



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 02:37 PM UTC

PDB ID : 6BQH / pdb_00006bqh
Title : Crystal structure of 5-HT2C in complex with ritanserine
Authors : Peng, Y.; McCorvy, J.D.; Harpsoe, K.; Lansu, K.; Yuan, S.; Popov, P.; Qu, L.; Pu, M.; Che, T.; Nikolajse, L.F.; Huang, X.P.; Wu, Y.; Shen, L.; Bjorn-Yoshimoto, W.E.; Ding, K.; Wacker, D.; Han, G.W.; Cheng, J.; Katritch, V.; Jensen, A.A.; Hanson, M.A.; Zhao, S.; Gloriam, D.E.; Roth, B.L.; Stevens, R.C.; Liu, Z.
Deposited on : 2017-11-27
Resolution : 2.70 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	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

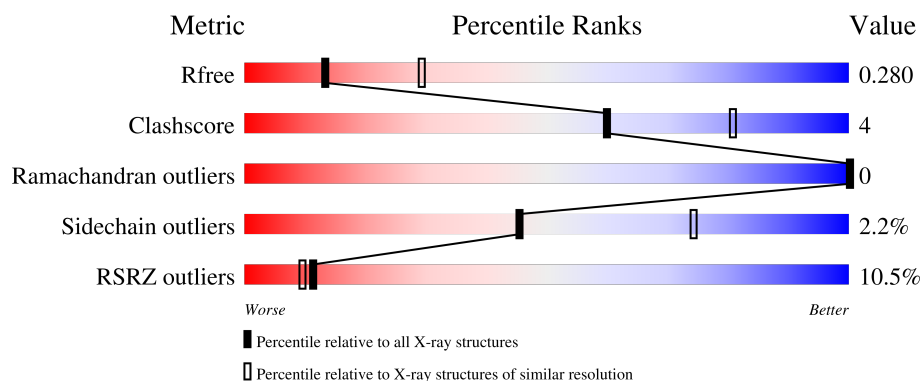
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.70 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}	180053	3538 (2.70-2.70)
Clashscore	190562	3843 (2.70-2.70)
Ramachandran outliers	187476	3778 (2.70-2.70)
Sidechain outliers	187428	3778 (2.70-2.70)
RSRZ outliers	180081	3538 (2.70-2.70)

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	452	

Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 2815 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 5-hydroxytryptamine receptor 2C,Soluble cytochrome b562.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	351	Total	C	N	O	S	0	0	0
			2657	1750	431	456	20			

There are 51 discrepancies between the modelled and reference sequences:

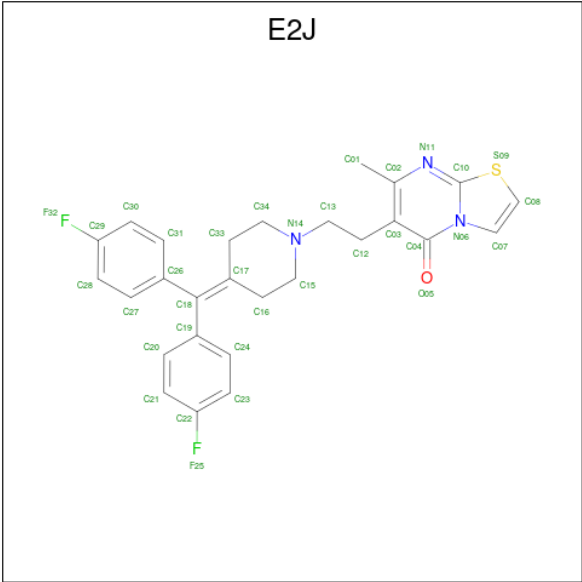
Chain	Residue	Modelled	Actual	Comment	Reference
A	14	MET	-	expression tag	UNP P28335
A	15	LYS	-	expression tag	UNP P28335
A	16	THR	-	expression tag	UNP P28335
A	17	ILE	-	expression tag	UNP P28335
A	18	ILE	-	expression tag	UNP P28335
A	19	ALA	-	expression tag	UNP P28335
A	20	LEU	-	expression tag	UNP P28335
A	21	SER	-	expression tag	UNP P28335
A	22	TYR	-	expression tag	UNP P28335
A	23	ILE	-	expression tag	UNP P28335
A	24	PHE	-	expression tag	UNP P28335
A	25	CYS	-	expression tag	UNP P28335
A	26	LEU	-	expression tag	UNP P28335
A	27	VAL	-	expression tag	UNP P28335
A	28	PHE	-	expression tag	UNP P28335
A	29	ALA	-	expression tag	UNP P28335
A	30	ASP	-	expression tag	UNP P28335
A	31	TYR	-	expression tag	UNP P28335
A	32	LYS	-	expression tag	UNP P28335
A	33	ASP	-	expression tag	UNP P28335
A	34	ASP	-	expression tag	UNP P28335
A	35	ASP	-	expression tag	UNP P28335
A	36	ASP	-	expression tag	UNP P28335
A	37	GLY	-	expression tag	UNP P28335
A	38	ALA	-	expression tag	UNP P28335
A	39	PRO	-	expression tag	UNP P28335
A	1007	TRP	MET	engineered mutation	UNP P0ABE7

