wwPDB X-ray Structure Validation Summary Report (i)

Jun 24, 2026 – 03:02 PM JST

PDB ID	:	9LP8 / pdb_00009lp8
Title	:	Extrinsic-protein reconstituted PSII of Thermosynechococcus vulcanus NIES-2134
Authors	:	Nakajima, Y.; Kato, K.; Shen, J.R.; Nagao, R.
Deposited on	:	2025-01-24
Resolution	:	2.00 Å(reported)

This is a wwPDB X-ray Structure Validation Summary Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (i)) were used in the production of this report:

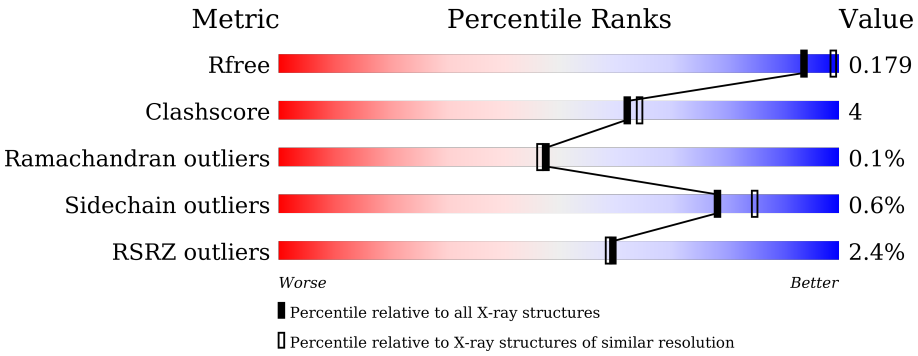
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
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 (i)

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

The reported resolution of this entry is 2.00 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	10052 (2.00-2.00)
Clashscore	190562	11152 (2.00-2.00)
Ramachandran outliers	187476	11031 (2.00-2.00)
Sidechain outliers	187428	11029 (2.00-2.00)
RSRZ outliers	180081	10067 (2.00-2.00)

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

Mol	Chain	Length	Quality of chain
1	A	360	2% 86% 6% 7%
1	a	360	3% 88% 5% 7%
2	B	505	2% 94% 5%
2	b	505	3% 94% 5%
3	C	473	% 88% 7% 5%
3	c	473	% 90% 7%

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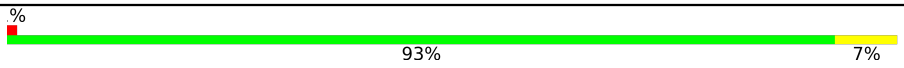
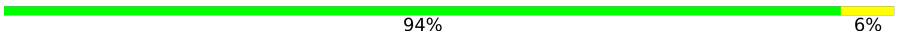
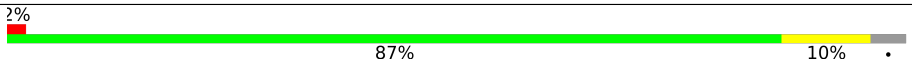
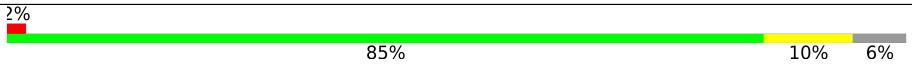
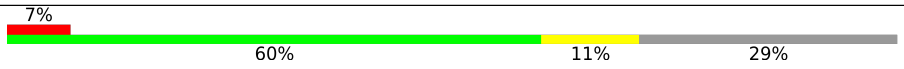
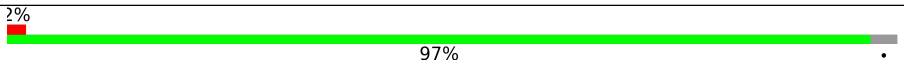
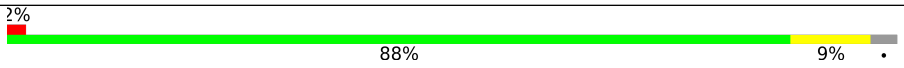
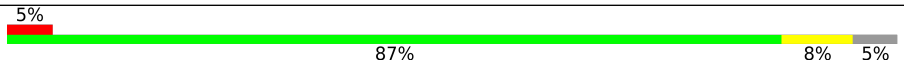
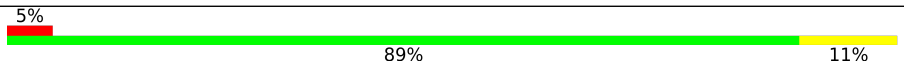
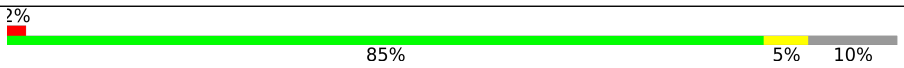
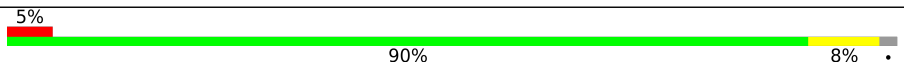
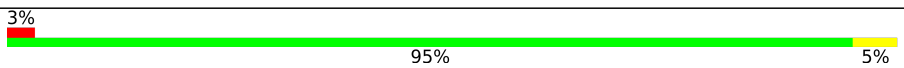
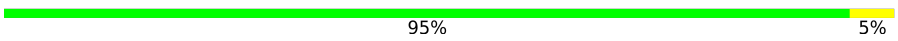
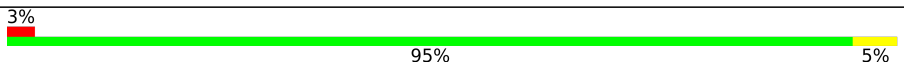
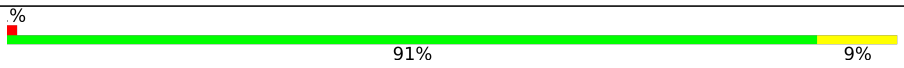
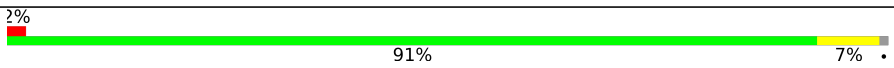
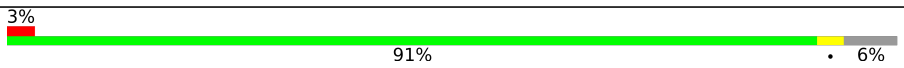
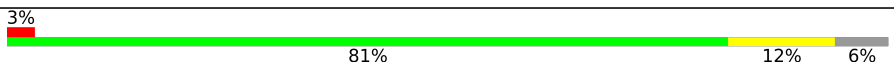
Mol	Chain	Length	Quality of chain
4	D	342	
4	d	342	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	65	
7	h	65	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	37	
10	k	37	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	244	
13	o	244	
14	T	32	
14	t	32	
15	U	104	
15	u	104	
16	V	163	

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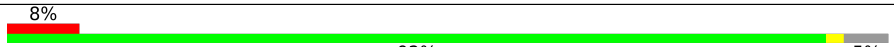
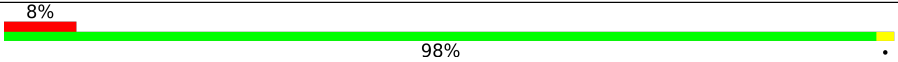
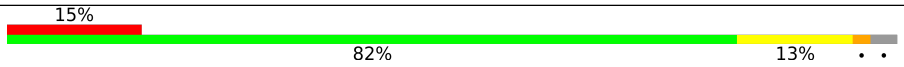
Mol	Chain	Length	Quality of chain
16	v	163	
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
19	Z	62	
19	z	62	
20	R	34	

2 Entry composition (i)

There are 42 unique types of molecules in this entry. The entry contains 54054 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 Photosystem II protein D1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	334	Total	C	N	O	S	0	3	0
			2620	1719	429	457	15			
1	a	334	Total	C	N	O	S	0	3	0
			2615	1716	428	456	15			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	variant	UNP P51765
a	279	PRO	ARG	variant	UNP P51765

- Molecule 2 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	504	Total	C	N	O	S	0	8	0
			3991	2621	664	693	13			
2	b	501	Total	C	N	O	S	0	11	0
			3959	2603	656	687	13			

- Molecule 3 is a protein called Photosystem II 44 kDa reaction center protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	451	Total	C	N	O	S	0	2	0
			3488	2284	583	608	13			
3	c	455	Total	C	N	O	S	0	4	0
			3536	2315	593	615	13			

- Molecule 4 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	2	0
			2726	1809	443	462	12			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	d	341	Total	C	N	O	S	0	3	0
			2733	1812	446	463	12			

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	0	0	0
			657	429	106	122			
5	e	79	Total	C	N	O	0	0	0
			627	413	97	117			

- Molecule 6 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			274	187	45	41	1			
6	f	32	Total	C	N	O	S	0	0	0
			255	173	43	38	1			

- Molecule 7 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	63	Total	C	N	O	S	0	0	0
			498	333	80	83	2			
7	h	63	Total	C	N	O	S	0	0	0
			498	333	80	83	2			

- Molecule 8 is a protein called Photosystem II reaction center protein I.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	36	Total	C	N	O	S	0	0	0
			291	198	45	47	1			
8	i	38	Total	C	N	O	S	0	0	0
			311	210	48	52	1			

- Molecule 9 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	N	O	S	0	0	0
			251	171	37	42	1			
9	j	39	Total	C	N	O	S	0	0	0
			267	180	40	46	1			

- Molecule 10 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	37	Total 287	C 201	N 42	O 44	0	1	0
10	k	37	Total 283	C 197	N 42	O 44	0	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	33	LEU	PHE	variant	UNP P19054
K	39	TRP	VAL	variant	UNP P19054
k	33	LEU	PHE	variant	UNP P19054
k	39	TRP	VAL	variant	UNP P19054

- Molecule 11 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L	37	Total 296	C 200	N 45	O 51	0	1	0
11	l	37	Total 300	C 204	N 45	O 51	0	2	0

- Molecule 12 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	33	Total 261	C 176	N 37	O 47	S 1	0	1	0
12	m	34	Total 275	C 187	N 39	O 48	S 1	0	2	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	variant	UNP P12312
m	8	LEU	PHE	variant	UNP P12312

- Molecule 13 is a protein called Photosystem II extrinsic protein O.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	244	Total 1865	C 1170	N 310	O 380	S 5	0	5	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	o	241	Total	C	N	O	S	0	5	0
			1837	1154	302	375	6			

- Molecule 14 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	0	0
			256	180	36	38	2			
14	t	30	Total	C	N	O	S	0	1	0
			265	185	37	41	2			

- Molecule 15 is a protein called Photosystem II extrinsic protein U.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	U	97	Total	C	N	O	0	0	0
			766	486	128	152			
15	u	97	Total	C	N	O	0	1	0
			769	489	129	151			

- Molecule 16 is a protein called Photosystem II extrinsic protein V.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	1	0
			1057	672	178	203	4			
16	v	137	Total	C	N	O	S	0	1	0
			1050	667	176	203	4			

- Molecule 17 is a protein called Photosystem II reaction center protein Psb30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	27	Total	C	N	O	S	0	0	0
			193	127	32	31	3			
17	y	28	Total	C	N	O	S	0	0	0
			196	128	33	32	3			

- Molecule 18 is a protein called Photosystem II reaction center protein X.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	X	38	Total	C	N	O	0	1	0
			280	190	44	46			
18	x	38	Total	C	N	O	0	1	0
			280	190	44	46			

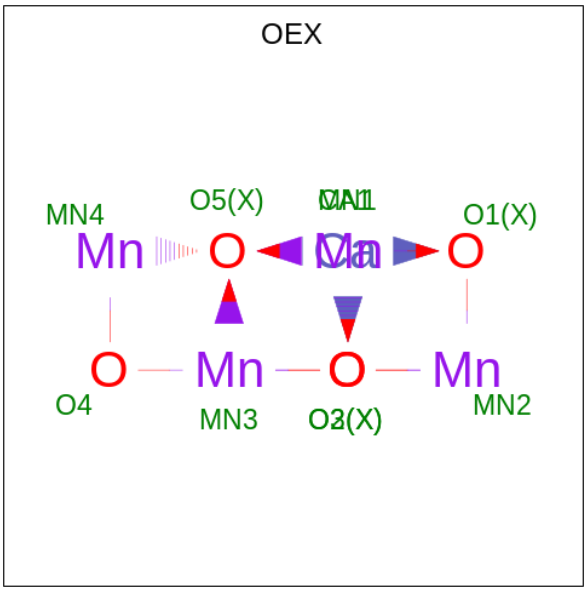
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0	0
			452	313	66	72	1			
19	z	60	Total	C	N	O	S	0	0	0
			432	301	64	66	1			

- Molecule 20 is a protein called Photosystem II reaction center protein Y.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	30	Total	C	N	O	0	0	0
			162	99	33	30			

- Molecule 21 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: $CaMn_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
21	A	1	Total	Ca	Mn	O	0	0
			10	1	4	5		
21	a	1	Total	Ca	Mn	O	0	0
			10	1	4	5		

- Molecule 22 is FE (II) ION (CCD ID: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	1	Total	Fe	0	0
			1	1		

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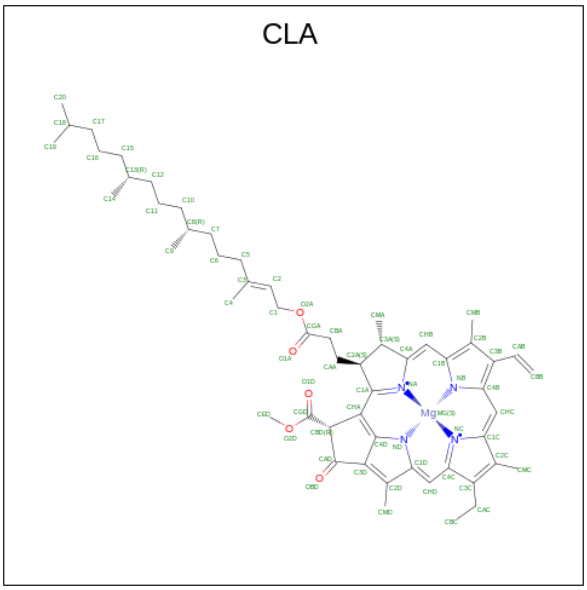
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	a	1	Total Fe 1 1	0	0

- Molecule 23 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	A	2	Total Cl 2 2	0	0
23	a	2	Total Cl 2 2	0	0

- Molecule 24 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A	1	Total C Mg N O 65 55 1 4 5	0	0
24	A	1	Total C Mg N O 65 55 1 4 5	0	0
24	A	1	Total C Mg N O 65 55 1 4 5	0	0
24	A	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	B	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	C	1	Total C Mg N O 65 55 1 4 5	0	0
24	D	1	Total C Mg N O 65 55 1 4 5	0	0
24	D	1	Total C Mg N O 65 55 1 4 5	0	0
24	a	1	Total C Mg N O 65 55 1 4 5	0	0
24	a	1	Total C Mg N O 65 55 1 4 5	0	0
24	a	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0
24	b	1	Total C Mg N O 65 55 1 4 5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

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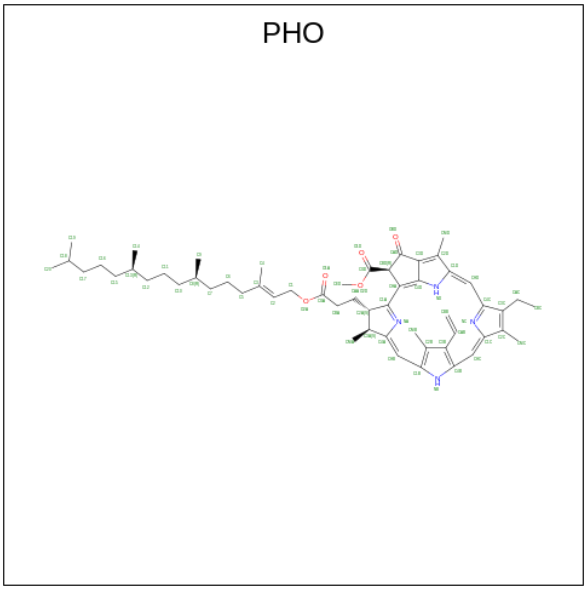
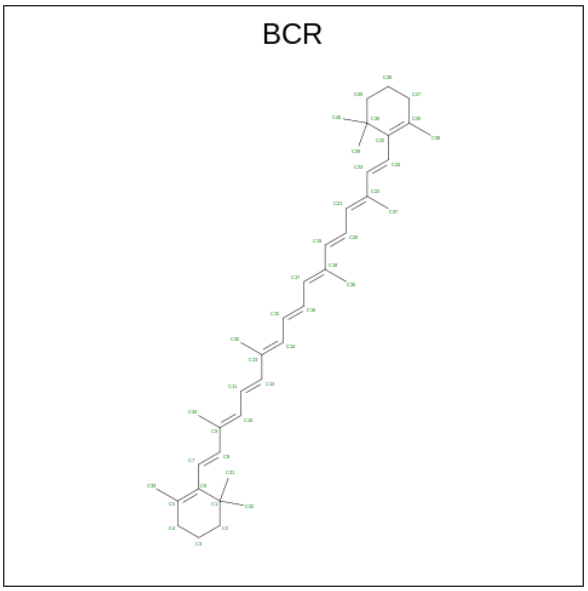
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 25 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	A	1	Total	C	N	O		0	0
			64	55	4	5			
25	A	1	Total	C	N	O		0	0
			64	55	4	5			
25	a	1	Total	C	N	O		0	0
			64	55	4	5			
25	a	1	Total	C	N	O		0	0
			64	55	4	5			

- Molecule 26 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	Y	1	Total C 40 40	0	0
26	a	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0

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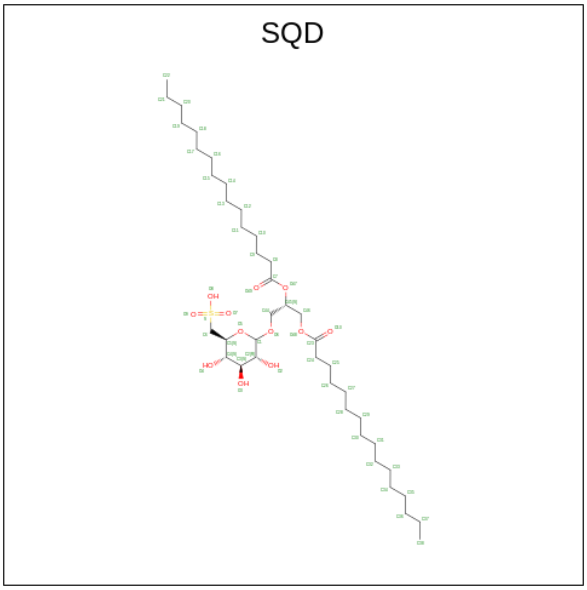
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	c	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	d	1	Total C 40 40	0	0
26	k	1	Total C 40 40	0	0
26	t	1	Total C 40 40	0	0
26	y	1	Total C 40 40	0	0

- Molecule 27 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C O S 52 39 12 1	0	0
27	A	1	Total C O S 54 41 12 1	0	0
27	B	1	Total C O S 54 41 12 1	0	0
27	F	1	Total C O S 37 25 11 1	0	0
27	a	1	Total C O S 54 41 12 1	0	0

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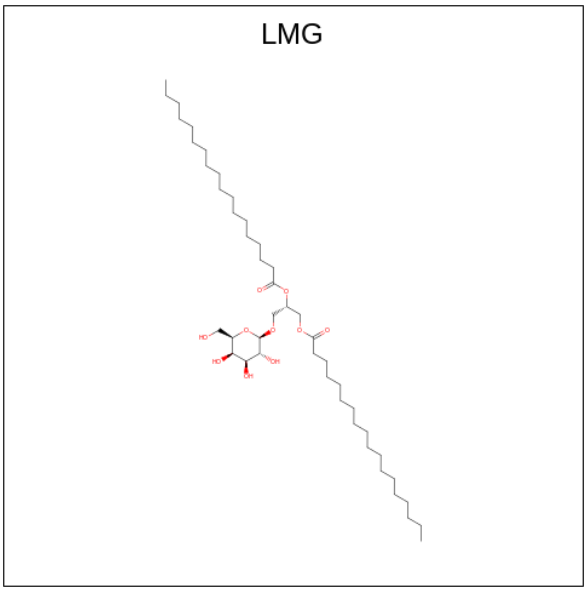
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	a	1	Total C O S 54 41 12 1	0	0
27	b	1	Total C O S 54 41 12 1	0	0
27	f	1	Total C O S 33 23 9 1	0	0

- Molecule 28 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 51 41 10	0	0
28	B	1	Total C O 51 41 10	0	0
28	C	1	Total C O 49 39 10	0	0
28	C	1	Total C O 51 41 10	0	0
28	D	1	Total C O 48 38 10	0	0
28	a	1	Total C O 51 41 10	0	0
28	b	1	Total C O 51 41 10	0	0
28	c	1	Total C O 51 41 10	0	0

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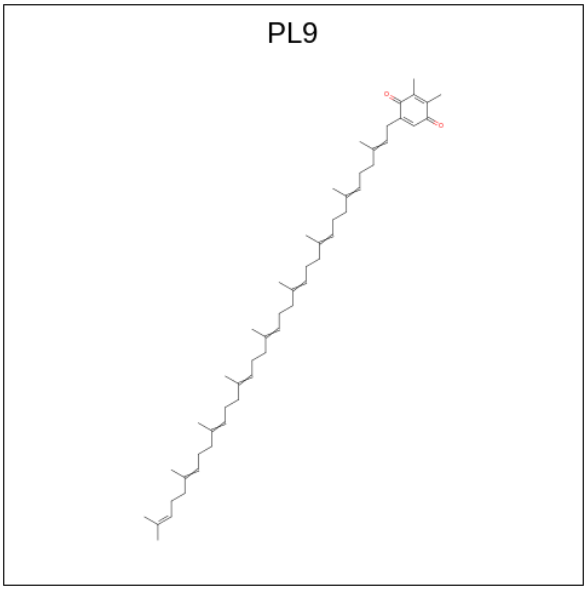
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	c	1	Total C O 51 41 10	0	0
28	d	1	Total C O 48 38 10	0	0

- Molecule 29 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: $C_{53}H_{80}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C O 55 53 2	0	0
29	D	1	Total C O 55 53 2	0	0
29	a	1	Total C O 55 53 2	0	0
29	d	1	Total C O 55 53 2	0	0

- Molecule 30 is UNKNOWN LIGAND (CCD ID: UNL) (formula:).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	A	3	Total C O 54 49 5	0	0
30	B	6	Total C O 78 75 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	C	4	Total C O 66 59 7	0	0
30	D	2	Total C O 53 48 5	0	0
30	E	2	Total C 29 29	0	0
30	H	1	Total C 7 7	0	0
30	I	3	Total C 38 38	0	0
30	J	2	Total C 29 29	0	0
30	M	1	Total C 16 16	0	0
30	T	1	Total C 15 15	0	0
30	Y	1	Total C 10 10	0	0
30	X	1	Total C 16 16	0	0
30	a	3	Total C O 56 51 5	0	0
30	b	5	Total C O 63 59 4	0	0
30	c	5	Total C O 74 65 9	0	0
30	d	3	Total C O 72 63 9	0	0
30	e	1	Total C 15 15	0	0
30	h	1	Total C 7 7	0	0
30	i	4	Total C O 55 53 2	0	0
30	j	2	Total C O 32 30 2	0	0
30	m	1	Total C 13 13	0	0
30	t	1	Total C 12 12	0	0
30	v	1	Total C 7 7	0	0

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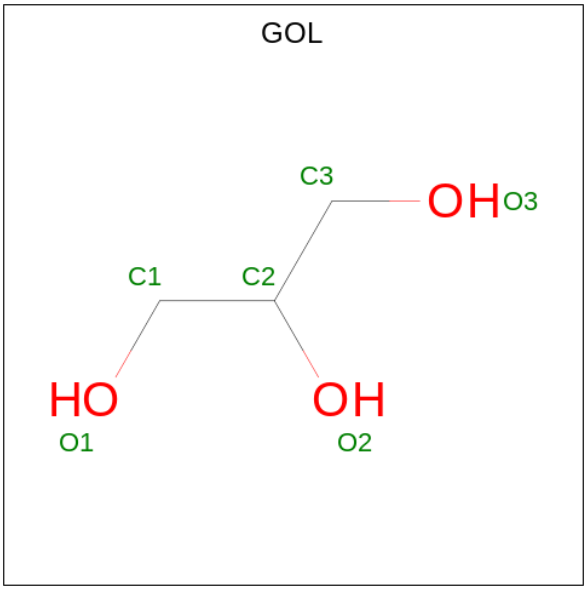
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	y	1	Total C 10 10	0	0

- Molecule 31 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	A	1	Total C O 6 3 3	0	0
31	A	1	Total C O 6 3 3	0	0
31	A	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	B	1	Total C O 6 3 3	0	0
31	C	1	Total C O 6 3 3	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	C	1	Total	C	O	0	0
			6	3	3		
31	C	1	Total	C	O	0	0
			6	3	3		
31	C	1	Total	C	O	0	0
			6	3	3		
31	C	1	Total	C	O	0	0
			6	3	3		
31	C	1	Total	C	O	0	0
			6	3	3		
31	H	1	Total	C	O	0	0
			6	3	3		
31	L	1	Total	C	O	0	0
			6	3	3		
31	O	1	Total	C	O	0	0
			6	3	3		
31	O	1	Total	C	O	0	0
			6	3	3		
31	O	1	Total	C	O	0	0
			6	3	3		
31	V	1	Total	C	O	0	0
			6	3	3		
31	V	1	Total	C	O	0	0
			6	3	3		
31	V	1	Total	C	O	0	0
			6	3	3		
31	V	1	Total	C	O	0	0
			6	3	3		
31	Z	1	Total	C	O	0	0
			6	3	3		
31	a	1	Total	C	O	0	0
			6	3	3		
31	a	1	Total	C	O	0	0
			6	3	3		
31	a	1	Total	C	O	0	0
			6	3	3		
31	b	1	Total	C	O	0	0
			6	3	3		
31	b	1	Total	C	O	0	0
			6	3	3		
31	b	1	Total	C	O	0	0
			6	3	3		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	b	1	Total C O 6 3 3	0	0
31	b	1	Total C O 6 3 3	0	0
31	b	1	Total C O 6 3 3	0	0
31	b	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	c	1	Total C O 6 3 3	0	0
31	f	1	Total C O 6 3 3	0	0
31	h	1	Total C O 6 3 3	0	0
31	o	1	Total C O 6 3 3	0	0
31	o	1	Total C O 6 3 3	0	0
31	t	1	Total C O 6 3 3	0	0
31	u	1	Total C O 6 3 3	0	0
31	u	1	Total C O 6 3 3	0	0

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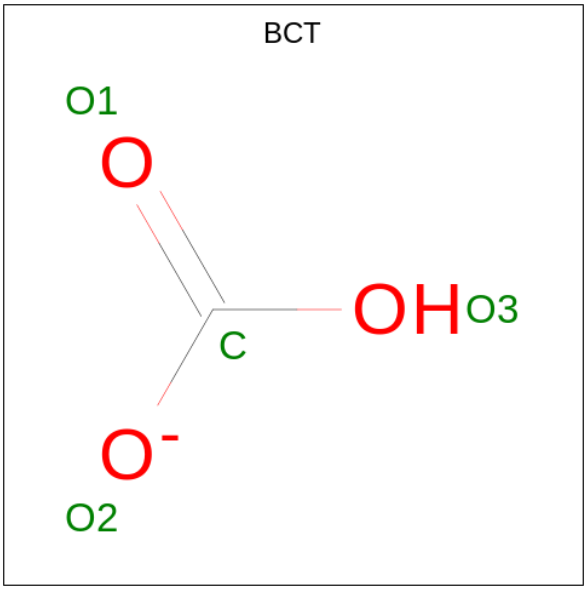
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	v	1	Total C O 6 3 3	0	0
31	v	1	Total C O 6 3 3	0	0
31	v	1	Total C O 6 3 3	0	0

- Molecule 32 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



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

- Molecule 33 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	B	1	Total Ca 1 1	0	0
33	F	1	Total Ca 1 1	0	0
33	O	1	Total Ca 1 1	0	0
33	b	1	Total Ca 1 1	0	0

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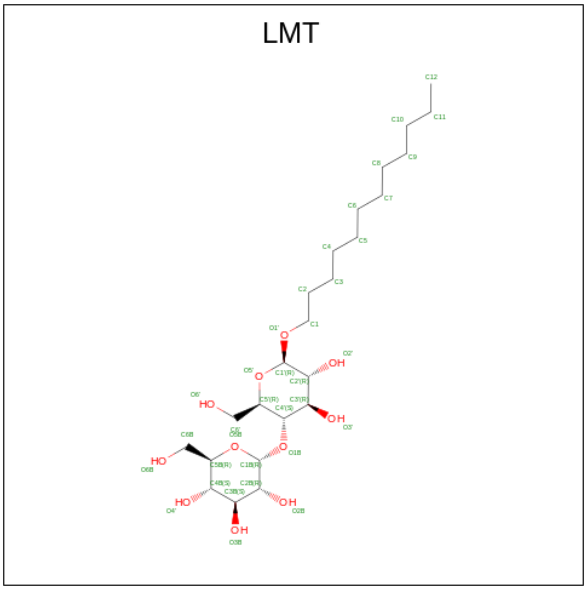
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	c	1	Total Ca 1 1	0	0
33	f	1	Total Ca 1 1	0	0
33	o	1	Total Ca 1 1	0	0

- Molecule 34 is DODECYL-BETA-D-MALTOSIDE (CCD ID: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	B	1	Total C O 35 24 11	0	0
34	C	1	Total C O 35 24 11	0	0
34	D	1	Total C O 35 24 11	0	0
34	F	1	Total C O 26 15 11	0	0
34	J	1	Total C O 23 18 5	0	0
34	M	1	Total C O 35 24 11	0	0
34	M	1	Total C O 35 24 11	0	0
34	T	1	Total C O 24 18 6	0	0

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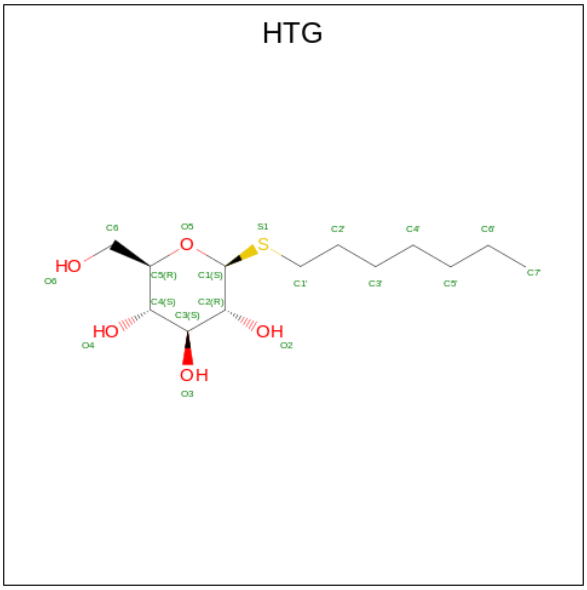
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	Z	1	Total C O 35 24 11	0	0
34	a	1	Total C O 35 24 11	0	0
34	b	1	Total C O 25 19 6	0	0
34	c	1	Total C O 35 24 11	0	0
34	m	1	Total C O 35 24 11	0	0
34	m	1	Total C O 35 24 11	0	0
34	t	1	Total C O 24 18 6	0	0
34	z	1	Total C O 32 21 11	0	0

- Molecule 35 is heptyl 1-thio-beta-D-glucopyranoside (CCD ID: HTG) (formula: $C_{13}H_{26}O_5S$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	B	1	Total C O S 19 13 5 1	0	0
35	B	1	Total C O S 19 13 5 1	0	0
35	B	1	Total C O S 19 13 5 1	0	0

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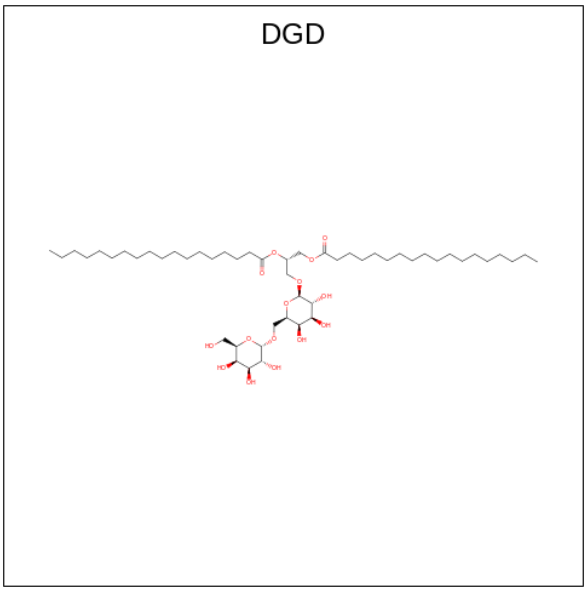
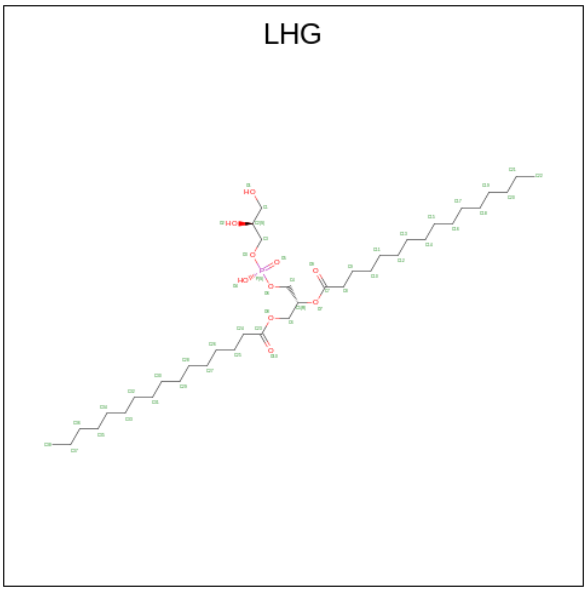
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	B	1	Total C O S 19 13 5 1	0	0
35	C	1	Total C O S 19 13 5 1	0	0
35	C	1	Total C O S 19 13 5 1	0	0
35	C	1	Total C O S 19 13 5 1	0	0
35	H	1	Total C O S 16 13 2 1	0	0
35	O	1	Total C O S 19 13 5 1	0	0
35	U	1	Total C S 9 8 1	0	0
35	V	1	Total C O S 13 7 5 1	0	0
35	X	1	Total C O S 12 7 4 1	0	0
35	b	1	Total C O S 19 13 5 1	0	0
35	b	1	Total C O S 19 13 5 1	0	0
35	b	1	Total C O S 19 13 5 1	0	0
35	b	1	Total C O S 19 13 5 1	0	0
35	c	1	Total C O S 19 13 5 1	0	0
35	c	1	Total C O S 19 13 5 1	0	0
35	d	1	Total C O S 19 13 5 1	0	0
35	o	1	Total C O S 19 13 5 1	0	0
35	u	1	Total C O S 14 10 3 1	0	0
35	v	1	Total C O S 13 7 5 1	0	0

- Molecule 36 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



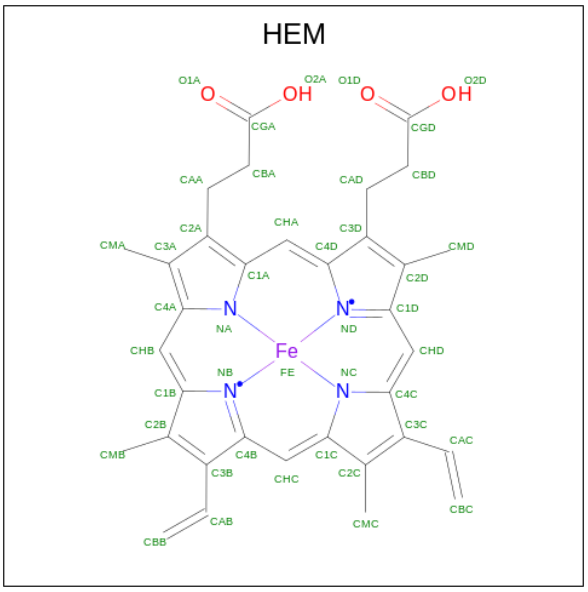
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	C	1	Total C O 62 47 15	0	0
36	C	1	Total C O 56 41 15	0	0
36	C	1	Total C O 58 43 15	0	0
36	D	1	Total C O 53 42 11	0	0
36	H	1	Total C O 62 47 15	0	0
36	c	1	Total C O 62 47 15	0	0
36	c	1	Total C O 55 40 15	0	0
36	c	1	Total C O 60 45 15	0	0
36	e	1	Total C O 39 30 9	0	0
36	h	1	Total C O 62 47 15	0	0

- Molecule 37 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$).



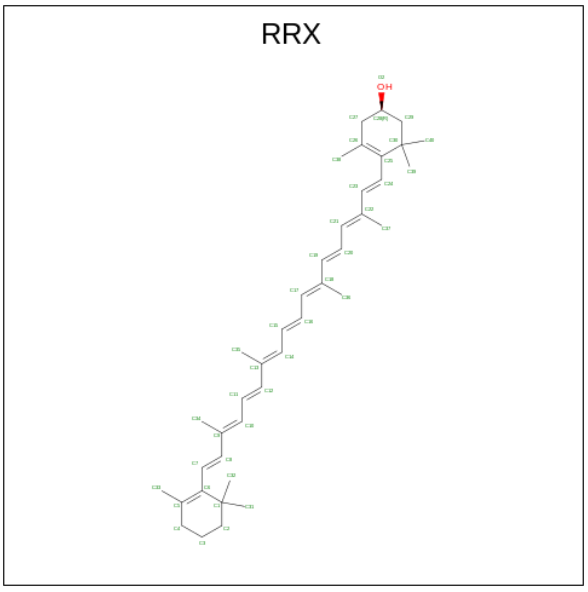
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			46	35	10	1		
37	E	1	Total	C	O	P	0	0
			49	38	10	1		
37	L	1	Total	C	O	P	0	0
			49	38	10	1		
37	b	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			40	29	10	1		
37	e	1	Total	C	O	P	0	0
			27	17	9	1		

- Molecule 38 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
38	F	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	V	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	f	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	v	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 39 is (3R)-beta,beta-caroten-3-ol (CCD ID: RRX) (formula: $C_{40}H_{56}O$).

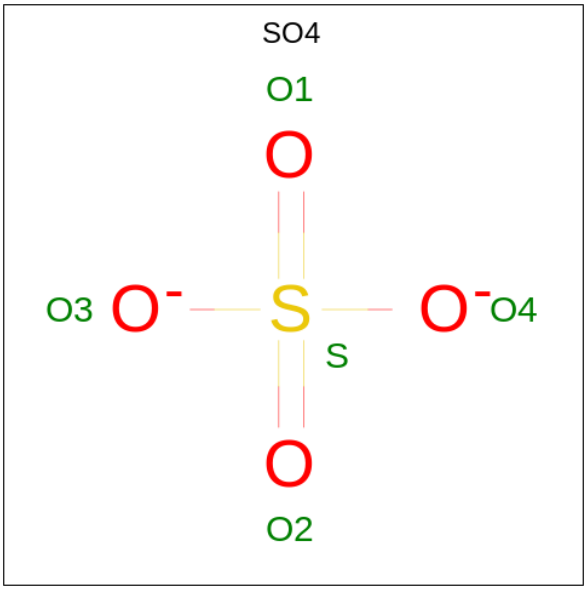


Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
39	H	1	Total C O 41 40 1	0	0
39	h	1	Total C O 41 40 1	0	0

- Molecule 40 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	J	1	Total Mg 1 1	0	0
40	j	1	Total Mg 1 1	0	0

- Molecule 41 is SULFATE ION (CCD ID: SO4) (formula: O_4S).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	O	1	Total O S 5 4 1	0	0

- Molecule 42 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
42	A	151	Total O 153 153	0	2
42	B	303	Total O 310 310	0	7

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
42	C	233	Total O 237 237	0	4
42	D	151	Total O 154 154	0	3
42	E	35	Total O 36 36	0	1
42	F	17	Total O 17 17	0	0
42	H	50	Total O 51 51	0	1
42	I	11	Total O 11 11	0	0
42	J	10	Total O 10 10	0	0
42	K	7	Total O 7 7	0	0
42	L	16	Total O 16 16	0	0
42	M	17	Total O 17 17	0	0
42	O	170	Total O 176 176	0	6
42	T	16	Total O 16 16	0	0
42	U	89	Total O 90 90	0	1
42	V	134	Total O 136 136	0	2
42	Y	7	Total O 7 7	0	0
42	X	12	Total O 12 12	0	0
42	a	156	Total O 156 156	0	0
42	b	287	Total O 291 291	0	4
42	c	225	Total O 229 229	0	4
42	d	152	Total O 157 157	0	5
42	e	24	Total O 25 25	0	1

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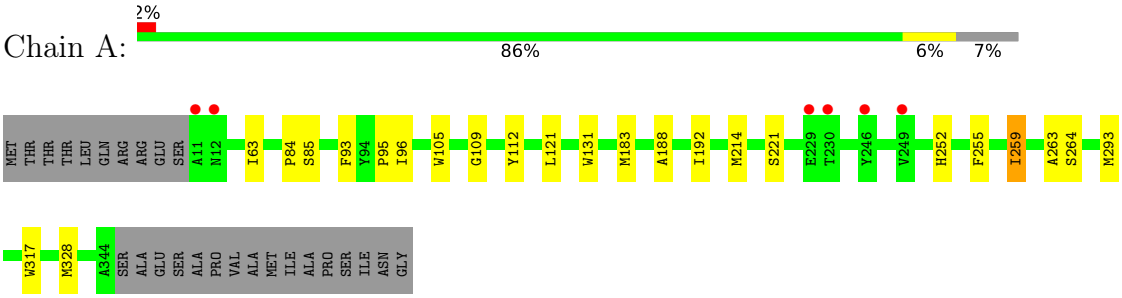
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
42	f	12	Total O 12 12	0	0
42	h	37	Total O 40 40	0	3
42	i	13	Total O 13 13	0	0
42	j	8	Total O 8 8	0	0
42	k	7	Total O 7 7	0	0
42	l	13	Total O 14 14	0	1
42	m	16	Total O 16 16	0	0
42	o	152	Total O 154 154	0	2
42	t	17	Total O 19 19	0	2
42	u	94	Total O 97 97	0	3
42	v	93	Total O 97 97	0	4
42	y	4	Total O 4 4	0	0
42	x	8	Total O 8 8	0	0
42	z	3	Total O 3 3	0	0

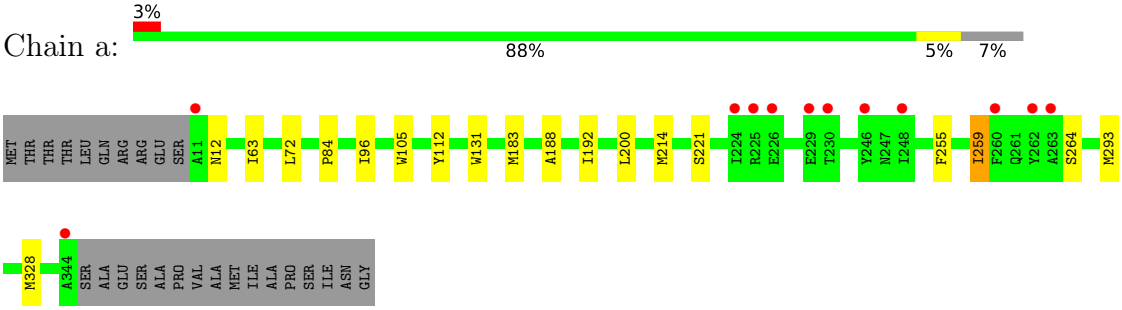
3 Residue-property plots (i)

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

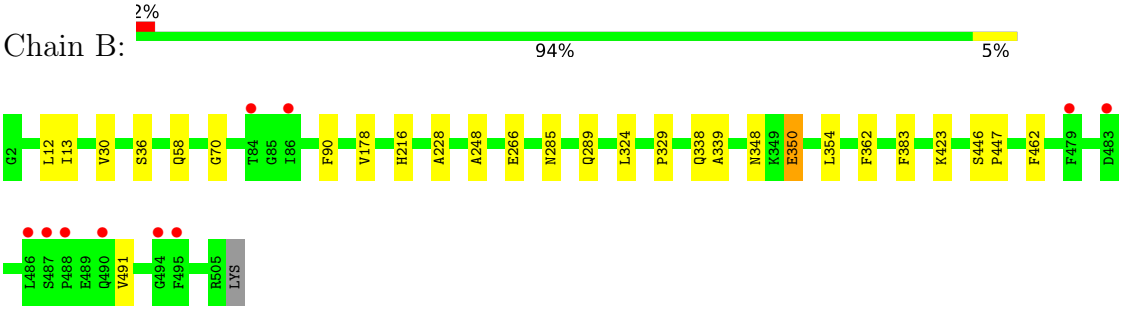
• Molecule 1: Photosystem II protein D1



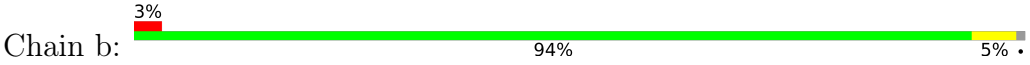
• Molecule 1: Photosystem II protein D1

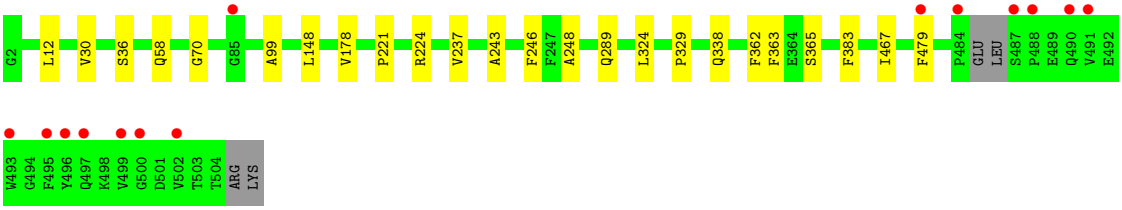


• Molecule 2: Photosystem II CP47 reaction center protein

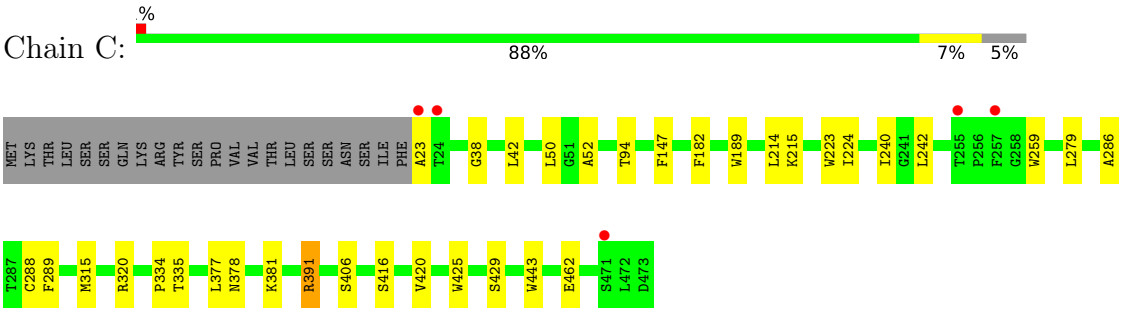


• Molecule 2: Photosystem II CP47 reaction center protein

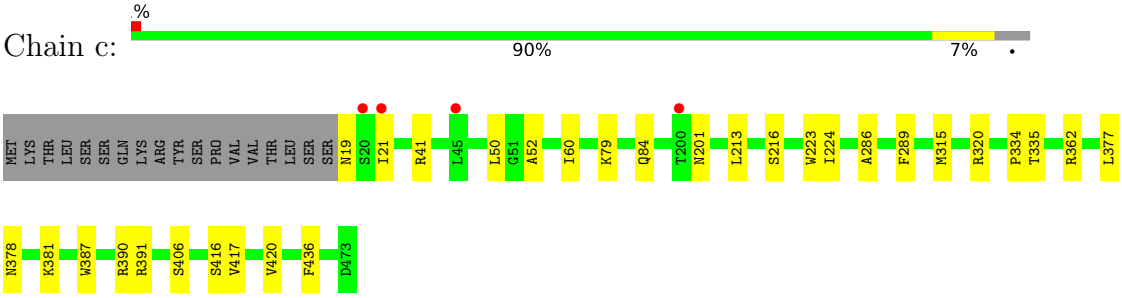




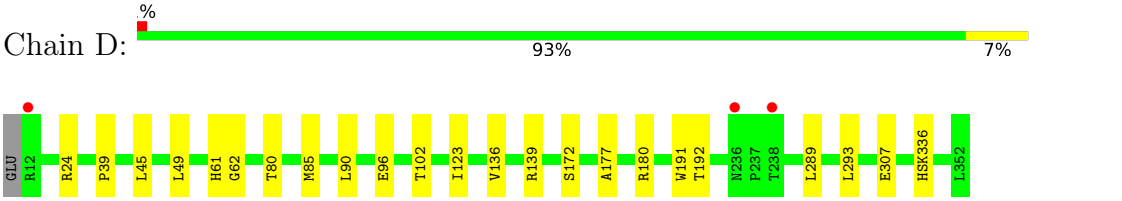
• Molecule 3: Photosystem II 44 kDa reaction center protein



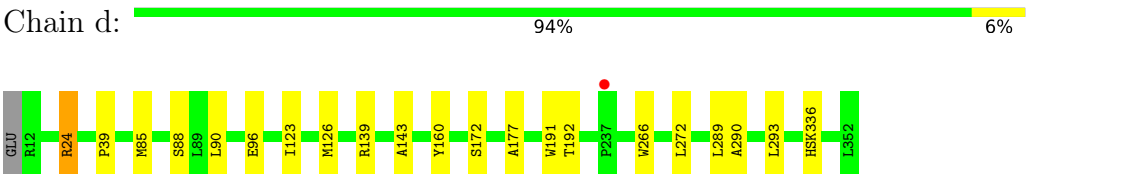
• Molecule 3: Photosystem II 44 kDa reaction center protein



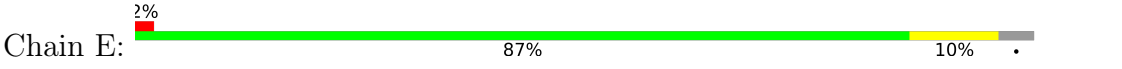
• Molecule 4: Photosystem II D2 protein

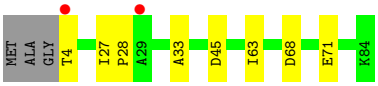


• Molecule 4: Photosystem II D2 protein

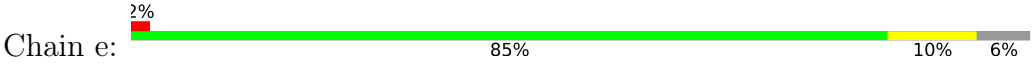


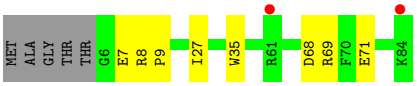
• Molecule 5: Cytochrome b559 subunit alpha



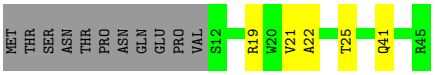


• Molecule 5: Cytochrome b559 subunit alpha

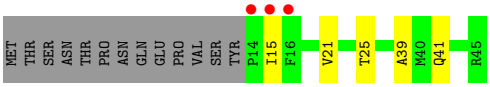




• Molecule 6: Cytochrome b559 subunit beta

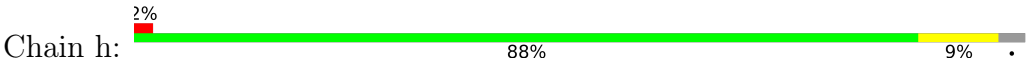


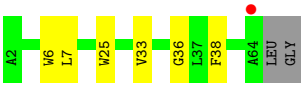
• Molecule 6: Cytochrome b559 subunit beta



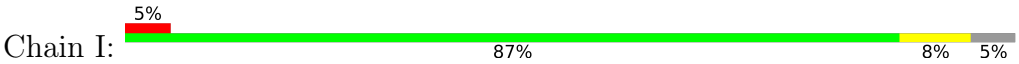
• Molecule 7: Photosystem II reaction center protein H

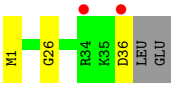
• Molecule 7: Photosystem II reaction center protein H





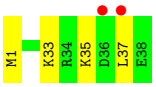
• Molecule 8: Photosystem II reaction center protein I





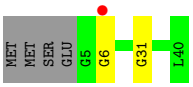
• Molecule 8: Photosystem II reaction center protein I

Chain i:



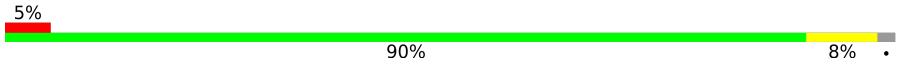
• Molecule 9: Photosystem II reaction center protein J

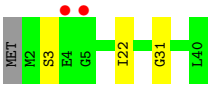
Chain J:



• Molecule 9: Photosystem II reaction center protein J

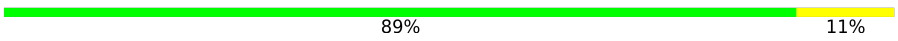
Chain j:





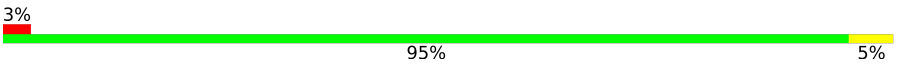
• Molecule 10: Photosystem II reaction center protein K

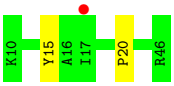
Chain K:



• Molecule 10: Photosystem II reaction center protein K

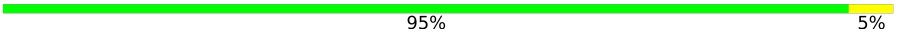
Chain k:

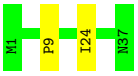




• Molecule 11: Photosystem II reaction center protein L

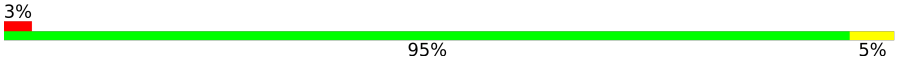
Chain L:

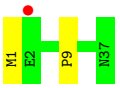




• Molecule 11: Photosystem II reaction center protein L

Chain l:





• Molecule 12: Photosystem II reaction center protein M

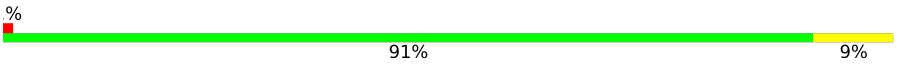
Chain M:

• Molecule 12: Photosystem II reaction center protein M

Chain m:

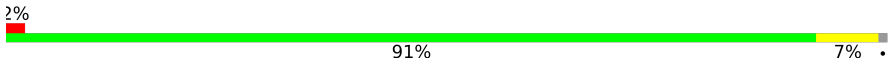
• Molecule 13: Photosystem II extrinsic protein O

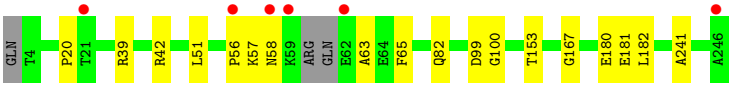
Chain O:



• Molecule 13: Photosystem II extrinsic protein O

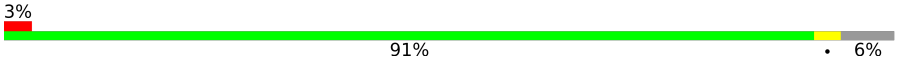
Chain o:





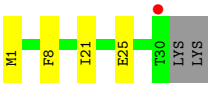
• Molecule 14: Photosystem II reaction center protein T

Chain T:



• Molecule 14: Photosystem II reaction center protein T

Chain t:

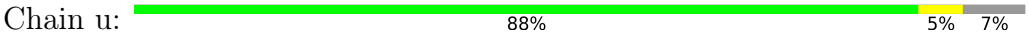


• Molecule 15: Photosystem II extrinsic protein U

Chain U:

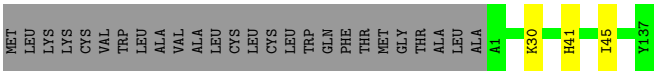
• Molecule 15: Photosystem II extrinsic protein U

Chain u:



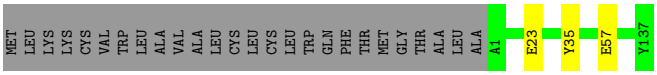
• Molecule 16: Photosystem II extrinsic protein V

Chain V:



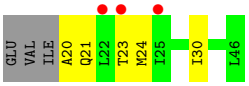
• Molecule 16: Photosystem II extrinsic protein V

Chain v:



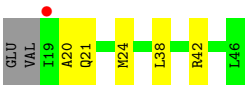
• Molecule 17: Photosystem II reaction center protein Psb30

Chain Y:



• Molecule 17: Photosystem II reaction center protein Psb30

Chain y:

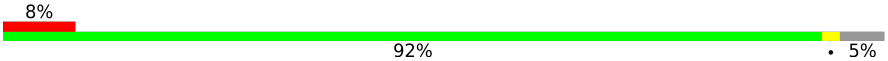


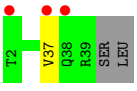
• Molecule 18: Photosystem II reaction center protein X

Chain X:

• Molecule 18: Photosystem II reaction center protein X

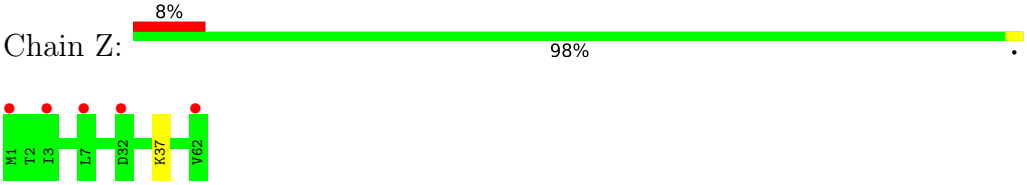
Chain x:





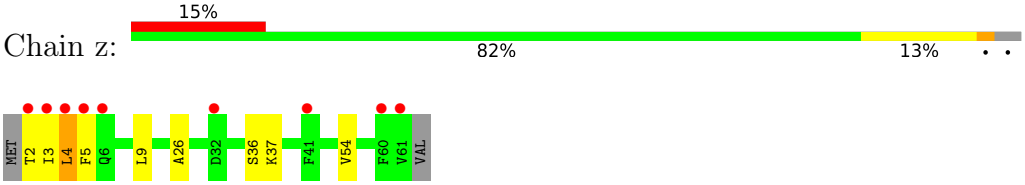
• Molecule 19: Photosystem II reaction center protein Z

Chain Z:



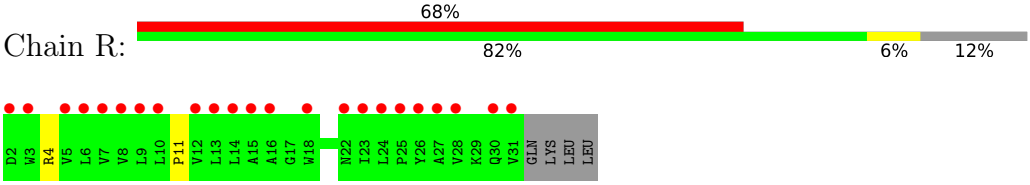
• Molecule 19: Photosystem II reaction center protein Z

Chain z:



• Molecule 20: Photosystem II reaction center protein Y

Chain R:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	123.34Å 228.88Å 286.81Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.10 – 2.00 49.10 – 2.00	Depositor EDS
% Data completeness (in resolution range)	99.9 (49.10-2.00) 99.9 (49.10-2.00)	Depositor EDS
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.76 (at 2.00Å)	Xtriage
Refinement program	REFMAC 5.8.0103, PHENIX 1.20.1_4487	Depositor
R, R_{free}	0.152 , 0.178 0.154 , 0.179	Depositor DCC
R_{free} test set	27141 reflections (4.29%)	wwPDB-VP
Wilson B-factor (Å^2)	39.2	Xtriage
Anisotropy	0.513	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 62.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.51$, $< L^2 > = 0.34$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	54054	wwPDB-VP
Average B, all atoms (Å^2)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.89% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: OEX, LHG, UNL, LMG, BCT, HTG, GOL, BCR, FE2, PL9, FME, LMT, CLA, SQD, MG, RRX, HSK, CL, CA, HEM, SO4, PHO, DGD

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	0.34	0/2714	0.50	0/3703
1	a	0.33	0/2708	0.50	0/3695
2	B	0.31	0/4152	0.47	0/5659
2	b	0.29	1/4129 (0.0%)	0.46	0/5627
3	C	0.27	0/3607	0.43	0/4911
3	c	0.25	0/3662	0.42	0/4986
4	D	0.34	0/2804	0.48	0/3820
4	d	0.31	0/2814	0.45	0/3833
5	E	0.25	0/676	0.41	0/924
5	e	0.22	0/646	0.40	0/885
6	F	0.26	0/283	0.41	0/386
6	f	0.32	0/262	0.39	0/356
7	H	0.25	0/511	0.41	0/697
7	h	0.23	0/511	0.42	0/697
8	I	0.20	0/288	0.33	0/390
8	i	0.23	0/308	0.37	0/415
9	J	0.22	0/257	0.37	0/349
9	j	0.21	0/273	0.34	0/371
10	K	0.24	0/300	0.38	0/414
10	k	0.22	0/293	0.36	0/404
11	L	0.36	0/306	0.44	0/418
11	l	0.33	0/313	0.41	0/428
12	M	0.35	0/257	0.52	0/352
12	m	0.30	0/274	0.48	0/374
13	O	0.29	0/1911	0.48	0/2595
13	o	0.26	0/1882	0.45	0/2555
14	T	0.32	0/255	0.42	0/346
14	t	0.32	0/264	0.41	0/359
15	U	0.28	0/777	0.47	0/1055
15	u	0.30	0/783	0.47	0/1063
16	V	0.31	0/1081	0.47	0/1469

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	v	0.25	0/1074	0.42	0/1462
17	Y	0.19	0/194	0.32	0/259
17	y	0.18	0/197	0.35	0/264
18	X	0.17	0/286	0.28	0/387
18	x	0.15	0/286	0.30	0/387
19	Z	0.17	0/463	0.36	0/636
19	z	0.17	0/443	0.36	0/609
20	R	0.18	0/162	0.30	0/224
All	All	0.29	1/42406 (0.0%)	0.45	0/57764

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	221	PRO	CA-C	5.85	1.55	1.51

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	2620	0	2520	17	0
1	a	2615	0	2520	13	0
2	B	3991	0	3844	22	0
2	b	3959	0	3806	19	0
3	C	3488	0	3410	29	0
3	c	3536	0	3460	22	0
4	D	2726	0	2629	18	0
4	d	2733	0	2641	17	0
5	E	657	0	637	7	0
5	e	627	0	595	6	0
6	F	274	0	279	4	0
6	f	255	0	263	3	0
7	H	498	0	518	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	h	498	0	518	8	0
8	I	291	0	302	2	0
8	i	311	0	326	2	0
9	J	251	0	257	1	0
9	j	267	0	266	3	0
10	K	287	0	292	4	0
10	k	283	0	283	2	0
11	L	296	0	305	2	0
11	l	300	0	314	2	0
12	M	261	0	280	4	0
12	m	275	0	304	6	0
13	O	1865	0	1829	17	0
13	o	1837	0	1800	11	0
14	T	256	0	256	0	0
14	t	265	0	262	4	0
15	U	766	0	758	3	0
15	u	769	0	764	3	0
16	V	1057	0	1063	2	0
16	v	1050	0	1043	3	0
17	Y	193	0	210	4	0
17	y	196	0	208	3	0
18	X	280	0	312	3	0
18	x	280	0	312	2	0
19	Z	452	0	469	1	0
19	z	432	0	441	6	0
20	R	162	0	103	1	0
21	A	10	0	0	0	0
21	a	10	0	0	0	0
22	A	1	0	0	0	0
22	a	1	0	0	0	0
23	A	2	0	0	0	0
23	a	2	0	0	0	0
24	A	260	0	288	8	0
24	B	1040	0	1152	31	0
24	C	845	0	936	36	0
24	D	130	0	144	2	0
24	a	195	0	216	5	0
24	b	1040	0	1152	29	0
24	c	845	0	936	28	0
24	d	195	0	216	7	0
25	A	128	0	148	3	0
25	a	128	0	148	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	A	40	0	56	0	0
26	B	120	0	168	8	0
26	C	80	0	112	4	0
26	D	40	0	56	2	0
26	K	40	0	56	1	0
26	T	40	0	56	5	0
26	Y	40	0	56	1	0
26	a	40	0	56	2	0
26	b	120	0	168	7	0
26	c	80	0	112	5	0
26	d	40	0	56	1	0
26	k	40	0	56	2	0
26	t	40	0	56	6	0
26	y	40	0	56	2	0
27	A	106	0	149	3	0
27	B	54	0	78	1	0
27	F	37	0	46	1	0
27	a	108	0	156	7	0
27	b	54	0	78	1	0
27	f	33	0	39	1	0
28	A	51	0	72	2	0
28	B	51	0	72	4	0
28	C	100	0	140	2	0
28	D	48	0	66	3	0
28	a	51	0	72	2	0
28	b	51	0	72	1	0
28	c	102	0	144	1	0
28	d	48	0	66	0	0
29	A	55	0	80	5	0
29	D	55	0	80	0	0
29	a	55	0	80	5	0
29	d	55	0	80	0	0
30	A	54	0	0	0	0
30	B	78	0	0	0	0
30	C	66	0	0	0	0
30	D	53	0	0	0	0
30	E	29	0	0	0	0
30	H	7	0	0	0	0
30	I	38	0	0	0	0
30	J	29	0	0	0	0
30	M	16	0	0	0	0
30	T	15	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	X	16	0	0	0	0
30	Y	10	0	0	0	0
30	a	56	0	0	0	0
30	b	63	0	0	0	0
30	c	74	0	0	0	0
30	d	72	0	0	0	0
30	e	15	0	0	0	0
30	h	7	0	0	0	0
30	i	55	0	0	0	0
30	j	32	0	0	0	0
30	m	13	0	0	0	0
30	t	12	0	0	0	0
30	v	7	0	0	0	0
30	y	10	0	0	0	0
31	A	18	0	24	2	0
31	B	36	0	48	1	0
31	C	36	0	48	4	0
31	H	6	0	8	1	0
31	L	6	0	8	0	0
31	O	18	0	24	1	0
31	V	24	0	30	0	0
31	Z	6	0	8	0	0
31	a	18	0	24	1	0
31	b	42	0	56	0	0
31	c	60	0	80	9	0
31	f	6	0	7	0	0
31	h	6	0	8	1	0
31	o	12	0	16	0	0
31	t	6	0	8	0	0
31	u	12	0	15	0	0
31	v	18	0	24	0	0
32	A	4	0	0	0	0
32	a	4	0	0	0	0
33	B	1	0	0	0	0
33	F	1	0	0	0	0
33	O	1	0	0	0	0
33	b	1	0	0	0	0
33	c	1	0	0	0	0
33	f	1	0	0	0	0
33	o	1	0	0	0	0
34	B	35	0	46	1	0
34	C	35	0	46	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
34	D	35	0	46	0	0
34	F	26	0	25	0	0
34	J	23	0	32	0	0
34	M	70	0	92	2	0
34	T	24	0	35	0	0
34	Z	35	0	46	1	0
34	a	35	0	46	1	0
34	b	25	0	35	1	0
34	c	35	0	46	0	0
34	m	70	0	92	1	0
34	t	24	0	35	0	0
34	z	32	0	33	4	0
35	B	76	0	104	0	0
35	C	57	0	78	4	0
35	H	16	0	20	1	0
35	O	19	0	26	0	0
35	U	9	0	15	1	0
35	V	13	0	11	0	0
35	X	12	0	8	0	0
35	b	76	0	104	3	0
35	c	38	0	52	1	0
35	d	19	0	26	1	0
35	o	19	0	26	0	0
35	u	14	0	19	0	0
35	v	13	0	11	0	0
36	C	176	0	226	5	0
36	D	53	0	71	4	0
36	H	62	0	82	1	0
36	c	177	0	228	1	0
36	e	39	0	47	1	0
36	h	62	0	82	1	0
37	D	144	0	213	4	0
37	E	49	0	74	6	0
37	L	49	0	74	1	0
37	b	49	0	74	2	0
37	d	138	0	198	7	0
37	e	27	0	30	2	0
38	F	43	0	30	2	0
38	V	43	0	30	1	0
38	f	43	0	30	2	0
38	v	43	0	30	0	0
39	H	41	0	56	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
39	h	41	0	56	3	0
40	J	1	0	0	0	0
40	j	1	0	0	0	0
41	O	5	0	0	0	0
42	A	153	0	0	0	0
42	B	310	0	0	1	0
42	C	237	0	0	5	0
42	D	154	0	0	2	0
42	E	36	0	0	0	0
42	F	17	0	0	0	0
42	H	51	0	0	1	0
42	I	11	0	0	1	0
42	J	10	0	0	0	0
42	K	7	0	0	1	0
42	L	16	0	0	0	0
42	M	17	0	0	0	0
42	O	176	0	0	3	0
42	T	16	0	0	0	0
42	U	90	0	0	3	0
42	V	136	0	0	1	0
42	X	12	0	0	0	0
42	Y	7	0	0	1	0
42	a	156	0	0	0	0
42	b	291	0	0	0	0
42	c	229	0	0	4	0
42	d	157	0	0	0	0
42	e	25	0	0	0	0
42	f	12	0	0	0	0
42	h	40	0	0	0	0
42	i	13	0	0	1	0
42	j	8	0	0	0	0
42	k	7	0	0	0	0
42	l	14	0	0	1	0
42	m	16	0	0	1	0
42	o	154	0	0	0	0
42	t	19	0	0	1	0
42	u	97	0	0	1	0
42	v	97	0	0	1	0
42	x	8	0	0	0	0
42	y	4	0	0	0	0
42	z	3	0	0	0	0
All	All	54054	0	51647	422	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.

The worst 5 of 422 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)
24:b:609:CLA:HHC	24:b:609:CLA:HBB1	1.58	0.85
36:D:406:DGD:HD4	5:E:45:ASP:HB3	1.59	0.83
3:c:320:ARG:HG3	31:c:927:GOL:H2	1.65	0.78
3:c:378:ASN:ND2	42:c:1001:HOH:O	2.18	0.77
24:B:611:CLA:HHC	24:B:611:CLA:HBB1	1.67	0.76

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	335/360 (93%)	331 (99%)	3 (1%)	1 (0%)	36	35
1	a	335/360 (93%)	330 (98%)	4 (1%)	1 (0%)	36	35
2	B	510/505 (101%)	505 (99%)	5 (1%)	0	100	100
2	b	508/505 (101%)	501 (99%)	7 (1%)	0	100	100
3	C	451/473 (95%)	443 (98%)	7 (2%)	1 (0%)	43	42
3	c	457/473 (97%)	446 (98%)	9 (2%)	2 (0%)	30	27
4	D	339/342 (99%)	333 (98%)	6 (2%)	0	100	100
4	d	340/342 (99%)	333 (98%)	7 (2%)	0	100	100
5	E	79/84 (94%)	79 (100%)	0	0	100	100
5	e	77/84 (92%)	77 (100%)	0	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	30/45 (67%)	30 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	H	61/65 (94%)	60 (98%)	1 (2%)	0	100	100
7	h	61/65 (94%)	59 (97%)	2 (3%)	0	100	100
8	I	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
8	i	36/38 (95%)	31 (86%)	5 (14%)	0	100	100
9	J	34/40 (85%)	32 (94%)	1 (3%)	1 (3%)	3	1
9	j	37/40 (92%)	36 (97%)	1 (3%)	0	100	100
10	K	36/37 (97%)	36 (100%)	0	0	100	100
10	k	35/37 (95%)	35 (100%)	0	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100
11	l	37/37 (100%)	37 (100%)	0	0	100	100
12	M	32/36 (89%)	32 (100%)	0	0	100	100
12	m	34/36 (94%)	34 (100%)	0	0	100	100
13	O	247/244 (101%)	241 (98%)	6 (2%)	0	100	100
13	o	242/244 (99%)	237 (98%)	5 (2%)	0	100	100
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	29/32 (91%)	29 (100%)	0	0	100	100
15	U	95/104 (91%)	92 (97%)	3 (3%)	0	100	100
15	u	96/104 (92%)	93 (97%)	3 (3%)	0	100	100
16	V	136/163 (83%)	134 (98%)	2 (2%)	0	100	100
16	v	136/163 (83%)	133 (98%)	3 (2%)	0	100	100
17	Y	25/30 (83%)	25 (100%)	0	0	100	100
17	y	26/30 (87%)	26 (100%)	0	0	100	100
18	X	37/40 (92%)	36 (97%)	1 (3%)	0	100	100
18	x	37/40 (92%)	36 (97%)	1 (3%)	0	100	100
19	Z	60/62 (97%)	59 (98%)	1 (2%)	0	100	100
19	z	58/62 (94%)	56 (97%)	1 (2%)	1 (2%)	7	3
20	R	28/34 (82%)	28 (100%)	0	0	100	100
All	All	5246/5508 (95%)	5153 (98%)	86 (2%)	7 (0%)	48	46

5 of 7 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER

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Mol	Chain	Res	Type
3	c	416[A]	SER
3	c	416[B]	SER
9	J	6	GLY
1	A	259	ILE

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	269/290 (93%)	269 (100%)	0	100	100
1	a	269/290 (93%)	268 (100%)	1 (0%)	84	89
2	B	403/403 (100%)	401 (100%)	2 (0%)	81	87
2	b	397/403 (98%)	395 (100%)	2 (0%)	81	87
3	C	353/374 (94%)	349 (99%)	4 (1%)	65	73
3	c	358/374 (96%)	353 (99%)	5 (1%)	59	66
4	D	275/276 (100%)	274 (100%)	1 (0%)	84	89
4	d	277/276 (100%)	275 (99%)	2 (1%)	76	82
5	E	71/73 (97%)	70 (99%)	1 (1%)	59	66
5	e	66/73 (90%)	65 (98%)	1 (2%)	57	64
6	F	27/39 (69%)	27 (100%)	0	100	100
6	f	25/39 (64%)	24 (96%)	1 (4%)	28	27
7	H	53/54 (98%)	53 (100%)	0	100	100
7	h	53/54 (98%)	53 (100%)	0	100	100
8	I	30/34 (88%)	30 (100%)	0	100	100
8	i	33/34 (97%)	33 (100%)	0	100	100
9	J	23/28 (82%)	23 (100%)	0	100	100
9	j	24/28 (86%)	24 (100%)	0	100	100
10	K	28/30 (93%)	28 (100%)	0	100	100
10	k	27/30 (90%)	27 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
11	L	33/35 (94%)	33 (100%)	0	100 100
11	l	34/35 (97%)	34 (100%)	0	100 100
12	M	29/32 (91%)	28 (97%)	1 (3%)	32 33
12	m	31/32 (97%)	31 (100%)	0	100 100
13	O	204/207 (99%)	204 (100%)	0	100 100
13	o	202/207 (98%)	200 (99%)	2 (1%)	68 75
14	T	25/28 (89%)	25 (100%)	0	100 100
14	t	26/28 (93%)	26 (100%)	0	100 100
15	U	82/89 (92%)	81 (99%)	1 (1%)	63 70
15	u	82/89 (92%)	82 (100%)	0	100 100
16	V	114/138 (83%)	114 (100%)	0	100 100
16	v	112/138 (81%)	111 (99%)	1 (1%)	70 78
17	Y	18/23 (78%)	17 (94%)	1 (6%)	19 16
17	y	18/23 (78%)	18 (100%)	0	100 100
18	X	30/33 (91%)	30 (100%)	0	100 100
18	x	30/33 (91%)	30 (100%)	0	100 100
19	Z	45/52 (86%)	45 (100%)	0	100 100
19	z	41/52 (79%)	40 (98%)	1 (2%)	43 47
20	R	4/29 (14%)	3 (75%)	1 (25%)	0 0
All	All	4221/4505 (94%)	4193 (99%)	28 (1%)	78 82

5 of 28 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	c	21	ILE
20	R	4	ARG
3	c	391[A]	ARG
13	o	182	LEU
3	c	315	MET

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 18 such sidechains are listed below:

Mol	Chain	Res	Type
4	d	301	GLN

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Mol	Chain	Res	Type
15	u	81	HIS
15	u	78	ASN
1	a	165	GLN
4	d	186	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)

10 non-standard protein/DNA/RNA residues are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
4	HSK	D	336[A]	-	9,10,12	5.24	1 (11%)	6,12,16	1.74	2 (33%)
4	HSK	d	336[A]	-	9,10,12	13.67	1 (11%)	6,12,16	1.60	2 (33%)
8	FME	i	1	8	8,9,10	0.58	0	7,9,11	1.48	1 (14%)
4	HSK	D	336[B]	-	9,11,12	1.92	2 (22%)	6,14,16	3.76	4 (66%)
12	FME	M	1	12	8,9,10	0.60	0	7,9,11	1.89	3 (42%)
4	HSK	d	336[B]	-	9,11,12	1.69	2 (22%)	6,14,16	4.07	4 (66%)
14	FME	T	1	14	8,9,10	0.68	0	7,9,11	1.54	1 (14%)
8	FME	I	1	8	8,9,10	0.63	0	7,9,11	1.64	2 (28%)
12	FME	m	1	12	8,9,10	0.70	0	7,9,11	1.81	3 (42%)
14	FME	t	1	14	8,9,10	0.69	0	7,9,11	1.38	1 (14%)

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	HSK	D	336[A]	-	-	0/5/6/8	0/1/1/1
4	HSK	d	336[A]	-	-	0/5/6/8	0/1/1/1
8	FME	i	1	8	-	0/7/9/11	-
4	HSK	D	336[B]	-	-	0/5/6/8	0/1/1/1
12	FME	M	1	12	-	3/7/9/11	-
4	HSK	d	336[B]	-	-	0/5/6/8	0/1/1/1
14	FME	T	1	14	-	1/7/9/11	-
8	FME	I	1	8	-	2/7/9/11	-
12	FME	m	1	12	-	3/7/9/11	-
14	FME	t	1	14	-	3/7/9/11	-

The worst 5 of 6 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	336[A]	HSK	OM-ND1	40.87	1.92	1.38
4	D	336[A]	HSK	OM-ND1	-15.34	1.18	1.38
4	D	336[B]	HSK	OM-ND1	4.37	1.44	1.38
4	d	336[B]	HSK	OM-ND1	3.33	1.43	1.38
4	d	336[B]	HSK	CE1-ND1	-2.60	1.32	1.37

The worst 5 of 23 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	336[B]	HSK	ND1-CE1-NE2	-6.24	103.94	111.75
4	D	336[B]	HSK	ND1-CE1-NE2	-5.79	104.50	111.75
4	d	336[B]	HSK	CE1-ND1-CG	5.77	114.76	107.37
4	D	336[B]	HSK	CE1-ND1-CG	5.55	114.47	107.37
4	d	336[B]	HSK	CD2-NE2-CE1	3.78	109.83	105.22

There are no chirality outliers.

5 of 12 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	I	1	FME	O1-CN-N-CA
12	M	1	FME	O1-CN-N-CA
12	M	1	FME	CB-CA-N-CN
14	T	1	FME	O1-CN-N-CA
12	m	1	FME	O1-CN-N-CA

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
12	M	1	FME	1	0
12	m	1	FME	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 310 ligands modelled in this entry, 15 are monoatomic and 55 are unknown - leaving 240 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
24	CLA	A	407	42	69,73,73	2.20	22 (31%)	83,113,113	2.61	29 (34%)
27	SQD	a	415	-	53,54,54	0.96	3 (5%)	62,65,65	1.74	11 (17%)
24	CLA	d	401	42	69,73,73	2.28	23 (33%)	83,113,113	2.79	35 (42%)
31	GOL	b	638	-	5,5,5	0.83	0	5,5,5	1.07	0
28	LMG	a	416	-	51,51,55	0.90	2 (3%)	59,59,63	1.23	4 (6%)
35	HTG	b	602	-	19,19,19	1.09	2 (10%)	23,24,24	1.54	3 (13%)
31	GOL	c	938	-	5,5,5	0.96	0	5,5,5	1.05	0
31	GOL	v	203	-	5,5,5	1.19	0	5,5,5	0.79	0
31	GOL	Z	102	-	5,5,5	0.88	0	5,5,5	1.01	0
35	HTG	b	627	-	19,19,19	1.03	1 (5%)	23,24,24	1.74	2 (8%)
29	PL9	A	414	-	55,55,55	0.62	2 (3%)	68,69,69	1.91	20 (29%)
24	CLA	B	617	2	69,73,73	2.30	23 (33%)	83,113,113	2.60	27 (32%)
34	LMT	a	402	-	36,36,36	0.50	1 (2%)	47,47,47	0.95	2 (4%)
24	CLA	B	603	2	69,73,73	2.42	23 (33%)	83,113,113	2.50	29 (34%)
25	PHO	A	408	-	58,69,69	2.53	13 (22%)	56,99,99	2.81	14 (25%)
24	CLA	C	507	42	69,73,73	2.55	25 (36%)	83,113,113	2.51	29 (34%)
36	DGD	e	102	-	39,39,67	1.12	2 (5%)	47,47,81	1.70	9 (19%)
38	HEM	F	102	5,6	50,50,50	1.88	10 (20%)	66,82,82	1.53	10 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
37	LHG	d	408	-	48,48,48	0.90	2 (4%)	51,54,54	1.12	4 (7%)
29	PL9	d	407	-	55,55,55	0.71	1 (1%)	68,69,69	1.47	13 (19%)
24	CLA	c	906	3	69,73,73	2.47	24 (34%)	83,113,113	2.45	26 (31%)
31	GOL	c	932	-	5,5,5	0.75	0	5,5,5	1.14	1 (20%)
24	CLA	a	410	42	69,73,73	2.34	21 (30%)	83,113,113	2.62	30 (36%)
24	CLA	a	409	1	69,73,73	2.32	23 (33%)	83,113,113	2.57	27 (32%)
36	DGD	h	102	-	63,63,67	0.90	3 (4%)	77,77,81	1.00	4 (5%)
27	SQD	B	621	-	53,54,54	1.06	4 (7%)	62,65,65	1.53	10 (16%)
28	LMG	C	534	-	51,51,55	1.00	3 (5%)	59,59,63	1.31	6 (10%)
34	LMT	t	904	-	24,24,36	0.57	1 (4%)	29,29,47	0.89	1 (3%)
24	CLA	c	902	3	69,73,73	2.40	23 (33%)	83,113,113	2.62	27 (32%)
32	BCT	A	421	22	2,3,3	0.65	0	2,3,3	0.66	0
24	CLA	d	405	4	69,73,73	2.38	25 (36%)	83,113,113	2.54	30 (36%)
31	GOL	b	631	-	5,5,5	0.73	0	5,5,5	1.03	0
31	GOL	b	640	-	5,5,5	0.90	0	5,5,5	1.07	0
35	HTG	b	626	-	19,19,19	0.83	1 (5%)	23,24,24	1.42	1 (4%)
31	GOL	v	204	-	5,5,5	0.77	0	5,5,5	1.07	0
31	GOL	O	304	-	5,5,5	0.88	0	5,5,5	1.00	0
24	CLA	d	404	4	69,73,73	2.40	24 (34%)	83,113,113	2.54	28 (33%)
24	CLA	B	607	2	69,73,73	2.40	22 (31%)	83,113,113	2.54	31 (37%)
31	GOL	O	306	-	5,5,5	0.90	0	5,5,5	0.98	0
24	CLA	B	608	42	69,73,73	2.30	22 (31%)	83,113,113	2.47	26 (31%)
24	CLA	c	905	42	69,73,73	2.34	25 (36%)	83,113,113	2.69	29 (34%)
37	LHG	e	101	-	26,26,48	0.95	1 (3%)	28,31,54	1.01	2 (7%)
26	BCR	B	620	-	41,41,41	0.74	0	56,56,56	1.25	3 (5%)
37	LHG	d	409	-	48,48,48	0.89	2 (4%)	51,54,54	1.02	5 (9%)
31	GOL	C	524	-	5,5,5	0.89	0	5,5,5	1.03	0
24	CLA	b	620	2	69,73,73	2.39	22 (31%)	83,113,113	2.49	26 (31%)
39	RRX	H	102	-	42,42,42	0.72	0	57,58,58	1.35	6 (10%)
28	LMG	b	624	-	51,51,55	0.90	2 (3%)	59,59,63	1.19	4 (6%)
31	GOL	C	531	-	5,5,5	0.89	0	5,5,5	1.19	0
35	HTG	c	923	-	19,19,19	1.04	2 (10%)	23,24,24	1.20	1 (4%)
31	GOL	u	202	-	5,5,5	0.92	0	5,5,5	0.89	0
24	CLA	D	402	4	69,73,73	2.11	23 (33%)	83,113,113	2.66	30 (36%)
37	LHG	d	410	-	39,39,48	1.04	2 (5%)	42,45,54	0.97	3 (7%)
35	HTG	c	924	-	19,19,19	0.99	2 (10%)	23,24,24	1.69	3 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	LMG	c	921	-	51,51,55	0.94	2 (3%)	59,59,63	1.25	7 (11%)
37	LHG	E	101	-	48,48,48	0.96	2 (4%)	51,54,54	1.00	2 (3%)
36	DGD	c	919	-	61,61,67	0.85	3 (4%)	75,75,81	0.99	4 (5%)
31	GOL	O	305	-	5,5,5	0.84	0	5,5,5	1.04	0
24	CLA	c	910	3	69,73,73	2.58	26 (37%)	83,113,113	2.34	27 (32%)
24	CLA	B	605	2	69,73,73	2.63	23 (33%)	83,113,113	2.55	26 (31%)
31	GOL	B	628	-	5,5,5	0.79	0	5,5,5	0.88	0
35	HTG	b	603	-	19,19,19	1.04	2 (10%)	23,24,24	1.08	1 (4%)
26	BCR	K	101	-	41,41,41	0.74	0	56,56,56	1.44	7 (12%)
31	GOL	C	527	-	5,5,5	0.82	0	5,5,5	1.14	0
36	DGD	H	103	-	63,63,67	0.90	3 (4%)	77,77,81	0.89	2 (2%)
34	LMT	D	401	-	36,36,36	0.43	0	47,47,47	0.95	0
24	CLA	c	909	3	69,73,73	2.52	25 (36%)	83,113,113	2.49	27 (32%)
37	LHG	D	408	-	48,48,48	0.88	2 (4%)	51,54,54	1.04	4 (7%)
28	LMG	c	920	-	51,51,55	0.95	2 (3%)	59,59,63	1.04	2 (3%)
31	GOL	c	934	-	5,5,5	0.82	0	5,5,5	1.12	0
36	DGD	c	918	-	56,56,67	0.93	2 (3%)	70,70,81	0.98	1 (1%)
24	CLA	b	610	2	69,73,73	2.36	22 (31%)	83,113,113	2.44	25 (30%)
25	PHO	a	412	-	58,69,69	2.65	12 (20%)	56,99,99	2.77	13 (23%)
24	CLA	c	913	3	69,73,73	2.55	24 (34%)	83,113,113	2.60	29 (34%)
31	GOL	c	937	-	5,5,5	0.94	0	5,5,5	0.90	0
24	CLA	c	903	3	69,73,73	2.39	24 (34%)	83,113,113	2.44	29 (34%)
26	BCR	A	411	-	41,41,41	0.72	0	56,56,56	1.35	6 (10%)
26	BCR	k	101	-	41,41,41	0.70	0	56,56,56	1.44	8 (14%)
27	SQD	F	101	-	36,37,54	1.00	2 (5%)	44,47,65	1.46	6 (13%)
24	CLA	B	610	2	69,73,73	2.44	21 (30%)	83,113,113	2.44	29 (34%)
34	LMT	m	1502	-	36,36,36	0.49	0	47,47,47	0.90	1 (2%)
34	LMT	c	922	-	36,36,36	0.48	1 (2%)	47,47,47	0.82	2 (4%)
25	PHO	A	409	-	58,69,69	2.66	13 (22%)	56,99,99	2.91	14 (25%)
26	BCR	b	622	-	41,41,41	0.79	0	56,56,56	1.17	7 (12%)
31	GOL	H	101	-	5,5,5	0.98	0	5,5,5	1.08	0
24	CLA	C	512	3	69,73,73	2.66	23 (33%)	83,113,113	2.54	28 (33%)
24	CLA	b	613	2	69,73,73	2.64	24 (34%)	83,113,113	2.48	31 (37%)
35	HTG	o	301	-	19,19,19	1.11	1 (5%)	23,24,24	1.09	1 (4%)
24	CLA	C	513	3	69,73,73	2.53	25 (36%)	83,113,113	2.38	25 (30%)
31	GOL	t	902	-	5,5,5	1.06	0	5,5,5	1.07	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
35	HTG	C	522	-	19,19,19	0.99	1 (5%)	23,24,24	1.74	4 (17%)
37	LHG	L	101	-	48,48,48	0.91	3 (6%)	51,54,54	0.95	2 (3%)
24	CLA	C	510	3	69,73,73	2.52	25 (36%)	83,113,113	2.50	30 (36%)
31	GOL	b	632	-	5,5,5	1.02	0	5,5,5	1.18	1 (20%)
24	CLA	C	505	3	69,73,73	2.61	25 (36%)	83,113,113	2.31	24 (28%)
24	CLA	B	614	2	69,73,73	2.33	22 (31%)	83,113,113	2.56	29 (34%)
26	BCR	d	406	-	41,41,41	0.77	0	56,56,56	1.82	13 (23%)
31	GOL	c	929	-	5,5,5	0.92	0	5,5,5	1.01	0
24	CLA	B	616	2	69,73,73	2.50	22 (31%)	83,113,113	2.49	26 (31%)
31	GOL	A	422	-	5,5,5	1.18	1 (20%)	5,5,5	0.94	0
36	DGD	C	517	-	57,57,67	0.88	2 (3%)	71,71,81	0.97	4 (5%)
31	GOL	v	201	-	5,5,5	0.82	0	5,5,5	1.06	0
21	OEX	A	401	3,42,1	0,15,15	-	-	-		
24	CLA	B	602	42	69,73,73	2.61	26 (37%)	83,113,113	2.38	25 (30%)
24	CLA	B	606	2	69,73,73	2.32	21 (30%)	83,113,113	2.46	24 (28%)
31	GOL	C	530	-	5,5,5	1.00	0	5,5,5	1.05	0
31	GOL	h	103	-	5,5,5	0.90	0	5,5,5	0.97	0
24	CLA	B	604	2	69,73,73	2.38	23 (33%)	83,113,113	2.58	27 (32%)
31	GOL	C	533	-	5,5,5	0.83	0	5,5,5	1.08	0
34	LMT	b	625	-	25,25,36	0.53	1 (4%)	30,30,47	1.11	2 (6%)
24	CLA	B	612	2	69,73,73	2.28	22 (31%)	83,113,113	2.53	27 (32%)
34	LMT	B	623	-	36,36,36	0.43	0	47,47,47	1.29	7 (14%)
36	DGD	C	516	-	63,63,67	0.83	2 (3%)	77,77,81	1.05	6 (7%)
24	CLA	c	908	42	69,73,73	2.48	24 (34%)	83,113,113	2.50	28 (33%)
39	RRX	h	101	-	42,42,42	0.72	0	57,58,58	1.33	7 (12%)
24	CLA	C	511	3	69,73,73	2.48	23 (33%)	83,113,113	2.41	27 (32%)
38	HEM	f	101	5,6	50,50,50	1.89	9 (18%)	66,82,82	1.45	7 (10%)
26	BCR	T	702	-	41,41,41	0.73	0	56,56,56	1.55	11 (19%)
24	CLA	b	614	42	69,73,73	2.30	22 (31%)	83,113,113	2.49	27 (32%)
24	CLA	C	501	3	69,73,73	2.36	22 (31%)	83,113,113	2.49	25 (30%)
28	LMG	B	622	-	51,51,55	0.95	2 (3%)	59,59,63	1.14	4 (6%)
24	CLA	a	413	1	69,73,73	2.27	22 (31%)	83,113,113	2.55	29 (34%)
31	GOL	V	204	-	5,5,5	1.40	2 (40%)	5,5,5	0.92	0
31	GOL	c	926	-	5,5,5	1.03	0	5,5,5	0.83	0
24	CLA	b	619	2	69,73,73	2.35	22 (31%)	83,113,113	2.38	25 (30%)
28	LMG	D	410	40	48,48,55	0.84	2 (4%)	56,56,63	0.99	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
34	LMT	M	303	-	36,36,36	0.42	0	47,47,47	0.90	0
29	PL9	a	417	-	55,55,55	0.64	2 (3%)	68,69,69	1.92	20 (29%)
35	HTG	B	624	-	19,19,19	0.81	1 (5%)	23,24,24	1.36	1 (4%)
35	HTG	V	203	-	12,13,19	0.53	0	16,18,24	2.40	4 (25%)
24	CLA	B	613	2	69,73,73	2.22	22 (31%)	83,113,113	2.58	24 (28%)
24	CLA	c	911	3	69,73,73	2.39	23 (33%)	83,113,113	2.46	31 (37%)
24	CLA	b	608	2	69,73,73	2.69	24 (34%)	83,113,113	2.51	30 (36%)
27	SQD	f	102	-	31,32,54	1.97	4 (12%)	34,36,65	1.62	5 (14%)
31	GOL	L	102	-	5,5,5	1.12	0	5,5,5	1.01	0
24	CLA	c	912	3	69,73,73	2.46	20 (28%)	83,113,113	2.51	32 (38%)
31	GOL	b	628	-	5,5,5	0.72	0	5,5,5	1.17	1 (20%)
34	LMT	J	102	-	23,23,36	0.61	1 (4%)	28,28,47	0.92	1 (3%)
35	HTG	v	205	-	12,13,19	0.75	0	16,18,24	1.64	5 (31%)
34	LMT	C	520	-	36,36,36	0.47	0	47,47,47	1.23	4 (8%)
26	BCR	b	621	-	41,41,41	0.82	1 (2%)	56,56,56	1.40	7 (12%)
36	DGD	C	518	-	59,59,67	0.90	2 (3%)	73,73,81	1.08	4 (5%)
24	CLA	b	615	2	69,73,73	2.48	23 (33%)	83,113,113	2.53	30 (36%)
31	GOL	b	629	-	5,5,5	0.91	0	5,5,5	0.98	0
31	GOL	V	206	-	5,5,5	0.84	0	5,5,5	1.01	0
28	LMG	A	413	-	51,51,55	0.95	2 (3%)	59,59,63	1.12	5 (8%)
31	GOL	B	633	-	5,5,5	1.42	1 (20%)	5,5,5	0.95	0
35	HTG	H	105	-	14,16,19	1.05	1 (7%)	15,18,24	1.43	1 (6%)
31	GOL	B	629	-	5,5,5	1.02	0	5,5,5	0.93	0
24	CLA	D	403	4	69,73,73	2.45	24 (34%)	83,113,113	2.54	31 (37%)
31	GOL	A	419	-	5,5,5	0.83	0	5,5,5	1.26	1 (20%)
31	GOL	A	420	-	5,5,5	1.09	0	5,5,5	0.94	0
37	LHG	D	409	-	45,45,48	0.93	2 (4%)	48,51,54	1.03	4 (8%)
29	PL9	D	405	-	55,55,55	0.75	2 (3%)	68,69,69	1.53	15 (22%)
26	BCR	t	903	-	41,41,41	0.73	0	56,56,56	1.62	15 (26%)
31	GOL	u	203	-	5,5,5	1.04	0	5,5,5	0.91	0
34	LMT	F	103	-	27,27,36	0.54	1 (3%)	37,38,47	0.89	0
26	BCR	B	619	-	41,41,41	0.88	0	56,56,56	1.21	9 (16%)
41	SO4	O	302	-	4,4,4	0.19	0	6,6,6	0.08	0
24	CLA	B	609	2	69,73,73	2.38	24 (34%)	83,113,113	2.46	27 (32%)
26	BCR	b	623	-	41,41,41	0.70	0	56,56,56	1.36	8 (14%)
24	CLA	C	506	3	69,73,73	2.54	25 (36%)	83,113,113	2.41	29 (34%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
27	SQD	b	601	-	53,54,54	1.05	3 (5%)	62,65,65	1.74	11 (17%)
26	BCR	c	916	-	41,41,41	0.81	0	56,56,56	1.33	7 (12%)
31	GOL	B	630	-	5,5,5	1.21	1 (20%)	5,5,5	0.45	0
34	LMT	z	101	-	32,32,36	0.49	0	42,42,47	0.92	1 (2%)
24	CLA	A	410	1	69,73,73	2.24	24 (34%)	83,113,113	2.63	29 (34%)
24	CLA	b	611	42	69,73,73	2.39	24 (34%)	83,113,113	2.47	30 (36%)
31	GOL	a	419	-	5,5,5	1.01	0	5,5,5	1.02	0
31	GOL	a	420	-	5,5,5	0.85	0	5,5,5	1.09	1 (20%)
24	CLA	c	914	3	69,73,73	2.47	24 (34%)	83,113,113	2.35	24 (28%)
24	CLA	B	615	2	69,73,73	2.27	21 (30%)	83,113,113	2.72	29 (34%)
38	HEM	v	202	16	50,50,50	1.84	9 (18%)	66,82,82	1.44	7 (10%)
32	BCT	a	408	22	2,3,3	0.61	0	2,3,3	0.64	0
31	GOL	o	303	-	5,5,5	0.85	0	5,5,5	0.90	0
31	GOL	c	928	-	5,5,5	0.83	0	5,5,5	1.05	1 (20%)
26	BCR	y	101	-	41,41,41	0.74	1 (2%)	56,56,56	1.59	10 (17%)
28	LMG	C	519	-	49,49,55	0.96	2 (4%)	57,57,63	1.17	6 (10%)
31	GOL	c	936	-	5,5,5	0.93	0	5,5,5	0.96	0
31	GOL	V	205	-	5,5,5	0.94	0	5,5,5	0.94	0
24	CLA	C	509	3	69,73,73	2.46	24 (34%)	83,113,113	2.42	27 (32%)
26	BCR	B	618	-	41,41,41	0.73	0	56,56,56	1.33	4 (7%)
34	LMT	T	703	-	24,24,36	0.44	0	29,29,47	1.35	2 (6%)
24	CLA	b	618	2	69,73,73	2.31	21 (30%)	83,113,113	2.67	31 (37%)
24	CLA	C	502	3	69,73,73	2.58	24 (34%)	83,113,113	2.37	26 (31%)
35	HTG	O	303	-	19,19,19	1.06	1 (5%)	23,24,24	1.03	2 (8%)
31	GOL	V	201	33	5,5,5	0.78	0	5,5,5	1.04	0
31	GOL	b	630	-	5,5,5	0.92	0	5,5,5	0.93	0
35	HTG	B	625	-	19,19,19	0.98	1 (5%)	23,24,24	1.82	3 (13%)
24	CLA	B	611	42	69,73,73	2.44	24 (34%)	83,113,113	2.51	30 (36%)
37	LHG	D	407	-	48,48,48	0.84	2 (4%)	51,54,54	1.16	3 (5%)
38	HEM	V	202	16	50,50,50	1.90	8 (16%)	66,82,82	1.47	7 (10%)
24	CLA	b	606	2	69,73,73	2.44	23 (33%)	83,113,113	2.41	28 (33%)
37	LHG	b	639	-	48,48,48	0.91	3 (6%)	51,54,54	0.90	3 (5%)
31	GOL	c	927	-	5,5,5	1.12	0	5,5,5	1.11	1 (20%)
24	CLA	b	612	2	69,73,73	2.60	24 (34%)	83,113,113	2.42	28 (33%)
28	LMG	d	411	40	48,48,55	0.95	2 (4%)	56,56,63	0.91	3 (5%)
36	DGD	c	917	-	63,63,67	0.79	2 (3%)	77,77,81	1.11	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
34	LMT	Z	101	-	36,36,36	0.43	0	47,47,47	0.87	0
26	BCR	c	915	-	41,41,41	0.75	0	56,56,56	1.43	8 (14%)
31	GOL	C	525	-	5,5,5	1.16	0	5,5,5	0.80	0
27	SQD	a	401	-	53,54,54	1.02	3 (5%)	62,65,65	1.24	4 (6%)
31	GOL	a	421	-	5,5,5	1.11	0	5,5,5	0.95	0
35	HTG	U	201	-	8,8,19	0.37	0	7,7,24	1.17	1 (14%)
26	BCR	D	404	-	41,41,41	0.80	0	56,56,56	1.70	9 (16%)
24	CLA	b	605	42	69,73,73	2.50	24 (34%)	83,113,113	2.37	25 (30%)
31	GOL	c	939	-	5,5,5	0.90	0	5,5,5	1.19	1 (20%)
21	OEX	a	404	3,42,1	0,15,15	-	-	-		
26	BCR	C	514	-	41,41,41	0.73	0	56,56,56	1.44	8 (14%)
35	HTG	C	521	-	19,19,19	0.96	2 (10%)	23,24,24	1.19	1 (4%)
36	DGD	D	406	-	53,53,67	0.98	2 (3%)	60,61,81	1.32	7 (11%)
24	CLA	A	405	1	69,73,73	2.39	23 (33%)	83,113,113	2.46	27 (32%)
24	CLA	b	617	2	69,73,73	2.38	24 (34%)	83,113,113	2.56	28 (33%)
27	SQD	A	412	-	51,52,54	0.99	3 (5%)	60,63,65	1.74	12 (20%)
24	CLA	C	504	42	69,73,73	2.42	24 (34%)	83,113,113	2.48	25 (30%)
35	HTG	X	902	-	11,12,19	0.63	0	14,17,24	0.93	1 (7%)
34	LMT	M	302	-	36,36,36	0.56	1 (2%)	47,47,47	0.93	2 (4%)
35	HTG	B	626	-	19,19,19	1.05	2 (10%)	23,24,24	1.51	4 (17%)
31	GOL	f	104	33	5,5,5	0.99	0	5,5,5	0.93	0
24	CLA	b	607	2	69,73,73	2.42	24 (34%)	83,113,113	2.42	29 (34%)
26	BCR	a	414	-	41,41,41	0.76	0	56,56,56	1.19	3 (5%)
27	SQD	A	417	-	53,54,54	1.05	3 (5%)	62,65,65	1.24	8 (12%)
24	CLA	c	907	3	69,73,73	2.66	25 (36%)	83,113,113	2.37	28 (33%)
24	CLA	C	503	3	69,73,73	2.55	24 (34%)	83,113,113	2.39	26 (31%)
24	CLA	C	508	3	69,73,73	2.47	24 (34%)	83,113,113	2.42	24 (28%)
35	HTG	d	403	-	19,19,19	1.10	2 (10%)	23,24,24	1.39	2 (8%)
31	GOL	B	632	-	5,5,5	0.49	0	5,5,5	1.13	0
34	LMT	m	1503	-	36,36,36	0.60	1 (2%)	47,47,47	1.09	4 (8%)
35	HTG	u	201	-	10,13,19	1.11	1 (10%)	13,14,24	1.60	1 (7%)
24	CLA	b	609	2	69,73,73	2.27	24 (34%)	83,113,113	2.59	28 (33%)
24	CLA	b	616	2	69,73,73	2.41	22 (31%)	83,113,113	2.50	24 (28%)
24	CLA	A	406	42	69,73,73	2.26	22 (31%)	83,113,113	2.60	28 (33%)
31	GOL	B	631	-	5,5,5	0.86	0	5,5,5	0.93	0
26	BCR	C	515	-	41,41,41	0.71	0	56,56,56	1.38	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
35	HTG	B	627	-	19,19,19	0.99	1 (5%)	23,24,24	1.45	2 (8%)
35	HTG	C	528	-	19,19,19	1.11	2 (10%)	23,24,24	1.59	4 (17%)
25	PHO	a	411	-	58,69,69	2.52	12 (20%)	56,99,99	2.77	14 (25%)
24	CLA	c	904	3	69,73,73	2.71	24 (34%)	83,113,113	2.29	26 (31%)
31	GOL	o	304	-	5,5,5	0.90	0	5,5,5	1.00	0
26	BCR	Y	101	-	41,41,41	0.79	0	56,56,56	1.57	8 (14%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	A	407	42	-	2/39/115/115	-
27	SQD	a	415	-	-	10/49/69/69	0/1/1/1
24	CLA	d	401	42	-	6/39/115/115	-
31	GOL	b	638	-	-	2/4/4/4	-
28	LMG	a	416	-	-	13/46/66/70	0/1/1/1
35	HTG	b	602	-	-	2/10/30/30	0/1/1/1
31	GOL	c	938	-	-	2/4/4/4	-
31	GOL	v	203	-	-	1/4/4/4	-
31	GOL	Z	102	-	-	0/4/4/4	-
35	HTG	b	627	-	-	3/10/30/30	0/1/1/1
29	PL9	A	414	-	-	9/53/73/73	0/1/1/1
24	CLA	B	617	2	-	8/39/115/115	-
34	LMT	a	402	-	-	6/21/61/61	0/2/2/2
24	CLA	B	603	2	-	5/39/115/115	-
25	PHO	A	408	-	-	4/37/103/103	0/5/6/6
24	CLA	C	507	42	-	5/39/115/115	-
36	DGD	e	102	-	-	4/33/53/95	0/1/1/2
38	HEM	F	102	5,6	-	1/14/54/54	-
37	LHG	d	408	-	-	6/53/53/53	-
29	PL9	d	407	-	-	3/53/73/73	0/1/1/1
24	CLA	c	906	3	-	5/39/115/115	-
31	GOL	c	932	-	-	2/4/4/4	-
24	CLA	a	410	42	-	6/39/115/115	-
24	CLA	a	409	1	-	5/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
36	DGD	h	102	-	-	5/51/91/95	0/2/2/2
27	SQD	B	621	-	-	25/49/69/69	0/1/1/1
28	LMG	C	534	-	-	9/46/66/70	0/1/1/1
34	LMT	t	904	-	-	9/15/35/61	0/1/1/2
24	CLA	c	902	3	-	4/39/115/115	-
24	CLA	d	405	4	-	8/39/115/115	-
31	GOL	b	631	-	-	2/4/4/4	-
31	GOL	b	640	-	-	0/4/4/4	-
35	HTG	b	626	-	-	2/10/30/30	0/1/1/1
31	GOL	v	204	-	-	0/4/4/4	-
31	GOL	O	304	-	-	0/4/4/4	-
24	CLA	d	404	4	-	3/39/115/115	-
24	CLA	B	607	2	-	5/39/115/115	-
31	GOL	O	306	-	-	2/4/4/4	-
24	CLA	B	608	42	-	1/39/115/115	-
24	CLA	c	905	42	-	7/39/115/115	-
37	LHG	e	101	-	-	3/30/30/53	-
26	BCR	B	620	-	-	0/29/63/63	0/2/2/2
37	LHG	d	409	-	-	11/53/53/53	-
31	GOL	C	524	-	-	0/4/4/4	-
24	CLA	b	620	2	-	7/39/115/115	-
39	RRX	H	102	-	-	2/29/65/65	0/2/2/2
28	LMG	b	624	-	-	14/46/66/70	0/1/1/1
31	GOL	C	531	-	-	0/4/4/4	-
35	HTG	c	923	-	-	1/10/30/30	0/1/1/1
31	GOL	u	202	-	-	3/4/4/4	-
24	CLA	D	402	4	-	3/39/115/115	-
37	LHG	d	410	-	-	10/44/44/53	-
35	HTG	c	924	-	-	3/10/30/30	0/1/1/1
28	LMG	c	921	-	-	4/46/66/70	0/1/1/1
37	LHG	E	101	-	-	16/53/53/53	-
36	DGD	c	919	-	-	6/49/89/95	0/2/2/2
31	GOL	O	305	-	-	2/4/4/4	-
24	CLA	c	910	3	-	8/39/115/115	-
24	CLA	B	605	2	-	5/39/115/115	-
31	GOL	B	628	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	HTG	b	603	-	-	1/10/30/30	0/1/1/1
26	BCR	K	101	-	-	1/29/63/63	0/2/2/2
31	GOL	C	527	-	-	2/4/4/4	-
36	DGD	H	103	-	-	4/51/91/95	0/2/2/2
34	LMT	D	401	-	-	5/21/61/61	0/2/2/2
24	CLA	c	909	3	-	3/39/115/115	-
37	LHG	D	408	-	-	8/53/53/53	-
28	LMG	c	920	-	-	5/46/66/70	0/1/1/1
31	GOL	c	934	-	-	4/4/4/4	-
36	DGD	c	918	-	-	7/44/84/95	0/2/2/2
24	CLA	b	610	2	-	6/39/115/115	-
25	PHO	a	412	-	-	3/37/103/103	0/5/6/6
24	CLA	c	913	3	-	7/39/115/115	-
31	GOL	c	937	-	-	2/4/4/4	-
24	CLA	c	903	3	-	3/39/115/115	-
26	BCR	A	411	-	-	0/29/63/63	0/2/2/2
26	BCR	k	101	-	-	1/29/63/63	0/2/2/2
27	SQD	F	101	-	-	9/30/50/69	0/1/1/1
24	CLA	B	610	2	-	3/39/115/115	-
34	LMT	m	1502	-	-	1/21/61/61	0/2/2/2
34	LMT	c	922	-	-	2/21/61/61	0/2/2/2
25	PHO	A	409	-	-	3/37/103/103	0/5/6/6
26	BCR	b	622	-	-	0/29/63/63	0/2/2/2
31	GOL	H	101	-	-	0/4/4/4	-
24	CLA	C	512	3	-	8/39/115/115	-
24	CLA	b	613	2	-	4/39/115/115	-
35	HTG	o	301	-	-	1/10/30/30	0/1/1/1
24	CLA	C	513	3	-	5/39/115/115	-
31	GOL	t	902	-	-	1/4/4/4	-
35	HTG	C	522	-	-	2/10/30/30	0/1/1/1
37	LHG	L	101	-	-	8/53/53/53	-
24	CLA	C	510	3	-	6/39/115/115	-
31	GOL	b	632	-	-	2/4/4/4	-
24	CLA	C	505	3	-	3/39/115/115	-
24	CLA	B	614	2	-	6/39/115/115	-
26	BCR	d	406	-	-	8/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	GOL	c	929	-	-	2/4/4/4	-
24	CLA	B	616	2	-	10/39/115/115	-
31	GOL	A	422	-	-	2/4/4/4	-
36	DGD	C	517	-	-	13/45/85/95	0/2/2/2
31	GOL	v	201	-	-	2/4/4/4	-
24	CLA	B	602	42	-	14/39/115/115	-
24	CLA	B	606	2	-	4/39/115/115	-
31	GOL	C	530	-	-	0/4/4/4	-
31	GOL	h	103	-	-	0/4/4/4	-
24	CLA	B	604	2	-	4/39/115/115	-
31	GOL	C	533	-	-	2/4/4/4	-
34	LMT	b	625	-	-	4/17/37/61	0/1/1/2
24	CLA	B	612	2	-	1/39/115/115	-
34	LMT	B	623	-	-	10/21/61/61	0/2/2/2
36	DGD	C	516	-	-	11/51/91/95	0/2/2/2
24	CLA	c	908	42	-	8/39/115/115	-
39	RRX	h	101	-	-	2/29/65/65	0/2/2/2
24	CLA	C	511	3	-	1/39/115/115	-
38	HEM	f	101	5,6	-	1/14/54/54	-
26	BCR	T	702	-	-	1/29/63/63	0/2/2/2
24	CLA	b	614	42	-	8/39/115/115	-
24	CLA	C	501	3	-	4/39/115/115	-
28	LMG	B	622	-	-	10/46/66/70	0/1/1/1
24	CLA	a	413	1	-	8/39/115/115	-
31	GOL	V	204	-	-	1/4/4/4	-
31	GOL	c	926	-	-	2/4/4/4	-
24	CLA	b	619	2	-	9/39/115/115	-
28	LMG	D	410	40	-	7/43/63/70	0/1/1/1
34	LMT	M	303	-	-	1/21/61/61	0/2/2/2
29	PL9	a	417	-	-	10/53/73/73	0/1/1/1
35	HTG	B	624	-	-	4/10/30/30	0/1/1/1
35	HTG	V	203	-	-	1/4/24/30	0/1/1/1
24	CLA	B	613	2	-	4/39/115/115	-
24	CLA	c	911	3	-	4/39/115/115	-
24	CLA	b	608	2	-	2/39/115/115	-
27	SQD	f	102	-	-	11/33/33/69	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	GOL	L	102	-	-	0/4/4/4	-
24	CLA	c	912	3	-	1/39/115/115	-
31	GOL	b	628	-	-	2/4/4/4	-
34	LMT	J	102	-	-	3/13/33/61	0/1/1/2
35	HTG	v	205	-	-	1/4/24/30	0/1/1/1
34	LMT	C	520	-	-	8/21/61/61	0/2/2/2
26	BCR	b	621	-	-	2/29/63/63	0/2/2/2
36	DGD	C	518	-	-	4/47/87/95	0/2/2/2
24	CLA	b	615	2	-	6/39/115/115	-
31	GOL	b	629	-	-	2/4/4/4	-
31	GOL	V	206	-	-	0/4/4/4	-
28	LMG	A	413	-	-	17/46/66/70	0/1/1/1
31	GOL	B	633	-	-	0/4/4/4	-
35	HTG	H	105	-	-	3/10/20/30	0/1/1/1
31	GOL	B	629	-	-	0/4/4/4	-
24	CLA	D	403	4	-	8/39/115/115	-
31	GOL	A	419	-	-	1/4/4/4	-
31	GOL	A	420	-	-	2/4/4/4	-
37	LHG	D	409	-	-	8/50/50/53	-
29	PL9	D	405	-	-	3/53/73/73	0/1/1/1
26	BCR	t	903	-	-	1/29/63/63	0/2/2/2
31	GOL	u	203	-	-	0/4/4/4	-
34	LMT	F	103	-	-	2/12/52/61	0/2/2/2
26	BCR	B	619	-	-	0/29/63/63	0/2/2/2
24	CLA	B	609	2	-	1/39/115/115	-
26	BCR	b	623	-	-	2/29/63/63	0/2/2/2
24	CLA	C	506	3	-	9/39/115/115	-
27	SQD	b	601	-	-	28/49/69/69	0/1/1/1
26	BCR	c	916	-	-	2/29/63/63	0/2/2/2
31	GOL	B	630	-	-	4/4/4/4	-
34	LMT	z	101	-	-	5/15/55/61	0/2/2/2
24	CLA	A	410	1	-	4/39/115/115	-
24	CLA	b	611	42	-	1/39/115/115	-
31	GOL	a	419	-	-	1/4/4/4	-
31	GOL	a	420	-	-	2/4/4/4	-
24	CLA	c	914	3	-	3/39/115/115	-
24	CLA	B	615	2	-	5/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	HEM	v	202	16	-	4/14/54/54	-
31	GOL	o	303	-	-	2/4/4/4	-
31	GOL	c	928	-	-	0/4/4/4	-
26	BCR	y	101	-	-	5/29/63/63	0/2/2/2
28	LMG	C	519	-	-	9/44/64/70	0/1/1/1
31	GOL	c	936	-	-	2/4/4/4	-
31	GOL	V	205	-	-	0/4/4/4	-
24	CLA	C	509	3	-	5/39/115/115	-
26	BCR	B	618	-	-	2/29/63/63	0/2/2/2
34	LMT	T	703	-	-	12/15/35/61	0/1/1/2
24	CLA	b	618	2	-	11/39/115/115	-
24	CLA	C	502	3	-	7/39/115/115	-
35	HTG	O	303	-	-	1/10/30/30	0/1/1/1
31	GOL	V	201	33	-	3/4/4/4	-
31	GOL	b	630	-	-	0/4/4/4	-
35	HTG	B	625	-	-	3/10/30/30	0/1/1/1
24	CLA	B	611	42	-	2/39/115/115	-
37	LHG	D	407	-	-	6/53/53/53	-
38	HEM	V	202	16	-	4/14/54/54	-
24	CLA	b	606	2	-	3/39/115/115	-
37	LHG	b	639	-	-	9/53/53/53	-
31	GOL	c	927	-	-	0/4/4/4	-
24	CLA	b	612	2	-	2/39/115/115	-
28	LMG	d	411	40	-	11/43/63/70	0/1/1/1
36	DGD	c	917	-	-	15/51/91/95	0/2/2/2
34	LMT	Z	101	-	-	10/21/61/61	0/2/2/2
26	BCR	c	915	-	-	1/29/63/63	0/2/2/2
31	GOL	C	525	-	-	0/4/4/4	-
27	SQD	a	401	-	-	14/49/69/69	0/1/1/1
31	GOL	a	421	-	-	4/4/4/4	-
35	HTG	U	201	-	-	1/6/6/30	-
26	BCR	D	404	-	-	8/29/63/63	0/2/2/2
24	CLA	b	605	42	-	8/39/115/115	-
31	GOL	c	939	-	-	0/4/4/4	-
26	BCR	C	514	-	-	3/29/63/63	0/2/2/2
35	HTG	C	521	-	-	1/10/30/30	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
36	DGD	D	406	-	-	14/47/68/95	0/1/1/2
24	CLA	A	405	1	-	4/39/115/115	-
24	CLA	b	617	2	-	3/39/115/115	-
27	SQD	A	412	-	-	10/47/67/69	0/1/1/1
24	CLA	C	504	42	-	7/39/115/115	-
35	HTG	X	902	-	-	2/2/22/30	0/1/1/1
34	LMT	M	302	-	-	7/21/61/61	0/2/2/2
35	HTG	B	626	-	-	3/10/30/30	0/1/1/1
31	GOL	f	104	33	-	2/4/4/4	-
24	CLA	b	607	2	-	5/39/115/115	-
26	BCR	a	414	-	-	1/29/63/63	0/2/2/2
27	SQD	A	417	-	-	12/49/69/69	0/1/1/1
24	CLA	c	907	3	-	6/39/115/115	-
24	CLA	C	503	3	-	4/39/115/115	-
24	CLA	C	508	3	-	5/39/115/115	-
35	HTG	d	403	-	-	2/10/30/30	0/1/1/1
31	GOL	B	632	-	-	0/4/4/4	-
34	LMT	m	1503	-	-	2/21/61/61	0/2/2/2
35	HTG	u	201	-	-	6/12/14/30	-
24	CLA	b	609	2	-	3/39/115/115	-
24	CLA	b	616	2	-	3/39/115/115	-
24	CLA	A	406	42	-	4/39/115/115	-
31	GOL	B	631	-	-	2/4/4/4	-
26	BCR	C	515	-	-	1/29/63/63	0/2/2/2
35	HTG	B	627	-	-	1/10/30/30	0/1/1/1
35	HTG	C	528	-	-	0/10/30/30	0/1/1/1
25	PHO	a	411	-	-	5/37/103/103	0/5/6/6
24	CLA	c	904	3	-	5/39/115/115	-
31	GOL	o	304	-	-	2/4/4/4	-
26	BCR	Y	101	-	-	5/29/63/63	0/2/2/2

The worst 5 of 1854 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	605	CLA	MG-ND	-10.48	1.85	2.05
24	C	503	CLA	MG-NA	9.73	2.29	2.06
24	C	507	CLA	MG-NA	9.35	2.28	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	412	PHO	C1D-C2D	9.32	1.49	1.39
24	c	904	CLA	MG-NA	9.27	2.28	2.06

The worst 5 of 2540 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	D	402	CLA	C1D-ND-C4D	-10.22	99.07	106.33
24	d	401	CLA	C1D-ND-C4D	-10.22	99.08	106.33
24	c	902	CLA	C1D-ND-C4D	-10.01	99.22	106.33
24	B	613	CLA	C1D-ND-C4D	-10.00	99.23	106.33
24	B	605	CLA	C1D-ND-C4D	-9.96	99.26	106.33

There are no chirality outliers.

