



wwPDB X-ray Structure Validation Summary Report ⓘ

Feb 11, 2024 – 08:49 AM EST

PDB ID : 3CCJ
Title : Structure of Anisomycin resistant 50S Ribosomal Subunit: 23S rRNA mutation C2534U
Authors : Blaha, G.; Gurel, G.
Deposited on : 2008-02-26
Resolution : 3.30 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

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

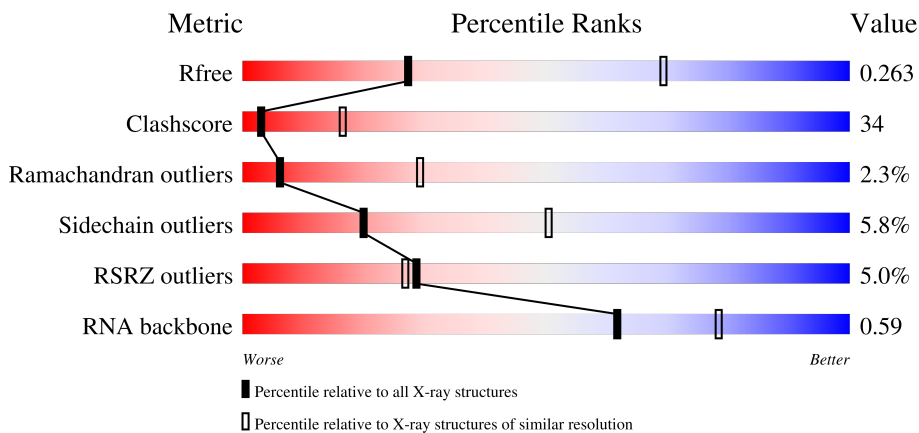
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.30 Å.

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



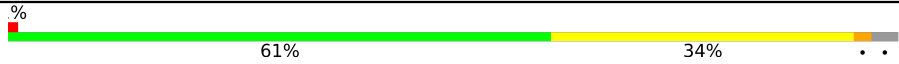
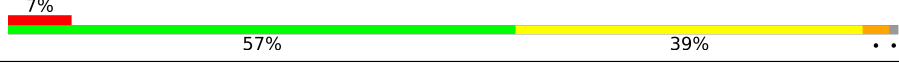
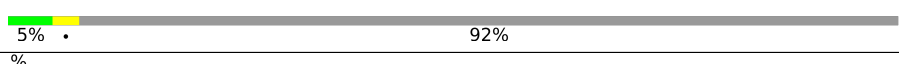


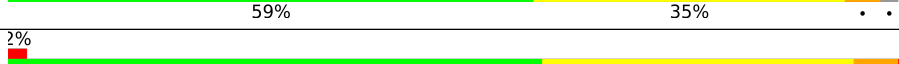


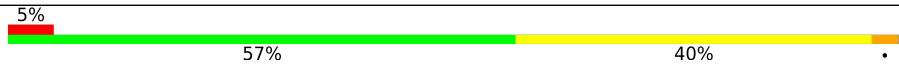

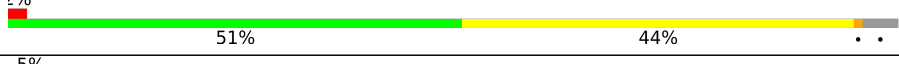
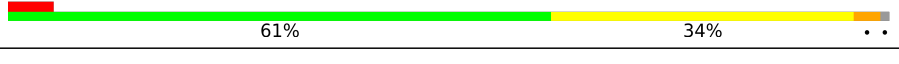
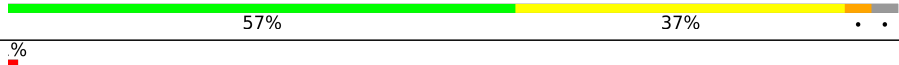
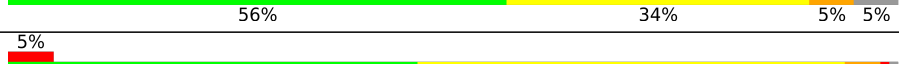

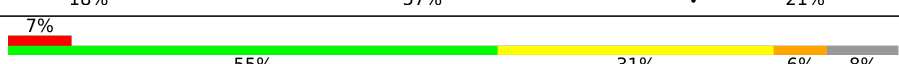

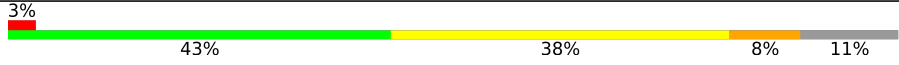
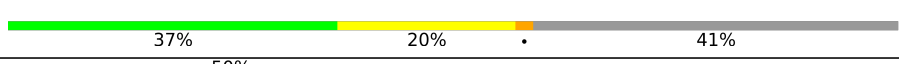


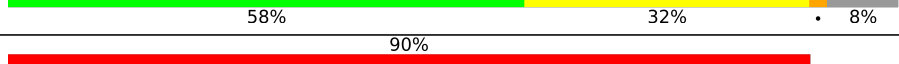



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1149 (3.34-3.26)
Clashscore	141614	1205 (3.34-3.26)
Ramachandran outliers	138981	1183 (3.34-3.26)
Sidechain outliers	138945	1182 (3.34-3.26)
RSRZ outliers	127900	1115 (3.34-3.26)
RNA backbone	3102	1117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

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 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	A	240	 17% 39% 45%
2	B	338	 46% 50%
3	C	246	 56% 39%
4	D	177	 17% 39% 37% 21%


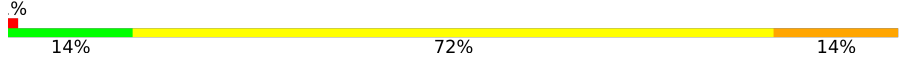
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Mol	Chain	Length	Quality of chain
5	E	178	
6	F	120	
7	G	348	
8	H	177	
9	I	162	
10	J	145	
11	K	132	
12	L	165	
13	M	196	
14	N	187	
15	O	116	
16	P	149	
17	Q	96	
18	R	155	
19	S	85	
20	T	120	
21	U	67	
22	V	71	
23	W	154	
24	X	92	
25	Y	241	
26	Z	116	
27	1	57	
28	2	50	
29	3	92	

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Mol	Chain	Length	Quality of chain
30	0	2923	
31	9	122	

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
32	MG	0	8066	-	-	-	X
33	CL	0	8812	-	-	X	-
33	CL	0	8813	-	-	X	-
33	CL	0	8822	-	-	-	X
33	CL	3	8804	-	-	X	-
33	CL	J	8801	-	-	X	-
33	CL	M	8818	-	-	X	-
33	CL	N	8807	-	-	X	-
34	SR	0	8957	-	-	-	X
34	SR	0	8979	-	-	-	X
34	SR	0	8982	-	-	-	X
34	SR	0	9004	-	-	-	X
34	SR	0	9006	-	-	-	X
34	SR	3	8999	-	-	-	X
34	SR	B	8987	-	-	-	X
35	NA	0	8509	-	-	-	X
35	NA	0	8545	-	-	-	X
35	NA	0	8560	-	-	-	X
35	NA	0	8562	-	-	-	X
35	NA	L	8568	-	-	-	X
35	NA	R	8575	-	-	-	X

2 Entry composition

There are 38 unique types of molecules in this entry. The entry contains 99122 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 protein called 50S ribosomal protein L2P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	237	1753	1072	352	324	5	0	0	0

- Molecule 2 is a protein called 50S ribosomal protein L3P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	337	2625	1616	493	511	5	0	0	0

- Molecule 3 is a protein called 50S ribosomal protein L4P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	246	1860	1130	345	384	1	0	0	0

- Molecule 4 is a protein called 50S ribosomal protein L5P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	140	1094	685	195	210	4	0	0	0

- Molecule 5 is a protein called 50S ribosomal protein L6P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	E	172	1357	840	224	289	4	0	0	0

- Molecule 6 is a protein called 50S ribosomal protein L7Ae.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	F	119	890	551	141	197	1	0	0	0

- Molecule 7 is a protein called 50S ribosomal protein L10E.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	G	29	240	149	39	51	1	0	0	0

- Molecule 8 is a protein called 50S ribosomal protein L10e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	H	160	1282	798	240	238	6	0	0	0

- Molecule 9 is a protein called 50S ribosomal protein L11P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	I	70	519	323	81	114	1	0	0	0

- Molecule 10 is a protein called 50S ribosomal protein L13P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	J	142	1120	696	199	222	3	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L14P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	K	132	994	609	189	192	4	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L15P.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
12	L	145	1118	670	222	226	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L15e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	M	194	1558	943	333	281	1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	N	186	1445	895	262	286	2	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L18e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O				
15	O	115	865	529	161	175		0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L19e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O				
16	P	143	1136	683	229	224		0	0	0

- Molecule 17 is a protein called 50S ribosomal protein L21e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O				
17	Q	95	735	450	141	144		0	0	0

- Molecule 18 is a protein called 50S ribosomal protein L22P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
18	R	150	1149	713	209	223	4	0	0	0

- Molecule 19 is a protein called 50S ribosomal protein L23P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	S	81	641	389	111	138	3	0	0	0

- Molecule 20 is a protein called 50S ribosomal protein L24P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O				
20	T	119	950	568	180	202		0	0	0

- Molecule 21 is a protein called 50S ribosomal protein L24e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	U	53	Total	C	N	O	S	0	0	0
			410	244	75	86	5			

- Molecule 22 is a protein called 50S ribosomal protein L29P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	V	65	Total	C	N	O	S	0	0	0
			499	304	94	100	1			

- Molecule 23 is a protein called 50S ribosomal protein L30P.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	W	154	Total	C	N	O	S	0	0	0
			1196	737	209	244	6			

- Molecule 24 is a protein called 50S ribosomal protein L31e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	X	82	Total	C	N	O	S	0	0	0
			654	402	129	122	1			

- Molecule 25 is a protein called 50S ribosomal protein L32e.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	Y	142	Total	C	N	O	0	0	0
			1130	686	228	216			

- Molecule 26 is a protein called 50S ribosomal protein L37Ae.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	Z	73	Total	C	N	O	S	0	0	0
			573	343	113	112	5			

- Molecule 27 is a protein called 50S ribosomal protein L37e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	1	56	Total	C	N	O	S	0	0	0
			431	258	86	83	4			

- Molecule 28 is a protein called 50S ribosomal protein L39e.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	2	46	Total	C	N	O	S	0	0	0
			396	239	89	67	1			

