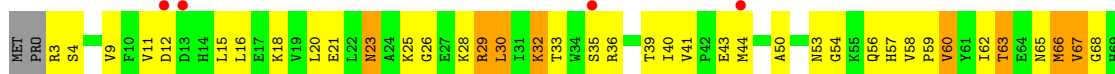




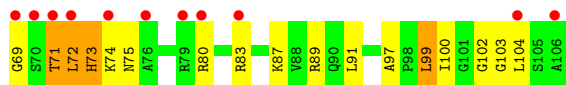
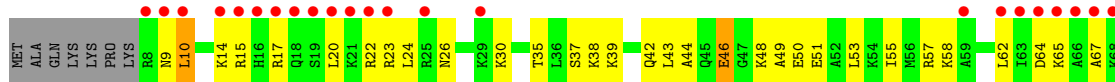




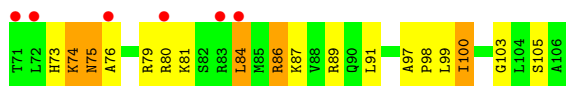
• Molecule 19: 30S ribosomal protein S19



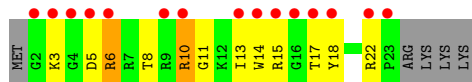
• Molecule 20: 30S ribosomal protein S20



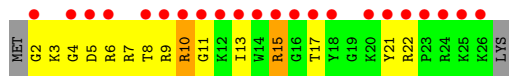
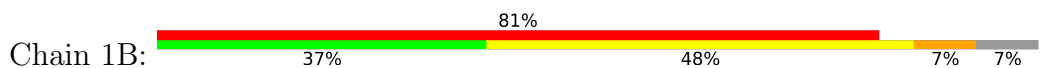
• Molecule 20: 30S ribosomal protein S20



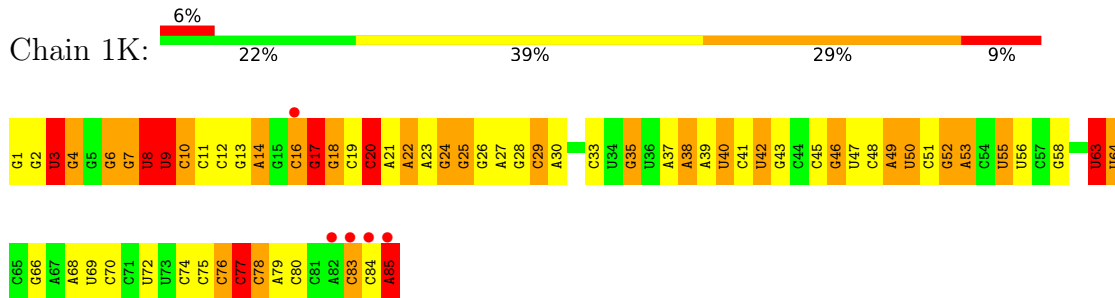
• Molecule 21: 30S ribosomal protein THX



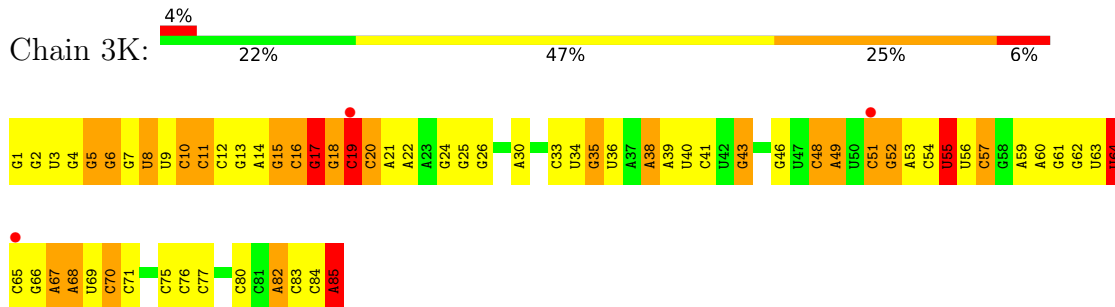
• Molecule 21: 30S ribosomal protein THX



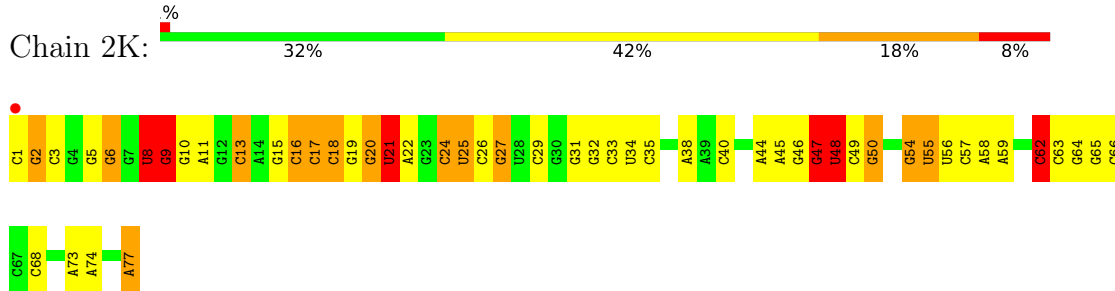
● Molecule 22: tRNA-Tyr



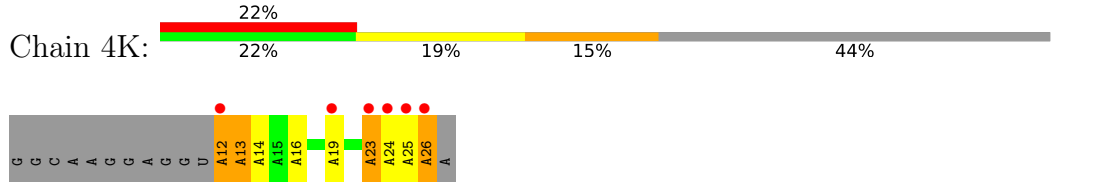
● Molecule 22: tRNA-Tyr



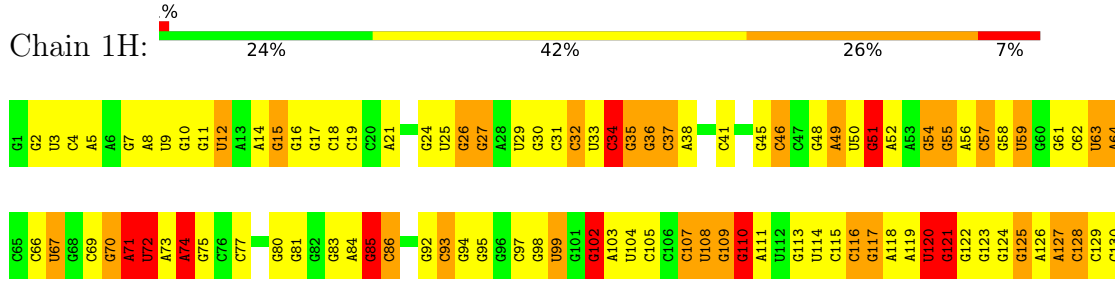
● Molecule 23: tRNA-fMet



● Molecule 24: mRNA



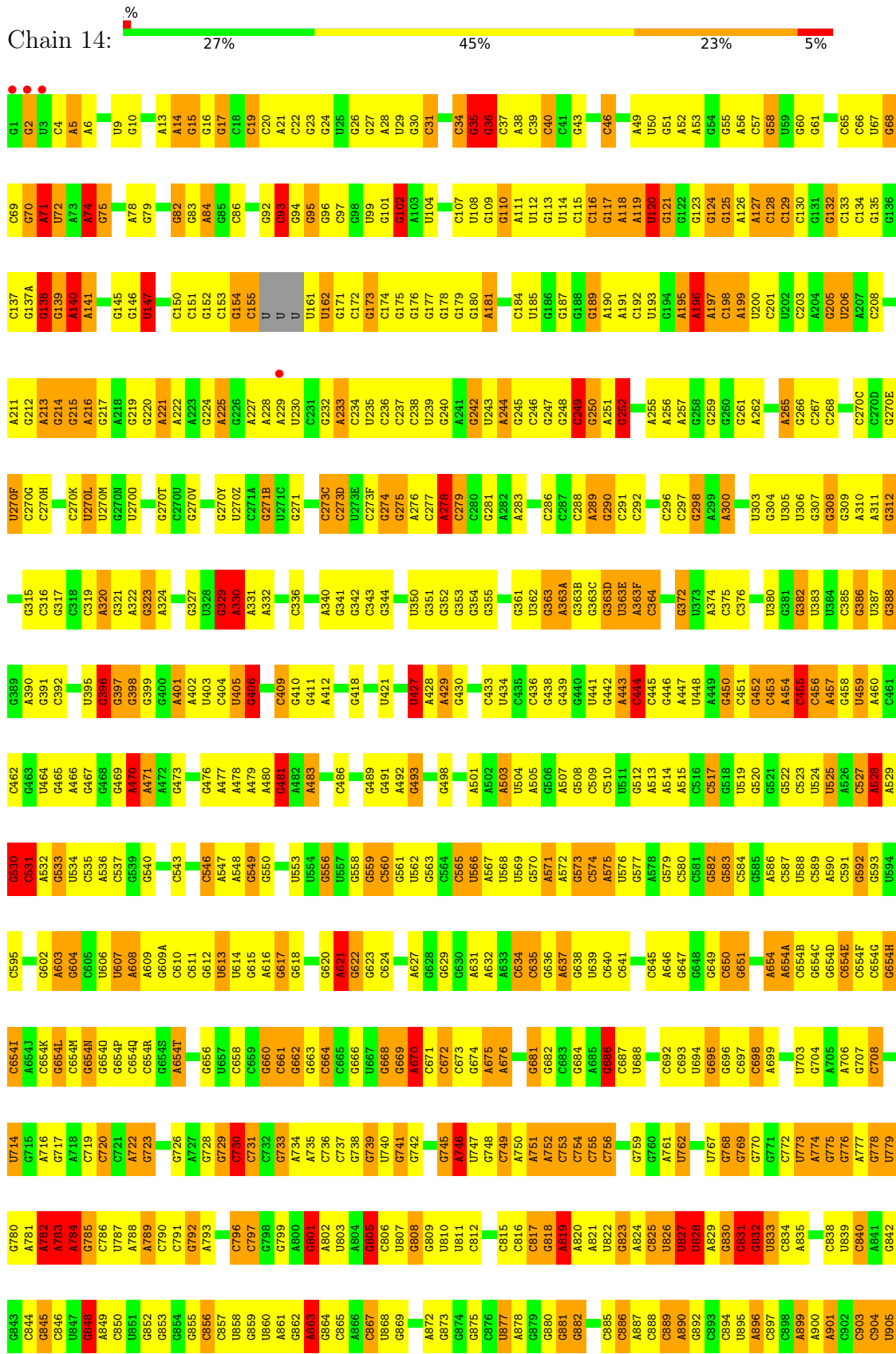
● Molecule 25: 23S ribosomal RNA





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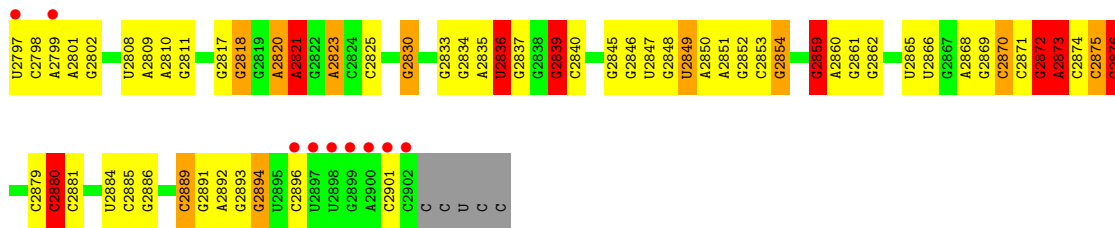




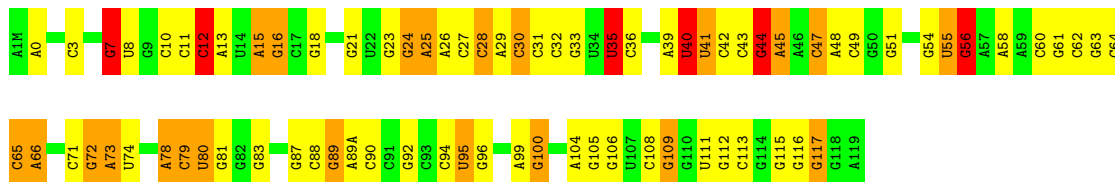
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C2395	G2396	G2400	G2401	G2402	G2403	G2404	G2405	G2406	G2407	G2408	G2409	G2410	G2413	G2414	G2415	G2416	G2417	A2418	U2419	C2420	G2421	A2422	U2423	G2424	A2425	G2426	G2427	G2428	G2429	A2430	U2431	A2432	A2433	A2434	A2435	G2436	U2437	G2438	A2439	G2440	G2441	G2442	G2443	G2444	G2445	G2446	G2447	A2448	U2449	G2452	A2453	U2457	G2458	A2459	U2460					
U2332	A2333	G2334	A2335	A2336	G2337	G2338	G2339	G2340	G2341	G2342	U2343	G2344	G2345	A2346	U2347	U2348	G2349	G2350	G2351	G2352	G2353	G2354	G2355	G2356	U2357	G2358	G2359	A2360	A2361	G2364	G2365	A2366	A2369	G2370	G2371	G2372	G2373	G2374	G2375	A2376	A2377	G2378	G2379	G2380	G2381	G2382	G2383	G2384	G2385	A2388	G2389	U2390	G2391	A2392	A2393	C2394				
G2271	U2272	A2273	A2274	G2275	G2276	G2277	A2278	G2279	G2280	G2281	G2282	G2283	G2284	G2285	A2286	A2287	A2288	G2289	G2290	U2291	C2292	G2293	G2294	G2295	U2296	G2297	A2298	G2299	G2300	G2301	G2302	G2303	G2304	A2305	G2306	G2307	G2308	A2309	A2310	A2311	G2312	G2313	G2314	G2315	G2316	G2317	G2318	G2319	A2320	G2321	G2322	G2323	G2324	G2325	G2326	G2327	G2328	G2329	G2330	G2331
U2197	A2198	U2208	U2209	G2210	G2211	G2212	G2213	G2214	G2215	G2216	G2217	G2224	A2225	A2226	A2227	A2228	G2229	G2230	U2231	U2232	U2233	G2234	G2235	G2236	G2237	G2238	G2239	C2240	U2243	U2244	U2245	G2246	A2247	G2248	U2249	G2250	G2251	G2252	G2253	G2254	G2255	G2256	U2257	G2258	G2259	C2260	G2261	U2262	G2263	G2264	U2265	A2266	A2267	A2268	A2269	G2270				
G2131	U2132	G2133	A2134	A2135	G2136	A2137	C2138	C2139	C2140	U2143	U2144	C2145	C2146	G2147	G2148	G2149	U2150	G2151	G2152	G2153	G2154	G2155	G2156	G2157	A2158	G2159	G2160	G2161	G2162	C2163	U2166	G2167	G2168	A2169	A2170	A2171	U2172	A2173	U2176	C2177	G2178	C2179	U2180	G2181	G2182	C2185	G2186	G2187	C2188	U2189	G2190	G2191	G2192	G2193	G2194					
G2065	G2066	G2067	U2068	G2069	G2070	A2071	G2072	G2073	U2074	U2075	U2076	A2077	G2078	U2079	G2080	G2081	A2082	G2083	G2084	G2085	U2086	G2087	U2092	G2093	G2094	U2099	G2100	G2101	U2102	C2103	G2104	C2105	G2106	G2107	G2108	U2109	G2110	G2111	G2112	U2113	G2115	G2116	A2117	U2118	A2119	G2120	G2121	U2122	G2123	G2124	G2125	A2059	U2126	G2127	C2128	U2130				
G1849	G1850	G1856	A1938	U1939	G1858	A1859	G1860	U1864	G1869	C1870	A1871	A1872	G1878	G1949	G1950	U1951	A1952	A1953	G1954	U1955	A1960	G1961	A1889	A1890	C1893	G1894	G1895	G1896	G1897	U1898	G1899	A1900	A1901	C1902	G1903	G1904	C1905	G1906	G1907	C1908	C1914	U1915	A1916	U1917	A1918	A1919	C1924	U1925	A1927	G1928	U1929	G1930	G1933	A1934						

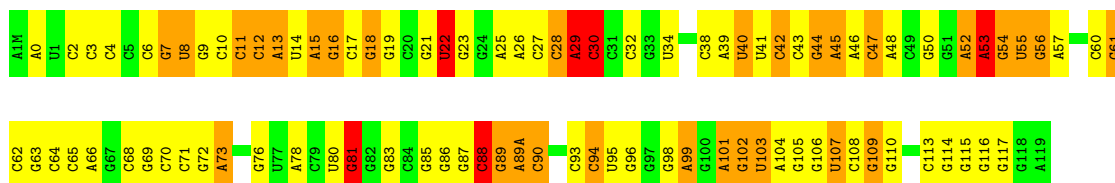




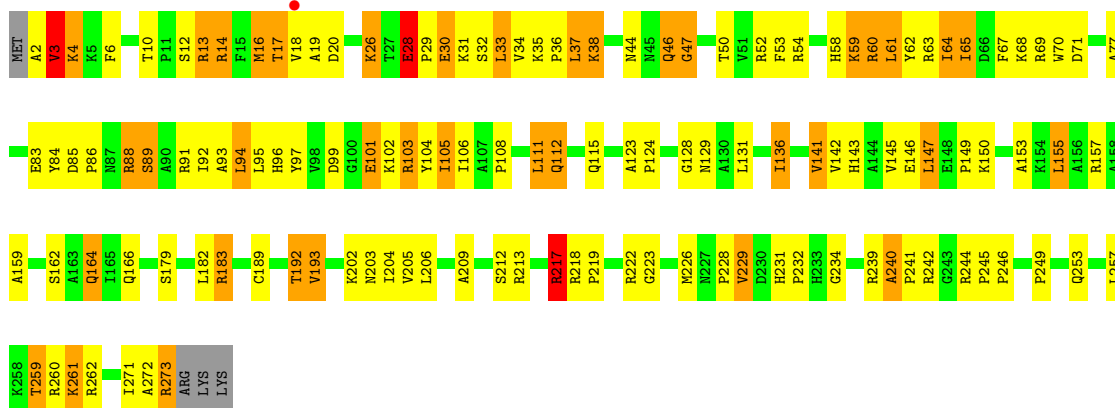
• Molecule 26: 5S ribosomal RNA



• Molecule 26: 5S ribosomal RNA

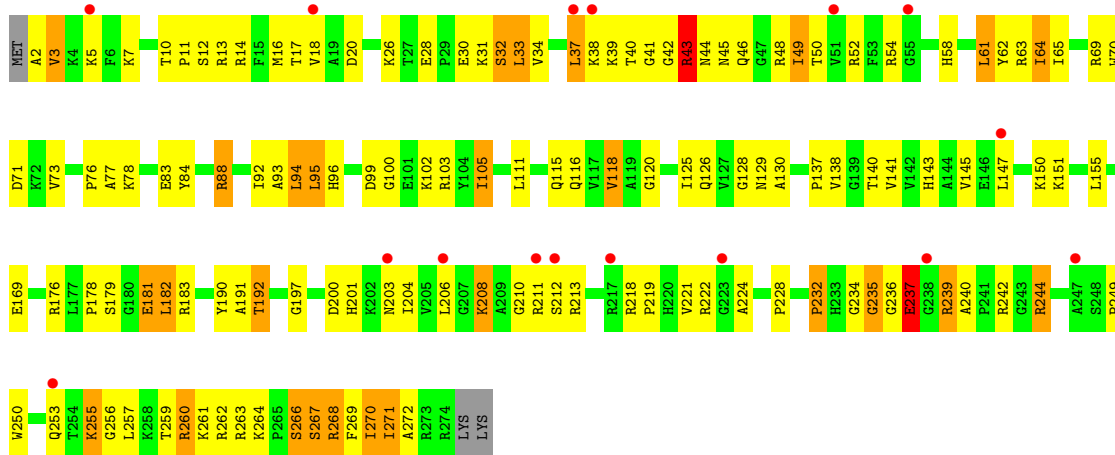


• Molecule 27: 50S ribosomal protein L2

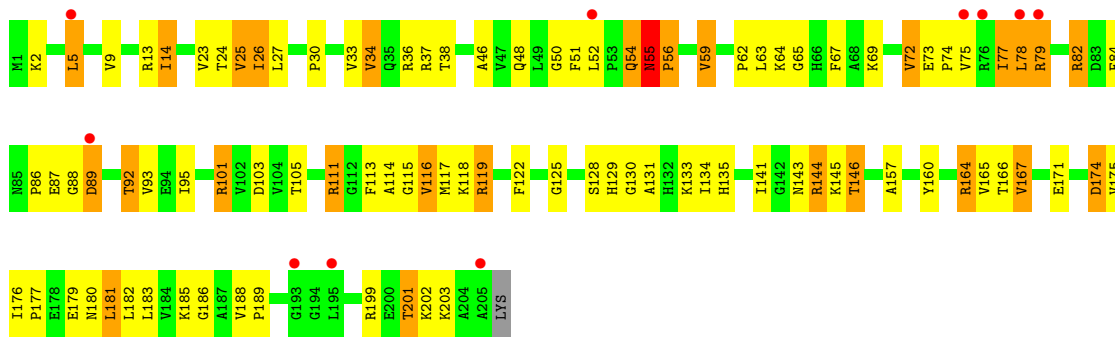


• Molecule 27: 50S ribosomal protein L2

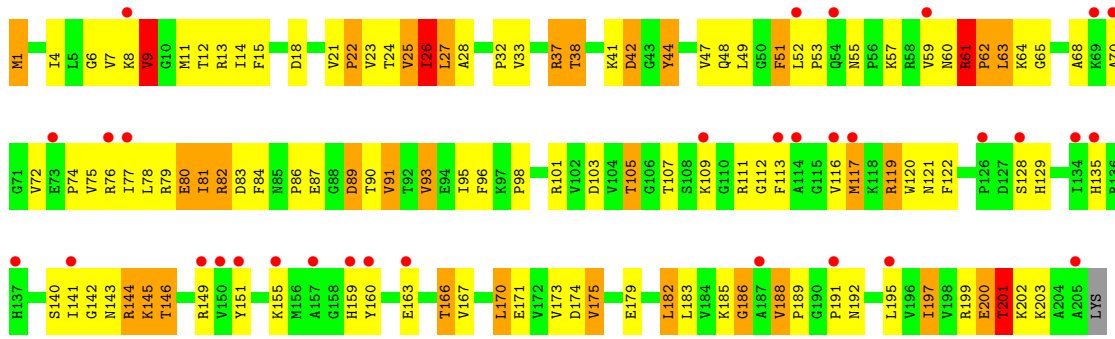
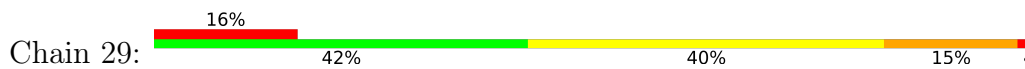




• Molecule 28: 50S ribosomal protein L3

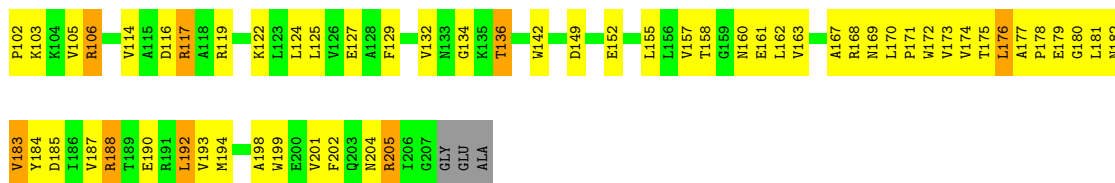


• Molecule 28: 50S ribosomal protein L3

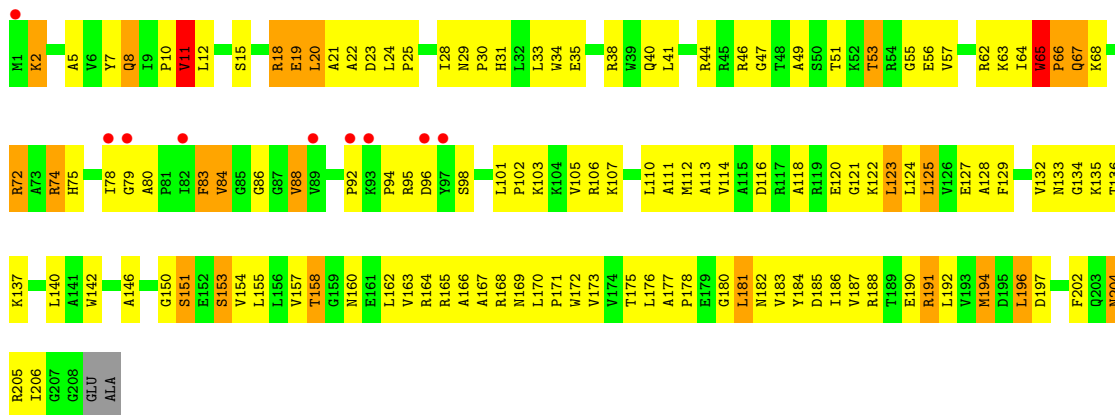
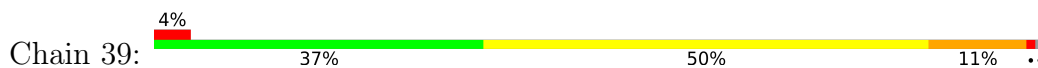


