Full wwPDB X-ray Structure Validation Report ⓘ

Sep 17, 2023 – 03:44 AM EDT

PDB ID	:	4PJ0
Title	:	Structure of T.elongatus Photosystem II, rows of dimers crystal packing
Authors	:	Hellmich, J.; Bommer, M.; Burkhardt, A.; Ibrahim, M.; Kern, J.; Meents, A.; Mueh, F.; Dobbek, H.; Zouni, A.
Deposited on	:	2014-05-10
Resolution	:	2.44 Å(reported)

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

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

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

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

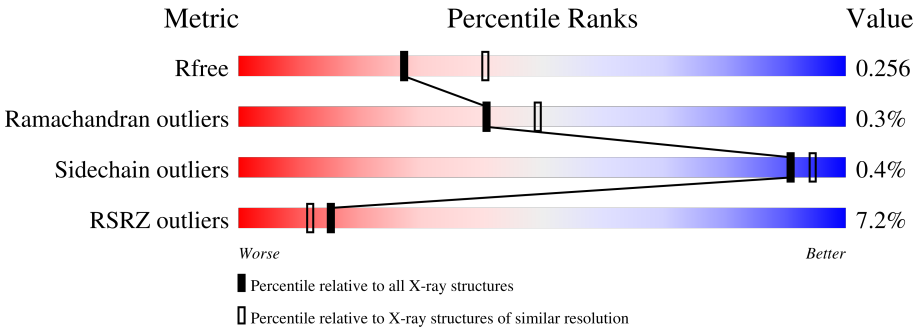
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.44 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1564 (2.46-2.42)
Ramachandran outliers	138981	1617 (2.46-2.42)
Sidechain outliers	138945	1617 (2.46-2.42)
RSRZ outliers	127900	1547 (2.46-2.42)

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	344	3% 96%
1	a	344	% 97%
2	B	510	5% 98%
2	b	510	6% 98%
3	C	461	2% 97%
3	c	461	3% 97%

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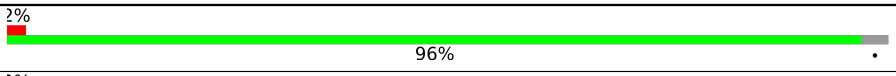
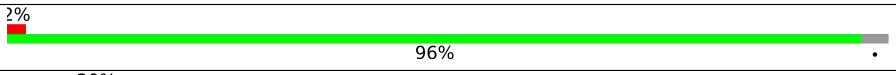
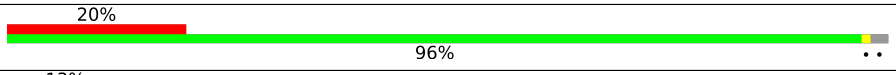
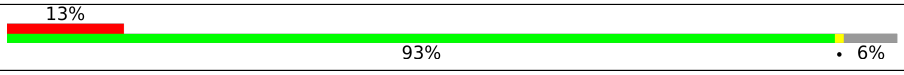
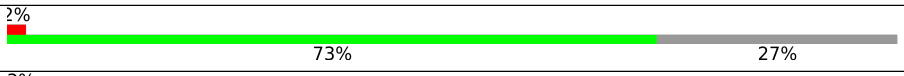
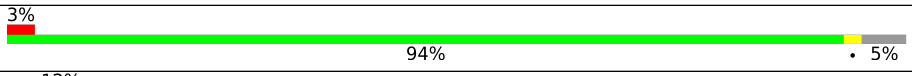
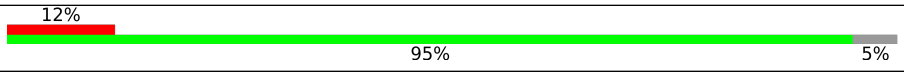
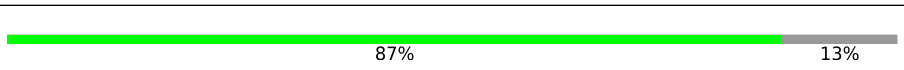
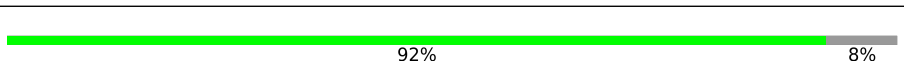
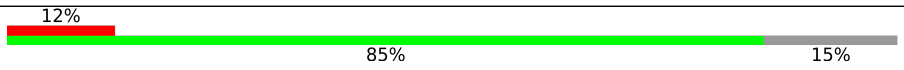
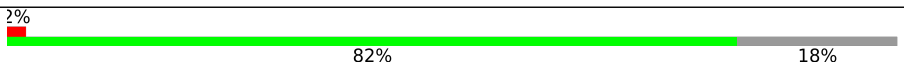
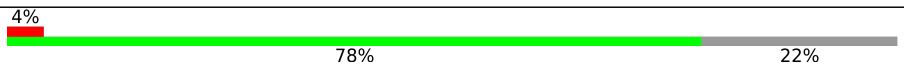
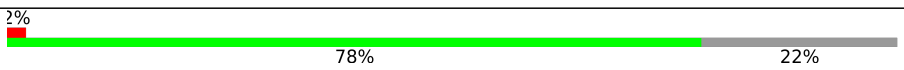
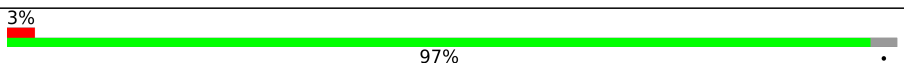
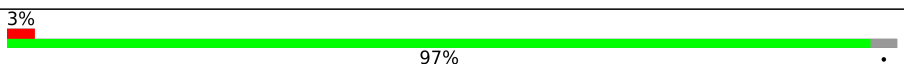
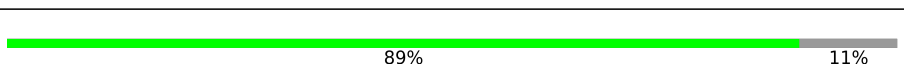
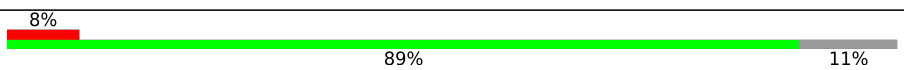
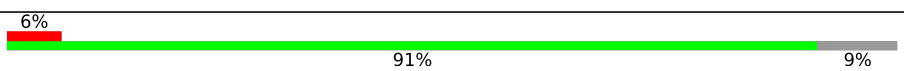
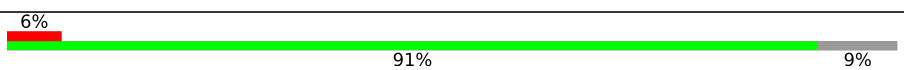
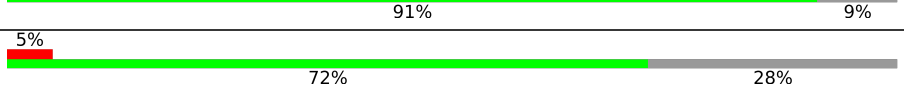
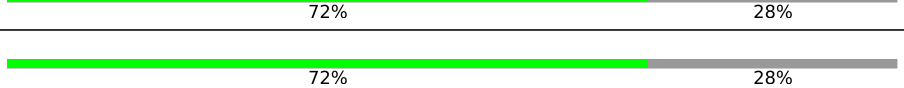
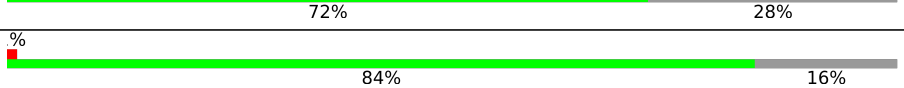
Mol	Chain	Length	Quality of chain
4	D	352	
4	d	352	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	66	
7	h	66	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	46	
10	k	46	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	272	
13	o	272	
14	T	32	
14	t	32	
15	U	134	
15	u	134	
16	V	163	

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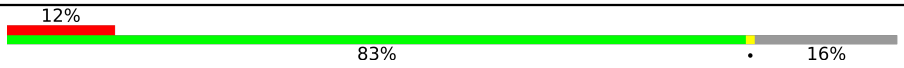
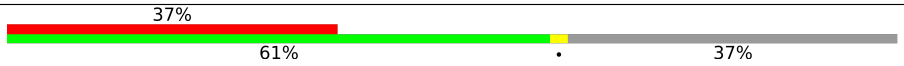
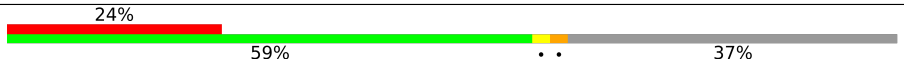
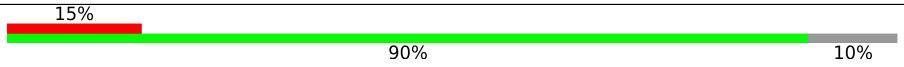
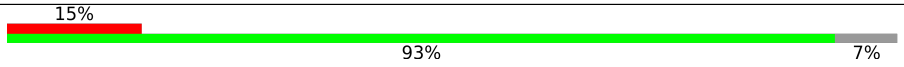
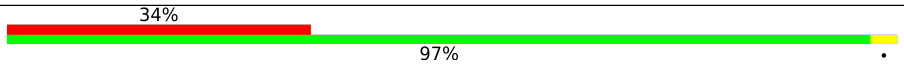
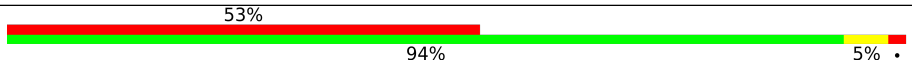
Mol	Chain	Length	Quality of chain
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	A	606	X	-	-	-
25	CLA	A	607	X	-	-	-
25	CLA	A	608	X	-	-	-
25	CLA	B	601	X	-	-	-
25	CLA	B	602	X	-	-	-
25	CLA	B	603	X	-	-	-
25	CLA	B	604	X	-	-	-
25	CLA	B	605	X	-	-	-
25	CLA	B	606	X	-	-	-
25	CLA	B	607	X	-	-	-
25	CLA	B	608	X	-	-	-
25	CLA	B	609	X	-	-	-
25	CLA	B	610	X	-	-	-
25	CLA	B	611	X	-	-	-
25	CLA	B	612	X	-	-	-
25	CLA	B	613	X	-	-	-
25	CLA	B	614	X	-	-	-
25	CLA	B	615	X	-	-	-
25	CLA	B	616	X	-	-	-
25	CLA	C	501	X	-	-	-
25	CLA	C	502	X	-	-	-
25	CLA	C	503	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	C	504	X	-	-	-
25	CLA	C	505	X	-	-	-
25	CLA	C	506	X	-	-	-
25	CLA	C	507	X	-	-	-
25	CLA	C	508	X	-	-	-
25	CLA	C	509	X	-	-	-
25	CLA	C	510	X	-	-	-
25	CLA	C	511	X	-	-	-
25	CLA	C	512	X	-	-	-
25	CLA	C	513	X	-	-	-
25	CLA	D	403	X	-	-	-
25	CLA	D	404	X	-	-	-
25	CLA	D	405	X	-	-	-
25	CLA	a	606	X	-	-	-
25	CLA	a	607	X	-	-	-
25	CLA	a	608	X	-	-	-
25	CLA	a	610	X	-	-	-
25	CLA	b	601	X	-	-	-
25	CLA	b	602	X	-	-	-
25	CLA	b	603	X	-	-	-
25	CLA	b	604	X	-	-	-
25	CLA	b	605	X	-	-	-
25	CLA	b	606	X	-	-	-
25	CLA	b	607	X	-	-	-
25	CLA	b	608	X	-	-	-
25	CLA	b	609	X	-	-	-
25	CLA	b	610	X	-	-	-
25	CLA	b	611	X	-	-	-
25	CLA	b	612	X	-	-	-
25	CLA	b	613	X	-	-	-
25	CLA	b	614	X	-	-	-
25	CLA	b	615	X	-	-	-
25	CLA	b	616	X	-	-	-
25	CLA	c	501	X	-	-	-
25	CLA	c	502	X	-	-	-
25	CLA	c	503	X	-	-	-
25	CLA	c	504	X	-	-	-
25	CLA	c	505	X	-	-	-
25	CLA	c	506	X	-	-	-
25	CLA	c	507	X	-	-	-
25	CLA	c	508	X	-	-	-
25	CLA	c	509	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	c	510	X	-	-	-
25	CLA	c	511	X	-	-	-
25	CLA	c	512	X	-	-	-
25	CLA	c	513	X	-	-	-
25	CLA	d	401	X	-	-	-
25	CLA	d	403	X	-	-	-

2 Entry composition (i)

There are 37 unique types of molecules in this entry. The entry contains 50236 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 Q(B) protein 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	333	Total	C	N	O	S	0	0	0
			2617	1714	430	458	15			
1	a	333	Total	C	N	O	S	0	0	0
			2617	1714	430	458	15			

- Molecule 2 is a protein called CP47 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	505	Total	C	N	O	S	0	0	0
			3980	2611	665	691	13			
2	b	503	Total	C	N	O	S	0	0	0
			3958	2599	657	689	13			

- Molecule 3 is a protein called Photosystem II CP43 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	448	Total	C	N	O	S	0	0	0
			3466	2270	580	603	13			
3	c	448	Total	C	N	O	S	0	0	0
			3466	2270	580	603	13			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	340	Total	C	N	O	S	0	0	0
			2706	1794	440	460	12			
4	d	340	Total	C	N	O	S	0	0	0
			2706	1794	440	460	12			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	82	Total 661	C 431	N 107	O 123	0	0	0
5	e	79	Total 645	C 422	N 104	O 119	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	33	Total 269	C 184	N 44	O 40	S 1	0	0	0
6	f	33	Total 269	C 184	N 44	O 40	S 1	0	0	0

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	33	Total 266	C 183	N 39	O 43	S 1	0	0	0
8	i	35	Total 286	C 195	N 45	O 45	S 1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	34	Total 249	C 170	N 38	O 40	S 1	0	0	0
9	j	33	Total 238	C 164	N 34	O 39	S 1	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	36	Total 284	C 198	N 41	O 45	0	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	k	36	Total 284	C 198	N 41	O 45	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L	36	Total 296	C 197	N 47	O 52	0	0	0
11	l	36	Total 296	C 197	N 47	O 52	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	32	Total 249	C 167	N 36	O 45	S 1	0	0	0
12	m	32	Total 249	C 167	N 36	O 45	S 1	0	0	0

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	242	Total 1859	C 1162	N 314	O 379	S 4	0	0	0
13	o	243	Total 1865	C 1165	N 315	O 381	S 4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	29	Total 249	C 176	N 35	O 36	S 2	0	0	0
14	t	29	Total 249	C 176	N 35	O 36	S 2	0	0	0

- Molecule 15 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	U	96	Total 765	C 486	N 128	O 151	0	0	0
15	u	96	Total 765	C 486	N 128	O 151	0	0	0

- Molecule 16 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			
16	v	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			

- Molecule 17 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			
17	y	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	X	37	Total	C	N	O	0	0	0
			270	182	41	47			
18	x	38	Total	C	N	O	0	0	0
			281	188	45	48			

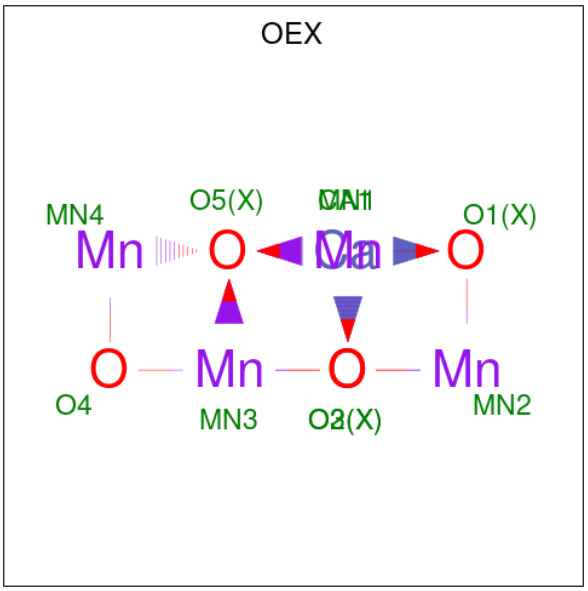
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			
19	z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	34	Total	C	N	O	0	0	0
			273	186	47	40			
20	r	33	Total	C	N	O	0	0	0
			265	182	46	37			

- Molecule 21 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).

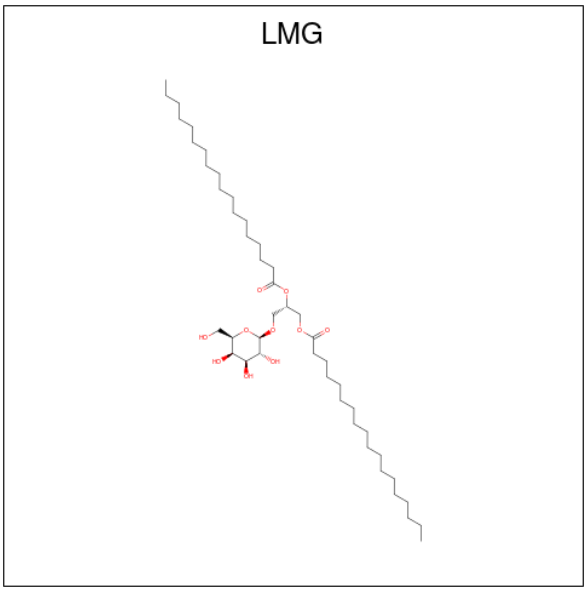


Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
21	A	1	Total	Ca	Mn	O	0	0
			10	1	4	5		
21	a	1	Total	Ca	Mn	O	0	0
			10	1	4	5		

- Molecule 22 is FE (III) ION (three-letter code: FE) (formula: Fe).

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

- Molecule 23 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).

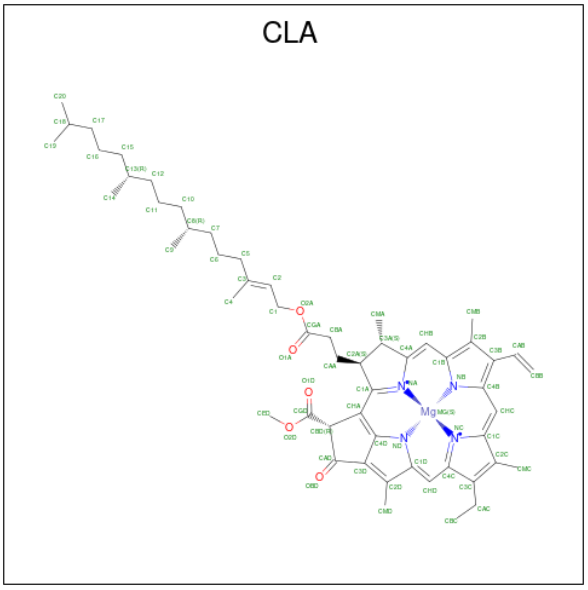


Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	A	1	Total C O 51 41 10	0	0
23	A	1	Total C O 51 41 10	0	0
23	B	1	Total C O 51 41 10	0	0
23	B	1	Total C O 51 41 10	0	0
23	C	1	Total C O 51 41 10	0	0
23	C	1	Total C O 51 41 10	0	0
23	D	1	Total C O 51 41 10	0	0
23	a	1	Total C O 51 41 10	0	0
23	a	1	Total C O 51 41 10	0	0
23	b	1	Total C O 51 41 10	0	0
23	b	1	Total C O 51 41 10	0	0
23	c	1	Total C O 51 41 10	0	0
23	c	1	Total C O 51 41 10	0	0
23	d	1	Total C O 51 41 10	0	0

- Molecule 24 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

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

- Molecule 25 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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

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

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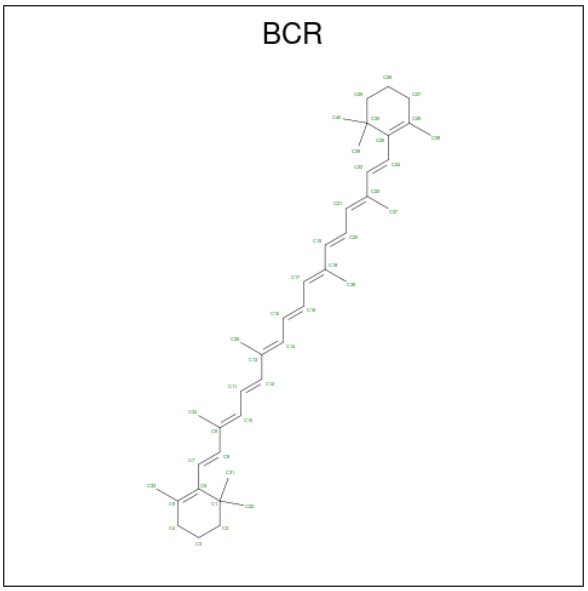
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5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

- Molecule 26 is BETA-CAROTENE (three-letter code: 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	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	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	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

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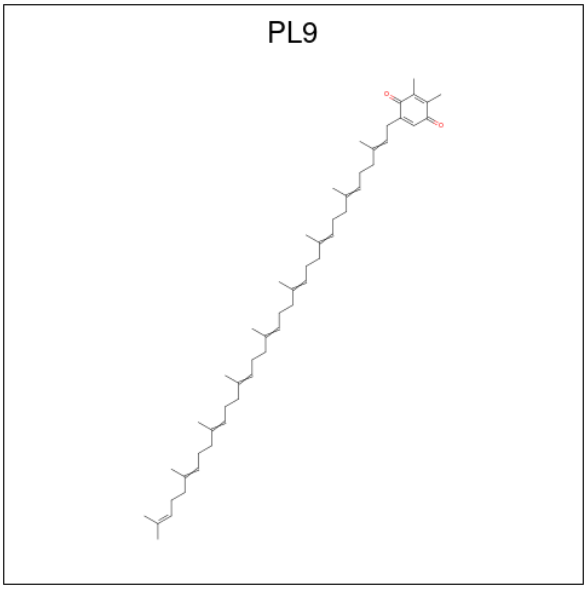
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	b	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	d	1	Total C 40 40	0	0
26	h	1	Total C 40 40	0	0
26	k	1	Total C 40 40	0	0
26	t	1	Total C 40 40	0	0
26	z	1	Total C 40 40	0	0

- Molecule 27 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 (three-letter code: PL9) (formula: $C_{53}H_{80}O_2$).



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

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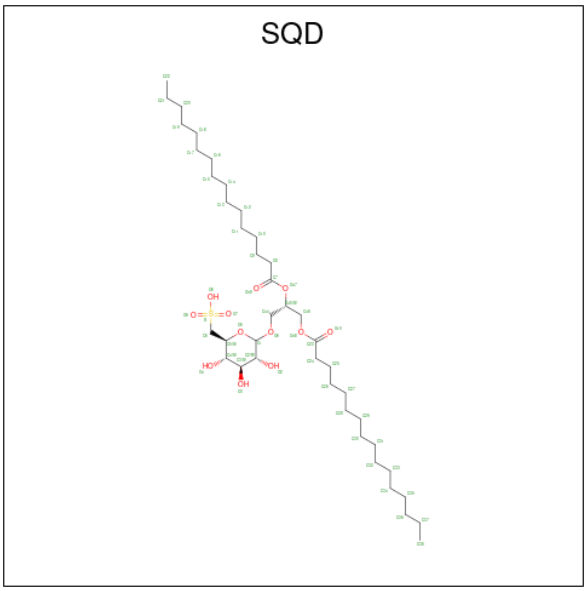
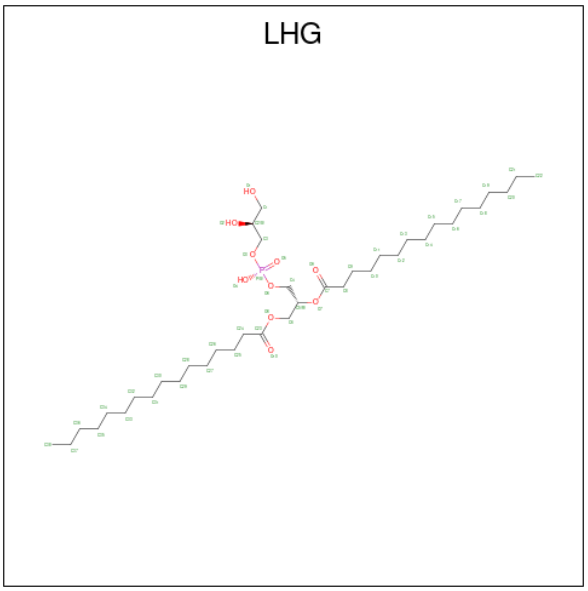
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	a	1	Total C O 55 53 2	0	0
27	d	1	Total C O 55 53 2	0	0

- Molecule 28 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



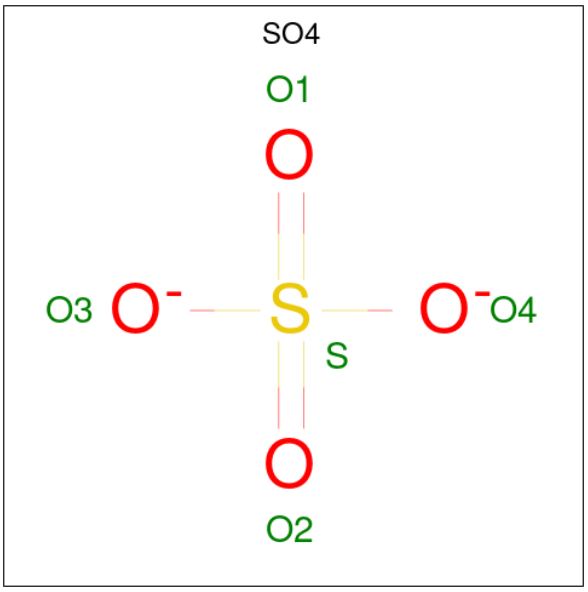
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O S 54 41 12 1	0	0
28	F	1	Total C O S 43 30 12 1	0	0
28	L	1	Total C O S 54 41 12 1	0	0
28	L	1	Total C O S 54 41 12 1	0	0
28	a	1	Total C O S 54 41 12 1	0	0
28	f	1	Total C O S 43 30 12 1	0	0

- Molecule 29 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



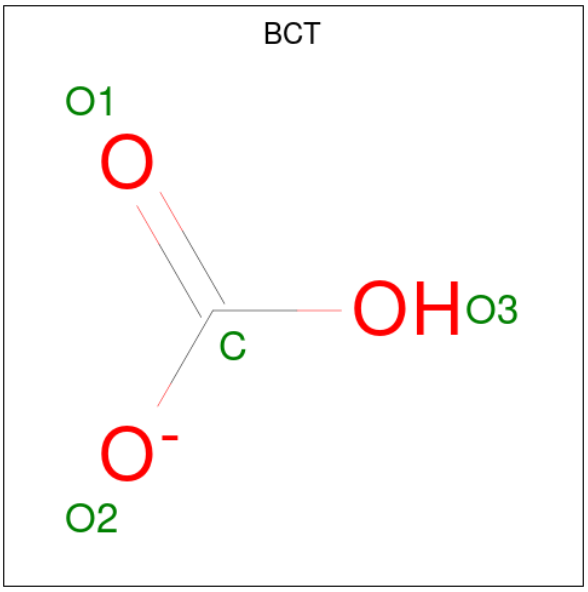
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
29	A	1	Total	C	O	P	0	0
			49	38	10	1		
29	A	1	Total	C	O	P	0	0
			49	38	10	1		
29	D	1	Total	C	O	P	0	0
			49	38	10	1		
29	E	1	Total	C	O	P	0	0
			42	31	10	1		
29	L	1	Total	C	O	P	0	0
			49	38	10	1		
29	a	1	Total	C	O	P	0	0
			49	38	10	1		
29	a	1	Total	C	O	P	0	0
			42	31	10	1		
29	d	1	Total	C	O	P	0	0
			49	38	10	1		
29	d	1	Total	C	O	P	0	0
			49	38	10	1		
29	l	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 30 is SULFATE ION (three-letter code: SO4) (formula: O_4S).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	A	1	Total O S 5 4 1	0	0
30	O	1	Total O S 5 4 1	0	0
30	O	1	Total O S 5 4 1	0	0
30	U	1	Total O S 5 4 1	0	0
30	V	1	Total O S 5 4 1	0	0
30	a	1	Total O S 5 4 1	0	0
30	d	1	Total O S 5 4 1	0	0
30	o	1	Total O S 5 4 1	0	0
30	u	1	Total O S 5 4 1	0	0
30	u	1	Total O S 5 4 1	0	0

- Molecule 31 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



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

- Molecule 32 is UNKNOWN LIGAND (three-letter code: UNL) (formula:).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	B	6	Total C 68 68	0	0
32	C	1	Total C 15 15	0	0
32	D	1	Total C 15 15	0	0
32	I	1	Total C 14 14	0	0
32	J	1	Total C 11 11	0	0
32	M	2	Total C 26 26	0	0
32	T	2	Total C 27 27	0	0
32	X	1	Total C 10 10	0	0
32	b	5	Total C 60 60	0	0
32	c	1	Total C 15 15	0	0

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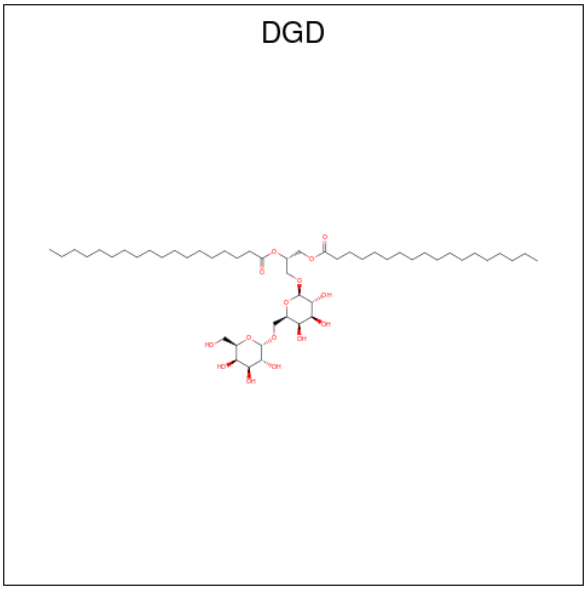
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	d	1	Total C 15 15	0	0
32	i	1	Total C 16 16	0	0
32	j	1	Total C 15 15	0	0
32	k	1	Total C 9 9	0	0
32	m	2	Total C 25 25	0	0
32	t	1	Total C 15 15	0	0
32	x	1	Total C 16 16	0	0

- Molecule 33 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	C	1	Total C O 62 47 15	0	0
33	C	1	Total C O 62 47 15	0	0
33	C	1	Total C O 62 47 15	0	0
33	H	1	Total C O 62 47 15	0	0

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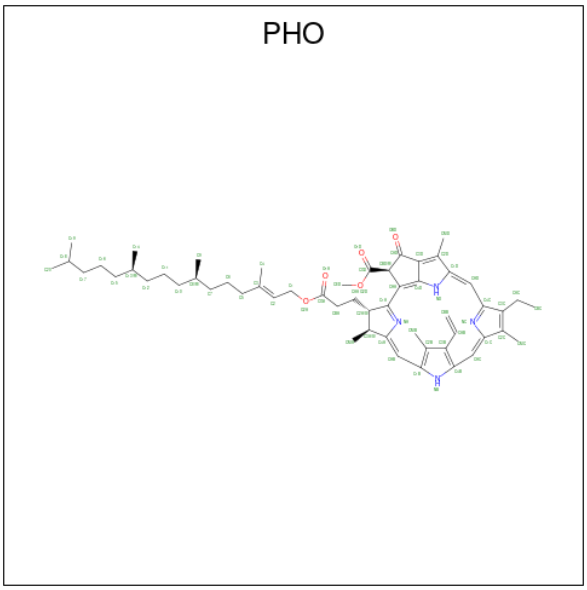
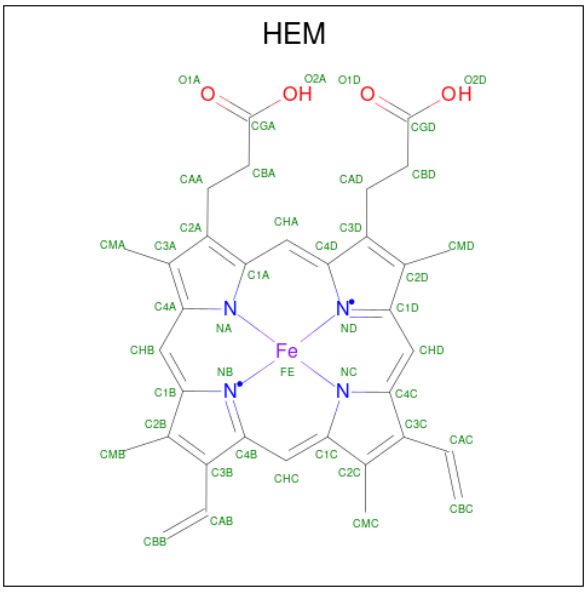
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	c	1	Total C O 62 47 15	0	0
33	c	1	Total C O 62 47 15	0	0
33	c	1	Total C O 62 47 15	0	0
33	h	1	Total C O 62 47 15	0	0

- Molecule 34 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



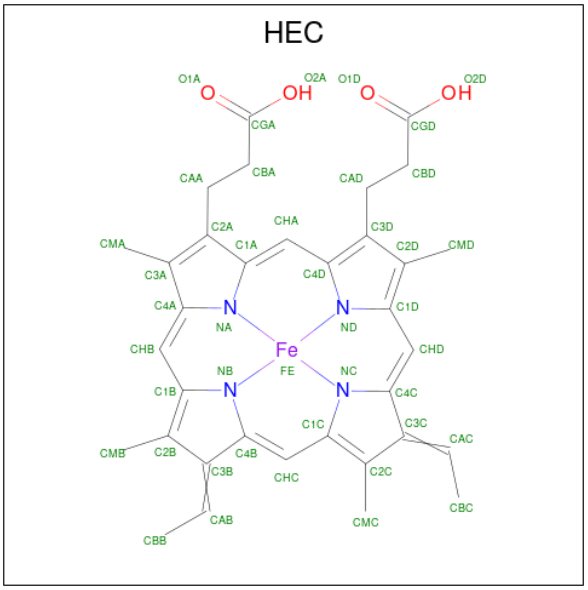
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	D	1	Total C N O 64 55 4 5	0	0
34	D	1	Total C N O 64 55 4 5	0	0
34	a	1	Total C N O 64 55 4 5	0	0
34	d	1	Total C N O 64 55 4 5	0	0

- Molecule 35 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
35	E	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
35	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 36 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



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

- Molecule 37 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	A	33	Total O 33 33	0	0
37	B	42	Total O 42 42	0	0
37	C	24	Total O 24 24	0	0
37	D	27	Total O 27 27	0	0
37	E	2	Total O 2 2	0	0
37	H	8	Total O 8 8	0	0
37	L	1	Total O 1 1	0	0
37	O	15	Total O 15 15	0	0
37	T	3	Total O 3 3	0	0
37	U	6	Total O 6 6	0	0
37	V	9	Total O 9 9	0	0
37	X	1	Total O 1 1	0	0
37	a	24	Total O 24 24	0	0
37	b	37	Total O 37 37	0	0
37	c	26	Total O 26 26	0	0
37	d	17	Total O 17 17	0	0
37	h	1	Total O 1 1	0	0
37	i	1	Total O 1 1	0	0
37	j	1	Total O 1 1	0	0
37	l	3	Total O 3 3	0	0
37	m	1	Total O 1 1	0	0

Continued on next page...

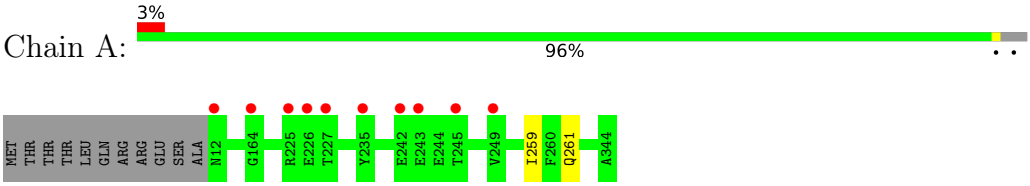
Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	o	11	Total O 11 11	0	0
37	t	1	Total O 1 1	0	0
37	u	7	Total O 7 7	0	0
37	v	3	Total O 3 3	0	0

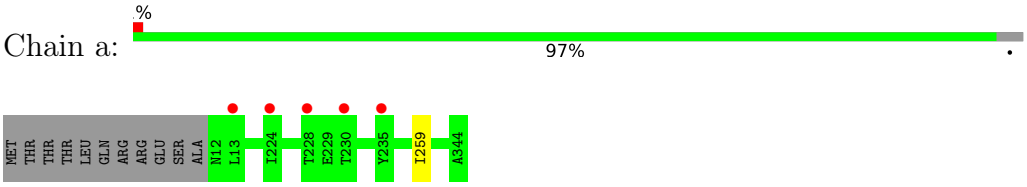
3 Residue-property plots

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.

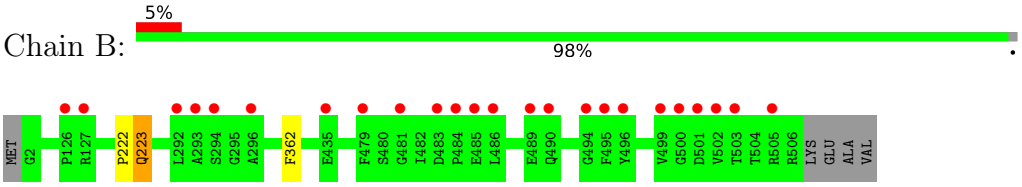
• Molecule 1: Photosystem Q(B) protein 1



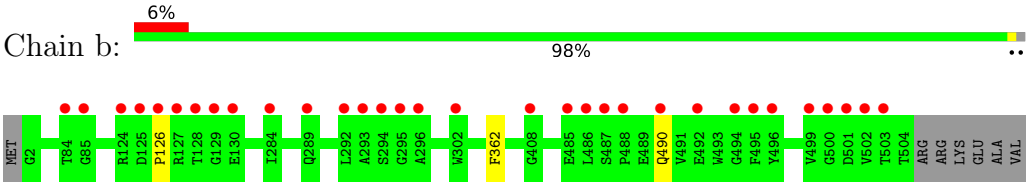
• Molecule 1: Photosystem Q(B) protein 1



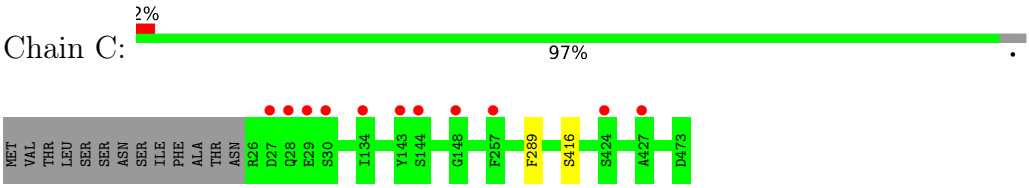
• Molecule 2: CP47 protein



• Molecule 2: CP47 protein

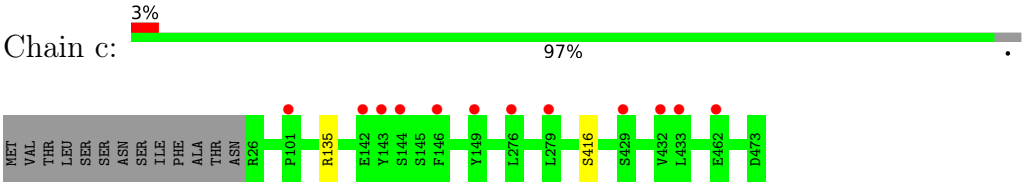


• Molecule 3: Photosystem II CP43 protein



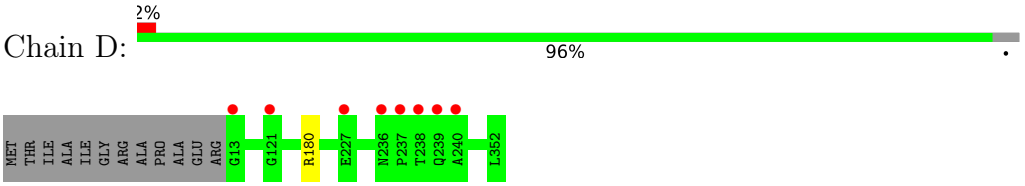
• Molecule 3: Photosystem II CP43 protein

Chain c:



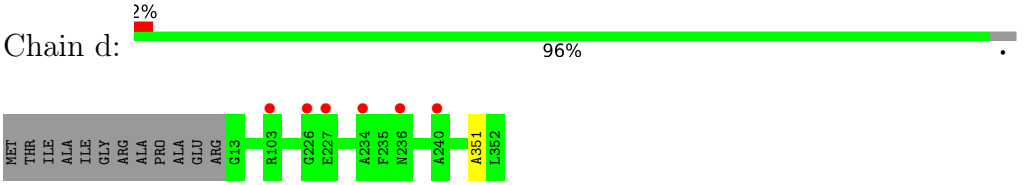
• Molecule 4: Photosystem II D2 protein

Chain D:



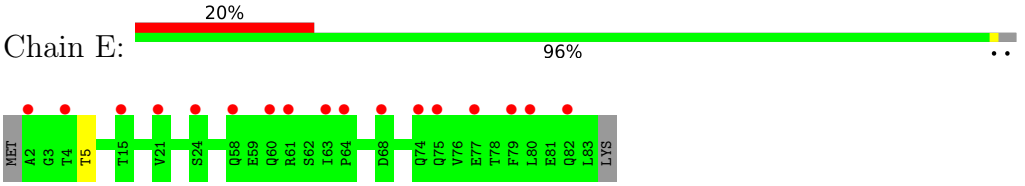
• Molecule 4: Photosystem II D2 protein

Chain d:



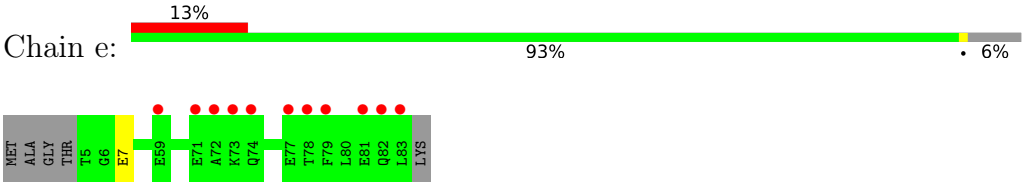
• Molecule 5: Cytochrome b559 subunit alpha

Chain E:



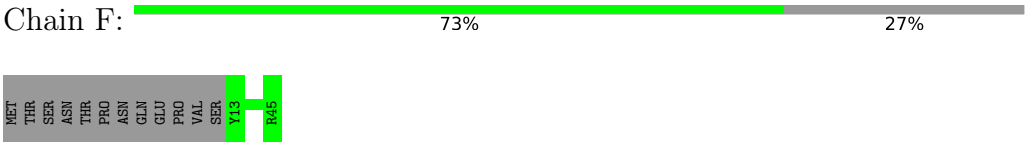
• Molecule 5: Cytochrome b559 subunit alpha

Chain e:



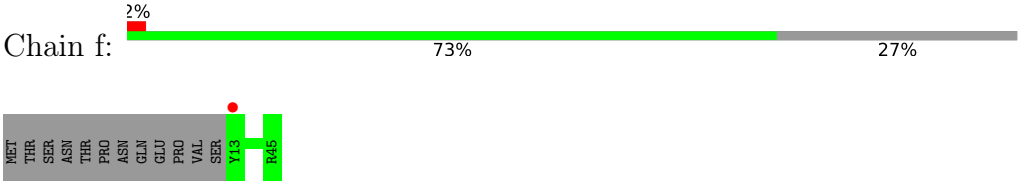
• Molecule 6: Cytochrome b559 subunit beta

Chain F:



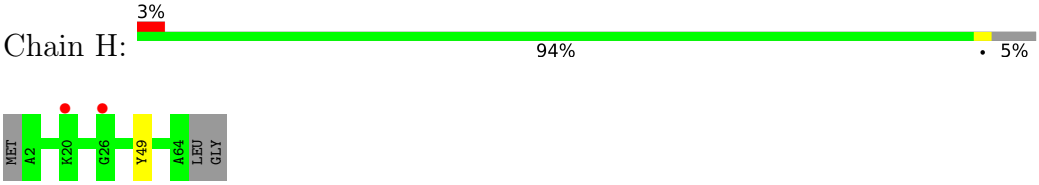
• Molecule 6: Cytochrome b559 subunit beta

Chain f:



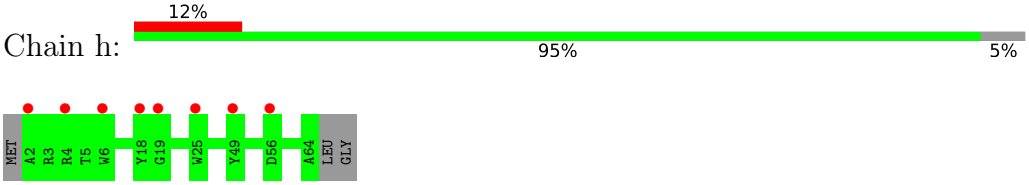
• Molecule 7: Photosystem II reaction center protein H

Chain H:



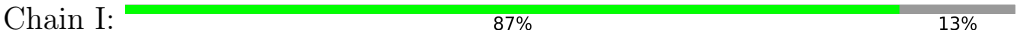
• Molecule 7: Photosystem II reaction center protein H

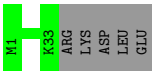
Chain h:



• Molecule 8: Photosystem II reaction center protein I

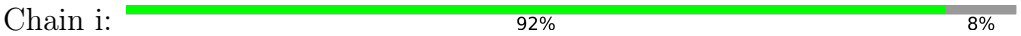
Chain I:

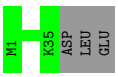




• Molecule 8: Photosystem II reaction center protein I

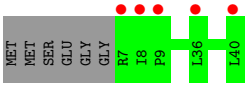
Chain i:





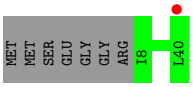
• Molecule 9: Photosystem II reaction center protein J

Chain J:



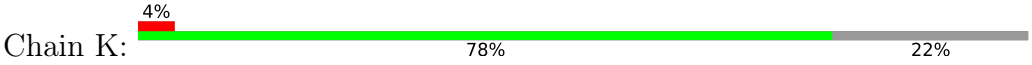
• Molecule 9: Photosystem II reaction center protein J

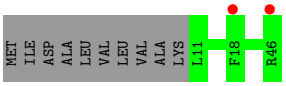
Chain j:



• Molecule 10: Photosystem II reaction center protein K

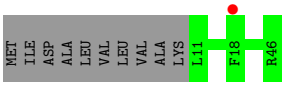
Chain K:





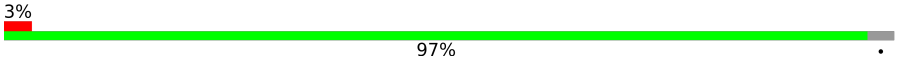
• Molecule 10: Photosystem II reaction center protein K

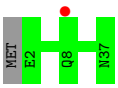
Chain k:



• Molecule 11: Photosystem II reaction center protein L

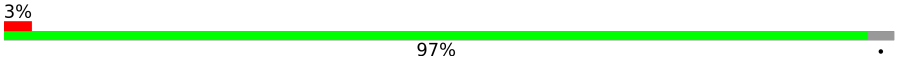
Chain L:





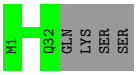
• Molecule 11: Photosystem II reaction center protein L

Chain l:



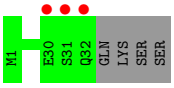
• Molecule 12: Photosystem II reaction center protein M

Chain M:



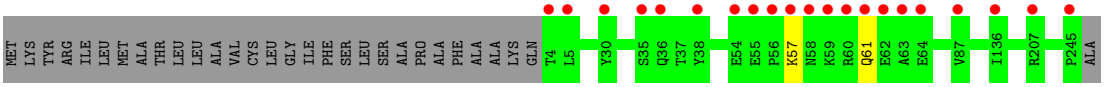
• Molecule 12: Photosystem II reaction center protein M

Chain m:



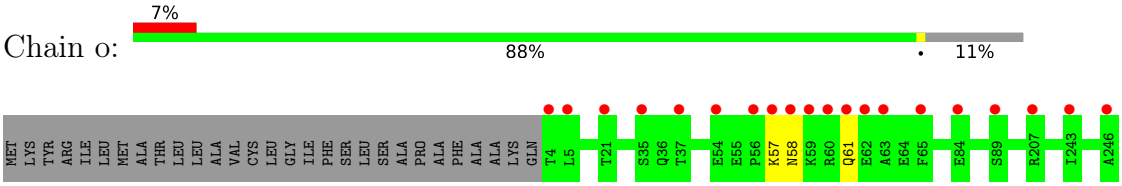
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:



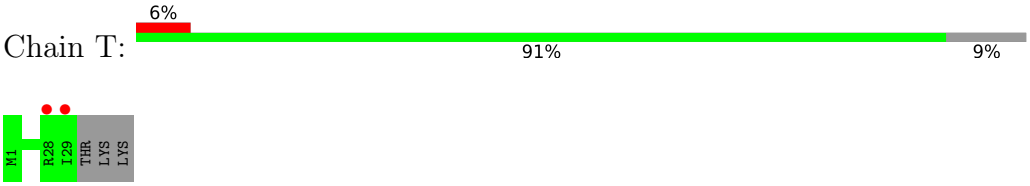
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:



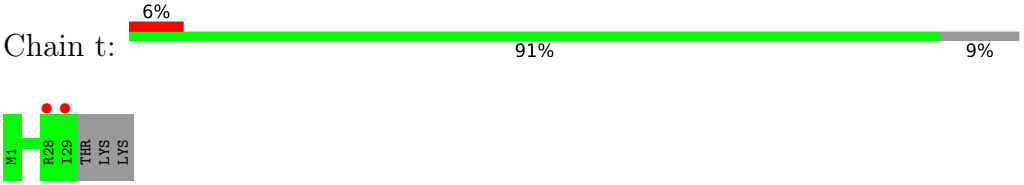
• Molecule 14: Photosystem II reaction center protein T

Chain T:



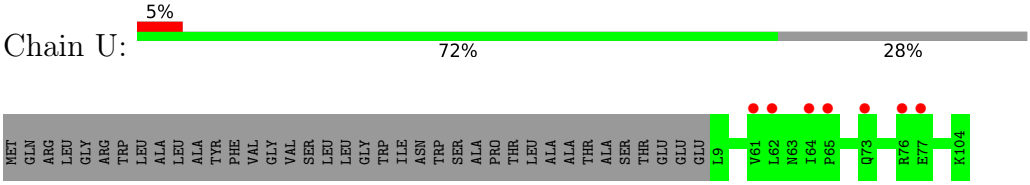
• Molecule 14: Photosystem II reaction center protein T

Chain t:



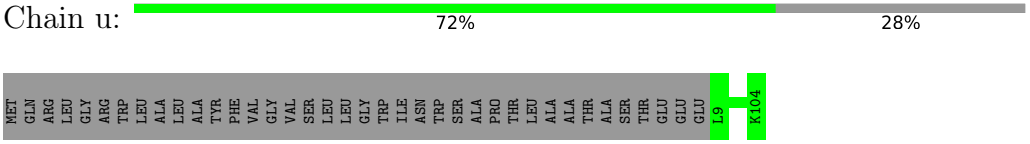
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:



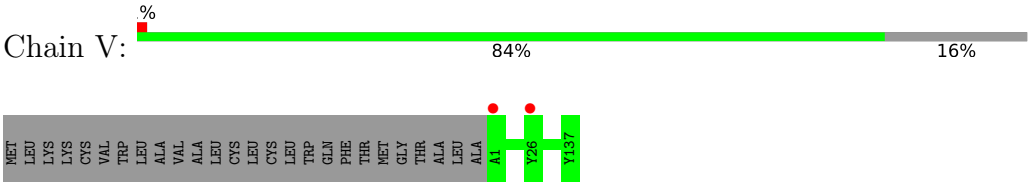
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:



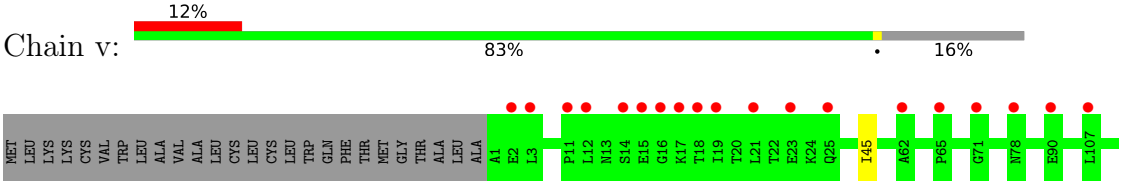
• Molecule 16: Cytochrome c-550

Chain V:



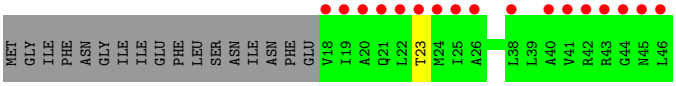
• Molecule 16: Cytochrome c-550

Chain v:



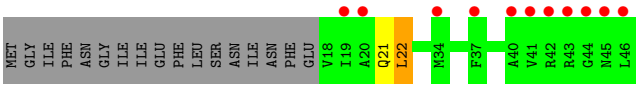
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y:



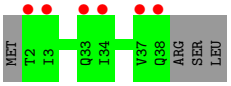
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain y:



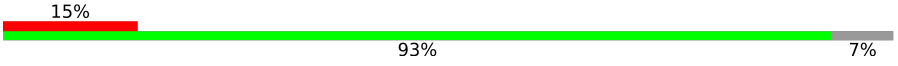
• Molecule 18: Photosystem II reaction center X protein

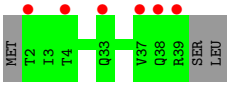
Chain X:



• Molecule 18: Photosystem II reaction center X protein

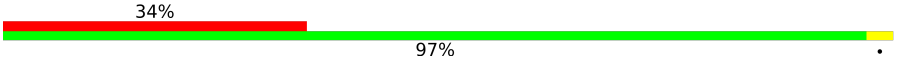
Chain x:

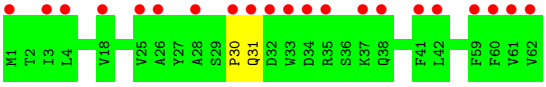




• Molecule 19: Photosystem II reaction center protein Z

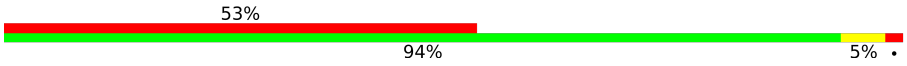
Chain Z:

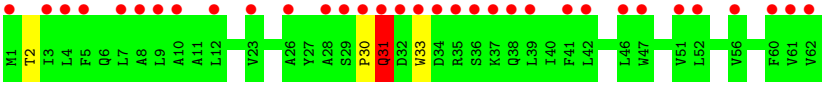




• Molecule 19: Photosystem II reaction center protein Z

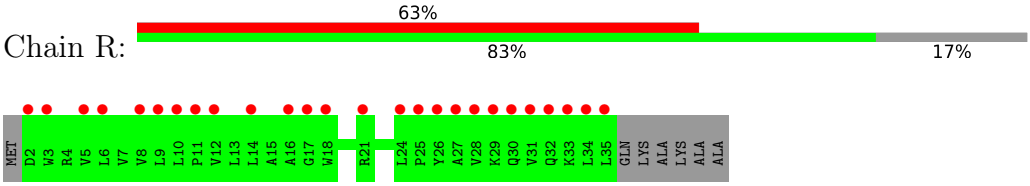
Chain z:





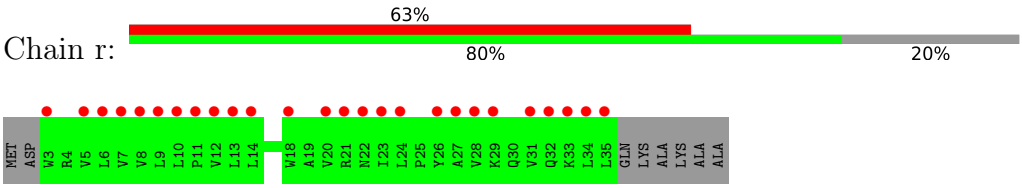
• Molecule 20: Photosystem II protein Y

Chain R:



• Molecule 20: Photosystem II 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	116.45Å 218.89Å 302.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.12 – 2.44 49.12 – 2.44	Depositor EDS
% Data completeness (in resolution range)	98.4 (49.12-2.44) 98.4 (49.12-2.44)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.76 (at 2.45Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.9_1690)	Depositor
R, R_{free}	0.216 , 0.256 0.218 , 0.256	Depositor DCC
R_{free} test set	14111 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	39.0	Xtriage
Anisotropy	0.707	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 52.7	EDS
L-test for twinning[2]	$< \|L\| > = 0.36$, $< L^2 > = 0.19$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	50236	wwPDB-VP
Average B, all atoms (Å^2)	44.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.25% 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: UNL, PHO, OEX, DGD, LHG, CL, PL9, HEM, SQD, LMG, BCR, SO4, HEC, FE, BCT, CLA

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	0.22	0/2702	0.39	0/3685
1	a	0.22	0/2702	0.37	0/3685
2	B	0.23	0/4120	0.38	1/5614 (0.0%)
2	b	0.22	0/4098	0.38	0/5586
3	C	0.21	0/3579	0.35	0/4872
3	c	0.21	0/3579	0.38	0/4872
4	D	0.22	0/2801	0.37	0/3818
4	d	0.22	0/2801	0.37	0/3818
5	E	0.21	0/680	0.39	0/929
5	e	0.21	0/664	0.38	0/907
6	F	0.22	0/278	0.38	0/379
6	f	0.22	0/278	0.39	0/379
7	H	0.22	0/511	0.37	0/697
7	h	0.22	0/511	0.38	0/697
8	I	0.23	0/273	0.37	0/370
8	i	0.23	0/293	0.39	0/395
9	J	0.20	0/255	0.33	0/346
9	j	0.21	0/244	0.36	0/332
10	K	0.30	0/294	0.55	0/405
10	k	0.23	0/294	0.40	0/405
11	L	0.22	0/303	0.34	0/412
11	l	0.22	0/303	0.35	0/412
12	M	0.22	0/252	0.40	0/344
12	m	0.22	0/252	0.39	0/344
13	O	0.21	0/1890	0.39	0/2564
13	o	0.22	0/1896	0.43	0/2571
14	T	0.24	0/258	0.37	0/349
14	t	0.24	0/258	0.37	0/349
15	U	0.20	0/776	0.36	0/1052
15	u	0.21	0/776	0.36	0/1052
16	V	0.20	0/1085	0.38	0/1473
16	v	0.20	0/1085	0.38	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
17	Y	0.20	0/216	0.39	0/289
17	y	0.21	0/216	0.63	1/289 (0.3%)
18	X	0.21	0/273	0.34	0/370
18	x	0.21	0/284	0.35	0/384
19	Z	0.22	0/490	0.40	0/669
19	z	0.43	0/490	0.62	0/669
20	R	0.20	0/279	0.37	0/383
20	r	0.21	0/271	0.46	0/372
All	All	0.22	0/42610	0.39	2/58011 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	B	0	1
19	z	0	1
All	All	0	2

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	y	22	LEU	CA-CB-CG	5.69	128.38	115.30
2	B	223	GLN	N-CA-C	-5.33	96.61	111.00

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	222	PRO	Peptide
19	z	31	GLN	Peptide

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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	331/344 (96%)	321 (97%)	9 (3%)	1 (0%)	41	49
1	a	331/344 (96%)	324 (98%)	6 (2%)	1 (0%)	41	49
2	B	503/510 (99%)	486 (97%)	17 (3%)	0	100	100
2	b	501/510 (98%)	482 (96%)	18 (4%)	1 (0%)	47	57
3	C	446/461 (97%)	430 (96%)	15 (3%)	1 (0%)	47	57
3	c	446/461 (97%)	435 (98%)	9 (2%)	2 (0%)	34	41
4	D	338/352 (96%)	326 (96%)	12 (4%)	0	100	100
4	d	338/352 (96%)	323 (96%)	14 (4%)	1 (0%)	41	49
5	E	80/84 (95%)	79 (99%)	1 (1%)	0	100	100
5	e	77/84 (92%)	76 (99%)	1 (1%)	0	100	100
6	F	31/45 (69%)	31 (100%)	0	0	100	100
6	f	31/45 (69%)	31 (100%)	0	0	100	100
7	H	61/66 (92%)	58 (95%)	3 (5%)	0	100	100
7	h	61/66 (92%)	58 (95%)	3 (5%)	0	100	100
8	I	31/38 (82%)	31 (100%)	0	0	100	100
8	i	33/38 (87%)	32 (97%)	1 (3%)	0	100	100
9	J	32/40 (80%)	32 (100%)	0	0	100	100
9	j	31/40 (78%)	31 (100%)	0	0	100	100
10	K	34/46 (74%)	31 (91%)	3 (9%)	0	100	100
10	k	34/46 (74%)	34 (100%)	0	0	100	100
11	L	34/37 (92%)	33 (97%)	1 (3%)	0	100	100
11	l	34/37 (92%)	33 (97%)	1 (3%)	0	100	100
12	M	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
12	m	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
13	O	240/272 (88%)	228 (95%)	11 (5%)	1 (0%)	34	41

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
13	o	241/272 (89%)	225 (93%)	13 (5%)	3 (1%)	13 13
14	T	27/32 (84%)	27 (100%)	0	0	100 100
14	t	27/32 (84%)	26 (96%)	1 (4%)	0	100 100
15	U	94/134 (70%)	89 (95%)	5 (5%)	0	100 100
15	u	94/134 (70%)	90 (96%)	4 (4%)	0	100 100
16	V	135/163 (83%)	130 (96%)	5 (4%)	0	100 100
16	v	135/163 (83%)	129 (96%)	5 (4%)	1 (1%)	22 26
17	Y	27/46 (59%)	26 (96%)	1 (4%)	0	100 100
17	y	27/46 (59%)	24 (89%)	2 (7%)	1 (4%)	3 1
18	X	35/41 (85%)	34 (97%)	1 (3%)	0	100 100
18	x	36/41 (88%)	35 (97%)	1 (3%)	0	100 100
19	Z	60/62 (97%)	58 (97%)	1 (2%)	1 (2%)	9 7
19	z	60/62 (97%)	53 (88%)	5 (8%)	2 (3%)	4 1
20	R	32/41 (78%)	32 (100%)	0	0	100 100
20	r	31/41 (76%)	29 (94%)	2 (6%)	0	100 100
All	All	5199/5700 (91%)	5010 (96%)	173 (3%)	16 (0%)	41 49

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
13	O	57	LYS
19	Z	30	PRO
13	o	57	LYS
3	c	416	SER
13	o	58	ASN
13	o	61	GLN
17	y	21	GLN
19	z	31	GLN
3	C	416	SER
3	c	135	ARG
4	d	351	ALA
2	b	126	PRO
19	z	30	PRO
1	A	259	ILE
1	a	259	ILE
16	v	45	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	270/280 (96%)	269 (100%)	1 (0%)	91 94
1	a	270/280 (96%)	270 (100%)	0	100 100
2	B	403/407 (99%)	401 (100%)	2 (0%)	88 93
2	b	401/407 (98%)	399 (100%)	2 (0%)	88 93
3	C	350/362 (97%)	349 (100%)	1 (0%)	92 95
3	c	350/362 (97%)	350 (100%)	0	100 100
4	D	275/283 (97%)	274 (100%)	1 (0%)	91 94
4	d	275/283 (97%)	275 (100%)	0	100 100
5	E	71/73 (97%)	70 (99%)	1 (1%)	67 78
5	e	70/73 (96%)	69 (99%)	1 (1%)	67 78
6	F	27/39 (69%)	27 (100%)	0	100 100
6	f	27/39 (69%)	27 (100%)	0	100 100
7	H	53/55 (96%)	52 (98%)	1 (2%)	57 69
7	h	53/55 (96%)	53 (100%)	0	100 100
8	I	30/35 (86%)	30 (100%)	0	100 100
8	i	32/35 (91%)	32 (100%)	0	100 100
9	J	24/28 (86%)	24 (100%)	0	100 100
9	j	23/28 (82%)	23 (100%)	0	100 100
10	K	29/37 (78%)	29 (100%)	0	100 100
10	k	29/37 (78%)	29 (100%)	0	100 100
11	L	34/35 (97%)	34 (100%)	0	100 100
11	l	34/35 (97%)	34 (100%)	0	100 100
12	M	29/33 (88%)	29 (100%)	0	100 100
12	m	29/33 (88%)	29 (100%)	0	100 100
13	O	206/228 (90%)	205 (100%)	1 (0%)	88 93
13	o	206/228 (90%)	206 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
14	T	26/29 (90%)	26 (100%)	0	100 100
14	t	26/29 (90%)	26 (100%)	0	100 100
15	U	83/112 (74%)	83 (100%)	0	100 100
15	u	83/112 (74%)	83 (100%)	0	100 100
16	V	117/138 (85%)	117 (100%)	0	100 100
16	v	117/138 (85%)	117 (100%)	0	100 100
17	Y	22/37 (60%)	21 (96%)	1 (4%)	27 36
17	y	22/37 (60%)	21 (96%)	1 (4%)	27 36
18	X	30/34 (88%)	30 (100%)	0	100 100
18	x	31/34 (91%)	31 (100%)	0	100 100
19	Z	52/52 (100%)	51 (98%)	1 (2%)	57 69
19	z	52/52 (100%)	49 (94%)	3 (6%)	20 26
20	R	29/33 (88%)	29 (100%)	0	100 100
20	r	28/33 (85%)	28 (100%)	0	100 100
All	All	4318/4660 (93%)	4301 (100%)	17 (0%)	91 94

All (17) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	261	GLN
2	B	223	GLN
2	B	362	PHE
3	C	289	PHE
4	D	180	ARG
5	E	5	THR
7	H	49	TYR
13	O	61	GLN
17	Y	23	THR
19	Z	31	GLN
2	b	362	PHE
2	b	490	GLN
5	e	7	GLU
17	y	22	LEU
19	z	2	THR
19	z	31	GLN
19	z	33	TRP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (5) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	223	GLN
13	o	61	GLN
16	v	25	GLN
20	r	30	GLN
19	z	31	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 191 ligands modelled in this entry, 6 are monoatomic and 29 are unknown - leaving 156 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	$\#\|Z\| > 2$
25	CLA	b	609	-	65,73,73	2.18	10 (15%)	76,113,113	1.26	10 (13%)
29	LHG	D	408	-	48,48,48	0.92	2 (4%)	51,54,54	1.02	3 (5%)
28	SQD	F	101	-	42,43,54	1.31	4 (9%)	51,54,65	1.28	7 (13%)
35	HEM	e	101	6,5	41,50,50	1.41	4 (9%)	45,82,82	1.53	10 (22%)
25	CLA	C	510	-	65,73,73	2.12	9 (13%)	76,113,113	1.32	11 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
26	BCR	B	617	-	41,41,41	0.69	0	56,56,56	1.96	17 (30%)
29	LHG	d	407	-	48,48,48	0.94	2 (4%)	51,54,54	0.99	2 (3%)
26	BCR	D	406	-	41,41,41	0.69	0	56,56,56	2.21	15 (26%)
25	CLA	c	509	-	65,73,73	2.12	9 (13%)	76,113,113	1.27	10 (13%)
25	CLA	c	505	-	65,73,73	2.17	9 (13%)	76,113,113	1.28	10 (13%)
25	CLA	A	606	-	65,73,73	2.11	9 (13%)	76,113,113	1.37	10 (13%)
26	BCR	B	618	-	41,41,41	0.69	0	56,56,56	1.86	11 (19%)
25	CLA	B	607	37	65,73,73	2.16	10 (15%)	76,113,113	1.30	12 (15%)
30	SO4	O	301	-	4,4,4	0.14	0	6,6,6	0.05	0
34	PHO	D	402	-	51,69,69	0.62	2 (3%)	47,99,99	0.72	1 (2%)
34	PHO	D	401	-	51,69,69	0.74	2 (3%)	47,99,99	0.61	0
21	OEX	A	601	3,37,1	0,15,15	-	-	-		
25	CLA	B	602	-	65,73,73	2.16	10 (15%)	76,113,113	1.35	12 (15%)
23	LMG	c	520	-	51,51,55	0.95	2 (3%)	59,59,63	1.04	4 (6%)
31	BCT	A	616	22	2,3,3	0.71	0	2,3,3	0.27	0
25	CLA	a	606	-	65,73,73	2.12	9 (13%)	76,113,113	1.35	10 (13%)
26	BCR	k	102	-	41,41,41	0.72	0	56,56,56	1.84	17 (30%)
25	CLA	b	615	-	65,73,73	2.16	10 (15%)	76,113,113	1.30	9 (11%)
26	BCR	C	522	-	41,41,41	0.66	0	56,56,56	2.07	15 (26%)
26	BCR	h	101	-	41,41,41	0.68	0	56,56,56	1.98	14 (25%)
25	CLA	C	504	-	65,73,73	2.12	9 (13%)	76,113,113	1.27	10 (13%)
23	LMG	a	603	-	51,51,55	0.94	2 (3%)	59,59,63	1.08	6 (10%)
25	CLA	b	616	-	65,73,73	2.16	10 (15%)	76,113,113	1.33	10 (13%)
25	CLA	C	501	-	65,73,73	2.10	8 (12%)	76,113,113	1.27	11 (14%)
29	LHG	a	615	-	48,48,48	0.93	2 (4%)	51,54,54	1.02	3 (5%)
25	CLA	C	507	-	65,73,73	2.14	10 (15%)	76,113,113	1.26	10 (13%)
35	HEM	E	102	6,5	41,50,50	1.39	4 (9%)	45,82,82	1.51	9 (20%)
25	CLA	C	505	-	65,73,73	2.16	10 (15%)	76,113,113	1.28	10 (13%)
23	LMG	B	620	-	51,51,55	0.95	2 (3%)	59,59,63	0.97	3 (5%)
30	SO4	V	202	-	4,4,4	0.14	0	6,6,6	0.10	0
33	DGD	c	516	-	63,63,67	0.88	2 (3%)	77,77,81	0.92	3 (3%)
29	LHG	L	102	-	48,48,48	0.93	2 (4%)	51,54,54	1.10	3 (5%)
25	CLA	C	503	-	65,73,73	2.13	10 (15%)	76,113,113	1.28	11 (14%)
25	CLA	B	610	-	65,73,73	2.16	9 (13%)	76,113,113	1.32	11 (14%)
26	BCR	C	515	-	41,41,41	0.71	0	56,56,56	1.83	14 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
36	HEC	v	201	16	32,50,50	1.81	3 (9%)	24,82,82	1.48	4 (16%)
25	CLA	D	405	-	65,73,73	2.12	9 (13%)	76,113,113	1.29	11 (14%)
23	LMG	A	612	-	51,51,55	0.93	2 (3%)	59,59,63	1.01	3 (5%)
25	CLA	c	511	3	65,73,73	2.13	10 (15%)	76,113,113	1.24	10 (13%)
23	LMG	A	603	-	51,51,55	0.94	2 (3%)	59,59,63	1.02	3 (5%)
26	BCR	a	611	-	41,41,41	0.69	0	56,56,56	1.80	11 (19%)
25	CLA	A	608	-	65,73,73	2.15	10 (15%)	76,113,113	1.29	10 (13%)
25	CLA	b	611	-	65,73,73	2.15	10 (15%)	76,113,113	1.29	11 (14%)
25	CLA	c	503	-	65,73,73	2.16	10 (15%)	76,113,113	1.29	10 (13%)
25	CLA	C	502	-	65,73,73	2.15	10 (15%)	76,113,113	1.27	11 (14%)
23	LMG	B	624	-	51,51,55	0.93	2 (3%)	59,59,63	0.97	3 (5%)
23	LMG	a	614	-	51,51,55	0.92	2 (3%)	59,59,63	1.04	3 (5%)
26	BCR	z	101	-	41,41,41	0.70	0	56,56,56	1.86	10 (17%)
33	DGD	h	102	-	63,63,67	0.87	2 (3%)	77,77,81	0.90	2 (2%)
25	CLA	b	606	-	65,73,73	2.19	10 (15%)	76,113,113	1.29	9 (11%)
25	CLA	D	404	-	65,73,73	2.19	10 (15%)	76,113,113	1.29	11 (14%)
34	PHO	a	609	-	51,69,69	0.72	2 (3%)	47,99,99	0.58	0
26	BCR	c	514	-	41,41,41	0.70	0	56,56,56	1.82	12 (21%)
25	CLA	c	501	-	65,73,73	2.13	10 (15%)	76,113,113	1.29	11 (14%)
27	PL9	d	405	-	55,55,55	0.61	1 (1%)	68,69,69	1.69	18 (26%)
26	BCR	K	101	-	41,41,41	0.73	0	56,56,56	1.79	14 (25%)
26	BCR	C	514	-	41,41,41	0.70	0	56,56,56	1.93	13 (23%)
30	SO4	o	301	-	4,4,4	0.14	0	6,6,6	0.05	0
25	CLA	B	611	-	65,73,73	2.13	9 (13%)	76,113,113	1.31	11 (14%)
26	BCR	d	404	-	41,41,41	0.72	0	56,56,56	2.04	14 (25%)
23	LMG	c	518	-	51,51,55	0.93	2 (3%)	59,59,63	0.97	3 (5%)
29	LHG	A	614	-	48,48,48	0.94	2 (4%)	51,54,54	1.01	2 (3%)
30	SO4	u	202	-	4,4,4	0.14	0	6,6,6	0.05	0
33	DGD	c	515	-	63,63,67	0.87	2 (3%)	77,77,81	0.95	4 (5%)
25	CLA	B	605	-	65,73,73	2.18	10 (15%)	76,113,113	1.32	10 (13%)
25	CLA	d	403	-	65,73,73	2.14	10 (15%)	76,113,113	1.24	10 (13%)
25	CLA	c	512	-	65,73,73	2.15	10 (15%)	76,113,113	1.24	10 (13%)
31	BCT	a	618	22	2,3,3	0.72	0	2,3,3	0.72	0
26	BCR	H	101	-	41,41,41	0.66	0	56,56,56	2.05	14 (25%)
26	BCR	c	521	-	41,41,41	0.66	0	56,56,56	2.06	12 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
27	PL9	A	610	-	55,55,55	0.62	1 (1%)	68,69,69	1.75	20 (29%)
33	DGD	H	102	-	63,63,67	0.89	2 (3%)	77,77,81	0.89	2 (2%)
29	LHG	E	101	-	41,41,48	1.01	2 (4%)	44,47,54	1.08	3 (6%)
26	BCR	B	619	-	41,41,41	0.74	0	56,56,56	1.94	15 (26%)
25	CLA	b	607	37	65,73,73	2.14	9 (13%)	76,113,113	1.30	11 (14%)
25	CLA	C	509	-	65,73,73	2.11	10 (15%)	76,113,113	1.26	11 (14%)
28	SQD	L	101	-	53,54,54	1.20	4 (7%)	62,65,65	3.49	8 (12%)
25	CLA	C	513	-	65,73,73	2.16	9 (13%)	76,113,113	1.30	11 (14%)
29	LHG	a	616	-	41,41,48	1.00	2 (4%)	44,47,54	1.09	3 (6%)
25	CLA	B	604	-	65,73,73	2.14	10 (15%)	76,113,113	1.28	12 (15%)
23	LMG	d	408	-	51,51,55	0.95	2 (3%)	59,59,63	0.97	3 (5%)
25	CLA	B	612	-	65,73,73	2.13	8 (12%)	76,113,113	1.27	11 (14%)
25	CLA	C	506	-	65,73,73	2.15	10 (15%)	76,113,113	1.28	11 (14%)
25	CLA	a	607	37	65,73,73	2.16	9 (13%)	76,113,113	1.35	11 (14%)
33	DGD	C	517	-	63,63,67	0.87	2 (3%)	77,77,81	0.95	3 (3%)
25	CLA	c	508	-	65,73,73	2.13	9 (13%)	76,113,113	1.31	11 (14%)
27	PL9	a	612	-	55,55,55	0.63	1 (1%)	68,69,69	1.67	19 (27%)
25	CLA	b	614	-	65,73,73	2.16	9 (13%)	76,113,113	1.34	10 (13%)
27	PL9	D	407	-	55,55,55	0.61	1 (1%)	68,69,69	1.68	17 (25%)
33	DGD	C	516	-	63,63,67	0.87	2 (3%)	77,77,81	0.95	4 (5%)
26	BCR	t	102	-	41,41,41	0.67	0	56,56,56	2.06	15 (26%)
30	SO4	u	201	-	4,4,4	0.14	0	6,6,6	0.05	0
36	HEC	V	201	16	32,50,50	1.82	3 (9%)	24,82,82	1.50	4 (16%)
25	CLA	B	609	-	65,73,73	2.18	10 (15%)	76,113,113	1.29	12 (15%)
25	CLA	C	511	3	65,73,73	2.13	10 (15%)	76,113,113	1.25	11 (14%)
25	CLA	c	513	-	65,73,73	2.16	9 (13%)	76,113,113	1.31	11 (14%)
25	CLA	A	607	-	65,73,73	2.15	9 (13%)	76,113,113	1.29	11 (14%)
23	LMG	b	620	-	51,51,55	0.94	2 (3%)	59,59,63	1.03	4 (6%)
25	CLA	b	610	37	65,73,73	2.16	9 (13%)	76,113,113	1.30	11 (14%)
23	LMG	b	624	-	51,51,55	0.94	2 (3%)	59,59,63	1.02	3 (5%)
25	CLA	b	604	-	65,73,73	2.15	10 (15%)	76,113,113	1.27	11 (14%)
25	CLA	c	510	-	65,73,73	2.11	8 (12%)	76,113,113	1.31	11 (14%)
25	CLA	b	608	-	65,73,73	2.17	9 (13%)	76,113,113	1.30	11 (14%)
34	PHO	d	402	-	51,69,69	0.66	2 (3%)	47,99,99	0.69	1 (2%)
28	SQD	L	103	-	53,54,54	1.19	4 (7%)	62,65,65	1.16	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	SQD	a	613	-	53,54,54	1.18	4 (7%)	62,65,65	1.21	8 (12%)
25	CLA	d	401	-	65,73,73	2.16	9 (13%)	76,113,113	1.30	11 (14%)
25	CLA	b	602	-	65,73,73	2.18	10 (15%)	76,113,113	1.37	11 (14%)
25	CLA	a	610	-	65,73,73	2.18	10 (15%)	76,113,113	1.30	11 (14%)
25	CLA	a	608	-	65,73,73	2.15	9 (13%)	76,113,113	1.30	12 (15%)
26	BCR	b	617	-	41,41,41	0.68	0	56,56,56	2.02	15 (26%)
29	LHG	A	613	-	48,48,48	0.93	2 (4%)	51,54,54	1.00	3 (5%)
30	SO4	d	410	-	4,4,4	0.13	0	6,6,6	0.05	0
25	CLA	C	508	-	65,73,73	2.13	9 (13%)	76,113,113	1.32	10 (13%)
26	BCR	A	609	-	41,41,41	0.69	0	56,56,56	1.85	12 (21%)
25	CLA	B	615	-	65,73,73	2.12	10 (15%)	76,113,113	1.30	9 (11%)
25	CLA	B	613	-	65,73,73	2.12	9 (13%)	76,113,113	1.28	11 (14%)
26	BCR	b	618	-	41,41,41	0.66	0	56,56,56	1.96	15 (26%)
25	CLA	c	504	-	65,73,73	2.13	9 (13%)	76,113,113	1.28	11 (14%)
25	CLA	b	605	-	65,73,73	2.18	10 (15%)	76,113,113	1.31	10 (13%)
23	LMG	C	519	-	51,51,55	0.95	2 (3%)	59,59,63	0.98	3 (5%)
30	SO4	O	302	-	4,4,4	0.14	0	6,6,6	0.04	0
30	SO4	U	201	-	4,4,4	0.14	0	6,6,6	0.05	0
25	CLA	c	507	-	65,73,73	2.15	10 (15%)	76,113,113	1.26	10 (13%)
23	LMG	D	409	-	51,51,55	0.95	2 (3%)	59,59,63	0.98	3 (5%)
25	CLA	c	502	-	65,73,73	2.18	10 (15%)	76,113,113	1.27	11 (14%)
21	OEX	a	601	3,37,1	0,15,15	-	-	-		
25	CLA	B	603	-	65,73,73	2.15	9 (13%)	76,113,113	1.34	11 (14%)
25	CLA	b	601	-	65,73,73	2.16	10 (15%)	76,113,113	1.26	10 (13%)
30	SO4	a	617	-	4,4,4	0.14	0	6,6,6	0.05	0
25	CLA	B	606	-	65,73,73	2.17	10 (15%)	76,113,113	1.31	11 (14%)
23	LMG	C	521	-	51,51,55	0.97	3 (5%)	59,59,63	1.10	4 (6%)
26	BCR	b	619	-	41,41,41	0.72	0	56,56,56	1.93	13 (23%)
25	CLA	C	512	-	65,73,73	2.14	10 (15%)	76,113,113	1.25	10 (13%)
25	CLA	b	613	-	65,73,73	2.11	8 (12%)	76,113,113	1.26	11 (14%)
29	LHG	l	101	-	48,48,48	0.94	2 (4%)	51,54,54	1.08	3 (5%)
25	CLA	c	506	-	65,73,73	2.16	10 (15%)	76,113,113	1.30	11 (14%)
25	CLA	b	603	-	65,73,73	2.19	9 (13%)	76,113,113	1.29	11 (14%)
25	CLA	B	616	-	65,73,73	2.14	10 (15%)	76,113,113	1.39	11 (14%)
25	CLA	B	601	-	65,73,73	2.17	10 (15%)	76,113,113	1.27	10 (13%)
25	CLA	B	614	-	65,73,73	2.17	10 (15%)	76,113,113	1.33	11 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
30	SO4	A	615	-	4,4,4	0.14	0	6,6,6	0.05	0
25	CLA	D	403	37	65,73,73	2.15	10 (15%)	76,113,113	1.35	11 (14%)
28	SQD	f	101	-	42,43,54	1.33	4 (9%)	51,54,65	1.31	7 (13%)
25	CLA	b	612	-	65,73,73	2.13	8 (12%)	76,113,113	1.30	11 (14%)
33	DGD	c	517	-	63,63,67	0.87	2 (3%)	77,77,81	0.89	3 (3%)
33	DGD	C	518	-	63,63,67	0.88	2 (3%)	77,77,81	0.90	3 (3%)
29	LHG	d	406	-	48,48,48	0.94	2 (4%)	51,54,54	1.01	3 (5%)
26	BCR	T	101	-	41,41,41	0.69	0	56,56,56	2.06	13 (23%)
25	CLA	B	608	-	65,73,73	2.13	9 (13%)	76,113,113	1.29	11 (14%)
28	SQD	A	611	-	53,54,54	1.17	4 (7%)	62,65,65	1.23	6 (9%)

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
25	CLA	b	609	-	1/1/15/20	2/37/115/115	-
29	LHG	D	408	-	-	6/53/53/53	-
28	SQD	F	101	-	-	6/38/58/69	0/1/1/1
35	HEM	e	101	6,5	-	6/12/54/54	-
25	CLA	C	510	-	1/1/15/20	4/37/115/115	-
26	BCR	B	617	-	-	2/29/63/63	0/2/2/2
29	LHG	d	407	-	-	14/53/53/53	-
26	BCR	D	406	-	-	6/29/63/63	0/2/2/2
25	CLA	c	509	-	1/1/15/20	3/37/115/115	-
25	CLA	c	505	-	1/1/15/20	1/37/115/115	-
25	CLA	A	606	-	1/1/15/20	1/37/115/115	-
26	BCR	B	618	-	-	0/29/63/63	0/2/2/2
25	CLA	B	607	37	1/1/15/20	6/37/115/115	-
34	PHO	D	402	-	-	2/37/103/103	0/5/6/6
34	PHO	D	401	-	-	6/37/103/103	0/5/6/6
25	CLA	B	602	-	1/1/15/20	9/37/115/115	-
23	LMG	c	520	-	-	13/46/66/70	0/1/1/1
25	CLA	a	606	-	1/1/15/20	1/37/115/115	-
26	BCR	k	102	-	-	4/29/63/63	0/2/2/2
25	CLA	b	615	-	1/1/15/20	2/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	BCR	C	522	-	-	0/29/63/63	0/2/2/2
26	BCR	h	101	-	-	4/29/63/63	0/2/2/2
25	CLA	C	504	-	1/1/15/20	3/37/115/115	-
23	LMG	a	603	-	-	11/46/66/70	0/1/1/1
25	CLA	b	616	-	1/1/15/20	7/37/115/115	-
25	CLA	C	501	-	1/1/15/20	0/37/115/115	-
29	LHG	a	615	-	-	8/53/53/53	-
25	CLA	C	507	-	1/1/15/20	4/37/115/115	-
35	HEM	E	102	6,5	-	6/12/54/54	-
25	CLA	C	505	-	1/1/15/20	1/37/115/115	-
23	LMG	B	620	-	-	4/46/66/70	0/1/1/1
33	DGD	c	516	-	-	8/51/91/95	0/2/2/2
29	LHG	L	102	-	-	15/53/53/53	-
25	CLA	C	503	-	1/1/15/20	2/37/115/115	-
25	CLA	B	610	-	1/1/15/20	2/37/115/115	-
26	BCR	C	515	-	-	0/29/63/63	0/2/2/2
36	HEC	v	201	16	-	1/10/54/54	-
25	CLA	D	405	-	1/1/15/20	3/37/115/115	-
23	LMG	A	612	-	-	11/46/66/70	0/1/1/1
25	CLA	c	511	3	1/1/15/20	0/37/115/115	-
23	LMG	A	603	-	-	15/46/66/70	0/1/1/1
26	BCR	a	611	-	-	0/29/63/63	0/2/2/2
25	CLA	A	608	-	1/1/15/20	2/37/115/115	-
25	CLA	b	611	-	1/1/15/20	0/37/115/115	-
25	CLA	c	503	-	1/1/15/20	3/37/115/115	-
25	CLA	C	502	-	1/1/15/20	2/37/115/115	-
23	LMG	B	624	-	-	10/46/66/70	0/1/1/1
23	LMG	a	614	-	-	5/46/66/70	0/1/1/1
26	BCR	z	101	-	-	2/29/63/63	0/2/2/2
33	DGD	h	102	-	-	6/51/91/95	0/2/2/2
25	CLA	b	606	-	1/1/15/20	4/37/115/115	-
25	CLA	D	404	-	1/1/15/20	2/37/115/115	-
34	PHO	a	609	-	-	7/37/103/103	0/5/6/6
26	BCR	c	514	-	-	1/29/63/63	0/2/2/2
25	CLA	c	501	-	1/1/15/20	4/37/115/115	-
27	PL9	d	405	-	-	8/53/73/73	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	BCR	K	101	-	-	2/29/63/63	0/2/2/2
26	BCR	C	514	-	-	2/29/63/63	0/2/2/2
25	CLA	B	611	-	1/1/15/20	1/37/115/115	-
26	BCR	d	404	-	-	6/29/63/63	0/2/2/2
23	LMG	c	518	-	-	8/46/66/70	0/1/1/1
29	LHG	A	614	-	-	5/53/53/53	-
33	DGD	c	515	-	-	10/51/91/95	0/2/2/2
25	CLA	B	605	-	1/1/15/20	7/37/115/115	-
25	CLA	d	403	-	1/1/15/20	1/37/115/115	-
25	CLA	c	512	-	1/1/15/20	5/37/115/115	-
26	BCR	H	101	-	-	2/29/63/63	0/2/2/2
26	BCR	c	521	-	-	0/29/63/63	0/2/2/2
27	PL9	A	610	-	-	8/53/73/73	0/1/1/1
33	DGD	H	102	-	-	5/51/91/95	0/2/2/2
29	LHG	E	101	-	-	10/46/46/53	-
26	BCR	B	619	-	-	4/29/63/63	0/2/2/2
25	CLA	b	607	37	1/1/15/20	6/37/115/115	-
25	CLA	C	509	-	1/1/15/20	2/37/115/115	-
28	SQD	L	101	-	-	17/49/69/69	0/1/1/1
25	CLA	C	513	-	1/1/15/20	3/37/115/115	-
29	LHG	a	616	-	-	7/46/46/53	-
25	CLA	B	604	-	1/1/15/20	1/37/115/115	-
23	LMG	d	408	-	-	3/46/66/70	0/1/1/1
25	CLA	B	612	-	1/1/15/20	1/37/115/115	-
25	CLA	C	506	-	1/1/15/20	9/37/115/115	-
25	CLA	a	607	37	1/1/15/20	3/37/115/115	-
33	DGD	C	517	-	-	13/51/91/95	0/2/2/2
25	CLA	c	508	-	1/1/15/20	2/37/115/115	-
27	PL9	a	612	-	-	9/53/73/73	0/1/1/1
25	CLA	b	614	-	1/1/15/20	12/37/115/115	-
27	PL9	D	407	-	-	8/53/73/73	0/1/1/1
33	DGD	C	516	-	-	8/51/91/95	0/2/2/2
26	BCR	t	102	-	-	8/29/63/63	0/2/2/2
36	HEC	V	201	16	-	1/10/54/54	-
25	CLA	B	609	-	1/1/15/20	3/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	C	511	3	1/1/15/20	0/37/115/115	-
25	CLA	c	513	-	1/1/15/20	2/37/115/115	-
25	CLA	A	607	-	1/1/15/20	3/37/115/115	-
25	CLA	b	610	37	1/1/15/20	3/37/115/115	-
23	LMG	b	620	-	-	4/46/66/70	0/1/1/1
23	LMG	b	624	-	-	9/46/66/70	0/1/1/1
25	CLA	b	604	-	1/1/15/20	3/37/115/115	-
25	CLA	c	510	-	1/1/15/20	5/37/115/115	-
25	CLA	b	608	-	1/1/15/20	1/37/115/115	-
34	PHO	d	402	-	-	1/37/103/103	0/5/6/6
28	SQD	L	103	-	-	18/49/69/69	0/1/1/1
28	SQD	a	613	-	-	7/49/69/69	0/1/1/1
25	CLA	d	401	-	1/1/15/20	0/37/115/115	-
25	CLA	b	602	-	1/1/15/20	2/37/115/115	-
25	CLA	a	610	-	1/1/15/20	4/37/115/115	-
25	CLA	a	608	-	1/1/15/20	2/37/115/115	-
26	BCR	b	617	-	-	2/29/63/63	0/2/2/2
29	LHG	A	613	-	-	7/53/53/53	-
25	CLA	C	508	-	1/1/15/20	2/37/115/115	-
26	BCR	A	609	-	-	1/29/63/63	0/2/2/2
25	CLA	B	615	-	1/1/15/20	5/37/115/115	-
25	CLA	B	613	-	1/1/15/20	2/37/115/115	-
26	BCR	b	618	-	-	0/29/63/63	0/2/2/2
25	CLA	c	504	-	1/1/15/20	2/37/115/115	-
25	CLA	b	605	-	1/1/15/20	2/37/115/115	-
23	LMG	C	519	-	-	9/46/66/70	0/1/1/1
25	CLA	c	507	-	1/1/15/20	4/37/115/115	-
25	CLA	c	502	-	1/1/15/20	1/37/115/115	-
23	LMG	D	409	-	-	3/46/66/70	0/1/1/1
25	CLA	B	603	-	1/1/15/20	2/37/115/115	-
25	CLA	b	601	-	1/1/15/20	7/37/115/115	-
25	CLA	B	606	-	1/1/15/20	3/37/115/115	-
23	LMG	C	521	-	-	17/46/66/70	0/1/1/1
26	BCR	b	619	-	-	2/29/63/63	0/2/2/2
25	CLA	C	512	-	1/1/15/20	3/37/115/115	-
25	CLA	b	613	-	1/1/15/20	1/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	LHG	l	101	-	-	17/53/53/53	-
25	CLA	c	506	-	1/1/15/20	3/37/115/115	-
25	CLA	b	603	-	1/1/15/20	3/37/115/115	-
25	CLA	B	616	-	1/1/15/20	3/37/115/115	-
25	CLA	B	601	-	1/1/15/20	8/37/115/115	-
25	CLA	B	614	-	1/1/15/20	10/37/115/115	-
25	CLA	D	403	37	1/1/15/20	3/37/115/115	-
28	SQD	f	101	-	-	11/38/58/69	0/1/1/1
25	CLA	b	612	-	1/1/15/20	1/37/115/115	-
33	DGD	c	517	-	-	1/51/91/95	0/2/2/2
33	DGD	C	518	-	-	4/51/91/95	0/2/2/2
29	LHG	d	406	-	-	5/53/53/53	-
26	BCR	T	101	-	-	6/29/63/63	0/2/2/2
25	CLA	B	608	-	1/1/15/20	1/37/115/115	-
28	SQD	A	611	-	-	5/49/69/69	0/1/1/1

All (779) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D	404	CLA	C4B-NB	12.18	1.46	1.35
25	B	609	CLA	C4B-NB	12.14	1.46	1.35
25	b	609	CLA	C4B-NB	12.12	1.46	1.35
25	c	503	CLA	C4B-NB	12.11	1.46	1.35
25	b	603	CLA	C4B-NB	12.05	1.46	1.35
25	B	614	CLA	C4B-NB	12.03	1.45	1.35
25	b	605	CLA	C4B-NB	11.97	1.45	1.35
25	b	606	CLA	C4B-NB	11.97	1.45	1.35
25	c	502	CLA	C4B-NB	11.97	1.45	1.35
25	b	615	CLA	C4B-NB	11.96	1.45	1.35
25	a	610	CLA	C4B-NB	11.91	1.45	1.35
25	B	610	CLA	C4B-NB	11.91	1.45	1.35
25	b	604	CLA	C4B-NB	11.90	1.45	1.35
25	C	503	CLA	C4B-NB	11.90	1.45	1.35
25	B	605	CLA	C4B-NB	11.89	1.45	1.35
25	c	506	CLA	C4B-NB	11.88	1.45	1.35
25	b	614	CLA	C4B-NB	11.86	1.45	1.35
25	b	610	CLA	C4B-NB	11.85	1.45	1.35
25	C	506	CLA	C4B-NB	11.85	1.45	1.35
25	c	505	CLA	C4B-NB	11.84	1.45	1.35
25	C	513	CLA	C4B-NB	11.84	1.45	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	601	CLA	C4B-NB	11.83	1.45	1.35
25	B	611	CLA	C4B-NB	11.83	1.45	1.35
25	d	401	CLA	C4B-NB	11.83	1.45	1.35
25	C	512	CLA	C4B-NB	11.82	1.45	1.35
25	B	606	CLA	C4B-NB	11.82	1.45	1.35
25	c	508	CLA	C4B-NB	11.81	1.45	1.35
25	B	601	CLA	C4B-NB	11.81	1.45	1.35
25	b	611	CLA	C4B-NB	11.79	1.45	1.35
25	c	512	CLA	C4B-NB	11.79	1.45	1.35
25	b	608	CLA	C4B-NB	11.77	1.45	1.35
25	b	616	CLA	C4B-NB	11.77	1.45	1.35
25	C	502	CLA	C4B-NB	11.76	1.45	1.35
25	C	505	CLA	C4B-NB	11.75	1.45	1.35
25	B	604	CLA	C4B-NB	11.74	1.45	1.35
25	b	607	CLA	C4B-NB	11.73	1.45	1.35
25	c	507	CLA	C4B-NB	11.73	1.45	1.35
25	B	603	CLA	C4B-NB	11.73	1.45	1.35
25	A	608	CLA	C4B-NB	11.72	1.45	1.35
25	C	508	CLA	C4B-NB	11.71	1.45	1.35
25	c	501	CLA	C4B-NB	11.71	1.45	1.35
25	B	612	CLA	C4B-NB	11.70	1.45	1.35
25	A	607	CLA	C4B-NB	11.70	1.45	1.35
25	c	511	CLA	C4B-NB	11.70	1.45	1.35
25	C	511	CLA	C4B-NB	11.69	1.45	1.35
25	d	403	CLA	C4B-NB	11.69	1.45	1.35
25	B	607	CLA	C4B-NB	11.67	1.45	1.35
25	B	616	CLA	C4B-NB	11.67	1.45	1.35
25	B	608	CLA	C4B-NB	11.67	1.45	1.35
25	B	602	CLA	C4B-NB	11.67	1.45	1.35
25	D	405	CLA	C4B-NB	11.66	1.45	1.35
25	C	507	CLA	C4B-NB	11.63	1.45	1.35
25	b	612	CLA	C4B-NB	11.63	1.45	1.35
25	b	613	CLA	C4B-NB	11.62	1.45	1.35
25	c	513	CLA	C4B-NB	11.62	1.45	1.35
25	D	403	CLA	C4B-NB	11.61	1.45	1.35
25	b	602	CLA	C4B-NB	11.60	1.45	1.35
25	B	615	CLA	C4B-NB	11.58	1.45	1.35
25	c	504	CLA	C4B-NB	11.57	1.45	1.35
25	B	613	CLA	C4B-NB	11.56	1.45	1.35
25	C	510	CLA	C4B-NB	11.55	1.45	1.35
25	c	509	CLA	C4B-NB	11.51	1.45	1.35
25	a	607	CLA	C4B-NB	11.49	1.45	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	510	CLA	C4B-NB	11.47	1.45	1.35
25	A	606	CLA	C4B-NB	11.45	1.45	1.35
25	C	504	CLA	C4B-NB	11.45	1.45	1.35
25	a	608	CLA	C4B-NB	11.43	1.45	1.35
25	C	509	CLA	C4B-NB	11.42	1.45	1.35
25	a	606	CLA	C4B-NB	11.36	1.45	1.35
25	C	501	CLA	C4B-NB	11.23	1.45	1.35
36	V	201	HEC	C3C-C2C	-7.14	1.33	1.40
36	v	201	HEC	C3C-C2C	-7.02	1.33	1.40
25	B	605	CLA	C1B-NB	6.65	1.41	1.35
25	b	606	CLA	C1B-NB	6.59	1.41	1.35
25	b	602	CLA	C1B-NB	6.58	1.41	1.35
25	B	602	CLA	C1B-NB	6.50	1.41	1.35
25	a	606	CLA	C1B-NB	6.45	1.41	1.35
25	c	513	CLA	C1B-NB	6.44	1.41	1.35
25	a	610	CLA	C1B-NB	6.39	1.40	1.35
25	D	404	CLA	C1B-NB	6.37	1.40	1.35
25	a	608	CLA	MG-ND	-6.36	1.93	2.05
25	a	608	CLA	C1B-NB	6.35	1.40	1.35
25	b	614	CLA	C1B-NB	6.35	1.40	1.35
25	B	606	CLA	C1B-NB	6.34	1.40	1.35
25	C	508	CLA	C1B-NB	6.32	1.40	1.35
25	A	606	CLA	C1B-NB	6.31	1.40	1.35
25	b	605	CLA	C1B-NB	6.29	1.40	1.35
25	C	513	CLA	C1B-NB	6.29	1.40	1.35
25	a	607	CLA	C1B-NB	6.29	1.40	1.35
25	b	603	CLA	C1B-NB	6.29	1.40	1.35
25	B	603	CLA	C1B-NB	6.28	1.40	1.35
25	C	505	CLA	C1B-NB	6.27	1.40	1.35
25	b	607	CLA	C1B-NB	6.27	1.40	1.35
25	C	510	CLA	MG-ND	-6.27	1.93	2.05
25	B	614	CLA	C1B-NB	6.27	1.40	1.35
25	C	502	CLA	MG-ND	-6.27	1.93	2.05
25	C	501	CLA	MG-ND	-6.26	1.93	2.05
25	b	616	CLA	C1B-NB	6.25	1.40	1.35
25	C	501	CLA	C1B-NB	6.23	1.40	1.35
25	b	608	CLA	C1B-NB	6.23	1.40	1.35
25	C	504	CLA	MG-ND	-6.23	1.93	2.05
25	c	508	CLA	C1B-NB	6.22	1.40	1.35
25	b	613	CLA	MG-ND	-6.21	1.93	2.05
25	c	502	CLA	MG-ND	-6.21	1.93	2.05
25	c	513	CLA	MG-ND	-6.21	1.93	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	613	CLA	MG-ND	-6.20	1.93	2.05
25	b	608	CLA	MG-ND	-6.19	1.93	2.05
25	D	403	CLA	C1B-NB	6.18	1.40	1.35
25	d	401	CLA	C1B-NB	6.18	1.40	1.35
25	B	607	CLA	MG-ND	-6.17	1.93	2.05
25	B	610	CLA	MG-ND	-6.17	1.93	2.05
25	C	513	CLA	MG-ND	-6.17	1.93	2.05
25	B	611	CLA	MG-ND	-6.16	1.93	2.05
25	B	601	CLA	C1B-NB	6.13	1.40	1.35
25	b	612	CLA	MG-ND	-6.12	1.93	2.05
25	C	509	CLA	MG-ND	-6.12	1.93	2.05
25	A	607	CLA	MG-ND	-6.12	1.93	2.05
25	c	501	CLA	MG-ND	-6.12	1.93	2.05
25	b	611	CLA	C1B-NB	6.12	1.40	1.35
25	b	604	CLA	MG-ND	-6.11	1.93	2.05
25	B	607	CLA	C1B-NB	6.11	1.40	1.35
25	c	503	CLA	C1B-NB	6.11	1.40	1.35
25	B	616	CLA	C1B-NB	6.11	1.40	1.35
25	C	502	CLA	C1B-NB	6.11	1.40	1.35
25	B	606	CLA	MG-ND	-6.10	1.93	2.05
25	B	601	CLA	MG-ND	-6.10	1.93	2.05
25	a	607	CLA	MG-ND	-6.10	1.93	2.05
25	A	607	CLA	C1B-NB	6.10	1.40	1.35
25	c	504	CLA	MG-ND	-6.10	1.93	2.05
25	C	508	CLA	MG-ND	-6.10	1.93	2.05
25	C	511	CLA	MG-ND	-6.10	1.93	2.05
25	B	604	CLA	MG-ND	-6.09	1.93	2.05
25	c	509	CLA	MG-ND	-6.09	1.93	2.05
25	c	511	CLA	MG-ND	-6.09	1.93	2.05
25	c	510	CLA	MG-ND	-6.09	1.93	2.05
25	c	502	CLA	C1B-NB	6.08	1.40	1.35
25	c	504	CLA	C1B-NB	6.08	1.40	1.35
25	D	403	CLA	MG-ND	-6.07	1.93	2.05
25	b	601	CLA	C1B-NB	6.07	1.40	1.35
25	b	609	CLA	C1B-NB	6.07	1.40	1.35
25	b	605	CLA	MG-ND	-6.07	1.93	2.05
25	c	501	CLA	C1B-NB	6.06	1.40	1.35
25	b	601	CLA	MG-ND	-6.06	1.93	2.05
25	b	610	CLA	C1B-NB	6.06	1.40	1.35
25	B	609	CLA	C1B-NB	6.05	1.40	1.35
25	b	603	CLA	MG-ND	-6.05	1.93	2.05
25	B	612	CLA	MG-ND	-6.05	1.93	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	506	CLA	MG-ND	-6.04	1.93	2.05
25	c	505	CLA	MG-ND	-6.04	1.93	2.05
25	A	608	CLA	C1B-NB	6.04	1.40	1.35
25	B	603	CLA	MG-ND	-6.04	1.93	2.05
25	b	606	CLA	MG-ND	-6.04	1.93	2.05
25	c	505	CLA	C1B-NB	6.03	1.40	1.35
25	a	606	CLA	MG-ND	-6.03	1.93	2.05
25	c	512	CLA	MG-ND	-6.03	1.93	2.05
25	d	401	CLA	MG-ND	-6.03	1.93	2.05
25	B	608	CLA	C1B-NB	6.02	1.40	1.35
25	d	403	CLA	MG-ND	-6.02	1.93	2.05
25	c	506	CLA	C1B-NB	6.02	1.40	1.35
25	b	607	CLA	MG-ND	-6.02	1.93	2.05
25	B	610	CLA	C1B-NB	6.01	1.40	1.35
25	b	610	CLA	MG-ND	-6.01	1.93	2.05
25	d	403	CLA	C1B-NB	6.01	1.40	1.35
25	C	506	CLA	MG-ND	-6.01	1.93	2.05
25	b	602	CLA	MG-ND	-6.00	1.93	2.05
25	b	611	CLA	MG-ND	-6.00	1.93	2.05
25	C	503	CLA	MG-ND	-5.98	1.93	2.05
25	B	608	CLA	MG-ND	-5.98	1.93	2.05
25	c	507	CLA	MG-ND	-5.98	1.93	2.05
25	b	609	CLA	MG-ND	-5.97	1.94	2.05
25	B	609	CLA	MG-ND	-5.97	1.94	2.05
25	C	507	CLA	MG-ND	-5.97	1.94	2.05
25	A	608	CLA	MG-ND	-5.96	1.94	2.05
25	c	509	CLA	C1B-NB	5.95	1.40	1.35
25	C	512	CLA	C1B-NB	5.95	1.40	1.35
25	c	512	CLA	C1B-NB	5.95	1.40	1.35
25	B	605	CLA	MG-ND	-5.94	1.94	2.05
25	b	616	CLA	MG-ND	-5.94	1.94	2.05
25	B	612	CLA	C1B-NB	5.94	1.40	1.35
25	C	509	CLA	C1B-NB	5.94	1.40	1.35
25	c	508	CLA	MG-ND	-5.92	1.94	2.05
25	D	405	CLA	C1B-NB	5.92	1.40	1.35
25	A	606	CLA	MG-ND	-5.92	1.94	2.05
25	D	404	CLA	MG-ND	-5.91	1.94	2.05
25	C	503	CLA	C1B-NB	5.91	1.40	1.35
25	B	616	CLA	MG-ND	-5.91	1.94	2.05
25	B	614	CLA	MG-ND	-5.91	1.94	2.05
25	C	511	CLA	C1B-NB	5.90	1.40	1.35
25	b	614	CLA	MG-ND	-5.90	1.94	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	505	CLA	MG-ND	-5.89	1.94	2.05
25	C	512	CLA	MG-ND	-5.89	1.94	2.05
25	C	506	CLA	C1B-NB	5.89	1.40	1.35
25	c	510	CLA	C1B-NB	5.87	1.40	1.35
25	B	613	CLA	C1B-NB	5.86	1.40	1.35
25	D	405	CLA	MG-ND	-5.86	1.94	2.05
25	C	507	CLA	C1B-NB	5.86	1.40	1.35
25	b	615	CLA	MG-ND	-5.86	1.94	2.05
25	C	504	CLA	C1B-NB	5.86	1.40	1.35
25	b	615	CLA	C1B-NB	5.86	1.40	1.35
25	c	503	CLA	MG-ND	-5.85	1.94	2.05
25	B	615	CLA	C1B-NB	5.85	1.40	1.35
25	a	610	CLA	MG-ND	-5.84	1.94	2.05
25	b	612	CLA	C1B-NB	5.80	1.40	1.35
25	B	604	CLA	C1B-NB	5.79	1.40	1.35
25	C	510	CLA	C1B-NB	5.79	1.40	1.35
25	B	611	CLA	C1B-NB	5.79	1.40	1.35
25	c	511	CLA	C1B-NB	5.79	1.40	1.35
25	c	507	CLA	C1B-NB	5.78	1.40	1.35
25	B	602	CLA	MG-ND	-5.74	1.94	2.05
25	B	615	CLA	MG-ND	-5.71	1.94	2.05
25	b	604	CLA	C1B-NB	5.71	1.40	1.35
25	b	613	CLA	C1B-NB	5.65	1.40	1.35
25	b	604	CLA	C4D-ND	5.56	1.45	1.37
25	B	604	CLA	C4D-ND	5.54	1.45	1.37
25	C	507	CLA	C4D-ND	5.43	1.45	1.37
25	c	507	CLA	C4D-ND	5.40	1.45	1.37
25	c	505	CLA	C4D-ND	5.38	1.45	1.37
25	C	512	CLA	C4D-ND	5.38	1.45	1.37
25	B	612	CLA	C4D-ND	5.36	1.45	1.37
25	b	603	CLA	C4D-ND	5.35	1.45	1.37
25	B	601	CLA	C4D-ND	5.35	1.45	1.37
25	c	512	CLA	C4D-ND	5.33	1.45	1.37
25	b	612	CLA	C4D-ND	5.32	1.44	1.37
25	b	613	CLA	C4D-ND	5.30	1.44	1.37
25	b	614	CLA	C4D-ND	5.28	1.44	1.37
25	C	511	CLA	C4D-ND	5.27	1.44	1.37
25	C	506	CLA	C4D-ND	5.27	1.44	1.37
25	b	615	CLA	C4D-ND	5.27	1.44	1.37
25	B	607	CLA	C4D-ND	5.26	1.44	1.37
25	c	511	CLA	C4D-ND	5.26	1.44	1.37
25	b	616	CLA	C4D-ND	5.26	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	610	CLA	C4D-ND	5.25	1.44	1.37
25	a	607	CLA	C4D-ND	5.25	1.44	1.37
25	C	505	CLA	C4D-ND	5.24	1.44	1.37
25	b	601	CLA	C4D-ND	5.23	1.44	1.37
25	B	603	CLA	C4D-ND	5.22	1.44	1.37
25	d	403	CLA	C4D-ND	5.22	1.44	1.37
25	B	615	CLA	C4D-ND	5.21	1.44	1.37
25	B	613	CLA	C4D-ND	5.21	1.44	1.37
25	b	607	CLA	C4D-ND	5.21	1.44	1.37
25	B	616	CLA	C4D-ND	5.21	1.44	1.37
25	c	509	CLA	C4D-ND	5.21	1.44	1.37
25	b	611	CLA	C4D-ND	5.20	1.44	1.37
25	D	404	CLA	C4D-ND	5.19	1.44	1.37
25	b	606	CLA	C4D-ND	5.19	1.44	1.37
25	C	509	CLA	C4D-ND	5.18	1.44	1.37
25	A	608	CLA	C4D-ND	5.18	1.44	1.37
25	c	510	CLA	C4D-ND	5.18	1.44	1.37
25	a	606	CLA	C4D-ND	5.17	1.44	1.37
25	b	602	CLA	C4D-ND	5.17	1.44	1.37
25	B	614	CLA	C4D-ND	5.17	1.44	1.37
25	b	608	CLA	C4D-ND	5.16	1.44	1.37
25	c	506	CLA	C4D-ND	5.15	1.44	1.37
25	D	403	CLA	C4D-ND	5.15	1.44	1.37
25	c	502	CLA	C4D-ND	5.14	1.44	1.37
25	B	606	CLA	C4D-ND	5.13	1.44	1.37
25	B	608	CLA	C4D-ND	5.13	1.44	1.37
25	c	501	CLA	C4D-ND	5.13	1.44	1.37
25	d	401	CLA	C4D-ND	5.12	1.44	1.37
25	C	510	CLA	C4D-ND	5.11	1.44	1.37
25	C	503	CLA	C4D-ND	5.10	1.44	1.37
25	c	513	CLA	C4D-ND	5.09	1.44	1.37
25	B	609	CLA	C4D-ND	5.09	1.44	1.37
25	b	605	CLA	C4D-ND	5.09	1.44	1.37
25	c	503	CLA	C4D-ND	5.09	1.44	1.37
25	a	608	CLA	C4D-ND	5.08	1.44	1.37
35	e	101	HEM	C3C-C2C	-5.07	1.33	1.40
25	b	609	CLA	C4D-ND	5.07	1.44	1.37
25	C	504	CLA	C4D-ND	5.07	1.44	1.37
25	b	610	CLA	C4D-ND	5.07	1.44	1.37
25	C	513	CLA	C4D-ND	5.06	1.44	1.37
25	C	501	CLA	C4D-ND	5.05	1.44	1.37
25	B	602	CLA	C4D-ND	5.04	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	504	CLA	C4D-ND	5.04	1.44	1.37
25	A	606	CLA	C4D-ND	5.03	1.44	1.37
28	L	101	SQD	O8-S	5.02	1.65	1.47
25	A	607	CLA	C4D-ND	5.01	1.44	1.37
25	D	405	CLA	C4D-ND	4.99	1.44	1.37
25	B	611	CLA	C4D-ND	4.98	1.44	1.37
25	B	605	CLA	C4D-ND	4.98	1.44	1.37
25	B	610	CLA	C4D-ND	4.94	1.44	1.37
25	C	502	CLA	C4D-ND	4.89	1.44	1.37
35	E	102	HEM	C3C-C2C	-4.88	1.33	1.40
25	c	508	CLA	C4D-ND	4.85	1.44	1.37
25	C	508	CLA	C4D-ND	4.69	1.44	1.37
28	a	613	SQD	O8-S	4.62	1.64	1.47
28	L	103	SQD	O8-S	4.61	1.63	1.47
28	f	101	SQD	O8-S	4.61	1.63	1.47
28	A	611	SQD	O8-S	4.59	1.63	1.47
28	F	101	SQD	O8-S	4.55	1.63	1.47
36	v	201	HEC	C2B-C3B	-4.45	1.36	1.40
36	V	201	HEC	C2B-C3B	-4.37	1.36	1.40
28	f	101	SQD	O48-C23	4.33	1.46	1.33
23	C	519	LMG	O8-C28	4.32	1.46	1.33
23	D	409	LMG	O8-C28	4.32	1.46	1.33
23	a	603	LMG	O8-C28	4.32	1.46	1.33
23	d	408	LMG	O8-C28	4.31	1.45	1.33
29	l	101	LHG	O8-C23	4.30	1.45	1.33
23	c	520	LMG	O8-C28	4.29	1.45	1.33
23	A	603	LMG	O8-C28	4.29	1.45	1.33
23	B	620	LMG	O8-C28	4.28	1.45	1.33
23	C	521	LMG	O8-C28	4.28	1.45	1.33
23	c	518	LMG	O8-C28	4.28	1.45	1.33
23	b	620	LMG	O8-C28	4.27	1.45	1.33
29	A	614	LHG	O8-C23	4.27	1.45	1.33
23	A	612	LMG	O8-C28	4.26	1.45	1.33
28	L	101	SQD	O47-C7	4.26	1.46	1.34
23	B	624	LMG	O8-C28	4.26	1.45	1.33
33	c	515	DGD	O1G-C1A	4.26	1.45	1.33
33	H	102	DGD	O1G-C1A	4.25	1.45	1.33
28	a	613	SQD	O48-C23	4.25	1.45	1.33
23	b	624	LMG	O8-C28	4.24	1.45	1.33
29	E	101	LHG	O8-C23	4.24	1.45	1.33
29	d	406	LHG	O8-C23	4.24	1.45	1.33
29	d	407	LHG	O8-C23	4.23	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	c	516	DGD	O1G-C1A	4.23	1.45	1.33
33	C	517	DGD	O1G-C1A	4.23	1.45	1.33
33	C	518	DGD	O1G-C1A	4.22	1.45	1.33
28	L	101	SQD	O48-C23	4.22	1.45	1.33
29	a	616	LHG	O8-C23	4.21	1.45	1.33
23	a	614	LMG	O8-C28	4.21	1.45	1.33
28	L	103	SQD	O48-C23	4.21	1.45	1.33
33	c	517	DGD	O1G-C1A	4.21	1.45	1.33
33	C	516	DGD	O1G-C1A	4.20	1.45	1.33
29	L	102	LHG	O8-C23	4.20	1.45	1.33
29	a	615	LHG	O8-C23	4.20	1.45	1.33
28	A	611	SQD	O47-C7	4.18	1.46	1.34
29	D	408	LHG	O8-C23	4.17	1.45	1.33
29	A	613	LHG	O8-C23	4.17	1.45	1.33
23	D	409	LMG	O7-C10	4.17	1.46	1.34
28	f	101	SQD	O47-C7	4.17	1.46	1.34
23	B	620	LMG	O7-C10	4.17	1.46	1.34
28	L	103	SQD	O47-C7	4.17	1.46	1.34
23	C	521	LMG	O7-C10	4.16	1.46	1.34
33	H	102	DGD	O2G-C1B	4.16	1.46	1.34
28	A	611	SQD	O48-C23	4.16	1.45	1.33
29	E	101	LHG	O7-C7	4.16	1.46	1.34
29	A	614	LHG	O7-C7	4.15	1.46	1.34
23	c	520	LMG	O7-C10	4.15	1.46	1.34
28	F	101	SQD	O47-C7	4.15	1.46	1.34
33	h	102	DGD	O2G-C1B	4.15	1.46	1.34
33	c	516	DGD	O2G-C1B	4.14	1.46	1.34
25	c	505	CLA	MG-NC	-4.14	1.96	2.06
23	d	408	LMG	O7-C10	4.14	1.46	1.34
33	C	516	DGD	O2G-C1B	4.13	1.45	1.34
23	b	624	LMG	O7-C10	4.12	1.45	1.34
23	b	620	LMG	O7-C10	4.12	1.45	1.34
23	C	519	LMG	O7-C10	4.12	1.45	1.34
29	d	407	LHG	O7-C7	4.11	1.45	1.34
23	A	603	LMG	O7-C10	4.11	1.45	1.34
33	C	517	DGD	O2G-C1B	4.11	1.45	1.34
33	c	517	DGD	O2G-C1B	4.11	1.45	1.34
28	F	101	SQD	O48-C23	4.11	1.45	1.33
33	C	518	DGD	O2G-C1B	4.10	1.45	1.34
29	l	101	LHG	O7-C7	4.09	1.45	1.34
28	a	613	SQD	O47-C7	4.09	1.45	1.34
25	a	607	CLA	MG-NC	-4.09	1.96	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	612	LMG	O7-C10	4.08	1.45	1.34
23	a	603	LMG	O7-C10	4.08	1.45	1.34
23	c	518	LMG	O7-C10	4.08	1.45	1.34
23	B	624	LMG	O7-C10	4.08	1.45	1.34
33	c	515	DGD	O2G-C1B	4.07	1.45	1.34
29	a	616	LHG	O7-C7	4.07	1.45	1.34
33	h	102	DGD	O1G-C1A	4.06	1.45	1.33
29	a	615	LHG	O7-C7	4.06	1.45	1.34
29	L	102	LHG	O7-C7	4.05	1.45	1.34
25	b	602	CLA	MG-NC	-4.05	1.96	2.06
29	d	406	LHG	O7-C7	4.05	1.45	1.34
25	B	602	CLA	MG-NC	-4.04	1.96	2.06
23	a	614	LMG	O7-C10	4.03	1.45	1.34
29	D	408	LHG	O7-C7	3.99	1.45	1.34
29	A	613	LHG	O7-C7	3.98	1.45	1.34
25	d	401	CLA	MG-NC	-3.96	1.96	2.06
25	b	616	CLA	MG-NC	-3.95	1.96	2.06
25	D	403	CLA	MG-NC	-3.95	1.96	2.06
25	C	505	CLA	MG-NC	-3.94	1.96	2.06
25	B	616	CLA	MG-NC	-3.91	1.97	2.06
25	D	404	CLA	MG-NC	-3.91	1.97	2.06
25	A	606	CLA	MG-NC	-3.90	1.97	2.06
25	b	608	CLA	MG-NC	-3.88	1.97	2.06
25	c	506	CLA	MG-NC	-3.85	1.97	2.06
25	A	607	CLA	MG-NC	-3.84	1.97	2.06
25	b	614	CLA	MG-NC	-3.84	1.97	2.06
25	a	610	CLA	MG-NC	-3.84	1.97	2.06
25	B	610	CLA	MG-NC	-3.84	1.97	2.06
25	B	614	CLA	MG-NC	-3.82	1.97	2.06
25	B	608	CLA	MG-NC	-3.81	1.97	2.06
25	B	603	CLA	MG-NC	-3.81	1.97	2.06
25	C	504	CLA	MG-NC	-3.81	1.97	2.06
25	a	606	CLA	MG-NC	-3.81	1.97	2.06
25	c	508	CLA	MG-NC	-3.79	1.97	2.06
25	A	608	CLA	MG-NC	-3.79	1.97	2.06
25	b	610	CLA	MG-NC	-3.79	1.97	2.06
25	B	606	CLA	MG-NC	-3.79	1.97	2.06
25	C	508	CLA	MG-NC	-3.79	1.97	2.06
25	C	506	CLA	MG-NC	-3.78	1.97	2.06
25	b	607	CLA	MG-NC	-3.78	1.97	2.06
25	B	607	CLA	MG-NC	-3.76	1.97	2.06
25	b	606	CLA	MG-NC	-3.76	1.97	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	504	CLA	MG-NC	-3.76	1.97	2.06
25	b	603	CLA	MG-NC	-3.76	1.97	2.06
25	B	601	CLA	MG-NC	-3.75	1.97	2.06
25	c	513	CLA	MG-NC	-3.74	1.97	2.06
25	b	601	CLA	MG-NC	-3.72	1.97	2.06
25	c	510	CLA	MG-NC	-3.71	1.97	2.06
25	a	608	CLA	MG-NC	-3.71	1.97	2.06
25	C	507	CLA	MG-NC	-3.71	1.97	2.06
25	b	615	CLA	MG-NC	-3.70	1.97	2.06
25	b	605	CLA	MG-NC	-3.69	1.97	2.06
25	C	510	CLA	MG-NC	-3.69	1.97	2.06
25	c	507	CLA	MG-NC	-3.68	1.97	2.06
25	B	609	CLA	MG-NC	-3.68	1.97	2.06
25	D	405	CLA	MG-NC	-3.67	1.97	2.06
25	B	615	CLA	MG-NC	-3.67	1.97	2.06
25	B	605	CLA	MG-NC	-3.67	1.97	2.06
25	C	502	CLA	MG-NC	-3.65	1.97	2.06
25	b	611	CLA	MG-NC	-3.65	1.97	2.06
25	B	611	CLA	MG-NC	-3.65	1.97	2.06
25	B	613	CLA	MG-NC	-3.65	1.97	2.06
25	c	512	CLA	MG-NC	-3.64	1.97	2.06
25	C	513	CLA	MG-NC	-3.64	1.97	2.06
25	c	502	CLA	MG-NC	-3.64	1.97	2.06
25	b	609	CLA	MG-NC	-3.63	1.97	2.06
25	B	612	CLA	MG-NC	-3.63	1.97	2.06
25	b	612	CLA	MG-NC	-3.62	1.97	2.06
25	c	501	CLA	MG-NC	-3.62	1.97	2.06
25	C	512	CLA	MG-NC	-3.61	1.97	2.06
25	C	509	CLA	MG-NC	-3.59	1.97	2.06
25	b	604	CLA	MG-NC	-3.58	1.97	2.06
25	a	607	CLA	MG-NA	-3.58	1.97	2.06
25	C	501	CLA	MG-NC	-3.56	1.97	2.06
25	c	509	CLA	MG-NC	-3.56	1.97	2.06
25	B	602	CLA	MG-NA	-3.54	1.97	2.06
25	C	511	CLA	MG-NC	-3.54	1.97	2.06
25	d	403	CLA	MG-NC	-3.54	1.97	2.06
25	c	511	CLA	MG-NC	-3.52	1.97	2.06
25	b	613	CLA	MG-NC	-3.50	1.98	2.06
25	c	503	CLA	MG-NC	-3.49	1.98	2.06
25	b	602	CLA	MG-NA	-3.48	1.98	2.06
25	B	604	CLA	MG-NC	-3.45	1.98	2.06
25	C	503	CLA	MG-NC	-3.44	1.98	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	608	CLA	MG-NA	-3.43	1.98	2.06
25	D	403	CLA	MG-NA	-3.40	1.98	2.06
25	A	606	CLA	MG-NA	-3.40	1.98	2.06
25	A	607	CLA	MG-NA	-3.39	1.98	2.06
25	C	504	CLA	MG-NA	-3.38	1.98	2.06
25	a	606	CLA	MG-NA	-3.38	1.98	2.06
25	B	612	CLA	MG-NA	-3.33	1.98	2.06
25	c	504	CLA	MG-NA	-3.33	1.98	2.06
34	D	401	PHO	C3B-C2B	-3.32	1.35	1.40
25	B	607	CLA	MG-NA	-3.32	1.98	2.06
35	E	102	HEM	C3D-C2D	3.31	1.43	1.36
25	A	608	CLA	MG-NA	-3.30	1.98	2.06
25	d	401	CLA	MG-NA	-3.30	1.98	2.06
25	B	608	CLA	MG-NA	-3.27	1.98	2.06
25	b	612	CLA	MG-NA	-3.27	1.98	2.06
25	C	510	CLA	MG-NA	-3.26	1.98	2.06
25	c	513	CLA	MG-NA	-3.26	1.98	2.06
35	e	101	HEM	C3D-C2D	3.24	1.43	1.36
25	D	405	CLA	MG-NA	-3.24	1.98	2.06
25	b	608	CLA	MG-NA	-3.21	1.98	2.06
25	C	508	CLA	MG-NA	-3.20	1.98	2.06
25	b	614	CLA	MG-NA	-3.20	1.98	2.06
25	c	509	CLA	MG-NA	-3.19	1.98	2.06
25	d	403	CLA	MG-NA	-3.18	1.98	2.06
25	c	505	CLA	MG-NA	-3.17	1.98	2.06
25	c	510	CLA	MG-NA	-3.17	1.98	2.06
25	C	513	CLA	MG-NA	-3.16	1.98	2.06
25	B	610	CLA	MG-NA	-3.16	1.98	2.06
25	B	603	CLA	MG-NA	-3.16	1.98	2.06
25	c	508	CLA	MG-NA	-3.15	1.98	2.06
25	a	610	CLA	MG-NA	-3.14	1.98	2.06
25	B	614	CLA	MG-NA	-3.13	1.98	2.06
25	C	509	CLA	MG-NA	-3.13	1.98	2.06
25	b	610	CLA	MG-NA	-3.13	1.98	2.06
25	C	505	CLA	MG-NA	-3.11	1.98	2.06
25	D	404	CLA	MG-NA	-3.10	1.98	2.06
25	b	607	CLA	MG-NA	-3.10	1.98	2.06
25	c	506	CLA	MG-NA	-3.09	1.98	2.06
25	C	502	CLA	MG-NA	-3.08	1.99	2.06
25	b	616	CLA	MG-NA	-3.08	1.99	2.06
25	b	601	CLA	MG-NA	-3.07	1.99	2.06
25	B	616	CLA	MG-NA	-3.06	1.99	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	507	CLA	MG-NA	-3.05	1.99	2.06
28	L	103	SQD	C6-S	-3.03	1.66	1.77
25	C	506	CLA	MG-NA	-3.02	1.99	2.06
25	b	603	CLA	MG-NA	-3.02	1.99	2.06
25	B	601	CLA	MG-NA	-3.01	1.99	2.06
25	c	501	CLA	MG-NA	-3.01	1.99	2.06
25	C	501	CLA	MG-NA	-3.01	1.99	2.06
25	B	605	CLA	MG-NA	-3.00	1.99	2.06
25	b	611	CLA	MG-NA	-3.00	1.99	2.06
25	b	615	CLA	MG-NA	-2.99	1.99	2.06
34	a	609	PHO	C3B-C2B	-2.99	1.36	1.40
25	B	611	CLA	MG-NA	-2.99	1.99	2.06
25	c	512	CLA	MG-NA	-2.98	1.99	2.06
25	c	502	CLA	MG-NA	-2.96	1.99	2.06
25	c	507	CLA	MG-NA	-2.95	1.99	2.06
25	C	511	CLA	MG-NA	-2.94	1.99	2.06
28	a	613	SQD	C6-S	-2.92	1.66	1.77
25	B	613	CLA	MG-NA	-2.92	1.99	2.06
25	b	609	CLA	C3B-C2B	-2.91	1.36	1.40
25	C	512	CLA	MG-NA	-2.90	1.99	2.06
25	B	615	CLA	MG-NA	-2.90	1.99	2.06
28	f	101	SQD	C6-S	-2.90	1.66	1.77
25	b	613	CLA	MG-NA	-2.89	1.99	2.06
28	F	101	SQD	C6-S	-2.88	1.66	1.77
25	c	511	CLA	MG-NA	-2.88	1.99	2.06
25	b	605	CLA	MG-NA	-2.87	1.99	2.06
25	b	609	CLA	MG-NA	-2.86	1.99	2.06
28	A	611	SQD	C6-S	-2.85	1.66	1.77
25	B	615	CLA	C3B-C2B	-2.84	1.36	1.40
25	B	606	CLA	MG-NA	-2.81	1.99	2.06
25	b	615	CLA	C3B-C2B	-2.80	1.36	1.40
25	B	604	CLA	MG-NA	-2.78	1.99	2.06
25	b	604	CLA	MG-NA	-2.77	1.99	2.06
25	B	609	CLA	C3B-C2B	-2.76	1.36	1.40
25	b	606	CLA	MG-NA	-2.75	1.99	2.06
25	B	609	CLA	MG-NA	-2.73	1.99	2.06
25	C	503	CLA	MG-NA	-2.71	1.99	2.06
34	a	609	PHO	C3D-C2D	2.71	1.44	1.39
34	D	402	PHO	C3D-C2D	2.70	1.44	1.39
34	D	401	PHO	C3D-C2D	2.69	1.44	1.39
25	c	503	CLA	MG-NA	-2.69	1.99	2.06
25	c	502	CLA	C3B-C2B	-2.66	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	512	CLA	C3B-C2B	-2.66	1.36	1.40
25	b	605	CLA	C3B-C2B	-2.65	1.36	1.40
25	c	503	CLA	C3B-C2B	-2.63	1.36	1.40
25	a	608	CLA	C3B-C2B	-2.62	1.36	1.40
25	c	507	CLA	C3B-C2B	-2.62	1.36	1.40
34	d	402	PHO	C3D-C2D	2.61	1.44	1.39
25	b	603	CLA	C3B-C2B	-2.60	1.36	1.40
27	A	610	PL9	C6-C5	2.58	1.48	1.35
25	b	606	CLA	C1D-C2D	-2.57	1.40	1.45
25	b	611	CLA	C3B-C2B	-2.57	1.36	1.40
25	B	605	CLA	C3B-C2B	-2.57	1.36	1.40
27	a	612	PL9	C6-C5	2.57	1.48	1.35
25	B	606	CLA	C3B-C2B	-2.57	1.36	1.40
25	a	607	CLA	C3B-C2B	-2.57	1.36	1.40
25	b	606	CLA	C3B-C2B	-2.56	1.36	1.40
25	b	610	CLA	C3B-C2B	-2.56	1.36	1.40
25	D	403	CLA	C3B-C2B	-2.56	1.36	1.40
27	d	405	PL9	C6-C5	2.56	1.48	1.35
25	b	613	CLA	C1D-C2D	-2.55	1.40	1.45
25	B	612	CLA	C1D-C2D	-2.55	1.40	1.45
25	A	608	CLA	C3B-C2B	-2.55	1.36	1.40
27	D	407	PL9	C6-C5	2.55	1.48	1.35
25	c	503	CLA	C1D-C2D	-2.54	1.40	1.45
25	c	507	CLA	C1D-C2D	-2.54	1.40	1.45
25	C	507	CLA	C1D-C2D	-2.54	1.40	1.45
25	C	512	CLA	C1D-C2D	-2.53	1.40	1.45
25	c	513	CLA	C3B-C2B	-2.53	1.36	1.40
25	b	615	CLA	C1D-C2D	-2.53	1.40	1.45
25	B	604	CLA	C1D-C2D	-2.53	1.40	1.45
25	B	606	CLA	C1D-C2D	-2.53	1.40	1.45
25	C	505	CLA	C1D-C2D	-2.53	1.40	1.45
25	B	615	CLA	C1D-C2D	-2.53	1.40	1.45
25	A	607	CLA	C3B-C2B	-2.52	1.36	1.40
25	B	607	CLA	C3B-C2B	-2.52	1.36	1.40
25	B	601	CLA	C3B-C2B	-2.52	1.36	1.40
25	C	502	CLA	C3B-C2B	-2.52	1.36	1.40
25	a	610	CLA	C3B-C2B	-2.52	1.36	1.40
25	B	604	CLA	C3B-C2B	-2.52	1.36	1.40
25	b	604	CLA	C1D-C2D	-2.51	1.40	1.45
25	C	504	CLA	C3B-C2B	-2.51	1.36	1.40
25	b	611	CLA	C1D-C2D	-2.51	1.40	1.45
25	B	613	CLA	C1D-C2D	-2.50	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	612	CLA	C1D-C2D	-2.50	1.40	1.45
25	C	506	CLA	C1D-C2D	-2.50	1.40	1.45
25	B	601	CLA	C1D-C2D	-2.50	1.40	1.45
25	b	601	CLA	C3B-C2B	-2.50	1.36	1.40
25	c	511	CLA	C1D-C2D	-2.50	1.40	1.45
25	b	608	CLA	C3B-C2B	-2.49	1.36	1.40
25	b	601	CLA	C1D-C2D	-2.49	1.40	1.45
25	B	611	CLA	C1D-C2D	-2.49	1.40	1.45
25	c	509	CLA	C1D-C2D	-2.49	1.40	1.45
25	c	512	CLA	C1D-C2D	-2.49	1.40	1.45
25	c	505	CLA	C3B-C2B	-2.48	1.36	1.40
25	c	502	CLA	C1D-C2D	-2.48	1.40	1.45
25	B	603	CLA	C1D-C2D	-2.48	1.40	1.45
25	C	503	CLA	C1D-C2D	-2.48	1.40	1.45
25	B	607	CLA	C1D-C2D	-2.48	1.40	1.45
25	c	504	CLA	C1D-C2D	-2.48	1.40	1.45
25	a	606	CLA	C1D-C2D	-2.48	1.40	1.45
25	C	505	CLA	C3B-C2B	-2.47	1.36	1.40
25	C	509	CLA	C1D-C2D	-2.47	1.40	1.45
25	C	504	CLA	C1D-C2D	-2.47	1.40	1.45
25	C	501	CLA	C1D-C2D	-2.47	1.40	1.45
25	C	511	CLA	C1D-C2D	-2.47	1.40	1.45
25	c	508	CLA	C1D-C2D	-2.47	1.40	1.45
25	c	505	CLA	C1D-C2D	-2.47	1.40	1.45
25	C	508	CLA	C1D-C2D	-2.47	1.40	1.45
25	b	616	CLA	C1D-C2D	-2.46	1.40	1.45
34	d	402	PHO	C3B-C2B	-2.46	1.37	1.40
25	b	603	CLA	C1D-C2D	-2.46	1.40	1.45
25	A	608	CLA	C1D-C2D	-2.46	1.40	1.45
35	E	102	HEM	O2D-CGD	-2.46	1.22	1.30
25	D	405	CLA	C1D-C2D	-2.46	1.40	1.45
25	c	510	CLA	C1D-C2D	-2.45	1.40	1.45
25	B	602	CLA	C3B-C2B	-2.45	1.37	1.40
25	B	614	CLA	C1D-C2D	-2.45	1.40	1.45
25	c	506	CLA	C1D-C2D	-2.45	1.40	1.45
25	b	609	CLA	C1D-C2D	-2.45	1.40	1.45
25	b	610	CLA	C1D-C2D	-2.45	1.40	1.45
25	b	607	CLA	C1D-C2D	-2.45	1.40	1.45
36	V	201	HEC	O2D-CGD	-2.45	1.22	1.30
25	B	609	CLA	C1D-C2D	-2.45	1.40	1.45
25	B	605	CLA	C1D-C2D	-2.44	1.40	1.45
25	C	502	CLA	C1D-C2D	-2.44	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	v	201	HEC	O2D-CGD	-2.44	1.22	1.30
25	b	614	CLA	C1D-C2D	-2.43	1.40	1.45
25	d	403	CLA	C1D-C2D	-2.43	1.40	1.45
25	B	608	CLA	C1D-C2D	-2.43	1.40	1.45
25	B	616	CLA	C1D-C2D	-2.43	1.40	1.45
25	b	605	CLA	C1D-C2D	-2.43	1.40	1.45
25	a	610	CLA	C1D-C2D	-2.43	1.40	1.45
25	B	602	CLA	C1D-C2D	-2.42	1.40	1.45
25	b	608	CLA	C1D-C2D	-2.42	1.40	1.45
25	d	401	CLA	C1D-C2D	-2.42	1.40	1.45
25	B	610	CLA	C1D-C2D	-2.41	1.40	1.45
25	b	602	CLA	C1D-C2D	-2.41	1.40	1.45
25	c	513	CLA	C1D-C2D	-2.41	1.40	1.45
25	C	513	CLA	C1D-C2D	-2.40	1.40	1.45
28	L	101	SQD	C6-S	-2.40	1.68	1.77
25	c	501	CLA	C1D-C2D	-2.40	1.40	1.45
35	e	101	HEM	O2D-CGD	-2.40	1.22	1.30
25	C	510	CLA	C1D-C2D	-2.40	1.40	1.45
25	D	404	CLA	C1D-C2D	-2.39	1.40	1.45
25	B	610	CLA	C3B-C2B	-2.39	1.37	1.40
25	a	608	CLA	C1D-C2D	-2.38	1.40	1.45
25	A	607	CLA	C1D-C2D	-2.37	1.40	1.45
25	C	507	CLA	C3B-C2B	-2.37	1.37	1.40
25	A	606	CLA	C1D-C2D	-2.35	1.40	1.45
25	D	403	CLA	C1D-C2D	-2.35	1.40	1.45
25	c	511	CLA	C3B-C2B	-2.33	1.37	1.40
25	c	504	CLA	C3B-C2B	-2.32	1.37	1.40
25	B	609	CLA	C1D-ND	2.30	1.40	1.37
25	b	602	CLA	C3B-C2B	-2.29	1.37	1.40
25	b	609	CLA	C1D-ND	2.29	1.40	1.37
25	b	601	CLA	C1D-ND	2.29	1.40	1.37
25	b	604	CLA	C3B-C2B	-2.29	1.37	1.40
25	d	403	CLA	C3B-C2B	-2.28	1.37	1.40
23	C	521	LMG	O1-C1	2.28	1.44	1.40
35	e	101	HEM	FE-ND	2.27	2.08	1.96
25	b	602	CLA	C1D-ND	2.27	1.40	1.37
25	a	607	CLA	C1D-C2D	-2.27	1.40	1.45
25	c	506	CLA	C3B-C2B	-2.27	1.37	1.40
25	c	501	CLA	C3B-C2B	-2.26	1.37	1.40
25	C	503	CLA	C3B-C2B	-2.26	1.37	1.40
25	B	608	CLA	C3B-C2B	-2.25	1.37	1.40
25	B	615	CLA	C1D-ND	2.25	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	E	102	HEM	FE-ND	2.25	2.08	1.96
25	b	614	CLA	C3B-C2B	-2.25	1.37	1.40
25	D	405	CLA	C1D-ND	2.23	1.40	1.37
25	C	510	CLA	C3B-C2B	-2.23	1.37	1.40
25	C	506	CLA	C3B-C2B	-2.23	1.37	1.40
25	c	511	CLA	C1D-ND	2.23	1.40	1.37
25	B	616	CLA	C1D-ND	2.22	1.40	1.37
25	B	601	CLA	C1D-ND	2.22	1.40	1.37
25	d	403	CLA	C1D-ND	2.22	1.40	1.37
25	C	513	CLA	C3B-C2B	-2.22	1.37	1.40
25	b	616	CLA	C1D-ND	2.22	1.40	1.37
25	c	506	CLA	C1D-ND	2.21	1.40	1.37
34	D	402	PHO	C3B-C2B	-2.21	1.37	1.40
25	a	608	CLA	C3D-C4D	-2.21	1.39	1.44
25	B	602	CLA	C3D-C4D	-2.20	1.39	1.44
25	B	603	CLA	C3B-C2B	-2.20	1.37	1.40
25	B	611	CLA	C3B-C2B	-2.19	1.37	1.40
25	a	610	CLA	C1D-ND	2.18	1.40	1.37
25	C	510	CLA	C3D-C4D	-2.18	1.39	1.44
25	B	608	CLA	C3D-C4D	-2.18	1.39	1.44
25	B	602	CLA	C1D-ND	2.18	1.40	1.37
25	D	404	CLA	C3B-C2B	-2.17	1.37	1.40
25	B	605	CLA	C3D-C4D	-2.16	1.39	1.44
25	C	505	CLA	C3D-C4D	-2.16	1.39	1.44
25	c	510	CLA	C3D-C4D	-2.16	1.39	1.44
25	A	608	CLA	C3D-C4D	-2.16	1.39	1.44
25	C	512	CLA	C1D-ND	2.16	1.40	1.37
25	c	513	CLA	C3D-C4D	-2.16	1.39	1.44
25	a	610	CLA	C3D-C4D	-2.15	1.39	1.44
25	c	508	CLA	C3D-C4D	-2.15	1.39	1.44
25	B	616	CLA	C3D-C4D	-2.15	1.39	1.44
25	c	507	CLA	C1D-ND	2.15	1.40	1.37
25	C	512	CLA	C3B-C2B	-2.15	1.37	1.40
25	b	608	CLA	C3D-C4D	-2.15	1.39	1.44
25	C	511	CLA	C3B-C2B	-2.15	1.37	1.40
25	c	506	CLA	C3D-C4D	-2.14	1.39	1.44
25	C	508	CLA	C3D-C4D	-2.14	1.39	1.44
25	b	602	CLA	C3D-C4D	-2.14	1.39	1.44
25	C	509	CLA	C1D-ND	2.14	1.40	1.37
25	C	504	CLA	C3D-C4D	-2.14	1.39	1.44
25	C	513	CLA	C3D-C4D	-2.14	1.39	1.44
25	b	605	CLA	C1D-ND	2.14	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d	401	CLA	C1D-ND	2.14	1.40	1.37
25	A	607	CLA	C3D-C4D	-2.13	1.39	1.44
25	B	615	CLA	C3D-C4D	-2.13	1.39	1.44
25	D	403	CLA	C3D-C4D	-2.13	1.39	1.44
25	b	607	CLA	C1D-ND	2.13	1.40	1.37
25	b	616	CLA	C3B-C2B	-2.13	1.37	1.40
25	A	606	CLA	C3D-C4D	-2.13	1.39	1.44
25	C	501	CLA	C3D-C4D	-2.13	1.39	1.44
25	B	613	CLA	C3B-C2B	-2.13	1.37	1.40
25	b	614	CLA	C3D-C4D	-2.13	1.39	1.44
25	b	615	CLA	C1D-ND	2.13	1.40	1.37
25	B	603	CLA	C3D-C4D	-2.13	1.39	1.44
25	B	610	CLA	C3D-C4D	-2.12	1.39	1.44
25	b	616	CLA	C3D-C4D	-2.12	1.39	1.44
25	b	605	CLA	C3D-C4D	-2.12	1.39	1.44
25	C	503	CLA	C1D-ND	2.12	1.40	1.37
25	d	403	CLA	C3D-C4D	-2.12	1.39	1.44
25	C	506	CLA	C3D-C4D	-2.12	1.39	1.44
25	D	404	CLA	C3D-C4D	-2.12	1.39	1.44
25	B	605	CLA	C1D-ND	2.12	1.40	1.37
25	B	614	CLA	C3B-C2B	-2.12	1.37	1.40
25	c	504	CLA	C3D-C4D	-2.12	1.39	1.44
25	C	506	CLA	C1D-ND	2.12	1.40	1.37
25	B	606	CLA	C3D-C4D	-2.12	1.39	1.44
25	B	614	CLA	C3D-C4D	-2.12	1.39	1.44
25	b	603	CLA	C3D-C4D	-2.12	1.39	1.44
25	C	502	CLA	C3D-C4D	-2.11	1.39	1.44
25	d	401	CLA	C3D-C4D	-2.11	1.39	1.44
25	c	503	CLA	C1D-ND	2.11	1.40	1.37
25	B	609	CLA	C3D-C4D	-2.11	1.39	1.44
25	B	607	CLA	C3D-C4D	-2.11	1.39	1.44
25	B	611	CLA	C3D-C4D	-2.11	1.39	1.44
25	a	607	CLA	C3D-C4D	-2.11	1.39	1.44
25	b	612	CLA	C3D-C4D	-2.11	1.39	1.44
25	b	609	CLA	C3D-C4D	-2.10	1.39	1.44
25	c	505	CLA	C3D-C4D	-2.10	1.39	1.44
25	B	604	CLA	C1D-ND	2.10	1.40	1.37
25	C	511	CLA	C1D-ND	2.10	1.40	1.37
25	c	501	CLA	C1D-ND	2.10	1.40	1.37
25	C	509	CLA	C3D-C4D	-2.10	1.39	1.44
25	b	610	CLA	C3D-C4D	-2.10	1.39	1.44
25	c	509	CLA	C1D-ND	2.10	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	502	CLA	C3D-C4D	-2.10	1.39	1.44
25	D	405	CLA	C3D-C4D	-2.10	1.39	1.44
25	B	606	CLA	C1D-ND	2.09	1.40	1.37
25	c	501	CLA	C3D-C4D	-2.09	1.39	1.44
25	c	511	CLA	C3D-C4D	-2.09	1.39	1.44
25	B	612	CLA	C3D-C4D	-2.09	1.39	1.44
25	c	512	CLA	C3D-C4D	-2.09	1.39	1.44
25	B	616	CLA	C3B-C2B	-2.09	1.37	1.40
25	D	403	CLA	C1D-ND	2.09	1.40	1.37
25	b	604	CLA	C1D-ND	2.09	1.40	1.37
25	b	607	CLA	C3D-C4D	-2.09	1.39	1.44
25	c	509	CLA	C3D-C4D	-2.08	1.39	1.44
25	b	613	CLA	C3D-C4D	-2.08	1.39	1.44
25	C	502	CLA	C1D-ND	2.08	1.40	1.37
25	B	613	CLA	C3D-C4D	-2.08	1.39	1.44
25	b	611	CLA	C3D-C4D	-2.08	1.39	1.44
25	C	507	CLA	C1D-ND	2.07	1.40	1.37
25	b	615	CLA	C3D-C4D	-2.07	1.39	1.44
25	a	606	CLA	C1D-ND	2.07	1.40	1.37
25	b	601	CLA	C3D-C4D	-2.07	1.39	1.44
25	C	503	CLA	C3D-C4D	-2.07	1.39	1.44
25	B	601	CLA	C3D-C4D	-2.06	1.39	1.44
25	a	606	CLA	C3D-C4D	-2.06	1.39	1.44
25	C	511	CLA	C3D-C4D	-2.06	1.39	1.44
25	B	607	CLA	C1D-ND	2.06	1.40	1.37
25	b	606	CLA	C1D-ND	2.06	1.40	1.37
25	D	404	CLA	C1D-ND	2.05	1.40	1.37
25	c	503	CLA	C3D-C4D	-2.05	1.39	1.44
25	C	512	CLA	C3D-C4D	-2.05	1.39	1.44
25	A	608	CLA	C1D-ND	2.05	1.40	1.37
25	b	606	CLA	C3D-C4D	-2.05	1.39	1.44
25	C	509	CLA	C3B-C2B	-2.05	1.37	1.40
25	A	606	CLA	C1D-ND	2.05	1.40	1.37
25	c	512	CLA	C1D-ND	2.04	1.40	1.37
25	B	604	CLA	C3D-C4D	-2.03	1.39	1.44
25	c	507	CLA	C3D-C4D	-2.03	1.39	1.44
25	C	508	CLA	C3B-C2B	-2.03	1.37	1.40
25	C	507	CLA	C3D-C4D	-2.02	1.39	1.44
25	B	614	CLA	C1D-ND	2.02	1.40	1.37
25	C	505	CLA	C1D-ND	2.01	1.40	1.37
25	c	502	CLA	C1D-ND	2.01	1.40	1.37
25	b	604	CLA	C3D-C4D	-2.01	1.39	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	508	CLA	C3B-C2B	-2.00	1.37	1.40
25	b	611	CLA	C1D-ND	2.00	1.40	1.37