- Molecule 29 is a protein called 50S ribosomal protein L44E.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	3	92	Total	C	N	O	S	0	0	0
			755	458	153	137	7			

- Molecule 30 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	0	2754	Total	C	N	O	P	0	0	0
			59020	26349	10872	19054	2745			

- Molecule 31 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	9	122	Total	C	N	O	P	0	0	0
			2599	1160	471	847	121			

- Molecule 32 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
32	A	2	Total	Mg	0	0
			2	2		
32	K	1	Total	Mg	0	0
			1	1		
32	T	1	Total	Mg	0	0
			1	1		
32	Y	2	Total	Mg	0	0
			2	2		
32	0	85	Total	Mg	0	0
			85	85		
32	9	2	Total	Mg	0	0
			2	2		

- Molecule 33 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
33	A	1	Total	Cl	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
33	B	1	Total 1	Cl 1	0	0
33	J	4	Total 4	Cl 4	0	0
33	L	1	Total 1	Cl 1	0	0
33	M	1	Total 1	Cl 1	0	0
33	N	1	Total 1	Cl 1	0	0
33	O	1	Total 1	Cl 1	0	0
33	Q	1	Total 1	Cl 1	0	0
33	R	1	Total 1	Cl 1	0	0
33	Y	1	Total 1	Cl 1	0	0
33	3	1	Total 1	Cl 1	0	0
33	0	8	Total 8	Cl 8	0	0

- Molecule 34 is STRONTIUM ION (three-letter code: SR) (formula: Sr).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
34	A	2	Total 2	Sr 2	0	0
34	B	2	Total 2	Sr 2	0	0
34	F	1	Total 1	Sr 1	0	0
34	J	1	Total 1	Sr 1	0	0
34	R	1	Total 1	Sr 1	0	0
34	S	1	Total 1	Sr 1	0	0
34	1	2	Total 2	Sr 2	0	0
34	2	1	Total 1	Sr 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
34	3	2	Total 2	Sr 2	0	0
34	0	93	Total 93	Sr 93	0	0
34	9	2	Total 2	Sr 2	0	0

- Molecule 35 is SODIUM ION (three-letter code: NA) (formula: Na).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
35	B	1	Total 1	Na 1	0	0
35	C	1	Total 1	Na 1	0	0
35	J	1	Total 1	Na 1	0	0
35	L	1	Total 1	Na 1	0	0
35	M	1	Total 1	Na 1	0	0
35	Q	1	Total 1	Na 1	0	0
35	R	3	Total 3	Na 3	0	0
35	S	1	Total 1	Na 1	0	0
35	0	63	Total 63	Na 63	0	0
35	9	2	Total 2	Na 2	0	0

- Molecule 36 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
36	M	1	Total 1	K 1	0	0
36	0	1	Total 1	K 1	0	0

- Molecule 37 is CADMIUM ION (three-letter code: CD) (formula: Cd).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	O	1	Total Cd 1 1	0	0
37	U	1	Total Cd 1 1	0	0
37	Z	1	Total Cd 1 1	0	0
37	1	1	Total Cd 1 1	0	0
37	3	1	Total Cd 1 1	0	0

- Molecule 38 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
38	A	122	Total O 122 122	0	0
38	B	158	Total O 158 158	0	0
38	C	176	Total O 176 176	0	0
38	D	51	Total O 51 51	0	0
38	E	51	Total O 51 51	0	0
38	F	27	Total O 27 27	0	0
38	G	15	Total O 15 15	0	0
38	H	73	Total O 73 73	0	0
38	I	3	Total O 3 3	0	0
38	J	55	Total O 55 55	0	0
38	K	61	Total O 61 61	0	0
38	L	99	Total O 99 99	0	0
38	M	148	Total O 148 148	0	0
38	N	56	Total O 56 56	0	0
38	O	42	Total O 42 42	0	0

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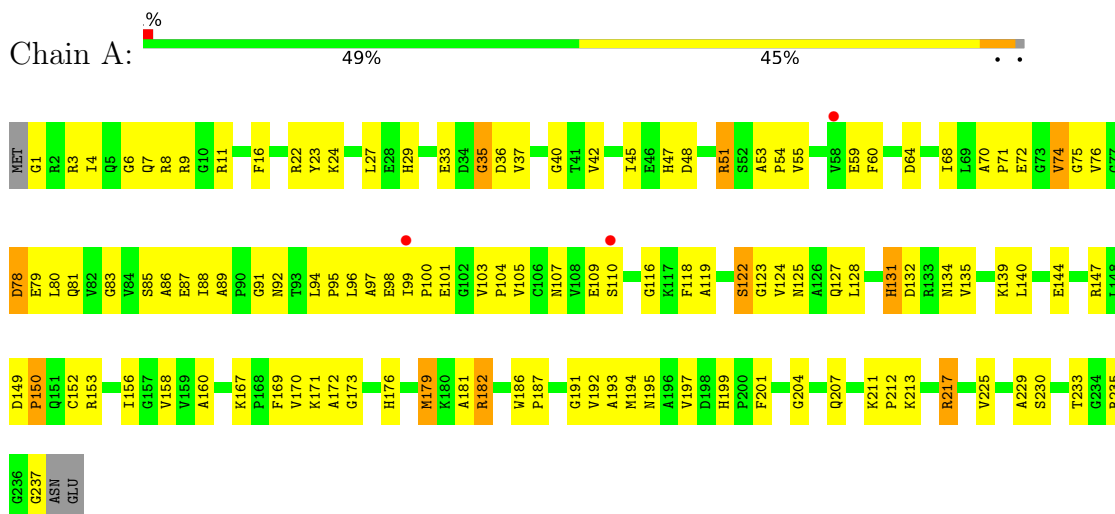
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
38	P	56	Total O 56 56	0	0
38	Q	58	Total O 58 58	0	0
38	R	78	Total O 78 78	0	0
38	S	37	Total O 37 37	0	0
38	T	41	Total O 41 41	0	0
38	U	34	Total O 34 34	0	0
38	V	10	Total O 10 10	0	0
38	W	71	Total O 71 71	0	0
38	X	28	Total O 28 28	0	0
38	Y	102	Total O 102 102	0	0
38	Z	33	Total O 33 33	0	0
38	1	53	Total O 53 53	0	0
38	2	48	Total O 48 48	0	0
38	3	80	Total O 80 80	0	0
38	0	5813	Total O 5813 5813	0	0
38	9	144	Total O 144 144	0	0