• Molecule 29: 50S ribosomal protein L4

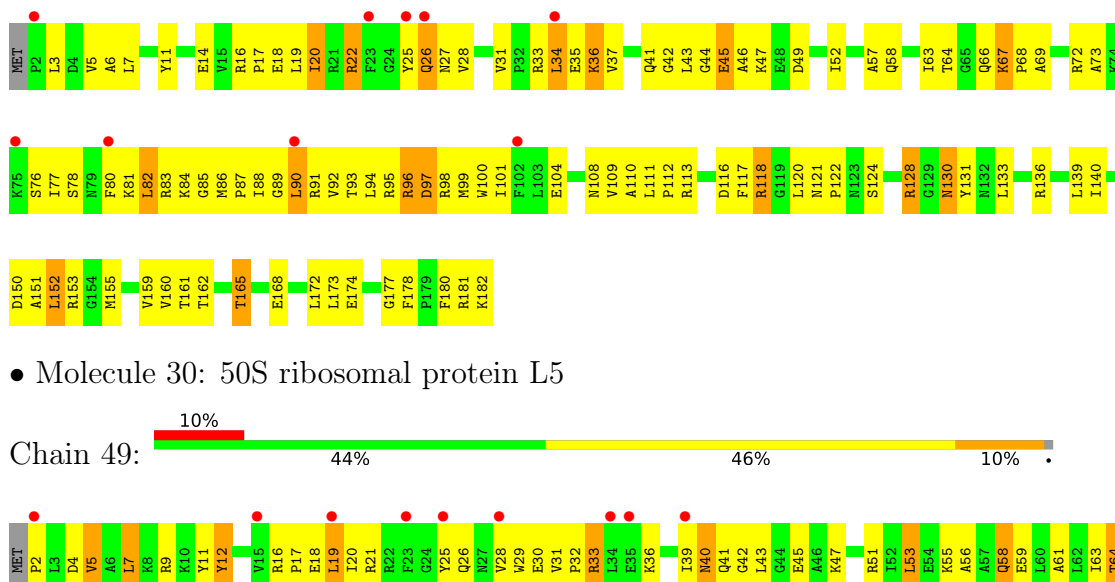
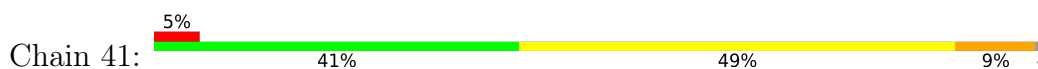




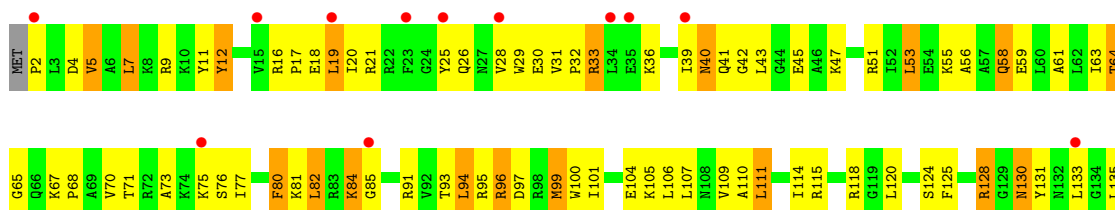
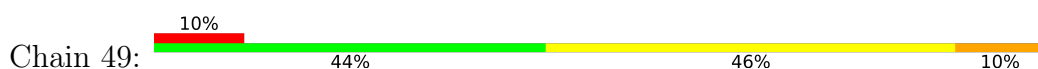
• Molecule 29: 50S ribosomal protein L4



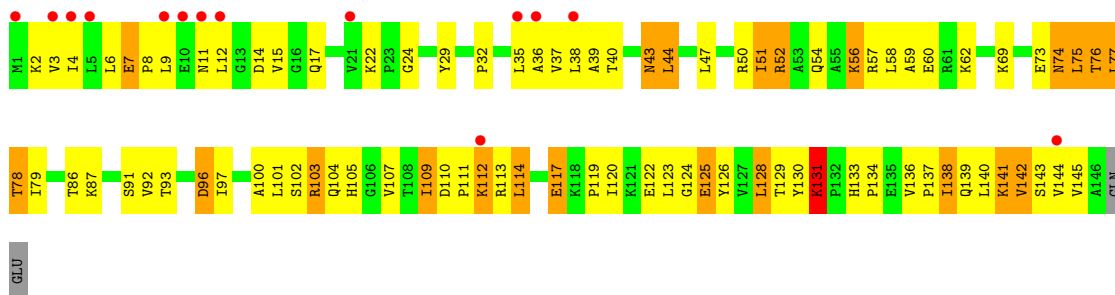
• Molecule 30: 50S ribosomal protein L5



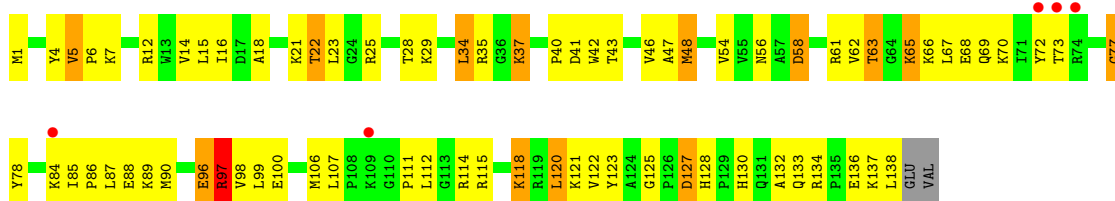
• Molecule 30: 50S ribosomal protein L5



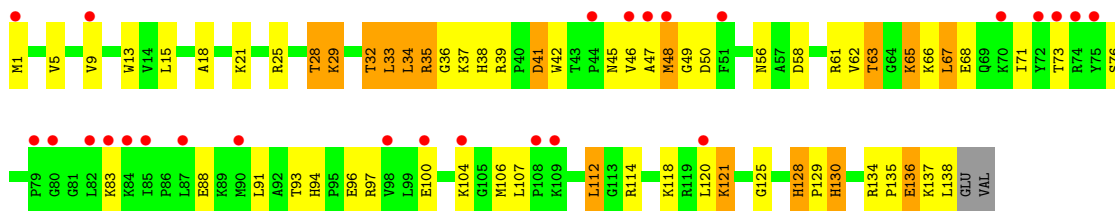




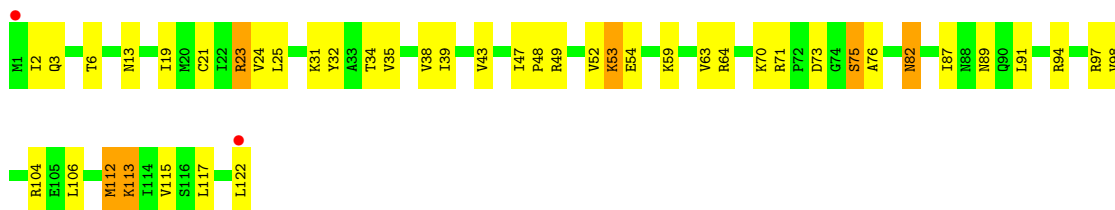
• Molecule 33: 50S ribosomal protein L13



• Molecule 33: 50S ribosomal protein L13



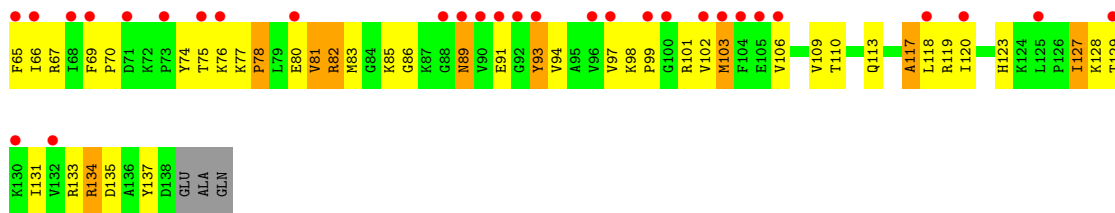
• Molecule 34: 50S ribosomal protein L14



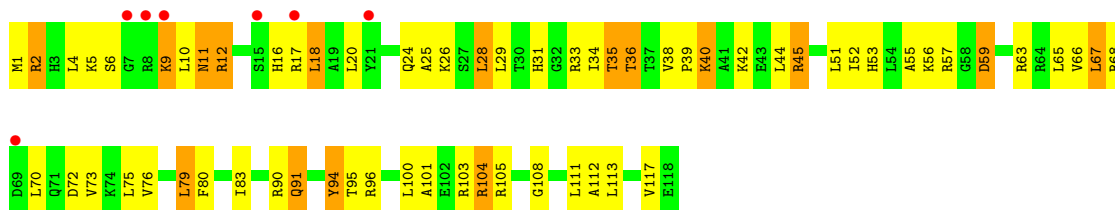
• Molecule 34: 50S ribosomal protein L14



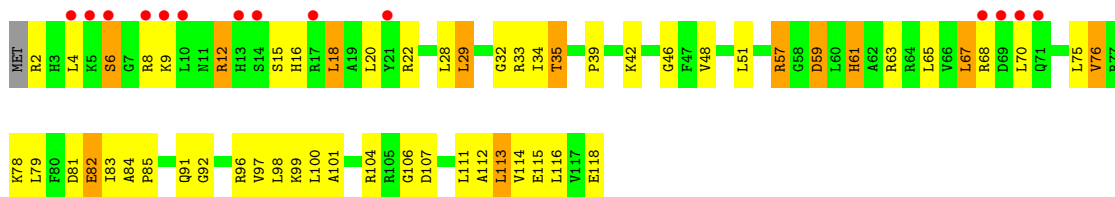




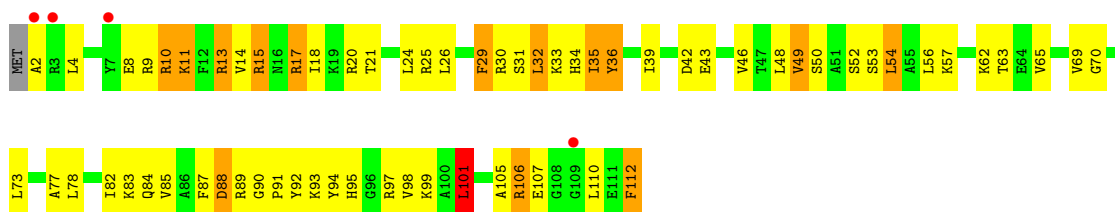
• Molecule 37: 50S ribosomal protein L17



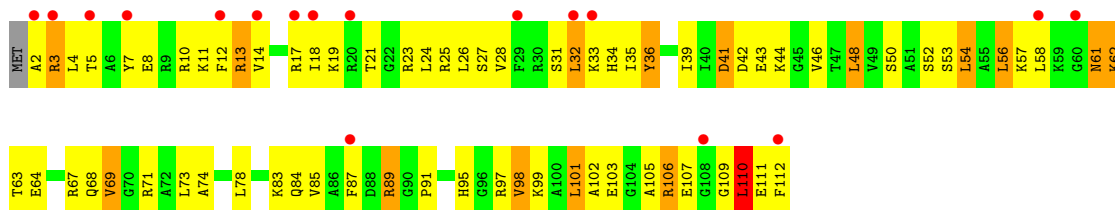
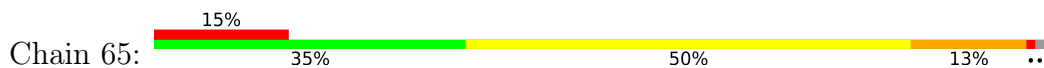
• Molecule 37: 50S ribosomal protein L17



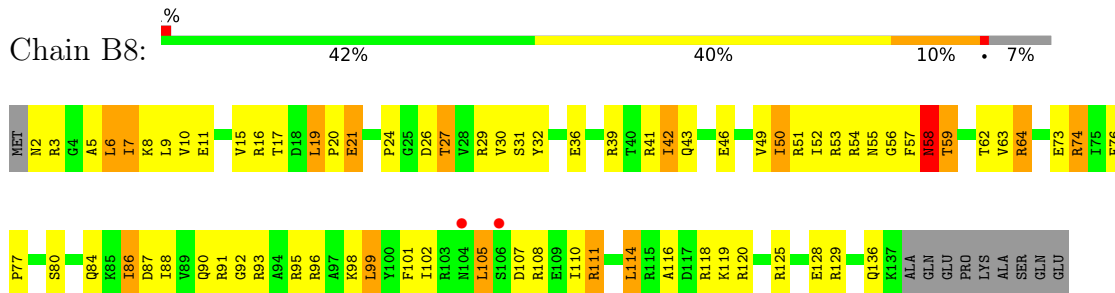
• Molecule 38: 50S ribosomal protein L18



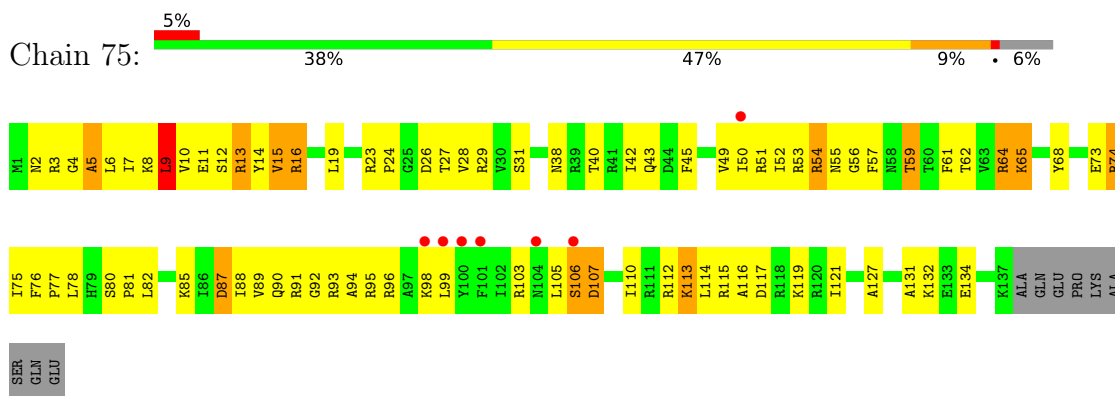
• Molecule 38: 50S ribosomal protein L18



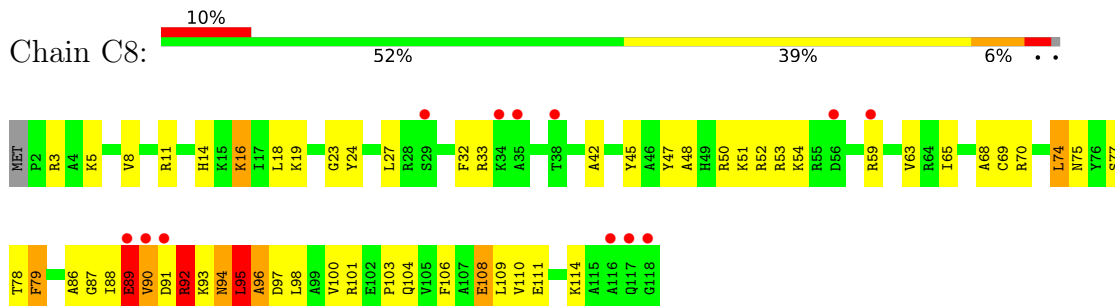
- Molecule 39: 50S ribosomal protein L19



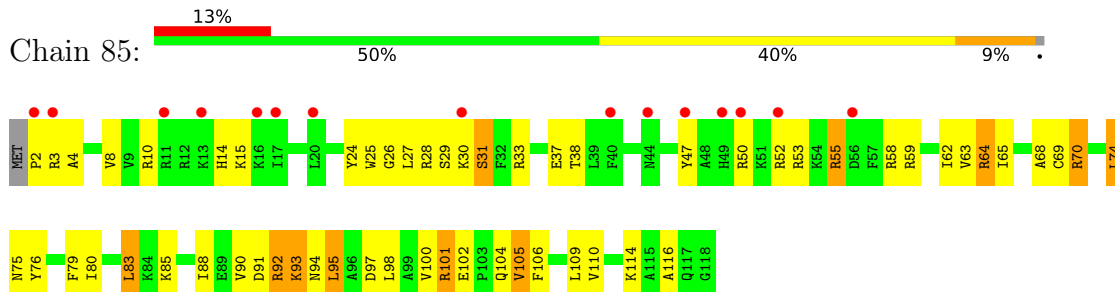
- Molecule 39: 50S ribosomal protein L19



- Molecule 40: 50S ribosomal protein L20



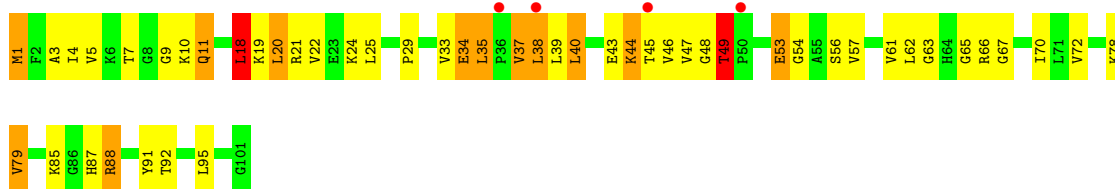
- Molecule 40: 50S ribosomal protein L20



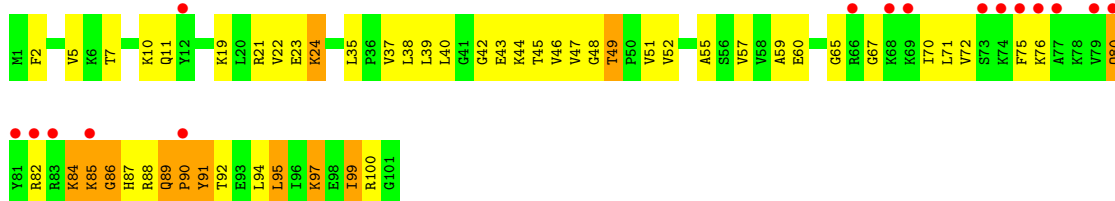
- Molecule 41: 50S ribosomal protein L21



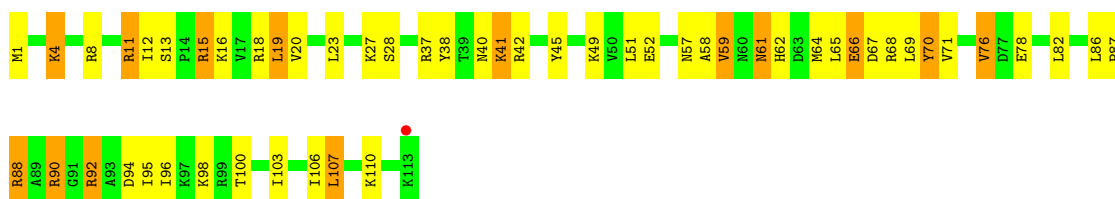




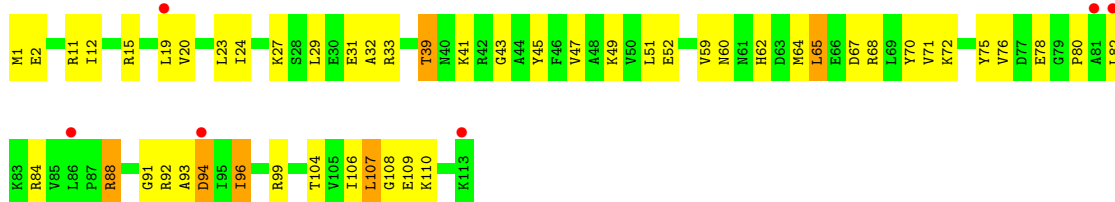
- Molecule 41: 50S ribosomal protein L21



- Molecule 42: 50S ribosomal protein L22



- Molecule 42: 50S ribosomal protein L22



- Molecule 43: 50S ribosomal protein L23



- Molecule 43: 50S ribosomal protein L23



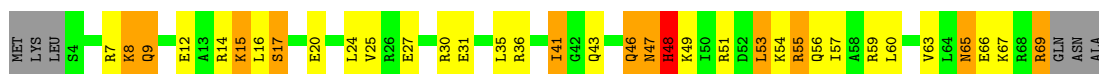




• Molecule 48: 50S ribosomal protein L29



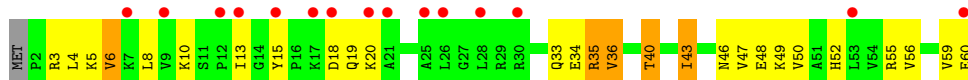
• Molecule 48: 50S ribosomal protein L29



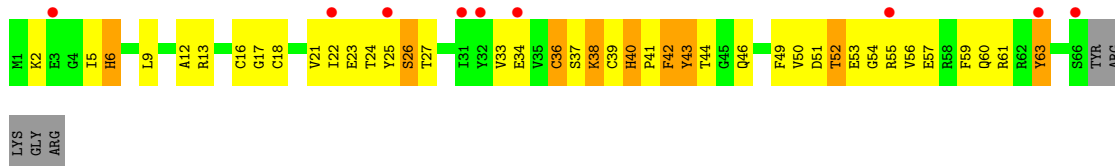
• Molecule 49: 50S ribosomal protein L30



• Molecule 49: 50S ribosomal protein L30

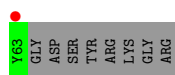


• Molecule 50: 50S ribosomal protein L31



• Molecule 50: 50S ribosomal protein L31





• Molecule 51: 50S ribosomal protein L32



• Molecule 51: 50S ribosomal protein L32



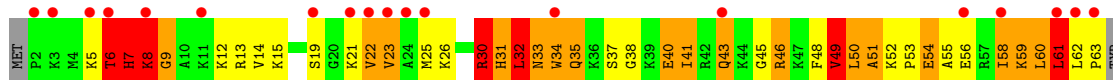
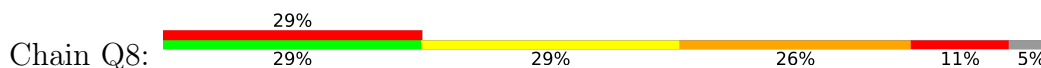
• Molecule 52: 50S ribosomal protein L34