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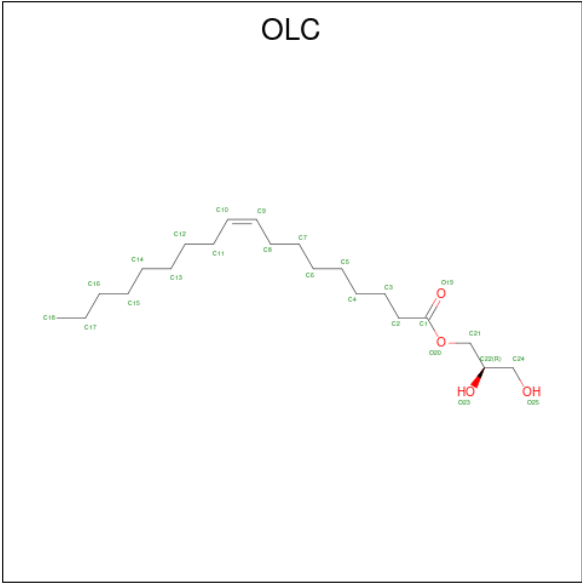
Chain	Residue	Modelled	Actual	Comment	Reference
A	1102	ILE	HIS	engineered mutation	UNP P0ABE7
A	1106	LEU	ARG	engineered mutation	UNP P0ABE7
A	360	ASN	CYS	conflict	UNP P28335
A	394	GLY	-	expression tag	UNP P28335
A	395	ARG	-	expression tag	UNP P28335
A	396	PRO	-	expression tag	UNP P28335
A	397	LEU	-	expression tag	UNP P28335
A	398	GLU	-	expression tag	UNP P28335
A	399	VAL	-	expression tag	UNP P28335
A	400	LEU	-	expression tag	UNP P28335
A	401	PHE	-	expression tag	UNP P28335
A	402	GLN	-	expression tag	UNP P28335
A	403	GLY	-	expression tag	UNP P28335
A	404	PRO	-	expression tag	UNP P28335
A	405	HIS	-	expression tag	UNP P28335
A	406	HIS	-	expression tag	UNP P28335
A	407	HIS	-	expression tag	UNP P28335
A	408	HIS	-	expression tag	UNP P28335
A	409	HIS	-	expression tag	UNP P28335
A	410	HIS	-	expression tag	UNP P28335
A	411	HIS	-	expression tag	UNP P28335
A	412	HIS	-	expression tag	UNP P28335
A	413	HIS	-	expression tag	UNP P28335
A	414	HIS	-	expression tag	UNP P28335

- Molecule 2 is 6-(2-{4-[bis(4-fluorophenyl)methylidene]piperidin-1-yl}ethyl)-7-methyl-5H-[1,3]thiazolo[3,2-a]pyrimidin-5-one (CCD ID: E2J) (formula: C₂₇H₂₅F₂N₃OS) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
2	A	1	Total	C	F	N	O	S	0	0
			34	27	2	3	1	1		

- Molecule 3 is (2R)-2,3-dihydroxypropyl (9Z)-octadec-9-enoate (CCD ID: OLC) (formula: $C_{21}H_{40}O_4$).



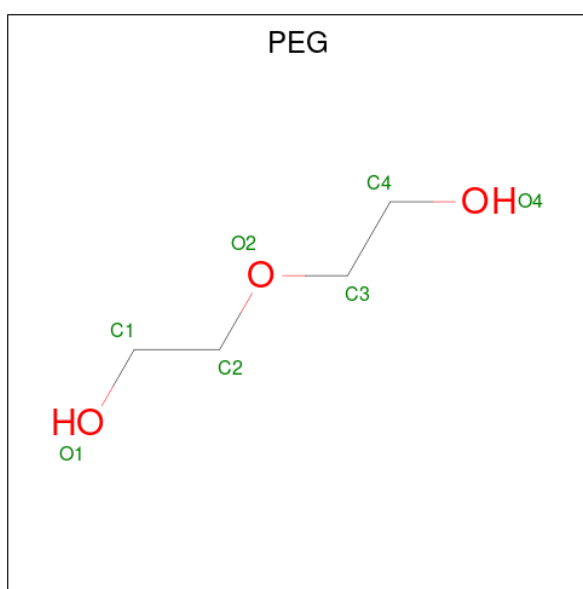
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total	C	O	0	0
			19	15	4		
3	A	1	Total	C	O	0	0
			13	9	4		

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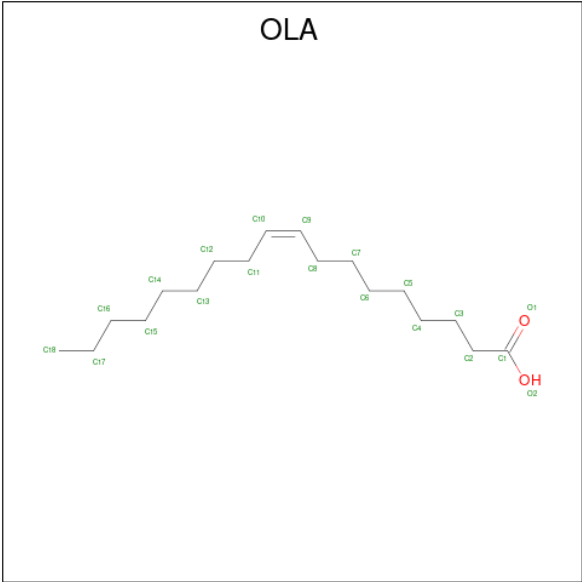
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total	C	O	0	0
			15	11	4		
3	A	1	Total	C	O	0	0
			12	8	4		
3	A	1	Total	C	O	0	0
			14	10	4		
3	A	1	Total	C		0	0
			7	7			

