



# wwPDB X-ray Structure Validation Summary Report ⓘ

Jan 2, 2024 – 11:55 pm GMT

PDB ID : 4WZO  
Title : Complex of 70S ribosome with tRNA-fMet and mRNA  
Authors : Rozov, A.; Demeshkina, N.; Yusupov, M.; Yusupova, G.  
Deposited on : 2014-11-20  
Resolution : 3.30 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

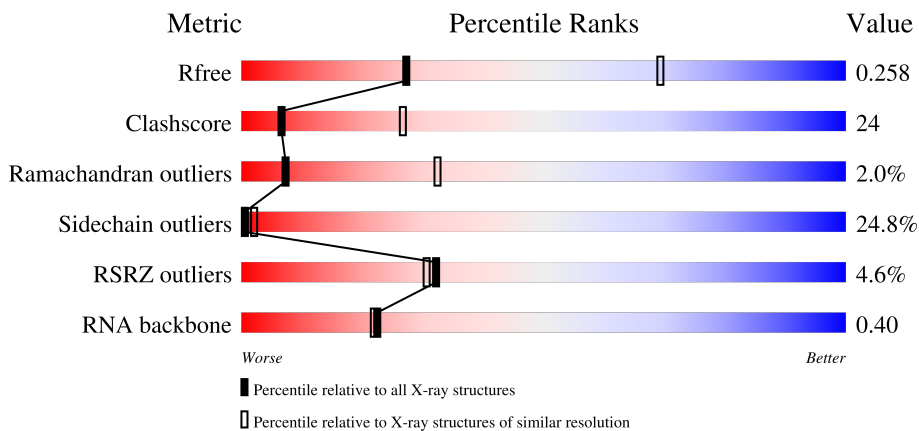
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.30 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.



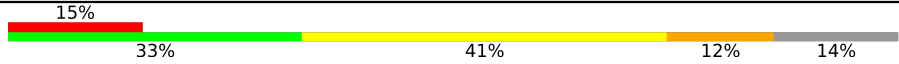

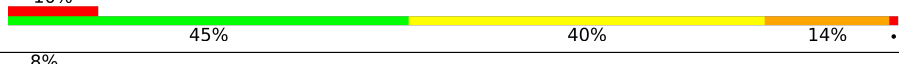
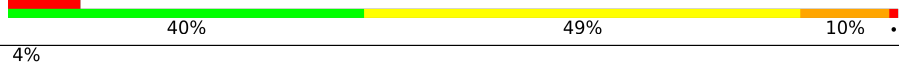
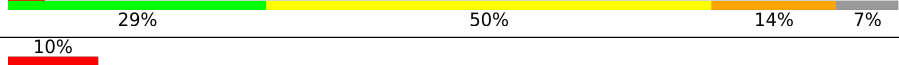

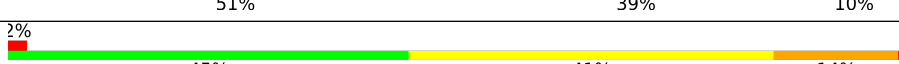
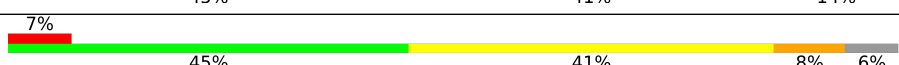


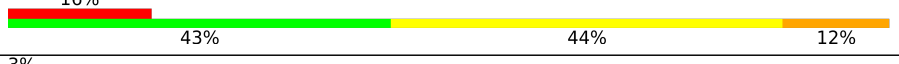
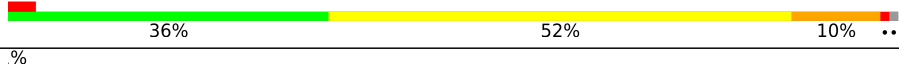
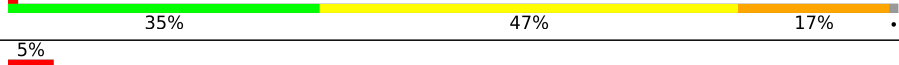

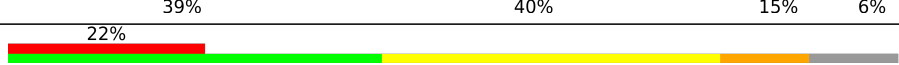
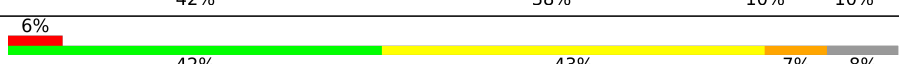
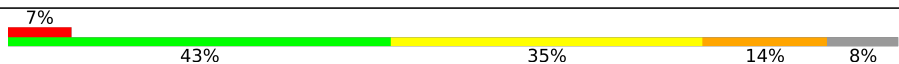

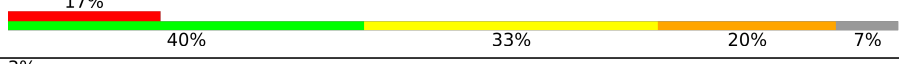

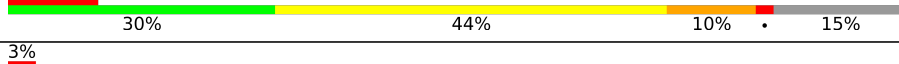




Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1149 (3.34-3.26)
Clashscore	141614	1205 (3.34-3.26)
Ramachandran outliers	138981	1183 (3.34-3.26)
Sidechain outliers	138945	1182 (3.34-3.26)
RSRZ outliers	127900	1115 (3.34-3.26)
RNA backbone	3102	1117 (3.70-2.90)

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	
1	1G	1522	
2	12	256	
2	1E	256	


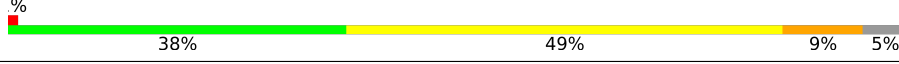
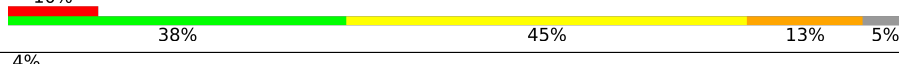
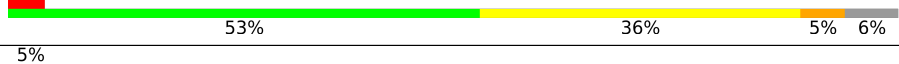
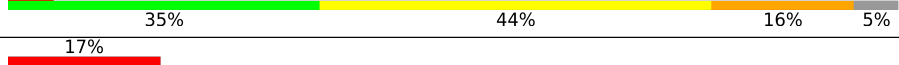
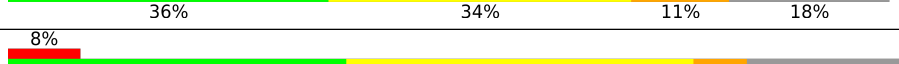
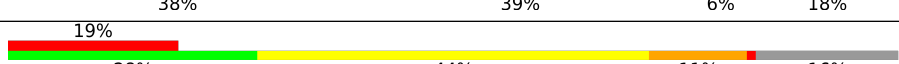
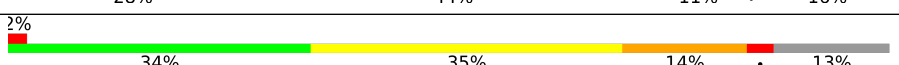


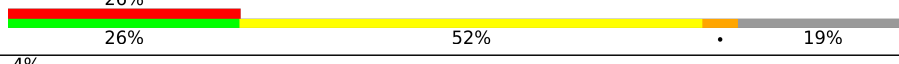
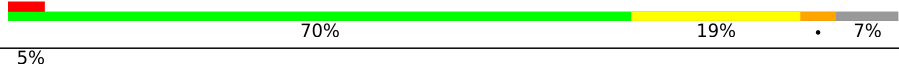
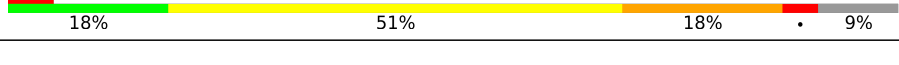
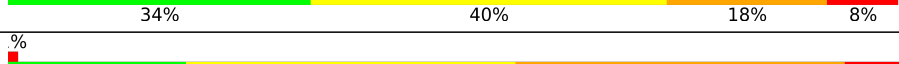

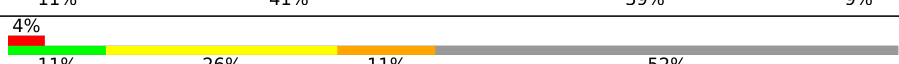
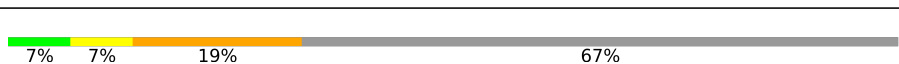
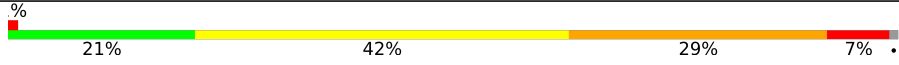
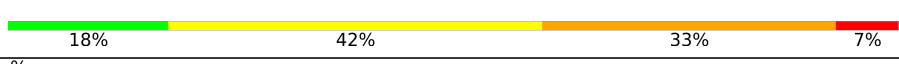
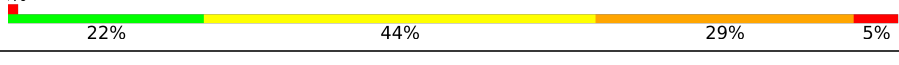





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Mol	Chain	Length	Quality of chain
3	22	239	
3	2E	239	
4	32	209	
4	3E	209	
5	42	162	
5	4E	162	
6	52	101	
6	5E	101	
7	62	156	
7	6E	156	
8	72	138	
8	7E	138	
9	82	128	
9	8E	128	
10	1A	105	
10	1I	105	
11	2A	129	
11	2I	129	
12	3A	132	
12	3I	132	
13	4A	126	
13	4I	126	
14	5A	61	
14	5I	61	
15	6A	89	

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Mol	Chain	Length	Quality of chain
15	6I	89	
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	77	
23	2K	77	
24	3K	76	
24	3L	76	
25	4K	27	
25	4L	27	
26	14	2917	
26	1H	2917	
27	16	122	
27	1J	122	
28	7I	229	
29	11	276	




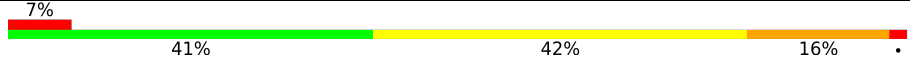
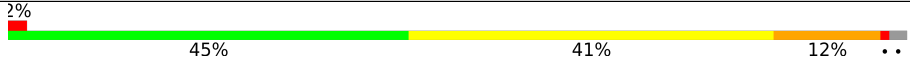
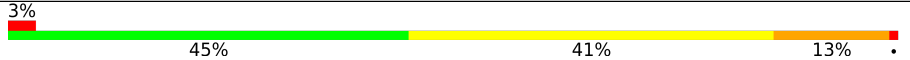
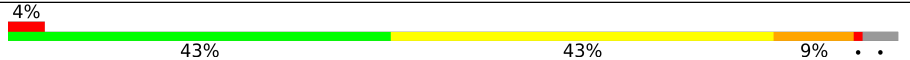
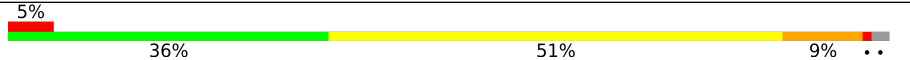
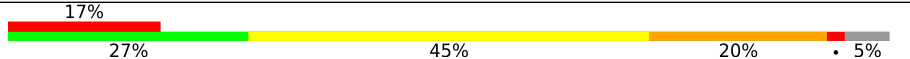
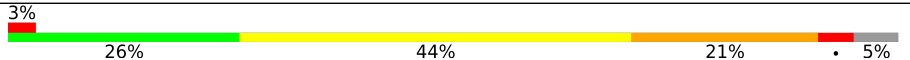
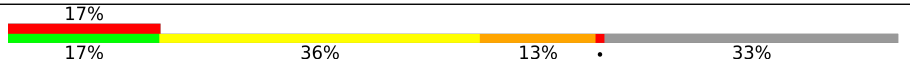
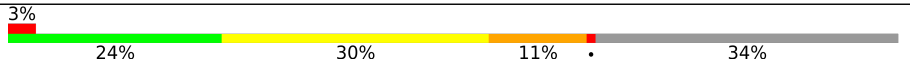
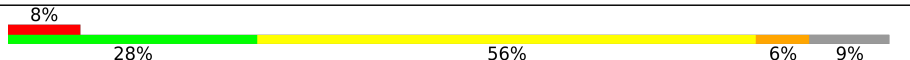
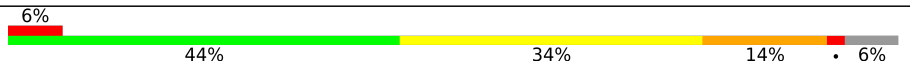
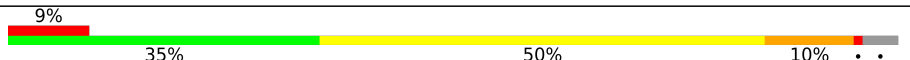
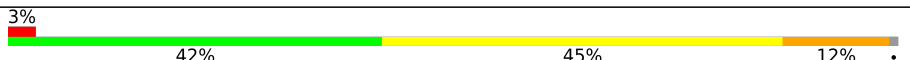
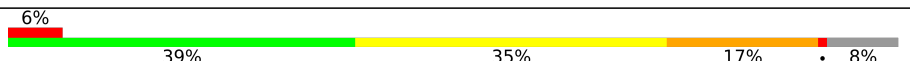
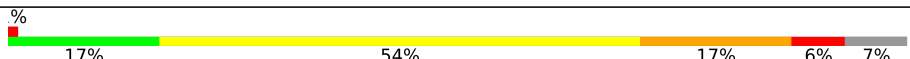
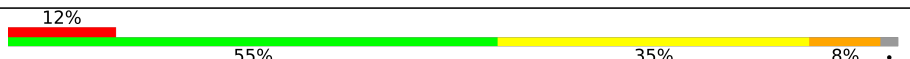
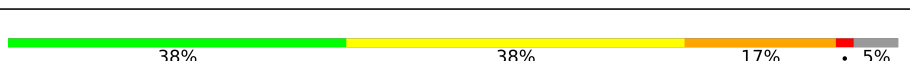
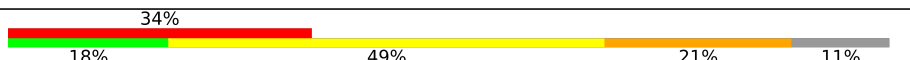
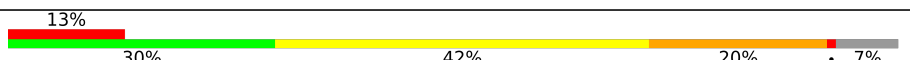
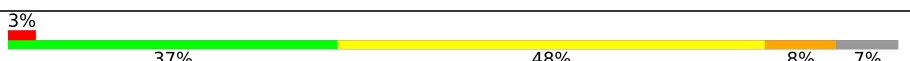

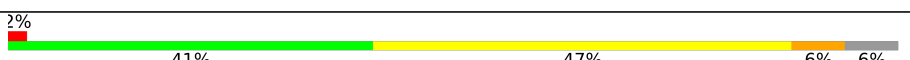
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Mol	Chain	Length	Quality of chain
29	19	276	% 49% 35% 14% ..
30	21	206	11% 41% 43% 15% .
30	29	206	3% 35% 47% 16% .
31	31	210	% 39% 44% 13% .
31	39	210	5% 31% 51% 13% ..
32	41	182	5% 31% 51% 18% ..
32	49	182	21% 31% 52% 16% .
33	51	180	2% 41% 41% 14% ..
33	59	180	24% 31% 46% 18% 6%
34	61	148	10% 39% 43% 15% ..
34	69	148	11% 39% 46% 14% ..
35	15	140	3% 46% 42% 11% .
35	58	140	3% 39% 41% 19% .
36	25	122	3% 43% 39% 17%
36	68	122	3% 51% 37% 12%
37	35	150	12% 31% 39% 23% 5% .
37	78	150	2% 36% 44% 17% .
38	45	141	21% 40% 44% 14% .
38	88	141	5% 45% 34% 16% ..
39	55	118	4% 31% 54% 14% .
39	98	118	3% 33% 53% 13% .
40	65	112	7% 33% 54% 11% ..
40	A8	112	13% 32% 44% 21% ..
41	75	146	3% 33% 44% 17% 6%
41	B8	146	% 41% 36% 16% . 6%


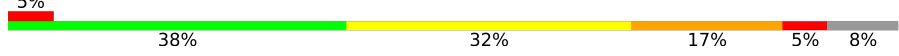

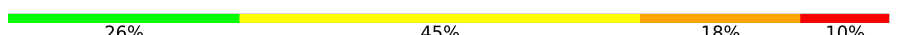
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Mol	Chain	Length	Quality of chain
42	85	118	
42	C8	118	
43	95	101	
43	D8	101	
44	A5	113	
44	E8	113	
45	B5	96	
45	F8	96	
46	C5	110	
46	G8	110	
47	D5	206	
47	H8	206	
48	E5	85	
48	I8	85	
49	F5	98	
49	J8	98	
50	G5	72	
50	K8	72	
51	H5	60	
51	L8	60	
52	I5	71	
52	M8	71	
53	J5	60	
53	N8	60	
54	L5	49	

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Mol	Chain	Length	Quality of chain
54	P8	49	
55	M5	65	
55	Q8	65	
56	2L	77	

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
57	MG	13	1626	-	-	-	X
57	MG	13	1642	-	-	-	X
57	MG	13	1659	-	-	-	X
57	MG	13	1661	-	-	-	X
57	MG	13	1662	-	-	-	X
57	MG	13	1664	-	-	-	X
57	MG	13	1671	-	-	-	X
57	MG	14	3069	-	-	-	X
57	MG	14	3086	-	-	-	X
57	MG	14	3094	-	-	-	X
57	MG	14	3102	-	-	-	X
57	MG	14	3124	-	-	-	X
57	MG	14	3156	-	-	-	X
57	MG	14	3164	-	-	-	X
57	MG	14	3166	-	-	-	X
57	MG	14	3170	-	-	-	X
57	MG	14	3174	-	-	-	X
57	MG	14	3176	-	-	-	X
57	MG	14	3179	-	-	-	X
57	MG	14	3201	-	-	-	X
57	MG	14	3211	-	-	-	X
57	MG	14	3212	-	-	-	X
57	MG	14	3213	-	-	-	X
57	MG	14	3216	-	-	-	X
57	MG	14	3218	-	-	-	X
57	MG	1G	1621	-	-	-	X
57	MG	1G	1635	-	-	-	X
57	MG	1G	1651	-	-	-	X
57	MG	1H	3053	-	-	-	X
57	MG	1H	3162	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	1H	3169	-	-	-	X
57	MG	1H	3170	-	-	-	X
57	MG	1H	3188	-	-	-	X
57	MG	1H	3198	-	-	-	X
57	MG	1H	3204	-	-	-	X
57	MG	1H	3224	-	-	-	X
57	MG	1H	3225	-	-	-	X
57	MG	1H	3230	-	-	-	X
57	MG	1H	3242	-	-	-	X
57	MG	1H	3244	-	-	-	X
57	MG	1H	3252	-	-	-	X
57	MG	1H	3261	-	-	-	X
57	MG	1H	3262	-	-	-	X
57	MG	1H	3271	-	-	-	X
57	MG	1H	3277	-	-	-	X



## 2 Entry composition

There are 59 unique types of molecules in this entry. The entry contains 295920 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	1497	Total 32185	C 14324	N 5968	O 10396	P 1497	0	0	0
1	1G	1497	Total 32182	C 14324	N 5968	O 10394	P 1496	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	Total 1924	C 1228	N 344	O 347	S 5	0	0	0
2	12	237	Total 1924	C 1228	N 344	O 347	S 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	Total 1605	C 1011	N 313	O 280	S 1	0	0	0
3	22	206	Total 1612	C 1016	N 314	O 281	S 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	Total 1702	C 1066	N 339	O 290	S 7	0	0	0
4	32	208	Total 1702	C 1066	N 339	O 290	S 7	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	155	Total	C	N	O	S	0	0	0
			1256	781	252	217	6			
7	62	147	Total	C	N	O	S	0	0	0
			1194	744	237	207	6			

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

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

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

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

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

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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1A	66	Total	C	N	O	S	0	0	0
			522	327	99	95	1			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	3I	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			
12	3A	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	4I	117	Total	C	N	O	S	0	0	0
			933	577	192	162	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 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	5I	60	Total	C	N	O	S	0	0	0
			491	312	104	71	4			
14	5A	52	Total	C	N	O	S	0	0	0
			418	262	90	62	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	99	Total	C	N	O	S	0	0	0
			823	528	151	142	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	72	Total	C	N	O	0	0	0
			590	376	117	97			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	81	Total	C	N	O	S	0	0	0
			647	413	119	113	2			
19	AA	78	Total	C	N	O	S	0	0	0
			624	398	115	109	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
			Total	C	N	O			
21	1F	25	217	134	52	31	0	0	0
21	1B	22	188	116	44	28	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
22	1K	70	1497	669	274	485	69	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 tRNA-Phe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
24	3K	76	1627	730	290	530	75	2	0	0	0
24	3L	76	1627	730	290	530	75	2	0	0	0

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
25	4K	13	285	129	62	81	13	0	0	0
25	4L	9	197	89	42	57	9	0	0	0

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
26	1H	2902	62497	27816	11684	20095	2902	0	0	0
26	14	2877	61968	27579	11594	19918	2877	0	0	0

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
27	16	122	Total 2617	C 1166	N 486	O 844	P 121	0	0	0
27	1J	122	Total 2617	C 1166	N 486	O 844	P 121	0	0	0

- Molecule 28 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
28	71	93	Total 737	C 465	N 139	O 133	0	0	0

- Molecule 29 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	11	272	Total 2115	C 1335	N 420	O 357	S 3	0	0	0
29	19	273	Total 2120	C 1338	N 421	O 358	S 3	0	0	0

- Molecule 30 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	21	205	Total 1568	C 991	N 300	O 271	S 6	0	0	0
30	29	205	Total 1568	C 991	N 300	O 271	S 6	0	0	0

- Molecule 31 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	31	202	Total 1585	C 1011	N 297	O 275	S 2	0	0	0
31	39	206	Total 1610	C 1026	N 301	O 281	S 2	0	0	0

- Molecule 32 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	41	181	Total 1473	C 942	N 268	O 259	S 4	0	0	0
32	49	181	Total 1473	C 942	N 268	O 259	S 4	0	0	0

- Molecule 33 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	51	174	Total	C	N	O	S	0	0	0
			1336	848	251	236	1			
33	59	170	Total	C	N	O	S	0	0	0
			1307	829	245	232	1			

- Molecule 34 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	61	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			
34	69	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			

- Molecule 35 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	58	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
35	15	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			

- Molecule 36 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	68	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			
36	25	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			

- Molecule 37 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	78	150	Total	C	N	O	S	0	0	0
			1144	712	232	197	3			
37	35	147	Total	C	N	O	S	0	0	0
			1122	698	229	192	3			

- Molecule 38 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	88	137	Total	C	N	O	S	0	0	0
			1077	688	206	177	6			
38	45	141	Total	C	N	O	S	0	0	0
			1121	715	212	187	7			

- Molecule 39 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
39	55	117	Total	C	N	O		0	0	0
			959	599	202	158				

- Molecule 40 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	A8	111	Total	C	N	O	0	0	0
			881	556	176	149			
40	65	111	Total	C	N	O	0	0	0
			881	556	176	149			

- Molecule 41 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	B8	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			
41	75	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 42 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	C8	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			
42	85	117	Total	C	N	O	S	0	0	0
			963	610	202	150	1			

- Molecule 43 is a protein called 50S ribosomal protein L21.

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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	95	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			

- Molecule 44 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	E8	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			
44	A5	111	Total	C	N	O	S	0	0	0
			886	558	174	152	2			

- Molecule 45 is a protein called 50S ribosomal protein L23.

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

- Molecule 46 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	G8	104	Total	C	N	O	S	0	0	0
			791	510	149	127	5			
46	C5	104	Total	C	N	O	S	0	0	0
			794	510	152	127	5			

- Molecule 47 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	H8	135	Total	C	N	O	S	0	0	0
			1110	714	202	192	2			
47	D5	137	Total	C	N	O	S	0	0	0
			1126	725	202	197	2			

- Molecule 48 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	I8	80	Total	C	N	O	S	0	0	0
			626	388	132	105	1			
48	E5	77	Total	C	N	O	S	0	0	0
			612	379	129	103	1			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I8	6	ALA	GLY	conflict	UNP P60493
I8	8	ALA	GLY	conflict	UNP P60493
E5	6	ALA	GLY	conflict	UNP P60493
E5	8	ALA	GLY	conflict	UNP P60493

- Molecule 49 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
49	J8	97	762	481	150	130	1	0	0	0
49	F5	94	737	463	146	127	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
50	K8	67	563	349	114	99	1	0	0	0
50	G5	66	558	346	113	98	1	0	0	0

- Molecule 51 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
51	L8	57	452	288	88	76	0	0	0
51	H5	59	468	298	90	80	0	0	0

- Molecule 52 is a protein called 50S ribosomal protein L31.

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

- Molecule 53 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	N8	54	Total	C	N	O	S	0	0	0
			422	264	85	68	5			
53	J5	56	Total	C	N	O	S	0	0	0
			434	272	87	70	5			

- Molecule 54 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	P8	47	Total	C	N	O	S	0	0	0
			409	251	102	54	2			
54	L5	46	Total	C	N	O	S	0	0	0
			398	245	98	53	2			

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	Q8	60	Total	C	N	O	S	0	0	0
			480	306	98	74	2			
55	M5	60	Total	C	N	O	S	0	0	0
			477	303	98	74	2			

- 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			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	13	99	Total	Mg	0	0
			99	99		
57	3E	1	Total	Mg	0	0
			1	1		
57	4E	1	Total	Mg	0	0
			1	1		
57	4I	1	Total	Mg	0	0
			1	1		
57	2K	2	Total	Mg	0	0
			2	2		
57	1H	444	Total	Mg	0	0
			444	444		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	16	11	Total Mg 11 11	0	0
57	11	3	Total Mg 3 3	0	0
57	41	2	Total Mg 2 2	0	0
57	68	2	Total Mg 2 2	0	0
57	78	2	Total Mg 2 2	0	0
57	88	1	Total Mg 1 1	0	0
57	98	1	Total Mg 1 1	0	0
57	I8	2	Total Mg 2 2	0	0
57	J8	2	Total Mg 2 2	0	0
57	L8	1	Total Mg 1 1	0	0
57	P8	1	Total Mg 1 1	0	0
57	1G	72	Total Mg 72 72	0	0
57	2L	2	Total Mg 2 2	0	0
57	3L	2	Total Mg 2 2	0	0
57	14	327	Total Mg 327 327	0	0
57	1J	3	Total Mg 3 3	0	0
57	29	2	Total Mg 2 2	0	0
57	25	1	Total Mg 1 1	0	0
57	35	1	Total Mg 1 1	0	0
57	45	1	Total Mg 1 1	0	0
57	55	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	M5	1	Total 1	Mg 1	0	0

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	3E	1	Total 1	Zn 1	0	0
58	5I	1	Total 1	Zn 1	0	0
58	G8	1	Total 1	Zn 1	0	0
58	32	1	Total 1	Zn 1	0	0
58	5A	1	Total 1	Zn 1	0	0
58	C5	1	Total 1	Zn 1	0	0

- Molecule 59 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	13	144	Total 144	O 144	0	0
59	3E	2	Total 2	O 2	0	0
59	1I	1	Total 1	O 1	0	0
59	3I	2	Total 2	O 2	0	0
59	5I	2	Total 2	O 2	0	0
59	2K	6	Total 6	O 6	0	0
59	4K	2	Total 2	O 2	0	0
59	1H	933	Total 933	O 933	0	0
59	16	22	Total 22	O 22	0	0
59	11	11	Total 11	O 11	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	21	3	Total O 3 3	0	0
59	31	9	Total O 9 9	0	0
59	78	6	Total O 6 6	0	0
59	D8	1	Total O 1 1	0	0
59	F8	2	Total O 2 2	0	0
59	G8	2	Total O 2 2	0	0
59	I8	5	Total O 5 5	0	0
59	J8	1	Total O 1 1	0	0
59	L8	1	Total O 1 1	0	0
59	P8	2	Total O 2 2	0	0
59	Q8	1	Total O 1 1	0	0
59	1G	48	Total O 48 48	0	0
59	14	592	Total O 592 592	0	0
59	19	8	Total O 8 8	0	0
59	29	5	Total O 5 5	0	0
59	39	4	Total O 4 4	0	0
59	25	6	Total O 6 6	0	0
59	35	2	Total O 2 2	0	0
59	55	3	Total O 3 3	0	0
59	75	1	Total O 1 1	0	0
59	A5	1	Total O 1 1	0	0

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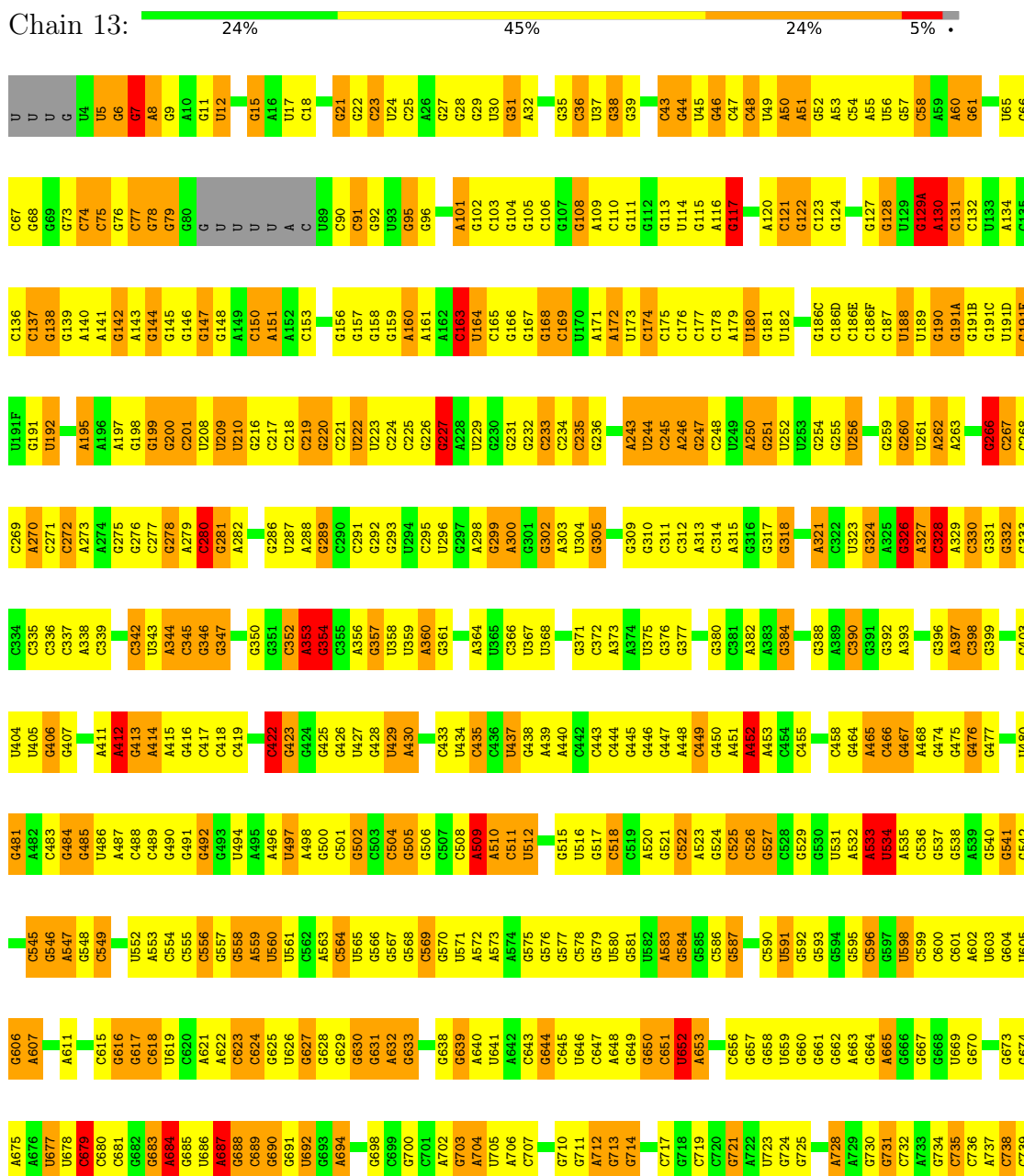
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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>	<b>ZeroOcc</b>	<b>AltConf</b>
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59	L5	1	Total O 1 1	0	0
59	M5	1	Total O 1 1	0	0

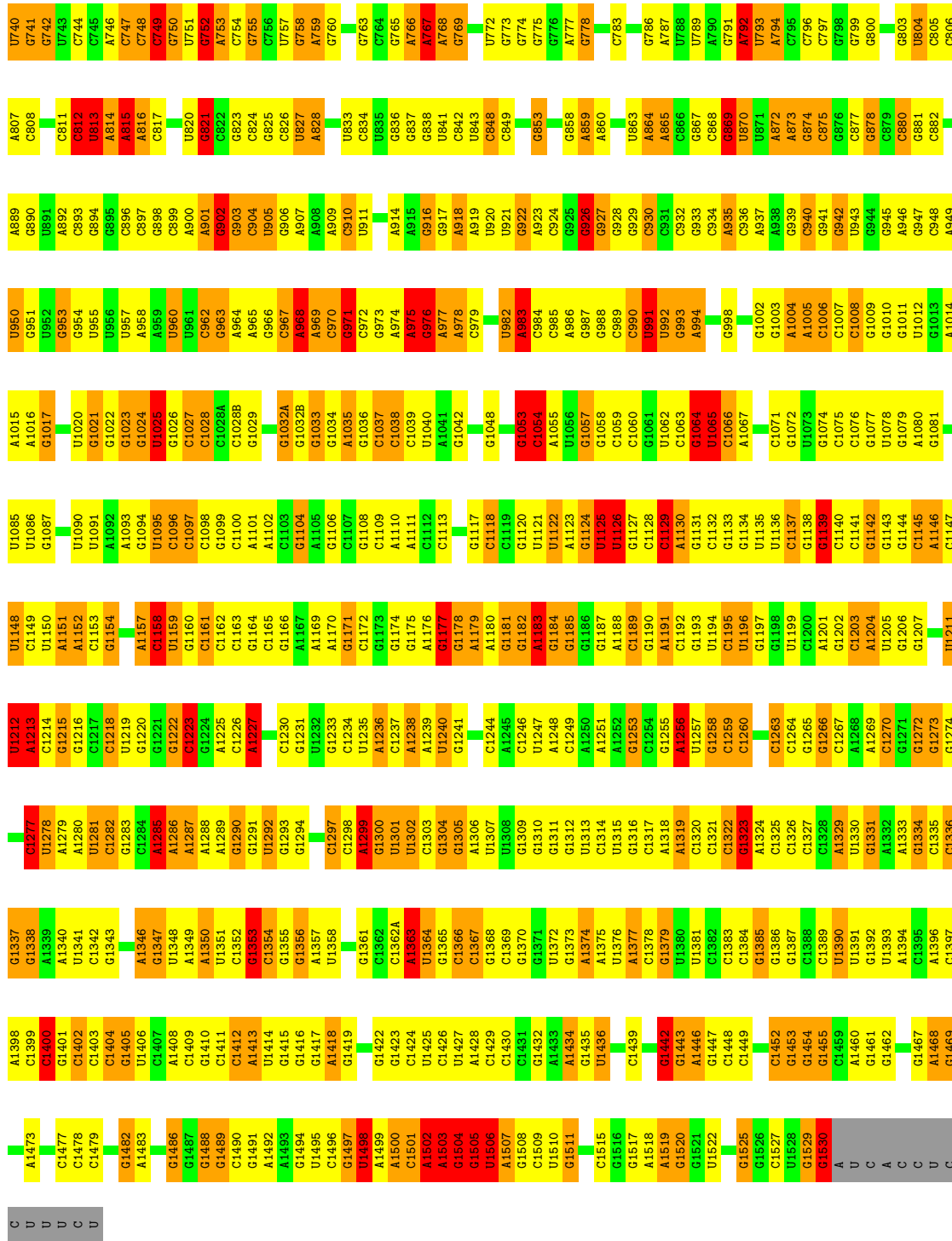
### 3 Residue-property plots [i](#)

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.

