



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 5, 2026 – 12:54 PM UTC

PDB ID : 6GPX / pdb_00006gpx
Title : CRYSTAL STRUCTURE OF CCR2A IN COMPLEX WITH MK-0812
Authors : Pautsch, A.; Schnapp, G.; Cheng, R.; Apel, A.
Deposited on : 2018-06-07
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)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

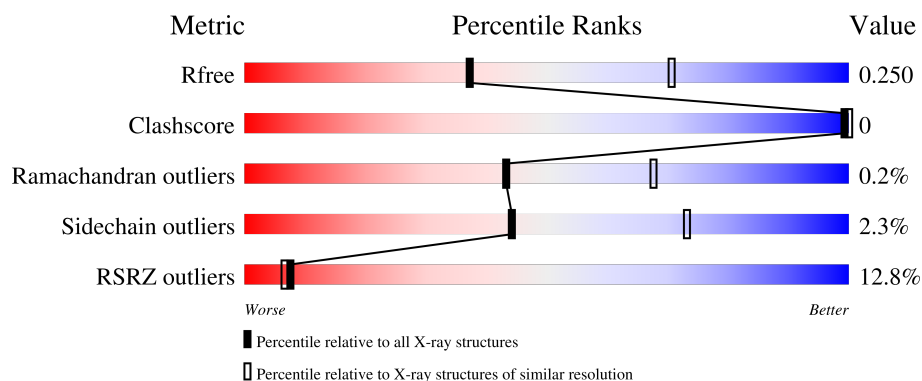
1 Overall quality at a glance

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	349	12% 91% 7%
1	B	349	9% 73% 25%

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 10209 atoms, of which 5174 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 C-C chemokine receptor type 2,Rubredoxin,C-C chemokine receptor type 2.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	324	Total	C	H	N	O	S	2611	0	0
			5200	1722	2611	400	448	19			
1	B	263	Total	C	H	N	O	S	2176	0	0
			4282	1422	2176	322	348	14			

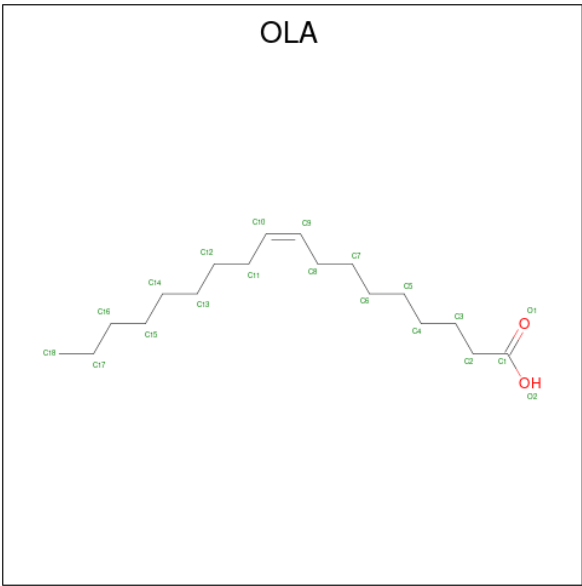
There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	70	TYR	CYS	conflict	UNP P41597
A	175	ASN	GLY	conflict	UNP P41597
A	292	ASP	ALA	conflict	UNP P41597
A	373	GLU	-	expression tag	UNP P41597
A	374	VAL	-	expression tag	UNP P41597
A	375	LEU	-	expression tag	UNP P41597
A	376	PHE	-	expression tag	UNP P41597
A	377	GLN	-	expression tag	UNP P41597
B	70	TYR	CYS	conflict	UNP P41597
B	175	ASN	GLY	conflict	UNP P41597
B	241	ASP	ALA	conflict	UNP P41597
B	322	GLU	-	expression tag	UNP P41597
B	323	VAL	-	expression tag	UNP P41597
B	324	LEU	-	expression tag	UNP P41597
B	325	PHE	-	expression tag	UNP P41597
B	326	GLN	-	expression tag	UNP P41597

- Molecule 2 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	1	Total	Zn	0	0
			1	1		

- Molecule 3 is OLEIC ACID (CCD ID: OLA) (formula: C₁₈H₃₄O₂).



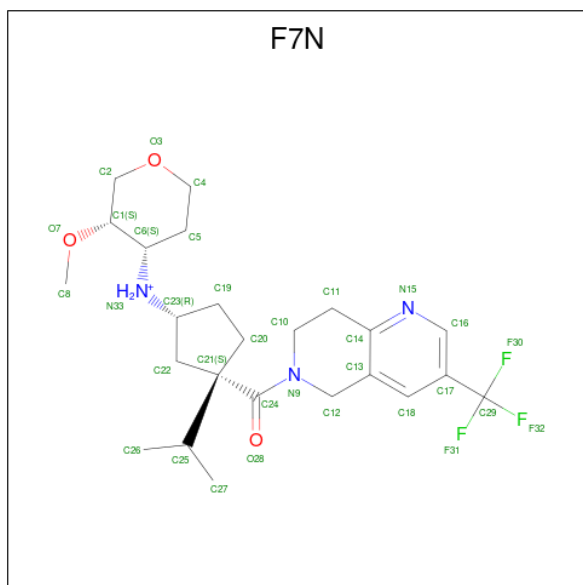
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
3	A	1	Total	C	H	O	21	0
			36	13	21	2		
3	A	1	Total	C	H	O	16	0
			28	10	16	2		
3	A	1	Total	C	H	O	17	0
			30	11	17	2		
3	A	1	Total	C	H	O	34	0
			54	18	34	2		
3	A	1	Total	C	H	O	21	0
			36	13	21	2		
3	A	1	Total	C	H	O	34	0
			54	18	34	2		
3	A	1	Total	C	H	O	11	0
			20	7	11	2		
3	A	1	Total	C	H	O	15	0
			26	9	15	2		
3	A	1	Total	C	H		27	0
			42	15	27			
3	A	1	Total	C	H	O	17	0
			30	11	17	2		
3	A	1	Total	C	H	O	34	0
			54	18	34	2		
3	B	1	Total	C	H	O	15	0
			26	9	15	2		
3	B	1	Total	C	H	O	21	0
			36	13	21	2		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
3	B	1	Total	C	H	O	34	0
			54	18	34	2		

- Molecule 4 is [(3 {S},4 {S})-3-methoxyoxan-4-yl]-[(1 {R},3 {S})-3-propan-2-yl-3-[[3-(trifluoromethyl)-7,8-dihydro-5 {H}-1,6-naphthyridin-6-yl]carbonyl]cyclopentyl]azanium (CCD ID: F7N) (formula: C₂₄H₃₅F₃N₃O₃).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
4	A	1	Total	C	F	H	N	O	35	0
			68	24	3	35	3	3		
4	B	1	Total	C	F	H	N	O	35	0
			68	24	3	35	3	3		

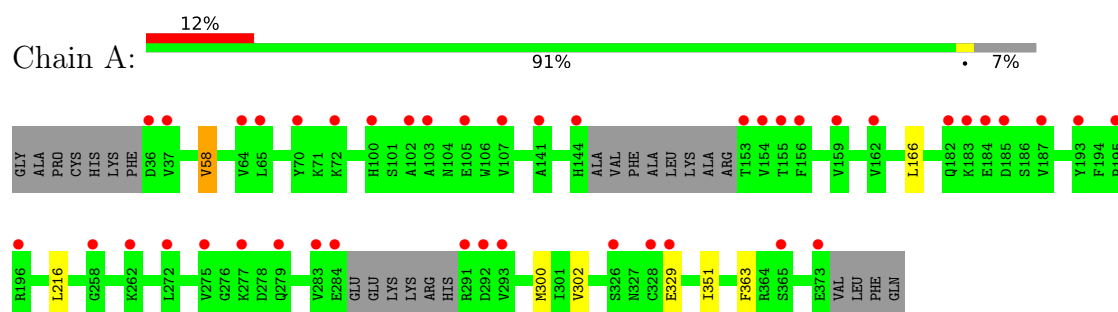
- Molecule 5 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	A	36	Total	O	0	0
			36	36		
5	B	28	Total	O	0	0
			28	28		

