



wwPDB X-ray Structure Validation Summary Report ⓘ

May 25, 2020 – 02:10 pm BST

PDB ID : 4V8J
Title : Crystal structure of the bacterial ribosome ram mutation G347U.
Authors : Fagan, C.E.; Dunkle, J.A.; Maehigashi, T.; Dunham, C.M.
Deposited on : 2011-12-20
Resolution : 3.90 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

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.11
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.11

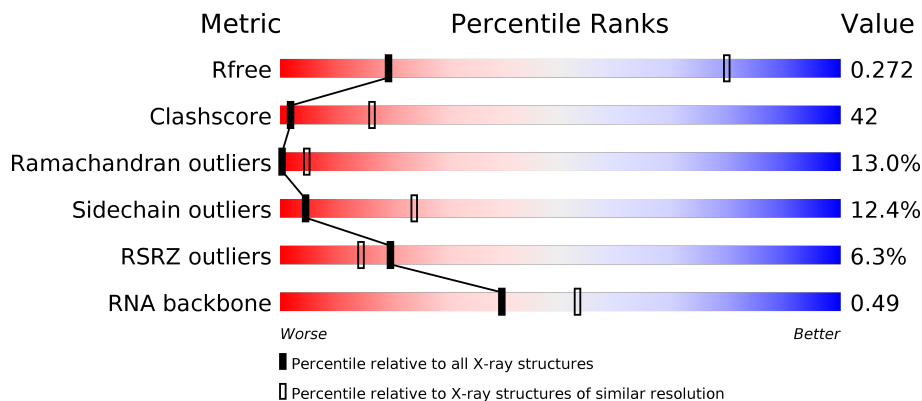
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.90 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	1002 (4.14-3.66)
Clashscore	141614	1004 (4.12-3.68)
Ramachandran outliers	138981	1021 (4.14-3.66)
Sidechain outliers	138945	1014 (4.14-3.66)
RSRZ outliers	127900	1275 (4.20-3.60)
RNA backbone	3102	1040 (4.76-3.00)

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 on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	AA	1522	 4% 35% 52% 12% ..
1	CA	1522	 4% 34% 51% 13% ..
2	AB	256	 4% 20% 57% 14% 8%
2	CB	256	 5% 18% 60% 13% 8%

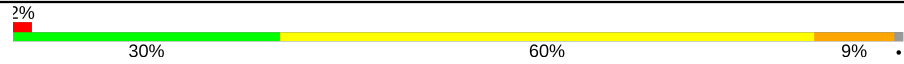
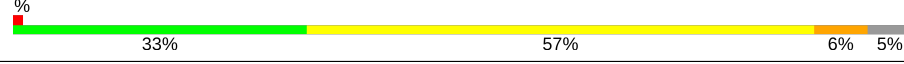
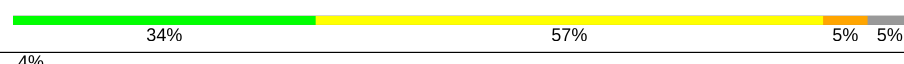
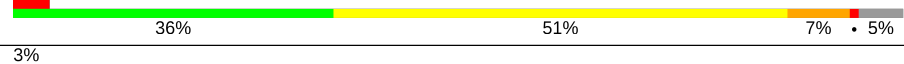
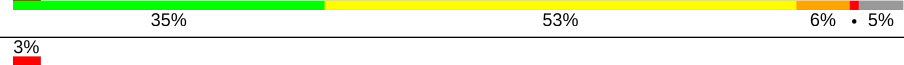
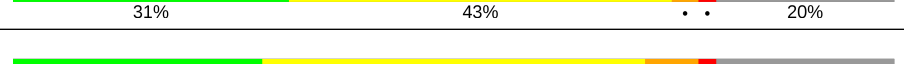
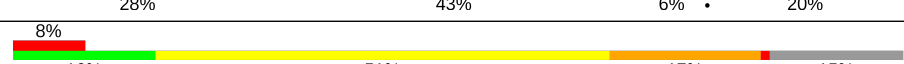
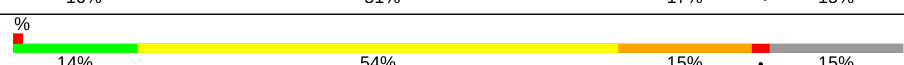
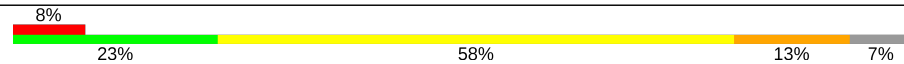
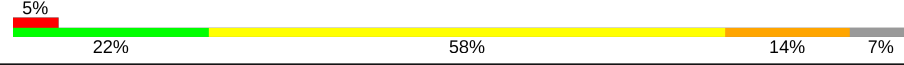

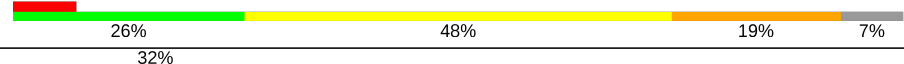
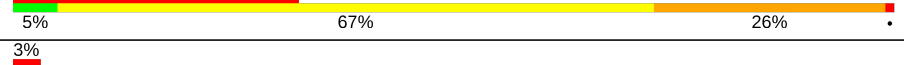



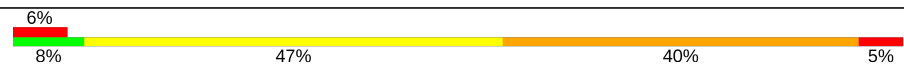




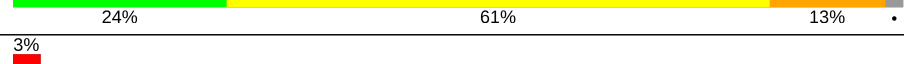
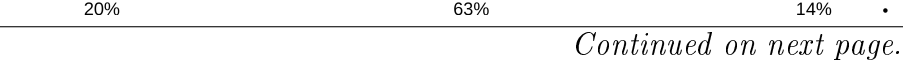


Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	
7	AG	156	
7	CG	156	
8	AH	138	
8	CH	138	
9	AI	128	
9	CI	128	
10	AJ	105	
10	CJ	105	
11	AK	129	
11	CK	129	
12	AL	132	
12	CL	132	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	

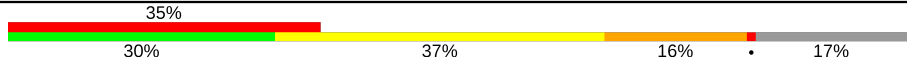
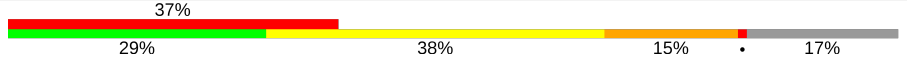
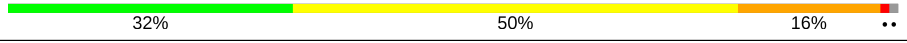
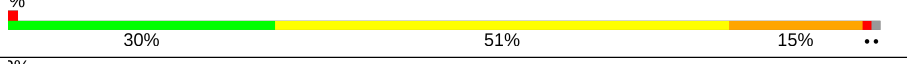
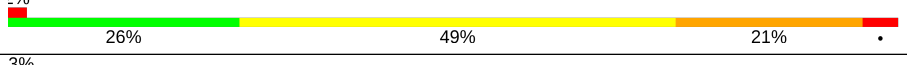
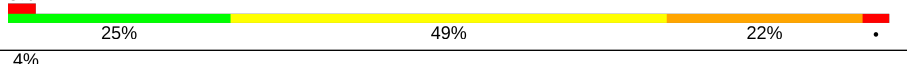
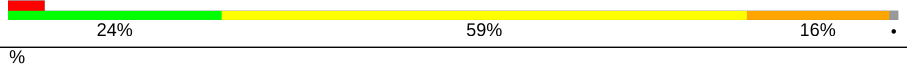
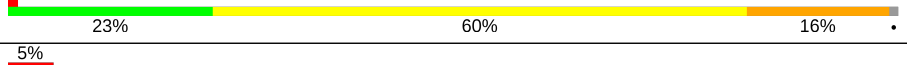
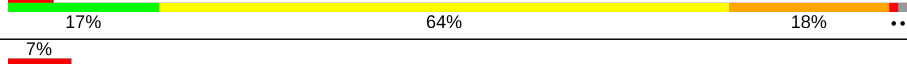
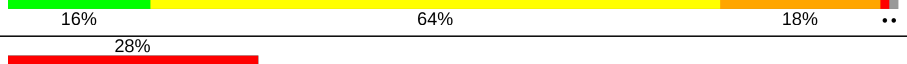

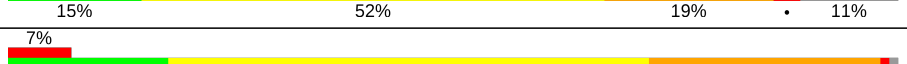
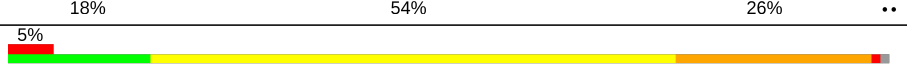
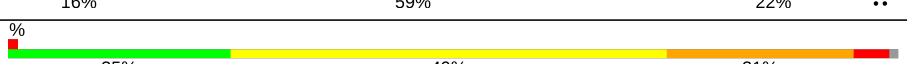
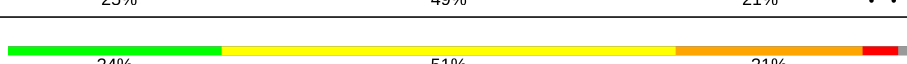
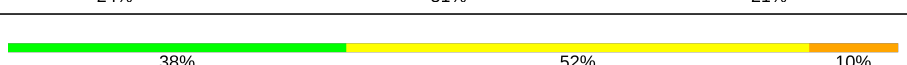

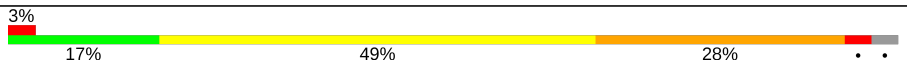
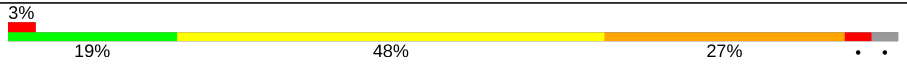

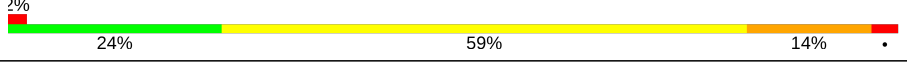
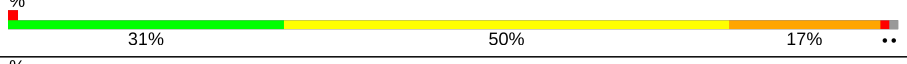

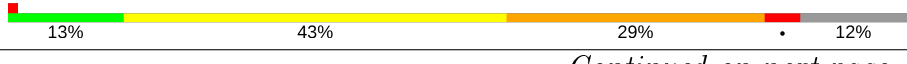

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AW	76	
22	AY	76	
22	CW	76	
22	CY	76	
23	AV	77	
23	CV	77	
24	AX	24	
24	CX	24	
25	BA	2916	
25	DA	2916	
26	BB	122	
26	DB	122	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	BC	229	
27	DC	229	
28	BD	276	
28	DD	276	
29	BE	206	
29	DE	206	
30	BF	210	
30	DF	210	
31	BG	182	
31	DG	182	
32	BH	180	
32	DH	180	
33	BI	148	
33	DI	148	
34	BN	140	
34	DN	140	
35	BO	122	
35	DO	122	
36	BP	150	
36	DP	150	
37	BQ	141	
37	DQ	141	
38	BR	118	
38	DR	118	
39	BS	112	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	DS	112	3% 13% 44% 29% 12%
40	BT	146	5% 24% 45% 25% 5%
40	DT	146	2% 23% 45% 25% 5%
41	BU	118	3% 25% 62% 12%
41	DU	118	25% 62% 12%
42	BV	101	5% 25% 53% 19% 5%
42	DV	101	2% 25% 53% 20% 5%
43	BW	113	6% 32% 53% 13% 5%
43	DW	113	30% 54% 14% 5%
44	BX	96	40% 51% 6%
44	DX	96	3% 38% 52% 7% 5%
45	BY	110	18% 23% 43% 22% 5% 8%
45	DY	110	8% 21% 42% 24% 5% 8%
46	BZ	206	12% 16% 50% 20% 14%
46	DZ	206	8% 15% 51% 20% 14%
47	B0	85	14% 32% 53% 13% 5%
47	D0	85	11% 29% 54% 14% 5%
48	B1	98	4% 21% 58% 14% 5%
48	D1	98	21% 58% 14% 5%
49	B2	72	3% 22% 54% 17% 6% 5%
49	D2	72	3% 21% 57% 14% 7% 5%
50	B3	60	5% 18% 63% 18%
50	D3	60	5% 18% 63% 18%
51	B4	71	7% 27% 8% 56%
51	D4	71	6% 27% 10% 56%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	B5	60	
52	D5	60	
53	B6	54	
53	D6	54	
54	B7	49	
54	D7	49	
55	B8	65	
55	D8	65	
56	B9	37	
56	D9	37	

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	AA	1610	-	-	-	X
57	MG	AA	1612	-	-	-	X
57	MG	AA	1623	-	-	-	X
57	MG	AA	1628	-	-	-	X
57	MG	AA	1631	-	-	-	X
57	MG	AA	1634	-	-	-	X
57	MG	AA	1636	-	-	-	X
57	MG	AA	1638	-	-	-	X
57	MG	AA	1645	-	-	-	X
57	MG	AA	1652	-	-	-	X
57	MG	AA	1654	-	-	-	X
57	MG	AA	1676	-	-	-	X
57	MG	AA	1679	-	-	-	X
57	MG	AA	1686	-	-	-	X
57	MG	AA	1687	-	-	-	X
57	MG	AA	1688	-	-	-	X
57	MG	BA	3001	-	-	-	X
57	MG	BA	3003	-	-	-	X
57	MG	BA	3009	-	-	-	X
57	MG	BA	3010	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	BA	3018	-	-	-	X
57	MG	BA	3021	-	-	-	X
57	MG	BA	3037	-	-	-	X
57	MG	BA	3059	-	-	-	X
57	MG	BA	3061	-	-	X	-
57	MG	BA	3062	-	-	X	-
57	MG	BA	3067	-	-	-	X
57	MG	BA	3085	-	-	-	X
57	MG	BA	3087	-	-	-	X
57	MG	BA	3097	-	-	-	X
57	MG	BA	3105	-	-	-	X
57	MG	BA	3117	-	-	-	X
57	MG	BA	3120	-	-	-	X
57	MG	BA	3124	-	-	-	X
57	MG	BA	3134	-	-	-	X
57	MG	BA	3135	-	-	-	X
57	MG	BA	3150	-	-	-	X
57	MG	BA	3154	-	-	-	X
57	MG	BA	3160	-	-	-	X
57	MG	BA	3163	-	-	-	X
57	MG	BA	3167	-	-	-	X
57	MG	BA	3173	-	-	-	X
57	MG	BA	3187	-	-	-	X
57	MG	BA	3190	-	-	-	X
57	MG	BA	3193	-	-	-	X
57	MG	BA	3195	-	-	-	X
57	MG	BA	3199	-	-	-	X
57	MG	BA	3201	-	-	-	X
57	MG	BA	3204	-	-	-	X
57	MG	BA	3217	-	-	-	X
57	MG	BA	3221	-	-	X	-
57	MG	BA	3223	-	-	-	X
57	MG	BA	3231	-	-	-	X
57	MG	BA	3233	-	-	-	X
57	MG	BA	3236	-	-	-	X
57	MG	BA	3237	-	-	-	X
57	MG	BA	3240	-	-	-	X
57	MG	BA	3242	-	-	-	X
57	MG	BA	3243	-	-	-	X
57	MG	BA	3245	-	-	-	X
57	MG	BA	3248	-	-	-	X
57	MG	BA	3249	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	BA	3251	-	-	-	X
57	MG	BA	3254	-	-	-	X
57	MG	BB	203	-	-	-	X
57	MG	BU	201	-	-	-	X
57	MG	CA	1604	-	-	-	X
57	MG	CA	1606	-	-	-	X
57	MG	CA	1609	-	-	-	X
57	MG	CA	1619	-	-	-	X
57	MG	CA	1620	-	-	-	X
57	MG	CA	1625	-	-	-	X
57	MG	CA	1626	-	-	-	X
57	MG	CA	1635	-	-	-	X
57	MG	CA	1636	-	-	-	X
57	MG	CA	1638	-	-	-	X
57	MG	CA	1640	-	-	-	X
57	MG	CA	1645	-	-	-	X
57	MG	CA	1656	-	-	-	X
57	MG	CA	1667	-	-	-	X
57	MG	CA	1669	-	-	-	X
57	MG	CA	1670	-	-	-	X
57	MG	CA	1678	-	-	-	X
57	MG	CA	1680	-	-	-	X
57	MG	CA	1682	-	-	-	X
57	MG	CA	1683	-	-	-	X
57	MG	CA	1693	-	-	-	X
57	MG	CV	102	-	-	-	X
57	MG	D0	101	-	-	-	X
57	MG	D5	102	-	-	-	X
57	MG	DA	3002	-	-	-	X
57	MG	DA	3006	-	-	-	X
57	MG	DA	3020	-	-	-	X
57	MG	DA	3028	-	-	-	X
57	MG	DA	3038	-	-	-	X
57	MG	DA	3060	-	-	-	X
57	MG	DA	3063	-	-	-	X
57	MG	DA	3064	-	-	-	X
57	MG	DA	3065	-	-	-	X
57	MG	DA	3075	-	-	-	X
57	MG	DA	3094	-	-	-	X
57	MG	DA	3107	-	-	-	X
57	MG	DA	3110	-	-	-	X
57	MG	DA	3112	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
57	MG	DA	3127	-	-	-	X
57	MG	DA	3128	-	-	-	X
57	MG	DA	3132	-	-	-	X
57	MG	DA	3136	-	-	-	X
57	MG	DA	3161	-	-	-	X
57	MG	DA	3162	-	-	-	X
57	MG	DA	3164	-	-	-	X
57	MG	DA	3165	-	-	-	X
57	MG	DA	3167	-	-	-	X
57	MG	DA	3176	-	-	-	X
57	MG	DA	3177	-	-	-	X
57	MG	DA	3179	-	-	-	X
57	MG	DA	3181	-	-	-	X
57	MG	DA	3184	-	-	-	X
57	MG	DA	3191	-	-	-	X
57	MG	DA	3192	-	-	-	X
57	MG	DA	3195	-	-	-	X
57	MG	DA	3197	-	-	-	X
57	MG	DA	3198	-	-	-	X
57	MG	DA	3199	-	-	-	X
57	MG	DA	3211	-	-	-	X
57	MG	DA	3212	-	-	-	X
57	MG	DA	3214	-	-	-	X
57	MG	DA	3221	-	-	-	X
57	MG	DA	3227	-	-	-	X
57	MG	DA	3230	-	-	-	X
57	MG	DA	3236	-	-	-	X
57	MG	DA	3237	-	-	-	X
57	MG	DA	3238	-	-	-	X
57	MG	DA	3241	-	-	-	X
57	MG	DA	3244	-	-	-	X
57	MG	DA	3246	-	-	-	X
57	MG	DA	3247	-	-	-	X
57	MG	DA	3251	-	-	-	X
57	MG	DA	3254	-	-	-	X
57	MG	DA	3256	-	-	-	X
57	MG	DA	3259	-	-	-	X
57	MG	DA	3264	-	-	-	X
57	MG	DA	3265	-	-	-	X
57	MG	DA	3268	-	-	-	X
59	ZN	AN	101	-	-	X	-

2 Entry composition i

There are 59 unique types of molecules in this entry. The entry contains 292667 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 rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	AA	1504	Total 32326	C 14389	N 5989	O 10445	P 1503	0	0	0
1	CA	1503	Total 32304	C 14379	N 5984	O 10439	P 1502	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AA	342	U	G	ENGINEERED MUTATION	GB AP008226.1
CA	342	U	G	ENGINEERED MUTATION	GB AP008226.1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	AB	235	Total 1901	C 1213	N 342	O 341	S 5	0	0	1
2	CB	235	Total 1901	C 1213	N 342	O 341	S 5	0	0	1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	AC	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1
3	CC	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	AD	208	Total 1703	C 1066	N 339	O 291	S 7	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	CD	208	Total 1703	C 1066	N 339	O 291	S 7	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	AE	151	Total 1147	C 724	N 218	O 201	S 4	0	0	1
5	CE	151	Total 1147	C 724	N 218	O 201	S 4	0	0	1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	AF	101	Total 843	C 531	N 155	O 154	S 3	0	0	0
6	CF	101	Total 843	C 531	N 155	O 154	S 3	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	AG	155	Total 1257	C 781	N 252	O 218	S 6	0	0	0
7	CG	155	Total 1257	C 781	N 252	O 218	S 6	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	AH	138	Total 1116	C 705	N 215	O 193	S 3	0	0	0
8	CH	138	Total 1116	C 705	N 215	O 193	S 3	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
9	AI	127	Total 1010	C 639	N 197	O 174	0	0	0
9	CI	127	Total 1010	C 639	N 197	O 174	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			
10	CJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
11	CK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			
12	CL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			
13	CM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	AY	17	Total	C	N	O	P	0	0	0
			365	163	68	117	17			
22	CW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CY	17	Total	C	N	O	P	0	0	0
			365	163	68	117	17			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AV	77	Total	C	N	O	P	0	0	0
			1644	732	297	538	77			
23	CV	77	Total	C	N	O	P	0	0	0
			1644	732	297	538	77			

- Molecule 24 is a RNA chain called messenger RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	8	Total	C	N	O	P	0	0	0
			169	76	29	56	8			
24	CX	10	Total	C	N	O	P	0	0	0
			210	96	39	66	9			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
25	BA	2803	60378	26870	11297	19409	2802	0	0	0
25	DA	2803	60378	26870	11297	19409	2802	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
26	BB	119	2551	1136	471	826	118	0	0	0
26	DB	119	2551	1136	471	826	118	0	0	0

- Molecule 27 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
27	BC	191	1142	691	221	230	0	0	1
27	DC	191	1142	691	221	230	0	0	1

- Molecule 28 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	BD	272	2105	1329	417	356	3	0	0	1
28	DD	272	2105	1329	417	356	3	0	0	1

- Molecule 29 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	BE	205	1564	988	300	270	6	0	0	1
29	DE	205	1564	988	300	270	6	0	0	1

- Molecule 30 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	BF	208	1624	1035	304	282	3	0	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	DF	208	1624	1035	304	282	3	0	0	1

- Molecule 31 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	BG	181	1474	942	268	260	4	0	0	0
31	DG	181	1474	942	268	260	4	0	0	0

- Molecule 32 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	BH	160	1223	773	229	220	1	0	0	1
32	DH	160	1223	773	229	220	1	0	0	1

- Molecule 33 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	BI	146	1132	723	201	207	1	0	0	1
33	DI	146	1132	723	201	207	1	0	0	1

- Molecule 34 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	BN	139	1105	712	207	182	4	0	0	1
34	DN	139	1105	712	207	182	4	0	0	1

- Molecule 35 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	BO	122	933	588	171	170	4	0	0	0
35	DO	122	933	588	171	170	4	0	0	0

- Molecule 36 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			
36	DP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			

- Molecule 37 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
37	DQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 38 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
38	BR	117	Total	C	N	O	0	0	0
			960	599	202	159			
38	DR	117	Total	C	N	O	0	0	0
			960	599	202	159			

- Molecule 39 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	BS	99	Total	C	N	O	0	0	1
			771	486	155	130			
39	DS	99	Total	C	N	O	0	0	1
			771	486	155	130			

- Molecule 40 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			
40	DT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			

- Molecule 41 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			
41	DU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			

- Molecule 42 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
42	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 43 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			
43	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 44 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	BX	93	Total	C	N	O	0	0	1
			726	471	132	123			
44	DX	93	Total	C	N	O	0	0	1
			726	471	132	123			

- Molecule 45 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
45	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 46 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	DZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

- Molecule 47 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	B0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			
47	D0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			

- Molecule 48 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			
48	D1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			

- Molecule 49 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			
49	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			
50	D3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			

- Molecule 51 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			
51	D4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			

- Molecule 52 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
52	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 53 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			
53	D6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
54	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			
55	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

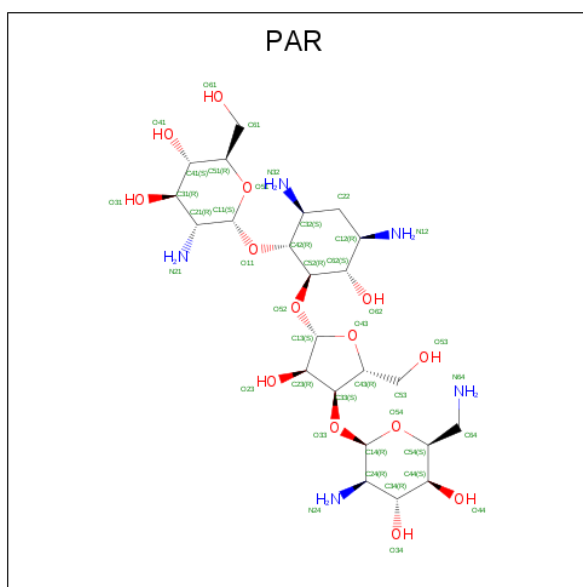
- Molecule 56 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	B9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			
56	D9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	BU	1	Total Mg 1 1	0	0
57	BB	4	Total Mg 4 4	0	0
57	BO	1	Total Mg 1 1	0	0
57	BA	261	Total Mg 261 261	0	0
57	CA	94	Total Mg 94 94	0	0
57	D0	1	Total Mg 1 1	0	0
57	CV	2	Total Mg 2 2	0	0
57	BF	2	Total Mg 2 2	0	0
57	B3	1	Total Mg 1 1	0	0
57	B5	2	Total Mg 2 2	0	0
57	BE	1	Total Mg 1 1	0	0
57	D5	2	Total Mg 2 2	0	0
57	AA	93	Total Mg 93 93	0	0
57	B1	1	Total Mg 1 1	0	0
57	DE	1	Total Mg 1 1	0	0
57	DA	268	Total Mg 268 268	0	0
57	AX	2	Total Mg 2 2	0	0
57	DD	1	Total Mg 1 1	0	0
57	DB	2	Total Mg 2 2	0	0

- Molecule 58 is PAROMOMYCIN (three-letter code: PAR) (formula: C₂₃H₄₅N₅O₁₄).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
58	AA	1	42	23	5	14	0	0
58	CA	1	42	23	5	14	0	0

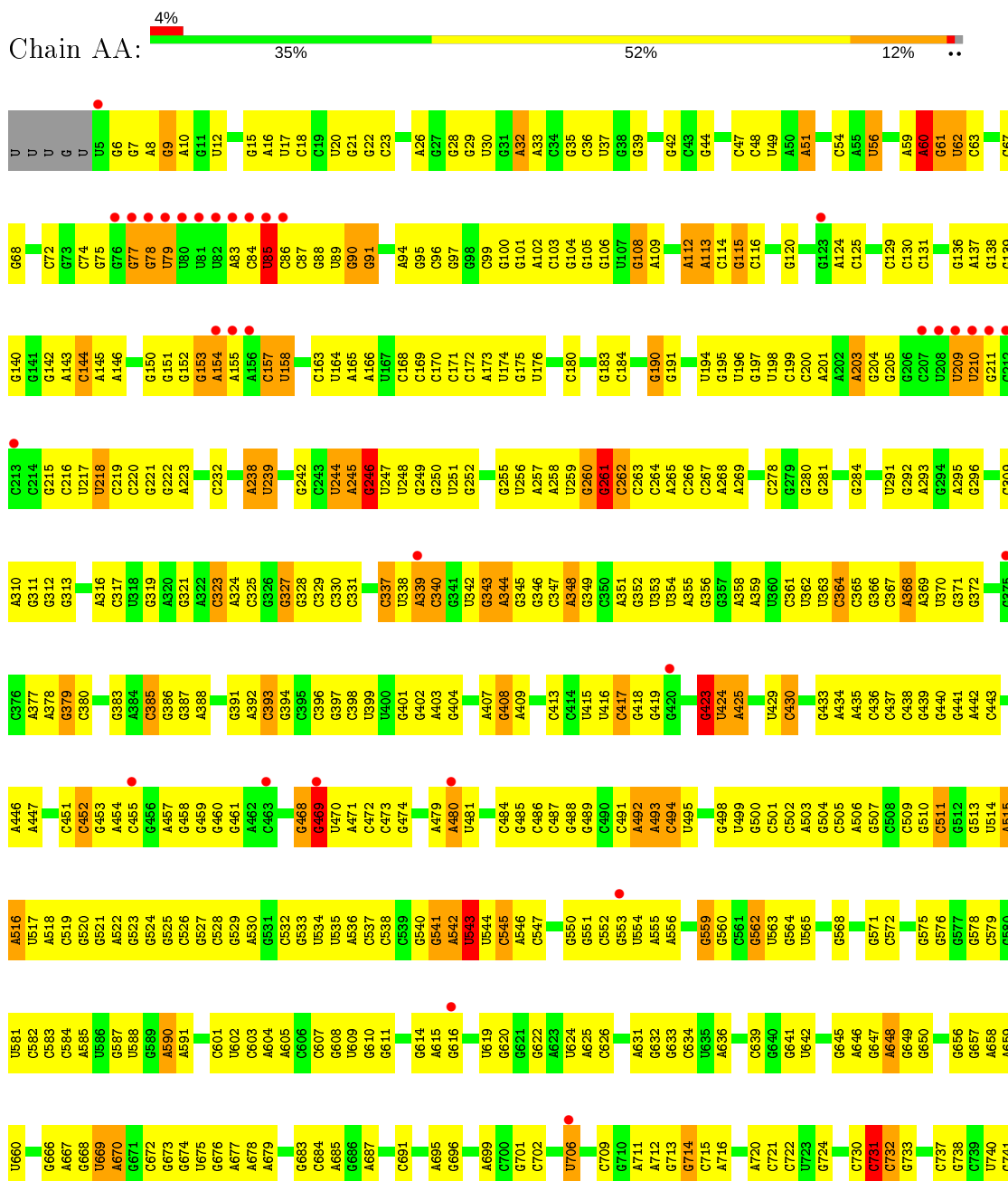
- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

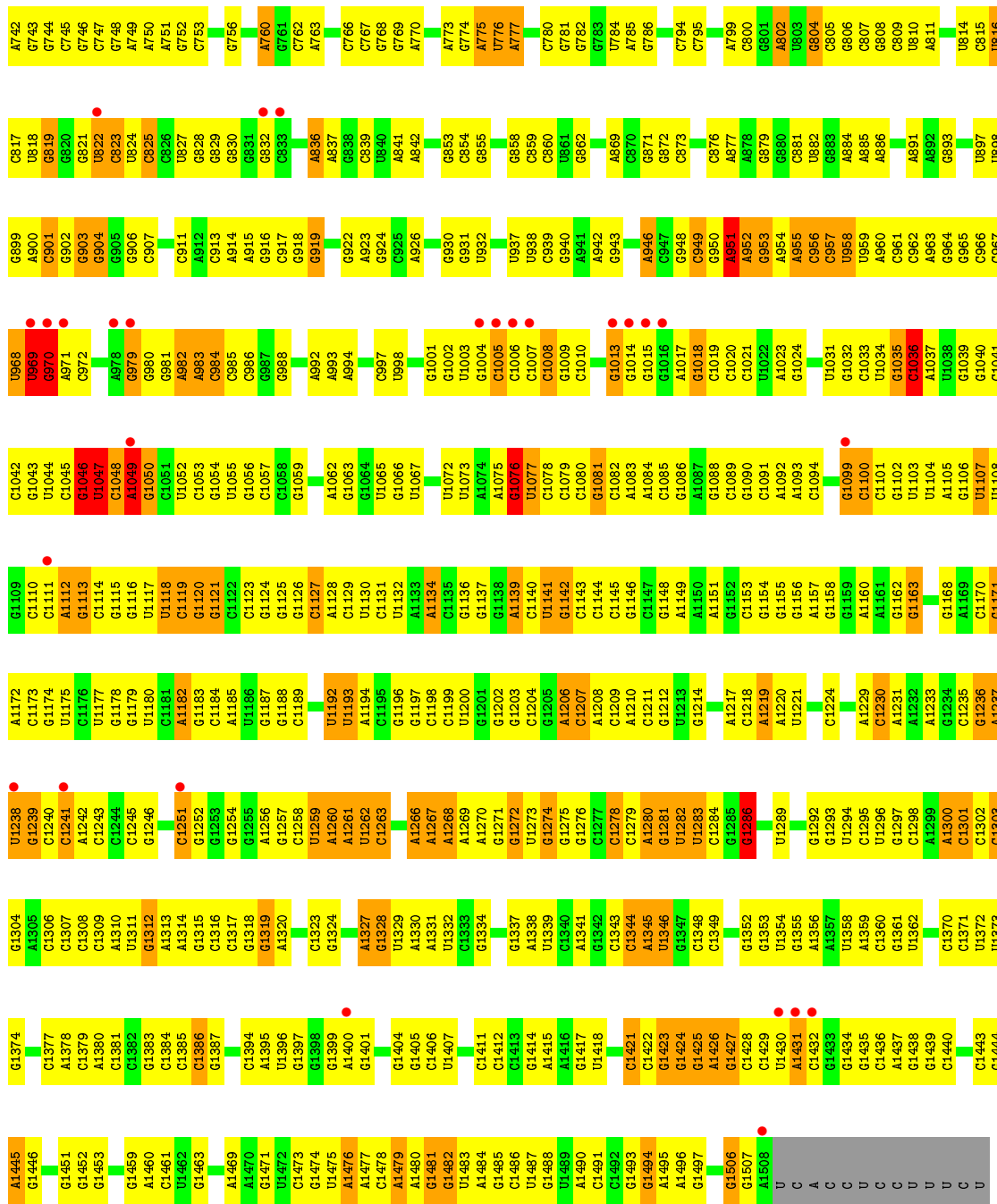
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
59	CN	1	1	1	0	0
59	AD	1	1	1	0	0
59	CD	1	1	1	0	0
59	AN	1	1	1	0	0

3 Residue-property plots [i](#)

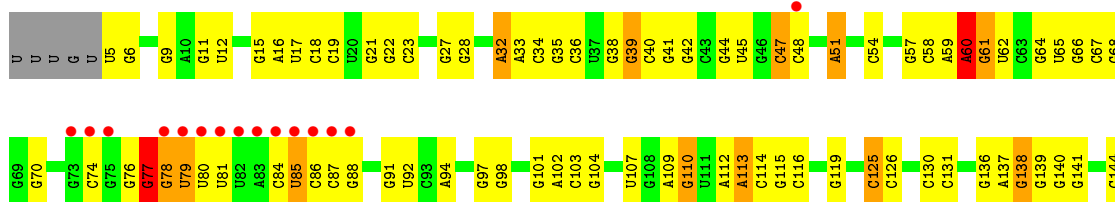
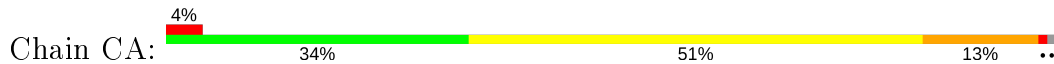
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are 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.