• Molecule 52: 50S ribosomal protein L34

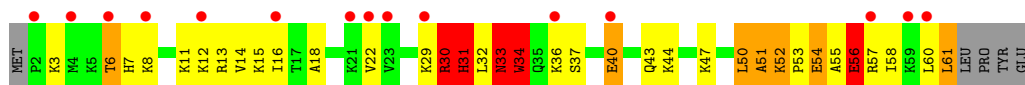


• Molecule 53: 50S ribosomal protein L35

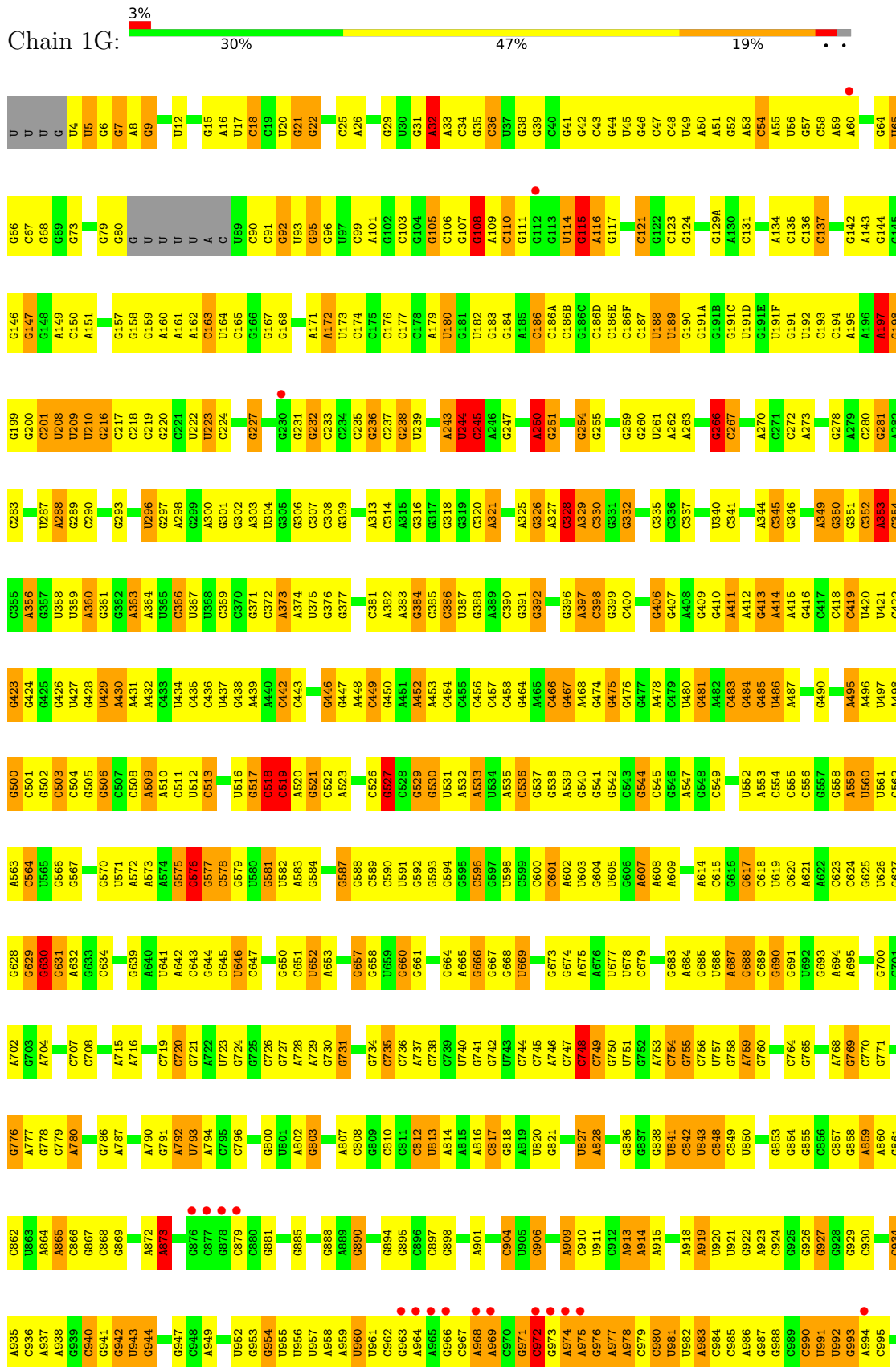


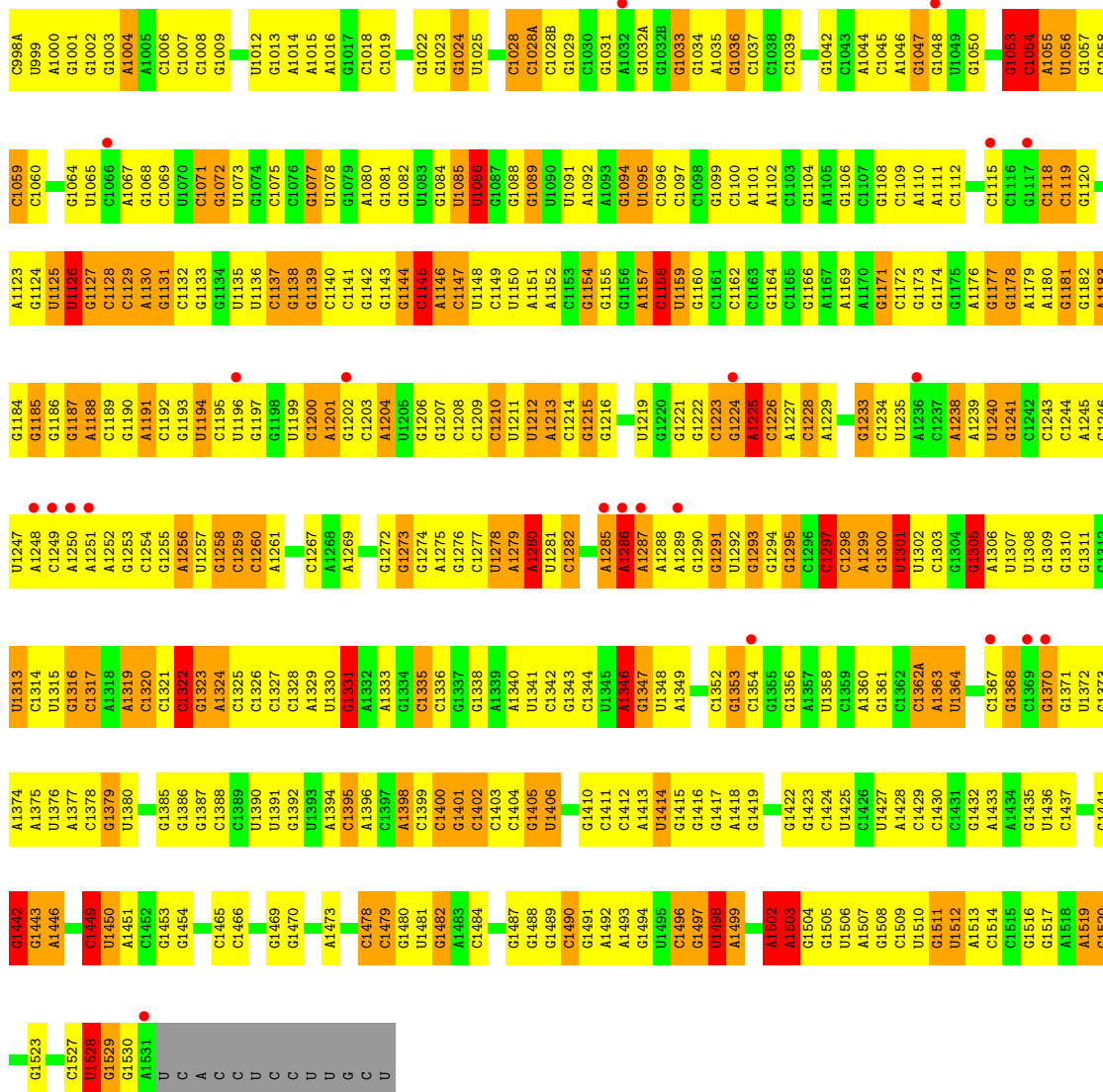
GLU

• Molecule 53: 50S ribosomal protein L35

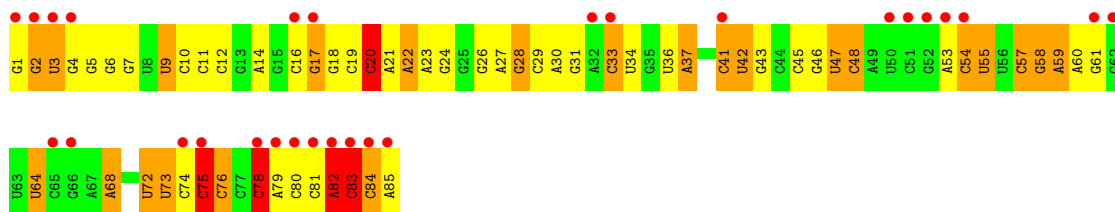


● Molecule 54: 16S ribosomal RNA

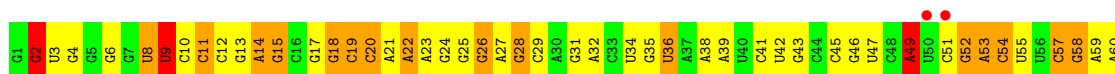
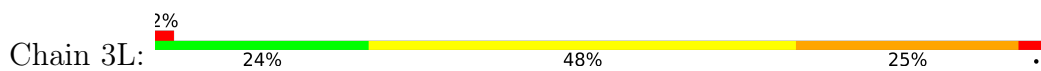


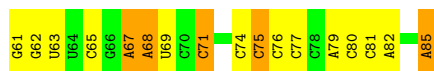


• Molecule 55: tRNA-Tyr

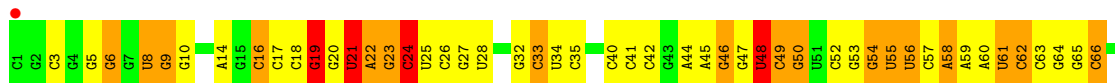


• Molecule 55: tRNA-Tyr

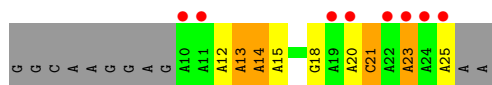
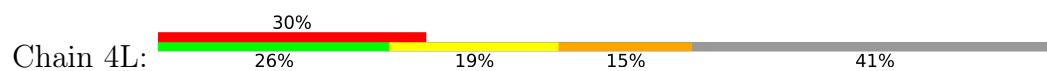




- Molecule 56: tRNA-fMet



- Molecule 57: mRNA





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	209.90Å 450.30Å 619.50Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	225.15 – 3.05 255.20 – 3.05	Depositor EDS
% Data completeness (in resolution range)	99.9 (225.15-3.05) 93.6 (255.20-3.05)	Depositor EDS
$R_{merge}$	0.42	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	0.86 (at 3.07Å)	Xtrriage
Refinement program	PHENIX	Depositor
R, $R_{free}$	0.205 , 0.249 0.201 , 0.249	Depositor DCC
$R_{free}$ test set	2000 reflections (0.18%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	76.2	Xtrriage
Anisotropy	0.299	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.26 , 75.4	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.42$ , $\langle L^2 \rangle = 0.25$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.89	EDS
Total number of atoms	299318	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	104.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.40% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, 7MG, MIA, 5MU, PSU, MG, H2U, QUO, OMC, OMG, 4SU

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	13	0.78	10/36053 (0.0%)	1.46	488/56270 (0.9%)
2	12	0.35	0/1959	0.61	0/2642
2	1E	0.42	0/1959	0.66	1/2642 (0.0%)
3	22	0.40	0/1636	0.60	0/2205
3	2E	0.51	0/1629	0.66	0/2195
4	32	0.48	0/1732	0.71	0/2318
4	3E	0.65	3/1732 (0.2%)	0.80	2/2318 (0.1%)
5	42	0.45	0/1171	0.70	1/1576 (0.1%)
5	4E	0.55	0/1171	0.70	0/1576
6	52	0.50	0/855	0.70	0/1154
6	5E	0.56	0/855	0.74	0/1154
7	62	0.43	0/1275	0.59	0/1709
7	6E	0.46	0/1275	0.61	0/1709
8	72	0.42	0/1135	0.64	0/1527
8	7E	0.53	0/1135	0.71	0/1527
9	82	0.42	0/1028	0.63	0/1379
9	8E	0.45	0/1028	0.66	0/1379
10	1A	0.36	0/814	0.60	0/1095
10	1I	0.46	0/814	0.67	0/1095
11	2A	0.46	0/899	0.69	0/1213
11	2I	0.53	0/879	0.72	1/1187 (0.1%)
12	3A	0.52	0/991	0.81	2/1327 (0.2%)
12	3I	0.71	0/991	0.85	0/1327
13	4A	0.37	0/943	0.60	0/1265
13	4I	0.47	0/938	0.72	1/1258 (0.1%)
14	5A	0.43	0/484	0.72	0/643
14	5I	0.59	0/507	0.92	1/672 (0.1%)
15	6A	0.45	0/744	0.62	1/992 (0.1%)
15	6I	0.57	0/744	0.77	0/992
16	7A	0.51	0/721	0.71	0/970
16	7I	0.47	0/721	0.72	0/970
17	8A	0.52	1/847 (0.1%)	0.64	0/1131

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	8I	0.55	0/847	0.74	0/1131
18	9A	0.50	0/569	0.69	0/757
18	9I	0.50	0/595	0.73	0/790
19	AA	0.41	0/654	0.70	0/884
19	AI	0.51	0/680	0.77	0/915
20	BA	0.48	0/764	0.76	0/1007
20	BI	0.43	0/764	0.68	0/1007
21	1B	0.48	0/221	0.65	0/288
21	1F	0.55	0/192	0.74	0/252
22	1K	0.76	0/1851	1.36	18/2877 (0.6%)
22	3K	0.64	0/1851	1.17	10/2877 (0.3%)
23	2K	0.90	1/1699 (0.1%)	1.64	40/2648 (1.5%)
24	4K	0.93	0/394	1.31	2/612 (0.3%)
25	14	0.95	72/70119 (0.1%)	1.66	1690/109464 (1.5%)
25	1H	1.12	193/70233 (0.3%)	1.89	2816/109643 (2.6%)
26	16	0.86	0/2928	1.60	51/4568 (1.1%)
26	1J	0.76	0/2928	1.48	37/4568 (0.8%)
27	11	0.83	0/2165	1.00	3/2919 (0.1%)
27	19	0.77	0/2170	0.98	6/2926 (0.2%)
28	21	0.66	0/1601	0.93	1/2160 (0.0%)
28	29	0.66	0/1601	0.89	1/2160 (0.0%)
29	31	0.79	1/1620 (0.1%)	0.90	2/2194 (0.1%)
29	39	0.62	1/1662 (0.1%)	0.84	2/2249 (0.1%)
30	41	0.55	0/1498	0.74	0/2016
30	49	0.42	0/1498	0.69	0/2016
31	51	0.60	0/1362	0.88	2/1841 (0.1%)
31	59	0.38	0/1341	0.67	1/1813 (0.1%)
32	61	0.50	0/1151	0.76	0/1558
32	69	0.47	0/1151	0.74	2/1558 (0.1%)
33	15	0.50	0/1131	0.69	0/1525
33	58	0.61	0/1131	0.84	0/1525
34	25	0.65	0/942	0.81	1/1269 (0.1%)
34	68	0.70	0/942	0.81	0/1269
35	35	0.65	0/1161	1.09	3/1544 (0.2%)
35	78	0.75	0/1161	1.06	1/1544 (0.1%)
36	45	0.68	0/1119	0.92	2/1496 (0.1%)
36	88	0.88	2/1142 (0.2%)	1.01	1/1527 (0.1%)
37	55	0.65	0/973	0.83	0/1302
37	98	0.64	0/981	0.85	0/1312
38	65	0.55	0/891	0.92	3/1187 (0.3%)
38	A8	0.65	0/891	0.89	2/1187 (0.2%)
39	75	0.60	0/1155	0.81	1/1542 (0.1%)
39	B8	0.66	0/1147	0.80	0/1532

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
40	85	0.61	0/981	0.76	0/1306
40	C8	0.72	0/981	0.93	3/1306 (0.2%)
41	95	0.59	0/789	0.81	0/1057
41	D8	0.61	0/789	0.85	2/1057 (0.2%)
42	A5	0.74	0/910	0.82	0/1220
42	E8	0.70	0/910	0.93	3/1220 (0.2%)
43	B5	0.78	0/739	0.86	0/993
43	F8	0.82	0/756	0.95	1/1014 (0.1%)
44	C5	0.60	0/807	0.82	0/1076
44	G8	0.76	1/791 (0.1%)	0.98	3/1055 (0.3%)
45	D5	0.41	0/1460	0.67	0/1982
45	H8	0.50	0/1427	0.82	2/1935 (0.1%)
46	E5	0.64	0/620	0.85	0/827
46	I8	0.85	0/620	0.94	0/827
47	F5	0.63	0/769	0.85	0/1022
47	J8	0.77	0/736	0.93	0/978
48	G5	0.60	0/560	0.79	0/741
48	K8	0.85	1/560 (0.2%)	0.92	0/741
49	H5	0.53	0/473	0.70	0/635
49	L8	0.57	0/473	0.70	0/635
50	I5	0.43	0/527	0.73	0/709
50	M8	0.45	0/545	0.70	0/733
51	J5	0.62	0/467	0.80	0/632
51	N8	0.65	0/386	0.84	0/523
52	L5	0.82	0/399	0.94	0/526
52	P8	0.96	0/399	0.98	0/526
53	M5	0.83	1/486 (0.2%)	1.13	2/638 (0.3%)
53	Q8	1.03	0/454	1.44	4/607 (0.7%)
54	1G	0.68	1/36049 (0.0%)	1.34	271/56262 (0.5%)
55	1L	0.85	1/2018 (0.0%)	1.32	24/3142 (0.8%)
55	3L	0.67	2/2018 (0.1%)	1.25	12/3142 (0.4%)
56	2L	0.73	0/1725	1.37	12/2689 (0.4%)
57	4L	0.81	0/394	1.29	2/612 (0.3%)
All	All	0.85	291/322559 (0.1%)	1.47	5537/483244 (1.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	1E	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
3	2E	0	1
4	3E	0	2
6	5E	0	1
11	2A	0	1
12	3I	0	1
13	4I	0	1
14	5A	0	1
14	5I	0	1
17	8I	0	1
19	AI	0	1
20	BA	0	1
20	BI	0	1
27	11	0	5
27	19	0	5
28	21	0	3
28	29	0	4
29	39	0	2
30	41	0	1
31	51	0	1
31	59	0	1
32	61	0	4
32	69	0	1
33	58	0	1
35	35	0	2
35	78	0	5
36	45	0	5
36	88	0	4
39	75	0	1
39	B8	0	1
40	85	0	2
40	C8	0	1
41	95	0	2
41	D8	0	1
43	B5	0	2
44	C5	0	2
44	G8	0	5
45	D5	0	1
45	H8	0	3
47	F5	0	2
47	J8	0	2
48	G5	0	3
50	M8	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
53	M5	0	3
53	Q8	0	4
All	All	0	95

The worst 5 of 291 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	1H	783	A	N3-C4	-12.01	1.27	1.34
25	1H	774	A	N9-C4	-10.83	1.31	1.37
25	1H	2430	A	N9-C4	-10.39	1.31	1.37
25	14	783	A	N9-C4	-9.88	1.31	1.37
25	14	774	A	N9-C4	-9.74	1.32	1.37

The worst 5 of 5537 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	1H	1899	G	N3-C4-N9	-19.08	114.55	126.00
25	1H	676	A	C2-N3-C4	-18.37	101.42	110.60
25	1H	945	A	C6-C5-N7	-18.34	119.46	132.30
25	1H	945	A	N1-C6-N6	17.84	129.30	118.60
25	1H	783	A	C2-N3-C4	-17.75	101.73	110.60

There are no chirality outliers.

5 of 95 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	1E	15	VAL	Peptide
2	1E	71	VAL	Peptide
3	2E	166	GLU	Peptide
4	3E	29	PRO	Peptide
4	3E	85	LYS	Peptide

## 5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32207	0	16254	795	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	12	1924	0	1975	105	0
2	1E	1924	0	1975	91	0
3	22	1612	0	1677	104	0
3	2E	1605	0	1668	46	0
4	32	1702	0	1763	103	0
4	3E	1702	0	1763	79	0
5	42	1155	0	1213	75	0
5	4E	1155	0	1213	37	0
6	52	842	0	857	28	0
6	5E	842	0	857	44	0
7	62	1256	0	1296	57	0
7	6E	1256	0	1296	60	0
8	72	1115	0	1177	46	0
8	7E	1115	0	1177	56	0
9	82	1009	0	1037	65	0
9	8E	1009	0	1037	63	0
10	1A	801	0	849	52	0
10	1I	801	0	849	52	0
11	2A	884	0	904	39	0
11	2I	864	0	881	35	0
12	3A	975	0	1062	57	0
12	3I	975	0	1062	37	0
13	4A	933	0	992	61	0
13	4I	928	0	987	56	0
14	5A	475	0	511	31	0
14	5I	498	0	537	38	0
15	6A	733	0	771	28	0
15	6I	733	0	771	30	0
16	7A	705	0	725	15	0
16	7I	705	0	725	46	0
17	8A	834	0	904	35	0
17	8I	834	0	904	54	0
18	9A	564	0	631	21	0
18	9I	590	0	662	33	0
19	AA	640	0	633	37	0
19	AI	665	0	686	41	0
20	BA	762	0	861	36	0
20	BI	762	0	861	38	0
21	1B	217	0	234	20	0
21	1F	188	0	195	9	0
22	1K	1825	0	946	59	0
22	3K	1825	0	946	49	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	2K	1646	0	847	33	0
24	4K	349	0	176	13	0
25	14	62605	0	31561	1396	0
25	1H	62707	0	31610	1456	1
26	16	2617	0	1328	68	0
26	1J	2617	0	1328	93	0
27	11	2115	0	2195	124	0
27	19	2120	0	2197	103	0
28	21	1568	0	1634	94	0
28	29	1568	0	1634	108	0
29	31	1585	0	1632	81	0
29	39	1627	0	1680	101	0
30	41	1473	0	1535	86	0
30	49	1473	0	1535	74	0
31	51	1336	0	1418	82	0
31	59	1316	0	1395	79	0
32	61	1136	0	1223	61	0
32	69	1136	0	1223	62	0
33	15	1104	0	1180	50	0
33	58	1104	0	1180	66	0
34	25	932	0	996	54	0
34	68	932	0	996	26	0
35	35	1144	0	1228	108	0
35	78	1144	0	1228	99	0
36	45	1098	0	1160	66	0
36	88	1121	0	1179	56	0
37	55	959	0	1021	44	0
37	98	967	0	1033	55	0
38	65	881	0	943	67	0
38	A8	881	0	943	47	0
39	75	1141	0	1202	64	0
39	B8	1133	0	1190	64	0
40	85	963	0	1022	55	0
40	C8	963	0	1022	65	0
41	95	778	0	852	60	0
41	D8	778	0	852	34	0
42	A5	899	0	964	40	0
42	E8	899	0	964	27	0
43	B5	725	0	778	29	0
43	F8	742	0	803	44	0
44	C5	794	0	883	64	0
44	G8	778	0	863	61	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	D5	1428	0	1454	82	0
45	H8	1397	0	1430	57	0
46	E5	612	0	633	35	0
46	I8	612	0	633	31	0
47	F5	762	0	848	42	0
47	J8	729	0	802	23	0
48	G5	558	0	610	24	0
48	K8	558	0	610	33	0
49	H5	468	0	518	16	0
49	L8	468	0	518	20	0
50	I5	515	0	514	30	0
50	M8	533	0	526	34	0
51	J5	453	0	475	18	0
51	N8	374	0	393	22	0
52	L5	391	0	432	22	0
52	P8	391	0	432	15	0
53	M5	480	0	549	44	0
53	Q8	448	0	463	60	0
54	1G	32204	0	16256	845	1
55	1L	1807	0	920	33	0
55	3L	1807	0	920	54	0
56	2L	1645	0	843	44	0
57	4L	349	0	176	10	0
58	11	1	0	0	0	0
58	13	138	0	0	0	0
58	14	398	0	0	0	0
58	16	13	0	0	0	0
58	1G	90	0	0	0	0
58	1H	475	0	0	0	0
58	1J	6	0	0	0	0
58	1K	1	0	0	0	0
58	1L	1	0	0	0	0
58	21	2	0	0	0	0
58	25	1	0	0	0	0
58	29	3	0	0	0	0
58	2K	6	0	0	0	0
58	2L	3	0	0	0	0
58	31	4	0	0	0	0
58	39	1	0	0	0	0
58	3E	1	0	0	0	0
58	3I	1	0	0	0	0
58	3L	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	45	1	0	0	0	0
58	4E	1	0	0	0	0
58	78	1	0	0	0	0
58	85	1	0	0	0	0
58	8E	1	0	0	0	0
58	98	2	0	0	0	0
58	C5	1	0	0	0	0
58	I8	2	0	0	0	0
58	L5	1	0	0	0	0
58	L8	2	0	0	0	0
58	P8	1	0	0	0	0
59	32	1	0	0	0	0
59	3E	1	0	0	0	0
59	5A	1	0	0	0	0
59	5I	1	0	0	0	0
59	C5	1	0	0	0	0
59	G8	1	0	0	0	0
60	11	4	0	0	0	0
60	13	100	0	0	20	0
60	14	409	0	0	100	0
60	16	11	0	0	1	0
60	19	7	0	0	1	0
60	1G	51	0	0	14	0
60	1H	538	0	0	157	0
60	1K	1	0	0	0	0
60	21	2	0	0	0	0
60	29	2	0	0	1	0
60	2K	6	0	0	0	0
60	31	4	0	0	0	0
60	32	1	0	0	0	0
60	35	1	0	0	0	0
60	39	4	0	0	0	0
60	3E	2	0	0	0	0
60	3I	2	0	0	1	0
60	4K	2	0	0	0	0
60	4L	1	0	0	0	0
60	55	1	0	0	2	0
60	5I	1	0	0	0	0
60	75	1	0	0	0	0
60	78	4	0	0	2	0
60	7I	1	0	0	0	0
60	85	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	BA	1	0	0	0	0
60	D8	1	0	0	0	0
60	F8	1	0	0	0	0
60	L8	3	0	0	0	0
All	All	299318	0	199912	8796	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 18.

