Full wwPDB X-ray Structure Validation Report ⓘ

Jun 23, 2024 – 07:51 AM EDT

PDB ID	:	5N10
Title	:	Cucurbit[8]uril and 14-3-3 based binary bivalent supramolecular-protein assembly platform
Authors	:	de Vink, P.J.; Ottmann, C.
Deposited on	:	2017-02-04
Resolution	:	1.60 Å(reported)

This is a Full wwPDB X-ray Structure Validation 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:

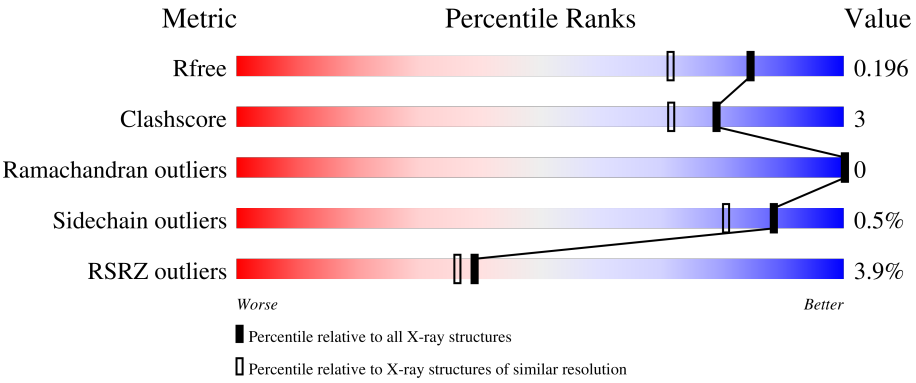
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.37.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.37.1

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 1.60 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	3398 (1.60-1.60)
Clashscore	141614	3665 (1.60-1.60)
Ramachandran outliers	138981	3564 (1.60-1.60)
Sidechain outliers	138945	3563 (1.60-1.60)
RSRZ outliers	127900	3321 (1.60-1.60)

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	C	15	93% 7%
1	D	15	7% 7% 13% 80%
1	F	15	27% 7% 67%
2	A	246	3% 88% 6% 6%
3	B	249	4% 92% 5%

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
5	C8L	C	601	X	-	-	-

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 9093 atoms, of which 4199 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 Estrogen receptor.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
1	F	5	Total C H N O P 76 26 34 5 10 1	0	0	0
1	C	15	Total C H N O P 197 66 90 15 25 1	0	1	0
1	D	3	Total C H N O 33 13 14 3 3	0	0	0

There are 9 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
F	581	PHE	-	expression tag	UNP P03372
F	582	GLY	-	expression tag	UNP P03372
F	583	GLY	-	expression tag	UNP P03372
C	581	PHE	-	expression tag	UNP P03372
C	582	GLY	-	expression tag	UNP P03372
C	583	GLY	-	expression tag	UNP P03372
D	581	PHE	-	expression tag	UNP P03372
D	582	GLY	-	expression tag	UNP P03372
D	583	GLY	-	expression tag	UNP P03372

- Molecule 2 is a protein called 14-3-3 protein beta/alpha.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
2	A	231	Total C H N O S 3914 1232 1932 332 407 11	0	29	0

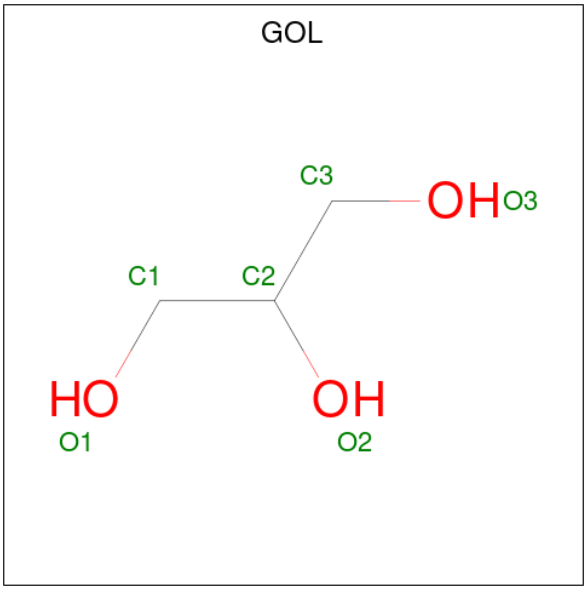
- Molecule 3 is a protein called 14-3-3 protein beta/alpha.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
3	B	236	Total C H N O S 4163 1295 2073 351 432 12	0	39	0