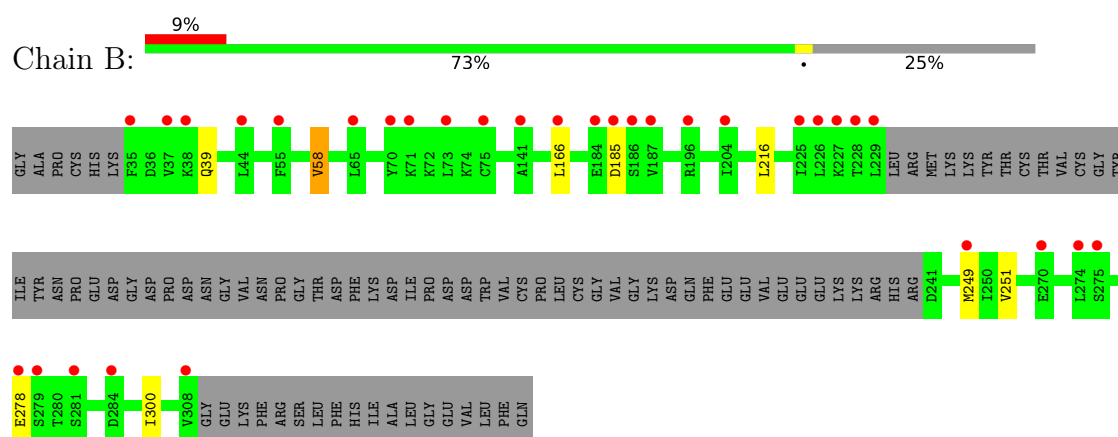
3 Residue-property plots [i](#)

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: C-C chemokine receptor type 2,Rubredoxin,C-C chemokine receptor type 2



- Molecule 1: C-C chemokine receptor type 2,Rubredoxin,C-C chemokine receptor type 2



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	54.57Å 64.55Å 131.20Å 90.00° 91.19° 90.00°	Depositor
Resolution (Å)	39.90 – 2.70 39.90 – 2.70	Depositor EDS
% Data completeness (in resolution range)	100.0 (39.90-2.70) 99.9 (39.90-2.70)	Depositor EDS
R_{merge}	0.55	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.48 (at 2.69Å)	Xtriage
Refinement program	BUSTER 2.11.7	Depositor
R, R_{free}	0.230 , 0.243 0.239 , 0.250	Depositor DCC
R_{free} test set	1266 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å ²)	49.4	Xtriage
Anisotropy	0.733	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 45.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.50$, $\langle L^2 \rangle = 0.33$	Xtriage
Estimated twinning fraction	0.029 for h,-k,-l	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	10209	wwPDB-VP
Average B, all atoms (Å ²)	64.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.71% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: OLA, F7N, ZN

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	0.74	0/2658	1.05	1/3622 (0.0%)
1	B	0.74	0/2163	1.07	1/2952 (0.0%)
All	All	0.74	0/4821	1.06	2/6574 (0.0%)

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	58	VAL	N-CA-CB	6.90	118.62	110.55
1	B	58	VAL	N-CA-CB	6.89	118.61	110.55

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	2589	2611	2611	1	0
1	B	2106	2176	2176	1	0
2	A	1	0	0	0	0
3	A	163	247	237	0	0
3	B	46	70	67	0	0
4	A	33	35	0	0	0
4	B	33	35	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	A	36	0	0	0	0
5	B	28	0	0	0	0
All	All	5035	5174	5091	2	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 0.

All (2) 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:302:VAL:HG11	1:A:351:ILE:HG21	1.97	0.46
1:B:251:VAL:HG11	1:B:300:ILE:HG21	1.98	0.45

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	318/349 (91%)	312 (98%)	6 (2%)	0	100	100
1	B	259/349 (74%)	253 (98%)	5 (2%)	1 (0%)	30	54
All	All	577/698 (83%)	565 (98%)	11 (2%)	1 (0%)	43	68

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	185	ASP

5.3.2 Protein sidechains ⓘ

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	289/309 (94%)	283 (98%)	6 (2%)	47	75
1	B	234/309 (76%)	228 (97%)	6 (3%)	40	70
All	All	523/618 (85%)	511 (98%)	12 (2%)	44	73

All (12) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	58	VAL
1	A	166	LEU
1	A	216	LEU
1	A	300	MET
1	A	329	GLU
1	A	363	PHE
1	B	39	GLN
1	B	58	VAL
1	B	166	LEU
1	B	216	LEU
1	B	249	MET
1	B	278	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (4) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	199	ASN
1	A	207	ASN
1	A	245	ASN
1	A	333	GLN

5.3.3 RNA ⓘ

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 [i](#)

Of 17 ligands modelled in this entry, 1 is monoatomic - leaving 16 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
3	OLA	A	404	-	12,12,19	0.24	0	12,12,19	0.17	0
4	F7N	B	404	-	33,36,36	0.53	0	40,54,54	0.79	1 (2%)
3	OLA	A	402	-	14,14,19	0.22	0	14,14,19	0.16	0
3	OLA	A	405	-	19,19,19	0.24	0	19,19,19	0.23	0
3	OLA	A	403	-	11,11,19	0.20	0	11,11,19	0.15	0
3	OLA	A	407	-	19,19,19	0.20	0	19,19,19	0.22	0
3	OLA	A	409	-	10,10,19	0.22	0	10,10,19	0.34	0
4	F7N	A	413	-	33,36,36	0.50	0	40,54,54	0.78	0
3	OLA	A	412	-	19,19,19	0.15	0	19,19,19	0.18	0
3	OLA	A	411	-	12,12,19	0.24	0	12,12,19	0.20	0
3	OLA	B	403	-	19,19,19	0.22	0	19,19,19	0.18	0
3	OLA	A	408	-	8,8,19	0.24	0	8,8,19	0.22	0
3	OLA	B	402	-	14,14,19	0.18	0	14,14,19	0.15	0
3	OLA	A	410	-	14,14,19	0.16	0	13,13,19	0.21	0
3	OLA	B	401	-	10,10,19	0.14	0	10,10,19	0.13	0
3	OLA	A	406	-	14,14,19	0.20	0	14,14,19	0.20	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
3	OLA	A	404	-	-	4/10/10/17	-
4	F7N	B	404	-	-	3/28/59/59	0/4/4/4
3	OLA	A	402	-	-	2/12/12/17	-
3	OLA	A	405	-	-	8/17/17/17	-
3	OLA	A	403	-	-	7/9/9/17	-
3	OLA	A	407	-	-	4/17/17/17	-
3	OLA	A	409	-	-	5/8/8/17	-
4	F7N	A	413	-	-	0/28/59/59	0/4/4/4
3	OLA	A	412	-	-	9/17/17/17	-
3	OLA	A	411	-	-	0/10/10/17	-
3	OLA	B	403	-	-	4/17/17/17	-
3	OLA	A	408	-	-	0/6/6/17	-
3	OLA	B	402	-	-	0/12/12/17	-
3	OLA	A	410	-	-	5/12/12/17	-
3	OLA	B	401	-	-	0/8/8/17	-
3	OLA	A	406	-	-	4/12/12/17	-

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	404	F7N	C12-N9-C10	-2.09	109.74	115.87

There are no chirality outliers.