All (1291) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	L	101	SQD	O9-S-C6	-17.82	85.76	106.94
28	L	101	SQD	O8-S-O9	-11.74	82.59	111.27
28	L	101	SQD	O7-S-C6	9.72	118.49	106.94
28	L	101	SQD	O9-S-O7	-9.24	81.97	113.95
28	L	101	SQD	O8-S-C6	7.84	118.24	105.74
25	A	606	CLA	C4A-NA-C1A	-6.73	103.68	106.71
25	b	602	CLA	C4A-NA-C1A	-6.72	103.69	106.71
25	a	606	CLA	C4A-NA-C1A	-6.47	103.80	106.71
25	b	614	CLA	C4A-NA-C1A	-6.45	103.81	106.71
25	B	616	CLA	C4A-NA-C1A	-6.40	103.83	106.71
26	t	102	BCR	C24-C23-C22	-6.39	116.58	126.23
25	a	607	CLA	C4A-NA-C1A	-6.25	103.90	106.71
25	B	614	CLA	C4A-NA-C1A	-6.21	103.92	106.71
25	B	602	CLA	C4A-NA-C1A	-6.20	103.92	106.71
25	b	616	CLA	C4A-NA-C1A	-6.19	103.92	106.71
25	D	403	CLA	C4A-NA-C1A	-6.14	103.95	106.71
25	B	610	CLA	C4A-NA-C1A	-6.13	103.95	106.71
25	B	603	CLA	C4A-NA-C1A	-6.08	103.97	106.71
25	B	605	CLA	C4A-NA-C1A	-6.03	104.00	106.71
25	b	605	CLA	C4A-NA-C1A	-5.99	104.02	106.71
25	B	608	CLA	C4A-NA-C1A	-5.97	104.02	106.71
25	C	508	CLA	C4A-NA-C1A	-5.97	104.02	106.71
25	d	401	CLA	C4A-NA-C1A	-5.94	104.03	106.71
25	D	404	CLA	C4A-NA-C1A	-5.91	104.05	106.71
25	B	606	CLA	C4A-NA-C1A	-5.89	104.06	106.71
25	b	608	CLA	C4A-NA-C1A	-5.86	104.07	106.71
26	d	404	BCR	C7-C8-C9	-5.86	117.38	126.23
25	c	508	CLA	C4A-NA-C1A	-5.84	104.08	106.71
25	c	513	CLA	C4A-NA-C1A	-5.84	104.08	106.71
25	c	506	CLA	C4A-NA-C1A	-5.82	104.09	106.71
25	c	505	CLA	C4A-NA-C1A	-5.81	104.10	106.71
25	B	609	CLA	C4A-NA-C1A	-5.79	104.10	106.71
25	C	510	CLA	C4A-NA-C1A	-5.78	104.11	106.71
25	B	615	CLA	C4A-NA-C1A	-5.73	104.13	106.71
25	b	610	CLA	C4A-NA-C1A	-5.72	104.14	106.71
25	C	513	CLA	C4A-NA-C1A	-5.69	104.15	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	t	102	BCR	C20-C21-C22	-5.69	119.19	127.31
25	b	606	CLA	C4A-NA-C1A	-5.69	104.15	106.71
25	A	607	CLA	C4A-NA-C1A	-5.68	104.15	106.71
25	b	615	CLA	C4A-NA-C1A	-5.67	104.16	106.71
25	A	608	CLA	C4A-NA-C1A	-5.65	104.17	106.71
25	b	603	CLA	C4A-NA-C1A	-5.65	104.17	106.71
25	b	607	CLA	C4A-NA-C1A	-5.65	104.17	106.71
26	D	406	BCR	C7-C8-C9	-5.64	117.72	126.23
25	C	505	CLA	C4A-NA-C1A	-5.53	104.22	106.71
25	B	601	CLA	C4A-NA-C1A	-5.51	104.23	106.71
25	a	610	CLA	C4A-NA-C1A	-5.49	104.24	106.71
25	B	611	CLA	C4A-NA-C1A	-5.48	104.24	106.71
25	b	609	CLA	C4A-NA-C1A	-5.44	104.26	106.71
25	B	607	CLA	C4A-NA-C1A	-5.43	104.27	106.71
25	B	613	CLA	C4A-NA-C1A	-5.40	104.28	106.71
25	C	506	CLA	C4A-NA-C1A	-5.37	104.29	106.71
25	c	510	CLA	C4A-NA-C1A	-5.37	104.29	106.71
25	D	405	CLA	C4A-NA-C1A	-5.34	104.31	106.71
26	c	521	BCR	C7-C8-C9	-5.33	118.19	126.23
25	c	503	CLA	C4A-NA-C1A	-5.32	104.31	106.71
26	h	101	BCR	C7-C8-C9	-5.32	118.20	126.23
25	C	503	CLA	C4A-NA-C1A	-5.26	104.34	106.71
25	b	601	CLA	C4A-NA-C1A	-5.26	104.34	106.71
25	c	501	CLA	C4A-NA-C1A	-5.26	104.34	106.71
26	H	101	BCR	C11-C10-C9	-5.26	119.80	127.31
25	b	611	CLA	C4A-NA-C1A	-5.23	104.35	106.71
26	D	406	BCR	C28-C27-C26	-5.22	104.75	114.08
25	b	613	CLA	C4A-NA-C1A	-5.20	104.37	106.71
25	C	504	CLA	C4A-NA-C1A	-5.20	104.37	106.71
25	c	504	CLA	C4A-NA-C1A	-5.19	104.37	106.71
25	a	608	CLA	C4A-NA-C1A	-5.17	104.38	106.71
25	b	612	CLA	C4A-NA-C1A	-5.15	104.39	106.71
26	b	617	BCR	C28-C27-C26	-5.12	104.93	114.08
35	e	101	HEM	C4B-CHC-C1C	5.06	129.24	122.56
25	C	501	CLA	C4A-NA-C1A	-5.04	104.44	106.71
25	C	502	CLA	C4A-NA-C1A	-5.03	104.44	106.71
25	c	502	CLA	C4A-NA-C1A	-5.03	104.45	106.71
25	c	507	CLA	C4A-NA-C1A	-5.02	104.45	106.71
35	E	102	HEM	C4B-CHC-C1C	5.01	129.18	122.56
25	C	509	CLA	C4A-NA-C1A	-5.01	104.45	106.71
25	B	612	CLA	C4A-NA-C1A	-5.00	104.46	106.71
26	T	101	BCR	C15-C14-C13	-5.00	120.17	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	D	406	BCR	C15-C14-C13	-4.99	120.19	127.31
25	c	509	CLA	C4A-NA-C1A	-4.97	104.47	106.71
26	T	101	BCR	C7-C8-C9	-4.95	118.75	126.23
26	z	101	BCR	C15-C14-C13	-4.94	120.26	127.31
26	H	101	BCR	C7-C8-C9	-4.94	118.78	126.23
26	C	515	BCR	C15-C14-C13	-4.92	120.28	127.31
26	T	101	BCR	C24-C23-C22	-4.89	118.85	126.23
26	c	521	BCR	C11-C10-C9	-4.88	120.35	127.31
25	b	604	CLA	C4A-NA-C1A	-4.86	104.52	106.71
26	h	101	BCR	C11-C10-C9	-4.86	120.38	127.31
25	C	512	CLA	C4A-NA-C1A	-4.85	104.53	106.71
25	C	507	CLA	C4A-NA-C1A	-4.84	104.53	106.71
26	A	609	BCR	C15-C14-C13	-4.83	120.42	127.31
26	C	522	BCR	C20-C21-C22	-4.83	120.42	127.31
25	c	512	CLA	C4A-NA-C1A	-4.82	104.54	106.71
26	k	102	BCR	C33-C5-C6	-4.81	119.12	124.53
25	B	604	CLA	C4A-NA-C1A	-4.81	104.55	106.71
26	K	101	BCR	C33-C5-C6	-4.81	119.13	124.53
25	d	403	CLA	C4A-NA-C1A	-4.76	104.57	106.71
26	b	618	BCR	C15-C14-C13	-4.74	120.54	127.31
26	t	102	BCR	C15-C14-C13	-4.72	120.57	127.31
26	C	514	BCR	C15-C14-C13	-4.71	120.59	127.31
26	T	101	BCR	C33-C5-C6	-4.66	119.29	124.53
25	C	511	CLA	C4A-NA-C1A	-4.66	104.61	106.71
26	C	514	BCR	C11-C10-C9	-4.65	120.67	127.31
26	C	522	BCR	C15-C14-C13	-4.65	120.68	127.31
26	k	102	BCR	C16-C17-C18	-4.63	120.70	127.31
26	C	522	BCR	C11-C10-C9	-4.63	120.71	127.31
26	K	101	BCR	C16-C17-C18	-4.61	120.73	127.31
26	T	101	BCR	C20-C21-C22	-4.61	120.73	127.31
27	D	407	PL9	C7-C8-C9	-4.61	119.12	126.79
26	H	101	BCR	C16-C17-C18	-4.61	120.74	127.31
26	c	514	BCR	C33-C5-C6	-4.58	119.38	124.53
26	c	521	BCR	C20-C21-C22	-4.57	120.78	127.31
26	T	101	BCR	C11-C10-C9	-4.57	120.78	127.31
26	d	404	BCR	C11-C10-C9	-4.57	120.79	127.31
25	c	511	CLA	C4A-NA-C1A	-4.55	104.66	106.71
26	D	406	BCR	C24-C23-C22	-4.53	119.39	126.23
26	C	515	BCR	C33-C5-C6	-4.53	119.45	124.53
26	B	619	BCR	C15-C14-C13	-4.52	120.86	127.31
26	t	102	BCR	C33-C5-C6	-4.51	119.46	124.53
26	c	514	BCR	C15-C14-C13	-4.51	120.87	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	B	618	BCR	C15-C14-C13	-4.51	120.88	127.31
27	A	610	PL9	C7-C8-C9	-4.50	119.30	126.79
26	a	611	BCR	C15-C14-C13	-4.49	120.90	127.31
26	B	617	BCR	C15-C14-C13	-4.49	120.91	127.31
26	C	522	BCR	C7-C8-C9	-4.45	119.52	126.23
26	B	619	BCR	C38-C26-C25	-4.43	119.56	124.53
26	h	101	BCR	C15-C14-C13	-4.42	121.01	127.31
27	d	405	PL9	C7-C8-C9	-4.40	119.47	126.79
26	B	617	BCR	C28-C27-C26	-4.39	106.24	114.08
26	b	617	BCR	C15-C14-C13	-4.38	121.05	127.31
26	b	619	BCR	C16-C17-C18	-4.38	121.06	127.31
26	d	404	BCR	C24-C23-C22	-4.38	119.62	126.23
26	C	514	BCR	C16-C17-C18	-4.37	121.08	127.31
26	b	617	BCR	C33-C5-C6	-4.36	119.63	124.53
26	B	617	BCR	C33-C5-C6	-4.36	119.64	124.53
26	D	406	BCR	C11-C10-C9	-4.34	121.11	127.31
26	T	101	BCR	C16-C17-C18	-4.33	121.13	127.31
26	D	406	BCR	C33-C5-C6	-4.33	119.67	124.53
26	b	619	BCR	C15-C14-C13	-4.32	121.15	127.31
26	c	521	BCR	C24-C23-C22	-4.31	119.72	126.23
26	C	522	BCR	C24-C23-C22	-4.31	119.72	126.23
26	B	619	BCR	C7-C8-C9	-4.30	119.73	126.23
26	c	514	BCR	C7-C8-C9	-4.30	119.73	126.23
26	c	521	BCR	C16-C17-C18	-4.28	121.20	127.31
26	c	521	BCR	C15-C14-C13	-4.26	121.23	127.31
26	b	617	BCR	C11-C10-C9	-4.26	121.23	127.31
26	d	404	BCR	C15-C14-C13	-4.24	121.26	127.31
26	b	619	BCR	C38-C26-C25	-4.22	119.78	124.53
23	a	614	LMG	O7-C10-C11	4.21	120.57	111.50
26	d	404	BCR	C33-C5-C6	-4.20	119.81	124.53
29	l	101	LHG	O7-C7-C8	4.20	120.55	111.50
26	k	102	BCR	C15-C14-C13	-4.18	121.35	127.31
28	a	613	SQD	O47-C7-C8	4.18	120.50	111.50
26	d	404	BCR	C38-C26-C25	-4.16	119.85	124.53
26	b	619	BCR	C7-C8-C9	-4.16	119.95	126.23
28	L	103	SQD	O47-C7-C8	4.15	120.45	111.50
26	H	101	BCR	C15-C14-C13	-4.14	121.40	127.31
26	C	515	BCR	C7-C8-C9	-4.14	119.98	126.23
26	d	404	BCR	C16-C17-C18	-4.13	121.41	127.31
26	b	618	BCR	C28-C27-C26	-4.13	106.70	114.08
26	b	619	BCR	C11-C10-C9	-4.12	121.43	127.31
23	c	520	LMG	O7-C10-C11	4.12	120.37	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	D	409	LMG	O7-C10-C11	4.11	120.36	111.50
29	E	101	LHG	O7-C7-C8	4.11	120.35	111.50
28	A	611	SQD	O47-C7-C8	4.10	120.35	111.50
28	f	101	SQD	O47-C7-C8	4.10	120.33	111.50
23	A	612	LMG	O7-C10-C11	4.09	120.32	111.50
26	z	101	BCR	C16-C17-C18	-4.09	121.48	127.31
29	L	102	LHG	O7-C7-C8	4.08	120.30	111.50
26	h	101	BCR	C16-C17-C18	-4.07	121.50	127.31
23	B	624	LMG	O7-C10-C11	4.07	120.27	111.50
26	H	101	BCR	C20-C21-C22	-4.06	121.52	127.31
23	b	620	LMG	O7-C10-C11	4.06	120.24	111.50
26	C	514	BCR	C7-C8-C9	-4.05	120.12	126.23
26	B	617	BCR	C11-C10-C9	-4.05	121.53	127.31
29	A	614	LHG	O7-C7-C8	4.05	120.22	111.50
23	b	624	LMG	O7-C10-C11	4.04	120.21	111.50
33	c	515	DGD	O2G-C1B-C2B	4.03	120.19	111.50
26	b	618	BCR	C16-C17-C18	-4.03	121.56	127.31
26	K	101	BCR	C15-C14-C13	-4.03	121.56	127.31
29	a	616	LHG	O7-C7-C8	4.03	120.18	111.50
26	B	619	BCR	C16-C17-C18	-4.02	121.57	127.31
26	B	619	BCR	C11-C10-C9	-4.02	121.58	127.31
33	C	516	DGD	O2G-C1B-C2B	4.01	120.15	111.50
23	d	408	LMG	O7-C10-C11	3.99	120.10	111.50
26	D	406	BCR	C16-C17-C18	-3.99	121.62	127.31
33	C	517	DGD	O2G-C1B-C2B	3.98	120.08	111.50
27	a	612	PL9	C7-C8-C9	-3.98	120.16	126.79
26	b	618	BCR	C11-C10-C9	-3.98	121.63	127.31
28	F	101	SQD	O47-C7-C8	3.97	120.06	111.50
26	C	522	BCR	C16-C17-C18	-3.95	121.68	127.31
26	c	514	BCR	C11-C10-C9	-3.94	121.68	127.31
26	t	102	BCR	C11-C10-C9	-3.94	121.69	127.31
33	H	102	DGD	O2G-C1B-C2B	3.92	119.95	111.50
26	z	101	BCR	C11-C10-C9	-3.92	121.72	127.31
23	a	603	LMG	O7-C10-C11	3.92	119.94	111.50
23	A	603	LMG	O7-C10-C11	3.90	119.91	111.50
25	a	610	CLA	C1D-ND-C4D	-3.88	103.58	106.33
26	B	618	BCR	C11-C10-C9	-3.85	121.81	127.31
29	d	406	LHG	O7-C7-C8	3.85	119.80	111.50
23	B	620	LMG	O7-C10-C11	3.85	119.79	111.50
33	C	518	DGD	O2G-C1B-C2B	3.84	119.77	111.50
26	H	101	BCR	C28-C27-C26	-3.83	107.23	114.08
33	c	517	DGD	O2G-C1B-C2B	3.83	119.76	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	c	518	LMG	O7-C10-C11	3.82	119.74	111.50
26	z	101	BCR	C20-C21-C22	-3.82	121.85	127.31
29	a	615	LHG	O7-C7-C8	3.82	119.74	111.50
26	h	101	BCR	C20-C21-C22	-3.82	121.85	127.31
25	b	615	CLA	C1D-ND-C4D	-3.81	103.62	106.33
26	C	514	BCR	C33-C5-C6	-3.81	120.25	124.53
33	h	102	DGD	O2G-C1B-C2B	3.80	119.69	111.50
26	b	618	BCR	C3-C4-C5	-3.80	107.29	114.08
26	h	101	BCR	C24-C23-C22	-3.80	120.50	126.23
25	a	607	CLA	CHD-C1D-ND	-3.78	120.98	124.45
29	d	407	LHG	O7-C7-C8	3.78	119.65	111.50
25	D	403	CLA	CHD-C1D-ND	-3.78	120.98	124.45
26	t	102	BCR	C16-C17-C18	-3.78	121.92	127.31
29	D	408	LHG	O7-C7-C8	3.77	119.64	111.50
26	a	611	BCR	C16-C17-C18	-3.77	121.93	127.31
25	A	607	CLA	CHD-C1D-ND	-3.76	121.00	124.45
23	C	519	LMG	O7-C10-C11	3.76	119.61	111.50
26	B	618	BCR	C33-C5-C6	-3.74	120.33	124.53
25	B	615	CLA	C1D-ND-C4D	-3.73	103.69	106.33
26	H	101	BCR	C24-C23-C22	-3.72	120.61	126.23
25	B	602	CLA	C1D-ND-C4D	-3.72	103.69	106.33
25	A	608	CLA	C1D-ND-C4D	-3.71	103.70	106.33
25	b	616	CLA	C1D-ND-C4D	-3.69	103.71	106.33
25	a	608	CLA	CHD-C1D-ND	-3.69	121.06	124.45
25	C	504	CLA	CHD-C1D-ND	-3.69	121.06	124.45
25	b	614	CLA	C1D-ND-C4D	-3.68	103.72	106.33
26	b	617	BCR	C16-C17-C18	-3.67	122.07	127.31
25	D	405	CLA	C1D-ND-C4D	-3.67	103.73	106.33
25	d	403	CLA	C1D-ND-C4D	-3.67	103.73	106.33
25	A	606	CLA	CHD-C1D-ND	-3.66	121.09	124.45
26	B	619	BCR	C24-C23-C22	-3.66	120.70	126.23
29	A	613	LHG	O7-C7-C8	3.66	119.39	111.50
25	B	602	CLA	CHD-C1D-ND	-3.66	121.09	124.45
25	B	614	CLA	C1D-ND-C4D	-3.66	103.74	106.33
25	c	503	CLA	C1D-ND-C4D	-3.66	103.74	106.33
26	B	618	BCR	C16-C17-C18	-3.65	122.10	127.31
25	d	401	CLA	C1D-ND-C4D	-3.65	103.74	106.33
23	C	521	LMG	O7-C10-C11	3.65	119.36	111.50
25	b	612	CLA	C1D-ND-C4D	-3.65	103.74	106.33
25	C	505	CLA	C1D-ND-C4D	-3.64	103.75	106.33
25	C	513	CLA	CHD-C1D-ND	-3.64	121.11	124.45
25	c	504	CLA	CHD-C1D-ND	-3.63	121.12	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	616	CLA	C1D-ND-C4D	-3.63	103.75	106.33
26	C	514	BCR	C20-C21-C22	-3.63	122.13	127.31
25	a	610	CLA	CHD-C1D-ND	-3.63	121.12	124.45
25	c	508	CLA	CHD-C1D-ND	-3.63	121.12	124.45
25	B	612	CLA	C1D-ND-C4D	-3.62	103.76	106.33
25	C	512	CLA	C1D-ND-C4D	-3.62	103.76	106.33
25	c	507	CLA	C1D-ND-C4D	-3.62	103.76	106.33
25	b	605	CLA	C1D-ND-C4D	-3.62	103.77	106.33
26	z	101	BCR	C24-C23-C22	-3.62	120.77	126.23
26	a	611	BCR	C11-C10-C9	-3.61	122.16	127.31
25	b	602	CLA	CHD-C1D-ND	-3.61	121.14	124.45
26	A	609	BCR	C38-C26-C25	-3.61	120.48	124.53
25	c	513	CLA	CHD-C1D-ND	-3.60	121.14	124.45
26	b	618	BCR	C20-C21-C22	-3.59	122.18	127.31
25	b	606	CLA	C1D-ND-C4D	-3.59	103.78	106.33
25	D	404	CLA	C1D-ND-C4D	-3.59	103.78	106.33
26	b	619	BCR	C24-C23-C22	-3.59	120.81	126.23
26	B	618	BCR	C7-C8-C9	-3.58	120.82	126.23
25	C	507	CLA	C1D-ND-C4D	-3.58	103.79	106.33
25	b	610	CLA	C1D-ND-C4D	-3.58	103.79	106.33
25	c	509	CLA	C1D-ND-C4D	-3.58	103.79	106.33
26	B	618	BCR	C24-C23-C22	-3.57	120.84	126.23
25	C	506	CLA	C1D-ND-C4D	-3.57	103.80	106.33
26	B	618	BCR	C28-C27-C26	-3.57	107.71	114.08
25	B	614	CLA	CHD-C1D-ND	-3.56	121.18	124.45
26	B	618	BCR	C20-C21-C22	-3.56	122.23	127.31
25	C	508	CLA	CHD-C1D-ND	-3.54	121.20	124.45
26	z	101	BCR	C7-C8-C9	-3.54	120.89	126.23
25	b	611	CLA	C1D-ND-C4D	-3.54	103.82	106.33
25	C	510	CLA	CHD-C1D-ND	-3.54	121.20	124.45
25	b	605	CLA	CHD-C1D-ND	-3.54	121.20	124.45
25	a	606	CLA	C1D-ND-C4D	-3.54	103.82	106.33
25	c	506	CLA	C1D-ND-C4D	-3.53	103.82	106.33
26	B	617	BCR	C24-C23-C22	-3.53	120.89	126.23
25	D	405	CLA	CHD-C1D-ND	-3.53	121.21	124.45
25	b	608	CLA	CHD-C1D-ND	-3.53	121.21	124.45
25	B	605	CLA	C1D-ND-C4D	-3.52	103.83	106.33
25	B	610	CLA	C1D-ND-C4D	-3.52	103.83	106.33
25	a	606	CLA	CHD-C1D-ND	-3.52	121.22	124.45
25	b	614	CLA	CHD-C1D-ND	-3.52	121.22	124.45
26	b	619	BCR	C20-C21-C22	-3.52	122.29	127.31
26	z	101	BCR	C33-C5-C6	-3.52	120.58	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	d	401	CLA	CHD-C1D-ND	-3.52	121.22	124.45
25	c	501	CLA	CHD-C1D-ND	-3.52	121.22	124.45
25	A	606	CLA	C1D-ND-C4D	-3.51	103.84	106.33
26	C	515	BCR	C11-C10-C9	-3.51	122.30	127.31
25	B	603	CLA	C1D-ND-C4D	-3.51	103.84	106.33
25	c	508	CLA	C1D-ND-C4D	-3.50	103.85	106.33
26	A	609	BCR	C20-C21-C22	-3.50	122.32	127.31
26	A	609	BCR	C16-C17-C18	-3.49	122.33	127.31
26	c	521	BCR	C33-C5-C6	-3.48	120.62	124.53
25	c	512	CLA	C1D-ND-C4D	-3.48	103.86	106.33
26	b	618	BCR	C7-C8-C9	-3.48	120.98	126.23
25	B	609	CLA	C1D-ND-C4D	-3.47	103.87	106.33
25	b	602	CLA	C1D-ND-C4D	-3.47	103.87	106.33
25	B	616	CLA	CHD-C1D-ND	-3.47	121.26	124.45
25	B	606	CLA	C1D-ND-C4D	-3.47	103.87	106.33
26	D	406	BCR	C20-C21-C22	-3.47	122.36	127.31
25	B	610	CLA	CHD-C1D-ND	-3.47	121.27	124.45
25	B	605	CLA	CHD-C1D-ND	-3.47	121.27	124.45
26	A	609	BCR	C33-C5-C6	-3.47	120.63	124.53
25	D	404	CLA	CHD-C1D-ND	-3.46	121.27	124.45
26	A	609	BCR	C7-C8-C9	-3.46	121.01	126.23
25	b	603	CLA	C1D-ND-C4D	-3.46	103.88	106.33
25	b	601	CLA	C1D-ND-C4D	-3.46	103.88	106.33
25	c	501	CLA	C1D-ND-C4D	-3.45	103.88	106.33
25	b	616	CLA	CHD-C1D-ND	-3.45	121.28	124.45
25	c	509	CLA	CHD-C1D-ND	-3.45	121.28	124.45
25	c	511	CLA	C1D-ND-C4D	-3.45	103.88	106.33
26	B	617	BCR	C16-C17-C18	-3.45	122.39	127.31
28	L	103	SQD	O8-S-C6	3.45	111.23	105.74
26	a	611	BCR	C33-C5-C6	-3.44	120.66	124.53
25	C	506	CLA	CHD-C1D-ND	-3.44	121.29	124.45
25	C	503	CLA	C1D-ND-C4D	-3.44	103.89	106.33
33	c	516	DGD	O2G-C1B-C2B	3.44	118.91	111.50
25	B	601	CLA	C1D-ND-C4D	-3.44	103.89	106.33
25	b	607	CLA	C1D-ND-C4D	-3.44	103.89	106.33
25	C	508	CLA	C1D-ND-C4D	-3.43	103.90	106.33
25	b	609	CLA	C1D-ND-C4D	-3.43	103.90	106.33
25	A	608	CLA	CHD-C1D-ND	-3.42	121.31	124.45
25	B	607	CLA	C1D-ND-C4D	-3.42	103.91	106.33
25	c	504	CLA	C1D-ND-C4D	-3.41	103.91	106.33
25	c	505	CLA	C1D-ND-C4D	-3.41	103.92	106.33
25	B	609	CLA	CHD-C1D-ND	-3.40	121.33	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	A	609	BCR	C24-C23-C22	-3.40	121.10	126.23
25	B	603	CLA	CHD-C1D-ND	-3.40	121.33	124.45
25	C	502	CLA	CHD-C1D-ND	-3.40	121.33	124.45
26	c	521	BCR	C28-C27-C26	-3.39	108.02	114.08
27	D	407	PL9	C37-C38-C39	-3.39	119.49	127.66
25	d	403	CLA	CHD-C1D-ND	-3.39	121.34	124.45
25	c	510	CLA	C1D-ND-C4D	-3.39	103.92	106.33
26	C	522	BCR	C3-C4-C5	-3.39	108.02	114.08
26	a	611	BCR	C38-C26-C25	-3.39	120.72	124.53
28	L	101	SQD	O47-C7-C8	3.39	118.81	111.50
25	b	608	CLA	C1D-ND-C4D	-3.37	103.94	106.33
25	B	608	CLA	CHD-C1D-ND	-3.37	121.36	124.45
25	C	511	CLA	C1D-ND-C4D	-3.37	103.94	106.33
25	C	509	CLA	C1D-ND-C4D	-3.37	103.94	106.33
25	c	506	CLA	CHD-C1D-ND	-3.36	121.36	124.45
25	C	501	CLA	CHD-C1D-ND	-3.36	121.37	124.45
25	B	606	CLA	CHD-C1D-ND	-3.35	121.38	124.45
25	C	504	CLA	C1D-ND-C4D	-3.35	103.96	106.33
25	c	505	CLA	CHD-C1D-ND	-3.34	121.39	124.45
25	B	611	CLA	C1D-ND-C4D	-3.34	103.96	106.33
26	H	101	BCR	C3-C4-C5	-3.34	108.12	114.08
26	C	514	BCR	C24-C23-C22	-3.33	121.20	126.23
26	K	101	BCR	C38-C26-C25	-3.33	120.79	124.53
28	L	101	SQD	O8-S-O7	3.32	119.40	111.27
25	C	509	CLA	CHD-C1D-ND	-3.32	121.40	124.45
25	c	510	CLA	CHD-C1D-ND	-3.32	121.40	124.45
25	D	403	CLA	C1D-ND-C4D	-3.32	103.98	106.33
25	b	606	CLA	CHD-C1D-ND	-3.32	121.41	124.45
25	B	604	CLA	C1D-ND-C4D	-3.32	103.98	106.33
25	C	510	CLA	C1D-ND-C4D	-3.32	103.98	106.33
25	c	502	CLA	C1D-ND-C4D	-3.31	103.98	106.33
26	b	617	BCR	C7-C8-C9	-3.31	121.23	126.23
26	A	609	BCR	C11-C10-C9	-3.31	122.58	127.31
25	C	513	CLA	C1D-ND-C4D	-3.31	103.98	106.33
25	A	607	CLA	C1D-ND-C4D	-3.31	103.99	106.33
26	C	522	BCR	C28-C27-C26	-3.30	108.18	114.08
25	C	511	CLA	CHD-C1D-ND	-3.30	121.42	124.45
25	b	609	CLA	CHD-C1D-ND	-3.30	121.42	124.45
25	B	608	CLA	C1D-ND-C4D	-3.30	103.99	106.33
25	b	611	CLA	CHD-C1D-ND	-3.30	121.42	124.45
25	B	607	CLA	CHD-C1D-ND	-3.30	121.42	124.45
25	b	615	CLA	CHD-C1D-ND	-3.30	121.42	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	511	CLA	CHD-C1D-ND	-3.29	121.44	124.45
25	C	502	CLA	C1D-ND-C4D	-3.28	104.01	106.33
25	b	603	CLA	CHD-C1D-ND	-3.27	121.44	124.45
25	b	610	CLA	CHD-C1D-ND	-3.27	121.44	124.45
25	c	513	CLA	C1D-ND-C4D	-3.27	104.01	106.33
27	a	612	PL9	C37-C38-C39	-3.27	119.78	127.66
25	b	604	CLA	C1D-ND-C4D	-3.27	104.01	106.33
25	B	601	CLA	CHD-C1D-ND	-3.27	121.45	124.45
25	c	502	CLA	CHD-C1D-ND	-3.27	121.45	124.45
26	k	102	BCR	C38-C26-C25	-3.27	120.86	124.53
25	B	611	CLA	C1-C2-C3	-3.27	120.39	126.04
25	b	607	CLA	CHD-C1D-ND	-3.26	121.46	124.45
26	D	406	BCR	C38-C26-C27	3.26	119.88	113.62
25	a	608	CLA	C1D-ND-C4D	-3.26	104.02	106.33
26	a	611	BCR	C7-C8-C9	-3.25	121.32	126.23
25	b	613	CLA	C1D-ND-C4D	-3.25	104.03	106.33
27	d	405	PL9	C37-C38-C39	-3.25	119.83	127.66
25	B	613	CLA	C1D-ND-C4D	-3.25	104.03	106.33
25	b	601	CLA	CHD-C1D-ND	-3.24	121.47	124.45
25	B	613	CLA	CHD-C1D-ND	-3.24	121.48	124.45
25	C	501	CLA	C1D-ND-C4D	-3.24	104.04	106.33
26	B	619	BCR	C20-C21-C22	-3.22	122.72	127.31
25	C	505	CLA	CHD-C1D-ND	-3.21	121.50	124.45
25	a	607	CLA	C1D-ND-C4D	-3.21	104.06	106.33
25	c	512	CLA	CHD-C1D-ND	-3.19	121.53	124.45
26	a	611	BCR	C20-C21-C22	-3.18	122.77	127.31
27	D	407	PL9	C20-C19-C21	3.18	120.62	115.27
36	v	201	HEC	CMC-C2C-C1C	-3.18	123.57	128.46
26	h	101	BCR	C3-C4-C5	-3.18	108.40	114.08
25	C	507	CLA	CHD-C1D-ND	-3.18	121.53	124.45
25	b	613	CLA	CHD-C1D-ND	-3.18	121.54	124.45
25	b	611	CLA	C1-C2-C3	-3.17	120.55	126.04
25	c	507	CLA	CHD-C1D-ND	-3.17	121.54	124.45
26	c	514	BCR	C24-C23-C22	-3.17	121.45	126.23
25	C	503	CLA	CHD-C1D-ND	-3.16	121.55	124.45
25	C	512	CLA	CHD-C1D-ND	-3.16	121.55	124.45
26	a	611	BCR	C24-C23-C22	-3.16	121.45	126.23
25	B	611	CLA	CHD-C1D-ND	-3.15	121.56	124.45
25	c	503	CLA	CHD-C1D-ND	-3.15	121.56	124.45
27	A	610	PL9	C32-C33-C34	-3.15	120.09	127.66
26	C	515	BCR	C24-C23-C22	-3.14	121.49	126.23
26	C	514	BCR	C38-C26-C25	-3.13	121.01	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	C	521	LMG	O1-C1-C2	3.13	113.18	108.30
26	t	102	BCR	C20-C19-C18	-3.11	117.67	126.42
25	B	615	CLA	CHD-C1D-ND	-3.11	121.59	124.45
25	c	510	CLA	C1-C2-C3	-3.11	120.66	126.04
25	B	612	CLA	CHD-C1D-ND	-3.10	121.60	124.45
25	b	612	CLA	CHD-C1D-ND	-3.10	121.61	124.45
25	B	604	CLA	C2C-C1C-NC	3.10	112.88	109.97
26	b	617	BCR	C20-C21-C22	-3.10	122.89	127.31
26	B	617	BCR	C7-C8-C9	-3.09	121.57	126.23
35	e	101	HEM	C4C-CHD-C1D	3.08	126.63	122.56
25	B	604	CLA	CHD-C1D-ND	-3.08	121.62	124.45
26	B	617	BCR	C20-C21-C22	-3.08	122.92	127.31
27	A	610	PL9	C22-C23-C24	-3.07	120.26	127.66
27	d	405	PL9	C27-C28-C29	-3.07	120.26	127.66
26	d	404	BCR	C20-C21-C22	-3.06	122.94	127.31
25	c	503	CLA	C4D-C3D-CAD	3.06	111.70	108.10
26	b	617	BCR	C27-C26-C25	-3.05	118.30	122.73
26	b	618	BCR	C24-C23-C22	-3.05	121.62	126.23
25	C	503	CLA	C4D-C3D-CAD	3.05	111.69	108.10
27	A	610	PL9	C37-C38-C39	-3.05	120.31	127.66
25	C	505	CLA	C4D-C3D-CAD	3.05	111.69	108.10
26	c	514	BCR	C16-C17-C18	-3.04	122.97	127.31
25	b	604	CLA	CHD-C1D-ND	-3.03	121.67	124.45
25	c	507	CLA	C4D-C3D-CAD	3.03	111.66	108.10
26	z	101	BCR	C38-C26-C25	-3.02	121.14	124.53
26	A	609	BCR	C3-C4-C5	-3.02	108.69	114.08
27	A	610	PL9	C7-C3-C4	3.01	119.32	116.88
26	b	619	BCR	C33-C5-C6	-2.99	121.17	124.53
36	V	201	HEC	CMC-C2C-C1C	-2.99	123.86	128.46
25	B	604	CLA	C4D-C3D-CAD	2.99	111.62	108.10
23	c	520	LMG	O8-C28-C29	2.99	121.29	111.91
26	b	617	BCR	C38-C26-C27	2.99	119.36	113.62
23	a	603	LMG	O8-C28-C29	2.99	121.28	111.91
25	B	601	CLA	C4D-C3D-CAD	2.98	111.61	108.10
26	h	101	BCR	C38-C26-C25	-2.98	121.18	124.53
27	D	407	PL9	C15-C14-C16	2.98	120.28	115.27
25	B	616	CLA	C1-C2-C3	-2.98	120.90	126.04
23	C	519	LMG	O8-C28-C29	2.97	121.23	111.91
26	K	101	BCR	C24-C23-C22	-2.97	121.75	126.23
25	C	507	CLA	C4D-C3D-CAD	2.97	111.59	108.10
25	C	510	CLA	C1-C2-C3	-2.96	120.92	126.04
35	E	102	HEM	C4C-CHD-C1D	2.96	126.46	122.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	502	CLA	C1-C2-C3	-2.95	120.94	126.04
25	C	502	CLA	C1-C2-C3	-2.95	120.94	126.04
25	b	604	CLA	C4D-C3D-CAD	2.95	111.58	108.10
26	b	617	BCR	C29-C30-C25	2.95	115.02	110.48
27	d	405	PL9	C20-C19-C21	2.95	120.23	115.27
25	B	612	CLA	C4D-C3D-CAD	2.95	111.57	108.10
25	b	601	CLA	C4D-C3D-CAD	2.94	111.56	108.10
25	b	604	CLA	C2C-C1C-NC	2.94	112.73	109.97
26	C	515	BCR	C20-C21-C22	-2.94	123.11	127.31
36	V	201	HEC	CMB-C2B-C1B	-2.94	123.95	128.46
26	C	515	BCR	C15-C16-C17	-2.94	117.45	123.47
28	A	611	SQD	O9-S-C6	2.93	110.42	106.94
25	b	612	CLA	C4D-C3D-CAD	2.93	111.55	108.10
29	L	102	LHG	C5-O7-C7	-2.93	110.58	117.79
25	B	614	CLA	C4D-C3D-CAD	2.92	111.54	108.10
28	a	613	SQD	O48-C23-C24	2.92	121.08	111.91
25	C	511	CLA	C4D-C3D-CAD	2.92	111.53	108.10
25	C	512	CLA	C4D-C3D-CAD	2.92	111.53	108.10
25	b	614	CLA	C4D-C3D-CAD	2.90	111.51	108.10
25	b	607	CLA	C4D-C3D-CAD	2.89	111.51	108.10
25	b	615	CLA	C4D-C3D-CAD	2.89	111.50	108.10
27	a	612	PL9	C20-C19-C21	2.89	120.14	115.27
25	c	511	CLA	C4D-C3D-CAD	2.89	111.50	108.10
23	A	603	LMG	O8-C28-C29	2.89	120.97	111.91
25	B	605	CLA	C4D-C3D-CAD	2.89	111.50	108.10
25	c	505	CLA	C4D-C3D-CAD	2.88	111.49	108.10
25	B	613	CLA	C4D-C3D-CAD	2.88	111.49	108.10
25	b	605	CLA	C4D-C3D-CAD	2.88	111.49	108.10
27	d	405	PL9	C15-C14-C16	2.88	120.11	115.27
23	b	620	LMG	O8-C28-C29	2.87	120.91	111.91
25	C	501	CLA	C2C-C1C-NC	2.87	112.66	109.97
27	D	407	PL9	C27-C28-C29	-2.87	120.76	127.66
25	D	404	CLA	C4D-C3D-CAD	2.86	111.47	108.10
25	c	512	CLA	C4D-C3D-CAD	2.86	111.47	108.10
33	c	516	DGD	O1G-C1A-C2A	2.86	120.90	111.91
27	A	610	PL9	C53-C6-C1	2.86	120.83	114.99
27	a	612	PL9	C22-C23-C24	-2.86	120.78	127.66
27	a	612	PL9	C17-C18-C19	-2.86	120.78	127.66
25	c	510	CLA	C4D-C3D-CAD	2.85	111.46	108.10
27	A	610	PL9	C17-C18-C19	-2.85	120.80	127.66
26	C	522	BCR	C33-C5-C6	-2.85	121.33	124.53
25	b	606	CLA	C4D-C3D-CAD	2.84	111.45	108.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	503	CLA	C1-C2-C3	-2.84	121.12	126.04
25	b	610	CLA	C1-C2-C3	-2.84	121.13	126.04
27	a	612	PL9	C42-C43-C44	-2.83	120.83	127.66
27	D	407	PL9	C35-C34-C36	2.83	120.04	115.27
28	A	611	SQD	O48-C23-C24	2.83	120.80	111.91
25	B	606	CLA	C4D-C3D-CAD	2.83	111.44	108.10
25	B	602	CLA	C4D-C3D-CAD	2.83	111.43	108.10
25	b	603	CLA	C4D-C3D-CAD	2.83	111.43	108.10
26	k	102	BCR	C24-C23-C22	-2.82	121.97	126.23
25	b	610	CLA	C4D-C3D-CAD	2.82	111.42	108.10
25	B	615	CLA	C4D-C3D-CAD	2.82	111.42	108.10
25	a	608	CLA	C2C-C1C-NC	2.82	112.61	109.97
27	A	610	PL9	C45-C44-C46	2.82	120.01	115.27
25	A	606	CLA	C4D-C3D-CAD	2.82	111.42	108.10
25	c	506	CLA	C4D-C3D-CAD	2.81	111.41	108.10
27	d	405	PL9	C25-C24-C26	2.81	120.00	115.27
26	B	619	BCR	C1-C6-C5	-2.81	118.66	122.61
25	B	611	CLA	C4D-C3D-CAD	2.80	111.40	108.10
25	B	607	CLA	C4D-C3D-CAD	2.80	111.40	108.10
33	C	518	DGD	O1G-C1A-C2A	2.80	120.70	111.91
25	C	501	CLA	C4D-C3D-CAD	2.80	111.39	108.10
26	b	617	BCR	C24-C23-C22	-2.79	122.01	126.23
27	a	612	PL9	C7-C3-C4	2.79	119.15	116.88
25	a	606	CLA	C4D-C3D-CAD	2.79	111.39	108.10
26	D	406	BCR	C38-C26-C25	-2.79	121.40	124.53
25	b	611	CLA	C4D-C3D-CAD	2.79	111.38	108.10
26	D	406	BCR	C27-C26-C25	-2.78	118.69	122.73
25	c	512	CLA	C2C-C1C-NC	2.78	112.58	109.97
25	B	616	CLA	C4D-C3D-CAD	2.78	111.37	108.10
25	C	504	CLA	C4D-C3D-CAD	2.78	111.37	108.10
25	b	613	CLA	C4D-C3D-CAD	2.78	111.37	108.10
27	a	612	PL9	C53-C6-C1	2.78	120.67	114.99
27	d	405	PL9	C45-C44-C46	2.78	119.94	115.27
25	C	510	CLA	C4D-C3D-CAD	2.78	111.37	108.10
25	B	610	CLA	C1-C2-C3	-2.77	121.24	126.04
25	B	607	CLA	C2C-C1C-NC	2.77	112.57	109.97
25	B	615	CLA	C2C-C1C-NC	2.77	112.57	109.97
25	b	616	CLA	C4D-C3D-CAD	2.77	111.36	108.10
25	B	613	CLA	C2C-C1C-NC	2.77	112.57	109.97
25	c	501	CLA	C4D-C3D-CAD	2.77	111.36	108.10
25	C	507	CLA	C2C-C1C-NC	2.77	112.56	109.97
34	d	402	PHO	C1-C2-C3	-2.77	121.26	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	D	406	BCR	C29-C30-C25	2.76	114.73	110.48
25	C	511	CLA	C2C-C1C-NC	2.76	112.56	109.97
27	A	610	PL9	C42-C43-C44	-2.76	121.02	127.66
23	c	518	LMG	O8-C28-C29	2.76	120.56	111.91
27	d	405	PL9	C35-C34-C36	2.76	119.91	115.27
25	d	401	CLA	C4D-C3D-CAD	2.75	111.34	108.10
27	a	612	PL9	C45-C44-C46	2.75	119.90	115.27
23	B	620	LMG	O8-C28-C29	2.75	120.55	111.91
25	c	504	CLA	C2C-C1C-NC	2.75	112.55	109.97
27	d	405	PL9	C53-C6-C1	2.75	120.61	114.99
25	B	603	CLA	C4D-C3D-CAD	2.75	111.33	108.10
25	C	503	CLA	C2C-C1C-NC	2.75	112.55	109.97
25	B	605	CLA	C2C-C1C-NC	2.74	112.54	109.97
25	B	610	CLA	C4D-C3D-CAD	2.74	111.33	108.10
25	d	403	CLA	C4D-C3D-CAD	2.74	111.33	108.10
25	c	504	CLA	C4D-C3D-CAD	2.74	111.32	108.10
27	a	612	PL9	C32-C33-C34	-2.74	121.07	127.66
27	D	407	PL9	C30-C29-C31	2.74	119.88	115.27
26	C	515	BCR	C16-C17-C18	-2.74	123.40	127.31
26	b	618	BCR	C2-C1-C6	2.74	114.69	110.48
25	c	503	CLA	C2C-C1C-NC	2.73	112.53	109.97
25	c	501	CLA	C2C-C1C-NC	2.73	112.53	109.97
25	c	513	CLA	C4D-C3D-CAD	2.73	111.32	108.10
29	A	613	LHG	O8-C23-C24	2.73	120.48	111.91
27	d	405	PL9	C17-C18-C19	-2.73	121.08	127.66
29	a	616	LHG	C5-O7-C7	-2.73	111.07	117.79
26	B	617	BCR	C38-C26-C27	2.73	118.85	113.62
25	C	512	CLA	C2C-C1C-NC	2.72	112.52	109.97
25	c	510	CLA	C2C-C1C-NC	2.72	112.52	109.97
26	C	522	BCR	C33-C5-C4	2.72	118.85	113.62
23	C	521	LMG	O8-C28-C29	2.72	120.45	111.91
25	c	509	CLA	C4D-C3D-CAD	2.72	111.30	108.10
29	l	101	LHG	C5-O7-C7	-2.72	111.10	117.79
25	C	509	CLA	C2C-C1C-NC	2.72	112.52	109.97
25	b	602	CLA	C4D-C3D-CAD	2.72	111.30	108.10
33	C	516	DGD	O1G-C1A-C2A	2.72	120.44	111.91
29	l	101	LHG	O8-C23-C24	2.71	120.42	111.91
25	D	403	CLA	C4D-C3D-CAD	2.71	111.29	108.10
25	A	608	CLA	C4D-C3D-CAD	2.71	111.29	108.10
25	c	502	CLA	C4D-C3D-CAD	2.71	111.29	108.10
25	a	610	CLA	C4D-C3D-CAD	2.71	111.29	108.10
27	A	610	PL9	C15-C14-C16	2.71	119.83	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	H	101	BCR	C29-C30-C25	2.71	114.65	110.48
33	c	515	DGD	C2G-O2G-C1B	-2.70	111.13	117.79
25	d	403	CLA	C2C-C1C-NC	2.70	112.50	109.97
27	A	610	PL9	C12-C13-C14	-2.70	121.15	127.66
28	L	103	SQD	O48-C23-C24	2.70	120.39	111.91
27	D	407	PL9	C25-C24-C26	2.69	119.80	115.27
27	D	407	PL9	C53-C6-C1	2.69	120.49	114.99
25	C	513	CLA	C4D-C3D-CAD	2.69	111.27	108.10
28	f	101	SQD	O48-C23-C24	2.69	120.35	111.91
25	C	502	CLA	C4D-C3D-CAD	2.69	111.26	108.10
26	B	618	BCR	C38-C26-C25	-2.68	121.52	124.53
25	D	403	CLA	C1-C2-C3	-2.68	121.40	126.04
25	b	613	CLA	C2C-C1C-NC	2.68	112.48	109.97
25	c	511	CLA	C2C-C1C-NC	2.68	112.48	109.97
36	v	201	HEC	CMB-C2B-C1B	-2.68	124.35	128.46
25	a	607	CLA	C4D-C3D-CAD	2.68	111.25	108.10
25	B	607	CLA	C1-C2-C3	-2.67	121.42	126.04
27	a	612	PL9	C27-C28-C29	-2.67	121.22	127.66
33	c	517	DGD	O1G-C1A-C2A	2.67	120.29	111.91
27	d	405	PL9	C30-C29-C31	2.67	119.76	115.27
26	c	514	BCR	C20-C21-C22	-2.67	123.50	127.31
23	A	612	LMG	O8-C28-C29	2.67	120.28	111.91
28	f	101	SQD	C3-C4-C5	2.67	114.99	110.24
25	c	509	CLA	C2C-C1C-NC	2.67	112.47	109.97
25	C	506	CLA	C1-C2-C3	-2.66	121.44	126.04
28	L	103	SQD	O9-S-C6	2.66	110.10	106.94
25	b	611	CLA	C2C-C1C-NC	2.66	112.47	109.97
27	d	405	PL9	C22-C23-C24	-2.66	121.26	127.66
23	a	614	LMG	C8-O7-C10	-2.66	111.25	117.79
25	b	609	CLA	C2C-C1C-NC	2.65	112.46	109.97
28	f	101	SQD	O9-S-C6	2.65	110.09	106.94
27	A	610	PL9	C25-C24-C26	2.65	119.73	115.27
25	A	607	CLA	C4D-C3D-CAD	2.65	111.22	108.10
25	B	609	CLA	C4D-C3D-CAD	2.65	111.22	108.10
26	B	617	BCR	C29-C30-C25	2.65	114.56	110.48
27	A	610	PL9	C7-C3-C2	-2.65	119.82	123.30
29	d	406	LHG	C5-O7-C7	-2.65	111.27	117.79
26	a	611	BCR	C3-C4-C5	-2.64	109.36	114.08
25	b	609	CLA	C4D-C3D-CAD	2.64	111.21	108.10
25	b	607	CLA	C2C-C1C-NC	2.64	112.45	109.97
26	C	515	BCR	C38-C26-C25	-2.64	121.56	124.53
25	C	504	CLA	C2C-C1C-NC	2.64	112.44	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	509	CLA	C4D-C3D-CAD	2.64	111.21	108.10
26	k	102	BCR	C11-C10-C9	-2.64	123.55	127.31
29	L	102	LHG	O8-C23-C24	2.64	120.18	111.91
25	B	603	CLA	C2C-C1C-NC	2.63	112.44	109.97
28	F	101	SQD	O9-S-C6	2.63	110.07	106.94
25	A	606	CLA	C1B-CHB-C4A	-2.63	124.91	130.12
25	B	606	CLA	C2C-C1C-NC	2.63	112.44	109.97
27	a	612	PL9	C25-C24-C26	2.63	119.69	115.27
25	c	508	CLA	C4D-C3D-CAD	2.63	111.19	108.10
26	T	101	BCR	C33-C5-C4	2.63	118.67	113.62
25	C	513	CLA	C2C-C1C-NC	2.62	112.43	109.97
33	C	517	DGD	O1G-C1A-C2A	2.62	120.13	111.91
27	A	610	PL9	C20-C19-C21	2.62	119.68	115.27
26	c	521	BCR	C29-C30-C25	2.62	114.51	110.48
25	b	602	CLA	C1B-CHB-C4A	-2.62	124.93	130.12
25	C	510	CLA	C2C-C1C-NC	2.62	112.42	109.97
29	a	615	LHG	O8-C23-C24	2.62	120.12	111.91
25	B	611	CLA	C2C-C1C-NC	2.61	112.42	109.97
26	c	514	BCR	C15-C16-C17	-2.61	118.13	123.47
26	h	101	BCR	C33-C5-C6	-2.61	121.60	124.53
26	k	102	BCR	C8-C7-C6	-2.61	119.88	127.20
26	h	101	BCR	C28-C27-C26	-2.60	109.43	114.08
27	D	407	PL9	C45-C44-C46	2.60	119.65	115.27
25	a	607	CLA	C1B-CHB-C4A	-2.60	124.97	130.12
26	B	619	BCR	C3-C4-C5	-2.60	109.44	114.08
25	b	603	CLA	C2C-C1C-NC	2.59	112.40	109.97
27	a	612	PL9	C40-C39-C41	2.59	119.63	115.27
25	a	608	CLA	C1-C2-C3	-2.59	121.56	126.04
26	H	101	BCR	C33-C5-C6	-2.59	121.62	124.53
23	A	612	LMG	C8-O7-C10	-2.59	111.42	117.79
33	C	516	DGD	C2G-O2G-C1B	-2.59	111.42	117.79
25	c	507	CLA	C1-C2-C3	-2.58	121.58	126.04
25	C	506	CLA	C4D-C3D-CAD	2.58	111.14	108.10
26	C	522	BCR	C29-C30-C25	2.58	114.45	110.48
25	c	513	CLA	C2C-C1C-NC	2.58	112.39	109.97
29	D	408	LHG	C5-O7-C7	-2.58	111.45	117.79
27	D	407	PL9	C22-C23-C24	-2.58	121.46	127.66
25	b	606	CLA	C2C-C1C-NC	2.58	112.39	109.97
26	b	619	BCR	C33-C5-C4	2.57	118.56	113.62
25	c	507	CLA	C2C-C1C-NC	2.57	112.38	109.97
25	B	604	CLA	C1-C2-C3	-2.57	121.59	126.04
29	A	614	LHG	O8-C23-C24	2.57	119.98	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	a	608	CLA	C4D-C3D-CAD	2.57	111.12	108.10
23	c	520	LMG	C8-O7-C10	-2.57	111.47	117.79
27	A	610	PL9	C10-C9-C11	2.57	119.59	115.27
27	A	610	PL9	C30-C29-C31	2.57	119.59	115.27
25	c	502	CLA	C2C-C1C-NC	2.56	112.37	109.97
26	B	619	BCR	C33-C5-C4	2.56	118.53	113.62
26	c	521	BCR	C3-C4-C5	-2.56	109.51	114.08
25	B	602	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
33	H	102	DGD	O1G-C1A-C2A	2.55	119.92	111.91
26	K	101	BCR	C8-C7-C6	-2.55	120.04	127.20
27	D	407	PL9	C17-C18-C19	-2.55	121.52	127.66
26	A	609	BCR	C15-C16-C17	-2.55	118.26	123.47
27	D	407	PL9	C10-C9-C11	2.54	119.55	115.27
23	B	624	LMG	C8-O7-C10	-2.54	111.53	117.79
35	E	102	HEM	CMC-C2C-C3C	2.54	129.43	124.68
25	a	606	CLA	C1B-CHB-C4A	-2.54	125.09	130.12
25	b	608	CLA	C4D-C3D-CAD	2.54	111.08	108.10
25	b	602	CLA	C1-C2-C3	-2.54	121.66	126.04
27	A	610	PL9	C40-C39-C41	2.54	119.54	115.27
25	B	608	CLA	C4D-C3D-CAD	2.53	111.08	108.10
29	E	101	LHG	O8-C23-C24	2.53	119.85	111.91
25	D	405	CLA	C4D-C3D-CAD	2.53	111.08	108.10
25	C	508	CLA	C4D-C3D-CAD	2.53	111.07	108.10
26	b	619	BCR	C3-C4-C5	-2.53	109.57	114.08
28	F	101	SQD	O6-C1-C2	2.52	112.24	108.30
27	D	407	PL9	C12-C13-C14	-2.52	121.59	127.66
25	B	613	CLA	C1-C2-C3	-2.52	121.69	126.04
25	B	616	CLA	C2C-C1C-NC	2.52	112.33	109.97
25	D	403	CLA	C2C-C1C-NC	2.52	112.33	109.97
25	B	603	CLA	C1B-CHB-C4A	-2.52	125.13	130.12
25	D	405	CLA	C2C-C1C-NC	2.51	112.33	109.97
28	a	613	SQD	O9-S-C6	2.51	109.93	106.94
25	b	604	CLA	CHC-C1C-C2C	-2.51	119.78	126.72
23	b	624	LMG	C8-O7-C10	-2.51	111.61	117.79
25	C	502	CLA	C2C-C1C-NC	2.51	112.32	109.97
25	B	612	CLA	C1-C2-C3	-2.51	121.70	126.04
25	b	615	CLA	C2C-C1C-NC	2.51	112.32	109.97
29	d	407	LHG	O8-C23-C24	2.51	119.77	111.91
35	E	102	HEM	CMA-C3A-C4A	-2.51	124.61	128.46
27	d	405	PL9	C12-C13-C14	-2.50	121.63	127.66
26	t	102	BCR	C3-C4-C5	-2.50	109.61	114.08
25	B	601	CLA	C2C-C1C-NC	2.50	112.31	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	A	608	CLA	C2C-C1C-NC	2.50	112.31	109.97
25	B	604	CLA	CHC-C1C-C2C	-2.49	119.82	126.72
25	c	501	CLA	C1-C2-C3	-2.49	121.73	126.04
25	B	609	CLA	C2C-C1C-NC	2.49	112.31	109.97
28	F	101	SQD	C44-O6-C1	-2.49	108.88	113.74
25	B	610	CLA	C2C-C1C-NC	2.49	112.30	109.97
23	d	408	LMG	C8-O7-C10	-2.48	111.67	117.79
25	b	614	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
26	d	404	BCR	C38-C26-C27	2.48	118.38	113.62
35	e	101	HEM	C1B-NB-C4B	2.48	107.63	105.07
25	B	606	CLA	C1-C2-C3	-2.48	121.76	126.04
25	C	503	CLA	C1-C2-C3	-2.48	121.76	126.04
25	b	601	CLA	C2C-C1C-NC	2.48	112.29	109.97
27	A	610	PL9	C27-C28-C29	-2.47	121.71	127.66
26	K	101	BCR	C20-C21-C22	-2.47	123.79	127.31
25	C	506	CLA	C2C-C1C-NC	2.47	112.28	109.97
35	e	101	HEM	CMA-C3A-C4A	-2.46	124.68	128.46
33	h	102	DGD	O1G-C1A-C2A	2.46	119.62	111.91
26	B	617	BCR	C27-C26-C25	-2.46	119.16	122.73
25	D	403	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
36	v	201	HEC	CMC-C2C-C3C	2.46	128.71	125.82
25	C	508	CLA	C2C-C1C-NC	2.45	112.27	109.97
25	a	606	CLA	C2C-C1C-NC	2.45	112.27	109.97
26	C	522	BCR	C15-C16-C17	-2.45	118.45	123.47
29	a	615	LHG	C5-O7-C7	-2.45	111.76	117.79
27	A	610	PL9	C35-C34-C36	2.45	119.39	115.27
26	T	101	BCR	C28-C27-C26	-2.45	109.71	114.08
25	A	606	CLA	C2C-C1C-NC	2.44	112.26	109.97
26	t	102	BCR	C28-C27-C26	-2.44	109.72	114.08
26	K	101	BCR	C7-C8-C9	-2.44	122.55	126.23
25	C	501	CLA	C1-C2-C3	-2.44	121.82	126.04
25	b	610	CLA	C2C-C1C-NC	2.44	112.26	109.97
25	B	607	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	c	508	CLA	C1-C2-C3	-2.44	121.82	126.04
23	b	624	LMG	O8-C28-C29	2.44	119.57	111.91
34	D	402	PHO	C1-C2-C3	-2.44	121.82	126.04
27	d	405	PL9	C32-C33-C34	-2.44	121.79	127.66
28	L	101	SQD	O48-C23-C24	2.43	119.55	111.91
35	E	102	HEM	O2D-CGD-CBD	2.43	121.85	114.03
27	d	405	PL9	C10-C9-C11	2.43	119.36	115.27
25	a	610	CLA	C2C-C1C-NC	2.43	112.25	109.97
25	b	608	CLA	C1B-CHB-C4A	-2.43	125.30	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	k	102	BCR	C16-C15-C14	-2.43	118.49	123.47
25	a	608	CLA	CHC-C1C-C2C	-2.43	120.01	126.72
27	a	612	PL9	C12-C13-C14	-2.43	121.82	127.66
25	A	607	CLA	C2C-C1C-NC	2.42	112.24	109.97
25	a	607	CLA	C1-C2-C3	-2.42	121.86	126.04
25	b	612	CLA	C2C-C1C-NC	2.42	112.24	109.97
33	c	515	DGD	O1G-C1A-C2A	2.42	119.50	111.91
26	k	102	BCR	C38-C26-C27	2.41	118.25	113.62
25	b	605	CLA	C2C-C1C-NC	2.41	112.23	109.97
25	C	508	CLA	C1-C2-C3	-2.41	121.87	126.04
25	c	506	CLA	C1-C2-C3	-2.41	121.87	126.04
28	A	611	SQD	O7-S-C6	2.41	109.81	106.94
25	A	607	CLA	C1-C2-C3	-2.41	121.87	126.04
25	B	608	CLA	C1B-CHB-C4A	-2.41	125.34	130.12
28	f	101	SQD	C45-O47-C7	-2.41	111.86	117.79
25	B	603	CLA	C1-C2-C3	-2.40	121.89	126.04
25	B	608	CLA	C2C-C1C-NC	2.40	112.22	109.97
25	c	513	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
27	D	407	PL9	C32-C33-C34	-2.40	121.89	127.66
26	c	521	BCR	C33-C5-C4	2.40	118.22	113.62
26	A	609	BCR	C33-C5-C4	2.40	118.22	113.62
25	C	508	CLA	C1B-CHB-C4A	-2.39	125.37	130.12
25	b	608	CLA	C2C-C1C-NC	2.39	112.21	109.97
23	a	614	LMG	O8-C28-C29	2.39	119.41	111.91
25	d	401	CLA	C1B-CHB-C4A	-2.39	125.39	130.12
35	E	102	HEM	C4D-ND-C1D	2.39	107.54	105.07
28	F	101	SQD	O7-S-C6	2.39	109.78	106.94
25	A	608	CLA	C1B-CHB-C4A	-2.39	125.39	130.12
28	F	101	SQD	C45-O47-C7	-2.39	111.92	117.79
33	c	515	DGD	O6D-C5D-C6D	2.39	111.48	106.67
27	a	612	PL9	C51-C49-C50	2.38	119.87	114.60
23	B	624	LMG	O8-C28-C29	2.38	119.38	111.91
25	c	504	CLA	CHC-C1C-C2C	-2.38	120.14	126.72
26	k	102	BCR	C20-C21-C22	-2.38	123.92	127.31
23	D	409	LMG	C8-O7-C10	-2.38	111.94	117.79
27	a	612	PL9	C10-C9-C11	2.38	119.27	115.27
26	k	102	BCR	C23-C24-C25	-2.38	120.53	127.20
25	b	608	CLA	C1-C2-C3	-2.37	121.94	126.04
25	a	610	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	B	607	CLA	CHC-C1C-C2C	-2.37	120.17	126.72
25	c	506	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	B	614	CLA	C1B-CHB-C4A	-2.37	125.42	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	D	404	CLA	C1B-CHB-C4A	-2.37	125.43	130.12
25	a	607	CLA	C2C-C1C-NC	2.37	112.19	109.97
26	B	619	BCR	C33-C5-C6	-2.37	121.87	124.53
25	b	613	CLA	C1-C2-C3	-2.36	121.96	126.04
27	a	612	PL9	C7-C3-C2	-2.36	120.19	123.30
27	d	405	PL9	C42-C43-C44	-2.36	121.97	127.66
25	b	607	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
35	E	102	HEM	C1B-NB-C4B	2.36	107.51	105.07
25	C	505	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
26	c	514	BCR	C21-C20-C19	-2.36	115.86	123.22
29	a	616	LHG	O8-C23-C24	2.36	119.30	111.91
25	B	613	CLA	CHC-C1C-C2C	-2.35	120.21	126.72
26	K	101	BCR	C10-C11-C12	-2.35	115.87	123.22
25	c	505	CLA	C1B-CHB-C4A	-2.35	125.45	130.12
25	c	508	CLA	C2C-C1C-NC	2.35	112.18	109.97
25	b	612	CLA	C1-C2-C3	-2.35	121.98	126.04
23	D	409	LMG	O8-C28-C29	2.35	119.28	111.91
25	b	604	CLA	C1-C2-C3	-2.35	121.98	126.04
25	b	606	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
28	a	613	SQD	C45-O47-C7	-2.35	112.01	117.79
25	C	513	CLA	C1-C2-C3	-2.35	121.98	126.04
25	C	511	CLA	CHC-C1C-C2C	-2.35	120.23	126.72
26	k	102	BCR	C28-C27-C26	-2.35	109.89	114.08
25	D	404	CLA	C1-C2-C3	-2.34	121.99	126.04
25	C	501	CLA	CHC-C1C-C2C	-2.34	120.25	126.72
25	B	615	CLA	CHC-C1C-C2C	-2.34	120.25	126.72
27	a	612	PL9	C30-C29-C31	2.34	119.21	115.27
29	d	406	LHG	O8-C23-C24	2.34	119.25	111.91
25	B	612	CLA	C2C-C1C-NC	2.34	112.16	109.97
25	D	405	CLA	C1-C2-C3	-2.33	122.00	126.04
25	b	603	CLA	C1B-CHB-C4A	-2.33	125.49	130.12
27	D	407	PL9	C51-C49-C50	2.33	119.76	114.60
26	C	515	BCR	C21-C20-C19	-2.33	115.93	123.22
36	V	201	HEC	CMC-C2C-C3C	2.33	128.56	125.82
26	B	619	BCR	C38-C26-C27	2.33	118.09	113.62
25	C	507	CLA	CHC-C1C-C2C	-2.33	120.27	126.72
35	e	101	HEM	O2D-CGD-CBD	2.33	121.52	114.03
26	h	101	BCR	C29-C30-C25	2.33	114.06	110.48
25	C	504	CLA	C1B-CHB-C4A	-2.32	125.52	130.12
26	k	102	BCR	C7-C8-C9	-2.32	122.72	126.23
26	B	618	BCR	C38-C26-C27	2.32	118.08	113.62
25	A	606	CLA	CMB-C2B-C1B	-2.32	124.90	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	T	101	BCR	C3-C4-C5	-2.32	109.94	114.08
25	c	501	CLA	CHC-C1C-C2C	-2.32	120.31	126.72
25	C	512	CLA	CHC-C1C-C2C	-2.32	120.31	126.72
27	A	610	PL9	C51-C49-C50	2.32	119.72	114.60
25	B	606	CLA	CHC-C1C-C2C	-2.32	120.32	126.72
25	A	607	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
26	C	515	BCR	C33-C5-C4	2.31	118.06	113.62
25	c	512	CLA	CHC-C1C-C2C	-2.31	120.32	126.72
25	B	605	CLA	C1B-CHB-C4A	-2.31	125.53	130.12
25	b	609	CLA	C1B-CHB-C4A	-2.31	125.54	130.12
25	C	503	CLA	CHC-C1C-C2C	-2.31	120.33	126.72
29	D	408	LHG	O8-C23-C24	2.31	119.16	111.91
36	V	201	HEC	O2D-CGD-CBD	2.31	121.45	114.03
27	a	612	PL9	C35-C34-C36	2.31	119.15	115.27
25	d	403	CLA	CHC-C1C-C2C	-2.31	120.34	126.72
25	a	610	CLA	C1-C2-C3	-2.31	122.05	126.04
25	C	509	CLA	CHC-C1C-C2C	-2.31	120.34	126.72
25	D	405	CLA	C1B-CHB-C4A	-2.31	125.55	130.12
26	t	102	BCR	C8-C7-C6	-2.31	120.72	127.20
29	E	101	LHG	C5-O7-C7	-2.30	112.12	117.79
25	C	513	CLA	C1B-CHB-C4A	-2.30	125.55	130.12
25	B	605	CLA	CHC-C1C-C2C	-2.30	120.35	126.72
25	b	606	CLA	CHC-C1C-C2C	-2.30	120.35	126.72
25	b	616	CLA	C2C-C1C-NC	2.30	112.13	109.97
25	B	614	CLA	C2C-C1C-NC	2.30	112.13	109.97
25	c	513	CLA	CHC-C1C-C2C	-2.30	120.36	126.72
25	C	513	CLA	CHC-C1C-C2C	-2.30	120.37	126.72
25	b	607	CLA	CHC-C1C-C2C	-2.30	120.37	126.72
26	B	617	BCR	C38-C26-C25	-2.30	121.95	124.53
25	C	504	CLA	CHC-C1C-C2C	-2.30	120.37	126.72
23	a	603	LMG	C8-O7-C10	-2.29	112.14	117.79
25	a	608	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
26	b	618	BCR	C15-C16-C17	-2.29	118.79	123.47
26	B	617	BCR	C15-C16-C17	-2.29	118.79	123.47
25	B	601	CLA	C1B-CHB-C4A	-2.29	125.59	130.12
26	c	514	BCR	C38-C26-C25	-2.29	121.96	124.53
26	t	102	BCR	C11-C12-C13	-2.29	120.00	126.42
25	c	511	CLA	CHC-C1C-C2C	-2.29	120.40	126.72
28	f	101	SQD	O7-S-C6	2.28	109.65	106.94
26	z	101	BCR	C15-C16-C17	-2.28	118.80	123.47
35	e	101	HEM	C3B-C2B-C1B	2.28	108.18	106.49
25	C	510	CLA	CHC-C1C-C2C	-2.28	120.41	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	609	CLA	C1B-CHB-C4A	-2.28	125.60	130.12
26	T	101	BCR	C20-C19-C18	-2.28	120.01	126.42
25	c	510	CLA	CHC-C1C-C2C	-2.28	120.42	126.72
25	B	611	CLA	CHC-C1C-C2C	-2.28	120.42	126.72
25	B	616	CLA	CHC-C1C-C2C	-2.28	120.42	126.72
26	c	514	BCR	C33-C5-C4	2.28	117.99	113.62
25	c	509	CLA	CHC-C1C-C2C	-2.28	120.43	126.72
25	b	613	CLA	CMB-C2B-C1B	-2.27	124.97	128.46
25	B	603	CLA	CHC-C1C-C2C	-2.27	120.43	126.72
25	c	508	CLA	C1B-CHB-C4A	-2.27	125.61	130.12
25	d	401	CLA	C1-C2-C3	-2.27	122.11	126.04
25	b	603	CLA	CHC-C1C-C2C	-2.27	120.44	126.72
25	B	609	CLA	C1-C2-C3	-2.27	122.12	126.04
25	b	613	CLA	CHC-C1C-C2C	-2.27	120.45	126.72
27	D	407	PL9	C42-C43-C44	-2.27	122.20	127.66
25	B	606	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	C	508	CLA	C1D-CHD-C4C	-2.26	121.18	126.06
35	e	101	HEM	CMC-C2C-C3C	2.26	128.91	124.68
25	D	403	CLA	CHC-C1C-C2C	-2.26	120.47	126.72
36	v	201	HEC	O2D-CGD-CBD	2.26	121.29	114.03
25	a	606	CLA	CMB-C2B-C1B	-2.26	124.99	128.46
25	C	506	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	b	607	CLA	C1-C2-C3	-2.25	122.14	126.04
25	b	605	CLA	C1B-CHB-C4A	-2.25	125.65	130.12
26	b	619	BCR	C23-C24-C25	-2.25	120.87	127.20
25	C	505	CLA	C1D-CHD-C4C	-2.25	121.20	126.06
26	b	618	BCR	C29-C30-C25	2.25	113.95	110.48
25	c	503	CLA	CHC-C1C-C2C	-2.25	120.49	126.72
25	b	611	CLA	CHC-C1C-C2C	-2.25	120.50	126.72
26	K	101	BCR	C23-C24-C25	-2.25	120.88	127.20
25	c	504	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
25	b	609	CLA	C1-C2-C3	-2.24	122.16	126.04
25	D	405	CLA	CHC-C1C-C2C	-2.24	120.52	126.72
26	a	611	BCR	C33-C5-C4	2.24	117.92	113.62
25	C	502	CLA	CHC-C1C-C2C	-2.24	120.52	126.72
25	D	405	CLA	CMB-C2B-C1B	-2.24	125.02	128.46
27	d	405	PL9	C51-C49-C50	2.24	119.55	114.60
25	B	611	CLA	C1B-CHB-C4A	-2.24	125.68	130.12
25	b	616	CLA	C1B-CHB-C4A	-2.24	125.68	130.12
28	a	613	SQD	O6-C1-C2	2.24	111.80	108.30
25	a	607	CLA	C3D-C2D-C1D	2.24	108.89	105.83
25	b	615	CLA	CHC-C1C-C2C	-2.24	120.53	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	505	CLA	C3D-C2D-C1D	2.24	108.88	105.83
25	c	507	CLA	CHC-C1C-C2C	-2.24	120.53	126.72
25	c	502	CLA	CHC-C1C-C2C	-2.23	120.56	126.72
23	a	603	LMG	C3-C4-C5	2.23	114.21	110.24
23	b	620	LMG	C8-O7-C10	-2.23	112.31	117.79
23	C	521	LMG	O2-C2-C3	-2.23	105.20	110.35
25	b	601	CLA	CHC-C1C-C2C	-2.22	120.57	126.72
26	k	102	BCR	C10-C11-C12	-2.22	116.28	123.22
26	k	102	BCR	C21-C20-C19	-2.22	116.28	123.22
25	B	609	CLA	CHC-C1C-C2C	-2.22	120.58	126.72
25	C	511	CLA	C1-C2-C3	-2.22	122.21	126.04
25	b	614	CLA	C2C-C1C-NC	2.22	112.05	109.97
26	c	514	BCR	C28-C27-C26	-2.22	110.12	114.08
26	b	618	BCR	C38-C26-C27	2.21	117.87	113.62
26	K	101	BCR	C16-C15-C14	-2.21	118.94	123.47
26	t	102	BCR	C33-C5-C4	2.21	117.87	113.62
26	b	617	BCR	C3-C4-C5	-2.21	110.13	114.08
25	a	606	CLA	C1D-CHD-C4C	-2.21	121.29	126.06
25	C	508	CLA	CHC-C1C-C2C	-2.21	120.61	126.72
25	b	609	CLA	CHC-C1C-C2C	-2.21	120.62	126.72
25	b	601	CLA	C1D-CHD-C4C	-2.21	121.30	126.06
26	B	617	BCR	C8-C7-C6	-2.21	121.01	127.20
25	A	608	CLA	CHC-C1C-C2C	-2.21	120.62	126.72
25	b	612	CLA	CHC-C1C-C2C	-2.21	120.62	126.72
25	B	615	CLA	C1D-CHD-C4C	-2.20	121.31	126.06
25	b	608	CLA	CHC-C1C-C2C	-2.20	120.63	126.72
25	b	607	CLA	CMB-C2B-C1B	-2.20	125.08	128.46
26	B	619	BCR	C4-C5-C6	-2.20	119.54	122.73
25	a	607	CLA	CHC-C1C-C2C	-2.20	120.64	126.72
27	d	405	PL9	C40-C39-C41	2.20	118.97	115.27
25	C	510	CLA	C3D-C2D-C1D	2.20	108.83	105.83
25	a	610	CLA	CHC-C1C-C2C	-2.20	120.64	126.72
25	c	506	CLA	CMB-C2B-C1B	-2.20	125.09	128.46
25	c	506	CLA	C2C-C1C-NC	2.19	112.03	109.97
25	B	601	CLA	CHC-C1C-C2C	-2.19	120.66	126.72
25	B	610	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	B	616	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	b	611	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	B	602	CLA	C1-C2-C3	-2.19	122.26	126.04
25	B	611	CLA	C1D-CHD-C4C	-2.19	121.34	126.06
25	c	508	CLA	CHC-C1C-C2C	-2.19	120.67	126.72
25	C	510	CLA	C1B-CHB-C4A	-2.19	125.78	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	509	CLA	C1D-CHD-C4C	-2.19	121.34	126.06
25	D	405	CLA	C1D-CHD-C4C	-2.19	121.34	126.06
26	B	618	BCR	C15-C16-C17	-2.19	119.00	123.47
23	d	408	LMG	O8-C28-C29	2.19	118.77	111.91
25	C	508	CLA	CMB-C2B-C1B	-2.18	125.11	128.46
25	A	607	CLA	CHC-C1C-C2C	-2.18	120.68	126.72
25	C	501	CLA	C1D-CHD-C4C	-2.18	121.35	126.06
25	C	506	CLA	CMB-C2B-C1B	-2.18	125.11	128.46
25	b	616	CLA	C1D-CHD-C4C	-2.18	121.35	126.06
25	B	611	CLA	CMB-C2B-C1B	-2.18	125.11	128.46
25	a	606	CLA	CHC-C1C-C2C	-2.18	120.69	126.72
26	b	617	BCR	C23-C24-C25	-2.18	121.08	127.20
25	A	606	CLA	CHC-C1C-C2C	-2.18	120.70	126.72
33	C	517	DGD	C2G-O2G-C1B	-2.18	112.43	117.79
25	C	507	CLA	C1-C2-C3	-2.18	122.28	126.04
25	c	505	CLA	C1D-CHD-C4C	-2.18	121.36	126.06
25	B	608	CLA	C1-C2-C3	-2.18	122.28	126.04
25	c	508	CLA	CMB-C2B-C1B	-2.18	125.12	128.46
26	b	619	BCR	C38-C26-C27	2.18	117.80	113.62
25	C	506	CLA	CHC-C1C-C2C	-2.17	120.71	126.72
25	b	602	CLA	C2C-C1C-NC	2.17	112.01	109.97
25	B	613	CLA	C1D-CHD-C4C	-2.17	121.37	126.06
25	b	612	CLA	C1D-CHD-C4C	-2.17	121.37	126.06
25	b	609	CLA	C1D-CHD-C4C	-2.17	121.37	126.06
25	b	610	CLA	C1D-CHD-C4C	-2.17	121.38	126.06
25	C	505	CLA	C3D-C2D-C1D	2.17	108.79	105.83
25	b	601	CLA	C1B-CHB-C4A	-2.17	125.82	130.12
25	B	603	CLA	CMB-C2B-C1B	-2.17	125.13	128.46
25	b	612	CLA	CMB-C2B-C1B	-2.17	125.13	128.46
25	b	610	CLA	C1B-CHB-C4A	-2.17	125.83	130.12
35	e	101	HEM	C4D-ND-C1D	2.17	107.31	105.07
25	c	507	CLA	C1B-CHB-C4A	-2.17	125.83	130.12
26	C	514	BCR	C3-C4-C5	-2.16	110.21	114.08
25	C	510	CLA	CMB-C2B-C1B	-2.16	125.14	128.46
28	F	101	SQD	O48-C23-C24	2.16	118.69	111.91
25	c	506	CLA	C1D-CHD-C4C	-2.16	121.39	126.06
25	b	605	CLA	CHC-C1C-C2C	-2.16	120.75	126.72
25	b	604	CLA	CHC-C1C-NC	2.16	127.48	124.20
25	b	602	CLA	C1D-CHD-C4C	-2.16	121.40	126.06
25	c	509	CLA	C1D-CHD-C4C	-2.16	121.40	126.06
25	B	615	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	B	616	CLA	CMB-C2B-C1B	-2.16	125.15	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	502	CLA	C1D-CHD-C4C	-2.16	121.40	126.06
25	c	502	CLA	C1D-CHD-C4C	-2.16	121.41	126.06
25	B	610	CLA	CHC-C1C-C2C	-2.16	120.76	126.72
25	b	615	CLA	C1B-CHB-C4A	-2.15	125.85	130.12
35	E	102	HEM	C3B-C2B-C1B	2.15	108.08	106.49
25	c	510	CLA	C1D-CHD-C4C	-2.15	121.41	126.06
25	d	403	CLA	C1D-CHD-C4C	-2.15	121.41	126.06
23	c	518	LMG	C8-O7-C10	-2.15	112.49	117.79
25	B	612	CLA	C1D-CHD-C4C	-2.15	121.42	126.06
26	K	101	BCR	C38-C26-C27	2.15	117.74	113.62
25	C	502	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
25	C	504	CLA	C1-C2-C3	-2.15	122.33	126.04
25	B	608	CLA	CMB-C2B-C1B	-2.15	125.16	128.46
25	A	606	CLA	C1D-CHD-C4C	-2.15	121.42	126.06
25	b	616	CLA	CMB-C2B-C1B	-2.15	125.16	128.46
25	B	609	CLA	C1D-CHD-C4C	-2.15	121.43	126.06
25	c	508	CLA	C1D-CHD-C4C	-2.15	121.43	126.06
25	b	604	CLA	C3D-C2D-C1D	2.15	108.76	105.83
25	B	614	CLA	CMB-C2B-C1B	-2.15	125.17	128.46
26	B	619	BCR	C23-C24-C25	-2.15	121.18	127.20
25	a	608	CLA	C1D-CHD-C4C	-2.14	121.43	126.06
25	b	604	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
26	t	102	BCR	C35-C13-C14	-2.14	119.92	122.92
25	B	608	CLA	CHC-C1C-C2C	-2.14	120.79	126.72
25	b	616	CLA	CHC-C1C-C2C	-2.14	120.79	126.72
25	B	601	CLA	C1D-CHD-C4C	-2.14	121.44	126.06
26	d	404	BCR	C33-C5-C4	2.14	117.73	113.62
25	b	603	CLA	C1D-CHD-C4C	-2.14	121.44	126.06
25	B	608	CLA	C3D-C2D-C1D	2.14	108.75	105.83
26	B	617	BCR	C33-C5-C4	2.14	117.73	113.62
26	D	406	BCR	C3-C4-C5	-2.14	110.26	114.08
25	C	512	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
26	C	514	BCR	C28-C27-C26	-2.14	110.26	114.08
25	c	507	CLA	C1D-CHD-C4C	-2.14	121.45	126.06
26	D	406	BCR	C33-C5-C4	2.14	117.72	113.62
25	C	504	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
25	B	612	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
25	C	503	CLA	C1D-CHD-C4C	-2.13	121.45	126.06
26	H	101	BCR	C38-C26-C27	2.13	117.72	113.62
33	C	518	DGD	C2G-O2G-C1B	-2.13	112.54	117.79
25	c	503	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
25	C	503	CLA	CMB-C2B-C1B	-2.13	125.19	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b	606	CLA	C1D-CHD-C4C	-2.13	121.46	126.06
25	b	607	CLA	C1D-CHD-C4C	-2.13	121.46	126.06
25	A	608	CLA	C1D-CHD-C4C	-2.13	121.46	126.06
25	c	513	CLA	C3D-C2D-C1D	2.13	108.74	105.83
25	c	511	CLA	C1D-CHD-C4C	-2.13	121.46	126.06
29	A	613	LHG	C5-O7-C7	-2.13	112.55	117.79
25	b	611	CLA	C1D-CHD-C4C	-2.13	121.47	126.06
28	a	613	SQD	O7-S-C6	2.13	109.47	106.94
26	d	404	BCR	C3-C4-C5	-2.13	110.28	114.08
25	B	613	CLA	CMB-C2B-C1B	-2.13	125.20	128.46
26	b	617	BCR	C33-C5-C4	2.13	117.70	113.62
25	C	501	CLA	CMB-C2B-C1B	-2.13	125.20	128.46
25	B	614	CLA	CHC-C1C-C2C	-2.13	120.84	126.72
25	c	510	CLA	CMB-C2B-C1B	-2.12	125.20	128.46
25	B	606	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	B	616	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	C	510	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	B	612	CLA	CHC-C1C-C2C	-2.12	120.85	126.72
25	B	602	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	c	501	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
25	C	513	CLA	C3D-C2D-C1D	2.12	108.73	105.83
25	c	510	CLA	C3D-C2D-C1D	2.12	108.73	105.83
25	B	605	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	B	607	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
25	b	614	CLA	C3D-C2D-C1D	2.12	108.72	105.83
25	b	608	CLA	C3D-C2D-C1D	2.12	108.72	105.83
25	b	608	CLA	CMB-C2B-C1B	-2.12	125.21	128.46
25	b	610	CLA	CHC-C1C-C2C	-2.12	120.86	126.72
25	d	403	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
25	d	401	CLA	C1D-CHD-C4C	-2.12	121.49	126.06
26	H	101	BCR	C33-C5-C4	2.12	117.68	113.62
28	f	101	SQD	O8-S-C6	2.12	109.11	105.74
25	c	504	CLA	CMB-C2B-C1B	-2.12	125.21	128.46
25	A	606	CLA	C3D-C2D-C1D	2.11	108.72	105.83
25	C	507	CLA	C1D-CHD-C4C	-2.11	121.50	126.06
25	B	601	CLA	C3D-C2D-C1D	2.11	108.72	105.83
25	D	403	CLA	C3D-C2D-C1D	2.11	108.71	105.83
25	a	607	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
25	b	605	CLA	C1D-CHD-C4C	-2.11	121.50	126.06
25	a	608	CLA	C3D-C2D-C1D	2.11	108.71	105.83
25	b	602	CLA	C3D-C2D-C1D	2.11	108.71	105.83
26	T	101	BCR	C35-C13-C14	-2.11	119.97	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	503	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
25	d	401	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
25	a	607	CLA	C1D-CHD-C4C	-2.11	121.51	126.06
25	c	513	CLA	C1-C2-C3	-2.11	122.40	126.04
25	B	602	CLA	C2C-C1C-NC	2.11	111.94	109.97
25	D	404	CLA	C1D-CHD-C4C	-2.11	121.52	126.06
25	c	503	CLA	C1D-CHD-C4C	-2.11	121.52	126.06
26	c	521	BCR	C16-C15-C14	-2.11	119.16	123.47
25	b	611	CLA	C3D-C2D-C1D	2.11	108.70	105.83
25	b	615	CLA	C1D-CHD-C4C	-2.11	121.52	126.06
25	c	512	CLA	C1B-CHB-C4A	-2.10	125.95	130.12
25	c	509	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
25	B	604	CLA	C3D-C2D-C1D	2.10	108.70	105.83
25	c	511	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
25	B	614	CLA	C1D-CHD-C4C	-2.10	121.52	126.06
25	b	614	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
25	d	403	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
25	B	602	CLA	CHC-C1C-C2C	-2.10	120.92	126.72
25	B	610	CLA	C1D-CHD-C4C	-2.10	121.53	126.06
25	D	403	CLA	C1D-CHD-C4C	-2.10	121.53	126.06
25	A	607	CLA	C1D-CHD-C4C	-2.10	121.53	126.06
25	c	501	CLA	C1D-CHD-C4C	-2.10	121.53	126.06
25	C	509	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
26	C	515	BCR	C36-C18-C19	2.10	121.38	118.08
25	A	607	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
25	c	502	CLA	C1B-CHB-C4A	-2.10	125.97	130.12
28	a	613	SQD	O48-C23-O10	-2.09	118.31	123.59
25	b	607	CLA	C3D-C2D-C1D	2.09	108.69	105.83
26	C	514	BCR	C11-C12-C13	-2.09	120.53	126.42
26	K	101	BCR	C21-C20-C19	-2.09	116.68	123.22
25	C	511	CLA	C1D-CHD-C4C	-2.09	121.54	126.06
25	c	504	CLA	C1D-CHD-C4C	-2.09	121.54	126.06
25	c	506	CLA	CHC-C1C-C2C	-2.09	120.93	126.72
25	C	507	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
25	B	603	CLA	C1D-CHD-C4C	-2.09	121.55	126.06
25	a	608	CLA	CHC-C1C-NC	2.09	127.38	124.20
25	b	603	CLA	C3D-C2D-C1D	2.09	108.69	105.83
28	A	611	SQD	C45-O47-C7	-2.09	112.64	117.79
33	c	517	DGD	C2G-O2G-C1B	-2.09	112.64	117.79
28	a	613	SQD	O8-S-C6	2.09	109.07	105.74
25	c	505	CLA	C2C-C1C-NC	2.09	111.93	109.97
26	H	101	BCR	C11-C12-C13	-2.09	120.55	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	513	CLA	CMB-C2B-C1B	-2.09	125.26	128.46
25	a	610	CLA	C1D-CHD-C4C	-2.08	121.56	126.06
25	b	616	CLA	C3D-C2D-C1D	2.08	108.68	105.83
33	C	516	DGD	O6D-C5D-C6D	2.08	110.87	106.67
25	c	510	CLA	C1B-CHB-C4A	-2.08	125.99	130.12
25	b	613	CLA	C1D-CHD-C4C	-2.08	121.56	126.06
25	B	611	CLA	C3D-C2D-C1D	2.08	108.67	105.83
25	d	403	CLA	C3D-C2D-C1D	2.08	108.67	105.83
25	B	613	CLA	C1B-CHB-C4A	-2.08	125.99	130.12
25	b	609	CLA	CHA-C1A-NA	-2.08	121.63	126.40
25	B	609	CLA	CHA-C1A-NA	-2.08	121.63	126.40
23	B	620	LMG	C8-O7-C10	-2.08	112.67	117.79
25	b	614	CLA	C1D-CHD-C4C	-2.08	121.57	126.06
25	b	604	CLA	C1D-CHD-C4C	-2.08	121.57	126.06
26	K	101	BCR	C28-C27-C26	-2.08	110.36	114.08
25	a	606	CLA	C3D-C2D-C1D	2.08	108.67	105.83
25	c	501	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
25	c	504	CLA	C3D-C2D-C1D	2.08	108.67	105.83
26	C	514	BCR	C8-C7-C6	-2.08	121.37	127.20
26	z	101	BCR	C28-C27-C26	-2.08	110.37	114.08
25	C	512	CLA	C1D-CHD-C4C	-2.08	121.58	126.06
25	B	604	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
25	c	501	CLA	C3D-C2D-C1D	2.08	108.67	105.83
25	C	503	CLA	CHA-C1A-NA	-2.08	121.64	126.40
26	b	618	BCR	C33-C5-C6	-2.08	122.20	124.53
35	e	101	HEM	CHC-C4B-C3B	2.08	127.75	124.57
25	b	603	CLA	C1-C2-C3	-2.07	122.46	126.04
25	B	609	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
25	C	504	CLA	C1D-CHD-C4C	-2.07	121.59	126.06
25	A	608	CLA	C3D-C2D-C1D	2.07	108.66	105.83
35	E	102	HEM	CHC-C4B-C3B	2.07	127.74	124.57
25	B	608	CLA	C1D-CHD-C4C	-2.07	121.59	126.06
25	c	513	CLA	C1D-CHD-C4C	-2.07	121.59	126.06
26	d	404	BCR	C11-C12-C13	-2.07	120.60	126.42
25	C	512	CLA	C1B-CHB-C4A	-2.07	126.02	130.12
26	b	618	BCR	C38-C26-C25	-2.07	122.20	124.53
25	C	506	CLA	C1D-CHD-C4C	-2.07	121.59	126.06
25	D	404	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
26	B	619	BCR	C15-C16-C17	-2.07	119.24	123.47
26	H	101	BCR	C34-C9-C10	-2.07	120.03	122.92
25	C	509	CLA	C3D-C2D-C1D	2.07	108.65	105.83
26	C	522	BCR	C38-C26-C25	-2.07	122.21	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	612	CLA	C3D-C2D-C1D	2.07	108.65	105.83
26	k	102	BCR	C33-C5-C4	2.07	117.58	113.62
25	A	607	CLA	C3D-C2D-C1D	2.06	108.65	105.83
25	C	505	CLA	C2C-C1C-NC	2.06	111.91	109.97
26	a	611	BCR	C15-C16-C17	-2.06	119.25	123.47
25	b	602	CLA	CMB-C2B-C1B	-2.06	125.29	128.46
25	B	603	CLA	C3D-C2D-C1D	2.06	108.64	105.83
23	A	603	LMG	C8-O7-C10	-2.06	112.72	117.79
26	B	617	BCR	C3-C4-C5	-2.06	110.40	114.08
25	a	610	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	c	506	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	C	507	CLA	C1B-CHB-C4A	-2.06	126.04	130.12
25	B	610	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	b	612	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	c	502	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	b	610	CLA	CMB-C2B-C1B	-2.06	125.30	128.46
25	B	602	CLA	CAA-C2A-C1A	-2.06	105.23	111.97
25	A	608	CLA	CMB-C2B-C1B	-2.06	125.30	128.46
23	b	620	LMG	O7-C10-O9	-2.06	118.73	123.70
25	C	512	CLA	C3D-C2D-C1D	2.06	108.64	105.83
25	b	608	CLA	C1D-CHD-C4C	-2.06	121.62	126.06
25	C	509	CLA	C1-C2-C3	-2.06	122.49	126.04
25	c	512	CLA	C1D-CHD-C4C	-2.06	121.62	126.06
25	b	602	CLA	CHC-C1C-C2C	-2.05	121.04	126.72
25	d	401	CLA	C2C-C1C-NC	2.05	111.90	109.97
25	b	614	CLA	CHC-C1C-C2C	-2.05	121.04	126.72
25	c	505	CLA	CHC-C1C-C2C	-2.05	121.04	126.72
25	C	502	CLA	CMB-C2B-C1B	-2.05	125.31	128.46
25	c	509	CLA	C3D-C2D-C1D	2.05	108.63	105.83
25	C	509	CLA	C1B-CHB-C4A	-2.05	126.05	130.12
26	C	515	BCR	C8-C7-C6	-2.05	121.44	127.20
25	C	501	CLA	C1B-CHB-C4A	-2.05	126.05	130.12
25	c	509	CLA	C1B-CHB-C4A	-2.05	126.06	130.12
26	C	514	BCR	C15-C16-C17	-2.05	119.27	123.47
26	h	101	BCR	C34-C9-C10	-2.05	120.05	122.92
25	c	511	CLA	CHA-C1A-NA	-2.05	121.71	126.40
25	B	613	CLA	C3D-C2D-C1D	2.05	108.62	105.83
25	C	501	CLA	C3D-C2D-C1D	2.05	108.62	105.83
25	b	610	CLA	C3D-C2D-C1D	2.05	108.62	105.83
25	C	505	CLA	CMB-C2B-C1B	-2.04	125.32	128.46
25	b	601	CLA	C3D-C2D-C1D	2.04	108.62	105.83
25	b	605	CLA	C3D-C2D-C1D	2.04	108.62	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	c	516	DGD	O3G-C1D-C2D	2.04	111.49	108.30
25	B	607	CLA	CMB-C2B-C1B	-2.04	125.32	128.46
25	B	615	CLA	C1-C2-C3	-2.04	122.51	126.04
25	B	610	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
25	B	616	CLA	C3D-C2D-C1D	2.04	108.62	105.83
25	c	502	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
25	a	608	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
25	B	604	CLA	C1D-CHD-C4C	-2.04	121.66	126.06
23	c	520	LMG	O8-C28-O10	-2.04	118.44	123.59
26	C	522	BCR	C38-C26-C27	2.04	117.53	113.62
25	C	511	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
26	A	609	BCR	C8-C7-C6	-2.04	121.48	127.20
26	C	515	BCR	C28-C27-C26	-2.04	110.44	114.08
25	B	605	CLA	C3D-C2D-C1D	2.04	108.61	105.83
25	b	605	CLA	CMB-C2B-C1B	-2.04	125.34	128.46
25	b	613	CLA	C1B-CHB-C4A	-2.04	126.09	130.12
25	c	508	CLA	C3D-C2D-C1D	2.03	108.61	105.83
25	D	404	CLA	C2C-C1C-NC	2.03	111.88	109.97
25	d	401	CLA	C3D-C2D-C1D	2.03	108.61	105.83
25	C	505	CLA	CHC-C1C-C2C	-2.03	121.10	126.72
26	t	102	BCR	C37-C22-C21	-2.03	120.07	122.92
23	C	519	LMG	C8-O7-C10	-2.03	112.78	117.79
25	a	610	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
25	b	603	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
25	C	506	CLA	C3D-C2D-C1D	2.03	108.60	105.83
25	b	613	CLA	C3D-C2D-C1D	2.03	108.60	105.83
26	b	617	BCR	C8-C7-C6	-2.03	121.50	127.20
26	h	101	BCR	C39-C30-C25	-2.03	107.01	110.30
23	a	603	LMG	O6-C5-C4	2.03	113.38	109.69
26	b	619	BCR	C16-C15-C14	-2.03	119.32	123.47
25	B	609	CLA	C3D-C2D-C1D	2.03	108.60	105.83
25	c	504	CLA	CHC-C1C-NC	2.03	127.28	124.20
25	B	601	CLA	CMB-C2B-C1B	-2.03	125.35	128.46
25	B	606	CLA	C3D-C2D-C1D	2.03	108.60	105.83
25	D	404	CLA	C3D-C2D-C1D	2.03	108.60	105.83
25	D	403	CLA	CMB-C2B-C1B	-2.02	125.35	128.46
26	t	102	BCR	C7-C6-C5	-2.02	116.56	121.46
25	b	606	CLA	CMB-C2B-C1B	-2.02	125.35	128.46
25	b	611	CLA	CMB-C2B-C1B	-2.02	125.35	128.46
26	T	101	BCR	C11-C12-C13	-2.02	120.73	126.42
25	C	502	CLA	C3D-C2D-C1D	2.02	108.59	105.83
25	B	604	CLA	CHC-C1C-NC	2.02	127.27	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	503	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
26	d	404	BCR	C16-C15-C14	-2.02	119.33	123.47
25	D	404	CLA	CHC-C1C-C2C	-2.02	121.13	126.72
26	D	406	BCR	C23-C24-C25	-2.02	121.53	127.20
25	B	602	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
25	C	511	CLA	CHA-C1A-NA	-2.02	121.77	126.40
26	k	102	BCR	C34-C9-C8	2.02	121.26	118.08
25	c	512	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
25	B	607	CLA	C3D-C2D-C1D	2.02	108.59	105.83
25	D	405	CLA	C3D-C2D-C1D	2.02	108.59	105.83
25	c	511	CLA	C3D-C2D-C1D	2.02	108.58	105.83
25	C	513	CLA	C1D-CHD-C4C	-2.02	121.71	126.06
26	B	617	BCR	C39-C30-C25	-2.02	107.03	110.30
25	b	615	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
25	B	604	CLA	CHA-C1A-NA	-2.01	121.78	126.40
25	b	612	CLA	C1B-CHB-C4A	-2.01	126.13	130.12
25	C	511	CLA	C3D-C2D-C1D	2.01	108.58	105.83
25	d	401	CLA	CHC-C1C-C2C	-2.01	121.15	126.72
26	h	101	BCR	C33-C5-C4	2.01	117.48	113.62
25	B	605	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
25	c	513	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
25	c	505	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
26	b	618	BCR	C33-C5-C4	2.01	117.48	113.62
25	B	614	CLA	C3D-C2D-C1D	2.01	108.57	105.83
25	c	512	CLA	C3D-C2D-C1D	2.01	108.57	105.83
25	c	507	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
25	B	602	CLA	C3D-C2D-C1D	2.01	108.57	105.83
26	d	404	BCR	C23-C24-C25	-2.01	121.56	127.20
25	B	606	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
35	e	101	HEM	C4A-C3A-C2A	2.01	108.39	107.00
25	b	601	CLA	CMB-C2B-C1B	-2.00	125.38	128.46
25	B	612	CLA	C1B-CHB-C4A	-2.00	126.15	130.12
28	A	611	SQD	O48-C23-O10	-2.00	118.54	123.59
26	C	522	BCR	C4-C5-C6	-2.00	119.82	122.73
25	B	614	CLA	C1-C2-C3	-2.00	122.58	126.04
25	B	607	CLA	CHC-C1C-NC	2.00	127.24	124.20
23	a	603	LMG	O8-C28-O10	-2.00	118.54	123.59

All (70) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	A	606	CLA	ND

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Mol	Chain	Res	Type	Atom
25	A	607	CLA	ND
25	A	608	CLA	ND
25	B	601	CLA	ND
25	B	602	CLA	ND
25	B	603	CLA	ND
25	B	604	CLA	ND
25	B	605	CLA	ND
25	B	606	CLA	ND
25	B	607	CLA	ND
25	B	608	CLA	ND
25	B	609	CLA	ND
25	B	610	CLA	ND
25	B	611	CLA	ND
25	B	612	CLA	ND
25	B	613	CLA	ND
25	B	614	CLA	ND
25	B	615	CLA	ND
25	B	616	CLA	ND
25	C	501	CLA	ND
25	C	502	CLA	ND
25	C	503	CLA	ND
25	C	504	CLA	ND
25	C	505	CLA	ND
25	C	506	CLA	ND
25	C	507	CLA	ND
25	C	508	CLA	ND
25	C	509	CLA	ND
25	C	510	CLA	ND
25	C	511	CLA	ND
25	C	512	CLA	ND
25	C	513	CLA	ND
25	D	403	CLA	ND
25	D	404	CLA	ND
25	D	405	CLA	ND
25	a	606	CLA	ND
25	a	607	CLA	ND
25	a	608	CLA	ND
25	a	610	CLA	ND
25	b	601	CLA	ND
25	b	602	CLA	ND
25	b	603	CLA	ND
25	b	604	CLA	ND

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Mol	Chain	Res	Type	Atom
25	b	605	CLA	ND
25	b	606	CLA	ND
25	b	607	CLA	ND
25	b	608	CLA	ND
25	b	609	CLA	ND
25	b	610	CLA	ND
25	b	611	CLA	ND
25	b	612	CLA	ND
25	b	613	CLA	ND
25	b	614	CLA	ND
25	b	615	CLA	ND
25	b	616	CLA	ND
25	c	501	CLA	ND
25	c	502	CLA	ND
25	c	503	CLA	ND
25	c	504	CLA	ND
25	c	505	CLA	ND
25	c	506	CLA	ND
25	c	507	CLA	ND
25	c	508	CLA	ND
25	c	509	CLA	ND
25	c	510	CLA	ND
25	c	511	CLA	ND
25	c	512	CLA	ND
25	c	513	CLA	ND
25	d	401	CLA	ND
25	d	403	CLA	ND

All (667) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	C	521	LMG	O6-C1-O1-C7
25	A	607	CLA	CHA-CBD-CGD-O1D
25	B	601	CLA	CHA-CBD-CGD-O1D
25	B	601	CLA	CAD-CBD-CGD-O1D
25	B	601	CLA	CAD-CBD-CGD-O2D
25	B	602	CLA	CHA-CBD-CGD-O1D
25	B	602	CLA	CHA-CBD-CGD-O2D
25	B	605	CLA	C2-C3-C5-C6
25	B	605	CLA	C4-C3-C5-C6
25	B	606	CLA	CHA-CBD-CGD-O1D
25	B	606	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
25	B	614	CLA	CAD-CBD-CGD-O1D
25	B	614	CLA	CAD-CBD-CGD-O2D
25	C	508	CLA	CHA-CBD-CGD-O1D
25	C	508	CLA	CHA-CBD-CGD-O2D
25	D	403	CLA	CHA-CBD-CGD-O1D
25	D	403	CLA	CHA-CBD-CGD-O2D
25	a	607	CLA	CHA-CBD-CGD-O1D
25	a	607	CLA	CHA-CBD-CGD-O2D
25	a	608	CLA	CHA-CBD-CGD-O1D
25	a	608	CLA	CHA-CBD-CGD-O2D
25	b	602	CLA	CHA-CBD-CGD-O1D
25	b	602	CLA	CHA-CBD-CGD-O2D
25	b	603	CLA	C2-C3-C5-C6
25	b	603	CLA	C4-C3-C5-C6
25	b	605	CLA	C2-C3-C5-C6
25	b	605	CLA	C4-C3-C5-C6
25	b	614	CLA	CHA-CBD-CGD-O1D
25	b	614	CLA	CAD-CBD-CGD-O1D
25	b	614	CLA	CAD-CBD-CGD-O2D
25	c	508	CLA	CHA-CBD-CGD-O1D
25	c	508	CLA	CHA-CBD-CGD-O2D
26	B	619	BCR	C7-C8-C9-C10
26	B	619	BCR	C7-C8-C9-C34
26	D	406	BCR	C7-C8-C9-C10
26	D	406	BCR	C7-C8-C9-C34
26	D	406	BCR	C21-C22-C23-C24
26	D	406	BCR	C37-C22-C23-C24
26	H	101	BCR	C7-C8-C9-C10
26	H	101	BCR	C7-C8-C9-C34
26	T	101	BCR	C1-C6-C7-C8
26	T	101	BCR	C5-C6-C7-C8
26	T	101	BCR	C7-C8-C9-C10
26	T	101	BCR	C7-C8-C9-C34
26	d	404	BCR	C7-C8-C9-C10
26	d	404	BCR	C7-C8-C9-C34
26	d	404	BCR	C37-C22-C23-C24
26	h	101	BCR	C7-C8-C9-C10
26	h	101	BCR	C7-C8-C9-C34
26	t	102	BCR	C5-C6-C7-C8
26	t	102	BCR	C17-C18-C19-C20
26	t	102	BCR	C36-C18-C19-C20
27	a	612	PL9	C18-C19-C21-C22