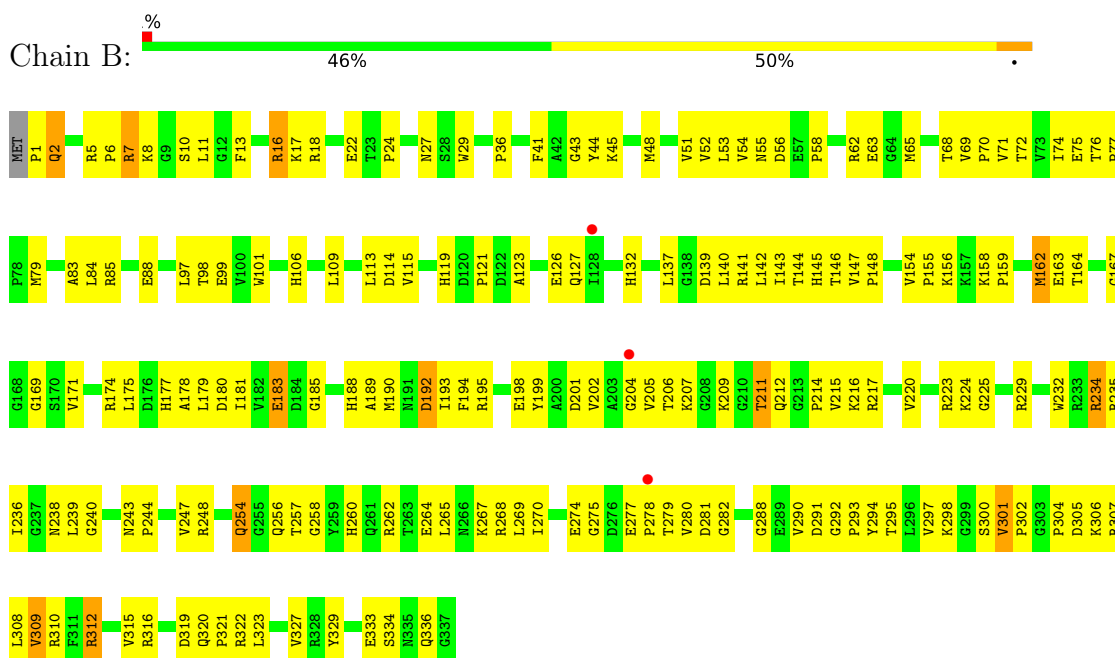
3 Residue-property plots

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

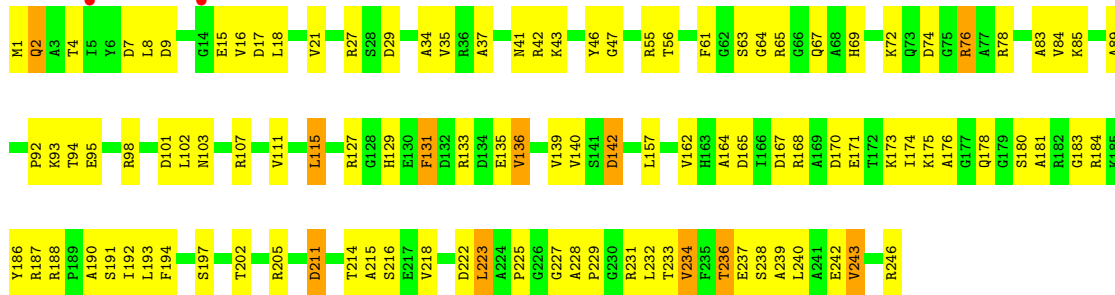
- Molecule 1: 50S ribosomal protein L2P



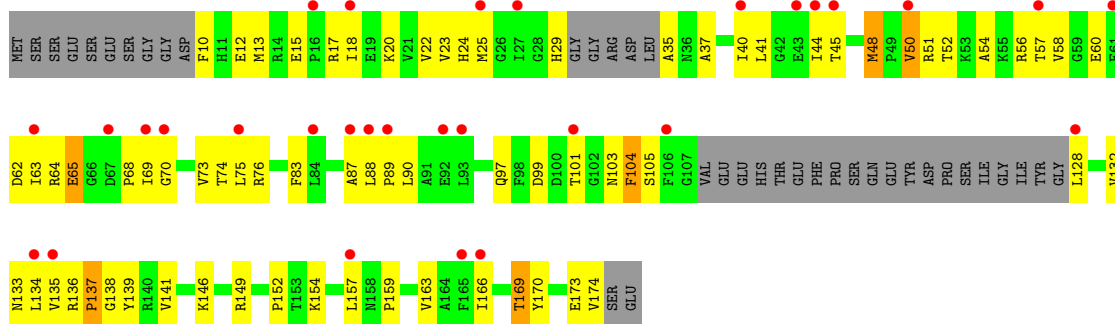
- Molecule 2: 50S ribosomal protein L3P



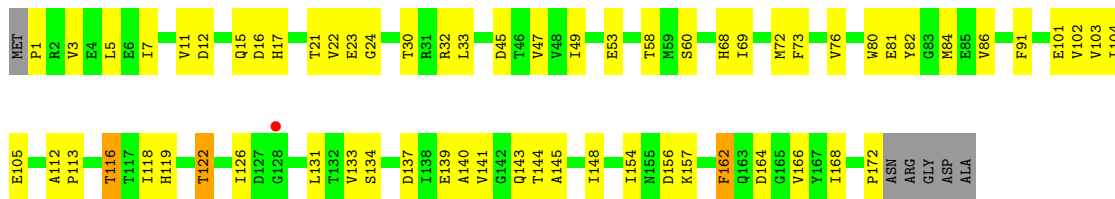
- Molecule 3: 50S ribosomal protein L4P



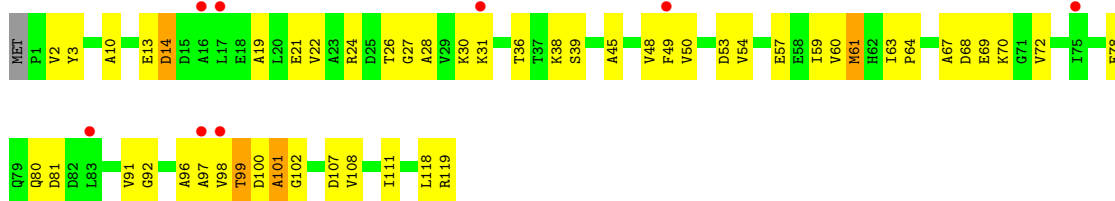
• Molecule 4: 50S ribosomal protein L5P



• Molecule 5: 50S ribosomal protein L6P



• Molecule 6: 50S ribosomal protein L7Ae



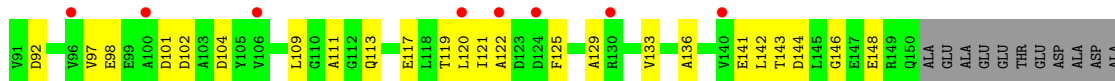
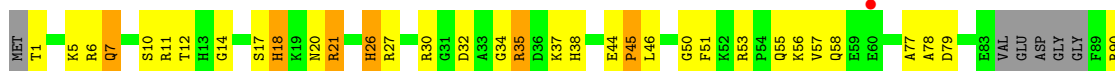
• Molecule 7: 50S ribosomal protein L10E



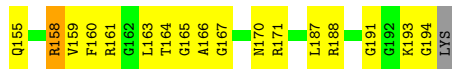
- Molecule 11: 50S ribosomal protein L14P



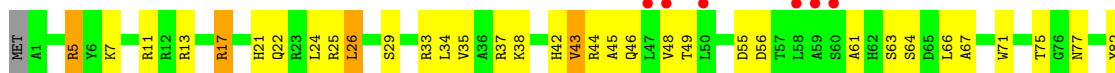
- Molecule 12: 50S ribosomal protein L15P

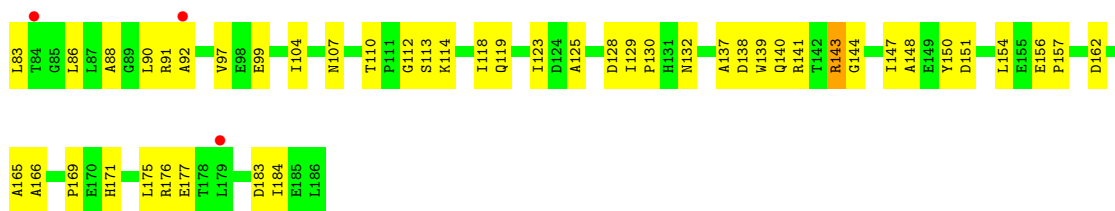


- Molecule 13: 50S ribosomal protein L15e

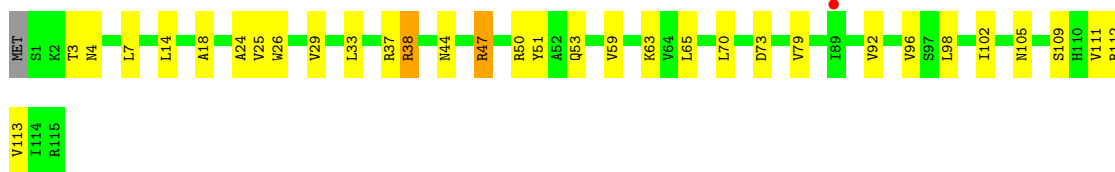


- Molecule 14: 50S ribosomal protein L18P

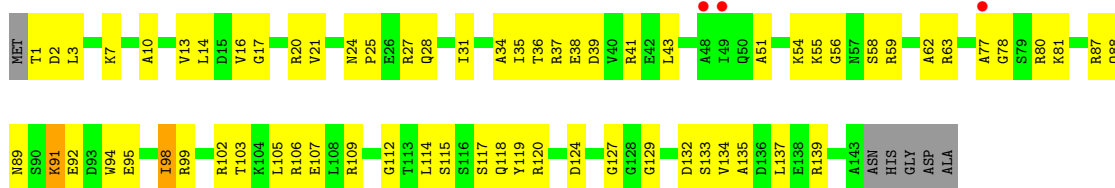




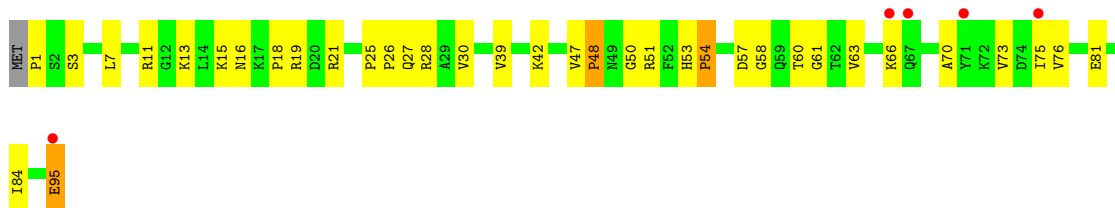
- Molecule 15: 50S ribosomal protein L18e



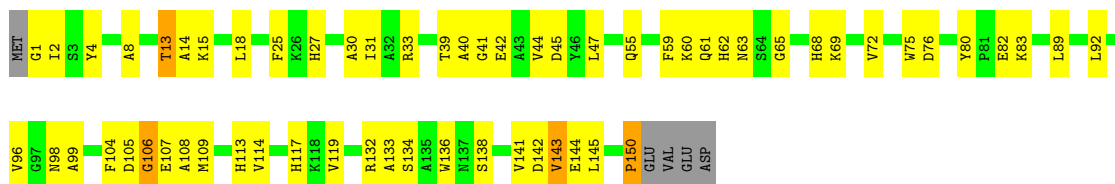
- Molecule 16: 50S ribosomal protein L19e



- Molecule 17: 50S ribosomal protein L21e



- Molecule 18: 50S ribosomal protein L22P

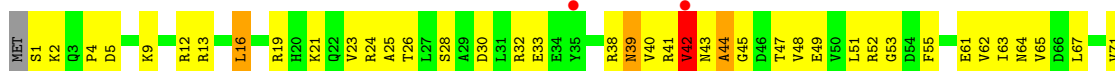


- Molecule 19: 50S ribosomal protein L23P

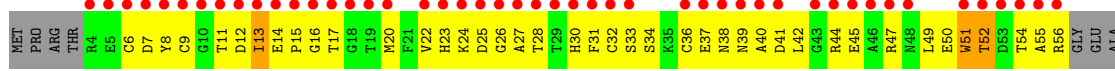
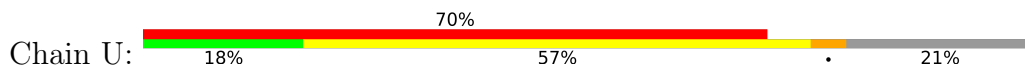


PHE

- Molecule 20: 50S ribosomal protein L24P

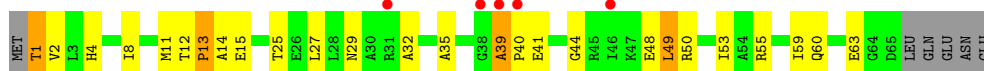


- Molecule 21: 50S ribosomal protein L24e



GLY
GLU
ALA
GLU
GLU
ALA

- Molecule 22: 50S ribosomal protein L29P

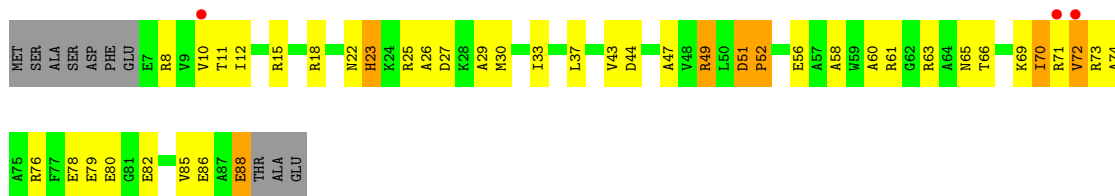


- Molecule 23: 50S ribosomal protein L30P

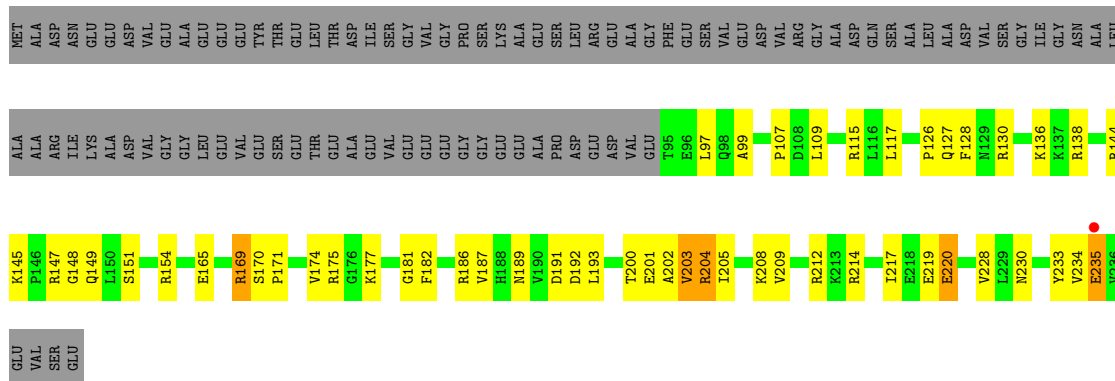
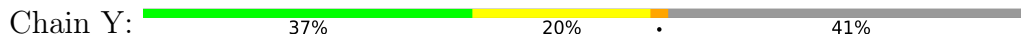