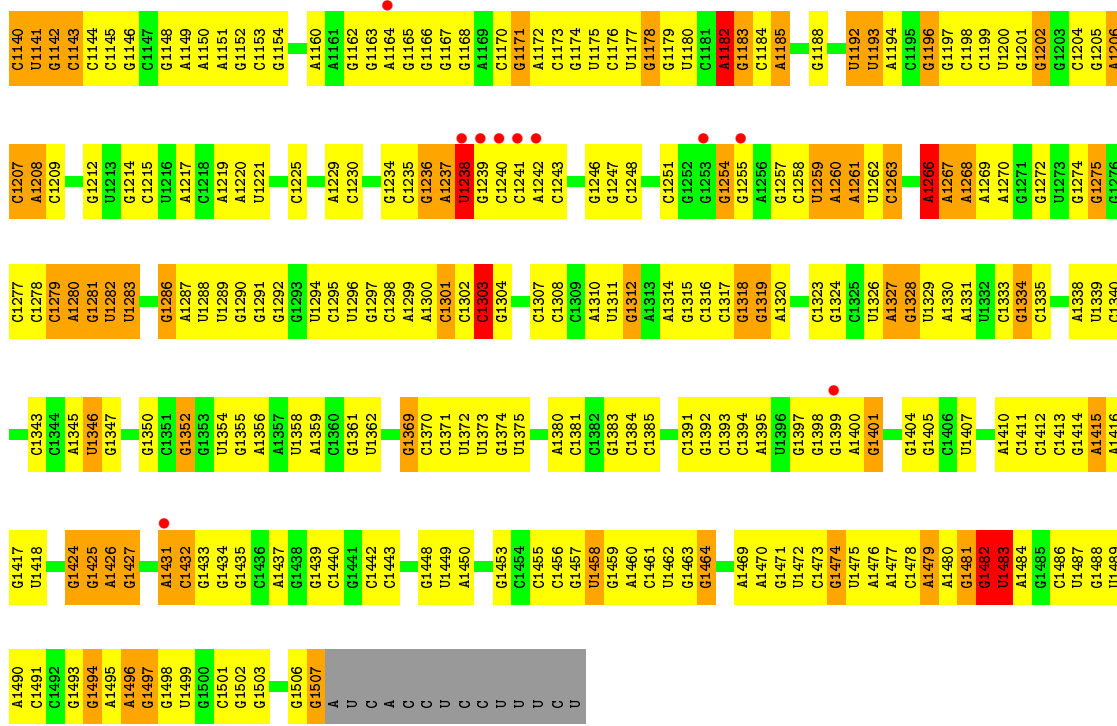
- Molecule 1: 16S rRNA



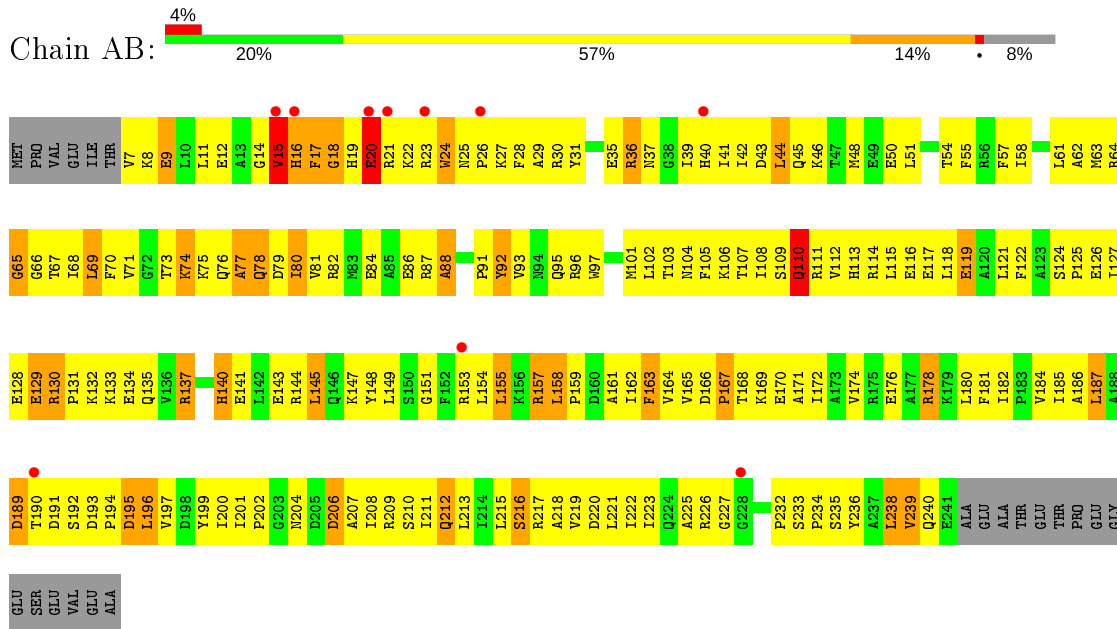


• Molecule 1: 16S rRNA

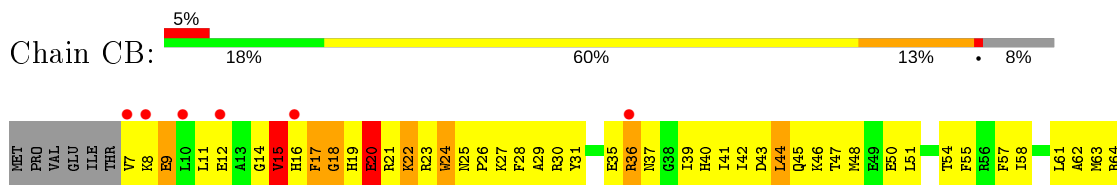


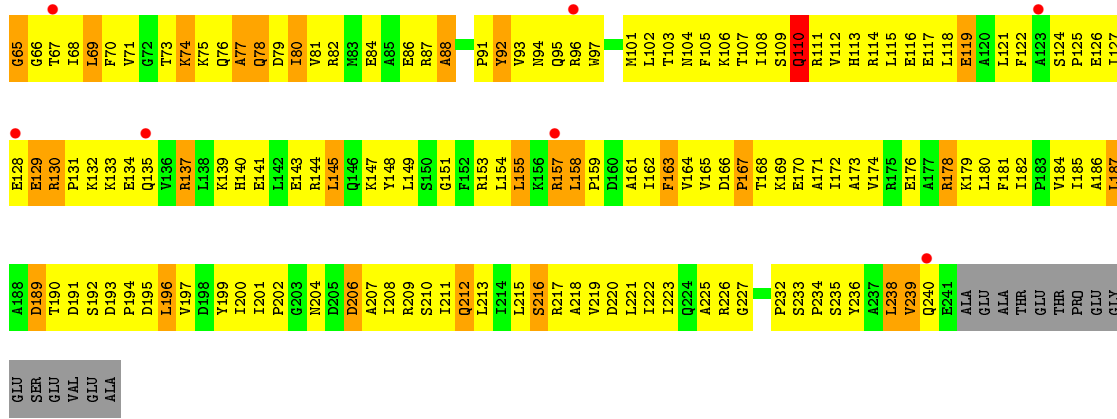


• Molecule 2: 30S ribosomal protein S2

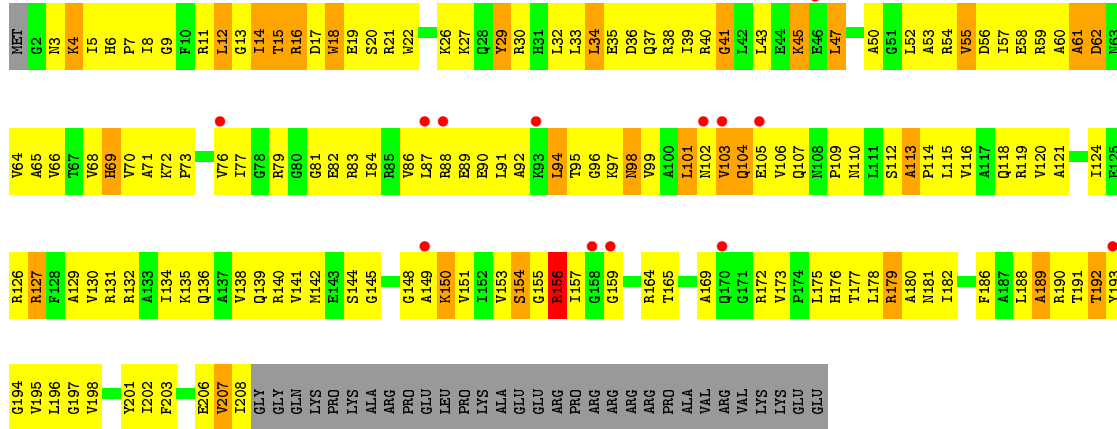


• Molecule 2: 30S ribosomal protein S2

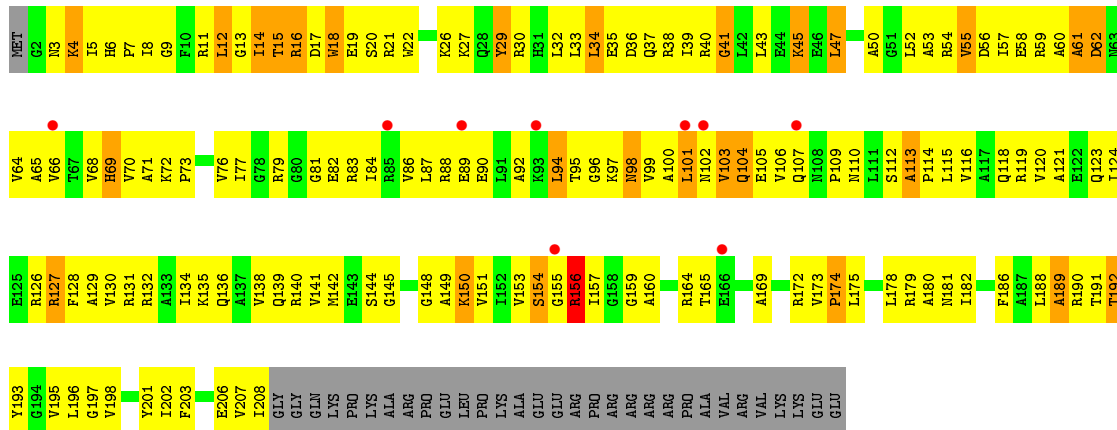




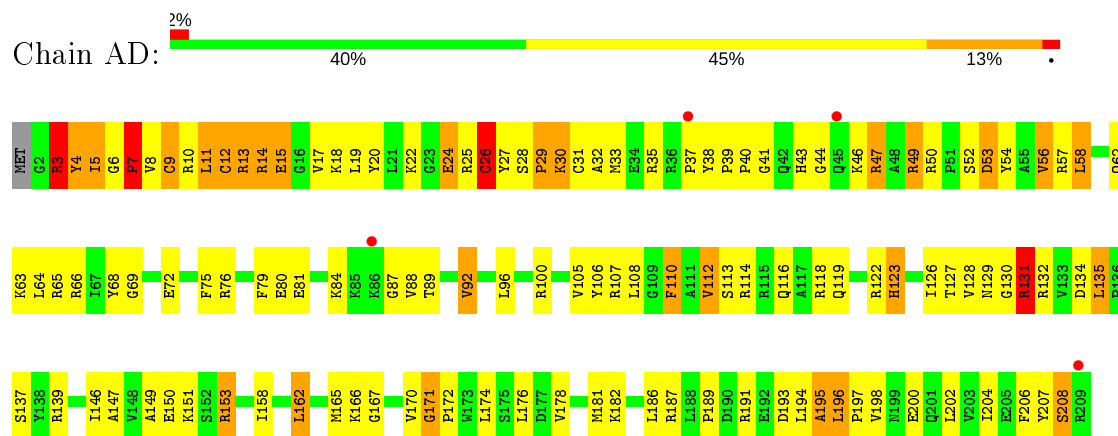
• Molecule 3: 30S ribosomal protein S3



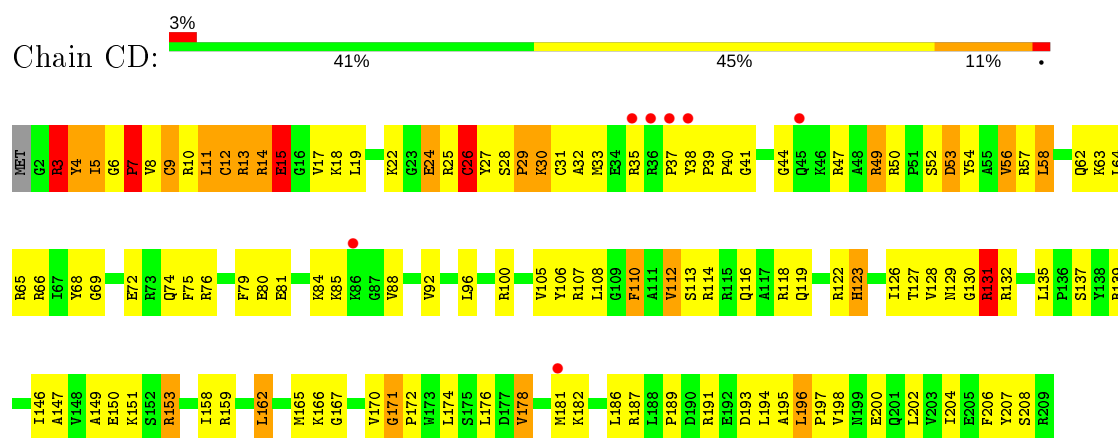
• Molecule 3: 30S ribosomal protein S3



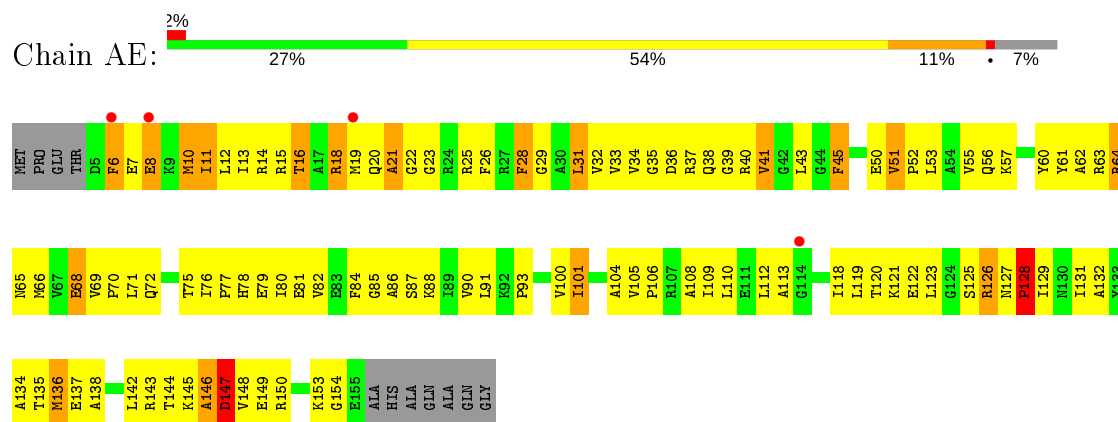
• Molecule 4: 30S ribosomal protein S4



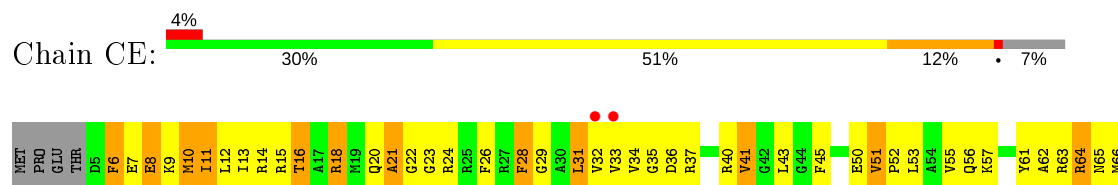
- Molecule 4: 30S ribosomal protein S4

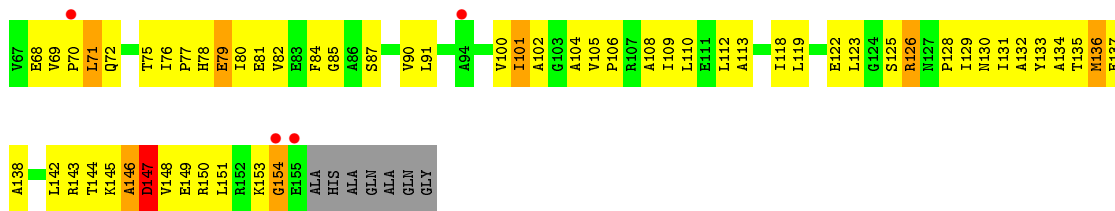


- Molecule 5: 30S ribosomal protein S5

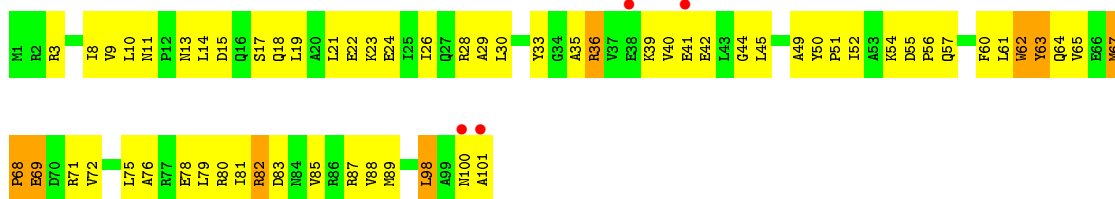


- Molecule 5: 30S ribosomal protein S5

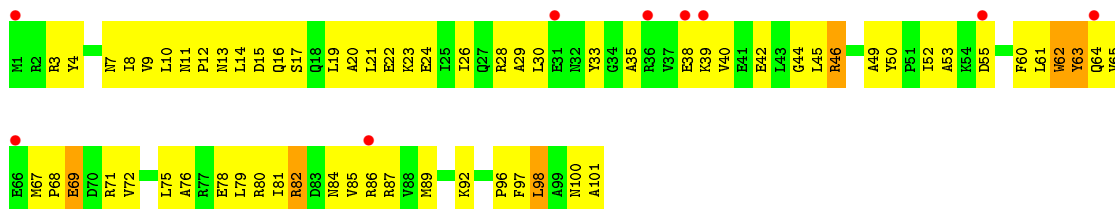
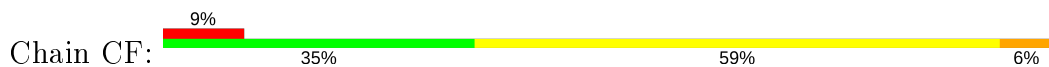




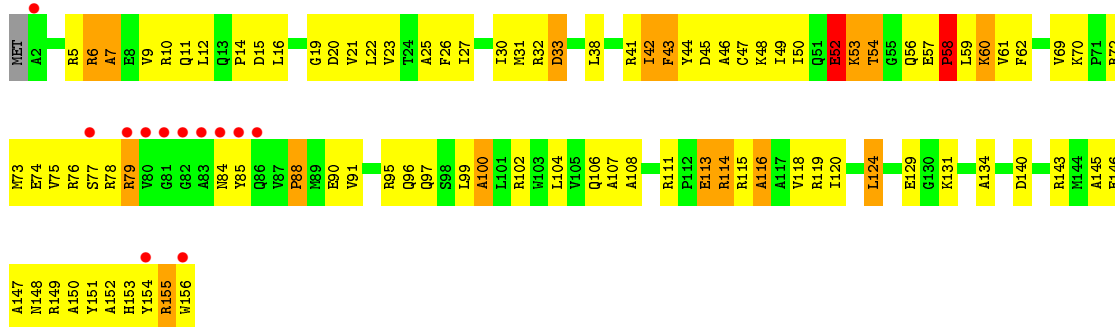
• Molecule 6: 30S ribosomal protein S6



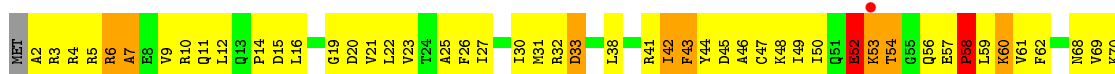
• Molecule 6: 30S ribosomal protein S6

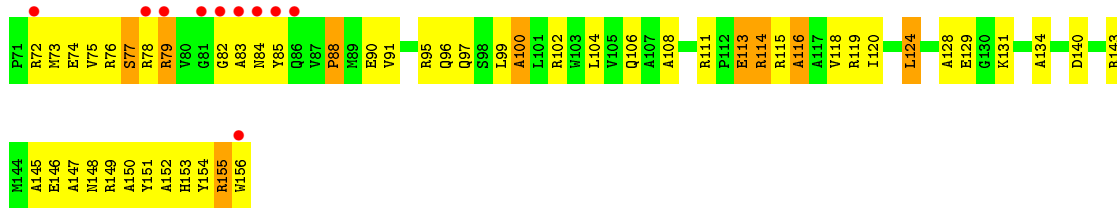


• Molecule 7: 30S ribosomal protein S7

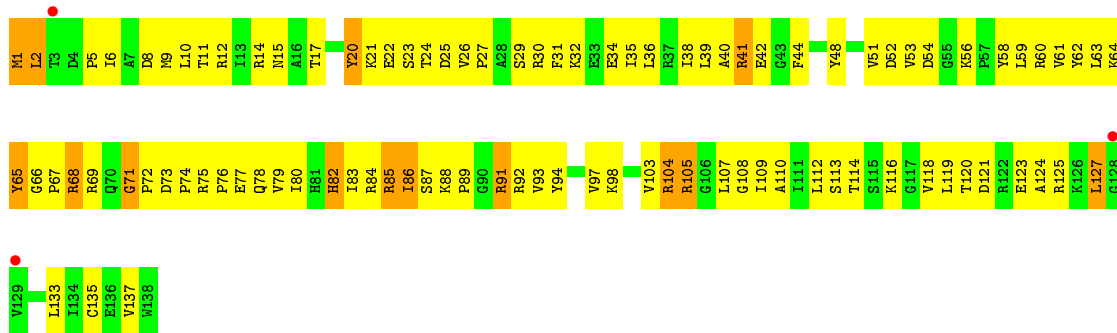


• Molecule 7: 30S ribosomal protein S7

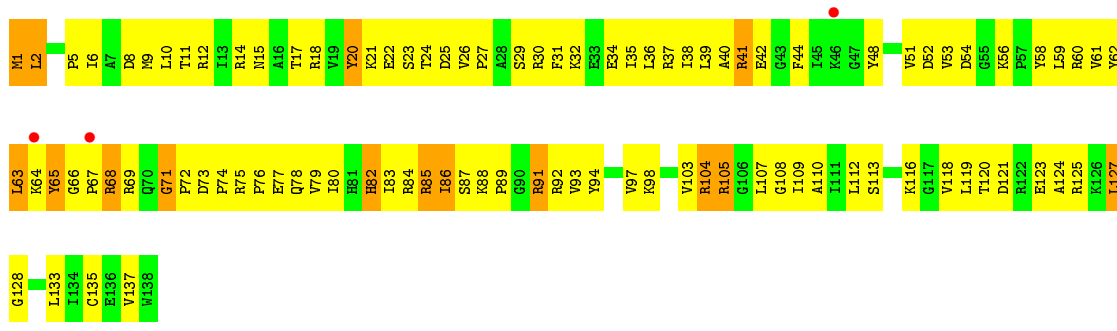




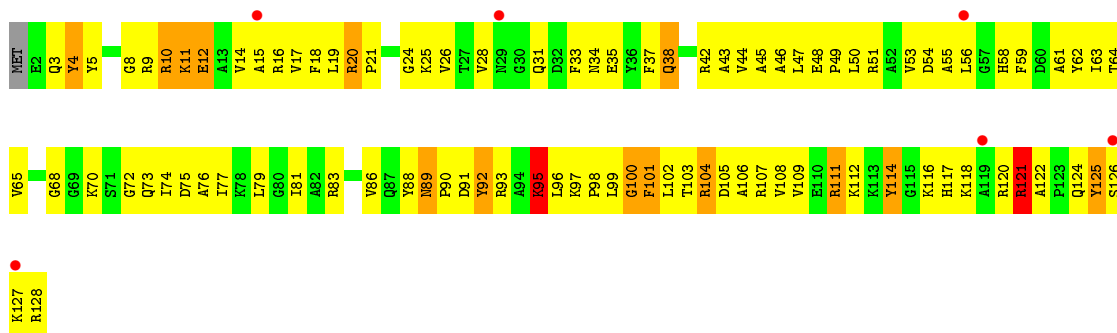
• Molecule 8: 30S ribosomal protein S8



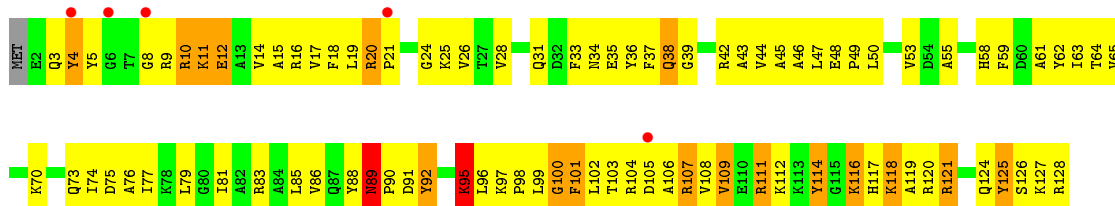
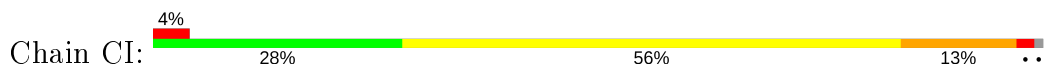
• Molecule 8: 30S ribosomal protein S8



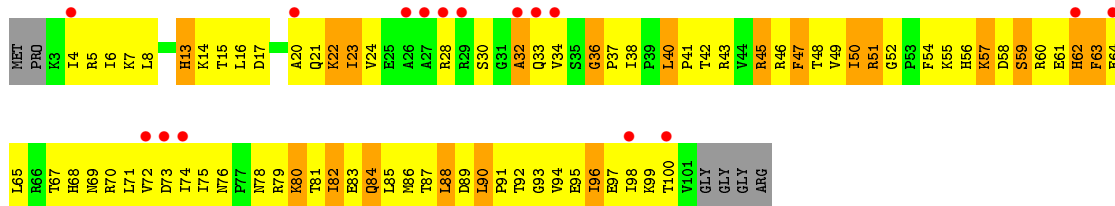
• Molecule 9: 30S ribosomal protein S9



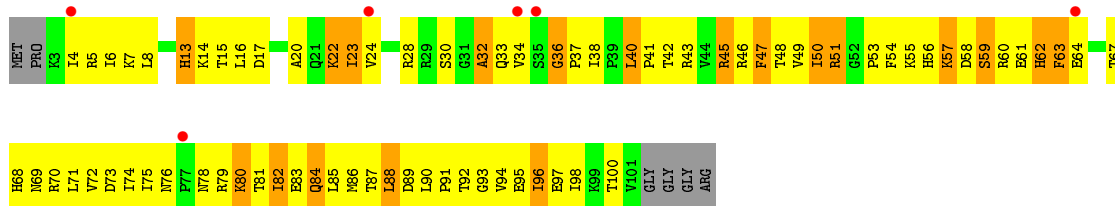
● Molecule 9: 30S ribosomal protein S9



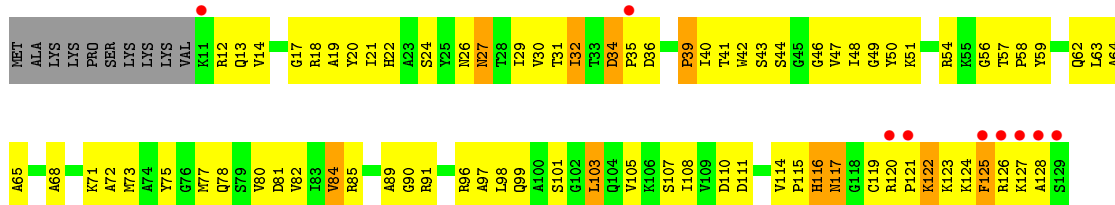
● Molecule 10: 30S ribosomal protein S10



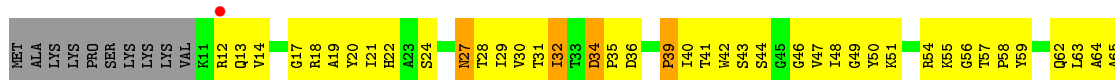
● Molecule 10: 30S ribosomal protein S10

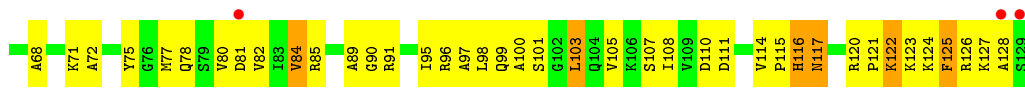


● Molecule 11: 30S ribosomal protein S11



● Molecule 11: 30S ribosomal protein S11





• Molecule 12: 30S ribosomal protein S12



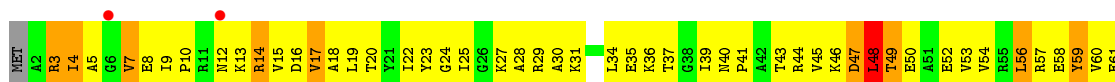
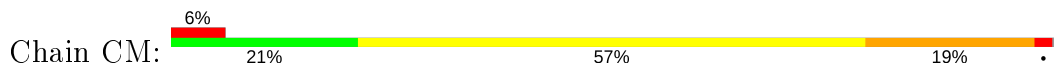
• Molecule 12: 30S ribosomal protein S12



• Molecule 13: 30S ribosomal protein S13

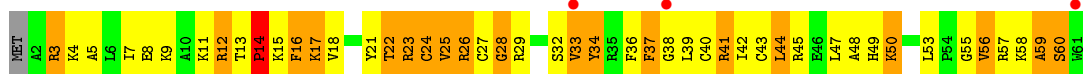
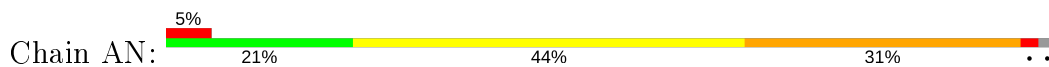


• Molecule 13: 30S ribosomal protein S13

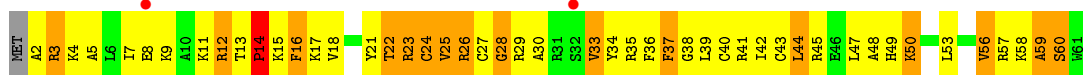




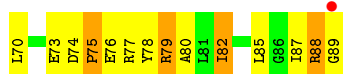
- Molecule 14: 30S ribosomal protein S14



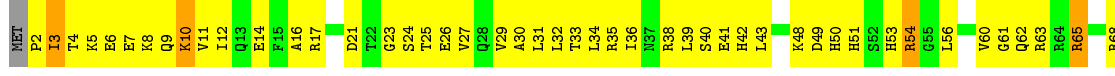
- Molecule 14: 30S ribosomal protein S14



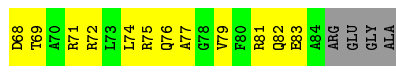
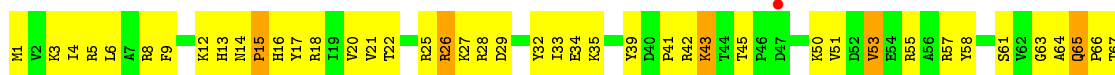
- Molecule 15: 30S ribosomal protein S15



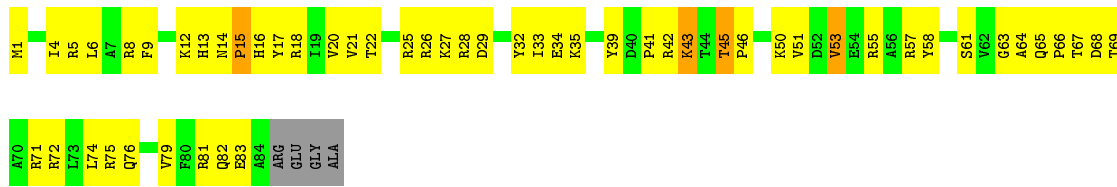
- Molecule 15: 30S ribosomal protein S15



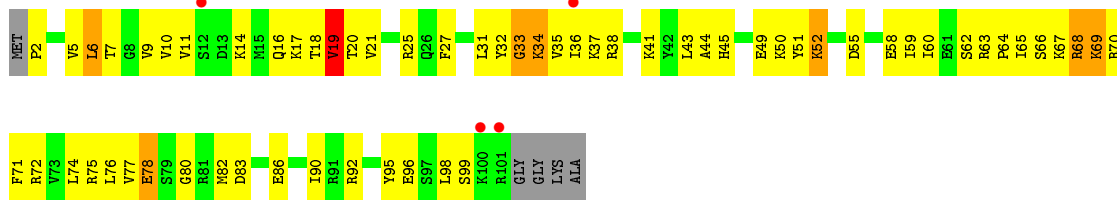
- Molecule 16: 30S ribosomal protein S16



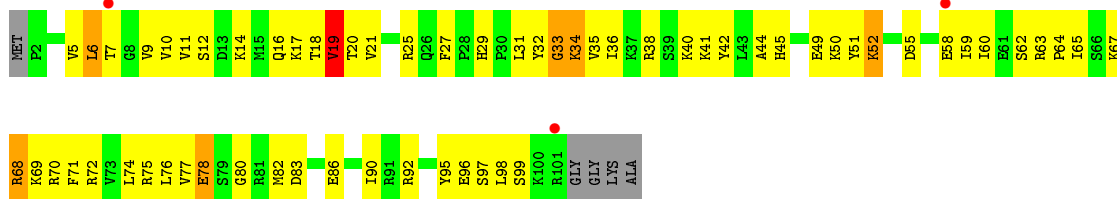
• Molecule 16: 30S ribosomal protein S16