All (55) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	410	OLA	C11-C12-C13-C14
3	A	410	OLA	C5-C6-C7-C8
3	A	406	OLA	C5-C6-C7-C8
3	B	403	OLA	C14-C15-C16-C17
3	A	406	OLA	C3-C4-C5-C6
3	A	405	OLA	C1-C2-C3-C4
3	A	409	OLA	C4-C5-C6-C7
3	A	412	OLA	C11-C12-C13-C14
3	A	407	OLA	C12-C13-C14-C15
3	A	412	OLA	C14-C15-C16-C17
3	A	405	OLA	C4-C5-C6-C7
3	A	404	OLA	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
3	A	405	OLA	C6-C7-C8-C9
3	B	403	OLA	C3-C4-C5-C6
3	A	409	OLA	C3-C4-C5-C6
3	A	407	OLA	C1-C2-C3-C4
3	A	409	OLA	C5-C6-C7-C8
3	A	412	OLA	C3-C4-C5-C6
3	A	412	OLA	C1-C2-C3-C4
3	A	412	OLA	C4-C5-C6-C7
3	A	403	OLA	C4-C5-C6-C7
3	A	405	OLA	C5-C6-C7-C8
3	A	412	OLA	C2-C3-C4-C5
3	A	403	OLA	C3-C4-C5-C6
4	B	404	F7N	C16-C17-C29-F30
3	A	405	OLA	C3-C4-C5-C6
3	A	403	OLA	C1-C2-C3-C4
3	A	407	OLA	C10-C11-C12-C13
3	A	405	OLA	O2-C1-C2-C3
3	A	405	OLA	O1-C1-C2-C3
3	B	403	OLA	O1-C1-C2-C3
3	B	403	OLA	O2-C1-C2-C3
3	A	403	OLA	O2-C1-C2-C3
3	A	403	OLA	O1-C1-C2-C3
3	A	406	OLA	O2-C1-C2-C3
3	A	404	OLA	O2-C1-C2-C3
3	A	406	OLA	O1-C1-C2-C3
3	A	412	OLA	O1-C1-C2-C3
3	A	412	OLA	O2-C1-C2-C3
3	A	404	OLA	O1-C1-C2-C3
3	A	412	OLA	C7-C8-C9-C10
3	A	410	OLA	C13-C14-C15-C16
4	B	404	F7N	C16-C17-C29-F31
3	A	404	OLA	C7-C8-C9-C10
3	A	402	OLA	O2-C1-C2-C3
4	B	404	F7N	C16-C17-C29-F32
3	A	410	OLA	C7-C8-C9-C10
3	A	405	OLA	C7-C8-C9-C10
3	A	407	OLA	C9-C10-C11-C12
3	A	402	OLA	O1-C1-C2-C3
3	A	409	OLA	O2-C1-C2-C3
3	A	410	OLA	C15-C16-C17-C18
3	A	409	OLA	O1-C1-C2-C3
3	A	403	OLA	C2-C3-C4-C5

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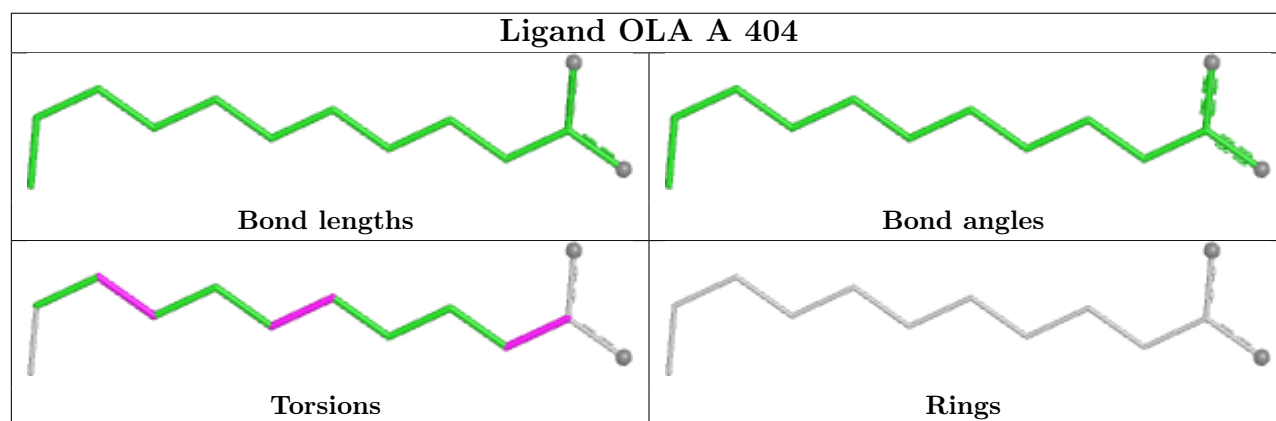
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Mol	Chain	Res	Type	Atoms
3	A	403	OLA	C5-C6-C7-C8

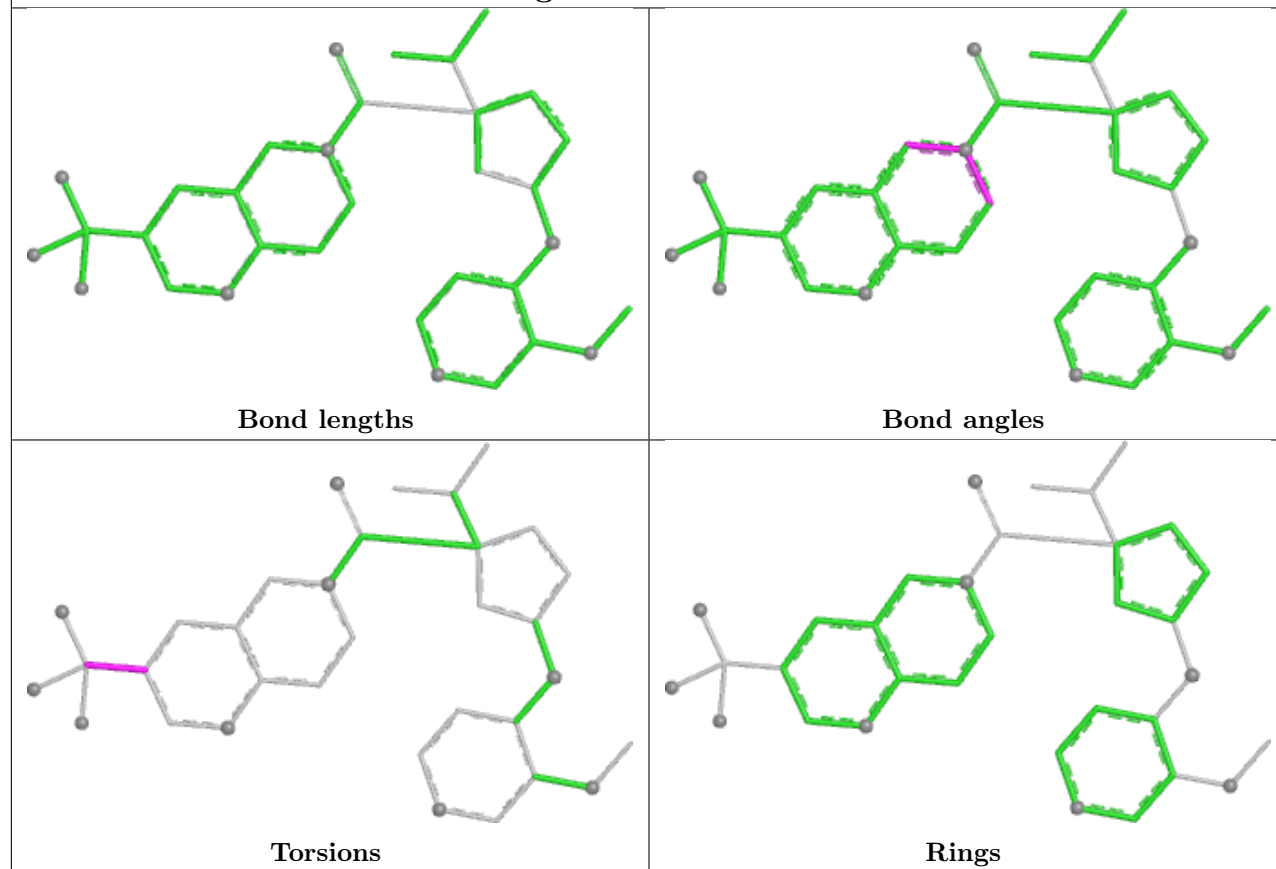
There are no ring outliers.

