Full wwPDB X-ray Structure Validation Report ⓘ

Oct 28, 2024 – 08:54 AM JST

PDB ID	:	4YUU
Title	:	Crystal structure of oxygen-evolving photosystem II from a red alga
Authors	:	Ago, H.; Shen, J.-R.
Deposited on	:	2015-03-19
Resolution	:	2.77 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:

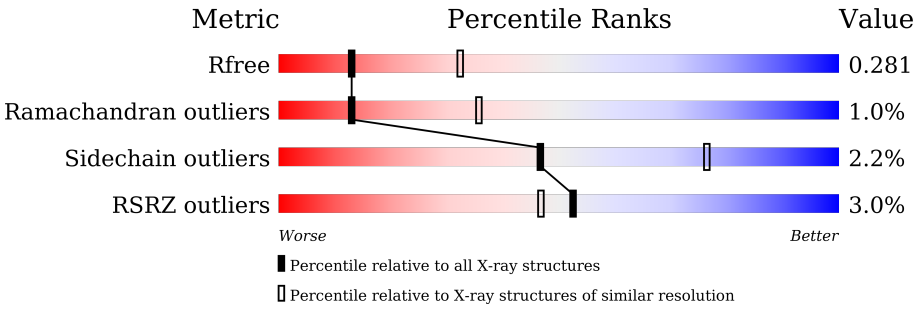
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 2.77 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.



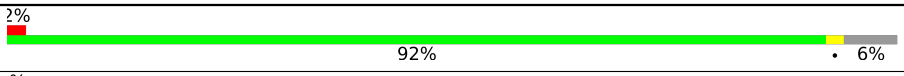
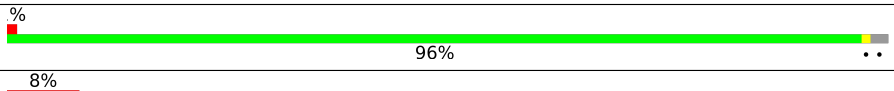
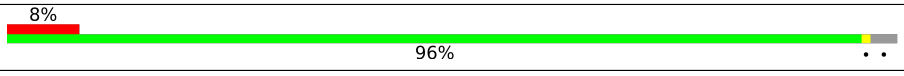
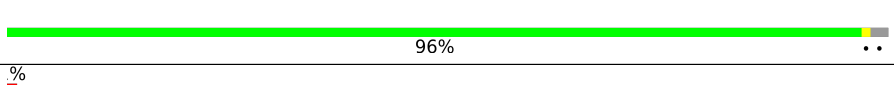
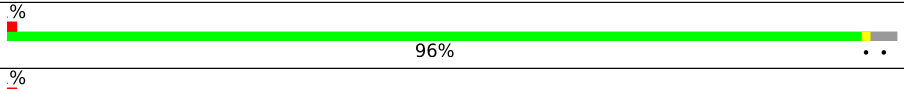
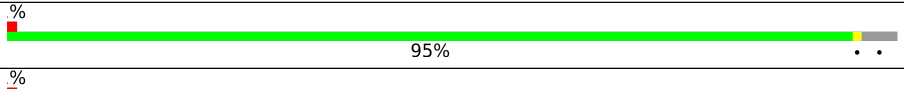
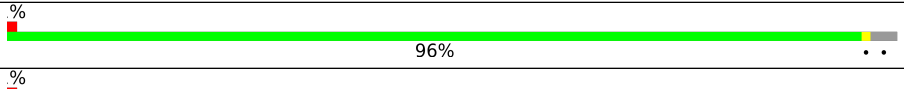
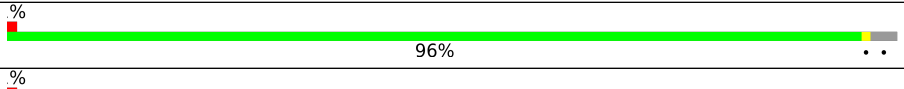
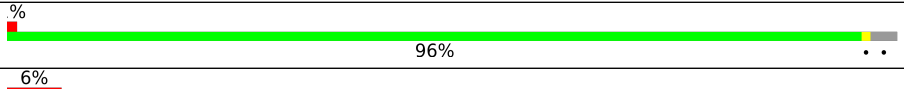
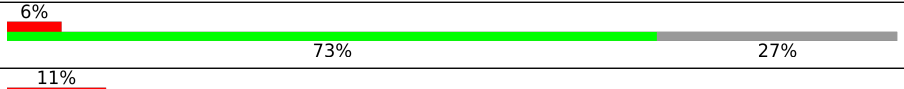
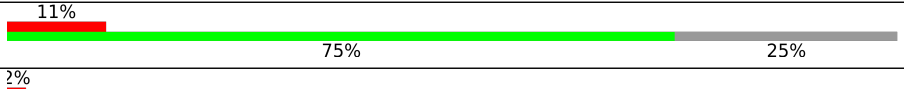
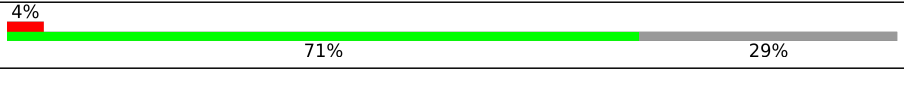
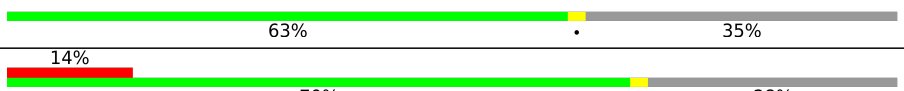
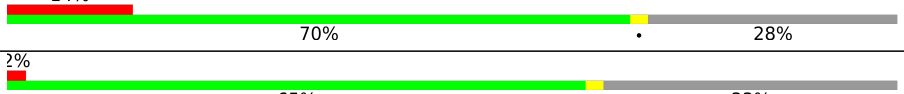
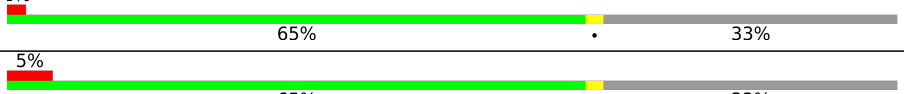
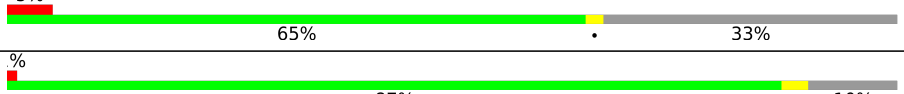
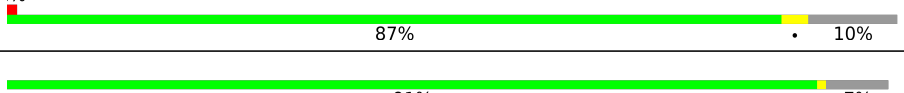
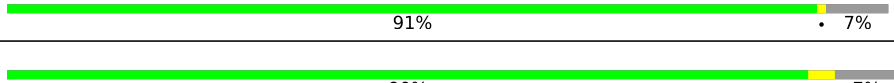
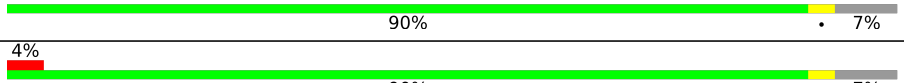
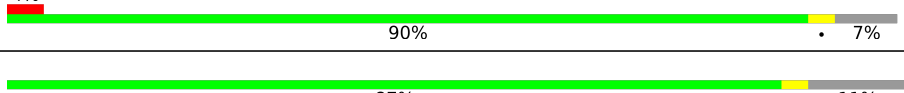
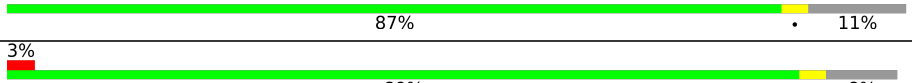
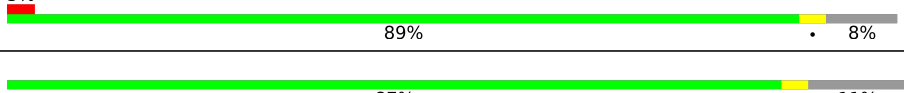
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	4924 (2.80-2.76)
Ramachandran outliers	177936	5386 (2.80-2.76)
Sidechain outliers	177891	5388 (2.80-2.76)
RSRZ outliers	164620	4926 (2.80-2.76)

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	A1	344	99%
1	A2	344	95%
1	a1	344	96%
1	a2	344	95%
2	B1	509	93% 5%
2	B2	509	96%
2	b1	509	96%

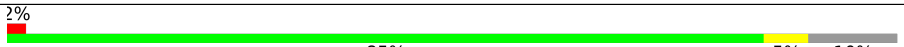
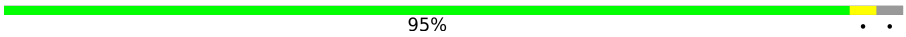
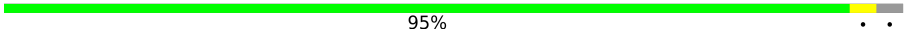
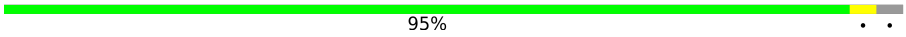
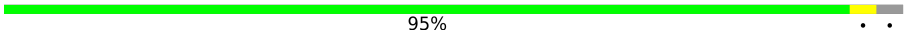
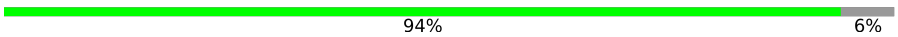
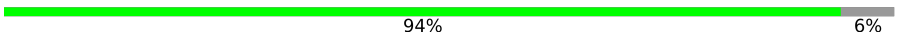
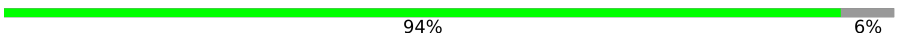
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	b2	509	
3	C1	460	
3	C2	460	
3	c1	460	
3	c2	460	
4	D1	351	
4	D2	351	
4	d1	351	
4	d2	351	
5	E1	84	
5	E2	84	
5	e1	84	
5	e2	84	
6	F1	43	
6	F2	43	
6	f1	43	
6	f2	43	
7	H1	67	
7	H2	67	
7	h1	67	
7	h2	67	
8	I1	38	
8	I2	38	
8	i1	38	
8	i2	38	

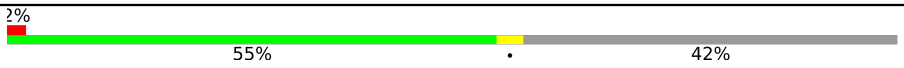
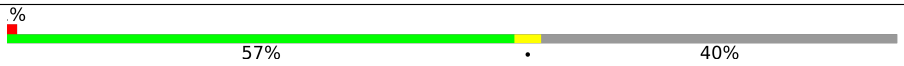
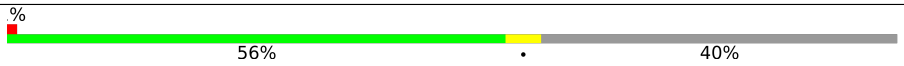
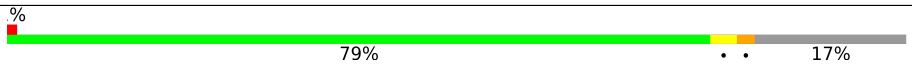
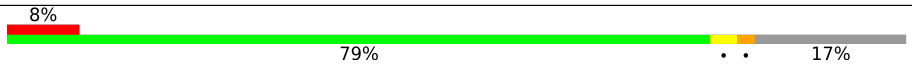
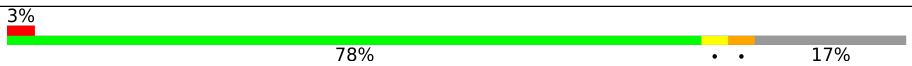
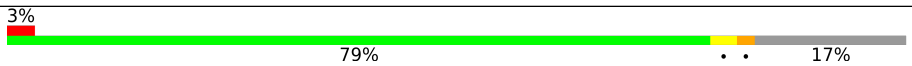
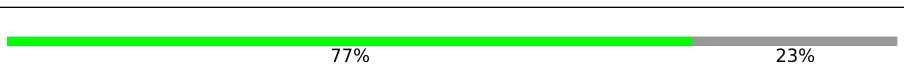
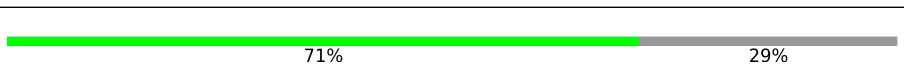
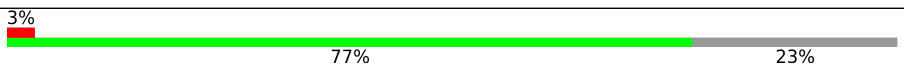
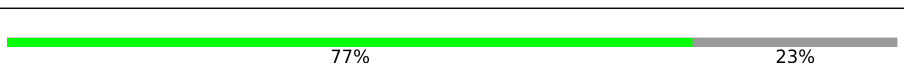
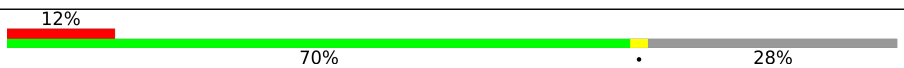
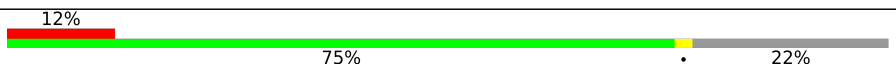
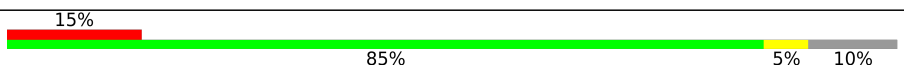
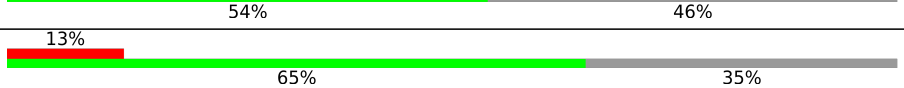
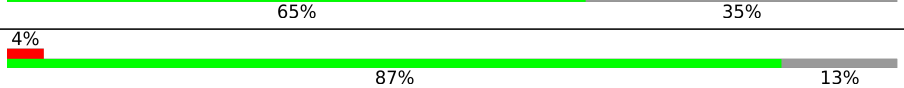
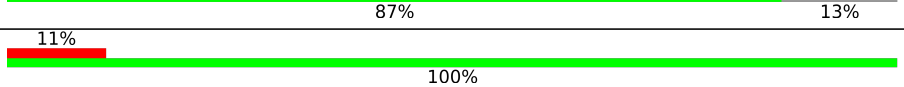
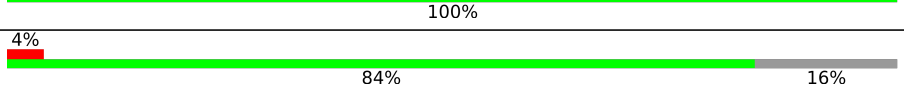
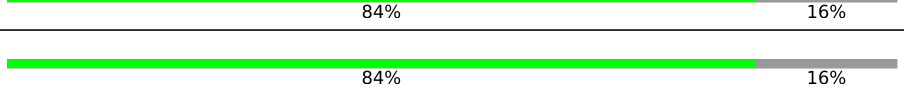
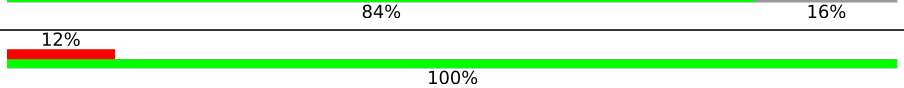
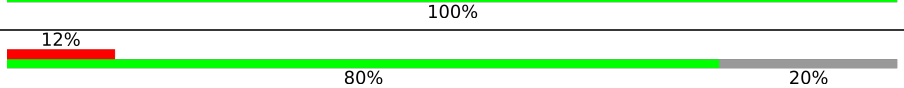
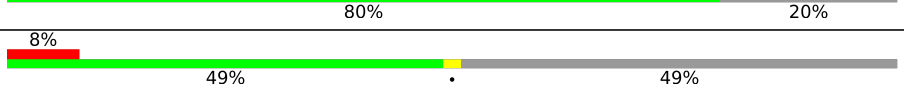
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	J1	39	
9	J2	39	
9	j1	39	
9	j2	39	
10	K1	41	
10	K2	41	
10	k1	41	
10	k2	41	
11	L1	38	
11	L2	38	
11	l1	38	
11	l2	38	
12	M1	108	
12	M2	108	
12	m1	108	
12	m2	108	
13	O1	329	
13	O2	329	
13	o1	329	
13	o2	329	
14	T1	32	
14	T2	32	
14	t1	32	
14	t2	32	
15	U1	155	

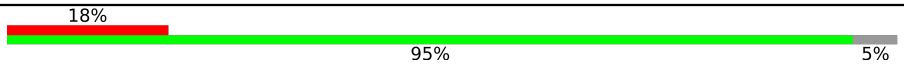
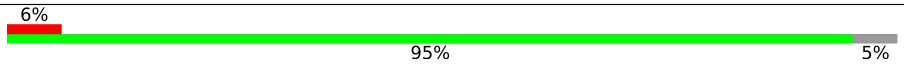
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	U2	155	
15	u1	155	
15	u2	155	
16	V1	155	
16	V2	155	
16	v1	155	
16	v2	155	
17	Y1	35	
17	Y2	35	
17	y1	35	
17	y2	35	
18	X1	40	
18	X2	40	
18	x1	40	
18	x2	40	
19	S1	46	
19	S2	46	
19	s1	46	
19	s2	46	
20	W1	25	
20	W2	25	
20	w1	25	
20	w2	25	
21	Q2	218	
21	q1	218	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
22	Z2	62	
22	z2	62	

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	A1	403	X	-	-	-
25	CLA	A1	404	X	-	-	-
25	CLA	A1	405	X	-	-	-
25	CLA	A1	406	X	-	-	-
25	CLA	A2	402	X	-	-	-
25	CLA	A2	403	X	-	-	-
25	CLA	A2	404	X	-	-	-
25	CLA	B1	604	X	-	-	-
25	CLA	B1	605	X	-	-	-
25	CLA	B1	606	X	-	-	-
25	CLA	B1	607	X	-	-	-
25	CLA	B1	608	X	-	-	-
25	CLA	B1	609	X	-	-	-
25	CLA	B1	610	X	-	-	-
25	CLA	B1	612	X	-	-	-
25	CLA	B1	613	X	-	-	-
25	CLA	B1	614	X	-	-	-
25	CLA	B1	615	X	-	-	-
25	CLA	B1	616	X	-	-	-
25	CLA	B1	617	X	-	-	-
25	CLA	B1	618	X	-	-	-
25	CLA	B1	619	X	-	-	-
25	CLA	B2	604	X	-	-	-
25	CLA	B2	605	X	-	-	-
25	CLA	B2	606	X	-	-	-
25	CLA	B2	607	X	-	-	-
25	CLA	B2	608	X	-	-	-
25	CLA	B2	609	X	-	-	-
25	CLA	B2	610	X	-	-	-
25	CLA	B2	611	X	-	-	-
25	CLA	B2	612	X	-	-	-
25	CLA	B2	613	X	-	-	-
25	CLA	B2	614	X	-	-	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B2	615	X	-	-	-
25	CLA	B2	616	X	-	-	-
25	CLA	B2	617	X	-	-	-
25	CLA	B2	618	X	-	-	-
25	CLA	B2	619	X	-	-	-
25	CLA	C1	502	X	-	-	-
25	CLA	C1	503	X	-	-	-
25	CLA	C1	504	X	-	-	-
25	CLA	C1	505	X	-	-	-
25	CLA	C1	506	X	-	-	-
25	CLA	C1	507	X	-	-	-
25	CLA	C1	508	X	-	-	-
25	CLA	C1	509	X	-	-	-
25	CLA	C1	510	X	-	-	-
25	CLA	C1	511	X	-	-	-
25	CLA	C1	512	X	-	-	-
25	CLA	C1	513	X	-	-	-
25	CLA	C1	514	X	-	-	-
25	CLA	C2	503	X	-	-	-
25	CLA	C2	504	X	-	-	-
25	CLA	C2	505	X	-	-	-
25	CLA	C2	506	X	-	-	-
25	CLA	C2	507	X	-	-	-
25	CLA	C2	508	X	-	-	-
25	CLA	C2	509	X	-	-	-
25	CLA	C2	510	X	-	-	-
25	CLA	C2	511	X	-	-	-
25	CLA	C2	513	X	-	-	-
25	CLA	C2	516	X	-	-	-
25	CLA	C2	518	X	-	-	-
25	CLA	D1	402	X	-	-	-
25	CLA	D1	403	X	-	-	-
25	CLA	D2	401	X	-	-	-
25	CLA	D2	404	X	-	-	-
25	CLA	D2	406	X	-	-	-
25	CLA	K2	101	X	-	-	-
25	CLA	a1	403	X	-	-	-
25	CLA	a1	404	X	-	-	-
25	CLA	a1	405	X	-	-	-
25	CLA	a2	404	X	-	-	-
25	CLA	a2	405	X	-	-	-
25	CLA	a2	413	X	-	-	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	b1	604	X	-	-	-
25	CLA	b1	605	X	-	-	-
25	CLA	b1	606	X	-	-	-
25	CLA	b1	607	X	-	-	-
25	CLA	b1	608	X	-	-	-
25	CLA	b1	609	X	-	-	-
25	CLA	b1	610	X	-	-	-
25	CLA	b1	611	X	-	-	-
25	CLA	b1	612	X	-	-	-
25	CLA	b1	613	X	-	-	-
25	CLA	b1	614	X	-	-	-
25	CLA	b1	615	X	-	-	-
25	CLA	b1	616	X	-	-	-
25	CLA	b1	617	X	-	-	-
25	CLA	b1	619	X	-	-	-
25	CLA	b1	620	X	-	-	-
25	CLA	b2	604	X	-	-	-
25	CLA	b2	606	X	-	-	-
25	CLA	b2	608	X	-	-	-
25	CLA	b2	609	X	-	-	-
25	CLA	b2	610	X	-	-	-
25	CLA	b2	611	X	-	-	-
25	CLA	b2	612	X	-	-	-
25	CLA	b2	613	X	-	-	-
25	CLA	b2	614	X	-	-	-
25	CLA	b2	615	X	-	-	-
25	CLA	b2	616	X	-	-	-
25	CLA	b2	617	X	-	-	-
25	CLA	b2	618	X	-	-	-
25	CLA	b2	619	X	-	-	-
25	CLA	b2	620	X	-	-	-
25	CLA	b2	624	X	-	-	-
25	CLA	c1	503	X	-	-	-
25	CLA	c1	504	X	-	-	-
25	CLA	c1	505	X	-	-	-
25	CLA	c1	506	X	-	-	-
25	CLA	c1	507	X	-	-	-
25	CLA	c1	508	X	-	-	-
25	CLA	c1	509	X	-	-	-
25	CLA	c1	510	X	-	-	-
25	CLA	c1	511	X	-	-	-
25	CLA	c1	512	X	-	-	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	c1	513	X	-	-	-
25	CLA	c1	515	X	-	-	-
25	CLA	c1	516	X	-	-	-
25	CLA	c2	502	X	-	-	-
25	CLA	c2	503	X	-	-	-
25	CLA	c2	504	X	-	-	-
25	CLA	c2	505	X	-	-	-
25	CLA	c2	506	X	-	-	-
25	CLA	c2	507	X	-	-	-
25	CLA	c2	508	X	-	-	-
25	CLA	c2	509	X	-	-	-
25	CLA	c2	510	X	-	-	-
25	CLA	c2	511	X	-	-	-
25	CLA	c2	512	X	-	-	-
25	CLA	c2	513	X	-	-	-
25	CLA	c2	515	X	-	-	-
25	CLA	d1	401	X	-	-	-
25	CLA	d1	404	X	-	-	-
25	CLA	d1	406	X	-	-	-
25	CLA	d2	402	X	-	-	-
25	CLA	d2	404	X	-	-	-
25	CLA	d2	405	X	-	-	-

2 Entry composition (i)

There are 40 unique types of molecules in this entry. The entry contains 92765 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Photosystem II protein D1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A1	344	Total	C	N	O	S	0	0	0
			2609	1708	425	462	14			
1	a1	334	Total	C	N	O	S	0	0	0
			2564	1676	421	454	13			
1	A2	332	Total	C	N	O	S	0	1	0
			2475	1607	411	444	13			
1	a2	334	Total	C	N	O	S	0	0	0
			2513	1638	410	452	13			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B1	483	Total	C	N	O	S	0	0	0
			3703	2426	624	641	12			
2	b1	503	Total	C	N	O	S	0	1	0
			3881	2549	646	674	12			
2	B2	503	Total	C	N	O	S	0	0	0
			3770	2460	645	654	11			
2	b2	481	Total	C	N	O	S	0	0	0
			3681	2418	620	631	12			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C1	449	Total	C	N	O	S	0	0	0
			3392	2215	573	594	10			
3	c1	449	Total	C	N	O	S	0	2	0
			3439	2241	577	611	10			
3	C2	444	Total	C	N	O	S	0	0	0
			3145	2028	545	564	8			
3	c2	448	Total	C	N	O	S	0	0	0
			3386	2201	578	597	10			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D1	337	Total	C	N	O	S	0	0	0
			2615	1736	422	447	10			
4	d1	339	Total	C	N	O	S	0	0	0
			2678	1775	433	460	10			
4	D2	340	Total	C	N	O	S	0	0	0
			2585	1713	422	440	10			
4	d2	340	Total	C	N	O	S	0	0	0
			2643	1756	425	452	10			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E1	61	Total	C	N	O	0	0	0
			405	264	68	73			
5	e1	57	Total	C	N	O	0	0	0
			427	280	71	76			
5	E2	63	Total	C	N	O	0	0	0
			430	279	72	79			
5	e2	60	Total	C	N	O	0	0	0
			421	279	71	71			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F1	28	Total	C	N	O	S	0	0	0
			213	144	36	32	1			
6	f1	29	Total	C	N	O	S	0	0	0
			227	158	36	32	1			
6	F2	31	Total	C	N	O	S	0	0	0
			229	153	41	34	1			
6	f2	29	Total	C	N	O	S	0	0	0
			225	157	34	33	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H1	60	Total	C	N	O	S	0	0	0
			433	289	69	73	2			
7	h1	62	Total	C	N	O	S	0	0	0
			470	317	71	80	2			
7	H2	62	Total	C	N	O	S	0	0	0
			443	294	72	75	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	h2	62	Total	C	N	O	S	0	0	0
			450	302	69	77	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I1	34	Total	C	N	O	S	0	0	0
			274	184	42	45	3			
8	i1	34	Total	C	N	O	S	0	0	0
			280	188	44	45	3			
8	I2	35	Total	C	N	O	S	0	0	0
			265	177	41	45	2			
8	i2	33	Total	C	N	O	S	0	0	0
			261	174	40	44	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	J1	32	Total	C	N	O	0	0	0
			220	148	33	39			
9	j1	32	Total	C	N	O	0	0	0
			224	152	33	39			
9	J2	35	Total	C	N	O	0	0	0
			231	154	36	41			
9	j2	33	Total	C	N	O	0	0	0
			228	153	34	41			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	K1	37	Total	C	N	O	S	0	0	0
			279	195	39	44	1			
10	k1	37	Total	C	N	O	S	0	0	0
			280	198	39	42	1			
10	K2	37	Total	C	N	O		0	0	0
			250	171	39	40				
10	k2	37	Total	C	N	O	S	0	0	0
			269	185	40	43	1			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L1	37	Total 292	C 197	N 46	O 49	0	0	0
11	l1	37	Total 299	C 203	N 47	O 49	0	0	0
11	L2	37	Total 299	C 202	N 46	O 51	0	0	0
11	l2	37	Total 299	C 202	N 46	O 51	0	0	0

- Molecule 12 is a protein called PHOTOSYSTEM II REACTION CENTER PROTEIN M.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M1	40	Total 285	C 189	N 44	O 50	S 2	0	0	0
12	m1	40	Total 285	C 189	N 44	O 50	S 2	0	0	0
12	M2	40	Total 284	C 188	N 46	O 48	S 2	0	0	0
12	m2	40	Total 287	C 189	N 46	O 50	S 2	0	0	0

- Molecule 13 is a protein called PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O1	240	Total 1674	C 1074	N 276	O 316	S 8	0	0	0
13	o1	238	Total 1692	C 1070	N 282	O 332	S 8	0	0	0
13	O2	205	Total 1376	C 870	N 237	O 262	S 7	0	0	0
13	o2	245	Total 1768	C 1123	N 296	O 341	S 8	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T1	30	Total 241	C 168	N 36	O 36	S 1	0	0	0
14	t1	30	Total 246	C 173	N 36	O 36	S 1	0	0	0
14	T2	30	Total 240	C 170	N 33	O 36	S 1	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	t2	29	Total	C	N	O	S	0	0	0
			235	167	32	35	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	U1	93	Total	C	N	O	S	0	0	0
			691	445	116	129	1			
15	u1	93	Total	C	N	O	S	0	0	0
			703	449	119	134	1			
15	U2	90	Total	C	N	O	S	0	0	0
			577	355	103	118	1			
15	u2	93	Total	C	N	O	S	0	0	0
			708	455	120	132	1			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
U1	-51	MET	-	initiating methionine	UNP Q9ZQS5
u1	-51	MET	-	initiating methionine	UNP Q9ZQS5
U2	-51	MET	-	initiating methionine	UNP Q9ZQS5
u2	-51	MET	-	initiating methionine	UNP Q9ZQS5

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V1	129	Total	C	N	O	S	0	0	0
			917	579	159	175	4			
16	v1	129	Total	C	N	O	S	0	0	0
			921	577	163	177	4			
16	V2	129	Total	C	N	O	S	0	0	0
			845	521	152	168	4			
16	v2	129	Total	C	N	O	S	0	0	0
			963	608	168	183	4			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
17	Y1	27	Total	C	N	O	0	0	0
			170	111	29	30			
17	y1	27	Total	C	N	O	0	0	0
			195	133	30	32			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
17	Y2	25	Total C N O 159 104 27 28	0	0	0
17	y2	27	Total C N O 188 126 30 32	0	0	0

- Molecule 18 is a protein called PHOTOSYSTEM II REACTION CENTER PROTEIN X.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
18	X1	29	Total C N O 197 135 30 32	0	0	0
18	x1	36	Total C N O S 255 174 38 42 1	0	0	0
18	X2	31	Total C N O S 215 149 33 32 1	0	0	0
18	x2	32	Total C N O 218 147 35 36	0	0	0

- Molecule 19 is a protein called PEPTIDE CHAIN UNASSIGNED.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
19	S1	25	Total C N O 164 113 26 25	0	0	0
19	s1	40	Total C N O 263 182 41 40	0	0	0
19	S2	30	Total C N O 191 130 31 30	0	0	0
19	s2	46	Total C N O 281 188 47 46	0	0	0

- Molecule 20 is a protein called PEPTIDE CHAIN UNASSIGNED.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
20	W1	21	Total C N O 134 91 21 22	0	0	0
20	w1	25	Total C N O 152 101 25 26	0	0	0
20	W2	21	Total C N O 129 86 21 22	0	0	0
20	w2	20	Total C N O 127 86 20 21	0	0	0

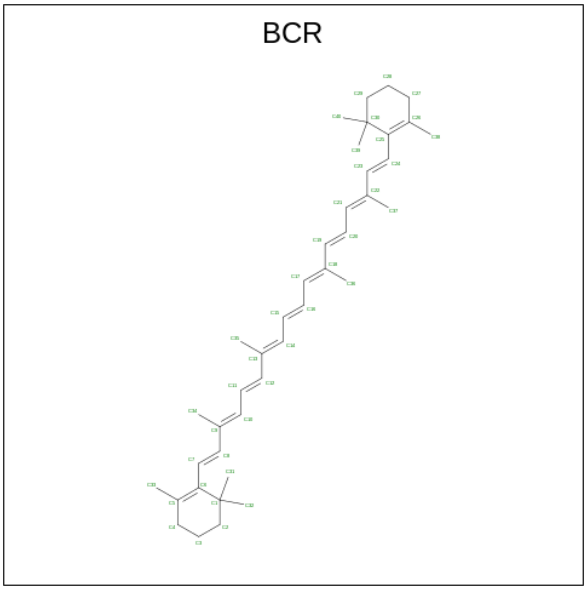
- Molecule 21 is a protein called Extrinsic protein in photosystem II.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	q1	105	Total	C	N	O	S	0	0	0
			645	399	115	127	4			
21	Q2	111	Total	C	N	O	S	0	0	0
			676	417	123	133	3			

- Molecule 22 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	Z2	59	Total	C	N	O	S	0	0	0
			351	224	61	65	1			
22	z2	59	Total	C	N	O	S	0	0	0
			381	250	63	67	1			

- Molecule 23 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	A1	1	Total	C	0	0
			40	40		
23	B1	1	Total	C	0	0
			40	40		
23	B1	1	Total	C	0	0
			40	40		
23	B1	1	Total	C	0	0
			40	40		
23	C1	1	Total	C	0	0
			40	40		
23	C1	1	Total	C	0	0
			40	40		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	D1	1	Total C 40 40	0	0
23	H1	1	Total C 22 22	0	0
23	J1	1	Total C 40 40	0	0
23	K1	1	Total C 31 31	0	0
23	a1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	c1	1	Total C 40 40	0	0
23	c1	1	Total C 40 40	0	0
23	d1	1	Total C 40 40	0	0
23	h1	1	Total C 40 40	0	0
23	k1	1	Total C 40 40	0	0
23	A2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	C2	1	Total C 40 40	0	0
23	F2	1	Total C 40 40	0	0
23	H2	1	Total C 24 24	0	0
23	K2	1	Total C 40 40	0	0

Continued on next page...

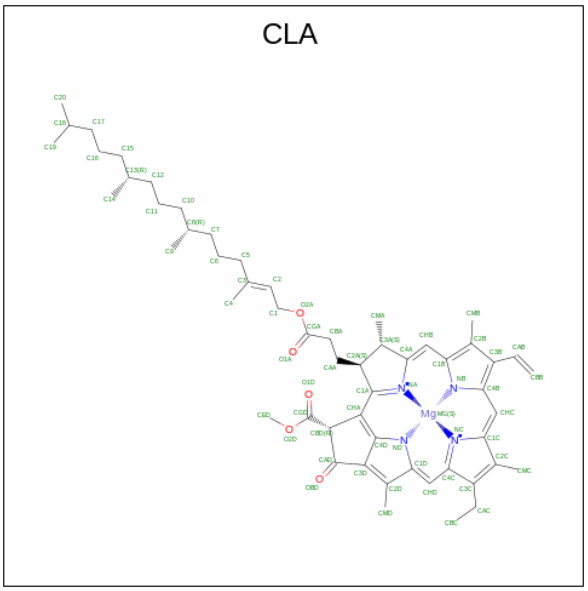
Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	K2	1	Total C 29 29	0	0
23	a2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	c2	1	Total C 40 40	0	0
23	d2	1	Total C 40 40	0	0
23	h2	1	Total C 40 40	0	0
23	j2	1	Total C 40 40	0	0
23	k2	1	Total C 40 40	0	0
23	z2	1	Total C 40 40	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A1	1	Total Cl 1 1	0	0
24	a1	1	Total Cl 1 1	0	0
24	A2	1	Total Cl 1 1	0	0
24	a2	1	Total Cl 1 1	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	A1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	A1	1	Total 51	C 41	Mg 1	N 4	O 5	0	0
25	A1	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
25	A1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 42	C 34	Mg 1	N 4	O 3	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 62	C 52	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	B1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	B1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	B1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	B1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	B1	1	Total 58, C 48, Mg 1, N 4, O 5	0	0
25	B1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 60, C 50, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	C1	1	Total 61, C 51, Mg 1, N 4, O 5	0	0
25	C1	1	Total 45, C 35, Mg 1, N 4, O 5	0	0
25	D1	1	Total 65, C 55, Mg 1, N 4, O 5	0	0
25	D1	1	Total 51, C 41, Mg 1, N 4, O 5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	a1	1	Total C Mg N O 65 55 1 4 5	0	0
25	a1	1	Total C Mg N O 60 50 1 4 5	0	0
25	a1	1	Total C Mg N O 50 40 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 59 49 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	b1	1	Total C Mg N O 65 55 1 4 5	0	0
25	c1	1	Total C Mg N O 65 55 1 4 5	0	0
25	c1	1	Total C Mg N O 65 55 1 4 5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 54	C 44	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B2	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
25	B2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	C2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	C2	1	Total 46	C 36	Mg 1	N 4	O 5	0	0
25	C2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	C2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	C2	1	Total 45	C 35	Mg 1	N 4	O 5	0	0
25	C2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
25	C2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	C2	1	Total 45	C 35	Mg 1	N 4	O 5	0	0
25	C2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0

Continued on next page...

Continued from previous page...

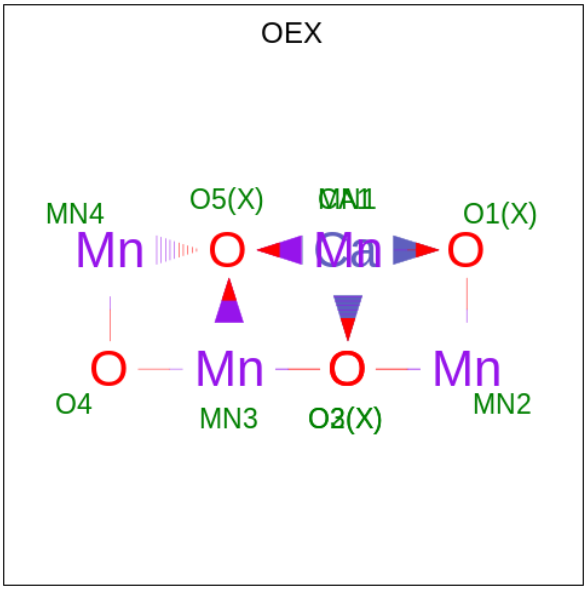
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	C2	1	Total	C	Mg	N	O	0	0
			53	43	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
25	D2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	D2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	D2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	K2	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			42	34	1	4	3		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		

Continued on next page...

Continued from previous page...

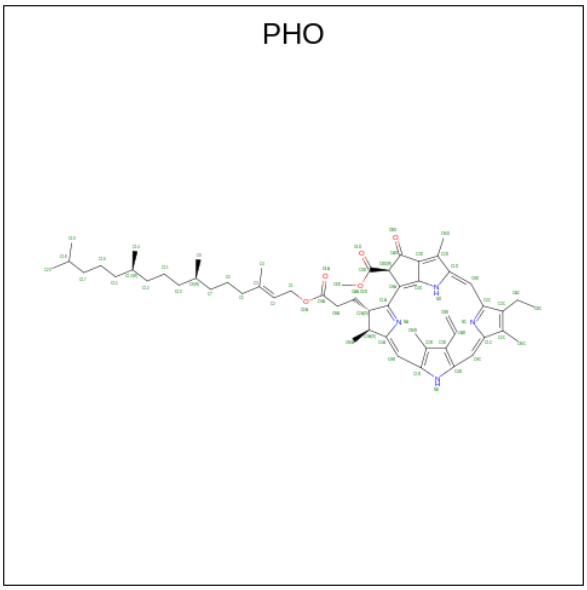
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	b2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	b2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	b2	1	Total 59	C 49	Mg 1	N 4	O 5	0	0
25	b2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	b2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 61	C 51	Mg 1	N 4	O 5	0	0
25	c2	1	Total 54	C 44	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 54	C 44	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c2	1	Total 54	C 44	Mg 1	N 4	O 5	0	0
25	c2	1	Total 46	C 36	Mg 1	N 4	O 5	0	0
25	d2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	d2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
25	d2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

- Molecule 26 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
26	A1	1	Total	Ca	Mn	O	0	0
			10	1	4	5		
26	a1	1	Total	Ca	Mn	O	0	0
			10	1	4	5		
26	A2	1	Total	Ca	Mn	O	0	0
			10	1	4	5		
26	a2	1	Total	Ca	Mn	O	0	0
			10	1	4	5		

- Molecule 27 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
27	A1	1	Total	C	N	O	0	0
			64	55	4	5		
27	D1	1	Total	C	N	O	0	0
			63	54	4	5		
27	a1	1	Total	C	N	O	0	0
			64	55	4	5		
27	d1	1	Total	C	N	O	0	0
			64	55	4	5		
27	A2	1	Total	C	N	O	0	0
			64	55	4	5		
27	D2	1	Total	C	N	O	0	0
			64	55	4	5		
27	a2	1	Total	C	N	O	0	0
			64	55	4	5		
27	d2	1	Total	C	N	O	0	0
			64	55	4	5		

- Molecule 28 is UNKNOWN LIGAND (three-letter code: UNL) (formula:).

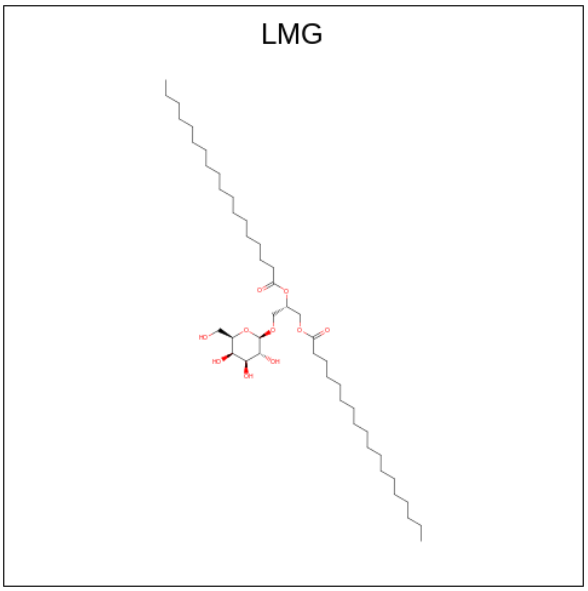
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
28	A1	1	Total	C	0	0
			14	14		
28	B1	3	Total	C	0	0
			41	41		
28	D1	1	Total	C	0	0
			6	6		
28	a1	1	Total	C	0	0
			11	11		
28	b1	7	Total	C	0	0
			92	92		
28	d1	1	Total	C	0	0
			12	12		
28	j1	1	Total	C	0	0
			17	17		
28	l1	1	Total	C	0	0
			12	12		
28	m1	1	Total	C	0	0
			6	6		
28	t1	2	Total	C	0	0
			27	27		
28	x1	1	Total	C	0	0
			15	15		
28	A2	2	Total	C	0	0
			28	28		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	B2	4	Total C 58 58	0	0
28	C2	2	Total C 24 24	0	0
28	F2	1	Total C 16 16	0	0
28	H2	1	Total C 5 5	0	0
28	I2	2	Total C 31 31	0	0
28	J2	1	Total C 10 10	0	0
28	K2	1	Total C 5 5	0	0
28	M2	1	Total C 11 11	0	0
28	X2	1	Total C 7 7	0	0
28	W2	1	Total C 9 9	0	0
28	a2	4	Total C 55 55	0	0
28	b2	1	Total C 12 12	0	0
28	c2	1	Total C 15 15	0	0
28	d2	2	Total C 25 25	0	0
28	i2	1	Total C 14 14	0	0
28	k2	4	Total C 30 30	0	0
28	m2	2	Total C 36 36	0	0

- Molecule 29 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A1	1	Total	C	O	0	0
			43	33	10		
29	A1	1	Total	C	O	0	0
			41	31	10		
29	B1	1	Total	C	O	0	0
			31	21	10		
29	B1	1	Total	C	O	0	0
			48	38	10		
29	C1	1	Total	C	O	0	0
			48	38	10		
29	D1	1	Total	C	O	0	0
			35	25	10		
29	M1	1	Total	C	O	0	0
			31	27	4		
29	a1	1	Total	C	O	0	0
			51	41	10		
29	b1	1	Total	C	O	0	0
			38	28	10		
29	b1	1	Total	C	O	0	0
			39	29	10		
29	b1	1	Total	C	O	0	0
			40	30	10		
29	c1	1	Total	C	O	0	0
			55	45	10		
29	d1	1	Total	C	O	0	0
			33	23	10		
29	d1	1	Total	C	O	0	0
			35	30	5		

Continued on next page...

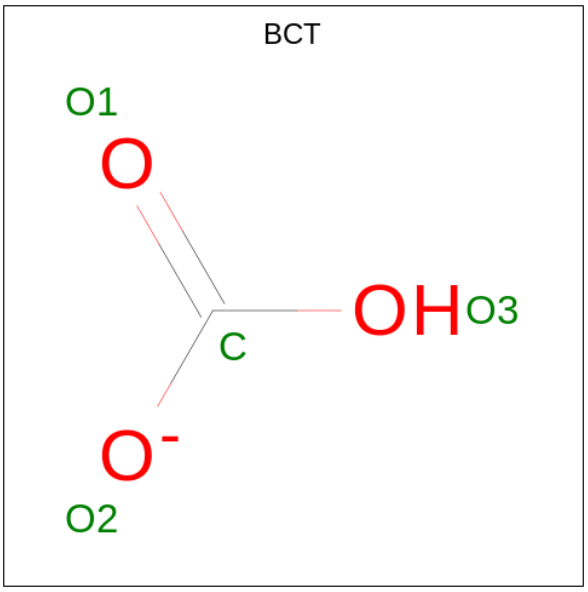
Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A2	1	Total C O 29 19 10	0	0
29	B2	1	Total C O 40 30 10	0	0
29	B2	1	Total C O 37 27 10	0	0
29	C2	1	Total C O 24 14 10	0	0
29	F2	1	Total C O 35 25 10	0	0
29	I2	1	Total C O 34 24 10	0	0
29	a2	1	Total C O 44 34 10	0	0
29	b2	1	Total C O 39 29 10	0	0
29	c2	1	Total C O 26 16 10	0	0
29	d2	1	Total C O 27 17 10	0	0
29	j2	1	Total C O 50 40 10	0	0

- Molecule 30 is FE (III) ION (three-letter code: FE) (formula: Fe).

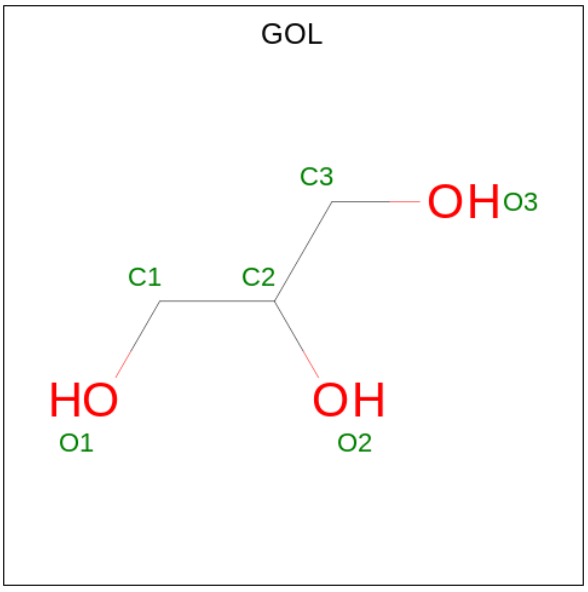
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	A1	1	Total Fe 1 1	0	0
30	a1	1	Total Fe 1 1	0	0
30	A2	1	Total Fe 1 1	0	0
30	a2	1	Total Fe 1 1	0	0

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



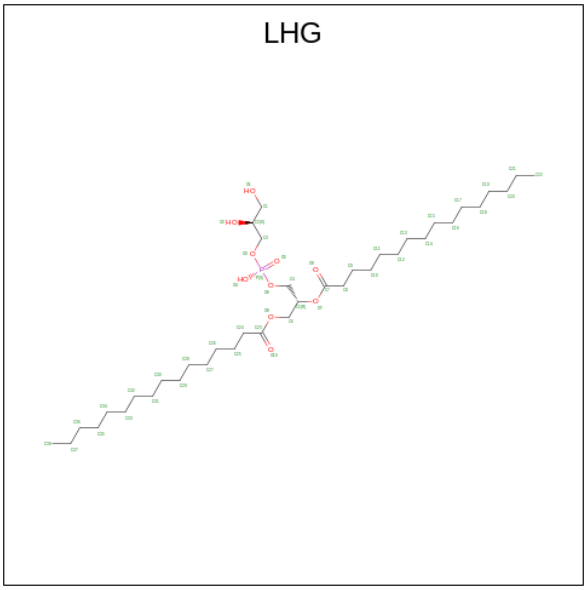
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	A1	1	Total	C	O	0	0
			4	1	3		
31	a1	1	Total	C	O	0	0
			4	1	3		
31	A2	1	Total	C	O	0	0
			4	1	3		
31	a2	1	Total	C	O	0	0
			4	1	3		

- Molecule 32 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	B1	1	Total	C	O		0	0
			6	3	3			
32	C1	1	Total	C	O		0	0
			6	3	3			
32	a1	1	Total	C	O		0	0
			6	3	3			
32	b1	1	Total	C	O		0	0
			6	3	3			
32	c1	1	Total	C	O		0	0
			6	3	3			
32	i1	1	Total	C	O		0	0
			6	3	3			
32	C2	1	Total	C	O		0	0
			6	3	3			
32	a2	1	Total	C	O		0	0
			6	3	3			
32	c2	1	Total	C	O		0	0
			6	3	3			

- Molecule 33 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



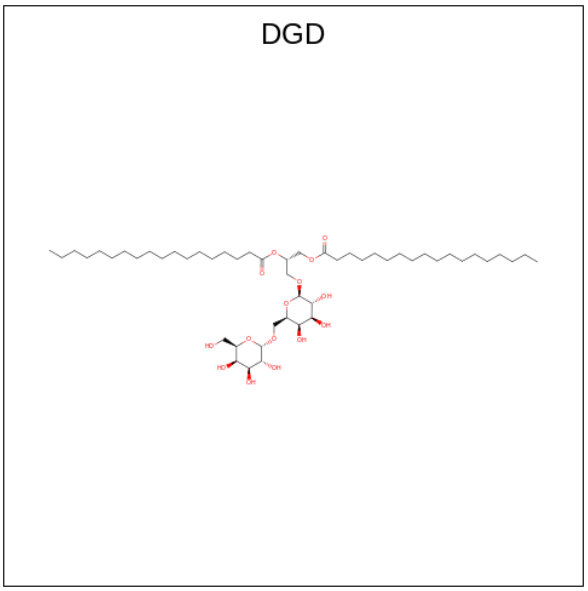
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
33	B1	1	Total	C	O	P		0	0
			49	38	10	1			
33	D1	1	Total	C	O	P		0	0
			49	38	10	1			

Continued on next page...

Continued from previous page...

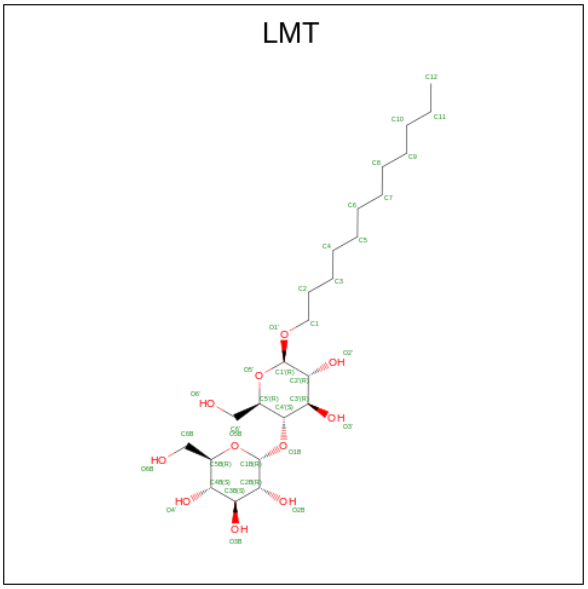
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	D1	1	Total	C	O	P	0	0
			49	38	10	1		
33	L1	1	Total	C	O	P	0	0
			41	30	10	1		
33	a1	1	Total	C	O	P	0	0
			43	32	10	1		
33	b1	1	Total	C	O	P	0	0
			49	38	10	1		
33	d1	1	Total	C	O	P	0	0
			32	21	10	1		
33	d1	1	Total	C	O	P	0	0
			49	38	10	1		
33	l1	1	Total	C	O	P	0	0
			49	38	10	1		
33	A2	1	Total	C	O	P	0	0
			33	22	10	1		
33	B2	1	Total	C	O	P	0	0
			42	31	10	1		
33	D2	1	Total	C	O	P	0	0
			49	38	10	1		
33	D2	1	Total	C	O	P	0	0
			49	38	10	1		
33	L2	1	Total	C	O	P	0	0
			49	38	10	1		
33	a2	1	Total	C	O	P	0	0
			30	19	10	1		
33	b2	1	Total	C	O	P	0	0
			43	32	10	1		
33	d2	1	Total	C	O	P	0	0
			49	38	10	1		
33	d2	1	Total	C	O	P	0	0
			49	38	10	1		
33	l2	1	Total	C	O	P	0	0
			44	33	10	1		

- Molecule 34 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	C1	1	Total C O 52 37 15	0	0
34	C1	1	Total C O 62 47 15	0	0
34	C1	1	Total C O 64 49 15	0	0
34	H1	1	Total C O 62 47 15	0	0
34	c1	1	Total C O 51 36 15	0	0
34	c1	1	Total C O 62 47 15	0	0
34	c1	1	Total C O 62 47 15	0	0
34	h1	1	Total C O 62 47 15	0	0
34	C2	1	Total C O 33 18 15	0	0
34	H2	1	Total C O 62 47 15	0	0
34	c2	1	Total C O 62 47 15	0	0
34	c2	1	Total C O 52 37 15	0	0
34	c2	1	Total C O 62 47 15	0	0
34	h2	1	Total C O 62 47 15	0	0

- Molecule 35 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



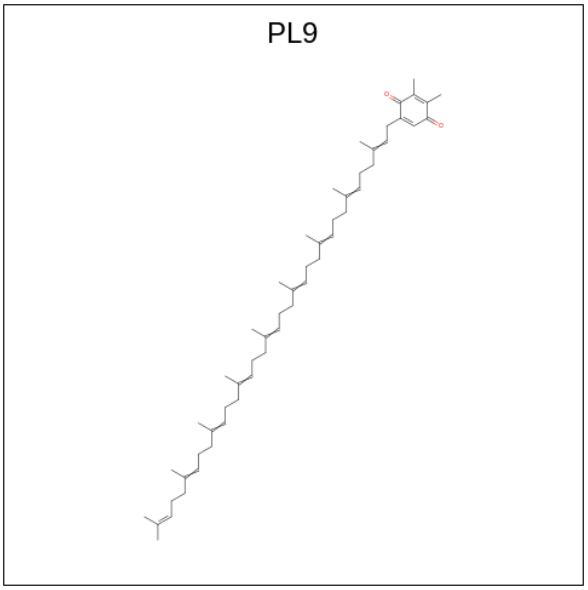
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	C1	1	Total C O 35 24 11	0	0
35	L1	1	Total C 12 12	0	0
35	M1	1	Total C 11 11	0	0
35	M1	1	Total C O 24 18 6	0	0
35	T1	1	Total C 12 12	0	0
35	c1	1	Total C O 33 22 11	0	0
35	l1	1	Total C O 24 18 6	0	0
35	m1	1	Total C O 35 24 11	0	0
35	a2	1	Total C O 35 24 11	0	0
35	b2	1	Total C O 35 24 11	0	0
35	b2	1	Total C O 35 24 11	0	0
35	i2	1	Total C 7 7	0	0

Continued on next page...

Continued from previous page...

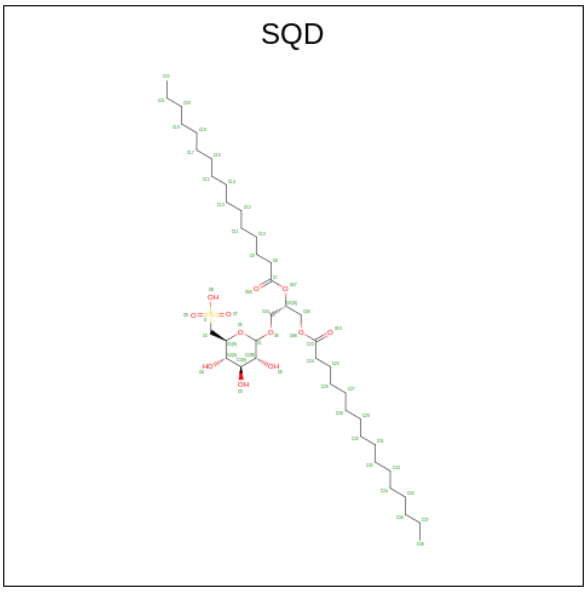
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	m2	1	Total C O 30 19 11	0	0
35	m2	1	Total C O 29 18 11	0	0

- Molecule 36 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: $C_{53}H_{80}O_2$).