- Molecule 4 is DI(HYDROXYETHYL)ETHER (CCD ID: PEG) (formula: $C_4H_{10}O_3$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total	C	O	0	0
			7	4	3		

- Molecule 5 is OLEIC ACID (CCD ID: OLA) (formula: $C_{18}H_{34}O_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total	C	O	0	0
			16	14	2		
5	A	1	Total	C	O	0	0
			17	15	2		

- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	4	Total	O	0	0
			4	4		

4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 2	Depositor
Cell constants a, b, c, α , β , γ	88.31Å 97.05Å 150.23Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.52 – 2.70 48.52 – 2.70	Depositor EDS
% Data completeness (in resolution range)	94.1 (48.52-2.70) 94.0 (48.52-2.70)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.10 (at 2.69Å)	Xtriage
Refinement program	PHENIX (dev_2289: ???)	Depositor
R, R_{free}	0.253 , 0.275 0.260 , 0.280	Depositor DCC
R_{free} test set	858 reflections (4.73%)	wwPDB-VP
Wilson B-factor (Å ²)	87.4	Xtriage
Anisotropy	0.084	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 84.6	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	2815	wwPDB-VP
Average B, all atoms (Å ²)	113.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.79% 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: OLC, OLA, E2J, PEG

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	0.15	0/2712	0.33	0/3702

There are no bond length outliers.

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	A	2657	0	2630	24	0
2	A	34	0	0	1	0
3	A	80	0	99	0	0
4	A	7	0	10	0	0
5	A	33	0	46	0	0
6	A	4	0	0	0	0
All	All	2815	0	2785	24	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 4.

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)
1:A:1103:GLN:HA	1:A:1106:LEU:HB3	1.83	0.60
1:A:220:PHE:HA	1:A:224:PHE:HB2	1.85	0.58
1:A:128:PRO:HG3	1:A:200:VAL:HG21	1.86	0.57
1:A:351:ASN:ND2	2:A:1201:E2J:S09	2.76	0.57
1:A:107:MET:HE2	1:A:358:TYR:HB3	1.87	0.55
1:A:1098:ARG:HA	1:A:1102:ILE:HD13	1.89	0.54
1:A:186:SER:HA	1:A:189:ILE:HD12	1.91	0.52
1:A:1031:THR:HA	1:A:1034:ARG:HG2	1.91	0.52
1:A:52:VAL:HG11	1:A:55:TRP:CZ2	2.46	0.51
1:A:369:THR:HG23	1:A:376:ARG:HA	1.95	0.47
1:A:75:ILE:HG23	1:A:93:MET:HE3	1.96	0.46
1:A:227:LEU:HD11	1:A:321:LEU:HD12	1.97	0.46
1:A:55:TRP:HZ3	1:A:58:LEU:HD22	1.82	0.45
1:A:46:PHE:HA	1:A:112:LEU:HD21	1.98	0.43
1:A:55:TRP:N	1:A:56:PRO:HD2	2.33	0.43
1:A:48:PHE:N	1:A:49:PRO:HA	2.34	0.43
1:A:196:ASP:OD1	1:A:198:GLU:HG2	2.19	0.43
1:A:1029:ALA:HA	1:A:1032:LYS:HB2	2.00	0.43
1:A:230:MET:HE3	1:A:230:MET:HB2	1.81	0.43
1:A:1010:LEU:HA	1:A:1033:MET:HG2	1.99	0.42
1:A:373:LYS:O	1:A:377:ARG:HB2	2.20	0.42
1:A:225:ILE:HB	1:A:226:PRO:HD3	2.02	0.42
1:A:227:LEU:O	1:A:230:MET:HG2	2.20	0.41
1:A:114:ILE:HD11	1:A:355:TRP:HE1	1.85	0.41

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	343/452 (76%)	330 (96%)	13 (4%)	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	A	272/397 (68%)	266 (98%)	6 (2%)	45 74

All (6) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	115	LEU
1	A	198	GLU
1	A	206	THR
1	A	208	VAL
1	A	238	ILE
1	A	343	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	1006	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry

10 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$
3	OLC	A	1203	-	12,12,24	0.23	0	13,13,25	0.22	0
3	OLC	A	1207	-	6,6,24	0.20	0	5,5,25	0.13	0
4	PEG	A	1208	-	6,6,6	0.48	0	5,5,5	0.27	0
3	OLC	A	1202	-	18,18,24	0.27	0	19,19,25	0.23	0
5	OLA	A	1209	-	15,15,19	0.65	0	15,15,19	1.04	0
5	OLA	A	1210	-	16,16,19	0.63	0	16,16,19	1.01	0
3	OLC	A	1205	-	11,11,24	0.23	0	12,12,25	0.17	0
3	OLC	A	1206	-	13,13,24	0.23	0	14,14,25	0.24	0
2	E2J	A	1201	-	38,38,38	1.01	2 (5%)	51,54,54	2.95	18 (35%)
3	OLC	A	1204	-	14,14,24	0.24	0	15,15,25	0.18	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 Torsions and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	OLC	A	1203	-	-	1/12/12/24	-
3	OLC	A	1207	-	-	0/4/4/24	-
4	PEG	A	1208	-	-	2/4/4/4	-
3	OLC	A	1202	-	-	1/18/18/24	-
5	OLA	A	1209	-	-	5/13/13/17	-
5	OLA	A	1210	-	-	8/14/14/17	-
3	OLC	A	1205	-	-	0/11/11/24	-
3	OLC	A	1206	-	-	7/13/13/24	-
2	E2J	A	1201	-	-	4/17/27/27	0/5/5/5
3	OLC	A	1204	-	-	1/14/14/24	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	1201	E2J	C02-N11	-2.99	1.32	1.39
2	A	1201	E2J	C04-N06	-2.65	1.37	1.44