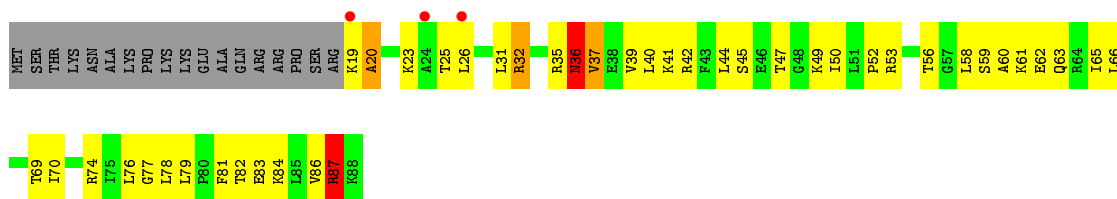
• Molecule 17: 30S ribosomal protein S17



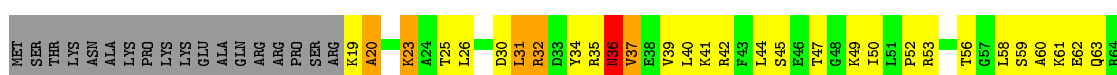
• Molecule 17: 30S ribosomal protein S17

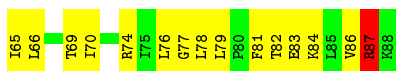


• Molecule 18: 30S ribosomal protein S18

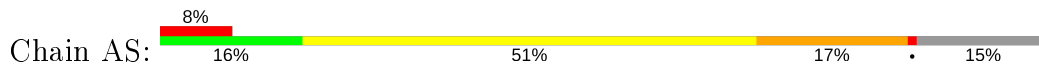


• Molecule 18: 30S ribosomal protein S18

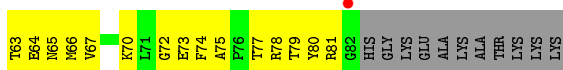
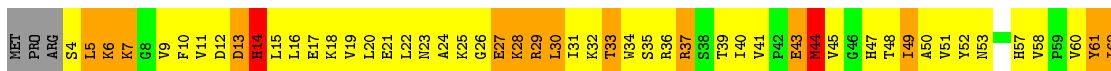
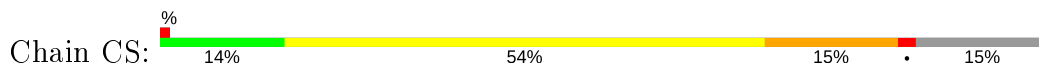




- Molecule 19: 30S ribosomal protein S19



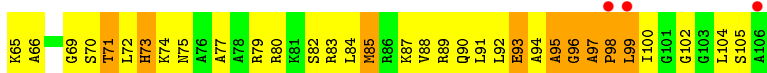
- Molecule 19: 30S ribosomal protein S19



- Molecule 20: 30S ribosomal protein S20

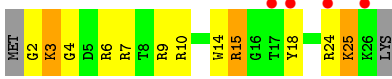


- Molecule 20: 30S ribosomal protein S20

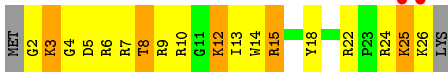


- Molecule 21: 30S ribosomal protein THX

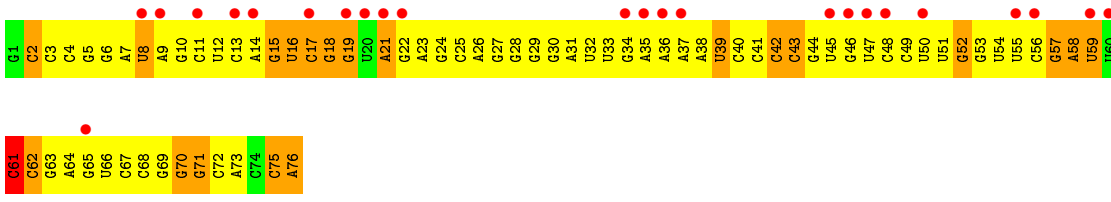
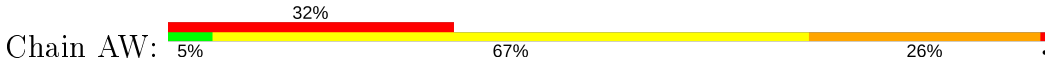




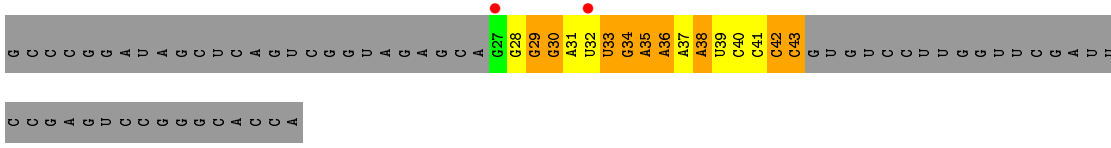
• Molecule 21: 30S ribosomal protein THX



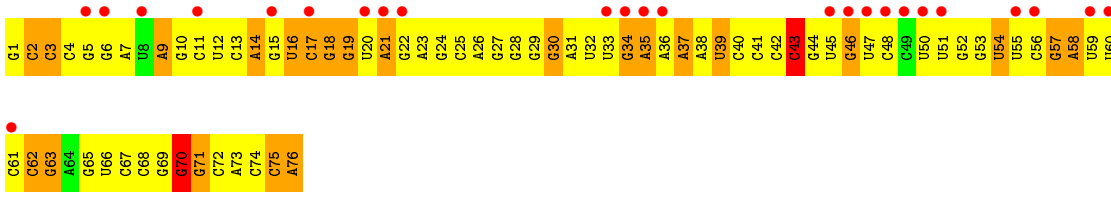
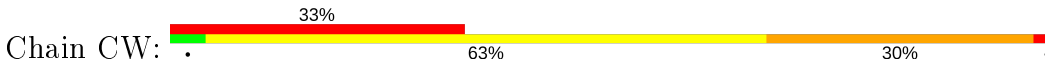
• Molecule 22: tRNA-Phe



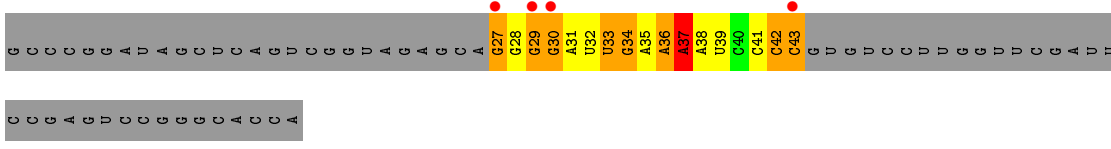
• Molecule 22: tRNA-Phe



• Molecule 22: tRNA-Phe



• Molecule 22: tRNA-Phe



• Molecule 23: tRNA-fMet



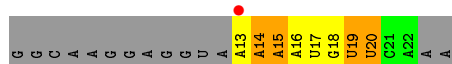
• Molecule 23: tRNA-fMet



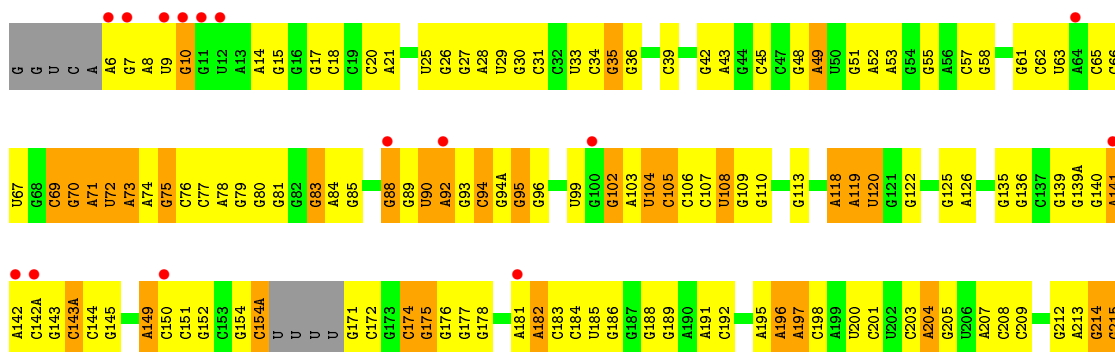
• Molecule 24: messenger RNA

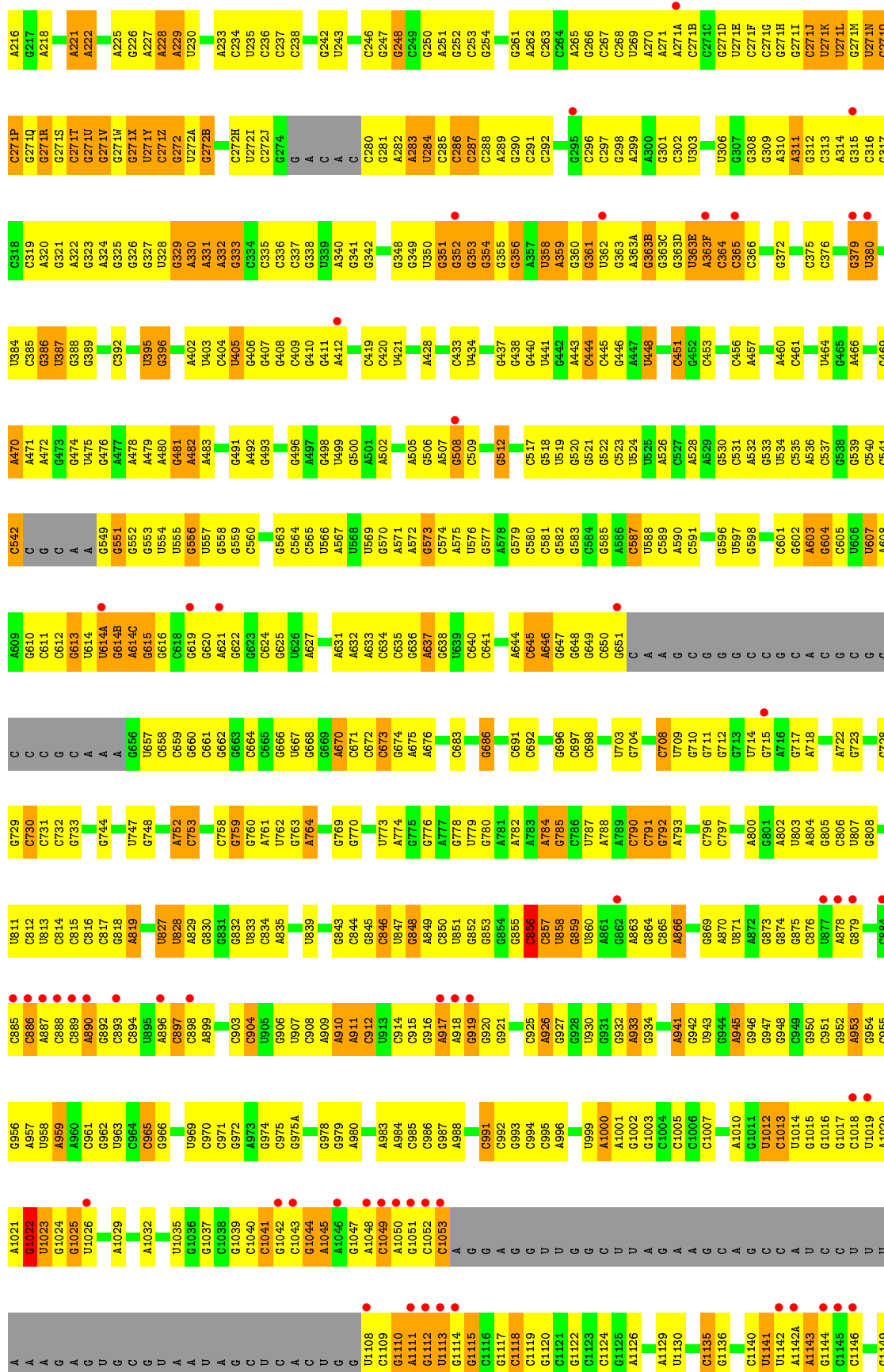


• Molecule 24: messenger RNA

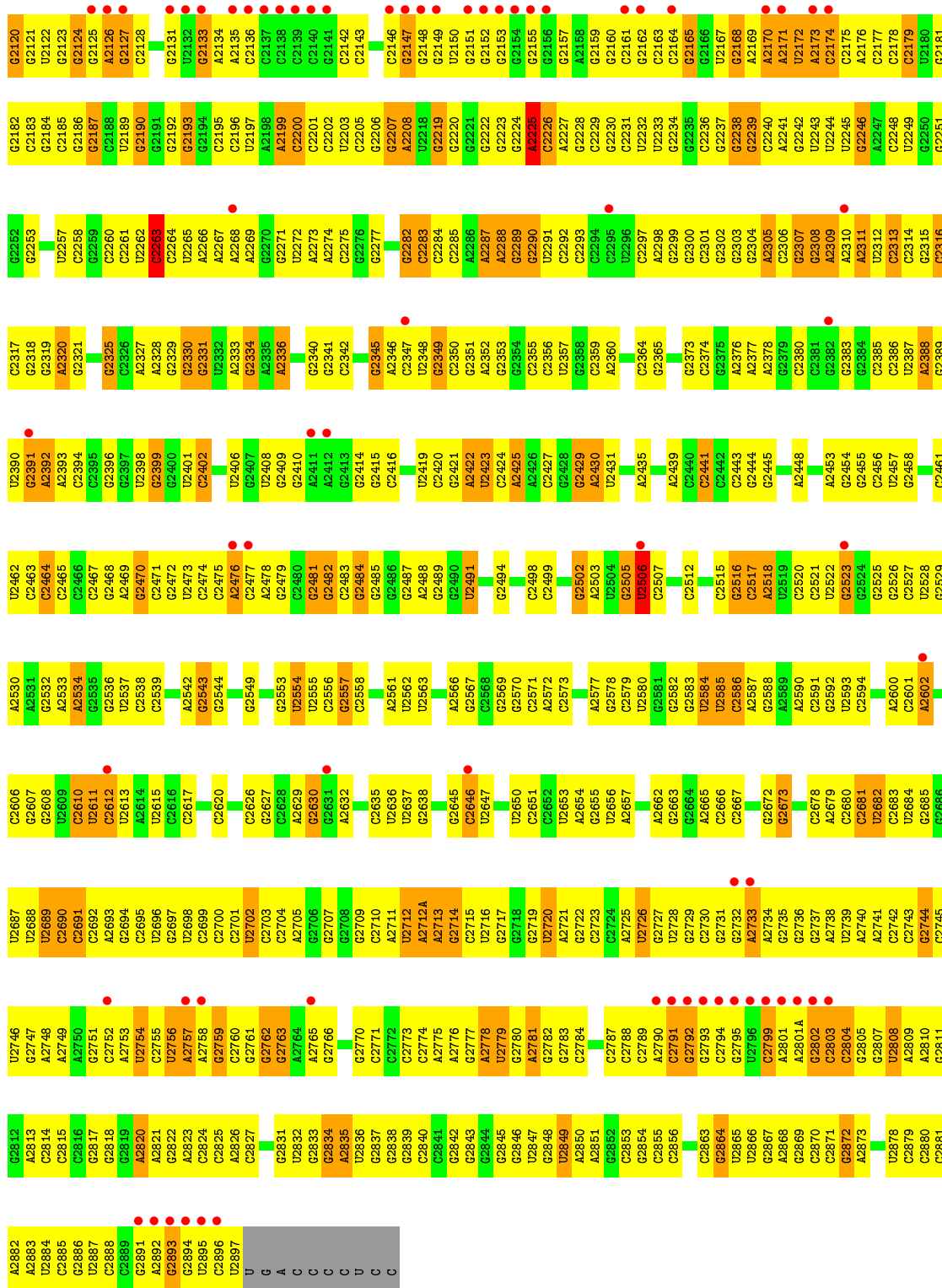


• Molecule 25: 23S rRNA



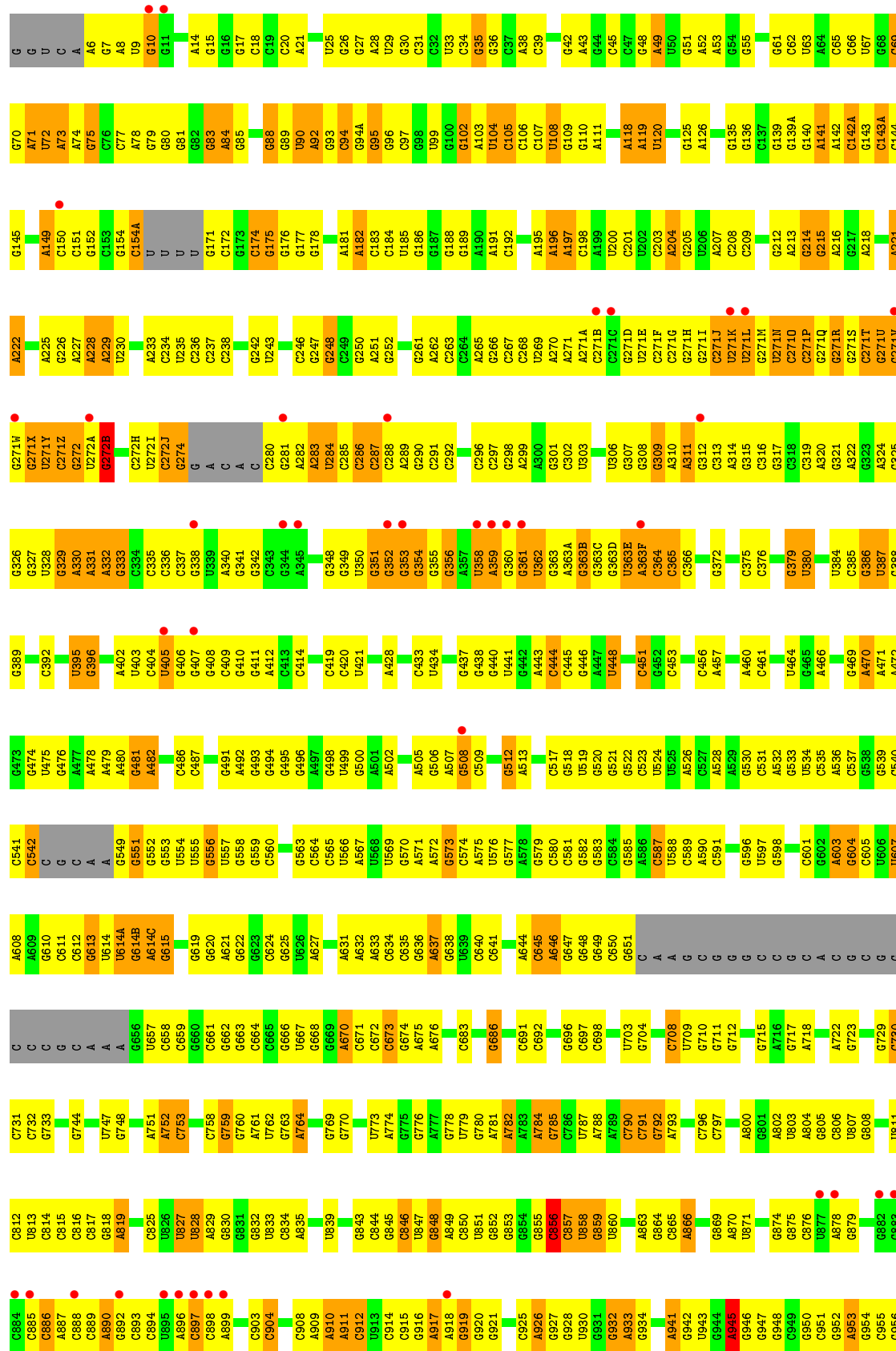


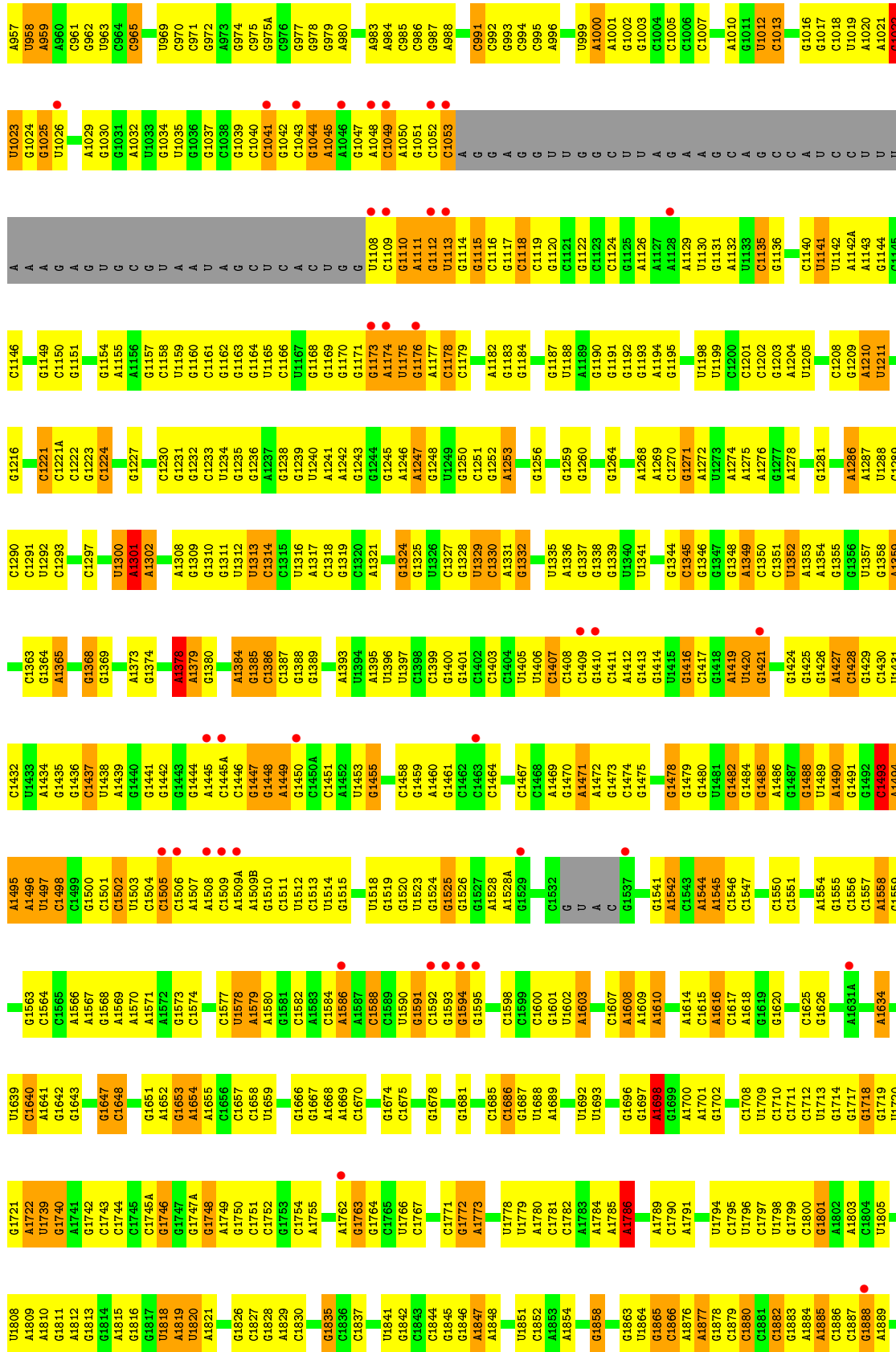
C2055	A1885	G1804	G1719	G1686	G1563	A1495	C1430	A1359	U1292	C1221A	G1150
G2056	C1886	U1805	U1720	C1887	C1564	A1496	U1431	C1362	C1293	C1222	G1151
A2059	G1888	U1808	A1722	C1889	C1566	U1497	U1433	C1363	C1297	C1223	G1154
C2060	A1889	U1809	U1739	C1890	A1567	C1499	U1434	A1364	C1298	C1224	A1155
C2061	G1894	A1810	G1740	C1640	G1568	G1500	G1435	A1365	G1299	G1227	A1156
A2062	C1895	G1812	A1741	G1642	A1569	C1501	G1436	U1300	U1300	G1227	G1157
C2063	G1899	G1813	G1742	G1643	A1570	C1502	C1437	A1301	A1301	C1230	C1158
C2064	A1899	G1814	G1743	G1647	A1571	U1503	U1438	A1302	A1302	C1231	U1159
C2065	A1900	G1815	C1744	A1572	A1572	C1504	A1439	A1308	A1308	G1232	G1160
C2066	G1901	G1816	C1745	C1574	C1574	C1506	G1441	G1309	G1309	C1233	C1161
G2067	A1902	G1817	G1746	G1651	A1574	A1507	G1442	G1310	U1284	U1284	G1162
U2068	G1903	U1818	G1747	A1652	C1577	A1508	G1443	G1311	G1311	G1285	G1163
C2069	G1906	A1819	G1747A	G1653	U1578	A1509	G1444	G1312	U1287	G1286	G1164
G2070	A1907	U1820	G1748	A1654	A1579	C1509	G1445	U1313	A1237	G1237	U1165
C2073	C1908	A1821	A1749	A1655	A1580	A1509B	C1446	G1314	G1239	G1239	U1167
U2074	C1909	G1826	G1750	C1657	G1581	G1510	C1446A	C1315	U1240	U1240	G1168
U2075	C1914	C1827	C1752	U1659	A1582	C1511	G1447	U1316	A1241	A1241	G1169
C2078	U1915	G1828	G1753	C1666	C1583	U1512	G1448	C1318	A1242	A1242	G1170
G2080	U1923	A1829	C1754	A1668	A1586	U1514	A1449	G1388	G1243	G1243	G1171
A2082	C1925	C1830	A1755	G1667	A1587	C1450A	G1450	G1389	G1244	G1244	G1173
G2083	A1927	G1835	G1758	U1669	C1588	C1451	C1451	G1322	A1247	A1247	U1175
G2087	G1927	C1836	A1762	C1670	U1589	G1519	U1453	U1323	G1248	G1248	U1177
G2088	A1928	C1837	A1763	U1592	G1591	G1520	G1455	G1324	U1249	U1249	G1178
U2091	G1929	U1841	G1764	C1600	C1600	U1523	C1464	G1325	G1259	G1259	G1179
U2092	A1937	G1842	C1765	G1601	G1601	G1524	C1467	U1396	G1260	G1260	U1188
G2093	A1938	C1843	U1766	U1602	A1468	A1525	G1469	G1397	G1261	G1261	G1190
U2017	U1939	G1844	C1767	A1603	G1470	G1526	G1471	U1405	G1262	G1262	G1191
U2022	U1946	U1851	U1778	C1604	A1603	G1527	A1472	U1406	G1264	G1264	G1192
G2023	C1947	C1852	U1779	C1607	A1607	A1528	G1473	C1407	A1265	A1265	G1193
G2024	G1948	U1853	A1780	A1609	A1609	A1528A	C1474	C1408	G1266	G1266	A1194
C2025	A1952	G1854	C1781	U1610	C1532	G	C1475	G1409	U1267	U1267	G1195
C2026	A1953	C1855	A1784	A1614	U	U	G1475	G1410	A1268	A1268	U1198
G2029	G1954	G1856	A1785	A1615	C	C	G1475	C1411	U1269	U1269	U1199
A2030	U1955	A1697	A1786	A1616	A1544	A1544	G1478	A1412	C1270	C1270	U1199
A2031	U1955	G1699	A1789	A1617	A1544	A1544	G1479	G1413	G1271	G1271	C1200
G2032	C1958	A1699	C1790	A1618	A1546	A1546	G1480	G1414	A1272	A1272	C1201
A2033	A1960	U1700	A1791	A1619	C1547	C1547	U1481	U1415	U1273	U1273	C1202
U2034	C1961	A1701	U1794	G1619	C1547	C1547	G1482	G1416	A1274	A1274	G1203
C2035	C1962	A1708	C1795	G1620	U1550	U1550	G1484	C1417	A1275	A1275	A1204
C2036	U1963	U1709	U1796	G1625	C1551	C1551	G1485	G1418	A1278	A1278	U1205
C2039	G1964	C1710	C1797	A1626	A1554	A1554	A1486	A1419	G1281	G1281	C1208
C2040	A1965	C1711	U1798	G1626	A1554	A1554	G1487	U1420	A1286	A1286	G1209
U2041	A1966	C1712	C1799	A1631A	C1556	C1556	U1489	U1352	A1287	A1287	U1211
A2042	C1967	U1713	C1800	A1634	C1557	C1557	A1490	A1353	U1288	U1288	G1216
C2043	G1968	G1714	A1801	A1634	A1558	A1558	G1491	G1426	C1289	C1289	U1216
U2118	A1969	A1634	A1802	A1634	A1559	A1559	G1492	A1427	U1357	U1357	A1220
A2119	A1970	G1718	A1803	G1635	C1559	C1559	C1493	G1429	G1358	G1358	C1221



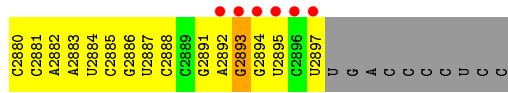
• Molecule 25: 23S rRNA



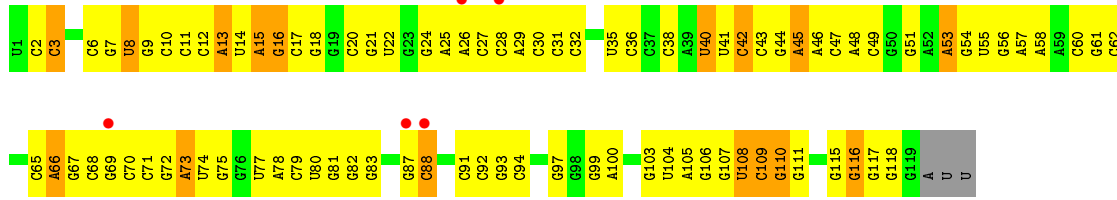




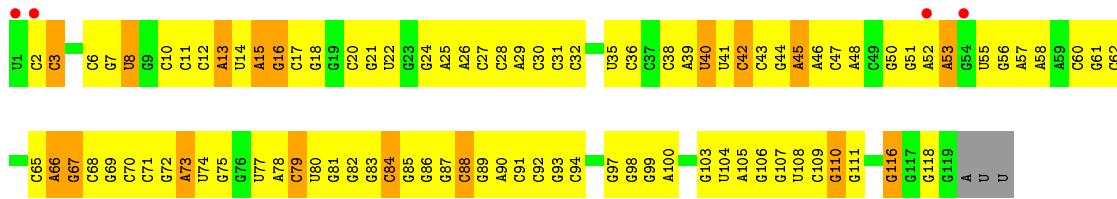
A2813	A2749	C2890	C2612	C2465	A2392	A2320	G2256	C2183	G2056	G1975	G1889
C2814	A2750	C2891	U2613	C2466	A2393	G2321	U2257	G2184	U2122	G1980	A1900
C2815	G2535	C2892	A2614	C2467	C2394	G2322	C2258	C2185	G2123	A1901	A1901
G2816	U2615	A2693	G2395	G2468	G2395	G2323	G2259	A2060	A2060	A1981	A1902
G2817	C2538	G2694	G2396	A2469	G2396	A2326	C2260	A2126	A2061	A1982	G1903
G2818	C2539	C2695	G2397	G2470	G2397	A2327	C2261	G2187	A2062	A1983	G1903
G2819	C2471	C2696	U2398	C2471	U2398	A2328	U2262	G2188	C2063	A1906	G1906
A2820	G2472	G2697	G2399	G2472	G2399	A2329	G2263	C2129	C2064	A1907	A1907
A2821	G2473	G2698	G2400	U2473	G2400	G2330	C2264	U2130	C2065	C1908	C1908
A2822	G2474	C2699	U2401	G2474	U2401	G2331	U2265	G2131	C2066	C1909	C1909
A2823	C2475	C2700	G2402	C2475	G2402	U2332	A2266	G2132	C2067	C1988	C1988
C2824	G2549	C2701	C2403	A2333	C2403	G2333	A2267	U2133	U2068	C1990	A1912
C2825	C2476	U2702	U2406	A2334	U2406	A2334	A2268	G2134	U2069	A1913	A1913
A2826	A2478	C2703	G2407	A2335	G2407	G2335	A2269	A2135	G2070	C1914	C1914
C2827	U2479	C2704	U2408	A2336	G2407	A2336	G2270	C2137	C2073	U1915	U1915
G2831	A2765	G2705	U2409	G2480	U2408	A2198	G2271	C2138	U2074	A1919	A1919
G2832	G2766	G2706	G2410	G2481	G2409	A2199	U2272	C2139	U2075	A1920	A1920
G2833	C2767	G2707	G2411	G2482	G2410	C2339	A2273	C2140	C1995	C1995	C1995
G2834	C2768	G2708	C2342	C2483	C2342	C2342	C2274	C2141	C1996	C1997	C1997
G2835	U2662	G2709	G2345	G2484	G2345	G2345	U2203	G2142	C1998	C1998	C1998
G2836	U2663	U2663	A2346	G2486	A2346	A2346	C2205	C2143	C2000	G2000	G2000
G2837	G2770	U2711	G2347	G2487	G2347	C2347	G2206	C2144	A2001	U1926	U1926
G2838	C2771	U2712	C2348	A2488	C2348	G2348	G2207	G2145	C2002	A1927	A1927
G2839	C2772	A2712A	U2419	A2489	U2419	G2349	A2208	G2146	C2003	A1928	A1928
G2840	C2773	A2713	C2421	G2490	C2421	C2350	U2218	G2147	C2004	G1929	G1929
C2841	C2774	G2714	A2422	U2491	A2422	C2351	G2219	G2148	C2006	C1930	C1930
C2842	A2775	C2715	A2423	U2492	A2423	C2352	G2220	G2149	U2011	U1946	U1946
C2843	A2776	U2716	U2424	G2493	U2424	A2352	A2286	U2150	G2023	C1947	C1947
C2844	G2777	C2717	C2425	G2494	C2425	A2353	A2287	G2151	G2024	G1948	G1948
G2845	A2778	G2718	A2426	G2495	A2426	A2354	A2288	G2152	A2013	G1985	G1985
G2846	C2779	G2719	A2426	C2496	A2426	C2355	A2289	G2153	A2014	A1937	A1937
G2847	U2720	U2720	C2427	C2497	C2427	C2356	G2290	G2154	A2015	A1938	A1938
U2847	A2781	A2721	G2428	U2498	G2428	U2357	U2291	G2155	U2016	U1939	U1939
G2848	C2782	G2722	A2429	G2502	A2429	C2358	C2226	G2156	G2094	U1946	U1946
A2849	G2783	C2723	A2430	U2503	A2430	C2359	A2227	G2157	C2095	C1947	C1947
A2850	C2784	G2724	U2431	U2504	U2431	A2360	G2228	G2158	C2096	G1948	G1948
A2851	U2725	A2725	U2431	U2505	U2431	A2360	G2229	G2159	U2098	U1946	U1946
G2852	U2726	U2726	A2435	U2506	A2435	A2360	G2230	G2160	G2024	G1948	G1948
C2853	G2727	U2562	A2439	C2507	A2439	G2365	C2231	G2161	C2025	U1946	U1946
C2854	U2728	G2563	C2440	C2512	C2440	G2366	U2232	G2162	C2026	A1952	A1952
C2855	G2729	U2564	C2441	C2513	C2441	G2367	U2233	G2163	G2029	A1953	A1953
C2856	C2730	U2565	C2442	C2514	C2442	G2368	U2234	G2164	A2030	G1954	G1954
C2857	G2731	C2566	C2443	C2515	C2443	G2369	G2235	G2165	A2031	U1955	U1955
C2791	G2731	C2567	G2444	G2516	G2444	C2370	C2236	G2166	A2032	U1956	U1956
G2792	G2732	G2568	G2445	G2517	G2445	C2371	G2237	U2167	A2033	C1957	C1957
G2793	C2733	A2569	G2446	G2518	G2446	C2372	G2238	G2168	U2034	C1958	C1958
G2794	A2734	A2590	U2448	U2519	U2448	C2373	G2239	G2169	G2036	A1960	A1960
G2795	G2735	C2591	A2453	C2520	A2453	G2374	C2240	A2170	C2035	C1961	C1961
U2796	G2736	G2592	G2454	U2522	G2454	A2458	A2241	G2171	C2036	C1962	C1962
C2799	C2737	U2593	G2455	G2523	G2455	C2380	U2242	U2172	G2039	U1963	U1963
A2801A	A2738	C2594	G2456	G2524	G2456	C2381	U2243	C2174	C2040	G1964	G1964
A2801A	A2739	C2594	G2457	G2525	G2457	C2382	U2244	C2175	U2041	C1967	C1967
G2802	C2740	A2600	G2458	G2526	G2458	C2383	U2245	C2176	A2042	G1968	G1968
C2803	C2741	C2601	G2459	G2527	G2459	C2384	U2246	G2177	C2043	A1969	A1969
C2804	C2742	C2602	G2461	G2528	G2461	C2385	U2247	C2178	G2044	A1970	A1970
C2805	G2743	A2602	U2462	G2529	U2462	C2386	U2248	C2179	G2045	A1971	A1971
C2806	C2744	C2606	U2463	G2530	U2463	C2387	U2249	U2180	G2052	A1972	A1972
C2807	G2745	U2610	C2464	U2531	C2464	C2388	G2250	G2181	C2055	C1973	C1973
C2808	A2746	C2610	C2464	U2532	C2464	C2389	G2251	G2182		C1974	C1974
C2809	U2747	U2611	C2464	A2533		C2391	G2251	G2182			



