wwPDB X-ray Structure Validation Summary Report (i)

Feb 10, 2025 – 01:30 PM EST

PDB ID	:	4X62
Title	:	Crystal Structure of 30S ribosomal subunit from Thermus thermophilus
Authors	:	Demirci, H.; Chen, J.; Choi, J.; Soltis, M.; Puglisi, J.D.
Deposited on	:	2014-12-06
Resolution	:	3.45 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 (i) 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 (i)) were used in the production of this report:

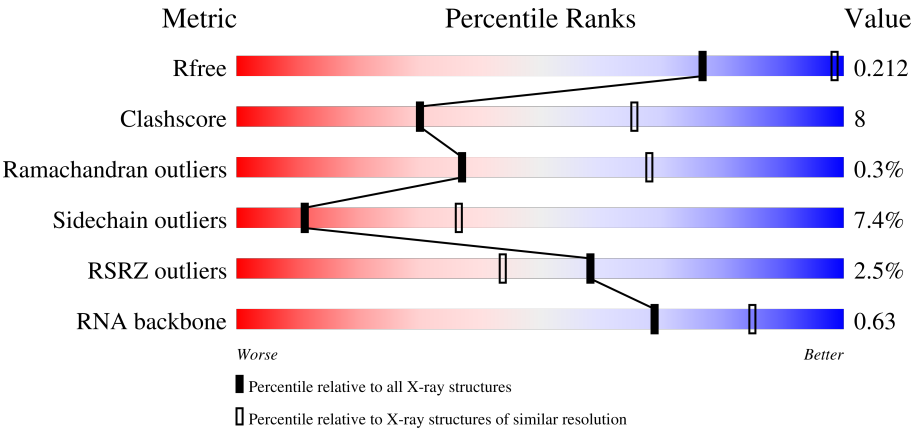
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.21
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.004 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.40

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.45 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}	164625	1587 (3.50-3.38)
Clashscore	180529	1676 (3.50-3.38)
Ramachandran outliers	177936	1665 (3.50-3.38)
Sidechain outliers	177891	1666 (3.50-3.38)
RSRZ outliers	164620	1587 (3.50-3.38)
RNA backbone	3690	1044 (3.88-3.00)

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

Mol	Chain	Length	Quality of chain
1	A	1522	% 55% 37% 7%
2	B	236	3% 78% 19%
3	C	207	% 74% 25%
4	D	208	6% 82% 15%

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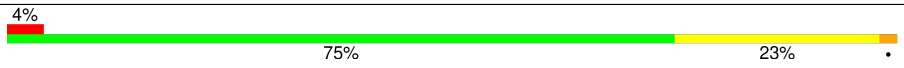
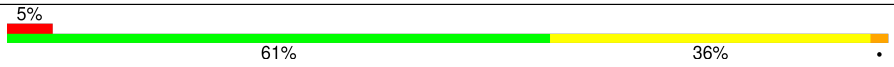
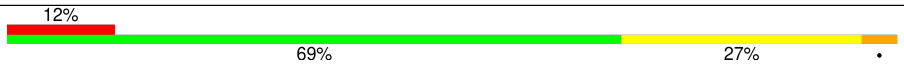
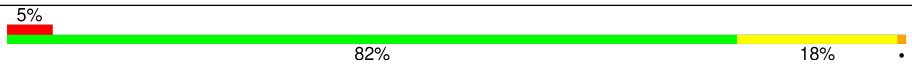
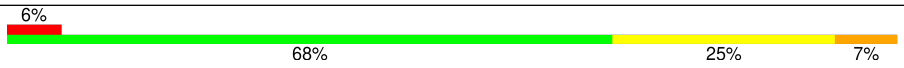
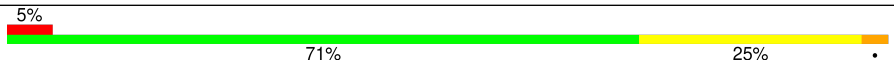
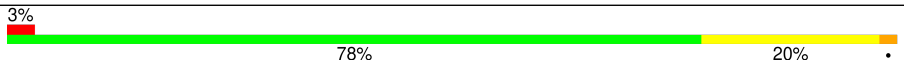
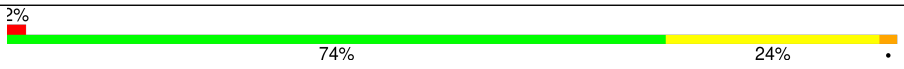
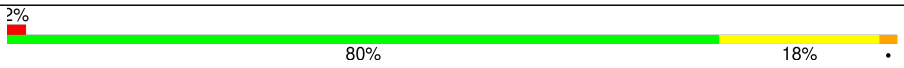
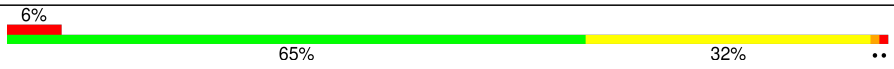
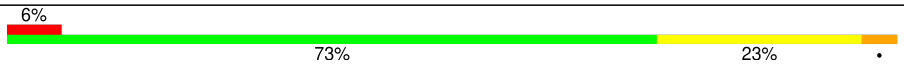
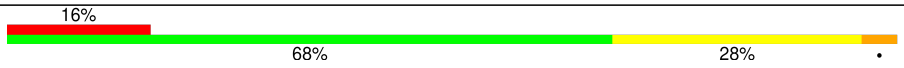
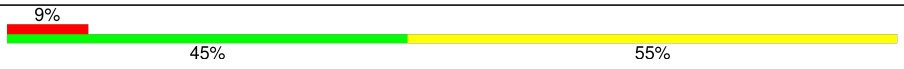
Mol	Chain	Length	Quality of chain
5	E	151	
6	F	101	
7	G	155	
8	H	138	
9	I	127	
10	J	99	
11	K	119	
12	L	125	
13	M	118	
14	N	60	
15	O	88	
16	P	84	
17	Q	99	
18	R	73	
19	S	81	
20	T	99	
21	U	25	
22	a	6	
23	b	11	

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
25	MG	A	1712	-	-	-	X
25	MG	A	1762	-	-	-	X
25	MG	A	1764	-	-	-	X
25	MG	A	1781	-	-	-	X
25	MG	A	1798	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	MG	A	1805	-	-	-	X
25	MG	A	1808	-	-	-	X
25	MG	A	1814	-	-	-	X

2 Entry composition (i)

There are 28 unique types of molecules in this entry. The entry contains 52777 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	A	1512	32504	14477	6011	10505	1511	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1534	C	A	conflict	GB 55771382
A	1535	A	C	conflict	GB 55771382

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	236	1874	1195	336	338	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	C	207	1613	1016	315	281	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	D	208	1703	1066	339	291	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	E	151	1147	724	218	201	4	0	0	1

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	99	Total	C	N	O	S	0	0	1
			793	498	157	137	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	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	L	125	Total	C	N	O	S	0	0	1
			973	612	196	163	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	M	118	Total	C	N	O	S	0	0	0
			937	579	193	163	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	N	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	O	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	P	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	Q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	R	73	Total	C	N	O	0	0	0
			598	381	118	99			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	S	81	Total	C	N	O	S	0	0	1
			648	414	120	112	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	T	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	U	25	Total	C	N	O	0	0	1
			209	128	51	30			

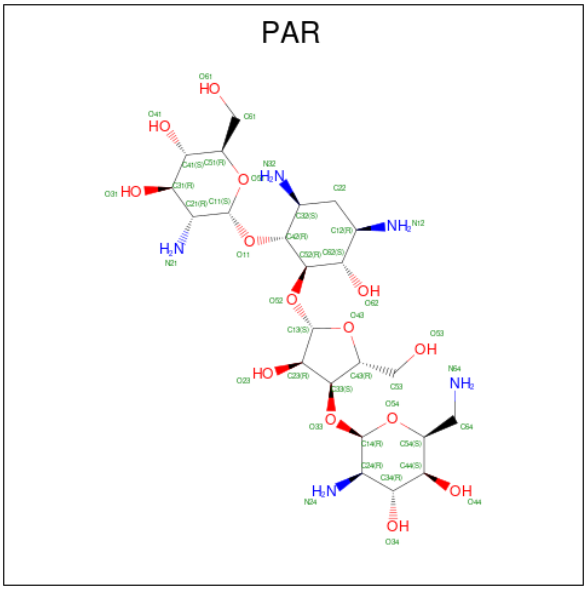
- Molecule 22 is a RNA chain called RNA (5'-D(*AP*AP*AP*UP*UP*U)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	a	6	Total	C	N	O	P	0	0	0
			123	57	21	40	5			

- Molecule 23 is a RNA chain called RNA (5'-D(P*GP*AP*CP*UP*(70U)P*UP*UP*(12A)P*AP*(PSU)P*C)-3').

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
23	b	11	Total	C	N	O	P	S	0	0	0
			247	112	37	85	11	2			

- Molecule 24 is PAROMOMYCIN (three-letter code: PAR) (formula: $C_{23}H_{45}N_5O_{14}$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
24	A	1	Total	C	N	O	0	0
			42	23	5	14		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A	1	Total C N O 42 23 5 14	0	0
24	A	1	Total C N O 42 23 5 14	0	0
24	A	1	Total C N O 42 23 5 14	0	0
24	A	1	Total C N O 42 23 5 14	0	0
24	A	1	Total C N O 42 23 5 14	0	0

- Molecule 25 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	A	261	Total Mg 261 261	0	0
25	C	1	Total Mg 1 1	0	0
25	D	1	Total Mg 1 1	0	0
25	E	1	Total Mg 1 1	0	0
25	F	1	Total Mg 1 1	0	0
25	G	1	Total Mg 1 1	0	0
25	H	1	Total Mg 1 1	0	0
25	L	2	Total Mg 2 2	0	0
25	P	4	Total Mg 4 4	0	0
25	Q	2	Total Mg 2 2	0	0
25	S	3	Total Mg 3 3	0	0
25	T	1	Total Mg 1 1	0	0
25	b	1	Total Mg 1 1	0	0

- Molecule 26 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	28	Total K 28 28	0	0
26	G	1	Total K 1 1	0	0

- Molecule 27 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	D	1	Total Zn 1 1	0	0
27	N	1	Total Zn 1 1	0	0

- Molecule 28 is water.

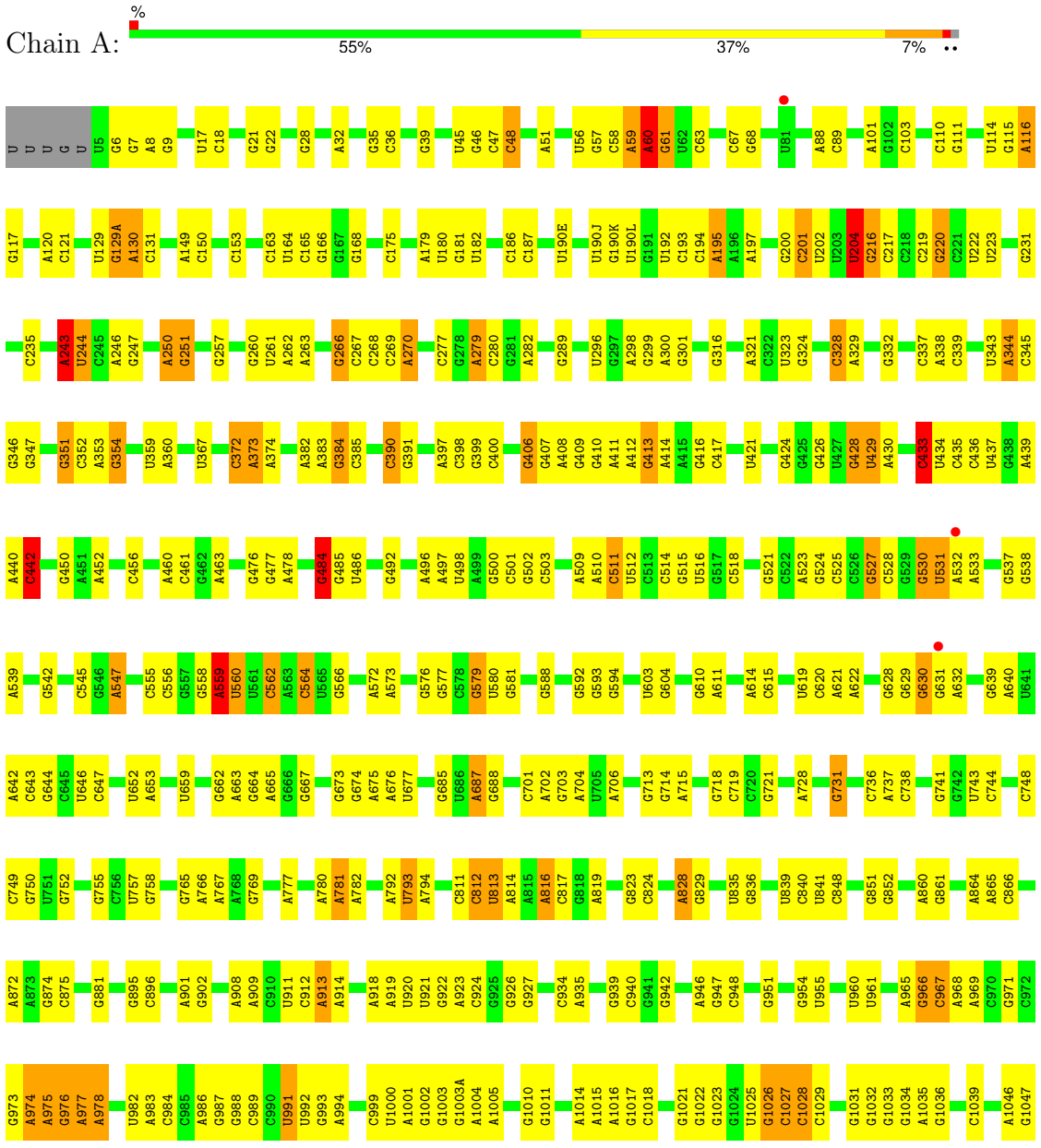
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	209	Total O 209 209	0	0
28	D	2	Total O 2 2	0	0
28	E	5	Total O 5 5	0	0
28	L	1	Total O 1 1	0	0
28	N	1	Total O 1 1	0	0
28	O	1	Total O 1 1	0	0
28	Q	1	Total O 1 1	0	0
28	T	1	Total O 1 1	0	0