The worst 5 of 8796 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:35:QUO:N3	22:1K:35:QUO:C4	1.70	1.51
22:3K:35:QUO:C4	22:3K:35:QUO:N3	1.72	1.48
25:14:2057:A:OP2	60:14:3437:HOH:O	1.73	1.07
25:14:2032:G:N7	60:14:3594:HOH:O	1.91	1.04
25:14:2711:A:OP2	60:14:3464:HOH:O	1.72	1.04

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:1H:2137:C:OP1	54:1G:999:U:O2'[4_555]	2.16	0.04

## 5.3 Torsion angles [\(i\)](#)

### 5.3.1 Protein backbone [\(i\)](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	12	235/256 (92%)	201 (86%)	32 (14%)	2 (1%)	17 47
2	1E	235/256 (92%)	202 (86%)	31 (13%)	2 (1%)	17 47

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	22	204/239 (85%)	187 (92%)	17 (8%)	0	100	100
3	2E	203/239 (85%)	191 (94%)	12 (6%)	0	100	100
4	32	206/209 (99%)	181 (88%)	25 (12%)	0	100	100
4	3E	206/209 (99%)	191 (93%)	14 (7%)	1 (0%)	29	60
5	42	149/162 (92%)	141 (95%)	8 (5%)	0	100	100
5	4E	149/162 (92%)	145 (97%)	3 (2%)	1 (1%)	22	52
6	52	99/101 (98%)	97 (98%)	2 (2%)	0	100	100
6	5E	99/101 (98%)	94 (95%)	5 (5%)	0	100	100
7	62	153/156 (98%)	146 (95%)	7 (5%)	0	100	100
7	6E	153/156 (98%)	145 (95%)	8 (5%)	0	100	100
8	72	136/138 (99%)	127 (93%)	8 (6%)	1 (1%)	22	52
8	7E	136/138 (99%)	130 (96%)	6 (4%)	0	100	100
9	82	125/128 (98%)	116 (93%)	9 (7%)	0	100	100
9	8E	125/128 (98%)	109 (87%)	16 (13%)	0	100	100
10	1A	97/105 (92%)	90 (93%)	7 (7%)	0	100	100
10	1I	97/105 (92%)	86 (89%)	11 (11%)	0	100	100
11	2A	117/129 (91%)	106 (91%)	11 (9%)	0	100	100
11	2I	114/129 (88%)	98 (86%)	14 (12%)	2 (2%)	8	30
12	3A	123/132 (93%)	106 (86%)	14 (11%)	3 (2%)	6	23
12	3I	123/132 (93%)	106 (86%)	17 (14%)	0	100	100
13	4A	115/126 (91%)	99 (86%)	15 (13%)	1 (1%)	17	47
13	4I	114/126 (90%)	98 (86%)	16 (14%)	0	100	100
14	5A	56/61 (92%)	48 (86%)	8 (14%)	0	100	100
14	5I	59/61 (97%)	49 (83%)	9 (15%)	1 (2%)	9	32
15	6A	86/89 (97%)	78 (91%)	8 (9%)	0	100	100
15	6I	86/89 (97%)	77 (90%)	9 (10%)	0	100	100
16	7A	82/88 (93%)	73 (89%)	9 (11%)	0	100	100
16	7I	82/88 (93%)	78 (95%)	4 (5%)	0	100	100
17	8A	98/105 (93%)	91 (93%)	7 (7%)	0	100	100
17	8I	98/105 (93%)	92 (94%)	6 (6%)	0	100	100
18	9A	67/88 (76%)	61 (91%)	6 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	9I	70/88 (80%)	63 (90%)	6 (9%)	1 (1%)	11	36
19	AA	80/93 (86%)	64 (80%)	14 (18%)	2 (2%)	5	22
19	AI	81/93 (87%)	69 (85%)	9 (11%)	3 (4%)	3	16
20	BA	97/106 (92%)	88 (91%)	9 (9%)	0	100	100
20	BI	97/106 (92%)	84 (87%)	13 (13%)	0	100	100
21	1B	23/27 (85%)	19 (83%)	4 (17%)	0	100	100
21	1F	20/27 (74%)	18 (90%)	2 (10%)	0	100	100
27	11	270/276 (98%)	249 (92%)	18 (7%)	3 (1%)	14	42
27	19	271/276 (98%)	249 (92%)	17 (6%)	5 (2%)	8	30
28	21	203/206 (98%)	175 (86%)	24 (12%)	4 (2%)	7	27
28	29	203/206 (98%)	162 (80%)	32 (16%)	9 (4%)	2	12
29	31	200/210 (95%)	178 (89%)	21 (10%)	1 (0%)	29	60
29	39	206/210 (98%)	171 (83%)	29 (14%)	6 (3%)	4	20
30	41	179/182 (98%)	158 (88%)	18 (10%)	3 (2%)	9	32
30	49	179/182 (98%)	160 (89%)	18 (10%)	1 (1%)	25	55
31	51	172/180 (96%)	139 (81%)	28 (16%)	5 (3%)	4	20
31	59	169/180 (94%)	137 (81%)	29 (17%)	3 (2%)	8	30
32	61	144/148 (97%)	117 (81%)	23 (16%)	4 (3%)	5	21
32	69	144/148 (97%)	120 (83%)	20 (14%)	4 (3%)	5	21
33	15	136/140 (97%)	122 (90%)	13 (10%)	1 (1%)	22	52
33	58	136/140 (97%)	118 (87%)	15 (11%)	3 (2%)	6	25
34	25	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
34	68	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
35	35	148/150 (99%)	110 (74%)	31 (21%)	7 (5%)	2	12
35	78	148/150 (99%)	119 (80%)	24 (16%)	5 (3%)	3	17
36	45	136/141 (96%)	114 (84%)	21 (15%)	1 (1%)	22	52
36	88	139/141 (99%)	113 (81%)	25 (18%)	1 (1%)	22	52
37	55	115/118 (98%)	107 (93%)	8 (7%)	0	100	100
37	98	116/118 (98%)	106 (91%)	8 (7%)	2 (2%)	9	32
38	65	109/112 (97%)	89 (82%)	19 (17%)	1 (1%)	17	47
38	A8	109/112 (97%)	89 (82%)	19 (17%)	1 (1%)	17	47

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
39	75	135/146 (92%)	116 (86%)	17 (13%)	2 (2%)	10	35
39	B8	134/146 (92%)	122 (91%)	12 (9%)	0	100	100
40	85	115/118 (98%)	106 (92%)	8 (7%)	1 (1%)	17	47
40	C8	115/118 (98%)	105 (91%)	8 (7%)	2 (2%)	9	32
41	95	99/101 (98%)	80 (81%)	17 (17%)	2 (2%)	7	27
41	D8	99/101 (98%)	95 (96%)	2 (2%)	2 (2%)	7	27
42	A5	111/113 (98%)	103 (93%)	7 (6%)	1 (1%)	17	47
42	E8	111/113 (98%)	105 (95%)	6 (5%)	0	100	100
43	B5	90/96 (94%)	87 (97%)	3 (3%)	0	100	100
43	F8	92/96 (96%)	83 (90%)	7 (8%)	2 (2%)	6	25
44	C5	102/110 (93%)	75 (74%)	24 (24%)	3 (3%)	4	20
44	G8	100/110 (91%)	81 (81%)	14 (14%)	5 (5%)	2	11
45	D5	177/206 (86%)	138 (78%)	30 (17%)	9 (5%)	2	10
45	H8	173/206 (84%)	143 (83%)	22 (13%)	8 (5%)	2	12
46	E5	75/85 (88%)	73 (97%)	1 (1%)	1 (1%)	12	38
46	I8	75/85 (88%)	63 (84%)	11 (15%)	1 (1%)	12	38
47	F5	95/98 (97%)	87 (92%)	6 (6%)	2 (2%)	7	26
47	J8	91/98 (93%)	85 (93%)	4 (4%)	2 (2%)	6	25
48	G5	64/72 (89%)	60 (94%)	2 (3%)	2 (3%)	4	19
48	K8	64/72 (89%)	59 (92%)	4 (6%)	1 (2%)	9	33
49	H5	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
49	L8	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
50	I5	61/71 (86%)	35 (57%)	24 (39%)	2 (3%)	4	17
50	M8	64/71 (90%)	44 (69%)	18 (28%)	2 (3%)	4	19
51	J5	56/60 (93%)	50 (89%)	5 (9%)	1 (2%)	8	30
51	N8	47/60 (78%)	43 (92%)	4 (8%)	0	100	100
52	L5	43/49 (88%)	41 (95%)	2 (5%)	0	100	100
52	P8	43/49 (88%)	41 (95%)	2 (5%)	0	100	100
53	M5	58/65 (89%)	46 (79%)	10 (17%)	2 (3%)	3	17
53	Q8	60/65 (92%)	41 (68%)	12 (20%)	7 (12%)	0	1
All	All	11230/11946 (94%)	9889 (88%)	1191 (11%)	150 (1%)	12	38

5 of 150 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
14	5I	25	VAL
18	9I	22	VAL
44	G8	81	LYS
45	H8	53	ILE
53	Q8	51	ALA

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	12	205/220 (93%)	159 (78%)	46 (22%)	1	3
2	1E	205/220 (93%)	161 (78%)	44 (22%)	1	3
3	22	160/188 (85%)	124 (78%)	36 (22%)	1	3
3	2E	159/188 (85%)	124 (78%)	35 (22%)	1	3
4	32	180/181 (99%)	150 (83%)	30 (17%)	2	8
4	3E	180/181 (99%)	148 (82%)	32 (18%)	2	7
5	42	116/123 (94%)	93 (80%)	23 (20%)	1	5
5	4E	116/123 (94%)	97 (84%)	19 (16%)	2	9
6	52	90/90 (100%)	73 (81%)	17 (19%)	1	5
6	5E	90/90 (100%)	77 (86%)	13 (14%)	3	12
7	62	126/127 (99%)	102 (81%)	24 (19%)	1	5
7	6E	126/127 (99%)	107 (85%)	19 (15%)	3	10
8	72	119/119 (100%)	106 (89%)	13 (11%)	6	22
8	7E	119/119 (100%)	97 (82%)	22 (18%)	1	6
9	82	98/99 (99%)	78 (80%)	20 (20%)	1	4
9	8E	98/99 (99%)	76 (78%)	22 (22%)	1	3
10	1A	89/92 (97%)	70 (79%)	19 (21%)	1	4
10	1I	89/92 (97%)	73 (82%)	16 (18%)	1	6
11	2A	90/99 (91%)	74 (82%)	16 (18%)	2	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	2I	88/99 (89%)	73 (83%)	15 (17%)	2	8
12	3A	104/109 (95%)	85 (82%)	19 (18%)	1	6
12	3I	104/109 (95%)	88 (85%)	16 (15%)	2	10
13	4A	94/101 (93%)	77 (82%)	17 (18%)	1	6
13	4I	94/101 (93%)	76 (81%)	18 (19%)	1	5
14	5A	48/50 (96%)	39 (81%)	9 (19%)	1	5
14	5I	50/50 (100%)	36 (72%)	14 (28%)	0	1
15	6A	79/80 (99%)	70 (89%)	9 (11%)	5	20
15	6I	79/80 (99%)	67 (85%)	12 (15%)	3	10
16	7A	72/74 (97%)	62 (86%)	10 (14%)	3	13
16	7I	72/74 (97%)	56 (78%)	16 (22%)	1	3
17	8A	95/97 (98%)	82 (86%)	13 (14%)	3	14
17	8I	95/97 (98%)	77 (81%)	18 (19%)	1	5
18	9A	60/77 (78%)	50 (83%)	10 (17%)	2	8
18	9I	63/77 (82%)	52 (82%)	11 (18%)	2	7
19	AA	66/80 (82%)	55 (83%)	11 (17%)	2	8
19	AI	72/80 (90%)	55 (76%)	17 (24%)	1	2
20	BA	76/82 (93%)	58 (76%)	18 (24%)	1	2
20	BI	76/82 (93%)	66 (87%)	10 (13%)	4	15
21	1B	20/22 (91%)	17 (85%)	3 (15%)	3	11
21	1F	17/22 (77%)	14 (82%)	3 (18%)	2	7
27	11	214/218 (98%)	164 (77%)	50 (23%)	1	2
27	19	214/218 (98%)	170 (79%)	44 (21%)	1	4
28	21	165/166 (99%)	131 (79%)	34 (21%)	1	4
28	29	165/166 (99%)	124 (75%)	41 (25%)	0	2
29	31	161/166 (97%)	133 (83%)	28 (17%)	2	7
29	39	165/166 (99%)	129 (78%)	36 (22%)	1	3
30	41	155/156 (99%)	123 (79%)	32 (21%)	1	4
30	49	155/156 (99%)	127 (82%)	28 (18%)	1	6
31	51	145/148 (98%)	111 (77%)	34 (23%)	1	2
31	59	143/148 (97%)	114 (80%)	29 (20%)	1	4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	61	122/124 (98%)	91 (75%)	31 (25%)	0	1
32	69	122/124 (98%)	89 (73%)	33 (27%)	0	1
33	15	117/119 (98%)	91 (78%)	26 (22%)	1	3
33	58	117/119 (98%)	96 (82%)	21 (18%)	2	6
34	25	100/100 (100%)	77 (77%)	23 (23%)	1	2
34	68	100/100 (100%)	84 (84%)	16 (16%)	2	9
35	35	116/116 (100%)	81 (70%)	35 (30%)	0	0
35	78	116/116 (100%)	73 (63%)	43 (37%)	0	0
36	45	109/111 (98%)	87 (80%)	22 (20%)	1	4
36	88	111/111 (100%)	89 (80%)	22 (20%)	1	5
37	55	100/101 (99%)	78 (78%)	22 (22%)	1	3
37	98	101/101 (100%)	78 (77%)	23 (23%)	1	3
38	65	87/88 (99%)	61 (70%)	26 (30%)	0	0
38	A8	87/88 (99%)	59 (68%)	28 (32%)	0	0
39	75	120/127 (94%)	94 (78%)	26 (22%)	1	3
39	B8	119/127 (94%)	89 (75%)	30 (25%)	0	1
40	85	93/94 (99%)	81 (87%)	12 (13%)	4	16
40	C8	93/94 (99%)	78 (84%)	15 (16%)	2	9
41	95	82/82 (100%)	65 (79%)	17 (21%)	1	4
41	D8	82/82 (100%)	63 (77%)	19 (23%)	1	2
42	A5	92/92 (100%)	75 (82%)	17 (18%)	1	6
42	E8	92/92 (100%)	66 (72%)	26 (28%)	0	1
43	B5	74/78 (95%)	60 (81%)	14 (19%)	1	5
43	F8	76/78 (97%)	66 (87%)	10 (13%)	4	15
44	C5	85/91 (93%)	59 (69%)	26 (31%)	0	0
44	G8	84/91 (92%)	68 (81%)	16 (19%)	1	5
45	D5	158/179 (88%)	123 (78%)	35 (22%)	1	3
45	H8	154/179 (86%)	120 (78%)	34 (22%)	1	3
46	E5	62/67 (92%)	51 (82%)	11 (18%)	2	7
46	I8	62/67 (92%)	51 (82%)	11 (18%)	2	7
47	F5	82/83 (99%)	63 (77%)	19 (23%)	1	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
47	J8	78/83 (94%)	66 (85%)	12 (15%)	2	10
48	G5	62/67 (92%)	49 (79%)	13 (21%)	1	4
48	K8	62/67 (92%)	42 (68%)	20 (32%)	0	0
49	H5	51/52 (98%)	40 (78%)	11 (22%)	1	3
49	L8	51/52 (98%)	42 (82%)	9 (18%)	2	7
50	I5	57/63 (90%)	43 (75%)	14 (25%)	0	2
50	M8	59/63 (94%)	47 (80%)	12 (20%)	1	4
51	J5	51/52 (98%)	45 (88%)	6 (12%)	5	18
51	N8	43/52 (83%)	34 (79%)	9 (21%)	1	4
52	L5	38/42 (90%)	33 (87%)	5 (13%)	4	15
52	P8	38/42 (90%)	30 (79%)	8 (21%)	1	4
53	M5	50/55 (91%)	37 (74%)	13 (26%)	0	1
53	Q8	42/55 (76%)	22 (52%)	20 (48%)	0	0
All	All	9458/9894 (96%)	7506 (79%)	1952 (21%)	1	4

5 of 1952 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
48	K8	66	GLU
42	A5	51	LEU
7	62	72	ARG
41	95	40	LEU
48	G5	14	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 23 such sidechains are listed below:

Mol	Chain	Res	Type
16	7A	82	GLN
30	49	58	GLN
29	39	40	GLN
32	69	104	GLN
39	B8	58	ASN

### 5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1496/1522 (98%)	355 (23%)	31 (2%)
22	1K	82/85 (96%)	39 (47%)	4 (4%)
22	3K	82/85 (96%)	31 (37%)	3 (3%)
23	2K	76/77 (98%)	20 (26%)	3 (3%)
24	4K	13/27 (48%)	4 (30%)	0
25	14	2905/2917 (99%)	766 (26%)	39 (1%)
25	1H	2911/2917 (99%)	766 (26%)	56 (1%)
26	16	121/122 (99%)	26 (21%)	0
26	1J	121/122 (99%)	30 (24%)	2 (1%)
54	1G	1495/1522 (98%)	393 (26%)	37 (2%)
55	1L	84/85 (98%)	37 (44%)	4 (4%)
55	3L	84/85 (98%)	28 (33%)	3 (3%)
56	2L	76/77 (98%)	17 (22%)	2 (2%)
57	4L	15/27 (55%)	5 (33%)	1 (6%)
All	All	9561/9670 (98%)	2517 (26%)	185 (1%)

5 of 2517 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	6	G
1	13	7	G
1	13	9	G
1	13	31	G

5 of 185 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
54	1G	793	U
57	4L	13	A
54	1G	1053	G
54	1G	1442	G
25	14	529	A

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

25 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
23	5MU	2K	55	23	19,22,23	3.83	5 (26%)	28,32,35	3.40	8 (28%)
22	PSU	3K	40	22	18,21,22	1.33	1 (5%)	22,30,33	1.53	3 (13%)
22	4SU	1K	8	22	18,21,22	1.97	5 (27%)	26,30,33	2.03	4 (15%)
22	PSU	1K	64	22	18,21,22	1.15	1 (5%)	22,30,33	1.71	4 (18%)
22	5MU	3K	63	22	19,22,23	3.91	5 (26%)	28,32,35	3.10	9 (32%)
23	4SU	2K	8	23	18,21,22	1.87	3 (16%)	26,30,33	2.82	5 (19%)
22	OMG	1K	17	22	18,26,27	5.26	8 (44%)	19,38,41	3.71	10 (52%)
22	QUO	1K	35	22,24	29,35,36	5.17	10 (34%)	31,52,55	3.69	9 (29%)
56	OMC	2L	33	56	19,22,23	1.80	4 (21%)	26,31,34	0.96	1 (3%)
22	PSU	3K	64	22	18,21,22	1.29	1 (5%)	22,30,33	1.59	4 (18%)
56	H2U	2L	21	56	18,21,22	2.38	3 (16%)	21,30,33	1.69	5 (23%)
22	5MU	1K	63	22	19,22,23	3.95	5 (26%)	28,32,35	3.26	10 (35%)
22	MIA	3K	38	22	24,31,32	2.72	5 (20%)	26,44,47	2.79	10 (38%)
22	QUO	3K	35	22	29,35,36	5.33	11 (37%)	31,52,55	3.85	10 (32%)
22	PSU	1K	40	22	18,21,22	1.08	1 (5%)	22,30,33	1.58	4 (18%)
56	4SU	2L	8	56	18,21,22	2.07	5 (27%)	26,30,33	2.52	7 (26%)
22	OMG	3K	17	22	18,26,27	5.31	9 (50%)	19,38,41	3.64	7 (36%)
22	MIA	1K	38	22	24,31,32	2.48	3 (12%)	26,44,47	2.83	9 (34%)
23	H2U	2K	21	23	18,21,22	2.58	4 (22%)	21,30,33	1.87	5 (23%)
56	5MU	2L	55	56	19,22,23	3.71	5 (26%)	28,32,35	3.29	10 (35%)
56	PSU	2L	56	56	18,21,22	1.27	2 (11%)	22,30,33	1.57	2 (9%)
23	7MG	2K	47	23	22,26,27	2.92	6 (27%)	29,39,42	2.85	10 (34%)
22	4SU	3K	8	22	18,21,22	1.83	5 (27%)	26,30,33	2.50	7 (26%)
23	PSU	2K	56	23	18,21,22	1.15	2 (11%)	22,30,33	1.88	4 (18%)
23	OMC	2K	33	23	19,22,23	1.68	3 (15%)	26,31,34	0.93	1 (3%)

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
23	5MU	2K	55	23	-	0/7/25/26	0/2/2/2
22	PSU	3K	40	22	-	1/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	4SU	1K	8	22	-	3/7/25/26	0/2/2/2
22	PSU	1K	64	22	-	0/7/25/26	0/2/2/2
22	5MU	3K	63	22	-	0/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/7/25/26	0/2/2/2
22	OMG	1K	17	22	-	3/5/27/28	0/3/3/3
22	QUO	1K	35	22,24	-	5/6/43/44	0/4/4/4
56	OMC	2L	33	56	-	0/9/27/28	0/2/2/2
22	PSU	3K	64	22	-	1/7/25/26	0/2/2/2
56	H2U	2L	21	56	-	3/7/38/39	0/2/2/2
22	5MU	1K	63	22	-	4/7/25/26	0/2/2/2
22	MIA	3K	38	22	-	6/11/33/34	0/3/3/3
22	QUO	3K	35	22	-	2/6/43/44	0/4/4/4
22	PSU	1K	40	22	-	2/7/25/26	0/2/2/2
56	4SU	2L	8	56	-	0/7/25/26	0/2/2/2
22	OMG	3K	17	22	-	4/5/27/28	0/3/3/3
22	MIA	1K	38	22	-	5/11/33/34	0/3/3/3
23	H2U	2K	21	23	-	4/7/38/39	0/2/2/2
56	5MU	2L	55	56	-	0/7/25/26	0/2/2/2
56	PSU	2L	56	56	-	0/7/25/26	0/2/2/2
23	7MG	2K	47	23	-	4/7/37/38	0/3/3/3
22	4SU	3K	8	22	-	2/7/25/26	0/2/2/2
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	0/9/27/28	0/2/2/2

The worst 5 of 112 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	1K	17	OMG	C8-N7	-15.47	1.08	1.35
22	3K	17	OMG	C8-N7	-15.29	1.09	1.35
22	1K	35	QUO	C6-N1	-15.09	1.15	1.37
22	3K	35	QUO	C6-N1	-14.80	1.15	1.37
22	3K	35	QUO	C4-N3	14.58	1.72	1.37

The worst 5 of 158 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	3K	35	QUO	C5-C6-N1	16.35	129.20	115.36
22	1K	35	QUO	C5-C6-N1	14.20	127.39	115.36
22	1K	35	QUO	C8-N9-C1'	-11.88	114.96	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2K	55	5MU	C5-C4-N3	11.81	125.39	115.31
22	1K	63	5MU	C5-C4-N3	11.33	124.98	115.31

There are no chirality outliers.

5 of 49 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	1K	8	4SU	C3'-C4'-C5'-O5'
22	1K	8	4SU	O4'-C4'-C5'-O5'
22	1K	17	OMG	O4'-C4'-C5'-O5'
22	1K	17	OMG	C1'-C2'-O2'-CM2
22	3K	17	OMG	C1'-C2'-O2'-CM2

There are no ring outliers.