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	1201	E2J	C08-C07-N06	9.05	121.09	112.19
2	A	1201	E2J	S09-C10-N06	-8.72	103.55	110.55
2	A	1201	E2J	C08-S09-C10	6.34	97.12	89.76
2	A	1201	E2J	C07-C08-S09	-5.57	102.05	111.83
2	A	1201	E2J	C03-C02-N11	-5.12	118.73	123.18
2	A	1201	E2J	C12-C03-C02	-4.59	120.60	124.43
2	A	1201	E2J	C01-C02-N11	4.49	119.16	112.45
2	A	1201	E2J	S09-C10-N11	4.37	132.26	123.25
2	A	1201	E2J	C33-C17-C18	-4.19	119.86	124.17
2	A	1201	E2J	C19-C18-C17	-3.91	118.27	122.88
2	A	1201	E2J	C33-C34-N14	-3.79	107.80	111.19
2	A	1201	E2J	O05-C04-C03	-2.82	119.69	125.06
2	A	1201	E2J	C10-N11-C02	2.60	121.28	116.81
2	A	1201	E2J	C30-C29-C28	-2.26	119.84	122.80
2	A	1201	E2J	C34-C33-C17	-2.16	107.47	111.06
2	A	1201	E2J	C12-C03-C04	2.15	119.45	116.50
2	A	1201	E2J	C16-C15-N14	-2.09	109.31	111.19
2	A	1201	E2J	C15-C16-C17	-2.04	107.67	111.06

There are no chirality outliers.

All (29) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	1206	OLC	O20-C21-C22-O23
3	A	1204	OLC	O20-C21-C22-O23
3	A	1206	OLC	C1-C2-C3-C4
3	A	1206	OLC	O20-C21-C22-C24
5	A	1209	OLA	C1-C2-C3-C4
5	A	1210	OLA	C11-C12-C13-C14
5	A	1210	OLA	C6-C7-C8-C9
5	A	1210	OLA	C2-C3-C4-C5
3	A	1202	OLC	C9-C10-C11-C12
4	A	1208	PEG	C4-C3-O2-C2
2	A	1201	E2J	C17-C18-C19-C24
2	A	1201	E2J	C17-C18-C19-C20
5	A	1210	OLA	C5-C6-C7-C8

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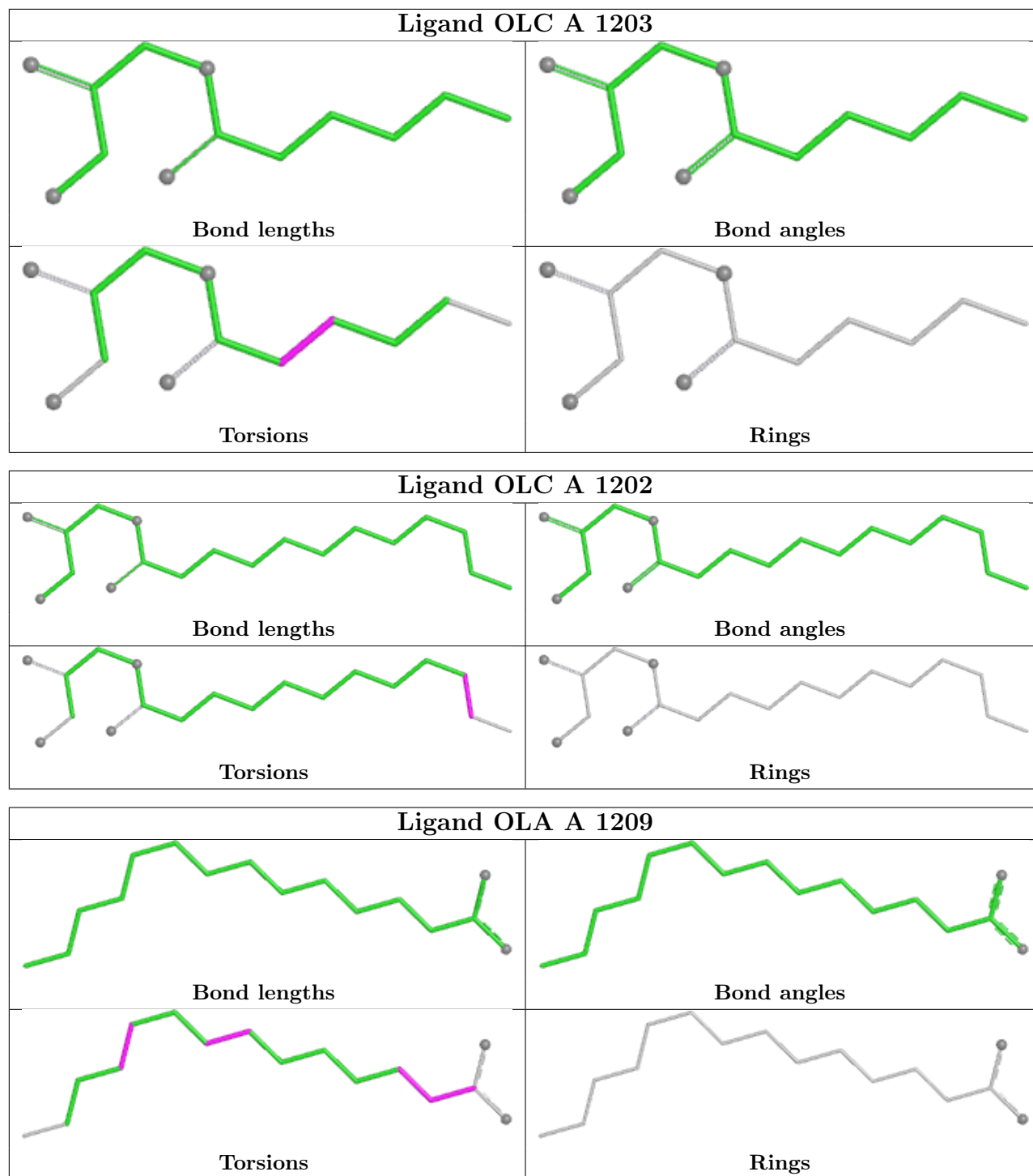
Mol	Chain	Res	Type	Atoms
5	A	1209	OLA	C6-C7-C8-C9
4	A	1208	PEG	C1-C2-O2-C3
2	A	1201	E2J	C26-C18-C19-C20
2	A	1201	E2J	C26-C18-C19-C24
5	A	1210	OLA	O2-C1-C2-C3
3	A	1206	OLC	C4-C5-C6-C7
5	A	1209	OLA	O1-C1-C2-C3
5	A	1210	OLA	O1-C1-C2-C3
5	A	1209	OLA	C9-C10-C11-C12
5	A	1209	OLA	O2-C1-C2-C3
5	A	1210	OLA	C9-C10-C11-C12
3	A	1206	OLC	O20-C1-C2-C3
5	A	1210	OLA	C7-C8-C9-C10
3	A	1203	OLC	C1-C2-C3-C4
3	A	1206	OLC	C2-C3-C4-C5
3	A	1206	OLC	O19-C1-C2-C3