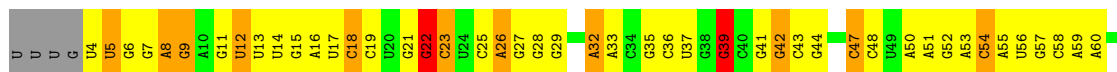
- Molecule 1: 16S ribosomal RNA

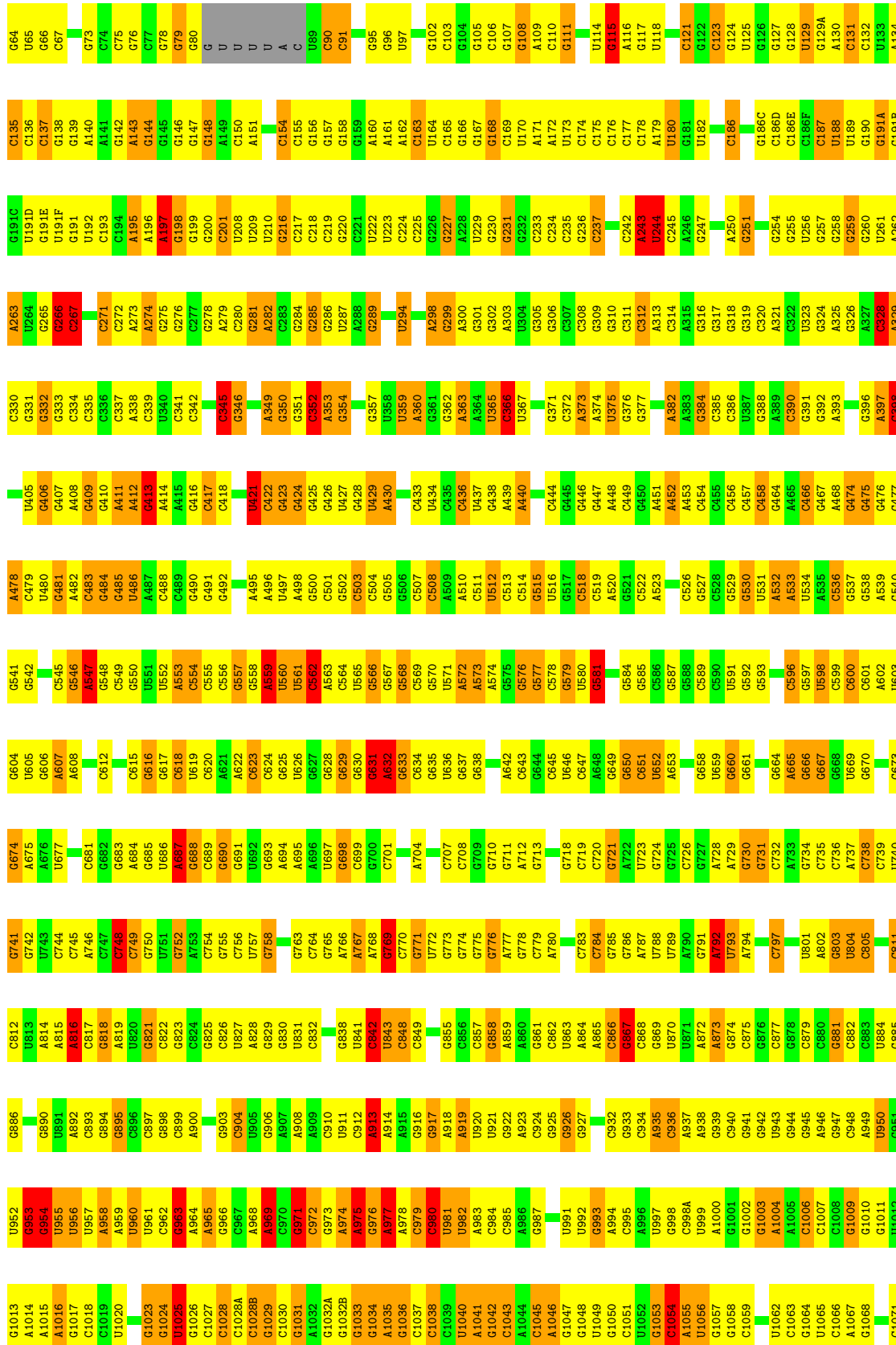


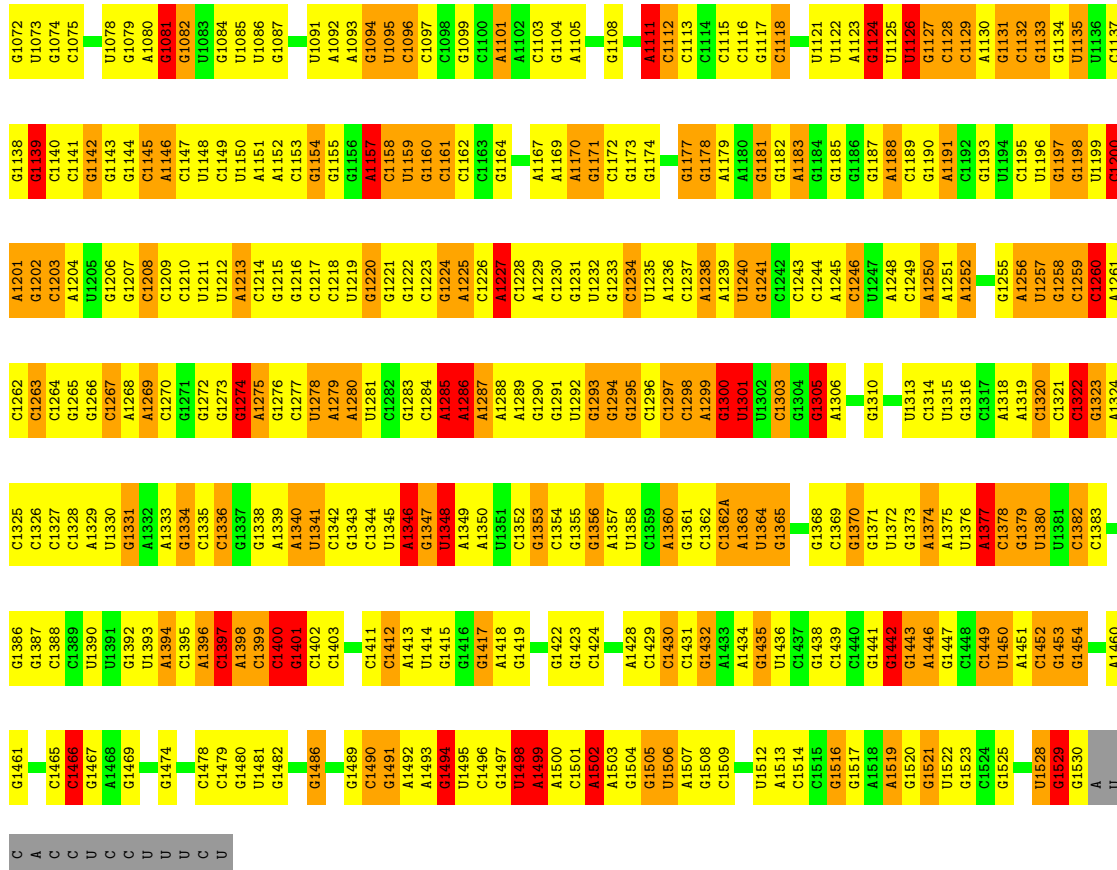




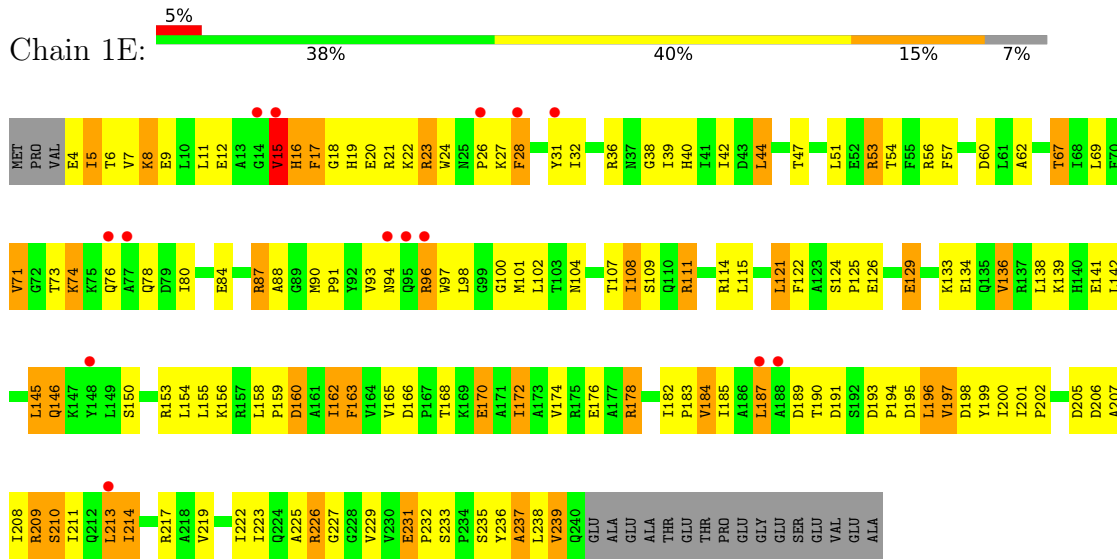
● Molecule 1: 16S ribosomal RNA



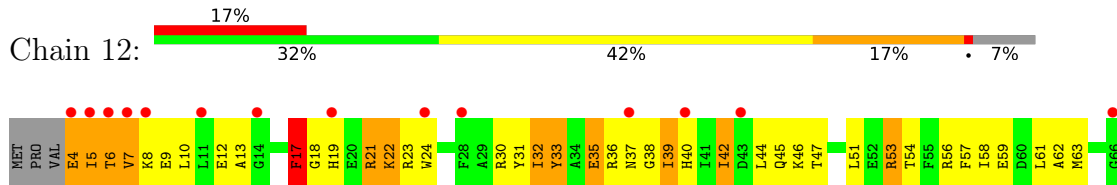


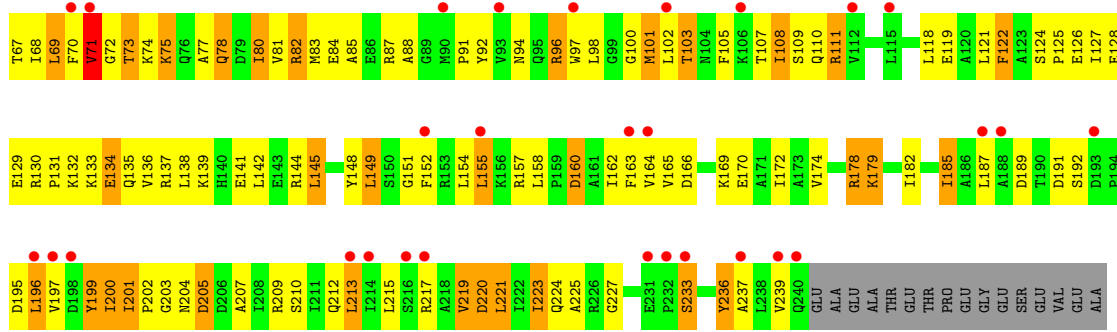


• Molecule 2: 30S ribosomal protein S2

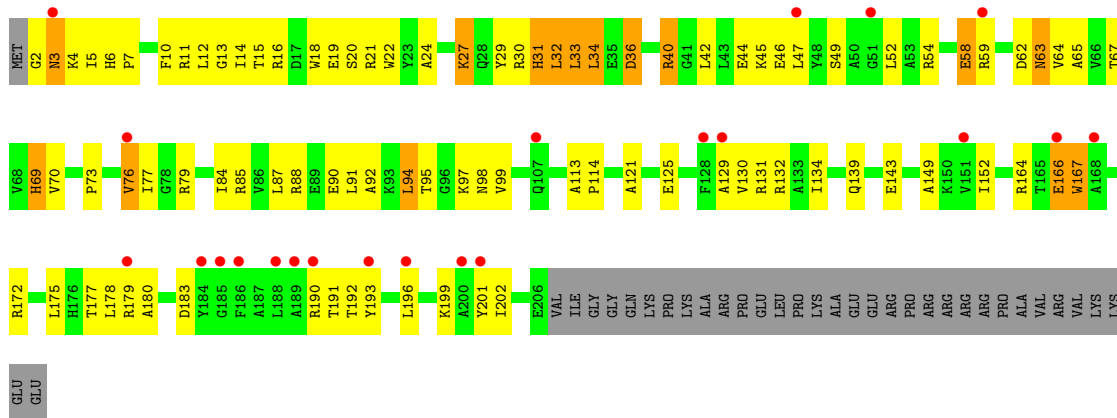


• Molecule 2: 30S ribosomal protein S2

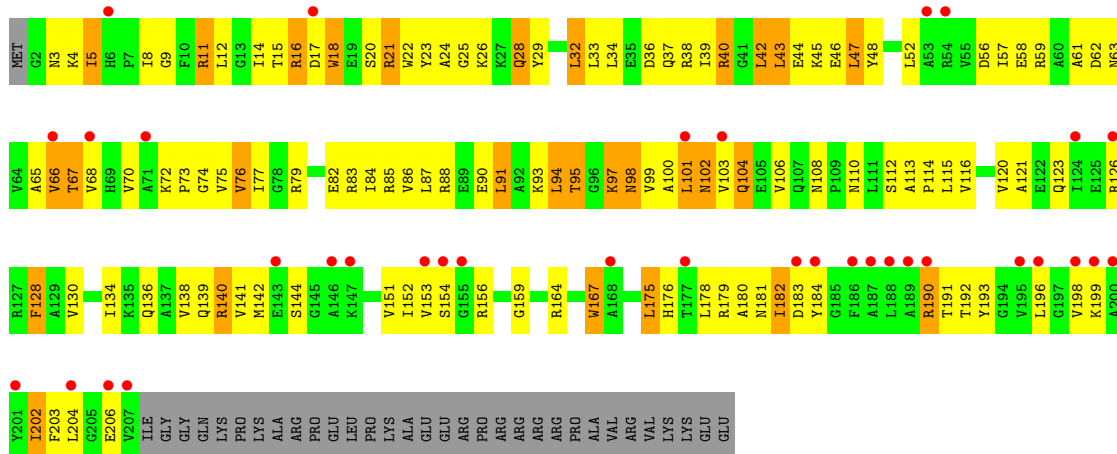




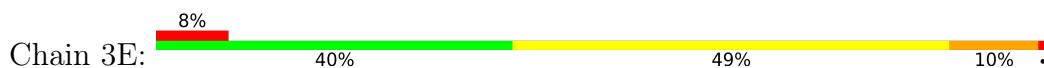
• Molecule 3: 30S ribosomal protein S3

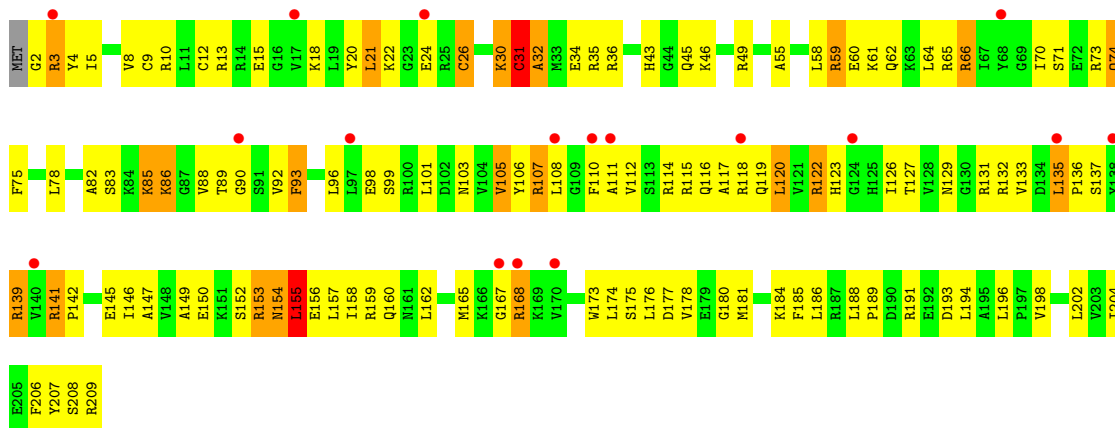


• Molecule 3: 30S ribosomal protein S3

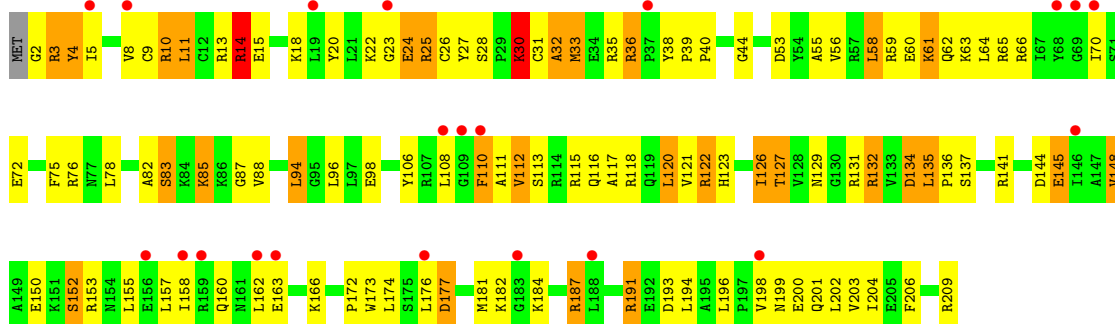


• Molecule 4: 30S ribosomal protein S4

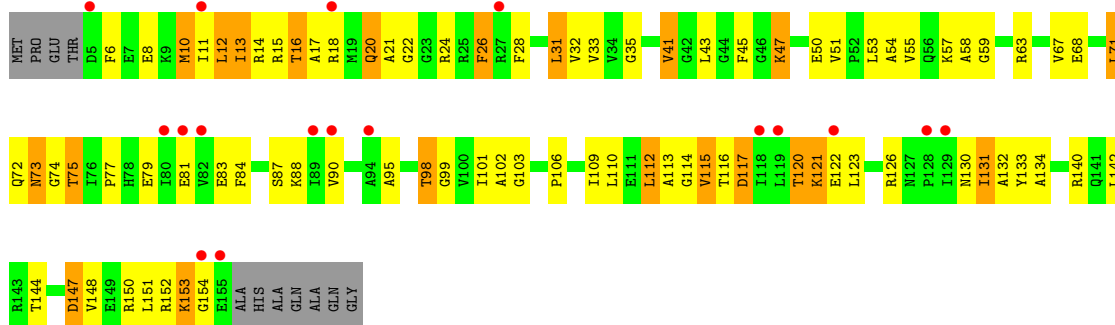
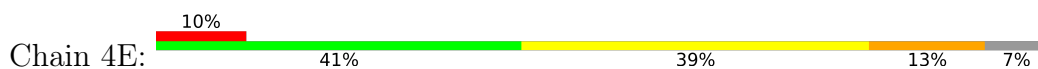




• Molecule 4: 30S ribosomal protein S4

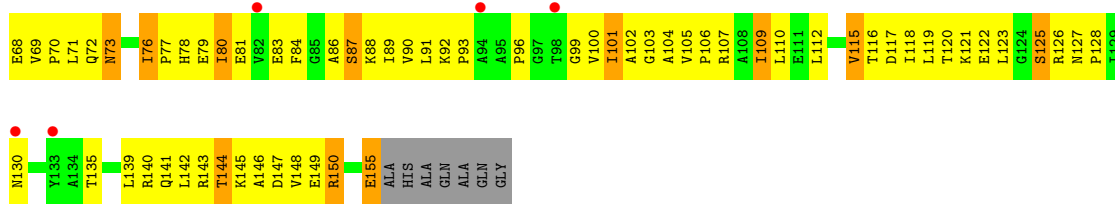


• Molecule 5: 30S ribosomal protein S5

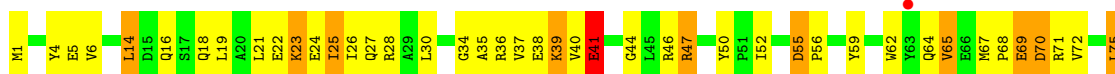
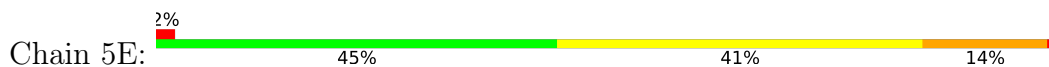


• Molecule 5: 30S ribosomal protein S5

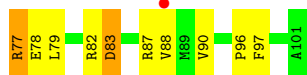




• Molecule 6: 30S ribosomal protein S6



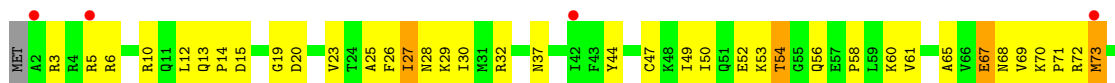
• Molecule 6: 30S ribosomal protein S6



• Molecule 7: 30S ribosomal protein S7

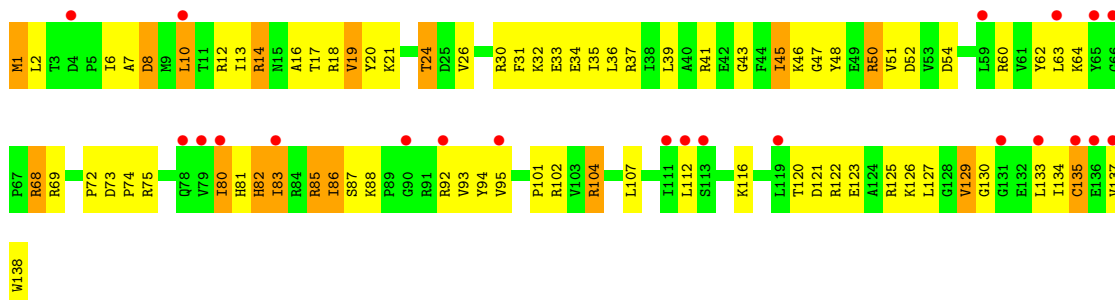


• Molecule 7: 30S ribosomal protein S7

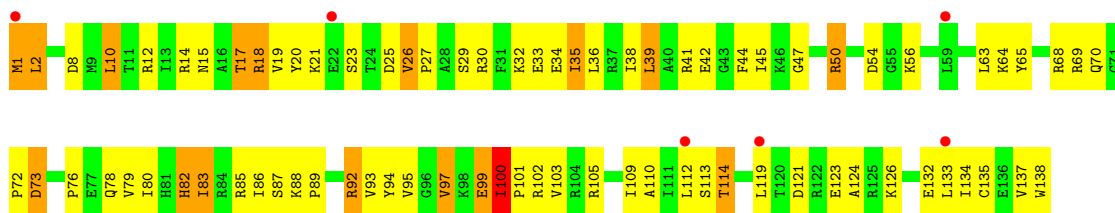




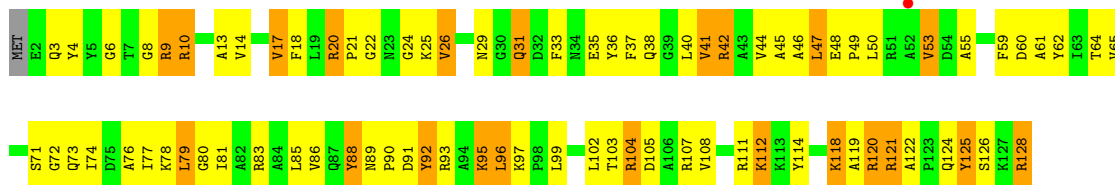
• Molecule 8: 30S ribosomal protein S8



• Molecule 8: 30S ribosomal protein S8

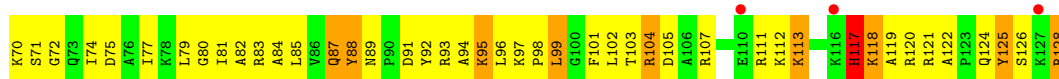


• Molecule 9: 30S ribosomal protein S9

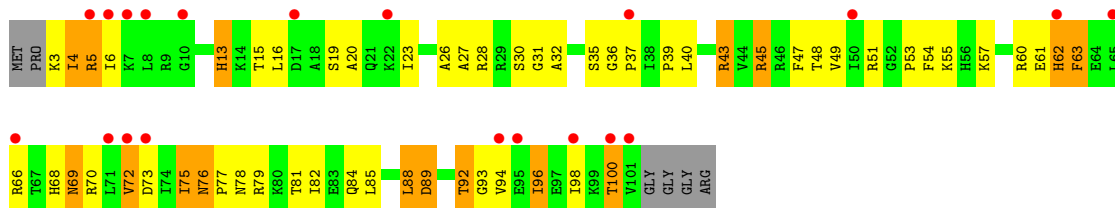


• Molecule 9: 30S ribosomal protein S9

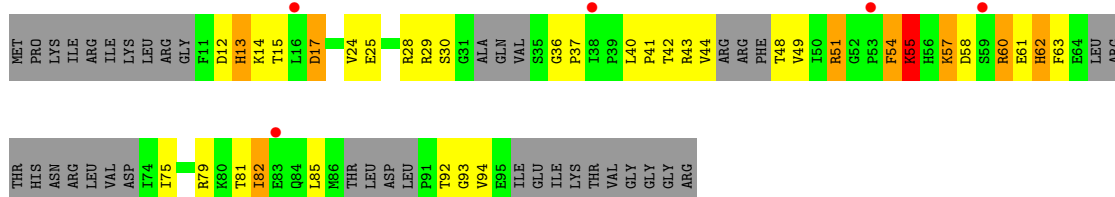
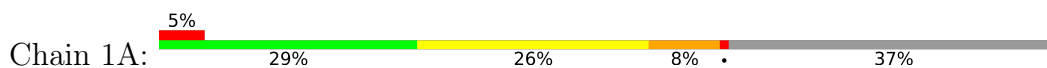




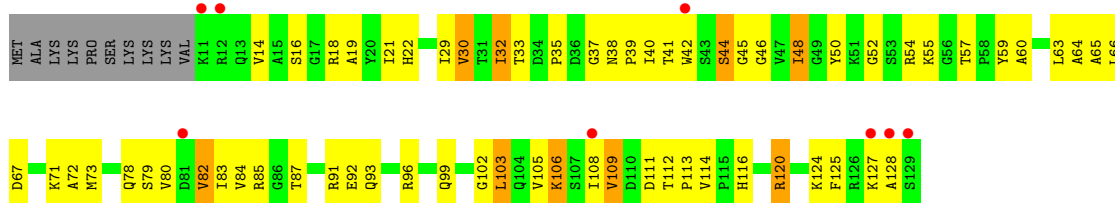
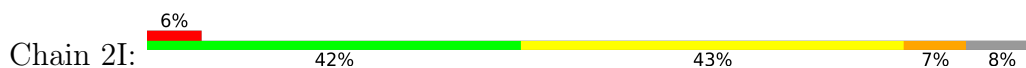
• Molecule 10: 30S ribosomal protein S10



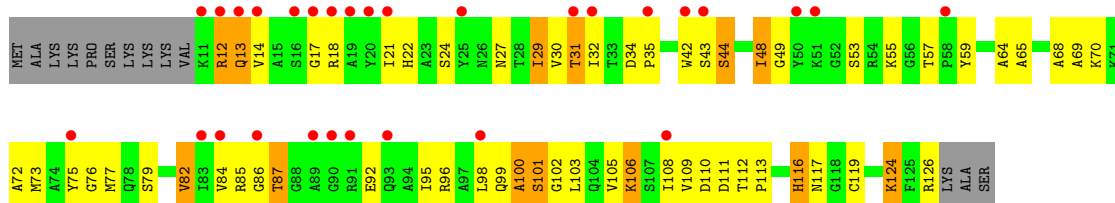
• Molecule 10: 30S ribosomal protein S10



• Molecule 11: 30S ribosomal protein S11



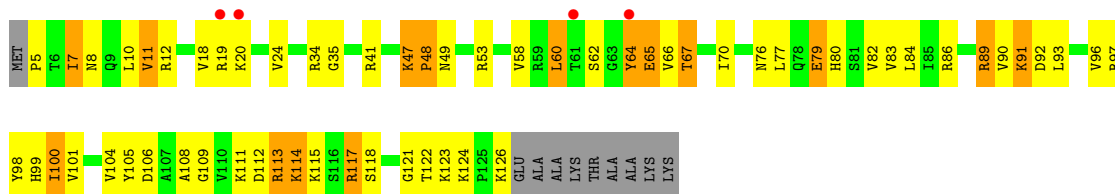
• Molecule 11: 30S ribosomal protein S11



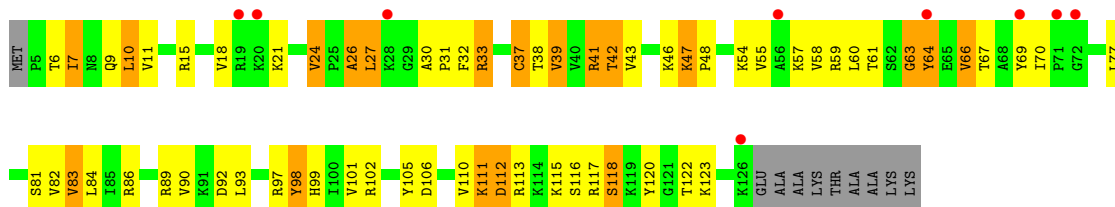
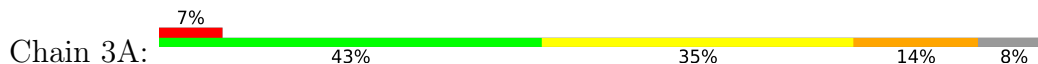
• Molecule 12: 30S ribosomal protein S12



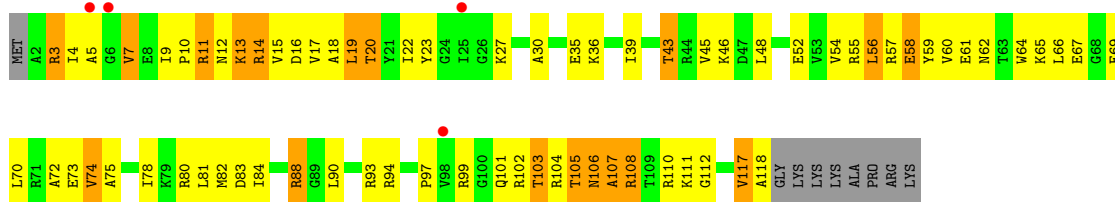




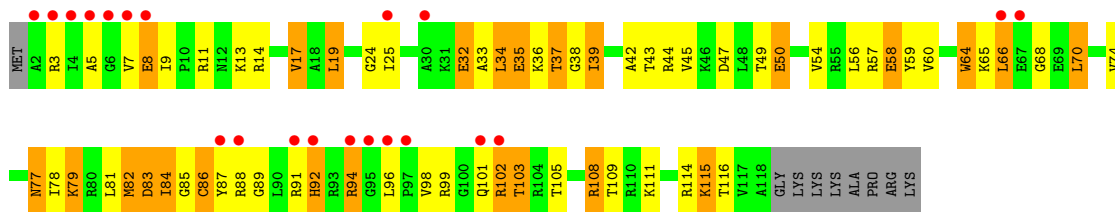
• Molecule 12: 30S ribosomal protein S12



• Molecule 13: 30S ribosomal protein S13



• Molecule 13: 30S ribosomal protein S13



• Molecule 14: 30S ribosomal protein S14 type Z

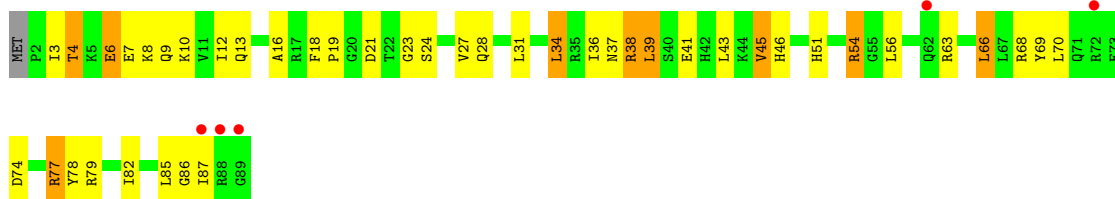


• Molecule 14: 30S ribosomal protein S14 type Z

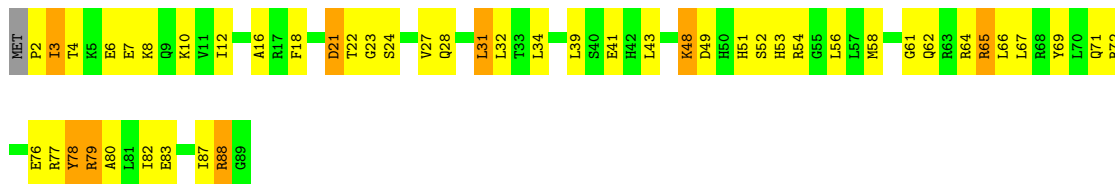




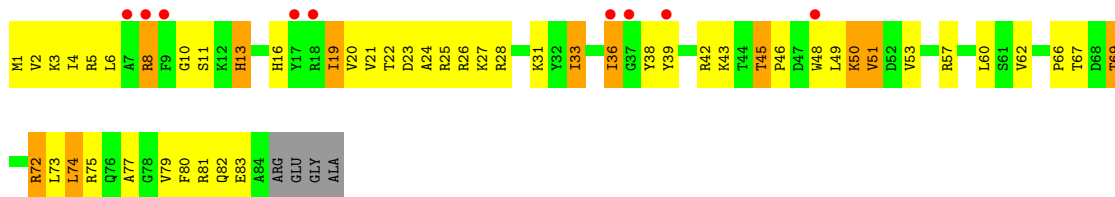
● Molecule 15: 30S ribosomal protein S15