20 monomers are involved in 43 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	2K	55	5MU	3	0
22	1K	8	4SU	1	0
22	1K	64	PSU	2	0
23	2K	8	4SU	1	0
22	1K	17	OMG	3	0
22	1K	35	QUO	6	0
56	2L	33	OMC	1	0
22	3K	64	PSU	1	0
56	2L	21	H2U	1	0
22	1K	63	5MU	2	0
22	3K	38	MIA	4	0
22	3K	35	QUO	2	0
56	2L	8	4SU	1	0
22	3K	17	OMG	3	0
22	1K	38	MIA	5	0
23	2K	21	H2U	1	0
56	2L	55	5MU	2	0
56	2L	56	PSU	1	0
23	2K	47	7MG	3	0
22	3K	8	4SU	2	0

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 1166 ligands modelled in this entry, 1166 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
54	1G	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1G	1530:G	O3'	1531:A	P	3.04

## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	13	1498/1522 (98%)	0.03	25 (1%) 70 46	53, 97, 184, 399	0
2	12	237/256 (92%)	-0.05	8 (3%) 45 22	130, 169, 209, 225	0
2	1E	237/256 (92%)	-0.03	5 (2%) 63 39	106, 143, 183, 208	0
3	22	206/239 (86%)	0.31	17 (8%) 11 4	131, 148, 178, 208	0
3	2E	205/239 (85%)	-0.10	2 (0%) 82 63	84, 106, 147, 160	0
4	32	208/209 (99%)	0.96	27 (12%) 3 1	94, 116, 145, 163	0
4	3E	208/209 (99%)	0.55	18 (8%) 10 3	78, 104, 133, 148	0
5	42	151/162 (93%)	0.76	27 (17%) 1 0	104, 128, 145, 174	0
5	4E	151/162 (93%)	0.59	17 (11%) 5 1	73, 99, 121, 159	0
6	52	101/101 (100%)	-0.36	0 100 100	86, 101, 124, 148	0
6	5E	101/101 (100%)	0.11	1 (0%) 82 63	82, 104, 122, 147	0
7	62	155/156 (99%)	0.61	22 (14%) 2 1	107, 125, 147, 172	0
7	6E	155/156 (99%)	0.55	21 (13%) 3 1	99, 117, 150, 172	0
8	72	138/138 (100%)	1.44	40 (28%) 0 0	103, 129, 141, 146	0
8	7E	138/138 (100%)	0.70	24 (17%) 1 0	86, 107, 122, 130	0
9	82	127/128 (99%)	2.63	67 (52%) 0 0	112, 160, 189, 195	0
9	8E	127/128 (99%)	1.72	46 (36%) 0 0	87, 138, 174, 191	0
10	1A	99/105 (94%)	1.37	28 (28%) 0 0	125, 160, 189, 204	0
10	1I	99/105 (94%)	0.87	23 (23%) 0 0	84, 135, 166, 180	0
11	2A	119/129 (92%)	1.00	14 (11%) 4 1	90, 112, 142, 222	0
11	2I	116/129 (89%)	0.53	8 (6%) 16 6	75, 106, 136, 169	0
12	3A	125/132 (94%)	0.50	18 (14%) 2 1	84, 106, 150, 179	0
12	3I	125/132 (94%)	0.35	11 (8%) 10 3	65, 74, 119, 207	0
13	4A	117/126 (92%)	0.83	23 (19%) 1 0	113, 148, 183, 198	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	4I	116/126 (92%)	0.29	9 (7%) 13 4	82, 125, 146, 160	0
14	5A	58/61 (95%)	3.44	40 (68%) 0 0	130, 150, 162, 165	0
14	5I	61/61 (100%)	0.87	9 (14%) 2 1	85, 96, 116, 139	0
15	6A	88/89 (98%)	0.36	5 (5%) 23 10	82, 113, 134, 140	0
15	6I	88/89 (98%)	0.46	4 (4%) 33 15	78, 99, 119, 132	0
16	7A	84/88 (95%)	1.87	34 (40%) 0 0	88, 105, 134, 165	0
16	7I	84/88 (95%)	2.62	48 (57%) 0 0	97, 113, 152, 171	0
17	8A	100/105 (95%)	0.85	21 (21%) 1 0	92, 111, 131, 172	0
17	8I	100/105 (95%)	0.60	12 (12%) 4 1	85, 103, 119, 129	0
18	9A	69/88 (78%)	0.03	2 (2%) 51 26	94, 116, 143, 162	0
18	9I	72/88 (81%)	0.13	0 100 100	87, 108, 156, 177	0
19	AA	82/93 (88%)	0.85	11 (13%) 3 1	144, 164, 200, 218	0
19	AI	83/93 (89%)	0.27	5 (6%) 21 9	93, 125, 162, 185	0
20	BA	99/106 (93%)	1.09	22 (22%) 0 0	85, 108, 139, 170	0
20	BI	99/106 (93%)	1.19	34 (34%) 0 0	107, 121, 164, 171	0
21	1B	25/27 (92%)	5.69	22 (88%) 0 0	114, 135, 154, 180	0
21	1F	22/27 (81%)	3.18	15 (68%) 0 0	96, 108, 115, 122	0
22	1K	78/85 (91%)	0.13	5 (6%) 19 7	84, 149, 162, 175	0
22	3K	78/85 (91%)	-0.27	3 (3%) 40 20	68, 166, 190, 197	0
23	2K	71/77 (92%)	-0.10	1 (1%) 75 53	65, 89, 122, 126	0
24	4K	15/27 (55%)	1.92	6 (40%) 0 0	68, 100, 173, 180	0
25	14	2907/2917 (99%)	0.05	40 (1%) 75 53	46, 81, 243, 482	0
25	1H	2912/2917 (99%)	0.08	20 (0%) 87 72	35, 69, 228, 380	0
26	16	122/122 (100%)	-0.31	0 100 100	64, 90, 115, 254	0
26	1J	122/122 (100%)	-0.43	0 100 100	79, 115, 142, 216	0
27	11	272/276 (98%)	0.19	1 (0%) 92 82	38, 61, 80, 92	0
27	19	273/276 (98%)	0.53	16 (5%) 22 9	43, 70, 87, 100	0
28	21	205/206 (99%)	0.52	10 (4%) 29 13	46, 86, 143, 168	0
28	29	205/206 (99%)	0.84	32 (15%) 2 1	56, 90, 162, 204	0
29	31	202/210 (96%)	0.08	0 100 100	41, 75, 128, 144	0
29	39	208/210 (99%)	0.20	9 (4%) 35 16	56, 99, 181, 218	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
30	41	181/182 (99%)	0.42	9 (4%) 28 12	81, 107, 149, 173	0
30	49	181/182 (99%)	0.47	19 (10%) 6 2	110, 135, 175, 194	0
31	51	174/180 (96%)	0.24	8 (4%) 32 15	80, 105, 120, 146	0
31	59	171/180 (95%)	1.93	67 (39%) 0 0	138, 195, 241, 262	0
32	61	146/148 (98%)	0.10	6 (4%) 37 18	72, 128, 153, 163	0
32	69	146/148 (98%)	0.36	14 (9%) 8 2	77, 127, 159, 170	0
33	15	138/140 (98%)	0.95	26 (18%) 1 0	72, 103, 140, 162	0
33	58	138/140 (98%)	0.31	5 (3%) 42 21	62, 87, 134, 151	0
34	25	122/122 (100%)	0.35	6 (4%) 29 13	62, 84, 103, 109	0
34	68	122/122 (100%)	0.11	2 (1%) 72 49	53, 73, 90, 105	0
35	35	150/150 (100%)	0.92	28 (18%) 1 0	57, 105, 148, 199	0
35	78	150/150 (100%)	0.37	6 (4%) 38 18	43, 80, 110, 179	0
36	45	138/141 (97%)	1.82	52 (37%) 0 0	72, 104, 132, 153	0
36	88	141/141 (100%)	0.58	4 (2%) 53 28	55, 77, 101, 124	0
37	55	117/118 (99%)	0.61	14 (11%) 4 1	56, 76, 93, 114	0
37	98	118/118 (100%)	0.47	7 (5%) 22 9	56, 80, 99, 114	0
38	65	111/112 (99%)	0.81	17 (15%) 2 1	88, 112, 136, 157	0
38	A8	111/112 (99%)	0.15	4 (3%) 42 21	72, 87, 122, 145	0
39	75	137/146 (93%)	0.35	7 (5%) 28 12	75, 92, 156, 208	0
39	B8	136/146 (93%)	0.15	2 (1%) 73 51	70, 91, 146, 166	0
40	85	117/118 (99%)	0.82	15 (12%) 3 1	61, 89, 141, 183	0
40	C8	117/118 (99%)	0.73	12 (10%) 6 2	49, 77, 129, 152	0
41	95	101/101 (100%)	0.66	16 (15%) 2 0	59, 129, 145, 163	0
41	D8	101/101 (100%)	0.29	4 (3%) 38 18	52, 106, 146, 167	0
42	A5	113/113 (100%)	0.56	6 (5%) 26 11	58, 71, 109, 189	0
42	E8	113/113 (100%)	0.36	1 (0%) 84 66	51, 69, 100, 167	0
43	B5	92/96 (95%)	0.18	4 (4%) 35 16	64, 79, 106, 118	0
43	F8	94/96 (97%)	-0.09	0 100 100	52, 68, 95, 109	0
44	C5	104/110 (94%)	1.28	27 (25%) 0 0	90, 118, 184, 206	0
44	G8	102/110 (92%)	0.63	4 (3%) 39 19	64, 93, 138, 169	0
45	D5	179/206 (86%)	1.12	40 (22%) 0 0	111, 159, 253, 266	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
45	H8	175/206 (84%)	-0.00	4 (2%) 60 36	83, 130, 215, 234	0
46	E5	77/85 (90%)	1.18	16 (20%) 1 0	64, 85, 108, 157	0
46	I8	77/85 (90%)	0.67	7 (9%) 9 3	53, 69, 93, 148	0
47	F5	97/98 (98%)	1.44	17 (17%) 1 0	57, 80, 139, 192	0
47	J8	93/98 (94%)	0.84	8 (8%) 10 4	48, 68, 134, 163	0
48	G5	66/72 (91%)	0.07	0 100 100	78, 100, 122, 175	0
48	K8	66/72 (91%)	0.56	5 (7%) 13 5	54, 78, 98, 148	0
49	H5	59/60 (98%)	1.41	15 (25%) 0 0	77, 97, 153, 166	0
49	L8	59/60 (98%)	0.41	1 (1%) 70 46	58, 77, 114, 136	0
50	I5	63/71 (88%)	1.98	27 (42%) 0 0	153, 212, 237, 256	0
50	M8	66/71 (92%)	0.72	9 (13%) 3 1	111, 171, 226, 241	0
51	J5	58/60 (96%)	0.31	2 (3%) 45 22	55, 84, 168, 218	0
51	N8	49/60 (81%)	0.45	0 100 100	45, 64, 135, 149	0
52	L5	45/49 (91%)	0.51	1 (2%) 62 38	47, 56, 67, 77	0
52	P8	45/49 (91%)	0.17	1 (2%) 62 38	38, 45, 58, 78	0
53	M5	60/65 (92%)	1.42	15 (25%) 0 0	66, 77, 112, 129	0
53	Q8	62/65 (95%)	1.51	19 (30%) 0 0	56, 70, 96, 108	0
54	1G	1498/1522 (98%)	0.07	40 (2%) 54 28	69, 115, 181, 370	0
55	1L	85/85 (100%)	1.93	28 (32%) 0 0	124, 157, 168, 180	0
55	3L	85/85 (100%)	0.07	2 (2%) 59 34	75, 171, 201, 208	0
56	2L	72/77 (93%)	-0.29	1 (1%) 75 53	74, 105, 136, 141	0
57	4L	16/27 (59%)	2.43	8 (50%) 0 0	93, 136, 209, 217	0
All	All	20977/21616 (97%)	0.39	1586 (7%) 13 5	35, 99, 186, 482	0

The worst 5 of 1586 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
11	2A	129	SER	23.9
47	F5	98	LEU	19.3
31	59	100	GLY	15.0
11	2A	128	ALA	14.9
47	F5	97	LEU	12.1