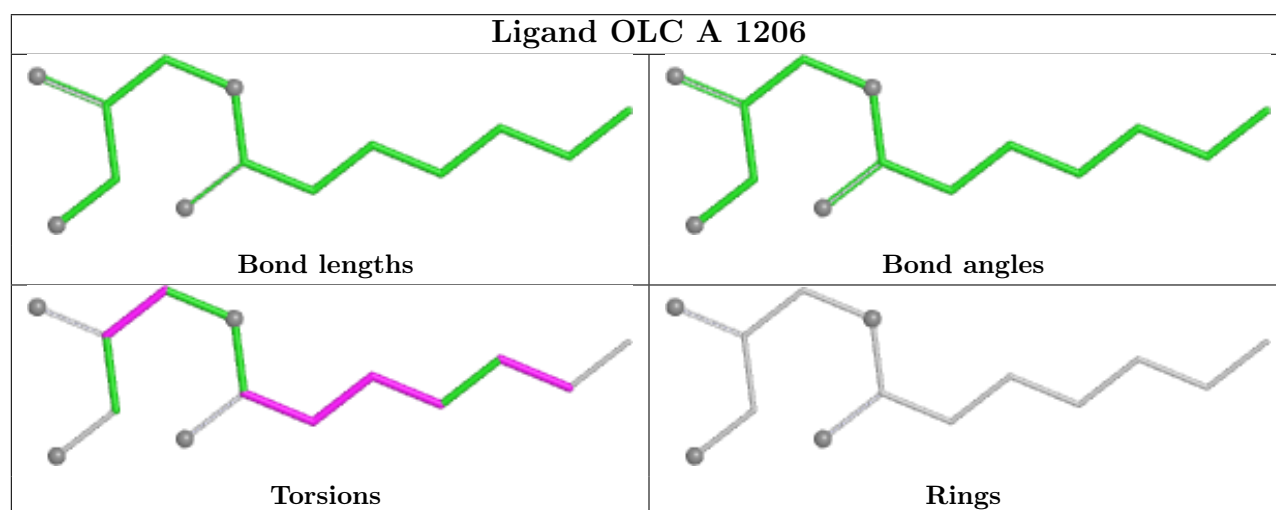
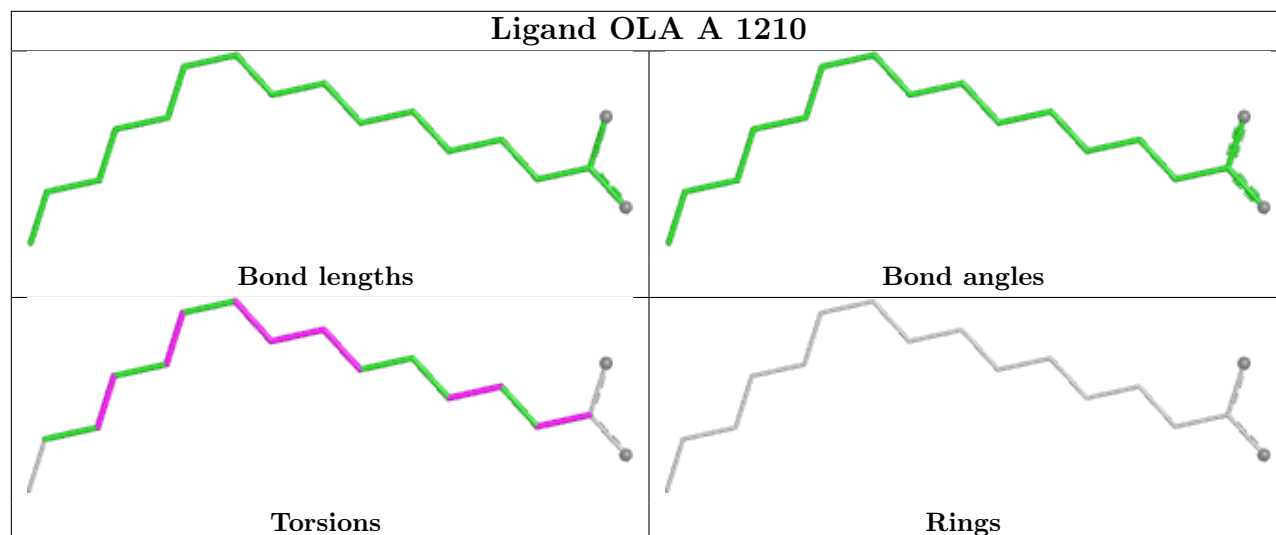
There are no ring outliers.