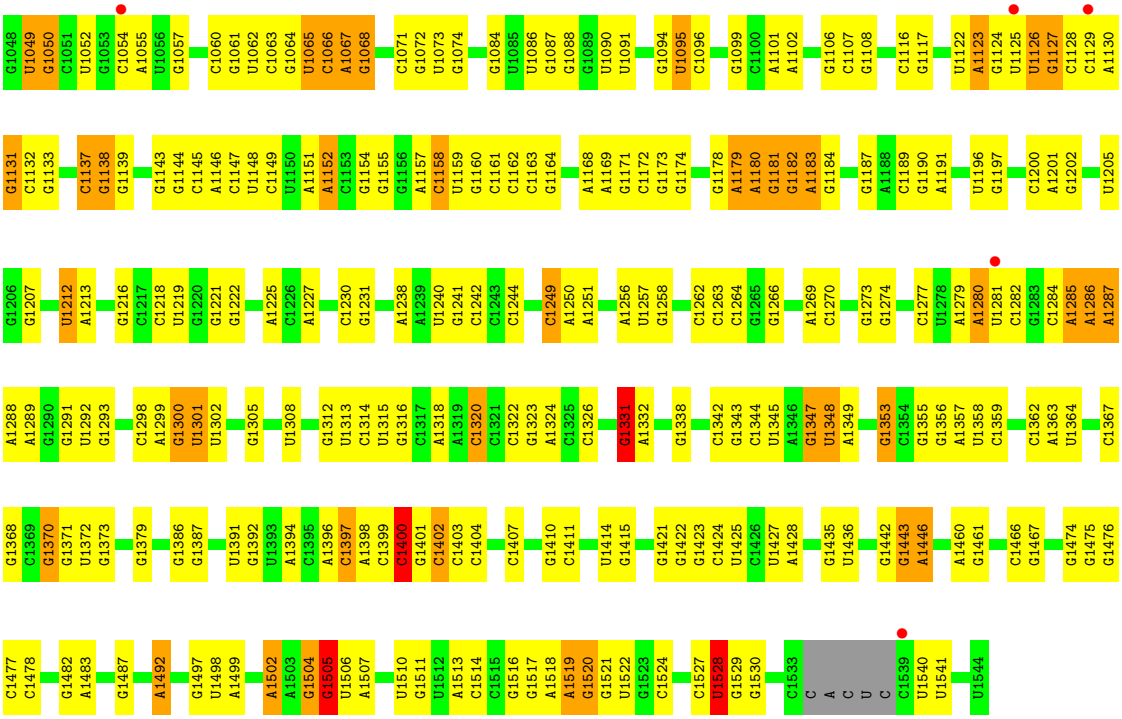
3 Residue-property plots (i)

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

- Molecule 1: 16S rRNA

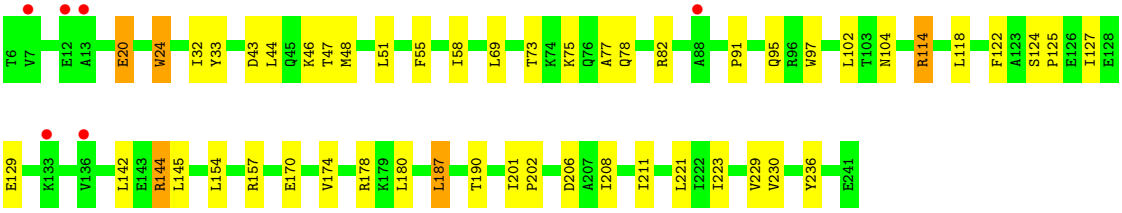
Chain A:





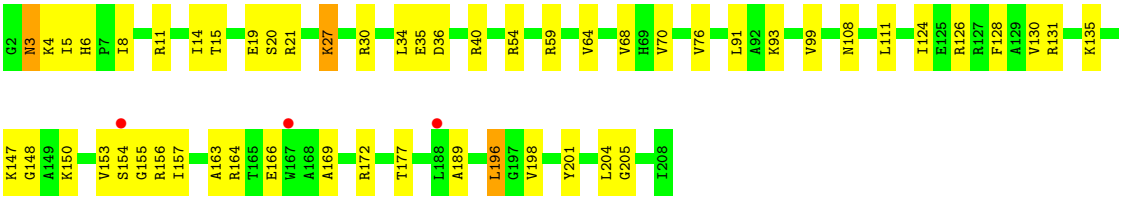
• Molecule 2: 30S ribosomal protein S2

Chain B:



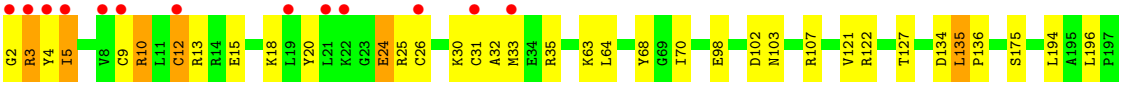
• Molecule 3: 30S ribosomal protein S3

Chain C:



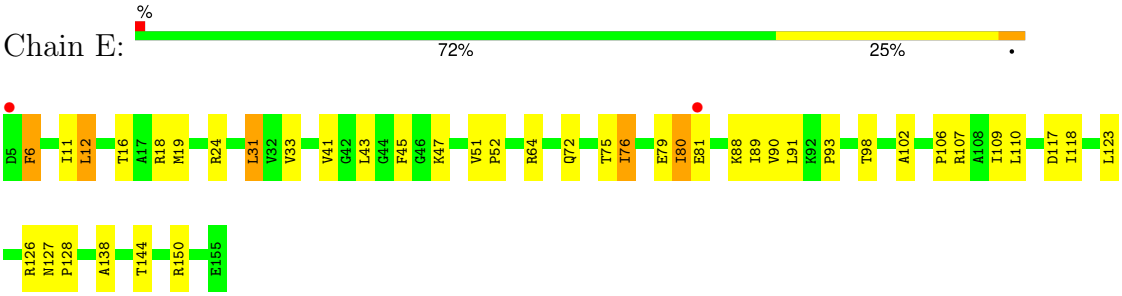
• Molecule 4: 30S ribosomal protein S4

Chain D:



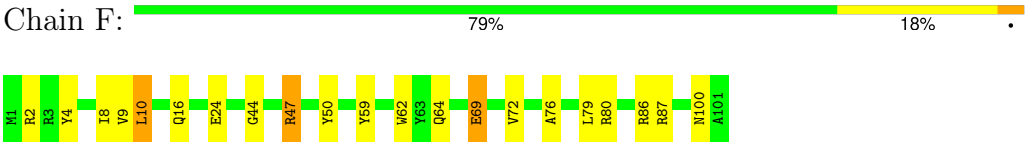
• Molecule 5: 30S ribosomal protein S5

Chain E:



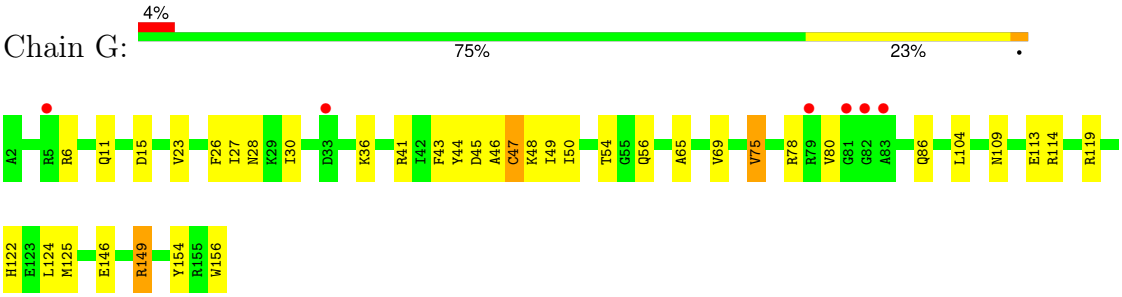
• Molecule 6: 30S ribosomal protein S6

Chain F:



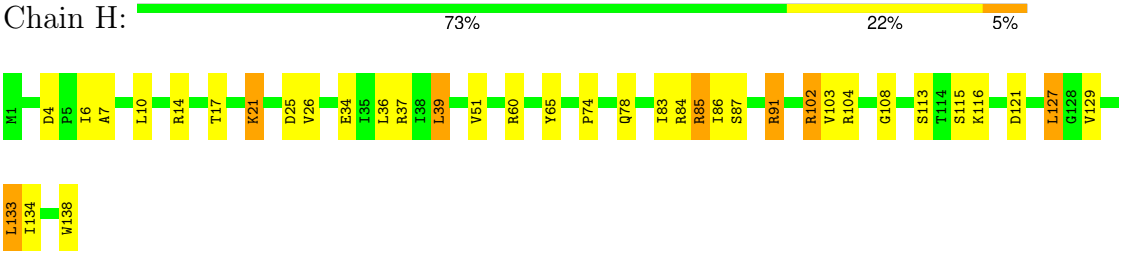
• Molecule 7: 30S ribosomal protein S7

Chain G:



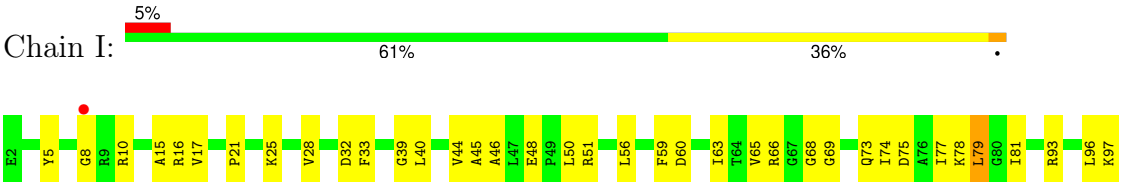
• Molecule 8: 30S ribosomal protein S8

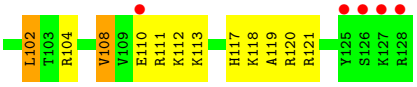
Chain H:



• Molecule 9: 30S ribosomal protein S9

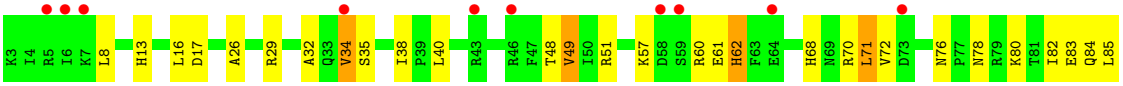
Chain I:

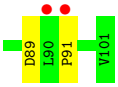




• Molecule 10: 30S ribosomal protein S10

Chain J:



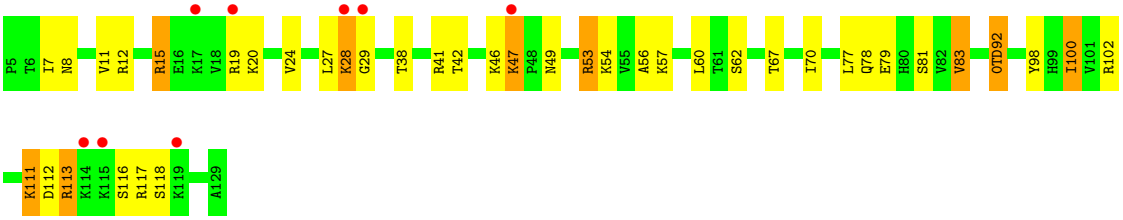


• Molecule 11: 30S ribosomal protein S11

Chain K:

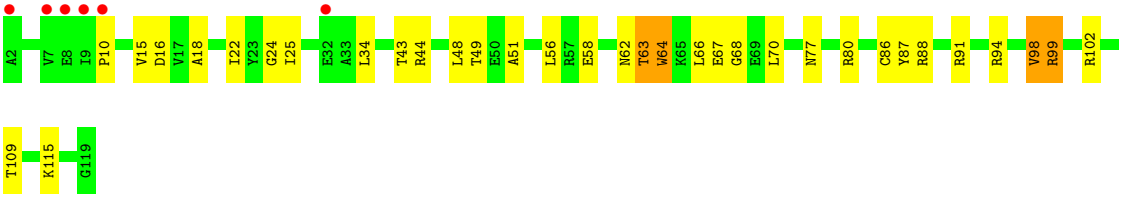
• Molecule 12: 30S ribosomal protein S12

Chain L:



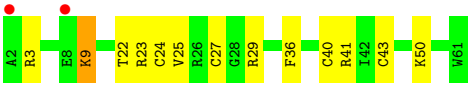
• Molecule 13: 30S ribosomal protein S13

Chain M:



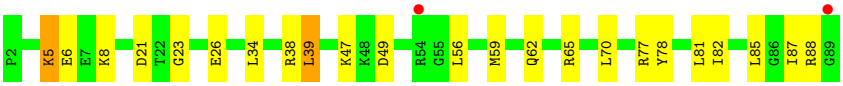
• Molecule 14: 30S ribosomal protein S14 type Z

Chain N:



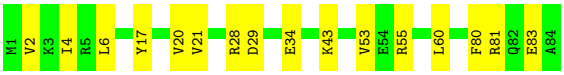
• Molecule 15: 30S ribosomal protein S15

Chain O:



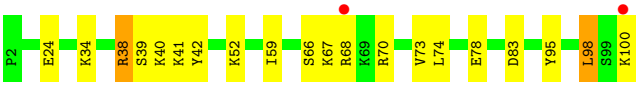
• Molecule 16: 30S ribosomal protein S16

Chain P:



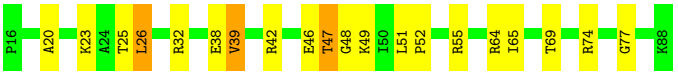
• Molecule 17: 30S ribosomal protein S17

Chain Q:



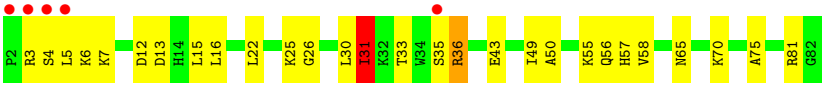
• Molecule 18: 30S ribosomal protein S18

Chain R:



• Molecule 19: 30S ribosomal protein S19

Chain S:

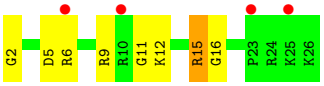


• Molecule 20: 30S ribosomal protein S20

Chain T:

• Molecule 21: 30S ribosomal protein Thx

Chain U:

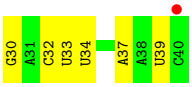


• Molecule 22: RNA (5'-D(*AP*AP*AP*UP*UP*U)-3')

Chain a:

• Molecule 23: RNA (5'-D(P*GP*AP*CP*UP*(70U)P*UP*UP*(12A)P*AP*(PSU)P*C)-3')

Chain b:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 41 21 2	Depositor
Cell constants a, b, c, α, β, γ	400.83Å 400.83Å 175.09Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	34.88 – 3.45 34.88 – 3.45	Depositor EDS
% Data completeness (in resolution range)	99.0 (34.88-3.45) 94.9 (34.88-3.45)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.95 (at 3.47Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1938)	Depositor
R, R_{free}	0.181 , 0.214 0.180 , 0.212	Depositor DCC
R_{free} test set	9236 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	99.3	Xtriage
Anisotropy	0.099	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.26 , 80.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.48$, $< L^2 > = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	52777	wwPDB-VP
Average B, all atoms (Å^2)	99.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.78% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 7MG, 2MG, M2G, PSU, 70U, PAR, MA6, UR3, 12A, ZN, 5MC, MG, 0TD, K, 4OC

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	0.45	0/36037	0.83	23/56239 (0.0%)
2	B	0.25	0/1909	0.42	0/2579
3	C	0.27	0/1637	0.44	0/2207
4	D	0.30	0/1733	0.45	1/2318 (0.0%)
5	E	0.32	0/1163	0.50	0/1566
6	F	0.25	0/856	0.41	0/1154
7	G	0.27	0/1276	0.43	0/1709
8	H	0.34	0/1136	0.44	0/1527
9	I	0.26	0/1029	0.45	0/1379
10	J	0.26	0/806	0.49	0/1084
11	K	0.31	0/900	0.48	0/1213
12	L	0.31	0/978	0.50	0/1308
13	M	0.26	0/947	0.44	0/1270
14	N	0.30	0/501	0.40	0/664
15	O	0.27	0/745	0.41	0/992
16	P	0.32	0/717	0.45	0/965
17	Q	0.33	0/836	0.47	0/1117
18	R	0.27	0/604	0.42	0/801
19	S	0.24	0/662	0.49	0/892
20	T	0.29	0/765	0.49	0/1007
21	U	0.26	0/213	0.41	0/279
22	a	0.38	0/137	0.85	0/211
23	b	0.83	1/184 (0.5%)	0.77	0/277
All	All	0.40	1/55771 (0.0%)	0.73	24/82758 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	30	G	OP3-P	-10.58	1.48	1.61

The worst 5 of 24 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	328	C	C2-N1-C1'	7.92	127.52	118.80
1	A	204	U	C2-N1-C1'	6.94	126.03	117.70
1	A	328	C	C6-N1-C2	-6.84	117.56	120.30
1	A	328	C	N1-C2-O2	6.80	122.98	118.90
1	A	1528	U	P-O3'-C3'	6.62	127.64	119.70

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	A	32504	0	16434	427	0
2	B	1874	0	1887	29	0
3	C	1613	0	1677	37	0
4	D	1703	0	1763	21	0
5	E	1147	0	1207	26	0
6	F	843	0	857	12	0
7	G	1257	0	1296	22	0
8	H	1116	0	1177	25	0
9	I	1010	0	1037	34	0
10	J	793	0	835	23	0
11	K	885	0	904	13	0
12	L	973	0	1058	28	0
13	M	937	0	995	17	0
14	N	492	0	529	11	0
15	O	734	0	771	11	0
16	P	701	0	720	9	0
17	Q	823	0	891	15	0
18	R	598	0	670	15	0
19	S	648	0	672	15	0
20	T	763	0	861	18	0
21	U	209	0	221	5	0
22	a	123	0	65	0	0
23	b	247	0	129	0	0
24	A	252	0	270	11	0
25	A	261	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	C	1	0	0	0	0
25	D	1	0	0	0	0
25	E	1	0	0	0	0
25	F	1	0	0	0	0
25	G	1	0	0	0	0
25	H	1	0	0	0	0
25	L	2	0	0	0	0
25	P	4	0	0	0	0
25	Q	2	0	0	0	0
25	S	3	0	0	0	0
25	T	1	0	0	0	0
25	b	1	0	0	0	0
26	A	28	0	0	0	0
26	G	1	0	0	0	0
27	D	1	0	0	0	0
27	N	1	0	0	0	0
28	A	209	0	0	4	0
28	D	2	0	0	0	0
28	E	5	0	0	0	0
28	L	1	0	0	0	0
28	N	1	0	0	0	0
28	O	1	0	0	0	0
28	Q	1	0	0	0	0
28	T	1	0	0	0	0
All	All	52777	0	36926	725	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 8.

The worst 5 of 725 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)
1:A:235:C:H5'	17:Q:70:ARG:HG2	1.55	0.88
1:A:989:C:H42	1:A:1216:G:H1	1.22	0.85
1:A:664:G:H22	1:A:741:G:H1	1.26	0.83
11:K:15:ALA:HA	11:K:77:MET:HA	1.60	0.83
1:A:153:C:H42	1:A:168:G:H1	1.26	0.83

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
2	B	234/236 (99%)	207 (88%)	26 (11%)	1 (0%)	30 63
3	C	205/207 (99%)	188 (92%)	17 (8%)	0	100 100
4	D	206/208 (99%)	200 (97%)	5 (2%)	1 (0%)	25 58
5	E	149/151 (99%)	145 (97%)	4 (3%)	0	100 100
6	F	99/101 (98%)	95 (96%)	4 (4%)	0	100 100
7	G	153/155 (99%)	144 (94%)	9 (6%)	0	100 100
8	H	136/138 (99%)	133 (98%)	3 (2%)	0	100 100
9	I	125/127 (98%)	114 (91%)	10 (8%)	1 (1%)	16 49
10	J	97/99 (98%)	78 (80%)	17 (18%)	2 (2%)	5 29
11	K	117/119 (98%)	104 (89%)	13 (11%)	0	100 100
12	L	122/125 (98%)	113 (93%)	8 (7%)	1 (1%)	16 49
13	M	116/118 (98%)	111 (96%)	5 (4%)	0	100 100
14	N	58/60 (97%)	53 (91%)	5 (9%)	0	100 100
15	O	86/88 (98%)	84 (98%)	2 (2%)	0	100 100
16	P	82/84 (98%)	78 (95%)	4 (5%)	0	100 100
17	Q	97/99 (98%)	94 (97%)	3 (3%)	0	100 100
18	R	71/73 (97%)	67 (94%)	4 (6%)	0	100 100
19	S	79/81 (98%)	71 (90%)	7 (9%)	1 (1%)	10 38
20	T	97/99 (98%)	85 (88%)	12 (12%)	0	100 100
21	U	23/25 (92%)	22 (96%)	1 (4%)	0	100 100
All	All	2352/2393 (98%)	2186 (93%)	159 (7%)	7 (0%)	37 68

5 of 7 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
12	L	28	LYS

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Mol	Chain	Res	Type
19	S	31	ILE
10	J	72	VAL
9	I	119	ALA
10	J	34	VAL

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	B	194/204 (95%)	181 (93%)	13 (7%)	13 40
3	C	160/161 (99%)	155 (97%)	5 (3%)	35 63
4	D	180/180 (100%)	168 (93%)	12 (7%)	13 40
5	E	115/116 (99%)	104 (90%)	11 (10%)	7 27
6	F	90/90 (100%)	84 (93%)	6 (7%)	13 40
7	G	126/126 (100%)	118 (94%)	8 (6%)	15 42
8	H	119/119 (100%)	109 (92%)	10 (8%)	9 31
9	I	98/98 (100%)	91 (93%)	7 (7%)	12 38
10	J	87/89 (98%)	81 (93%)	6 (7%)	13 39
11	K	90/90 (100%)	86 (96%)	4 (4%)	24 52
12	L	103/103 (100%)	92 (89%)	11 (11%)	5 23
13	M	94/94 (100%)	83 (88%)	11 (12%)	4 20
14	N	49/49 (100%)	47 (96%)	2 (4%)	26 54
15	O	79/79 (100%)	70 (89%)	9 (11%)	4 20
16	P	72/72 (100%)	69 (96%)	3 (4%)	25 53
17	Q	94/94 (100%)	89 (95%)	5 (5%)	19 46
18	R	64/64 (100%)	60 (94%)	4 (6%)	15 42
19	S	71/71 (100%)	62 (87%)	9 (13%)	3 17
20	T	76/76 (100%)	67 (88%)	9 (12%)	4 19
21	U	19/20 (95%)	17 (90%)	2 (10%)	5 24

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	1980/1995 (99%)	1833 (93%)	147 (7%)	11 36

5 of 147 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
16	P	2	VAL
20	T	75	ASN
17	Q	52	LYS
19	S	25	LYS
7	G	47	CYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 8 such sidechains are listed below:

Mol	Chain	Res	Type
20	T	18	GLN
12	L	49	ASN
7	G	122	HIS
6	F	100	ASN
9	I	73	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	A	1507/1522 (99%)	231 (15%)	40 (2%)
22	a	5/6 (83%)	1 (20%)	0
23	b	8/11 (72%)	2 (25%)	0
All	All	1520/1539 (98%)	234 (15%)	40 (2%)

5 of 234 RNA backbone outliers are listed below:

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

5 of 40 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	A	1179	A
1	A	1331	G
1	A	1182	G
1	A	1281	U
1	A	1443	G