- Molecule 24: 50S ribosomal protein L31e

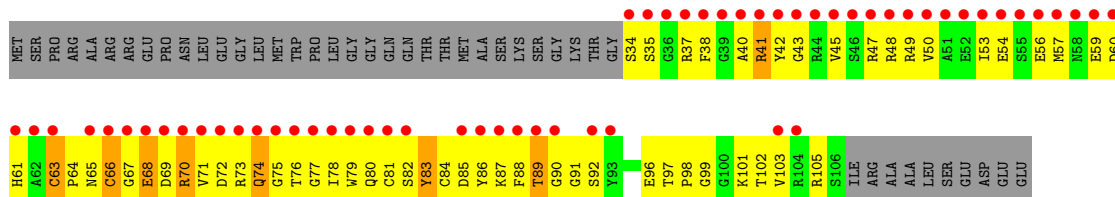




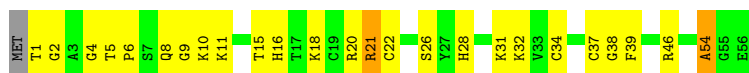
• Molecule 25: 50S ribosomal protein L32e



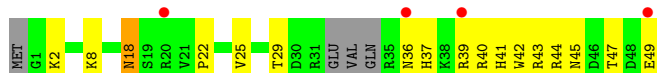
• Molecule 26: 50S ribosomal protein L37Ae



• Molecule 27: 50S ribosomal protein L37e

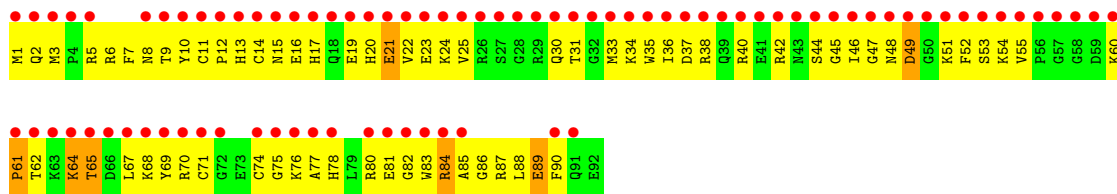


• Molecule 28: 50S ribosomal protein L39e

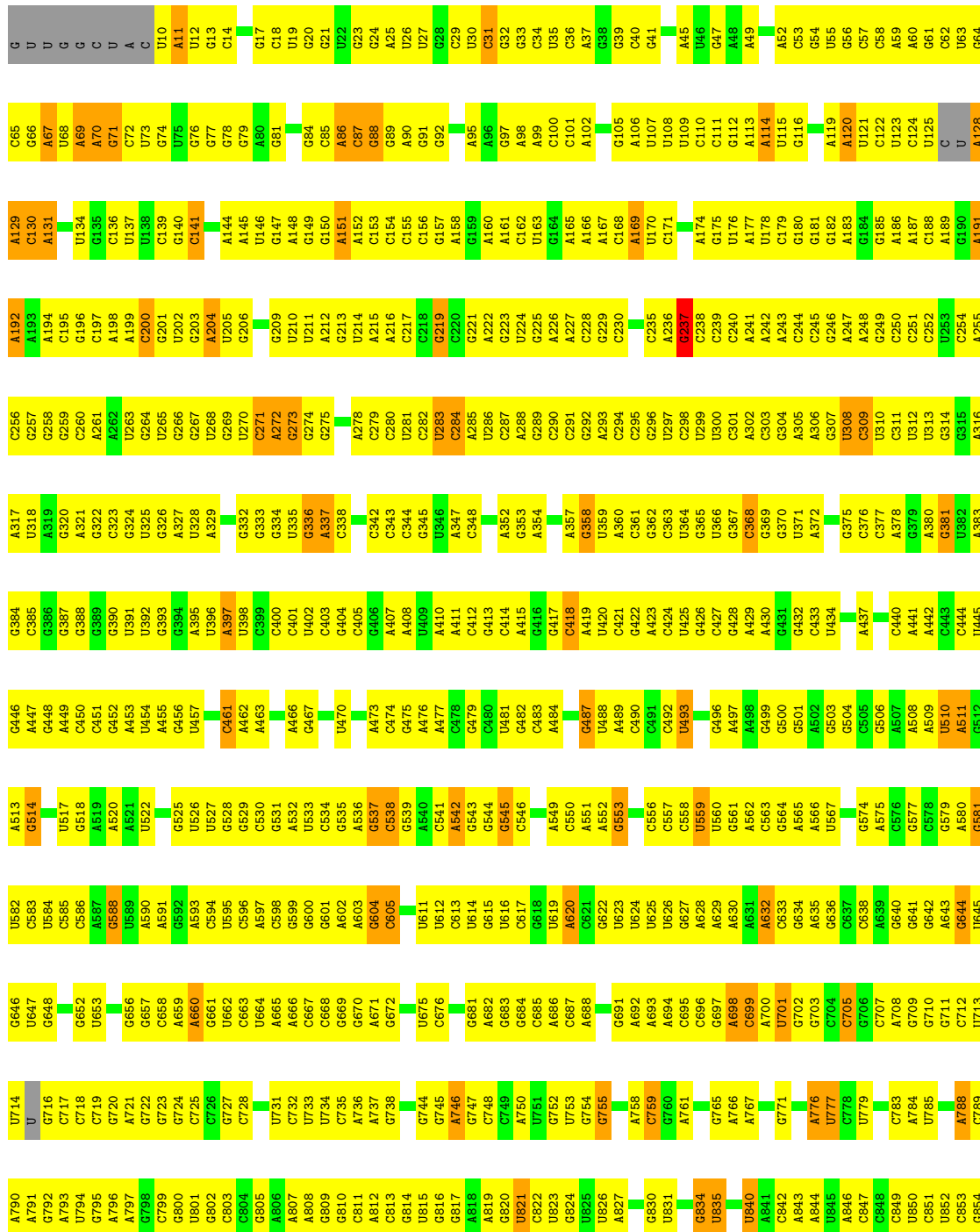
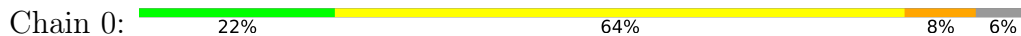


• Molecule 29: 50S ribosomal protein L44E





● Molecule 30: 23S RIBOSOMAL RNA



C2831 C2832 C2833 C2834 C2835 C2836 U2837 A2838 C2839 A2840 A2841 A2842 A2843 C2844 C2845 C2846 C2847 G2851 A2852 U2853 A2854 G2855 C2859 G2860 G2861 G2862 G2863 U2864 G2865 U2866 G2867 C2868 G2869 C2870 G2871 U2872 C2873 G2874 A2875 G2876 G2877 U2878 A2879 C2880 G2881 G2882 A2883 G2884 A2885 C2886 G2887 U2888 U2889 A2890 A2891 G2892 C2893 C2894

C2895 A2896 G2897 G2898 G2900 C2901 A2902 C2903 U2904 A2905 A2906 C2907 A2908 G2909 A2910 C2911 C2912 A2913 A2914 A G C C A U U C A U

● Molecule 31: 5S RIBOSOMAL RNA



U1 U2 A3 G4 G5 C6 G7 G8 C9 C10 A11 C12 A13 G14 G17 U18 G19 G20 G21 G22 U23 U24 G25 C26 G27 U28 C29 C30 C31 C32 G33 A34 C35 C36 C37 A38 U39 C40 C41 C42 G43 A44 A45 C46 A47 C48 G49 G50 A51 A52 G53 A54 U55 A56 A57 G58 C59 C61

A62 C63 A64 A65 G66 U69 U70 G74 G75 G76 A77 G78 U79 A80 C81 U82 G83 G84 A85 G86 U87 G88 C89 G90 C91 G92 A93 G94 C95 C96 U97 C98 U99 G100 G101 G102 A103 A104 A105 U106 C107 C108 G109 G110 U111 U112 C113 G114 C115 C116 G117 C118 C119 A120 G121 C122

4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α , β , γ	212.01Å 299.25Å 573.81Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.30 85.53 – 2.40	Depositor EDS
% Data completeness (in resolution range)	90.6 (50.00-3.30) 89.1 (85.53-2.40)	Depositor EDS
R_{merge}	0.18	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.00 (at 2.40Å)	Xtrriage
Refinement program	CNS 1.0	Depositor
R, R_{free}	0.208 , 0.287 0.184 , 0.263	Depositor DCC
R_{free} test set	6547 reflections (0.98%)	wwPDB-VP
Wilson B-factor (Å ²)	79.9	Xtrriage
Anisotropy	0.112	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.30 , 138.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	99122	wwPDB-VP
Average B, all atoms (Å ²)	74.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.71% 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: NA, 1MA, SR, MG, UR3, CL, CD, OMG, PSU, OMU, K

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	A	0.37	0/1786	0.66	0/2408
2	B	0.38	0/2690	0.67	0/3652
3	C	0.42	0/1885	0.65	0/2552
4	D	0.35	0/1111	0.58	0/1498
5	E	0.36	0/1382	0.61	0/1880
6	F	0.36	0/901	0.60	0/1224
7	G	0.40	0/241	0.53	0/324
8	H	0.36	0/1302	0.66	0/1743
9	I	0.33	0/526	0.54	0/716
10	J	0.42	0/1136	0.63	0/1530
11	K	0.40	0/1004	0.71	0/1351
12	L	0.35	0/1130	0.64	0/1509
13	M	0.41	0/1582	0.64	0/2116
14	N	0.33	0/1474	0.62	0/1999
15	O	0.37	0/874	0.64	0/1181
16	P	0.39	0/1147	0.56	0/1528
17	Q	0.37	0/749	0.67	0/1005
18	R	1.28	7/1172 (0.6%)	1.10	6/1578 (0.4%)
19	S	0.38	0/648	0.59	0/875
20	T	0.39	0/958	0.67	0/1289
21	U	0.46	0/417	0.64	0/562
22	V	0.35	0/502	0.56	0/675
23	W	0.41	0/1219	0.68	0/1655
24	X	0.39	0/664	0.62	0/895
25	Y	0.39	0/1146	0.64	0/1536
26	Z	0.42	0/584	0.63	0/781
27	1	0.47	0/438	0.63	0/578
28	2	0.38	0/401	0.61	0/529
29	3	0.43	0/771	0.67	0/1024
30	0	0.49	0/65957	0.70	6/102867 (0.0%)
31	9	0.37	0/2904	0.68	0/4526
All	All	0.48	7/98701 (0.0%)	0.69	12/147586 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
18	R	1	0
23	W	0	1
30	0	0	19
All	All	1	20

