



Full wwPDB X-ray Structure Validation Report ⓘ

May 14, 2020 – 03:32 pm BST

PDB ID : 6LI0
Title : Crystal structure of GPR52 in complex with agonist c17
Authors : Luo, Z.P.; Lin, X.; Xu, F.; Han, G.W.
Deposited on : 2019-12-10
Resolution : 2.20 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 following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

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

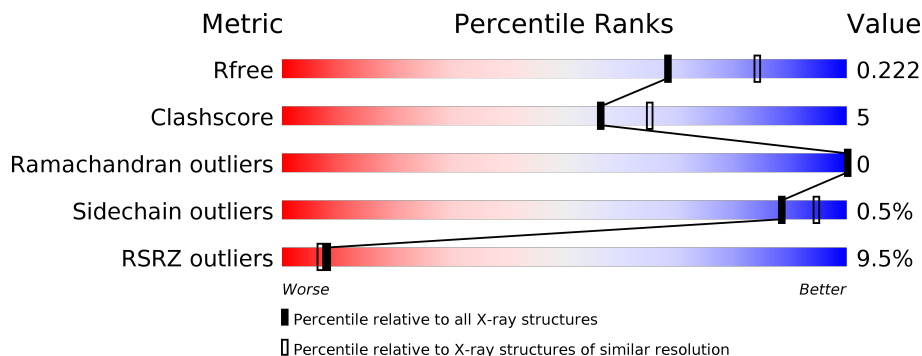
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.20 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	4898 (2.20-2.20)
Clashscore	141614	5594 (2.20-2.20)
Ramachandran outliers	138981	5503 (2.20-2.20)
Sidechain outliers	138945	5504 (2.20-2.20)
RSRZ outliers	127900	4800 (2.20-2.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	468	

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
4	OLC	A	1418	-	-	-	X
4	OLC	A	1421	-	-	-	X

2 Entry composition [i](#)

There are 7 unique types of molecules in this entry. The entry contains 3910 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 Chimera of G-protein coupled receptor 52 and Flavodoxin.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	441	3479	2270	556	628	25	0	1	0

There are 30 discrepancies between the modelled and reference sequences:

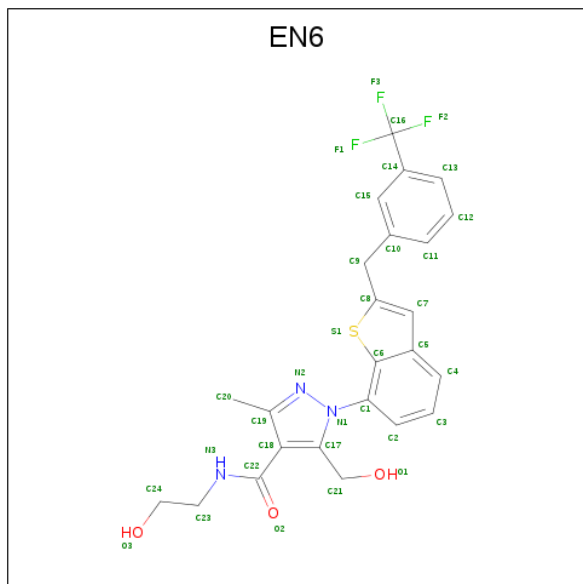
Chain	Residue	Modelled	Actual	Comment	Reference
A	16	GLY	-	expression tag	UNP Q9Y2T5
A	130	TRP	ALA	engineered mutation	UNP Q9Y2T5
A	1002	ALA	-	linker	UNP Q9Y2T5
A	1098	TRP	TYR	engineered mutation	UNP P00323
A	264	LEU	ALA	engineered mutation	UNP Q9Y2T5
A	278	GLN	TRP	engineered mutation	UNP Q9Y2T5
A	314	PRO	CYS	engineered mutation	UNP Q9Y2T5
A	318	ALA	SER	engineered mutation	UNP Q9Y2T5
A	321	ASP	ASN	engineered mutation	UNP Q9Y2T5
A	323	THR	VAL	engineered mutation	UNP Q9Y2T5
A	341	GLU	-	expression tag	UNP Q9Y2T5
A	342	PHE	-	expression tag	UNP Q9Y2T5
A	343	LEU	-	expression tag	UNP Q9Y2T5
A	344	GLU	-	expression tag	UNP Q9Y2T5
A	345	VAL	-	expression tag	UNP Q9Y2T5
A	346	LEU	-	expression tag	UNP Q9Y2T5
A	347	PHE	-	expression tag	UNP Q9Y2T5
A	348	GLN	-	expression tag	UNP Q9Y2T5
A	349	GLY	-	expression tag	UNP Q9Y2T5
A	350	PRO	-	expression tag	UNP Q9Y2T5
A	351	HIS	-	expression tag	UNP Q9Y2T5
A	352	HIS	-	expression tag	UNP Q9Y2T5
A	353	HIS	-	expression tag	UNP Q9Y2T5
A	354	HIS	-	expression tag	UNP Q9Y2T5
A	355	HIS	-	expression tag	UNP Q9Y2T5
A	356	HIS	-	expression tag	UNP Q9Y2T5
A	357	HIS	-	expression tag	UNP Q9Y2T5

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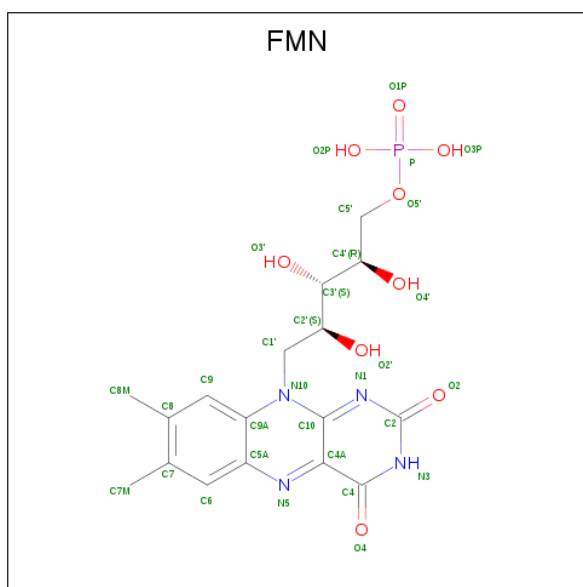
Chain	Residue	Modelled	Actual	Comment	Reference
A	358	HIS	-	expression tag	UNP Q9Y2T5
A	359	HIS	-	expression tag	UNP Q9Y2T5
A	360	HIS	-	expression tag	UNP Q9Y2T5

- Molecule 2 is N-(2-hydroxyethyl)-5-(hydroxymethyl)-3-methyl-1-[2-[[3-(trifluoromethyl)phenyl]methyl]-1-benzothiophen-7-yl]pyrazole-4-carboxamide (three-letter code: EN6) (formula: C₂₄H₂₂F₃N₃O₃S) (labeled as "Ligand of Interest" by author).



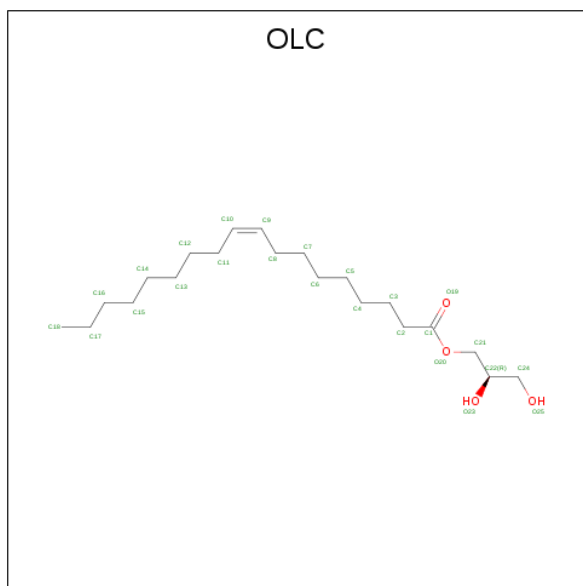
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	
			Total	C	F	N	O			S
2	A	1	34	24	3	3	3	1	0	0

- Molecule 3 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: C₁₇H₂₁N₄O₉P).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	N	O	P		
3	A	1	31	17	4	9	1	0	0

- Molecule 4 is (2R)-2,3-dihydroxypropyl (9Z)-octadec-9-enoate (three-letter code: OLC) (formula: $C_{21}H_{40}O_4$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
4	A	1	25	21	4	0	0
4	A	1	25	21	4	0	0

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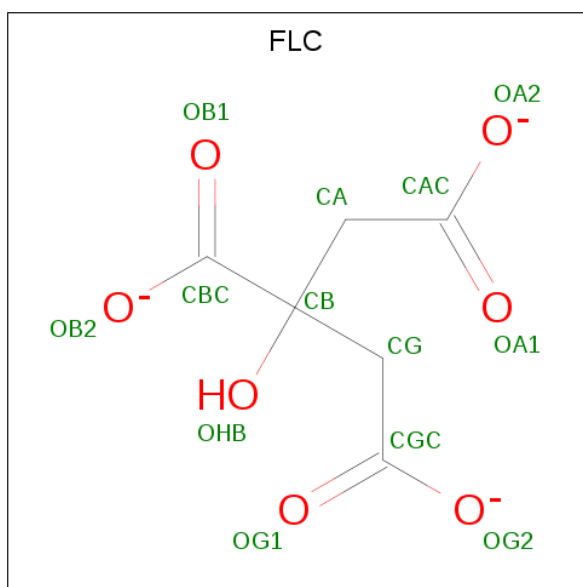
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total	C	O	0	0
			15	11	4		
4	A	1	Total	C	O	0	0
			16	12	4		
4	A	1	Total	C	O	0	0
			16	12	4		
4	A	1	Total	C	O	0	0
			12	8	4		
4	A	1	Total	C	O	0	0
			13	9	4		
4	A	1	Total	C	O	0	0
			23	19	4		
4	A	1	Total	C	O	0	0
			11	7	4		
4	A	1	Total	C	O	0	0
			9	5	4		
4	A	1	Total	C	O	0	0
			15	11	4		
4	A	1	Total	C	O	0	0
			10	6	4		
4	A	1	Total	C	O	0	0
			18	14	4		
4	A	1	Total	C	O	0	0
			16	12	4		
4	A	1	Total	C	O	0	0
			9	5	4		
4	A	1	Total	C	O	0	0
			9	5	4		
4	A	1	Total	C	O	0	0
			25	21	4		

- Molecule 5 is DI(HYDROXYETHYL)ETHER (three-letter code: PEG) (formula: C₄H₁₀O₃).



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

- Molecule 6 is CITRATE ANION (three-letter code: FLC) (formula: C₆H₅O₇).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	A	1	Total	C	O	0	0
			13	6	7		

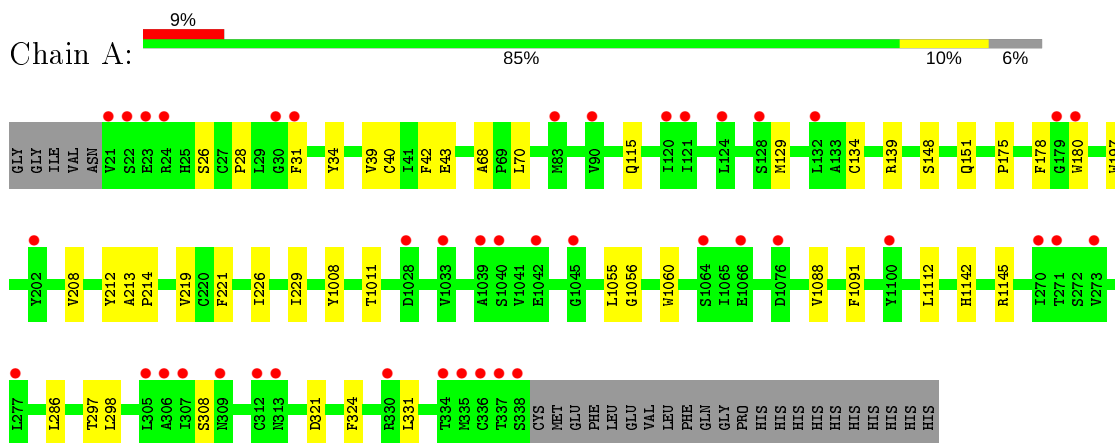
- Molecule 7 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
7	A	30	Total	O	0	0
			30	30		

3 Residue-property plots [i](#)

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

- Molecule 1: Chimera of G-protein coupled receptor 52 and Flavodoxin



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	59.97Å 88.36Å 156.28Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	41.89 – 2.20 41.89 – 2.20	Depositor EDS
% Data completeness (in resolution range)	99.4 (41.89-2.20) 99.4 (41.89-2.20)	Depositor EDS
R_{merge}	0.18	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.36 (at 2.20Å)	Xtrriage
Refinement program	REFMAC 5.8.0253	Depositor
R, R_{free}	0.194 , 0.220 0.199 , 0.222	Depositor DCC
R_{free} test set	2108 reflections (4.92%)	wwPDB-VP
Wilson B-factor (Å ²)	57.0	Xtrriage
Anisotropy	0.400	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 75.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	3910	wwPDB-VP
Average B, all atoms (Å ²)	83.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.59% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: FMN, FLC, OLC, PEG, EN6

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	0.78	0/3573	0.82	0/4870

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 [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	3479	0	3412	35	0
2	A	34	0	0	0	0
3	A	31	0	19	1	0
4	A	267	0	346	16	0
5	A	56	0	80	1	0
6	A	13	0	5	1	0
7	A	30	0	0	0	0
All	All	3910	0	3862	39	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 5.