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Mol	Chain	Res	Type	Atoms
27	a	612	PL9	C20-C19-C21-C22
28	L	101	SQD	C5-C6-S-O8
28	L	103	SQD	C5-C6-S-O7
28	f	101	SQD	C8-C7-O47-C45
29	A	613	LHG	C3-O3-P-O5
29	A	613	LHG	C4-O6-P-O5
29	A	614	LHG	O6-C4-C5-O7
29	D	408	LHG	C4-O6-P-O3
29	E	101	LHG	C1-C2-C3-O3
29	E	101	LHG	O2-C2-C3-O3
29	L	102	LHG	C3-O3-P-O4
29	L	102	LHG	C3-O3-P-O5
29	a	615	LHG	C4-O6-P-O4
29	a	615	LHG	C4-O6-P-O5
29	a	616	LHG	C3-O3-P-O4
29	d	406	LHG	C3-O3-P-O4
29	d	407	LHG	C3-O3-P-O5
29	d	407	LHG	C4-O6-P-O3
29	l	101	LHG	C3-O3-P-O4
29	l	101	LHG	C3-O3-P-O5
29	l	101	LHG	C3-O3-P-O6
35	E	102	HEM	C2A-CAA-CBA-CGA
35	e	101	HEM	C1A-C2A-CAA-CBA
35	e	101	HEM	C3A-C2A-CAA-CBA
36	v	201	HEC	C3D-CAD-CBD-CGD
28	f	101	SQD	O49-C7-O47-C45
25	B	614	CLA	C3-C5-C6-C7
25	b	606	CLA	C2A-CAA-CBA-CGA
28	L	101	SQD	C8-C7-O47-C45
28	L	103	SQD	C8-C7-O47-C45
25	B	602	CLA	C4-C3-C5-C6
25	b	614	CLA	C4-C3-C5-C6
25	B	602	CLA	C2-C3-C5-C6
25	b	614	CLA	C2-C3-C5-C6
27	A	610	PL9	C24-C26-C27-C28
27	a	612	PL9	C9-C11-C12-C13
27	a	612	PL9	C14-C16-C17-C18
29	a	616	LHG	C1-C2-C3-O3
28	L	103	SQD	O49-C7-O47-C45
28	F	101	SQD	C24-C23-O48-C46
29	a	616	LHG	O2-C2-C3-O3
25	B	605	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	b	601	CLA	C11-C10-C8-C9
34	D	401	PHO	C14-C13-C15-C16
25	B	606	CLA	C2A-CAA-CBA-CGA
26	T	101	BCR	C37-C22-C23-C24
26	t	102	BCR	C7-C8-C9-C34
26	T	101	BCR	C21-C22-C23-C24
26	t	102	BCR	C7-C8-C9-C10
23	B	624	LMG	C10-C11-C12-C13
28	L	101	SQD	C24-C23-O48-C46
36	V	201	HEC	C3D-CAD-CBD-CGD
23	b	624	LMG	C28-C29-C30-C31
28	L	101	SQD	C7-C8-C9-C10
33	h	102	DGD	C1B-C2B-C3B-C4B
23	C	521	LMG	C10-C11-C12-C13
28	L	101	SQD	C23-C24-C25-C26
33	c	516	DGD	C1A-C2A-C3A-C4A
28	L	101	SQD	O49-C7-O47-C45
33	c	516	DGD	C1B-C2B-C3B-C4B
28	L	101	SQD	O10-C23-O48-C46
28	F	101	SQD	O10-C23-O48-C46
27	A	610	PL9	C9-C11-C12-C13
25	c	503	CLA	C15-C16-C17-C18
25	c	506	CLA	C15-C16-C17-C18
29	A	613	LHG	C4-O6-P-O3
29	L	102	LHG	C3-O3-P-O6
29	L	102	LHG	C4-O6-P-O3
29	a	615	LHG	C4-O6-P-O3
29	a	616	LHG	C3-O3-P-O6
29	d	406	LHG	C3-O3-P-O6
29	d	407	LHG	C3-O3-P-O6
29	l	101	LHG	C4-O6-P-O3
27	d	405	PL9	C40-C39-C41-C42
29	d	407	LHG	C26-C27-C28-C29
33	h	102	DGD	C3B-C4B-C5B-C6B
23	A	603	LMG	C20-C21-C22-C23
33	C	517	DGD	C6B-C7B-C8B-C9B
25	D	405	CLA	C16-C17-C18-C20
23	A	603	LMG	C30-C31-C32-C33
23	A	612	LMG	C15-C16-C17-C18
23	a	603	LMG	C31-C32-C33-C34
29	l	101	LHG	O2-C2-C3-O3
35	E	102	HEM	C3D-CAD-CBD-CGD

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Mol	Chain	Res	Type	Atoms
28	L	103	SQD	C11-C12-C13-C14
23	A	612	LMG	C28-C29-C30-C31
33	c	516	DGD	C2E-C1E-O5D-C6D
29	l	101	LHG	C28-C29-C30-C31
25	B	601	CLA	C10-C11-C12-C13
25	B	609	CLA	C4-C3-C5-C6
25	C	510	CLA	C4-C3-C5-C6
25	b	609	CLA	C4-C3-C5-C6
28	L	103	SQD	C32-C33-C34-C35
27	d	405	PL9	C38-C39-C41-C42
23	A	612	LMG	C18-C19-C20-C21
28	L	101	SQD	C25-C26-C27-C28
29	a	615	LHG	C25-C26-C27-C28
26	t	102	BCR	C37-C22-C23-C24
23	a	614	LMG	C20-C21-C22-C23
26	t	102	BCR	C21-C22-C23-C24
23	b	624	LMG	O9-C10-O7-C8
23	b	624	LMG	C11-C10-O7-C8
23	B	624	LMG	C36-C37-C38-C39
23	B	624	LMG	C20-C21-C22-C23
23	C	521	LMG	C20-C21-C22-C23
28	L	101	SQD	C31-C32-C33-C34
33	C	517	DGD	C9A-CAA-CBA-CCA
33	H	102	DGD	C5B-C6B-C7B-C8B
33	c	516	DGD	O6E-C1E-O5D-C6D
28	a	613	SQD	C16-C17-C18-C19
23	c	518	LMG	C30-C31-C32-C33
29	L	102	LHG	C10-C11-C12-C13
33	c	516	DGD	CAA-CBA-CCA-CDA
23	C	519	LMG	C31-C32-C33-C34
23	A	612	LMG	C21-C22-C23-C24
23	a	603	LMG	C13-C14-C15-C16
33	c	515	DGD	C8A-C9A-CAA-CBA
23	a	603	LMG	O6-C5-C6-O5
23	c	520	LMG	C13-C14-C15-C16
23	c	520	LMG	C29-C30-C31-C32
25	B	609	CLA	C2-C3-C5-C6
34	D	401	PHO	C2-C3-C5-C6
34	a	609	PHO	C2-C3-C5-C6
23	A	603	LMG	C37-C38-C39-C40
29	L	102	LHG	C34-C35-C36-C37
29	A	614	LHG	C27-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
28	A	611	SQD	C11-C10-C9-C8
23	a	614	LMG	C10-C11-C12-C13
28	A	611	SQD	C17-C18-C19-C20
28	L	103	SQD	C31-C32-C33-C34
23	A	603	LMG	C36-C37-C38-C39
26	B	617	BCR	C1-C6-C7-C8
26	B	617	BCR	C5-C6-C7-C8
26	B	619	BCR	C1-C6-C7-C8
26	B	619	BCR	C5-C6-C7-C8
26	D	406	BCR	C1-C6-C7-C8
26	D	406	BCR	C5-C6-C7-C8
26	K	101	BCR	C1-C6-C7-C8
26	K	101	BCR	C5-C6-C7-C8
26	b	617	BCR	C1-C6-C7-C8
26	b	617	BCR	C5-C6-C7-C8
26	d	404	BCR	C1-C6-C7-C8
26	d	404	BCR	C5-C6-C7-C8
26	k	102	BCR	C1-C6-C7-C8
26	k	102	BCR	C5-C6-C7-C8
26	t	102	BCR	C1-C6-C7-C8
33	C	516	DGD	O6E-C5E-C6E-O5E
28	L	103	SQD	C25-C26-C27-C28
23	c	518	LMG	C14-C15-C16-C17
28	L	101	SQD	C26-C27-C28-C29
25	c	510	CLA	C4-C3-C5-C6
27	A	610	PL9	C15-C14-C16-C17
34	a	609	PHO	C4-C3-C5-C6
25	C	510	CLA	C2-C3-C5-C6
25	b	609	CLA	C2-C3-C5-C6
25	b	616	CLA	C11-C12-C13-C15
25	c	510	CLA	C2-C3-C5-C6
23	c	520	LMG	C29-C28-O8-C9
33	C	516	DGD	C4B-C5B-C6B-C7B
23	b	624	LMG	C32-C33-C34-C35
23	A	612	LMG	C13-C14-C15-C16
35	E	102	HEM	C2B-C3B-CAB-CBB
35	e	101	HEM	C2B-C3B-CAB-CBB
29	d	407	LHG	O6-C4-C5-O7
23	C	519	LMG	C20-C21-C22-C23
35	e	101	HEM	C4B-C3B-CAB-CBB
25	B	601	CLA	C3-C5-C6-C7
25	b	614	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
23	C	521	LMG	C2-C1-O1-C7
23	A	603	LMG	O1-C7-C8-O7
28	f	101	SQD	O6-C44-C45-O47
23	C	521	LMG	O6-C5-C6-O5
25	B	616	CLA	C10-C11-C12-C13
34	D	401	PHO	C4-C3-C5-C6
29	a	615	LHG	C7-C8-C9-C10
34	a	609	PHO	C14-C13-C15-C16
23	d	408	LMG	O6-C5-C6-O5
29	l	101	LHG	C10-C11-C12-C13
23	B	624	LMG	O6-C5-C6-O5
33	c	515	DGD	O6E-C5E-C6E-O5E
26	d	404	BCR	C21-C22-C23-C24
25	D	403	CLA	C1A-C2A-CAA-CBA
25	a	607	CLA	C1A-C2A-CAA-CBA
25	D	405	CLA	C16-C17-C18-C19
23	A	603	LMG	C33-C34-C35-C36
29	D	408	LHG	O6-C4-C5-C6
29	L	102	LHG	O6-C4-C5-C6
29	A	613	LHG	C23-C24-C25-C26
23	c	520	LMG	O6-C5-C6-O5
29	l	101	LHG	C11-C12-C13-C14
23	A	612	LMG	C35-C36-C37-C38
23	b	624	LMG	O6-C5-C6-O5
25	b	613	CLA	C8-C10-C11-C12
23	A	612	LMG	C36-C37-C38-C39
33	C	517	DGD	C1A-C2A-C3A-C4A
23	A	603	LMG	O1-C7-C8-C9
23	A	612	LMG	C7-C8-C9-O8
23	a	603	LMG	O1-C7-C8-C9
23	C	519	LMG	C10-C11-C12-C13
23	A	603	LMG	C19-C20-C21-C22
23	B	624	LMG	C22-C23-C24-C25
23	B	624	LMG	C17-C18-C19-C20
23	D	409	LMG	O6-C5-C6-O5
29	a	616	LHG	C9-C10-C11-C12
23	c	520	LMG	C17-C18-C19-C20
28	L	101	SQD	C46-C45-O47-C7
23	A	603	LMG	C32-C33-C34-C35
23	c	520	LMG	O10-C28-O8-C9
23	B	620	LMG	C32-C33-C34-C35
23	c	520	LMG	C2-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
23	C	521	LMG	O1-C7-C8-O7
23	a	603	LMG	O1-C7-C8-O7
28	f	101	SQD	O47-C45-C46-O48
33	c	515	DGD	O6D-C5D-C6D-O5D
23	c	520	LMG	C32-C33-C34-C35
27	d	405	PL9	C30-C29-C31-C32
25	D	404	CLA	C12-C13-C15-C16
25	B	615	CLA	C14-C13-C15-C16
25	b	616	CLA	C11-C12-C13-C14
23	C	521	LMG	C17-C18-C19-C20
23	a	603	LMG	C29-C28-O8-C9
23	a	603	LMG	C14-C15-C16-C17
29	A	614	LHG	O6-C4-C5-C6
29	d	407	LHG	O6-C4-C5-C6
29	l	101	LHG	O6-C4-C5-C6
33	C	517	DGD	CAA-CBA-CCA-CDA
25	C	506	CLA	C4-C3-C5-C6
27	d	405	PL9	C28-C29-C31-C32
28	L	103	SQD	C11-C10-C9-C8
23	A	603	LMG	C29-C28-O8-C9
33	C	517	DGD	CAB-CBB-CCB-CDB
23	b	620	LMG	C20-C21-C22-C23
23	c	520	LMG	C22-C23-C24-C25
28	f	101	SQD	C32-C33-C34-C35
28	L	101	SQD	C44-C45-C46-O48
28	f	101	SQD	O6-C44-C45-C46
29	a	616	LHG	C4-C5-C6-O8
23	B	624	LMG	C31-C32-C33-C34
23	C	521	LMG	C39-C40-C41-C42
33	c	516	DGD	C2B-C3B-C4B-C5B
25	b	616	CLA	C4-C3-C5-C6
25	c	507	CLA	C4-C3-C5-C6
27	D	407	PL9	C40-C39-C41-C42
27	A	610	PL9	C13-C14-C16-C17
33	c	515	DGD	C4D-C5D-C6D-O5D
23	C	521	LMG	C19-C20-C21-C22
28	a	613	SQD	C11-C12-C13-C14
33	C	518	DGD	CBA-CCA-CDA-CEA
29	D	408	LHG	O6-C4-C5-O7
23	C	521	LMG	O7-C8-C9-O8
23	c	520	LMG	O7-C8-C9-O8
28	L	101	SQD	O47-C45-C46-O48

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Mol	Chain	Res	Type	Atoms
29	E	101	LHG	C11-C12-C13-C14
29	E	101	LHG	C16-C17-C18-C19
28	a	613	SQD	O5-C1-O6-C44
27	A	610	PL9	C14-C16-C17-C18
27	d	405	PL9	C9-C11-C12-C13
25	C	506	CLA	C11-C10-C8-C9
26	h	101	BCR	C23-C24-C25-C26
23	C	521	LMG	C15-C16-C17-C18
25	b	607	CLA	C12-C13-C15-C16
25	b	615	CLA	C12-C13-C15-C16
25	b	616	CLA	C2-C3-C5-C6
33	C	517	DGD	C4B-C5B-C6B-C7B
25	c	506	CLA	C13-C15-C16-C17
29	A	614	LHG	C12-C13-C14-C15
25	B	616	CLA	CAD-CBD-CGD-O2D
25	C	503	CLA	CAD-CBD-CGD-O2D
25	C	506	CLA	CAD-CBD-CGD-O2D
25	c	510	CLA	CAD-CBD-CGD-O2D
25	c	513	CLA	CAD-CBD-CGD-O2D
34	D	401	PHO	CAD-CBD-CGD-O2D
23	c	518	LMG	C29-C28-O8-C9
27	a	612	PL9	C35-C34-C36-C37
23	C	519	LMG	C12-C13-C14-C15
29	A	613	LHG	C25-C26-C27-C28
33	C	517	DGD	O6E-C1E-O5D-C6D
23	A	603	LMG	O10-C28-O8-C9
29	l	101	LHG	O6-C4-C5-O7
35	E	102	HEM	C4B-C3B-CAB-CBB
28	L	101	SQD	C30-C31-C32-C33
29	l	101	LHG	C1-C2-C3-O3
25	A	607	CLA	CHA-CBD-CGD-O2D
25	b	607	CLA	CHA-CBD-CGD-O1D
25	b	607	CLA	CHA-CBD-CGD-O2D
25	b	614	CLA	CHA-CBD-CGD-O2D
23	a	603	LMG	O10-C28-O8-C9
33	C	517	DGD	C2E-C1E-O5D-C6D
33	c	515	DGD	C9A-CAA-CBA-CCA
25	b	614	CLA	C10-C11-C12-C13
27	A	610	PL9	C35-C34-C36-C37
27	D	407	PL9	C30-C29-C31-C32
27	A	610	PL9	C4-C3-C7-C8
27	D	407	PL9	C4-C3-C7-C8

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Mol	Chain	Res	Type	Atoms
25	b	615	CLA	C14-C13-C15-C16
23	c	518	LMG	C15-C16-C17-C18
28	L	103	SQD	C5-C6-S-O8
25	c	513	CLA	C10-C11-C12-C13
23	b	624	LMG	C36-C37-C38-C39
26	b	619	BCR	C7-C8-C9-C34
23	b	620	LMG	C39-C40-C41-C42
33	C	516	DGD	O6D-C5D-C6D-O5D
29	A	614	LHG	C4-O6-P-O3
29	d	406	LHG	C4-O6-P-O3
27	D	407	PL9	C28-C29-C31-C32
27	a	612	PL9	C33-C34-C36-C37
29	L	102	LHG	C11-C12-C13-C14
29	A	613	LHG	C4-O6-P-O4
29	D	408	LHG	C4-O6-P-O5
29	L	102	LHG	C4-O6-P-O5
29	d	407	LHG	C3-O3-P-O4
29	d	407	LHG	C4-O6-P-O4
29	l	101	LHG	C4-O6-P-O5
23	a	603	LMG	O6-C1-O1-C7
25	B	616	CLA	C8-C10-C11-C12
29	E	101	LHG	O6-C4-C5-C6
25	B	607	CLA	CAD-CBD-CGD-O1D
25	C	502	CLA	CAD-CBD-CGD-O1D
25	C	504	CLA	CAD-CBD-CGD-O1D
25	b	607	CLA	CAD-CBD-CGD-O1D
28	L	103	SQD	C5-C6-S-O9
28	L	101	SQD	C27-C28-C29-C30
33	C	516	DGD	C4D-C5D-C6D-O5D
23	c	520	LMG	C35-C36-C37-C38
23	C	519	LMG	C28-C29-C30-C31
25	B	607	CLA	C12-C13-C15-C16
27	D	407	PL9	C38-C39-C41-C42
23	c	518	LMG	O10-C28-O8-C9
23	C	521	LMG	O1-C7-C8-C9
23	A	612	LMG	O7-C8-C9-O8
23	b	624	LMG	C18-C19-C20-C21
29	E	101	LHG	C24-C25-C26-C27
33	C	517	DGD	C5D-C6D-O5D-C1E
28	f	101	SQD	O10-C23-O48-C46
28	f	101	SQD	C24-C23-O48-C46
23	a	603	LMG	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
27	A	610	PL9	C33-C34-C36-C37
23	B	620	LMG	C40-C41-C42-C43
23	a	614	LMG	C17-C18-C19-C20
25	B	607	CLA	C14-C13-C15-C16
25	B	609	CLA	C14-C13-C15-C16
25	b	614	CLA	C11-C10-C8-C9
25	c	509	CLA	C11-C10-C8-C9
23	c	520	LMG	O6-C1-O1-C7
25	B	601	CLA	CAA-CBA-CGA-O2A
26	k	102	BCR	C7-C8-C9-C34
25	b	606	CLA	C13-C15-C16-C17
25	b	610	CLA	C2A-CAA-CBA-CGA
25	A	606	CLA	C2-C1-O2A-CGA
25	a	606	CLA	C2-C1-O2A-CGA
33	c	517	DGD	O6D-C5D-C6D-O5D
28	F	101	SQD	C31-C32-C33-C34
29	L	102	LHG	O6-C4-C5-O7
26	C	514	BCR	C1-C6-C7-C8
26	C	514	BCR	C5-C6-C7-C8
26	z	101	BCR	C1-C6-C7-C8
28	a	613	SQD	C9-C10-C11-C12
29	A	613	LHG	C3-O3-P-O6
29	D	408	LHG	C3-O3-P-O6
29	E	101	LHG	C4-O6-P-O3
29	a	615	LHG	C3-O3-P-O6
23	b	624	LMG	C13-C14-C15-C16
28	f	101	SQD	C44-C45-C46-O48
33	H	102	DGD	O1G-C1G-C2G-C3G
25	B	614	CLA	C11-C12-C13-C15
25	C	506	CLA	C2-C3-C5-C6
25	C	506	CLA	C6-C7-C8-C10
25	a	610	CLA	C11-C10-C8-C7
33	H	102	DGD	O2G-C1B-C2B-C3B
25	b	607	CLA	C14-C13-C15-C16
28	a	613	SQD	C12-C13-C14-C15
23	a	603	LMG	C33-C34-C35-C36
23	c	518	LMG	C10-C11-C12-C13
28	L	103	SQD	C28-C29-C30-C31
29	d	406	LHG	O6-C4-C5-O7
28	A	611	SQD	C11-C12-C13-C14
25	c	504	CLA	C2-C1-O2A-CGA
28	F	101	SQD	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
33	c	515	DGD	C5B-C6B-C7B-C8B
25	C	507	CLA	C2A-CAA-CBA-CGA
25	b	614	CLA	C2A-CAA-CBA-CGA
25	c	507	CLA	C2A-CAA-CBA-CGA
28	f	101	SQD	C28-C29-C30-C31
33	C	516	DGD	C1B-C2B-C3B-C4B
29	d	407	LHG	C35-C36-C37-C38
23	a	614	LMG	C21-C22-C23-C24
27	a	612	PL9	C4-C3-C7-C8
25	b	604	CLA	C11-C10-C8-C9
29	d	407	LHG	C31-C32-C33-C34
23	b	620	LMG	C7-C8-C9-O8
23	c	520	LMG	C7-C8-C9-O8
28	L	103	SQD	C17-C18-C19-C20
25	B	614	CLA	C2A-CAA-CBA-CGA
29	a	615	LHG	C11-C10-C9-C8
33	c	515	DGD	C4B-C5B-C6B-C7B
25	b	614	CLA	C1A-C2A-CAA-CBA
25	B	615	CLA	C12-C13-C15-C16
25	b	601	CLA	C11-C12-C13-C15
29	a	616	LHG	O7-C5-C6-O8
29	E	101	LHG	C15-C16-C17-C18
23	B	624	LMG	C30-C31-C32-C33
34	D	401	PHO	C16-C17-C18-C19
27	D	407	PL9	C9-C11-C12-C13
27	d	405	PL9	C29-C31-C32-C33
29	d	407	LHG	C1-C2-C3-O3
33	h	102	DGD	C7A-C8A-C9A-CAA
25	B	615	CLA	C4-C3-C5-C6
25	b	614	CLA	C2-C1-O2A-CGA
33	H	102	DGD	CBA-CCA-CDA-CEA
25	b	601	CLA	CAA-CBA-CGA-O2A
35	E	102	HEM	CAA-CBA-CGA-O2A
25	c	510	CLA	C3-C5-C6-C7
26	A	609	BCR	C23-C24-C25-C30
26	c	514	BCR	C1-C6-C7-C8
26	h	101	BCR	C23-C24-C25-C30
23	C	521	LMG	C36-C37-C38-C39
25	B	608	CLA	C4-C3-C5-C6
27	d	405	PL9	C45-C44-C46-C47
35	e	101	HEM	CAA-CBA-CGA-O2A
23	C	521	LMG	C8-C7-O1-C1

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Mol	Chain	Res	Type	Atoms
33	c	515	DGD	C5D-C6D-O5D-C1E
28	L	103	SQD	C29-C30-C31-C32
23	c	518	LMG	C13-C14-C15-C16
29	E	101	LHG	O6-C4-C5-O7
29	l	101	LHG	C17-C18-C19-C20
29	d	406	LHG	O6-C4-C5-C6
25	C	504	CLA	C4-C3-C5-C6
25	C	513	CLA	C4-C3-C5-C6
25	c	503	CLA	C4-C3-C5-C6
27	D	407	PL9	C20-C19-C21-C22
23	A	612	LMG	C32-C33-C34-C35
25	B	613	CLA	C11-C10-C8-C7
29	E	101	LHG	C26-C27-C28-C29
29	a	615	LHG	C33-C34-C35-C36
23	A	612	LMG	C22-C23-C24-C25
25	A	608	CLA	C4-C3-C5-C6
25	B	614	CLA	C4-C3-C5-C6
25	C	507	CLA	C4-C3-C5-C6
25	a	610	CLA	C4-C3-C5-C6
25	b	604	CLA	C4-C3-C5-C6
25	B	615	CLA	C2-C3-C5-C6
25	c	507	CLA	C2-C3-C5-C6
27	d	405	PL9	C43-C44-C46-C47
23	C	521	LMG	C29-C28-O8-C9
23	A	603	LMG	O7-C10-C11-C12
25	B	602	CLA	C6-C7-C8-C9
25	B	602	CLA	C11-C10-C8-C9
25	D	404	CLA	C14-C13-C15-C16
25	b	601	CLA	C11-C12-C13-C14
25	b	601	CLA	C10-C11-C12-C13
33	C	517	DGD	C4A-C5A-C6A-C7A
29	L	102	LHG	O2-C2-C3-O3
23	C	521	LMG	O10-C28-O8-C9
28	L	103	SQD	C16-C17-C18-C19
25	B	603	CLA	CAD-CBD-CGD-O2D
25	B	604	CLA	CAD-CBD-CGD-O2D
25	B	605	CLA	CAD-CBD-CGD-O2D
25	B	610	CLA	CAD-CBD-CGD-O2D
25	C	505	CLA	CAD-CBD-CGD-O2D
25	C	509	CLA	CAD-CBD-CGD-O2D
25	C	510	CLA	CAD-CBD-CGD-O2D
25	C	513	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
25	D	405	CLA	CAD-CBD-CGD-O2D
25	b	603	CLA	CAD-CBD-CGD-O2D
25	b	610	CLA	CAD-CBD-CGD-O2D
25	b	612	CLA	CAD-CBD-CGD-O2D
25	b	616	CLA	CAD-CBD-CGD-O2D
25	c	501	CLA	CAD-CBD-CGD-O2D
25	c	503	CLA	CAD-CBD-CGD-O2D
25	c	506	CLA	CAD-CBD-CGD-O2D
25	c	509	CLA	CAD-CBD-CGD-O2D
34	D	402	PHO	CAD-CBD-CGD-O2D
25	c	501	CLA	C2A-CAA-CBA-CGA
25	B	602	CLA	C5-C6-C7-C8
33	C	517	DGD	C8A-C9A-CAA-CBA
25	C	512	CLA	CAA-CBA-CGA-O2A
28	A	611	SQD	O47-C7-C8-C9
35	E	102	HEM	CAA-CBA-CGA-O1A
33	c	515	DGD	O6E-C1E-O5D-C6D
25	C	513	CLA	C2-C3-C5-C6
27	a	612	PL9	C28-C29-C31-C32
29	L	102	LHG	O7-C7-C8-C9
23	b	620	LMG	C29-C30-C31-C32
26	b	619	BCR	C7-C8-C9-C10
26	k	102	BCR	C7-C8-C9-C10
23	B	624	LMG	C37-C38-C39-C40
23	c	518	LMG	C12-C13-C14-C15
33	C	516	DGD	C8A-C9A-CAA-CBA
23	C	521	LMG	C7-C8-C9-O8
33	C	518	DGD	O6D-C5D-C6D-O5D
25	C	503	CLA	C10-C11-C12-C13
33	C	517	DGD	O2G-C1B-C2B-C3B
35	e	101	HEM	CAA-CBA-CGA-O1A
25	B	602	CLA	O2A-C1-C2-C3
25	C	509	CLA	O2A-C1-C2-C3
25	C	512	CLA	O2A-C1-C2-C3
25	c	509	CLA	O2A-C1-C2-C3
25	c	512	CLA	O2A-C1-C2-C3
25	d	403	CLA	O2A-C1-C2-C3
34	D	401	PHO	O2A-C1-C2-C3
34	a	609	PHO	O2A-C1-C2-C3
25	c	512	CLA	CAA-CBA-CGA-O2A
34	D	402	PHO	C16-C17-C18-C20
25	B	601	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
25	B	607	CLA	CHA-CBD-CGD-O1D
25	B	607	CLA	CHA-CBD-CGD-O2D
25	B	612	CLA	CHA-CBD-CGD-O2D
25	B	614	CLA	CHA-CBD-CGD-O1D
25	B	614	CLA	CHA-CBD-CGD-O2D
25	C	502	CLA	CHA-CBD-CGD-O1D
25	C	504	CLA	CHA-CBD-CGD-O1D
25	C	507	CLA	CHA-CBD-CGD-O2D
25	b	601	CLA	CHA-CBD-CGD-O1D
25	b	606	CLA	CHA-CBD-CGD-O1D
25	b	606	CLA	CHA-CBD-CGD-O2D
25	c	507	CLA	CHA-CBD-CGD-O2D
25	c	512	CLA	CHA-CBD-CGD-O1D
23	B	620	LMG	O8-C28-C29-C30
28	L	103	SQD	O48-C23-C24-C25
23	b	624	LMG	O1-C7-C8-O7
28	a	613	SQD	O6-C44-C45-O47
29	L	102	LHG	O7-C5-C6-O8
29	l	101	LHG	O7-C5-C6-O8
33	c	516	DGD	O1G-C1G-C2G-O2G
33	C	518	DGD	O1A-C1A-O1G-C1G
23	a	614	LMG	C22-C23-C24-C25
28	L	103	SQD	C26-C27-C28-C29
33	h	102	DGD	CDB-CEB-CFB-CGB
23	C	519	LMG	O7-C10-C11-C12
25	B	601	CLA	C2A-CAA-CBA-CGA
34	a	609	PHO	CHA-CBD-CGD-O1D
33	C	518	DGD	C2A-C1A-O1G-C1G
23	d	408	LMG	C29-C30-C31-C32
25	A	607	CLA	C12-C13-C15-C16
33	H	102	DGD	CDB-CEB-CFB-CGB
25	B	605	CLA	C11-C12-C13-C14
25	C	506	CLA	C6-C7-C8-C9
25	a	610	CLA	C11-C10-C8-C9
23	A	603	LMG	C14-C15-C16-C17
29	d	407	LHG	C24-C25-C26-C27
29	l	101	LHG	O7-C7-C8-C9
25	b	607	CLA	C16-C17-C18-C20
29	d	407	LHG	C29-C30-C31-C32
29	L	102	LHG	O9-C7-C8-C9
25	C	506	CLA	C16-C17-C18-C20
25	B	611	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
25	c	512	CLA	C1A-C2A-CAA-CBA
29	L	102	LHG	C1-C2-C3-O3
29	D	408	LHG	C28-C29-C30-C31
23	A	603	LMG	O9-C10-C11-C12
25	b	608	CLA	C2-C1-O2A-CGA
34	d	402	PHO	C16-C17-C18-C20
25	C	512	CLA	CAA-CBA-CGA-O1A
29	d	407	LHG	C14-C15-C16-C17
23	B	624	LMG	O9-C10-O7-C8
23	C	519	LMG	C32-C33-C34-C35
23	C	519	LMG	O9-C10-C11-C12
28	L	103	SQD	O10-C23-C24-C25
29	l	101	LHG	O9-C7-C8-C9
23	D	409	LMG	O7-C10-C11-C12
26	z	101	BCR	C5-C6-C7-C8
23	B	620	LMG	O10-C28-C29-C30
28	A	611	SQD	O49-C7-C8-C9
33	C	517	DGD	O1B-C1B-C2B-C3B
28	f	101	SQD	O47-C7-C8-C9
33	C	516	DGD	O1G-C1A-C2A-C3A
25	B	607	CLA	C16-C17-C18-C20
25	C	506	CLA	C5-C6-C7-C8
29	l	101	LHG	C12-C13-C14-C15
33	c	516	DGD	C4A-C5A-C6A-C7A
25	c	512	CLA	CAA-CBA-CGA-O1A
25	C	506	CLA	C16-C17-C18-C19
25	b	601	CLA	CAD-CBD-CGD-O1D
25	c	502	CLA	CAD-CBD-CGD-O1D
25	c	504	CLA	CAD-CBD-CGD-O1D
25	c	505	CLA	CAD-CBD-CGD-O1D
28	F	101	SQD	O5-C5-C6-S
28	L	101	SQD	O5-C5-C6-S
25	B	613	CLA	C14-C13-C15-C16
25	B	614	CLA	C11-C12-C13-C14
25	B	615	CLA	C11-C12-C13-C14
25	b	610	CLA	C11-C12-C13-C14
28	a	613	SQD	C18-C19-C20-C21
23	A	603	LMG	C35-C36-C37-C38
25	a	610	CLA	C15-C16-C17-C18
25	c	510	CLA	C8-C10-C11-C12
25	B	603	CLA	C2A-CAA-CBA-CGA
25	c	501	CLA	CAA-CBA-CGA-O2A

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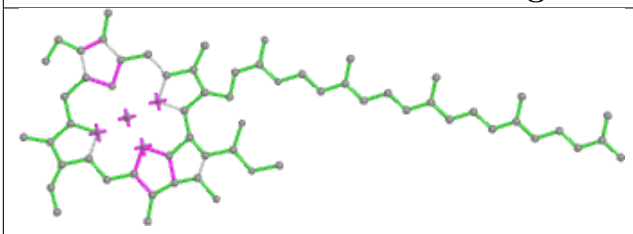
Mol	Chain	Res	Type	Atoms
33	h	102	DGD	O2G-C1B-C2B-C3B
25	A	608	CLA	C15-C16-C17-C18
33	h	102	DGD	C4B-C5B-C6B-C7B
27	a	612	PL9	C30-C29-C31-C32
25	B	605	CLA	C11-C12-C13-C15
25	B	610	CLA	C12-C13-C15-C16
25	B	614	CLA	C2-C3-C5-C6
25	C	507	CLA	C2-C3-C5-C6
25	b	604	CLA	C11-C12-C13-C15
27	D	407	PL9	C18-C19-C21-C22
34	a	609	PHO	C11-C12-C13-C15
23	D	409	LMG	O9-C10-C11-C12
25	C	510	CLA	CAA-CBA-CGA-O2A
25	b	616	CLA	CAA-CBA-CGA-O2A
28	F	101	SQD	O47-C7-C8-C9
25	b	616	CLA	CAA-CBA-CGA-O1A
28	L	101	SQD	O47-C7-C8-C9
28	L	103	SQD	O47-C7-C8-C9
25	B	605	CLA	C13-C15-C16-C17
33	c	515	DGD	C1A-C2A-C3A-C4A
25	B	602	CLA	C8-C10-C11-C12
25	c	501	CLA	CAA-CBA-CGA-O1A
33	C	516	DGD	O1A-C1A-C2A-C3A
34	a	609	PHO	C16-C17-C18-C19
23	C	519	LMG	C21-C22-C23-C24
23	d	408	LMG	C11-C12-C13-C14

There are no ring outliers.

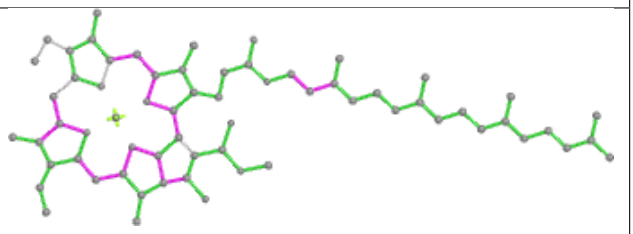
No monomer is involved in short contacts.

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

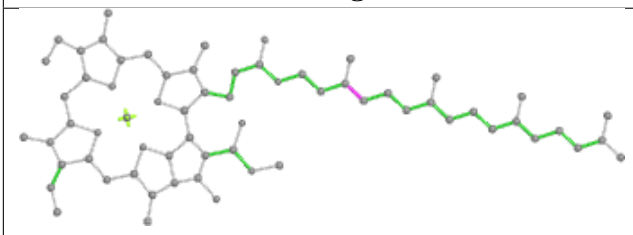
Ligand CLA b 609



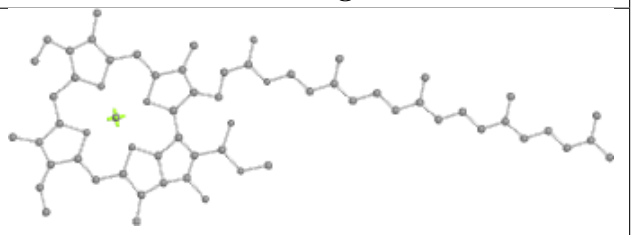
Bond lengths



Bond angles

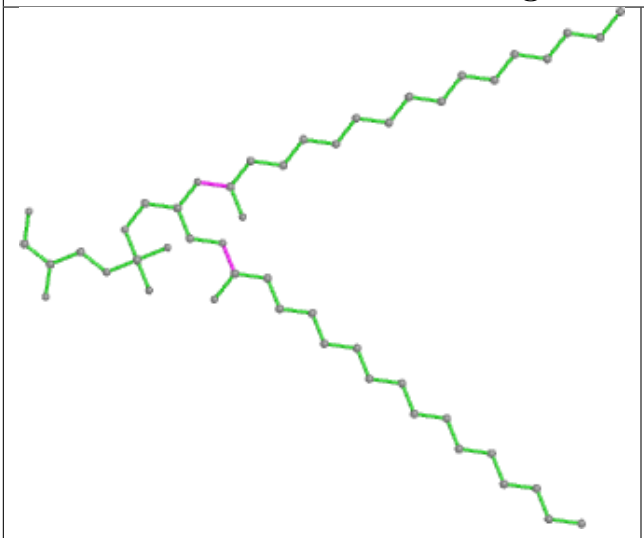


Torsions

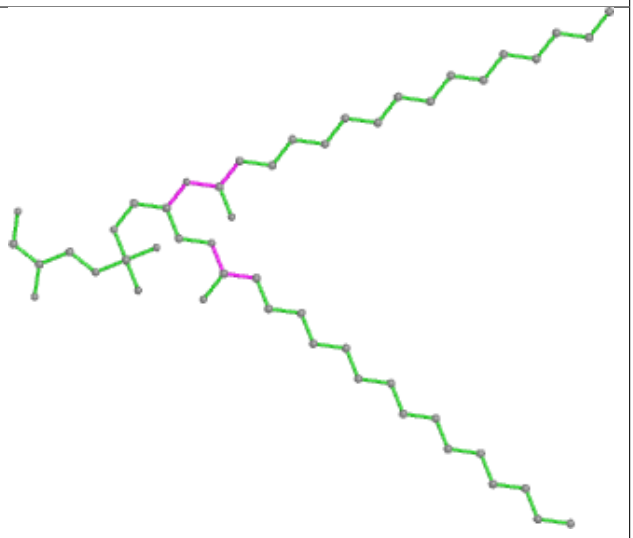


Rings

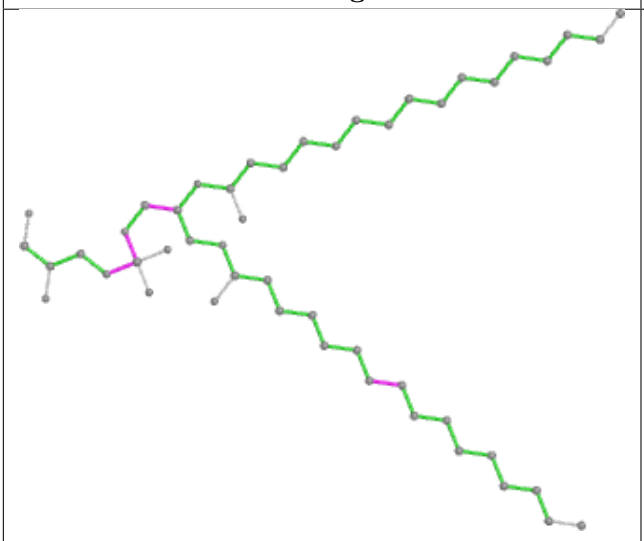
Ligand LHG D 408



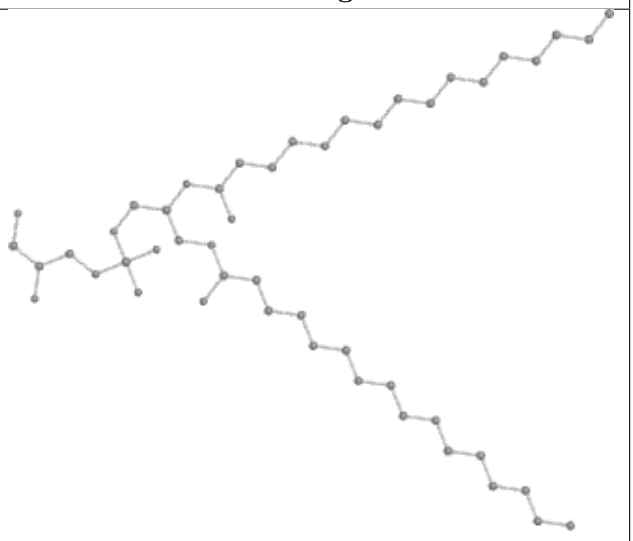
Bond lengths



Bond angles

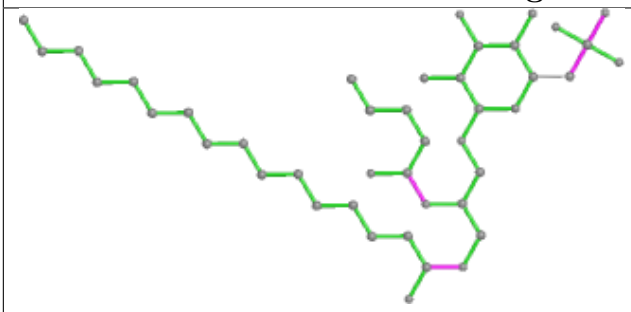


Torsions

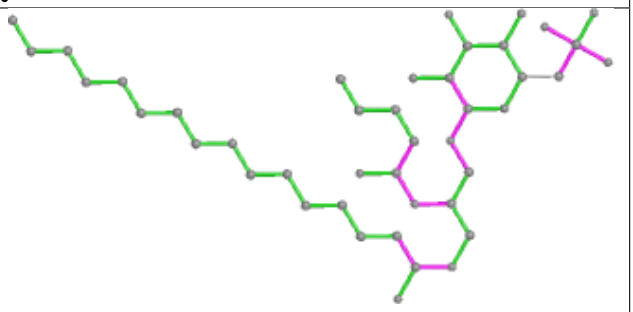


Rings

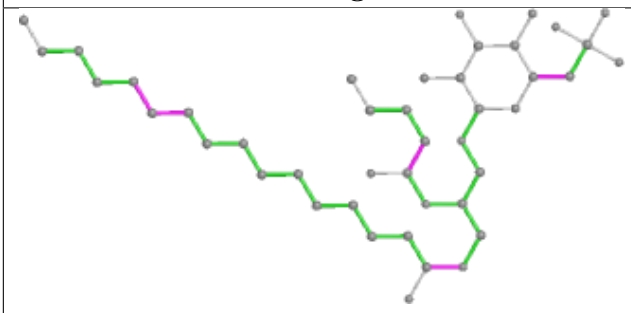
Ligand SQD F 101



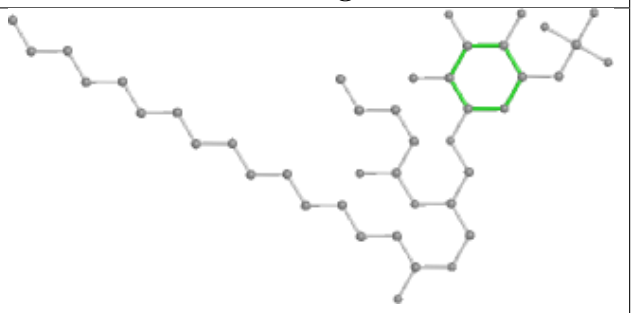
Bond lengths



Bond angles

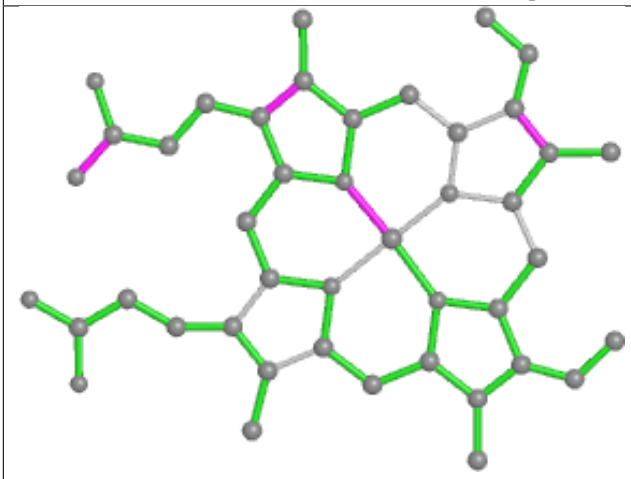


Torsions

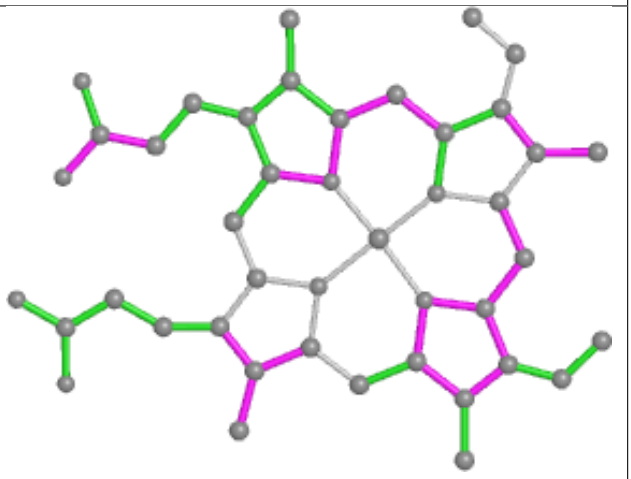


Rings

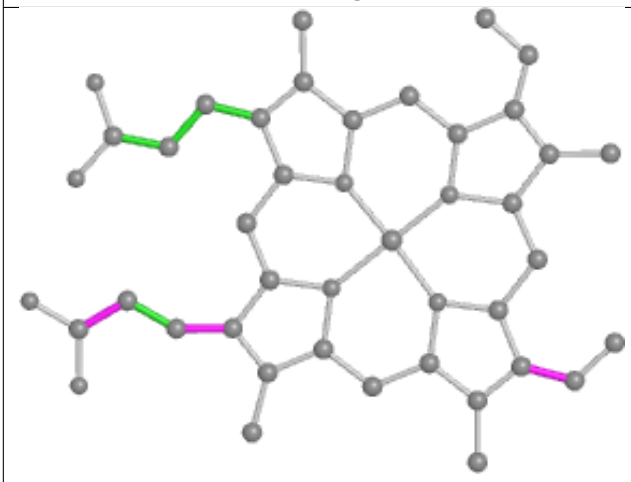
Ligand HEM e 101



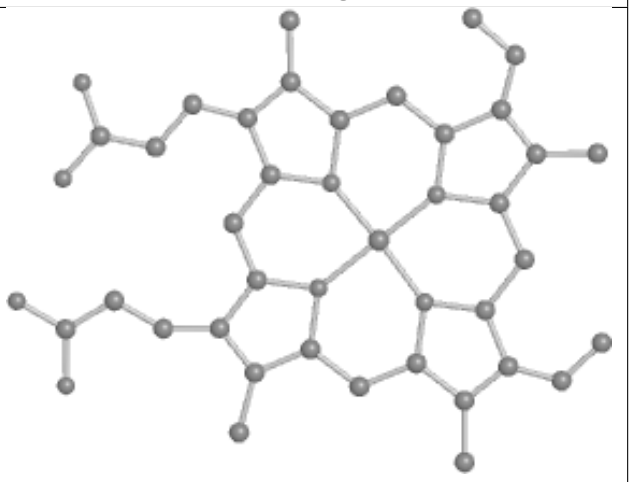
Bond lengths



Bond angles

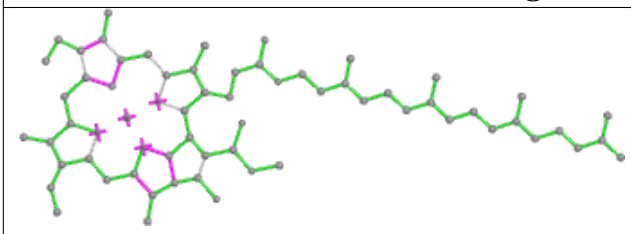


Torsions

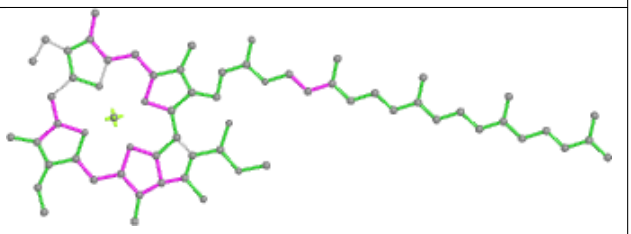


Rings

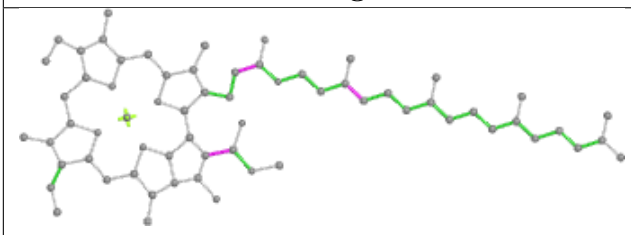
Ligand CLA C 510



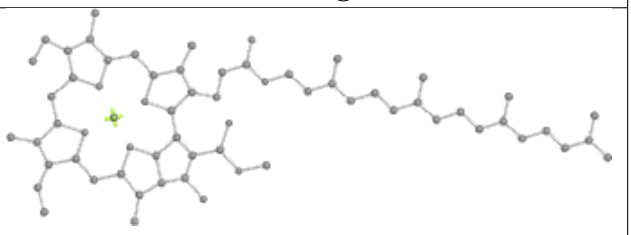
Bond lengths



Bond angles

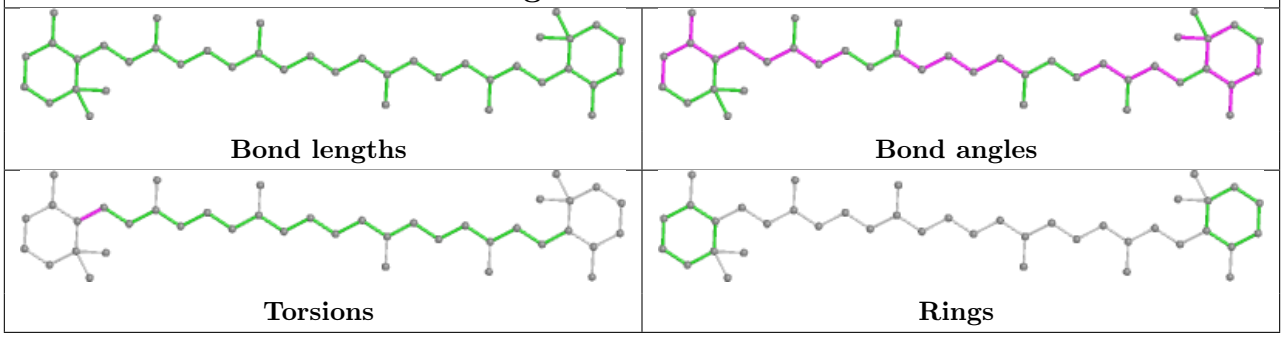


Torsions

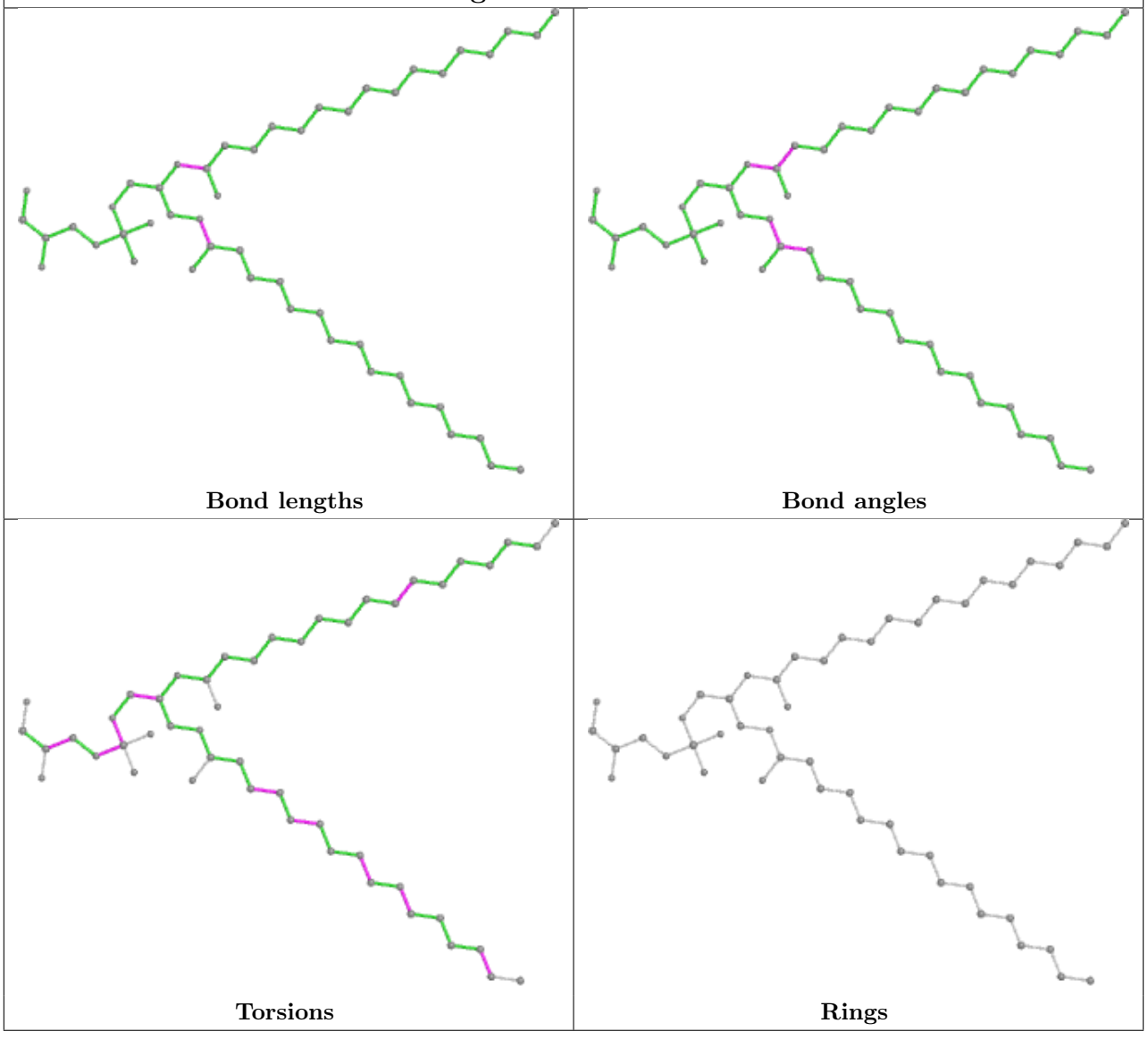


Rings

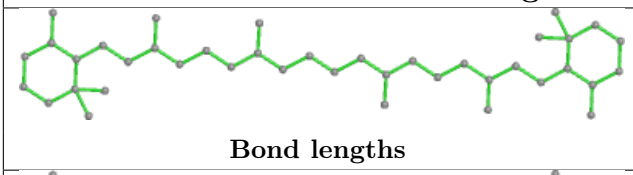
Ligand BCR B 617



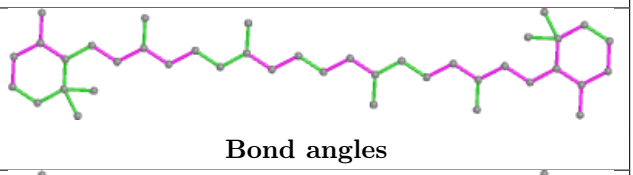
Ligand LHG d 407



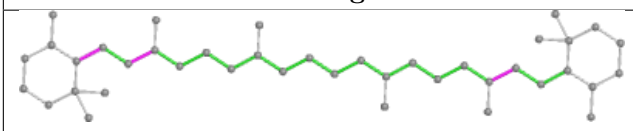
Ligand BCR D 406



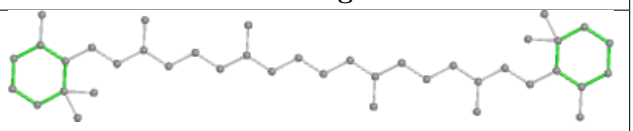
Bond lengths



Bond angles

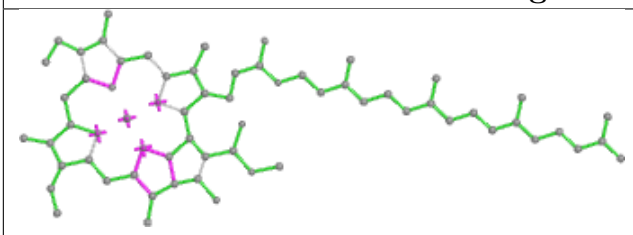


Torsions

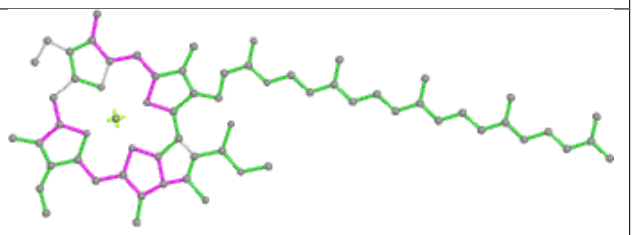


Rings

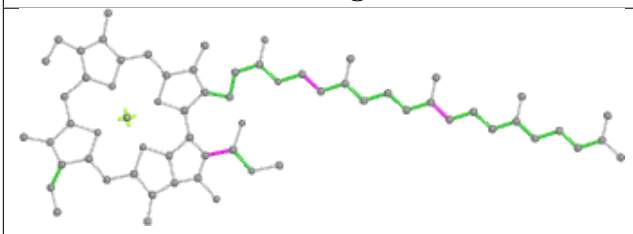
Ligand CLA c 509



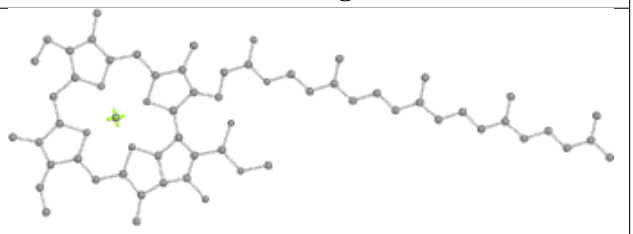
Bond lengths



Bond angles

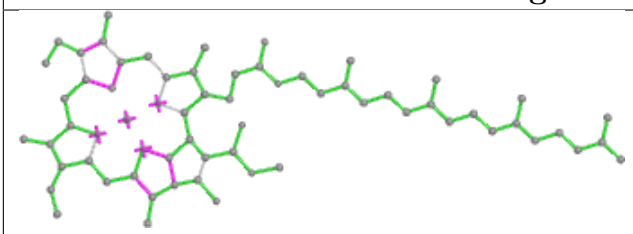


Torsions

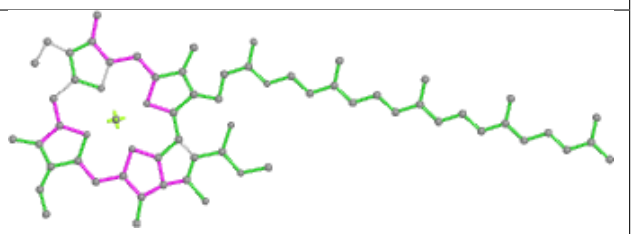


Rings

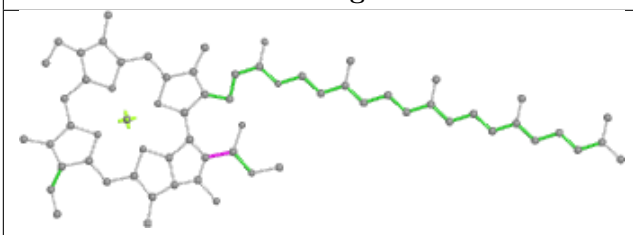
Ligand CLA c 505



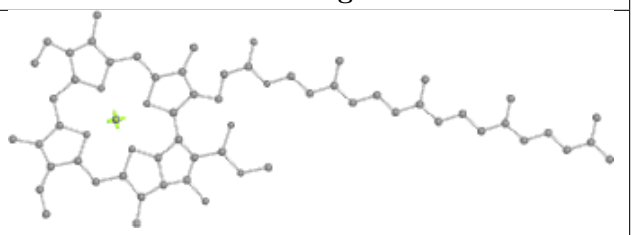
Bond lengths



Bond angles

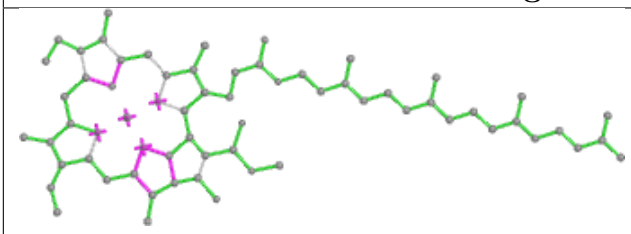


Torsions

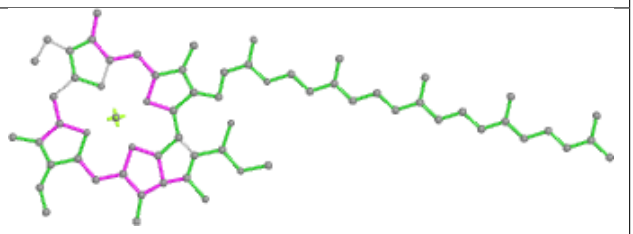


Rings

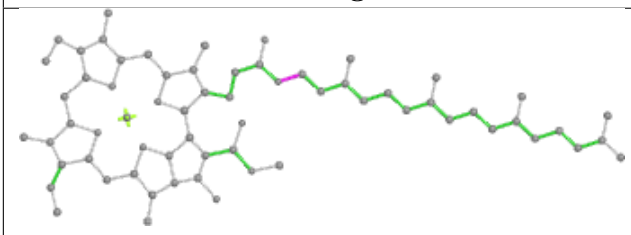
Ligand CLA A 606



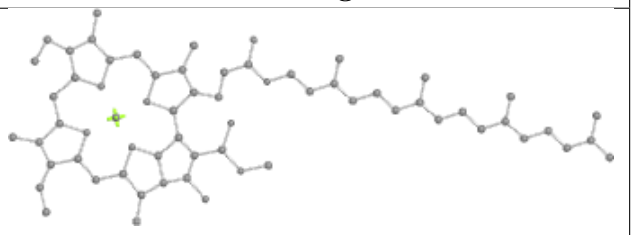
Bond lengths



Bond angles

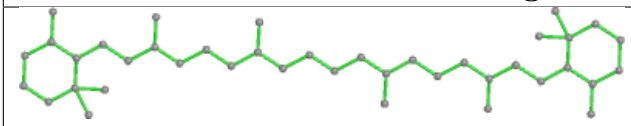


Torsions

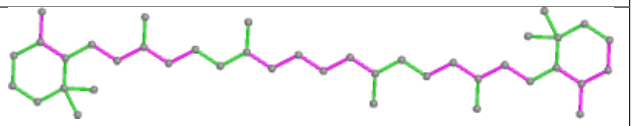


Rings

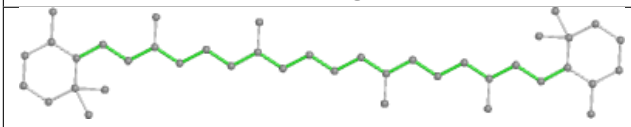
Ligand BCR B 618



Bond lengths



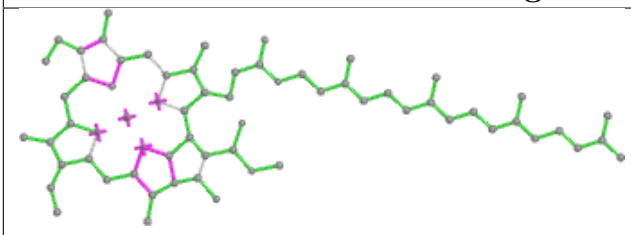
Bond angles



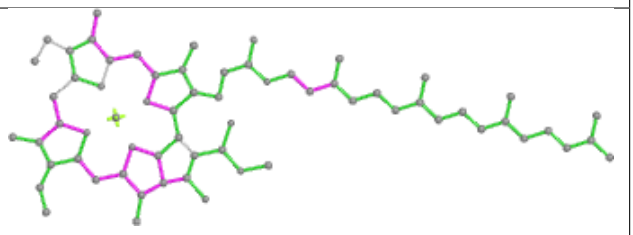
Torsions

Rings

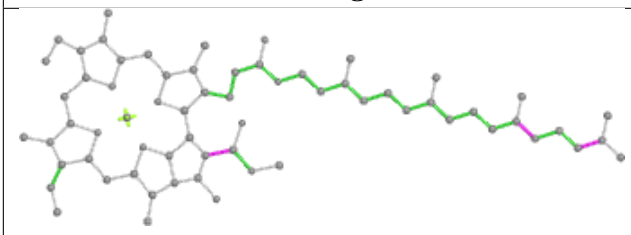
Ligand CLA B 607



Bond lengths



Bond angles



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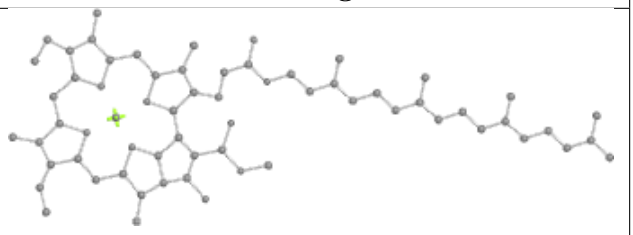
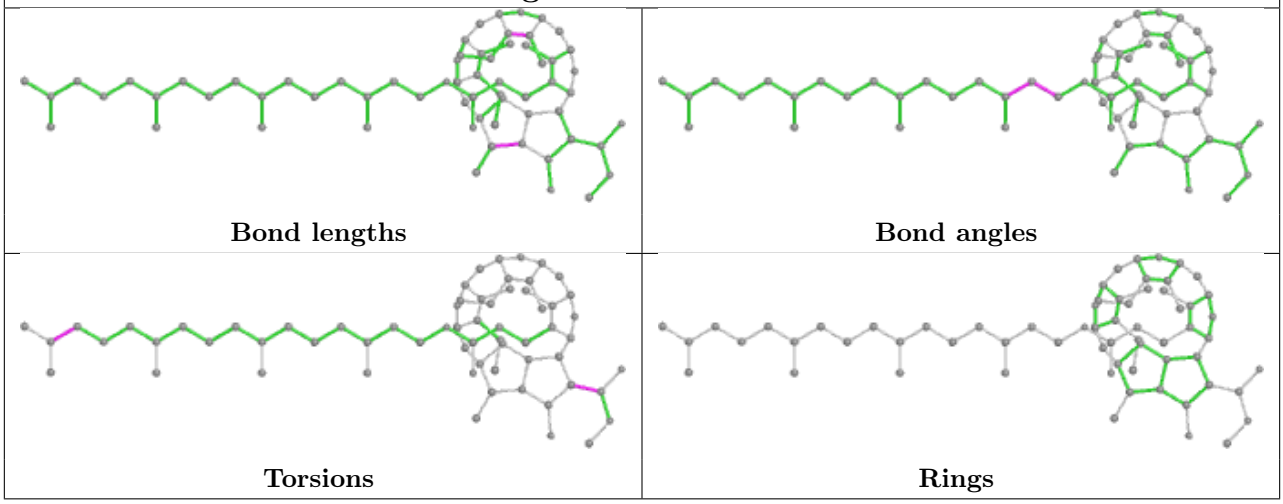
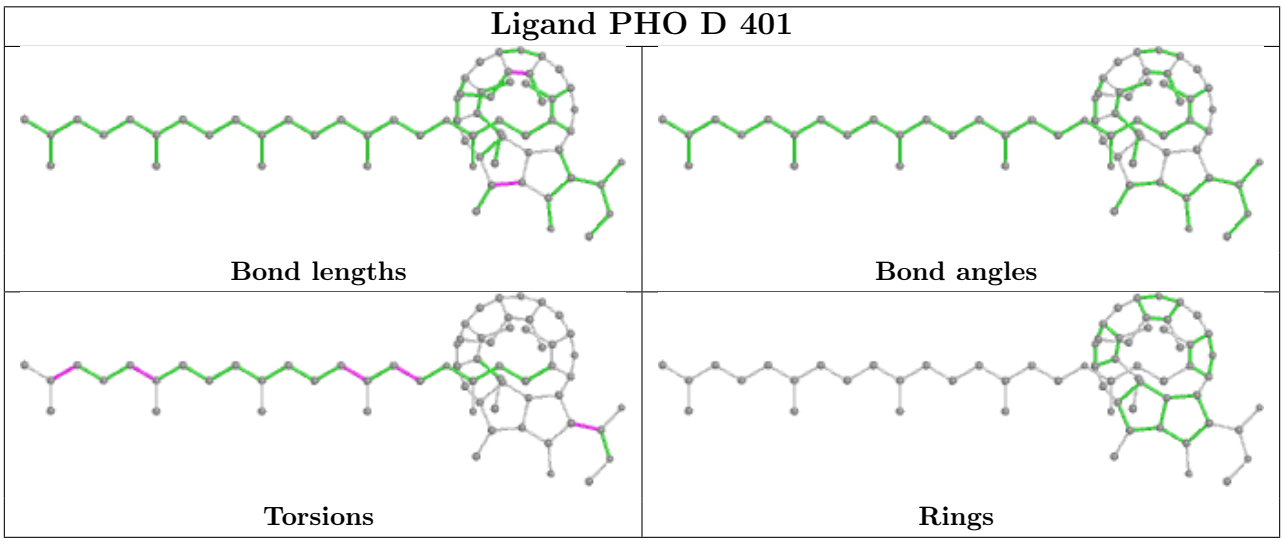


Rings

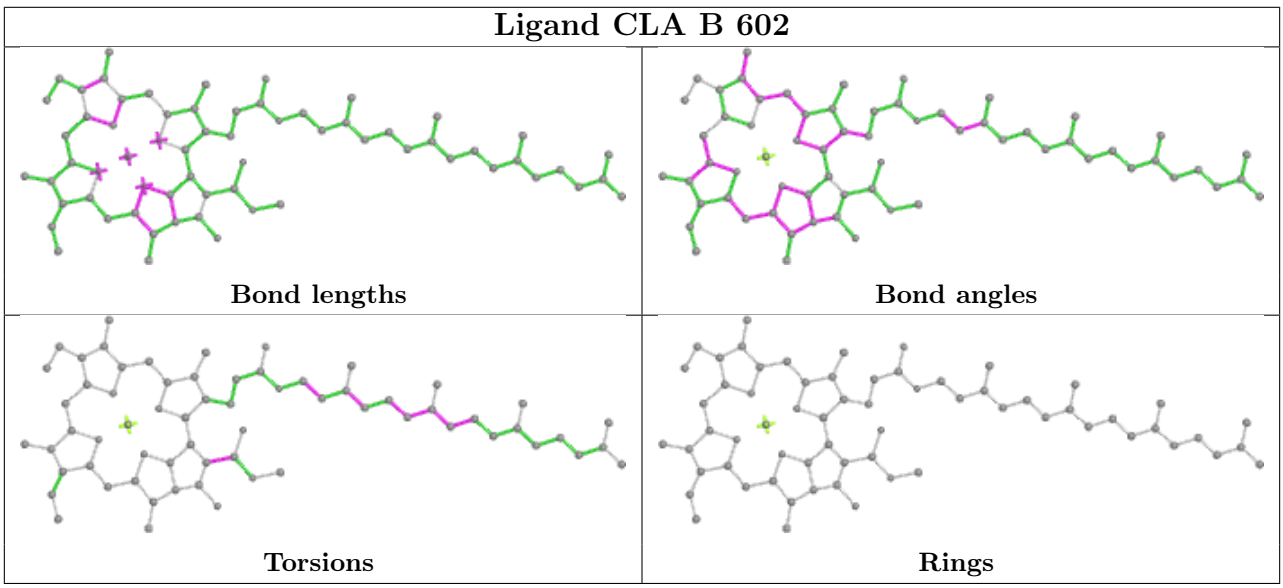
Ligand PHO D 402



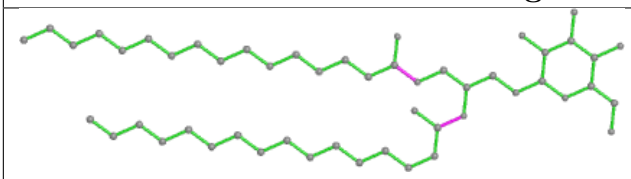
Ligand PHO D 401



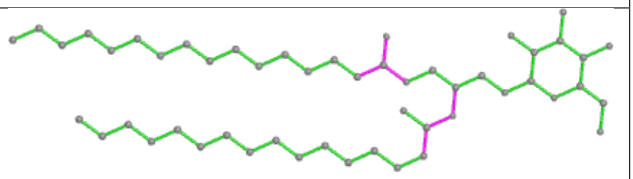
Ligand CLA B 602



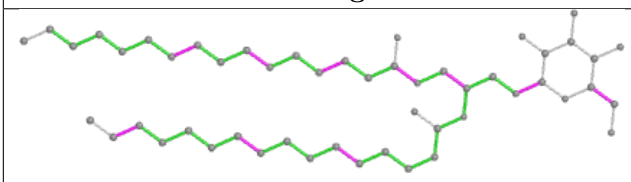
Ligand LMG c 520



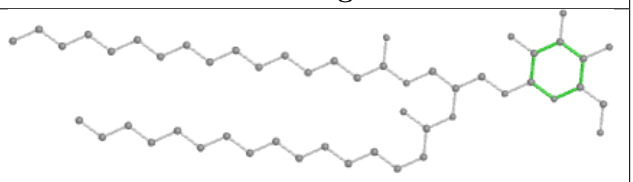
Bond lengths



Bond angles

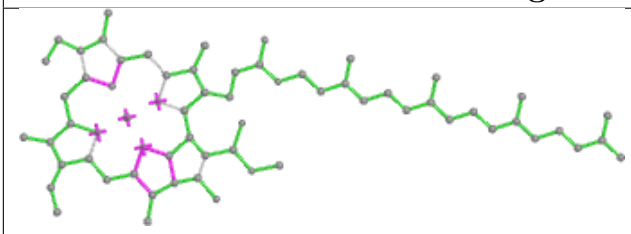


Torsions

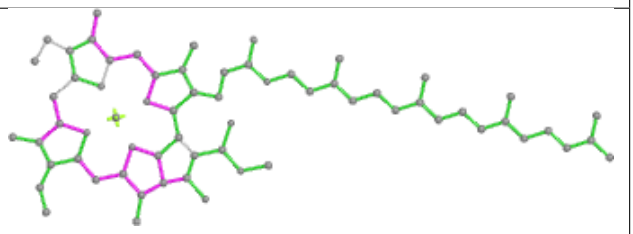


Rings

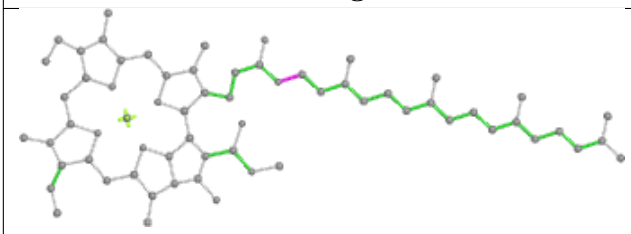
Ligand CLA a 606



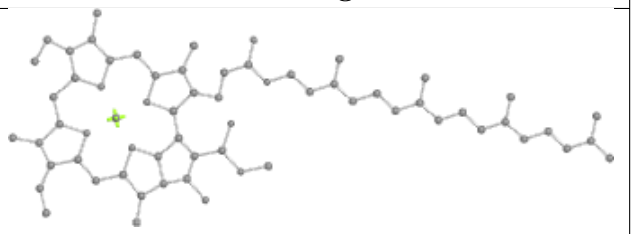
Bond lengths



Bond angles

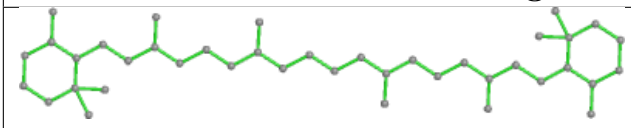


Torsions

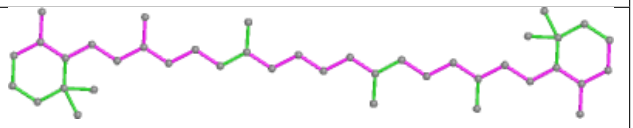


Rings

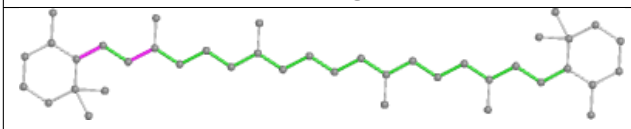
Ligand BCR k 102



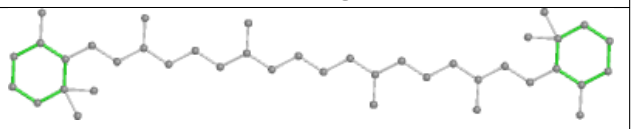
Bond lengths



Bond angles

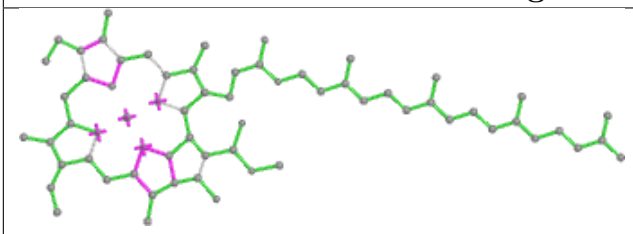


Torsions

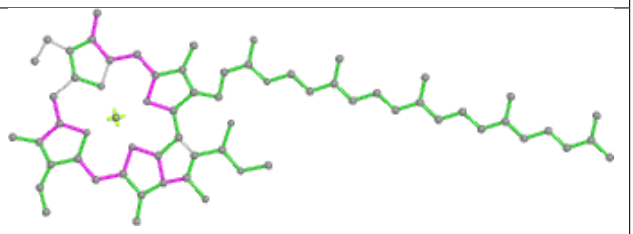


Rings

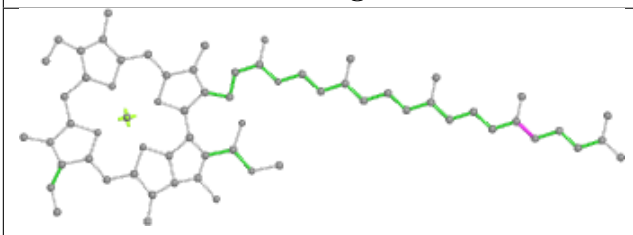
Ligand CLA b 615



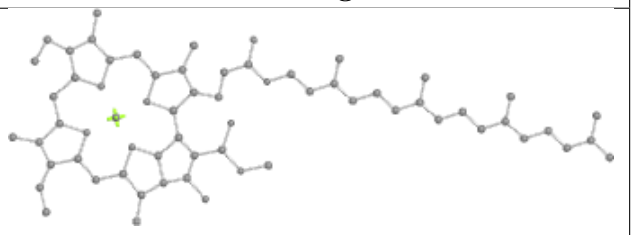
Bond lengths



Bond angles

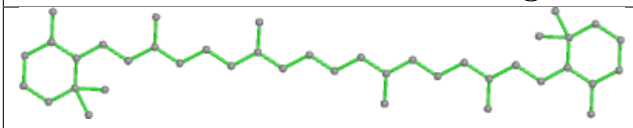


Torsions

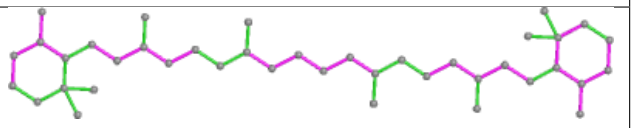


Rings

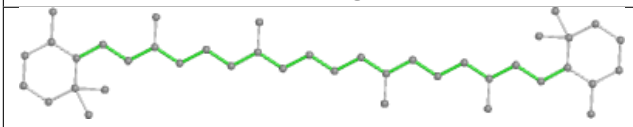
Ligand BCR C 522



Bond lengths



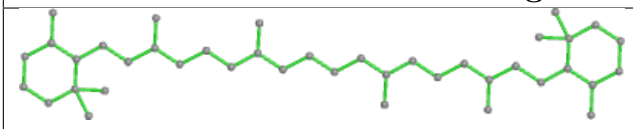
Bond angles



Torsions

Rings

Ligand BCR h 101



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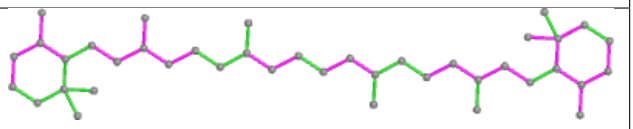
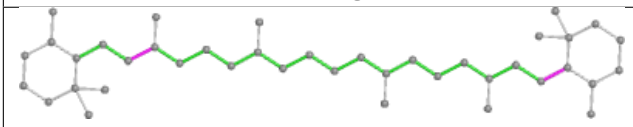


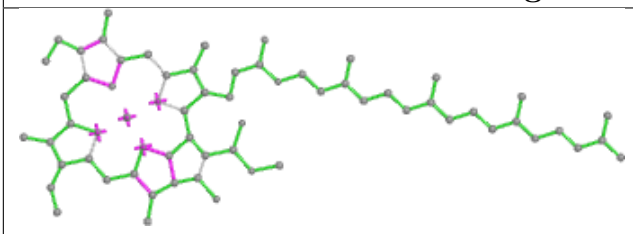
Bond angles



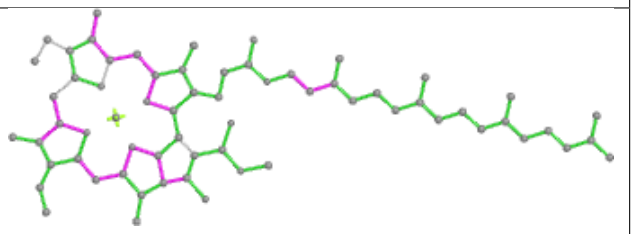
Torsions

Rings

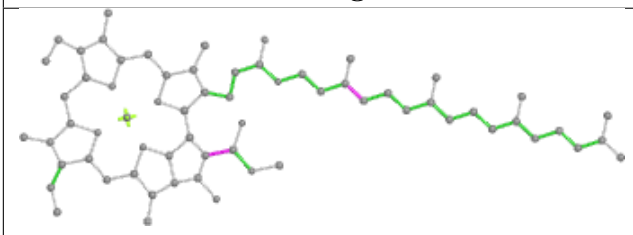
Ligand CLA C 504



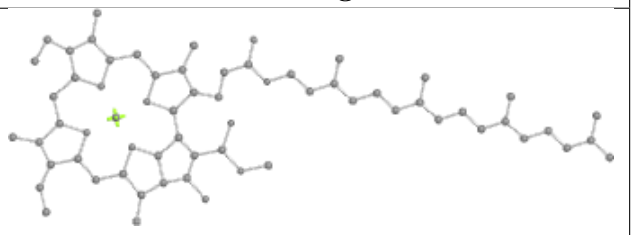
Bond lengths



Bond angles

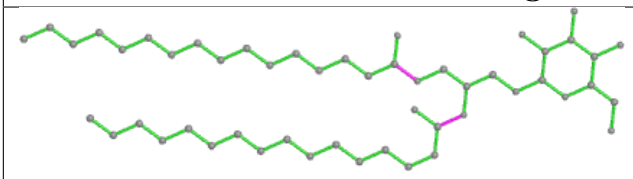


Torsions

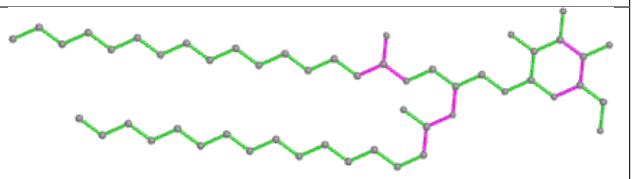


Rings

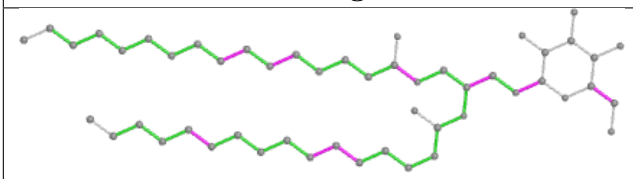
Ligand LMG a 603



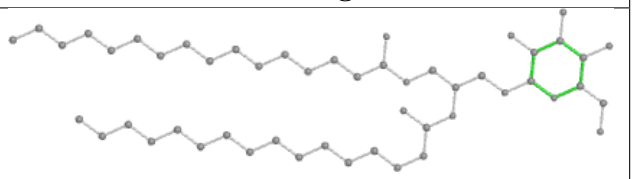
Bond lengths



Bond angles

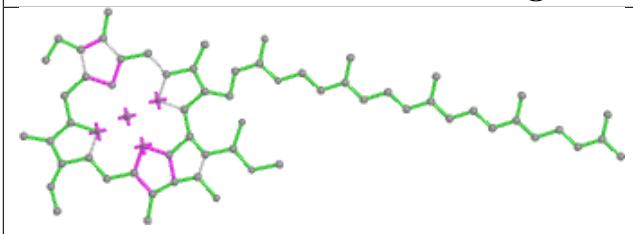


Torsions

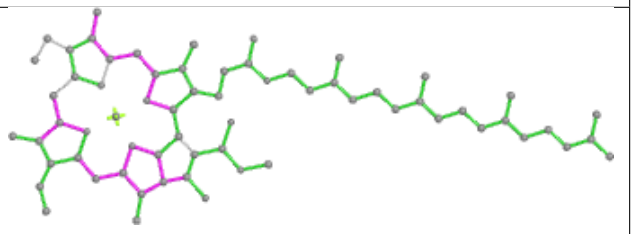


Rings

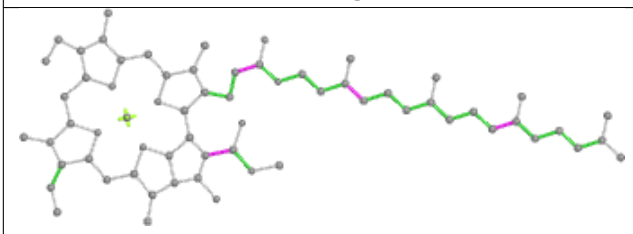
Ligand CLA b 616



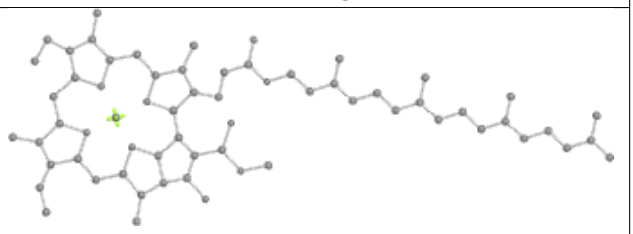
Bond lengths



Bond angles

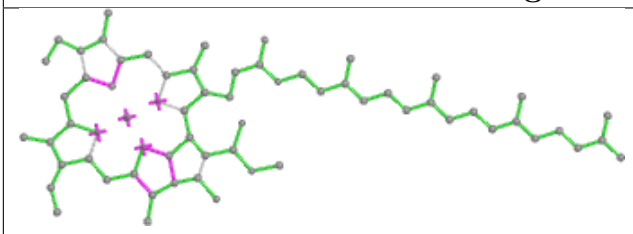


Torsions

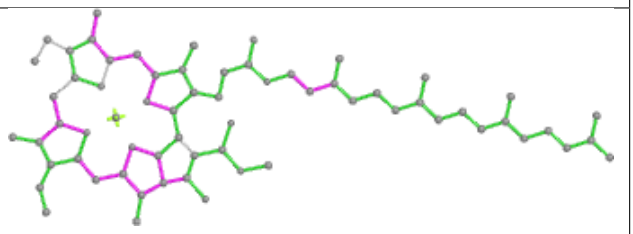


Rings

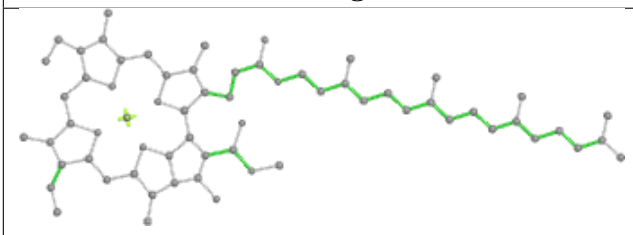
Ligand CLA C 501



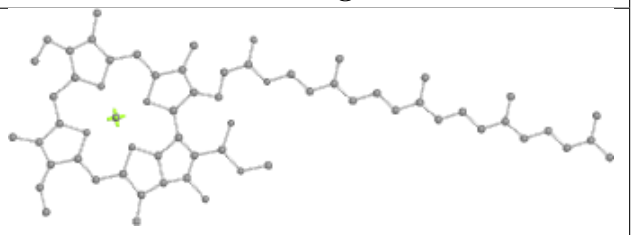
Bond lengths



Bond angles

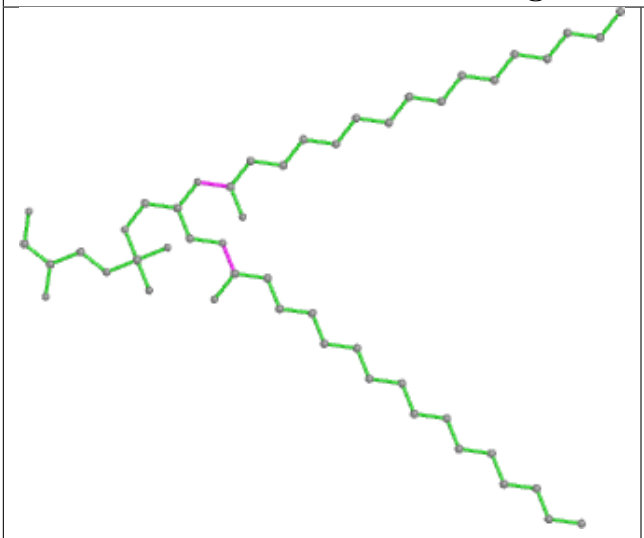


Torsions



Rings

Ligand LHG a 615



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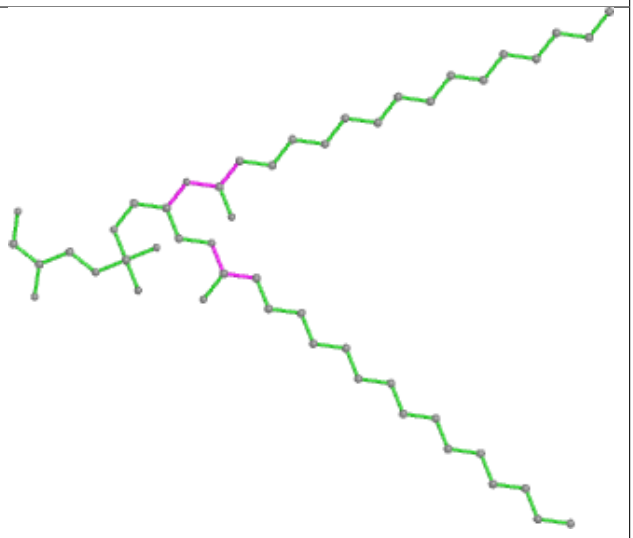
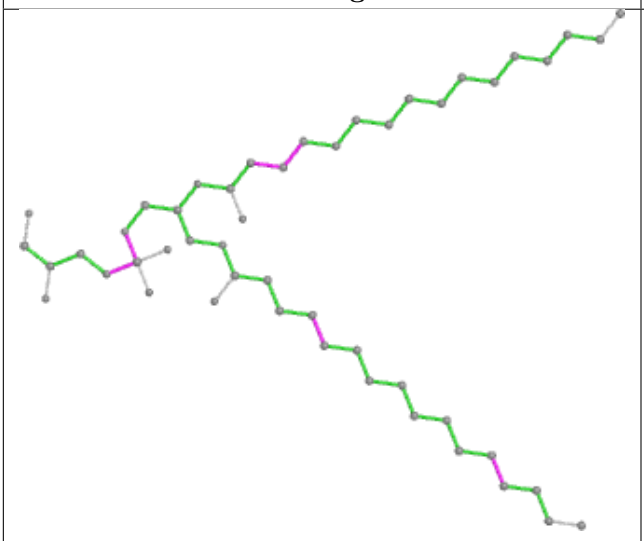
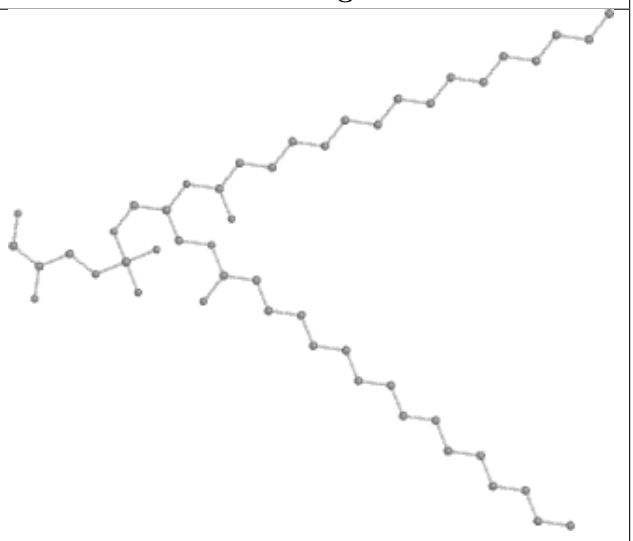


Bond angles

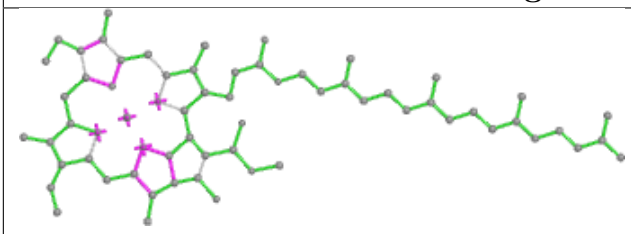


Torsions

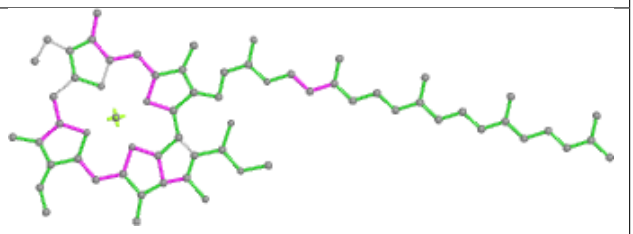


Rings

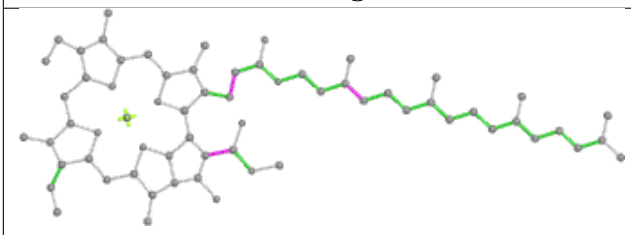
Ligand CLA C 507



Bond lengths



Bond angles



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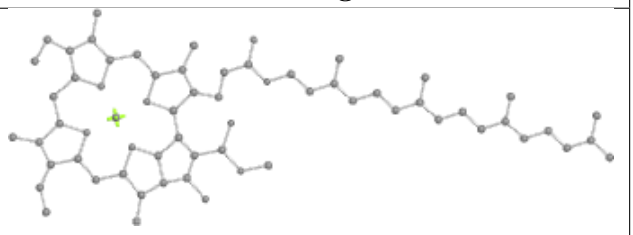
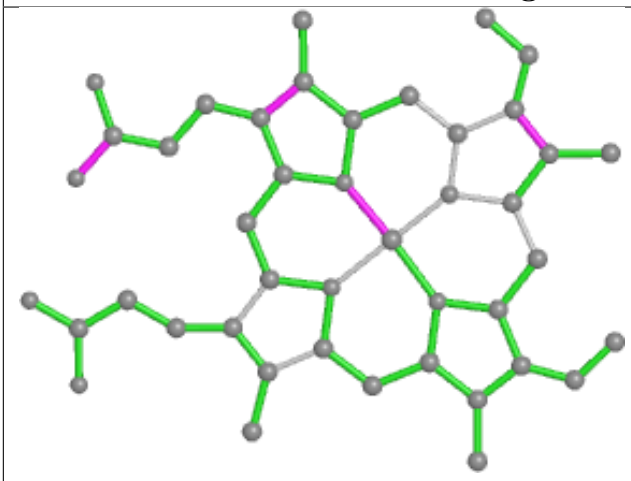
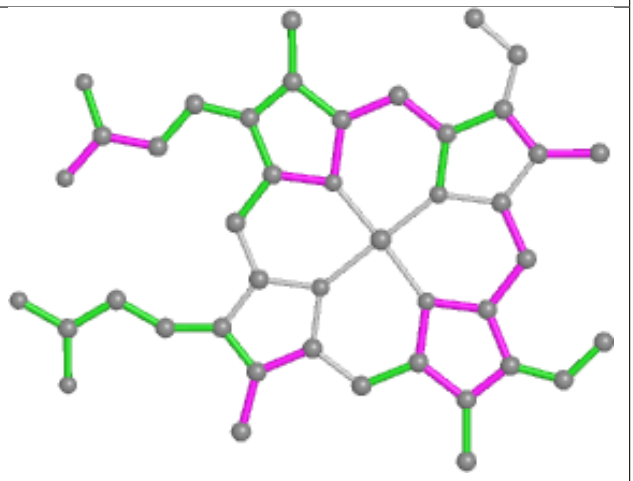