5 of 1039 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	406	CLA	CHA-CBD-CGD-O1D
24	B	602	CLA	C11-C10-C8-C9
24	B	606	CLA	C2-C3-C5-C6
24	B	606	CLA	C4-C3-C5-C6
24	B	607	CLA	CHA-CBD-CGD-O1D

There are no ring outliers.

158 monomers are involved in 284 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A	407	CLA	2	0
27	a	415	SQD	6	0
24	d	401	CLA	4	0
28	a	416	LMG	2	0
35	b	627	HTG	1	0
29	A	414	PL9	5	0
24	B	617	CLA	3	0
34	a	402	LMT	1	0
25	A	408	PHO	1	0
24	C	507	CLA	2	0
36	e	102	DGD	1	0
38	F	102	HEM	2	0
37	d	408	LHG	1	0
24	c	906	CLA	5	0
31	c	932	GOL	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	a	409	CLA	4	0
36	h	102	DGD	1	0
27	B	621	SQD	1	0
28	C	534	LMG	1	0
24	c	902	CLA	3	0
24	d	405	CLA	2	0
35	b	626	HTG	1	0
24	d	404	CLA	1	0
24	B	607	CLA	2	0
31	O	306	GOL	1	0
24	B	608	CLA	1	0
24	c	905	CLA	1	0
37	e	101	LHG	2	0
26	B	620	BCR	1	0
37	d	409	LHG	2	0
24	b	620	CLA	3	0
39	H	102	RRX	2	0
28	b	624	LMG	1	0
31	C	531	GOL	3	0
24	D	402	CLA	1	0
37	d	410	LHG	4	0
35	c	924	HTG	1	0
28	c	921	LMG	1	0
37	E	101	LHG	6	0
36	c	919	DGD	1	0
24	c	910	CLA	2	0
24	B	605	CLA	1	0
35	b	603	HTG	1	0
26	K	101	BCR	1	0
36	H	103	DGD	1	0
24	c	909	CLA	3	0
24	b	610	CLA	3	0
25	a	412	PHO	1	0
24	c	913	CLA	3	0
31	c	937	GOL	1	0
24	c	903	CLA	1	0
26	k	101	BCR	2	0
27	F	101	SQD	1	0
24	B	610	CLA	1	0
34	m	1502	LMT	1	0
25	A	409	PHO	2	0
26	b	622	BCR	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
31	H	101	GOL	1	0
24	C	512	CLA	6	0
24	b	613	CLA	2	0
24	C	513	CLA	7	0
37	L	101	LHG	1	0
24	C	510	CLA	2	0
24	C	505	CLA	2	0
24	B	614	CLA	3	0
26	d	406	BCR	1	0
31	c	929	GOL	1	0
24	B	616	CLA	4	0
31	A	422	GOL	1	0
36	C	517	DGD	3	0
24	B	602	CLA	1	0
24	B	606	CLA	3	0
31	C	530	GOL	1	0
31	h	103	GOL	1	0
24	B	604	CLA	2	0
34	b	625	LMT	1	0
24	B	612	CLA	1	0
34	B	623	LMT	1	0
36	C	516	DGD	1	0
24	c	908	CLA	3	0
39	h	101	RRX	3	0
24	C	511	CLA	3	0
38	f	101	HEM	2	0
26	T	702	BCR	5	0
24	b	614	CLA	3	0
24	C	501	CLA	5	0
28	B	622	LMG	4	0
24	a	413	CLA	1	0
31	c	926	GOL	2	0
24	b	619	CLA	4	0
28	D	410	LMG	3	0
34	M	303	LMT	1	0
29	a	417	PL9	5	0
24	B	613	CLA	2	0
24	b	608	CLA	2	0
27	f	102	SQD	1	0
24	c	912	CLA	3	0
34	C	520	LMT	4	0
26	b	621	BCR	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
36	C	518	DGD	1	0
24	b	615	CLA	1	0
28	A	413	LMG	2	0
35	H	105	HTG	1	0
24	D	403	CLA	1	0
31	A	420	GOL	1	0
37	D	409	LHG	4	0
26	t	903	BCR	6	0
26	B	619	BCR	5	0
26	b	623	BCR	2	0
24	C	506	CLA	3	0
27	b	601	SQD	1	0
26	c	916	BCR	2	0
31	B	630	GOL	1	0
34	z	101	LMT	4	0
24	A	410	CLA	2	0
31	a	420	GOL	1	0
24	c	914	CLA	5	0
24	B	615	CLA	8	0
26	y	101	BCR	2	0
28	C	519	LMG	1	0
31	c	936	GOL	1	0
24	C	509	CLA	3	0
26	B	618	BCR	2	0
24	b	618	CLA	1	0
24	C	502	CLA	4	0
24	B	611	CLA	4	0
38	V	202	HEM	1	0
24	b	606	CLA	1	0
37	b	639	LHG	2	0
31	c	927	GOL	3	0
34	Z	101	LMT	1	0
26	c	915	BCR	3	0
27	a	401	SQD	1	0
35	U	201	HTG	1	0
26	D	404	BCR	2	0
24	b	605	CLA	3	0
26	C	514	BCR	2	0
35	C	521	HTG	3	0
36	D	406	DGD	4	0
24	A	405	CLA	3	0
24	b	617	CLA	3	0

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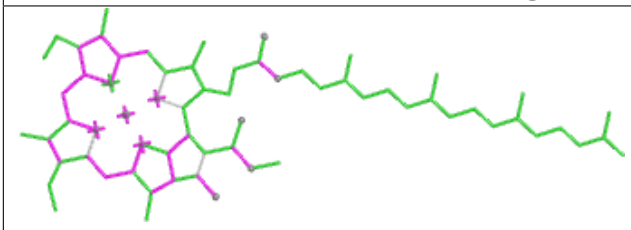
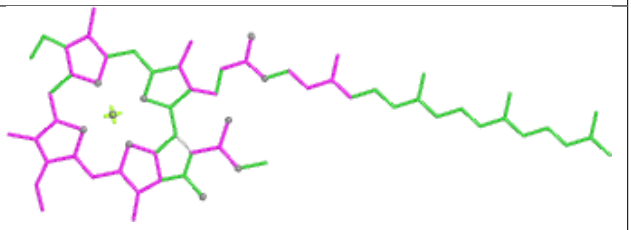
Mol	Chain	Res	Type	Clashes	Symm-Clashes
27	A	412	SQD	2	0
24	C	504	CLA	1	0
34	M	302	LMT	1	0
24	b	607	CLA	2	0
26	a	414	BCR	2	0
27	A	417	SQD	1	0
24	c	907	CLA	3	0
24	C	503	CLA	3	0
24	C	508	CLA	4	0
35	d	403	HTG	1	0
24	b	609	CLA	4	0
24	b	616	CLA	1	0
24	A	406	CLA	2	0
26	C	515	BCR	2	0
35	C	528	HTG	1	0
24	c	904	CLA	4	0
26	Y	101	BCR	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 then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

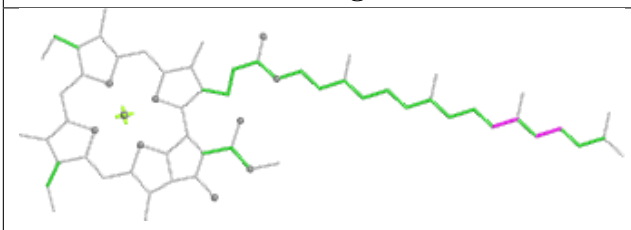
Ligand CLA A 407



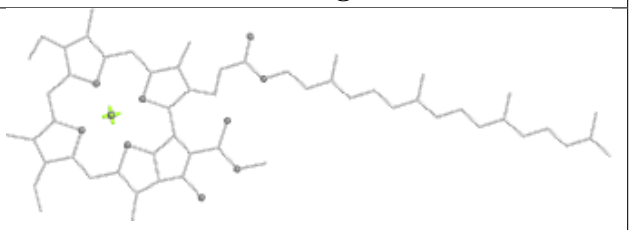
Bond lengths



Bond angles

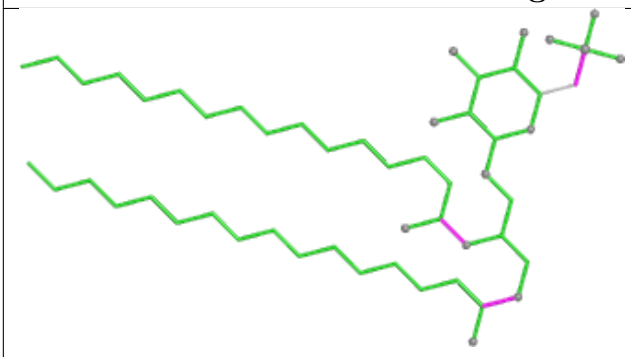


Torsions

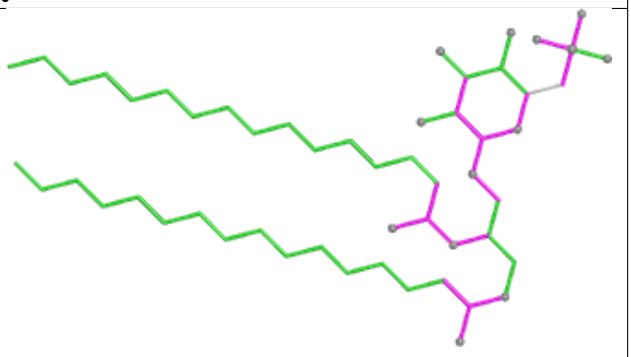


Rings

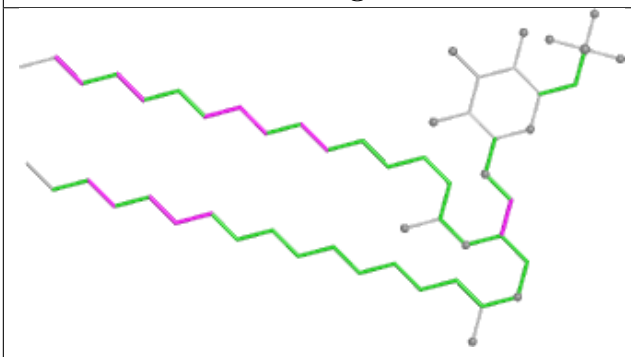
Ligand SQD a 415



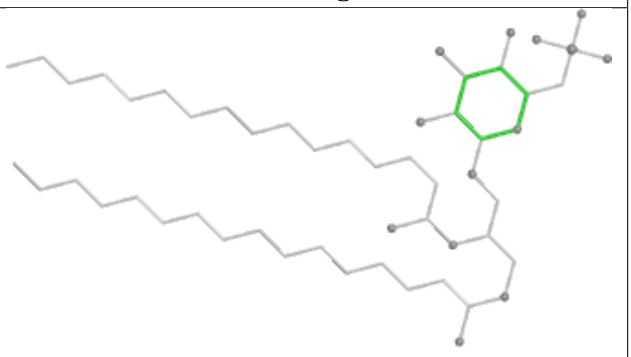
Bond lengths



Bond angles

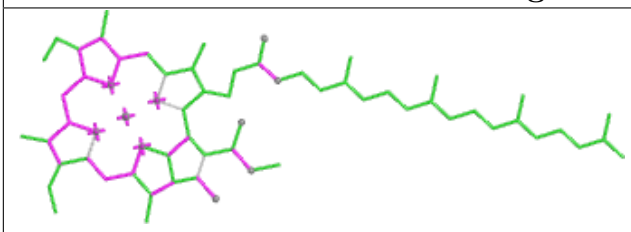


Torsions

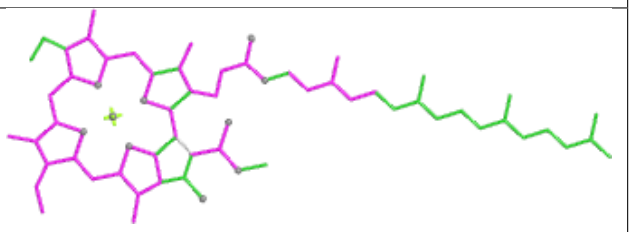


Rings

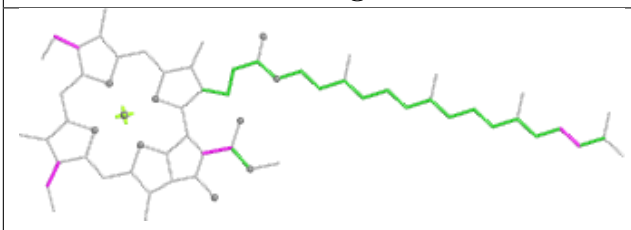
Ligand CLA d 401



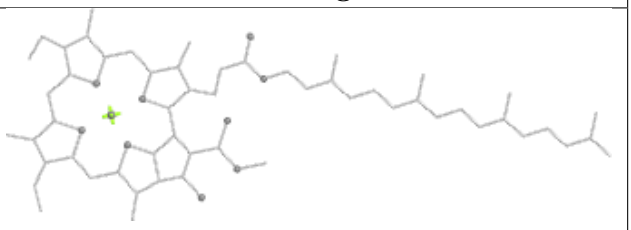
Bond lengths



Bond angles

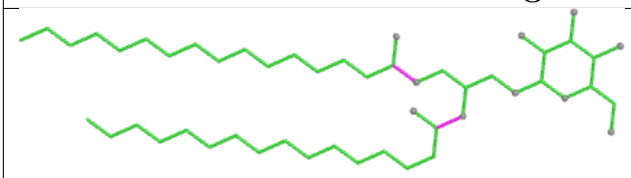


Torsions

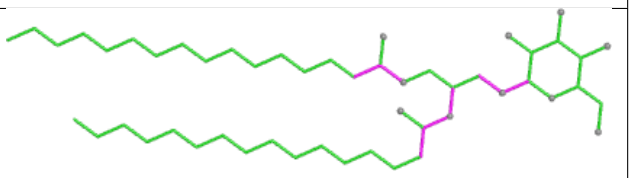


Rings

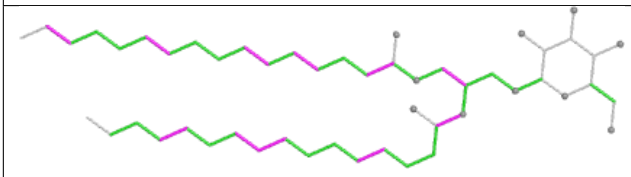
Ligand LMG a 416



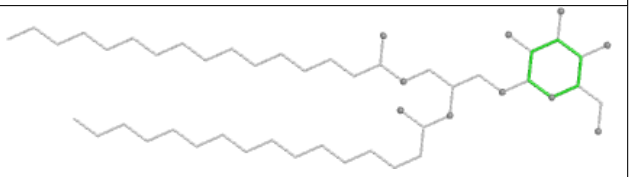
Bond lengths



Bond angles

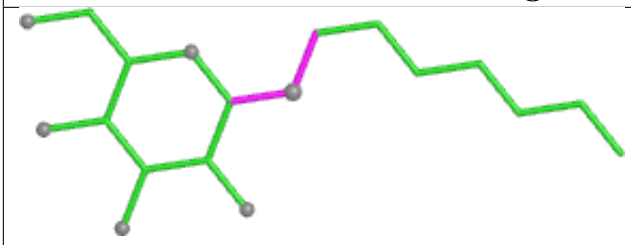


Torsions

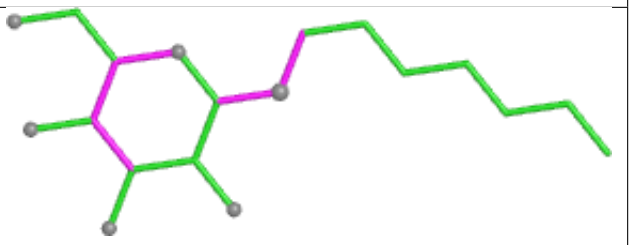


Rings

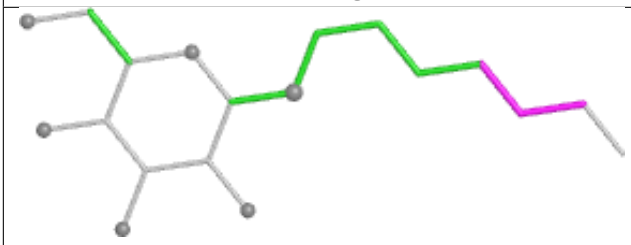
Ligand HTG b 602



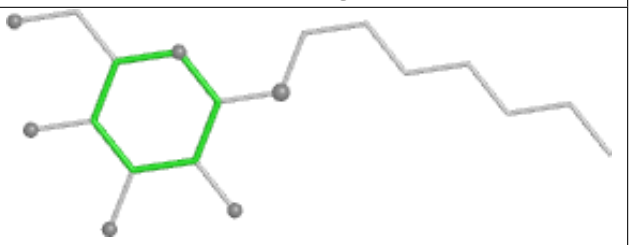
Bond lengths



Bond angles

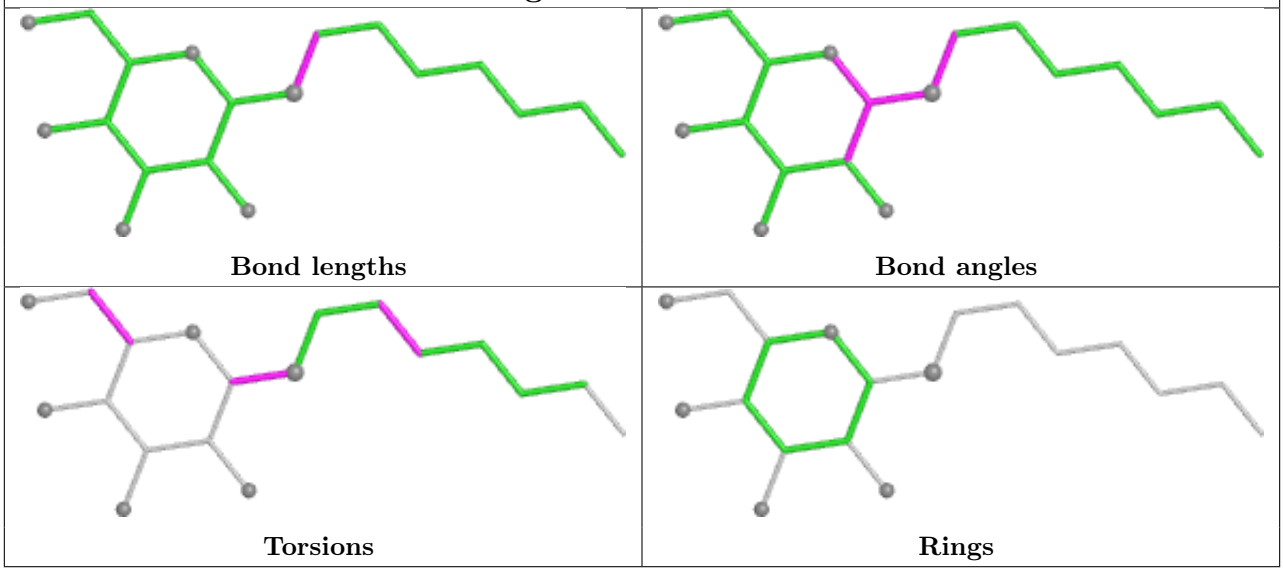


Torsions

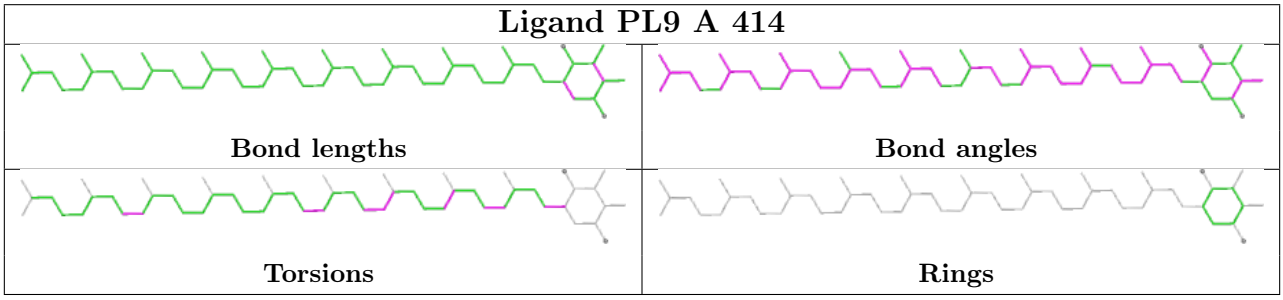


Rings

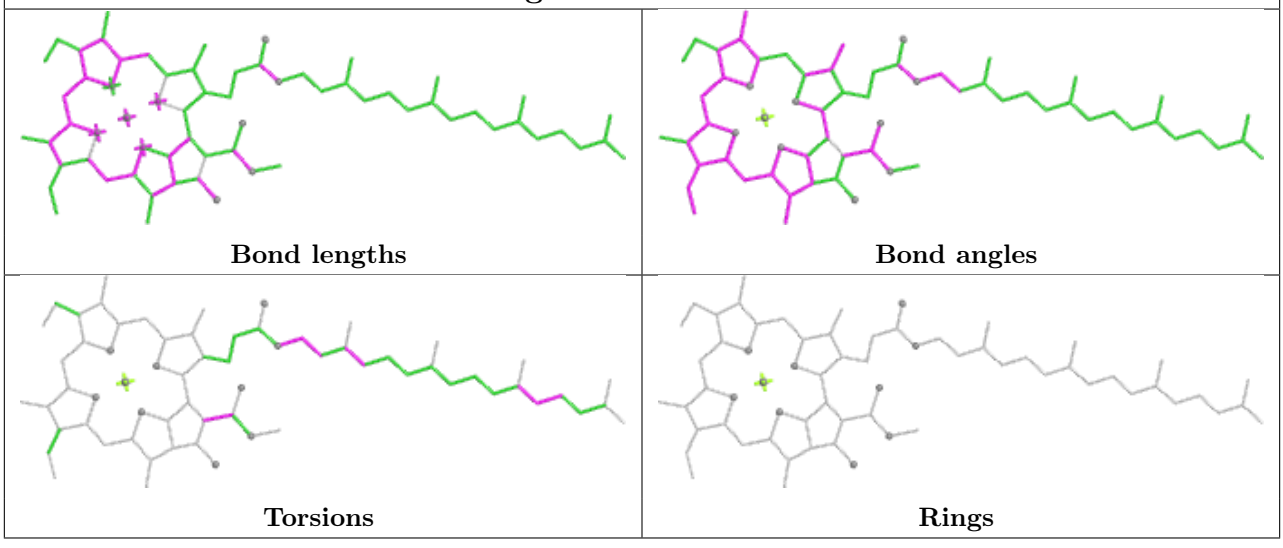
Ligand HTG b 627



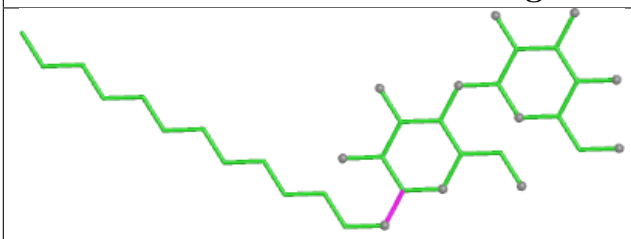
Ligand PL9 A 414



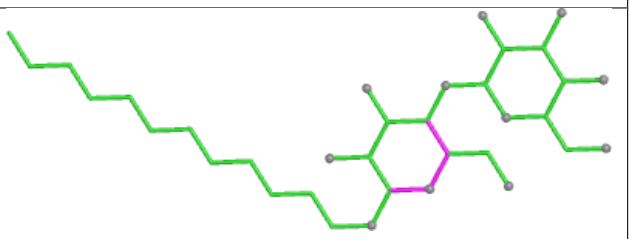
Ligand CLA B 617



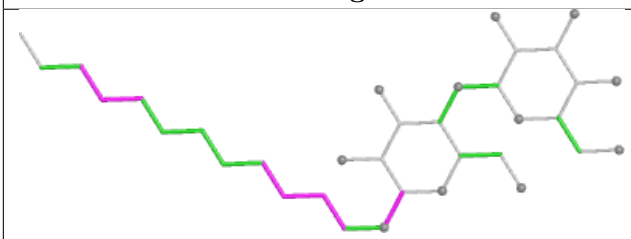
Ligand LMT a 402



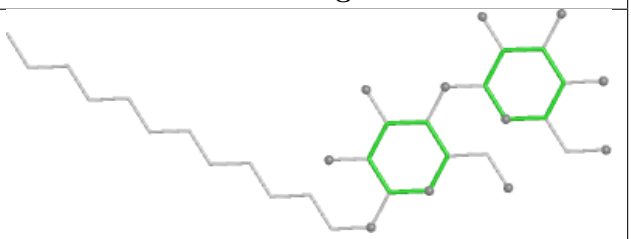
Bond lengths



Bond angles

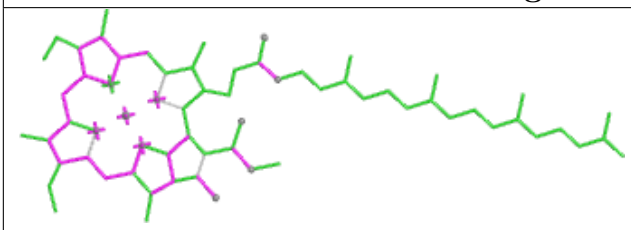


Torsions

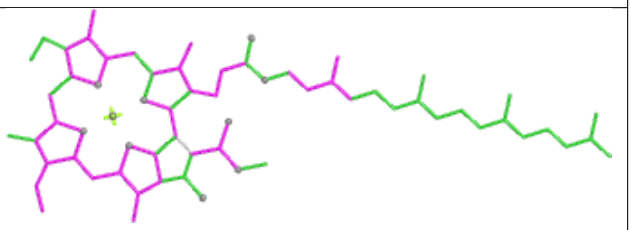


Rings

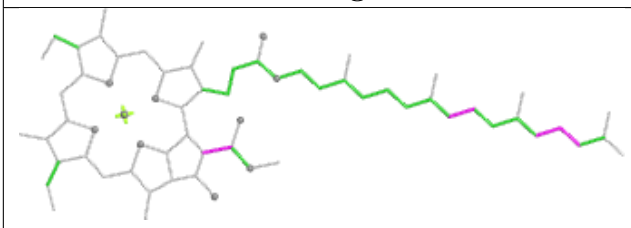
Ligand CLA B 603



Bond lengths



Bond angles



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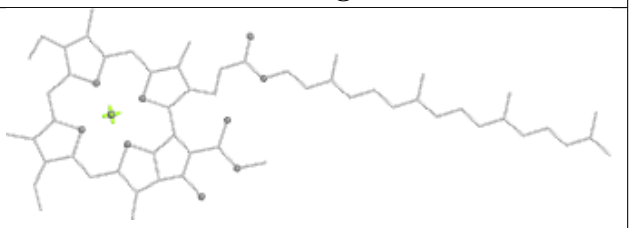
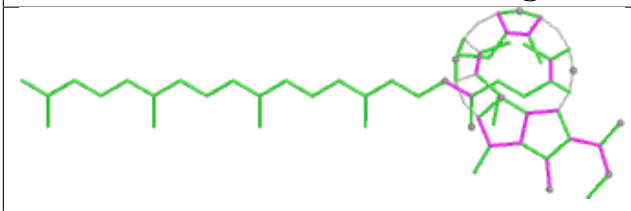


Rings

Ligand PHO A 408



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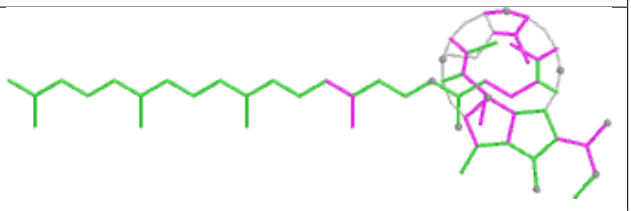
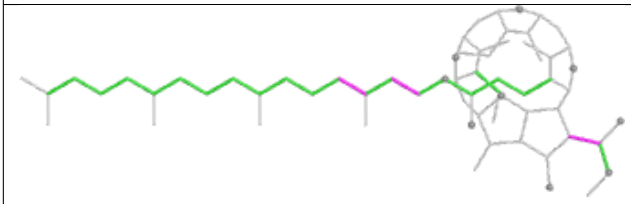
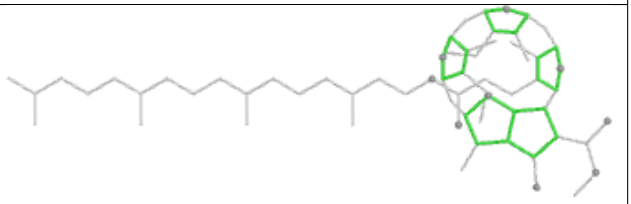


Bond angles

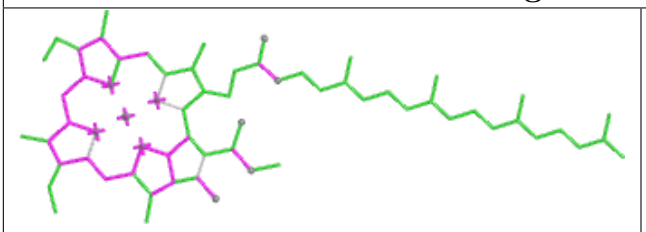


Torsions



Rings

Ligand CLA C 507



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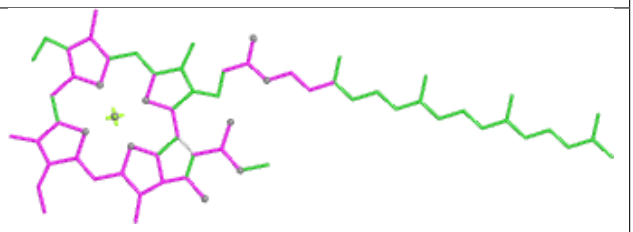
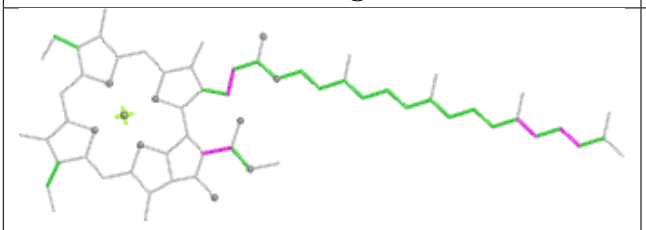


Bond angles



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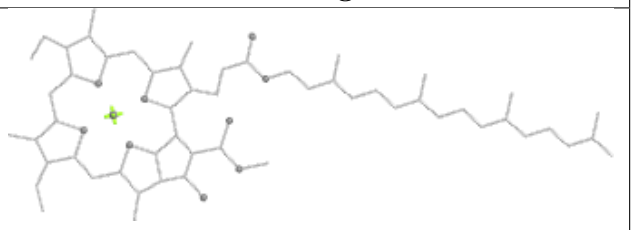
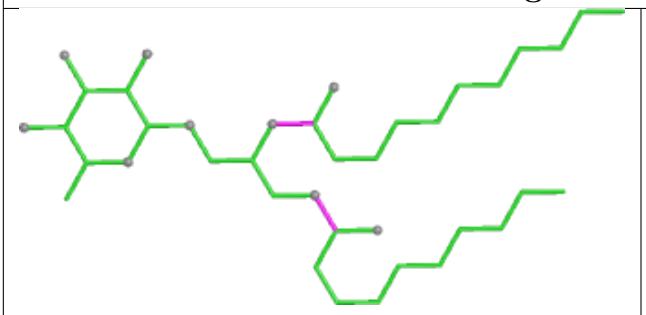


Rings

Ligand DGD e 102



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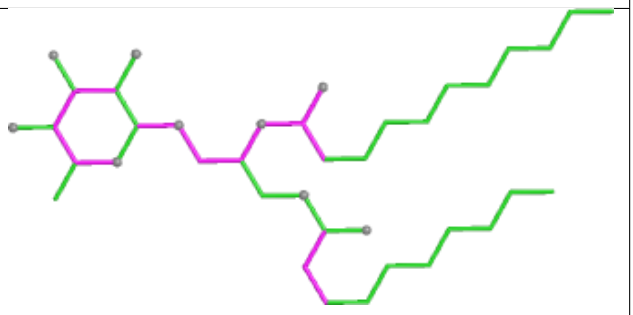
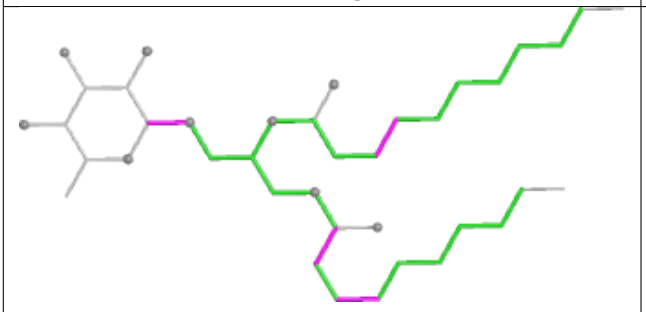


Bond angles



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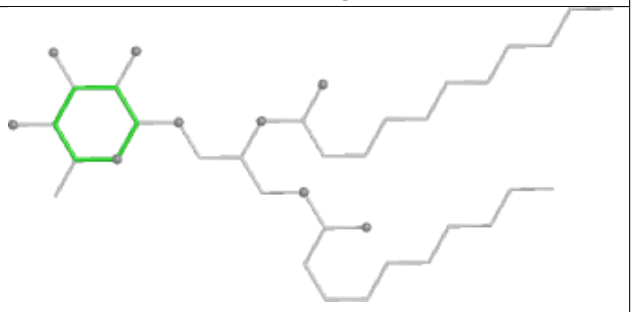
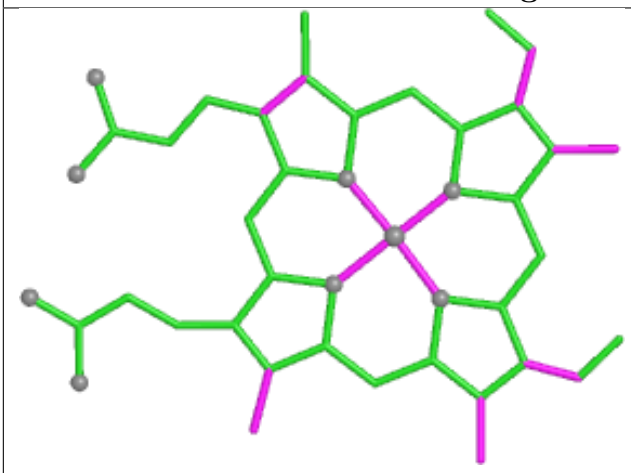


Rings

Ligand HEM F 102



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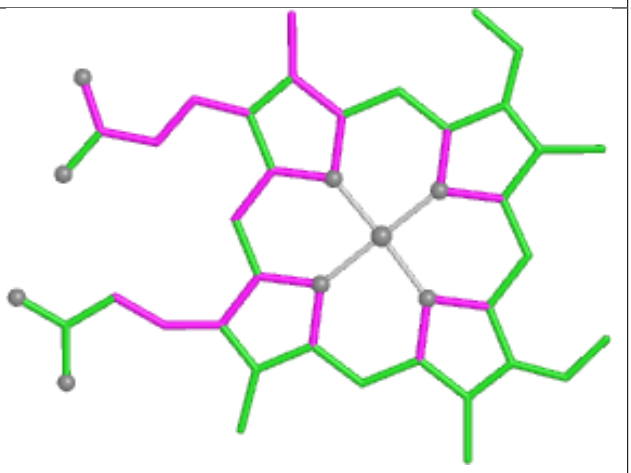
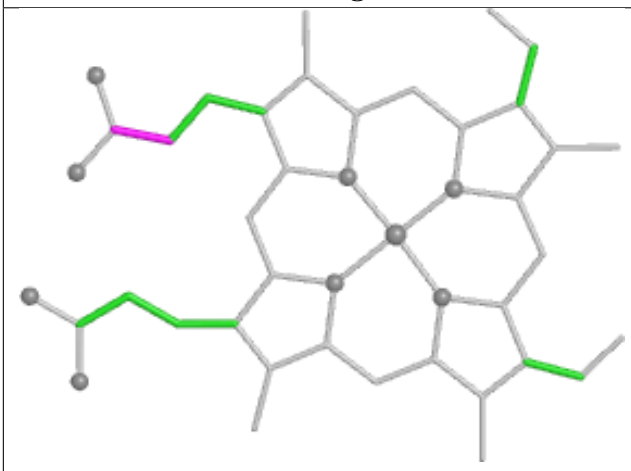


Bond angles



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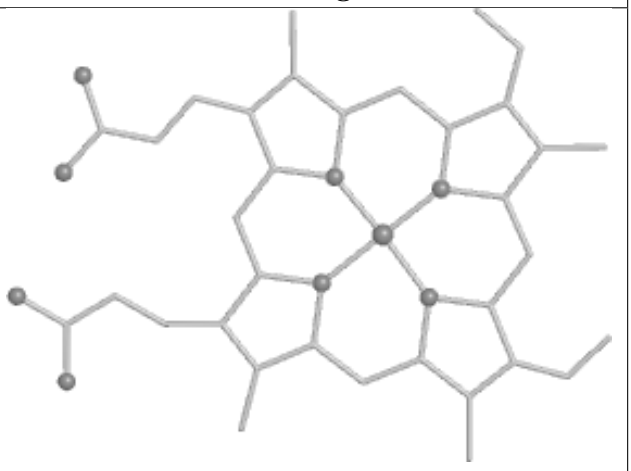
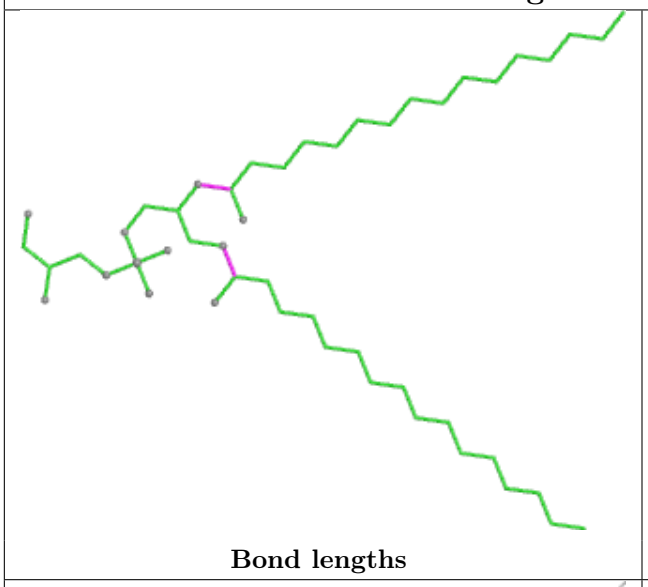


Rings

Ligand LHG d 408



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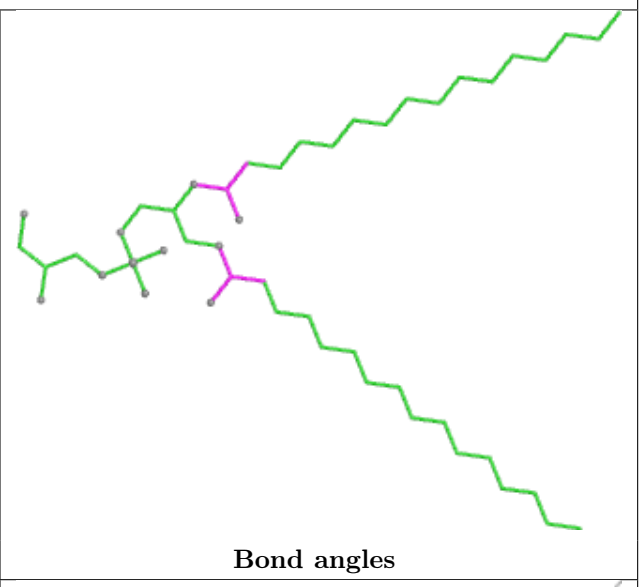
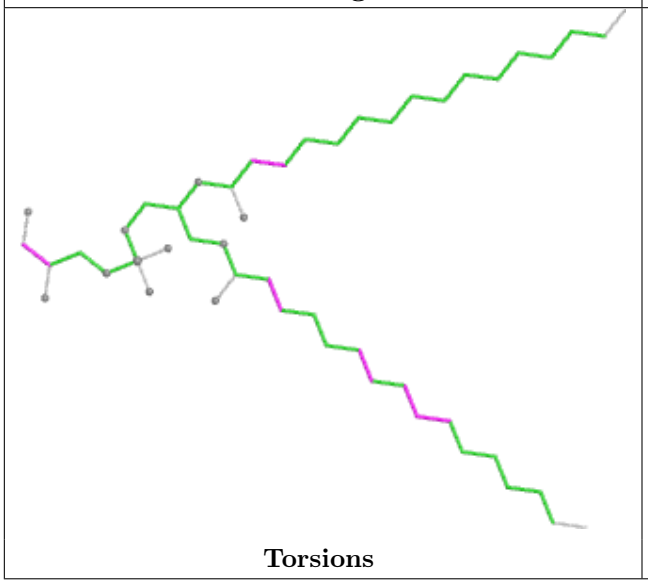


Bond angles



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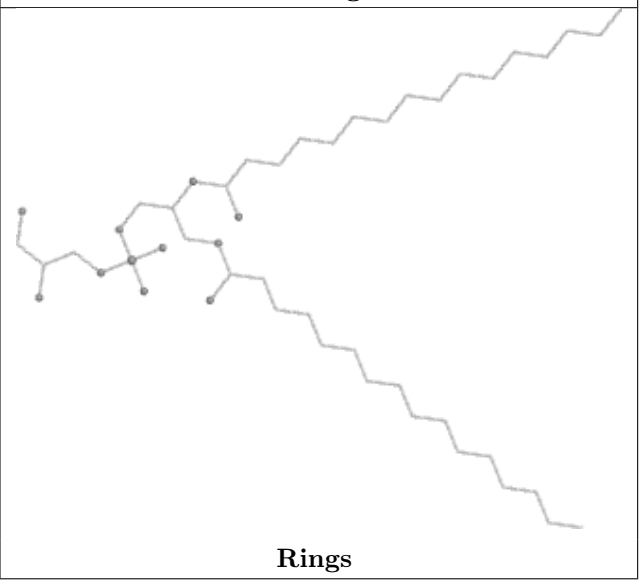


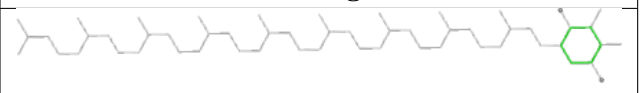
Rings

Ligand PL9 d 407

Bond lengths

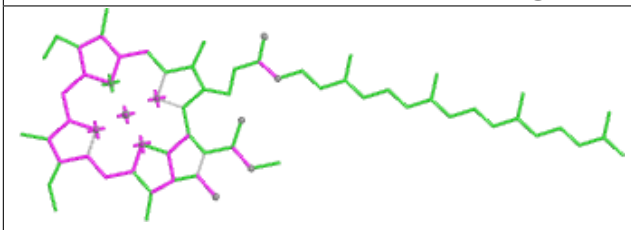
Bond angles

Torsions



Rings

Ligand CLA c 906



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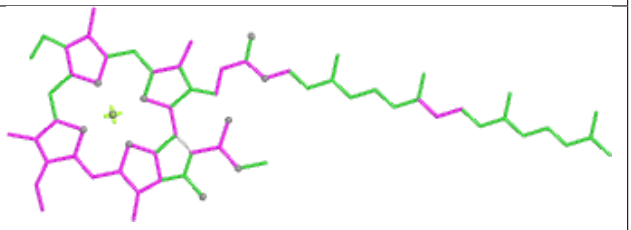
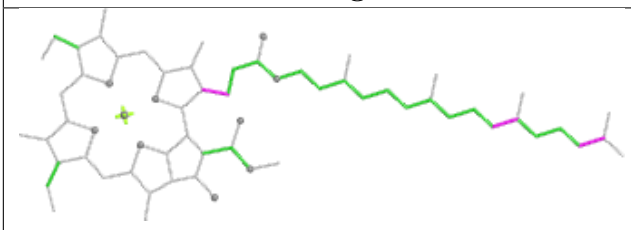


Bond angles



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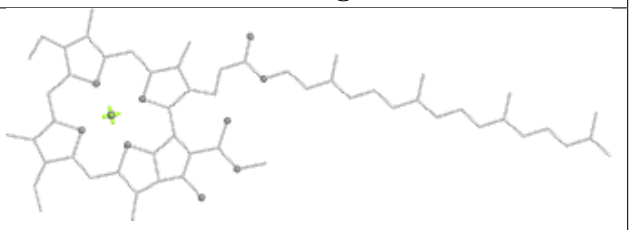
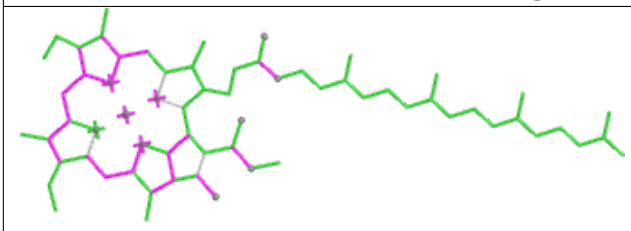


Rings

Ligand CLA a 410



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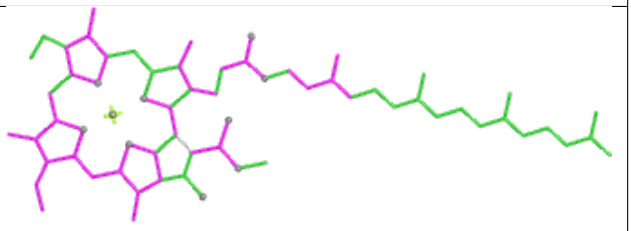
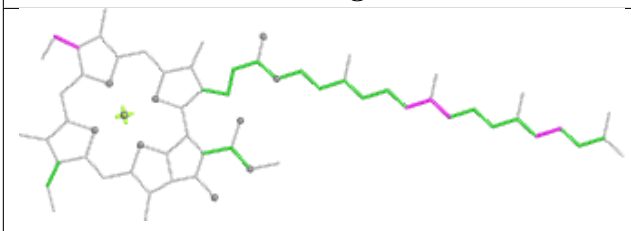


Bond angles



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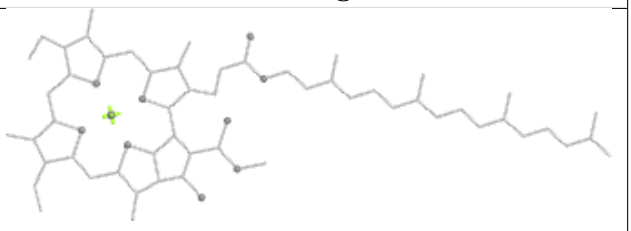

Rings

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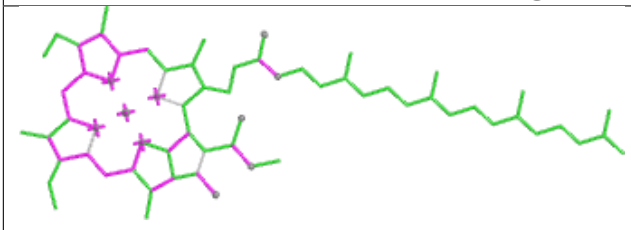
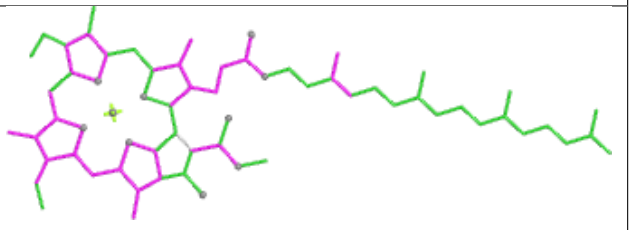
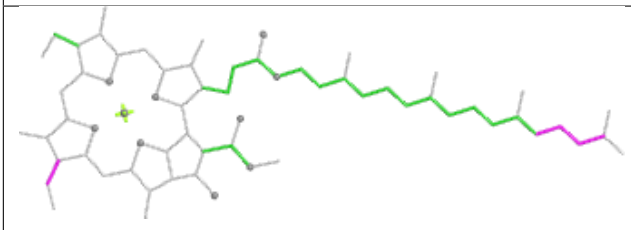


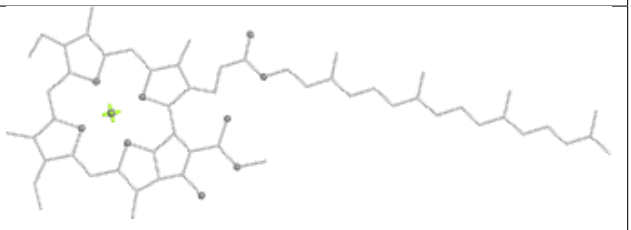
Bond lengths



Bond angles

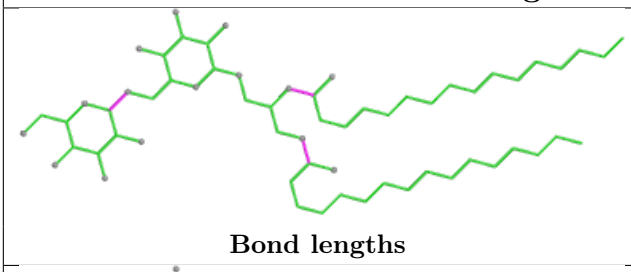


Torsions



Rings

Ligand DGD h 102



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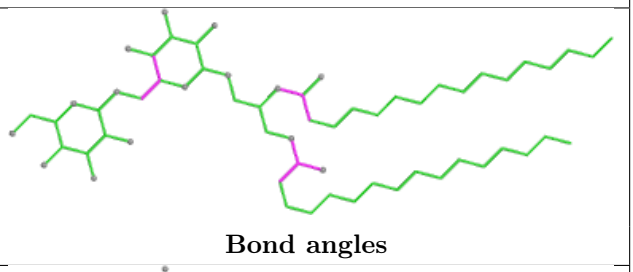
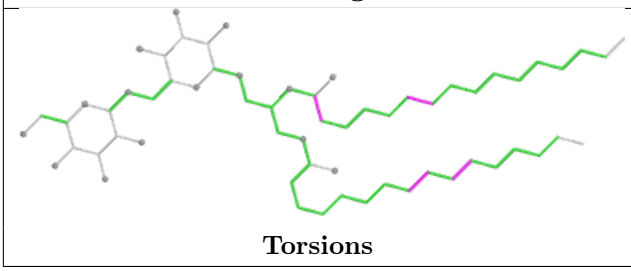


Bond angles



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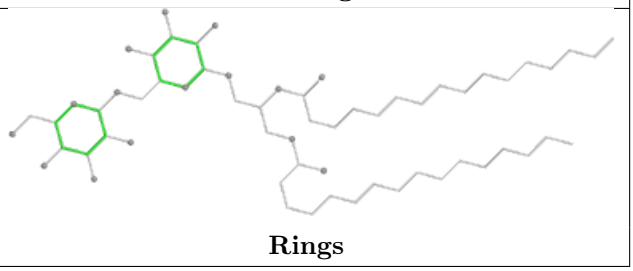
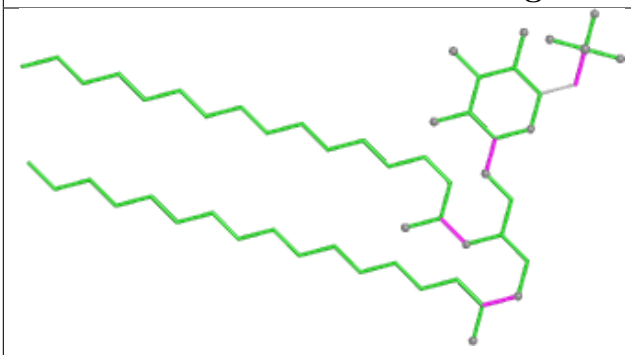


Rings

Ligand SQD B 621



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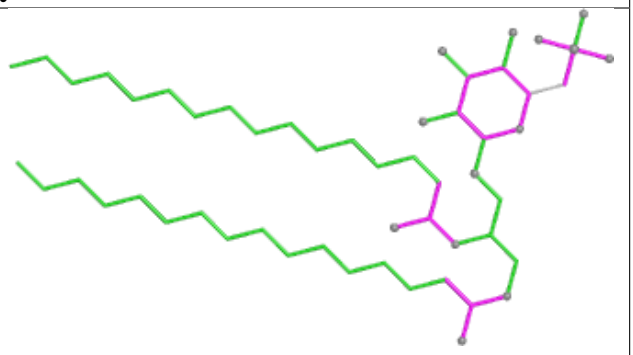
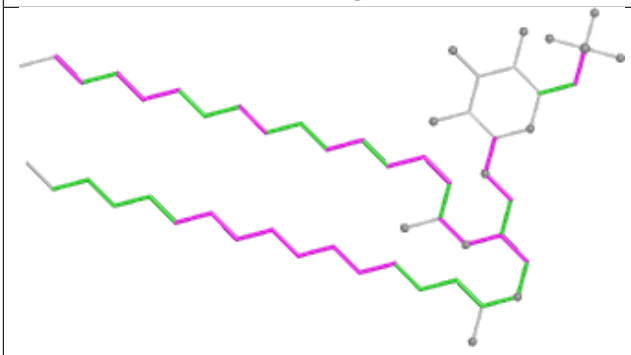


Bond angles



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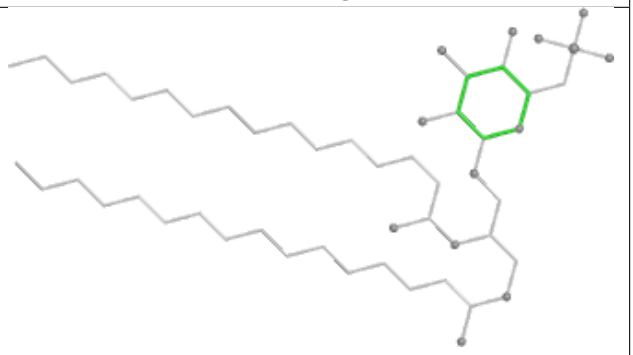
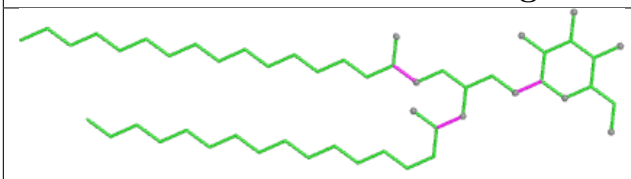


Rings

Ligand LMG C 534



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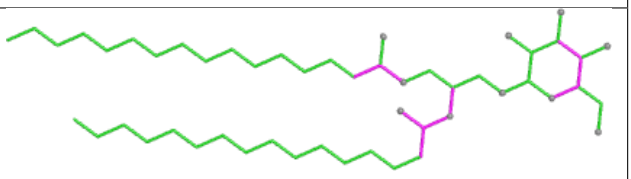
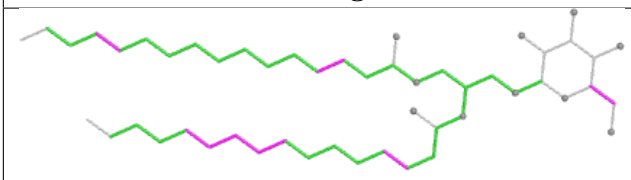


Bond angles



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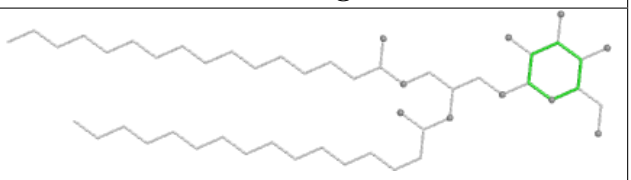
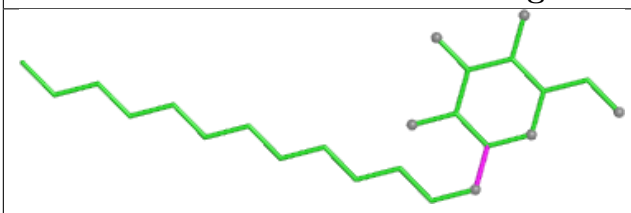


Rings

Ligand LMT t 904



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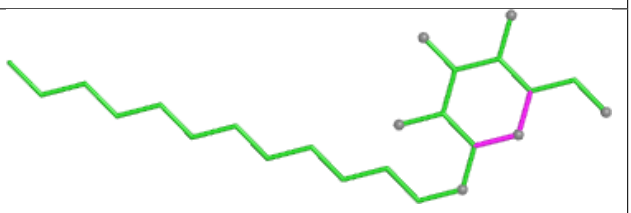
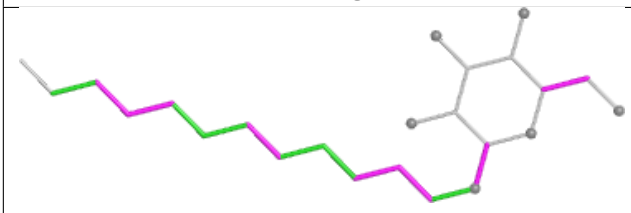
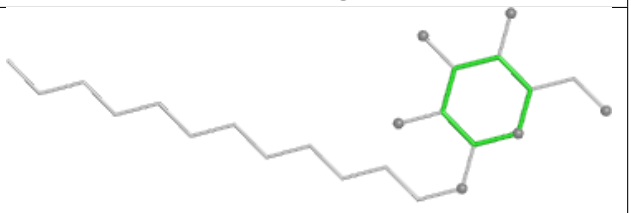


Bond angles

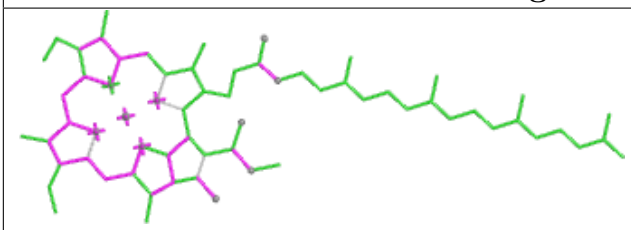


Torsions

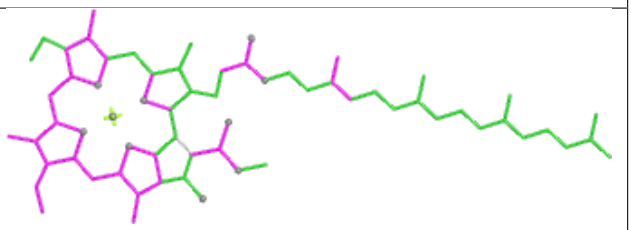


Rings

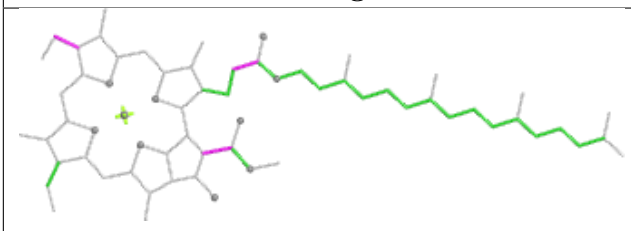
Ligand CLA c 902



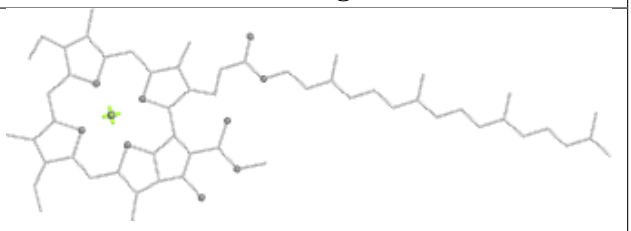
Bond lengths



Bond angles

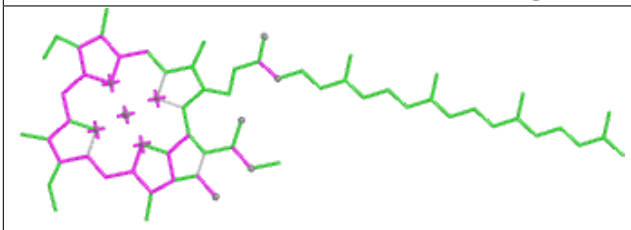


Torsions

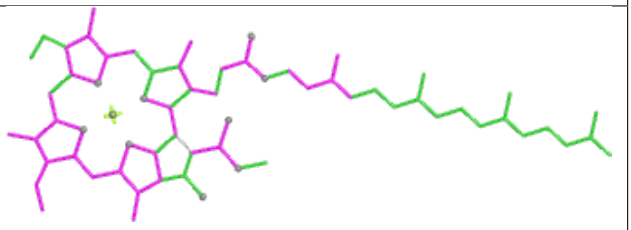


Rings

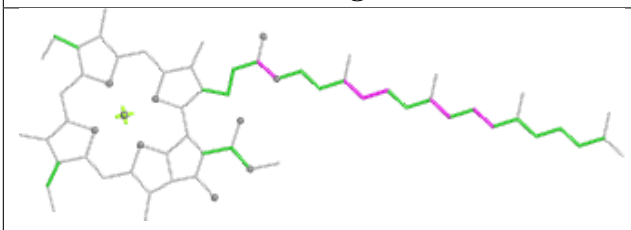
Ligand CLA d 405



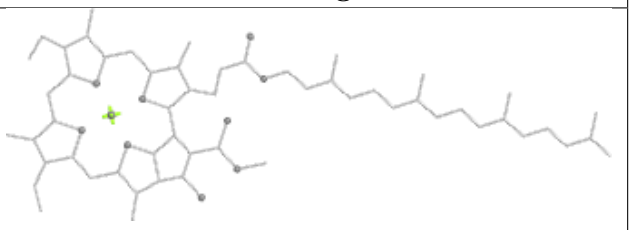
Bond lengths



Bond angles

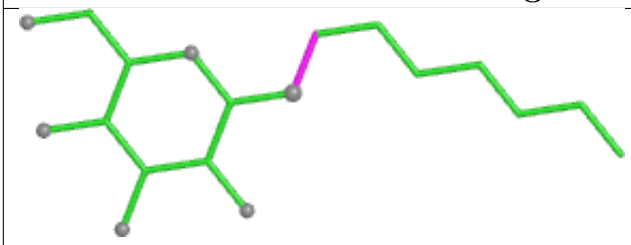


Torsions

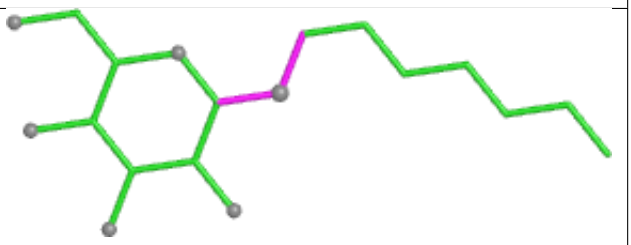


Rings

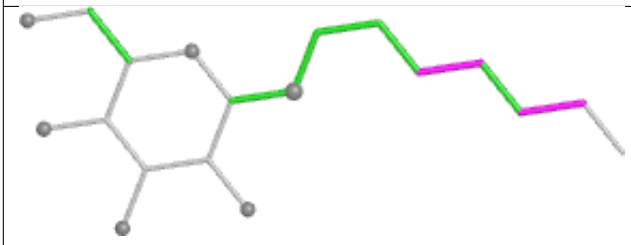
Ligand HTG b 626



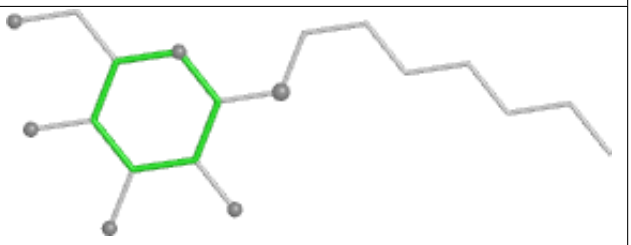
Bond lengths



Bond angles

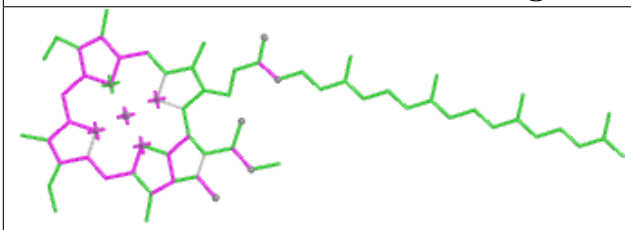


Torsions

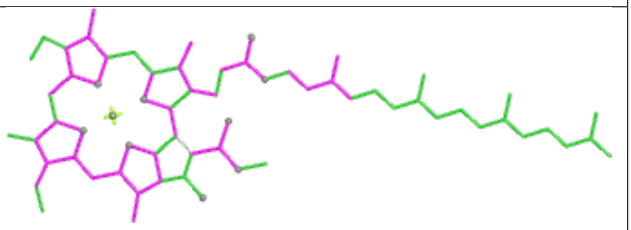


Rings

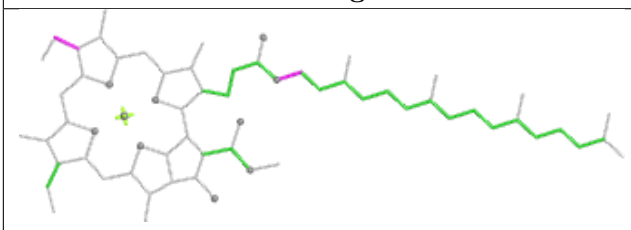
Ligand CLA d 404



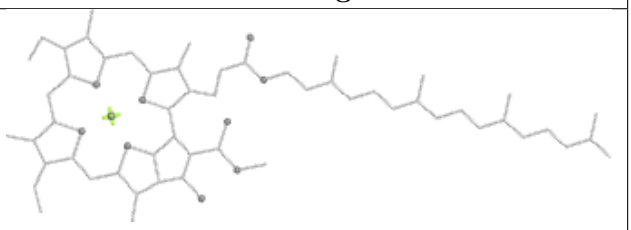
Bond lengths



Bond angles

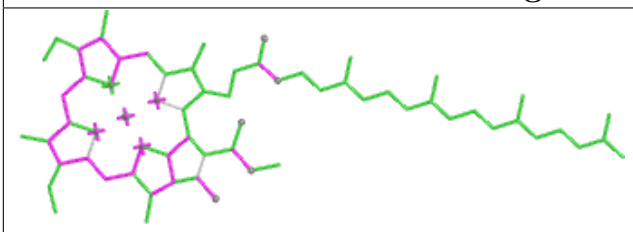


Torsions



Rings

Ligand CLA B 607



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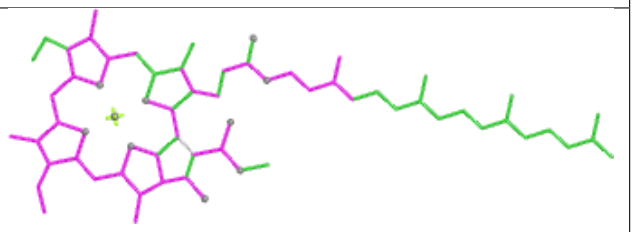
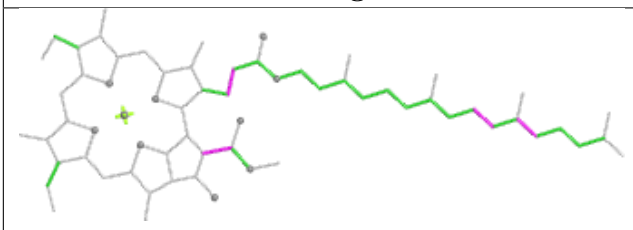
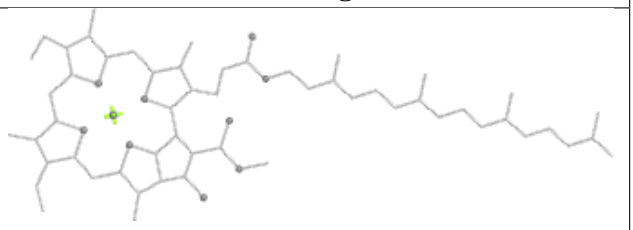


Bond angles

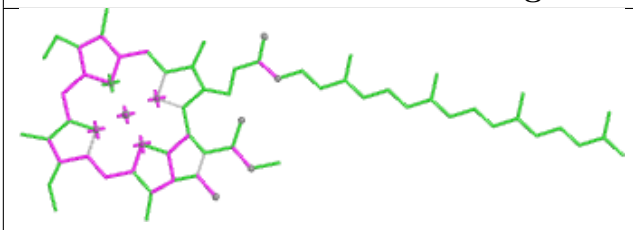


Torsions



Rings

Ligand CLA B 608



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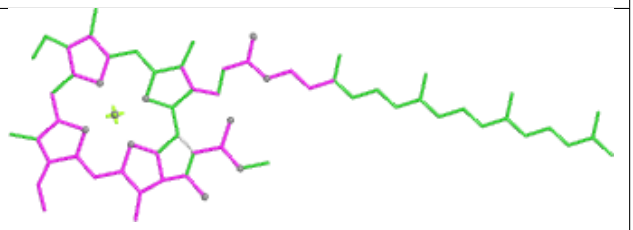
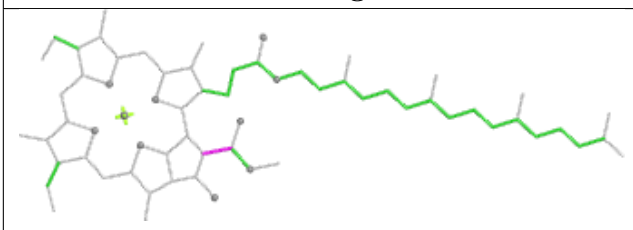
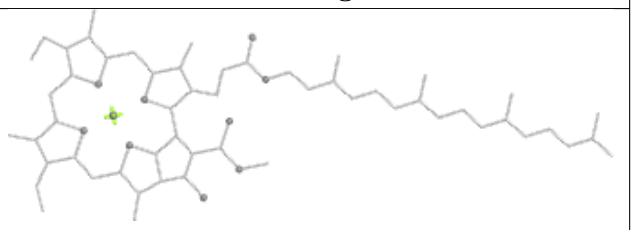


Bond angles

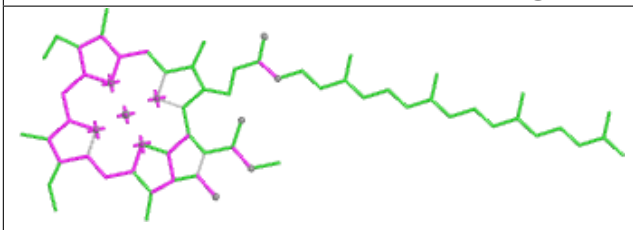


Torsions

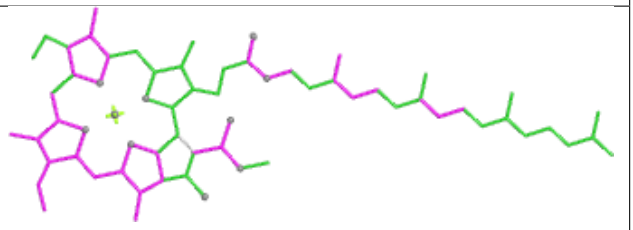


Rings

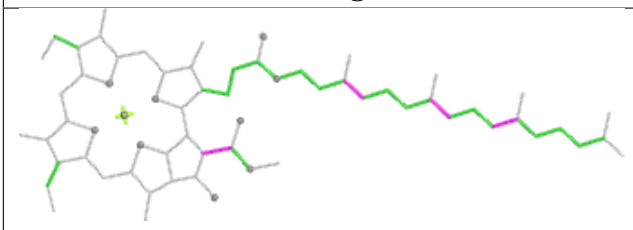
Ligand CLA c 905



Bond lengths



Bond angles



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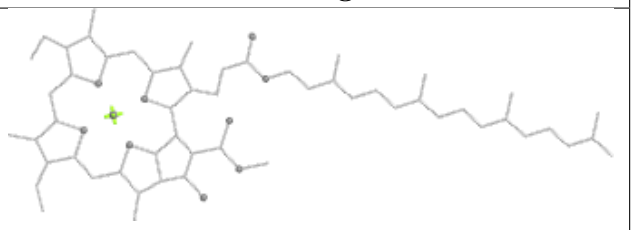
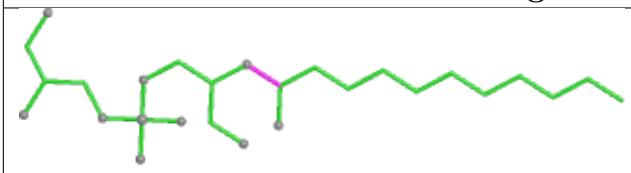
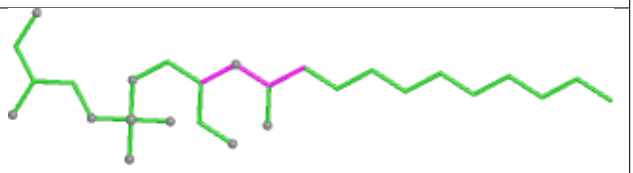


Rings

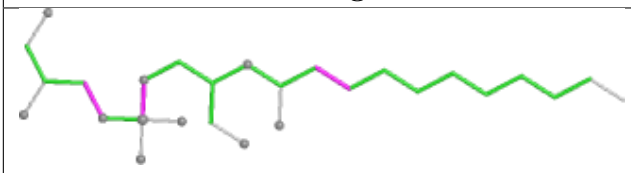
Ligand LHG e 101



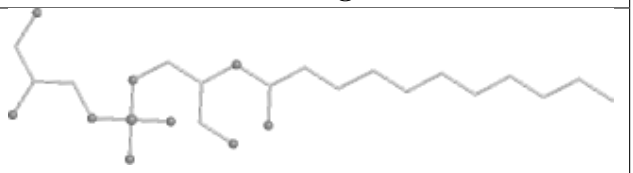
Bond lengths



Bond angles

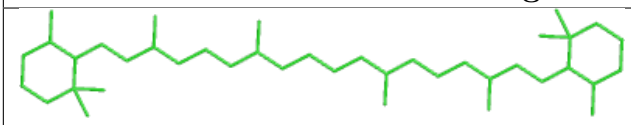


Torsions

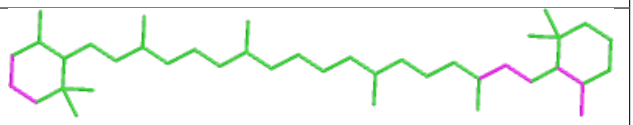


Rings

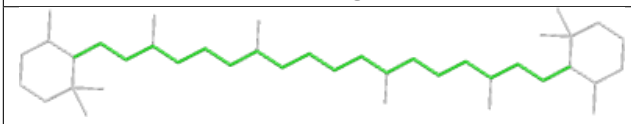
Ligand BCR B 620



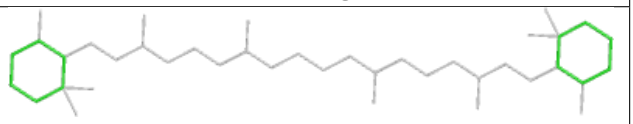
Bond lengths



Bond angles

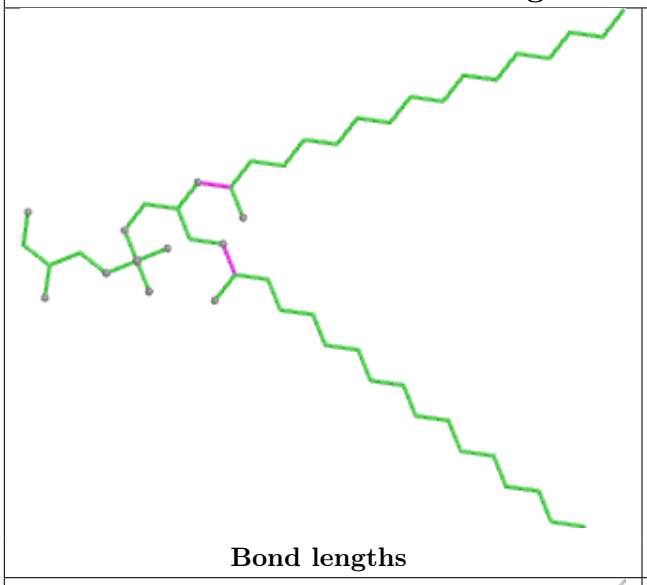


Torsions

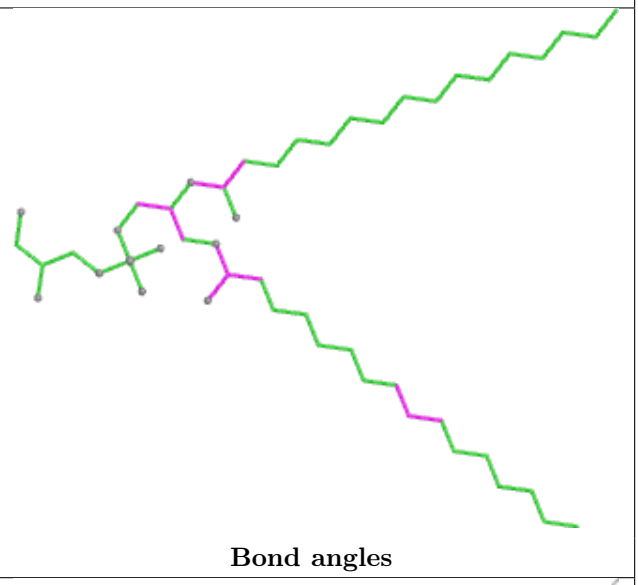


Rings

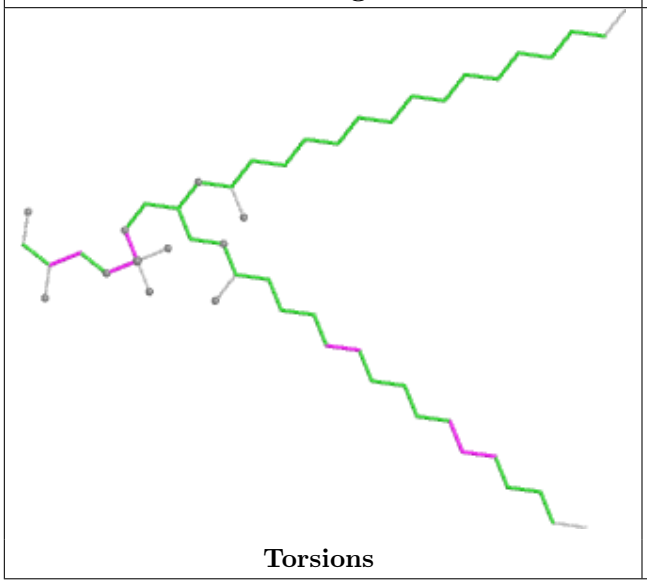
Ligand LHG d 409



Bond lengths



Bond angles



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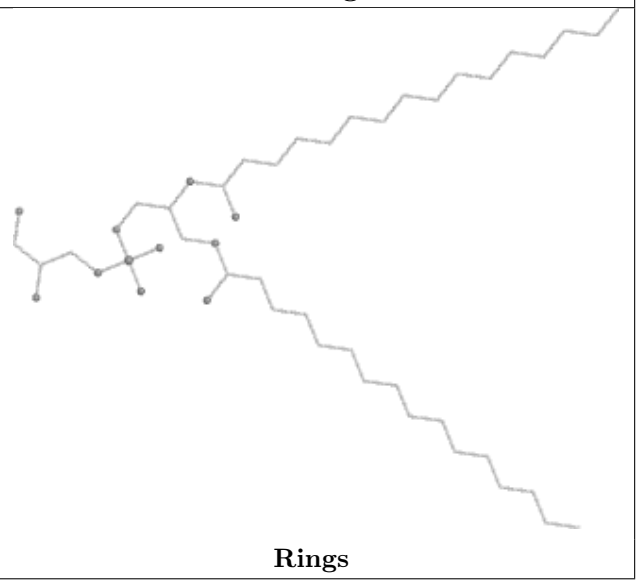
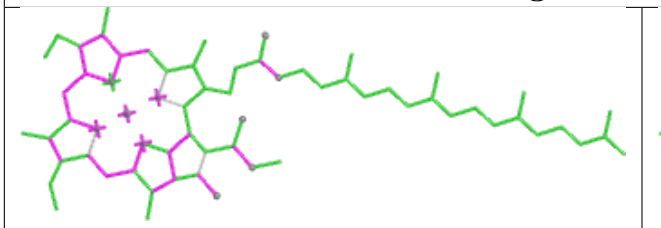
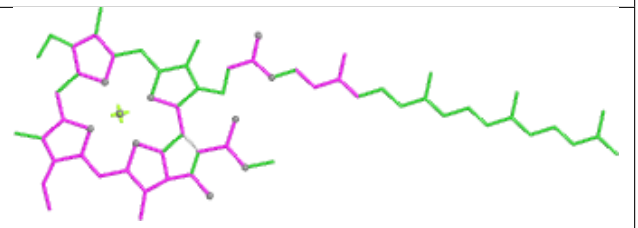


Rings

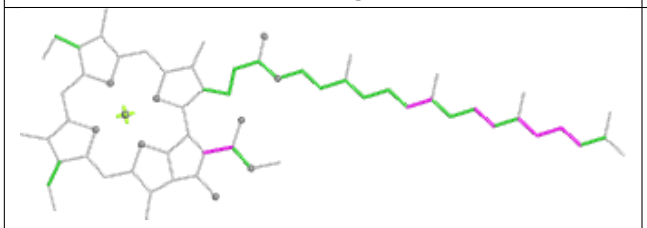
Ligand CLA b 620



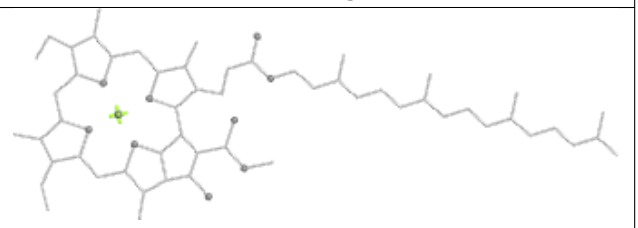
Bond lengths



Bond angles

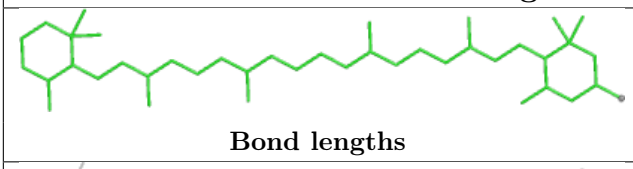


Torsions

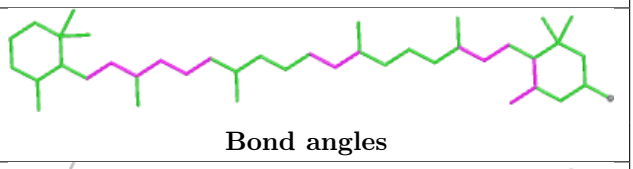


Rings

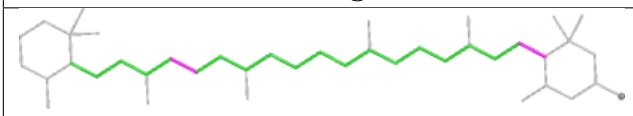
Ligand RRX H 102



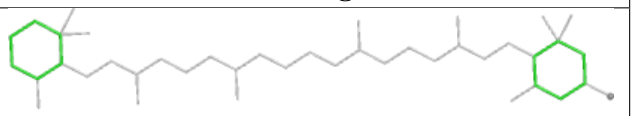
Bond lengths



Bond angles

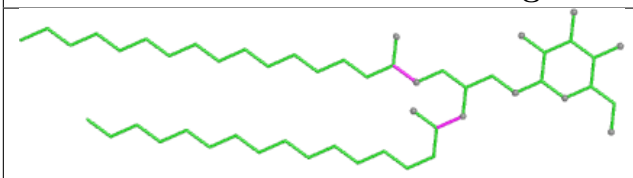


Torsions



Rings

Ligand LMG b 624



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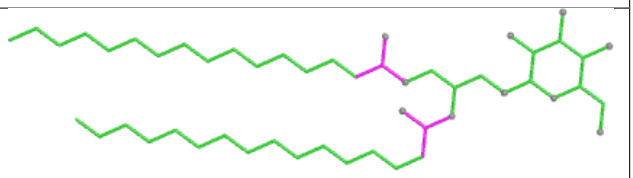
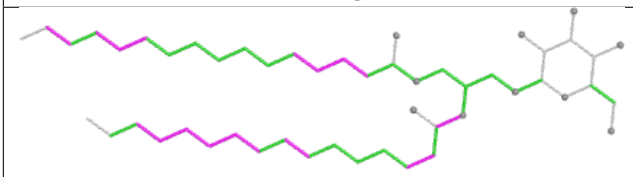
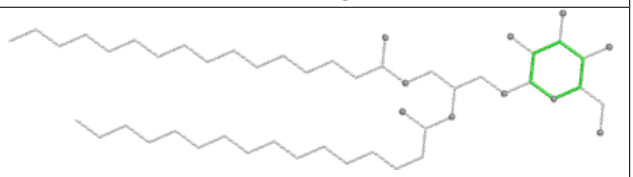


Bond angles

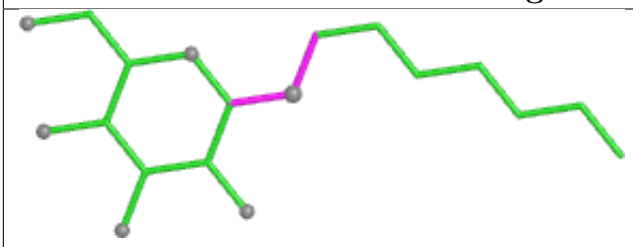


Torsions



Rings

Ligand HTG c 923



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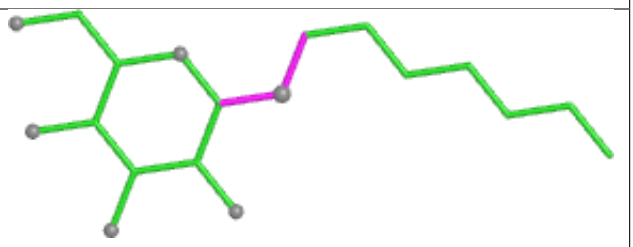
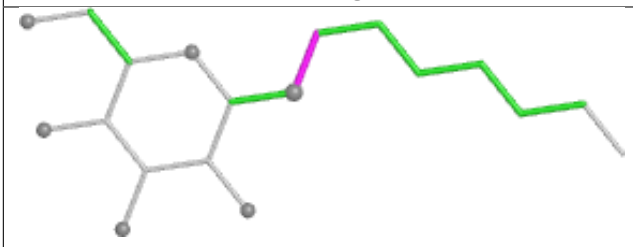
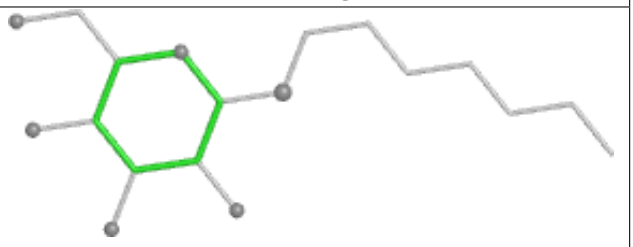


Bond angles

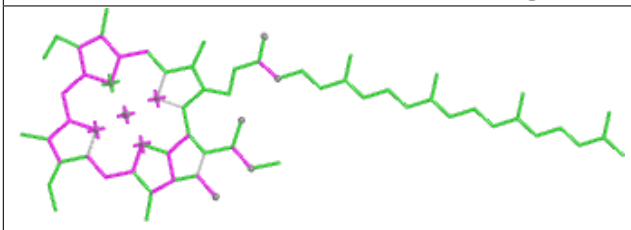


Torsions

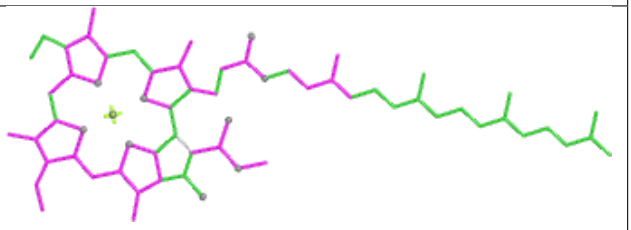


Rings

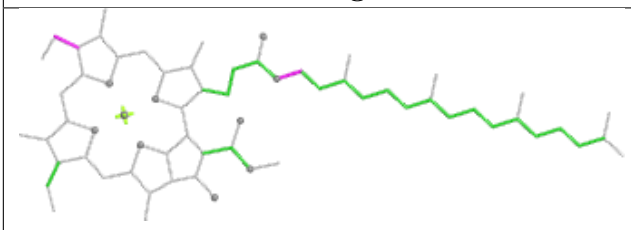
Ligand CLA D 402



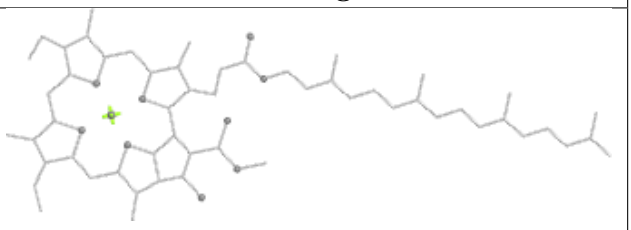
Bond lengths



Bond angles

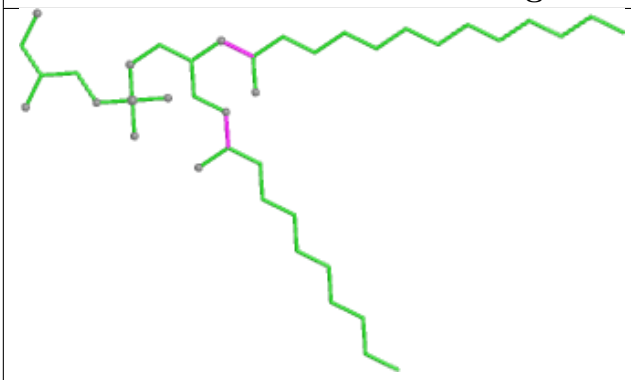


Torsions



Rings

Ligand LHG d 410



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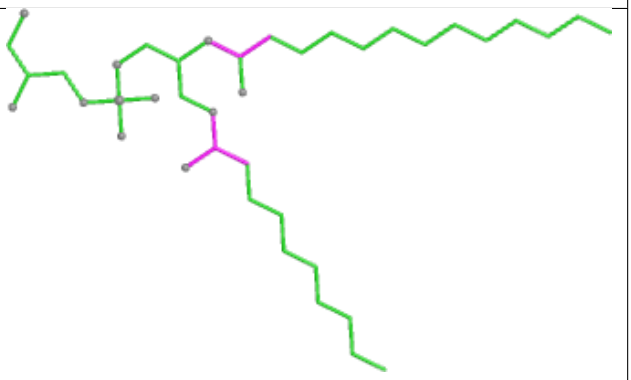
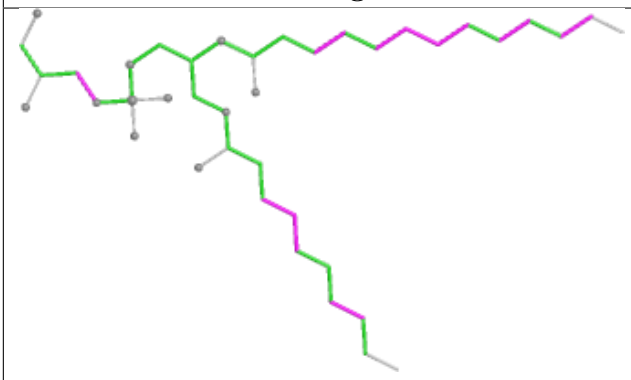
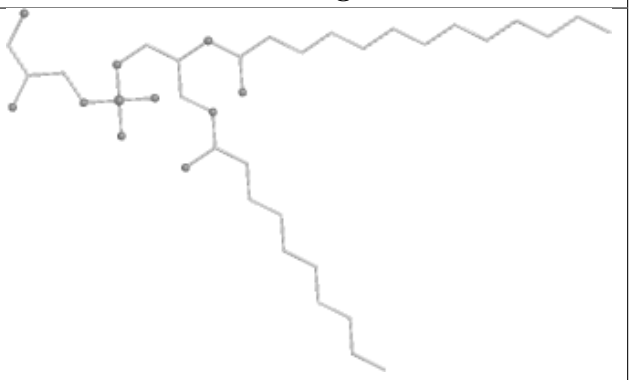


Bond angles

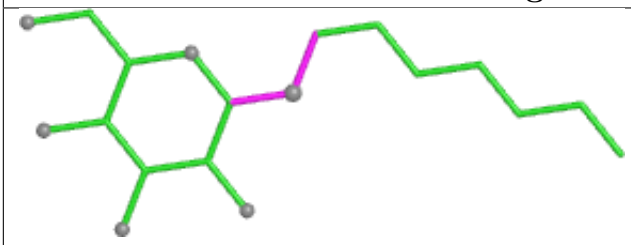


Torsions

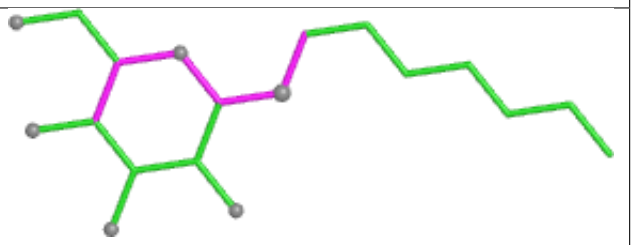


Rings

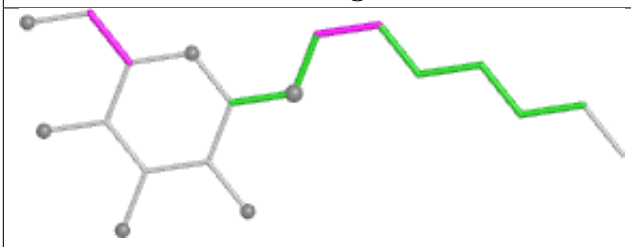
Ligand HTG c 924



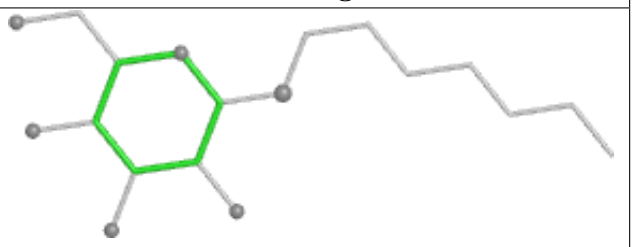
Bond lengths



Bond angles

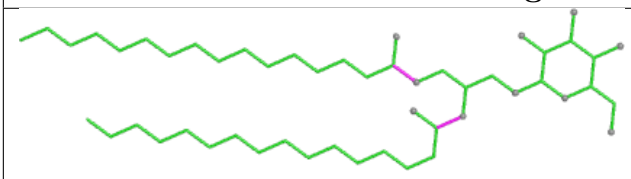


Torsions

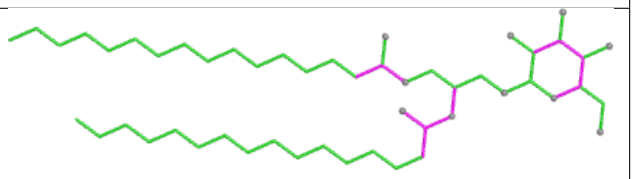


Rings

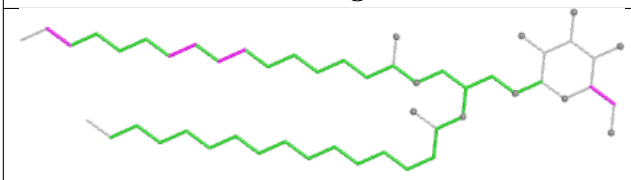
Ligand LMG c 921



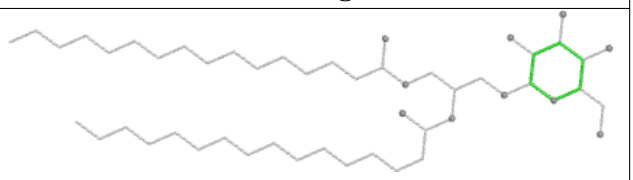
Bond lengths



Bond angles

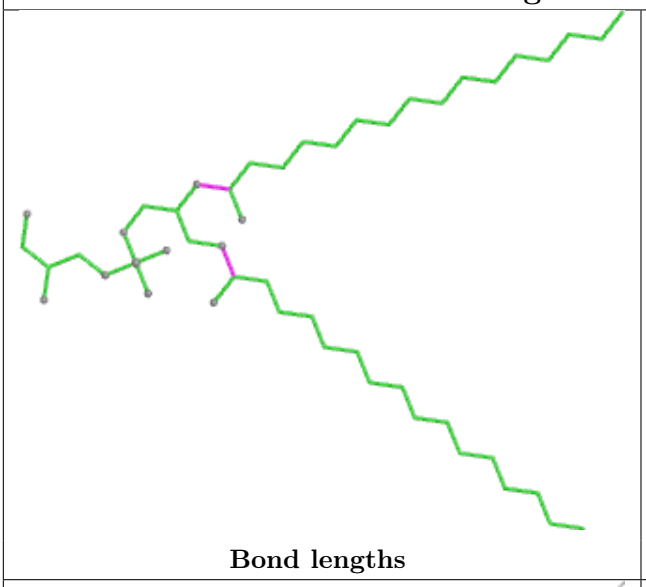


Torsions

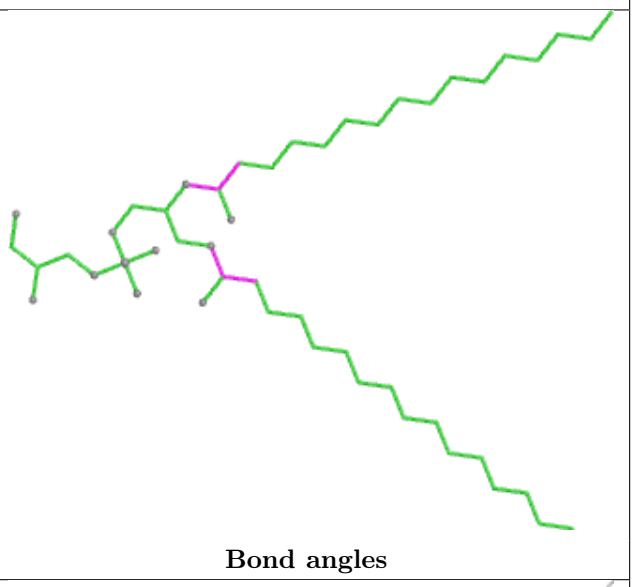


Rings

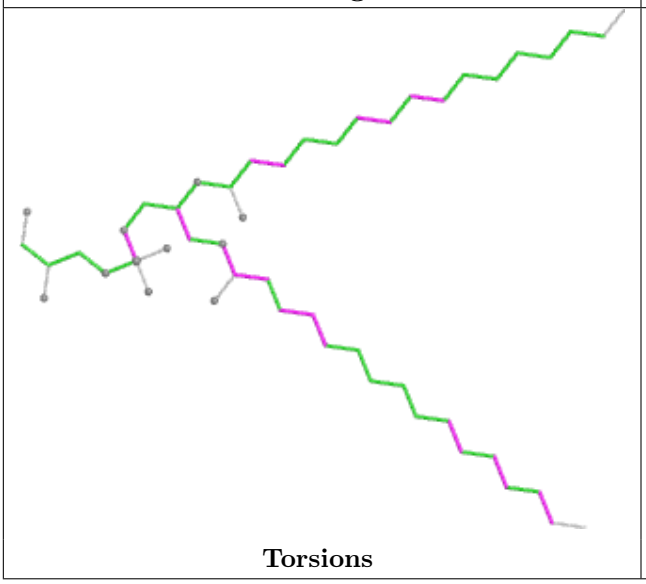
Ligand LHG E 101



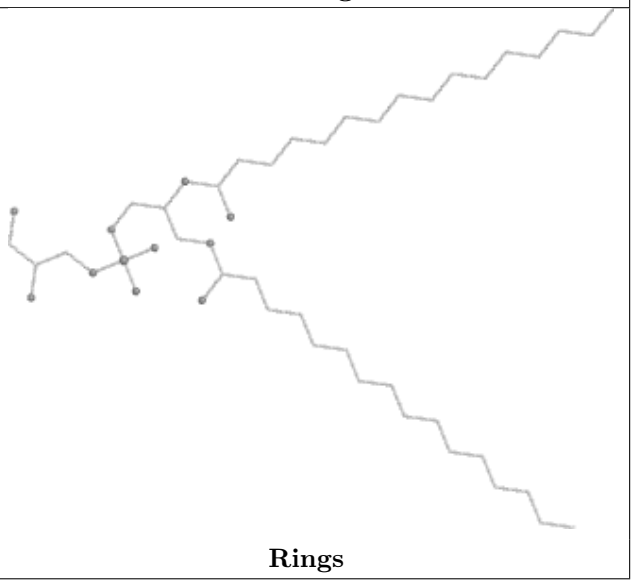
Bond lengths



Bond angles

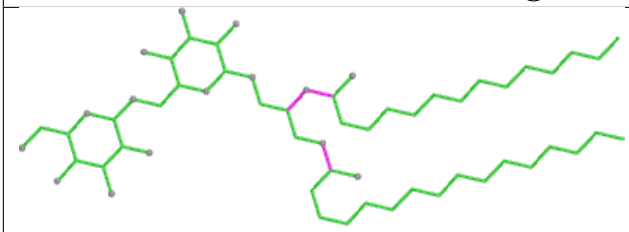


Torsions

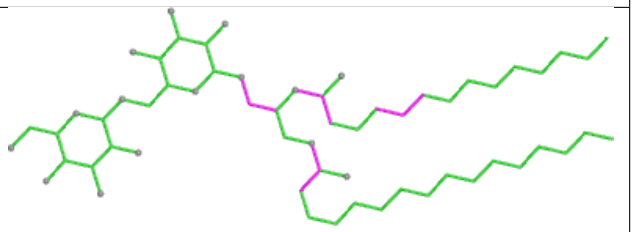


Rings

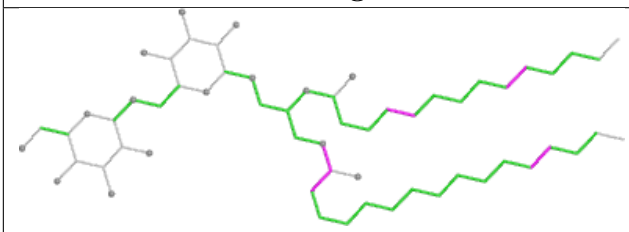
Ligand DGD c 919



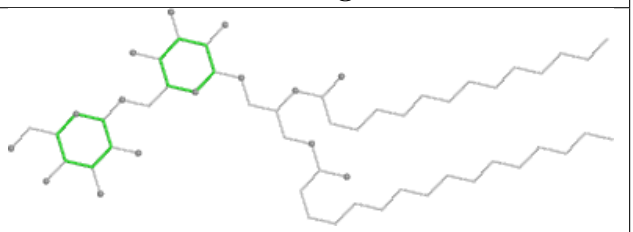
Bond lengths



Bond angles

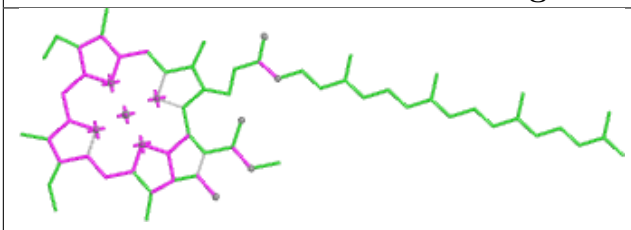


Torsions



Rings

Ligand CLA c 910



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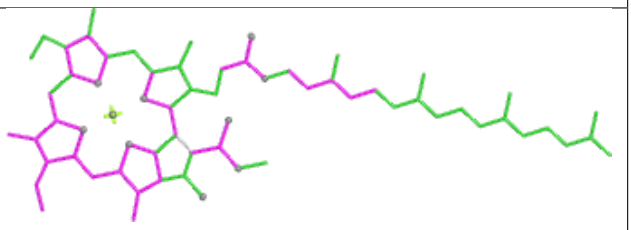
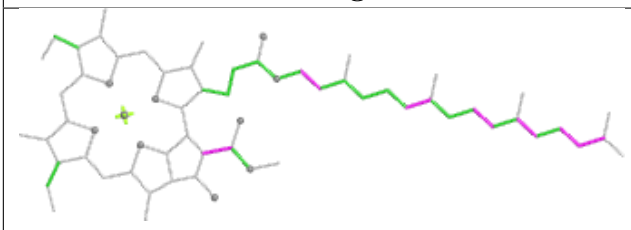
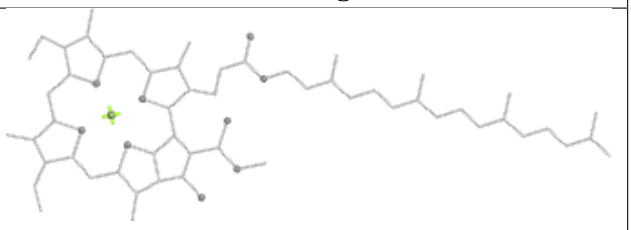