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

18 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	$\#\|Z\| > 2$
1	2MG	A	1207	1	18,26,27	1.34	4 (22%)	16,38,41	1.50	2 (12%)
1	MA6	A	1518	1	19,26,27	0.96	2 (10%)	18,38,41	0.76	0
1	MA6	A	1519	1	19,26,27	1.02	1 (5%)	18,38,41	0.71	0
1	5MC	A	1400	1	19,22,23	1.10	2 (10%)	26,32,35	1.04	3 (11%)
1	PSU	A	1540	1	18,21,22	1.94	7 (38%)	21,30,33	1.61	4 (19%)
1	M2G	A	966	1	20,27,28	1.38	4 (20%)	19,40,43	1.28	2 (10%)
1	PSU	A	516	25,1	18,21,22	2.02	7 (38%)	21,30,33	1.51	4 (19%)
1	5MC	A	967	1	19,22,23	1.07	2 (10%)	26,32,35	0.98	2 (7%)
1	5MC	A	1404	1	19,22,23	1.10	1 (5%)	26,32,35	0.94	2 (7%)
23	70U	b	34	23,22	22,26,27	3.54	10 (45%)	27,37,40	1.70	6 (22%)
23	12A	b	37	25,23	28,36,37	2.51	3 (10%)	30,52,55	2.24	7 (23%)
23	PSU	b	39	23	18,21,22	1.94	7 (38%)	21,30,33	1.62	4 (19%)
1	PSU	A	1541	25,1	18,21,22	1.92	7 (38%)	21,30,33	1.62	3 (14%)
1	4OC	A	1402	1	20,23,24	0.95	2 (10%)	25,32,35	0.77	0
12	0TD	L	92	12	8,9,10	2.39	1 (12%)	6,11,13	2.01	2 (33%)
1	7MG	A	527	1	23,26,27	4.32	4 (17%)	27,39,42	2.20	9 (33%)
1	5MC	A	1407	1	19,22,23	1.01	0	26,32,35	1.00	2 (7%)
1	UR3	A	1498	1	19,22,23	0.65	0	26,32,35	1.05	1 (3%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral

centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	2MG	A	1207	1	-	0/5/27/28	0/3/3/3
1	MA6	A	1518	1	-	2/7/29/30	0/3/3/3
1	MA6	A	1519	1	-	3/7/29/30	0/3/3/3
1	5MC	A	1400	1	-	2/7/25/26	0/2/2/2
1	PSU	A	1540	1	-	1/7/25/26	0/2/2/2
1	M2G	A	966	1	-	3/7/29/30	0/3/3/3
1	PSU	A	516	25,1	-	0/7/25/26	0/2/2/2
1	5MC	A	967	1	-	2/7/25/26	0/2/2/2
1	5MC	A	1404	1	-	0/7/25/26	0/2/2/2
23	70U	b	34	23,22	-	8/13/31/32	0/2/2/2
23	12A	b	37	25,23	-	6/21/43/44	0/3/3/3
23	PSU	b	39	23	-	2/7/25/26	0/2/2/2
1	PSU	A	1541	25,1	-	1/7/25/26	0/2/2/2
1	4OC	A	1402	1	-	2/9/29/30	0/2/2/2
12	0TD	L	92	12	-	2/7/12/14	-
1	7MG	A	527	1	-	2/7/37/38	0/3/3/3
1	5MC	A	1407	1	-	0/7/25/26	0/2/2/2
1	UR3	A	1498	1	-	0/7/25/26	0/2/2/2

The worst 5 of 64 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	527	7MG	C8-N9	-19.77	1.33	1.45
23	b	37	12A	C2-S2	10.91	1.84	1.75
23	b	34	70U	O4-C4	8.70	1.40	1.23
23	b	34	70U	C2-S2	8.30	1.81	1.67
12	L	92	0TD	CB-CA	-6.25	1.52	1.54

The worst 5 of 53 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	b	37	12A	C2M-S2-C2	8.76	108.82	102.25
1	A	527	7MG	C5-C6-N1	4.92	119.59	110.94
23	b	34	70U	C5M-C5-C4	4.77	124.46	118.00
1	A	527	7MG	N9-C4-N3	4.70	132.34	125.46
1	A	527	7MG	C2-N3-C4	4.65	120.30	112.30

There are no chirality outliers.

5 of 36 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	966	M2G	C4'-C5'-O5'-P
1	A	967	5MC	O4'-C4'-C5'-O5'
1	A	1402	4OC	O4'-C4'-C5'-O5'
1	A	1519	MA6	O4'-C4'-C5'-O5'
23	b	34	70U	C4-C5-C5M-C8

There are no ring outliers.

4 monomers are involved in 9 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	A	1519	MA6	1	0
1	A	1400	5MC	1	0
1	A	1402	4OC	3	0
12	L	92	0TD	4	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 317 ligands modelled in this entry, 311 are monoatomic - leaving 6 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	$\#\|Z\| > 2$
24	PAR	A	1605	-	44,45,45	1.26	5 (11%)	63,67,67	1.64	11 (17%)
24	PAR	A	1603	-	44,45,45	1.42	5 (11%)	63,67,67	1.67	12 (19%)
24	PAR	A	1606	-	44,45,45	1.46	6 (13%)	63,67,67	1.62	10 (15%)
24	PAR	A	1602	-	44,45,45	1.34	7 (15%)	63,67,67	1.66	11 (17%)
24	PAR	A	1601	-	44,45,45	1.25	7 (15%)	63,67,67	1.64	11 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	PAR	A	1604	-	44,45,45	1.29	5 (11%)	63,67,67	1.65	12 (19%)

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
24	PAR	A	1605	-	-	4/18/94/94	1/4/4/4
24	PAR	A	1603	-	-	7/18/94/94	1/4/4/4
24	PAR	A	1606	-	-	7/18/94/94	0/4/4/4
24	PAR	A	1602	-	-	4/18/94/94	0/4/4/4
24	PAR	A	1601	-	-	6/18/94/94	0/4/4/4
24	PAR	A	1604	-	-	6/18/94/94	1/4/4/4

The worst 5 of 35 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	1603	PAR	C13-C23	4.84	1.59	1.52
24	A	1606	PAR	C13-C23	4.05	1.58	1.52
24	A	1606	PAR	C52-C42	4.03	1.60	1.52
24	A	1601	PAR	C52-C42	3.98	1.60	1.52
24	A	1603	PAR	C52-C42	3.68	1.59	1.52

The worst 5 of 67 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	A	1604	PAR	O33-C14-C24	6.57	118.83	108.08
24	A	1601	PAR	O33-C14-C24	6.55	118.80	108.08
24	A	1602	PAR	O33-C14-C24	6.55	118.80	108.08
24	A	1603	PAR	O33-C14-C24	6.55	118.80	108.08
24	A	1606	PAR	O33-C14-C24	6.51	118.74	108.08

There are no chirality outliers.

5 of 34 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	1601	PAR	C43-C33-O33-C14
24	A	1601	PAR	C44-C54-C64-N64
24	A	1602	PAR	C23-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
24	A	1602	PAR	O43-C13-O52-C52
24	A	1603	PAR	C44-C54-C64-N64

All (3) ring outliers are listed below:

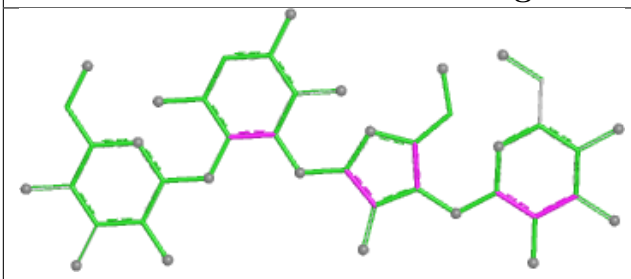
Mol	Chain	Res	Type	Atoms
24	A	1603	PAR	C12-C22-C32-C42-C52-C62
24	A	1605	PAR	C12-C22-C32-C42-C52-C62
24	A	1604	PAR	C12-C22-C32-C42-C52-C62

6 monomers are involved in 11 short contacts:

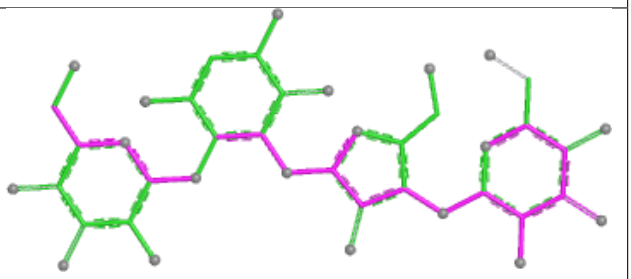
Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A	1605	PAR	1	0
24	A	1603	PAR	4	0
24	A	1606	PAR	1	0
24	A	1602	PAR	2	0
24	A	1601	PAR	1	0
24	A	1604	PAR	2	0

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 then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