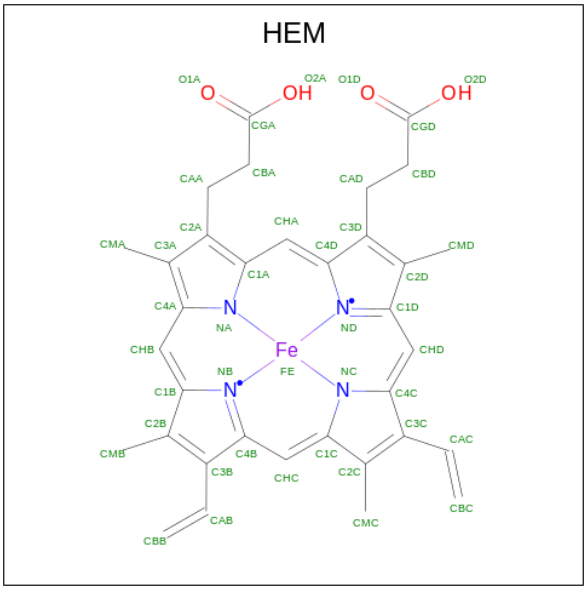
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	D1	1	Total C O 55 53 2	0	0
36	d1	1	Total C O 55 53 2	0	0
36	D2	1	Total C O 55 53 2	0	0
36	d2	1	Total C O 55 53 2	0	0

- Molecule 37 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
37	D1	1	Total	C	O	S	0	0
			35	22	12	1		
37	B2	1	Total	C	O	S	0	0
			45	32	12	1		
37	D2	1	Total	C	O	S	0	0
			25	12	12	1		
37	b2	1	Total	C	O	S	0	0
			45	32	12	1		

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



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
38	E1	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	V1	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	f1	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	v1	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	E2	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	V2	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	e2	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	v2	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 39 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
39	O1	1	Total	Ca	0	0
			1	1		
39	o2	1	Total	Ca	0	0
			1	1		

- Molecule 40 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
40	A1	2	Total	O	0	0
			2	2		
40	B1	1	Total	O	0	0
			1	1		
40	a1	4	Total	O	0	0
			4	4		
40	c1	2	Total	O	0	0
			2	2		
40	A2	2	Total	O	0	0
			2	2		
40	a2	4	Total	O	0	0
			4	4		
40	b2	1	Total	O	0	0
			1	1		
40	c2	1	Total	O	0	0
			1	1		

Continued on next page...

Continued from previous page...

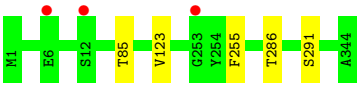
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	d2	1	Total O 1 1	0	0

3 Residue-property plots (i)

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

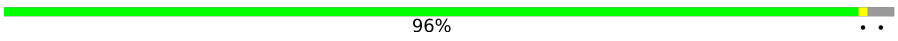
• Molecule 1: Photosystem II protein D1

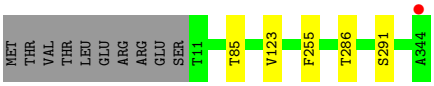
Chain A1:



• Molecule 1: Photosystem II protein D1

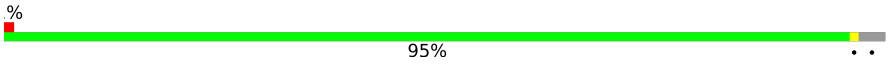
Chain a1:

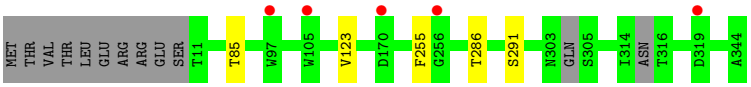




• Molecule 1: Photosystem II protein D1

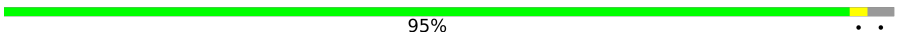
Chain A2:





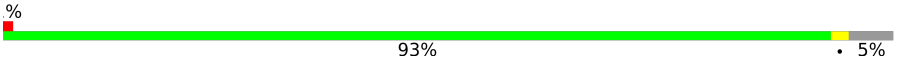
• Molecule 1: Photosystem II protein D1

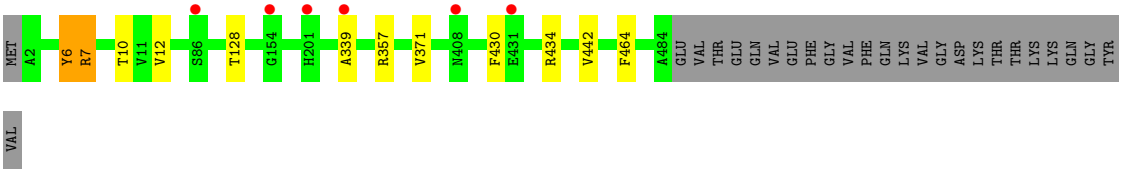
Chain a2:



• Molecule 2: Photosystem II CP47 reaction center protein

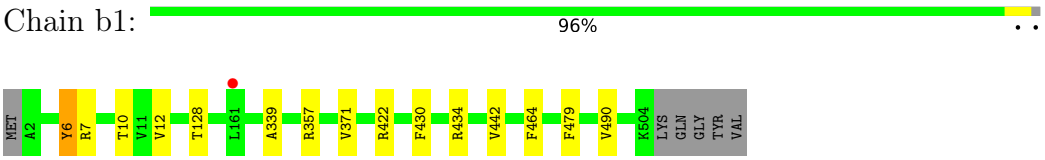
Chain B1:





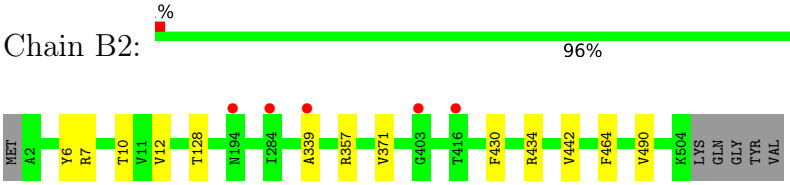
• Molecule 2: Photosystem II CP47 reaction center protein

Chain b1:



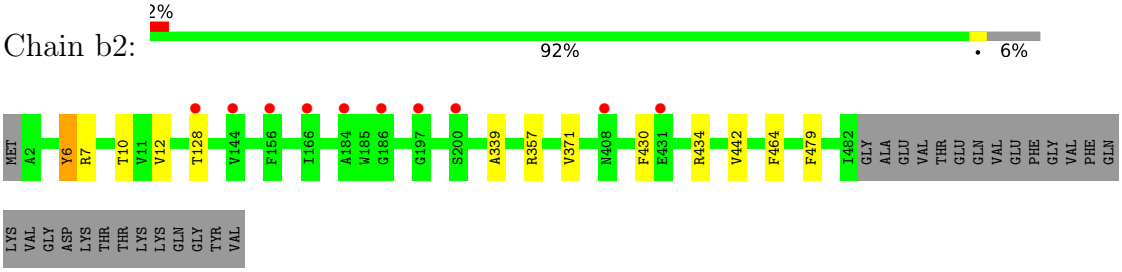
• Molecule 2: Photosystem II CP47 reaction center protein

Chain B2:



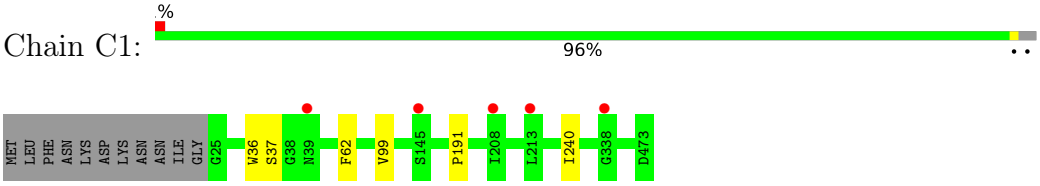
• Molecule 2: Photosystem II CP47 reaction center protein

Chain b2:



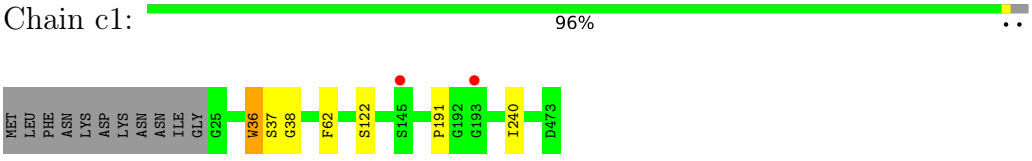
• Molecule 3: Photosystem II CP43 reaction center protein

Chain C1:



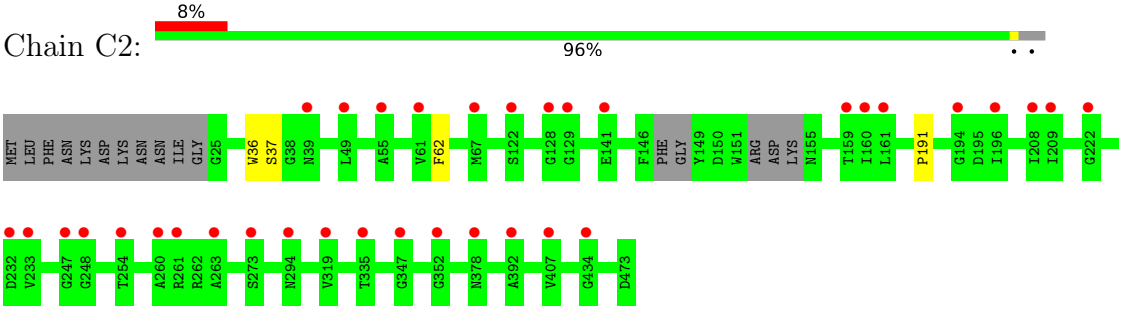
• Molecule 3: Photosystem II CP43 reaction center protein

Chain c1:



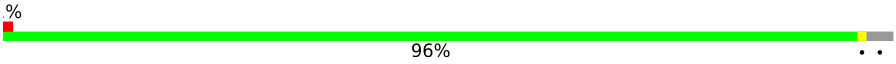
• Molecule 3: Photosystem II CP43 reaction center protein

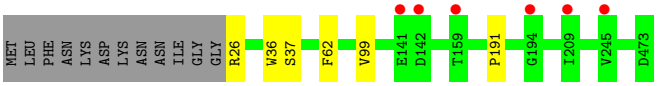
Chain C2:



• Molecule 3: Photosystem II CP43 reaction center protein

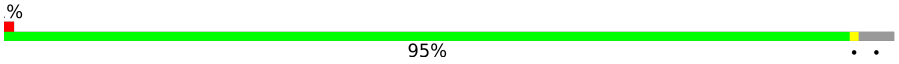
Chain c2:

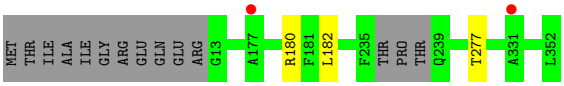




• Molecule 4: Photosystem II D2 protein

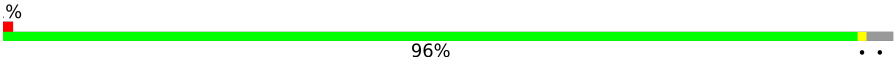
Chain D1:

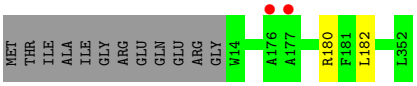




• Molecule 4: Photosystem II D2 protein

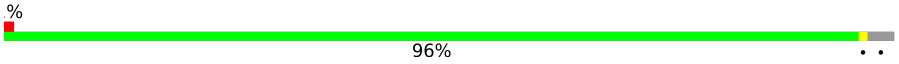
Chain d1:

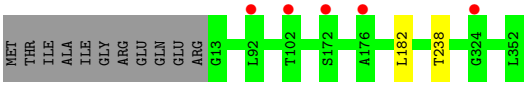




• Molecule 4: Photosystem II D2 protein

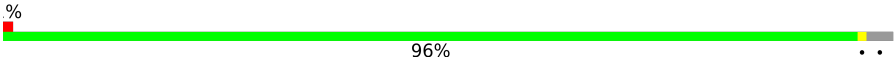
Chain D2:

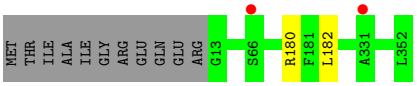




• Molecule 4: Photosystem II D2 protein

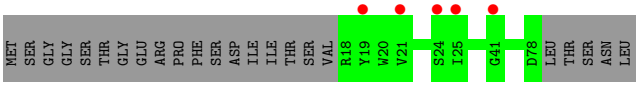
Chain d2:





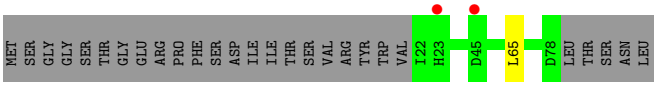
• Molecule 5: Cytochrome b559 subunit alpha

Chain E1:



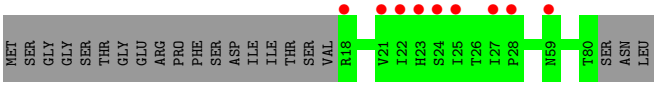
• Molecule 5: Cytochrome b559 subunit alpha

Chain e1:



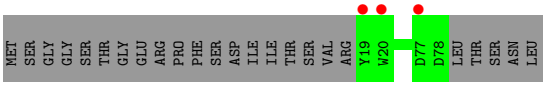
• Molecule 5: Cytochrome b559 subunit alpha

Chain E2:



• Molecule 5: Cytochrome b559 subunit alpha

Chain e2:

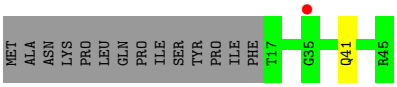


• Molecule 6: Cytochrome b559 subunit beta

Chain F1:

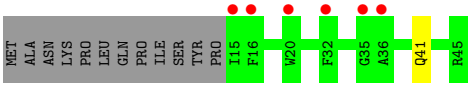
• Molecule 6: Cytochrome b559 subunit beta

Chain f1:



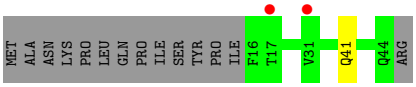
• Molecule 6: Cytochrome b559 subunit beta

Chain F2:



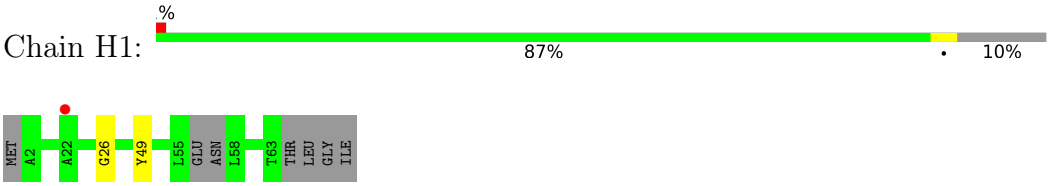
• Molecule 6: Cytochrome b559 subunit beta

Chain f2:



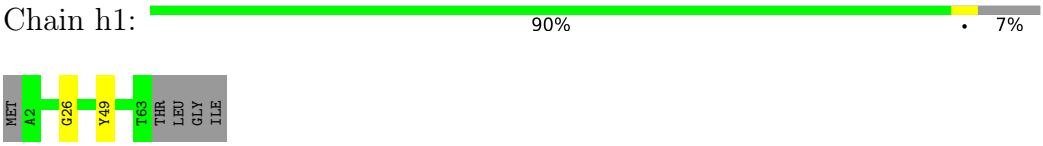
• Molecule 7: Photosystem II reaction center protein H

Chain H1:



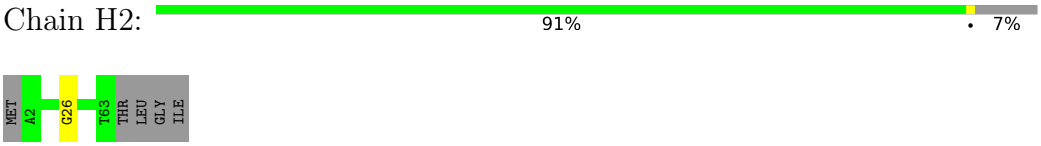
• Molecule 7: Photosystem II reaction center protein H

Chain h1:



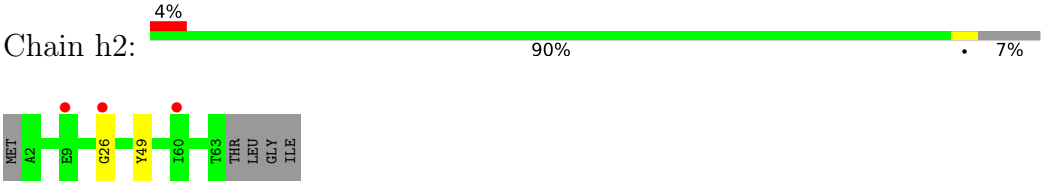
• Molecule 7: Photosystem II reaction center protein H

Chain H2:



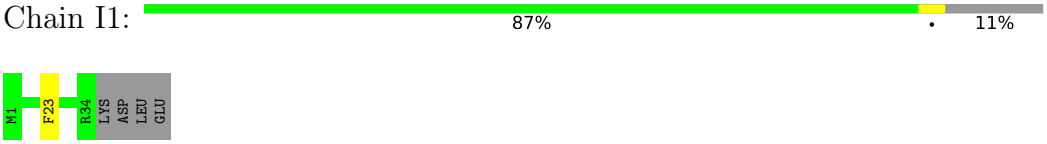
• Molecule 7: Photosystem II reaction center protein H

Chain h2:



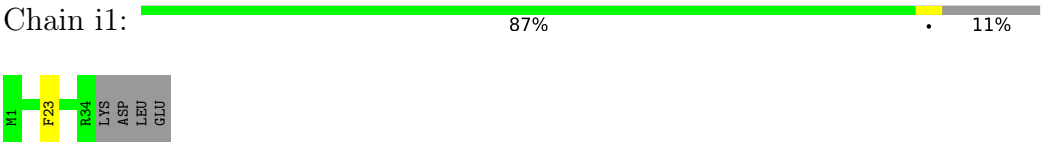
• Molecule 8: Photosystem II reaction center protein I

Chain I1:



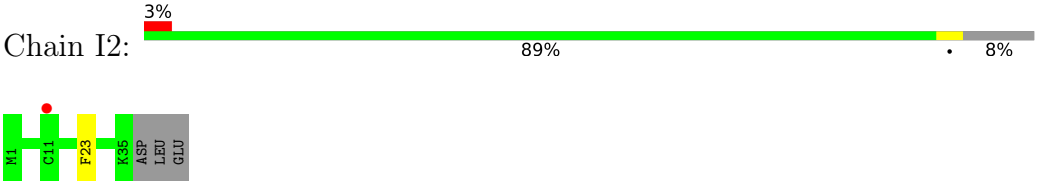
• Molecule 8: Photosystem II reaction center protein I

Chain i1:



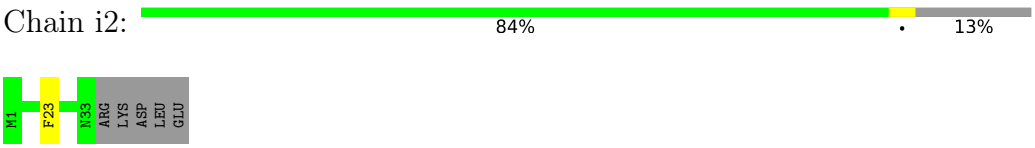
• Molecule 8: Photosystem II reaction center protein I

Chain I2:



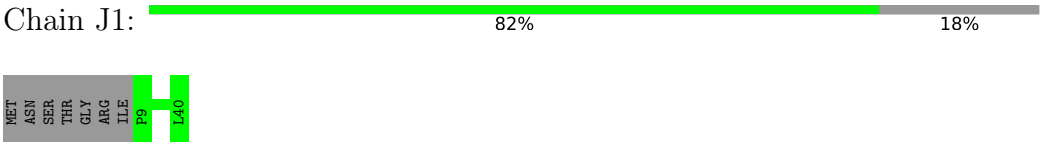
• Molecule 8: Photosystem II reaction center protein I

Chain i2:



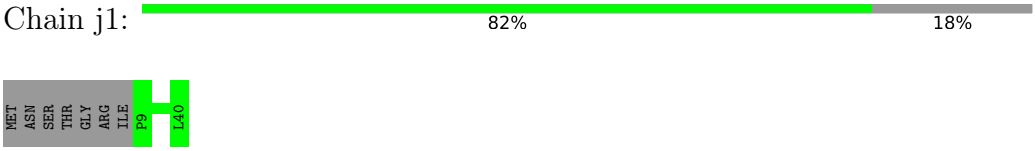
• Molecule 9: Photosystem II reaction center protein J

Chain J1:



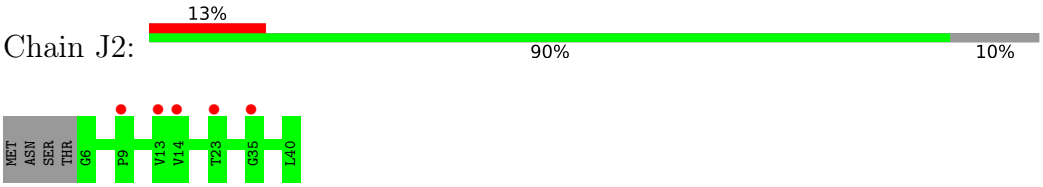
• Molecule 9: Photosystem II reaction center protein J

Chain j1:



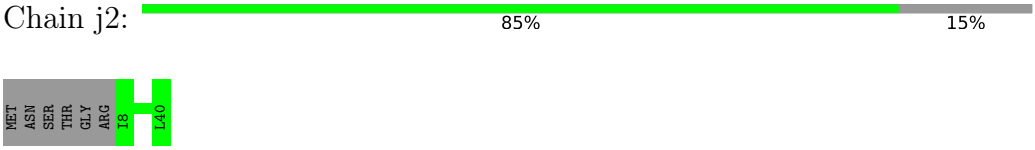
• Molecule 9: Photosystem II reaction center protein J

Chain J2:



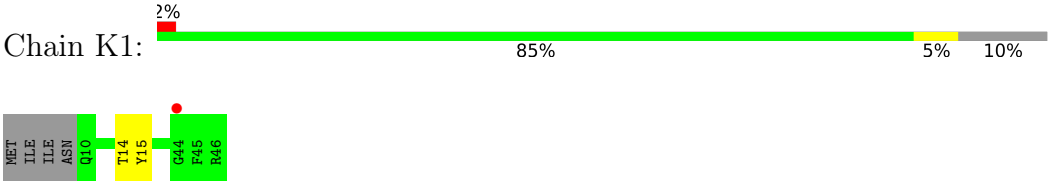
• Molecule 9: Photosystem II reaction center protein J

Chain j2:



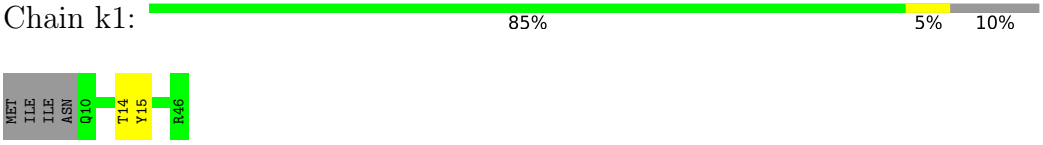
• Molecule 10: Photosystem II reaction center protein K

Chain K1:



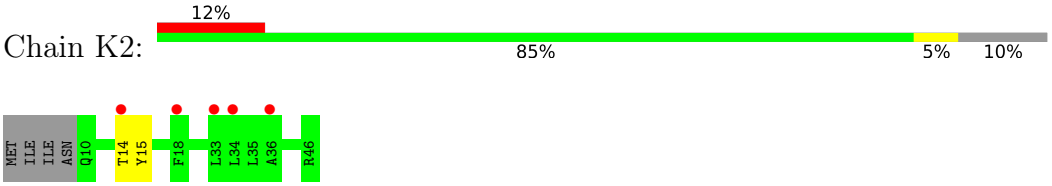
• Molecule 10: Photosystem II reaction center protein K

Chain k1:



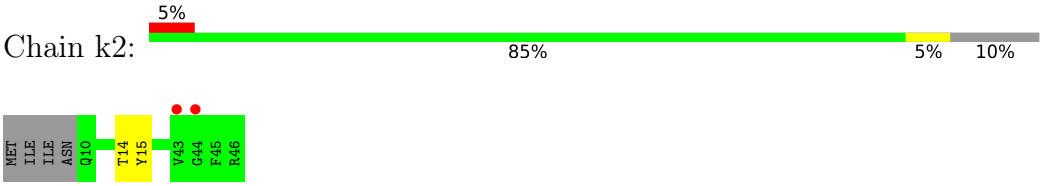
• Molecule 10: Photosystem II reaction center protein K

Chain K2:



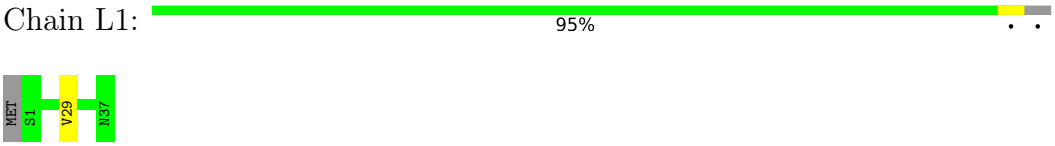
• Molecule 10: Photosystem II reaction center protein K

Chain k2:



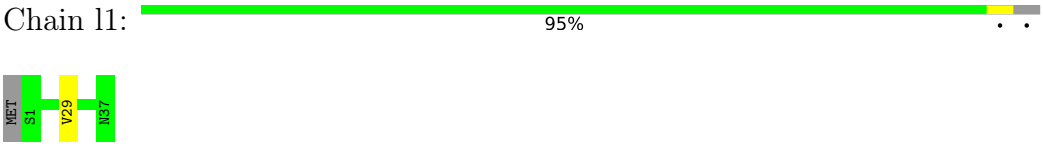
• Molecule 11: Photosystem II reaction center protein L

Chain L1:



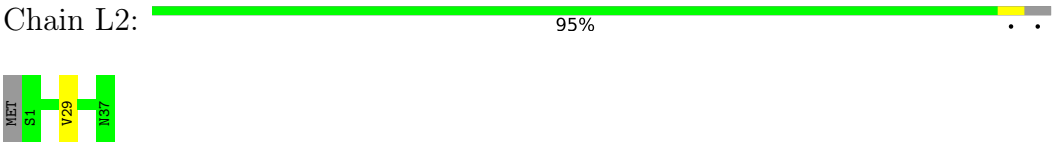
• Molecule 11: Photosystem II reaction center protein L

Chain l1:



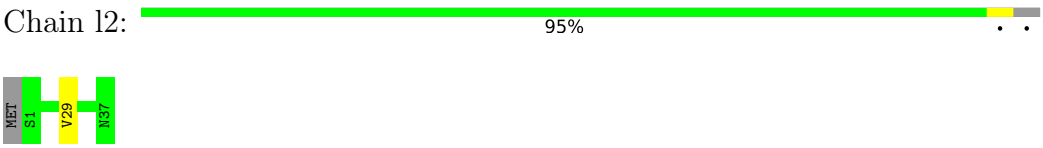
• Molecule 11: Photosystem II reaction center protein L

Chain L2:



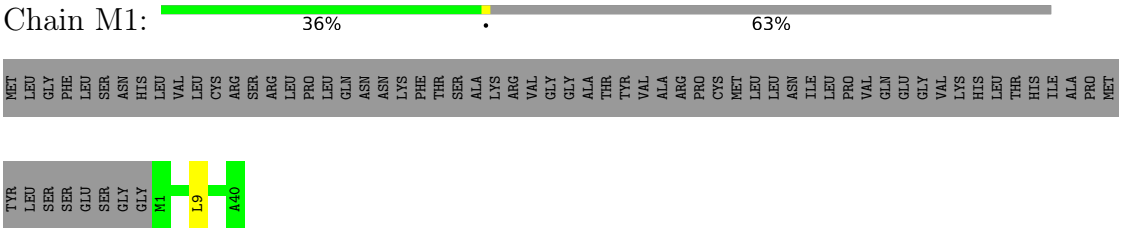
• Molecule 11: Photosystem II reaction center protein L

Chain l2:



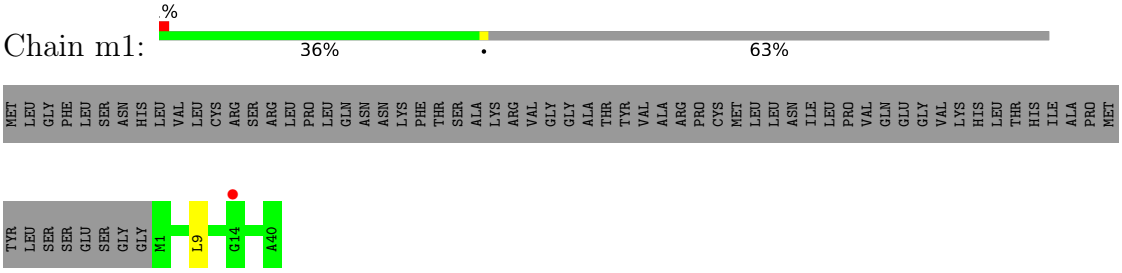
• Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

Chain M1:



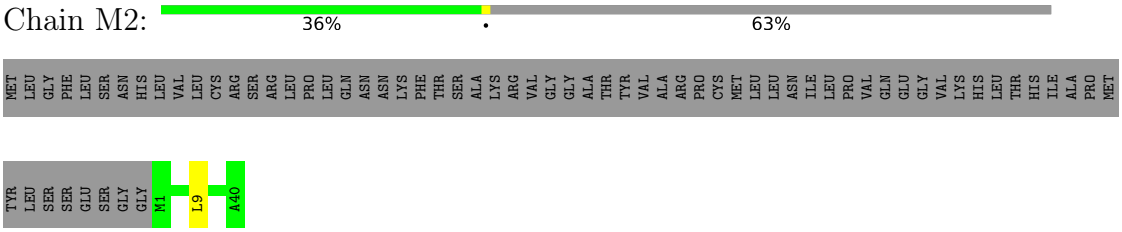
• Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

Chain m1:



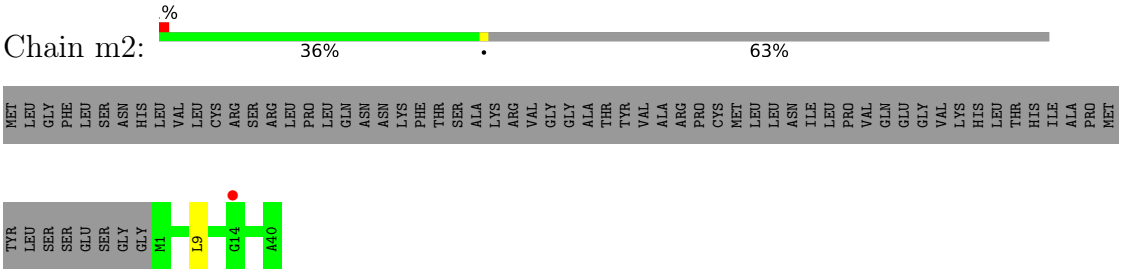
• Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

Chain M2:



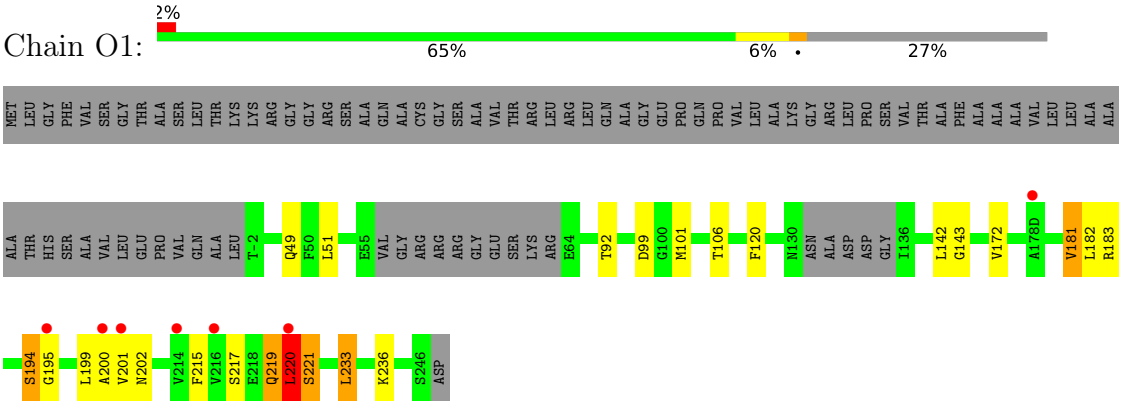
• Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

Chain m2:



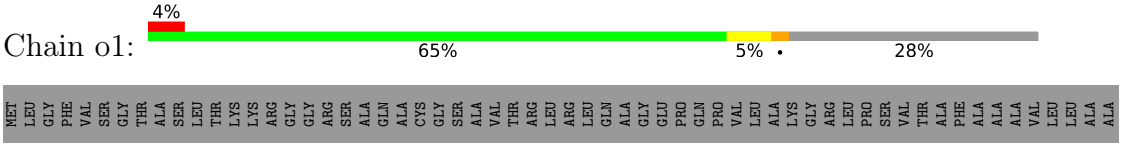
• Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO

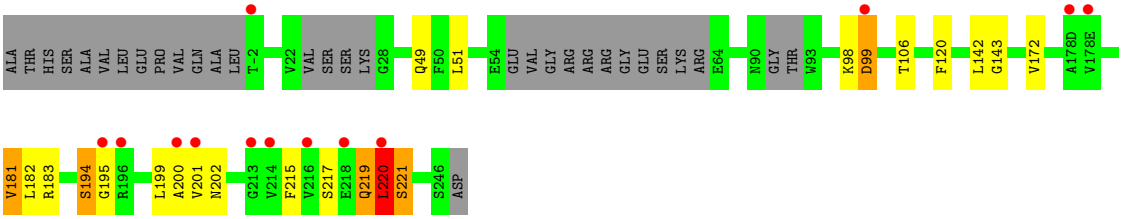
Chain O1:



• Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO

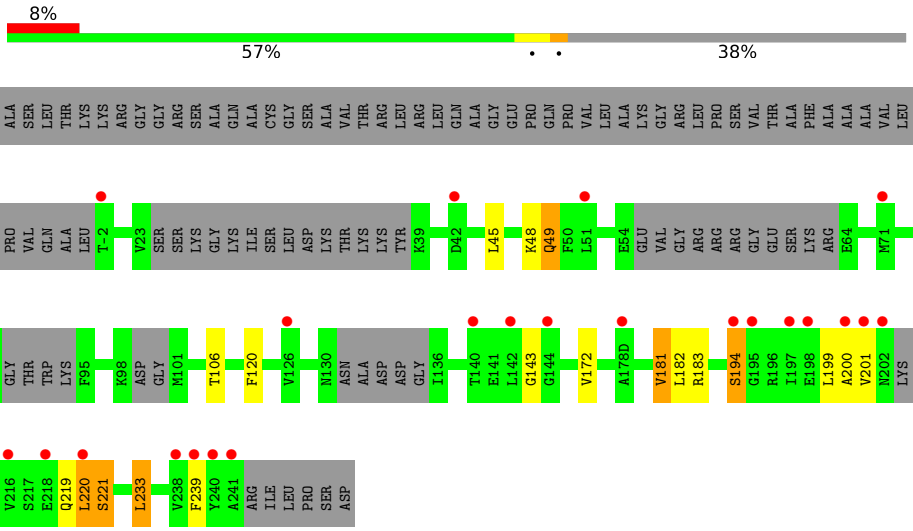
Chain o1:





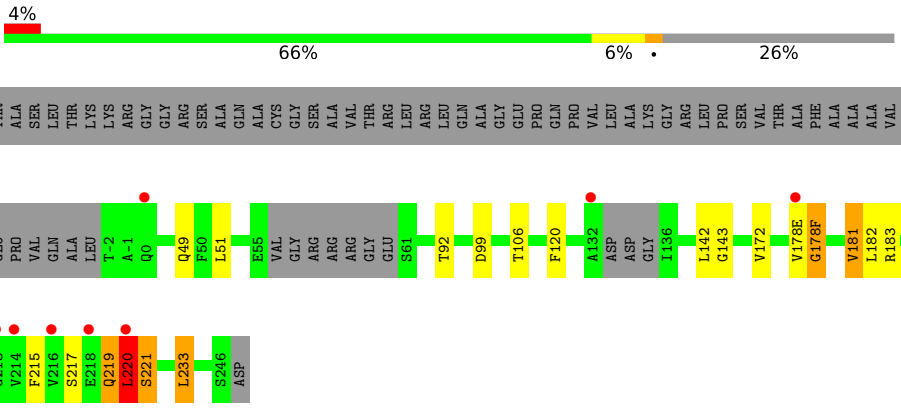
• Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO

Chain O2:



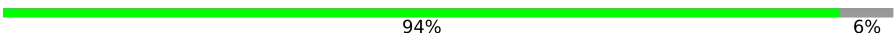
• Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO

Chain o2:



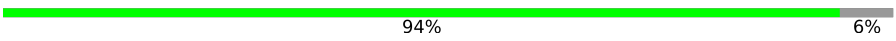
• Molecule 14: Photosystem II reaction center protein T

Chain T1:



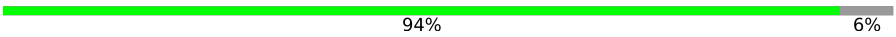
• Molecule 14: Photosystem II reaction center protein T

Chain t1:



• Molecule 14: Photosystem II reaction center protein T

Chain T2:

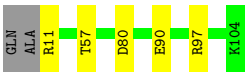


• Molecule 14: Photosystem II reaction center protein T

Chain t2:

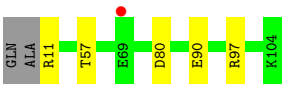
• Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic

Chain U1:



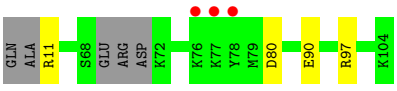
• Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic

Chain u1:



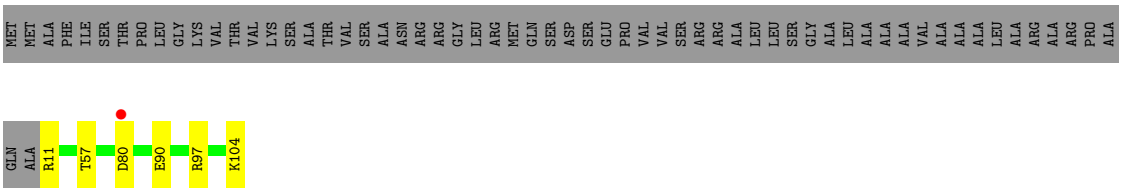
• Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic

Chain U2:

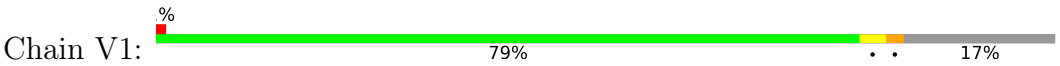


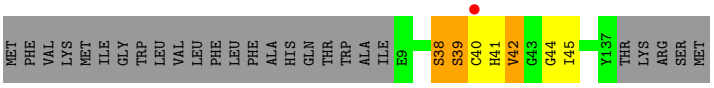
• Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic

Chain u2:

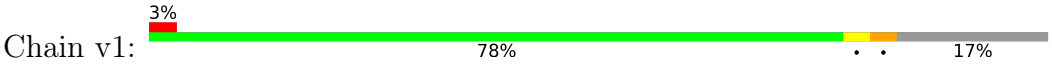


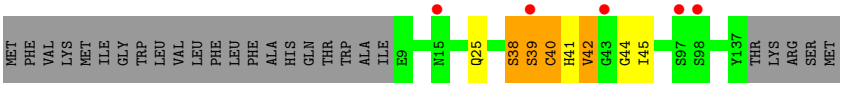
• Molecule 16: Cytochrome c-550



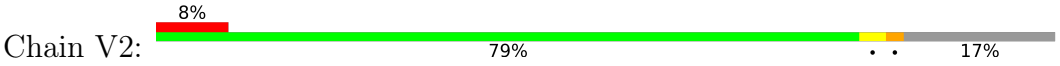


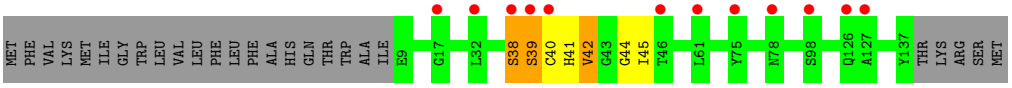
• Molecule 16: Cytochrome c-550



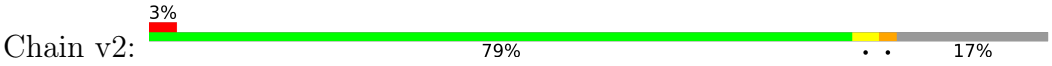


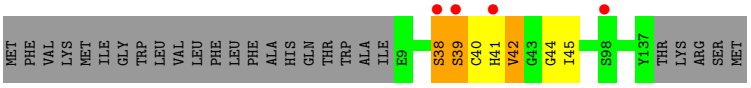
• Molecule 16: Cytochrome c-550



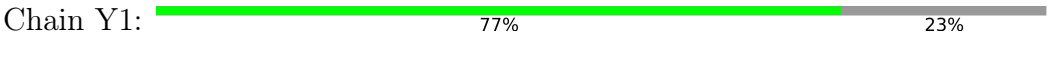


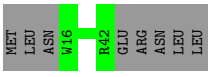
• Molecule 16: Cytochrome c-550



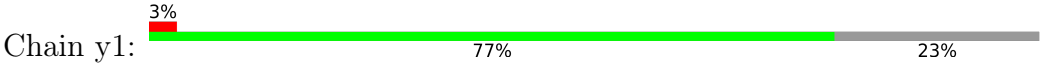


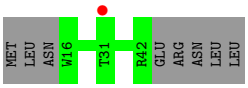
• Molecule 17: Photosystem II reaction center protein Ycf12





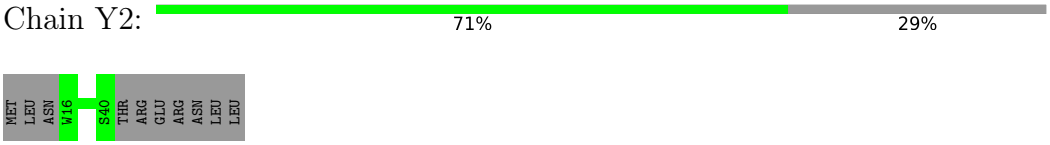
• Molecule 17: Photosystem II reaction center protein Ycf12





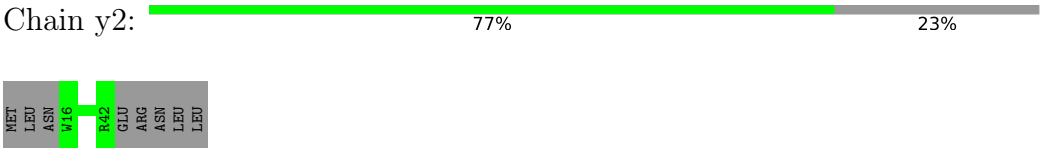
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y2:



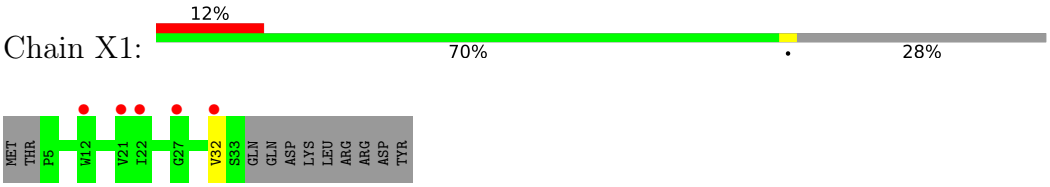
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain y2:



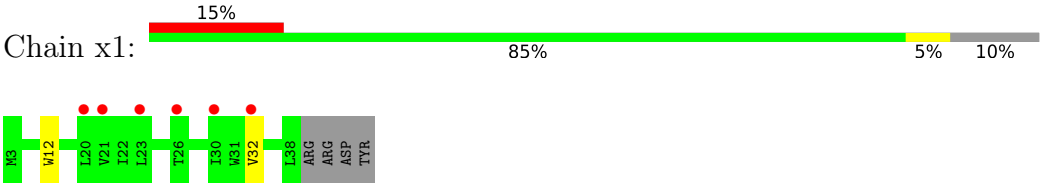
• Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X

Chain X1:



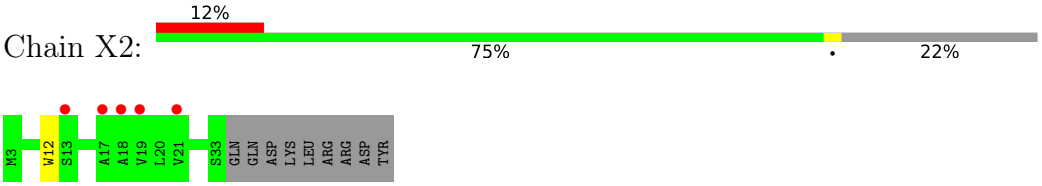
• Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X

Chain x1:



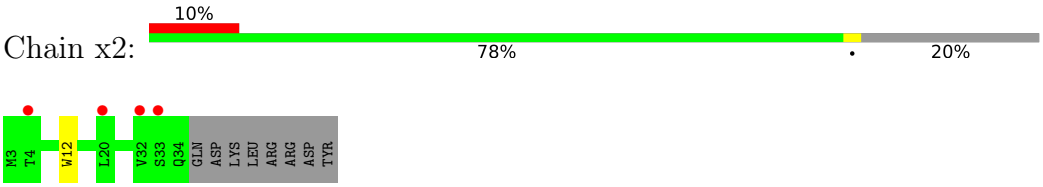
• Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X

Chain X2:



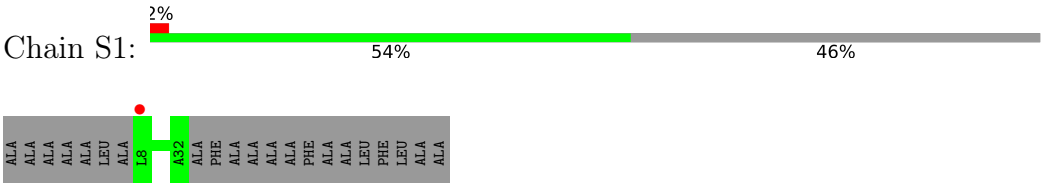
• Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X

Chain x2:



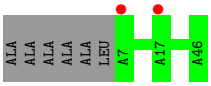
• Molecule 19: PEPTIDE CHAIN UNASSIGNED

Chain S1:



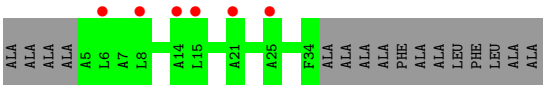
• Molecule 19: PEPTIDE CHAIN UNASSIGNED

Chain s1:



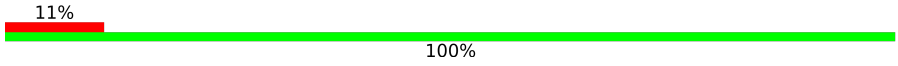
• Molecule 19: PEPTIDE CHAIN UNASSIGNED

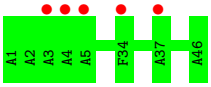
Chain S2:



• Molecule 19: PEPTIDE CHAIN UNASSIGNED

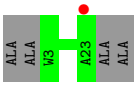
Chain s2:





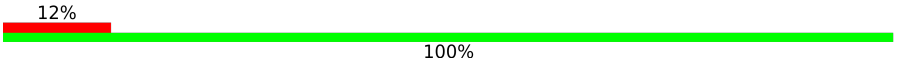
• Molecule 20: PEPTIDE CHAIN UNASSIGNED

Chain W1:



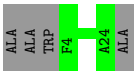
• Molecule 20: PEPTIDE CHAIN UNASSIGNED

Chain w1:



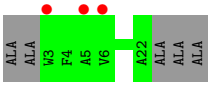
• Molecule 20: PEPTIDE CHAIN UNASSIGNED

Chain W2:



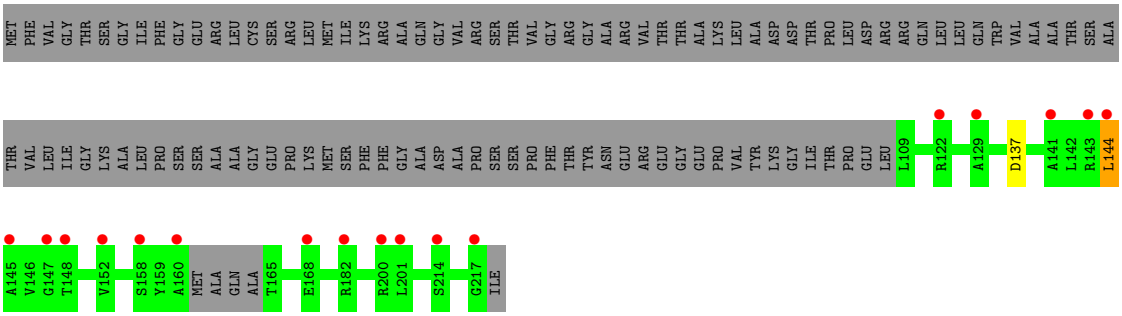
• Molecule 20: PEPTIDE CHAIN UNASSIGNED

Chain w2:



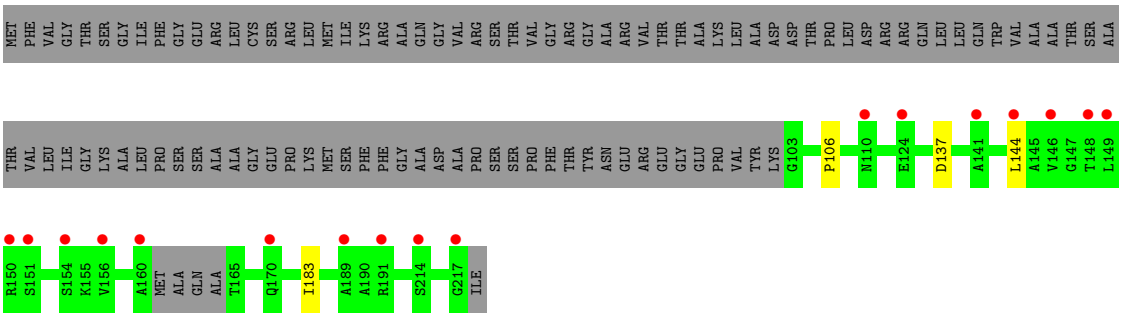
• Molecule 21: Extrinsic protein in photosystem II

Chain q1:



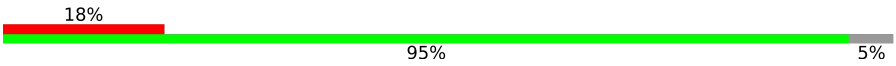
• Molecule 21: Extrinsic protein in photosystem II

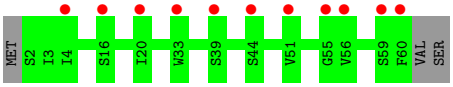
Chain Q2:



• Molecule 22: Photosystem II reaction center protein Z

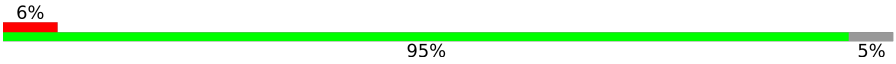
Chain Z2:

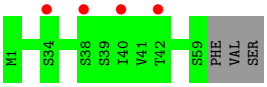




• Molecule 22: Photosystem II reaction center protein Z

Chain z2:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.44Å 240.31Å 300.06Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	10.00 – 2.77 10.00 – 2.77	Depositor EDS
% Data completeness (in resolution range)	99.7 (10.00-2.77) 97.5 (10.00-2.77)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.48 (at 2.76Å)	Xtriage
Refinement program	PHENIX 1.9_1692	Depositor
R, R_{free}	0.249 , 0.278 0.254 , 0.281	Depositor DCC
R_{free} test set	18742 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	68.0	Xtriage
Anisotropy	0.616	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 78.8	EDS
L-test for twinning[2]	$< \|L\| > = 0.49$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	92765	wwPDB-VP
Average B, all atoms (Å^2)	68.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.84% 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

5.1 Standard geometry

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

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	A1	0.28	0/2685	0.43	0/3673
1	A2	0.29	0/2548	0.43	0/3481
1	a1	0.28	0/2642	0.42	0/3612
1	a2	0.28	0/2586	0.43	0/3538
2	B1	0.33	0/3830	0.48	3/5227 (0.1%)
2	B2	0.33	0/3897	0.48	2/5323 (0.0%)
2	b1	0.36	1/4015 (0.0%)	0.49	2/5473 (0.0%)
2	b2	0.33	0/3808	0.48	2/5197 (0.0%)
3	C1	0.28	0/3501	0.43	0/4782
3	C2	0.27	0/3242	0.42	0/4441
3	c1	0.30	0/3555	0.43	0/4850
3	c2	0.27	0/3495	0.42	0/4773
4	D1	0.35	0/2704	0.46	0/3688
4	D2	0.34	0/2675	0.46	0/3655
4	d1	0.35	0/2772	0.46	0/3783
4	d2	0.35	0/2736	0.46	0/3734
5	E1	0.24	0/418	0.38	0/577
5	E2	0.25	0/443	0.39	0/614
5	e1	0.24	0/440	0.39	0/603
5	e2	0.24	0/434	0.37	0/598
6	F1	0.45	0/220	0.51	0/299
6	F2	0.43	0/236	0.51	0/320
6	f1	0.44	0/235	0.50	0/319
6	f2	0.45	0/234	0.49	0/318
7	H1	0.23	0/443	0.40	0/606
7	H2	0.23	0/453	0.38	0/619
7	h1	0.23	0/481	0.41	0/657
7	h2	0.23	0/461	0.38	0/631
8	I1	0.26	0/283	0.35	0/381
8	I2	0.26	0/273	0.35	0/371
8	i1	0.26	0/289	0.36	0/389

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
8	i2	0.27	0/270	0.34	0/364
9	J1	0.23	0/225	0.35	0/307
9	J2	0.22	0/236	0.35	0/324
9	j1	0.23	0/229	0.34	0/313
9	j2	0.22	0/233	0.36	0/319
10	K1	0.38	0/289	0.53	0/399
10	K2	0.38	0/258	0.52	0/359
10	k1	0.37	0/290	0.53	0/401
10	k2	0.38	0/278	0.52	0/385
11	L1	0.49	0/301	0.58	0/410
11	L2	0.47	0/308	0.57	0/419
11	l1	0.49	0/308	0.58	0/418
11	l2	0.48	0/308	0.58	0/418
12	M1	0.39	0/288	0.59	0/391
12	M2	0.38	0/287	0.58	0/390
12	m1	0.38	0/288	0.59	0/391
12	m2	0.38	0/290	0.59	0/394
13	O1	0.66	2/1700 (0.1%)	0.91	15/2315 (0.6%)
13	O2	0.63	1/1387 (0.1%)	0.85	7/1881 (0.4%)
13	o1	0.63	2/1716 (0.1%)	0.90	13/2330 (0.6%)
13	o2	0.65	2/1794 (0.1%)	0.91	14/2434 (0.6%)
14	T1	0.26	0/248	0.39	0/337
14	T2	0.25	0/247	0.38	0/337
14	t1	0.25	0/253	0.39	0/344
14	t2	0.26	0/242	0.39	0/330
15	U1	0.46	0/709	0.68	2/970 (0.2%)
15	U2	0.45	0/588	1.15	3/809 (0.4%)
15	u1	0.46	0/721	0.67	2/981 (0.2%)
15	u2	0.44	0/726	0.66	2/988 (0.2%)
16	V1	0.48	0/937	0.67	4/1281 (0.3%)
16	V2	0.46	1/858 (0.1%)	0.62	1/1177 (0.1%)
16	v1	0.47	0/941	0.67	4/1284 (0.3%)
16	v2	0.46	0/983	0.66	4/1337 (0.3%)
17	Y1	0.43	0/171	0.52	0/236
17	Y2	0.44	0/159	0.53	0/219
17	y1	0.41	0/198	0.50	0/274
17	y2	0.42	0/191	0.50	0/264
18	X1	0.26	0/202	0.43	0/278
18	X2	0.25	0/222	0.43	0/307
18	x1	0.29	0/262	0.44	0/363
18	x2	0.34	0/225	0.46	0/312
19	S1	0.25	0/167	0.36	0/231
19	S2	0.25	0/194	0.36	0/268

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
19	s1	0.26	0/269	0.33	0/371
19	s2	0.24	0/285	0.34	0/395
20	W1	0.20	0/134	0.37	0/186
20	W2	0.20	0/129	0.38	0/179
20	w1	0.20	0/152	0.36	0/211
20	w2	0.21	0/127	0.37	0/176
21	Q2	0.41	0/682	0.47	0/937
21	q1	0.40	0/650	0.50	1/893 (0.1%)
22	Z2	0.20	0/353	0.37	0/487
22	z2	0.22	0/387	0.38	0/532
All	All	0.37	9/79929 (0.0%)	0.53	81/109188 (0.1%)

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
13	O1	0	2
13	O2	0	4
13	o1	0	3
13	o2	0	3
16	V1	0	3
16	V2	0	3
16	v1	0	3
16	v2	0	3
All	All	0	24

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	O1	221	SER	N-CA	6.20	1.58	1.46
13	o2	221	SER	N-CA	6.10	1.58	1.46
13	o1	221	SER	N-CA	6.00	1.58	1.46
13	O1	220	LEU	N-CA	5.81	1.57	1.46
13	o2	220	LEU	N-CA	5.81	1.57	1.46
13	o1	220	LEU	N-CA	5.73	1.57	1.46
13	O2	221	SER	N-CA	5.50	1.57	1.46
16	V2	42	VAL	CA-C	-5.45	1.38	1.52
2	b1	422	ARG	C-O	5.30	1.33	1.23

All (81) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	U2	11	ARG	NE-CZ-NH1	-19.49	110.56	120.30
15	U2	11	ARG	NE-CZ-NH2	17.62	129.11	120.30
13	o1	99	ASP	CB-CG-OD1	-10.04	109.26	118.30
15	U2	11	ARG	CD-NE-CZ	9.31	136.64	123.60
13	o1	195	GLY	CA-C-O	-8.28	105.69	120.60
13	o2	195	GLY	CA-C-O	-8.27	105.71	120.60
13	O1	195	GLY	CA-C-O	-8.20	105.83	120.60
16	v2	42	VAL	CA-C-N	-8.15	99.90	116.20
16	v1	42	VAL	CA-C-N	-8.14	99.93	116.20
16	V1	42	VAL	CA-C-N	-8.09	100.01	116.20
13	O1	215	PHE	C-N-CA	-7.67	102.53	121.70
13	o1	215	PHE	C-N-CA	-7.65	102.58	121.70
13	o2	215	PHE	C-N-CA	-7.64	102.61	121.70
13	O2	239	PHE	C-N-CA	-7.60	102.70	121.70
13	O1	194	SER	C-N-CA	-7.50	106.54	122.30
13	o1	194	SER	C-N-CA	-7.44	106.68	122.30
13	o2	194	SER	C-N-CA	-7.42	106.72	122.30
16	V2	42	VAL	CA-C-N	-7.04	102.13	116.20
13	o2	233	LEU	CB-CG-CD1	-6.98	99.13	111.00
15	U1	11	ARG	NE-CZ-NH2	-6.85	116.88	120.30
13	O1	220	LEU	CA-CB-CG	6.79	130.91	115.30
13	o1	99	ASP	CB-CG-OD2	6.77	124.39	118.30
15	u2	11	ARG	NE-CZ-NH2	-6.77	116.92	120.30
13	o2	220	LEU	CA-CB-CG	6.66	130.61	115.30
13	o1	220	LEU	CA-CB-CG	6.59	130.47	115.30
13	O1	219	GLN	N-CA-C	6.57	128.74	111.00
13	o2	219	GLN	N-CA-C	6.57	128.73	111.00
15	u1	11	ARG	NE-CZ-NH2	-6.54	117.03	120.30
13	o1	143	GLY	C-N-CA	-6.45	108.76	122.30
13	o2	143	GLY	C-N-CA	-6.42	108.81	122.30
13	O1	143	GLY	C-N-CA	-6.40	108.85	122.30
13	o1	219	GLN	N-CA-C	6.38	128.22	111.00
13	O1	220	LEU	C-N-CA	6.35	137.59	121.70
13	O2	220	LEU	C-N-CA	6.35	137.57	121.70
13	o2	220	LEU	C-N-CA	6.34	137.55	121.70
16	v2	42	VAL	N-CA-CB	6.33	125.44	111.50
16	V1	42	VAL	N-CA-CB	6.33	125.43	111.50
13	O2	194	SER	C-N-CA	-6.32	109.03	122.30
13	O2	233	LEU	CB-CG-CD1	-6.32	100.26	111.00
16	v1	42	VAL	N-CA-CB	6.29	125.35	111.50
13	o1	220	LEU	C-N-CA	6.16	137.10	121.70
13	O1	233	LEU	CB-CG-CD1	-6.08	100.66	111.00
2	B1	430	PHE	C-N-CA	-5.90	106.95	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	o2	217	SER	C-N-CA	-5.87	107.03	121.70
13	o2	221	SER	N-CA-C	5.86	126.82	111.00
13	O1	221	SER	N-CA-C	5.84	126.78	111.00
13	O1	217	SER	C-N-CA	-5.84	107.10	121.70
13	o2	219	GLN	C-N-CA	-5.78	107.25	121.70
13	O1	219	GLN	C-N-CA	-5.77	107.27	121.70
2	b1	430	PHE	C-N-CA	-5.73	107.38	121.70
13	o1	219	GLN	C-N-CA	-5.68	107.50	121.70
13	O1	220	LEU	CB-CG-CD2	5.67	120.64	111.00
15	u2	11	ARG	NE-CZ-NH1	5.62	123.11	120.30
15	u1	11	ARG	NE-CZ-NH1	5.57	123.08	120.30
13	o2	92	THR	C-N-CA	-5.54	107.84	121.70
13	O1	92	THR	C-N-CA	-5.54	107.85	121.70
13	o1	221	SER	N-CA-C	5.54	125.96	111.00
13	o2	220	LEU	CB-CG-CD2	5.48	120.31	111.00
15	U1	11	ARG	NE-CZ-NH1	5.46	123.03	120.30
16	v2	42	VAL	CA-C-O	5.45	131.55	120.10
13	o1	220	LEU	CB-CG-CD2	5.45	120.26	111.00
16	v1	42	VAL	CA-C-O	5.45	131.54	120.10
13	o1	217	SER	C-N-CA	-5.44	108.09	121.70
2	b2	430	PHE	C-N-CA	-5.42	108.14	121.70
13	O2	221	SER	N-CA-C	5.41	125.59	111.00
16	V1	42	VAL	CA-C-O	5.39	131.43	120.10
2	B2	430	PHE	C-N-CA	-5.39	108.23	121.70
21	q1	144	LEU	CA-CB-CG	5.34	127.59	115.30
13	O2	143	GLY	C-N-CA	-5.33	111.11	122.30
13	O2	220	LEU	O-C-N	5.31	131.20	122.70
13	o2	178(F)	GLY	N-CA-C	5.26	126.24	113.10
2	b2	339	ALA	N-CA-C	5.21	125.06	111.00
2	b1	339	ALA	N-CA-C	5.19	125.01	111.00
2	B1	339	ALA	N-CA-C	5.16	124.92	111.00
2	B2	339	ALA	N-CA-C	5.13	124.86	111.00
13	O1	221	SER	CB-CA-C	-5.09	100.43	110.10
16	V1	42	VAL	N-CA-C	-5.09	97.27	111.00
13	O1	236	LYS	C-N-CA	-5.08	111.63	122.30
16	v2	42	VAL	N-CA-C	-5.07	97.31	111.00
16	v1	42	VAL	N-CA-C	-5.03	97.43	111.00
2	B1	7	ARG	NE-CZ-NH1	-5.02	117.79	120.30

There are no chirality outliers.