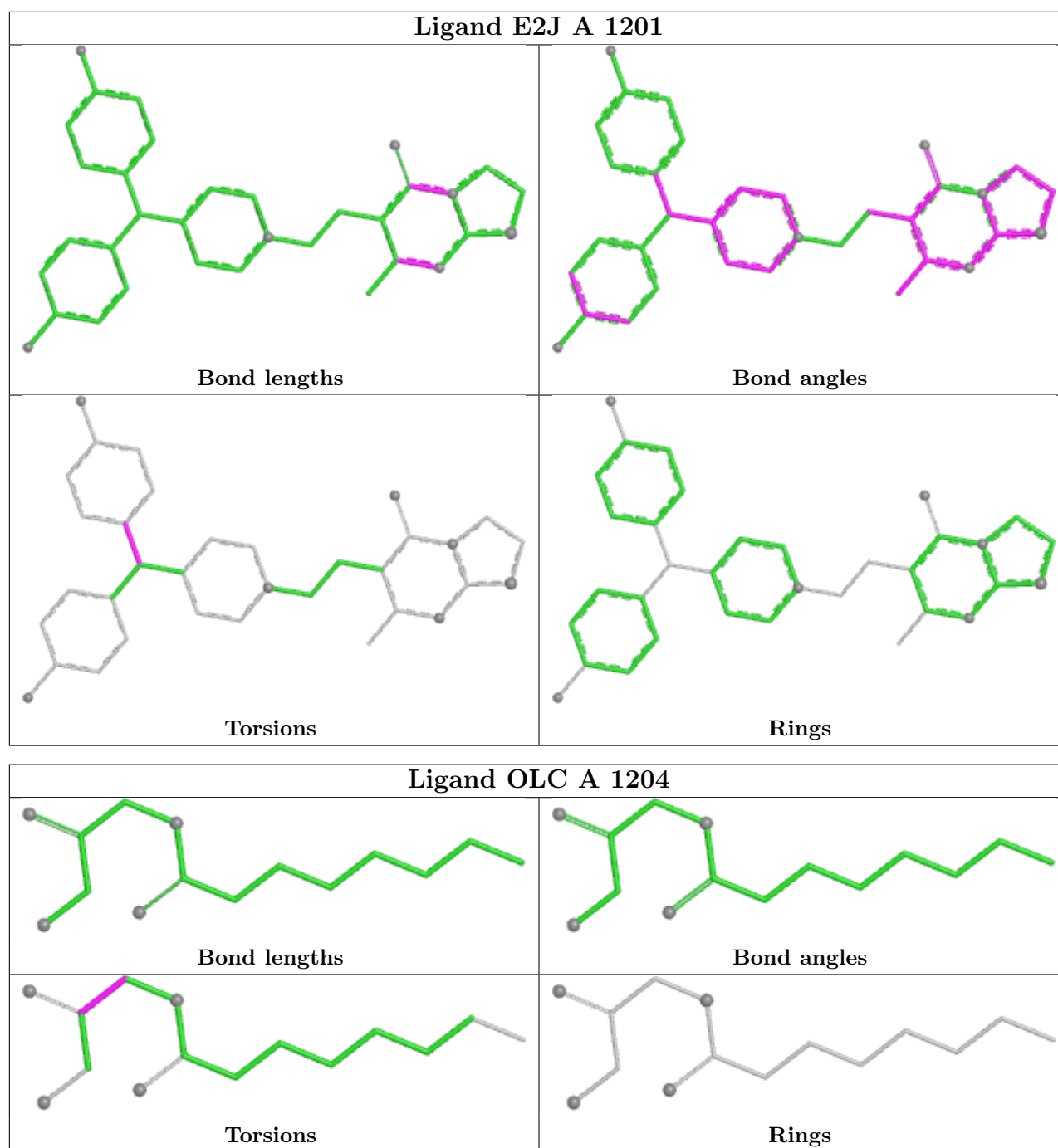
1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	1201	E2J	1	0

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







5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

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, 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	351/452 (77%)	0.68	37 (10%) 11 9	70, 100, 194, 264	0

All (37) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	1101	TYR	4.1
1	A	48	PHE	3.9
1	A	241	LEU	3.8
1	A	46	PHE	3.8
1	A	47	LYS	3.8
1	A	1106	LEU	3.5
1	A	1102	ILE	3.4
1	A	1043	ALA	3.4
1	A	1063	HIS	3.4
1	A	240	VAL	3.4
1	A	1044	THR	3.3
1	A	191	VAL	3.3
1	A	1037	ALA	3.3
1	A	1068	LEU	3.1
1	A	1016	VAL	3.0
1	A	1027	LYS	2.8
1	A	1031	THR	2.7
1	A	336	LEU	2.7
1	A	1059	LYS	2.7
1	A	1030	LEU	2.6
1	A	1028	ASP	2.6
1	A	1017	ILE	2.6
1	A	1062	ARG	2.6
1	A	337	CYS	2.6
1	A	154	VAL	2.4
1	A	1040	ALA	2.4
1	A	1058	MET	2.2