Bond angles

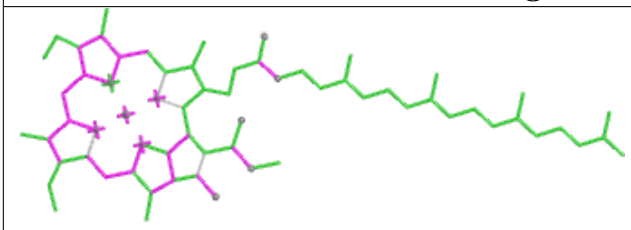


Torsions



Rings

Ligand CLA B 605



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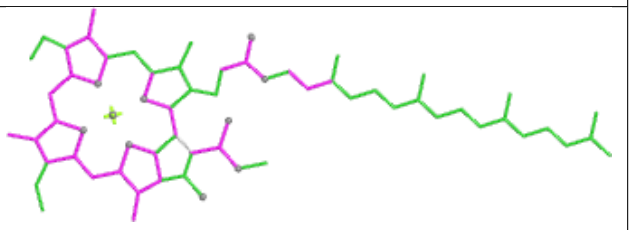
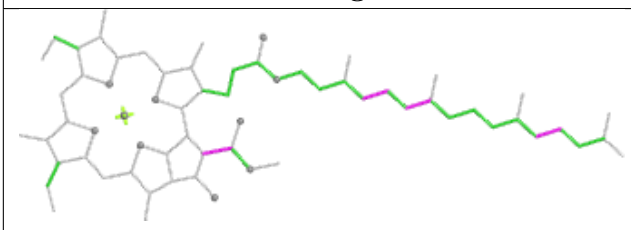


Bond angles



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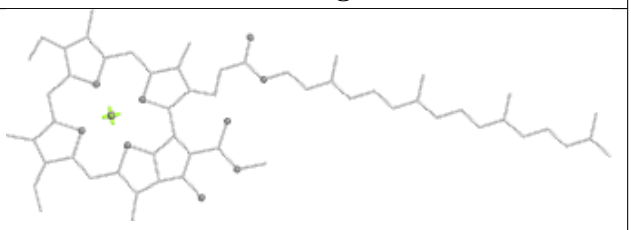
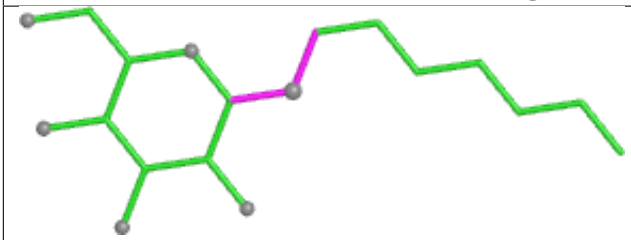


Rings

Ligand HTG b 603



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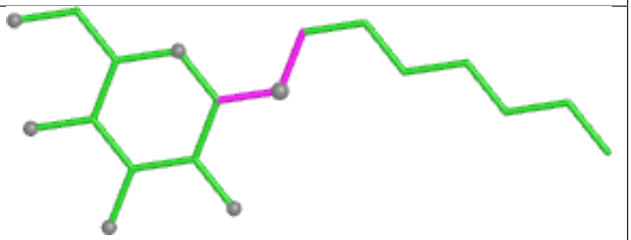
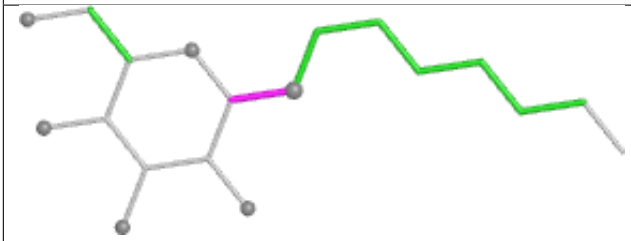


Bond angles



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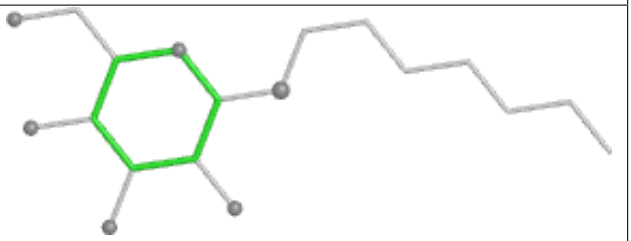
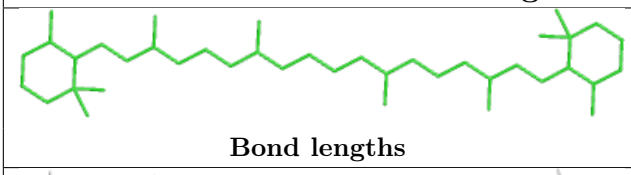
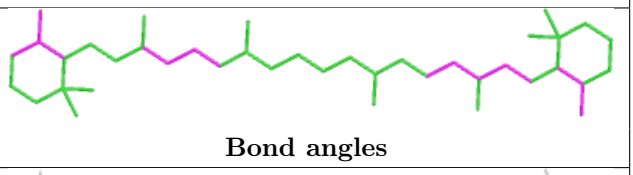
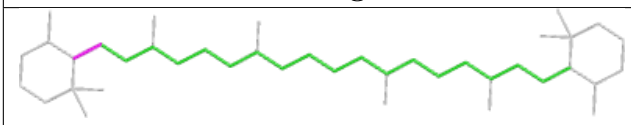


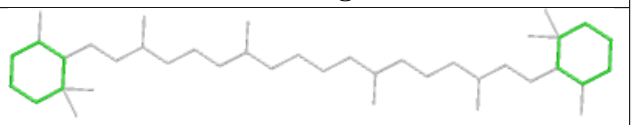
Rings

Ligand BCR K 101

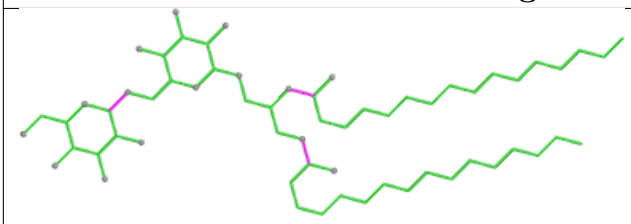

Bond lengths

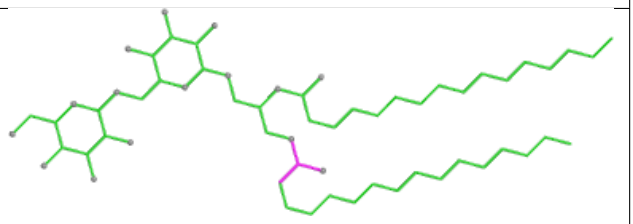

Bond angles

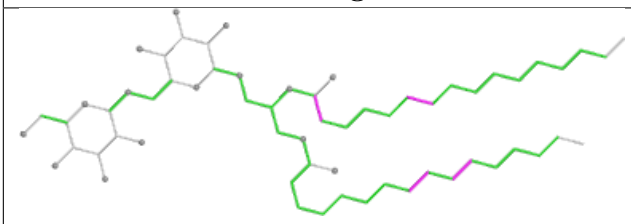

Torsions

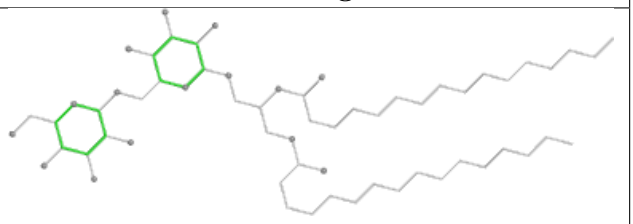

Rings

Ligand DGD H 103

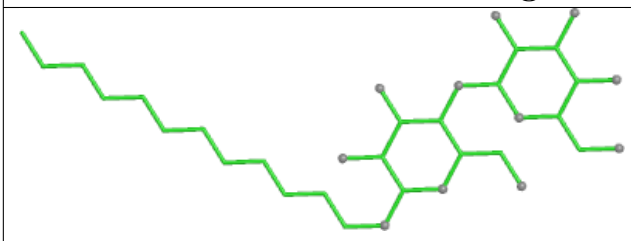

Bond lengths

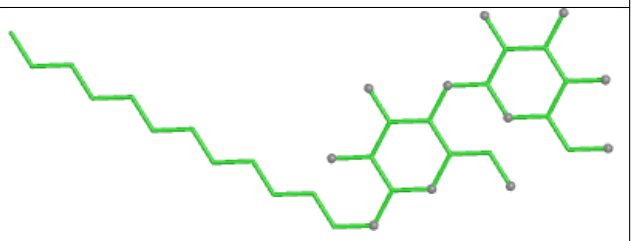

Bond angles

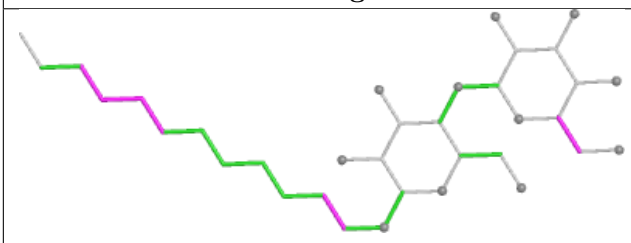

Torsions

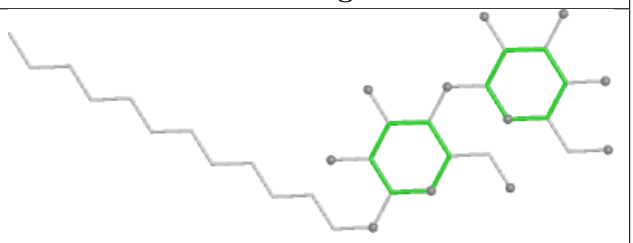

Rings

Ligand LMT D 401

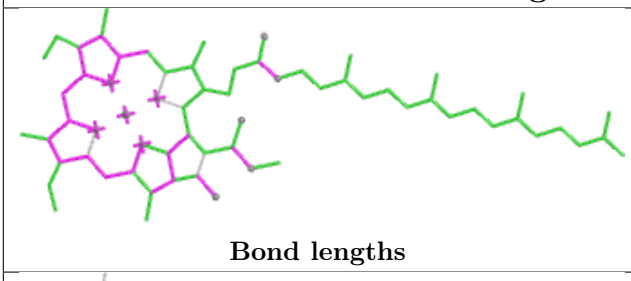

Bond lengths


Bond angles

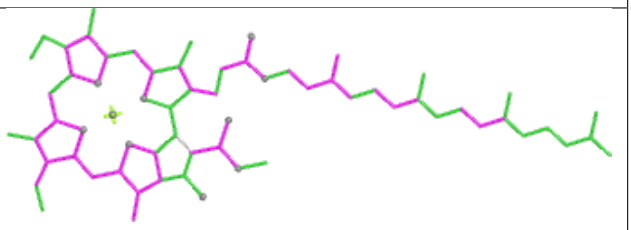

Torsions


Rings

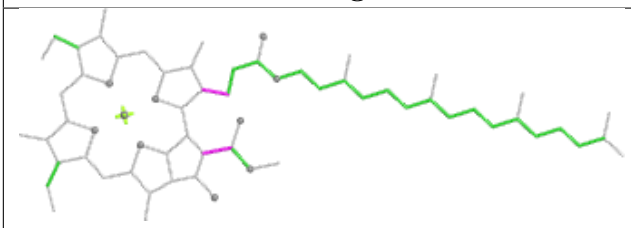
Ligand CLA c 909



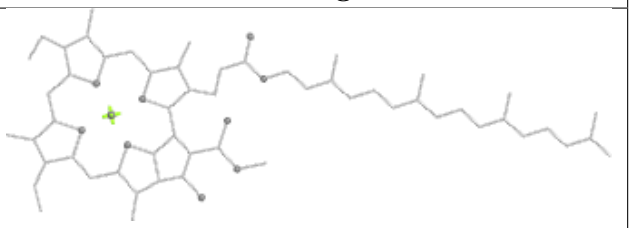
Bond lengths



Bond angles

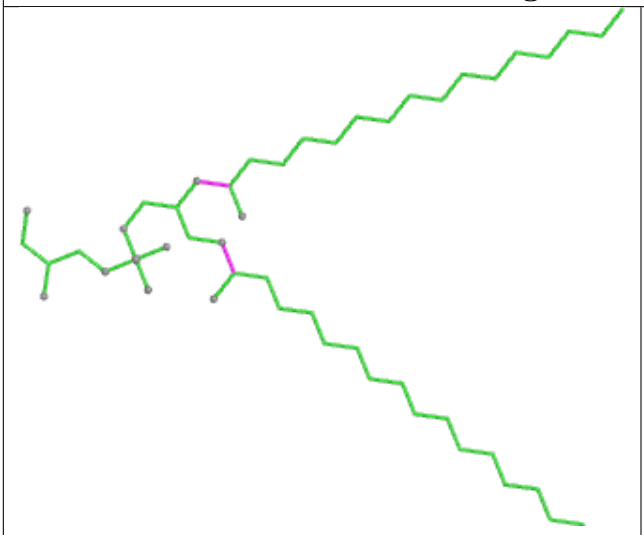


Torsions

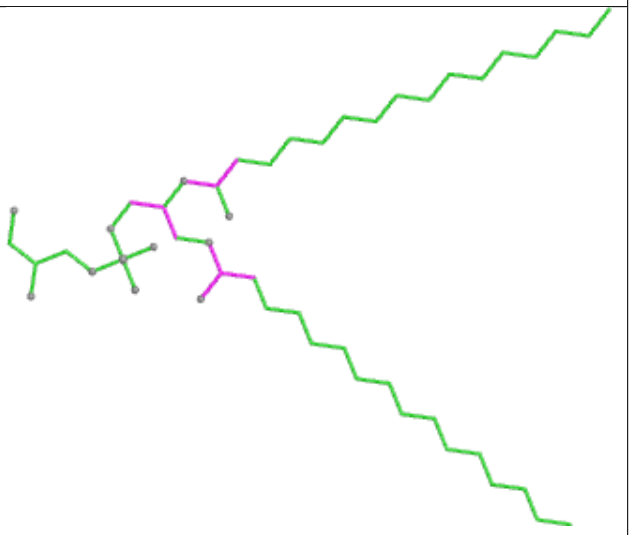


Rings

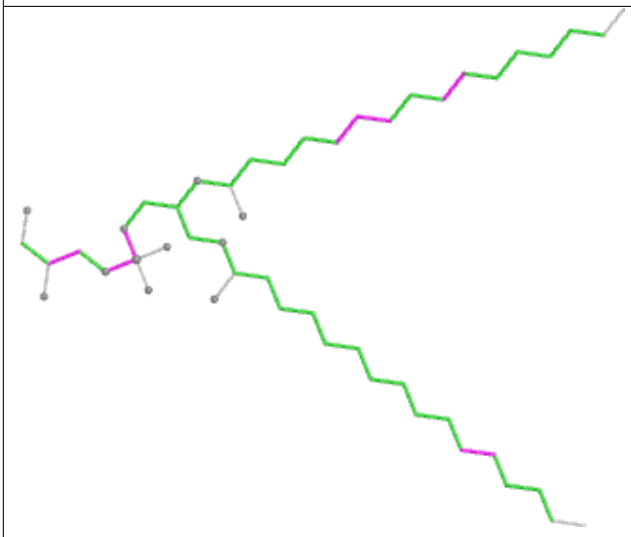
Ligand LHG D 408



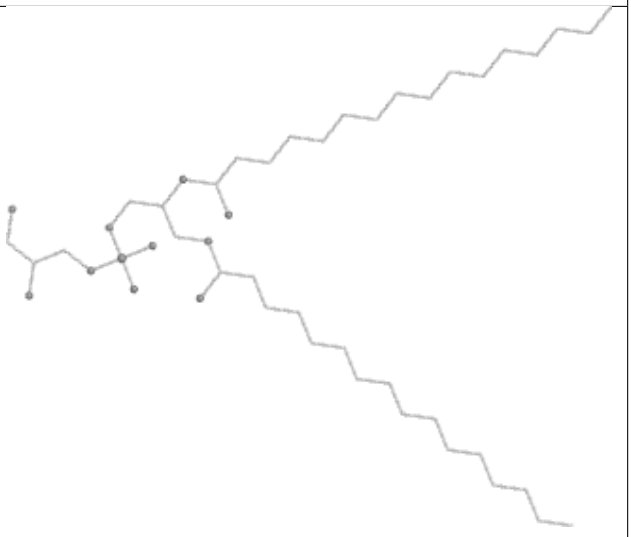
Bond lengths



Bond angles

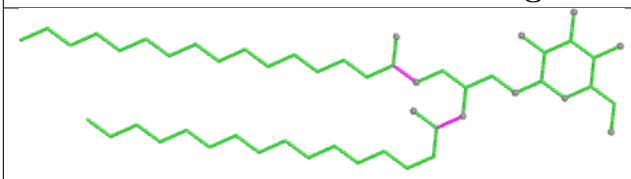


Torsions



Rings

Ligand LMG c 920



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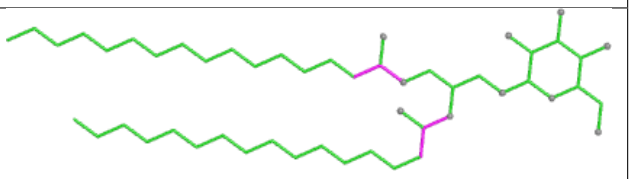
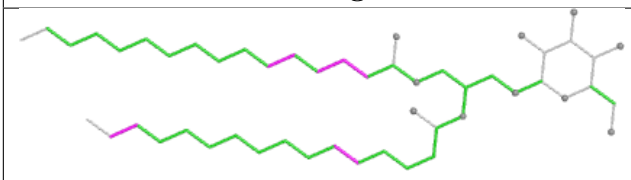
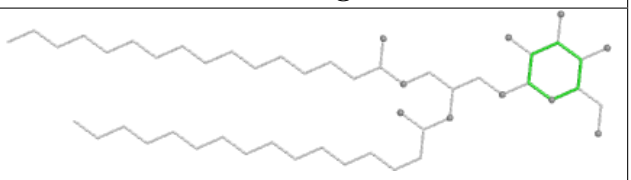


Bond angles

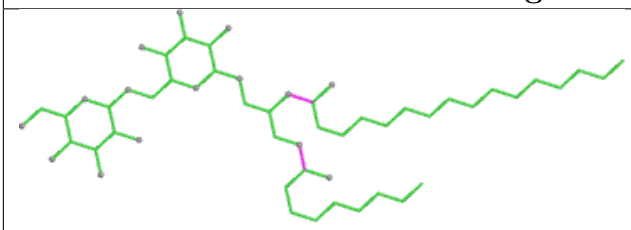


Torsions



Rings

Ligand DGD c 918



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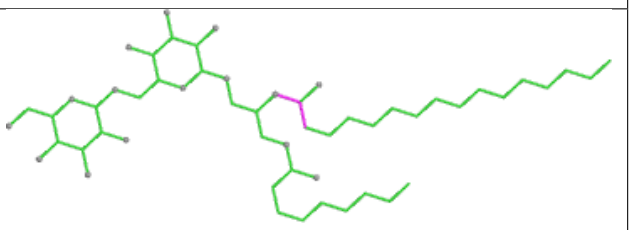
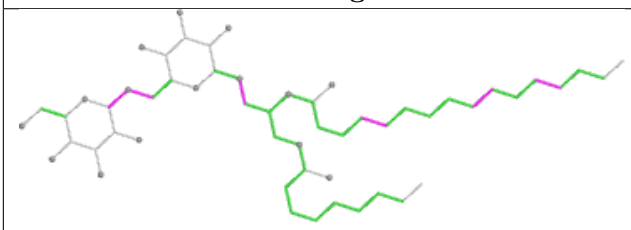
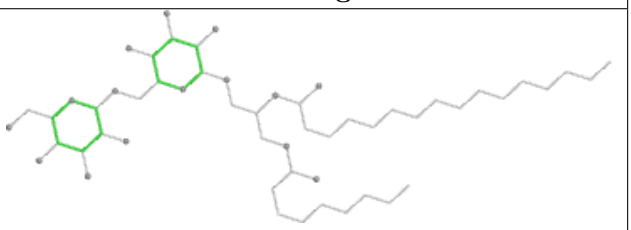


Bond angles

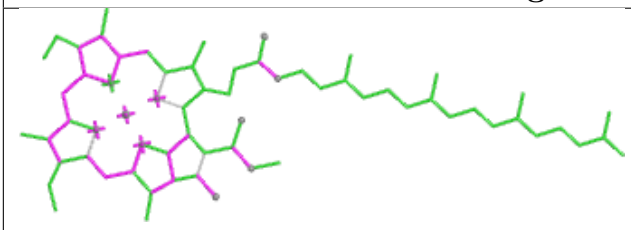


Torsions

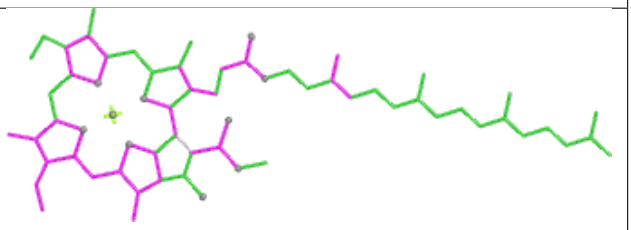


Rings

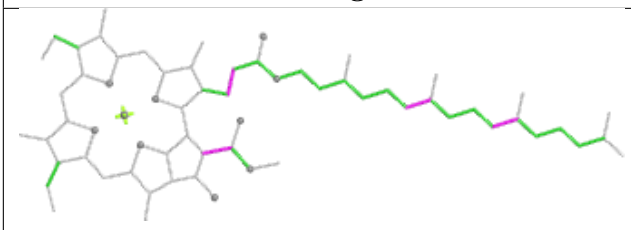
Ligand CLA b 610



Bond lengths



Bond angles



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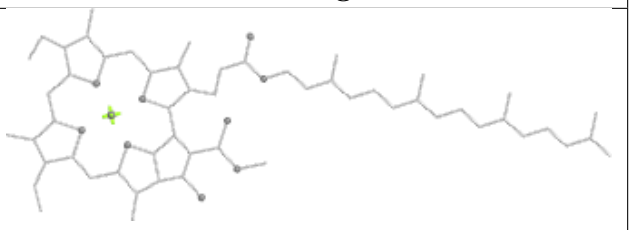
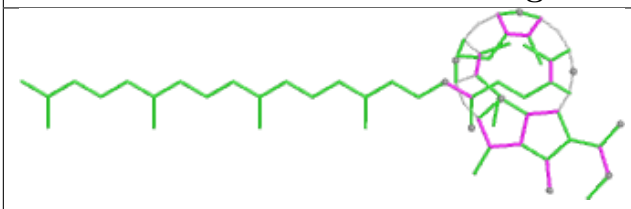
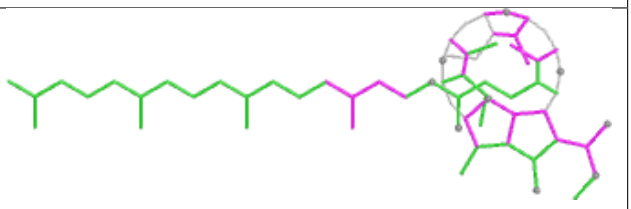


Rings

Ligand PHO a 412

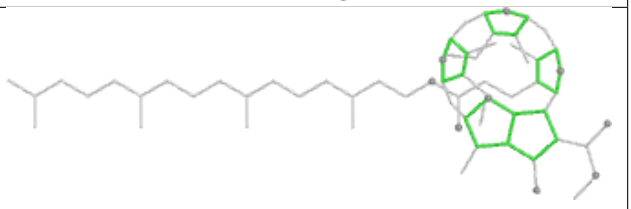


Bond lengths



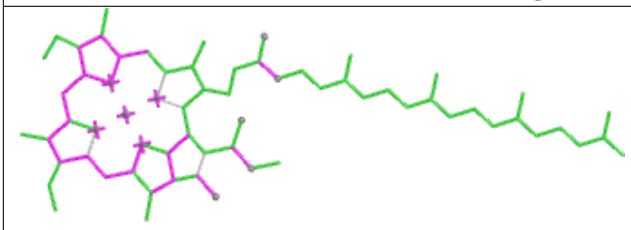
Bond angles

Torsions



Rings

Ligand CLA c 913



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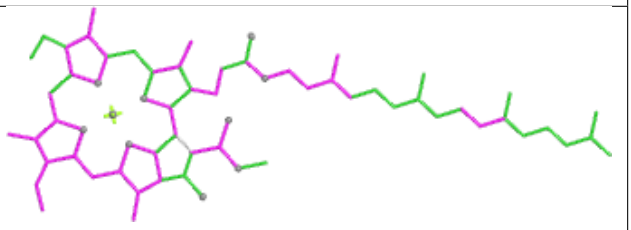
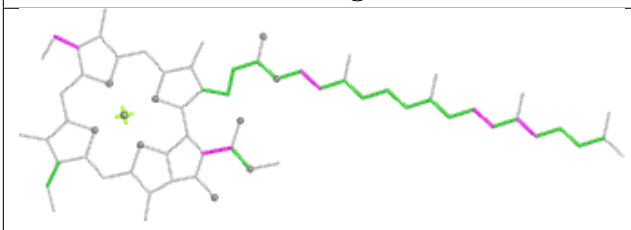
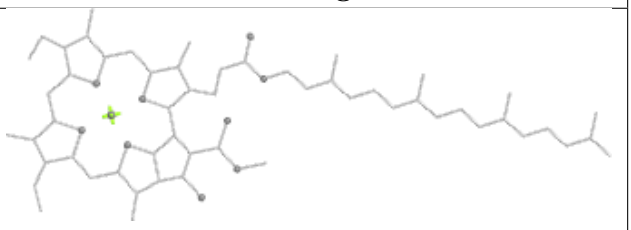


Bond angles

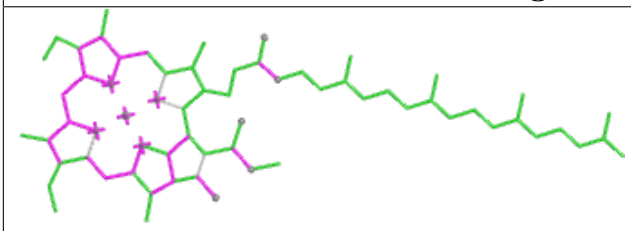


Torsions

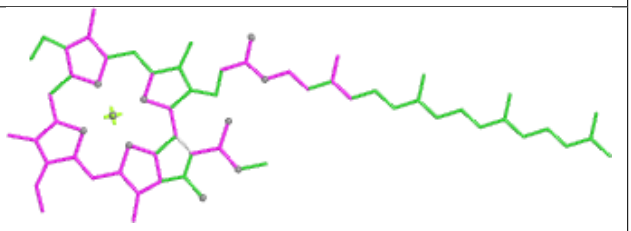


Rings

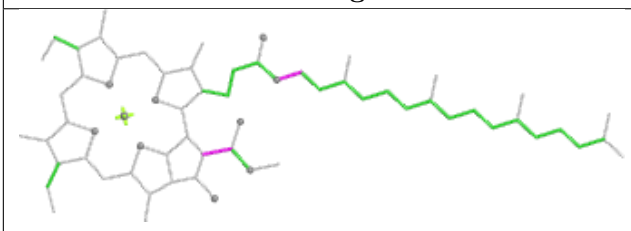
Ligand CLA c 903



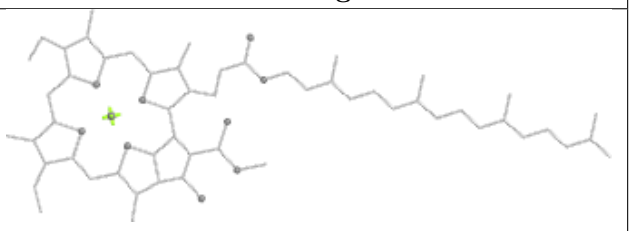
Bond lengths



Bond angles

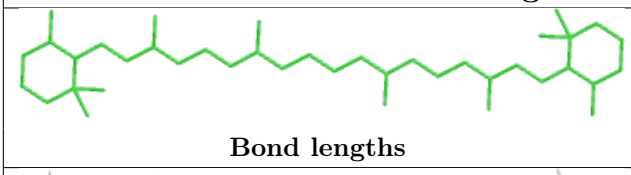


Torsions



Rings

Ligand BCR A 411



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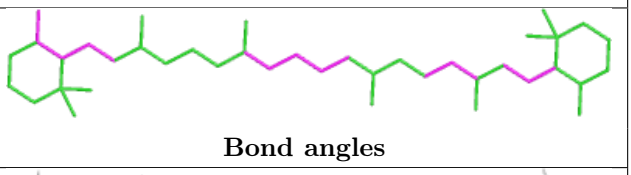
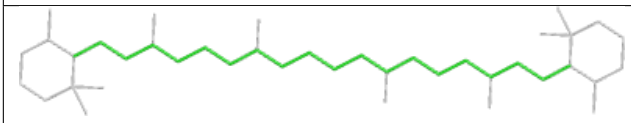


Bond angles



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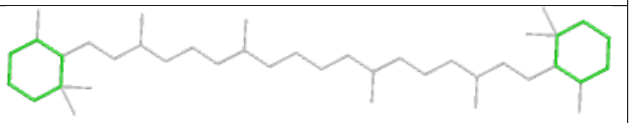
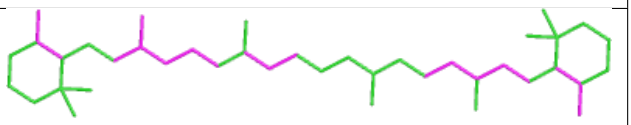


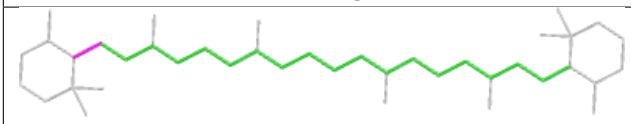
Rings

Ligand BCR k 101

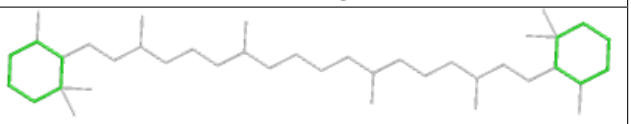
Bond lengths



Bond angles

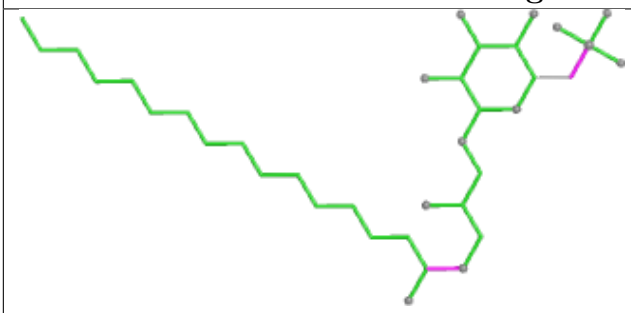


Torsions

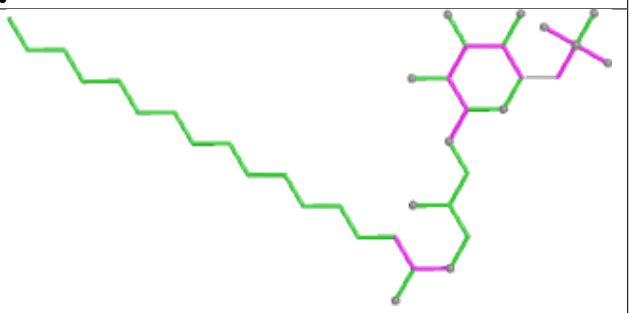


Rings

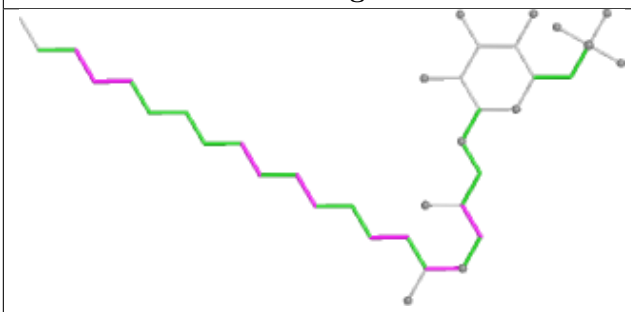
Ligand SQD F 101



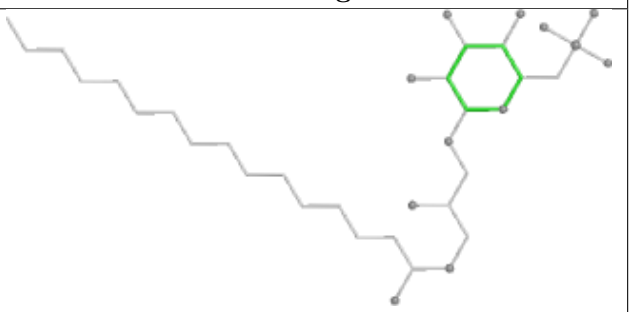
Bond lengths



Bond angles

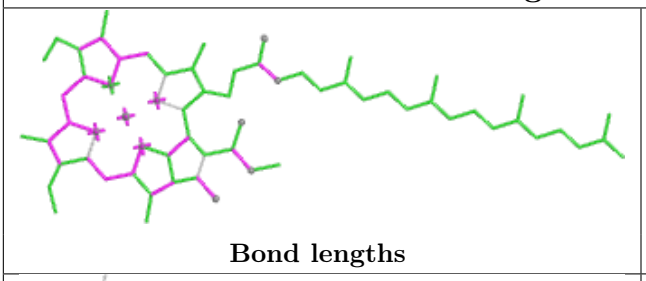


Torsions

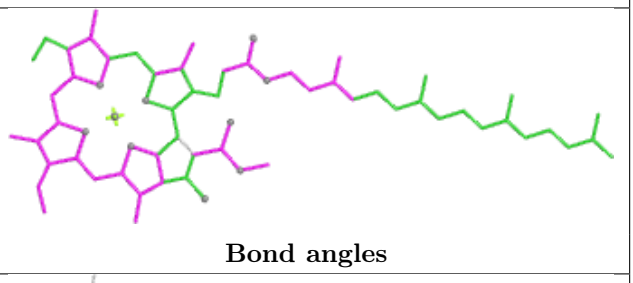


Rings

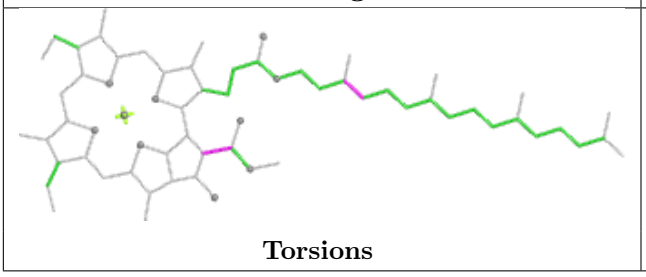
Ligand CLA B 610



Bond lengths



Bond angles



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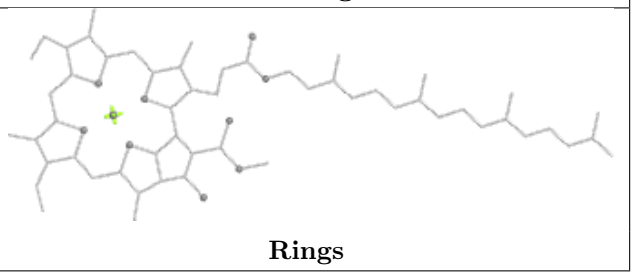
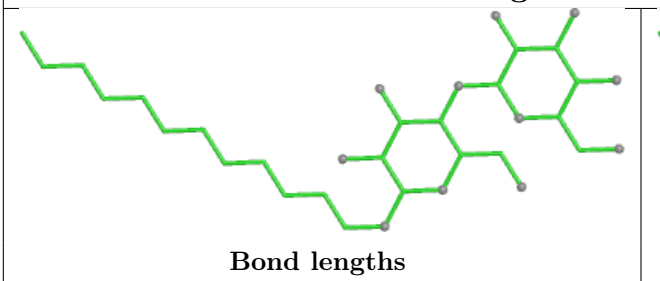


Rings

Ligand LMT m 1502



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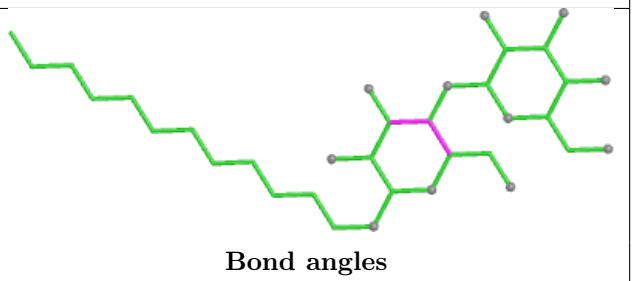
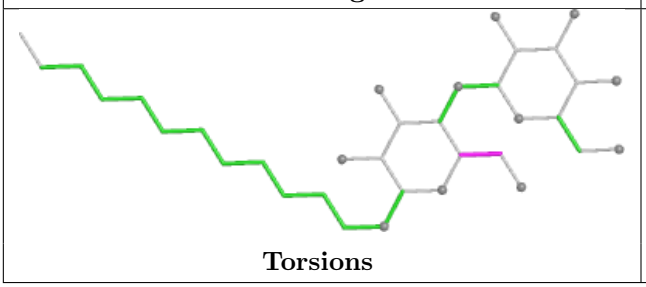
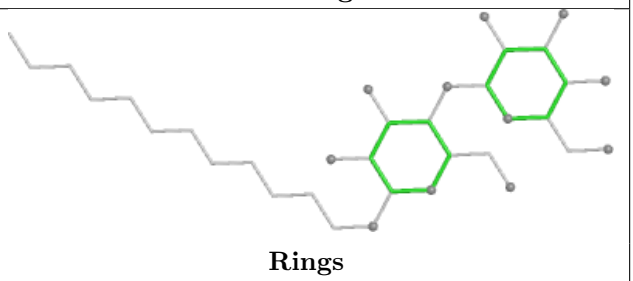


Bond angles

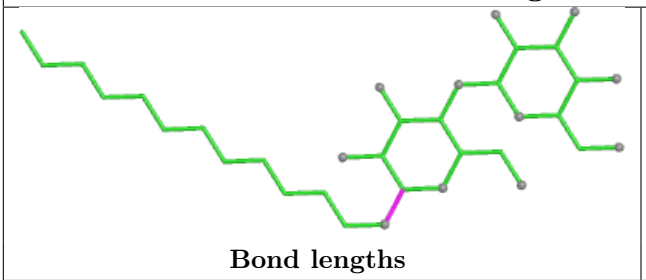


Torsions

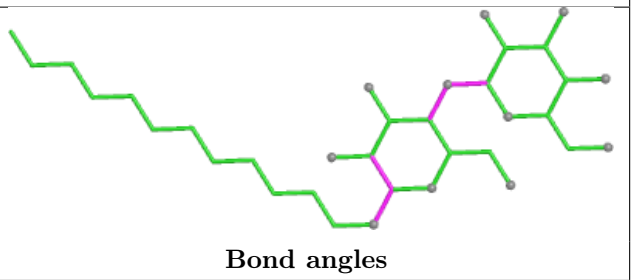


Rings

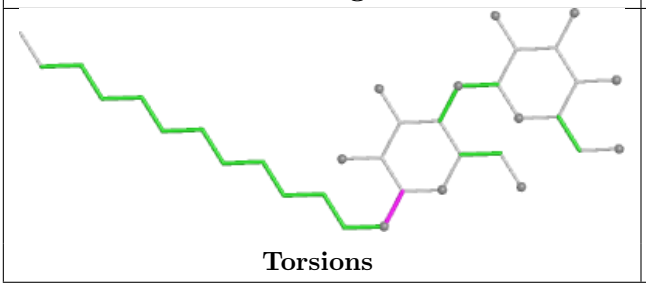
Ligand LMT c 922



Bond lengths



Bond angles



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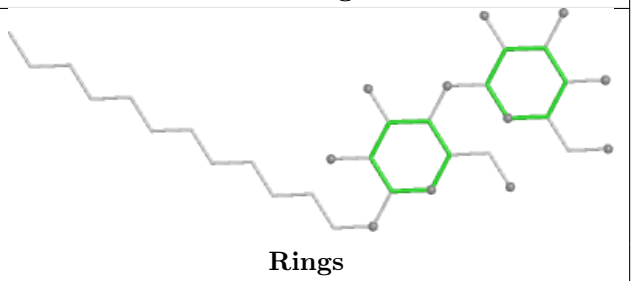
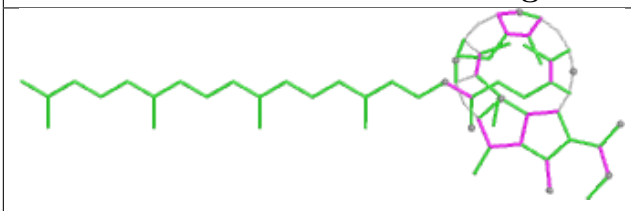


Rings

Ligand PHO A 409



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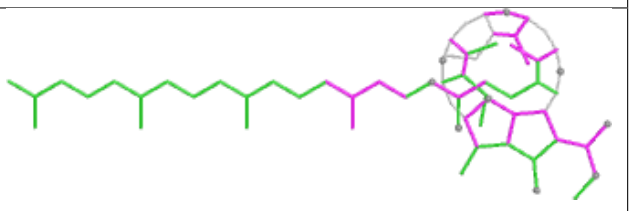
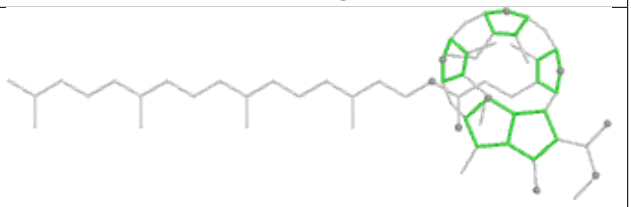


Bond angles

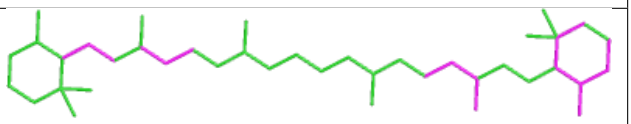
Torsions



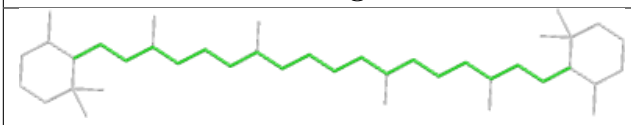
Rings

Ligand BCR b 622

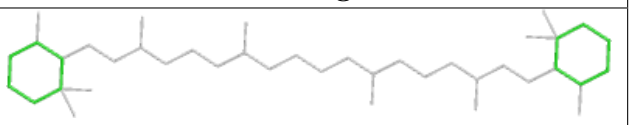
Bond lengths



Bond angles

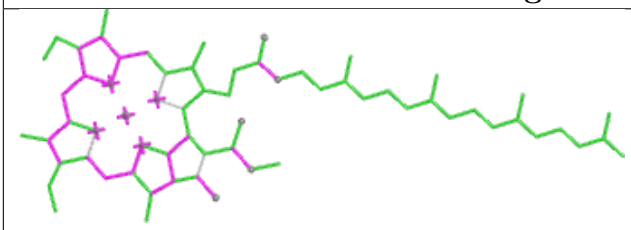


Torsions

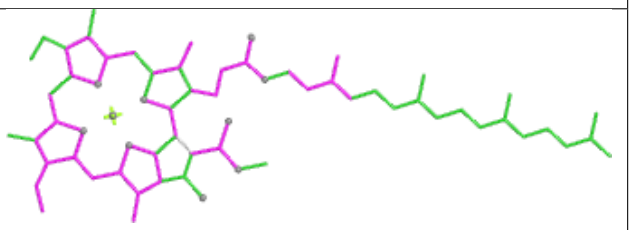


Rings

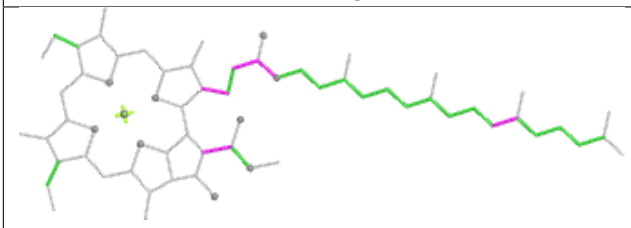
Ligand CLA C 512



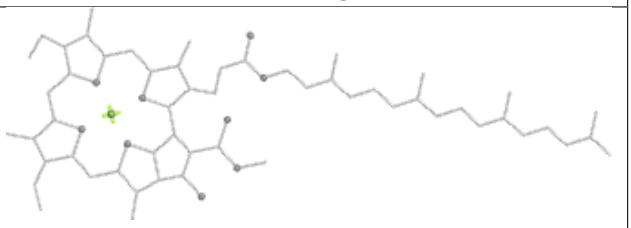
Bond lengths



Bond angles

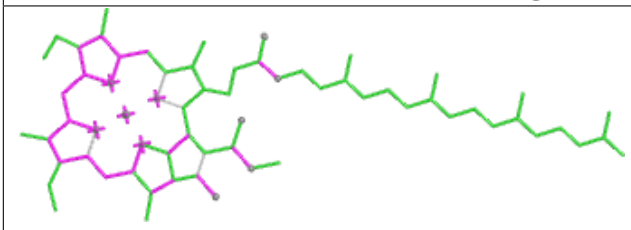


Torsions

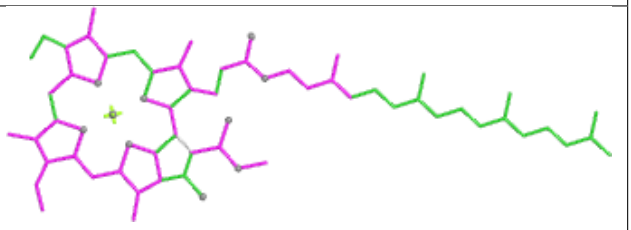


Rings

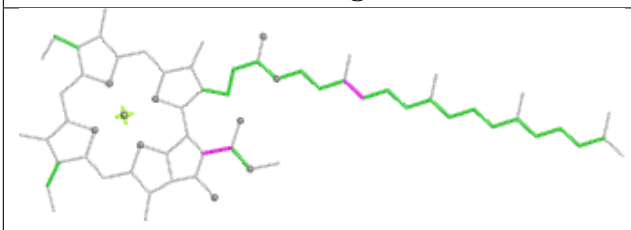
Ligand CLA b 613



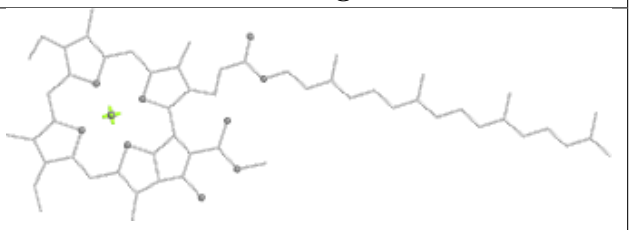
Bond lengths



Bond angles

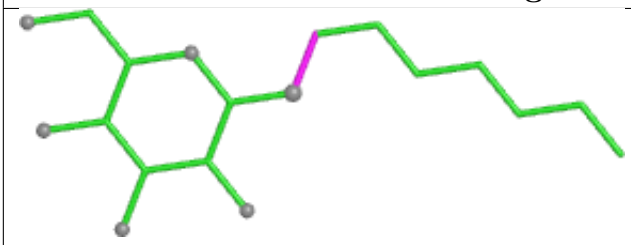


Torsions



Rings

Ligand HTG o 301



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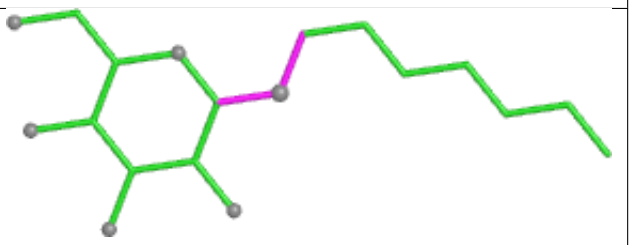
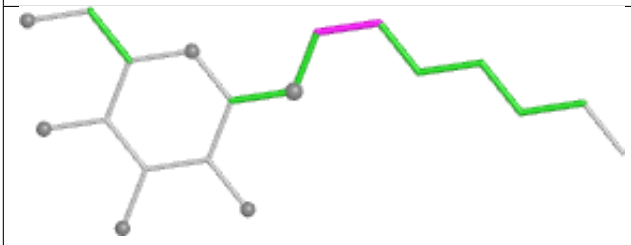


Bond angles



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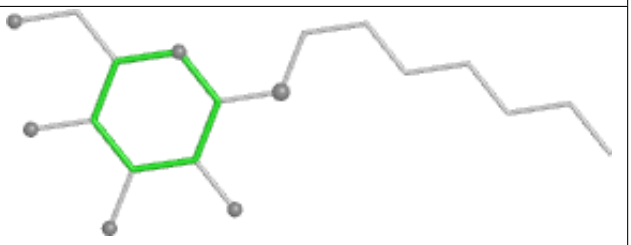
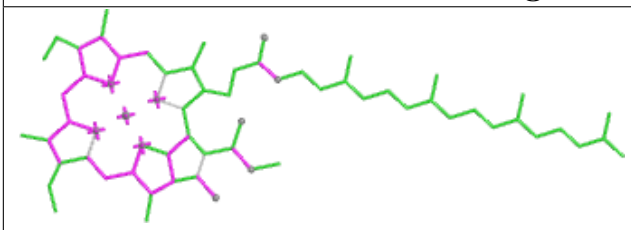
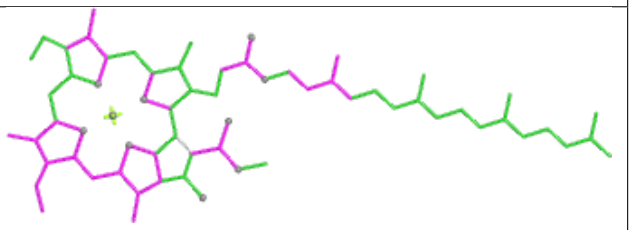


Rings

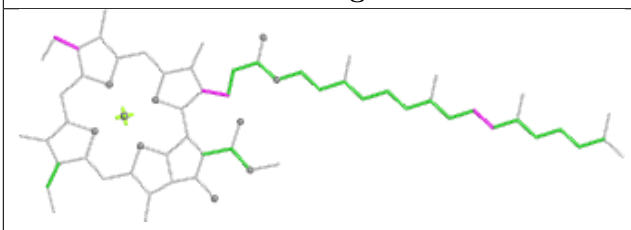
Ligand CLA C 513



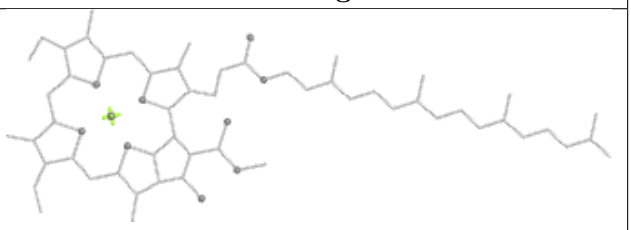
Bond lengths



Bond angles

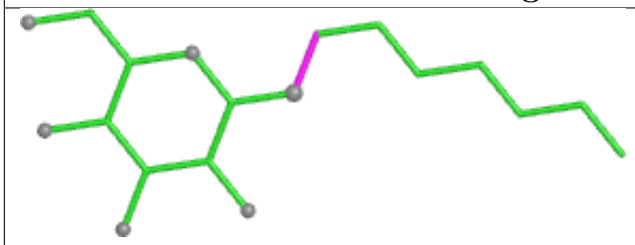


Torsions



Rings

Ligand HTG C 522



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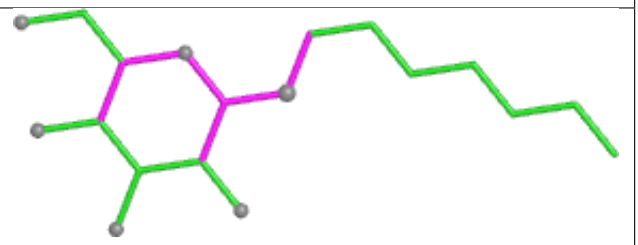
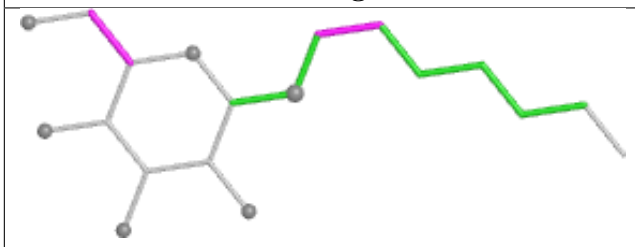
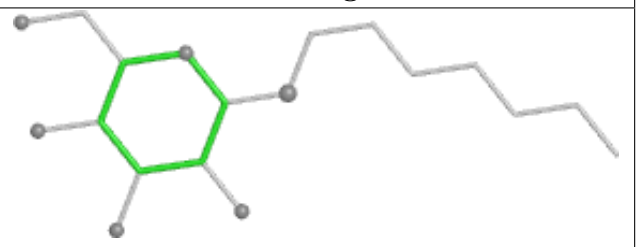


Bond angles

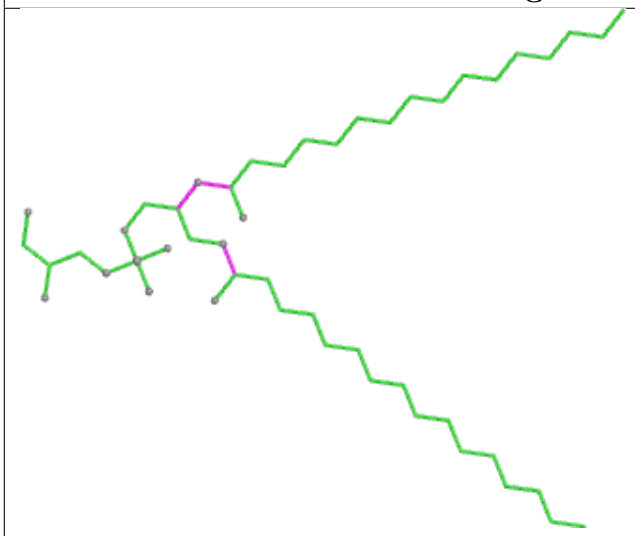


Torsions

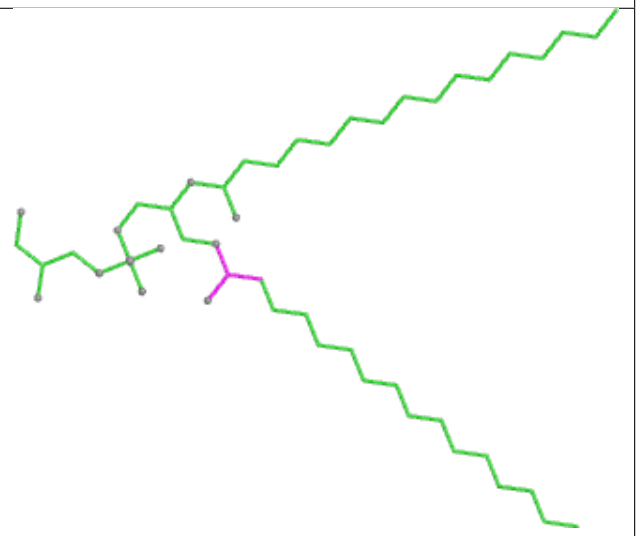


Rings

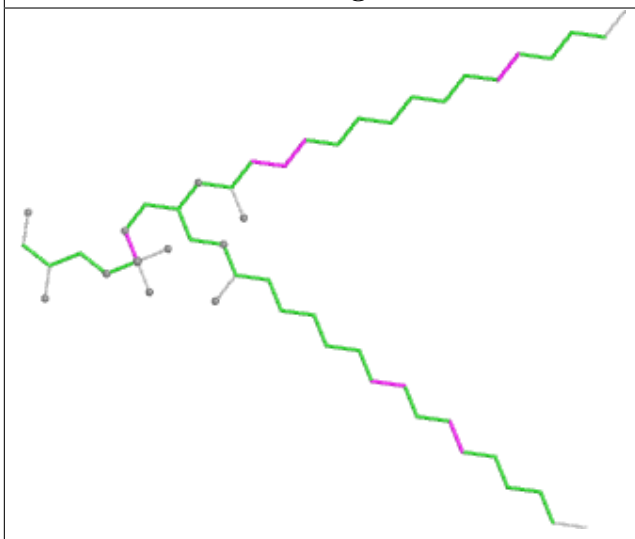
Ligand LHG L 101



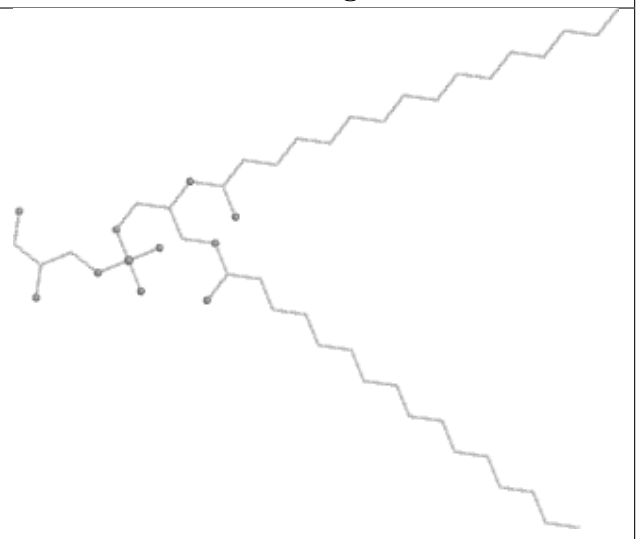
Bond lengths



Bond angles

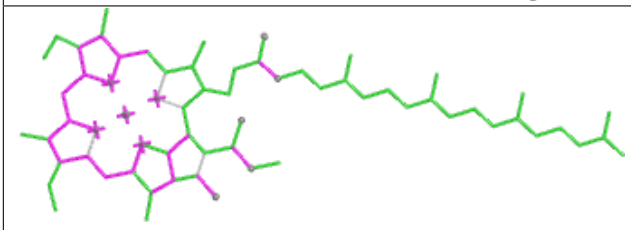


Torsions

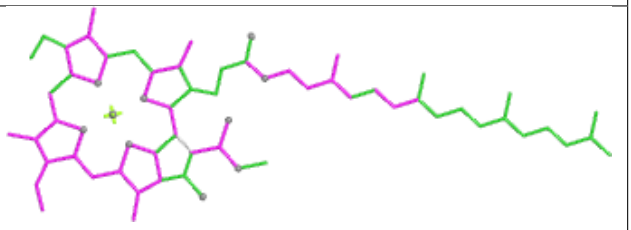


Rings

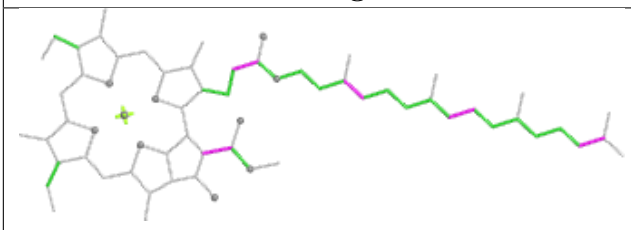
Ligand CLA C 510



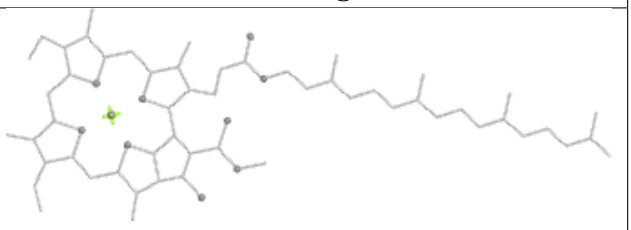
Bond lengths



Bond angles

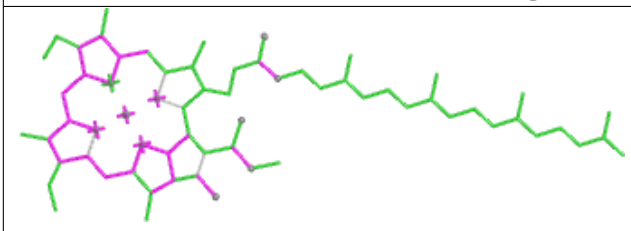


Torsions

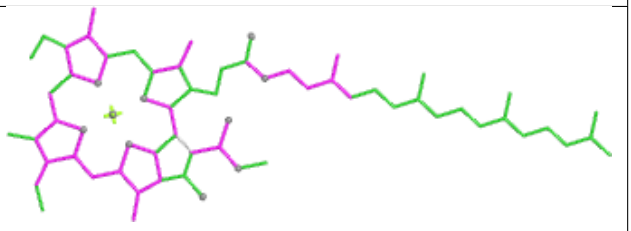


Rings

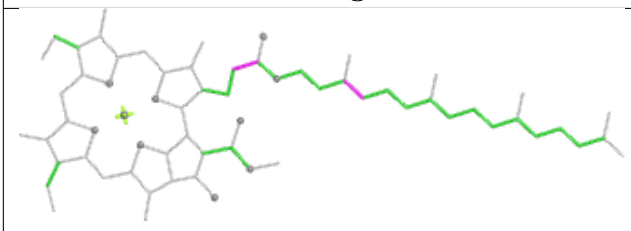
Ligand CLA C 505



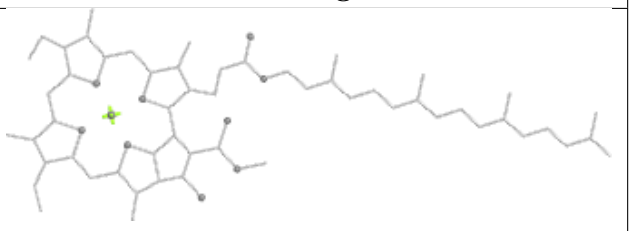
Bond lengths



Bond angles

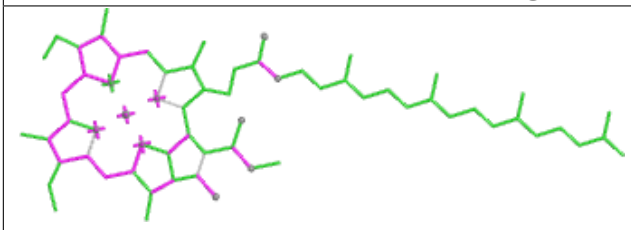


Torsions

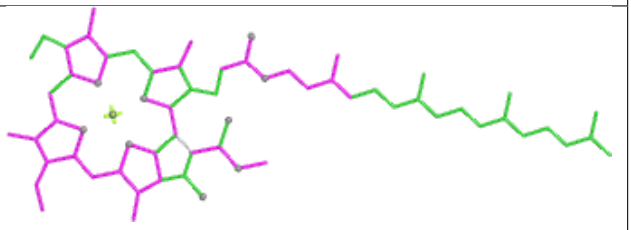


Rings

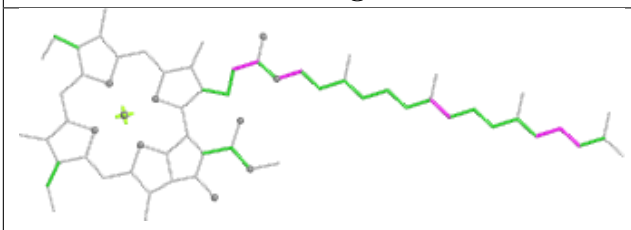
Ligand CLA B 614



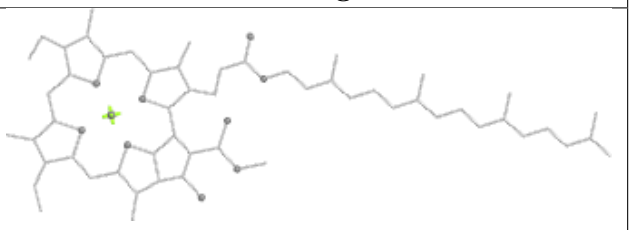
Bond lengths



Bond angles

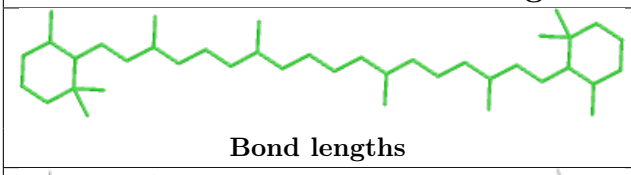


Torsions

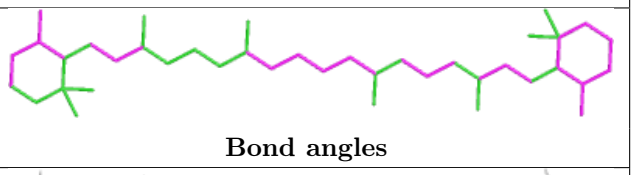


Rings

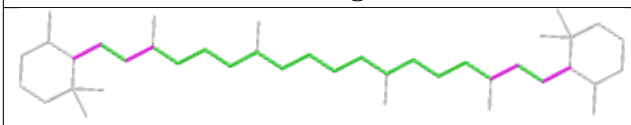
Ligand BCR d 406



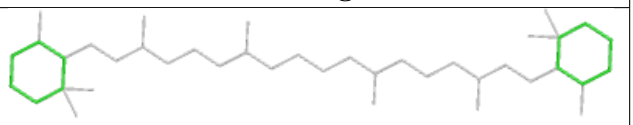
Bond lengths



Bond angles

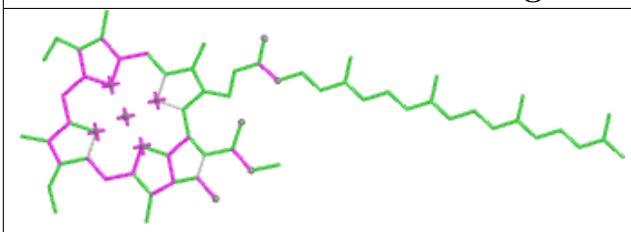


Torsions



Rings

Ligand CLA B 616



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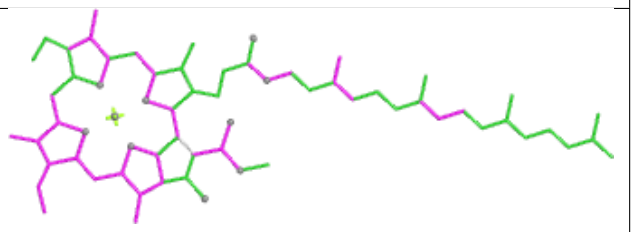
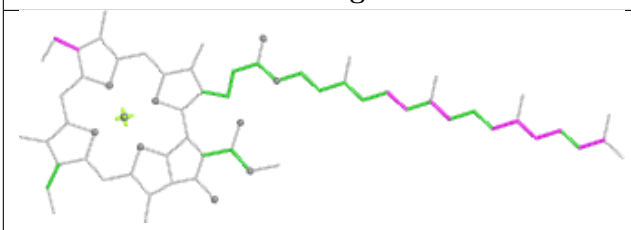
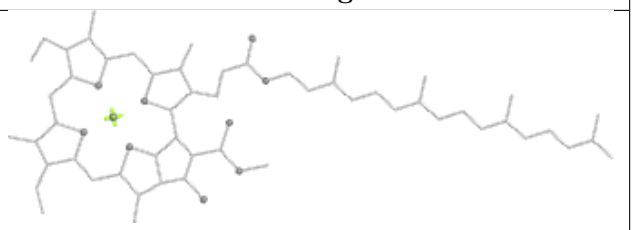


Bond angles

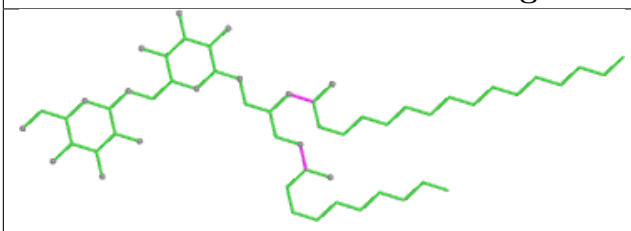


Torsions

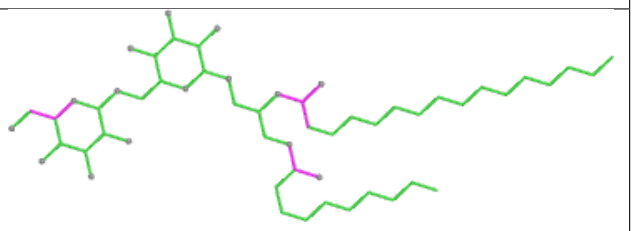


Rings

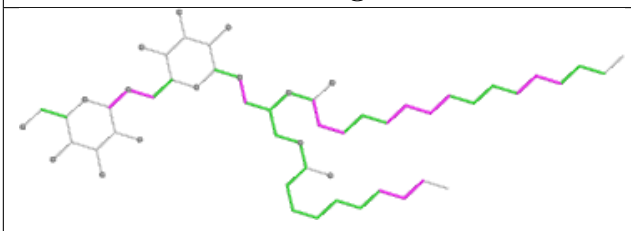
Ligand DGD C 517



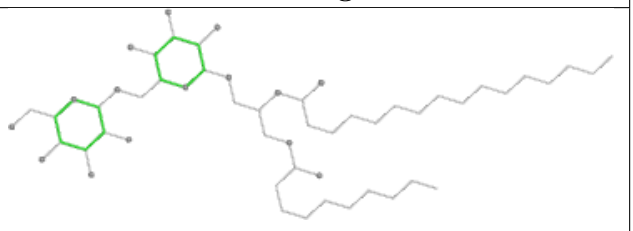
Bond lengths



Bond angles

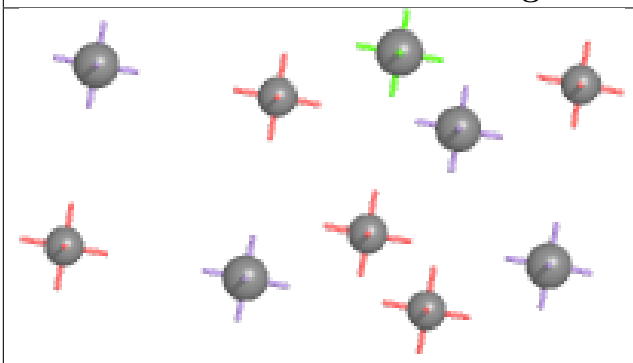


Torsions



Rings

Ligand OEX A 401



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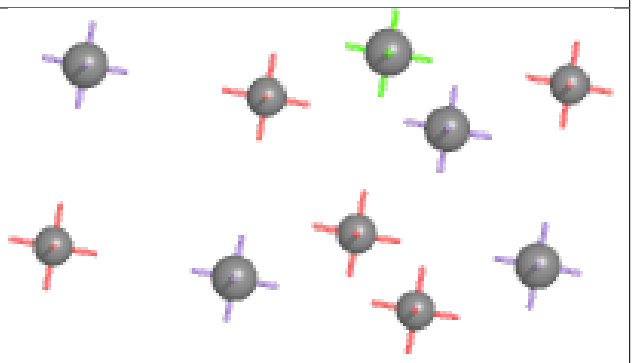
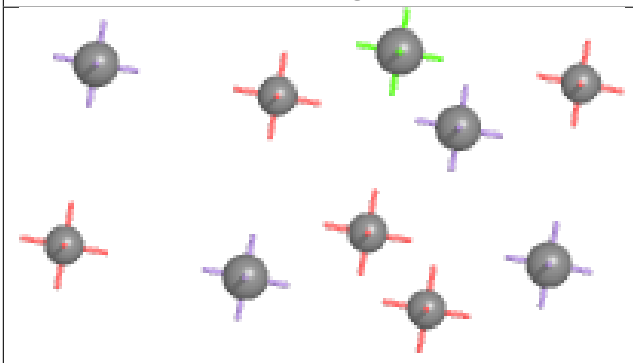
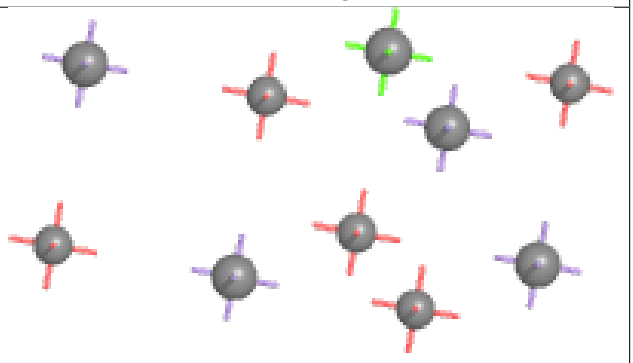


Bond angles

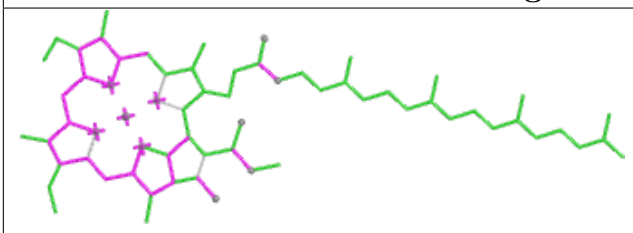


Torsions

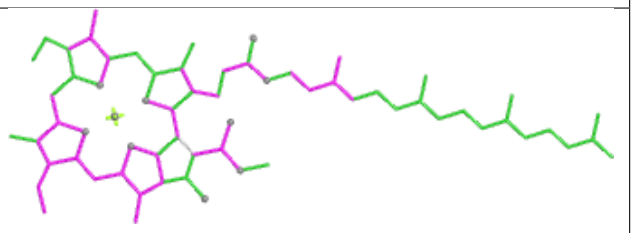


Rings

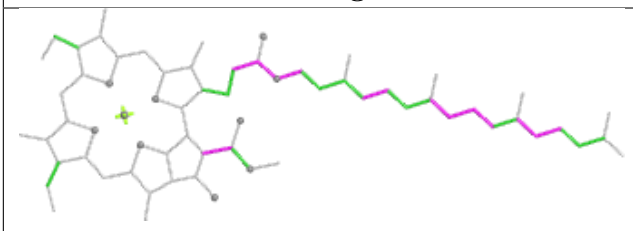
Ligand CLA B 602



Bond lengths



Bond angles



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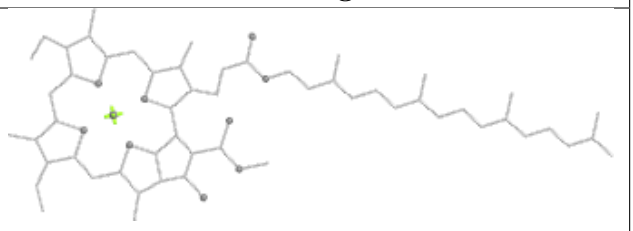
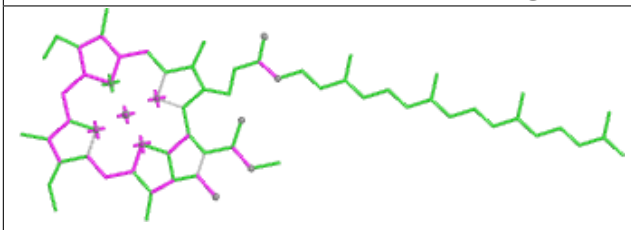


Rings

Ligand CLA B 606



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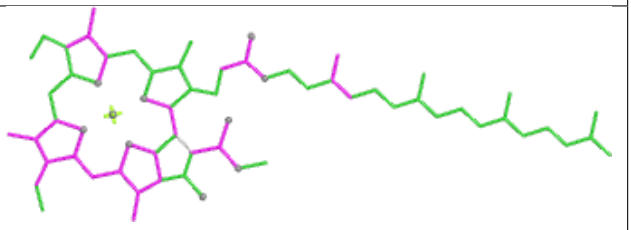
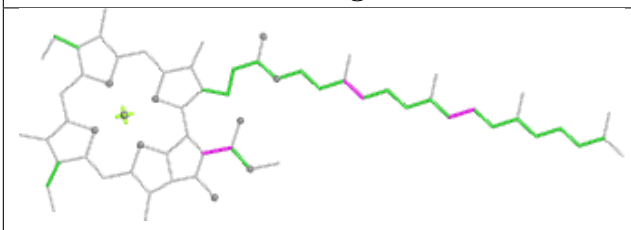


Bond angles



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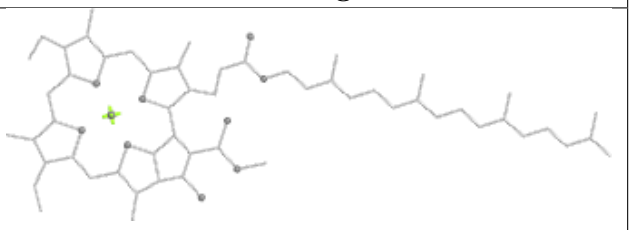
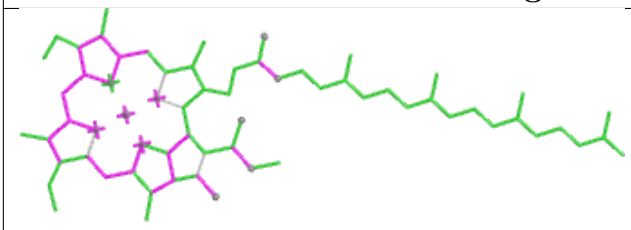
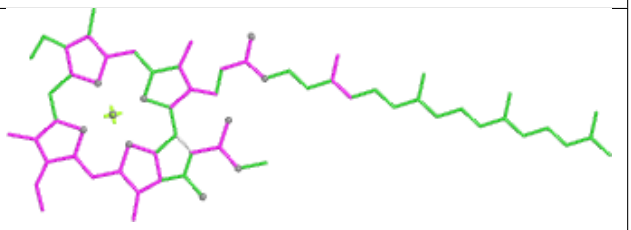


Rings

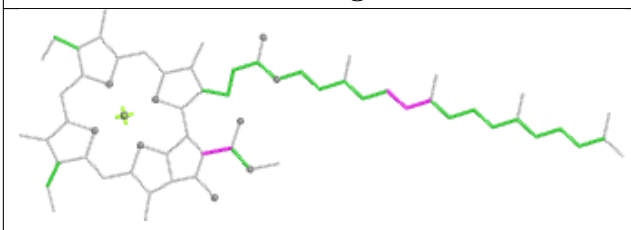
Ligand CLA B 604



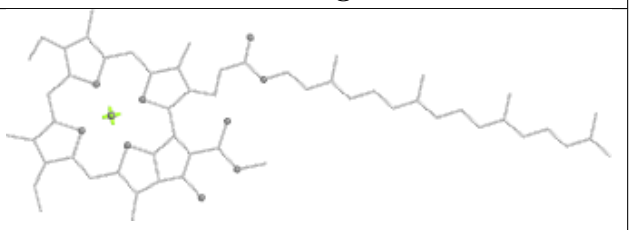
Bond lengths



Bond angles

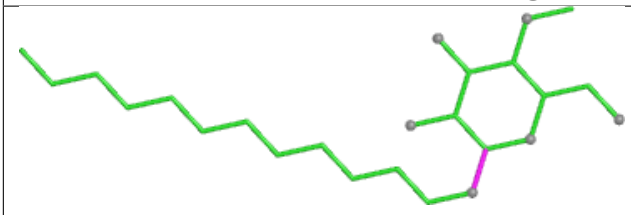


Torsions

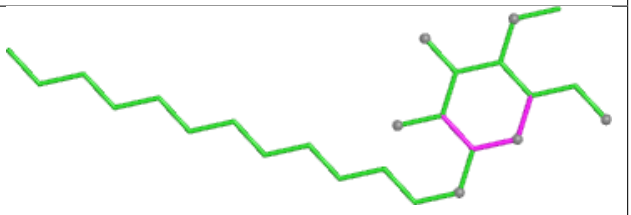


Rings

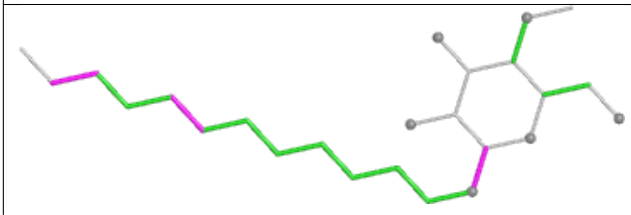
Ligand LMT b 625



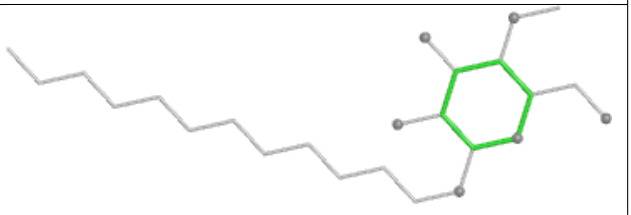
Bond lengths



Bond angles

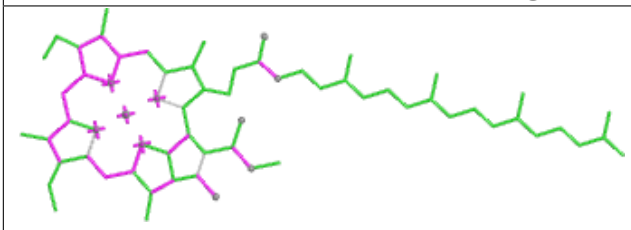


Torsions

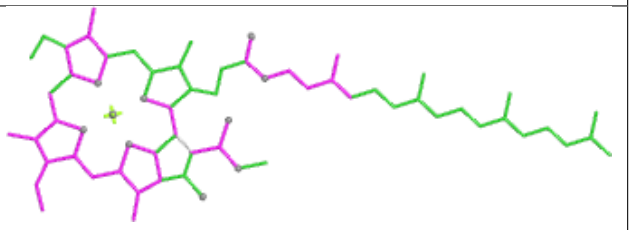


Rings

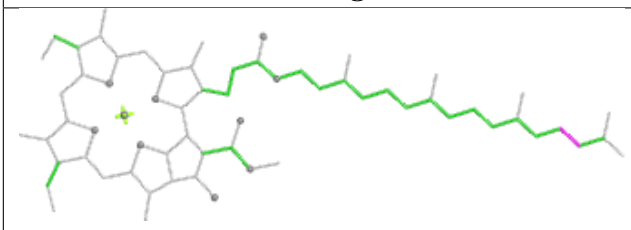
Ligand CLA B 612



Bond lengths



Bond angles



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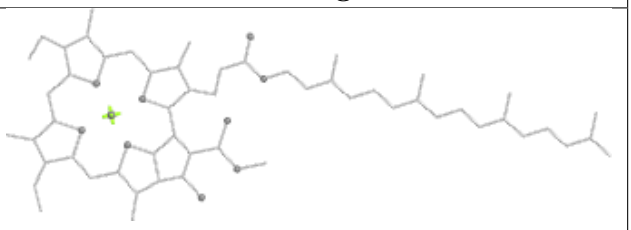
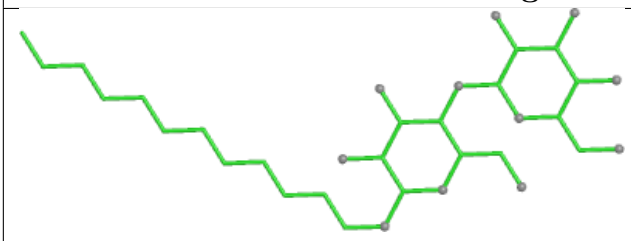


Rings

Ligand LMT B 623



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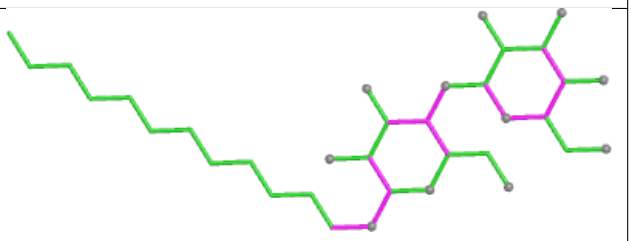
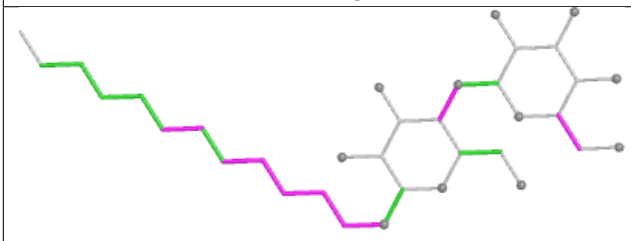
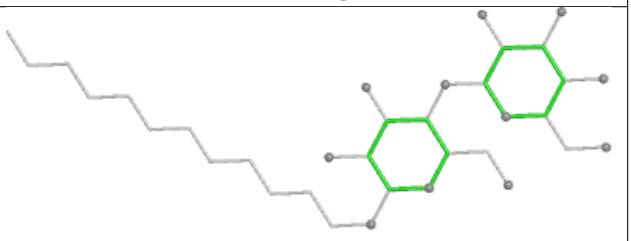


Bond angles

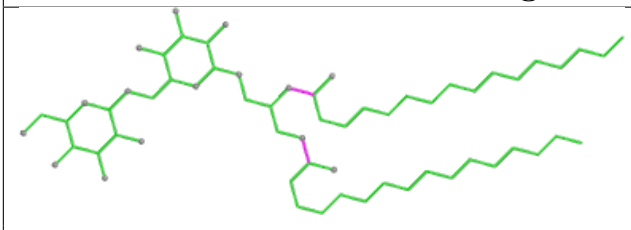


Torsions

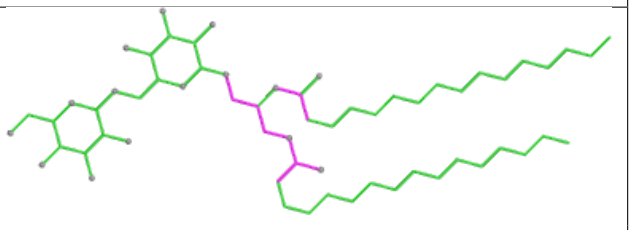


Rings

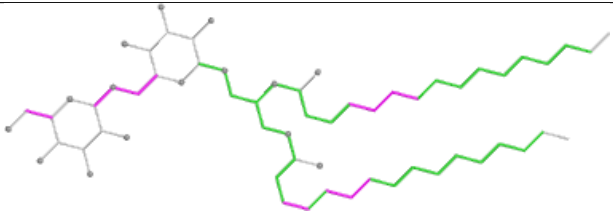
Ligand DGD C 516



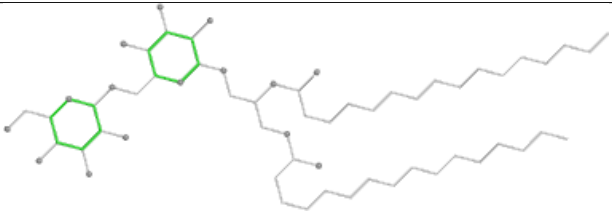
Bond lengths



Bond angles

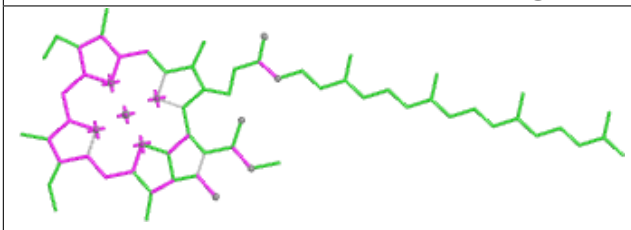


Torsions



Rings

Ligand CLA c 908



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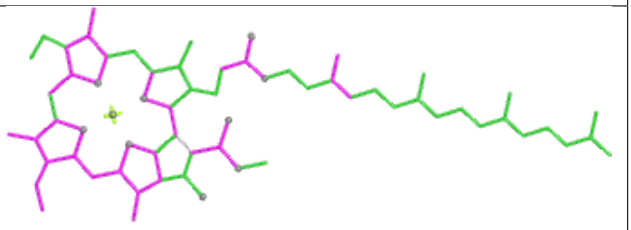
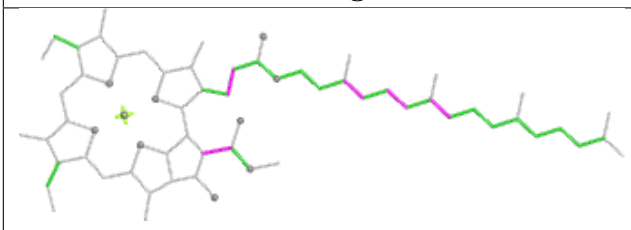
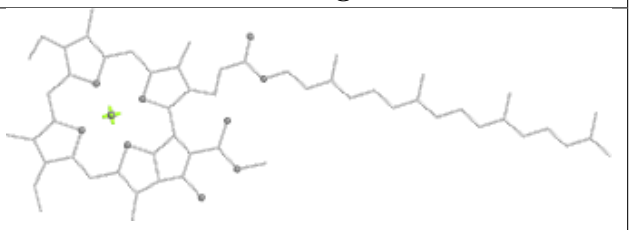


Bond angles

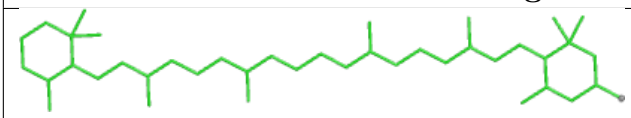


Torsions

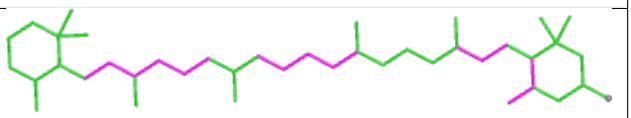


Rings

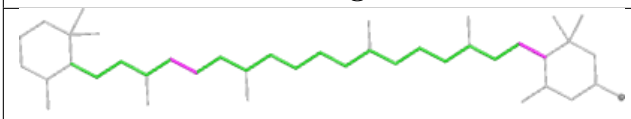
Ligand RRX h 101



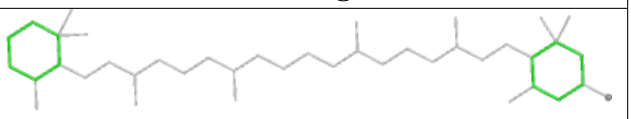
Bond lengths



Bond angles

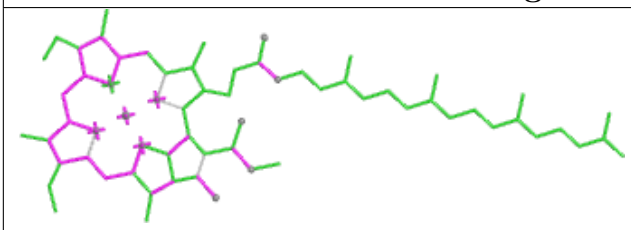


Torsions

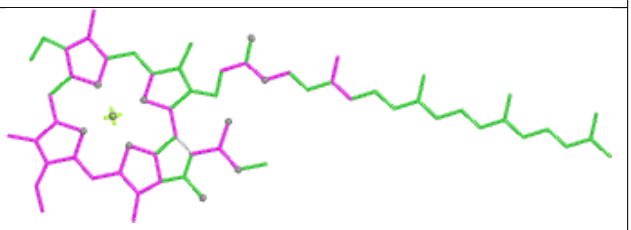


Rings

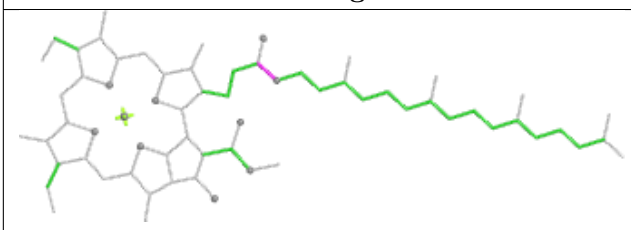
Ligand CLA C 511



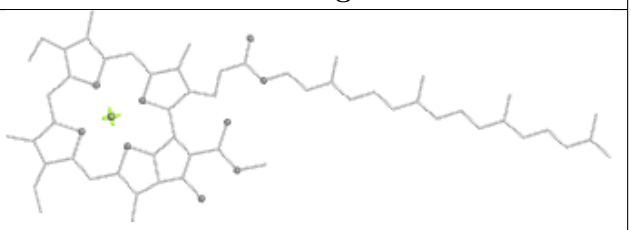
Bond lengths



Bond angles

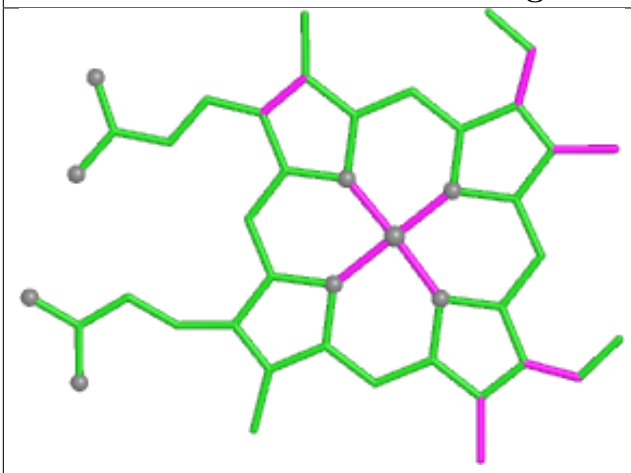


Torsions

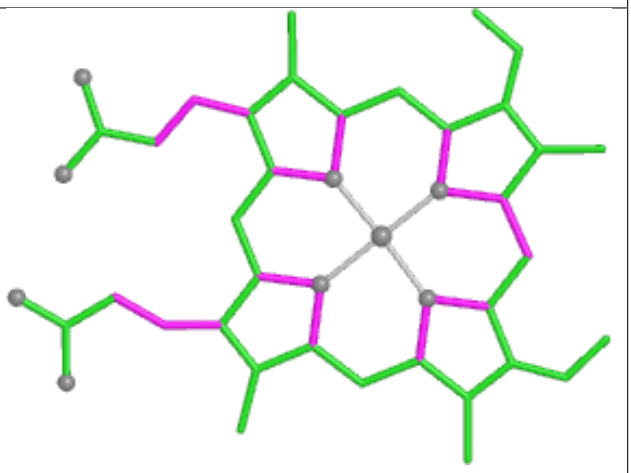


Rings

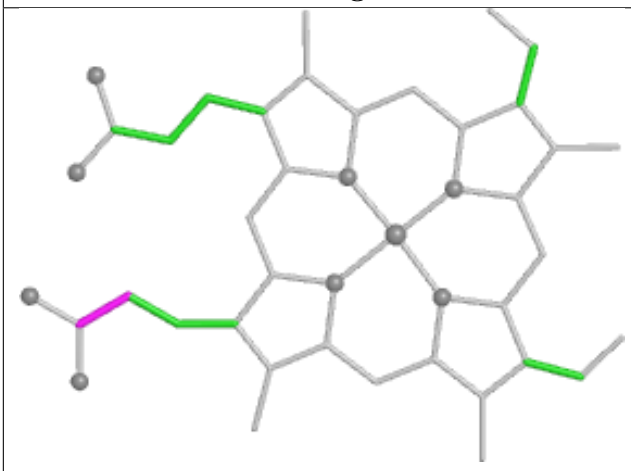
Ligand HEM f 101



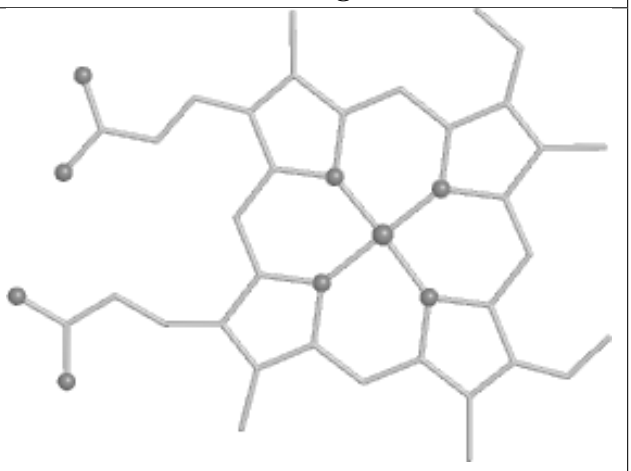
Bond lengths



Bond angles

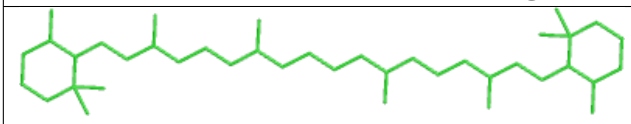


Torsions

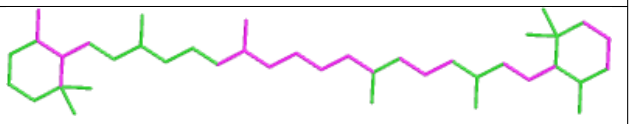


Rings

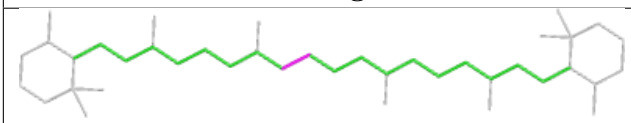
Ligand BCR T 702



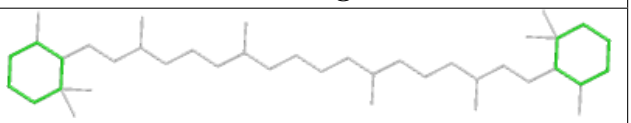
Bond lengths



Bond angles

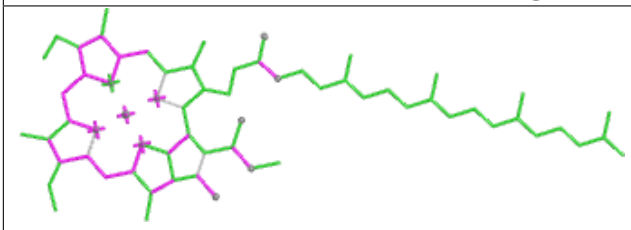


Torsions

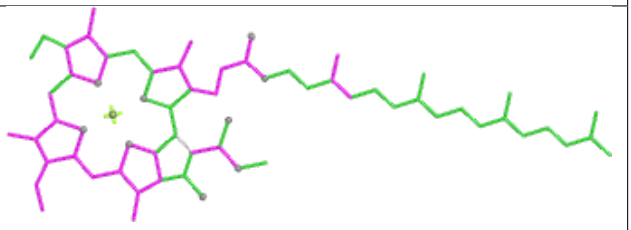


Rings

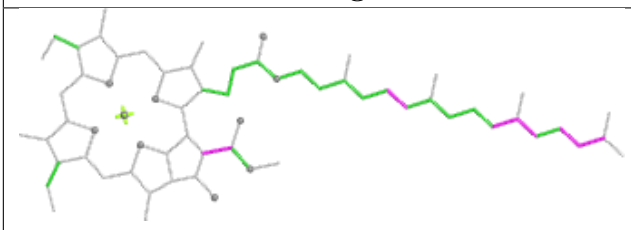
Ligand CLA b 614



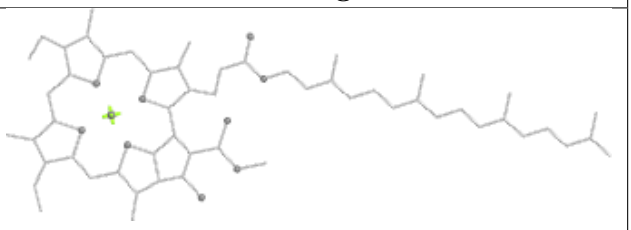
Bond lengths



Bond angles

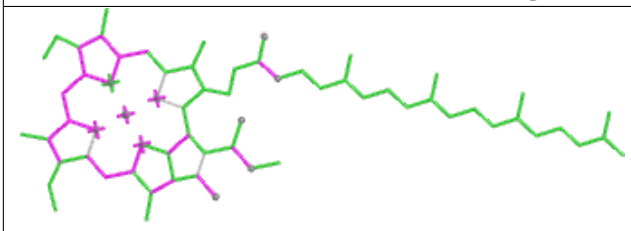


Torsions

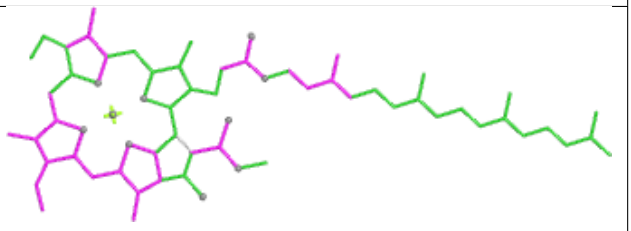


Rings

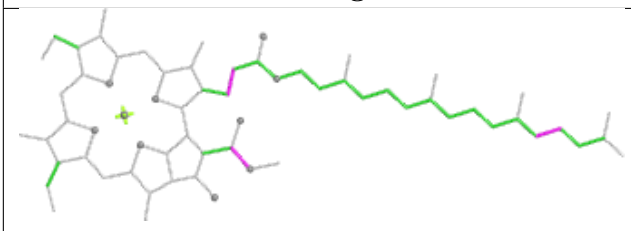
Ligand CLA C 501



Bond lengths



Bond angles



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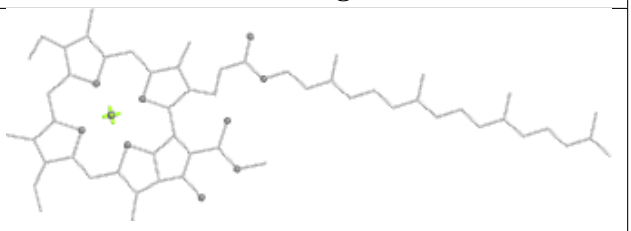
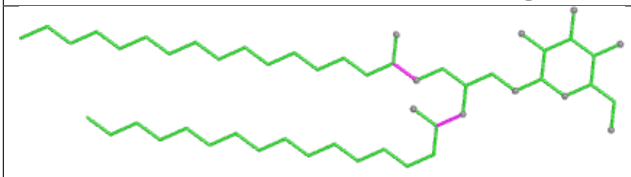


Rings

Ligand LMG B 622



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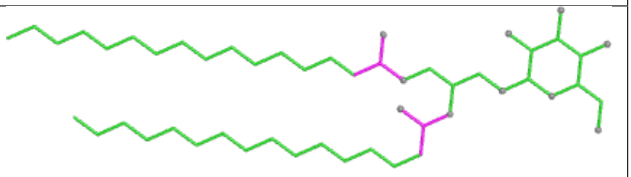
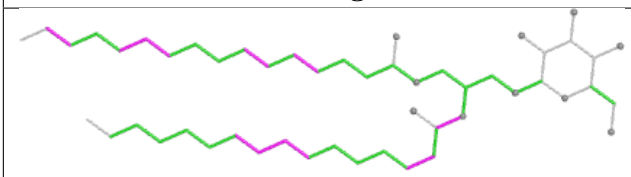
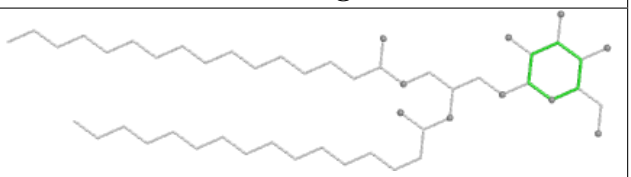