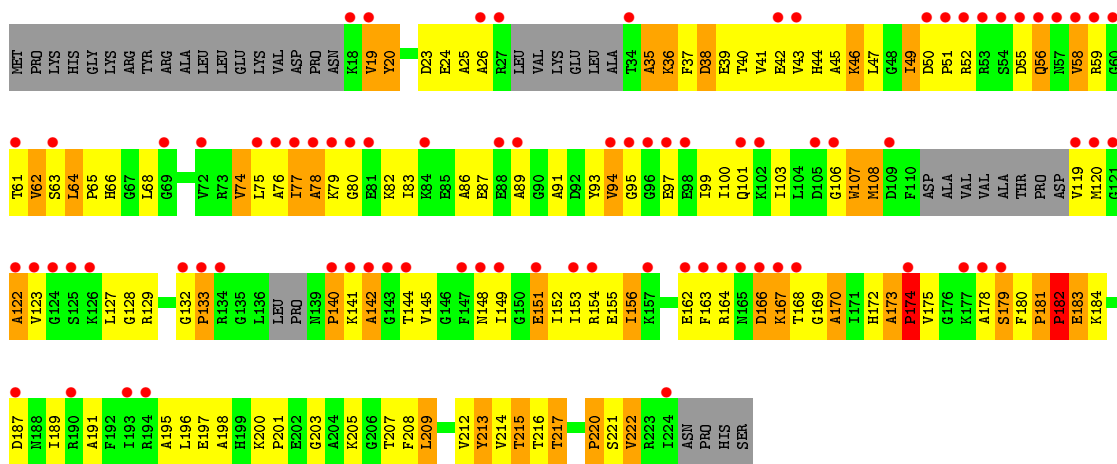
• Molecule 26: 5S rRNA



• Molecule 26: 5S rRNA

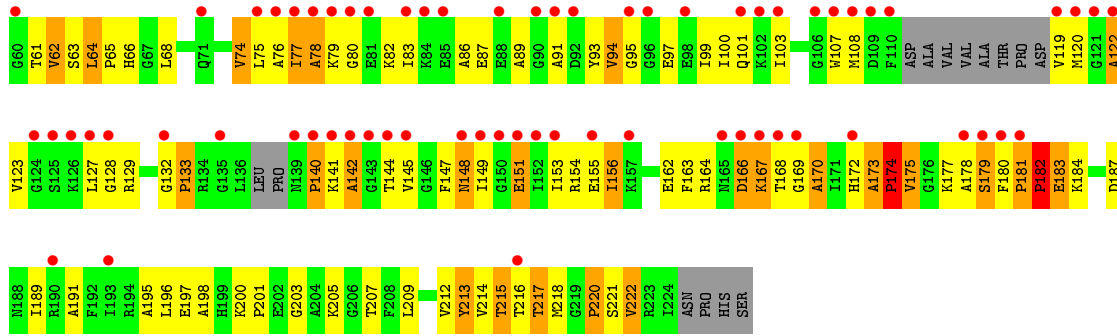


• Molecule 27: 50S ribosomal protein L1



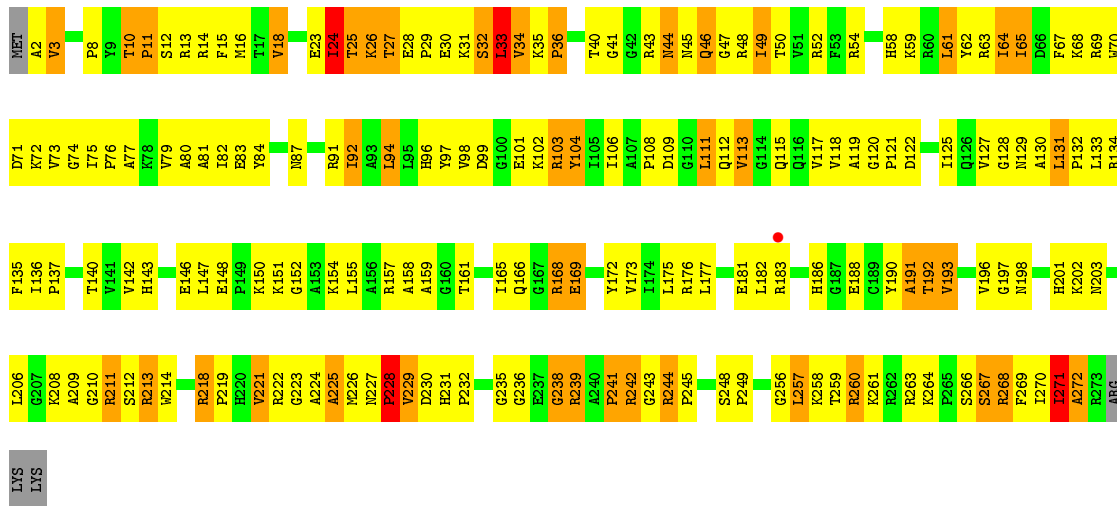
• Molecule 27: 50S ribosomal protein L1





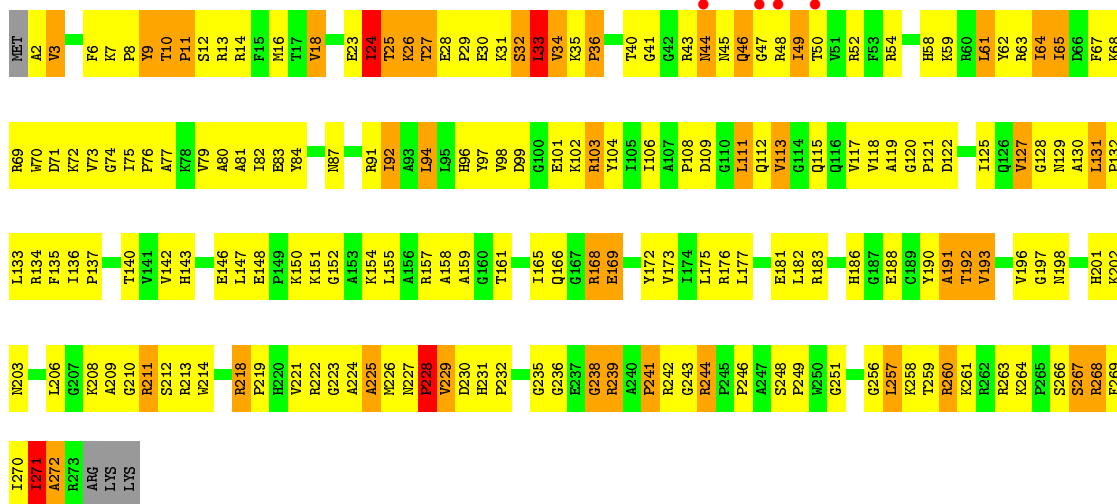
• Molecule 28: 50S ribosomal protein L2

Chain BD: ..

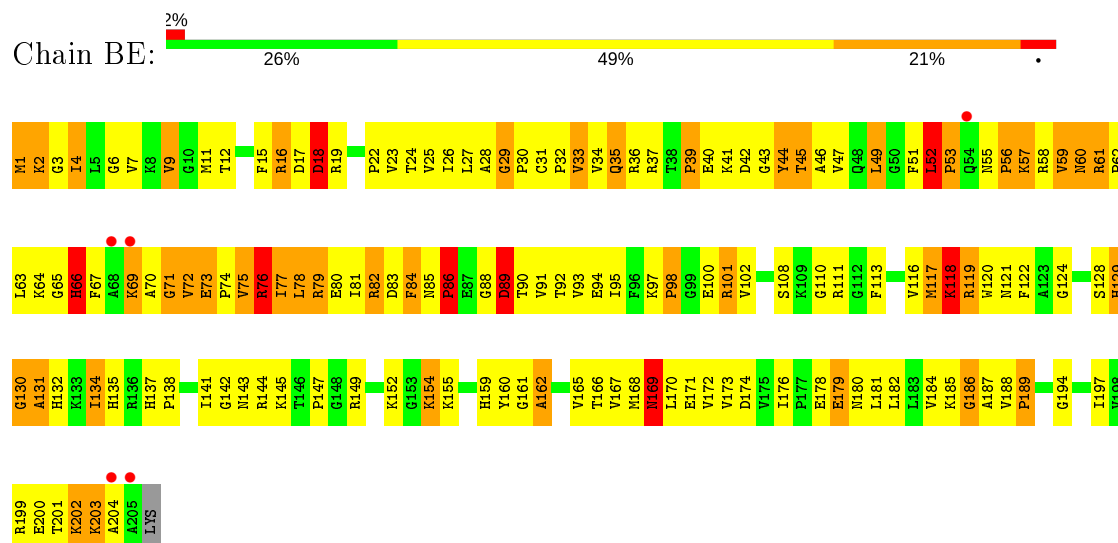


• Molecule 28: 50S ribosomal protein L2

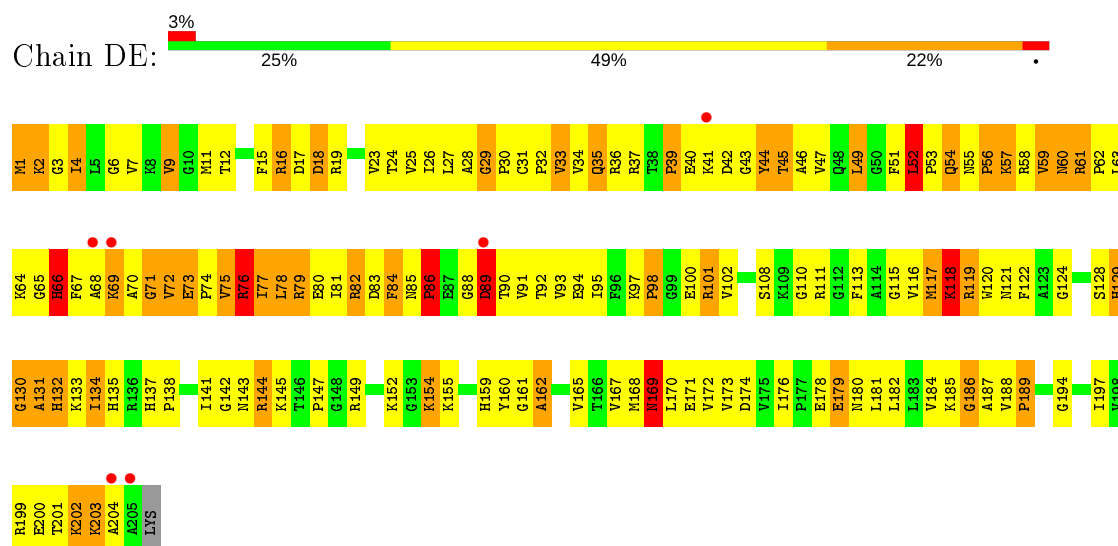
Chain DD: ..



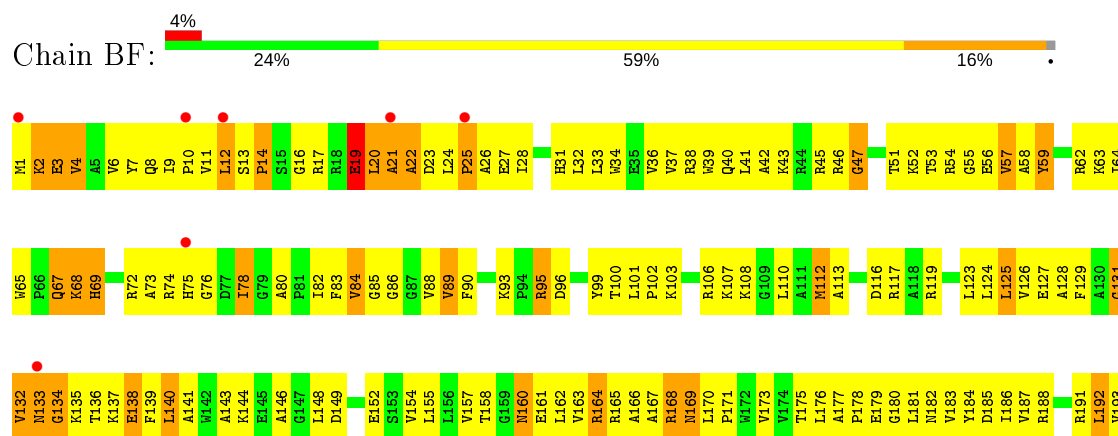
• Molecule 29: 50S ribosomal protein L3

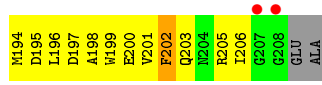


- Molecule 29: 50S ribosomal protein L3

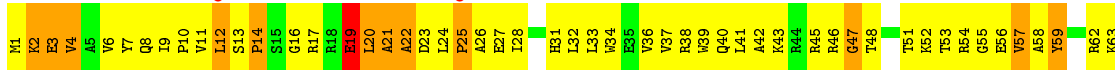


- Molecule 30: 50S ribosomal protein L4

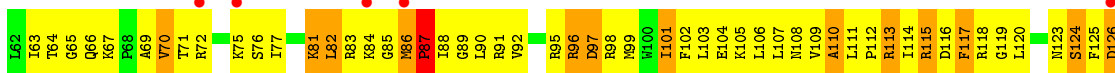




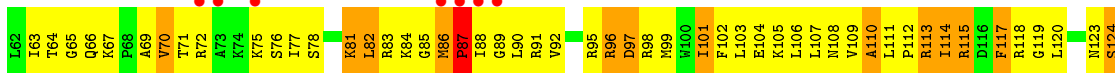
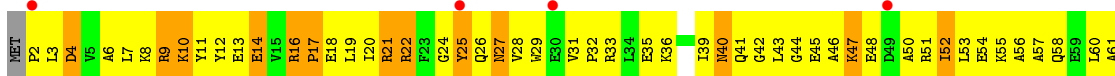
- Molecule 30: 50S ribosomal protein L4



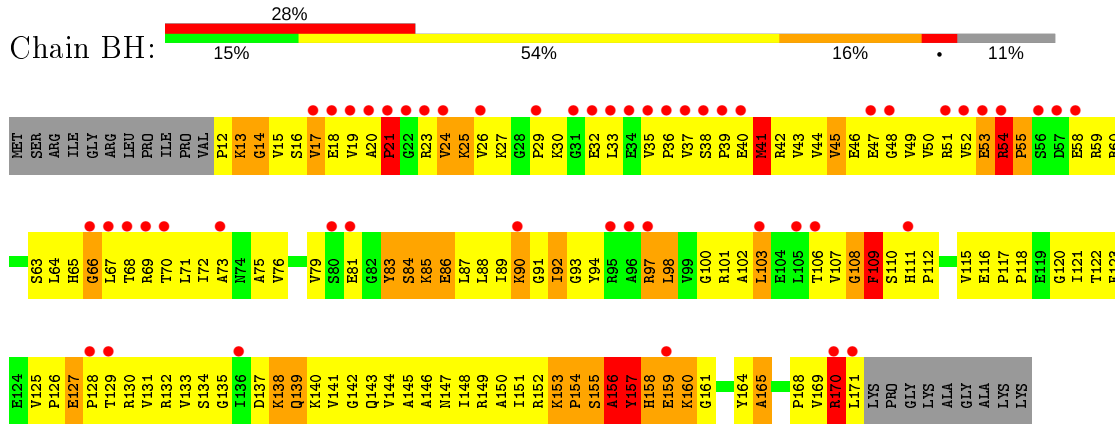
- Molecule 31: 50S ribosomal protein L5



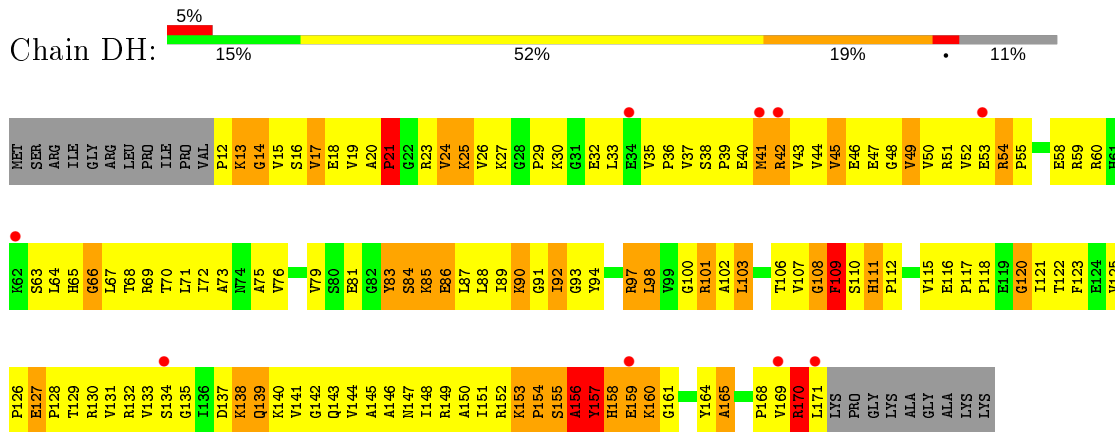
- Molecule 31: 50S ribosomal protein L5



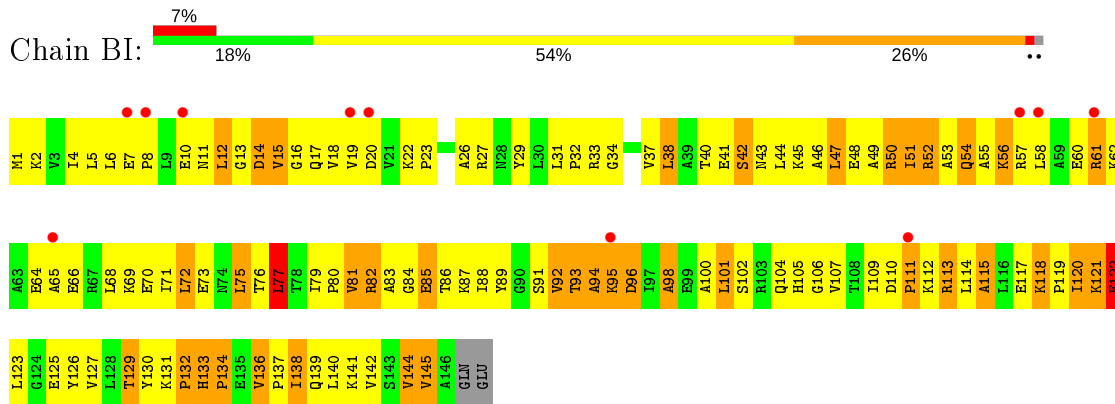
- Molecule 32: 50S ribosomal protein L6



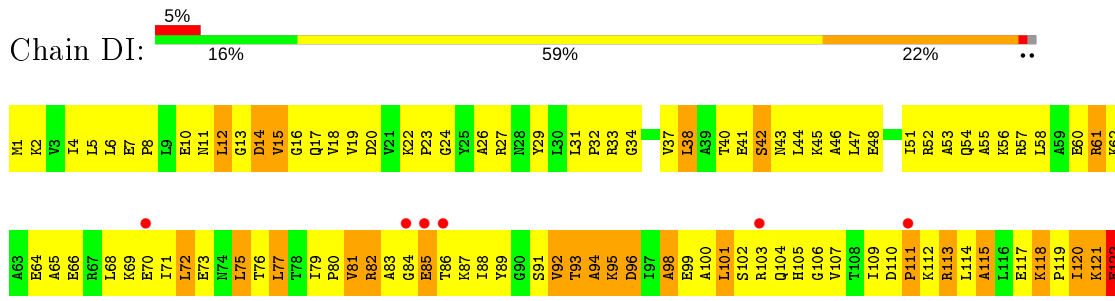
• Molecule 32: 50S ribosomal protein L6

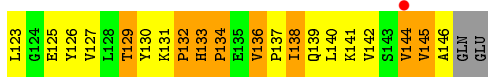


• Molecule 33: 50S ribosomal protein L9

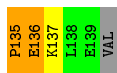
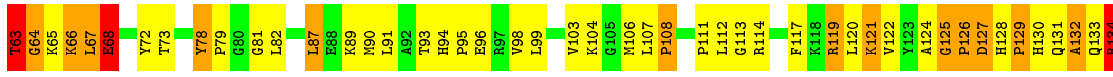
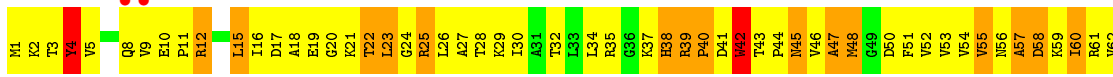


• Molecule 33: 50S ribosomal protein L9

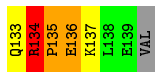
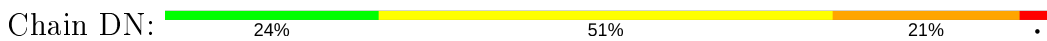




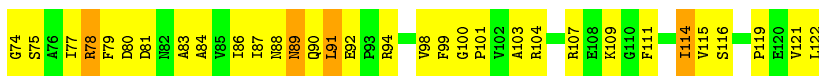
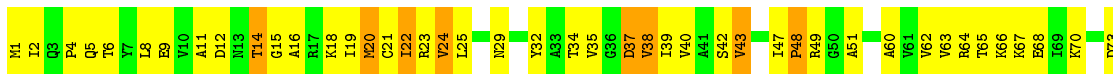
• Molecule 34: 50S ribosomal protein L13



• Molecule 34: 50S ribosomal protein L13



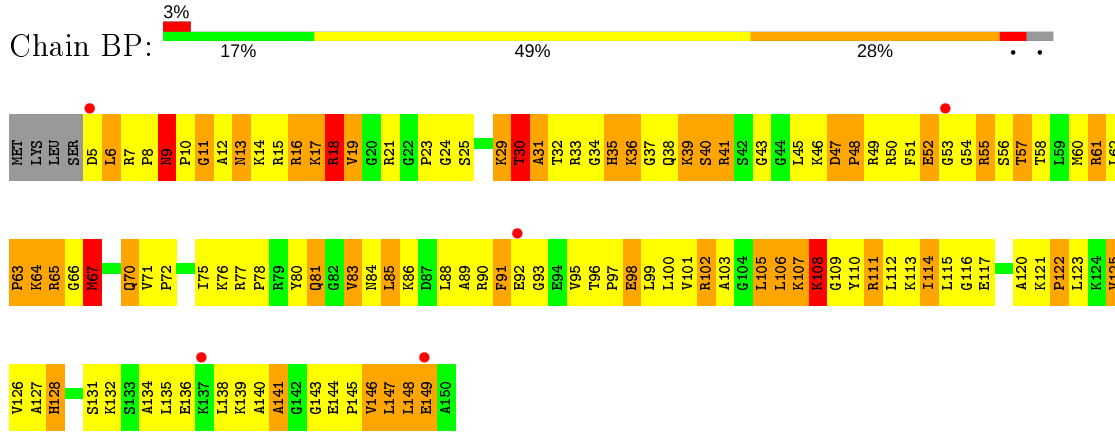
• Molecule 35: 50S ribosomal protein L14



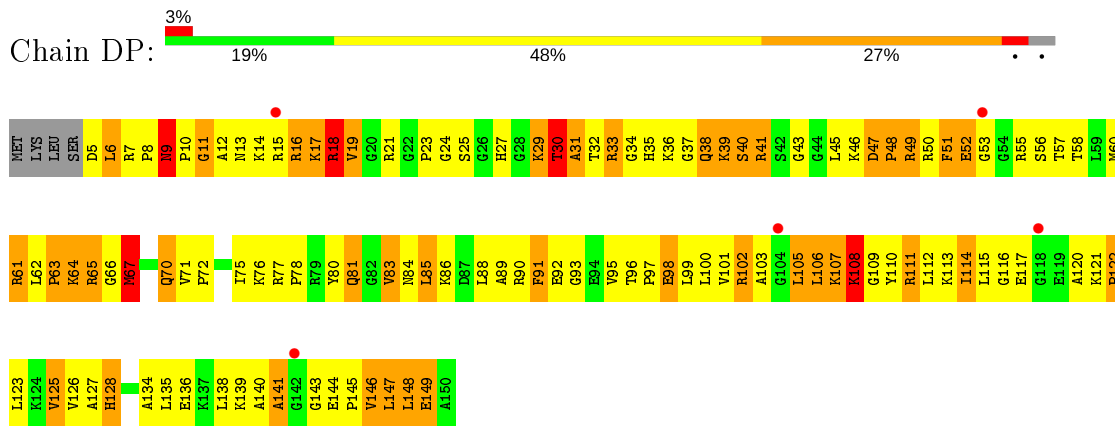
• Molecule 35: 50S ribosomal protein L14



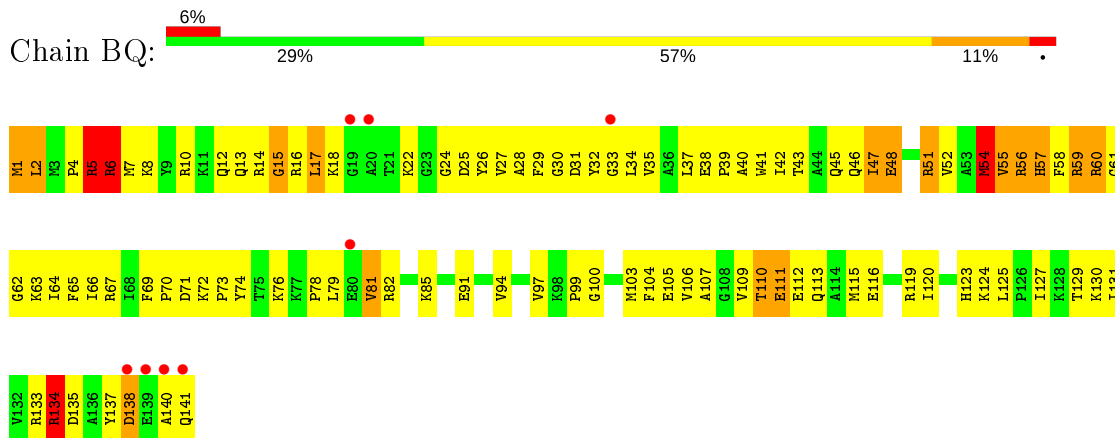
• Molecule 36: 50S ribosomal protein L15



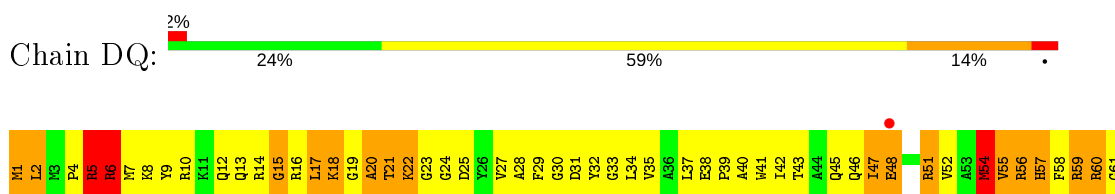
• Molecule 36: 50S ribosomal protein L15

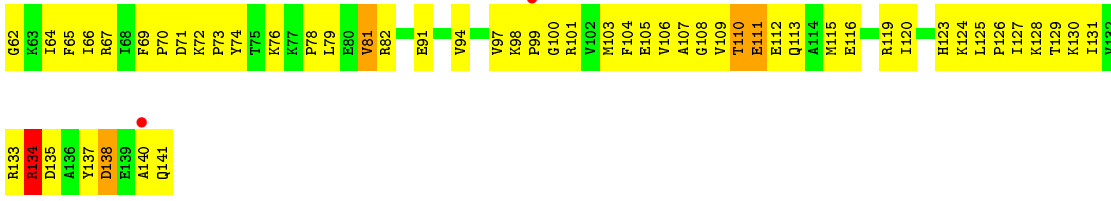


• Molecule 37: 50S ribosomal protein L16

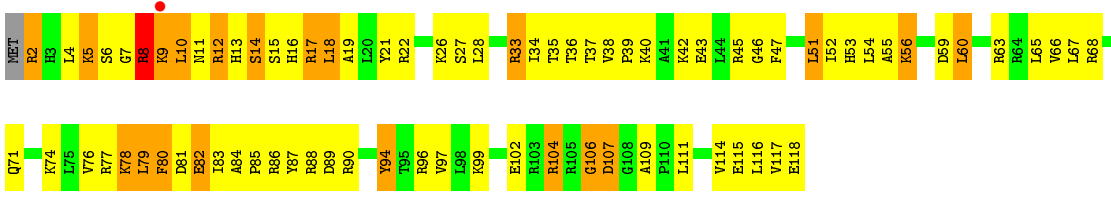


• Molecule 37: 50S ribosomal protein L16

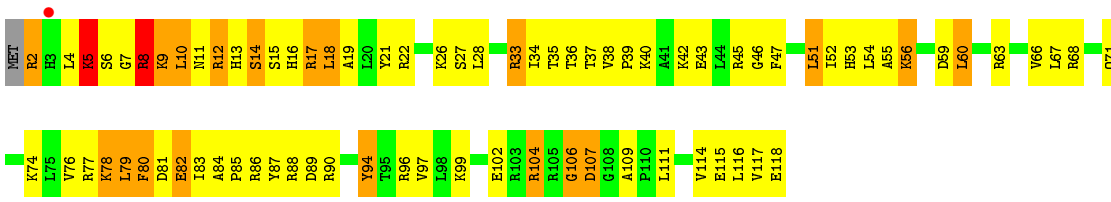




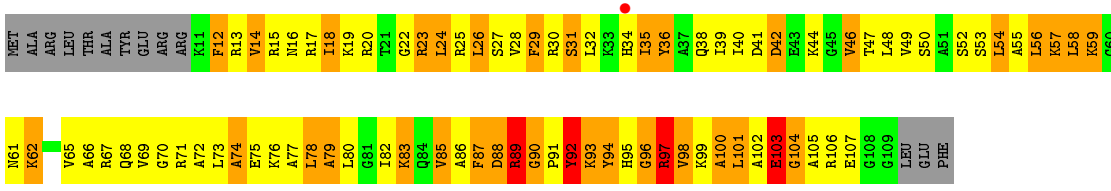
• Molecule 38: 50S ribosomal protein L17



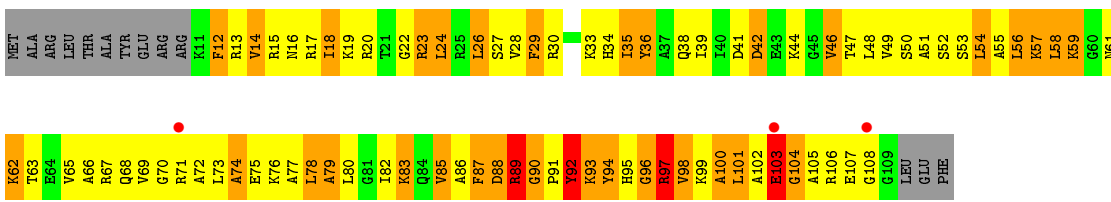
• Molecule 38: 50S ribosomal protein L17



• Molecule 39: 50S ribosomal protein L18

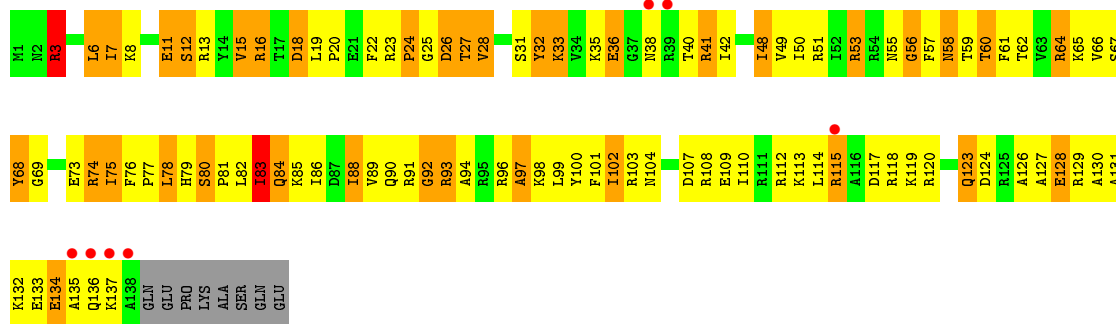


• Molecule 39: 50S ribosomal protein L18



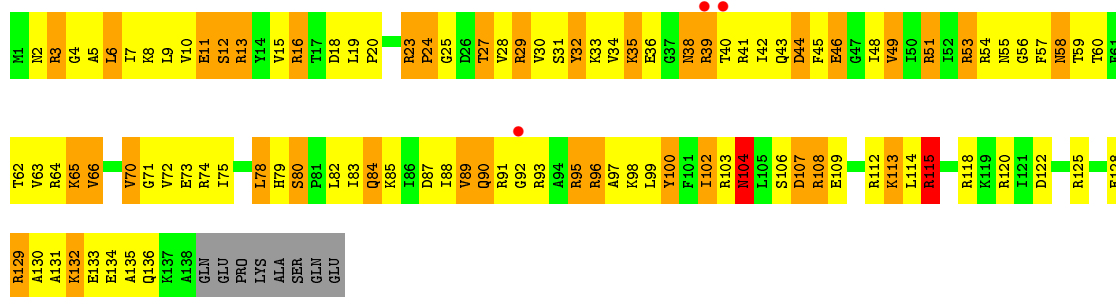
• Molecule 40: 50S ribosomal protein L19