## 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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
56	H2U	2L	21	20/21	0.72	0.21	126,132,139,144	0
22	OMG	1K	17	24/25	0.79	0.19	131,142,162,173	0
22	5MU	3K	63	21/22	0.80	0.20	141,157,163,170	0
22	PSU	3K	64	20/21	0.82	0.17	152,161,169,173	0
22	4SU	3K	8	20/21	0.83	0.11	159,163,169,172	0
22	OMG	3K	17	24/25	0.85	0.16	155,167,174,174	0
22	4SU	1K	8	20/21	0.85	0.14	137,141,150,153	0
23	H2U	2K	21	20/21	0.86	0.19	113,120,123,125	0
22	5MU	1K	63	21/22	0.89	0.18	115,124,133,139	0
22	PSU	1K	64	20/21	0.90	0.17	116,128,135,140	0
56	PSU	2L	56	20/21	0.90	0.10	110,113,122,124	0
22	QUO	3K	35	32/33	0.91	0.25	107,114,128,136	0
56	4SU	2L	8	20/21	0.91	0.12	108,114,119,122	0
22	QUO	1K	35	32/33	0.93	0.34	71,90,101,103	0
22	PSU	1K	40	20/21	0.93	0.17	75,99,107,110	0
22	MIA	3K	38	29/30	0.94	0.18	107,114,119,123	0
22	MIA	1K	38	29/30	0.94	0.32	76,87,107,110	0
23	PSU	2K	56	20/21	0.95	0.13	92,97,108,110	0
56	5MU	2L	55	21/22	0.95	0.10	109,115,121,126	0
23	7MG	2K	47	24/25	0.95	0.14	91,98,108,113	0
23	4SU	2K	8	20/21	0.96	0.15	87,91,95,95	0
56	OMC	2L	33	21/22	0.96	0.23	96,98,101,111	0
22	PSU	3K	40	20/21	0.96	0.11	104,112,115,117	0
23	OMC	2K	33	21/22	0.96	0.27	70,76,81,84	0
23	5MU	2K	55	21/22	0.97	0.15	92,101,109,115	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<sup>th</sup> 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( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3301	1/1	0.45	0.23	87,87,87,87	0
58	MG	14	3270	1/1	0.47	0.26	84,84,84,84	0
58	MG	14	3202	1/1	0.49	0.23	70,70,70,70	0
58	MG	14	3228	1/1	0.49	0.38	79,79,79,79	0
58	MG	13	1619	1/1	0.51	0.23	99,99,99,99	0
58	MG	2K	103	1/1	0.51	0.23	80,80,80,80	0
58	MG	1H	3309	1/1	0.53	0.28	83,83,83,83	0
58	MG	1G	1661	1/1	0.54	0.21	100,100,100,100	0
58	MG	14	3162	1/1	0.54	0.34	100,100,100,100	0
58	MG	14	3296	1/1	0.57	0.37	97,97,97,97	0
58	MG	14	3151	1/1	0.57	0.24	82,82,82,82	0
58	MG	13	1707	1/1	0.58	0.27	83,83,83,83	0
58	MG	1G	1633	1/1	0.58	0.20	80,80,80,80	0
58	MG	29	302	1/1	0.61	0.26	68,68,68,68	0
58	MG	1H	3359	1/1	0.62	0.56	97,97,97,97	0
58	MG	1H	3474	1/1	0.62	0.07	84,84,84,84	0
58	MG	14	3316	1/1	0.62	0.28	96,96,96,96	0
58	MG	1H	3175	1/1	0.62	0.17	58,58,58,58	0
58	MG	1H	3106	1/1	0.63	0.25	78,78,78,78	0
58	MG	13	1654	1/1	0.63	0.24	76,76,76,76	0
58	MG	1H	3365	1/1	0.63	0.46	84,84,84,84	0
58	MG	14	3398	1/1	0.65	0.21	107,107,107,107	0
58	MG	1H	3374	1/1	0.67	0.34	78,78,78,78	0
58	MG	14	3085	1/1	0.67	0.32	59,59,59,59	0
58	MG	13	1700	1/1	0.68	0.33	96,96,96,96	0
58	MG	1H	3110	1/1	0.68	0.30	58,58,58,58	0
58	MG	14	3064	1/1	0.68	0.54	63,63,63,63	0
58	MG	P8	101	1/1	0.68	0.34	70,70,70,70	0
58	MG	14	3146	1/1	0.68	0.52	88,88,88,88	0
58	MG	1H	3296	1/1	0.69	0.25	66,66,66,66	0
58	MG	1H	3313	1/1	0.69	0.40	82,82,82,82	0
58	MG	1G	1658	1/1	0.70	0.30	104,104,104,104	0
58	MG	14	3212	1/1	0.70	0.28	68,68,68,68	0
58	MG	3E	301	1/1	0.70	0.24	115,115,115,115	0
58	MG	1H	3377	1/1	0.70	0.28	68,68,68,68	0
58	MG	1H	3409	1/1	0.70	0.14	46,46,46,46	0
58	MG	1H	3210	1/1	0.70	0.27	86,86,86,86	0
58	MG	1H	3261	1/1	0.70	0.24	66,66,66,66	0
58	MG	13	1717	1/1	0.70	0.31	93,93,93,93	0
58	MG	14	3185	1/1	0.70	0.15	63,63,63,63	0
58	MG	14	3164	1/1	0.71	0.12	76,76,76,76	0
58	MG	1H	3316	1/1	0.71	0.24	80,80,80,80	0
58	MG	14	3306	1/1	0.71	0.23	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	25	201	1/1	0.71	0.26	88,88,88,88	0
58	MG	14	3200	1/1	0.72	0.21	85,85,85,85	0
58	MG	1H	3370	1/1	0.72	0.45	83,83,83,83	0
58	MG	1G	1689	1/1	0.72	0.08	108,108,108,108	0
58	MG	13	1720	1/1	0.72	0.26	89,89,89,89	0
58	MG	14	3284	1/1	0.73	0.18	70,70,70,70	0
58	MG	13	1693	1/1	0.73	0.30	87,87,87,87	0
58	MG	1H	3367	1/1	0.73	0.51	88,88,88,88	0
58	MG	13	1677	1/1	0.73	0.11	59,59,59,59	0
58	MG	13	1692	1/1	0.73	0.39	80,80,80,80	0
58	MG	1H	3269	1/1	0.73	0.25	55,55,55,55	0
58	MG	1H	3291	1/1	0.73	0.25	70,70,70,70	0
58	MG	14	3278	1/1	0.73	0.17	67,67,67,67	0
59	ZN	G8	201	1/1	0.73	0.33	185,185,185,185	0
58	MG	14	3302	1/1	0.74	0.25	131,131,131,131	0
58	MG	1G	1612	1/1	0.74	0.24	78,78,78,78	0
58	MG	14	3308	1/1	0.74	0.53	79,79,79,79	0
58	MG	14	3166	1/1	0.74	0.25	76,76,76,76	0
58	MG	14	3387	1/1	0.74	0.09	86,86,86,86	0
58	MG	1G	1666	1/1	0.74	0.20	117,117,117,117	0
58	MG	14	3147	1/1	0.74	0.15	73,73,73,73	0
58	MG	13	1680	1/1	0.74	0.25	71,71,71,71	0
58	MG	13	1713	1/1	0.74	0.24	83,83,83,83	0
58	MG	14	3374	1/1	0.75	0.15	87,87,87,87	0
58	MG	1H	3163	1/1	0.75	0.38	78,78,78,78	0
58	MG	1H	3315	1/1	0.75	0.26	67,67,67,67	0
58	MG	14	3140	1/1	0.76	0.13	61,61,61,61	0
58	MG	1H	3305	1/1	0.76	0.24	66,66,66,66	0
58	MG	1G	1631	1/1	0.76	0.26	73,73,73,73	0
58	MG	1H	3263	1/1	0.76	0.20	61,61,61,61	0
58	MG	1G	1656	1/1	0.76	0.16	92,92,92,92	0
58	MG	1H	3373	1/1	0.76	0.48	72,72,72,72	0
58	MG	13	1698	1/1	0.76	0.17	83,83,83,83	0
58	MG	1H	3221	1/1	0.76	0.14	69,69,69,69	0
58	MG	14	3187	1/1	0.76	0.46	88,88,88,88	0
58	MG	1H	3196	1/1	0.76	0.39	71,71,71,71	0
58	MG	1H	3301	1/1	0.76	0.21	75,75,75,75	0
58	MG	1H	3303	1/1	0.76	0.26	75,75,75,75	0
58	MG	14	3115	1/1	0.76	0.19	71,71,71,71	0
58	MG	14	3229	1/1	0.76	0.54	82,82,82,82	0
58	MG	14	3254	1/1	0.76	0.21	94,94,94,94	0
58	MG	1G	1654	1/1	0.77	0.16	110,110,110,110	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	13	1723	1/1	0.77	0.14	77,77,77,77	0
58	MG	14	3259	1/1	0.77	0.21	66,66,66,66	0
58	MG	1H	3332	1/1	0.77	0.17	62,62,62,62	0
58	MG	1H	3151	1/1	0.77	0.27	56,56,56,56	0
58	MG	1H	3198	1/1	0.77	0.16	79,79,79,79	0
58	MG	1G	1685	1/1	0.77	0.07	111,111,111,111	0
58	MG	13	1716	1/1	0.77	0.16	80,80,80,80	0
58	MG	2L	102	1/1	0.77	0.19	76,76,76,76	0
58	MG	1H	3122	1/1	0.78	0.35	74,74,74,74	0
58	MG	1G	1629	1/1	0.78	0.25	85,85,85,85	0
58	MG	14	3107	1/1	0.78	0.24	64,64,64,64	0
58	MG	1H	3357	1/1	0.78	0.38	86,86,86,86	0
58	MG	16	208	1/1	0.78	0.31	80,80,80,80	0
58	MG	L8	101	1/1	0.78	0.24	84,84,84,84	0
58	MG	1H	3253	1/1	0.78	0.15	47,47,47,47	0
58	MG	1H	3366	1/1	0.79	0.42	83,83,83,83	0
58	MG	1H	3461	1/1	0.79	0.16	103,103,103,103	0
58	MG	1G	1679	1/1	0.79	0.22	157,157,157,157	0
58	MG	1G	1645	1/1	0.79	0.23	78,78,78,78	0
58	MG	14	3141	1/1	0.79	0.17	75,75,75,75	0
58	MG	14	3194	1/1	0.79	0.14	57,57,57,57	0
58	MG	14	3397	1/1	0.79	0.10	86,86,86,86	0
58	MG	1H	3338	1/1	0.79	0.31	80,80,80,80	0
58	MG	14	3289	1/1	0.79	0.40	75,75,75,75	0
58	MG	1G	1627	1/1	0.79	0.26	77,77,77,77	0
58	MG	1H	3143	1/1	0.79	0.29	66,66,66,66	0
58	MG	14	3267	1/1	0.80	0.12	74,74,74,74	0
58	MG	13	1648	1/1	0.80	0.30	75,75,75,75	0
58	MG	1H	3262	1/1	0.80	0.17	56,56,56,56	0
58	MG	1H	3036	1/1	0.80	0.17	67,67,67,67	0
58	MG	1G	1657	1/1	0.80	0.39	110,110,110,110	0
58	MG	14	3295	1/1	0.80	0.19	80,80,80,80	0
58	MG	1H	3469	1/1	0.80	0.10	106,106,106,106	0
58	MG	14	3298	1/1	0.80	0.57	80,80,80,80	0
58	MG	1H	3184	1/1	0.80	0.16	87,87,87,87	0
58	MG	16	205	1/1	0.80	0.19	87,87,87,87	0
58	MG	1G	1677	1/1	0.80	0.18	99,99,99,99	0
58	MG	1H	3192	1/1	0.80	0.24	58,58,58,58	0
58	MG	13	1610	1/1	0.80	0.32	94,94,94,94	0
58	MG	14	3325	1/1	0.80	0.30	86,86,86,86	0
58	MG	13	1671	1/1	0.80	0.20	138,138,138,138	0
58	MG	1H	3302	1/1	0.80	0.55	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1G	1620	1/1	0.80	0.14	91,91,91,91	0
58	MG	13	1735	1/1	0.80	0.12	93,93,93,93	0
58	MG	13	1737	1/1	0.80	0.15	132,132,132,132	0
58	MG	39	301	1/1	0.80	0.12	60,60,60,60	0
58	MG	1H	3224	1/1	0.80	0.38	79,79,79,79	0
58	MG	13	1635	1/1	0.80	0.32	77,77,77,77	0
59	ZN	C5	202	1/1	0.80	0.15	194,194,194,194	0
58	MG	13	1714	1/1	0.81	0.36	95,95,95,95	0
58	MG	16	203	1/1	0.81	0.36	77,77,77,77	0
58	MG	16	204	1/1	0.81	0.12	75,75,75,75	0
58	MG	1G	1626	1/1	0.81	0.18	80,80,80,80	0
58	MG	13	1653	1/1	0.81	0.15	84,84,84,84	0
58	MG	1H	3226	1/1	0.81	0.48	66,66,66,66	0
58	MG	14	3310	1/1	0.81	0.30	76,76,76,76	0
58	MG	31	303	1/1	0.81	0.15	63,63,63,63	0
58	MG	13	1721	1/1	0.81	0.12	59,59,59,59	0
58	MG	13	1708	1/1	0.82	0.24	81,81,81,81	0
58	MG	13	1710	1/1	0.82	0.19	77,77,77,77	0
58	MG	13	1622	1/1	0.82	0.17	64,64,64,64	0
58	MG	13	1660	1/1	0.82	0.20	87,87,87,87	0
58	MG	14	3129	1/1	0.82	0.36	73,73,73,73	0
58	MG	14	3138	1/1	0.82	0.19	69,69,69,69	0
58	MG	13	1682	1/1	0.82	0.11	78,78,78,78	0
58	MG	8E	201	1/1	0.82	0.21	95,95,95,95	0
58	MG	1H	3297	1/1	0.82	0.22	59,59,59,59	0
58	MG	1H	3437	1/1	0.82	0.13	66,66,66,66	0
58	MG	1G	1668	1/1	0.82	0.24	76,76,76,76	0
58	MG	13	1702	1/1	0.82	0.23	77,77,77,77	0
58	MG	1H	3462	1/1	0.82	0.07	76,76,76,76	0
58	MG	1H	3467	1/1	0.82	0.09	68,68,68,68	0
58	MG	1H	3231	1/1	0.82	0.31	110,110,110,110	0
58	MG	13	1612	1/1	0.82	0.15	74,74,74,74	0
58	MG	2K	105	1/1	0.83	0.30	87,87,87,87	0
58	MG	I8	101	1/1	0.83	0.19	63,63,63,63	0
58	MG	14	3189	1/1	0.83	0.25	71,71,71,71	0
58	MG	1H	3035	1/1	0.83	0.34	83,83,83,83	0
58	MG	1H	3266	1/1	0.83	0.14	43,43,43,43	0
58	MG	13	1728	1/1	0.83	0.06	101,101,101,101	0
58	MG	14	3132	1/1	0.83	0.08	64,64,64,64	0
58	MG	13	1670	1/1	0.83	0.19	86,86,86,86	0
58	MG	14	3319	1/1	0.83	0.34	96,96,96,96	0
58	MG	1H	3398	1/1	0.83	0.12	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	13	1641	1/1	0.83	0.26	68,68,68,68	0
58	MG	14	3384	1/1	0.83	0.10	71,71,71,71	0
58	MG	14	3142	1/1	0.83	0.16	62,62,62,62	0
58	MG	14	3262	1/1	0.83	0.21	86,86,86,86	0
58	MG	1H	3433	1/1	0.83	0.12	53,53,53,53	0
58	MG	1H	3217	1/1	0.83	0.34	77,77,77,77	0
58	MG	16	212	1/1	0.83	0.11	78,78,78,78	0
58	MG	1G	1687	1/1	0.83	0.08	106,106,106,106	0
58	MG	1G	1637	1/1	0.83	0.17	75,75,75,75	0
58	MG	1G	1640	1/1	0.83	0.27	78,78,78,78	0
58	MG	1H	3082	1/1	0.84	0.36	60,60,60,60	0
58	MG	14	3078	1/1	0.84	0.27	87,87,87,87	0
58	MG	14	3299	1/1	0.84	0.23	53,53,53,53	0
58	MG	14	3080	1/1	0.84	0.19	45,45,45,45	0
58	MG	1H	3304	1/1	0.84	0.39	77,77,77,77	0
58	MG	1H	3238	1/1	0.84	0.31	67,67,67,67	0
58	MG	1H	3276	1/1	0.84	0.45	76,76,76,76	0
58	MG	1H	3239	1/1	0.84	0.38	76,76,76,76	0
58	MG	1H	3463	1/1	0.84	0.25	92,92,92,92	0
58	MG	1H	3465	1/1	0.84	0.09	87,87,87,87	0
58	MG	1H	3195	1/1	0.84	0.28	80,80,80,80	0
58	MG	14	3326	1/1	0.84	0.13	90,90,90,90	0
58	MG	14	3359	1/1	0.84	0.19	73,73,73,73	0
58	MG	1H	3074	1/1	0.84	0.26	58,58,58,58	0
58	MG	1H	3159	1/1	0.84	0.38	64,64,64,64	0
58	MG	14	3143	1/1	0.84	0.21	64,64,64,64	0
58	MG	1H	3475	1/1	0.84	0.14	95,95,95,95	0
58	MG	1H	3201	1/1	0.84	0.44	87,87,87,87	0
58	MG	1H	3380	1/1	0.84	0.22	69,69,69,69	0
58	MG	14	3156	1/1	0.84	0.33	70,70,70,70	0
58	MG	14	3286	1/1	0.84	0.31	84,84,84,84	0
58	MG	1G	1636	1/1	0.84	0.24	85,85,85,85	0
58	MG	1H	3342	1/1	0.84	0.23	70,70,70,70	0
58	MG	3I	201	1/1	0.85	0.09	59,59,59,59	0
58	MG	13	1650	1/1	0.85	0.30	76,76,76,76	0
58	MG	14	3196	1/1	0.85	0.32	82,82,82,82	0
58	MG	1H	3207	1/1	0.85	0.21	57,57,57,57	0
58	MG	13	1711	1/1	0.85	0.35	89,89,89,89	0
58	MG	1H	3346	1/1	0.85	0.28	78,78,78,78	0
58	MG	1H	3423	1/1	0.85	0.11	71,71,71,71	0
58	MG	13	1712	1/1	0.85	0.17	74,74,74,74	0
58	MG	14	3235	1/1	0.85	0.19	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3128	1/1	0.85	0.17	46,46,46,46	0
58	MG	1H	3223	1/1	0.85	0.25	63,63,63,63	0
58	MG	14	3150	1/1	0.85	0.37	70,70,70,70	0
58	MG	14	3034	1/1	0.85	0.30	57,57,57,57	0
58	MG	13	1663	1/1	0.85	0.20	68,68,68,68	0
58	MG	1H	3225	1/1	0.85	0.34	68,68,68,68	0
58	MG	14	3390	1/1	0.85	0.14	70,70,70,70	0
58	MG	14	3283	1/1	0.85	0.28	88,88,88,88	0
58	MG	13	1709	1/1	0.85	0.33	87,87,87,87	0
58	MG	1J	203	1/1	0.85	0.23	75,75,75,75	0
58	MG	1G	1611	1/1	0.85	0.23	89,89,89,89	0
58	MG	14	3170	1/1	0.85	0.12	69,69,69,69	0
58	MG	14	3291	1/1	0.85	0.15	77,77,77,77	0
58	MG	1H	3285	1/1	0.85	0.26	62,62,62,62	0
58	MG	1G	1660	1/1	0.85	0.41	82,82,82,82	0
58	MG	14	3030	1/1	0.86	0.17	91,91,91,91	0
58	MG	1H	3046	1/1	0.86	0.30	82,82,82,82	0
58	MG	14	3036	1/1	0.86	0.12	74,74,74,74	0
58	MG	14	3168	1/1	0.86	0.27	79,79,79,79	0
58	MG	1H	3328	1/1	0.86	0.31	63,63,63,63	0
58	MG	14	3174	1/1	0.86	0.11	78,78,78,78	0
58	MG	1H	3383	1/1	0.86	0.23	113,113,113,113	0
58	MG	13	1706	1/1	0.86	0.19	98,98,98,98	0
58	MG	14	3303	1/1	0.86	0.40	73,73,73,73	0
58	MG	1H	3404	1/1	0.86	0.12	56,56,56,56	0
58	MG	14	3086	1/1	0.86	0.19	69,69,69,69	0
58	MG	14	3309	1/1	0.86	0.24	83,83,83,83	0
58	MG	14	3102	1/1	0.86	0.48	81,81,81,81	0
58	MG	14	3197	1/1	0.86	0.18	85,85,85,85	0
58	MG	13	1642	1/1	0.86	0.17	59,59,59,59	0
58	MG	1H	3300	1/1	0.86	0.30	63,63,63,63	0
58	MG	1H	3105	1/1	0.86	0.15	59,59,59,59	0
58	MG	14	3131	1/1	0.86	0.23	71,71,71,71	0
58	MG	14	3363	1/1	0.86	0.07	77,77,77,77	0
58	MG	13	1694	1/1	0.86	0.15	82,82,82,82	0
58	MG	14	3381	1/1	0.86	0.08	70,70,70,70	0
58	MG	1H	3453	1/1	0.86	0.13	51,51,51,51	0
58	MG	14	3245	1/1	0.86	0.14	69,69,69,69	0
58	MG	13	1611	1/1	0.86	0.29	64,64,64,64	0
58	MG	1H	3112	1/1	0.86	0.14	33,33,33,33	0
58	MG	1G	1616	1/1	0.86	0.14	56,56,56,56	0
58	MG	13	1615	1/1	0.86	0.18	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1G	1624	1/1	0.86	0.31	89,89,89,89	0
58	MG	29	303	1/1	0.86	0.26	63,63,63,63	0
58	MG	13	1676	1/1	0.86	0.25	76,76,76,76	0
58	MG	1H	3312	1/1	0.86	0.26	68,68,68,68	0
58	MG	1H	3137	1/1	0.86	0.21	49,49,49,49	0
58	MG	1H	3288	1/1	0.86	0.28	76,76,76,76	0
58	MG	1G	1647	1/1	0.87	0.27	83,83,83,83	0
58	MG	1H	3197	1/1	0.87	0.23	61,61,61,61	0
58	MG	13	1684	1/1	0.87	0.27	96,96,96,96	0
58	MG	1H	3222	1/1	0.87	0.36	82,82,82,82	0
58	MG	1G	1621	1/1	0.87	0.15	81,81,81,81	0
58	MG	14	3238	1/1	0.87	0.14	83,83,83,83	0
58	MG	1H	3064	1/1	0.87	0.18	55,55,55,55	0
58	MG	14	3161	1/1	0.87	0.27	88,88,88,88	0
58	MG	1G	1625	1/1	0.87	0.20	90,90,90,90	0
58	MG	14	3261	1/1	0.87	0.39	68,68,68,68	0
58	MG	14	3327	1/1	0.87	0.29	86,86,86,86	0
58	MG	14	3089	1/1	0.87	0.08	72,72,72,72	0
58	MG	1G	1664	1/1	0.87	0.34	88,88,88,88	0
58	MG	14	3365	1/1	0.87	0.12	67,67,67,67	0
58	MG	14	3268	1/1	0.87	0.25	88,88,88,88	0
58	MG	1H	3244	1/1	0.87	0.42	75,75,75,75	0
58	MG	14	3275	1/1	0.87	0.15	70,70,70,70	0
58	MG	16	209	1/1	0.87	0.27	59,59,59,59	0
58	MG	14	3389	1/1	0.87	0.09	73,73,73,73	0
58	MG	13	1699	1/1	0.87	0.45	71,71,71,71	0
58	MG	14	3130	1/1	0.87	0.28	68,68,68,68	0
58	MG	31	301	1/1	0.87	0.23	56,56,56,56	0
58	MG	14	3188	1/1	0.87	0.25	79,79,79,79	0
58	MG	1H	3382	1/1	0.87	0.21	80,80,80,80	0
58	MG	1H	3040	1/1	0.87	0.16	62,62,62,62	0
58	MG	14	3195	1/1	0.87	0.33	81,81,81,81	0
58	MG	1H	3363	1/1	0.87	0.46	98,98,98,98	0
58	MG	1H	3320	1/1	0.87	0.24	59,59,59,59	0
58	MG	1H	3324	1/1	0.87	0.42	86,86,86,86	0
58	MG	13	1662	1/1	0.88	0.09	81,81,81,81	0
58	MG	14	3176	1/1	0.88	0.19	71,71,71,71	0
58	MG	13	1722	1/1	0.88	0.11	101,101,101,101	0
58	MG	1G	1635	1/1	0.88	0.21	86,86,86,86	0
58	MG	1H	3290	1/1	0.88	0.18	66,66,66,66	0
58	MG	1H	3323	1/1	0.88	0.16	61,61,61,61	0
58	MG	1H	3378	1/1	0.88	0.21	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	13	1637	1/1	0.88	0.40	73,73,73,73	0
58	MG	13	1719	1/1	0.88	0.11	89,89,89,89	0
58	MG	1H	3158	1/1	0.88	0.26	69,69,69,69	0
58	MG	16	213	1/1	0.88	0.13	82,82,82,82	0
58	MG	21	302	1/1	0.88	0.18	69,69,69,69	0
58	MG	14	3204	1/1	0.88	0.14	48,48,48,48	0
58	MG	14	3210	1/1	0.88	0.32	79,79,79,79	0
58	MG	1H	3336	1/1	0.88	0.34	66,66,66,66	0
58	MG	14	3216	1/1	0.88	0.20	83,83,83,83	0
58	MG	1K	101	1/1	0.88	0.21	84,84,84,84	0
58	MG	78	201	1/1	0.88	0.21	53,53,53,53	0
58	MG	1H	3408	1/1	0.88	0.11	47,47,47,47	0
58	MG	1H	3339	1/1	0.88	0.42	78,78,78,78	0
58	MG	1H	3341	1/1	0.88	0.51	86,86,86,86	0
58	MG	14	3249	1/1	0.88	0.61	49,49,49,49	0
58	MG	1H	3429	1/1	0.88	0.13	49,49,49,49	0
58	MG	1H	3161	1/1	0.88	0.28	68,68,68,68	0
58	MG	1H	3254	1/1	0.88	0.22	73,73,73,73	0
58	MG	1H	3347	1/1	0.88	0.31	64,64,64,64	0
58	MG	13	1703	1/1	0.88	0.27	71,71,71,71	0
58	MG	1H	3164	1/1	0.88	0.23	78,78,78,78	0
58	MG	2L	103	1/1	0.88	0.12	102,102,102,102	0
58	MG	14	3163	1/1	0.88	0.43	71,71,71,71	0
58	MG	14	3277	1/1	0.88	0.18	73,73,73,73	0
58	MG	1H	3168	1/1	0.88	0.17	64,64,64,64	0
58	MG	1H	3115	1/1	0.88	0.20	48,48,48,48	0
58	MG	1H	3178	1/1	0.88	0.49	69,69,69,69	0
58	MG	1H	3072	1/1	0.88	0.20	62,62,62,62	0
58	MG	14	3288	1/1	0.88	0.15	66,66,66,66	0
58	MG	13	1667	1/1	0.89	0.33	59,59,59,59	0
58	MG	11	301	1/1	0.89	0.22	39,39,39,39	0
58	MG	13	1649	1/1	0.89	0.45	83,83,83,83	0
58	MG	1G	1675	1/1	0.89	0.24	83,83,83,83	0
58	MG	14	3287	1/1	0.89	0.43	112,112,112,112	0
58	MG	1H	3317	1/1	0.89	0.27	73,73,73,73	0
58	MG	13	1687	1/1	0.89	0.20	82,82,82,82	0
58	MG	13	1688	1/1	0.89	0.19	101,101,101,101	0
58	MG	1H	3140	1/1	0.89	0.25	59,59,59,59	0
58	MG	1H	3049	1/1	0.89	0.24	56,56,56,56	0
58	MG	L8	102	1/1	0.89	0.23	67,67,67,67	0
58	MG	1H	3271	1/1	0.89	0.35	77,77,77,77	0
58	MG	14	3020	1/1	0.89	0.17	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	13	1655	1/1	0.89	0.28	78,78,78,78	0
58	MG	1H	3426	1/1	0.89	0.09	39,39,39,39	0
58	MG	14	3305	1/1	0.89	0.19	59,59,59,59	0
58	MG	1H	3066	1/1	0.89	0.23	71,71,71,71	0
58	MG	1H	3432	1/1	0.89	0.12	77,77,77,77	0
58	MG	1H	3287	1/1	0.89	0.37	62,62,62,62	0
58	MG	1H	3071	1/1	0.89	0.27	52,52,52,52	0
58	MG	1H	3447	1/1	0.89	0.14	47,47,47,47	0
58	MG	1H	3452	1/1	0.89	0.07	71,71,71,71	0
58	MG	4E	201	1/1	0.89	0.29	76,76,76,76	0
58	MG	1G	1628	1/1	0.89	0.21	64,64,64,64	0
58	MG	1H	3454	1/1	0.89	0.08	65,65,65,65	0
58	MG	1G	1630	1/1	0.89	0.19	71,71,71,71	0
58	MG	13	1718	1/1	0.89	0.29	113,113,113,113	0
58	MG	13	1674	1/1	0.89	0.09	81,81,81,81	0
58	MG	1H	3084	1/1	0.89	0.14	59,59,59,59	0
58	MG	14	3239	1/1	0.89	0.15	64,64,64,64	0
58	MG	1H	3358	1/1	0.89	0.44	92,92,92,92	0
58	MG	14	3386	1/1	0.89	0.09	83,83,83,83	0
58	MG	1H	3171	1/1	0.89	0.43	89,89,89,89	0
58	MG	14	3250	1/1	0.89	0.15	70,70,70,70	0
58	MG	1H	3228	1/1	0.89	0.33	83,83,83,83	0
58	MG	14	3255	1/1	0.89	0.35	69,69,69,69	0
58	MG	1H	3229	1/1	0.89	0.21	61,61,61,61	0
58	MG	13	1639	1/1	0.89	0.17	69,69,69,69	0
58	MG	13	1651	1/1	0.89	0.11	63,63,63,63	0
58	MG	13	1614	1/1	0.89	0.22	65,65,65,65	0
58	MG	1H	3185	1/1	0.89	0.45	77,77,77,77	0
58	MG	1H	3245	1/1	0.89	0.26	69,69,69,69	0