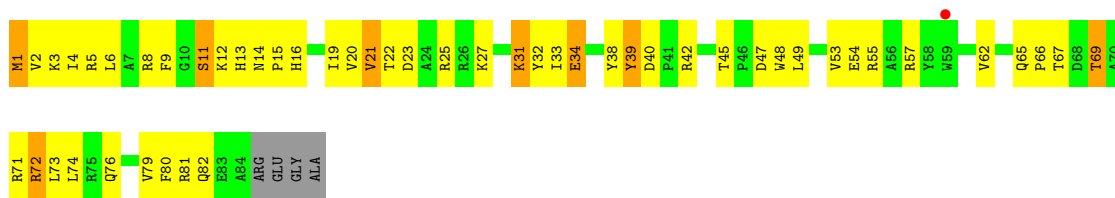
● Molecule 15: 30S ribosomal protein S15



● Molecule 16: 30S ribosomal protein S16

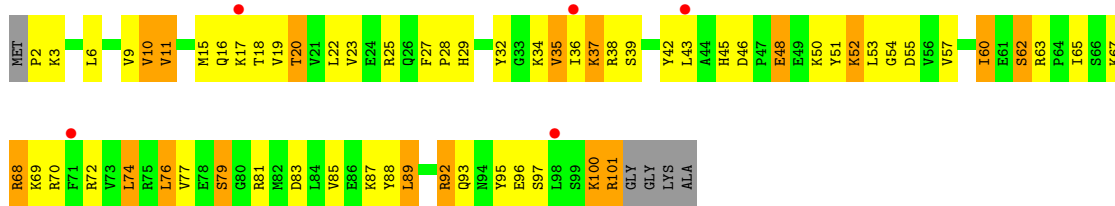


● Molecule 16: 30S ribosomal protein S16

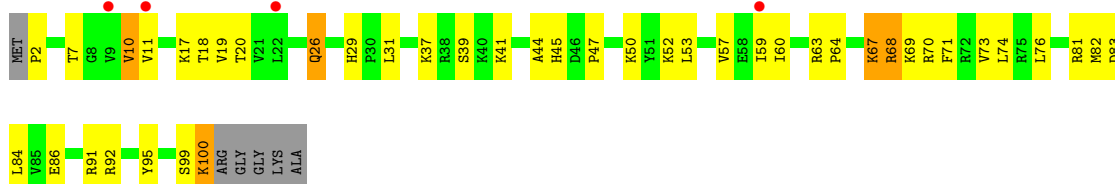


● Molecule 17: 30S ribosomal protein S17





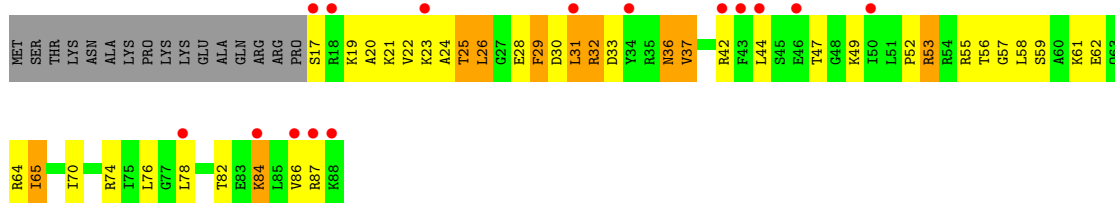
• Molecule 17: 30S ribosomal protein S17



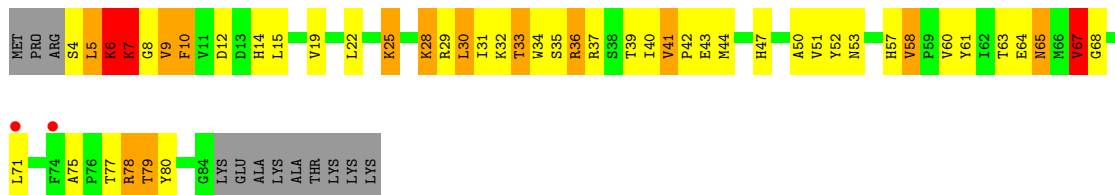
• Molecule 18: 30S ribosomal protein S18



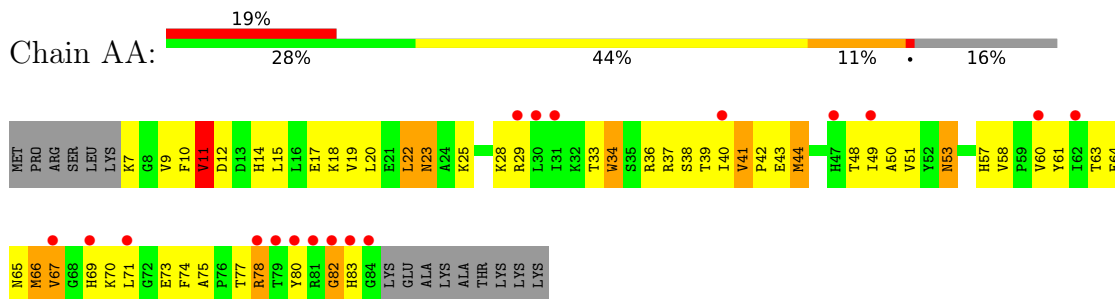
• Molecule 18: 30S ribosomal protein S18



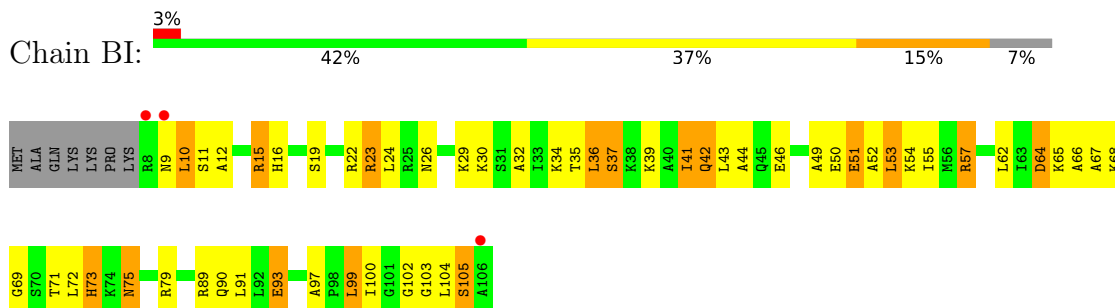
• Molecule 19: 30S ribosomal protein S19



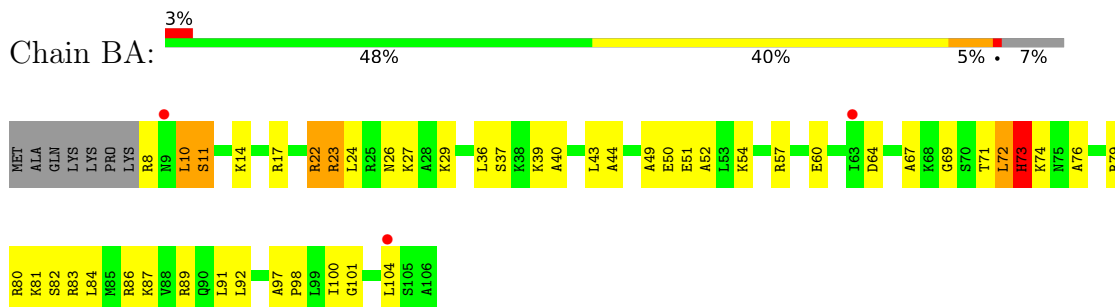
- Molecule 19: 30S ribosomal protein S19



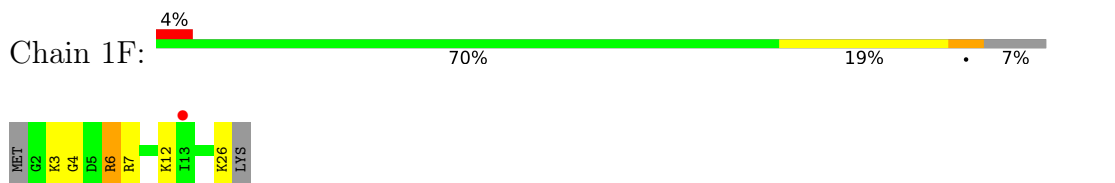
- Molecule 20: 30S ribosomal protein S20



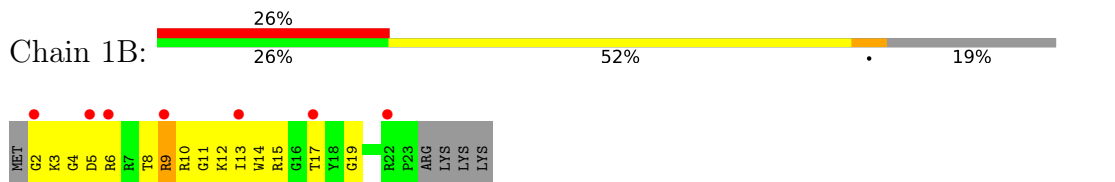
- Molecule 20: 30S ribosomal protein S20



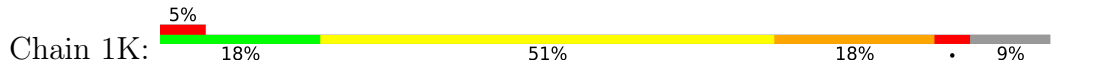
- Molecule 21: 30S ribosomal protein Thx

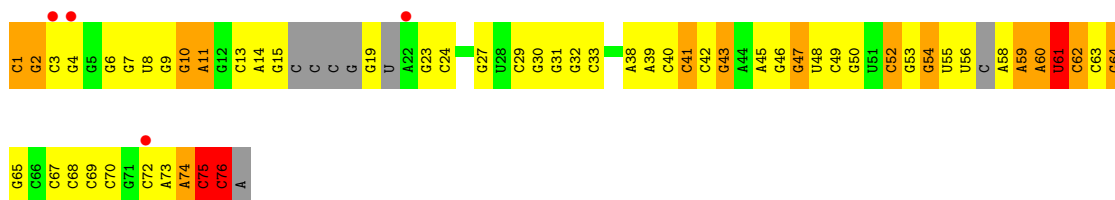


- Molecule 21: 30S ribosomal protein Thx

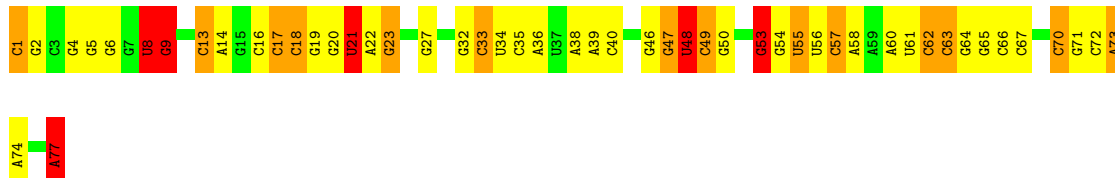
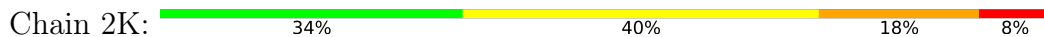


- Molecule 22: tRNA-fMet

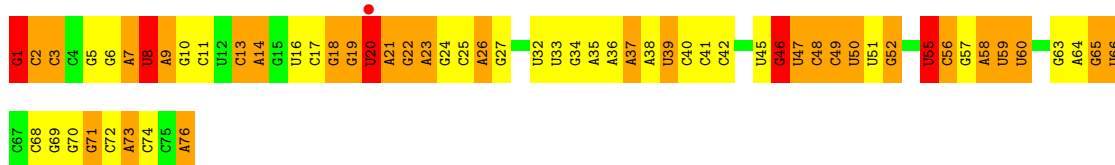
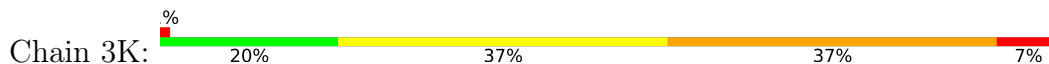




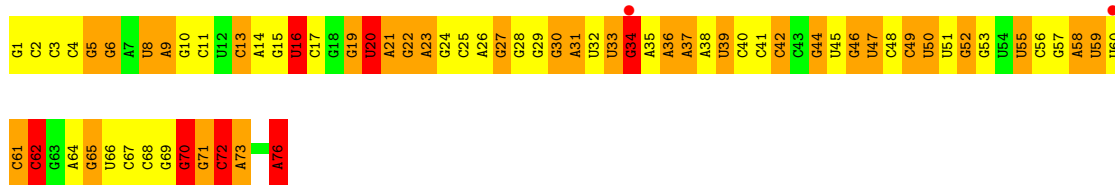
• Molecule 23: tRNA-fMet



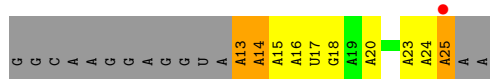
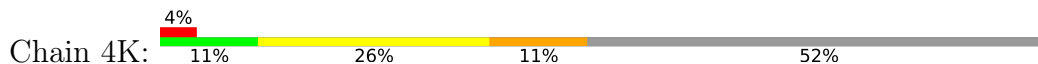
• Molecule 24: tRNA-Phe



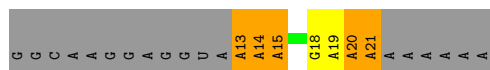
• Molecule 24: tRNA-Phe



• Molecule 25: mRNA

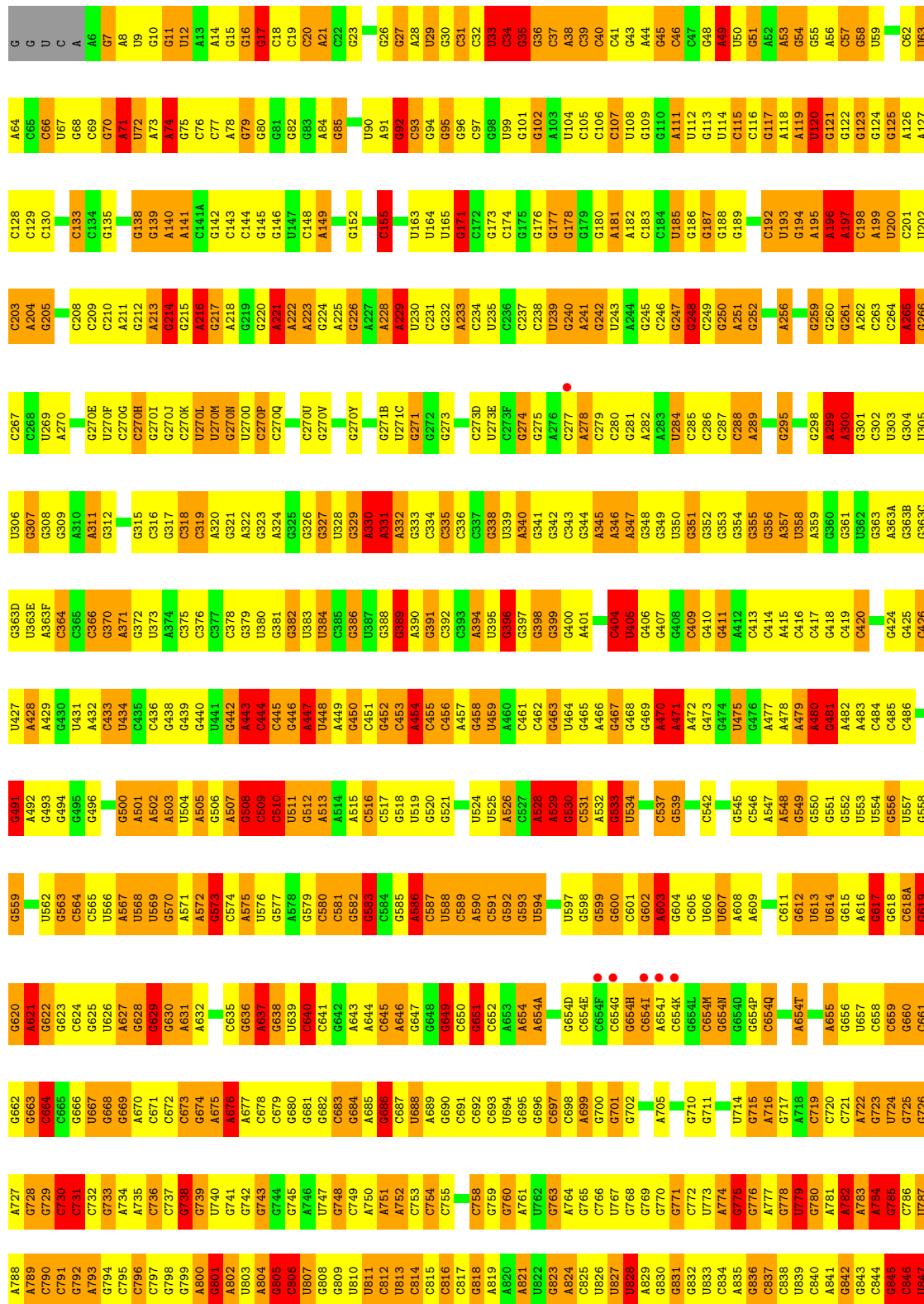


• Molecule 25: mRNA



● Molecule 26: 23S ribosomal RNA

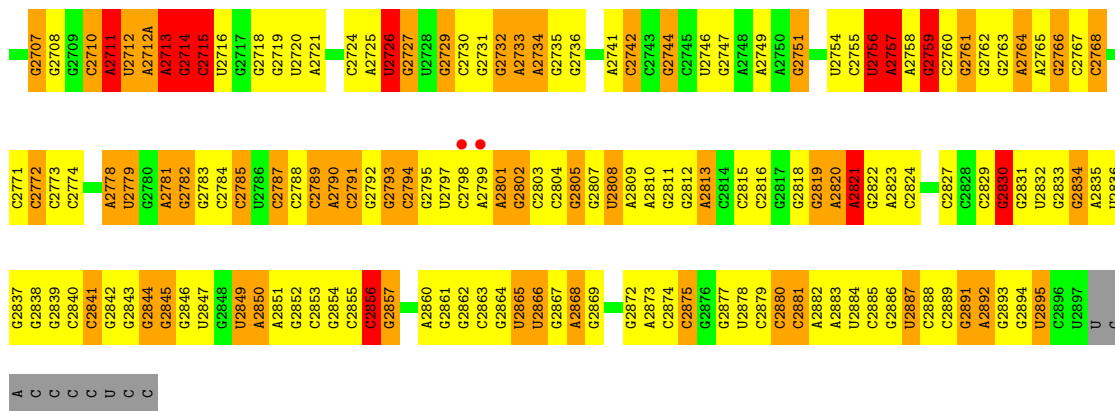
Chain 1H: 18% 42% 33% 7%



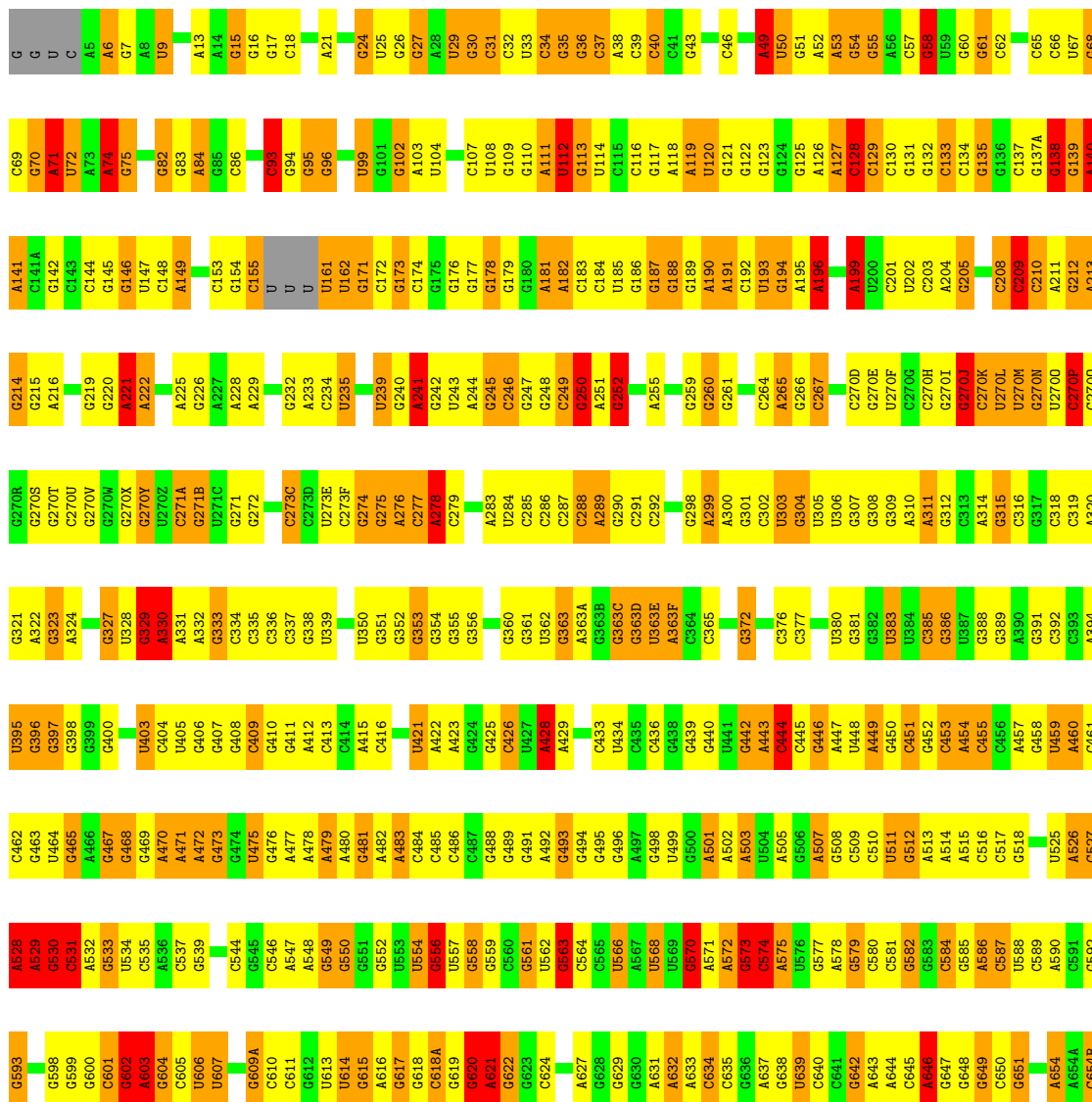
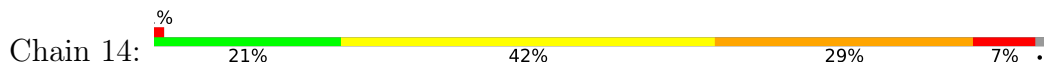






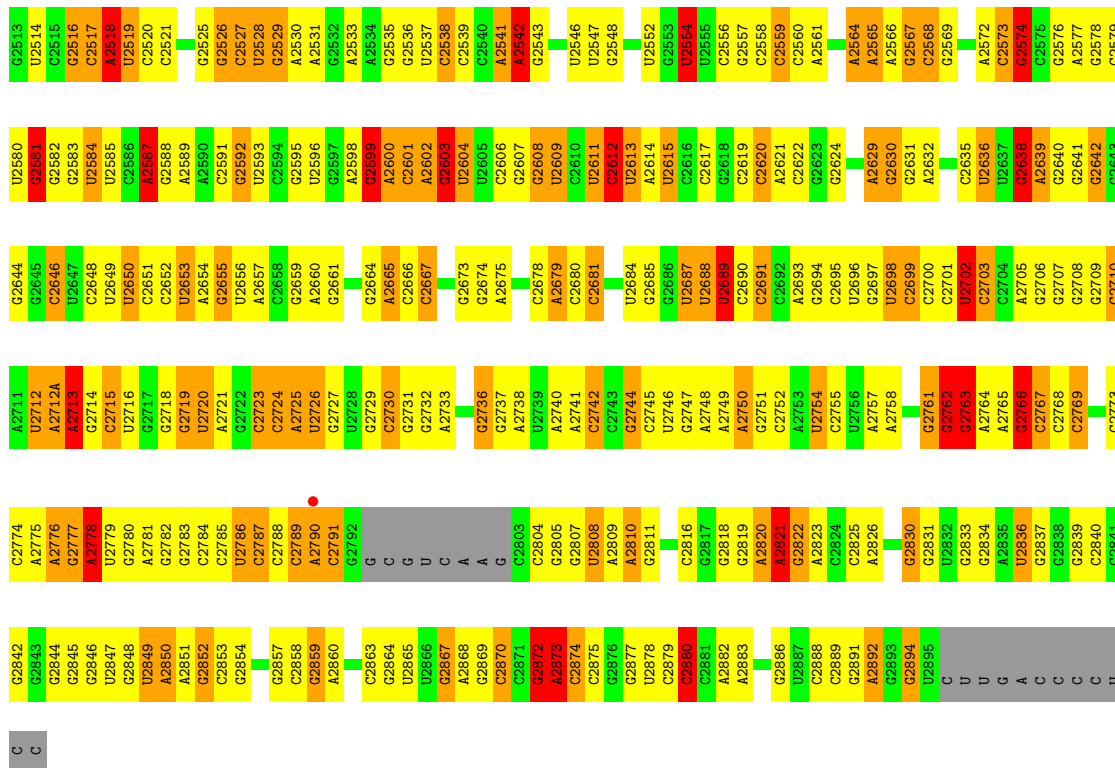


• Molecule 26: 23S ribosomal RNA

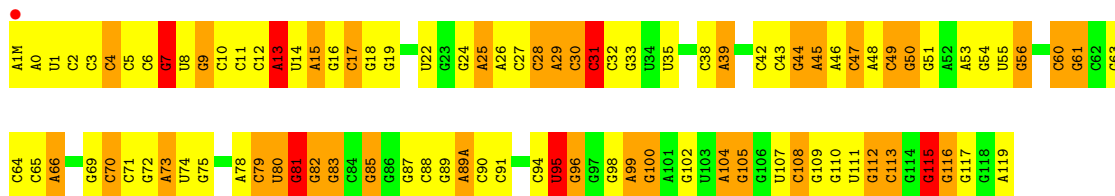
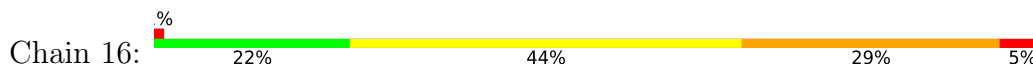


G1387	G1388	G1326	G1264	G1139	C1072	G1011	G952	C889	U826	G765	G696	G654C
G1388	G1389	U1326	A1265	C1140	A1073	U1012	A953	A890	U827	C766	G696	G654D
G1327	G1266	G1327	G1206	U1141	G1074	C1013	G954	A893	U828	U767	A699	C654E
G1328	U1267	U1328	C1207	U1142	C1075	U1014	C955	C893	A829	G768	G701	G654F
U1391	U1268	U1329	G1208	A1142A	C1076	G1015	G956	G894	G830	G769	G702	G654G
C1450	A1269	G1209	G1209	A1143	A	G1016	A957	U695	G831	G770	G703	G654H
A1393	C1270	A1210	A1210	G1144	U	G1017	U958	A896	G832	G771	U703	C654I
A1394	G1271	U1211	U1211	C1145	C	C1018	A959	C897	U833	C772	G704	C654J
A1395	A1272	C1212	C1212	C1146	A	U1019	A960	C898	U834	U773	A705	C654K
U1396	U1273	A1213	A1213	A1147	U	A1020	C961	A899	A835	A774	A706	G654L
U1397	A1274	A1214	A1214	A1148	U	A1021	G962	A900	G836	G775	G707	C654M
C1398	A1275	G1149	G1149	A1149	U	G1022	U963	A901	C837	G776	C708	G654N
C1399	A1276	A	A	U	U	U1023	G964	C902	C838	A777	U709	G654O
G1400	G1277	A	A	C1217	A	G1024	G965	C903	U839	G778	G710	G654P
G1401	A1278	C1218	G1219	C1152	A	G1025	G966	C904	C840	U779	G711	C654Q
G1402	A1278	G1219	G1219	C1152	A	U1026	G967	C905	C841	U780	G712	C654R
C1403	G1279	A1220	C1220	C1153	G	A1027	G968	U905	G843	A781	U713	G654S
C1404	G1280	C1221	A1154	G1161	A	A1028	U969	G906	G844	A782	U714	A654T
C1405	G1281	C1222	A1155	G1162	G	G1029	G970	C908	G845	A783	G715	A654U
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U1406	G1283	C1224	A1157	G1164	U	G1031	G972	A909	C847	A785	G717	A655
C1407	A1284	G1225	U1159	U1165	C1092	G1032	G973	A910	U847	G785	U717	G666
C1408	G1285	C1226	G1160	C1166	G1093	A1033	A974	A911	G848	C786	A718	G666
C1409	A1286	A1227	C1161	G1167	U1094	U1034	G975	A912	U849	U787	C719	U657
G1410	A1287	G1228	G1168	C1168	A1095	G1034	C974A	U913	C850	A788	C720	C658
C1411	U1288	G1229	G1169	G1169	A1096	U1035	G975	C914	U851	A789	C721	C659
A1412	C1289	G1229A	G1164	G1170	U1097	G1036	C976	C915	G852	C790	A722	G660
G1413	C1290	C1230	U1165	G1171	A1098	G1037	G977	G916	G853	C791	G728	C661
G1414	C1291	G1231	C1166	C1172	G1099	U1038	G978	G917	G854	G792	G728	G662
G1415	U1292	C1232	U1167	C1173	C1100	C1040	G979	A918	G855	A793	G729	G663
G1416	C1293	G1233	G1168	U1170	U1100	U1041	A980	G919	C856	A794	C730	C664
G1417	U1294	U1234	G1169	G1170	C1102	G1042	A981	G920	C857	C795	G731	C665
G1418	C1295	G1235	G1170	G1171	C1103	C1043	G982	G921	U858	C796	G732	G666
A1419	G1296	G1236	G1171	C1172	A1104	G1044	A983	U922	G859	C797	G733	U657
U1420	C1297	A1237	U1172	C1173	U1105	A1045	A984	C923	U860	G798	A734	G668
U1421	C1298	G1238	A1174	A1174	A1046	A1046	C985	C924	A861	G799	A735	G669
G1422	G1299	G1239	U1175	C1109	G1109	G1047	C986	G925	G862	A800	C736	A670
G1423	U1300	U1240	G1176	U1110	U1110	A1048	G987	A926	A863	G801	C737	C671
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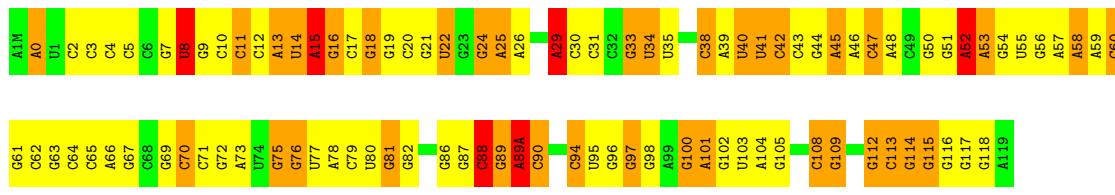
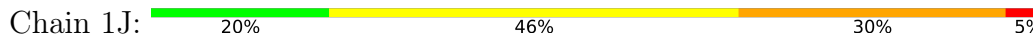
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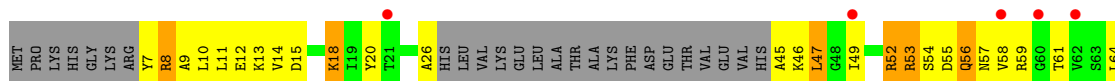
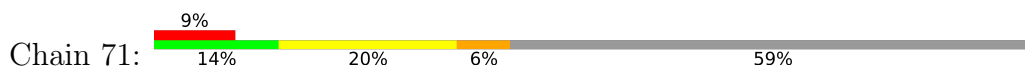
• Molecule 27: 5S ribosomal RNA