All (39) 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:68:ALA:H	1:A:331:LEU:HD11	1.52	0.75
1:A:68:ALA:N	1:A:331:LEU:HD11	2.10	0.66
1:A:208:VAL:HG21	1:A:286:LEU:HD21	1.79	0.64
4:A:1411:OLC:H24A	4:A:1411:OLC:H2A	1.81	0.61
1:A:31:PHE:HB2	4:A:1417:OLC:H5A	1.82	0.61
1:A:1060:TRP:CZ3	3:A:1402:FMN:HM83	2.36	0.59
1:A:180:TRP:HE1	4:A:1418:OLC:H22	1.68	0.59
1:A:42:PHE:HD1	4:A:1421:OLC:H24A	1.73	0.54
1:A:115:GLN:HG3	1:A:197:TRP:CH2	2.43	0.54
1:A:28:PRO:HG2	1:A:43:GLU:HG2	1.90	0.54
1:A:180:TRP:HA	5:A:1410:PEG:H31	1.91	0.52
1:A:68:ALA:HB2	1:A:331:LEU:CD1	2.42	0.50
1:A:297:THR:HG21	4:A:1408:OLC:H21A	1.95	0.49
1:A:178:PHE:CD2	4:A:1418:OLC:H2	2.48	0.48
1:A:129:MET:HE1	1:A:212:TYR:HA	1.97	0.47
4:A:1406:OLC:H4A	4:A:1406:OLC:H7A	1.39	0.46
1:A:178:PHE:CZ	4:A:1409:OLC:H2	2.50	0.46
1:A:1055:LEU:HD12	1:A:1112:LEU:HD11	1.98	0.45
1:A:1088:VAL:HG11	1:A:1112:LEU:HD13	1.98	0.45
1:A:308:SER:HB2	4:A:1421:OLC:H15	1.98	0.44
1:A:42:PHE:CD2	4:A:1417:OLC:H7A	2.53	0.44
1:A:1056:GLY:HA2	1:A:1091:PHE:O	2.18	0.44
1:A:148:SER:HA	1:A:151:GLN:HE21	1.84	0.43
1:A:321:ASP:HB3	1:A:324:PHE:HB3	2.00	0.43
1:A:1142:HIS:O	1:A:1145:ARG:HB2	2.19	0.42
1:A:298:LEU:HD23	1:A:298:LEU:HA	1.81	0.42
1:A:175:PRO:HG3	4:A:1418:OLC:H4	2.01	0.42
1:A:39:VAL:O	4:A:1417:OLC:H22	2.20	0.42
1:A:1008:TYR:HA	1:A:1056:GLY:O	2.20	0.42
1:A:221:PHE:HD1	4:A:1406:OLC:H22	1.85	0.42
1:A:219:VAL:HG12	4:A:1415:OLC:H22	2.01	0.42
4:A:1411:OLC:H24A	4:A:1411:OLC:C2	2.48	0.41
1:A:213:ALA:N	1:A:214:PRO:HD2	2.34	0.41
1:A:134:CYS:SG	4:A:1412:OLC:H2A	2.61	0.41
1:A:1011:THR:HB	1:A:1060:TRP:CZ2	2.56	0.41
1:A:34:TYR:HB3	1:A:40:CYS:SG	2.61	0.41
6:A:1414:FLC:OG2	6:A:1414:FLC:HA2	2.21	0.40
1:A:139:ARG:HA	1:A:139:ARG:NE	2.36	0.40
1:A:226:ILE:HA	1:A:229:ILE:HD12	2.03	0.40

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	440/468 (94%)	429 (98%)	11 (2%)	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	379/404 (94%)	377 (100%)	2 (0%)	88 94

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

Mol	Chain	Res	Type
1	A	26	SER
1	A	70	LEU

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

Mol	Chain	Res	Type
1	A	151	GLN

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 carbohydrates in this entry.

5.6 Ligand geometry [i](#)

28 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
4	OLC	A	1421	-	24,24,24	1.00	1 (4%)	25,25,25	0.91	2 (8%)
4	OLC	A	1412	-	10,10,24	1.86	1 (10%)	11,11,25	1.79	2 (18%)
4	OLC	A	1405	-	14,14,24	1.40	1 (7%)	15,15,25	1.11	1 (6%)
6	FLC	A	1414	-	3,12,12	0.78	0	3,17,17	2.54	2 (66%)
3	FMN	A	1402	-	31,33,33	2.29	7 (22%)	40,50,50	2.64	10 (25%)
4	OLC	A	1407	-	15,15,24	1.40	1 (6%)	16,16,25	1.04	2 (12%)
4	OLC	A	1409	-	12,12,24	1.30	1 (8%)	13,13,25	1.01	1 (7%)
4	OLC	A	1411	-	22,22,24	1.11	1 (4%)	23,23,25	1.27	1 (4%)
5	PEG	A	1424	-	6,6,6	0.37	0	5,5,5	0.28	0
5	PEG	A	1427	-	6,6,6	0.26	0	5,5,5	0.10	0
4	OLC	A	1413	-	8,8,24	1.13	1 (12%)	9,9,25	1.54	2 (22%)
4	OLC	A	1419	-	8,8,24	0.97	1 (12%)	9,9,25	1.15	1 (11%)
4	OLC	A	1404	-	24,24,24	1.12	1 (4%)	25,25,25	1.00	1 (4%)
5	PEG	A	1425	-	6,6,6	0.22	0	5,5,5	0.15	0
5	PEG	A	1422	-	6,6,6	0.23	0	5,5,5	0.34	0
2	EN6	A	1401	-	32,37,37	0.74	2 (6%)	35,54,54	0.78	1 (2%)
4	OLC	A	1420	-	8,8,24	1.17	1 (12%)	9,9,25	1.56	2 (22%)
5	PEG	A	1426	-	6,6,6	0.54	0	5,5,5	0.20	0
4	OLC	A	1416	-	9,9,24	1.85	1 (11%)	10,10,25	1.70	2 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	PEG	A	1428	-	6,6,6	0.25	0	5,5,5	0.17	0
4	OLC	A	1408	-	11,11,24	1.60	1 (9%)	12,12,25	1.07	1 (8%)
4	OLC	A	1415	-	14,14,24	1.38	1 (7%)	15,15,25	1.10	2 (13%)
4	OLC	A	1403	-	24,24,24	1.08	2 (8%)	25,25,25	0.98	2 (8%)
5	PEG	A	1410	-	6,6,6	0.23	0	5,5,5	0.23	0
4	OLC	A	1406	-	15,15,24	1.16	1 (6%)	16,16,25	0.90	1 (6%)
5	PEG	A	1423	-	6,6,6	0.16	0	5,5,5	0.14	0
4	OLC	A	1418	-	15,15,24	1.11	1 (6%)	16,16,25	1.04	2 (12%)
4	OLC	A	1417	-	17,17,24	1.19	1 (5%)	18,18,25	1.02	2 (11%)

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
4	OLC	A	1421	-	-	11/24/24/24	-
4	OLC	A	1412	-	-	5/10/10/24	-
4	OLC	A	1405	-	-	6/14/14/24	-
6	FLC	A	1414	-	-	3/6/16/16	-
3	FMN	A	1402	-	-	1/18/18/18	0/3/3/3
4	OLC	A	1407	-	-	7/15/15/24	-
4	OLC	A	1409	-	-	5/12/12/24	-
4	OLC	A	1411	-	-	14/22/22/24	-
5	PEG	A	1424	-	-	3/4/4/4	-
5	PEG	A	1427	-	-	3/4/4/4	-
4	OLC	A	1413	-	-	2/7/7/24	-
4	OLC	A	1419	-	-	5/7/7/24	-
4	OLC	A	1404	-	-	12/24/24/24	-
5	PEG	A	1425	-	-	1/4/4/4	-
5	PEG	A	1422	-	-	3/4/4/4	-
2	EN6	A	1401	-	-	0/16/24/24	0/4/4/4
4	OLC	A	1420	-	-	2/7/7/24	-
5	PEG	A	1426	-	-	3/4/4/4	-
4	OLC	A	1416	-	-	3/9/9/24	-
5	PEG	A	1428	-	-	4/4/4/4	-
4	OLC	A	1408	-	-	3/11/11/24	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	OLC	A	1415	-	-	7/14/14/24	-
4	OLC	A	1403	-	-	14/24/24/24	-
5	PEG	A	1410	-	-	3/4/4/4	-
4	OLC	A	1406	-	-	5/15/15/24	-
5	PEG	A	1423	-	-	2/4/4/4	-
4	OLC	A	1418	-	-	7/15/15/24	-
4	OLC	A	1417	-	-	8/17/17/24	-

All (27) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	1402	FMN	C4A-C10	8.60	1.47	1.38
4	A	1412	OLC	O20-C1	5.35	1.49	1.33
4	A	1416	OLC	O20-C1	5.34	1.49	1.33
4	A	1408	OLC	O20-C1	5.14	1.48	1.33
4	A	1404	OLC	O20-C1	5.07	1.48	1.33
4	A	1407	OLC	O20-C1	5.01	1.48	1.33
4	A	1415	OLC	O20-C1	4.78	1.47	1.33
4	A	1405	OLC	O20-C1	4.76	1.47	1.33
4	A	1411	OLC	O20-C1	4.51	1.46	1.33
4	A	1403	OLC	O20-C1	4.49	1.46	1.33
4	A	1417	OLC	O20-C1	4.38	1.46	1.33
4	A	1409	OLC	O20-C1	4.37	1.46	1.33
4	A	1421	OLC	O20-C1	4.27	1.45	1.33
4	A	1406	OLC	O20-C1	4.26	1.45	1.33
3	A	1402	FMN	C4-C4A	4.10	1.48	1.41
4	A	1418	OLC	O20-C1	4.04	1.45	1.33
3	A	1402	FMN	C9A-C5A	3.77	1.50	1.42
3	A	1402	FMN	C9A-N10	3.21	1.42	1.38
3	A	1402	FMN	C2-N3	-3.17	1.31	1.38
3	A	1402	FMN	C4A-N5	3.03	1.37	1.33
4	A	1420	OLC	O20-C1	2.93	1.47	1.33
4	A	1413	OLC	O20-C1	2.65	1.46	1.33
3	A	1402	FMN	C8-C7	2.62	1.47	1.40
4	A	1419	OLC	O20-C1	2.57	1.46	1.33
2	A	1401	EN6	C18-C22	-2.28	1.47	1.51
2	A	1401	EN6	C9-C8	-2.19	1.49	1.51
4	A	1403	OLC	O23-C22	2.05	1.49	1.43

All (40) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	1402	FMN	C4-N3-C2	10.02	123.60	115.14
3	A	1402	FMN	C4-C4A-C10	-7.18	115.20	119.95
3	A	1402	FMN	C1'-N10-C9A	5.53	122.64	118.29
4	A	1416	OLC	O20-C1-C2	4.68	123.66	111.38
4	A	1412	OLC	O20-C1-C2	4.43	125.80	111.91
3	A	1402	FMN	C4A-N5-C5A	4.15	120.92	116.77
4	A	1411	OLC	O20-C1-C2	4.02	124.52	111.91
3	A	1402	FMN	C4-C4A-N5	3.98	123.15	118.60
3	A	1402	FMN	C4A-C4-N3	-3.53	118.61	123.43
4	A	1420	OLC	O20-C1-C2	3.48	127.55	112.38
6	A	1414	FLC	CB-CG-CGC	3.31	120.28	114.98
4	A	1413	OLC	O20-C1-C2	3.20	126.33	112.38
4	A	1421	OLC	O20-C1-C2	3.15	121.79	111.91
4	A	1407	OLC	O20-C1-C2	3.02	121.39	111.91
4	A	1418	OLC	O20-C1-C2	2.93	121.09	111.91
4	A	1405	OLC	O20-C1-C2	2.89	120.99	111.91
4	A	1412	OLC	O20-C1-O19	-2.86	116.37	123.59
4	A	1408	OLC	O20-C1-C2	2.80	120.69	111.91
4	A	1403	OLC	O20-C1-C2	2.77	120.59	111.91
4	A	1415	OLC	O20-C1-C2	2.76	120.57	111.91
4	A	1417	OLC	O20-C1-O19	-2.66	116.88	123.59
6	A	1414	FLC	CG-CB-CA	2.63	116.37	109.33
4	A	1404	OLC	O20-C1-C2	2.59	120.02	111.91
4	A	1409	OLC	O20-C1-C2	2.58	119.99	111.91
4	A	1406	OLC	O20-C1-C2	2.57	119.97	111.91
4	A	1413	OLC	C21-O20-C1	2.52	123.43	117.10
4	A	1419	OLC	O20-C1-C2	2.50	123.30	112.38
4	A	1417	OLC	O20-C1-C2	2.47	119.66	111.91
3	A	1402	FMN	C5A-C9A-N10	2.44	119.48	117.72
3	A	1402	FMN	O4'-C4'-C5'	-2.37	104.59	109.92
3	A	1402	FMN	C9A-N10-C10	-2.20	119.02	121.91
4	A	1418	OLC	O20-C1-O19	-2.19	118.06	123.59
3	A	1402	FMN	O3P-P-O1P	2.17	119.19	110.68
4	A	1403	OLC	O23-C22-C24	2.15	118.59	109.12
4	A	1415	OLC	O20-C1-O19	-2.11	118.27	123.59
4	A	1407	OLC	O20-C1-O19	-2.07	118.37	123.59
4	A	1421	OLC	O20-C1-O19	-2.06	118.39	123.59
2	A	1401	EN6	C17-C18-C19	2.04	106.37	103.88
4	A	1420	OLC	O19-C1-C2	-2.01	117.47	124.81
4	A	1416	OLC	O20-C1-O19	-2.01	118.53	123.59

There are no chirality outliers.

All (142) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	1412	OLC	O20-C21-C22-C24
4	A	1405	OLC	C21-C22-C24-O25
4	A	1405	OLC	O20-C21-C22-O23
6	A	1414	FLC	CAC-CA-CB-CBC
4	A	1419	OLC	C21-C22-C24-O25
4	A	1404	OLC	C21-C22-C24-O25
4	A	1416	OLC	C21-C22-C24-O25
4	A	1416	OLC	O23-C22-C24-O25
4	A	1418	OLC	O20-C21-C22-C24
4	A	1417	OLC	C2-C1-O20-C21
4	A	1417	OLC	O19-C1-O20-C21
4	A	1411	OLC	O19-C1-O20-C21
4	A	1413	OLC	O19-C1-O20-C21
4	A	1415	OLC	C2-C1-O20-C21
4	A	1403	OLC	C2-C1-O20-C21
4	A	1412	OLC	C2-C1-O20-C21
4	A	1411	OLC	C2-C1-O20-C21
4	A	1413	OLC	C2-C1-O20-C21
4	A	1412	OLC	O19-C1-O20-C21
4	A	1415	OLC	O19-C1-O20-C21
4	A	1403	OLC	O19-C1-O20-C21
5	A	1410	PEG	C1-C2-O2-C3
4	A	1412	OLC	O20-C21-C22-O23
4	A	1418	OLC	O20-C21-C22-O23
4	A	1406	OLC	C4-C5-C6-C7
4	A	1421	OLC	O20-C21-C22-C24
4	A	1405	OLC	O20-C21-C22-C24
4	A	1411	OLC	O20-C21-C22-C24
4	A	1403	OLC	O20-C21-C22-C24
4	A	1407	OLC	C1-C2-C3-C4
4	A	1421	OLC	O20-C21-C22-O23
4	A	1411	OLC	O20-C21-C22-O23
4	A	1404	OLC	C1-C2-C3-C4
4	A	1406	OLC	C1-C2-C3-C4
4	A	1407	OLC	C2-C1-O20-C21
4	A	1409	OLC	C1-C2-C3-C4
4	A	1404	OLC	O23-C22-C24-O25
4	A	1417	OLC	C1-C2-C3-C4
5	A	1427	PEG	O2-C3-C4-O4
5	A	1428	PEG	O2-C3-C4-O4
4	A	1419	OLC	O19-C1-O20-C21
4	A	1409	OLC	O20-C21-C22-O23
4	A	1404	OLC	O20-C21-C22-O23