All (24) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
13	O1	194	SER	Peptide
13	O1	220	LEU	Peptide
13	O2	194	SER	Peptide
13	O2	220	LEU	Mainchain
13	O2	45	LEU	Mainchain
13	O2	49	GLN	Peptide
16	V1	38	SER	Peptide
16	V1	41	HIS	Peptide
16	V1	44	GLY	Peptide
16	V2	38	SER	Peptide
16	V2	41	HIS	Peptide
16	V2	44	GLY	Peptide
13	o1	194	SER	Peptide
13	o1	220	LEU	Peptide
13	o1	98	LYS	Peptide
13	o2	178(E)	VAL	Peptide
13	o2	194	SER	Peptide
13	o2	220	LEU	Peptide
16	v1	38	SER	Peptide
16	v1	41	HIS	Peptide
16	v1	44	GLY	Peptide
16	v2	38	SER	Peptide
16	v2	41	HIS	Peptide
16	v2	44	GLY	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	A1	342/344 (99%)	328 (96%)	14 (4%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A2	327/344 (95%)	318 (97%)	9 (3%)	0	100	100
1	a1	332/344 (96%)	323 (97%)	9 (3%)	0	100	100
1	a2	332/344 (96%)	323 (97%)	9 (3%)	0	100	100
2	B1	481/509 (94%)	456 (95%)	23 (5%)	2 (0%)	30	58
2	B2	501/509 (98%)	474 (95%)	26 (5%)	1 (0%)	44	71
2	b1	502/509 (99%)	474 (94%)	26 (5%)	2 (0%)	30	58
2	b2	479/509 (94%)	454 (95%)	23 (5%)	2 (0%)	30	58
3	C1	447/460 (97%)	424 (95%)	20 (4%)	3 (1%)	19	45
3	C2	438/460 (95%)	416 (95%)	19 (4%)	3 (1%)	19	45
3	c1	449/460 (98%)	426 (95%)	19 (4%)	4 (1%)	14	38
3	c2	446/460 (97%)	424 (95%)	19 (4%)	3 (1%)	19	45
4	D1	333/351 (95%)	318 (96%)	15 (4%)	0	100	100
4	D2	338/351 (96%)	322 (95%)	16 (5%)	0	100	100
4	d1	337/351 (96%)	321 (95%)	16 (5%)	0	100	100
4	d2	338/351 (96%)	323 (96%)	15 (4%)	0	100	100
5	E1	59/84 (70%)	57 (97%)	2 (3%)	0	100	100
5	E2	61/84 (73%)	59 (97%)	2 (3%)	0	100	100
5	e1	55/84 (66%)	54 (98%)	1 (2%)	0	100	100
5	e2	58/84 (69%)	57 (98%)	1 (2%)	0	100	100
6	F1	26/43 (60%)	26 (100%)	0	0	100	100
6	F2	29/43 (67%)	29 (100%)	0	0	100	100
6	f1	27/43 (63%)	27 (100%)	0	0	100	100
6	f2	27/43 (63%)	26 (96%)	1 (4%)	0	100	100
7	H1	56/67 (84%)	53 (95%)	2 (4%)	1 (2%)	7	21
7	H2	60/67 (90%)	54 (90%)	5 (8%)	1 (2%)	7	23
7	h1	60/67 (90%)	57 (95%)	2 (3%)	1 (2%)	7	23
7	h2	60/67 (90%)	56 (93%)	3 (5%)	1 (2%)	7	23
8	I1	32/38 (84%)	32 (100%)	0	0	100	100
8	I2	33/38 (87%)	32 (97%)	1 (3%)	0	100	100
8	i1	32/38 (84%)	32 (100%)	0	0	100	100
8	i2	31/38 (82%)	31 (100%)	0	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	J1	30/39 (77%)	30 (100%)	0	0	100	100
9	J2	33/39 (85%)	33 (100%)	0	0	100	100
9	j1	30/39 (77%)	30 (100%)	0	0	100	100
9	j2	31/39 (80%)	31 (100%)	0	0	100	100
10	K1	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1	3
10	K2	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1	3
10	k1	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1	3
10	k2	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1	3
11	L1	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	3	12
11	L2	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	3	12
11	l1	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	3	12
11	l2	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	3	12
12	M1	38/108 (35%)	30 (79%)	8 (21%)	0	100	100
12	M2	38/108 (35%)	30 (79%)	8 (21%)	0	100	100
12	m1	38/108 (35%)	30 (79%)	8 (21%)	0	100	100
12	m2	38/108 (35%)	30 (79%)	8 (21%)	0	100	100
13	O1	234/329 (71%)	210 (90%)	14 (6%)	10 (4%)	2	6
13	O2	187/329 (57%)	165 (88%)	14 (8%)	8 (4%)	2	6
13	o1	230/329 (70%)	204 (89%)	16 (7%)	10 (4%)	2	6
13	o2	239/329 (73%)	212 (89%)	15 (6%)	12 (5%)	1	4
14	T1	28/32 (88%)	28 (100%)	0	0	100	100
14	T2	28/32 (88%)	28 (100%)	0	0	100	100
14	t1	28/32 (88%)	28 (100%)	0	0	100	100
14	t2	27/32 (84%)	27 (100%)	0	0	100	100
15	U1	91/155 (59%)	85 (93%)	6 (7%)	0	100	100
15	U2	86/155 (56%)	81 (94%)	5 (6%)	0	100	100
15	u1	91/155 (59%)	87 (96%)	4 (4%)	0	100	100
15	u2	91/155 (59%)	85 (93%)	6 (7%)	0	100	100
16	V1	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	2	7
16	V2	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	2	7
16	v1	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	2	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
16	v2	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	2 7
17	Y1	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
17	Y2	23/35 (66%)	22 (96%)	1 (4%)	0	100 100
17	y1	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
17	y2	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
18	X1	27/40 (68%)	27 (100%)	0	0	100 100
18	X2	29/40 (72%)	29 (100%)	0	0	100 100
18	x1	34/40 (85%)	33 (97%)	1 (3%)	0	100 100
18	x2	30/40 (75%)	30 (100%)	0	0	100 100
19	S1	23/46 (50%)	23 (100%)	0	0	100 100
19	S2	28/46 (61%)	27 (96%)	1 (4%)	0	100 100
19	s1	38/46 (83%)	34 (90%)	4 (10%)	0	100 100
19	s2	44/46 (96%)	37 (84%)	7 (16%)	0	100 100
20	W1	19/25 (76%)	19 (100%)	0	0	100 100
20	W2	19/25 (76%)	19 (100%)	0	0	100 100
20	w1	23/25 (92%)	21 (91%)	2 (9%)	0	100 100
20	w2	18/25 (72%)	18 (100%)	0	0	100 100
21	Q2	107/218 (49%)	102 (95%)	3 (3%)	2 (2%)	6 20
21	q1	101/218 (46%)	97 (96%)	3 (3%)	1 (1%)	13 36
22	Z2	57/62 (92%)	55 (96%)	2 (4%)	0	100 100
22	z2	57/62 (92%)	55 (96%)	2 (4%)	0	100 100
All	All	10304/12316 (84%)	9726 (94%)	479 (5%)	99 (1%)	13 36

All (99) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C1	36	TRP
3	C1	37	SER
10	K1	14	THR
13	O1	49	GLN
13	O1	99	ASP
13	O1	199	LEU
13	O1	201	VAL
13	O1	202	ASN
16	V1	39	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	V1	40	CYS
3	c1	36	TRP
3	c1	37	SER
10	k1	14	THR
13	o1	49	GLN
13	o1	99	ASP
13	o1	199	LEU
13	o1	201	VAL
13	o1	202	ASN
16	v1	39	SER
16	v1	40	CYS
3	C2	36	TRP
3	C2	37	SER
10	K2	14	THR
13	O2	49	GLN
13	O2	199	LEU
13	O2	200	ALA
13	O2	201	VAL
16	V2	39	SER
16	V2	40	CYS
16	V2	42	VAL
21	Q2	106	PRO
3	c2	36	TRP
3	c2	37	SER
10	k2	14	THR
13	o2	49	GLN
13	o2	99	ASP
13	o2	178(F)	GLY
13	o2	199	LEU
13	o2	201	VAL
13	o2	202	ASN
16	v2	39	SER
16	v2	40	CYS
2	B1	7	ARG
10	K1	15	TYR
13	O1	51	LEU
13	O1	181	VAL
13	O1	182	LEU
13	O1	200	ALA
16	V1	42	VAL
2	b1	7	ARG
10	k1	15	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	o1	51	LEU
13	o1	181	VAL
13	o1	182	LEU
13	o1	200	ALA
16	v1	42	VAL
2	B2	7	ARG
10	K2	15	TYR
13	O2	48	LYS
13	O2	181	VAL
13	O2	182	LEU
2	b2	7	ARG
10	k2	15	TYR
13	o2	51	LEU
13	o2	181	VAL
13	o2	182	LEU
13	o2	200	ALA
16	v2	42	VAL
13	O1	120	PHE
16	V1	45	ILE
13	o1	120	PHE
16	v1	45	ILE
21	q1	144	LEU
13	O2	120	PHE
16	V2	45	ILE
21	Q2	144	LEU
13	o2	120	PHE
16	V1	38	SER
16	v1	38	SER
16	V2	38	SER
16	v2	38	SER
16	v2	45	ILE
2	B1	6	TYR
7	H1	26	GLY
7	h1	26	GLY
7	H2	26	GLY
2	b2	6	TYR
7	h2	26	GLY
3	C1	191	PRO
2	b1	6	TYR
3	c1	191	PRO
3	C2	191	PRO
3	c2	191	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	o2	198	GLU
11	l1	29	VAL
11	L2	29	VAL
11	l2	29	VAL
11	L1	29	VAL
3	c1	38	GLY

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	A1	261/282 (93%)	256 (98%)	5 (2%)	52	79
1	A2	239/282 (85%)	234 (98%)	5 (2%)	48	77
1	a1	261/282 (93%)	256 (98%)	5 (2%)	52	79
1	a2	249/282 (88%)	243 (98%)	6 (2%)	44	74
2	B1	360/415 (87%)	351 (98%)	9 (2%)	42	73
2	B2	351/415 (85%)	341 (97%)	10 (3%)	38	69
2	b1	380/415 (92%)	369 (97%)	11 (3%)	37	68
2	b2	352/415 (85%)	342 (97%)	10 (3%)	38	69
3	C1	320/364 (88%)	317 (99%)	3 (1%)	75	91
3	C2	261/364 (72%)	260 (100%)	1 (0%)	89	96
3	c1	338/364 (93%)	334 (99%)	4 (1%)	67	87
3	c2	323/364 (89%)	320 (99%)	3 (1%)	75	91
4	D1	255/283 (90%)	252 (99%)	3 (1%)	67	87
4	D2	238/283 (84%)	236 (99%)	2 (1%)	79	92
4	d1	267/283 (94%)	265 (99%)	2 (1%)	81	93
4	d2	258/283 (91%)	256 (99%)	2 (1%)	79	92
5	E1	28/75 (37%)	28 (100%)	0	100	100
5	E2	34/75 (45%)	34 (100%)	0	100	100
5	e1	38/75 (51%)	37 (97%)	1 (3%)	41	72

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	e2	33/75 (44%)	33 (100%)	0	100	100
6	F1	18/36 (50%)	17 (94%)	1 (6%)	17	43
6	F2	17/36 (47%)	16 (94%)	1 (6%)	16	41
6	f1	20/36 (56%)	19 (95%)	1 (5%)	20	48
6	f2	19/36 (53%)	18 (95%)	1 (5%)	19	46
7	H1	39/58 (67%)	38 (97%)	1 (3%)	41	72
7	H2	38/58 (66%)	38 (100%)	0	100	100
7	h1	47/58 (81%)	46 (98%)	1 (2%)	48	77
7	h2	42/58 (72%)	41 (98%)	1 (2%)	44	74
8	I1	30/36 (83%)	29 (97%)	1 (3%)	33	64
8	I2	26/36 (72%)	25 (96%)	1 (4%)	28	59
8	i1	32/36 (89%)	31 (97%)	1 (3%)	35	66
8	i2	28/36 (78%)	27 (96%)	1 (4%)	30	61
9	J1	20/32 (62%)	20 (100%)	0	100	100
9	J2	19/32 (59%)	19 (100%)	0	100	100
9	j1	22/32 (69%)	22 (100%)	0	100	100
9	j2	22/32 (69%)	22 (100%)	0	100	100
10	K1	26/36 (72%)	26 (100%)	0	100	100
10	K2	18/36 (50%)	18 (100%)	0	100	100
10	k1	27/36 (75%)	27 (100%)	0	100	100
10	k2	24/36 (67%)	24 (100%)	0	100	100
11	L1	31/35 (89%)	31 (100%)	0	100	100
11	L2	33/35 (94%)	33 (100%)	0	100	100
11	l1	33/35 (94%)	33 (100%)	0	100	100
11	l2	32/35 (91%)	32 (100%)	0	100	100
12	M1	26/88 (30%)	25 (96%)	1 (4%)	28	59
12	M2	26/88 (30%)	25 (96%)	1 (4%)	28	59
12	m1	26/88 (30%)	25 (96%)	1 (4%)	28	59
12	m2	27/88 (31%)	26 (96%)	1 (4%)	29	60
13	O1	148/266 (56%)	138 (93%)	10 (7%)	13	34
13	O2	110/266 (41%)	103 (94%)	7 (6%)	14	37

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
13	o1	156/266 (59%)	148 (95%)	8 (5%)	20 47
13	o2	168/266 (63%)	159 (95%)	9 (5%)	18 45
14	T1	24/28 (86%)	24 (100%)	0	100 100
14	T2	25/28 (89%)	25 (100%)	0	100 100
14	t1	26/28 (93%)	26 (100%)	0	100 100
14	t2	25/28 (89%)	24 (96%)	1 (4%)	27 57
15	U1	63/122 (52%)	59 (94%)	4 (6%)	15 38
15	U2	40/122 (33%)	37 (92%)	3 (8%)	11 30
15	u1	66/122 (54%)	62 (94%)	4 (6%)	15 40
15	u2	69/122 (57%)	64 (93%)	5 (7%)	12 31
16	V1	88/132 (67%)	87 (99%)	1 (1%)	70 88
16	V2	70/132 (53%)	69 (99%)	1 (1%)	62 85
16	v1	88/132 (67%)	85 (97%)	3 (3%)	32 63
16	v2	100/132 (76%)	99 (99%)	1 (1%)	73 89
17	Y1	11/33 (33%)	11 (100%)	0	100 100
17	Y2	13/33 (39%)	13 (100%)	0	100 100
17	y1	18/33 (54%)	18 (100%)	0	100 100
17	y2	16/33 (48%)	16 (100%)	0	100 100
18	X1	17/34 (50%)	16 (94%)	1 (6%)	16 41
18	X2	16/34 (47%)	15 (94%)	1 (6%)	15 38
18	x1	23/34 (68%)	21 (91%)	2 (9%)	8 24
18	x2	17/34 (50%)	16 (94%)	1 (6%)	16 41
19	S1	10/20 (50%)	10 (100%)	0	100 100
19	S2	10/20 (50%)	10 (100%)	0	100 100
19	s1	15/20 (75%)	15 (100%)	0	100 100
19	s2	13/20 (65%)	13 (100%)	0	100 100
20	W1	12/13 (92%)	12 (100%)	0	100 100
20	W2	10/13 (77%)	10 (100%)	0	100 100
20	w1	11/13 (85%)	11 (100%)	0	100 100
20	w2	11/13 (85%)	11 (100%)	0	100 100
21	Q2	35/175 (20%)	33 (94%)	2 (6%)	17 43

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
21	q1	33/175 (19%)	32 (97%)	1 (3%)	36 67
22	Z2	22/54 (41%)	22 (100%)	0	100 100
22	z2	28/54 (52%)	28 (100%)	0	100 100
All	All	7221/10010 (72%)	7059 (98%)	162 (2%)	47 76

All (162) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A1	85	THR
1	A1	123	VAL
1	A1	255	PHE
1	A1	286	THR
1	A1	291	SER
2	B1	6	TYR
2	B1	10	THR
2	B1	12	VAL
2	B1	128	THR
2	B1	357	ARG
2	B1	371	VAL
2	B1	434	ARG
2	B1	442	VAL
2	B1	464	PHE
3	C1	62	PHE
3	C1	99	VAL
3	C1	240	ILE
4	D1	180	ARG
4	D1	182	LEU
4	D1	277	THR
6	F1	41	GLN
7	H1	49	TYR
8	I1	23	PHE
12	M1	9	LEU
13	O1	101	MET
13	O1	106	THR
13	O1	142	LEU
13	O1	172	VAL
13	O1	181	VAL
13	O1	183	ARG
13	O1	219	GLN
13	O1	220	LEU
13	O1	221	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	O1	233	LEU
15	U1	57	THR
15	U1	80	ASP
15	U1	90	GLU
15	U1	97	ARG
16	V1	39	SER
18	X1	32	VAL
1	a1	85	THR
1	a1	123	VAL
1	a1	255	PHE
1	a1	286	THR
1	a1	291	SER
2	b1	6	TYR
2	b1	10	THR
2	b1	12	VAL
2	b1	128	THR
2	b1	357	ARG
2	b1	371	VAL
2	b1	434	ARG
2	b1	442	VAL
2	b1	464	PHE
2	b1	479	PHE
2	b1	490	VAL
3	c1	36	TRP
3	c1	62	PHE
3	c1	122	SER
3	c1	240	ILE
4	d1	180	ARG
4	d1	182	LEU
5	e1	65	LEU
6	f1	41	GLN
7	h1	49	TYR
8	i1	23	PHE
12	m1	9	LEU
13	o1	106	THR
13	o1	142	LEU
13	o1	172	VAL
13	o1	181	VAL
13	o1	183	ARG
13	o1	219	GLN
13	o1	220	LEU
13	o1	221	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	u1	57	THR
15	u1	80	ASP
15	u1	90	GLU
15	u1	97	ARG
16	v1	25	GLN
16	v1	39	SER
16	v1	40	CYS
18	x1	12	TRP
18	x1	32	VAL
21	q1	137	ASP
1	A2	85	THR
1	A2	123	VAL
1	A2	255	PHE
1	A2	286	THR
1	A2	291	SER
2	B2	6	TYR
2	B2	10	THR
2	B2	12	VAL
2	B2	128	THR
2	B2	357	ARG
2	B2	371	VAL
2	B2	434	ARG
2	B2	442	VAL
2	B2	464	PHE
2	B2	490	VAL
3	C2	62	PHE
4	D2	182	LEU
4	D2	238	THR
6	F2	41	GLN
8	I2	23	PHE
12	M2	9	LEU
13	O2	106	THR
13	O2	172	VAL
13	O2	181	VAL
13	O2	183	ARG
13	O2	219	GLN
13	O2	221	SER
13	O2	233	LEU
15	U2	80	ASP
15	U2	90	GLU
15	U2	97	ARG
16	V2	39	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	X2	12	TRP
21	Q2	137	ASP
21	Q2	183	ILE
1	a2	25	GLU
1	a2	85	THR
1	a2	123	VAL
1	a2	255	PHE
1	a2	286	THR
1	a2	291	SER
2	b2	6	TYR
2	b2	10	THR
2	b2	12	VAL
2	b2	128	THR
2	b2	357	ARG
2	b2	371	VAL
2	b2	434	ARG
2	b2	442	VAL
2	b2	464	PHE
2	b2	479	PHE
3	c2	26	ARG
3	c2	62	PHE
3	c2	99	VAL
4	d2	180	ARG
4	d2	182	LEU
6	f2	41	GLN
7	h2	49	TYR
8	i2	23	PHE
12	m2	9	LEU
13	o2	106	THR
13	o2	142	LEU
13	o2	172	VAL
13	o2	181	VAL
13	o2	183	ARG
13	o2	219	GLN
13	o2	220	LEU
13	o2	221	SER
13	o2	233	LEU
14	t2	29	ILE
15	u2	57	THR
15	u2	80	ASP
15	u2	90	GLU
15	u2	97	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	u2	104	LYS
16	v2	39	SER
18	x2	12	TRP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (25) such sidechains are listed below:

Mol	Chain	Res	Type
1	A1	234	ASN
2	B1	216	HIS
2	B1	223	GLN
2	B1	365	ASN
3	C1	56	HIS
3	C1	107	ASN
3	C1	418	ASN
13	O1	109	GLN
2	b1	216	HIS
2	b1	223	GLN
2	b1	365	ASN
2	b1	489	GLN
3	c1	56	HIS
3	c1	418	ASN
13	o1	109	GLN
21	q1	170	GLN
2	B2	216	HIS
3	C2	56	HIS
13	O2	109	GLN
16	V2	122	GLN
2	b2	216	HIS
2	b2	365	ASN
3	c2	56	HIS
13	o2	109	GLN
18	x2	34	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 353 ligands modelled in this entry, 10 are monoatomic and 52 are unknown - leaving 291 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	$\#\|Z\| > 2$
23	BCR	B2	601	-	41,41,41	0.70	0	56,56,56	1.92	15 (26%)
23	BCR	H2	103	-	24,24,41	0.71	0	31,31,56	1.67	8 (25%)
25	CLA	C1	506	-	65,73,73	1.50	6 (9%)	76,113,113	1.36	8 (10%)
25	CLA	D2	404	-	61,69,73	1.56	5 (8%)	71,108,113	1.40	9 (12%)
25	CLA	C2	518	-	41,49,73	1.86	5 (12%)	47,84,113	1.69	8 (17%)
29	LMG	d1	411	-	34,34,55	1.10	2 (5%)	36,36,63	1.14	3 (8%)
32	GOL	i1	101	-	5,5,5	0.42	0	5,5,5	0.20	0
33	LHG	D2	405	-	48,48,48	0.92	2 (4%)	51,54,54	1.02	4 (7%)
25	CLA	C1	511	-	65,73,73	1.51	6 (9%)	76,113,113	1.37	7 (9%)
25	CLA	c2	507	-	54,62,73	1.66	5 (9%)	62,99,113	1.48	7 (11%)
23	BCR	a1	401	-	41,41,41	0.69	0	56,56,56	1.73	14 (25%)
23	BCR	B2	603	-	41,41,41	0.69	0	56,56,56	1.84	12 (21%)
25	CLA	b2	615	-	60,68,73	1.56	5 (8%)	70,107,113	1.41	8 (11%)
29	LMG	a1	412	-	51,51,55	0.95	2 (3%)	59,59,63	1.07	4 (6%)
29	LMG	c2	519	-	26,26,55	1.60	3 (11%)	32,33,63	1.30	2 (6%)
23	BCR	k1	101	-	41,41,41	0.71	0	56,56,56	2.03	15 (26%)
32	GOL	a1	406	-	5,5,5	0.35	0	5,5,5	0.28	0
25	CLA	b1	612	-	65,73,73	1.51	5 (7%)	76,113,113	1.39	8 (10%)
33	LHG	D2	403	-	48,48,48	0.92	2 (4%)	51,54,54	1.03	3 (5%)
38	HEM	f1	101	6	41,50,50	1.97	7 (17%)	45,82,82	1.73	7 (15%)
33	LHG	a2	407	-	29,29,48	1.09	2 (6%)	30,34,54	1.02	1 (3%)
25	CLA	b1	604	-	65,73,73	1.54	5 (7%)	76,113,113	1.29	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
29	LMG	b1	631	-	40,40,55	1.08	2 (5%)	48,48,63	1.23	5 (10%)
25	CLA	B2	617	-	65,73,73	1.50	5 (7%)	76,113,113	1.38	7 (9%)
25	CLA	C1	504	-	65,73,73	1.53	5 (7%)	76,113,113	1.31	8 (10%)
25	CLA	d1	406	-	65,73,73	1.51	5 (7%)	76,113,113	1.40	8 (10%)
23	BCR	b2	602	-	41,41,41	0.70	0	56,56,56	2.13	17 (30%)
29	LMG	C2	515	-	24,24,55	1.18	2 (8%)	32,32,63	1.05	2 (6%)
25	CLA	b1	615	-	59,67,73	1.54	6 (10%)	68,105,113	1.44	8 (11%)
33	LHG	B1	621	-	48,48,48	0.92	2 (4%)	51,54,54	1.01	3 (5%)
35	LMT	m2	103	-	31,31,36	0.44	0	42,42,47	0.91	1 (2%)
25	CLA	B2	610	-	65,73,73	1.50	5 (7%)	76,113,113	1.36	7 (9%)
25	CLA	c1	512	-	65,73,73	1.50	6 (9%)	76,113,113	1.39	7 (9%)
23	BCR	B1	603	-	41,41,41	0.69	0	56,56,56	1.72	11 (19%)
23	BCR	d2	401	-	41,41,41	0.70	0	56,56,56	2.11	16 (28%)
25	CLA	C2	511	-	50,58,73	1.70	6 (12%)	58,95,113	1.62	9 (15%)
25	CLA	B2	608	-	65,73,73	1.49	5 (7%)	76,113,113	1.38	9 (11%)
25	CLA	A2	404	-	51,59,73	1.77	6 (11%)	59,96,113	1.47	9 (15%)
25	CLA	d2	404	-	50,58,73	1.73	5 (10%)	58,95,113	1.53	8 (13%)
23	BCR	A1	401	-	41,41,41	0.68	0	56,56,56	1.74	11 (19%)
25	CLA	c2	511	-	65,73,73	1.50	5 (7%)	76,113,113	1.35	7 (9%)
25	CLA	c2	512	3	65,73,73	1.51	5 (7%)	76,113,113	1.33	8 (10%)
29	LMG	A1	412	-	41,41,55	1.06	2 (4%)	49,49,63	1.02	3 (6%)
23	BCR	K2	104	-	29,29,41	0.55	0	40,41,56	1.67	10 (25%)
38	HEM	e2	101	5,6	41,50,50	1.97	5 (12%)	45,82,82	1.77	6 (13%)
25	CLA	B1	618	-	58,66,73	1.60	7 (12%)	67,104,113	1.41	6 (8%)
25	CLA	B1	607	-	60,68,73	1.58	5 (8%)	70,107,113	1.34	7 (10%)
23	BCR	F2	401	-	41,41,41	0.72	0	56,56,56	2.18	18 (32%)
25	CLA	C2	513	-	53,61,73	1.71	5 (9%)	61,98,113	1.44	7 (11%)
25	CLA	c2	513	-	54,62,73	1.64	6 (11%)	62,99,113	1.50	8 (12%)
25	CLA	c2	510	-	54,62,73	1.68	6 (11%)	62,99,113	1.41	7 (11%)
23	BCR	J1	101	-	41,41,41	0.75	0	56,56,56	2.10	16 (28%)
25	CLA	C2	504	-	46,54,73	1.76	5 (10%)	53,90,113	1.52	6 (11%)
23	BCR	c1	502	-	41,41,41	0.75	0	56,56,56	2.09	14 (25%)
33	LHG	L1	101	-	40,40,48	1.01	2 (5%)	43,46,54	1.10	4 (9%)
25	CLA	C1	510	-	65,73,73	1.52	6 (9%)	76,113,113	1.31	7 (9%)
34	DGD	c1	518	-	63,63,67	0.87	2 (3%)	77,77,81	1.00	5 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	b1	611	-	65,73,73	1.50	5 (7%)	76,113,113	1.29	7 (9%)
23	BCR	B1	601	-	41,41,41	0.69	0	56,56,56	1.90	15 (26%)
27	PHO	a1	411	-	51,69,69	1.67	7 (13%)	47,99,99	1.69	8 (17%)
33	LHG	a1	407	-	42,42,48	1.01	2 (4%)	45,48,54	1.09	3 (6%)
25	CLA	C1	512	-	65,73,73	1.48	6 (9%)	76,113,113	1.39	8 (10%)
25	CLA	B2	607	-	65,73,73	1.53	6 (9%)	76,113,113	1.36	9 (11%)
25	CLA	A1	404	-	51,59,73	1.71	6 (11%)	59,96,113	1.53	8 (13%)
29	LMG	B1	626	-	48,48,55	0.98	2 (4%)	56,56,63	1.18	3 (5%)
25	CLA	C1	505	-	65,73,73	1.48	5 (7%)	76,113,113	1.43	7 (9%)
25	CLA	b1	617	-	65,73,73	1.52	6 (9%)	76,113,113	1.36	7 (9%)
23	BCR	B2	602	-	41,41,41	0.68	0	56,56,56	2.02	14 (25%)
33	LHG	d1	402	-	31,31,48	1.16	2 (6%)	34,37,54	1.35	3 (8%)
25	CLA	B2	611	-	65,73,73	1.51	5 (7%)	76,113,113	1.36	8 (10%)
25	CLA	B1	619	40	65,73,73	1.51	5 (7%)	76,113,113	1.39	8 (10%)
25	CLA	C1	509	-	65,73,73	1.50	5 (7%)	76,113,113	1.48	8 (10%)
25	CLA	b1	610	-	65,73,73	1.50	5 (7%)	76,113,113	1.38	8 (10%)
33	LHG	D1	404	-	48,48,48	0.93	2 (4%)	51,54,54	1.04	4 (7%)
35	LMT	b2	623	-	36,36,36	0.38	0	47,47,47	0.84	0
29	LMG	D1	406	-	35,35,55	1.11	2 (5%)	43,43,63	1.07	3 (6%)
29	LMG	B1	622	-	31,31,55	1.20	2 (6%)	39,39,63	1.19	4 (10%)
25	CLA	B2	609	-	65,73,73	1.49	6 (9%)	76,113,113	1.43	9 (11%)
25	CLA	c1	505	-	65,73,73	1.51	5 (7%)	76,113,113	1.34	7 (9%)
26	OEX	A1	407	3,40,1	0,15,15	-	-	-		
25	CLA	d1	401	-	65,73,73	1.51	5 (7%)	76,113,113	1.38	9 (11%)
25	CLA	B2	615	-	65,73,73	1.49	5 (7%)	76,113,113	1.36	7 (9%)
32	GOL	C2	514	-	5,5,5	0.36	0	5,5,5	0.31	0
25	CLA	D1	403	-	51,59,73	1.69	5 (9%)	59,96,113	1.48	6 (10%)
38	HEM	v1	201	16	41,50,50	1.99	7 (17%)	45,82,82	1.64	5 (11%)
34	DGD	c2	517	-	63,63,67	0.89	2 (3%)	77,77,81	0.84	2 (2%)
25	CLA	b1	614	-	65,73,73	1.47	6 (9%)	76,113,113	1.42	8 (10%)
25	CLA	d1	404	40	65,73,73	1.57	5 (7%)	76,113,113	1.40	8 (10%)
25	CLA	b2	606	-	65,73,73	1.49	6 (9%)	76,113,113	1.38	7 (9%)
33	LHG	B2	627	-	41,41,48	1.03	2 (4%)	44,47,54	1.08	3 (6%)
25	CLA	b2	620	40	65,73,73	1.52	5 (7%)	76,113,113	1.41	8 (10%)
25	CLA	b2	616	-	60,68,73	1.59	5 (8%)	70,107,113	1.41	8 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	C2	508	-	50,58,73	1.71	5 (10%)	58,95,113	1.57	9 (15%)
34	DGD	c1	514	-	52,52,67	0.96	2 (3%)	66,66,81	1.04	4 (6%)
34	DGD	H2	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.91	3 (3%)
35	LMT	C1	519	-	36,36,36	0.35	0	47,47,47	0.70	1 (2%)
33	LHG	b2	625	-	42,42,48	1.00	2 (4%)	45,48,54	1.08	3 (6%)
35	LMT	T1	101	-	11,11,36	0.25	0	10,10,47	0.58	0
25	CLA	C2	506	-	65,73,73	1.49	5 (7%)	76,113,113	1.38	7 (9%)
25	CLA	b2	612	-	65,73,73	1.55	8 (12%)	76,113,113	1.39	7 (9%)
25	CLA	B1	610	-	65,73,73	1.51	5 (7%)	76,113,113	1.34	8 (10%)
25	CLA	B2	612	-	65,73,73	1.51	5 (7%)	76,113,113	1.38	9 (11%)
27	PHO	D1	407	-	50,68,69	1.77	7 (14%)	45,97,99	1.83	9 (20%)
25	CLA	B2	604	-	41,49,73	1.88	5 (12%)	47,84,113	1.61	8 (17%)
25	CLA	a2	405	-	65,73,73	1.47	5 (7%)	76,113,113	1.38	9 (11%)
25	CLA	b1	620	-	65,73,73	1.53	5 (7%)	76,113,113	1.38	8 (10%)
25	CLA	C2	509	-	65,73,73	1.51	5 (7%)	76,113,113	1.36	7 (9%)
25	CLA	a2	404	-	65,73,73	1.54	8 (12%)	76,113,113	1.31	8 (10%)
25	CLA	A2	403	-	61,69,73	1.58	5 (8%)	71,108,113	1.35	8 (11%)
29	LMG	F2	402	-	35,35,55	1.13	2 (5%)	43,43,63	1.03	3 (6%)
25	CLA	c1	513	3	60,68,73	1.57	6 (10%)	70,107,113	1.43	8 (11%)
25	CLA	c1	516	-	65,73,73	1.48	5 (7%)	76,113,113	1.37	8 (10%)
29	LMG	C1	520	-	48,48,55	0.97	2 (4%)	56,56,63	1.00	3 (5%)
25	CLA	B2	618	-	60,68,73	1.61	6 (10%)	70,107,113	1.43	7 (10%)
23	BCR	C1	521	-	41,41,41	0.69	0	56,56,56	1.94	13 (23%)
25	CLA	a1	405	-	50,58,73	1.70	5 (10%)	58,95,113	1.61	9 (15%)
25	CLA	a2	413	-	50,58,73	1.72	6 (12%)	58,95,113	1.50	10 (17%)
25	CLA	c2	508	40	65,73,73	1.52	5 (7%)	76,113,113	1.33	7 (9%)
34	DGD	C1	515	-	53,53,67	0.96	2 (3%)	67,67,81	1.01	4 (5%)
25	CLA	a1	404	-	60,68,73	1.62	6 (10%)	70,107,113	1.34	9 (12%)
25	CLA	B2	613	-	65,73,73	1.52	6 (9%)	76,113,113	1.46	8 (10%)
34	DGD	C1	517	-	65,65,67	0.86	2 (3%)	79,79,81	0.85	3 (3%)
25	CLA	B2	619	-	65,73,73	1.50	5 (7%)	76,113,113	1.37	8 (10%)
25	CLA	B2	616	-	54,62,73	1.67	6 (11%)	62,99,113	1.49	8 (12%)
25	CLA	C2	516	-	46,54,73	1.75	5 (10%)	53,90,113	1.55	7 (13%)
35	LMT	m1	101	-	36,36,36	0.42	0	47,47,47	0.68	0
32	GOL	c1	521	-	5,5,5	0.36	0	5,5,5	0.31	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
29	LMG	d2	407	-	27,27,55	1.36	2 (7%)	35,35,63	1.29	3 (8%)
31	BCT	a2	417	30	2,3,3	0.67	0	2,3,3	0.77	0
26	OEX	a2	408	3,40,1	0,15,15	-	-	-		
25	CLA	C1	507	-	65,73,73	1.54	6 (9%)	76,113,113	1.33	9 (11%)
35	LMT	a2	406	-	36,36,36	0.45	0	47,47,47	0.66	1 (2%)
25	CLA	C1	513	3	61,69,73	1.57	6 (9%)	71,108,113	1.39	7 (9%)
25	CLA	b1	616	-	65,73,73	1.50	6 (9%)	76,113,113	1.36	8 (10%)
26	OEX	a1	408	3,40,1	0,15,15	-	-	-		
33	LHG	L2	101	-	48,48,48	0.93	2 (4%)	51,54,54	1.10	4 (7%)
31	BCT	a1	413	30	2,3,3	0.67	0	2,3,3	0.72	0
34	DGD	h2	102	-	63,63,67	0.87	2 (3%)	77,77,81	0.91	2 (2%)
27	PHO	A2	407	-	51,69,69	1.68	7 (13%)	47,99,99	1.71	8 (17%)
25	CLA	b1	619	-	65,73,73	1.53	6 (9%)	76,113,113	1.36	7 (9%)
29	LMG	d1	408	-	33,33,55	1.15	2 (6%)	41,41,63	1.10	3 (7%)
25	CLA	C2	507	-	45,53,73	1.81	6 (13%)	52,89,113	1.60	6 (11%)
25	CLA	B2	606	-	65,73,73	1.52	5 (7%)	76,113,113	1.35	7 (9%)
25	CLA	d2	405	-	65,73,73	1.49	5 (7%)	76,113,113	1.32	8 (10%)
25	CLA	A2	402	-	65,73,73	1.59	7 (10%)	76,113,113	1.31	8 (10%)
29	LMG	A1	410	-	43,43,55	1.03	2 (4%)	51,51,63	1.11	4 (7%)
35	LMT	i2	102	-	6,6,36	0.28	0	5,5,47	0.44	0
23	BCR	j2	102	-	41,41,41	0.73	0	56,56,56	2.08	18 (32%)
25	CLA	c2	502	-	65,73,73	1.50	5 (7%)	76,113,113	1.36	8 (10%)
25	CLA	B1	612	-	65,73,73	1.54	5 (7%)	76,113,113	1.38	8 (10%)
25	CLA	a1	403	-	65,73,73	1.57	8 (12%)	76,113,113	1.30	8 (10%)
29	LMG	B2	620	-	40,40,55	1.07	3 (7%)	48,48,63	1.05	4 (8%)
23	BCR	z2	101	-	41,41,41	0.70	0	56,56,56	1.76	10 (17%)
25	CLA	c1	508	-	50,58,73	1.76	5 (10%)	58,95,113	1.53	10 (17%)
25	CLA	D2	406	-	65,73,73	1.52	5 (7%)	76,113,113	1.38	8 (10%)
25	CLA	D1	402	-	65,73,73	1.47	5 (7%)	76,113,113	1.37	8 (10%)
25	CLA	b2	604	-	42,50,73	1.85	5 (11%)	48,85,113	1.56	6 (12%)
25	CLA	b2	618	-	65,73,73	1.51	5 (7%)	76,113,113	1.36	8 (10%)
25	CLA	A1	403	-	65,73,73	1.57	9 (13%)	76,113,113	1.32	8 (10%)
25	CLA	C2	510	-	45,53,73	1.78	5 (11%)	52,89,113	1.60	7 (13%)
25	CLA	c2	509	-	65,73,73	1.49	5 (7%)	76,113,113	1.48	9 (11%)
34	DGD	C1	516	-	63,63,67	0.85	2 (3%)	77,77,81	1.00	4 (5%)
38	HEM	E2	101	5	41,50,50	1.95	7 (17%)	45,82,82	1.73	7 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	A1	405	-	55,63,73	1.70	6 (10%)	64,101,113	1.44	9 (14%)
27	PHO	A1	408	-	51,69,69	1.67	7 (13%)	47,99,99	1.72	9 (19%)
36	PL9	D1	408	-	55,55,55	0.64	2 (3%)	68,69,69	1.76	16 (23%)
35	LMT	b2	621	-	36,36,36	0.41	0	47,47,47	0.69	0
25	CLA	b2	613	-	65,73,73	1.52	5 (7%)	76,113,113	1.36	7 (9%)
25	CLA	c2	505	-	65,73,73	1.48	5 (7%)	76,113,113	1.40	8 (10%)
25	CLA	b2	611	-	65,73,73	1.50	5 (7%)	76,113,113	1.39	8 (10%)
23	BCR	H1	102	-	22,22,41	0.69	0	29,29,56	1.71	6 (20%)
25	CLA	c2	515	-	46,54,73	1.75	5 (10%)	53,90,113	1.56	7 (13%)
25	CLA	b2	619	-	59,67,73	1.60	6 (10%)	68,105,113	1.40	6 (8%)
33	LHG	A2	405	-	32,32,48	1.13	2 (6%)	35,38,54	1.07	2 (5%)
25	CLA	b1	609	-	65,73,73	1.52	5 (7%)	76,113,113	1.35	8 (10%)
25	CLA	b2	617	-	65,73,73	1.51	5 (7%)	76,113,113	1.34	8 (10%)
25	CLA	C2	505	-	65,73,73	1.51	5 (7%)	76,113,113	1.36	7 (9%)
32	GOL	B1	620	-	5,5,5	0.35	0	5,5,5	0.32	0
25	CLA	b1	613	-	65,73,73	1.52	8 (12%)	76,113,113	1.40	7 (9%)
37	SQD	B2	623	-	44,45,54	1.31	4 (9%)	53,56,65	1.22	6 (11%)
23	BCR	A2	401	-	41,41,41	0.69	0	56,56,56	2.02	16 (28%)
34	DGD	c2	514	-	63,63,67	0.87	2 (3%)	77,77,81	0.97	4 (5%)
35	LMT	M1	103	-	24,24,36	0.46	0	29,29,47	0.56	0
23	BCR	a2	402	-	41,41,41	0.67	0	56,56,56	1.64	12 (21%)
23	BCR	d1	405	-	41,41,41	0.71	0	56,56,56	1.86	12 (21%)
26	OEX	A2	406	3,40,1	0,15,15	-	-	-		
25	CLA	B1	615	-	65,73,73	1.49	5 (7%)	76,113,113	1.35	7 (9%)
27	PHO	D2	407	-	51,69,69	1.73	7 (13%)	47,99,99	1.85	9 (19%)
29	LMG	M1	101	-	30,30,55	1.20	3 (10%)	32,32,63	1.33	3 (9%)
23	BCR	h1	102	-	41,41,41	0.68	0	56,56,56	1.89	17 (30%)
29	LMG	B2	621	-	37,37,55	0.95	3 (8%)	45,45,63	1.11	3 (6%)
25	CLA	c1	507	-	65,73,73	1.51	6 (9%)	76,113,113	1.37	7 (9%)
33	LHG	d2	403	-	48,48,48	0.94	2 (4%)	51,54,54	1.02	3 (5%)
34	DGD	c1	520	-	63,63,67	0.87	2 (3%)	77,77,81	0.86	2 (2%)
25	CLA	C1	503	-	60,68,73	1.55	5 (8%)	70,107,113	1.38	6 (8%)
34	DGD	c2	516	-	53,53,67	0.96	2 (3%)	67,67,81	1.03	3 (4%)
23	BCR	k2	501	-	41,41,41	0.68	0	56,56,56	2.04	16 (28%)
23	BCR	c2	501	-	41,41,41	0.80	1 (2%)	56,56,56	3.50	20 (35%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	b1	606	-	65,73,73	1.49	6 (9%)	76,113,113	1.38	8 (10%)
25	CLA	b1	608	-	65,73,73	1.52	5 (7%)	76,113,113	1.38	8 (10%)
29	LMG	j2	101	-	50,50,55	0.94	2 (4%)	58,58,63	1.03	2 (3%)
37	SQD	D1	409	-	34,35,54	1.53	4 (11%)	43,46,65	1.41	6 (13%)
25	CLA	b2	608	-	65,73,73	1.54	5 (7%)	76,113,113	1.32	8 (10%)
25	CLA	c1	504	-	65,73,73	1.48	5 (7%)	76,113,113	1.36	7 (9%)
29	LMG	I2	101	-	34,34,55	1.15	2 (5%)	42,42,63	1.13	3 (7%)
25	CLA	D2	401	-	65,73,73	1.48	6 (9%)	76,113,113	1.39	8 (10%)
27	PHO	d1	403	-	51,69,69	1.76	7 (13%)	47,99,99	1.77	6 (12%)
29	LMG	a2	412	-	44,44,55	1.01	2 (4%)	52,52,63	1.11	5 (9%)
35	LMT	c1	517	-	34,34,36	0.43	0	45,45,47	0.68	1 (2%)
23	BCR	B1	602	-	41,41,41	0.69	0	56,56,56	1.95	12 (21%)
34	DGD	h1	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.96	4 (5%)
25	CLA	b1	605	-	65,73,73	1.52	6 (9%)	76,113,113	1.41	6 (7%)
23	BCR	b1	601	-	41,41,41	0.69	0	56,56,56	1.83	14 (25%)
23	BCR	c1	501	-	41,41,41	0.70	0	56,56,56	2.10	13 (23%)
33	LHG	l2	101	-	43,43,48	1.00	2 (4%)	46,49,54	1.07	4 (8%)
35	LMT	l1	101	-	24,24,36	0.47	0	29,29,47	0.83	2 (6%)
23	BCR	b2	603	-	41,41,41	0.70	0	56,56,56	1.91	13 (23%)
25	CLA	c1	509	40	65,73,73	1.51	5 (7%)	76,113,113	1.36	7 (9%)
25	CLA	b2	609	-	61,69,73	1.54	6 (9%)	71,108,113	1.43	7 (9%)
32	GOL	c2	518	-	5,5,5	0.37	0	5,5,5	0.26	0
32	GOL	C1	518	-	5,5,5	0.37	0	5,5,5	0.23	0
38	HEM	v2	201	16	41,50,50	2.00	6 (14%)	45,82,82	1.69	7 (15%)
34	DGD	C2	512	-	34,34,67	1.16	2 (5%)	46,47,81	1.06	2 (4%)
25	CLA	c1	515	-	55,63,73	1.63	5 (9%)	64,101,113	1.48	8 (12%)
29	LMG	b2	622	-	39,39,55	1.07	2 (5%)	47,47,63	1.01	3 (6%)
25	CLA	B1	608	-	65,73,73	1.49	5 (7%)	76,113,113	1.35	7 (9%)
25	CLA	c1	503	-	65,73,73	1.46	5 (7%)	76,113,113	1.41	8 (10%)
23	BCR	D1	401	-	41,41,41	0.72	0	56,56,56	1.98	13 (23%)
23	BCR	K2	102	-	41,41,41	0.72	0	56,56,56	2.07	16 (28%)
31	BCT	A2	413	30	2,3,3	0.68	0	2,3,3	0.74	0
25	CLA	c2	504	-	65,73,73	1.51	5 (7%)	76,113,113	1.35	8 (10%)
25	CLA	c1	510	-	65,73,73	1.50	6 (9%)	76,113,113	1.44	8 (10%)
25	CLA	B1	605	-	65,73,73	1.52	5 (7%)	76,113,113	1.34	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B2	614	-	65,73,73	1.46	6 (9%)	76,113,113	1.37	8 (10%)
25	CLA	c2	503	-	65,73,73	1.52	5 (7%)	76,113,113	1.35	6 (7%)
27	PHO	a2	416	-	51,69,69	1.69	7 (13%)	47,99,99	1.71	8 (17%)
38	HEM	V2	201	16	41,50,50	1.99	6 (14%)	45,82,82	1.81	8 (17%)
33	LHG	D1	405	-	48,48,48	0.93	2 (4%)	51,54,54	1.00	3 (5%)
25	CLA	d2	402	-	65,73,73	1.51	5 (7%)	76,113,113	1.43	9 (11%)
36	PL9	d1	409	-	55,55,55	0.64	2 (3%)	68,69,69	1.78	20 (29%)
23	BCR	b1	603	-	41,41,41	0.72	0	56,56,56	1.75	11 (19%)
25	CLA	b1	607	-	65,73,73	1.57	5 (7%)	76,113,113	1.36	8 (10%)
23	BCR	C1	501	-	41,41,41	0.70	0	56,56,56	1.80	14 (25%)
38	HEM	V1	201	16	41,50,50	2.00	7 (17%)	45,82,82	1.72	9 (20%)
25	CLA	C2	503	-	65,73,73	1.49	5 (7%)	76,113,113	1.42	7 (9%)
25	CLA	c1	506	40	65,73,73	1.51	5 (7%)	76,113,113	1.43	8 (10%)
25	CLA	c1	511	-	65,73,73	1.47	6 (9%)	76,113,113	1.40	8 (10%)
32	GOL	b1	618	-	5,5,5	0.35	0	5,5,5	0.39	0
33	LHG	b1	622	-	48,48,48	0.92	2 (4%)	51,54,54	1.04	5 (9%)
23	BCR	K1	101	-	31,31,41	0.70	0	40,40,56	2.32	14 (35%)
25	CLA	b2	610	-	65,73,73	1.50	5 (7%)	76,113,113	1.36	8 (10%)
25	CLA	K2	101	-	55,63,73	1.64	6 (10%)	64,101,113	1.44	7 (10%)
33	LHG	d2	406	-	48,48,48	0.92	2 (4%)	51,54,54	1.00	4 (7%)
35	LMT	M1	102	-	10,10,36	0.24	0	9,9,47	0.57	0
29	LMG	b1	624	-	39,39,55	1.08	2 (5%)	47,47,63	1.31	5 (10%)
25	CLA	B1	604	-	42,50,73	1.87	5 (11%)	48,85,113	1.56	6 (12%)
33	LHG	d1	407	-	48,48,48	0.91	2 (4%)	51,54,54	1.05	3 (5%)
37	SQD	b2	605	-	44,45,54	1.30	4 (9%)	53,56,65	1.16	4 (7%)
25	CLA	A1	406	-	65,73,73	1.56	5 (7%)	76,113,113	1.43	9 (11%)
33	LHG	l1	102	-	48,48,48	0.92	2 (4%)	51,54,54	1.07	4 (7%)
38	HEM	E1	101	5,6	41,50,50	1.97	7 (17%)	45,82,82	1.74	6 (13%)
25	CLA	b2	614	-	65,73,73	1.48	6 (9%)	76,113,113	1.37	7 (9%)
37	SQD	D2	402	-	24,25,54	1.94	4 (16%)	31,35,65	1.66	6 (19%)
25	CLA	b2	624	-	65,73,73	1.48	5 (7%)	76,113,113	1.38	8 (10%)
25	CLA	B1	606	-	65,73,73	1.49	5 (7%)	76,113,113	1.37	8 (10%)
23	BCR	C2	502	-	41,41,41	0.70	0	56,56,56	1.88	12 (21%)
27	PHO	d2	408	-	51,69,69	1.73	7 (13%)	47,99,99	1.73	8 (17%)
35	LMT	L1	102	-	11,11,36	0.25	0	10,10,47	0.57	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
36	PL9	D2	408	-	55,55,55	0.62	1 (1%)	68,69,69	1.73	19 (27%)
25	CLA	B1	616	-	65,73,73	1.56	6 (9%)	76,113,113	1.32	8 (10%)
23	BCR	h2	101	-	41,41,41	0.68	0	56,56,56	1.79	14 (25%)
25	CLA	B1	613	-	65,73,73	1.54	7 (10%)	76,113,113	1.38	7 (9%)
25	CLA	C1	508	-	65,73,73	1.51	5 (7%)	76,113,113	1.35	6 (7%)
25	CLA	c2	506	-	61,69,73	1.57	6 (9%)	71,108,113	1.49	9 (12%)
25	CLA	B1	611	-	62,70,73	1.58	5 (8%)	72,109,113	1.36	8 (11%)
25	CLA	C1	514	-	45,53,73	1.80	5 (11%)	52,89,113	1.57	7 (13%)
35	LMT	m2	104	-	30,30,36	0.47	0	41,41,47	0.81	1 (2%)
25	CLA	C1	502	-	65,73,73	1.47	5 (7%)	76,113,113	1.40	8 (10%)
32	GOL	a2	415	-	5,5,5	0.36	0	5,5,5	0.39	0
31	BCT	A1	413	30	2,3,3	0.94	0	2,3,3	0.26	0
29	LMG	A2	412	-	29,29,55	1.07	2 (6%)	37,37,63	1.10	2 (5%)
34	DGD	H1	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.92	3 (3%)
36	PL9	d2	409	-	55,55,55	0.64	1 (1%)	68,69,69	1.72	16 (23%)
29	LMG	b1	621	-	38,38,55	1.11	2 (5%)	46,46,63	1.07	2 (4%)
25	CLA	B1	609	-	65,73,73	1.50	5 (7%)	76,113,113	1.61	11 (14%)
25	CLA	B1	617	-	65,73,73	1.48	5 (7%)	76,113,113	1.36	8 (10%)
29	LMG	c1	519	-	55,55,55	0.91	2 (3%)	63,63,63	0.95	2 (3%)
25	CLA	B1	614	-	65,73,73	1.48	6 (9%)	76,113,113	1.37	8 (10%)
23	BCR	b1	602	-	41,41,41	0.69	0	56,56,56	2.05	18 (32%)
25	CLA	B2	605	-	65,73,73	1.51	5 (7%)	76,113,113	1.38	7 (9%)
23	BCR	b2	601	-	41,41,41	0.70	0	56,56,56	1.97	16 (28%)