The worst 5 of 7 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	R	150	PRO	CB-CG	27.13	2.85	1.50
18	R	150	PRO	CA-C	-18.46	1.16	1.52
18	R	150	PRO	CG-CD	14.04	1.97	1.50
18	R	150	PRO	C-O	11.94	1.47	1.23
18	R	150	PRO	N-CA	11.49	1.66	1.47

The worst 5 of 12 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	R	150	PRO	CB-CA-C	-22.46	55.84	112.00
18	R	150	PRO	N-CA-C	-19.38	61.71	112.10
18	R	150	PRO	CA-N-CD	12.12	128.68	111.70
18	R	150	PRO	N-CA-CB	11.03	116.54	103.30
18	R	150	PRO	CA-C-O	-8.33	100.20	120.20

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
18	R	150	PRO	CA

5 of 20 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
30	0	493	U	Sidechain
30	0	788	A	Sidechain
30	0	862	U	Sidechain
30	0	882	A	Sidechain
23	W	90	TYR	Sidechain

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	A	1753	0	1766	123	0
2	B	2625	0	2533	168	0
3	C	1860	0	1813	98	0
4	D	1094	0	1085	71	0
5	E	1357	0	1266	49	0
6	F	890	0	843	39	0
7	G	240	0	231	18	0
8	H	1282	0	1292	62	0
9	I	519	0	500	24	0
10	J	1120	0	1098	56	0
11	K	994	0	1027	54	0
12	L	1118	0	1076	54	0
13	M	1558	0	1573	120	0
14	N	1445	0	1401	74	0
15	O	865	0	873	47	0
16	P	1136	0	1123	64	0
17	Q	735	0	729	32	0
18	R	1149	0	1122	58	0
19	S	641	0	605	29	0
20	T	950	0	924	56	0
21	U	410	0	368	58	0
22	V	499	0	511	26	0
23	W	1196	0	1137	79	0
24	X	654	0	653	42	0
25	Y	1130	0	1133	69	0
26	Z	573	0	534	84	0
27	1	431	0	426	27	0
28	2	396	0	413	20	0
29	3	755	0	732	138	0
30	0	59020	0	29802	3476	0
31	9	2599	0	1325	195	0
32	0	85	0	0	0	0
32	9	2	0	0	0	0
32	A	2	0	0	0	0
32	K	1	0	0	0	0
32	T	1	0	0	0	0
32	Y	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
33	0	8	0	0	6	0
33	3	1	0	0	4	0
33	A	1	0	0	0	0
33	B	1	0	0	1	0
33	J	4	0	0	4	0
33	L	1	0	0	0	0
33	M	1	0	0	2	0
33	N	1	0	0	2	0
33	O	1	0	0	1	0
33	Q	1	0	0	1	0
33	R	1	0	0	0	0
33	Y	1	0	0	1	0
34	0	93	0	0	0	0
34	1	2	0	0	0	0
34	2	1	0	0	0	0
34	3	2	0	0	0	0
34	9	2	0	0	0	0
34	A	2	0	0	0	0
34	B	2	0	0	0	0
34	F	1	0	0	0	0
34	J	1	0	0	0	0
34	R	1	0	0	0	0
34	S	1	0	0	0	0
35	0	63	0	0	0	0
35	9	2	0	0	0	0
35	B	1	0	0	0	0
35	C	1	0	0	0	0
35	J	1	0	0	0	0
35	L	1	0	0	0	0
35	M	1	0	0	0	0
35	Q	1	0	0	0	0
35	R	3	0	0	0	0
35	S	1	0	0	0	0
36	0	1	0	0	0	0
36	M	1	0	0	0	0
37	1	1	0	0	0	0
37	3	1	0	0	0	0
37	O	1	0	0	0	0
37	U	1	0	0	0	0
37	Z	1	0	0	0	0
38	0	5813	0	0	458	0
38	1	53	0	0	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
38	2	48	0	0	0	0
38	3	80	0	0	12	0
38	9	144	0	0	18	0
38	A	122	0	0	13	0
38	B	158	0	0	21	0
38	C	176	0	0	16	0
38	D	51	0	0	7	0
38	E	51	0	0	3	0
38	F	27	0	0	2	0
38	G	15	0	0	1	0
38	H	73	0	0	2	0
38	I	3	0	0	0	0
38	J	55	0	0	4	0
38	K	61	0	0	5	0
38	L	99	0	0	11	0
38	M	148	0	0	15	0
38	N	56	0	0	7	0
38	O	42	0	0	3	0
38	P	56	0	0	4	0
38	Q	58	0	0	5	0
38	R	78	0	0	1	0
38	S	37	0	0	3	0
38	T	41	0	0	3	0
38	U	34	0	0	4	0
38	V	10	0	0	2	0
38	W	71	0	0	4	0
38	X	28	0	0	1	0
38	Y	102	0	0	8	0
38	Z	33	0	0	7	0
All	All	99122	0	59914	5051	0

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 34.

The worst 5 of 5051 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)
18:R:150:PRO:CG	18:R:150:PRO:CD	1.97	1.43
30:0:871:G:C8	30:0:871:G:H5'	1.74	1.22
31:9:29:C:H2'	31:9:30:C:H5'	1.21	1.17
14:N:37:ARG:NH1	31:9:6:C:H5''	1.59	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:9:56:A:H2'	31:9:57:A:H5''	1.23	1.16

There are no symmetry-related clashes.

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	
1	A	235/240 (98%)	198 (84%)	28 (12%)	9 (4%)	3	19
2	B	335/338 (99%)	287 (86%)	42 (12%)	6 (2%)	8	35
3	C	244/246 (99%)	211 (86%)	29 (12%)	4 (2%)	9	36
4	D	134/177 (76%)	109 (81%)	22 (16%)	3 (2%)	6	30
5	E	170/178 (96%)	152 (89%)	16 (9%)	2 (1%)	13	42
6	F	117/120 (98%)	102 (87%)	11 (9%)	4 (3%)	3	22
7	G	25/348 (7%)	23 (92%)	2 (8%)	0	100	100
8	H	156/177 (88%)	139 (89%)	14 (9%)	3 (2%)	8	34
9	I	68/162 (42%)	56 (82%)	10 (15%)	2 (3%)	4	24
10	J	140/145 (97%)	125 (89%)	12 (9%)	3 (2%)	7	31
11	K	130/132 (98%)	107 (82%)	21 (16%)	2 (2%)	10	38
12	L	141/165 (86%)	112 (79%)	25 (18%)	4 (3%)	5	25
13	M	192/196 (98%)	165 (86%)	22 (12%)	5 (3%)	5	27
14	N	184/187 (98%)	156 (85%)	23 (12%)	5 (3%)	5	26
15	O	113/116 (97%)	109 (96%)	4 (4%)	0	100	100
16	P	141/149 (95%)	125 (89%)	13 (9%)	3 (2%)	7	31
17	Q	93/96 (97%)	82 (88%)	7 (8%)	4 (4%)	2	16
18	R	148/155 (96%)	132 (89%)	15 (10%)	1 (1%)	22	54
19	S	79/85 (93%)	67 (85%)	11 (14%)	1 (1%)	12	40

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	T	117/120 (98%)	95 (81%)	18 (15%)	4 (3%)	3	22
21	U	51/67 (76%)	46 (90%)	3 (6%)	2 (4%)	3	18
22	V	63/71 (89%)	57 (90%)	5 (8%)	1 (2%)	9	36
23	W	152/154 (99%)	129 (85%)	21 (14%)	2 (1%)	12	40
24	X	80/92 (87%)	68 (85%)	8 (10%)	4 (5%)	2	14
25	Y	140/241 (58%)	131 (94%)	8 (6%)	1 (1%)	22	54
26	Z	71/116 (61%)	52 (73%)	13 (18%)	6 (8%)	1	5
27	1	54/57 (95%)	48 (89%)	5 (9%)	1 (2%)	8	34
28	2	42/50 (84%)	37 (88%)	4 (10%)	1 (2%)	6	28
29	3	90/92 (98%)	73 (81%)	14 (16%)	3 (3%)	4	22
All	All	3705/4472 (83%)	3193 (86%)	426 (12%)	86 (2%)	6	29

5 of 86 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	123	GLY
4	D	65	GLU
4	D	137	PRO
6	F	61	MET
6	F	101	ALA

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	179/182 (98%)	172 (96%)	7 (4%)	32	62
2	B	282/283 (100%)	261 (93%)	21 (7%)	13	40
3	C	193/193 (100%)	178 (92%)	15 (8%)	12	38
4	D	117/148 (79%)	109 (93%)	8 (7%)	16	44
5	E	152/156 (97%)	146 (96%)	6 (4%)	32	62
6	F	93/94 (99%)	89 (96%)	4 (4%)	29	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	G	27/282 (10%)	25 (93%)	2 (7%)	13	40
8	H	134/145 (92%)	125 (93%)	9 (7%)	16	45
9	I	58/130 (45%)	55 (95%)	3 (5%)	23	54
10	J	118/121 (98%)	112 (95%)	6 (5%)	24	54
11	K	106/106 (100%)	98 (92%)	8 (8%)	13	39
12	L	113/127 (89%)	105 (93%)	8 (7%)	14	42
13	M	158/160 (99%)	148 (94%)	10 (6%)	18	47
14	N	149/150 (99%)	143 (96%)	6 (4%)	31	61
15	O	93/94 (99%)	90 (97%)	3 (3%)	39	67
16	P	113/117 (97%)	111 (98%)	2 (2%)	59	78
17	Q	79/80 (99%)	75 (95%)	4 (5%)	24	54
18	R	117/122 (96%)	110 (94%)	7 (6%)	19	49
19	S	71/74 (96%)	67 (94%)	4 (6%)	21	52
20	T	105/106 (99%)	97 (92%)	8 (8%)	13	39
21	U	44/53 (83%)	42 (96%)	2 (4%)	27	58
22	V	51/57 (90%)	48 (94%)	3 (6%)	19	49
23	W	130/130 (100%)	124 (95%)	6 (5%)	27	58
24	X	66/74 (89%)	57 (86%)	9 (14%)	3	16
25	Y	120/196 (61%)	115 (96%)	5 (4%)	30	60
26	Z	60/94 (64%)	54 (90%)	6 (10%)	7	27
27	1	46/47 (98%)	45 (98%)	1 (2%)	52	74
28	2	42/46 (91%)	41 (98%)	1 (2%)	49	73
29	3	79/79 (100%)	75 (95%)	4 (5%)	24	54
All	All	3095/3646 (85%)	2917 (94%)	178 (6%)	20	50