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Mol	Chain	Res	Type	Atoms
4	A	1403	OLC	O20-C21-C22-O23
4	A	1421	OLC	C2-C1-O20-C21
5	A	1424	PEG	O1-C1-C2-O2
5	A	1410	PEG	O1-C1-C2-O2
4	A	1419	OLC	C2-C1-O20-C21
4	A	1404	OLC	C11-C12-C13-C14
4	A	1406	OLC	C3-C4-C5-C6
4	A	1417	OLC	C4-C5-C6-C7
4	A	1409	OLC	O20-C21-C22-C24
4	A	1404	OLC	O20-C21-C22-C24
4	A	1404	OLC	C14-C15-C16-C17
4	A	1415	OLC	C3-C4-C5-C6
4	A	1403	OLC	C1-C2-C3-C4
4	A	1403	OLC	C2-C3-C4-C5
4	A	1407	OLC	O19-C1-O20-C21
4	A	1411	OLC	C21-C22-C24-O25
4	A	1408	OLC	C21-C22-C24-O25
4	A	1403	OLC	C21-C22-C24-O25
4	A	1418	OLC	C21-C22-C24-O25
4	A	1419	OLC	O20-C21-C22-O23
4	A	1405	OLC	C4-C5-C6-C7
4	A	1403	OLC	C3-C4-C5-C6
4	A	1417	OLC	C5-C6-C7-C8
5	A	1424	PEG	O2-C3-C4-O4
4	A	1421	OLC	C13-C14-C15-C16
4	A	1420	OLC	C2-C1-O20-C21
4	A	1421	OLC	C3-C4-C5-C6
4	A	1405	OLC	O23-C22-C24-O25
4	A	1411	OLC	O23-C22-C24-O25
4	A	1419	OLC	O23-C22-C24-O25
4	A	1421	OLC	C14-C15-C16-C17
4	A	1404	OLC	C2-C3-C4-C5
4	A	1412	OLC	C1-C2-C3-C4
4	A	1421	OLC	O19-C1-O20-C21
5	A	1423	PEG	O2-C3-C4-O4
4	A	1411	OLC	C3-C4-C5-C6
4	A	1406	OLC	C5-C6-C7-C8
4	A	1418	OLC	C2-C1-O20-C21
4	A	1415	OLC	C4-C5-C6-C7
4	A	1404	OLC	C12-C13-C14-C15
6	A	1414	FLC	OHB-CB-CG-CGC
5	A	1426	PEG	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
4	A	1420	OLC	O19-C1-O20-C21
4	A	1403	OLC	C12-C13-C14-C15
5	A	1427	PEG	O1-C1-C2-O2
4	A	1408	OLC	O23-C22-C24-O25
4	A	1403	OLC	C10-C11-C12-C13
6	A	1414	FLC	CAC-CA-CB-OHB
4	A	1404	OLC	C13-C14-C15-C16
3	A	1402	FMN	C5'-O5'-P-O1P
5	A	1426	PEG	O2-C3-C4-O4
4	A	1418	OLC	O19-C1-O20-C21
4	A	1411	OLC	C13-C14-C15-C16
4	A	1421	OLC	C10-C11-C12-C13
4	A	1415	OLC	O20-C21-C22-O23
4	A	1415	OLC	C2-C3-C4-C5
4	A	1421	OLC	C4-C5-C6-C7
4	A	1421	OLC	C11-C12-C13-C14
4	A	1403	OLC	C4-C5-C6-C7
4	A	1417	OLC	C2-C3-C4-C5
4	A	1421	OLC	C2-C3-C4-C5
4	A	1403	OLC	C15-C16-C17-C18
4	A	1411	OLC	C12-C13-C14-C15
4	A	1404	OLC	C3-C4-C5-C6
5	A	1422	PEG	C4-C3-O2-C2
4	A	1407	OLC	C3-C4-C5-C6
5	A	1428	PEG	C4-C3-O2-C2
5	A	1426	PEG	C1-C2-O2-C3
4	A	1405	OLC	C5-C6-C7-C8
5	A	1428	PEG	C1-C2-O2-C3
4	A	1403	OLC	O23-C22-C24-O25
5	A	1428	PEG	O1-C1-C2-O2
5	A	1422	PEG	O2-C3-C4-O4
5	A	1423	PEG	C4-C3-O2-C2
4	A	1418	OLC	C2-C3-C4-C5
4	A	1408	OLC	O20-C21-C22-C24
4	A	1409	OLC	C2-C1-O20-C21
4	A	1411	OLC	C7-C8-C9-C10
5	A	1427	PEG	C4-C3-O2-C2
4	A	1411	OLC	C6-C7-C8-C9
5	A	1424	PEG	C1-C2-O2-C3
4	A	1409	OLC	O19-C1-O20-C21
4	A	1415	OLC	O20-C21-C22-C24
5	A	1410	PEG	C4-C3-O2-C2

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Mol	Chain	Res	Type	Atoms
4	A	1404	OLC	C7-C8-C9-C10
4	A	1406	OLC	C2-C3-C4-C5
4	A	1418	OLC	O23-C22-C24-O25
4	A	1407	OLC	O20-C1-C2-C3
4	A	1417	OLC	O20-C21-C22-C24
4	A	1411	OLC	O20-C1-C2-C3
4	A	1411	OLC	C9-C10-C11-C12
4	A	1407	OLC	C4-C5-C6-C7
4	A	1403	OLC	C14-C15-C16-C17
4	A	1417	OLC	O20-C21-C22-O23
4	A	1416	OLC	O20-C1-C2-C3
5	A	1425	PEG	O2-C3-C4-O4
4	A	1411	OLC	O19-C1-C2-C3
4	A	1407	OLC	O19-C1-C2-C3
5	A	1422	PEG	C1-C2-O2-C3

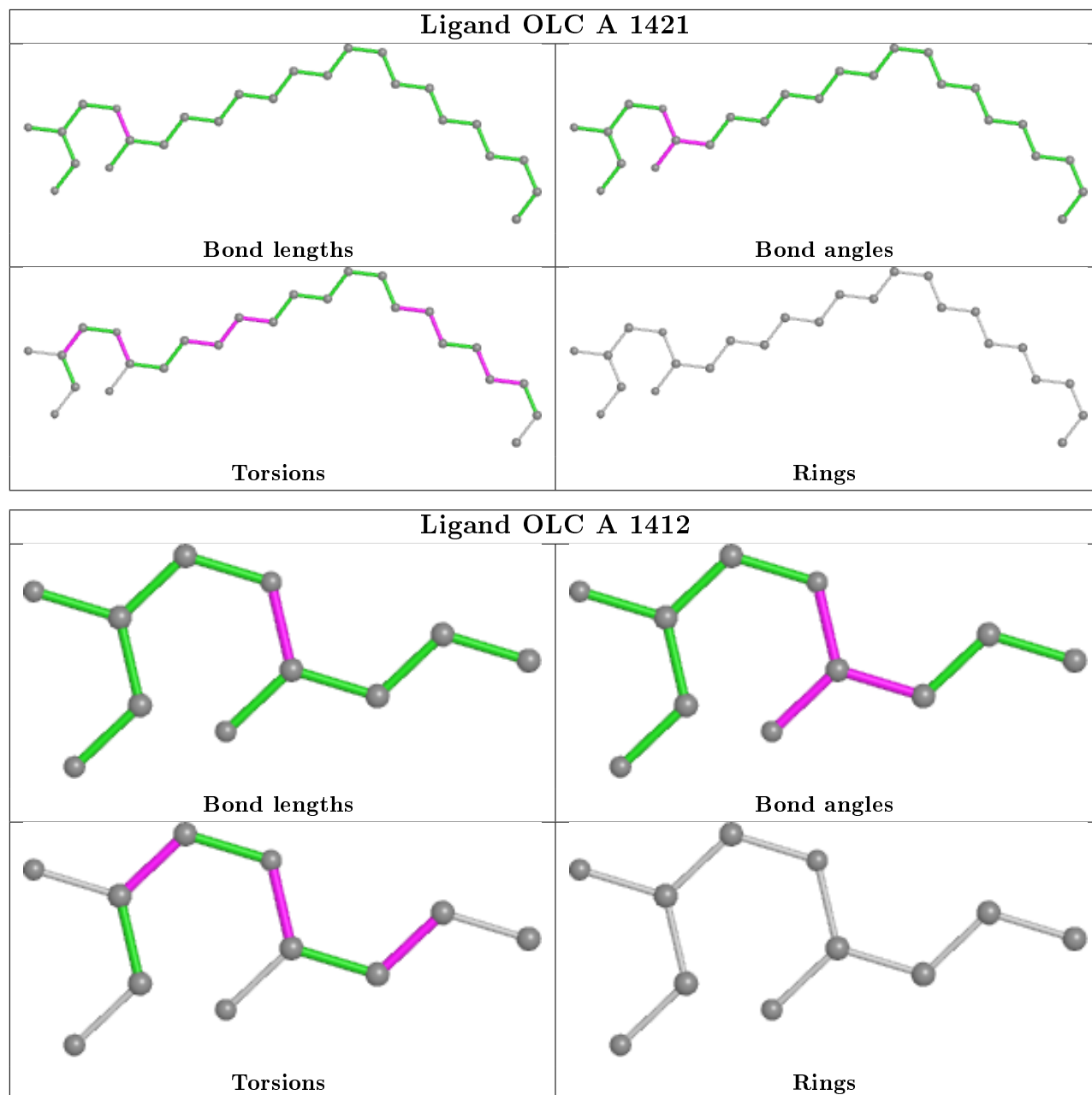
There are no ring outliers.

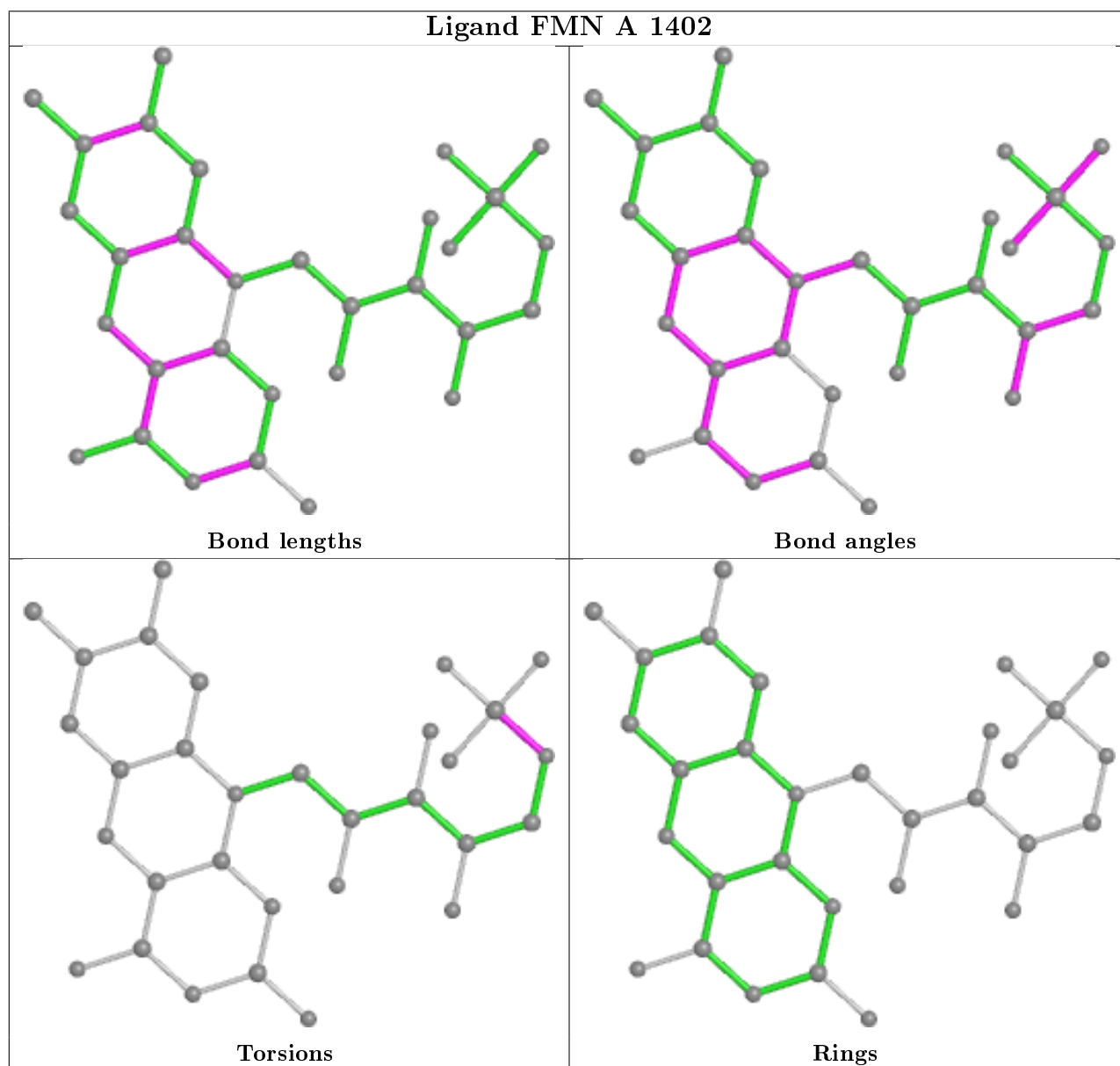
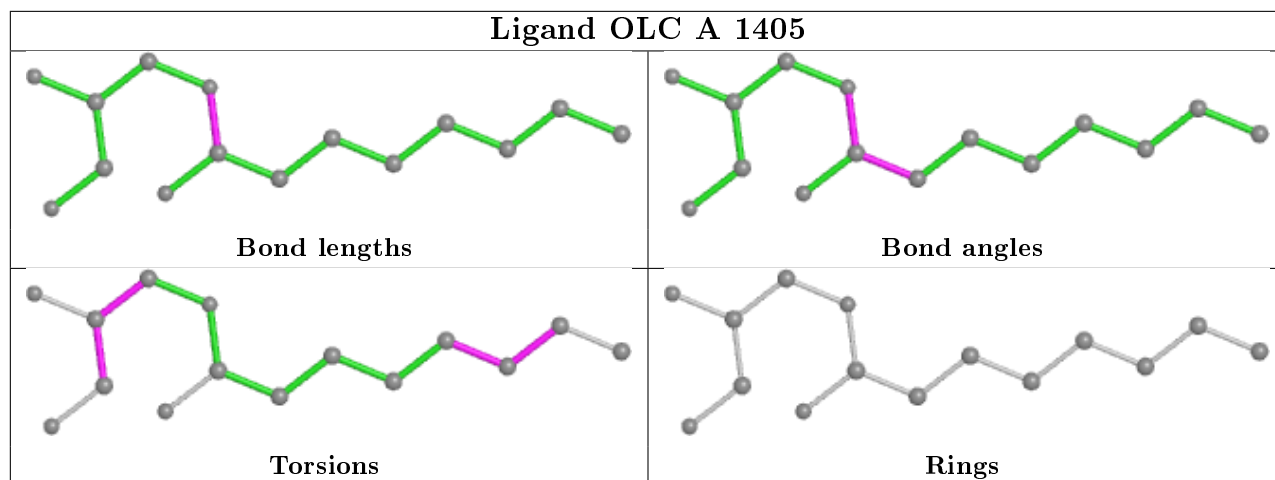
12 monomers are involved in 19 short contacts:

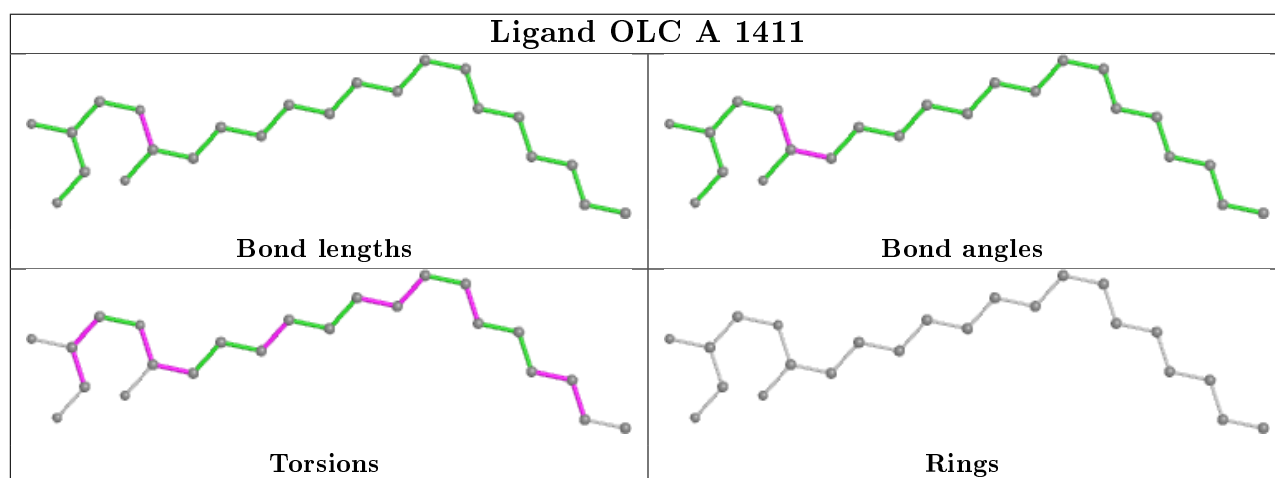
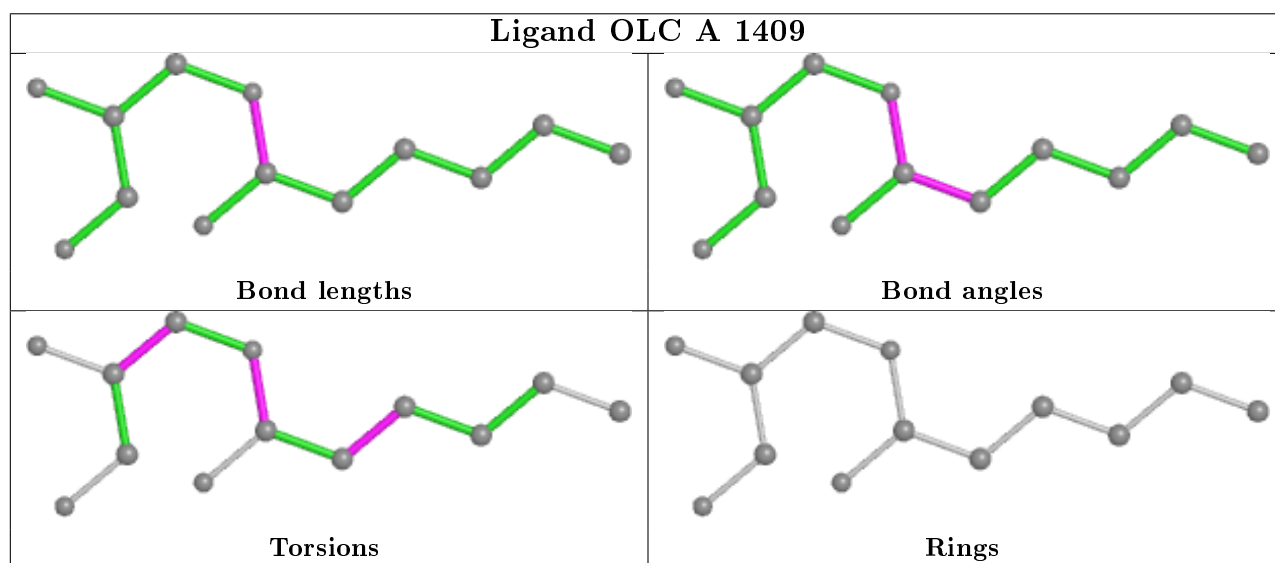
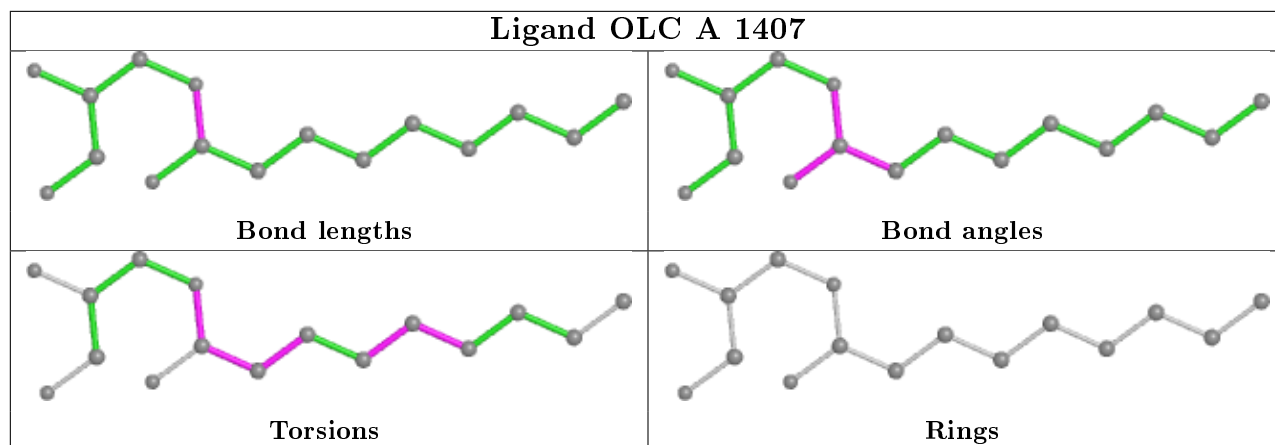
Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	A	1421	OLC	2	0
4	A	1412	OLC	1	0
6	A	1414	FLC	1	0
3	A	1402	FMN	1	0
4	A	1409	OLC	1	0
4	A	1411	OLC	2	0
4	A	1408	OLC	1	0
4	A	1415	OLC	1	0
5	A	1410	PEG	1	0
4	A	1406	OLC	2	0
4	A	1418	OLC	3	0
4	A	1417	OLC	3	0

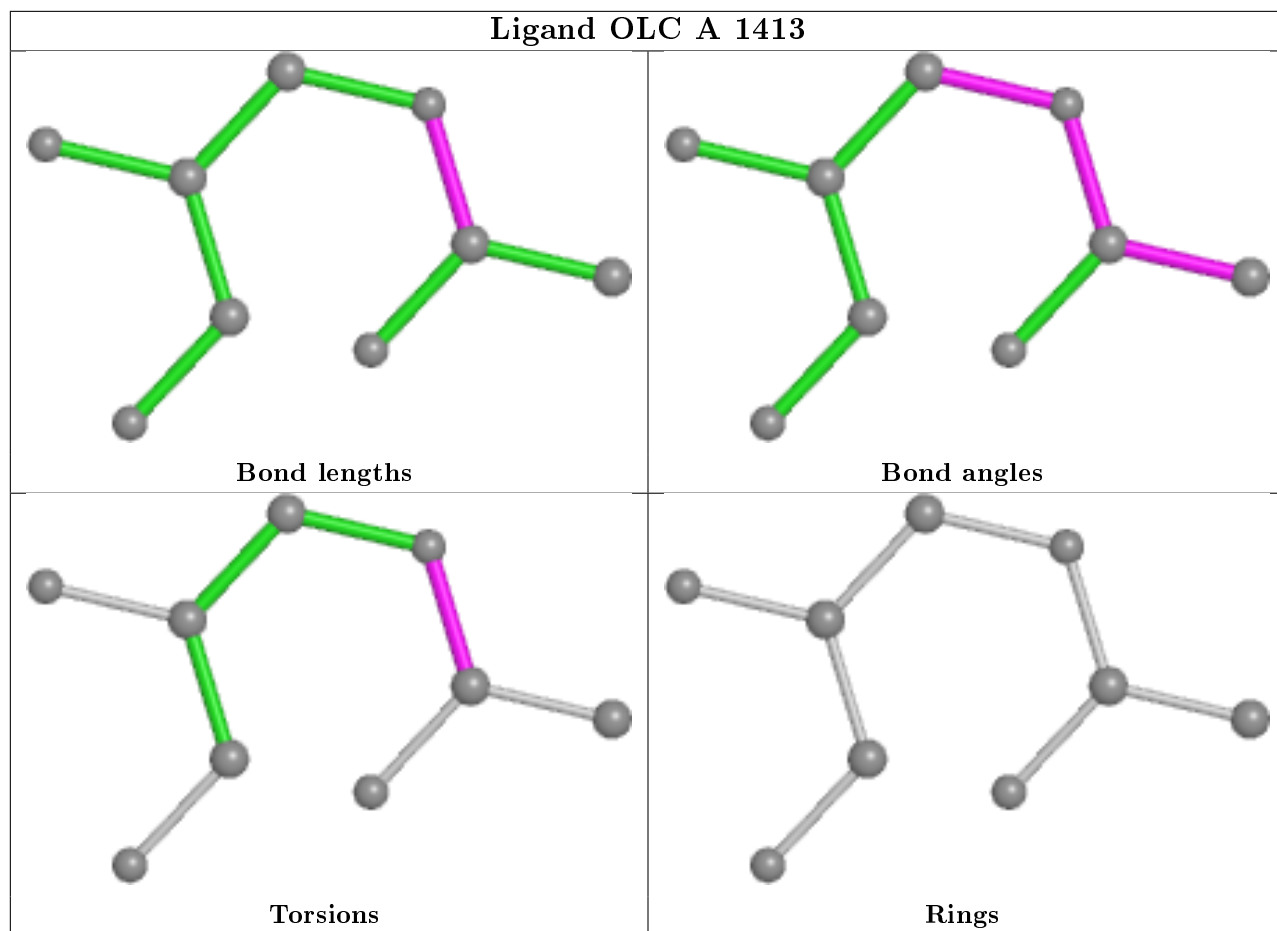
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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

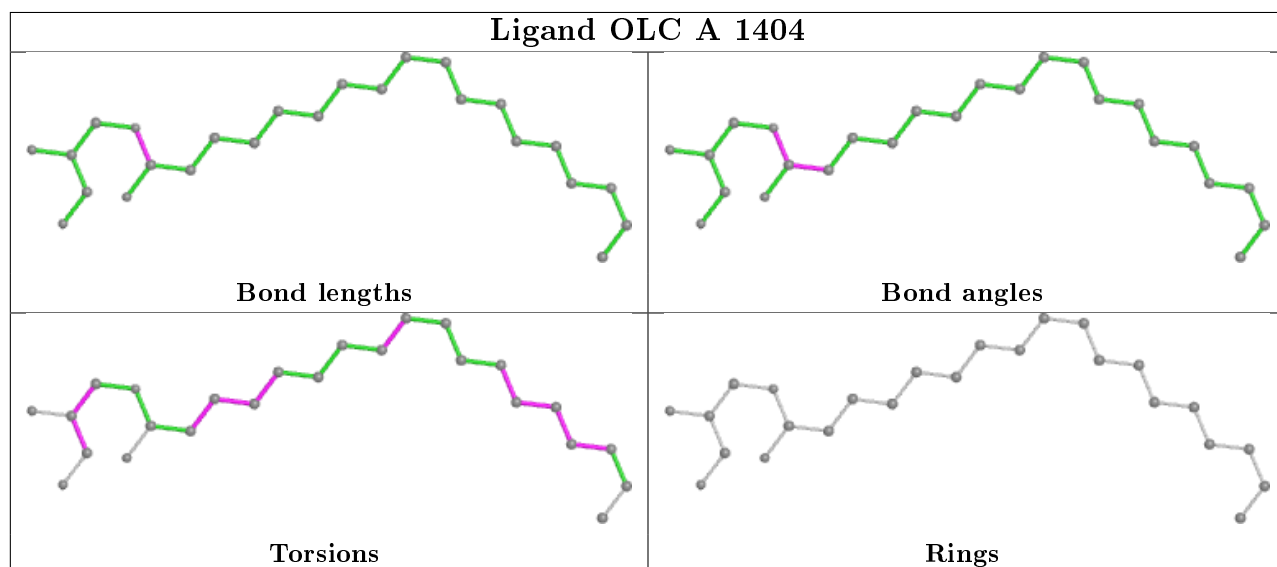
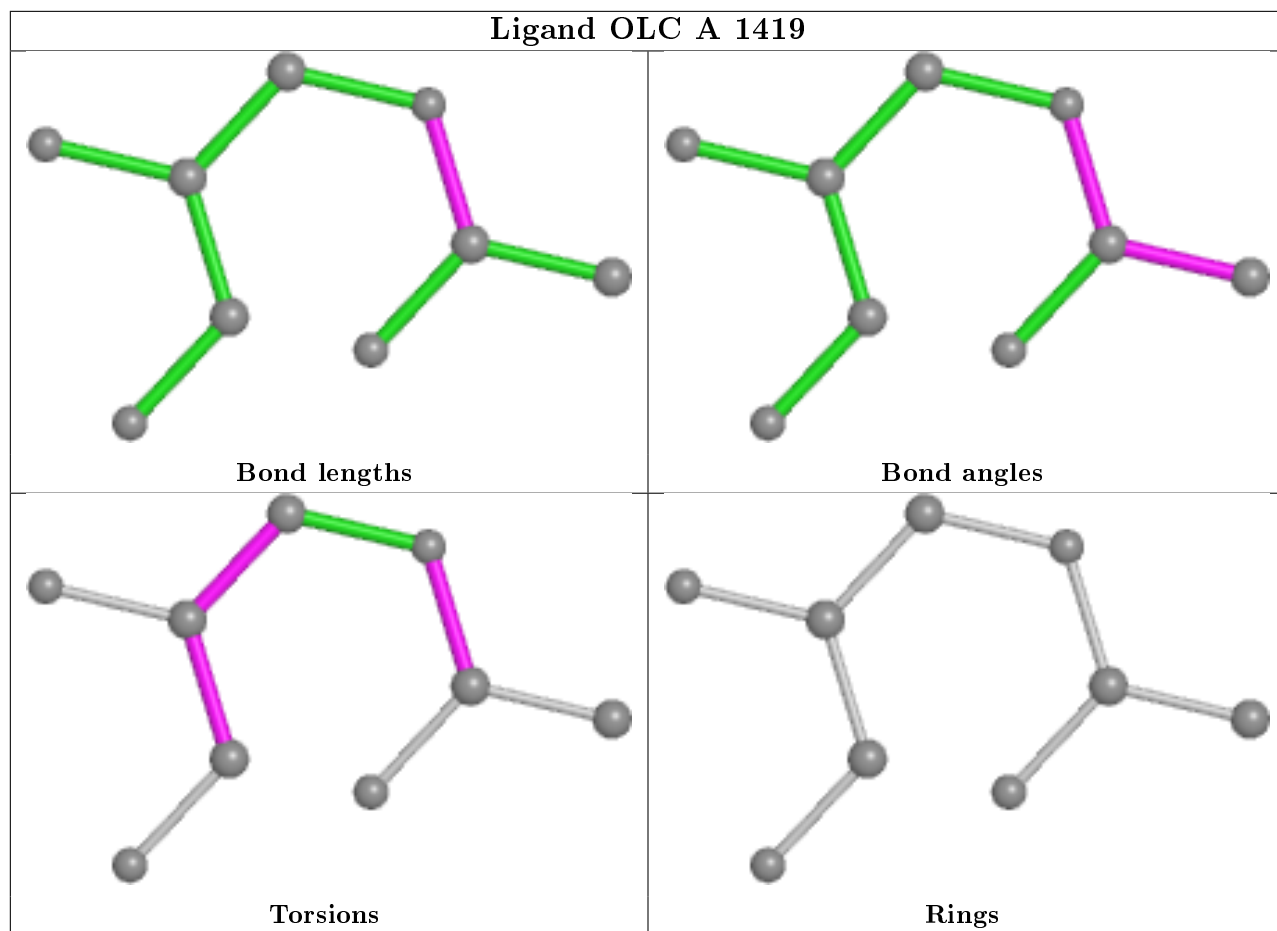
any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