No monomer is involved in short contacts.

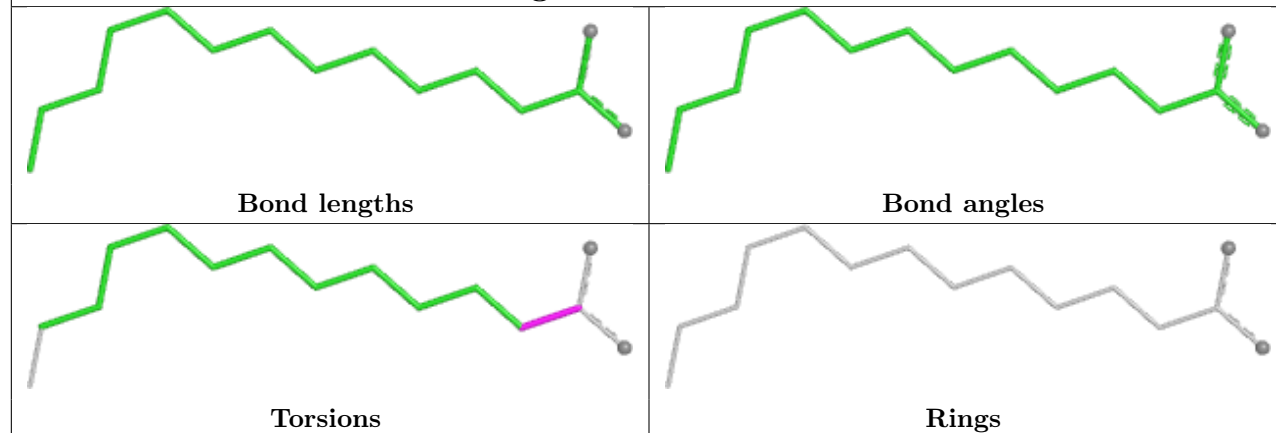
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

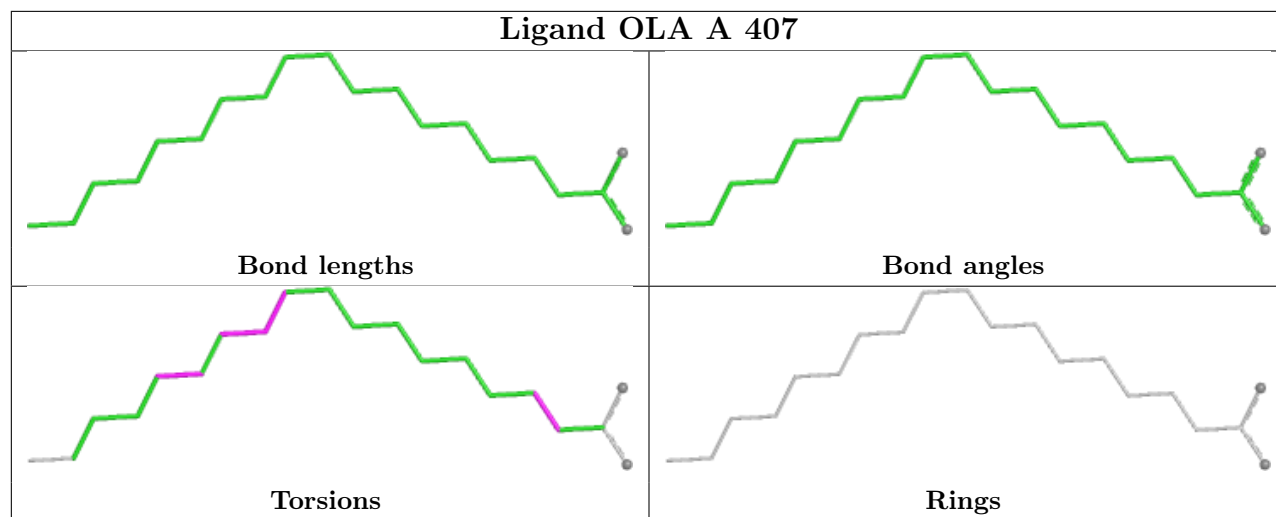
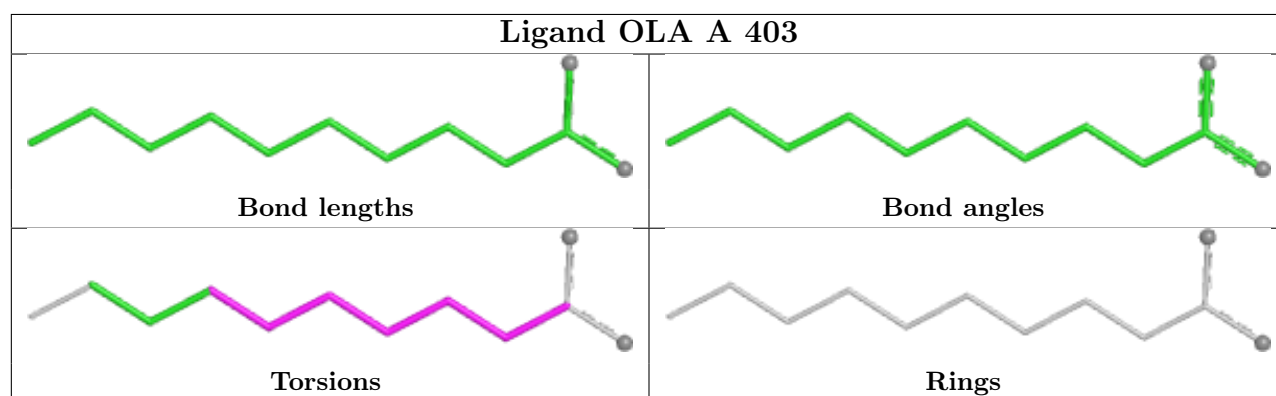
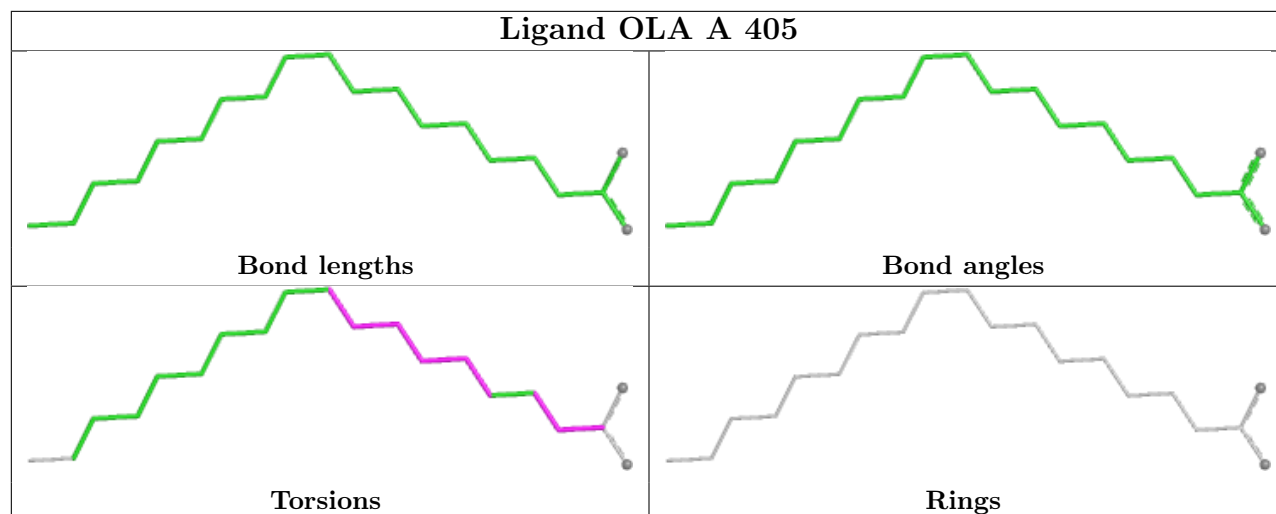