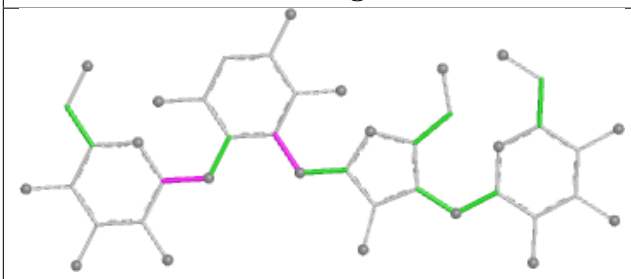
Ligand PAR A 1605



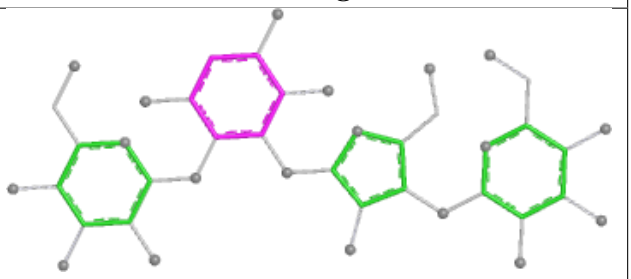
Bond lengths



Bond angles

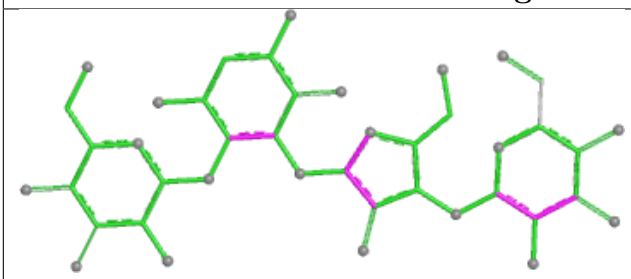


Torsions

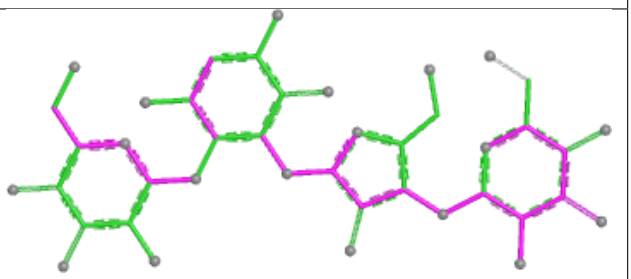


Rings

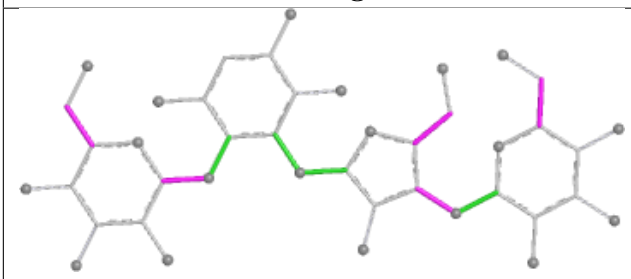
Ligand PAR A 1603



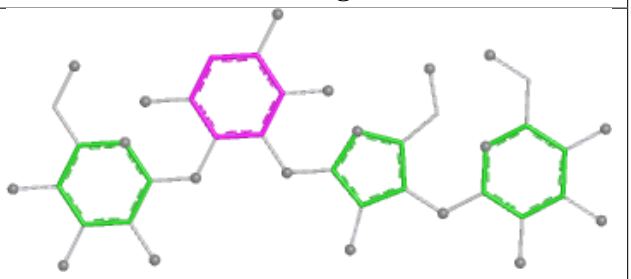
Bond lengths



Bond angles

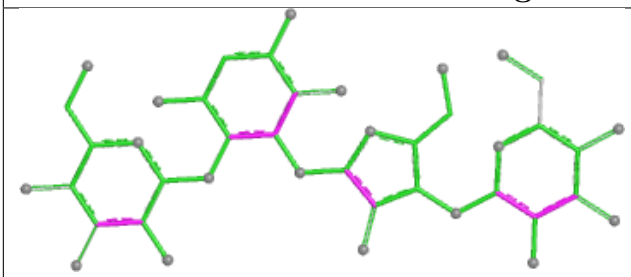


Torsions

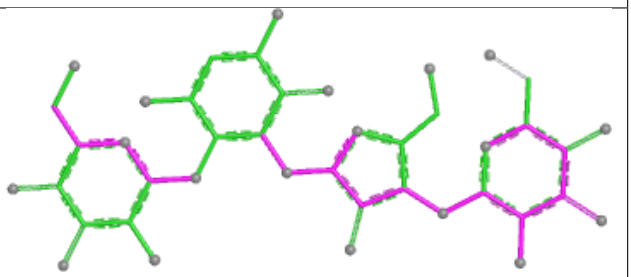


Rings

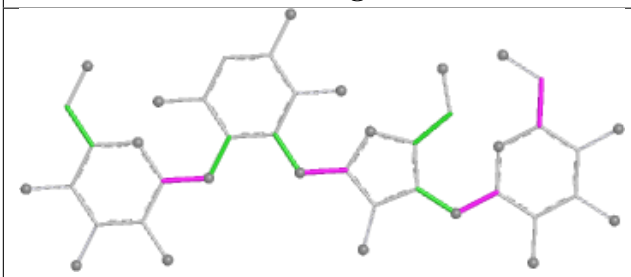
Ligand PAR A 1606



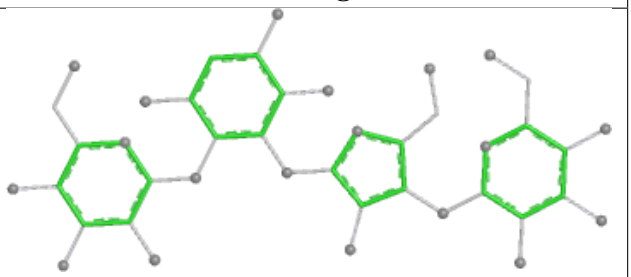
Bond lengths



Bond angles

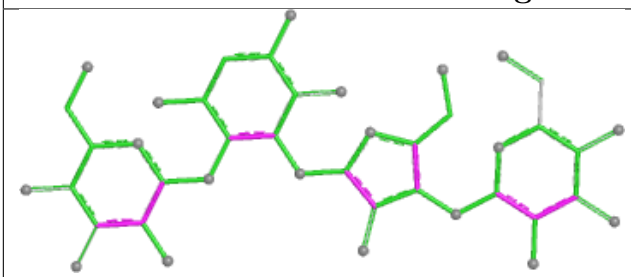


Torsions

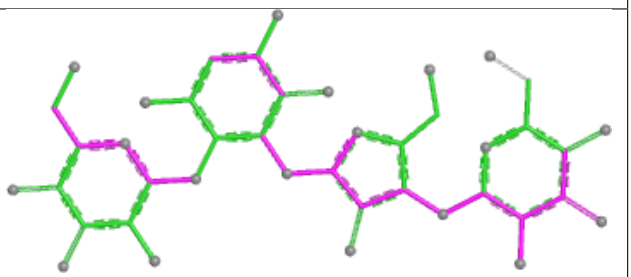


Rings

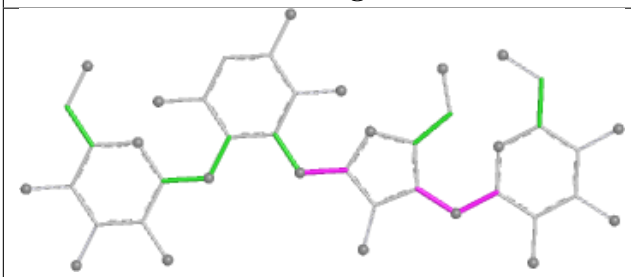
Ligand PAR A 1602



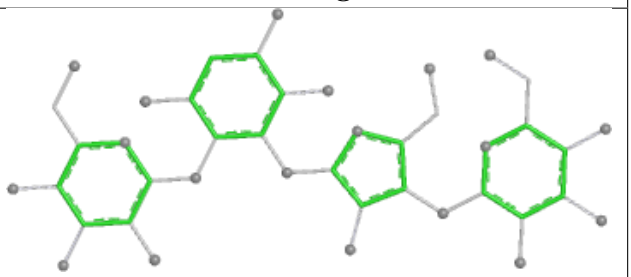
Bond lengths



Bond angles

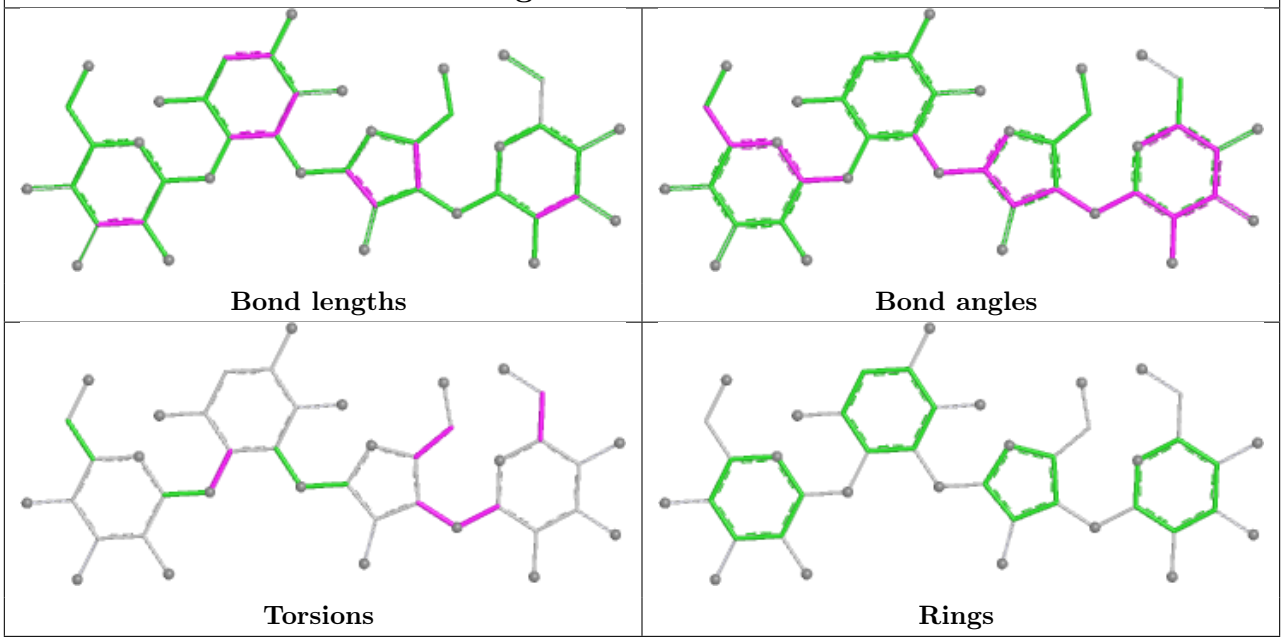


Torsions

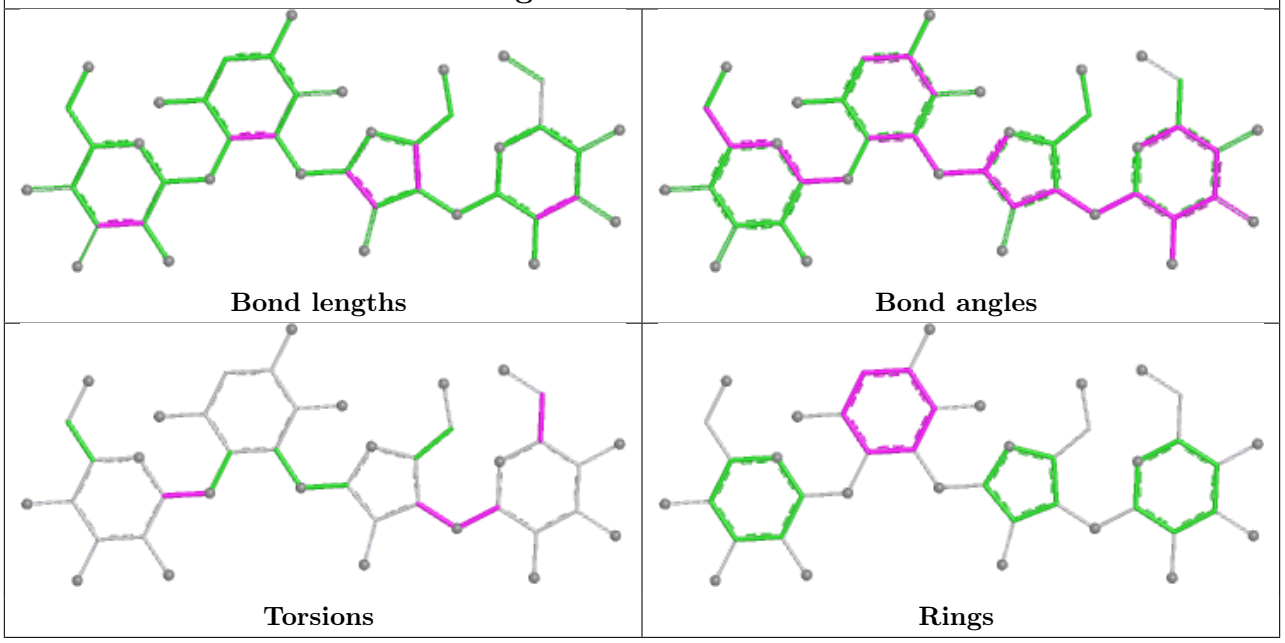


Rings

Ligand PAR A 1601



Ligand PAR A 1604



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

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	1498/1522 (98%)	-0.43	8 (0%) 87 78	59, 85, 160, 268	0
2	B	236/236 (100%)	-0.05	6 (2%) 58 44	64, 122, 200, 249	0
3	C	207/207 (100%)	-0.06	3 (1%) 73 57	51, 118, 164, 206	0
4	D	208/208 (100%)	0.08	13 (6%) 27 23	65, 93, 142, 179	0
5	E	151/151 (100%)	-0.14	2 (1%) 74 59	51, 83, 120, 214	0
6	F	101/101 (100%)	-0.25	0 100 100	82, 115, 150, 182	0
7	G	155/155 (100%)	0.01	6 (3%) 44 33	76, 103, 163, 256	0
8	H	138/138 (100%)	-0.37	0 100 100	55, 78, 104, 134	0
9	I	127/127 (100%)	0.21	6 (4%) 37 29	89, 121, 167, 198	0
10	J	99/99 (100%)	0.75	12 (12%) 10 10	72, 149, 243, 315	0
11	K	119/119 (100%)	0.20	6 (5%) 35 28	64, 87, 135, 187	0
12	L	124/125 (99%)	0.19	8 (6%) 26 22	52, 83, 137, 254	0
13	M	118/118 (100%)	0.18	6 (5%) 34 27	69, 103, 146, 225	0
14	N	60/60 (100%)	0.49	2 (3%) 49 37	84, 107, 145, 226	0
15	O	88/88 (100%)	-0.12	2 (2%) 61 46	66, 93, 148, 180	0
16	P	84/84 (100%)	0.01	0 100 100	63, 79, 106, 172	0
17	Q	99/99 (100%)	-0.07	2 (2%) 64 49	58, 81, 130, 157	0
18	R	73/73 (100%)	-0.16	0 100 100	62, 100, 161, 218	0
19	S	81/81 (100%)	0.40	5 (6%) 28 24	43, 122, 195, 234	0
20	T	99/99 (100%)	0.14	6 (6%) 28 24	64, 80, 134, 184	0
21	U	25/25 (100%)	0.98	4 (16%) 6 7	56, 105, 153, 179	0
22	a	6/6 (100%)	-0.17	0 100 100	85, 99, 114, 129	0
23	b	8/11 (72%)	0.71	1 (12%) 9 10	92, 133, 188, 212	0
All	All	3904/3932 (99%)	-0.13	98 (2%) 58 44	43, 95, 167, 315	0

The worst 5 of 98 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
11	K	129	SER	7.9
11	K	128	ALA	7.5
13	M	8	GLU	6.4
19	S	3	ARG	6.2
4	D	31	CYS	5.9