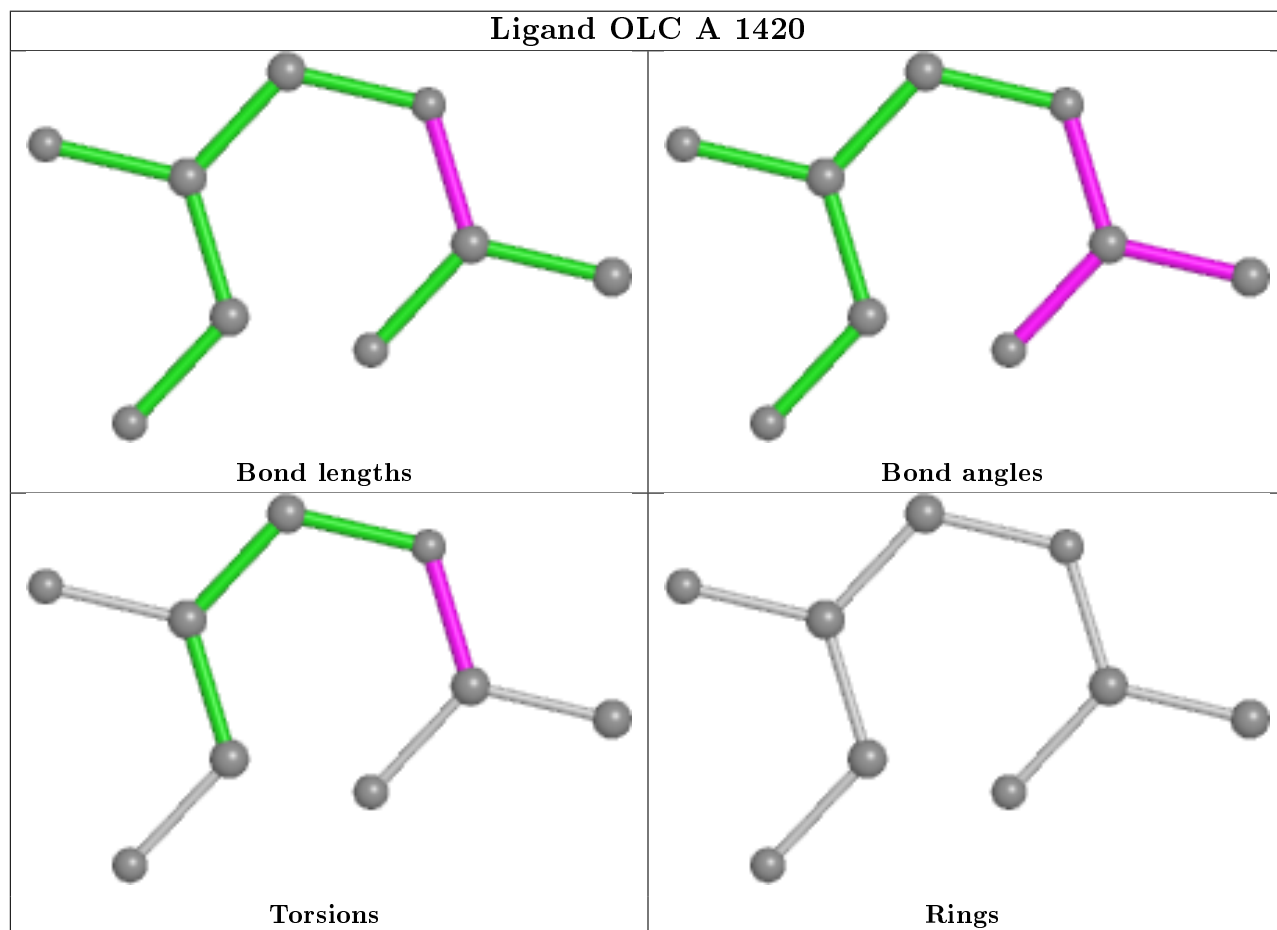
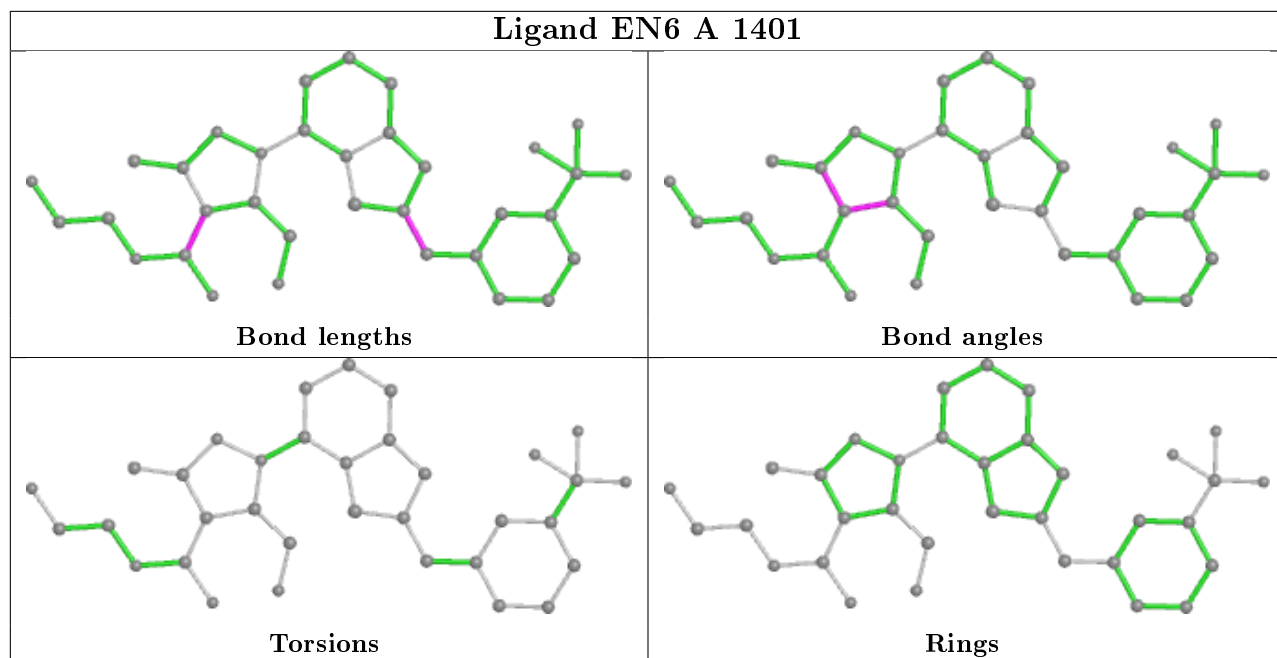


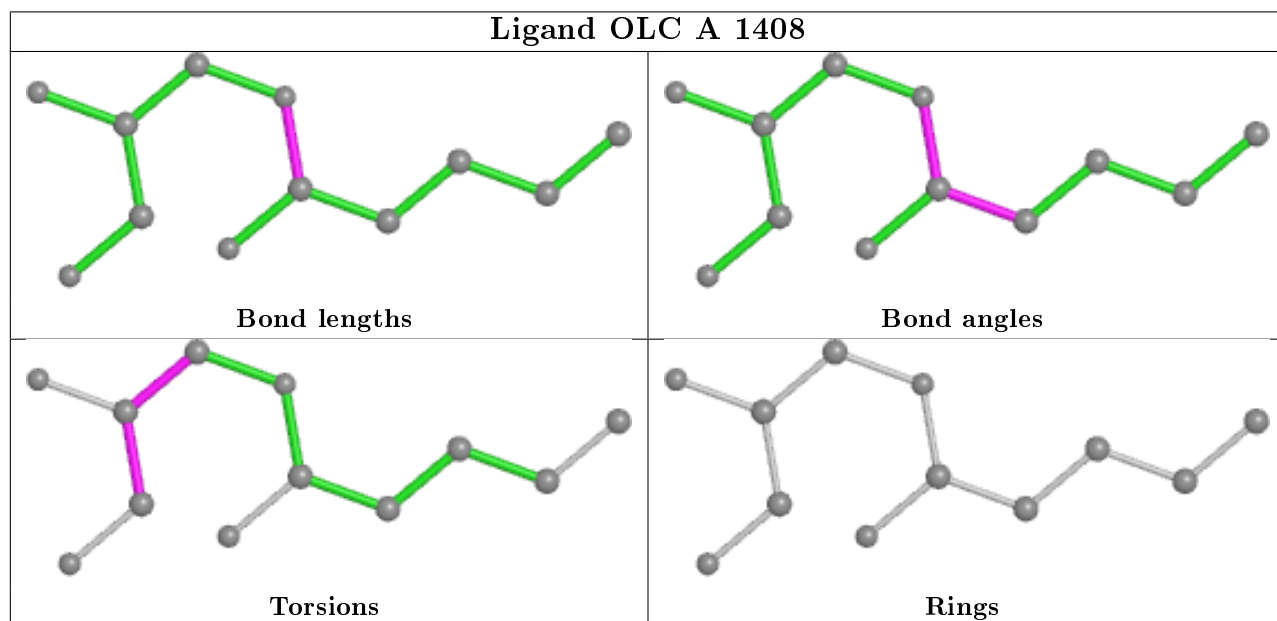
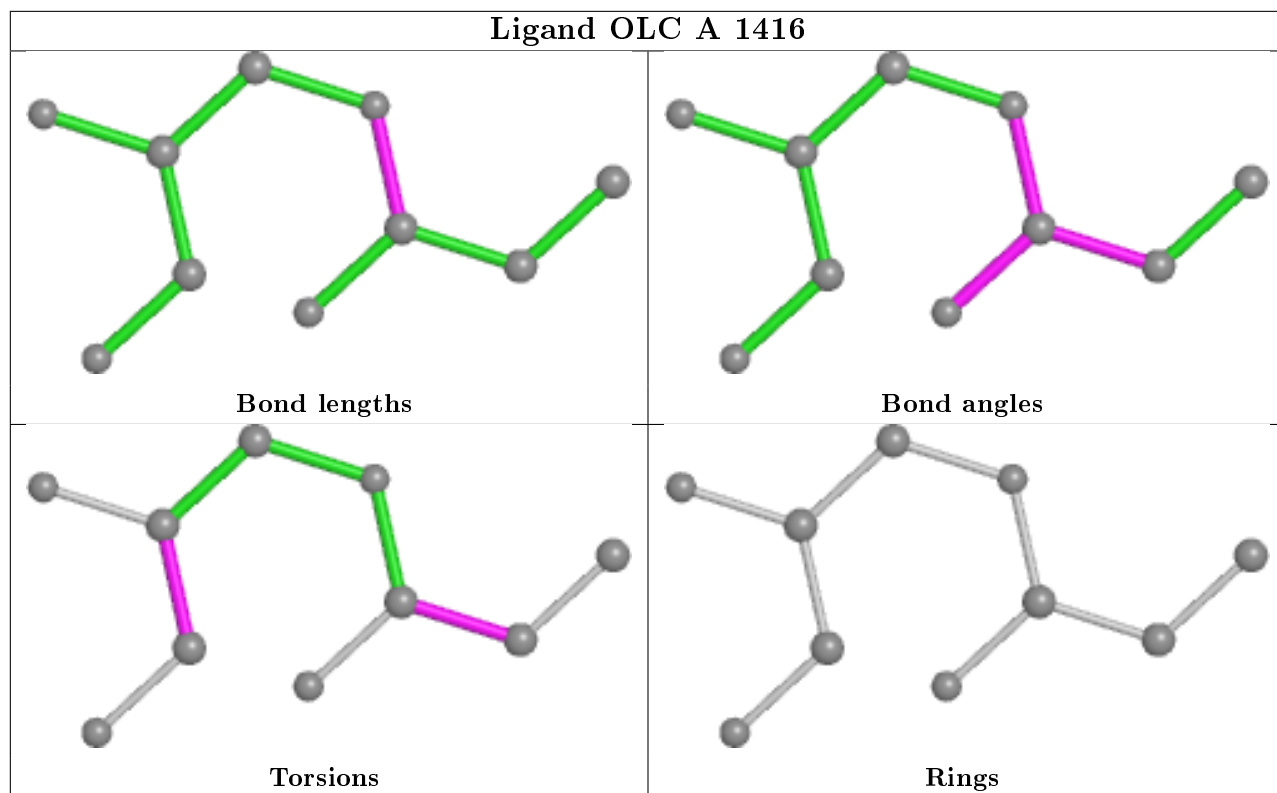