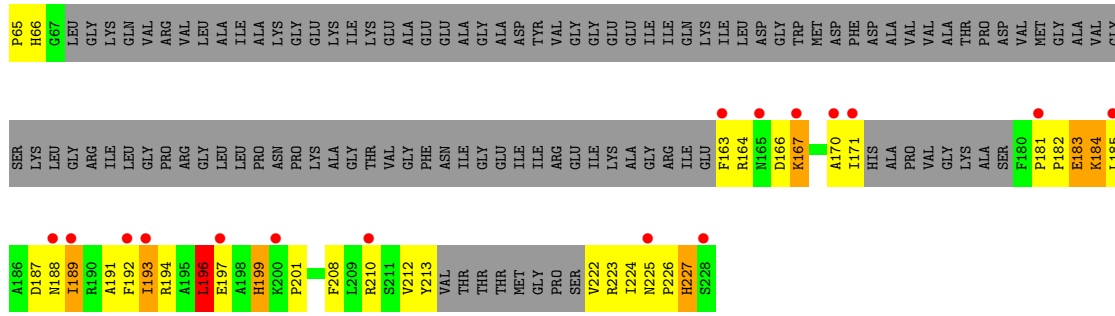


• Molecule 27: 5S ribosomal RNA

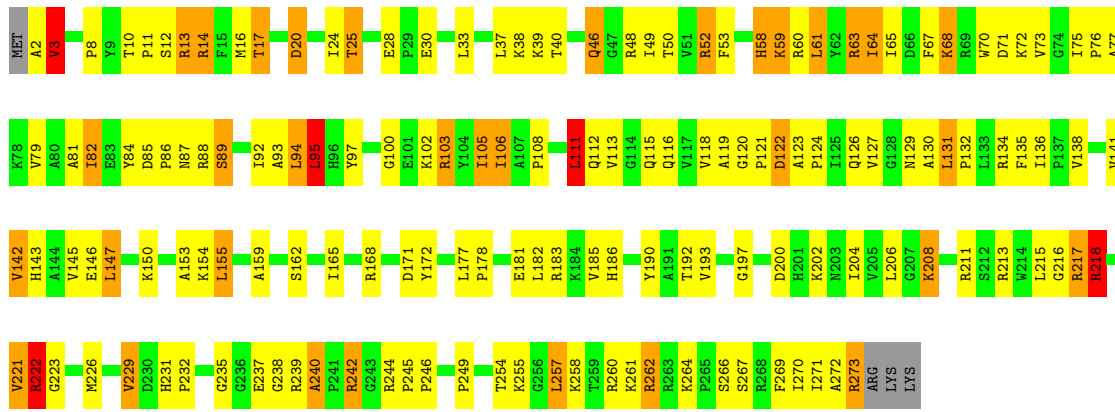


• Molecule 28: 50S ribosomal protein L1

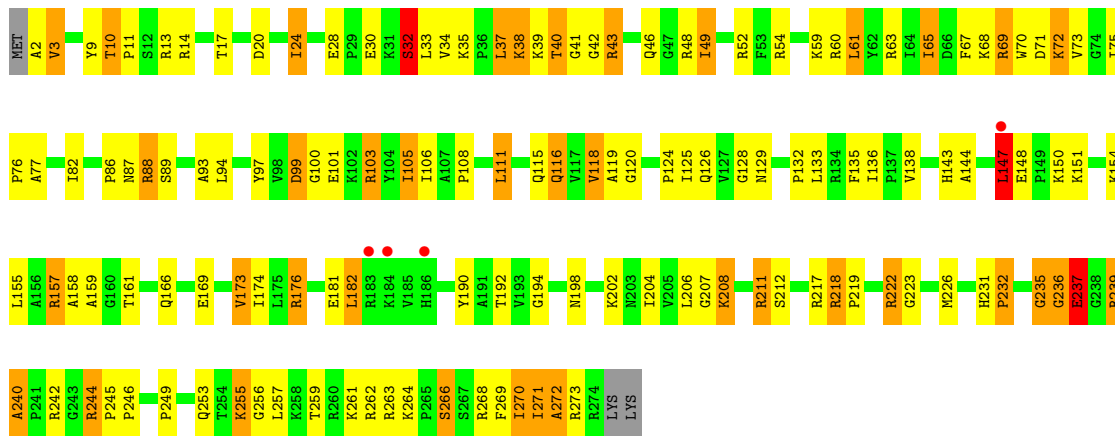




● Molecule 29: 50S ribosomal protein L2

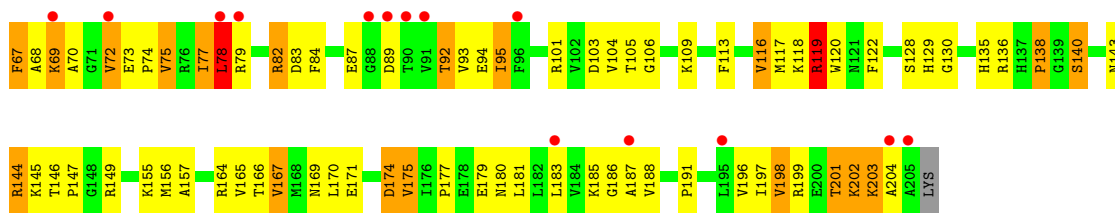


● Molecule 29: 50S ribosomal protein L2

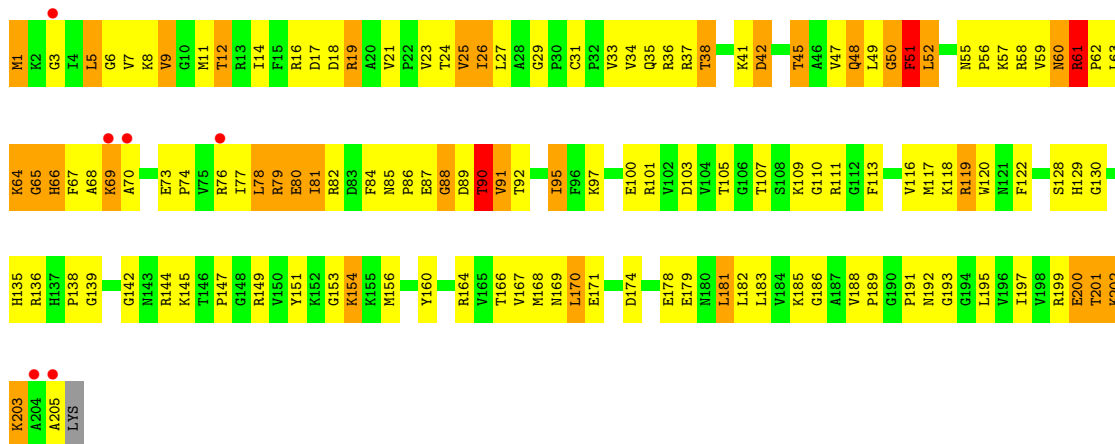


● Molecule 30: 50S ribosomal protein L3

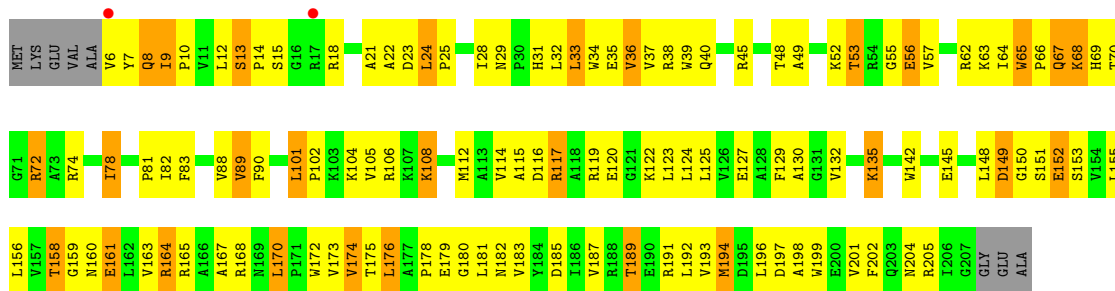




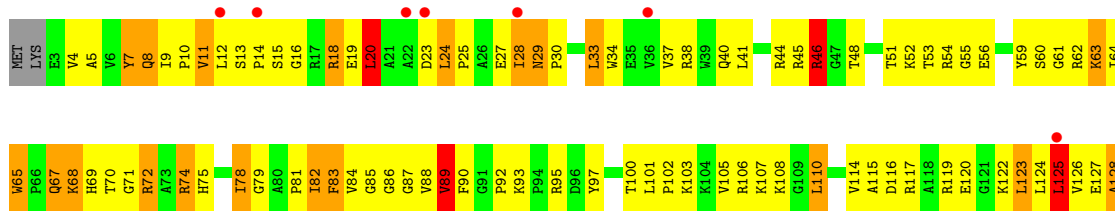
• Molecule 30: 50S ribosomal protein L3

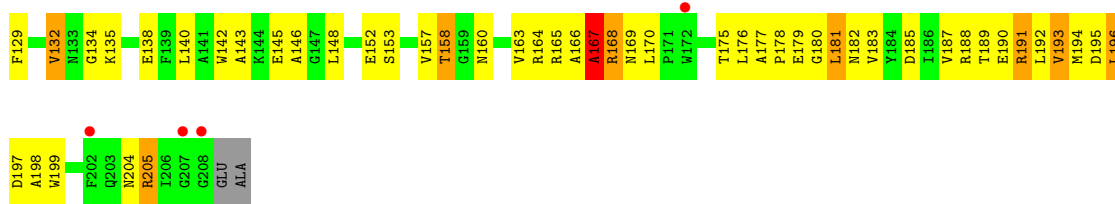


• Molecule 31: 50S ribosomal protein L4

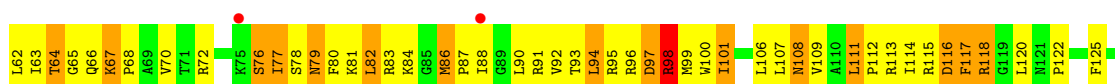
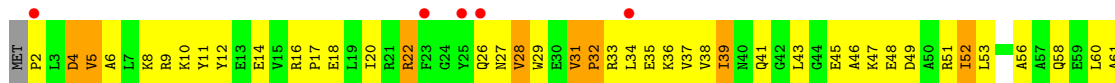


• Molecule 31: 50S ribosomal protein L4

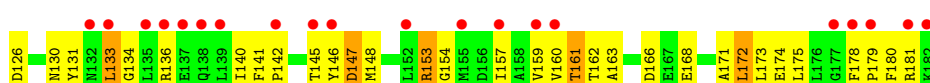
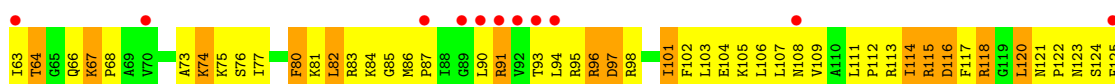




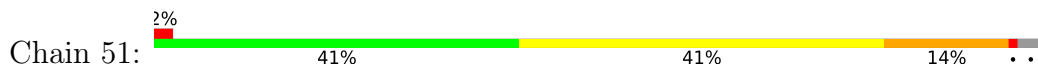
• Molecule 32: 50S ribosomal protein L5



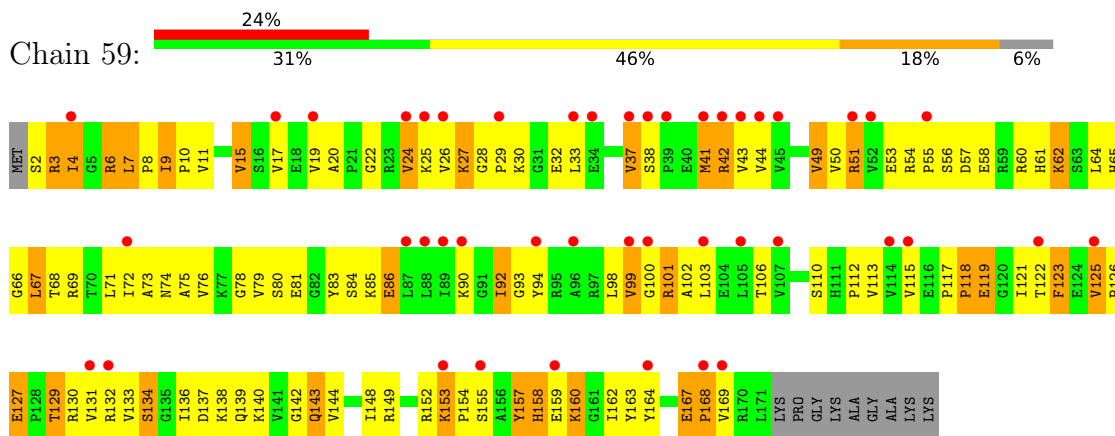
• Molecule 32: 50S ribosomal protein L5



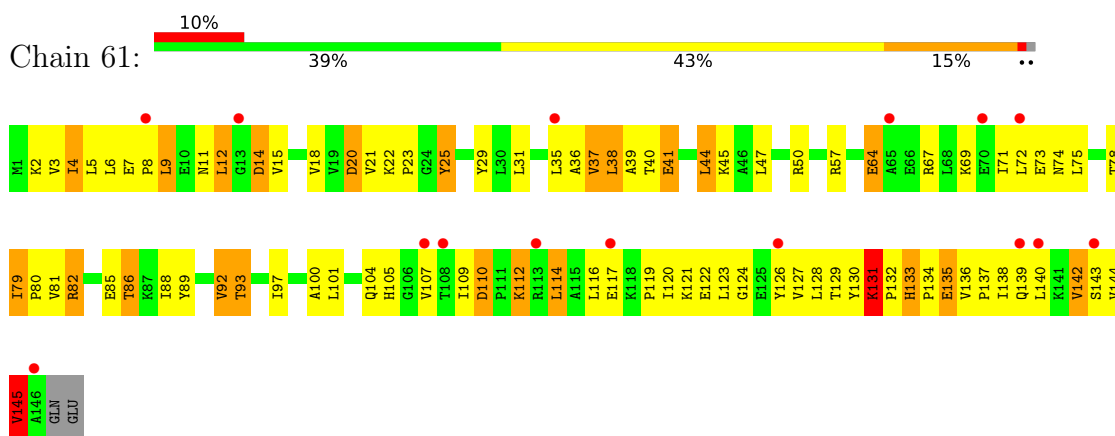
• Molecule 33: 50S ribosomal protein L6



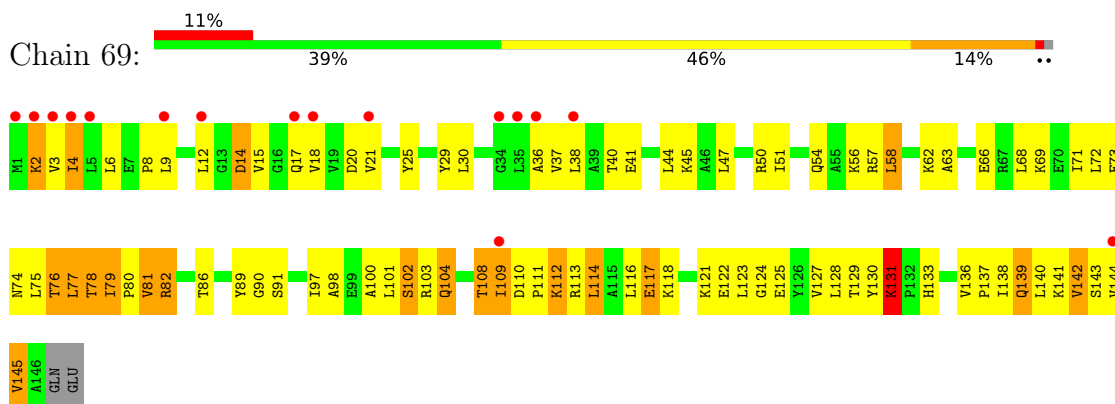
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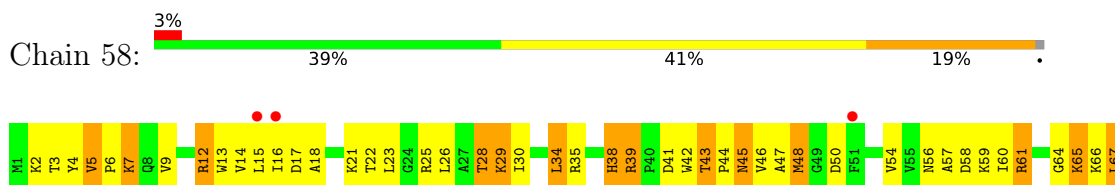
• Molecule 34: 50S ribosomal protein L9



• Molecule 34: 50S ribosomal protein L9



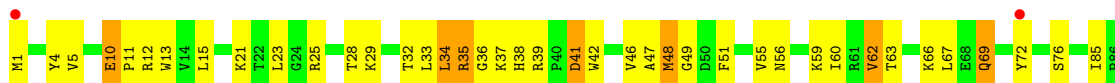
• Molecule 35: 50S ribosomal protein L13



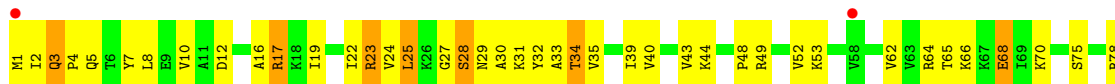




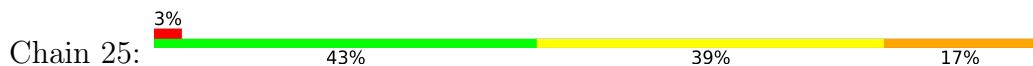
• Molecule 35: 50S ribosomal protein L13



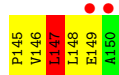
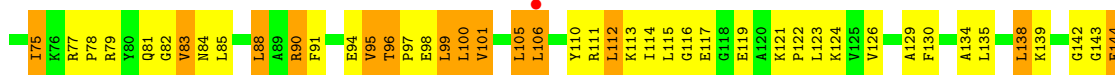
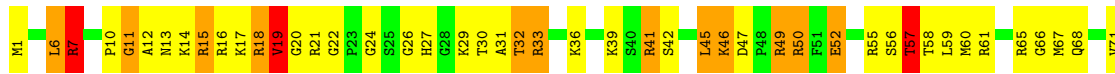
• Molecule 36: 50S ribosomal protein L14



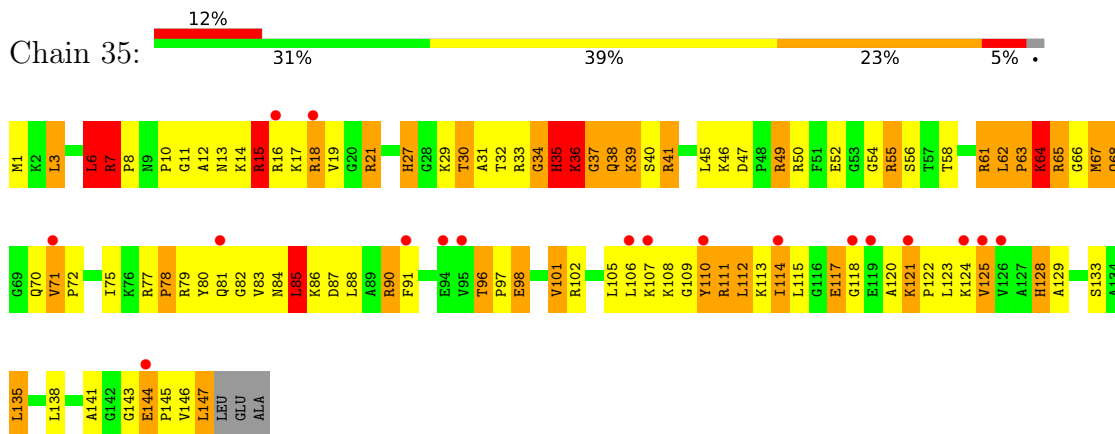
• Molecule 36: 50S ribosomal protein L14



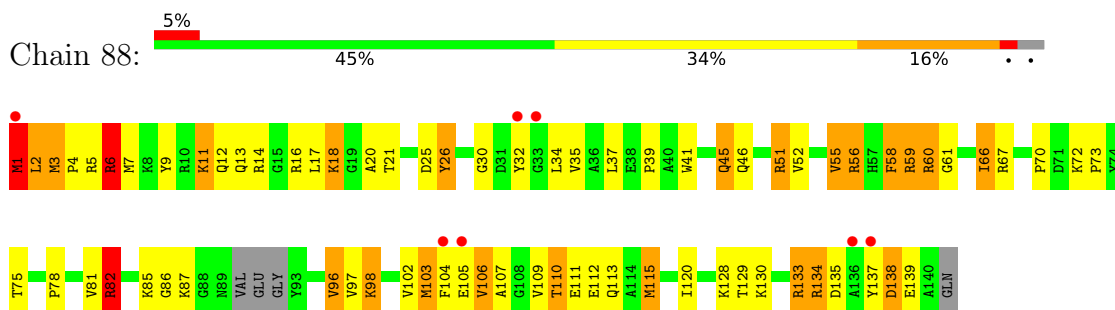
• Molecule 37: 50S ribosomal protein L15



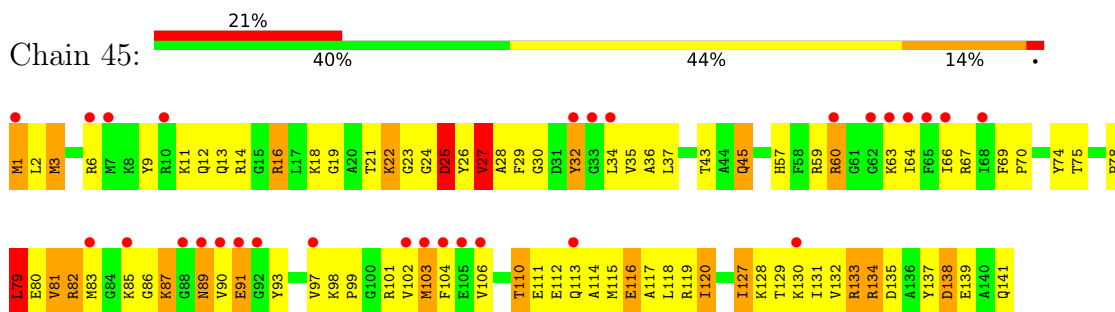
- Molecule 37: 50S ribosomal protein L15



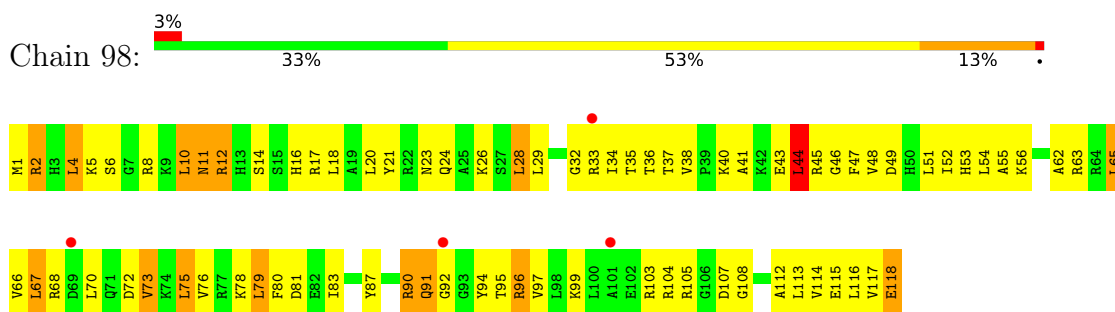
- Molecule 38: 50S ribosomal protein L16



- Molecule 38: 50S ribosomal protein L16

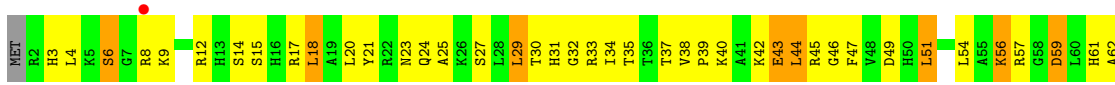


- Molecule 39: 50S ribosomal protein L17

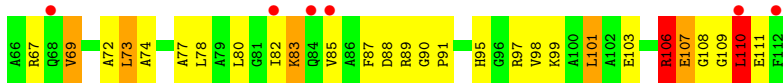
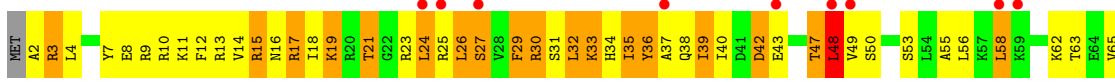


- Molecule 39: 50S ribosomal protein L17

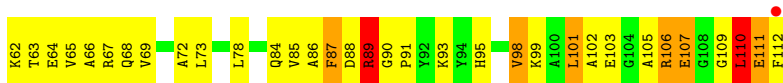
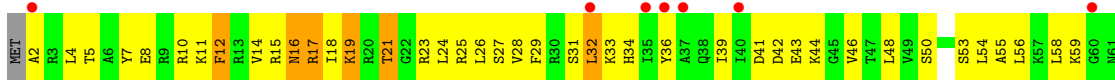




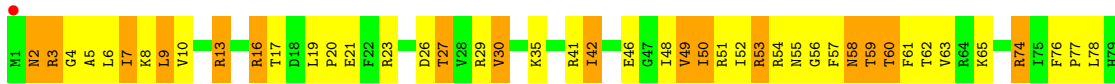
• Molecule 40: 50S ribosomal protein L18



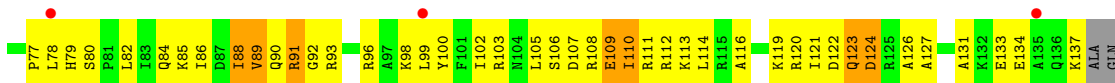
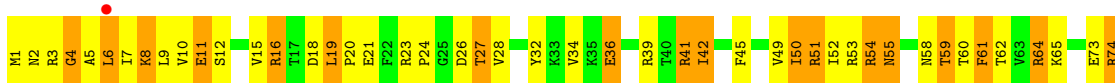
• Molecule 40: 50S ribosomal protein L18



• Molecule 41: 50S ribosomal protein L19

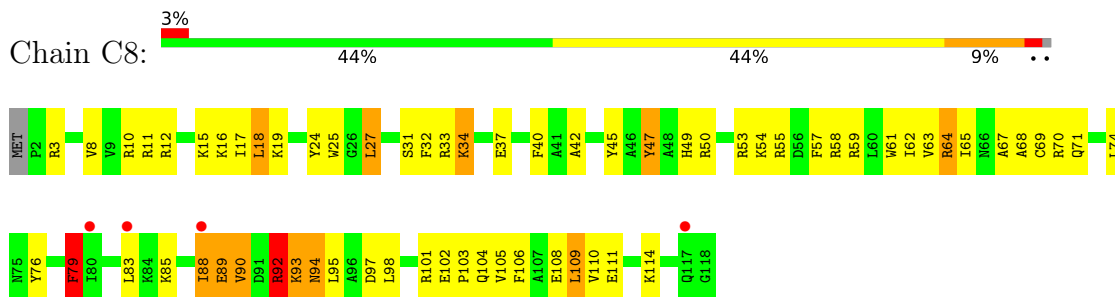


• Molecule 41: 50S ribosomal protein L19

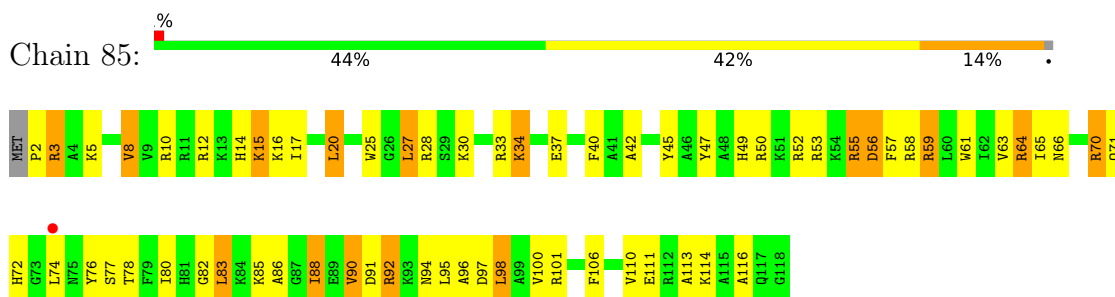


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PRO  
LYS  
ALA  
SER  
GLN  
GLU

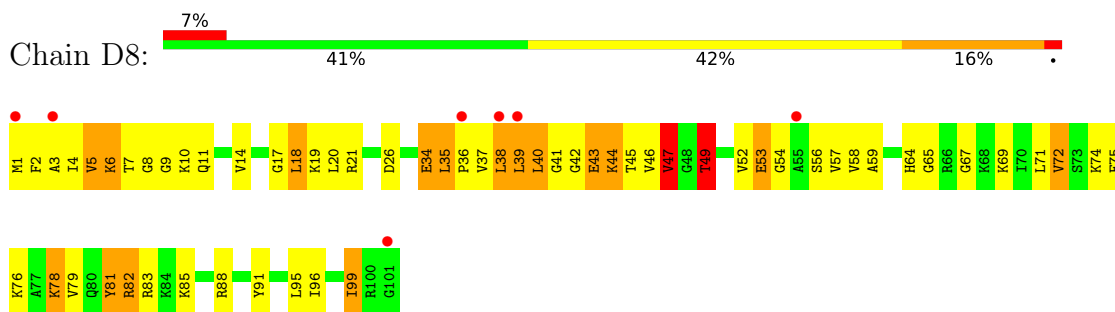
- Molecule 42: 50S ribosomal protein L20



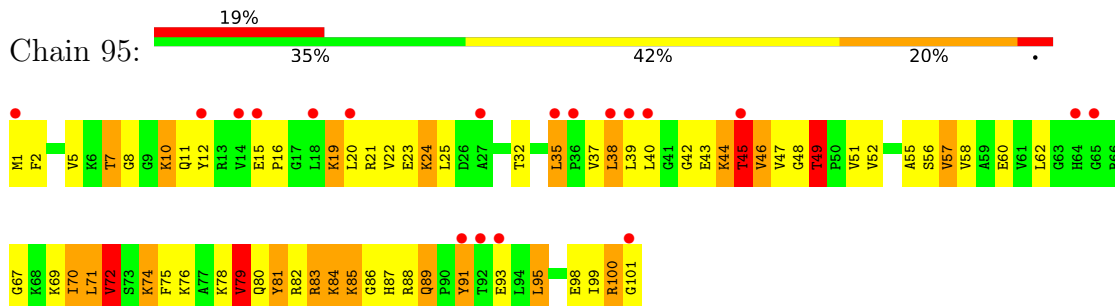
- Molecule 42: 50S ribosomal protein L20



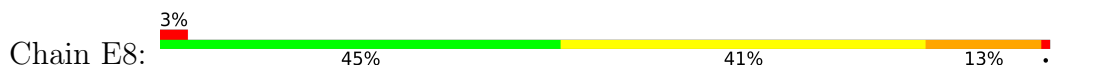
- Molecule 43: 50S ribosomal protein L21

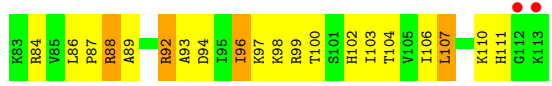
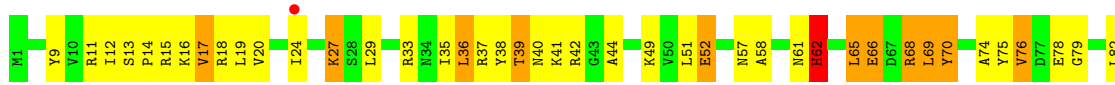


- Molecule 43: 50S ribosomal protein L21

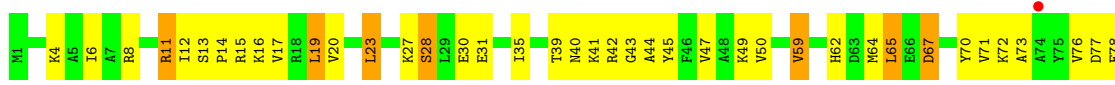


- Molecule 44: 50S ribosomal protein L22



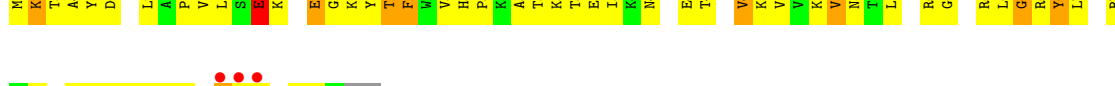
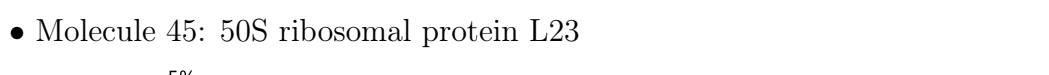


• Molecule 44: 50S ribosomal protein L22



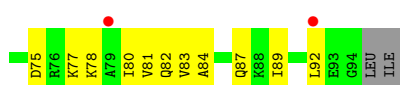
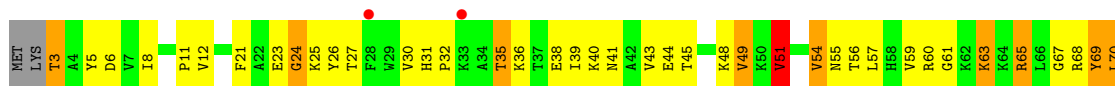
• Molecule 45: 50S ribosomal protein L23

• Molecule 45: 50S ribosomal protein L23

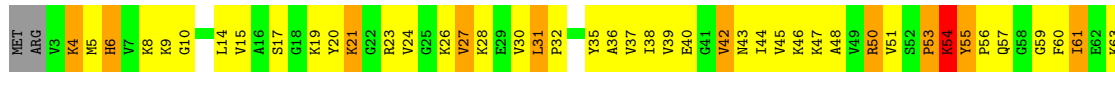


• Molecule 45: 50S ribosomal protein L23

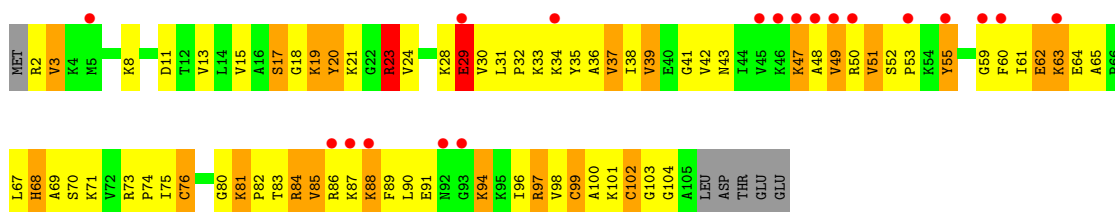
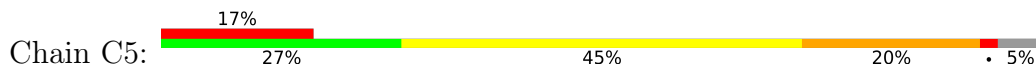
• Molecule 45: 50S ribosomal protein L23



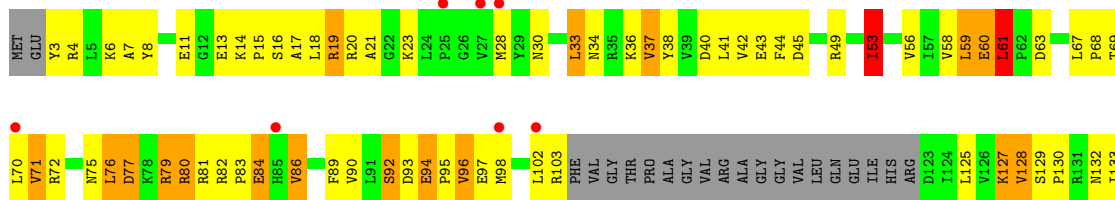
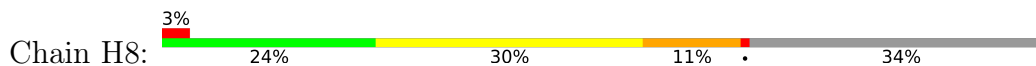
• Molecule 46: 50S ribosomal protein L24



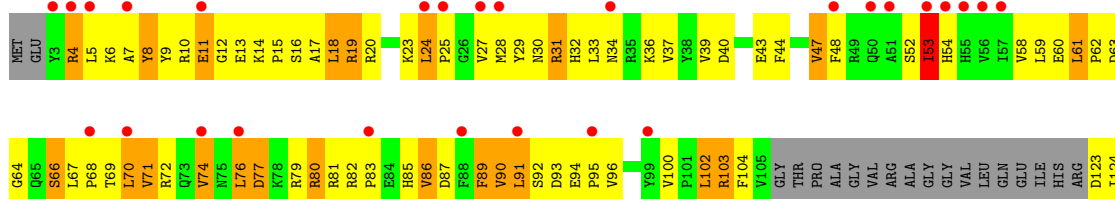
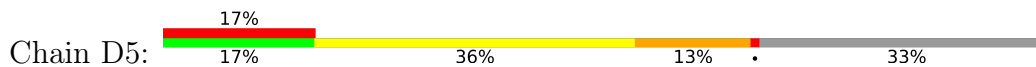
- Molecule 46: 50S ribosomal protein L24