There are 3 discrepancies between the modelled and reference sequences:

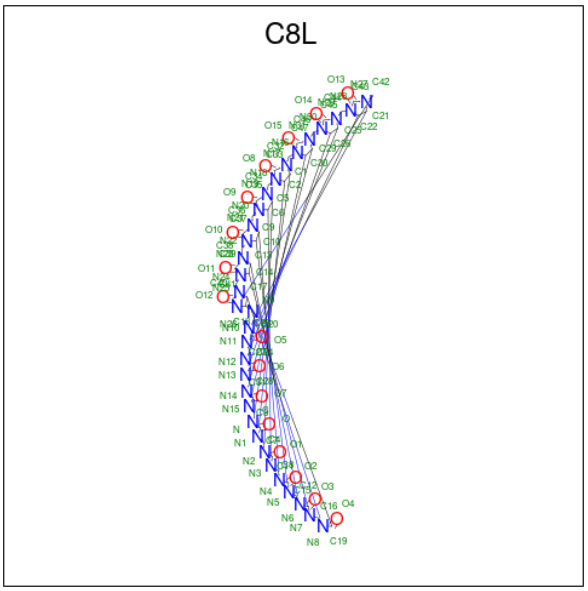
Chain	Residue	Modelled	Actual	Comment	Reference
B	-2	GLN	-	expression tag	UNP P31946
B	-1	GLY	-	expression tag	UNP P31946
B	0	SER	-	expression tag	UNP P31946

- Molecule 4 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
4	A	1	Total	C	H	O	0	0
			14	3	8	3		

- Molecule 5 is Cucurbit[8]uril (three-letter code: C8L) (formula: $C_{48}H_{48}N_{32}O_{16}$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
5	C	1	Total	C	H	N	O	0	0
			144	48	48	32	16		

- Molecule 6 is water.

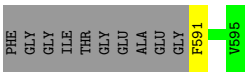
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	F	12	Total	O	0	0
			12	12		
6	A	244	Total	O	0	0
			244	244		
6	B	250	Total	O	0	0
			250	250		
6	C	45	Total	O	0	0
			45	45		
6	D	1	Total	O	0	0
			1	1		

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.

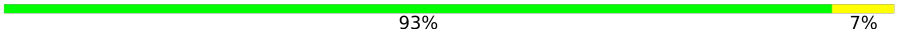
• Molecule 1: Estrogen receptor

Chain F:



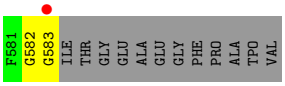
• Molecule 1: Estrogen receptor

Chain C:



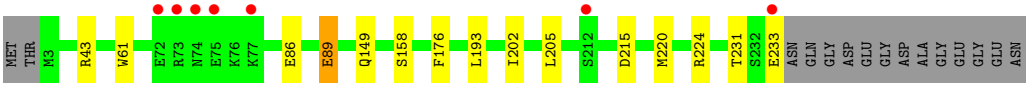
• Molecule 1: Estrogen receptor

Chain D:



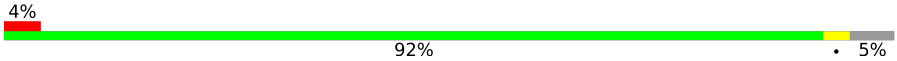
• Molecule 2: 14-3-3 protein beta/alpha

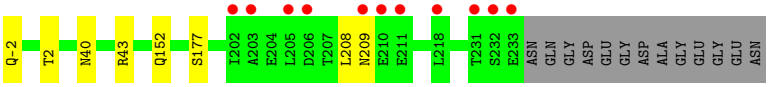
Chain A:



• Molecule 3: 14-3-3 protein beta/alpha

Chain B:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	133.81Å 57.57Å 93.45Å 90.00° 98.64° 90.00°	Depositor
Resolution (Å)	50.32 – 1.60 66.14 – 1.60	Depositor EDS
% Data completeness (in resolution range)	99.5 (50.32-1.60) 99.5 (66.14-1.60)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	0.07	Depositor
$< I/\sigma(I) >$ [1]	1.67 (at 1.60Å)	Xtriage
Refinement program	PHENIX 1.8.4_1496	Depositor
R, R_{free}	0.170 , 0.194 0.174 , 0.196	Depositor DCC
R_{free} test set	1922 reflections (2.08%)	wwPDB-VP
Wilson B-factor (Å^2)	24.4	Xtriage
Anisotropy	0.096	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.39 , 48.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	9093	wwPDB-VP
Average B, all atoms (Å^2)	37.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.49% 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: TPO, C8L, GOL

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	C	0.67	0/97	0.76	0/127
1	D	0.71	0/19	1.28	0/23
1	F	0.55	0/31	0.60	0/39
2	A	0.58	1/2118 (0.0%)	0.62	0/2850
3	B	0.54	0/2284	0.60	0/3066
All	All	0.56	1/4549 (0.0%)	0.61	0/6105

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	89	GLU	CB-CG	-5.23	1.42	1.52

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	C	107	90	87	0	0
1	D	19	14	14	2	0
1	F	42	34	34	1	0
2	A	1982	1932	1829	11	0
3	B	2090	2073	1934	10	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	A	6	8	8	0	0
5	C	96	48	0	0	0
6	A	244	0	0	6	3
6	B	250	0	0	10	3
6	C	45	0	0	0	0
6	D	1	0	0	0	0
6	F	12	0	0	1	0
All	All	4894	4199	3906	24	3

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 3.

All (24) 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)
2:A:215:ASP:OD2	6:A:401:HOH:O	1.88	0.91
1:F:591:PHE:N	6:F:601:HOH:O	2.07	0.86
1:D:582:GLY:N	1:D:583:GLY:HA2	2.12	0.64
2:A:193:LEU:HD12	6:A:536:HOH:O	1.99	0.62
3:B:177[B]:SER:OG	6:B:302:HOH:O	2.17	0.58
3:B:-2:GLN:N	6:B:307:HOH:O	2.36	0.58
2:A:86:GLU:OE1	6:A:403:HOH:O	2.17	0.58
2:A:202:ILE:HD13	2:A:220:MET:HE1	1.85	0.58
3:B:43:ARG:HD3	6:B:358:HOH:O	2.06	0.55
3:B:2[A]:THR:HG23	6:B:326:HOH:O	2.08	0.54
3:B:43:ARG:NH1	6:B:312:HOH:O	2.43	0.50
2:A:158[B]:SER:OG	6:A:402:HOH:O	2.16	0.48
2:A:43:ARG:NH1	6:A:411:HOH:O	2.45	0.47
3:B:208:LEU:HA	6:B:301:HOH:O	2.15	0.46
3:B:209:ASN:N	6:B:301:HOH:O	2.07	0.44
2:A:61:TRP:HE1	2:A:89:GLU:CG	2.29	0.44
3:B:40[B]:ASN:ND2	6:B:319:HOH:O	2.51	0.44
2:A:231:THR:C	2:A:233:GLU:H	2.19	0.43
3:B:40[B]:ASN:CG	6:B:319:HOH:O	2.57	0.43
2:A:202:ILE:HA	2:A:205:LEU:HG	2.02	0.42
1:D:582:GLY:N	1:D:583:GLY:CA	2.82	0.42
2:A:61:TRP:CD1	2:A:89:GLU:HG3	2.55	0.42
2:A:149[B]:GLN:HG3	6:A:547:HOH:O	2.19	0.42
3:B:152[B]:GLN:OE1	6:B:303:HOH:O	2.22	0.41

All (3) symmetry-related close contacts are listed below. The label for Atom-2 includes the sym-

metry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:A:574:HOH:O	6:B:437:HOH:O[1_565]	1.90	0.30
6:A:578:HOH:O	6:B:391:HOH:O[1_565]	1.98	0.22
6:A:547:HOH:O	6:B:463:HOH:O[3_455]	2.04	0.16