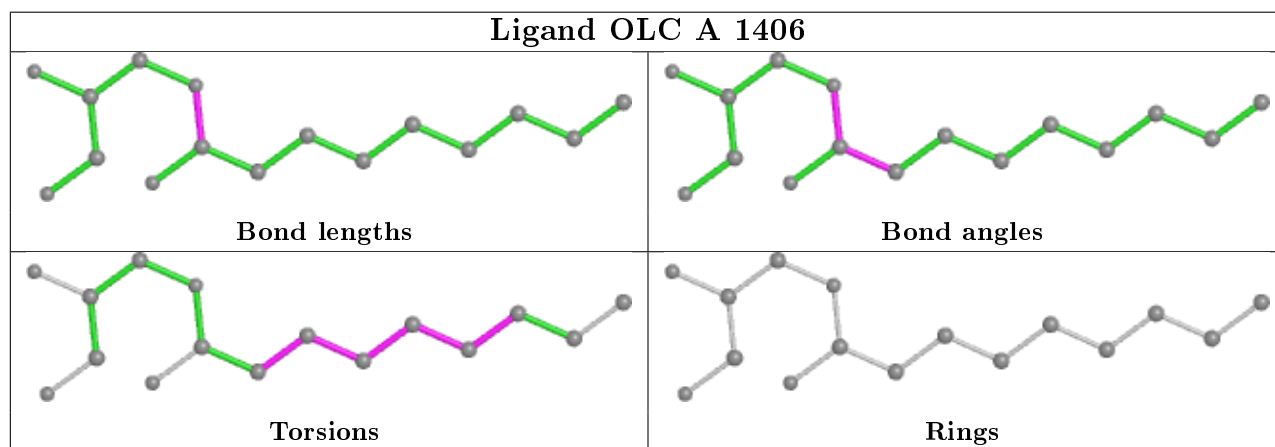
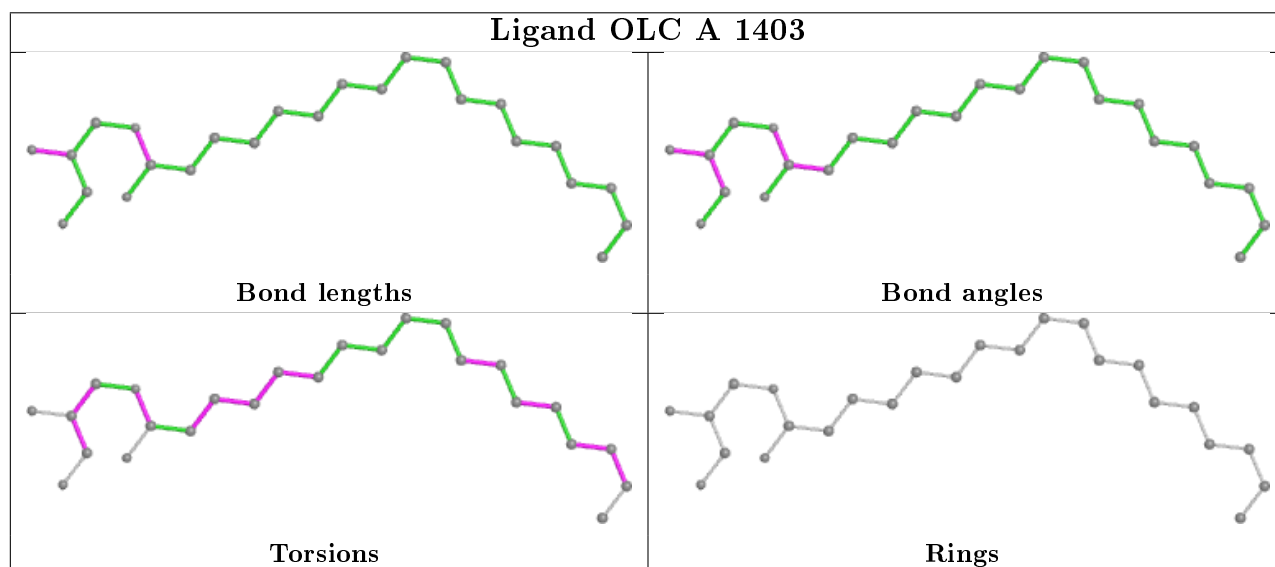
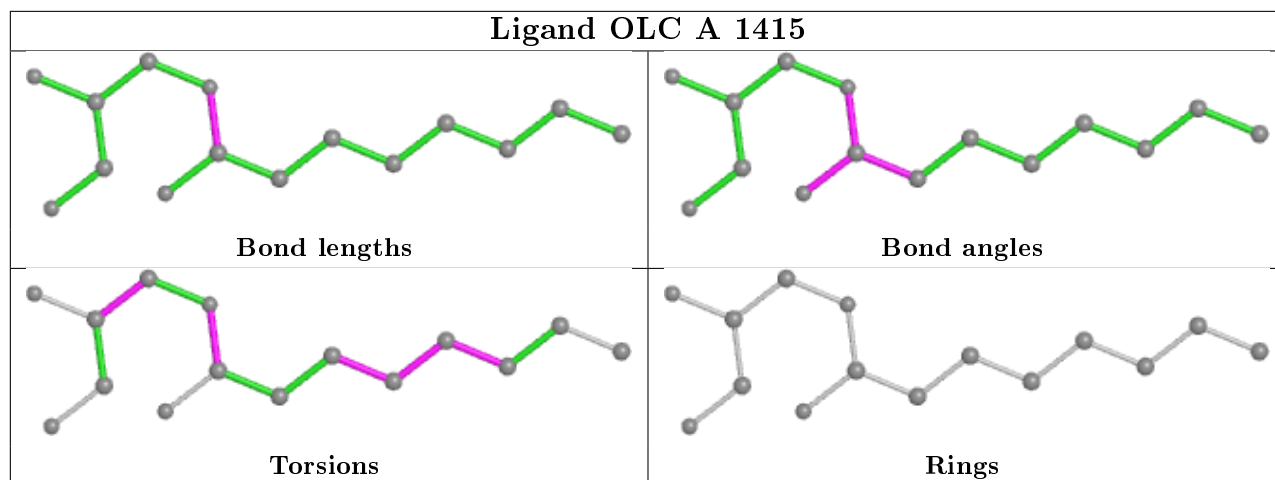


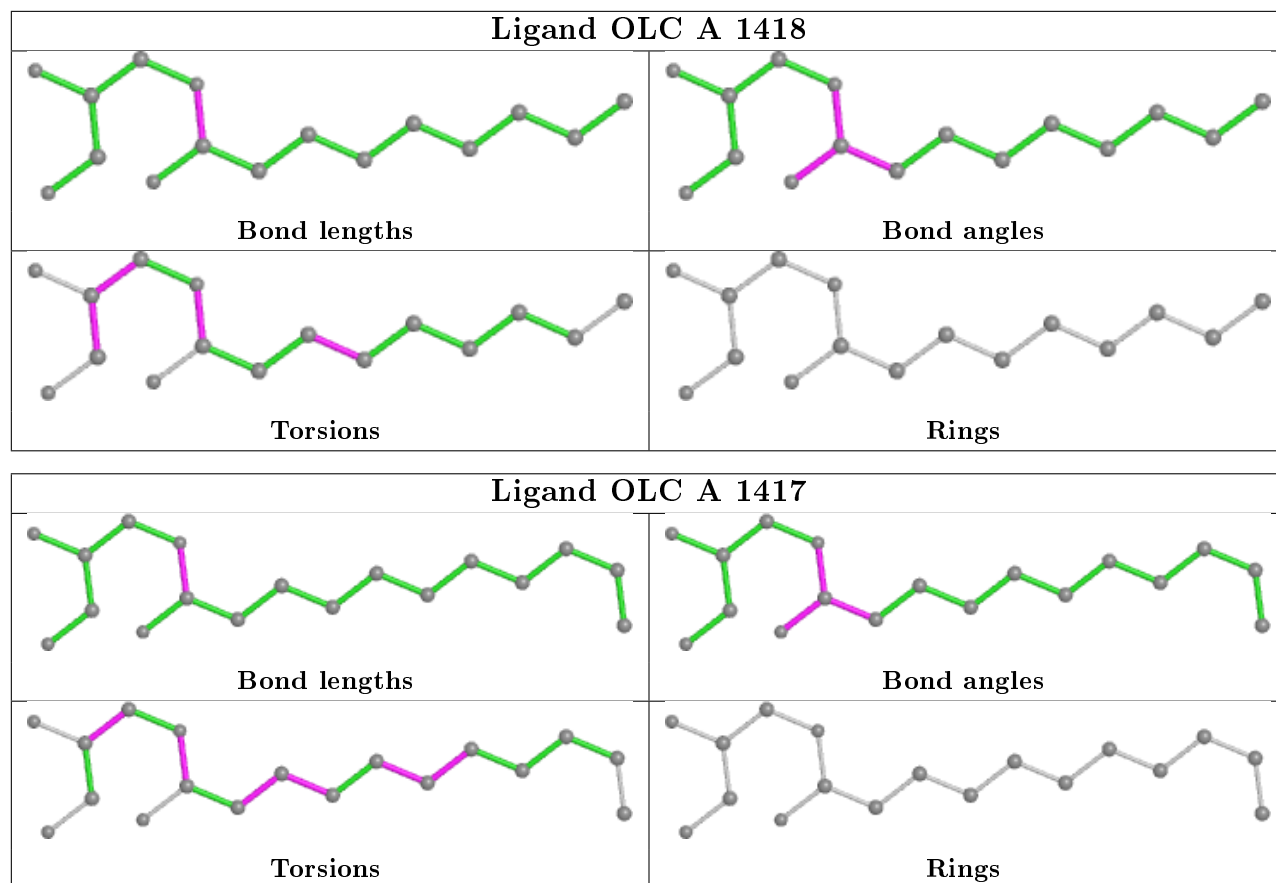












5.7 Other polymers [i](#)

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	441/468 (94%)	0.26	42 (9%) 8 7	59, 76, 113, 173	0

All (42) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	21	VAL	5.0
1	A	23	GLU	4.7
1	A	334	THR	4.6
1	A	31	PHE	4.5
1	A	335	MET	4.5
1	A	336	CYS	4.1
1	A	22	SER	4.0
1	A	338	SER	3.9
1	A	337	THR	3.6
1	A	24	ARG	3.4
1	A	1028	ASP	3.3
1	A	277	LEU	3.1
1	A	30	GLY	3.1
1	A	307	ILE	3.0
1	A	179	GLY	2.9
1	A	124	LEU	2.7
1	A	270	ILE	2.6
1	A	313	ASN	2.6
1	A	306	ALA	2.6
1	A	305	LEU	2.5
1	A	132	LEU	2.5
1	A	1064	SER	2.5
1	A	1100	TYR	2.5
1	A	83	MET	2.4
1	A	90	VAL	2.4
1	A	202	TYR	2.4
1	A	309	ASN	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	1045	GLY	2.3
1	A	1040	SER	2.3
1	A	312	CYS	2.3
1	A	1066	GLU	2.3
1	A	273	VAL	2.2
1	A	1042	GLU	2.2
1	A	271	THR	2.2
1	A	330	ARG	2.2
1	A	128	SER	2.2
1	A	1039	ALA	2.1
1	A	121	ILE	2.1
1	A	180	TRP	2.1
1	A	1076	ASP	2.1
1	A	1033	VAL	2.0
1	A	120	ILE	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 carbohydrates in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
4	OLC	A	1421	25/25	0.50	0.41	78,108,134,136	0
5	PEG	A	1423	7/7	0.51	0.30	112,120,133,138	0
4	OLC	A	1409	13/25	0.65	0.36	100,121,144,147	0
4	OLC	A	1417	18/25	0.65	0.31	93,110,159,165	0
5	PEG	A	1425	7/7	0.70	0.36	128,134,160,162	0
4	OLC	A	1407	16/25	0.74	0.29	76,127,186,198	0
5	PEG	A	1410	7/7	0.75	0.39	101,126,146,152	0
5	PEG	A	1422	7/7	0.76	0.30	118,129,139,140	0

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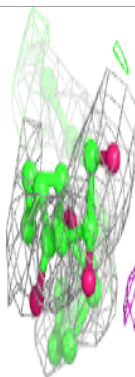
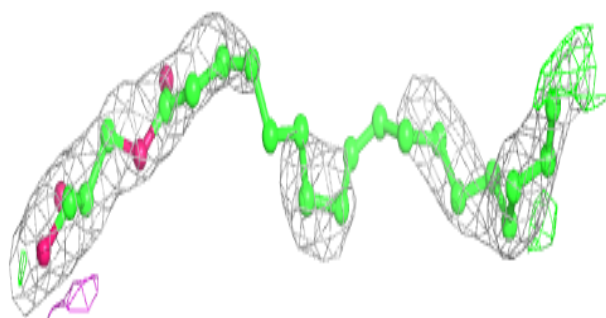
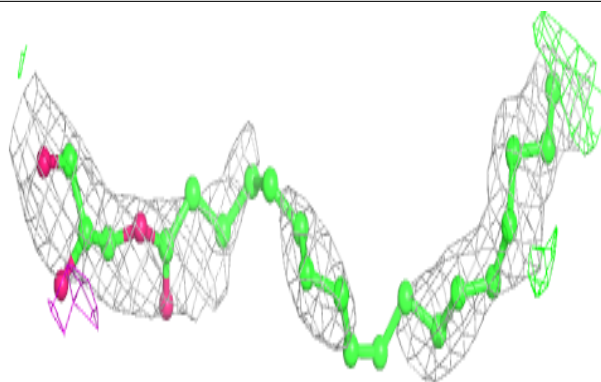
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
5	PEG	A	1424	7/7	0.77	0.20	106,115,130,131	0
4	OLC	A	1418	16/25	0.77	0.42	98,117,168,170	0
5	PEG	A	1428	7/7	0.77	0.30	109,113,123,146	0
4	OLC	A	1419	9/25	0.79	0.34	107,117,132,134	0
4	OLC	A	1406	16/25	0.81	0.20	104,121,160,163	0
4	OLC	A	1415	15/25	0.81	0.34	76,110,152,173	0
4	OLC	A	1416	10/25	0.82	0.24	92,103,118,129	0
5	PEG	A	1426	7/7	0.82	0.20	85,98,107,115	0
6	FLC	A	1414	13/13	0.83	0.23	63,78,97,109	13
4	OLC	A	1403	25/25	0.85	0.29	75,92,141,155	0
4	OLC	A	1412	11/25	0.85	0.22	87,96,111,118	0
4	OLC	A	1411	23/25	0.85	0.24	66,96,139,149	0
5	PEG	A	1427	7/7	0.87	0.25	85,103,120,128	0
4	OLC	A	1413	9/25	0.88	0.25	97,106,120,133	0
4	OLC	A	1420	9/25	0.89	0.49	84,111,147,172	0
4	OLC	A	1405	15/25	0.90	0.42	77,95,130,152	0
4	OLC	A	1408	12/25	0.92	0.13	94,106,120,122	0
4	OLC	A	1404	25/25	0.94	0.45	70,92,147,179	0
2	EN6	A	1401	34/34	0.95	0.10	56,68,80,87	0
3	FMN	A	1402	31/31	0.98	0.09	60,71,79,88	0

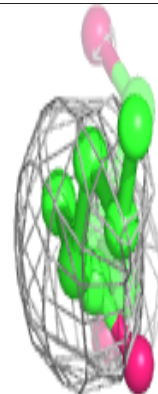
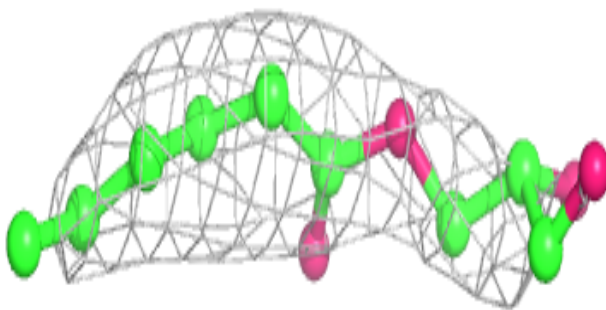
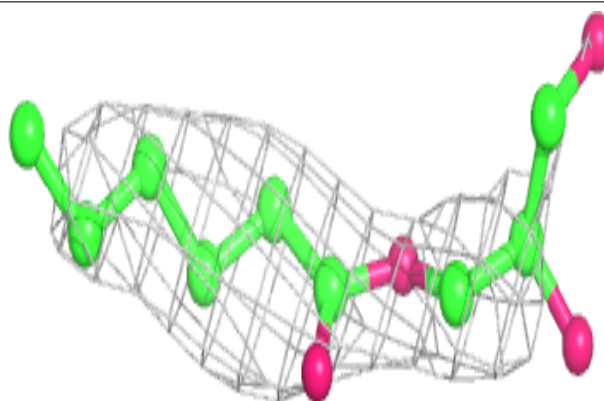
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around OLC A 1421:

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

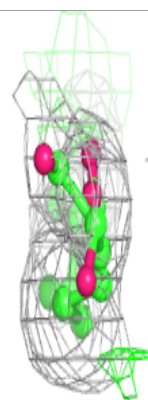
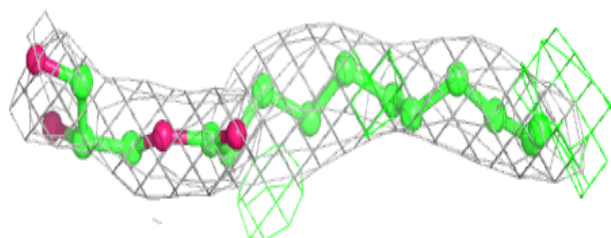
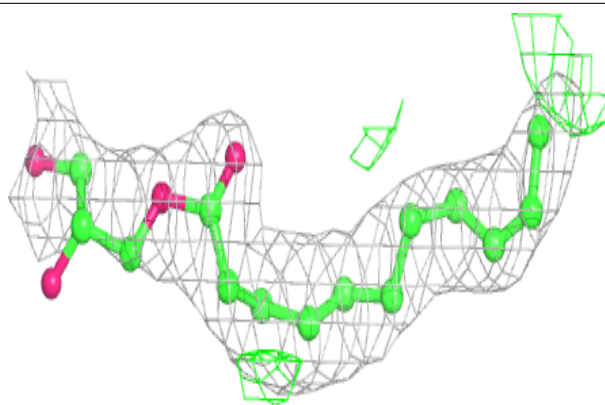
**Electron density around OLC A 1409:**

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

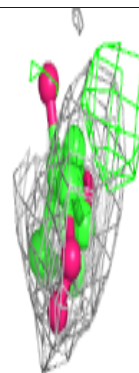
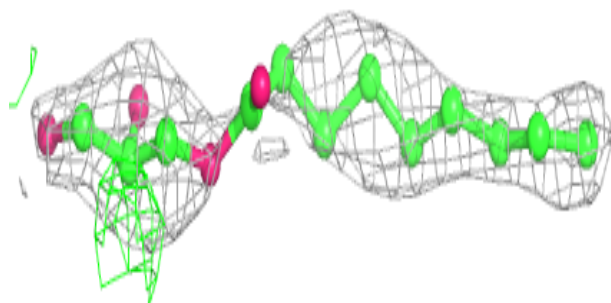
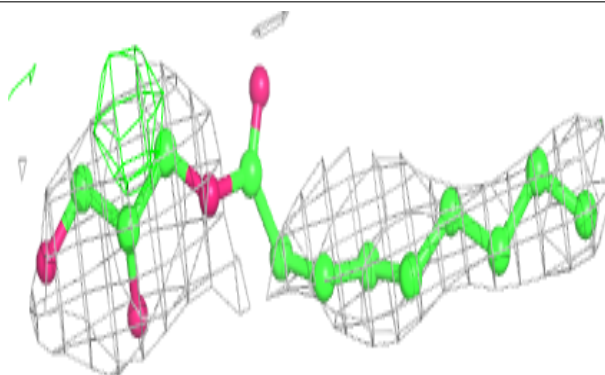


Electron density around OLC A 1417:

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

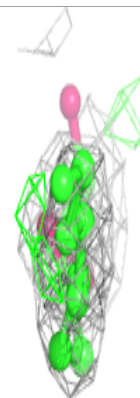
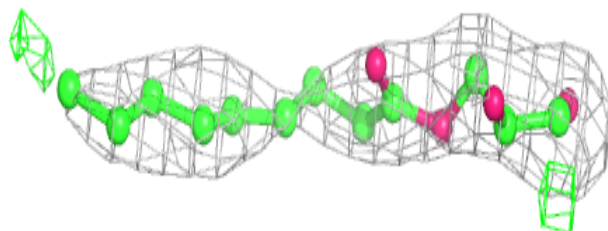
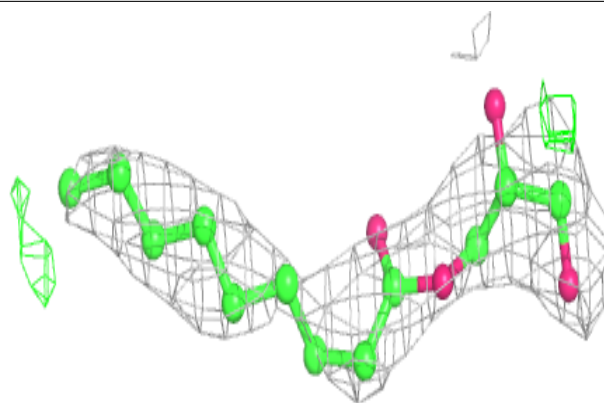
**Electron density around OLC A 1407:**

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

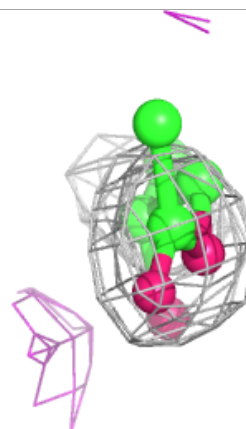
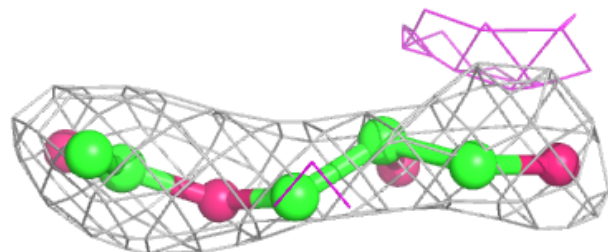
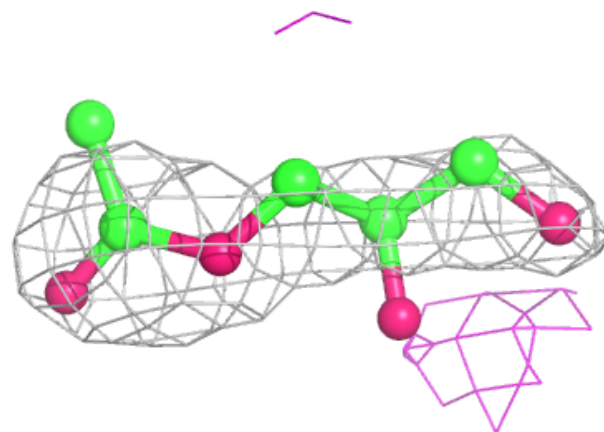


Electron density around OLC A 1418:

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

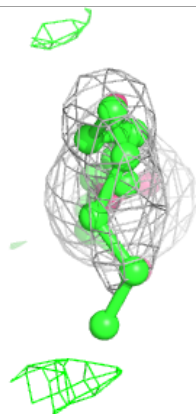
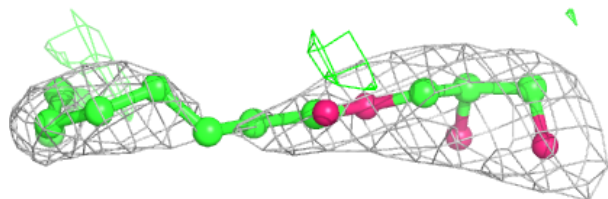
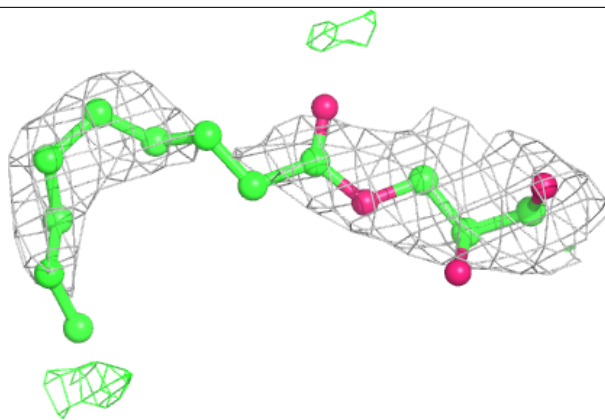
**Electron density around OLC A 1419:**

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

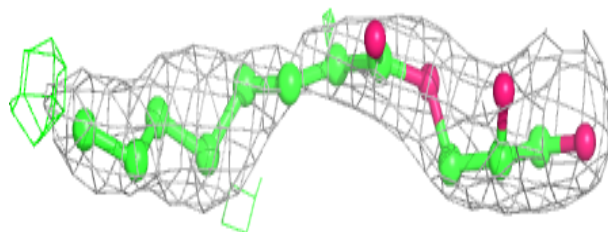
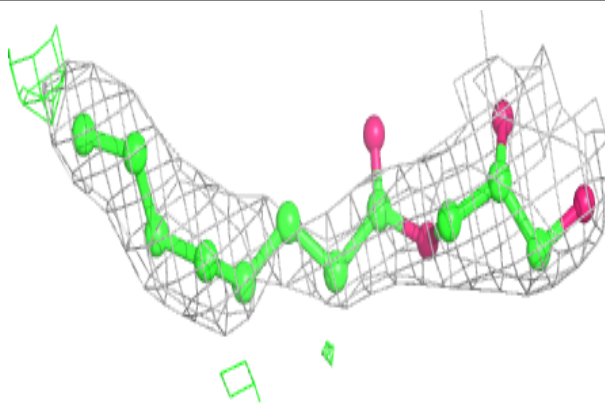


Electron density around OLC A 1406:

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

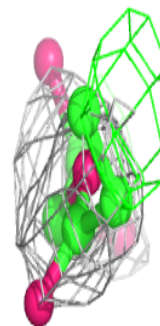
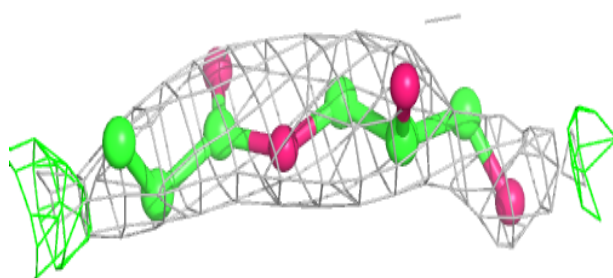
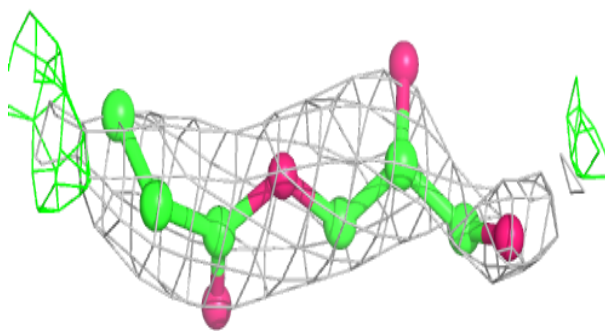
**Electron density around OLC A 1415:**

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

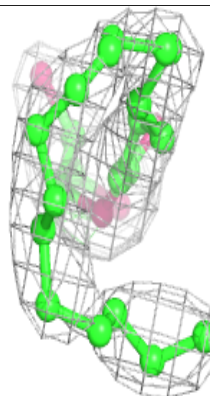
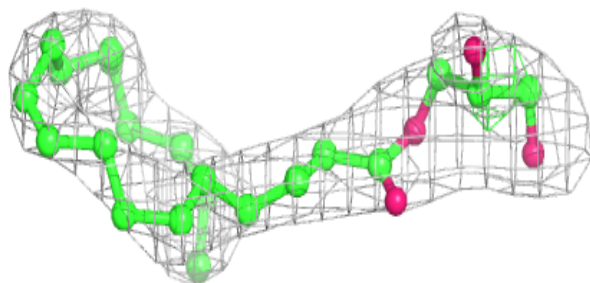
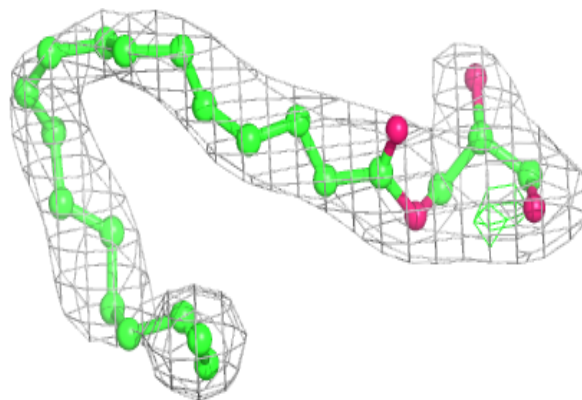


Electron density around OLC A 1416:

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

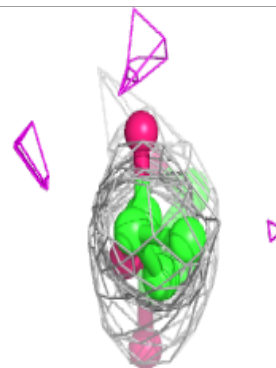
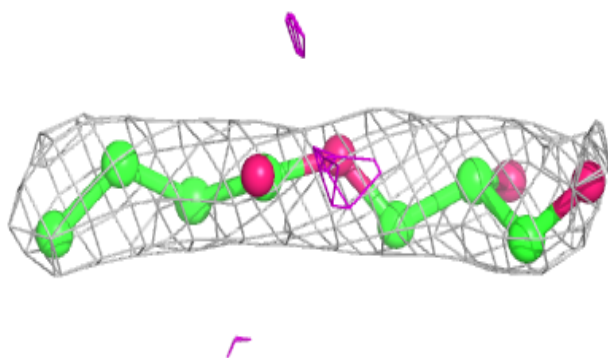
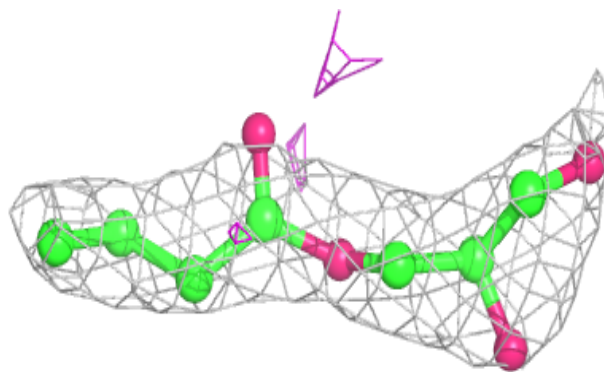
**Electron density around OLC A 1403:**

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 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

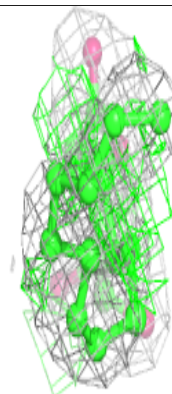
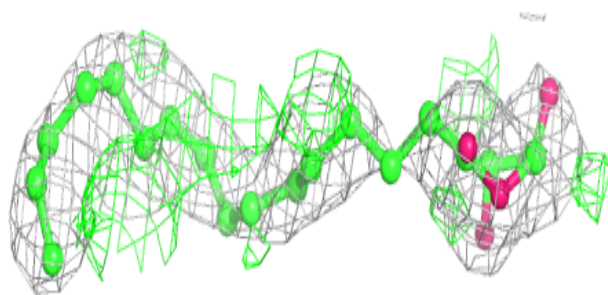
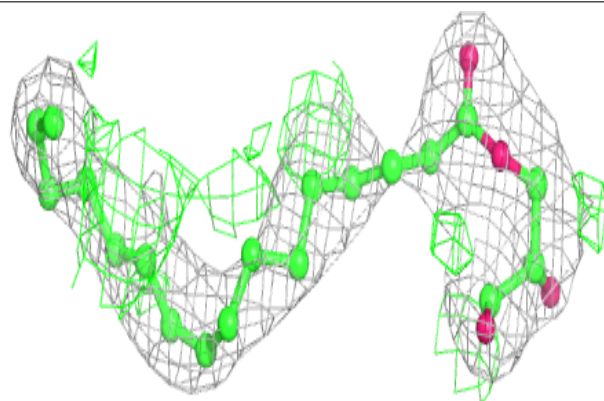