- Molecule 47: 50S ribosomal protein L25



- Molecule 47: 50S ribosomal protein L25

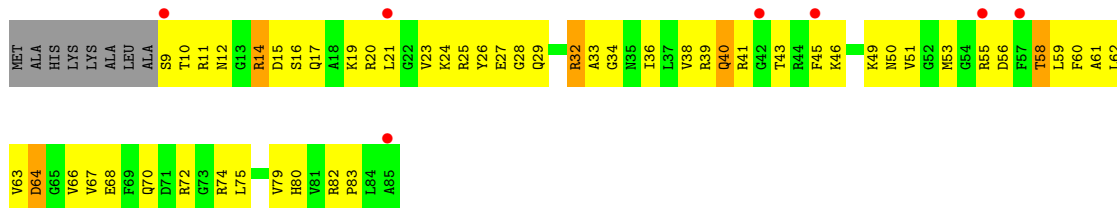


- Molecule 48: 50S ribosomal protein L27

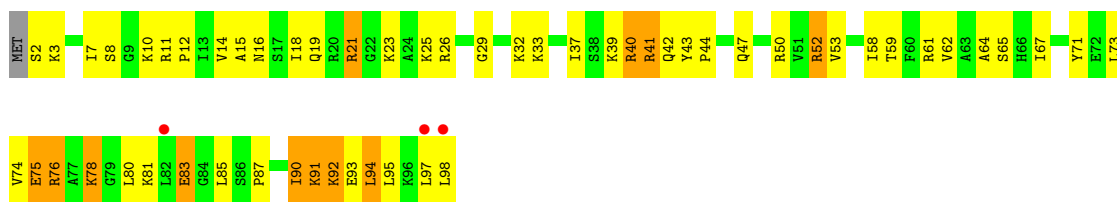
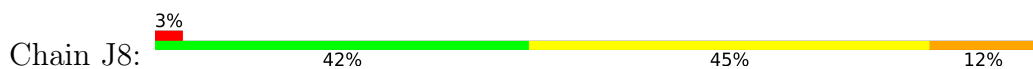




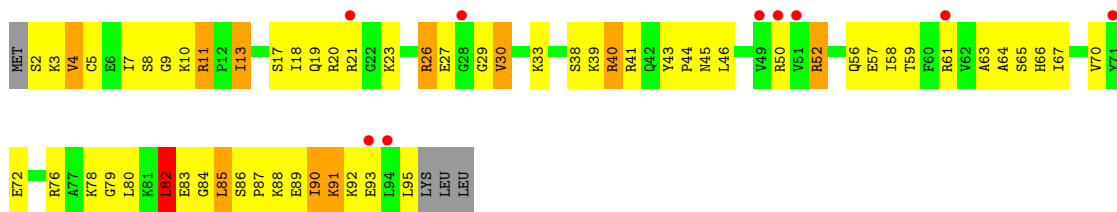
● Molecule 48: 50S ribosomal protein L27



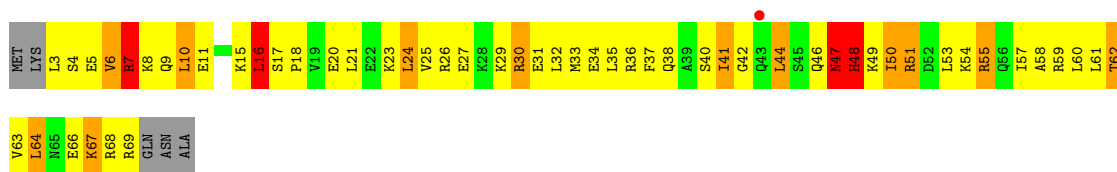
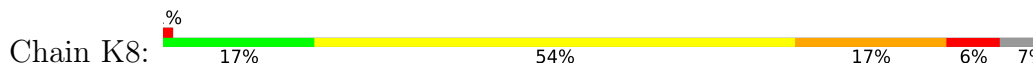
● Molecule 49: 50S ribosomal protein L28



● Molecule 49: 50S ribosomal protein L28



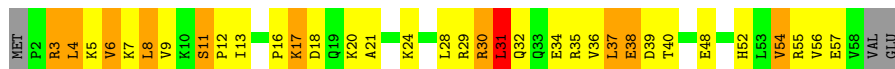
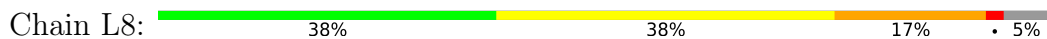
● Molecule 50: 50S ribosomal protein L29



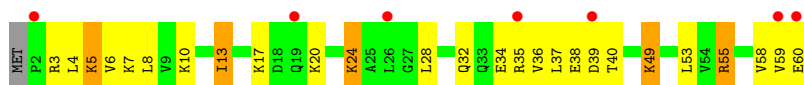
● Molecule 50: 50S ribosomal protein L29



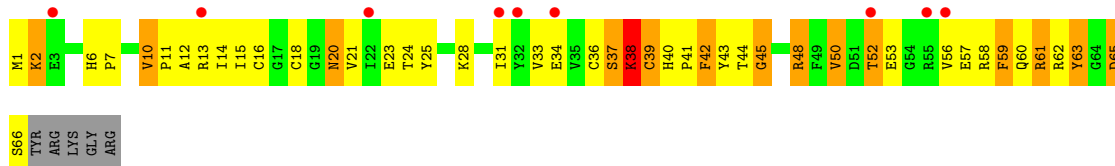
- Molecule 51: 50S ribosomal protein L30



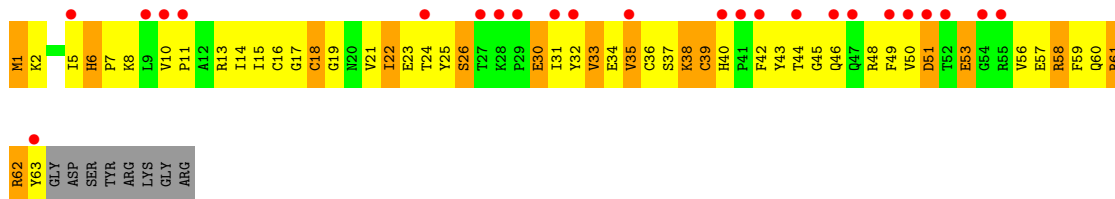
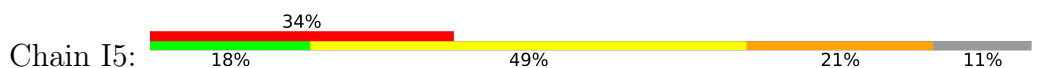
- Molecule 51: 50S ribosomal protein L30



- Molecule 52: 50S ribosomal protein L31



- Molecule 52: 50S ribosomal protein L31



- Molecule 53: 50S ribosomal protein L32



- Molecule 53: 50S ribosomal protein L32



Chain J5: 3% 37% 48% 8% 7%



• Molecule 54: 50S ribosomal protein L34

Chain P8: 55% 33% 8%



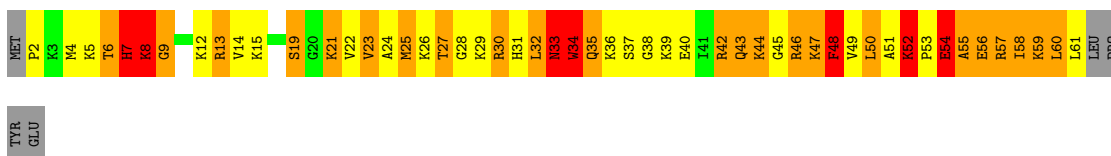
• Molecule 54: 50S ribosomal protein L34

Chain L5: 2% 41% 47% 6% 6%



• Molecule 55: 50S ribosomal protein L35

Chain Q8: 12% 34% 35% 11% 8%



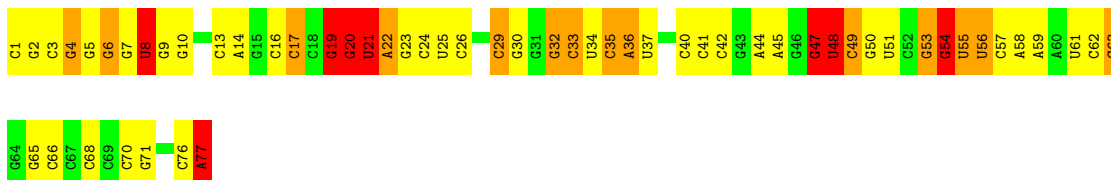
• Molecule 55: 50S ribosomal protein L35

Chain M5: 5% 38% 32% 17% 5% 8%



• Molecule 56: tRNA-fMet

Chain 2L: 26% 45% 18% 10%



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	210.20Å 448.80Å 621.00Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	153.41 – 3.30 153.41 – 3.30	Depositor EDS
% Data completeness (in resolution range)	99.9 (153.41-3.30) 92.6 (153.41-3.30)	Depositor EDS
$R_{merge}$	0.46	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	0.96 (at 3.33Å)	Xtrriage
Refinement program	PHENIX	Depositor
R, $R_{free}$	0.191 , 0.258 0.191 , 0.258	Depositor DCC
$R_{free}$ test set	2000 reflections (0.23%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	96.5	Xtrriage
Anisotropy	0.268	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 88.8	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.26$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.95	EDS
Total number of atoms	295920	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	115.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.44% 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: OMC, 4SU, 5MU, PSU, 7MG, ZN, MG, MIA

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	0.84	15/36028 (0.0%)	1.50	521/56231 (0.9%)
1	1G	0.74	0/36025	1.40	370/56227 (0.7%)
2	12	0.43	0/1959	0.71	3/2642 (0.1%)
2	1E	0.46	0/1959	0.74	1/2642 (0.0%)
3	22	0.43	0/1636	0.67	1/2205 (0.0%)
3	2E	0.54	0/1629	0.72	0/2195
4	32	0.50	0/1732	0.76	0/2318
4	3E	0.58	0/1732	0.77	2/2318 (0.1%)
5	42	0.54	0/1171	0.75	0/1576
5	4E	0.57	0/1171	0.74	0/1576
6	52	0.55	0/855	0.70	0/1154
6	5E	0.59	0/855	0.72	0/1154
7	62	0.47	0/1211	0.64	0/1622
7	6E	0.53	0/1275	0.64	0/1709
8	72	0.48	0/1135	0.69	0/1527
8	7E	0.56	0/1135	0.79	0/1527
9	82	0.44	0/1028	0.69	0/1379
9	8E	0.49	0/1028	0.72	0/1379
10	1A	0.48	0/529	0.70	0/706
10	1I	0.46	0/814	0.71	0/1095
11	2A	0.49	0/879	0.72	0/1187
11	2I	0.61	0/899	0.83	1/1213 (0.1%)
12	3A	0.60	0/972	0.81	0/1301
12	3I	0.67	0/972	0.87	0/1301
13	4A	0.41	0/943	0.66	0/1265
13	4I	0.55	0/943	0.76	0/1265
14	5A	0.52	0/423	0.75	0/560
14	5I	0.75	1/500 (0.2%)	0.74	0/664
15	6A	0.53	0/744	0.70	0/992
15	6I	0.63	0/744	0.81	0/992
16	7A	0.49	0/721	0.73	0/970
16	7I	0.48	0/721	0.74	1/970 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	8A	0.54	0/836	0.70	0/1117
17	8I	0.62	0/847	0.76	0/1131
18	9A	0.51	0/595	0.71	0/790
18	9I	0.57	0/595	0.79	0/790
19	AA	0.42	0/638	0.70	1/860 (0.1%)
19	AI	0.55	0/661	0.88	1/890 (0.1%)
20	BA	0.47	0/764	0.77	0/1007
20	BI	0.44	0/764	0.70	0/1007
21	1B	0.55	0/192	0.71	0/252
21	1F	0.51	0/221	0.76	0/288
22	1K	0.73	1/1623 (0.1%)	1.34	22/2521 (0.9%)
23	2K	1.17	6/1721 (0.3%)	1.62	36/2682 (1.3%)
24	3K	0.98	11/1669 (0.7%)	1.28	13/2599 (0.5%)
24	3L	1.00	11/1669 (0.7%)	1.37	33/2599 (1.3%)
25	4K	0.96	0/322	1.53	8/500 (1.6%)
25	4L	0.85	0/222	1.36	2/344 (0.6%)
26	14	1.00	78/69405 (0.1%)	1.72	1985/108348 (1.8%)
26	1H	1.21	256/69998 (0.4%)	1.93	3118/109276 (2.9%)
27	16	0.93	2/2928 (0.1%)	1.75	90/4568 (2.0%)
27	1J	0.75	0/2928	1.52	41/4568 (0.9%)
28	71	0.82	0/749	0.80	0/1004
29	11	0.89	3/2165 (0.1%)	1.04	7/2919 (0.2%)
29	19	0.76	0/2170	0.95	3/2926 (0.1%)
30	21	0.73	0/1601	0.98	5/2160 (0.2%)
30	29	0.70	0/1601	0.99	5/2160 (0.2%)
31	31	0.81	1/1620 (0.1%)	0.93	3/2194 (0.1%)
31	39	0.67	1/1645 (0.1%)	0.94	2/2228 (0.1%)
32	41	0.62	0/1498	0.82	2/2016 (0.1%)
32	49	0.45	0/1498	0.73	0/2016
33	51	0.66	0/1362	0.89	3/1841 (0.2%)
33	59	0.48	0/1332	0.84	1/1802 (0.1%)
34	61	0.59	0/1151	0.86	0/1558
34	69	0.53	0/1151	0.77	2/1558 (0.1%)
35	15	0.56	0/1131	0.80	0/1525
35	58	0.69	0/1131	0.94	0/1525
36	25	0.68	0/942	0.82	0/1269
36	68	0.76	0/942	0.82	0/1269
37	35	0.66	0/1139	1.01	6/1514 (0.4%)
37	78	0.75	0/1161	1.05	1/1544 (0.1%)
38	45	0.69	0/1142	0.94	3/1527 (0.2%)
38	88	0.86	0/1097	1.10	3/1466 (0.2%)
39	55	0.69	0/973	0.93	1/1302 (0.1%)
39	98	0.65	0/981	0.96	2/1312 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
40	65	0.57	0/891	0.96	2/1187 (0.2%)
40	A8	0.78	0/891	1.02	4/1187 (0.3%)
41	75	0.65	0/1155	0.82	1/1542 (0.1%)
41	B8	0.73	0/1155	0.94	1/1542 (0.1%)
42	85	0.60	0/981	0.79	1/1306 (0.1%)
42	C8	0.80	0/981	0.98	3/1306 (0.2%)
43	95	0.65	0/789	0.90	1/1057 (0.1%)
43	D8	0.73	0/789	0.94	2/1057 (0.2%)
44	A5	0.74	0/897	0.88	1/1204 (0.1%)
44	E8	0.77	0/910	0.92	1/1220 (0.1%)
45	B5	0.78	0/739	0.86	0/993
45	F8	0.92	2/756 (0.3%)	1.00	1/1014 (0.1%)
46	C5	0.73	0/807	1.03	3/1076 (0.3%)
46	G8	0.79	0/804	1.09	5/1073 (0.5%)
47	D5	0.46	0/1151	0.74	0/1557
47	H8	0.60	0/1135	0.88	0/1535
48	E5	0.67	0/620	0.87	0/827
48	I8	0.80	0/634	1.00	0/847
49	F5	0.63	0/744	0.92	1/989 (0.1%)
49	J8	0.83	0/769	1.00	0/1022
50	G5	0.61	0/560	0.82	0/741
50	K8	0.82	0/565	1.01	1/748 (0.1%)
51	H5	0.59	0/473	0.74	0/635
51	L8	0.74	0/457	1.04	1/613 (0.2%)
52	I5	0.52	0/527	0.92	0/709
52	M8	0.58	0/545	0.96	1/733 (0.1%)
53	J5	0.73	0/448	0.93	0/606
53	N8	0.65	0/436	0.87	0/589
54	L5	0.75	0/406	0.95	0/536
54	P8	0.88	0/417	0.99	0/550
55	M5	0.96	1/483 (0.2%)	1.14	3/634 (0.5%)
55	Q8	1.27	3/486 (0.6%)	1.65	9/638 (1.4%)
56	2L	1.26	13/1742 (0.7%)	1.51	30/2712 (1.1%)
All	All	0.92	405/318291 (0.1%)	1.52	6371/476619 (1.3%)

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	12	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	1E	0	2
4	32	0	3
4	3E	0	1
6	5E	0	1
9	82	0	1
10	1A	0	1
11	2A	0	1
12	3A	0	1
13	4A	0	1
13	4I	0	1
14	5A	0	1
19	AI	0	2
20	BA	0	3
29	11	0	2
29	19	0	5
30	21	0	4
30	29	0	5
31	31	0	1
31	39	0	4
32	41	0	1
32	49	0	1
33	59	0	1
34	61	0	4
34	69	0	1
35	15	0	1
36	25	0	1
37	35	0	3
37	78	0	2
38	45	0	5
38	88	0	3
39	98	0	1
40	65	0	1
40	A8	0	2
41	75	0	2
41	B8	0	2
42	85	0	3
42	C8	0	2
43	95	0	1
44	A5	0	2
45	B5	0	2
46	C5	0	3
46	G8	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
47	D5	0	2
47	H8	0	3
48	E5	0	1
48	I8	0	2
49	J8	0	1
50	G5	0	2
50	K8	0	3
52	I5	0	2
52	M8	0	1
53	N8	0	1
55	M5	0	2
55	Q8	0	7
All	All	0	116

The worst 5 of 405 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2L	55	U	N1-C2	22.39	1.58	1.38
23	2K	21	U	C5-C6	18.80	1.51	1.34
56	2L	21	U	C5-C6	18.33	1.50	1.34
24	3L	20	U	C5-C6	17.50	1.49	1.34
24	3K	16	U	C5-C6	17.45	1.49	1.34

The worst 5 of 6371 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1899	G	N3-C4-N9	-22.03	112.78	126.00
26	1H	2430	A	C2-N3-C4	-19.32	100.94	110.60
26	1H	783	A	C5-N7-C8	-17.81	94.99	103.90
26	1H	774	A	C2-N3-C4	-17.32	101.94	110.60
26	1H	2430	A	N1-C6-N6	16.97	128.78	118.60

There are no chirality outliers.

5 of 116 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	1E	15	VAL	Peptide
2	1E	237	ALA	Peptide
4	3E	31	CYS	Peptide
13	4I	107	ALA	Peptide
6	5E	41	GLU	Peptide

## 5.2 Too-close contacts [i](#)

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	32185	0	16244	1069	0
1	1G	32182	0	16244	1090	0
2	12	1924	0	1975	113	0
2	1E	1924	0	1975	127	0
3	22	1612	0	1677	111	0
3	2E	1605	0	1668	60	0
4	32	1702	0	1763	110	0
4	3E	1702	0	1762	110	0
5	42	1155	0	1213	83	0
5	4E	1155	0	1213	68	0
6	52	842	0	857	35	0
6	5E	842	0	857	47	0
7	62	1194	0	1234	58	0
7	6E	1256	0	1296	61	0
8	72	1115	0	1177	59	0
8	7E	1115	0	1177	68	0
9	82	1009	0	1037	81	0
9	8E	1009	0	1037	78	0
10	1A	522	0	530	31	0
10	1I	801	0	849	54	0
11	2A	864	0	881	52	0
11	2I	884	0	904	44	0
12	3A	956	0	1046	56	0
12	3I	956	0	1046	48	0
13	4A	933	0	992	62	0
13	4I	933	0	992	60	0
14	5A	418	0	456	36	0
14	5I	491	0	529	38	0
15	6A	733	0	771	40	0
15	6I	733	0	771	43	0
16	7A	705	0	725	36	0
16	7I	705	0	725	57	0
17	8A	823	0	891	27	0
17	8I	834	0	904	63	0
18	9A	590	0	662	27	0
18	9I	590	0	662	31	0
19	AA	624	0	636	51	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	AI	647	0	665	46	0
20	BA	762	0	861	41	0
20	BI	762	0	861	51	0
21	1B	188	0	195	16	0
21	1F	217	0	234	7	0
22	1K	1497	0	770	36	0
23	2K	1646	0	845	38	0
24	3K	1627	0	838	64	0
24	3L	1627	0	838	78	0
25	4K	285	0	143	16	0
25	4L	197	0	99	6	0
26	14	61968	0	31239	1915	0
26	1H	62497	0	31504	1930	2
27	16	2617	0	1328	93	0
27	1J	2617	0	1328	122	0
28	71	737	0	743	64	0
29	11	2115	0	2195	124	0
29	19	2120	0	2197	121	0
30	21	1568	0	1634	105	0
30	29	1568	0	1634	131	0
31	31	1585	0	1632	108	0
31	39	1610	0	1655	144	0
32	41	1473	0	1535	107	0
32	49	1473	0	1535	101	0
33	51	1336	0	1418	96	0
33	59	1307	0	1382	93	0
34	61	1136	0	1223	70	0
34	69	1136	0	1223	59	0
35	15	1104	0	1180	54	0
35	58	1104	0	1180	74	0
36	25	932	0	996	59	0
36	68	932	0	996	45	0
37	35	1122	0	1206	121	0
37	78	1144	0	1228	111	0
38	45	1121	0	1179	91	0
38	88	1077	0	1121	77	0
39	55	959	0	1021	70	0
39	98	967	0	1033	76	0
40	65	881	0	943	73	0
40	A8	881	0	943	70	0
41	75	1141	0	1202	71	0
41	B8	1141	0	1202	77	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
42	85	963	0	1022	69	0
42	C8	963	0	1022	63	0
43	95	778	0	852	81	0
43	D8	778	0	852	56	0
44	A5	886	0	948	40	0
44	E8	899	0	964	50	0
45	B5	725	0	778	33	0
45	F8	742	0	803	47	0
46	C5	794	0	884	67	0
46	G8	791	0	881	66	0
47	D5	1126	0	1154	92	0
47	H8	1110	0	1141	75	0
48	E5	612	0	633	42	0
48	I8	626	0	642	41	0
49	F5	737	0	813	35	0
49	J8	762	0	848	41	0
50	G5	558	0	610	26	1
50	K8	563	0	612	52	0
51	H5	468	0	518	15	1
51	L8	452	0	503	29	0
52	I5	515	0	514	60	0
52	M8	533	0	526	54	0
53	J5	434	0	454	33	0
53	N8	422	0	440	27	0
54	L5	398	0	441	25	0
54	P8	409	0	454	14	0
55	M5	477	0	540	47	0
55	Q8	480	0	549	104	0
56	2L	1645	0	843	40	0
57	11	3	0	0	0	0
57	13	99	0	0	0	0
57	14	327	0	0	0	0
57	16	11	0	0	0	0
57	1G	72	0	0	0	0
57	1H	444	0	0	0	0
57	1J	3	0	0	0	0
57	25	1	0	0	0	0
57	29	2	0	0	0	0
57	2K	2	0	0	0	0
57	2L	2	0	0	0	0
57	35	1	0	0	0	0
57	3E	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	3L	2	0	0	0	0
57	4I	2	0	0	0	0
57	45	1	0	0	0	0
57	4E	1	0	0	0	0
57	4I	1	0	0	0	0
57	55	1	0	0	0	0
57	68	2	0	0	0	0
57	78	2	0	0	0	0
57	88	1	0	0	0	0
57	98	1	0	0	0	0
57	I8	2	0	0	0	0
57	J8	2	0	0	0	0
57	L8	1	0	0	0	0
57	M5	1	0	0	0	0
57	P8	1	0	0	0	0
58	32	1	0	0	0	0
58	3E	1	0	0	0	0
58	5A	1	0	0	0	0
58	5I	1	0	0	0	0
58	C5	1	0	0	0	0
58	G8	1	0	0	0	0
59	11	11	0	0	1	0
59	13	144	0	0	30	0
59	14	592	0	0	151	0
59	16	22	0	0	0	0
59	19	8	0	0	1	0
59	1G	48	0	0	9	0
59	1H	933	0	0	316	0
59	1I	1	0	0	0	0
59	21	3	0	0	1	0
59	25	6	0	0	1	0
59	29	5	0	0	2	0
59	2K	6	0	0	0	0
59	31	9	0	0	0	0
59	35	2	0	0	0	0
59	39	4	0	0	0	0
59	3E	2	0	0	1	0
59	3I	2	0	0	0	0
59	4K	2	0	0	0	0
59	55	3	0	0	2	0
59	5I	2	0	0	0	0
59	75	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
59	78	6	0	0	2	0
59	A5	1	0	0	0	0
59	D8	1	0	0	0	0
59	F8	2	0	0	0	0
59	G8	2	0	0	0	0
59	H5	2	0	0	1	0
59	I8	5	0	0	2	0
59	J8	1	0	0	0	0
59	L5	1	0	0	0	0
59	L8	1	0	0	1	0
59	M5	1	0	0	0	0
59	P8	2	0	0	0	0
59	Q8	1	0	0	0	0
All	All	295920	0	197803	11212	2

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 24.

The worst 5 of 11212 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)
26:1H:270(L):U:H3	34:61:50:ARG:HG2	1.19	1.06
26:1H:2714:G:OP2	59:1H:3574:HOH:O	1.71	1.06
26:1H:2781:A:H5'	26:1H:2782:G:H5'	1.35	1.06
26:1H:741:G:OP1	59:1H:3910:HOH:O	1.74	1.05
5:4E:99:GLY:H	5:4E:117:ASP:HB3	1.21	1.04

All (2) 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)
26:1H:654(H):G:O2'	51:H5:55:ARG:NH2[2_464]	2.11	0.09
26:1H:277:C:O2'	50:G5:49:LYS:NZ[2_564]	2.16	0.04

## 5.3 Torsion angles

### 5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	12	235/256 (92%)	192 (82%)	37 (16%)	6 (3%)	5	27
2	1E	235/256 (92%)	193 (82%)	39 (17%)	3 (1%)	12	40
3	22	204/239 (85%)	182 (89%)	22 (11%)	0	100	100
3	2E	203/239 (85%)	185 (91%)	18 (9%)	0	100	100
4	32	206/209 (99%)	180 (87%)	22 (11%)	4 (2%)	8	34
4	3E	206/209 (99%)	190 (92%)	13 (6%)	3 (2%)	10	38
5	42	149/162 (92%)	135 (91%)	13 (9%)	1 (1%)	22	54
5	4E	149/162 (92%)	139 (93%)	9 (6%)	1 (1%)	22	54
6	52	99/101 (98%)	97 (98%)	2 (2%)	0	100	100
6	5E	99/101 (98%)	93 (94%)	6 (6%)	0	100	100
7	62	143/156 (92%)	135 (94%)	7 (5%)	1 (1%)	22	54
7	6E	153/156 (98%)	143 (94%)	10 (6%)	0	100	100
8	72	136/138 (99%)	124 (91%)	10 (7%)	2 (2%)	10	38
8	7E	136/138 (99%)	124 (91%)	11 (8%)	1 (1%)	22	54
9	82	125/128 (98%)	112 (90%)	12 (10%)	1 (1%)	19	51
9	8E	125/128 (98%)	106 (85%)	18 (14%)	1 (1%)	19	51
10	1A	56/105 (53%)	48 (86%)	8 (14%)	0	100	100
10	1I	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	15	46
11	2A	114/129 (88%)	101 (89%)	10 (9%)	3 (3%)	5	27
11	2I	117/129 (91%)	100 (86%)	16 (14%)	1 (1%)	17	48
12	3A	120/132 (91%)	101 (84%)	14 (12%)	5 (4%)	3	17
12	3I	120/132 (91%)	103 (86%)	17 (14%)	0	100	100
13	4A	115/126 (91%)	97 (84%)	16 (14%)	2 (2%)	9	35
13	4I	115/126 (91%)	95 (83%)	19 (16%)	1 (1%)	17	48
14	5A	48/61 (79%)	38 (79%)	9 (19%)	1 (2%)	7	31

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	5I	58/61 (95%)	45 (78%)	11 (19%)	2 (3%)	3	22
15	6A	86/89 (97%)	74 (86%)	12 (14%)	0	100	100
15	6I	86/89 (97%)	75 (87%)	11 (13%)	0	100	100
16	7A	82/88 (93%)	76 (93%)	6 (7%)	0	100	100
16	7I	82/88 (93%)	76 (93%)	5 (6%)	1 (1%)	13	42
17	8A	97/105 (92%)	92 (95%)	5 (5%)	0	100	100
17	8I	98/105 (93%)	93 (95%)	5 (5%)	0	100	100
18	9A	70/88 (80%)	61 (87%)	9 (13%)	0	100	100
18	9I	70/88 (80%)	62 (89%)	7 (10%)	1 (1%)	11	38
19	AA	76/93 (82%)	59 (78%)	14 (18%)	3 (4%)	3	18
19	AI	79/93 (85%)	65 (82%)	10 (13%)	4 (5%)	2	13
20	BA	97/106 (92%)	85 (88%)	11 (11%)	1 (1%)	15	46
20	BI	97/106 (92%)	83 (86%)	14 (14%)	0	100	100
21	1B	20/27 (74%)	19 (95%)	1 (5%)	0	100	100
21	1F	23/27 (85%)	21 (91%)	2 (9%)	0	100	100
28	7I	83/229 (36%)	79 (95%)	2 (2%)	2 (2%)	6	28
29	11	270/276 (98%)	253 (94%)	13 (5%)	4 (2%)	10	38
29	19	271/276 (98%)	248 (92%)	18 (7%)	5 (2%)	8	35
30	21	203/206 (98%)	160 (79%)	33 (16%)	10 (5%)	2	14
30	29	203/206 (98%)	149 (73%)	45 (22%)	9 (4%)	2	16
31	31	200/210 (95%)	180 (90%)	19 (10%)	1 (0%)	29	61
31	39	204/210 (97%)	163 (80%)	34 (17%)	7 (3%)	3	22
32	41	179/182 (98%)	155 (87%)	20 (11%)	4 (2%)	6	30
32	49	179/182 (98%)	150 (84%)	28 (16%)	1 (1%)	25	57
33	51	172/180 (96%)	146 (85%)	19 (11%)	7 (4%)	3	17
33	59	168/180 (93%)	125 (74%)	35 (21%)	8 (5%)	2	14
34	61	144/148 (97%)	119 (83%)	21 (15%)	4 (3%)	5	25
34	69	144/148 (97%)	115 (80%)	26 (18%)	3 (2%)	7	31
35	15	136/140 (97%)	119 (88%)	15 (11%)	2 (2%)	10	38
35	58	136/140 (97%)	114 (84%)	18 (13%)	4 (3%)	4	24
36	25	120/122 (98%)	111 (92%)	8 (7%)	1 (1%)	19	51

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
36	68	120/122 (98%)	114 (95%)	5 (4%)	1 (1%)	19	51
37	35	145/150 (97%)	110 (76%)	26 (18%)	9 (6%)	1	10
37	78	148/150 (99%)	117 (79%)	26 (18%)	5 (3%)	3	22
38	45	139/141 (99%)	109 (78%)	27 (19%)	3 (2%)	6	30
38	88	133/141 (94%)	110 (83%)	19 (14%)	4 (3%)	4	24
39	55	115/118 (98%)	107 (93%)	7 (6%)	1 (1%)	17	48
39	98	116/118 (98%)	99 (85%)	16 (14%)	1 (1%)	17	48
40	65	109/112 (97%)	85 (78%)	20 (18%)	4 (4%)	3	20
40	A8	109/112 (97%)	87 (80%)	20 (18%)	2 (2%)	8	35
41	75	135/146 (92%)	117 (87%)	17 (13%)	1 (1%)	22	54
41	B8	135/146 (92%)	114 (84%)	20 (15%)	1 (1%)	22	54
42	85	115/118 (98%)	99 (86%)	16 (14%)	0	100	100
42	C8	115/118 (98%)	102 (89%)	11 (10%)	2 (2%)	9	35
43	95	99/101 (98%)	79 (80%)	16 (16%)	4 (4%)	3	18
43	D8	99/101 (98%)	91 (92%)	6 (6%)	2 (2%)	7	32
44	A5	109/113 (96%)	97 (89%)	9 (8%)	3 (3%)	5	25
44	E8	111/113 (98%)	98 (88%)	13 (12%)	0	100	100
45	B5	90/96 (94%)	80 (89%)	8 (9%)	2 (2%)	6	30
45	F8	92/96 (96%)	83 (90%)	8 (9%)	1 (1%)	14	45
46	C5	102/110 (93%)	75 (74%)	20 (20%)	7 (7%)	1	8
46	G8	102/110 (93%)	80 (78%)	15 (15%)	7 (7%)	1	8
47	D5	131/206 (64%)	101 (77%)	24 (18%)	6 (5%)	2	15
47	H8	129/206 (63%)	104 (81%)	19 (15%)	6 (5%)	2	14
48	E5	75/85 (88%)	65 (87%)	9 (12%)	1 (1%)	12	40
48	I8	78/85 (92%)	67 (86%)	9 (12%)	2 (3%)	5	27
49	F5	92/98 (94%)	84 (91%)	7 (8%)	1 (1%)	14	45
49	J8	95/98 (97%)	85 (90%)	8 (8%)	2 (2%)	7	31
50	G5	64/72 (89%)	58 (91%)	4 (6%)	2 (3%)	4	23
50	K8	65/72 (90%)	56 (86%)	5 (8%)	4 (6%)	1	10
51	H5	57/60 (95%)	50 (88%)	7 (12%)	0	100	100
51	L8	55/60 (92%)	50 (91%)	4 (7%)	1 (2%)	8	35

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
52	I5	61/71 (86%)	33 (54%)	25 (41%)	3 (5%)	2	14
52	M8	64/71 (90%)	39 (61%)	22 (34%)	3 (5%)	2	14
53	J5	54/60 (90%)	49 (91%)	5 (9%)	0	100	100
53	N8	52/60 (87%)	43 (83%)	7 (14%)	2 (4%)	3	19
54	L5	44/49 (90%)	43 (98%)	1 (2%)	0	100	100
54	P8	45/49 (92%)	43 (96%)	2 (4%)	0	100	100
55	M5	58/65 (89%)	46 (79%)	9 (16%)	3 (5%)	2	13
55	Q8	58/65 (89%)	36 (62%)	15 (26%)	7 (12%)	0	2
All	All	11153/12175 (92%)	9578 (86%)	1350 (12%)	225 (2%)	7	32

5 of 225 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
18	9I	22	VAL
30	21	78	LEU
30	21	83	ASP
33	51	169	VAL
37	78	57	THR