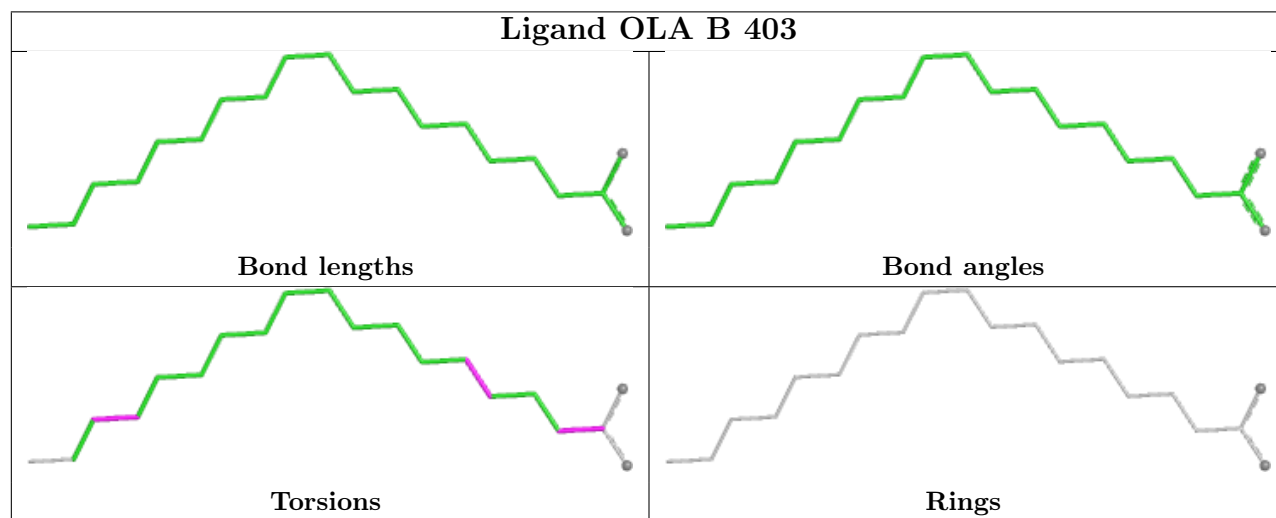
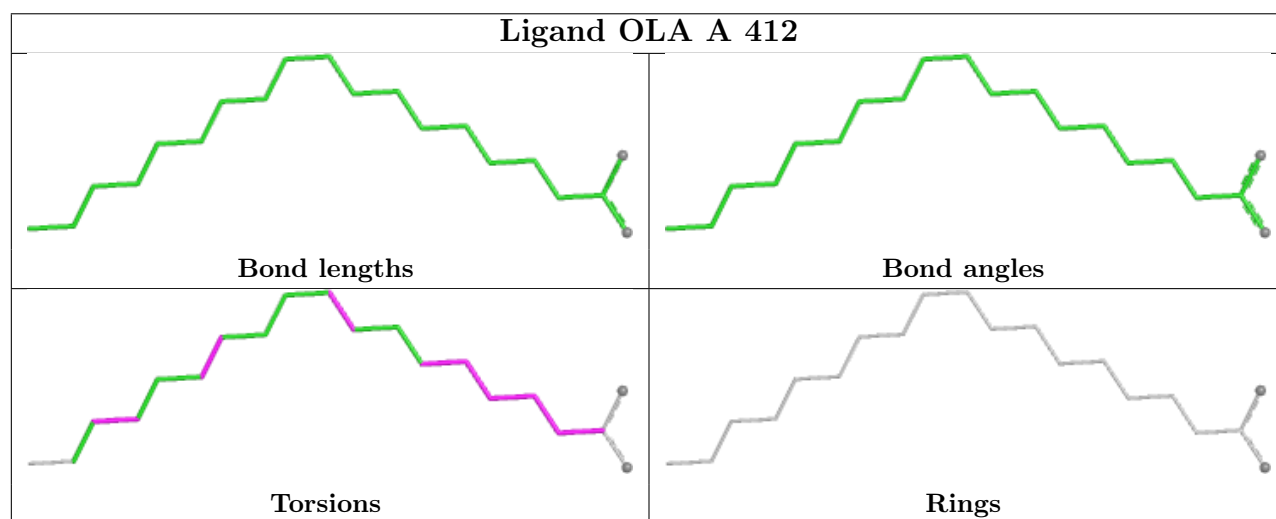
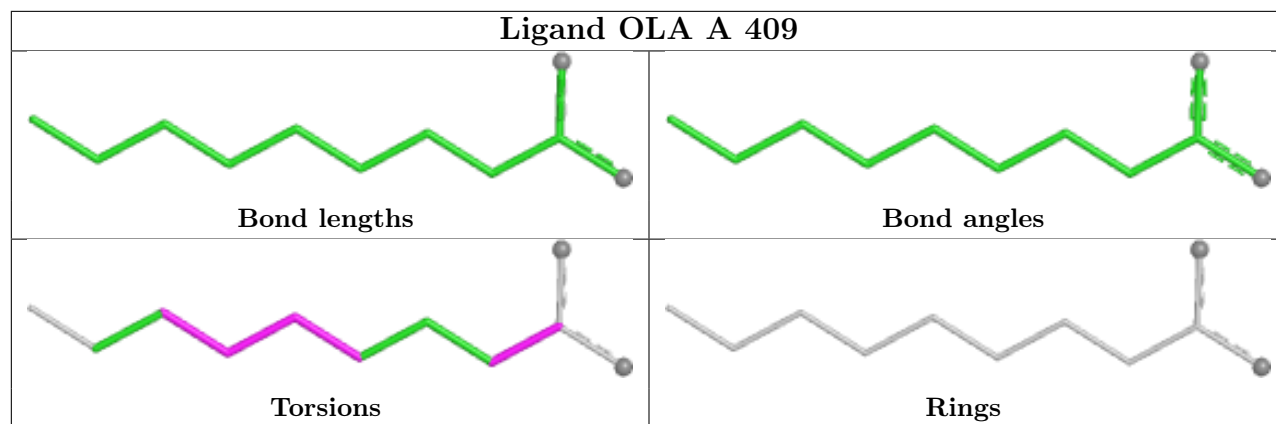
Ligand F7N B 404