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	PSU	A	1540	20/21	0.86	0.20	179,185,198,202	0
1	PSU	A	516	20/21	0.88	0.11	88,95,107,108	0
23	PSU	b	39	20/21	0.88	0.11	113,131,153,156	0
1	PSU	A	1541	20/21	0.89	0.20	175,188,215,219	0
12	0TD	L	92	10/11	0.91	0.20	75,104,119,121	0
23	12A	b	37	34/35	0.92	0.13	79,96,123,125	0
23	70U	b	34	25/26	0.92	0.13	89,109,130,140	0
1	5MC	A	967	21/22	0.94	0.11	83,87,94,99	0
1	UR3	A	1498	21/22	0.94	0.12	67,68,71,71	0
1	M2G	A	966	25/26	0.95	0.10	80,84,98,102	0
1	2MG	A	1207	24/25	0.96	0.08	101,106,112,114	0
1	5MC	A	1400	21/22	0.97	0.08	72,74,90,93	0
1	4OC	A	1402	22/23	0.97	0.09	71,73,77,85	0
1	5MC	A	1407	21/22	0.97	0.08	73,74,76,76	0
1	7MG	A	527	24/25	0.97	0.08	71,73,75,76	0
1	MA6	A	1518	24/25	0.97	0.09	67,69,70,71	0
1	MA6	A	1519	24/25	0.97	0.11	66,67,68,68	0
1	5MC	A	1404	21/22	0.98	0.08	68,69,71,72	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
26	K	A	1890	1/1	0.40	0.21	144,144,144,144	0
25	MG	A	1715	1/1	0.47	0.38	101,101,101,101	0
25	MG	A	1764	1/1	0.55	0.62	85,85,85,85	0
25	MG	A	1784	1/1	0.57	0.38	115,115,115,115	0
25	MG	A	1798	1/1	0.59	0.40	72,72,72,72	0
25	MG	A	1714	1/1	0.60	0.26	102,102,102,102	0
25	MG	A	1724	1/1	0.62	0.18	75,75,75,75	0
26	K	A	1879	1/1	0.64	0.22	132,132,132,132	0
26	K	A	1887	1/1	0.64	0.18	106,106,106,106	0
25	MG	A	1634	1/1	0.64	0.13	95,95,95,95	0
25	MG	A	1726	1/1	0.65	0.27	157,157,157,157	0
25	MG	A	1836	1/1	0.65	0.28	92,92,92,92	0
26	K	A	1872	1/1	0.65	0.26	139,139,139,139	0
25	MG	A	1708	1/1	0.67	0.21	156,156,156,156	0
26	K	A	1883	1/1	0.68	0.25	141,141,141,141	0
26	K	A	1875	1/1	0.68	0.15	126,126,126,126	0
25	MG	A	1801	1/1	0.68	0.10	257,257,257,257	0
25	MG	A	1683	1/1	0.71	0.13	92,92,92,92	0
25	MG	A	1643	1/1	0.71	0.28	74,74,74,74	0
25	MG	A	1805	1/1	0.71	0.53	79,79,79,79	0
26	K	A	1878	1/1	0.71	0.31	166,166,166,166	0
25	MG	A	1859	1/1	0.72	0.19	82,82,82,82	0
25	MG	A	1800	1/1	0.72	0.21	213,213,213,213	0
25	MG	A	1808	1/1	0.72	0.66	87,87,87,87	0
25	MG	A	1790	1/1	0.72	0.27	84,84,84,84	0
25	MG	A	1639	1/1	0.73	0.20	175,175,175,175	0
25	MG	A	1856	1/1	0.73	0.10	80,80,80,80	0
25	MG	A	1781	1/1	0.73	0.54	78,78,78,78	0
25	MG	A	1647	1/1	0.73	0.23	73,73,73,73	0
25	MG	A	1811	1/1	0.73	0.24	61,61,61,61	0
25	MG	C	301	1/1	0.74	0.11	70,70,70,70	0
25	MG	A	1812	1/1	0.74	0.23	69,69,69,69	0
25	MG	A	1697	1/1	0.75	0.18	70,70,70,70	0
25	MG	A	1712	1/1	0.76	0.54	235,235,235,235	0
25	MG	A	1674	1/1	0.76	0.24	107,107,107,107	0
25	MG	A	1729	1/1	0.76	0.19	59,59,59,59	0
25	MG	A	1795	1/1	0.76	0.33	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1860	1/1	0.76	0.26	72,72,72,72	0
25	MG	A	1863	1/1	0.76	0.13	66,66,66,66	0
25	MG	A	1640	1/1	0.76	0.30	90,90,90,90	0
26	K	A	1894	1/1	0.76	0.14	128,128,128,128	0
26	K	A	1871	1/1	0.77	0.38	125,125,125,125	0
25	MG	A	1703	1/1	0.77	0.28	62,62,62,62	0
26	K	A	1893	1/1	0.77	0.24	138,138,138,138	0
25	MG	Q	202	1/1	0.77	0.32	83,83,83,83	0
26	K	A	1889	1/1	0.78	0.15	106,106,106,106	0
25	MG	A	1762	1/1	0.78	0.45	74,74,74,74	0
26	K	A	1888	1/1	0.79	0.18	140,140,140,140	0
25	MG	A	1616	1/1	0.79	0.19	63,63,63,63	0
25	MG	Q	201	1/1	0.79	0.17	95,95,95,95	0
25	MG	A	1839	1/1	0.79	0.28	76,76,76,76	0
26	K	A	1877	1/1	0.79	0.18	130,130,130,130	0
25	MG	A	1814	1/1	0.80	0.45	85,85,85,85	0
25	MG	A	1818	1/1	0.80	0.28	74,74,74,74	0
25	MG	A	1688	1/1	0.80	0.30	159,159,159,159	0
25	MG	A	1740	1/1	0.80	0.21	88,88,88,88	0
25	MG	A	1759	1/1	0.80	0.29	82,82,82,82	0
25	MG	A	1723	1/1	0.80	0.29	72,72,72,72	0
26	K	A	1880	1/1	0.80	0.17	96,96,96,96	0
26	K	A	1881	1/1	0.80	0.21	138,138,138,138	0
25	MG	A	1679	1/1	0.80	0.35	207,207,207,207	0
25	MG	A	1769	1/1	0.80	0.18	101,101,101,101	0
25	MG	A	1779	1/1	0.80	0.28	96,96,96,96	0
25	MG	P	102	1/1	0.80	0.16	73,73,73,73	0
25	MG	A	1725	1/1	0.80	0.24	69,69,69,69	0
25	MG	A	1675	1/1	0.80	0.32	69,69,69,69	0
26	K	A	1867	1/1	0.80	0.12	113,113,113,113	0
25	MG	A	1730	1/1	0.81	0.14	70,70,70,70	0
25	MG	A	1720	1/1	0.81	0.39	228,228,228,228	0
25	MG	A	1817	1/1	0.81	0.22	76,76,76,76	0
25	MG	A	1657	1/1	0.81	0.09	48,48,48,48	0
25	MG	A	1825	1/1	0.81	0.35	83,83,83,83	0
26	K	A	1876	1/1	0.81	0.12	121,121,121,121	0
25	MG	A	1832	1/1	0.81	0.28	63,63,63,63	0
25	MG	A	1835	1/1	0.81	0.27	75,75,75,75	0
25	MG	A	1788	1/1	0.81	0.57	88,88,88,88	0
25	MG	A	1785	1/1	0.82	0.14	167,167,167,167	0
25	MG	A	1782	1/1	0.82	0.16	67,67,67,67	0
25	MG	A	1772	1/1	0.82	0.44	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
26	K	A	1873	1/1	0.82	0.20	99,99,99,99	0
25	MG	A	1826	1/1	0.82	0.46	86,86,86,86	0
25	MG	S	103	1/1	0.82	0.10	78,78,78,78	0
25	MG	A	1676	1/1	0.83	0.14	75,75,75,75	0
25	MG	A	1666	1/1	0.83	0.22	59,59,59,59	0
25	MG	A	1678	1/1	0.84	0.16	71,71,71,71	0
25	MG	A	1761	1/1	0.84	0.14	76,76,76,76	0
25	MG	A	1735	1/1	0.84	0.26	63,63,63,63	0
25	MG	A	1842	1/1	0.84	0.11	64,64,64,64	0
25	MG	A	1704	1/1	0.84	0.15	88,88,88,88	0
26	K	A	1868	1/1	0.84	0.17	130,130,130,130	0
26	K	A	1885	1/1	0.84	0.30	154,154,154,154	0
26	K	A	1870	1/1	0.84	0.36	112,112,112,112	0
25	MG	A	1741	1/1	0.84	0.30	74,74,74,74	0
25	MG	A	1744	1/1	0.84	0.22	95,95,95,95	0
25	MG	A	1829	1/1	0.84	0.18	67,67,67,67	0
25	MG	A	1773	1/1	0.84	0.14	79,79,79,79	0
25	MG	L	201	1/1	0.84	0.44	87,87,87,87	0
24	PAR	A	1605	42/42	0.85	0.23	178,184,186,188	0
25	MG	L	202	1/1	0.85	0.09	64,64,64,64	0
25	MG	A	1742	1/1	0.85	0.12	62,62,62,62	0
25	MG	A	1854	1/1	0.85	0.07	55,55,55,55	0
25	MG	A	1694	1/1	0.85	0.34	235,235,235,235	0
25	MG	A	1776	1/1	0.85	0.14	72,72,72,72	0
25	MG	A	1750	1/1	0.85	0.15	73,73,73,73	0
26	K	A	1891	1/1	0.85	0.15	122,122,122,122	0
25	MG	A	1766	1/1	0.85	0.09	53,53,53,53	0
25	MG	A	1768	1/1	0.85	0.18	60,60,60,60	0
25	MG	A	1853	1/1	0.86	0.25	75,75,75,75	0
25	MG	A	1667	1/1	0.86	0.21	53,53,53,53	0
25	MG	S	102	1/1	0.86	0.12	68,68,68,68	0
25	MG	A	1669	1/1	0.86	0.19	69,69,69,69	0
25	MG	A	1857	1/1	0.86	0.19	69,69,69,69	0
25	MG	A	1858	1/1	0.86	0.13	68,68,68,68	0
25	MG	A	1716	1/1	0.86	0.14	65,65,65,65	0
25	MG	A	1701	1/1	0.86	0.12	138,138,138,138	0
25	MG	A	1671	1/1	0.86	0.13	67,67,67,67	0
25	MG	A	1609	1/1	0.86	0.18	110,110,110,110	0
25	MG	A	1686	1/1	0.86	0.29	87,87,87,87	0
25	MG	A	1747	1/1	0.86	0.24	67,67,67,67	0
25	MG	A	1636	1/1	0.86	0.42	82,82,82,82	0
25	MG	A	1816	1/1	0.87	0.36	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1838	1/1	0.87	0.23	51,51,51,51	0
25	MG	A	1763	1/1	0.87	0.53	71,71,71,71	0
25	MG	A	1841	1/1	0.87	0.18	53,53,53,53	0
25	MG	A	1607	1/1	0.87	0.07	81,81,81,81	0
25	MG	A	1843	1/1	0.87	0.19	82,82,82,82	0
25	MG	A	1807	1/1	0.87	0.48	61,61,61,61	0
25	MG	A	1756	1/1	0.87	0.22	57,57,57,57	0
25	MG	A	1623	1/1	0.87	0.19	60,60,60,60	0
25	MG	A	1629	1/1	0.87	0.16	77,77,77,77	0
25	MG	A	1649	1/1	0.87	0.09	58,58,58,58	0
25	MG	A	1700	1/1	0.88	0.50	76,76,76,76	0
25	MG	A	1840	1/1	0.88	0.17	71,71,71,71	0
25	MG	A	1783	1/1	0.88	0.17	108,108,108,108	0
24	PAR	A	1602	42/42	0.88	0.36	148,176,197,207	0
25	MG	A	1803	1/1	0.88	0.40	71,71,71,71	0
25	MG	A	1846	1/1	0.88	0.20	70,70,70,70	0
25	MG	A	1848	1/1	0.88	0.26	70,70,70,70	0
25	MG	A	1734	1/1	0.88	0.21	84,84,84,84	0
25	MG	A	1828	1/1	0.88	0.16	55,55,55,55	0
25	MG	A	1787	1/1	0.88	0.17	125,125,125,125	0
25	MG	A	1831	1/1	0.88	0.23	52,52,52,52	0
25	MG	A	1684	1/1	0.88	0.24	72,72,72,72	0
25	MG	A	1680	1/1	0.88	0.20	75,75,75,75	0
25	MG	A	1792	1/1	0.88	0.14	104,104,104,104	0
25	MG	A	1705	1/1	0.88	0.20	56,56,56,56	0
26	K	A	1874	1/1	0.89	0.22	114,114,114,114	0
25	MG	D	302	1/1	0.89	0.15	80,80,80,80	0
25	MG	F	201	1/1	0.89	0.06	65,65,65,65	0
25	MG	A	1819	1/1	0.89	0.12	57,57,57,57	0
25	MG	A	1732	1/1	0.89	0.24	61,61,61,61	0
25	MG	A	1760	1/1	0.89	0.21	69,69,69,69	0
25	MG	A	1635	1/1	0.89	0.09	43,43,43,43	0
25	MG	A	1646	1/1	0.89	0.18	80,80,80,80	0
25	MG	A	1687	1/1	0.89	0.10	82,82,82,82	0
25	MG	A	1624	1/1	0.89	0.16	76,76,76,76	0
25	MG	b	101	1/1	0.89	0.13	79,79,79,79	0
25	MG	A	1618	1/1	0.89	0.12	94,94,94,94	0
25	MG	A	1709	1/1	0.89	0.08	66,66,66,66	0
25	MG	A	1672	1/1	0.89	0.34	73,73,73,73	0
25	MG	A	1713	1/1	0.89	0.14	209,209,209,209	0
24	PAR	A	1604	42/42	0.89	0.21	98,143,203,207	0
25	MG	A	1758	1/1	0.89	0.25	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1665	1/1	0.90	0.13	89,89,89,89	0
25	MG	A	1820	1/1	0.90	0.22	71,71,71,71	0
25	MG	A	1823	1/1	0.90	0.28	68,68,68,68	0
25	MG	A	1736	1/1	0.90	0.77	85,85,85,85	0
25	MG	A	1753	1/1	0.90	0.11	52,52,52,52	0
25	MG	A	1754	1/1	0.90	0.13	54,54,54,54	0
25	MG	A	1780	1/1	0.90	0.41	60,60,60,60	0
25	MG	A	1656	1/1	0.90	0.08	34,34,34,34	0
25	MG	A	1770	1/1	0.90	0.29	40,40,40,40	0
26	K	A	1892	1/1	0.90	0.29	116,116,116,116	0
25	MG	A	1866	1/1	0.90	0.09	65,65,65,65	0
25	MG	A	1847	1/1	0.90	0.21	70,70,70,70	0
25	MG	A	1804	1/1	0.91	0.33	61,61,61,61	0
25	MG	A	1824	1/1	0.91	0.28	69,69,69,69	0
25	MG	A	1786	1/1	0.91	0.15	185,185,185,185	0
25	MG	A	1673	1/1	0.91	0.10	100,100,100,100	0
25	MG	A	1695	1/1	0.91	0.31	59,59,59,59	0
25	MG	A	1810	1/1	0.91	0.25	64,64,64,64	0
25	MG	S	101	1/1	0.91	0.16	49,49,49,49	0
25	MG	A	1752	1/1	0.91	0.18	58,58,58,58	0
25	MG	A	1685	1/1	0.91	0.28	51,51,51,51	0
25	MG	A	1793	1/1	0.91	0.25	76,76,76,76	0
25	MG	A	1815	1/1	0.91	0.12	68,68,68,68	0
25	MG	A	1711	1/1	0.91	0.18	43,43,43,43	0
24	PAR	A	1603	42/42	0.91	0.27	101,140,178,184	0
25	MG	A	1865	1/1	0.91	0.34	80,80,80,80	0
24	PAR	A	1606	42/42	0.91	0.27	138,156,165,169	0
25	MG	A	1660	1/1	0.91	0.22	78,78,78,78	0
25	MG	A	1692	1/1	0.91	0.11	104,104,104,104	0
25	MG	A	1749	1/1	0.92	0.38	98,98,98,98	0
25	MG	A	1777	1/1	0.92	0.37	92,92,92,92	0
25	MG	A	1809	1/1	0.92	0.27	42,42,42,42	0
25	MG	A	1706	1/1	0.92	0.14	115,115,115,115	0
25	MG	A	1751	1/1	0.92	0.08	39,39,39,39	0
25	MG	A	1849	1/1	0.92	0.08	42,42,42,42	0
25	MG	A	1850	1/1	0.92	0.19	51,51,51,51	0
25	MG	A	1852	1/1	0.92	0.19	61,61,61,61	0
25	MG	A	1610	1/1	0.92	0.12	98,98,98,98	0
25	MG	A	1796	1/1	0.92	0.08	70,70,70,70	0
26	K	A	1884	1/1	0.92	0.09	150,150,150,150	0
25	MG	A	1644	1/1	0.92	0.10	141,141,141,141	0
26	K	A	1886	1/1	0.92	0.06	105,105,105,105	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1662	1/1	0.92	0.15	78,78,78,78	0
25	MG	A	1625	1/1	0.92	0.34	81,81,81,81	0
25	MG	A	1733	1/1	0.92	0.20	82,82,82,82	0
25	MG	A	1681	1/1	0.92	0.12	69,69,69,69	0
26	K	A	1869	1/1	0.92	0.21	160,160,160,160	0
25	MG	A	1861	1/1	0.92	0.14	60,60,60,60	0
25	MG	A	1748	1/1	0.92	0.07	50,50,50,50	0
25	MG	A	1822	1/1	0.92	0.32	69,69,69,69	0
25	MG	A	1707	1/1	0.93	0.12	44,44,44,44	0
25	MG	A	1661	1/1	0.93	0.35	152,152,152,152	0
25	MG	A	1621	1/1	0.93	0.10	74,74,74,74	0
25	MG	A	1821	1/1	0.93	0.30	78,78,78,78	0
25	MG	A	1845	1/1	0.93	0.19	68,68,68,68	0
25	MG	A	1745	1/1	0.93	0.19	44,44,44,44	0
25	MG	A	1655	1/1	0.93	0.09	83,83,83,83	0
25	MG	A	1638	1/1	0.93	0.27	64,64,64,64	0
24	PAR	A	1601	42/42	0.93	0.14	59,68,108,122	0
25	MG	P	103	1/1	0.93	0.12	76,76,76,76	0
26	K	A	1882	1/1	0.93	0.09	85,85,85,85	0
25	MG	P	104	1/1	0.93	0.22	80,80,80,80	0
25	MG	A	1731	1/1	0.93	0.24	76,76,76,76	0
25	MG	A	1658	1/1	0.93	0.09	78,78,78,78	0
25	MG	A	1670	1/1	0.93	0.17	41,41,41,41	0
25	MG	A	1789	1/1	0.93	0.28	80,80,80,80	0
25	MG	A	1771	1/1	0.93	0.59	67,67,67,67	0
25	MG	A	1834	1/1	0.93	0.07	35,35,35,35	0
25	MG	A	1691	1/1	0.93	0.09	65,65,65,65	0
25	MG	A	1719	1/1	0.93	0.32	50,50,50,50	0
25	MG	A	1626	1/1	0.93	0.11	51,51,51,51	0
25	MG	A	1722	1/1	0.93	0.17	39,39,39,39	0
25	MG	A	1862	1/1	0.93	0.17	81,81,81,81	0
26	K	G	202	1/1	0.93	0.12	153,153,153,153	0
25	MG	A	1791	1/1	0.94	0.32	60,60,60,60	0
25	MG	A	1693	1/1	0.94	0.17	67,67,67,67	0
25	MG	A	1830	1/1	0.94	0.25	40,40,40,40	0
25	MG	A	1813	1/1	0.94	0.16	58,58,58,58	0
25	MG	A	1682	1/1	0.94	0.09	81,81,81,81	0
25	MG	A	1663	1/1	0.94	0.10	64,64,64,64	0
25	MG	A	1710	1/1	0.94	0.10	62,62,62,62	0
25	MG	A	1641	1/1	0.94	0.10	57,57,57,57	0
25	MG	A	1699	1/1	0.94	0.21	46,46,46,46	0
25	MG	T	201	1/1	0.94	0.21	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1613	1/1	0.94	0.37	68,68,68,68	0
25	MG	A	1619	1/1	0.94	0.09	87,87,87,87	0
25	MG	A	1645	1/1	0.94	0.10	48,48,48,48	0
25	MG	A	1630	1/1	0.94	0.25	25,25,25,25	0
25	MG	A	1717	1/1	0.94	0.23	44,44,44,44	0
25	MG	A	1844	1/1	0.94	0.06	49,49,49,49	0
25	MG	A	1631	1/1	0.94	0.13	69,69,69,69	0
25	MG	A	1608	1/1	0.94	0.13	84,84,84,84	0
25	MG	A	1739	1/1	0.94	0.12	54,54,54,54	0
25	MG	A	1827	1/1	0.94	0.16	58,58,58,58	0
25	MG	A	1833	1/1	0.95	0.19	55,55,55,55	0
25	MG	A	1743	1/1	0.95	0.06	52,52,52,52	0
25	MG	A	1864	1/1	0.95	0.36	70,70,70,70	0
25	MG	A	1794	1/1	0.95	0.08	61,61,61,61	0
25	MG	A	1755	1/1	0.95	0.08	52,52,52,52	0
25	MG	A	1622	1/1	0.95	0.07	50,50,50,50	0
25	MG	A	1642	1/1	0.95	0.21	71,71,71,71	0
25	MG	A	1696	1/1	0.95	0.12	55,55,55,55	0
25	MG	H	201	1/1	0.95	0.14	48,48,48,48	0
25	MG	A	1855	1/1	0.95	0.15	55,55,55,55	0
25	MG	A	1689	1/1	0.95	0.09	79,79,79,79	0
25	MG	P	101	1/1	0.95	0.11	46,46,46,46	0
25	MG	A	1690	1/1	0.95	0.14	57,57,57,57	0
25	MG	A	1727	1/1	0.95	0.07	44,44,44,44	0
25	MG	A	1611	1/1	0.95	0.48	60,60,60,60	0
25	MG	A	1632	1/1	0.95	0.29	34,34,34,34	0
25	MG	A	1664	1/1	0.95	0.10	83,83,83,83	0
25	MG	A	1851	1/1	0.96	0.24	77,77,77,77	0
25	MG	A	1721	1/1	0.96	0.19	29,29,29,29	0
25	MG	A	1728	1/1	0.96	0.07	54,54,54,54	0
25	MG	A	1797	1/1	0.96	0.14	49,49,49,49	0
25	MG	A	1767	1/1	0.96	0.13	71,71,71,71	0
25	MG	A	1648	1/1	0.96	0.14	39,39,39,39	0
25	MG	A	1837	1/1	0.96	0.21	53,53,53,53	0
25	MG	A	1746	1/1	0.96	0.09	60,60,60,60	0
25	MG	A	1802	1/1	0.96	0.19	58,58,58,58	0
25	MG	A	1757	1/1	0.96	0.10	40,40,40,40	0
25	MG	A	1737	1/1	0.96	0.07	34,34,34,34	0
25	MG	A	1738	1/1	0.96	0.15	76,76,76,76	0
25	MG	A	1806	1/1	0.96	0.09	38,38,38,38	0
25	MG	A	1620	1/1	0.96	0.07	56,56,56,56	0
25	MG	A	1774	1/1	0.96	0.15	34,34,34,34	0