Chain BT: 5% 24% 45% 25% 5%



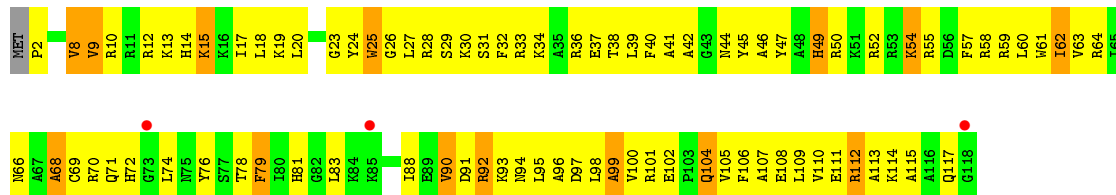
- Molecule 40: 50S ribosomal protein L19

Chain DT: 2% 23% 45% 25% 5%



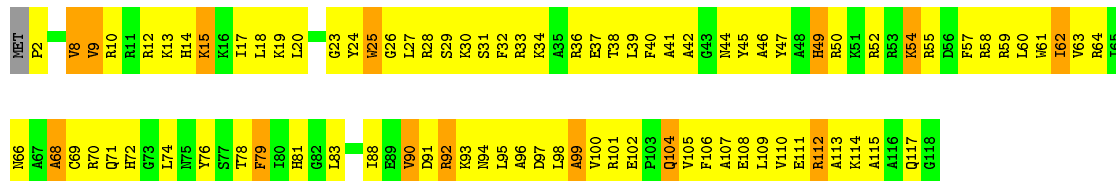
- Molecule 41: 50S ribosomal protein L20

Chain BU: 3% 25% 62% 12%



- Molecule 41: 50S ribosomal protein L20

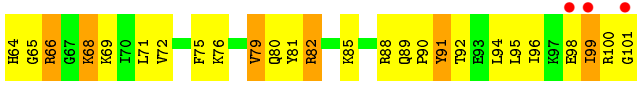
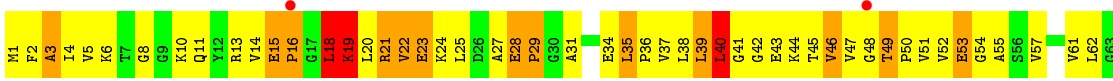
Chain DU: 25% 62% 12%



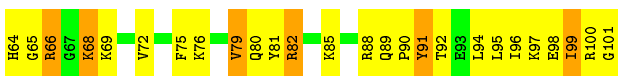
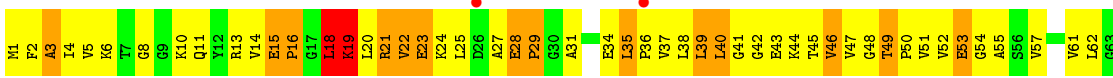
- Molecule 42: 50S ribosomal protein L21

Chain BV: 5% 25% 53% 19%

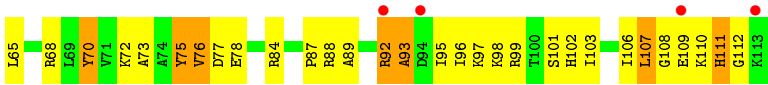




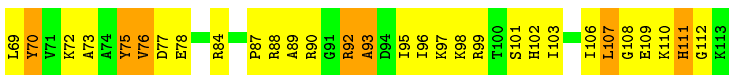
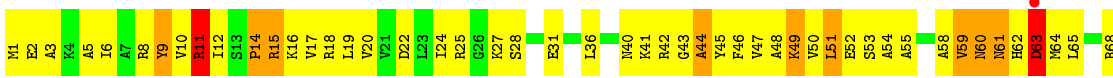
● Molecule 42: 50S ribosomal protein L21



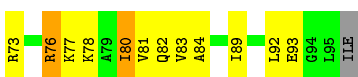
● Molecule 43: 50S ribosomal protein L22



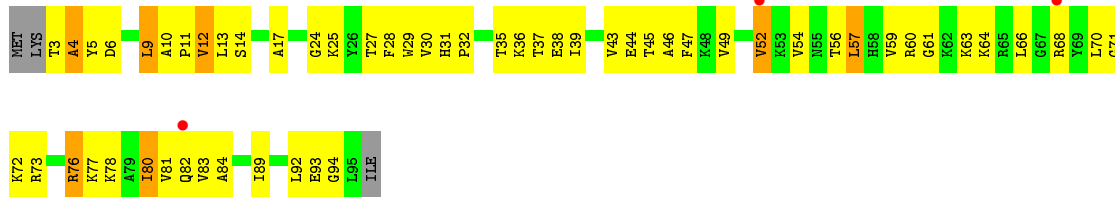
● Molecule 43: 50S ribosomal protein L22



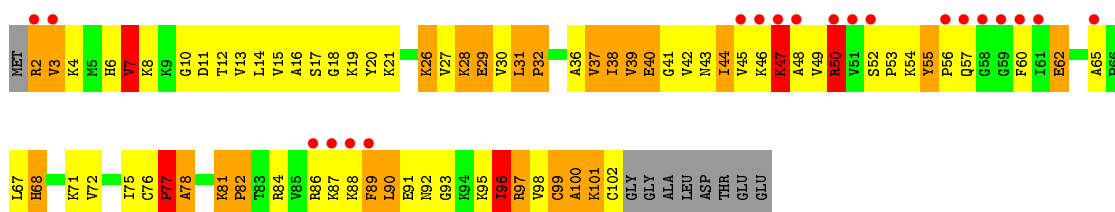
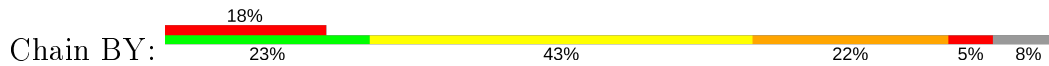
● Molecule 44: 50S ribosomal protein L23



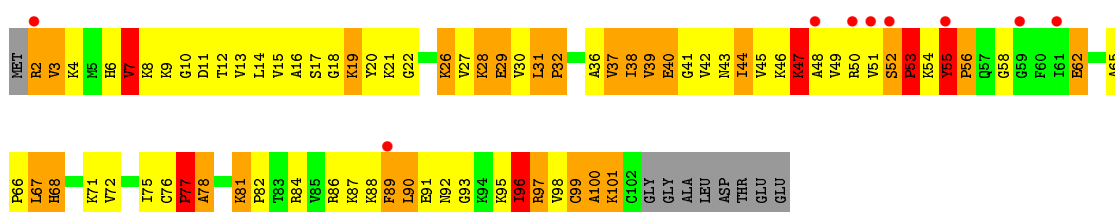
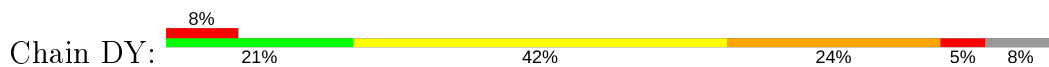
● Molecule 44: 50S ribosomal protein L23



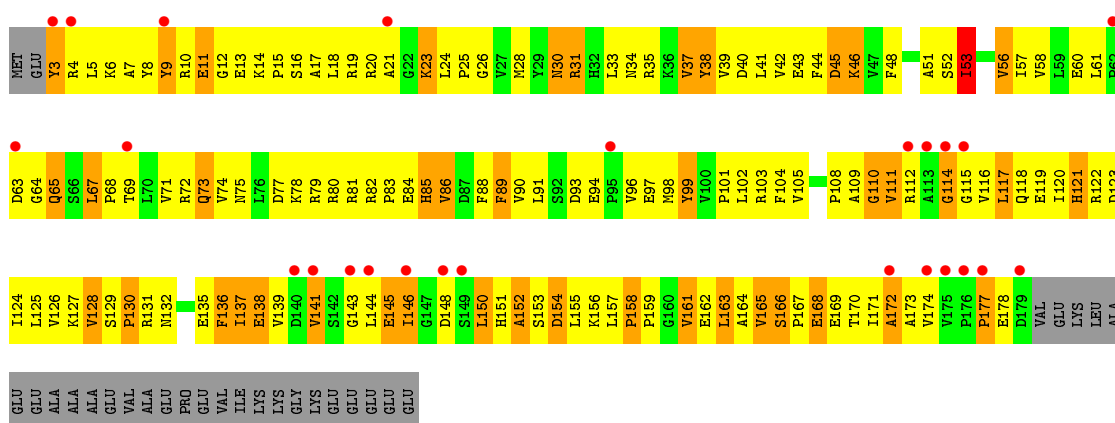
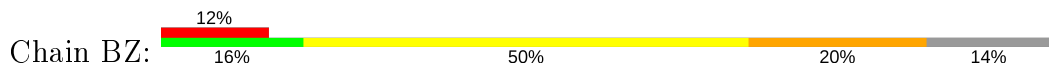
• Molecule 45: 50S ribosomal protein L24



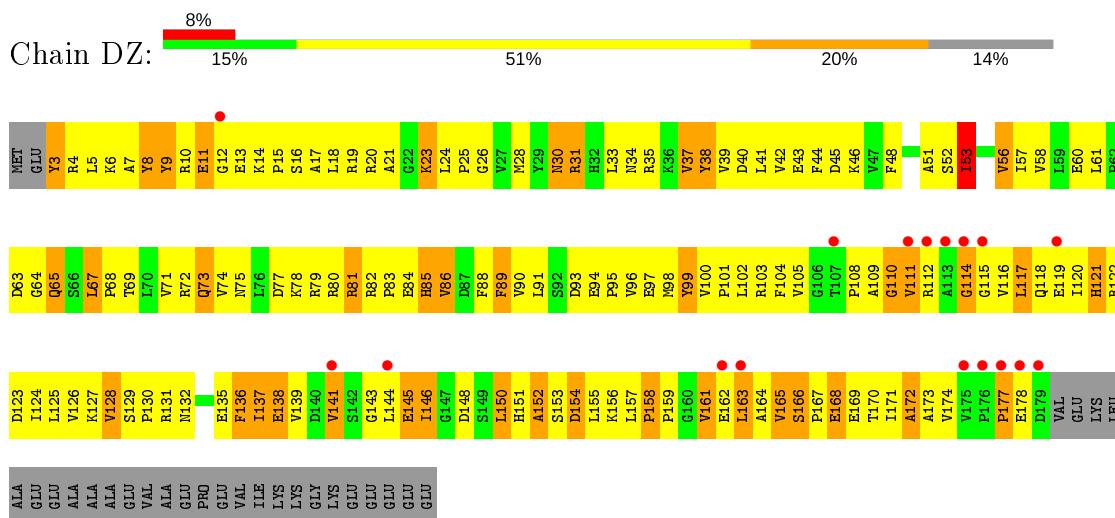
• Molecule 45: 50S ribosomal protein L24



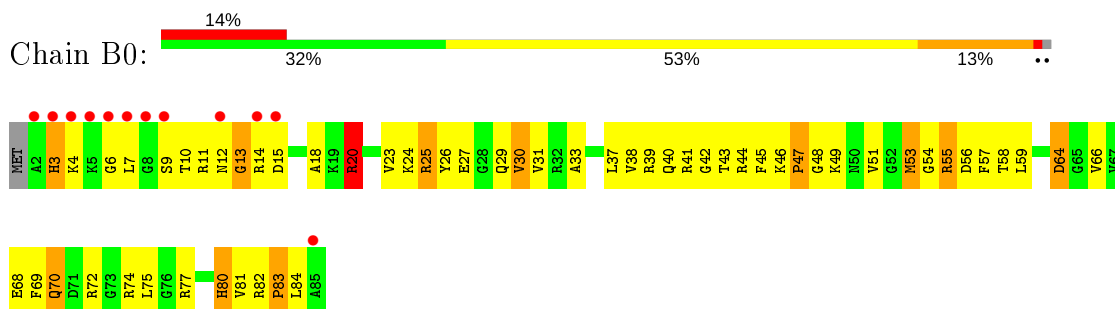
• Molecule 46: 50S ribosomal protein L25



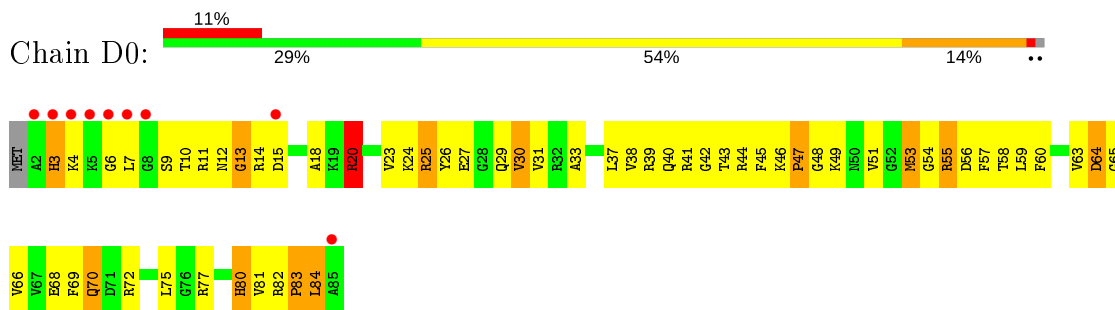
• Molecule 46: 50S ribosomal protein L25



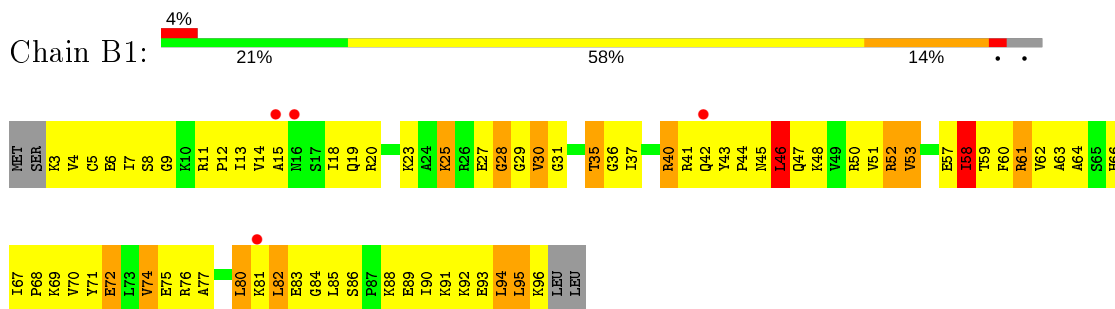
• Molecule 47: 50S ribosomal protein L27



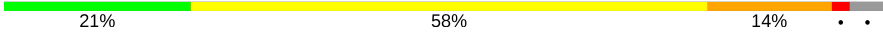
• Molecule 47: 50S ribosomal protein L27

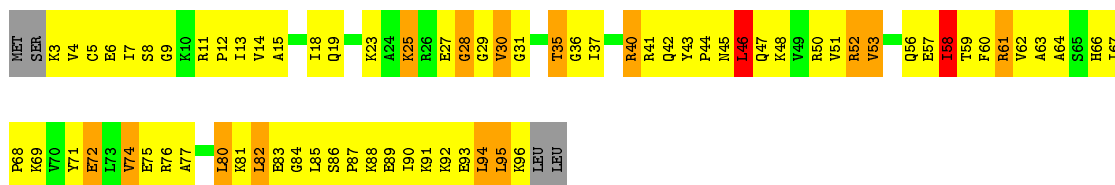


• Molecule 48: 50S ribosomal protein L28

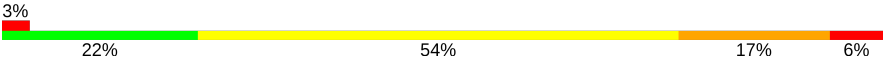


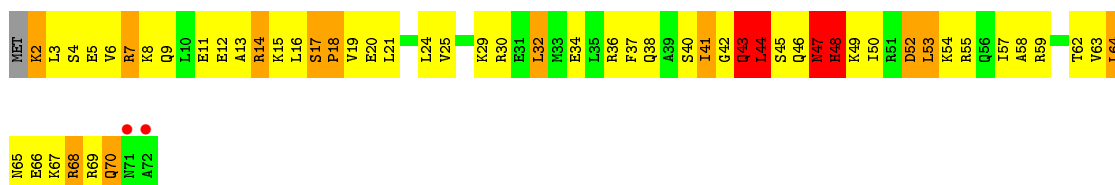
• Molecule 48: 50S ribosomal protein L28

Chain D1:  21% 58% 14%



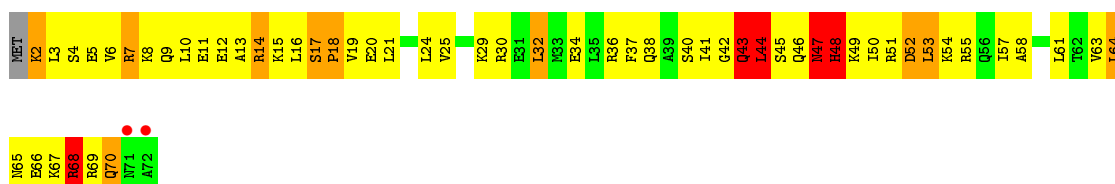
• Molecule 49: 50S ribosomal protein L29

Chain B2:  3% 22% 54% 17% 6%



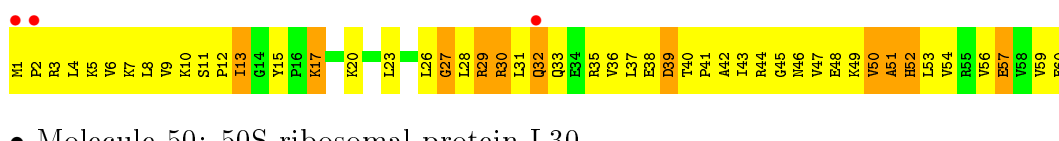
• Molecule 49: 50S ribosomal protein L29

Chain D2:  3% 21% 57% 14% 7%



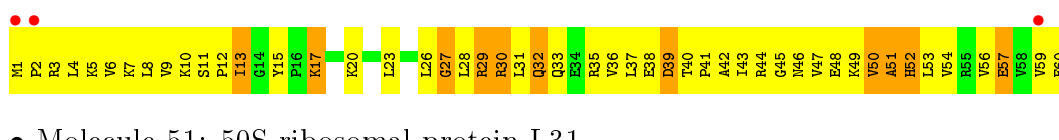
• Molecule 50: 50S ribosomal protein L30

Chain B3:  5% 18% 63% 18%




• Molecule 50: 50S ribosomal protein L30

Chain D3:  5% 18% 63% 18%



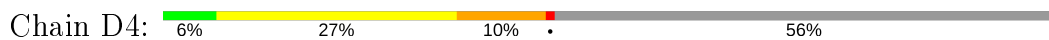
• Molecule 51: 50S ribosomal protein L31

Chain B4:  7% 27% 8% 56%



ARG
ARG
TYR
GLY
ASP
SER
TYR
ARG
LYS
GLY
ARG

• Molecule 51: 50S ribosomal protein L31



MET
LYS
GLU
GLY
ILE
HIS
SER
PRO
LYS
LEU
V36
P37
A38
R39
I40
I41
C42
G43
C44
G45
R46
V47
I48
E49
T50
Y51
S52
T53
K54
P55
E56
I57
Y58
V59
E60
V61
C62
S63
I64
C65
H66

ARG
ARG
TYR
GLY
ASP
SER
TYR
ARG
LYS
GLY
ARG

• Molecule 52: 50S ribosomal protein L32



MET
A2
K3
R4
P5
V6
P7
K10
T11
R16
D17
A18
R19
R20
R23
A24
L25
T29
P32
C33
P34
E35
C36
K37
A38
K39
K40
P41
P42
H43
T44
V45
C46
P47
E48
C49
G50
Y51
Y52
K56
G54
R55
L58
V57
E59
E58
V60

• Molecule 52: 50S ribosomal protein L32



MET
A2
K3
R4
P5
V6
P7
K8
T11
R16
D17
A18
R19
R20
R23
A24
L25
T29
P32
C33
P34
E35
C36
K37
A38
K39
K40
P41
P42
H43
T44
V45
C46
P47
E48
C49
G50
Y51
Y52
K56
G54
R55
L58
V57
E59
V60

• Molecule 53: 50S ribosomal protein L33



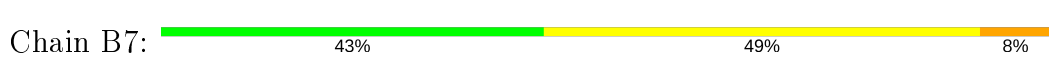
MET
ALA
SER
GLU
VAL
ARG
ILE
LYS
L9
L10
L11
L12
E13
T14
E15
C16
K17
R18
R19
N20
Y21
A22
T23
E24
K25
N26
K27
R28
N29
T30
T31
N32
K33
L34
E35
L36
R37
C40
P41
N42
R44
K45
R46
T47
V48
H49
R50
E51
V52
K53
ILE

• Molecule 53: 50S ribosomal protein L33



MET
ALA
SER
GLU
VAL
ARG
ILE
LYS
L9
L10
L11
L12
E13
T14
E15
C16
K17
R18
R19
N20
Y21
A22
T23
E24
K25
N26
K27
R28
N29
T30
T31
N32
K33
L34
E35
L36
R37
R38
L39
C40
P41
N42
R44
K45
R46
T47
V48
H49
R50
E51
V52
K53
ILE

• Molecule 54: 50S ribosomal protein L34

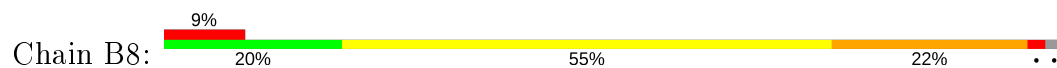


M1
A2
R3
T4
W5
Q6
P7
M8
R9
K10
K11
R12
H16
R19
A20
R21
T24
G27
R28
K29
V30
L31
K32
R35
Q36
R41
L42
T43
P44
A45
V46
R47
K48
R49

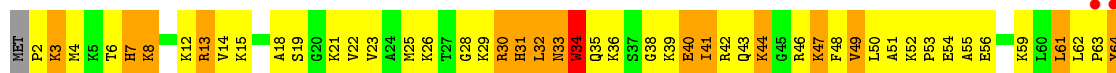
• Molecule 54: 50S ribosomal protein L34



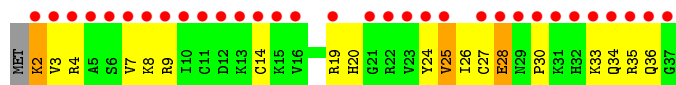
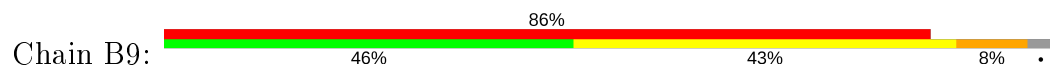
- Molecule 55: 50S ribosomal protein L35



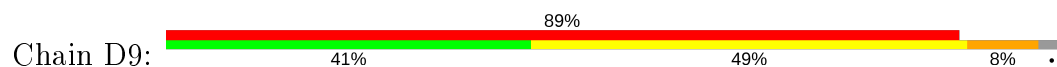
- Molecule 55: 50S ribosomal protein L35



- Molecule 56: 50S ribosomal protein L36



- Molecule 56: 50S ribosomal protein L36



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	210.20Å 446.16Å 620.95Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.90 34.93 – 4.00	Depositor EDS
% Data completeness (in resolution range)	94.3 (50.00-3.90) 95.2 (34.93-4.00)	Depositor EDS
R_{merge}	0.35	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.17 (at 3.99Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.8.1_1168), REFMAC	Depositor
R, R_{free}	0.242 , 0.269 0.247 , 0.272	Depositor DCC
R_{free} test set	20475 reflections (4.41%)	wwPDB-VP
Wilson B-factor (Å ²)	115.4	Xtriage
Anisotropy	0.219	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.25 , 38.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.88	EDS
Total number of atoms	292667	wwPDB-VP
Average B, all atoms (Å ²)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.56% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical 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 i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, MG, PAR

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	AA	0.53	1/36186 (0.0%)	1.07	56/56479 (0.1%)
1	CA	0.57	0/36161	1.11	53/56440 (0.1%)
2	AB	0.36	0/1936	0.63	0/2611
2	CB	0.35	0/1936	0.62	0/2611
3	AC	0.35	0/1637	0.60	0/2207
3	CC	0.35	0/1637	0.59	0/2207
4	AD	0.39	0/1733	0.66	0/2318
4	CD	0.38	0/1733	0.65	0/2318
5	AE	0.41	0/1163	0.66	0/1566
5	CE	0.41	0/1163	0.66	0/1566
6	AF	0.35	0/856	0.63	0/1154
6	CF	0.36	0/856	0.65	0/1154
7	AG	0.34	0/1276	0.57	0/1709
7	CG	0.34	0/1276	0.57	0/1709
8	AH	0.34	0/1136	0.65	0/1527
8	CH	0.34	0/1136	0.64	0/1527
9	AI	0.35	0/1029	0.62	0/1379
9	CI	0.35	0/1029	0.63	0/1379
10	AJ	0.38	0/808	0.65	0/1087
10	CJ	0.38	0/808	0.64	0/1087
11	AK	0.36	0/900	0.66	0/1213
11	CK	0.36	0/900	0.66	0/1213
12	AL	0.45	0/987	0.78	1/1322 (0.1%)
12	CL	0.43	0/987	0.78	0/1322
13	AM	0.40	0/999	0.72	0/1338
13	CM	0.34	0/999	0.68	1/1338 (0.1%)
14	AN	0.37	0/501	0.63	0/664
14	CN	0.37	0/501	0.63	0/664
15	AO	0.36	0/745	0.58	0/992
15	CO	0.35	0/745	0.58	0/992
16	AP	0.39	0/717	0.65	0/965
16	CP	0.38	0/717	0.63	0/965

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.40	0/837	0.65	0/1119
17	CQ	0.36	0/837	0.61	0/1119
18	AR	0.39	0/579	0.71	0/768
18	CR	0.40	0/579	0.70	0/768
19	AS	0.38	0/643	0.68	0/867
19	CS	0.37	0/643	0.62	0/867
20	AT	0.36	0/765	0.66	0/1007
20	CT	0.34	0/765	0.66	0/1007
21	AU	0.71	0/213	0.84	0/279
21	CU	0.75	0/213	0.78	0/279
22	AW	0.51	0/1809	1.00	3/2819 (0.1%)
22	AY	0.74	0/408	1.23	0/634
22	CW	0.53	0/1809	0.99	6/2819 (0.2%)
22	CY	0.85	0/408	1.39	3/634 (0.5%)
23	AV	0.80	0/1836	1.30	11/2859 (0.4%)
23	CV	0.81	0/1836	1.29	9/2859 (0.3%)
24	AX	0.78	0/188	1.33	2/290 (0.7%)
24	CX	0.97	0/235	1.28	2/364 (0.5%)
25	BA	0.52	1/67620 (0.0%)	0.74	24/105555 (0.0%)
25	DA	0.52	2/67620 (0.0%)	0.74	23/105555 (0.0%)
26	BB	0.41	0/2853	0.71	1/4451 (0.0%)
26	DB	0.42	0/2853	0.72	1/4451 (0.0%)
27	BC	0.37	0/1145	0.67	7/1556 (0.4%)
27	DC	0.38	0/1145	0.67	7/1556 (0.4%)
28	BD	0.52	0/2155	0.82	0/2907
28	DD	0.53	0/2155	0.83	0/2907
29	BE	0.44	0/1597	0.78	2/2155 (0.1%)
29	DE	0.44	0/1597	0.77	1/2155 (0.0%)
30	BF	0.45	0/1659	0.74	0/2246
30	DF	0.45	0/1659	0.73	0/2246
31	BG	0.41	0/1499	0.73	1/2016 (0.0%)
31	DG	0.41	0/1499	0.74	1/2016 (0.0%)
32	BH	0.37	0/1246	0.70	2/1684 (0.1%)
32	DH	0.37	0/1246	0.70	2/1684 (0.1%)
33	BI	0.35	0/1147	0.71	0/1553
33	DI	0.37	0/1147	0.71	0/1553
34	BN	0.40	0/1132	0.74	1/1527 (0.1%)
34	DN	0.39	0/1132	0.75	1/1527 (0.1%)
35	BO	0.66	0/943	0.68	0/1269
35	DO	0.82	0/943	0.71	0/1269
36	BP	0.47	0/1131	0.84	0/1504
36	DP	0.45	0/1131	0.82	1/1504 (0.1%)
37	BQ	0.41	0/1143	0.69	0/1527

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
37	DQ	0.40	0/1143	0.68	0/1527
38	BR	0.40	0/974	0.76	0/1302
38	DR	0.40	0/974	0.77	0/1302
39	BS	0.41	0/779	0.72	0/1038
39	DS	0.38	0/779	0.71	0/1038
40	BT	0.58	0/1156	0.68	0/1544
40	DT	0.65	0/1156	0.70	1/1544 (0.1%)
41	BU	0.39	0/975	0.70	0/1297
41	DU	0.39	0/975	0.70	0/1297
42	BV	0.38	0/790	0.70	0/1057
42	DV	0.39	0/790	0.71	0/1057
43	BW	0.41	0/907	0.69	0/1216
43	DW	0.41	0/907	0.69	0/1216
44	BX	0.49	0/740	0.72	0/995
44	DX	0.49	0/740	0.72	0/995
45	BY	0.49	0/789	0.77	0/1053
45	DY	0.45	0/789	0.79	1/1053 (0.1%)
46	BZ	0.38	0/1436	0.66	0/1951
46	DZ	0.37	0/1436	0.67	0/1951
47	B0	0.39	0/671	0.67	0/892
47	D0	0.39	0/671	0.67	0/892
48	B1	0.46	0/739	0.84	1/983 (0.1%)
48	D1	0.45	0/739	0.84	1/983 (0.1%)
49	B2	0.43	0/600	0.69	0/793
49	D2	0.44	0/600	0.71	0/793
50	B3	0.38	0/473	0.67	0/636
50	D3	0.38	0/473	0.67	0/636
51	B4	0.44	0/229	0.66	0/311
51	D4	0.45	0/229	0.66	0/311
52	B5	0.38	0/473	0.68	0/639
52	D5	0.38	0/473	0.68	0/639
53	B6	0.47	0/388	0.65	0/520
53	D6	0.48	0/388	0.65	0/520
54	B7	0.56	0/427	0.75	0/563
54	D7	0.56	0/427	0.75	0/563
55	B8	0.51	0/516	0.85	0/681
55	D8	0.52	0/516	0.85	0/681
56	B9	0.31	0/302	0.58	0/397
56	D9	0.31	0/302	0.58	0/397
All	All	0.50	4/317064 (0.0%)	0.84	226/474017 (0.0%)

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1480	A	N9-C4	5.60	1.41	1.37
25	DA	2307	G	O3'-P	5.54	1.67	1.61
25	BA	271(U)	G	O3'-P	5.17	1.67	1.61
25	DA	271(U)	G	O3'-P	5.13	1.67	1.61

The worst 5 of 226 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	BE	52	LEU	C-N-CD	-8.27	102.41	120.60
45	DY	55	TYR	C-N-CD	-6.12	107.12	120.60
13	CM	112	GLY	C-N-CD	-6.03	107.34	120.60
23	CV	72	C	N3-C4-C5	-6.00	119.50	121.90
1	CA	1164	A	C8-N9-C4	5.99	108.19	105.80

There are no chirality outliers.

There are no planarity outliers.

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	AA	32326	0	16316	985	0
1	CA	32304	0	16306	977	0
2	AB	1901	0	1951	288	0
2	CB	1901	0	1951	297	0
3	AC	1613	0	1677	215	0
3	CC	1613	0	1677	202	1
4	AD	1703	0	1765	202	0
4	CD	1703	0	1764	152	4
5	AE	1147	0	1207	147	0
5	CE	1147	0	1207	156	0
6	AF	843	0	857	81	0
6	CF	843	0	856	108	0
7	AG	1257	0	1296	137	0
7	CG	1257	0	1296	142	0
8	AH	1116	0	1177	148	0
8	CH	1116	0	1177	169	0
9	AI	1010	0	1037	169	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	CI	1010	0	1037	135	0
10	AJ	795	0	840	143	0
10	CJ	795	0	840	137	0
11	AK	885	0	904	104	1
11	CK	885	0	904	120	0
12	AL	971	0	1057	129	0
12	CL	971	0	1057	134	0
13	AM	988	0	1059	197	0
13	CM	988	0	1059	203	0
14	AN	492	0	531	88	0
14	CN	492	0	532	92	0
15	AO	734	0	771	70	0
15	CO	734	0	771	71	0
16	AP	701	0	720	56	0
16	CP	701	0	720	58	0
17	AQ	824	0	891	77	0
17	CQ	824	0	891	74	0
18	AR	574	0	644	61	0
18	CR	574	0	644	63	0
19	AS	630	0	652	102	0
19	CS	630	0	652	119	0
20	AT	763	0	861	114	0
20	CT	763	0	861	153	0
21	AU	209	0	221	10	0
21	CU	209	0	221	20	0
22	AW	1619	0	822	155	0
22	AY	365	0	185	55	0
22	CW	1619	0	822	203	0
22	CY	365	0	185	45	0
23	AV	1644	0	836	169	0
23	CV	1644	0	836	173	0
24	AX	169	0	86	17	0
24	CX	210	0	109	24	0
25	BA	60378	0	30440	2704	3
25	DA	60378	0	30441	2817	12
26	BB	2551	0	1295	140	1
26	DB	2551	0	1295	193	1
27	BC	1142	0	865	103	0
27	DC	1142	0	865	135	0
28	BD	2105	0	2182	296	4
28	DD	2105	0	2182	328	0
29	BE	1564	0	1629	269	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	DE	1564	0	1629	280	0
30	BF	1624	0	1677	241	0
30	DF	1624	0	1677	234	0
31	BG	1474	0	1535	318	0
31	DG	1474	0	1535	292	0
32	BH	1223	0	1282	198	0
32	DH	1223	0	1282	236	2
33	BI	1132	0	1218	217	0
33	DI	1132	0	1218	214	0
34	BN	1105	0	1180	169	0
34	DN	1105	0	1180	170	0
35	BO	933	0	995	88	0
35	DO	933	0	996	78	0
36	BP	1114	0	1187	318	0
36	DP	1114	0	1187	299	8
37	BQ	1122	0	1179	154	0
37	DQ	1122	0	1179	184	0
38	BR	960	0	1021	143	0
38	DR	960	0	1021	144	0
39	BS	771	0	832	194	0
39	DS	771	0	832	196	0
40	BT	1142	0	1202	149	0
40	DT	1142	0	1202	225	0
41	BU	958	0	1015	170	0
41	DU	958	0	1015	173	0
42	BV	779	0	852	169	0
42	DV	779	0	852	174	3
43	BW	896	0	953	107	1
43	DW	896	0	953	112	0
44	BX	726	0	778	72	0
44	DX	726	0	778	74	0
45	BY	776	0	870	158	11
45	DY	776	0	870	184	2
46	BZ	1404	0	1432	219	0
46	DZ	1404	0	1432	230	0
47	B0	662	0	688	79	0
47	D0	662	0	688	77	0
48	B1	732	0	808	98	0
48	D1	732	0	808	91	0
49	B2	598	0	653	71	0
49	D2	598	0	653	86	1
50	B3	468	0	523	67	8

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
50	D3	468	0	523	73	0
51	B4	226	0	229	46	0
51	D4	226	0	229	37	0
52	B5	459	0	480	64	0
52	D5	459	0	480	60	3
53	B6	381	0	391	74	0
53	D6	381	0	391	75	0
54	B7	419	0	467	42	0
54	D7	419	0	467	45	0
55	B8	508	0	576	109	0
55	D8	508	0	576	104	0
56	B9	299	0	326	24	0
56	D9	299	0	326	21	0
57	AA	93	0	0	0	0
57	AX	2	0	0	0	0
57	B1	1	0	0	0	0
57	B3	1	0	0	0	0
57	B5	2	0	0	0	0
57	BA	261	0	0	7	0
57	BB	4	0	0	0	0
57	BE	1	0	0	0	0
57	BF	2	0	0	0	0
57	BO	1	0	0	0	0
57	BU	1	0	0	0	0
57	CA	94	0	0	0	0
57	CV	2	0	0	0	0
57	D0	1	0	0	0	0
57	D5	2	0	0	0	0
57	DA	268	0	0	0	0
57	DB	2	0	0	0	0
57	DD	1	0	0	0	0
57	DE	1	0	0	0	0
58	AA	42	0	45	3	0
58	CA	42	0	45	1	0
59	AD	1	0	0	1	0
59	AN	1	0	0	2	0
59	CD	1	0	0	0	0
59	CN	1	0	0	0	0
All	All	292667	0	198350	20561	33

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 42.