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Mol	Chain	Res	Type	RSRZ
1	A	1060	ASP	2.2
1	A	1066	ASP	2.1
1	A	227	LEU	2.1
1	A	1038	LEU	2.1
1	A	387	TYR	2.1
1	A	341	CYS	2.1
1	A	1096	THR	2.1
1	A	1029	ALA	2.0
1	A	1095	LYS	2.0
1	A	1014	LEU	2.0

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

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

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

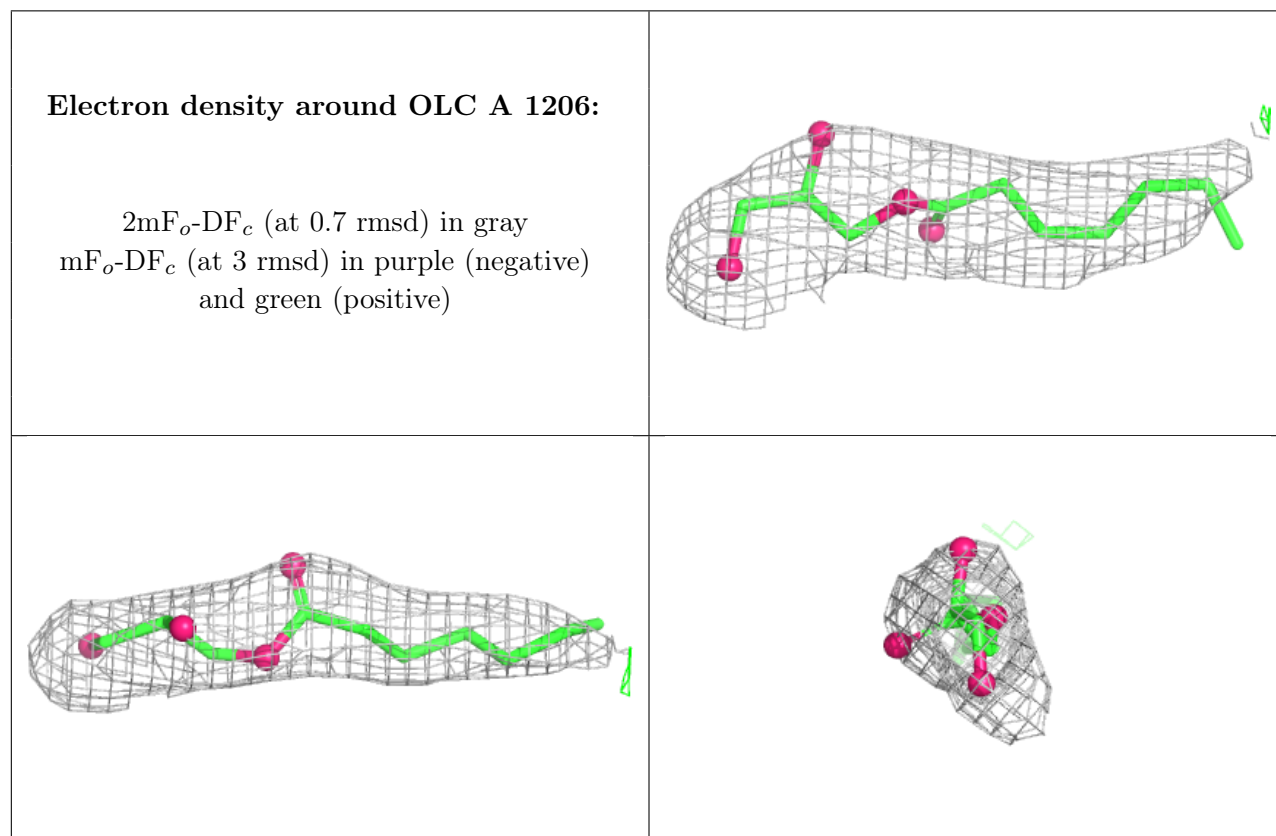
6.4 Ligands [i](#)

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($\text{\AA}^2$)	Q<0.9
3	OLC	A	1206	14/25	0.70	0.21	111,123,132,138	0
3	OLC	A	1202	19/25	0.84	0.21	86,99,138,140	0
4	PEG	A	1208	7/7	0.85	0.14	101,112,128,131	0
3	OLC	A	1203	13/25	0.89	0.18	86,109,125,129	0
3	OLC	A	1204	15/25	0.90	0.18	90,101,116,127	0
3	OLC	A	1205	12/25	0.90	0.14	101,125,128,133	0
5	OLA	A	1209	16/20	0.90	0.22	78,114,123,128	0
5	OLA	A	1210	17/20	0.91	0.21	98,113,128,128	0
3	OLC	A	1207	7/25	0.95	0.14	89,93,103,105	0
2	E2J	A	1201	34/34	0.96	0.10	71,90,99,101	0