58	MG	C5	201	1/1	0.89	0.29	105,105,105,105	0
58	MG	1H	3375	1/1	0.89	0.54	94,94,94,94	0
58	MG	1H	3033	1/1	0.89	0.41	82,82,82,82	0
58	MG	14	3182	1/1	0.90	0.23	61,61,61,61	0
58	MG	1H	3233	1/1	0.90	0.27	65,65,65,65	0
58	MG	14	3290	1/1	0.90	0.18	74,74,74,74	0
58	MG	1H	3169	1/1	0.90	0.17	58,58,58,58	0
58	MG	14	3293	1/1	0.90	0.13	71,71,71,71	0
58	MG	14	3059	1/1	0.90	0.40	65,65,65,65	0
58	MG	1H	3205	1/1	0.90	0.33	71,71,71,71	0
58	MG	1H	3170	1/1	0.90	0.28	65,65,65,65	0
58	MG	1G	1634	1/1	0.90	0.24	87,87,87,87	0
58	MG	16	207	1/1	0.90	0.40	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	1H	3141	1/1	0.90	0.10	70,70,70,70	0
58	MG	14	3198	1/1	0.90	0.31	84,84,84,84	0
58	MG	1H	3299	1/1	0.90	0.34	60,60,60,60	0
58	MG	1H	3142	1/1	0.90	0.23	59,59,59,59	0
58	MG	13	1738	1/1	0.90	0.08	112,112,112,112	0
58	MG	1H	3258	1/1	0.90	0.25	55,55,55,55	0
58	MG	13	1685	1/1	0.90	0.26	65,65,65,65	0
58	MG	1G	1655	1/1	0.90	0.18	112,112,112,112	0
58	MG	1H	3348	1/1	0.90	0.15	64,64,64,64	0
58	MG	14	3322	1/1	0.90	0.18	73,73,73,73	0
58	MG	1H	3349	1/1	0.90	0.20	62,62,62,62	0
58	MG	14	3234	1/1	0.90	0.08	56,56,56,56	0
58	MG	14	3133	1/1	0.90	0.13	58,58,58,58	0
58	MG	14	3335	1/1	0.90	0.11	71,71,71,71	0
58	MG	13	1673	1/1	0.90	0.26	70,70,70,70	0
58	MG	1H	3189	1/1	0.90	0.36	73,73,73,73	0
58	MG	1H	3308	1/1	0.90	0.35	82,82,82,82	0
58	MG	14	3370	1/1	0.90	0.06	75,75,75,75	0
58	MG	1H	3088	1/1	0.90	0.30	56,56,56,56	0
58	MG	14	3380	1/1	0.90	0.09	90,90,90,90	0
58	MG	1G	1665	1/1	0.90	0.27	77,77,77,77	0
58	MG	1H	3364	1/1	0.90	0.56	90,90,90,90	0
58	MG	1G	1667	1/1	0.90	0.14	84,84,84,84	0
58	MG	14	3148	1/1	0.90	0.20	79,79,79,79	0
58	MG	1G	1610	1/1	0.90	0.17	95,95,95,95	0
58	MG	1H	3267	1/1	0.90	0.14	57,57,57,57	0
58	MG	1G	1676	1/1	0.90	0.31	105,105,105,105	0
58	MG	1H	3456	1/1	0.90	0.09	87,87,87,87	0
58	MG	1H	3100	1/1	0.90	0.38	46,46,46,46	0
58	MG	1H	3314	1/1	0.90	0.36	86,86,86,86	0
58	MG	1H	3132	1/1	0.90	0.21	63,63,63,63	0
58	MG	1H	3464	1/1	0.90	0.08	88,88,88,88	0
58	MG	13	1725	1/1	0.90	0.07	85,85,85,85	0
58	MG	1H	3282	1/1	0.90	0.51	85,85,85,85	0
58	MG	1H	3032	1/1	0.90	0.25	71,71,71,71	0
58	MG	1H	3232	1/1	0.90	0.26	70,70,70,70	0
58	MG	1G	1678	1/1	0.91	0.32	92,92,92,92	0
58	MG	14	3222	1/1	0.91	0.26	58,58,58,58	0
58	MG	16	211	1/1	0.91	0.26	80,80,80,80	0
58	MG	14	3145	1/1	0.91	0.17	65,65,65,65	0
58	MG	1H	3129	1/1	0.91	0.32	58,58,58,58	0
58	MG	1H	3451	1/1	0.91	0.11	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3376	1/1	0.91	0.28	78,78,78,78	0
58	MG	1G	1690	1/1	0.91	0.30	98,98,98,98	0
58	MG	13	1690	1/1	0.91	0.18	66,66,66,66	0
58	MG	14	3248	1/1	0.91	0.10	65,65,65,65	0
58	MG	1H	3176	1/1	0.91	0.28	70,70,70,70	0
58	MG	13	1659	1/1	0.91	0.27	85,85,85,85	0
58	MG	14	3323	1/1	0.91	0.21	85,85,85,85	0
58	MG	14	3251	1/1	0.91	0.19	80,80,80,80	0
58	MG	31	304	1/1	0.91	0.11	48,48,48,48	0
58	MG	1H	3458	1/1	0.91	0.15	68,68,68,68	0
58	MG	1G	1641	1/1	0.91	0.09	94,94,94,94	0
58	MG	14	3345	1/1	0.91	0.13	63,63,63,63	0
58	MG	14	3346	1/1	0.91	0.07	63,63,63,63	0
58	MG	14	3046	1/1	0.91	0.24	73,73,73,73	0
58	MG	13	1652	1/1	0.91	0.21	60,60,60,60	0
58	MG	14	3266	1/1	0.91	0.22	72,72,72,72	0
58	MG	13	1630	1/1	0.91	0.30	70,70,70,70	0
58	MG	1H	3188	1/1	0.91	0.29	60,60,60,60	0
58	MG	1H	3215	1/1	0.91	0.20	52,52,52,52	0
58	MG	1G	1603	1/1	0.91	0.12	71,71,71,71	0
58	MG	14	3276	1/1	0.91	0.25	75,75,75,75	0
58	MG	13	1679	1/1	0.91	0.34	96,96,96,96	0
58	MG	1H	3325	1/1	0.91	0.22	67,67,67,67	0
58	MG	14	3388	1/1	0.91	0.12	88,88,88,88	0
58	MG	14	3098	1/1	0.91	0.39	67,67,67,67	0
58	MG	1H	3418	1/1	0.91	0.19	52,52,52,52	0
58	MG	1G	1613	1/1	0.91	0.33	81,81,81,81	0
58	MG	1H	3191	1/1	0.91	0.14	68,68,68,68	0
58	MG	1H	3275	1/1	0.91	0.14	53,53,53,53	0
58	MG	1H	3098	1/1	0.91	0.17	44,44,44,44	0
58	MG	1H	3279	1/1	0.91	0.21	77,77,77,77	0
58	MG	13	1656	1/1	0.91	0.13	72,72,72,72	0
58	MG	1G	1673	1/1	0.91	0.36	94,94,94,94	0
58	MG	45	201	1/1	0.91	0.16	59,59,59,59	0
58	MG	1H	3436	1/1	0.91	0.11	87,87,87,87	0
58	MG	L5	400	1/1	0.91	0.15	70,70,70,70	0
58	MG	1H	3248	1/1	0.91	0.20	88,88,88,88	0
58	MG	1H	3444	1/1	0.91	0.08	90,90,90,90	0
58	MG	16	202	1/1	0.92	0.30	63,63,63,63	0
58	MG	14	3029	1/1	0.92	0.11	77,77,77,77	0
58	MG	1H	3327	1/1	0.92	0.34	80,80,80,80	0
58	MG	13	1638	1/1	0.92	0.22	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3330	1/1	0.92	0.16	74,74,74,74	0
58	MG	1H	3194	1/1	0.92	0.20	55,55,55,55	0
58	MG	1H	3087	1/1	0.92	0.16	61,61,61,61	0
58	MG	1H	3068	1/1	0.92	0.31	63,63,63,63	0
58	MG	1G	1638	1/1	0.92	0.31	80,80,80,80	0
58	MG	1H	3410	1/1	0.92	0.08	59,59,59,59	0
58	MG	1H	3234	1/1	0.92	0.45	85,85,85,85	0
58	MG	14	3304	1/1	0.92	0.34	63,63,63,63	0
58	MG	1H	3089	1/1	0.92	0.14	68,68,68,68	0
58	MG	14	3087	1/1	0.92	0.23	41,41,41,41	0
58	MG	14	3307	1/1	0.92	0.08	62,62,62,62	0
58	MG	14	3208	1/1	0.92	0.16	58,58,58,58	0
58	MG	1H	3091	1/1	0.92	0.21	62,62,62,62	0
58	MG	1G	1648	1/1	0.92	0.30	95,95,95,95	0
58	MG	14	3314	1/1	0.92	0.27	59,59,59,59	0
58	MG	14	3315	1/1	0.92	0.16	67,67,67,67	0
58	MG	1G	1650	1/1	0.92	0.27	68,68,68,68	0
58	MG	1G	1653	1/1	0.92	0.13	77,77,77,77	0
58	MG	14	3321	1/1	0.92	0.38	86,86,86,86	0
58	MG	14	3224	1/1	0.92	0.28	59,59,59,59	0
58	MG	14	3108	1/1	0.92	0.20	55,55,55,55	0
58	MG	1H	3427	1/1	0.92	0.10	55,55,55,55	0
58	MG	14	3233	1/1	0.92	0.19	66,66,66,66	0
58	MG	1H	3240	1/1	0.92	0.62	86,86,86,86	0
58	MG	14	3329	1/1	0.92	0.10	56,56,56,56	0
58	MG	1H	3242	1/1	0.92	0.34	66,66,66,66	0
58	MG	14	3336	1/1	0.92	0.11	48,48,48,48	0
58	MG	1H	3199	1/1	0.92	0.26	63,63,63,63	0
58	MG	1H	3094	1/1	0.92	0.24	53,53,53,53	0
58	MG	14	3352	1/1	0.92	0.11	73,73,73,73	0
58	MG	98	202	1/1	0.92	0.20	90,90,90,90	0
58	MG	1H	3352	1/1	0.92	0.36	81,81,81,81	0
58	MG	1H	3095	1/1	0.92	0.15	47,47,47,47	0
58	MG	14	3368	1/1	0.92	0.10	64,64,64,64	0
58	MG	1H	3070	1/1	0.92	0.26	55,55,55,55	0
58	MG	13	1730	1/1	0.92	0.09	88,88,88,88	0
58	MG	1H	3211	1/1	0.92	0.36	59,59,59,59	0
58	MG	1H	3213	1/1	0.92	0.18	63,63,63,63	0
58	MG	1G	1670	1/1	0.92	0.18	86,86,86,86	0
58	MG	1H	3177	1/1	0.92	0.20	47,47,47,47	0
58	MG	13	1633	1/1	0.92	0.16	54,54,54,54	0
58	MG	14	3263	1/1	0.92	0.12	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
58	MG	1H	3218	1/1	0.92	0.28	57,57,57,57	0
58	MG	1H	3180	1/1	0.92	0.14	63,63,63,63	0
58	MG	14	3392	1/1	0.92	0.11	61,61,61,61	0
58	MG	1H	3150	1/1	0.92	0.17	48,48,48,48	0
58	MG	1H	3052	1/1	0.92	0.23	63,63,63,63	0
58	MG	14	3274	1/1	0.92	0.47	77,77,77,77	0
58	MG	1J	204	1/1	0.92	0.28	88,88,88,88	0
58	MG	1H	3319	1/1	0.92	0.18	50,50,50,50	0
58	MG	1G	1686	1/1	0.92	0.09	83,83,83,83	0
58	MG	1H	3186	1/1	0.92	0.33	52,52,52,52	0
58	MG	1H	3157	1/1	0.92	0.20	48,48,48,48	0
58	MG	13	1705	1/1	0.92	0.32	127,127,127,127	0
58	MG	1H	3083	1/1	0.92	0.26	71,71,71,71	0
58	MG	1H	3381	1/1	0.92	0.26	90,90,90,90	0
58	MG	14	3015	1/1	0.92	0.14	76,76,76,76	0
58	MG	14	3178	1/1	0.92	0.10	85,85,85,85	0
58	MG	13	1704	1/1	0.93	0.21	130,130,130,130	0
58	MG	1H	3385	1/1	0.93	0.14	49,49,49,49	0
58	MG	1H	3270	1/1	0.93	0.34	76,76,76,76	0
58	MG	14	3153	1/1	0.93	0.30	104,104,104,104	0
58	MG	14	3155	1/1	0.93	0.17	57,57,57,57	0
58	MG	1H	3400	1/1	0.93	0.14	58,58,58,58	0
58	MG	1H	3182	1/1	0.93	0.49	73,73,73,73	0
58	MG	1H	3406	1/1	0.93	0.16	53,53,53,53	0
58	MG	1H	3407	1/1	0.93	0.12	60,60,60,60	0
58	MG	1G	1674	1/1	0.93	0.21	136,136,136,136	0
58	MG	14	3165	1/1	0.93	0.19	65,65,65,65	0
58	MG	1H	3146	1/1	0.93	0.17	62,62,62,62	0
58	MG	13	1695	1/1	0.93	0.30	75,75,75,75	0
58	MG	1H	3331	1/1	0.93	0.28	72,72,72,72	0
58	MG	14	3171	1/1	0.93	0.17	65,65,65,65	0
58	MG	1H	3414	1/1	0.93	0.10	50,50,50,50	0
58	MG	13	1697	1/1	0.93	0.13	90,90,90,90	0
58	MG	14	3177	1/1	0.93	0.13	70,70,70,70	0
58	MG	1H	3333	1/1	0.93	0.20	63,63,63,63	0
58	MG	14	3181	1/1	0.93	0.23	81,81,81,81	0
58	MG	1G	1606	1/1	0.93	0.07	92,92,92,92	0
58	MG	1G	1608	1/1	0.93	0.25	81,81,81,81	0
58	MG	1H	3152	1/1	0.93	0.19	62,62,62,62	0
58	MG	1H	3073	1/1	0.93	0.26	52,52,52,52	0
58	MG	1H	3108	1/1	0.93	0.49	56,56,56,56	0
58	MG	1H	3340	1/1	0.93	0.23	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3037	1/1	0.93	0.20	47,47,47,47	0
58	MG	1H	3435	1/1	0.93	0.08	70,70,70,70	0
58	MG	1H	3075	1/1	0.93	0.13	41,41,41,41	0
58	MG	14	3317	1/1	0.93	0.30	65,65,65,65	0
58	MG	1G	1623	1/1	0.93	0.16	96,96,96,96	0
58	MG	14	3320	1/1	0.93	0.14	61,61,61,61	0
58	MG	1H	3344	1/1	0.93	0.35	71,71,71,71	0
58	MG	13	1658	1/1	0.93	0.29	73,73,73,73	0
58	MG	1H	3292	1/1	0.93	0.90	50,50,50,50	0
58	MG	14	3324	1/1	0.93	0.17	83,83,83,83	0
58	MG	14	3206	1/1	0.93	0.18	56,56,56,56	0
58	MG	1H	3294	1/1	0.93	0.22	70,70,70,70	0
58	MG	14	3062	1/1	0.93	0.17	51,51,51,51	0
58	MG	1H	3041	1/1	0.93	0.14	51,51,51,51	0
58	MG	1H	3351	1/1	0.93	0.19	62,62,62,62	0
58	MG	1H	3165	1/1	0.93	0.20	68,68,68,68	0
58	MG	1H	3125	1/1	0.93	0.24	46,46,46,46	0
58	MG	14	3226	1/1	0.93	0.18	74,74,74,74	0
58	MG	1G	1632	1/1	0.93	0.28	64,64,64,64	0
58	MG	1H	3044	1/1	0.93	0.15	50,50,50,50	0
58	MG	14	3231	1/1	0.93	0.27	75,75,75,75	0
58	MG	14	3232	1/1	0.93	0.13	73,73,73,73	0
58	MG	14	3366	1/1	0.93	0.13	76,76,76,76	0
58	MG	1H	3241	1/1	0.93	0.18	65,65,65,65	0
58	MG	14	3095	1/1	0.93	0.11	52,52,52,52	0
58	MG	1H	3360	1/1	0.93	0.34	73,73,73,73	0
58	MG	1H	3362	1/1	0.93	0.20	105,105,105,105	0
58	MG	1H	3200	1/1	0.93	0.25	73,73,73,73	0
58	MG	14	3240	1/1	0.93	0.17	71,71,71,71	0
58	MG	13	1640	1/1	0.93	0.19	65,65,65,65	0
58	MG	14	3247	1/1	0.93	0.48	64,64,64,64	0
58	MG	1H	3202	1/1	0.93	0.33	60,60,60,60	0
58	MG	14	3124	1/1	0.93	0.15	43,43,43,43	0
58	MG	14	3128	1/1	0.93	0.41	79,79,79,79	0
58	MG	1H	3246	1/1	0.93	0.46	79,79,79,79	0
58	MG	1H	3247	1/1	0.93	0.48	73,73,73,73	0
58	MG	1H	3204	1/1	0.93	0.24	72,72,72,72	0
58	MG	14	3257	1/1	0.93	0.18	63,63,63,63	0
58	MG	13	1729	1/1	0.93	0.08	85,85,85,85	0
58	MG	1J	205	1/1	0.93	0.27	75,75,75,75	0
58	MG	1J	206	1/1	0.93	0.14	109,109,109,109	0
58	MG	1H	3172	1/1	0.93	0.37	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3256	1/1	0.93	0.17	57,57,57,57	0
58	MG	1H	3173	1/1	0.93	0.24	68,68,68,68	0
58	MG	16	206	1/1	0.93	0.18	78,78,78,78	0
58	MG	13	1669	1/1	0.93	0.21	70,70,70,70	0
58	MG	85	201	1/1	0.93	0.29	64,64,64,64	0
58	MG	13	1631	1/1	0.93	0.21	64,64,64,64	0
58	MG	2K	106	1/1	0.93	0.07	87,87,87,87	0
58	MG	13	1657	1/1	0.93	0.23	74,74,74,74	0
59	ZN	5A	101	1/1	0.93	0.13	132,132,132,132	0
58	MG	1H	3179	1/1	0.93	0.31	71,71,71,71	0
58	MG	14	3112	1/1	0.94	0.26	86,86,86,86	0
58	MG	14	3252	1/1	0.94	0.11	71,71,71,71	0
58	MG	14	3253	1/1	0.94	0.14	83,83,83,83	0
58	MG	1G	1642	1/1	0.94	0.12	80,80,80,80	0
58	MG	14	3117	1/1	0.94	0.11	52,52,52,52	0
58	MG	14	3118	1/1	0.94	0.19	40,40,40,40	0
58	MG	14	3120	1/1	0.94	0.10	84,84,84,84	0
58	MG	1H	3109	1/1	0.94	0.15	37,37,37,37	0
58	MG	14	3125	1/1	0.94	0.14	42,42,42,42	0
58	MG	14	3127	1/1	0.94	0.17	55,55,55,55	0
58	MG	14	3264	1/1	0.94	0.24	69,69,69,69	0
58	MG	13	1681	1/1	0.94	0.06	71,71,71,71	0
58	MG	1H	3220	1/1	0.94	0.22	64,64,64,64	0
58	MG	1H	3183	1/1	0.94	0.23	56,56,56,56	0
58	MG	1G	1652	1/1	0.94	0.20	91,91,91,91	0
58	MG	1H	3379	1/1	0.94	0.21	85,85,85,85	0
58	MG	2K	102	1/1	0.94	0.20	78,78,78,78	0
58	MG	14	3134	1/1	0.94	0.14	54,54,54,54	0
58	MG	1H	3272	1/1	0.94	0.46	88,88,88,88	0
58	MG	1H	3273	1/1	0.94	0.12	66,66,66,66	0
58	MG	14	3280	1/1	0.94	0.12	51,51,51,51	0
58	MG	14	3281	1/1	0.94	0.62	67,67,67,67	0
58	MG	1H	3153	1/1	0.94	0.29	58,58,58,58	0
58	MG	1H	3329	1/1	0.94	0.38	74,74,74,74	0
58	MG	1H	3394	1/1	0.94	0.15	47,47,47,47	0
58	MG	14	3144	1/1	0.94	0.27	75,75,75,75	0
58	MG	1H	3113	1/1	0.94	0.31	37,37,37,37	0
58	MG	1G	1662	1/1	0.94	0.18	78,78,78,78	0
58	MG	13	1645	1/1	0.94	0.14	65,65,65,65	0
58	MG	1H	3402	1/1	0.94	0.07	58,58,58,58	0
58	MG	14	3292	1/1	0.94	0.17	109,109,109,109	0
58	MG	21	301	1/1	0.94	0.14	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3280	1/1	0.94	0.14	44,44,44,44	0
58	MG	1H	3119	1/1	0.94	0.20	55,55,55,55	0
58	MG	1G	1669	1/1	0.94	0.29	131,131,131,131	0
58	MG	1H	3284	1/1	0.94	0.10	72,72,72,72	0
58	MG	14	3300	1/1	0.94	0.09	81,81,81,81	0
58	MG	14	3158	1/1	0.94	0.14	72,72,72,72	0
58	MG	14	3159	1/1	0.94	0.21	63,63,63,63	0
58	MG	1G	1672	1/1	0.94	0.10	91,91,91,91	0
58	MG	1H	3337	1/1	0.94	0.40	67,67,67,67	0
58	MG	1H	3190	1/1	0.94	0.16	50,50,50,50	0
58	MG	1H	3286	1/1	0.94	0.25	67,67,67,67	0
58	MG	13	1683	1/1	0.94	0.10	94,94,94,94	0
58	MG	1H	3417	1/1	0.94	0.12	51,51,51,51	0
58	MG	14	3167	1/1	0.94	0.17	61,61,61,61	0
58	MG	13	1627	1/1	0.94	0.44	72,72,72,72	0
58	MG	1H	3289	1/1	0.94	0.18	63,63,63,63	0
58	MG	1H	3193	1/1	0.94	0.18	52,52,52,52	0
58	MG	13	1668	1/1	0.94	0.29	69,69,69,69	0
58	MG	14	3175	1/1	0.94	0.32	64,64,64,64	0
58	MG	13	1625	1/1	0.94	0.25	58,58,58,58	0
58	MG	1G	1688	1/1	0.94	0.17	105,105,105,105	0
58	MG	1H	3166	1/1	0.94	0.25	58,58,58,58	0
58	MG	1H	3167	1/1	0.94	0.26	65,65,65,65	0
58	MG	1H	3131	1/1	0.94	0.21	60,60,60,60	0
58	MG	14	3183	1/1	0.94	0.13	60,60,60,60	0
58	MG	14	3184	1/1	0.94	0.26	60,60,60,60	0
58	MG	1H	3099	1/1	0.94	0.15	37,37,37,37	0
58	MG	3L	101	1/1	0.94	0.30	81,81,81,81	0
58	MG	14	3011	1/1	0.94	0.17	48,48,48,48	0
58	MG	1H	3353	1/1	0.94	0.20	93,93,93,93	0
58	MG	1H	3441	1/1	0.94	0.12	40,40,40,40	0
58	MG	14	3344	1/1	0.94	0.09	60,60,60,60	0
58	MG	14	3025	1/1	0.94	0.20	79,79,79,79	0
58	MG	14	3026	1/1	0.94	0.09	76,76,76,76	0
58	MG	14	3347	1/1	0.94	0.09	49,49,49,49	0
58	MG	14	3027	1/1	0.94	0.23	76,76,76,76	0
58	MG	14	3356	1/1	0.94	0.17	78,78,78,78	0
58	MG	1H	3354	1/1	0.94	0.29	80,80,80,80	0
58	MG	14	3362	1/1	0.94	0.17	70,70,70,70	0
58	MG	1H	3446	1/1	0.94	0.07	60,60,60,60	0
58	MG	1H	3133	1/1	0.94	0.21	43,43,43,43	0
58	MG	1H	3136	1/1	0.94	0.24	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3367	1/1	0.94	0.08	49,49,49,49	0
58	MG	1H	3081	1/1	0.94	0.37	67,67,67,67	0
58	MG	14	3048	1/1	0.94	0.22	66,66,66,66	0
58	MG	14	3209	1/1	0.94	0.12	63,63,63,63	0
58	MG	14	3375	1/1	0.94	0.07	65,65,65,65	0
58	MG	14	3050	1/1	0.94	0.17	55,55,55,55	0
58	MG	14	3211	1/1	0.94	0.16	60,60,60,60	0
58	MG	14	3382	1/1	0.94	0.14	60,60,60,60	0
58	MG	14	3053	1/1	0.94	0.12	57,57,57,57	0
58	MG	14	3213	1/1	0.94	0.13	55,55,55,55	0
58	MG	14	3214	1/1	0.94	0.22	54,54,54,54	0
58	MG	14	3056	1/1	0.94	0.12	73,73,73,73	0
58	MG	1H	3139	1/1	0.94	0.19	48,48,48,48	0
58	MG	1H	3174	1/1	0.94	0.14	51,51,51,51	0
58	MG	14	3063	1/1	0.94	0.20	51,51,51,51	0
58	MG	1H	3455	1/1	0.94	0.13	58,58,58,58	0
58	MG	14	3076	1/1	0.94	0.13	59,59,59,59	0
58	MG	14	3230	1/1	0.94	0.12	63,63,63,63	0
58	MG	14	3077	1/1	0.94	0.21	68,68,68,68	0
58	MG	1H	3206	1/1	0.94	0.23	65,65,65,65	0
58	MG	1H	3457	1/1	0.94	0.09	81,81,81,81	0
58	MG	1H	3103	1/1	0.94	0.29	47,47,47,47	0
58	MG	1H	3209	1/1	0.94	0.18	57,57,57,57	0
58	MG	1H	3104	1/1	0.94	0.16	47,47,47,47	0
58	MG	1H	3061	1/1	0.94	0.20	51,51,51,51	0
58	MG	13	1626	1/1	0.94	0.24	80,80,80,80	0
58	MG	14	3241	1/1	0.94	0.10	72,72,72,72	0
58	MG	1H	3372	1/1	0.94	0.21	78,78,78,78	0
58	MG	13	1632	1/1	0.94	0.10	45,45,45,45	0
58	MG	14	3105	1/1	0.94	0.12	65,65,65,65	0
58	MG	1H	3216	1/1	0.94	0.22	68,68,68,68	0
58	MG	1H	3473	1/1	0.94	0.07	99,99,99,99	0
58	MG	16	201	1/1	0.95	0.23	75,75,75,75	0
58	MG	14	3285	1/1	0.95	0.18	74,74,74,74	0
58	MG	13	1686	1/1	0.95	0.17	89,89,89,89	0
58	MG	14	3172	1/1	0.95	0.21	64,64,64,64	0
58	MG	1H	3405	1/1	0.95	0.10	41,41,41,41	0
58	MG	1H	3268	1/1	0.95	0.25	65,65,65,65	0
58	MG	14	3055	1/1	0.95	0.18	55,55,55,55	0
58	MG	13	1678	1/1	0.95	0.28	92,92,92,92	0
58	MG	13	1646	1/1	0.95	0.12	63,63,63,63	0
58	MG	14	3179	1/1	0.95	0.45	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3060	1/1	0.95	0.17	67,67,67,67	0
58	MG	1G	1646	1/1	0.95	0.20	117,117,117,117	0
58	MG	1H	3311	1/1	0.95	0.18	58,58,58,58	0
58	MG	1H	3227	1/1	0.95	0.15	63,63,63,63	0
58	MG	14	3068	1/1	0.95	0.20	54,54,54,54	0
58	MG	14	3186	1/1	0.95	0.27	65,65,65,65	0
58	MG	1G	1649	1/1	0.95	0.19	78,78,78,78	0
58	MG	13	1736	1/1	0.95	0.14	97,97,97,97	0
58	MG	1H	3415	1/1	0.95	0.12	48,48,48,48	0
58	MG	13	1724	1/1	0.95	0.07	87,87,87,87	0
58	MG	14	3082	1/1	0.95	0.18	54,54,54,54	0
58	MG	1H	3274	1/1	0.95	0.14	59,59,59,59	0
58	MG	1H	3422	1/1	0.95	0.13	63,63,63,63	0
58	MG	1H	3102	1/1	0.95	0.18	44,44,44,44	0
58	MG	1H	3361	1/1	0.95	0.33	112,112,112,112	0
58	MG	14	3311	1/1	0.95	0.13	66,66,66,66	0
58	MG	14	3313	1/1	0.95	0.17	81,81,81,81	0
58	MG	14	3201	1/1	0.95	0.42	49,49,49,49	0
58	MG	2K	104	1/1	0.95	0.21	72,72,72,72	0
58	MG	14	3097	1/1	0.95	0.22	51,51,51,51	0
58	MG	1H	3277	1/1	0.95	0.18	70,70,70,70	0
58	MG	14	3099	1/1	0.95	0.41	75,75,75,75	0
58	MG	14	3100	1/1	0.95	0.47	62,62,62,62	0
58	MG	1H	3430	1/1	0.95	0.06	69,69,69,69	0
58	MG	1H	3431	1/1	0.95	0.08	57,57,57,57	0
58	MG	14	3106	1/1	0.95	0.13	57,57,57,57	0
58	MG	1G	1663	1/1	0.95	0.20	105,105,105,105	0
58	MG	98	201	1/1	0.95	0.28	64,64,64,64	0
58	MG	13	1608	1/1	0.95	0.20	77,77,77,77	0
58	MG	14	3219	1/1	0.95	0.13	68,68,68,68	0
58	MG	14	3220	1/1	0.95	0.16	66,66,66,66	0
58	MG	14	3332	1/1	0.95	0.14	62,62,62,62	0
58	MG	14	3334	1/1	0.95	0.18	48,48,48,48	0
58	MG	1H	3045	1/1	0.95	0.19	90,90,90,90	0
58	MG	I8	102	1/1	0.95	0.24	49,49,49,49	0
58	MG	14	3338	1/1	0.95	0.06	61,61,61,61	0
58	MG	14	3340	1/1	0.95	0.15	60,60,60,60	0
58	MG	14	3341	1/1	0.95	0.04	71,71,71,71	0
58	MG	14	3342	1/1	0.95	0.10	51,51,51,51	0
58	MG	1H	3281	1/1	0.95	0.21	65,65,65,65	0
58	MG	13	1727	1/1	0.95	0.14	69,69,69,69	0
58	MG	1H	3369	1/1	0.95	0.33	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1G	1671	1/1	0.95	0.13	85,85,85,85	0
58	MG	14	3126	1/1	0.95	0.29	78,78,78,78	0
58	MG	1H	3438	1/1	0.95	0.06	71,71,71,71	0
58	MG	14	3358	1/1	0.95	0.12	51,51,51,51	0
58	MG	1G	1605	1/1	0.95	0.12	78,78,78,78	0
58	MG	1H	3077	1/1	0.95	0.22	47,47,47,47	0
58	MG	1G	1607	1/1	0.95	0.08	92,92,92,92	0
58	MG	14	3236	1/1	0.95	0.11	71,71,71,71	0
58	MG	1H	3047	1/1	0.95	0.43	84,84,84,84	0