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	C	12/15 (80%)	12 (100%)	0	0	100	100
1	D	1/15 (7%)	1 (100%)	0	0	100	100
1	F	2/15 (13%)	2 (100%)	0	0	100	100
2	A	258/246 (105%)	256 (99%)	2 (1%)	0	100	100
3	B	280/249 (112%)	278 (99%)	2 (1%)	0	100	100
All	All	553/540 (102%)	549 (99%)	4 (1%)	0	100	100

There are no Ramachandran outliers to report.

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	C	8/8 (100%)	8 (100%)	0	100	100
1	D	1/8 (12%)	1 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	F	3/8 (38%)	3 (100%)	0	100 100
2	A	232/215 (108%)	230 (99%)	2 (1%)	78 65
3	B	254/217 (117%)	254 (100%)	0	100 100
All	All	498/456 (109%)	496 (100%)	2 (0%)	88 84

All (2) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	A	176	PHE
2	A	224	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

2 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	TPO	F	594	1	8,10,11	1.25	0	10,14,16	1.10	0
1	TPO	C	594	1	8,10,11	1.73	2 (25%)	10,14,16	1.23	1 (10%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	TPO	F	594	1	-	2/9/11/13	-
1	TPO	C	594	1	-	2/9/11/13	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	594	TPO	P-OG1	3.73	1.66	1.59
1	C	594	TPO	P-O1P	2.07	1.57	1.50

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	594	TPO	CG2-CB-CA	-2.08	109.06	113.16

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	C	594	TPO	CB-OG1-P-O2P
1	F	594	TPO	CB-OG1-P-O3P
1	F	594	TPO	O-C-CA-CB
1	C	594	TPO	O-C-CA-CB

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

2 ligands 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	$\#\|Z\|>2$
5	C8L	C	601	-	120,120,120	0.15	0	208,208,208	0.48	1 (0%)
4	GOL	A	301	-	5,5,5	0.57	0	5,5,5	0.62	0

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
5	C8L	C	601	-	14/14/64/64	-	-
4	GOL	A	301	-	-	4/4/4/4	-

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	C	601	C8L	N30-C46-N31	2.13	116.40	113.65

All (14) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
5	C	601	C8L	N21
5	C	601	C8L	N30
5	C	601	C8L	N25
5	C	601	C8L	N26
5	C	601	C8L	N18
5	C	601	C8L	N17
5	C	601	C8L	N22
5	C	601	C8L	N29
5	C	601	C8L	N24
5	C	601	C8L	N19
5	C	601	C8L	N20
5	C	601	C8L	N16
5	C	601	C8L	N27
5	C	601	C8L	N28

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	301	GOL	O1-C1-C2-C3
4	A	301	GOL	O1-C1-C2-O2