The worst 5 of 20561 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)
13:CM:93:ARG:CD	25:DA:888:C:H5'	1.15	1.61
4:AD:167:GLY:CA	28:DD:135:PHE:CE2	1.85	1.56
25:BA:2584:U:C2'	25:BA:2585:U:H5''	1.38	1.54
25:DA:2584:U:C2'	25:DA:2585:U:H5''	1.38	1.54
4:AD:167:GLY:HA3	28:DD:135:PHE:CE2	1.43	1.50

The worst 5 of 33 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)
45:BY:55:TYR:CZ	25:DA:355:G:O2'[3_555]	0.78	1.42
45:BY:55:TYR:OH	25:DA:355:G:C2'[3_555]	1.05	1.15
50:B3:1:MET:CB	36:DP:122:PRO:CG[3_455]	1.20	1.00
50:B3:1:MET:CG	36:DP:122:PRO:CB[3_455]	1.33	0.87
45:BY:55:TYR:CE2	25:DA:355:G:O2'[3_555]	1.37	0.83

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	233/256 (91%)	148 (64%)	65 (28%)	20 (9%)	1	13
2	CB	233/256 (91%)	148 (64%)	65 (28%)	20 (9%)	1	13
3	AC	205/239 (86%)	136 (66%)	45 (22%)	24 (12%)	0	6
3	CC	205/239 (86%)	137 (67%)	43 (21%)	25 (12%)	0	6
4	AD	206/209 (99%)	145 (70%)	40 (19%)	21 (10%)	0	10
4	CD	206/209 (99%)	144 (70%)	40 (19%)	22 (11%)	0	8
5	AE	149/162 (92%)	114 (76%)	19 (13%)	16 (11%)	0	8
5	CE	149/162 (92%)	114 (76%)	19 (13%)	16 (11%)	0	8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	AF	99/101 (98%)	82 (83%)	13 (13%)	4 (4%)	3	27
6	CF	99/101 (98%)	81 (82%)	15 (15%)	3 (3%)	4	33
7	AG	153/156 (98%)	107 (70%)	32 (21%)	14 (9%)	1	12
7	CG	153/156 (98%)	107 (70%)	32 (21%)	14 (9%)	1	12
8	AH	136/138 (99%)	102 (75%)	26 (19%)	8 (6%)	1	20
8	CH	136/138 (99%)	100 (74%)	28 (21%)	8 (6%)	1	20
9	AI	125/128 (98%)	92 (74%)	21 (17%)	12 (10%)	0	11
9	CI	125/128 (98%)	93 (74%)	22 (18%)	10 (8%)	1	15
10	AJ	97/105 (92%)	66 (68%)	22 (23%)	9 (9%)	0	12
10	CJ	97/105 (92%)	67 (69%)	21 (22%)	9 (9%)	0	12
11	AK	117/129 (91%)	94 (80%)	18 (15%)	5 (4%)	2	26
11	CK	117/129 (91%)	92 (79%)	20 (17%)	5 (4%)	2	26
12	AL	123/132 (93%)	86 (70%)	24 (20%)	13 (11%)	0	8
12	CL	123/132 (93%)	85 (69%)	25 (20%)	13 (11%)	0	8
13	AM	123/126 (98%)	79 (64%)	26 (21%)	18 (15%)	0	4
13	CM	123/126 (98%)	84 (68%)	23 (19%)	16 (13%)	0	5
14	AN	58/61 (95%)	37 (64%)	9 (16%)	12 (21%)	0	2
14	CN	58/61 (95%)	37 (64%)	9 (16%)	12 (21%)	0	2
15	AO	86/89 (97%)	62 (72%)	19 (22%)	5 (6%)	1	21
15	CO	86/89 (97%)	63 (73%)	18 (21%)	5 (6%)	1	21
16	AP	82/88 (93%)	57 (70%)	22 (27%)	3 (4%)	3	29
16	CP	82/88 (93%)	58 (71%)	21 (26%)	3 (4%)	3	29
17	AQ	98/105 (93%)	77 (79%)	14 (14%)	7 (7%)	1	17
17	CQ	98/105 (93%)	77 (79%)	13 (13%)	8 (8%)	1	14
18	AR	68/88 (77%)	48 (71%)	15 (22%)	5 (7%)	1	16
18	CR	68/88 (77%)	45 (66%)	17 (25%)	6 (9%)	1	13
19	AS	77/93 (83%)	55 (71%)	11 (14%)	11 (14%)	0	4
19	CS	77/93 (83%)	55 (71%)	12 (16%)	10 (13%)	0	5
20	AT	97/106 (92%)	72 (74%)	14 (14%)	11 (11%)	0	7
20	CT	97/106 (92%)	72 (74%)	15 (16%)	10 (10%)	0	9
21	AU	23/27 (85%)	15 (65%)	4 (17%)	4 (17%)	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
21	CU	23/27 (85%)	18 (78%)	3 (13%)	2 (9%)	1	13
27	BC	183/229 (80%)	84 (46%)	45 (25%)	54 (30%)	0	0
27	DC	183/229 (80%)	84 (46%)	44 (24%)	55 (30%)	0	0
28	BD	270/276 (98%)	212 (78%)	33 (12%)	25 (9%)	0	12
28	DD	270/276 (98%)	209 (77%)	36 (13%)	25 (9%)	0	12
29	BE	203/206 (98%)	130 (64%)	35 (17%)	38 (19%)	0	2
29	DE	203/206 (98%)	129 (64%)	36 (18%)	38 (19%)	0	2
30	BF	206/210 (98%)	129 (63%)	54 (26%)	23 (11%)	0	7
30	DF	206/210 (98%)	128 (62%)	55 (27%)	23 (11%)	0	7
31	BG	179/182 (98%)	115 (64%)	39 (22%)	25 (14%)	0	4
31	DG	179/182 (98%)	114 (64%)	39 (22%)	26 (14%)	0	4
32	BH	158/180 (88%)	93 (59%)	31 (20%)	34 (22%)	0	1
32	DH	158/180 (88%)	95 (60%)	31 (20%)	32 (20%)	0	2
33	BI	144/148 (97%)	89 (62%)	28 (19%)	27 (19%)	0	2
33	DI	144/148 (97%)	87 (60%)	30 (21%)	27 (19%)	0	2
34	BN	137/140 (98%)	84 (61%)	33 (24%)	20 (15%)	0	4
34	DN	137/140 (98%)	84 (61%)	33 (24%)	20 (15%)	0	4
35	BO	120/122 (98%)	88 (73%)	25 (21%)	7 (6%)	1	21
35	DO	120/122 (98%)	94 (78%)	16 (13%)	10 (8%)	1	14
36	BP	144/150 (96%)	83 (58%)	32 (22%)	29 (20%)	0	2
36	DP	144/150 (96%)	81 (56%)	33 (23%)	30 (21%)	0	2
37	BQ	139/141 (99%)	104 (75%)	19 (14%)	16 (12%)	0	7
37	DQ	139/141 (99%)	104 (75%)	17 (12%)	18 (13%)	0	5
38	BR	115/118 (98%)	83 (72%)	22 (19%)	10 (9%)	1	13
38	DR	115/118 (98%)	83 (72%)	21 (18%)	11 (10%)	0	11
39	BS	97/112 (87%)	38 (39%)	27 (28%)	32 (33%)	0	0
39	DS	97/112 (87%)	38 (39%)	27 (28%)	32 (33%)	0	0
40	BT	136/146 (93%)	82 (60%)	31 (23%)	23 (17%)	0	3
40	DT	136/146 (93%)	88 (65%)	33 (24%)	15 (11%)	0	8
41	BU	115/118 (98%)	70 (61%)	34 (30%)	11 (10%)	0	11
41	DU	115/118 (98%)	70 (61%)	34 (30%)	11 (10%)	0	11

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
42	BV	99/101 (98%)	63 (64%)	19 (19%)	17 (17%)	0	3
42	DV	99/101 (98%)	64 (65%)	19 (19%)	16 (16%)	0	3
43	BW	111/113 (98%)	75 (68%)	24 (22%)	12 (11%)	0	8
43	DW	111/113 (98%)	75 (68%)	24 (22%)	12 (11%)	0	8
44	BX	91/96 (95%)	66 (72%)	20 (22%)	5 (6%)	2	22
44	DX	91/96 (95%)	66 (72%)	20 (22%)	5 (6%)	2	22
45	BY	99/110 (90%)	54 (54%)	18 (18%)	27 (27%)	0	0
45	DY	99/110 (90%)	53 (54%)	16 (16%)	30 (30%)	0	0
46	BZ	175/206 (85%)	103 (59%)	35 (20%)	37 (21%)	0	2
46	DZ	175/206 (85%)	103 (59%)	35 (20%)	37 (21%)	0	2
47	B0	82/85 (96%)	63 (77%)	12 (15%)	7 (8%)	1	13
47	D0	82/85 (96%)	63 (77%)	12 (15%)	7 (8%)	1	13
48	B1	92/98 (94%)	64 (70%)	19 (21%)	9 (10%)	0	10
48	D1	92/98 (94%)	64 (70%)	19 (21%)	9 (10%)	0	10
49	B2	69/72 (96%)	47 (68%)	13 (19%)	9 (13%)	0	5
49	D2	69/72 (96%)	51 (74%)	9 (13%)	9 (13%)	0	5
50	B3	58/60 (97%)	41 (71%)	7 (12%)	10 (17%)	0	3
50	D3	58/60 (97%)	41 (71%)	7 (12%)	10 (17%)	0	3
51	B4	29/71 (41%)	15 (52%)	7 (24%)	7 (24%)	0	1
51	D4	29/71 (41%)	15 (52%)	7 (24%)	7 (24%)	0	1
52	B5	57/60 (95%)	42 (74%)	8 (14%)	7 (12%)	0	5
52	D5	57/60 (95%)	42 (74%)	8 (14%)	7 (12%)	0	5
53	B6	43/54 (80%)	20 (46%)	12 (28%)	11 (26%)	0	1
53	D6	43/54 (80%)	20 (46%)	12 (28%)	11 (26%)	0	1
54	B7	47/49 (96%)	44 (94%)	2 (4%)	1 (2%)	7	39
54	D7	47/49 (96%)	44 (94%)	2 (4%)	1 (2%)	7	39
55	B8	62/65 (95%)	40 (64%)	13 (21%)	9 (14%)	0	4
55	D8	62/65 (95%)	39 (63%)	14 (23%)	9 (14%)	0	4
56	B9	34/37 (92%)	27 (79%)	6 (18%)	1 (3%)	4	33
56	D9	34/37 (92%)	27 (79%)	6 (18%)	1 (3%)	4	33
All	All	11698/12586 (93%)	7854 (67%)	2318 (20%)	1526 (13%)	0	5

5 of 1526 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	9	GLU
2	AB	15	VAL
2	AB	20	GLU
2	AB	88	ALA
2	AB	195	ASP

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	AB	202/220 (92%)	177 (88%)	25 (12%)	4	24
2	CB	202/220 (92%)	179 (89%)	23 (11%)	5	26
3	AC	160/188 (85%)	149 (93%)	11 (7%)	15	45
3	CC	160/188 (85%)	149 (93%)	11 (7%)	15	45
4	AD	180/181 (99%)	161 (89%)	19 (11%)	6	29
4	CD	180/181 (99%)	161 (89%)	19 (11%)	6	29
5	AE	115/123 (94%)	101 (88%)	14 (12%)	5	24
5	CE	115/123 (94%)	101 (88%)	14 (12%)	5	24
6	AF	90/90 (100%)	83 (92%)	7 (8%)	12	41
6	CF	90/90 (100%)	85 (94%)	5 (6%)	21	51
7	AG	126/127 (99%)	117 (93%)	9 (7%)	14	44
7	CG	126/127 (99%)	117 (93%)	9 (7%)	14	44
8	AH	119/119 (100%)	112 (94%)	7 (6%)	19	49
8	CH	119/119 (100%)	110 (92%)	9 (8%)	13	42
9	AI	98/99 (99%)	86 (88%)	12 (12%)	5	24
9	CI	98/99 (99%)	83 (85%)	15 (15%)	2	17
10	AJ	88/92 (96%)	76 (86%)	12 (14%)	3	22
10	CJ	88/92 (96%)	77 (88%)	11 (12%)	4	23
11	AK	90/99 (91%)	82 (91%)	8 (9%)	9	36

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	CK	90/99 (91%)	82 (91%)	8 (9%)	9	36
12	AL	104/109 (95%)	94 (90%)	10 (10%)	8	32
12	CL	104/109 (95%)	92 (88%)	12 (12%)	5	26
13	AM	99/101 (98%)	81 (82%)	18 (18%)	1	11
13	CM	99/101 (98%)	83 (84%)	16 (16%)	2	16
14	AN	49/50 (98%)	40 (82%)	9 (18%)	1	11
14	CN	49/50 (98%)	42 (86%)	7 (14%)	3	20
15	AO	79/80 (99%)	73 (92%)	6 (8%)	13	42
15	CO	79/80 (99%)	73 (92%)	6 (8%)	13	42
16	AP	72/74 (97%)	64 (89%)	8 (11%)	6	27
16	CP	72/74 (97%)	66 (92%)	6 (8%)	11	39
17	AQ	94/97 (97%)	85 (90%)	9 (10%)	8	32
17	CQ	94/97 (97%)	87 (93%)	7 (7%)	13	43
18	AR	61/77 (79%)	57 (93%)	4 (7%)	16	46
18	CR	61/77 (79%)	57 (93%)	4 (7%)	16	46
19	AS	69/80 (86%)	58 (84%)	11 (16%)	2	17
19	CS	69/80 (86%)	58 (84%)	11 (16%)	2	17
20	AT	76/82 (93%)	71 (93%)	5 (7%)	16	46
20	CT	76/82 (93%)	69 (91%)	7 (9%)	9	34
21	AU	19/22 (86%)	18 (95%)	1 (5%)	22	52
21	CU	19/22 (86%)	14 (74%)	5 (26%)	0	4
27	BC	61/181 (34%)	56 (92%)	5 (8%)	11	40
27	DC	61/181 (34%)	56 (92%)	5 (8%)	11	40
28	BD	213/218 (98%)	179 (84%)	34 (16%)	2	16
28	DD	213/218 (98%)	180 (84%)	33 (16%)	2	17
29	BE	165/166 (99%)	140 (85%)	25 (15%)	3	17
29	DE	165/166 (99%)	139 (84%)	26 (16%)	2	17
30	BF	165/166 (99%)	146 (88%)	19 (12%)	5	26
30	DF	165/166 (99%)	146 (88%)	19 (12%)	5	26
31	BG	155/156 (99%)	138 (89%)	17 (11%)	6	28
31	DG	155/156 (99%)	138 (89%)	17 (11%)	6	28

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	BH	132/148 (89%)	119 (90%)	13 (10%)	8	31
32	DH	132/148 (89%)	119 (90%)	13 (10%)	8	31
33	BI	122/124 (98%)	102 (84%)	20 (16%)	2	15
33	DI	122/124 (98%)	107 (88%)	15 (12%)	4	24
34	BN	117/119 (98%)	96 (82%)	21 (18%)	2	12
34	DN	117/119 (98%)	96 (82%)	21 (18%)	2	12
35	BO	100/100 (100%)	92 (92%)	8 (8%)	12	41
35	DO	100/100 (100%)	83 (83%)	17 (17%)	2	14
36	BP	112/116 (97%)	86 (77%)	26 (23%)	1	6
36	DP	112/116 (97%)	89 (80%)	23 (20%)	1	8
37	BQ	111/111 (100%)	96 (86%)	15 (14%)	4	22
37	DQ	111/111 (100%)	94 (85%)	17 (15%)	2	17
38	BR	100/101 (99%)	87 (87%)	13 (13%)	4	23
38	DR	100/101 (99%)	87 (87%)	13 (13%)	4	23
39	BS	77/88 (88%)	66 (86%)	11 (14%)	3	20
39	DS	77/88 (88%)	67 (87%)	10 (13%)	4	23
40	BT	120/127 (94%)	90 (75%)	30 (25%)	0	4
40	DT	120/127 (94%)	85 (71%)	35 (29%)	0	2
41	BU	92/94 (98%)	85 (92%)	7 (8%)	13	42
41	DU	92/94 (98%)	85 (92%)	7 (8%)	13	42
42	BV	82/82 (100%)	72 (88%)	10 (12%)	5	24
42	DV	82/82 (100%)	72 (88%)	10 (12%)	5	24
43	BW	91/92 (99%)	82 (90%)	9 (10%)	8	31
43	DW	91/92 (99%)	81 (89%)	10 (11%)	6	28
44	BX	74/78 (95%)	67 (90%)	7 (10%)	8	33
44	DX	74/78 (95%)	67 (90%)	7 (10%)	8	33
45	BY	84/91 (92%)	72 (86%)	12 (14%)	3	20
45	DY	84/91 (92%)	70 (83%)	14 (17%)	2	15
46	BZ	155/179 (87%)	138 (89%)	17 (11%)	6	28
46	DZ	155/179 (87%)	137 (88%)	18 (12%)	5	26
47	B0	66/67 (98%)	58 (88%)	8 (12%)	5	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
47	D0	66/67 (98%)	58 (88%)	8 (12%)	5	24
48	B1	78/83 (94%)	67 (86%)	11 (14%)	3	21
48	D1	78/83 (94%)	67 (86%)	11 (14%)	3	21
49	B2	66/67 (98%)	55 (83%)	11 (17%)	2	15
49	D2	66/67 (98%)	55 (83%)	11 (17%)	2	15
50	B3	51/52 (98%)	49 (96%)	2 (4%)	32	59
50	D3	51/52 (98%)	49 (96%)	2 (4%)	32	59
51	B4	27/63 (43%)	24 (89%)	3 (11%)	6	27
51	D4	27/63 (43%)	24 (89%)	3 (11%)	6	27
52	B5	51/52 (98%)	45 (88%)	6 (12%)	5	25
52	D5	51/52 (98%)	45 (88%)	6 (12%)	5	25
53	B6	43/52 (83%)	32 (74%)	11 (26%)	0	4
53	D6	43/52 (83%)	32 (74%)	11 (26%)	0	4
54	B7	41/42 (98%)	37 (90%)	4 (10%)	8	31
54	D7	41/42 (98%)	37 (90%)	4 (10%)	8	31
55	B8	53/55 (96%)	44 (83%)	9 (17%)	2	14
55	D8	53/55 (96%)	43 (81%)	10 (19%)	1	10
56	B9	33/34 (97%)	30 (91%)	3 (9%)	9	35
56	D9	33/34 (97%)	30 (91%)	3 (9%)	9	35
All	All	9654/10428 (93%)	8458 (88%)	1196 (12%)	4	24

5 of 1196 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
48	B1	82	LEU
7	CG	88	PRO
45	DY	77	PRO
51	B4	46	ASN
2	CB	155	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 118 such sidechains are listed below:

Mol	Chain	Res	Type
53	B6	20	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	CF	100	ASN
47	D0	29	GLN
53	B6	26	ASN
2	CB	95	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	291 (19%)	27 (1%)
1	CA	1502/1522 (98%)	290 (19%)	32 (2%)
22	AW	75/76 (98%)	22 (29%)	0
22	AY	16/76 (21%)	9 (56%)	0
22	CW	75/76 (98%)	26 (34%)	0
22	CY	16/76 (21%)	7 (43%)	0
23	AV	76/77 (98%)	37 (48%)	5 (6%)
23	CV	76/77 (98%)	34 (44%)	5 (6%)
24	AX	7/24 (29%)	2 (28%)	0
24	CX	9/24 (37%)	3 (33%)	1 (11%)
25	BA	2796/2916 (95%)	557 (19%)	53 (1%)
25	DA	2796/2916 (95%)	564 (20%)	58 (2%)
26	BB	118/122 (96%)	18 (15%)	1 (0%)
26	DB	118/122 (96%)	19 (16%)	1 (0%)
All	All	9183/9626 (95%)	1879 (20%)	183 (1%)

5 of 1879 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C

5 of 183 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
25	BA	2763	G
1	CA	731	C
25	DA	2263	C
26	BB	66	A
1	CA	262	C

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 746 ligands modelled in this entry, 744 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
58	PAR	AA	1694	-	45,45,45	1.56	9 (20%)	64,67,67	1.26	6 (9%)
58	PAR	CA	1695	-	45,45,45	1.86	11 (24%)	64,67,67	1.38	7 (10%)

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
58	PAR	AA	1694	-	-	5/18/94/94	0/4/4/4
58	PAR	CA	1695	-	-	3/18/94/94	0/4/4/4

The worst 5 of 20 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	CA	1695	PAR	C34-C24	6.06	1.61	1.53
58	CA	1695	PAR	C64-C54	5.69	1.59	1.52
58	AA	1694	PAR	C64-C54	4.45	1.58	1.52
58	CA	1695	PAR	C52-C42	3.66	1.59	1.52
58	AA	1694	PAR	C34-C24	3.34	1.57	1.53

The worst 5 of 13 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed($^{\circ}$)	Ideal($^{\circ}$)
58	CA	1695	PAR	C14-O54-C54	4.51	122.53	113.69
58	CA	1695	PAR	O54-C54-C64	4.16	113.76	106.01
58	AA	1694	PAR	O54-C54-C64	3.93	113.32	106.01
58	CA	1695	PAR	O52-C13-C23	3.86	115.96	107.96
58	AA	1694	PAR	C14-O54-C54	3.67	120.89	113.69

There are no chirality outliers.

5 of 8 torsion outliers are listed below:

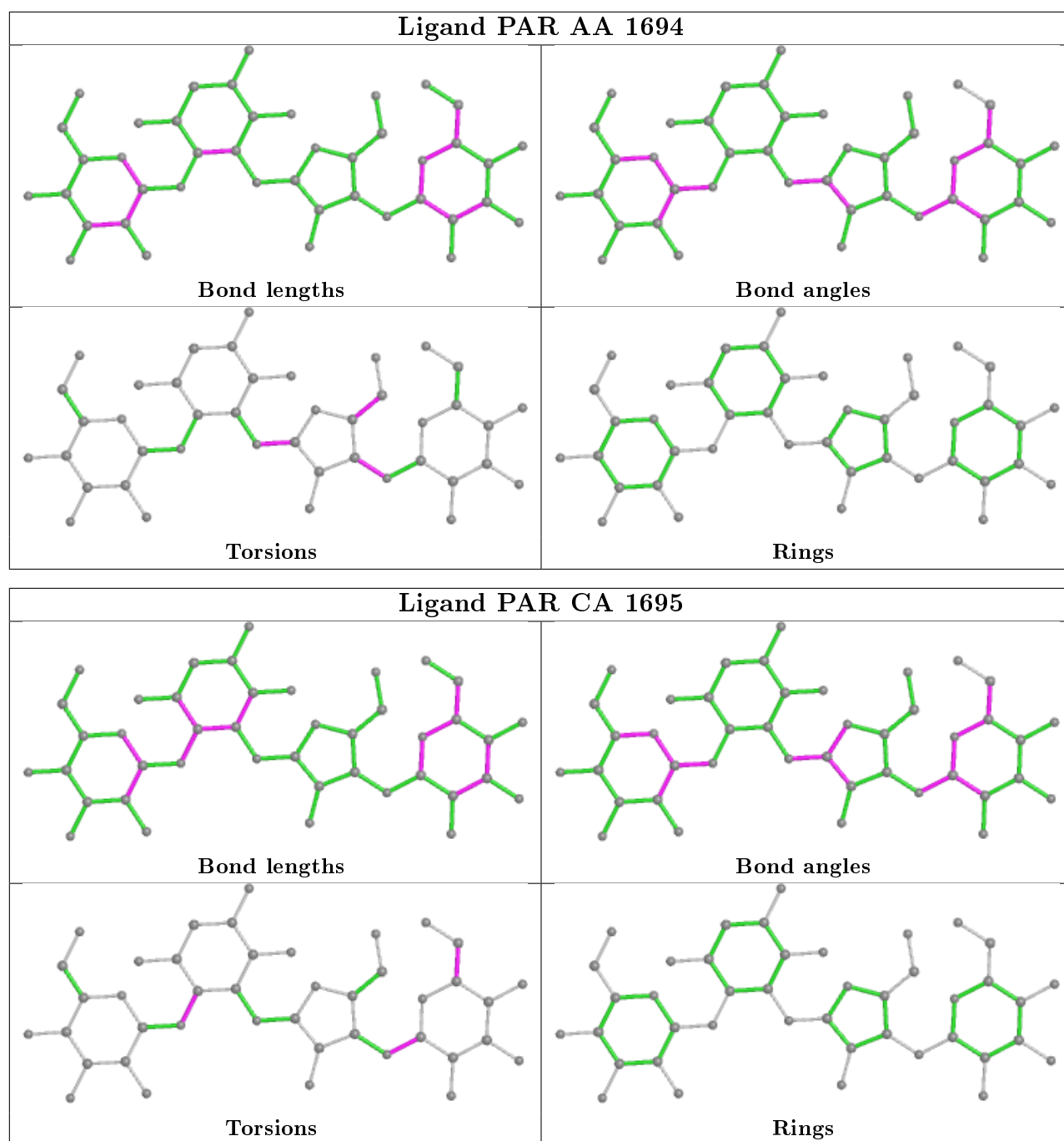
Mol	Chain	Res	Type	Atoms
58	AA	1694	PAR	C23-C13-O52-C52
58	AA	1694	PAR	O43-C43-C53-O53
58	AA	1694	PAR	C33-C43-C53-O53
58	AA	1694	PAR	O43-C13-O52-C52
58	CA	1695	PAR	C44-C54-C64-N64

There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
58	AA	1694	PAR	3	0
58	CA	1695	PAR	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data [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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q < 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1504/1522 (98%)	0.20	60 (3%) 38 30	7, 49, 127, 206	0
1	CA	1503/1522 (98%)	0.18	63 (4%) 36 29	2, 41, 123, 215	0
2	AB	235/256 (91%)	0.17	10 (4%) 35 28	44, 88, 131, 174	0
2	CB	235/256 (91%)	0.24	13 (5%) 25 20	40, 81, 123, 166	0
3	AC	207/239 (86%)	0.23	13 (6%) 20 14	38, 71, 111, 143	0
3	CC	207/239 (86%)	0.20	9 (4%) 35 28	28, 62, 104, 145	0
4	AD	208/209 (99%)	-0.01	4 (1%) 66 57	28, 59, 107, 141	0
4	CD	208/209 (99%)	0.11	7 (3%) 45 35	21, 52, 103, 125	0
5	AE	151/162 (93%)	0.24	4 (2%) 56 45	7, 52, 95, 111	0
5	CE	151/162 (93%)	0.21	6 (3%) 38 30	4, 46, 92, 114	0
6	AF	101/101 (100%)	0.03	4 (3%) 38 30	16, 53, 101, 141	0
6	CF	101/101 (100%)	0.49	9 (8%) 9 7	12, 55, 104, 131	0
7	AG	155/156 (99%)	0.28	12 (7%) 13 10	34, 66, 111, 154	0
7	CG	155/156 (99%)	0.25	11 (7%) 16 11	27, 64, 114, 148	0
8	AH	138/138 (100%)	0.06	3 (2%) 62 51	19, 59, 87, 125	0
8	CH	138/138 (100%)	-0.04	3 (2%) 62 51	12, 49, 82, 122	0
9	AI	127/128 (99%)	0.41	6 (4%) 31 25	31, 75, 120, 153	0
9	CI	127/128 (99%)	0.43	5 (3%) 39 30	27, 75, 114, 148	0
10	AJ	99/105 (94%)	0.89	16 (16%) 1 2	41, 85, 128, 142	0
10	CJ	99/105 (94%)	0.64	6 (6%) 21 15	27, 77, 128, 143	0
11	AK	119/129 (92%)	0.35	9 (7%) 13 10	13, 49, 98, 129	0
11	CK	119/129 (92%)	0.18	4 (3%) 45 35	8, 46, 98, 121	0
12	AL	125/132 (94%)	0.04	5 (4%) 38 30	2, 39, 88, 141	0
12	CL	125/132 (94%)	0.18	4 (3%) 47 37	0, 27, 75, 143	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	125/126 (99%)	0.54	13 (10%) 6 5	36, 76, 116, 147	0
13	CM	125/126 (99%)	0.22	8 (6%) 19 14	22, 61, 109, 136	0
14	AN	60/61 (98%)	0.38	3 (5%) 28 24	40, 67, 117, 132	0
14	CN	60/61 (98%)	0.37	2 (3%) 46 36	31, 50, 106, 121	0
15	AO	88/89 (98%)	0.13	3 (3%) 45 35	14, 48, 93, 116	0
15	CO	88/89 (98%)	0.05	2 (2%) 60 50	9, 45, 89, 132	0
16	AP	84/88 (95%)	0.10	1 (1%) 79 70	30, 51, 101, 137	0
16	CP	84/88 (95%)	0.04	0 100 100	30, 52, 88, 106	0
17	AQ	100/105 (95%)	0.17	4 (4%) 38 30	24, 56, 103, 111	0
17	CQ	100/105 (95%)	0.15	3 (3%) 50 38	18, 53, 110, 121	0
18	AR	70/88 (79%)	0.20	3 (4%) 35 28	17, 54, 98, 118	0
18	CR	70/88 (79%)	0.07	0 100 100	12, 47, 88, 116	0
19	AS	79/93 (84%)	0.26	7 (8%) 9 7	37, 76, 126, 161	0
19	CS	79/93 (84%)	0.15	1 (1%) 77 68	26, 55, 121, 146	0
20	AT	99/106 (93%)	0.30	8 (8%) 12 9	11, 59, 105, 121	0
20	CT	99/106 (93%)	0.26	5 (5%) 28 23	3, 58, 106, 125	0
21	AU	25/27 (92%)	0.98	4 (16%) 1 2	41, 69, 87, 97	0
21	CU	25/27 (92%)	0.49	2 (8%) 12 10	31, 55, 91, 125	0
22	AW	76/76 (100%)	1.47	24 (31%) 0 0	23, 129, 187, 208	0
22	AY	17/76 (22%)	1.27	2 (11%) 4 4	29, 51, 105, 123	0
22	CW	76/76 (100%)	1.58	25 (32%) 0 0	12, 118, 185, 207	0
22	CY	17/76 (22%)	0.77	4 (23%) 0 0	10, 37, 117, 125	0
23	AV	77/77 (100%)	0.28	3 (3%) 39 30	16, 67, 122, 137	0
23	CV	77/77 (100%)	0.23	5 (6%) 18 13	10, 55, 109, 155	0
24	AX	8/24 (33%)	0.15	0 100 100	15, 33, 63, 66	0
24	CX	10/24 (41%)	0.05	1 (10%) 7 6	9, 26, 96, 134	0
25	BA	2803/2916 (96%)	0.50	187 (6%) 17 13	6, 38, 143, 240	0
25	DA	2803/2916 (96%)	0.45	145 (5%) 27 23	0, 20, 132, 232	0
26	BB	119/122 (97%)	0.61	5 (4%) 36 29	32, 70, 127, 179	0
26	DB	119/122 (97%)	0.40	4 (3%) 45 35	14, 44, 88, 118	0
27	BC	191/229 (83%)	2.00	81 (42%) 0 0	44, 115, 155, 180	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
27	DC	191/229 (83%)	2.19	85 (44%) 0 0	33, 112, 151, 174	0
28	BD	272/276 (98%)	-0.02	1 (0%) 92 87	6, 23, 70, 121	0
28	DD	272/276 (98%)	-0.18	4 (1%) 73 64	0, 11, 51, 96	0
29	BE	205/206 (99%)	0.10	5 (2%) 59 48	13, 50, 111, 161	0
29	DE	205/206 (99%)	0.15	6 (2%) 51 40	1, 29, 96, 158	0
30	BF	208/210 (99%)	0.11	9 (4%) 35 28	10, 43, 115, 172	0
30	DF	208/210 (99%)	-0.12	3 (1%) 75 66	0, 23, 106, 154	0
31	BG	181/182 (99%)	0.15	10 (5%) 25 20	9, 63, 118, 169	0
31	DG	181/182 (99%)	0.12	12 (6%) 18 13	4, 51, 107, 178	0
32	BH	160/180 (88%)	1.49	51 (31%) 0 0	37, 115, 166, 197	0
32	DH	160/180 (88%)	0.55	9 (5%) 24 19	3, 61, 115, 143	0
33	BI	146/148 (98%)	0.45	11 (7%) 14 10	19, 68, 125, 152	0
33	DI	146/148 (98%)	0.22	7 (4%) 30 25	6, 64, 119, 168	0
34	BN	139/140 (99%)	0.09	2 (1%) 75 66	23, 58, 106, 176	0
34	DN	139/140 (99%)	-0.20	0 100 100	2, 29, 83, 139	0
35	BO	122/122 (100%)	-0.33	0 100 100	17, 42, 82, 99	0
35	DO	122/122 (100%)	-0.45	0 100 100	0, 22, 61, 74	0
36	BP	146/150 (97%)	0.28	5 (3%) 45 35	8, 49, 108, 157	0
36	DP	146/150 (97%)	0.21	5 (3%) 45 35	0, 43, 108, 167	0
37	BQ	141/141 (100%)	0.29	8 (5%) 23 19	7, 50, 102, 180	0
37	DQ	141/141 (100%)	-0.06	3 (2%) 63 53	1, 25, 75, 167	0
38	BR	117/118 (99%)	-0.17	1 (0%) 84 77	18, 39, 91, 120	0
38	DR	117/118 (99%)	-0.15	1 (0%) 84 77	4, 22, 64, 109	0
39	BS	99/112 (88%)	0.22	1 (1%) 82 75	15, 67, 116, 158	0
39	DS	99/112 (88%)	0.18	3 (3%) 50 38	11, 41, 91, 147	0
40	BT	138/146 (94%)	-0.03	7 (5%) 28 23	24, 57, 109, 142	0
40	DT	138/146 (94%)	-0.19	3 (2%) 62 51	3, 39, 96, 120	0
41	BU	117/118 (99%)	0.21	3 (2%) 56 45	14, 48, 114, 142	0
41	DU	117/118 (99%)	-0.22	0 100 100	2, 19, 65, 93	0
42	BV	101/101 (100%)	0.39	5 (4%) 28 24	15, 72, 122, 175	0
42	DV	101/101 (100%)	0.08	2 (1%) 65 55	1, 39, 86, 153	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
43	BW	113/113 (100%)	0.28	7 (6%) 20 15	11, 32, 89, 159	0
43	DW	113/113 (100%)	-0.09	1 (0%) 84 77	2, 17, 64, 110	0
44	BX	93/96 (96%)	-0.06	0 100 100	15, 35, 72, 98	0
44	DX	93/96 (96%)	0.12	3 (3%) 47 37	2, 20, 73, 84	0
45	BY	101/110 (91%)	0.80	20 (19%) 1 1	20, 63, 128, 197	0
45	DY	101/110 (91%)	0.45	9 (8%) 9 7	6, 54, 131, 226	0
46	BZ	177/206 (85%)	0.87	25 (14%) 2 3	0, 83, 131, 156	0
46	DZ	177/206 (85%)	0.51	17 (9%) 8 6	4, 66, 131, 155	0
47	B0	84/85 (98%)	0.75	12 (14%) 2 2	11, 44, 92, 147	0
47	D0	84/85 (98%)	0.44	9 (10%) 6 5	4, 23, 85, 144	0
48	B1	94/98 (95%)	0.56	4 (4%) 35 28	6, 33, 89, 106	0
48	D1	94/98 (95%)	0.11	0 100 100	2, 28, 85, 136	0
49	B2	71/72 (98%)	-0.10	2 (2%) 53 41	18, 49, 104, 122	0
49	D2	71/72 (98%)	0.06	2 (2%) 53 41	2, 30, 96, 132	0
50	B3	60/60 (100%)	0.34	3 (5%) 28 24	20, 59, 111, 177	0
50	D3	60/60 (100%)	0.20	3 (5%) 28 24	2, 26, 90, 130	0
51	B4	31/71 (43%)	-0.12	0 100 100	33, 76, 100, 107	0
51	D4	31/71 (43%)	0.10	0 100 100	8, 66, 113, 156	0
52	B5	59/60 (98%)	0.42	6 (10%) 6 6	1, 43, 128, 147	0
52	D5	59/60 (98%)	0.17	3 (5%) 28 23	0, 29, 112, 160	0
53	B6	45/54 (83%)	1.67	14 (31%) 0 0	26, 85, 131, 153	0
53	D6	45/54 (83%)	1.58	18 (40%) 0 0	15, 78, 124, 159	0
54	B7	49/49 (100%)	-0.05	0 100 100	0, 18, 70, 86	0
54	D7	49/49 (100%)	-0.13	1 (2%) 65 55	0, 3, 44, 108	0
55	B8	64/65 (98%)	0.47	6 (9%) 8 7	0, 39, 92, 121	0
55	D8	64/65 (98%)	0.12	2 (3%) 49 38	0, 21, 71, 121	0
56	B9	36/37 (97%)	3.95	32 (88%) 0 0	79, 117, 145, 155	0
56	D9	36/37 (97%)	4.31	33 (91%) 0 0	45, 105, 140, 163	0
All	All	21119/22212 (95%)	0.34	1335 (6%) 20 14	0, 46, 126, 240	0