Bond angles

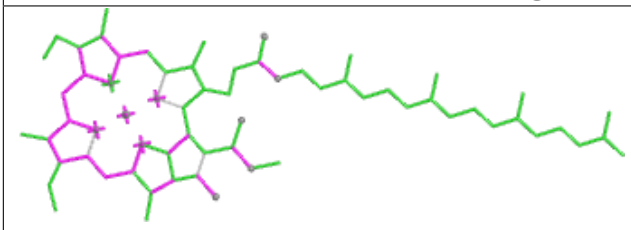


Torsions

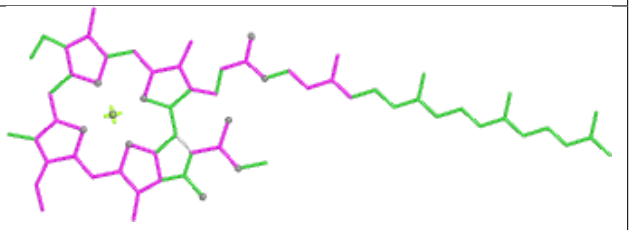


Rings

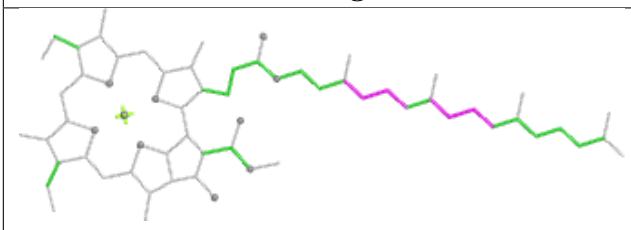
Ligand CLA a 413



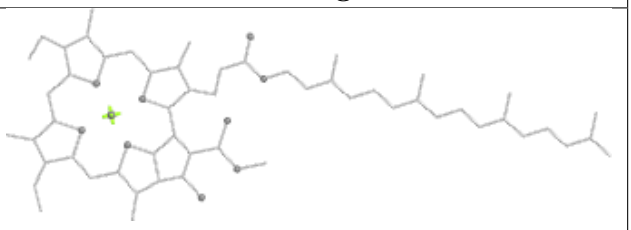
Bond lengths



Bond angles

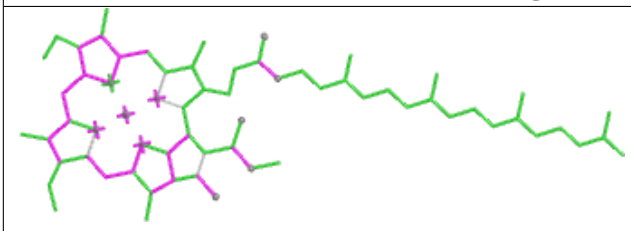


Torsions

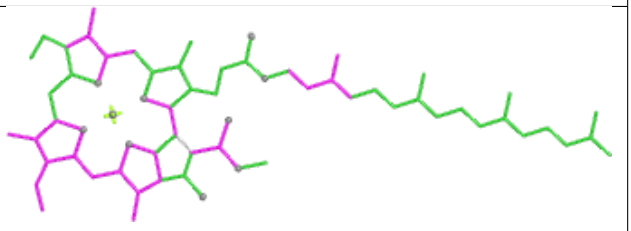


Rings

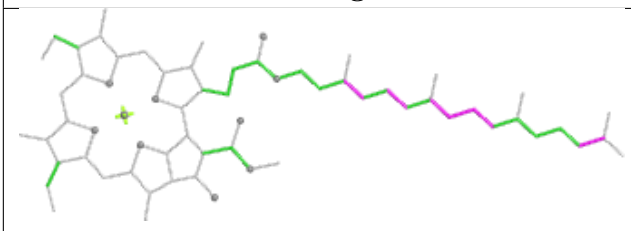
Ligand CLA b 619



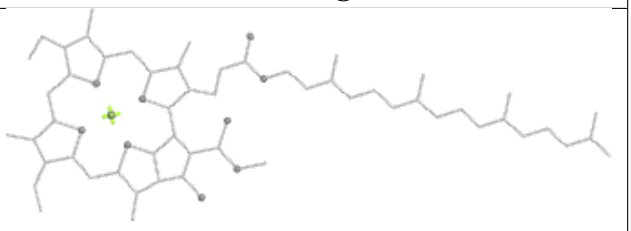
Bond lengths



Bond angles

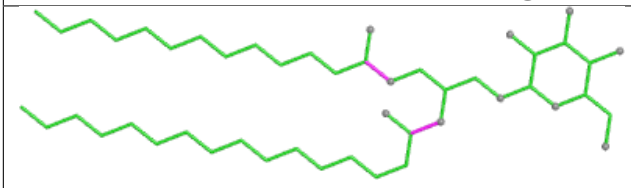


Torsions

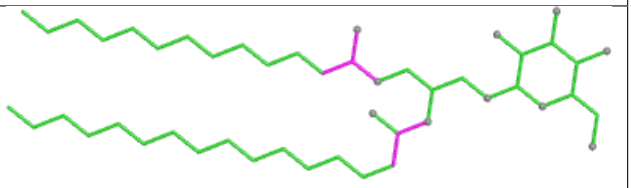


Rings

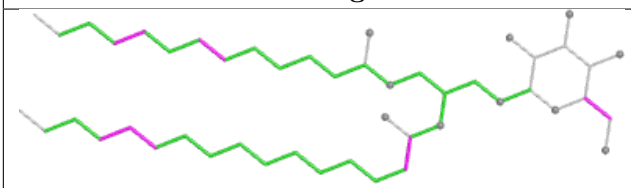
Ligand LMG D 410



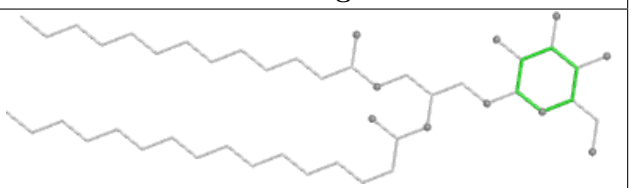
Bond lengths



Bond angles

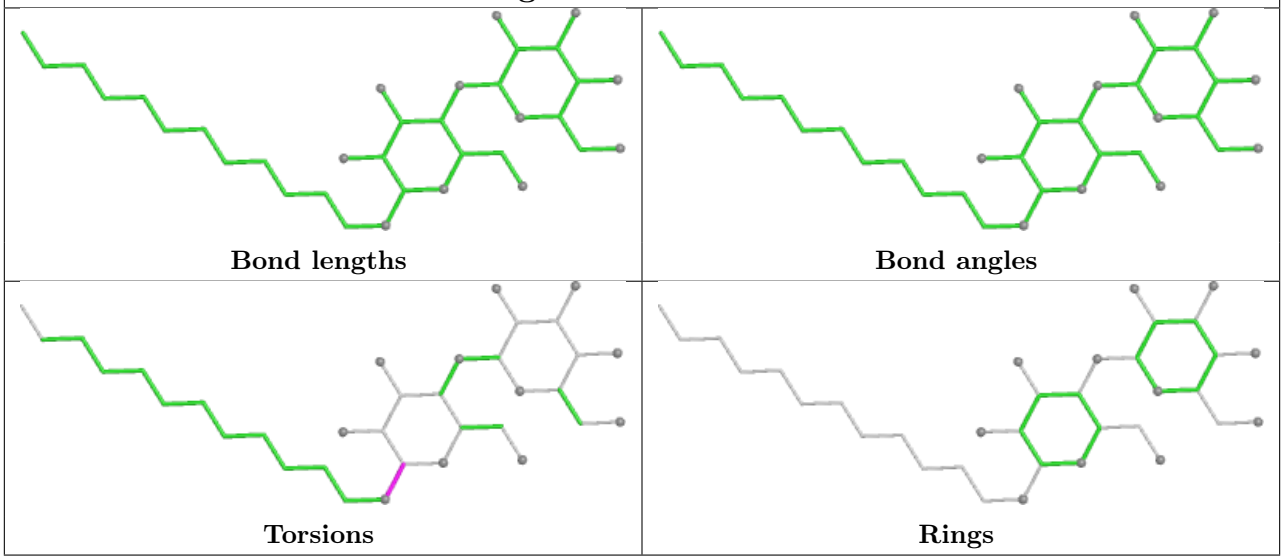


Torsions

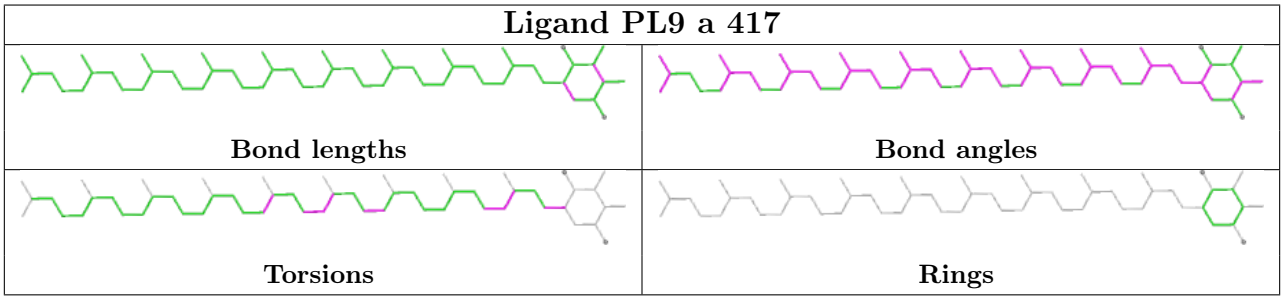


Rings

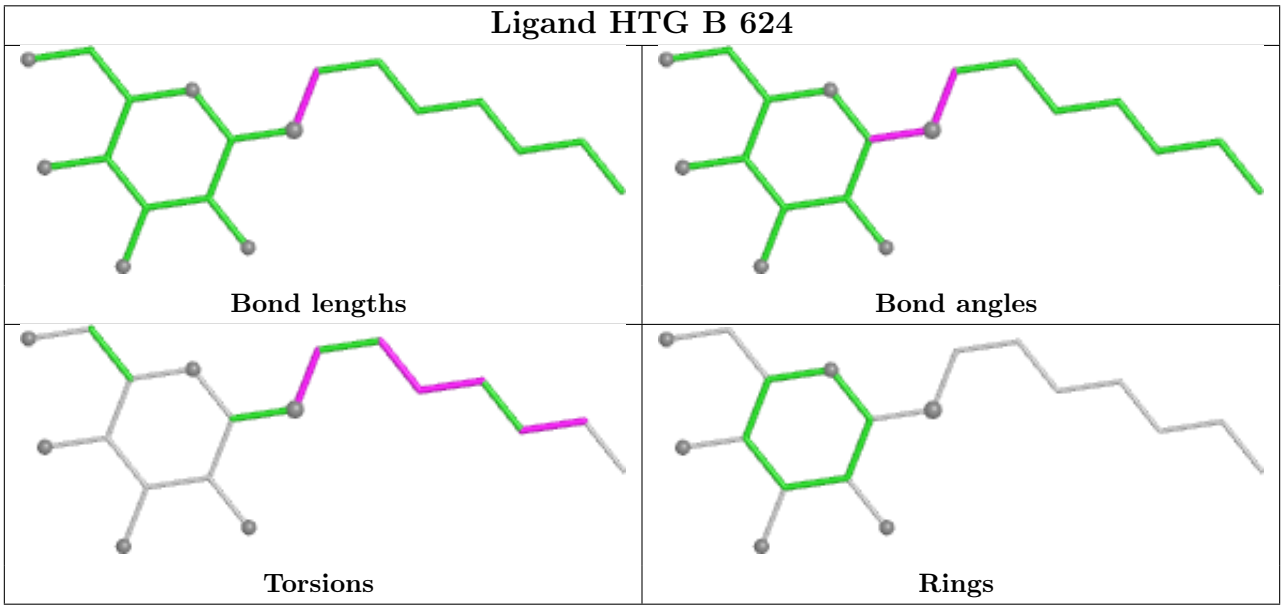
Ligand LMT M 303



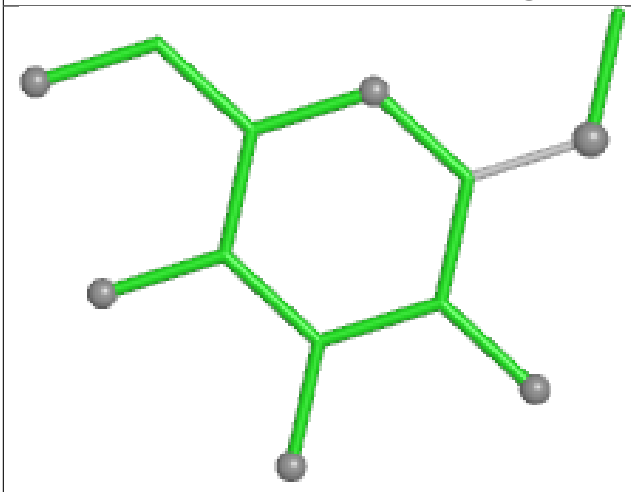
Ligand PL9 a 417



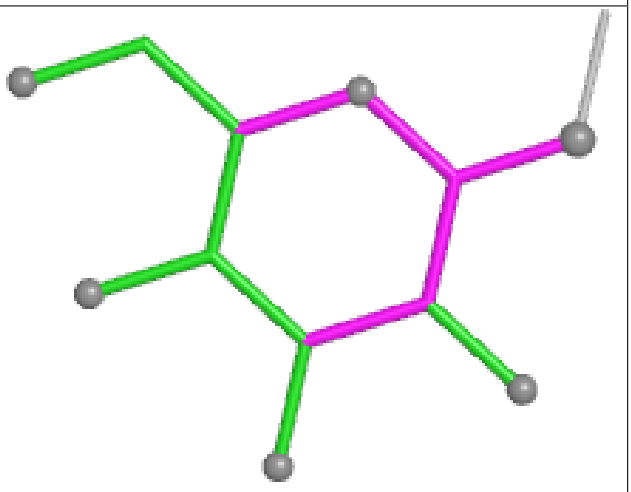
Ligand HTG B 624



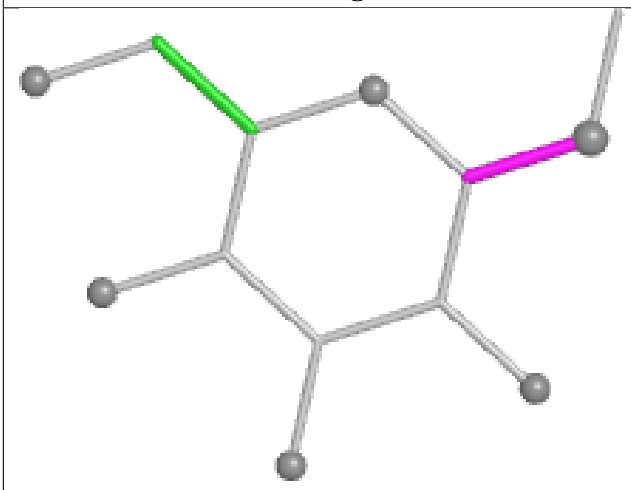
Ligand HTG V 203



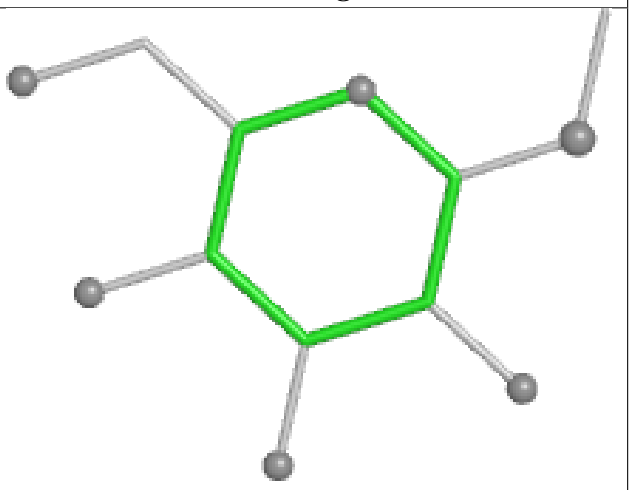
Bond lengths



Bond angles

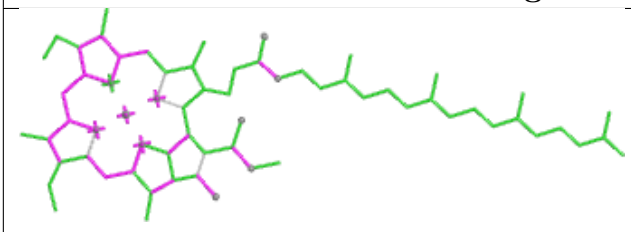


Torsions

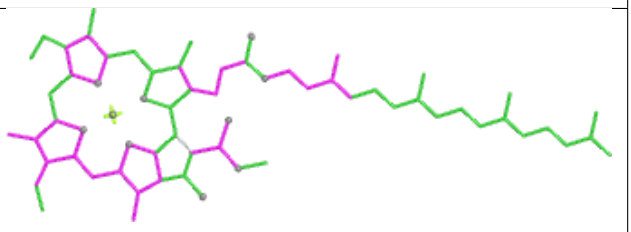


Rings

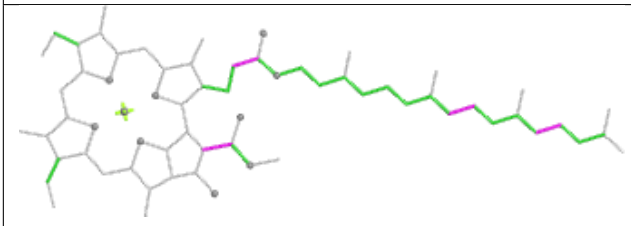
Ligand CLA B 613



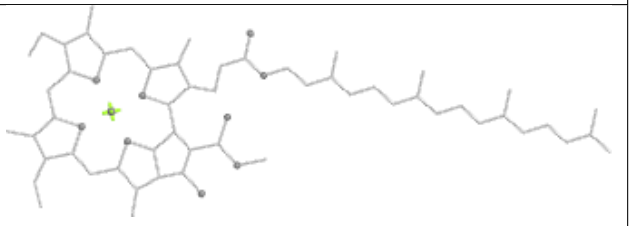
Bond lengths



Bond angles

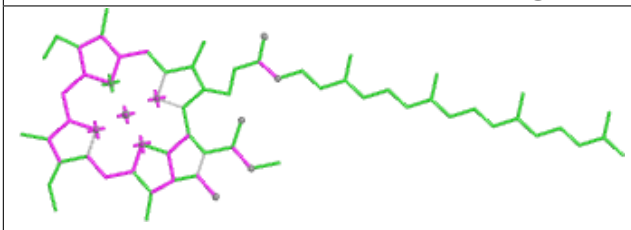


Torsions

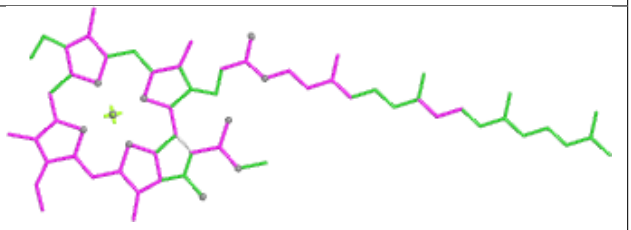


Rings

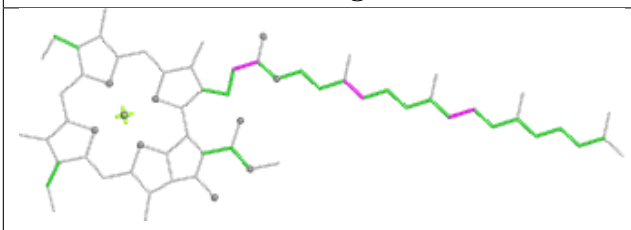
Ligand CLA c 911



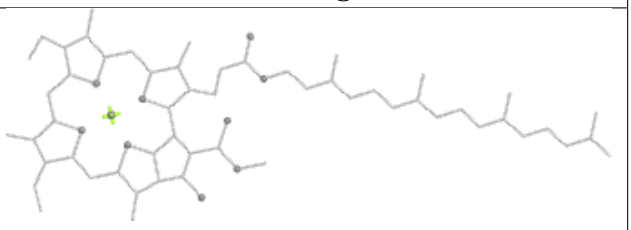
Bond lengths



Bond angles

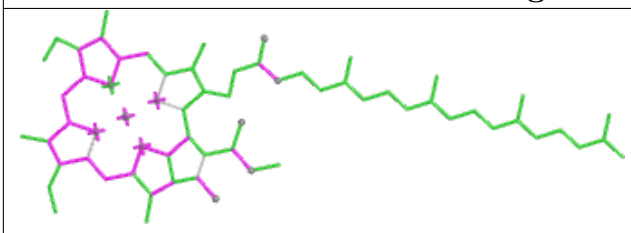


Torsions

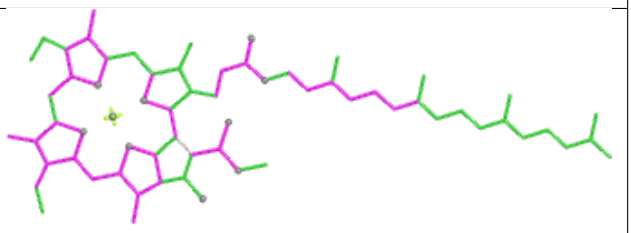


Rings

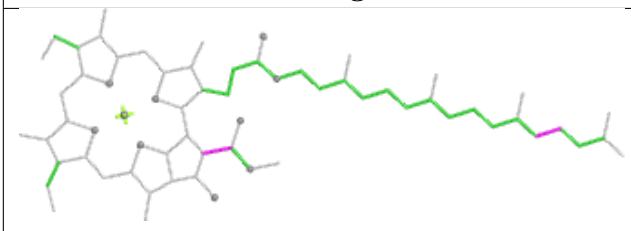
Ligand CLA b 608



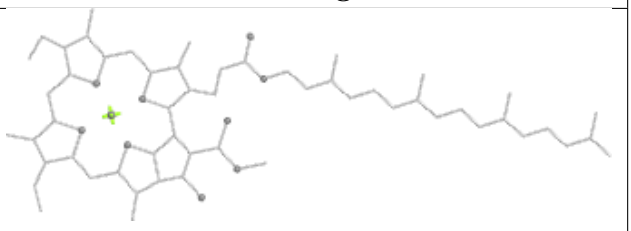
Bond lengths



Bond angles

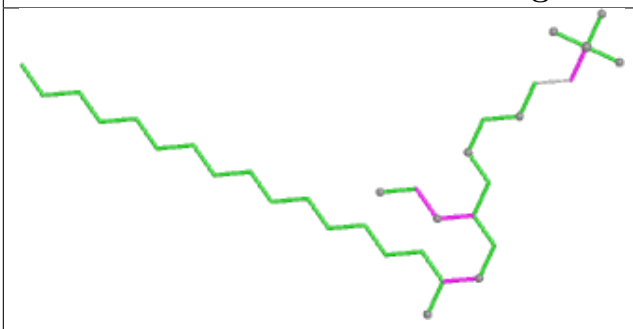


Torsions

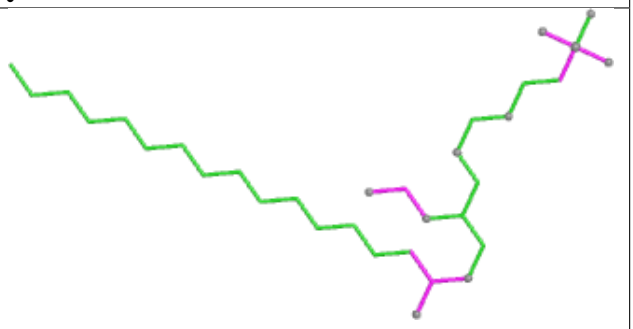


Rings

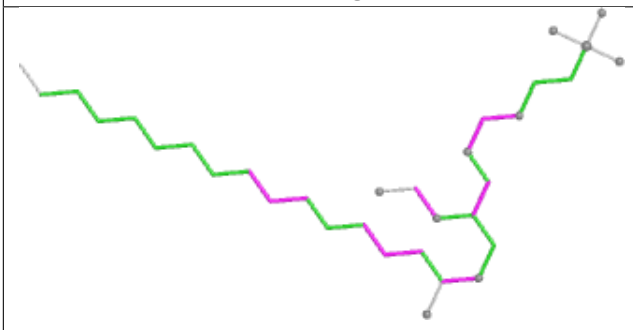
Ligand SQD f 102



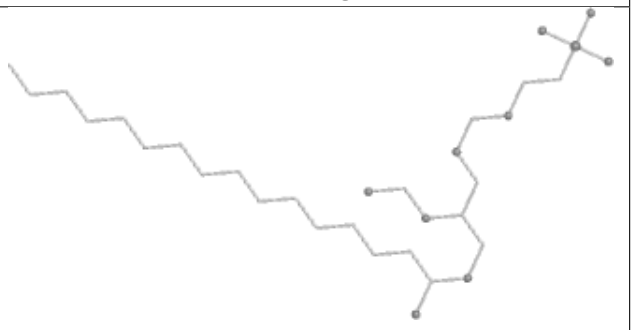
Bond lengths



Bond angles

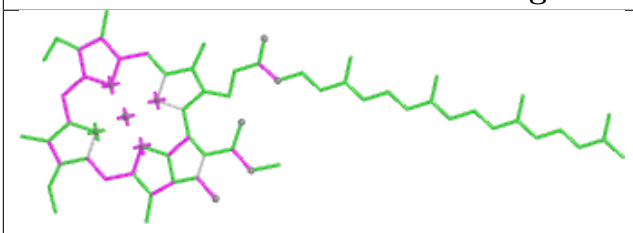


Torsions

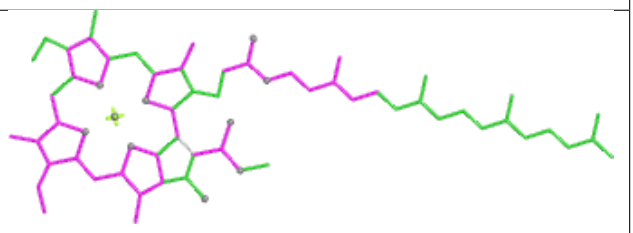


Rings

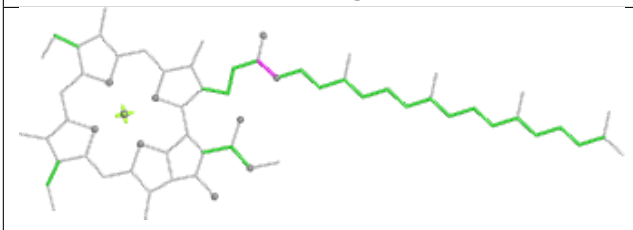
Ligand CLA c 912



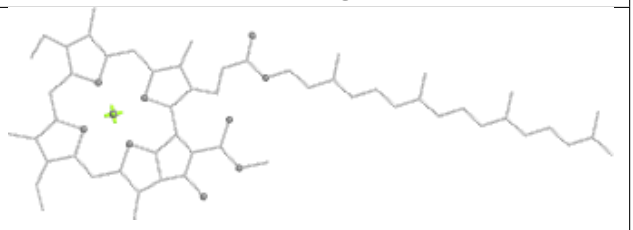
Bond lengths



Bond angles

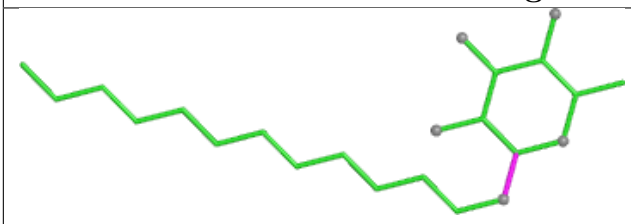


Torsions

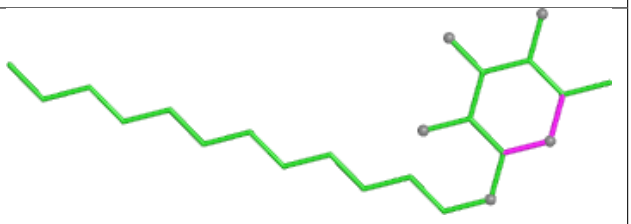


Rings

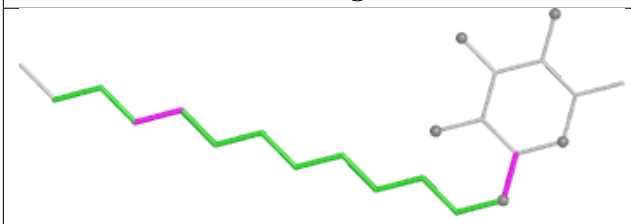
Ligand LMT J 102



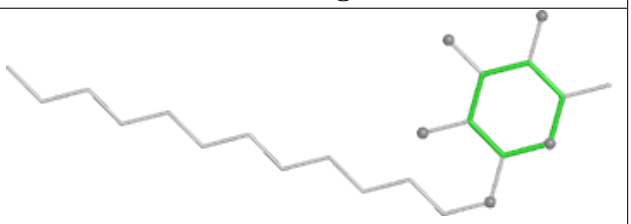
Bond lengths



Bond angles

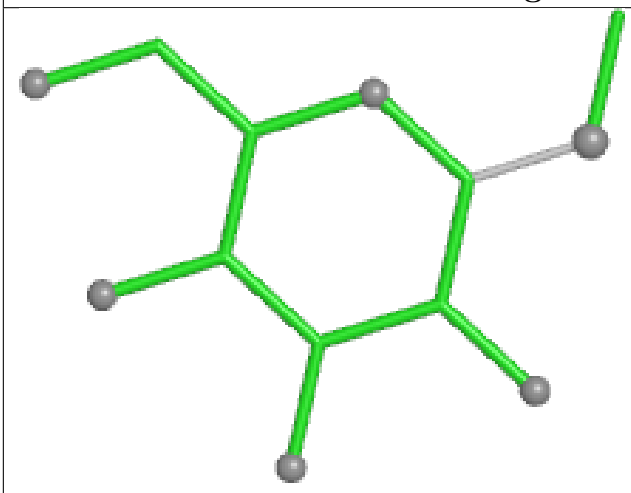


Torsions



Rings

Ligand HTG v 205



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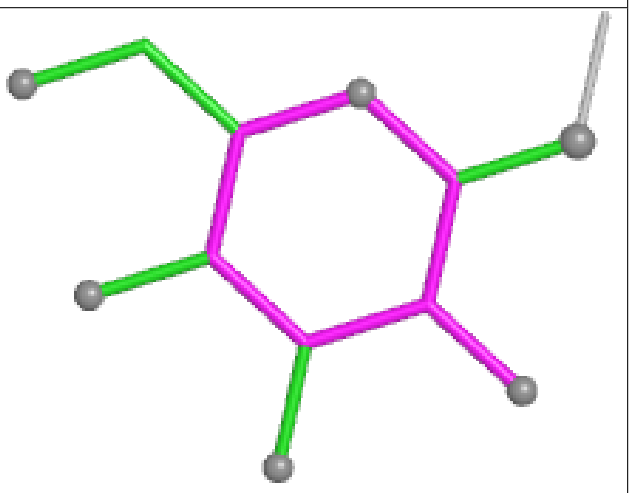
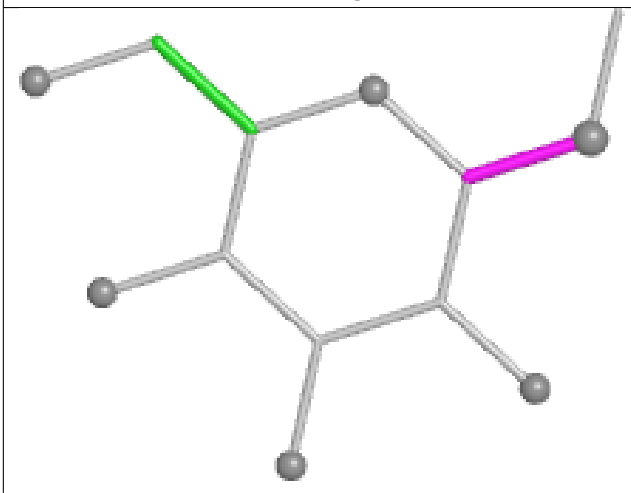
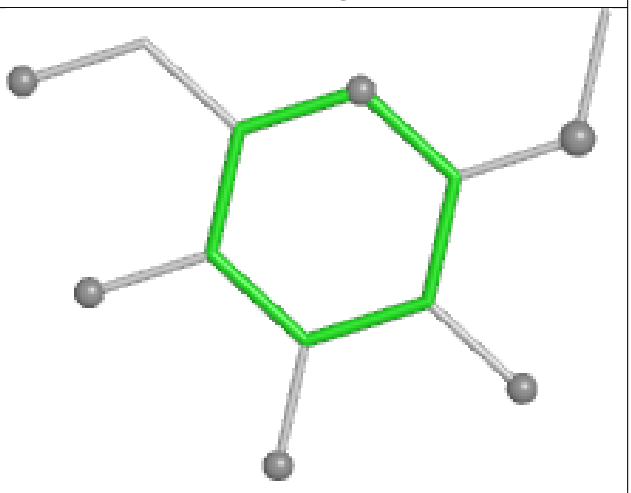


Bond angles

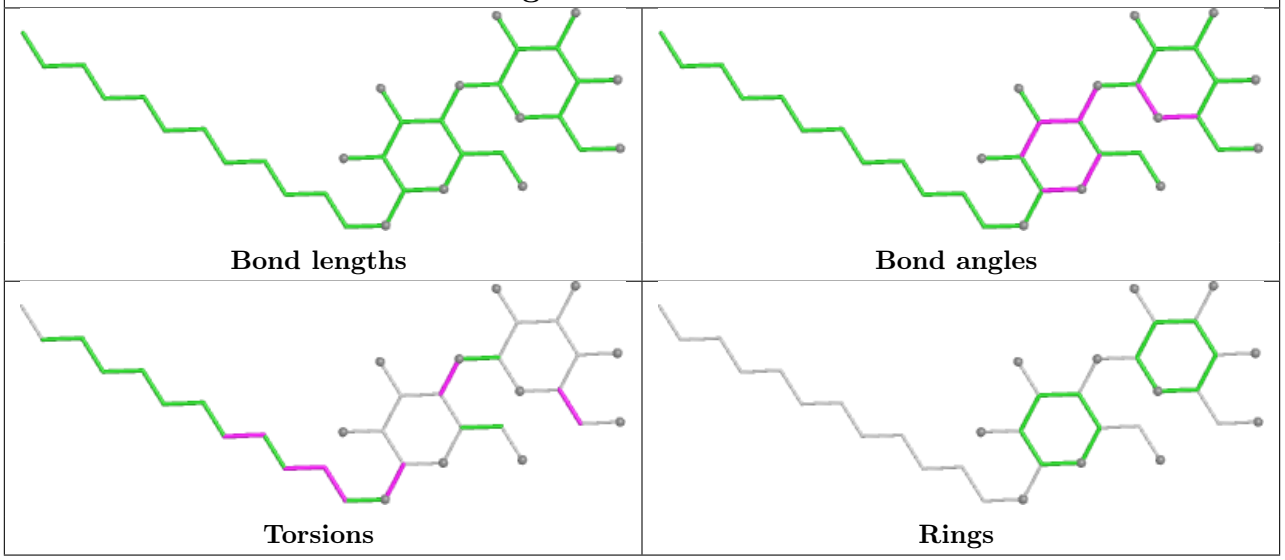


Torsions

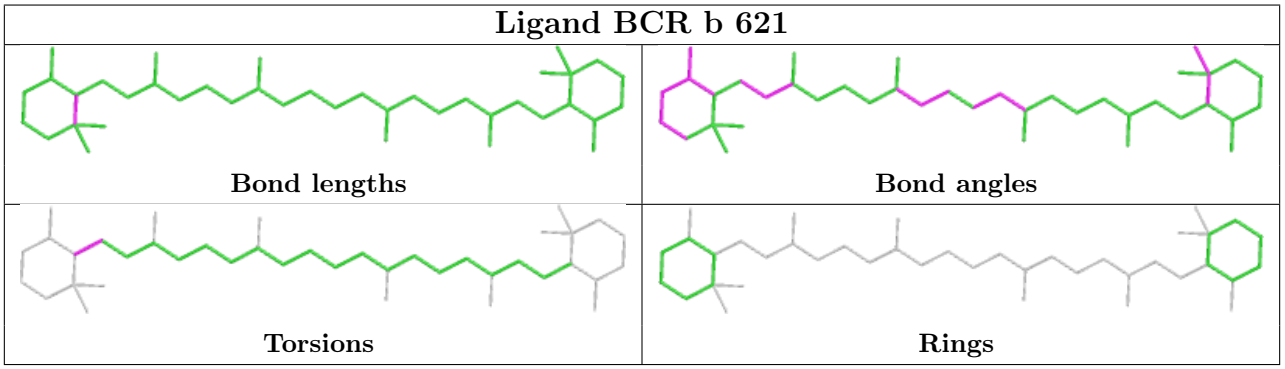


Rings

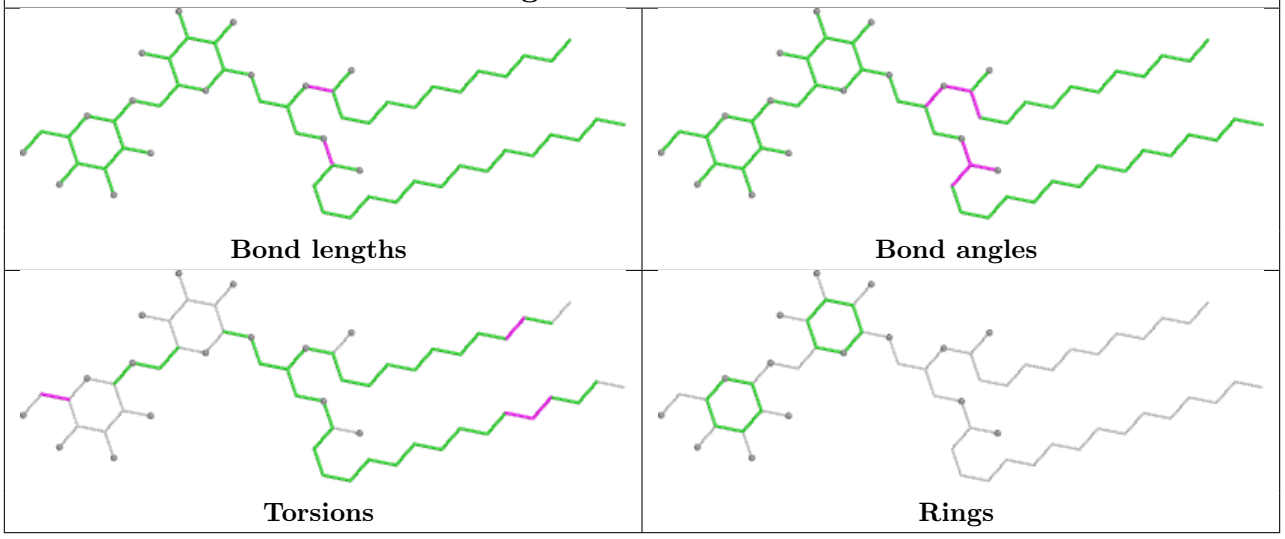
Ligand LMT C 520



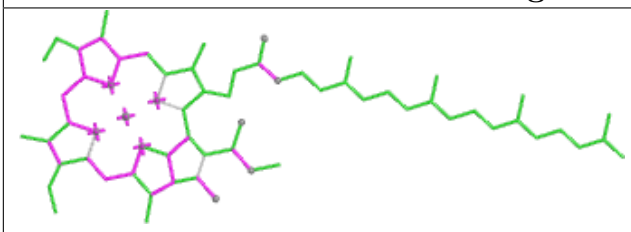
Ligand BCR b 621



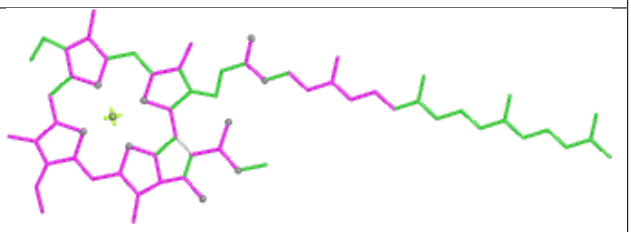
Ligand DGD C 518



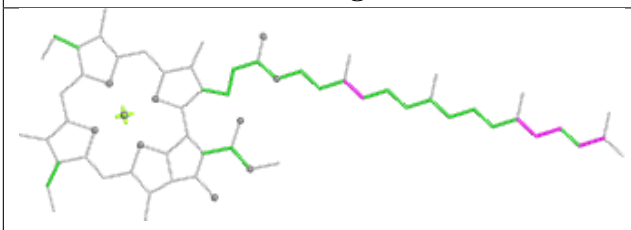
Ligand CLA b 615



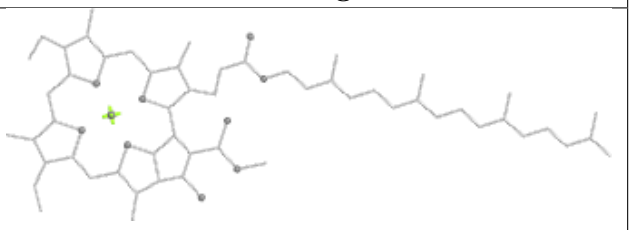
Bond lengths



Bond angles

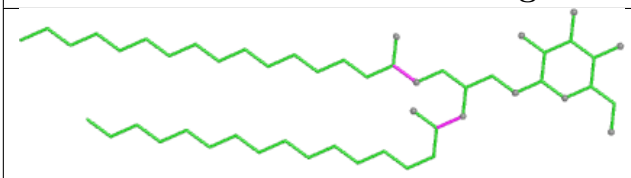


Torsions

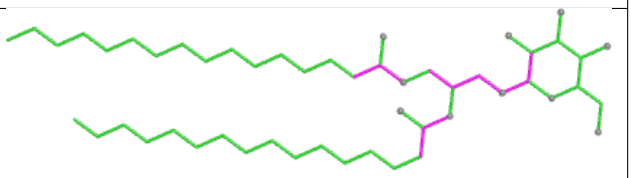


Rings

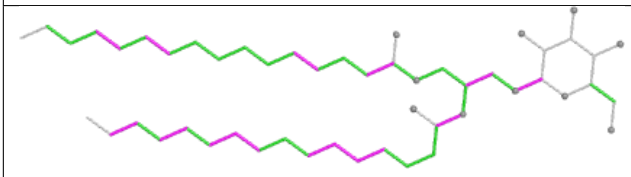
Ligand LMG A 413



Bond lengths



Bond angles



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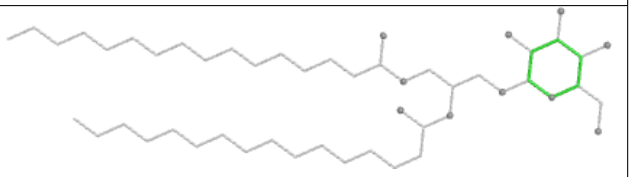
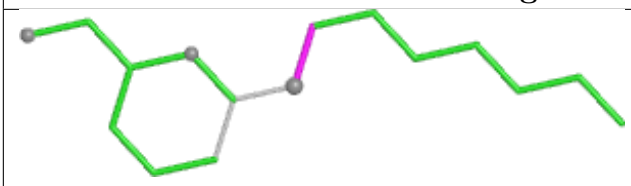


Rings

Ligand HTG H 105



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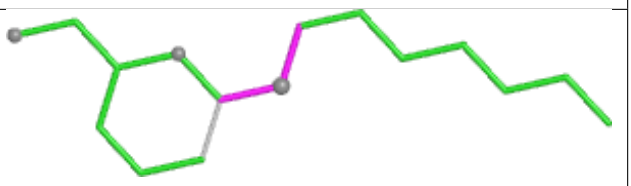
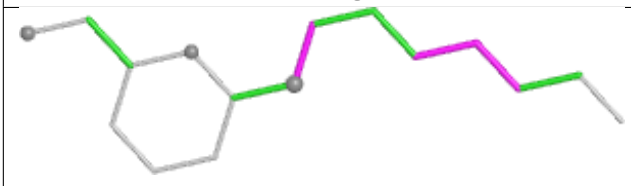


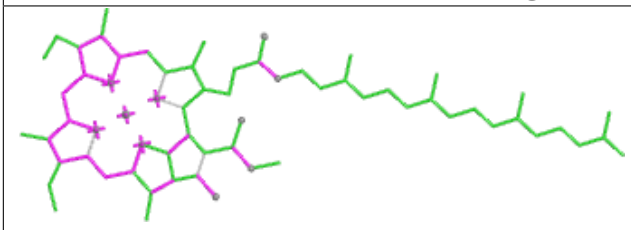
Bond angles



Torsions

Rings

Ligand CLA D 403



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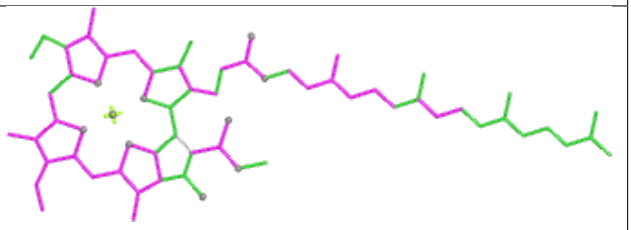
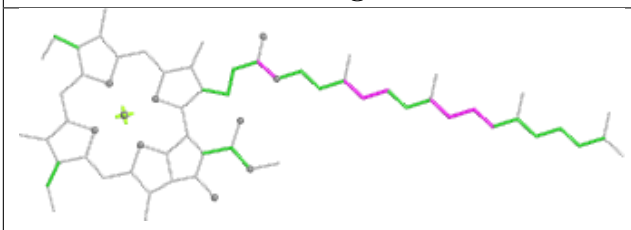
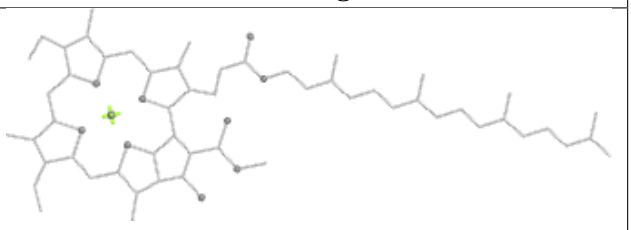


Bond angles

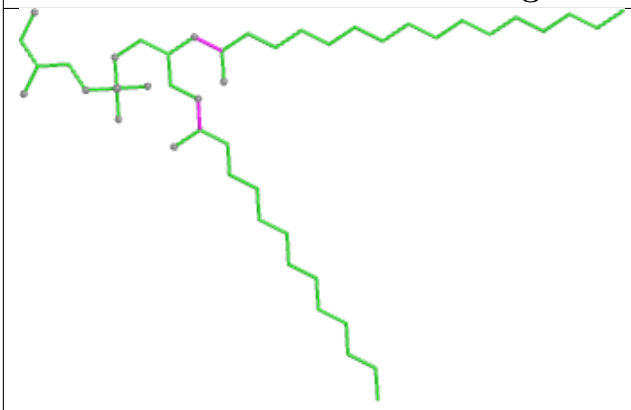


Torsions



Rings

Ligand LHG D 409



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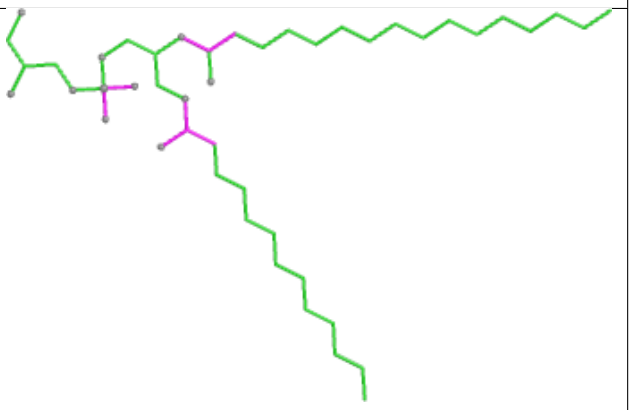
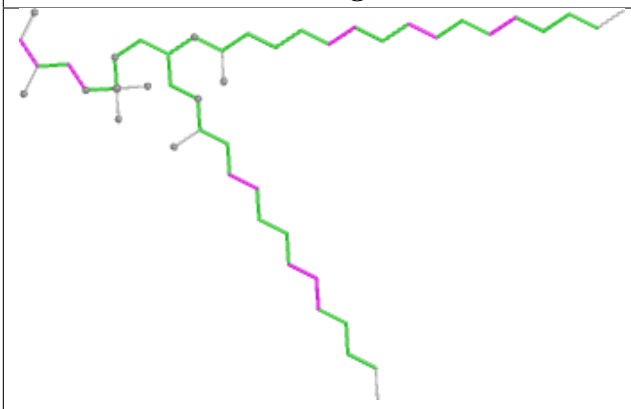
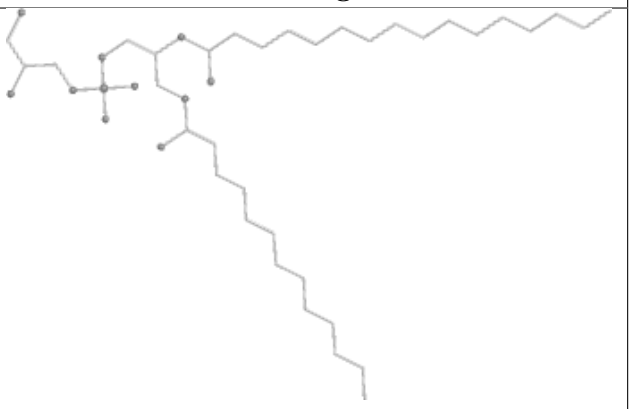


Bond angles

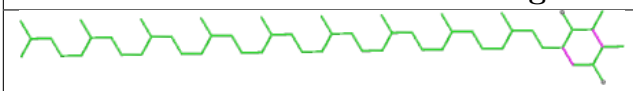


Torsions

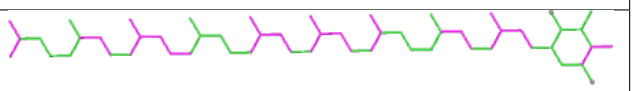


Rings

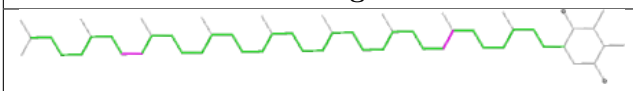
Ligand PL9 D 405



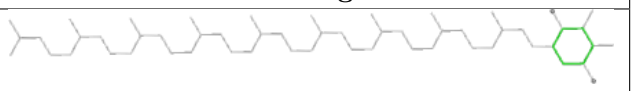
Bond lengths



Bond angles

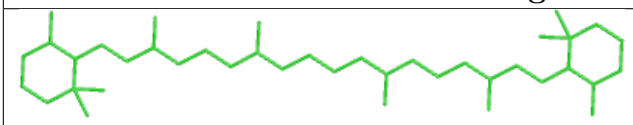


Torsions

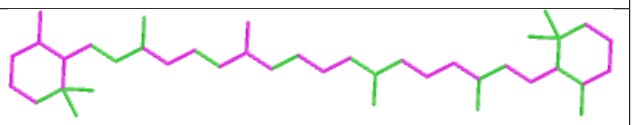


Rings

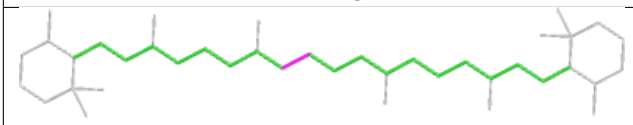
Ligand BCR t 903



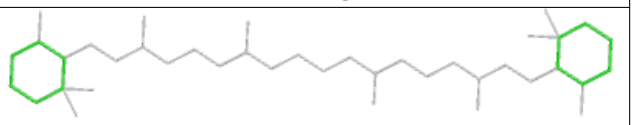
Bond lengths



Bond angles

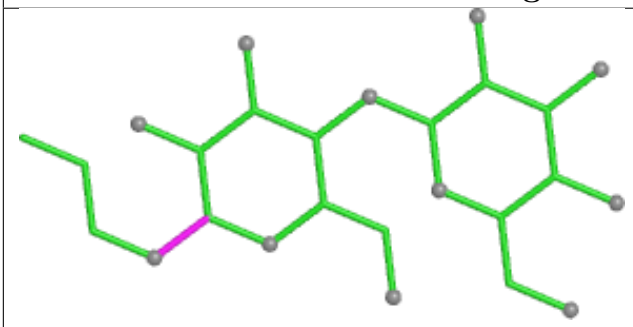


Torsions



Rings

Ligand LMT F 103



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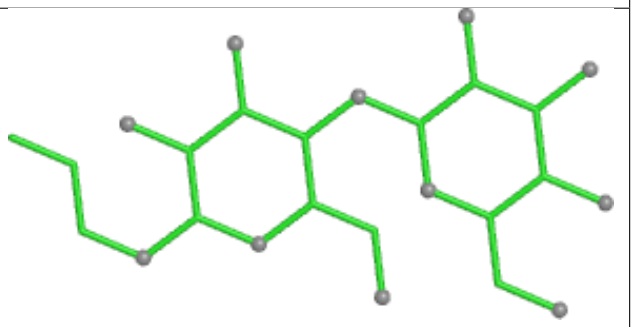
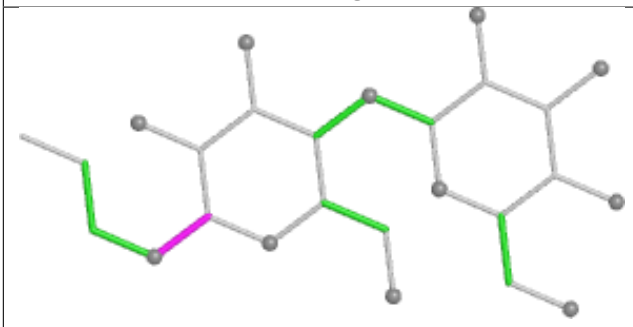
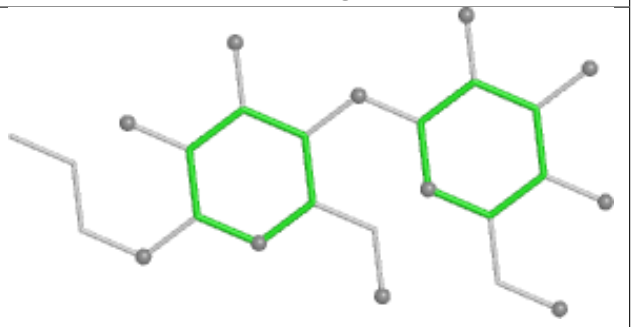


Bond angles

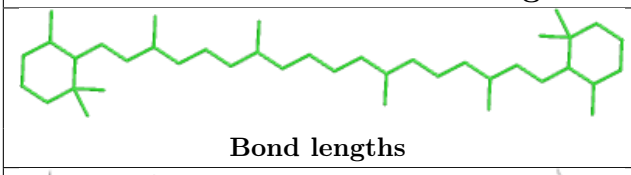


Torsions



Rings

Ligand BCR B 619



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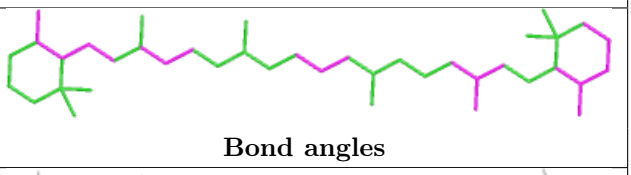
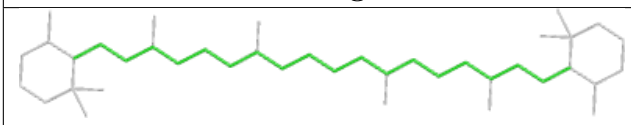


Bond angles



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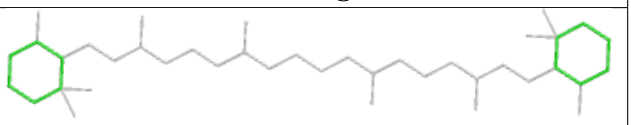
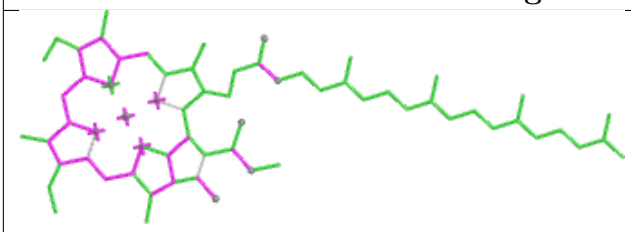


Rings

Ligand CLA B 609



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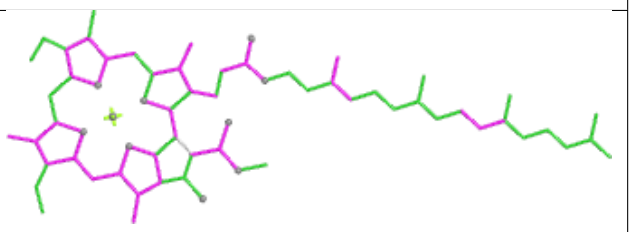
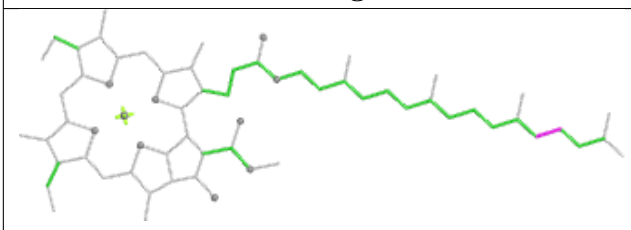
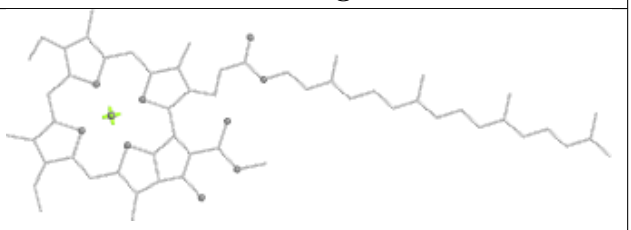


Bond angles



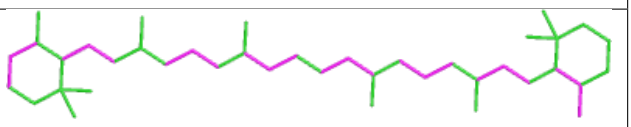
Torsions



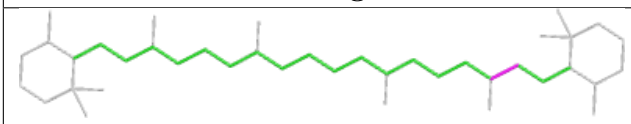
Rings

Ligand BCR b 623

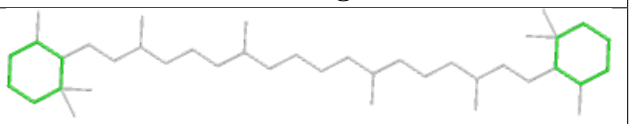
Bond lengths



Bond angles

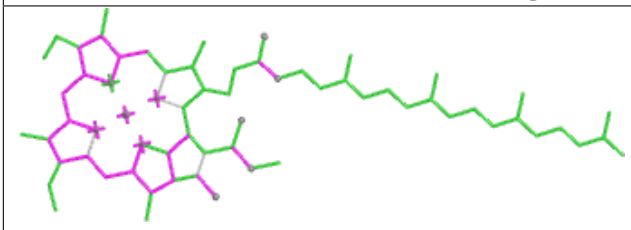


Torsions

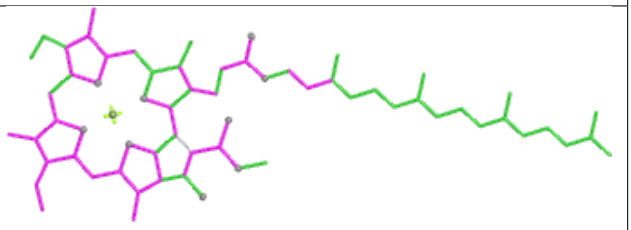


Rings

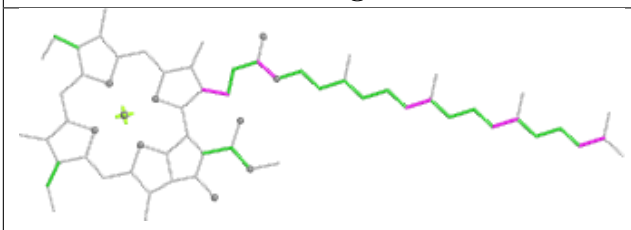
Ligand CLA C 506



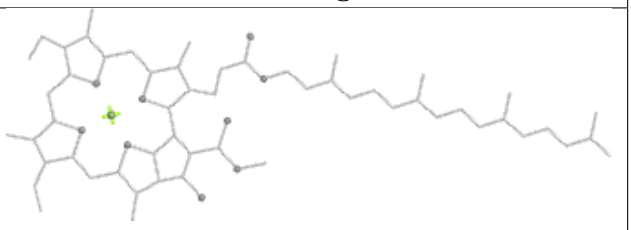
Bond lengths



Bond angles

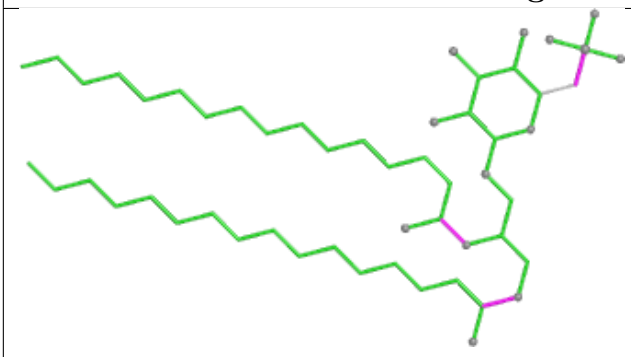


Torsions

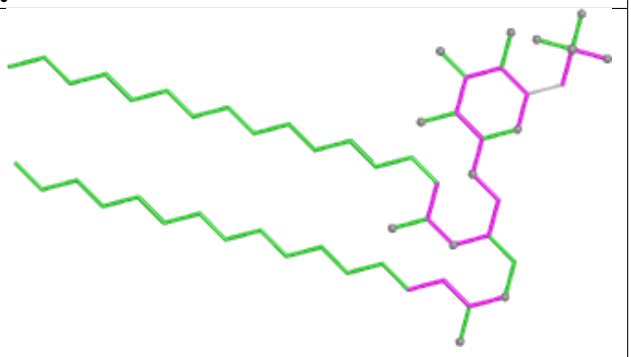


Rings

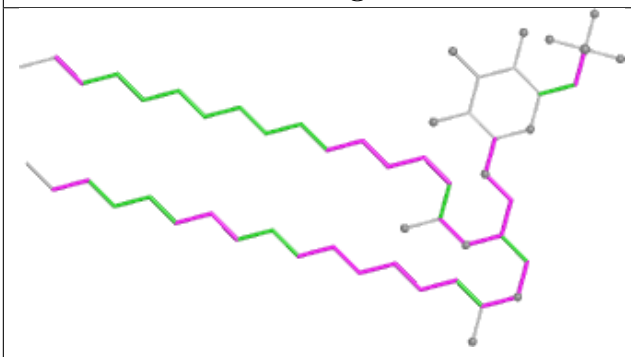
Ligand SQD b 601



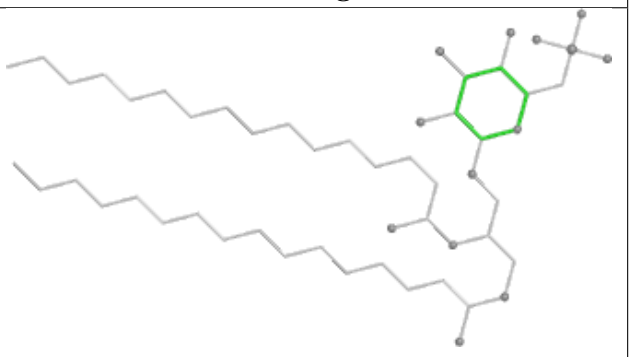
Bond lengths



Bond angles

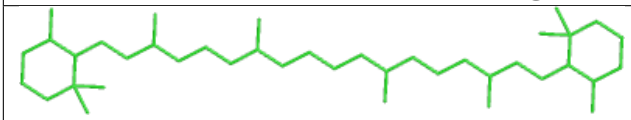


Torsions

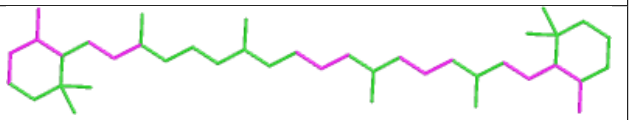


Rings

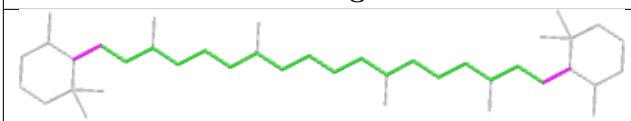
Ligand BCR c 916



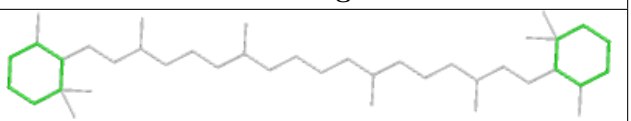
Bond lengths



Bond angles

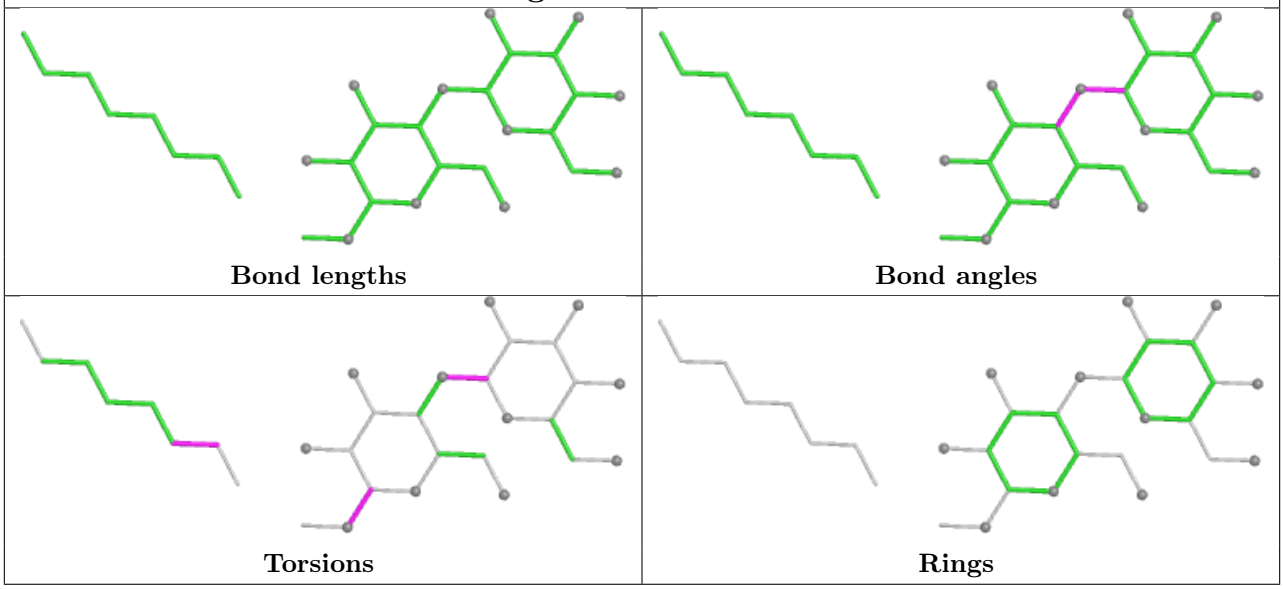


Torsions

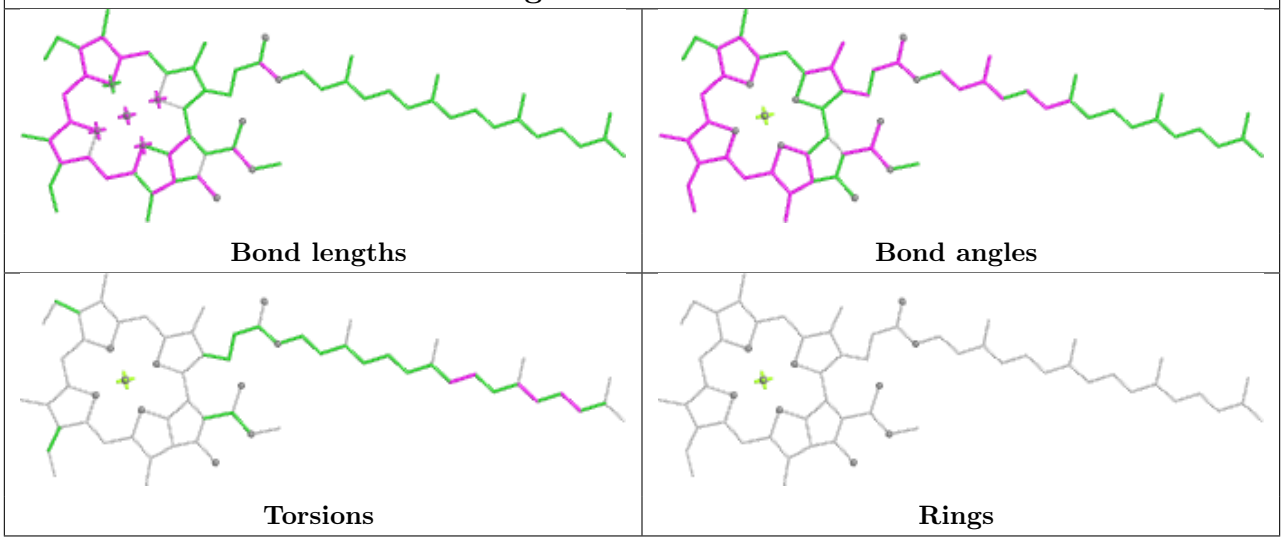


Rings

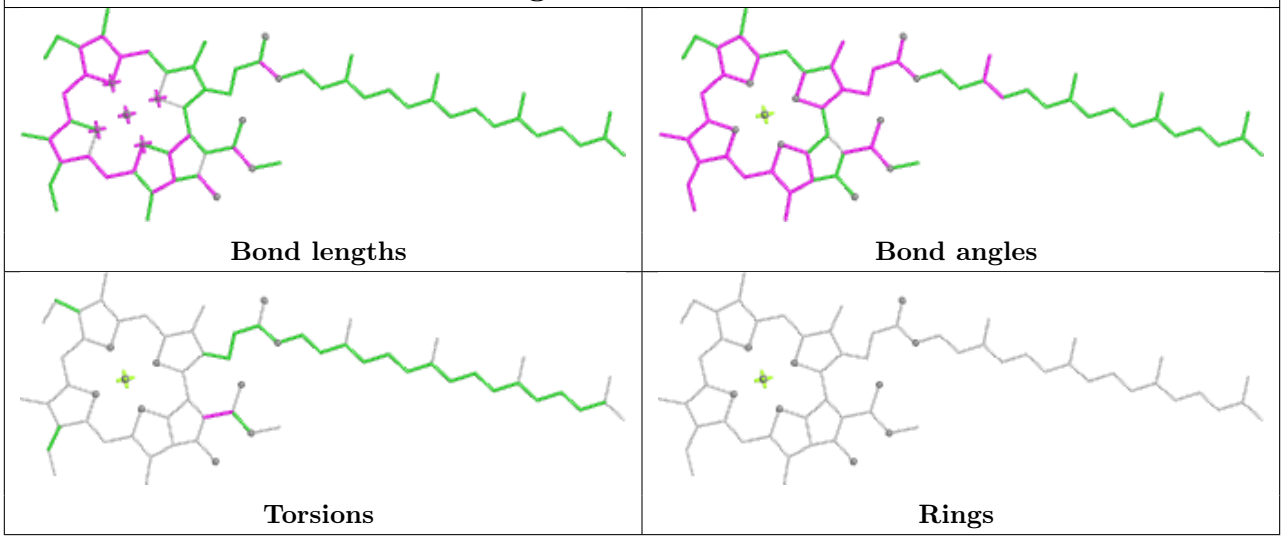
Ligand LMT z 101



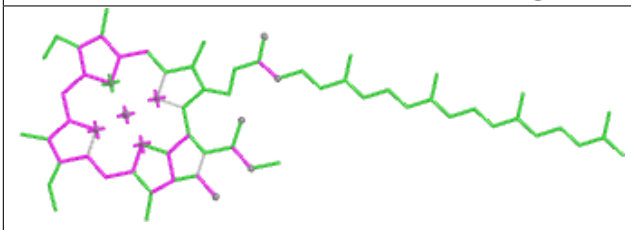
Ligand CLA A 410



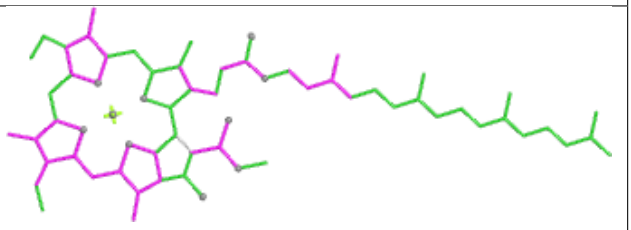
Ligand CLA b 611



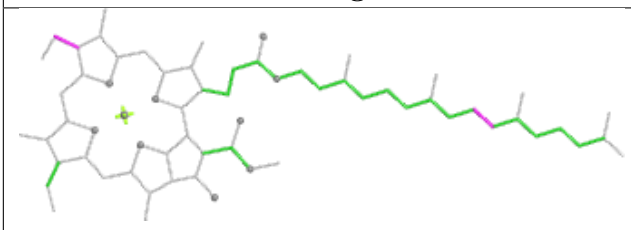
Ligand CLA c 914



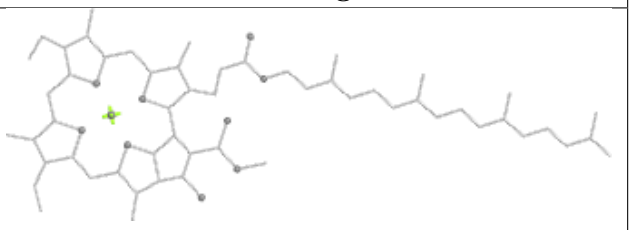
Bond lengths



Bond angles

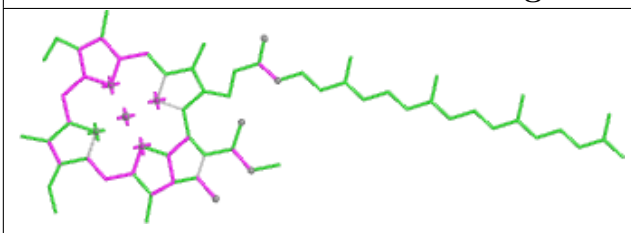


Torsions

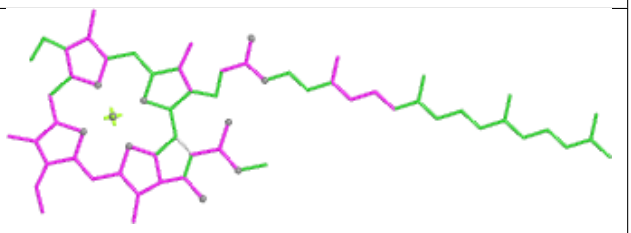


Rings

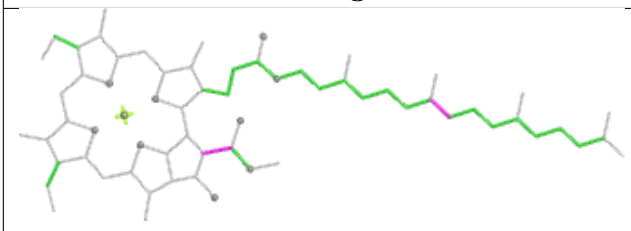
Ligand CLA B 615



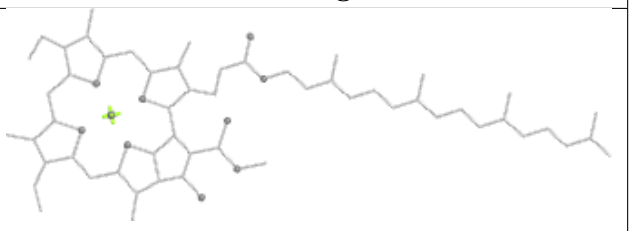
Bond lengths



Bond angles

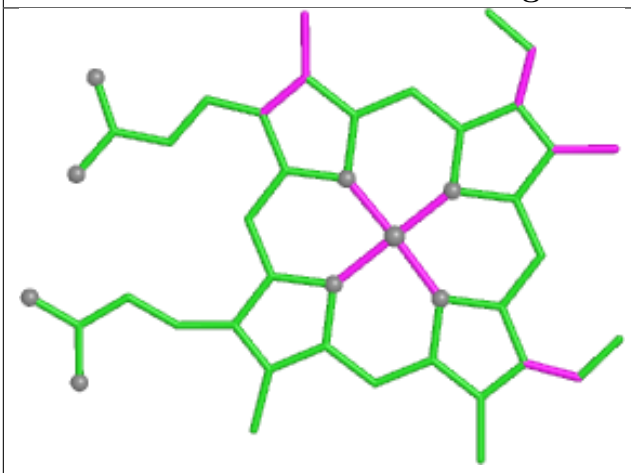


Torsions

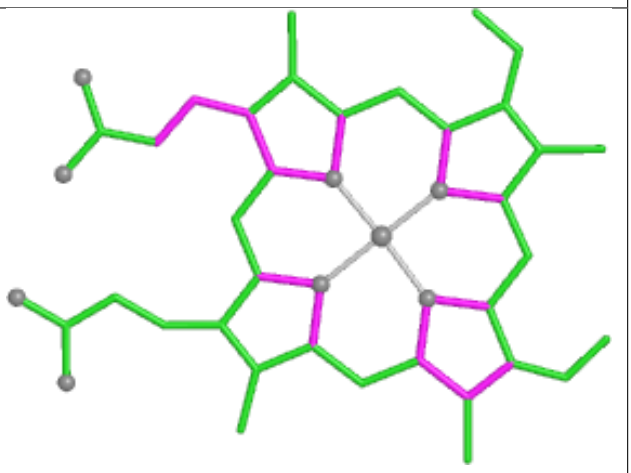


Rings

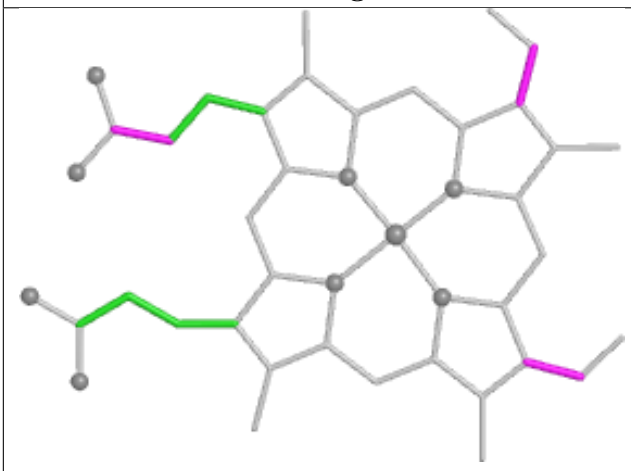
Ligand HEM v 202



Bond lengths



Bond angles



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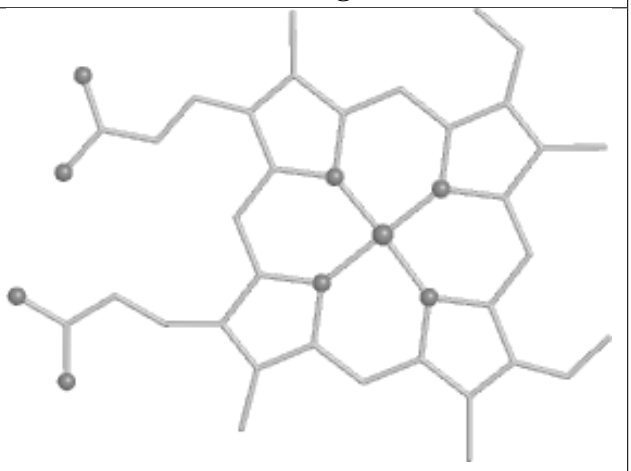
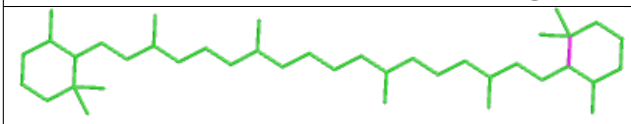
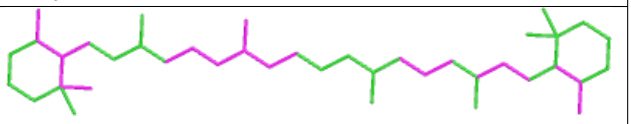


Rings

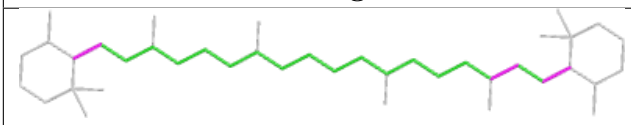
Ligand BCR y 101



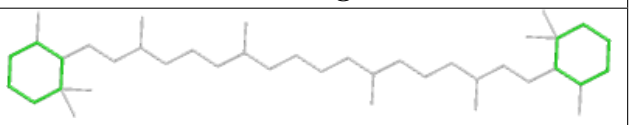
Bond lengths



Bond angles

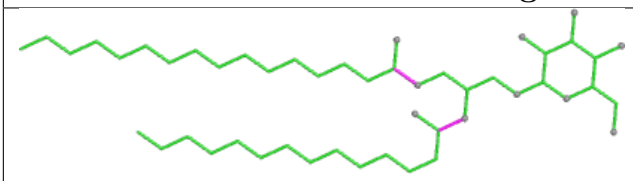


Torsions

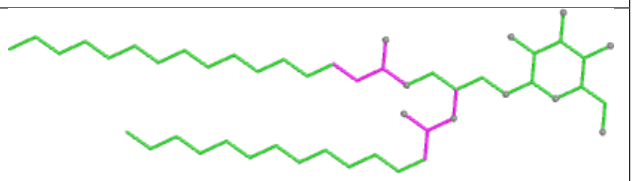


Rings

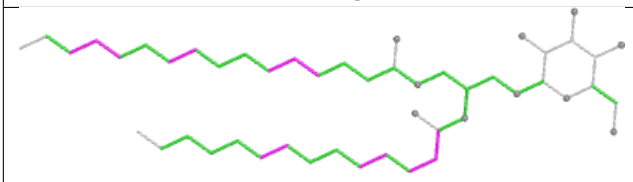
Ligand LMG C 519



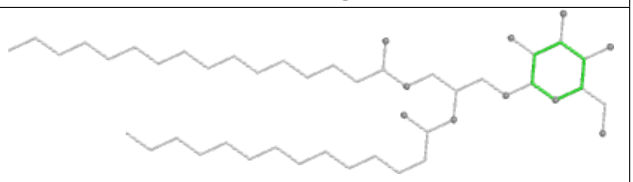
Bond lengths



Bond angles

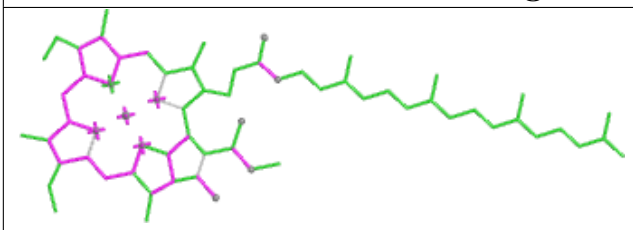


Torsions

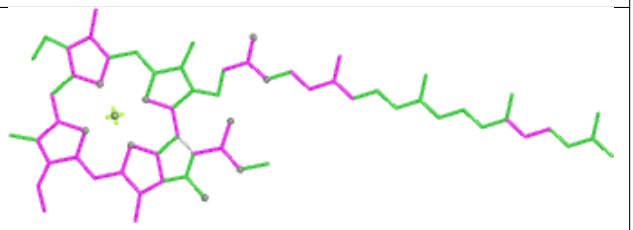


Rings

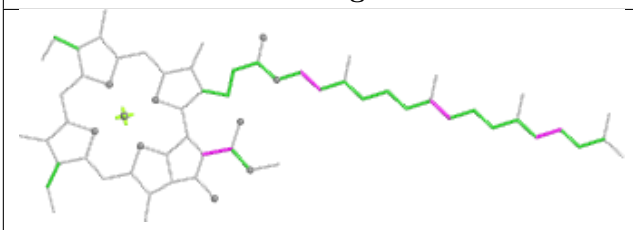
Ligand CLA C 509



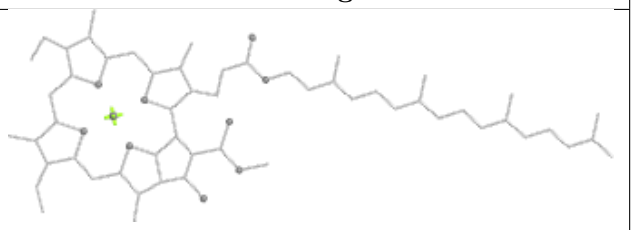
Bond lengths



Bond angles

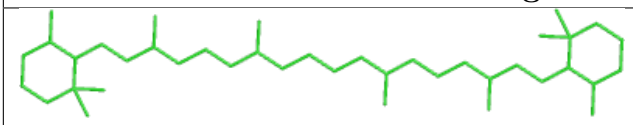


Torsions

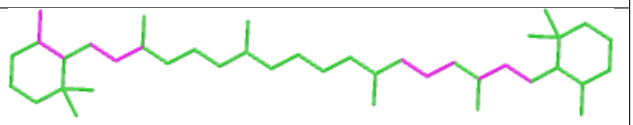


Rings

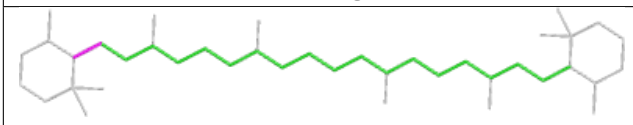
Ligand BCR B 618



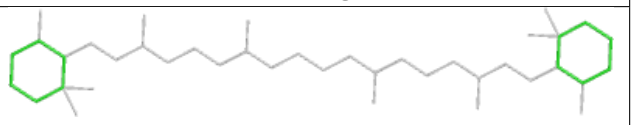
Bond lengths



Bond angles

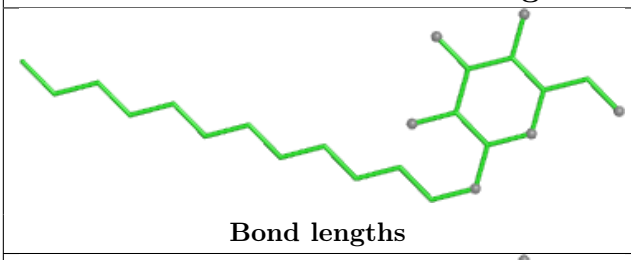


Torsions

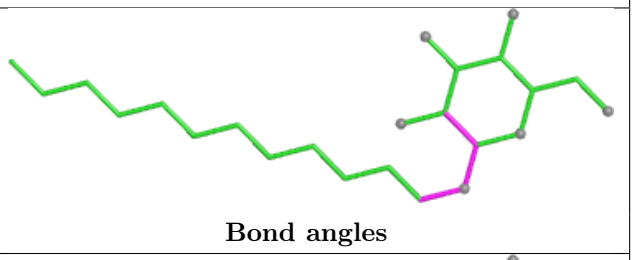


Rings

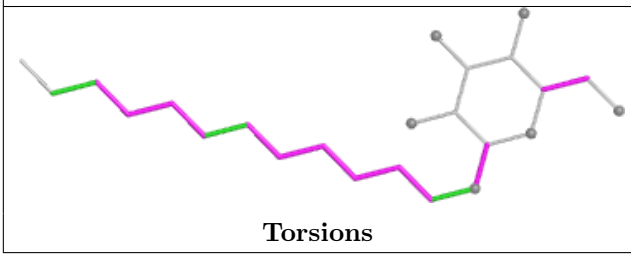
Ligand LMT T 703



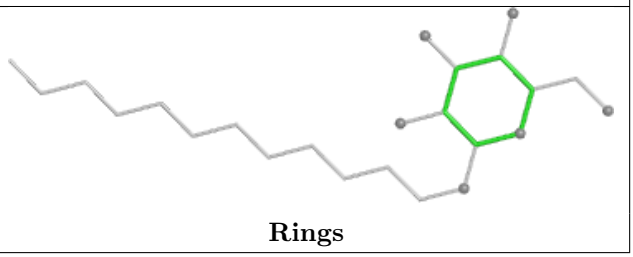
Bond lengths



Bond angles

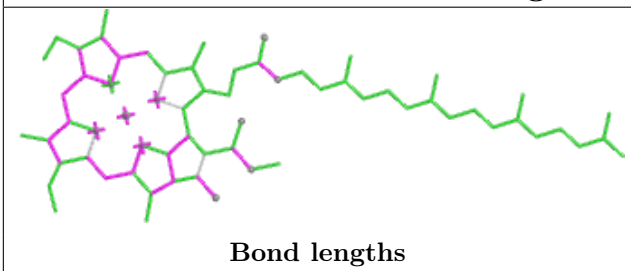


Torsions



Rings

Ligand CLA b 618



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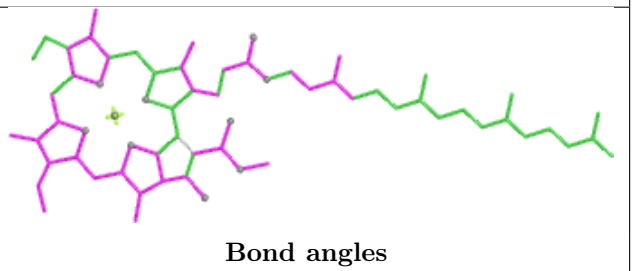
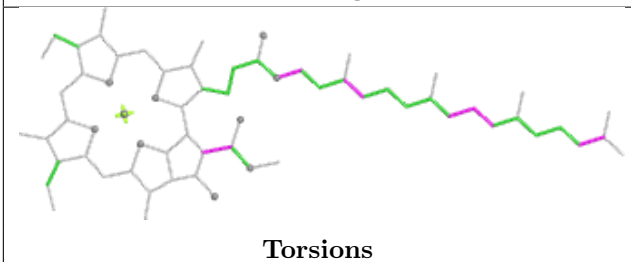
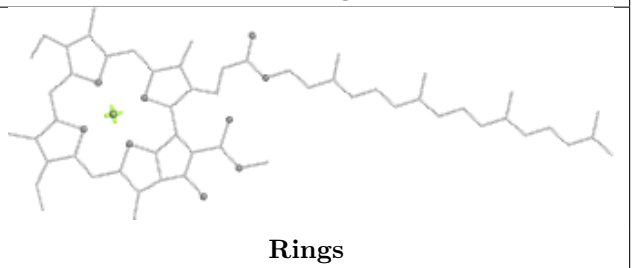


Bond angles

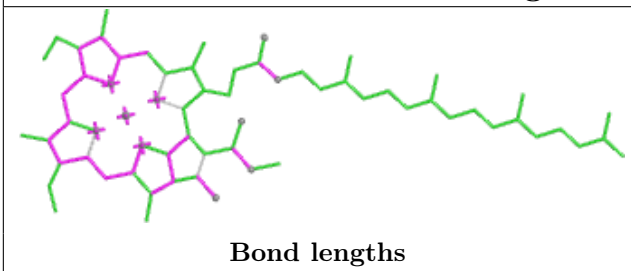


Torsions

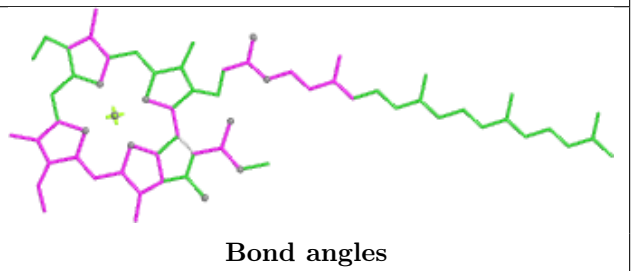


Rings

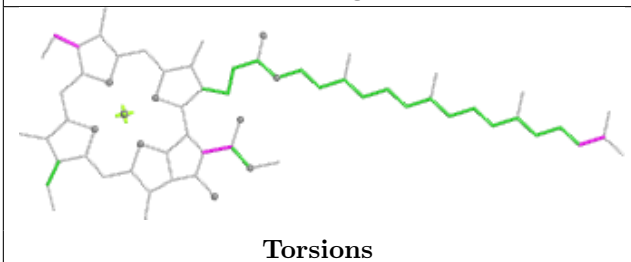
Ligand CLA C 502



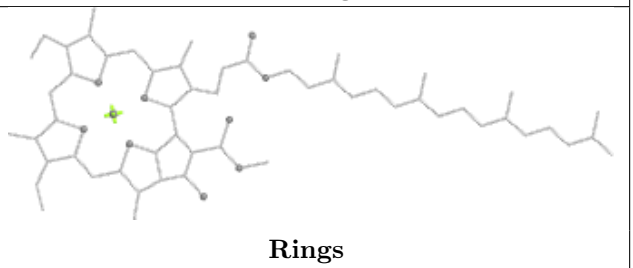
Bond lengths



Bond angles

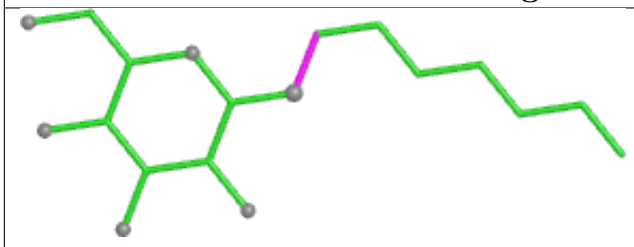


Torsions

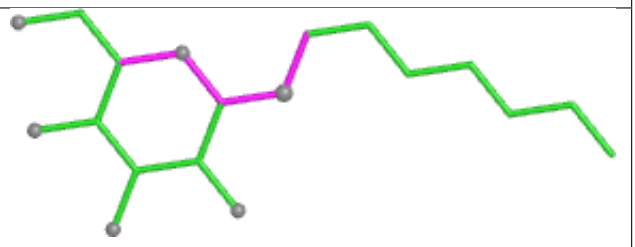


Rings

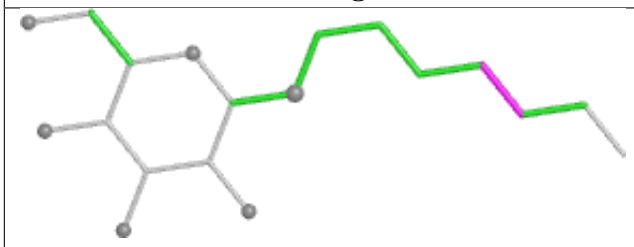
Ligand HTG O 303



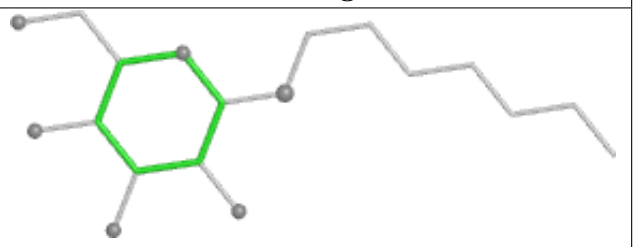
Bond lengths



Bond angles

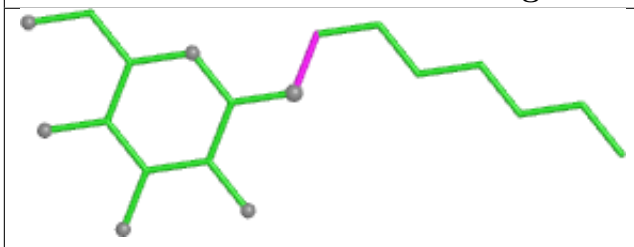


Torsions

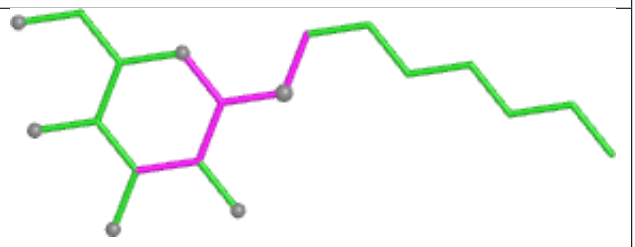


Rings

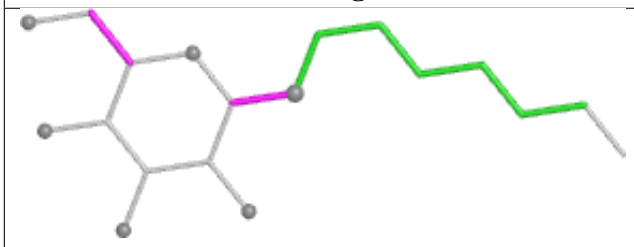
Ligand HTG B 625



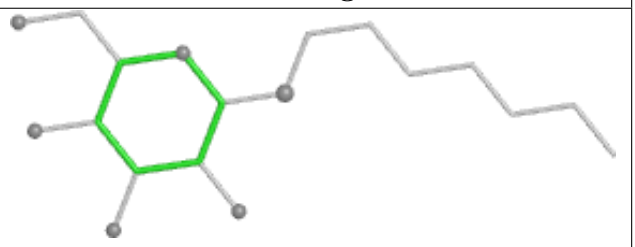
Bond lengths



Bond angles

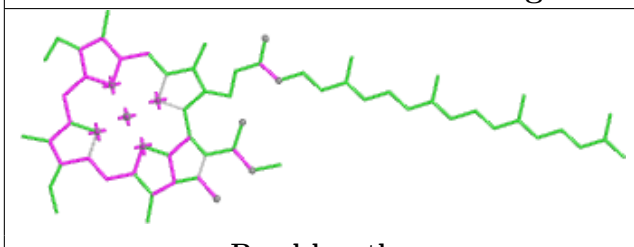


Torsions

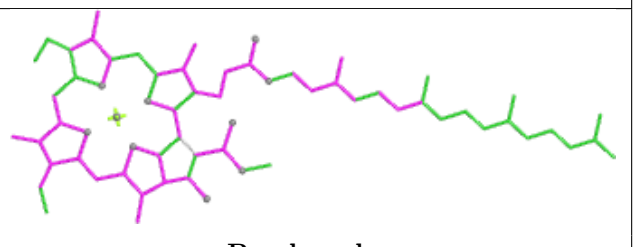


Rings

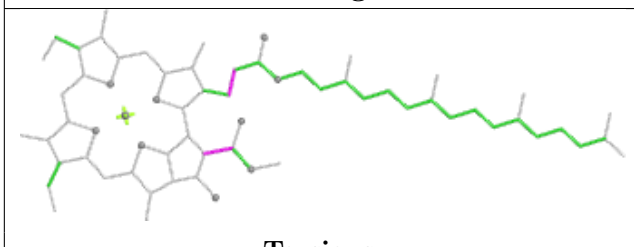
Ligand CLA B 611



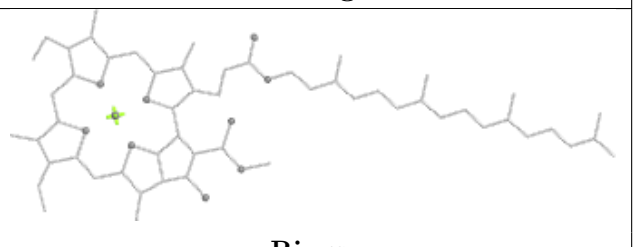
Bond lengths



Bond angles

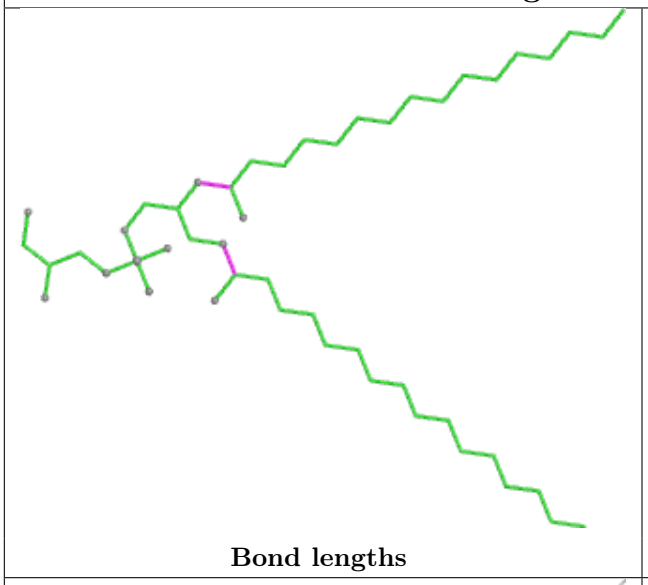


Torsions

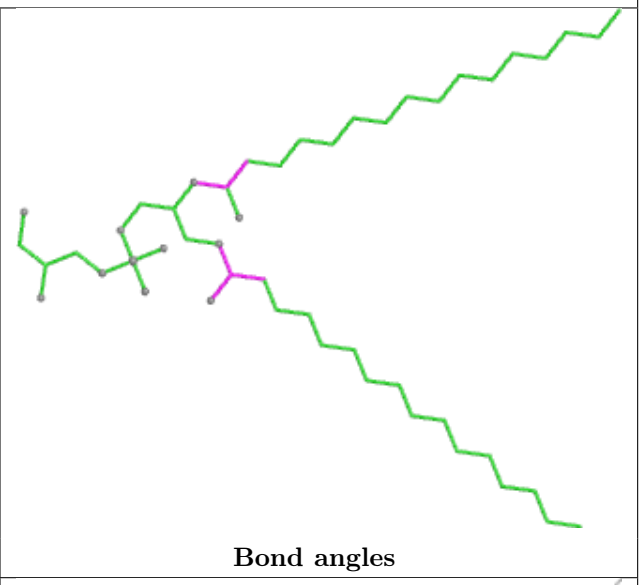


Rings

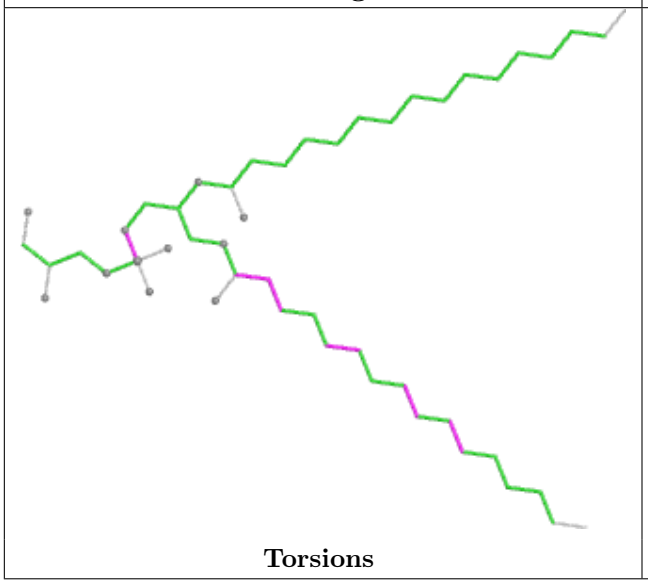
Ligand LHG D 407



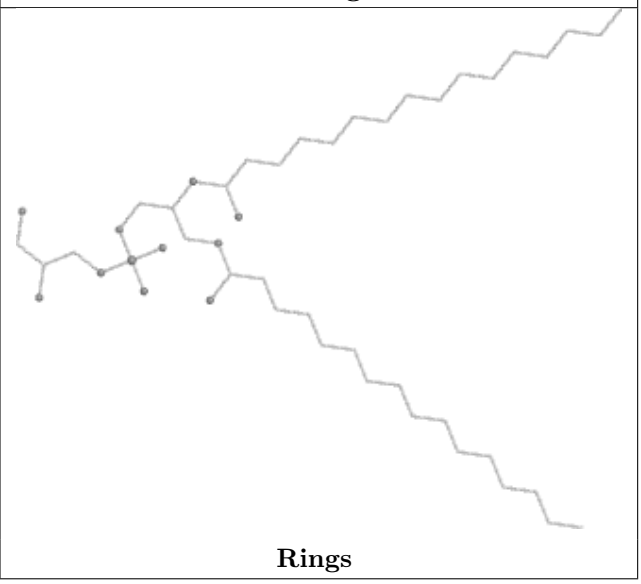
Bond lengths



Bond angles

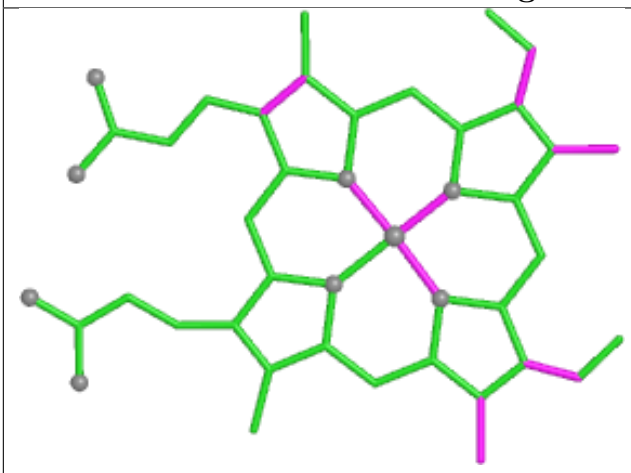


Torsions

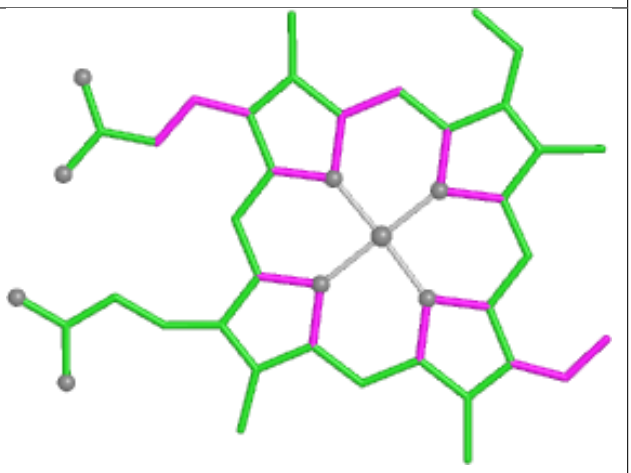


Rings

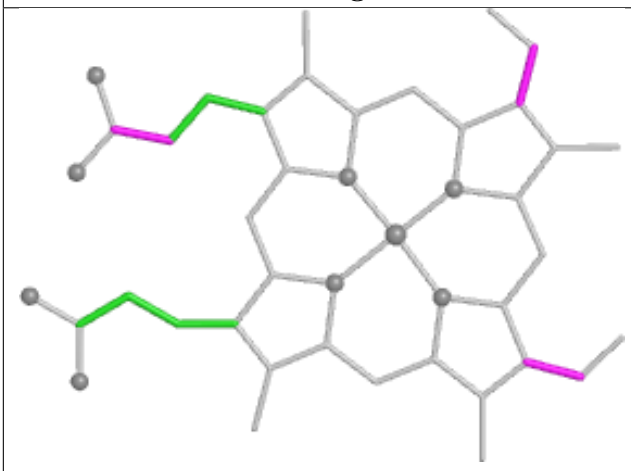
Ligand HEM V 202



Bond lengths



Bond angles



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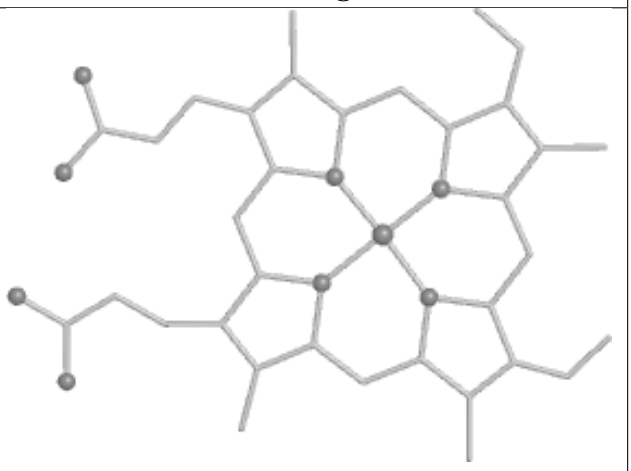
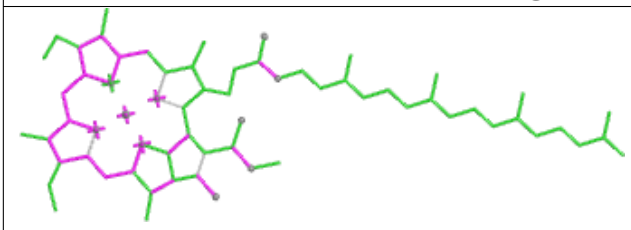
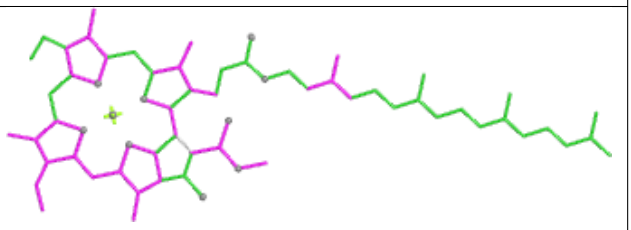


Rings

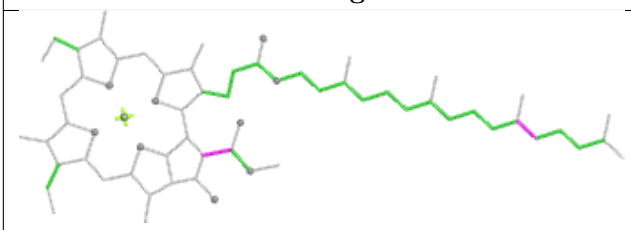
Ligand CLA b 606



Bond lengths



Bond angles



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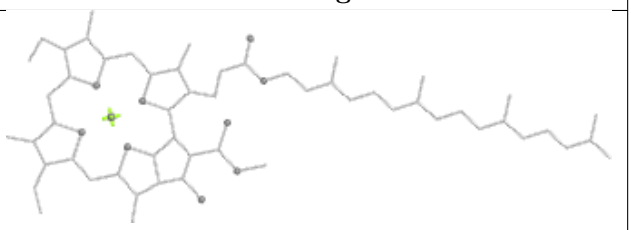
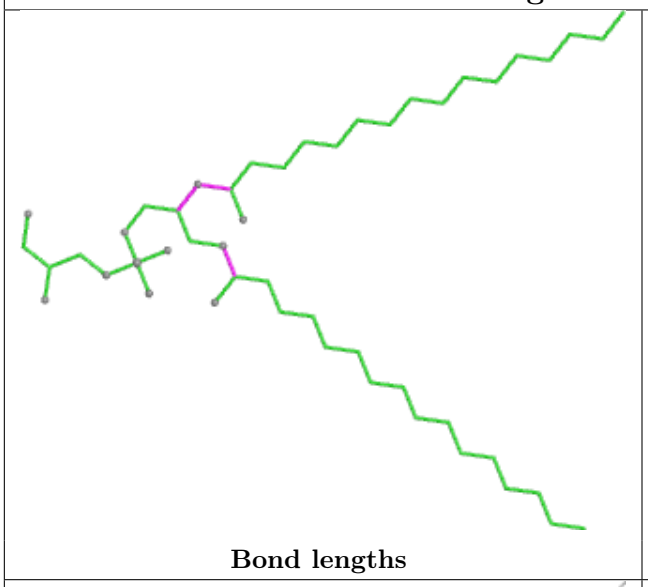
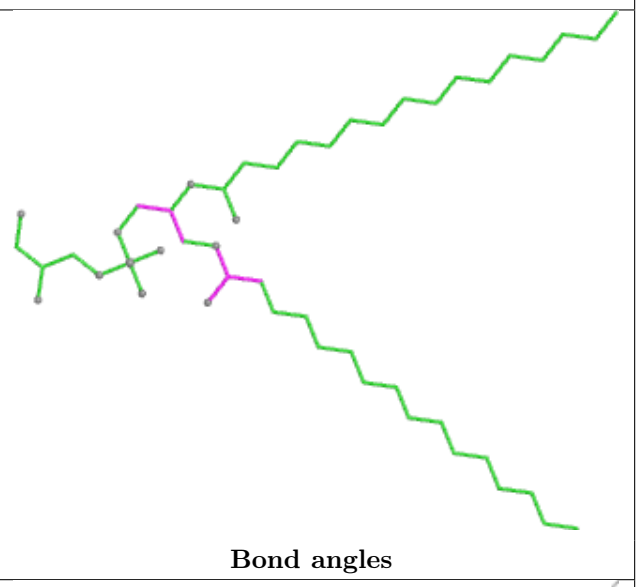


Rings

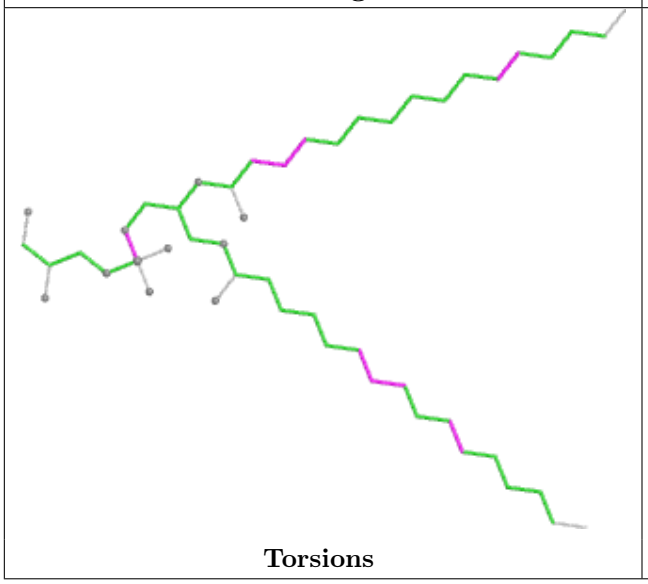
Ligand LHG b 639



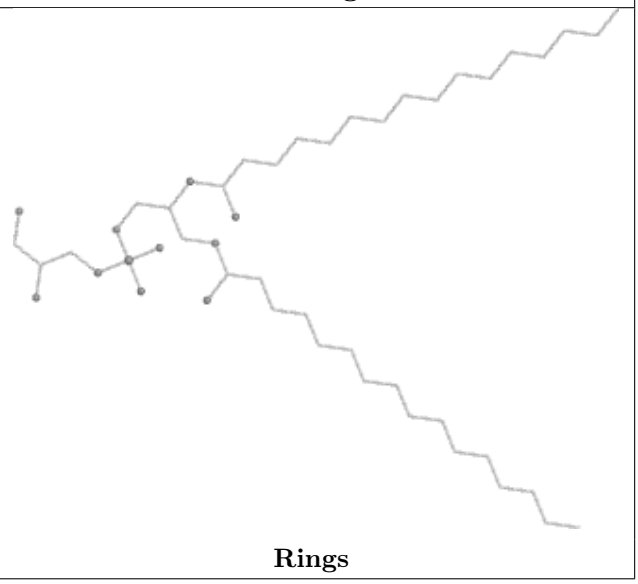
Bond lengths



Bond angles

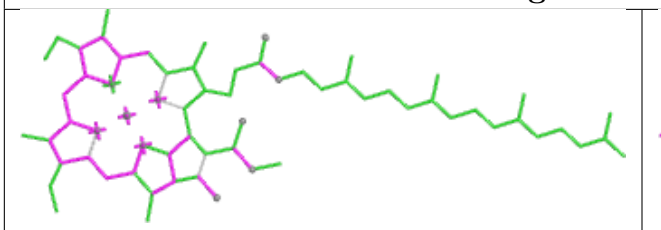


Torsions

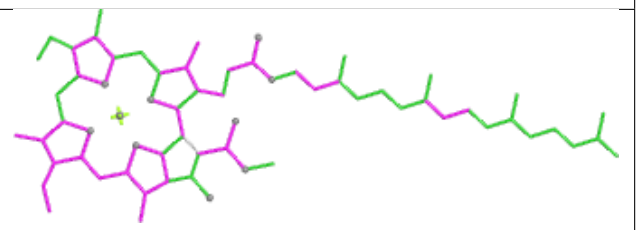


Rings

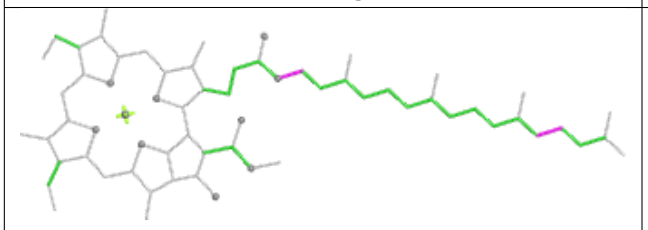
Ligand CLA b 612



Bond lengths



Bond angles



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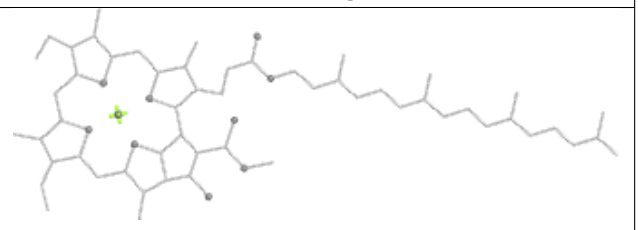
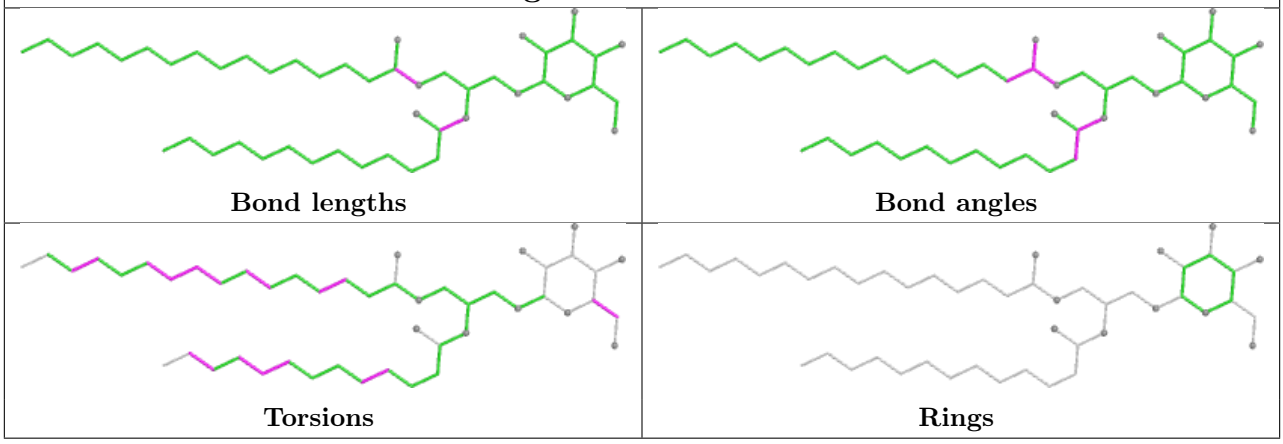
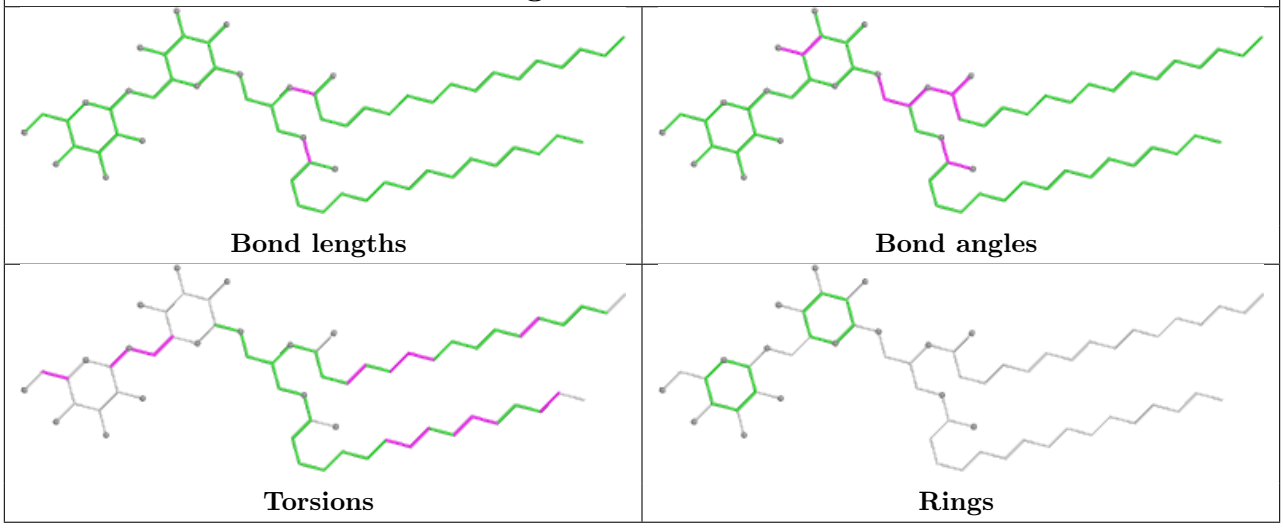