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	C1	506	-	1/1/15/20	15/37/115/115	-
23	BCR	B2	601	-	-	0/29/63/63	0/2/2/2
23	BCR	H2	103	-	-	3/17/34/63	0/1/1/2
25	CLA	D2	404	-	1/1/14/20	11/33/111/115	-
25	CLA	C2	518	-	1/1/10/20	4/8/86/115	-
29	LMG	d1	411	-	-	2/36/36/70	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	GOL	i1	101	-	-	2/4/4/4	-
33	LHG	D2	405	-	-	16/53/53/53	-
25	CLA	C1	511	-	1/1/15/20	12/37/115/115	-
25	CLA	c2	507	-	1/1/12/20	5/24/102/115	-
23	BCR	a1	401	-	-	2/29/63/63	0/2/2/2
23	BCR	B2	603	-	-	2/29/63/63	0/2/2/2
25	CLA	b2	615	-	1/1/14/20	8/31/109/115	-
29	LMG	a1	412	-	-	12/46/66/70	0/1/1/1
29	LMG	c2	519	-	-	3/20/40/70	0/1/1/1
23	BCR	b1	602	-	-	3/29/63/63	0/2/2/2
23	BCR	k1	101	-	-	5/29/63/63	0/2/2/2
25	CLA	b1	612	-	1/1/15/20	11/37/115/115	-
32	GOL	a1	406	-	-	2/4/4/4	-
33	LHG	D2	403	-	-	10/53/53/53	-
38	HEM	f1	101	6	-	5/12/54/54	-
33	LHG	a2	407	-	-	11/33/33/53	-
25	CLA	b1	604	-	1/1/15/20	14/37/115/115	-
29	LMG	b1	631	-	-	7/35/55/70	0/1/1/1
25	CLA	B2	617	-	1/1/15/20	7/37/115/115	-
25	CLA	C1	504	-	1/1/15/20	6/37/115/115	-
25	CLA	d1	406	-	1/1/15/20	14/37/115/115	-
23	BCR	b2	602	-	-	6/29/63/63	0/2/2/2
29	LMG	C2	515	-	-	0/18/38/70	0/1/1/1
25	CLA	b1	615	-	1/1/13/20	7/30/108/115	-
33	LHG	B1	621	-	-	11/53/53/53	-
35	LMT	m2	103	-	-	5/16/56/61	0/2/2/2
25	CLA	B2	610	-	1/1/15/20	6/37/115/115	-
25	CLA	c1	512	-	1/1/15/20	15/37/115/115	-
23	BCR	B1	603	-	-	1/29/63/63	0/2/2/2
25	CLA	C2	511	-	1/1/12/20	4/19/97/115	-
23	BCR	d2	401	-	-	8/29/63/63	0/2/2/2
25	CLA	B2	608	-	1/1/15/20	18/37/115/115	-
25	CLA	A2	404	-	1/1/12/20	8/21/99/115	-
25	CLA	d2	404	-	1/1/12/20	2/19/97/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	BCR	A1	401	-	-	2/29/63/63	0/2/2/2
25	CLA	c2	511	-	1/1/15/20	15/37/115/115	-
25	CLA	c2	512	3	1/1/15/20	13/37/115/115	-
29	LMG	A1	412	-	-	7/36/56/70	0/1/1/1
23	BCR	K2	104	-	-	2/12/46/63	0/2/2/2
38	HEM	e2	101	5,6	-	3/12/54/54	-
25	CLA	B1	618	-	1/1/13/20	3/29/107/115	-
25	CLA	B1	607	-	1/1/14/20	7/31/109/115	-
25	CLA	C2	513	-	1/1/12/20	0/23/101/115	-
25	CLA	c2	513	-	1/1/12/20	7/24/102/115	-
23	BCR	F2	401	-	-	9/29/63/63	0/2/2/2
25	CLA	c2	510	-	1/1/12/20	8/24/102/115	-
25	CLA	C2	504	-	1/1/11/20	8/15/93/115	-
23	BCR	J1	101	-	-	9/29/63/63	0/2/2/2
23	BCR	c1	502	-	-	5/29/63/63	0/2/2/2
33	LHG	L1	101	-	-	14/45/45/53	-
25	CLA	C1	510	-	1/1/15/20	8/37/115/115	-
34	DGD	c1	518	-	-	10/51/91/95	0/2/2/2
25	CLA	b1	611	-	1/1/15/20	6/37/115/115	-
23	BCR	B1	601	-	-	0/29/63/63	0/2/2/2
27	PHO	a1	411	-	-	5/37/103/103	0/5/6/6
33	LHG	a1	407	-	-	14/47/47/53	-
25	CLA	B2	607	-	1/1/15/20	7/37/115/115	-
25	CLA	C1	512	-	1/1/15/20	14/37/115/115	-
25	CLA	A1	404	-	1/1/12/20	7/21/99/115	-
29	LMG	B1	626	-	-	12/43/63/70	0/1/1/1
25	CLA	b1	617	-	1/1/15/20	3/37/115/115	-
25	CLA	C1	505	-	1/1/15/20	11/37/115/115	-
23	BCR	B2	602	-	-	2/29/63/63	0/2/2/2
33	LHG	d1	402	-	-	12/36/36/53	-
25	CLA	B2	611	-	1/1/15/20	8/37/115/115	-
25	CLA	B1	619	40	1/1/15/20	16/37/115/115	-
25	CLA	C1	509	-	1/1/15/20	18/37/115/115	-
25	CLA	b1	610	-	1/1/15/20	2/37/115/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	LHG	D1	404	-	-	11/53/53/53	-
35	LMT	b2	623	-	-	1/21/61/61	0/2/2/2
29	LMG	D1	406	-	-	4/30/50/70	0/1/1/1
29	LMG	B1	622	-	-	2/26/46/70	0/1/1/1
25	CLA	B2	609	-	1/1/15/20	9/37/115/115	-
25	CLA	c1	505	-	1/1/15/20	5/37/115/115	-
25	CLA	d1	401	-	1/1/15/20	10/37/115/115	-
25	CLA	B2	615	-	1/1/15/20	11/37/115/115	-
32	GOL	C2	514	-	-	2/4/4/4	-
25	CLA	D1	403	-	1/1/12/20	4/21/99/115	-
38	HEM	v1	201	16	-	3/12/54/54	-
34	DGD	c2	517	-	-	7/51/91/95	0/2/2/2
25	CLA	b1	614	-	1/1/15/20	14/37/115/115	-
25	CLA	d1	404	40	1/1/15/20	8/37/115/115	-
25	CLA	b2	606	-	1/1/15/20	14/37/115/115	-
33	LHG	B2	627	-	-	8/46/46/53	-
25	CLA	b2	620	40	1/1/15/20	20/37/115/115	-
25	CLA	b2	616	-	1/1/14/20	9/31/109/115	-
25	CLA	C2	508	-	1/1/12/20	7/19/97/115	-
34	DGD	c1	514	-	-	9/40/80/95	0/2/2/2
34	DGD	H2	101	-	-	7/51/91/95	0/2/2/2
35	LMT	C1	519	-	-	2/21/61/61	0/2/2/2
33	LHG	b2	625	-	-	5/47/47/53	-
35	LMT	T1	101	-	-	0/9/9/61	-
25	CLA	C2	506	-	1/1/15/20	14/37/115/115	-
25	CLA	b2	612	-	1/1/15/20	10/37/115/115	-
25	CLA	B1	610	-	1/1/15/20	13/37/115/115	-
25	CLA	B2	612	-	1/1/15/20	9/37/115/115	-
27	PHO	D1	407	-	-	3/35/101/103	0/5/6/6
25	CLA	B2	604	-	1/1/10/20	4/8/86/115	-
25	CLA	a2	405	-	1/1/15/20	13/37/115/115	-
25	CLA	b1	620	-	1/1/15/20	16/37/115/115	-
25	CLA	C2	509	-	1/1/15/20	14/37/115/115	-
25	CLA	a2	404	-	1/1/15/20	7/37/115/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	A2	403	-	1/1/14/20	7/33/111/115	-
29	LMG	F2	402	-	-	2/30/50/70	0/1/1/1
25	CLA	c1	513	3	1/1/14/20	5/31/109/115	-
25	CLA	c1	516	-	1/1/15/20	11/37/115/115	-
29	LMG	C1	520	-	-	8/43/63/70	0/1/1/1
25	CLA	B2	618	-	1/1/14/20	4/31/109/115	-
25	CLA	a2	413	-	1/1/12/20	5/19/97/115	-
25	CLA	a1	405	-	1/1/12/20	6/19/97/115	-
25	CLA	c2	508	40	1/1/15/20	14/37/115/115	-
23	BCR	C1	521	-	-	0/29/63/63	0/2/2/2
34	DGD	C1	515	-	-	10/41/81/95	0/2/2/2
25	CLA	a1	404	-	1/1/14/20	7/31/109/115	-
25	CLA	B2	613	-	1/1/15/20	12/37/115/115	-
34	DGD	C1	517	-	-	6/53/93/95	0/2/2/2
25	CLA	B2	619	-	1/1/15/20	17/37/115/115	-
25	CLA	C2	516	-	1/1/11/20	6/15/93/115	-
35	LMT	m1	101	-	-	8/21/61/61	0/2/2/2
32	GOL	c1	521	-	-	2/4/4/4	-
29	LMG	d2	407	-	-	3/21/41/70	0/1/1/1
25	CLA	C1	507	-	1/1/15/20	20/37/115/115	-
35	LMT	a2	406	-	-	5/21/61/61	0/2/2/2
25	CLA	C1	513	3	1/1/14/20	13/33/111/115	-
25	CLA	b1	616	-	1/1/15/20	15/37/115/115	-
33	LHG	L2	101	-	-	16/53/53/53	-
34	DGD	h2	102	-	-	9/51/91/95	0/2/2/2
27	PHO	A2	407	-	-	8/37/103/103	0/5/6/6
25	CLA	b1	619	-	1/1/15/20	17/37/115/115	-
29	LMG	d1	408	-	-	2/28/48/70	0/1/1/1
25	CLA	C2	507	-	1/1/11/20	6/13/91/115	-
25	CLA	B2	606	-	1/1/15/20	11/37/115/115	-
25	CLA	d2	405	-	1/1/15/20	9/37/115/115	-
25	CLA	A2	402	-	1/1/15/20	10/37/115/115	-
29	LMG	A1	410	-	-	4/38/58/70	0/1/1/1
35	LMT	i2	102	-	-	0/4/4/61	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	c2	502	-	1/1/15/20	13/37/115/115	-
23	BCR	j2	102	-	-	9/29/63/63	0/2/2/2
25	CLA	B1	612	-	1/1/15/20	9/37/115/115	-
25	CLA	a1	403	-	1/1/15/20	6/37/115/115	-
29	LMG	B2	620	-	-	8/35/55/70	0/1/1/1
25	CLA	c1	508	-	1/1/12/20	5/19/97/115	-
25	CLA	D2	406	-	1/1/15/20	14/37/115/115	-
25	CLA	b2	604	-	1/1/10/20	4/10/88/115	-
25	CLA	D1	402	-	1/1/15/20	7/37/115/115	-
25	CLA	b2	618	-	1/1/15/20	4/37/115/115	-
23	BCR	z2	101	-	-	0/29/63/63	0/2/2/2
25	CLA	A1	403	-	1/1/15/20	10/37/115/115	-
25	CLA	C2	510	-	1/1/11/20	4/13/91/115	-
25	CLA	c2	509	-	1/1/15/20	11/37/115/115	-
34	DGD	C1	516	-	-	9/51/91/95	0/2/2/2
38	HEM	E2	101	5	-	2/12/54/54	-
25	CLA	A1	405	-	1/1/13/20	3/25/103/115	-
27	PHO	A1	408	-	-	7/37/103/103	0/5/6/6
36	PL9	D1	408	-	-	7/53/73/73	0/1/1/1
35	LMT	b2	621	-	-	1/21/61/61	0/2/2/2
25	CLA	b2	613	-	1/1/15/20	6/37/115/115	-
25	CLA	c2	505	-	1/1/15/20	14/37/115/115	-
25	CLA	b2	611	-	1/1/15/20	5/37/115/115	-
23	BCR	H1	102	-	-	3/15/32/63	0/1/1/2
25	CLA	c2	515	-	1/1/11/20	5/15/93/115	-
25	CLA	b2	619	-	1/1/13/20	10/30/108/115	-
33	LHG	A2	405	-	-	10/37/37/53	-
25	CLA	b1	609	-	1/1/15/20	11/37/115/115	-
25	CLA	b2	617	-	1/1/15/20	16/37/115/115	-
25	CLA	C2	505	-	1/1/15/20	15/37/115/115	-
32	GOL	B1	620	-	-	2/4/4/4	-
25	CLA	b1	613	-	1/1/15/20	6/37/115/115	-
37	SQD	B2	623	-	-	2/40/60/69	0/1/1/1
23	BCR	A2	401	-	-	0/29/63/63	0/2/2/2
34	DGD	c2	514	-	-	16/51/91/95	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	LMT	M1	103	-	-	3/15/35/61	0/1/1/2
23	BCR	a2	402	-	-	3/29/63/63	0/2/2/2
23	BCR	d1	405	-	-	8/29/63/63	0/2/2/2
27	PHO	D2	407	-	-	6/37/103/103	0/5/6/6
25	CLA	B1	615	-	1/1/15/20	15/37/115/115	-
29	LMG	M1	101	-	-	4/31/31/70	-
33	LHG	d2	403	-	-	13/53/53/53	-
23	BCR	h1	102	-	-	5/29/63/63	0/2/2/2
29	LMG	B2	621	-	-	8/31/51/70	0/1/1/1
25	CLA	c1	507	-	1/1/15/20	16/37/115/115	-
34	DGD	c1	520	-	-	8/51/91/95	0/2/2/2
34	DGD	c2	516	-	-	6/41/81/95	0/2/2/2
25	CLA	C1	503	-	1/1/14/20	11/31/109/115	-
23	BCR	k2	501	-	-	0/29/63/63	0/2/2/2
23	BCR	c2	501	-	-	14/29/63/63	0/2/2/2
25	CLA	b1	606	-	1/1/15/20	17/37/115/115	-
25	CLA	b1	608	-	1/1/15/20	15/37/115/115	-
29	LMG	j2	101	-	-	7/45/65/70	0/1/1/1
37	SQD	D1	409	-	-	2/29/49/69	0/1/1/1
25	CLA	b2	608	-	1/1/15/20	12/37/115/115	-
25	CLA	c1	504	-	1/1/15/20	7/37/115/115	-
29	LMG	I2	101	-	-	3/29/49/70	0/1/1/1
25	CLA	D2	401	-	1/1/15/20	6/37/115/115	-
27	PHO	d1	403	-	-	3/37/103/103	0/5/6/6
29	LMG	a2	412	-	-	6/39/59/70	0/1/1/1
35	LMT	c1	517	-	-	1/19/59/61	0/2/2/2
23	BCR	B1	602	-	-	5/29/63/63	0/2/2/2
34	DGD	h1	101	-	-	9/51/91/95	0/2/2/2
25	CLA	b1	605	-	1/1/15/20	7/37/115/115	-
23	BCR	b1	601	-	-	0/29/63/63	0/2/2/2
23	BCR	c1	501	-	-	0/29/63/63	0/2/2/2
33	LHG	l2	101	-	-	20/48/48/53	-
35	LMT	l1	101	-	-	3/15/35/61	0/1/1/2
25	CLA	c1	509	40	1/1/15/20	15/37/115/115	-
25	CLA	b2	609	-	1/1/14/20	10/33/111/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	BCR	b2	603	-	-	0/29/63/63	0/2/2/2
32	GOL	c2	518	-	-	2/4/4/4	-
32	GOL	C1	518	-	-	2/4/4/4	-
38	HEM	v2	201	16	-	1/12/54/54	-
34	DGD	C2	512	-	-	1/20/60/95	0/2/2/2
25	CLA	c1	515	-	1/1/13/20	9/25/103/115	-
29	LMG	b2	622	-	-	0/34/54/70	0/1/1/1
25	CLA	B1	608	-	1/1/15/20	14/37/115/115	-
25	CLA	c1	503	-	1/1/15/20	15/37/115/115	-
23	BCR	D1	401	-	-	8/29/63/63	0/2/2/2
23	BCR	K2	102	-	-	7/29/63/63	0/2/2/2
25	CLA	c2	504	-	1/1/15/20	10/37/115/115	-
25	CLA	c1	510	-	1/1/15/20	10/37/115/115	-
25	CLA	B1	605	-	1/1/15/20	9/37/115/115	-
25	CLA	B2	614	-	1/1/15/20	12/37/115/115	-
25	CLA	c2	503	-	1/1/15/20	13/37/115/115	-
27	PHO	a2	416	-	-	6/37/103/103	0/5/6/6
38	HEM	V2	201	16	-	2/12/54/54	-
33	LHG	D1	405	-	-	14/53/53/53	-
25	CLA	d2	402	-	1/1/15/20	11/37/115/115	-
36	PL9	d1	409	-	-	9/53/73/73	0/1/1/1
25	CLA	b1	607	-	1/1/15/20	10/37/115/115	-
23	BCR	b1	603	-	-	4/29/63/63	0/2/2/2
23	BCR	C1	501	-	-	4/29/63/63	0/2/2/2
38	HEM	V1	201	16	-	3/12/54/54	-
25	CLA	C2	503	-	1/1/15/20	16/37/115/115	-
25	CLA	c1	506	40	1/1/15/20	15/37/115/115	-
25	CLA	c1	511	-	1/1/15/20	10/37/115/115	-
32	GOL	b1	618	-	-	4/4/4/4	-
33	LHG	b1	622	-	-	14/53/53/53	-
23	BCR	K1	101	-	-	5/26/43/63	0/1/1/2
25	CLA	b2	610	-	1/1/15/20	7/37/115/115	-
25	CLA	K2	101	-	1/1/13/20	11/25/103/115	-
33	LHG	d2	406	-	-	10/53/53/53	-
35	LMT	M1	102	-	-	1/8/8/61	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	LMG	b1	624	-	-	3/34/54/70	0/1/1/1
25	CLA	B1	604	-	1/1/10/20	4/10/88/115	-
33	LHG	d1	407	-	-	14/53/53/53	-
37	SQD	b2	605	-	-	10/40/60/69	0/1/1/1
25	CLA	A1	406	-	1/1/15/20	11/37/115/115	-
33	LHG	l1	102	-	-	18/53/53/53	-
38	HEM	E1	101	5,6	-	3/12/54/54	-
25	CLA	b2	614	-	1/1/15/20	17/37/115/115	-
37	SQD	D2	402	-	-	4/18/38/69	0/1/1/1
25	CLA	b2	624	-	1/1/15/20	9/37/115/115	-
25	CLA	B1	606	-	1/1/15/20	18/37/115/115	-
23	BCR	C2	502	-	-	0/29/63/63	0/2/2/2
27	PHO	d2	408	-	-	0/37/103/103	0/5/6/6
35	LMT	L1	102	-	-	1/9/9/61	-
36	PL9	D2	408	-	-	7/53/73/73	0/1/1/1
25	CLA	B1	616	-	1/1/15/20	9/37/115/115	-
23	BCR	h2	101	-	-	4/29/63/63	0/2/2/2
25	CLA	B1	613	-	1/1/15/20	13/37/115/115	-
25	CLA	C1	508	-	1/1/15/20	11/37/115/115	-
25	CLA	c2	506	-	1/1/14/20	11/33/111/115	-
25	CLA	B1	611	-	-	10/34/112/115	-
25	CLA	C1	514	-	1/1/11/20	2/13/91/115	-
35	LMT	m2	104	-	-	4/15/55/61	0/2/2/2
25	CLA	C1	502	-	1/1/15/20	15/37/115/115	-
32	GOL	a2	415	-	-	2/4/4/4	-
29	LMG	A2	412	-	-	5/23/43/70	0/1/1/1
34	DGD	H1	101	-	-	12/51/91/95	0/2/2/2
36	PL9	d2	409	-	-	8/53/73/73	0/1/1/1
29	LMG	b1	621	-	-	6/33/53/70	0/1/1/1
25	CLA	B1	609	-	1/1/15/20	10/37/115/115	-
25	CLA	B1	617	-	1/1/15/20	12/37/115/115	-
29	LMG	c1	519	-	-	9/50/70/70	0/1/1/1
25	CLA	B1	614	-	1/1/15/20	12/37/115/115	-
25	CLA	B2	616	-	1/1/12/20	7/24/102/115	-
25	CLA	B2	605	-	1/1/15/20	9/37/115/115	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	BCR	b2	601	-	-	0/29/63/63	0/2/2/2

All (1015) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d1	404	CLA	C4B-NB	8.30	1.42	1.35
25	A2	402	CLA	C4B-NB	8.28	1.42	1.35
25	A2	404	CLA	C4B-NB	8.24	1.42	1.35
25	b1	607	CLA	C4B-NB	8.19	1.42	1.35
25	A1	406	CLA	C4B-NB	8.16	1.42	1.35
25	B2	618	CLA	C4B-NB	8.09	1.42	1.35
38	E1	101	HEM	C3D-C2D	8.08	1.53	1.36
38	e2	101	HEM	C3D-C2D	8.07	1.53	1.36
38	E2	101	HEM	C3D-C2D	8.05	1.53	1.36
38	V1	201	HEM	C3D-C2D	8.04	1.53	1.36
38	V2	201	HEM	C3D-C2D	8.04	1.53	1.36
25	B1	616	CLA	C4B-NB	8.03	1.42	1.35
38	f1	101	HEM	C3D-C2D	8.03	1.53	1.36
38	v1	201	HEM	C3D-C2D	8.01	1.53	1.36
38	v2	201	HEM	C3D-C2D	7.99	1.53	1.36
25	a1	404	CLA	C4B-NB	7.98	1.42	1.35
25	c2	510	CLA	C4B-NB	7.98	1.42	1.35
25	B1	612	CLA	C4B-NB	7.94	1.42	1.35
25	b1	604	CLA	C4B-NB	7.94	1.42	1.35
25	C2	513	CLA	C4B-NB	7.92	1.42	1.35
25	b2	608	CLA	C4B-NB	7.92	1.42	1.35
25	a1	403	CLA	C4B-NB	7.92	1.42	1.35
25	A1	405	CLA	C4B-NB	7.91	1.42	1.35
25	b2	612	CLA	C4B-NB	7.91	1.42	1.35
25	A2	403	CLA	C4B-NB	7.90	1.42	1.35
25	B1	611	CLA	C4B-NB	7.88	1.42	1.35
25	A1	403	CLA	C4B-NB	7.87	1.42	1.35
25	b1	619	CLA	C4B-NB	7.86	1.42	1.35
25	C1	507	CLA	C4B-NB	7.84	1.42	1.35
25	C1	504	CLA	C4B-NB	7.83	1.42	1.35
25	b1	620	CLA	C4B-NB	7.83	1.42	1.35
25	b2	616	CLA	C4B-NB	7.83	1.42	1.35
25	b2	619	CLA	C4B-NB	7.83	1.42	1.35
25	B2	607	CLA	C4B-NB	7.80	1.42	1.35
25	B1	613	CLA	C4B-NB	7.80	1.42	1.35
25	d1	401	CLA	C4B-NB	7.80	1.42	1.35
25	D2	406	CLA	C4B-NB	7.78	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c2	506	CLA	C4B-NB	7.77	1.42	1.35
25	b1	609	CLA	C4B-NB	7.77	1.42	1.35
25	B2	613	CLA	C4B-NB	7.76	1.42	1.35
25	C1	510	CLA	C4B-NB	7.76	1.42	1.35
25	B2	616	CLA	C4B-NB	7.75	1.42	1.35
25	B1	618	CLA	C4B-NB	7.73	1.42	1.35
25	B1	604	CLA	C4B-NB	7.73	1.42	1.35
25	B1	619	CLA	C4B-NB	7.73	1.42	1.35
25	C2	507	CLA	C4B-NB	7.73	1.42	1.35
25	d1	406	CLA	C4B-NB	7.72	1.42	1.35
25	C1	511	CLA	C4B-NB	7.71	1.42	1.35
25	b2	615	CLA	C4B-NB	7.70	1.42	1.35
25	B2	615	CLA	C4B-NB	7.70	1.42	1.35
25	c1	506	CLA	C4B-NB	7.69	1.42	1.35
25	c1	508	CLA	C4B-NB	7.69	1.42	1.35
25	c2	503	CLA	C4B-NB	7.69	1.42	1.35
25	b2	620	CLA	C4B-NB	7.69	1.42	1.35
25	B1	607	CLA	C4B-NB	7.69	1.42	1.35
25	d2	402	CLA	C4B-NB	7.68	1.42	1.35
25	b1	617	CLA	C4B-NB	7.67	1.42	1.35
25	c1	515	CLA	C4B-NB	7.67	1.42	1.35
25	D2	404	CLA	C4B-NB	7.66	1.42	1.35
25	b2	618	CLA	C4B-NB	7.66	1.42	1.35
25	c2	508	CLA	C4B-NB	7.65	1.42	1.35
25	d2	404	CLA	C4B-NB	7.65	1.42	1.35
25	B1	610	CLA	C4B-NB	7.65	1.42	1.35
25	C2	505	CLA	C4B-NB	7.64	1.42	1.35
25	C1	513	CLA	C4B-NB	7.64	1.42	1.35
25	c2	502	CLA	C4B-NB	7.64	1.42	1.35
25	c1	513	CLA	C4B-NB	7.62	1.42	1.35
25	C2	518	CLA	C4B-NB	7.62	1.42	1.35
25	B1	605	CLA	C4B-NB	7.61	1.42	1.35
25	C1	508	CLA	C4B-NB	7.61	1.42	1.35
25	c1	505	CLA	C4B-NB	7.61	1.42	1.35
25	B2	610	CLA	C4B-NB	7.61	1.42	1.35
25	b2	613	CLA	C4B-NB	7.61	1.42	1.35
25	b2	604	CLA	C4B-NB	7.60	1.42	1.35
25	C2	503	CLA	C4B-NB	7.60	1.42	1.35
25	B1	614	CLA	C4B-NB	7.60	1.42	1.35
25	c2	507	CLA	C4B-NB	7.58	1.42	1.35
25	A1	404	CLA	C4B-NB	7.58	1.42	1.35
25	c2	511	CLA	C4B-NB	7.58	1.42	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b1	610	CLA	C4B-NB	7.57	1.42	1.35
25	c2	504	CLA	C4B-NB	7.57	1.42	1.35
25	b1	608	CLA	C4B-NB	7.56	1.42	1.35
25	B2	604	CLA	C4B-NB	7.56	1.42	1.35
25	B2	606	CLA	C4B-NB	7.56	1.42	1.35
25	C2	508	CLA	C4B-NB	7.56	1.42	1.35
25	c2	513	CLA	C4B-NB	7.55	1.41	1.35
25	b1	605	CLA	C4B-NB	7.55	1.41	1.35
25	B2	617	CLA	C4B-NB	7.55	1.41	1.35
25	B2	614	CLA	C4B-NB	7.55	1.41	1.35
25	C2	509	CLA	C4B-NB	7.55	1.41	1.35
25	b1	612	CLA	C4B-NB	7.55	1.41	1.35
25	b2	617	CLA	C4B-NB	7.55	1.41	1.35
25	d2	405	CLA	C4B-NB	7.55	1.41	1.35
25	B2	605	CLA	C4B-NB	7.54	1.41	1.35
25	a2	413	CLA	C4B-NB	7.54	1.41	1.35
25	c2	512	CLA	C4B-NB	7.54	1.41	1.35
25	B1	615	CLA	C4B-NB	7.53	1.41	1.35
25	B2	611	CLA	C4B-NB	7.52	1.41	1.35
25	c1	512	CLA	C4B-NB	7.52	1.41	1.35
25	B2	609	CLA	C4B-NB	7.51	1.41	1.35
25	D2	401	CLA	C4B-NB	7.51	1.41	1.35
25	c1	507	CLA	C4B-NB	7.51	1.41	1.35
25	B2	612	CLA	C4B-NB	7.51	1.41	1.35
25	c1	510	CLA	C4B-NB	7.51	1.41	1.35
25	K2	101	CLA	C4B-NB	7.50	1.41	1.35
25	b2	606	CLA	C4B-NB	7.49	1.41	1.35
25	B1	609	CLA	C4B-NB	7.49	1.41	1.35
25	c1	509	CLA	C4B-NB	7.48	1.41	1.35
25	B2	619	CLA	C4B-NB	7.48	1.41	1.35
25	C1	514	CLA	C4B-NB	7.48	1.41	1.35
25	C2	506	CLA	C4B-NB	7.48	1.41	1.35
25	C2	511	CLA	C4B-NB	7.48	1.41	1.35
25	B1	608	CLA	C4B-NB	7.47	1.41	1.35
25	b2	610	CLA	C4B-NB	7.47	1.41	1.35
25	b2	611	CLA	C4B-NB	7.47	1.41	1.35
25	C1	506	CLA	C4B-NB	7.45	1.41	1.35
25	b1	614	CLA	C4B-NB	7.45	1.41	1.35
25	a2	404	CLA	C4B-NB	7.45	1.41	1.35
25	B2	608	CLA	C4B-NB	7.44	1.41	1.35
25	C1	509	CLA	C4B-NB	7.44	1.41	1.35
25	b2	614	CLA	C4B-NB	7.44	1.41	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b1	611	CLA	C4B-NB	7.44	1.41	1.35
25	D1	403	CLA	C4B-NB	7.43	1.41	1.35
25	c2	515	CLA	C4B-NB	7.43	1.41	1.35
25	c2	509	CLA	C4B-NB	7.43	1.41	1.35
25	B1	617	CLA	C4B-NB	7.42	1.41	1.35
25	b2	624	CLA	C4B-NB	7.42	1.41	1.35
25	c1	516	CLA	C4B-NB	7.42	1.41	1.35
25	b1	606	CLA	C4B-NB	7.41	1.41	1.35
25	b1	613	CLA	C4B-NB	7.41	1.41	1.35
25	C2	504	CLA	C4B-NB	7.41	1.41	1.35
25	C2	516	CLA	C4B-NB	7.41	1.41	1.35
25	C1	505	CLA	C4B-NB	7.40	1.41	1.35
25	b2	609	CLA	C4B-NB	7.40	1.41	1.35
25	B1	606	CLA	C4B-NB	7.38	1.41	1.35
25	b1	616	CLA	C4B-NB	7.38	1.41	1.35
25	C1	512	CLA	C4B-NB	7.37	1.41	1.35
25	C2	510	CLA	C4B-NB	7.37	1.41	1.35
25	a1	405	CLA	C4B-NB	7.37	1.41	1.35
25	c2	505	CLA	C4B-NB	7.36	1.41	1.35
25	C1	503	CLA	C4B-NB	7.36	1.41	1.35
25	b1	615	CLA	C4B-NB	7.33	1.41	1.35
25	c1	511	CLA	C4B-NB	7.33	1.41	1.35
25	C1	502	CLA	C4B-NB	7.32	1.41	1.35
25	D1	402	CLA	C4B-NB	7.28	1.41	1.35
25	c1	504	CLA	C4B-NB	7.26	1.41	1.35
25	a2	405	CLA	C4B-NB	7.14	1.41	1.35
25	c1	503	CLA	C4B-NB	7.05	1.41	1.35
37	D2	402	SQD	O7-S	6.36	1.63	1.45
29	c2	519	LMG	O7-C10	5.61	1.45	1.33
27	D1	407	PHO	C3B-C2B	5.47	1.48	1.40
27	d1	403	PHO	C3B-C2B	5.42	1.47	1.40
27	D2	407	PHO	C3B-C2B	5.41	1.47	1.40
27	d2	408	PHO	C3B-C2B	5.37	1.47	1.40
27	a1	411	PHO	C3B-C2B	5.29	1.47	1.40
27	d2	408	PHO	O2D-CGD	5.29	1.46	1.33
27	d1	403	PHO	O2D-CGD	5.22	1.45	1.33
27	D1	407	PHO	O2D-CGD	5.21	1.45	1.33
27	D2	407	PHO	O2D-CGD	5.18	1.45	1.33
27	a2	416	PHO	O2D-CGD	5.16	1.45	1.33
27	a1	411	PHO	O2D-CGD	5.15	1.45	1.33
27	A2	407	PHO	O2D-CGD	5.12	1.45	1.33
27	A1	408	PHO	C3B-C2B	5.08	1.47	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A2	407	PHO	C3B-C2B	5.07	1.47	1.40
27	a2	416	PHO	C3B-C2B	5.04	1.47	1.40
27	A1	408	PHO	O2D-CGD	5.03	1.45	1.33
27	d1	403	PHO	OBD-CAD	4.86	1.29	1.22
29	d2	407	LMG	O7-C10	4.85	1.46	1.35
27	D2	407	PHO	OBD-CAD	4.81	1.29	1.22
34	C2	512	DGD	O2G-C1B	4.80	1.46	1.35
37	D2	402	SQD	O47-C7	4.77	1.46	1.35
27	D1	407	PHO	OBD-CAD	4.75	1.28	1.22
37	D1	409	SQD	O47-C7	4.73	1.45	1.35
38	v2	201	HEM	C3C-C2C	-4.69	1.33	1.40
27	d2	408	PHO	OBD-CAD	4.68	1.28	1.22
37	B2	623	SQD	O8-S	4.66	1.64	1.47
38	V1	201	HEM	C3C-C2C	-4.64	1.33	1.40
37	D1	409	SQD	O8-S	4.63	1.64	1.47
27	a2	416	PHO	OBD-CAD	4.63	1.28	1.22
38	v1	201	HEM	C3C-C2C	-4.62	1.34	1.40
37	b2	605	SQD	O8-S	4.62	1.63	1.47
27	A2	407	PHO	OBD-CAD	4.61	1.28	1.22
27	A1	408	PHO	OBD-CAD	4.58	1.28	1.22
38	V2	201	HEM	C3C-C2C	-4.47	1.34	1.40
27	a1	411	PHO	OBD-CAD	4.41	1.28	1.22
29	a1	412	LMG	O8-C28	4.39	1.46	1.33
29	B1	626	LMG	O8-C28	4.38	1.46	1.33
29	A1	412	LMG	O8-C28	4.38	1.46	1.33
29	b1	621	LMG	O8-C28	4.38	1.46	1.33
29	b1	621	LMG	O7-C10	4.38	1.46	1.34
34	c1	514	DGD	O1G-C1A	4.37	1.46	1.33
29	b2	622	LMG	O8-C28	4.33	1.46	1.33
33	B2	627	LHG	O8-C23	4.33	1.46	1.33
34	c2	517	DGD	O1G-C1A	4.32	1.46	1.33
29	A1	410	LMG	O8-C28	4.31	1.45	1.33
34	c1	520	DGD	O1G-C1A	4.30	1.45	1.33
34	C1	515	DGD	O1G-C1A	4.30	1.45	1.33
29	b1	624	LMG	O8-C28	4.30	1.45	1.33
29	I2	101	LMG	O8-C28	4.30	1.45	1.33
29	b1	631	LMG	O7-C10	4.29	1.46	1.34
37	B2	623	SQD	O48-C23	4.29	1.45	1.33
29	d2	407	LMG	O8-C28	4.29	1.45	1.33
29	j2	101	LMG	O8-C28	4.28	1.45	1.33
29	b1	631	LMG	O8-C28	4.28	1.45	1.33
29	d1	408	LMG	O8-C28	4.28	1.45	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	h1	101	DGD	O1G-C1A	4.28	1.45	1.33
29	c2	519	LMG	O8-C28	4.27	1.45	1.33
29	C1	520	LMG	O8-C28	4.26	1.45	1.33
37	b2	605	SQD	O47-C7	4.26	1.46	1.34
29	d1	411	LMG	O8-C28	4.26	1.45	1.33
33	b2	625	LHG	O8-C23	4.26	1.45	1.33
27	d1	403	PHO	O2A-CGA	4.26	1.45	1.33
33	a1	407	LHG	O8-C23	4.26	1.45	1.33
29	F2	402	LMG	O8-C28	4.25	1.45	1.33
33	d1	402	LHG	O8-C23	4.25	1.45	1.33
33	a1	407	LHG	O7-C7	4.25	1.46	1.34
29	b1	624	LMG	O7-C10	4.25	1.46	1.34
29	c1	519	LMG	O8-C28	4.25	1.45	1.33
29	B1	622	LMG	O8-C28	4.24	1.45	1.33
33	a2	407	LHG	O7-C7	4.24	1.46	1.34
27	d1	403	PHO	C3D-C2D	4.24	1.47	1.39
29	M1	101	LMG	O8-C28	4.24	1.45	1.33
29	c1	519	LMG	O7-C10	4.24	1.46	1.34
37	D1	409	SQD	O48-C23	4.24	1.45	1.33
34	c2	516	DGD	O1G-C1A	4.24	1.45	1.33
37	b2	605	SQD	O48-C23	4.24	1.45	1.33
29	B1	626	LMG	O7-C10	4.23	1.46	1.34
33	l1	102	LHG	O8-C23	4.23	1.45	1.33
34	C1	517	DGD	O1G-C1A	4.23	1.45	1.33
33	d2	403	LHG	O8-C23	4.23	1.45	1.33
34	h2	102	DGD	O1G-C1A	4.22	1.45	1.33
33	D1	405	LHG	O8-C23	4.21	1.45	1.33
33	A2	405	LHG	O7-C7	4.21	1.46	1.34
34	H2	101	DGD	O1G-C1A	4.21	1.45	1.33
27	d2	408	PHO	O2A-CGA	4.21	1.45	1.33
29	B2	620	LMG	O8-C28	4.21	1.45	1.33
34	c2	514	DGD	O1G-C1A	4.20	1.45	1.33
33	D1	404	LHG	O8-C23	4.20	1.45	1.33
29	D1	406	LMG	O8-C28	4.20	1.45	1.33
33	L2	101	LHG	O8-C23	4.20	1.45	1.33
34	H1	101	DGD	O2G-C1B	4.20	1.46	1.34
34	c1	518	DGD	O1G-C1A	4.20	1.45	1.33
29	A2	412	LMG	O7-C10	4.20	1.46	1.34
27	D1	407	PHO	C3D-C2D	4.20	1.47	1.39
34	H1	101	DGD	O1G-C1A	4.20	1.45	1.33
29	B2	620	LMG	O7-C10	4.20	1.46	1.34
29	a2	412	LMG	O8-C28	4.19	1.45	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	M1	101	LMG	O7-C10	4.19	1.46	1.34
29	F2	402	LMG	O7-C10	4.19	1.46	1.34
27	a2	416	PHO	O2A-CGA	4.19	1.45	1.33
29	d1	411	LMG	O7-C10	4.18	1.46	1.34
25	b1	608	CLA	C1D-ND	4.18	1.42	1.37
27	D1	407	PHO	O2A-CGA	4.17	1.45	1.33
34	H2	101	DGD	O2G-C1B	4.17	1.46	1.34
33	B1	621	LHG	O8-C23	4.17	1.45	1.33
33	l2	101	LHG	O8-C23	4.17	1.45	1.33
29	C2	515	LMG	O7-C10	4.17	1.46	1.34
29	I2	101	LMG	O7-C10	4.16	1.46	1.34
34	c2	516	DGD	O2G-C1B	4.16	1.46	1.34
33	d1	402	LHG	O7-C7	4.15	1.46	1.34
34	C1	516	DGD	O1G-C1A	4.15	1.45	1.33
29	a1	412	LMG	O7-C10	4.15	1.46	1.34
25	B1	611	CLA	C1D-ND	4.15	1.42	1.37
33	b2	625	LHG	O7-C7	4.14	1.46	1.34
29	a2	412	LMG	O7-C10	4.14	1.46	1.34
33	d2	406	LHG	O8-C23	4.14	1.45	1.33
33	D2	405	LHG	O8-C23	4.14	1.45	1.33
33	l2	101	LHG	O7-C7	4.14	1.46	1.34
33	A2	405	LHG	O8-C23	4.14	1.45	1.33
37	B2	623	SQD	O47-C7	4.13	1.46	1.34
33	L1	101	LHG	O8-C23	4.13	1.45	1.33
34	c2	514	DGD	O2G-C1B	4.13	1.45	1.34
34	h2	102	DGD	O2G-C1B	4.13	1.45	1.34
33	D2	403	LHG	O8-C23	4.13	1.45	1.33
33	B2	627	LHG	O7-C7	4.12	1.45	1.34
29	C1	520	LMG	O7-C10	4.12	1.45	1.34
34	c1	518	DGD	O2G-C1B	4.12	1.45	1.34
27	D2	407	PHO	C3D-C2D	4.12	1.46	1.39
29	A1	410	LMG	O7-C10	4.11	1.45	1.34
25	B1	616	CLA	C1D-ND	4.11	1.42	1.37
29	b2	622	LMG	O7-C10	4.11	1.45	1.34
34	c2	517	DGD	O2G-C1B	4.11	1.45	1.34
29	A1	412	LMG	O7-C10	4.11	1.45	1.34
25	c2	502	CLA	C1D-ND	4.11	1.42	1.37
29	B1	622	LMG	O7-C10	4.11	1.45	1.34
25	B2	611	CLA	C1D-ND	4.10	1.42	1.37
34	c1	514	DGD	O2G-C1B	4.09	1.45	1.34
34	C1	515	DGD	O2G-C1B	4.09	1.45	1.34
25	c1	510	CLA	C1D-ND	4.09	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	A1	408	PHO	O2A-CGA	4.09	1.45	1.33
34	h1	101	DGD	O2G-C1B	4.09	1.45	1.34
29	B2	621	LMG	O7-C10	4.08	1.45	1.34
27	d2	408	PHO	C3D-C2D	4.08	1.46	1.39
33	D1	404	LHG	O7-C7	4.08	1.45	1.34
27	a1	411	PHO	C3D-C2D	4.08	1.46	1.39
25	d1	404	CLA	C1D-ND	4.08	1.42	1.37
33	d1	407	LHG	O8-C23	4.07	1.45	1.33
33	b1	622	LHG	O8-C23	4.07	1.45	1.33
25	B1	604	CLA	C1D-ND	4.06	1.42	1.37
29	j2	101	LMG	O7-C10	4.06	1.45	1.34
33	d2	403	LHG	O7-C7	4.06	1.45	1.34
25	C2	504	CLA	C1D-ND	4.06	1.42	1.37
25	C1	502	CLA	C1D-ND	4.06	1.42	1.37
25	B2	607	CLA	C1D-ND	4.05	1.42	1.37
34	C1	517	DGD	O2G-C1B	4.05	1.45	1.34
25	a1	404	CLA	C1D-ND	4.05	1.42	1.37
34	C1	516	DGD	O2G-C1B	4.05	1.45	1.34
29	D1	406	LMG	O7-C10	4.04	1.45	1.34
25	A2	404	CLA	C1D-ND	4.04	1.42	1.37
27	A1	408	PHO	C3D-C2D	4.04	1.46	1.39
27	A2	407	PHO	O2A-CGA	4.04	1.45	1.33
25	a1	405	CLA	C1D-ND	4.03	1.42	1.37
34	c1	520	DGD	O2G-C1B	4.03	1.45	1.34
25	a1	403	CLA	C1D-ND	4.03	1.42	1.37
25	c2	503	CLA	C1D-ND	4.03	1.42	1.37
33	D1	405	LHG	O7-C7	4.03	1.45	1.34
25	B2	606	CLA	C1D-ND	4.03	1.42	1.37
25	c1	503	CLA	C1D-ND	4.03	1.42	1.37
25	C2	508	CLA	C1D-ND	4.02	1.42	1.37
27	D2	407	PHO	O2A-CGA	4.02	1.45	1.33
25	b2	617	CLA	C1D-ND	4.02	1.42	1.37
33	b1	622	LHG	O7-C7	4.02	1.45	1.34
25	b1	607	CLA	C1D-ND	4.02	1.42	1.37
25	c2	504	CLA	C1D-ND	4.02	1.42	1.37
33	L1	101	LHG	O7-C7	4.02	1.45	1.34
25	c1	515	CLA	C1D-ND	4.01	1.42	1.37
25	D1	403	CLA	C1D-ND	4.01	1.42	1.37
25	B2	619	CLA	C1D-ND	4.00	1.42	1.37
25	b1	606	CLA	C1D-ND	4.00	1.42	1.37
25	b2	613	CLA	C1D-ND	4.00	1.42	1.37
25	b2	611	CLA	C1D-ND	4.00	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	a1	411	PHO	O2A-CGA	4.00	1.45	1.33
25	C2	503	CLA	C1D-ND	3.99	1.42	1.37
25	A1	405	CLA	C1D-ND	3.99	1.42	1.37
25	C1	514	CLA	C1D-ND	3.99	1.42	1.37
25	C2	511	CLA	C1D-ND	3.98	1.42	1.37
25	c2	515	CLA	C1D-ND	3.98	1.42	1.37
25	B2	604	CLA	C1D-ND	3.98	1.42	1.37
25	a2	404	CLA	C1D-ND	3.98	1.42	1.37
25	A1	404	CLA	C1D-ND	3.98	1.42	1.37
33	D2	403	LHG	O7-C7	3.98	1.45	1.34
33	L2	101	LHG	O7-C7	3.98	1.45	1.34
27	a2	416	PHO	C3D-C2D	3.97	1.46	1.39
25	B1	615	CLA	C1D-ND	3.97	1.42	1.37
25	c2	507	CLA	C1D-ND	3.97	1.42	1.37
25	C1	508	CLA	C1D-ND	3.97	1.42	1.37
25	b1	604	CLA	C1D-ND	3.97	1.42	1.37
25	b2	608	CLA	C1D-ND	3.97	1.42	1.37
25	C2	509	CLA	C1D-ND	3.97	1.42	1.37
25	C2	518	CLA	C1D-ND	3.97	1.42	1.37
25	C2	510	CLA	C1D-ND	3.96	1.42	1.37
25	c2	505	CLA	C1D-ND	3.96	1.42	1.37
25	b2	610	CLA	C1D-ND	3.96	1.42	1.37
25	b1	620	CLA	C1D-ND	3.96	1.42	1.37
25	c1	504	CLA	C1D-ND	3.96	1.42	1.37
25	c1	516	CLA	C1D-ND	3.96	1.42	1.37
25	d2	402	CLA	C1D-ND	3.96	1.42	1.37
33	d1	407	LHG	O7-C7	3.96	1.45	1.34
25	b2	616	CLA	C1D-ND	3.95	1.42	1.37
25	b2	620	CLA	C1D-ND	3.95	1.42	1.37
25	B1	608	CLA	C1D-ND	3.95	1.42	1.37
29	d1	408	LMG	O7-C10	3.95	1.45	1.34
25	b1	611	CLA	C1D-ND	3.95	1.42	1.37
25	b1	616	CLA	C1D-ND	3.95	1.42	1.37
25	c2	508	CLA	C1D-ND	3.95	1.42	1.37
25	B1	617	CLA	C1D-ND	3.94	1.42	1.37
25	C2	513	CLA	C1D-ND	3.94	1.42	1.37
25	C1	513	CLA	C1D-ND	3.94	1.42	1.37
25	b1	617	CLA	C1D-ND	3.94	1.42	1.37
33	B1	621	LHG	O7-C7	3.94	1.45	1.34
25	C1	504	CLA	C1D-ND	3.94	1.42	1.37
25	a2	405	CLA	C1D-ND	3.94	1.42	1.37
25	b2	604	CLA	C1D-ND	3.94	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	513	CLA	C1D-ND	3.94	1.42	1.37
25	b1	613	CLA	C1D-ND	3.94	1.42	1.37
25	C2	505	CLA	C1D-ND	3.94	1.42	1.37
25	A2	402	CLA	C1D-ND	3.94	1.42	1.37
25	c1	506	CLA	C1D-ND	3.93	1.42	1.37
25	B2	605	CLA	C1D-ND	3.93	1.42	1.37
25	B2	618	CLA	C1D-ND	3.93	1.42	1.37
25	A2	403	CLA	C1D-ND	3.93	1.42	1.37
33	D2	405	LHG	O7-C7	3.93	1.45	1.34
25	A1	406	CLA	C1D-ND	3.93	1.42	1.37
25	b2	609	CLA	C1D-ND	3.92	1.42	1.37
25	d2	404	CLA	C1D-ND	3.92	1.42	1.37
25	b2	618	CLA	C1D-ND	3.92	1.42	1.37
25	B1	607	CLA	C1D-ND	3.92	1.42	1.37
33	d2	406	LHG	O7-C7	3.91	1.45	1.34
25	A1	403	CLA	C1D-ND	3.91	1.42	1.37
25	B2	612	CLA	C1D-ND	3.91	1.42	1.37
25	C1	503	CLA	C1D-ND	3.90	1.42	1.37
38	f1	101	HEM	C3C-C2C	-3.90	1.35	1.40
25	b1	610	CLA	C1D-ND	3.90	1.42	1.37
25	c2	511	CLA	C1D-ND	3.90	1.42	1.37
25	b1	619	CLA	C1D-ND	3.90	1.42	1.37
25	D2	404	CLA	C1D-ND	3.90	1.42	1.37
25	a2	413	CLA	C1D-ND	3.90	1.42	1.37
25	b1	605	CLA	C1D-ND	3.90	1.42	1.37
25	c1	509	CLA	C1D-ND	3.90	1.42	1.37
38	e2	101	HEM	C3C-CAC	3.89	1.55	1.47
33	l1	102	LHG	O7-C7	3.89	1.45	1.34
25	c1	511	CLA	C1D-ND	3.89	1.42	1.37
25	b2	606	CLA	C1D-ND	3.89	1.42	1.37
25	b1	612	CLA	C1D-ND	3.89	1.42	1.37
25	B1	612	CLA	C1D-ND	3.89	1.42	1.37
27	A2	407	PHO	C3D-C2D	3.89	1.46	1.39
25	B2	616	CLA	C1D-ND	3.88	1.42	1.37
25	d1	406	CLA	C1D-ND	3.88	1.42	1.37
25	B1	610	CLA	C1D-ND	3.88	1.42	1.37
25	b2	619	CLA	C1D-ND	3.88	1.42	1.37
25	B2	610	CLA	C1D-ND	3.88	1.42	1.37
25	c2	512	CLA	C1D-ND	3.88	1.42	1.37
25	c1	508	CLA	C1D-ND	3.87	1.42	1.37
38	E2	101	HEM	C3C-CAC	3.87	1.55	1.47
25	C1	511	CLA	C1D-ND	3.87	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	505	CLA	C1D-ND	3.87	1.42	1.37
25	c2	509	CLA	C1D-ND	3.86	1.42	1.37
38	E1	101	HEM	C3C-CAC	3.86	1.55	1.47
25	B1	605	CLA	C1D-ND	3.86	1.42	1.37
25	b1	615	CLA	C1D-ND	3.86	1.42	1.37
25	b2	615	CLA	C1D-ND	3.86	1.42	1.37
25	c1	512	CLA	C1D-ND	3.85	1.42	1.37
25	b1	609	CLA	C1D-ND	3.85	1.42	1.37
25	c1	507	CLA	C1D-ND	3.85	1.42	1.37
25	B1	618	CLA	C1D-ND	3.85	1.42	1.37
25	D2	406	CLA	C1D-ND	3.84	1.42	1.37
25	c2	513	CLA	C1D-ND	3.84	1.42	1.37
25	B2	617	CLA	C1D-ND	3.84	1.42	1.37
38	v2	201	HEM	C3C-CAC	3.83	1.55	1.47
25	K2	101	CLA	C1D-ND	3.83	1.42	1.37
25	b2	624	CLA	C1D-ND	3.82	1.42	1.37
25	C1	505	CLA	C1D-ND	3.82	1.42	1.37
38	v1	201	HEM	C3C-CAC	3.82	1.55	1.47
25	C2	506	CLA	C1D-ND	3.81	1.42	1.37
38	f1	101	HEM	C3C-CAC	3.80	1.55	1.47
25	B2	608	CLA	C1D-ND	3.80	1.42	1.37
25	c2	510	CLA	C1D-ND	3.80	1.42	1.37
38	e2	101	HEM	C3C-C2C	-3.80	1.35	1.40
25	B1	619	CLA	C1D-ND	3.79	1.42	1.37
25	C2	507	CLA	C1D-ND	3.79	1.42	1.37
25	B1	613	CLA	C1D-ND	3.79	1.42	1.37
38	V2	201	HEM	C3C-CAC	3.79	1.55	1.47
25	C1	507	CLA	C1D-ND	3.78	1.42	1.37
38	E1	101	HEM	C3C-C2C	-3.78	1.35	1.40
25	C1	506	CLA	C1D-ND	3.78	1.42	1.37
25	C1	510	CLA	C1D-ND	3.78	1.42	1.37
25	B1	606	CLA	C1D-ND	3.78	1.42	1.37
25	c2	506	CLA	C1D-ND	3.77	1.42	1.37
25	C2	516	CLA	C1D-ND	3.76	1.42	1.37
38	E2	101	HEM	C3C-C2C	-3.75	1.35	1.40
25	B2	615	CLA	C1D-ND	3.75	1.42	1.37
38	V1	201	HEM	C3C-CAC	3.74	1.55	1.47
25	C1	509	CLA	C1D-ND	3.74	1.42	1.37
25	B2	609	CLA	C1D-ND	3.73	1.42	1.37
25	C1	512	CLA	C1D-ND	3.69	1.42	1.37
25	B2	613	CLA	C1D-ND	3.69	1.42	1.37
25	d2	405	CLA	C1D-ND	3.68	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B1	614	CLA	C1D-ND	3.67	1.42	1.37
25	D1	402	CLA	C1D-ND	3.67	1.42	1.37
25	A2	402	CLA	CHC-C1C	3.67	1.44	1.35
25	a1	403	CLA	CHC-C1C	3.66	1.44	1.35
25	B1	609	CLA	C1D-ND	3.65	1.42	1.37
25	b2	612	CLA	C1D-ND	3.64	1.42	1.37
27	D2	407	PHO	C3C-C2C	3.64	1.48	1.37
27	a1	411	PHO	C3C-C2C	3.63	1.48	1.37
27	a2	416	PHO	C3C-C2C	3.63	1.48	1.37
27	D1	407	PHO	C3C-C2C	3.63	1.48	1.37
25	B2	614	CLA	C1D-ND	3.61	1.42	1.37
25	A1	403	CLA	CHC-C1C	3.61	1.44	1.35
25	b2	614	CLA	C1D-ND	3.60	1.42	1.37
25	D2	401	CLA	C1D-ND	3.57	1.42	1.37
27	A1	408	PHO	C3C-C2C	3.57	1.48	1.37
25	b1	614	CLA	C1D-ND	3.56	1.42	1.37
25	a2	404	CLA	CHC-C1C	3.56	1.44	1.35
27	A2	407	PHO	C3C-C2C	3.54	1.48	1.37
27	d1	403	PHO	C3C-C2C	3.54	1.48	1.37
27	d2	408	PHO	C3C-C2C	3.53	1.48	1.37
27	d1	403	PHO	C3A-C2A	-3.53	1.51	1.54
25	d1	401	CLA	C1D-ND	3.45	1.42	1.37
25	A1	405	CLA	CHC-C1C	3.43	1.43	1.35
25	b1	607	CLA	CHC-C1C	3.40	1.43	1.35
25	b1	604	CLA	CHC-C1C	3.38	1.43	1.35
25	d2	404	CLA	CHC-C1C	3.36	1.43	1.35
25	B2	610	CLA	CHC-C1C	3.35	1.43	1.35
25	b1	605	CLA	CHC-C1C	3.35	1.43	1.35
25	B1	616	CLA	CHC-C1C	3.34	1.43	1.35
25	a1	404	CLA	CHC-C1C	3.33	1.43	1.35
25	a2	413	CLA	CHC-C1C	3.33	1.43	1.35
25	b1	620	CLA	CHC-C1C	3.33	1.43	1.35
25	b2	624	CLA	CHC-C1C	3.33	1.43	1.35
25	C1	507	CLA	CHC-C1C	3.32	1.43	1.35
25	A2	404	CLA	CHC-C1C	3.32	1.43	1.35
25	C2	513	CLA	CHC-C1C	3.31	1.43	1.35
25	B1	619	CLA	CHC-C1C	3.31	1.43	1.35
27	D1	407	PHO	C3A-C2A	-3.30	1.51	1.54
25	B2	606	CLA	CHC-C1C	3.30	1.43	1.35
25	B2	616	CLA	CHC-C1C	3.29	1.43	1.35
25	B1	606	CLA	CHC-C1C	3.28	1.43	1.35
25	c1	506	CLA	CHC-C1C	3.28	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b2	617	CLA	CHC-C1C	3.28	1.43	1.35
25	d1	406	CLA	CHC-C1C	3.28	1.43	1.35
25	B2	619	CLA	CHC-C1C	3.27	1.43	1.35
25	A1	404	CLA	CHC-C1C	3.27	1.43	1.35
25	b1	616	CLA	CHC-C1C	3.27	1.43	1.35
34	C2	512	DGD	O1G-C1A	3.27	1.46	1.33
25	b1	608	CLA	CHC-C1C	3.26	1.43	1.35
25	b1	609	CLA	CHC-C1C	3.26	1.43	1.35
25	B2	607	CLA	CHC-C1C	3.26	1.43	1.35
37	D2	402	SQD	O48-C23	3.26	1.45	1.33
25	b1	606	CLA	CHC-C1C	3.26	1.43	1.35
25	b2	606	CLA	CHC-C1C	3.25	1.43	1.35
25	B2	604	CLA	CHC-C1C	3.25	1.43	1.35
25	B1	612	CLA	CHC-C1C	3.24	1.43	1.35
25	B1	610	CLA	CHC-C1C	3.24	1.43	1.35
33	a2	407	LHG	O8-C23	3.24	1.45	1.33
25	A2	403	CLA	CHC-C1C	3.24	1.43	1.35
25	B2	609	CLA	CHC-C1C	3.23	1.43	1.35
25	b2	604	CLA	CHC-C1C	3.23	1.43	1.35
25	c1	504	CLA	CHC-C1C	3.23	1.43	1.35
25	b2	615	CLA	CHC-C1C	3.23	1.43	1.35
25	C2	507	CLA	CHC-C1C	3.23	1.43	1.35
25	C1	510	CLA	CHC-C1C	3.23	1.43	1.35
25	C1	504	CLA	CHC-C1C	3.23	1.43	1.35
25	b1	610	CLA	CHC-C1C	3.23	1.43	1.35
25	D1	403	CLA	CHC-C1C	3.23	1.43	1.35
25	c2	506	CLA	CHC-C1C	3.23	1.43	1.35
25	c1	515	CLA	CHC-C1C	3.23	1.43	1.35
25	C2	504	CLA	CHC-C1C	3.23	1.43	1.35
25	C2	506	CLA	CHC-C1C	3.23	1.43	1.35
25	B1	604	CLA	CHC-C1C	3.22	1.43	1.35
25	d1	404	CLA	CHC-C1C	3.22	1.43	1.35
25	c2	510	CLA	CHC-C1C	3.22	1.43	1.35
25	D2	404	CLA	CHC-C1C	3.22	1.43	1.35
25	B1	617	CLA	CHC-C1C	3.21	1.43	1.35
25	B1	615	CLA	CHC-C1C	3.21	1.43	1.35
25	d2	402	CLA	CHC-C1C	3.21	1.43	1.35
25	c2	515	CLA	CHC-C1C	3.21	1.43	1.35
25	A1	406	CLA	CHC-C1C	3.21	1.43	1.35
25	b2	616	CLA	CHC-C1C	3.21	1.43	1.35
25	C2	508	CLA	CHC-C1C	3.21	1.43	1.35
25	B1	618	CLA	CHC-C1C	3.20	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	505	CLA	CHC-C1C	3.20	1.43	1.35
25	b2	608	CLA	CHC-C1C	3.20	1.43	1.35
25	B2	605	CLA	CHC-C1C	3.20	1.43	1.35
25	C1	514	CLA	CHC-C1C	3.20	1.43	1.35
25	B1	614	CLA	CHC-C1C	3.20	1.43	1.35
25	B1	605	CLA	CHC-C1C	3.20	1.43	1.35
25	D2	406	CLA	CHC-C1C	3.19	1.43	1.35
25	B1	611	CLA	CHC-C1C	3.19	1.43	1.35
25	c1	513	CLA	CHC-C1C	3.19	1.43	1.35
29	c2	519	LMG	O7-C8	-3.19	1.43	1.46
25	c1	507	CLA	CHC-C1C	3.19	1.43	1.35
25	B1	609	CLA	CHC-C1C	3.18	1.43	1.35
25	d1	401	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	503	CLA	CHC-C1C	3.18	1.43	1.35
25	c1	512	CLA	CHC-C1C	3.18	1.43	1.35
25	c1	508	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	518	CLA	CHC-C1C	3.18	1.43	1.35
25	b2	611	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	505	CLA	CHC-C1C	3.18	1.43	1.35
25	B1	607	CLA	CHC-C1C	3.18	1.43	1.35
25	B2	608	CLA	CHC-C1C	3.17	1.43	1.35
25	b1	612	CLA	CHC-C1C	3.17	1.43	1.35
25	K2	101	CLA	CHC-C1C	3.17	1.43	1.35
25	C1	511	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	618	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	613	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	619	CLA	CHC-C1C	3.17	1.43	1.35
25	b1	615	CLA	CHC-C1C	3.17	1.43	1.35
25	B2	613	CLA	C4D-ND	-3.16	1.33	1.37
25	c2	508	CLA	CHC-C1C	3.16	1.43	1.35
25	B2	611	CLA	CHC-C1C	3.16	1.43	1.35
25	c2	504	CLA	CHC-C1C	3.16	1.43	1.35
25	b2	620	CLA	CHC-C1C	3.16	1.43	1.35
25	c2	509	CLA	CHC-C1C	3.16	1.43	1.35
25	b1	619	CLA	CHC-C1C	3.16	1.43	1.35
25	b1	617	CLA	CHC-C1C	3.16	1.43	1.35
25	B2	613	CLA	CHC-C1C	3.16	1.43	1.35
25	B1	608	CLA	CHC-C1C	3.16	1.43	1.35
25	c1	511	CLA	CHC-C1C	3.15	1.43	1.35
25	D2	401	CLA	CHC-C1C	3.15	1.43	1.35
25	c2	513	CLA	CHC-C1C	3.15	1.43	1.35
25	B2	615	CLA	CHC-C1C	3.15	1.43	1.35