Rings

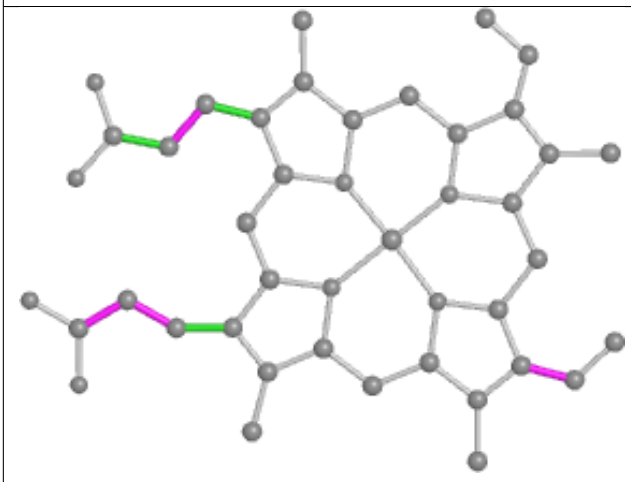
Ligand HEM E 102



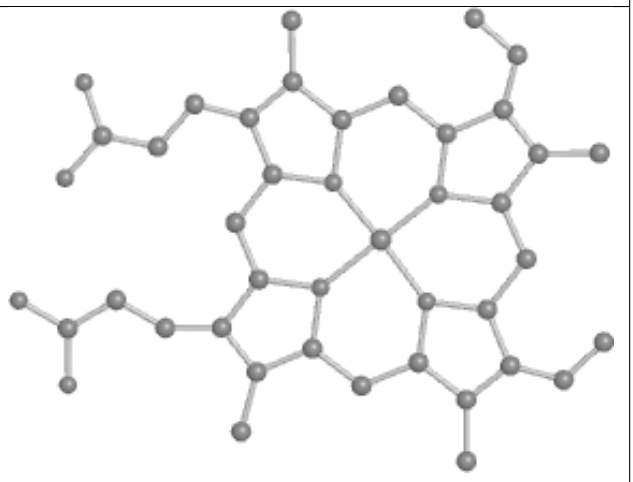
Bond lengths



Bond angles

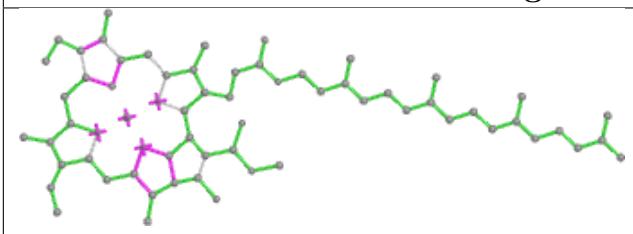


Torsions

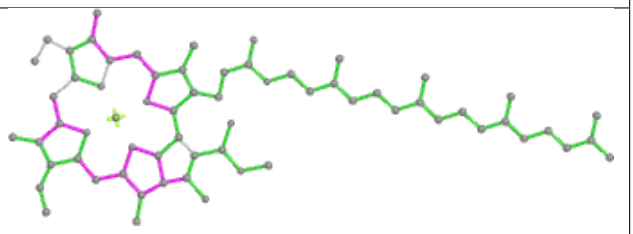


Rings

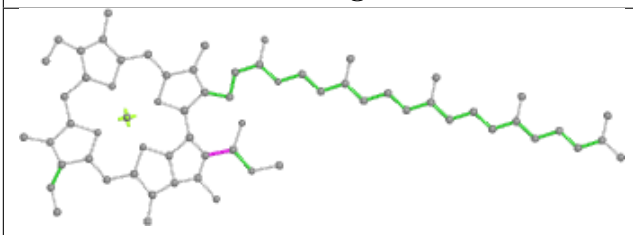
Ligand CLA C 505



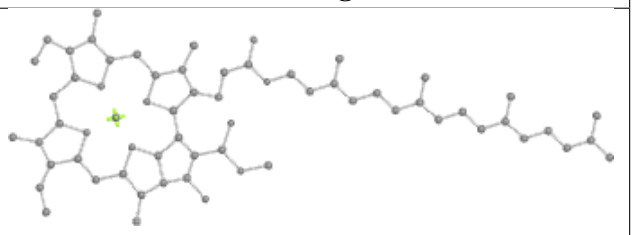
Bond lengths



Bond angles

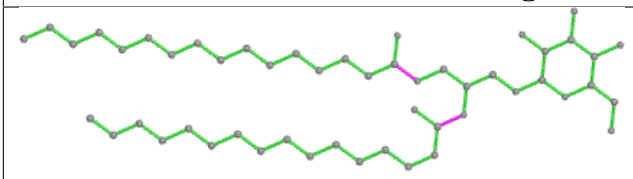


Torsions

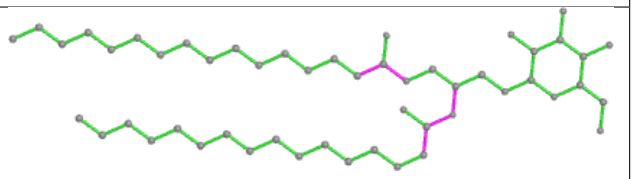


Rings

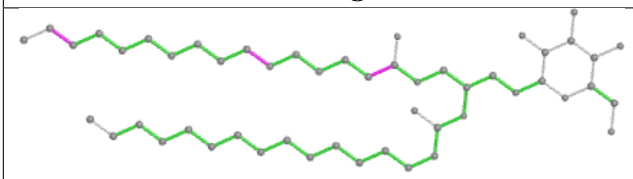
Ligand LMG B 620



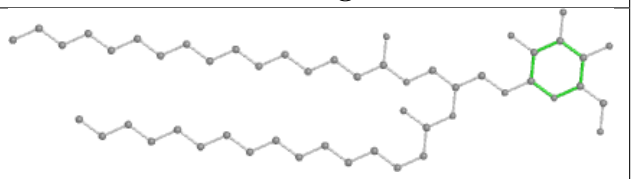
Bond lengths



Bond angles

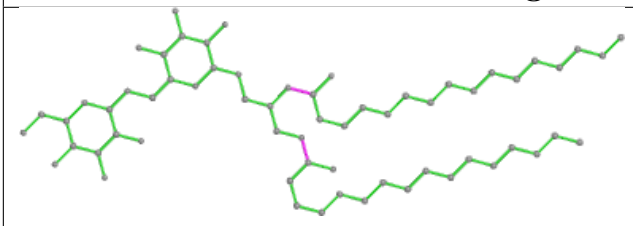


Torsions

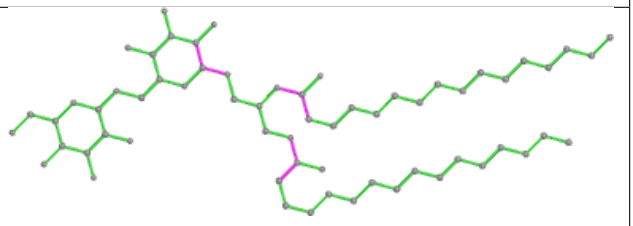


Rings

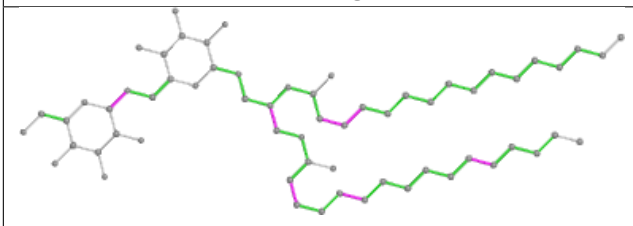
Ligand DGD c 516



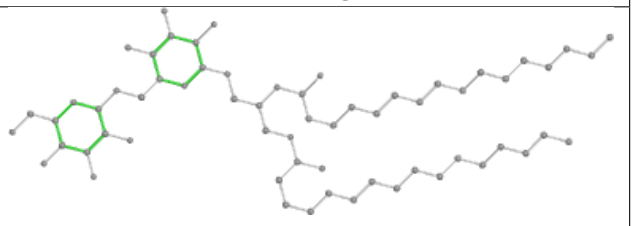
Bond lengths



Bond angles

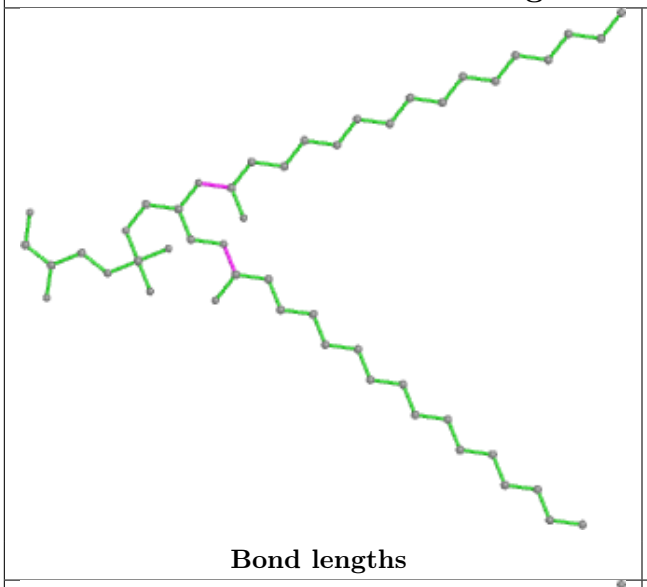


Torsions

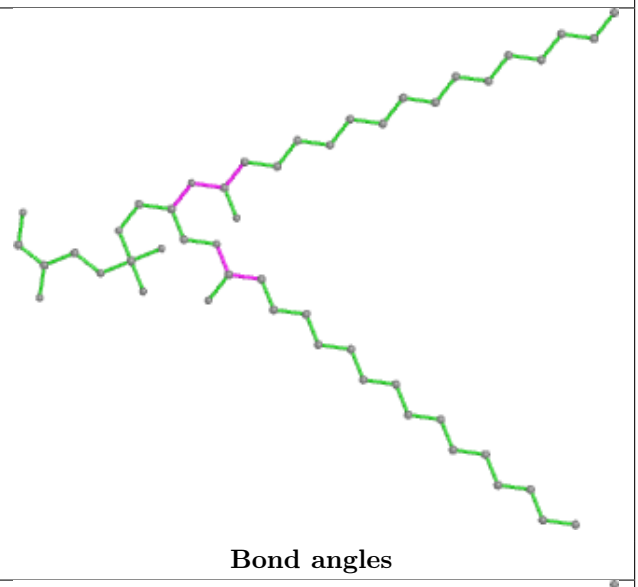


Rings

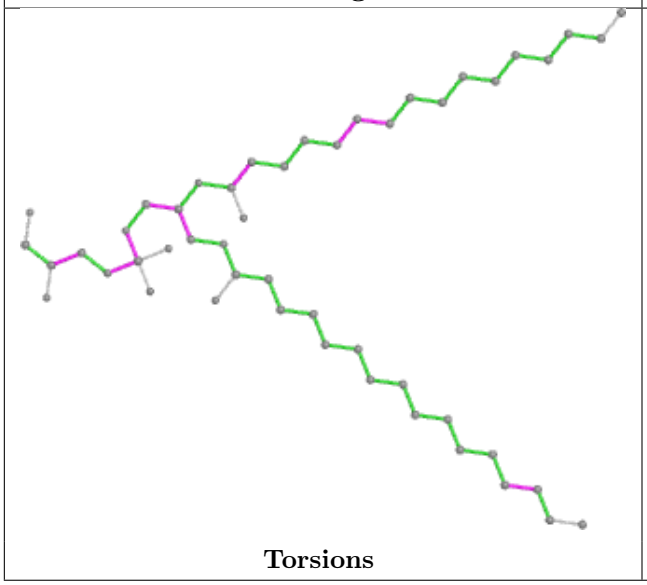
Ligand LHG L 102



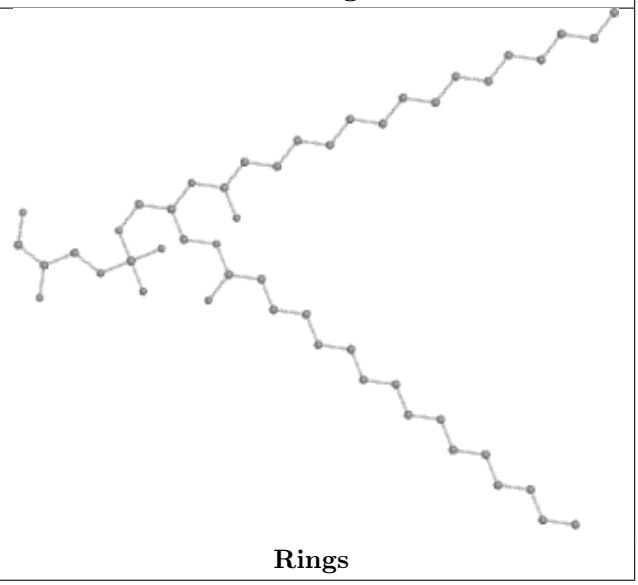
Bond lengths



Bond angles

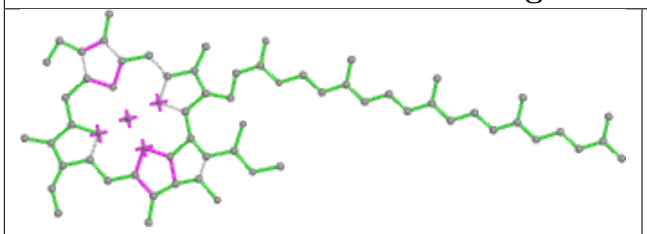


Torsions

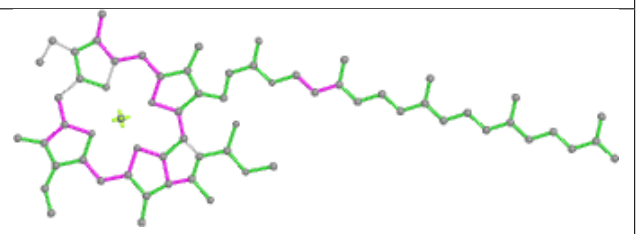


Rings

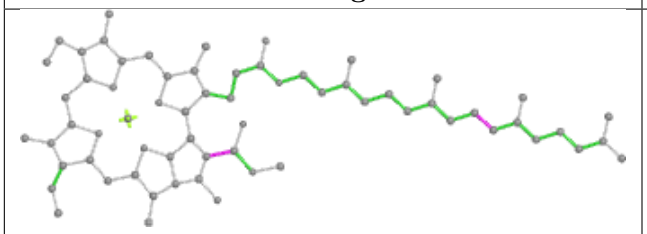
Ligand CLA C 503



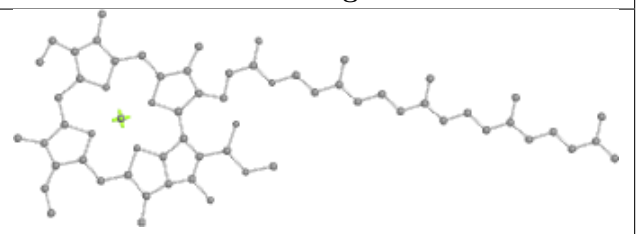
Bond lengths



Bond angles

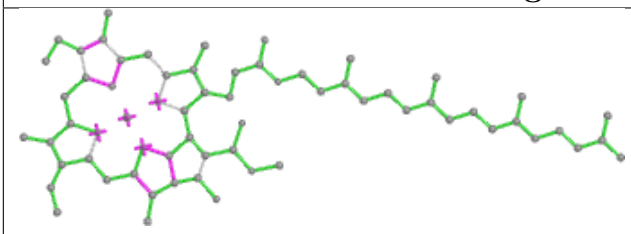


Torsions

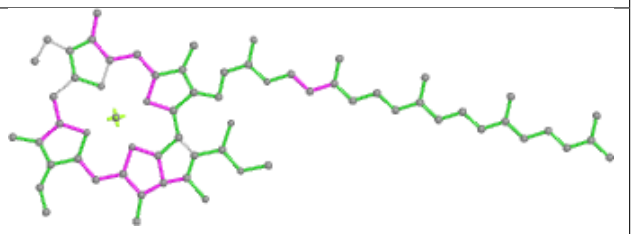


Rings

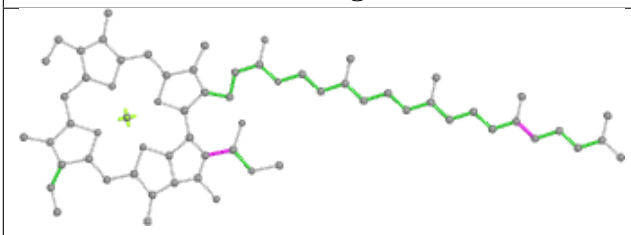
Ligand CLA B 610



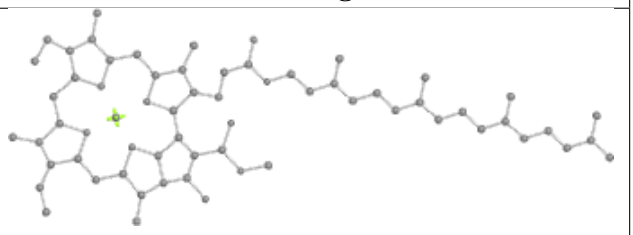
Bond lengths



Bond angles

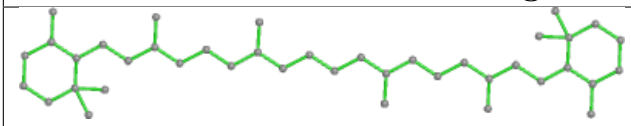


Torsions

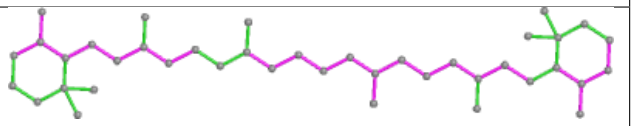


Rings

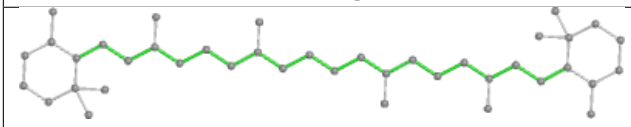
Ligand BCR C 515



Bond lengths



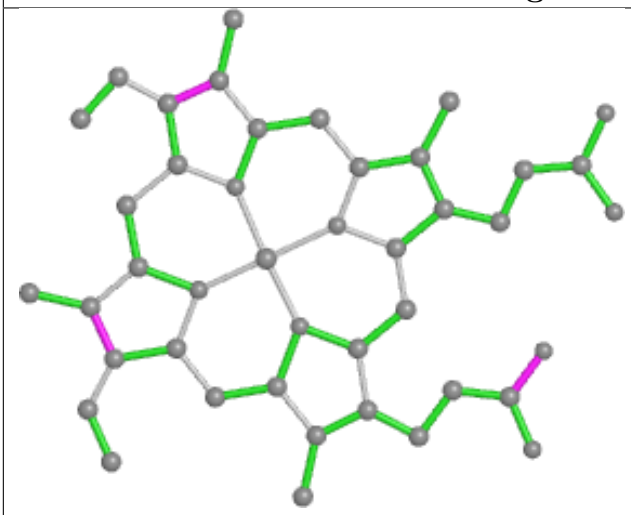
Bond angles



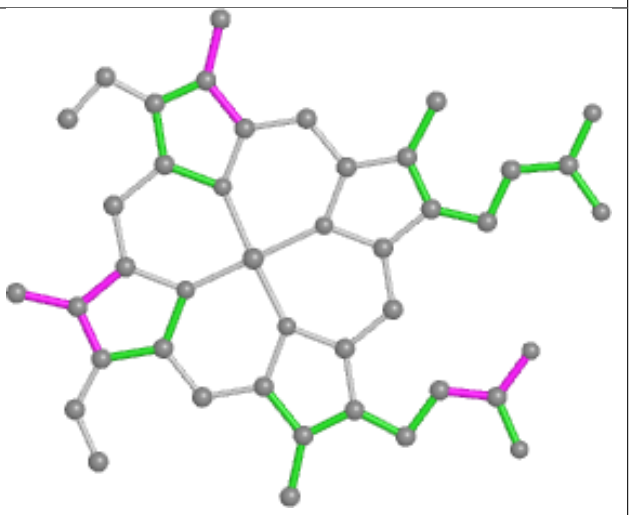
Torsions

Rings

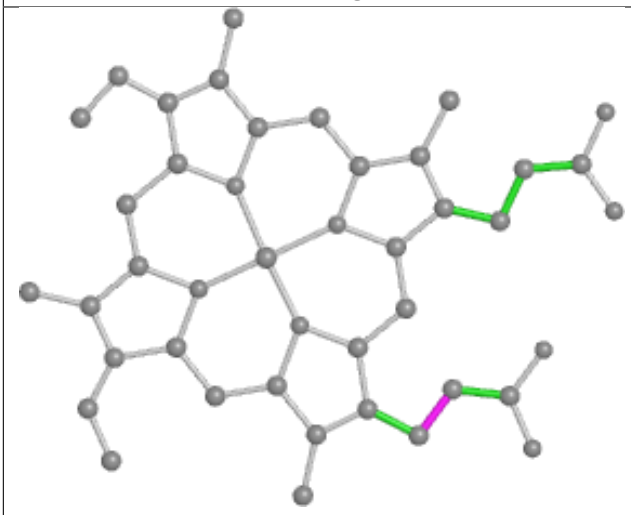
Ligand HEC v 201



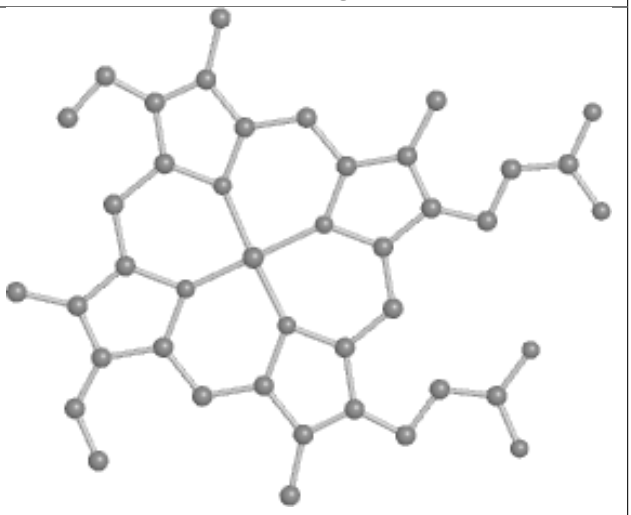
Bond lengths



Bond angles

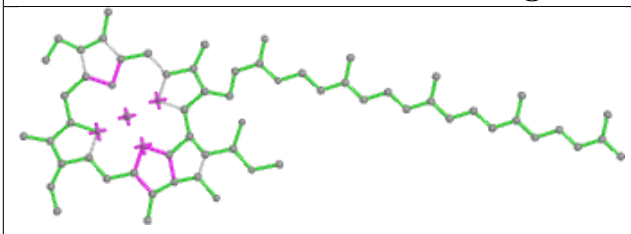


Torsions

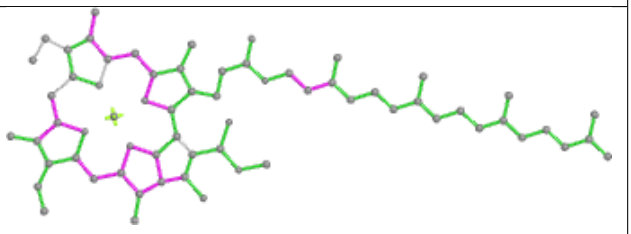


Rings

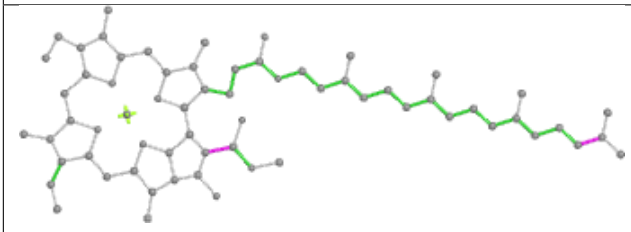
Ligand CLA D 405



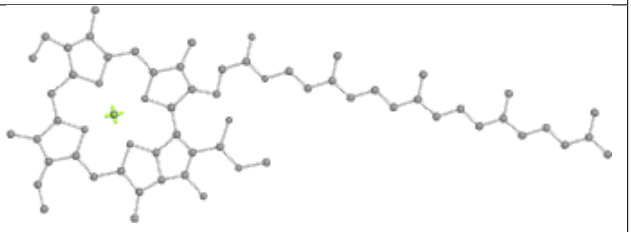
Bond lengths



Bond angles

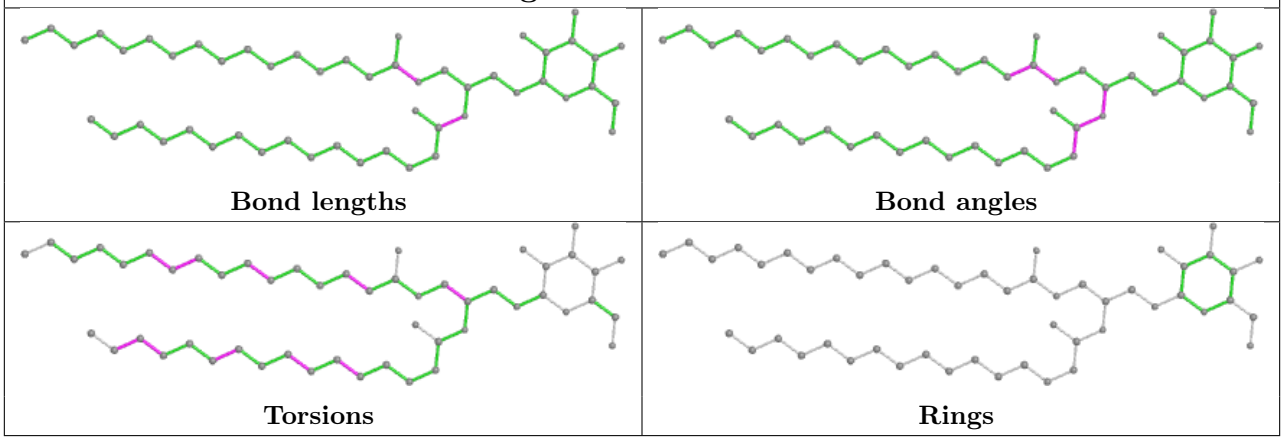


Torsions

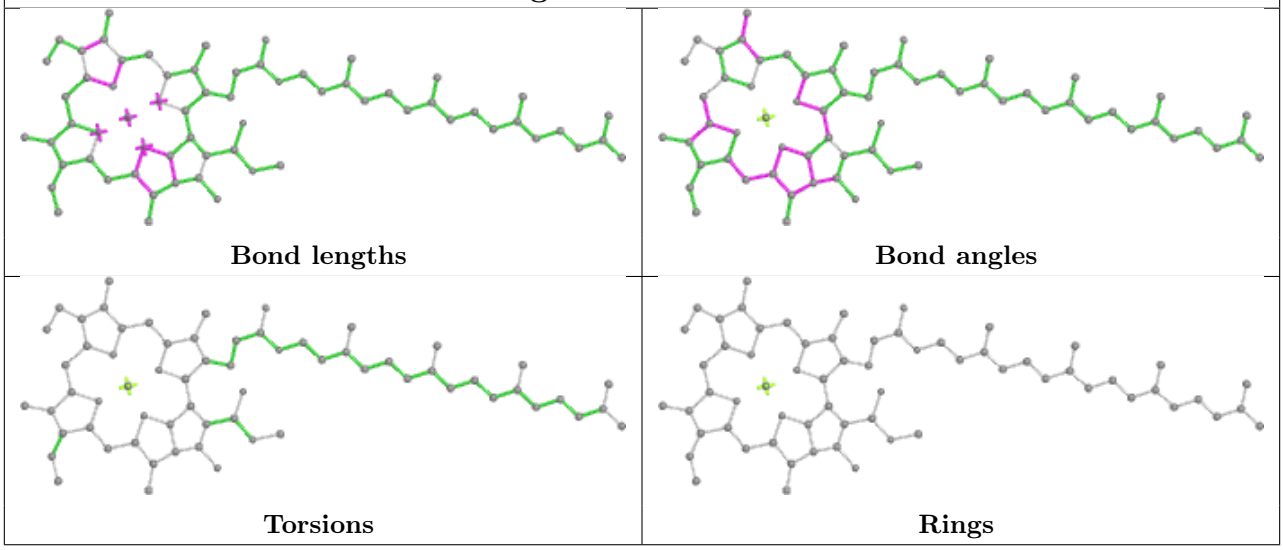


Rings

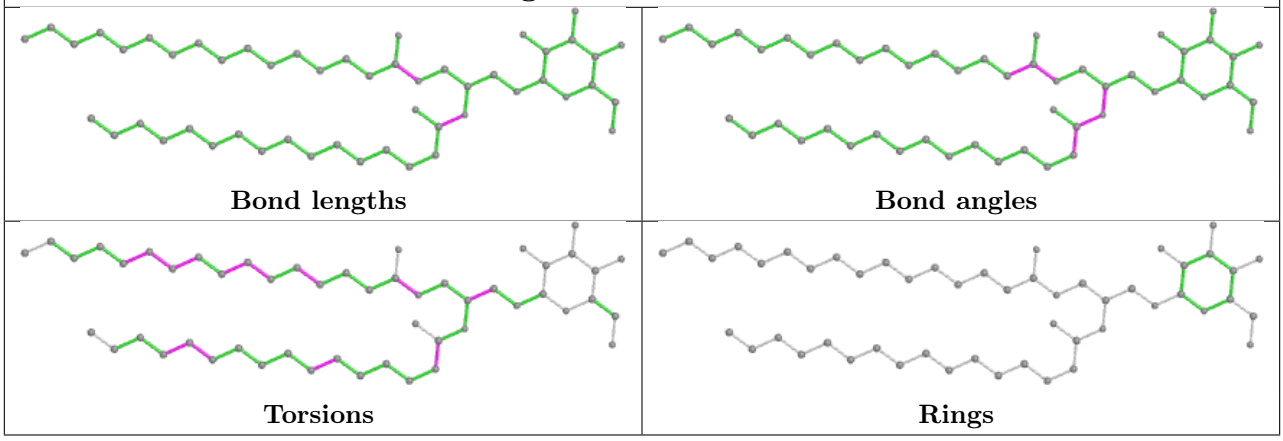
Ligand LMG A 612



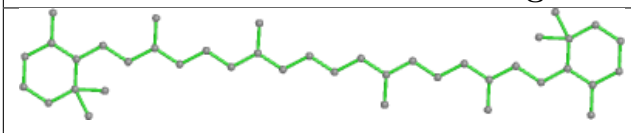
Ligand CLA c 511



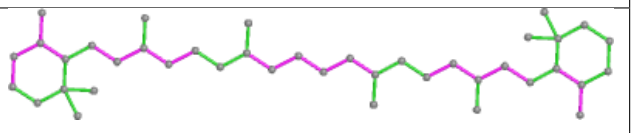
Ligand LMG A 603



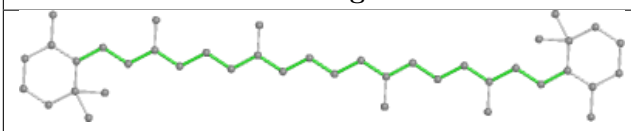
Ligand BCR a 611



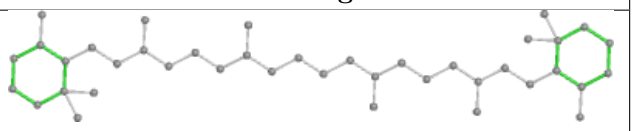
Bond lengths



Bond angles

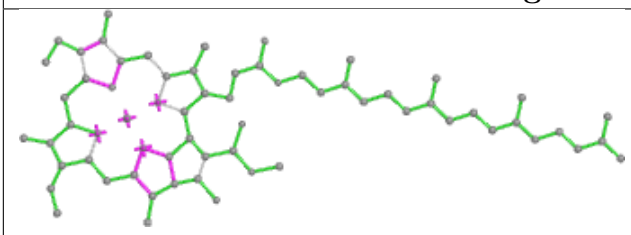


Torsions

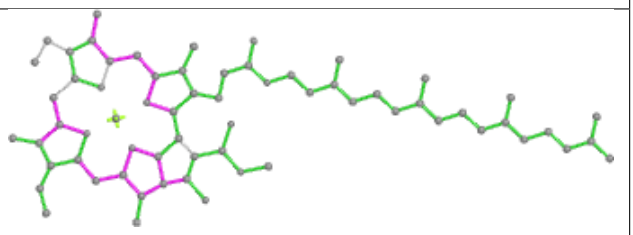


Rings

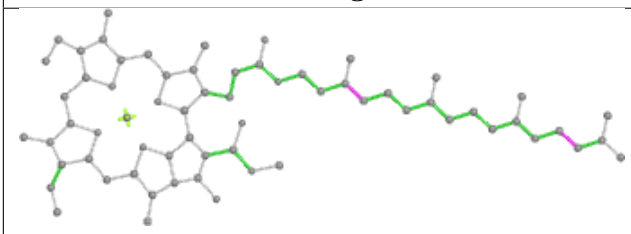
Ligand CLA A 608



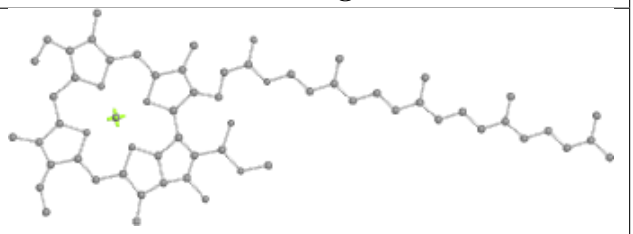
Bond lengths



Bond angles

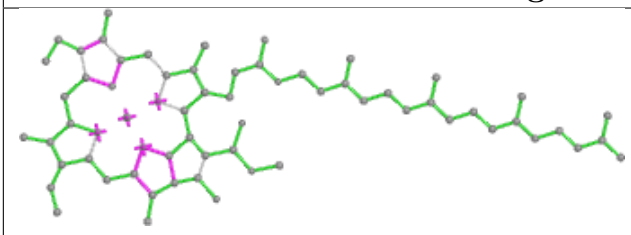


Torsions

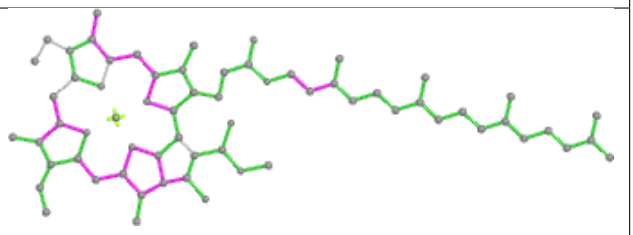


Rings

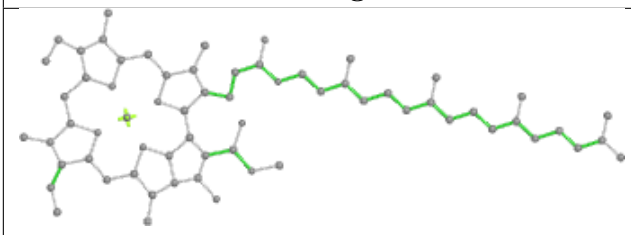
Ligand CLA b 611



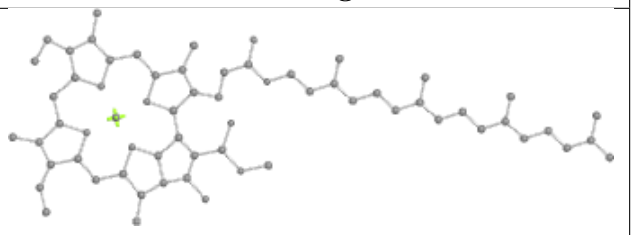
Bond lengths



Bond angles

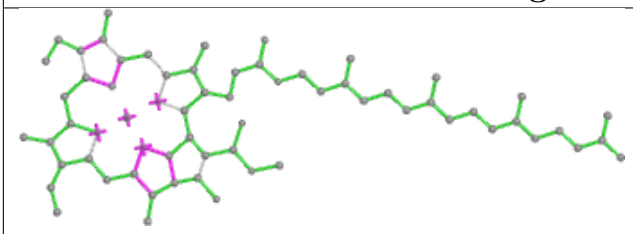


Torsions

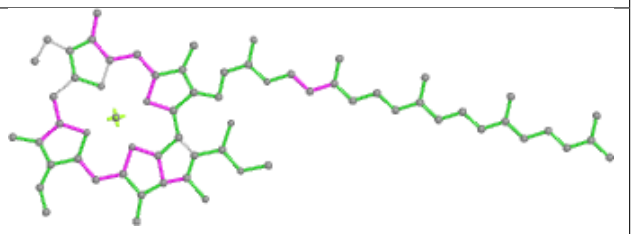


Rings

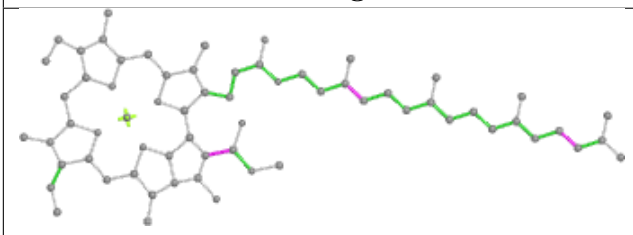
Ligand CLA c 503



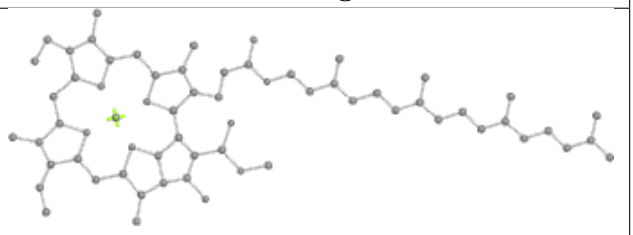
Bond lengths



Bond angles

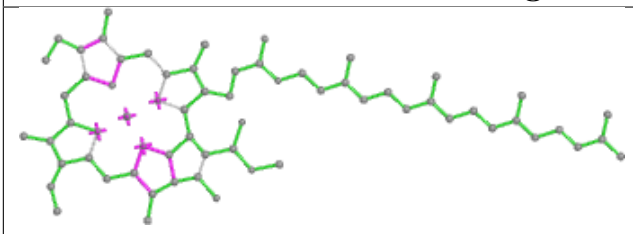


Torsions

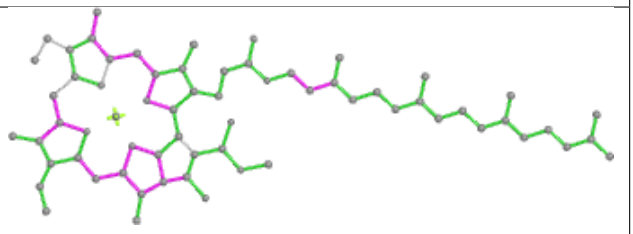


Rings

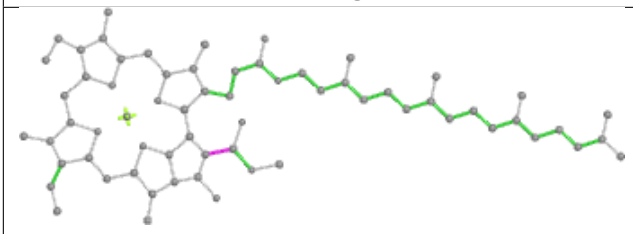
Ligand CLA C 502



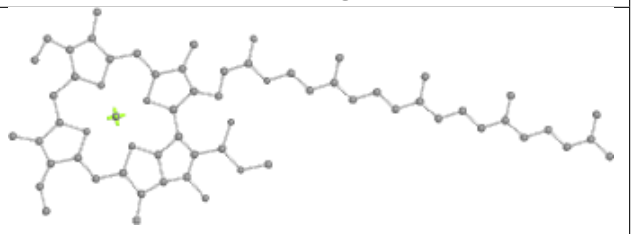
Bond lengths



Bond angles

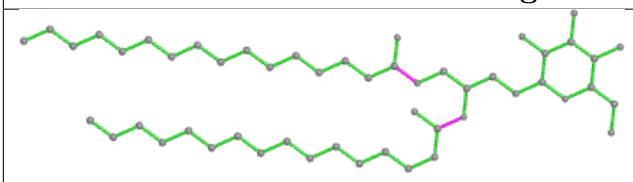


Torsions

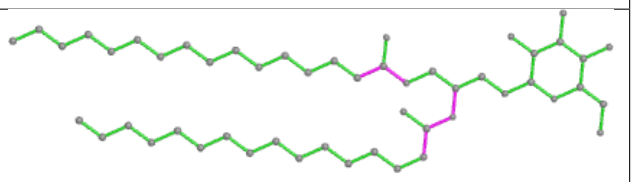


Rings

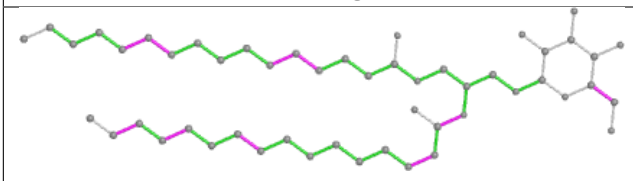
Ligand LMG B 624



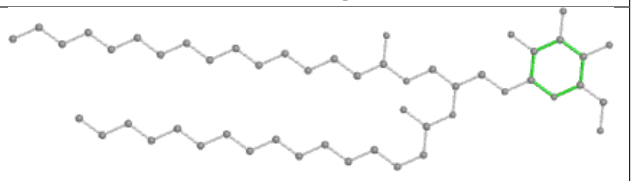
Bond lengths



Bond angles

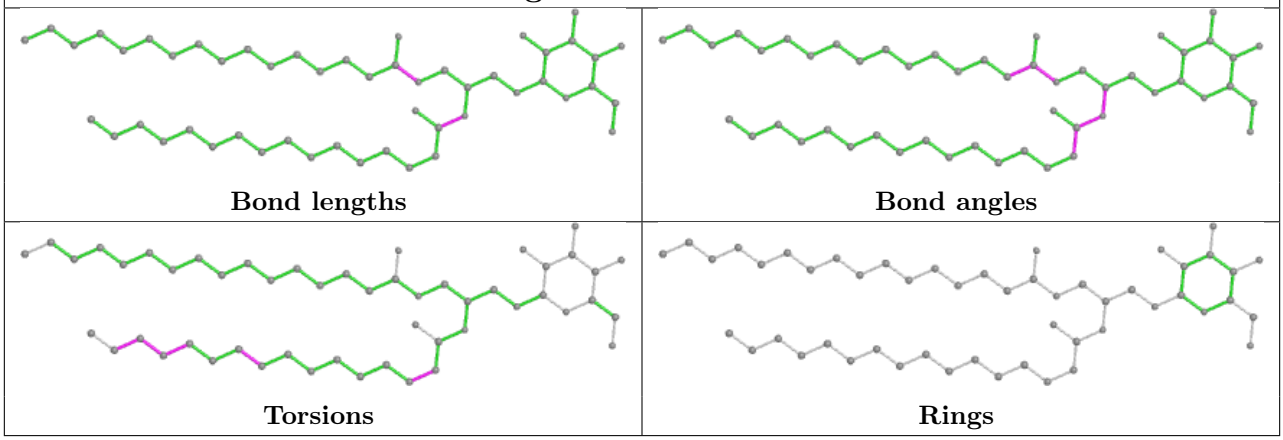


Torsions

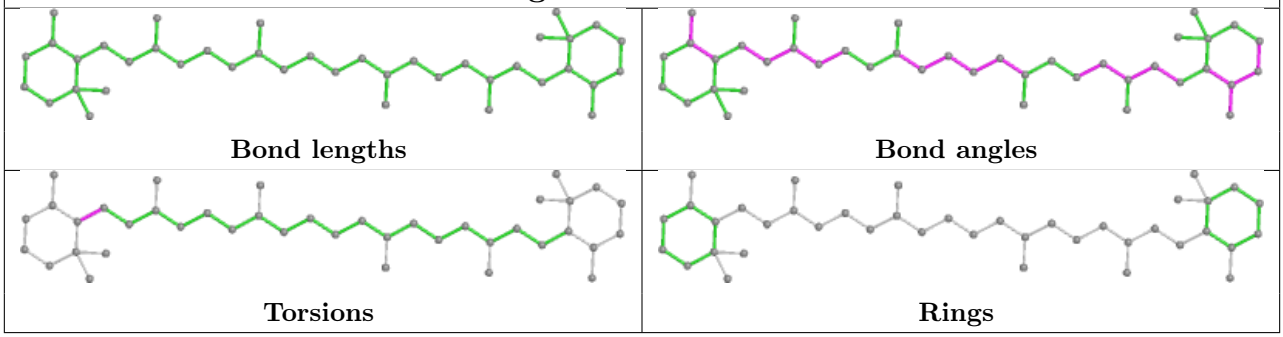


Rings

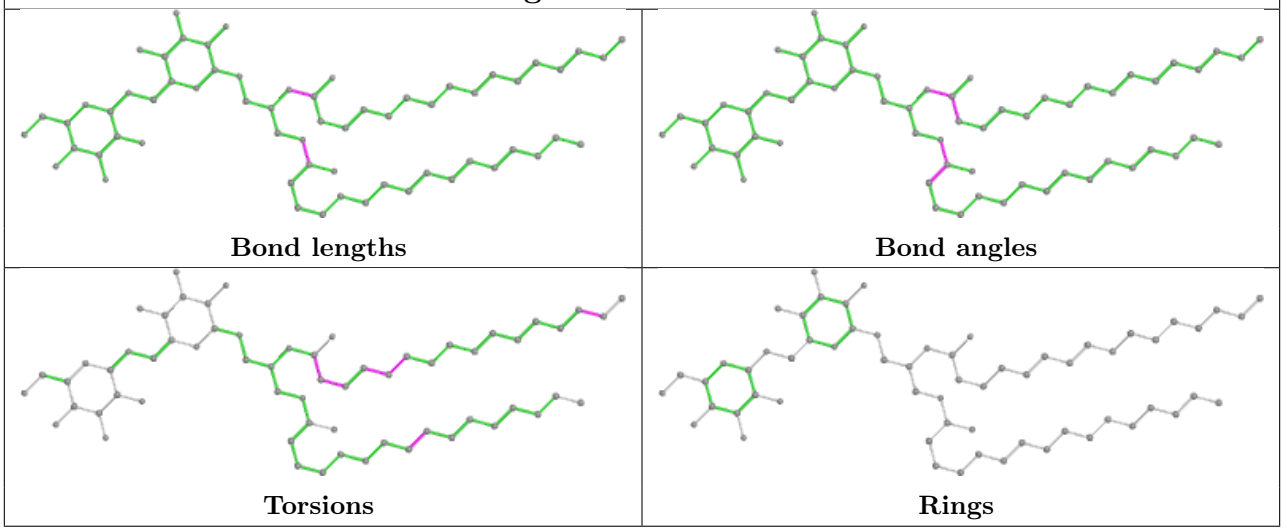
Ligand LMG a 614



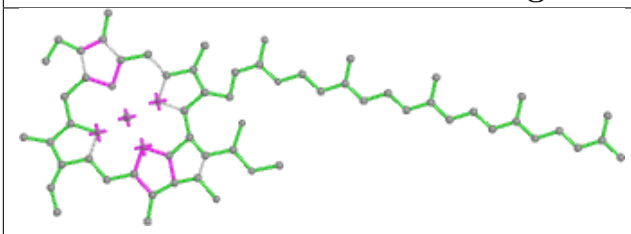
Ligand BCR z 101



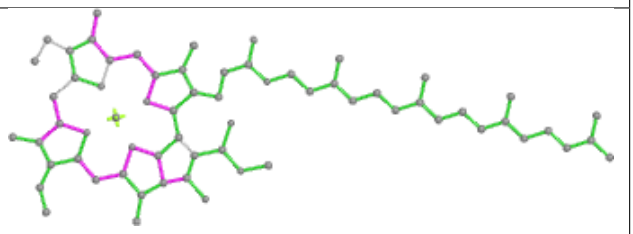
Ligand DGD h 102



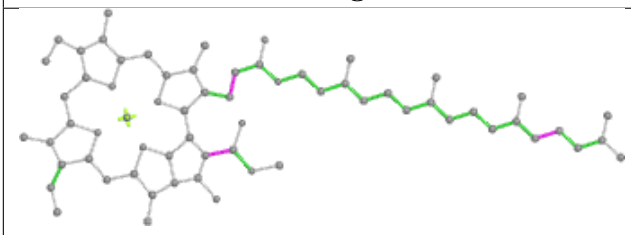
Ligand CLA b 606



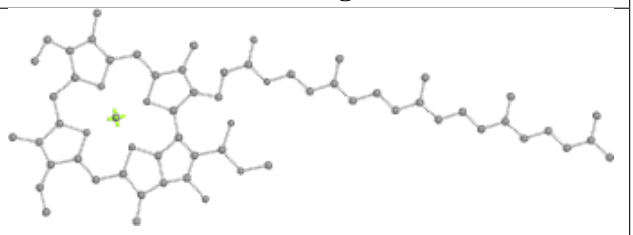
Bond lengths



Bond angles

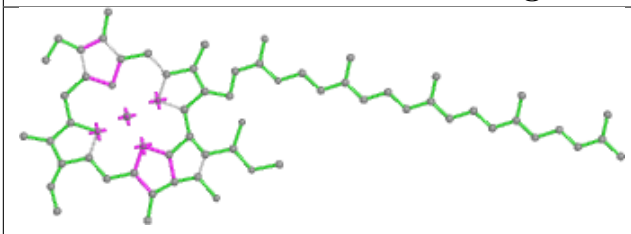


Torsions

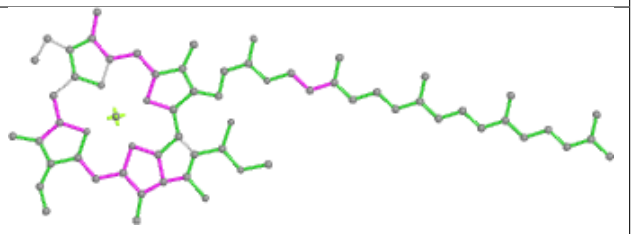


Rings

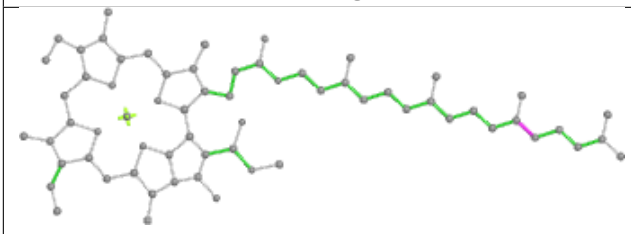
Ligand CLA D 404



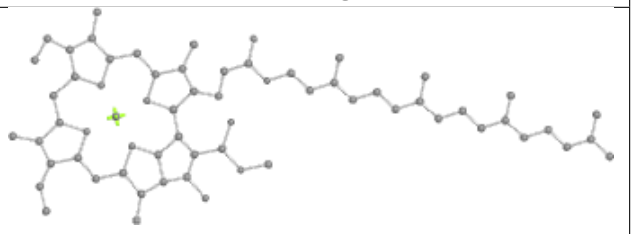
Bond lengths



Bond angles

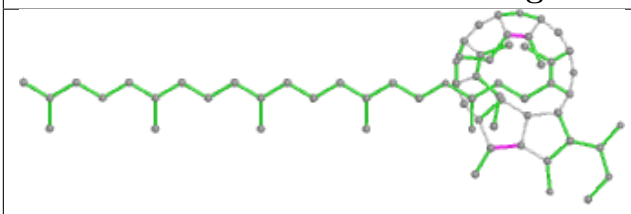


Torsions

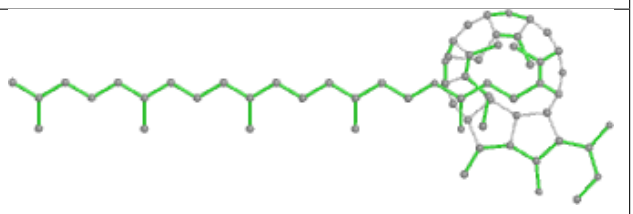


Rings

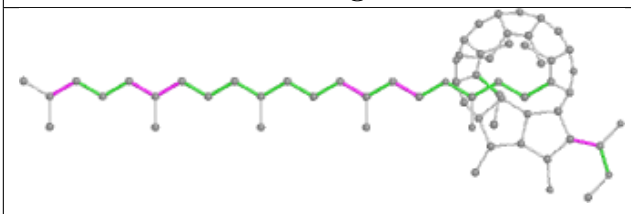
Ligand PHO a 609



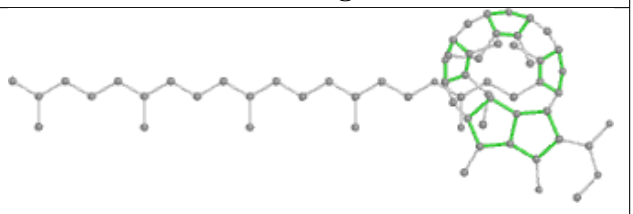
Bond lengths



Bond angles

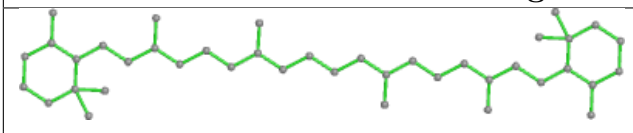


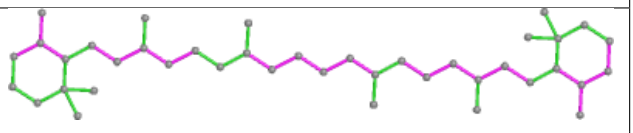
Torsions

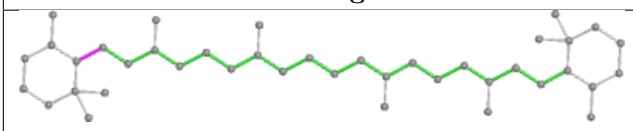


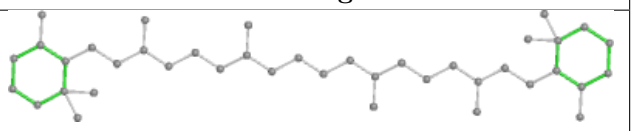
Rings

Ligand BCR c 514

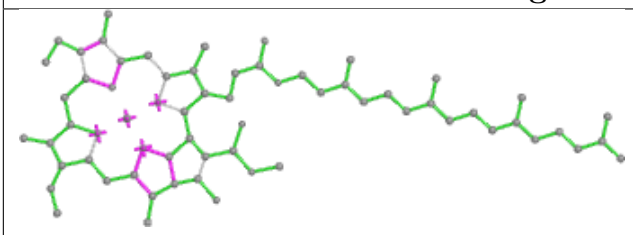

Bond lengths

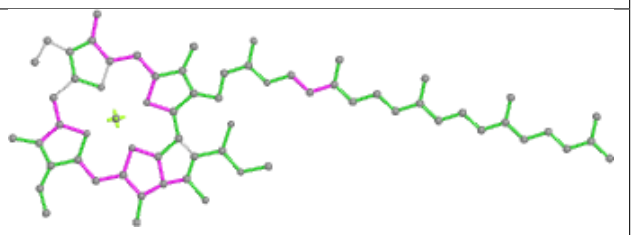

Bond angles

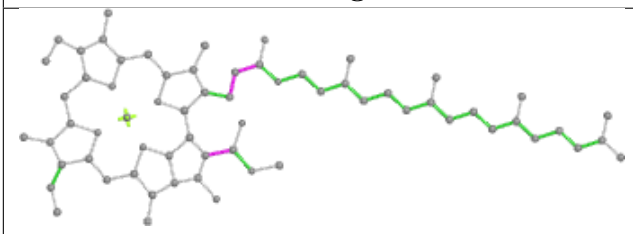

Torsions

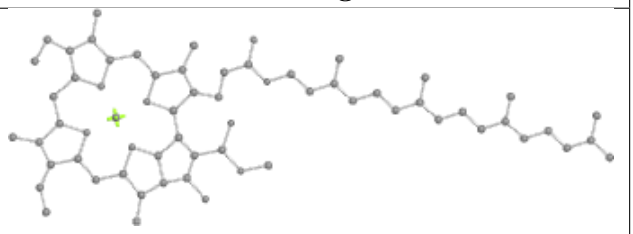

Rings

Ligand CLA c 501

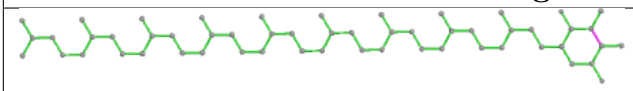

Bond lengths

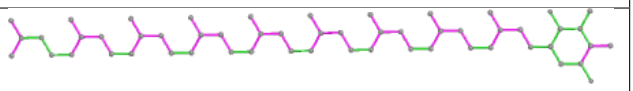

Bond angles

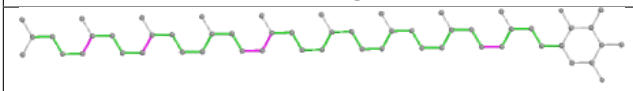

Torsions

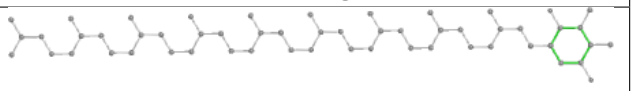

Rings

Ligand PL9 d 405

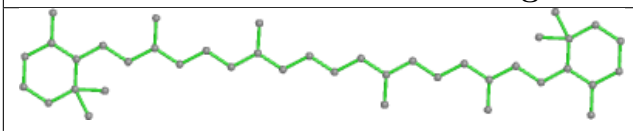

Bond lengths

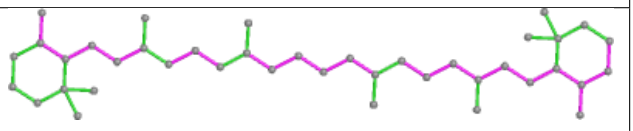

Bond angles

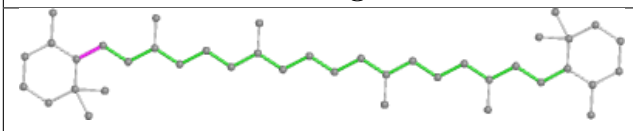

Torsions

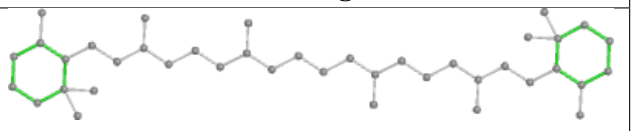

Rings

Ligand BCR K 101

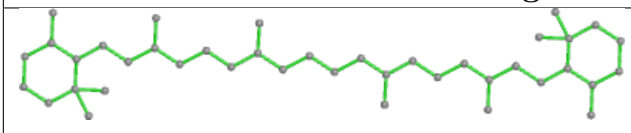

Bond lengths


Bond angles

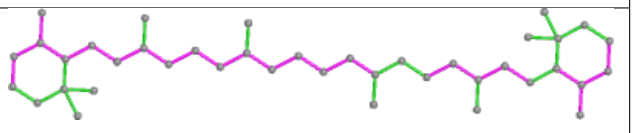

Torsions


Rings

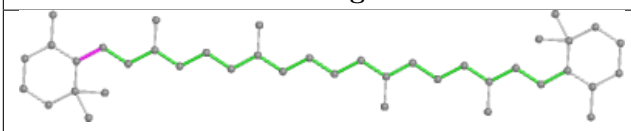
Ligand BCR C 514



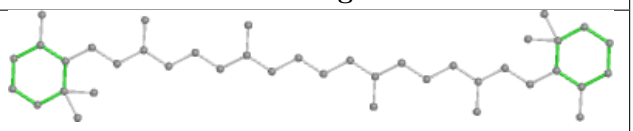
Bond lengths



Bond angles

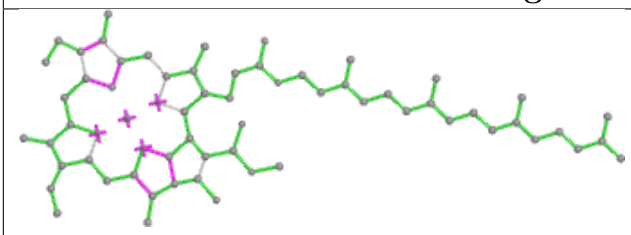


Torsions

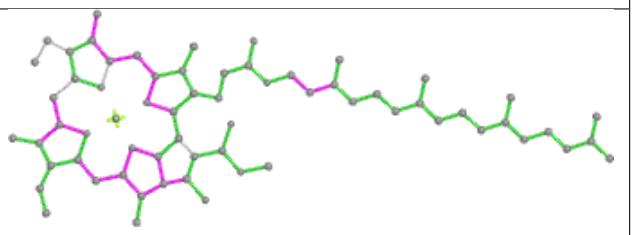


Rings

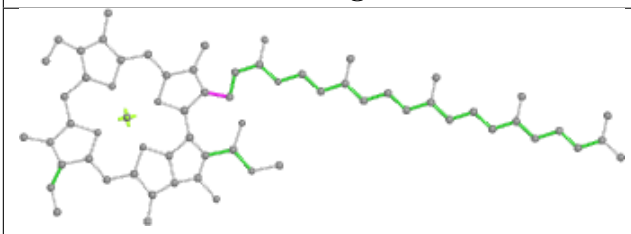
Ligand CLA B 611



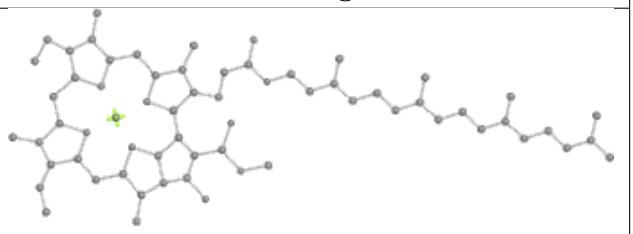
Bond lengths



Bond angles

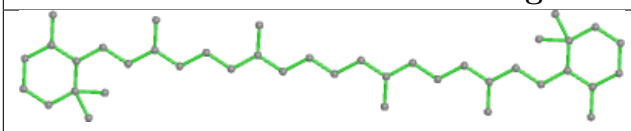


Torsions

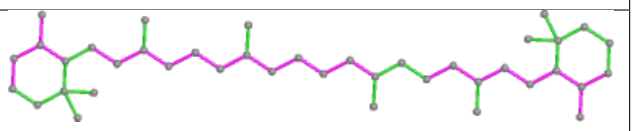


Rings

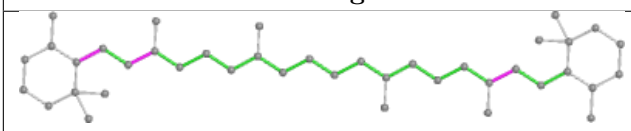
Ligand BCR d 404



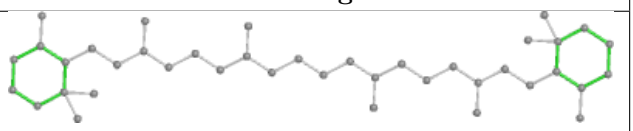
Bond lengths



Bond angles

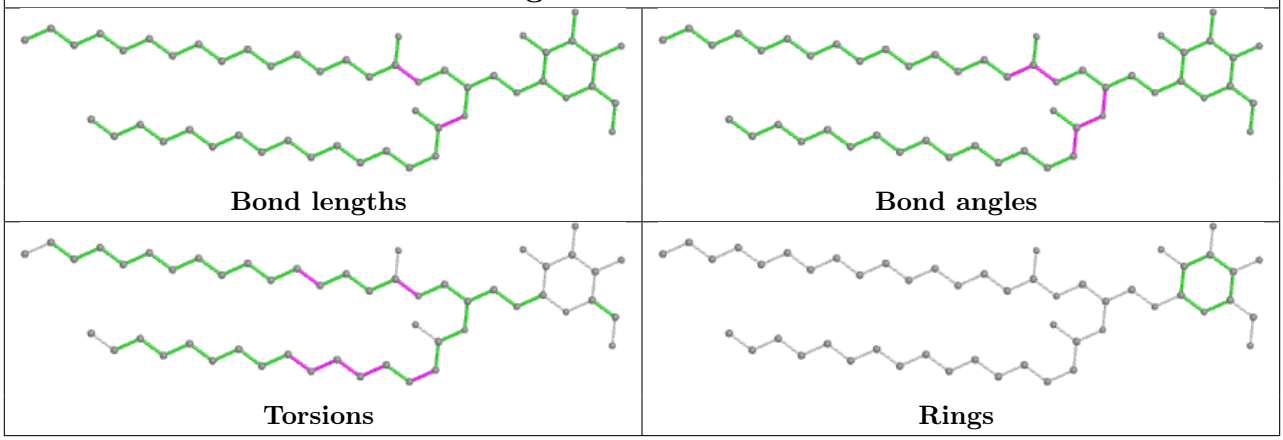


Torsions

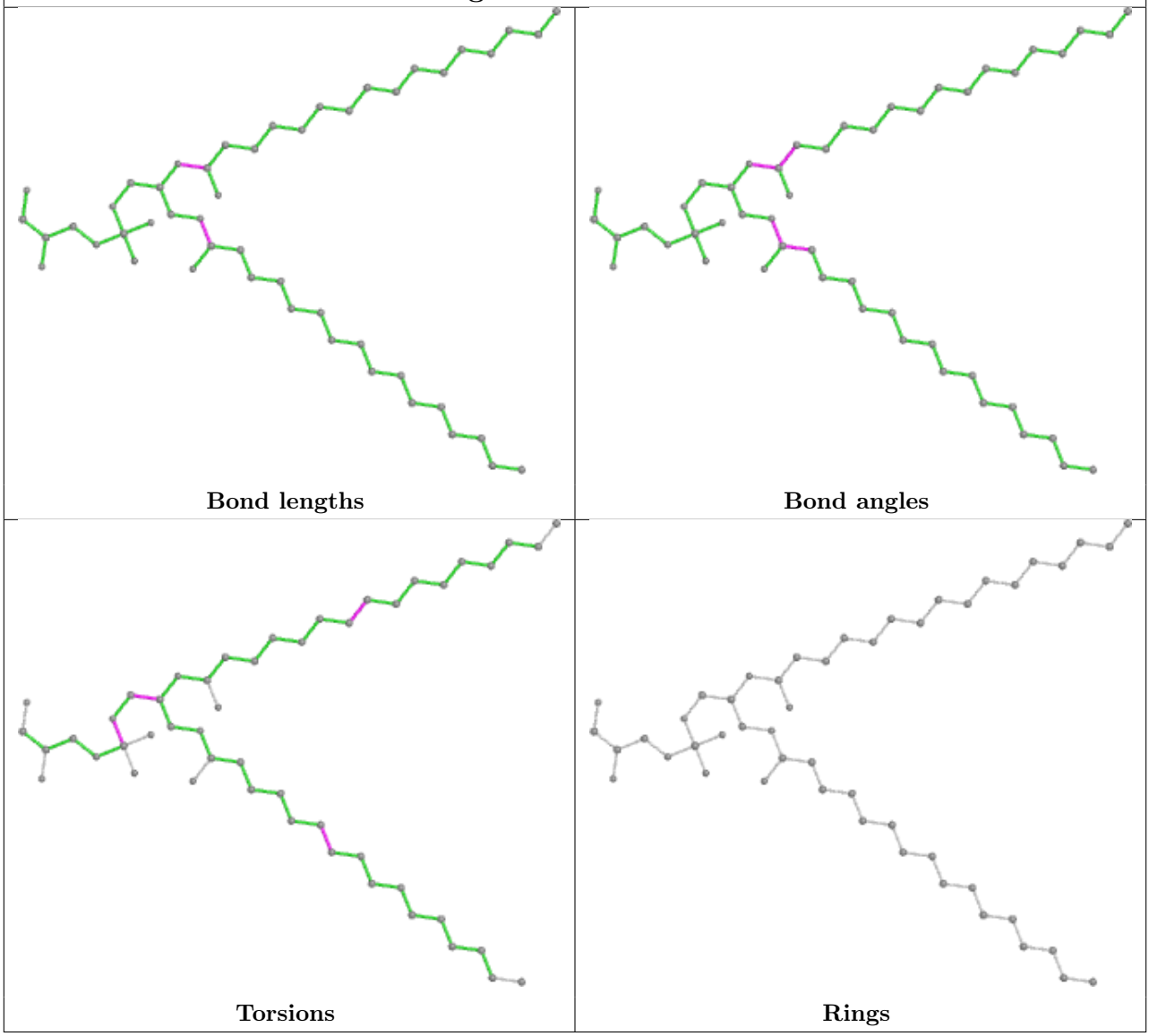


Rings

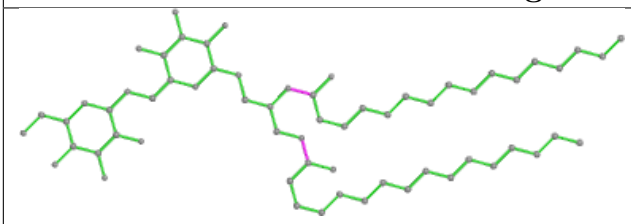
Ligand LMG c 518



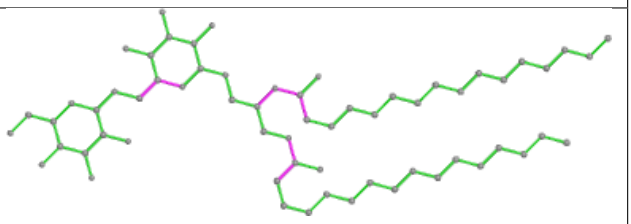
Ligand LHG A 614



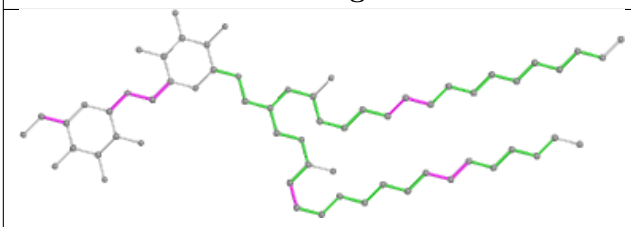
Ligand DGD c 515



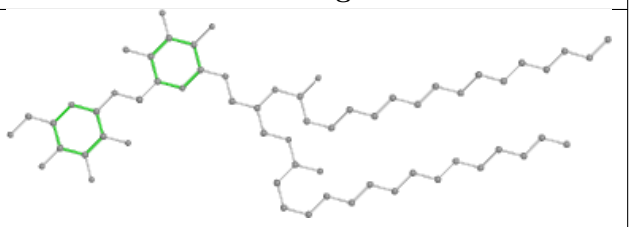
Bond lengths



Bond angles

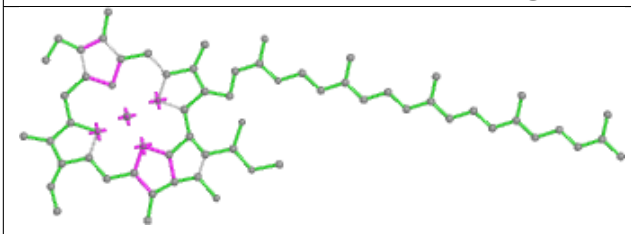


Torsions

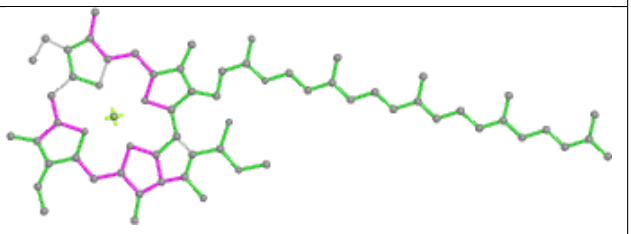


Rings

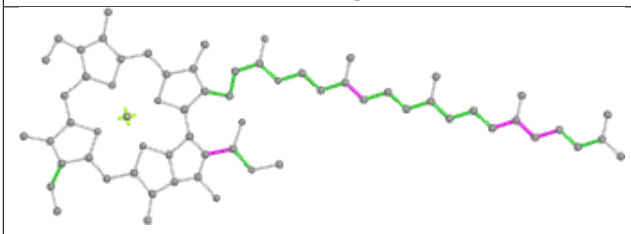
Ligand CLA B 605



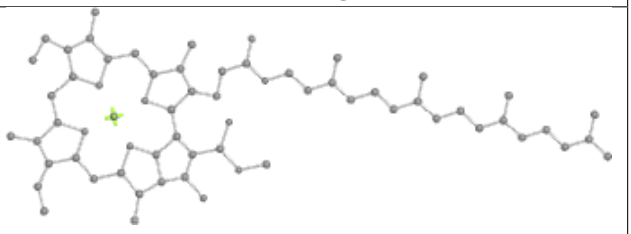
Bond lengths



Bond angles

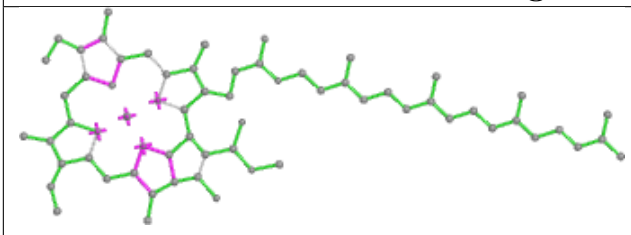


Torsions

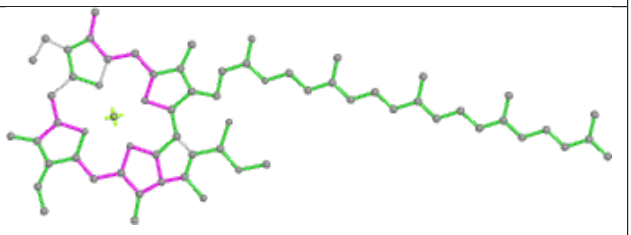


Rings

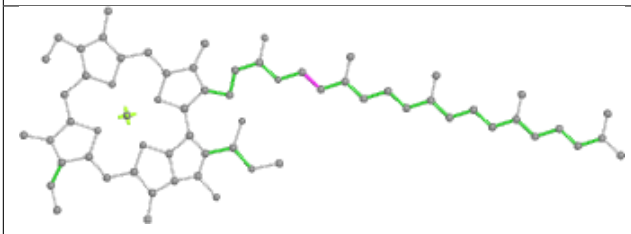
Ligand CLA d 403



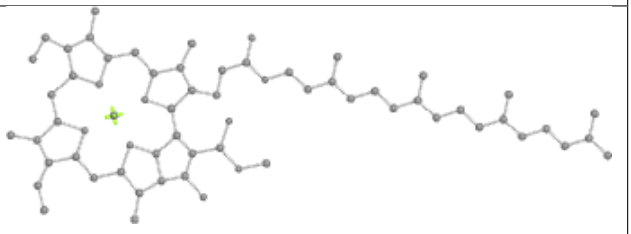
Bond lengths



Bond angles

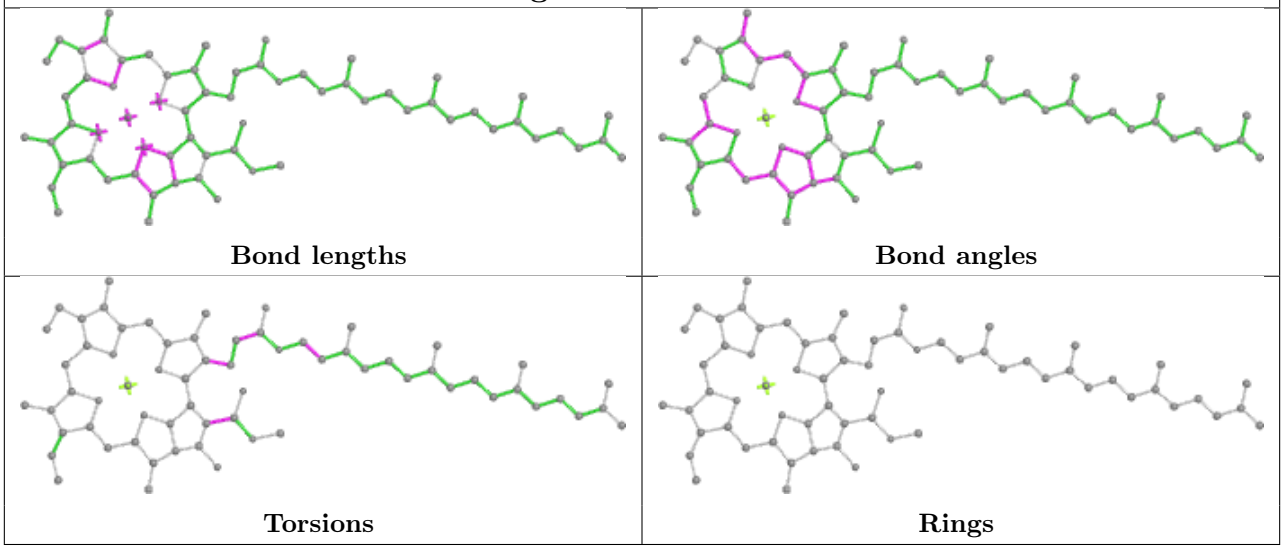


Torsions

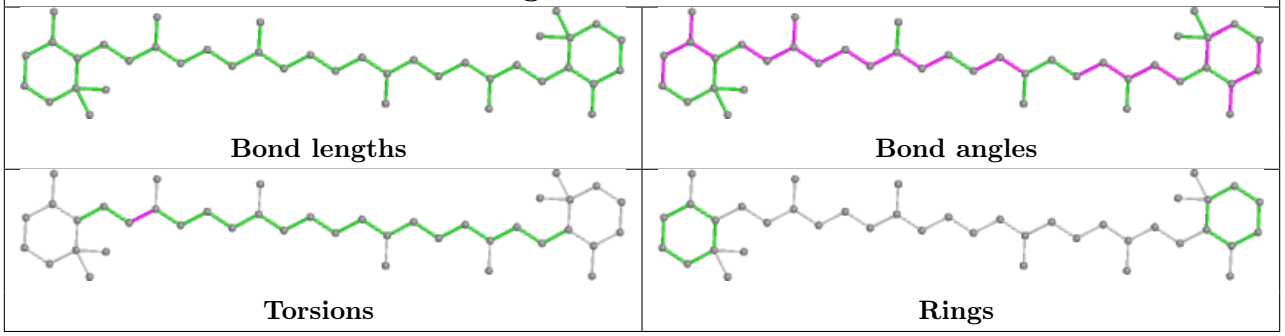


Rings

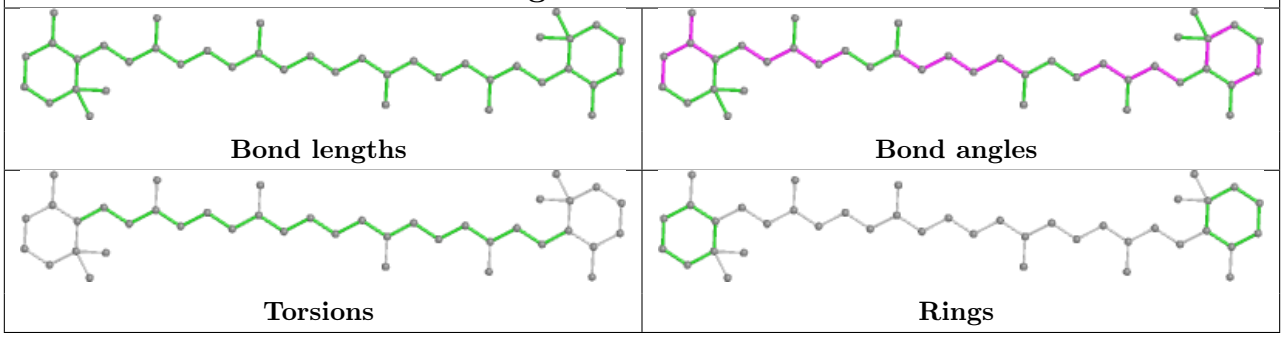
Ligand CLA c 512



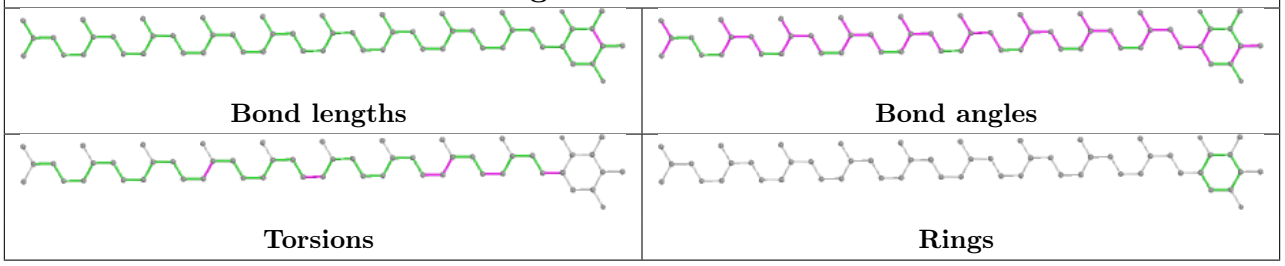
Ligand BCR H 101



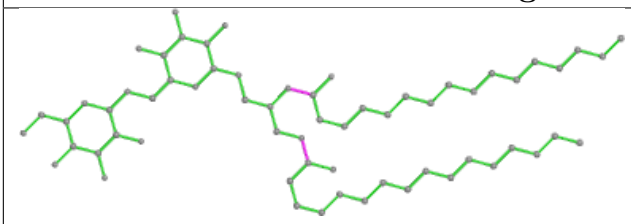
Ligand BCR c 521



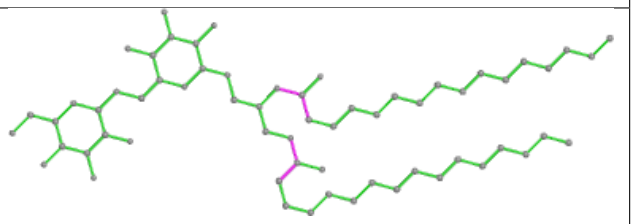
Ligand PL9 A 610



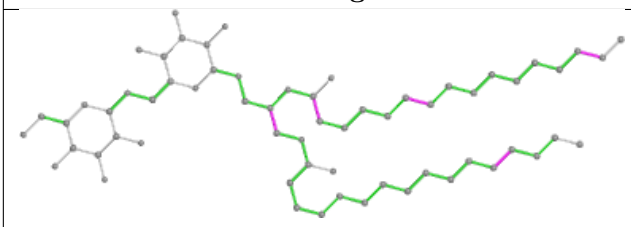
Ligand DGD H 102



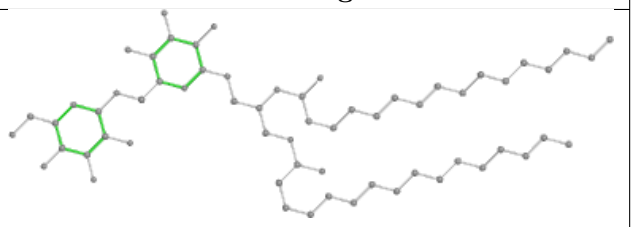
Bond lengths



Bond angles

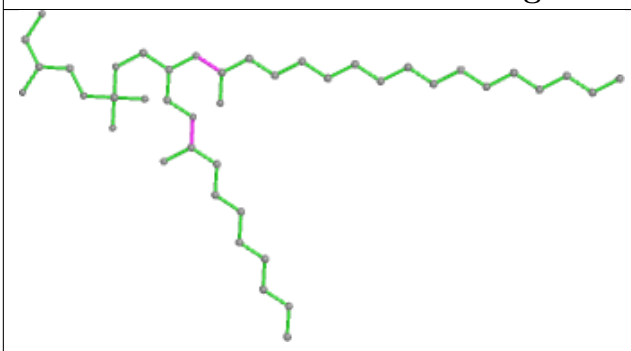


Torsions

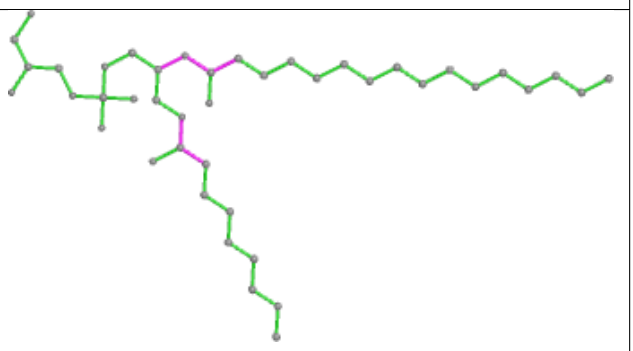


Rings

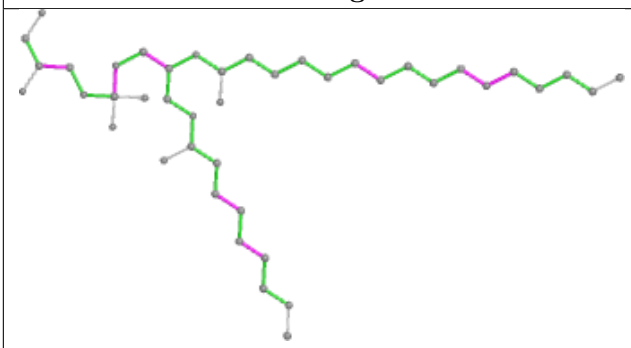
Ligand LHG E 101



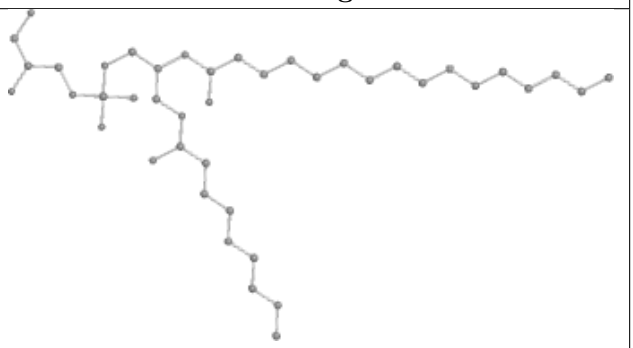
Bond lengths



Bond angles



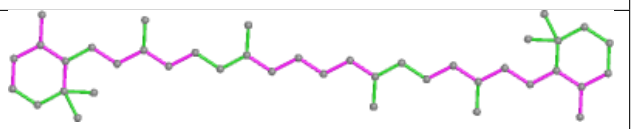
Torsions



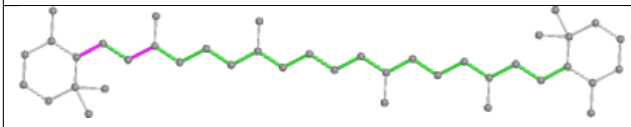
Rings

Ligand BCR B 619

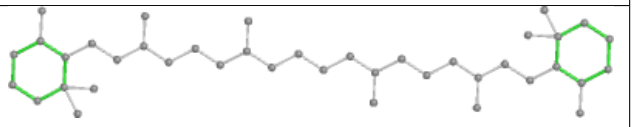
Bond lengths



Bond angles

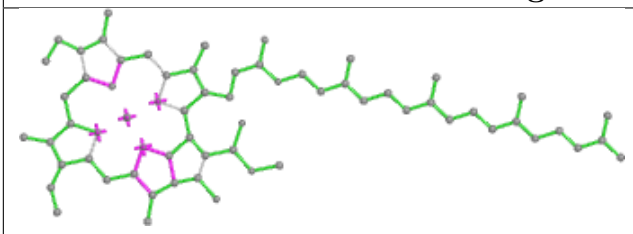


Torsions

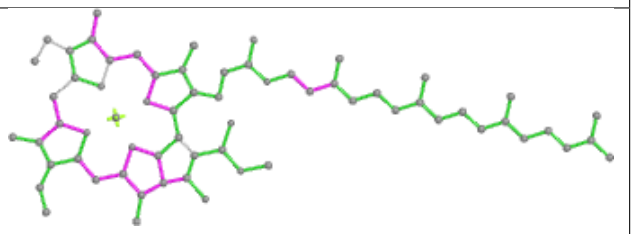


Rings

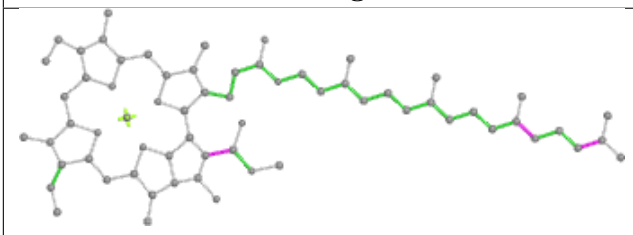
Ligand CLA b 607



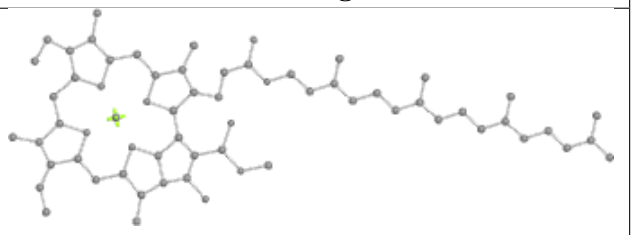
Bond lengths



Bond angles

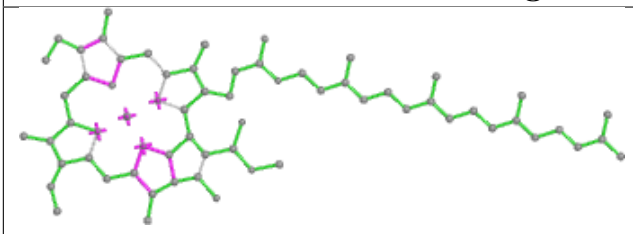


Torsions

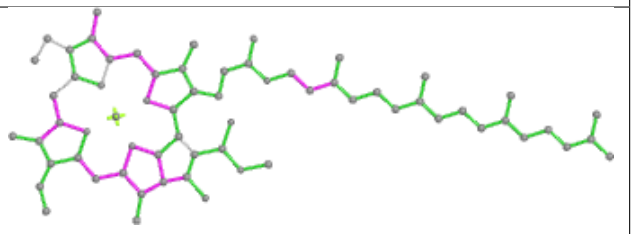


Rings

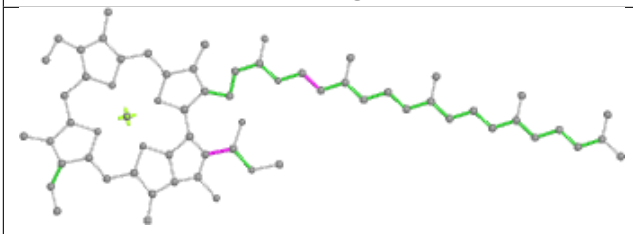
Ligand CLA C 509



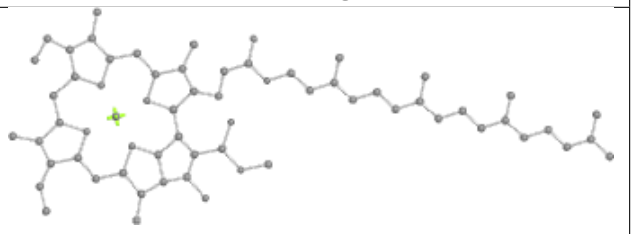
Bond lengths



Bond angles

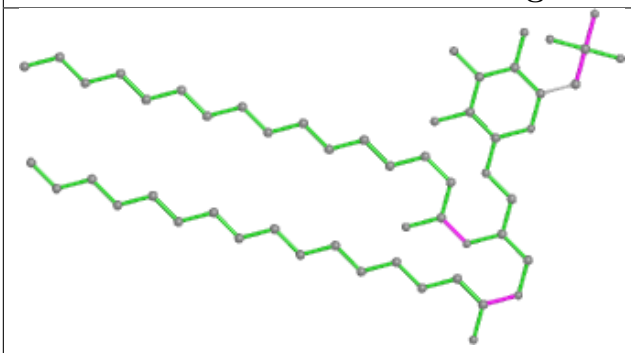


Torsions



Rings

Ligand SQD L 101



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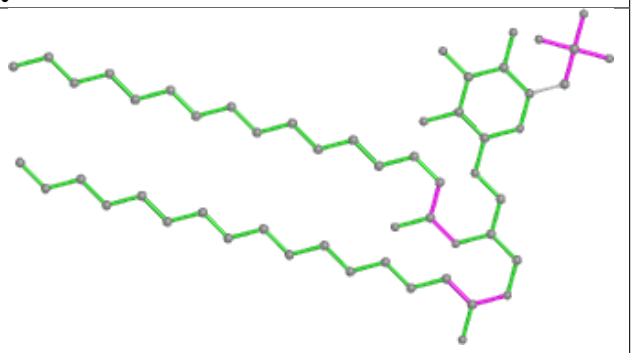
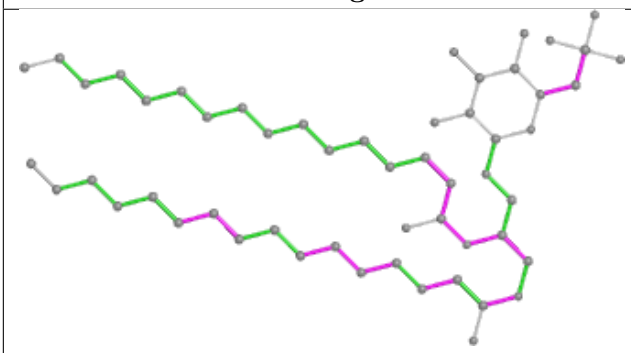
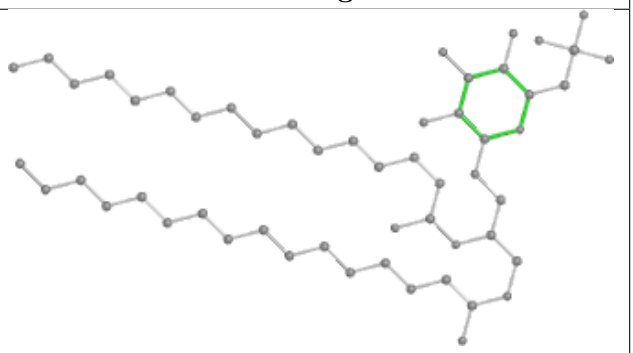


Bond angles

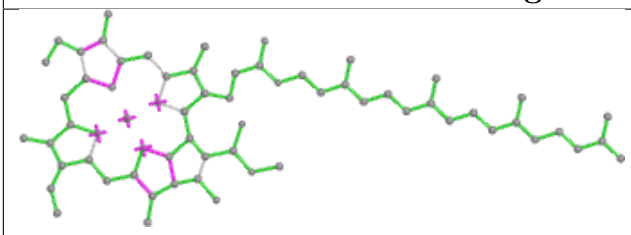


Torsions



Rings

Ligand CLA C 513



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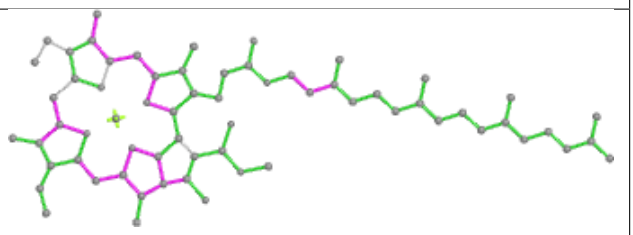
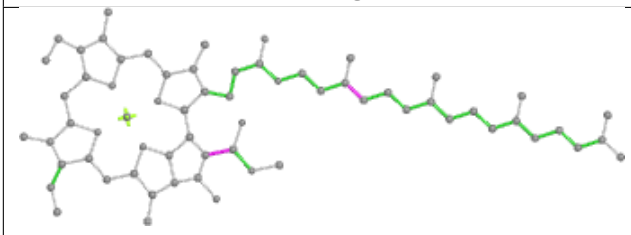
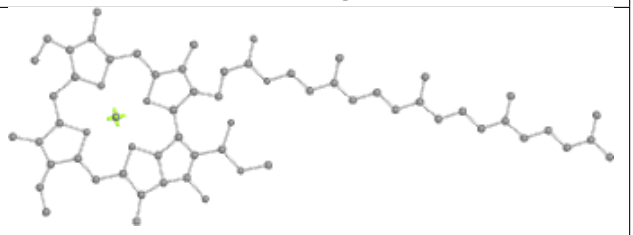


Bond angles

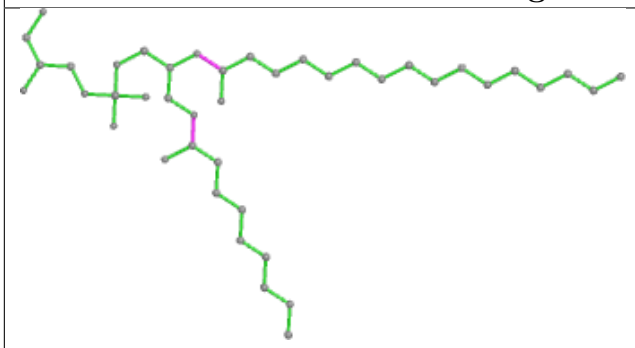


Torsions

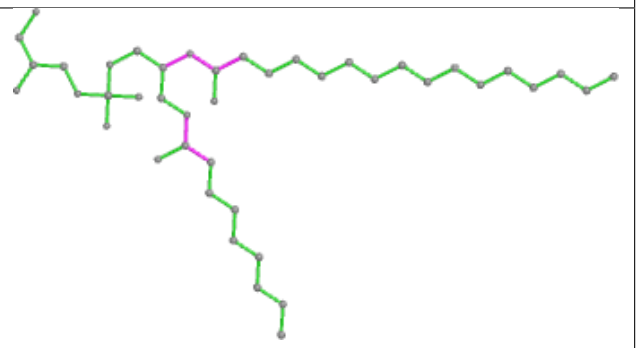


Rings

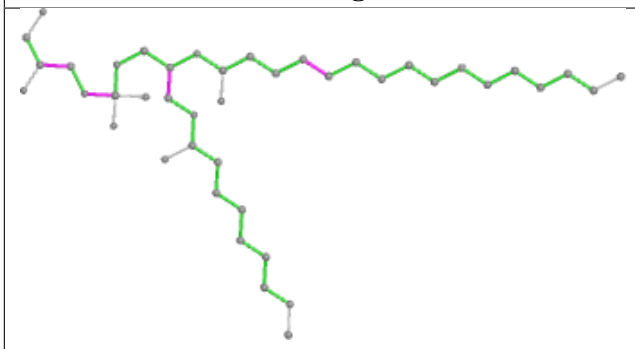
Ligand LHG a 616



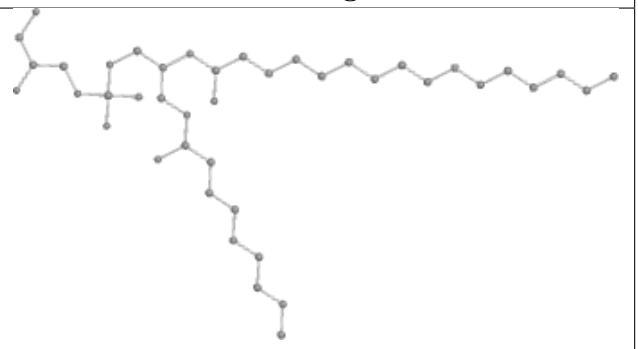
Bond lengths



Bond angles

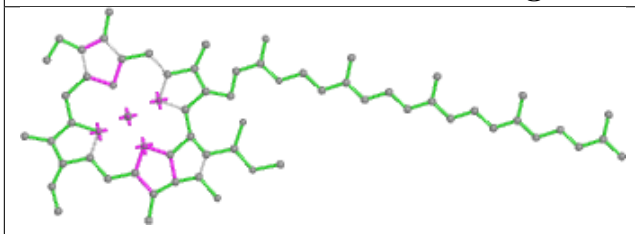


Torsions



Rings

Ligand CLA B 604



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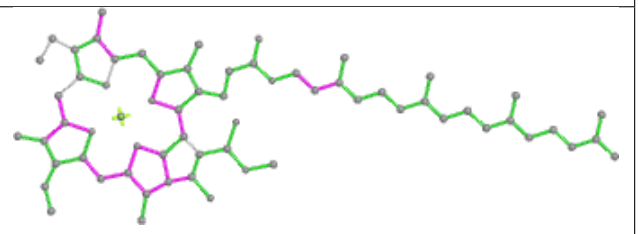
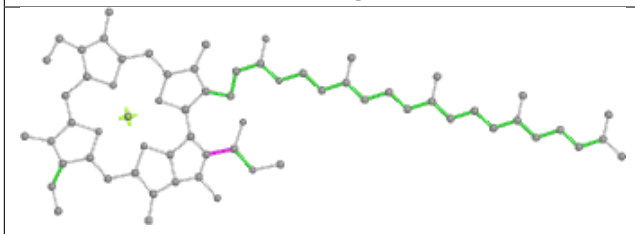


Bond angles



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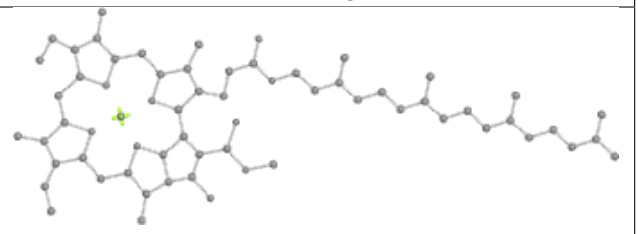
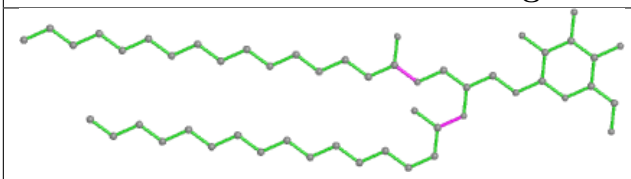


Rings

Ligand LMG d 408



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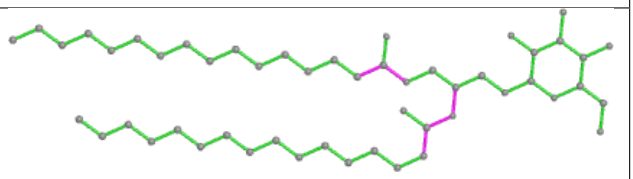
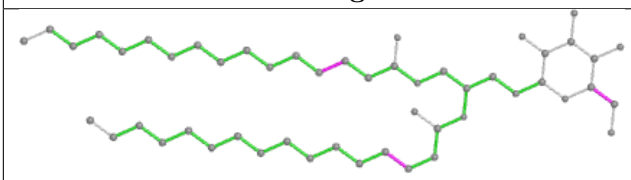


Bond angles



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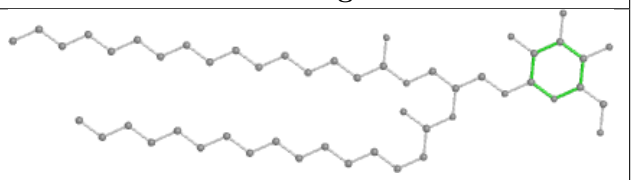
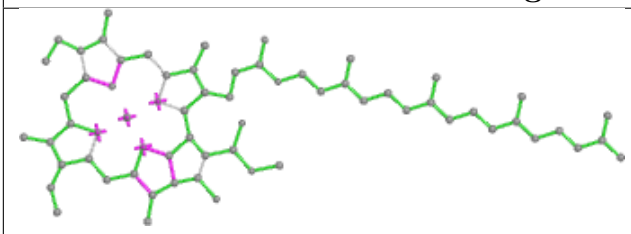


Rings

Ligand CLA B 612



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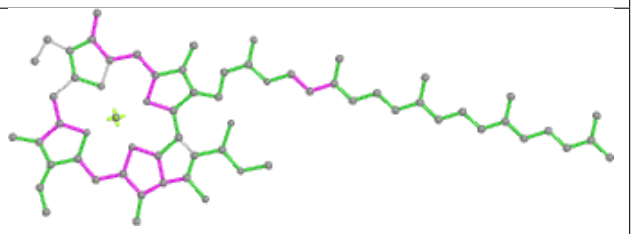
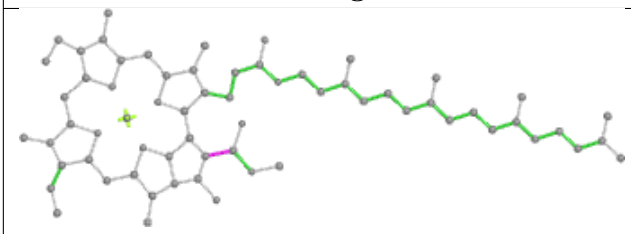


Bond angles



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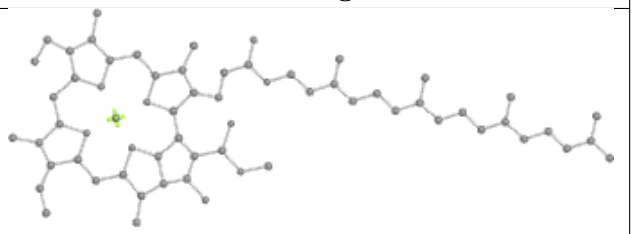
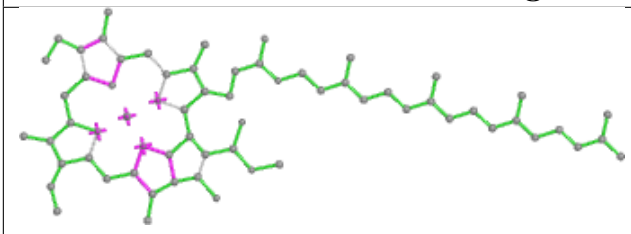


Rings

Ligand CLA C 506



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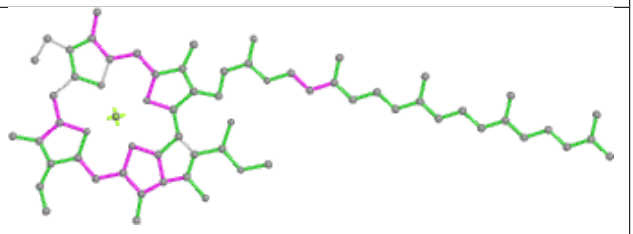
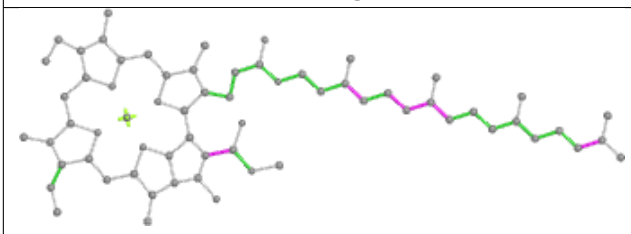


Bond angles



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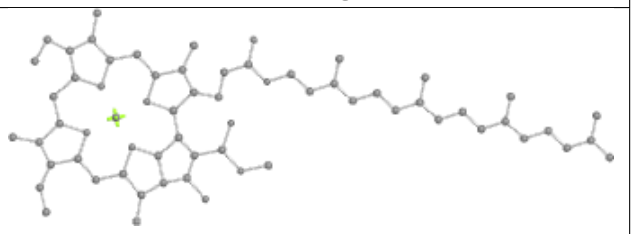
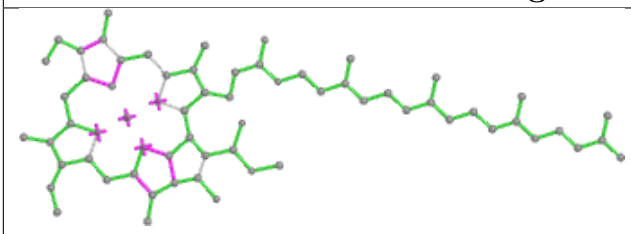
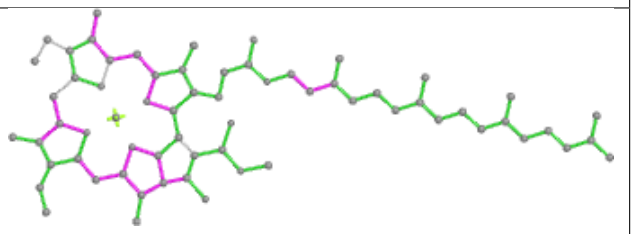


Rings

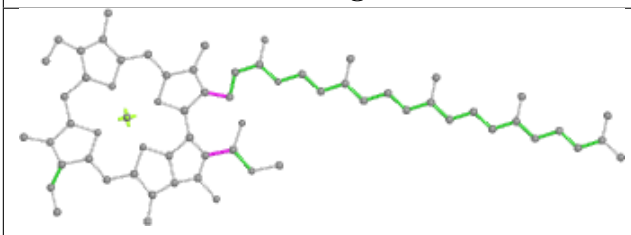
Ligand CLA a 607



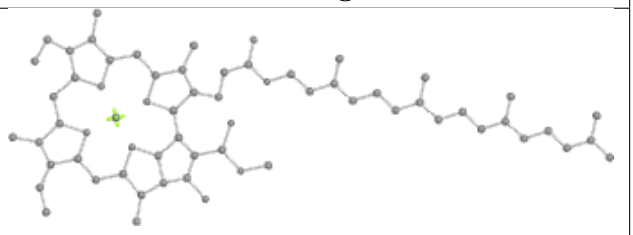
Bond lengths



Bond angles

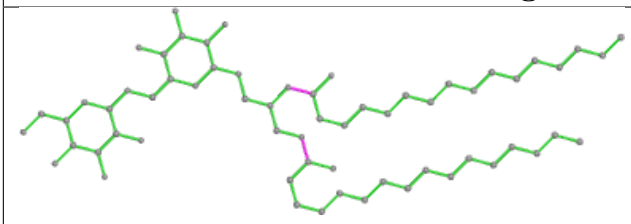


Torsions



Rings

Ligand DGD C 517



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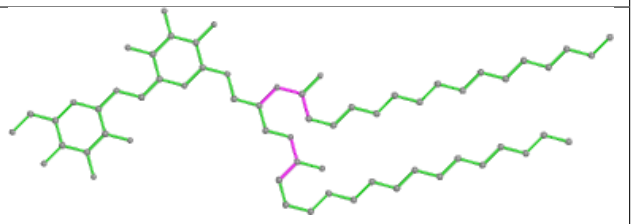
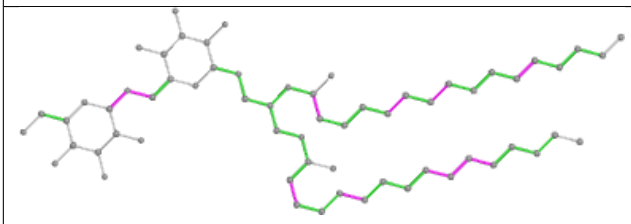
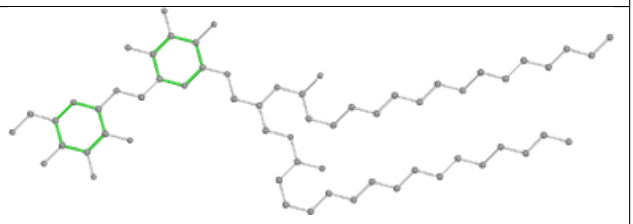


Bond angles

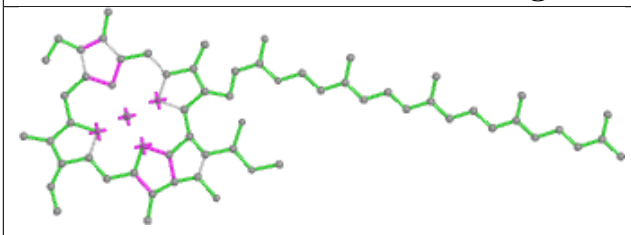


Torsions

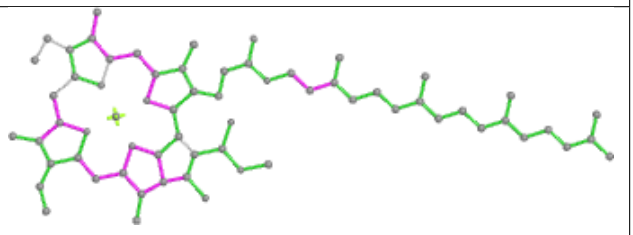


Rings

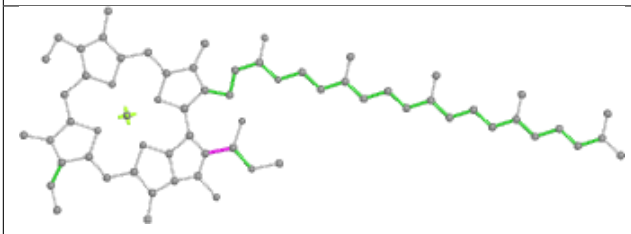
Ligand CLA c 508



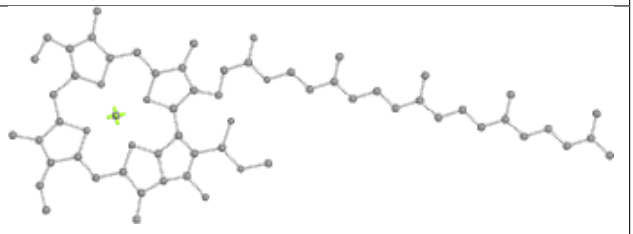
Bond lengths



Bond angles

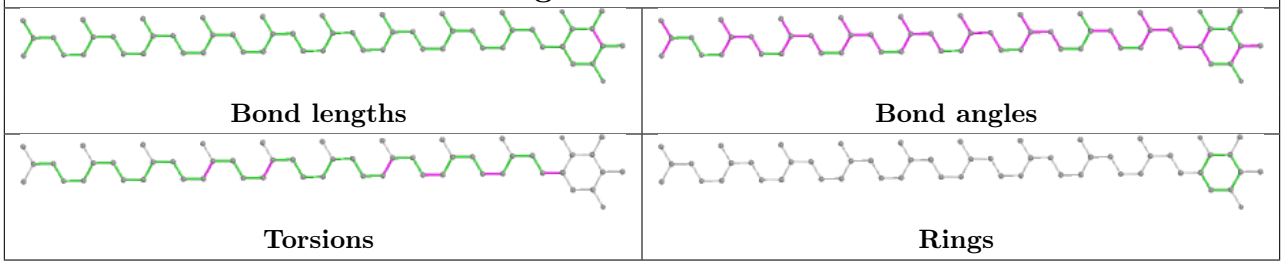


Torsions



Rings

Ligand PL9 a 612



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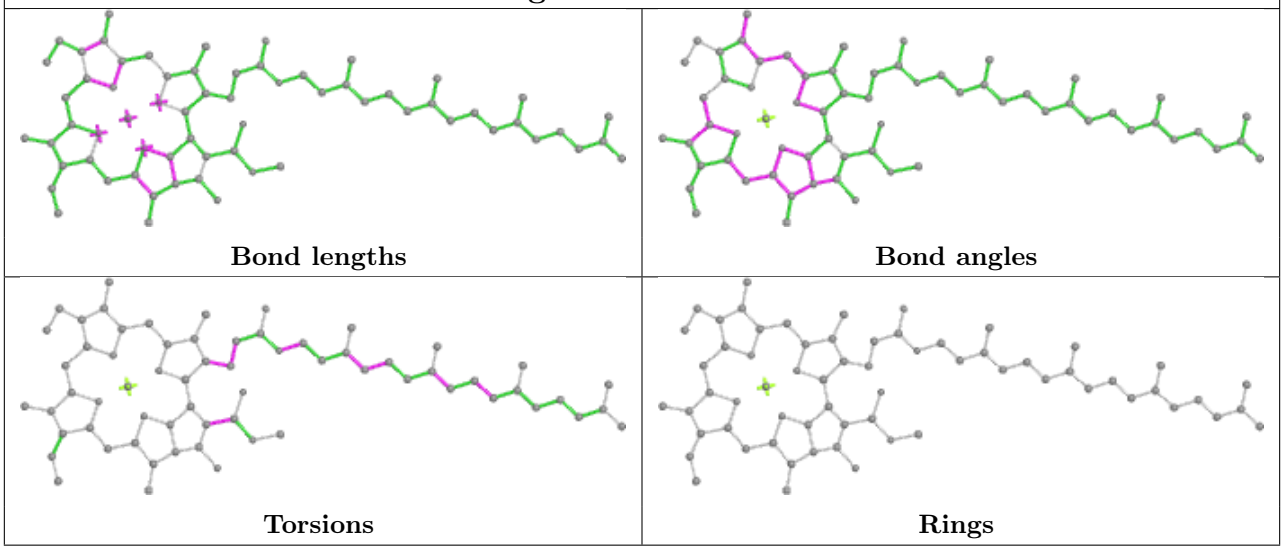
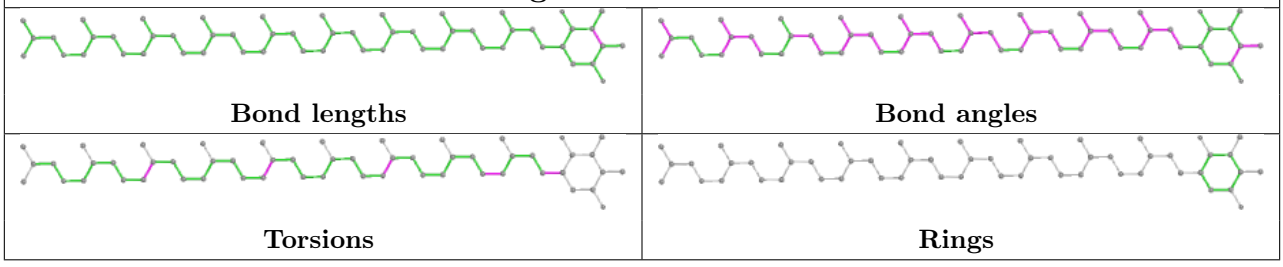
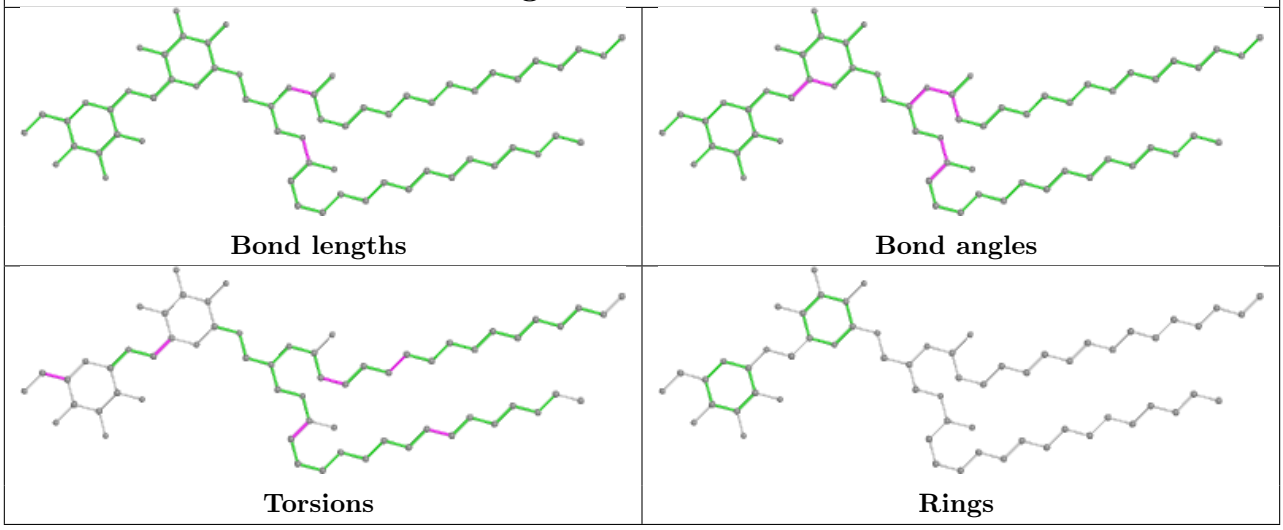


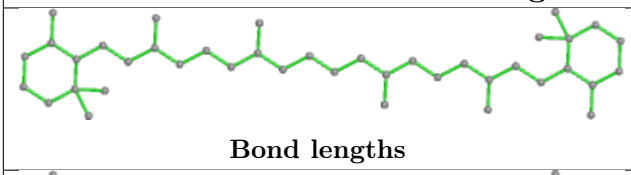
Ligand PL9 D 407



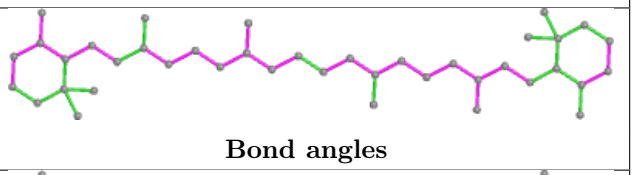
Ligand DGD C 516



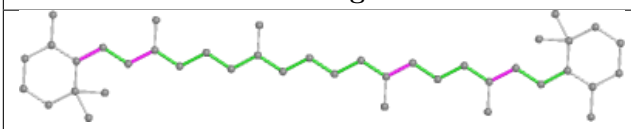
Ligand BCR t 102



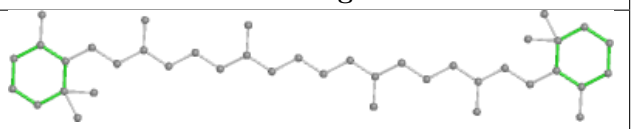
Bond lengths



Bond angles

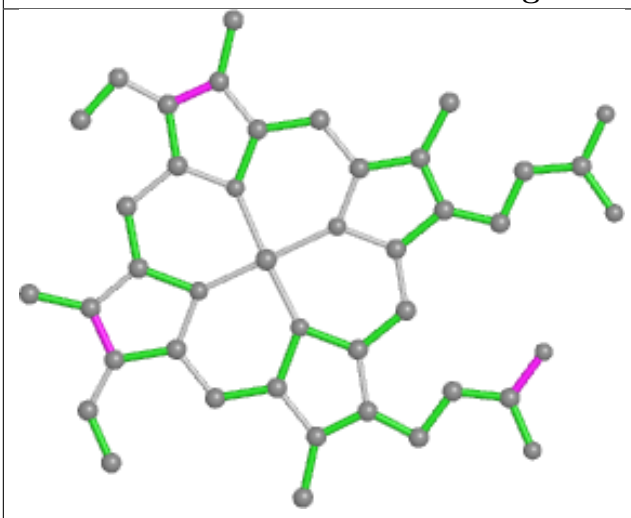


Torsions

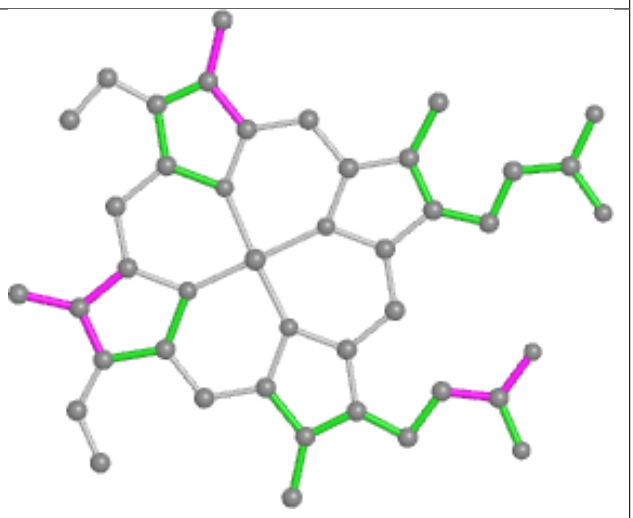


Rings

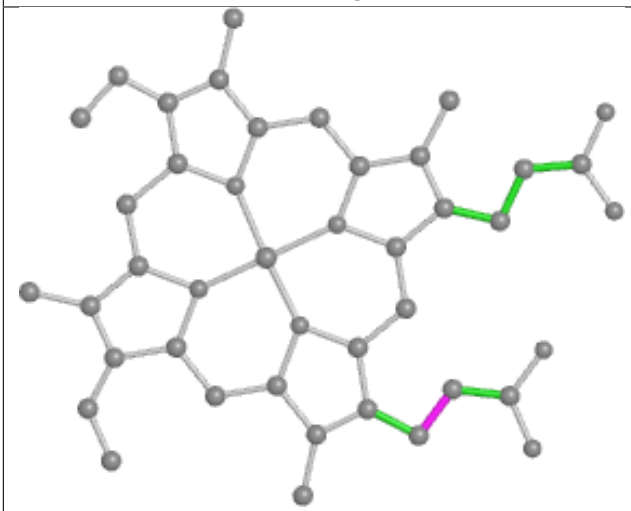
Ligand HEC V 201



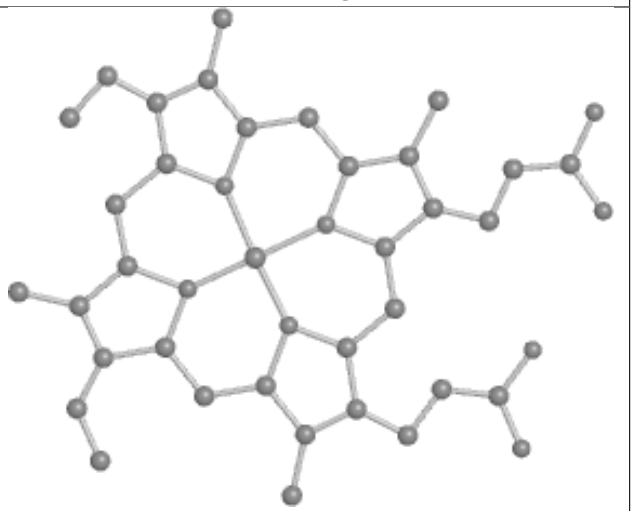
Bond lengths



Bond angles

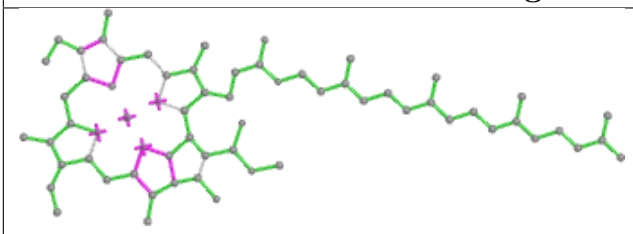


Torsions

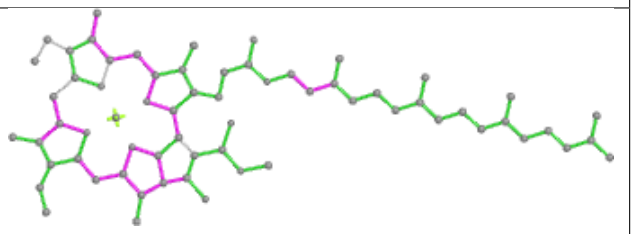


Rings

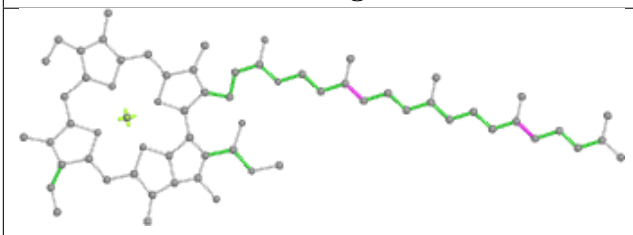
Ligand CLA B 609



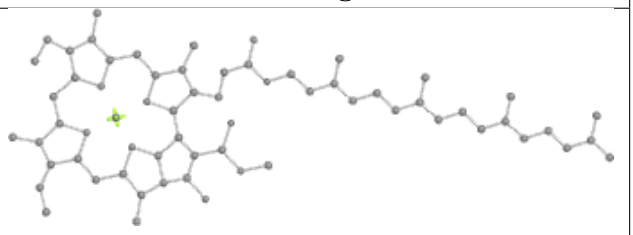
Bond lengths



Bond angles

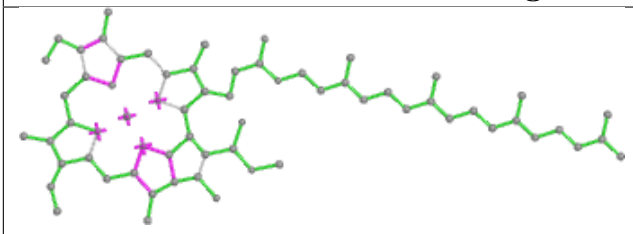


Torsions



Rings

Ligand CLA C 511



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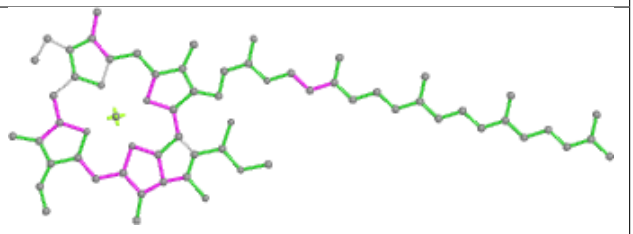
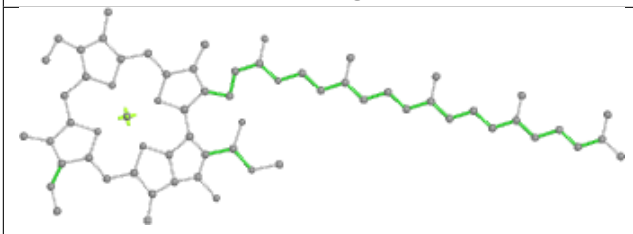


Bond angles



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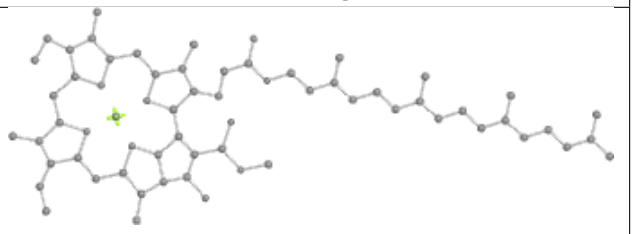
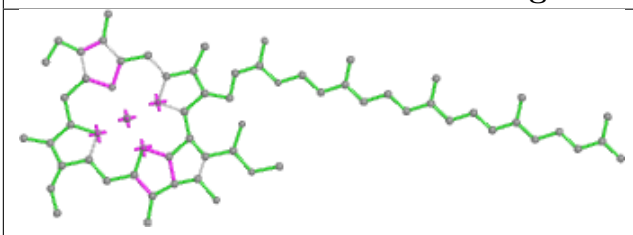


Rings

Ligand CLA c 513



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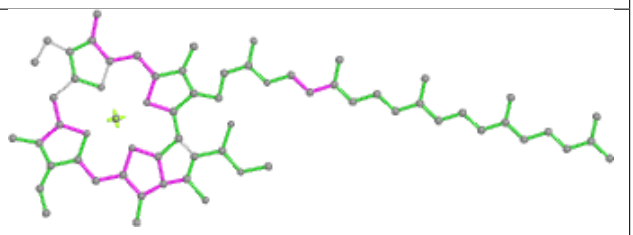
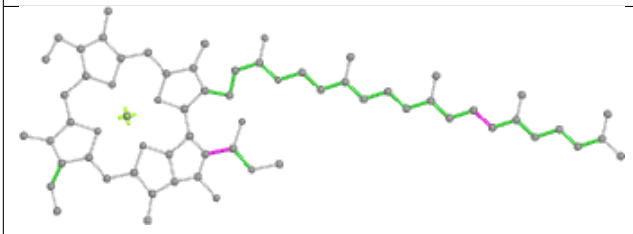


Bond angles



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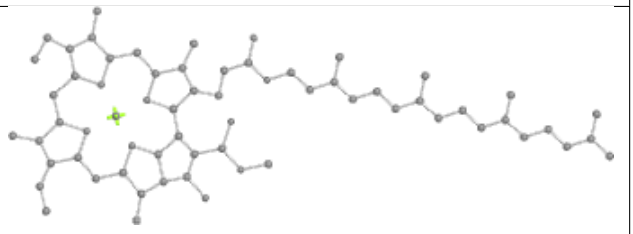
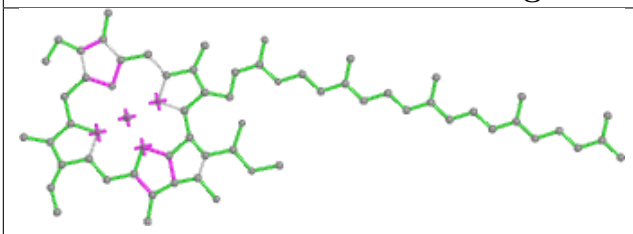


Rings

Ligand CLA A 607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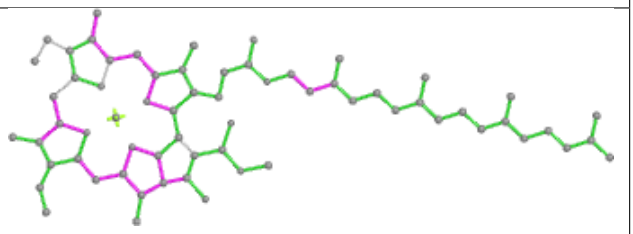
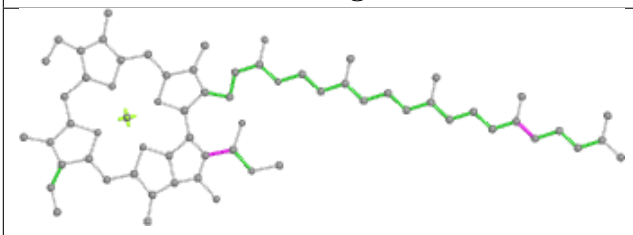

Bond angles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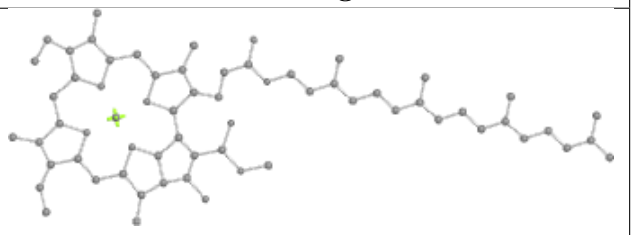
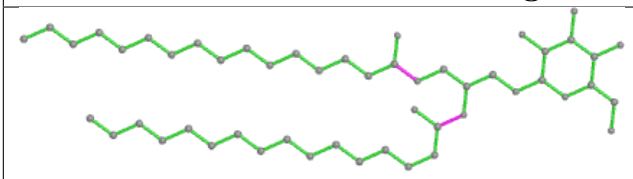
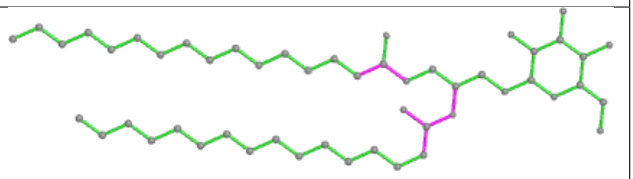
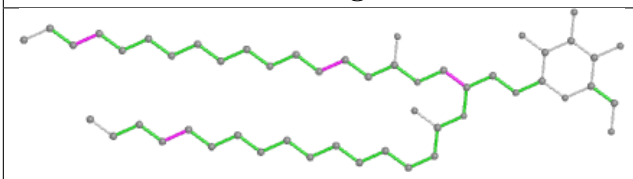

Rings

Ligand LMG b 620


Bond lengths


Bond angles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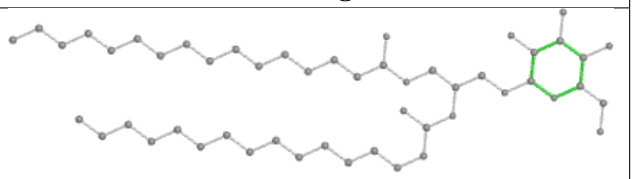
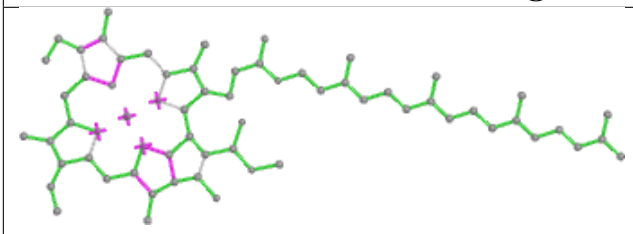

Rings

Ligand CLA b 610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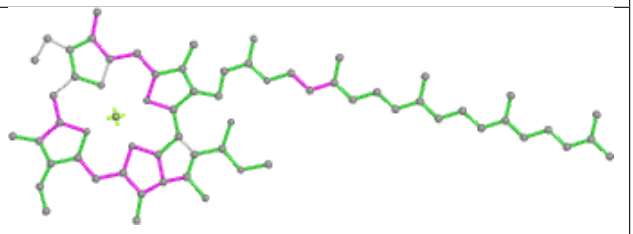
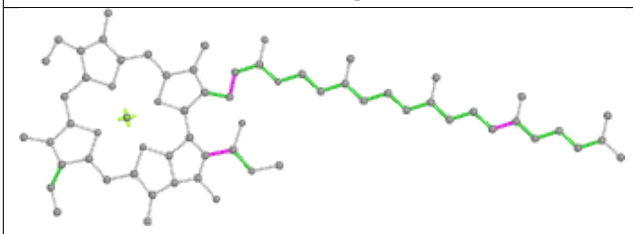

Bond angles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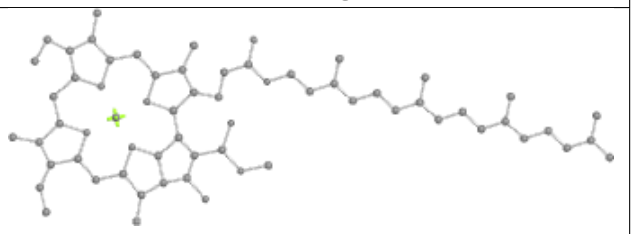
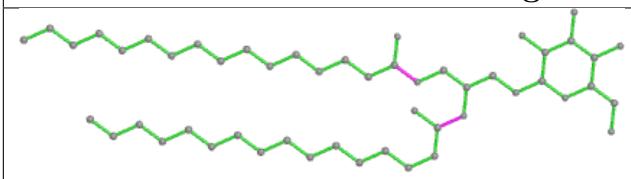

Rings

Ligand LMG b 624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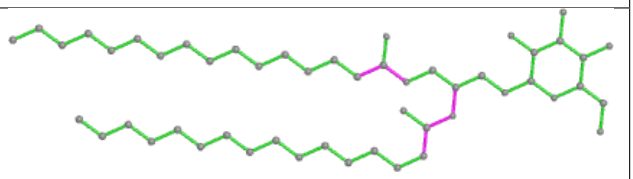
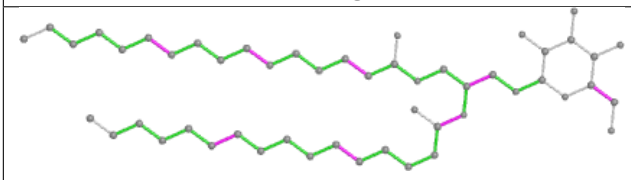

Bond angles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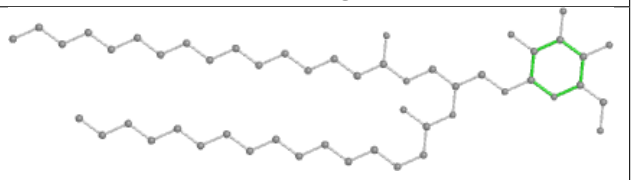
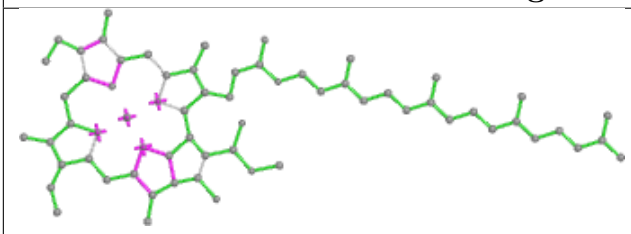

Rings

Ligand CLA b 604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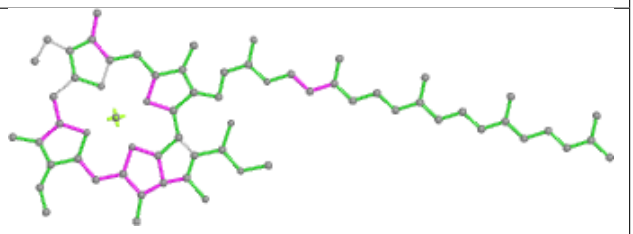
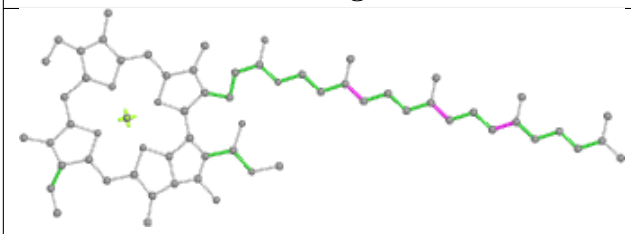

Bond angles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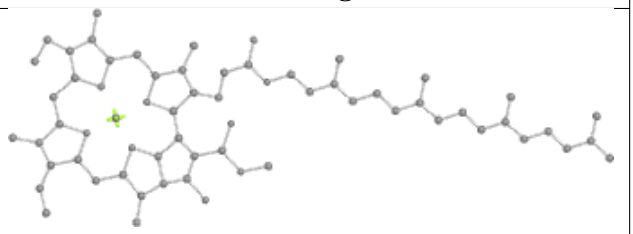
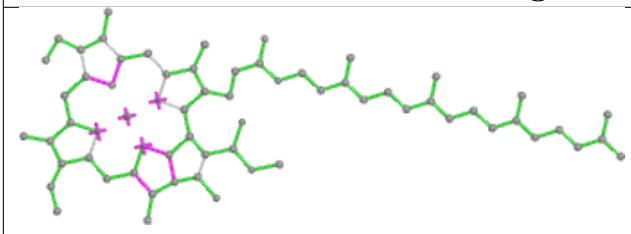

Rings

Ligand CLA c 510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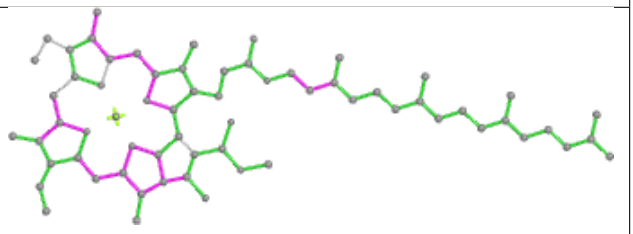
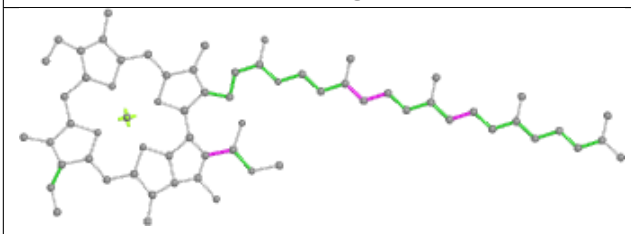

Bond angles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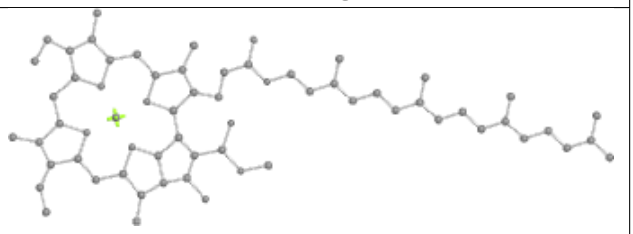
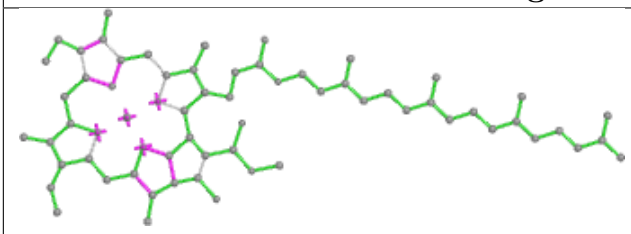

Rings

Ligand CLA b 608



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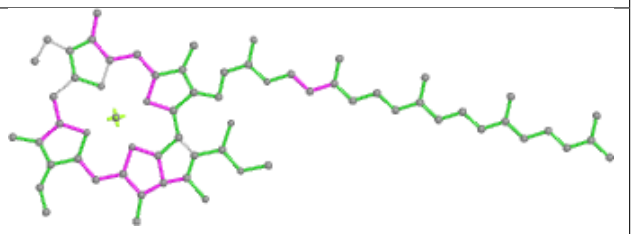
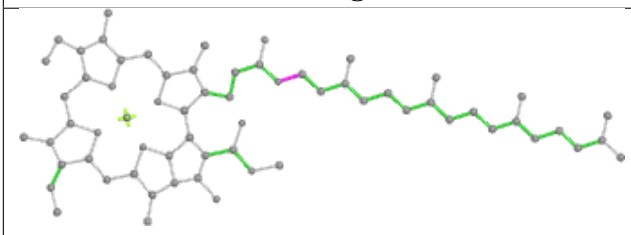


Bond angles



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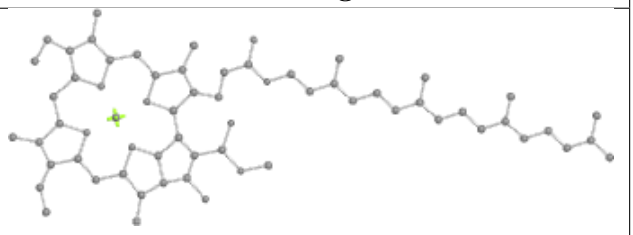
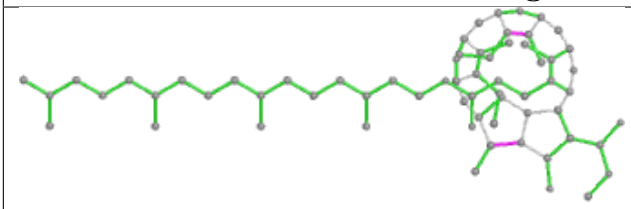


Rings

Ligand PHO d 402



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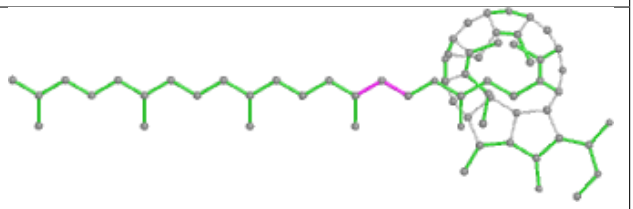
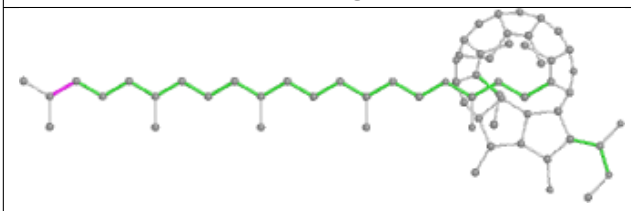


Bond angles



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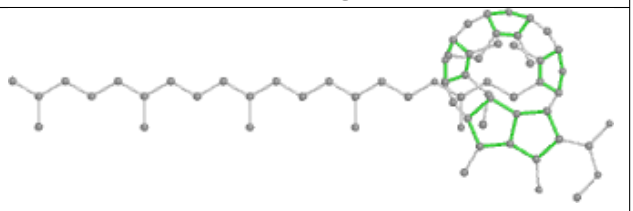
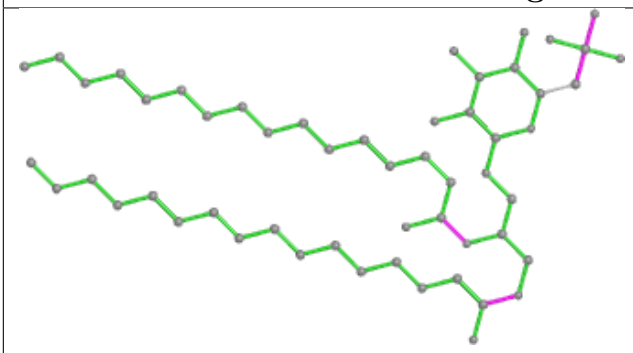


Rings

Ligand SQD L 103



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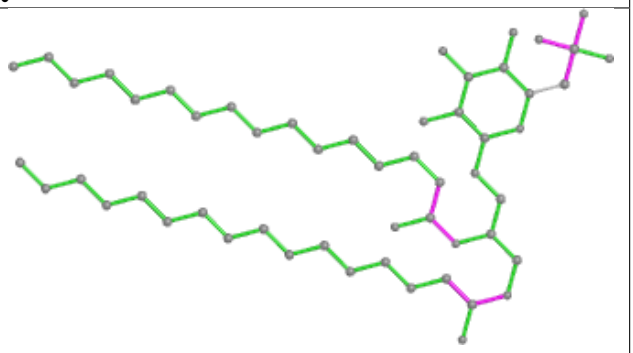
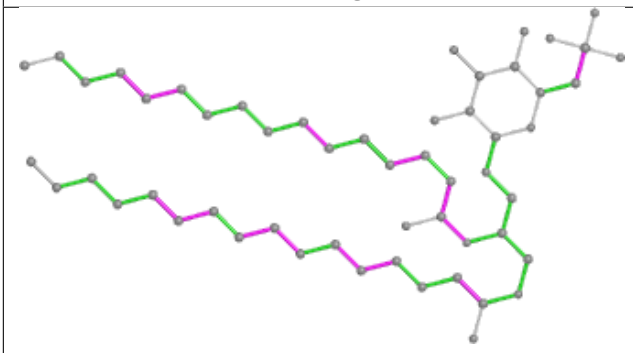


Bond angles



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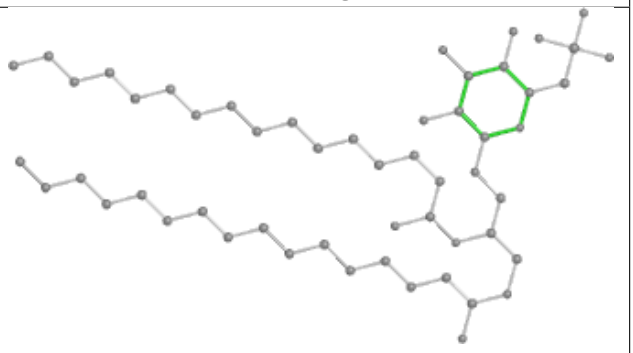
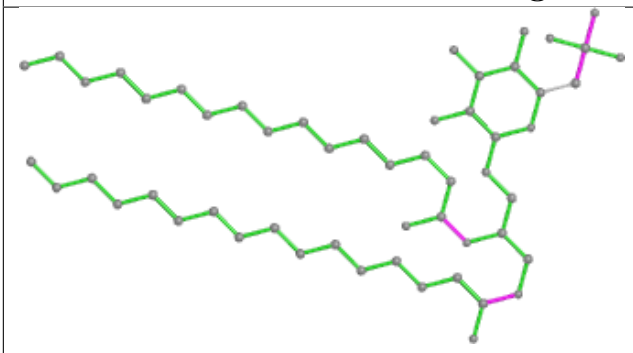


Rings

Ligand SQD a 613



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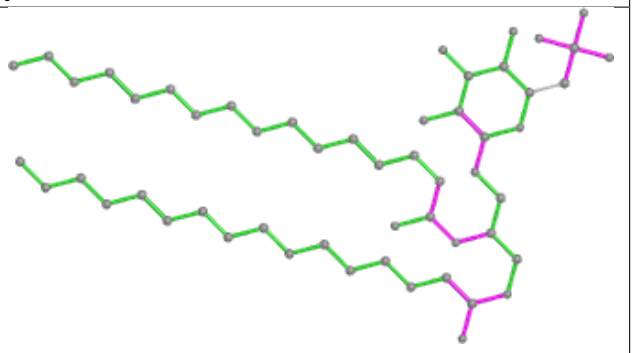
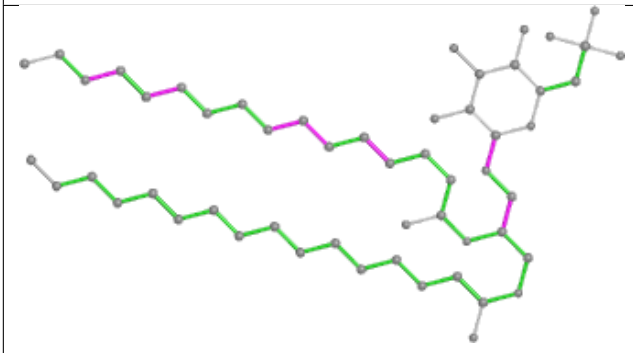
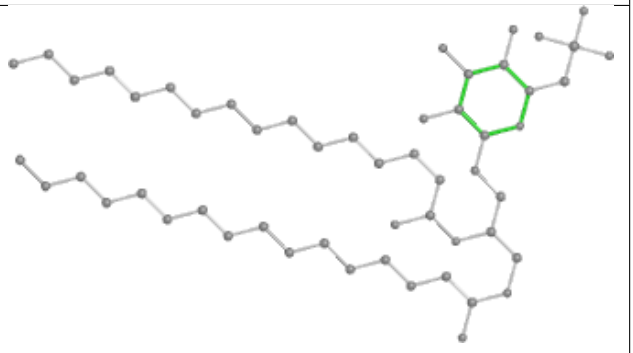


Bond angles

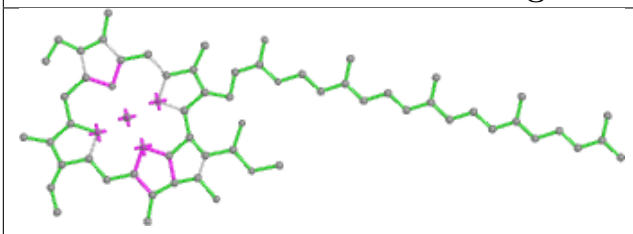


Torsions



Rings

Ligand CLA d 401



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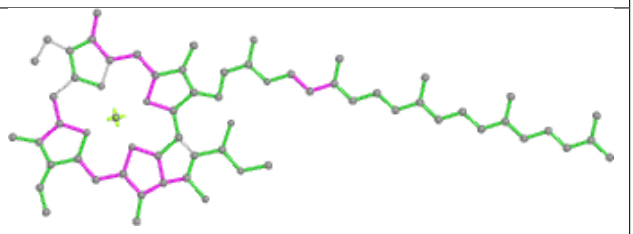
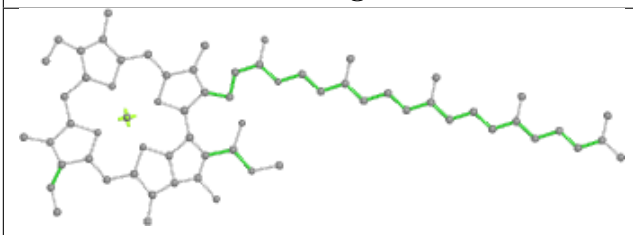
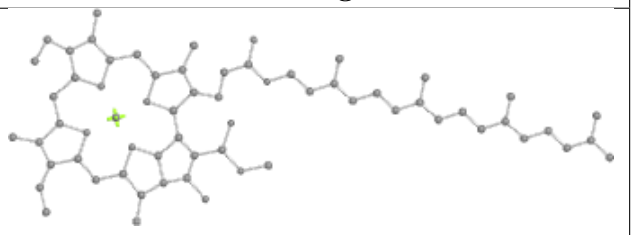