The worst 5 of 1335 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
25	BA	2802	G	13.9
25	DA	2802	G	13.0
11	AK	129	SER	12.9
27	DC	166	ASP	12.4
25	BA	2795	G	11.7

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

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3197	1/1	0.17	0.97	1,1,1,1	0
57	MG	DA	3268	1/1	0.27	0.86	0,0,0,0	1
57	MG	DA	3241	1/1	0.28	1.00	0,0,0,0	0
57	MG	BU	201	1/1	0.28	0.95	8,8,8,8	0
57	MG	BA	3199	1/1	0.28	0.48	0,0,0,0	0
57	MG	BA	3237	1/1	0.29	1.21	3,3,3,3	0
57	MG	DA	3132	1/1	0.32	0.94	0,0,0,0	0
57	MG	DA	3020	1/1	0.41	1.04	0,0,0,0	0
57	MG	AA	1652	1/1	0.42	1.48	0,0,0,0	1
57	MG	DA	3210	1/1	0.43	0.38	15,15,15,15	0
57	MG	BA	3190	1/1	0.43	0.76	0,0,0,0	0
57	MG	CA	1625	1/1	0.45	1.30	1,1,1,1	0
57	MG	DA	3251	1/1	0.45	0.72	0,0,0,0	1
57	MG	BA	3204	1/1	0.47	0.46	3,3,3,3	0
57	MG	BA	3231	1/1	0.48	0.60	0,0,0,0	0
57	MG	DA	3164	1/1	0.48	1.07	0,0,0,0	0
57	MG	AA	1631	1/1	0.49	1.23	0,0,0,0	0
57	MG	DA	3110	1/1	0.50	0.59	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	AA	1634	1/1	0.51	1.91	0,0,0,0	1
57	MG	DA	3198	1/1	0.52	0.85	0,0,0,0	1
57	MG	DA	3060	1/1	0.52	0.69	11,11,11,11	0
57	MG	DA	3179	1/1	0.53	0.69	0,0,0,0	0
57	MG	BA	3117	1/1	0.54	0.85	0,0,0,0	0
57	MG	BA	3018	1/1	0.54	1.14	0,0,0,0	0
57	MG	DA	3199	1/1	0.54	0.59	1,1,1,1	0
57	MG	DA	3094	1/1	0.55	0.89	0,0,0,0	0
57	MG	BA	3242	1/1	0.56	0.53	0,0,0,0	0
57	MG	BA	3124	1/1	0.56	1.21	2,2,2,2	1
57	MG	DA	3078	1/1	0.56	0.21	0,0,0,0	0
57	MG	DA	3195	1/1	0.57	0.55	32,32,32,32	0
57	MG	AA	1638	1/1	0.57	0.66	9,9,9,9	0
57	MG	AA	1612	1/1	0.58	1.12	0,0,0,0	0
57	MG	BA	3223	1/1	0.59	0.45	0,0,0,0	0
57	MG	DA	3027	1/1	0.60	0.22	1,1,1,1	0
57	MG	DA	3165	1/1	0.60	1.08	0,0,0,0	0
57	MG	BA	3243	1/1	0.61	0.99	0,0,0,0	0
57	MG	BA	3248	1/1	0.61	0.64	7,7,7,7	0
57	MG	BA	3037	1/1	0.63	0.67	0,0,0,0	0
57	MG	AA	1676	1/1	0.63	0.52	0,0,0,0	0
57	MG	BA	3148	1/1	0.63	0.40	0,0,0,0	0
57	MG	CA	1667	1/1	0.63	0.68	27,27,27,27	0
57	MG	DA	3247	1/1	0.63	0.51	0,0,0,0	1
57	MG	DA	3221	1/1	0.64	0.75	0,0,0,0	0
57	MG	DA	3166	1/1	0.64	0.37	11,11,11,11	0
57	MG	DA	3107	1/1	0.64	0.53	0,0,0,0	0
57	MG	BA	3240	1/1	0.64	0.46	0,0,0,0	0
57	MG	CA	1693	1/1	0.64	0.45	0,0,0,0	0
57	MG	BA	3087	1/1	0.64	0.49	0,0,0,0	0
57	MG	AA	1628	1/1	0.65	1.09	0,0,0,0	0
57	MG	AA	1687	1/1	0.65	0.65	0,0,0,0	0
57	MG	BA	3160	1/1	0.65	0.65	0,0,0,0	0
57	MG	BA	3195	1/1	0.65	0.46	0,0,0,0	0
57	MG	BA	3150	1/1	0.66	1.33	0,0,0,0	0
57	MG	BA	3105	1/1	0.66	1.14	0,0,0,0	0
57	MG	BB	203	1/1	0.66	0.76	0,0,0,0	1
57	MG	DA	3244	1/1	0.66	1.35	0,0,0,0	0
57	MG	BA	3187	1/1	0.66	0.69	5,5,5,5	0
57	MG	DA	3194	1/1	0.66	0.29	0,0,0,0	0
57	MG	CA	1670	1/1	0.67	0.82	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	DA	3065	1/1	0.67	0.69	0,0,0,0	0
57	MG	CA	1635	1/1	0.67	1.07	0,0,0,0	0
57	MG	DA	3212	1/1	0.67	1.20	0,0,0,0	0
57	MG	BA	3001	1/1	0.67	1.58	17,17,17,17	0
57	MG	AA	1610	1/1	0.68	1.45	0,0,0,0	0
57	MG	BA	3173	1/1	0.68	0.43	0,0,0,0	0
57	MG	CA	1604	1/1	0.68	0.40	0,0,0,0	0
57	MG	DA	3264	1/1	0.68	0.68	1,1,1,1	0
57	MG	BA	3193	1/1	0.69	0.73	0,0,0,0	0
57	MG	CA	1685	1/1	0.69	0.34	11,11,11,11	0
57	MG	BA	3163	1/1	0.69	1.29	3,3,3,3	0
57	MG	AA	1623	1/1	0.69	0.46	0,0,0,0	0
57	MG	CA	1620	1/1	0.69	0.97	1,1,1,1	0
57	MG	BA	3249	1/1	0.69	1.44	0,0,0,0	0
57	MG	BA	3120	1/1	0.69	0.82	0,0,0,0	0
57	MG	BA	3236	1/1	0.69	0.59	0,0,0,0	0
57	MG	DA	3167	1/1	0.69	0.66	1,1,1,1	0
57	MG	DD	301	1/1	0.70	0.37	0,0,0,0	0
57	MG	BA	3010	1/1	0.70	0.55	0,0,0,0	0
57	MG	DA	3230	1/1	0.70	0.58	0,0,0,0	0
57	MG	CA	1609	1/1	0.70	1.55	0,0,0,0	0
57	MG	CV	102	1/1	0.70	0.77	0,0,0,0	0
57	MG	DA	3259	1/1	0.70	1.04	0,0,0,0	0
57	MG	CA	1619	1/1	0.70	0.47	0,0,0,0	0
57	MG	DA	3028	1/1	0.70	0.54	0,0,0,0	0
57	MG	DA	3248	1/1	0.70	0.39	0,0,0,0	1
57	MG	DA	3177	1/1	0.71	0.76	1,1,1,1	0
57	MG	AA	1686	1/1	0.71	0.96	0,0,0,0	0
57	MG	DA	3112	1/1	0.71	0.79	0,0,0,0	0
57	MG	D5	102	1/1	0.71	0.80	0,0,0,0	1
57	MG	CA	1669	1/1	0.71	0.70	0,0,0,0	0
57	MG	DA	3227	1/1	0.71	0.41	0,0,0,0	0
57	MG	CA	1626	1/1	0.71	1.21	0,0,0,0	0
57	MG	DA	3214	1/1	0.71	1.17	0,0,0,0	0
57	MG	DA	3265	1/1	0.71	0.61	0,0,0,0	0
57	MG	BA	3059	1/1	0.72	0.82	0,0,0,0	0
57	MG	DA	3192	1/1	0.72	0.94	0,0,0,0	0
57	MG	DA	3254	1/1	0.72	2.31	0,0,0,0	1
57	MG	DA	3064	1/1	0.72	0.49	0,0,0,0	0
57	MG	CA	1645	1/1	0.72	1.83	1,1,1,1	0
57	MG	AA	1688	1/1	0.72	1.02	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	CA	1640	1/1	0.73	0.56	0,0,0,0	0
57	MG	DA	3063	1/1	0.73	0.89	0,0,0,0	0
57	MG	BA	3134	1/1	0.73	1.33	0,0,0,0	1
57	MG	DA	3202	1/1	0.73	0.34	0,0,0,0	0
57	MG	DA	3176	1/1	0.73	0.95	0,0,0,0	0
57	MG	AA	1645	1/1	0.73	0.91	0,0,0,0	0
57	MG	DA	3196	1/1	0.73	0.25	3,3,3,3	0
57	MG	BA	3067	1/1	0.73	0.59	0,0,0,0	0
57	MG	DA	3181	1/1	0.73	0.65	15,15,15,15	0
57	MG	DA	3006	1/1	0.73	0.56	3,3,3,3	0
57	MG	DA	3075	1/1	0.74	0.52	0,0,0,0	0
57	MG	DA	3236	1/1	0.74	1.44	0,0,0,0	0
57	MG	DA	3128	1/1	0.74	1.29	1,1,1,1	0
57	MG	BA	3167	1/1	0.74	0.72	0,0,0,0	0
57	MG	DA	3237	1/1	0.74	1.38	1,1,1,1	0
57	MG	DA	3185	1/1	0.74	0.30	0,0,0,0	0
57	MG	CA	1638	1/1	0.74	0.56	0,0,0,0	0
57	MG	CA	1678	1/1	0.74	0.50	0,0,0,0	1
57	MG	BA	3241	1/1	0.74	0.37	5,5,5,5	0
57	MG	BA	3254	1/1	0.75	0.81	0,0,0,0	0
57	MG	BA	3201	1/1	0.75	1.18	0,0,0,0	0
57	MG	CA	1677	1/1	0.75	0.29	0,0,0,0	1
57	MG	CA	1683	1/1	0.75	1.04	1,1,1,1	0
57	MG	DA	3204	1/1	0.75	0.34	0,0,0,0	0
57	MG	CA	1630	1/1	0.75	0.40	1,1,1,1	0
57	MG	DA	3136	1/1	0.75	0.77	1,1,1,1	0
57	MG	CA	1656	1/1	0.75	1.31	0,0,0,0	0
57	MG	D0	101	1/1	0.75	0.54	1,1,1,1	0
57	MG	DA	3184	1/1	0.76	0.72	0,0,0,0	1
57	MG	DA	3191	1/1	0.76	0.40	13,13,13,13	0
57	MG	AA	1636	1/1	0.76	0.81	4,4,4,4	0
57	MG	BA	3135	1/1	0.76	0.94	0,0,0,0	0
57	MG	DA	3256	1/1	0.76	1.10	0,0,0,0	0
57	MG	BA	3097	1/1	0.76	0.48	0,0,0,0	0
57	MG	DA	3246	1/1	0.76	1.26	0,0,0,0	0
57	MG	CA	1636	1/1	0.77	0.47	0,0,0,0	0
57	MG	BA	3245	1/1	0.77	0.65	0,0,0,0	0
57	MG	BA	3233	1/1	0.77	0.86	0,0,0,0	0
57	MG	DA	3153	1/1	0.77	0.38	0,0,0,0	0
57	MG	AA	1647	1/1	0.77	0.27	0,0,0,0	0
57	MG	AA	1641	1/1	0.77	0.30	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3009	1/1	0.77	0.44	0,0,0,0	0
57	MG	DA	3211	1/1	0.77	0.52	12,12,12,12	0
57	MG	BA	3128	1/1	0.78	0.18	4,4,4,4	0
57	MG	BA	3003	1/1	0.78	1.27	0,0,0,0	0
57	MG	BA	3217	1/1	0.78	0.45	0,0,0,0	0
57	MG	DA	3206	1/1	0.78	0.32	36,36,36,36	0
57	MG	DA	3127	1/1	0.78	1.28	1,1,1,1	0
57	MG	CA	1680	1/1	0.78	0.52	1,1,1,1	0
57	MG	CA	1606	1/1	0.78	1.16	5,5,5,5	0
57	MG	DE	301	1/1	0.78	0.26	1,1,1,1	0
57	MG	CA	1682	1/1	0.78	0.70	1,1,1,1	0
57	MG	AA	1664	1/1	0.78	0.38	0,0,0,0	0
57	MG	AA	1654	1/1	0.78	0.53	0,0,0,0	0
57	MG	BA	3154	1/1	0.78	0.45	0,0,0,0	0
57	MG	BA	3228	1/1	0.78	0.29	1,1,1,1	0
57	MG	BO	201	1/1	0.78	0.30	47,47,47,47	0
57	MG	DA	3161	1/1	0.79	0.62	0,0,0,0	0
57	MG	BA	3251	1/1	0.79	0.52	8,8,8,8	0
57	MG	BA	3085	1/1	0.79	1.26	0,0,0,0	0
57	MG	AA	1679	1/1	0.79	0.49	0,0,0,0	1
57	MG	DA	3026	1/1	0.79	0.35	0,0,0,0	0
57	MG	DA	3038	1/1	0.79	0.55	0,0,0,0	1
57	MG	DA	3002	1/1	0.79	1.10	0,0,0,0	0
57	MG	DA	3238	1/1	0.79	0.41	0,0,0,0	0
57	MG	DA	3187	1/1	0.80	0.44	0,0,0,0	0
57	MG	BA	3261	1/1	0.80	0.35	31,31,31,31	0
57	MG	DA	3124	1/1	0.80	0.49	0,0,0,0	0
57	MG	DA	3021	1/1	0.80	0.32	18,18,18,18	0
57	MG	DA	3162	1/1	0.80	0.66	0,0,0,0	0
57	MG	BA	3021	1/1	0.80	1.66	0,0,0,0	0
57	MG	BA	3202	1/1	0.80	0.64	0,0,0,0	0
57	MG	BA	3026	1/1	0.80	0.83	0,0,0,0	0
57	MG	CA	1689	1/1	0.81	1.21	0,0,0,0	1
57	MG	DA	3250	1/1	0.81	0.39	46,46,46,46	0
57	MG	BA	3094	1/1	0.81	0.61	0,0,0,0	0
57	MG	BA	3104	1/1	0.81	0.98	0,0,0,0	0
57	MG	AA	1601	1/1	0.81	1.05	0,0,0,0	0
57	MG	CA	1657	1/1	0.81	0.21	0,0,0,0	0
57	MG	BA	3132	1/1	0.81	0.93	0,0,0,0	0
57	MG	DA	3088	1/1	0.81	0.74	1,1,1,1	0
57	MG	DA	3266	1/1	0.81	0.49	0,0,0,0	0
57	MG	DA	3240	1/1	0.81	0.46	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	DA	3039	1/1	0.81	0.60	0,0,0,0	0
57	MG	CA	1624	1/1	0.81	0.25	1,1,1,1	0
57	MG	DA	3077	1/1	0.82	0.60	1,1,1,1	0
57	MG	BA	3024	1/1	0.82	0.54	0,0,0,0	0
57	MG	AA	1669	1/1	0.82	0.92	3,3,3,3	1
57	MG	AA	1660	1/1	0.82	0.45	2,2,2,2	0
57	MG	DA	3232	1/1	0.82	0.30	0,0,0,0	0
57	MG	CA	1679	1/1	0.82	0.18	45,45,45,45	0
57	MG	DA	3145	1/1	0.82	0.69	1,1,1,1	0
57	MG	CA	1668	1/1	0.82	1.04	0,0,0,0	0
57	MG	DA	3071	1/1	0.82	1.18	1,1,1,1	0
57	MG	BA	3209	1/1	0.82	1.40	0,0,0,0	0
57	MG	BA	3044	1/1	0.82	0.96	0,0,0,0	0
57	MG	BB	204	1/1	0.82	0.15	0,0,0,0	1
57	MG	DA	3249	1/1	0.82	0.17	0,0,0,0	0
57	MG	BA	3028	1/1	0.82	0.17	83,83,83,83	0
57	MG	BA	3203	1/1	0.82	0.57	0,0,0,0	0
57	MG	BA	3002	1/1	0.82	0.28	13,13,13,13	0
57	MG	DA	3182	1/1	0.82	0.37	0,0,0,0	0
57	MG	AA	1640	1/1	0.82	0.44	0,0,0,0	0
57	MG	AA	1684	1/1	0.82	0.34	0,0,0,0	0
57	MG	CA	1664	1/1	0.83	0.26	0,0,0,0	0
57	MG	BA	3230	1/1	0.83	0.90	0,0,0,0	0
57	MG	BA	3244	1/1	0.83	0.63	0,0,0,0	0
57	MG	BA	3246	1/1	0.83	0.09	21,21,21,21	0
57	MG	BA	3126	1/1	0.83	0.61	0,0,0,0	1
57	MG	CA	1637	1/1	0.83	0.35	0,0,0,0	0
57	MG	DA	3228	1/1	0.83	0.42	0,0,0,0	0
57	MG	BA	3030	1/1	0.83	0.25	26,26,26,26	0
57	MG	AA	1681	1/1	0.83	0.38	0,0,0,0	0
57	MG	DA	3234	1/1	0.83	0.95	0,0,0,0	0
57	MG	DA	3220	1/1	0.83	0.67	0,0,0,0	0
57	MG	DA	3037	1/1	0.83	0.24	0,0,0,0	0
57	MG	BA	3039	1/1	0.83	0.35	0,0,0,0	0
57	MG	BA	3011	1/1	0.83	1.90	0,0,0,0	0
57	MG	DA	3170	1/1	0.83	0.58	0,0,0,0	0
57	MG	BA	3099	1/1	0.83	0.64	0,0,0,0	0
57	MG	BA	3088	1/1	0.83	0.17	2,2,2,2	0
57	MG	BA	3006	1/1	0.83	0.82	0,0,0,0	0
57	MG	DA	3016	1/1	0.83	0.45	0,0,0,0	0
57	MG	BA	3090	1/1	0.83	0.53	0,0,0,0	0
57	MG	DA	3105	1/1	0.84	0.57	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	CA	1617	1/1	0.84	0.77	1,1,1,1	0
57	MG	DA	3160	1/1	0.84	1.10	0,0,0,0	0
57	MG	AA	1685	1/1	0.84	0.96	0,0,0,0	0
57	MG	DA	3003	1/1	0.84	0.47	1,1,1,1	0
57	MG	DA	3169	1/1	0.84	0.81	0,0,0,0	0
57	MG	BA	3253	1/1	0.84	1.13	0,0,0,0	0
57	MG	BA	3145	1/1	0.84	1.06	0,0,0,0	0
57	MG	BA	3205	1/1	0.84	0.22	33,33,33,33	0
57	MG	AA	1658	1/1	0.84	0.14	41,41,41,41	0
57	MG	DA	3085	1/1	0.84	0.85	0,0,0,0	0
57	MG	CA	1608	1/1	0.84	0.35	0,0,0,0	0
57	MG	BA	3045	1/1	0.84	0.69	0,0,0,0	0
57	MG	DA	3139	1/1	0.84	0.48	0,0,0,0	0
57	MG	BA	3111	1/1	0.84	0.79	2,2,2,2	0
57	MG	BA	3058	1/1	0.84	0.33	4,4,4,4	0
57	MG	BA	3198	1/1	0.84	0.19	41,41,41,41	0
57	MG	AA	1620	1/1	0.84	0.31	1,1,1,1	0
57	MG	DA	3100	1/1	0.84	0.76	0,0,0,0	0
57	MG	AA	1674	1/1	0.84	1.24	16,16,16,16	0
57	MG	DA	3233	1/1	0.84	1.30	0,0,0,0	0
57	MG	BF	302	1/1	0.84	0.33	0,0,0,0	0
57	MG	CA	1654	1/1	0.85	0.48	0,0,0,0	0
57	MG	BA	3229	1/1	0.85	0.32	13,13,13,13	0
57	MG	CA	1634	1/1	0.85	1.02	0,0,0,0	0
57	MG	AA	1646	1/1	0.85	0.81	0,0,0,0	0
57	MG	CA	1641	1/1	0.85	1.79	0,0,0,0	0
57	MG	BA	3114	1/1	0.85	0.57	0,0,0,0	0
57	MG	CA	1687	1/1	0.85	0.90	0,0,0,0	1
57	MG	CA	1647	1/1	0.85	0.71	0,0,0,0	1
57	MG	DA	3019	1/1	0.85	0.43	0,0,0,0	0
57	MG	BA	3110	1/1	0.85	0.90	0,0,0,0	0
57	MG	CA	1673	1/1	0.85	0.42	0,0,0,0	0
57	MG	BA	3040	1/1	0.85	0.70	0,0,0,0	0
57	MG	DA	3012	1/1	0.85	0.33	0,0,0,0	0
57	MG	BA	3082	1/1	0.86	0.28	88,88,88,88	0
57	MG	BA	3191	1/1	0.86	0.90	0,0,0,0	0
57	MG	BA	3070	1/1	0.86	0.25	0,0,0,0	0
59	ZN	CD	801	1/1	0.86	0.29	8,8,8,8	0
57	MG	DA	3222	1/1	0.86	1.29	1,1,1,1	0
57	MG	DA	3245	1/1	0.86	0.96	0,0,0,0	1
57	MG	BA	3073	1/1	0.86	0.53	0,0,0,0	0
57	MG	DA	3043	1/1	0.86	0.86	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3038	1/1	0.86	0.51	28,28,28,28	0
57	MG	BA	3131	1/1	0.86	0.25	0,0,0,0	0
57	MG	BA	3213	1/1	0.86	0.42	0,0,0,0	0
57	MG	CA	1652	1/1	0.86	0.29	0,0,0,0	0
57	MG	CA	1646	1/1	0.86	0.52	1,1,1,1	0
57	MG	BA	3259	1/1	0.86	0.82	0,0,0,0	0
57	MG	BA	3123	1/1	0.86	0.51	0,0,0,0	0
57	MG	BA	3219	1/1	0.86	0.11	0,0,0,0	0
57	MG	CA	1661	1/1	0.86	0.47	1,1,1,1	0
57	MG	DA	3252	1/1	0.86	0.26	0,0,0,0	0
57	MG	BA	3144	1/1	0.86	0.33	1,1,1,1	0
57	MG	BA	3066	1/1	0.86	0.13	86,86,86,86	0
57	MG	AA	1650	1/1	0.86	1.13	0,0,0,0	0
57	MG	DA	3044	1/1	0.87	0.60	0,0,0,0	0
57	MG	AA	1629	1/1	0.87	0.17	29,29,29,29	0
57	MG	BA	3004	1/1	0.87	1.47	0,0,0,0	0
57	MG	DA	3084	1/1	0.87	0.44	0,0,0,0	0
57	MG	DA	3151	1/1	0.87	0.27	0,0,0,0	0
57	MG	B1	101	1/1	0.87	0.20	59,59,59,59	1
57	MG	DA	3059	1/1	0.87	0.28	1,1,1,1	0
57	MG	AA	1662	1/1	0.87	0.37	26,26,26,26	0
57	MG	BA	3192	1/1	0.87	0.40	0,0,0,0	0
57	MG	BA	3076	1/1	0.87	0.24	34,34,34,34	0
57	MG	DA	3051	1/1	0.87	0.63	0,0,0,0	0
57	MG	DA	3173	1/1	0.87	0.99	0,0,0,0	0
57	MG	CA	1665	1/1	0.87	0.35	0,0,0,0	0
57	MG	BA	3168	1/1	0.87	0.15	11,11,11,11	0
57	MG	DA	3024	1/1	0.87	0.35	0,0,0,0	0
57	MG	DA	3215	1/1	0.87	0.30	0,0,0,0	0
57	MG	DA	3134	1/1	0.87	0.60	0,0,0,0	0
57	MG	AA	1626	1/1	0.87	0.40	0,0,0,0	0
57	MG	AA	1624	1/1	0.87	0.67	0,0,0,0	0
57	MG	BA	3260	1/1	0.87	0.20	13,13,13,13	0
57	MG	CA	1694	1/1	0.87	0.93	1,1,1,1	0
57	MG	DA	3122	1/1	0.87	0.30	0,0,0,0	0
57	MG	BA	3116	1/1	0.87	0.29	0,0,0,0	0
57	MG	DA	3004	1/1	0.88	1.01	1,1,1,1	0
57	MG	BA	3036	1/1	0.88	0.73	0,0,0,0	0
57	MG	BA	3218	1/1	0.88	0.25	0,0,0,0	0
57	MG	AA	1617	1/1	0.88	0.77	0,0,0,0	0
57	MG	DA	3098	1/1	0.88	0.82	1,1,1,1	0
57	MG	DA	3130	1/1	0.88	0.43	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	DA	3036	1/1	0.88	0.81	1,1,1,1	0
57	MG	BA	3208	1/1	0.88	0.33	0,0,0,0	0
57	MG	AA	1680	1/1	0.88	1.74	0,0,0,0	0
57	MG	CA	1655	1/1	0.88	0.23	21,21,21,21	0
57	MG	DA	3113	1/1	0.88	0.46	0,0,0,0	0
57	MG	BA	3091	1/1	0.88	0.94	0,0,0,0	0
57	MG	BA	3084	1/1	0.88	0.63	0,0,0,0	0
57	MG	BA	3212	1/1	0.88	1.17	11,11,11,11	0
57	MG	BA	3169	1/1	0.88	1.18	0,0,0,0	0
57	MG	DA	3258	1/1	0.88	0.59	8,8,8,8	0
57	MG	BA	3252	1/1	0.88	0.26	0,0,0,0	0
57	MG	AA	1648	1/1	0.88	0.21	1,1,1,1	0
57	MG	DA	3058	1/1	0.88	1.18	0,0,0,0	0
57	MG	CA	1615	1/1	0.88	0.37	1,1,1,1	0
57	MG	DA	3030	1/1	0.88	0.19	0,0,0,0	0
57	MG	DA	3056	1/1	0.88	0.86	0,0,0,0	0
58	PAR	AA	1694	42/42	0.88	0.29	11,14,23,25	0
57	MG	BA	3046	1/1	0.88	0.60	0,0,0,0	0
57	MG	BB	201	1/1	0.88	0.45	0,0,0,0	1
57	MG	BA	3017	1/1	0.88	0.32	0,0,0,0	0
57	MG	BA	3081	1/1	0.88	0.35	0,0,0,0	0
57	MG	BA	3108	1/1	0.88	1.12	0,0,0,0	0
57	MG	BA	3211	1/1	0.88	0.27	0,0,0,0	1
57	MG	DA	3001	1/1	0.88	0.51	0,0,0,0	0
57	MG	BA	3025	1/1	0.89	0.40	0,0,0,0	0
57	MG	BA	3078	1/1	0.89	0.17	0,0,0,0	0
57	MG	DA	3042	1/1	0.89	0.50	0,0,0,0	0
57	MG	DA	3007	1/1	0.89	0.81	1,1,1,1	0
57	MG	DA	3072	1/1	0.89	1.37	1,1,1,1	0
57	MG	DA	3029	1/1	0.89	0.30	0,0,0,0	0
57	MG	BA	3258	1/1	0.89	0.13	23,23,23,23	0
57	MG	DA	3200	1/1	0.89	0.85	0,0,0,0	0
57	MG	DA	3047	1/1	0.89	0.70	0,0,0,0	0
57	MG	DA	3213	1/1	0.89	0.24	0,0,0,0	0
57	MG	BA	3180	1/1	0.89	0.52	0,0,0,0	0
57	MG	AA	1619	1/1	0.89	0.45	1,1,1,1	0
57	MG	BA	3256	1/1	0.89	0.96	0,0,0,0	0
57	MG	AA	1656	1/1	0.89	0.27	9,9,9,9	0
57	MG	BA	3043	1/1	0.89	0.13	0,0,0,0	1
57	MG	BA	3069	1/1	0.89	0.08	24,24,24,24	0
57	MG	AA	1667	1/1	0.89	0.34	15,15,15,15	0
57	MG	DA	3086	1/1	0.89	0.91	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AA	1630	1/1	0.89	0.37	29,29,29,29	0
57	MG	BA	3232	1/1	0.89	0.41	0,0,0,0	0
57	MG	DA	3009	1/1	0.89	1.01	0,0,0,0	0
57	MG	BA	3029	1/1	0.89	0.33	0,0,0,0	0
57	MG	BA	3171	1/1	0.89	0.12	6,6,6,6	0
57	MG	BA	3146	1/1	0.89	0.25	0,0,0,0	0
57	MG	DA	3045	1/1	0.89	0.51	0,0,0,0	0
57	MG	BA	3194	1/1	0.89	0.51	0,0,0,0	0
57	MG	AA	1621	1/1	0.89	1.01	0,0,0,0	0
57	MG	CA	1611	1/1	0.89	0.62	0,0,0,0	0
57	MG	BA	3216	1/1	0.89	0.24	0,0,0,0	1
57	MG	CA	1672	1/1	0.89	0.57	0,0,0,0	0
57	MG	AA	1635	1/1	0.89	1.26	0,0,0,0	0
57	MG	BA	3207	1/1	0.89	0.18	0,0,0,0	0
57	MG	DA	3008	1/1	0.90	0.73	0,0,0,0	0
57	MG	DA	3263	1/1	0.90	0.42	0,0,0,0	0
57	MG	BA	3140	1/1	0.90	0.25	12,12,12,12	0
57	MG	DA	3239	1/1	0.90	0.22	0,0,0,0	0
58	PAR	CA	1695	42/42	0.90	0.34	36,39,47,50	0
57	MG	BA	3178	1/1	0.90	0.71	0,0,0,0	0
57	MG	BA	3141	1/1	0.90	0.52	0,0,0,0	0
57	MG	DA	3050	1/1	0.90	1.28	0,0,0,0	0
57	MG	DB	201	1/1	0.90	0.21	0,0,0,0	1
57	MG	BA	3032	1/1	0.90	0.19	0,0,0,0	0
57	MG	BE	301	1/1	0.90	0.49	0,0,0,0	0
57	MG	BA	3093	1/1	0.90	1.07	0,0,0,0	0
57	MG	AA	1693	1/1	0.90	0.12	5,5,5,5	0
57	MG	CA	1607	1/1	0.90	1.25	0,0,0,0	0
57	MG	BA	3096	1/1	0.90	0.31	0,0,0,0	0
57	MG	DA	3034	1/1	0.90	0.37	0,0,0,0	0
57	MG	AA	1632	1/1	0.90	0.16	3,3,3,3	0
57	MG	B3	101	1/1	0.90	0.67	0,0,0,0	0
57	MG	BA	3051	1/1	0.90	0.66	0,0,0,0	0
57	MG	AA	1659	1/1	0.90	0.22	0,0,0,0	0
57	MG	BA	3008	1/1	0.90	0.16	0,0,0,0	0
57	MG	CA	1684	1/1	0.90	0.69	0,0,0,0	0
57	MG	CA	1632	1/1	0.90	1.30	0,0,0,0	0
57	MG	AA	1644	1/1	0.90	0.42	0,0,0,0	0
57	MG	DA	3152	1/1	0.90	0.24	2,2,2,2	0
57	MG	CA	1622	1/1	0.90	0.56	0,0,0,0	0
57	MG	DA	3073	1/1	0.90	0.53	0,0,0,0	0
57	MG	BA	3015	1/1	0.90	0.23	0,0,0,0	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3061	1/1	0.91	0.22	40,40,40,40	0
57	MG	DA	3108	1/1	0.91	0.30	0,0,0,0	0
57	MG	AA	1633	1/1	0.91	1.07	0,0,0,0	0
57	MG	BA	3063	1/1	0.91	0.19	32,32,32,32	0
57	MG	CA	1642	1/1	0.91	1.14	0,0,0,0	0
57	MG	AA	1604	1/1	0.91	0.34	0,0,0,0	0
57	MG	DA	3218	1/1	0.91	0.54	0,0,0,0	0
57	MG	DA	3243	1/1	0.91	0.27	0,0,0,0	0
57	MG	BA	3041	1/1	0.91	0.54	0,0,0,0	1
57	MG	B5	102	1/1	0.91	1.09	0,0,0,0	1
57	MG	B5	101	1/1	0.91	0.26	0,0,0,0	0
57	MG	BA	3052	1/1	0.91	0.15	1,1,1,1	0
57	MG	AA	1657	1/1	0.91	0.26	1,1,1,1	0
57	MG	BA	3158	1/1	0.91	0.95	0,0,0,0	0
57	MG	AA	1616	1/1	0.91	0.63	0,0,0,0	0
57	MG	DA	3208	1/1	0.91	0.22	0,0,0,0	0
57	MG	BA	3050	1/1	0.91	0.17	0,0,0,0	0
57	MG	BA	3064	1/1	0.91	0.18	51,51,51,51	0
57	MG	BA	3166	1/1	0.91	0.32	0,0,0,0	0
57	MG	BA	3103	1/1	0.91	0.69	0,0,0,0	0
57	MG	DA	3081	1/1	0.91	0.29	0,0,0,0	0
57	MG	AA	1622	1/1	0.91	0.22	0,0,0,0	0
57	MG	DA	3190	1/1	0.91	0.25	0,0,0,0	0
57	MG	BA	3119	1/1	0.91	0.37	0,0,0,0	0
57	MG	BA	3152	1/1	0.91	0.88	3,3,3,3	0
59	ZN	CN	101	1/1	0.91	0.16	125,125,125,125	0
57	MG	BA	3127	1/1	0.91	0.17	55,55,55,55	0
57	MG	AA	1637	1/1	0.91	0.17	34,34,34,34	0
57	MG	CA	1601	1/1	0.91	0.44	0,0,0,0	0
57	MG	BA	3235	1/1	0.91	0.22	0,0,0,0	0
57	MG	AA	1642	1/1	0.91	0.09	46,46,46,46	0
57	MG	DA	3126	1/1	0.91	0.38	0,0,0,0	0
57	MG	BA	3102	1/1	0.91	0.35	38,38,38,38	0
57	MG	BA	3226	1/1	0.91	0.32	39,39,39,39	0
57	MG	BA	3054	1/1	0.91	0.77	0,0,0,0	0
57	MG	CA	1627	1/1	0.91	0.21	3,3,3,3	0
57	MG	BA	3130	1/1	0.91	0.21	0,0,0,0	0
57	MG	AA	1607	1/1	0.91	0.19	0,0,0,0	0
57	MG	DA	3103	1/1	0.91	1.31	1,1,1,1	0
57	MG	AA	1675	1/1	0.92	0.94	0,0,0,0	0
57	MG	CA	1613	1/1	0.92	0.85	0,0,0,0	0
57	MG	DA	3163	1/1	0.92	0.79	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3242	1/1	0.92	0.59	1,1,1,1	0
57	MG	DA	3186	1/1	0.92	1.20	0,0,0,0	0
57	MG	BA	3133	1/1	0.92	0.34	0,0,0,0	0
57	MG	DA	3255	1/1	0.92	0.37	0,0,0,0	0
57	MG	BA	3197	1/1	0.92	0.36	0,0,0,0	0
57	MG	DA	3049	1/1	0.92	0.52	0,0,0,0	0
57	MG	BA	3184	1/1	0.92	0.55	0,0,0,0	0
57	MG	DA	3046	1/1	0.92	0.34	0,0,0,0	0
57	MG	DA	3102	1/1	0.92	0.70	0,0,0,0	0
57	MG	DA	3143	1/1	0.92	0.51	1,1,1,1	0
57	MG	DA	3005	1/1	0.92	0.68	0,0,0,0	0
57	MG	BA	3007	1/1	0.92	1.07	0,0,0,0	0
57	MG	DA	3144	1/1	0.92	0.53	0,0,0,0	0
57	MG	CA	1663	1/1	0.92	0.26	0,0,0,0	0
57	MG	CA	1623	1/1	0.92	0.36	0,0,0,0	0
57	MG	BA	3101	1/1	0.92	0.08	13,13,13,13	0
57	MG	BA	3214	1/1	0.92	1.09	0,0,0,0	0
57	MG	BA	3071	1/1	0.92	0.44	0,0,0,0	0
57	MG	BA	3075	1/1	0.92	0.63	0,0,0,0	0
57	MG	BF	301	1/1	0.92	0.25	27,27,27,27	1
57	MG	BA	3250	1/1	0.92	1.46	0,0,0,0	1
57	MG	DA	3067	1/1	0.92	1.36	1,1,1,1	0
57	MG	BA	3155	1/1	0.92	0.64	0,0,0,0	0
57	MG	BA	3106	1/1	0.92	0.21	7,7,7,7	0
57	MG	DA	3055	1/1	0.92	0.34	0,0,0,0	0
57	MG	CA	1651	1/1	0.92	0.26	0,0,0,0	0
57	MG	DA	3033	1/1	0.92	1.72	1,1,1,1	0
57	MG	DA	3062	1/1	0.93	0.40	1,1,1,1	0
57	MG	BA	3086	1/1	0.93	0.16	35,35,35,35	0
57	MG	DA	3091	1/1	0.93	0.66	0,0,0,0	0
57	MG	CA	1662	1/1	0.93	0.28	13,13,13,13	0
57	MG	BA	3056	1/1	0.93	1.22	0,0,0,0	0
57	MG	CA	1674	1/1	0.93	0.47	0,0,0,0	0
57	MG	BA	3129	1/1	0.93	0.24	0,0,0,0	1
57	MG	DA	3260	1/1	0.93	0.59	0,0,0,0	0
57	MG	DA	3076	1/1	0.93	0.29	1,1,1,1	0
57	MG	DA	3207	1/1	0.93	0.48	0,0,0,0	0
57	MG	DA	3131	1/1	0.93	0.31	0,0,0,0	0
57	MG	AA	1689	1/1	0.93	0.50	0,0,0,0	0
57	MG	BA	3153	1/1	0.93	0.21	0,0,0,0	0
57	MG	AA	1605	1/1	0.93	0.12	26,26,26,26	0
57	MG	BA	3149	1/1	0.93	0.18	10,10,10,10	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	DA	3087	1/1	0.93	1.05	1,1,1,1	0
57	MG	CA	1628	1/1	0.93	0.20	0,0,0,0	0
57	MG	DA	3159	1/1	0.93	0.69	0,0,0,0	0
57	MG	DA	3174	1/1	0.93	0.44	0,0,0,0	0
57	MG	BA	3255	1/1	0.93	0.09	0,0,0,0	0
57	MG	DA	3129	1/1	0.93	0.52	0,0,0,0	0
57	MG	BA	3125	1/1	0.93	0.62	0,0,0,0	0
57	MG	AA	1643	1/1	0.93	0.15	35,35,35,35	0
57	MG	DA	3116	1/1	0.93	0.28	0,0,0,0	0
57	MG	AA	1663	1/1	0.93	0.17	4,4,4,4	0
57	MG	BA	3142	1/1	0.93	0.62	0,0,0,0	0
57	MG	DA	3142	1/1	0.93	0.56	0,0,0,0	0
57	MG	DA	3262	1/1	0.93	0.77	0,0,0,0	0
57	MG	DA	3121	1/1	0.93	0.70	0,0,0,0	0
57	MG	DA	3203	1/1	0.93	0.40	0,0,0,0	0
57	MG	BA	3181	1/1	0.93	1.57	8,8,8,8	0
57	MG	BA	3139	1/1	0.93	0.31	0,0,0,0	0
57	MG	BA	3095	1/1	0.93	0.58	0,0,0,0	0
57	MG	BA	3013	1/1	0.93	0.19	63,63,63,63	0
57	MG	BA	3023	1/1	0.93	0.11	43,43,43,43	0
57	MG	CA	1644	1/1	0.93	0.50	27,27,27,27	0
57	MG	BA	3210	1/1	0.93	0.22	0,0,0,0	0
57	MG	DA	3155	1/1	0.93	0.52	0,0,0,0	0
57	MG	BA	3143	1/1	0.93	0.53	0,0,0,0	0
57	MG	DA	3154	1/1	0.93	0.21	0,0,0,0	0
57	MG	BA	3147	1/1	0.93	0.15	0,0,0,0	0
57	MG	BA	3247	1/1	0.93	0.54	7,7,7,7	0
57	MG	BA	3121	1/1	0.93	0.49	0,0,0,0	0
57	MG	DA	3118	1/1	0.93	0.92	0,0,0,0	0
57	MG	BA	3225	1/1	0.93	0.95	0,0,0,0	0
57	MG	DA	3017	1/1	0.93	0.40	0,0,0,0	0
57	MG	BA	3137	1/1	0.94	0.11	108,108,108,108	0
57	MG	DA	3141	1/1	0.94	0.80	0,0,0,0	0
57	MG	AA	1690	1/1	0.94	0.21	23,23,23,23	0
57	MG	BA	3098	1/1	0.94	0.97	0,0,0,0	0
57	MG	AA	1678	1/1	0.94	0.42	2,2,2,2	0
57	MG	CA	1659	1/1	0.94	0.38	8,8,8,8	0
57	MG	DA	3188	1/1	0.94	0.75	0,0,0,0	0
57	MG	DA	3219	1/1	0.94	0.60	0,0,0,0	0
57	MG	BA	3161	1/1	0.94	0.75	0,0,0,0	0
57	MG	DA	3235	1/1	0.94	0.93	0,0,0,0	0
57	MG	DA	3083	1/1	0.94	0.46	1,1,1,1	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3049	1/1	0.94	0.37	0,0,0,0	0
57	MG	AA	1606	1/1	0.94	0.52	0,0,0,0	0
57	MG	AA	1668	1/1	0.94	0.20	36,36,36,36	0
57	MG	CA	1658	1/1	0.94	0.21	0,0,0,0	0
57	MG	CA	1612	1/1	0.94	0.19	8,8,8,8	0
57	MG	DA	3104	1/1	0.94	0.77	0,0,0,0	0
57	MG	BA	3162	1/1	0.94	0.21	6,6,6,6	0
57	MG	BA	3186	1/1	0.94	0.57	0,0,0,0	0
57	MG	DA	3209	1/1	0.94	0.39	0,0,0,0	0
57	MG	DA	3066	1/1	0.94	0.58	1,1,1,1	0
57	MG	BA	3182	1/1	0.94	0.15	17,17,17,17	0
57	MG	AA	1639	1/1	0.94	0.48	0,0,0,0	0
57	MG	DA	3022	1/1	0.94	0.70	0,0,0,0	0
57	MG	DA	3111	1/1	0.94	0.69	1,1,1,1	0
57	MG	BA	3092	1/1	0.94	0.38	0,0,0,0	0
57	MG	AA	1627	1/1	0.94	0.25	0,0,0,0	0
57	MG	BA	3022	1/1	0.94	0.13	8,8,8,8	0
57	MG	BA	3083	1/1	0.94	0.65	0,0,0,0	0
57	MG	CA	1653	1/1	0.94	0.46	1,1,1,1	0
57	MG	DA	3052	1/1	0.94	0.21	0,0,0,0	0
57	MG	DA	3135	1/1	0.94	0.28	1,1,1,1	0
57	MG	DA	3147	1/1	0.94	0.18	1,1,1,1	0
57	MG	AA	1649	1/1	0.94	0.06	67,67,67,67	0
57	MG	AA	1677	1/1	0.94	0.39	0,0,0,0	0
57	MG	AA	1618	1/1	0.94	0.23	7,7,7,7	0
57	MG	DA	3090	1/1	0.94	0.28	0,0,0,0	0
57	MG	BA	3185	1/1	0.94	0.30	13,13,13,13	1
57	MG	BA	3057	1/1	0.94	0.08	29,29,29,29	0
57	MG	DA	3261	1/1	0.94	0.15	3,3,3,3	0
57	MG	BA	3109	1/1	0.94	0.26	2,2,2,2	0
57	MG	DA	3216	1/1	0.94	0.59	0,0,0,0	0
57	MG	BA	3033	1/1	0.94	0.30	0,0,0,0	0
57	MG	BA	3179	1/1	0.94	0.25	0,0,0,0	0
57	MG	DA	3070	1/1	0.94	1.00	0,0,0,0	0
57	MG	AA	1625	1/1	0.94	0.08	3,3,3,3	0
57	MG	BA	3107	1/1	0.94	0.17	12,12,12,12	0
57	MG	DA	3175	1/1	0.94	0.82	0,0,0,0	0
57	MG	DA	3041	1/1	0.94	0.23	36,36,36,36	0
57	MG	BA	3113	1/1	0.94	0.32	0,0,0,0	0
57	MG	BA	3239	1/1	0.94	0.42	0,0,0,0	0
57	MG	CA	1610	1/1	0.94	0.42	0,0,0,0	0
57	MG	DA	3224	1/1	0.94	0.25	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3138	1/1	0.95	0.76	0,0,0,0	0
57	MG	DA	3150	1/1	0.95	0.35	0,0,0,0	0
57	MG	DA	3178	1/1	0.95	0.43	0,0,0,0	1
57	MG	BA	3016	1/1	0.95	0.54	1,1,1,1	0
57	MG	DA	3095	1/1	0.95	0.93	0,0,0,0	0
57	MG	BA	3174	1/1	0.95	0.62	0,0,0,0	0
59	ZN	AN	101	1/1	0.95	0.10	76,76,76,76	0
57	MG	CA	1660	1/1	0.95	0.11	0,0,0,0	0
57	MG	CA	1616	1/1	0.95	0.27	0,0,0,0	0
57	MG	BA	3027	1/1	0.95	0.13	0,0,0,0	1
59	ZN	AD	801	1/1	0.95	0.26	9,9,9,9	0
57	MG	CA	1676	1/1	0.95	0.18	0,0,0,0	0
57	MG	DA	3061	1/1	0.95	0.54	0,0,0,0	0
57	MG	BA	3034	1/1	0.95	0.15	2,2,2,2	0
57	MG	BA	3227	1/1	0.95	0.54	0,0,0,0	0
57	MG	DA	3014	1/1	0.95	0.20	8,8,8,8	0
57	MG	DA	3048	1/1	0.95	0.57	0,0,0,0	0
57	MG	D5	101	1/1	0.95	0.57	0,0,0,0	0
57	MG	CA	1618	1/1	0.95	0.13	0,0,0,0	0
57	MG	DA	3140	1/1	0.95	0.28	0,0,0,0	0
57	MG	DA	3193	1/1	0.95	0.63	0,0,0,0	0
57	MG	BA	3221	1/1	0.95	0.13	79,79,79,79	0
57	MG	CA	1671	1/1	0.95	1.03	0,0,0,0	0
57	MG	BA	3012	1/1	0.95	0.16	68,68,68,68	0
57	MG	CA	1614	1/1	0.95	0.20	0,0,0,0	0
57	MG	BA	3176	1/1	0.95	0.19	24,24,24,24	0
57	MG	BA	3042	1/1	0.95	0.58	0,0,0,0	0
57	MG	BA	3215	1/1	0.95	0.27	18,18,18,18	0
57	MG	DA	3120	1/1	0.95	0.43	0,0,0,0	0
57	MG	CA	1621	1/1	0.95	0.12	34,34,34,34	0
57	MG	DA	3018	1/1	0.95	0.76	0,0,0,0	0
57	MG	BA	3053	1/1	0.95	0.38	0,0,0,0	0
57	MG	BA	3065	1/1	0.95	0.11	16,16,16,16	0
57	MG	BA	3189	1/1	0.95	0.60	40,40,40,40	0
57	MG	AA	1673	1/1	0.95	1.28	0,0,0,0	0
57	MG	BA	3112	1/1	0.95	0.30	0,0,0,0	0
57	MG	BA	3206	1/1	0.95	0.29	0,0,0,0	0
57	MG	BA	3238	1/1	0.95	0.30	2,2,2,2	1
57	MG	BA	3035	1/1	0.95	1.45	0,0,0,0	0
57	MG	BA	3175	1/1	0.95	0.21	0,0,0,0	0
57	MG	DA	3096	1/1	0.95	0.39	0,0,0,0	0
57	MG	CA	1605	1/1	0.95	0.25	1,1,1,1	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	AX	101	1/1	0.95	0.09	3,3,3,3	0
57	MG	BA	3080	1/1	0.95	0.25	13,13,13,13	0
57	MG	DB	202	1/1	0.95	0.13	0,0,0,0	0
57	MG	DA	3031	1/1	0.95	0.33	0,0,0,0	0
57	MG	DA	3068	1/1	0.95	0.37	1,1,1,1	0
57	MG	DA	3023	1/1	0.95	1.09	0,0,0,0	0
57	MG	DA	3074	1/1	0.95	0.26	0,0,0,0	0
57	MG	CA	1603	1/1	0.95	0.33	0,0,0,0	0
57	MG	DA	3149	1/1	0.95	0.44	0,0,0,0	0
57	MG	DA	3201	1/1	0.95	0.46	0,0,0,0	0
57	MG	AA	1615	1/1	0.96	0.30	1,1,1,1	0
57	MG	AA	1614	1/1	0.96	0.63	2,2,2,2	0
57	MG	DA	3146	1/1	0.96	0.58	0,0,0,0	0
57	MG	DA	3106	1/1	0.96	0.30	0,0,0,0	0
57	MG	AA	1671	1/1	0.96	0.41	0,0,0,0	0
57	MG	DA	3123	1/1	0.96	0.42	0,0,0,0	0
57	MG	BA	3048	1/1	0.96	0.56	0,0,0,0	0
57	MG	DA	3054	1/1	0.96	0.85	0,0,0,0	0
57	MG	AA	1691	1/1	0.96	0.88	58,58,58,58	0
57	MG	AA	1603	1/1	0.96	0.08	55,55,55,55	0
57	MG	BA	3165	1/1	0.96	0.40	0,0,0,0	0
57	MG	DA	3069	1/1	0.96	0.52	0,0,0,0	0
57	MG	AA	1670	1/1	0.96	0.23	0,0,0,0	0
57	MG	DA	3099	1/1	0.96	0.57	0,0,0,0	0
57	MG	CA	1675	1/1	0.96	0.41	0,0,0,0	0
57	MG	CA	1688	1/1	0.96	0.29	1,1,1,1	0
57	MG	BA	3183	1/1	0.96	0.32	1,1,1,1	0
57	MG	CA	1633	1/1	0.96	0.43	0,0,0,0	0
57	MG	DA	3089	1/1	0.96	0.42	0,0,0,0	0
57	MG	AA	1682	1/1	0.96	0.14	0,0,0,0	0
57	MG	BA	3172	1/1	0.96	0.18	0,0,0,0	0
57	MG	DA	3157	1/1	0.96	0.41	0,0,0,0	0
57	MG	DA	3010	1/1	0.96	0.56	0,0,0,0	0
57	MG	BA	3060	1/1	0.96	0.08	28,28,28,28	0
57	MG	DA	3171	1/1	0.96	0.14	0,0,0,0	0
57	MG	BA	3068	1/1	0.96	0.99	0,0,0,0	0
57	MG	BA	3164	1/1	0.96	0.14	54,54,54,54	0
57	MG	AA	1666	1/1	0.96	0.12	45,45,45,45	0
57	MG	BA	3156	1/1	0.96	0.49	0,0,0,0	0
57	MG	DA	3040	1/1	0.96	0.88	0,0,0,0	0
57	MG	DA	3267	1/1	0.96	0.10	0,0,0,0	0
57	MG	BA	3077	1/1	0.96	0.45	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3183	1/1	0.96	0.48	0,0,0,0	0
57	MG	DA	3180	1/1	0.96	0.27	0,0,0,0	0
57	MG	DA	3025	1/1	0.96	0.16	1,1,1,1	0
57	MG	DA	3079	1/1	0.96	0.60	0,0,0,0	0
57	MG	BB	202	1/1	0.96	0.08	29,29,29,29	0
57	MG	CA	1649	1/1	0.96	0.17	0,0,0,0	0
57	MG	DA	3035	1/1	0.96	0.31	0,0,0,0	0
57	MG	BA	3019	1/1	0.96	0.72	0,0,0,0	0
57	MG	DA	3101	1/1	0.96	0.58	0,0,0,0	0
57	MG	CA	1666	1/1	0.96	0.52	0,0,0,0	0
57	MG	DA	3156	1/1	0.96	0.29	0,0,0,0	0
57	MG	AX	102	1/1	0.96	0.17	29,29,29,29	0
57	MG	AA	1611	1/1	0.96	0.41	0,0,0,0	0
57	MG	AA	1665	1/1	0.96	0.19	0,0,0,0	0
57	MG	DA	3114	1/1	0.96	0.28	0,0,0,0	0
57	MG	DA	3231	1/1	0.96	0.31	0,0,0,0	0
57	MG	AA	1692	1/1	0.96	0.27	2,2,2,2	0
57	MG	BA	3089	1/1	0.96	0.37	0,0,0,0	0
57	MG	AA	1609	1/1	0.96	0.88	3,3,3,3	0
57	MG	AA	1613	1/1	0.96	0.34	0,0,0,0	0
57	MG	AA	1683	1/1	0.96	0.23	0,0,0,0	0
57	MG	BA	3224	1/1	0.96	0.15	52,52,52,52	0
57	MG	DA	3013	1/1	0.96	0.23	0,0,0,0	0
57	MG	CV	101	1/1	0.97	0.12	1,1,1,1	0
57	MG	DA	3092	1/1	0.97	0.37	0,0,0,0	0
57	MG	BA	3118	1/1	0.97	0.26	3,3,3,3	0
57	MG	BA	3170	1/1	0.97	0.30	0,0,0,0	0
57	MG	BA	3020	1/1	0.97	0.70	0,0,0,0	0
57	MG	AA	1602	1/1	0.97	0.19	0,0,0,0	0
57	MG	DA	3097	1/1	0.97	0.41	1,1,1,1	0
57	MG	DA	3229	1/1	0.97	0.51	1,1,1,1	0
57	MG	BA	3047	1/1	0.97	0.34	0,0,0,0	0
57	MG	DA	3257	1/1	0.97	0.31	0,0,0,0	1
57	MG	DA	3093	1/1	0.97	0.46	0,0,0,0	0
57	MG	DA	3115	1/1	0.97	0.19	0,0,0,0	0
57	MG	BA	3074	1/1	0.97	0.37	0,0,0,0	0
57	MG	BA	3159	1/1	0.97	0.42	7,7,7,7	0
57	MG	BA	3222	1/1	0.97	0.20	4,4,4,4	0
57	MG	DA	3119	1/1	0.97	0.44	0,0,0,0	0
57	MG	BA	3031	1/1	0.97	0.11	21,21,21,21	0
57	MG	DA	3158	1/1	0.97	0.43	0,0,0,0	0
57	MG	BA	3072	1/1	0.97	0.66	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3172	1/1	0.97	0.23	43,43,43,43	0
57	MG	BA	3014	1/1	0.97	0.19	0,0,0,0	0
57	MG	DA	3217	1/1	0.97	0.06	31,31,31,31	0
57	MG	CA	1686	1/1	0.97	0.43	0,0,0,0	0
57	MG	AA	1651	1/1	0.97	0.36	0,0,0,0	0
57	MG	BA	3062	1/1	0.97	0.05	42,42,42,42	0
57	MG	CA	1639	1/1	0.97	0.43	1,1,1,1	0
57	MG	AA	1661	1/1	0.97	0.09	1,1,1,1	0
57	MG	BA	3220	1/1	0.97	0.11	16,16,16,16	0
57	MG	CA	1643	1/1	0.97	0.35	0,0,0,0	0
57	MG	DA	3109	1/1	0.97	0.53	0,0,0,0	0
57	MG	AA	1653	1/1	0.97	0.31	0,0,0,0	0
57	MG	AA	1672	1/1	0.97	0.62	0,0,0,0	0
57	MG	AA	1655	1/1	0.97	0.18	0,0,0,0	0
57	MG	BA	3100	1/1	0.97	0.10	73,73,73,73	0
57	MG	BA	3115	1/1	0.97	0.44	1,1,1,1	0
57	MG	BA	3055	1/1	0.97	0.41	0,0,0,0	0
57	MG	BA	3151	1/1	0.97	0.27	0,0,0,0	0
57	MG	CA	1648	1/1	0.97	0.32	0,0,0,0	0
57	MG	DA	3015	1/1	0.97	0.68	0,0,0,0	0
57	MG	CA	1631	1/1	0.97	0.06	0,0,0,0	0
57	MG	DA	3032	1/1	0.98	0.25	0,0,0,0	0
57	MG	BA	3200	1/1	0.98	0.06	64,64,64,64	0
57	MG	BA	3257	1/1	0.98	0.56	0,0,0,0	0
57	MG	DA	3080	1/1	0.98	0.41	0,0,0,0	0
57	MG	DA	3053	1/1	0.98	0.41	0,0,0,0	0
57	MG	DA	3189	1/1	0.98	0.55	0,0,0,0	0
57	MG	DA	3226	1/1	0.98	0.42	0,0,0,0	0
57	MG	BA	3188	1/1	0.98	0.55	5,5,5,5	0
57	MG	BA	3005	1/1	0.98	0.23	0,0,0,0	0
57	MG	DA	3225	1/1	0.98	0.73	0,0,0,0	0
57	MG	CA	1691	1/1	0.98	0.13	0,0,0,0	0
57	MG	DA	3057	1/1	0.98	0.21	0,0,0,0	0
57	MG	BA	3234	1/1	0.98	0.44	0,0,0,0	0
57	MG	BA	3079	1/1	0.98	0.55	0,0,0,0	0
57	MG	BA	3177	1/1	0.98	0.39	0,0,0,0	0
57	MG	AA	1608	1/1	0.98	0.27	0,0,0,0	0
57	MG	CA	1690	1/1	0.98	0.32	3,3,3,3	0
57	MG	CA	1629	1/1	0.98	0.22	0,0,0,0	0
57	MG	DA	3205	1/1	0.98	0.37	0,0,0,0	0
57	MG	CA	1602	1/1	0.98	0.29	0,0,0,0	0
57	MG	DA	3133	1/1	0.98	0.44	0,0,0,0	0