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	516	CLA	CHC-C1C	3.15	1.43	1.35
25	c2	503	CLA	CHC-C1C	3.15	1.43	1.35
25	C1	512	CLA	CHC-C1C	3.15	1.43	1.35
25	b1	611	CLA	CHC-C1C	3.15	1.43	1.35
25	C1	509	CLA	CMB-C2B	-3.14	1.45	1.51
25	b1	614	CLA	CHC-C1C	3.14	1.43	1.35
25	C1	508	CLA	CHC-C1C	3.14	1.43	1.35
25	C2	510	CLA	CHC-C1C	3.14	1.43	1.35
25	D1	402	CLA	C4D-ND	-3.14	1.33	1.37
25	C1	506	CLA	CHC-C1C	3.14	1.43	1.35
25	B2	617	CLA	CHC-C1C	3.14	1.43	1.35
25	c2	505	CLA	CHC-C1C	3.14	1.43	1.35
25	C1	503	CLA	CHC-C1C	3.13	1.43	1.35
25	c2	507	CLA	CHC-C1C	3.13	1.43	1.35
25	c1	510	CLA	CHC-C1C	3.13	1.43	1.35
25	c1	509	CLA	CHC-C1C	3.13	1.43	1.35
25	a2	405	CLA	CHC-C1C	3.13	1.43	1.35
25	c2	511	CLA	CHC-C1C	3.13	1.43	1.35
25	b2	610	CLA	CHC-C1C	3.12	1.43	1.35
25	B2	612	CLA	CHC-C1C	3.12	1.43	1.35
25	C1	505	CLA	CHC-C1C	3.12	1.43	1.35
38	v2	201	HEM	CAB-C3B	3.12	1.55	1.47
25	c2	502	CLA	CHC-C1C	3.11	1.42	1.35
25	b2	609	CLA	CHC-C1C	3.11	1.42	1.35
25	B2	614	CLA	CHC-C1C	3.11	1.42	1.35
25	b2	612	CLA	CMB-C2B	-3.11	1.45	1.51
25	B1	613	CLA	CHC-C1C	3.10	1.42	1.35
25	c1	508	CLA	C4D-ND	-3.09	1.33	1.37
27	a2	416	PHO	C3A-C2A	-3.09	1.51	1.54
25	a1	405	CLA	CHC-C1C	3.09	1.42	1.35
25	c2	512	CLA	CHC-C1C	3.09	1.42	1.35
25	C2	509	CLA	CHC-C1C	3.09	1.42	1.35
25	B2	618	CLA	CHC-C1C	3.08	1.42	1.35
25	C1	513	CLA	CHC-C1C	3.08	1.42	1.35
27	D2	407	PHO	C3A-C2A	-3.08	1.51	1.54
25	C2	516	CLA	CHC-C1C	3.08	1.42	1.35
27	A2	407	PHO	C3A-C2A	-3.08	1.51	1.54
25	d1	401	CLA	C4D-ND	-3.06	1.33	1.37
38	V1	201	HEM	CAB-C3B	3.06	1.55	1.47
25	C1	509	CLA	CHC-C1C	3.06	1.42	1.35
25	A1	404	CLA	C4D-ND	-3.05	1.33	1.37
27	d2	408	PHO	C3A-C2A	-3.05	1.51	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	503	CLA	CHC-C1C	3.05	1.42	1.35
38	v1	201	HEM	CAB-C3B	3.05	1.55	1.47
25	b2	612	CLA	CHC-C1C	3.05	1.42	1.35
25	c2	509	CLA	C4D-ND	-3.04	1.33	1.37
25	C2	511	CLA	CHC-C1C	3.04	1.42	1.35
25	b1	613	CLA	CHC-C1C	3.03	1.42	1.35
25	C1	502	CLA	CHC-C1C	3.02	1.42	1.35
25	B1	619	CLA	C4D-ND	-3.02	1.33	1.37
25	b2	614	CLA	CHC-C1C	3.02	1.42	1.35
25	B2	606	CLA	C4D-ND	-3.02	1.33	1.37
25	d2	405	CLA	CHC-C1C	3.02	1.42	1.35
25	A1	403	CLA	C4D-ND	-3.01	1.33	1.37
25	A1	406	CLA	C4D-ND	-3.00	1.33	1.37
25	C2	506	CLA	C4D-ND	-3.00	1.33	1.37
25	D1	402	CLA	CHC-C1C	2.99	1.42	1.35
25	c2	507	CLA	C4D-ND	-2.98	1.33	1.37
25	b1	609	CLA	C4D-ND	-2.98	1.33	1.37
25	C1	505	CLA	C4D-ND	-2.98	1.33	1.37
25	C1	504	CLA	C4D-ND	-2.97	1.33	1.37
25	A2	402	CLA	C4D-ND	-2.97	1.33	1.37
25	b1	613	CLA	CMB-C2B	-2.97	1.45	1.51
37	D1	409	SQD	C6-S	-2.96	1.66	1.77
25	B2	618	CLA	C4D-ND	-2.96	1.33	1.37
27	a1	411	PHO	C3A-C2A	-2.96	1.52	1.54
25	B1	612	CLA	C4D-ND	-2.96	1.33	1.37
25	c1	512	CLA	C4D-ND	-2.96	1.33	1.37
25	B1	606	CLA	C4D-ND	-2.96	1.33	1.37
25	b2	620	CLA	C4D-ND	-2.96	1.33	1.37
38	e2	101	HEM	CAB-C3B	2.96	1.55	1.47
25	b2	613	CLA	C4D-ND	-2.95	1.33	1.37
25	B1	613	CLA	CMB-C2B	-2.95	1.45	1.51
25	b1	612	CLA	C4D-ND	-2.95	1.33	1.37
25	B2	609	CLA	C4D-ND	-2.94	1.33	1.37
25	d2	404	CLA	C4D-ND	-2.94	1.33	1.37
25	C1	510	CLA	C4D-ND	-2.94	1.33	1.37
25	b1	613	CLA	C4D-ND	-2.94	1.33	1.37
25	c1	505	CLA	C4D-ND	-2.93	1.33	1.37
25	c1	504	CLA	C4D-ND	-2.93	1.33	1.37
25	C1	506	CLA	C4D-ND	-2.93	1.33	1.37
25	C1	511	CLA	C4D-ND	-2.93	1.33	1.37
38	E1	101	HEM	CAB-C3B	2.93	1.55	1.47
25	c1	510	CLA	C4D-ND	-2.92	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a1	405	CLA	C4D-ND	-2.92	1.33	1.37
25	b2	619	CLA	C4D-ND	-2.92	1.33	1.37
25	b2	609	CLA	C4D-ND	-2.92	1.33	1.37
25	d1	404	CLA	C4D-ND	-2.92	1.33	1.37
25	b2	611	CLA	C4D-ND	-2.92	1.33	1.37
25	D1	403	CLA	C4D-ND	-2.92	1.33	1.37
25	B2	619	CLA	C4D-ND	-2.91	1.33	1.37
38	E2	101	HEM	CAB-C3B	2.91	1.55	1.47
25	B1	613	CLA	C4D-ND	-2.91	1.33	1.37
27	A1	408	PHO	C3A-C2A	-2.91	1.52	1.54
25	c2	506	CLA	C4D-ND	-2.91	1.33	1.37
25	c1	515	CLA	C4D-ND	-2.91	1.33	1.37
37	B2	623	SQD	C6-S	-2.91	1.66	1.77
25	B2	608	CLA	C4D-ND	-2.91	1.33	1.37
25	d2	405	CLA	C4D-ND	-2.91	1.33	1.37
25	b1	611	CLA	C4D-ND	-2.90	1.33	1.37
25	b2	617	CLA	C4D-ND	-2.90	1.33	1.37
25	d2	402	CLA	C4D-ND	-2.90	1.33	1.37
25	B2	615	CLA	C4D-ND	-2.90	1.33	1.37
25	B2	605	CLA	C4D-ND	-2.90	1.33	1.37
25	a2	413	CLA	C4D-ND	-2.90	1.33	1.37
37	D2	402	SQD	C6-S	-2.90	1.66	1.77
25	a2	404	CLA	C4D-ND	-2.90	1.33	1.37
25	C1	507	CLA	C4D-ND	-2.90	1.33	1.37
25	b2	608	CLA	C4D-ND	-2.90	1.33	1.37
25	a2	405	CLA	C4D-ND	-2.89	1.33	1.37
25	C2	510	CLA	C4D-ND	-2.89	1.33	1.37
25	C2	516	CLA	C4D-ND	-2.89	1.33	1.37
25	b1	605	CLA	C4D-ND	-2.89	1.33	1.37
25	B2	610	CLA	C4D-ND	-2.89	1.33	1.37
25	C2	511	CLA	C4D-ND	-2.89	1.33	1.37
38	f1	101	HEM	FE-ND	2.89	2.11	1.96
25	B1	611	CLA	C4D-ND	-2.88	1.33	1.37
25	b2	614	CLA	C4D-ND	-2.88	1.33	1.37
25	B1	610	CLA	C4D-ND	-2.88	1.33	1.37
25	B1	615	CLA	C4D-ND	-2.87	1.33	1.37
25	C1	502	CLA	C4D-ND	-2.87	1.33	1.37
25	B1	608	CLA	C4D-ND	-2.87	1.33	1.37
25	B1	609	CLA	C4D-ND	-2.87	1.33	1.37
25	C2	503	CLA	C4D-ND	-2.87	1.33	1.37
25	D2	401	CLA	C4D-ND	-2.87	1.33	1.37
25	c2	511	CLA	C4D-ND	-2.87	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	f1	101	HEM	CAB-C3B	2.86	1.55	1.47
25	C1	513	CLA	C4D-ND	-2.86	1.33	1.37
25	B1	605	CLA	C4D-ND	-2.86	1.33	1.37
38	V2	201	HEM	CAB-C3B	2.86	1.55	1.47
25	b1	608	CLA	C4D-ND	-2.86	1.33	1.37
25	B2	616	CLA	C4D-ND	-2.86	1.33	1.37
25	b1	617	CLA	C4D-ND	-2.86	1.33	1.37
25	c1	506	CLA	C4D-ND	-2.86	1.33	1.37
25	c2	513	CLA	C4D-ND	-2.86	1.33	1.37
25	b1	616	CLA	C4D-ND	-2.86	1.33	1.37
25	C2	507	CLA	C4D-ND	-2.85	1.33	1.37
25	b2	606	CLA	C4D-ND	-2.85	1.33	1.37
25	b2	612	CLA	C4D-ND	-2.85	1.33	1.37
25	A1	405	CLA	C4D-ND	-2.85	1.33	1.37
25	c1	516	CLA	C4D-ND	-2.85	1.33	1.37
25	B2	611	CLA	C4D-ND	-2.85	1.33	1.37
25	c2	512	CLA	C4D-ND	-2.85	1.33	1.37
25	b1	614	CLA	C4D-ND	-2.84	1.33	1.37
25	c1	503	CLA	C4D-ND	-2.84	1.33	1.37
25	C1	509	CLA	C4D-ND	-2.84	1.33	1.37
25	C1	514	CLA	C4D-ND	-2.84	1.33	1.37
25	c1	507	CLA	C4D-ND	-2.84	1.33	1.37
25	b1	610	CLA	C4D-ND	-2.83	1.33	1.37
25	a1	403	CLA	C4D-ND	-2.83	1.33	1.37
25	A2	403	CLA	C4D-ND	-2.83	1.33	1.37
25	c2	515	CLA	C4D-ND	-2.83	1.33	1.37
25	D2	406	CLA	C4D-ND	-2.83	1.33	1.37
25	B2	604	CLA	C4D-ND	-2.83	1.33	1.37
25	c1	513	CLA	C4D-ND	-2.82	1.33	1.37
25	b2	604	CLA	C4D-ND	-2.82	1.33	1.37
25	b2	618	CLA	C4D-ND	-2.82	1.33	1.37
25	b2	624	CLA	C4D-ND	-2.82	1.33	1.37
25	c2	502	CLA	C4D-ND	-2.82	1.33	1.37
25	b1	604	CLA	C4D-ND	-2.81	1.33	1.37
25	d1	406	CLA	C4D-ND	-2.81	1.33	1.37
37	b2	605	SQD	C6-S	-2.81	1.67	1.77
25	C1	512	CLA	C4D-ND	-2.81	1.33	1.37
25	B2	613	CLA	CMB-C2B	-2.81	1.45	1.51
25	b1	620	CLA	C4D-ND	-2.81	1.33	1.37
25	b2	615	CLA	C4D-ND	-2.81	1.33	1.37
25	C2	508	CLA	C4D-ND	-2.81	1.33	1.37
25	B2	617	CLA	C4D-ND	-2.80	1.33	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D2	404	CLA	C4D-ND	-2.80	1.33	1.37
25	a1	404	CLA	C4D-ND	-2.80	1.33	1.37
25	b1	619	CLA	C4D-ND	-2.80	1.33	1.37
25	B1	616	CLA	C4D-ND	-2.80	1.33	1.37
25	A2	404	CLA	C4D-ND	-2.80	1.33	1.37
25	C2	513	CLA	C4D-ND	-2.80	1.33	1.37
25	b1	615	CLA	C4D-ND	-2.79	1.33	1.37
25	c2	510	CLA	C4D-ND	-2.79	1.33	1.37
25	b1	606	CLA	C4D-ND	-2.79	1.33	1.37
38	E1	101	HEM	FE-ND	2.79	2.10	1.96
38	e2	101	HEM	FE-ND	2.78	2.10	1.96
25	B2	612	CLA	C4D-ND	-2.78	1.33	1.37
25	c2	508	CLA	C4D-ND	-2.78	1.33	1.37
25	C1	503	CLA	C4D-ND	-2.77	1.33	1.37
25	c2	504	CLA	C4D-ND	-2.77	1.33	1.37
25	B1	614	CLA	C4D-ND	-2.77	1.33	1.37
25	B1	618	CLA	C4D-ND	-2.76	1.33	1.37
25	b1	607	CLA	CMB-C2B	-2.75	1.45	1.51
25	b2	616	CLA	C4D-ND	-2.74	1.33	1.37
25	c2	503	CLA	C4D-ND	-2.74	1.33	1.37
25	c1	511	CLA	C4D-ND	-2.73	1.33	1.37
25	C2	505	CLA	C4D-ND	-2.73	1.33	1.37
25	K2	101	CLA	C4D-ND	-2.73	1.33	1.37
25	b2	610	CLA	C4D-ND	-2.72	1.34	1.37
25	C2	518	CLA	C4D-ND	-2.72	1.34	1.37
25	C1	508	CLA	C4D-ND	-2.71	1.34	1.37
25	c2	505	CLA	C4D-ND	-2.71	1.34	1.37
25	C2	509	CLA	C4D-ND	-2.71	1.34	1.37
25	c1	509	CLA	C4D-ND	-2.70	1.34	1.37
25	B1	604	CLA	C4D-ND	-2.69	1.34	1.37
25	B2	614	CLA	C4D-ND	-2.69	1.34	1.37
25	b1	607	CLA	C4D-ND	-2.68	1.34	1.37
25	C2	511	CLA	CMB-C2B	-2.68	1.46	1.51
25	c2	509	CLA	CMB-C2B	-2.66	1.46	1.51
25	c1	508	CLA	CMB-C2B	-2.64	1.46	1.51
25	B1	617	CLA	C4D-ND	-2.64	1.34	1.37
25	C2	504	CLA	C4D-ND	-2.64	1.34	1.37
38	v2	201	HEM	FE-ND	2.63	2.09	1.96
25	b2	616	CLA	CMB-C2B	-2.63	1.46	1.51
38	V1	201	HEM	FE-ND	2.62	2.09	1.96
38	V2	201	HEM	FE-ND	2.62	2.09	1.96
25	B1	607	CLA	C4D-ND	-2.62	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	607	CLA	C4D-ND	-2.62	1.34	1.37
25	B1	610	CLA	CMB-C2B	-2.58	1.46	1.51
36	D2	408	PL9	C6-C5	2.58	1.48	1.35
25	c1	509	CLA	CMB-C2B	-2.56	1.46	1.51
25	A2	402	CLA	CMB-C2B	-2.56	1.46	1.51
38	v1	201	HEM	FE-ND	2.55	2.09	1.96
29	C2	515	LMG	O8-C28	2.55	1.45	1.33
36	D1	408	PL9	C6-C5	2.54	1.48	1.35
29	A2	412	LMG	O8-C28	2.54	1.45	1.33
36	d1	409	PL9	C6-C5	2.54	1.48	1.35
25	c1	510	CLA	CMB-C2B	-2.54	1.46	1.51
25	B2	607	CLA	CMB-C2B	-2.52	1.46	1.51
25	c2	507	CLA	CMB-C2B	-2.52	1.46	1.51
36	d2	409	PL9	C6-C5	2.52	1.48	1.35
25	B1	607	CLA	CMB-C2B	-2.51	1.46	1.51
29	B2	621	LMG	O8-C28	2.51	1.45	1.33
25	b1	610	CLA	CMB-C2B	-2.50	1.46	1.51
25	A2	404	CLA	CMB-C2B	-2.50	1.46	1.51
25	A1	405	CLA	CMB-C2B	-2.50	1.46	1.51
38	V2	201	HEM	FE-NB	2.50	2.09	1.96
25	A1	403	CLA	CMB-C2B	-2.50	1.46	1.51
25	b1	619	CLA	CMB-C2B	-2.49	1.46	1.51
25	d1	404	CLA	CMB-C2B	-2.49	1.46	1.51
25	c2	503	CLA	CMB-C2B	-2.49	1.46	1.51
25	d2	402	CLA	CMB-C2B	-2.49	1.46	1.51
25	B1	616	CLA	CMB-C2B	-2.48	1.46	1.51
25	C1	507	CLA	CMB-C2B	-2.48	1.46	1.51
25	b2	620	CLA	CMB-C2B	-2.48	1.46	1.51
25	C2	513	CLA	CMB-C2B	-2.47	1.46	1.51
25	B2	606	CLA	CMB-C2B	-2.46	1.46	1.51
25	b1	604	CLA	CMB-C2B	-2.46	1.46	1.51
25	C2	509	CLA	CMB-C2B	-2.46	1.46	1.51
25	K2	101	CLA	CMB-C2B	-2.46	1.46	1.51
25	D2	404	CLA	CMB-C2B	-2.45	1.46	1.51
25	a1	404	CLA	CMB-C2B	-2.45	1.46	1.51
25	A1	406	CLA	CMB-C2B	-2.45	1.46	1.51
25	C1	504	CLA	CMB-C2B	-2.44	1.46	1.51
25	B2	617	CLA	CMB-C2B	-2.44	1.46	1.51
25	B1	606	CLA	CMB-C2B	-2.44	1.46	1.51
25	b2	611	CLA	CMB-C2B	-2.44	1.46	1.51
25	c1	507	CLA	CMB-C2B	-2.44	1.46	1.51
25	B1	614	CLA	CMB-C2B	-2.44	1.46	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A2	403	CLA	CMB-C2B	-2.43	1.46	1.51
25	B2	616	CLA	CMB-C2B	-2.43	1.46	1.51
25	b2	618	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	606	CLA	CMB-C2B	-2.43	1.46	1.51
25	B1	619	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	609	CLA	CMB-C2B	-2.43	1.46	1.51
25	C2	516	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	611	CLA	CMB-C2B	-2.43	1.46	1.51
25	B1	612	CLA	CMB-C2B	-2.43	1.46	1.51
25	a2	405	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	616	CLA	CMB-C2B	-2.42	1.46	1.51
25	C1	510	CLA	CMB-C2B	-2.42	1.46	1.51
25	C1	506	CLA	CMB-C2B	-2.42	1.46	1.51
25	C2	506	CLA	CMB-C2B	-2.42	1.46	1.51
25	c2	512	CLA	CMB-C2B	-2.41	1.46	1.51
25	B2	618	CLA	CMB-C2B	-2.41	1.46	1.51
25	a2	413	CLA	CMB-C2B	-2.41	1.46	1.51
25	a2	404	CLA	CMB-C2B	-2.41	1.46	1.51
25	b2	609	CLA	CMB-C2B	-2.41	1.46	1.51
25	b1	620	CLA	CMB-C2B	-2.41	1.46	1.51
25	c2	504	CLA	CMB-C2B	-2.41	1.46	1.51
25	B1	611	CLA	CMB-C2B	-2.41	1.46	1.51
25	C2	508	CLA	CMB-C2B	-2.41	1.46	1.51
25	B1	609	CLA	CMB-C2B	-2.41	1.46	1.51
38	E2	101	HEM	FE-ND	2.41	2.08	1.96
25	c1	515	CLA	CMB-C2B	-2.40	1.46	1.51
25	d2	404	CLA	CMB-C2B	-2.40	1.46	1.51
25	b2	613	CLA	CMB-C2B	-2.40	1.46	1.51
25	D2	406	CLA	CMB-C2B	-2.40	1.46	1.51
25	C1	513	CLA	CMB-C2B	-2.40	1.46	1.51
25	B1	618	CLA	CMB-C2B	-2.40	1.46	1.51
25	C1	514	CLA	CMB-C2B	-2.40	1.46	1.51
25	b1	617	CLA	CMB-C2B	-2.40	1.46	1.51
25	c2	506	CLA	CMB-C2B	-2.40	1.46	1.51
25	c2	508	CLA	CMB-C2B	-2.40	1.46	1.51
25	A2	402	CLA	C3B-C2B	-2.40	1.37	1.40
25	B1	605	CLA	CMB-C2B	-2.39	1.46	1.51
25	a1	403	CLA	CMB-C2B	-2.39	1.46	1.51
25	C1	503	CLA	CMB-C2B	-2.39	1.46	1.51
25	b2	610	CLA	CMB-C2B	-2.39	1.46	1.51
25	B2	619	CLA	CMB-C2B	-2.39	1.46	1.51
25	D2	401	CLA	CMB-C2B	-2.39	1.46	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	609	CLA	CMB-C2B	-2.39	1.46	1.51
25	B2	612	CLA	CMB-C2B	-2.39	1.46	1.51
25	c1	503	CLA	CMB-C2B	-2.39	1.46	1.51
25	c1	506	CLA	CMB-C2B	-2.38	1.46	1.51
25	c2	513	CLA	CMB-C2B	-2.38	1.46	1.51
25	b1	614	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	617	CLA	CMB-C2B	-2.38	1.46	1.51
25	c1	505	CLA	CMB-C2B	-2.38	1.46	1.51
25	C2	505	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	604	CLA	CMB-C2B	-2.38	1.46	1.51
25	C1	511	CLA	CMB-C2B	-2.38	1.46	1.51
25	b1	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	c2	510	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	605	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	624	CLA	CMB-C2B	-2.37	1.46	1.51
25	C2	510	CLA	CMB-C2B	-2.37	1.46	1.51
25	c1	512	CLA	CMB-C2B	-2.37	1.46	1.51
25	C1	508	CLA	CMB-C2B	-2.36	1.46	1.51
25	C2	518	CLA	CMB-C2B	-2.36	1.46	1.51
25	c2	505	CLA	CMB-C2B	-2.36	1.46	1.51
25	b2	615	CLA	CMB-C2B	-2.36	1.46	1.51
25	c2	511	CLA	CMB-C2B	-2.36	1.46	1.51
25	b1	612	CLA	CMB-C2B	-2.36	1.46	1.51
25	B2	614	CLA	CMB-C2B	-2.36	1.46	1.51
25	B1	604	CLA	CMB-C2B	-2.36	1.46	1.51
25	B1	608	CLA	CMB-C2B	-2.36	1.46	1.51
25	b2	606	CLA	CMB-C2B	-2.36	1.46	1.51
25	A1	404	CLA	CMB-C2B	-2.36	1.46	1.51
25	C1	512	CLA	CMB-C2B	-2.35	1.46	1.51
25	D1	403	CLA	CMB-C2B	-2.35	1.46	1.51
25	c1	513	CLA	CMB-C2B	-2.35	1.46	1.51
25	a1	405	CLA	CMB-C2B	-2.35	1.46	1.51
25	C2	503	CLA	CMB-C2B	-2.35	1.46	1.51
25	c1	516	CLA	CMB-C2B	-2.35	1.46	1.51
25	C2	507	CLA	CMB-C2B	-2.34	1.46	1.51
25	c2	502	CLA	CMB-C2B	-2.34	1.46	1.51
25	C1	505	CLA	CMB-C2B	-2.34	1.46	1.51
25	d1	406	CLA	CMB-C2B	-2.34	1.46	1.51
23	c2	501	BCR	C19-C18	2.34	1.51	1.45
25	b1	605	CLA	CMB-C2B	-2.33	1.46	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b2	619	CLA	CMB-C2B	-2.33	1.46	1.51
25	b2	604	CLA	CMB-C2B	-2.33	1.46	1.51
25	B1	617	CLA	CMB-C2B	-2.32	1.46	1.51
25	C2	504	CLA	CMB-C2B	-2.32	1.46	1.51
25	a2	404	CLA	C3B-C2B	-2.32	1.37	1.40
25	c2	515	CLA	CMB-C2B	-2.32	1.46	1.51
25	d2	405	CLA	CMB-C2B	-2.31	1.46	1.51
25	A1	405	CLA	C3B-C2B	-2.30	1.37	1.40
25	c1	511	CLA	CMB-C2B	-2.30	1.46	1.51
25	C1	502	CLA	CMB-C2B	-2.29	1.46	1.51
25	B2	610	CLA	CMB-C2B	-2.29	1.46	1.51
25	B2	615	CLA	CMB-C2B	-2.29	1.46	1.51
25	A1	403	CLA	C3B-C2B	-2.29	1.37	1.40
25	A1	403	CLA	CMD-C2D	-2.29	1.46	1.50
25	B1	615	CLA	CMB-C2B	-2.28	1.46	1.51
25	b2	614	CLA	CMB-C2B	-2.28	1.46	1.51
25	B2	611	CLA	CMB-C2B	-2.28	1.46	1.51
25	c1	504	CLA	CMB-C2B	-2.28	1.46	1.51
25	D1	402	CLA	CMB-C2B	-2.27	1.46	1.51
25	d1	401	CLA	CMB-C2B	-2.27	1.46	1.51
25	C1	506	CLA	CMD-C2D	-2.26	1.46	1.50
25	b1	615	CLA	CMB-C2B	-2.22	1.47	1.51
25	b2	614	CLA	CMD-C2D	-2.21	1.46	1.50
25	a2	413	CLA	CMD-C2D	-2.20	1.46	1.50
25	b1	614	CLA	CMD-C2D	-2.19	1.46	1.50
38	V1	201	HEM	FE-NB	2.19	2.07	1.96
25	b2	619	CLA	CMC-C2C	-2.18	1.46	1.50
29	M1	101	LMG	O7-C8	-2.18	1.43	1.47
25	B1	613	CLA	C3B-C2B	-2.18	1.37	1.40
25	A1	403	CLA	CMC-C2C	-2.18	1.46	1.50
25	c1	507	CLA	CMD-C2D	-2.17	1.46	1.50
38	f1	101	HEM	FE-NB	2.16	2.07	1.96
25	b2	612	CLA	C3B-C2B	-2.16	1.37	1.40
25	a1	403	CLA	C3B-C2B	-2.16	1.37	1.40
25	c1	512	CLA	CMD-C2D	-2.15	1.46	1.50
25	a1	404	CLA	C3B-C2B	-2.15	1.37	1.40
38	v1	201	HEM	FE-NB	2.15	2.07	1.96
25	C1	512	CLA	CMD-C2D	-2.14	1.46	1.50
25	a1	403	CLA	CMD-C2D	-2.14	1.46	1.50
25	c1	511	CLA	CMD-C2D	-2.14	1.46	1.50
25	K2	101	CLA	CMD-C2D	-2.14	1.46	1.50
25	a2	404	CLA	CMD-C2D	-2.14	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	618	CLA	CMC-C2C	-2.13	1.46	1.50
25	A2	402	CLA	CMC-C2C	-2.13	1.46	1.50
25	C2	507	CLA	CMD-C2D	-2.13	1.46	1.50
25	b1	613	CLA	C3B-C2B	-2.13	1.37	1.40
25	c2	506	CLA	CMD-C2D	-2.12	1.46	1.50
25	C1	507	CLA	C3C-C2C	2.11	1.41	1.36
38	f1	101	HEM	CAA-C2A	2.11	1.55	1.52
25	B2	607	CLA	CMD-C2D	-2.11	1.46	1.50
25	A1	404	CLA	CMD-C2D	-2.11	1.46	1.50
38	E2	101	HEM	FE-NB	2.10	2.07	1.96
25	c1	513	CLA	CMD-C2D	-2.10	1.46	1.50
25	B2	614	CLA	CMD-C2D	-2.10	1.46	1.50
25	a2	404	CLA	C3B-CAB	-2.10	1.43	1.47
25	B1	614	CLA	CMD-C2D	-2.09	1.46	1.50
25	B1	613	CLA	CMD-C2D	-2.09	1.46	1.50
25	C1	511	CLA	CMD-C2D	-2.07	1.46	1.50
25	B1	618	CLA	CMC-C2C	-2.07	1.46	1.50
36	D1	408	PL9	C2-C3	2.06	1.40	1.34
25	B2	609	CLA	CMC-C2C	-2.06	1.46	1.50
25	C1	510	CLA	CMD-C2D	-2.06	1.46	1.50
29	B2	620	LMG	O1-C1	2.05	1.43	1.40
25	B2	613	CLA	CMD-C2D	-2.05	1.46	1.50
38	V1	201	HEM	CAA-C2A	2.05	1.55	1.52
25	b1	619	CLA	CMC-C2C	-2.05	1.46	1.50
25	c2	513	CLA	CMD-C2D	-2.05	1.46	1.50
25	c2	510	CLA	CMD-C2D	-2.04	1.46	1.50
25	b2	609	CLA	CMC-C2C	-2.04	1.46	1.50
25	C2	511	CLA	CMC-C2C	-2.04	1.46	1.50
25	c1	510	CLA	CMC-C2C	-2.04	1.46	1.50
25	b1	613	CLA	CMC-C2C	-2.04	1.46	1.50
25	b2	612	CLA	CMD-C2D	-2.03	1.46	1.50
25	a1	403	CLA	CMC-C2C	-2.03	1.46	1.50
38	E1	101	HEM	CAA-C2A	2.03	1.55	1.52
36	d1	409	PL9	C2-C3	2.02	1.40	1.34
38	E1	101	HEM	FE-NB	2.02	2.06	1.96
25	B1	616	CLA	CMD-C2D	-2.02	1.46	1.50
25	D2	401	CLA	CMD-C2D	-2.02	1.46	1.50
38	E2	101	HEM	CAA-C2A	2.02	1.55	1.52
25	A1	403	CLA	C3B-CAB	-2.02	1.43	1.47
38	v1	201	HEM	CAA-C2A	2.02	1.55	1.52
25	C1	513	CLA	CMD-C2D	-2.02	1.46	1.50
25	B2	616	CLA	CMD-C2D	-2.01	1.46	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b1	615	CLA	CMD-C2D	-2.01	1.46	1.50
29	B2	621	LMG	O1-C1	2.01	1.43	1.40
25	b1	613	CLA	CMD-C2D	-2.01	1.46	1.50
25	A2	404	CLA	CMD-C2D	-2.01	1.46	1.50
25	b1	617	CLA	CMD-C2D	-2.01	1.46	1.50
25	b1	605	CLA	CMD-C2D	-2.00	1.46	1.50
25	b1	606	CLA	CMD-C2D	-2.00	1.46	1.50
25	b2	606	CLA	CMD-C2D	-2.00	1.46	1.50
25	b1	616	CLA	C3B-C2B	-2.00	1.37	1.40
25	b2	612	CLA	CMC-C2C	-2.00	1.46	1.50
38	v2	201	HEM	CAA-C2A	2.00	1.55	1.52
25	B1	618	CLA	CMD-C2D	-2.00	1.46	1.50

All (2013) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	c2	501	BCR	C36-C18-C17	-10.87	107.70	122.92
23	c2	501	BCR	C24-C23-C22	-9.36	112.09	126.23
23	c2	501	BCR	C16-C17-C18	9.01	140.16	127.31
27	a1	411	PHO	O2D-CGD-CBD	7.32	120.27	111.00
27	A1	408	PHO	O2D-CGD-CBD	7.29	120.24	111.00
27	D1	407	PHO	O2D-CGD-CBD	7.29	120.23	111.00
27	d1	403	PHO	O2D-CGD-CBD	7.28	120.21	111.00
27	D2	407	PHO	O2D-CGD-CBD	7.27	120.21	111.00
23	c2	501	BCR	C16-C15-C14	-7.18	108.77	123.47
27	A2	407	PHO	O2D-CGD-CBD	7.17	120.08	111.00
27	a2	416	PHO	O2D-CGD-CBD	7.15	120.06	111.00
25	c1	509	CLA	C4A-NA-C1A	7.10	109.90	106.71
25	C1	506	CLA	C4A-NA-C1A	7.05	109.88	106.71
25	b2	609	CLA	C4A-NA-C1A	6.98	109.84	106.71
25	C1	512	CLA	C4A-NA-C1A	6.97	109.84	106.71
25	C1	502	CLA	C4A-NA-C1A	6.95	109.83	106.71
25	c1	507	CLA	C4A-NA-C1A	6.95	109.83	106.71
25	B1	606	CLA	C4A-NA-C1A	6.93	109.82	106.71
25	B2	608	CLA	C4A-NA-C1A	6.93	109.82	106.71
25	D1	402	CLA	C4A-NA-C1A	6.91	109.81	106.71
25	b2	606	CLA	C4A-NA-C1A	6.89	109.81	106.71
25	b2	616	CLA	C4A-NA-C1A	6.88	109.80	106.71
25	D2	401	CLA	C4A-NA-C1A	6.87	109.79	106.71
25	d1	401	CLA	C4A-NA-C1A	6.85	109.78	106.71
25	B2	618	CLA	C4A-NA-C1A	6.84	109.78	106.71
25	B2	614	CLA	C4A-NA-C1A	6.83	109.78	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C2	510	CLA	C4A-NA-C1A	6.82	109.77	106.71
25	c2	504	CLA	C4A-NA-C1A	6.79	109.76	106.71
25	C2	503	CLA	C4A-NA-C1A	6.77	109.75	106.71
25	C1	505	CLA	C4A-NA-C1A	6.77	109.75	106.71
25	C2	505	CLA	C4A-NA-C1A	6.76	109.74	106.71
25	C2	511	CLA	C4A-NA-C1A	6.76	109.74	106.71
25	C2	516	CLA	C4A-NA-C1A	6.73	109.73	106.71
23	B2	602	BCR	C7-C8-C9	-6.73	116.06	126.23
25	b1	616	CLA	C4A-NA-C1A	6.73	109.73	106.71
23	c2	501	BCR	C23-C22-C21	6.73	129.27	118.94
25	B1	608	CLA	C4A-NA-C1A	6.73	109.73	106.71
27	d2	408	PHO	O2D-CGD-CBD	6.73	119.52	111.00
25	C2	509	CLA	C4A-NA-C1A	6.72	109.73	106.71
25	c2	503	CLA	C4A-NA-C1A	6.72	109.73	106.71
25	d2	402	CLA	C4A-NA-C1A	6.72	109.72	106.71
25	C2	507	CLA	C4A-NA-C1A	6.71	109.72	106.71
25	B2	616	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	C2	518	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	b2	619	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	b2	615	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	K2	101	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	c2	502	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	c1	513	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	B2	609	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	c1	503	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	A1	406	CLA	C4A-NA-C1A	6.65	109.70	106.71
25	c1	506	CLA	C4A-NA-C1A	6.65	109.70	106.71
25	c1	510	CLA	C4A-NA-C1A	6.65	109.69	106.71
25	c2	508	CLA	C4A-NA-C1A	6.64	109.69	106.71
25	c1	505	CLA	C4A-NA-C1A	6.64	109.69	106.71
25	c1	515	CLA	C4A-NA-C1A	6.63	109.69	106.71
25	b1	606	CLA	C4A-NA-C1A	6.62	109.68	106.71
25	B2	615	CLA	C4A-NA-C1A	6.62	109.68	106.71
25	D2	406	CLA	C4A-NA-C1A	6.60	109.67	106.71
25	c2	513	CLA	C4A-NA-C1A	6.59	109.67	106.71
25	b2	618	CLA	C4A-NA-C1A	6.58	109.66	106.71
25	a1	405	CLA	C4A-NA-C1A	6.56	109.66	106.71
25	c2	506	CLA	C4A-NA-C1A	6.56	109.66	106.71
25	b2	614	CLA	C4A-NA-C1A	6.56	109.65	106.71
38	V1	201	HEM	C4D-ND-C1D	6.55	111.84	105.07
25	B1	615	CLA	C4A-NA-C1A	6.54	109.65	106.71
25	b1	617	CLA	C4A-NA-C1A	6.54	109.65	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B1	614	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	B1	619	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	B2	606	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	b1	620	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	c1	511	CLA	C4A-NA-C1A	6.51	109.63	106.71
25	b2	620	CLA	C4A-NA-C1A	6.50	109.63	106.71
38	E2	101	HEM	C4D-ND-C1D	6.49	111.78	105.07
25	B1	604	CLA	C4A-NA-C1A	6.48	109.62	106.71
38	e2	101	HEM	C4D-ND-C1D	6.48	111.77	105.07
25	C1	504	CLA	C4A-NA-C1A	6.46	109.61	106.71
25	c1	512	CLA	C4A-NA-C1A	6.46	109.61	106.71
23	b2	602	BCR	C7-C8-C9	-6.45	116.48	126.23
25	B1	613	CLA	C4A-NA-C1A	6.45	109.61	106.71
25	A1	404	CLA	C4A-NA-C1A	6.44	109.60	106.71
25	b1	609	CLA	C4A-NA-C1A	6.44	109.60	106.71
25	C2	508	CLA	C4A-NA-C1A	6.44	109.60	106.71
38	V2	201	HEM	C4D-ND-C1D	6.43	111.72	105.07
25	c2	515	CLA	C4A-NA-C1A	6.43	109.59	106.71
25	C1	508	CLA	C4A-NA-C1A	6.42	109.59	106.71
25	b2	604	CLA	C4A-NA-C1A	6.41	109.59	106.71
25	c2	511	CLA	C4A-NA-C1A	6.41	109.59	106.71
25	b1	614	CLA	C4A-NA-C1A	6.40	109.58	106.71
25	c2	505	CLA	C4A-NA-C1A	6.40	109.58	106.71
25	B2	604	CLA	C4A-NA-C1A	6.39	109.58	106.71
25	C1	503	CLA	C4A-NA-C1A	6.38	109.58	106.71
25	b1	619	CLA	C4A-NA-C1A	6.38	109.57	106.71
25	b1	607	CLA	C4A-NA-C1A	6.37	109.57	106.71
25	B2	613	CLA	C4A-NA-C1A	6.35	109.56	106.71
38	v1	201	HEM	C4D-ND-C1D	6.35	111.63	105.07
38	E1	101	HEM	C4D-ND-C1D	6.34	111.63	105.07
25	b1	608	CLA	C4A-NA-C1A	6.34	109.56	106.71
25	b1	615	CLA	C4A-NA-C1A	6.34	109.56	106.71
25	B2	617	CLA	C4A-NA-C1A	6.34	109.56	106.71
25	B2	619	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	b1	612	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	c1	504	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	C1	511	CLA	C4A-NA-C1A	6.31	109.54	106.71
38	v2	201	HEM	C4D-ND-C1D	6.30	111.58	105.07
25	C2	504	CLA	C4A-NA-C1A	6.30	109.54	106.71
25	C1	513	CLA	C4A-NA-C1A	6.28	109.53	106.71
25	d2	405	CLA	C4A-NA-C1A	6.28	109.53	106.71
25	B2	607	CLA	C4A-NA-C1A	6.27	109.53	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C1	510	CLA	C4A-NA-C1A	6.27	109.53	106.71
25	c1	516	CLA	C4A-NA-C1A	6.27	109.52	106.71
25	b2	617	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	c2	510	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	c2	507	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	A2	404	CLA	C4A-NA-C1A	6.25	109.52	106.71
25	d1	406	CLA	C4A-NA-C1A	6.23	109.51	106.71
25	C1	514	CLA	C4A-NA-C1A	6.22	109.50	106.71
25	D2	404	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	b2	613	CLA	C4A-NA-C1A	6.21	109.50	106.71
23	b1	602	BCR	C7-C8-C9	-6.21	116.85	126.23
25	B1	607	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	b1	605	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	B1	605	CLA	C4A-NA-C1A	6.20	109.49	106.71
25	c2	509	CLA	C4A-NA-C1A	6.20	109.49	106.71
25	b2	610	CLA	C4A-NA-C1A	6.17	109.48	106.71
25	B2	612	CLA	C4A-NA-C1A	6.16	109.48	106.71
38	f1	101	HEM	C4D-ND-C1D	6.16	111.44	105.07
25	C2	506	CLA	C4A-NA-C1A	6.15	109.47	106.71
25	B1	609	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	b2	612	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	b2	611	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	B1	616	CLA	C4A-NA-C1A	6.12	109.46	106.71
25	B1	618	CLA	C4A-NA-C1A	6.10	109.45	106.71
25	d1	404	CLA	C4A-NA-C1A	6.08	109.44	106.71
25	b2	608	CLA	C4A-NA-C1A	6.07	109.44	106.71
25	c2	512	CLA	C4A-NA-C1A	6.06	109.43	106.71
25	B2	605	CLA	C4A-NA-C1A	6.06	109.43	106.71
25	B1	617	CLA	C4A-NA-C1A	6.05	109.43	106.71
25	b2	624	CLA	C4A-NA-C1A	5.99	109.40	106.71
25	C2	513	CLA	C4A-NA-C1A	5.98	109.39	106.71
25	b1	610	CLA	C4A-NA-C1A	5.97	109.39	106.71
25	a2	405	CLA	C4A-NA-C1A	5.96	109.39	106.71
25	B1	612	CLA	C4A-NA-C1A	5.94	109.38	106.71
25	b1	604	CLA	C4A-NA-C1A	5.94	109.38	106.71
25	B1	611	CLA	C4A-NA-C1A	5.93	109.37	106.71
23	c2	501	BCR	C20-C21-C22	5.89	135.72	127.31
25	C1	509	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	D1	403	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	d2	404	CLA	C4A-NA-C1A	5.86	109.34	106.71
25	B2	610	CLA	C4A-NA-C1A	5.81	109.32	106.71
25	B2	611	CLA	C4A-NA-C1A	5.80	109.31	106.71

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b1	611	CLA	C4A-NA-C1A	5.77	109.30	106.71
23	K1	101	BCR	C24-C23-C22	-5.75	120.52	126.59
23	c2	501	BCR	C37-C22-C21	-5.74	114.88	122.92
25	B1	609	CLA	CAC-C3C-C4C	5.73	132.25	124.81
25	c1	508	CLA	C4A-NA-C1A	5.67	109.25	106.71
25	A2	403	CLA	C4A-NA-C1A	5.62	109.23	106.71
25	b1	613	CLA	C4A-NA-C1A	5.61	109.23	106.71
23	J1	101	BCR	C20-C21-C22	-5.60	119.32	127.31
23	B1	602	BCR	C7-C8-C9	-5.57	117.82	126.23
23	k1	101	BCR	C20-C21-C22	-5.54	119.40	127.31
25	C1	507	CLA	C4A-NA-C1A	5.53	109.19	106.71
23	B1	602	BCR	C11-C10-C9	-5.53	119.42	127.31
23	c2	501	BCR	C15-C16-C17	5.51	134.76	123.47
23	j2	102	BCR	C33-C5-C6	-5.51	118.34	124.53
25	A2	402	CLA	C4A-NA-C1A	5.49	109.17	106.71
23	D1	401	BCR	C7-C8-C9	-5.47	117.97	126.23
23	F2	401	BCR	C20-C21-C22	-5.47	119.51	127.31
29	c2	519	LMG	O7-C10-O9	-5.46	118.62	125.57
25	B1	610	CLA	C4A-NA-C1A	5.46	109.16	106.71
23	K1	101	BCR	C15-C14-C13	-5.44	119.54	127.31
23	c2	501	BCR	C19-C18-C17	5.43	127.28	118.94
25	a2	413	CLA	C4A-NA-C1A	5.39	109.13	106.71
23	J1	101	BCR	C33-C5-C6	-5.34	118.53	124.53
25	A1	403	CLA	C4A-NA-C1A	5.34	109.11	106.71
23	B2	602	BCR	C11-C10-C9	-5.30	119.74	127.31
23	j2	102	BCR	C20-C21-C22	-5.29	119.76	127.31
23	F2	401	BCR	C7-C8-C9	-5.26	118.28	126.23
23	c1	502	BCR	C15-C14-C13	-5.21	119.88	127.31
23	c1	501	BCR	C11-C10-C9	-5.16	119.95	127.31
25	A1	405	CLA	C4A-NA-C1A	5.13	109.01	106.71
23	d1	405	BCR	C7-C8-C9	-5.11	118.52	126.23
23	k1	101	BCR	C33-C5-C6	-5.10	118.80	124.53
25	a1	404	CLA	C4A-NA-C1A	5.08	108.99	106.71
25	a2	404	CLA	C4A-NA-C1A	5.06	108.98	106.71
23	c1	501	BCR	C15-C14-C13	-5.01	120.16	127.31
37	D1	409	SQD	O47-C7-C8	5.00	120.29	111.09
37	D2	402	SQD	O47-C7-C8	5.00	120.28	111.09
23	c1	501	BCR	C16-C17-C18	-4.98	120.20	127.31
23	b2	602	BCR	C20-C21-C22	-4.93	120.27	127.31
23	c1	502	BCR	C24-C23-C22	-4.93	118.78	126.23
29	b1	624	LMG	O7-C10-C11	4.92	122.10	111.50
23	d2	401	BCR	C16-C17-C18	-4.91	120.30	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	d2	407	LMG	O7-C10-C11	4.91	120.12	111.09
25	a1	403	CLA	C4A-NA-C1A	4.90	108.91	106.71
23	c1	502	BCR	C20-C21-C22	-4.90	120.32	127.31
23	H1	102	BCR	C15-C14-C13	-4.89	120.33	127.31
23	D1	401	BCR	C11-C10-C9	-4.89	120.33	127.31
34	C2	512	DGD	O2G-C1B-C2B	4.88	120.07	111.09
23	j2	102	BCR	C15-C14-C13	-4.88	120.35	127.31
23	C2	502	BCR	C15-C14-C13	-4.87	120.36	127.31
23	h2	101	BCR	C15-C14-C13	-4.86	120.38	127.31
23	D1	401	BCR	C16-C17-C18	-4.80	120.45	127.31
23	k2	501	BCR	C24-C23-C22	-4.78	119.01	126.23
23	J1	101	BCR	C24-C23-C22	-4.77	119.03	126.23
25	C1	509	CLA	CMB-C2B-C1B	-4.75	121.16	128.46
23	A2	401	BCR	C28-C27-C26	-4.71	105.66	114.08
23	F2	401	BCR	C15-C14-C13	-4.70	120.60	127.31
23	k2	501	BCR	C20-C21-C22	-4.70	120.60	127.31
23	h1	102	BCR	C16-C17-C18	-4.69	120.61	127.31
27	D2	407	PHO	C1-C2-C3	-4.69	117.93	126.04
25	B2	613	CLA	CMB-C2B-C1B	-4.68	121.27	128.46
23	K2	102	BCR	C24-C23-C22	-4.68	119.16	126.23
23	K2	102	BCR	C20-C21-C22	-4.68	120.63	127.31
23	k2	501	BCR	C15-C14-C13	-4.67	120.64	127.31
23	C1	521	BCR	C11-C10-C9	-4.66	120.66	127.31
33	d1	402	LHG	O7-C7-C8	4.64	121.50	111.50
36	D1	408	PL9	C7-C8-C9	-4.63	119.08	126.79
23	A2	401	BCR	C7-C8-C9	-4.62	119.25	126.23
36	D2	408	PL9	C7-C8-C9	-4.62	119.10	126.79
23	A2	401	BCR	C16-C17-C18	-4.61	120.73	127.31
23	B2	601	BCR	C28-C27-C26	-4.60	105.86	114.08
23	c1	501	BCR	C20-C21-C22	-4.60	120.75	127.31
23	C1	501	BCR	C15-C14-C13	-4.58	120.77	127.31
23	B2	601	BCR	C15-C14-C13	-4.54	120.84	127.31
23	b2	601	BCR	C28-C27-C26	-4.52	106.00	114.08
37	b2	605	SQD	O47-C7-C8	4.52	121.23	111.50
23	c1	502	BCR	C36-C18-C19	4.52	125.19	118.08
36	d2	409	PL9	C7-C8-C9	-4.50	119.30	126.79
36	d1	409	PL9	C7-C8-C9	-4.50	119.30	126.79
23	c2	501	BCR	C38-C26-C25	-4.49	119.48	124.53
25	B2	610	CLA	CMB-C2B-C1B	-4.49	121.56	128.46
23	A2	401	BCR	C11-C10-C9	-4.49	120.90	127.31
23	F2	401	BCR	C36-C18-C19	4.48	125.14	118.08
23	h1	102	BCR	C20-C21-C22	-4.48	120.92	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B1	601	BCR	C28-C27-C26	-4.48	106.08	114.08
23	c1	502	BCR	C7-C8-C9	-4.47	119.48	126.23
23	b2	601	BCR	C15-C14-C13	-4.46	120.95	127.31
23	K1	101	BCR	C33-C5-C6	-4.42	119.56	124.53
29	M1	101	LMG	O7-C10-C11	4.42	121.03	111.50
34	c2	516	DGD	O2G-C1B-C2B	4.42	121.02	111.50
23	j2	102	BCR	C24-C23-C22	-4.41	119.57	126.23
23	C2	502	BCR	C20-C21-C22	-4.40	121.03	127.31
23	c2	501	BCR	C36-C18-C19	4.40	125.00	118.08
23	c2	501	BCR	C7-C8-C9	-4.40	119.59	126.23
23	K1	101	BCR	C16-C17-C18	-4.39	121.04	127.31
23	K2	104	BCR	C28-C27-C26	-4.39	106.24	114.08
34	c1	518	DGD	O2G-C1B-C2B	4.39	120.95	111.50
25	c2	509	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
25	b1	610	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
23	B2	603	BCR	C15-C14-C13	-4.38	121.07	127.31
29	B1	626	LMG	O7-C10-C11	4.37	120.92	111.50
23	B1	601	BCR	C7-C8-C9	-4.37	119.64	126.23
23	k2	501	BCR	C16-C17-C18	-4.36	121.08	127.31
23	d2	401	BCR	C20-C21-C22	-4.36	121.09	127.31
23	C1	521	BCR	C15-C14-C13	-4.35	121.10	127.31
23	b2	603	BCR	C15-C14-C13	-4.34	121.12	127.31
23	K2	102	BCR	C36-C18-C19	4.33	124.90	118.08
23	b2	603	BCR	C7-C8-C9	-4.33	119.69	126.23
29	b1	621	LMG	O7-C10-C11	4.32	120.82	111.50
29	b1	631	LMG	O7-C10-C11	4.30	120.77	111.50
25	b2	624	CLA	CMB-C2B-C1B	-4.28	121.88	128.46
23	b1	602	BCR	C35-C13-C12	4.27	124.80	118.08
23	J1	101	BCR	C15-C14-C13	-4.25	121.24	127.31
23	K2	102	BCR	C15-C14-C13	-4.25	121.24	127.31
23	b2	603	BCR	C11-C10-C9	-4.24	121.25	127.31
25	c1	506	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
37	B2	623	SQD	O47-C7-C8	4.23	120.62	111.50
23	J1	101	BCR	C36-C18-C19	4.22	124.73	118.08
23	b2	602	BCR	C15-C14-C13	-4.22	121.29	127.31
29	A2	412	LMG	O7-C10-C11	4.22	120.59	111.50
34	c1	514	DGD	O2G-C1B-C2B	4.21	120.56	111.50
34	C1	515	DGD	O2G-C1B-C2B	4.20	120.55	111.50
23	d2	401	BCR	C38-C26-C25	-4.19	119.82	124.53
23	z2	101	BCR	C15-C14-C13	-4.19	121.33	127.31
23	c1	502	BCR	C33-C5-C6	-4.18	119.84	124.53
23	h1	102	BCR	C28-C27-C26	-4.17	106.62	114.08