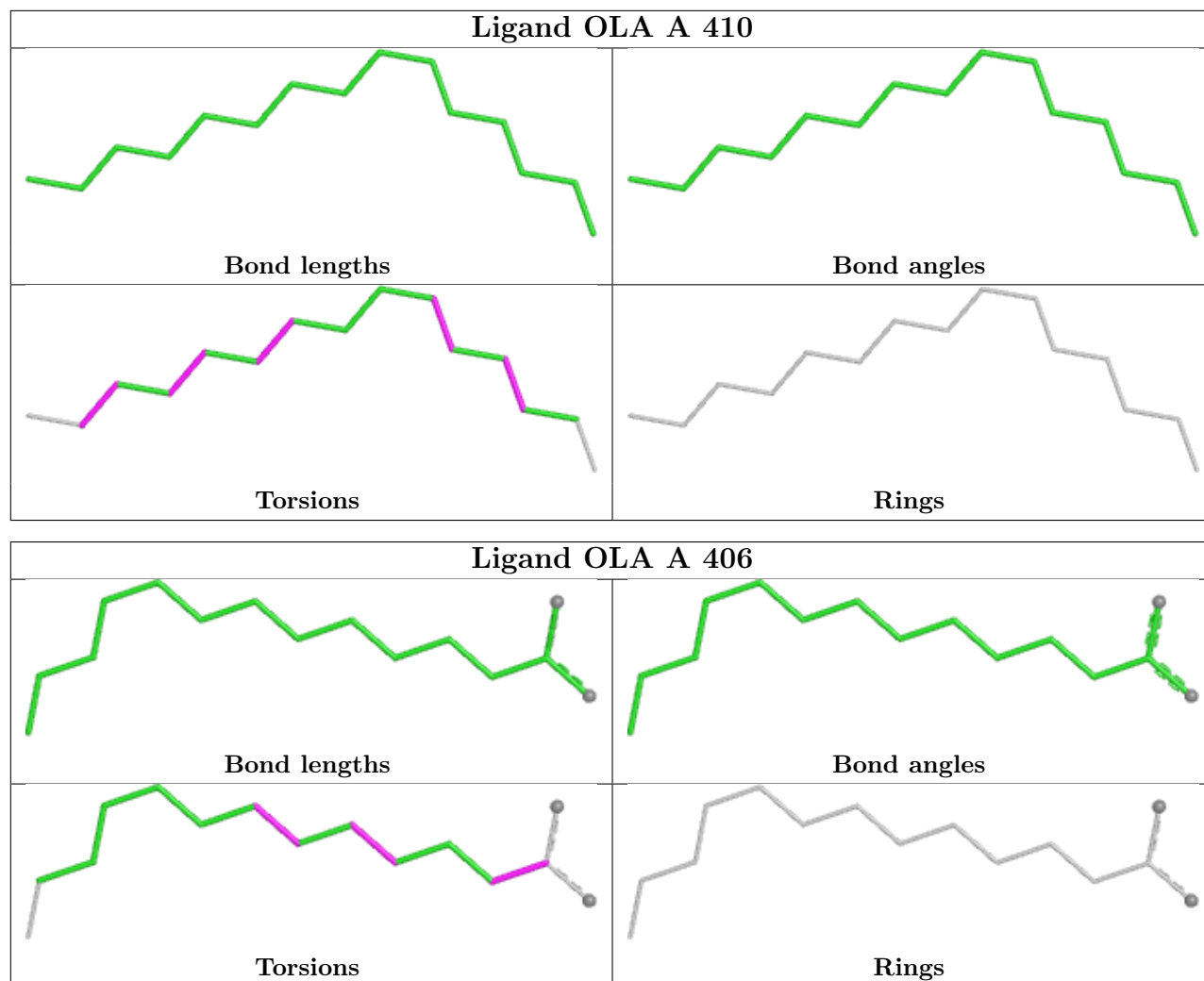


Ligand OLA A 402









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	324/349 (92%)	0.81	43 (13%) 7 6	15, 30, 57, 91	0
1	B	263/349 (75%)	0.82	32 (12%) 8 7	15, 29, 53, 76	0
All	All	587/698 (84%)	0.81	75 (12%) 7 6	15, 29, 55, 91	0

All (75) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	229	LEU	5.9
1	B	228	THR	5.0
1	B	35	PHE	5.0
1	A	184	GLU	4.2
1	B	187	VAL	4.2
1	B	185	ASP	4.1
1	A	326	SER	4.1
1	B	281	SER	4.1
1	B	275	SER	4.1
1	A	103	ALA	3.9
1	A	153	THR	3.9
1	B	308	VAL	3.7
1	A	65	LEU	3.5
1	A	196	ARG	3.5
1	A	182	GLN	3.4
1	A	292	ASP	3.4
1	A	293	VAL	3.2
1	B	166	LEU	3.0
1	B	73	LEU	3.0
1	B	70	TYR	2.9
1	A	279	GLN	2.9
1	B	270	GLU	2.9
1	A	277	LYS	2.8
1	B	274	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
1	B	227	LYS	2.7
1	B	75	CYS	2.7
1	A	284	GLU	2.7
1	A	291	ARG	2.7
1	A	155	THR	2.7
1	A	329	GLU	2.6
1	A	64	VAL	2.6
1	A	141	ALA	2.6
1	B	196	ARG	2.6
1	B	249	MET	2.6
1	A	70	TYR	2.6
1	A	183	LYS	2.6
1	A	193	TYR	2.5
1	B	278	GLU	2.5
1	B	44	LEU	2.5
1	B	225	ILE	2.5
1	A	187	VAL	2.5
1	A	144	HIS	2.4
1	A	373	GLU	2.4
1	A	105	GLU	2.4
1	A	185	ASP	2.4
1	A	262	LYS	2.4
1	B	204	ILE	2.4
1	B	186	SER	2.4
1	A	100	HIS	2.3
1	A	102	ALA	2.3
1	A	107	VAL	2.3
1	B	65	LEU	2.3
1	B	184	GLU	2.3
1	B	284	ASP	2.3
1	A	162	VAL	2.3
1	A	365	SER	2.2
1	B	37	VAL	2.2
1	A	37	VAL	2.2
1	B	38	LYS	2.2
1	A	36	ASP	2.2
1	B	71	LYS	2.2
1	B	226	LEU	2.2
1	A	159	VAL	2.2
1	A	195	PRO	2.1
1	A	72	LYS	2.1
1	A	156	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
1	B	141	ALA	2.1
1	A	328	CYS	2.1
1	B	55	PHE	2.1
1	A	272	LEU	2.1
1	A	258	GLY	2.1
1	B	279	SER	2.0
1	A	283	VAL	2.0
1	A	154	VAL	2.0
1	A	275	VAL	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.