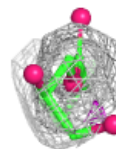
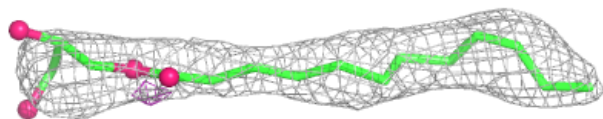
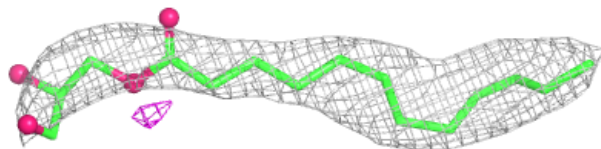
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers

as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

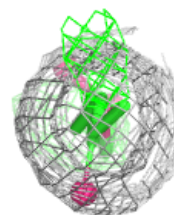
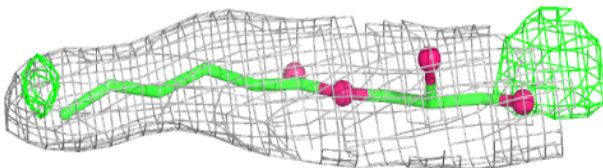
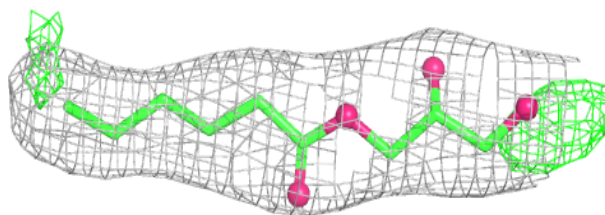


Electron density around OLC A 1202:

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

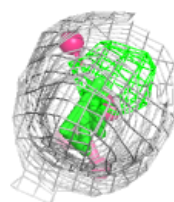
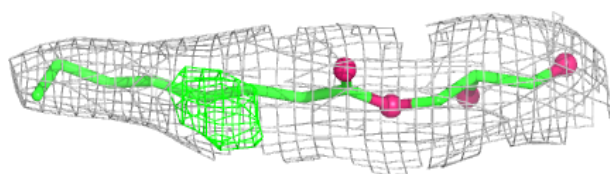
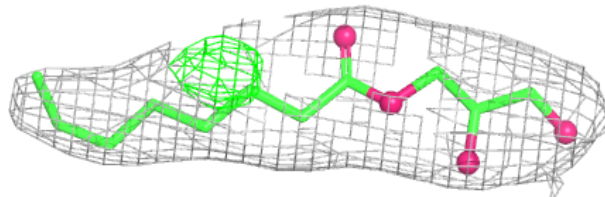
**Electron density around OLC A 1203:**

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

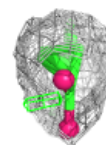
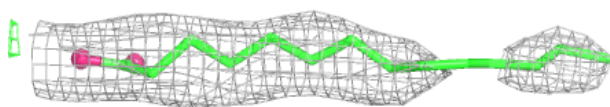
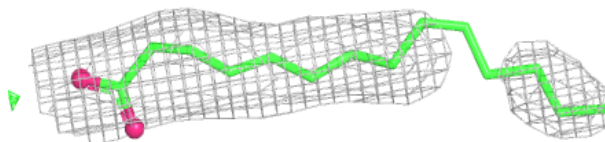


Electron density around OLC A 1204:

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

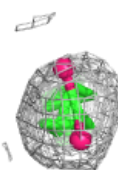
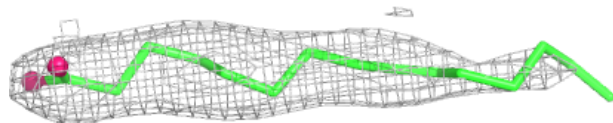
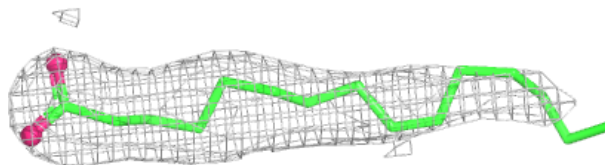
**Electron density around OLA A 1209:**

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

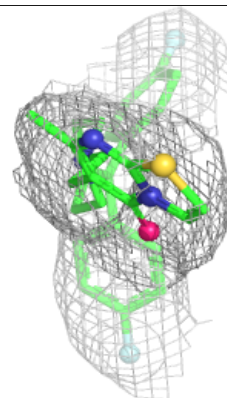
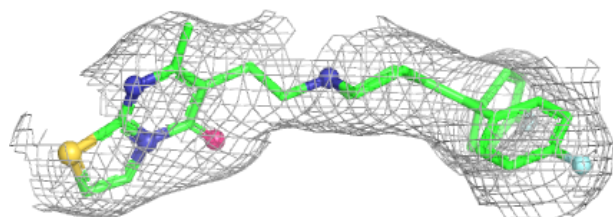
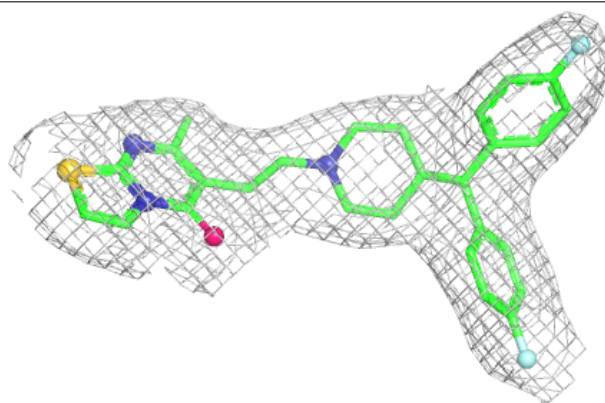


Electron density around OLA A 1210:

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

**Electron density around E2J A 1201:**

$2mF_o-DF_c$ (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.