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	k1	101	BCR	C24-C23-C22	-4.17	119.93	126.23
23	b1	601	BCR	C28-C27-C26	-4.16	106.64	114.08
23	d2	401	BCR	C11-C10-C9	-4.15	121.38	127.31
25	b1	615	CLA	CMB-C2B-C1B	-4.15	122.08	128.46
34	H1	101	DGD	O2G-C1B-C2B	4.15	120.44	111.50
29	j2	101	LMG	O7-C10-C11	4.15	120.44	111.50
23	z2	101	BCR	C16-C17-C18	-4.15	121.39	127.31
25	b1	614	CLA	CMB-C2B-C1B	-4.14	122.11	128.46
33	L2	101	LHG	O7-C7-C8	4.13	120.41	111.50
34	C1	516	DGD	O2G-C1B-C2B	4.13	120.40	111.50
23	D1	401	BCR	C24-C23-C22	-4.13	120.00	126.23
23	c1	501	BCR	C24-C23-C22	-4.13	120.00	126.23
23	A2	401	BCR	C33-C5-C6	-4.12	119.90	124.53
29	I2	101	LMG	O7-C10-C11	4.12	120.39	111.50
34	c2	514	DGD	O2G-C1B-C2B	4.12	120.37	111.50
23	B1	602	BCR	C28-C27-C26	-4.10	106.75	114.08
23	C1	521	BCR	C16-C17-C18	-4.10	121.46	127.31
23	k1	101	BCR	C36-C18-C19	4.08	124.50	118.08
23	j2	102	BCR	C36-C18-C19	4.07	124.49	118.08
23	B2	602	BCR	C16-C17-C18	-4.07	121.50	127.31
29	C1	520	LMG	O7-C10-C11	4.07	120.27	111.50
23	C2	502	BCR	C16-C17-C18	-4.07	121.50	127.31
29	d1	408	LMG	O7-C10-C11	4.06	120.26	111.50
33	l2	101	LHG	O7-C7-C8	4.06	120.26	111.50
23	B2	603	BCR	C7-C8-C9	-4.06	120.10	126.23
25	c1	511	CLA	CMB-C2B-C1B	-4.05	122.23	128.46
25	C2	506	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
23	D1	401	BCR	C33-C5-C6	-4.05	119.98	124.53
33	a2	407	LHG	O7-C7-C8	4.04	120.21	111.50
23	B2	603	BCR	C11-C10-C9	-4.04	121.55	127.31
25	B2	615	CLA	CMB-C2B-C1B	-4.03	122.27	128.46
23	b2	601	BCR	C7-C8-C9	-4.03	120.14	126.23
33	B2	627	LHG	O7-C7-C8	4.02	120.17	111.50
34	h1	101	DGD	O2G-C1B-C2B	4.02	120.16	111.50
25	B1	614	CLA	CMB-C2B-C1B	-4.01	122.30	128.46
25	c1	504	CLA	CMB-C2B-C1B	-4.00	122.31	128.46
33	l1	102	LHG	O7-C7-C8	4.00	120.12	111.50
23	K1	101	BCR	C3-C4-C5	-3.99	106.94	114.08
23	h2	101	BCR	C11-C10-C9	-3.99	121.61	127.31
33	b2	625	LHG	O7-C7-C8	3.99	120.10	111.50
23	b2	602	BCR	C24-C23-C22	-3.99	120.21	126.23
29	F2	402	LMG	O7-C10-C11	3.98	120.09	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	c2	501	BCR	C11-C10-C9	-3.98	121.63	127.31
23	d2	401	BCR	C24-C23-C22	-3.98	120.22	126.23
23	b2	603	BCR	C24-C23-C22	-3.97	120.23	126.23
29	A1	412	LMG	O7-C10-C11	3.97	120.06	111.50
23	k2	501	BCR	C11-C10-C9	-3.97	121.64	127.31
25	c1	515	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
23	a1	401	BCR	C33-C5-C6	-3.96	120.08	124.53
23	b2	601	BCR	C11-C10-C9	-3.96	121.66	127.31
33	a1	407	LHG	O7-C7-C8	3.95	120.02	111.50
23	B1	601	BCR	C24-C23-C22	-3.95	120.27	126.23
27	D1	407	PHO	C1-C2-C3	-3.95	119.22	126.04
23	k1	101	BCR	C15-C14-C13	-3.94	121.68	127.31
29	B2	621	LMG	O7-C10-C11	3.94	120.00	111.50
23	D1	401	BCR	C15-C14-C13	-3.94	121.69	127.31
23	d1	405	BCR	C33-C5-C6	-3.94	120.11	124.53
25	C1	505	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
25	c1	512	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
25	C2	508	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
25	B1	610	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
33	d1	407	LHG	O7-C7-C8	3.93	119.97	111.50
25	c2	513	CLA	CMB-C2B-C1B	-3.93	122.43	128.46
23	d2	401	BCR	C15-C14-C13	-3.93	121.71	127.31
23	K1	101	BCR	C11-C10-C9	-3.92	121.71	127.31
23	b1	603	BCR	C15-C14-C13	-3.92	121.71	127.31
25	C1	511	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
23	A1	401	BCR	C16-C17-C18	-3.91	121.73	127.31
23	d2	401	BCR	C1-C6-C5	-3.91	117.11	122.61
23	C1	521	BCR	C24-C23-C22	-3.91	120.33	126.23
23	h1	102	BCR	C24-C23-C22	-3.90	120.34	126.23
23	F2	401	BCR	C11-C10-C9	-3.90	121.75	127.31
25	b1	613	CLA	O2A-CGA-O1A	-3.89	113.77	123.59
33	D1	404	LHG	O7-C7-C8	3.89	119.88	111.50
23	d2	401	BCR	C3-C4-C5	-3.89	107.14	114.08
25	D1	403	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
23	b1	603	BCR	C11-C10-C9	-3.89	121.76	127.31
25	c2	507	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
27	d2	408	PHO	C1-C2-C3	-3.88	119.33	126.04
23	F2	401	BCR	C24-C23-C22	-3.88	120.37	126.23
29	a2	412	LMG	O7-C10-C11	3.87	119.85	111.50
25	c1	513	CLA	CMB-C2B-C1B	-3.87	122.51	128.46
33	D2	405	LHG	O7-C7-C8	3.87	119.85	111.50
25	b2	614	CLA	CMB-C2B-C1B	-3.87	122.52	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	d2	404	CLA	CMB-C2B-C1B	-3.87	122.52	128.46
23	c1	502	BCR	C11-C10-C9	-3.86	121.80	127.31
29	A1	410	LMG	O7-C10-C11	3.86	119.82	111.50
23	b1	603	BCR	C7-C8-C9	-3.86	120.41	126.23
33	L1	101	LHG	O7-C7-C8	3.86	119.81	111.50
25	d1	406	CLA	CMB-C2B-C1B	-3.86	122.54	128.46
23	B2	602	BCR	C38-C26-C25	-3.85	120.20	124.53
25	C2	511	CLA	CMB-C2B-C1B	-3.85	122.55	128.46
36	d2	409	PL9	C22-C23-C24	-3.84	118.41	127.66
25	C2	507	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
33	b1	622	LHG	O7-C7-C8	3.84	119.78	111.50
23	A1	401	BCR	C7-C8-C9	-3.84	120.43	126.23
25	b2	615	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
29	D1	406	LMG	O7-C10-C11	3.84	119.77	111.50
23	b2	602	BCR	C16-C17-C18	-3.84	121.84	127.31
23	a2	402	BCR	C38-C26-C25	-3.84	120.22	124.53
34	C1	517	DGD	O2G-C1B-C2B	3.83	119.76	111.50
25	B1	615	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
29	b1	624	LMG	O1-C1-C2	3.83	114.28	108.30
25	B2	614	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
23	d1	405	BCR	C24-C23-C22	-3.83	120.45	126.23
29	d1	411	LMG	O7-C10-C11	3.82	119.74	111.50
34	H2	101	DGD	O2G-C1B-C2B	3.82	119.74	111.50
23	B1	603	BCR	C15-C14-C13	-3.82	121.86	127.31
33	D1	405	LHG	O7-C7-C8	3.82	119.73	111.50
27	d1	403	PHO	C1-C2-C3	-3.82	119.44	126.04
23	d1	405	BCR	C11-C10-C9	-3.82	121.86	127.31
38	V2	201	HEM	C4C-CHD-C1D	3.82	127.59	122.56
23	a1	401	BCR	C11-C10-C9	-3.82	121.86	127.31
25	b1	605	CLA	CMB-C2B-C1B	-3.82	122.60	128.46
23	C1	521	BCR	C7-C8-C9	-3.80	120.49	126.23
36	D1	408	PL9	C22-C23-C24	-3.80	118.50	127.66
25	d1	404	CLA	CMB-C2B-C1B	-3.80	122.62	128.46
23	b1	601	BCR	C15-C14-C13	-3.80	121.88	127.31
23	C2	502	BCR	C7-C8-C9	-3.80	120.50	126.23
23	K2	104	BCR	C33-C5-C6	-3.80	120.26	124.53
25	C1	512	CLA	CMB-C2B-C1B	-3.80	122.63	128.46
23	c1	501	BCR	C7-C8-C9	-3.79	120.50	126.23
25	B2	610	CLA	CMB-C2B-C3B	3.79	131.76	124.68
23	B2	601	BCR	C20-C21-C22	-3.79	121.91	127.31
29	B1	622	LMG	O7-C10-C11	3.79	119.66	111.50
25	b2	612	CLA	CMB-C2B-C1B	-3.77	122.66	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B1	603	BCR	C7-C8-C9	-3.77	120.53	126.23
23	c2	501	BCR	C3-C4-C5	-3.77	107.34	114.08
25	B2	605	CLA	CMB-C2B-C1B	-3.76	122.68	128.46
38	V1	201	HEM	C4C-CHD-C1D	3.76	127.52	122.56
29	a1	412	LMG	O7-C10-C11	3.76	119.60	111.50
25	c1	516	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
25	b1	613	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
25	B2	609	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
23	B1	601	BCR	C15-C14-C13	-3.75	121.95	127.31
23	b2	603	BCR	C38-C26-C25	-3.75	120.31	124.53
25	c2	505	CLA	CMB-C2B-C1B	-3.75	122.70	128.46
23	a1	401	BCR	C38-C26-C25	-3.75	120.32	124.53
23	b1	601	BCR	C7-C8-C9	-3.74	120.58	126.23
25	b2	613	CLA	CMB-C2B-C1B	-3.74	122.72	128.46
23	b2	602	BCR	C11-C10-C9	-3.73	121.99	127.31
23	A1	401	BCR	C33-C5-C6	-3.73	120.34	124.53
23	b1	602	BCR	C28-C27-C26	-3.73	107.42	114.08
23	b2	602	BCR	C38-C26-C25	-3.73	120.34	124.53
25	c2	515	CLA	CMB-C2B-C1B	-3.72	122.75	128.46
23	B2	603	BCR	C20-C21-C22	-3.72	122.00	127.31
33	d2	406	LHG	O7-C7-C8	3.72	119.51	111.50
25	b2	606	CLA	CMB-C2B-C1B	-3.72	122.75	128.46
23	B1	602	BCR	C16-C17-C18	-3.71	122.01	127.31
23	a1	401	BCR	C7-C8-C9	-3.71	120.63	126.23
23	C1	501	BCR	C7-C8-C9	-3.71	120.64	126.23
25	c2	506	CLA	CMB-C2B-C1B	-3.70	122.77	128.46
23	A1	401	BCR	C15-C14-C13	-3.70	122.03	127.31
25	B1	619	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
23	b2	603	BCR	C16-C17-C18	-3.70	122.03	127.31
25	b2	611	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
23	K2	104	BCR	C7-C8-C9	-3.69	120.65	126.23
23	J1	101	BCR	C11-C10-C9	-3.69	122.04	127.31
23	c2	501	BCR	C33-C5-C6	-3.69	120.38	124.53
25	c2	506	CLA	O2D-CGD-O1D	-3.69	116.62	123.84
23	d2	401	BCR	C4-C5-C6	-3.69	117.38	122.73
25	b2	620	CLA	CMB-C2B-C1B	-3.69	122.80	128.46
29	c1	519	LMG	O7-C10-C11	3.68	119.43	111.50
23	B2	602	BCR	C15-C14-C13	-3.68	122.06	127.31
33	d2	403	LHG	O7-C7-C8	3.68	119.42	111.50
36	d1	409	PL9	C22-C23-C24	-3.68	118.81	127.66
23	d1	405	BCR	C16-C17-C18	-3.67	122.07	127.31
29	B2	620	LMG	O7-C10-C11	3.66	119.40	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	z2	101	BCR	C11-C10-C9	-3.66	122.08	127.31
23	B1	601	BCR	C33-C5-C6	-3.66	120.42	124.53
25	c1	505	CLA	CMB-C2B-C1B	-3.66	122.84	128.46
38	v2	201	HEM	C4C-CHD-C1D	3.66	127.38	122.56
23	C2	502	BCR	C11-C10-C9	-3.65	122.10	127.31
23	b2	601	BCR	C33-C5-C6	-3.65	120.43	124.53
23	K2	102	BCR	C3-C4-C5	-3.65	107.56	114.08
23	K2	102	BCR	C16-C17-C18	-3.65	122.10	127.31
23	b1	602	BCR	C16-C17-C18	-3.65	122.11	127.31
36	d1	409	PL9	C42-C43-C44	-3.65	118.88	127.66
23	A1	401	BCR	C38-C26-C25	-3.64	120.44	124.53
25	C2	518	CLA	CMB-C2B-C1B	-3.64	122.87	128.46
23	B1	603	BCR	C11-C10-C9	-3.64	122.12	127.31
29	b2	622	LMG	O7-C10-C11	3.63	119.33	111.50
23	F2	401	BCR	C33-C5-C6	-3.62	120.46	124.53
23	B2	603	BCR	C38-C26-C25	-3.62	120.46	124.53
34	h2	102	DGD	O2G-C1B-C2B	3.62	119.30	111.50
34	c2	517	DGD	O2G-C1B-C2B	3.62	119.29	111.50
25	B1	612	CLA	CMB-C2B-C1B	-3.61	122.91	128.46
23	k2	501	BCR	C7-C8-C9	-3.61	120.78	126.23
33	D2	403	LHG	O7-C7-C8	3.61	119.27	111.50
25	C2	503	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
25	B2	611	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
25	a1	405	CLA	O2D-CGD-O1D	-3.61	116.79	123.84
23	B2	603	BCR	C24-C23-C22	-3.60	120.79	126.23
25	c1	503	CLA	CMB-C2B-C1B	-3.60	122.93	128.46
25	b2	624	CLA	CMB-C2B-C3B	3.60	131.41	124.68
23	B1	601	BCR	C11-C10-C9	-3.60	122.17	127.31
36	D2	408	PL9	C42-C43-C44	-3.60	119.00	127.66
23	b2	601	BCR	C16-C17-C18	-3.59	122.18	127.31
23	k1	101	BCR	C11-C10-C9	-3.59	122.19	127.31
25	A1	406	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
23	B2	601	BCR	C33-C5-C6	-3.58	120.50	124.53
23	B1	603	BCR	C16-C17-C18	-3.58	122.20	127.31
25	C1	507	CLA	CMB-C2B-C1B	-3.58	122.96	128.46
23	h2	101	BCR	C16-C17-C18	-3.57	122.21	127.31
25	B1	617	CLA	CMB-C2B-C1B	-3.57	122.98	128.46
25	c1	510	CLA	CMB-C2B-C1B	-3.57	122.98	128.46
25	B1	609	CLA	CMB-C2B-C1B	-3.56	122.99	128.46
25	c1	506	CLA	CMB-C2B-C3B	3.55	131.32	124.68
25	b1	609	CLA	CMB-C2B-C1B	-3.55	123.01	128.46
25	C2	504	CLA	CMB-C2B-C1B	-3.55	123.01	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	K1	101	BCR	C7-C8-C9	-3.55	120.88	126.23
23	b1	601	BCR	C33-C5-C6	-3.54	120.55	124.53
36	D1	408	PL9	C37-C38-C39	-3.54	119.14	127.66
25	B2	606	CLA	CMB-C2B-C1B	-3.54	123.03	128.46
25	D2	404	CLA	CMB-C2B-C1B	-3.53	123.03	128.46
23	K2	102	BCR	C11-C10-C9	-3.53	122.27	127.31
25	C1	514	CLA	CMB-C2B-C1B	-3.53	123.04	128.46
25	b1	610	CLA	CMB-C2B-C3B	3.53	131.28	124.68
25	B2	619	CLA	CMB-C2B-C1B	-3.52	123.06	128.46
23	b2	603	BCR	C20-C21-C22	-3.51	122.30	127.31
25	C2	505	CLA	CMB-C2B-C1B	-3.51	123.08	128.46
25	b2	608	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
25	C2	513	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
25	B1	611	CLA	O2D-CGD-O1D	-3.50	116.99	123.84
25	b1	615	CLA	CMB-C2B-C3B	3.50	131.23	124.68
23	B2	602	BCR	C20-C21-C22	-3.50	122.31	127.31
25	B1	605	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
25	C1	503	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
23	B1	602	BCR	C24-C23-C22	-3.50	120.95	126.23
25	B2	608	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
25	B2	617	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
23	C1	501	BCR	C11-C10-C9	-3.50	122.32	127.31
25	B2	607	CLA	O2D-CGD-O1D	-3.49	117.00	123.84
25	B2	612	CLA	CMB-C2B-C1B	-3.49	123.10	128.46
23	B2	603	BCR	C16-C17-C18	-3.49	122.33	127.31
23	B2	601	BCR	C7-C8-C9	-3.49	120.96	126.23
38	v1	201	HEM	C4C-CHD-C1D	3.49	127.16	122.56
36	D2	408	PL9	C22-C23-C24	-3.48	119.28	127.66
25	b1	606	CLA	O2D-CGD-O1D	-3.48	117.03	123.84
25	C1	504	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
25	D2	401	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
25	b2	612	CLA	O2A-CGA-O1A	-3.48	114.82	123.59
33	B1	621	LHG	O7-C7-C8	3.47	118.99	111.50
23	d1	405	BCR	C15-C14-C13	-3.47	122.36	127.31
23	K2	102	BCR	C33-C5-C6	-3.47	120.63	124.53
25	A1	404	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
25	C1	502	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
34	c1	520	DGD	O2G-C1B-C2B	3.46	118.97	111.50
23	k2	501	BCR	C3-C4-C5	-3.46	107.89	114.08
25	B2	613	CLA	CMB-C2B-C3B	3.46	131.16	124.68
25	C2	509	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
23	B2	601	BCR	C16-C17-C18	-3.46	122.38	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	C1	521	BCR	C20-C21-C22	-3.45	122.38	127.31
25	C1	509	CLA	O2D-CGD-O1D	-3.45	117.09	123.84
23	F2	401	BCR	C16-C17-C18	-3.45	122.39	127.31
23	C2	502	BCR	C24-C23-C22	-3.45	121.02	126.23
25	B1	606	CLA	CMB-C2B-C1B	-3.45	123.17	128.46
23	b1	602	BCR	C20-C21-C22	-3.45	122.39	127.31
23	b1	601	BCR	C16-C17-C18	-3.44	122.40	127.31
25	B1	611	CLA	CMB-C2B-C1B	-3.44	123.18	128.46
25	c1	508	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	C1	508	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	A2	404	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	b1	614	CLA	CMB-C2B-C3B	3.43	131.10	124.68
25	c1	504	CLA	CMB-C2B-C3B	3.43	131.10	124.68
25	c2	509	CLA	CMB-C2B-C3B	3.43	131.09	124.68
25	a2	405	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
23	b2	603	BCR	C33-C5-C6	-3.43	120.68	124.53
25	b1	619	CLA	CMB-C2B-C1B	-3.43	123.20	128.46
23	a1	401	BCR	C16-C17-C18	-3.42	122.42	127.31
23	b1	603	BCR	C38-C26-C25	-3.42	120.69	124.53
25	b1	608	CLA	O2D-CGD-O1D	-3.41	117.16	123.84
36	d2	409	PL9	C30-C29-C31	3.41	121.02	115.27
25	a2	413	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	B1	618	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	d2	402	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	C2	510	CLA	CMB-C2B-C1B	-3.40	123.24	128.46
23	a2	402	BCR	C11-C10-C9	-3.40	122.46	127.31
23	b1	603	BCR	C16-C17-C18	-3.40	122.46	127.31
25	B1	609	CLA	CAC-C3C-C2C	-3.39	121.72	127.53
25	c2	511	CLA	CMB-C2B-C1B	-3.39	123.25	128.46
25	d1	401	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
25	B2	604	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
25	B2	613	CLA	O2A-CGA-O1A	-3.38	115.07	123.59
25	B1	613	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
25	A2	402	CLA	CMB-C2B-C1B	-3.38	123.28	128.46
25	b1	607	CLA	CMB-C2B-C1B	-3.38	123.28	128.46
25	C2	506	CLA	CMB-C2B-C3B	3.37	130.99	124.68
25	C2	516	CLA	CMB-C2B-C1B	-3.37	123.28	128.46
23	z2	101	BCR	C33-C5-C6	-3.37	120.75	124.53
23	a2	402	BCR	C7-C8-C9	-3.37	121.15	126.23
25	C1	510	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
23	h2	101	BCR	C7-C8-C9	-3.36	121.16	126.23
25	c1	509	CLA	CMB-C2B-C1B	-3.36	123.30	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b1	617	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
25	B2	615	CLA	CMB-C2B-C3B	3.35	130.95	124.68
25	b2	609	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
36	D1	408	PL9	C15-C14-C16	3.35	120.91	115.27
23	K2	102	BCR	C36-C18-C17	-3.35	118.23	122.92
25	c1	507	CLA	CMB-C2B-C1B	-3.35	123.32	128.46
25	B1	619	CLA	O2D-CGD-O1D	-3.35	117.30	123.84
25	b2	610	CLA	CMB-C2B-C1B	-3.34	123.32	128.46
25	c1	511	CLA	CMB-C2B-C3B	3.34	130.93	124.68
25	B2	605	CLA	O2D-CGD-O1D	-3.34	117.30	123.84
25	b1	605	CLA	CMB-C2B-C3B	3.34	130.93	124.68
25	b1	614	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
23	H2	103	BCR	C15-C14-C13	-3.34	122.55	127.31
29	C2	515	LMG	O7-C10-C11	3.34	120.11	110.80
25	b1	612	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
25	b2	604	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
25	b2	617	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
25	A1	406	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
23	b2	602	BCR	C28-C27-C26	-3.32	108.14	114.08
25	D1	403	CLA	CMB-C2B-C3B	3.32	130.90	124.68
25	a1	405	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
25	C1	509	CLA	CMB-C2B-C3B	3.32	130.88	124.68
25	c2	502	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
23	b1	601	BCR	C11-C10-C9	-3.31	122.58	127.31
25	A1	403	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
36	d1	409	PL9	C20-C19-C21	3.31	120.84	115.27
25	b1	606	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
23	B1	602	BCR	C20-C21-C22	-3.30	122.59	127.31
25	C1	513	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
33	d1	402	LHG	C5-O7-C7	-3.30	109.67	117.79
25	C2	508	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	c1	507	CLA	O2D-CGD-O1D	-3.30	117.39	123.84
25	D2	404	CLA	O2D-CGD-O1D	-3.30	117.39	123.84
23	h2	101	BCR	C3-C4-C5	-3.30	108.19	114.08
23	C1	521	BCR	C38-C26-C25	-3.29	120.83	124.53
25	C2	518	CLA	O2D-CGD-O1D	-3.29	117.40	123.84
25	A1	405	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
23	C2	502	BCR	C38-C26-C25	-3.29	120.83	124.53
25	c1	510	CLA	O2D-CGD-O1D	-3.28	117.42	123.84
25	b2	618	CLA	CMB-C2B-C1B	-3.28	123.42	128.46
36	D1	408	PL9	C30-C29-C31	3.28	120.79	115.27
23	B2	601	BCR	C24-C23-C22	-3.28	121.28	126.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	d2	401	BCR	C33-C5-C4	3.28	119.91	113.62
25	C1	505	CLA	CMB-C2B-C3B	3.28	130.81	124.68
25	a1	403	CLA	CMB-C2B-C1B	-3.28	123.43	128.46
25	b1	608	CLA	CMB-C2B-C1B	-3.28	123.43	128.46
25	c2	505	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
34	C1	516	DGD	C2G-O2G-C1B	-3.27	109.73	117.79
38	f1	101	HEM	C4C-CHD-C1D	3.27	126.88	122.56
25	B1	610	CLA	O2D-CGD-O1D	-3.27	117.45	123.84
25	b1	604	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
25	B1	604	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
25	D2	406	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
38	e2	101	HEM	C4C-CHD-C1D	3.27	126.87	122.56
23	b1	602	BCR	C35-C13-C14	-3.27	118.35	122.92
25	c2	513	CLA	CMB-C2B-C3B	3.26	130.78	124.68
25	d1	401	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
23	k2	501	BCR	C28-C27-C26	-3.26	108.25	114.08
25	b2	614	CLA	CMB-C2B-C3B	3.26	130.78	124.68
25	B2	616	CLA	O2D-CGD-O1D	-3.25	117.47	123.84
25	d2	405	CLA	CMB-C2B-C1B	-3.25	123.46	128.46
25	c1	515	CLA	CMB-C2B-C3B	3.25	130.76	124.68
25	c1	512	CLA	CMB-C2B-C3B	3.25	130.76	124.68
25	B2	618	CLA	CMB-C2B-C1B	-3.25	123.47	128.46
25	C1	511	CLA	CMB-C2B-C3B	3.25	130.75	124.68
23	b2	601	BCR	C20-C21-C22	-3.24	122.68	127.31
23	A2	401	BCR	C15-C14-C13	-3.24	122.68	127.31
36	d2	409	PL9	C25-C24-C26	3.24	120.73	115.27
25	d2	402	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	b2	612	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	B2	616	CLA	CMB-C2B-C1B	-3.24	123.49	128.46
25	d1	406	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
25	B2	605	CLA	CMB-C2B-C3B	3.24	130.73	124.68
23	c1	501	BCR	C33-C5-C6	-3.24	120.89	124.53
25	c2	509	CLA	O2D-CGD-O1D	-3.23	117.52	123.84
25	B2	609	CLA	O2D-CGD-O1D	-3.23	117.52	123.84
25	c2	504	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
25	B1	613	CLA	O2A-CGA-O1A	-3.23	115.45	123.59
23	z2	101	BCR	C7-C8-C9	-3.23	121.36	126.23
25	b1	605	CLA	O2D-CGD-O1D	-3.23	117.53	123.84
25	b1	609	CLA	O2D-CGD-O1D	-3.22	117.53	123.84
25	b2	616	CLA	CMB-C2B-C1B	-3.22	123.51	128.46
23	d1	405	BCR	C38-C26-C25	-3.22	120.92	124.53
23	B2	601	BCR	C11-C10-C9	-3.21	122.72	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B2	619	CLA	O2D-CGD-O1D	-3.21	117.55	123.84
23	h1	102	BCR	C15-C14-C13	-3.21	122.72	127.31
23	A1	401	BCR	C11-C10-C9	-3.21	122.73	127.31
25	A2	403	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
25	B1	615	CLA	CMB-C2B-C3B	3.21	130.68	124.68
38	f1	101	HEM	C4B-CHC-C1C	3.21	126.79	122.56
25	D1	402	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
29	B1	626	LMG	O8-C28-C29	3.21	121.97	111.91
25	c1	513	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	d1	406	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	C2	511	CLA	O2D-CGD-O1D	-3.21	117.57	123.84
23	B1	601	BCR	C16-C17-C18	-3.20	122.74	127.31
25	B1	614	CLA	CMB-C2B-C3B	3.20	130.67	124.68
25	c2	510	CLA	CMB-C2B-C1B	-3.20	123.54	128.46
25	b2	613	CLA	CMB-C2B-C3B	3.20	130.67	124.68
23	C2	502	BCR	C33-C5-C6	-3.20	120.93	124.53
25	B1	618	CLA	O2D-CGD-O1D	-3.20	117.58	123.84
25	c2	512	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
25	b2	619	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
27	d1	403	PHO	CMB-C2B-C3B	3.20	130.66	124.68
25	d2	404	CLA	CMB-C2B-C3B	3.19	130.65	124.68
23	B1	602	BCR	C15-C14-C13	-3.19	122.76	127.31
23	J1	101	BCR	C16-C17-C18	-3.18	122.77	127.31
23	k2	501	BCR	C38-C26-C25	-3.17	120.96	124.53
25	B1	616	CLA	CMB-C2B-C1B	-3.17	123.59	128.46
25	b2	615	CLA	CMB-C2B-C3B	3.16	130.60	124.68
25	C2	507	CLA	CMB-C2B-C3B	3.16	130.60	124.68
25	a2	404	CLA	CMB-C2B-C1B	-3.16	123.60	128.46
23	b2	601	BCR	C24-C23-C22	-3.16	121.46	126.23
23	C1	521	BCR	C3-C4-C5	-3.16	108.44	114.08
25	b2	620	CLA	O2D-CGD-O1D	-3.16	117.67	123.84
25	C2	507	CLA	O2D-CGD-O1D	-3.16	117.67	123.84
25	B2	609	CLA	CMB-C2B-C3B	3.15	130.58	124.68
25	c1	508	CLA	O2D-CGD-O1D	-3.15	117.67	123.84
25	B2	618	CLA	O2D-CGD-O1D	-3.15	117.67	123.84
33	d1	402	LHG	O8-C23-C24	3.15	119.65	111.38
25	b2	606	CLA	CMB-C2B-C3B	3.15	130.57	124.68
23	z2	101	BCR	C20-C21-C22	-3.15	122.81	127.31
36	d1	409	PL9	C15-C14-C16	3.15	120.57	115.27
23	b1	602	BCR	C24-C23-C22	-3.15	121.48	126.23
25	B2	607	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
25	B1	608	CLA	O2D-CGD-O1D	-3.15	117.68	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c2	515	CLA	CMB-C2B-C3B	3.15	130.57	124.68
25	b1	611	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
25	c2	508	CLA	CMB-C2B-C1B	-3.14	123.63	128.46
23	a2	402	BCR	C15-C14-C13	-3.14	122.83	127.31
23	a2	402	BCR	C16-C17-C18	-3.14	122.83	127.31
23	d2	401	BCR	C28-C27-C26	-3.14	108.47	114.08
25	C1	512	CLA	CMB-C2B-C3B	3.14	130.55	124.68
36	D1	408	PL9	C25-C24-C26	3.14	120.55	115.27
25	B2	614	CLA	CMB-C2B-C3B	3.13	130.54	124.68
23	B2	602	BCR	C24-C23-C22	-3.13	121.50	126.23
23	C1	501	BCR	C3-C4-C5	-3.13	108.49	114.08
33	A2	405	LHG	O7-C7-C8	3.13	119.53	110.80
37	D2	402	SQD	C45-O47-C7	-3.13	112.06	117.90
25	c1	503	CLA	CMB-C2B-C3B	3.13	130.53	124.68
23	z2	101	BCR	C24-C23-C22	-3.13	121.51	126.23
25	c2	505	CLA	CMB-C2B-C3B	3.13	130.53	124.68
25	b1	616	CLA	O2D-CGD-O1D	-3.12	117.73	123.84
25	c2	507	CLA	CMB-C2B-C3B	3.12	130.52	124.68
23	F2	401	BCR	C36-C18-C17	-3.12	118.55	122.92
25	c2	506	CLA	CMB-C2B-C3B	3.12	130.51	124.68
25	c1	515	CLA	O2D-CGD-O1D	-3.12	117.74	123.84
25	c1	516	CLA	CMB-C2B-C3B	3.12	130.51	124.68
23	a2	402	BCR	C33-C5-C6	-3.12	121.03	124.53
23	c1	501	BCR	C33-C5-C4	3.11	119.60	113.62
25	C1	506	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
25	B2	611	CLA	C1-C2-C3	-3.11	120.66	126.04
25	C2	503	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
25	c1	506	CLA	O2D-CGD-O1D	-3.11	117.76	123.84
25	B1	607	CLA	O2D-CGD-O1D	-3.10	117.77	123.84
23	k1	101	BCR	C38-C26-C25	-3.10	121.05	124.53
25	D2	406	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
25	C1	506	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
36	d1	409	PL9	C27-C28-C29	-3.09	120.21	127.66
33	l1	102	LHG	C5-O7-C7	-3.09	110.18	117.79
25	K2	101	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
25	d2	404	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
25	B1	608	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
23	k2	501	BCR	C33-C5-C6	-3.09	121.06	124.53
23	h2	101	BCR	C33-C5-C6	-3.09	121.06	124.53
23	z2	101	BCR	C38-C26-C25	-3.09	121.06	124.53
23	C1	501	BCR	C16-C17-C18	-3.08	122.91	127.31
25	b1	607	CLA	O2D-CGD-O1D	-3.08	117.81	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	D1	407	PHO	C4-C3-C5	3.08	120.45	115.27
25	b2	617	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
25	c1	503	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
33	L2	101	LHG	C5-O7-C7	-3.07	110.23	117.79
36	d2	409	PL9	C17-C18-C19	-3.07	120.26	127.66
25	B2	611	CLA	CMB-C2B-C3B	3.07	130.42	124.68
25	c1	505	CLA	CMB-C2B-C3B	3.07	130.41	124.68
25	c2	502	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	B1	616	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	d1	404	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	c2	503	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
23	c1	502	BCR	C15-C16-C17	-3.06	117.21	123.47
36	D2	408	PL9	C15-C14-C16	3.06	120.42	115.27
25	b2	620	CLA	CMB-C2B-C3B	3.06	130.40	124.68
25	c2	503	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
25	b1	620	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
25	C1	507	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
36	D1	408	PL9	C32-C33-C34	-3.05	120.31	127.66
25	C1	502	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
23	k1	101	BCR	C16-C17-C18	-3.05	122.96	127.31
23	a1	401	BCR	C24-C23-C22	-3.05	121.63	126.23
27	a2	416	PHO	CBA-CAA-C2A	-3.05	104.91	113.81
23	c1	501	BCR	C3-C4-C5	-3.05	108.64	114.08
23	C1	501	BCR	C24-C23-C22	-3.04	121.64	126.23
38	e2	101	HEM	C1B-NB-C4B	3.04	108.22	105.07
25	C2	506	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
25	C2	518	CLA	CMB-C2B-C3B	3.04	130.37	124.68
38	f1	101	HEM	C1B-NB-C4B	3.04	108.21	105.07
27	D1	407	PHO	CMB-C2B-C3B	3.03	130.35	124.68
25	b2	611	CLA	CMB-C2B-C3B	3.03	130.35	124.68
25	B2	619	CLA	CMB-C2B-C3B	3.03	130.35	124.68
25	C2	503	CLA	CMB-C2B-C3B	3.03	130.35	124.68
38	e2	101	HEM	C4B-CHC-C1C	3.03	126.56	122.56
25	b2	606	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
23	j2	102	BCR	C11-C10-C9	-3.03	122.99	127.31
29	B1	622	LMG	O8-C28-C29	3.03	121.41	111.91
36	d1	409	PL9	C17-C18-C19	-3.03	120.37	127.66
36	d2	409	PL9	C37-C38-C39	-3.03	120.37	127.66
25	D1	402	CLA	O2D-CGD-O1D	-3.02	117.92	123.84
23	b1	601	BCR	C3-C4-C5	-3.02	108.68	114.08
25	B1	605	CLA	CMB-C2B-C3B	3.02	130.33	124.68
25	B1	609	CLA	O2D-CGD-O1D	-3.02	117.93	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C2	508	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
23	H1	102	BCR	C33-C5-C6	-3.02	121.14	124.53
38	E1	101	HEM	C4C-CHD-C1D	3.02	126.54	122.56
23	c1	501	BCR	C38-C26-C25	-3.02	121.14	124.53
25	C1	508	CLA	O2D-CGD-O1D	-3.02	117.94	123.84
23	c2	501	BCR	C33-C5-C4	3.02	119.41	113.62
27	d2	408	PHO	CMB-C2B-C3B	3.01	130.31	124.68
25	C1	514	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
23	B1	603	BCR	C33-C5-C6	-3.01	121.15	124.53
25	D1	403	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
23	b1	603	BCR	C24-C23-C22	-3.01	121.69	126.23
25	C2	504	CLA	CMB-C2B-C3B	3.01	130.30	124.68
25	B1	614	CLA	O2D-CGD-O1D	-3.01	117.96	123.84
23	b1	602	BCR	C15-C14-C13	-3.01	123.02	127.31
38	E2	101	HEM	C4B-CHC-C1C	3.00	126.52	122.56
25	B1	619	CLA	CMB-C2B-C3B	3.00	130.29	124.68
23	b1	602	BCR	C34-C9-C10	-3.00	118.72	122.92
25	C2	504	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
25	C1	509	CLA	O2A-CGA-O1A	-3.00	116.03	123.59
27	a2	416	PHO	CMB-C2B-C3B	2.99	130.28	124.68
25	C2	505	CLA	O2D-CGD-O1D	-2.99	117.99	123.84
25	B1	610	CLA	CMB-C2B-C3B	2.99	130.27	124.68
25	B1	606	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
25	A2	404	CLA	O2D-CGD-O1D	-2.98	118.00	123.84
25	b1	620	CLA	O2D-CGD-O1D	-2.98	118.01	123.84
36	D2	408	PL9	C37-C38-C39	-2.98	120.48	127.66
25	B1	617	CLA	CMB-C2B-C3B	2.98	130.25	124.68
23	F2	401	BCR	C28-C27-C26	-2.98	108.76	114.08
25	B1	617	CLA	O2D-CGD-O1D	-2.98	118.01	123.84
25	C1	514	CLA	CMB-C2B-C3B	2.98	130.25	124.68
25	b1	604	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
25	b1	612	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
25	C1	503	CLA	CMB-C2B-C3B	2.97	130.24	124.68
25	B2	617	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
23	K2	102	BCR	C38-C26-C25	-2.97	121.19	124.53
29	a1	412	LMG	O8-C28-C29	2.97	121.22	111.91
23	j2	102	BCR	C30-C25-C26	-2.97	118.43	122.61
38	E2	101	HEM	C1B-NB-C4B	2.97	108.14	105.07
25	C1	507	CLA	CMB-C2B-C3B	2.97	130.23	124.68
38	V2	201	HEM	C3B-C2B-C1B	2.96	108.69	106.49
25	b2	611	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
25	b1	616	CLA	CMB-C2B-C1B	-2.96	123.91	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	J1	101	BCR	C38-C26-C25	-2.96	121.20	124.53
25	B2	613	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
25	c2	504	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
25	c2	508	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
25	B1	609	CLA	CMB-C2B-C3B	2.96	130.21	124.68
23	b1	602	BCR	C33-C5-C6	-2.95	121.21	124.53
25	C1	505	CLA	O2D-CGD-O1D	-2.95	118.06	123.84
25	C1	502	CLA	CMB-C2B-C3B	2.95	130.21	124.68
23	B1	603	BCR	C38-C26-C25	-2.95	121.22	124.53
23	F2	401	BCR	C38-C26-C27	2.95	119.28	113.62
23	B1	603	BCR	C20-C21-C22	-2.95	123.10	127.31
38	E1	101	HEM	C1B-NB-C4B	2.95	108.12	105.07
25	c2	515	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
23	c2	501	BCR	C34-C9-C10	-2.95	118.80	122.92
34	c1	518	DGD	C2G-O2G-C1B	-2.95	110.54	117.79
23	B2	601	BCR	C29-C30-C25	2.94	115.01	110.48
36	D2	408	PL9	C27-C28-C29	-2.94	120.58	127.66
23	A2	401	BCR	C38-C26-C27	2.94	119.27	113.62
23	K2	104	BCR	C3-C4-C5	-2.94	108.83	114.08
23	B1	603	BCR	C28-C27-C26	-2.94	108.83	114.08
23	a1	401	BCR	C15-C14-C13	-2.94	123.12	127.31
25	C1	513	CLA	O2D-CGD-O1D	-2.94	118.10	123.84
23	b1	601	BCR	C29-C30-C25	2.93	115.00	110.48
25	c1	516	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
25	C1	508	CLA	CMB-C2B-C3B	2.93	130.16	124.68
23	C1	501	BCR	C38-C26-C25	-2.93	121.24	124.53
25	C2	511	CLA	CMB-C2B-C3B	2.93	130.16	124.68
25	a2	405	CLA	CMB-C2B-C3B	2.93	130.15	124.68
25	A2	403	CLA	O2D-CGD-O1D	-2.93	118.12	123.84
25	B2	608	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	C2	505	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	b2	617	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	b2	610	CLA	O2D-CGD-O1D	-2.92	118.14	123.84
25	B1	606	CLA	CMB-C2B-C3B	2.91	130.13	124.68
23	C1	521	BCR	C33-C5-C6	-2.91	121.26	124.53
25	B2	611	CLA	O2D-CGD-O1D	-2.91	118.14	123.84
23	C1	501	BCR	C33-C5-C6	-2.91	121.26	124.53
25	B2	606	CLA	CMB-C2B-C3B	2.91	130.13	124.68
25	B1	612	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
25	A1	404	CLA	CMB-C2B-C3B	2.91	130.12	124.68
34	C2	512	DGD	C2G-O2G-C1B	-2.91	112.47	117.90
25	c2	512	CLA	O2D-CGD-O1D	-2.91	118.15	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	E1	101	HEM	C4B-CHC-C1C	2.91	126.40	122.56
25	B1	613	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
25	A1	406	CLA	CHB-C4A-NA	2.91	128.53	124.51
36	D2	408	PL9	C20-C19-C21	2.91	120.16	115.27
25	B2	617	CLA	CMB-C2B-C3B	2.91	130.12	124.68
27	A2	407	PHO	C4-C3-C5	2.91	120.16	115.27
25	b2	608	CLA	CMB-C2B-C3B	2.90	130.11	124.68
25	b2	610	CLA	C1-C2-C3	-2.90	121.02	126.04
25	C1	503	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	B2	608	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	a2	413	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	D2	404	CLA	CMB-C2B-C3B	2.90	130.10	124.68
25	d2	405	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	b1	610	CLA	O2D-CGD-O1D	-2.90	118.18	123.84
25	D2	401	CLA	CMB-C2B-C3B	2.90	130.09	124.68
36	D1	408	PL9	C20-C19-C21	2.89	120.14	115.27
27	A1	408	PHO	C4-C3-C5	2.89	120.13	115.27
25	B1	612	CLA	CMB-C2B-C3B	2.89	130.08	124.68
38	E2	101	HEM	C4C-CHD-C1D	2.89	126.37	122.56
23	A1	401	BCR	C20-C21-C22	-2.89	123.19	127.31
23	A2	401	BCR	C23-C24-C25	-2.89	119.10	127.20
25	C2	509	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	C2	510	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	d1	401	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	a2	405	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
25	b1	609	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	B1	605	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
25	c1	510	CLA	CMB-C2B-C3B	2.88	130.07	124.68
23	b1	603	BCR	C28-C27-C26	-2.88	108.93	114.08
29	b1	631	LMG	O1-C1-C2	2.88	112.80	108.30
25	b2	604	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
23	c1	502	BCR	C38-C26-C25	-2.88	121.30	124.53
25	b2	618	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
25	B1	604	CLA	O2D-CGD-O1D	-2.88	118.22	123.84
36	d1	409	PL9	C53-C6-C1	2.87	120.87	114.99
23	b2	602	BCR	C1-C6-C5	-2.87	118.57	122.61
25	B2	612	CLA	CMB-C2B-C3B	2.87	130.05	124.68
25	b2	608	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
25	a2	413	CLA	CMB-C2B-C3B	2.87	130.04	124.68
25	a1	404	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
38	e2	101	HEM	C3B-C2B-C1B	2.87	108.61	106.49
25	B1	607	CLA	CMB-C2B-C1B	-2.86	124.06	128.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	B1	622	LMG	C8-O7-C10	-2.86	110.74	117.79
25	C1	504	CLA	CMB-C2B-C3B	2.86	130.03	124.68
34	c2	516	DGD	O1G-C1A-C2A	2.86	120.89	111.91
25	D2	401	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
27	d1	403	PHO	O2D-CGD-O1D	-2.86	118.24	123.84
36	d1	409	PL9	C32-C33-C34	-2.86	120.77	127.66
25	A1	403	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
23	j2	102	BCR	C38-C26-C25	-2.86	121.32	124.53
29	A1	410	LMG	C8-O7-C10	-2.86	110.75	117.79
33	D2	403	LHG	O8-C23-C24	2.86	120.87	111.91
36	d2	409	PL9	C32-C33-C34	-2.86	120.78	127.66
29	a2	412	LMG	O8-C28-C29	2.86	120.87	111.91
25	C2	513	CLA	O2D-CGD-O1D	-2.86	118.26	123.84
27	a2	416	PHO	O1D-CGD-CBD	-2.85	119.98	124.74
23	H2	103	BCR	C11-C10-C9	-2.85	123.24	127.31
23	C1	501	BCR	C15-C16-C17	-2.85	117.63	123.47
25	a1	404	CLA	CMB-C2B-C1B	-2.85	124.08	128.46
25	B2	604	CLA	CMB-C2B-C3B	2.85	130.01	124.68
25	b2	613	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
36	d2	409	PL9	C53-C6-C1	2.85	120.81	114.99
33	b2	625	LHG	O8-C23-C24	2.84	120.83	111.91
23	A2	401	BCR	C29-C30-C25	2.84	114.86	110.48
38	V2	201	HEM	C1B-NB-C4B	2.84	108.01	105.07
23	A2	401	BCR	C20-C21-C22	-2.84	123.26	127.31
25	A1	406	CLA	O2D-CGD-CBD	2.84	116.31	111.27
25	b2	610	CLA	CMB-C2B-C3B	2.84	129.99	124.68
25	c2	511	CLA	O2D-CGD-O1D	-2.84	118.30	123.84
25	b2	609	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
27	D2	407	PHO	O2A-CGA-CBA	2.83	120.80	111.91
29	d2	407	LMG	C8-O7-C10	-2.83	112.62	117.90
29	B2	620	LMG	O8-C28-C29	2.83	120.79	111.91
25	d1	404	CLA	CMB-C2B-C3B	2.83	129.97	124.68
33	a1	407	LHG	O8-C23-C24	2.83	120.79	111.91
25	c2	507	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
25	A1	406	CLA	CMB-C2B-C3B	2.83	129.97	124.68
25	A1	405	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
25	b2	616	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
25	c2	511	CLA	CMB-C2B-C3B	2.82	129.96	124.68
36	d2	409	PL9	C15-C14-C16	2.82	120.02	115.27
23	K2	102	BCR	C33-C5-C4	2.82	119.03	113.62
25	b1	619	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
25	c2	513	CLA	O2D-CGD-O1D	-2.82	118.33	123.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	b2	601	BCR	C38-C26-C25	-2.82	121.36	124.53
25	B1	609	CLA	CBC-CAC-C3C	2.82	120.19	112.43
25	b2	614	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
27	a2	416	PHO	C1-C2-C3	-2.81	121.18	126.04
38	f1	101	HEM	C3B-C2B-C1B	2.81	108.57	106.49
36	D2	408	PL9	C40-C39-C41	2.81	120.00	115.27
25	B2	606	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
25	A1	404	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
38	v2	201	HEM	CHD-C1D-ND	2.81	127.48	124.43
38	v2	201	HEM	CAD-C3D-C4D	2.81	129.56	124.66
25	C2	513	CLA	CMB-C2B-C3B	2.80	129.93	124.68
23	B1	601	BCR	C29-C30-C25	2.80	114.80	110.48
25	b1	606	CLA	CMB-C2B-C3B	2.80	129.92	124.68
25	A1	405	CLA	C1B-CHB-C4A	-2.80	124.57	130.12
33	B2	627	LHG	O8-C23-C24	2.80	120.70	111.91
38	V2	201	HEM	C4B-CHC-C1C	2.80	126.25	122.56
29	M1	101	LMG	O8-C28-C29	2.79	120.67	111.91
23	b1	603	BCR	C20-C21-C22	-2.79	123.33	127.31
36	d2	409	PL9	C20-C19-C21	2.79	119.97	115.27
38	E1	101	HEM	C3B-C2B-C1B	2.79	108.56	106.49
25	C2	509	CLA	CHB-C4A-NA	2.79	128.37	124.51
25	b2	609	CLA	CMB-C2B-C3B	2.79	129.90	124.68
25	d2	405	CLA	CMB-C2B-C3B	2.79	129.90	124.68
25	C2	516	CLA	O2D-CGD-O1D	-2.78	118.39	123.84
25	C2	510	CLA	O2D-CGD-O1D	-2.78	118.39	123.84
37	D1	409	SQD	O48-C23-C24	2.78	120.64	111.91
23	K1	101	BCR	C20-C21-C22	-2.78	123.34	127.31
23	k1	101	BCR	C7-C8-C9	-2.78	122.03	126.23
25	b2	604	CLA	CMB-C2B-C3B	2.78	129.88	124.68
23	b2	602	BCR	C3-C4-C5	-2.78	109.11	114.08
37	D1	409	SQD	C45-O47-C7	-2.77	112.73	117.90
23	B2	603	BCR	C33-C5-C6	-2.77	121.42	124.53
25	c1	509	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	613	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
25	c1	507	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	617	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	615	CLA	O2D-CGD-O1D	-2.77	118.43	123.84
27	a2	416	PHO	C4-C3-C5	2.77	119.92	115.27
25	C1	513	CLA	CMB-C2B-C3B	2.77	129.85	124.68
25	B2	610	CLA	O2D-CGD-O1D	-2.77	118.43	123.84
27	D2	407	PHO	CAA-CBA-CGA	-2.76	105.17	113.25
25	B1	618	CLA	CMB-C2B-C3B	2.76	129.85	124.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	h2	101	BCR	C38-C26-C25	-2.76	121.43	124.53
25	c1	513	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
23	b1	602	BCR	C11-C10-C9	-2.76	123.37	127.31
23	b1	602	BCR	C8-C9-C10	2.76	123.17	118.94
23	b2	601	BCR	C38-C26-C27	2.76	118.91	113.62
25	B2	614	CLA	O2D-CGD-O1D	-2.75	118.46	123.84
23	b2	603	BCR	C28-C27-C26	-2.75	109.17	114.08
25	C1	512	CLA	CHB-C4A-NA	2.75	128.31	124.51
25	D1	402	CLA	CMB-C2B-C3B	2.75	129.82	124.68
25	b1	608	CLA	CMB-C2B-C3B	2.75	129.82	124.68
23	K2	104	BCR	C33-C5-C4	2.75	118.89	113.62
25	B1	615	CLA	O2D-CGD-O1D	-2.75	118.47	123.84
36	D2	408	PL9	C30-C29-C31	2.75	119.89	115.27
23	b1	601	BCR	C24-C23-C22	-2.75	122.09	126.23
29	b1	624	LMG	C8-O7-C10	-2.74	111.03	117.79
25	c1	509	CLA	CHB-C4A-NA	2.74	128.31	124.51
25	C1	512	CLA	O2D-CGD-O1D	-2.74	118.47	123.84
25	C2	516	CLA	CMB-C2B-C3B	2.74	129.81	124.68
25	B1	611	CLA	CMB-C2B-C3B	2.74	129.81	124.68
25	d2	402	CLA	CHB-C4A-NA	2.74	128.31	124.51
25	c2	504	CLA	CMB-C2B-C3B	2.74	129.81	124.68
27	D2	407	PHO	CMB-C2B-C3B	2.74	129.80	124.68
27	a1	411	PHO	O2D-CGD-O1D	-2.74	118.48	123.84
25	c1	504	CLA	O2D-CGD-O1D	-2.73	118.49	123.84
25	D2	406	CLA	CHB-C4A-NA	2.73	128.29	124.51
34	h2	102	DGD	O1G-C1A-C2A	2.73	120.48	111.91
25	d2	402	CLA	CMB-C2B-C3B	2.73	129.79	124.68
36	D1	408	PL9	C27-C28-C29	-2.73	121.09	127.66
33	b1	622	LHG	O8-C23-C24	2.73	120.47	111.91
23	b2	601	BCR	C29-C30-C25	2.73	114.68	110.48
25	c1	508	CLA	CMB-C2B-C3B	2.73	129.78	124.68
25	a1	403	CLA	CMB-C2B-C3B	2.73	129.78	124.68
25	A1	404	CLA	CHB-C4A-NA	2.72	128.28	124.51
25	a1	405	CLA	CMB-C2B-C3B	2.72	129.77	124.68
25	b2	615	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
27	d2	408	PHO	C4-C3-C5	2.72	119.85	115.27
25	b1	617	CLA	CHB-C4A-NA	2.72	128.27	124.51
25	c2	510	CLA	O2D-CGD-O1D	-2.72	118.53	123.84
23	c1	502	BCR	C37-C22-C21	-2.72	119.12	122.92
29	d1	411	LMG	O8-C28-C29	2.72	120.43	111.91
25	c2	502	CLA	CMB-C2B-C3B	2.72	129.76	124.68
25	b1	605	CLA	C1B-CHB-C4A	-2.71	124.75	130.12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b2	618	CLA	CMB-C2B-C3B	2.71	129.75	124.68
37	D1	409	SQD	O8-S-C6	2.71	110.06	105.74
34	h1	101	DGD	O1G-C1A-C2A	2.71	120.41	111.91
23	b1	602	BCR	C3-C4-C5	-2.70	109.25	114.08
27	A1	408	PHO	O2D-CGD-O1D	-2.70	118.56	123.84
25	B2	607	CLA	O2D-CGD-CBD	2.70	116.07	111.27
33	d1	407	LHG	C5-O7-C7	-2.70	111.14	117.79
33	D1	404	LHG	O8-C23-C24	2.70	120.37	111.91
25	c2	509	CLA	O2A-CGA-O1A	-2.70	116.79	123.59
25	K2	101	CLA	O2D-CGD-O1D	-2.70	118.57	123.84
25	C1	510	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
36	d2	409	PL9	C25-C24-C23	-2.69	116.77	123.68
36	D2	408	PL9	C53-C6-C1	2.69	120.50	114.99
36	D1	408	PL9	C17-C18-C19	-2.69	121.18	127.66
25	K2	101	CLA	CHB-C4A-NA	2.69	128.24	124.51
23	b1	601	BCR	C20-C21-C22	-2.69	123.47	127.31
25	A2	402	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
23	B1	601	BCR	C38-C26-C27	2.69	118.78	113.62
23	b2	602	BCR	C33-C5-C4	2.69	118.78	113.62
34	H1	101	DGD	O1G-C1A-C2A	2.69	120.34	111.91
23	C1	521	BCR	C33-C5-C4	2.69	118.78	113.62
25	b2	619	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
25	d2	402	CLA	O2D-CGD-CBD	2.69	116.04	111.27
23	c1	502	BCR	C36-C18-C17	-2.69	119.16	122.92
25	a1	405	CLA	CHB-C4A-NA	2.69	128.23	124.51
27	a1	411	PHO	C1-C2-C3	-2.69	121.40	126.04
25	A1	404	CLA	C1B-CHB-C4A	-2.68	124.80	130.12
25	b1	612	CLA	CMB-C2B-C3B	2.68	129.70	124.68
36	D2	408	PL9	C25-C24-C26	2.68	119.78	115.27
25	b1	611	CLA	CMB-C2B-C3B	2.68	129.70	124.68
25	a2	404	CLA	CMB-C2B-C3B	2.68	129.70	124.68
23	h1	102	BCR	C33-C5-C6	-2.68	121.52	124.53
23	b1	601	BCR	C38-C26-C25	-2.68	121.52	124.53
27	a1	411	PHO	CMB-C2B-C3B	2.68	129.69	124.68
33	L2	101	LHG	O8-C23-C24	2.68	120.31	111.91
29	A1	410	LMG	O8-C28-C29	2.68	120.31	111.91
36	D2	408	PL9	C32-C33-C34	-2.68	121.22	127.66
36	D1	408	PL9	C53-C6-C1	2.68	120.46	114.99
25	b1	617	CLA	O2D-CGD-O1D	-2.68	118.61	123.84
29	c2	519	LMG	O8-C28-C29	2.67	120.30	111.91
23	h1	102	BCR	C29-C30-C25	2.67	114.59	110.48
23	K2	104	BCR	C29-C30-C25	2.67	114.59	110.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B1	604	CLA	CMB-C2B-C3B	2.67	129.68	124.68
27	D2	407	PHO	C4-C3-C5	2.67	119.76	115.27
23	d2	401	BCR	C16-C15-C14	-2.67	118.01	123.47
33	l1	102	LHG	O8-C23-C24	2.67	120.28	111.91
36	d1	409	PL9	C37-C38-C39	-2.67	121.24	127.66
27	A1	408	PHO	C1-C2-C3	-2.66	121.44	126.04
38	V2	201	HEM	CBA-CAA-C2A	-2.66	108.07	112.62
25	b1	619	CLA	CMB-C2B-C3B	2.66	129.66	124.68
25	B2	612	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
25	a1	403	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
25	C1	510	CLA	CMB-C2B-C3B	2.66	129.65	124.68
29	B1	626	LMG	C8-O7-C10	-2.66	111.25	117.79
33	d2	406	LHG	O8-C23-C24	2.66	120.25	111.91
25	B2	617	CLA	CHB-C4A-NA	2.66	128.18	124.51
33	l2	101	LHG	O8-C23-C24	2.66	120.24	111.91
25	c1	511	CLA	O2D-CGD-O1D	-2.66	118.65	123.84
23	j2	102	BCR	C37-C22-C21	-2.65	119.20	122.92
25	c1	512	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
27	d1	403	PHO	O2A-CGA-CBA	2.65	120.23	111.91
27	d2	408	PHO	O2A-CGA-CBA	2.65	120.23	111.91
25	C2	509	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
23	a2	402	BCR	C23-C24-C25	-2.65	119.76	127.20
23	J1	101	BCR	C36-C18-C17	-2.65	119.21	122.92
27	d1	403	PHO	C4-C3-C5	2.65	119.73	115.27
27	A1	408	PHO	CMB-C2B-C3B	2.65	129.63	124.68
25	c1	505	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
29	j2	101	LMG	O8-C28-C29	2.65	120.21	111.91
29	B2	620	LMG	C8-O7-C10	-2.64	111.28	117.79
36	D1	408	PL9	C25-C24-C23	-2.64	116.90	123.68
25	b2	624	CLA	O2D-CGD-O1D	-2.64	118.67	123.84
23	B1	602	BCR	C38-C26-C25	-2.64	121.56	124.53
34	c2	514	DGD	C2G-O2G-C1B	-2.64	111.29	117.79
25	A1	406	CLA	C1B-CHB-C4A	-2.64	124.89	130.12
25	B2	616	CLA	CMB-C2B-C3B	2.64	129.62	124.68
23	h1	102	BCR	C11-C10-C9	-2.64	123.55	127.31
23	a1	401	BCR	C40-C30-C25	-2.64	106.03	110.30
25	C1	505	CLA	CHB-C4A-NA	2.63	128.16	124.51
25	A1	405	CLA	CMB-C2B-C3B	2.63	129.60	124.68
25	d1	404	CLA	CHB-C4A-NA	2.63	128.15	124.51
25	D1	402	CLA	C1B-CHB-C4A	-2.63	124.91	130.12
36	D1	408	PL9	C10-C9-C11	2.63	119.69	115.27
25	A1	403	CLA	CMB-C2B-C3B	2.63	129.59	124.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B1	608	CLA	CMB-C2B-C3B	2.63	129.59	124.68
23	A2	401	BCR	C16-C15-C14	-2.63	118.09	123.47
23	D1	401	BCR	C38-C26-C25	-2.63	121.58	124.53
25	B2	615	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
27	D2	407	PHO	O1D-CGD-CBD	-2.62	120.37	124.74
36	d1	409	PL9	C30-C29-C31	2.62	119.68	115.27
25	b2	616	CLA	CHB-C4A-NA	2.62	128.13	124.51
23	a1	401	BCR	C20-C21-C22	-2.62	123.57	127.31
29	B2	621	LMG	O1-C1-C2	2.62	112.39	108.30
25	a2	404	CLA	C1B-CHB-C4A	-2.62	124.94	130.12
23	H2	103	BCR	C33-C5-C6	-2.62	121.59	124.53
29	B2	621	LMG	C7-O1-C1	-2.62	108.63	113.74
23	h2	101	BCR	C21-C20-C19	-2.61	115.06	123.22
25	c2	508	CLA	CHB-C4A-NA	2.61	128.13	124.51
36	d1	409	PL9	C25-C24-C26	2.61	119.67	115.27
23	j2	102	BCR	C16-C17-C18	-2.61	123.58	127.31
23	B1	601	BCR	C38-C26-C25	-2.61	121.60	124.53
25	c2	512	CLA	CMB-C2B-C3B	2.61	129.56	124.68
33	d2	403	LHG	O8-C23-C24	2.61	120.09	111.91
34	C1	515	DGD	O1G-C1A-C2A	2.61	120.09	111.91
33	D2	405	LHG	C5-O7-C7	-2.61	111.37	117.79
23	K1	101	BCR	C33-C5-C4	2.61	118.62	113.62
23	A2	401	BCR	C33-C5-C4	2.61	118.62	113.62
27	A1	408	PHO	CBA-CAA-C2A	-2.61	106.20	113.81
25	c2	509	CLA	C1B-CHB-C4A	-2.61	124.96	130.12
33	B1	621	LHG	O8-C23-C24	2.60	120.08	111.91
23	c1	501	BCR	C8-C7-C6	-2.60	119.89	127.20
25	c1	503	CLA	CHB-C4A-NA	2.60	128.11	124.51
25	B1	611	CLA	O2D-CGD-CBD	2.60	115.89	111.27
25	b1	604	CLA	CMB-C2B-C3B	2.60	129.55	124.68
29	a2	412	LMG	O1-C1-C2	2.60	112.36	108.30
29	b2	622	LMG	O8-C28-C29	2.60	120.07	111.91
23	A1	401	BCR	C24-C23-C22	-2.60	122.30	126.23
36	d1	409	PL9	C40-C39-C41	2.60	119.65	115.27
25	D2	406	CLA	CMB-C2B-C3B	2.60	129.54	124.68
23	b1	603	BCR	C1-C6-C5	-2.60	118.95	122.61
29	I2	101	LMG	O8-C28-C29	2.60	120.06	111.91
29	b1	631	LMG	C8-O7-C10	-2.60	111.39	117.79
23	a2	402	BCR	C20-C21-C22	-2.60	123.60	127.31
25	B1	615	CLA	CHB-C4A-NA	2.60	128.10	124.51
25	C2	518	CLA	CHB-C4A-NA	2.60	128.10	124.51
25	B2	619	CLA	C1B-CHB-C4A	-2.59	124.98	130.12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b1	612	CLA	C1-C2-C3	-2.59	121.56	126.04
25	A1	405	CLA	CHB-C4A-NA	2.59	128.10	124.51
25	b2	618	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	c2	508	CLA	CMB-C2B-C3B	2.59	129.52	124.68
25	b1	620	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	B2	615	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	b2	609	CLA	CHB-C4A-NA	2.59	128.09	124.51
33	L1	101	LHG	O8-C23-C24	2.59	120.02	111.91
23	K2	102	BCR	C37-C22-C21	-2.58	119.30	122.92
25	b1	607	CLA	CHB-C4A-NA	2.58	128.08	124.51
25	c1	510	CLA	CHB-C4A-NA	2.58	128.08	124.51
25	c1	510	CLA	O2A-CGA-O1A	-2.58	117.07	123.59
37	B2	623	SQD	C45-O47-C7	-2.58	111.43	117.79
25	B2	619	CLA	CHD-C1D-ND	-2.58	122.08	124.45
25	b2	606	CLA	CHB-C4A-NA	2.58	128.08	124.51
23	h1	102	BCR	C10-C11-C12	-2.58	115.16	123.22
27	A2	407	PHO	CMB-C2B-C3B	2.58	129.51	124.68
23	A1	401	BCR	C3-C4-C5	-2.58	109.47	114.08
25	C1	511	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
25	b1	619	CLA	CHB-C4A-NA	2.58	128.08	124.51
38	E2	101	HEM	C3B-C2B-C1B	2.58	108.40	106.49
29	b1	631	LMG	C7-O1-C1	-2.58	108.70	113.74
25	C2	511	CLA	O2A-CGA-O1A	-2.58	117.09	123.59
23	J1	101	BCR	C7-C8-C9	-2.58	122.34	126.23
23	d2	401	BCR	C38-C26-C27	2.57	118.56	113.62
33	A2	405	LHG	O8-C23-C24	2.57	119.98	111.91
27	A2	407	PHO	C1-C2-C3	-2.57	121.59	126.04
25	C2	506	CLA	CHB-C4A-NA	2.57	128.07	124.51
25	A1	405	CLA	CAC-C3C-C4C	2.57	128.15	124.81
37	B2	623	SQD	O9-S-C6	2.57	109.99	106.94
25	b2	613	CLA	C1B-CHB-C4A	-2.57	125.03	130.12
25	B1	610	CLA	C1B-CHB-C4A	-2.57	125.03	130.12
35	c1	517	LMT	C1B-O1B-C4'	-2.57	111.61	117.96
23	H2	103	BCR	C7-C8-C9	-2.57	122.36	126.23
25	b1	610	CLA	CHB-C4A-NA	2.57	128.06	124.51
25	B2	604	CLA	O2D-CGD-O1D	-2.56	118.82	123.84
23	B1	602	BCR	C34-C9-C10	-2.56	119.33	122.92
34	c2	514	DGD	O1G-C1A-C2A	2.56	119.95	111.91
23	J1	101	BCR	C8-C7-C6	-2.56	120.01	127.20
25	C2	508	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	B2	618	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	a1	405	CLA	O2D-CGD-CBD	2.56	115.82	111.27