58	MG	1G	1609	1/1	0.95	0.15	81,81,81,81	0
58	MG	1H	3148	1/1	0.95	0.28	57,57,57,57	0
58	MG	1H	3006	1/1	0.95	0.14	42,42,42,42	0
58	MG	14	3136	1/1	0.95	0.11	50,50,50,50	0
58	MG	1G	1684	1/1	0.95	0.08	81,81,81,81	0
58	MG	1H	3208	1/1	0.95	0.43	70,70,70,70	0
58	MG	1H	3014	1/1	0.95	0.18	33,33,33,33	0
58	MG	1H	3053	1/1	0.95	0.28	33,33,33,33	0
58	MG	14	3383	1/1	0.95	0.12	70,70,70,70	0
58	MG	1H	3085	1/1	0.95	0.33	48,48,48,48	0
58	MG	1H	3155	1/1	0.95	0.14	41,41,41,41	0
58	MG	1H	3116	1/1	0.95	0.21	52,52,52,52	0
58	MG	2L	101	1/1	0.95	0.19	69,69,69,69	0
58	MG	1H	3117	1/1	0.95	0.30	54,54,54,54	0
58	MG	1H	3187	1/1	0.95	0.24	64,64,64,64	0
58	MG	14	3258	1/1	0.95	0.41	68,68,68,68	0
58	MG	14	3396	1/1	0.95	0.28	75,75,75,75	0
58	MG	1H	3460	1/1	0.95	0.12	53,53,53,53	0
58	MG	14	3010	1/1	0.95	0.18	48,48,48,48	0
58	MG	1J	202	1/1	0.95	0.43	84,84,84,84	0
58	MG	1H	3057	1/1	0.95	0.23	60,60,60,60	0
58	MG	1H	3384	1/1	0.95	0.13	38,38,38,38	0
58	MG	1H	3060	1/1	0.95	0.39	59,59,59,59	0
58	MG	14	3157	1/1	0.95	0.35	63,63,63,63	0
58	MG	14	3022	1/1	0.95	0.28	80,80,80,80	0
58	MG	1H	3390	1/1	0.95	0.09	41,41,41,41	0
58	MG	1H	3391	1/1	0.95	0.08	47,47,47,47	0
58	MG	1H	3393	1/1	0.95	0.11	47,47,47,47	0
58	MG	14	3028	1/1	0.95	0.16	76,76,76,76	0
58	MG	1H	3343	1/1	0.95	0.28	62,62,62,62	0
58	MG	1H	3123	1/1	0.95	0.10	32,32,32,32	0
58	MG	13	1664	1/1	0.95	0.26	71,71,71,71	0
58	MG	1H	3063	1/1	0.95	0.25	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3038	1/1	0.95	0.29	71,71,71,71	0
58	MG	14	3169	1/1	0.95	0.29	91,91,91,91	0
58	MG	1G	1644	1/1	0.96	0.20	83,83,83,83	0
58	MG	1H	3368	1/1	0.96	0.15	72,72,72,72	0
58	MG	14	3215	1/1	0.96	0.27	60,60,60,60	0
58	MG	1H	3326	1/1	0.96	0.15	92,92,92,92	0
58	MG	14	3139	1/1	0.96	0.35	68,68,68,68	0
58	MG	1H	3214	1/1	0.96	0.27	53,53,53,53	0
58	MG	1H	3130	1/1	0.96	0.31	67,67,67,67	0
58	MG	1H	3050	1/1	0.96	0.29	59,59,59,59	0
58	MG	14	3225	1/1	0.96	0.15	68,68,68,68	0
58	MG	13	1647	1/1	0.96	0.30	47,47,47,47	0
58	MG	1H	3080	1/1	0.96	0.25	67,67,67,67	0
58	MG	14	3037	1/1	0.96	0.08	72,72,72,72	0
58	MG	1H	3219	1/1	0.96	0.27	61,61,61,61	0
58	MG	14	3040	1/1	0.96	0.17	61,61,61,61	0
58	MG	1H	3255	1/1	0.96	0.12	40,40,40,40	0
58	MG	1H	3334	1/1	0.96	0.14	55,55,55,55	0
58	MG	13	1732	1/1	0.96	0.08	79,79,79,79	0
58	MG	14	3052	1/1	0.96	0.15	52,52,52,52	0
58	MG	1H	3257	1/1	0.96	0.17	55,55,55,55	0
58	MG	14	3237	1/1	0.96	0.11	48,48,48,48	0
58	MG	13	1606	1/1	0.96	0.17	70,70,70,70	0
58	MG	1G	1659	1/1	0.96	0.10	76,76,76,76	0
58	MG	14	3057	1/1	0.96	0.23	62,62,62,62	0
58	MG	14	3330	1/1	0.96	0.14	58,58,58,58	0
58	MG	1G	1602	1/1	0.96	0.21	64,64,64,64	0
58	MG	14	3243	1/1	0.96	0.15	68,68,68,68	0
58	MG	14	3244	1/1	0.96	0.42	61,61,61,61	0
58	MG	1H	3259	1/1	0.96	0.19	46,46,46,46	0
58	MG	1H	3260	1/1	0.96	0.32	48,48,48,48	0
58	MG	13	1665	1/1	0.96	0.20	82,82,82,82	0
58	MG	13	1618	1/1	0.96	0.31	92,92,92,92	0
58	MG	1H	3386	1/1	0.96	0.16	39,39,39,39	0
58	MG	14	3070	1/1	0.96	0.19	62,62,62,62	0
58	MG	1H	3388	1/1	0.96	0.14	39,39,39,39	0
58	MG	1H	3038	1/1	0.96	0.16	46,46,46,46	0
58	MG	1H	3265	1/1	0.96	0.15	66,66,66,66	0
58	MG	14	3350	1/1	0.96	0.13	61,61,61,61	0
58	MG	1H	3392	1/1	0.96	0.10	60,60,60,60	0
58	MG	14	3256	1/1	0.96	0.27	80,80,80,80	0
58	MG	14	3357	1/1	0.96	0.16	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3345	1/1	0.96	0.19	75,75,75,75	0
58	MG	1G	1615	1/1	0.96	0.19	82,82,82,82	0
58	MG	13	1726	1/1	0.96	0.10	75,75,75,75	0
58	MG	1H	3396	1/1	0.96	0.13	55,55,55,55	0
58	MG	1H	3065	1/1	0.96	0.19	72,72,72,72	0
58	MG	14	3092	1/1	0.96	0.16	59,59,59,59	0
58	MG	1G	1622	1/1	0.96	0.12	113,113,113,113	0
58	MG	14	3096	1/1	0.96	0.11	61,61,61,61	0
58	MG	14	3369	1/1	0.96	0.13	69,69,69,69	0
58	MG	14	3180	1/1	0.96	0.26	75,75,75,75	0
58	MG	14	3371	1/1	0.96	0.08	59,59,59,59	0
58	MG	14	3373	1/1	0.96	0.06	65,65,65,65	0
58	MG	13	1696	1/1	0.96	0.35	81,81,81,81	0
58	MG	1H	3306	1/1	0.96	0.23	54,54,54,54	0
58	MG	14	3376	1/1	0.96	0.11	87,87,87,87	0
58	MG	14	3379	1/1	0.96	0.10	51,51,51,51	0
58	MG	14	3273	1/1	0.96	0.11	64,64,64,64	0
58	MG	1H	3043	1/1	0.96	0.26	62,62,62,62	0
58	MG	1H	3005	1/1	0.96	0.23	53,53,53,53	0
58	MG	1G	1682	1/1	0.96	0.10	75,75,75,75	0
58	MG	1G	1683	1/1	0.96	0.11	81,81,81,81	0
58	MG	14	3385	1/1	0.96	0.15	71,71,71,71	0
58	MG	13	1613	1/1	0.96	0.14	66,66,66,66	0
58	MG	14	3279	1/1	0.96	0.09	67,67,67,67	0
58	MG	1H	3120	1/1	0.96	0.18	63,63,63,63	0
58	MG	1H	3097	1/1	0.96	0.22	47,47,47,47	0
58	MG	14	3282	1/1	0.96	0.25	62,62,62,62	0
58	MG	14	3193	1/1	0.96	0.23	60,60,60,60	0
58	MG	14	3395	1/1	0.96	0.08	64,64,64,64	0
58	MG	1H	3154	1/1	0.96	0.32	52,52,52,52	0
58	MG	1H	3012	1/1	0.96	0.22	58,58,58,58	0
58	MG	1H	3413	1/1	0.96	0.07	40,40,40,40	0
58	MG	1H	3156	1/1	0.96	0.16	44,44,44,44	0
58	MG	13	1602	1/1	0.96	0.22	71,71,71,71	0
58	MG	1H	3278	1/1	0.96	0.14	75,75,75,75	0
58	MG	1H	3127	1/1	0.96	0.30	75,75,75,75	0
58	MG	1H	3419	1/1	0.96	0.11	37,37,37,37	0
58	MG	14	3203	1/1	0.96	0.23	47,47,47,47	0
58	MG	14	3007	1/1	0.96	0.13	42,42,42,42	0
58	MG	14	3294	1/1	0.96	0.31	90,90,90,90	0
58	MG	14	3205	1/1	0.96	0.14	44,44,44,44	0
58	MG	1H	3321	1/1	0.96	0.27	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3207	1/1	0.96	0.17	53,53,53,53	0
58	MG	1G	1639	1/1	0.96	0.24	110,110,110,110	0
58	MG	1H	3018	1/1	0.96	0.29	48,48,48,48	0
58	MG	1H	3243	1/1	0.96	0.28	50,50,50,50	0
58	MG	1H	3101	1/1	0.96	0.25	30,30,30,30	0
58	MG	14	3024	1/1	0.96	0.14	70,70,70,70	0
58	MG	13	1675	1/1	0.97	0.22	63,63,63,63	0
58	MG	1G	1614	1/1	0.97	0.17	73,73,73,73	0
58	MG	13	1634	1/1	0.97	0.20	52,52,52,52	0
58	MG	14	3079	1/1	0.97	0.20	55,55,55,55	0
58	MG	1H	3264	1/1	0.97	0.19	47,47,47,47	0
58	MG	14	3081	1/1	0.97	0.18	52,52,52,52	0
58	MG	1G	1617	1/1	0.97	0.16	96,96,96,96	0
58	MG	14	3083	1/1	0.97	0.22	58,58,58,58	0
58	MG	14	3084	1/1	0.97	0.21	54,54,54,54	0
58	MG	1G	1618	1/1	0.97	0.20	86,86,86,86	0
58	MG	1G	1619	1/1	0.97	0.18	88,88,88,88	0
58	MG	14	3190	1/1	0.97	0.21	65,65,65,65	0
58	MG	14	3192	1/1	0.97	0.18	74,74,74,74	0
58	MG	1H	3019	1/1	0.97	0.28	38,38,38,38	0
58	MG	14	3088	1/1	0.97	0.20	47,47,47,47	0
58	MG	1H	3397	1/1	0.97	0.10	51,51,51,51	0
58	MG	14	3090	1/1	0.97	0.23	65,65,65,65	0
58	MG	1H	3350	1/1	0.97	0.34	62,62,62,62	0
58	MG	1G	1680	1/1	0.97	0.12	83,83,83,83	0
58	MG	14	3199	1/1	0.97	0.22	66,66,66,66	0
58	MG	1G	1681	1/1	0.97	0.40	85,85,85,85	0
58	MG	1H	3138	1/1	0.97	0.44	62,62,62,62	0
58	MG	1H	3401	1/1	0.97	0.10	71,71,71,71	0
58	MG	1H	3468	1/1	0.97	0.07	59,59,59,59	0
58	MG	14	3312	1/1	0.97	0.09	89,89,89,89	0
58	MG	1H	3307	1/1	0.97	0.12	64,64,64,64	0
58	MG	14	3101	1/1	0.97	0.18	60,60,60,60	0
58	MG	1H	3470	1/1	0.97	0.10	64,64,64,64	0
58	MG	14	3104	1/1	0.97	0.26	42,42,42,42	0
58	MG	1H	3020	1/1	0.97	0.22	38,38,38,38	0
58	MG	14	3318	1/1	0.97	0.06	81,81,81,81	0
58	MG	1H	3021	1/1	0.97	0.20	43,43,43,43	0
58	MG	1H	3355	1/1	0.97	0.21	73,73,73,73	0
58	MG	1H	3025	1/1	0.97	0.28	47,47,47,47	0
58	MG	14	3109	1/1	0.97	0.21	60,60,60,60	0
58	MG	1H	3026	1/1	0.97	0.19	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	14	3113	1/1	0.97	0.10	46,46,46,46	0
58	MG	14	3114	1/1	0.97	0.20	65,65,65,65	0
58	MG	1H	3027	1/1	0.97	0.28	36,36,36,36	0
58	MG	14	3217	1/1	0.97	0.39	79,79,79,79	0
58	MG	14	3328	1/1	0.97	0.16	55,55,55,55	0
58	MG	14	3218	1/1	0.97	0.16	89,89,89,89	0
58	MG	14	3116	1/1	0.97	0.12	57,57,57,57	0
58	MG	1H	3203	1/1	0.97	0.14	68,68,68,68	0
58	MG	14	3221	1/1	0.97	0.17	66,66,66,66	0
58	MG	1H	3412	1/1	0.97	0.10	48,48,48,48	0
58	MG	14	3223	1/1	0.97	0.18	44,44,44,44	0
58	MG	14	3119	1/1	0.97	0.32	75,75,75,75	0
58	MG	14	3339	1/1	0.97	0.09	60,60,60,60	0
58	MG	14	3002	1/1	0.97	0.21	43,43,43,43	0
58	MG	14	3122	1/1	0.97	0.24	54,54,54,54	0
58	MG	14	3227	1/1	0.97	0.29	51,51,51,51	0
58	MG	14	3343	1/1	0.97	0.09	49,49,49,49	0
58	MG	14	3004	1/1	0.97	0.15	50,50,50,50	0
58	MG	14	3006	1/1	0.97	0.13	46,46,46,46	0
58	MG	1H	3235	1/1	0.97	0.12	53,53,53,53	0
58	MG	1H	3237	1/1	0.97	0.12	44,44,44,44	0
58	MG	14	3348	1/1	0.97	0.07	42,42,42,42	0
58	MG	1H	3144	1/1	0.97	0.26	47,47,47,47	0
58	MG	14	3012	1/1	0.97	0.27	66,66,66,66	0
58	MG	14	3353	1/1	0.97	0.06	57,57,57,57	0
58	MG	14	3355	1/1	0.97	0.12	43,43,43,43	0
58	MG	1H	3145	1/1	0.97	0.33	53,53,53,53	0
58	MG	14	3016	1/1	0.97	0.15	53,53,53,53	0
58	MG	14	3019	1/1	0.97	0.13	69,69,69,69	0
58	MG	16	210	1/1	0.97	0.14	63,63,63,63	0
58	MG	14	3361	1/1	0.97	0.08	52,52,52,52	0
58	MG	14	3021	1/1	0.97	0.16	51,51,51,51	0
58	MG	14	3135	1/1	0.97	0.14	67,67,67,67	0
58	MG	1H	3086	1/1	0.97	0.40	52,52,52,52	0
58	MG	14	3023	1/1	0.97	0.12	46,46,46,46	0
58	MG	1H	3059	1/1	0.97	0.35	55,55,55,55	0
58	MG	1H	3149	1/1	0.97	0.21	42,42,42,42	0
58	MG	1H	3030	1/1	0.97	0.19	40,40,40,40	0
58	MG	14	3246	1/1	0.97	0.21	76,76,76,76	0
58	MG	1H	3031	1/1	0.97	0.22	60,60,60,60	0
58	MG	14	3372	1/1	0.97	0.08	59,59,59,59	0
58	MG	13	1616	1/1	0.97	0.18	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3371	1/1	0.97	0.16	59,59,59,59	0
58	MG	1H	3283	1/1	0.97	0.20	59,59,59,59	0
58	MG	14	3031	1/1	0.97	0.25	56,56,56,56	0
58	MG	14	3377	1/1	0.97	0.15	66,66,66,66	0
58	MG	1H	3212	1/1	0.97	0.32	80,80,80,80	0
58	MG	14	3035	1/1	0.97	0.20	76,76,76,76	0
58	MG	14	3149	1/1	0.97	0.23	69,69,69,69	0
58	MG	1G	1651	1/1	0.97	0.26	71,71,71,71	0
58	MG	1H	3121	1/1	0.97	0.26	41,41,41,41	0
58	MG	13	1628	1/1	0.97	0.25	43,43,43,43	0
58	MG	14	3039	1/1	0.97	0.14	45,45,45,45	0
58	MG	1H	3249	1/1	0.97	0.18	53,53,53,53	0
58	MG	14	3044	1/1	0.97	0.14	40,40,40,40	0
58	MG	14	3045	1/1	0.97	0.16	44,44,44,44	0
58	MG	1H	3251	1/1	0.97	0.18	33,33,33,33	0
58	MG	14	3160	1/1	0.97	0.19	80,80,80,80	0
58	MG	14	3391	1/1	0.97	0.11	93,93,93,93	0
58	MG	14	3265	1/1	0.97	0.19	55,55,55,55	0
58	MG	14	3393	1/1	0.97	0.07	71,71,71,71	0
58	MG	14	3394	1/1	0.97	0.07	94,94,94,94	0
58	MG	14	3047	1/1	0.97	0.17	71,71,71,71	0
58	MG	1H	3252	1/1	0.97	0.11	36,36,36,36	0
58	MG	1H	3001	1/1	0.97	0.15	44,44,44,44	0
58	MG	14	3269	1/1	0.97	0.17	78,78,78,78	0
58	MG	1J	201	1/1	0.97	0.16	100,100,100,100	0
58	MG	1H	3003	1/1	0.97	0.35	30,30,30,30	0
58	MG	14	3271	1/1	0.97	0.11	58,58,58,58	0
58	MG	1H	3004	1/1	0.97	0.35	33,33,33,33	0
58	MG	1H	3293	1/1	0.97	0.12	56,56,56,56	0
58	MG	13	1607	1/1	0.97	0.23	69,69,69,69	0
58	MG	1H	3449	1/1	0.97	0.08	74,74,74,74	0
58	MG	1H	3295	1/1	0.97	0.27	51,51,51,51	0
58	MG	13	1666	1/1	0.97	0.34	81,81,81,81	0
58	MG	14	3061	1/1	0.97	0.23	43,43,43,43	0
58	MG	1H	3009	1/1	0.97	0.23	42,42,42,42	0
58	MG	14	3173	1/1	0.97	0.12	78,78,78,78	0
58	MG	1H	3162	1/1	0.97	0.39	57,57,57,57	0
58	MG	1H	3389	1/1	0.97	0.10	49,49,49,49	0
58	MG	1H	3011	1/1	0.97	0.19	50,50,50,50	0
58	MG	13	1661	1/1	0.97	0.29	82,82,82,82	0
58	MG	14	3072	1/1	0.97	0.30	56,56,56,56	0
58	MG	1H	3250	1/1	0.98	0.20	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3069	1/1	0.98	0.43	69,69,69,69	0
58	MG	1H	3034	1/1	0.98	0.22	71,71,71,71	0
58	MG	14	3032	1/1	0.98	0.22	54,54,54,54	0
58	MG	14	3033	1/1	0.98	0.15	56,56,56,56	0
58	MG	1H	3111	1/1	0.98	0.11	53,53,53,53	0
58	MG	1H	3411	1/1	0.98	0.11	43,43,43,43	0
58	MG	1H	3356	1/1	0.98	0.34	55,55,55,55	0
58	MG	13	1621	1/1	0.98	0.23	59,59,59,59	0
58	MG	14	3137	1/1	0.98	0.19	65,65,65,65	0
58	MG	1H	3160	1/1	0.98	0.17	64,64,64,64	0
58	MG	13	1731	1/1	0.98	0.11	85,85,85,85	0
58	MG	13	1609	1/1	0.98	0.19	72,72,72,72	0
58	MG	14	3041	1/1	0.98	0.12	35,35,35,35	0
58	MG	14	3042	1/1	0.98	0.18	46,46,46,46	0
58	MG	13	1733	1/1	0.98	0.10	61,61,61,61	0
58	MG	1H	3039	1/1	0.98	0.31	76,76,76,76	0
58	MG	14	3331	1/1	0.98	0.09	53,53,53,53	0
58	MG	31	302	1/1	0.98	0.08	57,57,57,57	0
58	MG	14	3333	1/1	0.98	0.21	54,54,54,54	0
58	MG	1H	3421	1/1	0.98	0.10	43,43,43,43	0
58	MG	1H	3118	1/1	0.98	0.17	36,36,36,36	0
58	MG	14	3049	1/1	0.98	0.13	47,47,47,47	0
58	MG	14	3337	1/1	0.98	0.10	49,49,49,49	0
58	MG	1H	3310	1/1	0.98	0.16	79,79,79,79	0
58	MG	1H	3424	1/1	0.98	0.08	48,48,48,48	0
58	MG	14	3242	1/1	0.98	0.12	55,55,55,55	0
58	MG	1H	3076	1/1	0.98	0.15	53,53,53,53	0
58	MG	14	3152	1/1	0.98	0.18	72,72,72,72	0
58	MG	1H	3007	1/1	0.98	0.34	45,45,45,45	0
58	MG	14	3154	1/1	0.98	0.17	80,80,80,80	0
58	MG	1H	3428	1/1	0.98	0.10	38,38,38,38	0
58	MG	1H	3078	1/1	0.98	0.22	41,41,41,41	0
58	MG	1H	3079	1/1	0.98	0.32	55,55,55,55	0
58	MG	1H	3008	1/1	0.98	0.30	37,37,37,37	0
58	MG	1G	1601	1/1	0.98	0.22	77,77,77,77	0
58	MG	14	3351	1/1	0.98	0.17	60,60,60,60	0
58	MG	1H	3042	1/1	0.98	0.17	48,48,48,48	0
58	MG	1H	3126	1/1	0.98	0.24	46,46,46,46	0
58	MG	14	3354	1/1	0.98	0.11	57,57,57,57	0
58	MG	1G	1604	1/1	0.98	0.12	84,84,84,84	0
58	MG	14	3066	1/1	0.98	0.18	54,54,54,54	0
58	MG	14	3067	1/1	0.98	0.20	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3434	1/1	0.98	0.12	42,42,42,42	0
58	MG	13	1715	1/1	0.98	0.08	78,78,78,78	0
58	MG	14	3360	1/1	0.98	0.07	55,55,55,55	0
58	MG	14	3071	1/1	0.98	0.27	38,38,38,38	0
58	MG	13	1623	1/1	0.98	0.27	56,56,56,56	0
58	MG	14	3073	1/1	0.98	0.30	37,37,37,37	0
58	MG	14	3364	1/1	0.98	0.11	45,45,45,45	0
58	MG	13	1672	1/1	0.98	0.29	56,56,56,56	0
58	MG	1H	3013	1/1	0.98	0.28	46,46,46,46	0
58	MG	1H	3440	1/1	0.98	0.07	59,59,59,59	0
58	MG	13	1701	1/1	0.98	0.21	74,74,74,74	0
58	MG	1H	3048	1/1	0.98	0.18	52,52,52,52	0
58	MG	13	1605	1/1	0.98	0.11	77,77,77,77	0
58	MG	1H	3134	1/1	0.98	0.21	45,45,45,45	0
58	MG	1H	3181	1/1	0.98	0.30	71,71,71,71	0
58	MG	1H	3135	1/1	0.98	0.28	52,52,52,52	0
58	MG	13	1636	1/1	0.98	0.22	65,65,65,65	0
58	MG	1H	3230	1/1	0.98	0.23	47,47,47,47	0
58	MG	1H	3090	1/1	0.98	0.27	45,45,45,45	0
58	MG	13	1601	1/1	0.98	0.21	59,59,59,59	0
58	MG	14	3378	1/1	0.98	0.08	73,73,73,73	0
58	MG	1H	3092	1/1	0.98	0.26	65,65,65,65	0
58	MG	1H	3387	1/1	0.98	0.12	38,38,38,38	0
58	MG	1L	101	1/1	0.98	0.17	71,71,71,71	0
58	MG	14	3094	1/1	0.98	0.21	40,40,40,40	0
58	MG	13	1689	1/1	0.98	0.10	70,70,70,70	0
58	MG	1H	3056	1/1	0.98	0.19	59,59,59,59	0
58	MG	1H	3096	1/1	0.98	0.21	40,40,40,40	0
58	MG	1H	3024	1/1	0.98	0.21	40,40,40,40	0
58	MG	14	3191	1/1	0.98	0.22	66,66,66,66	0
58	MG	14	3001	1/1	0.98	0.27	50,50,50,50	0
58	MG	1H	3058	1/1	0.98	0.23	50,50,50,50	0
58	MG	14	3003	1/1	0.98	0.19	49,49,49,49	0
58	MG	13	1617	1/1	0.98	0.27	87,87,87,87	0
58	MG	13	1691	1/1	0.98	0.14	71,71,71,71	0
58	MG	1H	3466	1/1	0.98	0.12	51,51,51,51	0
58	MG	14	3008	1/1	0.98	0.21	55,55,55,55	0
58	MG	1H	3395	1/1	0.98	0.17	40,40,40,40	0
58	MG	13	1603	1/1	0.98	0.12	61,61,61,61	0
58	MG	1H	3062	1/1	0.98	0.21	66,66,66,66	0
58	MG	14	3111	1/1	0.98	0.19	63,63,63,63	0
58	MG	14	3297	1/1	0.98	0.11	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3028	1/1	0.98	0.18	51,51,51,51	0
58	MG	1H	3471	1/1	0.98	0.11	54,54,54,54	0
58	MG	14	3017	1/1	0.98	0.22	49,49,49,49	0
58	MG	14	3018	1/1	0.98	0.16	79,79,79,79	0
58	MG	1H	3472	1/1	0.98	0.07	75,75,75,75	0
58	MG	29	301	1/1	0.98	0.19	46,46,46,46	0
58	MG	1H	3399	1/1	0.98	0.08	58,58,58,58	0
58	MG	13	1629	1/1	0.98	0.32	45,45,45,45	0
58	MG	13	1604	1/1	0.98	0.14	65,65,65,65	0
58	MG	13	1620	1/1	0.98	0.11	64,64,64,64	0
58	MG	14	3121	1/1	0.98	0.15	64,64,64,64	0
58	MG	1H	3403	1/1	0.98	0.11	69,69,69,69	0
58	MG	14	3123	1/1	0.98	0.15	59,59,59,59	0
58	MG	1H	3107	1/1	0.98	0.32	54,54,54,54	0
59	ZN	3E	302	1/1	0.98	0.37	89,89,89,89	0
58	MG	1G	1643	1/1	0.98	0.09	83,83,83,83	0
58	MG	13	1644	1/1	0.98	0.14	56,56,56,56	0
58	MG	1H	3298	1/1	0.98	0.36	94,94,94,94	0
58	MG	14	3260	1/1	0.99	0.12	57,57,57,57	0
58	MG	14	3110	1/1	0.99	0.17	44,44,44,44	0
58	MG	1H	3443	1/1	0.99	0.12	55,55,55,55	0
58	MG	1H	3318	1/1	0.99	0.10	50,50,50,50	0
58	MG	1H	3445	1/1	0.99	0.11	40,40,40,40	0
58	MG	13	1734	1/1	0.99	0.09	76,76,76,76	0
58	MG	14	3065	1/1	0.99	0.29	39,39,39,39	0
58	MG	1H	3416	1/1	0.99	0.12	51,51,51,51	0
58	MG	1H	3448	1/1	0.99	0.12	50,50,50,50	0
58	MG	1H	3015	1/1	0.99	0.27	46,46,46,46	0
58	MG	14	3069	1/1	0.99	0.26	75,75,75,75	0
58	MG	1H	3450	1/1	0.99	0.05	79,79,79,79	0
58	MG	14	3272	1/1	0.99	0.14	72,72,72,72	0
58	MG	1H	3236	1/1	0.99	0.12	52,52,52,52	0
58	MG	1H	3322	1/1	0.99	0.23	39,39,39,39	0
58	MG	1H	3420	1/1	0.99	0.14	37,37,37,37	0
58	MG	14	3074	1/1	0.99	0.28	41,41,41,41	0
58	MG	14	3075	1/1	0.99	0.19	53,53,53,53	0
58	MG	1H	3051	1/1	0.99	0.38	57,57,57,57	0
58	MG	1H	3067	1/1	0.99	0.15	53,53,53,53	0
58	MG	1H	3016	1/1	0.99	0.30	45,45,45,45	0
58	MG	1H	3017	1/1	0.99	0.17	52,52,52,52	0
58	MG	1H	3425	1/1	0.99	0.10	43,43,43,43	0
58	MG	1H	3459	1/1	0.99	0.07	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
58	MG	1H	3054	1/1	0.99	0.27	57,57,57,57	0
58	MG	1H	3055	1/1	0.99	0.36	41,41,41,41	0
58	MG	1H	3029	1/1	0.99	0.21	50,50,50,50	0
58	MG	1H	3124	1/1	0.99	0.20	43,43,43,43	0
58	MG	2K	101	1/1	0.99	0.21	55,55,55,55	0
58	MG	1H	3010	1/1	0.99	0.33	33,33,33,33	0
58	MG	13	1624	1/1	0.99	0.26	85,85,85,85	0
58	MG	14	3043	1/1	0.99	0.21	47,47,47,47	0
58	MG	14	3005	1/1	0.99	0.24	49,49,49,49	0
58	MG	14	3091	1/1	0.99	0.26	50,50,50,50	0
58	MG	1H	3147	1/1	0.99	0.20	57,57,57,57	0
58	MG	14	3093	1/1	0.99	0.11	63,63,63,63	0
58	MG	1H	3335	1/1	0.99	0.17	47,47,47,47	0
58	MG	14	3349	1/1	0.99	0.12	57,57,57,57	0
58	MG	13	1643	1/1	0.99	0.22	50,50,50,50	0
58	MG	14	3009	1/1	0.99	0.16	49,49,49,49	0
58	MG	1H	3093	1/1	0.99	0.39	38,38,38,38	0
58	MG	1H	3022	1/1	0.99	0.17	39,39,39,39	0
58	MG	14	3051	1/1	0.99	0.09	52,52,52,52	0
58	MG	1H	3023	1/1	0.99	0.25	40,40,40,40	0
58	MG	14	3013	1/1	0.99	0.18	56,56,56,56	0
58	MG	14	3054	1/1	0.99	0.15	48,48,48,48	0
58	MG	14	3103	1/1	0.99	0.22	36,36,36,36	0
58	MG	14	3014	1/1	0.99	0.19	61,61,61,61	0
58	MG	1H	3439	1/1	0.99	0.06	70,70,70,70	0
58	MG	1H	3002	1/1	0.99	0.19	38,38,38,38	0
59	ZN	5I	101	1/1	0.99	0.19	88,88,88,88	0
58	MG	14	3058	1/1	0.99	0.20	61,61,61,61	0
59	ZN	32	301	1/1	0.99	0.34	103,103,103,103	0
58	MG	1H	3114	1/1	0.99	0.16	40,40,40,40	0
58	MG	1H	3442	1/1	0.99	0.06	60,60,60,60	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.