Bond angles

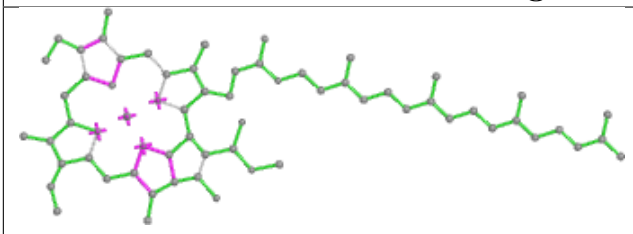


Torsions

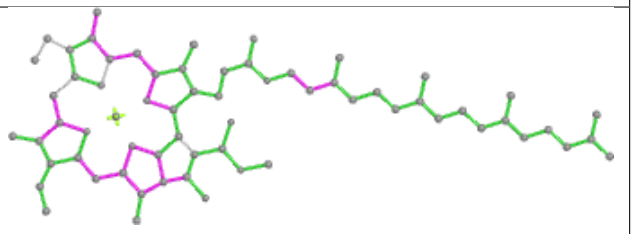


Rings

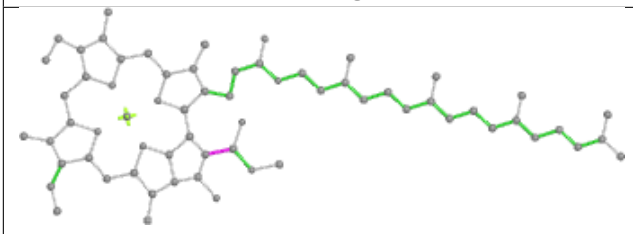
Ligand CLA b 602



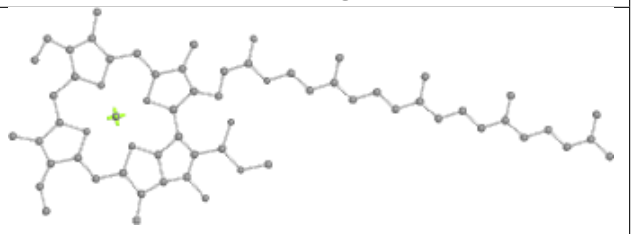
Bond lengths



Bond angles

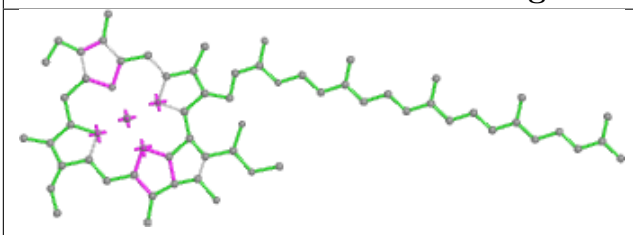


Torsions

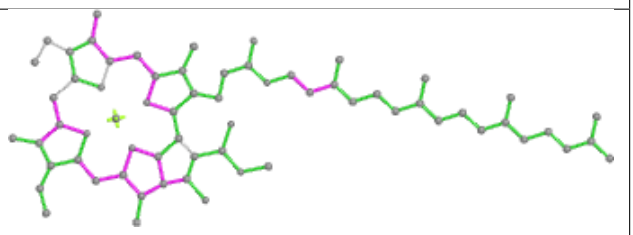


Rings

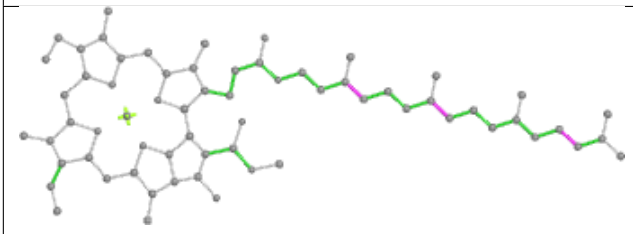
Ligand CLA a 610



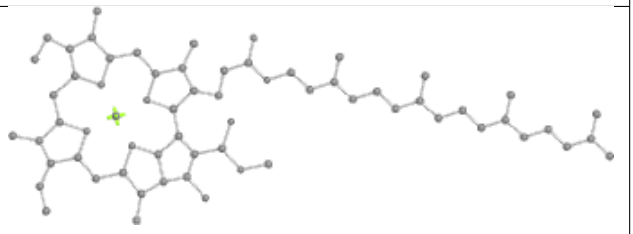
Bond lengths



Bond angles

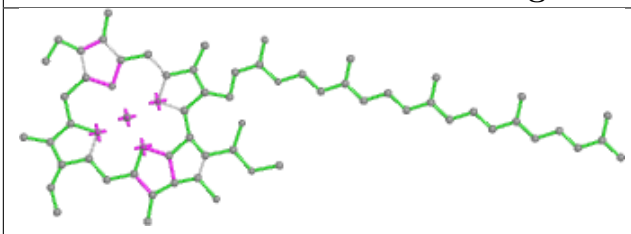


Torsions

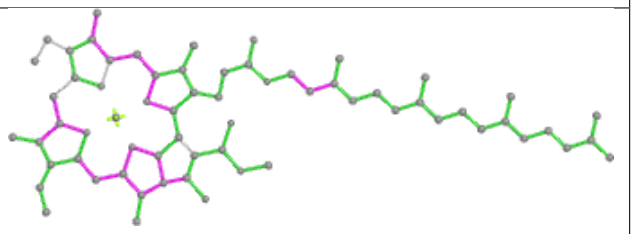


Rings

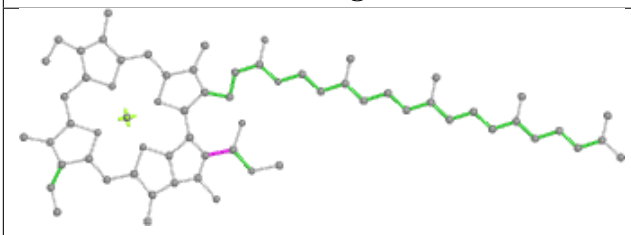
Ligand CLA a 608



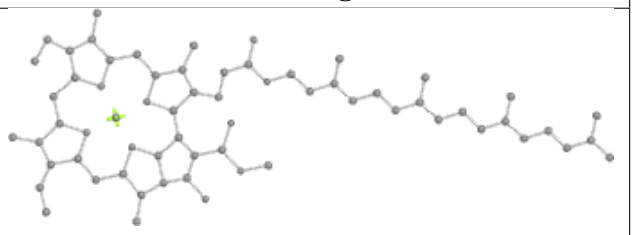
Bond lengths



Bond angles

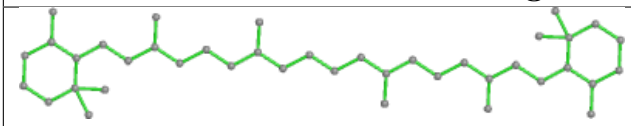


Torsions

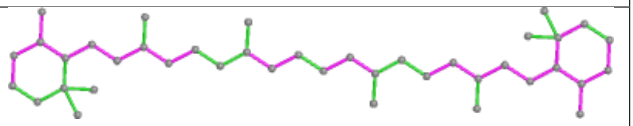


Rings

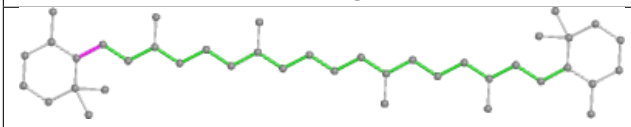
Ligand BCR b 617



Bond lengths



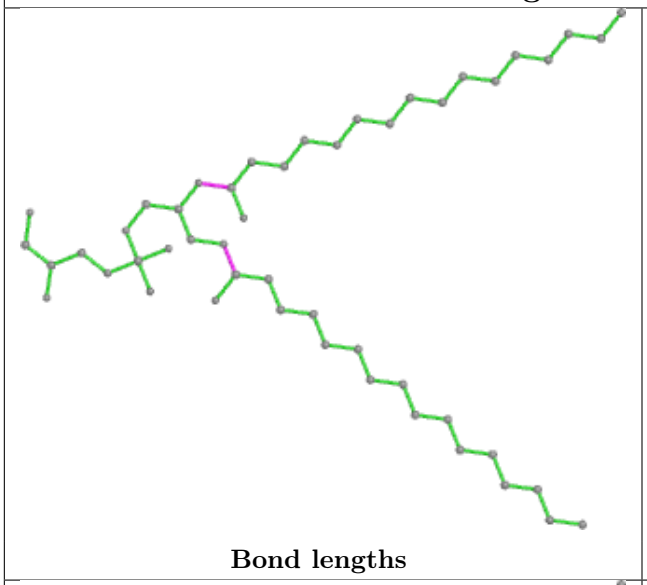
Bond angles



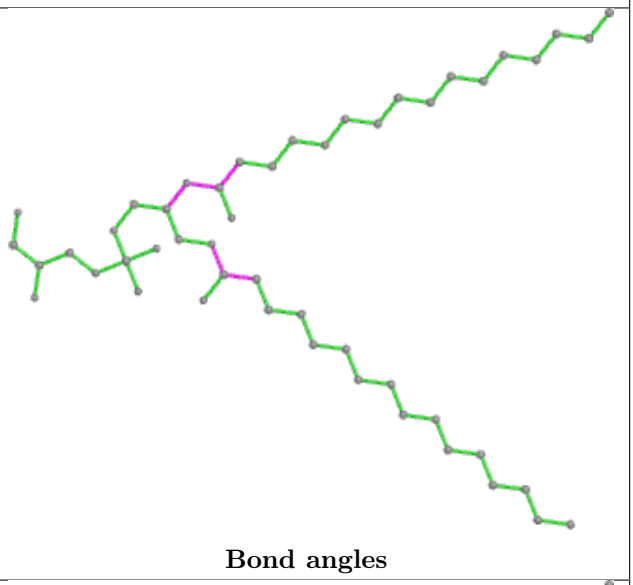
Torsions

Rings

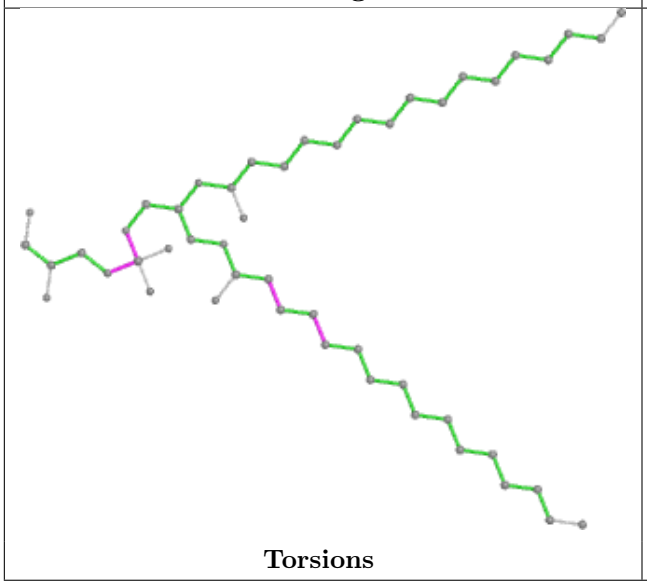
Ligand LHG A 613



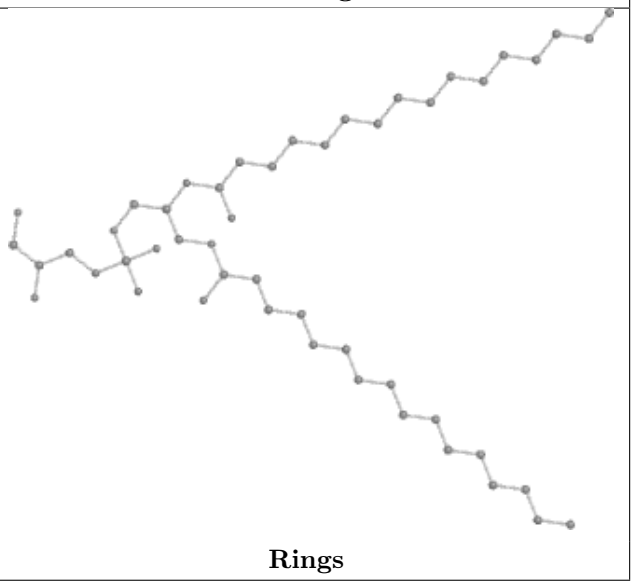
Bond lengths



Bond angles

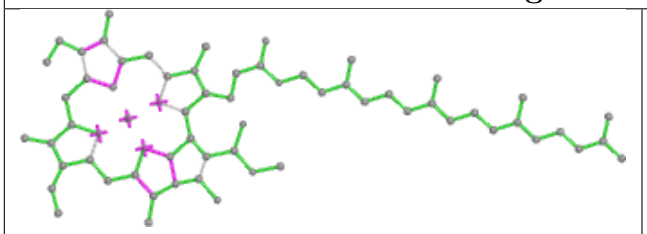


Torsions

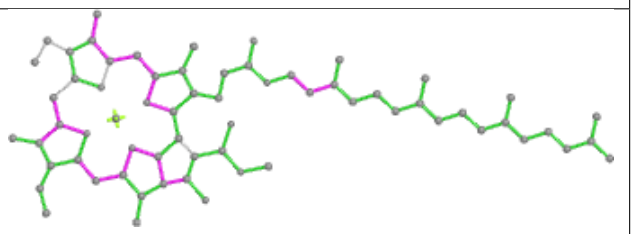


Rings

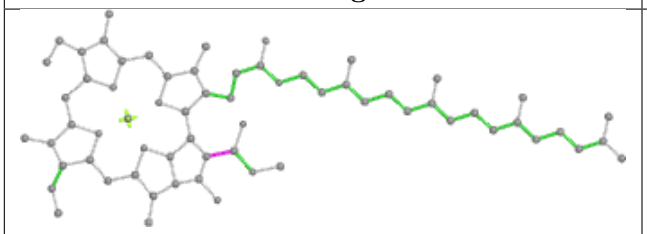
Ligand CLA C 508



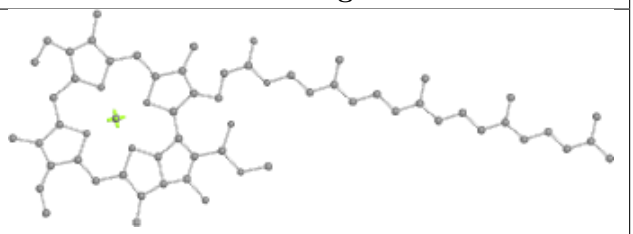
Bond lengths



Bond angles

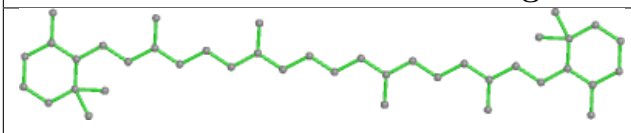


Torsions

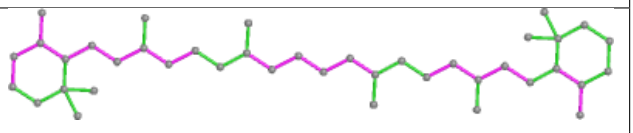


Rings

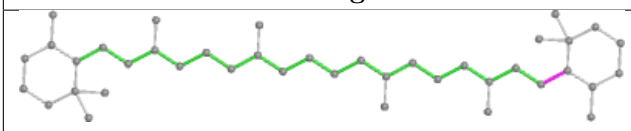
Ligand BCR A 609



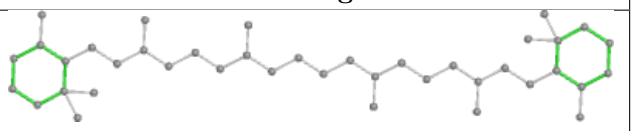
Bond lengths



Bond angles

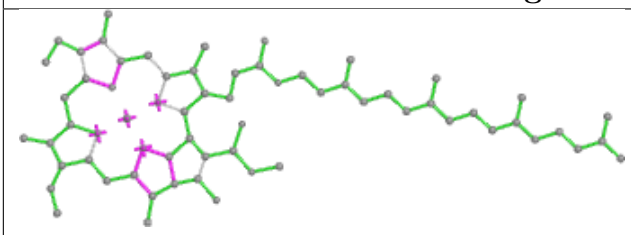


Torsions

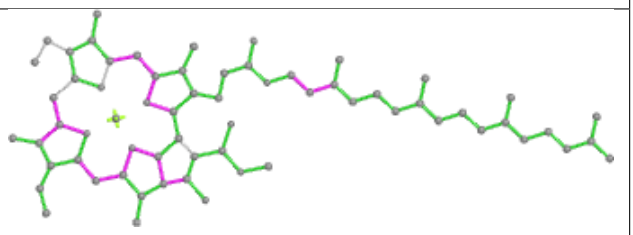


Rings

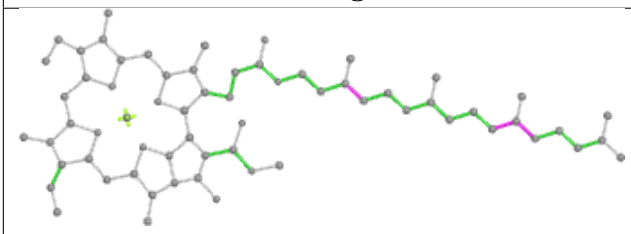
Ligand CLA B 615



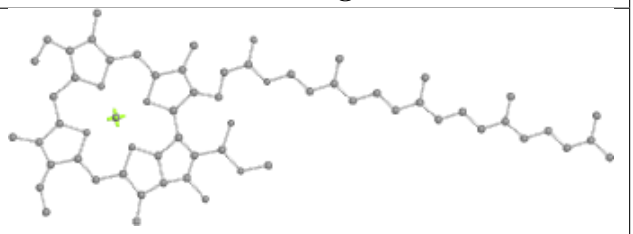
Bond lengths



Bond angles

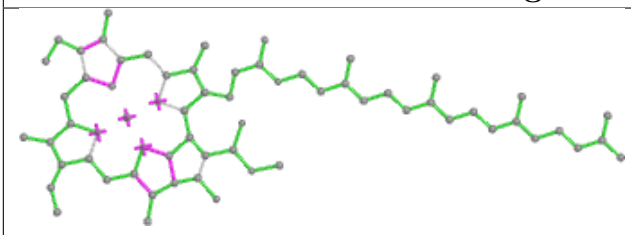


Torsions

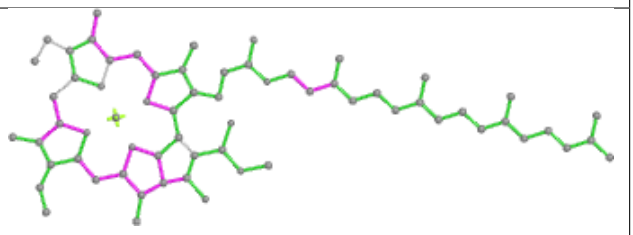


Rings

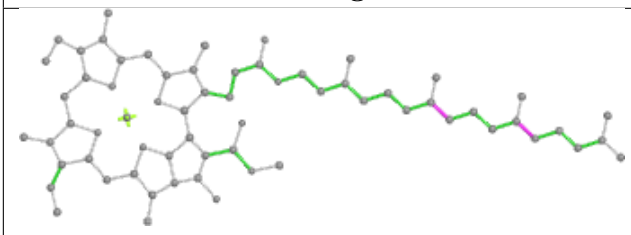
Ligand CLA B 613



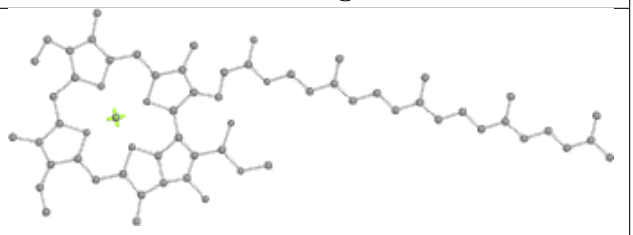
Bond lengths



Bond angles

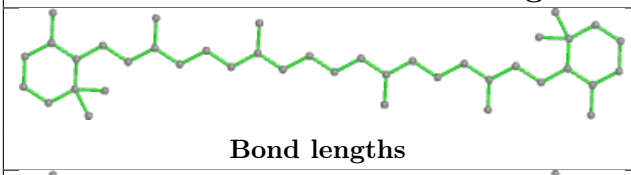


Torsions

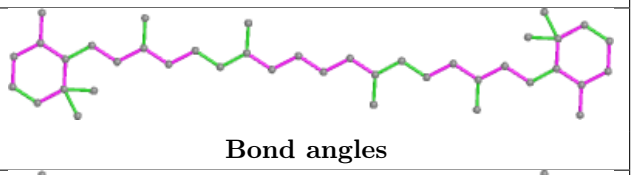


Rings

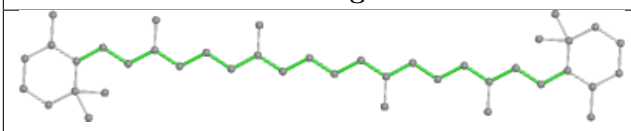
Ligand BCR b 618



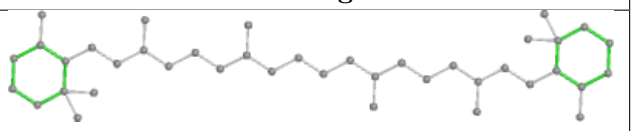
Bond lengths



Bond angles

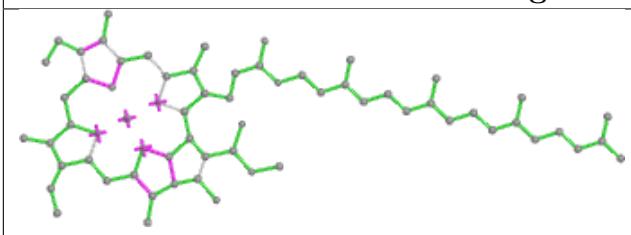


Torsions

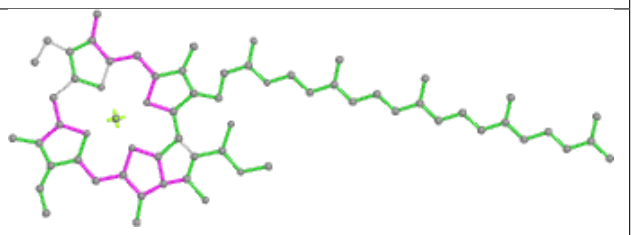


Rings

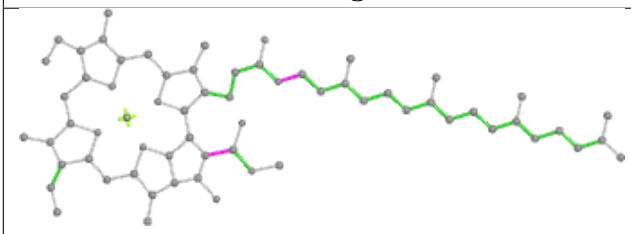
Ligand CLA c 504



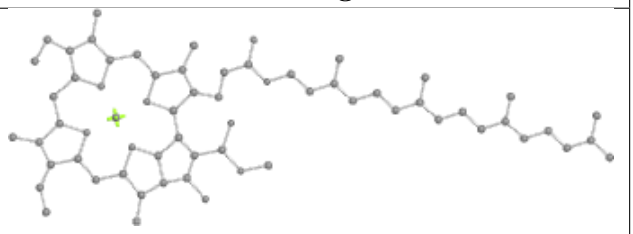
Bond lengths



Bond angles

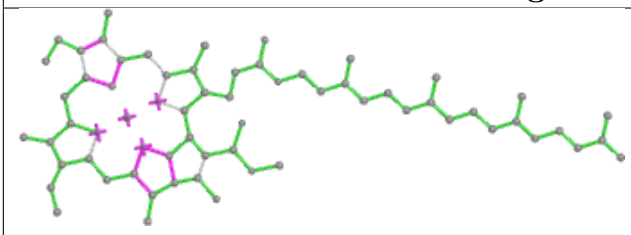


Torsions

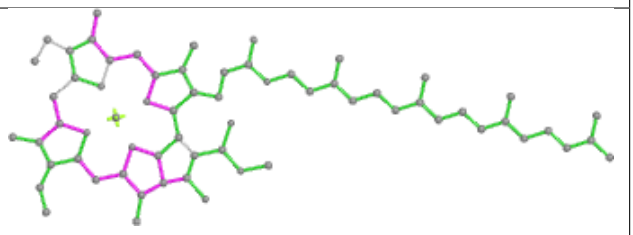


Rings

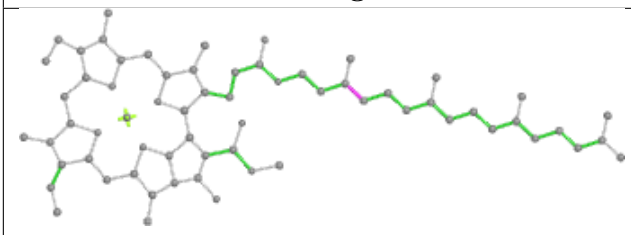
Ligand CLA b 605



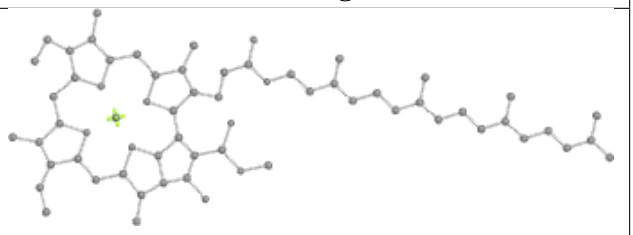
Bond lengths



Bond angles

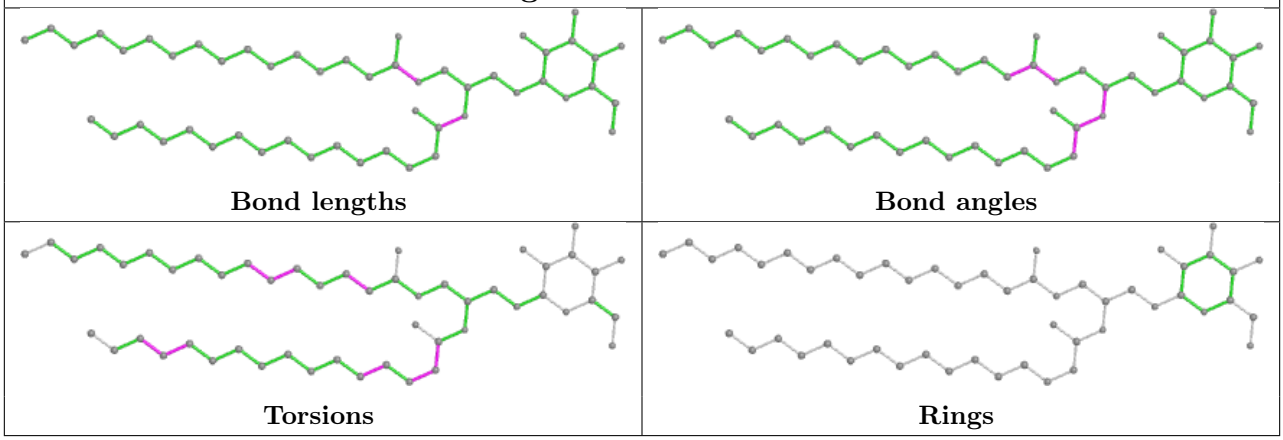


Torsions

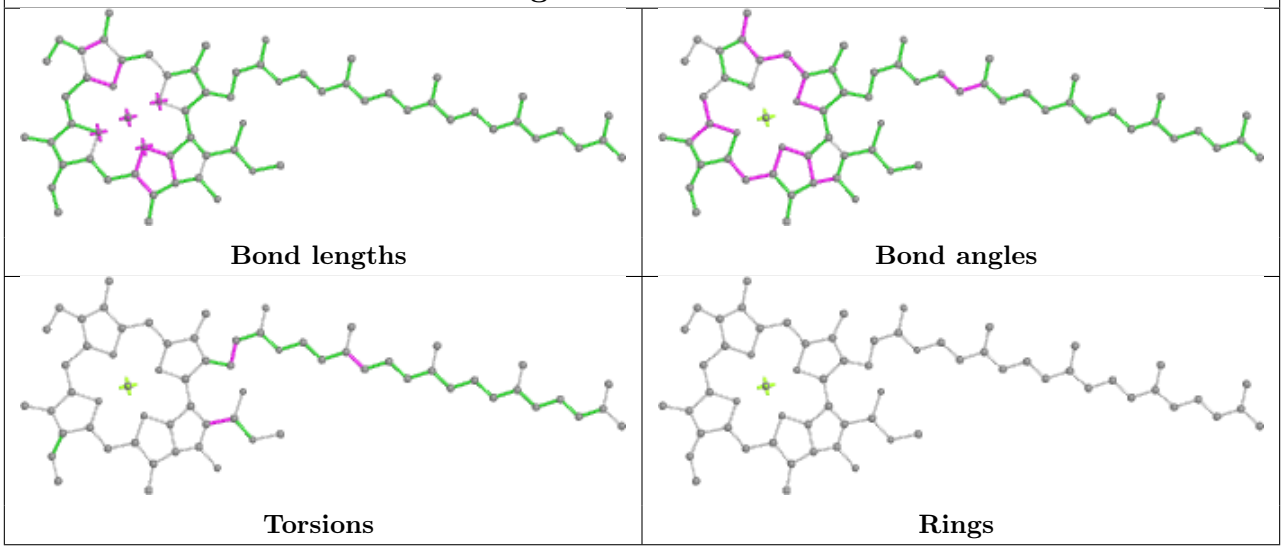


Rings

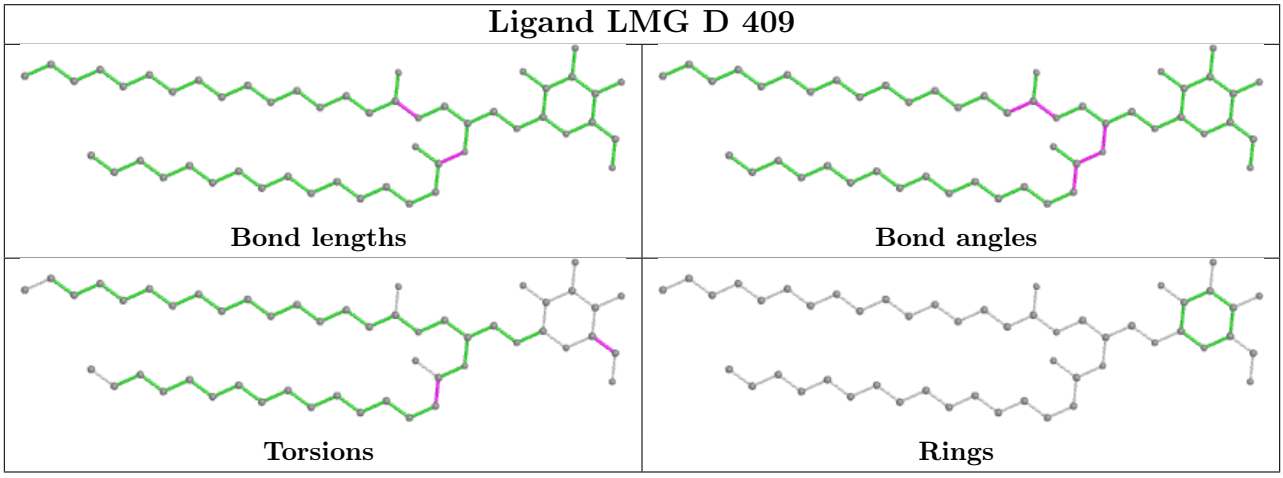
Ligand LMG C 519



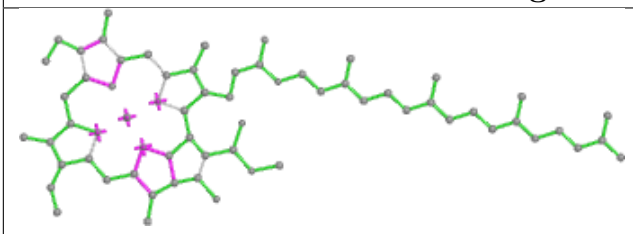
Ligand CLA c 507



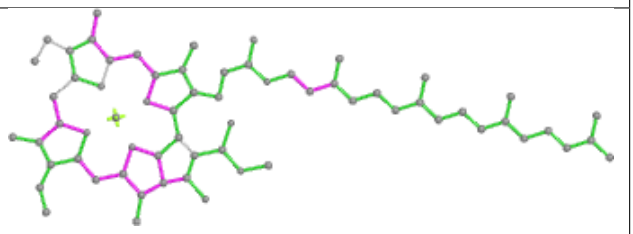
Ligand LMG D 409



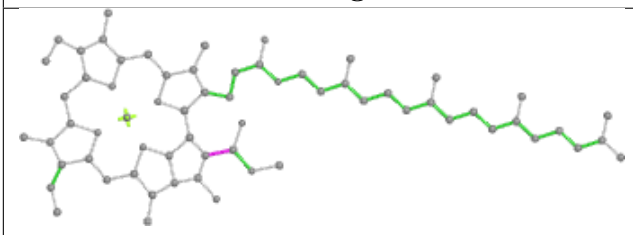
Ligand CLA c 502



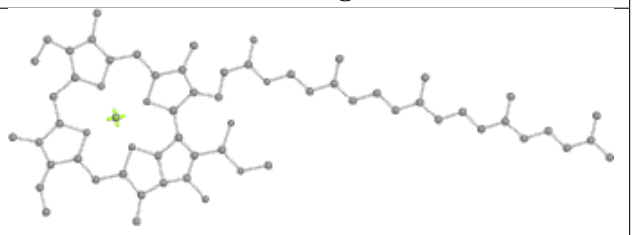
Bond lengths



Bond angles

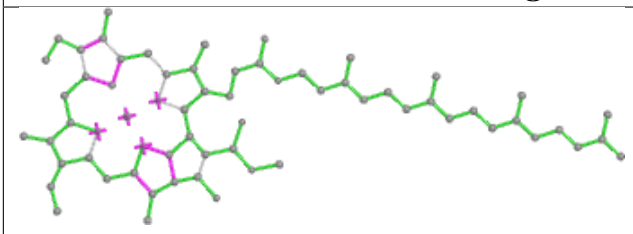


Torsions

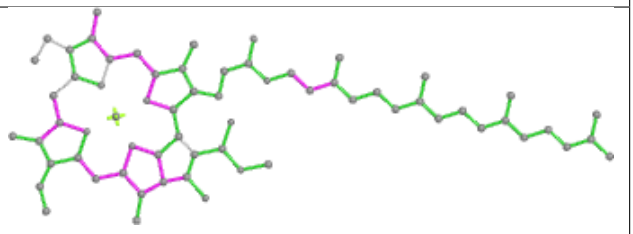


Rings

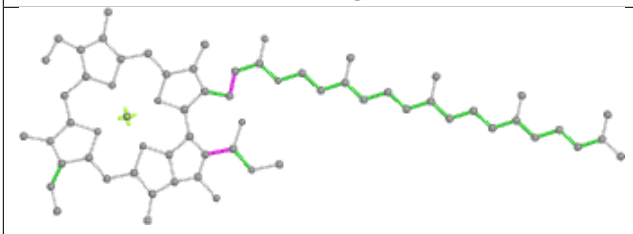
Ligand CLA B 603



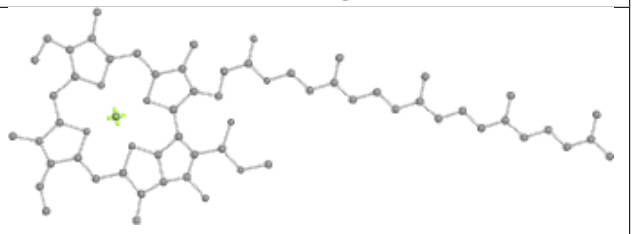
Bond lengths



Bond angles

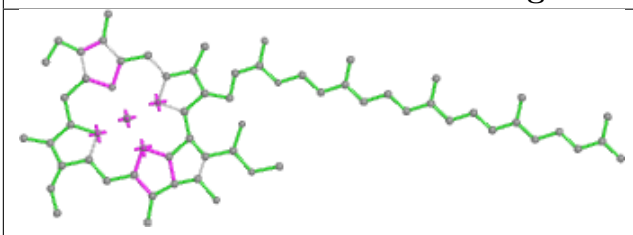


Torsions

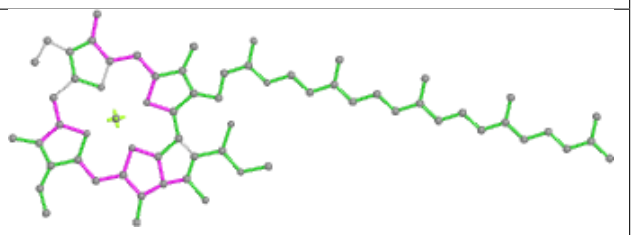


Rings

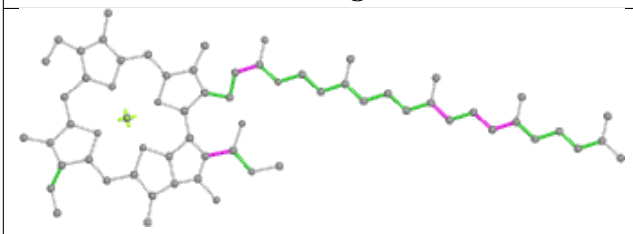
Ligand CLA b 601



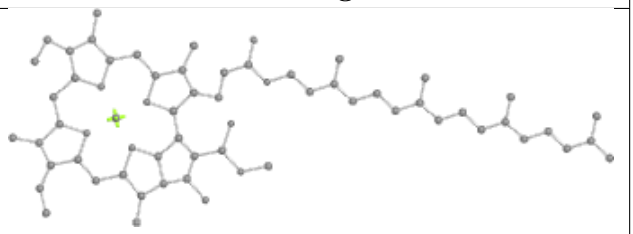
Bond lengths



Bond angles

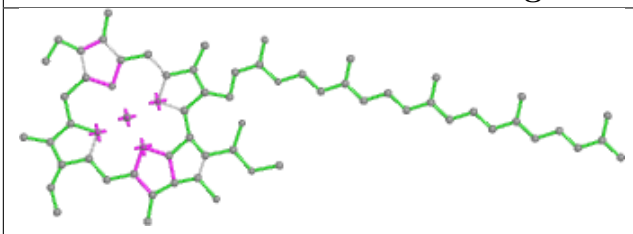


Torsions

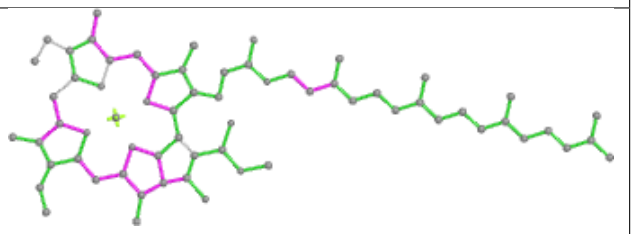


Rings

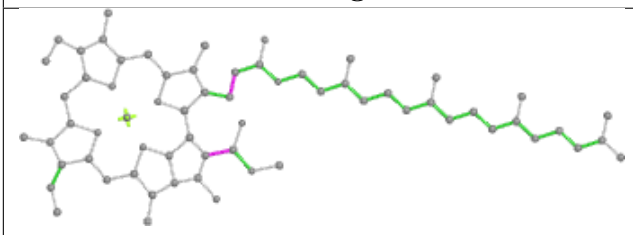
Ligand CLA B 606



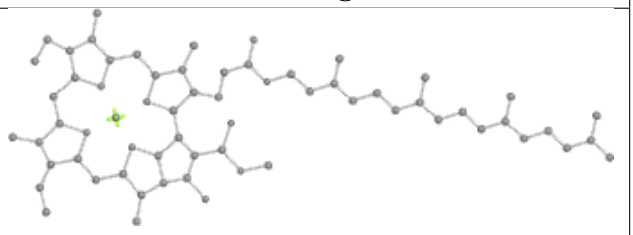
Bond lengths



Bond angles

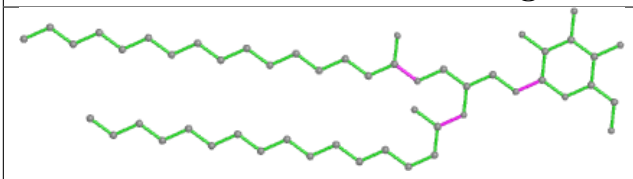


Torsions

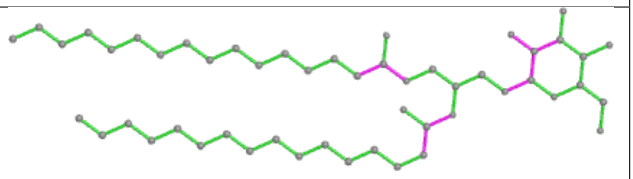


Rings

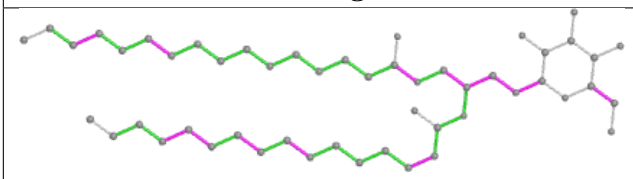
Ligand LMG C 521



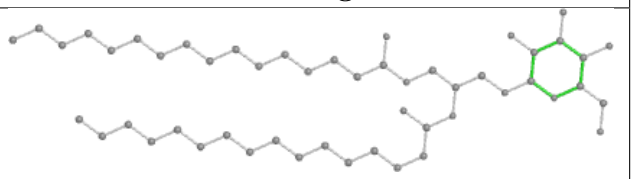
Bond lengths



Bond angles

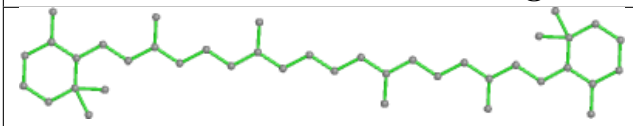


Torsions



Rings

Ligand BCR b 619



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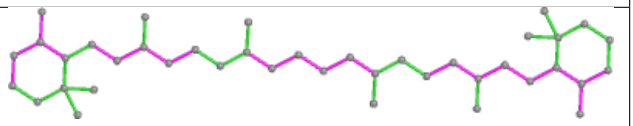
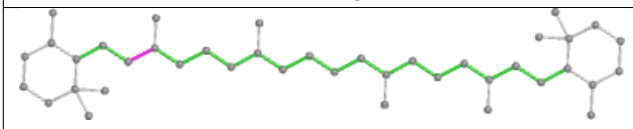
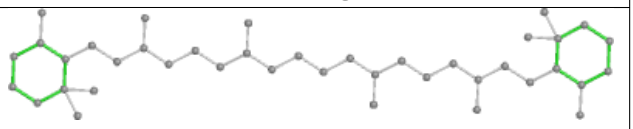


Bond angles

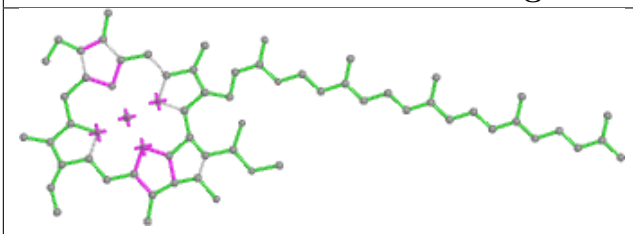


Torsions

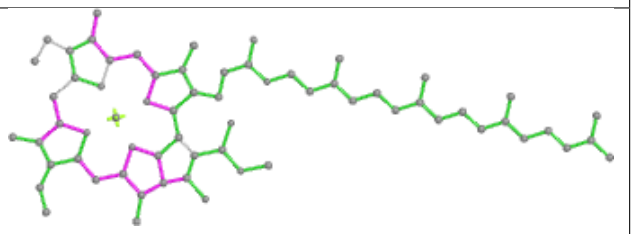


Rings

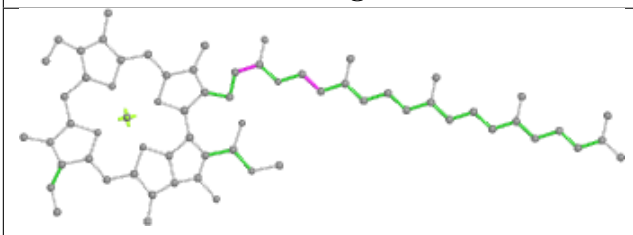
Ligand CLA C 512



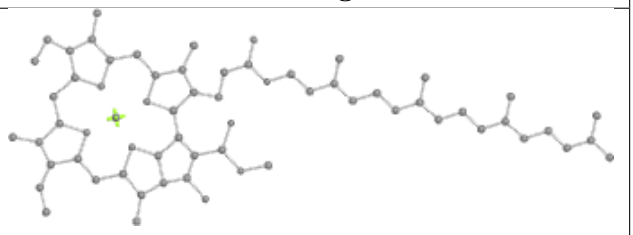
Bond lengths



Bond angles

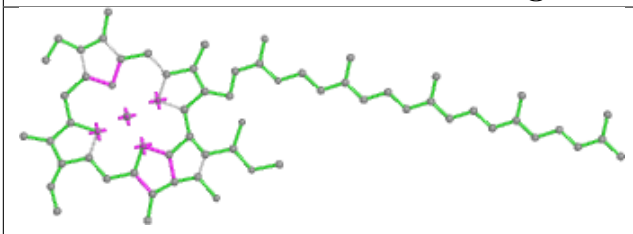


Torsions

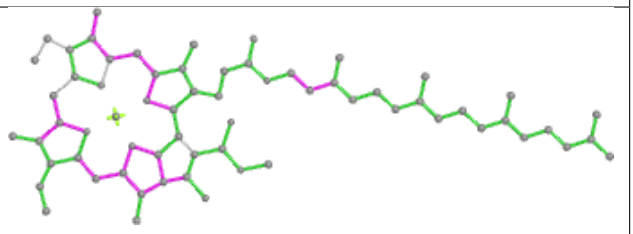


Rings

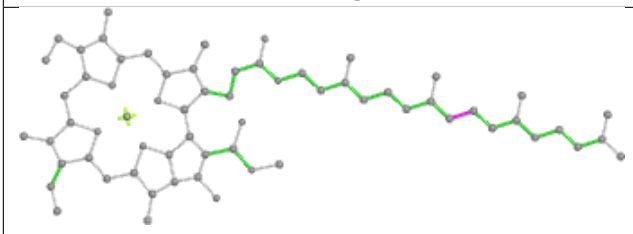
Ligand CLA b 613



Bond lengths



Bond angles



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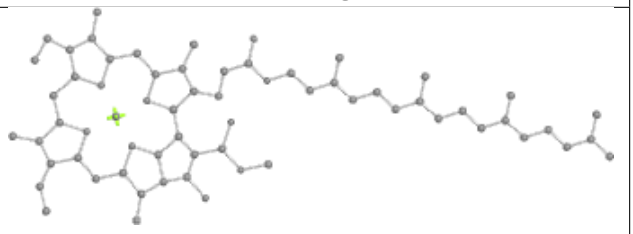
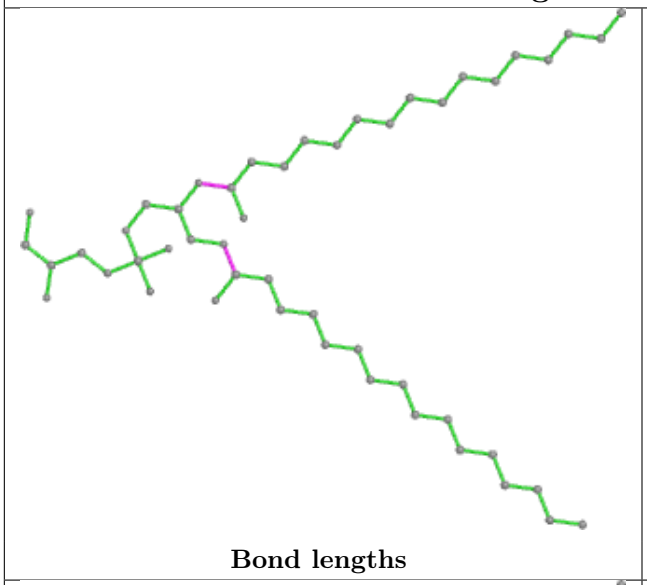


Rings

Ligand LHG l 101



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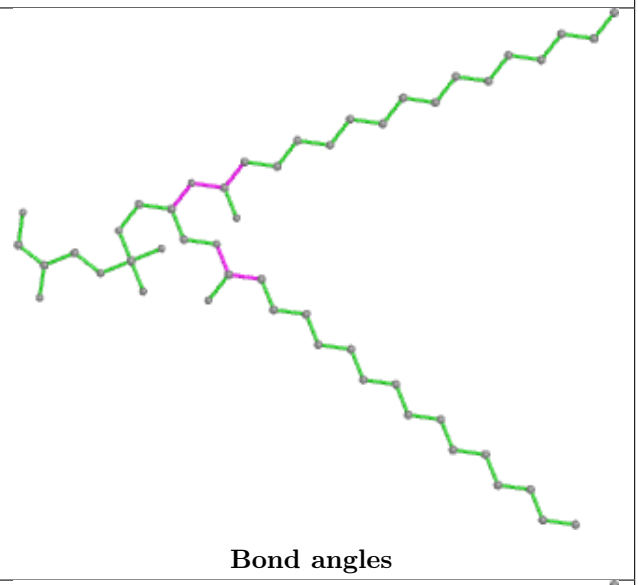
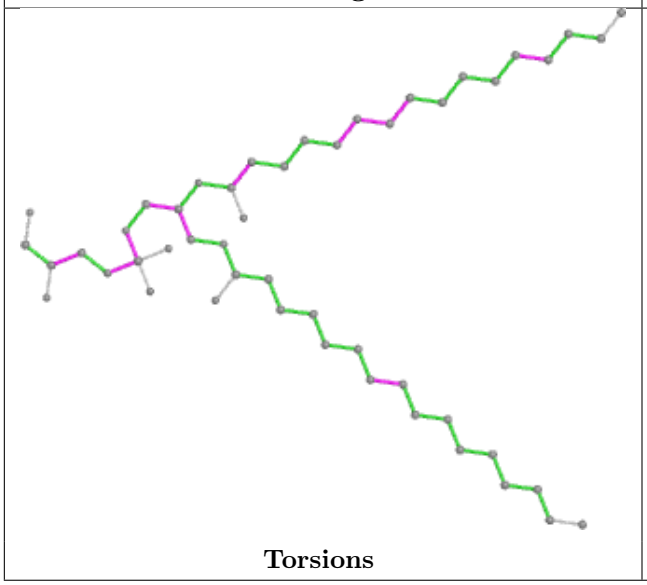


Bond angles



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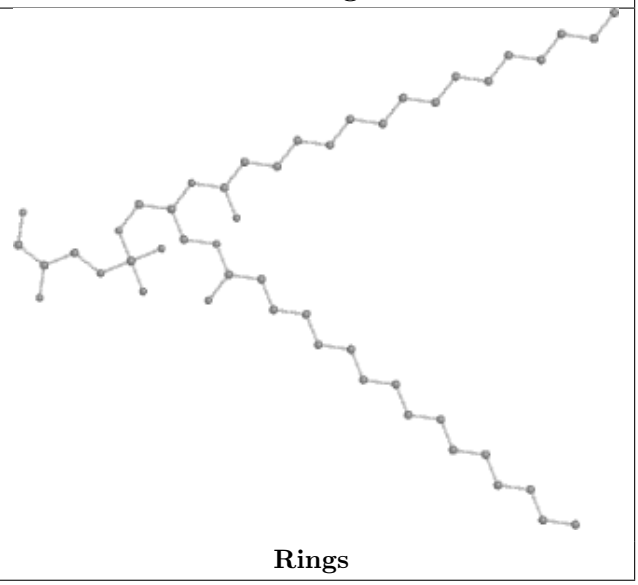
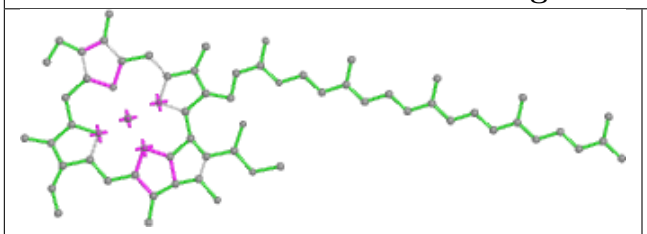


Rings

Ligand CLA c 506



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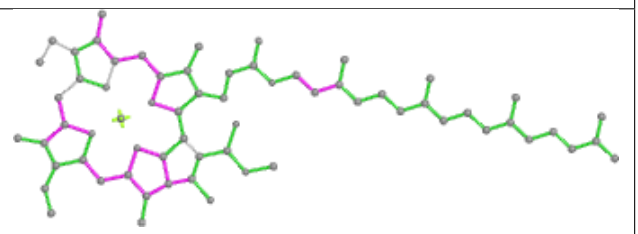
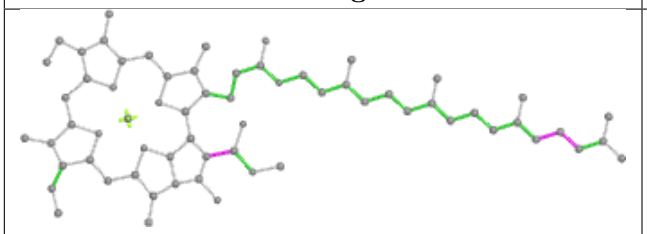


Bond angles



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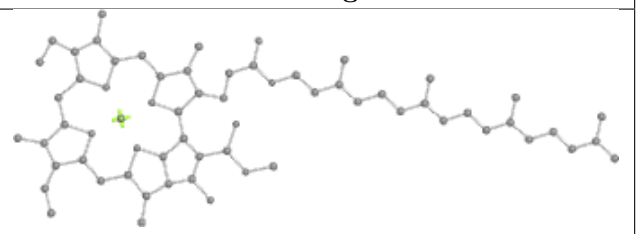
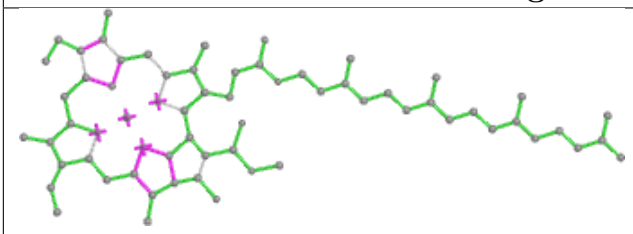
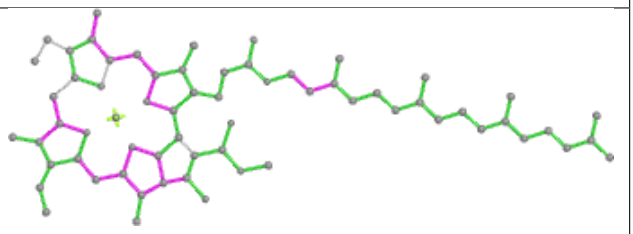


Rings

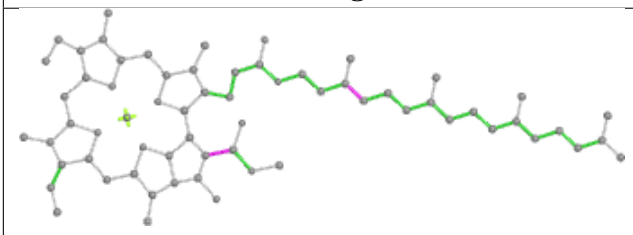
Ligand CLA b 603



Bond lengths



Bond angles



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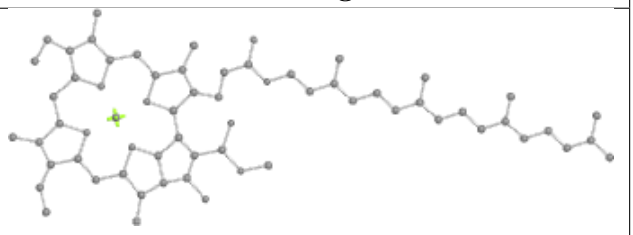
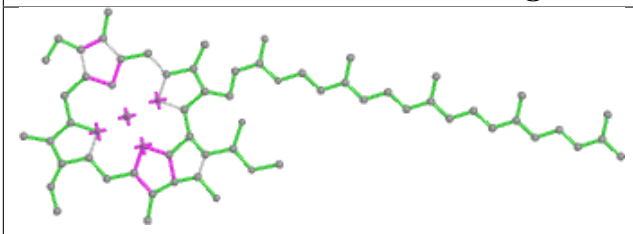


Rings

Ligand CLA B 616



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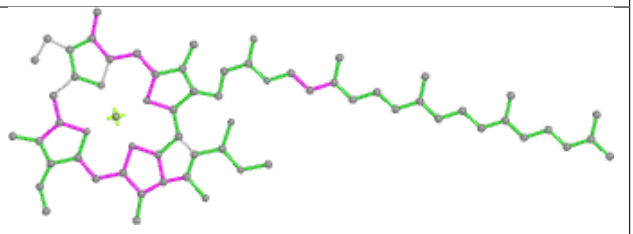
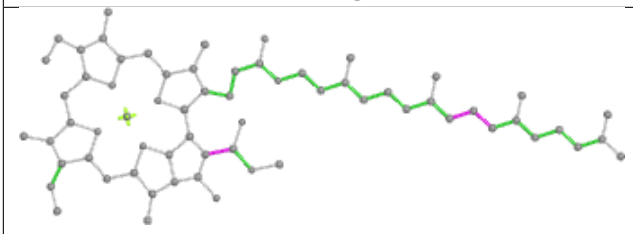


Bond angles



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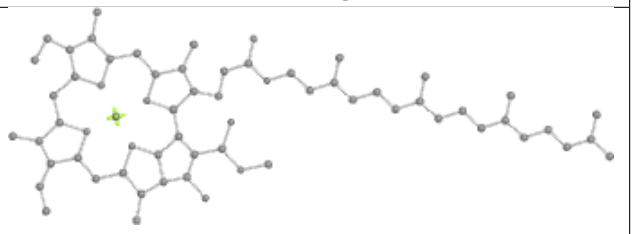
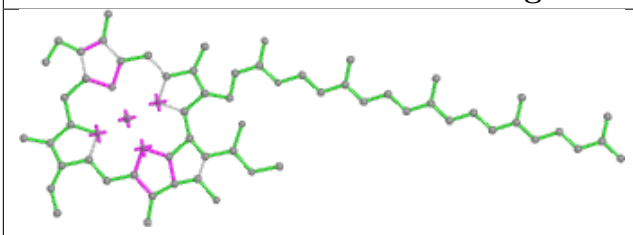


Rings

Ligand CLA B 601



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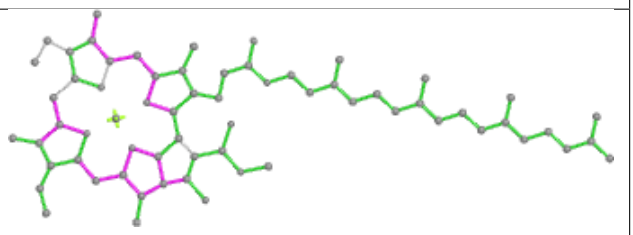
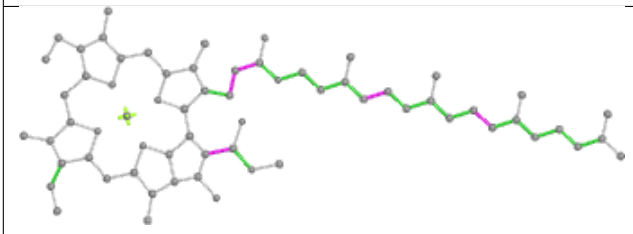


Bond angles



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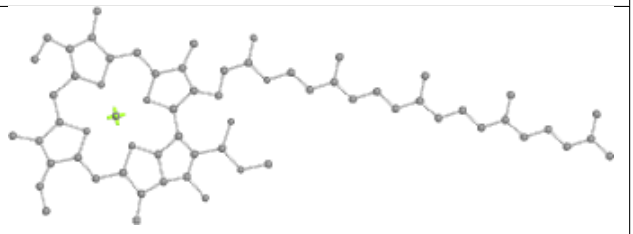
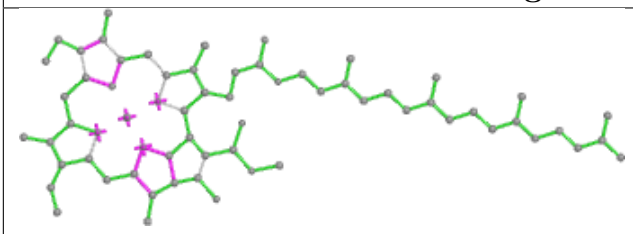
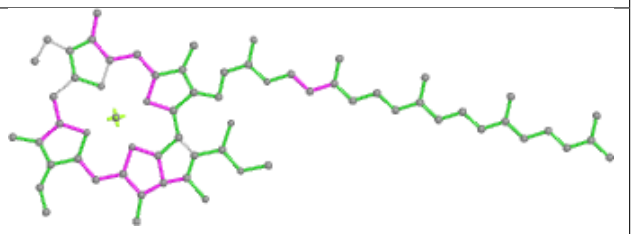


Rings

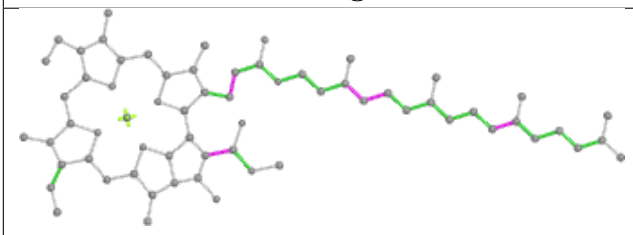
Ligand CLA B 614



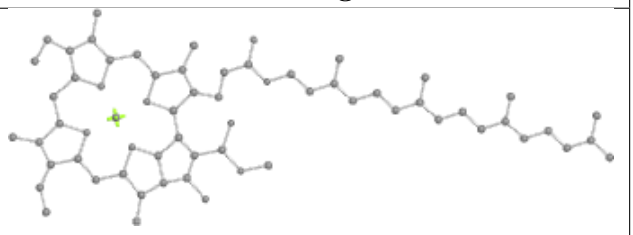
Bond lengths



Bond angles

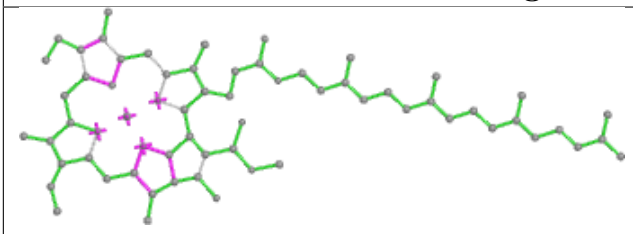


Torsions

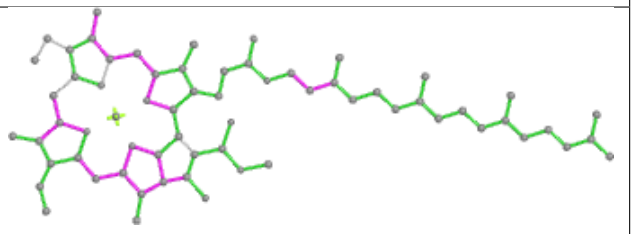


Rings

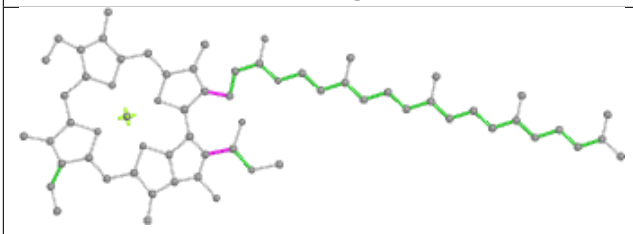
Ligand CLA D 403



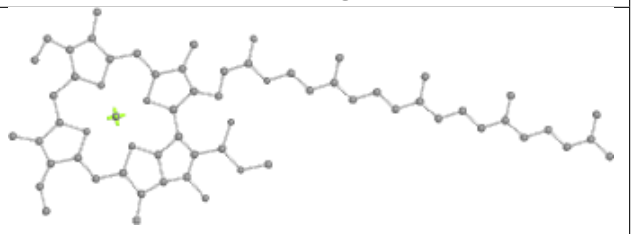
Bond lengths



Bond angles

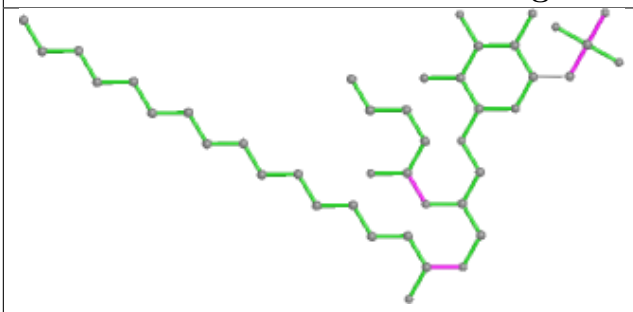


Torsions

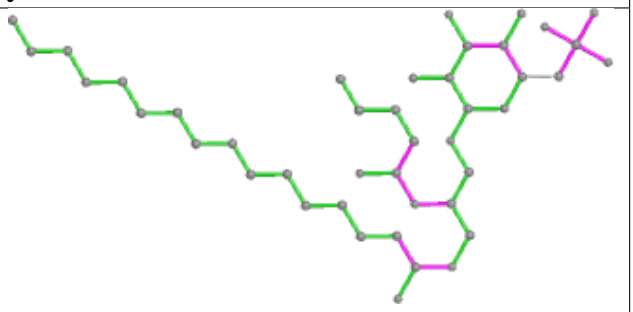


Rings

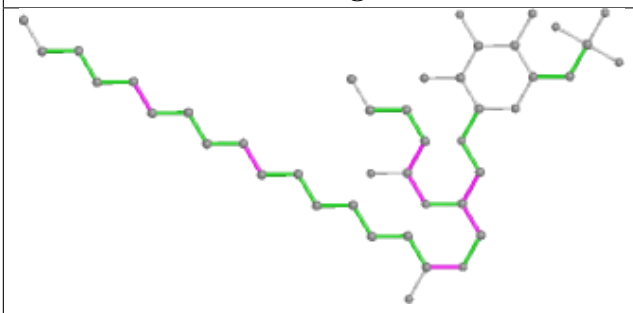
Ligand SQD f 101



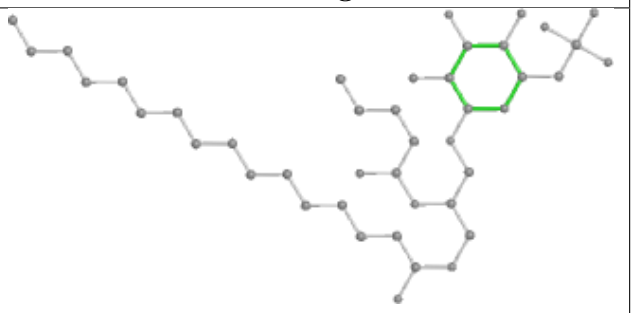
Bond lengths



Bond angles

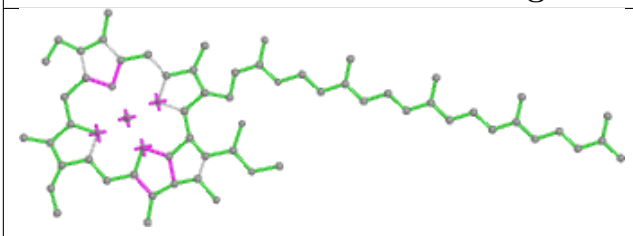


Torsions

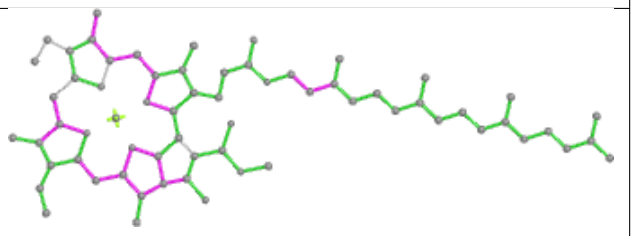


Rings

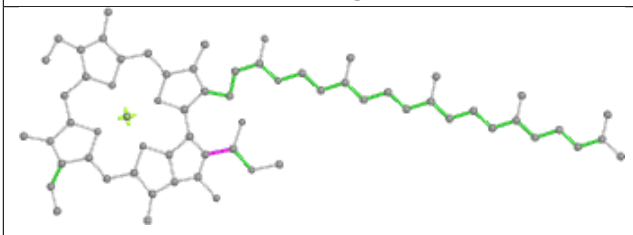
Ligand CLA b 612



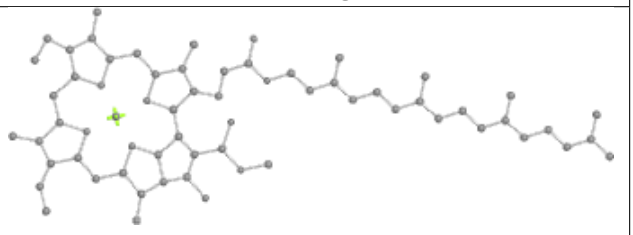
Bond lengths



Bond angles

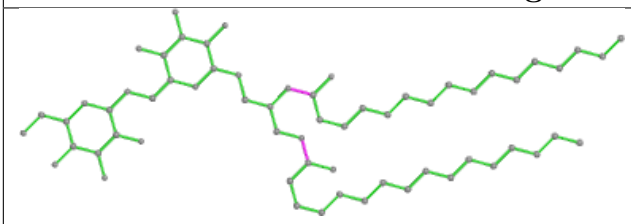


Torsions

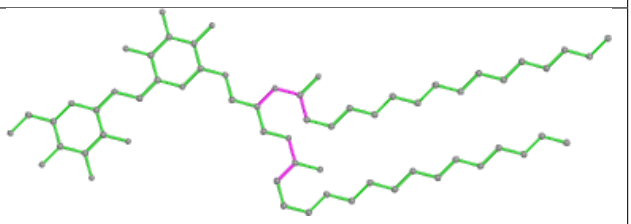


Rings

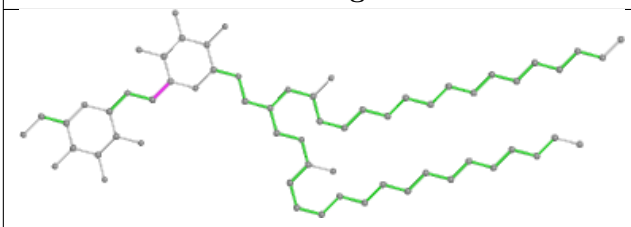
Ligand DGD c 517



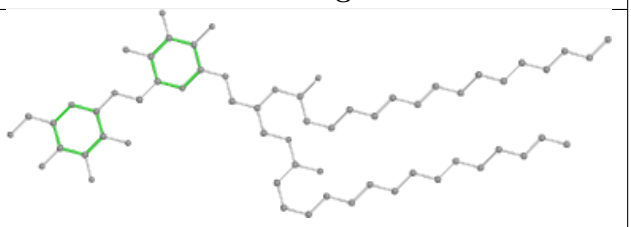
Bond lengths



Bond angles

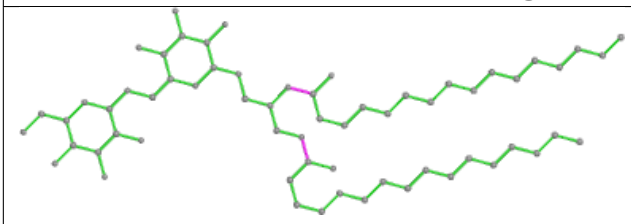


Torsions

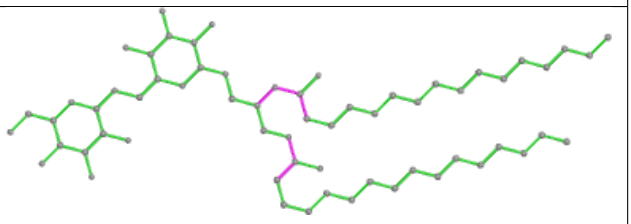


Rings

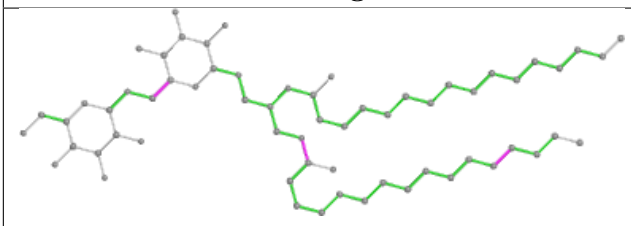
Ligand DGD C 518



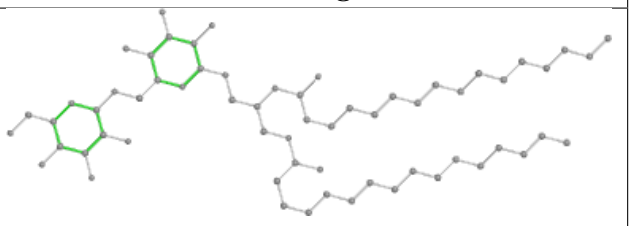
Bond lengths



Bond angles

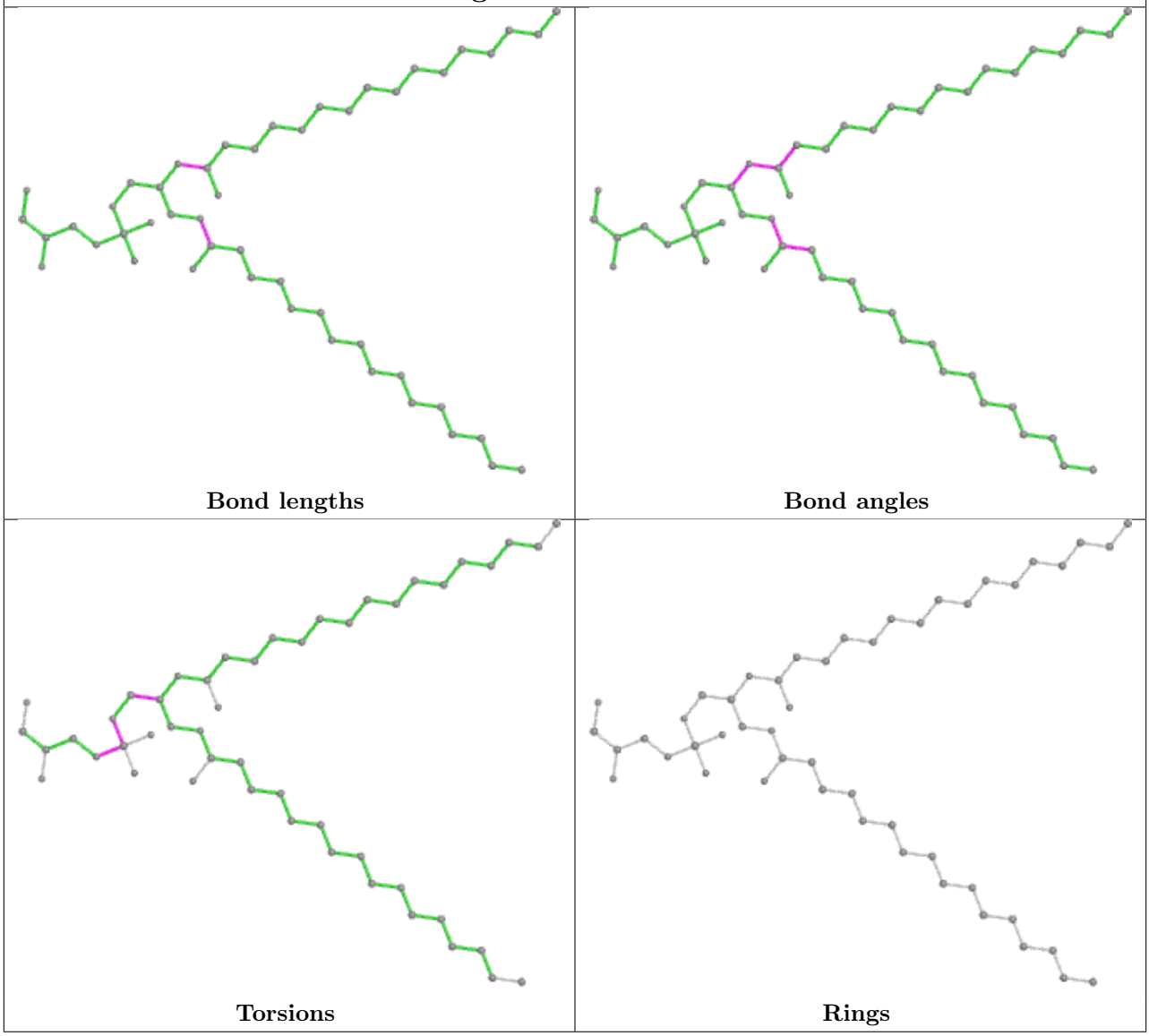


Torsions

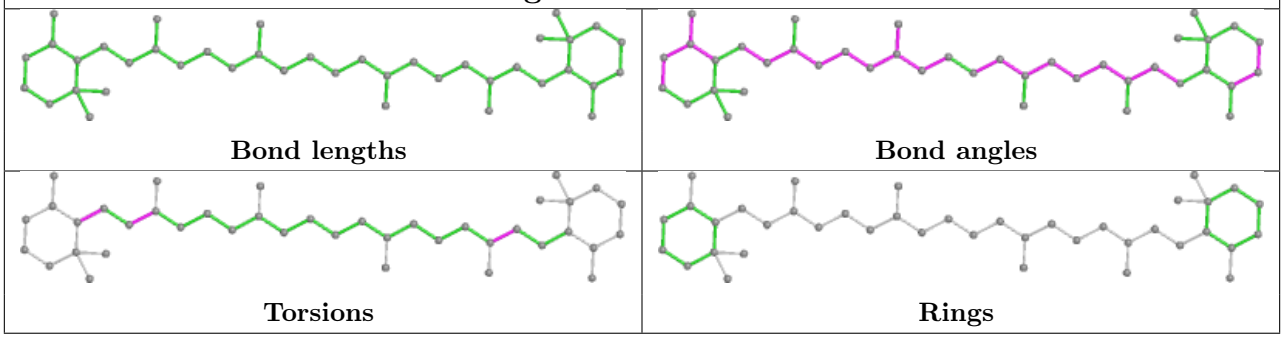


Rings

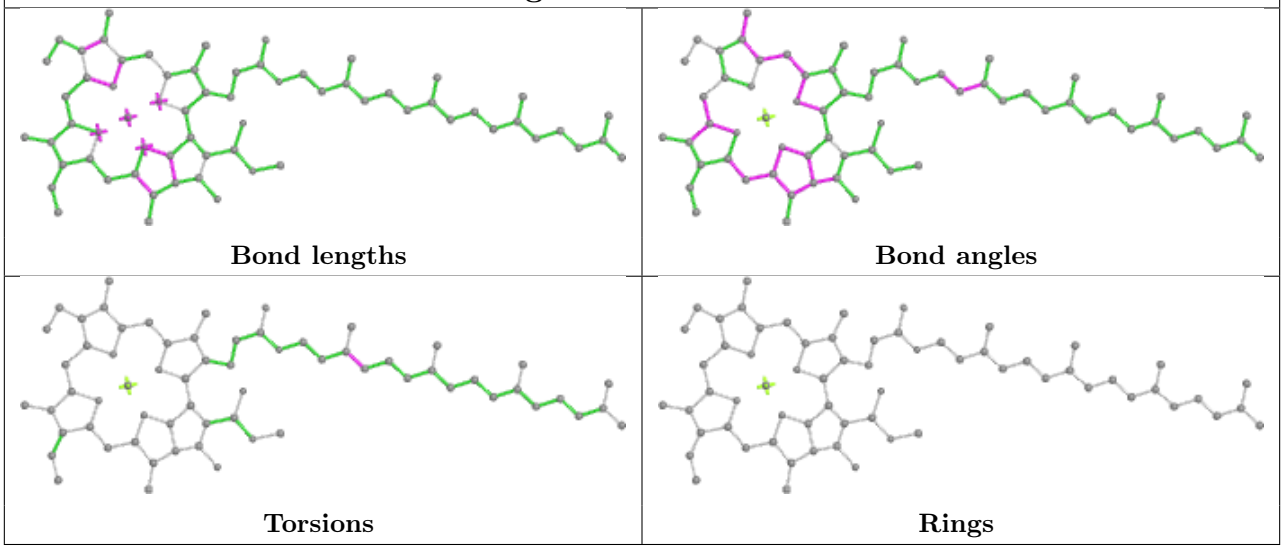
Ligand LHG d 406



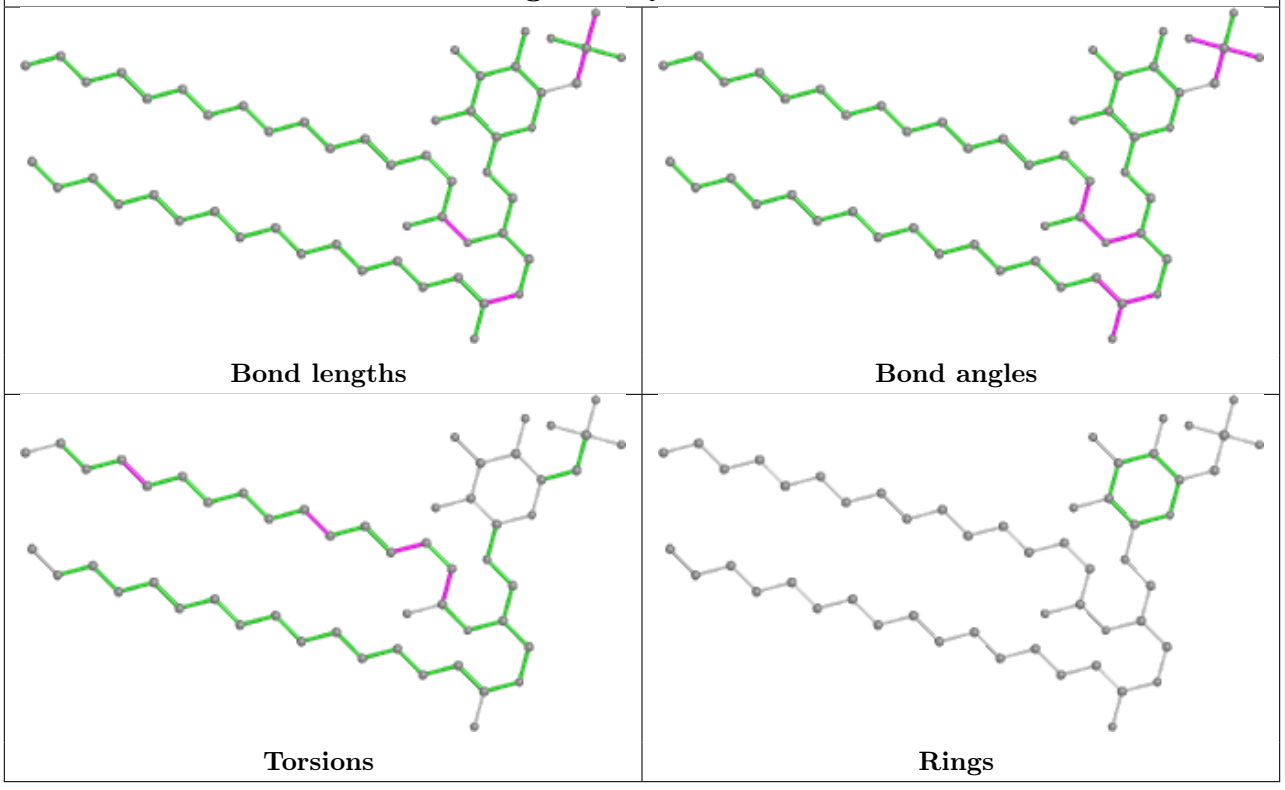
Ligand BCR T 101



Ligand CLA B 608



Ligand SQD A 611



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	333/344 (96%)	0.12	10 (3%) 50 46	24, 32, 54, 72	0
1	a	333/344 (96%)	0.00	5 (1%) 73 71	24, 34, 62, 76	0
2	B	505/510 (99%)	0.04	24 (4%) 30 28	24, 35, 61, 84	0
2	b	503/510 (98%)	0.14	32 (6%) 19 16	26, 38, 67, 87	0
3	C	448/461 (97%)	0.09	11 (2%) 57 53	24, 40, 59, 77	0
3	c	448/461 (97%)	0.03	12 (2%) 54 50	29, 42, 60, 80	0
4	D	340/352 (96%)	-0.01	8 (2%) 59 54	25, 34, 52, 70	0
4	d	340/352 (96%)	-0.13	6 (1%) 68 64	26, 37, 59, 74	0
5	E	82/84 (97%)	1.03	17 (20%) 1 0	39, 57, 71, 75	0
5	e	79/84 (94%)	0.57	11 (13%) 2 1	43, 58, 71, 81	0
6	F	33/45 (73%)	-0.18	0 100 100	42, 49, 63, 71	0
6	f	33/45 (73%)	-0.08	1 (3%) 50 46	46, 52, 73, 82	0
7	H	63/66 (95%)	0.12	2 (3%) 47 44	34, 41, 48, 60	0
7	h	63/66 (95%)	0.48	8 (12%) 3 2	39, 48, 59, 69	0
8	I	33/38 (86%)	-0.33	0 100 100	30, 36, 44, 55	0
8	i	35/38 (92%)	-0.24	0 100 100	31, 39, 56, 66	0
9	J	34/40 (85%)	0.16	5 (14%) 2 1	40, 53, 64, 78	0
9	j	33/40 (82%)	0.15	1 (3%) 50 46	43, 52, 61, 65	0
10	K	36/46 (78%)	0.42	2 (5%) 24 20	52, 61, 75, 77	0
10	k	36/46 (78%)	0.17	1 (2%) 53 49	48, 60, 76, 78	0
11	L	36/37 (97%)	-0.26	1 (2%) 53 49	26, 33, 53, 59	0
11	l	36/37 (97%)	-0.09	1 (2%) 53 49	28, 35, 50, 62	0
12	M	32/36 (88%)	-0.11	0 100 100	30, 36, 56, 58	0
12	m	32/36 (88%)	0.11	3 (9%) 8 5	30, 38, 57, 63	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	O	242/272 (88%)	0.44	21 (8%) 10 7	30, 44, 70, 104	0
13	o	243/272 (89%)	0.30	20 (8%) 11 8	28, 45, 72, 108	0
14	T	29/32 (90%)	0.19	2 (6%) 16 13	26, 35, 56, 62	0
14	t	29/32 (90%)	0.16	2 (6%) 16 13	31, 36, 55, 67	0
15	U	96/134 (71%)	0.38	7 (7%) 15 11	34, 43, 64, 72	0
15	u	96/134 (71%)	0.01	0 100 100	35, 45, 58, 65	0
16	V	137/163 (84%)	0.13	2 (1%) 73 71	33, 44, 56, 64	0
16	v	137/163 (84%)	0.72	20 (14%) 2 1	37, 50, 67, 82	0
17	Y	29/46 (63%)	2.59	17 (58%) 0 0	63, 76, 95, 96	0
17	y	29/46 (63%)	1.58	11 (37%) 0 0	61, 71, 90, 91	0
18	X	37/41 (90%)	0.26	6 (16%) 1 1	42, 50, 65, 79	0
18	x	38/41 (92%)	0.55	6 (15%) 2 1	41, 52, 74, 84	0
19	Z	62/62 (100%)	1.75	21 (33%) 0 0	57, 73, 104, 111	0
19	z	62/62 (100%)	2.31	33 (53%) 0 0	62, 74, 100, 107	0
20	R	34/41 (82%)	3.15	26 (76%) 0 0	61, 74, 88, 92	0
20	r	33/41 (80%)	2.94	26 (78%) 0 0	64, 73, 86, 91	0
All	All	5279/5700 (92%)	0.24	381 (7%) 15 12	24, 41, 72, 111	0

All (381) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	O	61	GLN	9.1
13	O	56	PRO	8.8
13	O	63	ALA	8.2
19	Z	33	TRP	7.5
17	Y	22	LEU	7.0
19	Z	30	PRO	6.9
19	Z	34	ASP	6.7
20	R	35	LEU	6.7
20	R	32	GLN	6.6
13	O	62	GLU	6.5
20	R	31	VAL	6.4
19	z	32	ASP	6.4
13	o	57	LYS	6.2
20	r	34	LEU	6.1
17	Y	19	ILE	6.1

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Mol	Chain	Res	Type	RSRZ
13	O	58	ASN	6.0
19	Z	31	GLN	5.9
20	R	34	LEU	5.8
19	z	1	MET	5.8
20	r	5	VAL	5.8
2	b	126	PRO	5.8
17	Y	18	VAL	5.7
19	z	39	LEU	5.7
19	z	4	LEU	5.7
13	o	5	LEU	5.6
2	b	495	PHE	5.4
19	Z	32	ASP	5.4
20	R	28	VAL	5.4
2	b	128	THR	5.4
17	Y	45	ASN	5.3
20	R	6	LEU	5.3
13	o	63	ALA	5.2
13	o	60	ARG	5.2
19	Z	62	VAL	5.2
20	R	27	ALA	5.2
19	z	30	PRO	5.2
19	z	31	GLN	5.1
2	b	499	VAL	5.1
17	Y	26	ALA	5.0
5	E	79	PHE	4.9
20	r	9	LEU	4.9
2	b	129	GLY	4.9
3	c	143	TYR	4.9
19	z	3	ILE	4.9
2	B	503	THR	4.9
17	Y	43	ARG	4.8
2	B	490	GLN	4.7
2	B	484	PRO	4.5
20	R	25	PRO	4.5
7	h	49	TYR	4.4
20	r	26	TYR	4.4
19	z	33	TRP	4.3
20	r	24	LEU	4.3
5	e	74	GLN	4.3
10	K	46	ARG	4.3
18	X	2	THR	4.2
19	z	34	ASP	4.2

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Mol	Chain	Res	Type	RSRZ
18	x	38	GLN	4.2
5	E	82	GLN	4.2
13	o	62	GLU	4.2
19	Z	1	MET	4.2
17	y	20	ALA	4.2
1	A	245	THR	4.1
18	x	2	THR	4.1
13	o	59	LYS	4.1
13	o	56	PRO	4.1
13	O	35	SER	4.1
19	Z	41	PHE	4.1
13	O	64	GLU	4.0
19	Z	37	LYS	4.0
17	Y	44	GLY	4.0
20	r	3	TRP	4.0
3	c	146	PHE	4.0
5	E	60	GLN	4.0
13	O	60	ARG	4.0
17	Y	20	ALA	4.0
17	y	41	VAL	3.9
16	v	21	LEU	3.9
19	Z	4	LEU	3.9
16	V	1	ALA	3.9
2	B	496	TYR	3.9
18	X	38	GLN	3.9
18	X	37	VAL	3.9
17	y	40	ALA	3.9
20	r	31	VAL	3.8
20	r	14	LEU	3.8
14	T	29	ILE	3.8
2	b	486	LEU	3.8
14	t	28	ARG	3.8
2	b	488	PRO	3.8
20	r	27	ALA	3.8
18	x	39	ARG	3.8
20	R	21	ARG	3.7
20	r	6	LEU	3.7
13	O	57	LYS	3.7
16	v	12	LEU	3.7
19	z	8	ALA	3.7
2	B	495	PHE	3.7
19	z	41	PHE	3.7

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Mol	Chain	Res	Type	RSRZ
2	b	502	VAL	3.7
2	B	489	GLU	3.7
14	T	28	ARG	3.7
15	U	61	VAL	3.6
4	D	236	ASN	3.6
3	C	144	SER	3.6
20	r	28	VAL	3.6
13	O	59	LYS	3.6
2	b	503	THR	3.6
2	B	505	ARG	3.6
5	E	68	ASP	3.6
20	R	2	ASP	3.5
20	R	3	TRP	3.5
19	z	47	TRP	3.5
2	b	487	SER	3.5
2	b	127	ARG	3.5
18	X	3	ILE	3.5
19	Z	35	ARG	3.5
16	v	17	LYS	3.5
20	r	12	VAL	3.5
13	O	54	GLU	3.4
17	y	45	ASN	3.4
13	o	89	SER	3.4
13	o	54	GLU	3.4
1	A	227	THR	3.4
16	v	14	SER	3.4
20	r	10	LEU	3.4
20	R	30	GLN	3.3
17	Y	25	ILE	3.3
19	Z	60	PHE	3.3
19	z	46	LEU	3.3
2	B	485	GLU	3.3
18	x	37	VAL	3.3
19	z	7	LEU	3.3
1	a	230	THR	3.3
13	o	246	ALA	3.3
16	v	18	THR	3.3
17	y	44	GLY	3.3
4	D	240	ALA	3.3
18	x	4	THR	3.3
1	A	225	ARG	3.3
2	b	125	ASP	3.3

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Mol	Chain	Res	Type	RSRZ
16	v	3	LEU	3.2
9	J	36	LEU	3.2
10	k	18	PHE	3.2
17	y	19	ILE	3.2
19	z	61	VAL	3.2
2	b	490	GLN	3.2
13	o	61	GLN	3.2
14	t	29	ILE	3.2
20	R	14	LEU	3.2
17	y	37	PHE	3.2
13	O	207	ARG	3.2
19	z	36	SER	3.2
2	b	84	THR	3.1
2	b	296	ALA	3.1
19	z	42	LEU	3.1
20	R	8	VAL	3.1
13	o	58	ASN	3.1
3	c	142	GLU	3.1
3	C	28	GLN	3.1
20	r	13	LEU	3.1
5	e	79	PHE	3.1
5	e	81	GLU	3.1
16	v	71	GLY	3.1
17	Y	23	THR	3.1
20	r	7	VAL	3.1
5	E	64	PRO	3.1
19	Z	59	PHE	3.1
17	Y	46	LEU	3.1
20	R	24	LEU	3.1
13	o	4	THR	3.0
19	z	52	LEU	3.0
15	U	73	GLN	3.0
20	R	11	PRO	3.0
18	X	34	ILE	3.0
2	b	496	TYR	3.0
2	B	292	LEU	3.0
19	z	62	VAL	3.0
6	f	13	TYR	3.0
20	R	18	TRP	3.0
1	a	228	THR	3.0
5	e	83	LEU	3.0
5	E	80	LEU	3.0

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Mol	Chain	Res	Type	RSRZ
19	z	9	LEU	3.0
7	h	19	GLY	3.0
17	Y	24	MET	3.0
3	C	30	SER	3.0
19	z	29	SER	3.0
17	Y	40	ALA	3.0
2	B	500	GLY	3.0
3	C	148	GLY	3.0
19	z	35	ARG	3.0
5	e	73	LYS	2.9
2	B	293	ALA	2.9
16	v	2	GLU	2.9
19	Z	3	ILE	2.9
7	h	2	ALA	2.9
13	O	55	GLU	2.9
5	E	61	ARG	2.9
2	b	494	GLY	2.9
2	b	501	ASP	2.9
2	B	294	SER	2.9
2	B	296	ALA	2.9
5	E	2	ALA	2.9
17	Y	38	LEU	2.9
19	Z	61	VAL	2.8
17	y	43	ARG	2.8
20	r	33	LYS	2.8
2	b	295	GLY	2.8
19	z	56	VAL	2.8
13	O	5	LEU	2.8
4	d	226	GLY	2.8
2	B	499	VAL	2.8
19	z	51	VAL	2.8
2	B	479	PHE	2.8
5	e	72	ALA	2.8
20	R	16	ALA	2.8
16	v	15	GLU	2.8
2	b	292	LEU	2.8
3	C	143	TYR	2.8
19	z	38	GLN	2.8
5	E	4	THR	2.8
9	j	40	LEU	2.8
20	R	17	GLY	2.7
1	A	226	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
15	U	77	GLU	2.7
1	a	224	ILE	2.7
3	C	257	PHE	2.7
20	r	8	VAL	2.7
16	v	107	LEU	2.7
2	b	289	GLN	2.7
12	m	31	SER	2.7
3	c	429	SER	2.7
2	B	501	ASP	2.7
1	A	249	VAL	2.6
2	B	502	VAL	2.6
5	e	78	THR	2.6
4	D	237	PRO	2.6
20	r	11	PRO	2.6
5	e	59	GLU	2.6
1	A	243	GLU	2.6
13	O	4	THR	2.6
15	U	62	LEU	2.6
2	b	130	GLU	2.6
2	b	294	SER	2.6
2	b	302	TRP	2.6
10	K	18	PHE	2.6
19	z	28	ALA	2.6
3	c	433	LEU	2.6
16	v	25	GLN	2.6
20	r	18	TRP	2.6
20	R	26	TYR	2.6
2	b	293	ALA	2.5
13	o	37	THR	2.5
3	c	462	GLU	2.5
16	v	11	PRO	2.5
5	E	24	SER	2.5
13	O	38	TYR	2.5
19	Z	42	LEU	2.5
3	C	29	GLU	2.5
19	z	23	VAL	2.5
1	A	12	ASN	2.5
17	Y	42	ARG	2.5
4	d	236	ASN	2.5
20	R	12	VAL	2.5
2	b	485	GLU	2.5
19	z	60	PHE	2.5

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Mol	Chain	Res	Type	RSRZ
20	r	20	VAL	2.5
20	r	35	LEU	2.5
3	C	134	ILE	2.5
20	r	23	ILE	2.5
20	R	29	LYS	2.4
2	b	492	GLU	2.4
13	o	207	ARG	2.4
2	B	486	LEU	2.4
11	l	3	PRO	2.4
20	r	21	ARG	2.4
16	v	19	ILE	2.4
19	Z	28	ALA	2.4
5	e	82	GLN	2.4
17	y	46	LEU	2.4
12	m	30	GLU	2.4
19	z	37	LYS	2.3
16	V	26	TYR	2.3
20	R	9	LEU	2.3
17	Y	41	VAL	2.3
5	E	63	ILE	2.3
13	O	30	TYR	2.3
4	d	240	ALA	2.3
19	Z	26	ALA	2.3
13	o	21	THR	2.3
7	h	6	TRP	2.3
4	D	13	GLY	2.3
19	z	10	ALA	2.3
1	a	13	LEU	2.3
20	R	5	VAL	2.2
20	r	22	ASN	2.2
3	c	144	SER	2.2
7	h	4	ARG	2.2
9	J	40	LEU	2.2
20	r	29	LYS	2.2
17	Y	21	GLN	2.2
18	x	33	GLN	2.2
2	B	435	GLU	2.2
4	d	234	ALA	2.2
19	z	12	LEU	2.2
3	c	149	TYR	2.2
5	E	74	GLN	2.2
16	v	16	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
16	v	90	GLU	2.2
13	O	87	VAL	2.2
9	J	8	ILE	2.2
4	D	239	GLN	2.2
7	h	18	TYR	2.2
2	B	481	GLY	2.2
7	H	20	LYS	2.2
13	O	245	PRO	2.2
1	a	235	TYR	2.2
9	J	7	ARG	2.2
20	R	33	LYS	2.2
9	J	9	PRO	2.2
15	U	65	PRO	2.2
5	e	77	GLU	2.2
19	Z	18	VAL	2.2
1	A	164	GLY	2.2
4	d	227	GLU	2.2
16	v	23	GLU	2.2
3	c	432	VAL	2.1
2	b	85	GLY	2.1
2	B	126	PRO	2.1
11	L	8	GLN	2.1
20	r	32	GLN	2.1
1	A	235	TYR	2.1
2	B	483	ASP	2.1
2	b	124	ARG	2.1
4	D	121	GLY	2.1
16	v	62	ALA	2.1
19	z	26	ALA	2.1
16	v	65	PRO	2.1
19	Z	38	GLN	2.1
2	B	127	ARG	2.1
2	b	500	GLY	2.1
4	D	238	THR	2.1
13	o	65	PHE	2.1
3	C	424	SER	2.1
13	o	35	SER	2.1
12	m	32	GLN	2.1
2	b	408	GLY	2.1
17	y	34	MET	2.1
5	E	77	GLU	2.1
2	b	284	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
3	C	27	ASP	2.1
3	c	276	LEU	2.1
5	E	58	GLN	2.1
1	A	242	GLU	2.1
5	e	71	GLU	2.1
3	C	427	ALA	2.1
3	c	101	PRO	2.1
5	E	15	THR	2.1
19	Z	25	VAL	2.1
19	z	5	PHE	2.1
7	h	25	TRP	2.1
7	h	56	ASP	2.0
3	c	279	LEU	2.0
4	D	227	GLU	2.0
13	O	36	GLN	2.0
13	o	84	GLU	2.0
18	X	33	GLN	2.0
15	U	76	ARG	2.0
5	E	21	VAL	2.0
16	v	113	VAL	2.0
16	v	78	ASN	2.0
7	H	26	GLY	2.0
13	O	136	ILE	2.0
13	o	243	ILE	2.0
15	U	64	ILE	2.0
2	B	494	GLY	2.0
4	d	103	ARG	2.0
17	y	42	ARG	2.0
20	R	10	LEU	2.0
5	E	75	GLN	2.0

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

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
28	SQD	L	103	54/54	0.72	0.28	34,53,92,102	0
30	SO4	u	202	5/5	0.75	0.23	64,73,90,96	0
23	LMG	C	519	51/55	0.77	0.26	48,64,79,84	0
27	PL9	a	612	55/55	0.77	0.29	48,64,76,81	0
28	SQD	L	101	54/54	0.81	0.23	34,54,89,94	0
27	PL9	A	610	55/55	0.81	0.26	34,52,63,70	0
26	BCR	K	101	40/40	0.81	0.22	51,61,70,73	0
23	LMG	a	603	51/55	0.82	0.21	37,52,70,80	0
23	LMG	B	620	51/55	0.82	0.25	27,50,57,64	0
26	BCR	c	521	40/40	0.82	0.23	43,53,62,66	0
23	LMG	A	612	51/55	0.82	0.25	38,52,61,63	0
32	UNL	D	410	15/-	0.82	0.21	36,44,67,68	0
32	UNL	b	625	16/-	0.82	0.18	37,43,48,49	0
23	LMG	A	603	51/55	0.83	0.20	36,49,64,72	0
23	LMG	a	614	51/55	0.83	0.23	34,50,68,75	0
29	LHG	E	101	42/49	0.83	0.23	44,67,78,83	0
23	LMG	b	624	51/55	0.84	0.27	43,59,69,72	0
32	UNL	J	101	11/-	0.84	0.25	48,58,64,67	0
32	UNL	B	626	9/-	0.84	0.27	35,40,44,47	0
32	UNL	i	101	16/-	0.84	0.23	33,42,48,48	0
28	SQD	F	101	43/54	0.85	0.25	46,63,76,85	0
32	UNL	M	101	10/-	0.85	0.22	45,49,60,62	0
23	LMG	C	521	51/55	0.85	0.27	38,51,63,67	0
29	LHG	a	616	42/49	0.85	0.23	53,71,80,87	0
32	UNL	x	101	16/-	0.85	0.18	31,42,52,54	0
32	UNL	B	623	13/-	0.86	0.19	36,40,48,51	0
23	LMG	c	518	51/55	0.86	0.23	38,58,76,80	0
26	BCR	d	404	40/40	0.86	0.22	38,50,62,67	0
26	BCR	k	102	40/40	0.86	0.19	48,59,65,65	0
26	BCR	z	101	40/40	0.86	0.25	49,59,63,67	0
32	UNL	T	102	15/-	0.86	0.24	36,46,51,51	0
32	UNL	T	103	12/-	0.86	0.22	35,42,49,49	0
32	UNL	b	621	10/-	0.86	0.20	32,41,44,46	0
32	UNL	b	622	12/-	0.86	0.23	37,47,51,51	0
25	CLA	C	512	65/65	0.86	0.23	45,56,66,71	0
32	UNL	d	409	15/-	0.86	0.25	39,45,52,53	0
23	LMG	b	620	51/55	0.86	0.23	31,44,58,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	UNL	j	101	15/-	0.86	0.20	43,53,57,59	0
32	UNL	m	101	10/-	0.86	0.21	44,53,58,59	0
32	UNL	B	622	8/-	0.86	0.33	38,42,45,46	0
28	SQD	f	101	43/54	0.87	0.33	55,77,85,88	0
25	CLA	b	601	65/65	0.87	0.24	39,59,77,84	0
26	BCR	h	101	40/40	0.87	0.18	34,44,52,53	0
26	BCR	C	514	40/40	0.87	0.23	50,58,65,66	0
32	UNL	m	102	15/-	0.87	0.19	34,43,51,52	0
32	UNL	t	101	15/-	0.87	0.21	31,49,57,57	0
28	SQD	a	613	54/54	0.87	0.21	37,65,73,77	0
26	BCR	t	102	40/40	0.88	0.22	28,39,45,49	0
23	LMG	B	624	51/55	0.88	0.22	41,50,60,66	0
26	BCR	D	406	40/40	0.88	0.21	28,45,64,66	0
32	UNL	b	623	13/-	0.88	0.17	37,44,53,54	0
26	BCR	H	101	40/40	0.88	0.17	32,37,53,54	0
32	UNL	c	519	15/-	0.88	0.18	40,46,51,53	0
27	PL9	d	405	55/55	0.88	0.20	29,37,50,55	0
25	CLA	C	513	65/65	0.88	0.20	51,62,77,82	0
32	UNL	B	627	12/-	0.88	0.24	33,39,45,50	0
23	LMG	c	520	51/55	0.88	0.30	41,54,74,79	0
25	CLA	c	502	65/65	0.88	0.24	31,41,49,55	0
25	CLA	c	513	65/65	0.88	0.24	45,60,76,79	0
26	BCR	B	619	40/40	0.88	0.17	33,39,46,50	0
33	DGD	C	517	62/66	0.88	0.21	36,50,69,82	0
33	DGD	c	516	62/66	0.88	0.23	32,46,78,87	0
28	SQD	A	611	54/54	0.89	0.20	32,57,74,79	0
25	CLA	B	601	65/65	0.89	0.16	36,49,72,80	0
25	CLA	c	503	65/65	0.89	0.20	33,43,50,57	0
32	UNL	b	626	9/-	0.89	0.26	32,45,53,56	0
32	UNL	B	625	16/-	0.89	0.15	37,42,49,50	0
26	BCR	T	101	40/40	0.89	0.21	30,41,48,50	0
33	DGD	C	518	62/66	0.89	0.20	30,46,63,70	0
30	SO4	V	202	5/5	0.89	0.55	71,72,81,81	0
25	CLA	B	609	65/65	0.90	0.15	28,36,43,52	0
25	CLA	C	502	65/65	0.90	0.20	35,43,48,50	0
25	CLA	c	511	65/65	0.90	0.15	39,54,62,66	0
25	CLA	C	511	65/65	0.90	0.18	42,58,67,70	0
30	SO4	O	301	5/5	0.90	0.31	51,67,76,82	0
26	BCR	A	609	40/40	0.90	0.17	24,34,39,40	0
32	UNL	I	101	14/-	0.90	0.15	32,41,48,49	0
25	CLA	b	616	65/65	0.90	0.20	28,42,62,69	0
33	DGD	H	102	62/66	0.90	0.23	27,36,47,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
31	BCT	a	618	4/4	0.90	0.13	36,38,43,44	0
33	DGD	h	102	62/66	0.90	0.19	35,44,51,56	0
30	SO4	a	617	5/5	0.91	0.20	52,57,70,79	0
25	CLA	C	510	65/65	0.91	0.22	36,46,58,68	0
22	FE	a	602	1/1	0.91	0.08	37,37,37,37	0
32	UNL	B	621	10/-	0.91	0.19	34,41,45,46	0
25	CLA	B	616	65/65	0.91	0.18	26,36,78,87	0
26	BCR	a	611	40/40	0.91	0.15	26,35,41,44	0
26	BCR	b	617	40/40	0.91	0.21	31,41,48,51	0
25	CLA	c	512	65/65	0.91	0.19	44,57,65,68	0
25	CLA	B	606	65/65	0.91	0.17	25,33,57,62	0
32	UNL	C	520	15/-	0.91	0.14	31,42,47,47	0
25	CLA	D	405	65/65	0.91	0.19	24,35,63,68	0
29	LHG	A	614	49/49	0.91	0.20	29,48,70,78	0
25	CLA	C	503	65/65	0.91	0.17	32,44,49,50	0
29	LHG	a	615	49/49	0.91	0.19	32,42,53,62	0
25	CLA	b	604	65/65	0.91	0.23	23,34,50,58	0
26	BCR	C	522	40/40	0.91	0.19	45,55,63,64	0
25	CLA	C	508	65/65	0.91	0.21	36,43,79,88	0
29	LHG	l	101	49/49	0.92	0.17	28,39,50,53	0
27	PL9	D	407	55/55	0.92	0.19	21,37,44,47	0
25	CLA	c	505	65/65	0.92	0.16	32,40,48,51	0
25	CLA	c	508	65/65	0.92	0.21	35,44,73,77	0
25	CLA	a	608	65/65	0.92	0.18	28,36,75,85	0
23	LMG	d	408	51/55	0.92	0.17	35,49,72,80	0
25	CLA	C	504	65/65	0.92	0.20	35,49,67,75	0
25	CLA	d	403	65/65	0.92	0.17	28,39,77,85	0
25	CLA	b	606	65/65	0.92	0.15	24,35,55,62	0
26	BCR	B	617	40/40	0.92	0.17	32,38,44,47	0
29	LHG	A	613	49/49	0.92	0.18	21,37,47,56	0
25	CLA	b	614	65/65	0.92	0.16	25,38,57,65	0
25	CLA	C	507	65/65	0.92	0.16	26,41,51,57	0
29	LHG	L	102	49/49	0.92	0.17	27,39,46,50	0
25	CLA	B	614	65/65	0.92	0.17	27,36,57,61	0
25	CLA	C	509	65/65	0.92	0.17	35,43,55,60	0
29	LHG	d	406	49/49	0.92	0.16	25,41,48,53	0
32	UNL	M	102	16/-	0.92	0.15	28,43,53,56	0
29	LHG	d	407	49/49	0.92	0.22	38,50,68,76	0
26	BCR	b	619	40/40	0.93	0.16	35,44,50,54	0
26	BCR	c	514	40/40	0.93	0.16	26,42,50,53	0
25	CLA	c	510	65/65	0.93	0.25	41,46,53,57	0
23	LMG	D	409	51/55	0.93	0.17	31,48,74,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	B	604	65/65	0.93	0.20	20,32,50,65	0
25	CLA	b	613	65/65	0.93	0.23	21,29,52,58	0
30	SO4	A	615	5/5	0.93	0.29	49,50,62,64	0
25	CLA	C	505	65/65	0.93	0.17	29,39,49,57	0
25	CLA	b	615	65/65	0.93	0.14	31,39,49,52	0
25	CLA	C	506	65/65	0.93	0.13	32,41,67,71	0
26	BCR	B	618	40/40	0.93	0.18	23,35,48,50	0
25	CLA	c	501	65/65	0.93	0.18	27,39,45,54	0
25	CLA	B	615	65/65	0.93	0.15	28,36,47,55	0
32	UNL	k	101	9/-	0.93	0.27	44,52,56,56	0
26	BCR	C	515	40/40	0.93	0.16	30,40,50,54	0
25	CLA	a	607	65/65	0.93	0.16	22,30,37,45	0
25	CLA	c	504	65/65	0.93	0.23	35,42,61,74	0
24	CL	a	604	1/1	0.93	0.22	40,40,40,40	0
25	CLA	c	506	65/65	0.93	0.17	35,44,66,73	0
25	CLA	c	507	65/65	0.93	0.17	31,41,50,52	0
25	CLA	B	608	65/65	0.93	0.19	21,32,41,47	0
25	CLA	c	509	65/65	0.93	0.20	32,45,56,61	0
33	DGD	c	517	62/66	0.93	0.17	33,45,66,77	0
26	BCR	b	618	40/40	0.93	0.21	27,36,41,48	0
34	PHO	d	402	64/64	0.93	0.17	29,40,48,54	0
35	HEM	E	102	43/43	0.93	0.17	42,53,68,74	0
25	CLA	B	605	65/65	0.94	0.17	21,30,37,42	0
25	CLA	B	612	65/65	0.94	0.18	25,31,40,44	0
25	CLA	B	602	65/65	0.94	0.16	21,34,47,50	0
25	CLA	b	608	65/65	0.94	0.20	28,40,49,56	0
25	CLA	b	609	65/65	0.94	0.15	28,41,55,60	0
30	SO4	O	302	5/5	0.94	0.31	65,66,78,80	0
30	SO4	U	201	5/5	0.94	0.14	47,60,63,71	5
33	DGD	c	515	62/66	0.94	0.18	26,37,70,73	0
25	CLA	b	611	65/65	0.94	0.17	23,36,45,48	0
25	CLA	b	612	65/65	0.94	0.21	24,34,43,48	0
30	SO4	o	301	5/5	0.94	0.29	62,68,71,91	0
34	PHO	D	402	64/64	0.94	0.20	24,33,41,49	0
34	PHO	a	609	64/64	0.94	0.15	24,30,39,42	0
25	CLA	A	607	65/65	0.94	0.19	23,36,71,74	0
25	CLA	a	610	65/65	0.94	0.16	23,30,65,76	0
35	HEM	e	101	43/43	0.94	0.16	49,57,69,72	0
25	CLA	b	610	65/65	0.95	0.17	23,35,45,48	0
25	CLA	a	606	65/65	0.95	0.15	19,30,40,48	0
25	CLA	C	501	65/65	0.95	0.15	21,34,46,51	0
25	CLA	B	611	65/65	0.95	0.17	19,27,39,42	0

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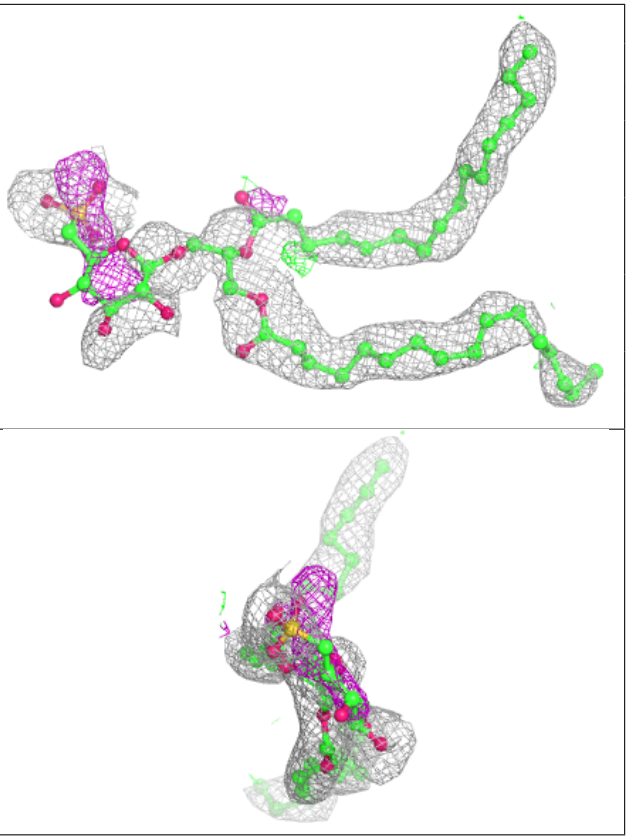
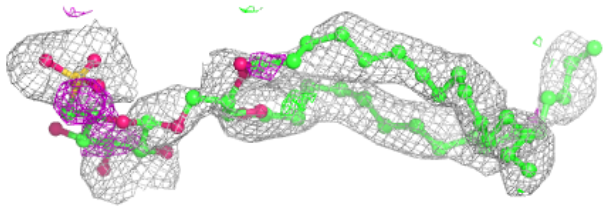
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	B	603	65/65	0.95	0.16	21,31,48,53	0
25	CLA	B	613	65/65	0.95	0.18	21,30,50,60	0
25	CLA	d	401	65/65	0.95	0.15	20,30,45,53	0
33	DGD	C	516	62/66	0.95	0.18	25,35,67,72	0
25	CLA	b	602	65/65	0.95	0.15	29,41,55,60	0
25	CLA	b	603	65/65	0.95	0.18	24,36,50,60	0
25	CLA	A	606	65/65	0.95	0.16	19,29,35,47	0
30	SO4	d	410	5/5	0.95	0.18	73,73,83,84	0
32	UNL	X	101	10/-	0.95	0.22	36,38,40,40	0
25	CLA	b	605	65/65	0.95	0.18	24,33,42,47	0
30	SO4	u	201	5/5	0.95	0.19	63,66,73,73	0
25	CLA	A	608	65/65	0.95	0.17	14,27,68,74	0
29	LHG	D	408	49/49	0.95	0.15	20,36,45,51	0
25	CLA	b	607	65/65	0.95	0.21	22,29,42,44	0
25	CLA	D	403	65/65	0.95	0.14	23,30,39,49	0
25	CLA	B	610	65/65	0.95	0.16	20,29,37,40	0
36	HEC	v	201	43/43	0.95	0.15	29,39,47,55	0
25	CLA	D	404	65/65	0.96	0.15	18,28,40,43	0
34	PHO	D	401	64/64	0.96	0.16	24,30,36,39	0
25	CLA	B	607	65/65	0.96	0.16	19,28,53,54	0
24	CL	A	604	1/1	0.96	0.15	35,35,35,35	0
22	FE	A	602	1/1	0.97	0.06	34,34,34,34	0
21	OEX	a	601	10/10	0.97	0.11	33,37,46,51	0
31	BCT	A	616	4/4	0.97	0.11	28,33,33,38	0
36	HEC	V	201	43/43	0.97	0.15	31,38,46,48	0
24	CL	a	605	1/1	0.97	0.17	38,38,38,38	1
21	OEX	A	601	10/10	0.98	0.13	34,40,52,57	0
24	CL	A	605	1/1	0.99	0.18	26,26,26,26	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 SQD L 103:

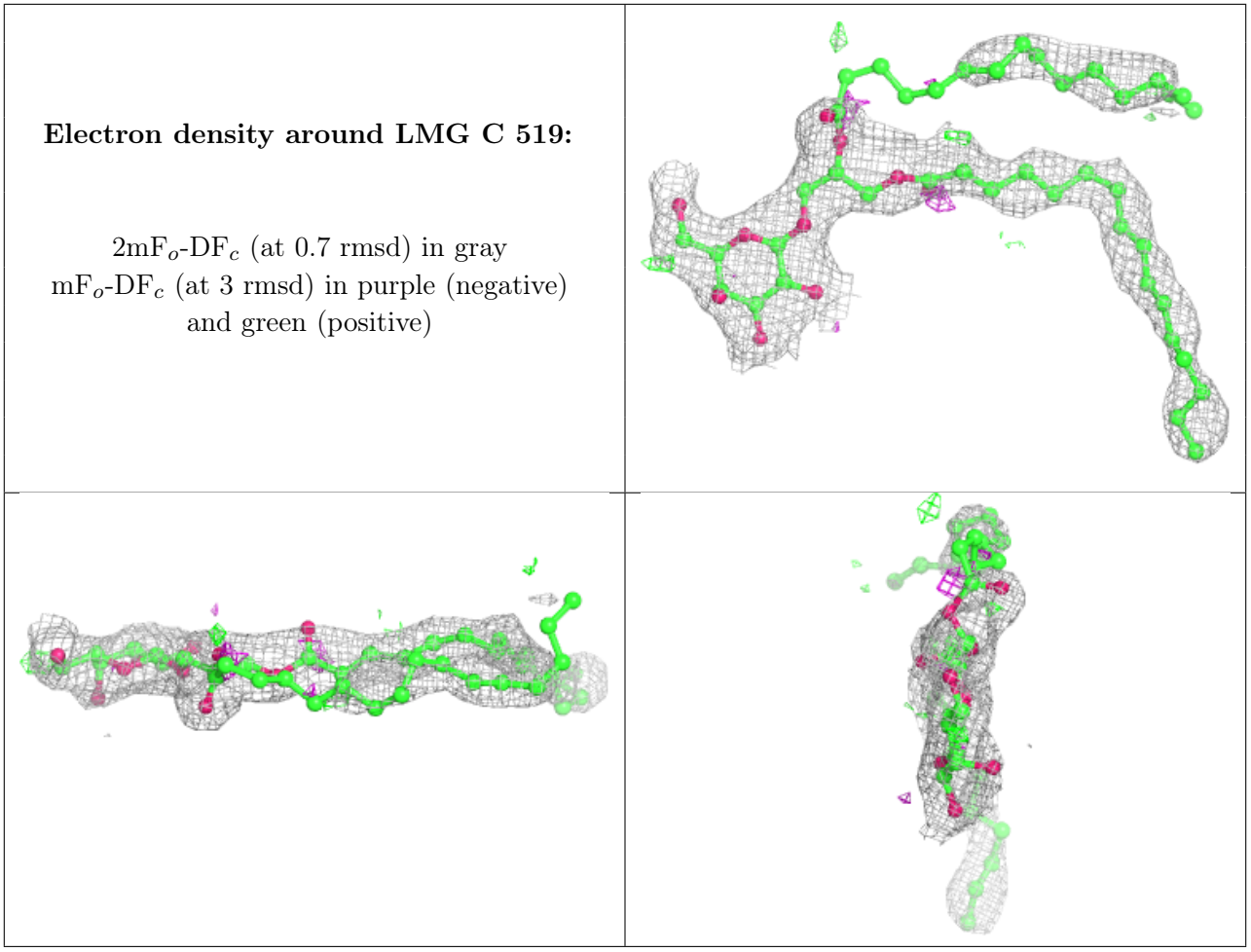
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





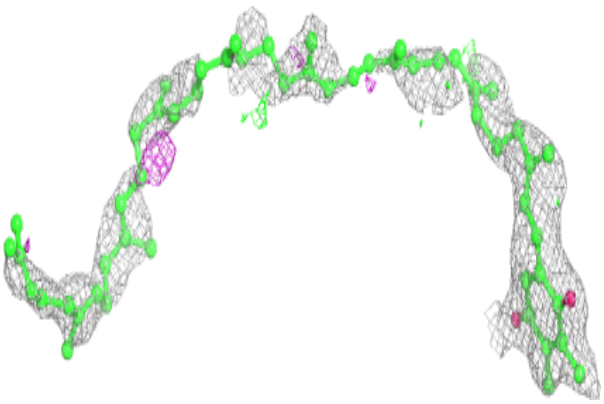
Electron density around LMG C 519:

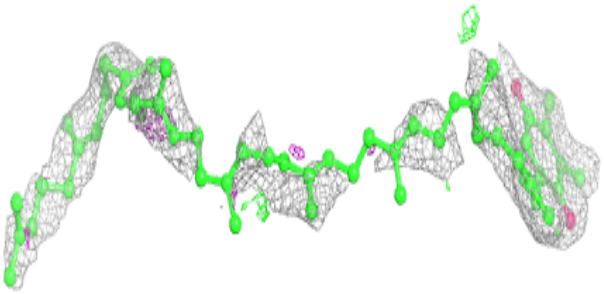
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

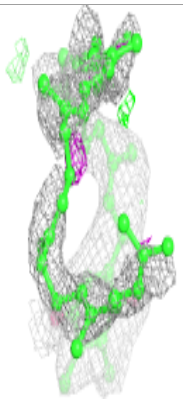


Electron density around PL9 a 612:

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

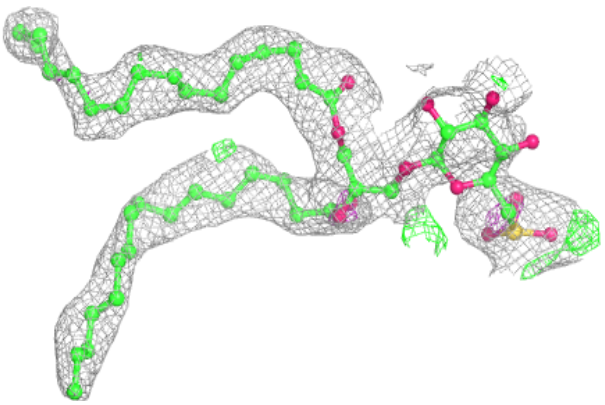


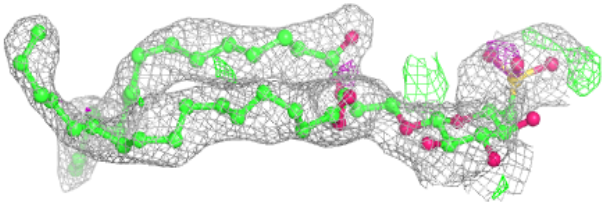


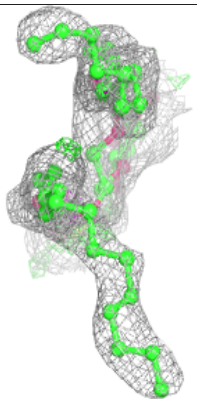


Electron density around SQD L 101:

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

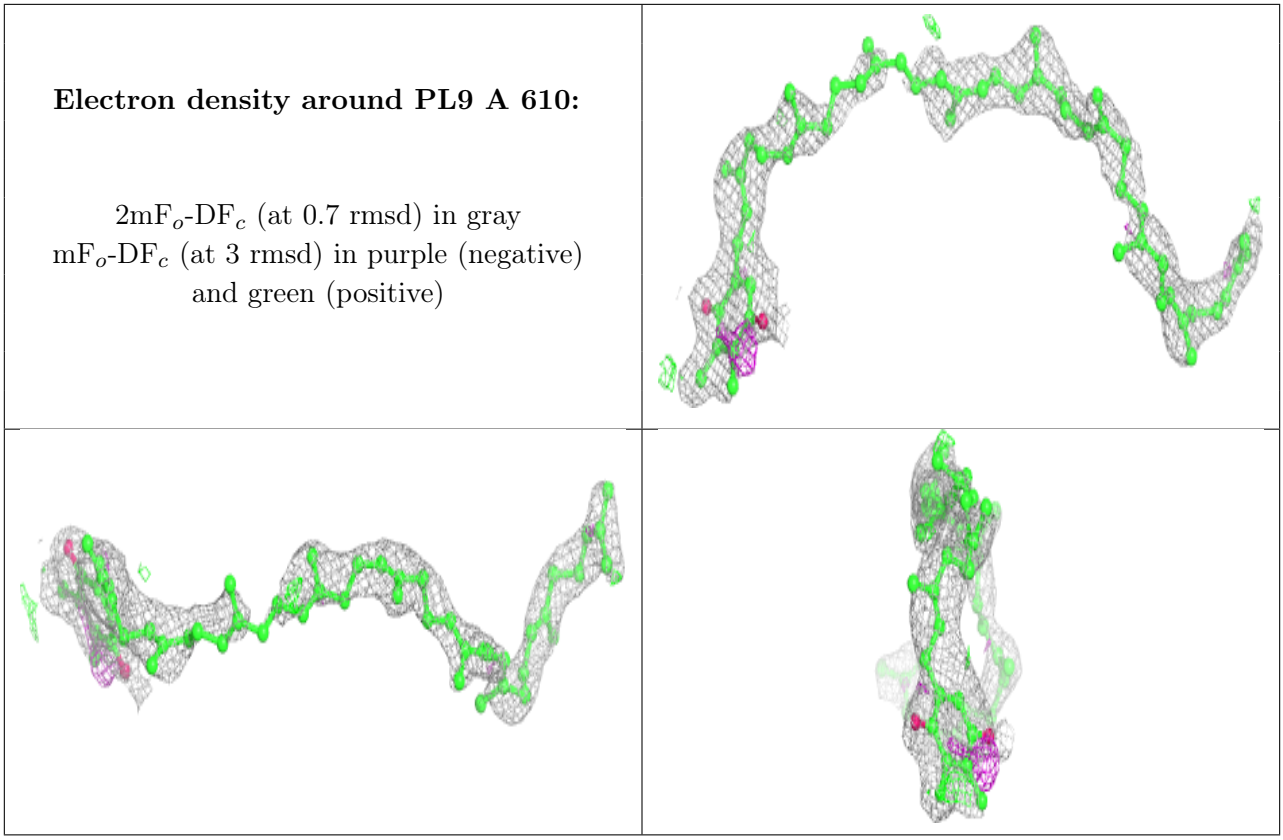






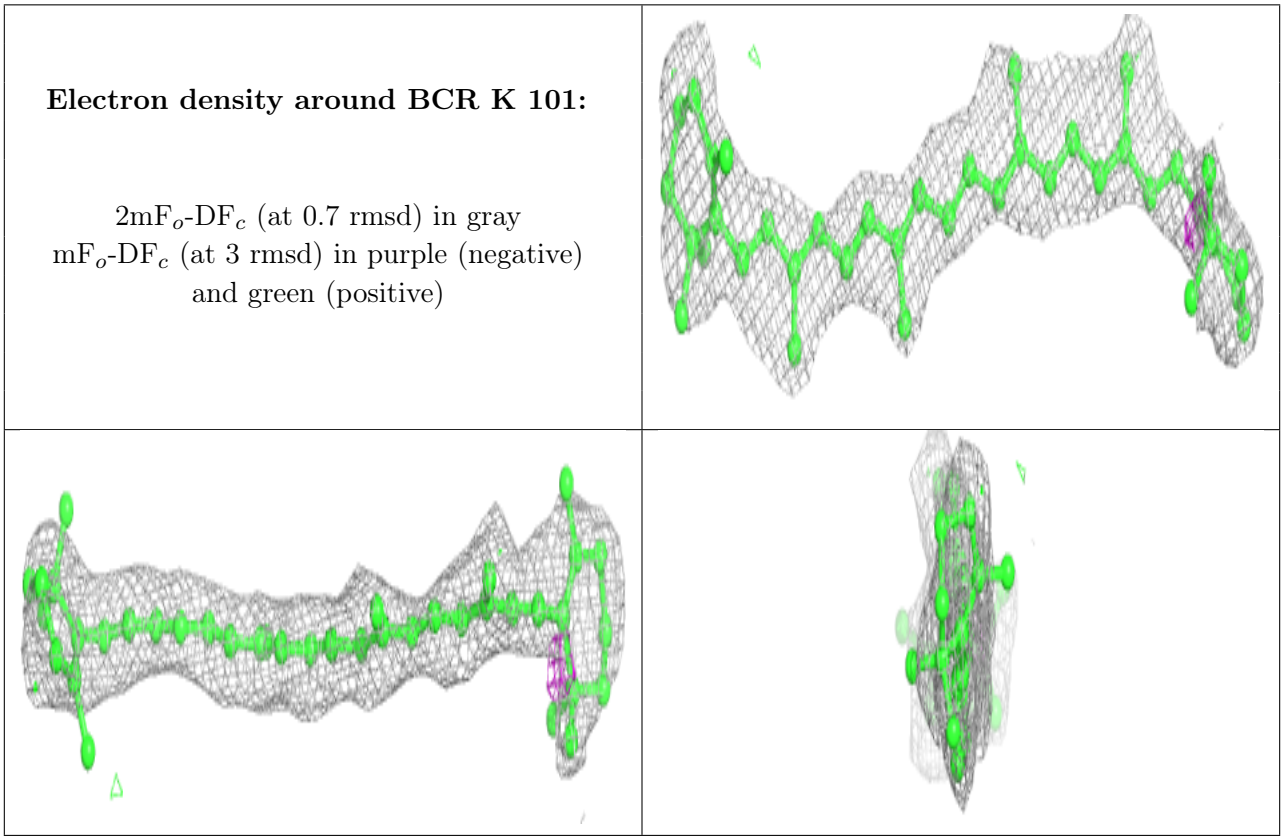
Electron density around PL9 A 610:

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



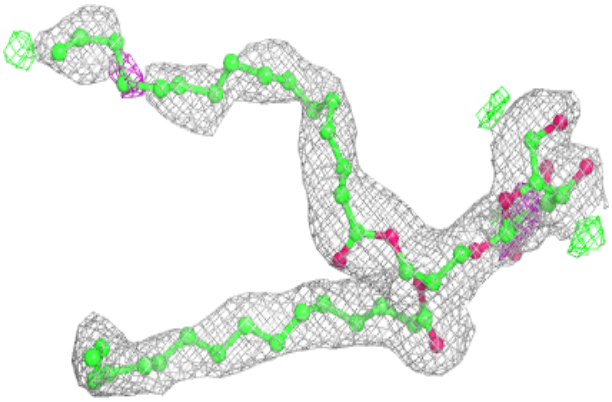
Electron density around BCR K 101:

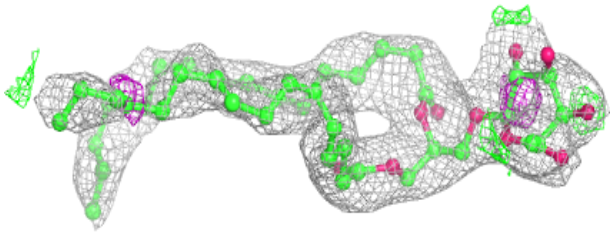
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

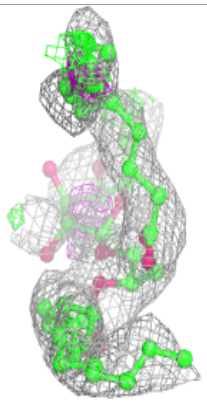


Electron density around LMG a 603:

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

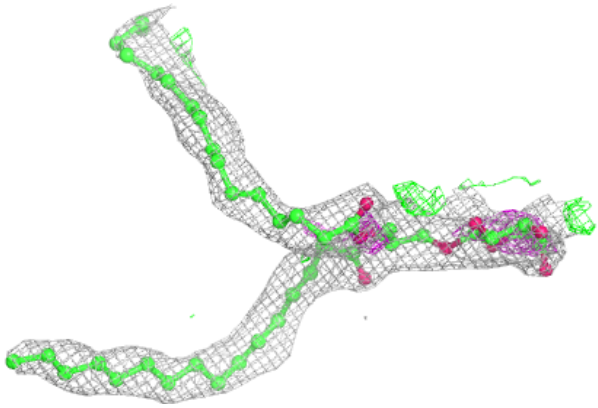


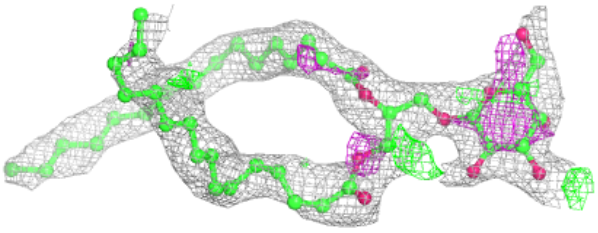


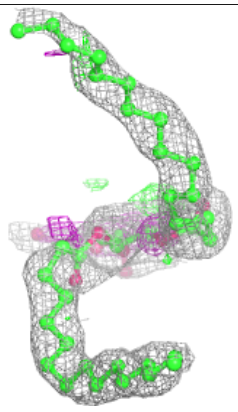


Electron density around LMG B 620:

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

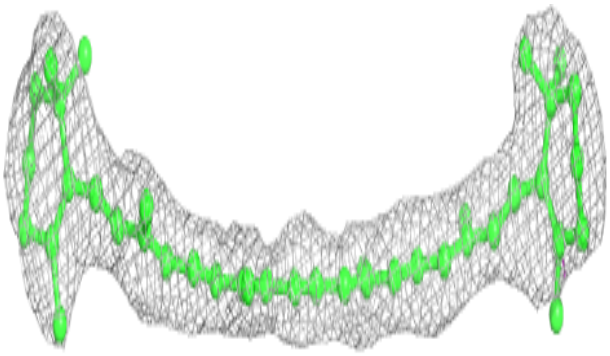


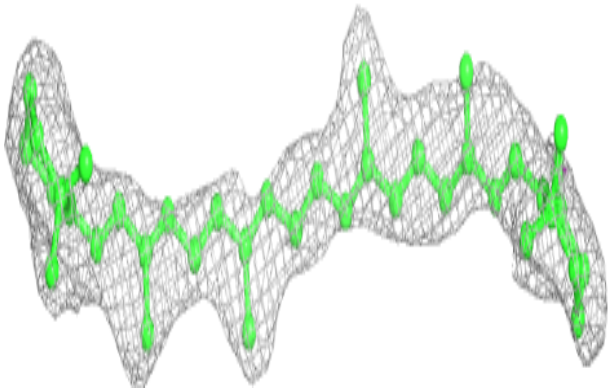


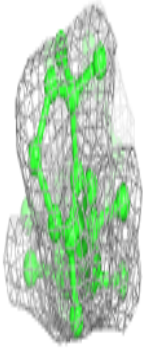


Electron density around BCR c 521:

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

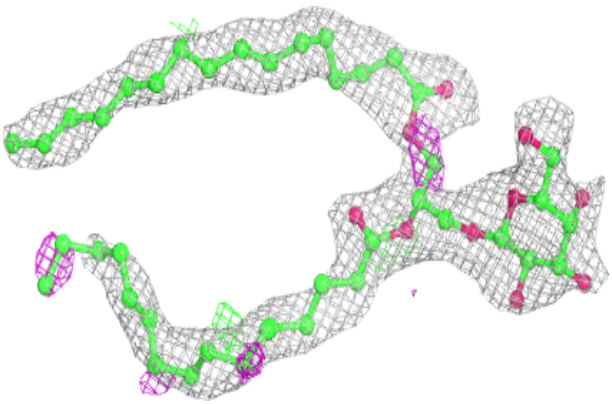


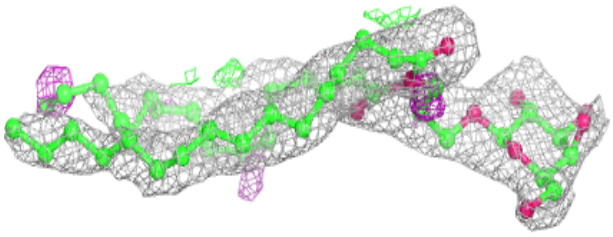


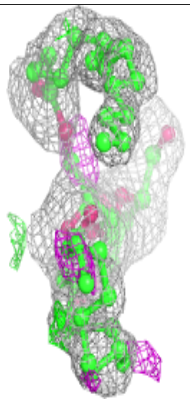


Electron density around LMG A 612:

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

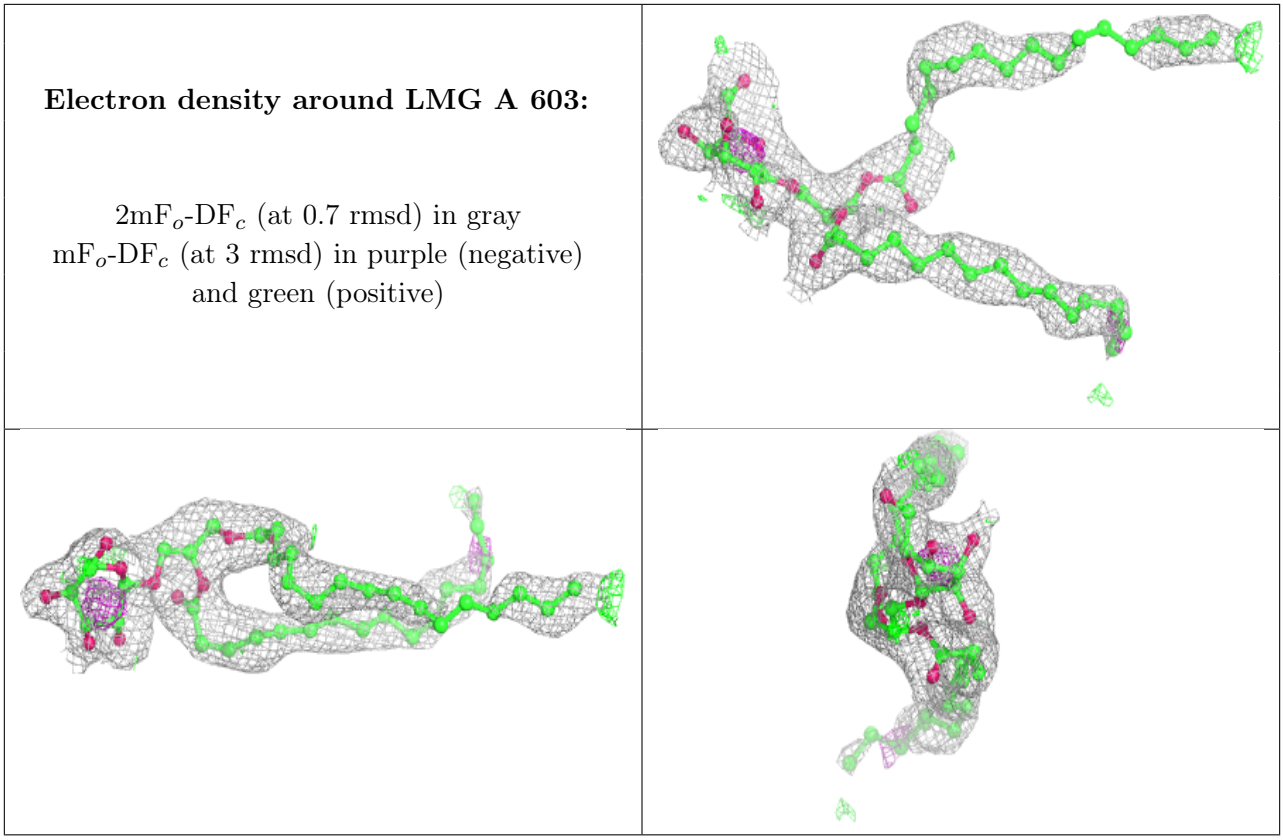






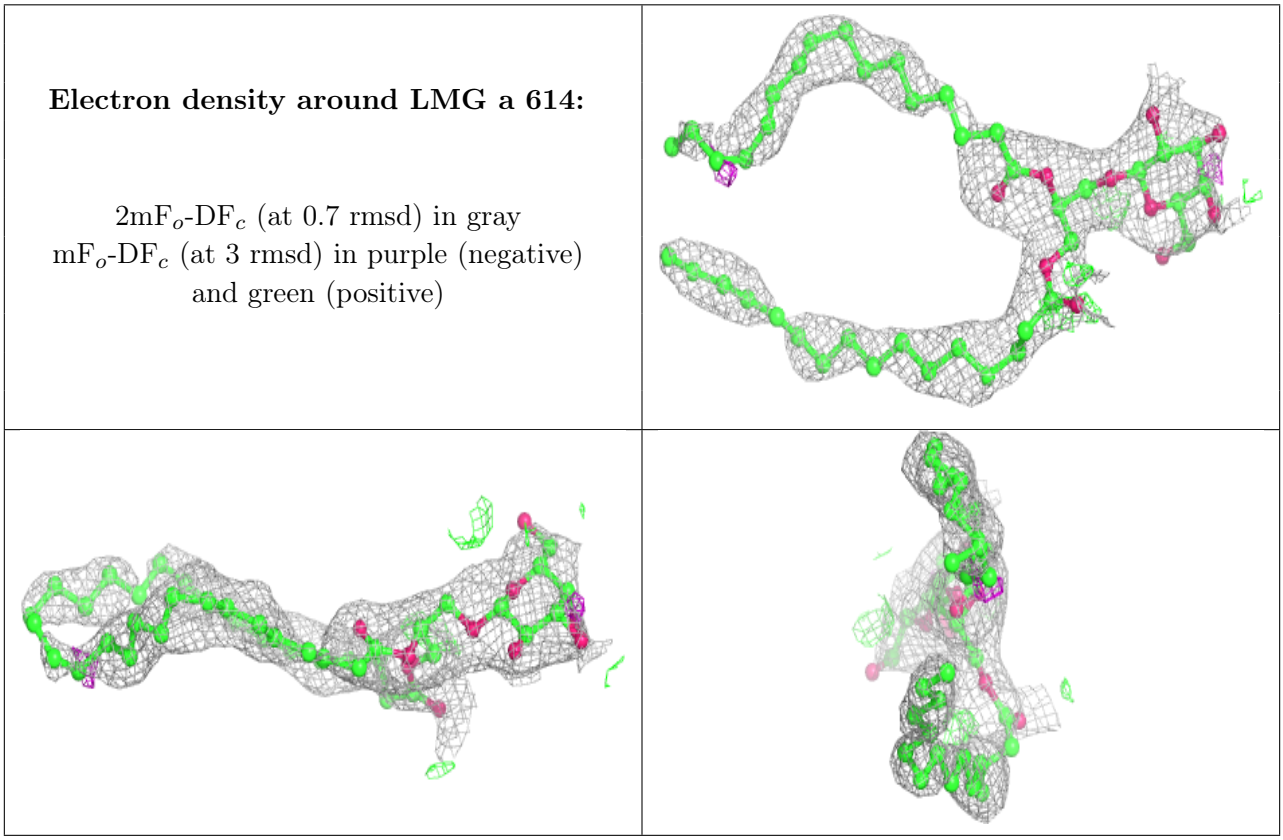
Electron density around LMG A 603:

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



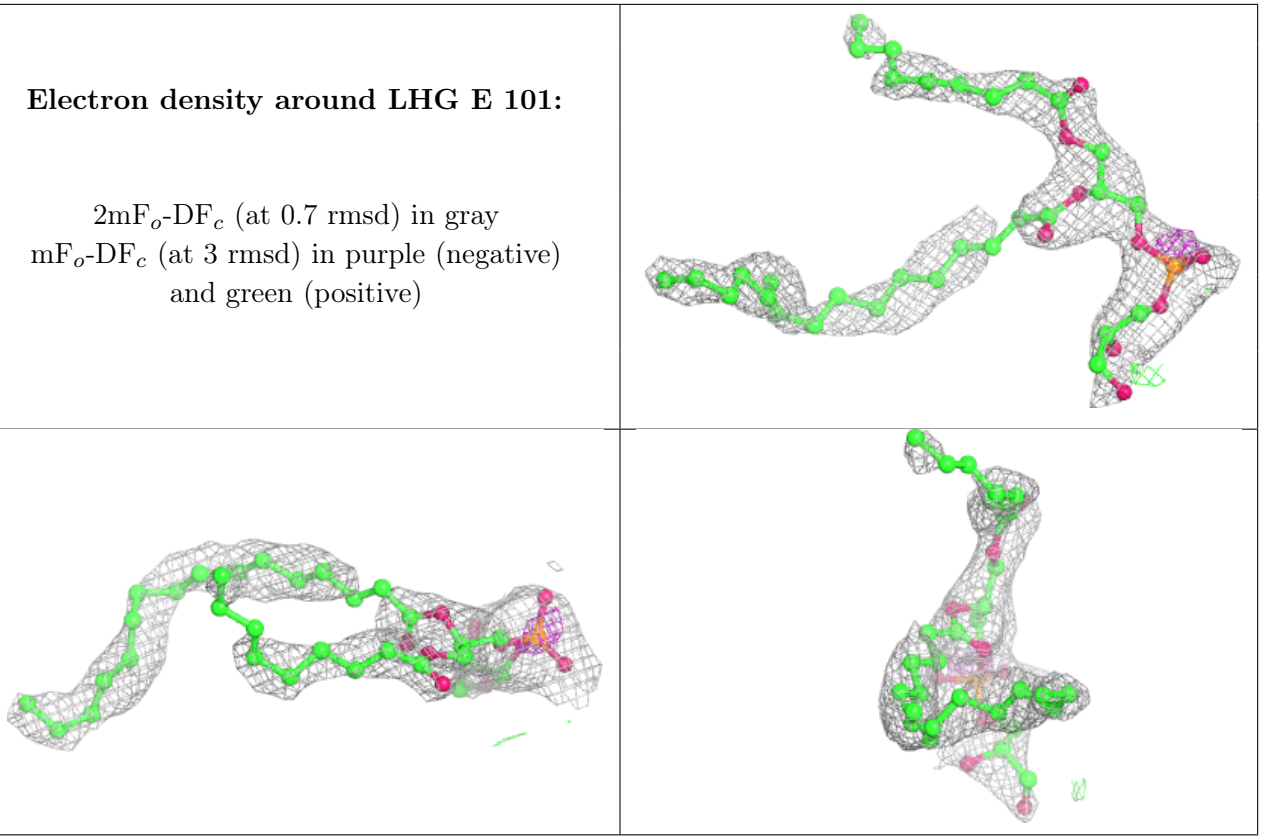
Electron density around LMG a 614:

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



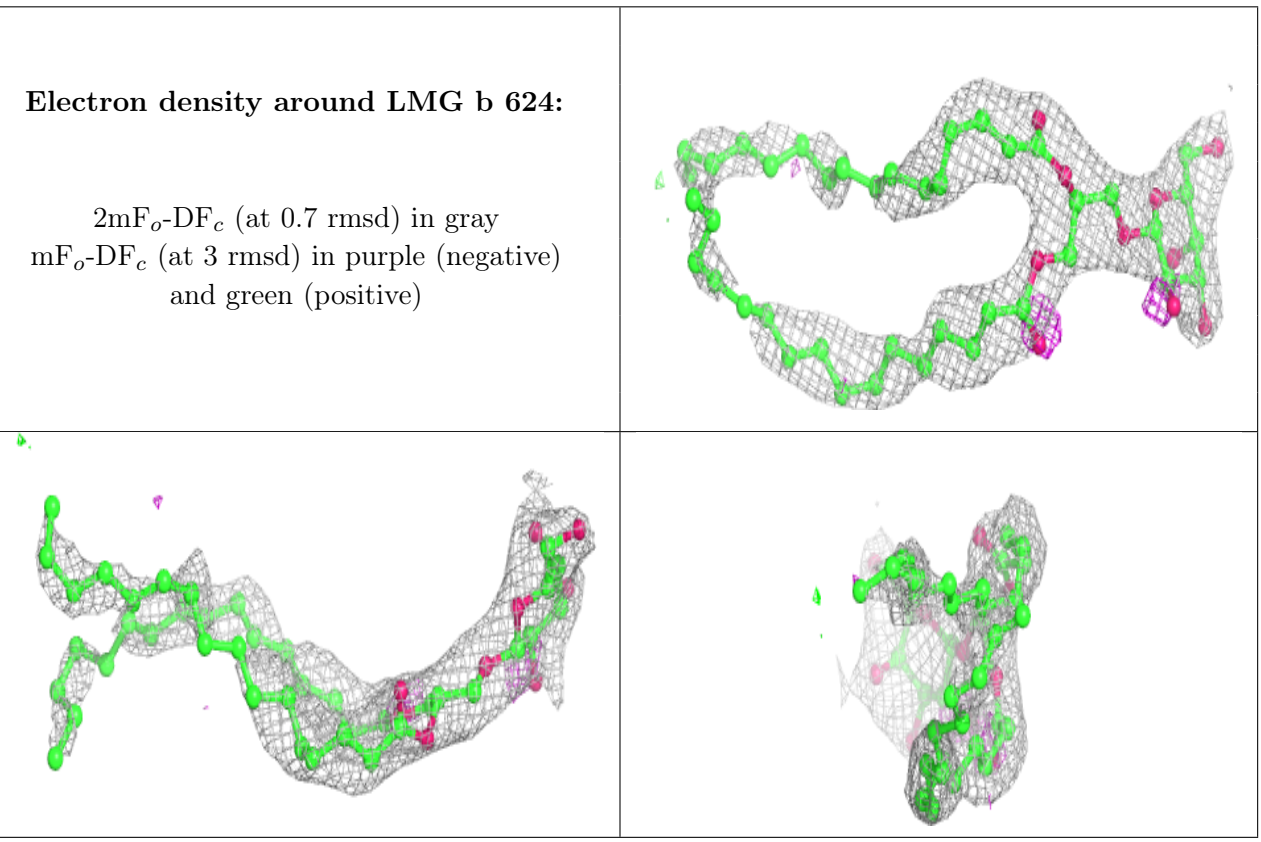
Electron density around LHG E 101:

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



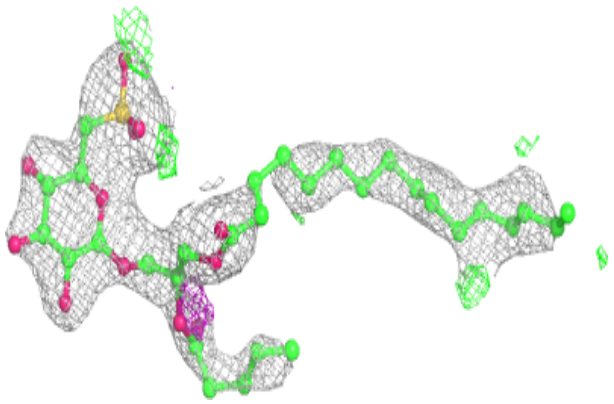
Electron density around LMG b 624:

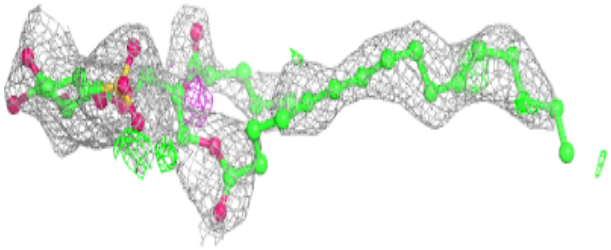
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

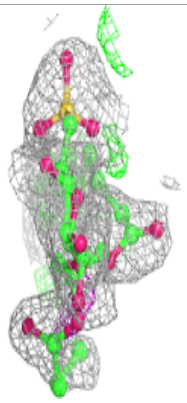


Electron density around SQD F 101:

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

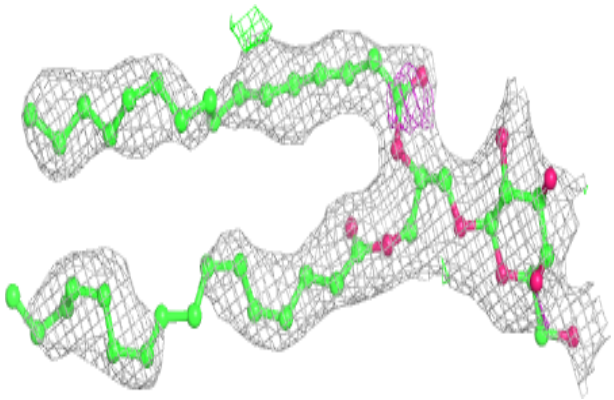


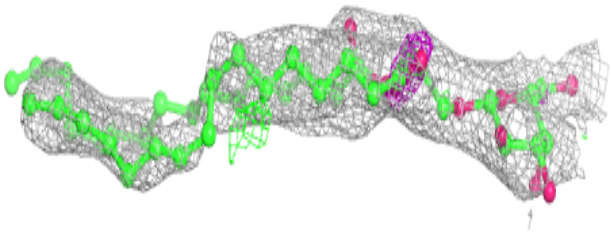


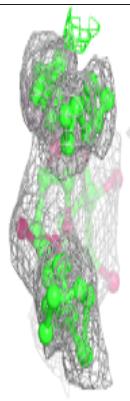


Electron density around LMG C 521:

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

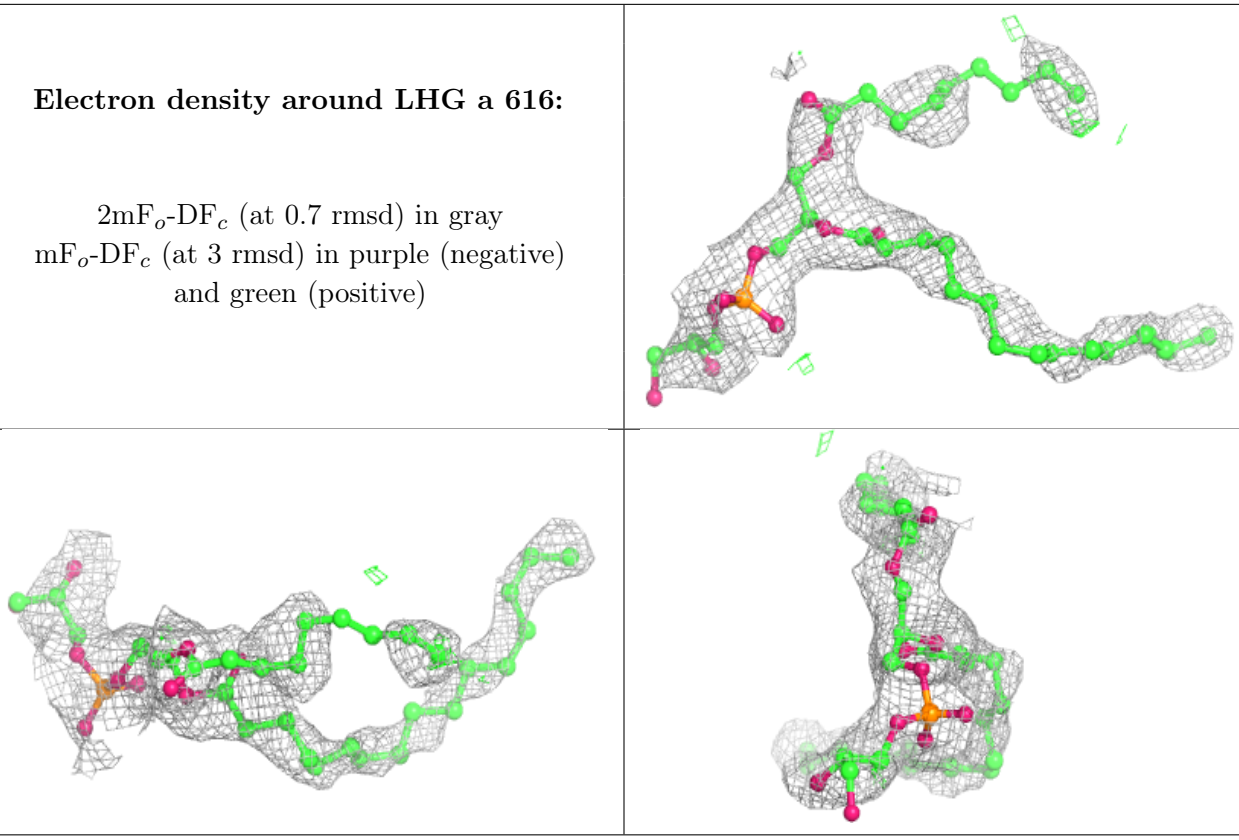






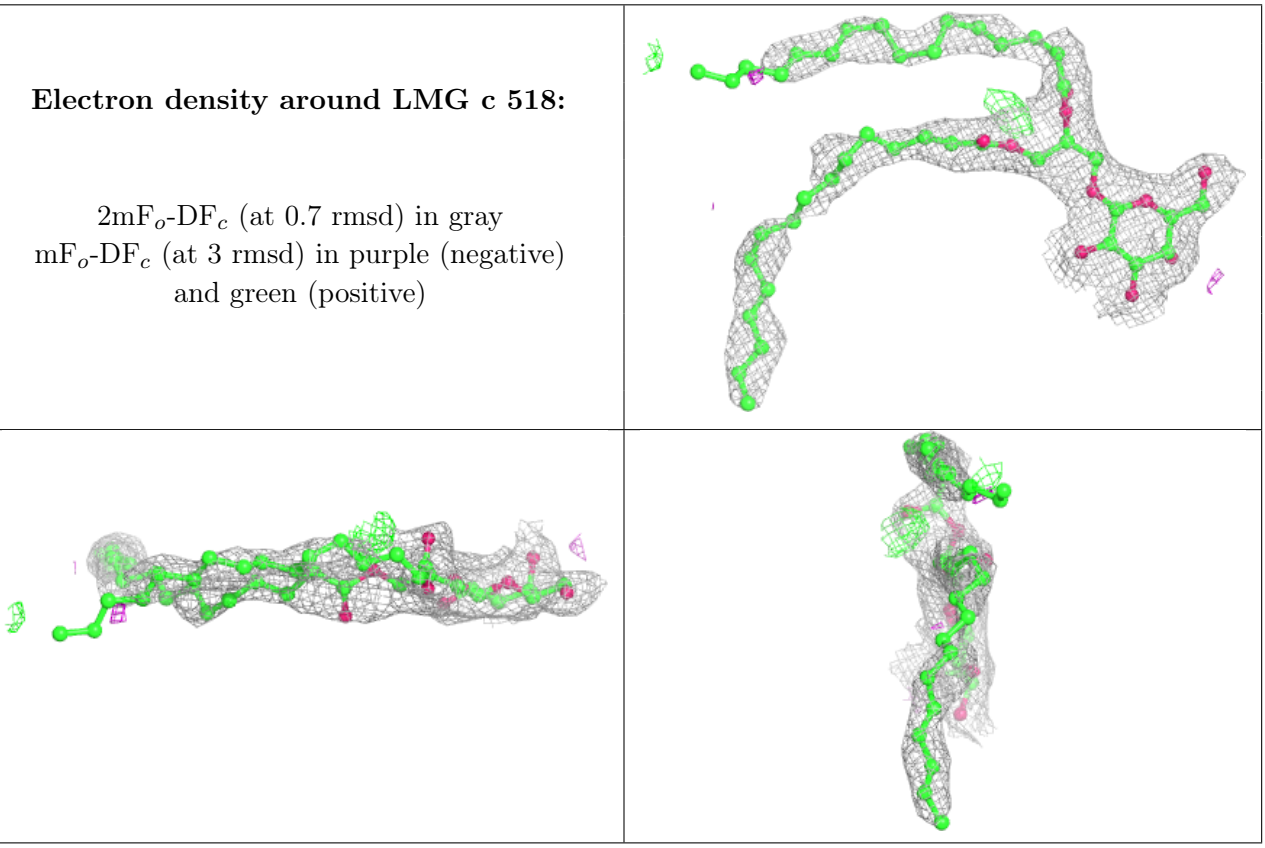
Electron density around LHG a 616:

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



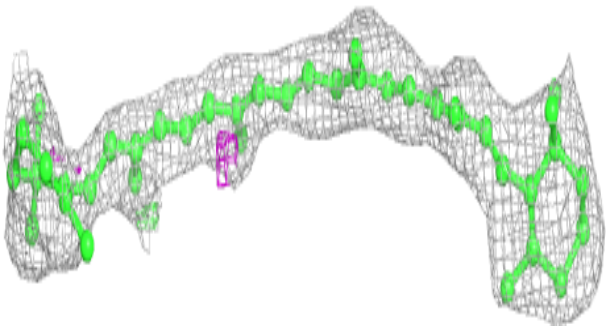
Electron density around LMG c 518:

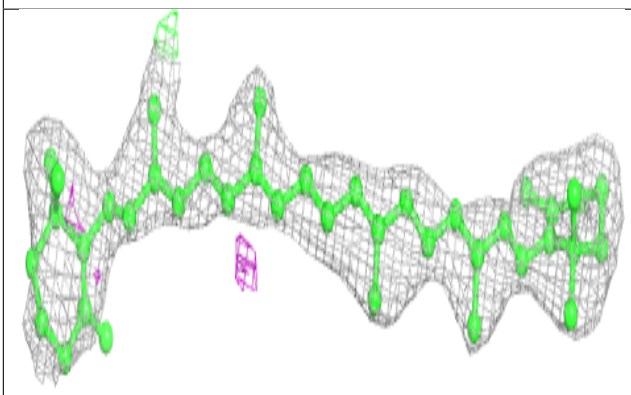
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

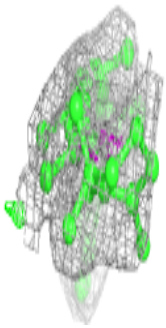


Electron density around BCR d 404:

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

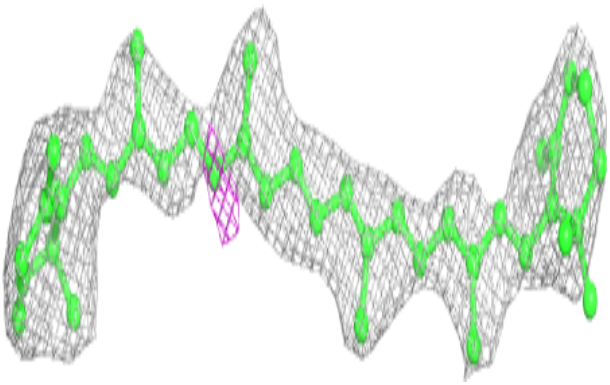


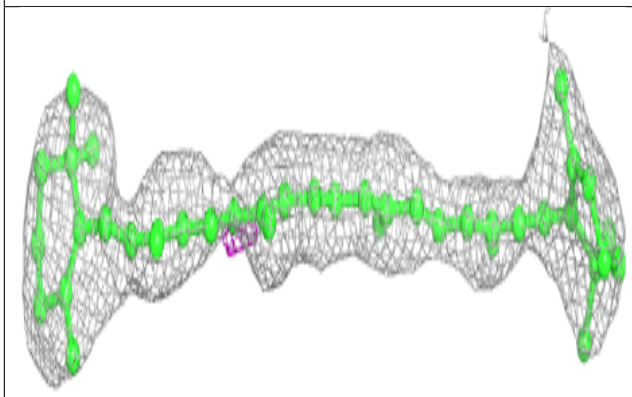


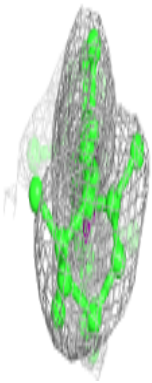


Electron density around BCR k 102:

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

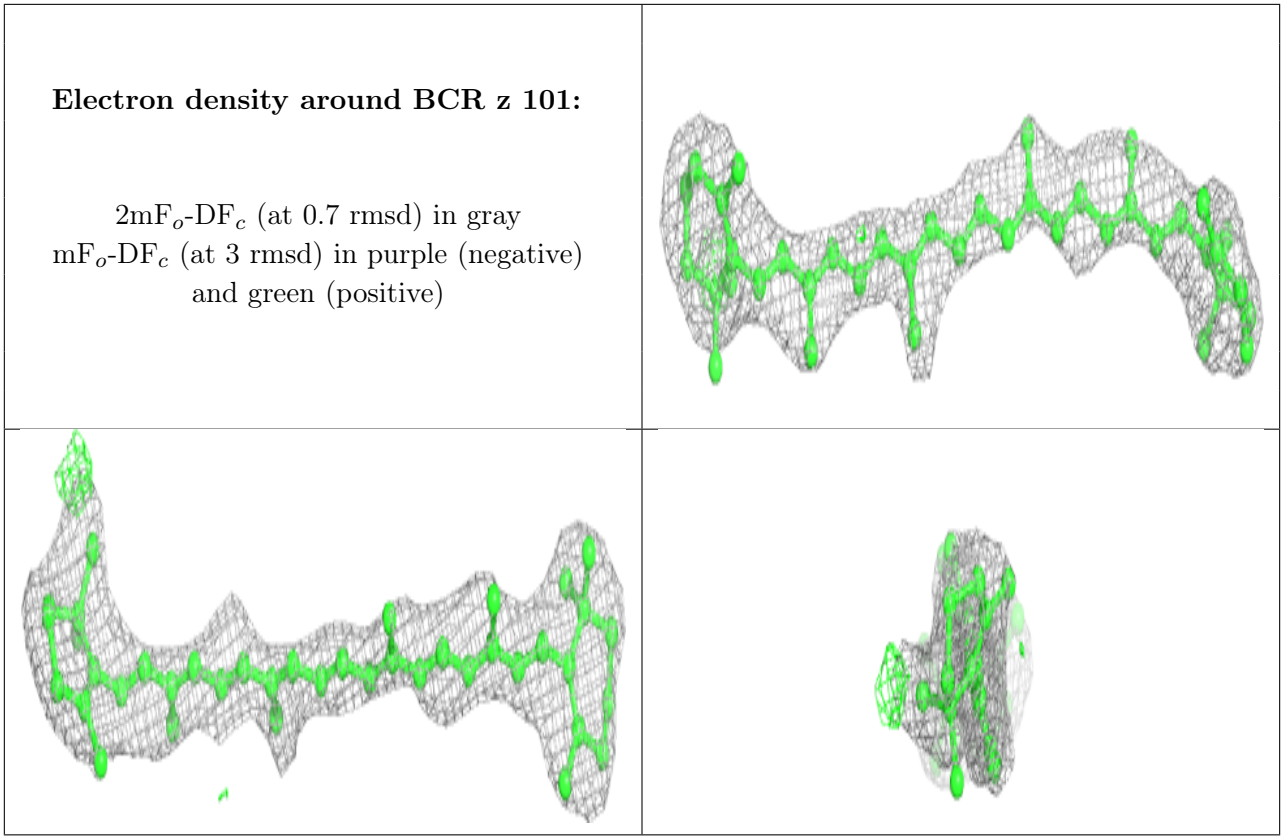






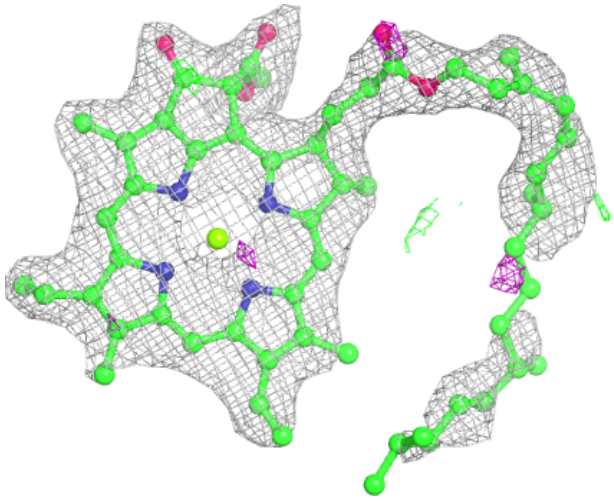
Electron density around BCR z 101:

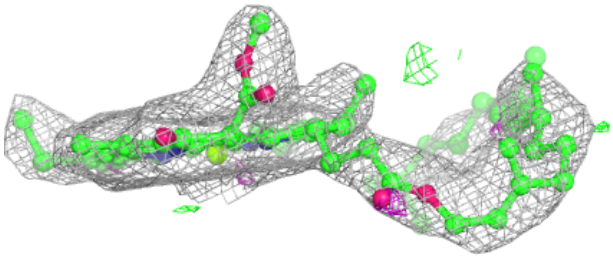
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

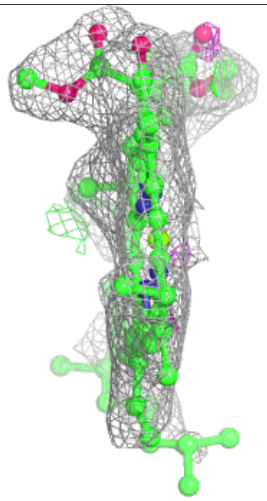


Electron density around CLA C 512:

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

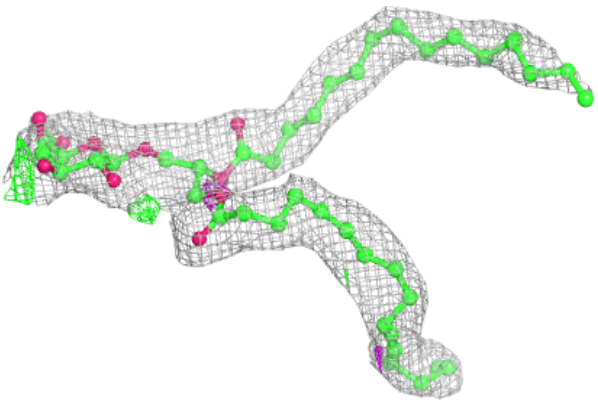


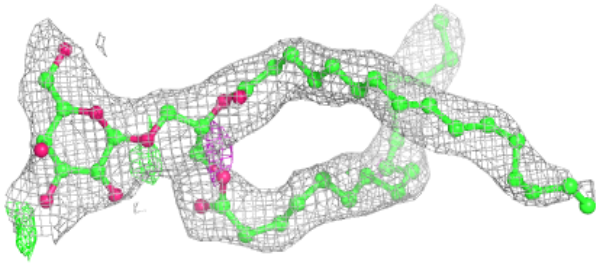


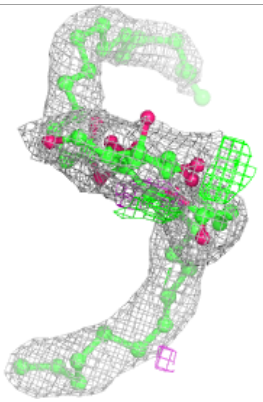


Electron density around LMG b 620:

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

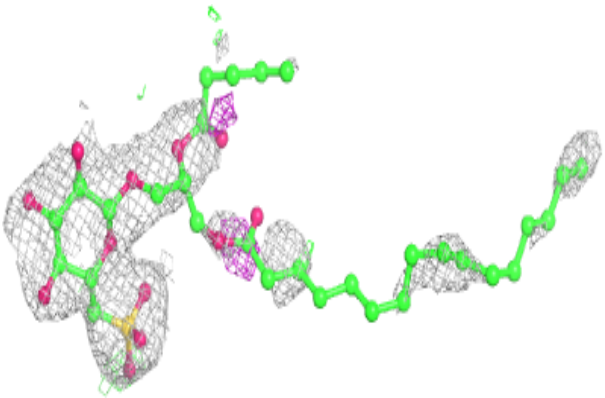


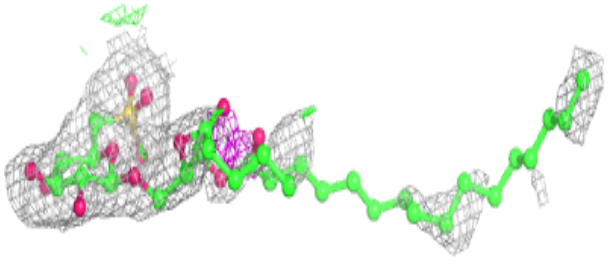


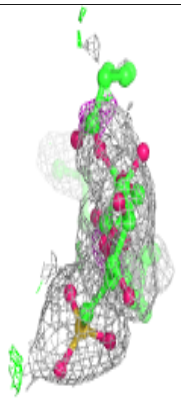


Electron density around SQD f 101:

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

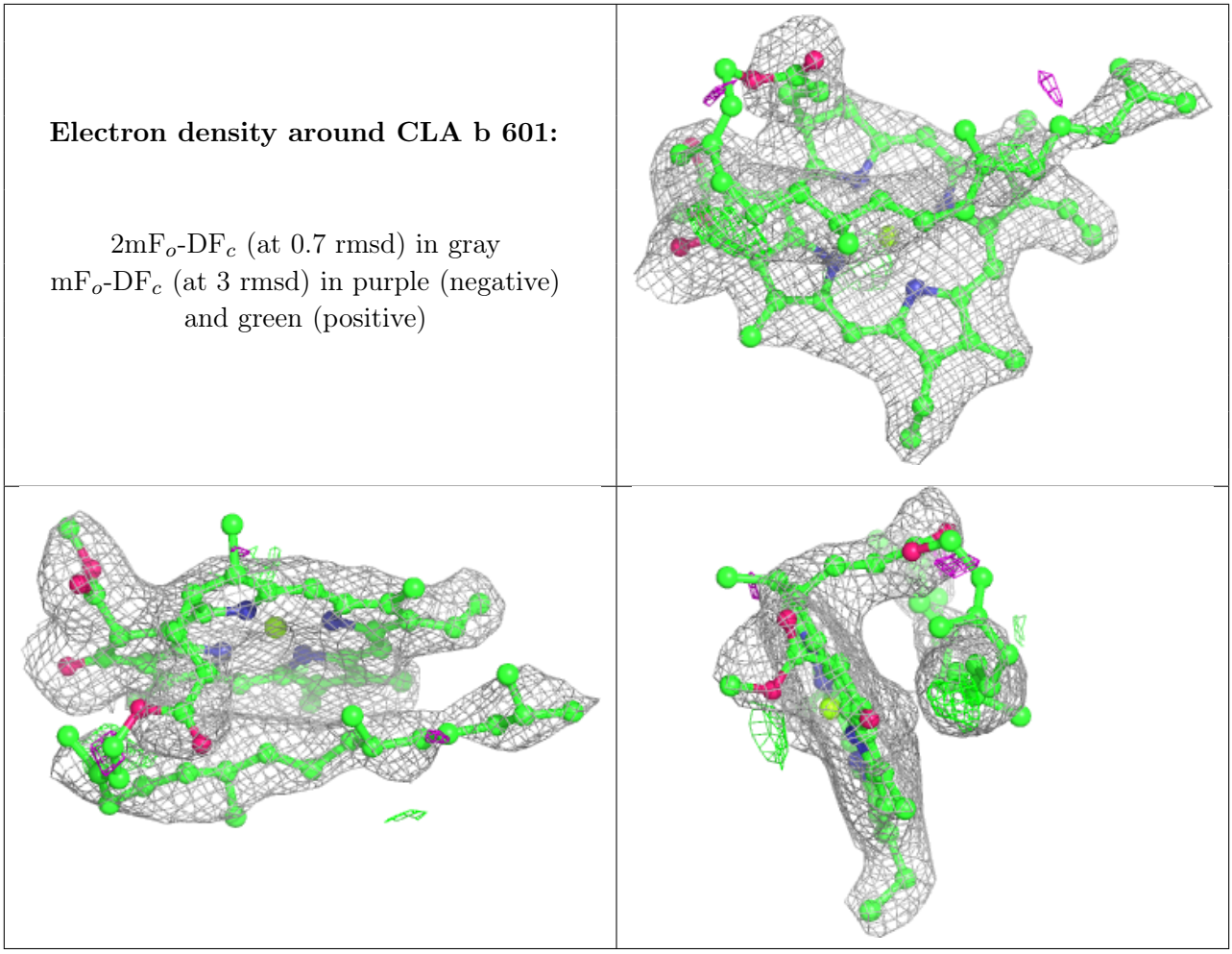






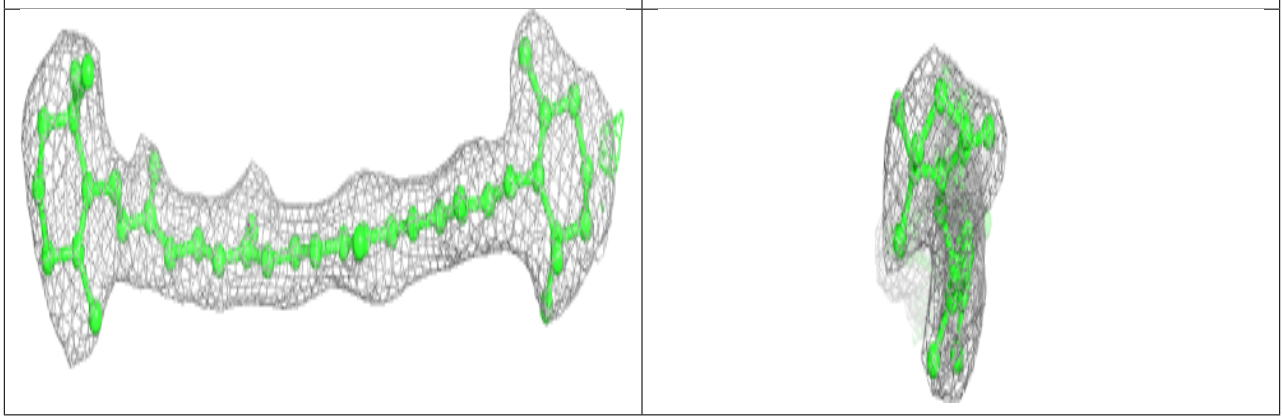
Electron density around CLA b 601:

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



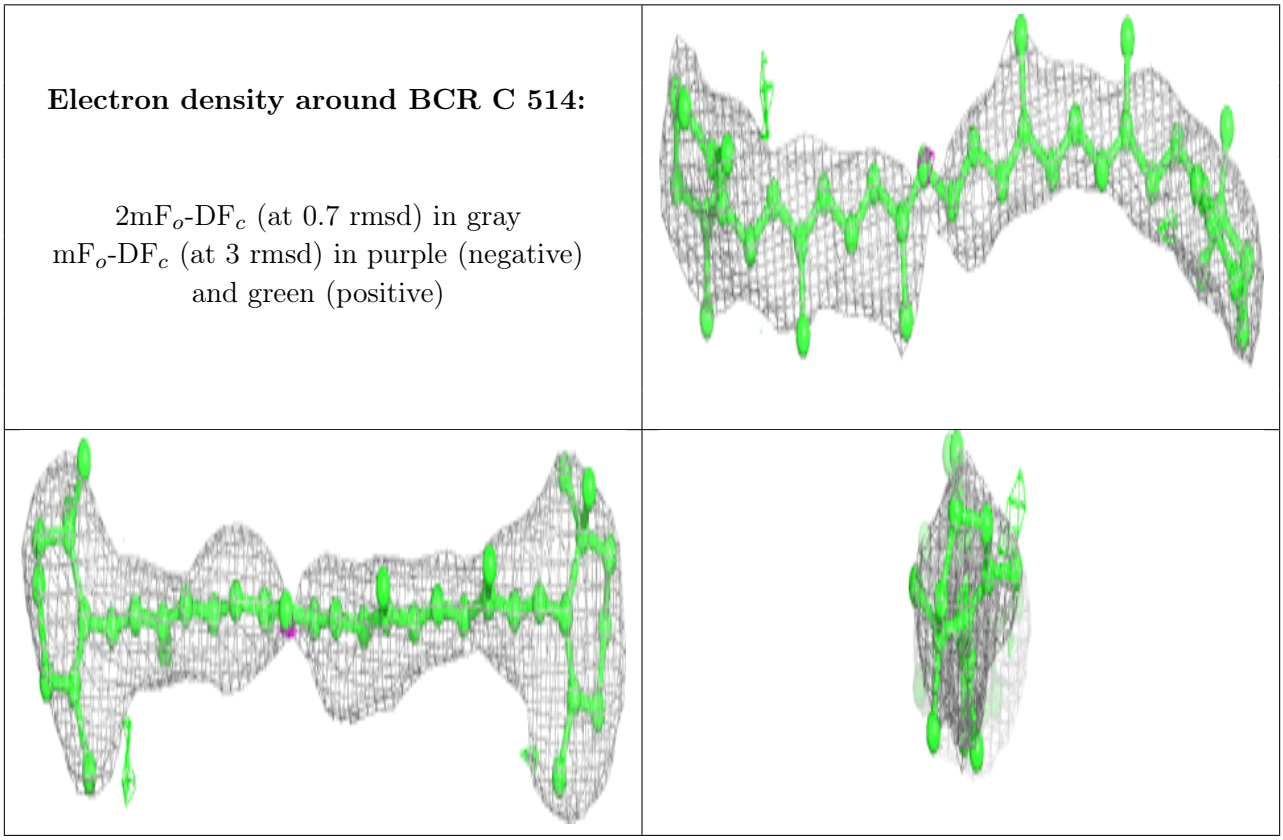
Electron density around BCR h 101:

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



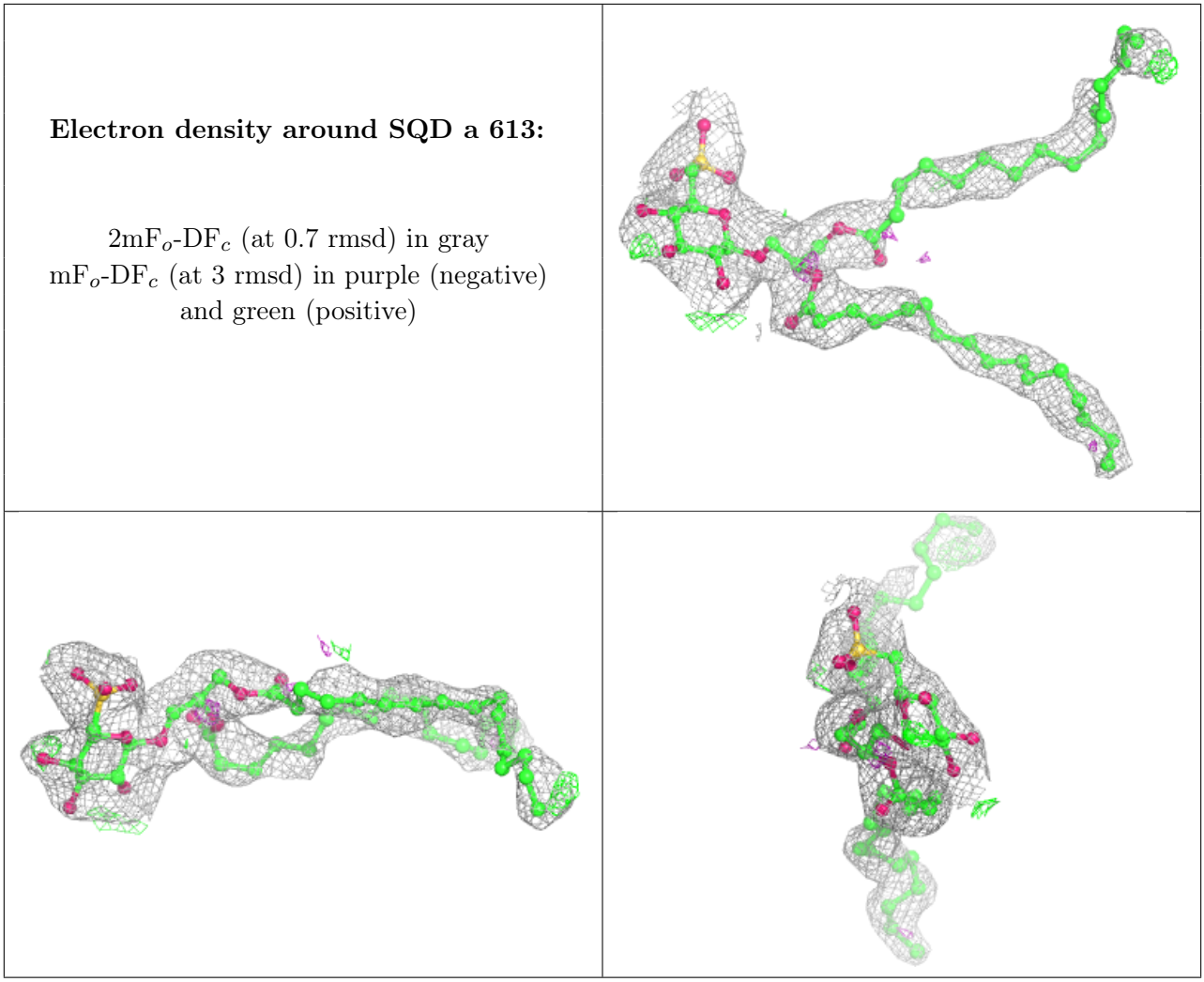
Electron density around BCR C 514:

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



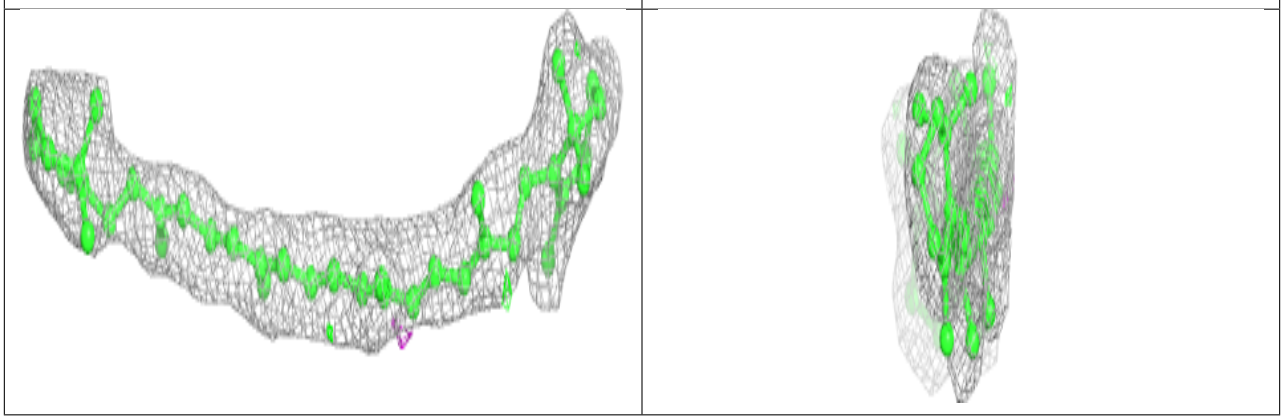
Electron density around SQD a 613:

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



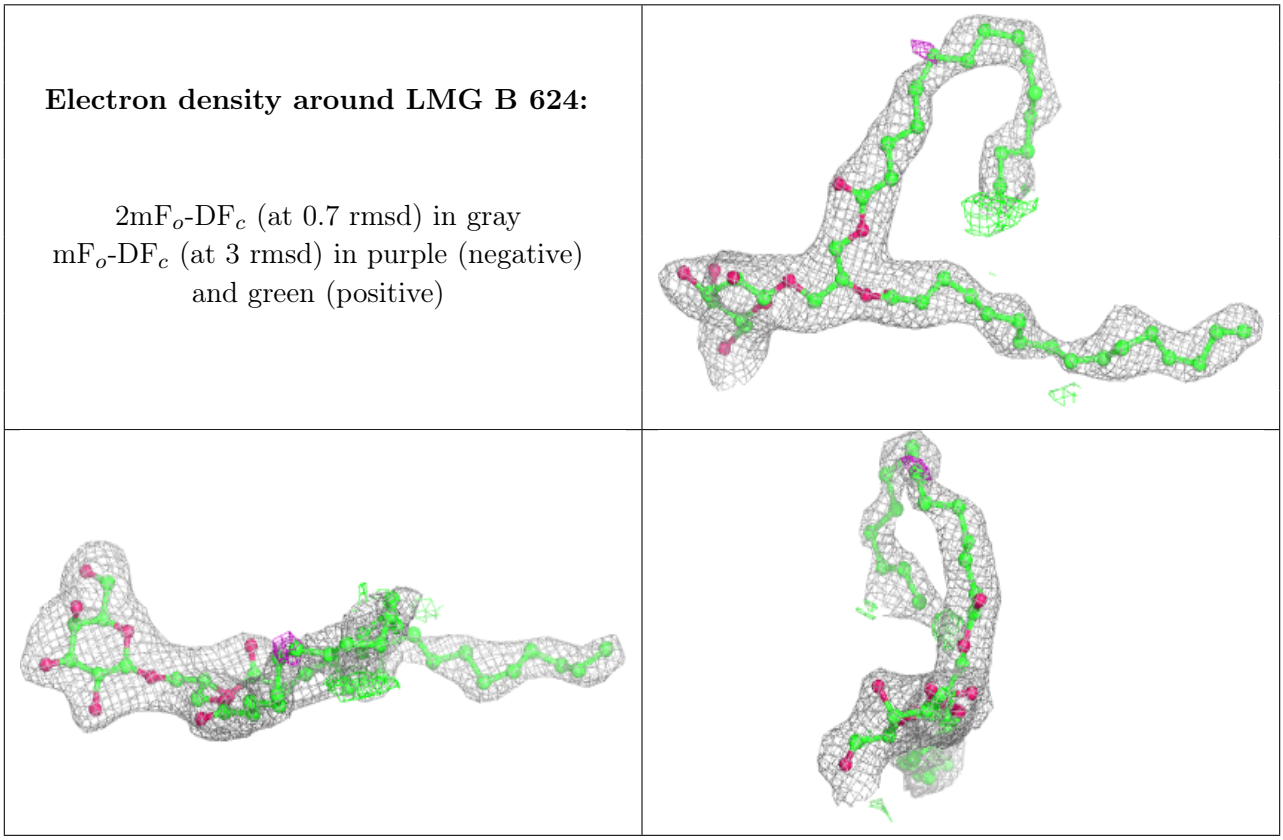
Electron density around BCR t 102:

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



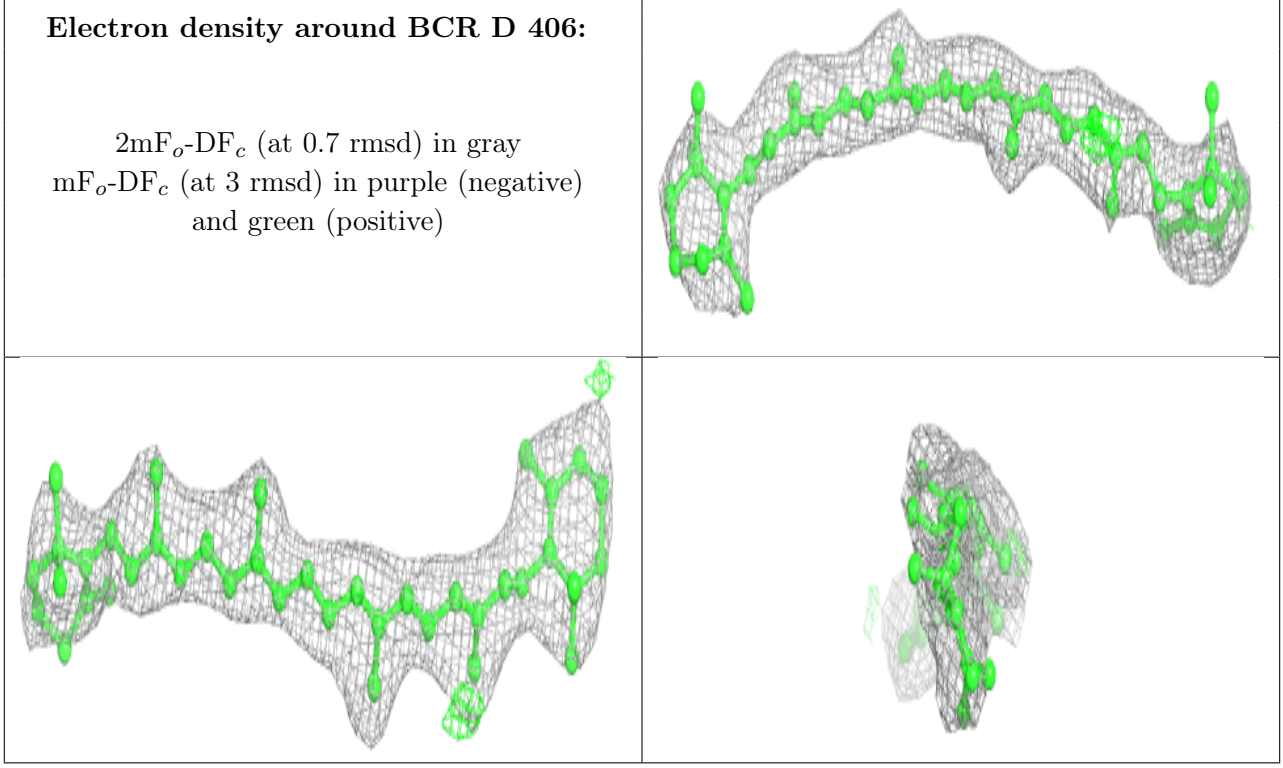
Electron density around LMG B 624:

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



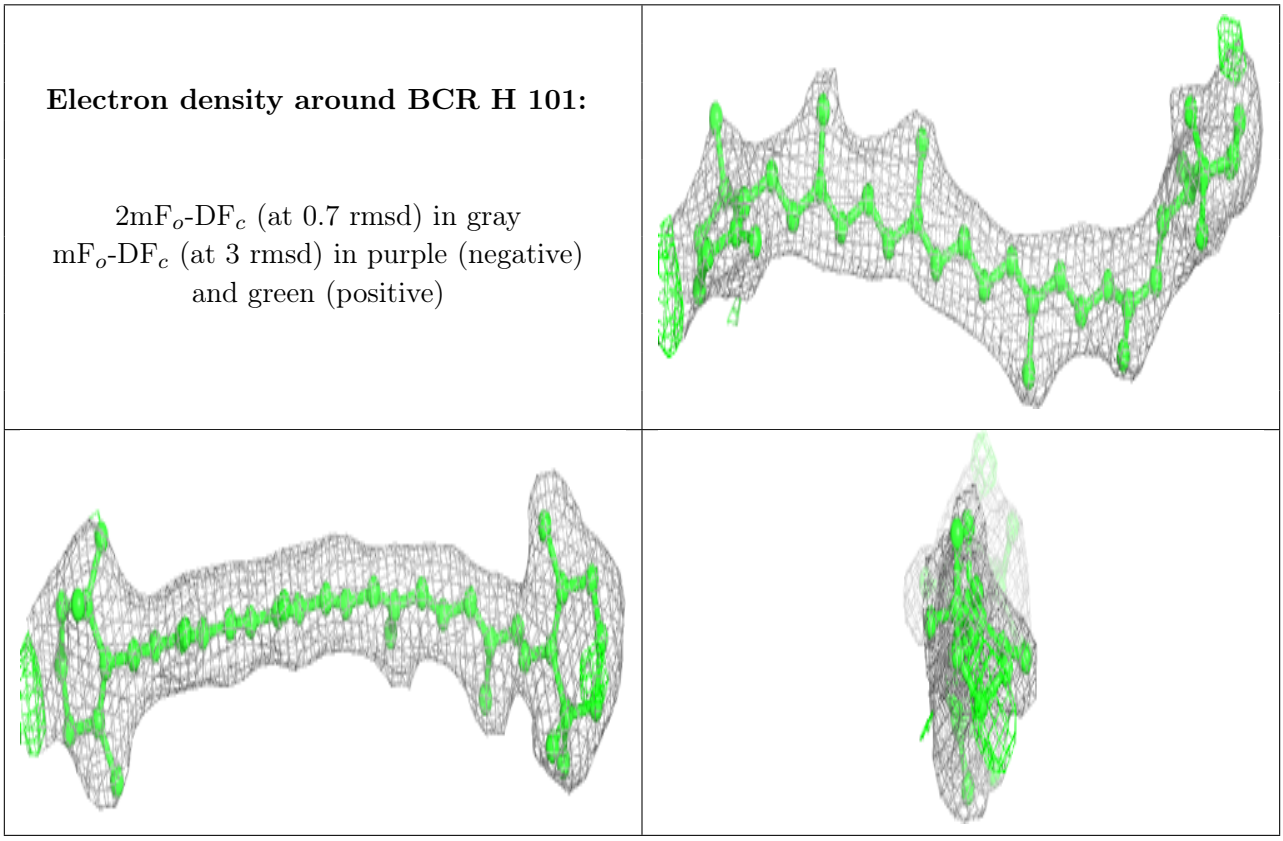
Electron density around BCR D 406:

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



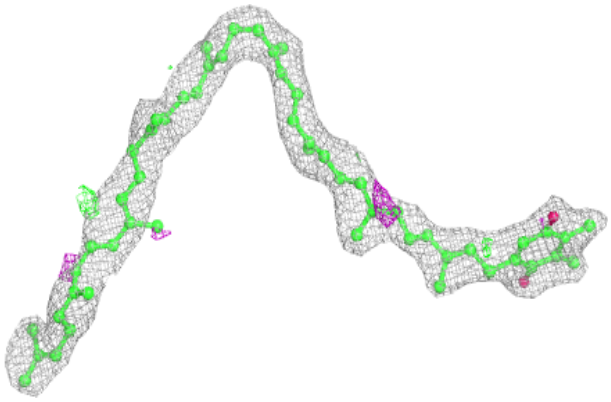
Electron density around BCR H 101:

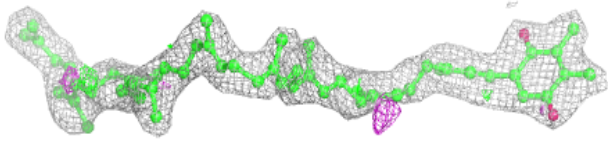
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

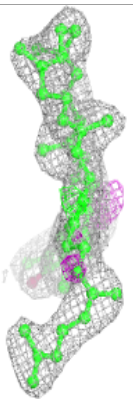


Electron density around PL9 d 405:

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

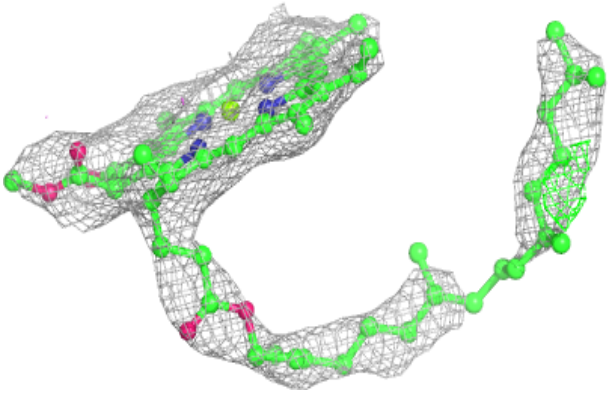


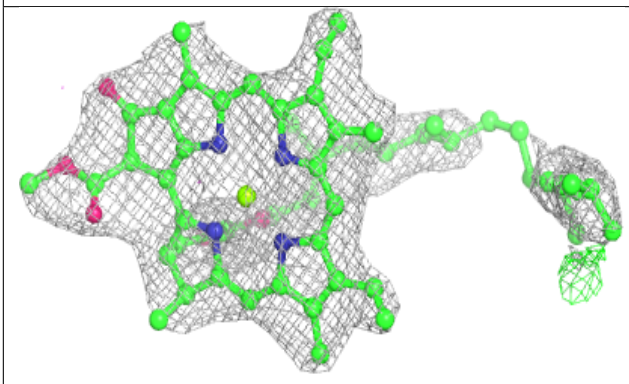


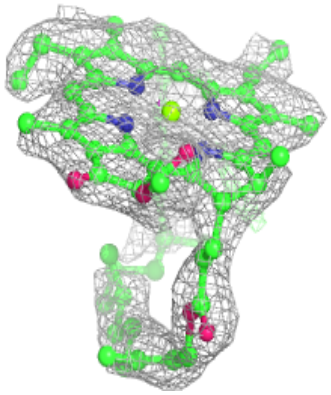


Electron density around CLA C 513:

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

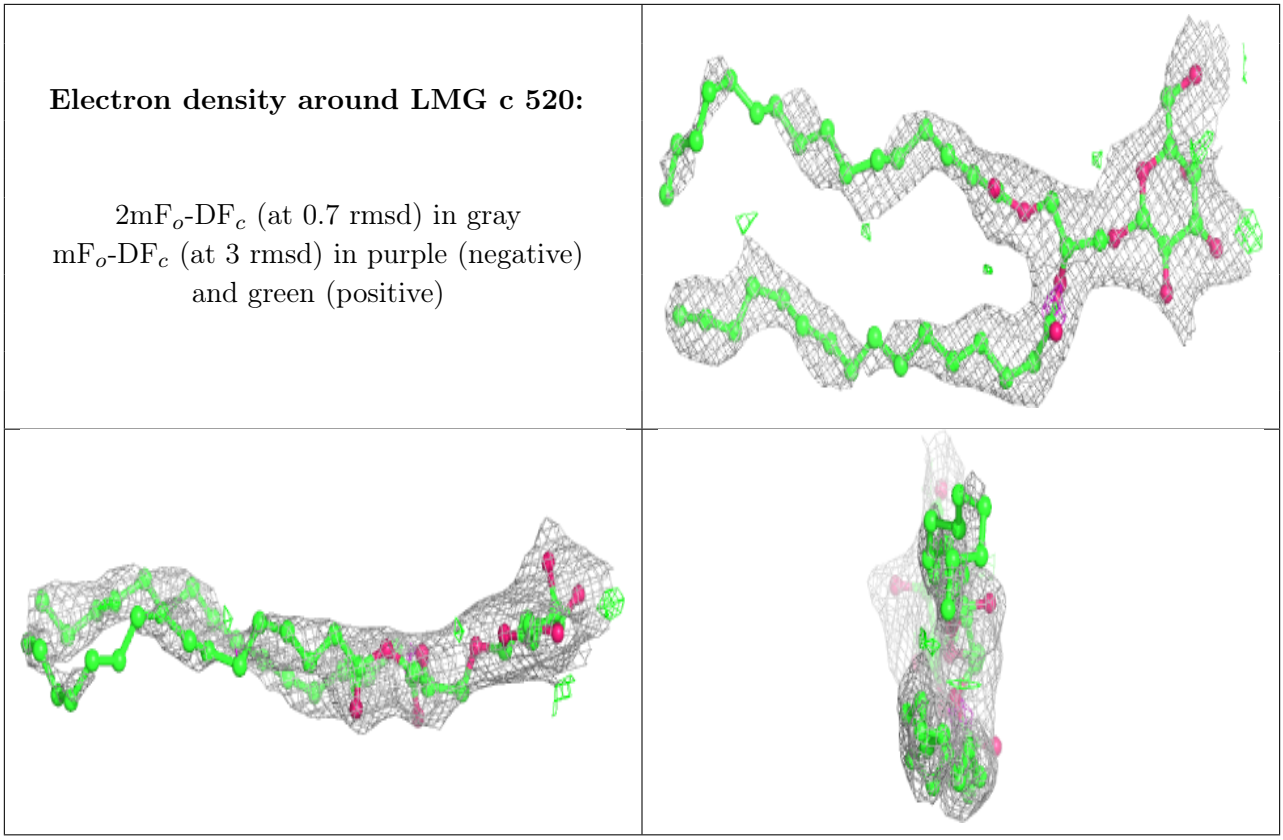






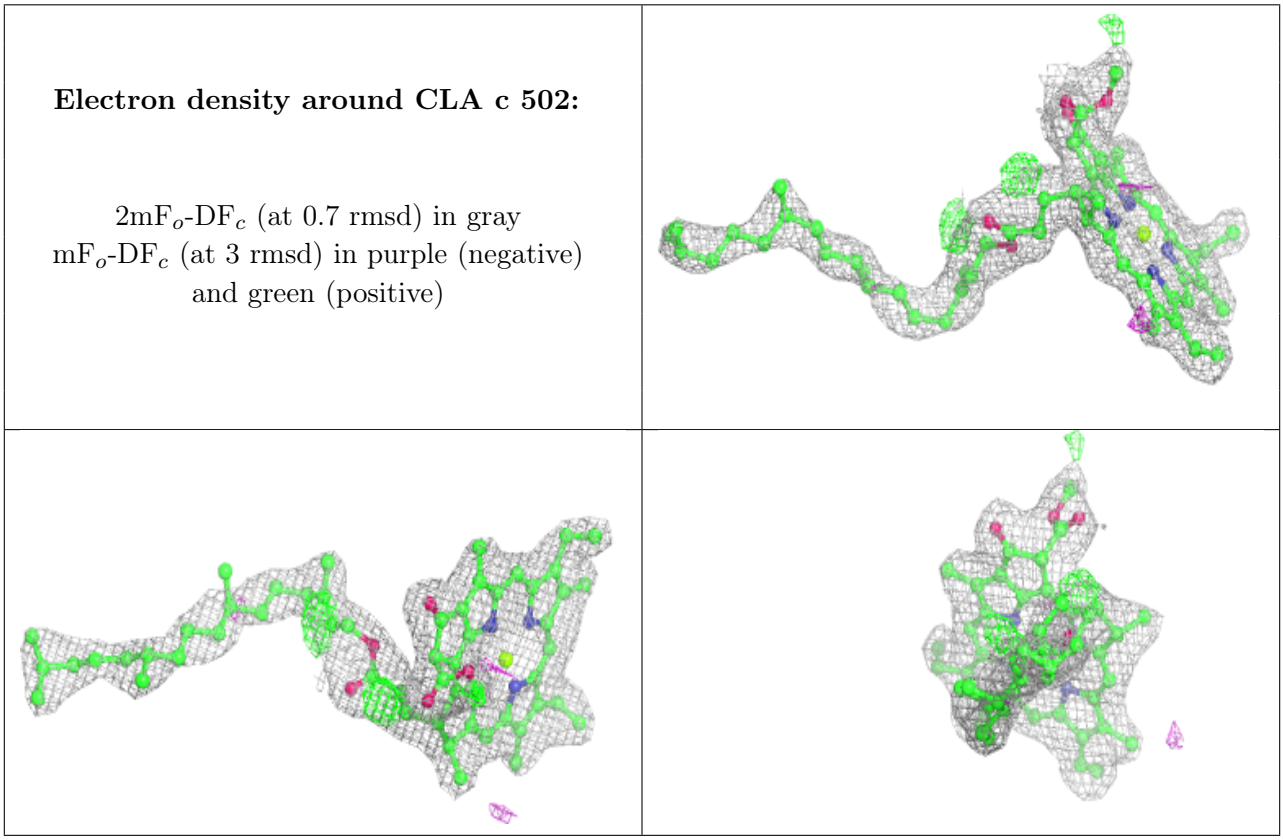
Electron density around LMG c 520:

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



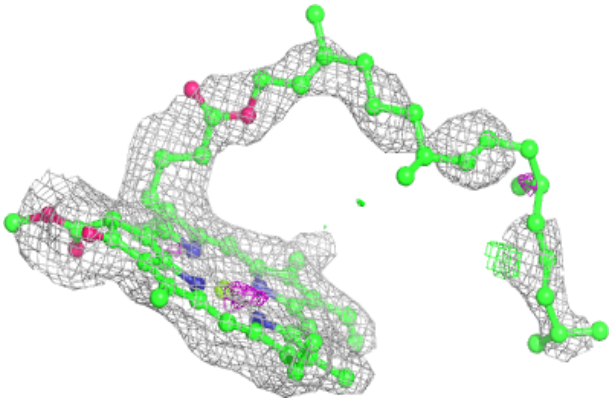
Electron density around CLA c 502:

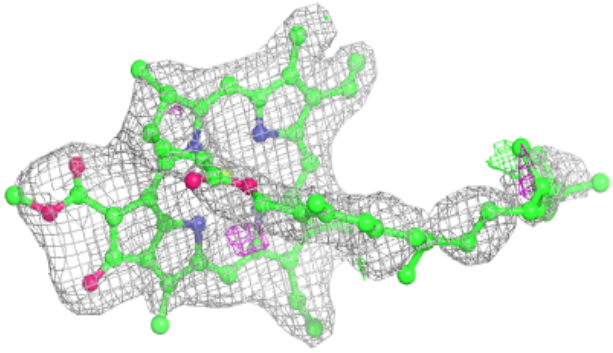
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

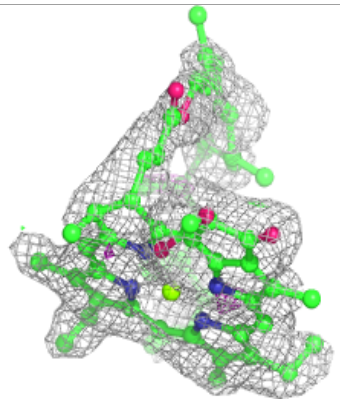


Electron density around CLA c 513:

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

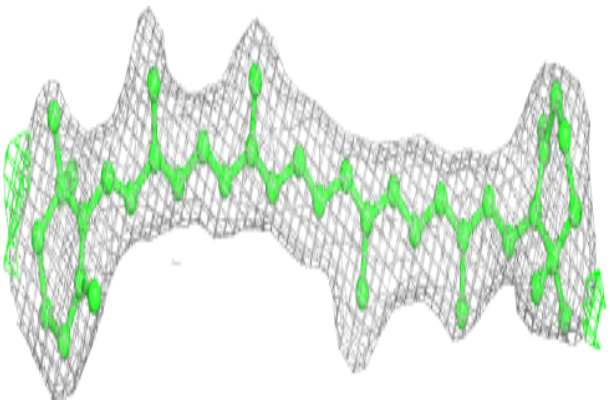


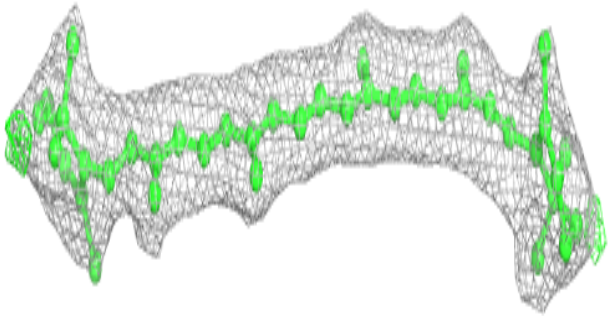


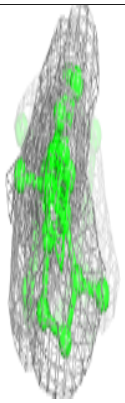


Electron density around BCR B 619:

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

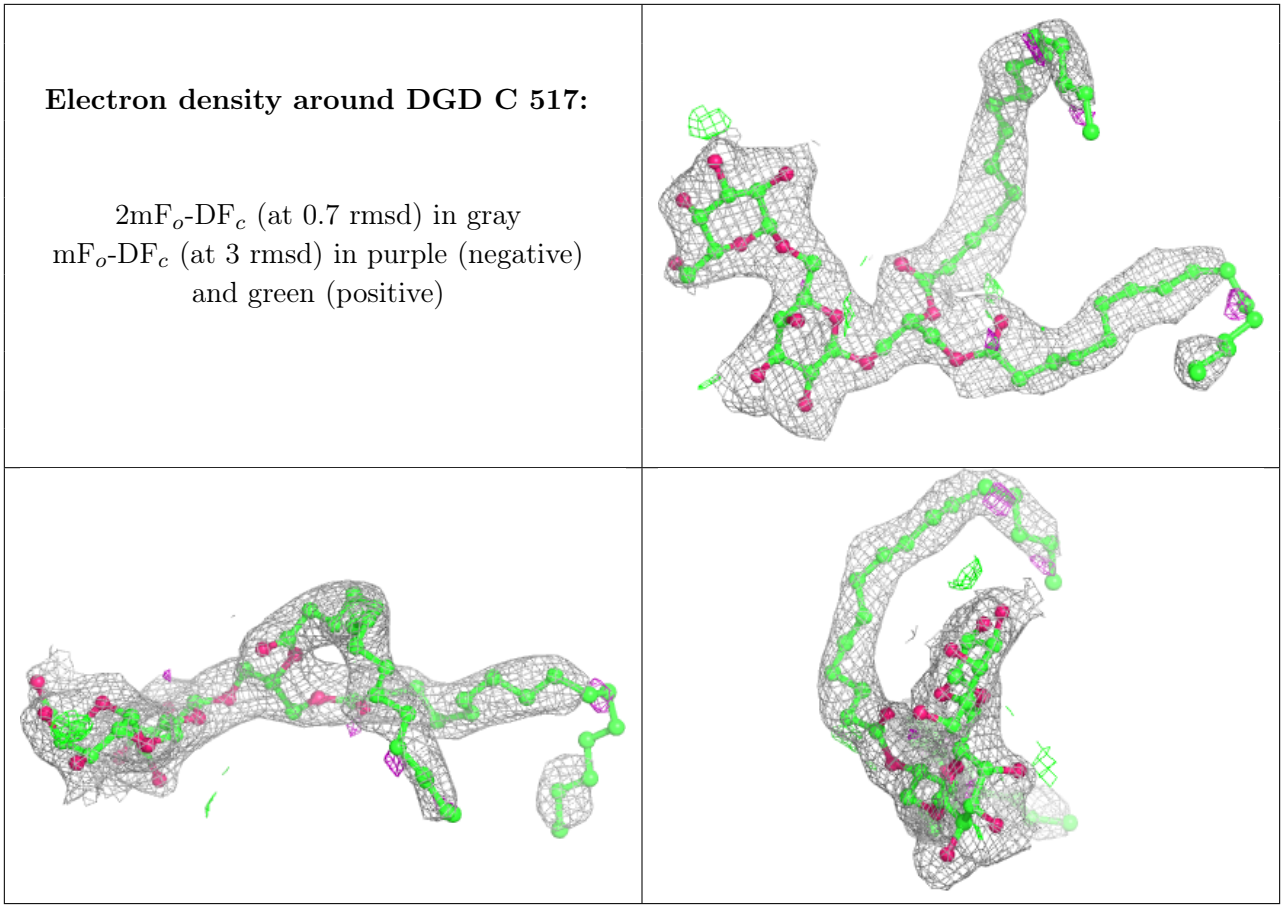






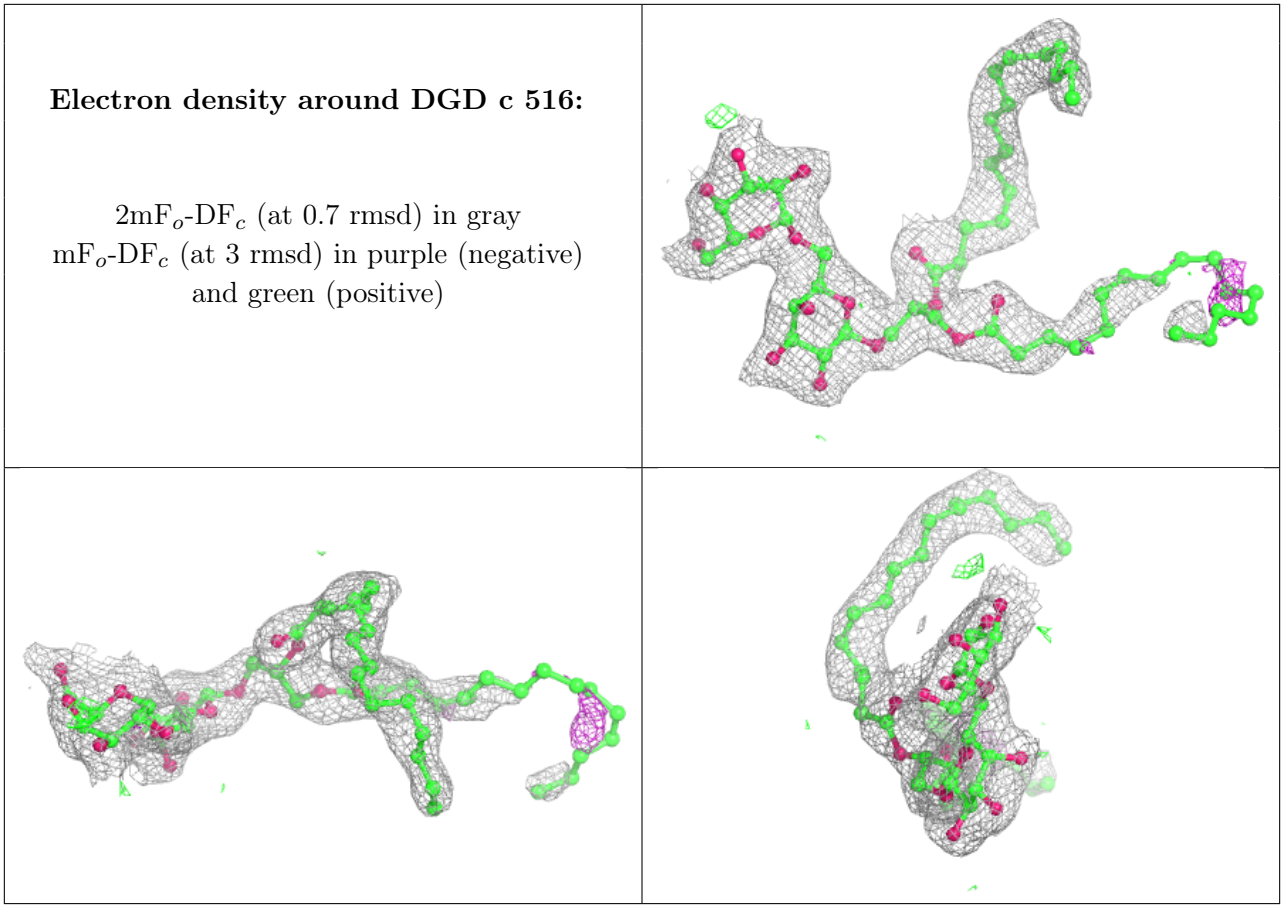
Electron density around DGD C 517:

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



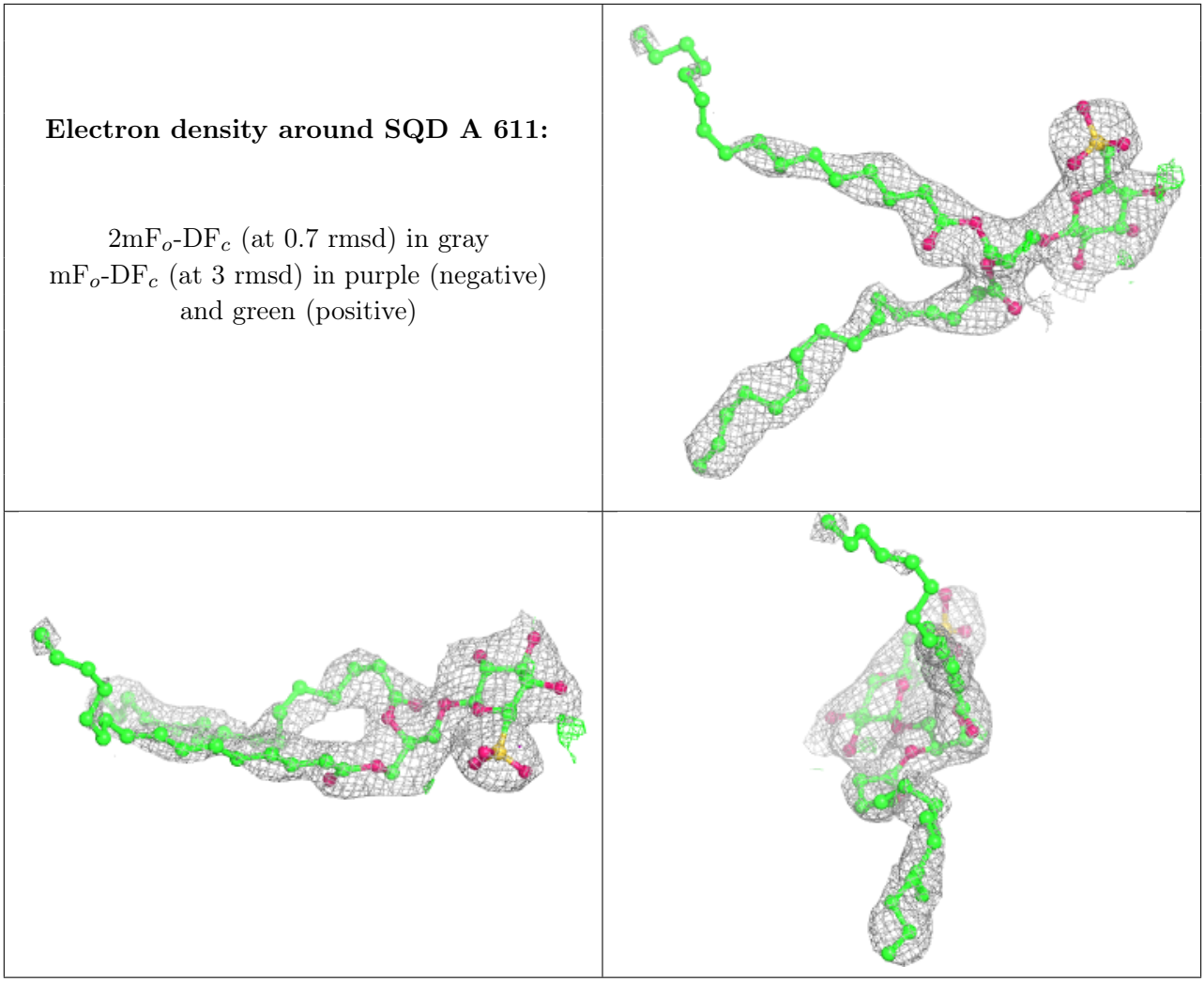
Electron density around DGD c 516:

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



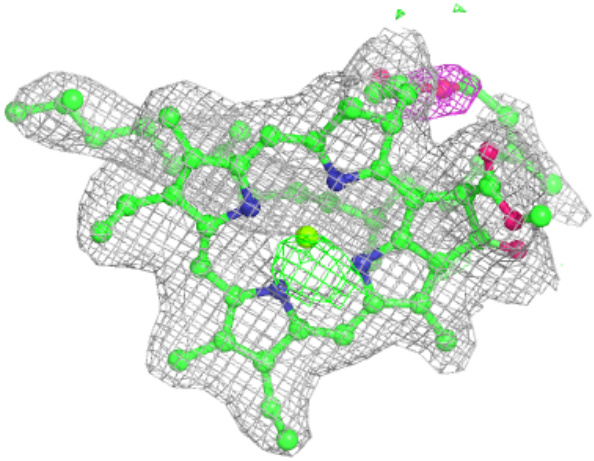
Electron density around SQD A 611:

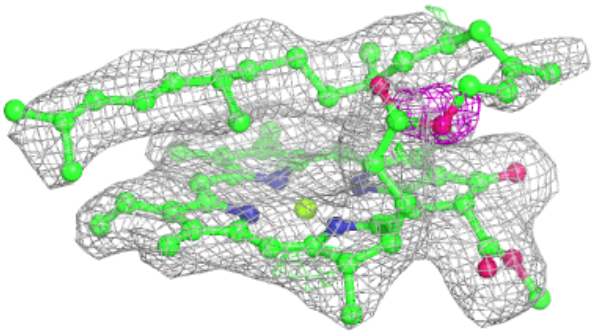
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

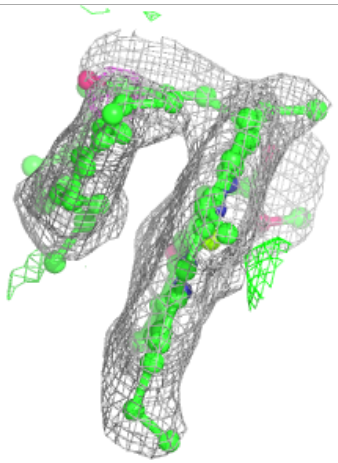


Electron density around CLA B 601:

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

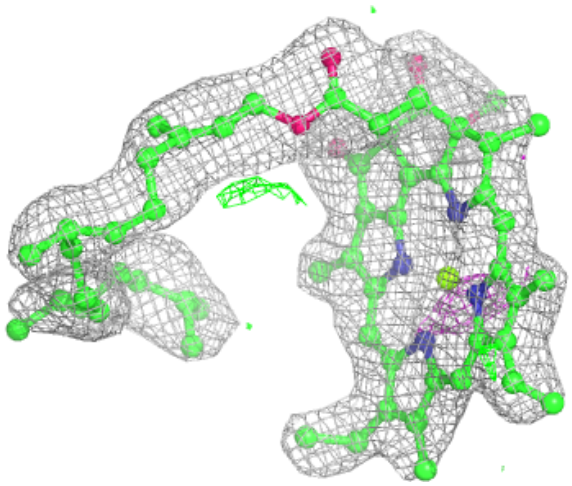


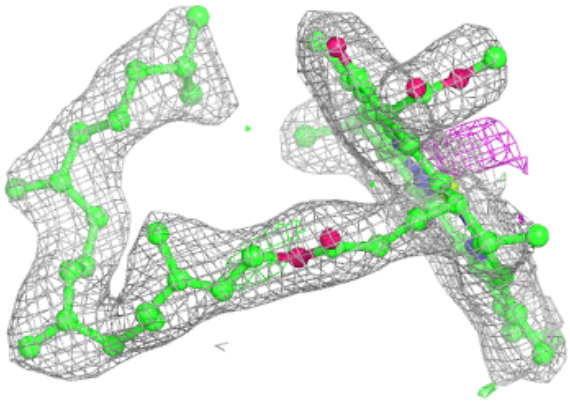


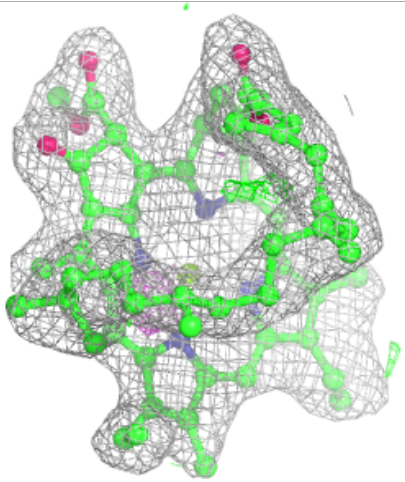


Electron density around CLA c 503:

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

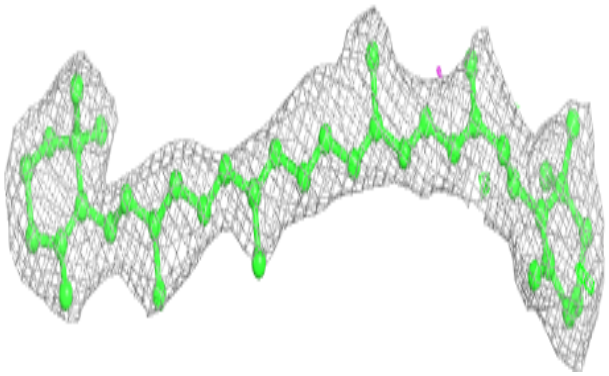


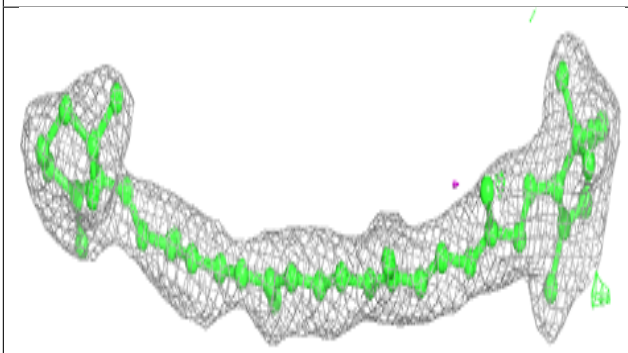


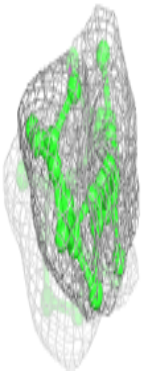


Electron density around BCR T 101:

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

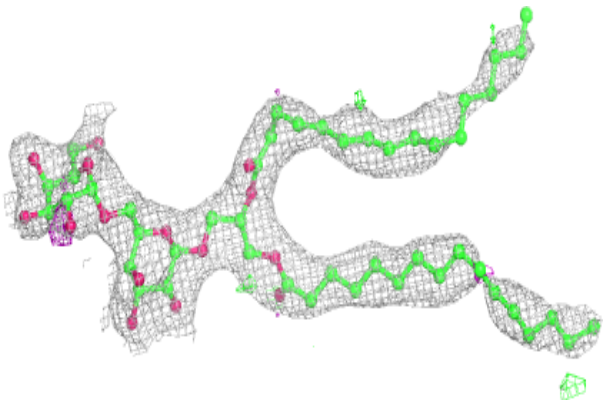


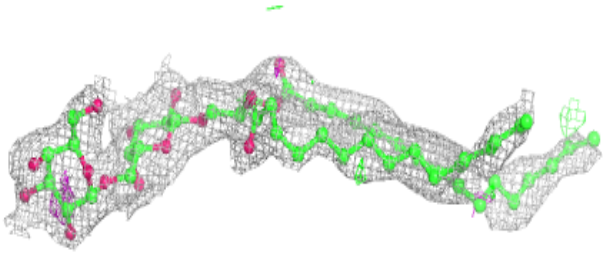


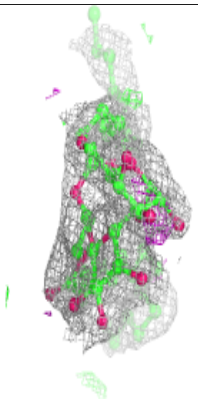


Electron density around DGD C 518:

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

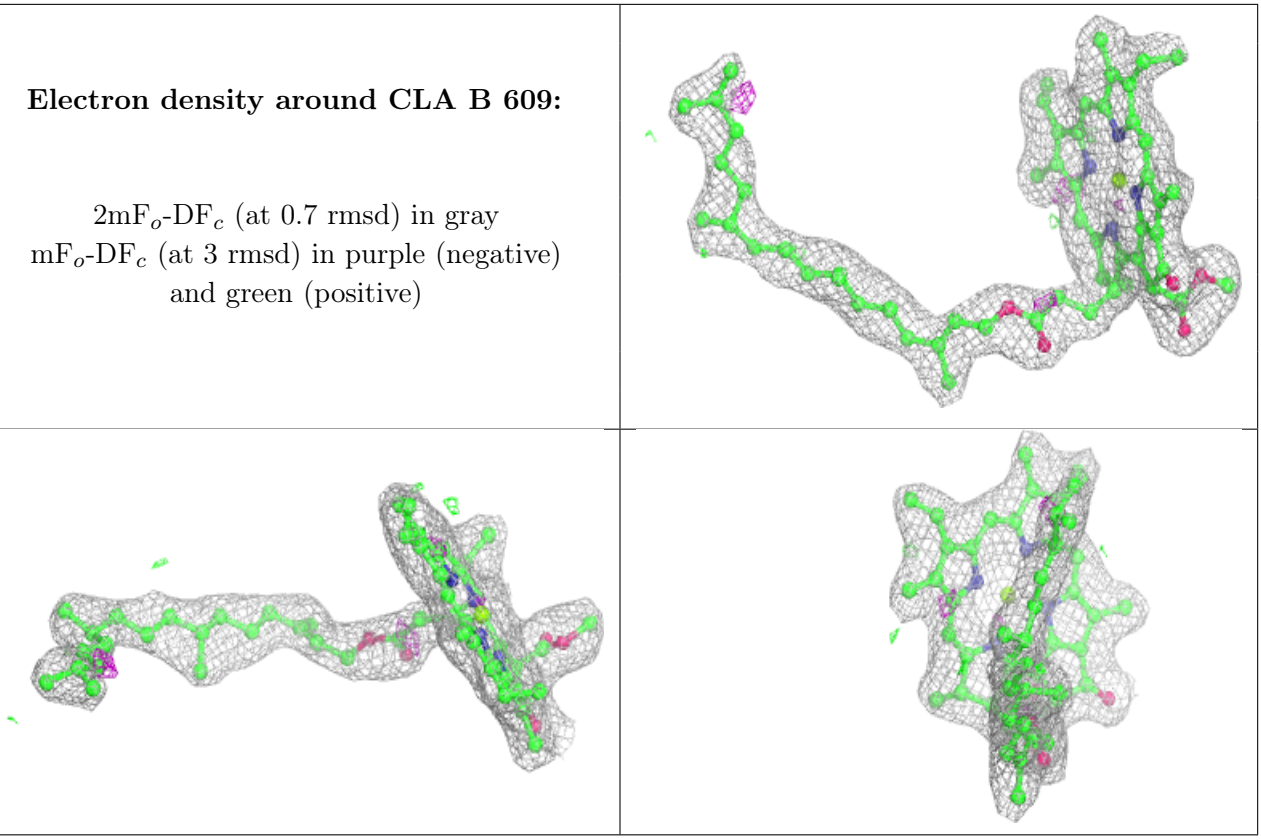






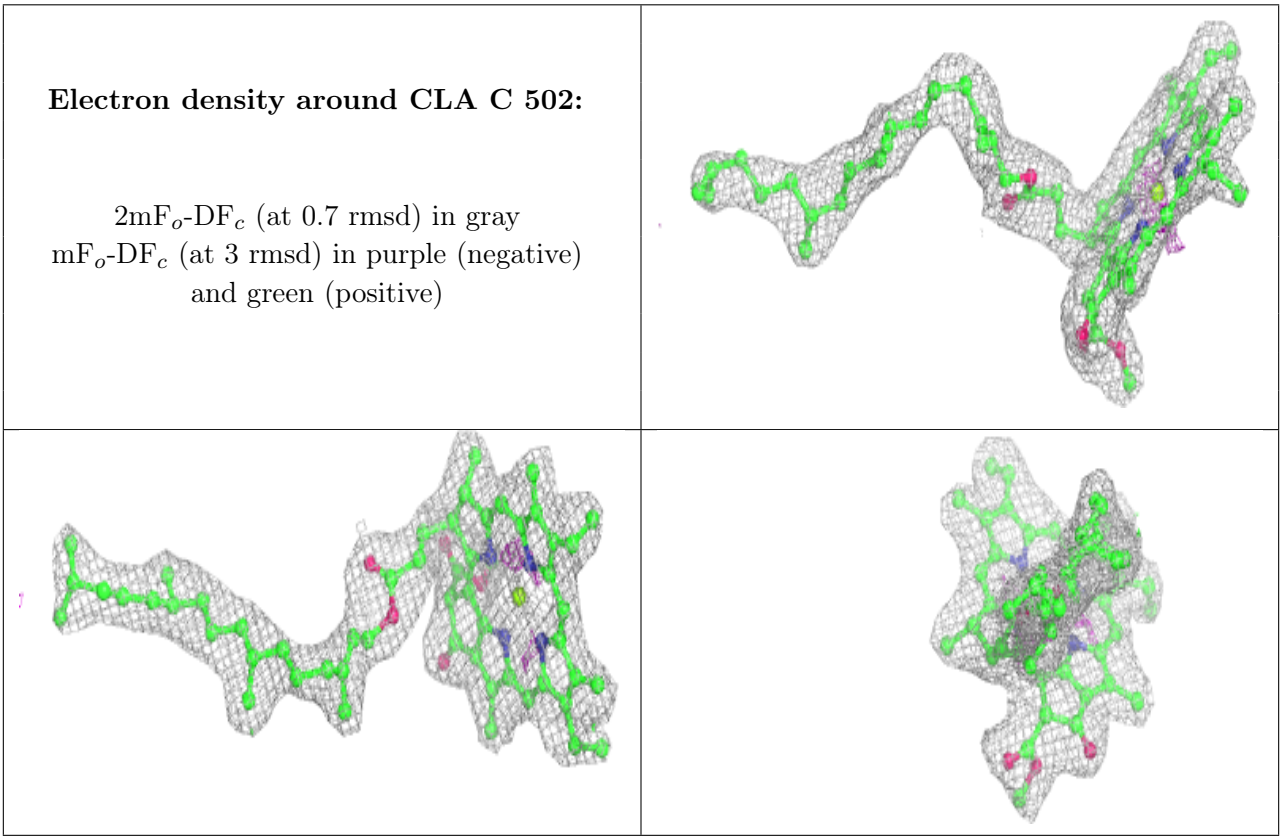
Electron density around CLA B 609:

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



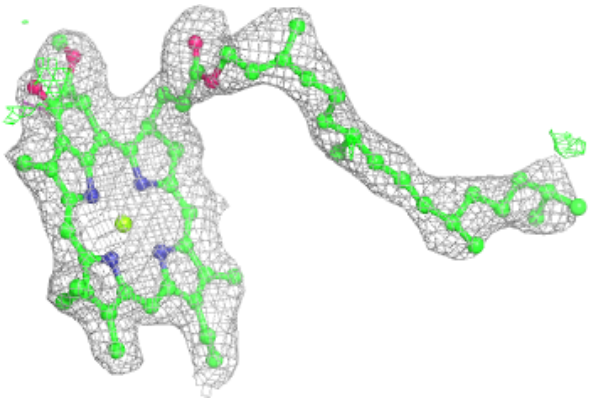
Electron density around CLA C 502:

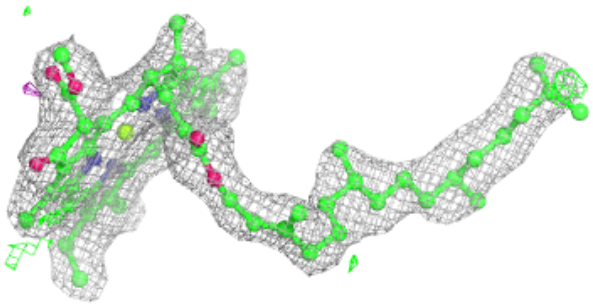
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

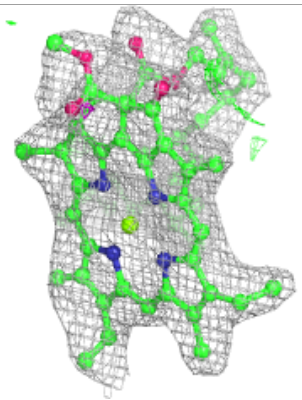


Electron density around CLA c 511:

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

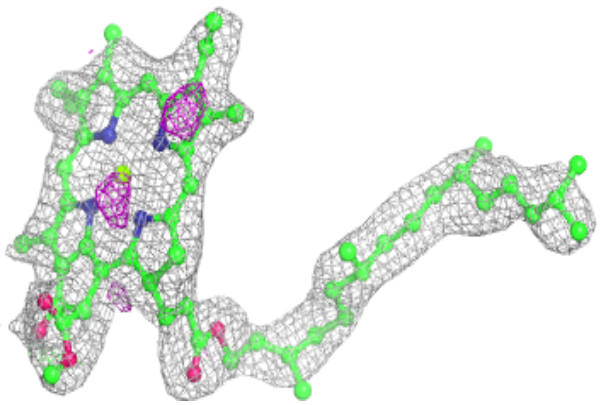


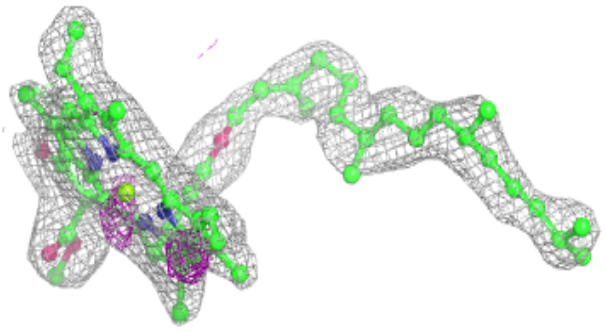


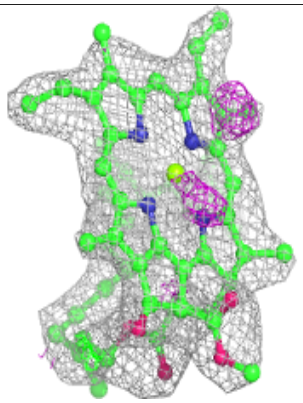


Electron density around CLA C 511:

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

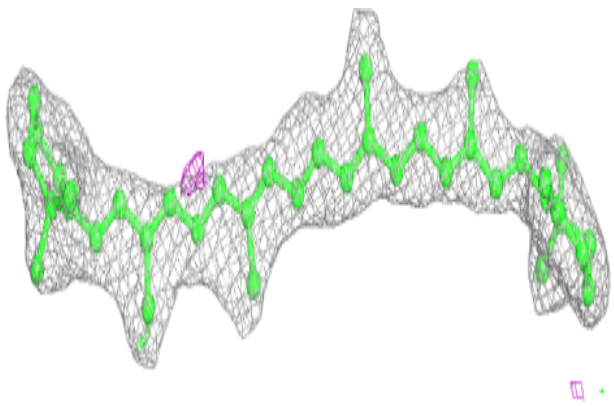


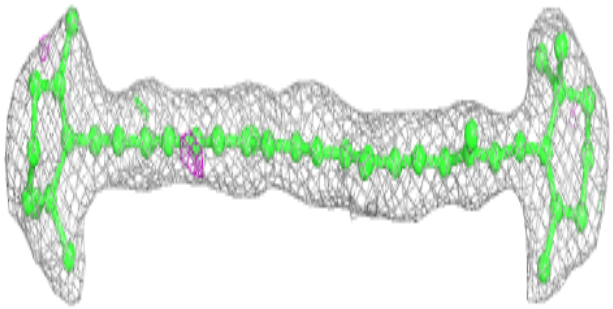


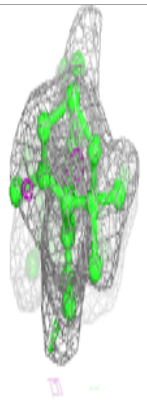


Electron density around BCR A 609:

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

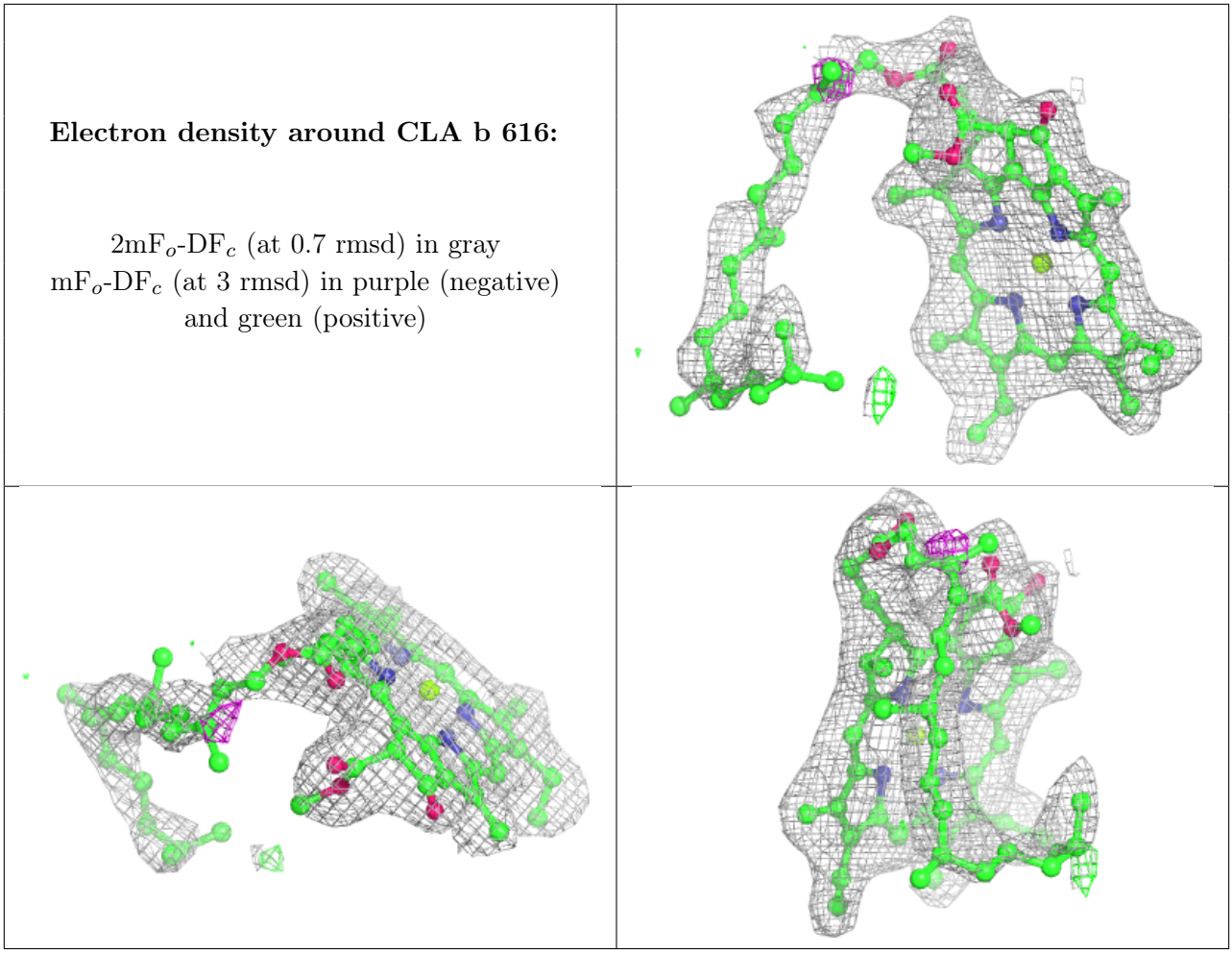






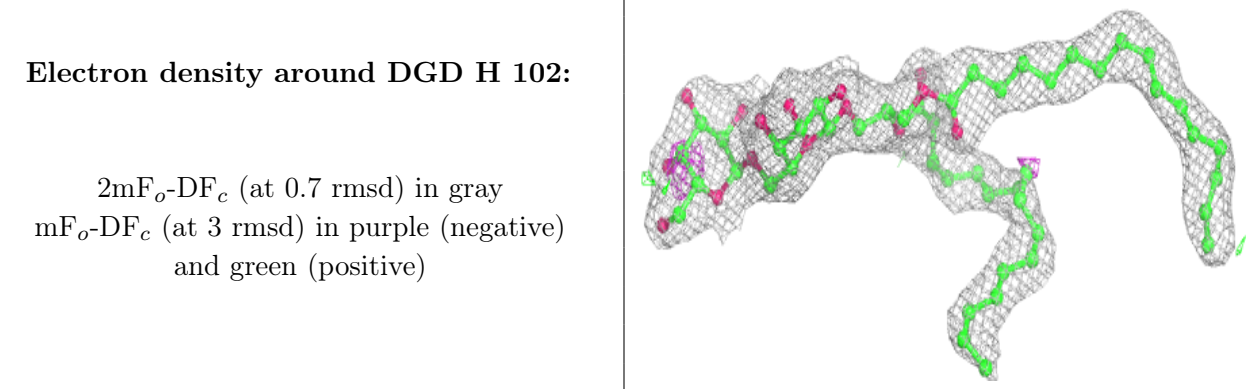
Electron density around CLA b 616:

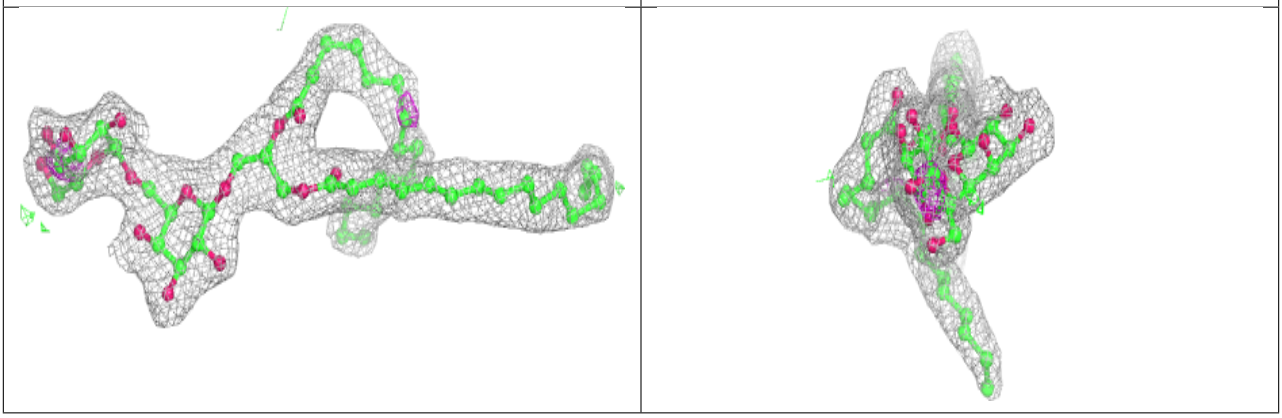
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around DGD H 102:

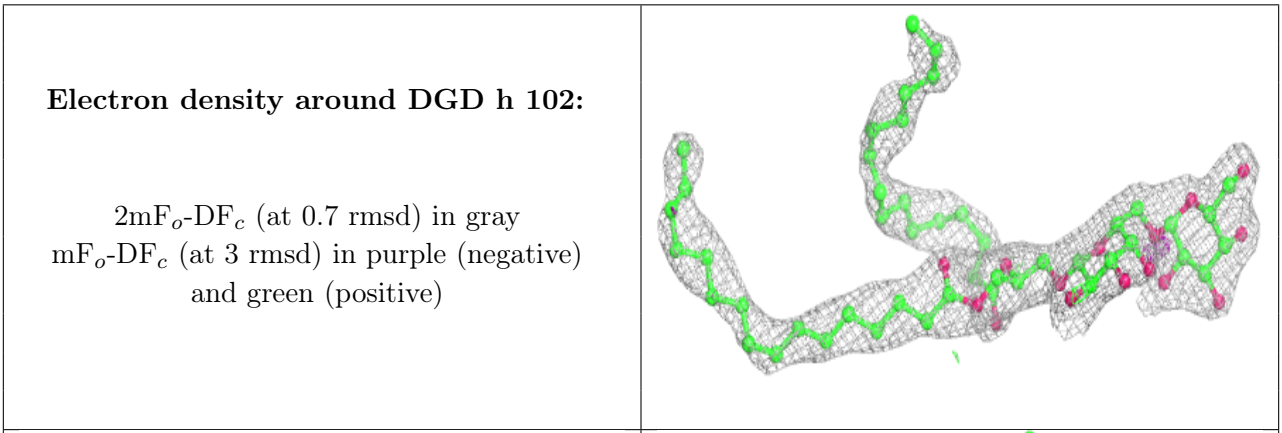
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