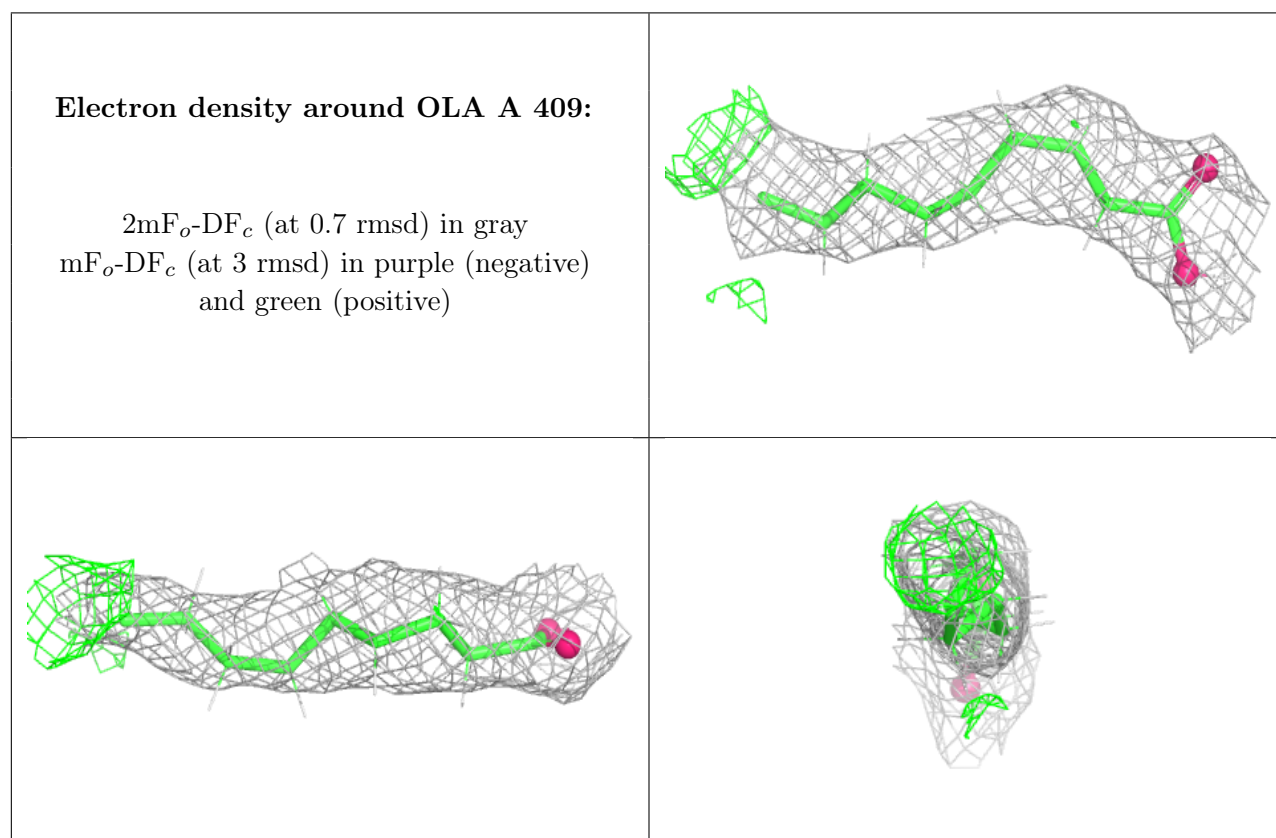
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
3	OLA	B	402	15/20	0.77	0.31	110,113,117,117	21
3	OLA	B	401	11/20	0.79	0.26	92,96,100,100	15
3	OLA	A	408	9/20	0.80	0.20	84,88,93,93	11
3	OLA	A	409	11/20	0.80	0.23	80,80,83,83	15
3	OLA	A	402	15/20	0.81	0.20	71,72,77,78	21
3	OLA	A	411	13/20	0.82	0.23	92,97,105,105	17
3	OLA	A	410	15/20	0.85	0.23	62,67,73,73	27
3	OLA	A	407	20/20	0.85	0.19	88,89,100,101	34
3	OLA	A	404	13/20	0.85	0.21	79,84,90,91	17
3	OLA	A	405	20/20	0.85	0.25	86,89,96,97	34
3	OLA	B	403	20/20	0.85	0.18	85,88,94,94	34
3	OLA	A	406	15/20	0.86	0.18	98,100,100,100	21
3	OLA	A	412	20/20	0.88	0.27	76,81,86,86	34
4	F7N	B	404	33/33	0.90	0.11	39,49,54,57	35

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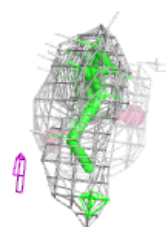
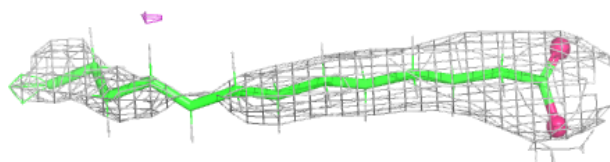
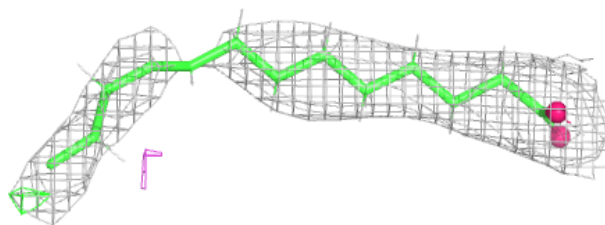
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
4	F7N	A	413	33/33	0.91	0.12	41,44,50,51	35
3	OLA	A	403	12/20	0.93	0.16	70,76,85,85	16
2	ZN	A	401	1/1	1.00	0.02	67,67,67,67	0

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.

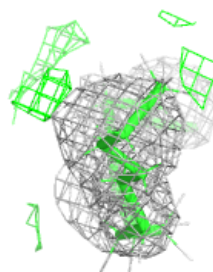
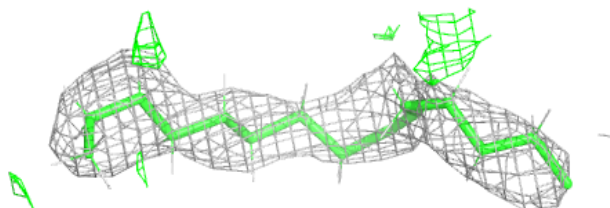
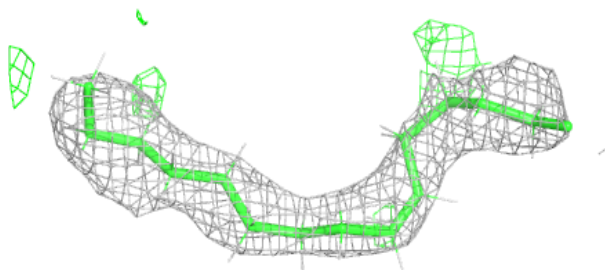


Electron density around OLA A 402:

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

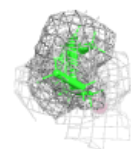
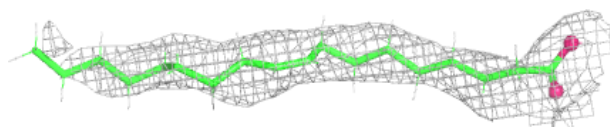
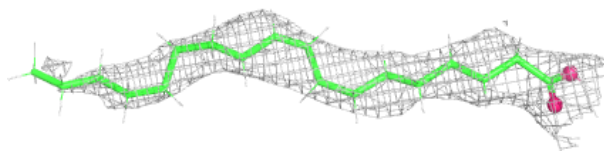
**Electron density around OLA A 410:**