Continued on next page...

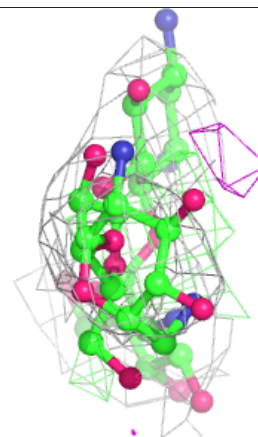
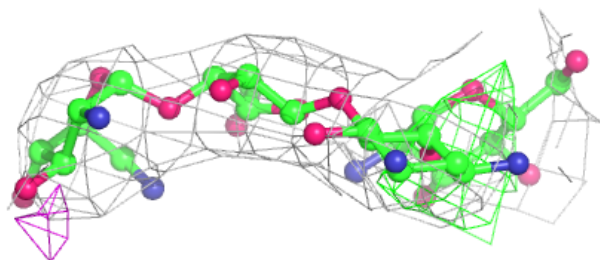
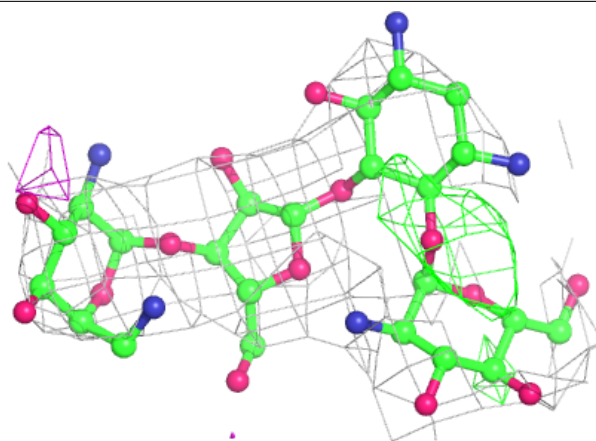
Continued from previous page...

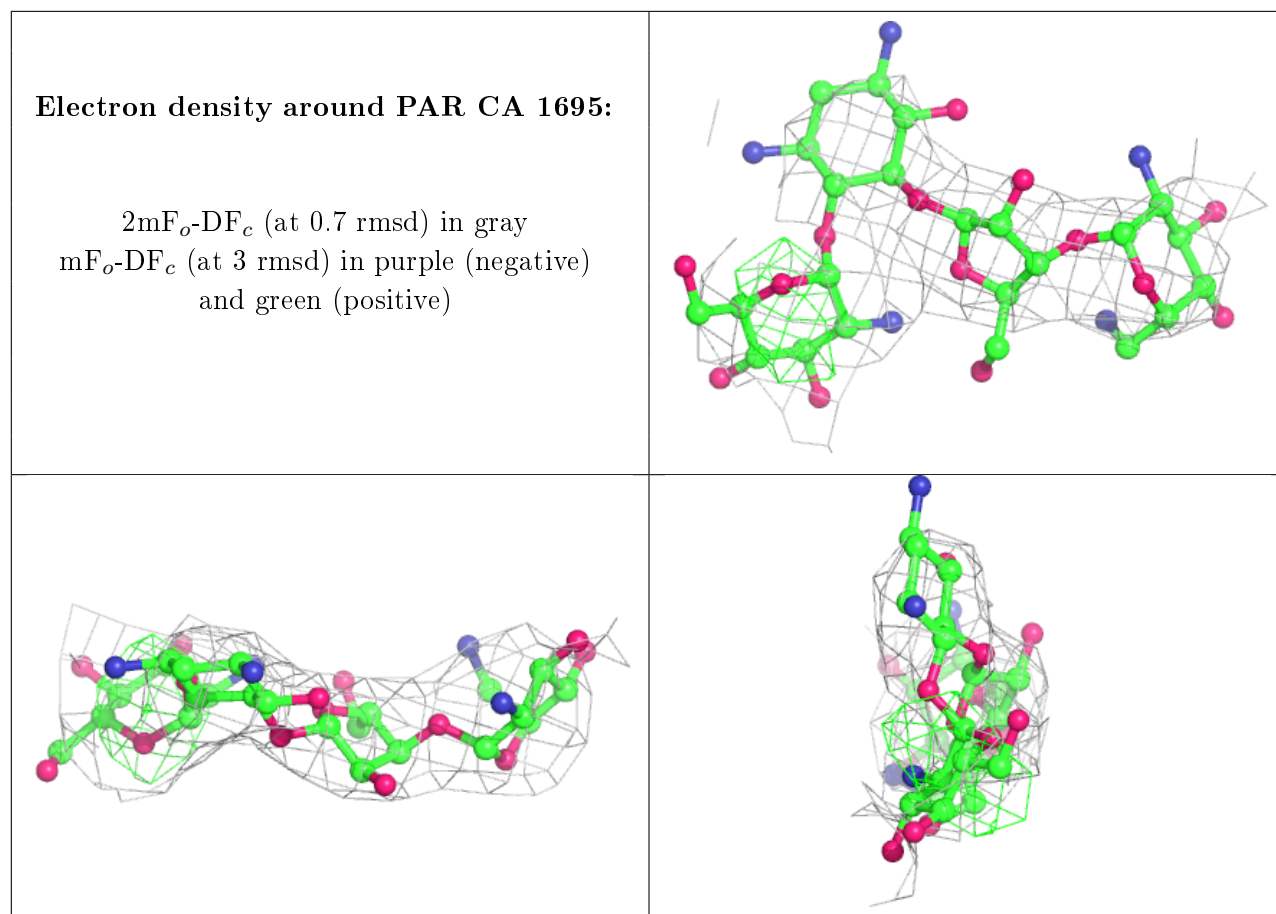
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3138	1/1	0.98	0.25	0,0,0,0	0
57	MG	DA	3117	1/1	0.98	0.31	0,0,0,0	0
57	MG	DA	3082	1/1	0.98	0.28	0,0,0,0	0
57	MG	DA	3223	1/1	0.98	0.24	0,0,0,0	0
57	MG	BA	3122	1/1	0.98	0.43	0,0,0,0	0
57	MG	BA	3196	1/1	0.98	0.20	0,0,0,0	1
57	MG	BA	3157	1/1	0.98	0.80	1,1,1,1	0
57	MG	DA	3168	1/1	0.98	0.49	37,37,37,37	1
57	MG	CA	1650	1/1	0.98	0.31	0,0,0,0	0
57	MG	DA	3011	1/1	0.98	0.12	10,10,10,10	0
57	MG	DA	3148	1/1	0.98	0.20	0,0,0,0	0
57	MG	CA	1681	1/1	0.98	0.30	1,1,1,1	0
57	MG	CA	1692	1/1	0.98	0.08	0,0,0,0	1
57	MG	BA	3136	1/1	0.99	0.50	0,0,0,0	0
57	MG	DA	3253	1/1	0.99	0.38	5,5,5,5	0
57	MG	DA	3125	1/1	0.99	0.12	0,0,0,0	0
57	MG	DA	3137	1/1	0.99	0.24	0,0,0,0	0

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

Electron density around PAR AA 1694:

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





6.5 Other polymers [i](#)

There are no such residues in this entry.