5 of 178 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
15	O	53	GLN
22	V	1	THR
17	Q	54	PRO
19	S	17	ASP
23	W	126	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 80 such sidechains are listed below:

Mol	Chain	Res	Type
19	S	44	GLN
26	Z	61	HIS
21	U	23	HIS
23	W	2	HIS
29	3	2	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
30	0	2745/2923 (93%)	263 (9%)	14 (0%)
31	9	121/122 (99%)	18 (14%)	1 (0%)
All	All	2866/3045 (94%)	281 (9%)	15 (0%)

5 of 281 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
30	0	11	A
30	0	31	C
30	0	67	A
30	0	69	A
30	0	70	A

5 of 15 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
30	0	1352	A
30	0	2718	C
30	0	1377	C
31	9	65	A
30	0	2466	G

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

5 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond

length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	PSU	0	2621	30	18,21,22	1.40	3 (16%)	22,30,33	1.32	3 (13%)
30	UR3	0	2619	30	19,22,23	0.52	0	26,32,35	0.61	1 (3%)
30	1MA	0	628	30,35	16,25,26	1.34	3 (18%)	18,37,40	1.16	2 (11%)
30	OMU	0	2587	30	19,22,23	0.41	0	26,31,34	0.39	0
30	OMG	0	2588	30	18,26,27	1.10	2 (11%)	19,38,41	0.73	1 (5%)

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
30	PSU	0	2621	30	-	0/7/25/26	0/2/2/2
30	UR3	0	2619	30	-	0/7/25/26	0/2/2/2
30	1MA	0	628	30,35	-	0/3/25/26	0/3/3/3
30	OMU	0	2587	30	-	0/9/27/28	0/2/2/2
30	OMG	0	2588	30	-	0/5/27/28	0/3/3/3

The worst 5 of 8 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	0	2621	PSU	C2-N1	4.28	1.42	1.36
30	0	628	1MA	C2-N3	3.28	1.33	1.29
30	0	2588	OMG	C5-C6	-2.99	1.41	1.47
30	0	2621	PSU	C6-C5	2.59	1.38	1.35
30	0	628	1MA	C6-N6	2.48	1.33	1.27

The worst 5 of 7 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	0	2621	PSU	C6-C5-C4	3.58	120.70	118.20
30	0	2621	PSU	C6-N1-C2	-2.96	119.66	122.68
30	0	628	1MA	N1-C2-N3	2.81	129.29	126.02
30	0	2621	PSU	O2-C2-N1	2.62	125.67	122.79
30	0	628	1MA	C5-C6-N1	2.56	117.71	113.90

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

4 monomers are involved in 12 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
30	0	2621	PSU	2	0
30	0	2619	UR3	2	0
30	0	2587	OMU	5	0
30	0	2588	OMG	3	0

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 305 ligands modelled in this entry, 305 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

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	A	237/240 (98%)	-0.28	3 (1%) 77 77	36, 78, 117, 135	0
2	B	337/338 (99%)	-0.40	3 (0%) 84 84	36, 72, 106, 116	0
3	C	246/246 (100%)	-0.46	2 (0%) 86 86	31, 60, 87, 97	0
4	D	140/177 (79%)	0.83	30 (21%) 0 1	91, 126, 152, 162	0
5	E	172/178 (96%)	-0.27	1 (0%) 89 90	62, 89, 116, 123	0
6	F	119/120 (99%)	0.12	8 (6%) 17 17	68, 96, 130, 142	0
7	G	29/348 (8%)	0.21	0 100 100	104, 117, 126, 127	0
8	H	160/177 (90%)	0.04	2 (1%) 77 77	57, 81, 125, 130	0
9	I	70/162 (43%)	1.77	29 (41%) 0 0	149, 172, 188, 190	0
10	J	142/145 (97%)	-0.28	1 (0%) 87 88	48, 67, 90, 114	0
11	K	132/132 (100%)	-0.36	2 (1%) 73 72	38, 69, 98, 107	0
12	L	145/165 (87%)	0.29	9 (6%) 20 20	50, 96, 141, 147	0
13	M	194/196 (98%)	0.00	10 (5%) 27 25	41, 61, 109, 119	0
14	N	186/187 (99%)	0.17	9 (4%) 30 28	72, 94, 145, 152	0
15	O	115/116 (99%)	-0.52	1 (0%) 84 84	57, 72, 93, 98	0
16	P	143/149 (95%)	-0.27	3 (2%) 63 62	52, 74, 92, 103	0
17	Q	95/96 (98%)	-0.09	5 (5%) 26 24	55, 71, 88, 103	0
18	R	150/155 (96%)	-0.49	0 100 100	45, 61, 87, 109	0
19	S	81/85 (95%)	-0.39	1 (1%) 79 78	61, 80, 103, 113	0
20	T	119/120 (99%)	0.02	6 (5%) 28 27	51, 74, 105, 132	0
21	U	53/67 (79%)	3.92	47 (88%) 0 0	119, 128, 137, 138	0
22	V	65/71 (91%)	0.47	5 (7%) 13 12	68, 97, 141, 146	0
23	W	154/154 (100%)	-0.13	3 (1%) 66 65	49, 66, 88, 103	0
24	X	82/92 (89%)	0.16	3 (3%) 41 38	57, 81, 104, 121	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
25	Y	142/241 (58%)	-0.49	1 (0%) 87 88	39, 59, 87, 116	0
26	Z	73/116 (62%)	5.59	58 (79%) 0 0	109, 128, 137, 141	0
27	1	56/57 (98%)	-0.45	0 100 100	34, 47, 56, 60	0
28	2	46/50 (92%)	0.06	4 (8%) 10 10	43, 84, 116, 122	0
29	3	92/92 (100%)	5.69	83 (90%) 0 0	112, 132, 141, 144	0
30	0	2749/2923 (94%)	-0.61	1 (0%) 100 100	31, 64, 118, 195	0
31	9	122/122 (100%)	-0.75	1 (0%) 86 86	53, 94, 121, 167	0
All	All	6646/7517 (88%)	-0.15	331 (4%) 28 27	31, 72, 133, 195	0

The worst 5 of 331 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
29	3	41	GLU	21.4
26	Z	35	SER	15.5
29	3	45	GLY	15.4
29	3	35	TRP	15.3
29	3	38	ARG	14.7

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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(Å ²)	Q<0.9
30	PSU	0	2621	20/21	0.96	0.20	49,51,60,60	0
30	OMG	0	2588	24/25	0.97	0.14	48,51,54,55	0
30	1MA	0	628	23/24	0.98	0.17	37,44,45,46	0
30	UR3	0	2619	21/22	0.98	0.14	56,57,60,60	0
30	OMU	0	2587	21/22	0.98	0.13	51,52,54,56	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands i