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

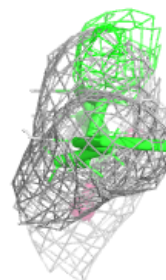
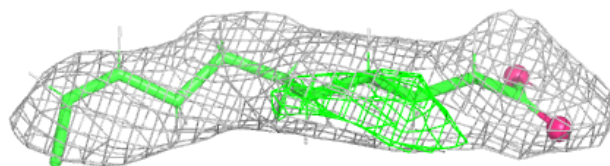
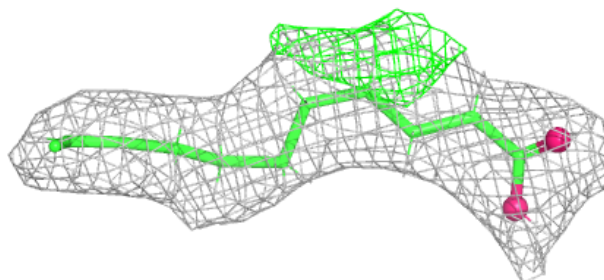


Electron density around OLA A 407:

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

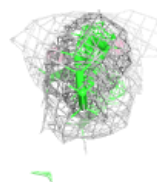
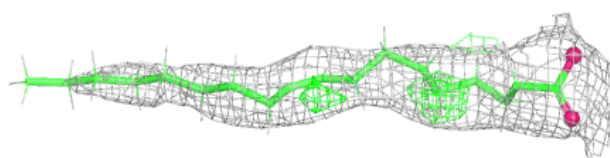
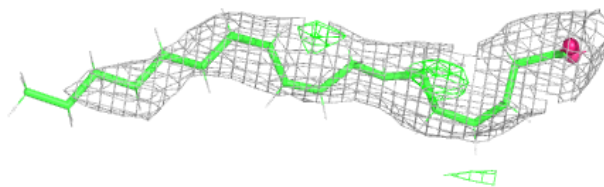
**Electron density around OLA A 404:**

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

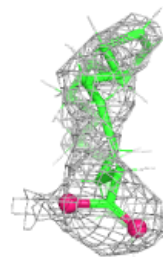
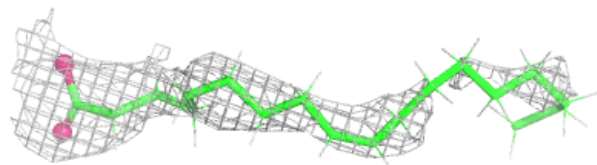
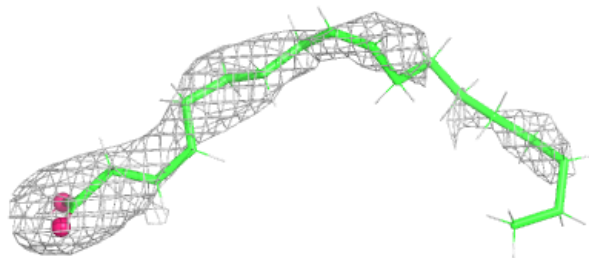


Electron density around OLA A 405:

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

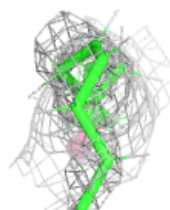
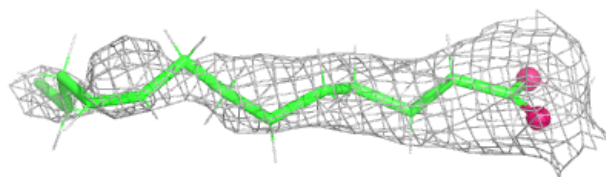
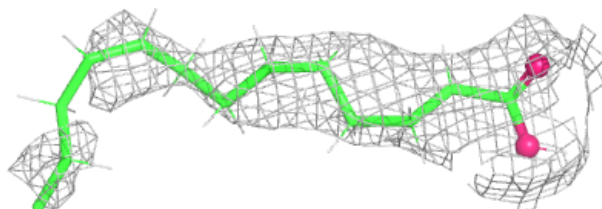
**Electron density around OLA B 403:**

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

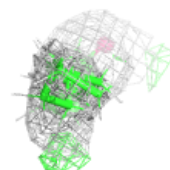
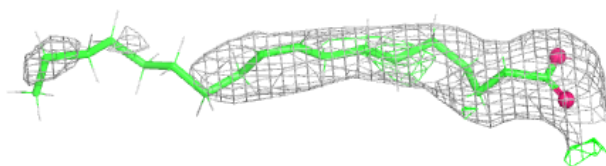
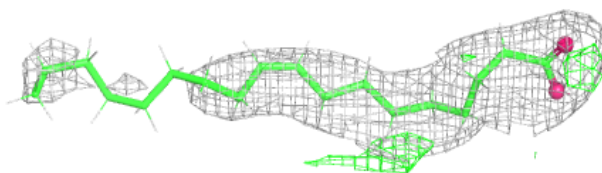


Electron density around OLA A 406:

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

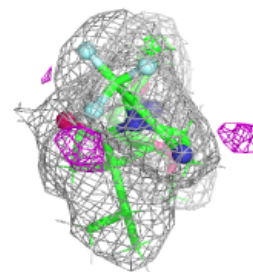
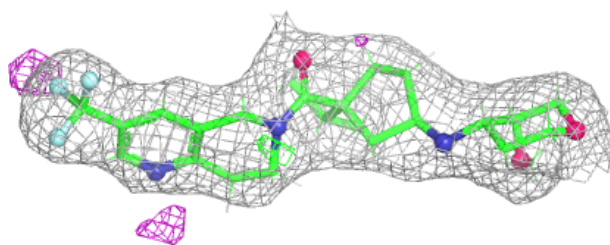
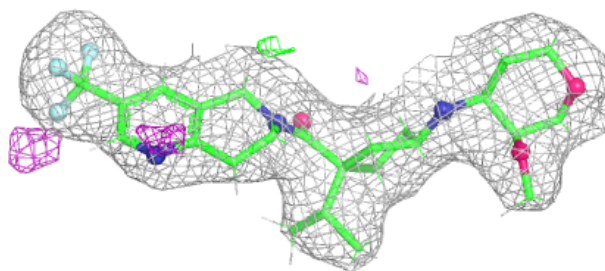
**Electron density around OLA A 412:**

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

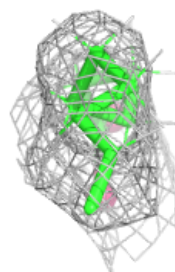
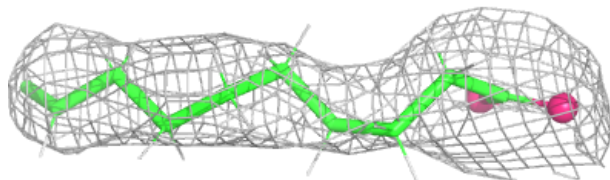
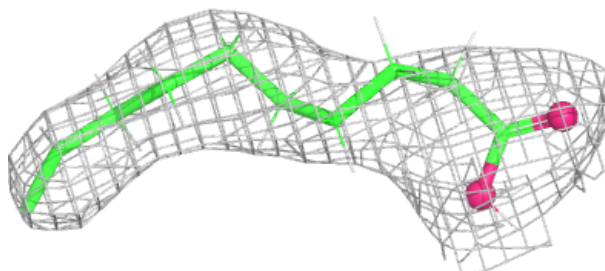


Electron density around F7N B 404:

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

**Electron density around OLA A 403:**

$2mF_o-DF_c$ (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.