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	A2	401	BCR	C24-C23-C22	-2.56	122.37	126.23
25	b2	620	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	B2	609	CLA	O2A-CGA-O1A	-2.56	117.13	123.59
25	a2	405	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
25	B1	619	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	K2	101	CLA	CMB-C2B-C3B	2.55	129.46	124.68
23	k1	101	BCR	C37-C22-C21	-2.55	119.34	122.92
34	H2	101	DGD	O1G-C1A-C2A	2.55	119.92	111.91
23	B1	601	BCR	C20-C21-C22	-2.55	123.67	127.31
36	d2	409	PL9	C10-C9-C11	2.55	119.56	115.27
25	d2	404	CLA	CHB-C4A-NA	2.55	128.04	124.51
34	c1	514	DGD	O1G-C1A-C2A	2.55	119.92	111.91
23	F2	401	BCR	C38-C26-C25	-2.55	121.66	124.53
25	B1	605	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
25	c1	508	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
25	a2	405	CLA	CHB-C4A-NA	2.55	128.04	124.51
33	l2	101	LHG	C5-O7-C7	-2.55	111.51	117.79
25	C1	505	CLA	C1B-CHB-C4A	-2.55	125.07	130.12
33	D2	405	LHG	O8-C23-C24	2.55	119.91	111.91
23	A2	401	BCR	C38-C26-C25	-2.55	121.67	124.53
25	B2	616	CLA	CHB-C4A-NA	2.55	128.03	124.51
25	B1	616	CLA	CMB-C2B-C3B	2.55	129.44	124.68
25	C1	506	CLA	CMB-C2B-C3B	2.55	129.44	124.68
27	a1	411	PHO	C4-C3-C5	2.54	119.55	115.27
29	a1	412	LMG	C8-O7-C10	-2.54	111.53	117.79
23	F2	401	BCR	C27-C26-C25	-2.54	119.04	122.73
25	B2	607	CLA	CHB-C4A-NA	2.54	128.03	124.51
25	c2	513	CLA	CHB-C4A-NA	2.54	128.03	124.51
25	b2	615	CLA	CHB-C4A-NA	2.54	128.03	124.51
23	b2	602	BCR	C38-C26-C27	2.54	118.50	113.62
27	A2	407	PHO	CBA-CAA-C2A	-2.54	106.39	113.81
29	M1	101	LMG	C8-O7-C10	-2.54	114.61	117.88
34	c1	518	DGD	O1G-C1A-C2A	2.54	119.87	111.91
25	b1	616	CLA	C1B-CHB-C4A	-2.54	125.09	130.12
29	C1	520	LMG	O8-C28-C29	2.54	119.87	111.91
25	c1	506	CLA	CHB-C4A-NA	2.54	128.02	124.51
25	c2	503	CLA	CHB-C4A-NA	2.54	128.02	124.51
25	B1	606	CLA	CHB-C4A-NA	2.53	128.02	124.51
25	C1	503	CLA	CHB-C4A-NA	2.53	128.02	124.51
25	c2	505	CLA	CHB-C4A-NA	2.53	128.02	124.51
23	A2	401	BCR	C27-C26-C25	-2.53	119.05	122.73
36	d2	409	PL9	C27-C28-C29	-2.53	121.56	127.66

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	A2	402	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
29	a2	412	LMG	C8-O7-C10	-2.53	111.56	117.79
25	b2	619	CLA	CMB-C2B-C3B	2.53	129.41	124.68
25	b2	608	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
25	A2	402	CLA	CMB-C2B-C3B	2.53	129.41	124.68
33	L1	101	LHG	C5-O7-C7	-2.53	111.57	117.79
27	D1	407	PHO	O2A-CGA-CBA	2.53	119.83	111.91
27	D1	407	PHO	O1D-CGD-CBD	-2.53	120.53	124.74
25	b2	617	CLA	CHB-C4A-NA	2.53	128.00	124.51
25	c1	516	CLA	CHD-C1D-ND	-2.52	122.13	124.45
25	a1	404	CLA	C1B-CHB-C4A	-2.52	125.12	130.12
25	c1	512	CLA	CHB-C4A-NA	2.52	128.00	124.51
23	B2	602	BCR	C34-C9-C10	-2.52	119.39	122.92
37	D2	402	SQD	O9-S-C6	2.52	109.93	106.94
27	A2	407	PHO	O1D-CGD-CBD	-2.52	120.55	124.74
23	C1	501	BCR	C21-C20-C19	-2.52	115.36	123.22
25	b1	616	CLA	CMB-C2B-C3B	2.52	129.38	124.68
25	B2	605	CLA	C1B-CHB-C4A	-2.52	125.14	130.12
23	B2	602	BCR	C28-C27-C26	-2.52	109.59	114.08
25	d1	404	CLA	O2D-CGD-CBD	2.51	115.74	111.27
25	C2	506	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
35	C1	519	LMT	C1B-O1B-C4'	-2.51	111.74	117.96
23	b1	602	BCR	C29-C30-C25	2.51	114.35	110.48
25	C2	513	CLA	CHB-C4A-NA	2.51	127.99	124.51
37	B2	623	SQD	O48-C23-C24	2.51	119.80	111.91
35	m2	104	LMT	O1B-C1B-C2B	2.51	114.61	108.10
23	k1	101	BCR	C33-C5-C4	2.51	118.44	113.62
25	C2	511	CLA	CHB-C4A-NA	2.51	127.99	124.51
25	a1	405	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
23	D1	401	BCR	C16-C15-C14	-2.51	118.33	123.47
25	d1	401	CLA	CHD-C1D-ND	-2.51	122.15	124.45
25	d2	405	CLA	CHD-C1D-ND	-2.51	122.15	124.45
25	C2	503	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	c2	512	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	b1	616	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	b1	610	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
36	D1	408	PL9	C51-C49-C50	2.51	120.14	114.60
23	b2	602	BCR	C4-C5-C6	-2.51	119.09	122.73
25	d1	404	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
25	d2	404	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
25	b2	617	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
29	b1	631	LMG	O8-C28-C29	2.50	119.76	111.91

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	a1	404	CLA	CHD-C1D-ND	-2.50	122.16	124.45
25	c1	511	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	b1	613	CLA	CMB-C2B-C3B	2.50	129.35	124.68
25	b1	614	CLA	CHB-C4A-NA	2.50	127.97	124.51
23	A1	401	BCR	C23-C24-C25	-2.50	120.18	127.20
25	b1	606	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	B2	619	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	a2	404	CLA	O2D-CGD-O1D	-2.49	118.96	123.84
25	b2	616	CLA	CMB-C2B-C3B	2.49	129.35	124.68
25	c2	511	CLA	CHB-C4A-NA	2.49	127.96	124.51
25	B2	604	CLA	CAA-C2A-C3A	-2.49	110.28	116.10
25	c2	503	CLA	CMB-C2B-C3B	2.49	129.34	124.68
23	h1	102	BCR	C38-C26-C25	-2.49	121.73	124.53
29	A1	412	LMG	O8-C28-C29	2.49	119.72	111.91
25	c2	502	CLA	CHB-C4A-NA	2.49	127.96	124.51
25	C1	508	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	c2	515	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	d2	405	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
23	H1	102	BCR	C7-C8-C9	-2.49	122.47	126.23
25	a1	404	CLA	CAC-C3C-C4C	2.49	128.04	124.81
25	c2	506	CLA	O2D-CGD-CBD	2.49	115.69	111.27
25	c1	510	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
23	h1	102	BCR	C3-C4-C5	-2.49	109.64	114.08
29	I2	101	LMG	C8-O7-C10	-2.49	111.67	117.79
25	B1	604	CLA	CHB-C4A-NA	2.48	127.95	124.51
25	c1	506	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
25	b1	609	CLA	O2A-CGA-O1A	-2.48	117.33	123.59
25	B2	614	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	d2	402	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
23	b1	602	BCR	C38-C26-C25	-2.48	121.74	124.53
23	k1	101	BCR	C36-C18-C17	-2.48	119.45	122.92
25	A2	403	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	c1	507	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
25	B2	608	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	c2	510	CLA	CHB-C4A-NA	2.48	127.94	124.51
23	a2	402	BCR	C24-C23-C22	-2.48	122.49	126.23
25	b1	620	CLA	C1B-CHB-C4A	-2.47	125.22	130.12
25	b2	620	CLA	C1B-CHB-C4A	-2.47	125.22	130.12
23	B1	603	BCR	C24-C23-C22	-2.47	122.50	126.23
23	D1	401	BCR	C28-C27-C26	-2.47	109.66	114.08
29	c1	519	LMG	O8-C28-C29	2.47	119.67	111.91
37	b2	605	SQD	O48-C23-C24	2.47	119.67	111.91

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b1	611	CLA	O2D-CGD-O1D	-2.47	119.00	123.84
38	v1	201	HEM	C4B-CHC-C1C	2.47	125.82	122.56
27	a1	411	PHO	O2A-CGA-CBA	2.47	119.66	111.91
25	B1	608	CLA	CHB-C4A-NA	2.47	127.93	124.51
25	C1	511	CLA	CHB-C4A-NA	2.47	127.93	124.51
29	b1	621	LMG	O8-C28-C29	2.47	119.65	111.91
25	c1	504	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	a2	413	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	c2	506	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	b1	620	CLA	CMB-C2B-C3B	2.47	129.30	124.68
25	B2	604	CLA	CHB-C4A-NA	2.47	127.92	124.51
25	b1	608	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	c1	504	CLA	CHB-C4A-NA	2.47	127.92	124.51
25	D1	403	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	b2	614	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	B1	609	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	C2	510	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	B2	608	CLA	C1B-CHB-C4A	-2.46	125.24	130.12
25	C1	502	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	A1	403	CLA	C1B-CHB-C4A	-2.46	125.24	130.12
25	b2	604	CLA	CHB-C4A-NA	2.46	127.91	124.51
25	A2	403	CLA	CMB-C2B-C3B	2.46	129.28	124.68
25	b2	612	CLA	CMB-C2B-C3B	2.46	129.28	124.68
25	B2	616	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
23	C2	502	BCR	C3-C4-C5	-2.46	109.69	114.08
25	A2	403	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
25	a2	413	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
25	a1	405	CLA	C1-C2-C3	-2.45	122.78	126.75
23	a2	402	BCR	C3-C4-C5	-2.45	109.70	114.08
25	C2	504	CLA	CHB-C4A-NA	2.45	127.90	124.51
23	F2	401	BCR	C30-C25-C26	-2.45	119.16	122.61
25	C1	510	CLA	CHB-C4A-NA	2.45	127.90	124.51
25	B1	619	CLA	C1B-CHB-C4A	-2.45	125.27	130.12
25	b2	619	CLA	CHB-C4A-NA	2.45	127.90	124.51
25	c2	509	CLA	CHB-C4A-NA	2.45	127.90	124.51
36	D2	408	PL9	C10-C9-C11	2.45	119.39	115.27
25	A2	404	CLA	CMB-C2B-C3B	2.45	129.26	124.68
25	c2	510	CLA	CMB-C2B-C3B	2.45	129.26	124.68
36	d1	409	PL9	C12-C13-C14	-2.45	121.77	127.66
25	b1	605	CLA	CHB-C4A-NA	2.45	127.89	124.51
25	b2	617	CLA	CHD-C1D-ND	-2.45	122.21	124.45
25	c1	515	CLA	CHB-C4A-NA	2.45	127.89	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C2	505	CLA	CHB-C4A-NA	2.44	127.89	124.51
25	A2	404	CLA	O2A-CGA-O1A	-2.44	117.43	123.59
23	J1	101	BCR	C33-C5-C4	2.44	118.31	113.62
25	c1	510	CLA	O2D-CGD-CBD	2.44	115.61	111.27
25	D2	406	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	B2	610	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	a1	404	CLA	CHB-C4A-NA	2.44	127.89	124.51
25	B2	612	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	B2	606	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	B2	612	CLA	C1-C2-C3	-2.44	121.83	126.04
23	a1	401	BCR	C28-C27-C26	-2.44	109.73	114.08
23	c2	501	BCR	C28-C27-C26	-2.44	109.73	114.08
25	D2	404	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	b1	608	CLA	C1-C2-C3	-2.44	121.83	126.04
25	C2	516	CLA	CHB-C4A-NA	2.43	127.88	124.51
25	b2	611	CLA	CHB-C4A-NA	2.43	127.88	124.51
25	a1	403	CLA	C1B-CHB-C4A	-2.43	125.30	130.12
36	d1	409	PL9	C25-C24-C23	-2.43	117.44	123.68
29	A2	412	LMG	C8-O7-C10	-2.43	111.81	117.79
25	a2	413	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	B1	611	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	B1	606	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	B2	619	CLA	O2D-CGD-CBD	2.43	115.58	111.27
25	C1	514	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	A2	404	CLA	CHB-C4A-NA	2.43	127.87	124.51
34	h1	101	DGD	C2G-O2G-C1B	-2.43	111.82	117.79
25	b1	615	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	c2	505	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	b1	607	CLA	CMB-C2B-C3B	2.43	129.22	124.68
25	b2	624	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	C2	503	CLA	CHD-C1D-ND	-2.43	122.22	124.45
25	B1	612	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	B2	609	CLA	CHB-C4A-NA	2.42	127.86	124.51
25	C1	503	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
36	D2	408	PL9	C45-C44-C46	2.42	119.35	115.27
25	B2	610	CLA	CHB-C4A-NA	2.42	127.86	124.51
25	B1	616	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
25	B1	610	CLA	CHD-C1D-ND	-2.42	122.23	124.45
36	D2	408	PL9	C17-C18-C19	-2.42	121.83	127.66
25	b1	613	CLA	C1B-CHB-C4A	-2.42	125.33	130.12
23	B2	603	BCR	C28-C27-C26	-2.42	109.76	114.08
23	d1	405	BCR	C20-C21-C22	-2.42	123.86	127.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B1	617	CLA	CHB-C4A-NA	2.42	127.86	124.51
23	B1	602	BCR	C38-C26-C27	2.42	118.26	113.62
25	c1	506	CLA	CHD-C1D-ND	-2.41	122.23	124.45
25	B2	607	CLA	CMB-C2B-C3B	2.41	129.19	124.68
25	c1	515	CLA	O2A-CGA-O1A	-2.41	117.50	123.59
25	c2	507	CLA	CHB-C4A-NA	2.41	127.85	124.51
25	D2	401	CLA	CHB-C4A-NA	2.41	127.85	124.51
25	b1	606	CLA	C1B-CHB-C4A	-2.41	125.34	130.12
25	d1	406	CLA	CHB-C4A-NA	2.41	127.85	124.51
23	j2	102	BCR	C38-C26-C27	2.41	118.25	113.62
38	V1	201	HEM	CHD-C1D-ND	2.41	127.05	124.43
25	B1	618	CLA	CHB-C4A-NA	2.41	127.84	124.51
25	B1	610	CLA	CHB-C4A-NA	2.41	127.84	124.51
25	b1	620	CLA	CHD-C1D-ND	-2.41	122.24	124.45
25	C1	507	CLA	C1B-CHB-C4A	-2.41	125.35	130.12
25	C1	504	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
23	d1	405	BCR	C16-C15-C14	-2.41	118.55	123.47
25	C2	511	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
25	c1	508	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	c1	508	CLA	C1-C2-C3	-2.40	122.87	126.75
25	a1	403	CLA	CHD-C1D-ND	-2.40	122.25	124.45
25	b1	612	CLA	CHB-C4A-NA	2.40	127.83	124.51
35	l1	101	LMT	O1'-C1'-C2'	2.40	112.05	108.30
25	B1	614	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	c1	516	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	C1	509	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
25	b1	615	CLA	O2A-CGA-O1A	-2.40	117.54	123.59
25	C1	513	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	B2	611	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
25	B1	616	CLA	CHD-C1D-ND	-2.40	122.25	124.45
25	B2	618	CLA	CMB-C2B-C3B	2.39	129.16	124.68
25	C1	504	CLA	CHB-C4A-NA	2.39	127.82	124.51
23	b2	601	BCR	C3-C4-C5	-2.39	109.80	114.08
38	V1	201	HEM	CAD-CBD-CGD	-2.39	108.45	113.60
23	d2	401	BCR	C8-C7-C6	-2.39	120.48	127.20
23	H2	103	BCR	C3-C4-C5	-2.39	109.81	114.08
25	c1	503	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
33	D1	405	LHG	C5-O7-C7	-2.39	111.91	117.79
23	J1	101	BCR	C37-C22-C21	-2.39	119.58	122.92
25	b2	613	CLA	CHB-C4A-NA	2.38	127.81	124.51
23	h1	102	BCR	C7-C8-C9	-2.38	122.63	126.23
25	B1	616	CLA	CHB-C4A-NA	2.38	127.80	124.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c2	504	CLA	CHB-C4A-NA	2.38	127.80	124.51
25	b2	610	CLA	CHB-C4A-NA	2.38	127.80	124.51
38	V2	201	HEM	CHD-C1D-ND	2.38	127.02	124.43
37	b2	605	SQD	O9-S-C6	2.38	109.76	106.94
23	k2	501	BCR	C38-C26-C27	2.38	118.18	113.62
25	B1	605	CLA	CHB-C4A-NA	2.37	127.80	124.51
23	C1	521	BCR	C15-C16-C17	-2.37	118.61	123.47
25	b2	624	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	B1	612	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	c1	513	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	B1	608	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	b2	609	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
33	B2	627	LHG	C5-O7-C7	-2.37	111.95	117.79
25	B1	607	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	b2	611	CLA	C1-C2-C3	-2.37	121.95	126.04
25	C1	510	CLA	CHD-C1D-ND	-2.37	122.28	124.45
37	b2	605	SQD	O7-S-C6	2.37	109.75	106.94
23	B1	601	BCR	C3-C4-C5	-2.37	109.85	114.08
25	b2	620	CLA	O2D-CGD-CBD	2.36	115.47	111.27
23	c2	501	BCR	C38-C26-C27	2.36	118.16	113.62
25	b2	611	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
25	b1	604	CLA	CHB-C4A-NA	2.36	127.78	124.51
25	c1	512	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
25	d1	401	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
35	a2	406	LMT	C1B-O1B-C4'	-2.36	112.12	117.96
38	V2	201	HEM	CAD-CBD-CGD	-2.36	108.53	113.60
25	D2	401	CLA	C1B-CHB-C4A	-2.36	125.45	130.12
25	D1	403	CLA	C1B-CHB-C4A	-2.36	125.45	130.12
34	C1	515	DGD	C2G-O2G-C1B	-2.36	111.99	117.79
27	D1	407	PHO	O2D-CGD-O1D	-2.36	119.23	123.84
25	c2	509	CLA	O2D-CGD-CBD	2.36	115.45	111.27
25	A1	406	CLA	O2A-CGA-O1A	-2.36	117.65	123.59
25	d1	401	CLA	O2D-CGD-CBD	2.36	115.45	111.27
33	D1	405	LHG	O8-C23-C24	2.35	119.30	111.91
25	c1	509	CLA	O2D-CGD-O1D	-2.35	119.23	123.84
25	B1	609	CLA	C1B-CHB-C4A	-2.35	125.45	130.12
25	B2	609	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
27	d2	408	PHO	CMA-C3A-C4A	-2.35	109.22	114.38
25	C1	506	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
38	V1	201	HEM	C3B-C2B-C1B	2.35	108.23	106.49
25	b1	609	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	d1	401	CLA	O2A-CGA-O1A	-2.35	117.66	123.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	H1	102	BCR	C11-C10-C9	-2.35	123.95	127.31
25	C2	509	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	C1	514	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	K2	101	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
38	v2	201	HEM	C4B-CHC-C1C	2.35	125.66	122.56
25	b1	617	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
25	B2	605	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	B2	612	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
36	d2	409	PL9	C51-C49-C50	2.34	119.78	114.60
25	b2	610	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	C2	508	CLA	C1-C2-C3	-2.34	122.96	126.75
25	A2	404	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	C1	507	CLA	CHB-C4A-NA	2.34	127.75	124.51
25	b1	607	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	B2	606	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
23	h1	102	BCR	C16-C15-C14	-2.34	118.68	123.47
36	D1	408	PL9	C45-C44-C46	2.34	119.21	115.27
25	A1	403	CLA	CHB-C4A-NA	2.34	127.75	124.51
23	B2	602	BCR	C3-C4-C5	-2.34	109.90	114.08
25	C2	507	CLA	CHB-C4A-NA	2.34	127.75	124.51
25	B2	604	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
23	j2	102	BCR	C36-C18-C17	-2.34	119.65	122.92
25	d1	401	CLA	CHB-C4A-NA	2.34	127.74	124.51
25	b1	612	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
25	d1	406	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
25	d2	404	CLA	C1-C2-C3	-2.34	122.97	126.75
23	h2	101	BCR	C23-C24-C25	-2.34	120.64	127.20
25	B1	617	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
25	b1	616	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
25	B2	614	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
23	K2	104	BCR	C38-C26-C27	2.33	118.10	113.62
29	d1	408	LMG	C8-O7-C10	-2.33	112.05	117.79
25	A1	406	CLA	CHD-C1D-ND	-2.33	122.31	124.45
23	K2	102	BCR	C7-C8-C9	-2.33	122.71	126.23
25	B2	608	CLA	CHD-C1D-ND	-2.33	122.31	124.45
25	B2	616	CLA	CHD-C1D-ND	-2.33	122.31	124.45
23	K1	101	BCR	C7-C6-C5	-2.33	115.82	121.46
25	B2	617	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
23	a2	402	BCR	C21-C20-C19	-2.33	115.95	123.22
25	b2	606	CLA	C1B-CHB-C4A	-2.33	125.51	130.12
25	d2	402	CLA	CHD-C1D-ND	-2.32	122.32	124.45
37	D2	402	SQD	O6-C1-C2	2.32	111.93	108.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	D1	402	CLA	CHB-C4A-NA	2.32	127.72	124.51
25	B1	606	CLA	O2A-CGA-O1A	-2.32	117.74	123.59
38	V1	201	HEM	C4B-CHC-C1C	2.32	125.62	122.56
25	B2	613	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
25	b1	611	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
36	d1	409	PL9	C45-C44-C46	2.32	119.17	115.27
25	B1	611	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	b1	606	CLA	O2A-CGA-O1A	-2.31	117.75	123.59
25	b1	611	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	c1	507	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	a2	413	CLA	C1-C2-C3	-2.31	123.01	126.75
25	c1	516	CLA	C1B-CHB-C4A	-2.31	125.54	130.12
25	c1	505	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	C2	518	CLA	O2D-CGD-CBD	2.31	115.37	111.27
29	d1	408	LMG	O8-C28-C29	2.31	119.15	111.91
25	B1	613	CLA	CHB-C4A-NA	2.31	127.70	124.51
23	C1	501	BCR	C23-C24-C25	-2.31	120.73	127.20
25	A2	402	CLA	CHD-C1D-ND	-2.31	122.33	124.45
23	b2	602	BCR	C37-C22-C21	-2.31	119.69	122.92
25	c2	505	CLA	CHD-C1D-ND	-2.30	122.34	124.45
25	C1	509	CLA	O2D-CGD-CBD	2.30	115.36	111.27
25	b1	608	CLA	CHB-C4A-NA	2.30	127.70	124.51
33	b1	622	LHG	C5-O7-C7	-2.30	112.12	117.79
25	c2	515	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
25	b2	604	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
25	d1	406	CLA	CHD-C1D-ND	-2.30	122.34	124.45
23	B2	601	BCR	C38-C26-C27	2.30	118.03	113.62
25	a2	404	CLA	CHD-C1D-ND	-2.30	122.34	124.45
25	B2	607	CLA	O2A-CGA-O1A	-2.30	117.80	123.59
23	b2	601	BCR	C23-C24-C25	-2.30	120.76	127.20
34	c2	517	DGD	O1G-C1A-C2A	2.30	119.11	111.91
23	k1	101	BCR	C8-C7-C6	-2.29	120.76	127.20
25	b2	616	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
25	A1	404	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
25	B1	613	CLA	CMB-C2B-C3B	2.29	128.96	124.68
35	m2	103	LMT	C1B-O5B-C5B	-2.29	109.19	113.69
25	C2	518	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
25	b2	619	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
25	D2	406	CLA	O2D-CGD-CBD	2.29	115.34	111.27
27	A2	407	PHO	O2A-CGA-CBA	2.29	119.09	111.91
25	b1	610	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
23	a1	401	BCR	C23-C24-C25	-2.29	120.78	127.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	A2	402	CLA	CHB-C4A-NA	2.29	127.67	124.51
25	c2	506	CLA	CHB-C4A-NA	2.29	127.67	124.51
27	A2	407	PHO	O2D-CGD-O1D	-2.29	119.37	123.84
25	B2	616	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
25	C1	505	CLA	CHD-C1D-ND	-2.28	122.36	124.45
25	c1	509	CLA	C1B-CHB-C4A	-2.28	125.59	130.12
25	A1	405	CLA	CHD-C1D-ND	-2.28	122.36	124.45
25	b2	620	CLA	CHD-C1D-ND	-2.28	122.36	124.45
25	B2	611	CLA	CHB-C4A-NA	2.28	127.67	124.51
36	D2	408	PL9	C35-C34-C36	2.28	119.11	115.27
25	a2	413	CLA	CHD-C1D-ND	-2.28	122.36	124.45
29	F2	402	LMG	C8-O7-C10	-2.28	112.18	117.79
25	b1	604	CLA	C1B-CHB-C4A	-2.28	125.60	130.12
23	b2	601	BCR	C33-C5-C4	2.28	117.99	113.62
25	C2	510	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
34	c1	520	DGD	O1G-C1A-C2A	2.28	119.05	111.91
23	B1	603	BCR	C29-C30-C25	2.28	113.99	110.48
25	D2	404	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	a1	405	CLA	O2A-CGA-O1A	-2.28	117.85	123.59
25	B1	604	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	C1	512	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
23	D1	401	BCR	C21-C20-C19	-2.28	116.12	123.22
25	b2	608	CLA	CHB-C4A-NA	2.27	127.66	124.51
23	b1	602	BCR	C38-C26-C27	2.27	117.98	113.62
25	C2	513	CLA	C1B-CHB-C4A	-2.27	125.61	130.12
25	c2	512	CLA	C1B-CHB-C4A	-2.27	125.61	130.12
23	c1	502	BCR	C16-C17-C18	-2.27	124.06	127.31
25	c2	515	CLA	CHD-C1D-ND	-2.27	122.37	124.45
25	C1	504	CLA	O2A-CGA-O1A	-2.27	117.86	123.59
25	c2	511	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
38	V1	201	HEM	CAD-C3D-C4D	2.27	128.62	124.66
23	h1	102	BCR	C38-C26-C27	2.26	117.97	113.62
23	B2	601	BCR	C3-C4-C5	-2.26	110.04	114.08
25	B2	613	CLA	CHB-C4A-NA	2.26	127.64	124.51
25	C1	508	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
27	D2	407	PHO	O2D-CGD-O1D	-2.26	119.42	123.84
25	C2	508	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	c1	512	CLA	CHD-C1D-ND	-2.26	122.38	124.45
25	B2	618	CLA	O2D-CGD-CBD	2.26	115.28	111.27
25	C2	507	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	C1	513	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	B2	615	CLA	C1B-CHB-C4A	-2.26	125.65	130.12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	d2	405	CLA	CHB-C4A-NA	2.26	127.63	124.51
38	v1	201	HEM	C1B-NB-C4B	2.26	107.40	105.07
29	C2	515	LMG	C8-O7-C10	-2.26	112.23	117.79
25	b1	619	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	C1	506	CLA	O2D-CGD-CBD	2.26	115.28	111.27
25	c2	507	CLA	C1B-CHB-C4A	-2.25	125.65	130.12
27	d2	408	PHO	O1D-CGD-CBD	-2.25	120.99	124.74
33	d2	403	LHG	C5-O7-C7	-2.25	112.25	117.79
25	a2	404	CLA	CHB-C4A-NA	2.25	127.63	124.51
23	B1	602	BCR	C1-C6-C5	-2.25	119.44	122.61
25	b1	607	CLA	O2D-CGD-CBD	2.25	115.27	111.27
29	A1	412	LMG	C8-O7-C10	-2.25	112.25	117.79
25	b2	615	CLA	O2A-CGA-O1A	-2.25	117.91	123.59
25	b2	612	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
23	B2	602	BCR	C23-C24-C25	-2.25	120.88	127.20
23	h2	101	BCR	C15-C16-C17	-2.25	118.87	123.47
25	D2	404	CLA	C1-C2-C3	-2.25	122.16	126.04
25	C2	503	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
25	C1	510	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
27	A1	408	PHO	O2A-CGA-CBA	2.24	118.95	111.91
25	C1	506	CLA	CHB-C4A-NA	2.24	127.61	124.51
25	B1	613	CLA	C1B-CHB-C4A	-2.24	125.67	130.12
25	c1	507	CLA	O2D-CGD-CBD	2.24	115.25	111.27
27	a1	411	PHO	CMA-C3A-C4A	-2.24	109.47	114.38
34	c1	518	DGD	O6D-C5D-C6D	2.24	111.19	106.67
23	k2	501	BCR	C8-C7-C6	-2.24	120.92	127.20
25	B1	607	CLA	CMB-C2B-C3B	2.24	128.86	124.68
25	d1	404	CLA	CHD-C1D-ND	-2.24	122.40	124.45
25	C2	504	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
23	b2	601	BCR	C15-C16-C17	-2.23	118.90	123.47
25	b1	608	CLA	CHD-C1D-ND	-2.23	122.40	124.45
25	c2	512	CLA	CHD-C1D-ND	-2.23	122.40	124.45
25	b2	618	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
25	B1	618	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
23	B2	601	BCR	C15-C16-C17	-2.23	118.90	123.47
23	z2	101	BCR	C28-C27-C26	-2.23	110.09	114.08
29	D1	406	LMG	O8-C28-C29	2.23	118.91	111.91
25	C1	506	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
23	b1	603	BCR	C33-C5-C6	-2.23	122.02	124.53
25	B2	615	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
25	C2	518	CLA	CAA-C2A-C3A	-2.23	110.90	116.10
23	c1	501	BCR	C4-C5-C6	-2.23	119.50	122.73

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	F2	401	BCR	C15-C16-C17	-2.23	118.91	123.47
25	B2	611	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
38	e2	101	HEM	CMC-C2C-C3C	2.23	128.84	124.68
38	E1	101	HEM	CMC-C2C-C3C	2.22	128.84	124.68
25	B1	607	CLA	O2A-CGA-O1A	-2.22	117.98	123.59
27	d2	408	PHO	O2D-CGD-O1D	-2.22	119.49	123.84
27	D1	407	PHO	CMA-C3A-C4A	-2.22	109.51	114.38
23	j2	102	BCR	C8-C7-C6	-2.22	120.96	127.20
25	C1	502	CLA	C1B-CHB-C4A	-2.22	125.72	130.12
25	c1	505	CLA	O2A-CGA-O1A	-2.22	117.99	123.59
36	d1	409	PL9	C51-C49-C50	2.22	119.50	114.60
25	B1	616	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
25	b2	615	CLA	C1B-CHB-C4A	-2.22	125.73	130.12
25	A1	404	CLA	CHD-C1D-ND	-2.22	122.42	124.45
23	h2	101	BCR	C33-C5-C4	2.22	117.87	113.62
25	C2	516	CLA	C1B-CHB-C4A	-2.22	125.73	130.12
25	b2	624	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
25	B1	615	CLA	O2A-CGA-O1A	-2.21	118.00	123.59
23	K1	101	BCR	C1-C6-C7	2.21	122.04	115.78
34	C1	516	DGD	O1G-C1A-C2A	2.21	118.86	111.91
29	d1	411	LMG	C8-O7-C10	-2.21	112.34	117.79
25	b1	609	CLA	C1B-CHB-C4A	-2.21	125.73	130.12
23	k2	501	BCR	C33-C5-C4	2.21	117.86	113.62
25	C2	516	CLA	CHD-C1D-ND	-2.21	122.42	124.45
25	A1	403	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
33	b1	622	LHG	O8-C23-O10	-2.21	118.02	123.59
25	B1	619	CLA	CHD-C1D-ND	-2.21	122.42	124.45
25	B1	609	CLA	O2A-CGA-O1A	-2.21	118.02	123.59
23	b1	601	BCR	C38-C26-C27	2.21	117.85	113.62
23	h1	102	BCR	C39-C30-C25	-2.21	106.72	110.30
25	c2	503	CLA	C1B-CHB-C4A	-2.21	125.75	130.12
23	B2	603	BCR	C3-C4-C5	-2.20	110.14	114.08
23	b2	602	BCR	C33-C5-C6	-2.20	122.05	124.53
37	D2	402	SQD	O8-S-C6	2.20	109.25	105.74
25	C1	514	CLA	CHD-C1D-ND	-2.20	122.43	124.45
25	c1	503	CLA	CHD-C1D-ND	-2.20	122.43	124.45
25	a2	404	CLA	O2A-CGA-O1A	-2.20	118.03	123.59
29	a1	412	LMG	O1-C1-C2	2.20	111.74	108.30
25	a2	405	CLA	CAC-C3C-C4C	2.20	127.67	124.81
33	d1	407	LHG	O8-C23-C24	2.20	118.81	111.91
23	j2	102	BCR	C33-C5-C4	2.20	117.84	113.62
23	K1	101	BCR	C16-C15-C14	-2.20	118.97	123.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	E2	101	HEM	CMC-C2C-C3C	2.20	128.79	124.68
23	b2	603	BCR	C33-C5-C4	2.20	117.84	113.62
25	c2	513	CLA	C1B-CHB-C4A	-2.20	125.77	130.12
25	c1	508	CLA	O2A-CGA-O1A	-2.20	118.05	123.59
25	b2	606	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
25	C1	504	CLA	CHD-C1D-ND	-2.19	122.44	124.45
25	D2	406	CLA	CHD-C1D-ND	-2.19	122.44	124.45
25	B1	615	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	c2	513	CLA	CHD-C1D-ND	-2.19	122.44	124.45
25	c1	515	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	B2	613	CLA	O2D-CGD-CBD	2.19	115.16	111.27
25	B2	618	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
23	J1	101	BCR	C38-C26-C27	2.19	117.82	113.62
25	c1	513	CLA	CHD-C1D-ND	-2.19	122.44	124.45
25	b1	614	CLA	CHD-C1D-ND	-2.19	122.44	124.45
25	b2	614	CLA	C1B-CHB-C4A	-2.19	125.79	130.12
23	C1	521	BCR	C8-C7-C6	-2.18	121.07	127.20
23	K1	101	BCR	C35-C13-C14	-2.18	119.86	122.92
25	c2	510	CLA	CHD-C1D-ND	-2.18	122.45	124.45
34	H1	101	DGD	C2G-O2G-C1B	-2.18	112.43	117.79
25	b2	608	CLA	CHD-C1D-ND	-2.18	122.45	124.45
23	B2	602	BCR	C38-C26-C27	2.18	117.80	113.62
36	D2	408	PL9	C12-C13-C14	-2.18	122.42	127.66
25	a2	405	CLA	CHD-C1D-ND	-2.18	122.45	124.45
23	C2	502	BCR	C28-C27-C26	-2.18	110.19	114.08
34	C1	517	DGD	O1G-C1A-C2A	2.18	118.74	111.91
36	D1	408	PL9	C42-C43-C44	-2.18	122.42	127.66
25	b2	609	CLA	O2A-CGA-O1A	-2.18	118.10	123.59
23	c1	502	BCR	C20-C19-C18	2.17	132.53	126.42
25	b2	612	CLA	CHB-C4A-NA	2.17	127.52	124.51
25	C2	505	CLA	C1B-CHB-C4A	-2.17	125.81	130.12
29	D1	406	LMG	C8-O7-C10	-2.17	112.44	117.79
25	c2	502	CLA	C1B-CHB-C4A	-2.17	125.81	130.12
23	h1	102	BCR	C36-C18-C17	-2.17	119.88	122.92
23	H1	102	BCR	C3-C4-C5	-2.17	110.20	114.08
23	C1	501	BCR	C20-C21-C22	-2.17	124.21	127.31
25	b1	604	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
33	L2	101	LHG	O7-C7-O9	-2.17	118.45	123.70
33	D1	404	LHG	C5-O7-C7	-2.17	112.44	117.79
25	C2	506	CLA	CHD-C1D-ND	-2.17	122.46	124.45
23	F2	401	BCR	C33-C5-C4	2.17	117.78	113.62
25	c2	508	CLA	C1B-CHB-C4A	-2.17	125.82	130.12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	A1	408	PHO	CMA-C3A-C4A	-2.17	109.63	114.38
25	D2	404	CLA	CHD-C1D-ND	-2.17	122.46	124.45
33	d2	406	LHG	C5-O7-C7	-2.17	112.46	117.79
34	c1	518	DGD	O2G-C1B-O1B	-2.17	118.47	123.70
25	c1	508	CLA	CHD-C1D-ND	-2.17	122.46	124.45
34	C1	517	DGD	C2G-O2G-C1B	-2.16	112.46	117.79
23	K2	104	BCR	C8-C7-C6	-2.16	121.12	127.20
25	B1	614	CLA	C1B-CHB-C4A	-2.16	125.83	130.12
25	b2	618	CLA	C1B-CHB-C4A	-2.16	125.83	130.12
25	B1	617	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	c1	505	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	B2	609	CLA	C1-C2-C3	-2.16	122.31	126.04
29	a2	412	LMG	C7-O1-C1	-2.16	109.52	113.74
25	A2	402	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
23	B2	601	BCR	C33-C5-C4	2.16	117.77	113.62
23	B1	601	BCR	C27-C26-C25	-2.16	119.60	122.73
23	K2	102	BCR	C8-C7-C6	-2.16	121.14	127.20
25	b2	616	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
29	b2	622	LMG	C8-O7-C10	-2.16	112.48	117.79
25	b1	611	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
23	b2	603	BCR	C34-C9-C10	-2.15	119.91	122.92
25	B1	614	CLA	CHD-C1D-ND	-2.15	122.48	124.45
23	C2	502	BCR	C15-C16-C17	-2.15	119.06	123.47
25	b1	607	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
23	B1	602	BCR	C29-C30-C25	2.15	113.79	110.48
27	a2	416	PHO	CED-O2D-CGD	2.15	120.80	115.94
25	b1	619	CLA	O2A-CGA-O1A	-2.15	118.17	123.59
33	l1	102	LHG	O7-C7-O9	-2.15	118.51	123.70
23	J1	101	BCR	C28-C27-C26	-2.15	110.24	114.08
25	C1	511	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
25	c2	509	CLA	CHD-C1D-ND	-2.15	122.48	124.45
23	c1	502	BCR	C19-C18-C17	-2.15	115.64	118.94
23	a1	401	BCR	C21-C20-C19	-2.15	116.52	123.22
38	V1	201	HEM	C1B-NB-C4B	2.15	107.29	105.07
23	k2	501	BCR	C11-C12-C13	-2.15	120.38	126.42
25	b1	614	CLA	C1B-CHB-C4A	-2.15	125.87	130.12
25	c2	510	CLA	C1B-CHB-C4A	-2.14	125.87	130.12
25	a2	405	CLA	O2A-CGA-O1A	-2.14	118.18	123.59
25	c2	511	CLA	CHD-C1D-ND	-2.14	122.48	124.45
38	v2	201	HEM	C1B-NB-C4B	2.14	107.29	105.07
23	B2	602	BCR	C2-C1-C6	2.14	113.78	110.48
33	a1	407	LHG	O8-C23-O10	-2.14	118.19	123.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C2	513	CLA	CHD-C1D-ND	-2.14	122.49	124.45
25	b2	610	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
36	D2	408	PL9	C25-C24-C23	-2.14	118.19	123.68
25	C1	512	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
23	b2	603	BCR	C38-C26-C27	2.14	117.73	113.62
38	v2	201	HEM	CMA-C3A-C4A	-2.14	125.18	128.46
25	C1	507	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
25	B2	617	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
29	b1	624	LMG	O8-C28-C29	2.13	118.61	111.91
25	c2	504	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
25	B1	608	CLA	CHD-C1D-ND	-2.13	122.49	124.45
25	b2	608	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
23	j2	102	BCR	C7-C8-C9	-2.13	123.02	126.23
23	B2	601	BCR	C38-C26-C25	-2.13	122.14	124.53
25	a1	404	CLA	CMB-C2B-C3B	2.13	128.66	124.68
23	a1	401	BCR	C38-C26-C27	2.13	117.71	113.62
23	h2	101	BCR	C28-C27-C26	-2.13	110.28	114.08
23	K2	104	BCR	C27-C26-C25	-2.13	119.64	122.73
29	d2	407	LMG	O8-C28-C29	2.13	118.58	111.91
36	d1	409	PL9	C12-C11-C9	-2.13	105.98	112.98
25	b1	620	CLA	O2D-CGD-CBD	2.13	115.05	111.27
25	c1	503	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
25	B1	609	CLA	CHD-C1D-ND	-2.12	122.50	124.45
25	b1	616	CLA	CHD-C1D-ND	-2.12	122.50	124.45
25	C1	511	CLA	CHD-C1D-ND	-2.12	122.50	124.45
25	d2	404	CLA	CHD-C1D-ND	-2.12	122.50	124.45
23	b1	601	BCR	C33-C5-C4	2.12	117.69	113.62
23	C1	521	BCR	C28-C27-C26	-2.12	110.29	114.08
27	A1	408	PHO	O1D-CGD-CBD	-2.12	121.21	124.74
25	B2	612	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
23	K2	102	BCR	C38-C26-C27	2.12	117.68	113.62
25	C2	505	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
37	B2	623	SQD	O8-S-C6	2.12	109.11	105.74
23	C1	501	BCR	C33-C5-C4	2.12	117.68	113.62
25	b1	612	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
25	D2	401	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
23	H2	103	BCR	C16-C15-C14	-2.12	119.14	123.47
37	D1	409	SQD	O48-C23-O10	-2.12	118.25	123.59
25	B2	607	CLA	C1B-CHB-C4A	-2.11	125.93	130.12
33	l2	101	LHG	O8-C23-O10	-2.11	118.26	123.59
23	H2	103	BCR	C10-C11-C12	-2.11	116.62	123.22
25	B2	610	CLA	O2A-CGA-O1A	-2.11	118.26	123.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B2	609	CLA	CHD-C1D-ND	-2.11	122.51	124.45
25	A2	404	CLA	O2D-CGD-CBD	2.11	115.02	111.27
25	d2	405	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
25	C1	504	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
25	b1	610	CLA	CHD-C1D-ND	-2.11	122.52	124.45
25	c1	513	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
23	h1	102	BCR	C8-C7-C6	-2.11	121.28	127.20
23	b2	602	BCR	C10-C11-C12	-2.11	116.64	123.22
25	b2	613	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
25	c2	508	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
25	B1	607	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
25	b1	615	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
37	D2	402	SQD	O7-S-C6	2.11	109.44	106.94
25	c1	511	CLA	C1B-CHB-C4A	-2.11	125.95	130.12
25	B2	604	CLA	CHD-C1D-ND	-2.11	122.52	124.45
25	c2	504	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
23	h2	101	BCR	C8-C7-C6	-2.11	121.29	127.20
25	C2	511	CLA	CHD-C1D-ND	-2.10	122.52	124.45
23	j2	102	BCR	C15-C16-C17	-2.10	119.16	123.47
25	B2	608	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
25	a2	413	CLA	C2D-C1D-ND	-2.10	108.55	110.10
23	A2	401	BCR	C3-C4-C5	-2.10	110.32	114.08
25	a1	403	CLA	CHB-C4A-NA	2.10	127.42	124.51
33	D1	404	LHG	O8-C23-O10	-2.10	118.29	123.59
25	b2	611	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
27	D1	407	PHO	CED-O2D-CGD	2.10	120.68	115.94
34	H2	101	DGD	O6D-C5D-C6D	2.10	110.90	106.67
23	H2	103	BCR	C16-C17-C18	-2.10	120.73	124.69
23	F2	401	BCR	C3-C4-C5	-2.10	110.33	114.08
25	b2	624	CLA	CHD-C1D-ND	-2.10	122.53	124.45
33	D2	403	LHG	O8-C23-O10	-2.10	118.30	123.59
29	b1	624	LMG	O7-C10-O9	-2.10	118.64	123.70
27	a1	411	PHO	O1D-CGD-CBD	-2.10	121.25	124.74
38	f1	101	HEM	CMC-C2C-C3C	2.10	128.60	124.68
25	c1	513	CLA	C1B-CHB-C4A	-2.10	125.97	130.12
25	B1	611	CLA	O2A-CGA-O1A	-2.09	118.31	123.59
34	c2	516	DGD	O1G-C1A-O1A	-2.09	118.31	123.59
23	c1	501	BCR	C15-C16-C17	-2.09	119.19	123.47
23	d1	405	BCR	C3-C4-C5	-2.09	110.34	114.08
23	d1	405	BCR	C21-C20-C19	-2.09	116.69	123.22
23	d1	405	BCR	C34-C9-C10	-2.09	119.99	122.92
25	A2	404	CLA	CHD-C1D-ND	-2.09	122.53	124.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	C2	502	BCR	C33-C5-C4	2.09	117.63	113.62
23	k1	101	BCR	C28-C27-C26	-2.09	110.34	114.08
23	b2	601	BCR	C27-C26-C25	-2.09	119.70	122.73
23	B1	601	BCR	C21-C20-C19	-2.09	116.69	123.22
36	d2	409	PL9	C35-C34-C36	2.09	118.79	115.27
25	C2	510	CLA	CHD-C1D-ND	-2.09	122.53	124.45
34	C1	515	DGD	O2G-C1B-O1B	-2.09	118.66	123.70
23	d2	401	BCR	C37-C22-C21	-2.09	120.00	122.92
25	B2	607	CLA	C1-C2-C3	-2.09	122.43	126.04
25	B2	606	CLA	CHD-C1D-ND	-2.09	122.54	124.45
25	b1	614	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
23	D1	401	BCR	C3-C4-C5	-2.09	110.35	114.08
25	D1	402	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
37	D1	409	SQD	O9-S-C6	2.08	109.42	106.94
29	F2	402	LMG	O8-C28-C29	2.08	118.45	111.91
25	c1	515	CLA	CHD-C1D-ND	-2.08	122.54	124.45
25	b1	617	CLA	O2A-CGA-O1A	-2.08	118.33	123.59
25	C1	507	CLA	CHD-C1D-ND	-2.08	122.54	124.45
25	B2	612	CLA	CHD-C1D-ND	-2.08	122.54	124.45
25	B1	610	CLA	O2A-CGA-O1A	-2.08	118.34	123.59
33	b1	622	LHG	O7-C7-O9	-2.08	118.68	123.70
25	c2	512	CLA	O2A-CGA-O1A	-2.08	118.35	123.59
23	B1	601	BCR	C33-C5-C4	2.08	117.60	113.62
25	C1	502	CLA	O2D-CGD-CBD	2.07	114.95	111.27
25	A1	403	CLA	CHD-C1D-ND	-2.07	122.55	124.45
23	a1	401	BCR	C34-C9-C10	-2.07	120.02	122.92
23	h2	101	BCR	C37-C22-C23	2.07	121.34	118.08
33	B1	621	LHG	C5-O7-C7	-2.07	112.69	117.79
23	K2	102	BCR	C28-C27-C26	-2.07	110.38	114.08
23	d2	401	BCR	C20-C19-C18	-2.07	120.61	126.42
23	F2	401	BCR	C23-C24-C25	-2.07	121.39	127.20
34	c1	514	DGD	C1E-O6E-C5E	-2.07	109.63	113.69
23	B2	603	BCR	C11-C12-C13	-2.07	120.61	126.42
25	c2	506	CLA	O2A-CGA-O1A	-2.07	118.38	123.59
23	J1	101	BCR	C15-C16-C17	-2.07	119.24	123.47
25	B2	614	CLA	C1B-CHB-C4A	-2.06	126.03	130.12
36	d2	409	PL9	C45-C44-C46	2.06	118.74	115.27
25	b2	616	CLA	O2D-CGD-CBD	2.06	114.94	111.27
25	c2	506	CLA	CBC-CAC-C3C	2.06	118.12	112.43
25	C1	507	CLA	CBC-CAC-C3C	2.06	118.12	112.43
25	B2	605	CLA	O1D-CGD-CBD	2.06	128.70	124.48
25	c2	507	CLA	CHD-C1D-ND	-2.06	122.56	124.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B1	614	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c2	513	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c1	516	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c1	511	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
37	B2	623	SQD	O6-C1-C2	2.06	111.52	108.30
25	C2	511	CLA	O2D-CGD-CBD	2.06	114.92	111.27
25	c1	504	CLA	CHD-C1D-ND	-2.06	122.56	124.45
25	a1	404	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
35	l1	101	LMT	C1-O1'-C1'	-2.06	110.43	113.84
23	b1	602	BCR	C11-C12-C13	2.06	132.19	126.42
25	C1	509	CLA	CHB-C4A-NA	2.06	127.35	124.51
25	C1	513	CLA	CHD-C1D-ND	-2.05	122.57	124.45
25	B2	608	CLA	C1-C2-C3	-2.05	122.49	126.04
33	d2	406	LHG	O8-C23-O10	-2.05	118.41	123.59
25	B1	617	CLA	CHD-C1D-ND	-2.05	122.57	124.45
29	B2	620	LMG	O8-C28-O10	-2.05	118.41	123.59
25	d1	406	CLA	O2D-CGD-CBD	2.05	114.91	111.27
23	B1	603	BCR	C3-C4-C5	-2.05	110.42	114.08
25	C1	502	CLA	CHD-C1D-ND	-2.05	122.57	124.45
25	c2	504	CLA	CHD-C1D-ND	-2.05	122.57	124.45
25	c2	502	CLA	O2A-CGA-O1A	-2.05	118.42	123.59
25	d2	402	CLA	C1-C2-C3	-2.05	122.50	126.04
25	B1	605	CLA	CHD-C1D-ND	-2.05	122.57	124.45
23	a2	402	BCR	C16-C15-C14	-2.05	119.28	123.47
23	k1	101	BCR	C20-C19-C18	2.05	132.17	126.42
25	b1	613	CLA	CHB-C4A-NA	2.05	127.34	124.51
25	b1	609	CLA	O2D-CGD-CBD	2.05	114.90	111.27
23	K1	101	BCR	C36-C18-C17	-2.05	120.06	122.92
25	b2	615	CLA	CHD-C1D-ND	-2.05	122.57	124.45
23	c2	501	BCR	C1-C6-C7	2.05	121.56	115.78
25	B1	619	CLA	O2D-CGD-CBD	2.04	114.90	111.27
25	b1	606	CLA	O2D-CGD-CBD	2.04	114.90	111.27
38	V1	201	HEM	CMA-C3A-C4A	-2.04	125.32	128.46
25	b2	617	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
33	L1	101	LHG	O7-C7-O9	-2.04	118.77	123.70
34	c2	514	DGD	O6D-C5D-C6D	2.04	110.79	106.67
36	D2	408	PL9	C51-C49-C50	2.04	119.11	114.60
23	b2	603	BCR	C3-C4-C5	-2.04	110.44	114.08
33	D2	405	LHG	O7-C7-O9	-2.04	118.77	123.70
23	A1	401	BCR	C33-C5-C4	2.04	117.53	113.62
23	B2	602	BCR	C16-C15-C14	-2.04	119.30	123.47
25	B1	612	CLA	CHD-C1D-ND	-2.03	122.58	124.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	D1	402	CLA	CHD-C1D-ND	-2.03	122.58	124.45
23	j2	102	BCR	C19-C18-C17	-2.03	115.82	118.94
25	A2	403	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
25	A2	403	CLA	CHD-C1D-ND	-2.03	122.59	124.45
23	b1	603	BCR	C35-C13-C14	-2.03	120.08	122.92
38	f1	101	HEM	CHC-C4B-C3B	2.03	127.68	124.57
25	B1	606	CLA	C1-C2-C3	-2.03	122.53	126.04
23	B2	603	BCR	C33-C5-C4	2.03	117.52	113.62
25	A1	405	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
25	c1	511	CLA	CHD-C1D-ND	-2.03	122.59	124.45
25	b2	618	CLA	CHD-C1D-ND	-2.03	122.59	124.45
27	D2	407	PHO	CMC-C2C-C3C	2.03	128.77	124.94
25	C2	508	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
25	c2	505	CLA	O2D-CGD-CBD	2.03	114.87	111.27
29	A1	410	LMG	C7-O1-C1	-2.03	109.78	113.74
25	C1	512	CLA	CHD-C1D-ND	-2.03	122.59	124.45
25	K2	101	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
34	c1	514	DGD	O2G-C1B-O1B	-2.03	118.81	123.70
38	E2	101	HEM	CHC-C4B-C3B	2.03	127.67	124.57
29	C1	520	LMG	C8-O7-C10	-2.02	112.81	117.79
25	C2	508	CLA	CHD-C1D-ND	-2.02	122.59	124.45
29	B1	622	LMG	O8-C28-O10	-2.02	118.48	123.59
34	h1	101	DGD	O2G-C1B-O1B	-2.02	118.81	123.70
23	z2	101	BCR	C8-C7-C6	-2.02	121.53	127.20
23	K2	104	BCR	C38-C26-C25	-2.02	122.26	124.53
33	b2	625	LHG	C5-O7-C7	-2.02	112.82	117.79
23	C1	501	BCR	C36-C18-C19	2.02	121.26	118.08
23	j2	102	BCR	C10-C11-C12	-2.02	116.92	123.22
25	c2	502	CLA	CHD-C1D-ND	-2.02	122.60	124.45
25	D2	401	CLA	CHD-C1D-ND	-2.02	122.60	124.45
23	k2	501	BCR	C20-C19-C18	-2.02	120.75	126.42
36	d1	409	PL9	C47-C46-C44	-2.02	106.35	112.98
25	C2	509	CLA	O2A-CGA-O1A	-2.02	118.50	123.59
25	B1	612	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
38	v1	201	HEM	C3B-C2B-C1B	2.01	107.98	106.49
23	b1	601	BCR	C35-C13-C14	-2.01	120.10	122.92
25	a1	403	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
23	k2	501	BCR	C37-C22-C21	-2.01	120.10	122.92
23	D1	401	BCR	C34-C9-C10	-2.01	120.11	122.92
25	b2	614	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
25	b1	615	CLA	CHD-C1D-ND	-2.01	122.61	124.45
25	D2	404	CLA	O2A-CGA-O1A	-2.01	118.52	123.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	B2	601	BCR	C27-C26-C25	-2.01	119.81	122.73
25	c1	506	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
23	D1	401	BCR	C33-C5-C4	2.01	117.47	113.62
25	B1	605	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
25	c1	508	CLA	CAC-C3C-C4C	2.01	127.41	124.81
36	d1	409	PL9	C10-C9-C11	2.01	118.65	115.27
25	B2	614	CLA	C1-C2-C3	-2.01	122.58	126.04
23	b1	602	BCR	C39-C30-C25	-2.00	107.05	110.30
23	H1	102	BCR	C8-C7-C6	-2.00	121.58	127.20
27	a2	416	PHO	O2A-CGA-CBA	2.00	118.19	111.91
34	C1	516	DGD	O2G-C1B-O1B	-2.00	118.86	123.70
23	b2	602	BCR	C34-C9-C10	-2.00	120.12	122.92
25	c1	509	CLA	O2A-CGA-O1A	-2.00	118.54	123.59