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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(Å ²)	Q<0.9
35	NA	L	8568	1/1	-0.00	0.63	59,59,59,59	0
34	SR	0	8979	1/1	0.43	0.69	200,200,200,200	0
34	SR	0	8982	1/1	0.54	0.78	200,200,200,200	0
35	NA	0	8553	1/1	0.55	0.22	81,81,81,81	0
35	NA	0	8560	1/1	0.56	0.43	80,80,80,80	0
34	SR	0	8991	1/1	0.57	0.09	188,188,188,188	0
33	CL	0	8822	1/1	0.60	0.91	140,140,140,140	0
35	NA	Q	8540	1/1	0.60	0.12	74,74,74,74	0
34	SR	0	9006	1/1	0.65	0.52	200,200,200,200	0
35	NA	0	8509	1/1	0.66	0.43	84,84,84,84	0
34	SR	3	8999	1/1	0.69	0.43	200,200,200,200	0
35	NA	0	8528	1/1	0.69	0.40	113,113,113,113	0
37	CD	U	8701	1/1	0.69	0.39	180,180,180,180	0
35	NA	0	8562	1/1	0.70	1.01	83,83,83,83	0
34	SR	0	8957	1/1	0.72	1.76	200,200,200,200	0
34	SR	0	8971	1/1	0.73	0.16	200,200,200,200	0
34	SR	0	8960	1/1	0.73	0.06	156,156,156,156	0
34	SR	0	9001	1/1	0.73	0.13	200,200,200,200	0
34	SR	3	8932	1/1	0.74	0.11	148,148,148,148	0
33	CL	J	8821	1/1	0.74	0.26	99,99,99,99	0
34	SR	B	8987	1/1	0.74	0.79	200,200,200,200	0
32	MG	0	8066	1/1	0.75	0.45	71,71,71,71	0
35	NA	0	8545	1/1	0.75	0.43	74,74,74,74	0
32	MG	0	8031	1/1	0.76	0.11	68,68,68,68	0
33	CL	J	8801	1/1	0.76	0.22	85,85,85,85	0
35	NA	R	8575	1/1	0.77	0.50	97,97,97,97	0
34	SR	0	9004	1/1	0.78	1.32	200,200,200,200	0
33	CL	3	8804	1/1	0.79	0.11	98,98,98,98	0
32	MG	T	8057	1/1	0.80	0.08	80,80,80,80	0
35	NA	0	8518	1/1	0.80	0.85	91,91,91,91	0
33	CL	0	8815	1/1	0.80	0.24	130,130,130,130	0
34	SR	0	8928	1/1	0.80	0.12	156,156,156,156	0
32	MG	0	8087	1/1	0.81	0.06	22,22,22,22	0
34	SR	0	8993	1/1	0.81	0.05	200,200,200,200	0
35	NA	0	8549	1/1	0.81	0.28	96,96,96,96	0
35	NA	0	8507	1/1	0.81	0.20	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
35	NA	B	8552	1/1	0.81	0.55	70,70,70,70	0
33	CL	N	8807	1/1	0.81	0.49	99,99,99,99	0
35	NA	0	8570	1/1	0.81	0.18	57,57,57,57	0
35	NA	0	8524	1/1	0.81	0.42	53,53,53,53	0
37	CD	3	8704	1/1	0.81	0.59	183,183,183,183	0
34	SR	0	8955	1/1	0.82	0.11	200,200,200,200	0
34	SR	0	8983	1/1	0.83	0.30	200,200,200,200	0
35	NA	0	8544	1/1	0.83	0.45	76,76,76,76	0
34	SR	0	8975	1/1	0.84	0.06	189,189,189,189	0
35	NA	0	8501	1/1	0.84	0.26	53,53,53,53	0
34	SR	0	8968	1/1	0.84	0.18	175,175,175,175	0
34	SR	0	8964	1/1	0.84	0.25	176,176,176,176	0
32	MG	0	8068	1/1	0.85	0.08	44,44,44,44	0
34	SR	0	8974	1/1	0.85	0.42	196,196,196,196	0
32	MG	Y	8077	1/1	0.85	0.39	58,58,58,58	0
33	CL	L	8810	1/1	0.85	0.12	91,91,91,91	0
32	MG	9	8074	1/1	0.85	0.23	97,97,97,97	0
34	SR	9	9003	1/1	0.86	0.04	200,200,200,200	0
34	SR	0	9000	1/1	0.86	0.15	200,200,200,200	0
33	CL	J	8802	1/1	0.86	0.11	86,86,86,86	0
35	NA	0	8571	1/1	0.86	0.36	99,99,99,99	0
32	MG	0	8065	1/1	0.86	0.10	66,66,66,66	0
32	MG	0	8008	1/1	0.86	0.20	26,26,26,26	0
35	NA	R	8532	1/1	0.87	0.21	68,68,68,68	0
34	SR	0	8959	1/1	0.87	0.06	190,190,190,190	0
35	NA	0	8519	1/1	0.87	0.19	51,51,51,51	0
32	MG	0	8032	1/1	0.88	0.05	47,47,47,47	0
35	NA	0	8522	1/1	0.88	0.26	130,130,130,130	0
34	SR	0	8989	1/1	0.88	0.13	174,174,174,174	0
34	SR	F	9005	1/1	0.88	0.15	170,170,170,170	0
35	NA	0	8536	1/1	0.88	0.12	64,64,64,64	0
34	SR	0	8953	1/1	0.89	0.33	179,179,179,179	0
35	NA	0	8556	1/1	0.89	0.39	94,94,94,94	0
35	NA	0	8502	1/1	0.89	0.19	66,66,66,66	0
35	NA	0	8506	1/1	0.89	0.56	91,91,91,91	0
34	SR	0	8988	1/1	0.89	0.05	200,200,200,200	0
33	CL	B	8819	1/1	0.89	1.19	83,83,83,83	0
34	SR	0	8919	1/1	0.89	0.09	185,185,185,185	0
33	CL	O	8808	1/1	0.89	0.38	114,114,114,114	0
34	SR	0	8969	1/1	0.90	1.49	200,200,200,200	0
35	NA	0	8557	1/1	0.90	0.06	70,70,70,70	0
35	NA	0	8529	1/1	0.90	0.16	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
34	SR	0	8984	1/1	0.90	0.03	124,124,124,124	0
32	MG	0	8081	1/1	0.90	0.38	116,116,116,116	0
32	MG	0	8092	1/1	0.90	0.09	53,53,53,53	0
35	NA	0	8508	1/1	0.90	0.35	118,118,118,118	0
35	NA	0	8525	1/1	0.90	0.55	113,113,113,113	0
34	SR	0	8970	1/1	0.91	0.15	158,158,158,158	0
34	SR	J	8986	1/1	0.91	0.34	200,200,200,200	0
34	SR	A	8930	1/1	0.91	0.11	131,131,131,131	0
32	MG	0	8093	1/1	0.91	0.16	48,48,48,48	0
34	SR	0	8956	1/1	0.91	0.24	200,200,200,200	0
32	MG	0	8046	1/1	0.91	0.07	44,44,44,44	0
33	CL	0	8803	1/1	0.92	0.14	82,82,82,82	0
32	MG	0	8038	1/1	0.92	0.12	94,94,94,94	0
32	MG	0	8067	1/1	0.92	0.27	47,47,47,47	0
35	NA	0	8516	1/1	0.92	0.22	27,27,27,27	0
35	NA	J	8538	1/1	0.92	0.12	84,84,84,84	0
32	MG	0	8053	1/1	0.92	0.13	88,88,88,88	0
34	SR	0	8972	1/1	0.92	0.18	138,138,138,138	0
34	SR	B	8950	1/1	0.92	0.15	123,123,123,123	0
32	MG	0	8042	1/1	0.92	0.05	75,75,75,75	0
34	SR	0	8976	1/1	0.92	0.26	195,195,195,195	0
35	NA	9	8572	1/1	0.92	0.08	71,71,71,71	0
34	SR	0	8977	1/1	0.92	0.05	200,200,200,200	0
34	SR	0	8938	1/1	0.92	0.06	200,200,200,200	0
35	NA	0	8517	1/1	0.93	0.21	69,69,69,69	0
32	MG	0	8023	1/1	0.93	0.21	38,38,38,38	0
33	CL	J	8816	1/1	0.93	2.10	99,99,99,99	0
33	CL	0	8805	1/1	0.93	0.38	105,105,105,105	0
32	MG	0	8011	1/1	0.93	0.21	33,33,33,33	0
35	NA	0	8511	1/1	0.93	0.09	53,53,53,53	0
35	NA	0	8555	1/1	0.93	0.25	80,80,80,80	0
34	SR	0	8908	1/1	0.93	0.10	99,99,99,99	0
32	MG	K	8054	1/1	0.94	0.15	42,42,42,42	0
35	NA	0	8537	1/1	0.94	0.12	46,46,46,46	0
34	SR	0	8936	1/1	0.94	0.10	114,114,114,114	0
33	CL	M	8818	1/1	0.94	0.29	58,58,58,58	0
35	NA	0	8547	1/1	0.94	0.49	115,115,115,115	0
32	MG	0	8026	1/1	0.94	0.14	37,37,37,37	0
32	MG	0	8003	1/1	0.94	0.20	27,27,27,27	0
32	MG	0	8049	1/1	0.94	0.26	82,82,82,82	0
32	MG	0	8079	1/1	0.94	0.31	57,57,57,57	0
32	MG	0	8020	1/1	0.94	0.19	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	MG	0	8085	1/1	0.94	0.11	67,67,67,67	0
34	SR	0	8962	1/1	0.94	0.06	168,168,168,168	0
35	NA	0	8523	1/1	0.94	0.22	51,51,51,51	0
34	SR	0	8963	1/1	0.94	0.12	117,117,117,117	0
35	NA	0	8573	1/1	0.94	0.25	89,89,89,89	0
35	NA	0	8574	1/1	0.94	1.44	92,92,92,92	0
32	MG	0	8064	1/1	0.94	0.23	51,51,51,51	0
34	SR	0	8922	1/1	0.94	0.27	181,181,181,181	0
34	SR	0	8927	1/1	0.94	0.10	171,171,171,171	0
34	SR	0	8925	1/1	0.95	0.14	98,98,98,98	0
35	NA	0	8554	1/1	0.95	0.36	124,124,124,124	0
34	SR	0	8926	1/1	0.95	0.23	131,131,131,131	0
32	MG	0	8082	1/1	0.95	0.19	62,62,62,62	0
35	NA	0	8526	1/1	0.95	0.11	67,67,67,67	0
32	MG	0	8015	1/1	0.95	0.13	30,30,30,30	0
32	MG	A	8051	1/1	0.95	0.23	95,95,95,95	0
35	NA	0	8563	1/1	0.95	0.25	66,66,66,66	0
35	NA	0	8564	1/1	0.95	0.67	87,87,87,87	0
32	MG	0	8030	1/1	0.95	0.91	75,75,75,75	0
34	SR	0	8951	1/1	0.95	0.17	183,183,183,183	0
32	MG	0	8052	1/1	0.95	0.13	63,63,63,63	0
34	SR	0	8997	1/1	0.95	0.92	200,200,200,200	0
34	SR	0	8998	1/1	0.95	0.65	200,200,200,200	0
34	SR	0	8965	1/1	0.95	0.23	160,160,160,160	0
35	NA	0	8550	1/1	0.95	0.12	129,129,129,129	0
32	MG	0	8033	1/1	0.96	0.20	69,69,69,69	0
32	MG	0	8010	1/1	0.96	0.13	46,46,46,46	0
33	CL	0	8817	1/1	0.96	0.10	84,84,84,84	0
35	NA	0	8535	1/1	0.96	0.25	58,58,58,58	0
32	MG	0	8039	1/1	0.96	0.20	94,94,94,94	0
34	SR	A	8929	1/1	0.96	0.09	139,139,139,139	0
34	SR	0	8942	1/1	0.96	0.05	123,123,123,123	0