Rings

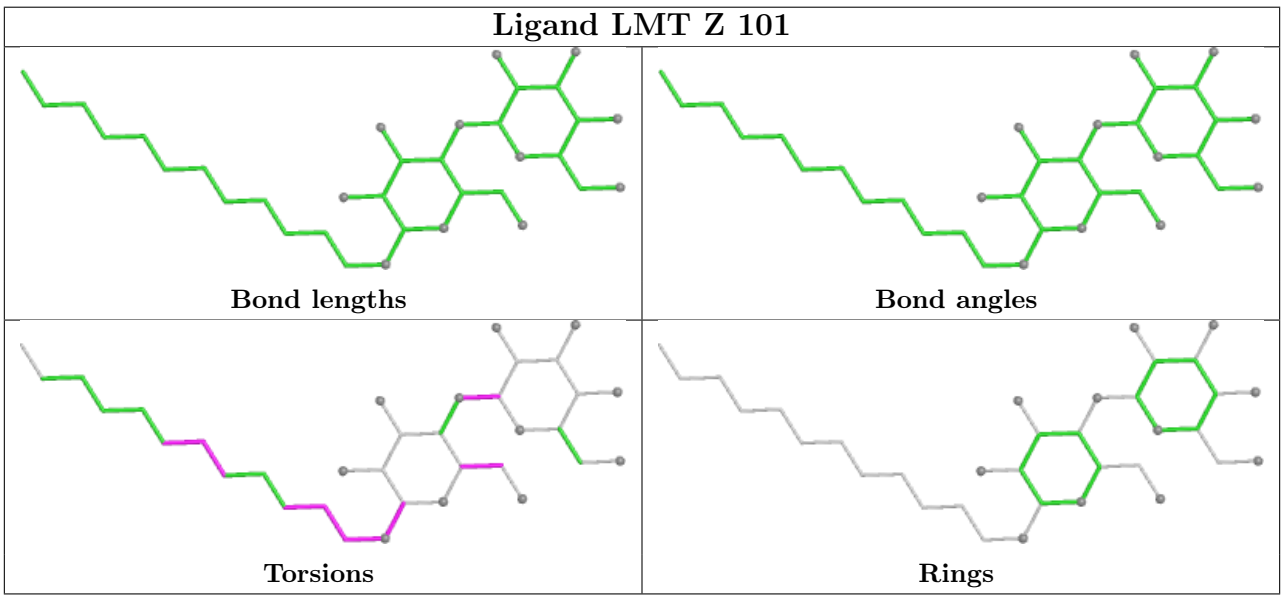
Ligand LMG d 411



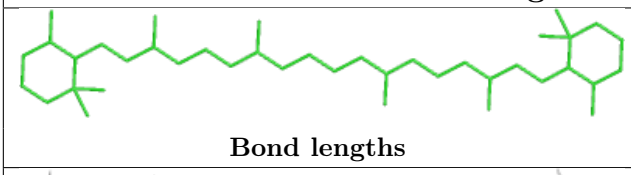
Ligand DGD c 917



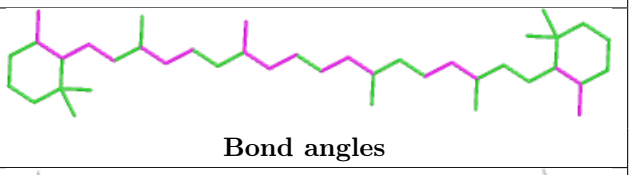
Ligand LMT Z 101



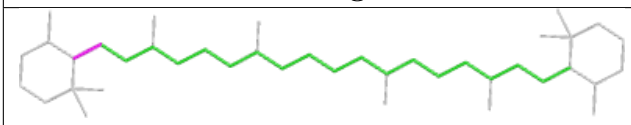
Ligand BCR c 915



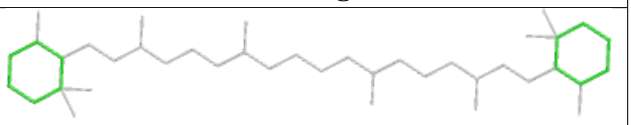
Bond lengths



Bond angles

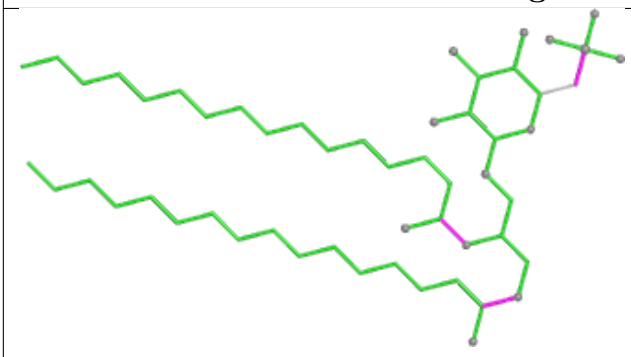


Torsions

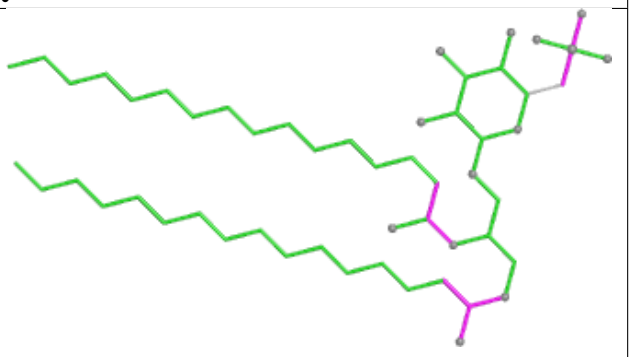


Rings

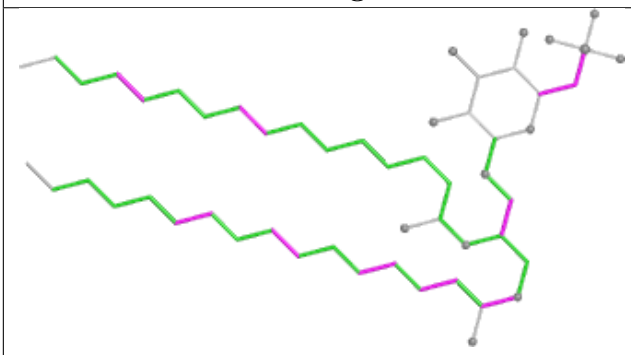
Ligand SQD a 401



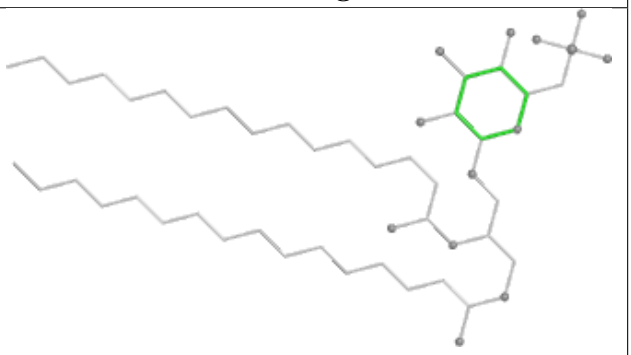
Bond lengths



Bond angles

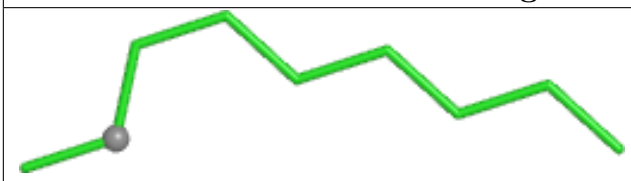


Torsions



Rings

Ligand HTG U 201



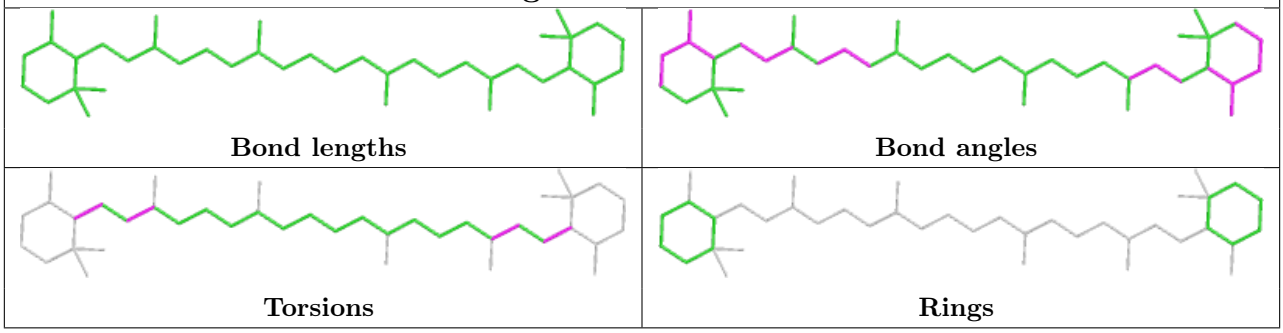
Bond lengths

Bond angles

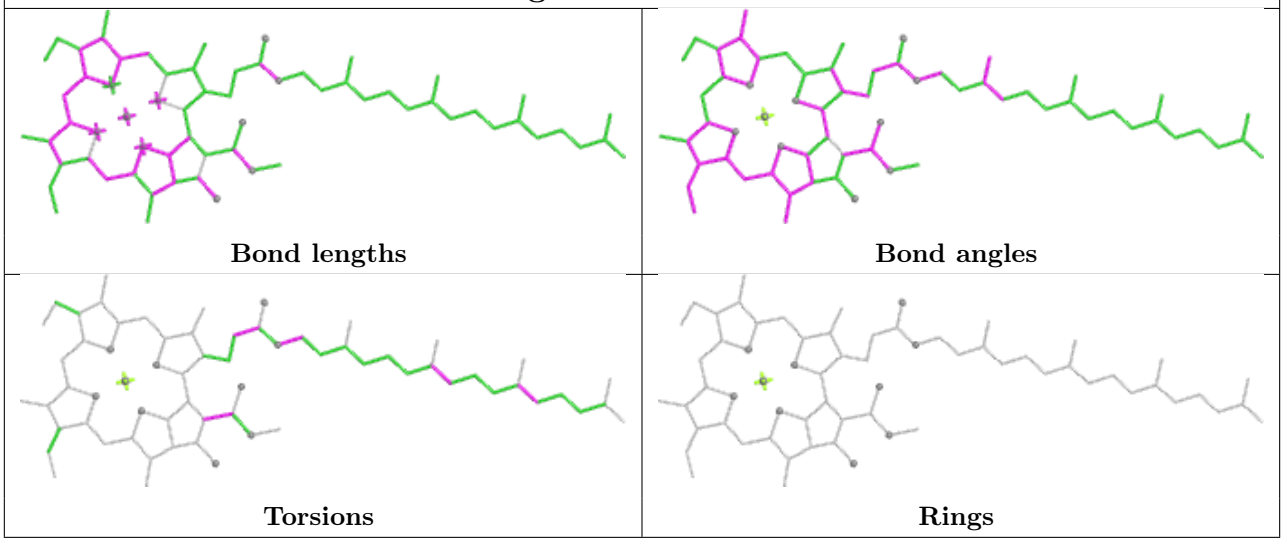
Torsions

Rings

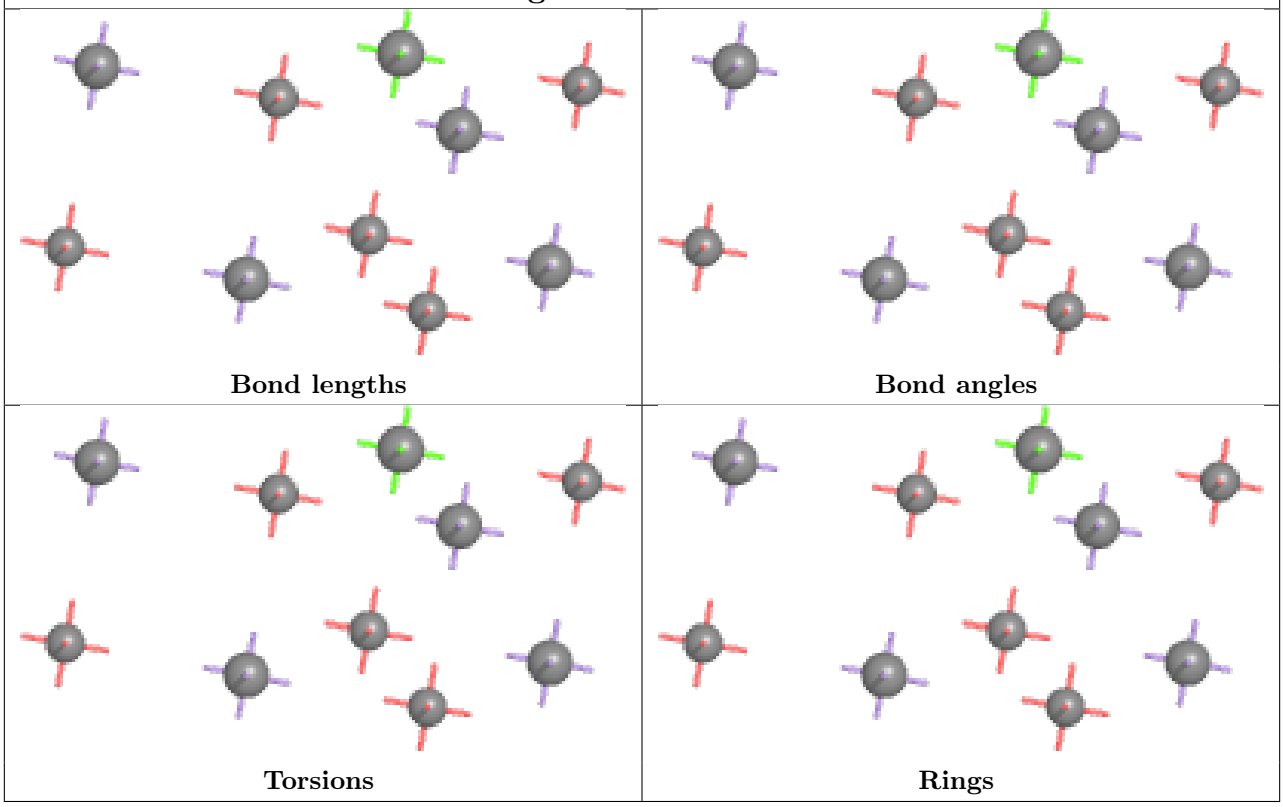
Ligand BCR D 404



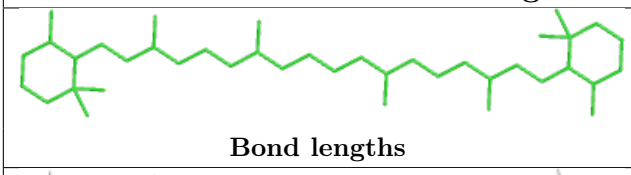
Ligand CLA b 605



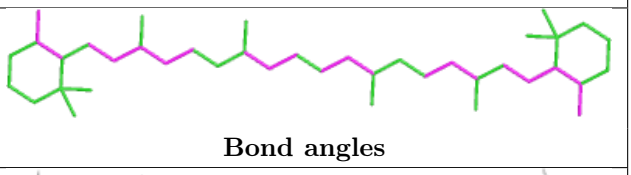
Ligand OEX a 404



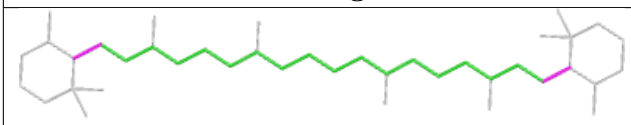
Ligand BCR C 514



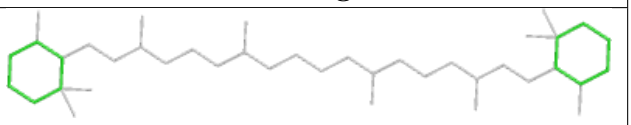
Bond lengths



Bond angles

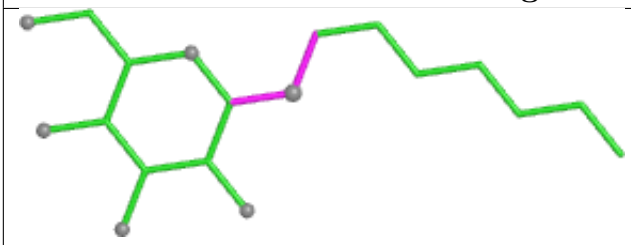


Torsions

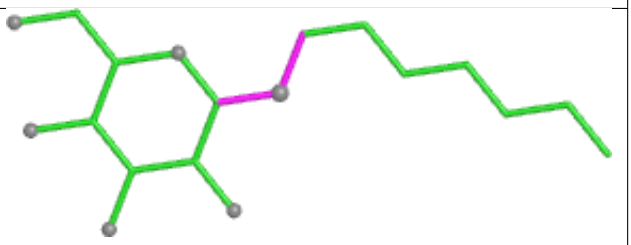


Rings

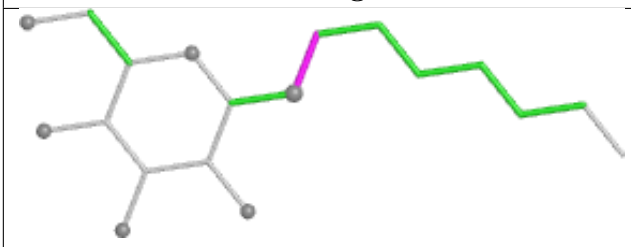
Ligand HTG C 521



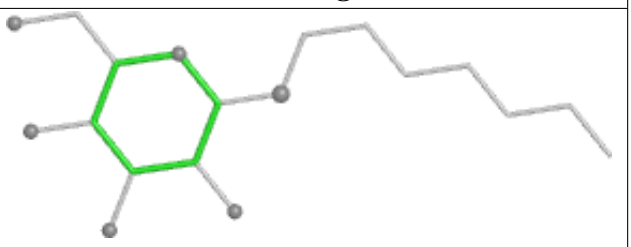
Bond lengths



Bond angles

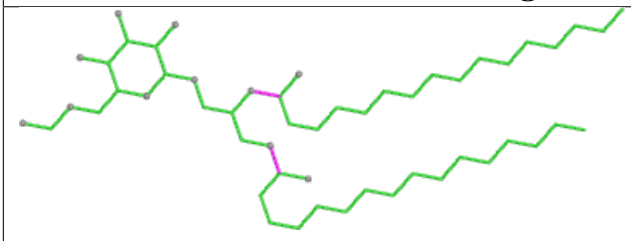


Torsions

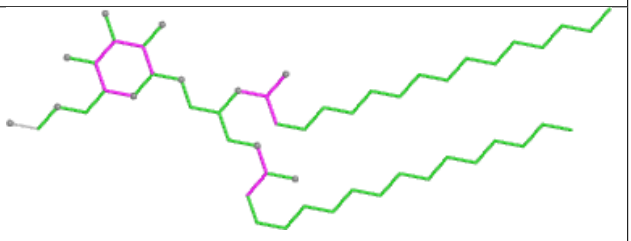


Rings

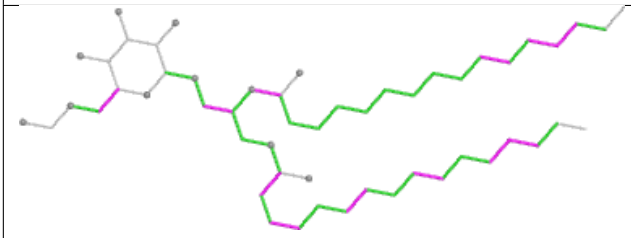
Ligand DGD D 406



Bond lengths



Bond angles



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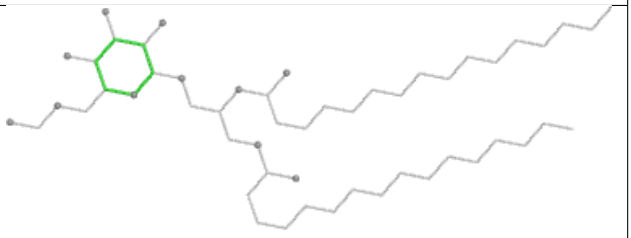
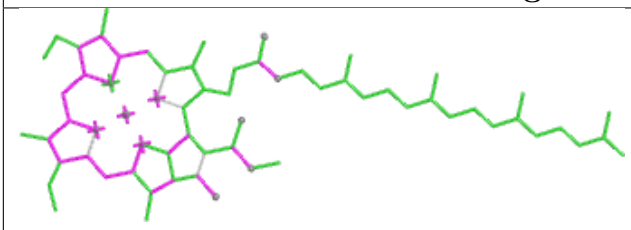
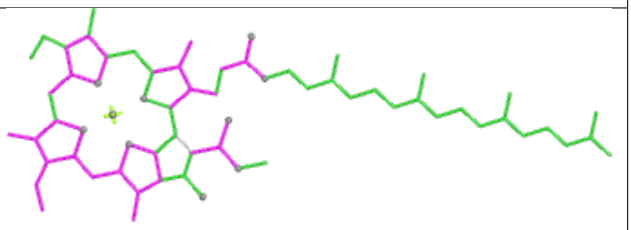
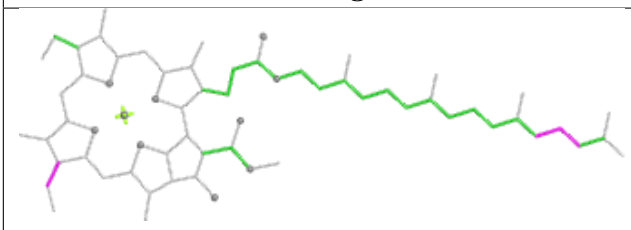
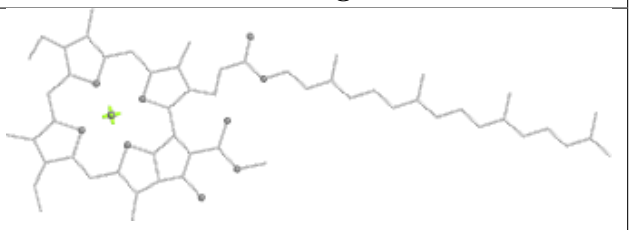
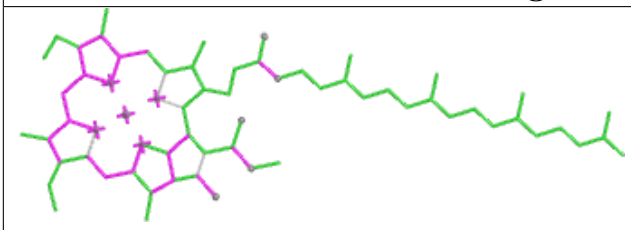
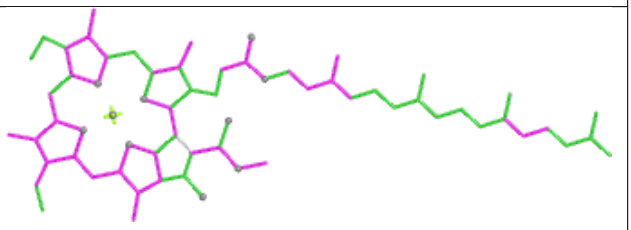
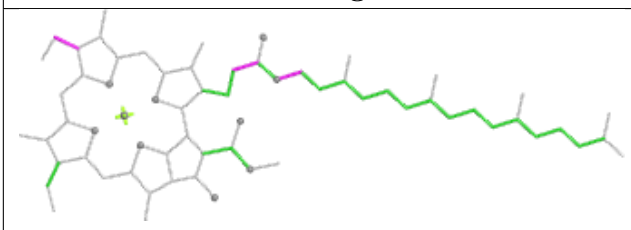
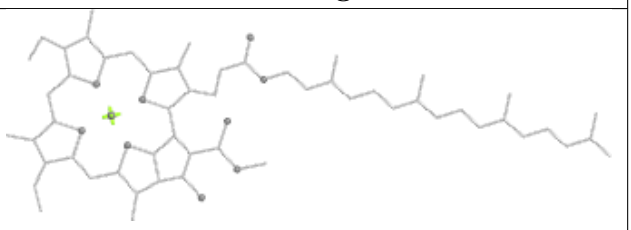
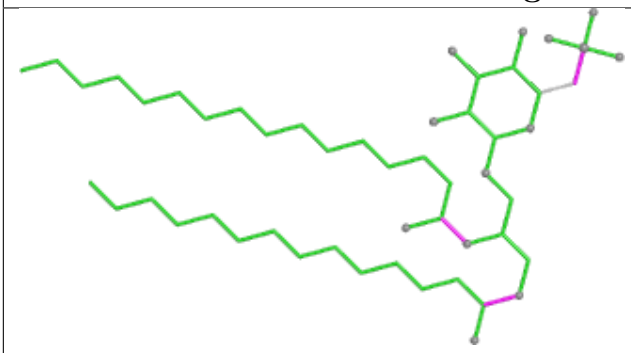


Rings

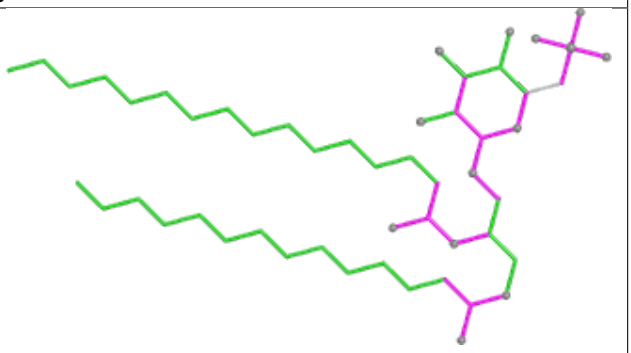
Ligand CLA A 405	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 617	
 Bond lengths	 Bond angles
 Torsions	 Rings

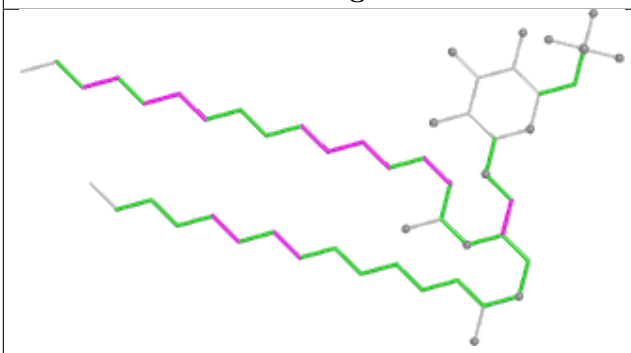
Ligand SQD A 412



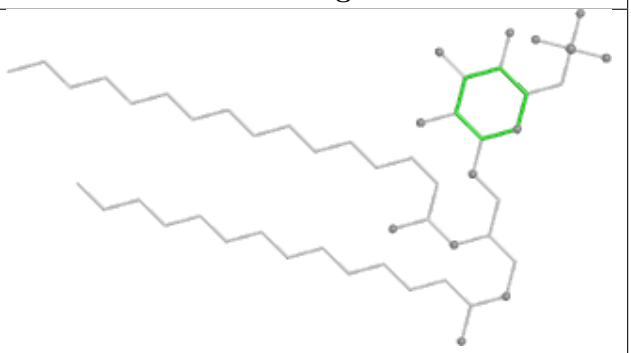
Bond lengths



Bond angles

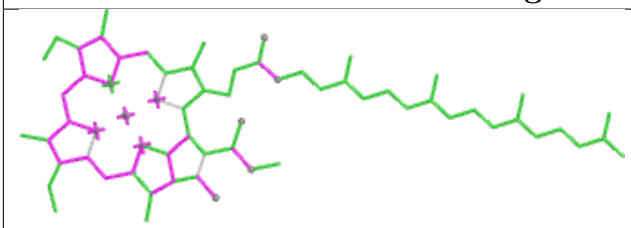


Torsions

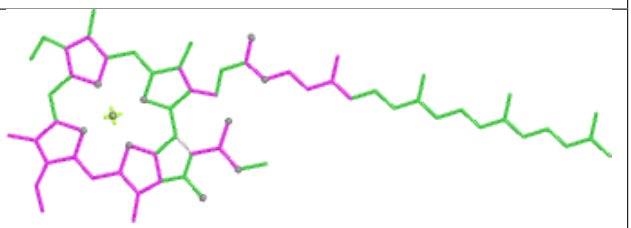


Rings

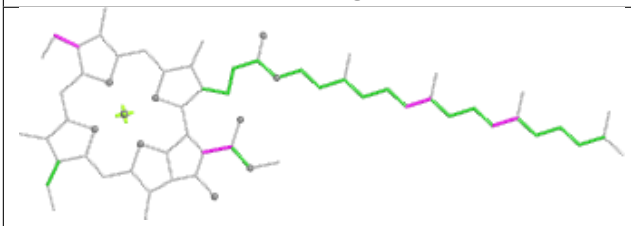
Ligand CLA C 504



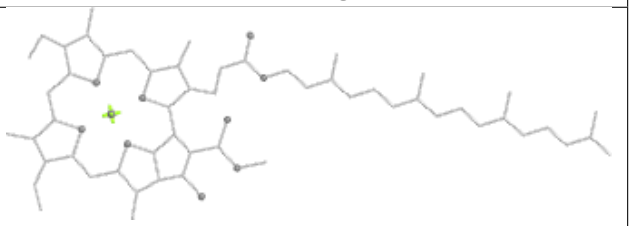
Bond lengths



Bond angles

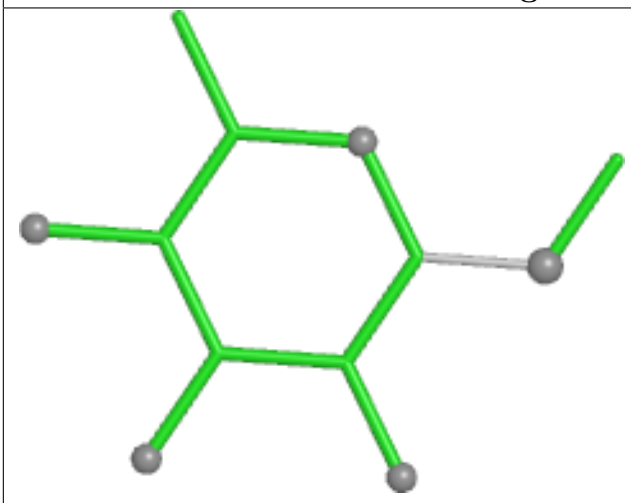


Torsions

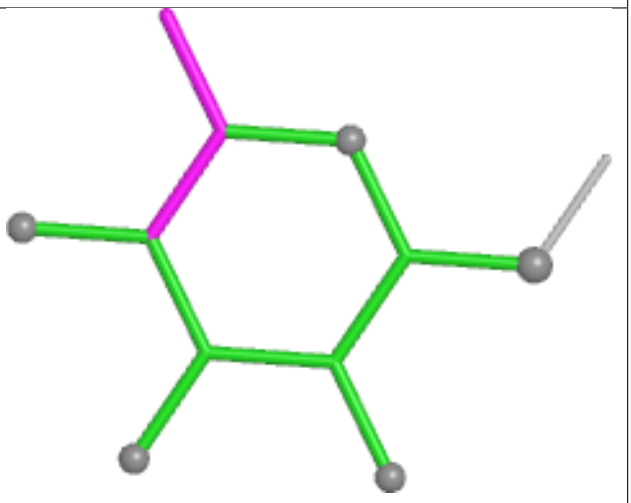


Rings

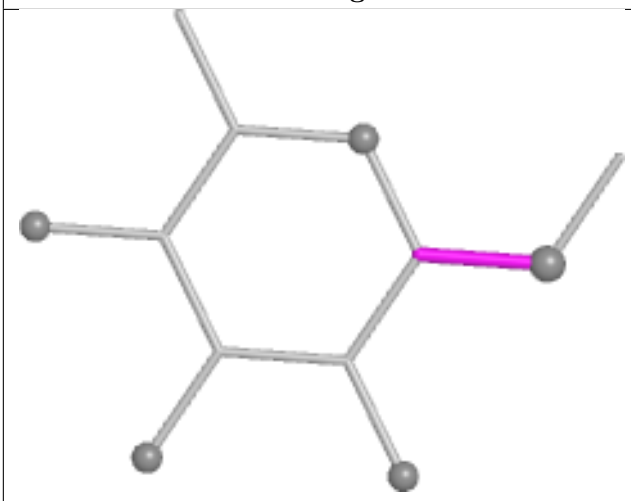
Ligand HTG X 902



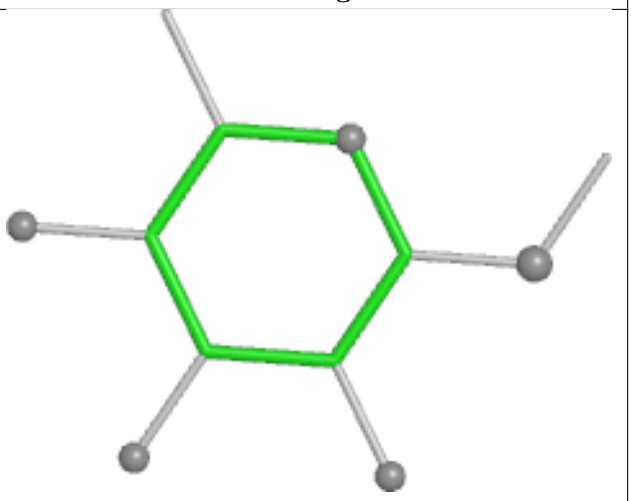
Bond lengths



Bond angles

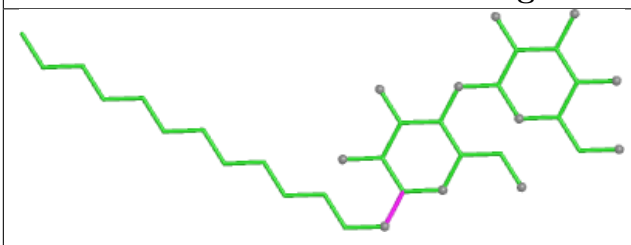


Torsions

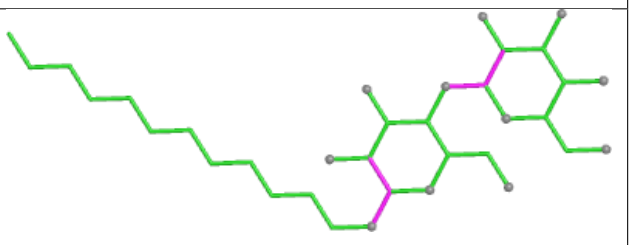


Rings

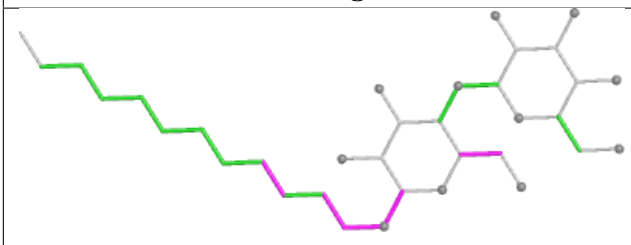
Ligand LMT M 302



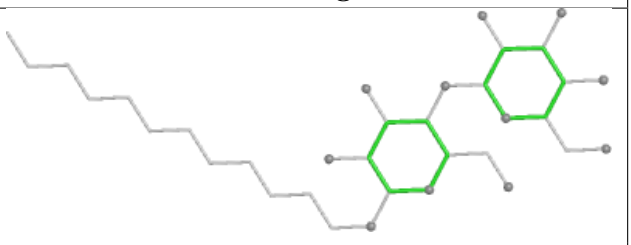
Bond lengths



Bond angles

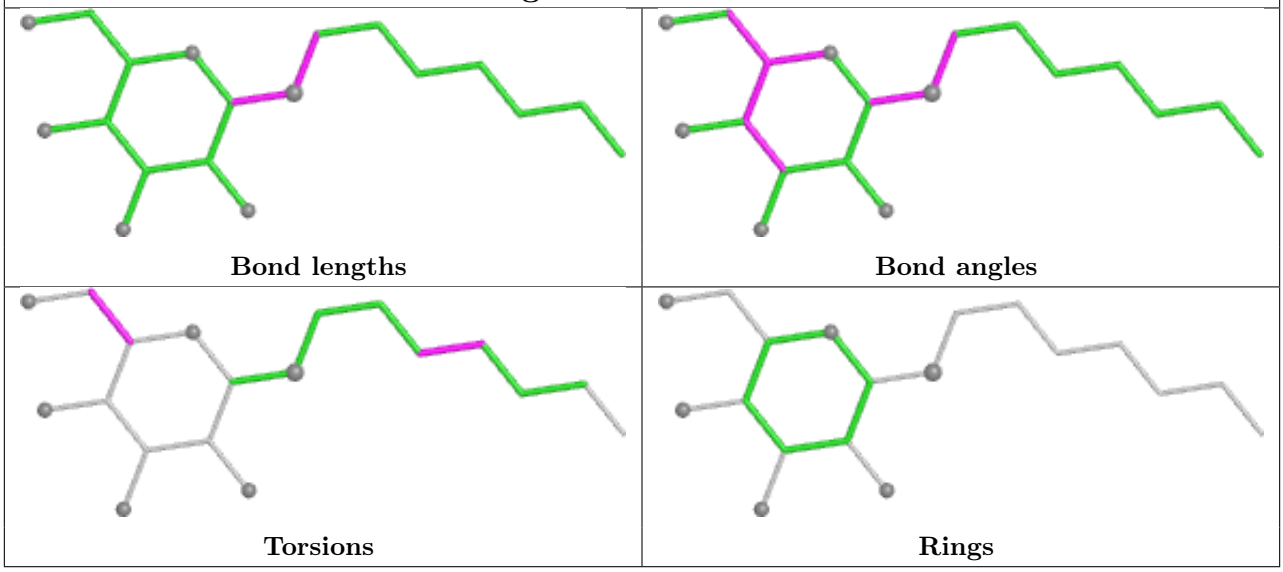


Torsions

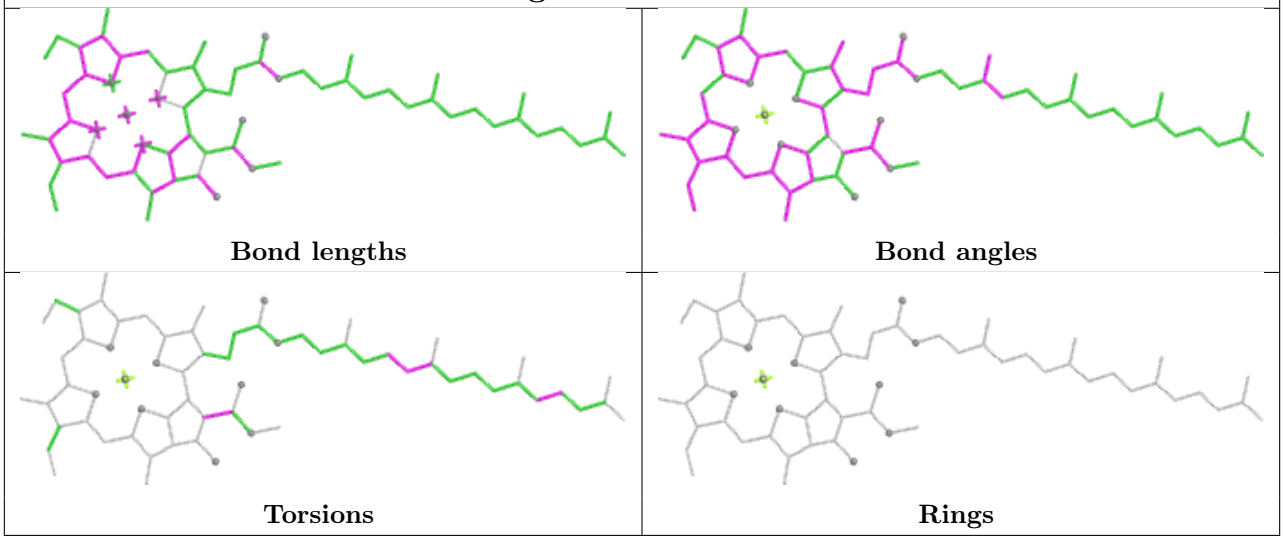


Rings

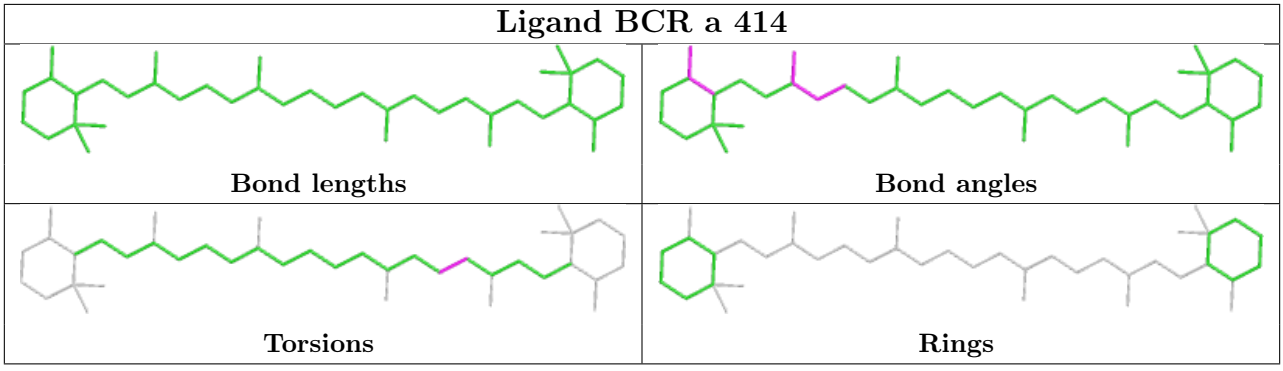
Ligand HTG B 626



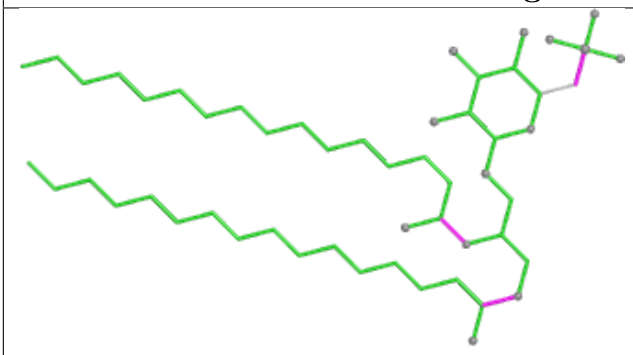
Ligand CLA b 607



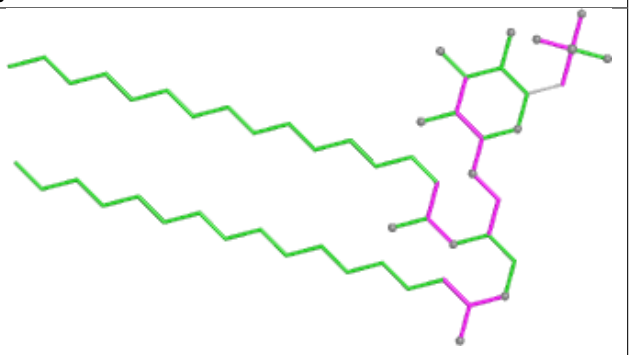
Ligand BCR a 414



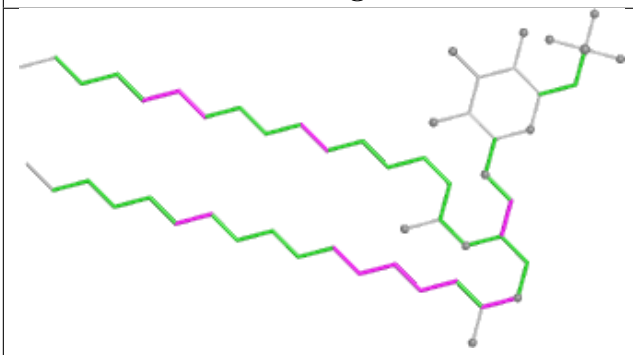
Ligand SQD A 417



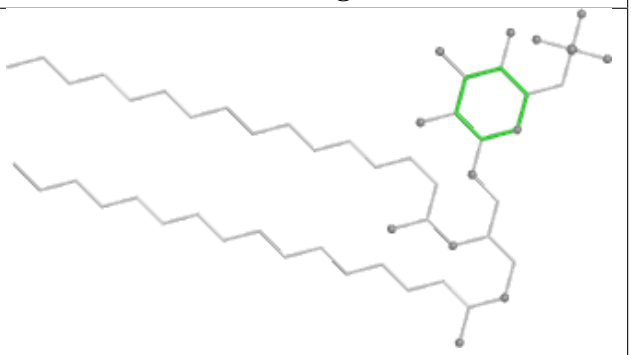
Bond lengths



Bond angles

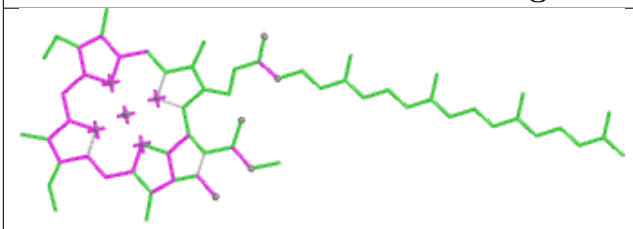


Torsions

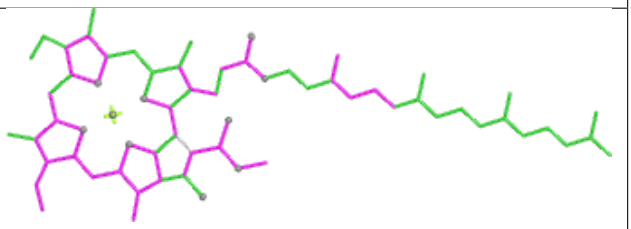


Rings

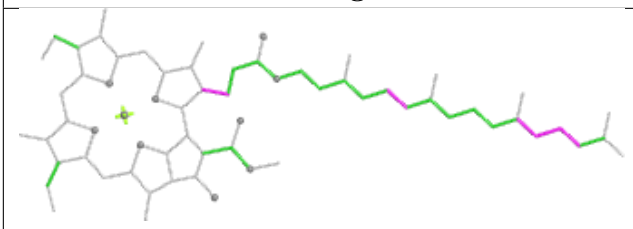
Ligand CLA c 907



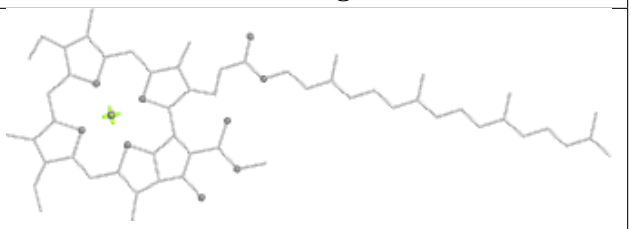
Bond lengths



Bond angles

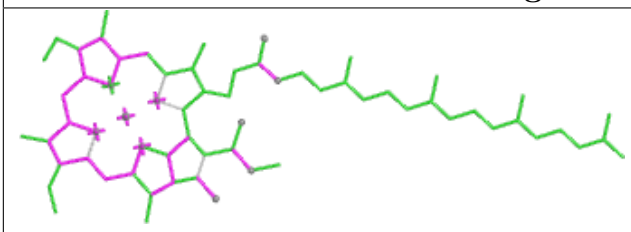


Torsions

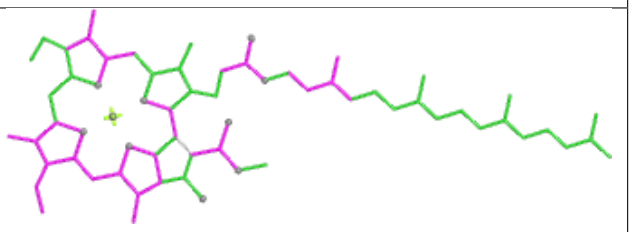


Rings

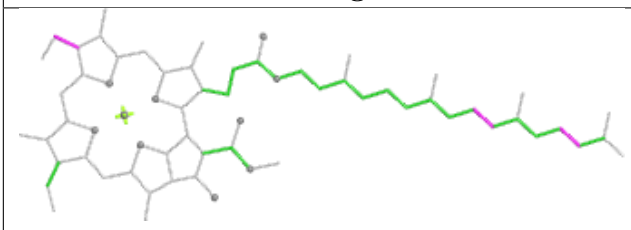
Ligand CLA C 503



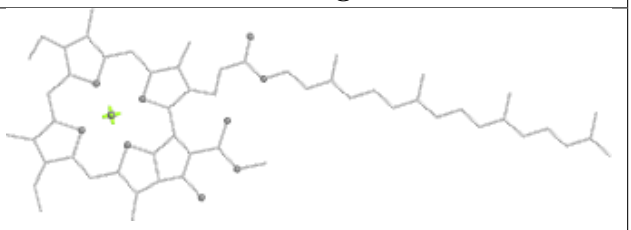
Bond lengths



Bond angles

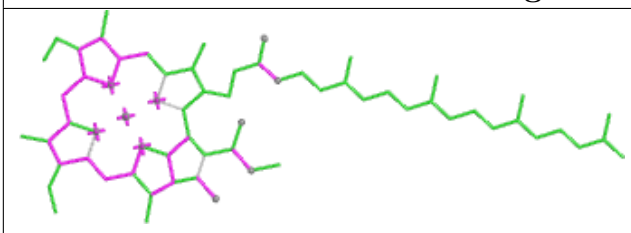


Torsions

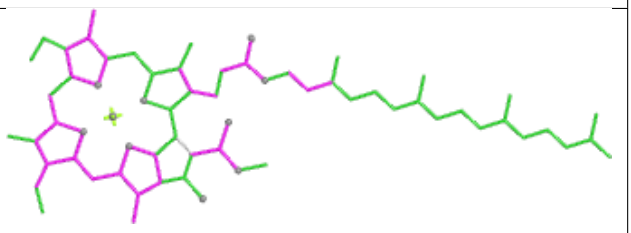


Rings

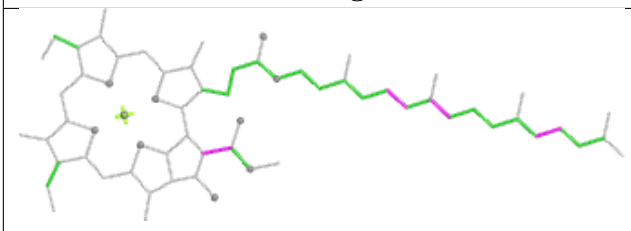
Ligand CLA C 508



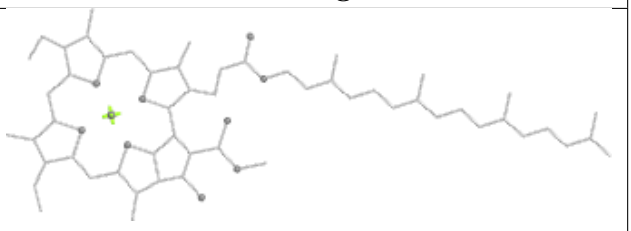
Bond lengths



Bond angles

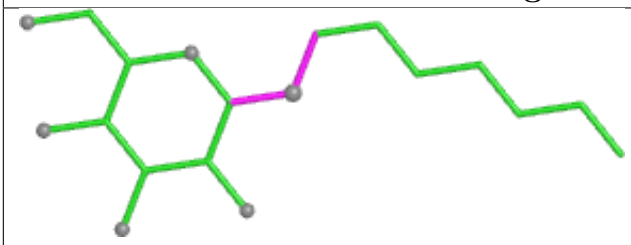


Torsions

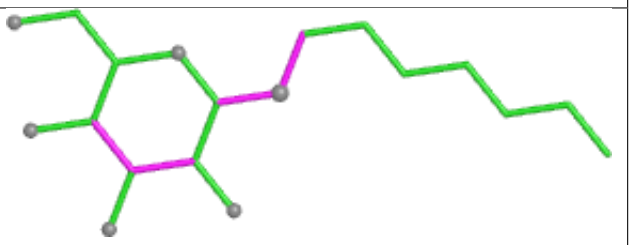


Rings

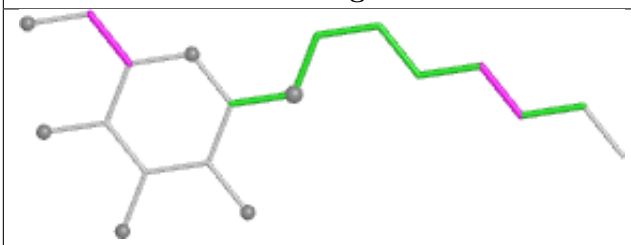
Ligand HTG d 403



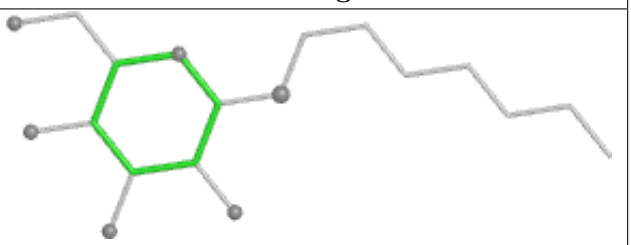
Bond lengths



Bond angles

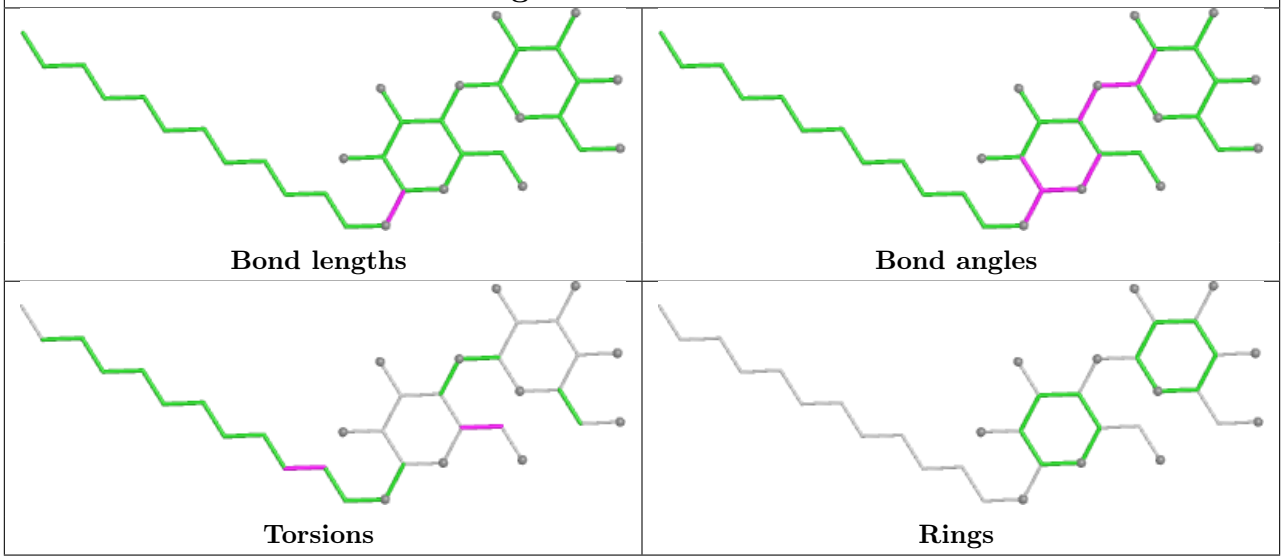


Torsions

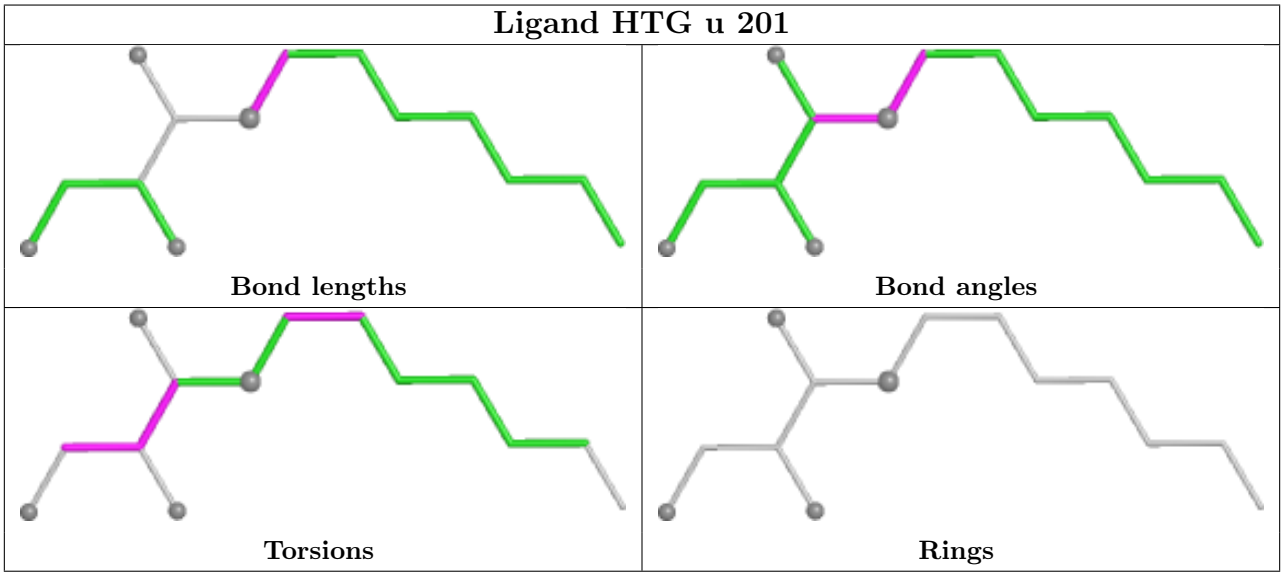


Rings

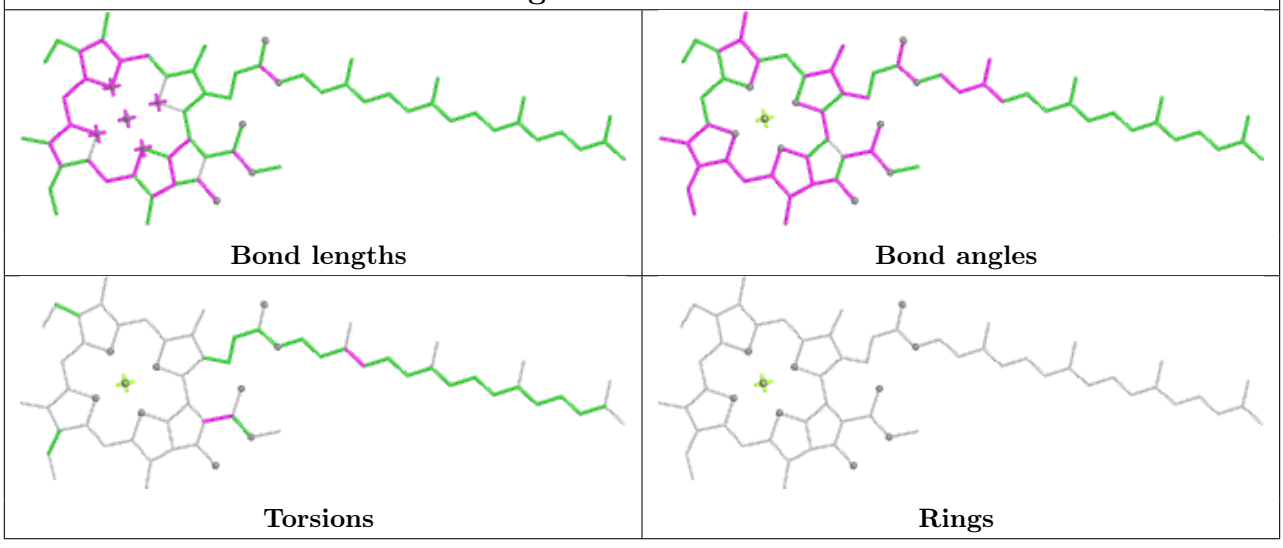
Ligand LMT m 1503



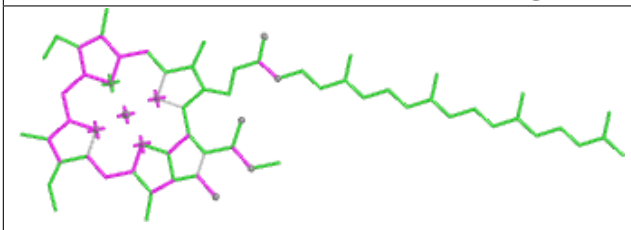
Ligand HTG u 201



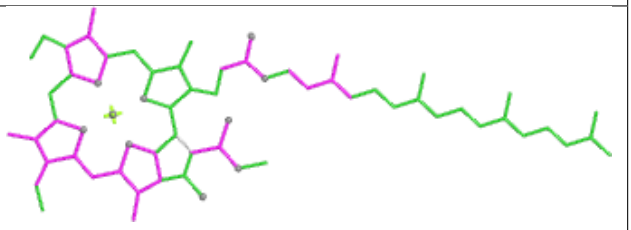
Ligand CLA b 609



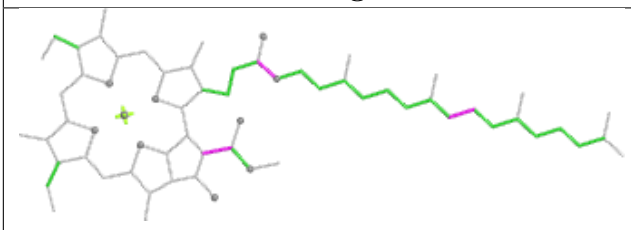
Ligand CLA b 616



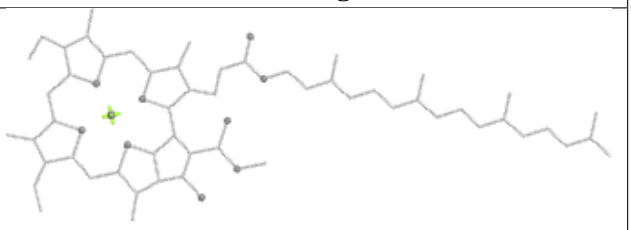
Bond lengths



Bond angles

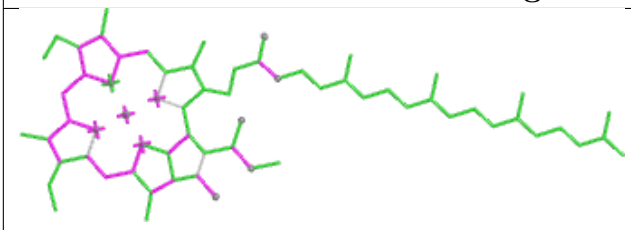


Torsions

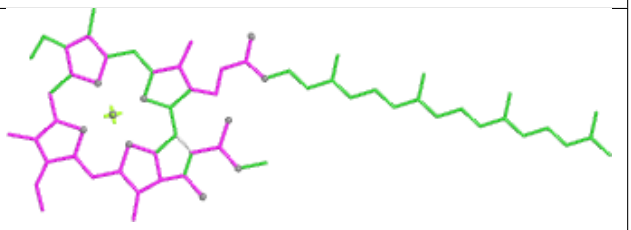


Rings

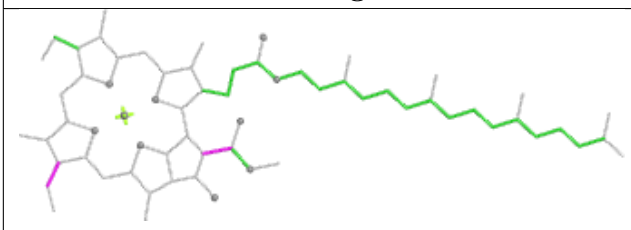
Ligand CLA A 406



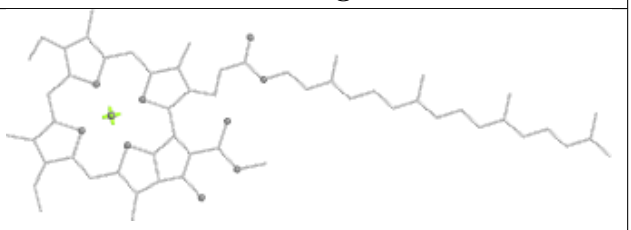
Bond lengths



Bond angles

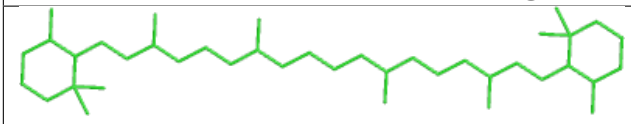


Torsions

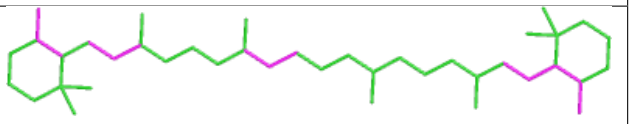


Rings

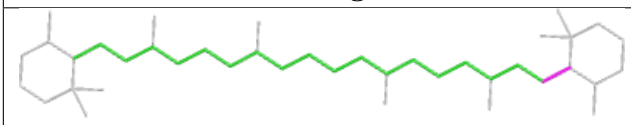
Ligand BCR C 515



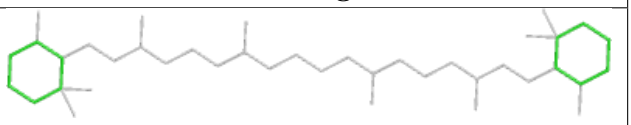
Bond lengths



Bond angles

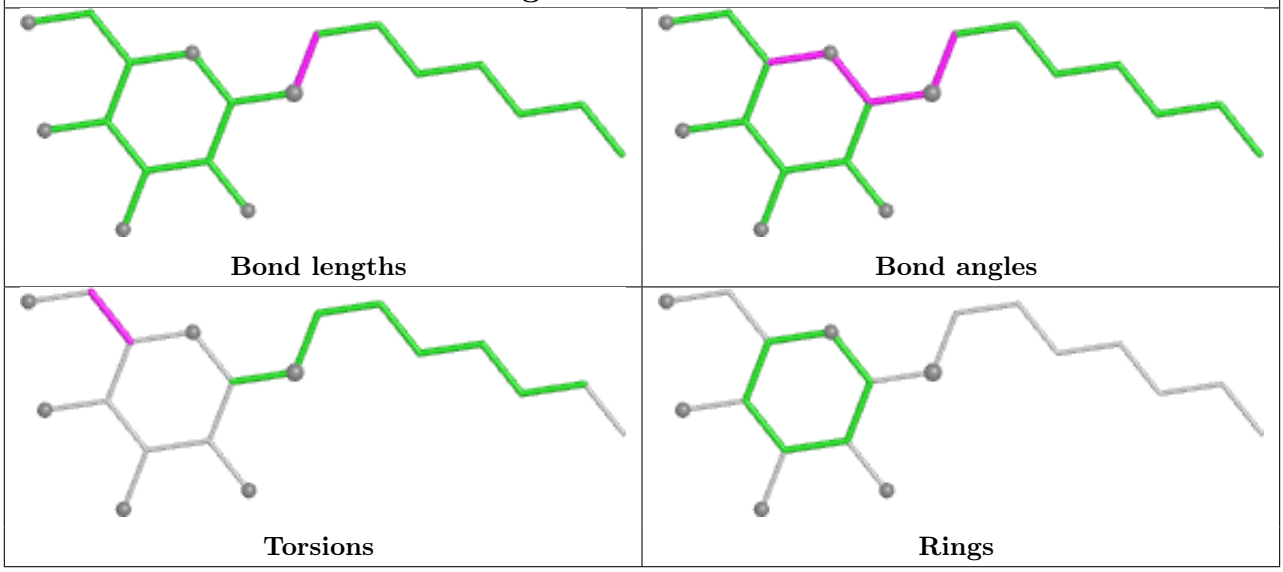


Torsions

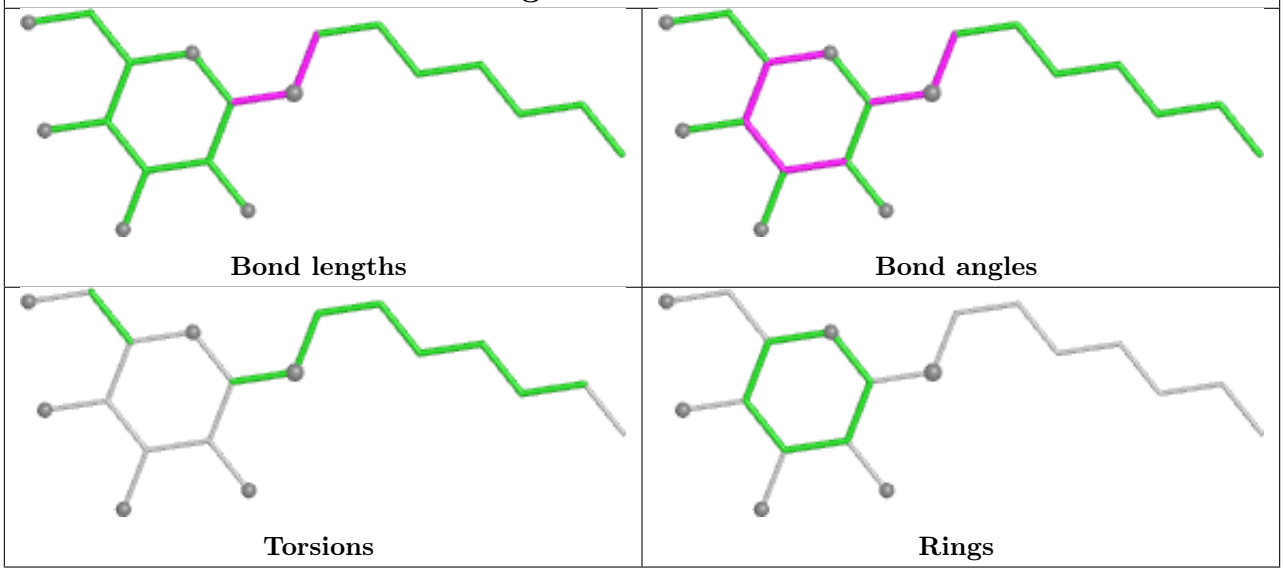


Rings

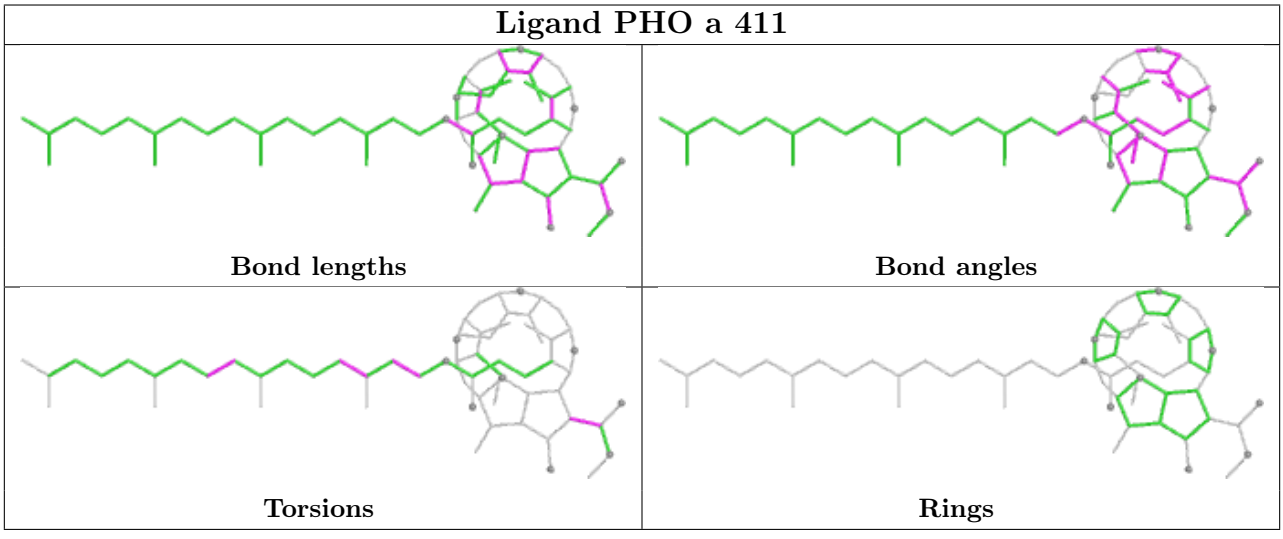
Ligand HTG B 627



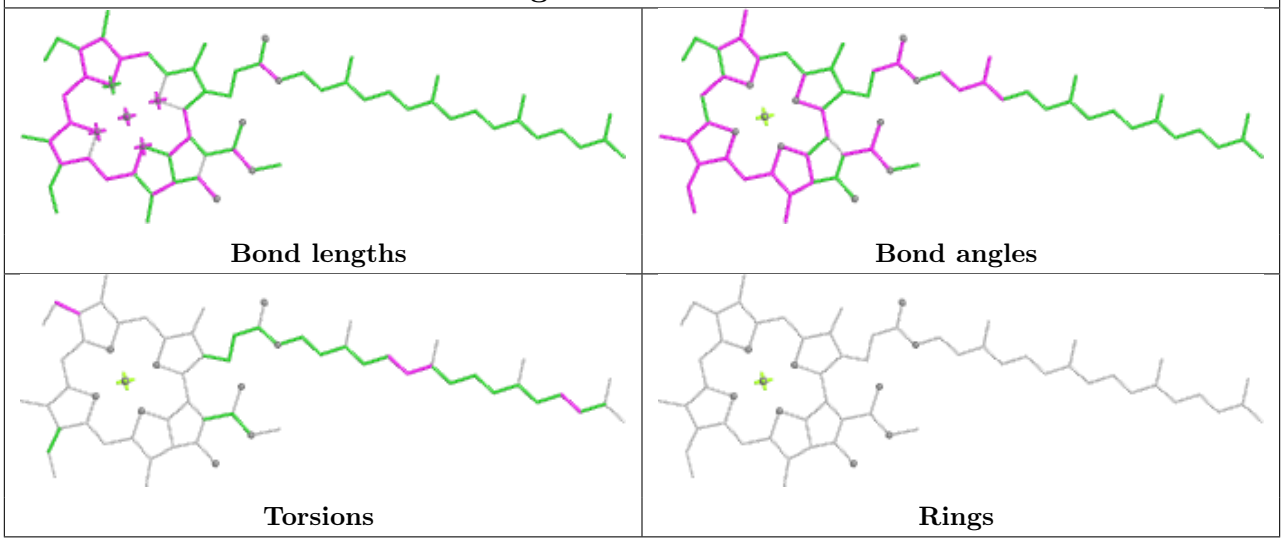
Ligand HTG C 528



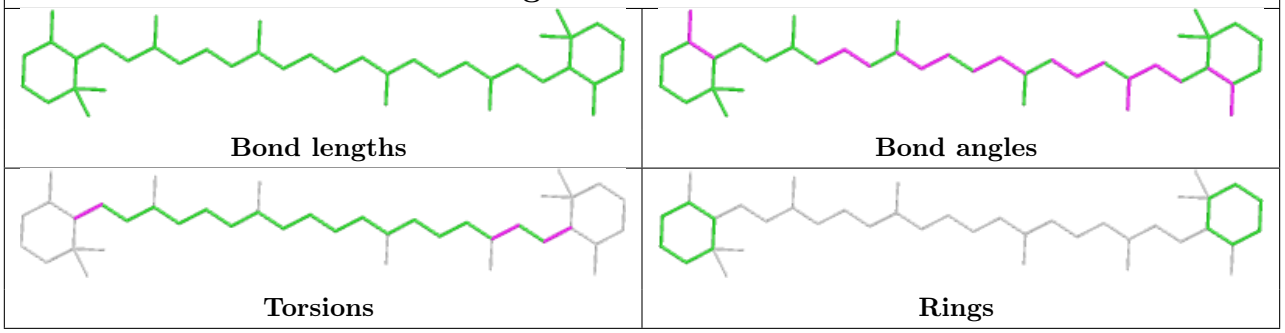
Ligand PHO a 411



Ligand CLA c 904



Ligand BCR Y 101



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	334/360 (92%)	-0.43	6 (1%) 67 67	24, 36, 63, 91	3 (0%)
1	a	334/360 (92%)	-0.32	12 (3%) 46 45	25, 39, 68, 104	5 (1%)
2	B	504/505 (99%)	-0.34	10 (1%) 65 64	23, 42, 67, 94	11 (2%)
2	b	501/505 (99%)	-0.24	14 (2%) 55 54	27, 45, 71, 110	12 (2%)
3	C	451/473 (95%)	-0.27	5 (1%) 78 77	33, 47, 64, 117	2 (0%)
3	c	455/473 (96%)	-0.15	4 (0%) 81 80	32, 52, 66, 101	5 (1%)
4	D	340/342 (99%)	-0.53	3 (0%) 81 80	20, 37, 57, 101	1 (0%)
4	d	340/342 (99%)	-0.43	1 (0%) 90 89	22, 42, 63, 95	2 (0%)
5	E	81/84 (96%)	0.20	2 (2%) 58 58	41, 58, 77, 105	0
5	e	79/84 (94%)	0.27	2 (2%) 58 58	49, 62, 87, 105	1 (1%)
6	F	34/45 (75%)	-0.11	0 100 100	43, 49, 76, 87	1 (2%)
6	f	32/45 (71%)	0.14	3 (9%) 14 13	47, 56, 104, 120	0
7	H	63/65 (96%)	-0.16	1 (1%) 70 70	39, 49, 58, 80	0
7	h	63/65 (96%)	0.17	1 (1%) 70 70	44, 55, 65, 104	0
8	I	35/38 (92%)	0.17	2 (5%) 29 28	44, 51, 79, 106	0
8	i	37/38 (97%)	-0.04	2 (5%) 31 30	43, 50, 85, 93	0
9	J	36/40 (90%)	-0.04	1 (2%) 55 54	40, 55, 84, 97	0
9	j	39/40 (97%)	0.38	2 (5%) 33 32	48, 60, 84, 89	0
10	K	37/37 (100%)	-0.17	0 100 100	36, 54, 64, 66	1 (2%)
10	k	37/37 (100%)	0.24	1 (2%) 56 55	53, 61, 73, 75	0
11	L	37/37 (100%)	-0.55	0 100 100	20, 34, 67, 97	1 (2%)
11	l	37/37 (100%)	-0.44	1 (2%) 56 55	21, 36, 80, 110	2 (5%)
12	M	32/36 (88%)	-0.46	0 100 100	21, 36, 48, 70	2 (6%)
12	m	33/36 (91%)	-0.36	0 100 100	21, 36, 57, 84	3 (9%)

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	O	244/244 (100%)	-0.19	2 (0%) 82 82	26, 49, 83, 125	7 (2%)
13	o	241/244 (98%)	0.02	6 (2%) 58 58	26, 50, 84, 120	7 (2%)
14	T	29/32 (90%)	-0.39	1 (3%) 48 47	31, 37, 62, 93	0
14	t	29/32 (90%)	-0.28	1 (3%) 48 47	25, 37, 62, 99	1 (3%)
15	U	97/104 (93%)	-0.27	0 100 100	38, 47, 68, 78	4 (4%)
15	u	97/104 (93%)	-0.26	0 100 100	34, 50, 62, 95	1 (1%)
16	V	137/163 (84%)	-0.44	0 100 100	25, 45, 57, 74	2 (1%)
16	v	137/163 (84%)	-0.22	0 100 100	30, 57, 71, 94	1 (0%)
17	Y	27/30 (90%)	0.56	3 (11%) 10 9	59, 66, 95, 101	0
17	y	28/30 (93%)	0.90	1 (3%) 46 45	66, 75, 99, 112	0
18	X	38/40 (95%)	0.14	0 100 100	33, 57, 75, 81	1 (2%)
18	x	38/40 (95%)	0.38	3 (7%) 18 17	35, 63, 94, 108	1 (2%)
19	Z	62/62 (100%)	0.45	5 (8%) 18 17	58, 68, 99, 104	0
19	z	60/62 (96%)	0.94	9 (15%) 5 5	68, 76, 105, 123	0
20	R	30/34 (88%)	2.45	23 (76%) 0 0	85, 107, 118, 123	0
All	All	5265/5508 (95%)	-0.20	127 (2%) 59 59	20, 46, 77, 125	77 (1%)

The worst 5 of 127 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
7	h	64	ALA	6.0
13	O	58	ASN	4.9
19	z	3	ILE	4.8
2	b	495	PHE	4.7
14	T	30	THR	4.6

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
14	FME	t	1	10/11	0.92	0.10	35,39,52,64	0
12	FME	m	1	10/11	0.93	0.13	40,47,63,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
4	HSK	d	336[A]	10/12	0.94	0.09	44,46,47,47	7
4	HSK	d	336[B]	11/12	0.94	0.09	44,46,46,47	8
12	FME	M	1	10/11	0.95	0.11	39,47,68,68	0
14	FME	T	1	10/11	0.95	0.08	37,42,55,60	0
4	HSK	D	336[A]	10/12	0.97	0.07	40,41,42,43	7
4	HSK	D	336[B]	11/12	0.97	0.07	40,41,42,42	8
8	FME	I	1	10/11	0.98	0.06	42,49,55,57	0
8	FME	i	1	10/11	0.98	0.07	44,51,57,58	0

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, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
35	HTG	X	902	12/19	0.46	0.16	107,121,127,127	0
34	LMT	M	302	35/35	0.70	0.18	53,76,89,91	0
31	GOL	h	103	6/6	0.73	0.13	83,88,89,91	0
30	UNL	j	1401	18/-	0.73	0.23	65,78,86,91	0
31	GOL	Z	102	6/6	0.73	0.15	108,110,112,118	0
30	UNL	E	103	13/-	0.74	0.25	81,89,92,92	0
31	GOL	O	305	6/6	0.74	0.15	98,101,103,104	0
30	UNL	M	301	16/-	0.75	0.24	59,67,81,82	0
36	DGD	D	406	53/66	0.75	0.19	82,93,104,108	0
35	HTG	u	201	14/19	0.76	0.19	73,87,103,108	0
30	UNL	y	102	10/-	0.76	0.28	93,99,101,103	0
36	DGD	e	102	39/66	0.76	0.18	83,100,111,113	0
30	UNL	a	418	40/-	0.77	0.19	76,86,97,103	0
31	GOL	C	533	6/6	0.77	0.17	86,88,90,96	0
35	HTG	V	203	13/19	0.78	0.13	60,67,81,99	0
30	UNL	B	635	10/-	0.78	0.24	68,77,86,91	0
31	GOL	o	303	6/6	0.78	0.14	69,76,83,88	0
34	LMT	F	103	26/35	0.78	0.19	59,71,79,82	26
30	UNL	E	102	16/-	0.78	0.25	76,80,88,88	0
41	SO4	O	302	5/5	0.78	0.12	93,106,108,126	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
30	UNL	c	933	9/-	0.79	0.23	74,83,93,97	0
31	GOL	c	934	6/6	0.79	0.17	67,77,78,80	0
34	LMT	m	1503	35/35	0.79	0.15	52,76,88,88	0
35	HTG	B	625	19/19	0.79	0.13	66,96,101,101	0
34	LMT	C	520	35/35	0.79	0.16	82,89,94,97	0
30	UNL	c	931	18/-	0.80	0.20	87,93,101,104	0
30	UNL	C	523	34/-	0.80	0.18	79,87,96,101	0
30	UNL	e	103	15/-	0.80	0.19	66,75,83,83	0
30	UNL	C	526	19/-	0.80	0.17	70,82,93,94	0
30	UNL	m	1501	13/-	0.80	0.23	63,67,77,81	0
30	UNL	A	415	36/-	0.80	0.18	68,78,90,91	0
35	HTG	B	627	19/19	0.80	0.17	75,92,105,106	0
28	LMG	C	534	51/55	0.80	0.16	67,87,95,105	0
30	UNL	J	104	13/-	0.80	0.23	78,84,93,94	0
35	HTG	c	924	19/19	0.80	0.13	75,96,105,109	0
30	UNL	B	636	15/-	0.80	0.24	69,82,91,92	0
30	UNL	B	638	22/-	0.80	0.14	71,79,97,100	0
31	GOL	c	937	6/6	0.80	0.15	99,99,99,100	0
30	UNL	a	422	10/-	0.80	0.21	69,72,84,90	0
30	UNL	i	804	9/-	0.81	0.18	80,82,84,84	0
34	LMT	t	904	24/35	0.81	0.17	56,65,87,95	0
31	GOL	a	421	6/6	0.81	0.16	69,77,77,80	0
30	UNL	A	418	4/-	0.81	0.24	78,79,82,84	0
30	UNL	j	1403	14/-	0.81	0.19	70,76,79,87	0
31	GOL	c	939	6/6	0.81	0.16	78,79,83,84	0
30	UNL	Y	102	10/-	0.81	0.23	82,87,93,98	0
30	UNL	c	935	6/-	0.81	0.19	75,82,87,87	0
31	GOL	C	531	6/6	0.81	0.15	52,55,58,59	0
30	UNL	b	636	8/-	0.81	0.18	61,68,73,78	0
30	UNL	i	803	16/-	0.81	0.18	71,79,88,91	0
30	UNL	t	901	12/-	0.82	0.18	70,77,83,85	0
35	HTG	d	403	19/19	0.82	0.14	83,97,112,112	0
30	UNL	b	633	18/-	0.82	0.19	59,64,79,79	0
30	UNL	b	635	9/-	0.82	0.23	71,78,82,83	0
34	LMT	T	703	24/35	0.82	0.17	53,67,81,92	0
34	LMT	B	623	35/35	0.82	0.14	63,79,93,96	0
30	UNL	i	801	18/-	0.83	0.19	53,64,80,89	0
35	HTG	b	627	19/19	0.83	0.14	89,109,113,114	0
34	LMT	c	922	35/35	0.83	0.14	77,85,101,103	0
31	GOL	t	902	6/6	0.83	0.15	54,59,60,60	0
30	UNL	A	416	14/-	0.83	0.18	66,76,88,89	0
31	GOL	O	304	6/6	0.83	0.10	69,76,77,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
27	SQD	B	621	54/54	0.83	0.15	62,75,100,111	0
37	LHG	E	101	49/49	0.83	0.18	72,94,100,105	0
27	SQD	b	601	54/54	0.83	0.15	55,71,92,98	0
35	HTG	C	522	19/19	0.84	0.12	76,93,101,104	0
34	LMT	J	102	23/35	0.84	0.17	65,77,93,97	0
30	UNL	B	637	11/-	0.84	0.20	72,78,85,91	0
35	HTG	b	603	19/19	0.84	0.14	78,91,101,106	0
30	UNL	h	104	7/-	0.84	0.17	65,68,75,77	0
34	LMT	Z	101	35/35	0.84	0.15	71,96,106,112	0
34	LMT	b	625	25/35	0.84	0.15	72,87,99,101	0
31	GOL	v	201	6/6	0.84	0.17	102,103,103,105	0
33	CA	B	601	1/1	0.84	0.11	86,86,86,86	0
27	SQD	a	401	54/54	0.84	0.14	53,70,88,95	0
30	UNL	T	701	15/-	0.84	0.20	73,80,88,89	0
27	SQD	f	102	33/54	0.84	0.15	83,92,110,112	0
30	UNL	c	925	30/-	0.85	0.17	83,94,106,108	0
31	GOL	u	202	6/6	0.85	0.11	76,80,89,95	0
30	UNL	B	634	15/-	0.85	0.18	54,60,76,81	0
31	GOL	L	102	6/6	0.85	0.14	55,56,59,60	0
35	HTG	v	205	13/19	0.85	0.12	69,80,89,92	0
35	HTG	U	201	9/19	0.85	0.20	79,83,102,116	0
30	UNL	B	639	5/-	0.85	0.16	72,72,75,76	0
30	UNL	H	104	7/-	0.85	0.18	61,66,76,79	0
30	UNL	d	402	36/-	0.85	0.18	63,74,89,92	0
27	SQD	A	417	54/54	0.86	0.13	52,68,83,87	0
29	PL9	a	417	55/55	0.86	0.18	68,79,90,94	0
30	UNL	b	634	18/-	0.86	0.20	83,94,109,115	0
30	UNL	I	102	12/-	0.86	0.17	63,68,74,74	0
30	UNL	I	103	12/-	0.86	0.16	67,71,84,88	0
30	UNL	X	901	16/-	0.86	0.15	50,53,69,72	0
31	GOL	b	631	6/6	0.86	0.16	60,64,65,72	0
34	LMT	z	101	32/35	0.86	0.14	66,98,106,107	0
31	GOL	c	927	6/6	0.86	0.13	58,61,62,64	0
31	GOL	c	932	6/6	0.86	0.14	67,68,74,75	0
31	GOL	C	530	6/6	0.86	0.21	84,85,85,87	0
37	LHG	e	101	27/49	0.86	0.13	102,117,131,137	0
30	UNL	J	103	16/-	0.86	0.21	82,88,104,107	0
35	HTG	H	105	16/19	0.87	0.16	82,95,106,108	0
31	GOL	u	203	6/6	0.87	0.12	71,72,77,78	0
31	GOL	b	632	6/6	0.87	0.16	57,60,65,66	0
30	UNL	C	532	4/-	0.87	0.20	76,78,80,80	0
29	PL9	A	414	55/55	0.87	0.18	65,74,87,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
31	GOL	B	630	6/6	0.87	0.14	47,51,55,57	0
35	HTG	c	923	19/19	0.87	0.11	88,93,99,102	0
30	UNL	I	101	14/-	0.87	0.17	54,59,72,77	0
30	UNL	c	930	11/-	0.88	0.13	82,91,105,109	0
28	LMG	c	921	51/55	0.88	0.13	60,87,94,96	0
31	GOL	c	938	6/6	0.88	0.12	60,64,70,77	0
30	UNL	i	802	12/-	0.88	0.19	66,71,81,81	0
30	UNL	D	411	37/-	0.88	0.16	54,67,82,84	0
31	GOL	B	632	6/6	0.88	0.14	52,55,61,71	0
34	LMT	M	303	35/35	0.88	0.11	46,58,66,66	0
30	UNL	a	403	6/-	0.88	0.17	73,79,79,80	0
27	SQD	F	101	37/54	0.88	0.12	60,74,80,84	0
30	UNL	C	529	9/-	0.88	0.16	80,81,83,84	0
31	GOL	H	101	6/6	0.88	0.15	95,95,98,100	0
34	LMT	a	402	35/35	0.89	0.11	47,60,70,77	0
30	UNL	v	206	7/-	0.89	0.17	69,72,76,78	0
30	UNL	b	637	10/-	0.89	0.16	63,83,91,91	0
34	LMT	m	1502	35/35	0.89	0.10	44,56,63,66	0
35	HTG	C	528	19/19	0.89	0.12	89,101,108,114	0
31	GOL	C	525	6/6	0.89	0.13	48,51,56,60	0
33	CA	b	604	1/1	0.89	0.08	107,107,107,107	0
30	UNL	d	412	18/-	0.90	0.14	54,66,76,78	0
30	UNL	D	412	16/-	0.90	0.15	45,54,68,70	0
31	GOL	o	304	6/6	0.90	0.13	87,89,89,89	0
28	LMG	b	624	51/55	0.90	0.12	42,54,60,64	0
31	GOL	b	638	6/6	0.90	0.18	91,91,92,95	0
34	LMT	D	401	35/35	0.90	0.11	50,61,74,75	0
35	HTG	b	602	19/19	0.90	0.11	52,62,69,76	0
28	LMG	a	416	51/55	0.90	0.12	56,69,76,79	0
35	HTG	b	626	19/19	0.90	0.14	47,54,76,79	0
35	HTG	C	521	19/19	0.90	0.11	77,83,92,94	0
28	LMG	C	519	49/55	0.91	0.13	43,67,78,81	0
35	HTG	B	626	19/19	0.91	0.11	50,64,70,73	0
31	GOL	B	631	6/6	0.91	0.11	43,51,54,61	0
31	GOL	c	936	6/6	0.91	0.16	87,87,87,87	0
31	GOL	v	204	6/6	0.91	0.10	65,71,77,79	0
31	GOL	b	630	6/6	0.91	0.11	44,49,55,56	0
28	LMG	B	622	51/55	0.91	0.11	39,50,59,63	0
28	LMG	c	920	51/55	0.91	0.13	47,71,83,85	0
31	GOL	C	527	6/6	0.91	0.17	74,75,75,76	0
31	GOL	c	926	6/6	0.91	0.11	56,63,69,74	0
31	GOL	B	628	6/6	0.91	0.11	47,52,55,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
31	GOL	c	929	6/6	0.91	0.11	62,63,72,72	0
31	GOL	A	422	6/6	0.92	0.10	41,43,45,47	0
26	BCR	t	903	40/40	0.92	0.09	34,47,56,59	0
28	LMG	A	413	51/55	0.92	0.11	54,66,75,79	0
31	GOL	V	204	6/6	0.92	0.12	38,47,48,49	0
27	SQD	A	412	52/54	0.92	0.12	41,66,75,79	0
35	HTG	B	624	19/19	0.92	0.14	43,51,69,69	0
31	GOL	a	419	6/6	0.92	0.11	40,45,50,52	0
24	CLA	B	602	65/65	0.92	0.10	44,58,78,81	0
31	GOL	b	628	6/6	0.92	0.11	56,60,64,66	0
24	CLA	C	506	65/65	0.92	0.11	48,59,75,78	0
30	UNL	d	413	18/-	0.92	0.14	58,65,82,84	0
24	CLA	b	605	65/65	0.92	0.10	49,65,82,88	0
37	LHG	D	407	49/49	0.92	0.10	37,44,52,56	0
24	CLA	c	914	65/65	0.92	0.10	55,68,83,86	0
26	BCR	T	702	40/40	0.92	0.09	36,48,57,58	0
31	GOL	A	420	6/6	0.92	0.11	47,53,60,60	0
31	GOL	b	629	6/6	0.93	0.11	52,57,57,61	0
24	CLA	C	513	65/65	0.93	0.10	55,66,80,81	0
27	SQD	a	415	54/54	0.93	0.12	42,71,82,83	0
26	BCR	d	406	40/40	0.93	0.10	45,52,67,71	0
31	GOL	B	633	6/6	0.93	0.10	47,50,52,54	0
31	GOL	O	306	6/6	0.93	0.09	73,77,81,86	0
24	CLA	B	617	65/65	0.93	0.10	37,44,71,73	0
24	CLA	b	618	65/65	0.93	0.10	33,40,65,71	0
24	CLA	b	620	65/65	0.93	0.10	40,47,77,79	0
24	CLA	c	907	65/65	0.93	0.12	49,58,71,75	0
39	RRX	h	101	41/41	0.93	0.10	44,54,63,71	0
24	CLA	B	615	65/65	0.93	0.10	32,38,63,67	0
24	CLA	b	610	65/65	0.94	0.09	37,46,58,64	0
26	BCR	C	514	40/40	0.94	0.09	52,62,67,70	0
26	BCR	D	404	40/40	0.94	0.10	41,47,68,69	0
26	BCR	K	101	40/40	0.94	0.09	47,51,56,58	0
32	BCT	a	408	4/4	0.94	0.09	45,46,52,59	0
31	GOL	A	419	6/6	0.94	0.08	41,45,46,50	0
37	LHG	D	409	46/49	0.94	0.10	37,45,76,78	0
24	CLA	C	512	65/65	0.94	0.09	52,58,73,76	0
37	LHG	d	408	49/49	0.94	0.09	40,47,54,58	0
26	BCR	c	915	40/40	0.94	0.10	61,69,75,75	0
28	LMG	D	410	48/55	0.94	0.10	39,45,69,75	0
24	CLA	c	913	65/65	0.94	0.09	53,60,74,78	0
24	CLA	C	508	65/65	0.95	0.08	38,44,70,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
31	GOL	V	205	6/6	0.95	0.07	59,66,69,75	0
24	CLA	d	405	65/65	0.95	0.09	43,51,79,82	0
26	BCR	B	618	40/40	0.95	0.07	37,42,47,49	0
31	GOL	a	420	6/6	0.95	0.07	42,44,45,49	0
28	LMG	d	411	48/55	0.95	0.09	44,50,70,74	0
26	BCR	B	619	40/40	0.95	0.07	34,43,54,59	0
24	CLA	B	607	65/65	0.95	0.08	34,42,60,65	0
29	PL9	d	407	55/55	0.95	0.07	31,37,42,45	0
24	CLA	C	504	65/65	0.95	0.08	37,43,63,69	0
31	GOL	v	203	6/6	0.95	0.09	43,51,53,54	0
24	CLA	c	905	65/65	0.95	0.08	42,48,65,68	0
36	DGD	H	103	62/66	0.95	0.09	37,43,51,54	0
36	DGD	c	917	62/66	0.95	0.09	38,47,74,79	0
24	CLA	a	413	65/65	0.95	0.09	35,40,77,79	0
36	DGD	h	102	62/66	0.95	0.08	42,48,55,59	0
31	GOL	b	640	6/6	0.95	0.08	44,52,54,54	0
26	BCR	Y	101	40/40	0.95	0.08	49,54,61,62	0
26	BCR	b	623	40/40	0.95	0.08	43,48,59,60	0
37	LHG	b	639	49/49	0.95	0.09	36,45,54,65	0
24	CLA	c	908	65/65	0.95	0.09	43,50,64,67	0
24	CLA	c	909	65/65	0.95	0.09	40,46,77,81	0
24	CLA	A	410	65/65	0.95	0.10	35,39,77,82	0
26	BCR	y	101	40/40	0.95	0.09	51,60,66,67	0
24	CLA	a	410	65/65	0.96	0.09	35,39,75,85	0
24	CLA	c	911	65/65	0.96	0.07	42,49,54,64	0
31	GOL	V	206	6/6	0.96	0.06	50,53,55,58	0
24	CLA	C	507	65/65	0.96	0.08	44,49,64,66	0
24	CLA	C	503	65/65	0.96	0.07	42,47,55,63	0
32	BCT	A	421	4/4	0.96	0.07	41,42,49,57	0
24	CLA	b	606	65/65	0.96	0.07	40,44,50,55	0
24	CLA	C	509	65/65	0.96	0.07	43,47,59,62	0
24	CLA	b	613	65/65	0.96	0.07	44,48,53,56	0
26	BCR	B	620	40/40	0.96	0.07	40,46,59,60	0
24	CLA	b	614	65/65	0.96	0.07	38,44,47,49	0
26	BCR	C	515	40/40	0.96	0.08	44,52,56,58	0
31	GOL	B	629	6/6	0.96	0.08	42,44,46,47	0
24	CLA	C	510	65/65	0.96	0.07	40,45,53,59	0
35	HTG	o	301	19/19	0.96	0.08	41,45,54,54	0
24	CLA	b	619	65/65	0.96	0.07	38,46,59,63	0
24	CLA	C	511	65/65	0.96	0.07	42,52,58,59	0
36	DGD	C	516	62/66	0.96	0.09	35,43,72,77	0
36	DGD	C	517	56/66	0.96	0.07	38,46,67,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
36	DGD	C	518	58/66	0.96	0.08	36,43,61,69	0
24	CLA	c	902	65/65	0.96	0.08	42,51,58,61	0
26	BCR	a	414	40/40	0.96	0.07	33,40,47,48	0
26	BCR	b	621	40/40	0.96	0.07	38,44,48,52	0
36	DGD	c	918	55/66	0.96	0.08	41,52,65,68	0
36	DGD	c	919	60/66	0.96	0.08	42,48,60,68	0
26	BCR	b	622	40/40	0.96	0.07	36,44,56,59	0
24	CLA	c	904	65/65	0.96	0.07	44,52,58,70	0
24	CLA	B	611	65/65	0.96	0.07	37,40,44,47	0
37	LHG	D	408	49/49	0.96	0.08	32,40,52,57	0
26	BCR	c	916	40/40	0.96	0.08	48,53,58,59	0
29	PL9	D	405	55/55	0.96	0.06	30,35,39,42	0
31	GOL	f	104	6/6	0.96	0.07	61,63,66,68	0
24	CLA	C	501	65/65	0.96	0.08	40,47,55,60	0
37	LHG	d	409	49/49	0.96	0.08	35,41,52,57	0
37	LHG	d	410	40/49	0.96	0.09	42,48,76,78	0
26	BCR	k	101	40/40	0.96	0.08	51,58,66,67	0
39	RRX	H	102	41/41	0.96	0.07	41,48,58,70	0
24	CLA	D	403	65/65	0.96	0.07	38,44,72,74	0
31	GOL	V	201	6/6	0.96	0.07	53,58,62,62	0
24	CLA	B	608	65/65	0.97	0.06	30,35,46,49	0
24	CLA	b	607	65/65	0.97	0.06	38,42,49,54	0
24	CLA	b	608	65/65	0.97	0.06	33,37,63,68	0
25	PHO	A	408	64/64	0.97	0.05	28,33,38,40	0
25	PHO	A	409	64/64	0.97	0.06	31,37,45,51	0
25	PHO	a	411	64/64	0.97	0.06	31,35,39,44	0
25	PHO	a	412	64/64	0.97	0.06	34,41,48,57	0
26	BCR	A	411	40/40	0.97	0.07	34,40,47,48	0
24	CLA	b	609	65/65	0.97	0.06	34,38,49,51	0
24	CLA	C	505	65/65	0.97	0.07	38,44,57,60	0
24	CLA	b	611	65/65	0.97	0.06	32,37,47,48	0
24	CLA	b	612	65/65	0.97	0.06	39,44,52,56	0
24	CLA	B	609	65/65	0.97	0.06	34,39,47,50	0
24	CLA	B	610	65/65	0.97	0.06	39,42,47,54	0
24	CLA	b	615	65/65	0.97	0.06	33,38,48,52	0
24	CLA	b	616	65/65	0.97	0.06	33,39,44,48	0
31	GOL	c	928	6/6	0.97	0.07	42,44,45,46	0
24	CLA	b	617	65/65	0.97	0.06	32,37,58,63	0
24	CLA	B	603	65/65	0.97	0.07	36,40,47,48	0
24	CLA	B	612	65/65	0.97	0.06	30,35,45,48	0
24	CLA	B	613	65/65	0.97	0.06	30,36,42,44	0
24	CLA	B	614	65/65	0.97	0.06	30,35,56,60	0

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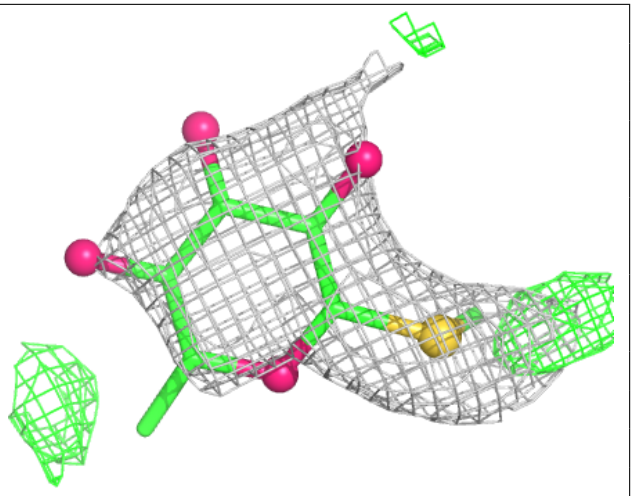
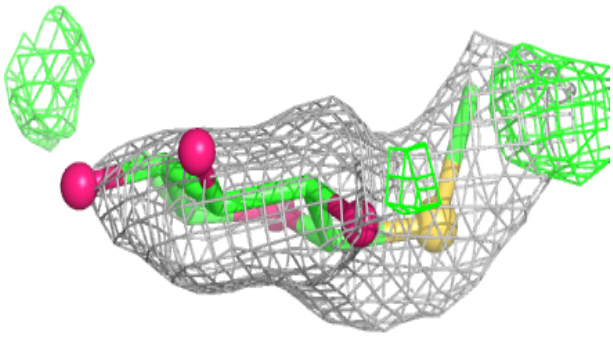
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
24	CLA	c	903	65/65	0.97	0.07	40,47,60,71	0
24	CLA	B	604	65/65	0.97	0.06	34,38,46,48	0
24	CLA	B	616	65/65	0.97	0.07	37,41,56,59	0
37	LHG	L	101	49/49	0.97	0.07	35,43,53,61	0
24	CLA	c	906	65/65	0.97	0.06	41,45,56,64	0
24	CLA	B	605	65/65	0.97	0.07	30,34,57,68	0
24	CLA	B	606	65/65	0.97	0.06	32,35,45,49	0
24	CLA	C	502	65/65	0.97	0.06	39,42,54,60	0
24	CLA	c	910	65/65	0.97	0.07	44,50,61,66	0
38	HEM	F	102	43/43	0.97	0.08	53,58,70,74	0
38	HEM	f	101	43/43	0.97	0.08	59,65,75,91	0
35	HTG	O	303	19/19	0.97	0.08	41,45,57,58	0
24	CLA	A	407	65/65	0.97	0.07	29,34,73,77	0
40	MG	j	1402	1/1	0.97	0.14	51,51,51,51	0
24	CLA	c	912	65/65	0.97	0.07	45,54,63,65	0
24	CLA	A	406	65/65	0.98	0.05	27,31,40,43	0
24	CLA	d	401	65/65	0.98	0.05	30,33,41,48	0
24	CLA	d	404	65/65	0.98	0.06	30,35,55,59	0
24	CLA	a	409	65/65	0.98	0.05	31,35,40,51	0
38	HEM	v	202	43/43	0.98	0.06	44,49,51,54	0
24	CLA	A	405	65/65	0.98	0.05	27,31,38,49	0
24	CLA	D	402	65/65	0.98	0.05	25,31,49,54	0
31	GOL	C	524	6/6	0.98	0.06	37,38,40,40	0
33	CA	f	103	1/1	0.98	0.08	70,70,70,70	0
33	CA	O	301	1/1	0.99	0.06	68,68,68,68	0
38	HEM	V	202	43/43	0.99	0.06	37,40,43,45	0
21	OEX	a	404	10/10	0.99	0.03	38,39,41,44	0
33	CA	c	901	1/1	0.99	0.05	61,61,61,61	0
23	CL	A	403	1/1	0.99	0.06	36,36,36,36	0
33	CA	o	302	1/1	0.99	0.04	69,69,69,69	0
40	MG	J	101	1/1	0.99	0.08	43,43,43,43	0
21	OEX	A	401	10/10	0.99	0.04	34,37,40,41	0
33	CA	F	104	1/1	0.99	0.06	63,63,63,63	0
23	CL	A	404	1/1	1.00	0.03	35,35,35,35	0
23	CL	a	406	1/1	1.00	0.07	43,43,43,43	0
23	CL	a	407	1/1	1.00	0.02	41,41,41,41	0
22	FE2	a	405	1/1	1.00	0.02	41,41,41,41	0
22	FE2	A	402	1/1	1.00	0.01	37,37,37,37	0

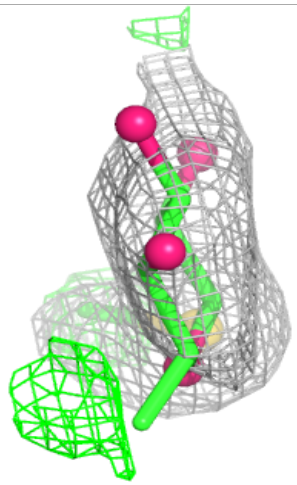
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around HTG X 902:

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

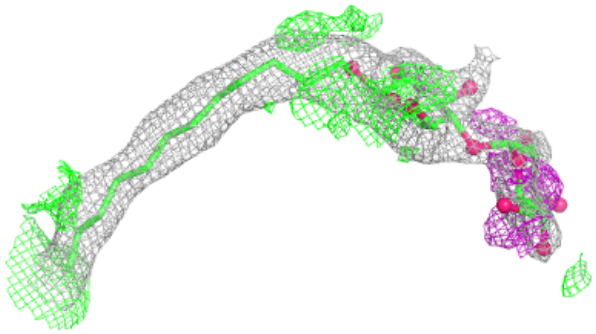


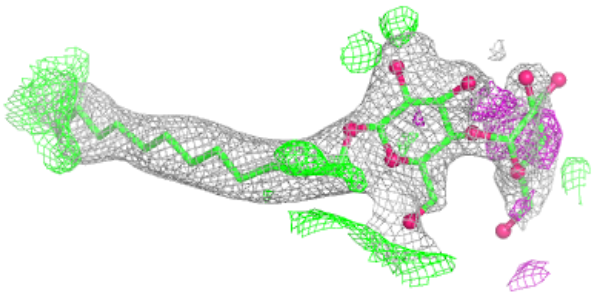


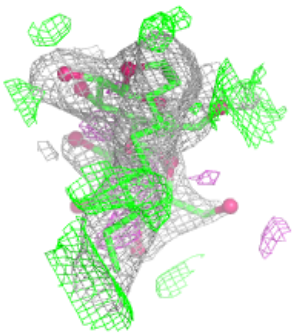


Electron density around LMT M 302:

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

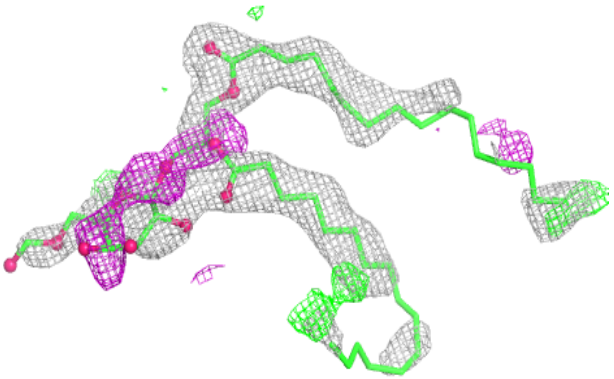


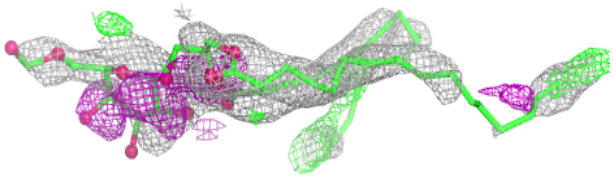


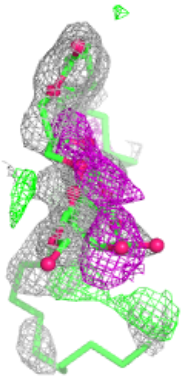


Electron density around DGD D 406:

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

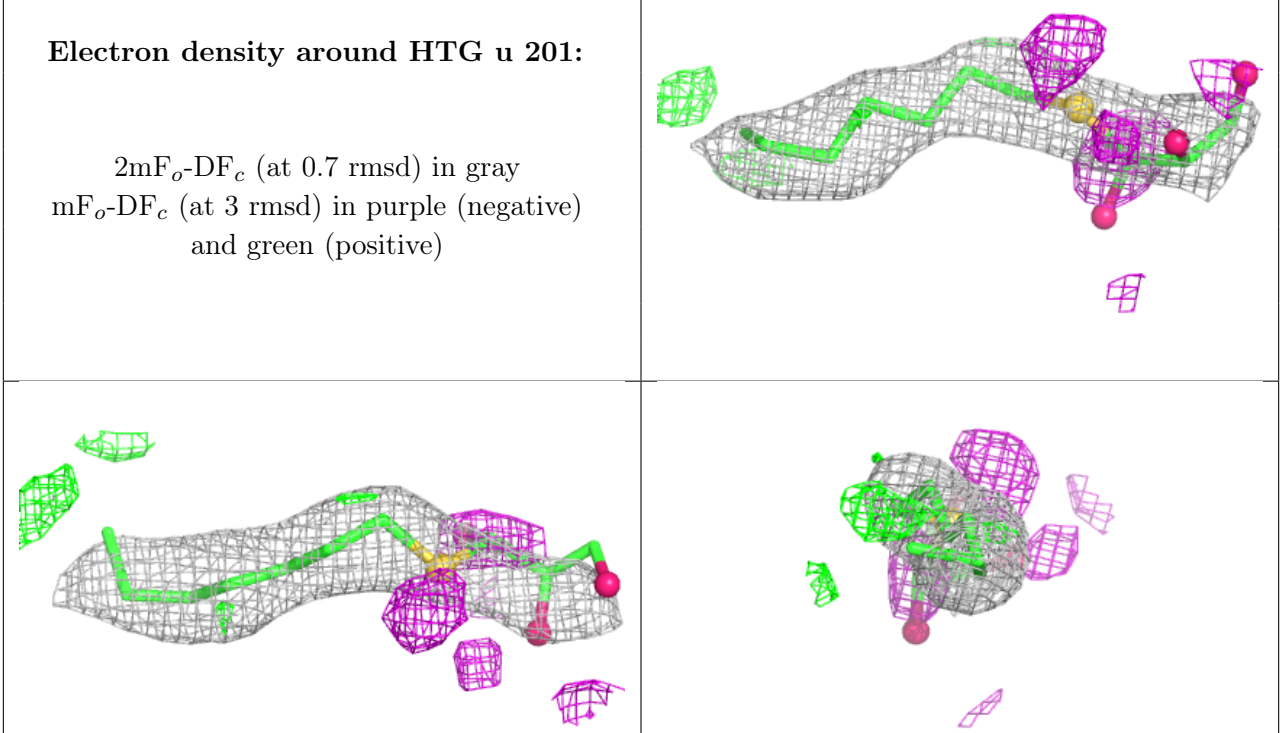






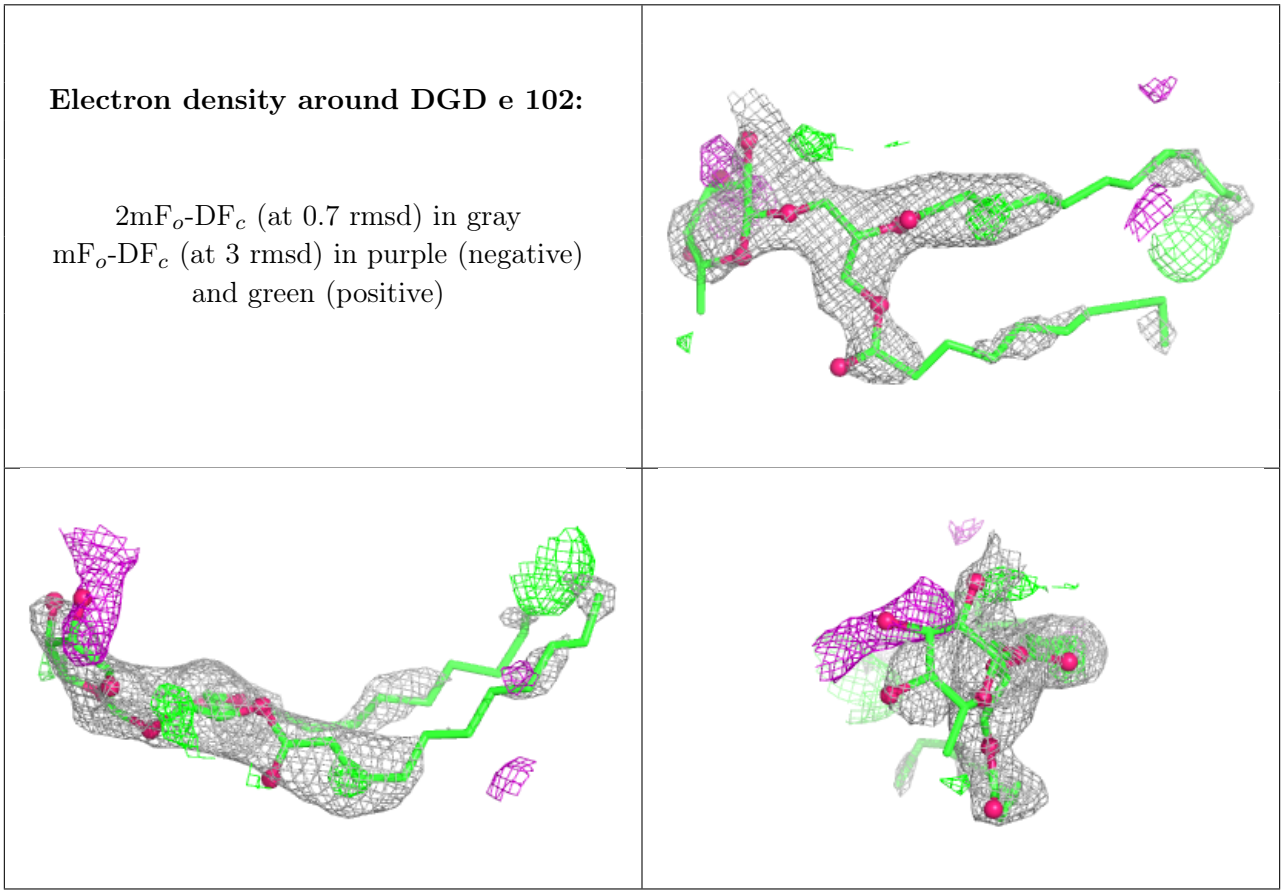
Electron density around HTG u 201:

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



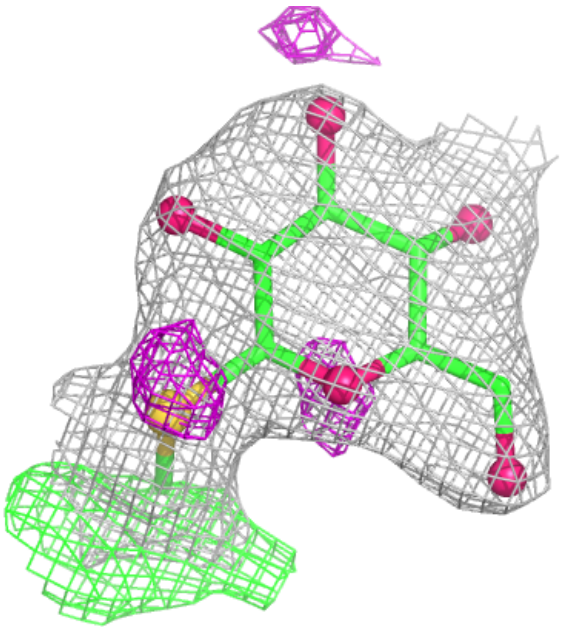
Electron density around DGD e 102:

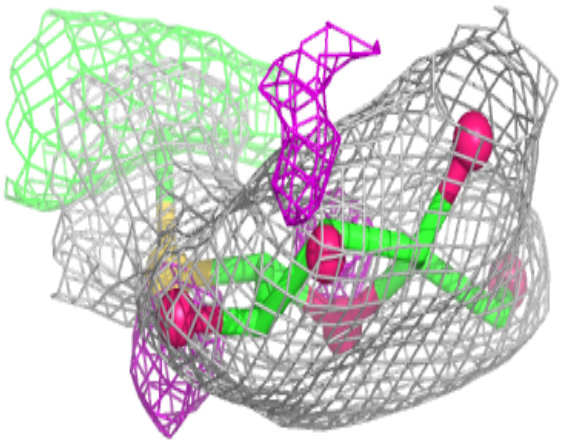
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

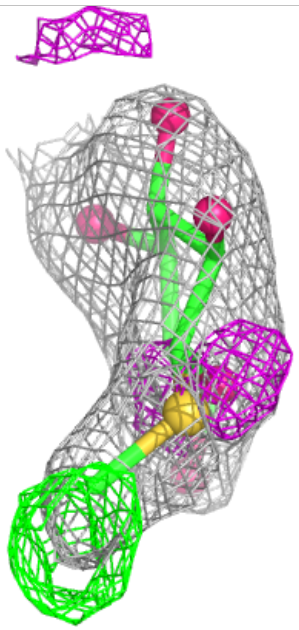


Electron density around HTG V 203:

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

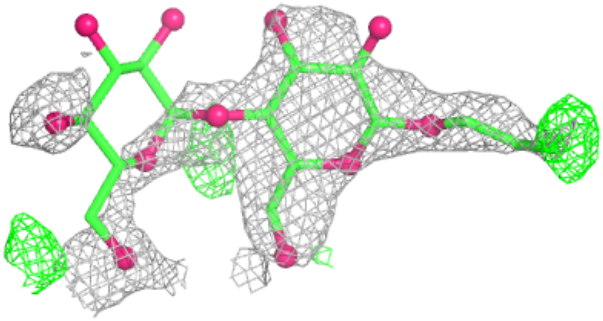


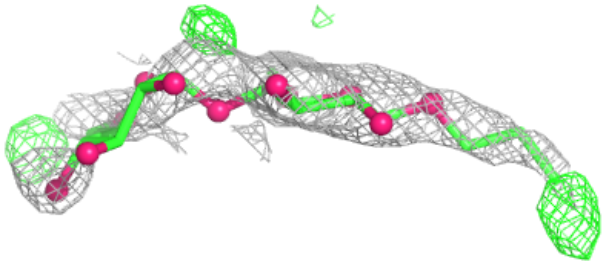


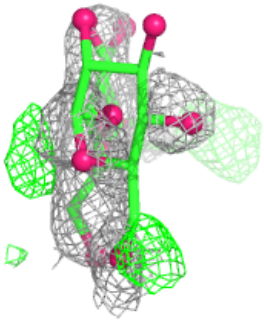


Electron density around LMT F 103:

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

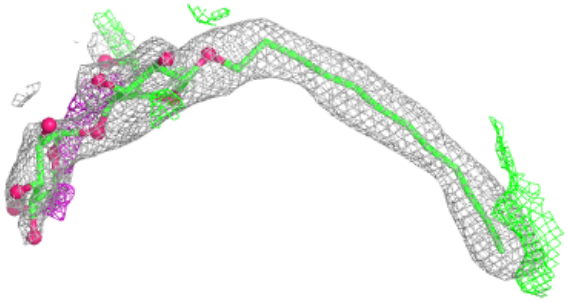


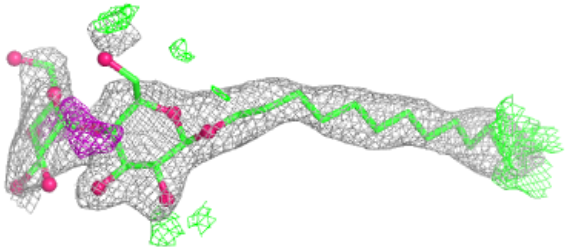


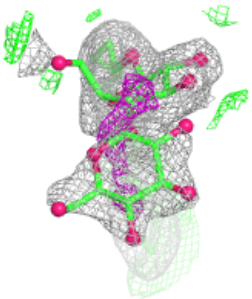


Electron density around LMT m 1503:

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

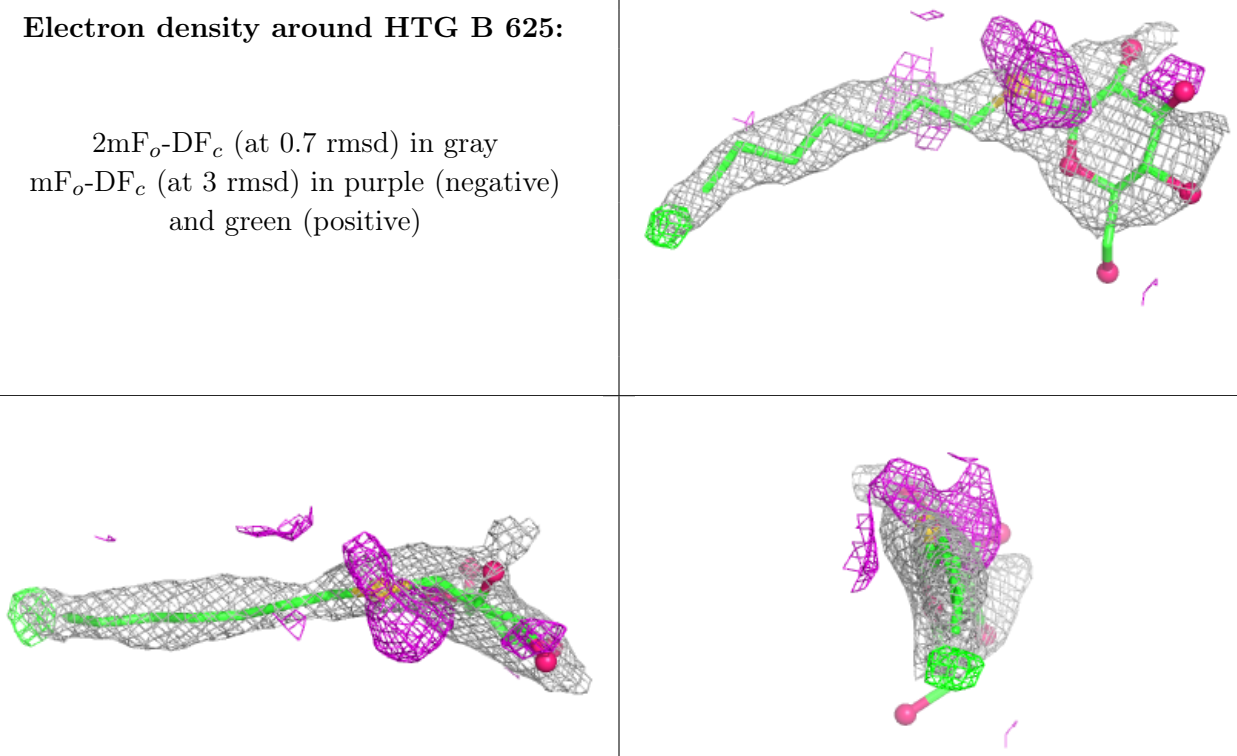






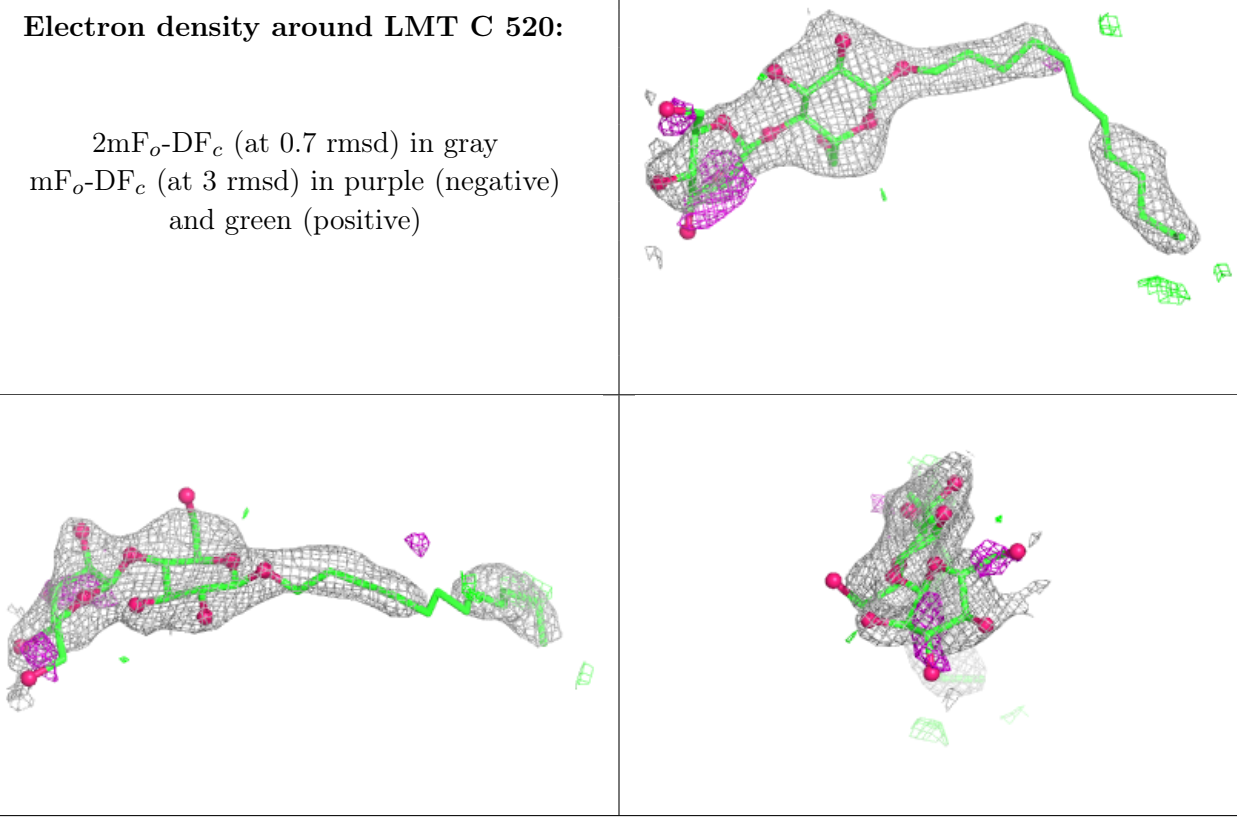
Electron density around HTG B 625:

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



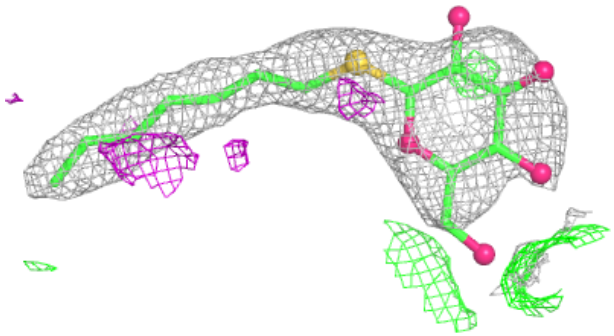
Electron density around LMT C 520:

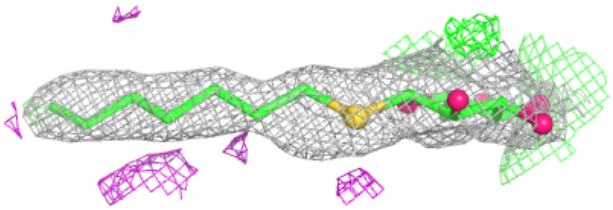
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

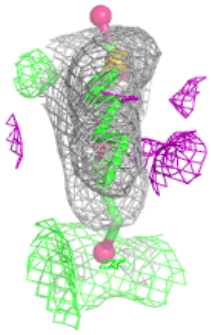


Electron density around HTG B 627:

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

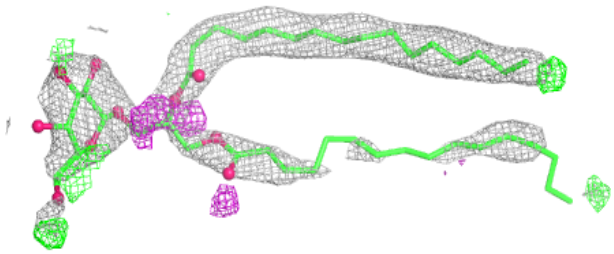


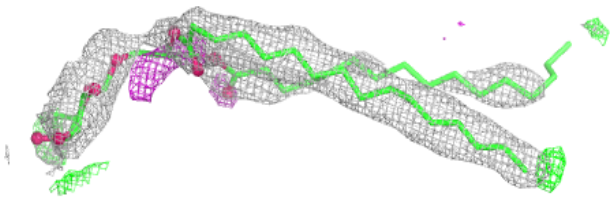


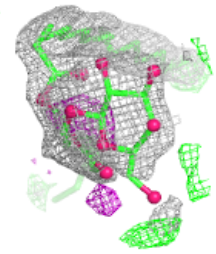


Electron density around LMG C 534:

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

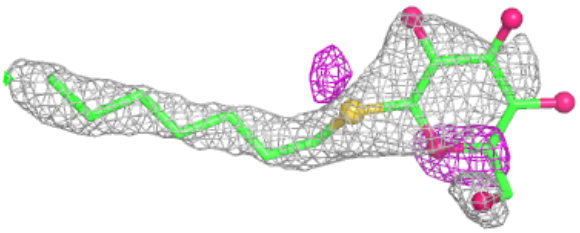


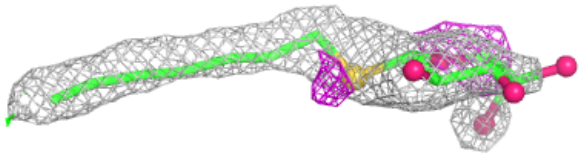


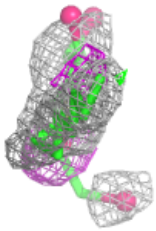


Electron density around HTG c 924:

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

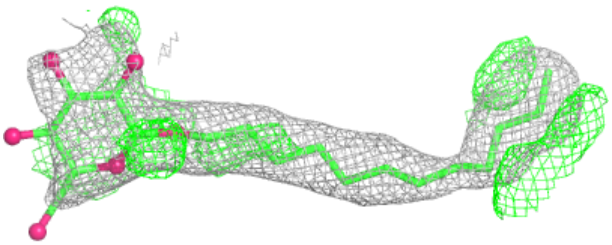


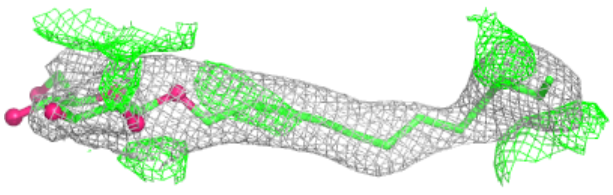


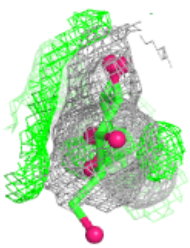


Electron density around LMT t 904:

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

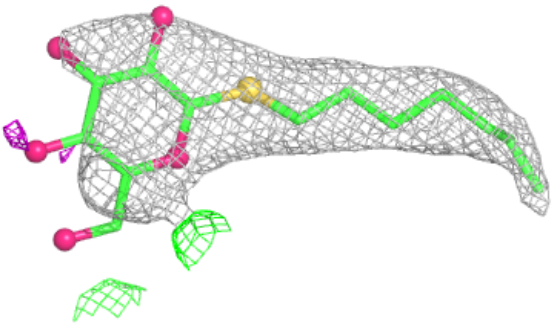


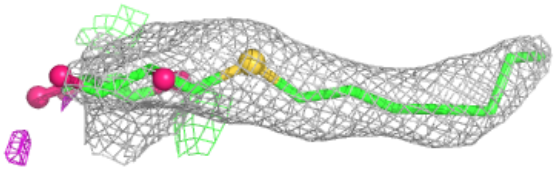


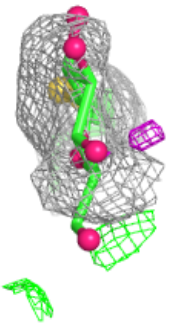


Electron density around HTG d 403:

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

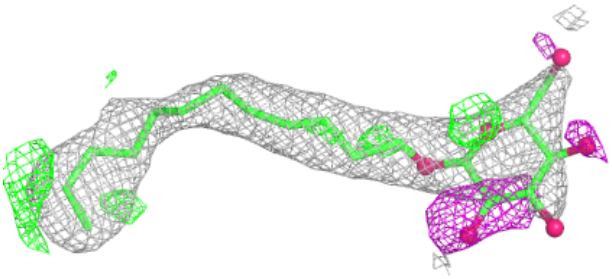


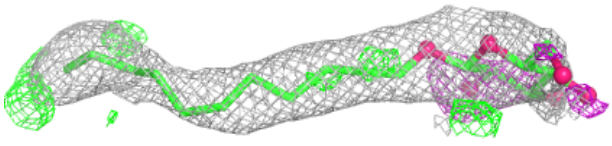


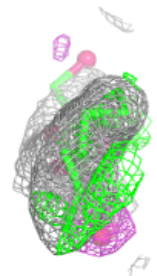


Electron density around LMT T 703:

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

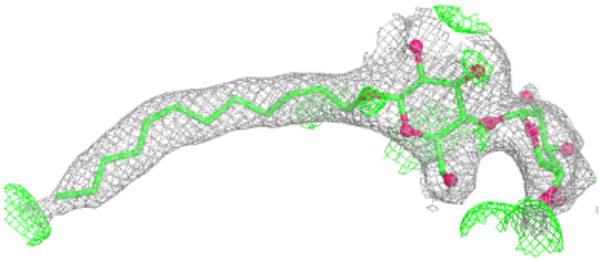


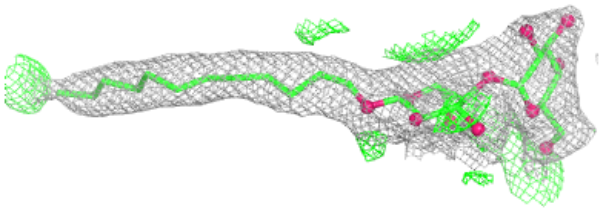


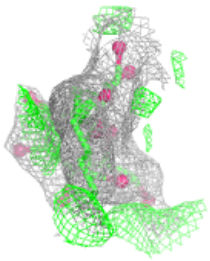


Electron density around LMT B 623:

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

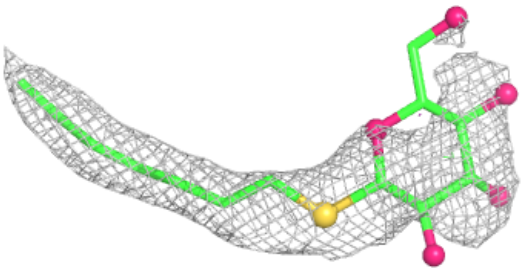


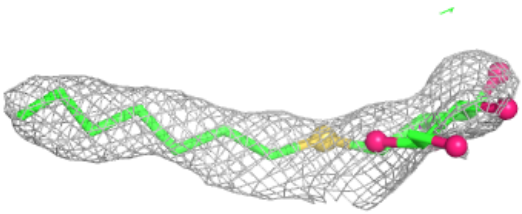


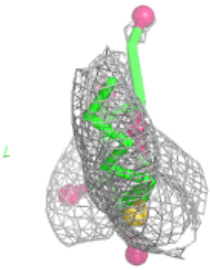


Electron density around HTG b 627:

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

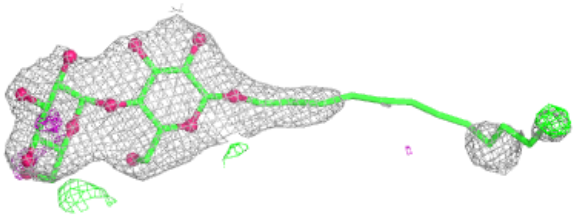


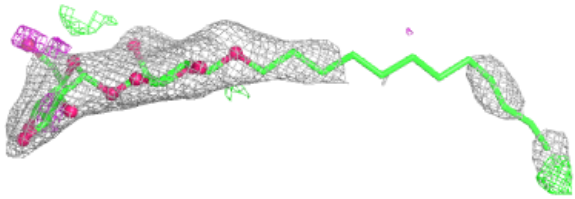


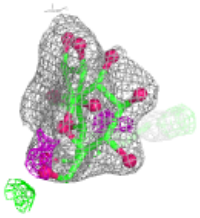


Electron density around LMT c 922:

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

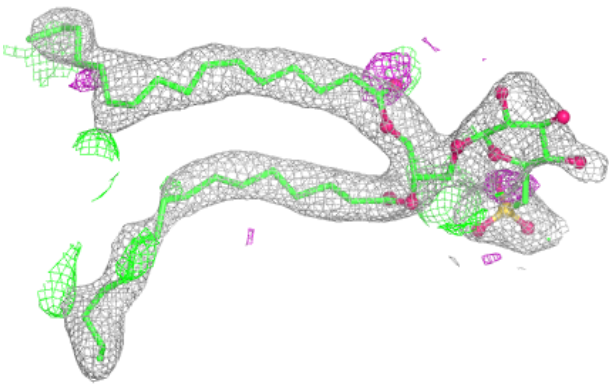


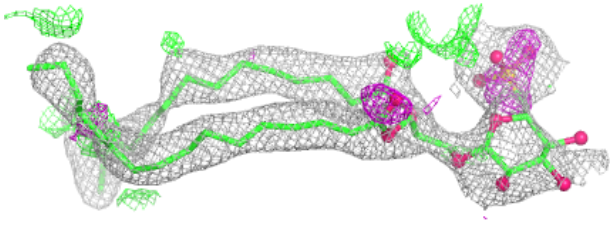


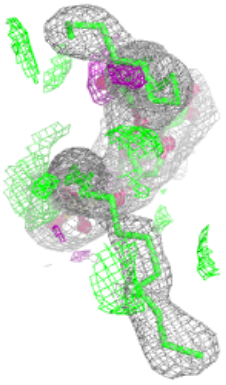


Electron density around SQD B 621:

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

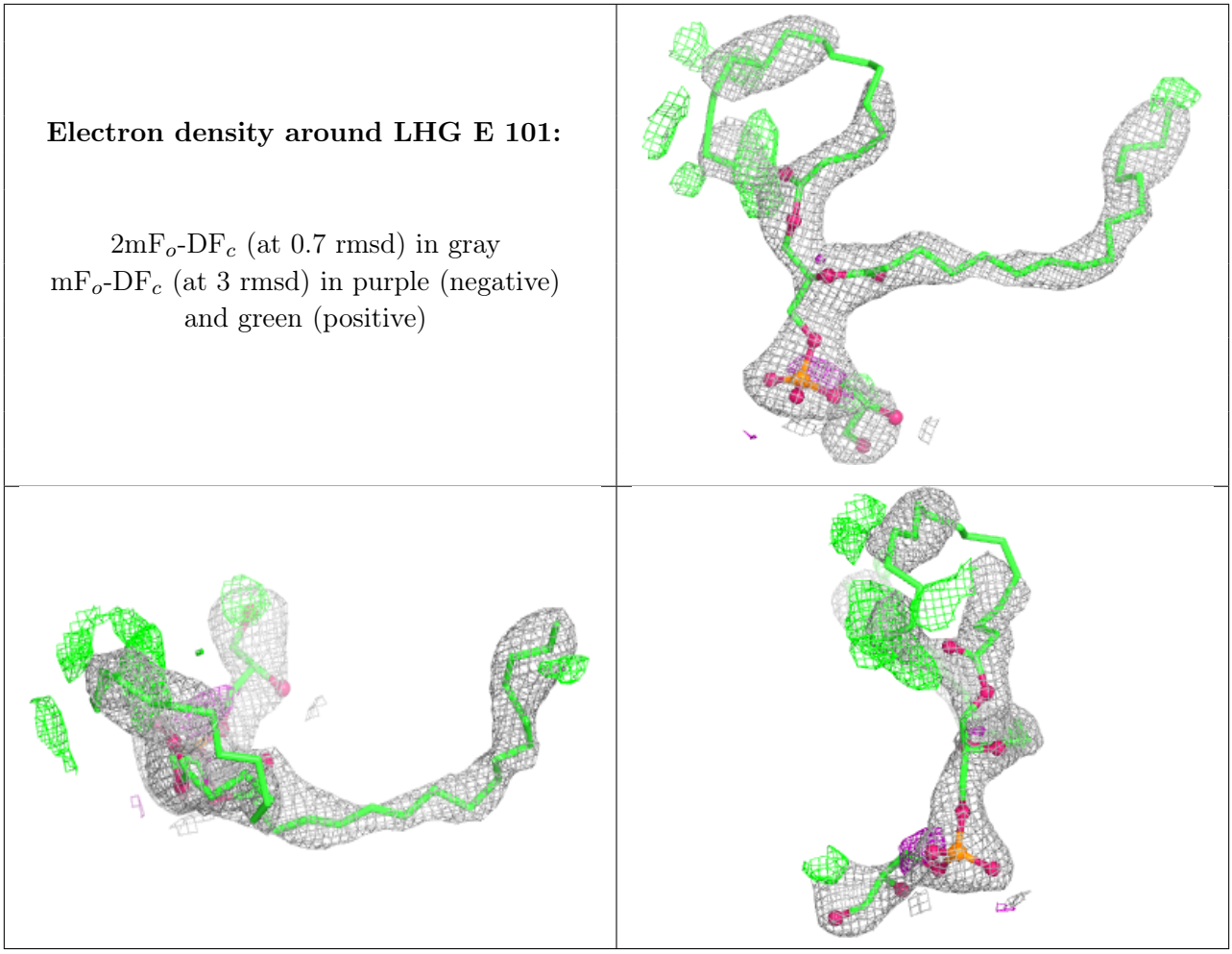






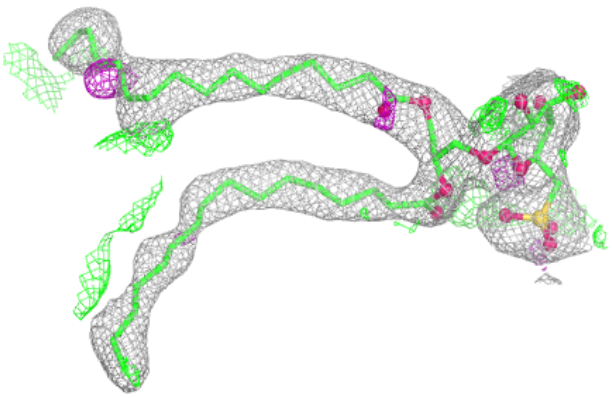
Electron density around LHG E 101:

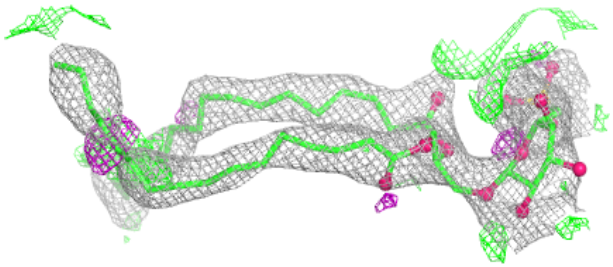
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

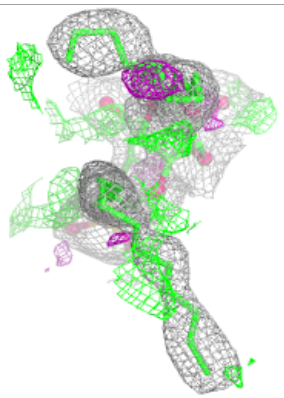


Electron density around SQD b 601:

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

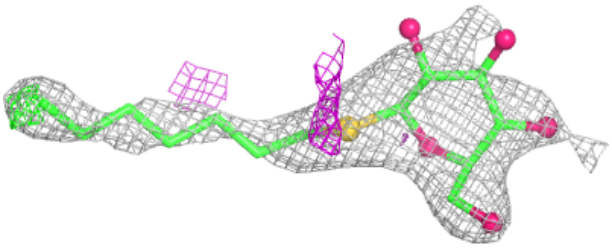


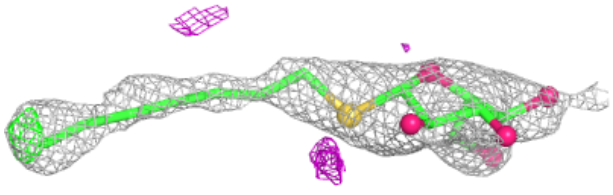


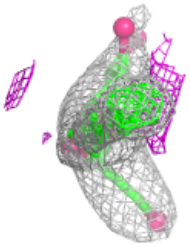


Electron density around HTG C 522:

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

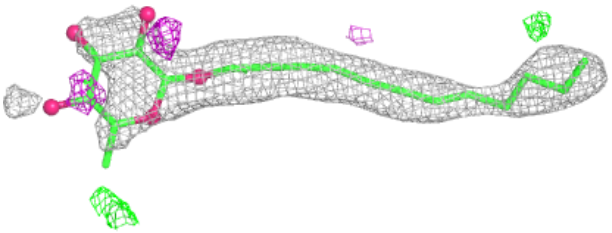


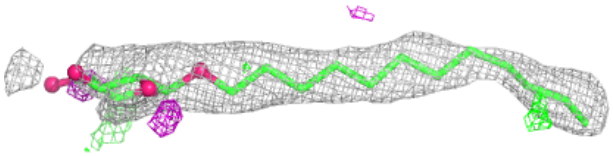


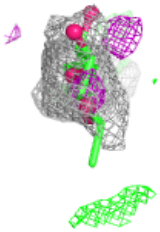


Electron density around LMT J 102:

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

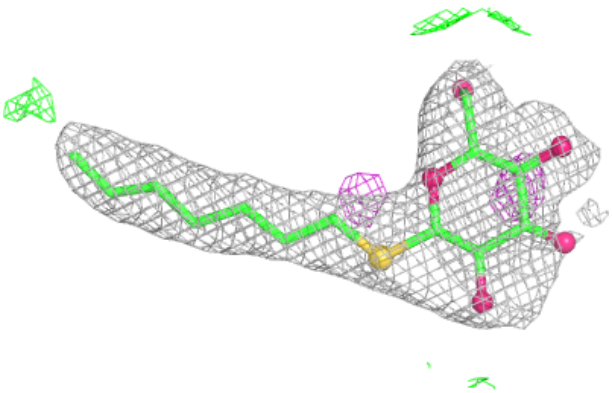


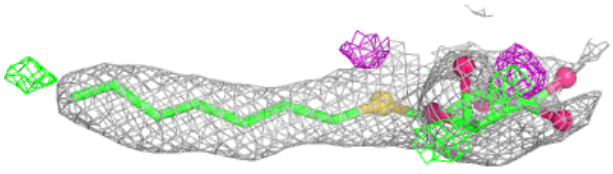


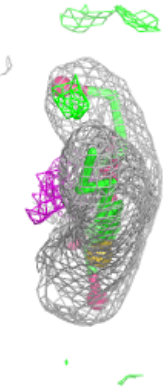


Electron density around HTG b 603:

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

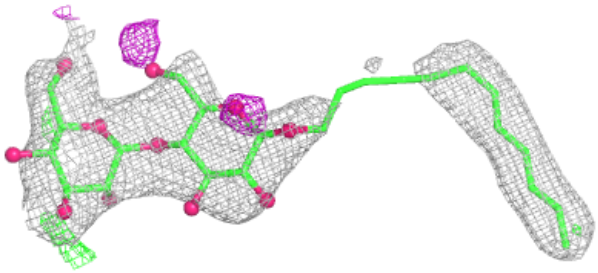


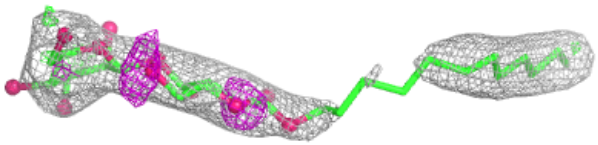


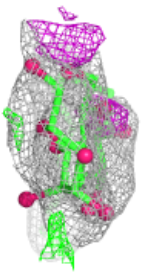


Electron density around LMT Z 101:

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

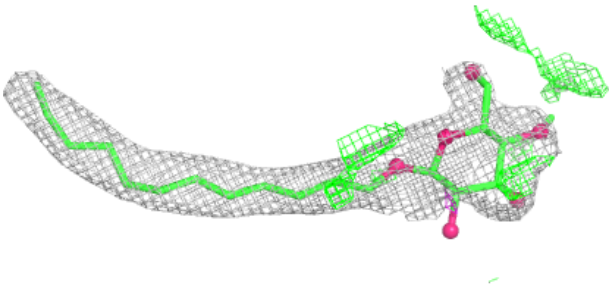


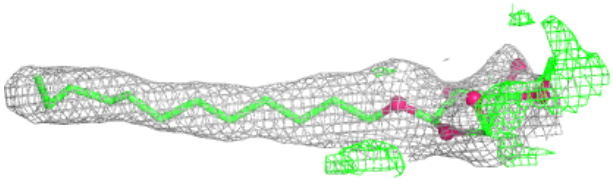


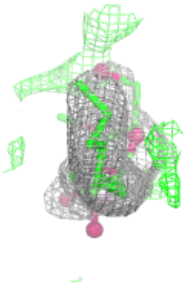


Electron density around LMT b 625:

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

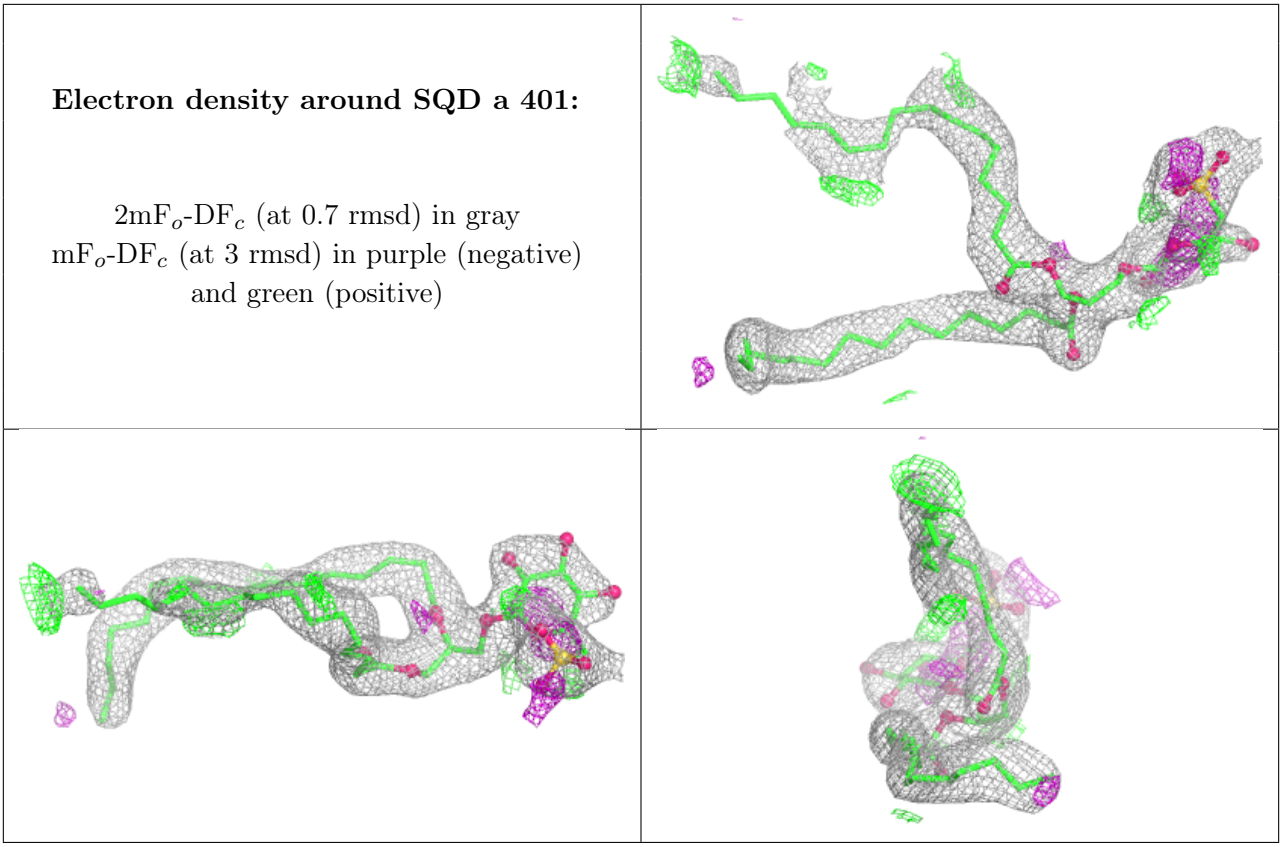






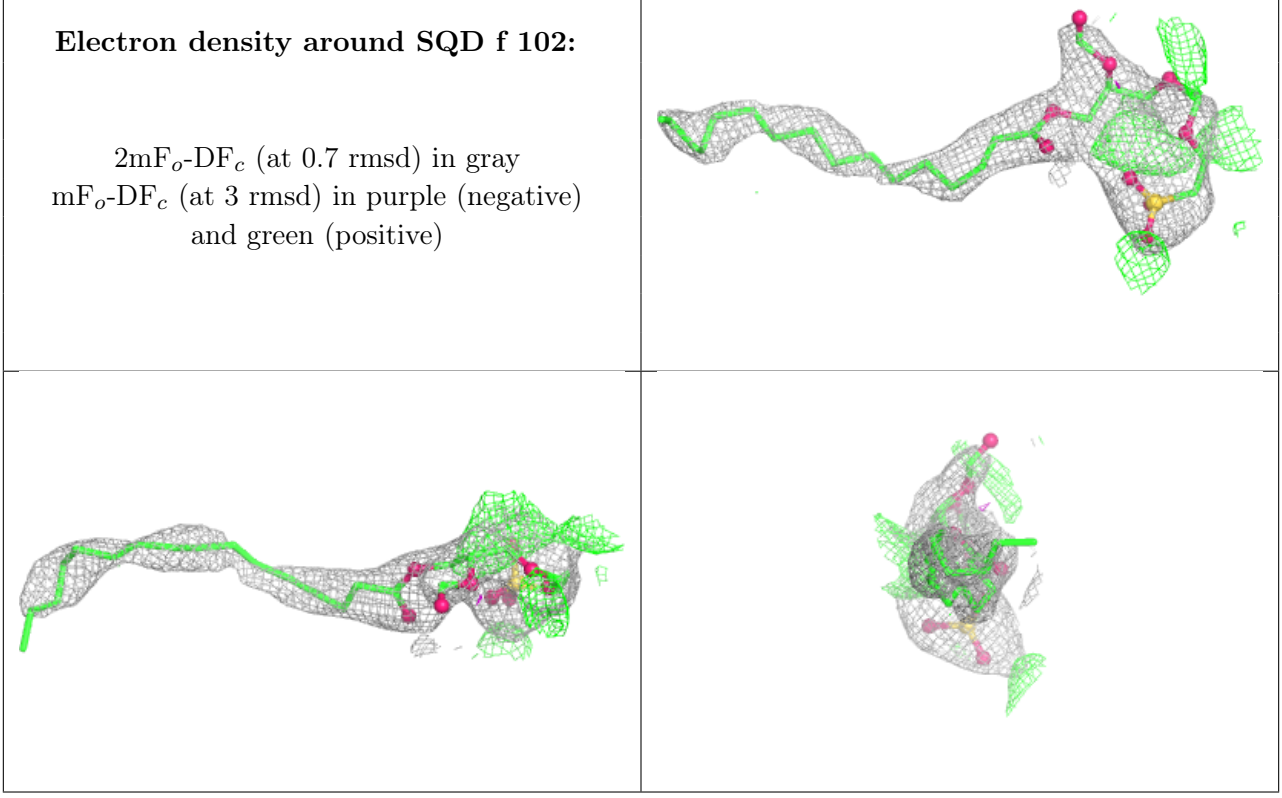
Electron density around SQD a 401:

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



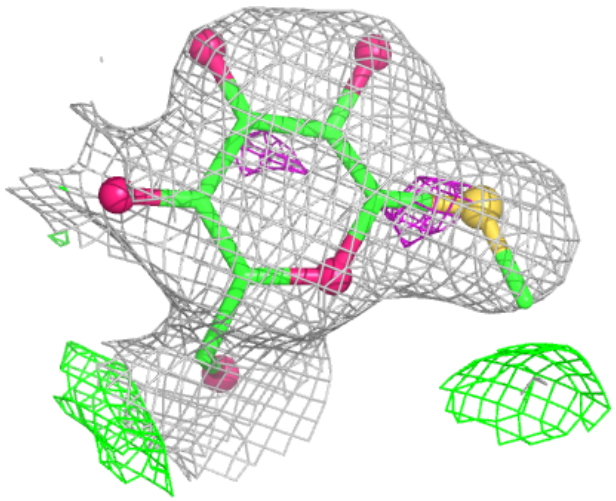
Electron density around SQD f 102:

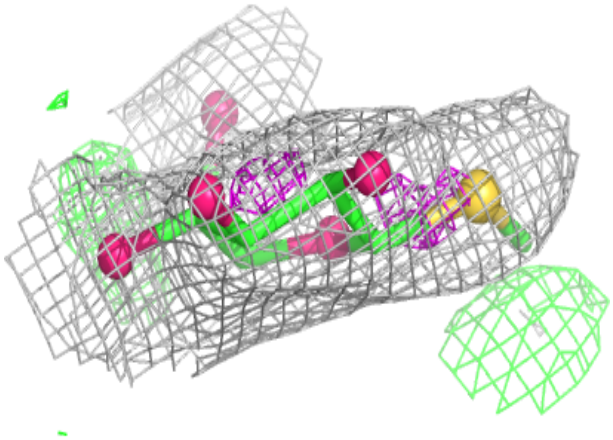
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

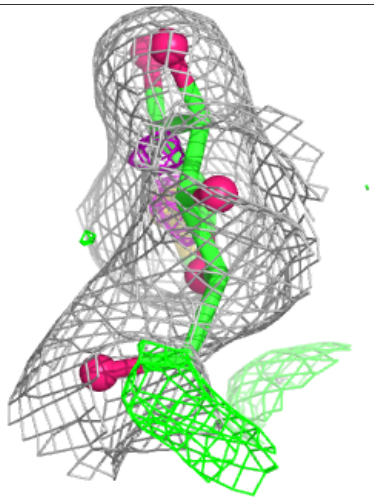


Electron density around HTG v 205:

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

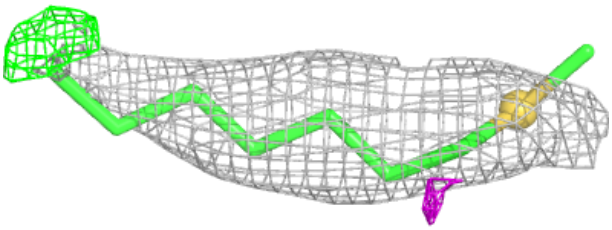


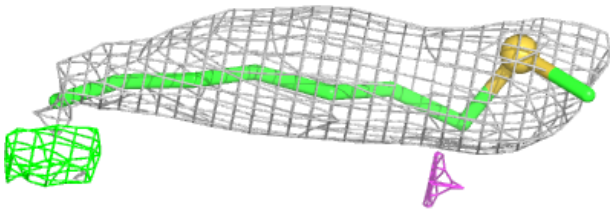


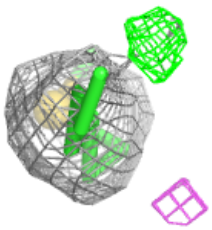


Electron density around HTG U 201:

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

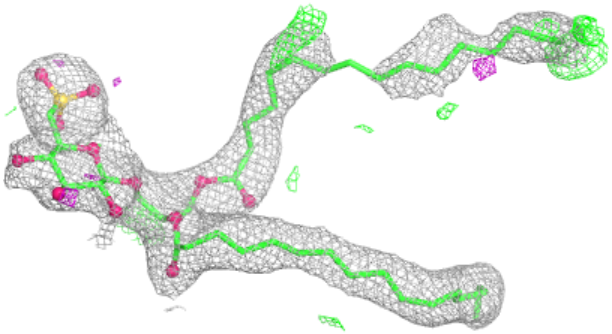


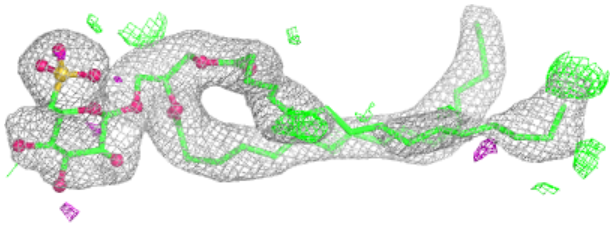


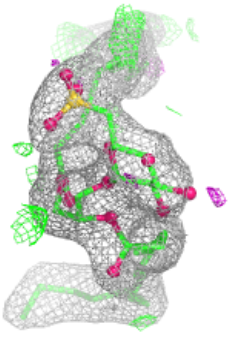


Electron density around SQD A 417:

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

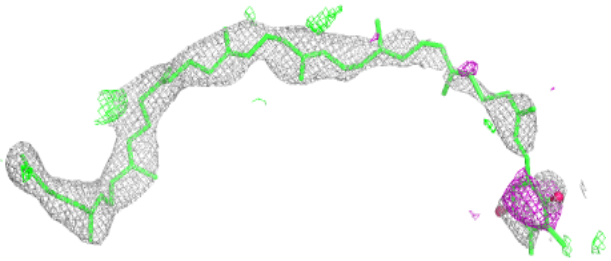


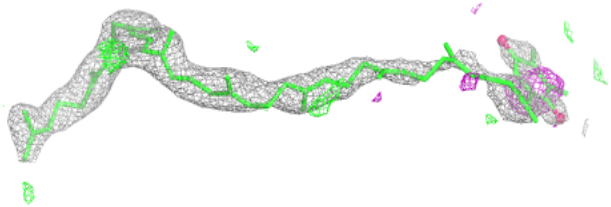


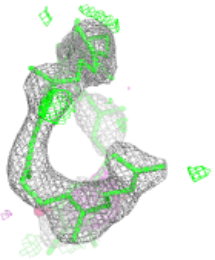


Electron density around PL9 a 417:

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

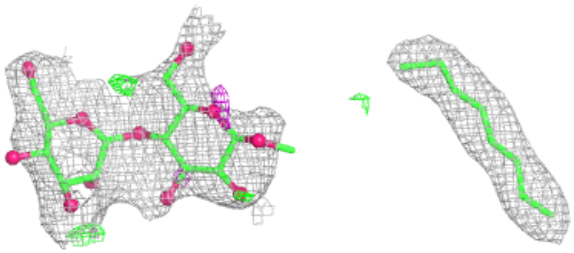


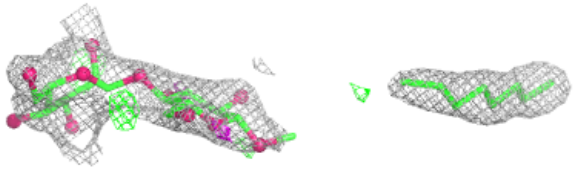




Electron density around LMT z 101:

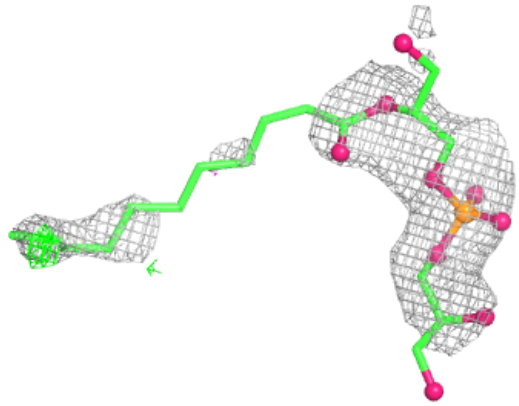
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

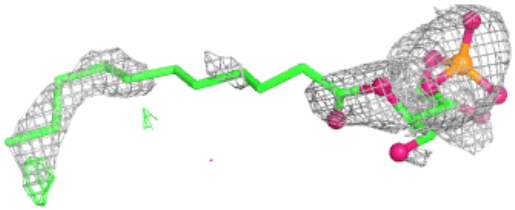


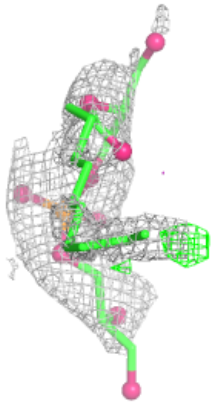


Electron density around LHG e 101:

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

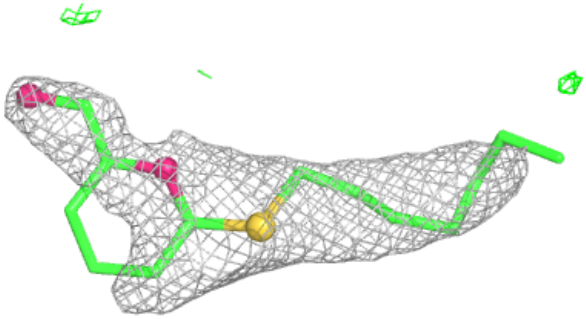


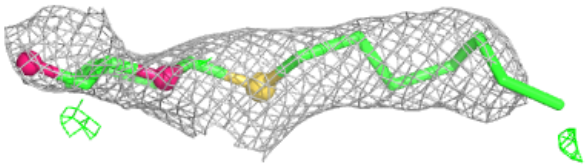


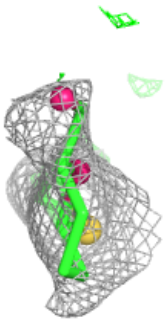


Electron density around HTG H 105:

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

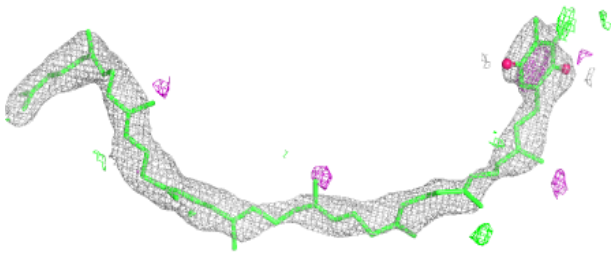


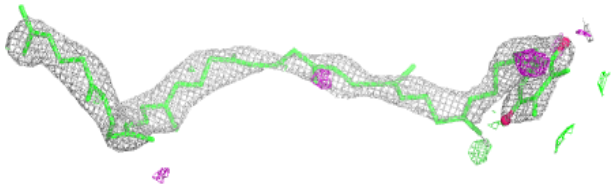


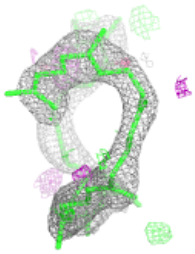


Electron density around PL9 A 414:

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

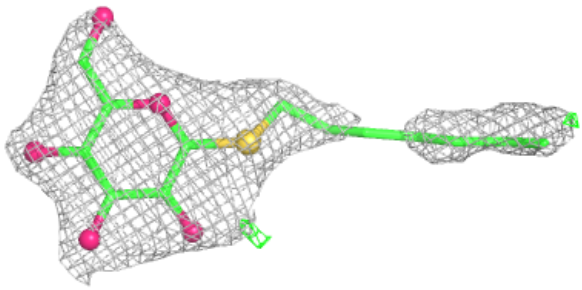


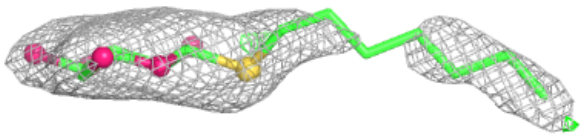


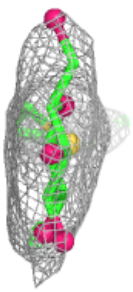


Electron density around HTG c 923:

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

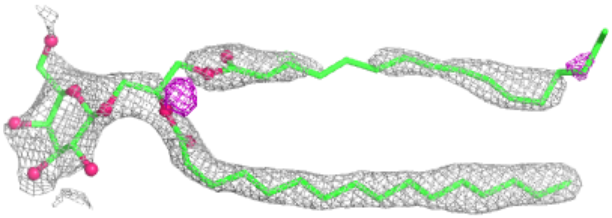


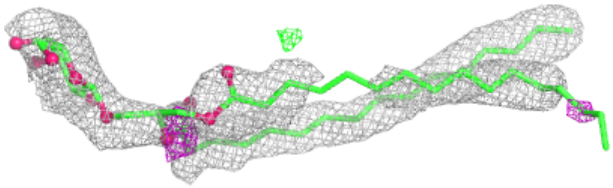


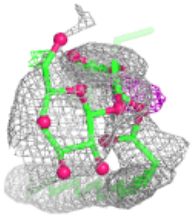


Electron density around LMG c 921:

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

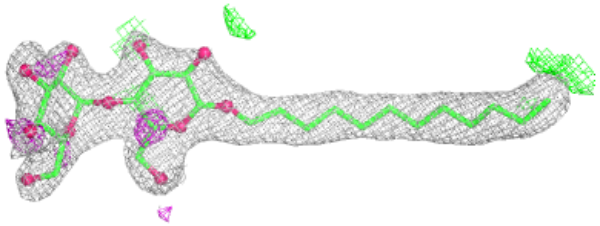


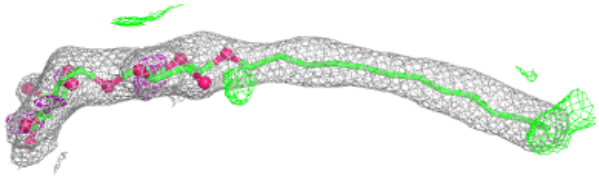


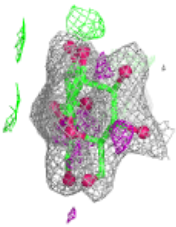


Electron density around LMT M 303:

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

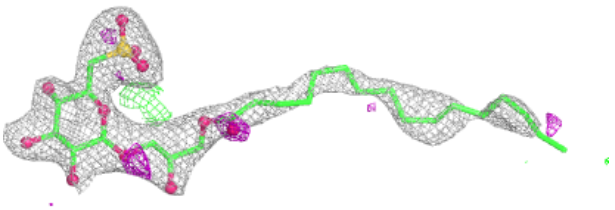


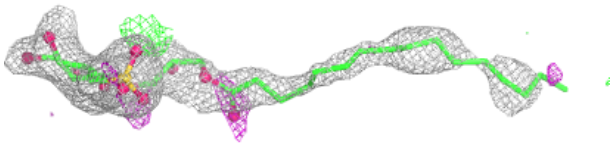


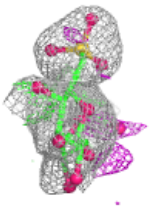


Electron density around SQD F 101:

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

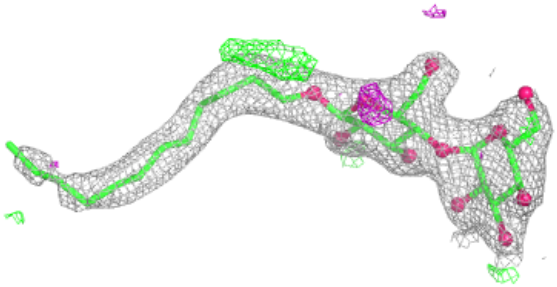


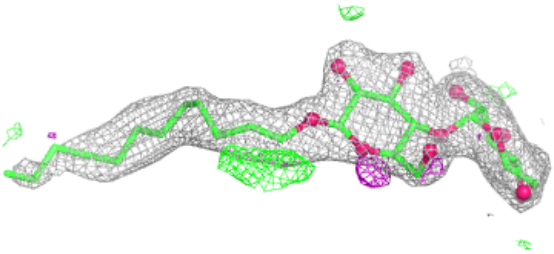




Electron density around LMT a 402:

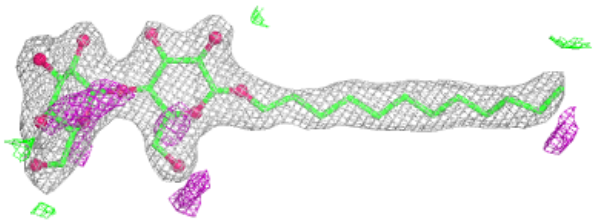
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

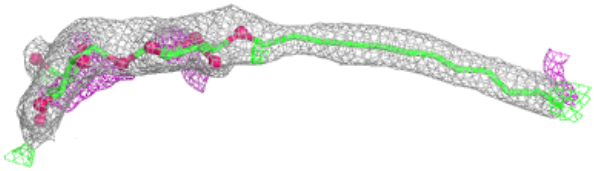


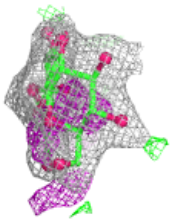


Electron density around LMT m 1502:

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

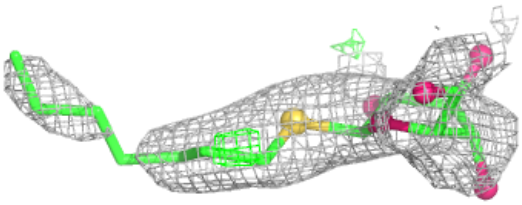


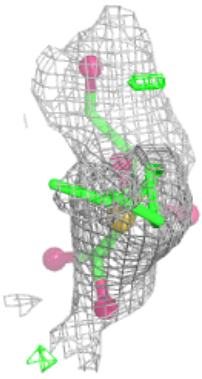




Electron density around HTG C 528:

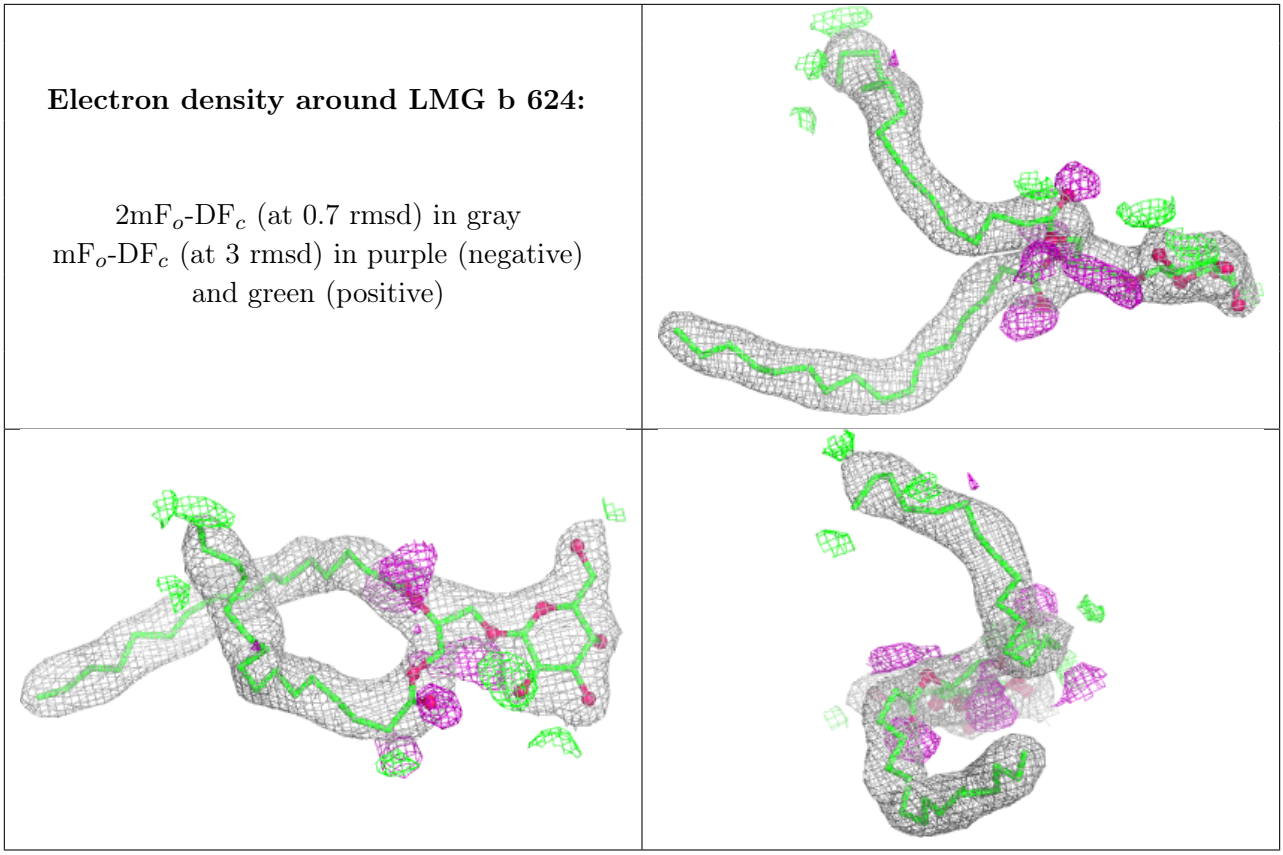
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





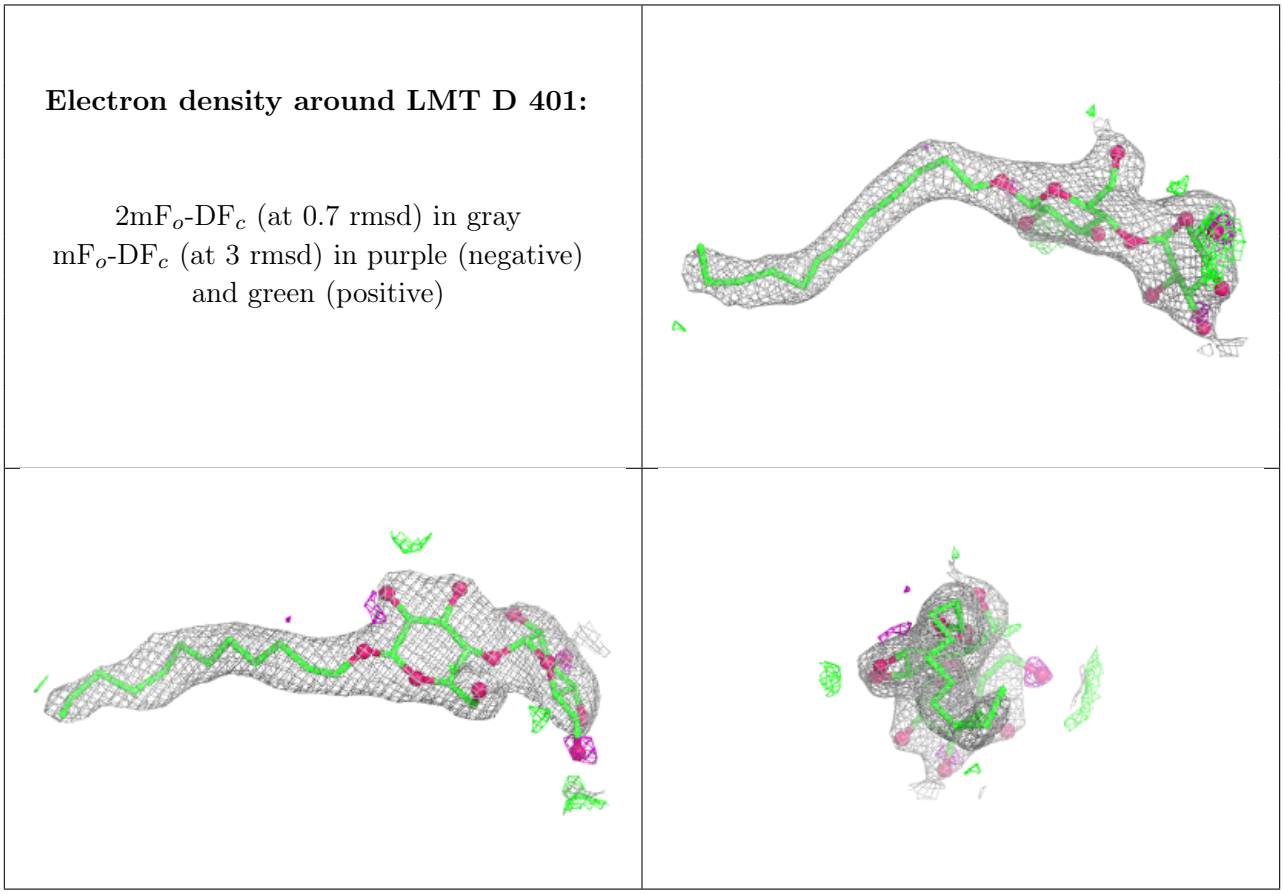
Electron density around LMG b 624:

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



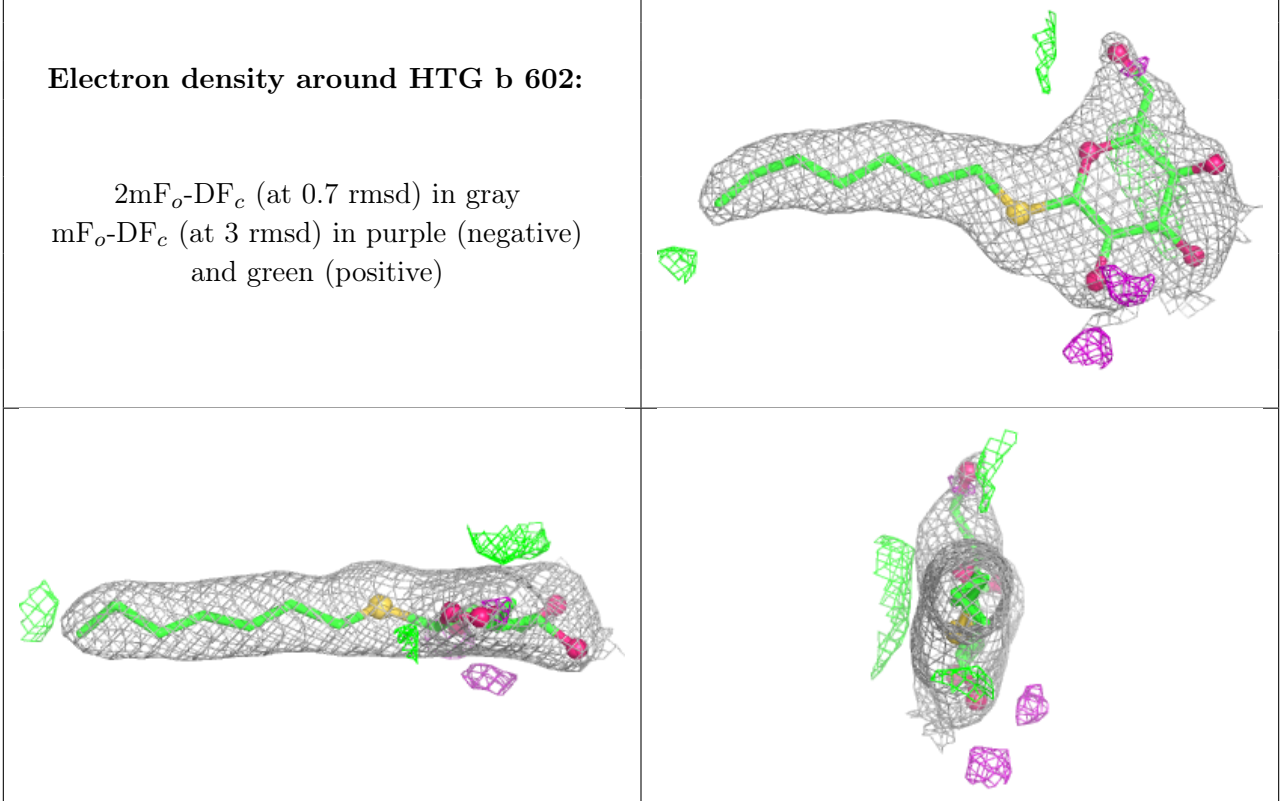
Electron density around LMT D 401:

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



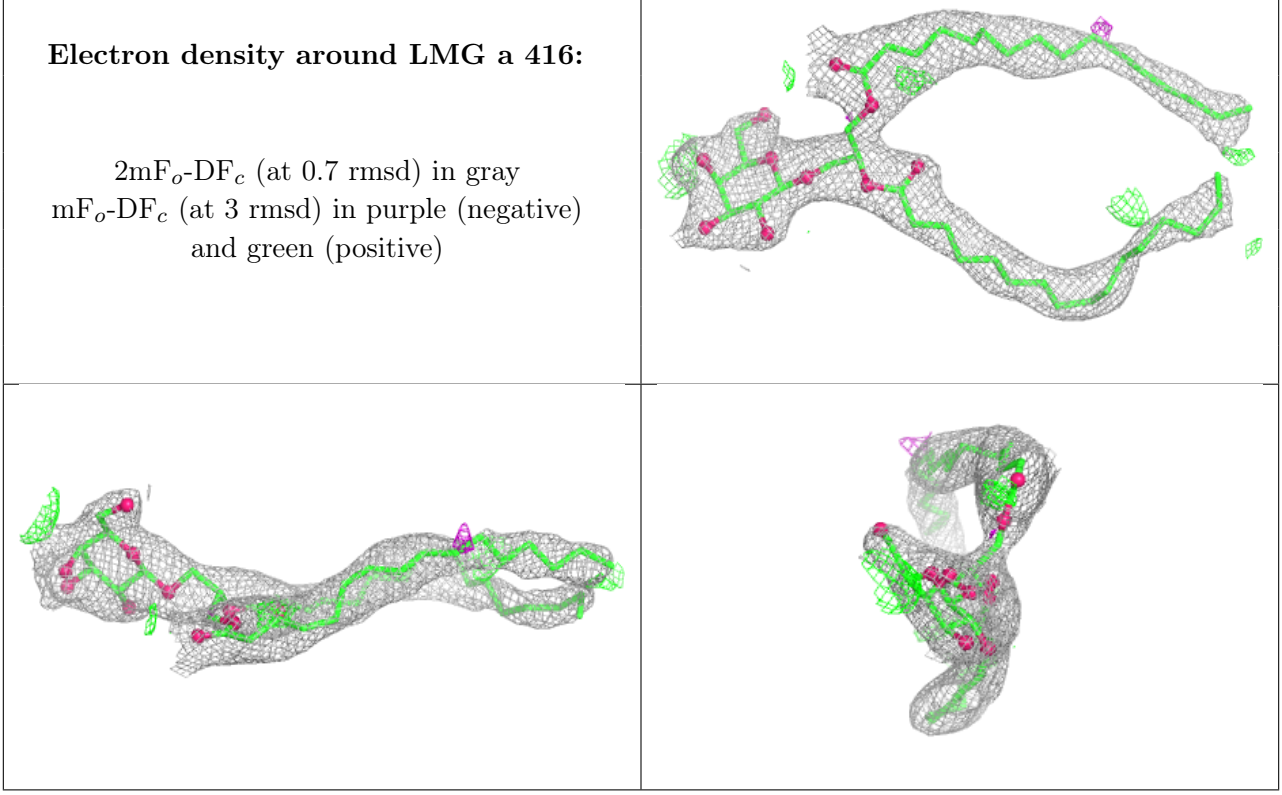
Electron density around HTG b 602:

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



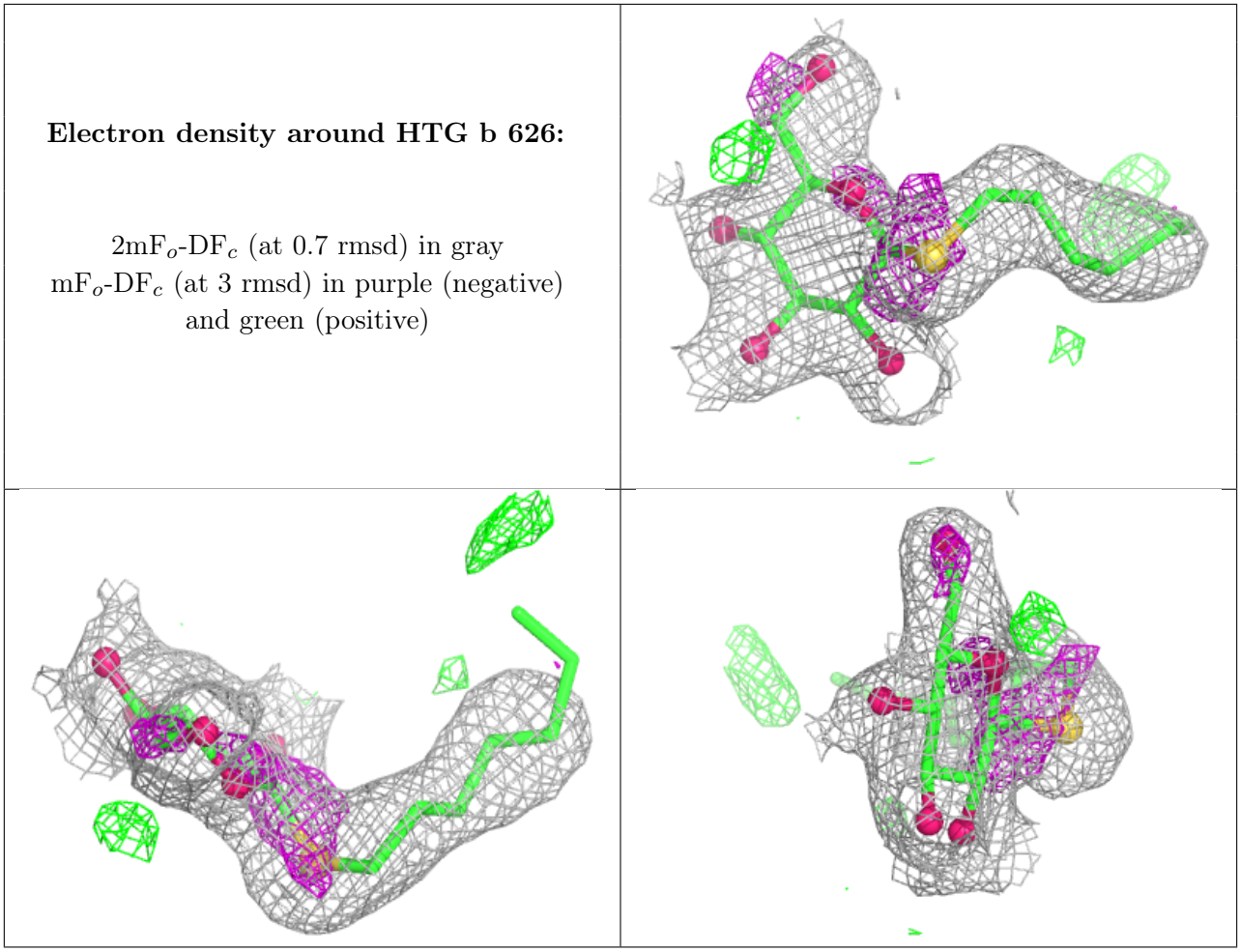
Electron density around LMG a 416:

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



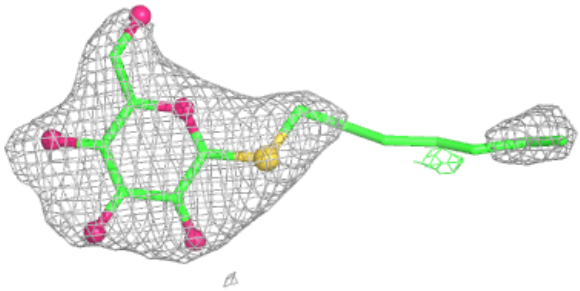
Electron density around HTG b 626:

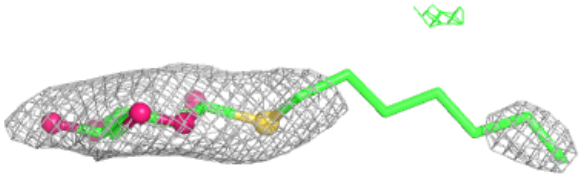
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

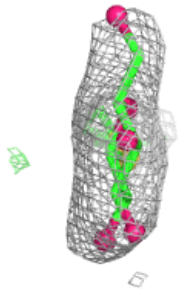


Electron density around HTG C 521:

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

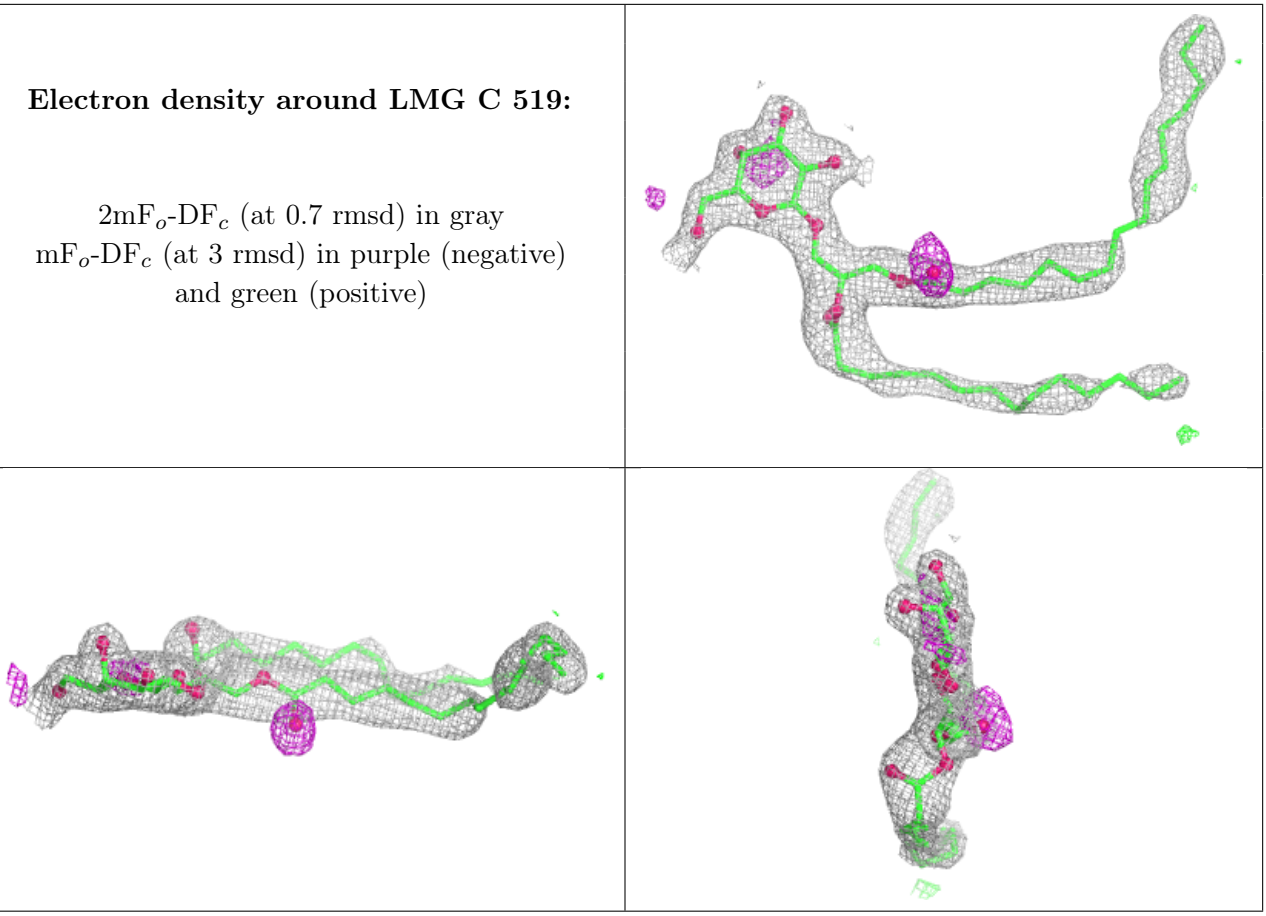






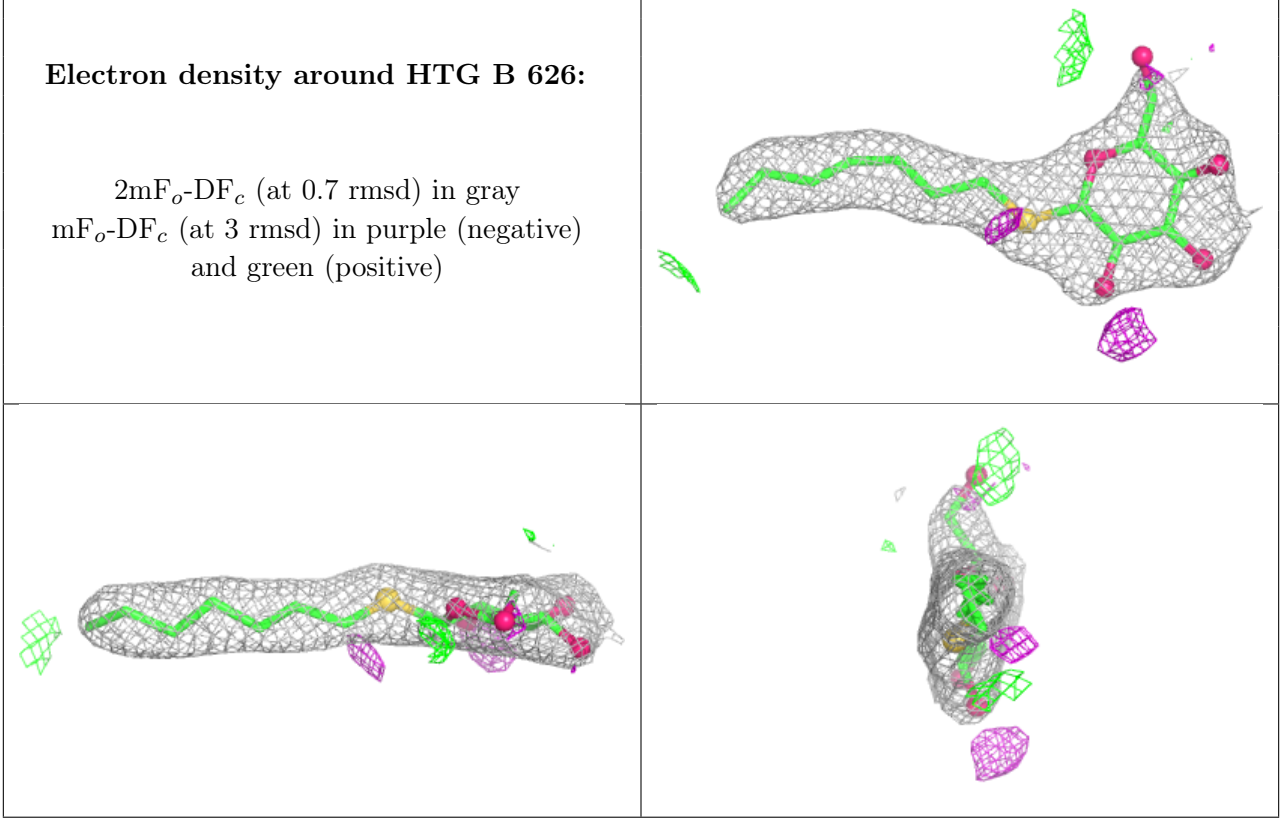
Electron density around LMG C 519:

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



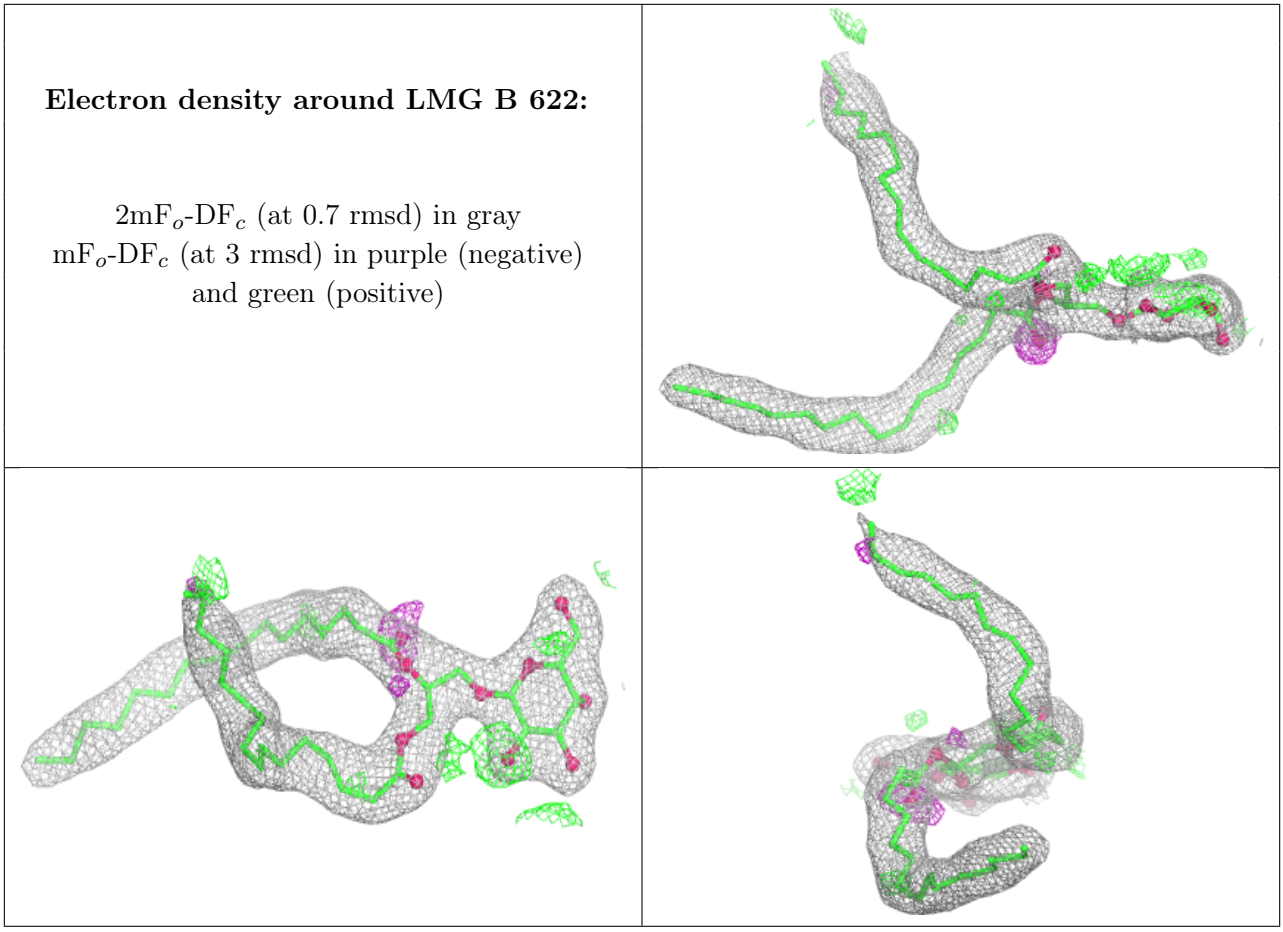
Electron density around HTG B 626:

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



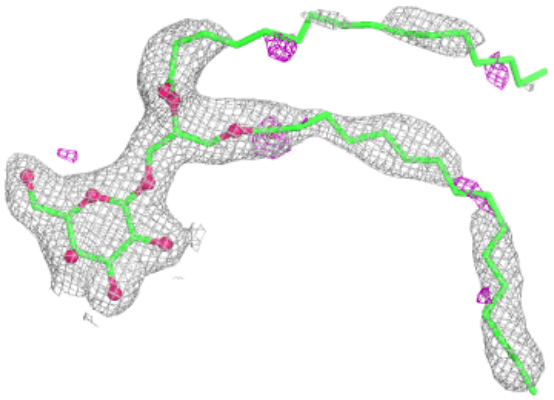
Electron density around LMG B 622:

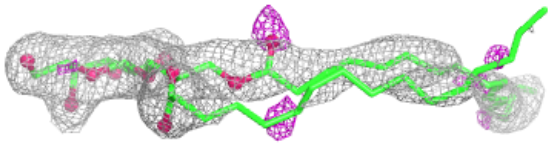
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

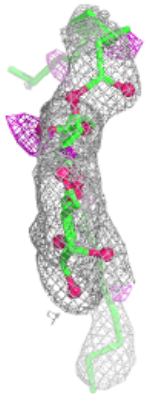


Electron density around LMG c 920:

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

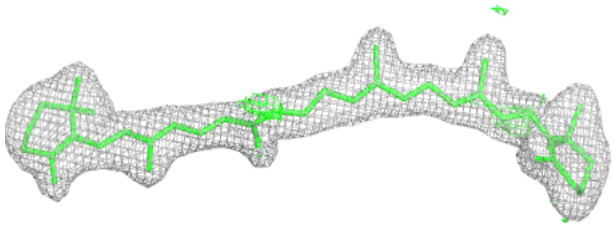


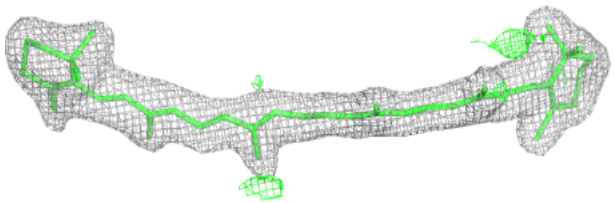


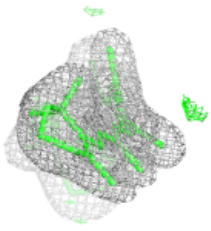


Electron density around BCR t 903:

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

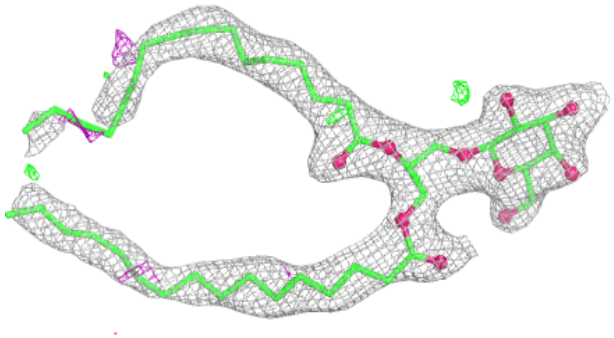


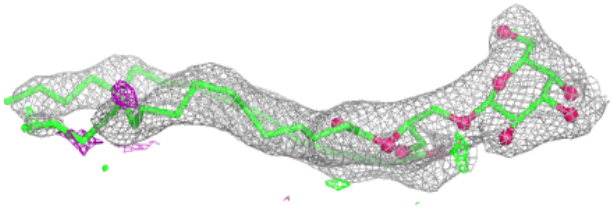


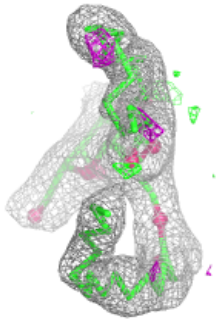


Electron density around LMG A 413:

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

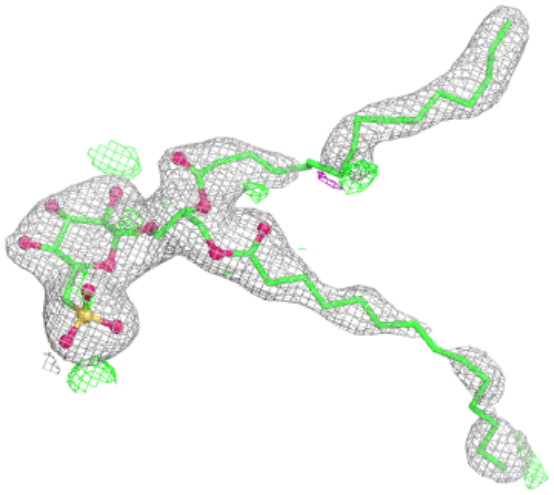


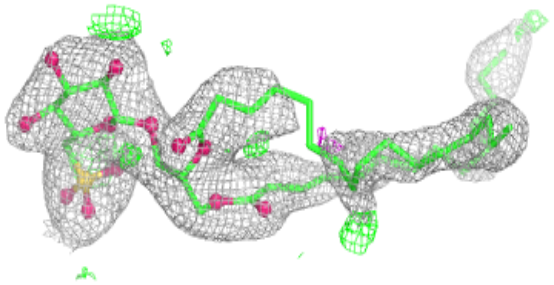


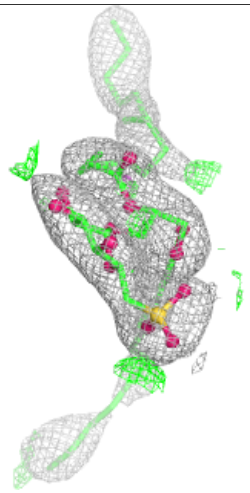


Electron density around SQD A 412:

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

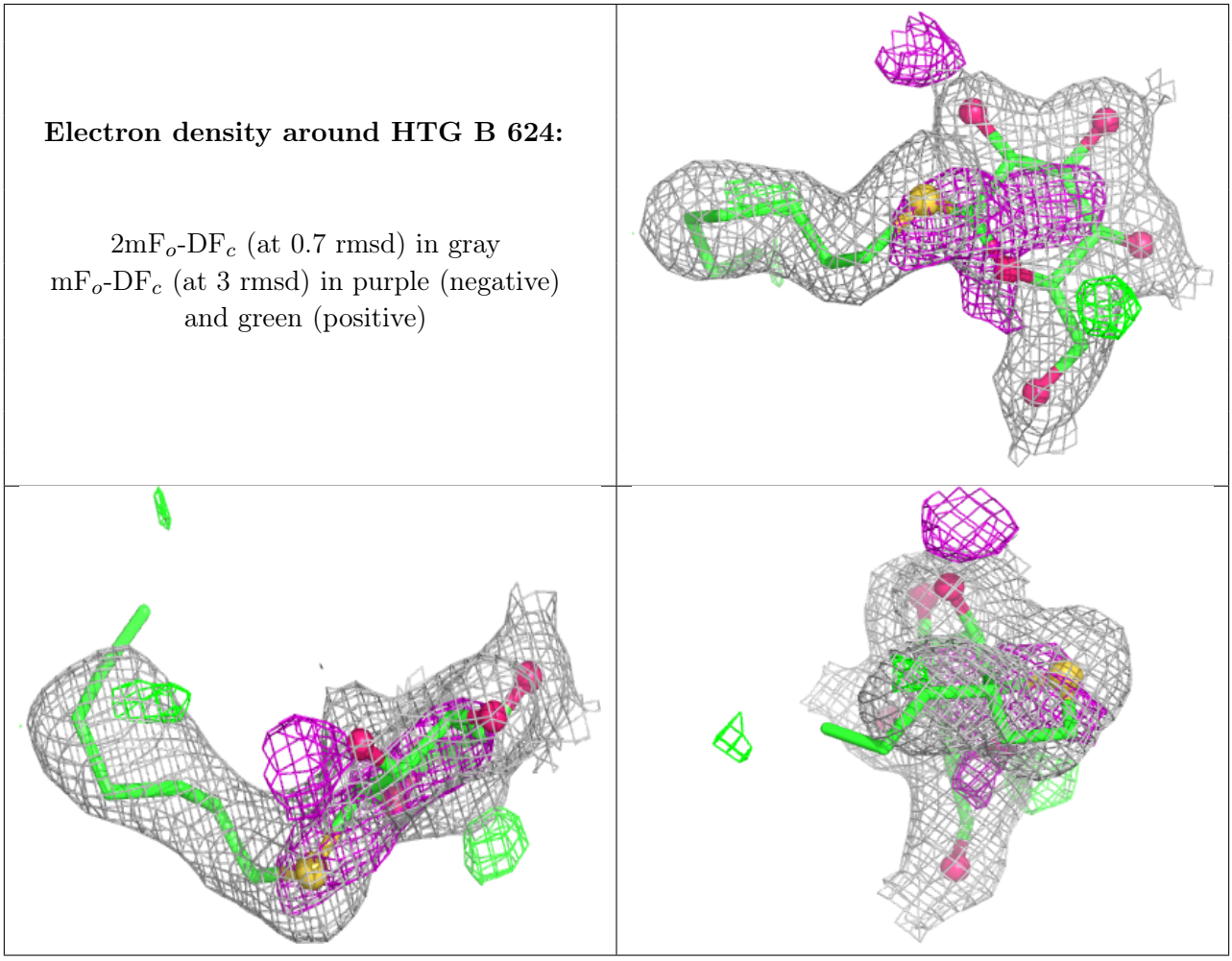






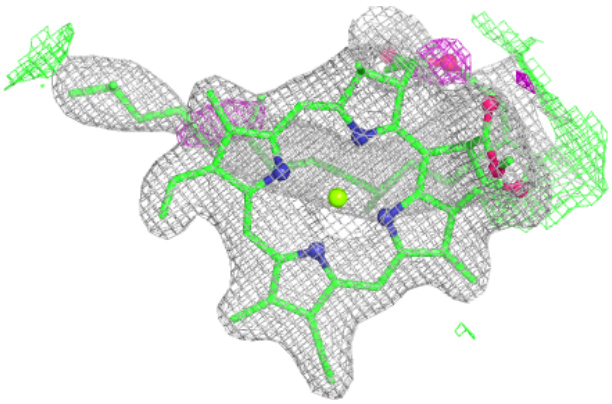
Electron density around HTG B 624:

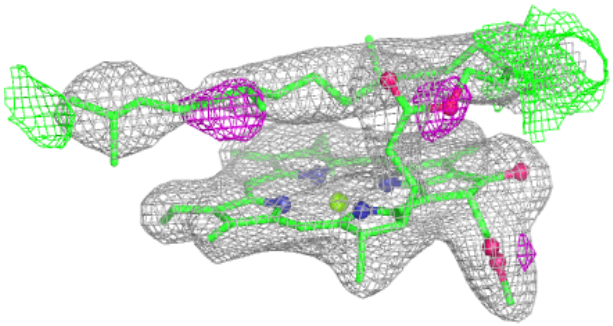
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

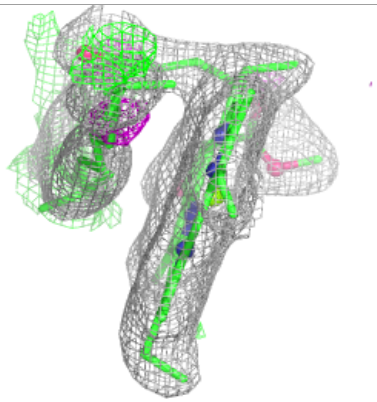


Electron density around CLA B 602:

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

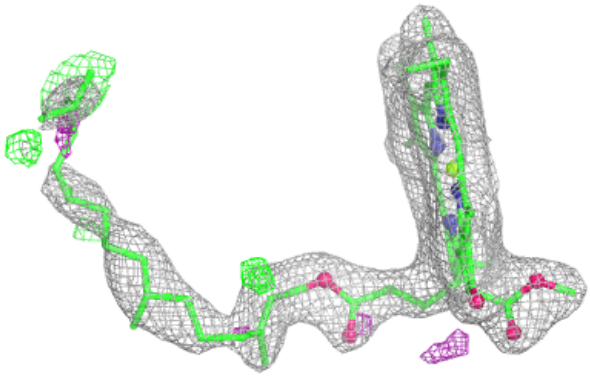


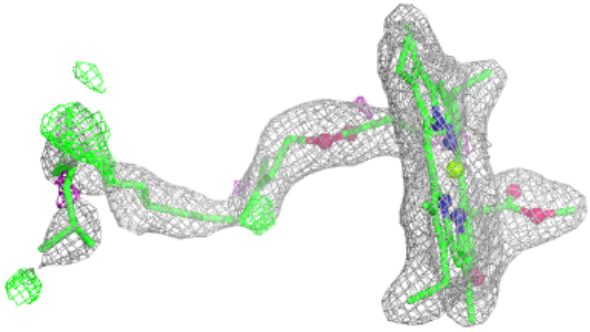


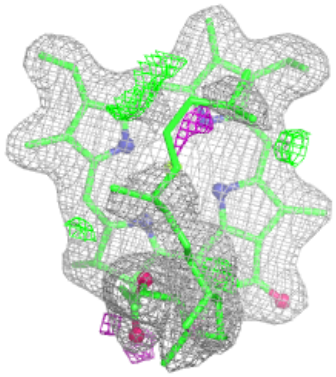


Electron density around CLA C 506:

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

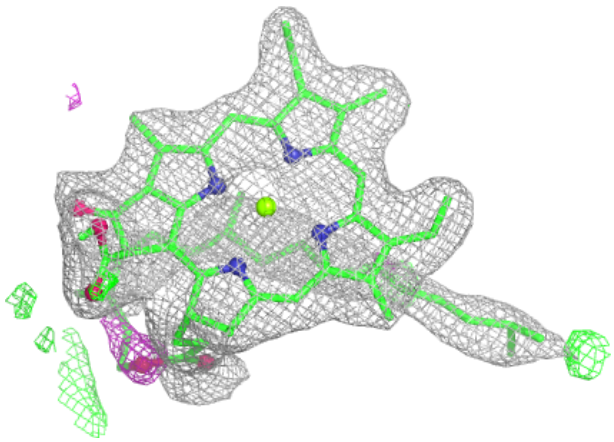


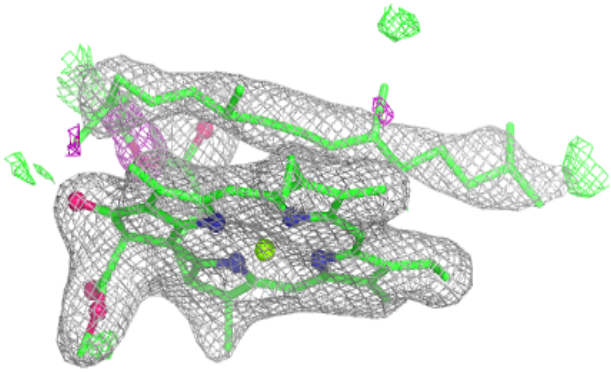


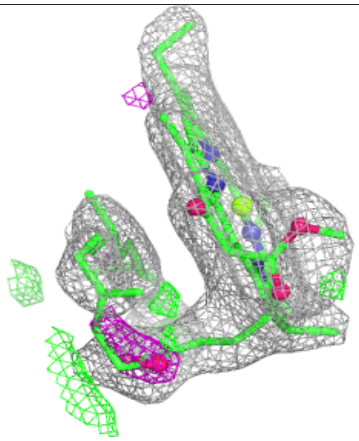


Electron density around CLA b 605:

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

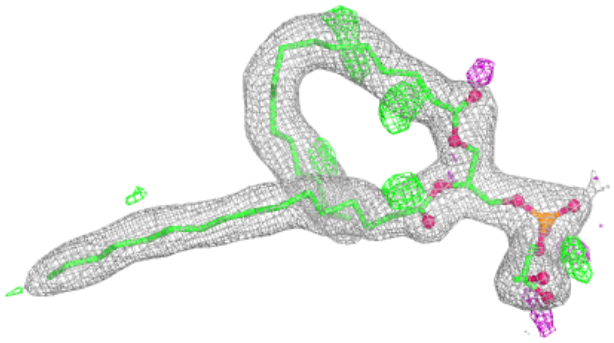


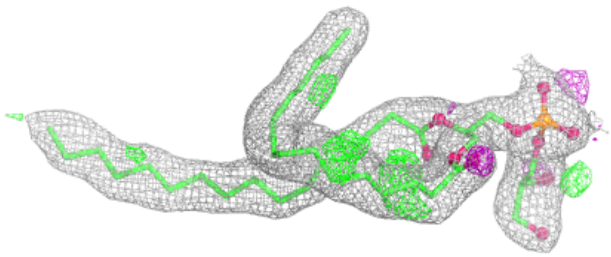


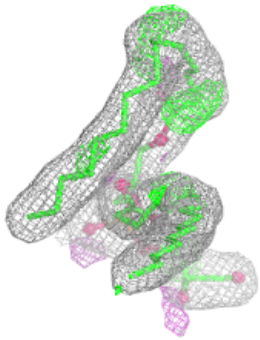


Electron density around LHG D 407:

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

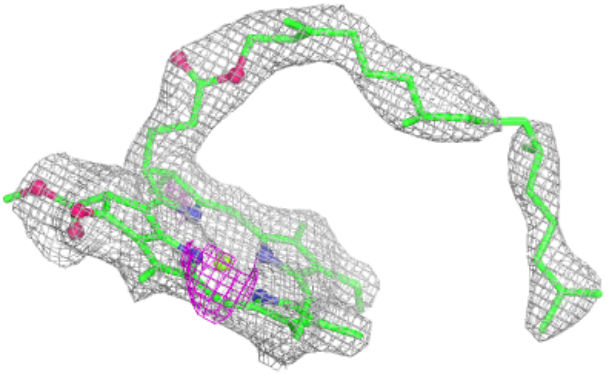


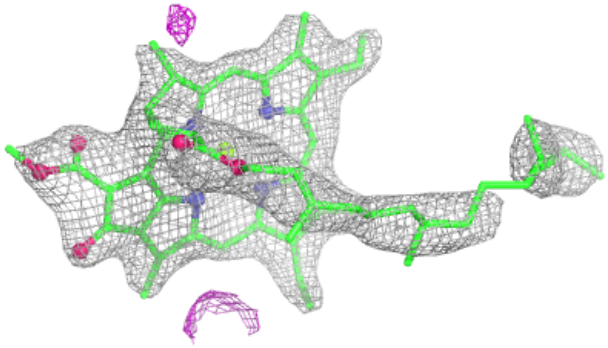


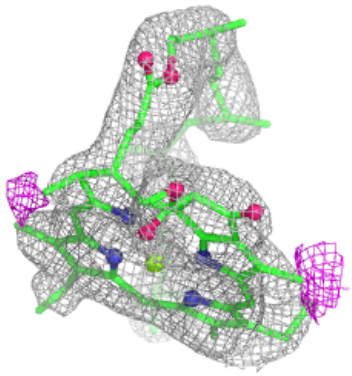


Electron density around CLA c 914:

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

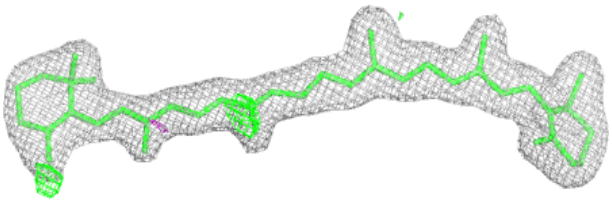


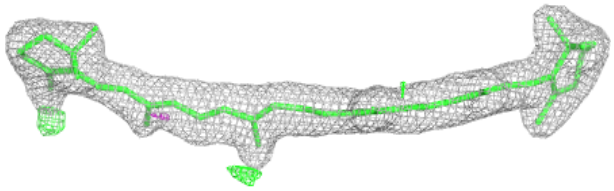


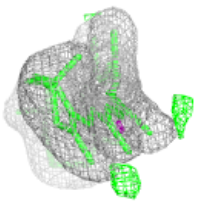


Electron density around BCR T 702:

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

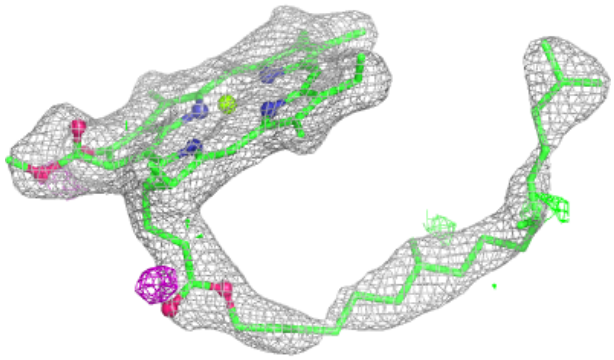


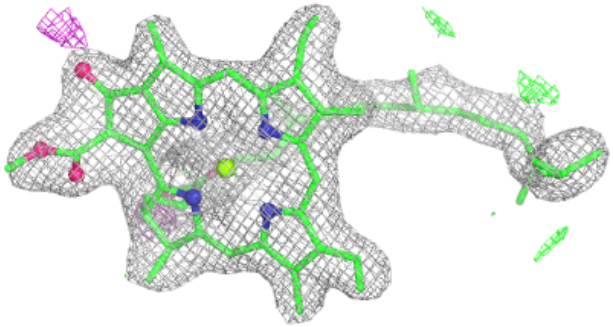


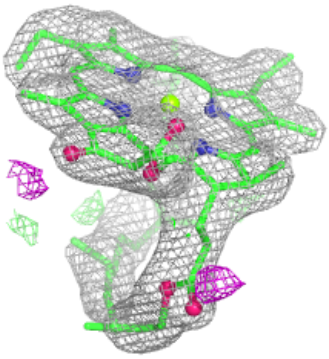


Electron density around CLA C 513:

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

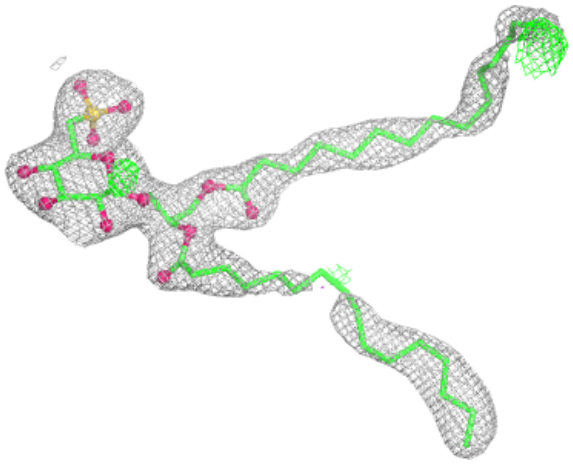


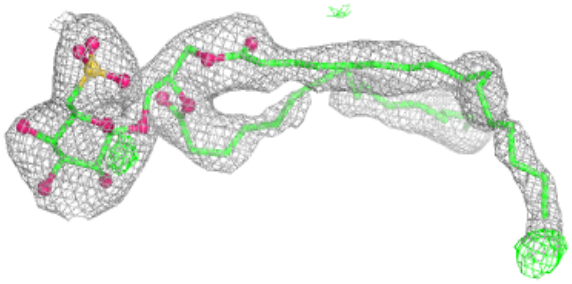




Electron density around SQD a 415:

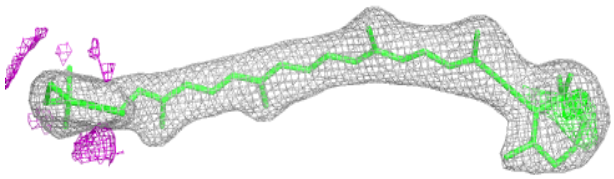
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

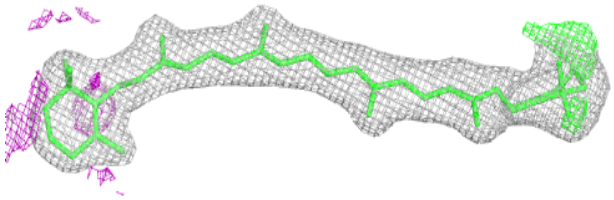


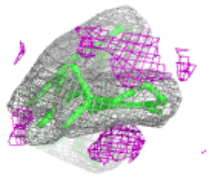


Electron density around BCR d 406:

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

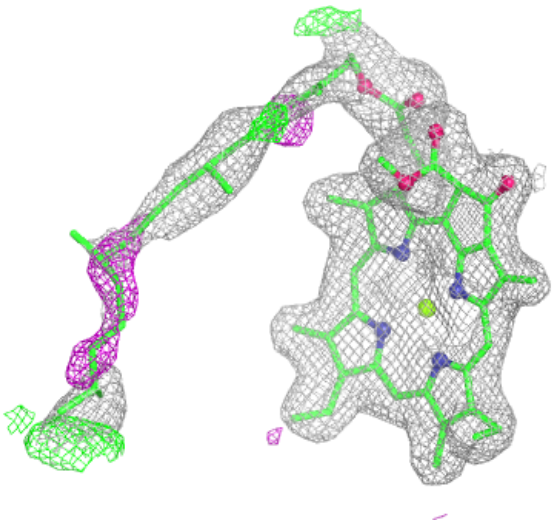


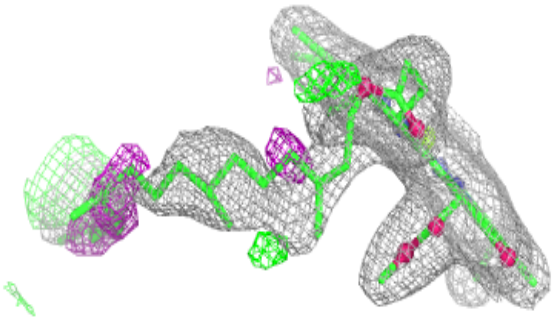


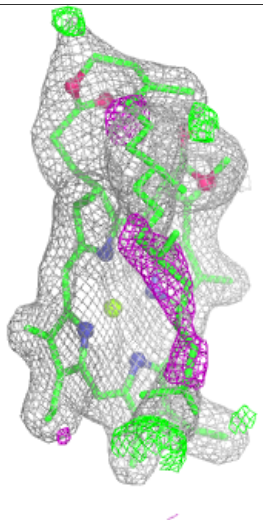


Electron density around CLA B 617:

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

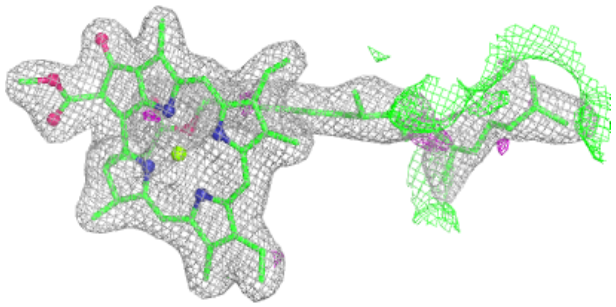


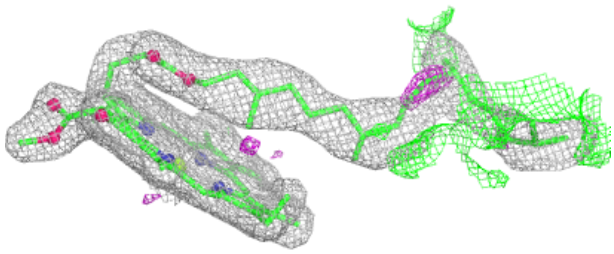


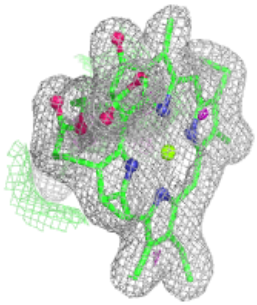


Electron density around CLA b 618:

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

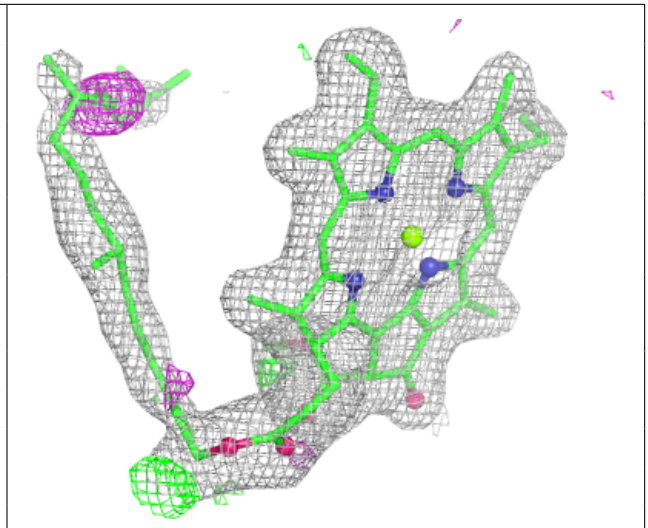


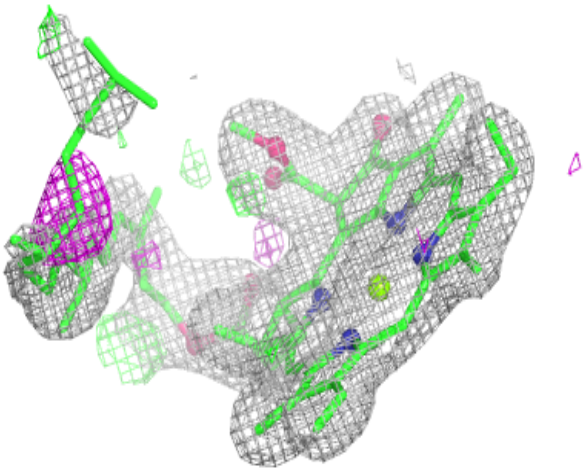


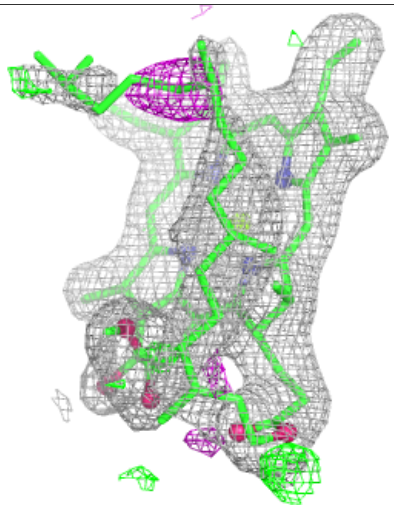


Electron density around CLA b 620:

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

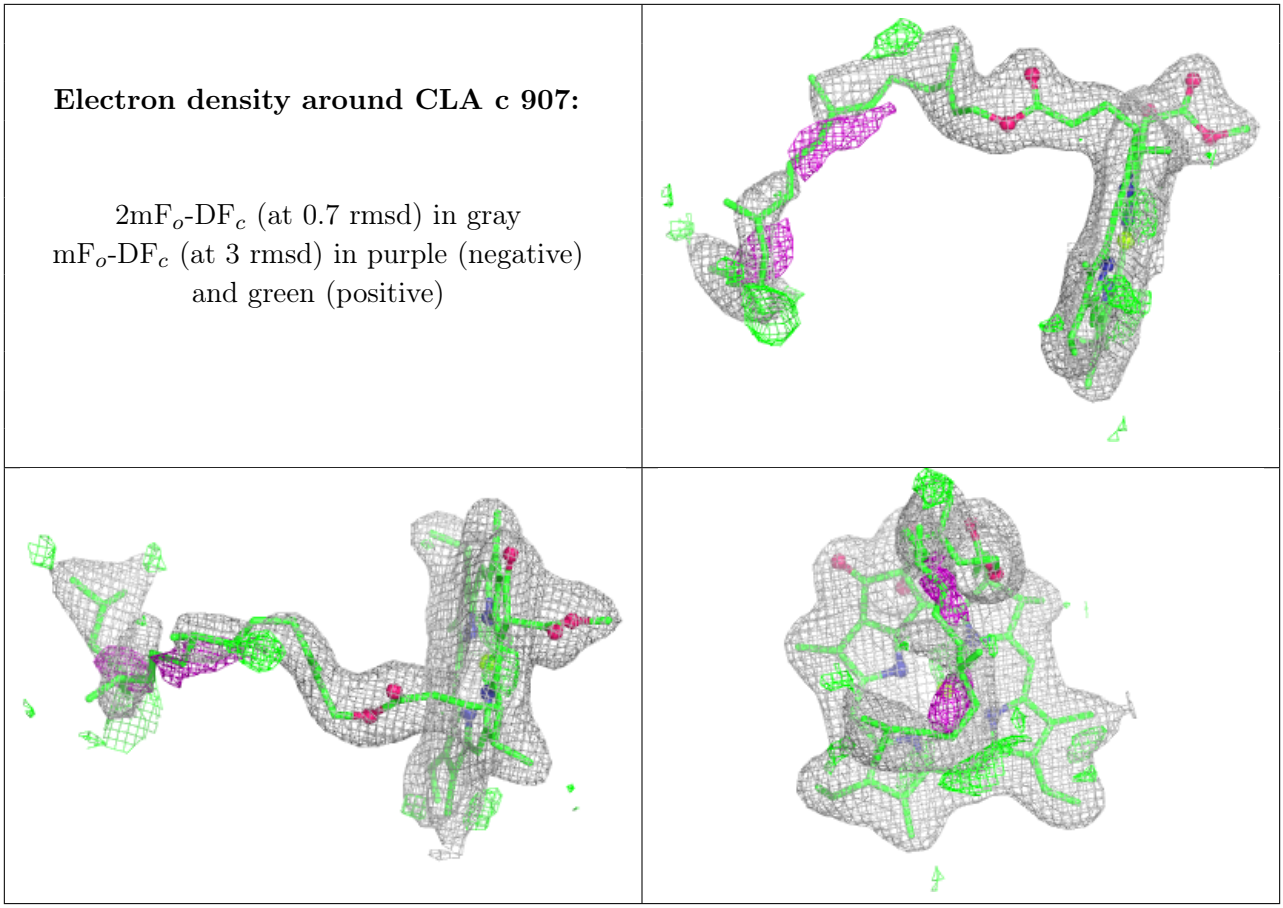






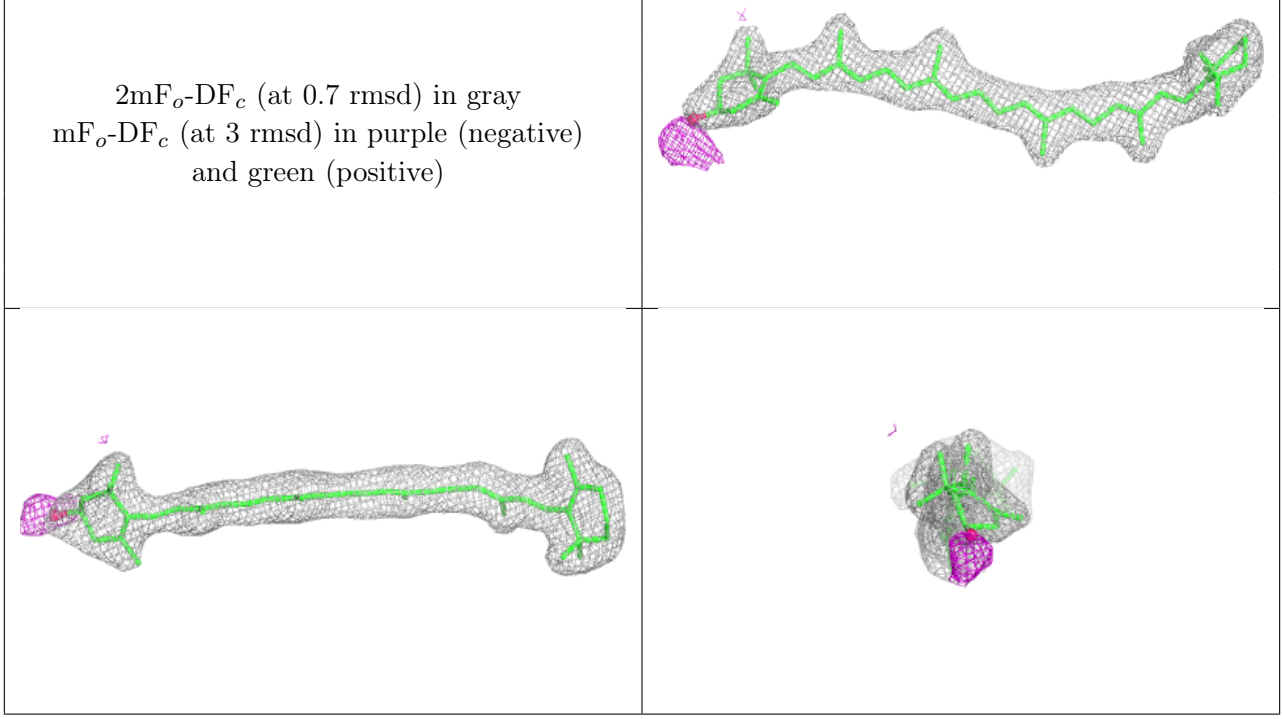
Electron density around CLA c 907:

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



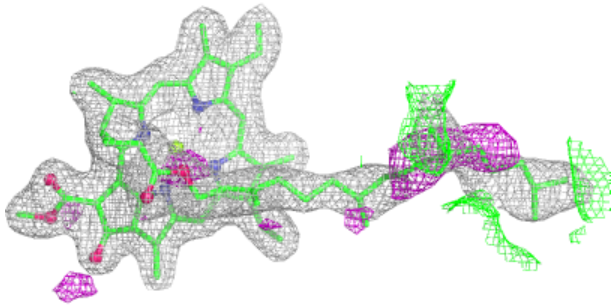
Electron density around RRX h 101:

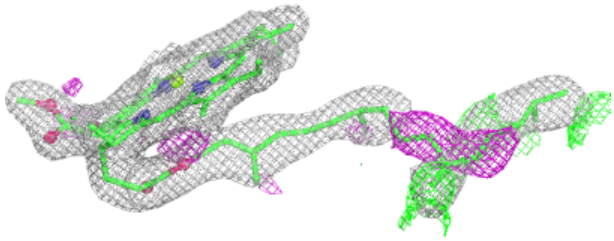
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

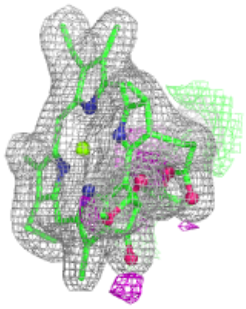


Electron density around CLA B 615:

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

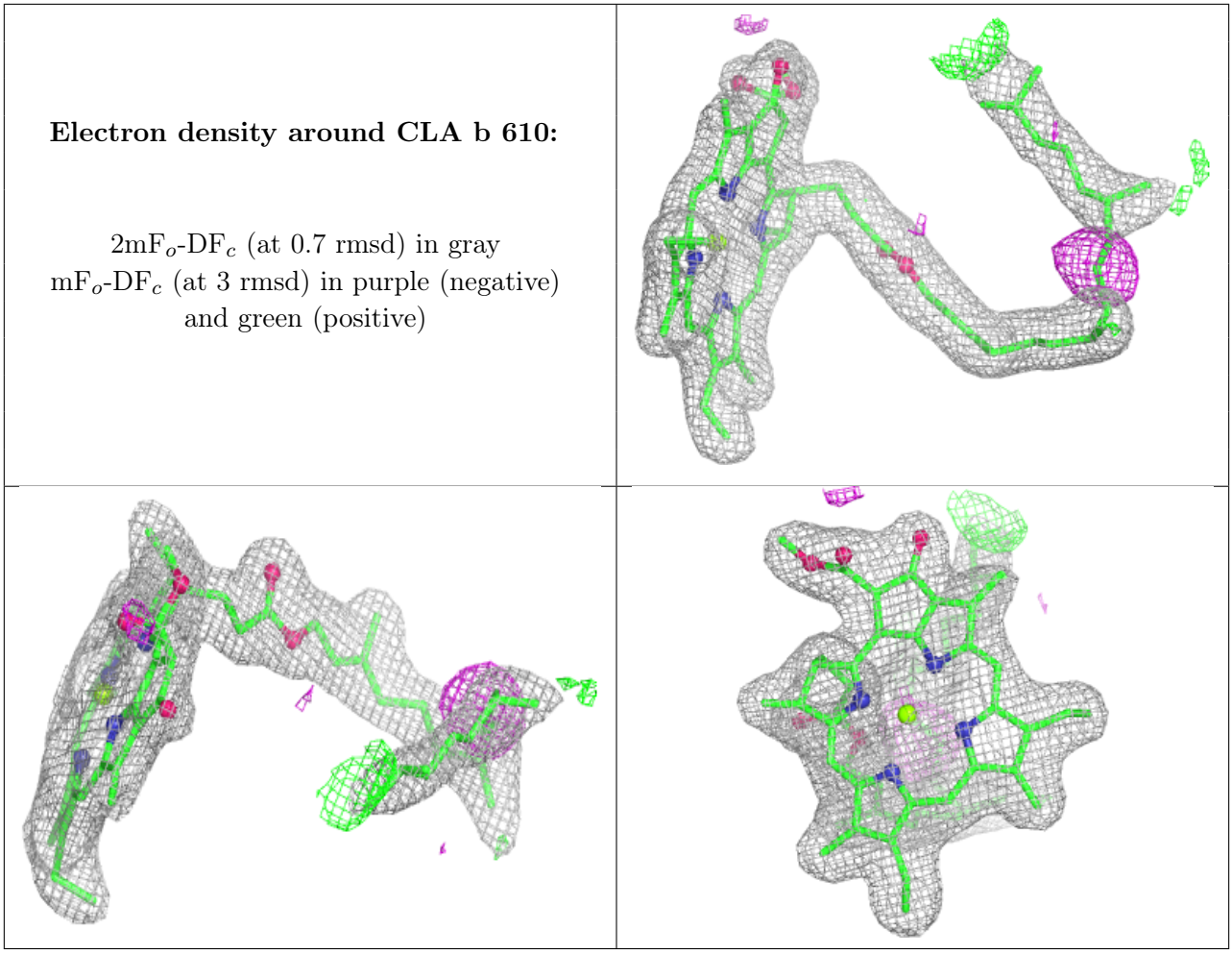






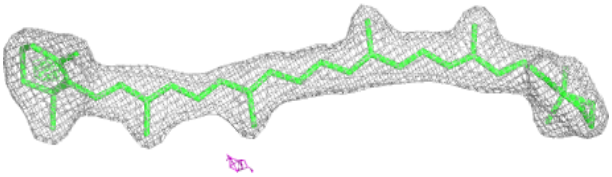
Electron density around CLA b 610:

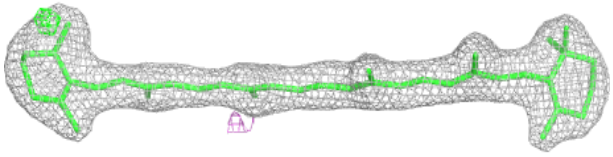
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

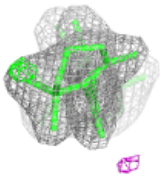


Electron density around BCR C 514:

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

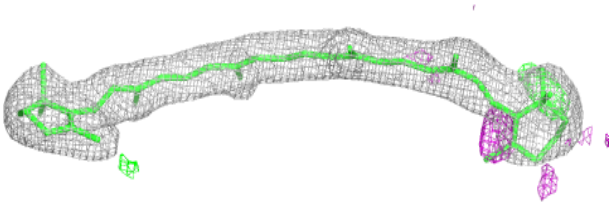


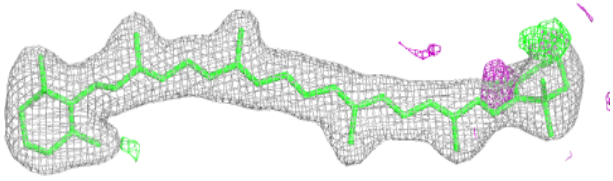


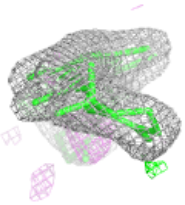


Electron density around BCR D 404:

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

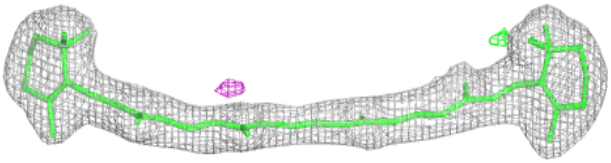


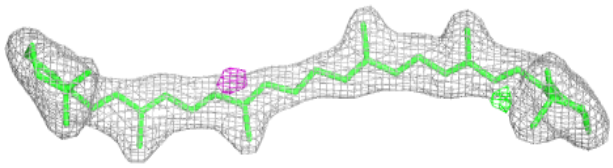


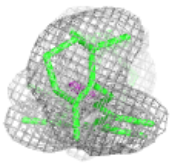


Electron density around BCR K 101:

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

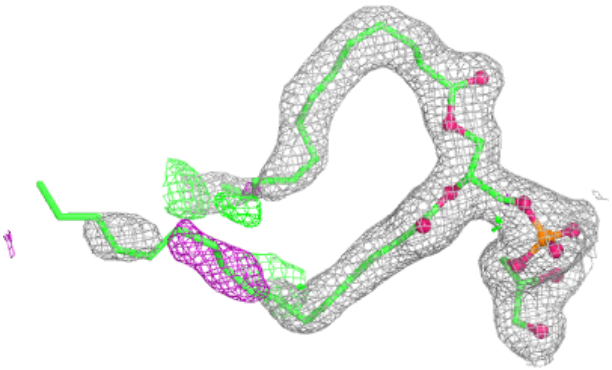


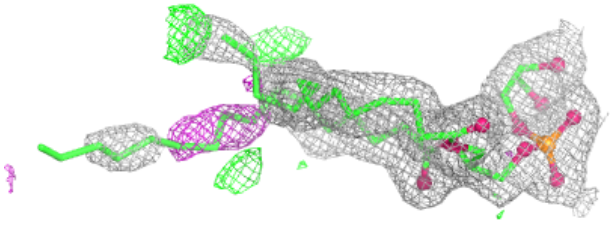


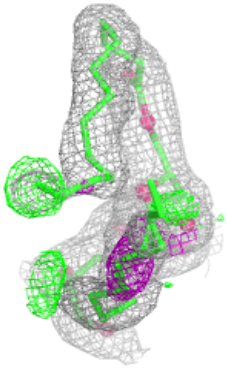


Electron density around LHG D 409:

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

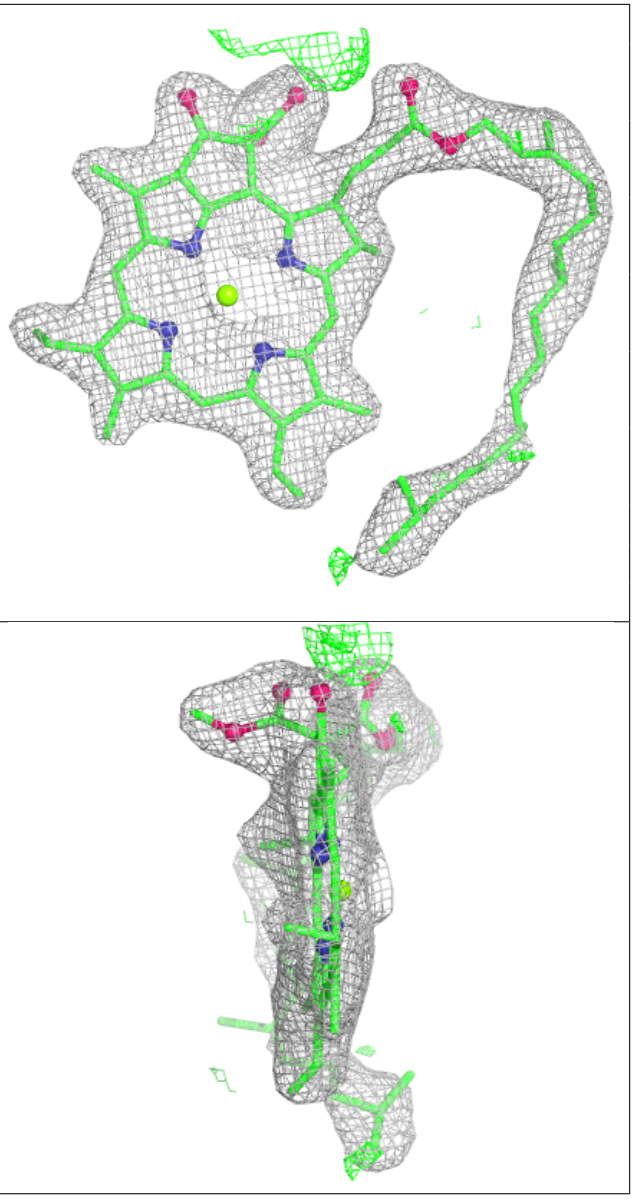






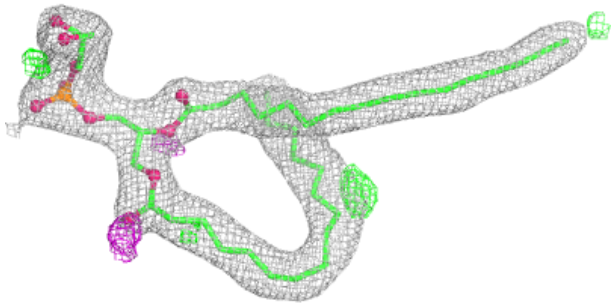
Electron density around CLA C 512:

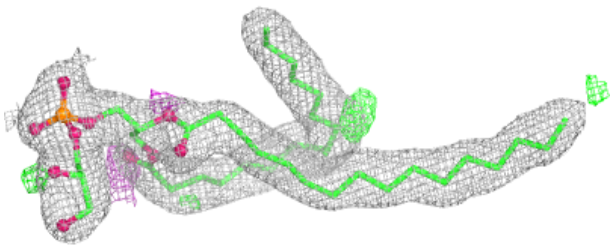
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around LHG d 408:

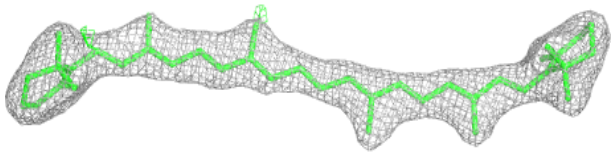
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

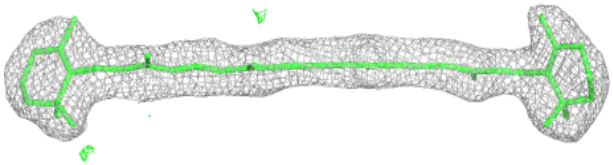


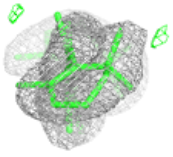


Electron density around BCR c 915:

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

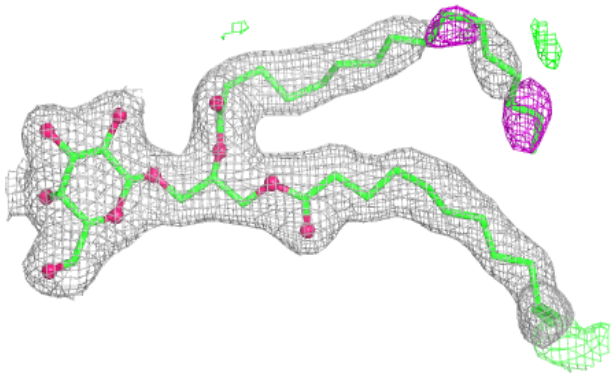


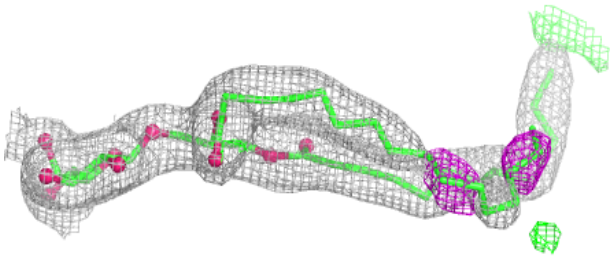


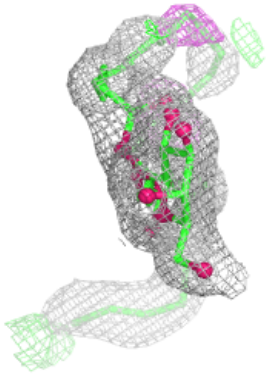


Electron density around LMG D 410:

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

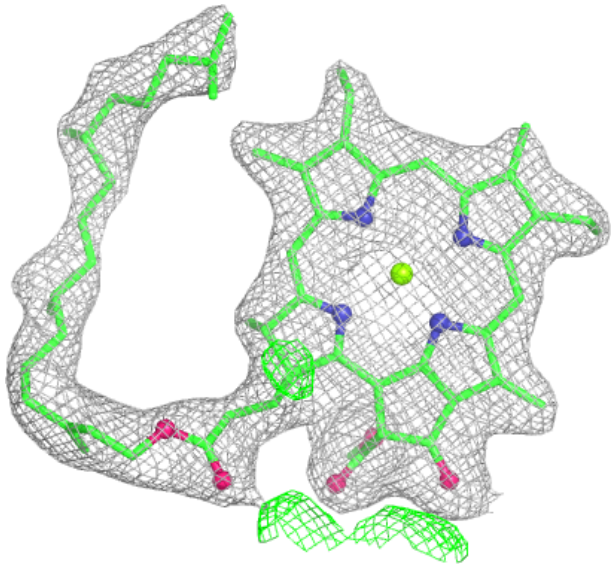


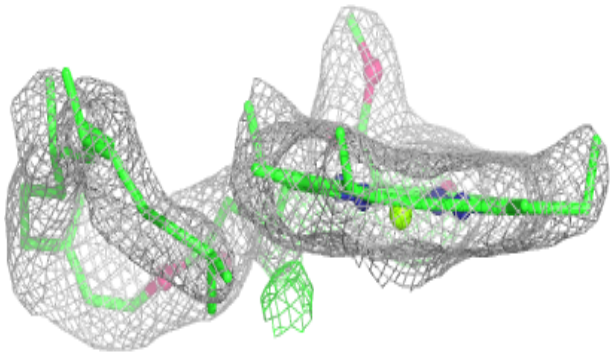


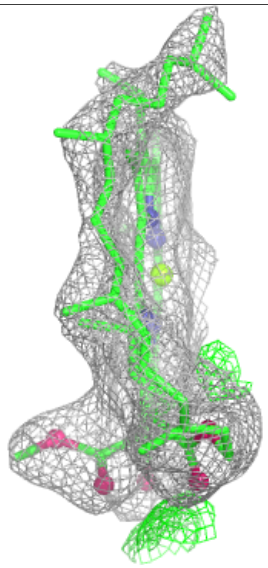


Electron density around CLA c 913:

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

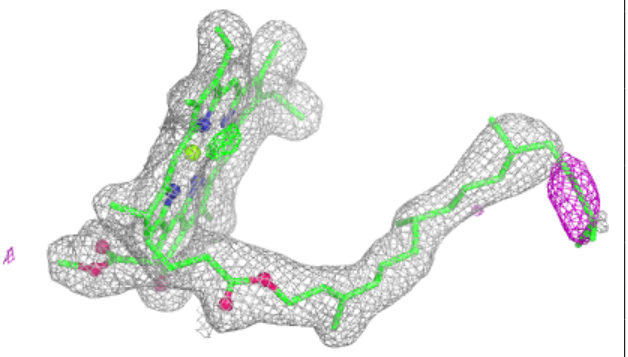


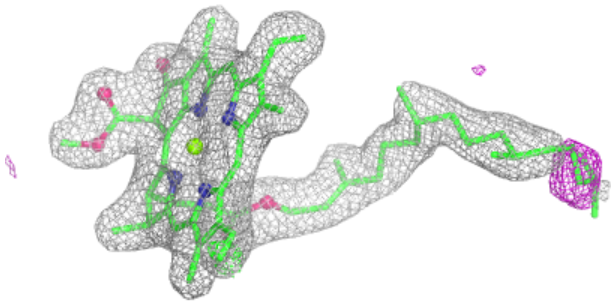


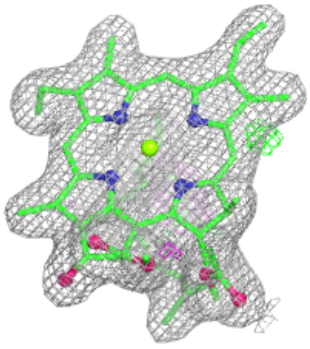


Electron density around CLA C 508:

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

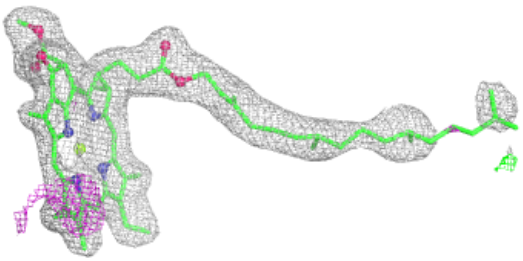


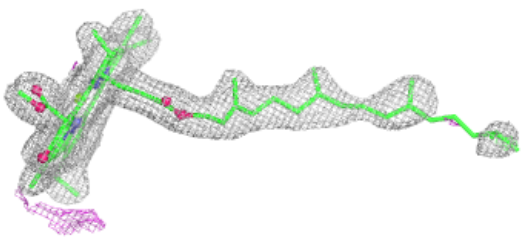


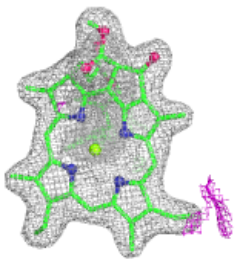


Electron density around CLA d 405:

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

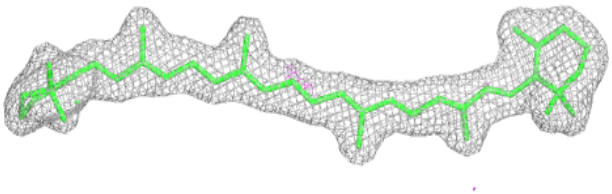


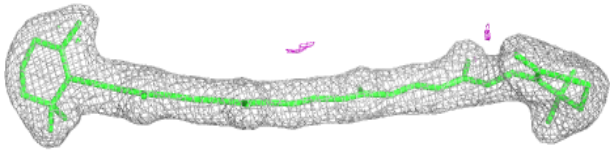


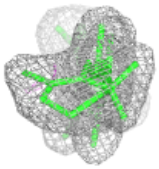


Electron density around BCR B 618:

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

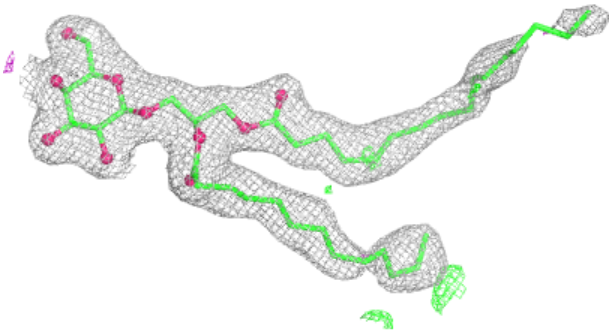


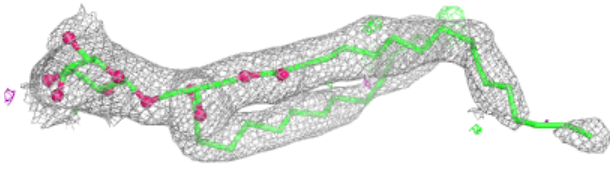




Electron density around LMG d 411:

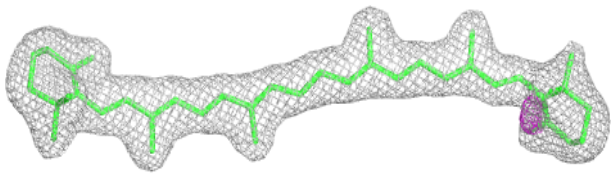
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

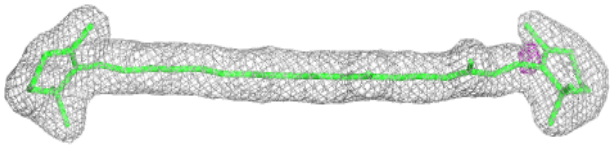


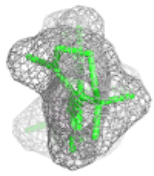


Electron density around BCR B 619:

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

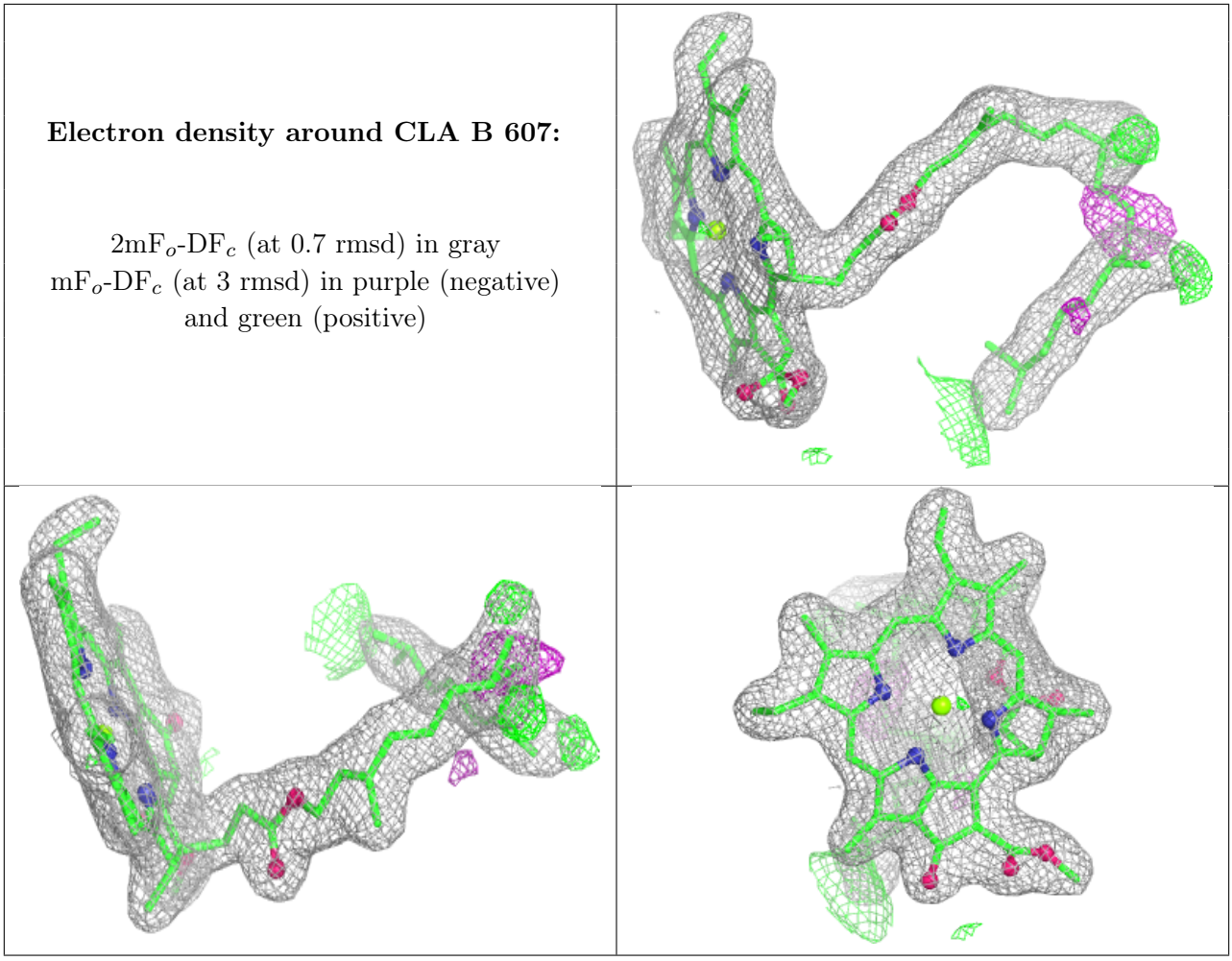






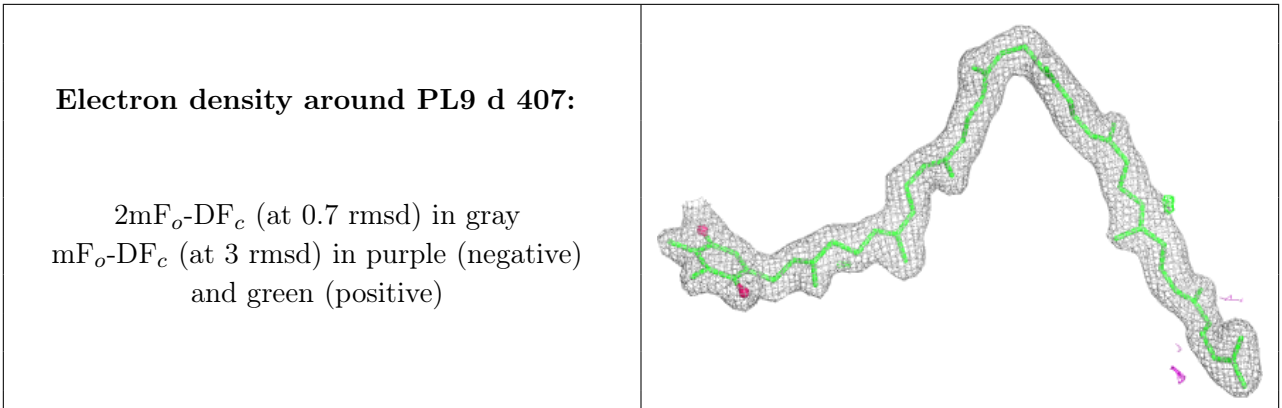
Electron density around CLA B 607:

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



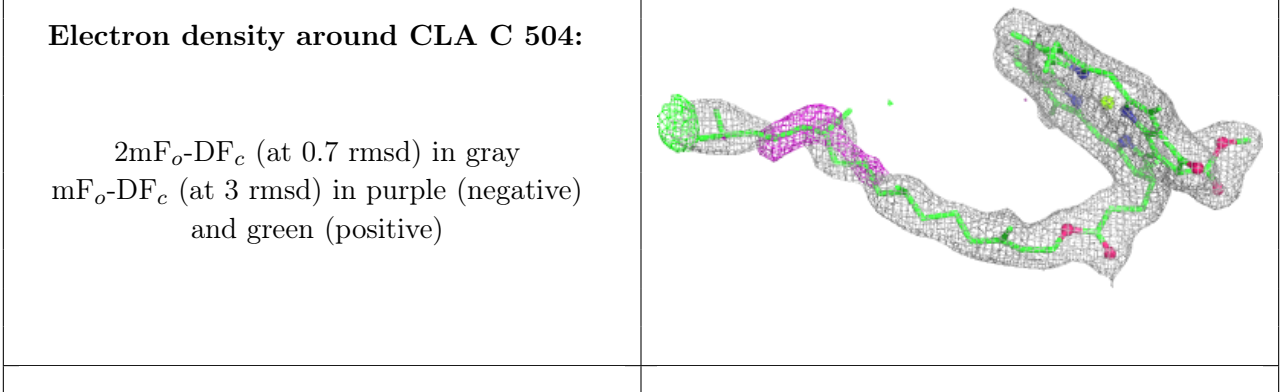
Electron density around PL9 d 407:

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



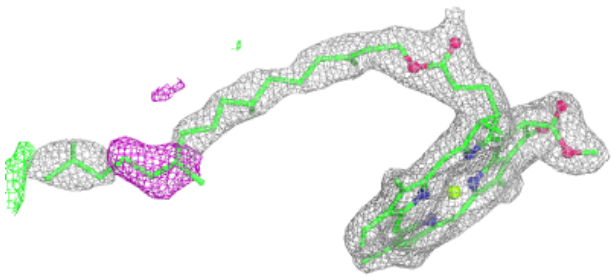
Electron density around CLA C 504:

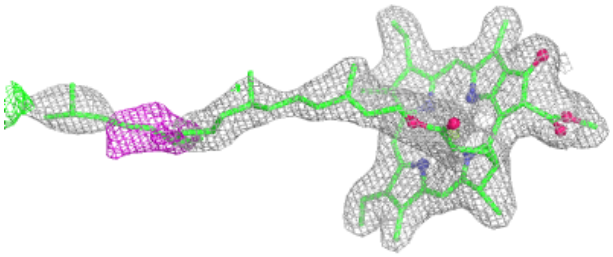
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

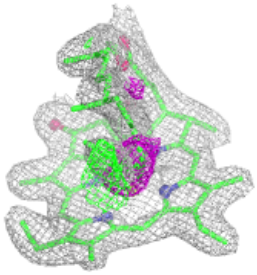


Electron density around CLA c 905:

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

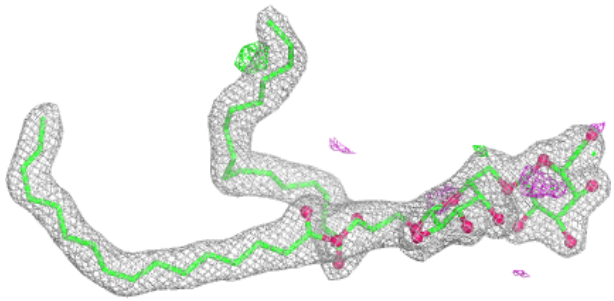


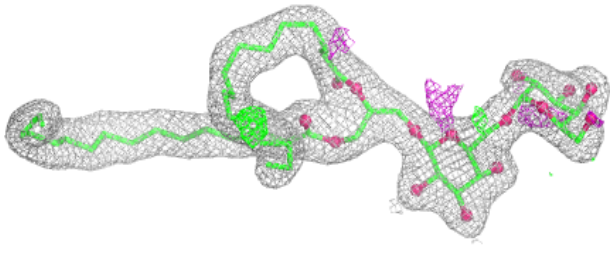




Electron density around DGD H 103:

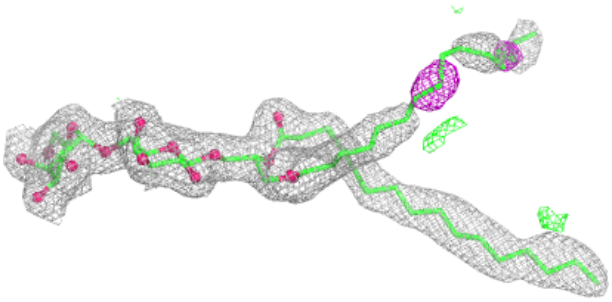
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

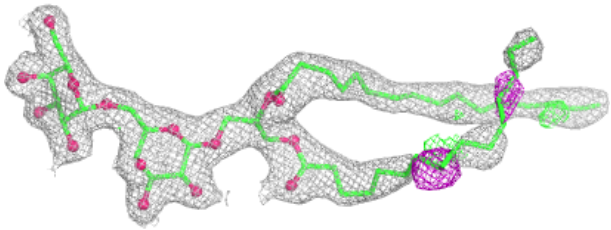


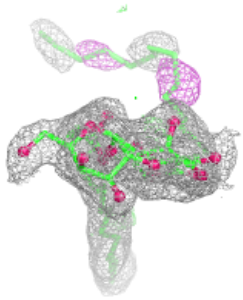


Electron density around DGD c 917:

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

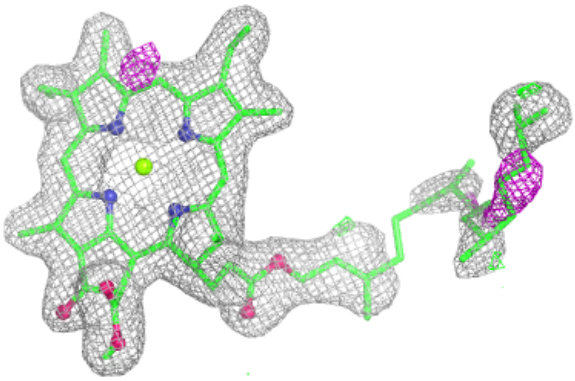


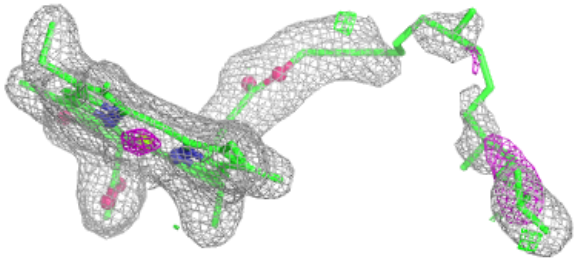




Electron density around CLA a 413:

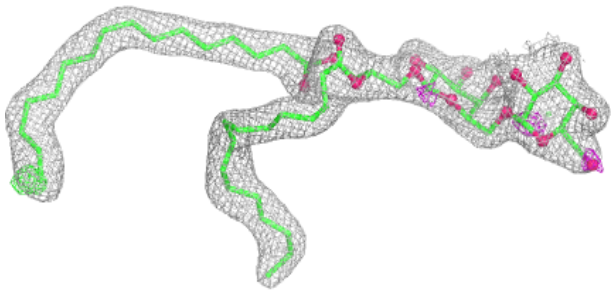
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

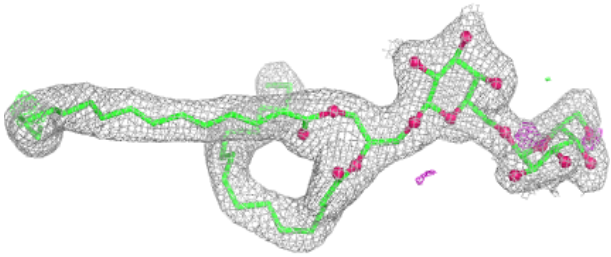




Electron density around DGD h 102:

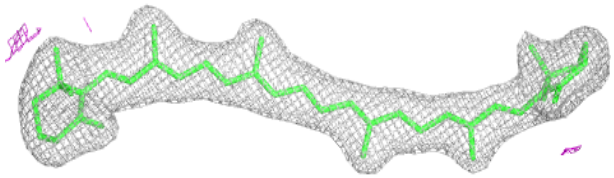
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

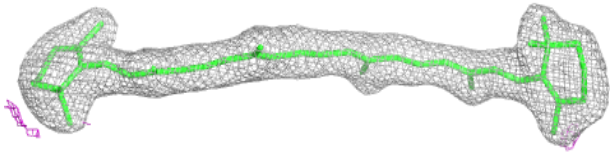


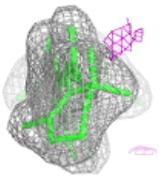


Electron density around BCR Y 101:

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

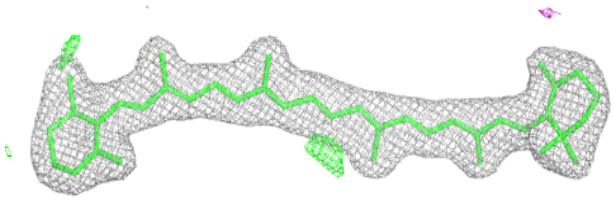


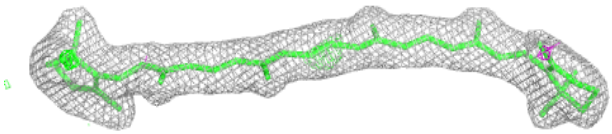


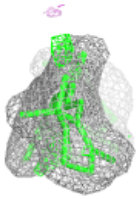


Electron density around BCR b 623:

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

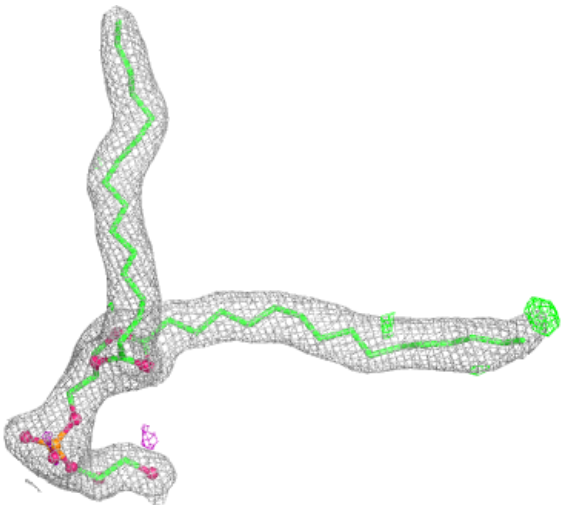


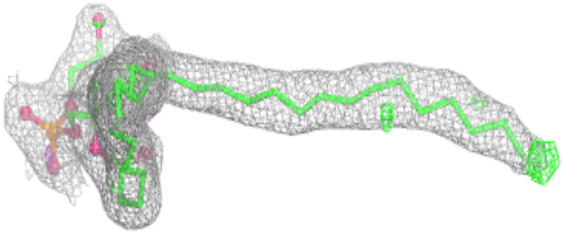


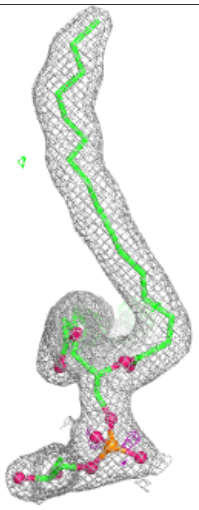


Electron density around LHG b 639:

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

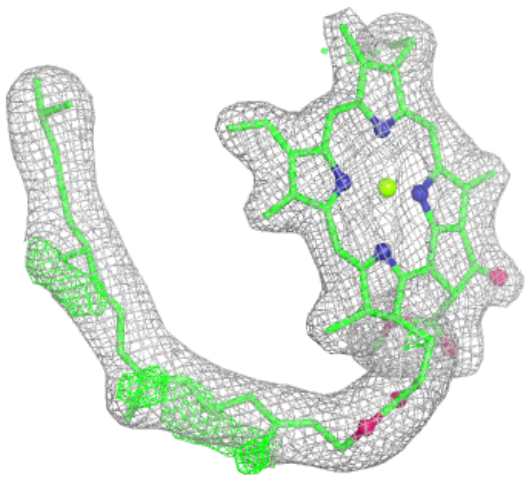


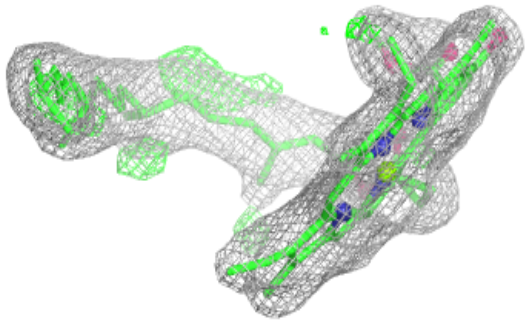


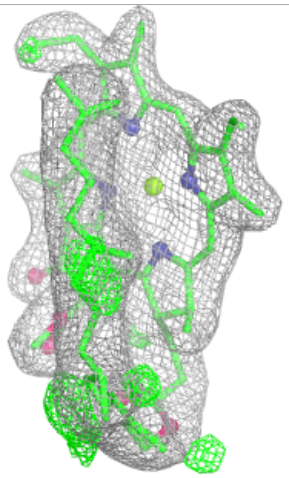


Electron density around CLA c 908:

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

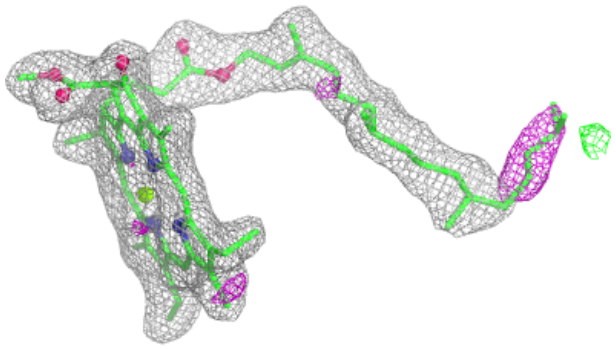


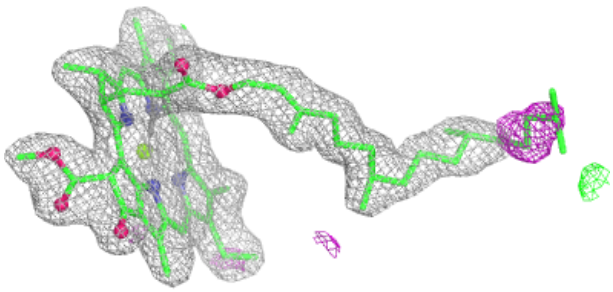


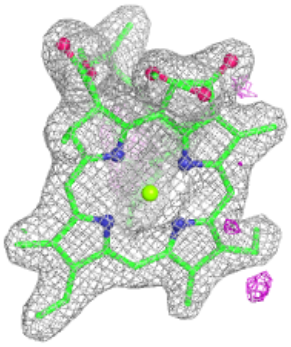


Electron density around CLA c 909:

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

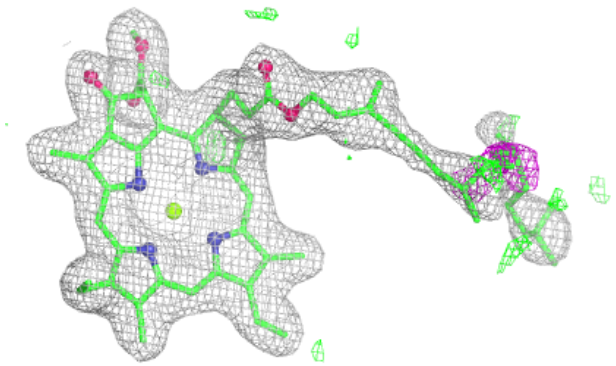


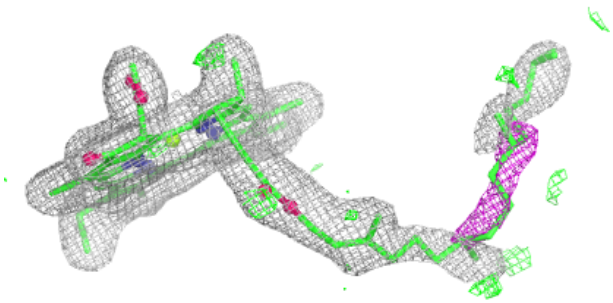


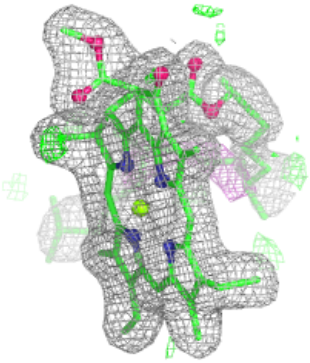


Electron density around CLA A 410:

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

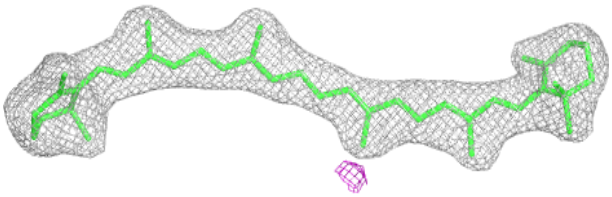


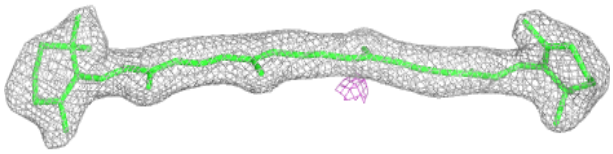


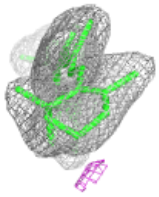


Electron density around BCR y 101:

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

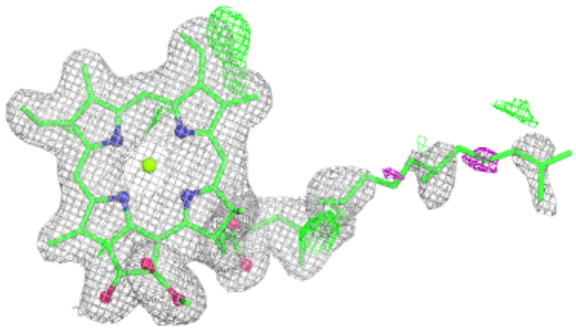


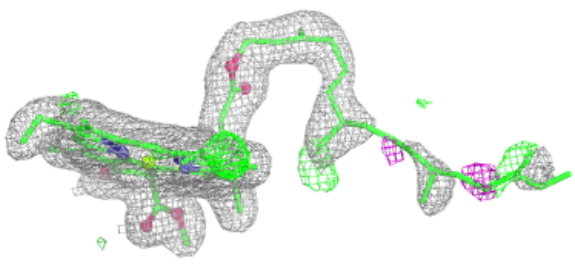




Electron density around CLA a 410:

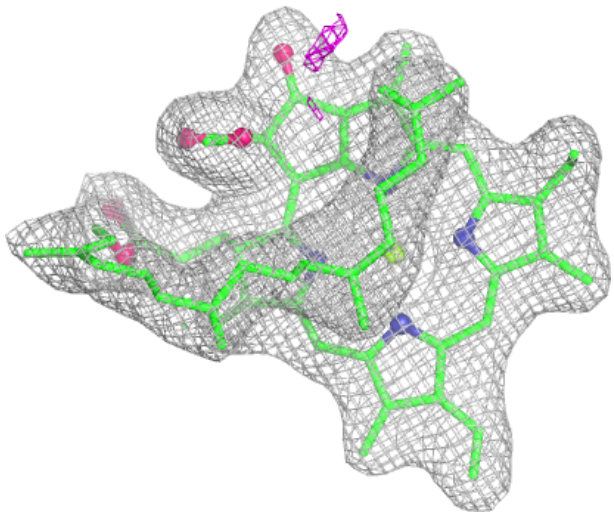
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

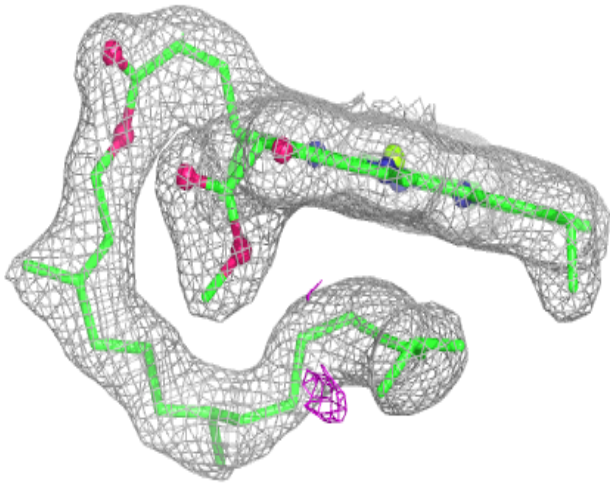


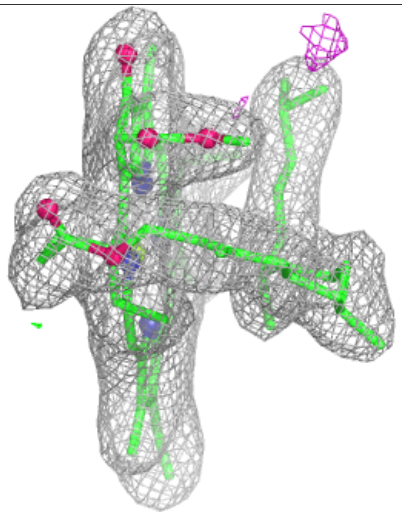


Electron density around CLA c 911:

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

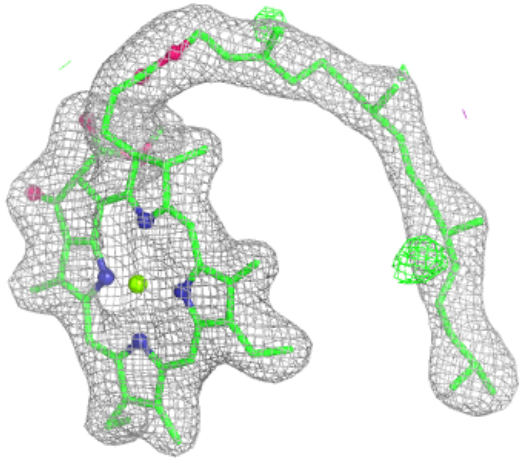


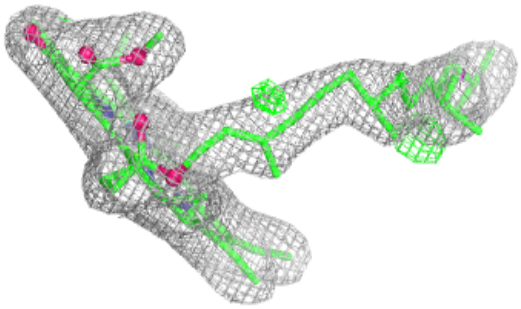


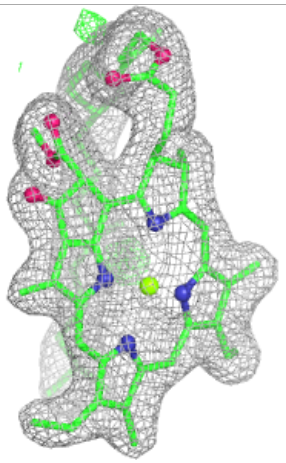


Electron density around CLA C 507:

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

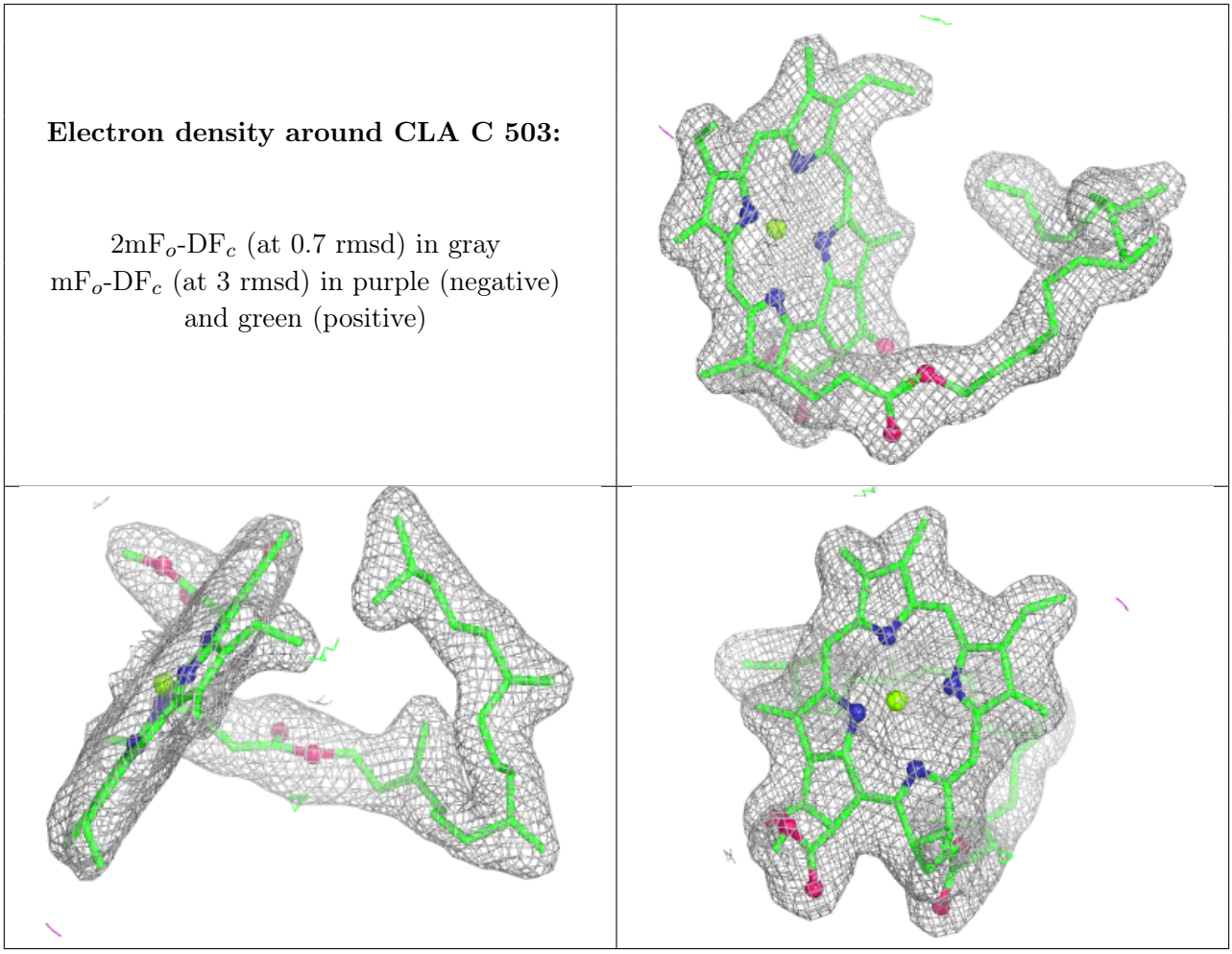






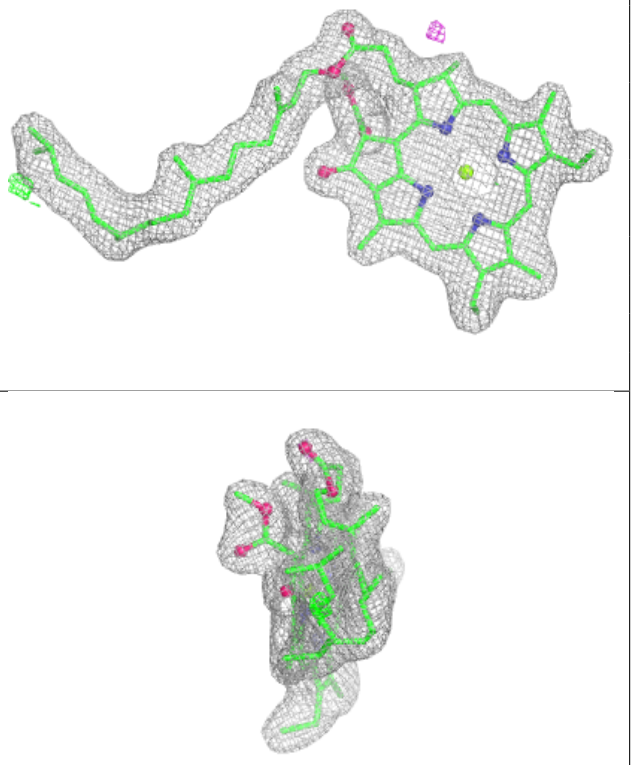
Electron density around CLA C 503:

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



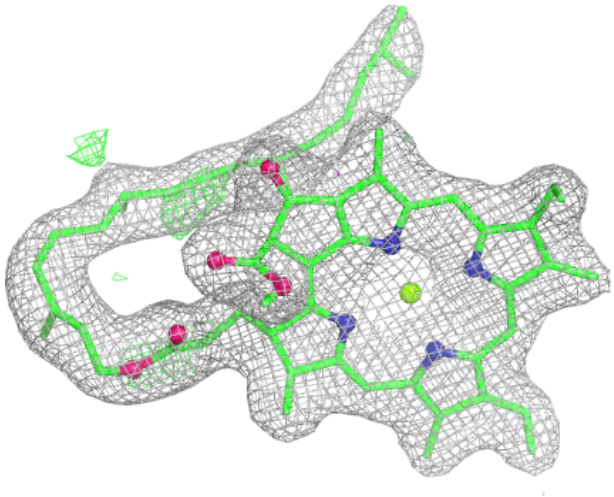
Electron density around CLA b 606:

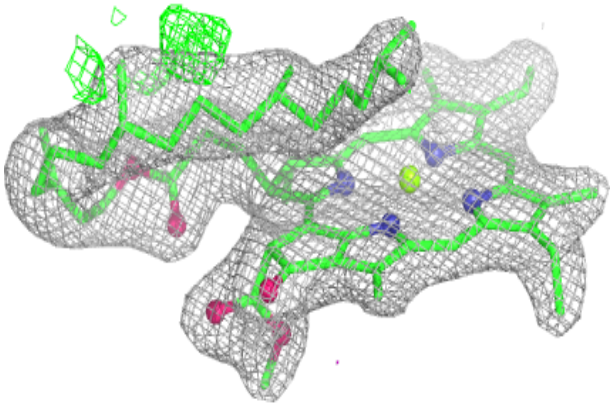
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

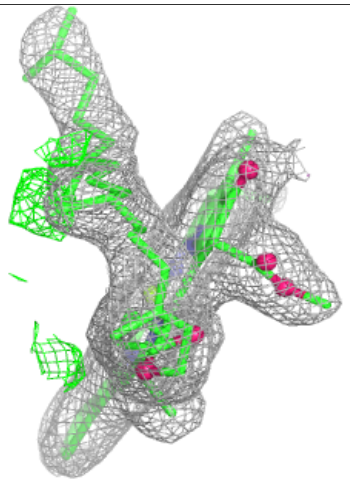


Electron density around CLA C 509:

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

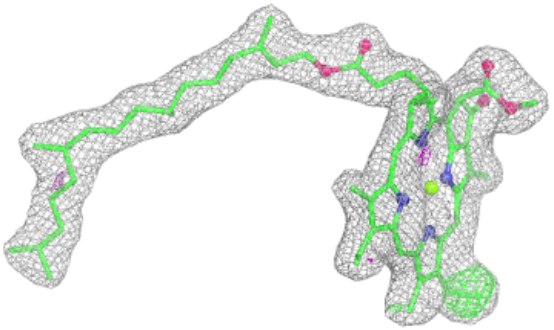


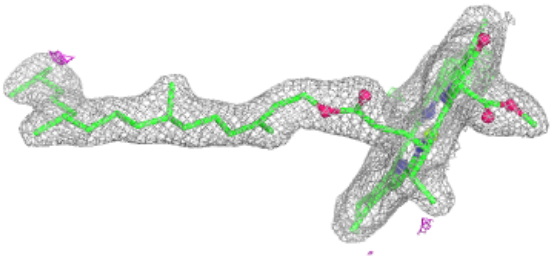




Electron density around CLA b 613:

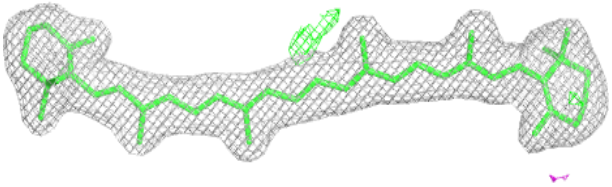
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

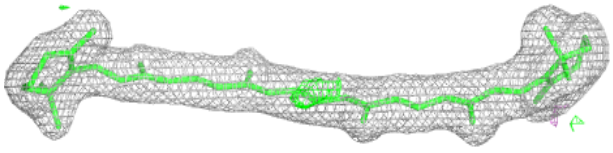


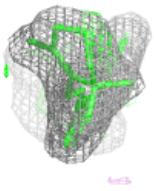


Electron density around BCR B 620:

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

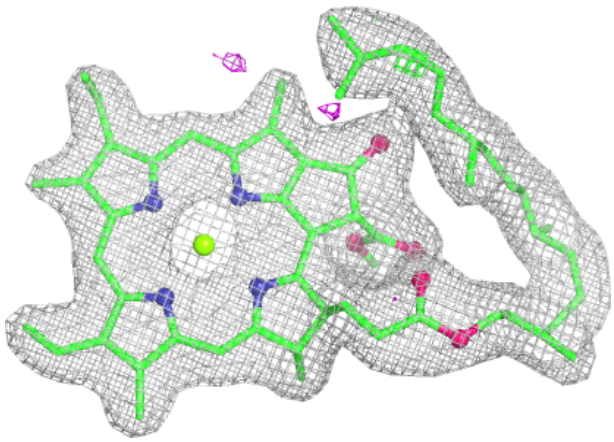


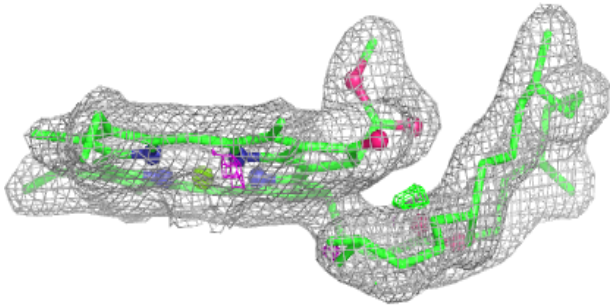


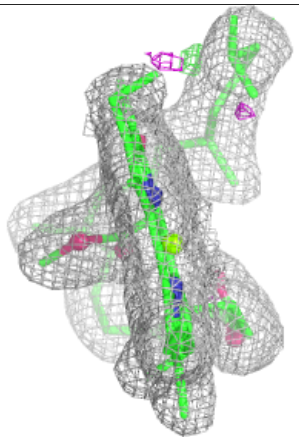


Electron density around CLA b 614:

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

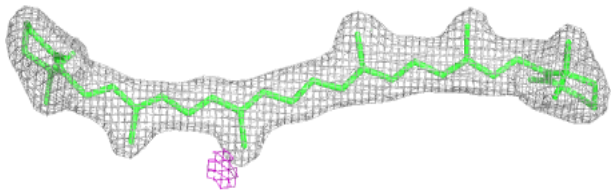


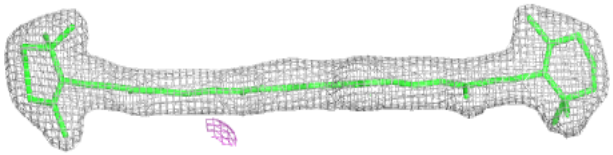




Electron density around BCR C 515:

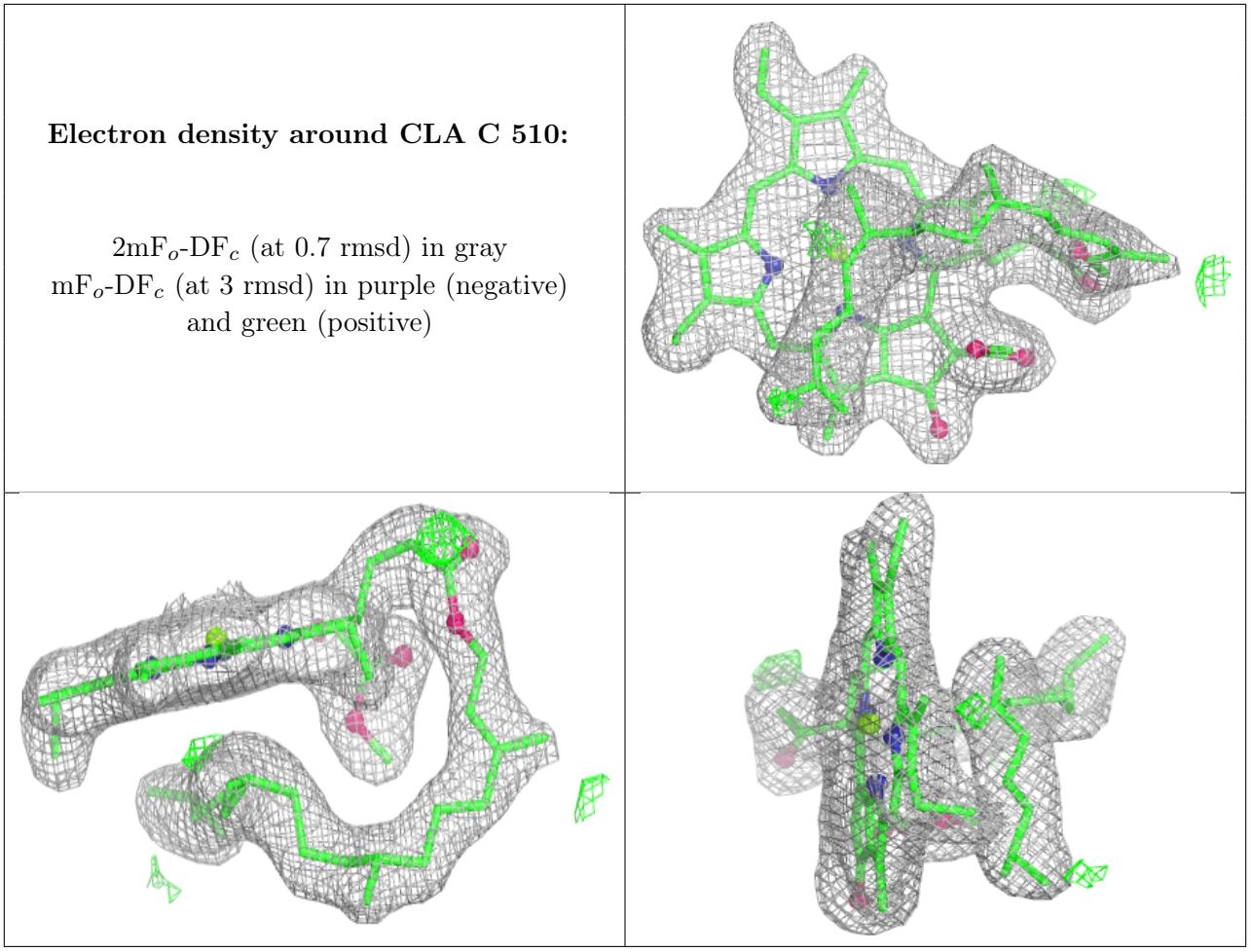
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





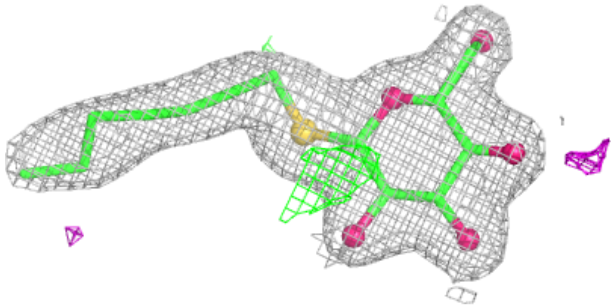
Electron density around CLA C 510:

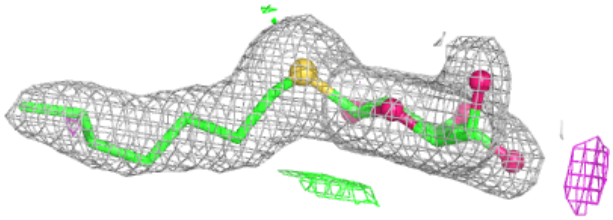
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

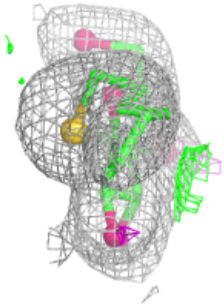


Electron density around HTG o 301:

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

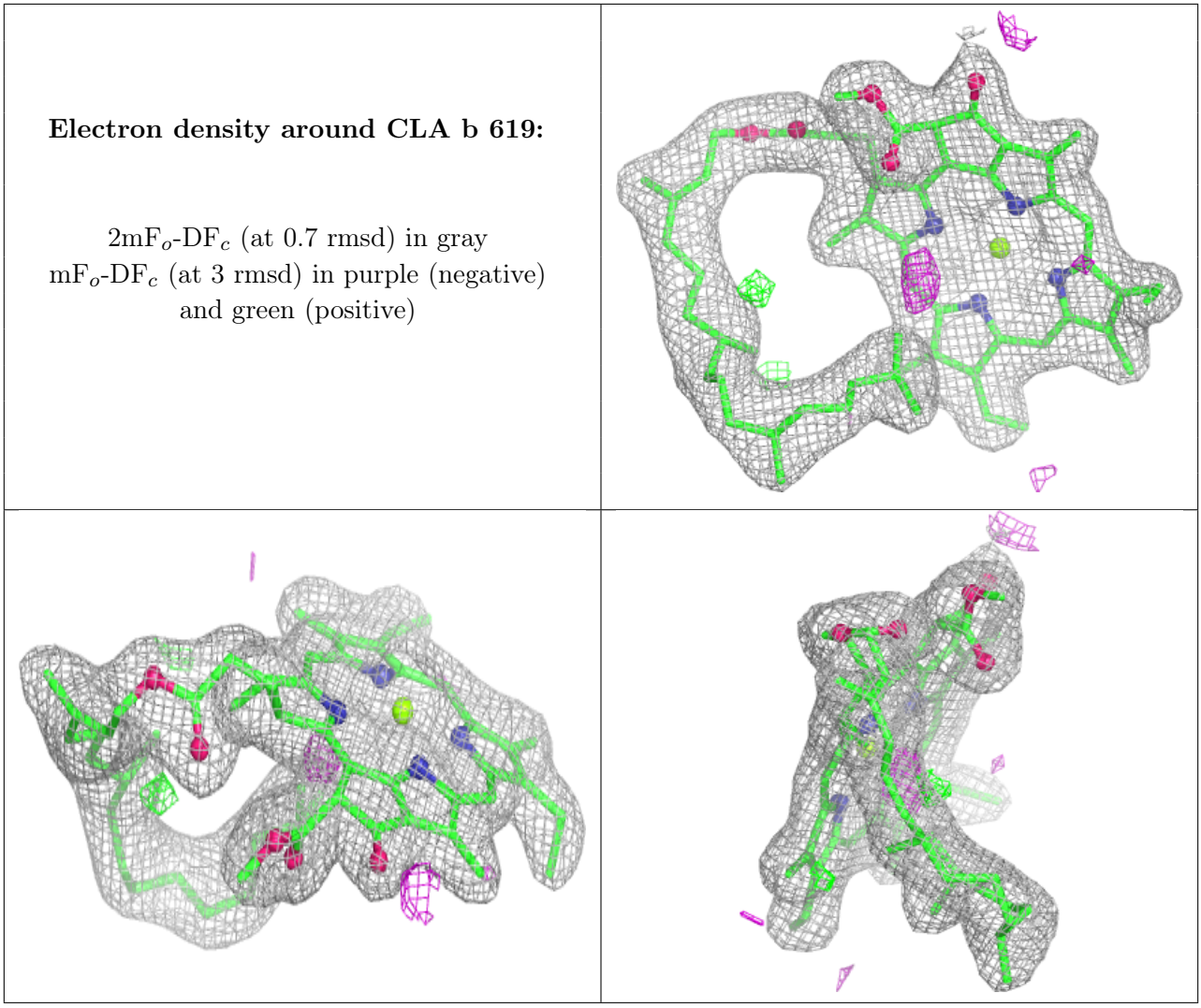






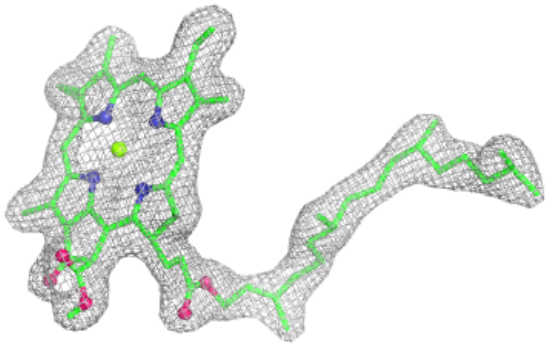
Electron density around CLA b 619:

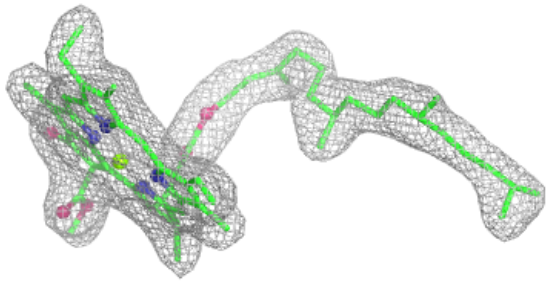
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

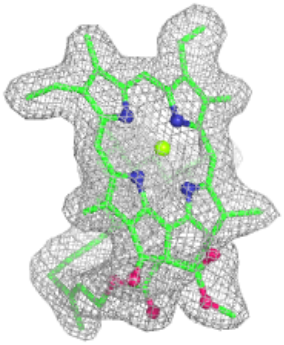


Electron density around CLA C 511:

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

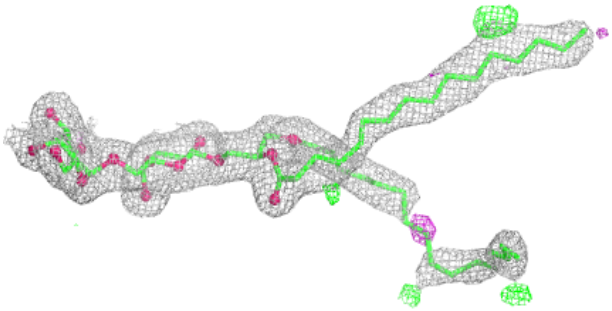


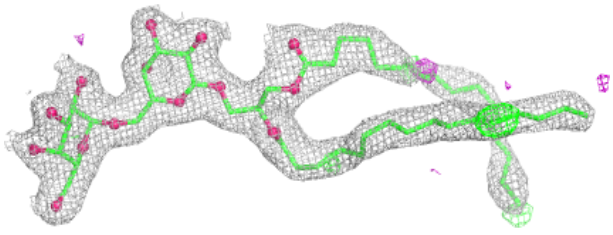


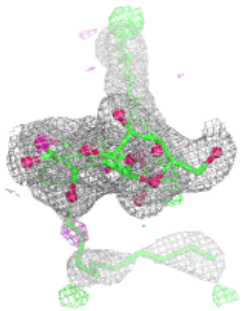


Electron density around DGD C 516:

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

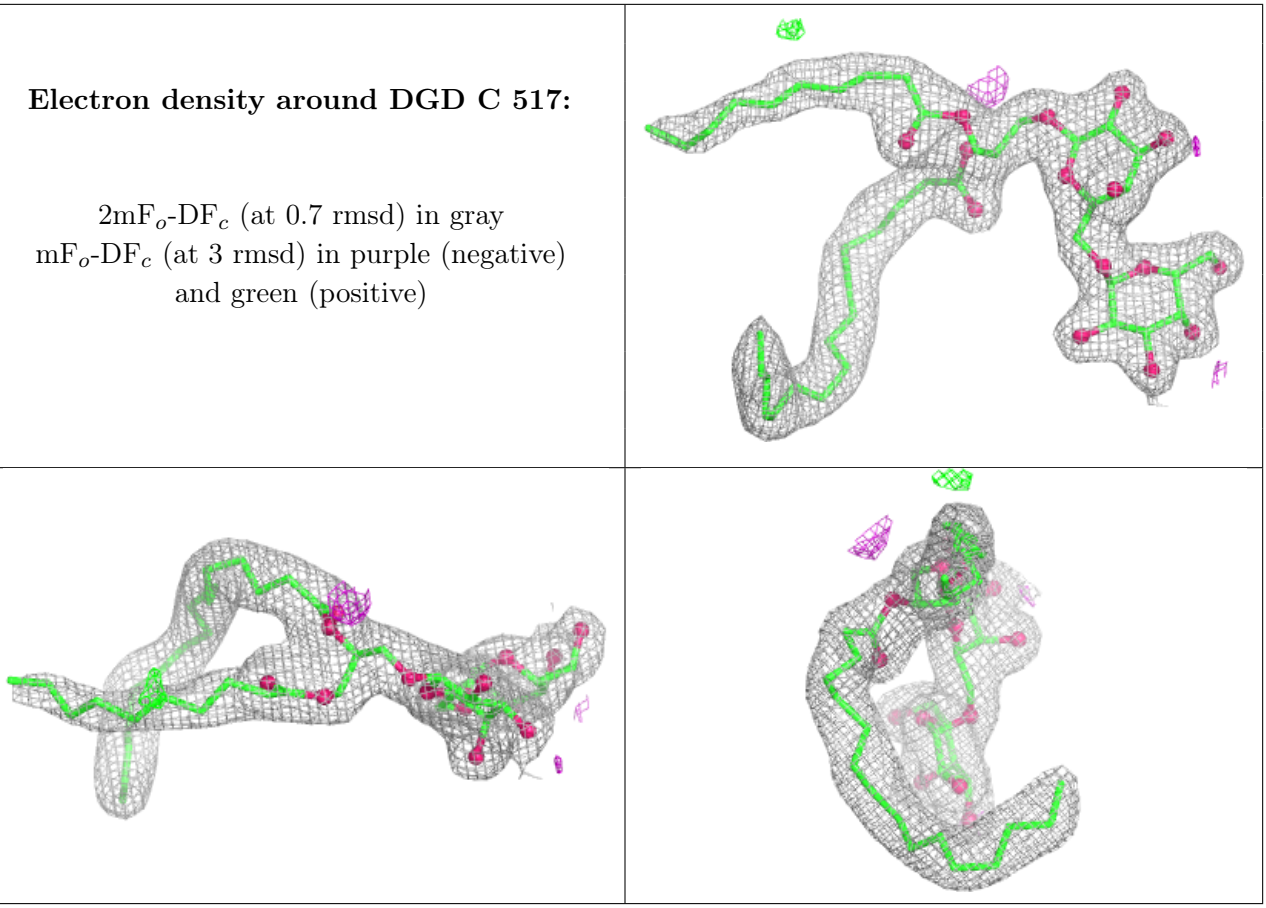






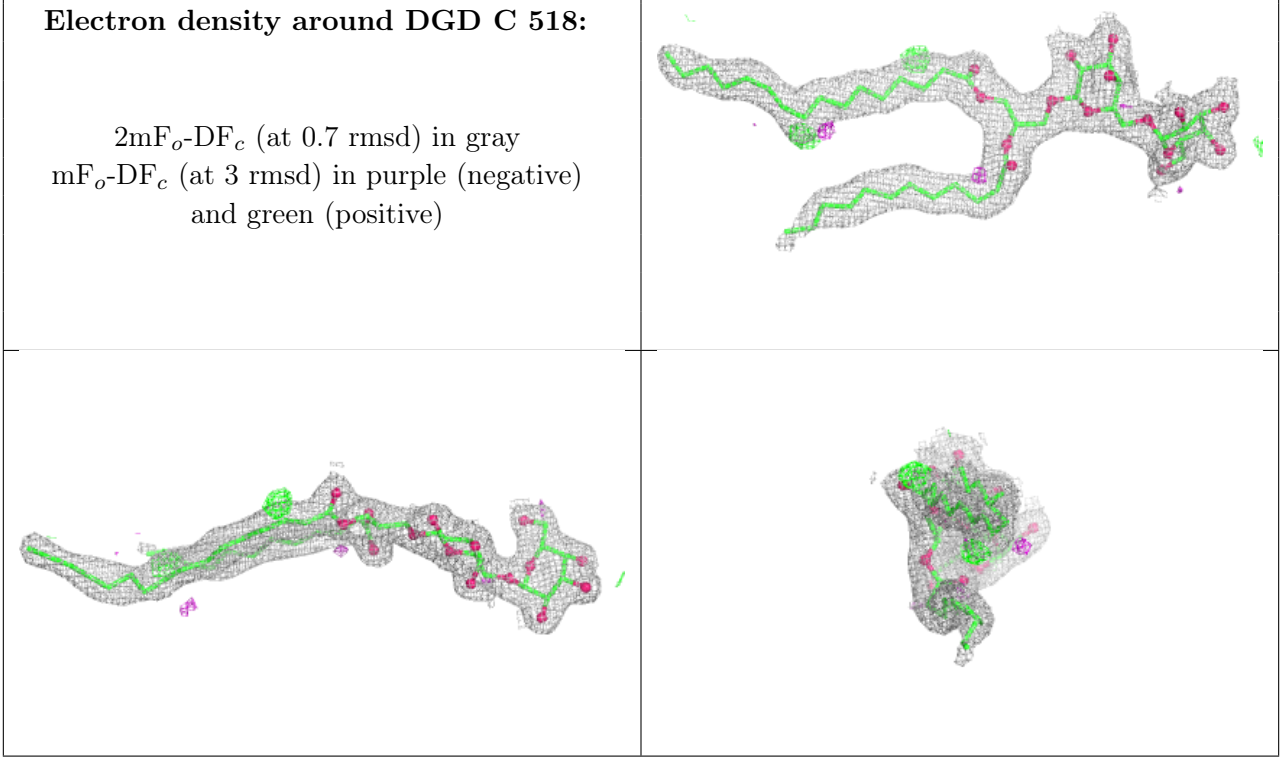
Electron density around DGD C 517:

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



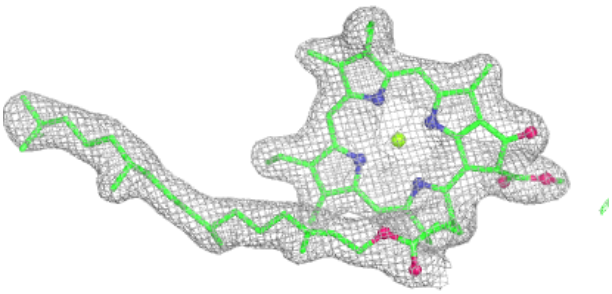
Electron density around DGD C 518:

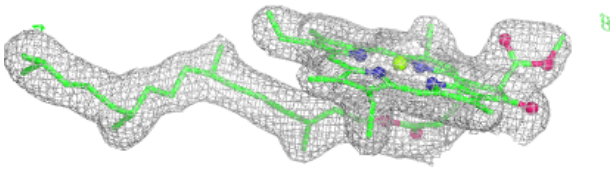
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

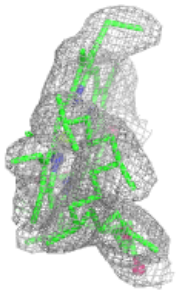


Electron density around CLA c 902:

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

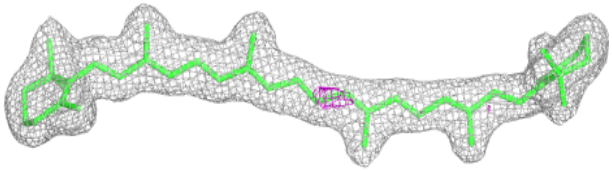


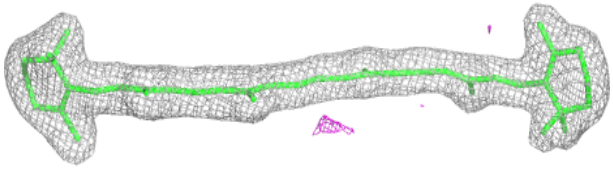


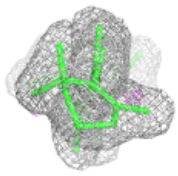


Electron density around BCR a 414:

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

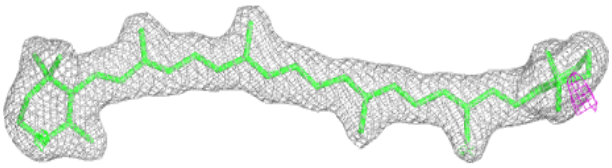


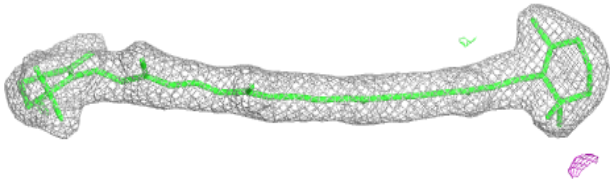


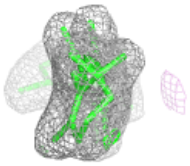


Electron density around BCR b 621:

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

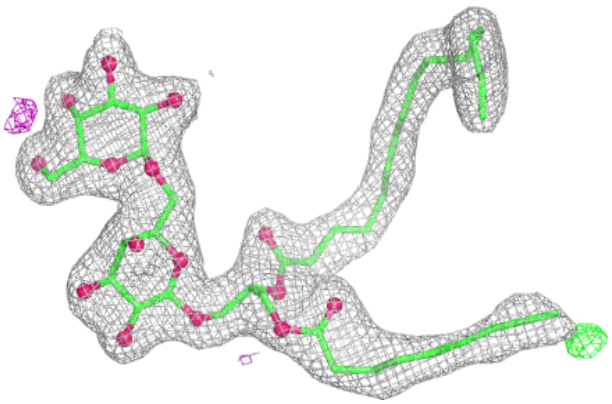


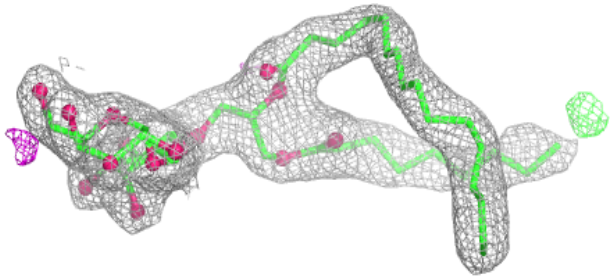


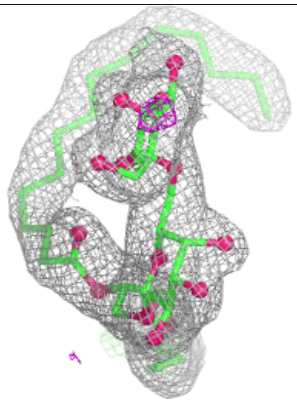


Electron density around DGD c 918:

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

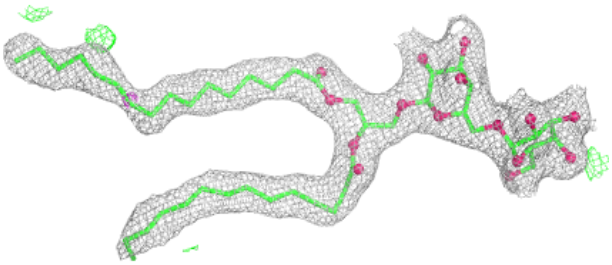


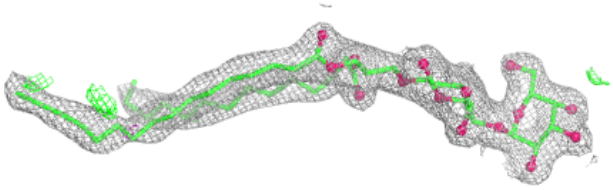


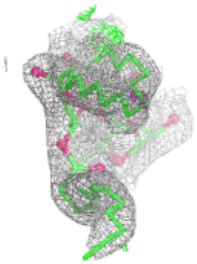


Electron density around DGD c 919:

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

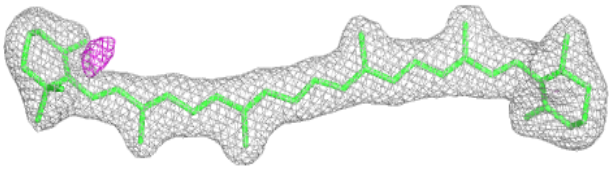


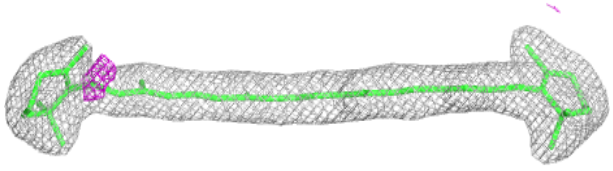


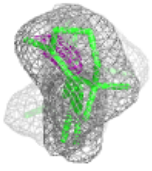


Electron density around BCR b 622:

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

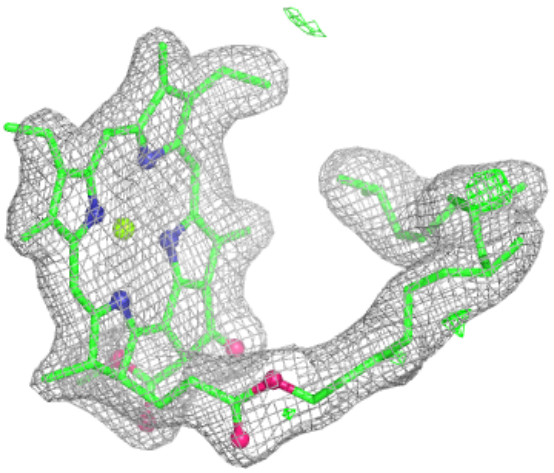


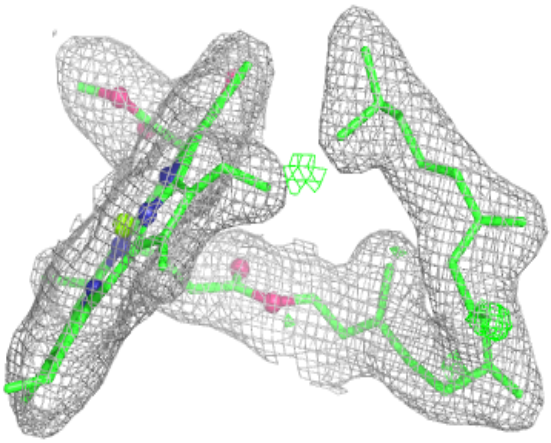


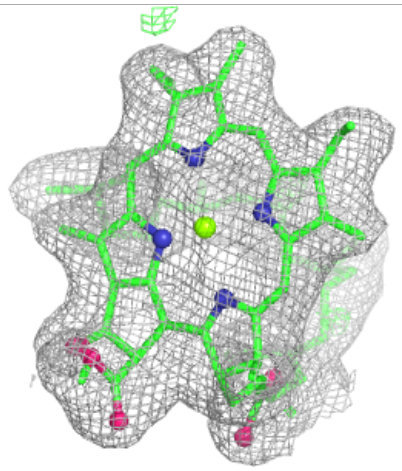


Electron density around CLA c 904:

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

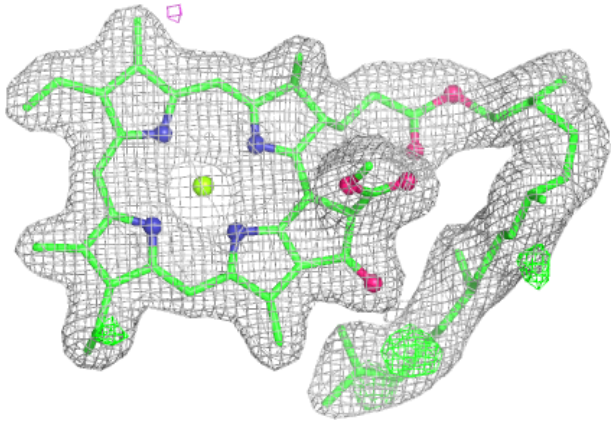


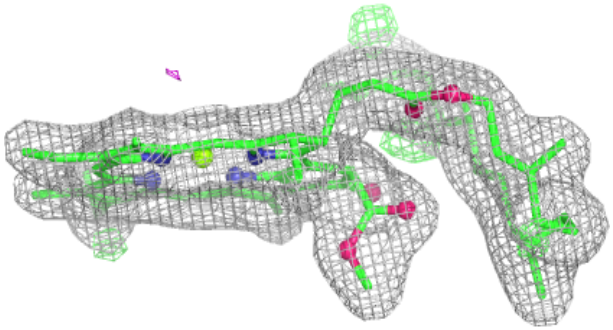


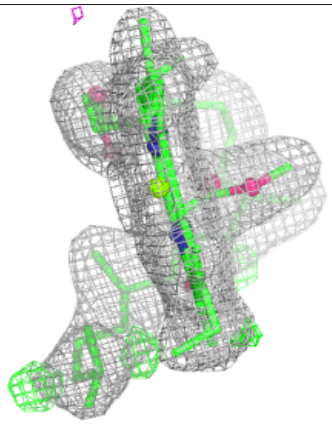


Electron density around CLA B 611:

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

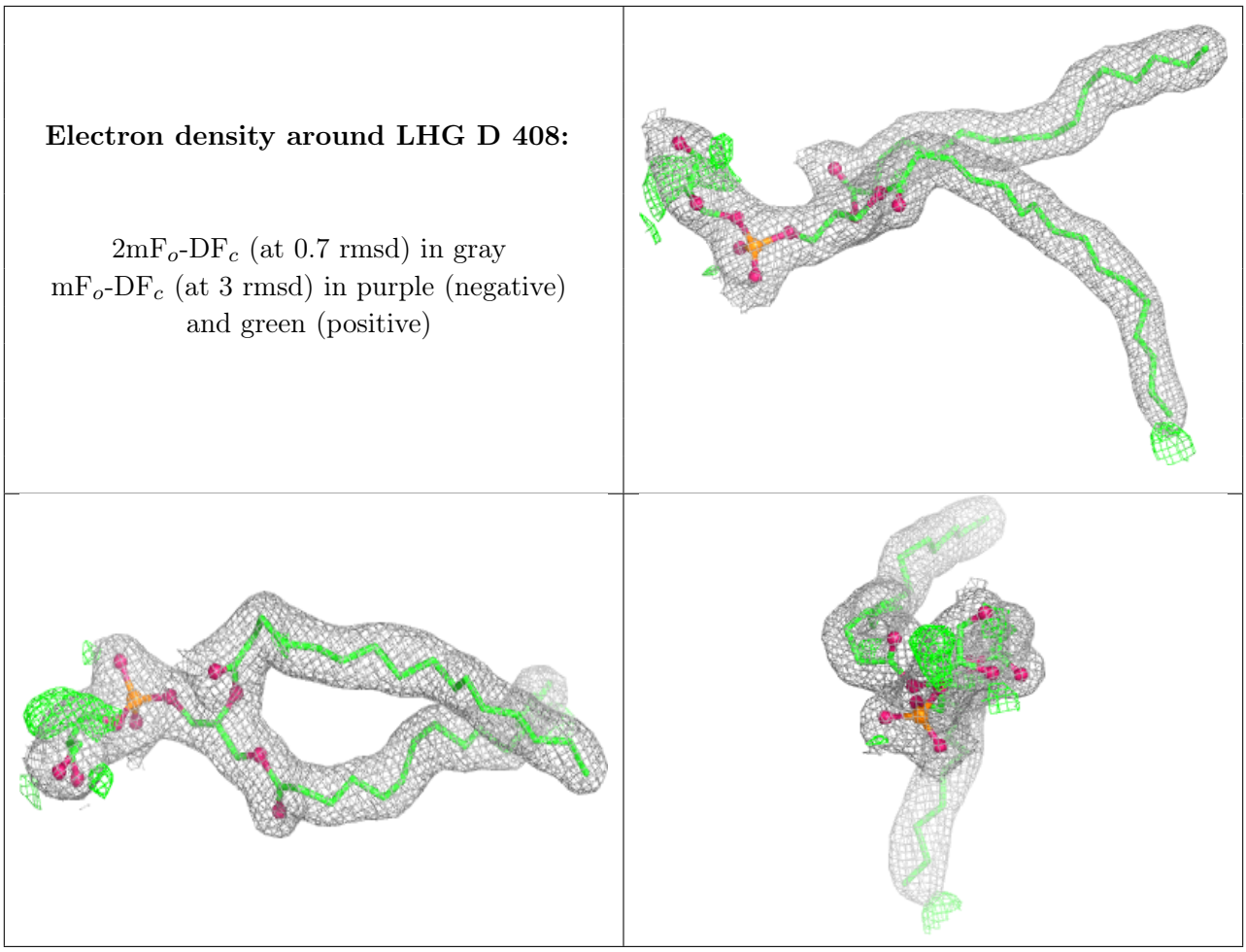






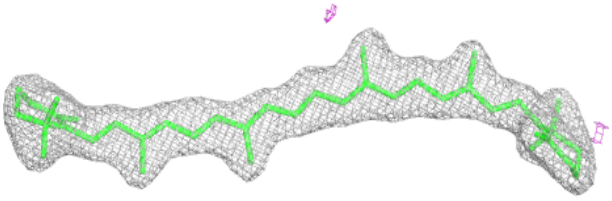
Electron density around LHG D 408:

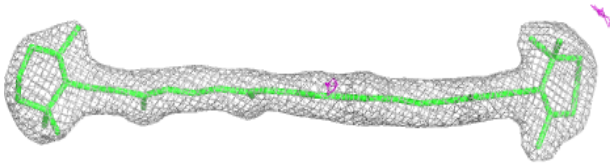
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

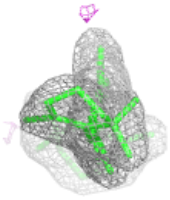


Electron density around BCR c 916:

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

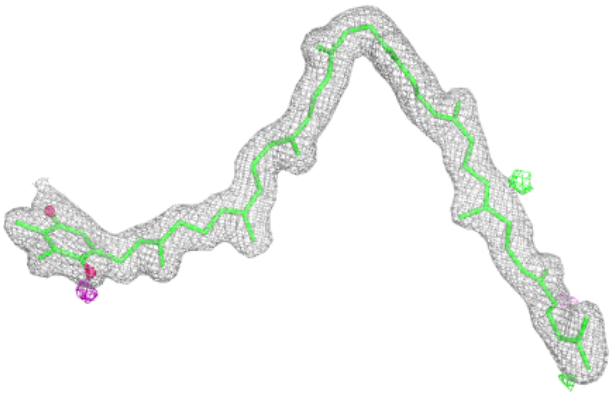


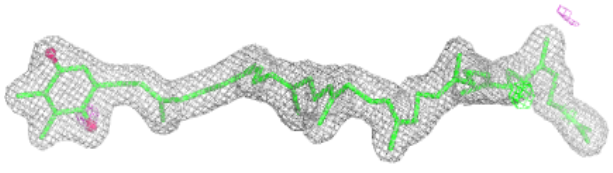


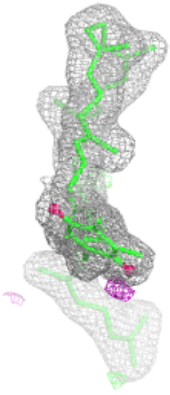


Electron density around PL9 D 405:

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

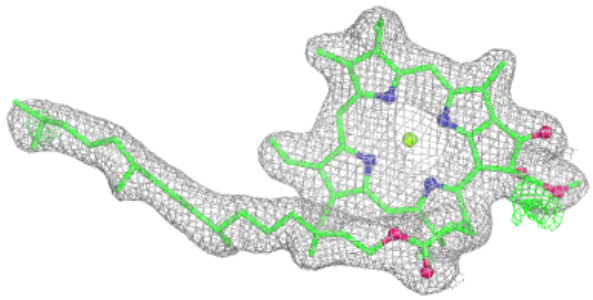


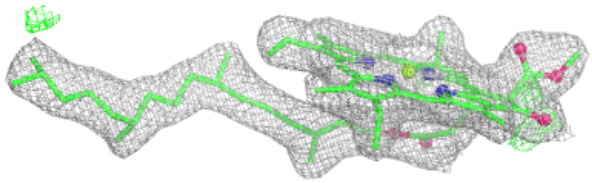


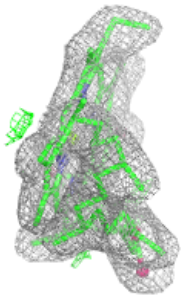


Electron density around CLA C 501:

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

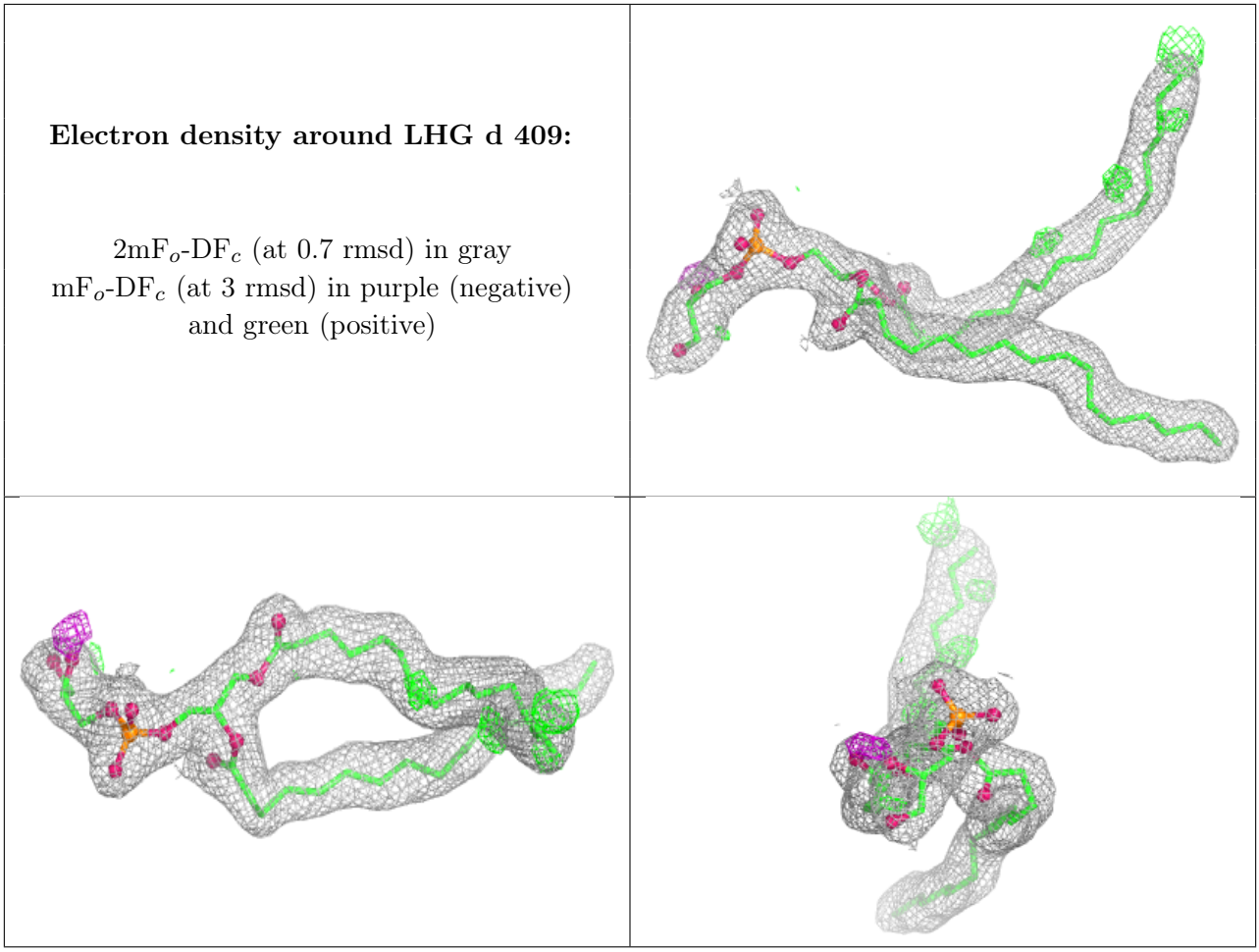






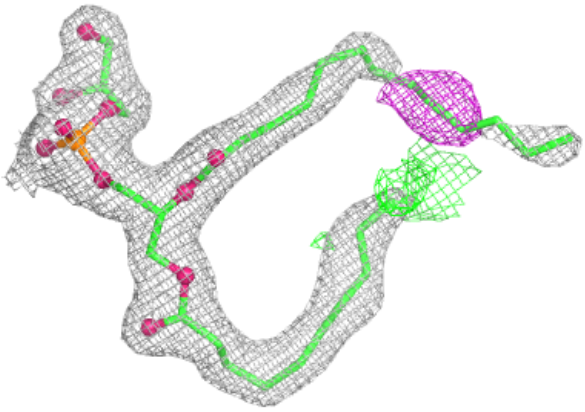
Electron density around LHG d 409:

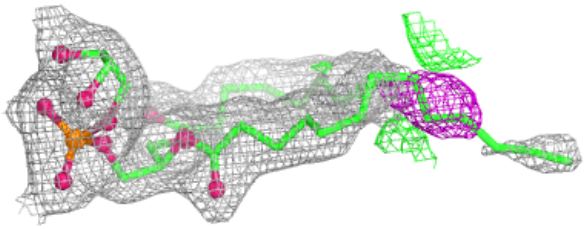
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

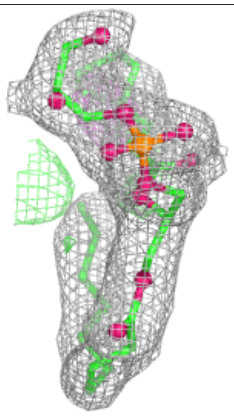


Electron density around LHG d 410:

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

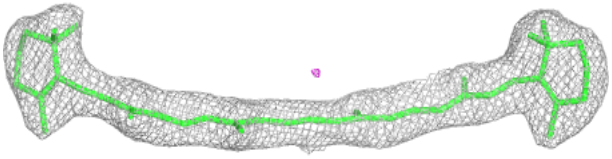


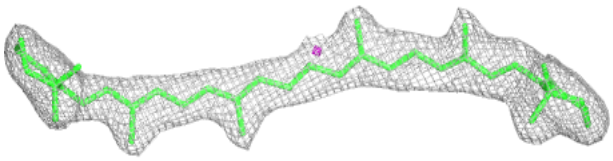


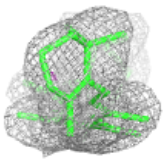


Electron density around BCR k 101:

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

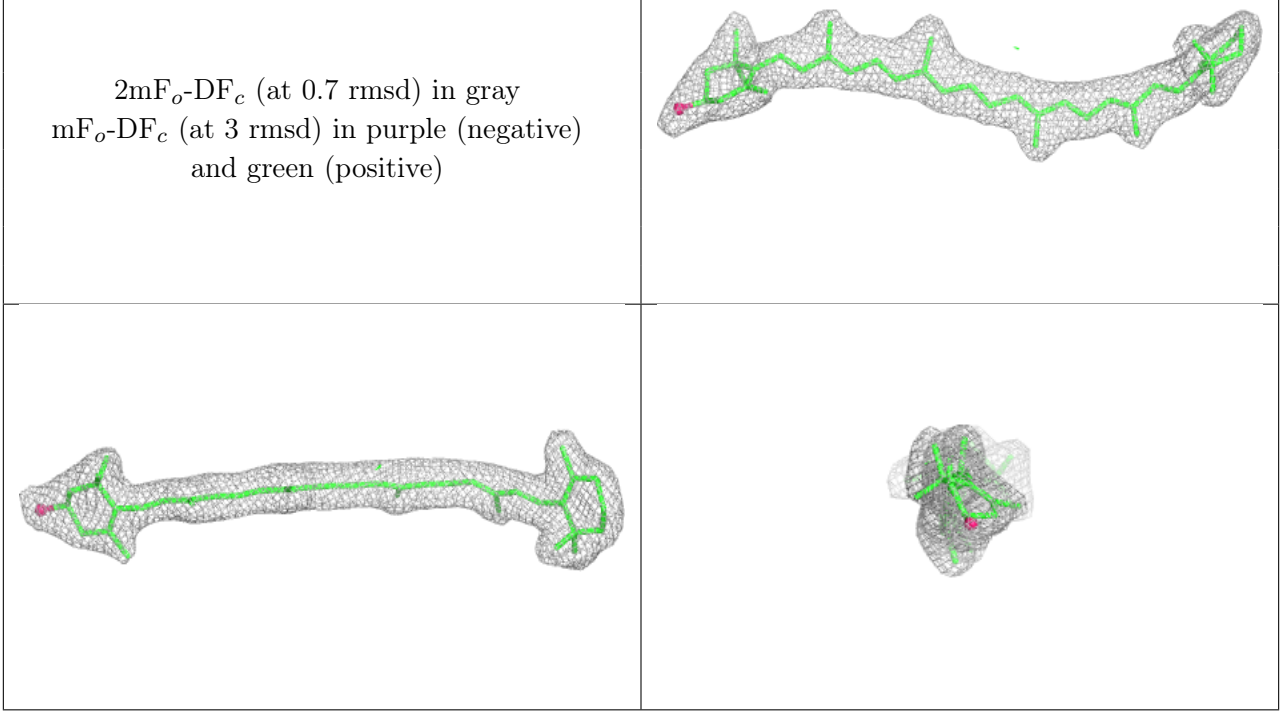






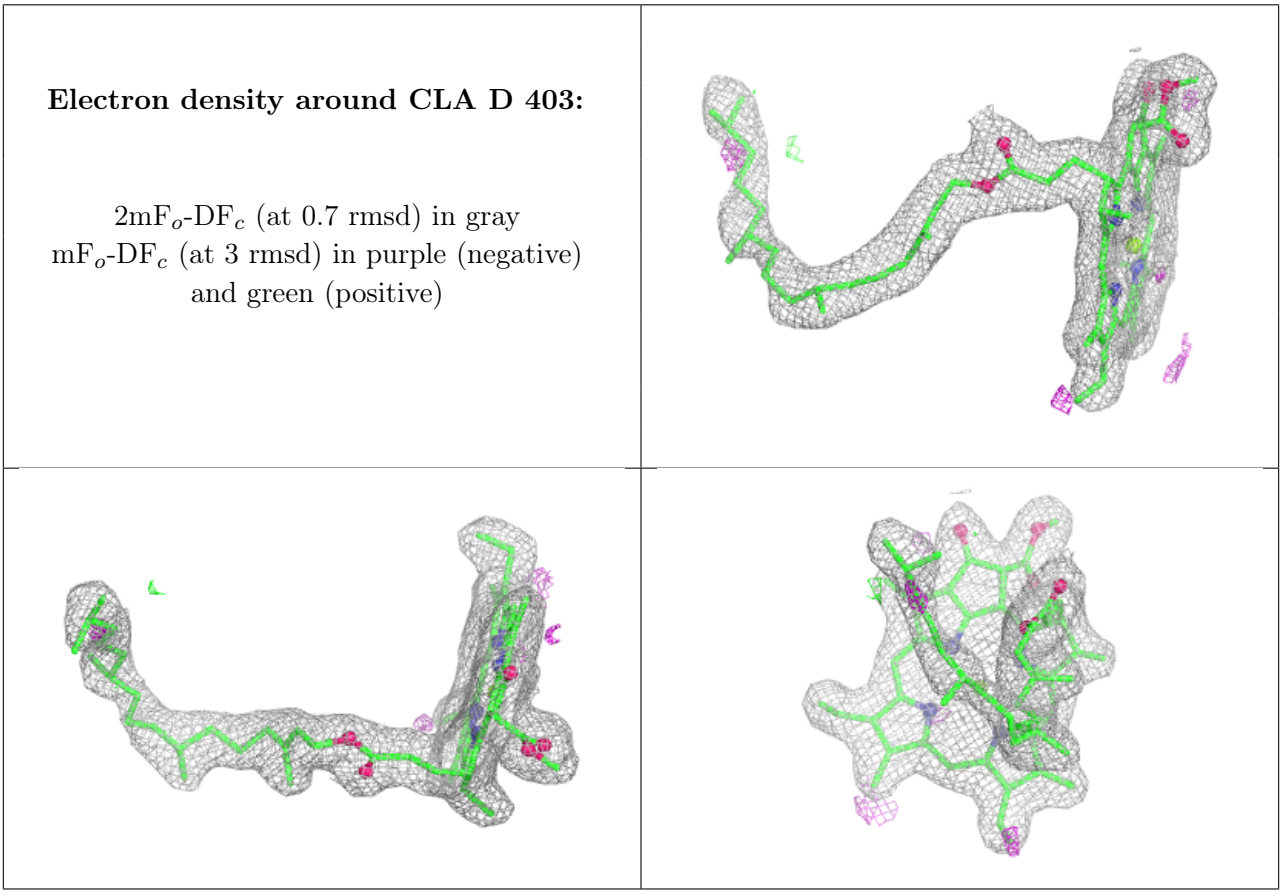
Electron density around RRX H 102:

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



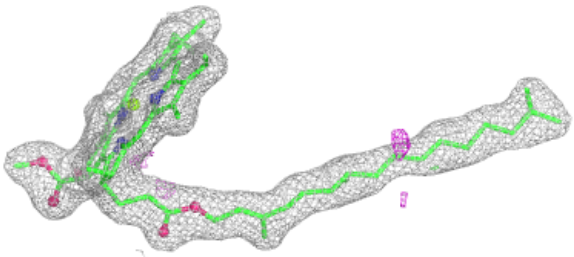
Electron density around CLA D 403:

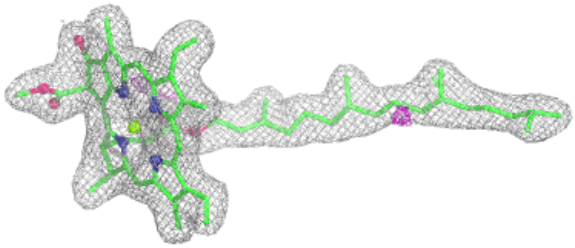
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

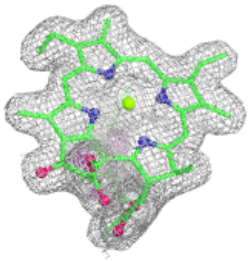


Electron density around CLA B 608:

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

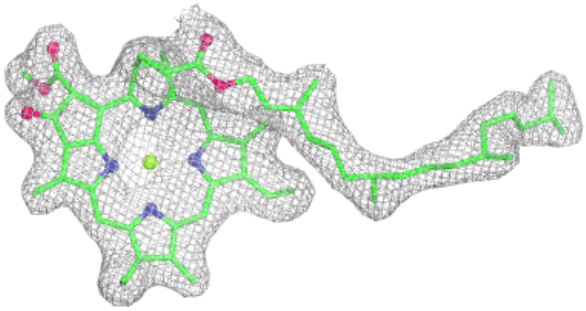


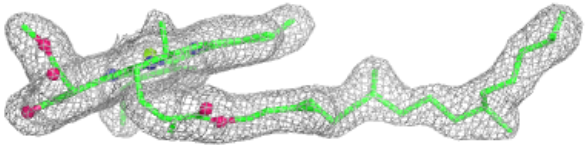




Electron density around CLA b 607:

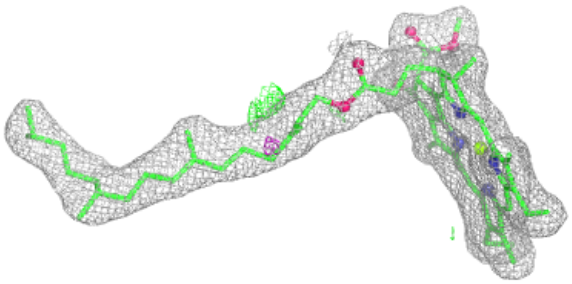
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

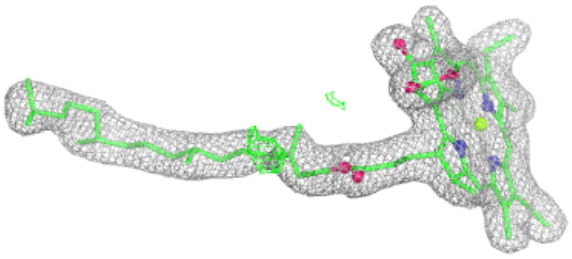


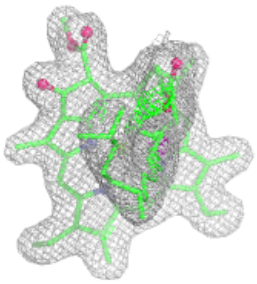


Electron density around CLA b 608:

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

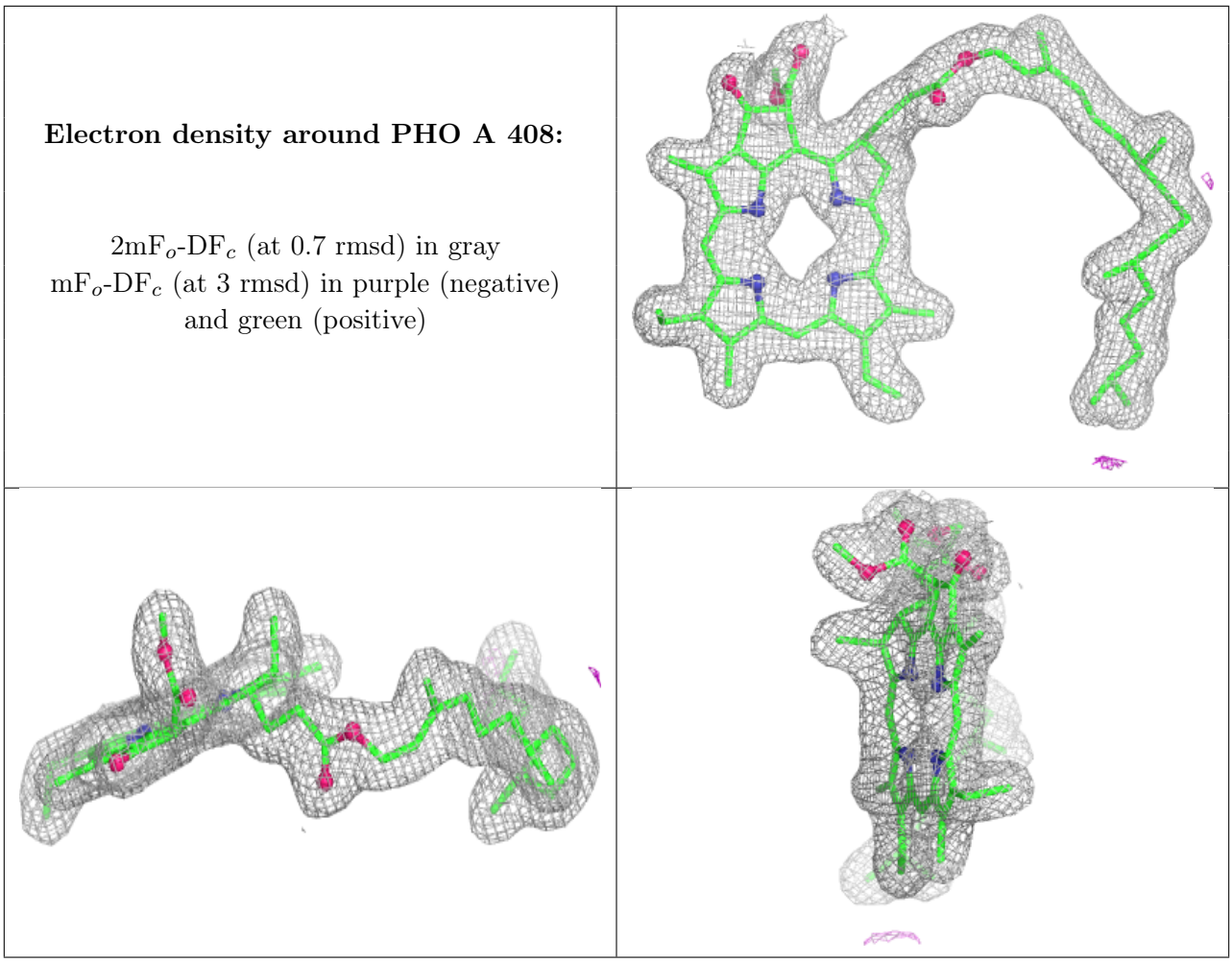






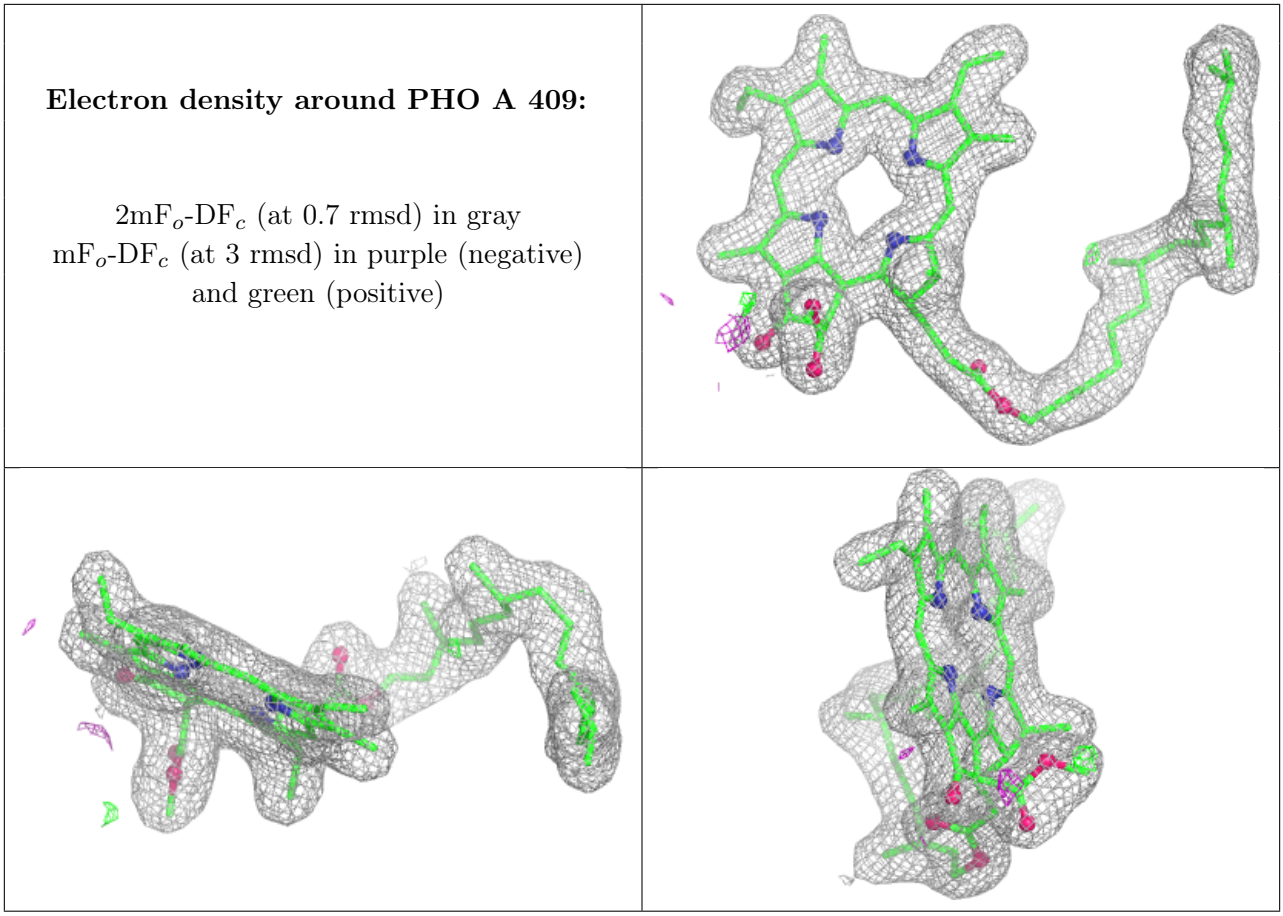
Electron density around PHO A 408:

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



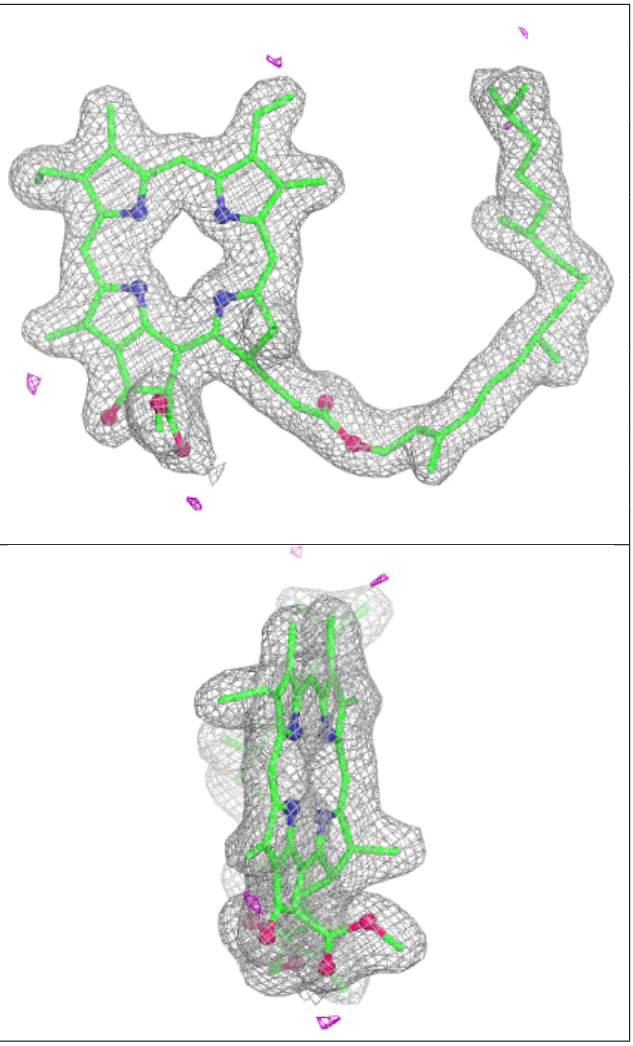
Electron density around PHO A 409:

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



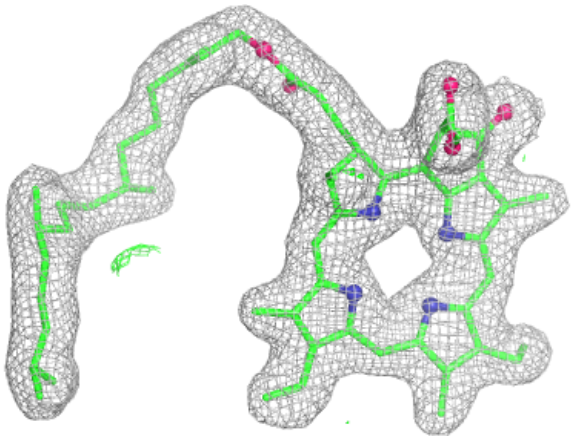
Electron density around PHO a 411:

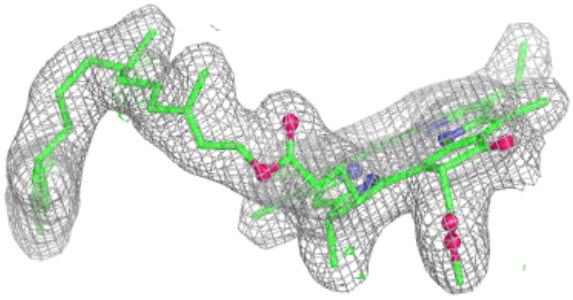
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around PHO a 412:

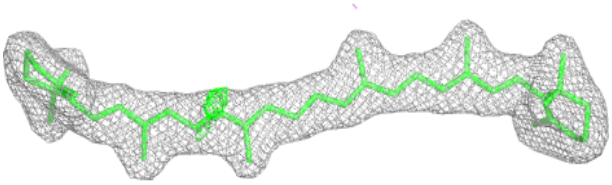
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

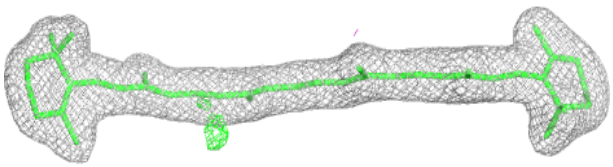


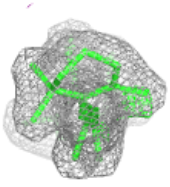


Electron density around BCR A 411:

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

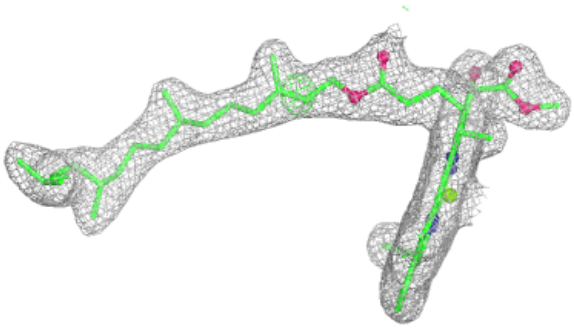


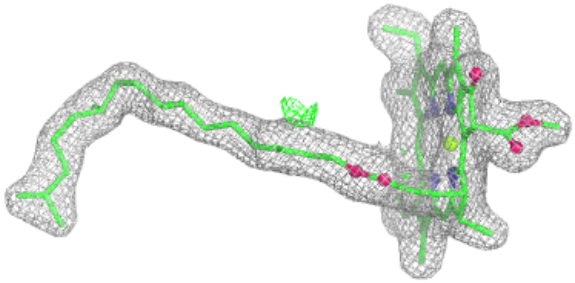


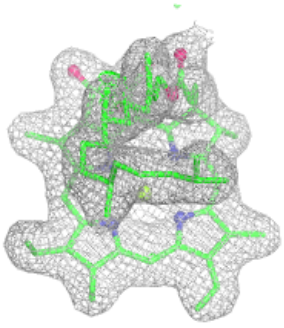


Electron density around CLA b 609:

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

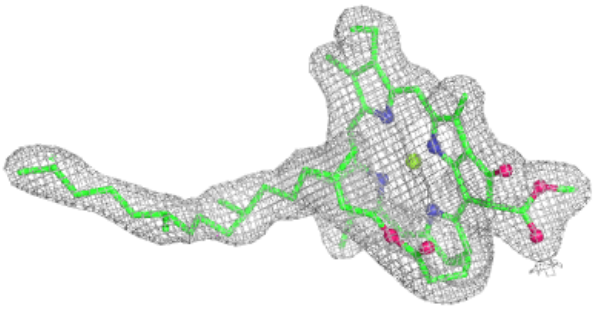


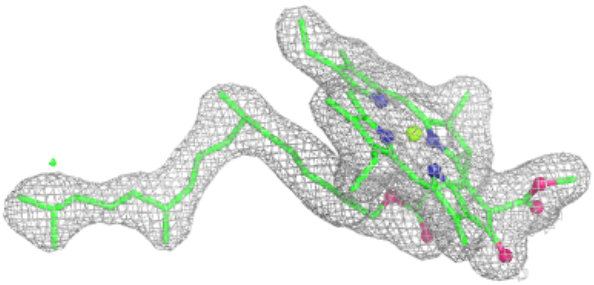


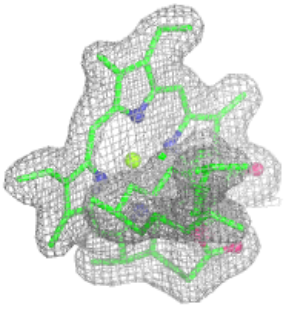


Electron density around CLA C 505:

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

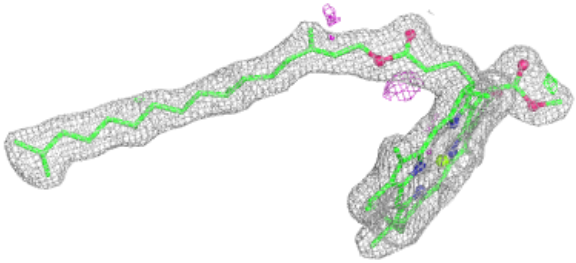


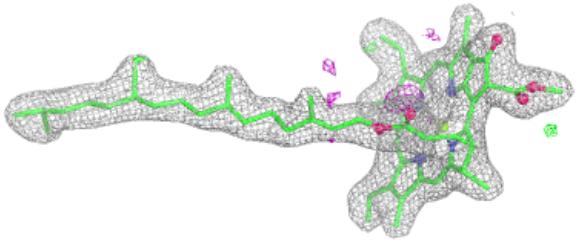


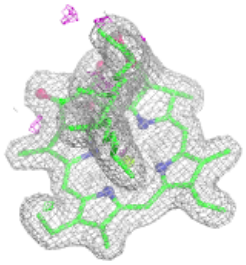


Electron density around CLA b 611:

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

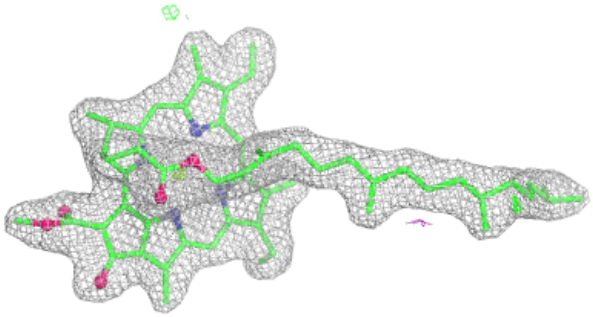


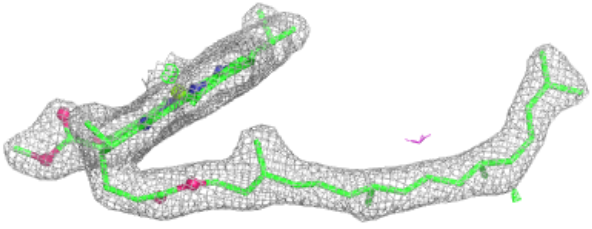


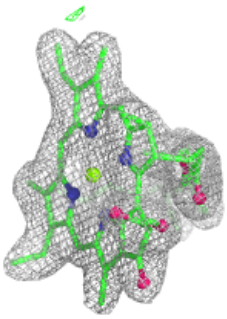


Electron density around CLA b 612:

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

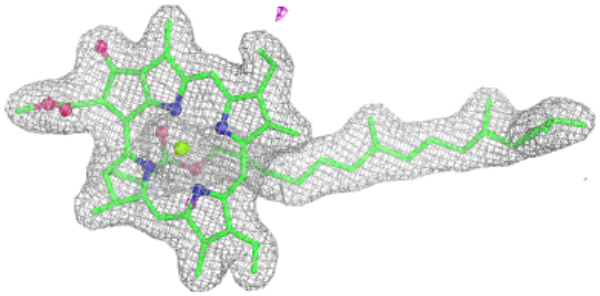


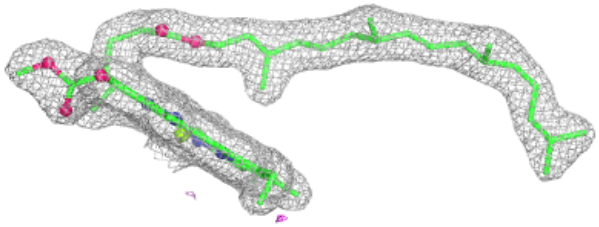


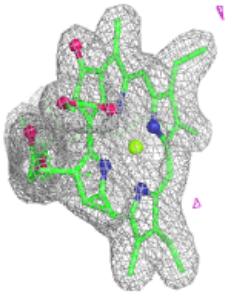


Electron density around CLA B 609:

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

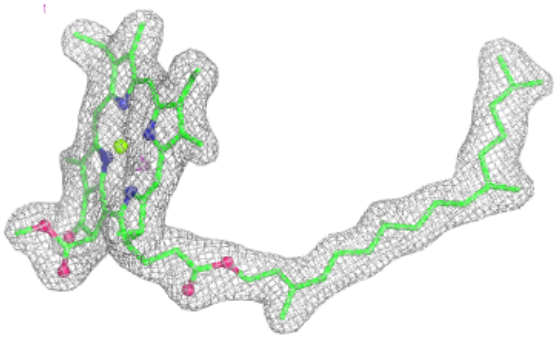


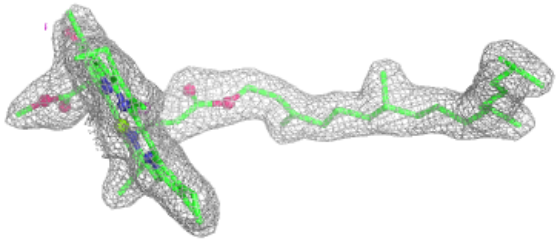


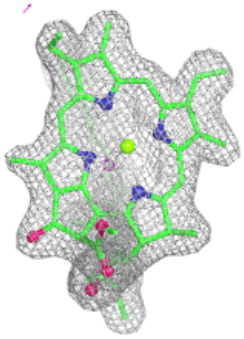


Electron density around CLA B 610:

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

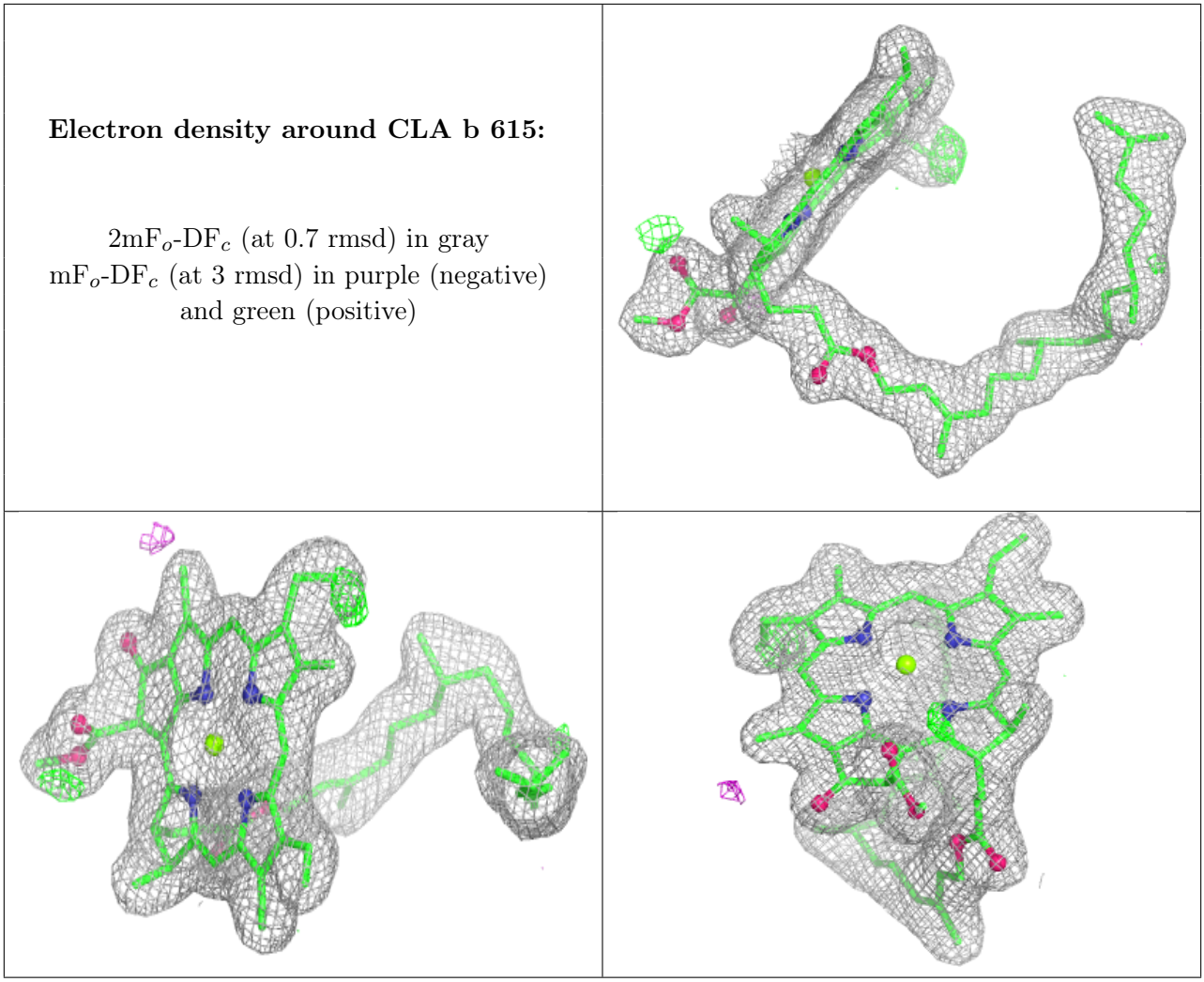






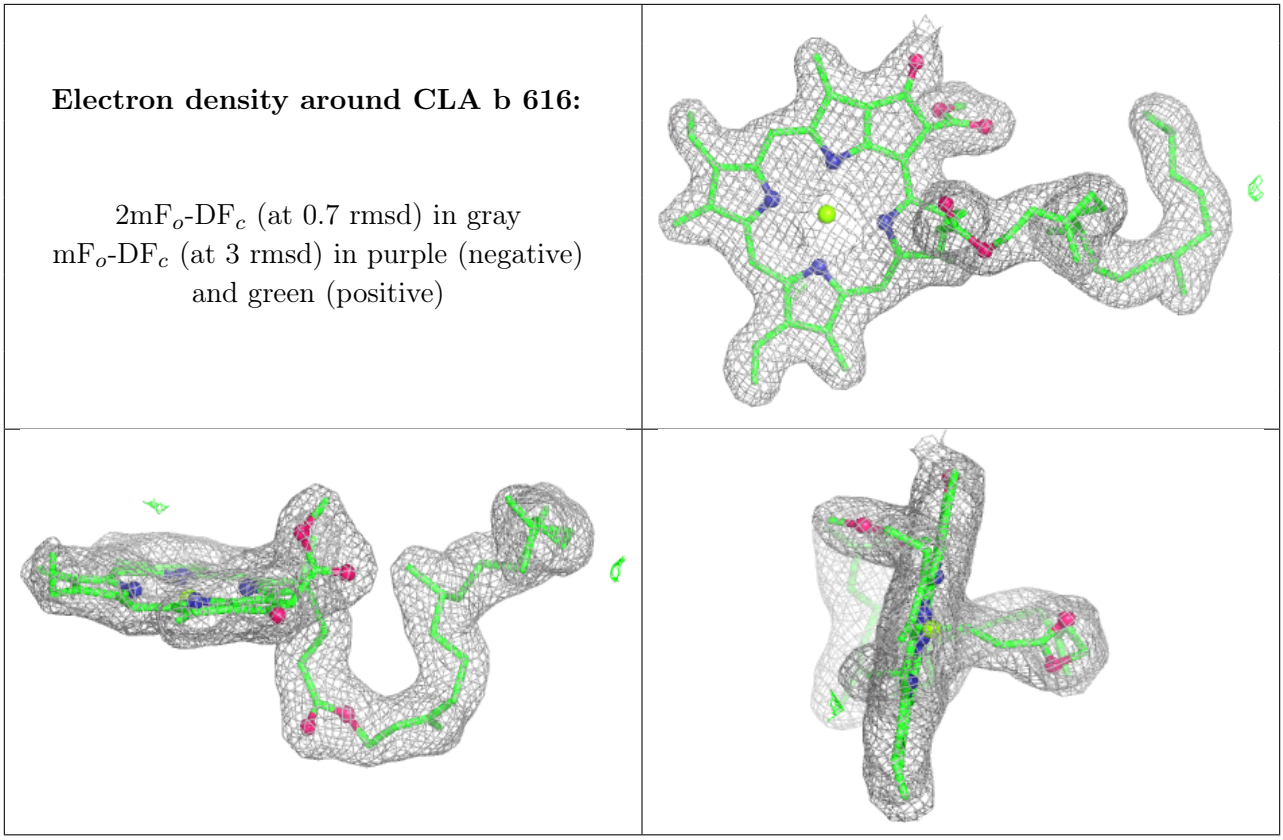
Electron density around CLA b 615:

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



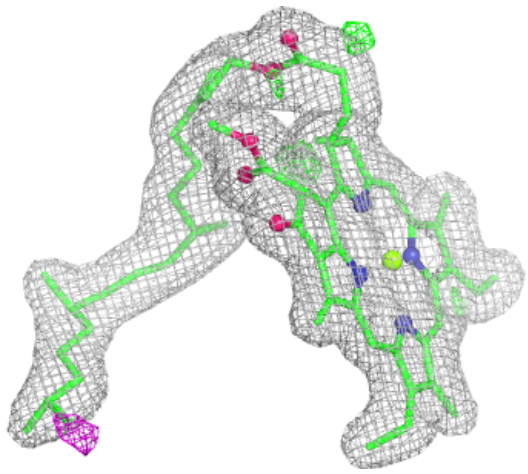
Electron density around CLA b 616:

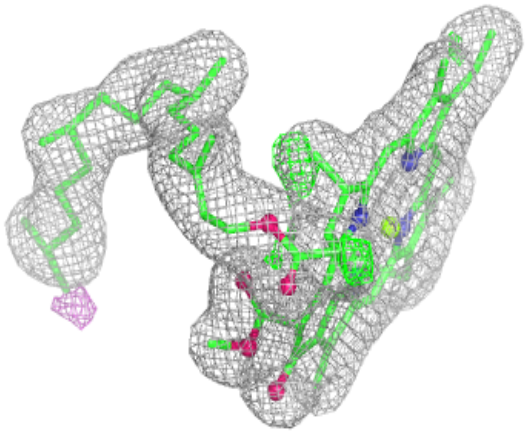
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

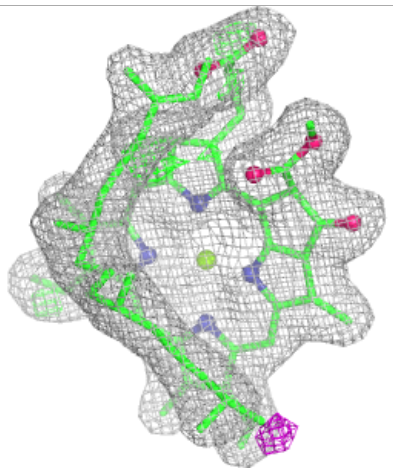


Electron density around CLA b 617:

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

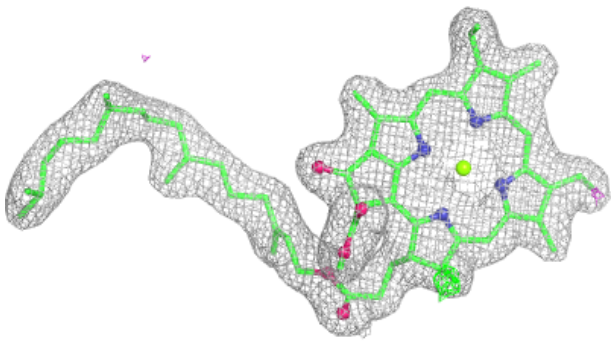


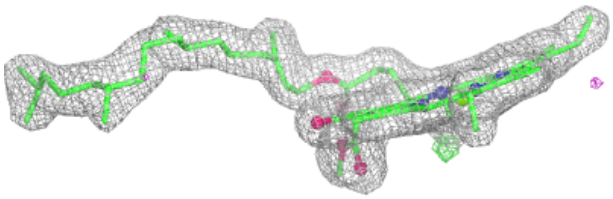


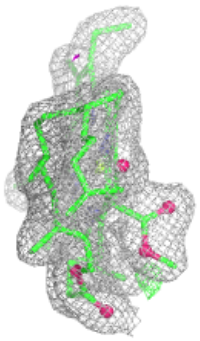


Electron density around CLA B 603:

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

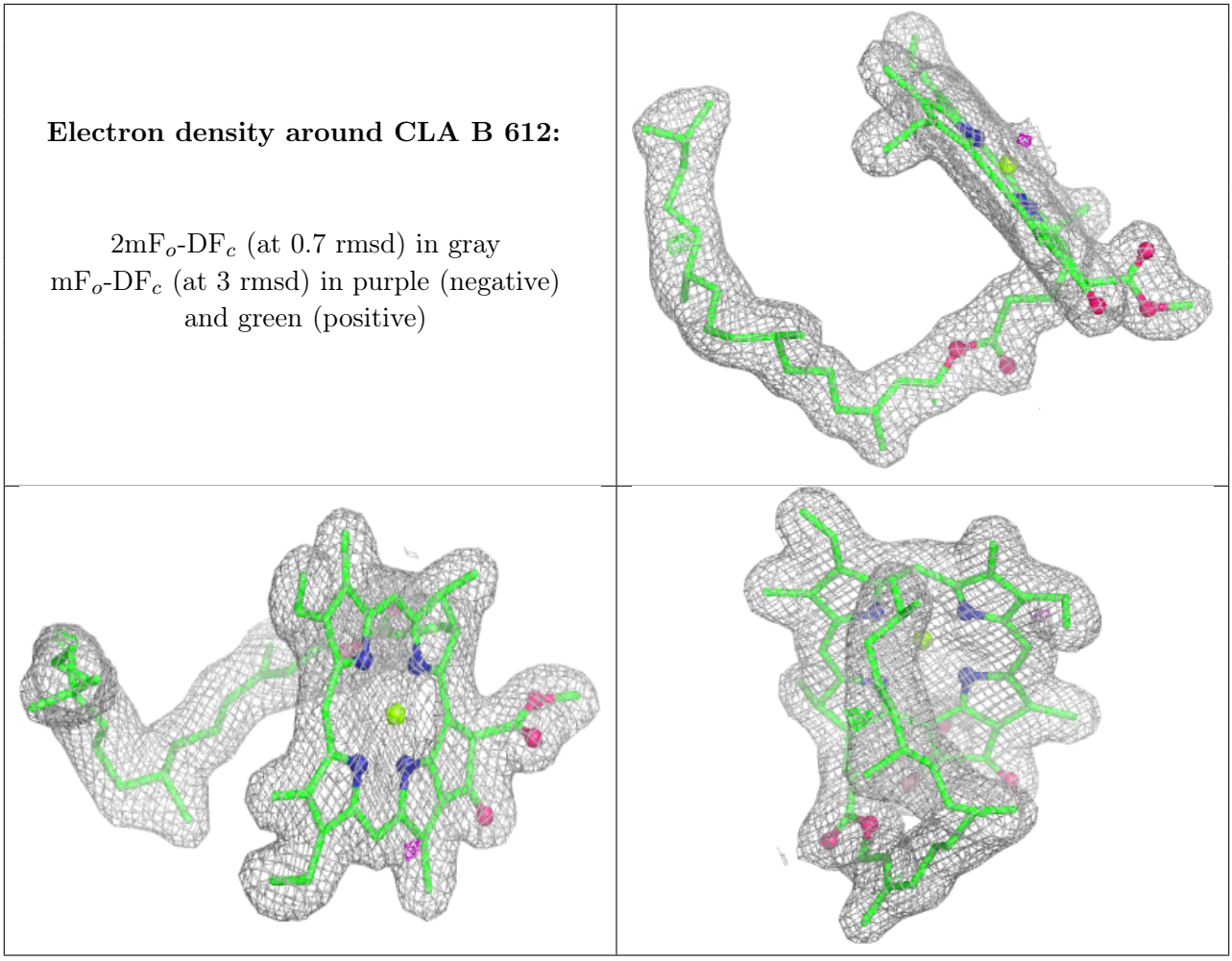






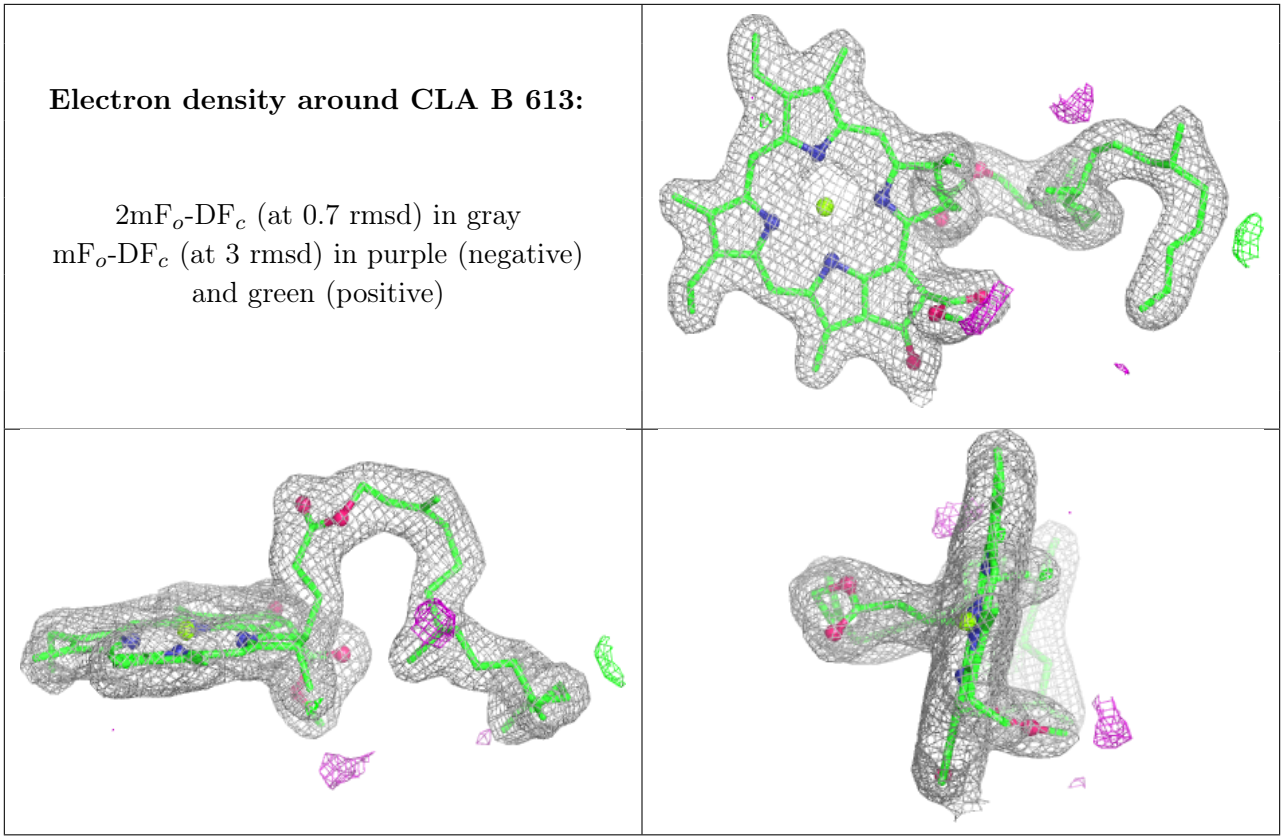
Electron density around CLA B 612:

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



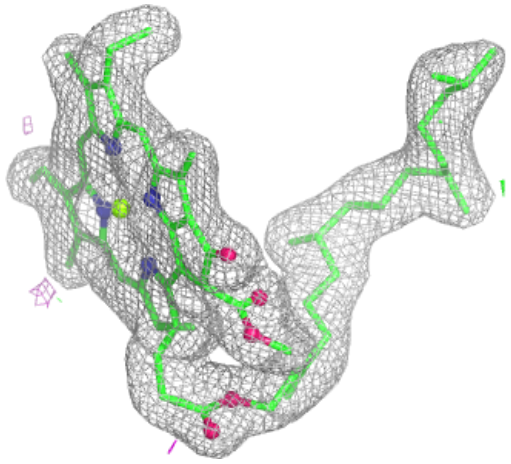
Electron density around CLA B 613:

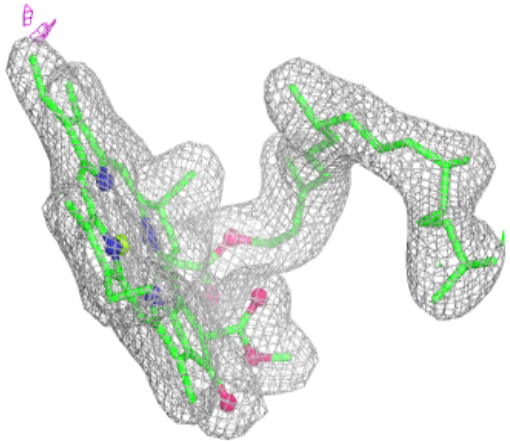
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

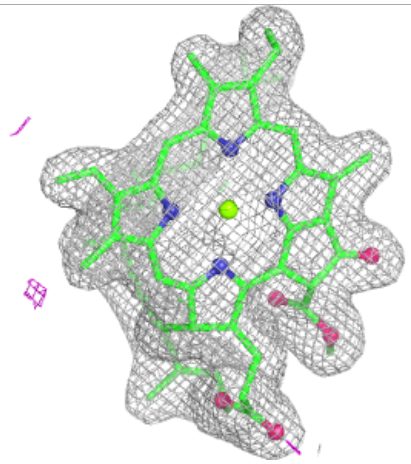


Electron density around CLA B 614:

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

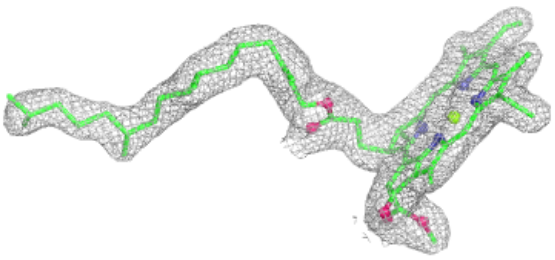


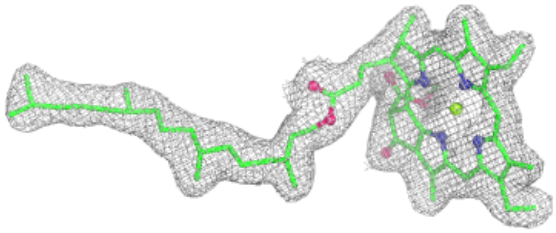


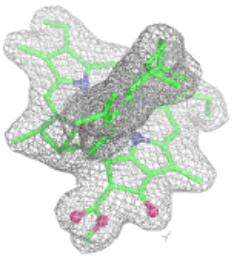


Electron density around CLA c 903:

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

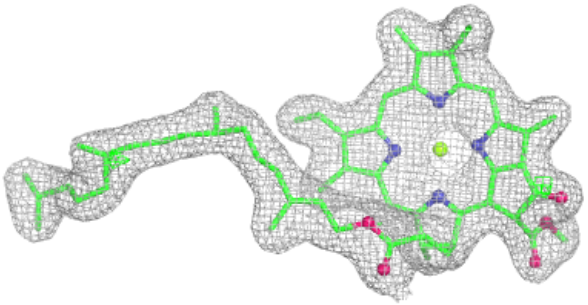


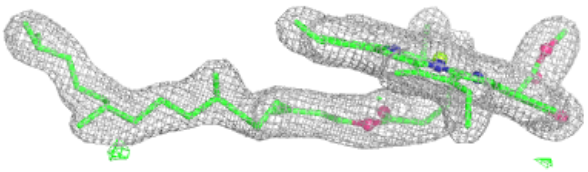


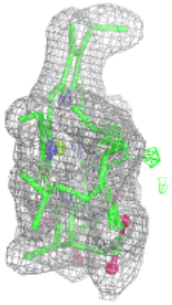


Electron density around CLA B 604:

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

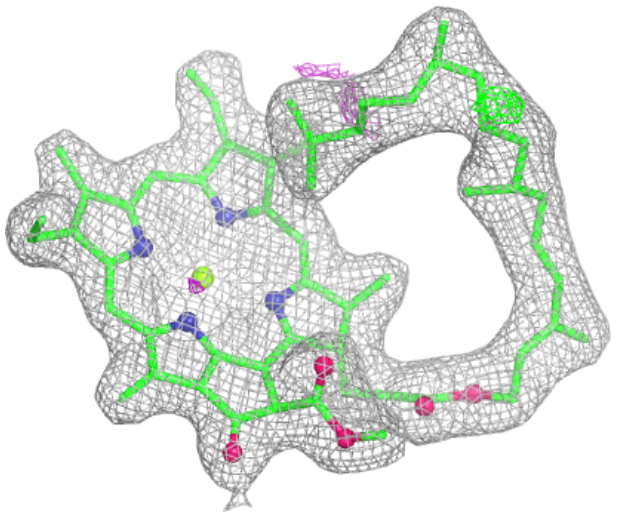


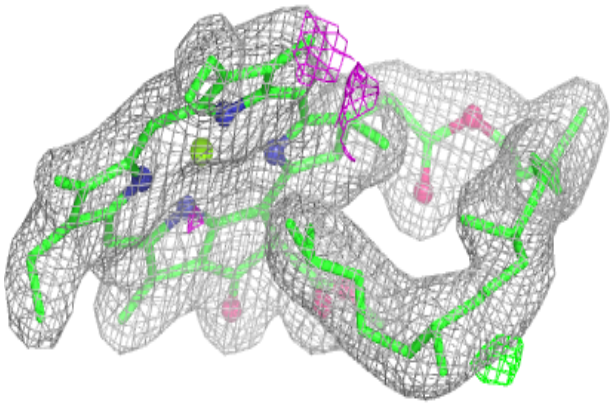


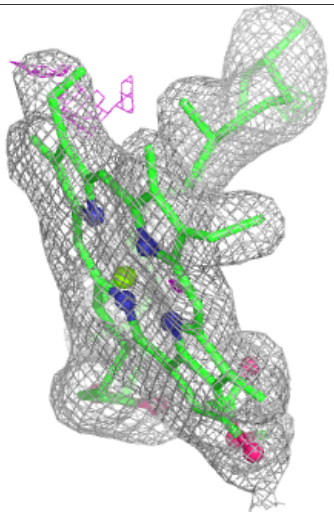


Electron density around CLA B 616:

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

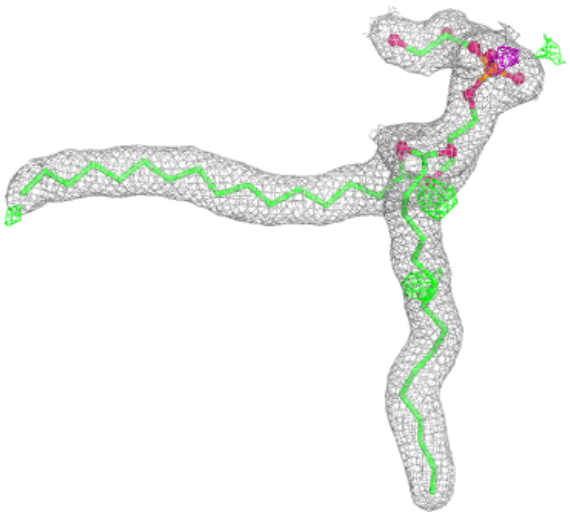


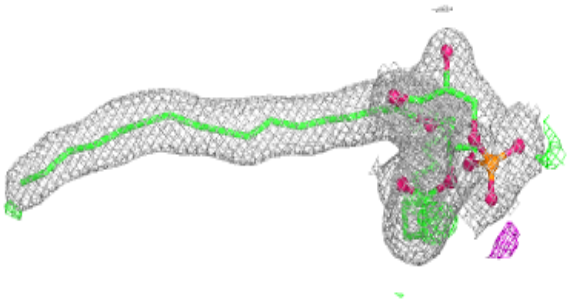


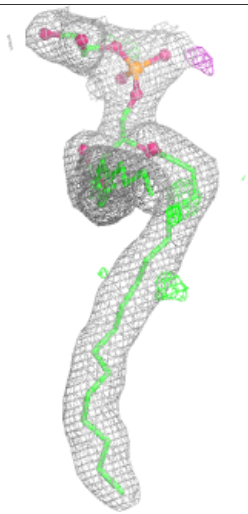


Electron density around LHG L 101:

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

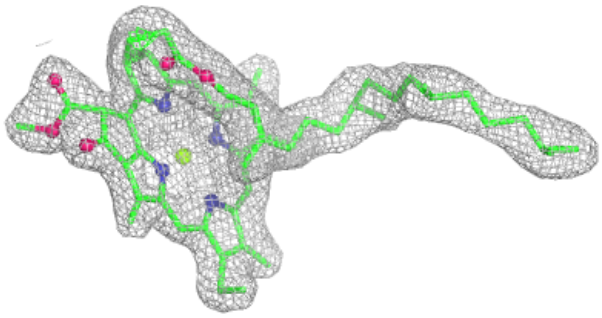


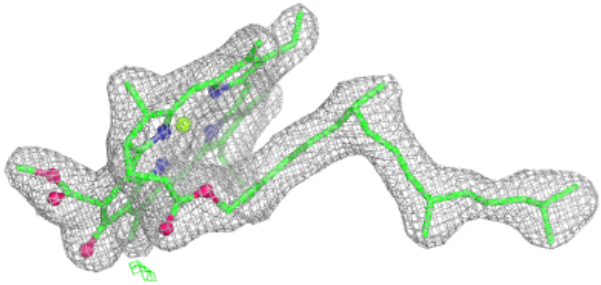


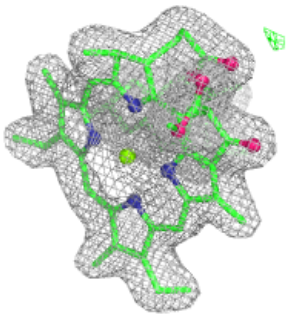


Electron density around CLA c 906:

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

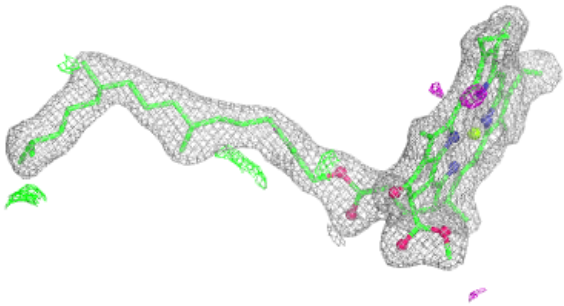


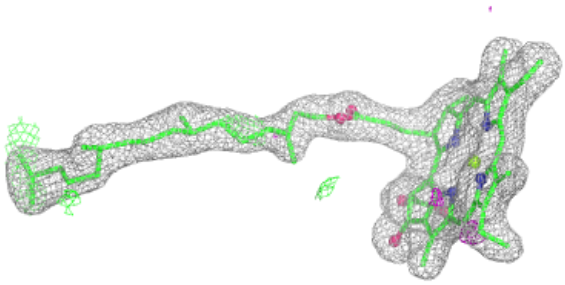


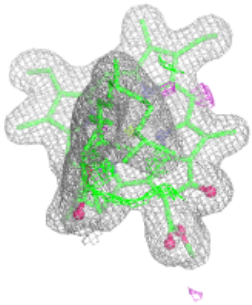


Electron density around CLA B 605:

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

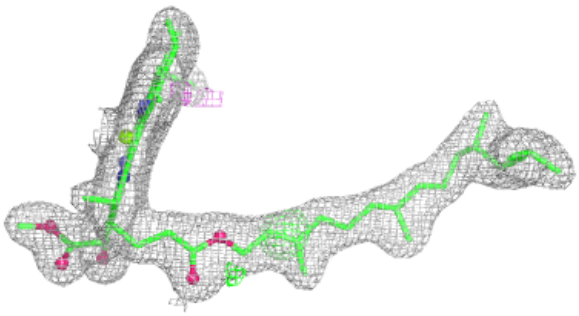


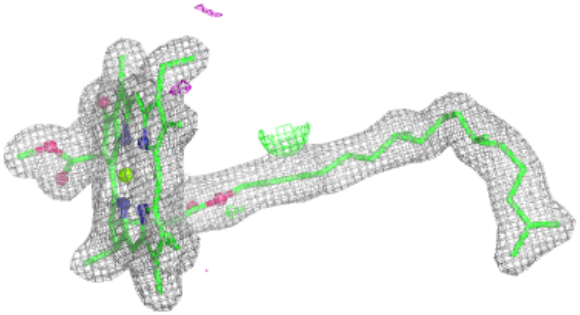


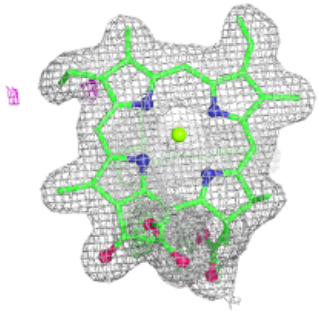


Electron density around CLA B 606:

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

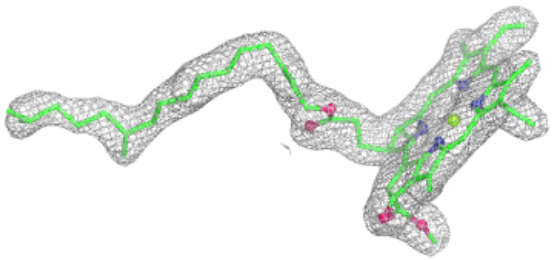


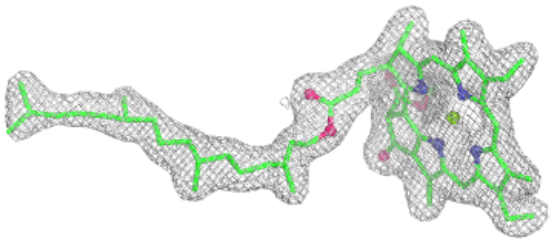


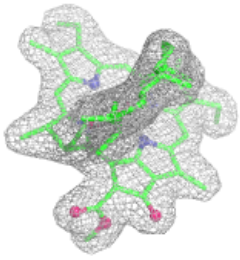


Electron density around CLA C 502:

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

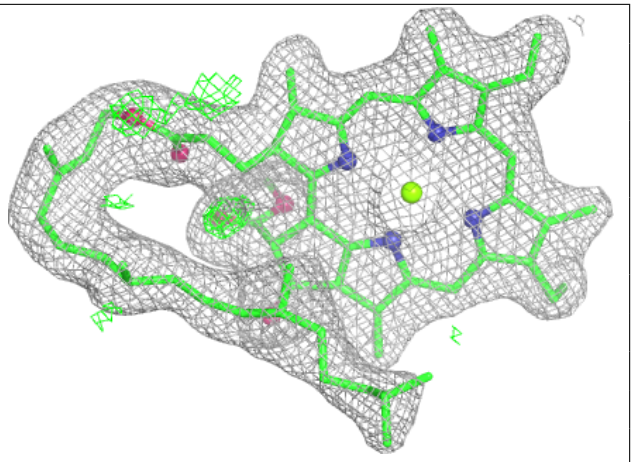


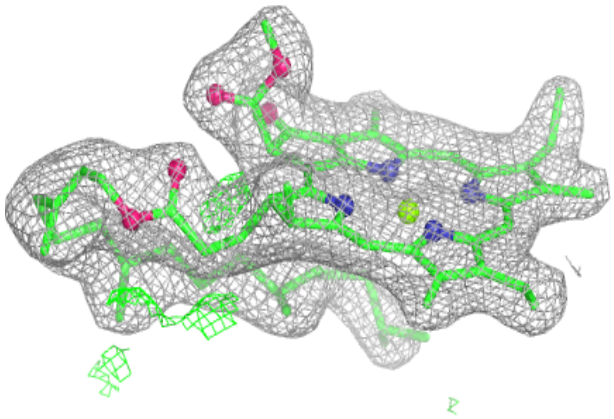


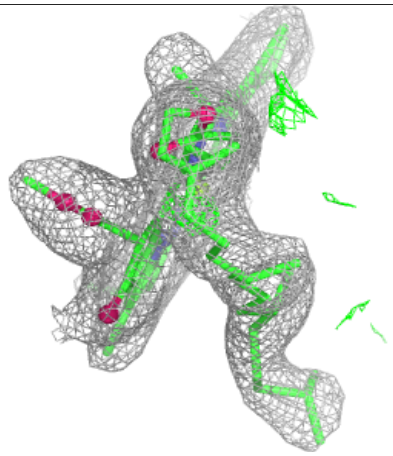


Electron density around CLA c 910:

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

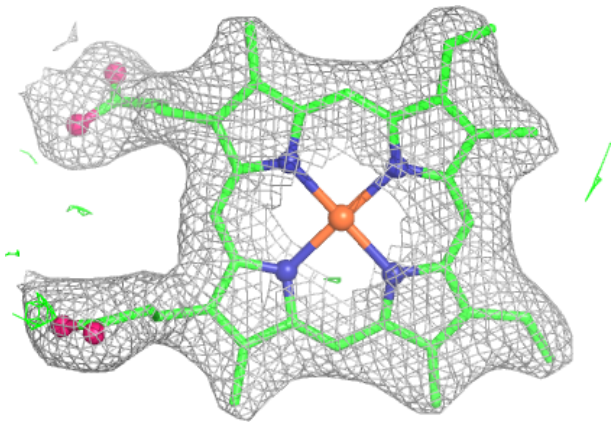


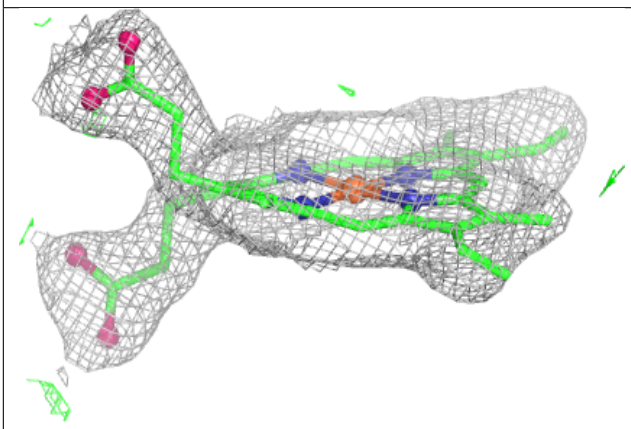


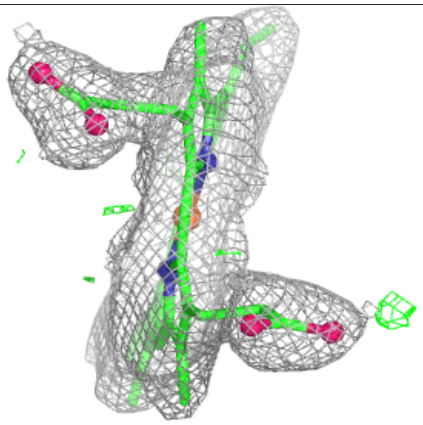


Electron density around HEM F 102:

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

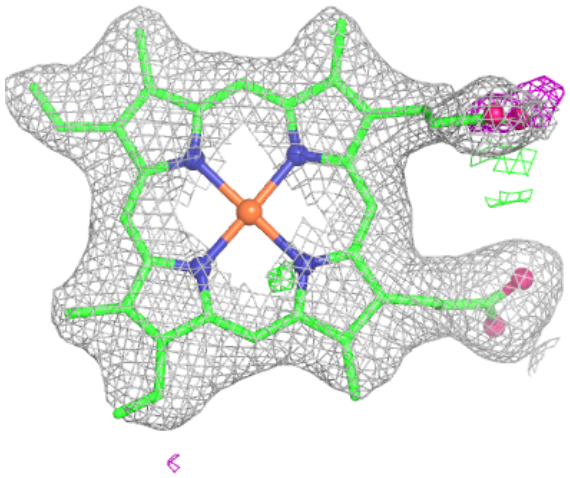


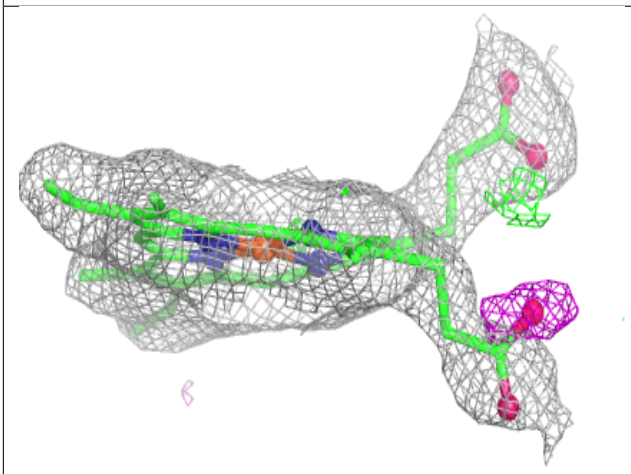


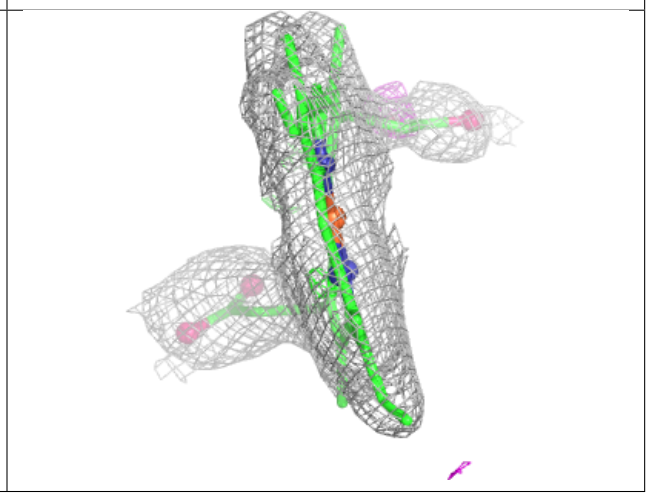


Electron density around HEM f 101:

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

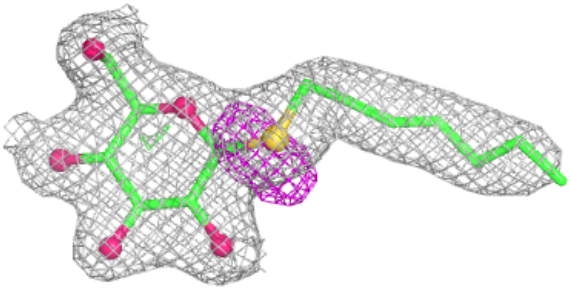


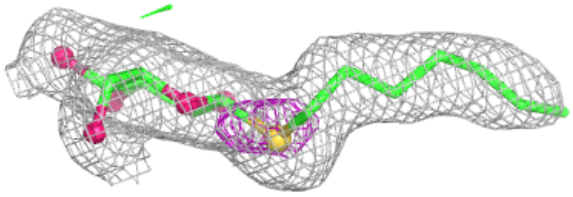


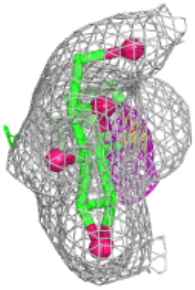


Electron density around HTG O 303:

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

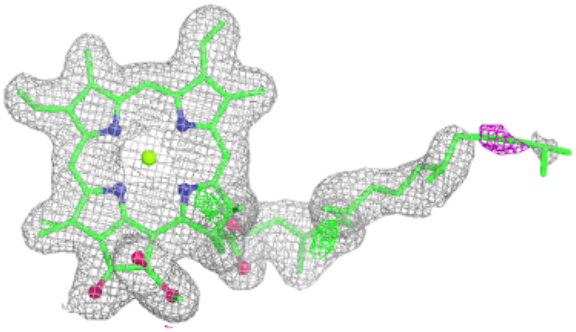


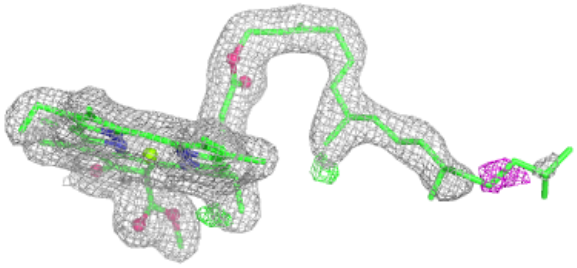


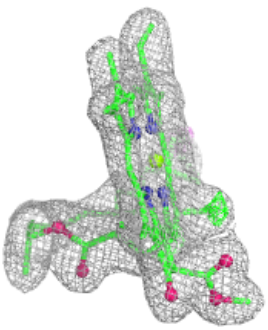


Electron density around CLA A 407:

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

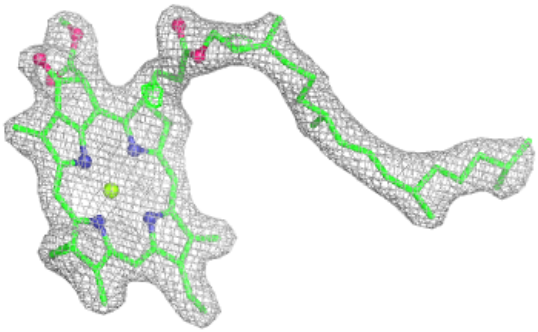


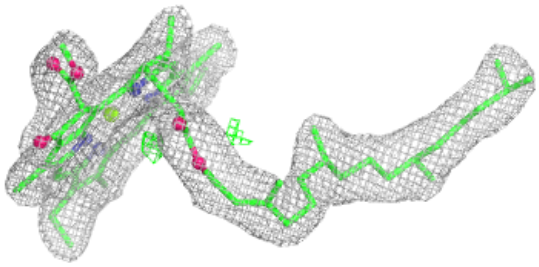


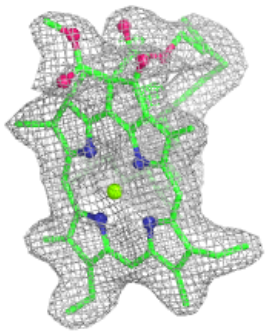


Electron density around CLA c 912:

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

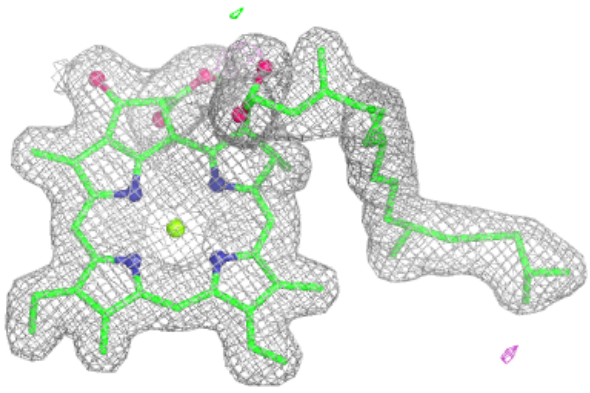


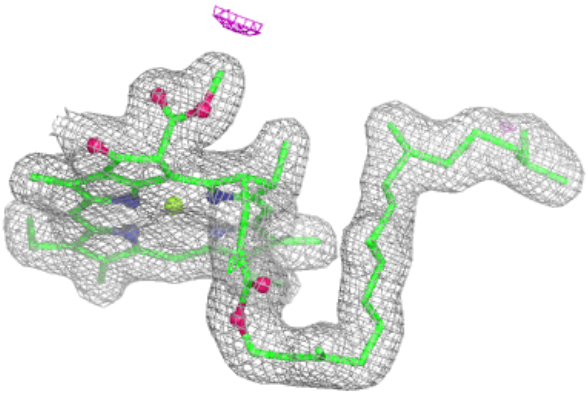


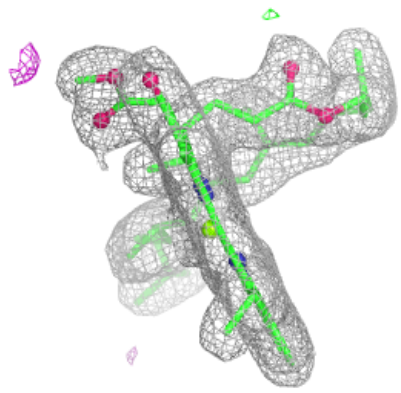


Electron density around CLA A 406:

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

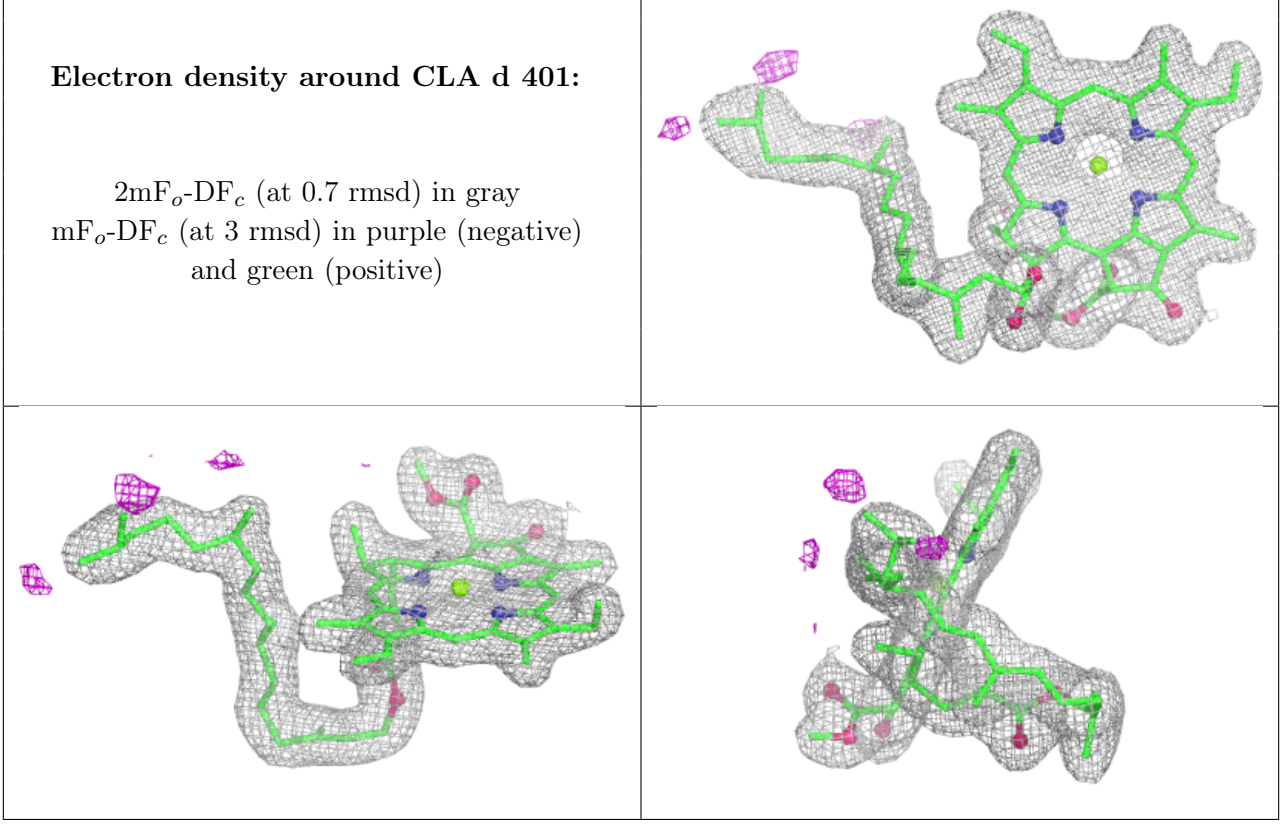






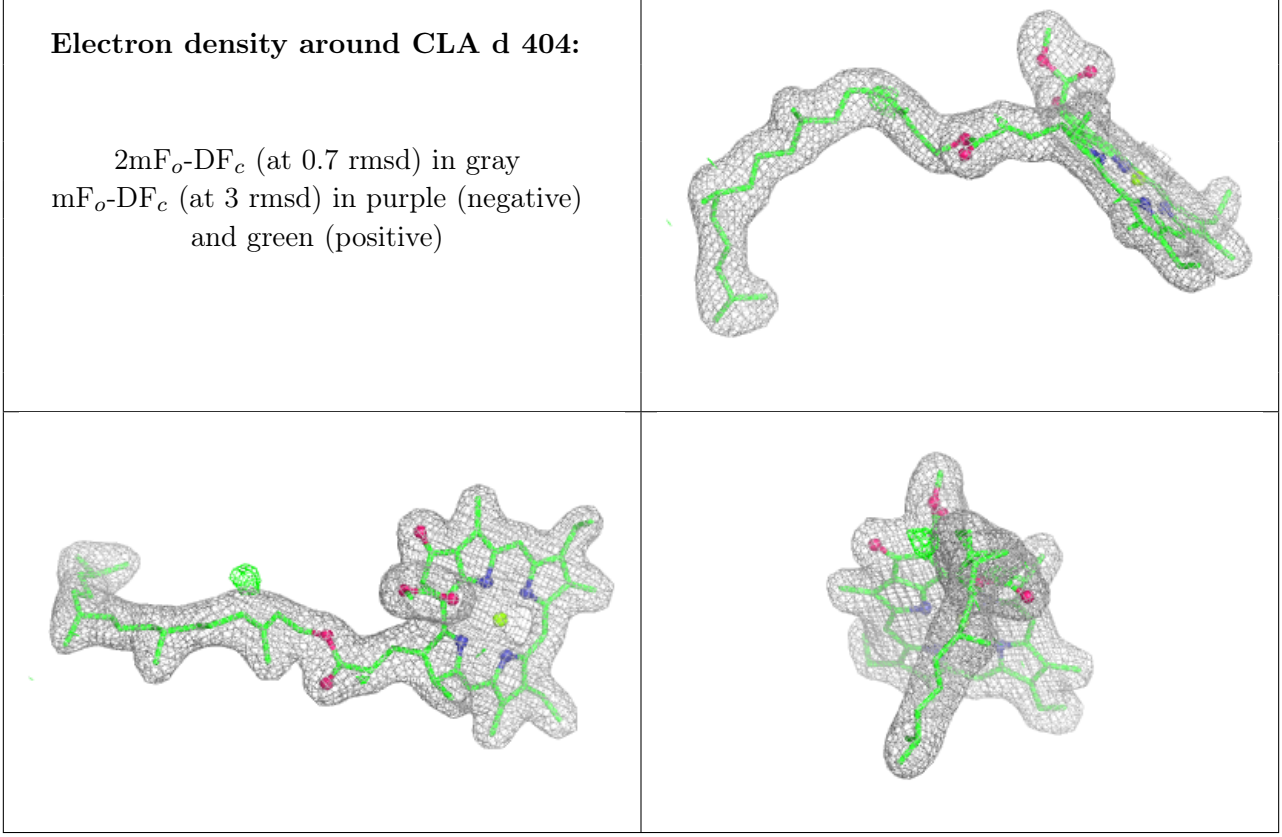
Electron density around CLA d 401:

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



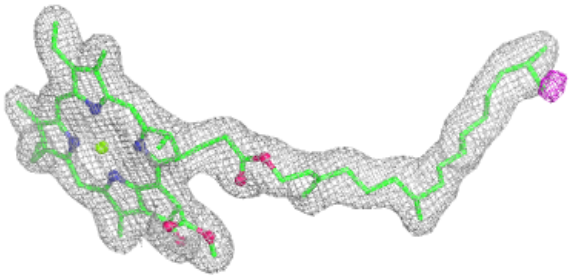
Electron density around CLA d 404:

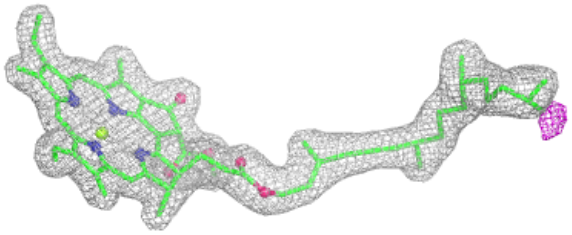
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

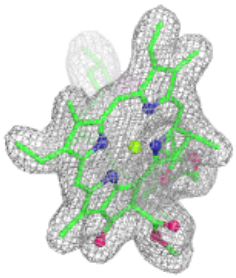


Electron density around CLA a 409:

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

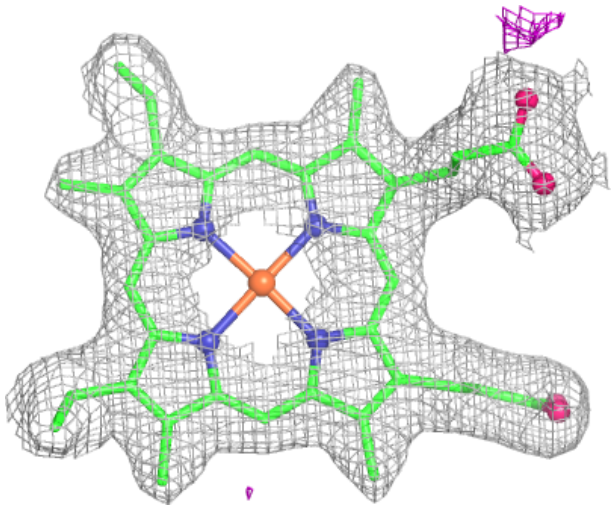


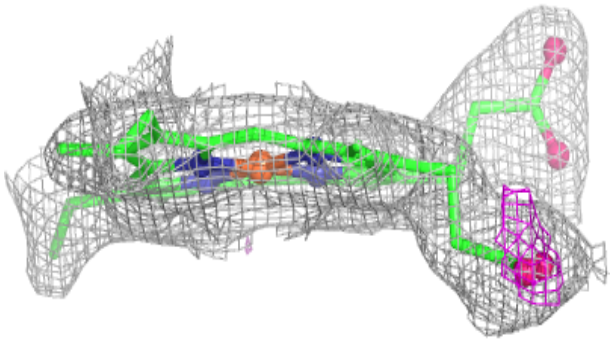


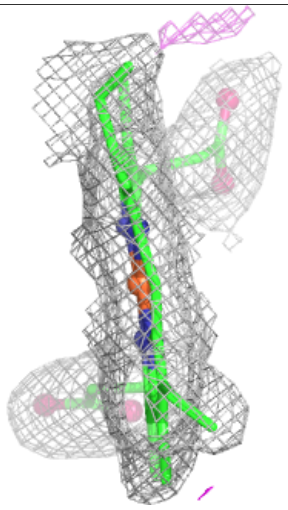


Electron density around HEM v 202:

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

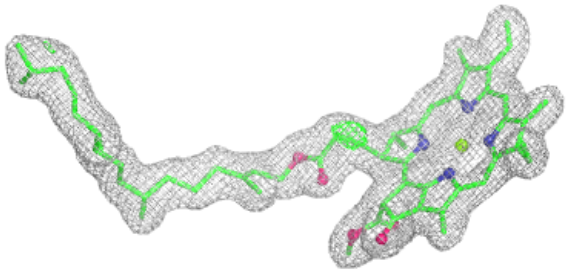


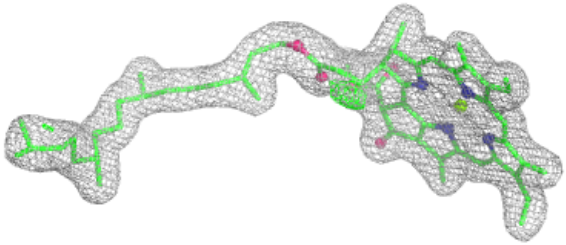


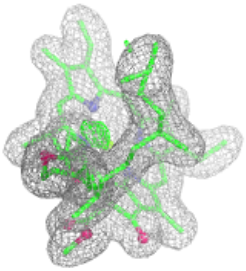


Electron density around CLA A 405:

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

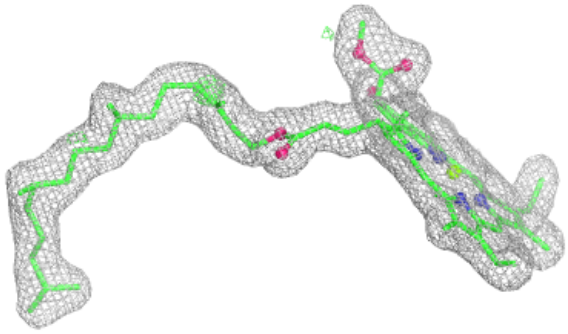


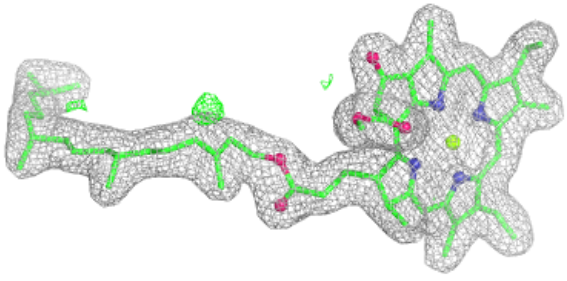


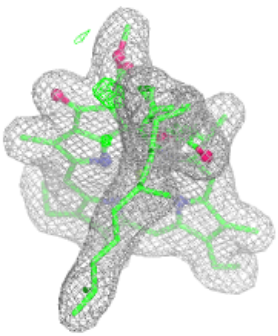


Electron density around CLA D 402:

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

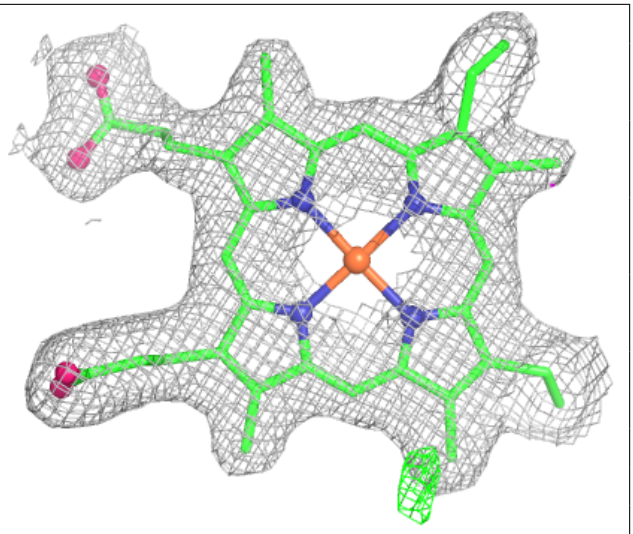


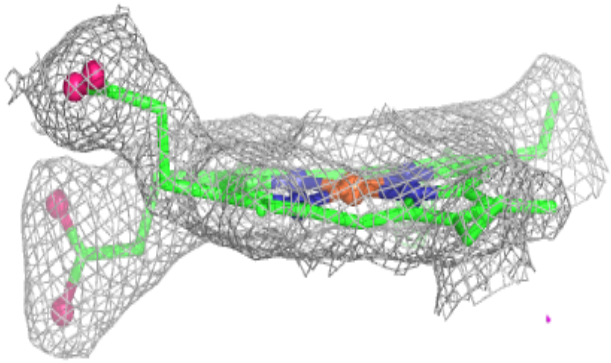


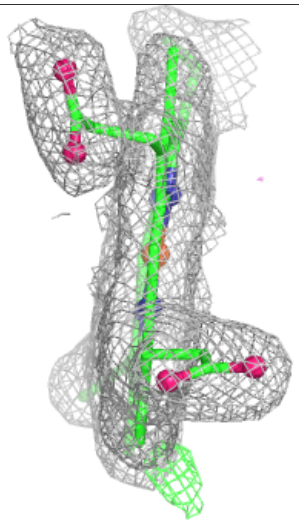


Electron density around HEM V 202:

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

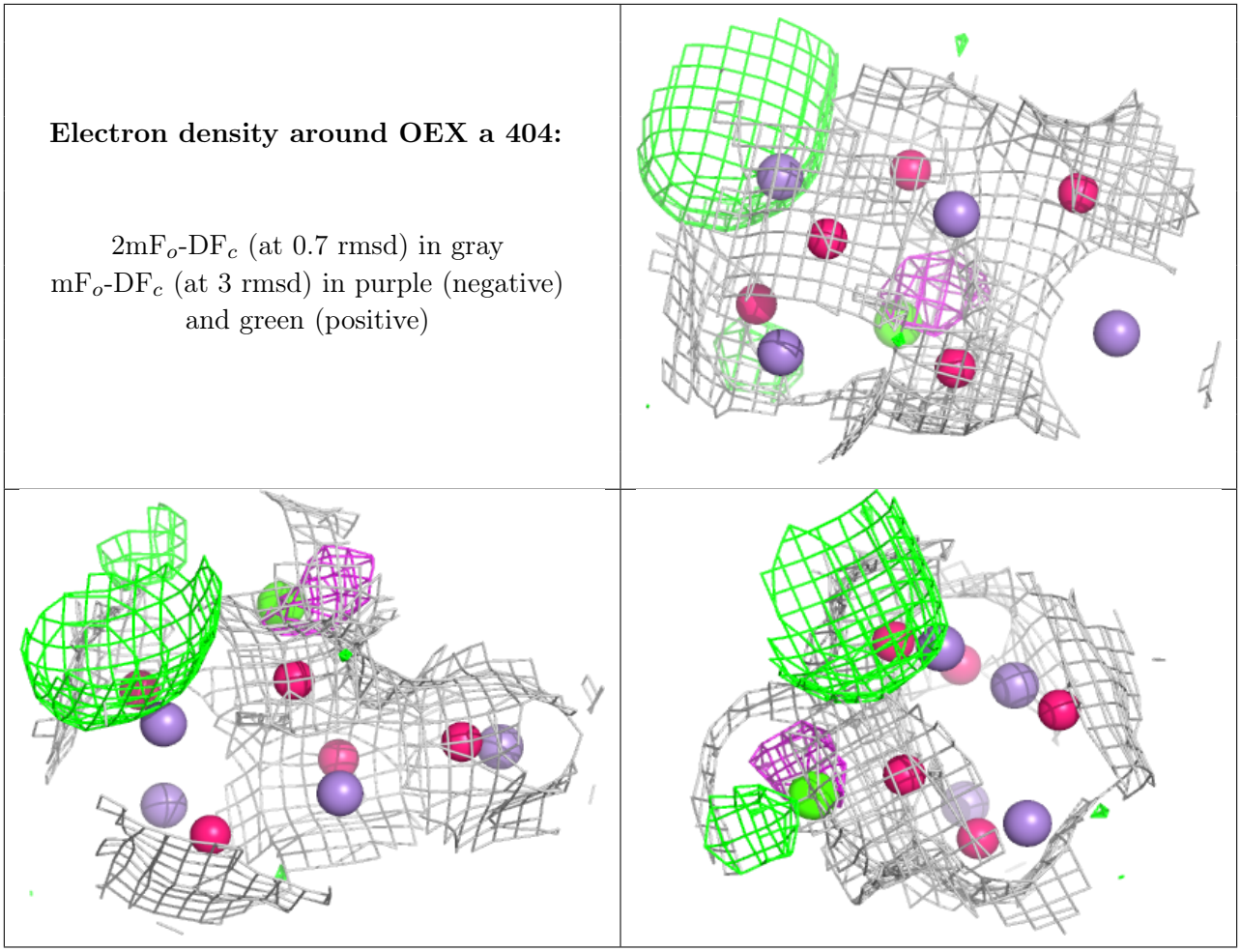






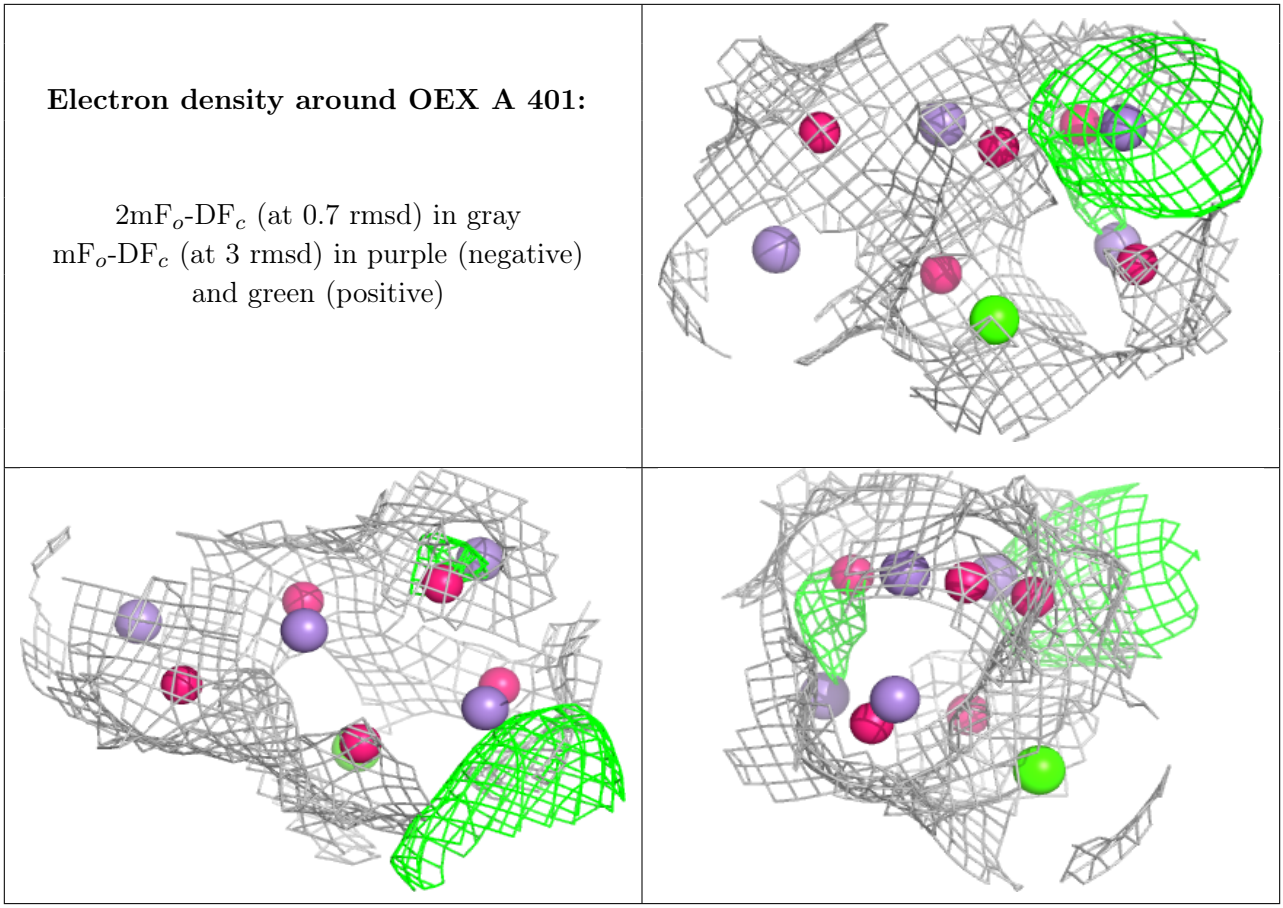
Electron density around OEX a 404:

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



Electron density around OEX A 401:

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



6.5 Other polymers

There are no such residues in this entry.