### 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%)	148 (72%)	57 (28%)	0	1
2	1E	205/220 (93%)	158 (77%)	47 (23%)	1	3
3	22	160/188 (85%)	121 (76%)	39 (24%)	0	2
3	2E	159/188 (85%)	128 (80%)	31 (20%)	1	5
4	32	180/181 (99%)	140 (78%)	40 (22%)	1	3
4	3E	180/181 (99%)	146 (81%)	34 (19%)	1	6
5	42	116/123 (94%)	80 (69%)	36 (31%)	0	1
5	4E	116/123 (94%)	86 (74%)	30 (26%)	0	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	52	90/90 (100%)	73 (81%)	17 (19%)	1	6
6	5E	90/90 (100%)	70 (78%)	20 (22%)	1	3
7	62	121/127 (95%)	97 (80%)	24 (20%)	1	5
7	6E	126/127 (99%)	98 (78%)	28 (22%)	1	3
8	72	119/119 (100%)	91 (76%)	28 (24%)	1	3
8	7E	119/119 (100%)	93 (78%)	26 (22%)	1	4
9	82	98/99 (99%)	77 (79%)	21 (21%)	1	4
9	8E	98/99 (99%)	71 (72%)	27 (28%)	0	1
10	1A	58/92 (63%)	43 (74%)	15 (26%)	0	2
10	1I	89/92 (97%)	68 (76%)	21 (24%)	1	3
11	2A	88/99 (89%)	72 (82%)	16 (18%)	1	7
11	2I	90/99 (91%)	73 (81%)	17 (19%)	1	6
12	3A	103/109 (94%)	81 (79%)	22 (21%)	1	4
12	3I	103/109 (94%)	80 (78%)	23 (22%)	1	3
13	4A	94/101 (93%)	60 (64%)	34 (36%)	0	0
13	4I	94/101 (93%)	71 (76%)	23 (24%)	0	2
14	5A	43/50 (86%)	33 (77%)	10 (23%)	1	3
14	5I	49/50 (98%)	42 (86%)	7 (14%)	3	15
15	6A	79/80 (99%)	64 (81%)	15 (19%)	1	6
15	6I	79/80 (99%)	68 (86%)	11 (14%)	3	16
16	7A	72/74 (97%)	53 (74%)	19 (26%)	0	1
16	7I	72/74 (97%)	56 (78%)	16 (22%)	1	3
17	8A	94/97 (97%)	80 (85%)	14 (15%)	3	13
17	8I	95/97 (98%)	73 (77%)	22 (23%)	1	3
18	9A	63/77 (82%)	44 (70%)	19 (30%)	0	1
18	9I	63/77 (82%)	53 (84%)	10 (16%)	2	11
19	AA	67/80 (84%)	54 (81%)	13 (19%)	1	5
19	AI	70/80 (88%)	45 (64%)	25 (36%)	0	0
20	BA	76/82 (93%)	66 (87%)	10 (13%)	4	17
20	BI	76/82 (93%)	55 (72%)	21 (28%)	0	1
21	1B	17/22 (77%)	16 (94%)	1 (6%)	19	49

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
21	1F	20/22 (91%)	19 (95%)	1 (5%)	24	55
28	71	77/181 (42%)	58 (75%)	19 (25%)	0	2
29	11	214/218 (98%)	162 (76%)	52 (24%)	0	2
29	19	214/218 (98%)	162 (76%)	52 (24%)	0	2
30	21	165/166 (99%)	130 (79%)	35 (21%)	1	4
30	29	165/166 (99%)	128 (78%)	37 (22%)	1	3
31	31	161/166 (97%)	123 (76%)	38 (24%)	1	3
31	39	163/166 (98%)	125 (77%)	38 (23%)	1	3
32	41	155/156 (99%)	109 (70%)	46 (30%)	0	1
32	49	155/156 (99%)	112 (72%)	43 (28%)	0	1
33	51	145/148 (98%)	112 (77%)	33 (23%)	1	3
33	59	142/148 (96%)	108 (76%)	34 (24%)	0	2
34	61	122/124 (98%)	89 (73%)	33 (27%)	0	1
34	69	122/124 (98%)	87 (71%)	35 (29%)	0	1
35	15	117/119 (98%)	93 (80%)	24 (20%)	1	4
35	58	117/119 (98%)	85 (73%)	32 (27%)	0	1
36	25	100/100 (100%)	72 (72%)	28 (28%)	0	1
36	68	100/100 (100%)	78 (78%)	22 (22%)	1	3
37	35	114/116 (98%)	70 (61%)	44 (39%)	0	0
37	78	116/116 (100%)	79 (68%)	37 (32%)	0	1
38	45	111/111 (100%)	85 (77%)	26 (23%)	1	3
38	88	103/111 (93%)	73 (71%)	30 (29%)	0	1
39	55	100/101 (99%)	78 (78%)	22 (22%)	1	3
39	98	101/101 (100%)	80 (79%)	21 (21%)	1	4
40	65	87/88 (99%)	68 (78%)	19 (22%)	1	4
40	A8	87/88 (99%)	58 (67%)	29 (33%)	0	1
41	75	120/127 (94%)	83 (69%)	37 (31%)	0	1
41	B8	120/127 (94%)	85 (71%)	35 (29%)	0	1
42	85	93/94 (99%)	71 (76%)	22 (24%)	1	2
42	C8	93/94 (99%)	73 (78%)	20 (22%)	1	4
43	95	82/82 (100%)	53 (65%)	29 (35%)	0	0

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	D8	82/82 (100%)	56 (68%)	26 (32%)	0	1
44	A5	91/92 (99%)	65 (71%)	26 (29%)	0	1
44	E8	92/92 (100%)	68 (74%)	24 (26%)	0	2
45	B5	74/78 (95%)	57 (77%)	17 (23%)	1	3
45	F8	76/78 (97%)	56 (74%)	20 (26%)	0	2
46	C5	85/91 (93%)	60 (71%)	25 (29%)	0	1
46	G8	85/91 (93%)	57 (67%)	28 (33%)	0	1
47	D5	126/179 (70%)	95 (75%)	31 (25%)	0	2
47	H8	124/179 (69%)	96 (77%)	28 (23%)	1	3
48	E5	62/67 (92%)	48 (77%)	14 (23%)	1	3
48	I8	61/67 (91%)	44 (72%)	17 (28%)	0	1
49	F5	79/83 (95%)	56 (71%)	23 (29%)	0	1
49	J8	82/83 (99%)	61 (74%)	21 (26%)	0	2
50	G5	62/67 (92%)	41 (66%)	21 (34%)	0	1
50	K8	62/67 (92%)	44 (71%)	18 (29%)	0	1
51	H5	51/52 (98%)	38 (74%)	13 (26%)	0	2
51	L8	49/52 (94%)	33 (67%)	16 (33%)	0	1
52	I5	57/63 (90%)	40 (70%)	17 (30%)	0	1
52	M8	59/63 (94%)	43 (73%)	16 (27%)	0	1
53	J5	48/52 (92%)	34 (71%)	14 (29%)	0	1
53	N8	47/52 (90%)	35 (74%)	12 (26%)	0	2
54	L5	39/42 (93%)	31 (80%)	8 (20%)	1	4
54	P8	40/42 (95%)	31 (78%)	9 (22%)	1	3
55	M5	49/55 (89%)	36 (74%)	13 (26%)	0	1
55	Q8	50/55 (91%)	33 (66%)	17 (34%)	0	1
All	All	9429/10075 (94%)	7093 (75%)	2336 (25%)	0	2

5 of 2336 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
34	69	109	ILE
52	I5	35	VAL
36	25	91	LEU

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Mol	Chain	Res	Type
34	69	104	GLN
42	85	83	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 31 such sidechains are listed below:

Mol	Chain	Res	Type
48	I8	29	GLN
39	55	11	ASN
5	42	127	ASN
46	C5	68	HIS
34	69	104	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1495/1522 (98%)	395 (26%)	38 (2%)
1	1G	1495/1522 (98%)	396 (26%)	36 (2%)
22	1K	65/77 (84%)	28 (43%)	3 (4%)
23	2K	76/77 (98%)	16 (21%)	1 (1%)
24	3K	75/76 (98%)	35 (46%)	6 (8%)
24	3L	74/76 (97%)	38 (51%)	2 (2%)
25	4K	12/27 (44%)	2 (16%)	0
25	4L	9/27 (33%)	4 (44%)	1 (11%)
26	14	2874/2917 (98%)	803 (27%)	48 (1%)
26	1H	2901/2917 (99%)	734 (25%)	52 (1%)
27	16	121/122 (99%)	25 (20%)	0
27	1J	121/122 (99%)	39 (32%)	1 (0%)
56	2L	75/77 (97%)	22 (29%)	3 (4%)
All	All	9393/9559 (98%)	2537 (27%)	191 (2%)

5 of 2537 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	6	G
1	13	7	G
1	13	8	A
1	13	9	G

5 of 191 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1G	632	A
26	14	49	A
1	1G	913	A
1	1G	1300	G
26	14	573	G

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

23 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	7MG	2K	47	23	22,26,27	2.84	7 (31%)	29,39,42	2.87	10 (34%)
24	7MG	3K	46	24	22,26,27	2.95	6 (27%)	29,39,42	2.90	10 (34%)
24	4SU	3K	8	24	18,21,22	1.83	3 (16%)	26,30,33	2.44	5 (19%)
24	PSU	3L	32	24	18,21,22	1.25	1 (5%)	22,30,33	1.49	2 (9%)
24	PSU	3K	32	24	18,21,22	1.05	1 (5%)	22,30,33	1.64	4 (18%)
24	MIA	3L	37	24	24,31,32	2.66	4 (16%)	26,44,47	3.09	10 (38%)
23	PSU	2K	56	23	18,21,22	1.24	2 (11%)	22,30,33	2.18	5 (22%)
24	PSU	3L	39	24	18,21,22	1.05	1 (5%)	22,30,33	1.64	4 (18%)
24	7MG	3L	46	24	22,26,27	3.23	7 (31%)	29,39,42	2.82	10 (34%)
24	MIA	3K	37	24	24,31,32	2.39	4 (16%)	26,44,47	3.43	10 (38%)
56	7MG	2L	47	56	22,26,27	2.96	7 (31%)	29,39,42	2.87	10 (34%)
23	5MU	2K	55	23	19,22,23	3.76	5 (26%)	28,32,35	3.16	10 (35%)
24	PSU	3L	55	24	18,21,22	1.15	1 (5%)	22,30,33	1.63	2 (9%)
24	4SU	3L	8	24	18,21,22	1.88	4 (22%)	26,30,33	1.96	5 (19%)
22	OMC	1K	33	22	19,22,23	1.72	3 (15%)	26,31,34	0.77	0
24	PSU	3K	55	24	18,21,22	1.14	1 (5%)	22,30,33	1.99	6 (27%)
22	5MU	1K	55	22	19,22,23	3.85	5 (26%)	28,32,35	3.30	10 (35%)
24	PSU	3K	39	24	18,21,22	1.09	1 (5%)	22,30,33	1.72	4 (18%)
56	4SU	2L	8	56	18,21,22	1.88	5 (27%)	26,30,33	2.65	6 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
56	PSU	2L	56	56	18,21,22	1.32	2 (11%)	22,30,33	1.72	4 (18%)
23	4SU	2K	8	23	18,21,22	1.60	4 (22%)	26,30,33	3.13	5 (19%)
23	OMC	2K	33	23	19,22,23	1.84	3 (15%)	26,31,34	0.92	1 (3%)
56	OMC	2L	33	56	19,22,23	1.78	3 (15%)	26,31,34	1.11	3 (11%)

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	7MG	2K	47	23	-	3/7/37/38	0/3/3/3
24	7MG	3K	46	24	-	2/7/37/38	0/3/3/3
24	4SU	3K	8	24	-	5/7/25/26	0/2/2/2
24	PSU	3L	32	24	-	1/7/25/26	0/2/2/2
24	PSU	3K	32	24	-	0/7/25/26	0/2/2/2
24	MIA	3L	37	24	-	7/11/33/34	0/3/3/3
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
24	PSU	3L	39	24	-	2/7/25/26	0/2/2/2
24	7MG	3L	46	24	-	2/7/37/38	0/3/3/3
24	MIA	3K	37	24	-	6/11/33/34	0/3/3/3
56	7MG	2L	47	56	-	3/7/37/38	0/3/3/3
23	5MU	2K	55	23	-	0/7/25/26	0/2/2/2
24	PSU	3L	55	24	-	0/7/25/26	0/2/2/2
24	4SU	3L	8	24	-	0/7/25/26	0/2/2/2
22	OMC	1K	33	22	-	0/9/27/28	0/2/2/2
24	PSU	3K	55	24	-	4/7/25/26	0/2/2/2
22	5MU	1K	55	22	-	0/7/25/26	0/2/2/2
24	PSU	3K	39	24	-	0/7/25/26	0/2/2/2
56	4SU	2L	8	56	-	2/7/25/26	0/2/2/2
56	PSU	2L	56	56	-	0/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	1/9/27/28	0/2/2/2
56	OMC	2L	33	56	-	0/9/27/28	0/2/2/2

The worst 5 of 80 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	1K	55	5MU	C2-N1	12.31	1.58	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2K	55	5MU	C2-N1	11.73	1.57	1.38
24	3L	46	7MG	C5-N7	9.56	1.46	1.35
24	3K	37	MIA	C13-C14	8.69	1.57	1.32
24	3L	37	MIA	C13-C14	8.66	1.57	1.32

The worst 5 of 136 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	55	5MU	C5-C4-N3	11.66	125.26	115.31
24	3K	37	MIA	C11-S10-C2	11.38	110.77	102.27
23	2K	8	4SU	C4-N3-C2	-9.98	117.64	127.34
23	2K	8	4SU	C5-C4-N3	9.59	123.58	114.69
24	3K	37	MIA	C12-C13-C14	-9.36	108.93	127.14

There are no chirality outliers.

5 of 38 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	2K	33	OMC	C1'-C2'-O2'-CM2
24	3K	8	4SU	C2'-C1'-N1-C2
24	3K	8	4SU	C2'-C1'-N1-C6
24	3K	37	MIA	C5-C6-N6-C12
24	3K	37	MIA	N1-C2-S10-C11

There are no ring outliers.

16 monomers are involved in 29 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	2K	47	7MG	3	0
24	3K	46	7MG	2	0
24	3K	8	4SU	1	0
24	3L	37	MIA	2	0
24	3K	37	MIA	1	0
56	2L	47	7MG	2	0
23	2K	55	5MU	1	0
24	3L	55	PSU	1	0
24	3L	8	4SU	5	0
24	3K	55	PSU	2	0
24	3K	39	PSU	2	0
56	2L	8	4SU	1	0
56	2L	56	PSU	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	2K	8	4SU	1	0
23	2K	33	OMC	2	0
56	2L	33	OMC	1	0

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 995 ligands modelled in this entry, 995 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
22	1K	1
56	2L	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1K	69:C	O3'	70:C	P	5.53
1	2L	54:G	O3'	55:U	P	2.94



## 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	1497/1522 (98%)	-0.58	0 <a href="#">100</a> <a href="#">100</a>	70, 114, 187, 287	0
1	1G	1497/1522 (98%)	-0.66	0 <a href="#">100</a> <a href="#">100</a>	79, 129, 197, 297	0
2	12	237/256 (92%)	0.88	43 (18%) <a href="#">1</a> <a href="#">1</a>	143, 175, 203, 210	0
2	1E	237/256 (92%)	0.26	14 (5%) <a href="#">22</a> <a href="#">22</a>	124, 155, 178, 191	0
3	22	206/239 (86%)	1.02	35 (16%) <a href="#">1</a> <a href="#">1</a>	132, 155, 182, 195	0
3	2E	205/239 (85%)	0.72	22 (10%) <a href="#">6</a> <a href="#">5</a>	101, 124, 154, 164	0
4	32	208/209 (99%)	0.73	21 (10%) <a href="#">7</a> <a href="#">6</a>	118, 137, 157, 163	0
4	3E	208/209 (99%)	0.60	17 (8%) <a href="#">11</a> <a href="#">11</a>	100, 127, 145, 153	0
5	42	151/162 (93%)	0.37	7 (4%) <a href="#">32</a> <a href="#">30</a>	115, 132, 153, 171	0
5	4E	151/162 (93%)	0.75	17 (11%) <a href="#">5</a> <a href="#">5</a>	93, 117, 136, 166	0
6	52	101/101 (100%)	0.49	2 (1%) <a href="#">65</a> <a href="#">64</a>	102, 116, 134, 144	0
6	5E	101/101 (100%)	0.33	2 (1%) <a href="#">65</a> <a href="#">64</a>	89, 112, 132, 144	0
7	62	147/156 (94%)	0.28	11 (7%) <a href="#">14</a> <a href="#">13</a>	122, 138, 151, 165	0
7	6E	155/156 (99%)	0.35	14 (9%) <a href="#">9</a> <a href="#">9</a>	108, 123, 152, 169	0
8	72	138/138 (100%)	0.36	6 (4%) <a href="#">35</a> <a href="#">34</a>	111, 137, 150, 157	0
8	7E	138/138 (100%)	0.72	22 (15%) <a href="#">1</a> <a href="#">2</a>	107, 122, 136, 144	0
9	82	127/128 (99%)	0.42	4 (3%) <a href="#">49</a> <a href="#">48</a>	125, 161, 179, 186	0
9	8E	127/128 (99%)	0.30	1 (0%) <a href="#">86</a> <a href="#">86</a>	98, 142, 161, 174	0
10	1A	66/105 (62%)	0.47	5 (7%) <a href="#">13</a> <a href="#">13</a>	130, 158, 176, 188	0
10	1I	99/105 (94%)	0.91	20 (20%) <a href="#">1</a> <a href="#">1</a>	98, 147, 178, 183	0
11	2A	116/129 (89%)	1.32	29 (25%) <a href="#">0</a> <a href="#">0</a>	103, 124, 142, 169	0
11	2I	119/129 (92%)	0.67	8 (6%) <a href="#">17</a> <a href="#">17</a>	85, 112, 156, 180	0
12	3A	122/132 (92%)	0.50	9 (7%) <a href="#">14</a> <a href="#">14</a>	97, 113, 129, 145	0
12	3I	122/132 (92%)	0.24	4 (3%) <a href="#">46</a> <a href="#">44</a>	83, 93, 119, 143	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	4A	117/126 (92%)	0.67	21 (17%) 1 1	125, 155, 178, 192	0
13	4I	117/126 (92%)	0.15	4 (3%) 45 43	95, 131, 145, 162	0
14	5A	52/61 (85%)	0.83	6 (11%) 4 4	138, 151, 163, 167	0
14	5I	60/61 (98%)	0.45	2 (3%) 46 44	101, 113, 127, 134	0
15	6A	88/89 (98%)	-0.04	0 100 100	99, 120, 141, 148	0
15	6I	88/89 (98%)	0.17	5 (5%) 23 23	87, 110, 128, 134	0
16	7A	84/88 (95%)	0.23	1 (1%) 79 78	108, 123, 139, 168	0
16	7I	84/88 (95%)	0.67	9 (10%) 6 5	113, 127, 155, 174	0
17	8A	99/105 (94%)	0.35	4 (4%) 38 36	101, 116, 131, 136	0
17	8I	100/105 (95%)	0.34	5 (5%) 28 27	100, 117, 127, 131	0
18	9A	72/88 (81%)	1.34	15 (20%) 1 1	109, 130, 167, 194	0
18	9I	72/88 (81%)	0.81	7 (9%) 7 8	96, 115, 152, 185	0
19	AA	78/93 (83%)	1.07	18 (23%) 0 1	137, 178, 195, 198	0
19	AI	81/93 (87%)	0.21	2 (2%) 57 54	107, 129, 146, 157	0
20	BA	99/106 (93%)	0.38	3 (3%) 50 49	104, 122, 141, 156	0
20	BI	99/106 (93%)	0.29	3 (3%) 50 49	120, 135, 156, 164	0
21	1B	22/27 (81%)	1.42	7 (31%) 0 0	122, 142, 149, 152	0
21	1F	25/27 (92%)	0.42	1 (4%) 38 36	106, 118, 135, 147	0
22	1K	68/77 (88%)	0.51	4 (5%) 22 22	117, 196, 214, 216	0
23	2K	72/77 (93%)	-0.41	0 100 100	80, 108, 138, 146	0
24	3K	70/76 (92%)	-0.25	1 (1%) 75 75	83, 231, 262, 266	0
24	3L	70/76 (92%)	-0.09	2 (2%) 51 50	96, 239, 268, 279	0
25	4K	13/27 (48%)	0.30	1 (7%) 13 12	83, 115, 170, 170	0
25	4L	9/27 (33%)	-0.03	0 100 100	100, 136, 151, 157	0
26	14	2877/2917 (98%)	-0.38	16 (0%) 89 90	62, 96, 237, 329	0
26	1H	2902/2917 (99%)	-0.36	13 (0%) 92 93	50, 81, 226, 314	0
27	16	122/122 (100%)	-0.64	1 (0%) 86 86	76, 99, 116, 199	0
27	1J	122/122 (100%)	-0.75	0 100 100	98, 136, 162, 199	0
28	7I	93/229 (40%)	1.10	21 (22%) 0 1	109, 115, 131, 143	0
29	11	272/276 (98%)	0.12	0 100 100	52, 71, 87, 95	0
29	19	273/276 (98%)	0.28	4 (1%) 73 72	60, 83, 100, 111	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
30	21	205/206 (99%)	0.60	23 (11%) 5 5	59, 95, 137, 152	0
30	29	205/206 (99%)	0.23	6 (2%) 51 50	70, 104, 144, 178	0
31	31	202/210 (96%)	0.10	2 (0%) 82 82	55, 84, 120, 142	0
31	39	206/210 (98%)	0.55	11 (5%) 26 24	70, 110, 163, 190	0
32	41	181/182 (99%)	0.42	9 (4%) 28 27	85, 110, 141, 149	0
32	49	181/182 (99%)	0.98	38 (20%) 1 1	133, 152, 174, 187	0
33	51	174/180 (96%)	0.20	3 (1%) 70 68	88, 108, 123, 136	0
33	59	170/180 (94%)	1.27	44 (25%) 0 0	131, 193, 221, 241	0
34	61	146/148 (98%)	0.58	15 (10%) 6 6	81, 135, 151, 154	0
34	69	146/148 (98%)	0.46	16 (10%) 5 5	97, 138, 155, 163	0
35	15	138/140 (98%)	0.45	4 (2%) 51 50	87, 114, 146, 168	0
35	58	138/140 (98%)	0.34	4 (2%) 51 50	73, 95, 129, 147	0
36	25	122/122 (100%)	0.38	4 (3%) 46 44	75, 96, 112, 124	0
36	68	122/122 (100%)	0.52	4 (3%) 46 44	65, 85, 103, 115	0
37	35	147/150 (98%)	0.82	18 (12%) 4 3	70, 114, 145, 159	0
37	78	150/150 (100%)	0.01	3 (2%) 65 64	57, 85, 111, 159	0
38	45	141/141 (100%)	1.18	29 (20%) 1 1	80, 111, 139, 153	0
38	88	137/141 (97%)	0.39	7 (5%) 28 26	63, 84, 103, 146	0
39	55	117/118 (99%)	0.32	5 (4%) 35 34	69, 88, 105, 121	0
39	98	118/118 (100%)	0.53	4 (3%) 45 43	70, 91, 111, 121	0
40	65	111/112 (99%)	0.51	8 (7%) 15 15	104, 128, 140, 146	0
40	A8	111/112 (99%)	0.80	15 (13%) 3 3	81, 95, 120, 129	0
41	75	137/146 (93%)	0.13	4 (2%) 51 50	86, 104, 164, 200	0
41	B8	137/146 (93%)	0.11	1 (0%) 87 88	80, 99, 151, 186	0
42	85	117/118 (99%)	0.24	1 (0%) 84 84	76, 103, 142, 163	0
42	C8	117/118 (99%)	0.22	4 (3%) 45 43	63, 83, 117, 136	0
43	95	101/101 (100%)	0.98	19 (18%) 1 1	72, 129, 143, 161	0
43	D8	101/101 (100%)	0.45	7 (6%) 16 16	63, 108, 131, 145	0
44	A5	111/113 (98%)	0.30	2 (1%) 68 67	69, 83, 117, 151	0
44	E8	113/113 (100%)	0.26	3 (2%) 54 52	66, 80, 116, 158	0
45	B5	92/96 (95%)	0.60	4 (4%) 35 34	78, 94, 113, 133	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
45	F8	94/96 (97%)	0.60	5 (5%) 26 24	65, 77, 101, 118	0
46	C5	104/110 (94%)	0.84	19 (18%) 1 1	98, 120, 152, 163	0
46	G8	104/110 (94%)	0.17	3 (2%) 51 50	76, 98, 132, 143	0
47	D5	137/206 (66%)	1.18	34 (24%) 0 0	118, 147, 190, 205	0
47	H8	135/206 (65%)	0.51	7 (5%) 27 25	89, 115, 161, 182	0
48	E5	77/85 (90%)	0.84	7 (9%) 9 9	81, 97, 115, 148	0
48	I8	80/85 (94%)	0.42	5 (6%) 20 20	66, 78, 106, 122	0
49	F5	94/98 (95%)	0.66	9 (9%) 8 8	72, 94, 135, 145	0
49	J8	97/98 (98%)	0.28	3 (3%) 49 48	60, 79, 122, 155	0
50	G5	66/72 (91%)	0.61	4 (6%) 21 20	95, 113, 128, 155	0
50	K8	67/72 (93%)	0.36	1 (1%) 73 72	70, 89, 107, 139	0
51	H5	59/60 (98%)	0.76	7 (11%) 4 4	87, 104, 146, 161	0
51	L8	57/60 (95%)	0.09	0 100 100	70, 86, 105, 121	0
52	I5	63/71 (88%)	1.50	24 (38%) 0 0	163, 192, 207, 213	0
52	M8	66/71 (92%)	0.77	9 (13%) 3 2	120, 156, 195, 205	0
53	J5	56/60 (93%)	0.13	2 (3%) 42 40	69, 94, 139, 149	0
53	N8	54/60 (90%)	0.20	2 (3%) 41 38	62, 100, 155, 165	0
54	L5	46/49 (93%)	0.09	1 (2%) 62 60	61, 71, 82, 95	0
54	P8	47/49 (95%)	-0.18	0 100 100	53, 60, 76, 85	0
55	M5	60/65 (92%)	0.57	3 (5%) 28 27	78, 90, 114, 129	0
55	Q8	60/65 (92%)	0.13	0 100 100	64, 77, 102, 113	0
56	2L	73/77 (94%)	-0.33	0 100 100	91, 123, 156, 173	0
All	All	20765/21734 (95%)	0.08	951 (4%) 32 30	50, 110, 186, 329	0

The worst 5 of 951 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	4A	6	GLY	10.5
31	39	208	GLY	9.4
30	21	204	ALA	8.0
18	9A	88	LYS	8.0
38	45	65	PHE	7.8