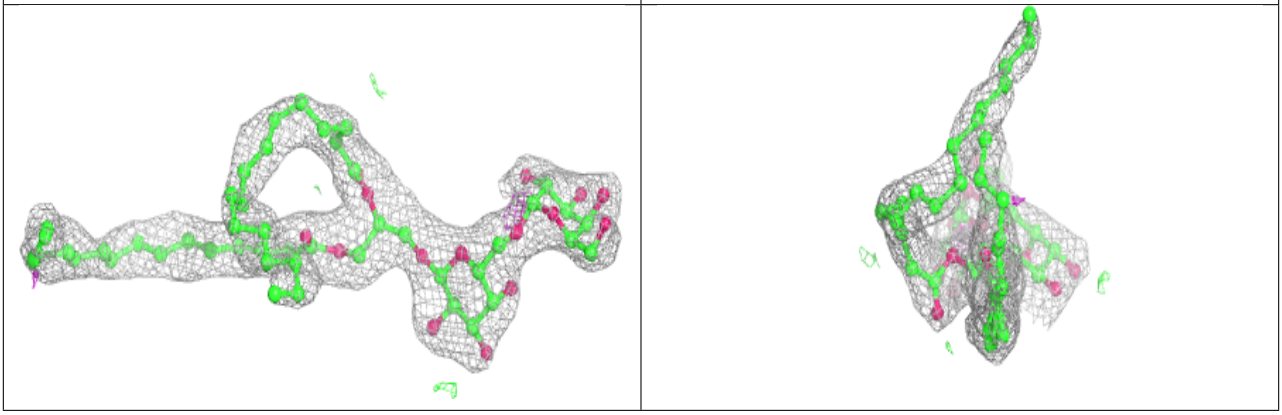




Electron density around DGD h 102:

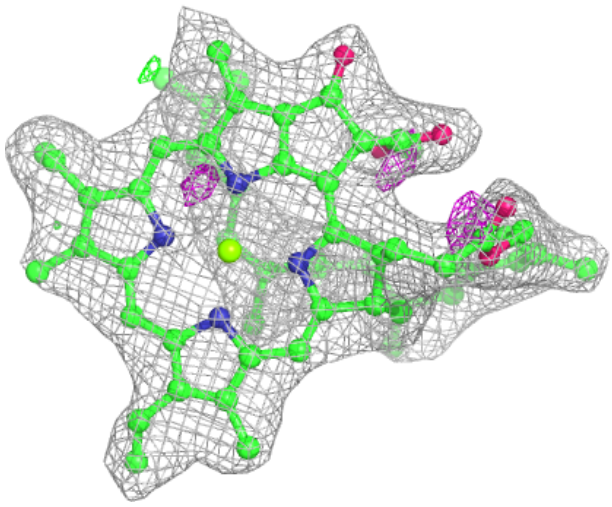
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

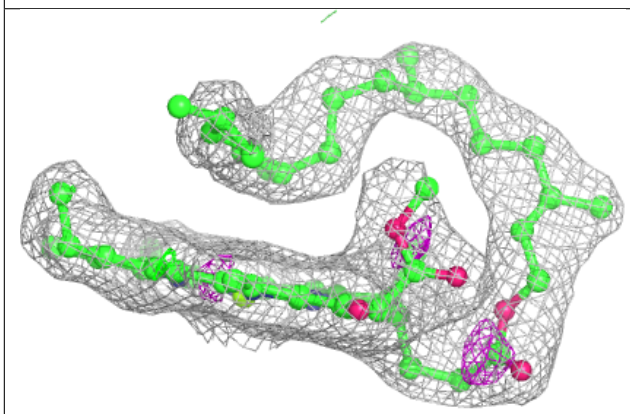


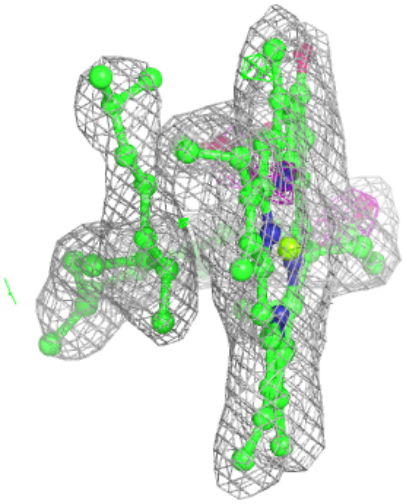


Electron density around CLA C 510:

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

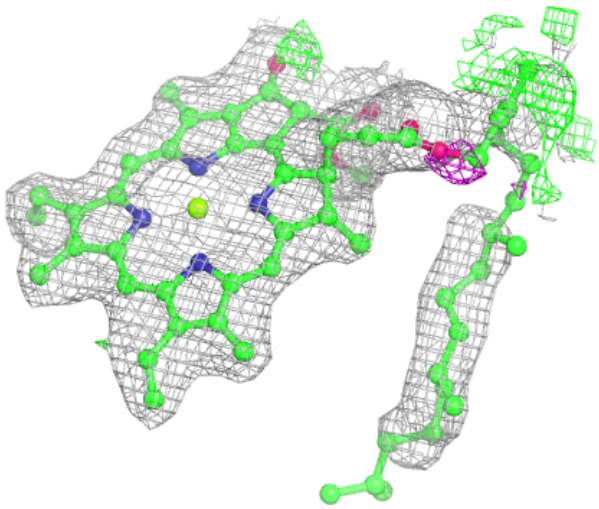


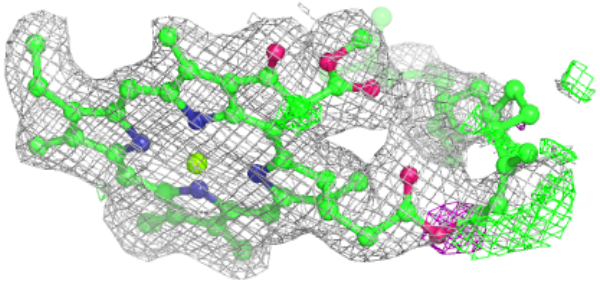


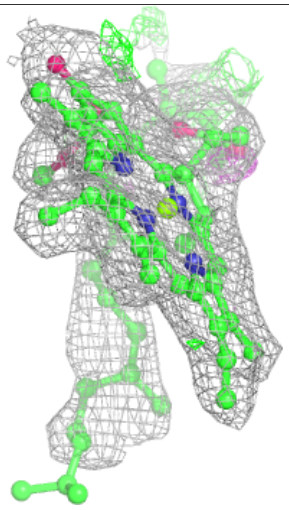


Electron density around CLA B 616:

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

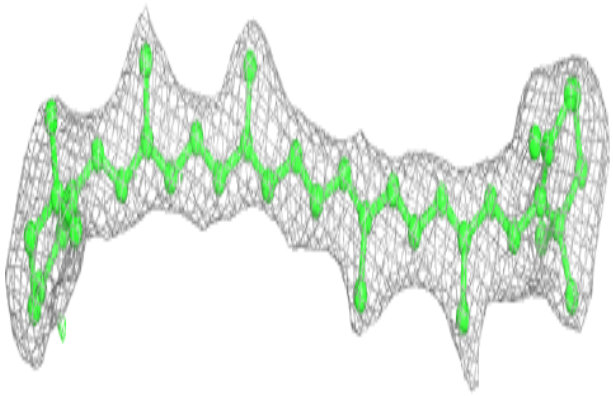


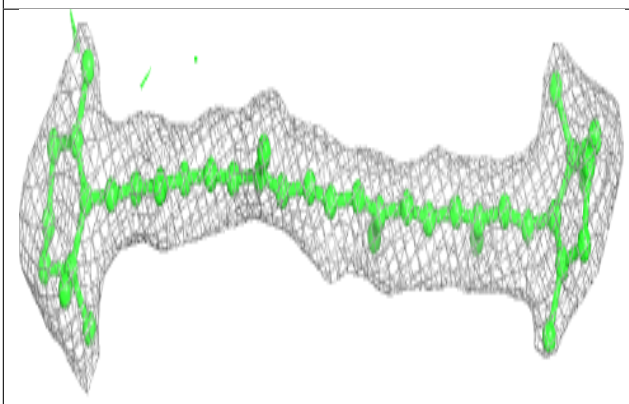


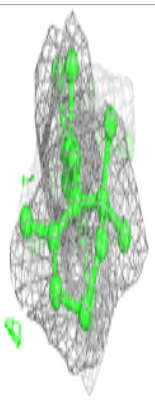


Electron density around BCR a 611:

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

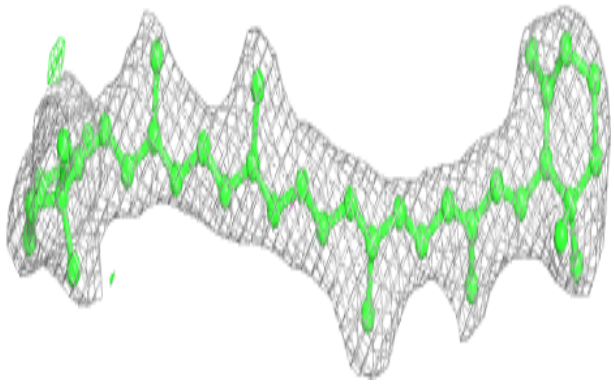


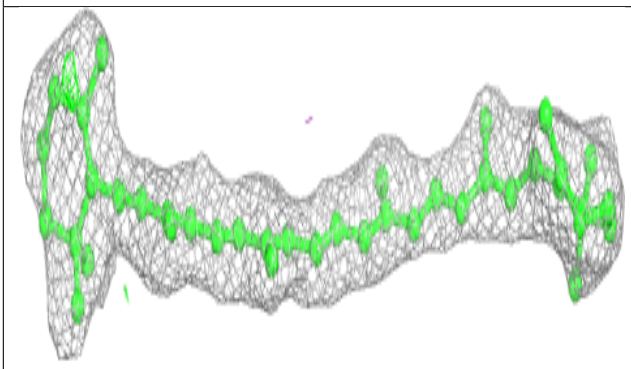


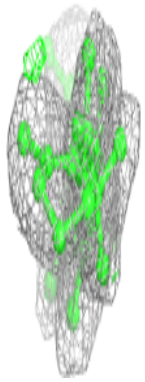


Electron density around BCR b 617:

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

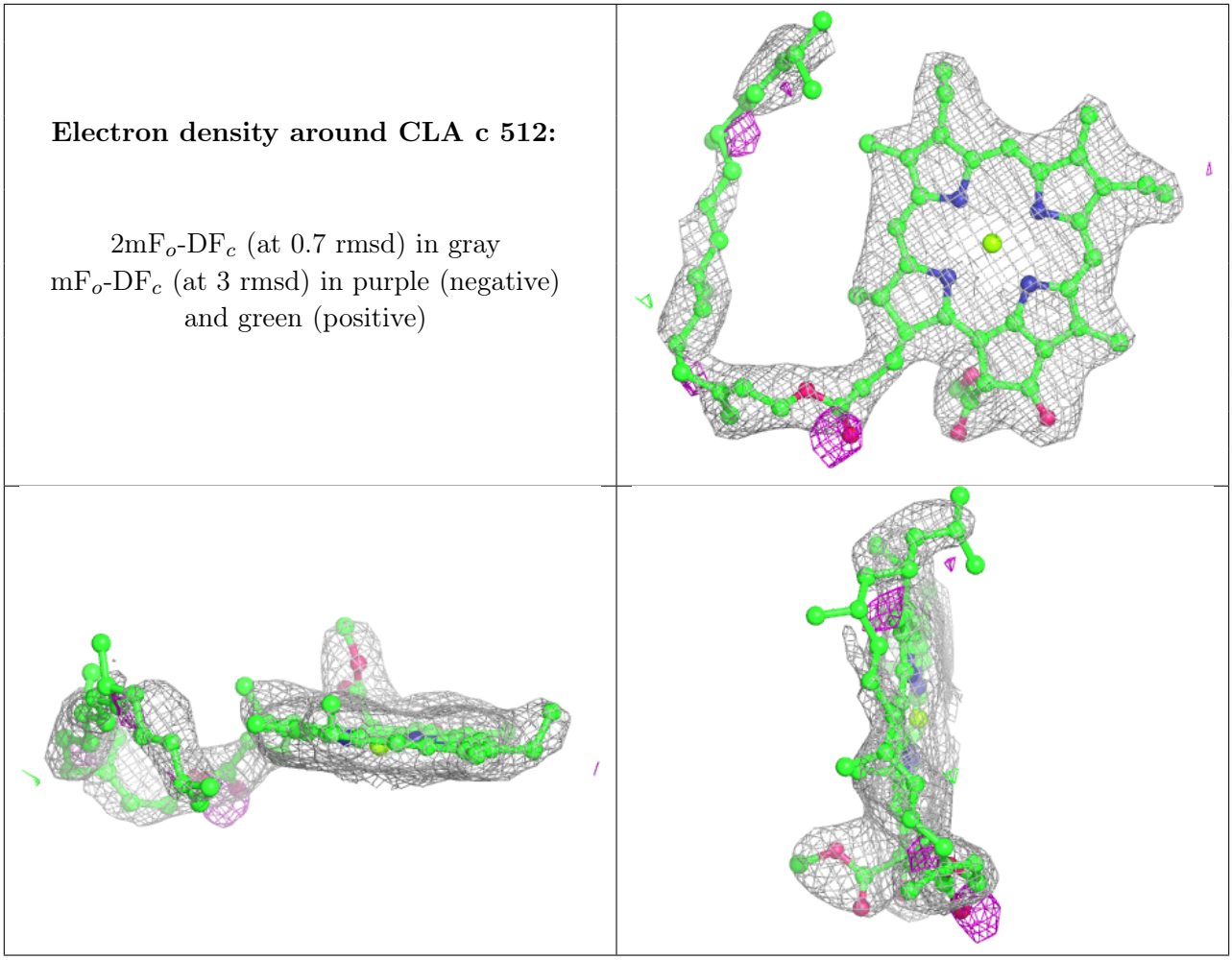






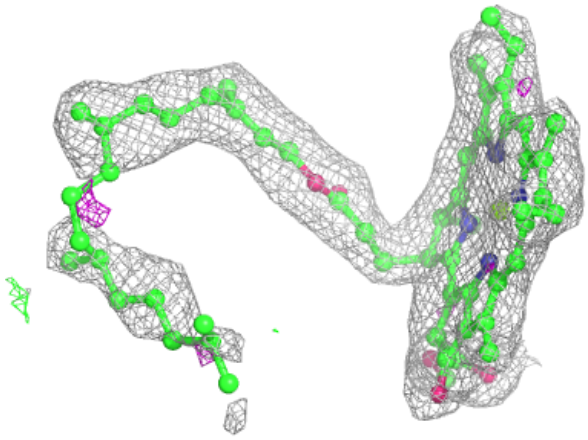
Electron density around CLA c 512:

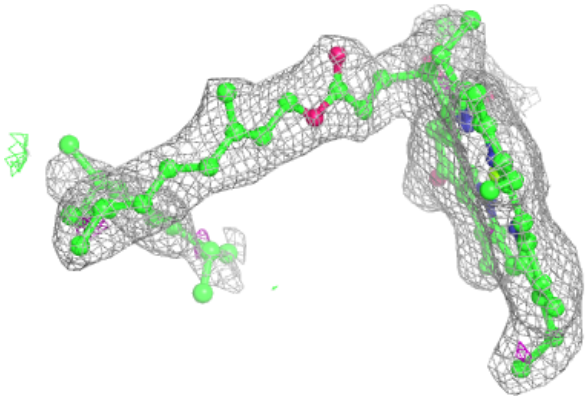
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

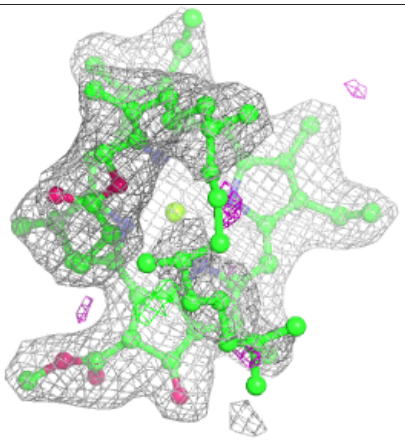


Electron density around CLA B 606:

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

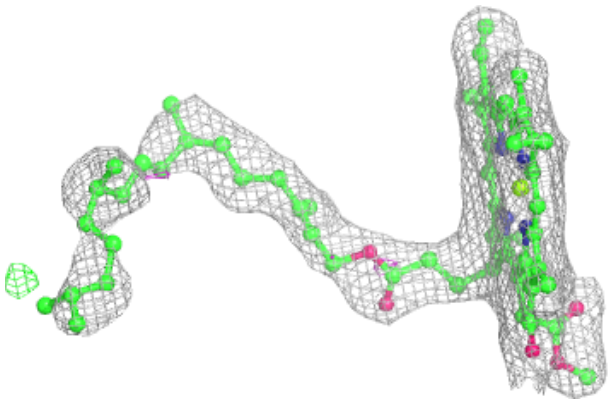


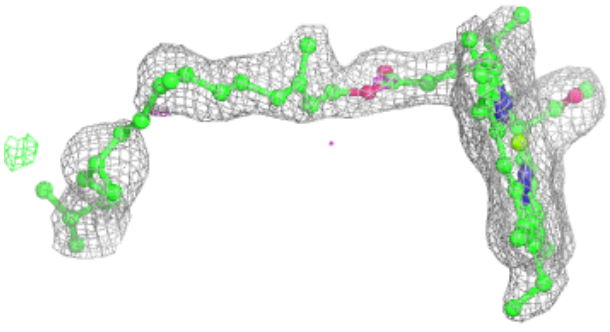


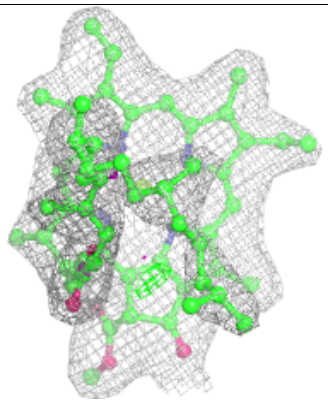


Electron density around CLA D 405:

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

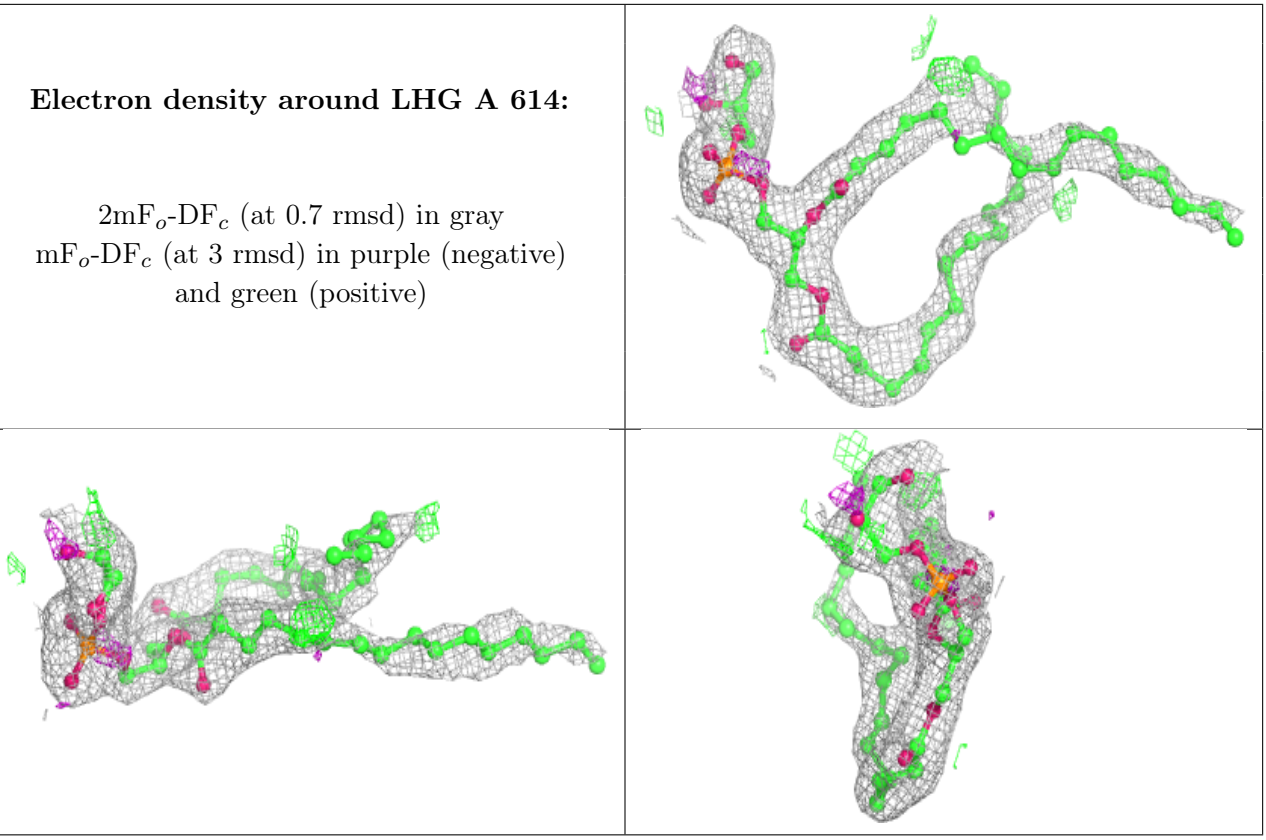






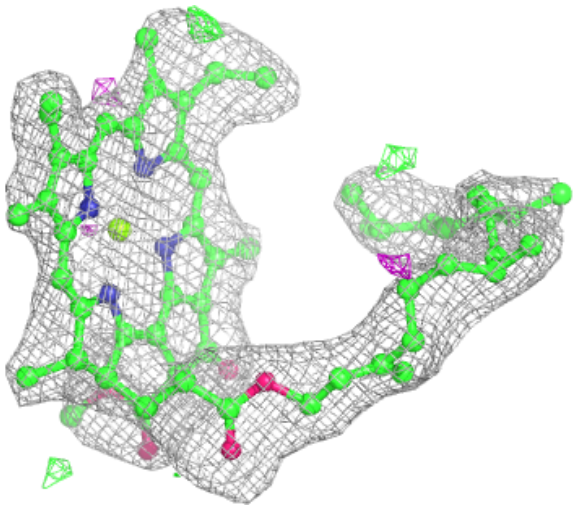
Electron density around LHG A 614:

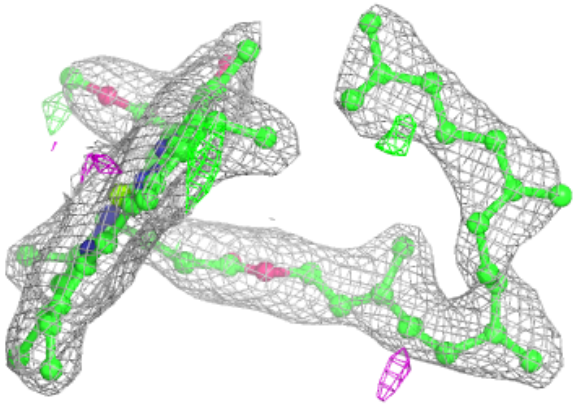
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

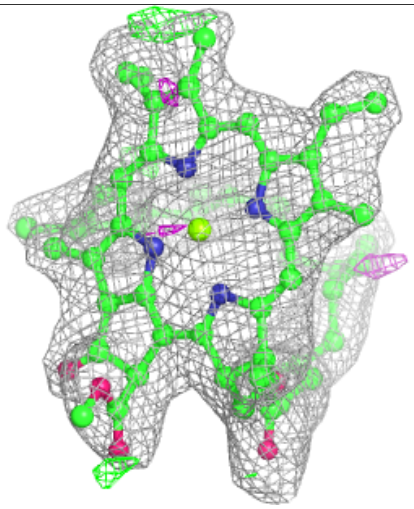


Electron density around CLA C 503:

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

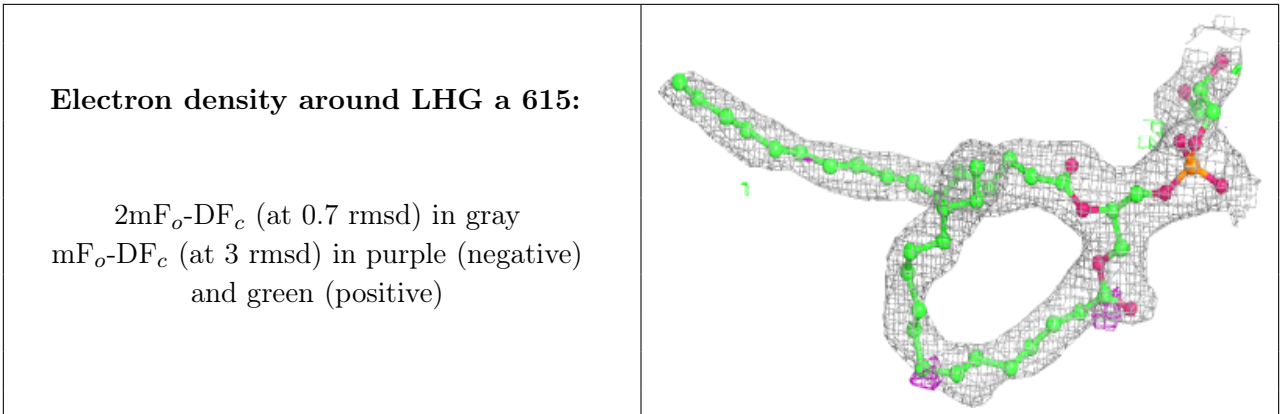


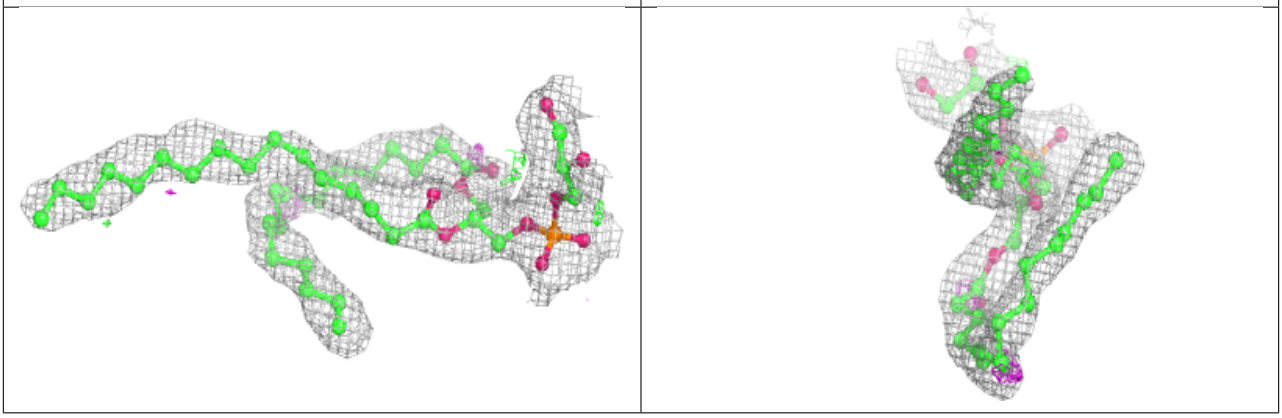




Electron density around LHG a 615:

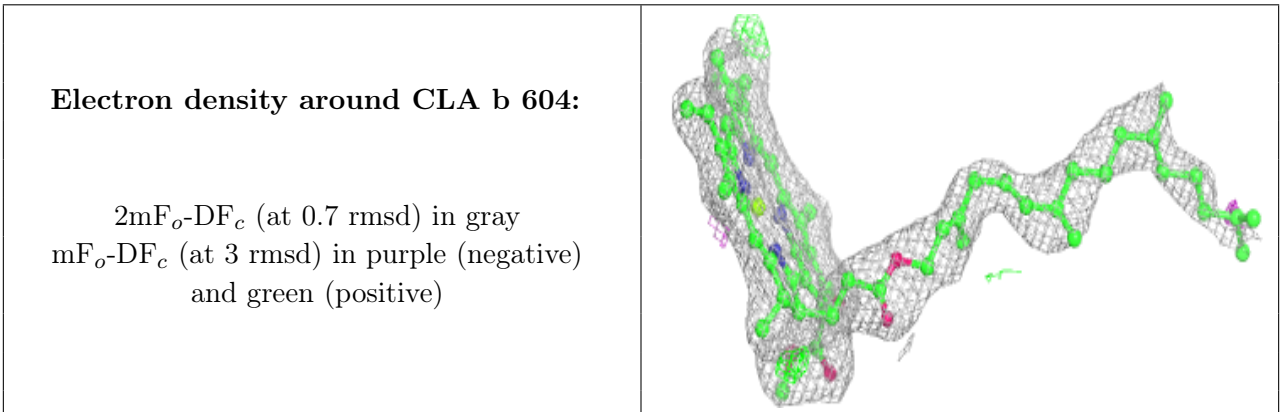
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

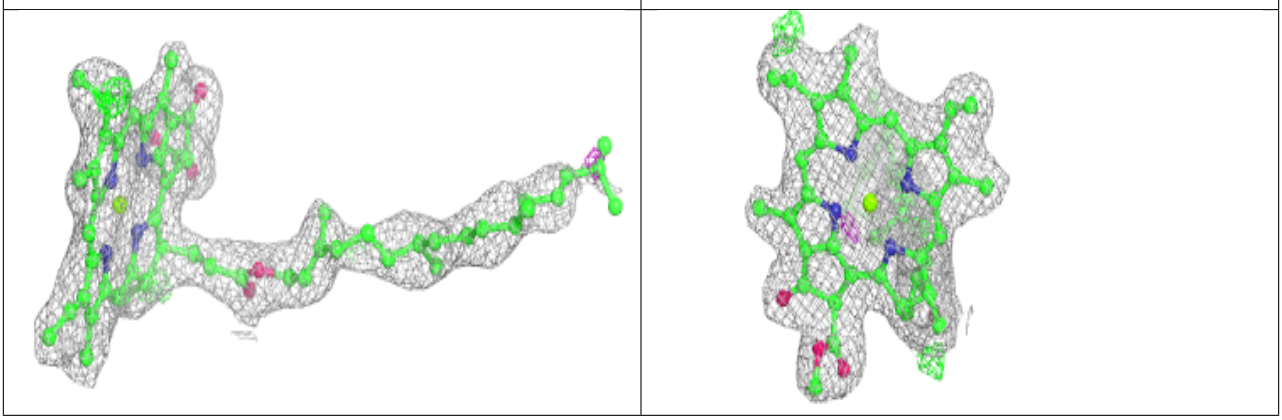




Electron density around CLA b 604:

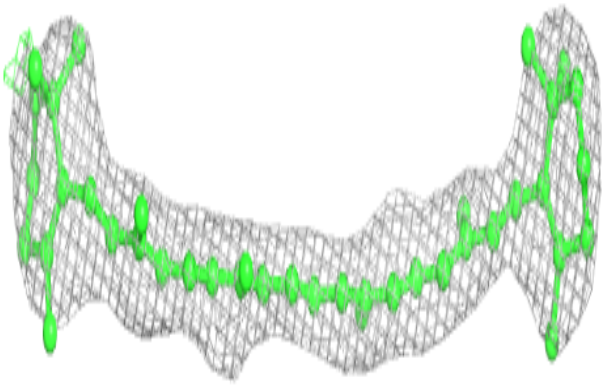
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

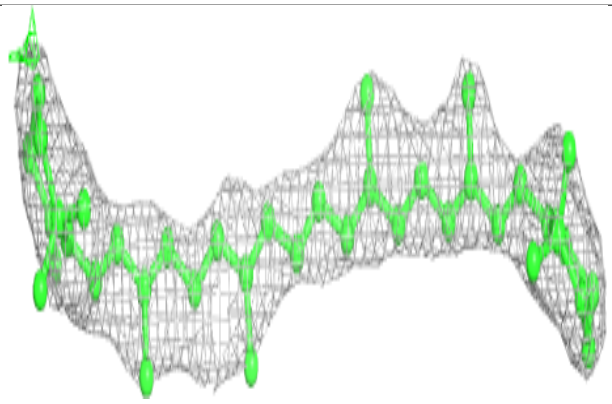


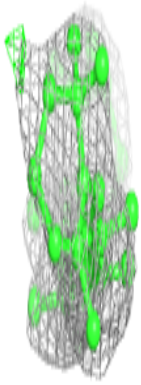


Electron density around BCR C 522:

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

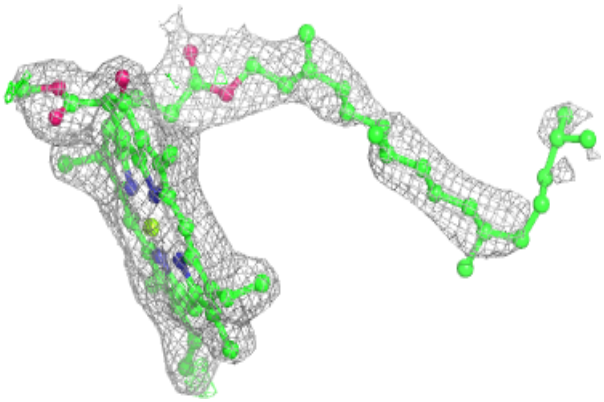


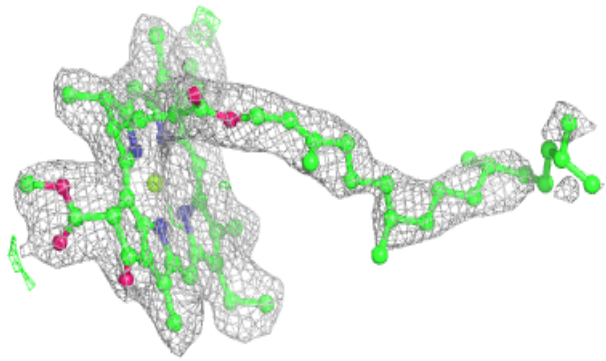


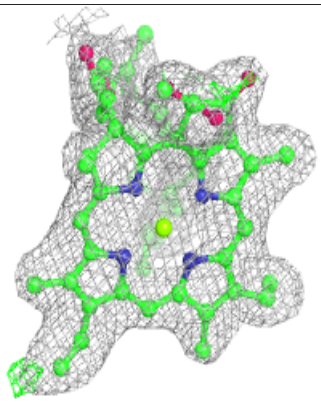


Electron density around CLA C 508:

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

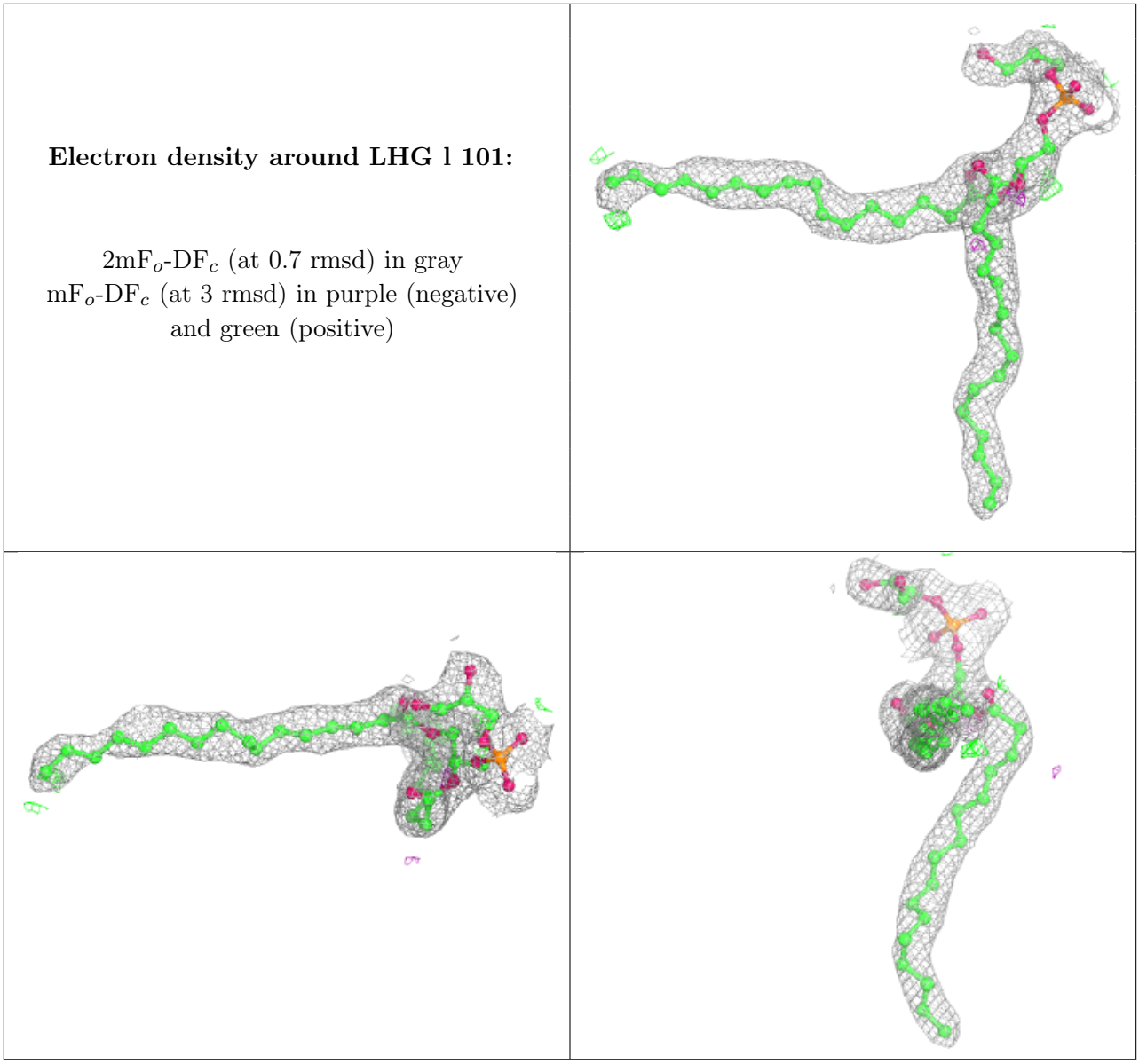






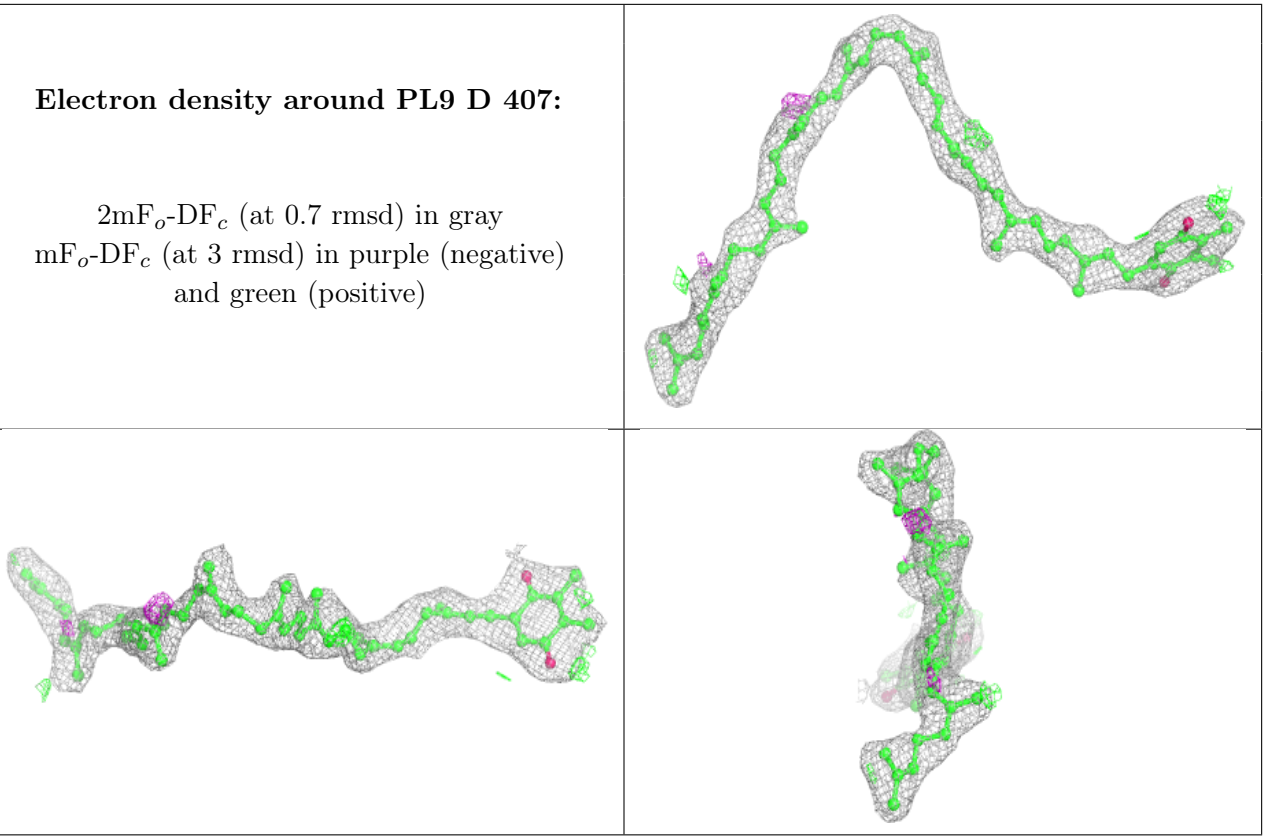
Electron density around LHG l 101:

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



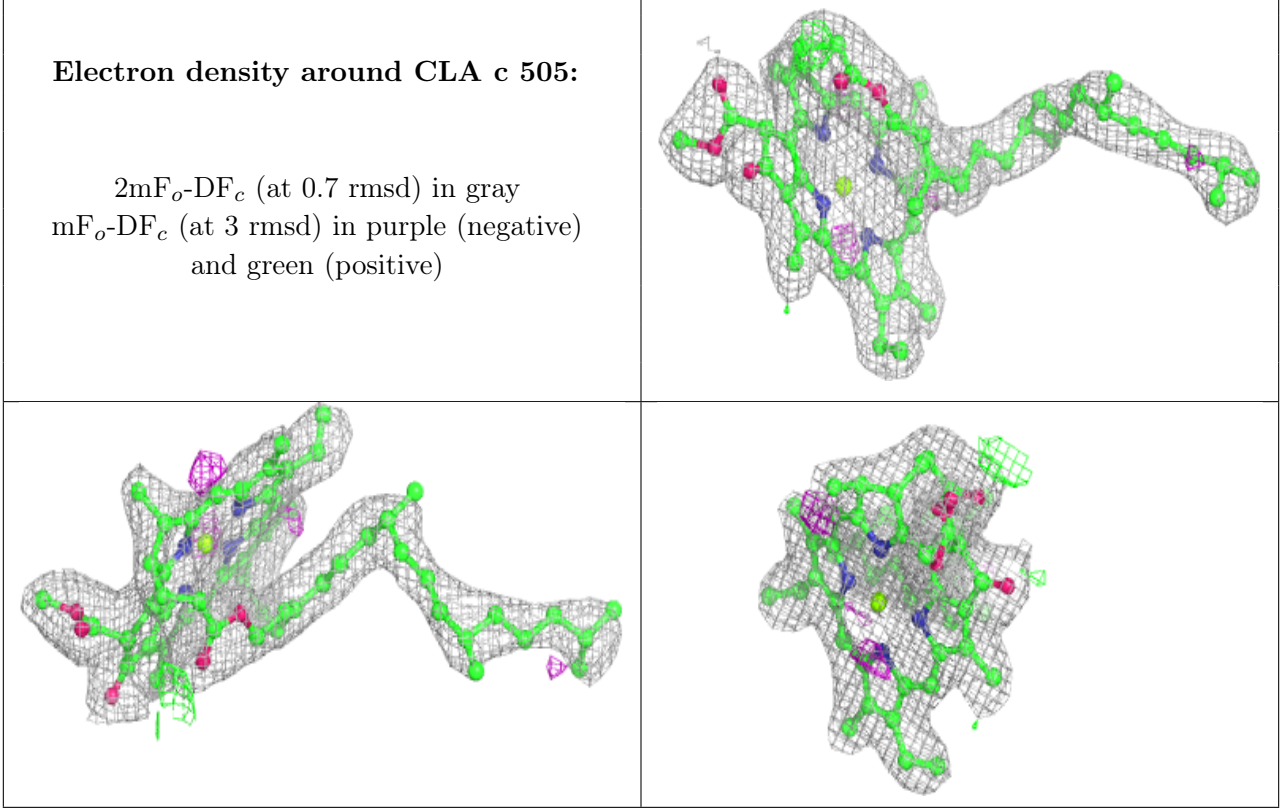
Electron density around PL9 D 407:

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



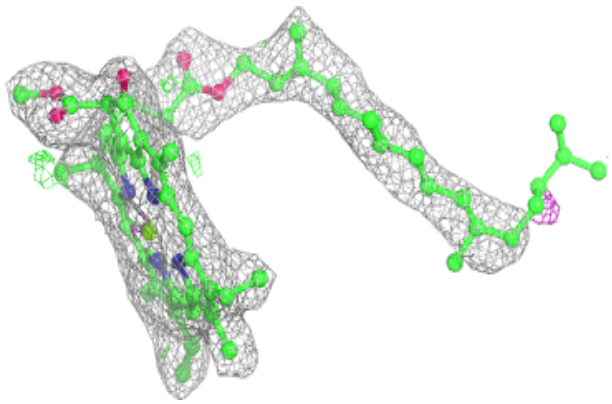
Electron density around CLA c 505:

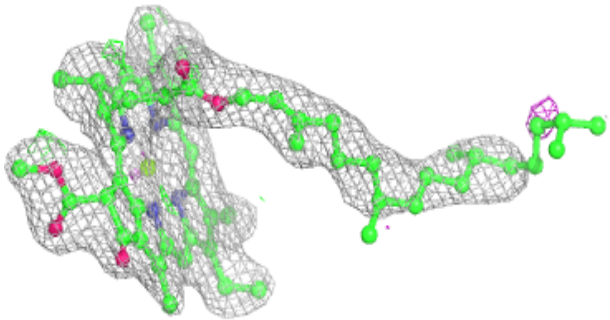
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

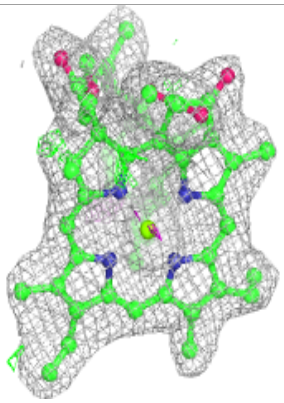


Electron density around CLA c 508:

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

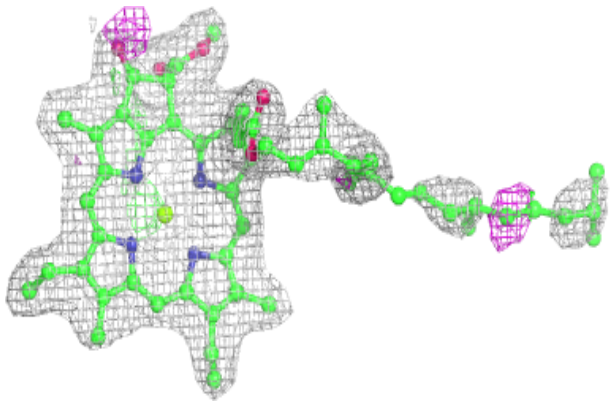


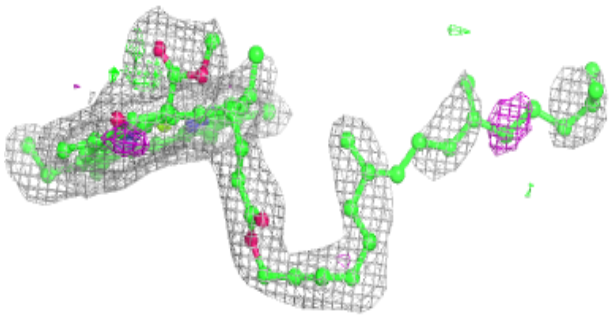


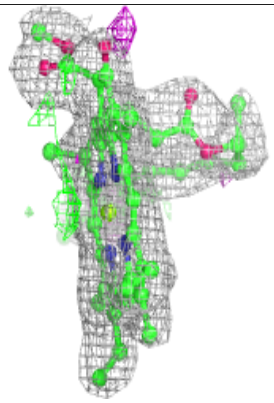


Electron density around CLA a 608:

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

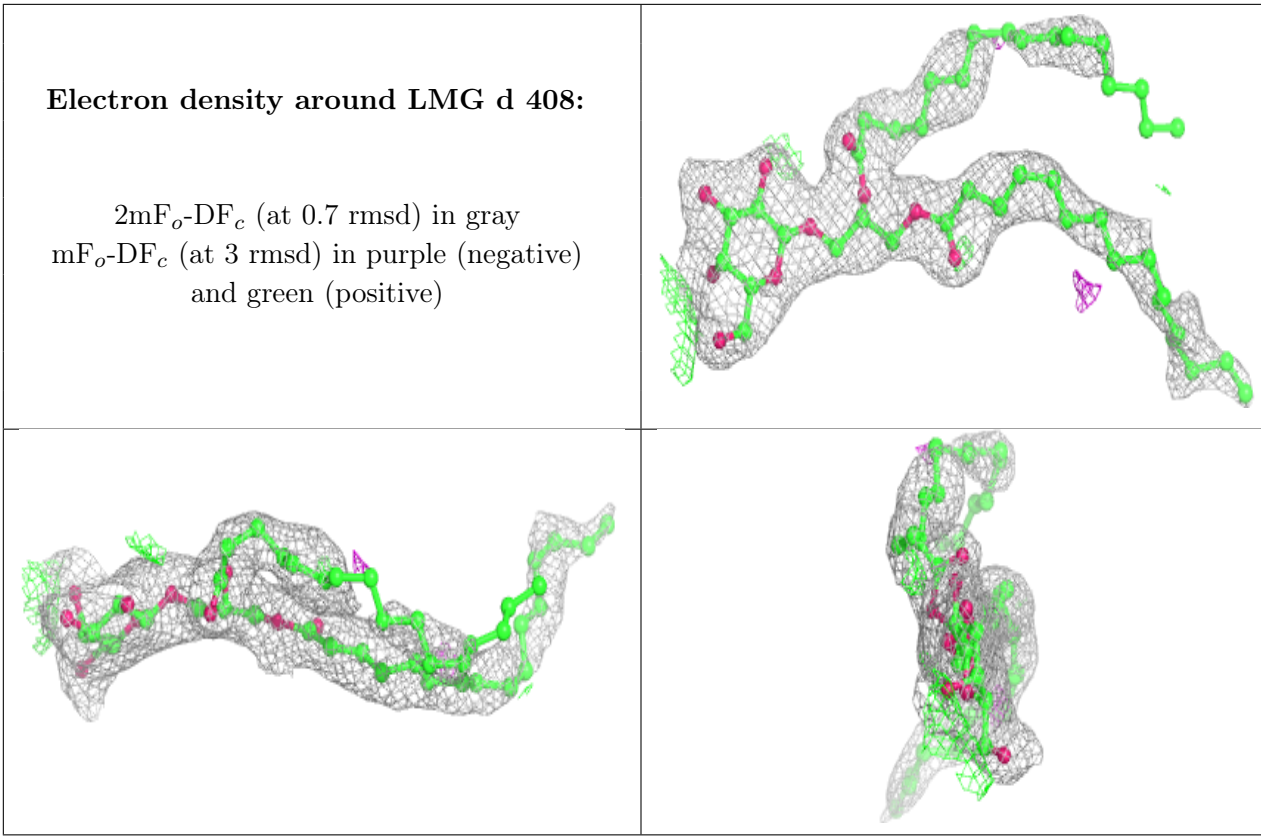






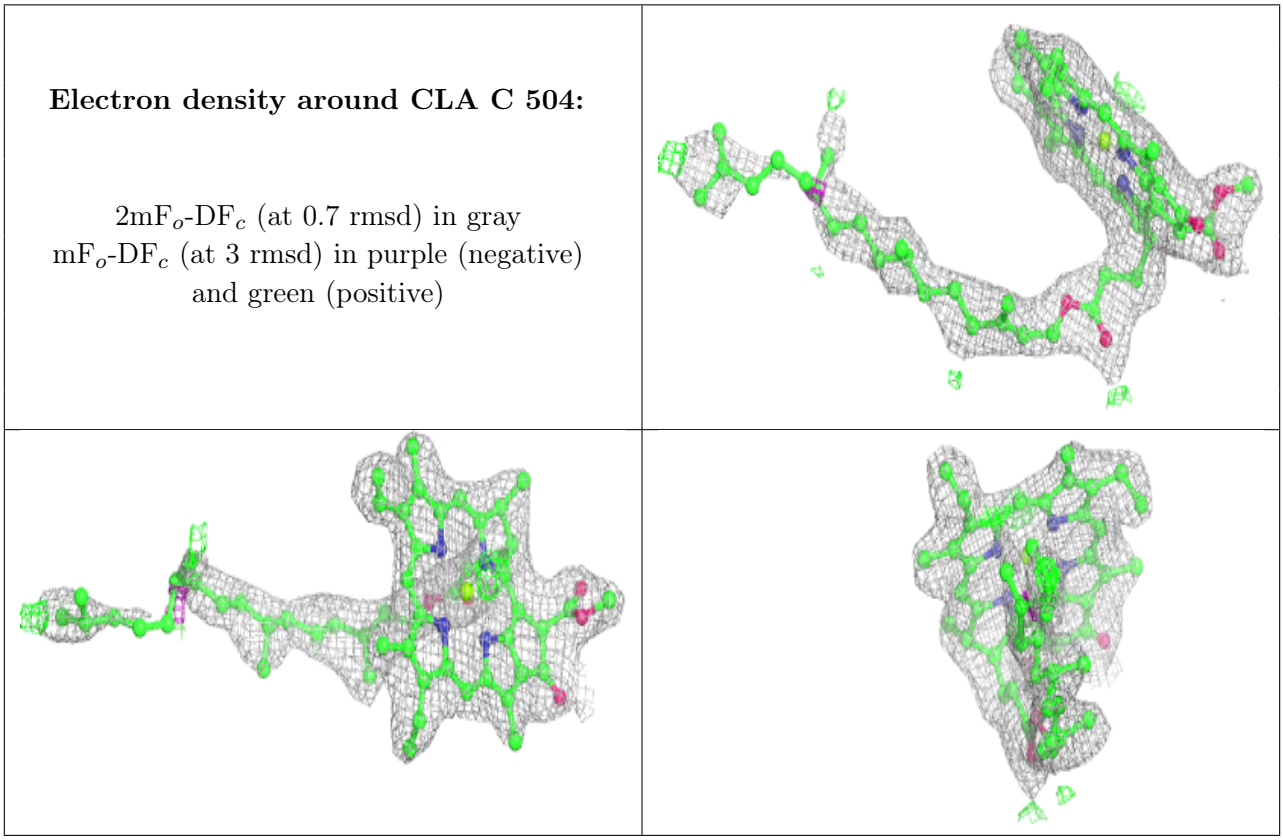
Electron density around LMG d 408:

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



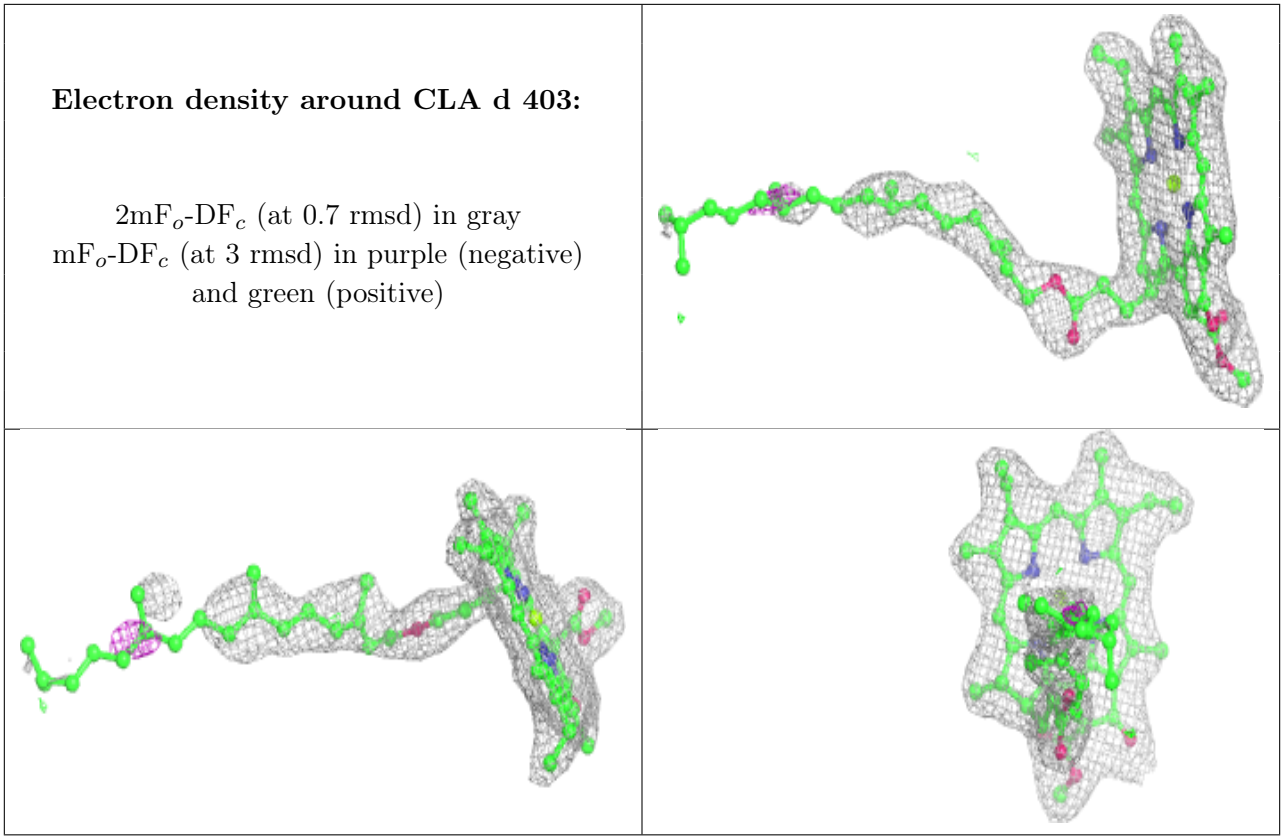
Electron density around CLA C 504:

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



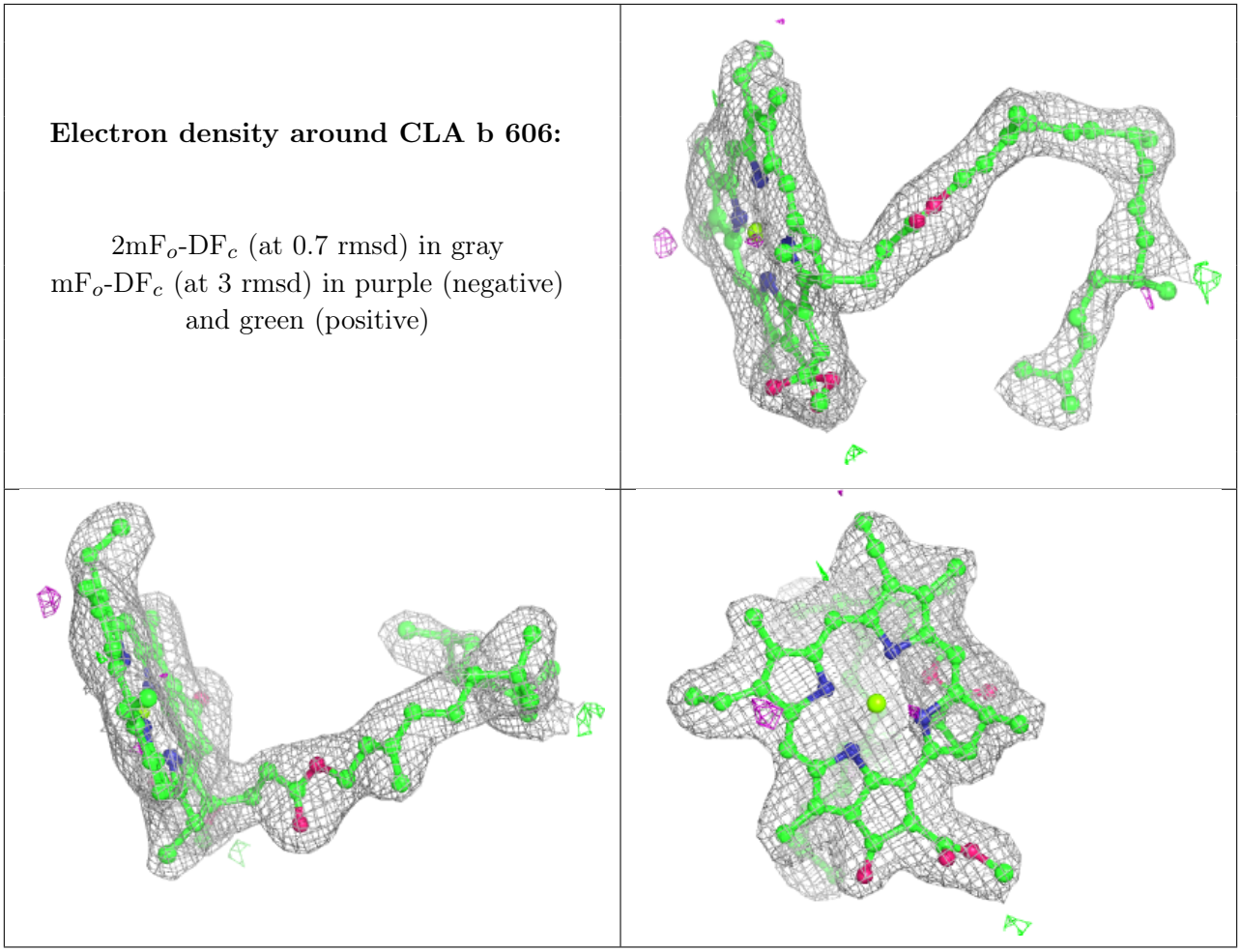
Electron density around CLA d 403:

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



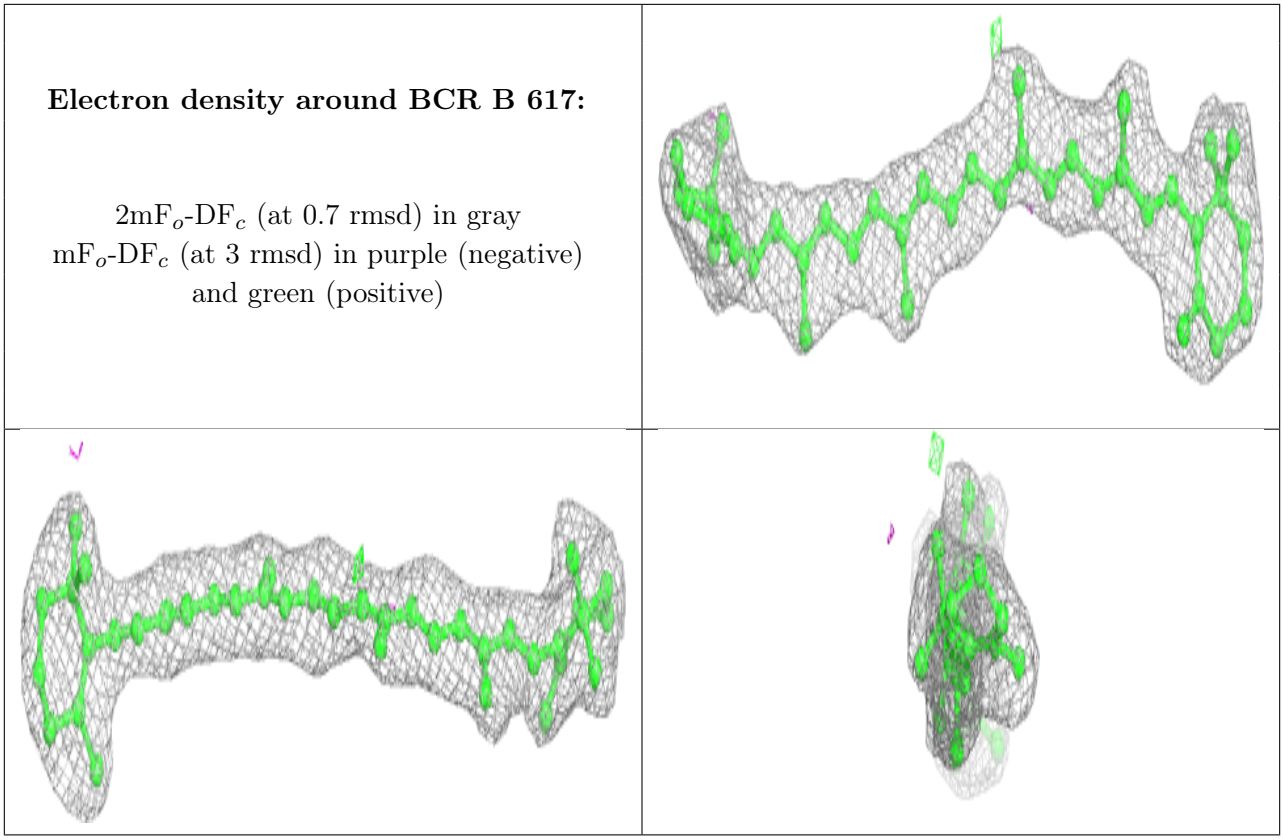
Electron density around CLA b 606:

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



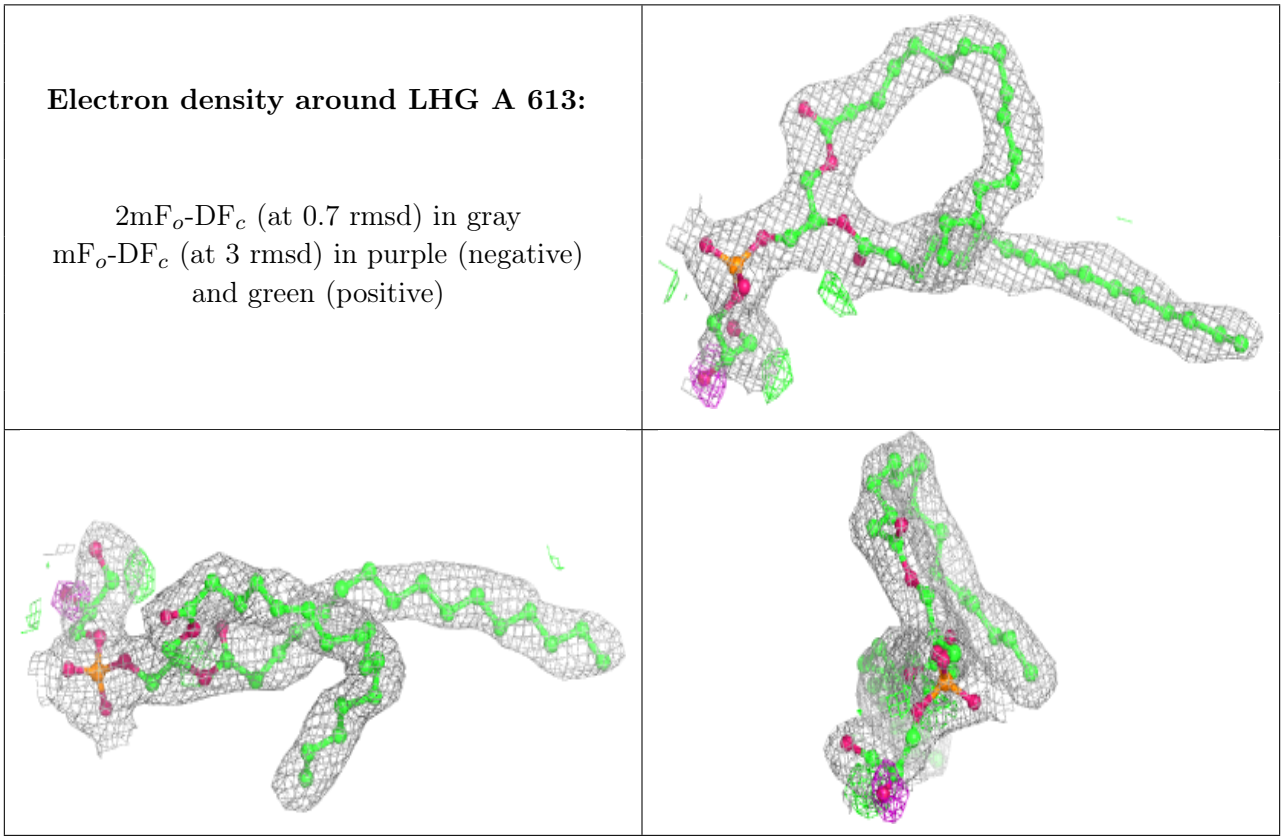
Electron density around BCR B 617:

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



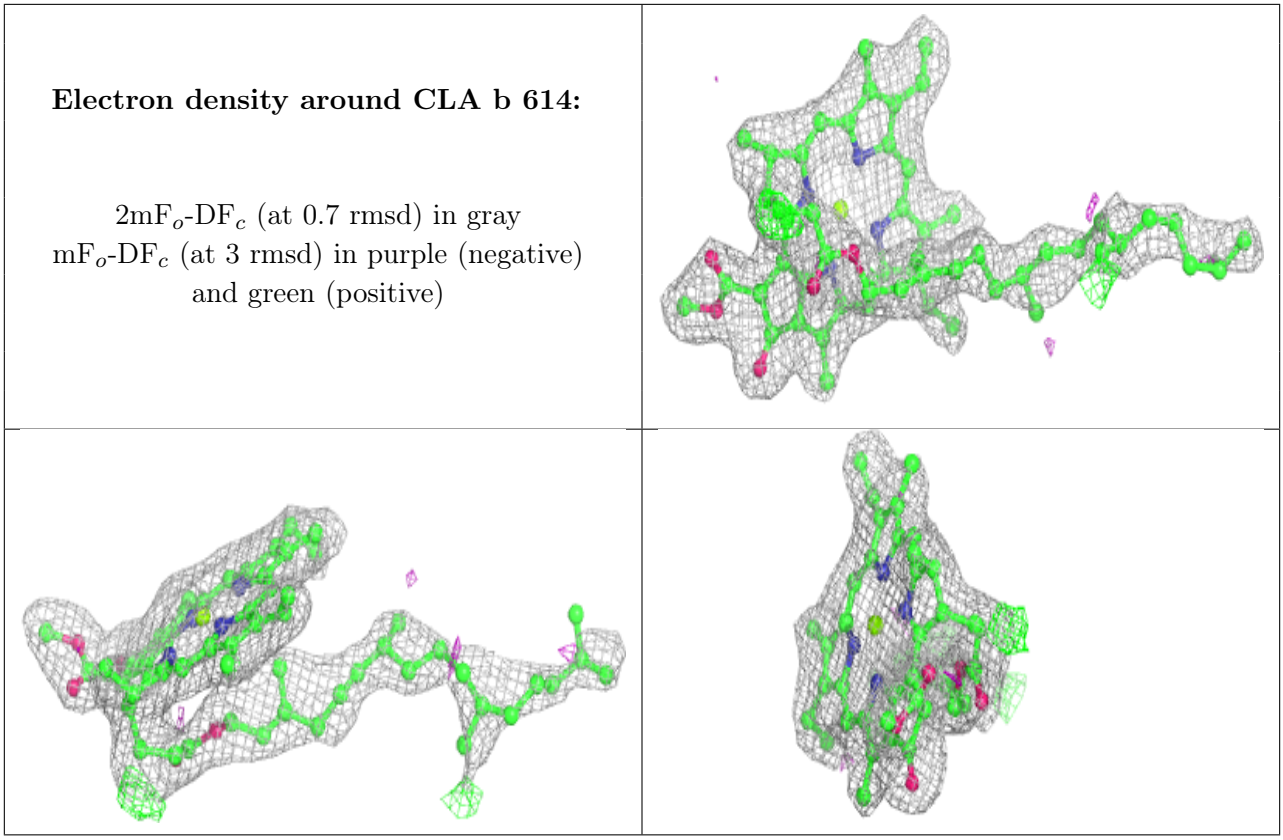
Electron density around LHG A 613:

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



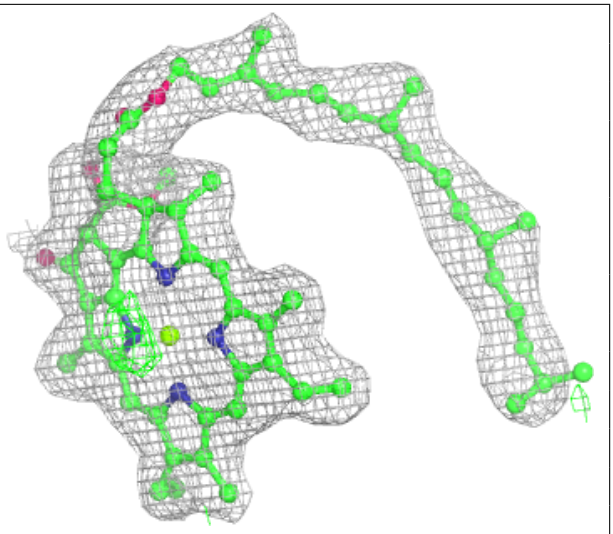
Electron density around CLA b 614:

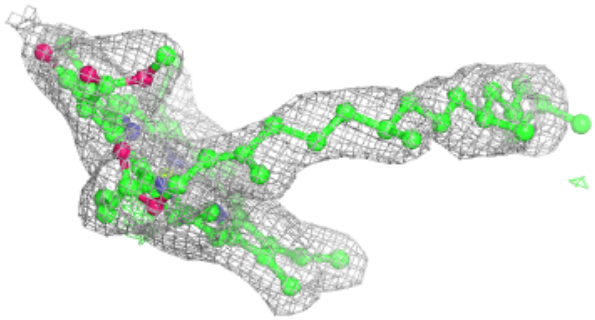
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

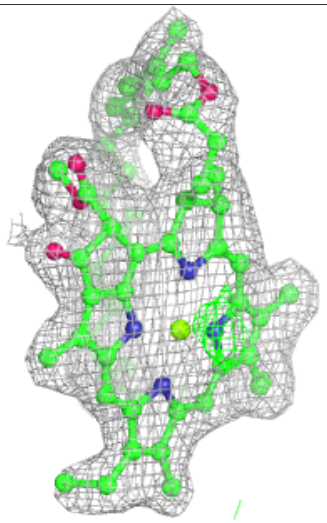


Electron density around CLA C 507:

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

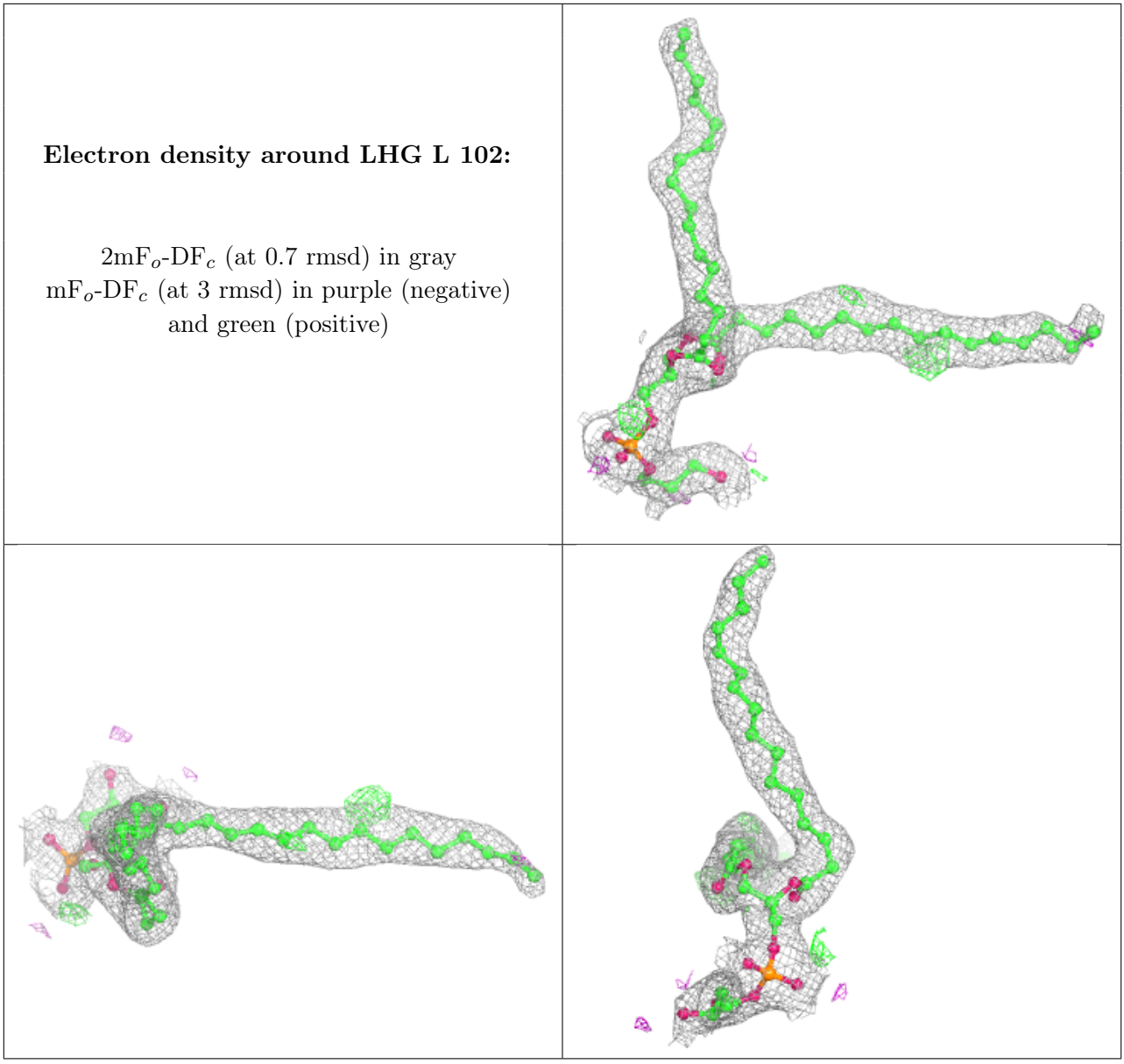






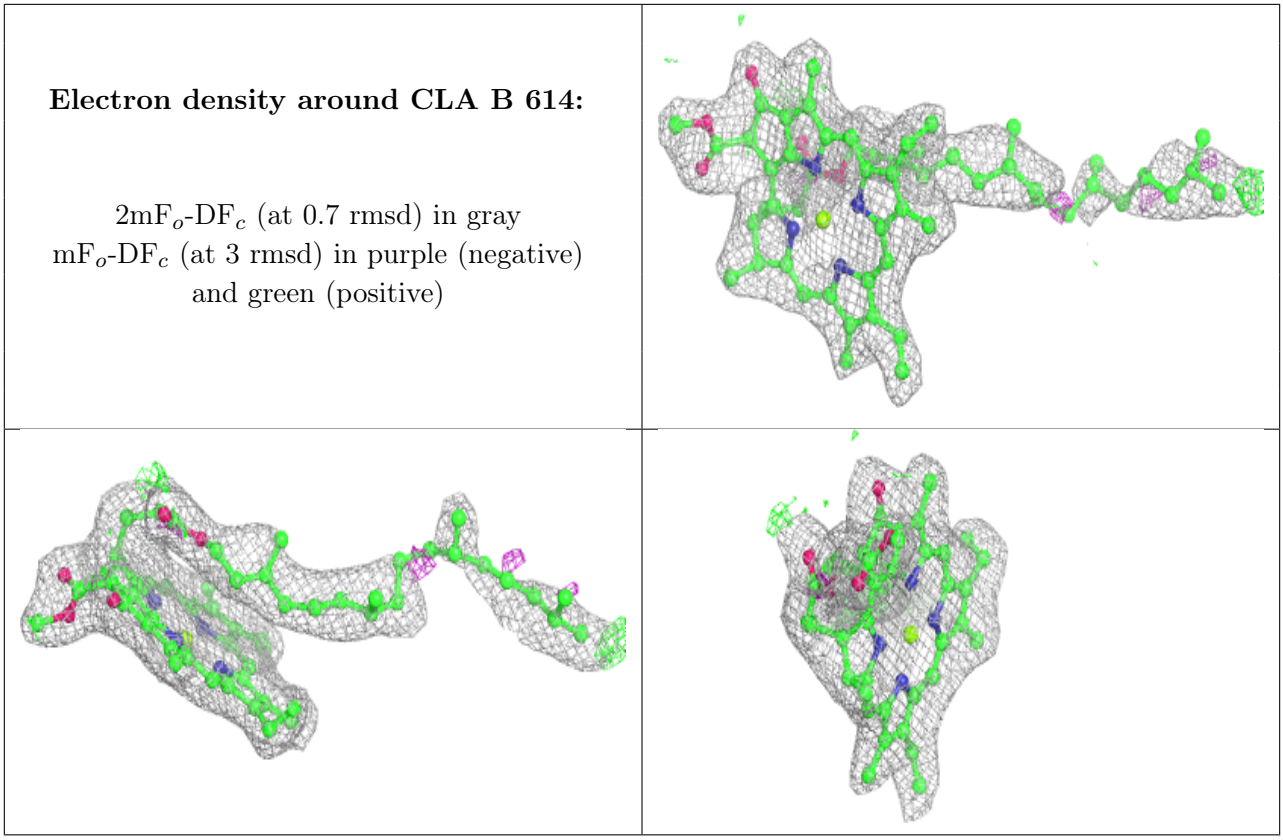
Electron density around LHG L 102:

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



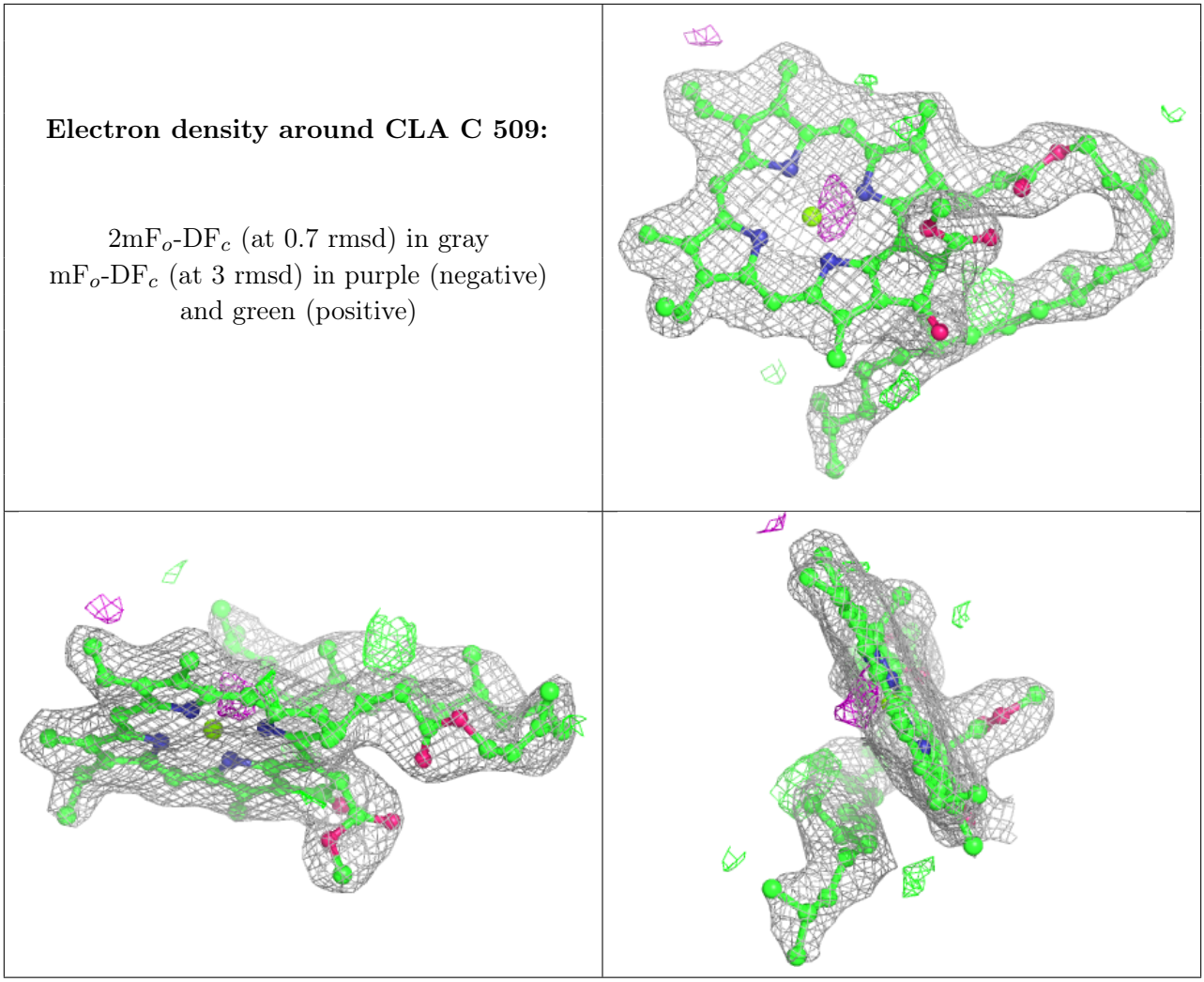
Electron density around CLA B 614:

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



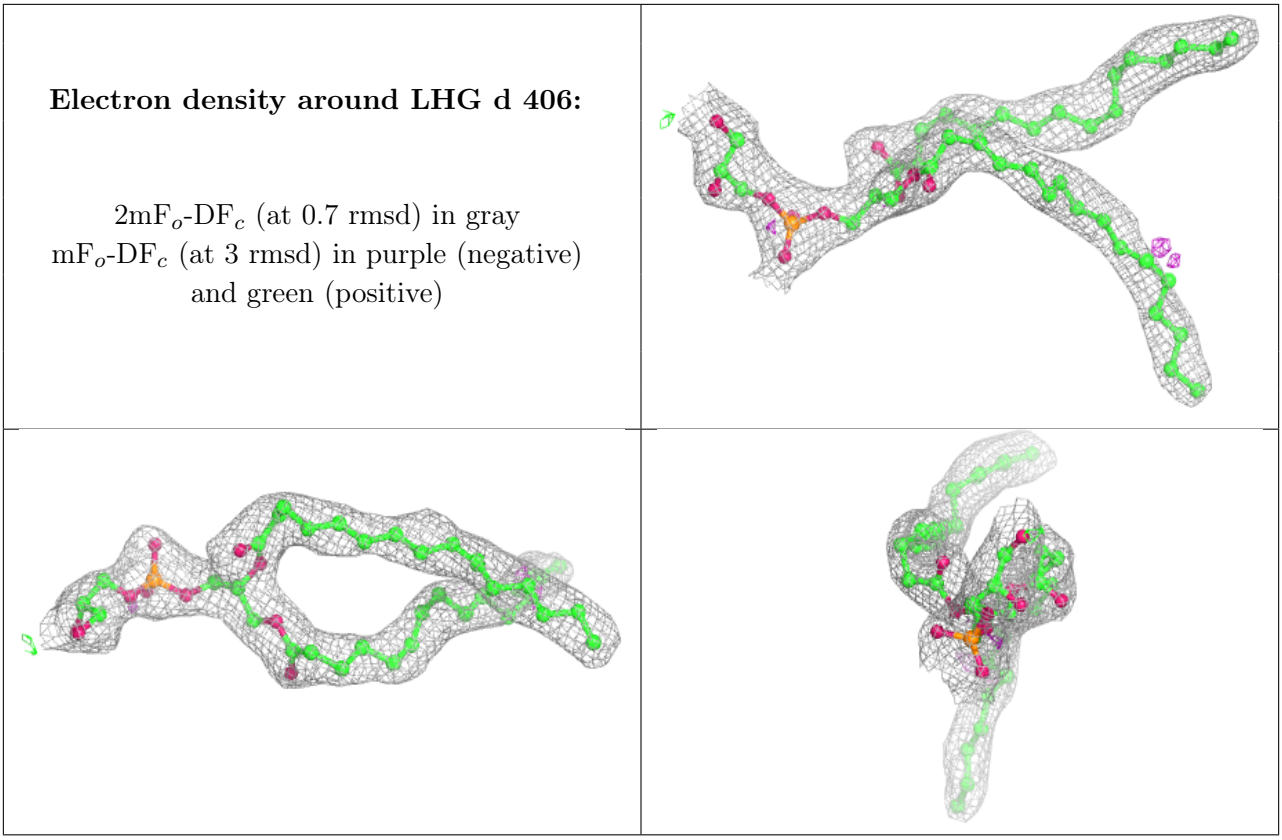
Electron density around CLA C 509:

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



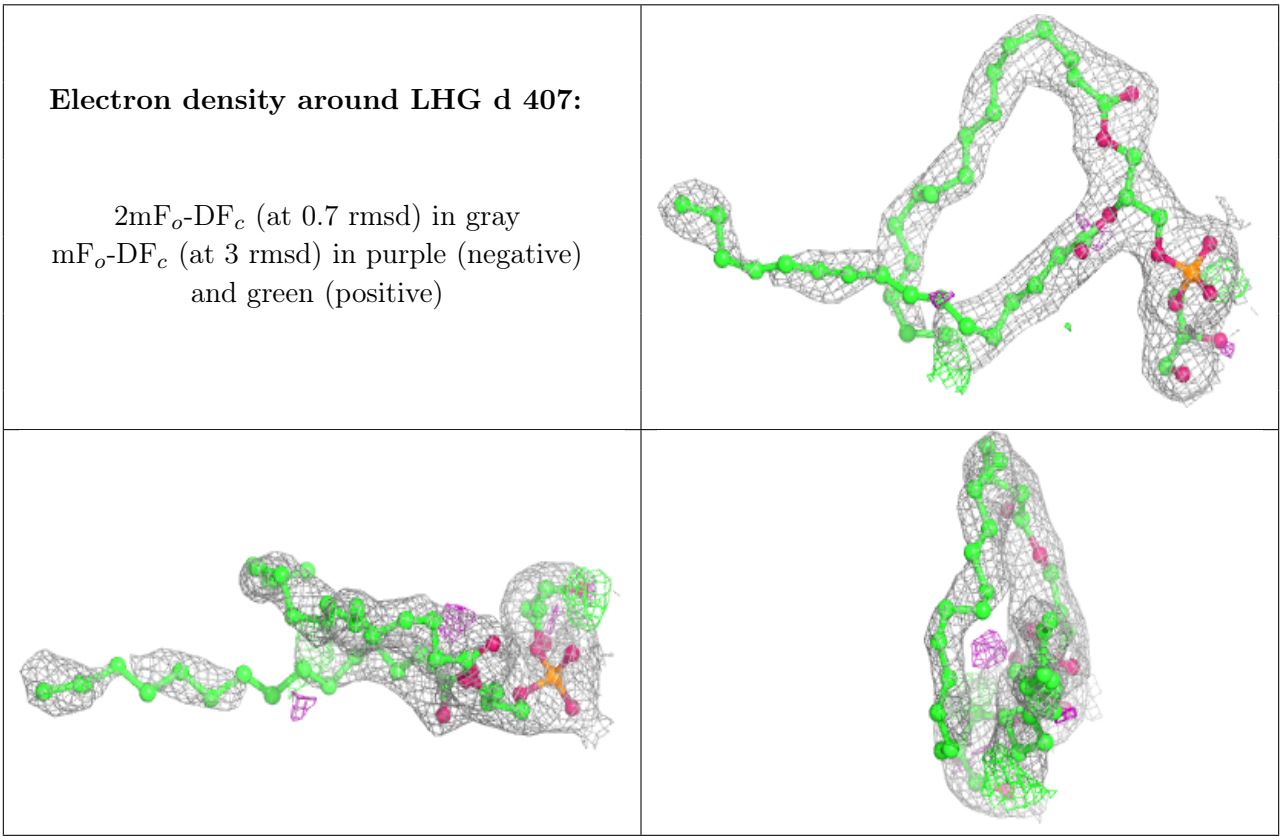
Electron density around LHG d 406:

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



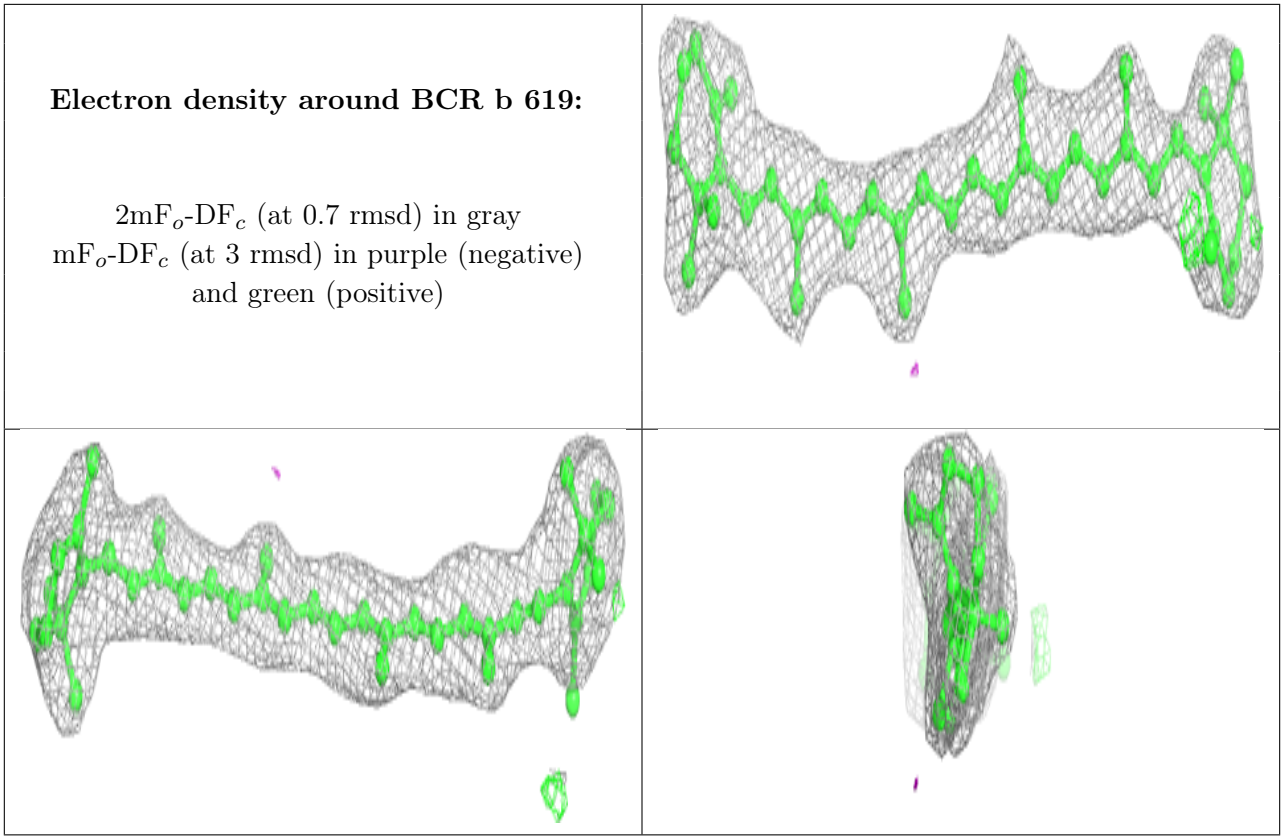
Electron density around LHG d 407:

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



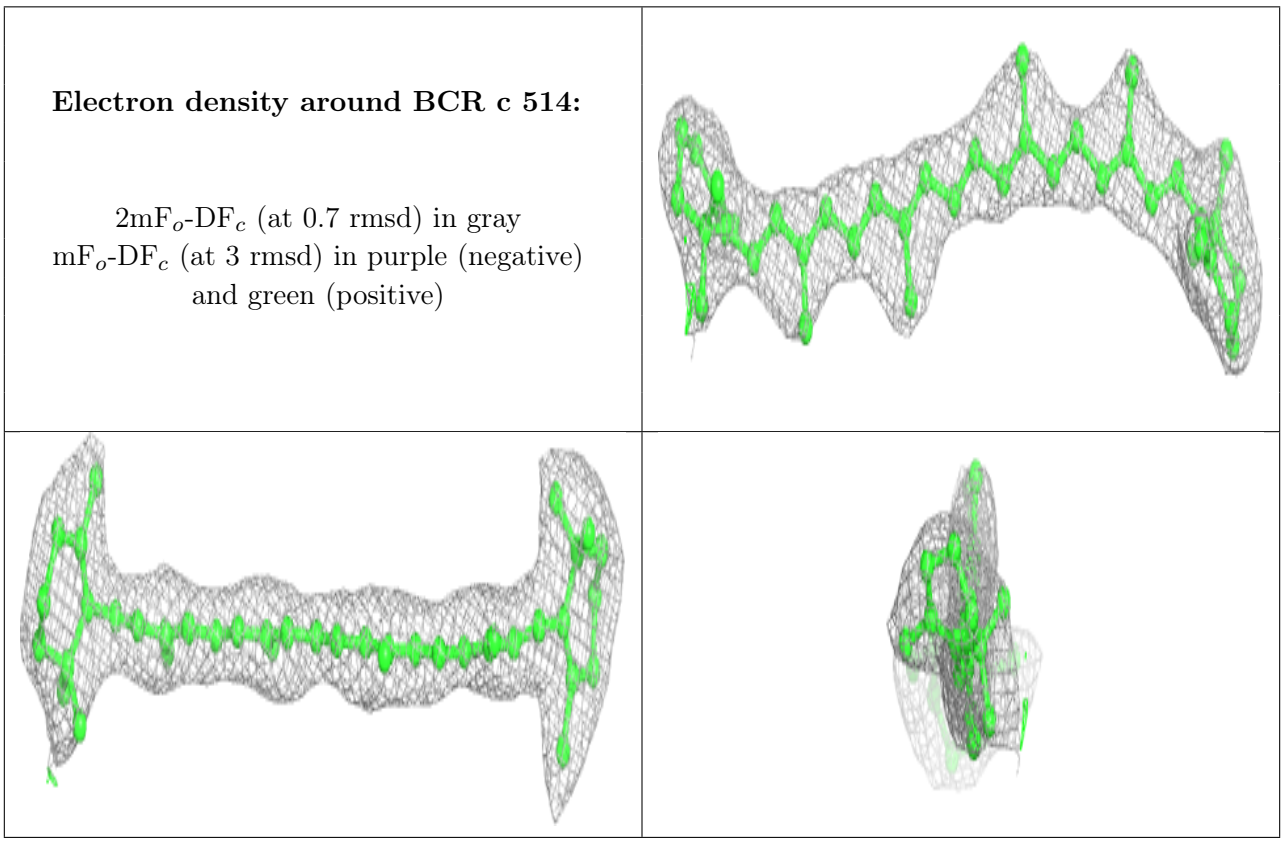
Electron density around BCR b 619:

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



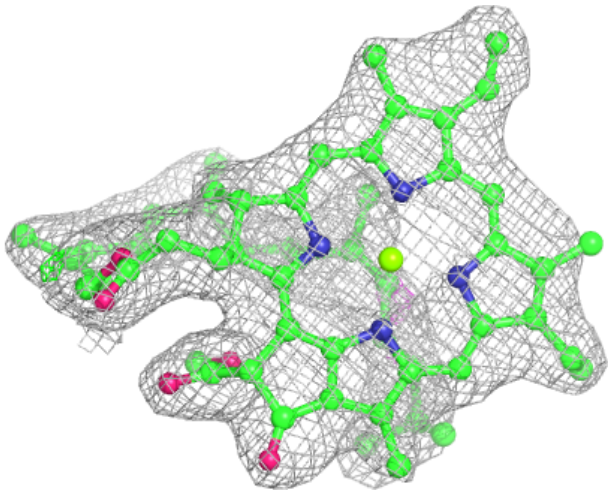
Electron density around BCR c 514:

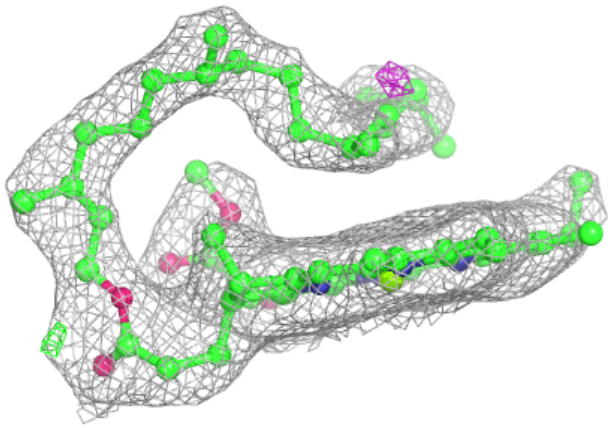
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

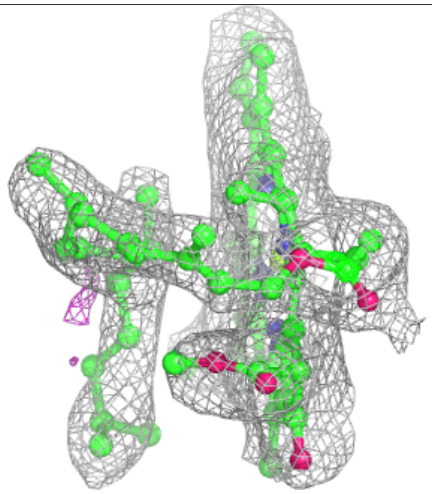


Electron density around CLA c 510:

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

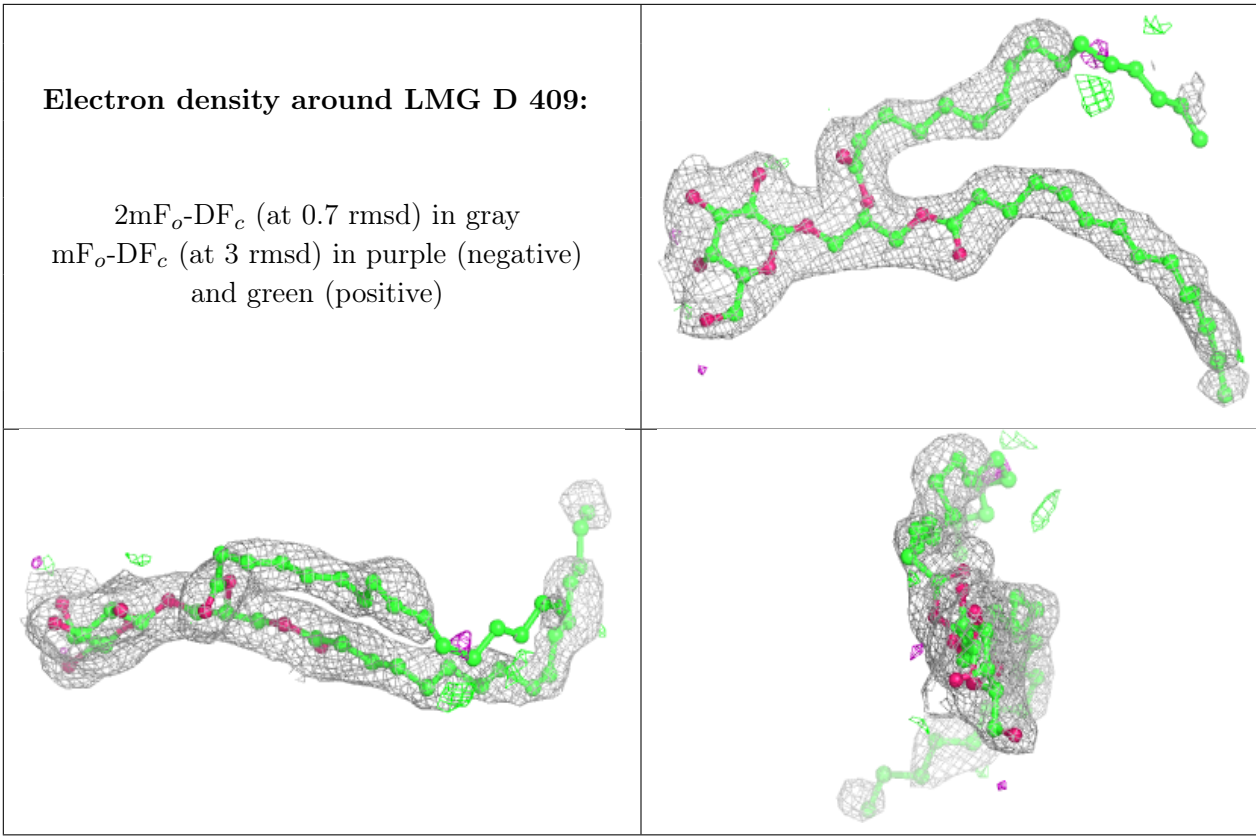






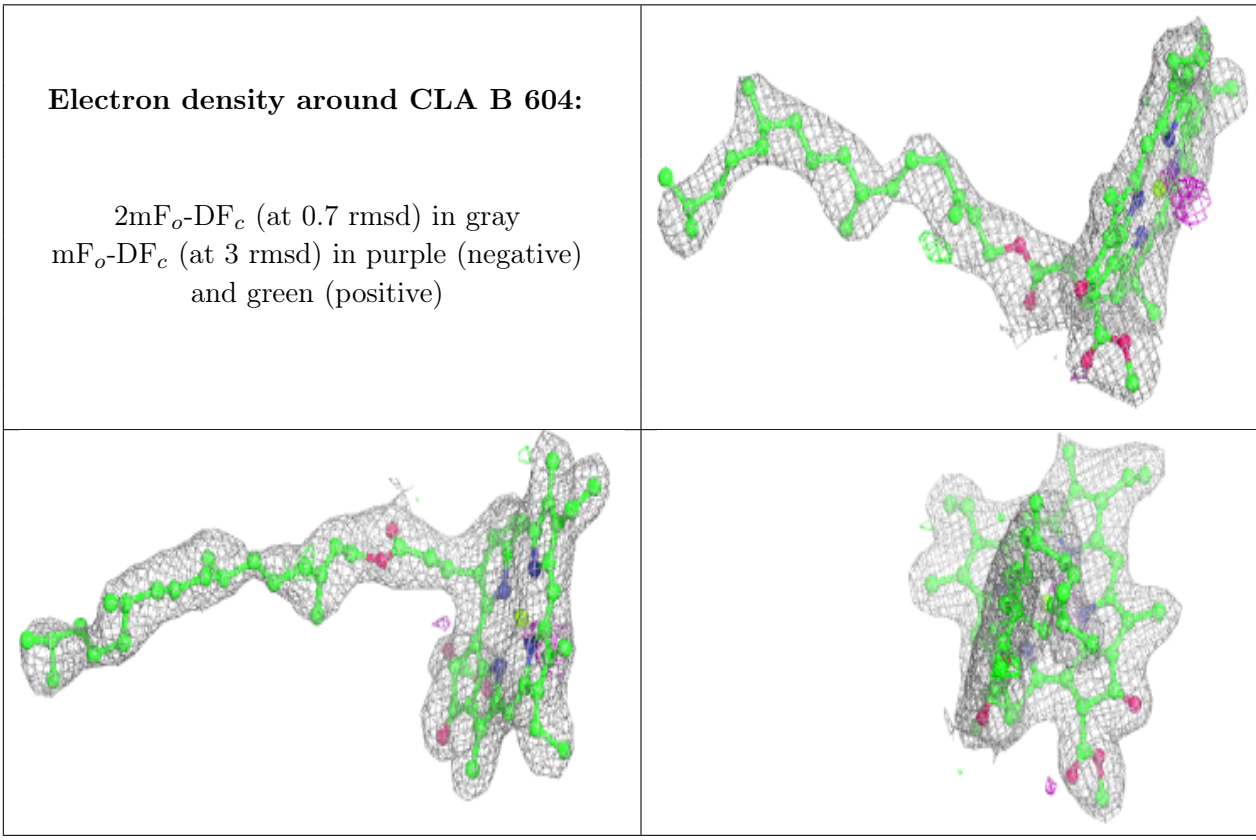
Electron density around LMG D 409:

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



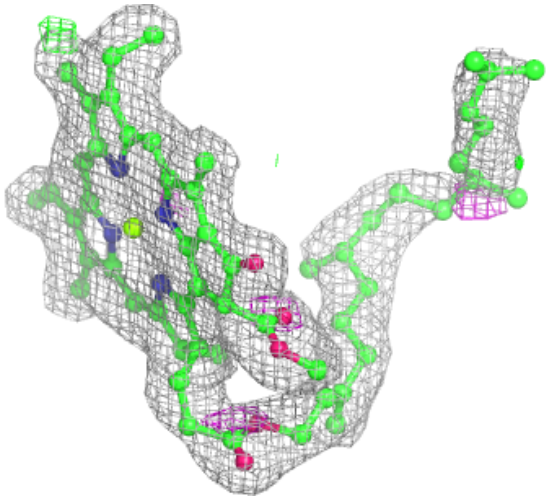
Electron density around CLA B 604:

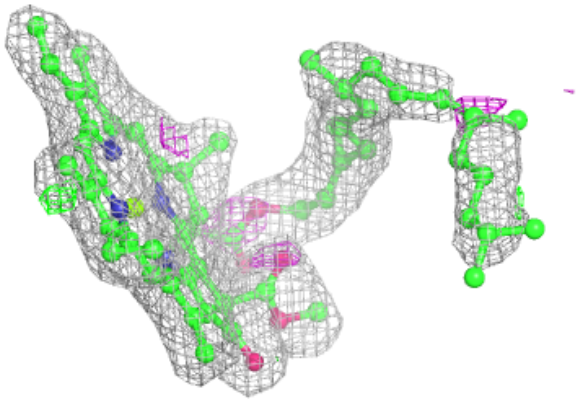
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

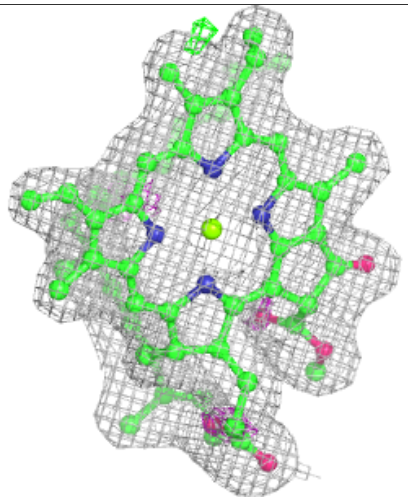


Electron density around CLA b 613:

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

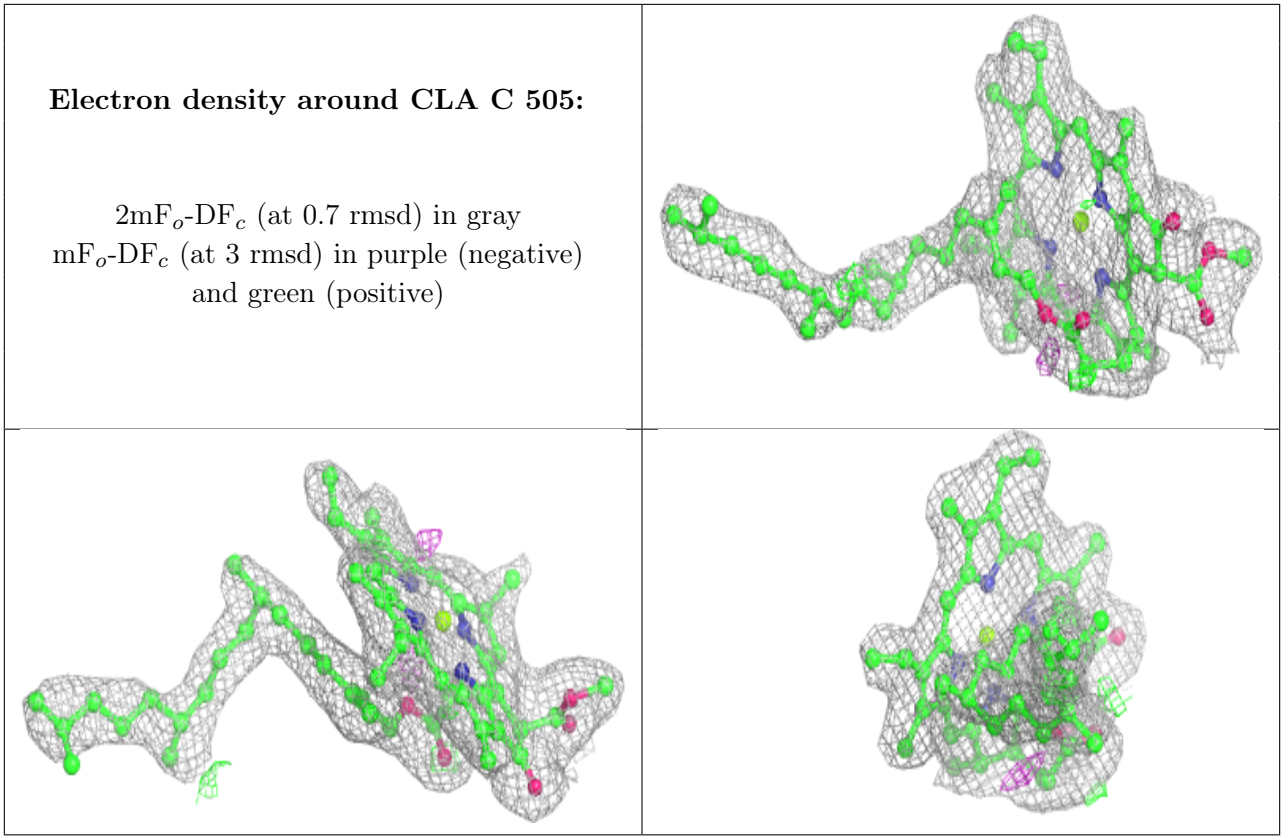






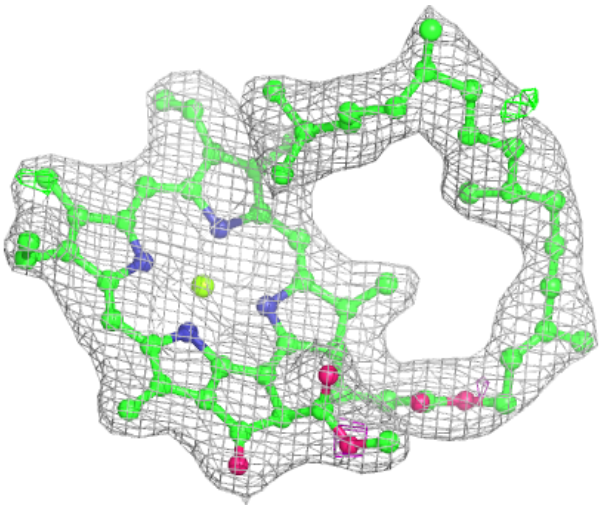
Electron density around CLA C 505:

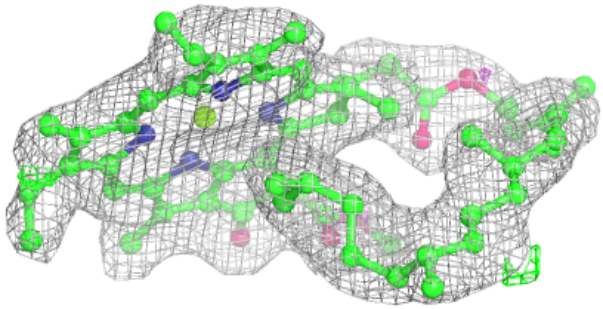
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

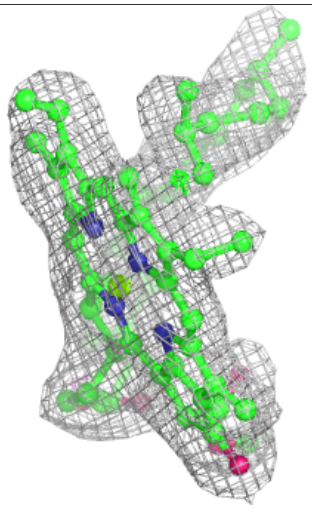


Electron density around CLA b 615:

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

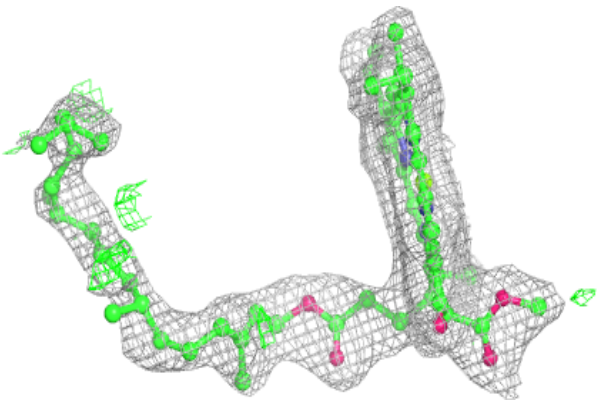


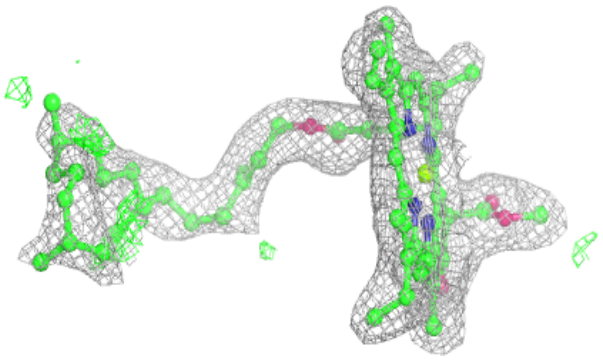


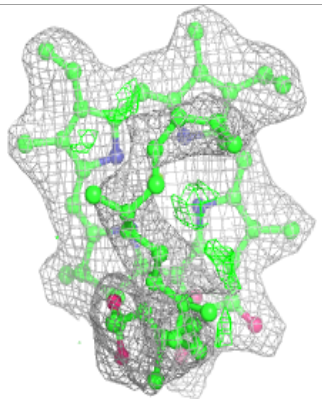


Electron density around CLA C 506:

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

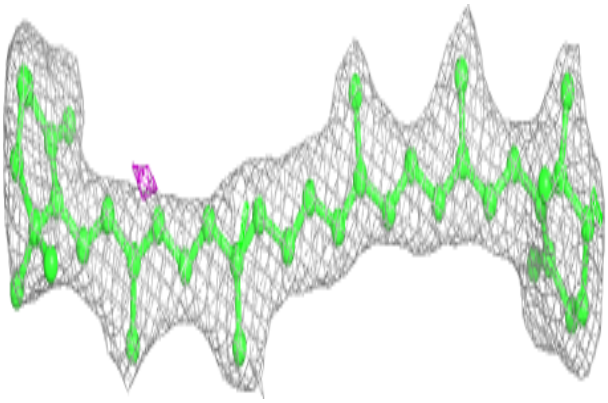


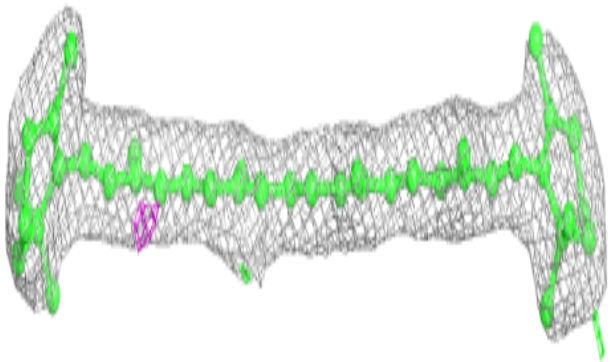


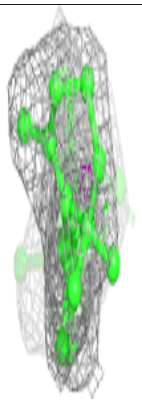


Electron density around BCR B 618:

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

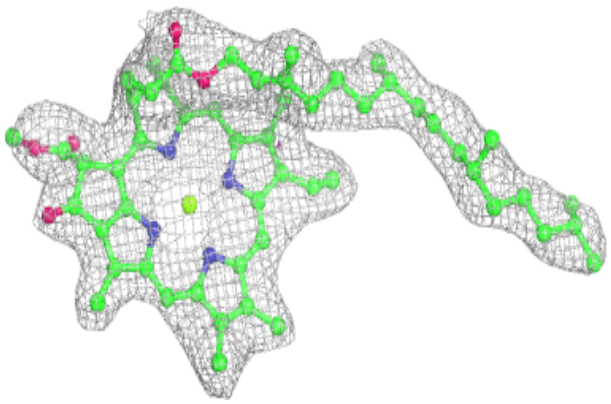


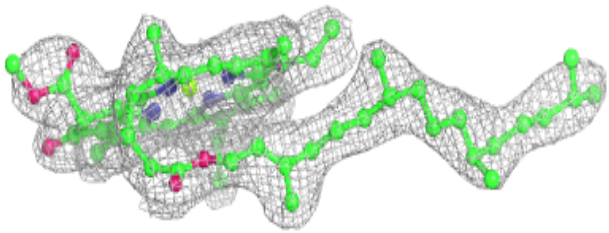


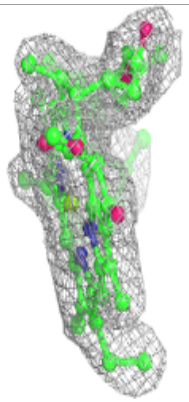


Electron density around CLA c 501:

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

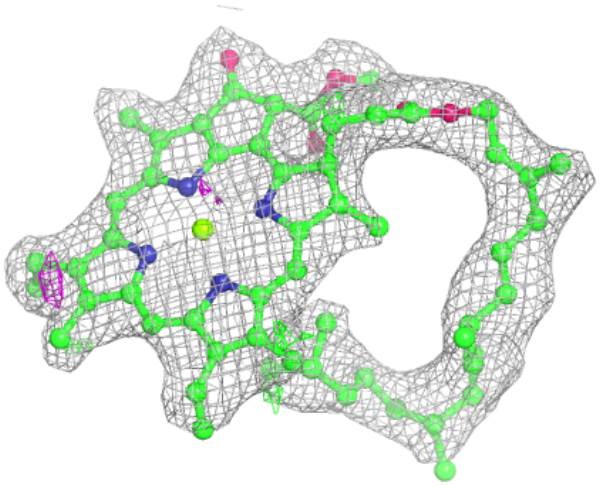


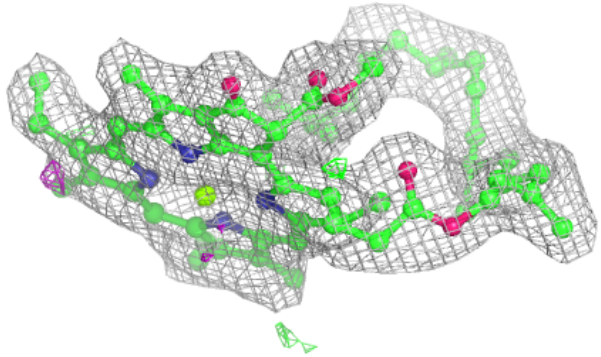


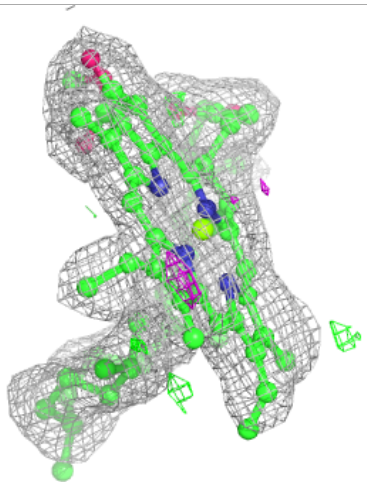


Electron density around CLA B 615:

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

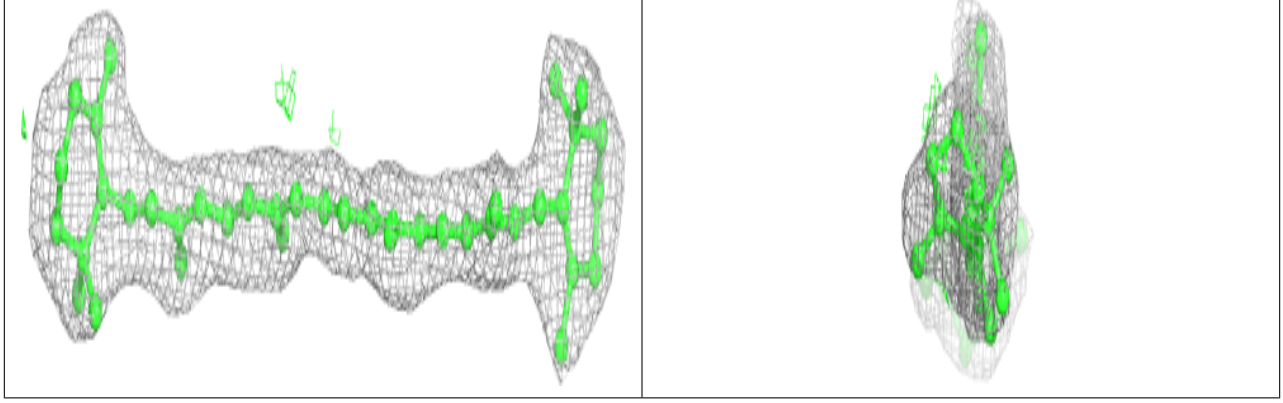






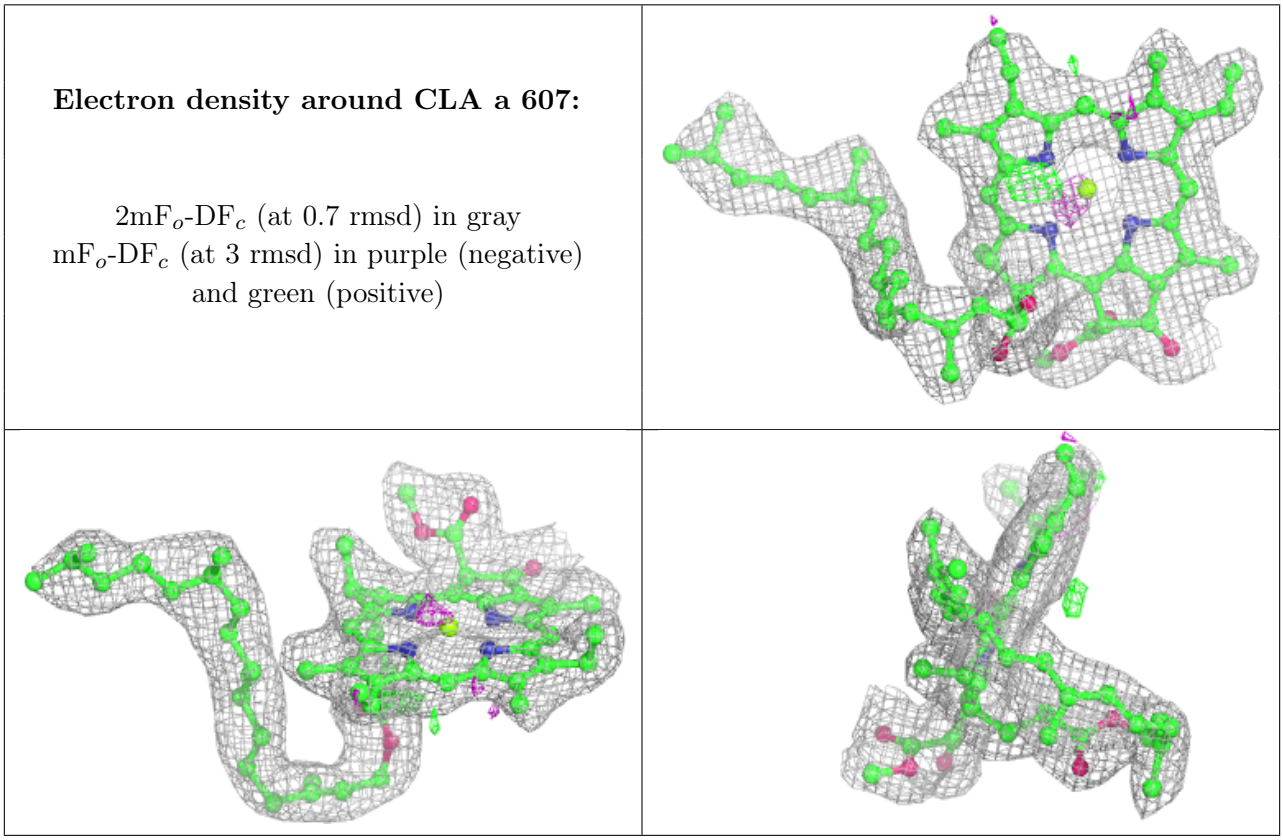
Electron density around BCR C 515:

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



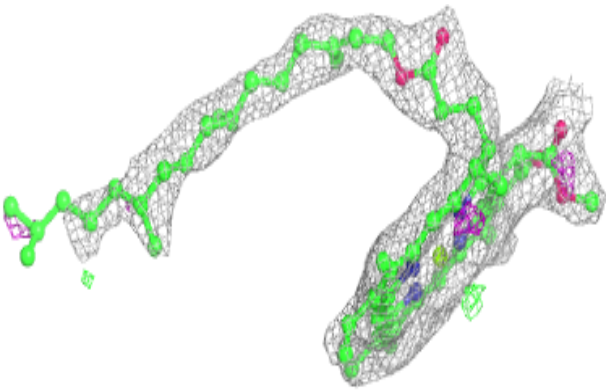
Electron density around CLA a 607:

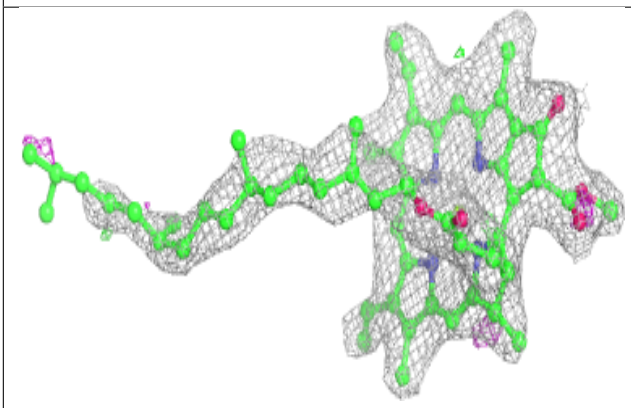
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

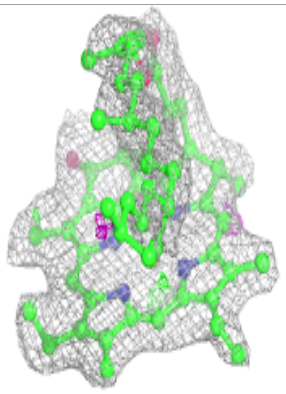


Electron density around CLA c 504:

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

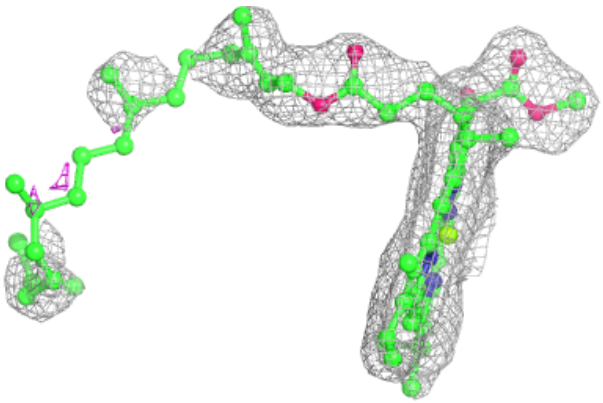


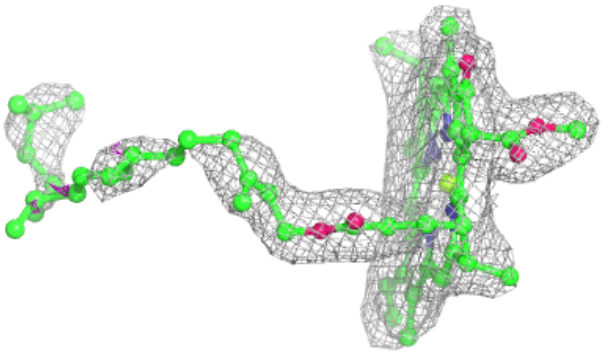


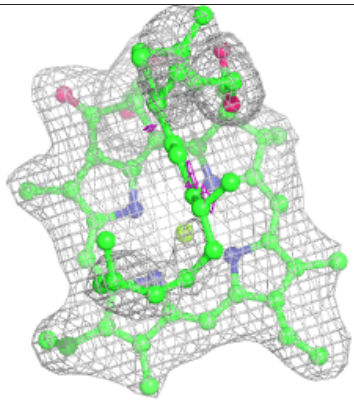


Electron density around CLA c 506:

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

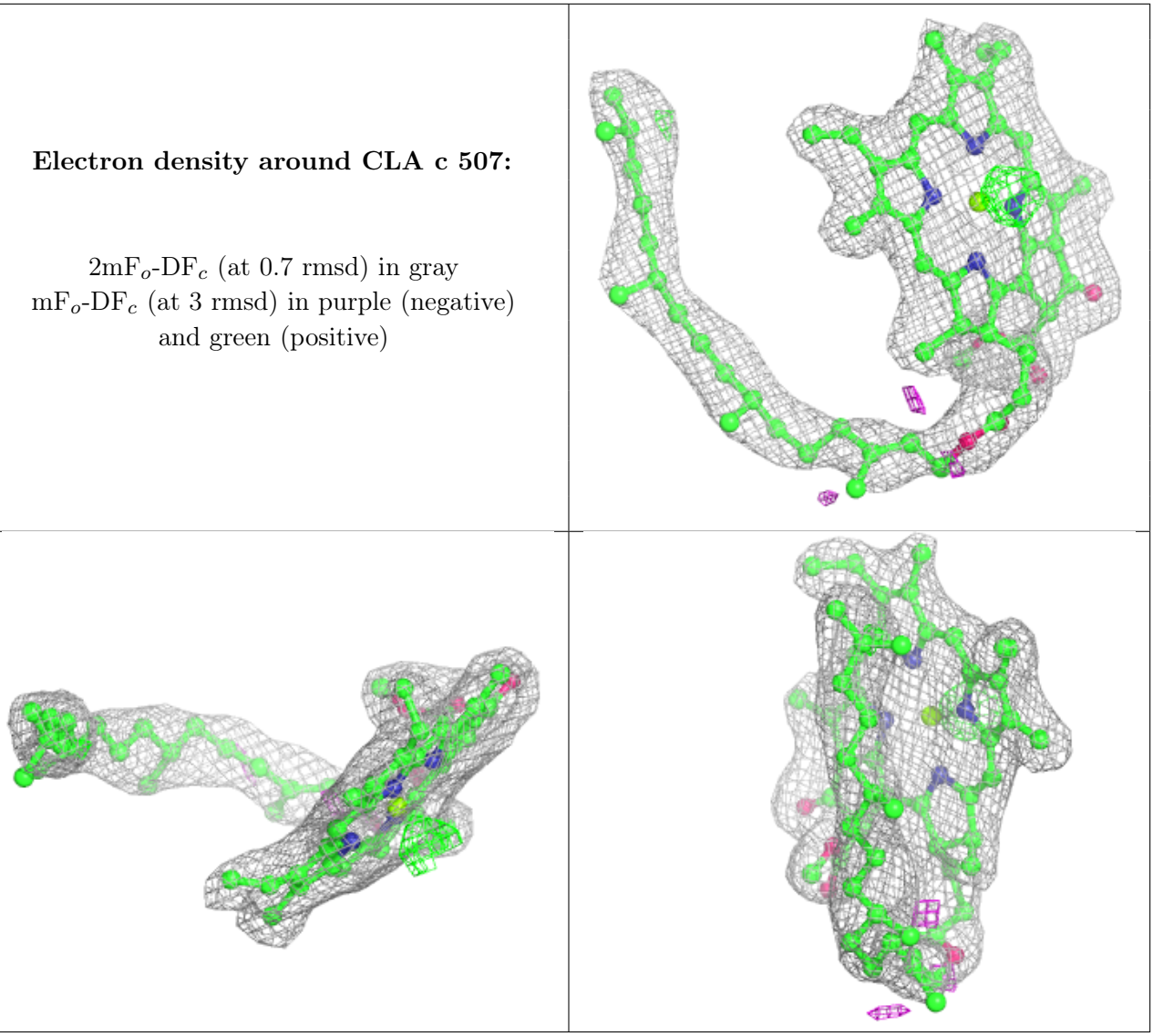






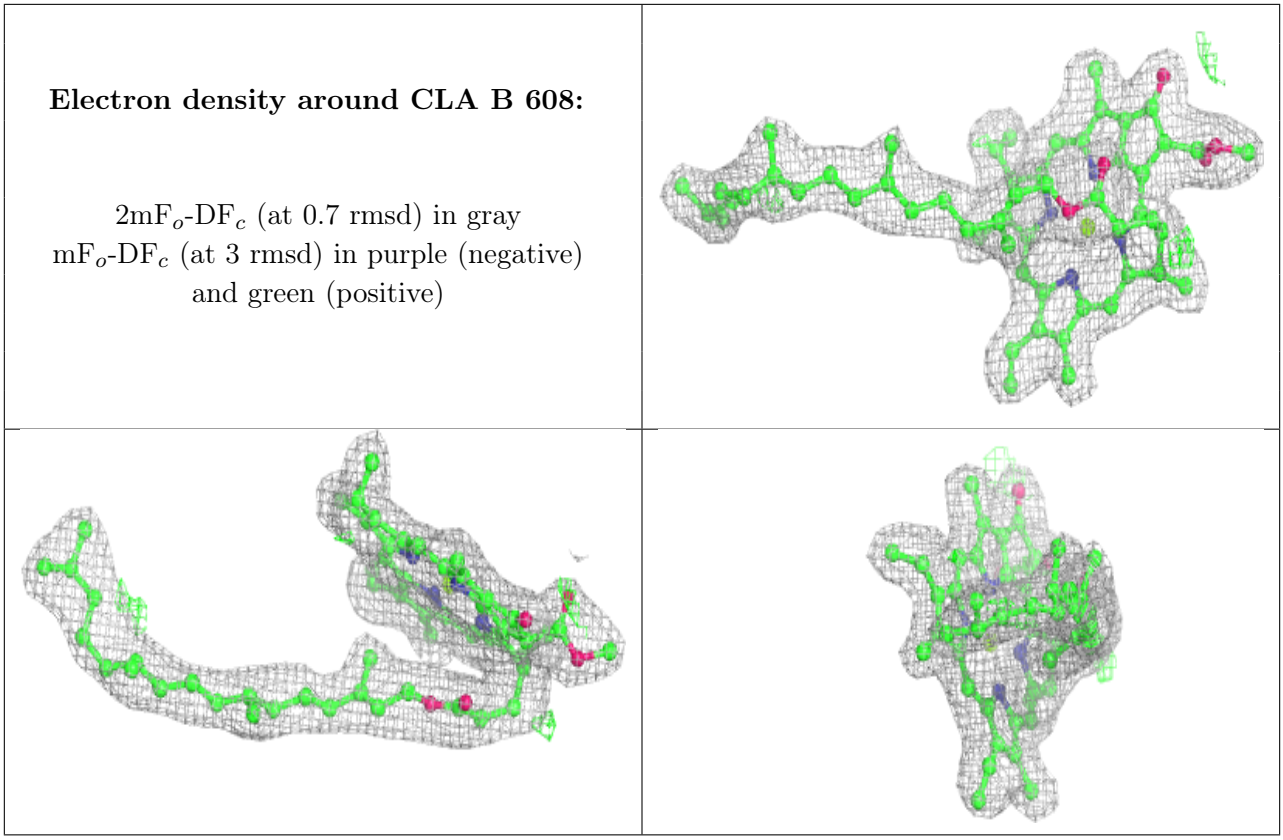
Electron density around CLA c 507:

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



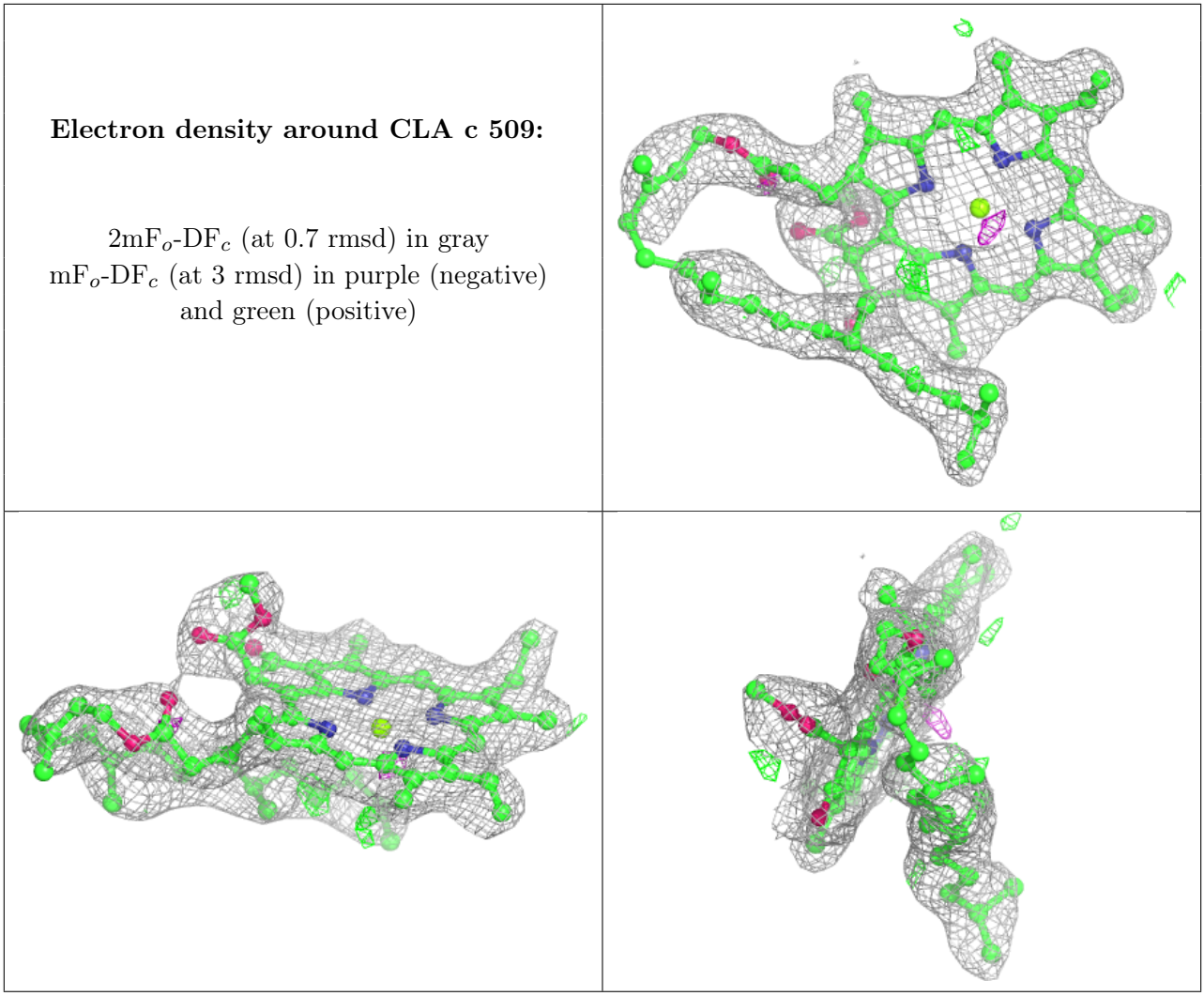
Electron density around CLA B 608:

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



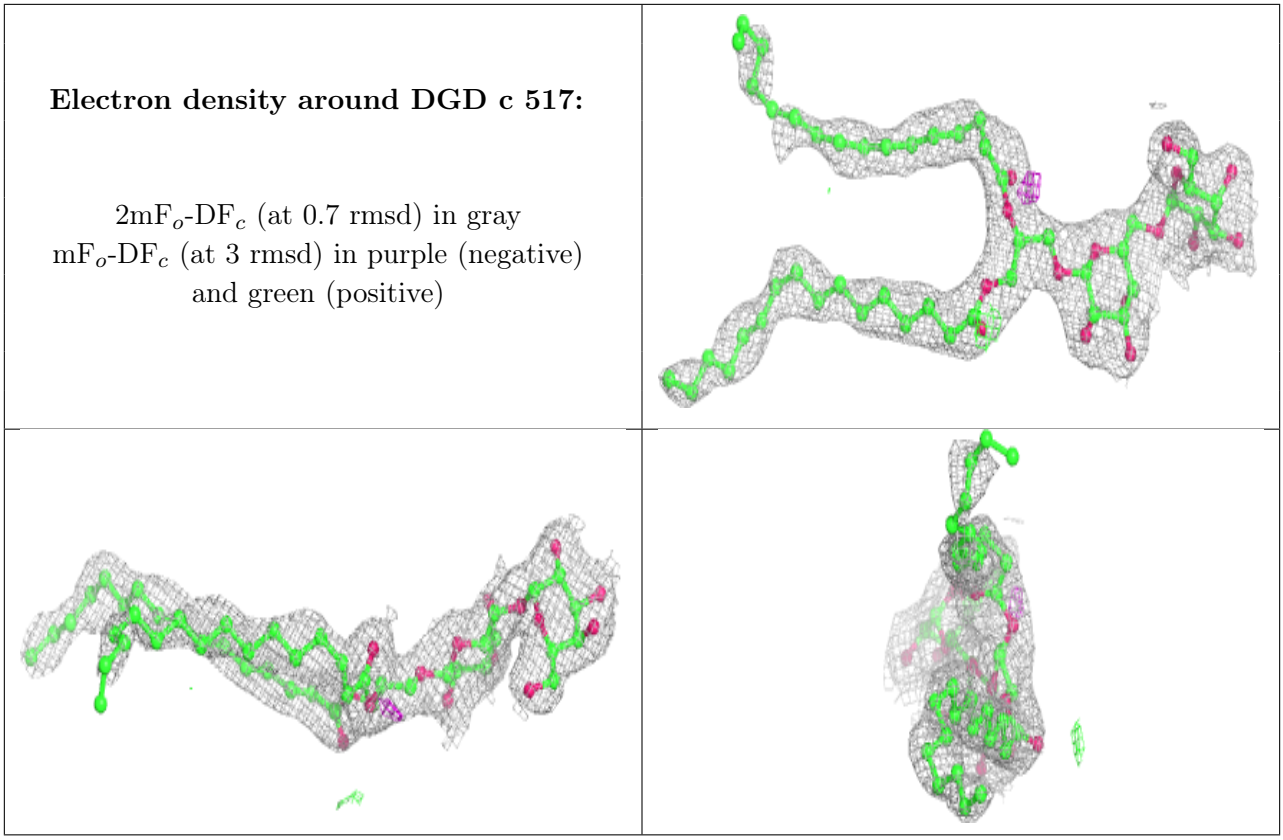
Electron density around CLA c 509:

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



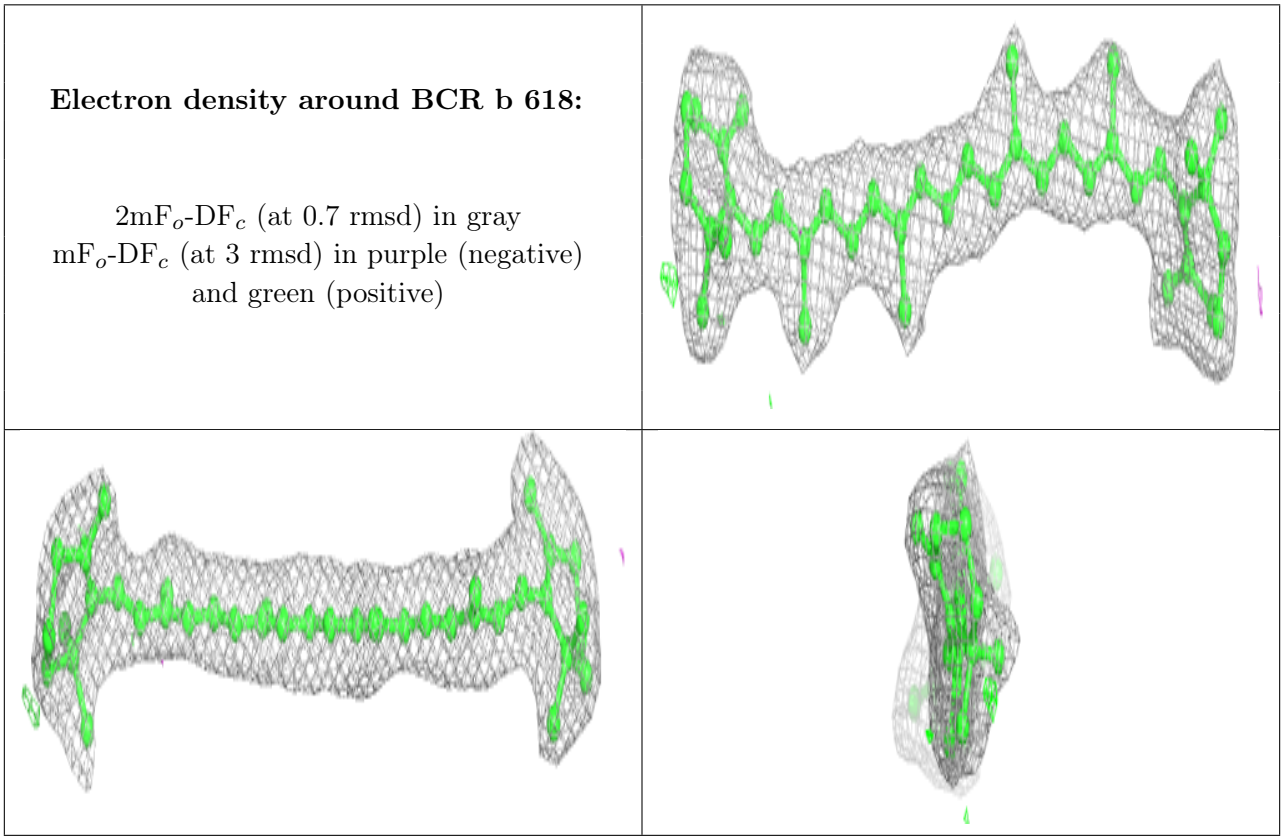
Electron density around DGD c 517:

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



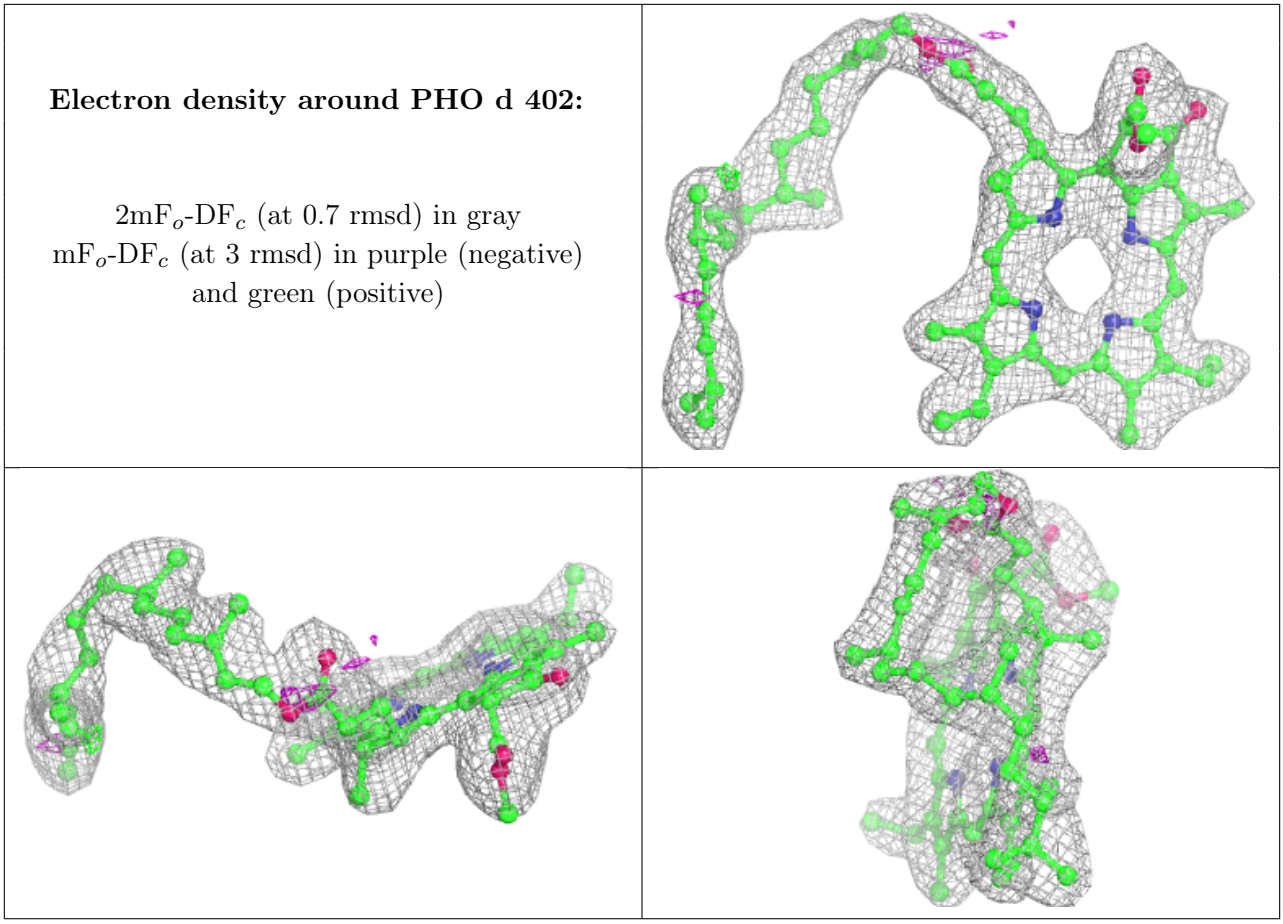
Electron density around BCR b 618:

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



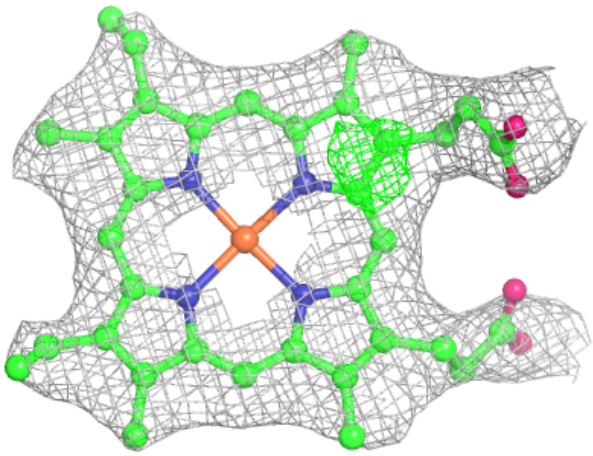
Electron density around PHO d 402:

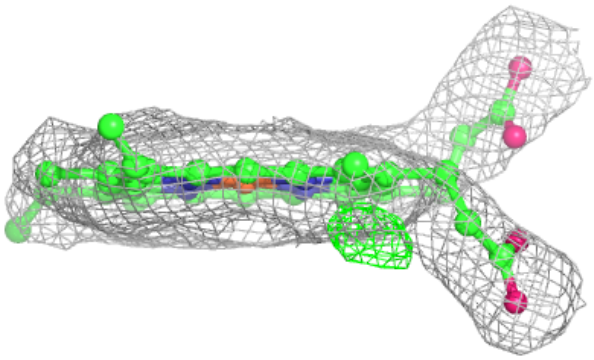
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

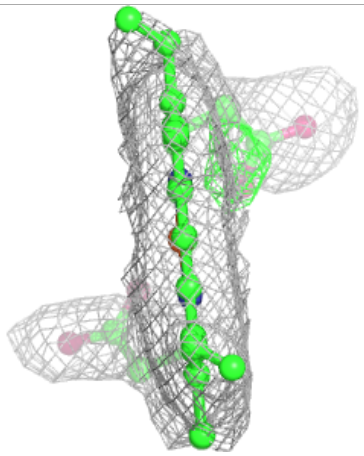


Electron density around HEM E 102:

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

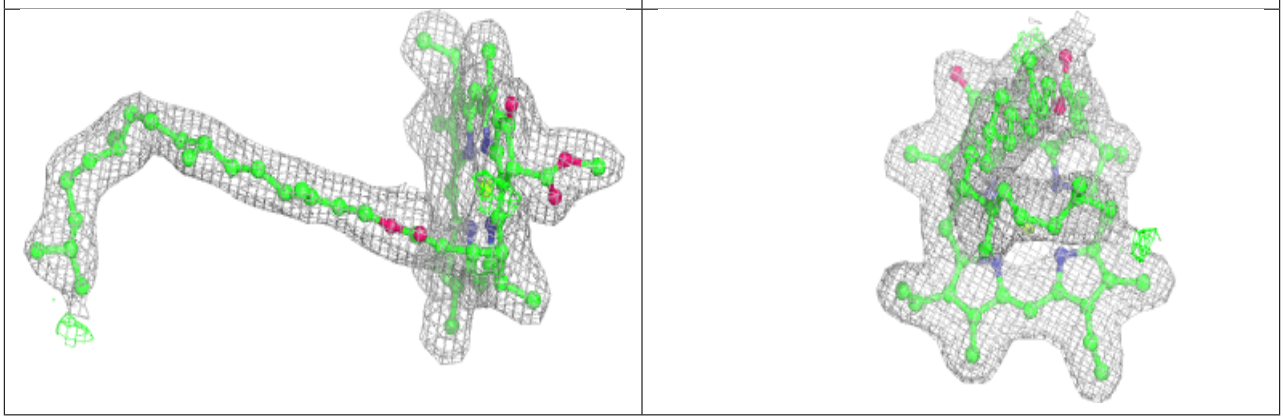






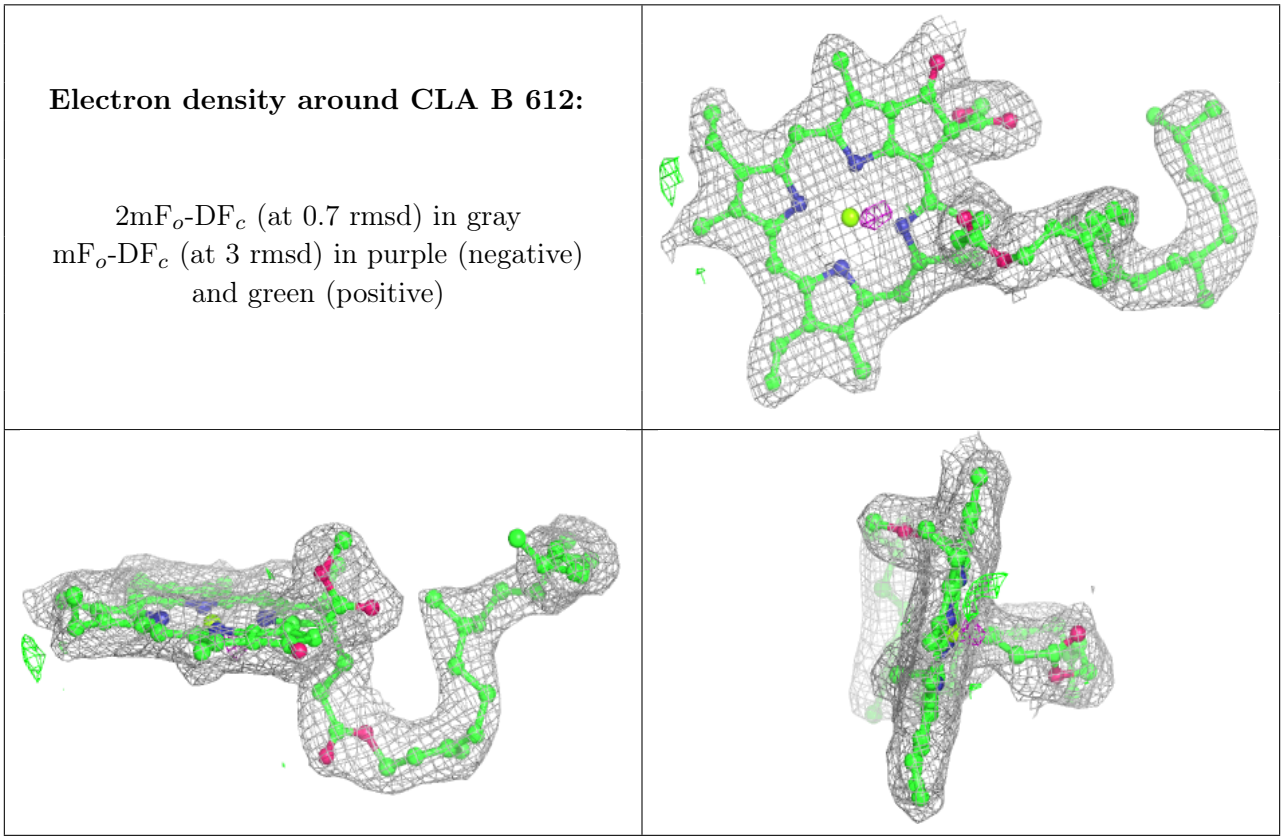
Electron density around CLA B 605:

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



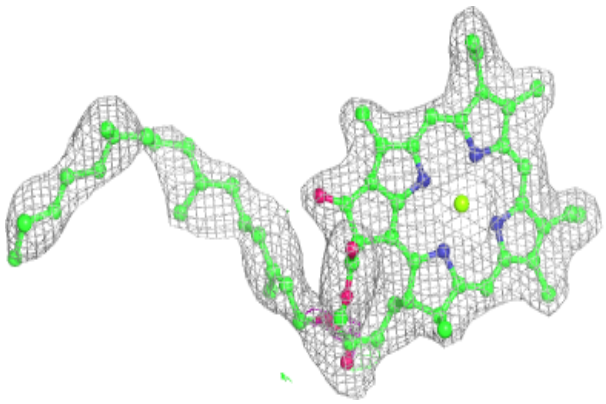
Electron density around CLA B 612:

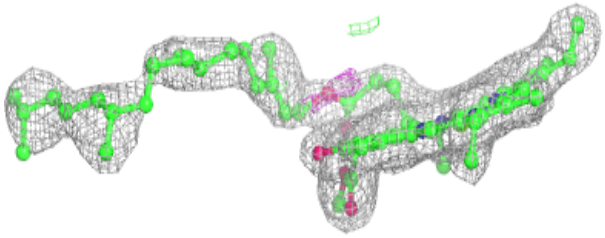
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

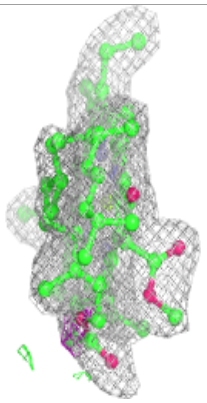


Electron density around CLA B 602:

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

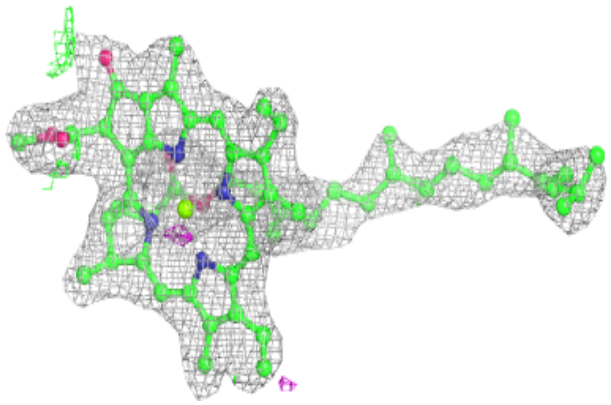


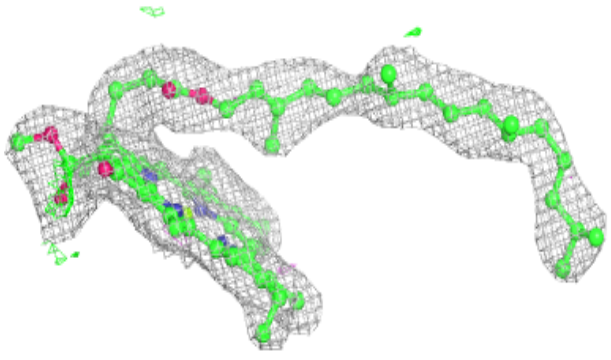


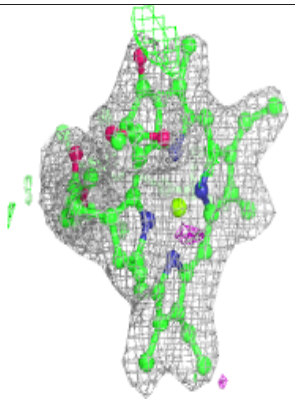


Electron density around CLA b 608:

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

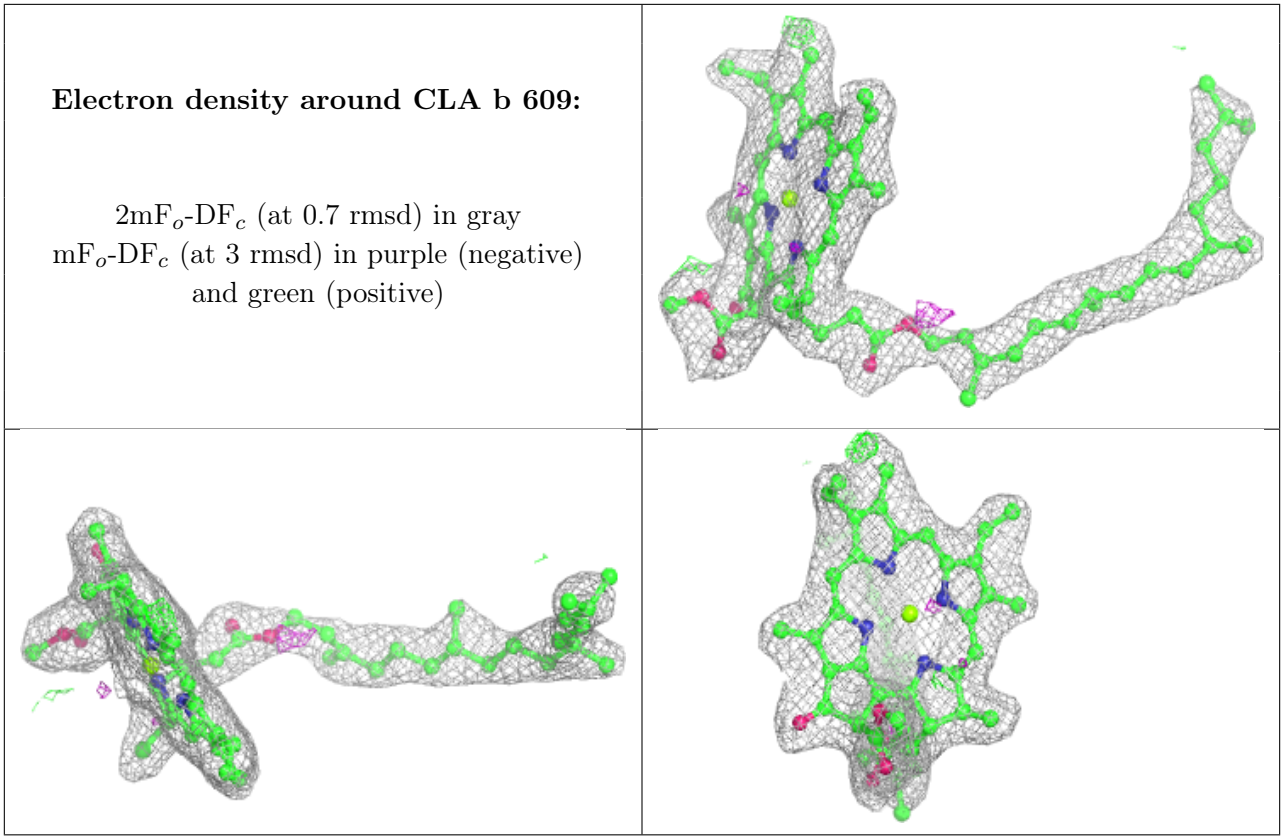






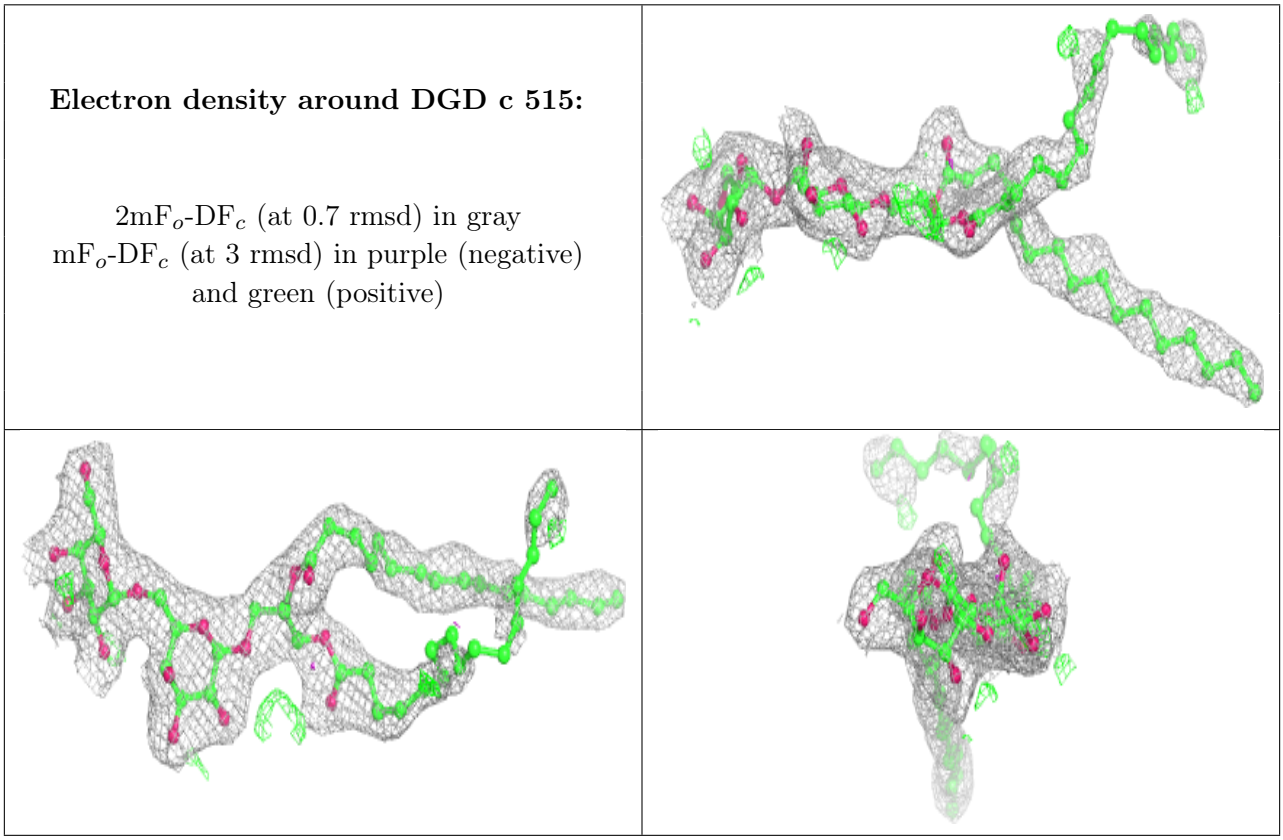
Electron density around CLA b 609:

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



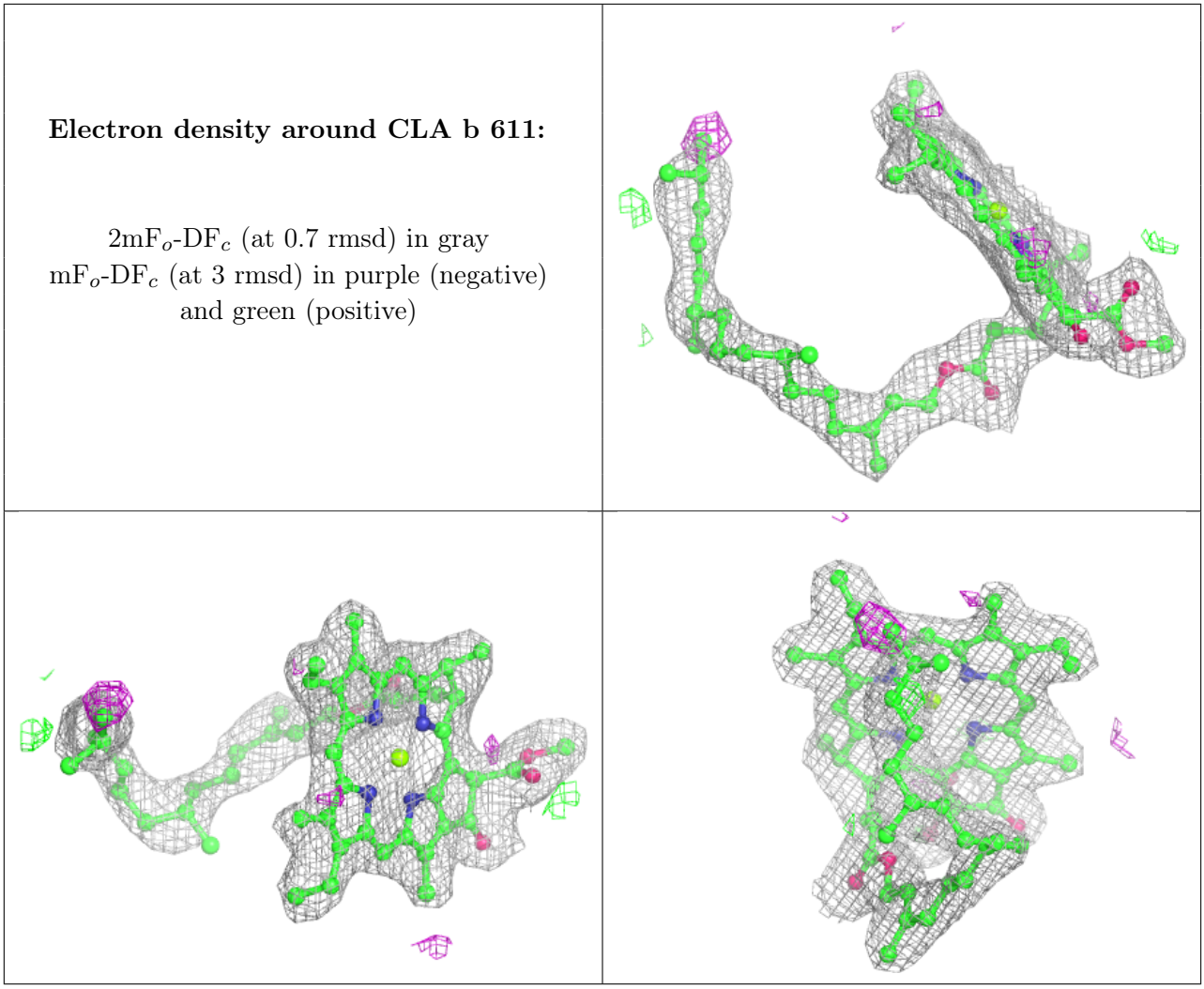
Electron density around DGD c 515:

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



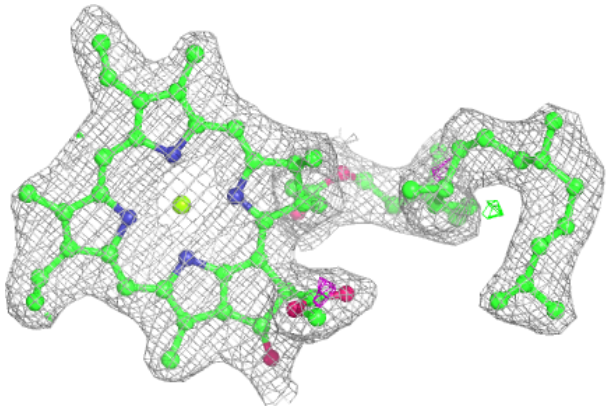
Electron density around CLA b 611:

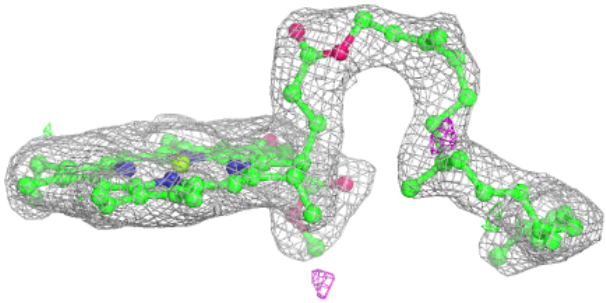
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

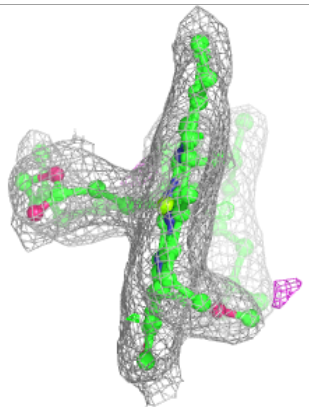


Electron density around CLA b 612:

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

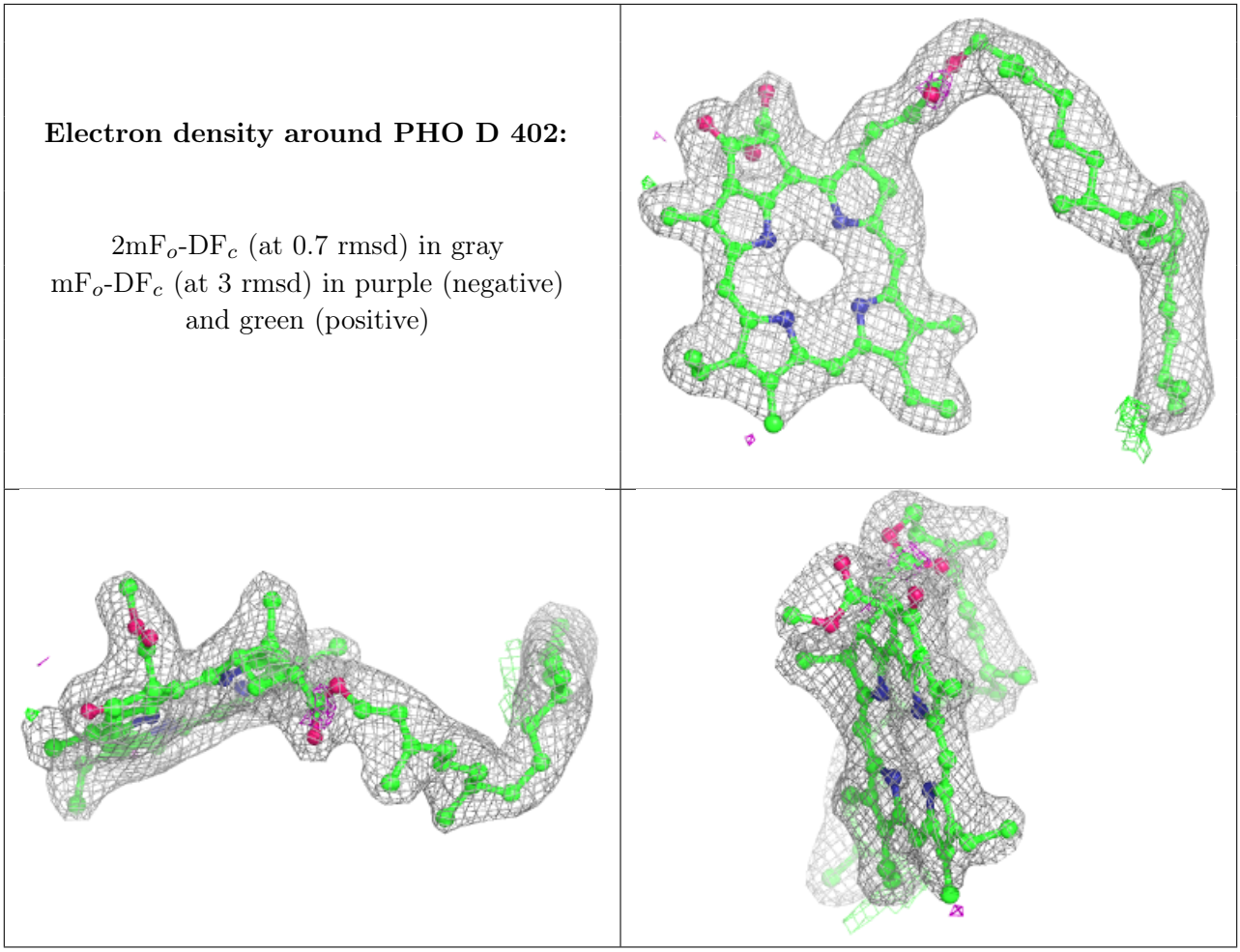






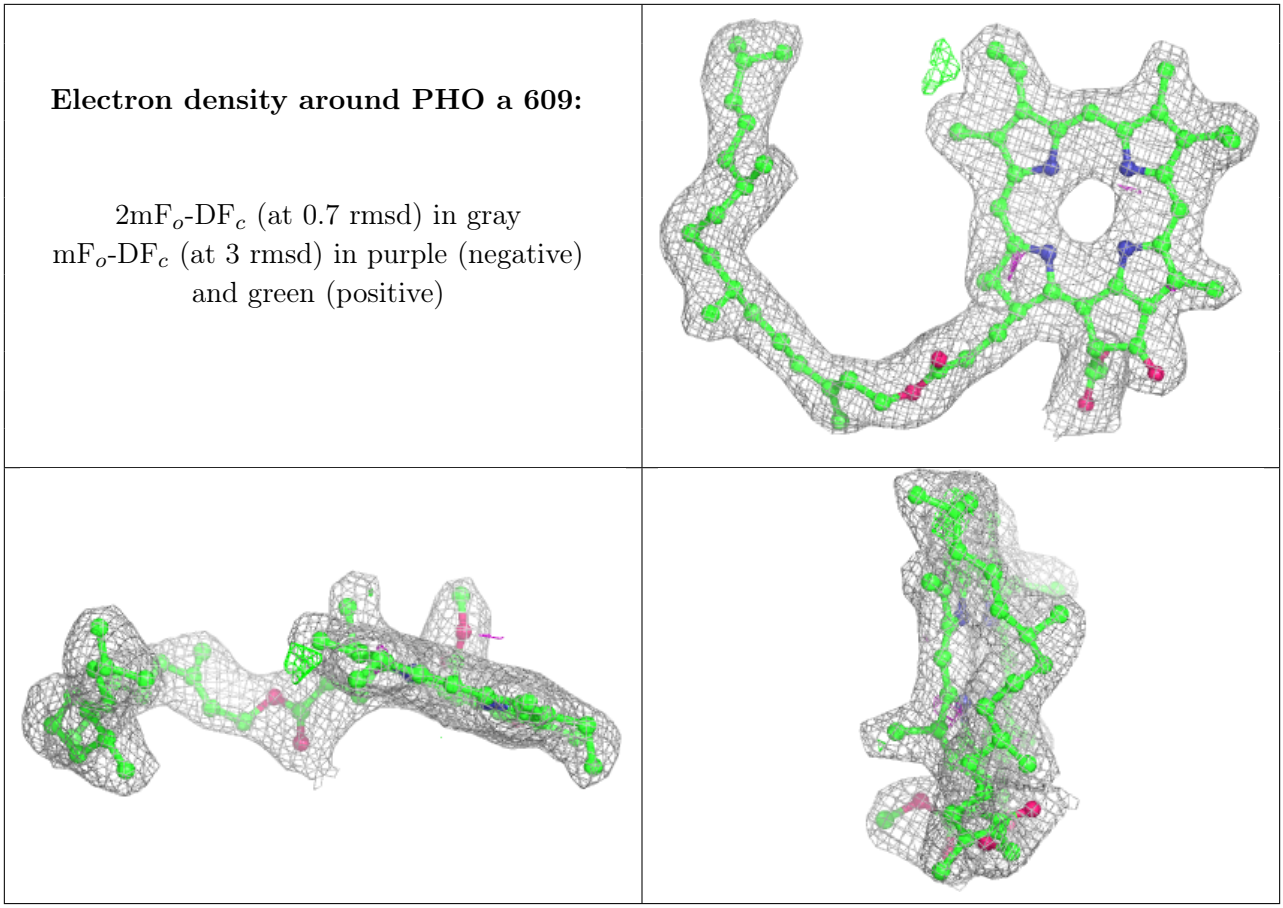
Electron density around PHO D 402:

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



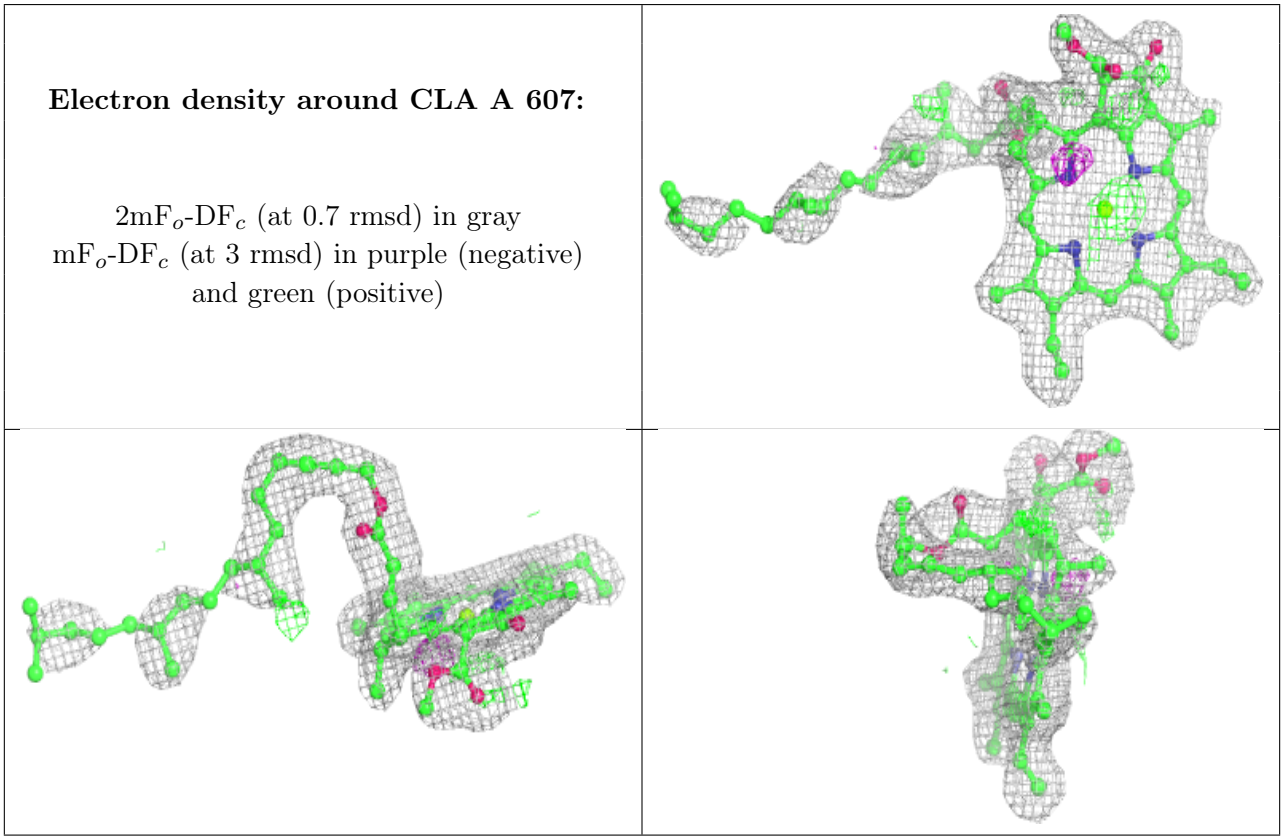
Electron density around PHO a 609:

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



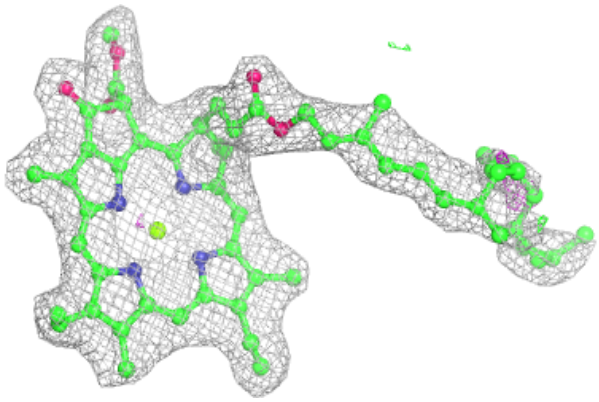
Electron density around CLA A 607:

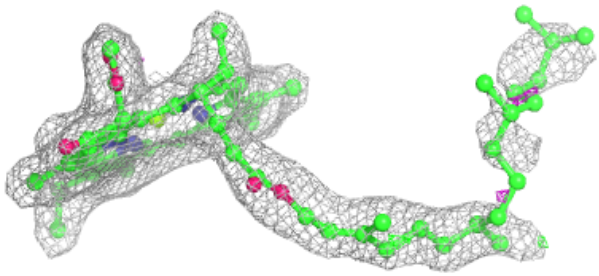
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

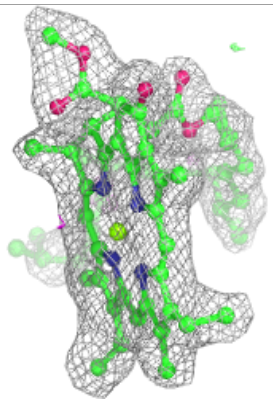


Electron density around CLA a 610:

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

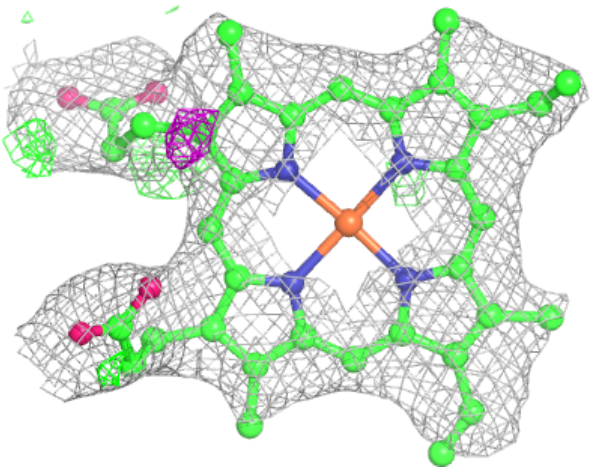


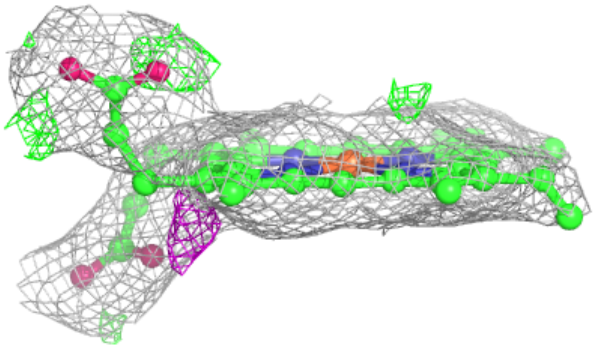


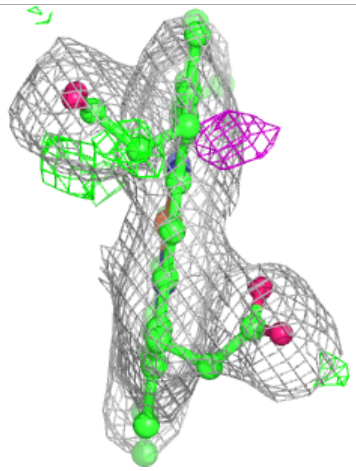


Electron density around HEM e 101:

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

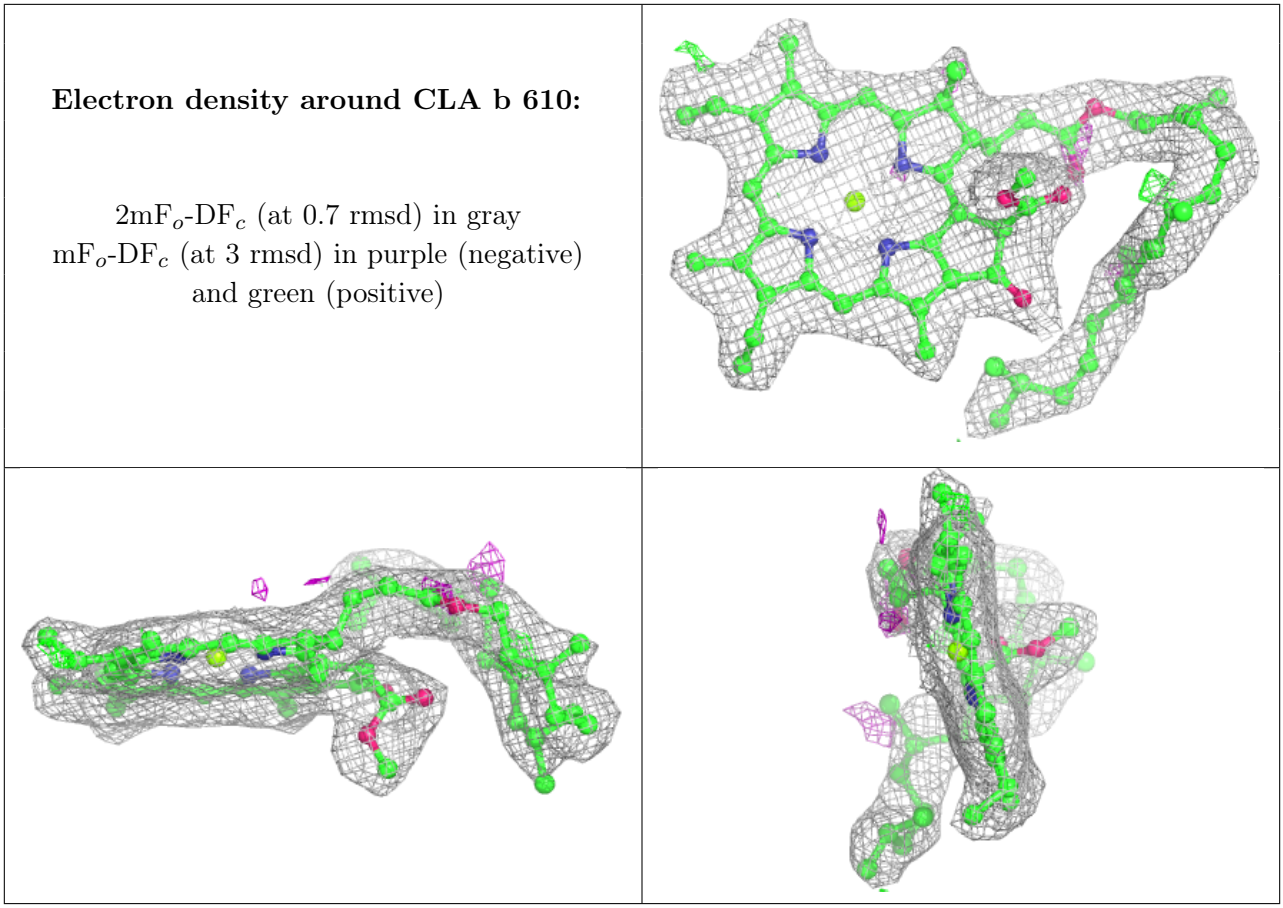






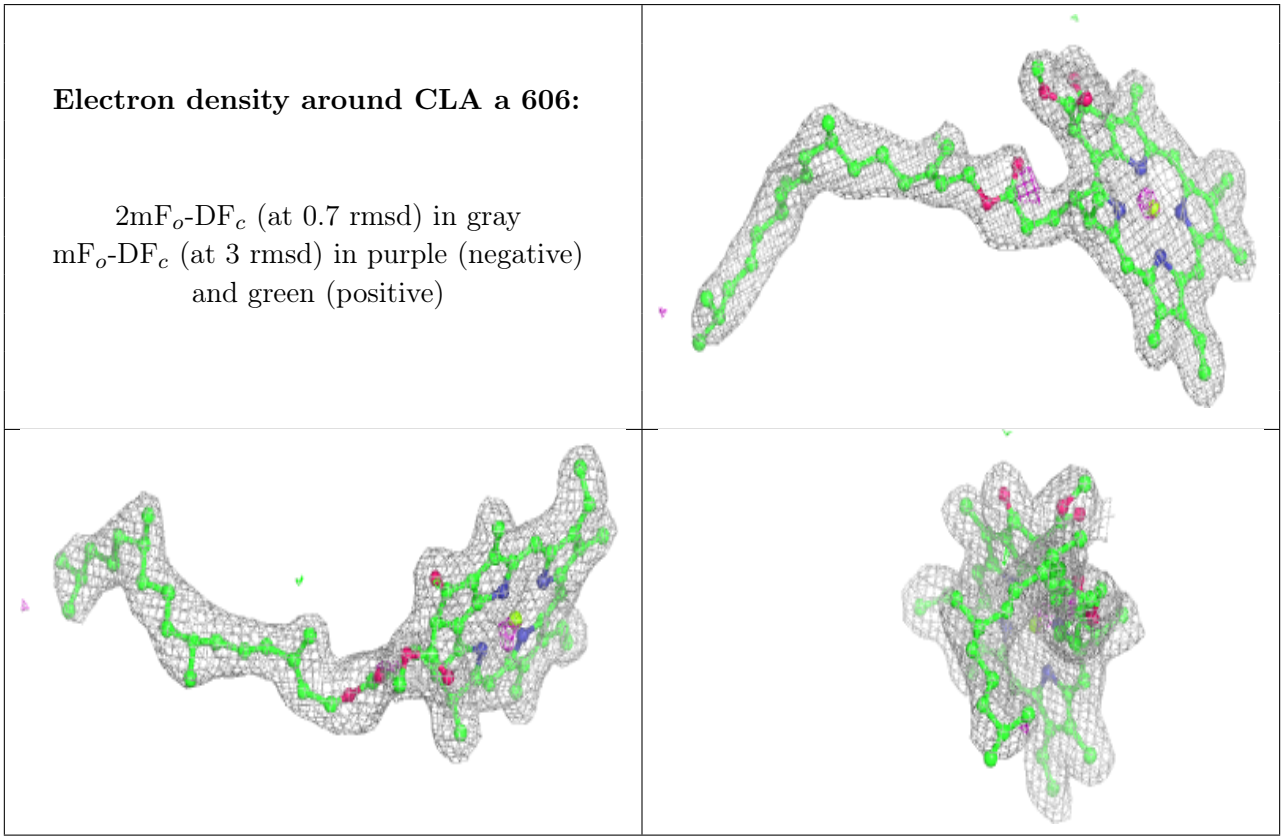
Electron density around CLA b 610:

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



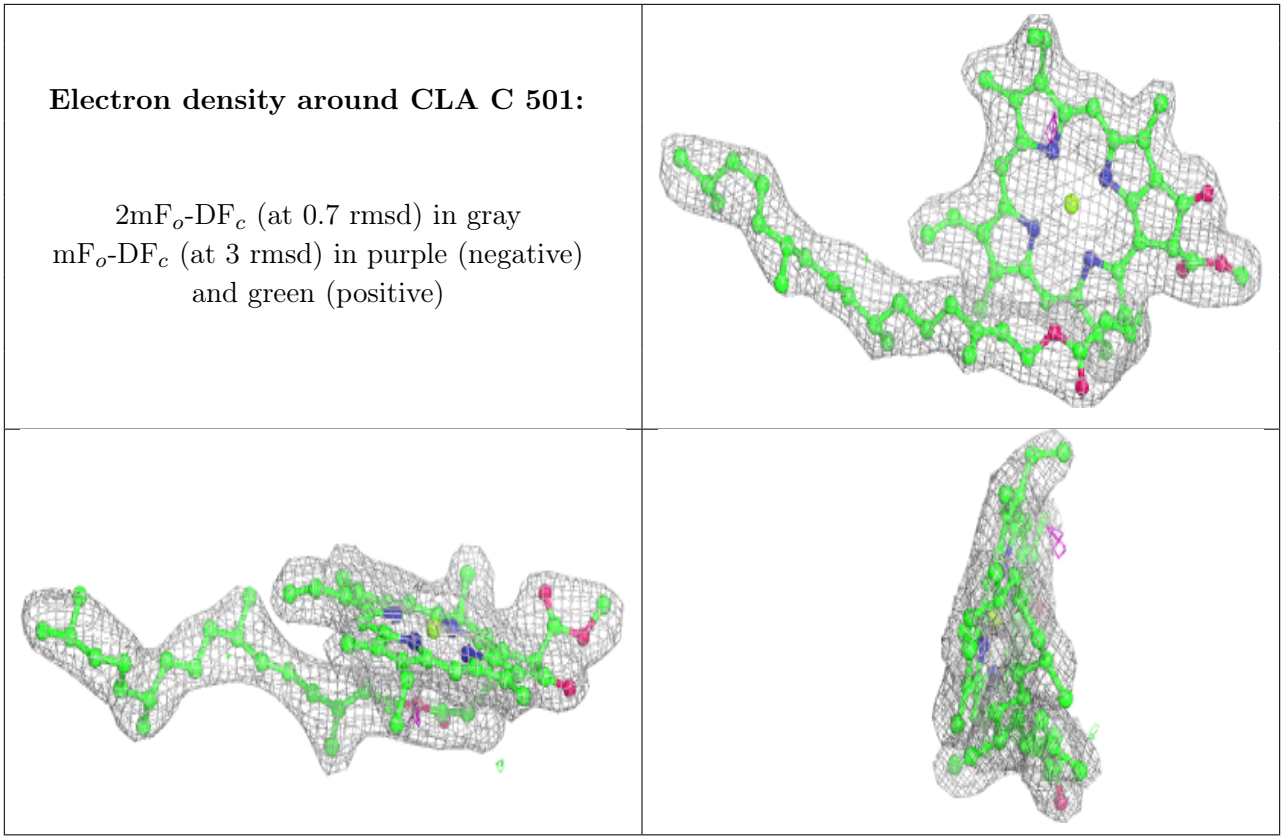
Electron density around CLA a 606:

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



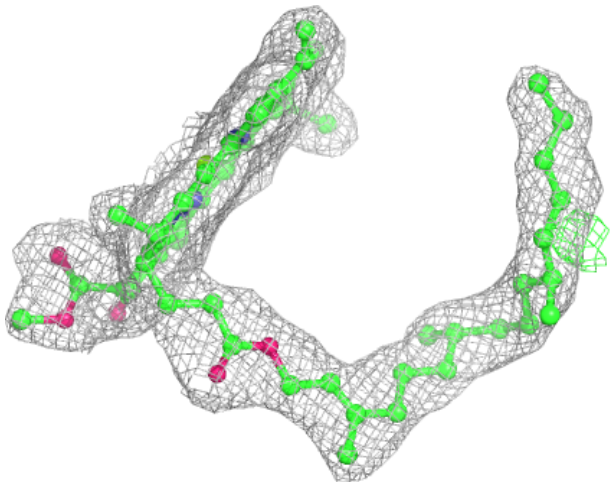
Electron density around CLA C 501:

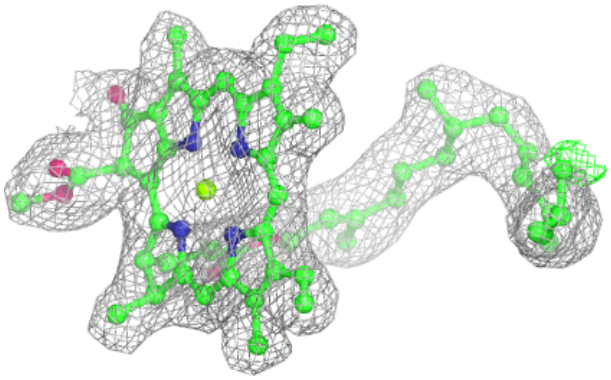
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

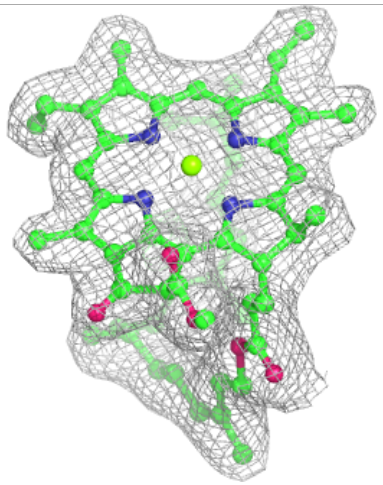


Electron density around CLA B 611:

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

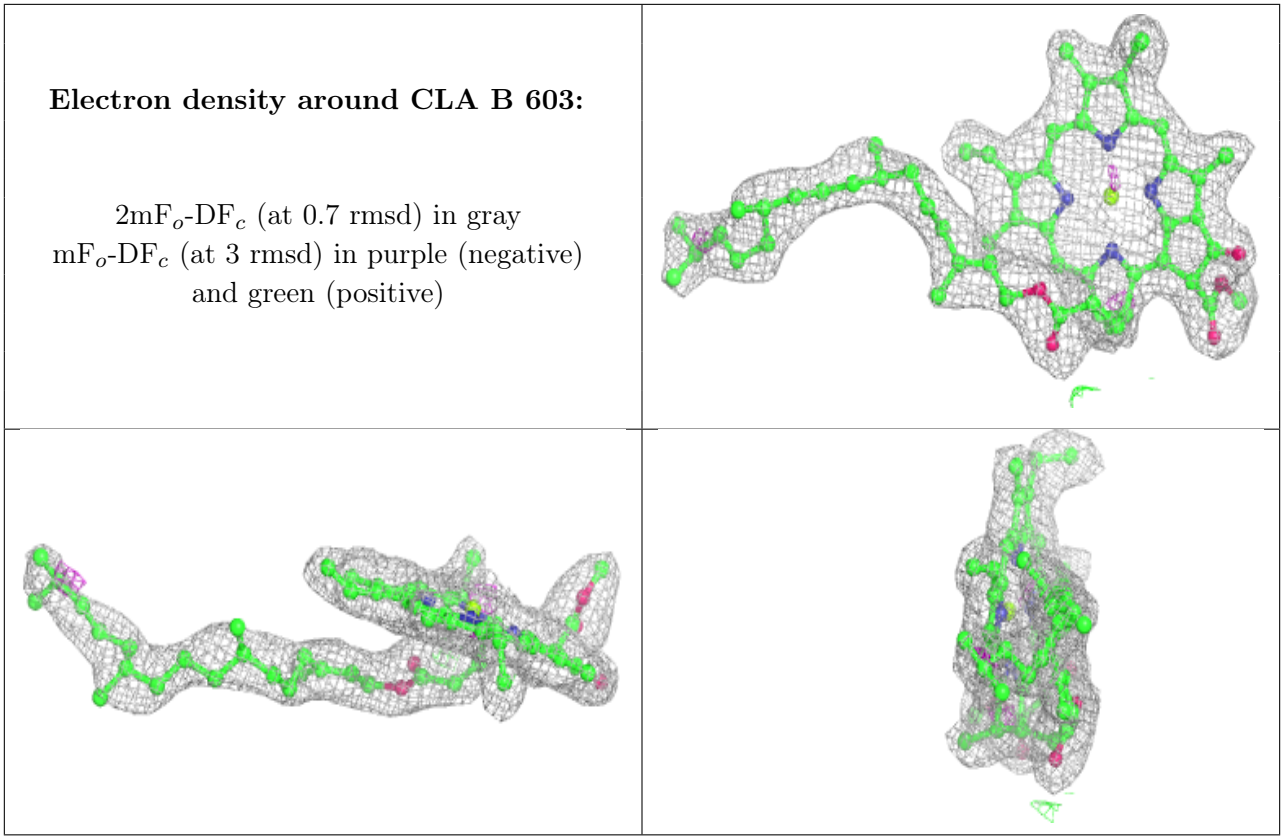






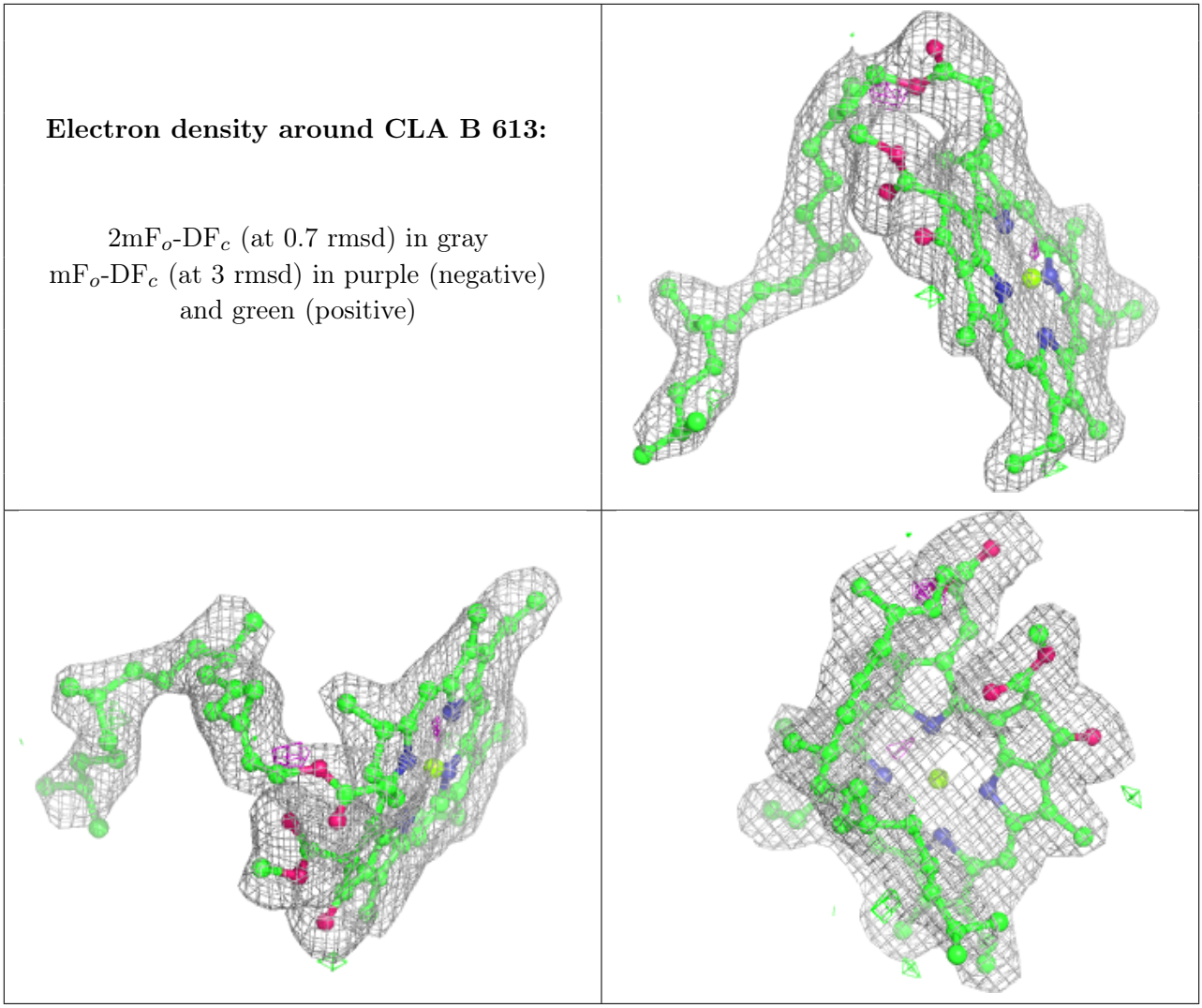
Electron density around CLA B 603:

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



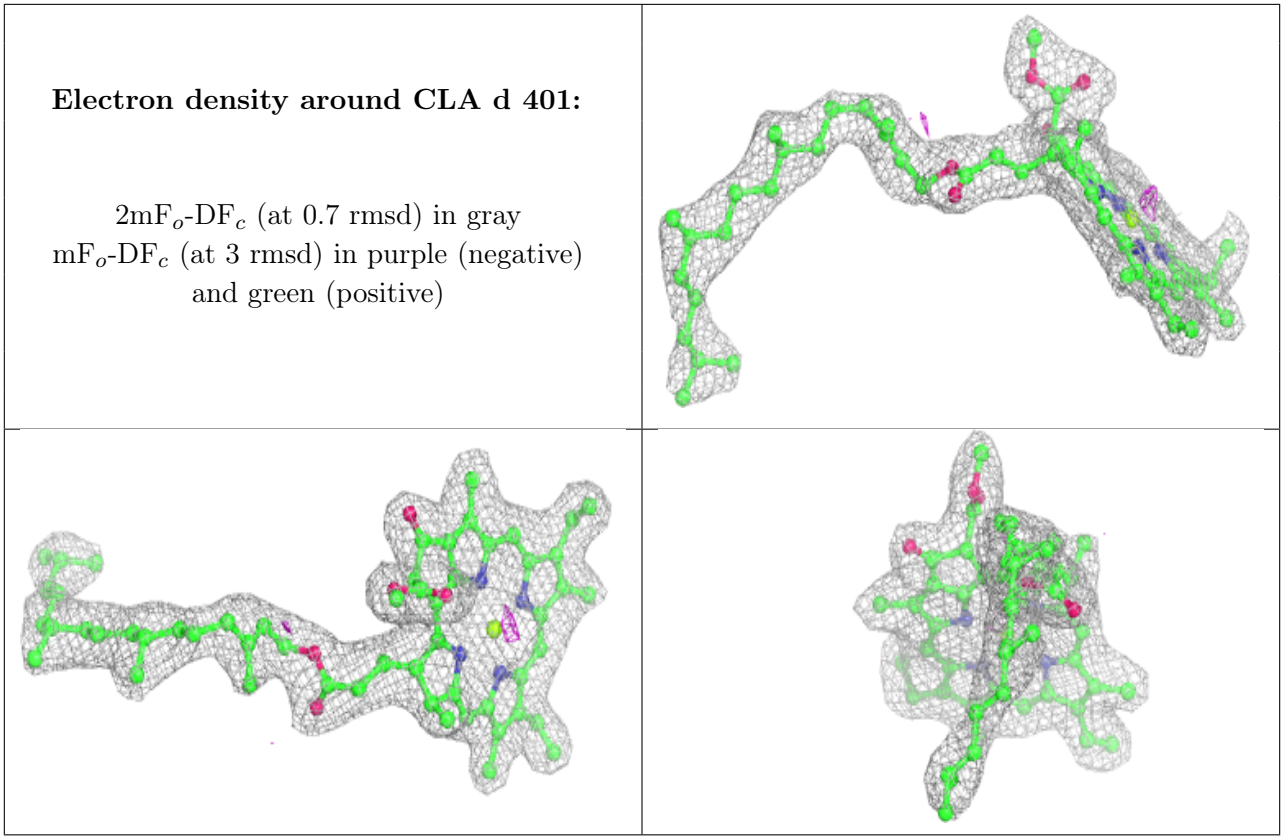
Electron density around CLA B 613:

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



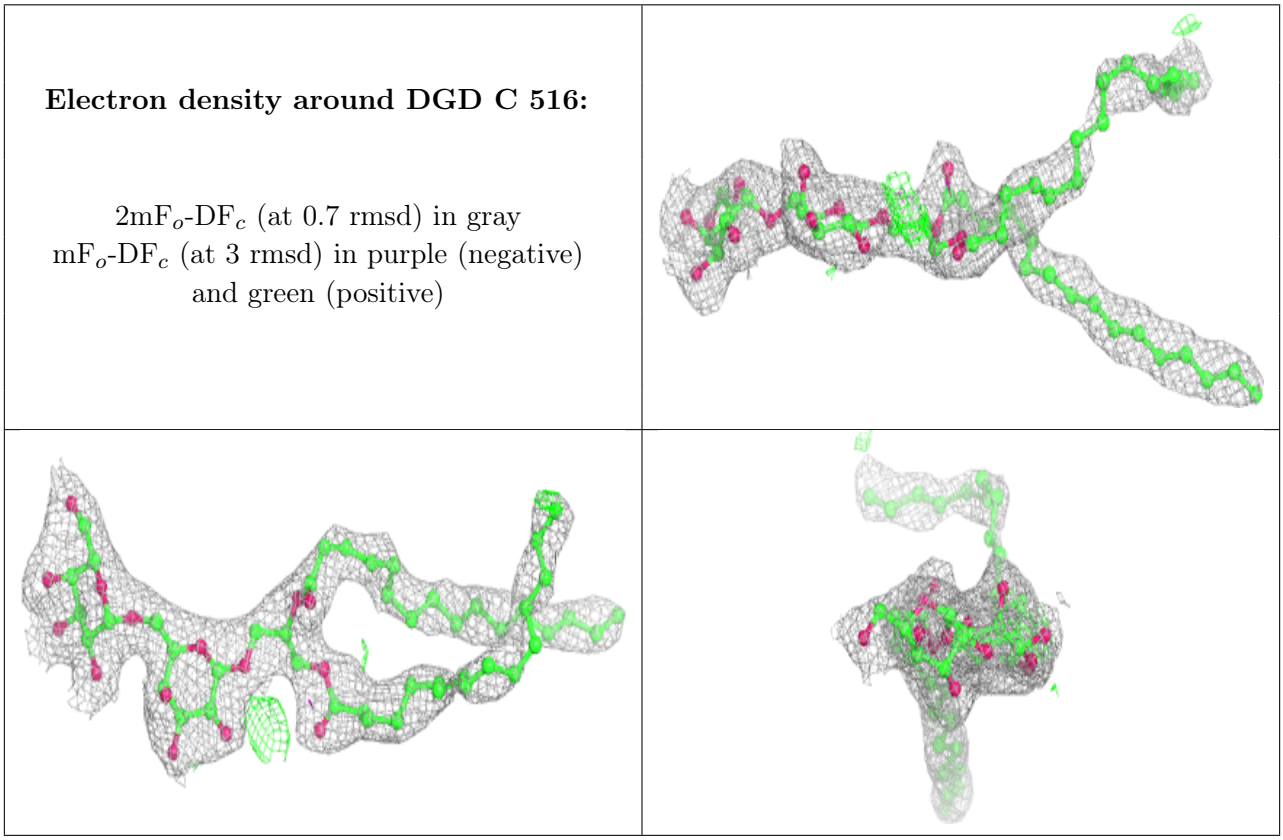
Electron density around CLA d 401:

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



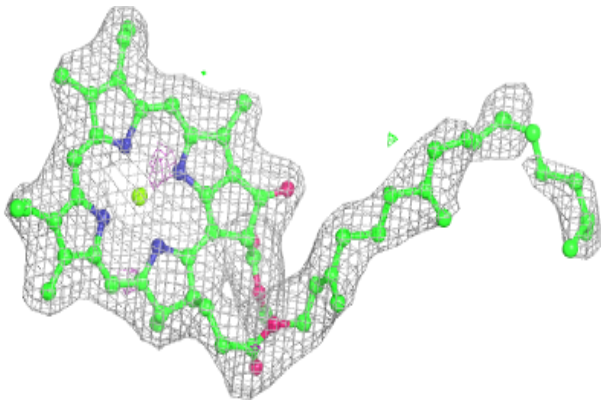
Electron density around DGD C 516:

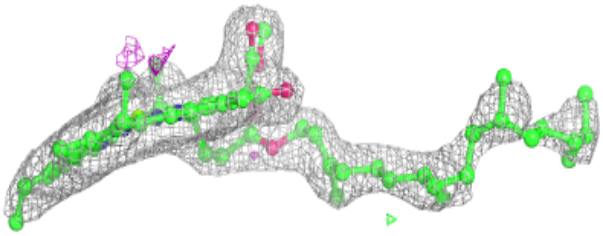
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

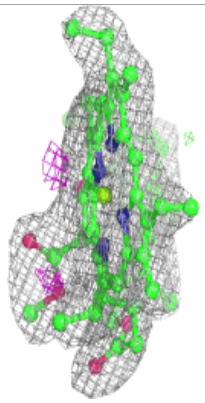


Electron density around CLA b 602:

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

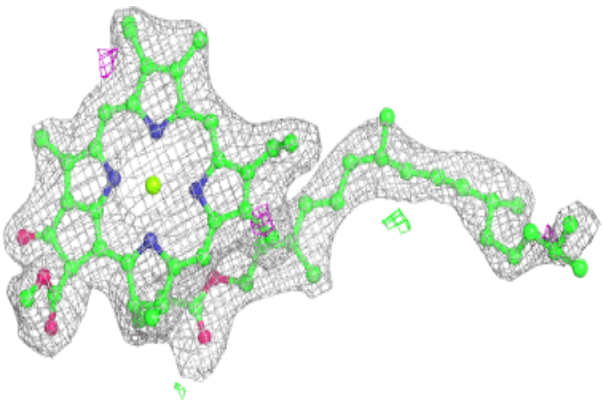


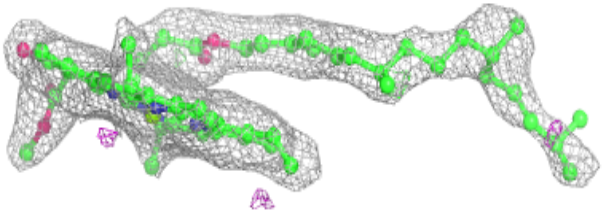


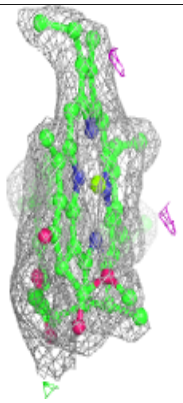


Electron density around CLA b 603:

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

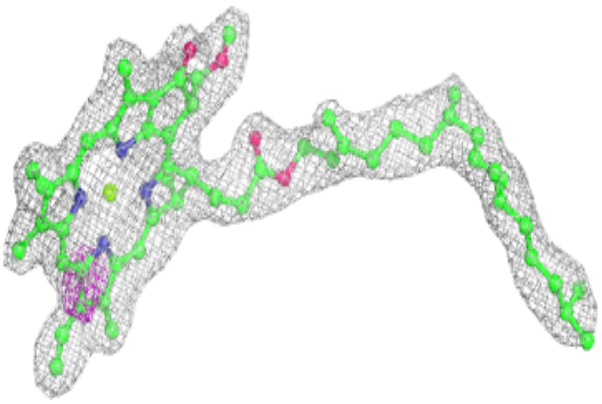


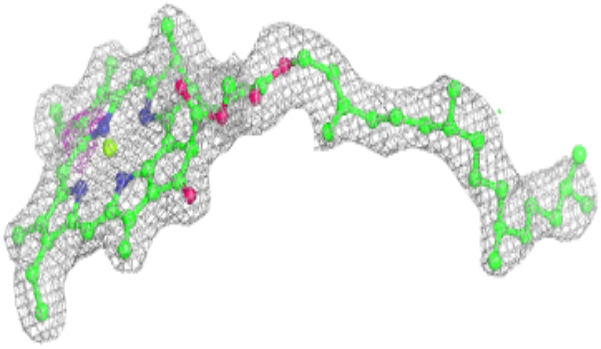


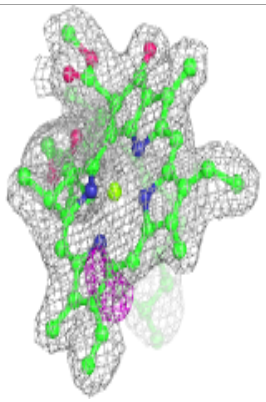


Electron density around CLA A 606:

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

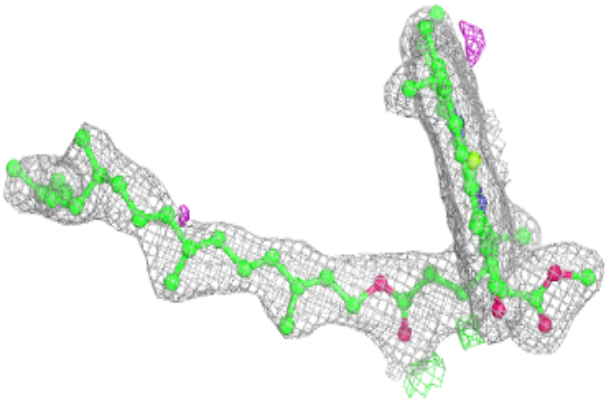


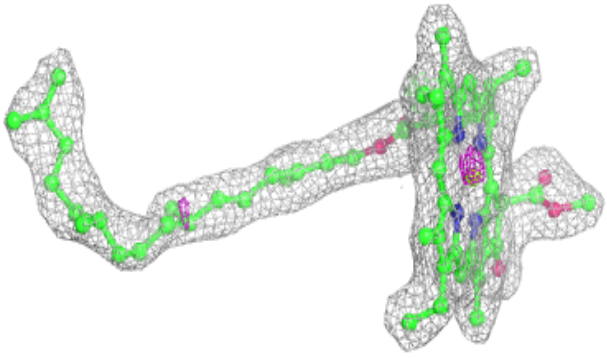


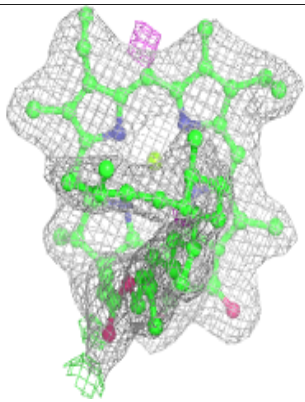


Electron density around CLA b 605:

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

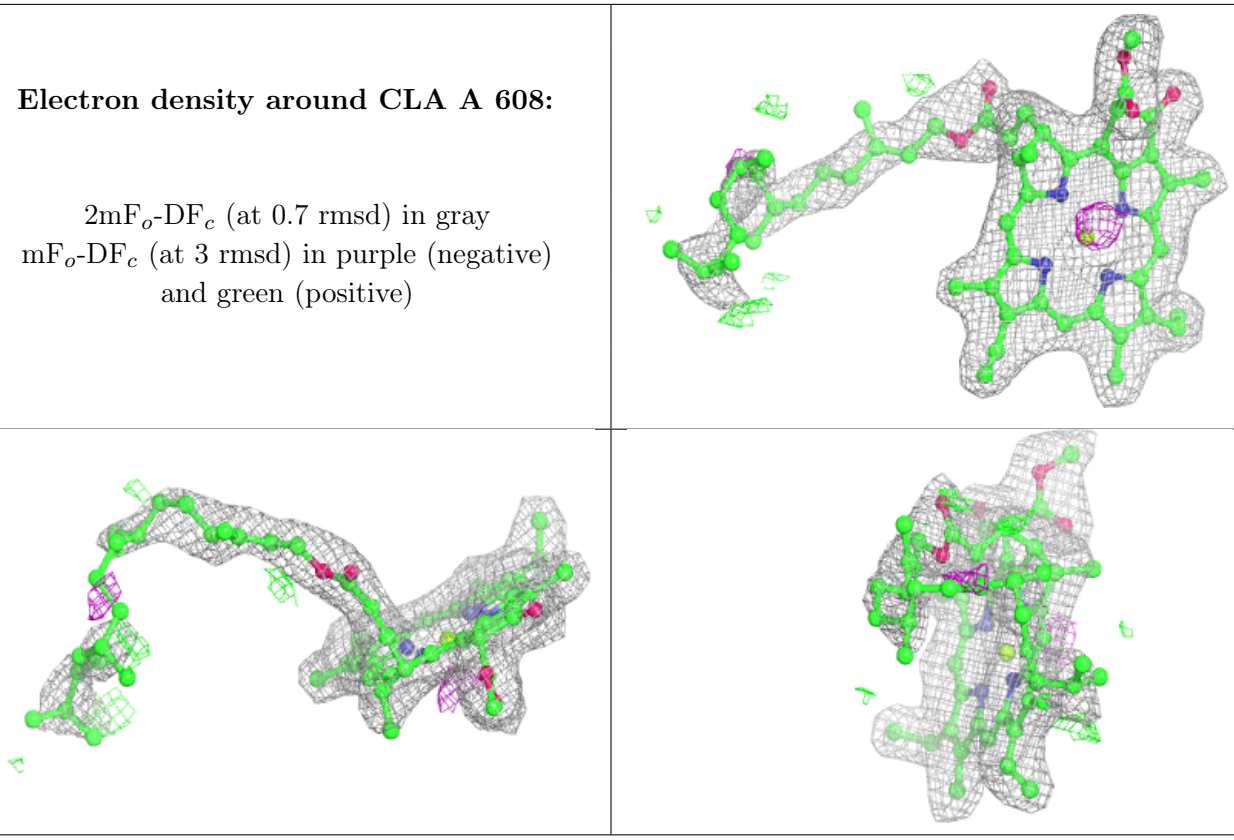






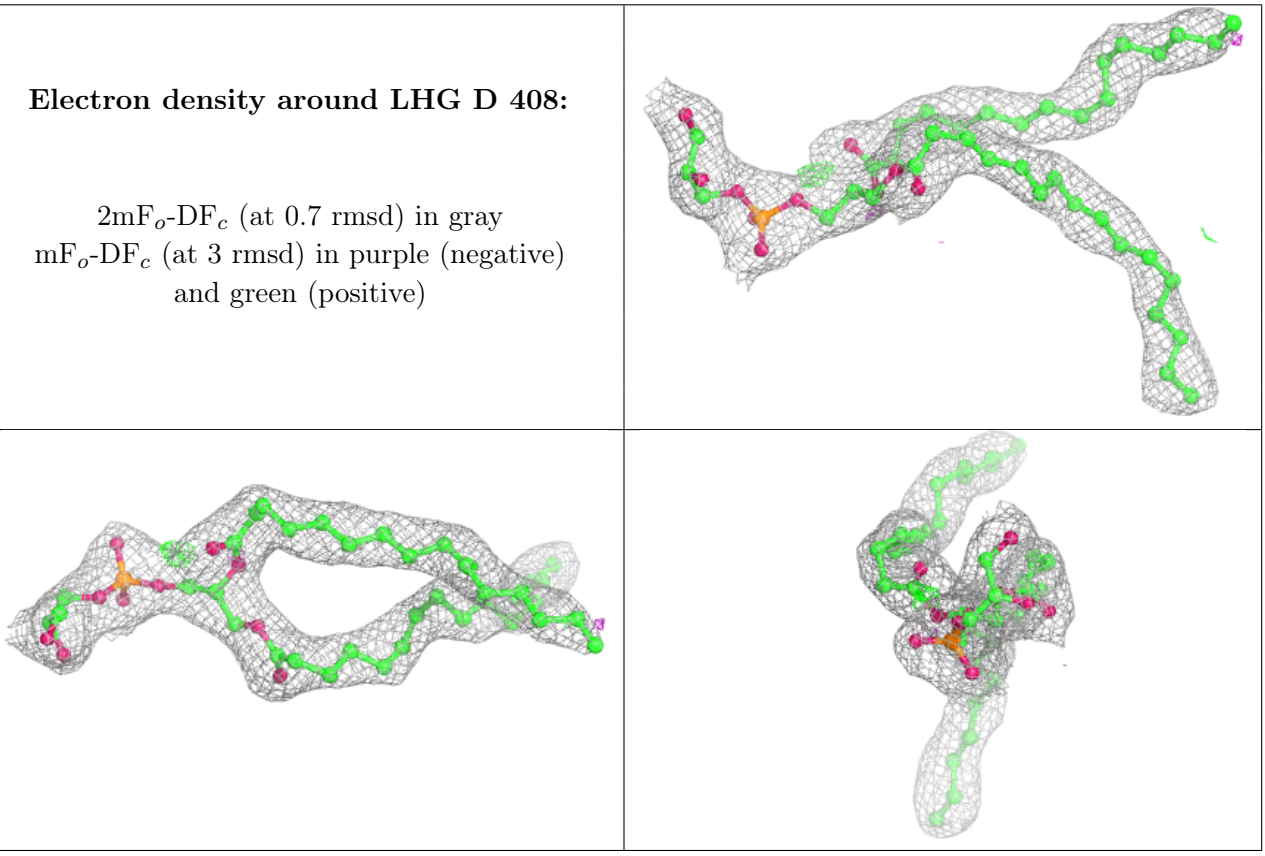
Electron density around CLA A 608:

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



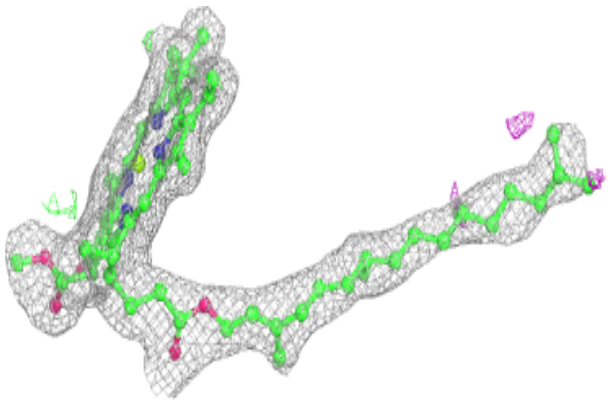
Electron density around LHG D 408:

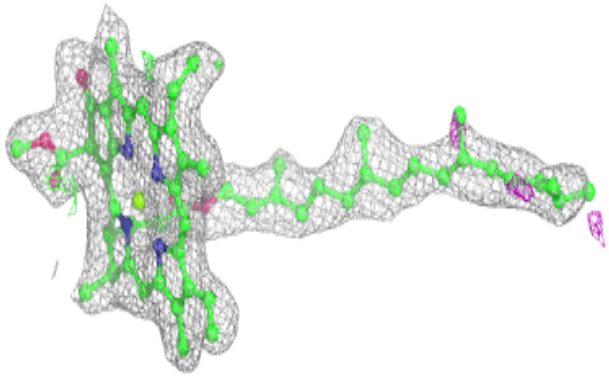
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

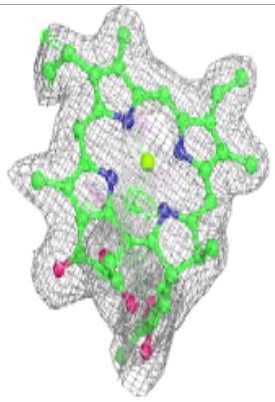


Electron density around CLA b 607:

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

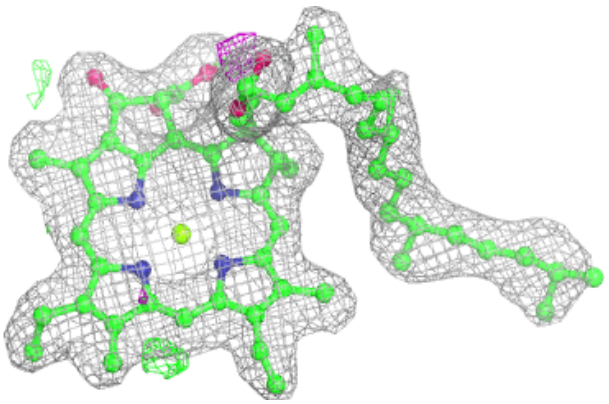


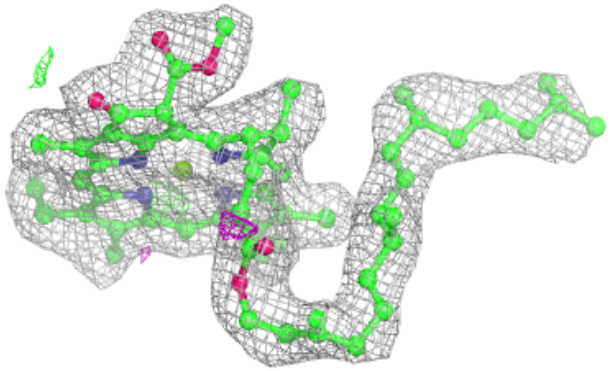


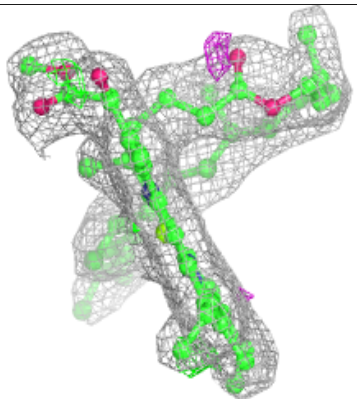


Electron density around CLA D 403:

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

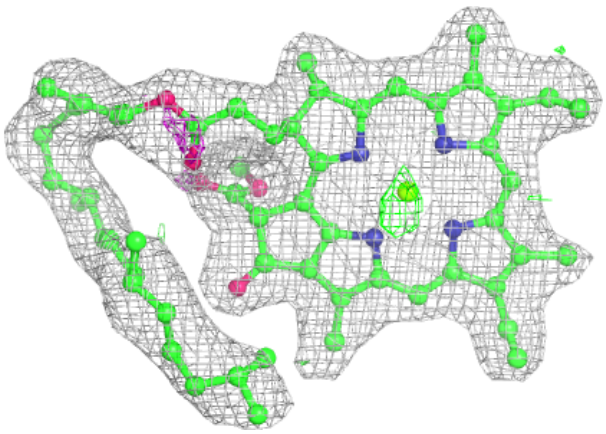


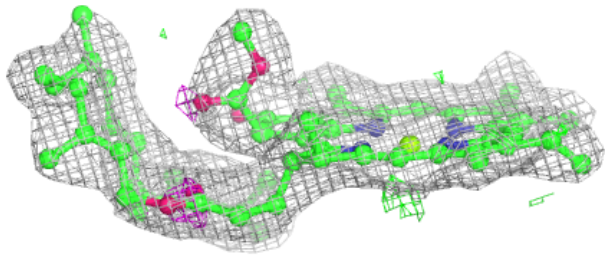


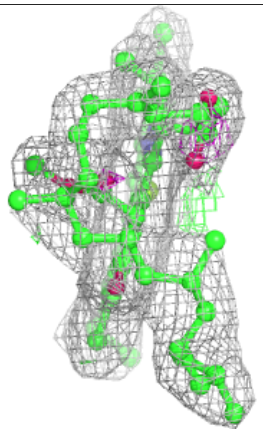


Electron density around CLA B 610:

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

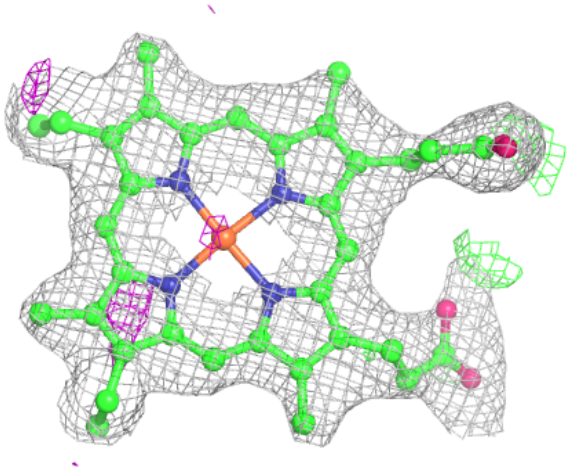


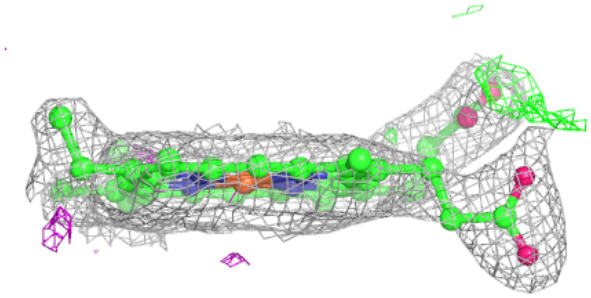


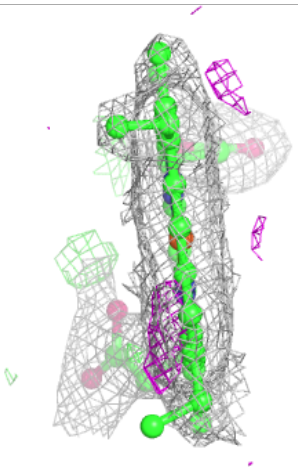


Electron density around HEC v 201:

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

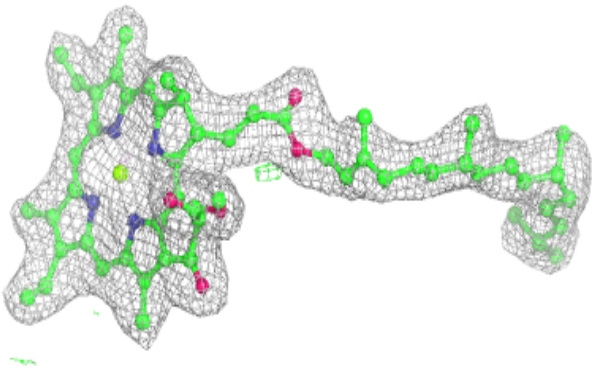


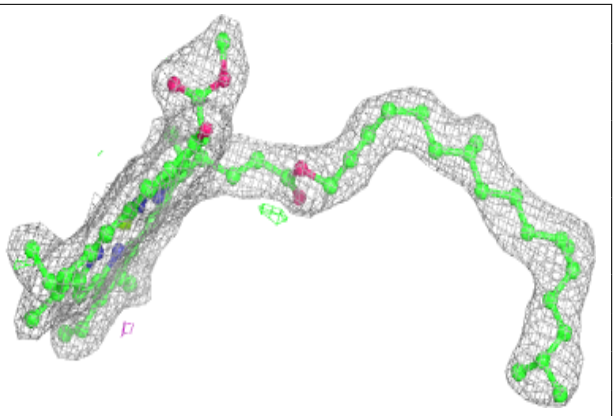


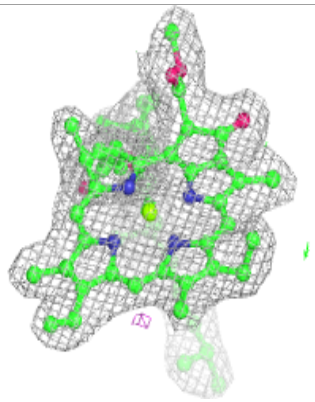


Electron density around CLA D 404:

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

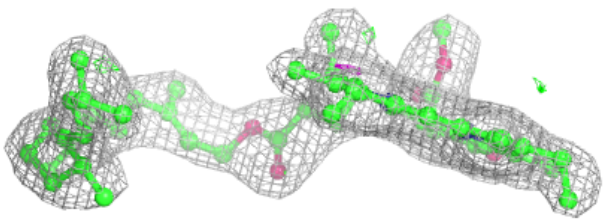


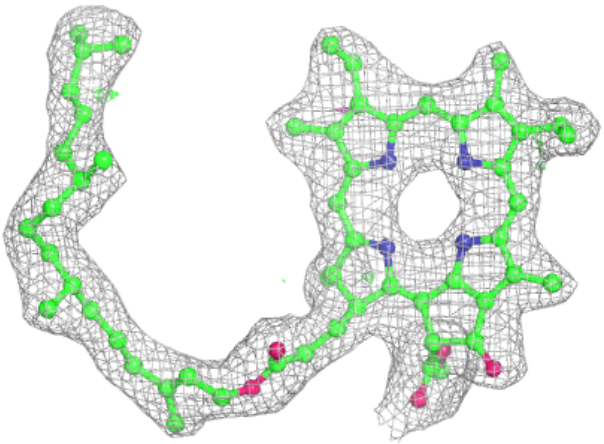


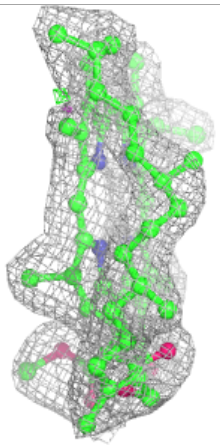


Electron density around PHO D 401:

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

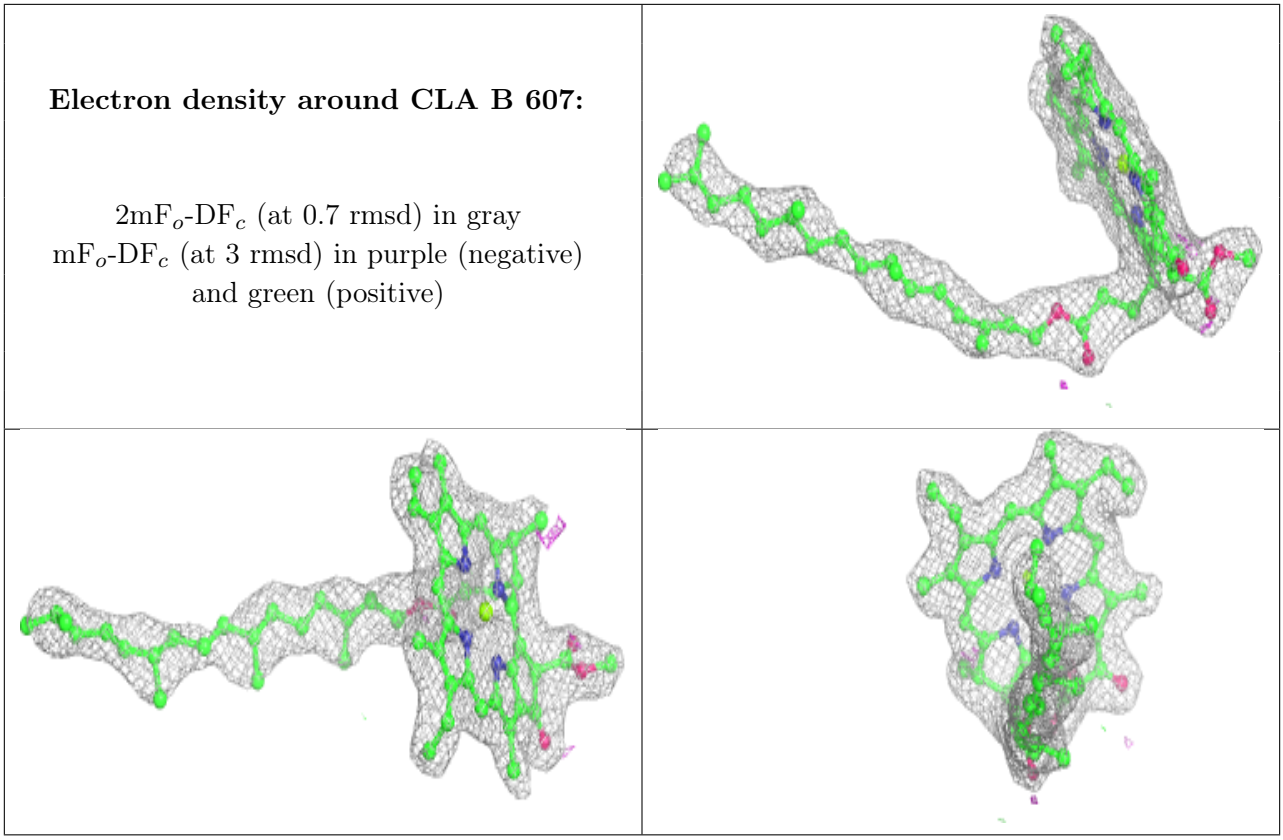






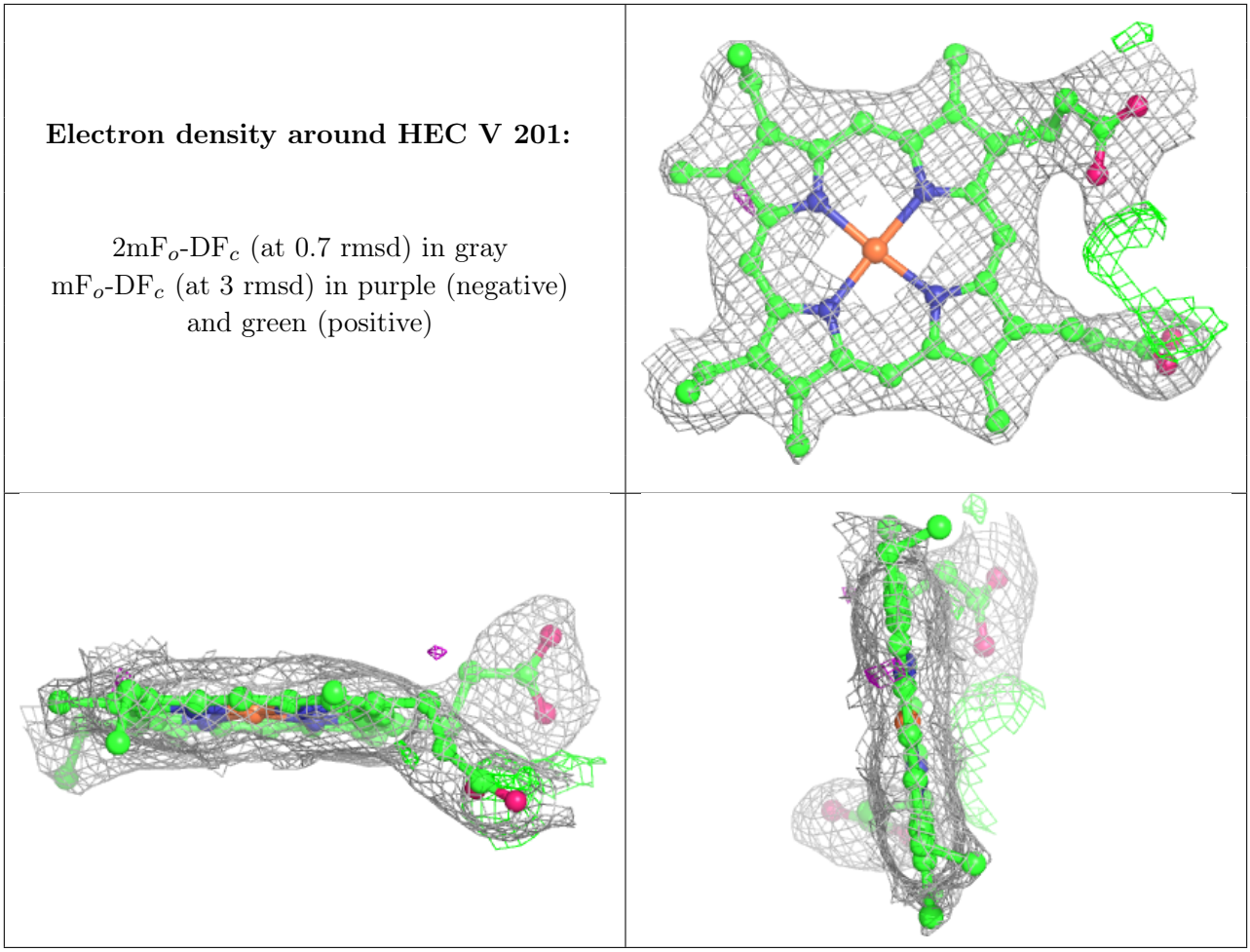
Electron density around CLA B 607:

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



Electron density around HEC V 201:

$2mF_o$-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.