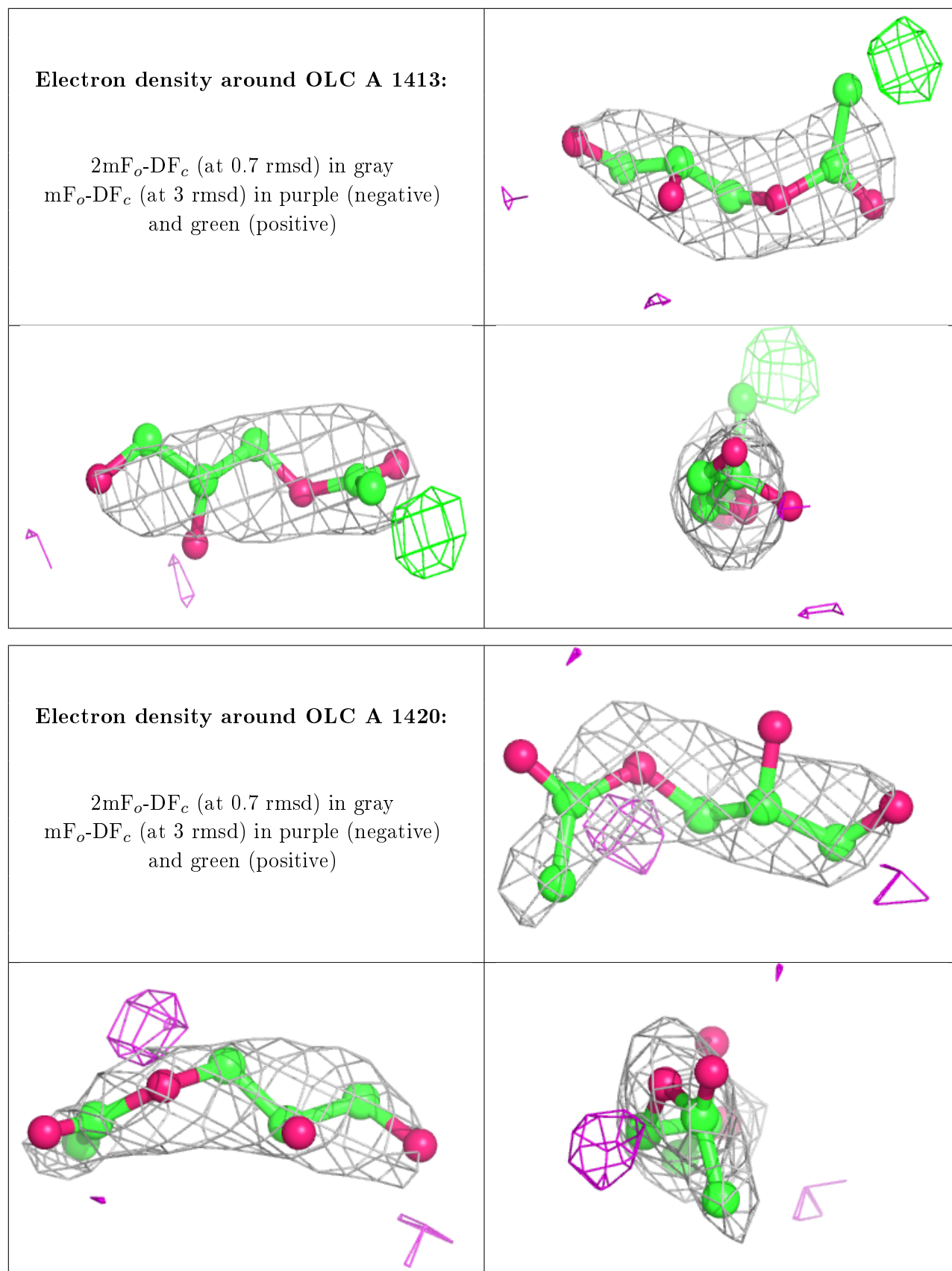
Electron density around OLC A 1412:

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

**Electron density around OLC A 1411:**

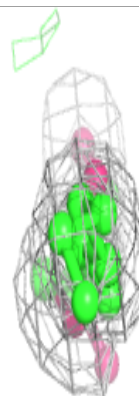
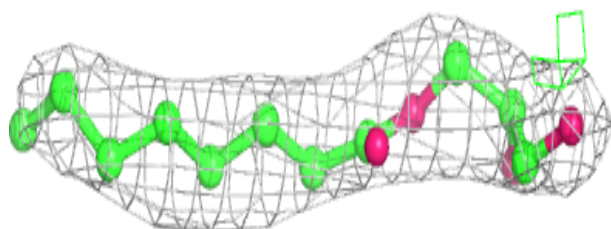
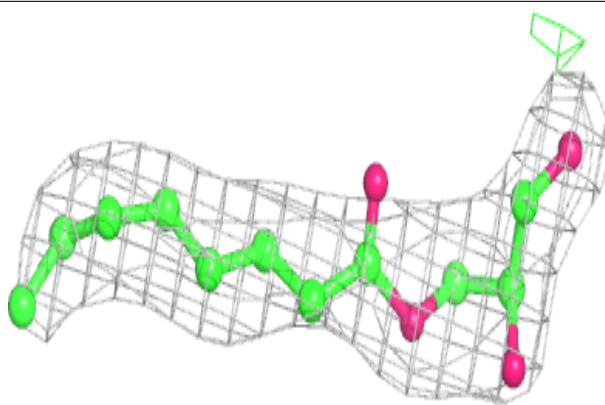
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 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



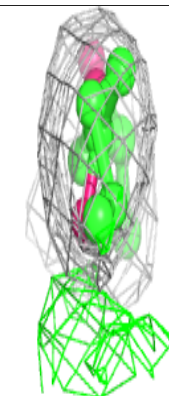
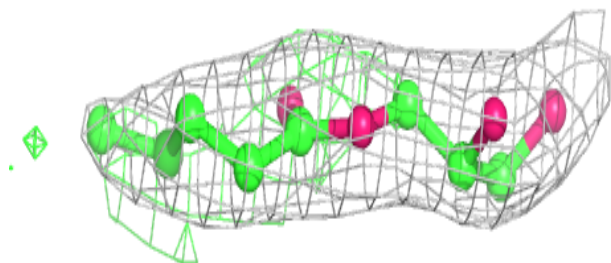
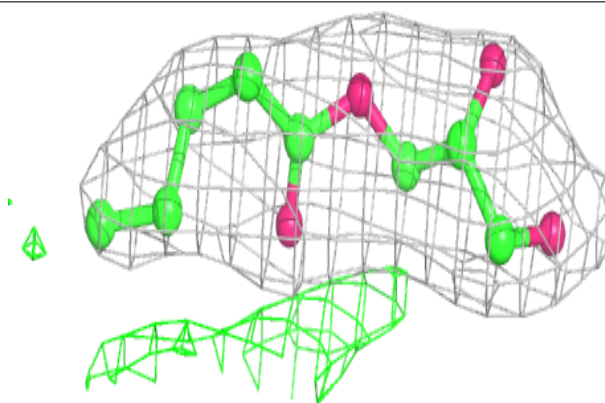


Electron density around OLC A 1405:

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

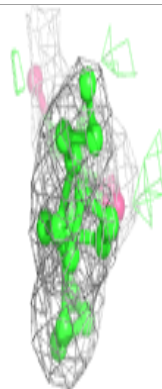
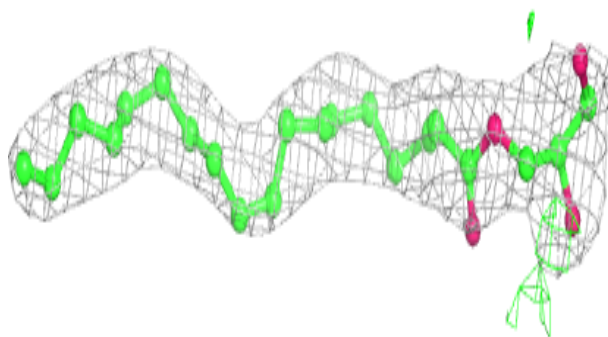
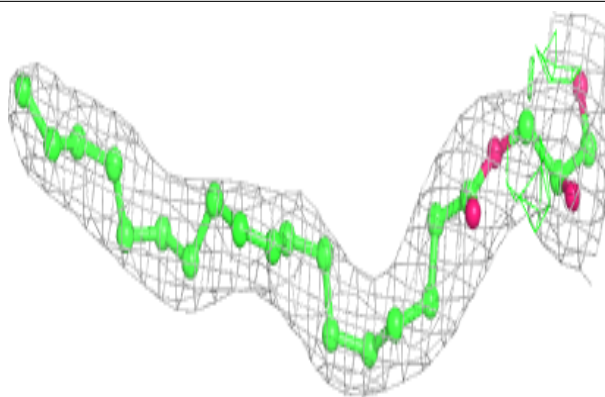
**Electron density around OLC A 1408:**

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and green (positive)

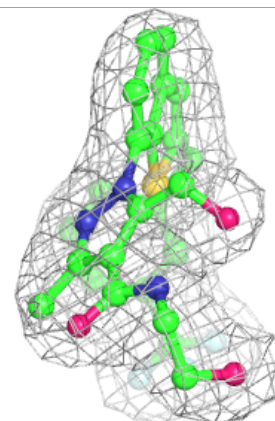
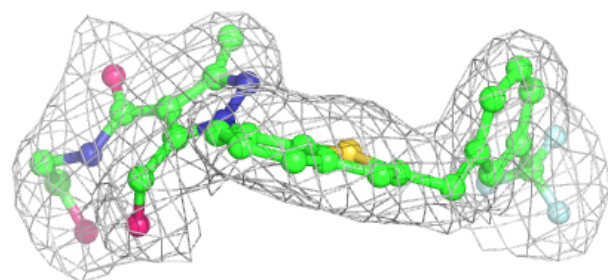
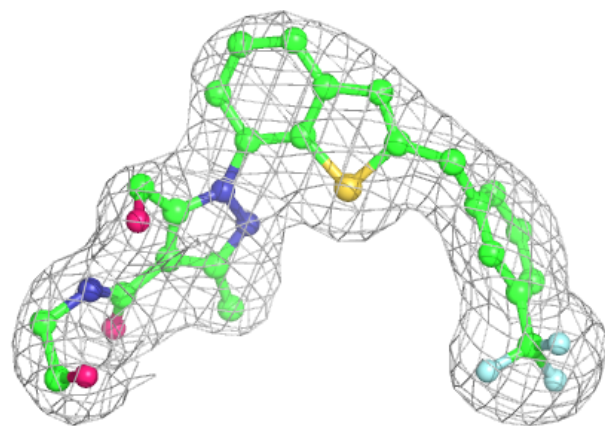


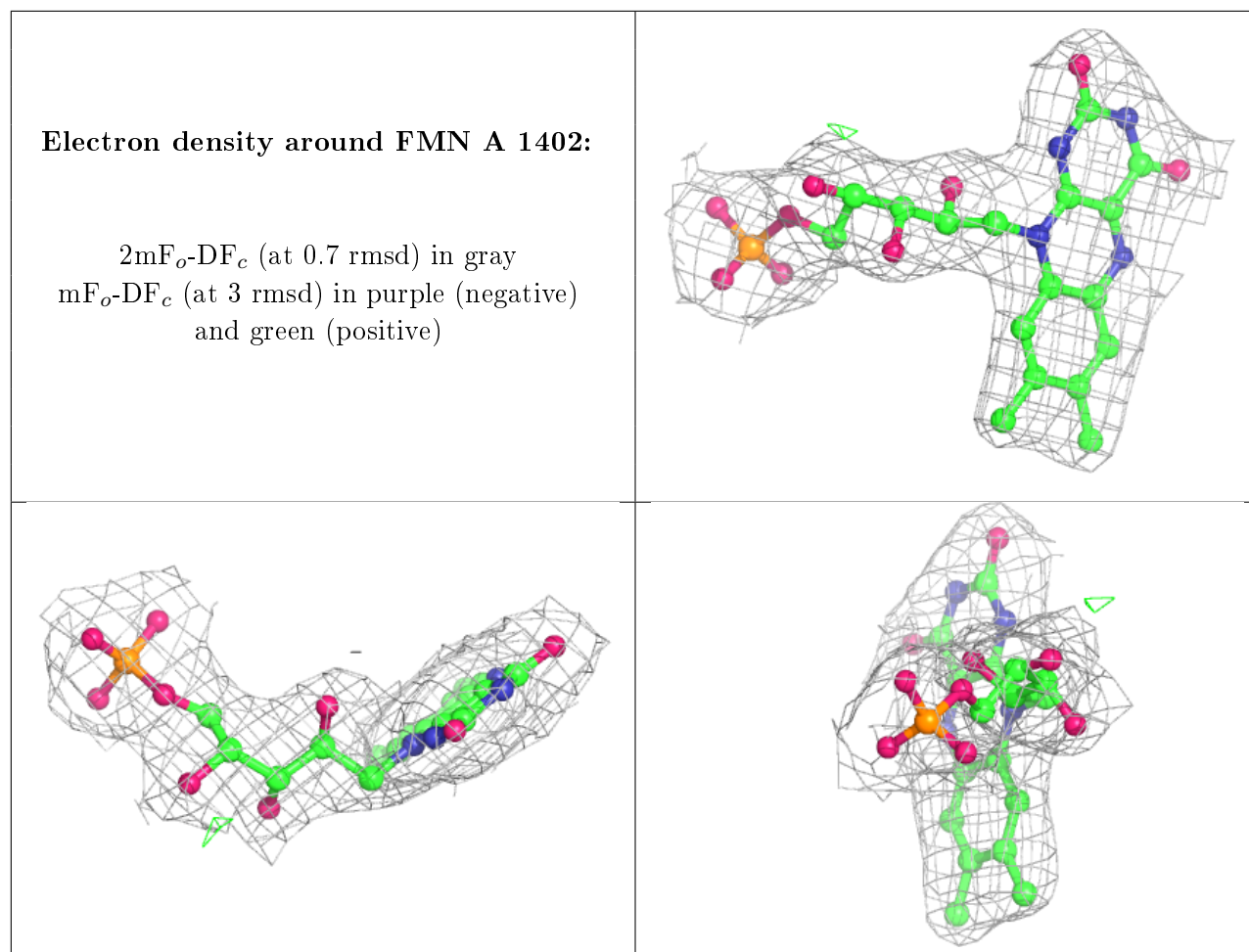
Electron density around OLC A 1404:

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

**Electron density around EN6 A 1401:**

$2mF_o-DF_c$ (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.