## 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
24	4SU	3K	8	20/21	0.44	0.22	240,248,252,254	0
24	7MG	3K	46	24/25	0.68	0.19	234,242,250,254	0
24	4SU	3L	8	20/21	0.70	0.12	239,245,250,250	0
24	PSU	3L	55	20/21	0.71	0.18	244,253,256,256	0
24	7MG	3L	46	24/25	0.75	0.16	242,245,250,252	0
24	PSU	3K	55	20/21	0.78	0.16	233,248,253,253	0
24	MIA	3L	37	29/30	0.78	0.28	158,185,200,208	0
24	PSU	3L	32	20/21	0.80	0.18	165,176,183,185	0
22	5MU	1K	55	21/22	0.87	0.19	147,158,168,170	0
24	PSU	3K	32	20/21	0.88	0.19	149,154,157,159	0
24	PSU	3L	39	20/21	0.89	0.15	156,173,181,188	0
24	MIA	3K	37	29/30	0.90	0.19	139,155,160,161	0
56	4SU	2L	8	20/21	0.91	0.17	127,132,138,139	0
23	4SU	2K	8	20/21	0.92	0.15	101,110,114,119	0
23	PSU	2K	56	20/21	0.92	0.12	95,103,113,113	0
56	PSU	2L	56	20/21	0.92	0.10	116,124,129,135	0
22	OMC	1K	33	21/22	0.93	0.18	114,132,138,141	0
24	PSU	3K	39	20/21	0.94	0.12	126,143,151,159	0
56	7MG	2L	47	24/25	0.94	0.13	137,143,153,157	0
23	7MG	2K	47	24/25	0.94	0.13	113,121,127,130	0
23	OMC	2K	33	21/22	0.95	0.16	84,91,99,106	0
23	5MU	2K	55	21/22	0.95	0.13	96,109,114,116	0
56	OMC	2L	33	21/22	0.96	0.15	105,114,117,119	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
57	MG	1H	3252	1/1	0.17	0.65	92,92,92,92	0
57	MG	13	1667	1/1	0.19	0.38	119,119,119,119	0
57	MG	1G	1631	1/1	0.37	0.24	97,97,97,97	0
57	MG	1H	3199	1/1	0.44	0.29	98,98,98,98	0
57	MG	13	1626	1/1	0.45	0.46	73,73,73,73	0
57	MG	1H	3259	1/1	0.45	0.27	73,73,73,73	0
57	MG	1H	3225	1/1	0.45	0.78	95,95,95,95	0
57	MG	13	1662	1/1	0.49	0.56	88,88,88,88	0
57	MG	14	3176	1/1	0.49	0.58	85,85,85,85	0
57	MG	13	1659	1/1	0.50	0.41	100,100,100,100	0
57	MG	1H	3232	1/1	0.50	0.31	102,102,102,102	0
57	MG	14	3108	1/1	0.51	0.35	77,77,77,77	0
57	MG	14	3164	1/1	0.52	0.76	94,94,94,94	0
57	MG	1H	3096	1/1	0.52	0.27	65,65,65,65	0
57	MG	16	207	1/1	0.53	0.27	88,88,88,88	0
57	MG	14	3213	1/1	0.53	0.41	102,102,102,102	0
57	MG	1H	3174	1/1	0.55	0.29	88,88,88,88	0
57	MG	14	3069	1/1	0.56	0.46	97,97,97,97	0
57	MG	14	3179	1/1	0.57	0.56	100,100,100,100	0
57	MG	14	3200	1/1	0.57	0.38	90,90,90,90	0
57	MG	1G	1655	1/1	0.57	0.37	82,82,82,82	0
57	MG	16	205	1/1	0.58	0.40	90,90,90,90	0
57	MG	13	1671	1/1	0.59	0.46	97,97,97,97	0
57	MG	1G	1635	1/1	0.59	0.58	79,79,79,79	0
57	MG	1H	3262	1/1	0.60	0.50	75,75,75,75	0
57	MG	14	3102	1/1	0.60	0.62	81,81,81,81	0
57	MG	1H	3148	1/1	0.60	0.16	64,64,64,64	0
57	MG	1H	3167	1/1	0.60	0.37	79,79,79,79	0
57	MG	1H	3190	1/1	0.61	0.29	94,94,94,94	0
57	MG	14	3218	1/1	0.61	0.43	74,74,74,74	0
57	MG	1G	1672	1/1	0.64	0.09	117,117,117,117	0
57	MG	1H	3240	1/1	0.64	0.30	73,73,73,73	0
57	MG	14	3086	1/1	0.64	0.43	82,82,82,82	0
57	MG	14	3094	1/1	0.64	0.56	94,94,94,94	0
57	MG	13	1664	1/1	0.66	0.58	95,95,95,95	0
57	MG	14	3103	1/1	0.66	0.38	74,74,74,74	0
57	MG	1H	3053	1/1	0.66	0.66	76,76,76,76	0
57	MG	2L	102	1/1	0.66	0.28	96,96,96,96	0
57	MG	14	3166	1/1	0.66	0.48	82,82,82,82	0
57	MG	14	3124	1/1	0.67	0.49	97,97,97,97	0
57	MG	1H	3100	1/1	0.67	0.40	84,84,84,84	0
57	MG	1H	3270	1/1	0.68	0.35	102,102,102,102	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	14	3211	1/1	0.68	0.47	101,101,101,101	0
57	MG	M5	101	1/1	0.68	0.36	85,85,85,85	0
57	MG	45	201	1/1	0.69	0.16	98,98,98,98	0
57	MG	14	3107	1/1	0.69	0.32	76,76,76,76	0
57	MG	14	3142	1/1	0.70	0.21	86,86,86,86	0
57	MG	1H	3162	1/1	0.70	0.44	83,83,83,83	0
57	MG	14	3212	1/1	0.70	1.00	86,86,86,86	0
57	MG	1G	1663	1/1	0.70	0.25	89,89,89,89	0
57	MG	14	3216	1/1	0.70	0.67	84,84,84,84	0
57	MG	14	3170	1/1	0.70	0.80	83,83,83,83	0
57	MG	1J	201	1/1	0.70	0.32	88,88,88,88	0
57	MG	1H	3169	1/1	0.70	0.70	72,72,72,72	0
57	MG	1G	1648	1/1	0.70	0.26	99,99,99,99	0
57	MG	1H	3428	1/1	0.71	0.07	103,103,103,103	0
57	MG	1G	1656	1/1	0.71	0.40	97,97,97,97	0
57	MG	1H	3255	1/1	0.71	0.33	81,81,81,81	0
57	MG	1H	3102	1/1	0.71	0.28	82,82,82,82	0
57	MG	13	1693	1/1	0.71	0.08	118,118,118,118	0
57	MG	1H	3074	1/1	0.71	0.21	63,63,63,63	0
57	MG	14	3151	1/1	0.71	0.35	71,71,71,71	0
57	MG	1H	3314	1/1	0.71	0.09	86,86,86,86	0
57	MG	1G	1651	1/1	0.71	0.59	94,94,94,94	0
57	MG	14	3167	1/1	0.71	0.31	91,91,91,91	0
57	MG	14	3099	1/1	0.71	0.18	108,108,108,108	0
57	MG	1H	3188	1/1	0.72	0.51	82,82,82,82	0
57	MG	1H	3129	1/1	0.72	0.29	93,93,93,93	0
57	MG	13	1661	1/1	0.72	0.40	89,89,89,89	0
57	MG	14	3139	1/1	0.72	0.14	93,93,93,93	0
57	MG	14	3291	1/1	0.72	0.11	126,126,126,126	0
57	MG	1H	3242	1/1	0.72	0.54	79,79,79,79	0
57	MG	1H	3219	1/1	0.72	0.30	77,77,77,77	0
57	MG	1H	3404	1/1	0.72	0.06	110,110,110,110	0
57	MG	16	208	1/1	0.73	0.09	102,102,102,102	0
57	MG	1H	3181	1/1	0.73	0.25	75,75,75,75	0
57	MG	1H	3228	1/1	0.74	0.40	83,83,83,83	0
57	MG	14	3180	1/1	0.74	0.39	112,112,112,112	0
57	MG	13	1645	1/1	0.75	0.23	89,89,89,89	0
57	MG	1H	3186	1/1	0.75	0.35	72,72,72,72	0
57	MG	1H	3247	1/1	0.76	0.18	97,97,97,97	0
57	MG	1H	3170	1/1	0.76	0.49	88,88,88,88	0
57	MG	1H	3140	1/1	0.76	0.33	74,74,74,74	0
57	MG	14	3156	1/1	0.76	0.43	107,107,107,107	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	14	3304	1/1	0.76	0.12	103,103,103,103	0
57	MG	1H	3098	1/1	0.76	0.27	83,83,83,83	0
57	MG	1H	3152	1/1	0.76	0.38	92,92,92,92	0
57	MG	1H	3224	1/1	0.76	0.52	66,66,66,66	0
57	MG	13	1612	1/1	0.77	0.24	84,84,84,84	0
57	MG	14	3098	1/1	0.77	0.36	78,78,78,78	0
57	MG	14	3307	1/1	0.77	0.15	91,91,91,91	0
57	MG	13	1634	1/1	0.77	0.19	110,110,110,110	0
57	MG	29	302	1/1	0.77	0.17	68,68,68,68	0
57	MG	1H	3277	1/1	0.77	0.46	89,89,89,89	0
57	MG	1H	3248	1/1	0.77	0.34	76,76,76,76	0
57	MG	1H	3230	1/1	0.78	0.73	97,97,97,97	0
57	MG	1H	3198	1/1	0.78	0.62	77,77,77,77	0
57	MG	1G	1621	1/1	0.78	0.76	92,92,92,92	0
57	MG	1H	3177	1/1	0.78	0.24	57,57,57,57	0
57	MG	1H	3204	1/1	0.78	0.94	77,77,77,77	0
57	MG	1H	3018	1/1	0.78	0.12	80,80,80,80	0
57	MG	14	3194	1/1	0.78	0.28	79,79,79,79	0
57	MG	1H	3073	1/1	0.78	0.36	55,55,55,55	0
57	MG	1H	3024	1/1	0.78	0.23	72,72,72,72	0
57	MG	1H	3163	1/1	0.78	0.28	65,65,65,65	0
57	MG	1H	3261	1/1	0.79	0.68	80,80,80,80	0
57	MG	14	3160	1/1	0.79	0.22	83,83,83,83	0
57	MG	1H	3064	1/1	0.79	0.26	52,52,52,52	0
57	MG	1H	3078	1/1	0.79	0.15	73,73,73,73	0
57	MG	1G	1661	1/1	0.79	0.16	109,109,109,109	0
57	MG	1H	3271	1/1	0.79	0.59	90,90,90,90	0
57	MG	68	201	1/1	0.79	0.37	80,80,80,80	0
57	MG	2K	102	1/1	0.79	0.11	111,111,111,111	0
57	MG	14	3310	1/1	0.79	0.10	102,102,102,102	0
57	MG	1H	3164	1/1	0.79	0.31	66,66,66,66	0
57	MG	14	3189	1/1	0.79	0.28	69,69,69,69	0
57	MG	1H	3244	1/1	0.79	0.53	88,88,88,88	0
57	MG	1H	3423	1/1	0.79	0.09	65,65,65,65	0
57	MG	14	3022	1/1	0.80	0.08	89,89,89,89	0
57	MG	14	3302	1/1	0.80	0.10	106,106,106,106	0
57	MG	14	3111	1/1	0.80	0.34	89,89,89,89	0
57	MG	14	3201	1/1	0.80	0.61	78,78,78,78	0
57	MG	14	3174	1/1	0.80	0.86	87,87,87,87	0
57	MG	14	3122	1/1	0.80	0.18	76,76,76,76	0
57	MG	1H	3172	1/1	0.80	0.39	73,73,73,73	0
57	MG	14	3135	1/1	0.80	0.37	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	13	1642	1/1	0.80	0.47	80,80,80,80	0
57	MG	1H	3269	1/1	0.81	0.69	74,74,74,74	0
57	MG	14	3195	1/1	0.81	0.52	88,88,88,88	0
57	MG	1H	3136	1/1	0.81	0.22	55,55,55,55	0
57	MG	14	3020	1/1	0.81	0.60	76,76,76,76	0
57	MG	1H	3251	1/1	0.81	0.58	84,84,84,84	0
57	MG	14	3060	1/1	0.81	0.55	83,83,83,83	0
57	MG	68	202	1/1	0.81	0.45	91,91,91,91	0
57	MG	14	3083	1/1	0.81	0.41	57,57,57,57	0
57	MG	1H	3274	1/1	0.81	0.88	86,86,86,86	0
57	MG	14	3271	1/1	0.81	0.13	92,92,92,92	0
57	MG	1H	3236	1/1	0.81	0.37	80,80,80,80	0
57	MG	1H	3191	1/1	0.81	0.62	102,102,102,102	0
57	MG	1H	3257	1/1	0.81	0.59	90,90,90,90	0
57	MG	1H	3059	1/1	0.81	0.28	75,75,75,75	0
57	MG	1H	3427	1/1	0.81	0.07	122,122,122,122	0
57	MG	1H	3111	1/1	0.81	0.39	71,71,71,71	0
57	MG	1H	3443	1/1	0.81	0.08	100,100,100,100	0
57	MG	13	1663	1/1	0.81	0.76	77,77,77,77	0
57	MG	14	3112	1/1	0.81	0.38	78,78,78,78	0
58	ZN	G8	201	1/1	0.81	0.26	176,176,176,176	0
57	MG	14	3178	1/1	0.82	0.29	76,76,76,76	0
57	MG	1H	3143	1/1	0.82	0.37	64,64,64,64	0
57	MG	14	3143	1/1	0.82	0.16	92,92,92,92	0
57	MG	1H	3110	1/1	0.82	0.52	84,84,84,84	0
57	MG	13	1632	1/1	0.82	0.50	74,74,74,74	0
57	MG	1G	1652	1/1	0.82	0.31	82,82,82,82	0
57	MG	1H	3377	1/1	0.82	0.07	103,103,103,103	0
57	MG	14	3327	1/1	0.82	0.08	108,108,108,108	0
57	MG	1H	3095	1/1	0.82	0.36	74,74,74,74	0
57	MG	1J	202	1/1	0.82	0.36	74,74,74,74	0
57	MG	1G	1658	1/1	0.82	0.13	132,132,132,132	0
57	MG	1H	3130	1/1	0.82	0.41	81,81,81,81	0
57	MG	1H	3070	1/1	0.82	0.31	64,64,64,64	0
57	MG	1H	3109	1/1	0.82	0.27	76,76,76,76	0
57	MG	14	3116	1/1	0.83	0.35	60,60,60,60	0
57	MG	1H	3087	1/1	0.83	0.31	80,80,80,80	0
57	MG	1H	3182	1/1	0.83	0.25	78,78,78,78	0
57	MG	1H	3201	1/1	0.83	0.55	68,68,68,68	0
57	MG	13	1652	1/1	0.83	0.16	104,104,104,104	0
57	MG	1G	1614	1/1	0.83	0.49	72,72,72,72	0
57	MG	1G	1659	1/1	0.83	0.30	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	1G	1620	1/1	0.83	0.50	71,71,71,71	0
57	MG	13	1655	1/1	0.83	0.40	81,81,81,81	0
57	MG	1H	3119	1/1	0.83	0.67	62,62,62,62	0
57	MG	1H	3178	1/1	0.83	0.19	91,91,91,91	0
57	MG	1G	1644	1/1	0.83	0.37	90,90,90,90	0
57	MG	1H	3278	1/1	0.83	0.66	68,68,68,68	0
57	MG	14	3027	1/1	0.83	0.14	94,94,94,94	0
57	MG	13	1650	1/1	0.84	0.34	88,88,88,88	0
57	MG	1H	3218	1/1	0.84	0.56	91,91,91,91	0
57	MG	1G	1670	1/1	0.84	0.11	129,129,129,129	0
57	MG	1H	3392	1/1	0.84	0.16	96,96,96,96	0
57	MG	1H	3138	1/1	0.84	0.11	67,67,67,67	0
57	MG	1H	3107	1/1	0.84	0.29	81,81,81,81	0
57	MG	14	3318	1/1	0.84	0.14	84,84,84,84	0
57	MG	1G	1612	1/1	0.84	0.14	99,99,99,99	0
57	MG	1H	3099	1/1	0.84	0.09	88,88,88,88	0
57	MG	13	1627	1/1	0.84	0.52	84,84,84,84	0
57	MG	1G	1657	1/1	0.84	0.76	91,91,91,91	0
57	MG	1H	3229	1/1	0.84	0.12	72,72,72,72	0
57	MG	1G	1624	1/1	0.84	0.37	71,71,71,71	0
57	MG	14	3125	1/1	0.84	0.58	68,68,68,68	0
57	MG	1G	1636	1/1	0.85	0.24	96,96,96,96	0
57	MG	1G	1641	1/1	0.85	0.22	113,113,113,113	0
57	MG	14	3084	1/1	0.85	0.18	82,82,82,82	0
57	MG	1H	3253	1/1	0.85	0.41	67,67,67,67	0
57	MG	14	3089	1/1	0.85	0.20	56,56,56,56	0
57	MG	14	3093	1/1	0.85	0.20	62,62,62,62	0
57	MG	1G	1668	1/1	0.85	0.07	120,120,120,120	0
57	MG	1H	3126	1/1	0.85	0.30	67,67,67,67	0
57	MG	1H	3444	1/1	0.85	0.08	96,96,96,96	0
57	MG	1H	3168	1/1	0.85	0.43	100,100,100,100	0
57	MG	1H	3221	1/1	0.85	0.42	79,79,79,79	0
57	MG	14	3157	1/1	0.85	0.76	79,79,79,79	0
57	MG	13	1665	1/1	0.85	0.40	86,86,86,86	0
57	MG	11	303	1/1	0.85	0.64	48,48,48,48	0
57	MG	1H	3243	1/1	0.85	0.52	65,65,65,65	0
57	MG	14	3214	1/1	0.85	0.25	84,84,84,84	0
58	ZN	C5	201	1/1	0.85	0.22	187,187,187,187	0
57	MG	1H	3154	1/1	0.86	0.37	101,101,101,101	0
57	MG	14	3100	1/1	0.86	0.32	82,82,82,82	0
57	MG	13	1614	1/1	0.86	0.61	70,70,70,70	0
57	MG	1H	3075	1/1	0.86	0.46	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	1H	3202	1/1	0.86	0.36	84,84,84,84	0
57	MG	13	1630	1/1	0.86	0.27	83,83,83,83	0
57	MG	14	3169	1/1	0.86	0.32	59,59,59,59	0
57	MG	1H	3215	1/1	0.86	0.34	79,79,79,79	0
57	MG	14	3172	1/1	0.86	0.38	68,68,68,68	0
57	MG	1H	3216	1/1	0.86	0.38	75,75,75,75	0
57	MG	11	301	1/1	0.86	0.31	62,62,62,62	0
57	MG	1H	3116	1/1	0.86	0.18	80,80,80,80	0
57	MG	1H	3141	1/1	0.86	0.33	81,81,81,81	0
57	MG	1H	3042	1/1	0.86	0.27	77,77,77,77	0
57	MG	14	3185	1/1	0.86	0.70	71,71,71,71	0
57	MG	1G	1611	1/1	0.86	0.11	98,98,98,98	0
57	MG	1H	3092	1/1	0.86	0.30	67,67,67,67	0
57	MG	13	1670	1/1	0.86	0.12	101,101,101,101	0
57	MG	1H	3196	1/1	0.86	0.29	84,84,84,84	0
57	MG	1H	3197	1/1	0.86	0.36	53,53,53,53	0
57	MG	14	3206	1/1	0.86	0.29	78,78,78,78	0
57	MG	1H	3414	1/1	0.87	0.09	87,87,87,87	0
57	MG	1H	3142	1/1	0.87	0.36	55,55,55,55	0
57	MG	14	3171	1/1	0.87	0.56	71,71,71,71	0
57	MG	13	1696	1/1	0.87	0.05	101,101,101,101	0
57	MG	13	1618	1/1	0.87	0.39	63,63,63,63	0
57	MG	14	3288	1/1	0.87	0.09	108,108,108,108	0
57	MG	1H	3150	1/1	0.87	0.28	65,65,65,65	0
57	MG	14	3294	1/1	0.87	0.09	107,107,107,107	0
57	MG	14	3299	1/1	0.87	0.05	114,114,114,114	0
57	MG	1H	3151	1/1	0.87	0.39	75,75,75,75	0
57	MG	1H	3088	1/1	0.87	0.25	65,65,65,65	0
57	MG	1H	3227	1/1	0.87	0.67	66,66,66,66	0
57	MG	1H	3115	1/1	0.87	0.20	63,63,63,63	0
57	MG	1H	3157	1/1	0.87	0.13	89,89,89,89	0
57	MG	1H	3106	1/1	0.87	0.40	69,69,69,69	0
57	MG	1H	3091	1/1	0.87	0.21	71,71,71,71	0
57	MG	14	3199	1/1	0.87	0.54	95,95,95,95	0
57	MG	1H	3400	1/1	0.87	0.08	85,85,85,85	0
57	MG	14	3161	1/1	0.87	0.47	88,88,88,88	0
57	MG	14	3031	1/1	0.87	0.42	73,73,73,73	0
57	MG	14	3109	1/1	0.87	0.31	84,84,84,84	0
57	MG	1H	3121	1/1	0.87	0.55	73,73,73,73	0
57	MG	L8	101	1/1	0.88	0.35	70,70,70,70	0
57	MG	1H	3180	1/1	0.88	0.16	80,80,80,80	0
57	MG	13	1646	1/1	0.88	0.18	102,102,102,102	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3217	1/1	0.88	0.11	83,83,83,83	0
57	MG	1H	3060	1/1	0.88	0.29	63,63,63,63	0
57	MG	14	3264	1/1	0.88	0.19	57,57,57,57	0
57	MG	1G	1615	1/1	0.88	0.49	90,90,90,90	0
57	MG	1H	3082	1/1	0.88	0.29	60,60,60,60	0
57	MG	1H	3331	1/1	0.88	0.08	74,74,74,74	0
57	MG	1G	1623	1/1	0.88	0.53	66,66,66,66	0
57	MG	1H	3175	1/1	0.88	0.48	64,64,64,64	0
57	MG	14	3095	1/1	0.88	0.42	83,83,83,83	0
57	MG	1G	1664	1/1	0.88	0.65	87,87,87,87	0
57	MG	14	3191	1/1	0.88	0.22	72,72,72,72	0
57	MG	14	3153	1/1	0.88	0.49	87,87,87,87	0
57	MG	1H	3390	1/1	0.88	0.08	99,99,99,99	0
57	MG	1G	1634	1/1	0.88	0.21	93,93,93,93	0
57	MG	1H	3263	1/1	0.88	0.70	75,75,75,75	0
57	MG	1H	3233	1/1	0.88	0.80	86,86,86,86	0
57	MG	14	3203	1/1	0.88	0.42	83,83,83,83	0
57	MG	1H	3160	1/1	0.88	0.39	67,67,67,67	0
57	MG	14	3210	1/1	0.88	0.20	78,78,78,78	0
57	MG	1H	3114	1/1	0.88	0.40	77,77,77,77	0
57	MG	1H	3418	1/1	0.88	0.06	82,82,82,82	0
57	MG	14	3198	1/1	0.89	0.66	86,86,86,86	0
57	MG	1H	3184	1/1	0.89	0.34	86,86,86,86	0
57	MG	13	1677	1/1	0.89	0.14	98,98,98,98	0
57	MG	1H	3256	1/1	0.89	0.52	72,72,72,72	0
57	MG	1H	3226	1/1	0.89	0.42	70,70,70,70	0
57	MG	1H	3025	1/1	0.89	0.18	66,66,66,66	0
57	MG	14	3041	1/1	0.89	0.24	60,60,60,60	0
57	MG	1H	3076	1/1	0.89	0.28	77,77,77,77	0
57	MG	13	1687	1/1	0.89	0.08	103,103,103,103	0
57	MG	14	3074	1/1	0.89	0.27	82,82,82,82	0
57	MG	13	1628	1/1	0.89	0.19	90,90,90,90	0
57	MG	13	1633	1/1	0.89	0.39	90,90,90,90	0
57	MG	1G	1642	1/1	0.89	0.26	93,93,93,93	0
57	MG	16	203	1/1	0.89	0.10	98,98,98,98	0
57	MG	14	3219	1/1	0.89	0.56	81,81,81,81	0
57	MG	14	3228	1/1	0.89	0.08	69,69,69,69	0
57	MG	14	3229	1/1	0.89	0.09	82,82,82,82	0
57	MG	14	3244	1/1	0.89	0.10	93,93,93,93	0
57	MG	14	3260	1/1	0.89	0.09	86,86,86,86	0
57	MG	14	3090	1/1	0.89	0.20	77,77,77,77	0
57	MG	14	3092	1/1	0.89	0.77	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3283	1/1	0.89	0.14	74,74,74,74	0
57	MG	16	204	1/1	0.89	0.10	78,78,78,78	0
57	MG	3E	301	1/1	0.89	0.13	127,127,127,127	0
57	MG	14	3292	1/1	0.89	0.08	91,91,91,91	0
57	MG	1H	3146	1/1	0.89	0.51	80,80,80,80	0
57	MG	14	3096	1/1	0.89	0.35	70,70,70,70	0
57	MG	1H	3090	1/1	0.89	0.33	47,47,47,47	0
57	MG	16	211	1/1	0.89	0.07	99,99,99,99	0
57	MG	1H	3062	1/1	0.89	0.61	78,78,78,78	0
57	MG	13	1615	1/1	0.89	0.34	85,85,85,85	0
57	MG	1H	3068	1/1	0.89	0.10	63,63,63,63	0
57	MG	14	3325	1/1	0.89	0.10	104,104,104,104	0
57	MG	1H	3179	1/1	0.89	0.41	81,81,81,81	0
57	MG	14	3182	1/1	0.89	0.24	84,84,84,84	0
57	MG	1H	3354	1/1	0.89	0.20	66,66,66,66	0
57	MG	1H	3069	1/1	0.89	0.15	69,69,69,69	0
57	MG	1H	3382	1/1	0.89	0.07	74,74,74,74	0
57	MG	1H	3012	1/1	0.89	0.39	69,69,69,69	0
57	MG	13	1672	1/1	0.89	0.88	84,84,84,84	0
57	MG	14	3196	1/1	0.89	0.37	86,86,86,86	0
57	MG	13	1640	1/1	0.90	0.08	141,141,141,141	0
57	MG	13	1619	1/1	0.90	0.28	72,72,72,72	0
57	MG	1H	3123	1/1	0.90	0.28	58,58,58,58	0
57	MG	13	1673	1/1	0.90	0.32	87,87,87,87	0
57	MG	1G	1622	1/1	0.90	0.41	80,80,80,80	0
57	MG	1H	3166	1/1	0.90	0.41	75,75,75,75	0
57	MG	1H	3254	1/1	0.90	0.44	94,94,94,94	0
57	MG	14	3234	1/1	0.90	0.12	86,86,86,86	0
57	MG	1G	1626	1/1	0.90	0.28	81,81,81,81	0
57	MG	14	3257	1/1	0.90	0.12	89,89,89,89	0
57	MG	1H	3316	1/1	0.90	0.08	75,75,75,75	0
57	MG	14	3263	1/1	0.90	0.06	99,99,99,99	0
57	MG	1H	3320	1/1	0.90	0.14	76,76,76,76	0
57	MG	13	1643	1/1	0.90	0.23	91,91,91,91	0
57	MG	14	3278	1/1	0.90	0.04	109,109,109,109	0
57	MG	13	1657	1/1	0.90	0.24	129,129,129,129	0
57	MG	14	3036	1/1	0.90	0.38	64,64,64,64	0
57	MG	14	3117	1/1	0.90	0.37	80,80,80,80	0
57	MG	1H	3371	1/1	0.90	0.13	66,66,66,66	0
57	MG	14	3047	1/1	0.90	0.43	56,56,56,56	0
57	MG	14	3296	1/1	0.90	0.12	110,110,110,110	0
57	MG	1H	3183	1/1	0.90	0.60	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3132	1/1	0.90	0.29	81,81,81,81	0
57	MG	1H	3135	1/1	0.90	0.28	74,74,74,74	0
57	MG	14	3197	1/1	0.90	0.32	78,78,78,78	0
57	MG	11	302	1/1	0.90	0.35	48,48,48,48	0
57	MG	13	1616	1/1	0.90	0.38	93,93,93,93	0
57	MG	13	1638	1/1	0.90	0.56	84,84,84,84	0
57	MG	14	3148	1/1	0.90	0.31	93,93,93,93	0
57	MG	1G	1653	1/1	0.90	0.26	91,91,91,91	0
57	MG	1G	1654	1/1	0.90	0.38	92,92,92,92	0
57	MG	14	3207	1/1	0.90	0.33	70,70,70,70	0
57	MG	1H	3396	1/1	0.90	0.07	80,80,80,80	0
57	MG	1H	3173	1/1	0.90	0.57	99,99,99,99	0
57	MG	1H	3267	1/1	0.90	0.34	106,106,106,106	0
57	MG	13	1699	1/1	0.90	0.07	119,119,119,119	0
57	MG	13	1698	1/1	0.91	0.11	105,105,105,105	0
57	MG	1H	3085	1/1	0.91	0.15	58,58,58,58	0
57	MG	1H	3279	1/1	0.91	0.27	78,78,78,78	0
57	MG	14	3137	1/1	0.91	0.12	76,76,76,76	0
57	MG	1H	3147	1/1	0.91	0.16	74,74,74,74	0
57	MG	14	3141	1/1	0.91	0.29	67,67,67,67	0
57	MG	14	3277	1/1	0.91	0.07	98,98,98,98	0
57	MG	13	1647	1/1	0.91	0.31	81,81,81,81	0
57	MG	1H	3235	1/1	0.91	0.52	69,69,69,69	0
57	MG	1G	1665	1/1	0.91	0.07	117,117,117,117	0
57	MG	14	3150	1/1	0.91	0.23	79,79,79,79	0
57	MG	13	1689	1/1	0.91	0.10	115,115,115,115	0
57	MG	1H	3346	1/1	0.91	0.09	58,58,58,58	0
57	MG	1H	3348	1/1	0.91	0.12	90,90,90,90	0
57	MG	1H	3239	1/1	0.91	0.52	71,71,71,71	0
57	MG	1H	3089	1/1	0.91	0.29	74,74,74,74	0
57	MG	1H	3223	1/1	0.91	0.31	63,63,63,63	0
57	MG	1H	3101	1/1	0.91	0.41	70,70,70,70	0
57	MG	1H	3385	1/1	0.91	0.08	112,112,112,112	0
57	MG	14	3312	1/1	0.91	0.09	115,115,115,115	0
57	MG	1H	3386	1/1	0.91	0.06	96,96,96,96	0
57	MG	1H	3037	1/1	0.91	0.37	55,55,55,55	0
57	MG	14	3044	1/1	0.91	0.29	82,82,82,82	0
57	MG	13	1656	1/1	0.91	0.18	96,96,96,96	0
57	MG	13	1649	1/1	0.91	0.07	97,97,97,97	0
57	MG	1H	3250	1/1	0.91	0.29	71,71,71,71	0
57	MG	14	3175	1/1	0.91	0.31	75,75,75,75	0
57	MG	14	3119	1/1	0.91	0.24	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3203	1/1	0.91	0.28	62,62,62,62	0
57	MG	1H	3275	1/1	0.91	0.21	63,63,63,63	0
57	MG	1H	3315	1/1	0.92	0.21	81,81,81,81	0
57	MG	16	206	1/1	0.92	0.32	83,83,83,83	0
57	MG	13	1674	1/1	0.92	0.13	83,83,83,83	0
57	MG	1H	3171	1/1	0.92	0.47	84,84,84,84	0
57	MG	1G	1660	1/1	0.92	0.23	124,124,124,124	0
57	MG	1H	3194	1/1	0.92	0.13	83,83,83,83	0
57	MG	1H	3195	1/1	0.92	0.89	70,70,70,70	0
57	MG	1H	3124	1/1	0.92	0.12	61,61,61,61	0
57	MG	1H	3083	1/1	0.92	0.31	61,61,61,61	0
57	MG	41	201	1/1	0.92	0.09	82,82,82,82	0
57	MG	1H	3021	1/1	0.92	0.36	62,62,62,62	0
57	MG	1H	3023	1/1	0.92	0.18	68,68,68,68	0
57	MG	I8	101	1/1	0.92	0.08	91,91,91,91	0
57	MG	1H	3379	1/1	0.92	0.12	83,83,83,83	0
57	MG	1G	1605	1/1	0.92	0.10	104,104,104,104	0
57	MG	14	3025	1/1	0.92	0.23	95,95,95,95	0
57	MG	1G	1608	1/1	0.92	0.31	88,88,88,88	0
57	MG	13	1623	1/1	0.92	0.21	77,77,77,77	0
57	MG	14	3243	1/1	0.92	0.11	74,74,74,74	0
57	MG	1H	3158	1/1	0.92	0.35	59,59,59,59	0
57	MG	13	1683	1/1	0.92	0.11	96,96,96,96	0
57	MG	14	3043	1/1	0.92	0.29	71,71,71,71	0
57	MG	1H	3388	1/1	0.92	0.09	75,75,75,75	0
57	MG	1H	3268	1/1	0.92	0.17	96,96,96,96	0
57	MG	14	3048	1/1	0.92	0.27	59,59,59,59	0
57	MG	1H	3391	1/1	0.92	0.07	91,91,91,91	0
57	MG	1H	3034	1/1	0.92	0.18	62,62,62,62	0
57	MG	1H	3205	1/1	0.92	0.64	73,73,73,73	0
57	MG	1H	3398	1/1	0.92	0.07	98,98,98,98	0
57	MG	13	1660	1/1	0.92	0.28	61,61,61,61	0
57	MG	1H	3402	1/1	0.92	0.10	88,88,88,88	0
57	MG	13	1624	1/1	0.92	0.17	84,84,84,84	0
57	MG	1H	3043	1/1	0.92	0.14	75,75,75,75	0
57	MG	1H	3416	1/1	0.92	0.09	81,81,81,81	0
57	MG	1H	3276	1/1	0.92	0.37	67,67,67,67	0
57	MG	13	1639	1/1	0.92	0.61	83,83,83,83	0
57	MG	1H	3220	1/1	0.92	0.40	62,62,62,62	0
57	MG	1G	1645	1/1	0.92	0.20	107,107,107,107	0
57	MG	14	3097	1/1	0.92	0.10	62,62,62,62	0
57	MG	14	3315	1/1	0.92	0.10	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	14	3184	1/1	0.92	0.65	75,75,75,75	0
57	MG	1G	1646	1/1	0.92	0.16	117,117,117,117	0
57	MG	14	3186	1/1	0.92	0.35	75,75,75,75	0
57	MG	1H	3077	1/1	0.92	0.51	65,65,65,65	0
57	MG	1H	3287	1/1	0.92	0.10	71,71,71,71	0
57	MG	1H	3300	1/1	0.92	0.08	68,68,68,68	0
57	MG	35	201	1/1	0.92	0.14	77,77,77,77	0
57	MG	16	201	1/1	0.92	0.17	90,90,90,90	0
57	MG	14	3105	1/1	0.92	0.23	89,89,89,89	0
57	MG	1H	3308	1/1	0.92	0.05	91,91,91,91	0
57	MG	1H	3017	1/1	0.92	0.20	81,81,81,81	0
57	MG	1H	3011	1/1	0.93	0.55	63,63,63,63	0
57	MG	1H	3245	1/1	0.93	0.49	96,96,96,96	0
57	MG	1G	1606	1/1	0.93	0.22	92,92,92,92	0
57	MG	14	3114	1/1	0.93	0.46	88,88,88,88	0
57	MG	1H	3397	1/1	0.93	0.15	76,76,76,76	0
57	MG	1G	1610	1/1	0.93	0.20	111,111,111,111	0
57	MG	1H	3222	1/1	0.93	0.63	81,81,81,81	0
57	MG	1H	3122	1/1	0.93	0.39	81,81,81,81	0
57	MG	14	3013	1/1	0.93	0.37	55,55,55,55	0
57	MG	1G	1613	1/1	0.93	0.17	89,89,89,89	0
57	MG	14	3127	1/1	0.93	0.22	77,77,77,77	0
57	MG	1H	3249	1/1	0.93	0.24	79,79,79,79	0
57	MG	13	1621	1/1	0.93	0.22	88,88,88,88	0
57	MG	14	3215	1/1	0.93	0.28	97,97,97,97	0
57	MG	1G	1616	1/1	0.93	0.20	105,105,105,105	0
57	MG	1H	3289	1/1	0.93	0.10	48,48,48,48	0
57	MG	14	3140	1/1	0.93	0.20	54,54,54,54	0
57	MG	14	3032	1/1	0.93	0.38	98,98,98,98	0
57	MG	14	3220	1/1	0.93	0.26	84,84,84,84	0
57	MG	14	3223	1/1	0.93	0.13	79,79,79,79	0
57	MG	1H	3145	1/1	0.93	0.66	66,66,66,66	0
57	MG	14	3039	1/1	0.93	0.59	75,75,75,75	0
57	MG	13	1635	1/1	0.93	0.20	92,92,92,92	0
57	MG	13	1610	1/1	0.93	0.24	72,72,72,72	0
57	MG	13	1666	1/1	0.93	0.23	116,116,116,116	0
57	MG	14	3246	1/1	0.93	0.09	96,96,96,96	0
57	MG	14	3250	1/1	0.93	0.12	56,56,56,56	0
57	MG	14	3254	1/1	0.93	0.17	69,69,69,69	0
57	MG	14	3046	1/1	0.93	0.44	61,61,61,61	0
57	MG	1H	3097	1/1	0.93	0.41	93,93,93,93	0
57	MG	1H	3434	1/1	0.93	0.14	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	1G	1633	1/1	0.93	0.09	141,141,141,141	0
57	MG	14	3061	1/1	0.93	0.56	67,67,67,67	0
57	MG	14	3162	1/1	0.93	0.19	102,102,102,102	0
57	MG	14	3063	1/1	0.93	0.25	80,80,80,80	0
57	MG	1H	3439	1/1	0.93	0.15	65,65,65,65	0
57	MG	1H	3441	1/1	0.93	0.13	70,70,70,70	0
57	MG	1H	3318	1/1	0.93	0.12	55,55,55,55	0
57	MG	1G	1639	1/1	0.93	0.15	90,90,90,90	0
57	MG	14	3293	1/1	0.93	0.08	84,84,84,84	0
57	MG	1H	3131	1/1	0.93	0.31	67,67,67,67	0
57	MG	1H	3324	1/1	0.93	0.05	76,76,76,76	0
57	MG	1H	3326	1/1	0.93	0.11	105,105,105,105	0
57	MG	1H	3231	1/1	0.93	0.44	79,79,79,79	0
57	MG	1H	3258	1/1	0.93	0.41	86,86,86,86	0
57	MG	14	3306	1/1	0.93	0.07	82,82,82,82	0
57	MG	1H	3207	1/1	0.93	0.37	80,80,80,80	0
57	MG	14	3308	1/1	0.93	0.07	106,106,106,106	0
57	MG	1H	3210	1/1	0.93	0.15	70,70,70,70	0
57	MG	1H	3071	1/1	0.93	0.27	66,66,66,66	0
57	MG	14	3181	1/1	0.93	0.44	85,85,85,85	0
57	MG	1H	3022	1/1	0.93	0.23	64,64,64,64	0