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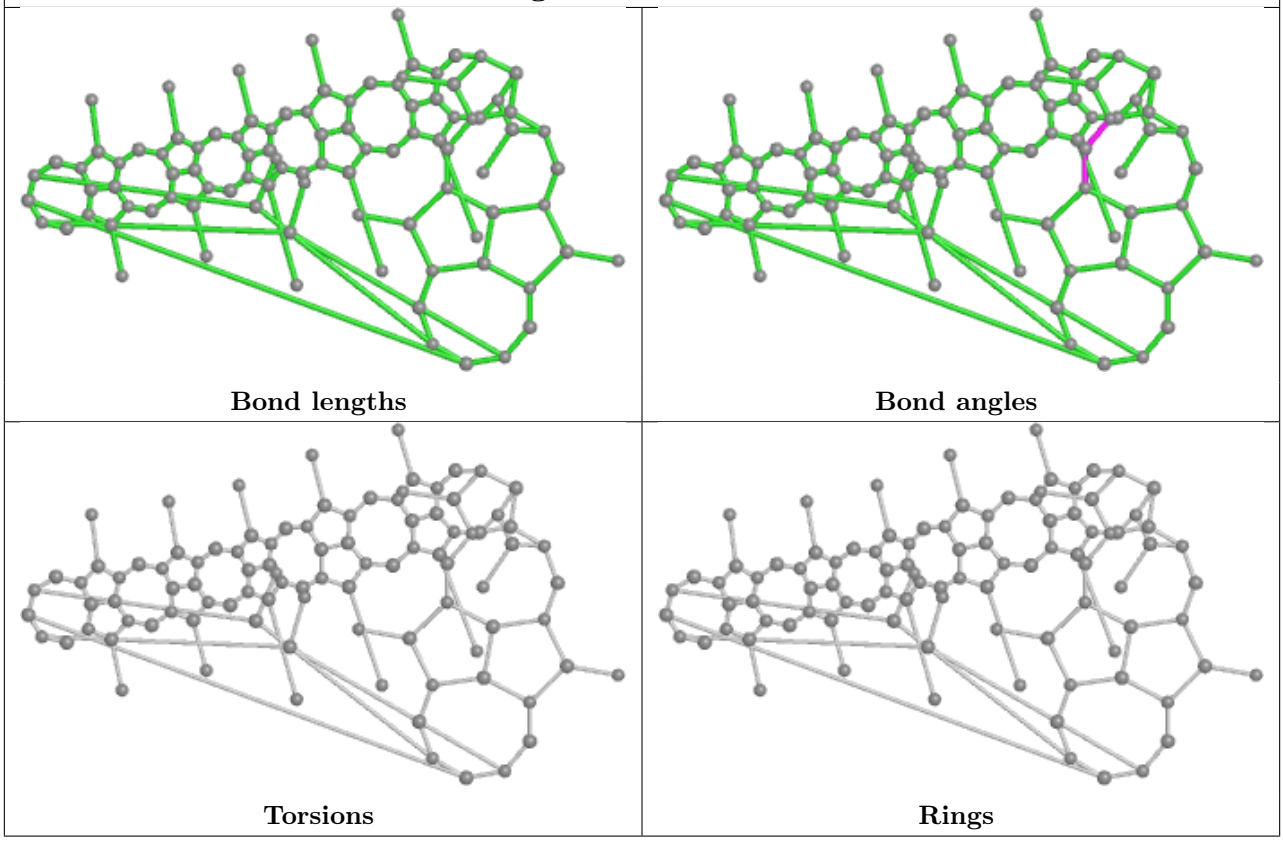
Mol	Chain	Res	Type	Atoms
4	A	301	GOL	O2-C2-C3-O3
4	A	301	GOL	C1-C2-C3-O3

There are no ring outliers.

No monomer is involved in short contacts.

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 C8L C 601



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	C	14/15 (93%)	-0.43	0 100 100	18, 22, 29, 40	0
1	D	3/15 (20%)	0.86	1 (33%) 0 0	33, 33, 55, 71	0
1	F	4/15 (26%)	0.16	0 100 100	28, 32, 35, 45	0
2	A	231/246 (93%)	-0.12	7 (3%) 50 48	17, 26, 73, 136	0
3	B	236/249 (94%)	0.10	11 (4%) 31 28	20, 31, 65, 137	0
All	All	488/540 (90%)	-0.01	19 (3%) 39 36	17, 29, 69, 137	0

All (19) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	B	233	GLU	7.6
2	A	74	ASN	6.6
3	B	202	ILE	5.1
3	B	209	ASN	4.7
3	B	232	SER	4.5
3	B	205	LEU	4.4
2	A	233	GLU	4.4
2	A	73	ARG	3.8
2	A	75	GLU	3.3
3	B	206	ASP	3.2
3	B	231	THR	3.2
1	D	583	GLY	3.0
3	B	203	ALA	2.9
3	B	218	LEU	2.9
2	A	72	GLU	2.8
2	A	77	LYS	2.5
2	A	212	SER	2.4
3	B	211	GLU	2.2
3	B	210	GLU	2.0

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	TPO	F	594	11/12	0.97	0.09	23,26,29,31	0
1	TPO	C	594	11/12	0.99	0.10	15,17,19,19	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