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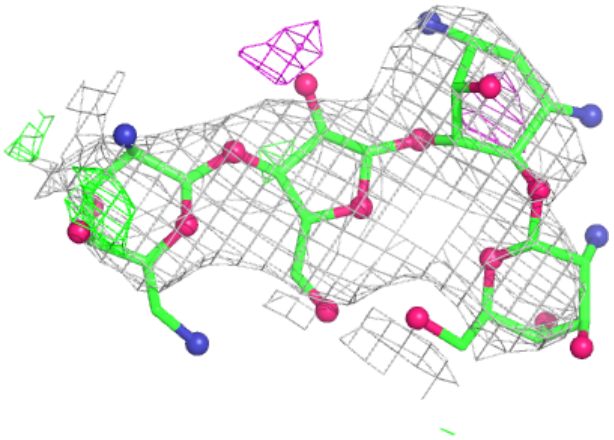
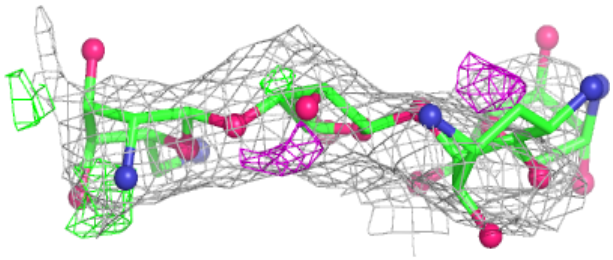
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	MG	A	1775	1/1	0.96	0.12	46,46,46,46	0
25	MG	A	1651	1/1	0.96	0.28	71,71,71,71	0
25	MG	A	1653	1/1	0.96	0.09	53,53,53,53	0
25	MG	A	1778	1/1	0.96	0.06	42,42,42,42	0
25	MG	G	201	1/1	0.96	0.08	53,53,53,53	0
25	MG	A	1698	1/1	0.96	0.10	27,27,27,27	0
25	MG	A	1677	1/1	0.97	0.14	52,52,52,52	0
25	MG	A	1895	1/1	0.97	0.10	64,64,64,64	0
25	MG	A	1702	1/1	0.97	0.09	73,73,73,73	0
25	MG	A	1628	1/1	0.97	0.07	48,48,48,48	0
25	MG	E	201	1/1	0.97	0.04	88,88,88,88	0
25	MG	A	1617	1/1	0.97	0.09	39,39,39,39	0
25	MG	A	1633	1/1	0.97	0.30	52,52,52,52	0
25	MG	A	1799	1/1	0.97	0.14	48,48,48,48	0
25	MG	A	1652	1/1	0.97	0.06	139,139,139,139	0
25	MG	A	1627	1/1	0.97	0.12	71,71,71,71	0
25	MG	A	1637	1/1	0.98	0.05	56,56,56,56	0
25	MG	A	1659	1/1	0.98	0.07	16,16,16,16	0
25	MG	A	1654	1/1	0.98	0.16	57,57,57,57	0
25	MG	A	1765	1/1	0.98	0.05	57,57,57,57	0
25	MG	A	1650	1/1	0.98	0.03	41,41,41,41	0
25	MG	A	1615	1/1	0.98	0.07	47,47,47,47	0
25	MG	A	1614	1/1	0.98	0.04	77,77,77,77	0
27	ZN	D	301	1/1	0.98	0.21	57,57,57,57	0
25	MG	A	1668	1/1	0.99	0.09	43,43,43,43	0
25	MG	A	1612	1/1	0.99	0.11	63,63,63,63	0
25	MG	A	1718	1/1	0.99	0.07	43,43,43,43	0
27	ZN	N	101	1/1	0.99	0.02	83,83,83,83	0

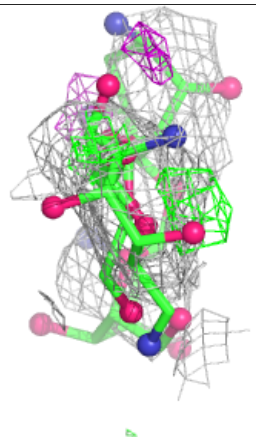
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around PAR A 1605:

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

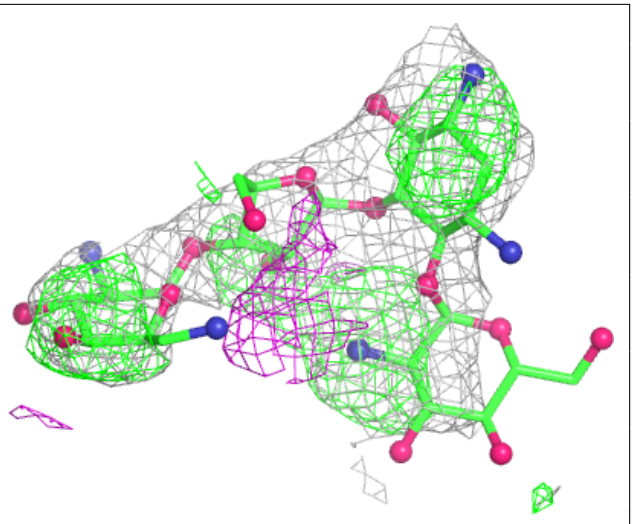


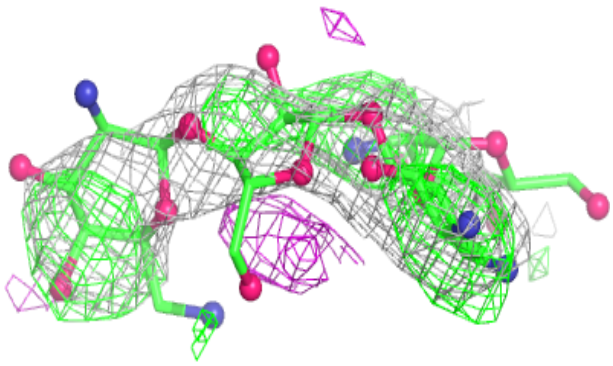


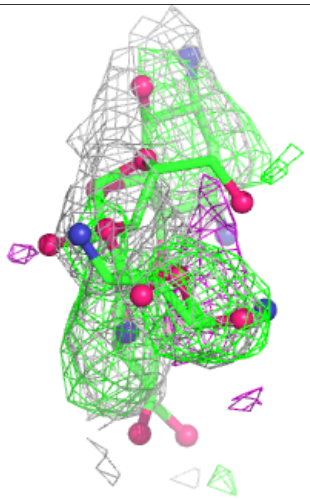


Electron density around PAR A 1602:

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

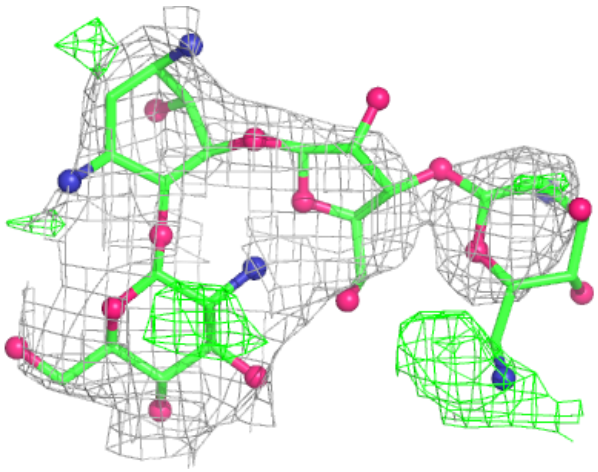


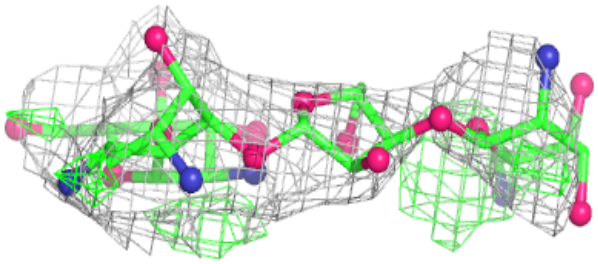


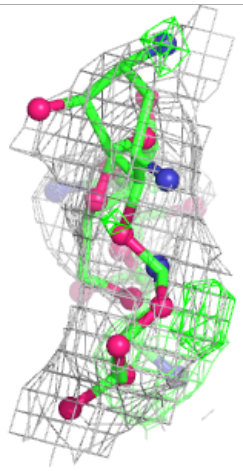


Electron density around PAR A 1604:

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

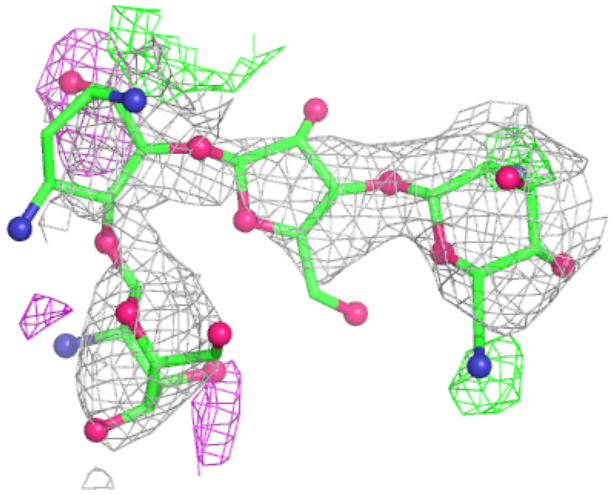


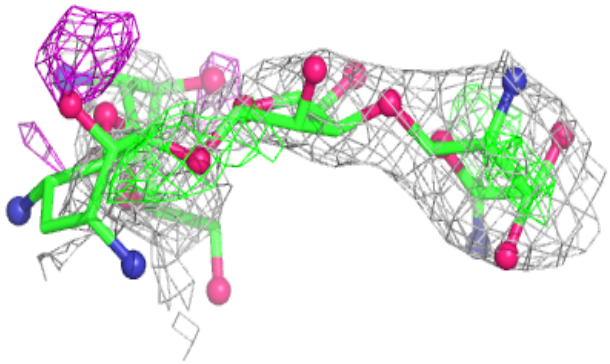


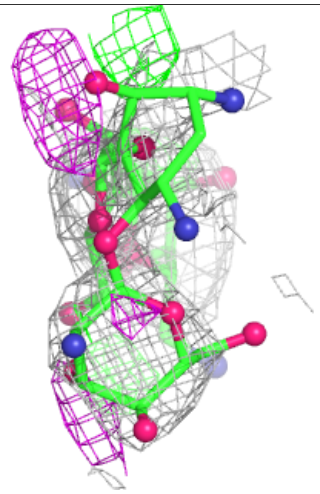


Electron density around PAR A 1603:

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

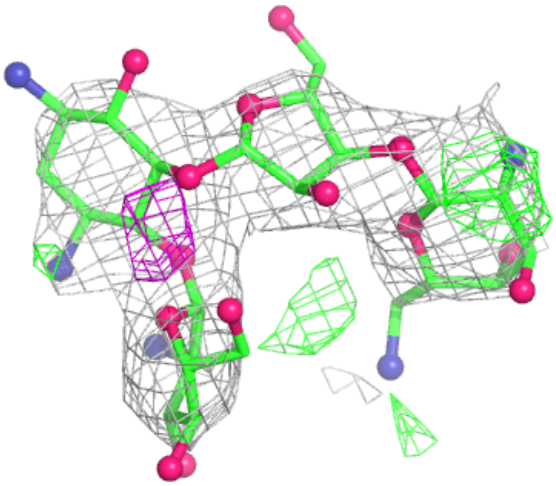


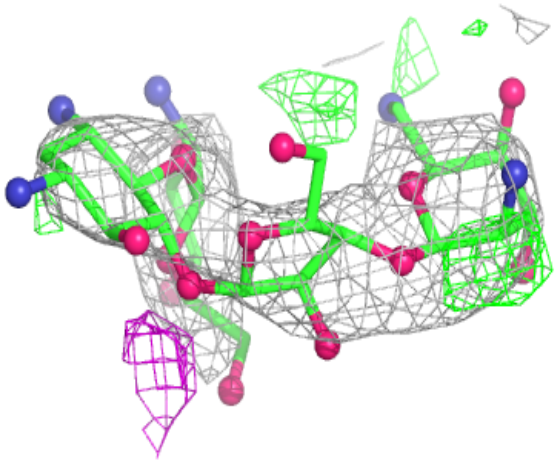


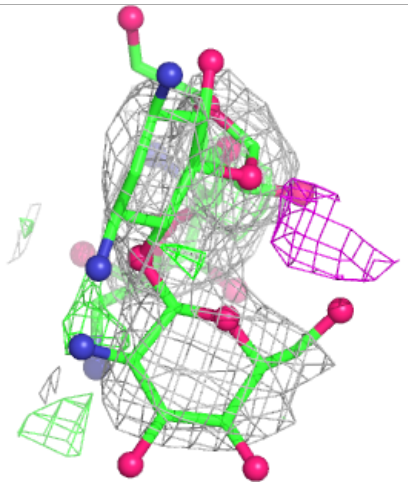


Electron density around PAR A 1606:

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

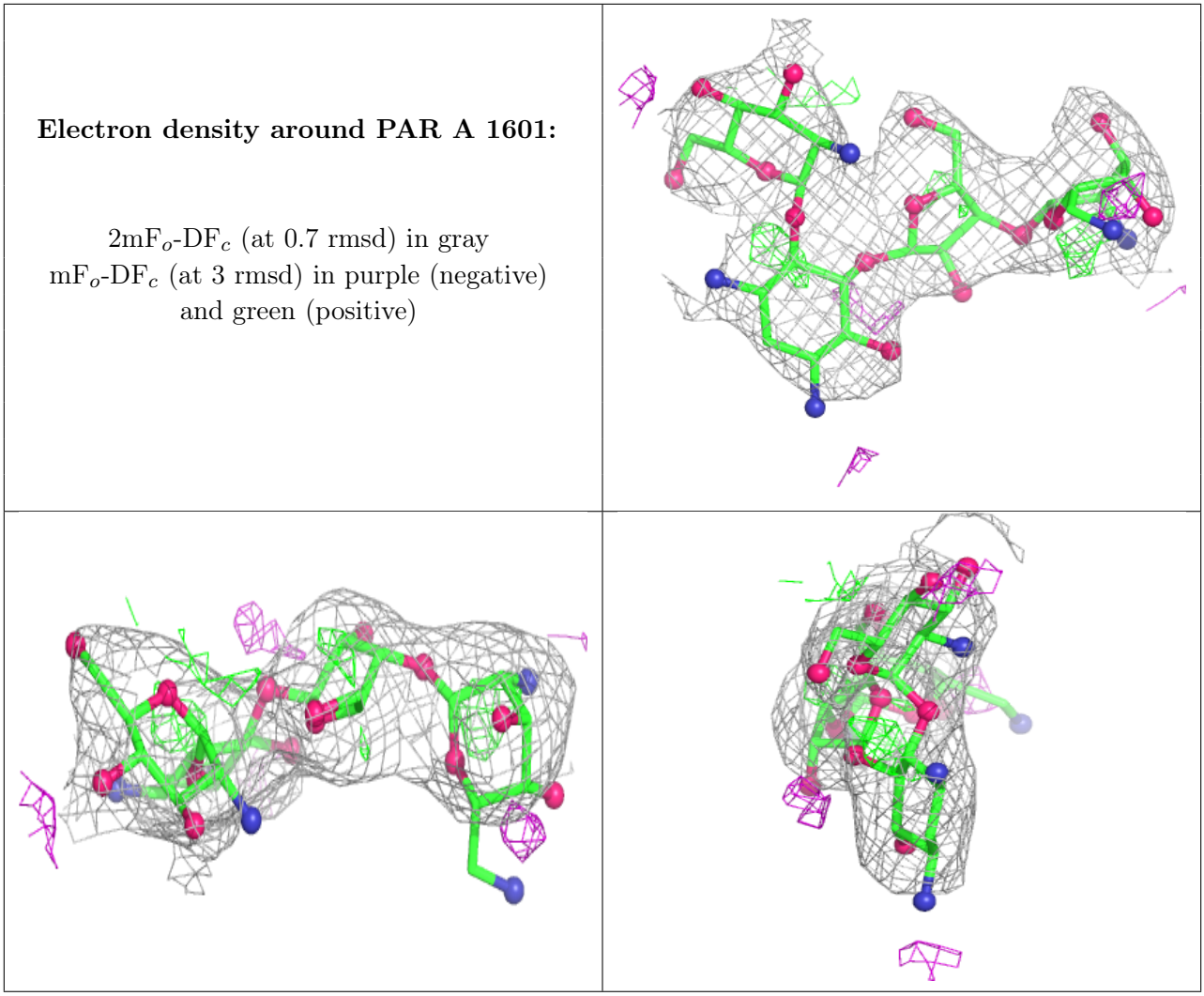






Electron density around PAR A 1601:

$2mF_o$-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

There are no such residues in this entry.