57	MG	14	3323	1/1	0.93	0.11	73,73,73,73	0
57	MG	14	3183	1/1	0.93	0.40	77,77,77,77	0
57	MG	14	3326	1/1	0.93	0.09	104,104,104,104	0
57	MG	1H	3265	1/1	0.93	0.20	83,83,83,83	0
57	MG	1H	3237	1/1	0.93	0.51	64,64,64,64	0
57	MG	1H	3217	1/1	0.93	0.36	97,97,97,97	0
57	MG	1J	203	1/1	0.93	0.36	90,90,90,90	0
57	MG	1H	3156	1/1	0.93	0.31	81,81,81,81	0
57	MG	14	3190	1/1	0.93	0.46	72,72,72,72	0
57	MG	1H	3241	1/1	0.93	0.37	73,73,73,73	0
57	MG	4E	201	1/1	0.93	0.46	88,88,88,88	0
57	MG	78	201	1/1	0.93	0.26	60,60,60,60	0
57	MG	13	1611	1/1	0.93	0.18	107,107,107,107	0
57	MG	1H	3120	1/1	0.94	0.42	56,56,56,56	0
57	MG	14	3205	1/1	0.94	0.62	80,80,80,80	0
57	MG	13	1617	1/1	0.94	0.62	70,70,70,70	0
57	MG	14	3113	1/1	0.94	0.22	76,76,76,76	0
57	MG	1H	3280	1/1	0.94	0.44	72,72,72,72	0
57	MG	98	201	1/1	0.94	0.44	70,70,70,70	0
57	MG	1H	3282	1/1	0.94	0.09	65,65,65,65	0
57	MG	J8	102	1/1	0.94	0.19	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3086	1/1	0.94	0.46	48,48,48,48	0
57	MG	P8	101	1/1	0.94	0.41	65,65,65,65	0
57	MG	13	1685	1/1	0.94	0.13	93,93,93,93	0
57	MG	1H	3050	1/1	0.94	0.19	68,68,68,68	0
57	MG	14	3128	1/1	0.94	0.16	98,98,98,98	0
57	MG	1G	1607	1/1	0.94	0.12	98,98,98,98	0
57	MG	14	3134	1/1	0.94	0.14	72,72,72,72	0
57	MG	1H	3125	1/1	0.94	0.46	77,77,77,77	0
57	MG	14	3227	1/1	0.94	0.13	64,64,64,64	0
57	MG	14	3021	1/1	0.94	0.40	65,65,65,65	0
57	MG	1H	3403	1/1	0.94	0.11	76,76,76,76	0
57	MG	14	3230	1/1	0.94	0.10	65,65,65,65	0
57	MG	14	3023	1/1	0.94	0.33	50,50,50,50	0
57	MG	14	3238	1/1	0.94	0.13	76,76,76,76	0
57	MG	14	3239	1/1	0.94	0.09	92,92,92,92	0
57	MG	1H	3103	1/1	0.94	0.23	80,80,80,80	0
57	MG	14	3026	1/1	0.94	0.07	83,83,83,83	0
57	MG	14	3245	1/1	0.94	0.04	99,99,99,99	0
57	MG	1H	3406	1/1	0.94	0.12	106,106,106,106	0
57	MG	1H	3408	1/1	0.94	0.07	67,67,67,67	0
57	MG	1H	3411	1/1	0.94	0.09	133,133,133,133	0
57	MG	1H	3234	1/1	0.94	0.56	86,86,86,86	0
57	MG	1H	3415	1/1	0.94	0.09	105,105,105,105	0
57	MG	1H	3104	1/1	0.94	0.30	69,69,69,69	0
57	MG	1H	3417	1/1	0.94	0.07	73,73,73,73	0
57	MG	14	3268	1/1	0.94	0.11	84,84,84,84	0
57	MG	1H	3317	1/1	0.94	0.12	76,76,76,76	0
57	MG	1H	3419	1/1	0.94	0.10	83,83,83,83	0
57	MG	13	1608	1/1	0.94	0.15	88,88,88,88	0
57	MG	14	3281	1/1	0.94	0.09	95,95,95,95	0
57	MG	1G	1625	1/1	0.94	0.42	81,81,81,81	0
57	MG	14	3058	1/1	0.94	0.32	77,77,77,77	0
57	MG	14	3290	1/1	0.94	0.03	114,114,114,114	0
57	MG	1H	3159	1/1	0.94	0.46	67,67,67,67	0
57	MG	1G	1628	1/1	0.94	0.17	108,108,108,108	0
57	MG	13	1668	1/1	0.94	0.17	119,119,119,119	0
57	MG	1H	3108	1/1	0.94	0.99	73,73,73,73	0
57	MG	1H	3328	1/1	0.94	0.05	91,91,91,91	0
57	MG	14	3075	1/1	0.94	0.26	103,103,103,103	0
57	MG	13	1669	1/1	0.94	0.40	79,79,79,79	0
57	MG	14	3303	1/1	0.94	0.06	85,85,85,85	0
57	MG	1H	3336	1/1	0.94	0.10	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
57	MG	1G	1637	1/1	0.94	0.47	85,85,85,85	0
57	MG	14	3088	1/1	0.94	0.30	76,76,76,76	0
57	MG	1H	3337	1/1	0.94	0.10	65,65,65,65	0
57	MG	13	1676	1/1	0.94	0.11	110,110,110,110	0
57	MG	14	3311	1/1	0.94	0.11	78,78,78,78	0
57	MG	1H	3189	1/1	0.94	0.26	70,70,70,70	0
57	MG	14	3313	1/1	0.94	0.06	101,101,101,101	0
57	MG	1H	3094	1/1	0.94	0.36	60,60,60,60	0
57	MG	1H	3357	1/1	0.94	0.05	77,77,77,77	0
57	MG	1H	3016	1/1	0.94	0.24	71,71,71,71	0
57	MG	1G	1647	1/1	0.94	0.56	101,101,101,101	0
57	MG	1H	3272	1/1	0.94	0.35	71,71,71,71	0
57	MG	1G	1650	1/1	0.94	0.31	86,86,86,86	0
57	MG	1H	3273	1/1	0.94	0.61	85,85,85,85	0
57	MG	16	210	1/1	0.94	0.05	88,88,88,88	0
57	MG	1H	3035	1/1	0.94	0.18	64,64,64,64	0
57	MG	29	301	1/1	0.94	0.34	67,67,67,67	0
57	MG	1H	3384	1/1	0.94	0.08	68,68,68,68	0
57	MG	14	3104	1/1	0.94	0.48	68,68,68,68	0
57	MG	13	1637	1/1	0.94	0.17	105,105,105,105	0
57	MG	1H	3117	1/1	0.94	0.23	74,74,74,74	0
57	MG	1H	3084	1/1	0.94	0.15	53,53,53,53	0
57	MG	41	202	1/1	0.94	0.18	93,93,93,93	0
57	MG	1G	1603	1/1	0.95	0.34	77,77,77,77	0
57	MG	13	1686	1/1	0.95	0.13	89,89,89,89	0
57	MG	1H	3187	1/1	0.95	0.88	81,81,81,81	0
57	MG	1H	3093	1/1	0.95	0.25	69,69,69,69	0
57	MG	14	3209	1/1	0.95	0.26	84,84,84,84	0
57	MG	1H	3080	1/1	0.95	0.25	81,81,81,81	0
57	MG	14	3012	1/1	0.95	0.59	60,60,60,60	0
57	MG	1H	3067	1/1	0.95	0.33	70,70,70,70	0
57	MG	14	3115	1/1	0.95	0.39	71,71,71,71	0
57	MG	14	3017	1/1	0.95	0.15	75,75,75,75	0
57	MG	1H	3407	1/1	0.95	0.09	77,77,77,77	0
57	MG	13	1607	1/1	0.95	0.22	88,88,88,88	0
57	MG	1H	3322	1/1	0.95	0.12	74,74,74,74	0
57	MG	1H	3193	1/1	0.95	0.35	65,65,65,65	0
57	MG	1H	3019	1/1	0.95	0.30	72,72,72,72	0
57	MG	14	3126	1/1	0.95	0.37	66,66,66,66	0
57	MG	13	1678	1/1	0.95	0.05	106,106,106,106	0
57	MG	1H	3133	1/1	0.95	0.20	54,54,54,54	0
57	MG	1H	3335	1/1	0.95	0.17	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3134	1/1	0.95	0.47	62,62,62,62	0
57	MG	14	3033	1/1	0.95	0.20	74,74,74,74	0
57	MG	14	3231	1/1	0.95	0.18	66,66,66,66	0
57	MG	14	3034	1/1	0.95	0.18	82,82,82,82	0
57	MG	14	3235	1/1	0.95	0.18	66,66,66,66	0
57	MG	14	3237	1/1	0.95	0.10	69,69,69,69	0
57	MG	14	3035	1/1	0.95	0.38	59,59,59,59	0
57	MG	1H	3420	1/1	0.95	0.12	60,60,60,60	0
57	MG	13	1692	1/1	0.95	0.06	100,100,100,100	0
57	MG	1H	3342	1/1	0.95	0.17	63,63,63,63	0
57	MG	1H	3343	1/1	0.95	0.09	57,57,57,57	0
57	MG	14	3144	1/1	0.95	0.42	72,72,72,72	0
57	MG	14	3145	1/1	0.95	0.59	64,64,64,64	0
57	MG	1H	3344	1/1	0.95	0.12	57,57,57,57	0
57	MG	14	3045	1/1	0.95	0.30	66,66,66,66	0
57	MG	14	3258	1/1	0.95	0.15	80,80,80,80	0
57	MG	1G	1630	1/1	0.95	0.17	102,102,102,102	0
57	MG	13	1680	1/1	0.95	0.09	91,91,91,91	0
57	MG	14	3154	1/1	0.95	0.43	59,59,59,59	0
57	MG	1H	3440	1/1	0.95	0.15	64,64,64,64	0
57	MG	14	3053	1/1	0.95	0.39	64,64,64,64	0
57	MG	14	3273	1/1	0.95	0.10	69,69,69,69	0
57	MG	14	3158	1/1	0.95	0.10	94,94,94,94	0
57	MG	1H	3054	1/1	0.95	0.50	41,41,41,41	0
57	MG	14	3279	1/1	0.95	0.10	69,69,69,69	0
57	MG	1H	3139	1/1	0.95	0.55	62,62,62,62	0
57	MG	14	3282	1/1	0.95	0.05	92,92,92,92	0
57	MG	1H	3356	1/1	0.95	0.07	81,81,81,81	0
57	MG	14	3287	1/1	0.95	0.14	101,101,101,101	0
57	MG	14	3163	1/1	0.95	0.49	72,72,72,72	0
57	MG	13	1613	1/1	0.95	0.48	74,74,74,74	0
57	MG	14	3065	1/1	0.95	0.33	58,58,58,58	0
57	MG	1H	3361	1/1	0.95	0.05	95,95,95,95	0
57	MG	1H	3367	1/1	0.95	0.12	90,90,90,90	0
57	MG	1H	3368	1/1	0.95	0.08	65,65,65,65	0
57	MG	14	3076	1/1	0.95	0.20	80,80,80,80	0
57	MG	14	3080	1/1	0.95	0.41	89,89,89,89	0
57	MG	14	3082	1/1	0.95	0.23	63,63,63,63	0
57	MG	1H	3015	1/1	0.95	0.23	52,52,52,52	0
57	MG	1H	3372	1/1	0.95	0.10	62,62,62,62	0
57	MG	14	3085	1/1	0.95	0.23	64,64,64,64	0
57	MG	1H	3374	1/1	0.95	0.07	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3281	1/1	0.95	0.11	55,55,55,55	0
57	MG	13	1609	1/1	0.95	0.17	82,82,82,82	0
57	MG	1H	3380	1/1	0.95	0.07	57,57,57,57	0
57	MG	14	3091	1/1	0.95	0.54	69,69,69,69	0
57	MG	1H	3284	1/1	0.95	0.12	51,51,51,51	0
57	MG	1H	3206	1/1	0.95	0.65	73,73,73,73	0
57	MG	1H	3105	1/1	0.95	0.13	81,81,81,81	0
57	MG	14	3187	1/1	0.95	0.35	81,81,81,81	0
57	MG	1H	3294	1/1	0.95	0.07	65,65,65,65	0
57	MG	1H	3296	1/1	0.95	0.13	51,51,51,51	0
57	MG	1H	3185	1/1	0.95	0.08	121,121,121,121	0
57	MG	14	3192	1/1	0.95	0.37	74,74,74,74	0
57	MG	14	3193	1/1	0.95	0.85	78,78,78,78	0
57	MG	1H	3307	1/1	0.95	0.05	114,114,114,114	0
57	MG	78	202	1/1	0.95	0.33	84,84,84,84	0
57	MG	1H	3214	1/1	0.95	0.45	55,55,55,55	0
57	MG	14	3101	1/1	0.95	0.42	84,84,84,84	0
57	MG	1H	3394	1/1	0.95	0.07	83,83,83,83	0
57	MG	55	201	1/1	0.95	0.18	57,57,57,57	0
57	MG	1H	3310	1/1	0.95	0.09	91,91,91,91	0
57	MG	1H	3311	1/1	0.95	0.08	70,70,70,70	0
57	MG	1H	3313	1/1	0.95	0.06	84,84,84,84	0
57	MG	1H	3304	1/1	0.96	0.07	76,76,76,76	0
57	MG	1G	1669	1/1	0.96	0.10	129,129,129,129	0
57	MG	1H	3389	1/1	0.96	0.09	87,87,87,87	0
57	MG	14	3110	1/1	0.96	0.24	82,82,82,82	0
57	MG	1G	1671	1/1	0.96	0.12	117,117,117,117	0
57	MG	1H	3153	1/1	0.96	0.63	83,83,83,83	0
57	MG	1H	3031	1/1	0.96	0.29	87,87,87,87	0
57	MG	14	3010	1/1	0.96	0.33	58,58,58,58	0
57	MG	4I	201	1/1	0.96	0.06	97,97,97,97	0
57	MG	1H	3393	1/1	0.96	0.10	58,58,58,58	0
57	MG	14	3014	1/1	0.96	0.31	72,72,72,72	0
57	MG	14	3118	1/1	0.96	0.16	58,58,58,58	0
57	MG	13	1625	1/1	0.96	0.37	80,80,80,80	0
57	MG	14	3120	1/1	0.96	0.34	49,49,49,49	0
57	MG	1H	3036	1/1	0.96	0.27	57,57,57,57	0
57	MG	14	3222	1/1	0.96	0.16	62,62,62,62	0
57	MG	1H	3001	1/1	0.96	0.62	83,83,83,83	0
57	MG	13	1620	1/1	0.96	0.20	61,61,61,61	0
57	MG	1H	3260	1/1	0.96	0.48	71,71,71,71	0
57	MG	1H	3401	1/1	0.96	0.05	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3161	1/1	0.96	0.27	71,71,71,71	0
57	MG	14	3130	1/1	0.96	0.19	84,84,84,84	0
57	MG	14	3232	1/1	0.96	0.09	67,67,67,67	0
57	MG	14	3233	1/1	0.96	0.15	82,82,82,82	0
57	MG	13	1648	1/1	0.96	0.32	84,84,84,84	0
57	MG	14	3133	1/1	0.96	0.21	77,77,77,77	0
57	MG	14	3236	1/1	0.96	0.12	63,63,63,63	0
57	MG	14	3028	1/1	0.96	0.39	67,67,67,67	0
57	MG	1H	3044	1/1	0.96	0.24	60,60,60,60	0
57	MG	1H	3264	1/1	0.96	0.32	65,65,65,65	0
57	MG	14	3241	1/1	0.96	0.12	69,69,69,69	0
57	MG	14	3138	1/1	0.96	0.45	74,74,74,74	0
57	MG	1H	3046	1/1	0.96	0.46	75,75,75,75	0
57	MG	1H	3266	1/1	0.96	0.35	85,85,85,85	0
57	MG	1H	3327	1/1	0.96	0.11	81,81,81,81	0
57	MG	1G	1618	1/1	0.96	0.27	100,100,100,100	0
57	MG	1H	3048	1/1	0.96	0.30	69,69,69,69	0
57	MG	14	3255	1/1	0.96	0.11	72,72,72,72	0
57	MG	14	3040	1/1	0.96	0.42	62,62,62,62	0
57	MG	1H	3329	1/1	0.96	0.08	80,80,80,80	0
57	MG	1H	3049	1/1	0.96	0.16	58,58,58,58	0
57	MG	14	3262	1/1	0.96	0.21	55,55,55,55	0
57	MG	14	3149	1/1	0.96	0.31	96,96,96,96	0
57	MG	13	1605	1/1	0.96	0.19	75,75,75,75	0
57	MG	14	3266	1/1	0.96	0.11	73,73,73,73	0
57	MG	1H	3137	1/1	0.96	0.32	62,62,62,62	0
57	MG	14	3270	1/1	0.96	0.08	97,97,97,97	0
57	MG	1H	3200	1/1	0.96	0.22	73,73,73,73	0
57	MG	1H	3340	1/1	0.96	0.14	64,64,64,64	0
57	MG	1G	1627	1/1	0.96	0.30	103,103,103,103	0
57	MG	13	1641	1/1	0.96	0.37	74,74,74,74	0
57	MG	14	3056	1/1	0.96	0.22	65,65,65,65	0
57	MG	1G	1629	1/1	0.96	0.18	96,96,96,96	0
57	MG	1H	3425	1/1	0.96	0.09	110,110,110,110	0
57	MG	1H	3426	1/1	0.96	0.07	97,97,97,97	0
57	MG	14	3062	1/1	0.96	0.29	70,70,70,70	0
57	MG	13	1690	1/1	0.96	0.10	83,83,83,83	0
57	MG	1H	3056	1/1	0.96	0.18	46,46,46,46	0
57	MG	1H	3431	1/1	0.96	0.13	66,66,66,66	0
57	MG	14	3070	1/1	0.96	0.30	74,74,74,74	0
57	MG	1H	3432	1/1	0.96	0.11	56,56,56,56	0
57	MG	1H	3238	1/1	0.96	0.39	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3435	1/1	0.96	0.20	90,90,90,90	0
57	MG	14	3297	1/1	0.96	0.07	92,92,92,92	0
57	MG	14	3298	1/1	0.96	0.08	78,78,78,78	0
57	MG	1G	1640	1/1	0.96	0.04	107,107,107,107	0
57	MG	14	3081	1/1	0.96	0.20	94,94,94,94	0
57	MG	1H	3437	1/1	0.96	0.13	64,64,64,64	0
57	MG	1H	3058	1/1	0.96	0.11	71,71,71,71	0
57	MG	1H	3351	1/1	0.96	0.06	79,79,79,79	0
57	MG	1H	3112	1/1	0.96	0.42	76,76,76,76	0
57	MG	1H	3113	1/1	0.96	0.28	81,81,81,81	0
57	MG	14	3309	1/1	0.96	0.11	86,86,86,86	0
57	MG	14	3087	1/1	0.96	0.38	76,76,76,76	0
57	MG	13	1651	1/1	0.96	0.09	110,110,110,110	0
57	MG	1H	3209	1/1	0.96	0.27	76,76,76,76	0
57	MG	1G	1649	1/1	0.96	0.42	70,70,70,70	0
57	MG	1H	3363	1/1	0.96	0.10	69,69,69,69	0
57	MG	14	3316	1/1	0.96	0.07	88,88,88,88	0
57	MG	14	3317	1/1	0.96	0.07	76,76,76,76	0
57	MG	1H	3364	1/1	0.96	0.10	93,93,93,93	0
57	MG	14	3322	1/1	0.96	0.14	79,79,79,79	0
57	MG	13	1675	1/1	0.96	0.14	70,70,70,70	0
57	MG	14	3324	1/1	0.96	0.11	77,77,77,77	0
57	MG	1H	3211	1/1	0.96	0.32	78,78,78,78	0
57	MG	1H	3369	1/1	0.96	0.16	60,60,60,60	0
57	MG	1H	3213	1/1	0.96	0.58	77,77,77,77	0
57	MG	13	1606	1/1	0.96	0.17	83,83,83,83	0
57	MG	13	1636	1/1	0.96	0.08	103,103,103,103	0
57	MG	1H	3291	1/1	0.96	0.14	56,56,56,56	0
57	MG	13	1644	1/1	0.96	0.40	78,78,78,78	0
57	MG	1H	3295	1/1	0.96	0.09	76,76,76,76	0
57	MG	13	1601	1/1	0.96	0.25	82,82,82,82	0
57	MG	1H	3298	1/1	0.96	0.14	65,65,65,65	0
57	MG	1H	3299	1/1	0.96	0.13	49,49,49,49	0
57	MG	13	1682	1/1	0.96	0.16	84,84,84,84	0
58	ZN	3E	302	1/1	0.96	0.32	95,95,95,95	0
57	MG	14	3106	1/1	0.96	0.64	86,86,86,86	0
58	ZN	5A	101	1/1	0.96	0.10	139,139,139,139	0
57	MG	14	3204	1/1	0.96	0.30	71,71,71,71	0
57	MG	1H	3395	1/1	0.97	0.09	73,73,73,73	0
57	MG	1H	3127	1/1	0.97	0.36	63,63,63,63	0
57	MG	1H	3128	1/1	0.97	0.18	52,52,52,52	0
57	MG	1H	3039	1/1	0.97	0.29	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3063	1/1	0.97	0.29	56,56,56,56	0
57	MG	1H	3212	1/1	0.97	0.24	62,62,62,62	0
57	MG	14	3242	1/1	0.97	0.13	65,65,65,65	0
57	MG	1H	3041	1/1	0.97	0.30	68,68,68,68	0
57	MG	1H	3303	1/1	0.97	0.10	61,61,61,61	0
57	MG	1H	3349	1/1	0.97	0.11	68,68,68,68	0
57	MG	1H	3405	1/1	0.97	0.10	72,72,72,72	0
57	MG	14	3248	1/1	0.97	0.09	103,103,103,103	0
57	MG	1H	3006	1/1	0.97	0.43	58,58,58,58	0
57	MG	I8	102	1/1	0.97	0.06	69,69,69,69	0
57	MG	J8	101	1/1	0.97	0.37	62,62,62,62	0
57	MG	14	3256	1/1	0.97	0.15	57,57,57,57	0
57	MG	14	3168	1/1	0.97	0.48	51,51,51,51	0
57	MG	1H	3352	1/1	0.97	0.05	68,68,68,68	0
57	MG	1H	3009	1/1	0.97	0.20	47,47,47,47	0
57	MG	1H	3409	1/1	0.97	0.04	99,99,99,99	0
57	MG	1G	1667	1/1	0.97	0.10	98,98,98,98	0
57	MG	1G	1602	1/1	0.97	0.41	79,79,79,79	0
57	MG	14	3265	1/1	0.97	0.08	72,72,72,72	0
57	MG	1H	3410	1/1	0.97	0.11	102,102,102,102	0
57	MG	1G	1604	1/1	0.97	0.21	91,91,91,91	0
57	MG	14	3177	1/1	0.97	0.29	65,65,65,65	0
57	MG	1H	3010	1/1	0.97	0.33	51,51,51,51	0
57	MG	1H	3309	1/1	0.97	0.11	66,66,66,66	0
57	MG	1H	3359	1/1	0.97	0.07	79,79,79,79	0
57	MG	3L	101	1/1	0.97	0.43	156,156,156,156	0
57	MG	3L	102	1/1	0.97	0.28	165,165,165,165	0
57	MG	14	3280	1/1	0.97	0.14	75,75,75,75	0
57	MG	1H	3360	1/1	0.97	0.10	67,67,67,67	0
57	MG	1G	1609	1/1	0.97	0.11	106,106,106,106	0
57	MG	1H	3045	1/1	0.97	0.31	70,70,70,70	0
57	MG	14	3284	1/1	0.97	0.05	84,84,84,84	0
57	MG	14	3286	1/1	0.97	0.06	91,91,91,91	0
57	MG	1H	3362	1/1	0.97	0.15	60,60,60,60	0
57	MG	14	3015	1/1	0.97	0.32	69,69,69,69	0
57	MG	14	3289	1/1	0.97	0.06	106,106,106,106	0
57	MG	14	3016	1/1	0.97	0.18	86,86,86,86	0
57	MG	13	1688	1/1	0.97	0.10	74,74,74,74	0
57	MG	14	3019	1/1	0.97	0.41	77,77,77,77	0
57	MG	1H	3312	1/1	0.97	0.17	93,93,93,93	0
57	MG	1H	3421	1/1	0.97	0.08	104,104,104,104	0
57	MG	14	3295	1/1	0.97	0.09	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	1H	3366	1/1	0.97	0.13	75,75,75,75	0
57	MG	13	1603	1/1	0.97	0.22	78,78,78,78	0
57	MG	14	3024	1/1	0.97	0.22	78,78,78,78	0
57	MG	1H	3030	1/1	0.97	0.28	79,79,79,79	0
57	MG	13	1697	1/1	0.97	0.10	76,76,76,76	0
57	MG	1H	3032	1/1	0.97	0.30	75,75,75,75	0
57	MG	1H	3429	1/1	0.97	0.08	60,60,60,60	0
57	MG	1H	3430	1/1	0.97	0.16	50,50,50,50	0
57	MG	1H	3118	1/1	0.97	0.21	76,76,76,76	0
57	MG	1H	3373	1/1	0.97	0.05	55,55,55,55	0
57	MG	1H	3433	1/1	0.97	0.12	56,56,56,56	0
57	MG	1H	3033	1/1	0.97	0.18	54,54,54,54	0
57	MG	1H	3376	1/1	0.97	0.11	90,90,90,90	0
57	MG	1H	3144	1/1	0.97	0.21	95,95,95,95	0
57	MG	1H	3321	1/1	0.97	0.12	74,74,74,74	0
57	MG	14	3314	1/1	0.97	0.06	91,91,91,91	0
57	MG	1H	3055	1/1	0.97	0.53	64,64,64,64	0
57	MG	1H	3323	1/1	0.97	0.05	83,83,83,83	0
57	MG	14	3129	1/1	0.97	0.33	90,90,90,90	0
57	MG	13	1622	1/1	0.97	0.33	65,65,65,65	0
57	MG	14	3321	1/1	0.97	0.10	78,78,78,78	0
57	MG	1H	3325	1/1	0.97	0.10	75,75,75,75	0
57	MG	1H	3081	1/1	0.97	0.21	47,47,47,47	0
57	MG	16	202	1/1	0.97	0.28	62,62,62,62	0
57	MG	1H	3387	1/1	0.97	0.11	82,82,82,82	0
57	MG	14	3051	1/1	0.97	0.39	74,74,74,74	0
57	MG	1H	3057	1/1	0.97	0.18	60,60,60,60	0
57	MG	14	3221	1/1	0.97	0.18	67,67,67,67	0
57	MG	1H	3149	1/1	0.97	0.23	61,61,61,61	0
57	MG	13	1684	1/1	0.97	0.11	95,95,95,95	0
57	MG	14	3224	1/1	0.97	0.13	55,55,55,55	0
57	MG	14	3226	1/1	0.97	0.13	67,67,67,67	0
57	MG	1H	3003	1/1	0.97	0.24	53,53,53,53	0
57	MG	1H	3334	1/1	0.97	0.08	54,54,54,54	0
57	MG	16	209	1/1	0.97	0.07	76,76,76,76	0
57	MG	1H	3004	1/1	0.97	0.21	56,56,56,56	0
57	MG	14	3064	1/1	0.97	0.19	84,84,84,84	0
57	MG	1H	3292	1/1	0.97	0.18	58,58,58,58	0
57	MG	14	3067	1/1	0.97	0.46	71,71,71,71	0
57	MG	14	3068	1/1	0.97	0.34	81,81,81,81	0
57	MG	1H	3378	1/1	0.98	0.13	59,59,59,59	0
57	MG	1H	3288	1/1	0.98	0.07	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3121	1/1	0.98	0.15	65,65,65,65	0
57	MG	1H	3436	1/1	0.98	0.16	50,50,50,50	0
57	MG	14	3225	1/1	0.98	0.11	55,55,55,55	0
57	MG	14	3123	1/1	0.98	0.31	73,73,73,73	0
57	MG	14	3029	1/1	0.98	0.21	78,78,78,78	0
57	MG	14	3030	1/1	0.98	0.24	64,64,64,64	0
57	MG	13	1604	1/1	0.98	0.19	79,79,79,79	0
57	MG	1H	3381	1/1	0.98	0.11	58,58,58,58	0
57	MG	1H	3290	1/1	0.98	0.11	49,49,49,49	0
57	MG	1H	3383	1/1	0.98	0.07	82,82,82,82	0
57	MG	1H	3442	1/1	0.98	0.06	73,73,73,73	0
57	MG	1G	1632	1/1	0.98	0.13	131,131,131,131	0
57	MG	14	3037	1/1	0.98	0.26	61,61,61,61	0
57	MG	1H	3330	1/1	0.98	0.16	49,49,49,49	0
57	MG	1H	3002	1/1	0.98	0.38	47,47,47,47	0
57	MG	14	3136	1/1	0.98	0.20	66,66,66,66	0
57	MG	1H	3332	1/1	0.98	0.08	49,49,49,49	0
57	MG	14	3042	1/1	0.98	0.40	75,75,75,75	0
57	MG	13	1691	1/1	0.98	0.12	78,78,78,78	0
57	MG	1H	3293	1/1	0.98	0.17	62,62,62,62	0
57	MG	1G	1638	1/1	0.98	0.20	83,83,83,83	0
57	MG	13	1653	1/1	0.98	0.12	92,92,92,92	0
57	MG	1H	3038	1/1	0.98	0.26	55,55,55,55	0
57	MG	1H	3338	1/1	0.98	0.12	60,60,60,60	0
57	MG	14	3249	1/1	0.98	0.12	62,62,62,62	0
57	MG	14	3049	1/1	0.98	0.38	63,63,63,63	0
57	MG	14	3251	1/1	0.98	0.07	77,77,77,77	0
57	MG	14	3253	1/1	0.98	0.13	66,66,66,66	0
57	MG	14	3146	1/1	0.98	0.39	71,71,71,71	0
57	MG	14	3147	1/1	0.98	0.42	79,79,79,79	0
57	MG	14	3050	1/1	0.98	0.35	63,63,63,63	0
57	MG	1H	3339	1/1	0.98	0.13	50,50,50,50	0
57	MG	14	3052	1/1	0.98	0.28	63,63,63,63	0
57	MG	14	3259	1/1	0.98	0.10	71,71,71,71	0
57	MG	1G	1643	1/1	0.98	0.10	97,97,97,97	0
57	MG	14	3152	1/1	0.98	0.38	93,93,93,93	0
57	MG	14	3054	1/1	0.98	0.64	53,53,53,53	0
57	MG	14	3055	1/1	0.98	0.26	62,62,62,62	0
57	MG	1H	3155	1/1	0.98	0.34	68,68,68,68	0
57	MG	1H	3341	1/1	0.98	0.08	47,47,47,47	0
57	MG	14	3267	1/1	0.98	0.15	48,48,48,48	0
57	MG	14	3059	1/1	0.98	0.32	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3159	1/1	0.98	0.33	73,73,73,73	0
57	MG	1H	3208	1/1	0.98	0.37	48,48,48,48	0
57	MG	14	3272	1/1	0.98	0.22	58,58,58,58	0
57	MG	1H	3061	1/1	0.98	0.32	52,52,52,52	0
57	MG	14	3274	1/1	0.98	0.10	74,74,74,74	0
57	MG	14	3276	1/1	0.98	0.10	83,83,83,83	0
57	MG	1H	3005	1/1	0.98	0.40	51,51,51,51	0
57	MG	1H	3345	1/1	0.98	0.15	53,53,53,53	0
57	MG	1H	3399	1/1	0.98	0.04	111,111,111,111	0
57	MG	14	3165	1/1	0.98	0.46	86,86,86,86	0
57	MG	1H	3301	1/1	0.98	0.12	61,61,61,61	0
57	MG	14	3066	1/1	0.98	0.50	63,63,63,63	0
57	MG	1H	3347	1/1	0.98	0.07	64,64,64,64	0
57	MG	1H	3302	1/1	0.98	0.15	60,60,60,60	0
57	MG	14	3285	1/1	0.98	0.11	87,87,87,87	0
57	MG	1H	3020	1/1	0.98	0.25	70,70,70,70	0
57	MG	1H	3350	1/1	0.98	0.10	74,74,74,74	0
57	MG	14	3071	1/1	0.98	0.23	68,68,68,68	0
57	MG	14	3173	1/1	0.98	0.28	44,44,44,44	0
57	MG	14	3072	1/1	0.98	0.23	62,62,62,62	0
57	MG	14	3073	1/1	0.98	0.31	81,81,81,81	0
57	MG	13	1679	1/1	0.98	0.07	100,100,100,100	0
57	MG	88	201	1/1	0.98	0.39	76,76,76,76	0
57	MG	1H	3065	1/1	0.98	0.18	58,58,58,58	0
57	MG	1H	3066	1/1	0.98	0.39	59,59,59,59	0
57	MG	1H	3007	1/1	0.98	0.38	47,47,47,47	0
57	MG	1H	3008	1/1	0.98	0.34	53,53,53,53	0
57	MG	1G	1662	1/1	0.98	0.38	91,91,91,91	0
57	MG	1H	3358	1/1	0.98	0.08	73,73,73,73	0
57	MG	14	3300	1/1	0.98	0.08	87,87,87,87	0
57	MG	14	3301	1/1	0.98	0.06	92,92,92,92	0
57	MG	13	1694	1/1	0.98	0.09	111,111,111,111	0
57	MG	1H	3413	1/1	0.98	0.08	57,57,57,57	0
57	MG	1G	1666	1/1	0.98	0.14	89,89,89,89	0
57	MG	14	3305	1/1	0.98	0.11	74,74,74,74	0
57	MG	1G	1601	1/1	0.98	0.27	90,90,90,90	0
57	MG	14	3188	1/1	0.98	0.42	87,87,87,87	0
57	MG	1H	3165	1/1	0.98	0.22	96,96,96,96	0
57	MG	1H	3246	1/1	0.98	0.43	78,78,78,78	0
57	MG	1H	3192	1/1	0.98	0.32	66,66,66,66	0
57	MG	13	1695	1/1	0.98	0.09	87,87,87,87	0
57	MG	1H	3047	1/1	0.98	0.30	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	2L	101	1/1	0.98	0.31	80,80,80,80	0
57	MG	1H	3365	1/1	0.98	0.12	68,68,68,68	0
57	MG	1H	3072	1/1	0.98	0.36	66,66,66,66	0
57	MG	1H	3027	1/1	0.98	0.34	35,35,35,35	0
57	MG	14	3001	1/1	0.98	0.39	58,58,58,58	0
57	MG	14	3002	1/1	0.98	0.33	64,64,64,64	0
57	MG	14	3319	1/1	0.98	0.10	63,63,63,63	0
57	MG	14	3320	1/1	0.98	0.15	73,73,73,73	0
57	MG	14	3005	1/1	0.98	0.31	61,61,61,61	0
57	MG	14	3006	1/1	0.98	0.41	53,53,53,53	0
57	MG	14	3007	1/1	0.98	0.27	76,76,76,76	0
57	MG	14	3008	1/1	0.98	0.32	59,59,59,59	0
57	MG	1H	3422	1/1	0.98	0.08	86,86,86,86	0
57	MG	14	3011	1/1	0.98	0.42	60,60,60,60	0
57	MG	1H	3319	1/1	0.98	0.11	60,60,60,60	0
57	MG	14	3208	1/1	0.98	0.33	77,77,77,77	0
57	MG	1H	3424	1/1	0.98	0.08	94,94,94,94	0
57	MG	1H	3028	1/1	0.98	0.33	71,71,71,71	0
57	MG	1H	3370	1/1	0.98	0.17	60,60,60,60	0
57	MG	2K	101	1/1	0.98	0.37	77,77,77,77	0
57	MG	25	201	1/1	0.98	0.05	111,111,111,111	0
57	MG	13	1654	1/1	0.98	0.12	133,133,133,133	0
57	MG	1G	1617	1/1	0.98	0.25	88,88,88,88	0
57	MG	1H	3013	1/1	0.98	0.21	63,63,63,63	0
57	MG	1G	1619	1/1	0.98	0.29	103,103,103,103	0
57	MG	1H	3285	1/1	0.98	0.12	53,53,53,53	0
58	ZN	5I	101	1/1	0.98	0.13	100,100,100,100	0
57	MG	1H	3375	1/1	0.98	0.16	60,60,60,60	0
58	ZN	32	301	1/1	0.98	0.30	117,117,117,117	0
57	MG	1H	3286	1/1	0.98	0.10	62,62,62,62	0
57	MG	1H	3014	1/1	0.98	0.37	67,67,67,67	0
57	MG	1H	3026	1/1	0.99	0.21	62,62,62,62	0
57	MG	13	1629	1/1	0.99	0.42	74,74,74,74	0
57	MG	14	3038	1/1	0.99	0.39	55,55,55,55	0
57	MG	1H	3051	1/1	0.99	0.32	50,50,50,50	0
57	MG	1H	3052	1/1	0.99	0.36	42,42,42,42	0
57	MG	14	3269	1/1	0.99	0.08	108,108,108,108	0
57	MG	14	3131	1/1	0.99	0.17	76,76,76,76	0
57	MG	1H	3176	1/1	0.99	0.23	42,42,42,42	0
57	MG	13	1681	1/1	0.99	0.09	71,71,71,71	0
57	MG	1H	3029	1/1	0.99	0.25	55,55,55,55	0
57	MG	1H	3297	1/1	0.99	0.12	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
57	MG	14	3275	1/1	0.99	0.10	90,90,90,90	0
57	MG	14	3202	1/1	0.99	0.21	88,88,88,88	0
57	MG	14	3018	1/1	0.99	0.39	66,66,66,66	0
57	MG	1H	3283	1/1	0.99	0.15	65,65,65,65	0
57	MG	1H	3333	1/1	0.99	0.10	54,54,54,54	0
57	MG	14	3240	1/1	0.99	0.08	71,71,71,71	0
57	MG	1H	3412	1/1	0.99	0.05	94,94,94,94	0
57	MG	14	3077	1/1	0.99	0.12	61,61,61,61	0
57	MG	14	3078	1/1	0.99	0.10	70,70,70,70	0
57	MG	14	3079	1/1	0.99	0.31	56,56,56,56	0
57	MG	13	1602	1/1	0.99	0.27	80,80,80,80	0
57	MG	1H	3353	1/1	0.99	0.09	62,62,62,62	0
57	MG	14	3247	1/1	0.99	0.12	65,65,65,65	0
57	MG	13	1658	1/1	0.99	0.25	91,91,91,91	0
57	MG	1H	3355	1/1	0.99	0.17	56,56,56,56	0
57	MG	1H	3438	1/1	0.99	0.10	55,55,55,55	0
57	MG	1H	3132	1/1	0.99	0.14	49,49,49,49	0
57	MG	14	3252	1/1	0.99	0.08	71,71,71,71	0
57	MG	13	1631	1/1	0.99	0.26	83,83,83,83	0
57	MG	14	3003	1/1	0.99	0.27	54,54,54,54	0
57	MG	14	3057	1/1	0.99	0.47	78,78,78,78	0
57	MG	14	3004	1/1	0.99	0.30	60,60,60,60	0
57	MG	1H	3040	1/1	0.99	0.25	67,67,67,67	0
57	MG	1H	3079	1/1	0.99	0.23	66,66,66,66	0
57	MG	14	3155	1/1	0.99	0.31	70,70,70,70	0
57	MG	1H	3305	1/1	0.99	0.13	49,49,49,49	0
57	MG	14	3261	1/1	0.99	0.23	56,56,56,56	0
57	MG	1H	3306	1/1	0.99	0.09	70,70,70,70	0
57	MG	14	3009	1/1	0.99	0.36	59,59,59,59	0

## 6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.