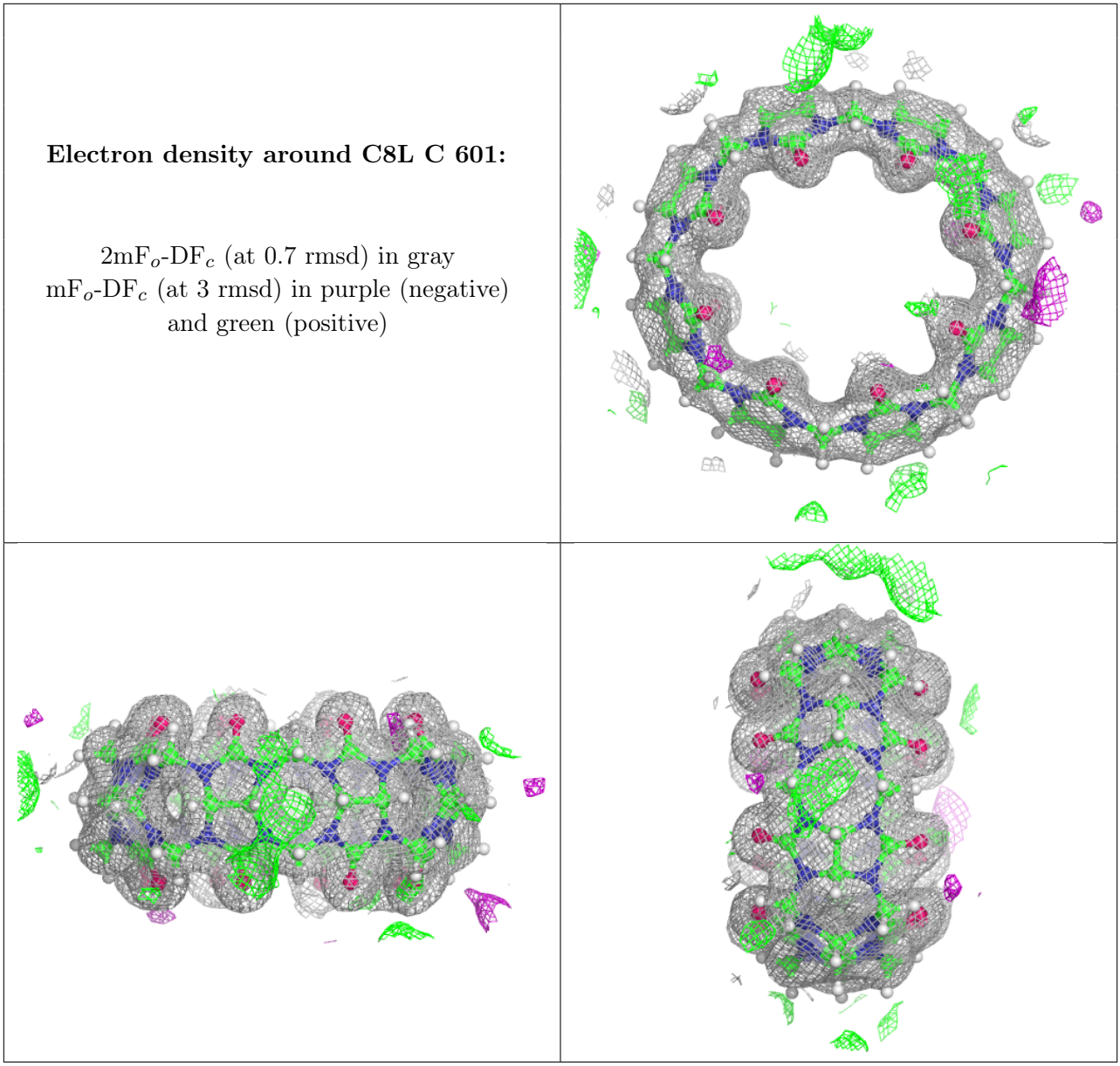
In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' 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
4	GOL	A	301	6/6	0.85	0.28	20,20,20,20	0
5	C8L	C	601	96/96	0.96	0.06	21,29,40,43	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 C8L C 601:

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



6.5 Other polymers (i)

There are no such residues in this entry.