35	NA	R	8533	1/1	0.96	0.07	94,94,94,94	0
35	NA	0	8546	1/1	0.96	1.01	108,108,108,108	0
34	SR	0	8978	1/1	0.96	0.07	132,132,132,132	0
35	NA	S	8510	1/1	0.96	0.06	41,41,41,41	0
32	MG	0	8056	1/1	0.96	0.14	47,47,47,47	0
32	MG	0	8058	1/1	0.96	0.07	7,7,7,7	0
32	MG	0	8061	1/1	0.96	0.31	47,47,47,47	0
32	MG	0	8018	1/1	0.96	0.08	34,34,34,34	0
32	MG	0	8089	1/1	0.96	0.28	56,56,56,56	0
34	SR	2	8947	1/1	0.96	0.12	195,195,195,195	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	MG	0	8091	1/1	0.96	0.30	67,67,67,67	0
35	NA	0	8514	1/1	0.96	0.38	74,74,74,74	0
35	NA	0	8515	1/1	0.96	0.09	35,35,35,35	0
32	MG	0	8043	1/1	0.96	0.22	62,62,62,62	0
35	NA	0	8566	1/1	0.96	0.25	86,86,86,86	0
33	CL	Q	8811	1/1	0.96	0.72	124,124,124,124	0
34	SR	0	8911	1/1	0.96	0.14	100,100,100,100	0
34	SR	0	8915	1/1	0.96	0.12	123,123,123,123	0
33	CL	Y	8820	1/1	0.96	0.13	58,58,58,58	0
34	SR	0	9002	1/1	0.96	0.14	200,200,200,200	0
32	MG	0	8019	1/1	0.96	0.18	19,19,19,19	0
37	CD	Z	8703	1/1	0.96	0.43	188,188,188,188	0
32	MG	9	8040	1/1	0.96	0.18	101,101,101,101	0
34	SR	0	8939	1/1	0.97	0.07	155,155,155,155	0
34	SR	1	8952	1/1	0.97	0.12	92,92,92,92	0
34	SR	0	8943	1/1	0.97	0.10	89,89,89,89	0
35	NA	0	8542	1/1	0.97	0.41	79,79,79,79	0
34	SR	0	8946	1/1	0.97	0.24	144,144,144,144	0
32	MG	A	8050	1/1	0.97	0.12	69,69,69,69	0
32	MG	0	8029	1/1	0.97	0.10	62,62,62,62	0
33	CL	0	8812	1/1	0.97	0.08	70,70,70,70	0
35	NA	0	8504	1/1	0.97	0.33	41,41,41,41	0
34	SR	0	8985	1/1	0.97	0.10	168,168,168,168	0
33	CL	0	8813	1/1	0.97	0.21	64,64,64,64	0
33	CL	0	8814	1/1	0.97	0.28	51,51,51,51	0
32	MG	0	8088	1/1	0.97	0.17	53,53,53,53	0
34	SR	0	8992	1/1	0.97	0.23	141,141,141,141	0
32	MG	0	8055	1/1	0.97	0.30	60,60,60,60	0
35	NA	0	8558	1/1	0.97	0.24	82,82,82,82	0
34	SR	0	8920	1/1	0.97	0.08	145,145,145,145	0
35	NA	0	8561	1/1	0.97	0.14	53,53,53,53	0
32	MG	0	8009	1/1	0.97	0.24	24,24,24,24	0
34	SR	0	8923	1/1	0.97	0.09	108,108,108,108	0
34	SR	0	8924	1/1	0.97	0.23	131,131,131,131	0
32	MG	0	8073	1/1	0.97	0.09	89,89,89,89	0
32	MG	0	8075	1/1	0.97	0.06	50,50,50,50	0
32	MG	0	8021	1/1	0.97	0.07	31,31,31,31	0
32	MG	0	8007	1/1	0.97	0.07	21,21,21,21	0
34	SR	0	8935	1/1	0.97	0.15	101,101,101,101	0
35	NA	9	8543	1/1	0.97	0.26	51,51,51,51	0
33	CL	A	8809	1/1	0.97	0.34	116,116,116,116	0
36	K	M	8402	1/1	0.97	0.21	96,96,96,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	MG	0	8024	1/1	0.97	0.03	39,39,39,39	0
35	NA	M	8539	1/1	0.97	0.12	38,38,38,38	0
35	NA	0	8534	1/1	0.97	0.27	53,53,53,53	0
34	SR	0	8937	1/1	0.98	0.26	126,126,126,126	0
32	MG	0	8078	1/1	0.98	0.36	72,72,72,72	0
32	MG	0	8013	1/1	0.98	0.06	19,19,19,19	0
32	MG	0	8080	1/1	0.98	0.27	65,65,65,65	0
35	NA	0	8541	1/1	0.98	0.18	60,60,60,60	0
34	SR	0	8910	1/1	0.98	0.13	118,118,118,118	0
34	SR	0	8945	1/1	0.98	0.07	119,119,119,119	0
32	MG	0	8041	1/1	0.98	0.19	25,25,25,25	0
34	SR	0	8981	1/1	0.98	0.13	198,198,198,198	0
34	SR	0	8914	1/1	0.98	0.22	133,133,133,133	0
32	MG	0	8059	1/1	0.98	0.06	55,55,55,55	0
34	SR	0	8954	1/1	0.98	0.15	115,115,115,115	0
32	MG	0	8060	1/1	0.98	0.04	58,58,58,58	0
32	MG	0	8006	1/1	0.98	0.10	44,44,44,44	0
32	MG	0	8022	1/1	0.98	0.20	25,25,25,25	0
34	SR	0	8990	1/1	0.98	0.14	113,113,113,113	0
32	MG	0	8044	1/1	0.98	0.10	59,59,59,59	0
32	MG	0	8016	1/1	0.98	0.15	41,41,41,41	0
35	NA	0	8559	1/1	0.98	0.51	96,96,96,96	0
32	MG	0	8001	1/1	0.98	0.14	42,42,42,42	0
34	SR	0	8994	1/1	0.98	0.11	200,200,200,200	0
34	SR	0	8995	1/1	0.98	0.16	123,123,123,123	0
34	SR	0	8996	1/1	0.98	0.48	200,200,200,200	0
33	CL	R	8806	1/1	0.98	0.15	66,66,66,66	0
32	MG	0	8034	1/1	0.98	0.06	50,50,50,50	0
35	NA	0	8569	1/1	0.98	0.12	71,71,71,71	0
34	SR	S	8961	1/1	0.98	0.10	130,130,130,130	0
34	SR	0	8931	1/1	0.98	0.15	120,120,120,120	0
34	SR	0	8934	1/1	0.98	0.10	138,138,138,138	0
32	MG	0	8037	1/1	0.98	0.31	92,92,92,92	0
32	MG	0	8005	1/1	0.98	0.22	24,24,24,24	0
34	SR	0	9007	1/1	0.98	1.31	200,200,200,200	0
34	SR	0	9008	1/1	0.98	0.10	94,94,94,94	0
36	K	0	8401	1/1	0.98	0.62	145,145,145,145	0
34	SR	9	8980	1/1	0.98	0.16	191,191,191,191	0
35	NA	0	8530	1/1	0.98	0.17	53,53,53,53	0
35	NA	0	8531	1/1	0.98	0.18	54,54,54,54	0
34	SR	0	8909	1/1	0.99	0.08	100,100,100,100	0
32	MG	0	8090	1/1	0.99	0.11	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	MG	0	8017	1/1	0.99	0.14	28,28,28,28	0
35	NA	0	8527	1/1	0.99	0.31	92,92,92,92	0
32	MG	Y	8086	1/1	0.99	0.26	52,52,52,52	0
32	MG	0	8069	1/1	0.99	0.12	73,73,73,73	0
34	SR	0	8916	1/1	0.99	0.05	110,110,110,110	0
34	SR	0	8917	1/1	0.99	0.10	111,111,111,111	0
34	SR	0	8918	1/1	0.99	0.10	88,88,88,88	0
32	MG	0	8070	1/1	0.99	0.16	39,39,39,39	0
32	MG	0	8071	1/1	0.99	0.13	78,78,78,78	0
34	SR	0	8921	1/1	0.99	0.09	88,88,88,88	0
32	MG	0	8072	1/1	0.99	0.09	45,45,45,45	0
34	SR	0	8966	1/1	0.99	0.07	101,101,101,101	0
34	SR	0	8967	1/1	0.99	0.06	163,163,163,163	0
35	NA	C	8503	1/1	0.99	0.12	36,36,36,36	0
32	MG	0	8014	1/1	0.99	0.08	25,25,25,25	0
32	MG	0	8004	1/1	0.99	0.11	19,19,19,19	0
35	NA	0	8548	1/1	0.99	0.05	44,44,44,44	0
32	MG	0	8028	1/1	0.99	0.09	13,13,13,13	0
32	MG	0	8035	1/1	0.99	0.17	76,76,76,76	0
35	NA	0	8551	1/1	0.99	0.16	75,75,75,75	0
32	MG	0	8045	1/1	0.99	0.09	28,28,28,28	0
34	SR	0	8973	1/1	0.99	0.16	142,142,142,142	0
32	MG	0	8036	1/1	0.99	0.10	62,62,62,62	0
32	MG	0	8062	1/1	0.99	0.18	66,66,66,66	0
34	SR	0	8933	1/1	0.99	0.16	126,126,126,126	0
34	SR	R	8912	1/1	0.99	0.24	107,107,107,107	0
32	MG	0	8083	1/1	0.99	0.35	58,58,58,58	0
35	NA	0	8505	1/1	0.99	0.22	37,37,37,37	0
32	MG	0	8084	1/1	0.99	0.13	37,37,37,37	0
32	MG	0	8063	1/1	0.99	0.12	60,60,60,60	0
32	MG	0	8047	1/1	0.99	0.40	90,90,90,90	0
32	MG	0	8048	1/1	0.99	0.31	26,26,26,26	0
35	NA	0	8565	1/1	0.99	0.16	85,85,85,85	0
34	SR	0	8940	1/1	0.99	0.10	93,93,93,93	0
35	NA	0	8567	1/1	0.99	0.44	83,83,83,83	0
35	NA	0	8512	1/1	0.99	0.24	40,40,40,40	0
35	NA	0	8513	1/1	0.99	0.19	67,67,67,67	0
34	SR	0	8941	1/1	0.99	0.26	141,141,141,141	0
34	SR	0	8903	1/1	0.99	0.23	63,63,63,63	0
34	SR	0	8904	1/1	0.99	0.23	73,73,73,73	0
34	SR	0	8944	1/1	0.99	0.05	168,168,168,168	0
34	SR	0	8905	1/1	0.99	0.28	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	MG	0	8002	1/1	0.99	0.14	31,31,31,31	0
35	NA	0	8520	1/1	0.99	0.06	44,44,44,44	0
37	CD	O	8705	1/1	0.99	0.05	105,105,105,105	0
35	NA	0	8521	1/1	0.99	0.26	40,40,40,40	0
34	SR	0	8948	1/1	0.99	0.09	110,110,110,110	0
37	CD	1	8702	1/1	0.99	0.11	78,78,78,78	0
34	SR	0	8949	1/1	0.99	0.07	128,128,128,128	0
34	SR	1	8913	1/1	1.00	0.10	108,108,108,108	0
32	MG	0	8076	1/1	1.00	0.32	76,76,76,76	0
34	SR	0	8958	1/1	1.00	0.13	126,126,126,126	0
32	MG	0	8025	1/1	1.00	0.04	23,23,23,23	0
34	SR	0	8906	1/1	1.00	0.14	66,66,66,66	0
34	SR	0	8907	1/1	1.00	0.17	60,60,60,60	0
32	MG	0	8012	1/1	1.00	0.22	26,26,26,26	0
32	MG	0	8027	1/1	1.00	0.10	44,44,44,44	0
34	SR	0	8901	1/1	1.00	0.14	73,73,73,73	0
34	SR	0	8902	1/1	1.00	0.07	72,72,72,72	0

6.5 Other polymers [i](#)

There are no such residues in this entry.