All (139) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	A1	403	CLA	ND
25	A1	404	CLA	ND
25	A1	405	CLA	ND
25	A1	406	CLA	ND
25	B1	604	CLA	ND
25	B1	605	CLA	ND
25	B1	606	CLA	ND
25	B1	607	CLA	ND
25	B1	608	CLA	ND
25	B1	609	CLA	ND
25	B1	610	CLA	ND
25	B1	612	CLA	ND
25	B1	613	CLA	ND
25	B1	614	CLA	ND
25	B1	615	CLA	ND
25	B1	616	CLA	ND
25	B1	617	CLA	ND
25	B1	618	CLA	ND
25	B1	619	CLA	ND
25	C1	502	CLA	ND
25	C1	503	CLA	ND
25	C1	504	CLA	ND
25	C1	505	CLA	ND
25	C1	506	CLA	ND
25	C1	507	CLA	ND

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atom
25	C1	508	CLA	ND
25	C1	509	CLA	ND
25	C1	510	CLA	ND
25	C1	511	CLA	ND
25	C1	512	CLA	ND
25	C1	513	CLA	ND
25	C1	514	CLA	ND
25	D1	402	CLA	ND
25	D1	403	CLA	ND
25	a1	403	CLA	ND
25	a1	404	CLA	ND
25	a1	405	CLA	ND
25	b1	604	CLA	ND
25	b1	605	CLA	ND
25	b1	606	CLA	ND
25	b1	607	CLA	ND
25	b1	608	CLA	ND
25	b1	609	CLA	ND
25	b1	610	CLA	ND
25	b1	611	CLA	ND
25	b1	612	CLA	ND
25	b1	613	CLA	ND
25	b1	614	CLA	ND
25	b1	615	CLA	ND
25	b1	616	CLA	ND
25	b1	617	CLA	ND
25	b1	619	CLA	ND
25	b1	620	CLA	ND
25	c1	503	CLA	ND
25	c1	504	CLA	ND
25	c1	505	CLA	ND
25	c1	506	CLA	ND
25	c1	507	CLA	ND
25	c1	508	CLA	ND
25	c1	509	CLA	ND
25	c1	510	CLA	ND
25	c1	511	CLA	ND
25	c1	512	CLA	ND
25	c1	513	CLA	ND
25	c1	515	CLA	ND
25	c1	516	CLA	ND
25	d1	401	CLA	ND

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atom
25	d1	404	CLA	ND
25	d1	406	CLA	ND
25	A2	402	CLA	ND
25	A2	403	CLA	ND
25	A2	404	CLA	ND
25	B2	604	CLA	ND
25	B2	605	CLA	ND
25	B2	606	CLA	ND
25	B2	607	CLA	ND
25	B2	608	CLA	ND
25	B2	609	CLA	ND
25	B2	610	CLA	ND
25	B2	611	CLA	ND
25	B2	612	CLA	ND
25	B2	613	CLA	ND
25	B2	614	CLA	ND
25	B2	615	CLA	ND
25	B2	616	CLA	ND
25	B2	617	CLA	ND
25	B2	618	CLA	ND
25	B2	619	CLA	ND
25	C2	503	CLA	ND
25	C2	504	CLA	ND
25	C2	505	CLA	ND
25	C2	506	CLA	ND
25	C2	507	CLA	ND
25	C2	508	CLA	ND
25	C2	509	CLA	ND
25	C2	510	CLA	ND
25	C2	511	CLA	ND
25	C2	513	CLA	ND
25	C2	516	CLA	ND
25	C2	518	CLA	ND
25	D2	401	CLA	ND
25	D2	404	CLA	ND
25	D2	406	CLA	ND
25	K2	101	CLA	ND
25	a2	404	CLA	ND
25	a2	405	CLA	ND
25	a2	413	CLA	ND
25	b2	604	CLA	ND
25	b2	606	CLA	ND

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atom
25	b2	608	CLA	ND
25	b2	609	CLA	ND
25	b2	610	CLA	ND
25	b2	611	CLA	ND
25	b2	612	CLA	ND
25	b2	613	CLA	ND
25	b2	614	CLA	ND
25	b2	615	CLA	ND
25	b2	616	CLA	ND
25	b2	617	CLA	ND
25	b2	618	CLA	ND
25	b2	619	CLA	ND
25	b2	620	CLA	ND
25	b2	624	CLA	ND
25	c2	502	CLA	ND
25	c2	503	CLA	ND
25	c2	504	CLA	ND
25	c2	505	CLA	ND
25	c2	506	CLA	ND
25	c2	507	CLA	ND
25	c2	508	CLA	ND
25	c2	509	CLA	ND
25	c2	510	CLA	ND
25	c2	511	CLA	ND
25	c2	512	CLA	ND
25	c2	513	CLA	ND
25	c2	515	CLA	ND
25	d2	402	CLA	ND
25	d2	404	CLA	ND
25	d2	405	CLA	ND

All (2184) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	C1	501	BCR	C7-C8-C9-C10
23	C1	501	BCR	C7-C8-C9-C34
23	D1	401	BCR	C7-C8-C9-C10
23	D1	401	BCR	C7-C8-C9-C34
23	K1	101	BCR	C1-C6-C7-C8
23	K1	101	BCR	C5-C6-C7-C8
23	K1	101	BCR	C36-C18-C19-C20
23	c1	502	BCR	C7-C8-C9-C34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
23	d1	405	BCR	C7-C8-C9-C10
23	d1	405	BCR	C7-C8-C9-C34
23	d1	405	BCR	C21-C22-C23-C24
23	d1	405	BCR	C37-C22-C23-C24
23	B2	602	BCR	C7-C8-C9-C10
23	B2	602	BCR	C7-C8-C9-C34
23	F2	401	BCR	C7-C8-C9-C10
23	F2	401	BCR	C7-C8-C9-C34
23	F2	401	BCR	C21-C22-C23-C24
23	F2	401	BCR	C37-C22-C23-C24
23	K2	102	BCR	C5-C6-C7-C8
23	K2	102	BCR	C7-C8-C9-C10
23	K2	102	BCR	C7-C8-C9-C34
23	b2	602	BCR	C1-C6-C7-C8
23	b2	602	BCR	C5-C6-C7-C8
23	c2	501	BCR	C1-C6-C7-C8
23	c2	501	BCR	C5-C6-C7-C8
23	c2	501	BCR	C7-C8-C9-C10
23	c2	501	BCR	C7-C8-C9-C34
23	c2	501	BCR	C11-C12-C13-C14
23	c2	501	BCR	C11-C12-C13-C35
23	d2	401	BCR	C7-C8-C9-C10
23	d2	401	BCR	C7-C8-C9-C34
23	d2	401	BCR	C23-C24-C25-C26
23	j2	102	BCR	C1-C6-C7-C8
23	j2	102	BCR	C5-C6-C7-C8
23	j2	102	BCR	C7-C8-C9-C10
23	j2	102	BCR	C7-C8-C9-C34
25	A1	404	CLA	C1A-C2A-CAA-CBA
25	A1	404	CLA	C3A-C2A-CAA-CBA
25	A1	404	CLA	CHA-CBD-CGD-O1D
25	A1	404	CLA	CHA-CBD-CGD-O2D
25	A1	406	CLA	CHA-CBD-CGD-O1D
25	A1	406	CLA	CHA-CBD-CGD-O2D
25	B1	604	CLA	CHA-CBD-CGD-O1D
25	B1	604	CLA	CHA-CBD-CGD-O2D
25	B1	609	CLA	C2C-C3C-CAC-CBC
25	B1	609	CLA	C4C-C3C-CAC-CBC
25	B1	611	CLA	CHA-CBD-CGD-O1D
25	B1	611	CLA	CHA-CBD-CGD-O2D
25	B1	611	CLA	CBD-CGD-O2D-CED
25	B1	612	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	B1	613	CLA	C11-C12-C13-C14
25	B1	616	CLA	CHA-CBD-CGD-O1D
25	B1	616	CLA	CHA-CBD-CGD-O2D
25	B1	616	CLA	CAD-CBD-CGD-O1D
25	B1	618	CLA	CBD-CGD-O2D-CED
25	B1	619	CLA	CBD-CGD-O2D-CED
25	C1	503	CLA	CHA-CBD-CGD-O1D
25	C1	503	CLA	CHA-CBD-CGD-O2D
25	C1	507	CLA	CHA-CBD-CGD-O1D
25	C1	507	CLA	CHA-CBD-CGD-O2D
25	C1	508	CLA	C2-C3-C5-C6
25	C1	508	CLA	C4-C3-C5-C6
25	C1	509	CLA	CHA-CBD-CGD-O1D
25	C1	509	CLA	CHA-CBD-CGD-O2D
25	C1	512	CLA	C12-C13-C15-C16
25	a1	405	CLA	C1A-C2A-CAA-CBA
25	a1	405	CLA	C3A-C2A-CAA-CBA
25	b1	606	CLA	C2-C3-C5-C6
25	b1	606	CLA	C4-C3-C5-C6
25	b1	608	CLA	C2-C3-C5-C6
25	b1	608	CLA	C4-C3-C5-C6
25	b1	616	CLA	CAD-CBD-CGD-O1D
25	b1	616	CLA	CAD-CBD-CGD-O2D
25	b1	619	CLA	CBD-CGD-O2D-CED
25	b1	620	CLA	CBD-CGD-O2D-CED
25	b1	620	CLA	C4-C3-C5-C6
25	b1	620	CLA	C11-C10-C8-C9
25	c1	503	CLA	CHA-CBD-CGD-O1D
25	c1	503	CLA	CHA-CBD-CGD-O2D
25	c1	503	CLA	CAD-CBD-CGD-O1D
25	c1	504	CLA	CHA-CBD-CGD-O1D
25	c1	504	CLA	CHA-CBD-CGD-O2D
25	c1	504	CLA	CAD-CBD-CGD-O1D
25	c1	508	CLA	CHA-CBD-CGD-O1D
25	c1	508	CLA	CHA-CBD-CGD-O2D
25	c1	508	CLA	CBD-CGD-O2D-CED
25	c1	510	CLA	CHA-CBD-CGD-O1D
25	c1	510	CLA	CHA-CBD-CGD-O2D
25	c1	515	CLA	CHA-CBD-CGD-O1D
25	c1	515	CLA	CHA-CBD-CGD-O2D
25	d1	404	CLA	CHA-CBD-CGD-O1D
25	d1	404	CLA	CHA-CBD-CGD-O2D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	A2	404	CLA	CHA-CBD-CGD-O1D
25	A2	404	CLA	CHA-CBD-CGD-O2D
25	A2	404	CLA	C4-C3-C5-C6
25	B2	604	CLA	CHA-CBD-CGD-O1D
25	B2	604	CLA	CHA-CBD-CGD-O2D
25	B2	604	CLA	CAD-CBD-CGD-O1D
25	B2	605	CLA	CHA-CBD-CGD-O1D
25	B2	605	CLA	CBD-CGD-O2D-CED
25	B2	606	CLA	CBD-CGD-O2D-CED
25	B2	606	CLA	C2-C3-C5-C6
25	B2	606	CLA	C4-C3-C5-C6
25	B2	606	CLA	C11-C10-C8-C9
25	B2	608	CLA	C2-C3-C5-C6
25	B2	608	CLA	C4-C3-C5-C6
25	B2	616	CLA	CHA-CBD-CGD-O1D
25	B2	616	CLA	CAD-CBD-CGD-O1D
25	B2	616	CLA	CAD-CBD-CGD-O2D
25	B2	618	CLA	CBD-CGD-O2D-CED
25	C2	503	CLA	C1A-C2A-CAA-CBA
25	C2	504	CLA	CHA-CBD-CGD-O1D
25	C2	504	CLA	CHA-CBD-CGD-O2D
25	C2	504	CLA	CAD-CBD-CGD-O1D
25	C2	505	CLA	CHA-CBD-CGD-O1D
25	C2	505	CLA	CHA-CBD-CGD-O2D
25	C2	507	CLA	CBD-CGD-O2D-CED
25	C2	508	CLA	CBD-CGD-O2D-CED
25	C2	510	CLA	C1A-C2A-CAA-CBA
25	C2	510	CLA	C2A-CAA-CBA-CGA
25	a2	413	CLA	CHA-CBD-CGD-O1D
25	a2	413	CLA	CHA-CBD-CGD-O2D
25	b2	604	CLA	CHA-CBD-CGD-O1D
25	b2	604	CLA	CAD-CBD-CGD-O1D
25	b2	604	CLA	CAD-CBD-CGD-O2D
25	b2	610	CLA	C6-C7-C8-C9
25	b2	612	CLA	CHA-CBD-CGD-O1D
25	b2	612	CLA	CHA-CBD-CGD-O2D
25	b2	614	CLA	C6-C7-C8-C10
25	b2	614	CLA	C11-C10-C8-C9
25	b2	617	CLA	CHA-CBD-CGD-O1D
25	b2	617	CLA	CHA-CBD-CGD-O2D
25	b2	619	CLA	CBD-CGD-O2D-CED
25	b2	620	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	624	CLA	C11-C10-C8-C9
25	c2	503	CLA	C1A-C2A-CAA-CBA
25	c2	503	CLA	C3A-C2A-CAA-CBA
25	c2	507	CLA	CBD-CGD-O2D-CED
25	c2	508	CLA	C11-C10-C8-C9
25	c2	508	CLA	C11-C12-C13-C14
25	c2	509	CLA	CHA-CBD-CGD-O1D
25	c2	509	CLA	CHA-CBD-CGD-O2D
25	c2	511	CLA	CBD-CGD-O2D-CED
25	c2	511	CLA	C2-C3-C5-C6
25	c2	511	CLA	C4-C3-C5-C6
25	d2	402	CLA	CHA-CBD-CGD-O1D
25	d2	402	CLA	CHA-CBD-CGD-O2D
29	A1	410	LMG	O1-C7-C8-O7
29	M1	101	LMG	C11-C10-O7-C8
29	a1	412	LMG	O1-C7-C8-O7
29	b1	621	LMG	C11-C10-O7-C8
29	c2	519	LMG	O9-C10-O7-C8
32	C1	518	GOL	O1-C1-C2-C3
32	b1	618	GOL	O1-C1-C2-C3
32	b1	618	GOL	C1-C2-C3-O3
32	c1	521	GOL	O1-C1-C2-C3
32	C2	514	GOL	O1-C1-C2-C3
32	a2	415	GOL	O1-C1-C2-C3
32	c2	518	GOL	O1-C1-C2-C3
33	B1	621	LHG	C3-O3-P-O4
33	B1	621	LHG	C3-O3-P-O5
33	B1	621	LHG	C3-O3-P-O6
33	D1	404	LHG	C3-O3-P-O5
33	D1	404	LHG	C4-O6-P-O4
33	D1	404	LHG	C4-O6-P-O5
33	D1	405	LHG	C4-O6-P-O3
33	D1	405	LHG	C4-O6-P-O4
33	D1	405	LHG	C4-O6-P-O5
33	L1	101	LHG	C3-O3-P-O4
33	L1	101	LHG	C4-O6-P-O4
33	L1	101	LHG	C4-O6-P-O5
33	a1	407	LHG	C3-O3-P-O5
33	a1	407	LHG	C4-O6-P-O4
33	b1	622	LHG	C3-O3-P-O5
33	b1	622	LHG	C4-O6-P-O5
33	d1	402	LHG	C1-C2-C3-O3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
33	d1	402	LHG	C3-O3-P-O5
33	d1	402	LHG	C4-O6-P-O3
33	d1	407	LHG	C4-O6-P-O3
33	d1	407	LHG	C4-O6-P-O4
33	d1	407	LHG	C4-O6-P-O5
33	l1	102	LHG	C3-O3-P-O4
33	l1	102	LHG	C3-O3-P-O5
33	l1	102	LHG	C3-O3-P-O6
33	l1	102	LHG	C4-O6-P-O4
33	l1	102	LHG	C4-O6-P-O5
33	A2	405	LHG	C3-O3-P-O5
33	A2	405	LHG	C4-O6-P-O3
33	A2	405	LHG	C4-O6-P-O5
33	B2	627	LHG	C4-O6-P-O5
33	D2	403	LHG	O1-C1-C2-C3
33	D2	403	LHG	C3-O3-P-O4
33	D2	405	LHG	C3-O3-P-O5
33	D2	405	LHG	C4-O6-P-O3
33	D2	405	LHG	C4-O6-P-O5
33	L2	101	LHG	C3-O3-P-O4
33	L2	101	LHG	C4-O6-P-O5
33	a2	407	LHG	C4-O6-P-O3
33	a2	407	LHG	C4-O6-P-O4
33	a2	407	LHG	C4-O6-P-O5
33	b2	625	LHG	C4-O6-P-O3
33	b2	625	LHG	C4-O6-P-O5
33	b2	625	LHG	C8-C7-O7-C5
33	d2	403	LHG	O1-C1-C2-C3
33	d2	403	LHG	C3-O3-P-O4
33	d2	403	LHG	C4-O6-P-O3
33	d2	406	LHG	C4-O6-P-O4
33	d2	406	LHG	C4-O6-P-O5
33	l2	101	LHG	C3-O3-P-O4
33	l2	101	LHG	C3-O3-P-O5
33	l2	101	LHG	C4-O6-P-O3
33	l2	101	LHG	C4-O6-P-O4
33	l2	101	LHG	C4-O6-P-O5
35	m1	101	LMT	C2'-C1'-O1'-C1
35	m1	101	LMT	O5'-C1'-O1'-C1
35	b2	623	LMT	C2-C1-O1'-C1'
36	D1	408	PL9	C34-C36-C37-C38
36	d1	409	PL9	C34-C36-C37-C38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
36	D2	408	PL9	C34-C36-C37-C38
36	d2	409	PL9	C34-C36-C37-C38
37	D2	402	SQD	O10-C23-O48-C46
37	b2	605	SQD	O5-C1-O6-C44
37	b2	605	SQD	C8-C7-O47-C45
25	C1	507	CLA	O1D-CGD-O2D-CED
25	b1	619	CLA	O1D-CGD-O2D-CED
25	c1	508	CLA	O1D-CGD-O2D-CED
25	b2	619	CLA	O1D-CGD-O2D-CED
35	m1	101	LMT	C5'-C4'-O1B-C1B
25	B1	618	CLA	O1D-CGD-O2D-CED
25	B1	605	CLA	CBD-CGD-O2D-CED
25	B1	606	CLA	CBD-CGD-O2D-CED
25	C1	502	CLA	CBD-CGD-O2D-CED
25	C1	507	CLA	CBD-CGD-O2D-CED
25	b1	606	CLA	CBD-CGD-O2D-CED
25	b1	612	CLA	CBD-CGD-O2D-CED
25	c1	503	CLA	CBD-CGD-O2D-CED
25	B2	619	CLA	CBD-CGD-O2D-CED
25	C2	503	CLA	CBD-CGD-O2D-CED
25	C2	504	CLA	CBD-CGD-O2D-CED
25	C2	516	CLA	CBD-CGD-O2D-CED
25	b2	606	CLA	CBD-CGD-O2D-CED
25	c2	502	CLA	CBD-CGD-O2D-CED
25	c2	503	CLA	CBD-CGD-O2D-CED
25	B1	611	CLA	O1D-CGD-O2D-CED
35	m2	104	LMT	O5B-C1B-O1B-C4'
25	B1	606	CLA	O1D-CGD-O2D-CED
25	B1	619	CLA	O1D-CGD-O2D-CED
25	b1	606	CLA	O1D-CGD-O2D-CED
25	B2	618	CLA	O1D-CGD-O2D-CED
25	b2	606	CLA	O1D-CGD-O2D-CED
25	c2	511	CLA	O1D-CGD-O2D-CED
25	B1	607	CLA	CBD-CGD-O2D-CED
25	B1	608	CLA	CBD-CGD-O2D-CED
25	C1	503	CLA	CBD-CGD-O2D-CED
25	c1	504	CLA	CBD-CGD-O2D-CED
25	B2	607	CLA	CBD-CGD-O2D-CED
25	K2	101	CLA	CBD-CGD-O2D-CED
25	b2	613	CLA	CBD-CGD-O2D-CED
25	c2	504	CLA	CBD-CGD-O2D-CED
25	c2	512	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b1	620	CLA	O1D-CGD-O2D-CED
25	B2	606	CLA	O1D-CGD-O2D-CED
25	C2	507	CLA	O1D-CGD-O2D-CED
25	C2	508	CLA	O1D-CGD-O2D-CED
25	b2	620	CLA	O1D-CGD-O2D-CED
25	c2	506	CLA	C4C-C3C-CAC-CBC
25	B1	612	CLA	O1D-CGD-O2D-CED
25	B2	605	CLA	O1D-CGD-O2D-CED
25	C1	513	CLA	CBD-CGD-O2D-CED
25	b1	614	CLA	CBD-CGD-O2D-CED
25	A2	402	CLA	CBD-CGD-O2D-CED
25	C2	518	CLA	CBD-CGD-O2D-CED
25	b2	610	CLA	CBD-CGD-O2D-CED
25	C2	504	CLA	O1D-CGD-O2D-CED
25	c2	507	CLA	O1D-CGD-O2D-CED
29	M1	101	LMG	O9-C10-O7-C8
29	b1	621	LMG	O9-C10-O7-C8
33	b2	625	LHG	O9-C7-O7-C5
37	b2	605	SQD	O49-C7-O47-C45
35	m2	104	LMT	C2B-C1B-O1B-C4'
25	C1	502	CLA	O1D-CGD-O2D-CED
25	B1	611	CLA	C3-C5-C6-C7
25	B1	613	CLA	C3-C5-C6-C7
25	b1	620	CLA	C3-C5-C6-C7
25	A2	403	CLA	C3-C5-C6-C7
25	B2	607	CLA	C3-C5-C6-C7
25	b2	617	CLA	C3-C5-C6-C7
25	b2	619	CLA	C3-C5-C6-C7
25	c2	507	CLA	C3-C5-C6-C7
25	c2	510	CLA	C3-C5-C6-C7
25	c2	512	CLA	C3-C5-C6-C7
25	c2	503	CLA	CBA-CGA-O2A-C1
25	c2	506	CLA	CBA-CGA-O2A-C1
25	c2	506	CLA	C2C-C3C-CAC-CBC
25	c2	503	CLA	O1D-CGD-O2D-CED
25	D1	403	CLA	CBD-CGD-O2D-CED
25	C2	516	CLA	CBA-CGA-O2A-C1
25	c1	509	CLA	C4-C3-C5-C6
25	C2	503	CLA	C4-C3-C5-C6
25	C2	506	CLA	C4-C3-C5-C6
25	C2	509	CLA	C4-C3-C5-C6
36	d1	409	PL9	C20-C19-C21-C22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b1	620	CLA	C2-C3-C5-C6
25	C1	511	CLA	CBD-CGD-O2D-CED
25	a1	403	CLA	C2A-CAA-CBA-CGA
25	b1	609	CLA	C2A-CAA-CBA-CGA
25	B2	609	CLA	C2A-CAA-CBA-CGA
25	b2	611	CLA	C2A-CAA-CBA-CGA
25	B1	610	CLA	C3-C5-C6-C7
25	B1	619	CLA	C3-C5-C6-C7
25	B2	619	CLA	C3-C5-C6-C7
25	c2	506	CLA	C3-C5-C6-C7
25	c1	507	CLA	CBA-CGA-O2A-C1
25	C2	506	CLA	CBA-CGA-O2A-C1
29	B1	626	LMG	C29-C28-O8-C9
25	b1	612	CLA	O1D-CGD-O2D-CED
25	C1	509	CLA	CBD-CGD-O2D-CED
25	c1	513	CLA	CBD-CGD-O2D-CED
25	C2	505	CLA	CBD-CGD-O2D-CED
25	B1	605	CLA	O1D-CGD-O2D-CED
25	C2	516	CLA	O1D-CGD-O2D-CED
25	C2	506	CLA	O1A-CGA-O2A-C1
29	B1	626	LMG	O10-C28-O8-C9
23	K1	101	BCR	C19-C20-C21-C22
25	B1	610	CLA	CBD-CGD-O2D-CED
25	C1	505	CLA	CBD-CGD-O2D-CED
25	d1	406	CLA	CBD-CGD-O2D-CED
25	D2	406	CLA	CBD-CGD-O2D-CED
25	b2	617	CLA	CBD-CGD-O2D-CED
25	C2	503	CLA	O1D-CGD-O2D-CED
33	d1	402	LHG	O2-C2-C3-O3
25	C1	507	CLA	C3-C5-C6-C7
25	B2	613	CLA	C3-C5-C6-C7
25	c2	503	CLA	O1A-CGA-O2A-C1
25	c2	506	CLA	O1A-CGA-O2A-C1
29	F2	402	LMG	C11-C10-O7-C8
25	b1	607	CLA	CBD-CGD-O2D-CED
25	b1	615	CLA	CBD-CGD-O2D-CED
25	D2	404	CLA	CBD-CGD-O2D-CED
25	b2	616	CLA	CBD-CGD-O2D-CED
25	d2	404	CLA	CBD-CGD-O2D-CED
29	B1	626	LMG	O6-C5-C6-O5
25	c2	502	CLA	O1D-CGD-O2D-CED
25	c1	510	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C1	506	CLA	CBA-CGA-O2A-C1
25	B2	619	CLA	O1D-CGD-O2D-CED
29	A2	412	LMG	C4-C5-C6-O5
25	c1	507	CLA	O1A-CGA-O2A-C1
38	V1	201	HEM	C3D-CAD-CBD-CGD
25	B1	606	CLA	C4-C3-C5-C6
25	B1	608	CLA	C4-C3-C5-C6
25	B1	606	CLA	C2-C3-C5-C6
25	B1	608	CLA	C2-C3-C5-C6
36	d1	409	PL9	C18-C19-C21-C22
25	C2	511	CLA	CBD-CGD-O2D-CED
25	B1	609	CLA	C2A-CAA-CBA-CGA
25	A2	402	CLA	C2A-CAA-CBA-CGA
25	C1	506	CLA	O1A-CGA-O2A-C1
29	I2	101	LMG	O6-C1-O1-C7
36	D1	408	PL9	C14-C16-C17-C18
36	d1	409	PL9	C19-C21-C22-C23
36	d1	409	PL9	C29-C31-C32-C33
36	D2	408	PL9	C29-C31-C32-C33
36	D2	408	PL9	C44-C46-C47-C48
36	d2	409	PL9	C9-C11-C12-C13
36	d2	409	PL9	C14-C16-C17-C18
25	C2	516	CLA	O1A-CGA-O2A-C1
25	c1	507	CLA	C3-C5-C6-C7
25	B1	619	CLA	CBA-CGA-O2A-C1
25	C2	506	CLA	CBD-CGD-O2D-CED
35	m2	103	LMT	C4'-C5'-C6'-O6'
25	c1	503	CLA	O1D-CGD-O2D-CED
25	B1	608	CLA	O1D-CGD-O2D-CED
33	a2	407	LHG	C1-C2-C3-O3
29	F2	402	LMG	O9-C10-O7-C8
25	K2	101	CLA	O1D-CGD-O2D-CED
34	C1	516	DGD	O6E-C5E-C6E-O5E
34	c1	520	DGD	O6E-C5E-C6E-O5E
35	m1	101	LMT	O5B-C5B-C6B-O6B
29	B1	626	LMG	C4-C5-C6-O5
35	m1	101	LMT	C4B-C5B-C6B-O6B
25	b1	613	CLA	C15-C16-C17-C18
25	b1	619	CLA	C10-C11-C12-C13
25	a2	404	CLA	C8-C10-C11-C12
34	c1	520	DGD	C4E-C5E-C6E-O5E
25	b2	615	CLA	C8-C10-C11-C12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	618	CLA	C10-C11-C12-C13
29	A2	412	LMG	O6-C5-C6-O5
25	d1	406	CLA	C4-C3-C5-C6
25	c1	509	CLA	C2-C3-C5-C6
25	C2	503	CLA	C2-C3-C5-C6
25	C2	509	CLA	C2-C3-C5-C6
25	B1	606	CLA	C14-C13-C15-C16
25	B1	611	CLA	C11-C12-C13-C14
25	B1	612	CLA	C11-C12-C13-C14
25	B1	614	CLA	C11-C10-C8-C9
25	B1	619	CLA	C6-C7-C8-C9
25	C1	503	CLA	C6-C7-C8-C9
25	C1	506	CLA	C11-C12-C13-C14
25	C1	510	CLA	C14-C13-C15-C16
25	b1	608	CLA	C11-C10-C8-C9
25	b1	611	CLA	C6-C7-C8-C9
25	b1	612	CLA	C11-C12-C13-C14
25	c1	506	CLA	C11-C12-C13-C14
25	c1	507	CLA	C11-C10-C8-C9
25	c1	509	CLA	C11-C10-C8-C9
25	c1	509	CLA	C11-C12-C13-C14
25	B2	611	CLA	C6-C7-C8-C9
25	B2	612	CLA	C11-C12-C13-C14
25	B2	613	CLA	C11-C12-C13-C14
25	B2	619	CLA	C6-C7-C8-C9
25	C2	509	CLA	C11-C12-C13-C14
25	D2	404	CLA	C11-C10-C8-C9
25	b2	606	CLA	C11-C10-C8-C9
25	b2	608	CLA	C11-C10-C8-C9
25	b2	609	CLA	C11-C12-C13-C14
25	b2	612	CLA	C11-C12-C13-C14
25	b2	613	CLA	C14-C13-C15-C16
25	b2	617	CLA	C6-C7-C8-C9
25	b2	617	CLA	C11-C10-C8-C9
25	b2	619	CLA	C11-C10-C8-C9
25	b2	620	CLA	C6-C7-C8-C9
25	c2	502	CLA	C11-C12-C13-C14
25	c2	505	CLA	C11-C12-C13-C14
25	d2	405	CLA	C11-C10-C8-C9
25	B1	607	CLA	O1D-CGD-O2D-CED
25	c2	504	CLA	O1D-CGD-O2D-CED
25	A1	403	CLA	CBD-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C1	507	CLA	C2C-C3C-CAC-CBC
25	C1	511	CLA	C10-C11-C12-C13
25	D2	404	CLA	C8-C10-C11-C12
25	C2	507	CLA	C2A-CAA-CBA-CGA
23	B1	602	BCR	C7-C8-C9-C34
23	D1	401	BCR	C37-C22-C23-C24
23	J1	101	BCR	C7-C8-C9-C34
23	J1	101	BCR	C36-C18-C19-C20
23	d2	401	BCR	C37-C22-C23-C24
23	j2	102	BCR	C36-C18-C19-C20
23	B1	602	BCR	C7-C8-C9-C10
23	D1	401	BCR	C21-C22-C23-C24
23	d2	401	BCR	C21-C22-C23-C24
25	B1	610	CLA	C8-C10-C11-C12
25	C1	505	CLA	C5-C6-C7-C8
25	b1	614	CLA	C10-C11-C12-C13
25	C2	509	CLA	C8-C10-C11-C12
25	b2	606	CLA	C10-C11-C12-C13
25	c2	505	CLA	C8-C10-C11-C12
25	c2	512	CLA	O1D-CGD-O2D-CED
25	c1	516	CLA	CBA-CGA-O2A-C1
25	B1	607	CLA	C8-C10-C11-C12
25	B1	609	CLA	C8-C10-C11-C12
25	B1	615	CLA	C8-C10-C11-C12
25	C1	507	CLA	C5-C6-C7-C8
25	a1	404	CLA	C8-C10-C11-C12
25	b1	612	CLA	C15-C16-C17-C18
25	B2	608	CLA	C10-C11-C12-C13
25	B2	608	CLA	C15-C16-C17-C18
25	B2	613	CLA	C13-C15-C16-C17
25	a2	404	CLA	C15-C16-C17-C18
25	b2	615	CLA	C10-C11-C12-C13
25	b2	620	CLA	C15-C16-C17-C18
25	d2	405	CLA	C10-C11-C12-C13
25	B1	606	CLA	C8-C10-C11-C12
25	B1	613	CLA	C10-C11-C12-C13
25	B1	619	CLA	C15-C16-C17-C18
25	C1	504	CLA	C8-C10-C11-C12
25	C1	507	CLA	C8-C10-C11-C12
25	C1	511	CLA	C5-C6-C7-C8
25	a1	403	CLA	C8-C10-C11-C12
25	b1	604	CLA	C15-C16-C17-C18

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b1	606	CLA	C13-C15-C16-C17
25	b1	607	CLA	C13-C15-C16-C17
25	b1	609	CLA	C15-C16-C17-C18
25	b1	620	CLA	C5-C6-C7-C8
25	c1	507	CLA	C10-C11-C12-C13
25	c1	511	CLA	C10-C11-C12-C13
25	d1	406	CLA	C8-C10-C11-C12
25	A2	402	CLA	C8-C10-C11-C12
25	B2	609	CLA	C15-C16-C17-C18
25	B2	615	CLA	C8-C10-C11-C12
25	a2	405	CLA	C13-C15-C16-C17
25	a2	405	CLA	C15-C16-C17-C18
25	b2	620	CLA	C10-C11-C12-C13
25	c2	511	CLA	C13-C15-C16-C17
25	c2	512	CLA	C8-C10-C11-C12
25	c1	504	CLA	O1D-CGD-O2D-CED
25	b2	613	CLA	O1D-CGD-O2D-CED
32	i1	101	GOL	O1-C1-C2-O2
37	D1	409	SQD	C23-C24-C25-C26
25	a2	405	CLA	CBD-CGD-O2D-CED
25	C1	503	CLA	O1D-CGD-O2D-CED
25	B2	607	CLA	O1D-CGD-O2D-CED
25	C1	509	CLA	C10-C11-C12-C13
25	b1	605	CLA	C13-C15-C16-C17
25	b1	608	CLA	C15-C16-C17-C18
25	b1	614	CLA	C8-C10-C11-C12
25	d1	406	CLA	C15-C16-C17-C18
25	B2	608	CLA	C5-C6-C7-C8
25	B2	612	CLA	C15-C16-C17-C18
25	B2	619	CLA	C15-C16-C17-C18
27	D2	407	PHO	C15-C16-C17-C18
34	c2	514	DGD	O6E-C5E-C6E-O5E
25	C1	507	CLA	C15-C16-C17-C18
25	C1	509	CLA	C13-C15-C16-C17
25	b1	615	CLA	C8-C10-C11-C12
25	c1	506	CLA	C8-C10-C11-C12
25	c2	506	CLA	C10-C11-C12-C13
25	c1	512	CLA	CBD-CGD-O2D-CED
35	m2	103	LMT	C4B-C5B-C6B-O6B
38	v1	201	HEM	C3D-CAD-CBD-CGD
25	B1	613	CLA	C13-C15-C16-C17
25	C1	505	CLA	C8-C10-C11-C12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b1	614	CLA	C13-C15-C16-C17
25	c1	507	CLA	C8-C10-C11-C12
25	c1	509	CLA	C8-C10-C11-C12
25	a2	404	CLA	C13-C15-C16-C17
25	B1	606	CLA	C11-C10-C8-C7
25	B1	609	CLA	C12-C13-C15-C16
25	B1	614	CLA	C6-C7-C8-C10
25	B1	615	CLA	C11-C10-C8-C7
25	B1	615	CLA	C12-C13-C15-C16
25	C1	506	CLA	C11-C12-C13-C15
25	C1	507	CLA	C12-C13-C15-C16
25	C1	509	CLA	C12-C13-C15-C16
25	b1	607	CLA	C6-C7-C8-C10
25	b1	615	CLA	C11-C10-C8-C7
25	C2	505	CLA	C6-C7-C8-C10
25	C2	505	CLA	C11-C10-C8-C7
25	b2	612	CLA	C12-C13-C15-C16
25	b2	620	CLA	C3-C5-C6-C7
25	c2	513	CLA	CBA-CGA-O2A-C1
25	A1	403	CLA	C2A-CAA-CBA-CGA
25	B2	605	CLA	C2A-CAA-CBA-CGA
25	K2	101	CLA	C2A-CAA-CBA-CGA
25	A2	402	CLA	O1D-CGD-O2D-CED
25	C2	518	CLA	O1D-CGD-O2D-CED
25	b2	610	CLA	O1D-CGD-O2D-CED
25	B1	615	CLA	C5-C6-C7-C8
25	C1	505	CLA	C15-C16-C17-C18
25	b1	620	CLA	C15-C16-C17-C18
25	b2	618	CLA	C13-C15-C16-C17
25	C1	506	CLA	CBD-CGD-O2D-CED
25	b1	609	CLA	CBD-CGD-O2D-CED
25	B2	606	CLA	C5-C6-C7-C8
25	B2	613	CLA	C10-C11-C12-C13
25	b2	624	CLA	C10-C11-C12-C13
25	b1	614	CLA	O1D-CGD-O2D-CED
36	D1	408	PL9	C9-C11-C12-C13
36	D2	408	PL9	C14-C16-C17-C18
29	D1	406	LMG	C10-C11-C12-C13
33	a2	407	LHG	O2-C2-C3-O3
25	B1	611	CLA	C13-C15-C16-C17
25	B1	611	CLA	C5-C6-C7-C8
25	C2	505	CLA	C8-C10-C11-C12

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C2	506	CLA	C10-C11-C12-C13
25	b2	619	CLA	C5-C6-C7-C8
25	c2	509	CLA	C10-C11-C12-C13
25	C1	513	CLA	O1D-CGD-O2D-CED
25	B1	619	CLA	O1A-CGA-O2A-C1
25	c1	516	CLA	O1A-CGA-O2A-C1
25	c2	515	CLA	CBA-CGA-O2A-C1
35	a2	406	LMT	O1'-C1-C2-C3
25	C1	505	CLA	C10-C11-C12-C13
25	C1	509	CLA	C15-C16-C17-C18
25	b1	606	CLA	C10-C11-C12-C13
25	c1	505	CLA	C5-C6-C7-C8
35	m2	103	LMT	O5'-C5'-C6'-O6'
29	c1	519	LMG	C11-C10-O7-C8
25	B1	606	CLA	C5-C6-C7-C8
25	C1	507	CLA	C10-C11-C12-C13
25	D1	402	CLA	C15-C16-C17-C18
25	b1	604	CLA	C8-C10-C11-C12
25	b1	606	CLA	C5-C6-C7-C8
25	b1	620	CLA	C8-C10-C11-C12
25	B2	615	CLA	C13-C15-C16-C17
25	c2	504	CLA	C8-C10-C11-C12
25	c2	505	CLA	C10-C11-C12-C13
25	c2	506	CLA	C5-C6-C7-C8
25	c2	512	CLA	C15-C16-C17-C18
33	D1	404	LHG	C3-O3-P-O6
33	D1	404	LHG	C4-O6-P-O3
33	L1	101	LHG	C4-O6-P-O3
33	a1	407	LHG	C3-O3-P-O6
33	a1	407	LHG	C4-O6-P-O3
33	d1	402	LHG	C3-O3-P-O6
33	l1	102	LHG	C4-O6-P-O3
33	A2	405	LHG	C3-O3-P-O6
33	B2	627	LHG	C4-O6-P-O3
33	d2	406	LHG	C4-O6-P-O3
33	l2	101	LHG	C3-O3-P-O6
25	b2	609	CLA	C3-C5-C6-C7
25	B1	617	CLA	C10-C11-C12-C13
25	C1	512	CLA	C13-C15-C16-C17
25	D1	403	CLA	O1D-CGD-O2D-CED
29	c1	519	LMG	O9-C10-O7-C8
25	b1	616	CLA	C4-C3-C5-C6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	K2	101	CLA	C4-C3-C5-C6
25	b2	608	CLA	C4-C3-C5-C6
25	C2	506	CLA	C2-C3-C5-C6
25	C1	508	CLA	C5-C6-C7-C8
25	C2	509	CLA	C10-C11-C12-C13
34	C1	516	DGD	C6A-C7A-C8A-C9A
25	B1	605	CLA	C2A-CAA-CBA-CGA
25	B1	612	CLA	C2A-CAA-CBA-CGA
25	b1	612	CLA	C2A-CAA-CBA-CGA
25	c1	503	CLA	C2A-CAA-CBA-CGA
25	c1	507	CLA	C2A-CAA-CBA-CGA
25	C2	503	CLA	C2A-CAA-CBA-CGA
25	b2	609	CLA	C2A-CAA-CBA-CGA
25	c2	508	CLA	C2A-CAA-CBA-CGA
25	b1	620	CLA	C16-C17-C18-C20
25	C2	503	CLA	C16-C17-C18-C19
25	b2	620	CLA	C16-C17-C18-C20
25	b1	613	CLA	C3-C5-C6-C7
25	B2	619	CLA	CBA-CGA-O2A-C1
25	K2	101	CLA	CBA-CGA-O2A-C1
25	c1	511	CLA	C8-C10-C11-C12
34	c2	514	DGD	C7A-C8A-C9A-CAA
29	A1	410	LMG	C11-C10-O7-C8
29	a1	412	LMG	C11-C10-O7-C8
29	b1	631	LMG	C11-C10-O7-C8
29	a2	412	LMG	C11-C10-O7-C8
25	c1	511	CLA	C13-C15-C16-C17
33	D1	405	LHG	C9-C10-C11-C12
33	a2	407	LHG	C9-C10-C11-C12
34	c1	518	DGD	C7A-C8A-C9A-CAA
25	C1	502	CLA	C16-C17-C18-C19
25	b1	616	CLA	C16-C17-C18-C19
25	B2	615	CLA	C16-C17-C18-C20
25	d2	405	CLA	C16-C17-C18-C19
29	a1	412	LMG	C14-C15-C16-C17
29	c1	519	LMG	C41-C42-C43-C44
33	l2	101	LHG	C11-C10-C9-C8
25	C1	509	CLA	O1D-CGD-O2D-CED
25	c1	513	CLA	O1D-CGD-O2D-CED
29	A1	410	LMG	O9-C10-O7-C8
29	a1	412	LMG	O9-C10-O7-C8
29	b1	631	LMG	O9-C10-O7-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	509	CLA	CBD-CGD-O2D-CED
33	L1	101	LHG	C10-C11-C12-C13
33	l2	101	LHG	C9-C10-C11-C12
34	c2	514	DGD	C4B-C5B-C6B-C7B
25	C1	511	CLA	O1D-CGD-O2D-CED
25	C2	505	CLA	O1D-CGD-O2D-CED
33	D2	405	LHG	C10-C11-C12-C13
34	h2	102	DGD	CBB-CCB-CDB-CEB
25	C1	505	CLA	O1D-CGD-O2D-CED
33	l1	102	LHG	O2-C2-C3-O3
38	V2	201	HEM	C3D-CAD-CBD-CGD
25	B1	607	CLA	C3-C5-C6-C7
34	C1	515	DGD	C2E-C1E-O5D-C6D
34	c1	514	DGD	C2E-C1E-O5D-C6D
34	c2	516	DGD	C2E-C1E-O5D-C6D
33	A2	405	LHG	C29-C30-C31-C32
25	C1	506	CLA	C5-C6-C7-C8
25	B2	619	CLA	O1A-CGA-O2A-C1
25	C1	505	CLA	C16-C17-C18-C20
25	b1	606	CLA	C16-C17-C18-C20
25	c1	509	CLA	C16-C17-C18-C20
25	K2	101	CLA	C6-C7-C8-C10
25	c2	505	CLA	C16-C17-C18-C20
25	b1	604	CLA	C4-C3-C5-C6
33	d2	406	LHG	C30-C31-C32-C33
25	K2	101	CLA	C2-C3-C5-C6
25	A1	406	CLA	C11-C12-C13-C14
25	B1	608	CLA	C11-C12-C13-C14
25	B1	611	CLA	C6-C7-C8-C9
25	C1	508	CLA	C11-C10-C8-C9
25	C1	512	CLA	C14-C13-C15-C16
25	C1	513	CLA	C11-C12-C13-C14
25	b1	610	CLA	C11-C12-C13-C14
25	c1	503	CLA	C14-C13-C15-C16
25	c1	504	CLA	C6-C7-C8-C9
25	c1	510	CLA	C11-C10-C8-C9
25	B2	619	CLA	C11-C12-C13-C14
25	C2	509	CLA	C11-C10-C8-C9
25	b2	614	CLA	C6-C7-C8-C9
25	c2	511	CLA	C14-C13-C15-C16
27	A2	407	PHO	C11-C10-C8-C9
25	c2	510	CLA	C5-C6-C7-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
33	l1	102	LHG	C11-C12-C13-C14
25	C1	513	CLA	C10-C11-C12-C13
25	c1	505	CLA	C8-C10-C11-C12
25	b2	610	CLA	C5-C6-C7-C8
25	c2	513	CLA	O1A-CGA-O2A-C1
23	b2	602	BCR	C7-C8-C9-C34
34	C1	515	DGD	C3B-C4B-C5B-C6B
32	B1	620	GOL	O1-C1-C2-C3
32	i1	101	GOL	O1-C1-C2-C3
23	c1	502	BCR	C7-C8-C9-C10
23	b2	602	BCR	C7-C8-C9-C10
25	b1	604	CLA	C3-C5-C6-C7
29	a2	412	LMG	O9-C10-O7-C8
25	B1	615	CLA	C13-C15-C16-C17
25	B1	618	CLA	C8-C10-C11-C12
25	c1	510	CLA	C15-C16-C17-C18
29	a1	412	LMG	C17-C18-C19-C20
34	c1	518	DGD	C5B-C6B-C7B-C8B
29	a1	412	LMG	C13-C14-C15-C16
33	b1	622	LHG	C17-C18-C19-C20
33	L2	101	LHG	C14-C15-C16-C17
25	C1	503	CLA	C11-C12-C13-C14
25	C1	503	CLA	C11-C12-C13-C15
25	b1	616	CLA	C16-C17-C18-C20
25	c1	503	CLA	C16-C17-C18-C19
25	C2	503	CLA	C16-C17-C18-C20
25	b2	620	CLA	C16-C17-C18-C19
25	c2	502	CLA	C16-C17-C18-C19
25	c2	502	CLA	C16-C17-C18-C20
34	C1	515	DGD	O6E-C1E-O5D-C6D
34	c1	514	DGD	O6E-C1E-O5D-C6D
34	c2	516	DGD	O6E-C1E-O5D-C6D
25	C1	510	CLA	C10-C11-C12-C13
33	l2	101	LHG	C11-C12-C13-C14
25	c2	510	CLA	CBD-CGD-O2D-CED
25	D2	406	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	C10-C11-C12-C13
25	B2	615	CLA	C15-C16-C17-C18
29	c1	519	LMG	C35-C36-C37-C38
33	l1	102	LHG	C25-C26-C27-C28
25	B2	605	CLA	C3-C5-C6-C7
35	m2	104	LMT	O5'-C5'-C6'-O6'

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	617	CLA	O1D-CGD-O2D-CED
25	C1	512	CLA	C3A-C2A-CAA-CBA
25	c1	515	CLA	C3A-C2A-CAA-CBA
25	C2	510	CLA	C3A-C2A-CAA-CBA
25	D2	401	CLA	C3A-C2A-CAA-CBA
25	C1	507	CLA	C4C-C3C-CAC-CBC
23	H1	102	BCR	C14-C15-C16-C17
23	H2	103	BCR	C16-C17-C18-C19
25	B1	615	CLA	C16-C17-C18-C20
25	C1	505	CLA	C16-C17-C18-C19
25	b1	606	CLA	C16-C17-C18-C19
25	c1	510	CLA	C16-C17-C18-C19
25	B2	615	CLA	C16-C17-C18-C19
29	A1	412	LMG	C39-C40-C41-C42
29	B2	621	LMG	C7-C8-C9-O8
25	C1	508	CLA	CBD-CGD-O2D-CED
25	C1	511	CLA	C3-C5-C6-C7
34	h1	101	DGD	C1A-C2A-C3A-C4A
25	c1	512	CLA	C5-C6-C7-C8
27	a1	411	PHO	C4-C3-C5-C6
27	A2	407	PHO	C4-C3-C5-C6
25	b1	608	CLA	CBA-CGA-O2A-C1
25	B2	613	CLA	C2-C3-C5-C6
25	b2	612	CLA	C2-C3-C5-C6
27	A2	407	PHO	C2-C3-C5-C6
29	B1	622	LMG	C11-C10-O7-C8
29	d1	411	LMG	C11-C10-O7-C8
33	D1	405	LHG	C33-C34-C35-C36
35	M1	103	LMT	C7-C8-C9-C10
25	c1	509	CLA	C2A-CAA-CBA-CGA
25	a2	404	CLA	C2A-CAA-CBA-CGA
32	b1	618	GOL	O1-C1-C2-O2
32	C2	514	GOL	O1-C1-C2-O2
33	D2	403	LHG	O1-C1-C2-O2
33	d1	407	LHG	C30-C31-C32-C33
25	c1	506	CLA	C16-C17-C18-C20
33	B1	621	LHG	O2-C2-C3-O3
25	c2	505	CLA	CBA-CGA-O2A-C1
25	K2	101	CLA	O1A-CGA-O2A-C1
29	B1	622	LMG	O9-C10-O7-C8
29	d1	411	LMG	O9-C10-O7-C8
25	c2	513	CLA	C2-C1-O2A-CGA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
34	c2	514	DGD	O6D-C5D-C6D-O5D
34	c2	514	DGD	C5B-C6B-C7B-C8B
25	B1	615	CLA	C10-C11-C12-C13
25	B2	617	CLA	C15-C16-C17-C18
25	b2	617	CLA	C10-C11-C12-C13
34	c2	517	DGD	CAA-CBA-CCA-CDA
23	C1	501	BCR	C1-C6-C7-C8
23	C1	501	BCR	C5-C6-C7-C8
23	D1	401	BCR	C1-C6-C7-C8
23	D1	401	BCR	C5-C6-C7-C8
23	D1	401	BCR	C23-C24-C25-C30
23	J1	101	BCR	C1-C6-C7-C8
23	J1	101	BCR	C5-C6-C7-C8
23	b1	603	BCR	C5-C6-C7-C8
23	d1	405	BCR	C1-C6-C7-C8
23	d1	405	BCR	C5-C6-C7-C8
23	k1	101	BCR	C1-C6-C7-C8
23	k1	101	BCR	C5-C6-C7-C8
23	F2	401	BCR	C1-C6-C7-C8
23	F2	401	BCR	C5-C6-C7-C8
23	K2	102	BCR	C1-C6-C7-C8
23	c2	501	BCR	C23-C24-C25-C26
23	c2	501	BCR	C23-C24-C25-C30
23	d2	401	BCR	C5-C6-C7-C8
23	d2	401	BCR	C23-C24-C25-C30
23	h2	101	BCR	C1-C6-C7-C8
23	h2	101	BCR	C5-C6-C7-C8
25	B1	607	CLA	CBA-CGA-O2A-C1
25	c1	506	CLA	CBA-CGA-O2A-C1
25	d1	404	CLA	CBA-CGA-O2A-C1
25	B1	619	CLA	C10-C11-C12-C13
25	b1	616	CLA	C13-C15-C16-C17
25	C2	503	CLA	C5-C6-C7-C8
29	B2	620	LMG	C11-C10-O7-C8
33	D1	405	LHG	C32-C33-C34-C35
33	l2	101	LHG	C10-C11-C12-C13
25	b1	608	CLA	C10-C11-C12-C13
25	B2	606	CLA	C10-C11-C12-C13
25	C2	506	CLA	C5-C6-C7-C8
25	C1	506	CLA	C4-C3-C5-C6
25	c2	512	CLA	C4-C3-C5-C6
25	B1	610	CLA	O1D-CGD-O2D-CED

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	d2	404	CLA	O1D-CGD-O2D-CED
25	A1	403	CLA	C11-C10-C8-C7
25	A1	406	CLA	C11-C12-C13-C15
25	B1	608	CLA	C11-C12-C13-C15
25	C1	504	CLA	C11-C10-C8-C7
25	C1	507	CLA	C11-C12-C13-C15
25	C1	509	CLA	C11-C10-C8-C7
25	C1	512	CLA	C11-C10-C8-C7
25	b1	604	CLA	C2-C3-C5-C6
25	b1	608	CLA	C11-C12-C13-C15
25	b1	609	CLA	C6-C7-C8-C10
25	b1	610	CLA	C11-C12-C13-C15
25	b1	612	CLA	C11-C10-C8-C7
25	c1	507	CLA	C6-C7-C8-C10
25	c1	510	CLA	C11-C10-C8-C7
25	d1	406	CLA	C2-C3-C5-C6
25	B2	608	CLA	C11-C12-C13-C15
25	B2	609	CLA	C11-C12-C13-C15
25	B2	611	CLA	C2-C3-C5-C6
25	B2	613	CLA	C11-C10-C8-C7
25	B2	615	CLA	C12-C13-C15-C16
25	B2	617	CLA	C11-C12-C13-C15
25	B2	619	CLA	C11-C12-C13-C15
25	b2	606	CLA	C11-C10-C8-C7
25	b2	608	CLA	C11-C10-C8-C7
25	b2	620	CLA	C11-C12-C13-C15
25	c2	504	CLA	C12-C13-C15-C16
25	c2	511	CLA	C12-C13-C15-C16
27	A1	408	PHO	C2-C3-C5-C6
27	a1	411	PHO	C2-C3-C5-C6
27	a2	416	PHO	C2-C3-C5-C6
36	D1	408	PL9	C38-C39-C41-C42
25	a1	404	CLA	C2C-C3C-CAC-CBC
25	C1	502	CLA	C5-C6-C7-C8
25	C1	513	CLA	C8-C10-C11-C12
25	B1	610	CLA	C16-C17-C18-C20
25	b1	620	CLA	C16-C17-C18-C19
25	c1	509	CLA	C16-C17-C18-C19
25	c2	505	CLA	C16-C17-C18-C19
25	d1	406	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	O9-C10-O7-C8
34	C1	517	DGD	C1A-C2A-C3A-C4A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	D1	403	CLA	CBA-CGA-O2A-C1
25	c1	505	CLA	CBA-CGA-O2A-C1
25	B1	612	CLA	C15-C16-C17-C18
25	b1	615	CLA	O1D-CGD-O2D-CED
25	C1	505	CLA	C13-C15-C16-C17
25	b1	608	CLA	O1A-CGA-O2A-C1
25	c2	505	CLA	O1A-CGA-O2A-C1
25	a1	403	CLA	CBD-CGD-O2D-CED
25	B1	619	CLA	C16-C17-C18-C20
25	C2	509	CLA	C16-C17-C18-C20
25	b1	620	CLA	C10-C11-C12-C13
25	b2	609	CLA	C8-C10-C11-C12
33	l1	102	LHG	C7-C8-C9-C10
33	d1	402	LHG	C8-C7-O7-C5
33	B2	627	LHG	C8-C7-O7-C5
25	D2	404	CLA	O1D-CGD-O2D-CED
29	B1	626	LMG	C36-C37-C38-C39
33	l1	102	LHG	C11-C10-C9-C8
25	K2	101	CLA	C3-C5-C6-C7
34	C1	517	DGD	CAA-CBA-CCA-CDA
34	H2	101	DGD	CBB-CCB-CDB-CEB
35	m2	103	LMT	O1'-C1-C2-C3
25	c1	510	CLA	O1D-CGD-O2D-CED
25	d2	405	CLA	C16-C17-C18-C20
33	L1	101	LHG	C16-C17-C18-C19
29	D1	406	LMG	O6-C5-C6-O5
25	B1	616	CLA	C10-C11-C12-C13
25	B2	611	CLA	C4-C3-C5-C6
25	B2	613	CLA	C4-C3-C5-C6
25	b2	612	CLA	C4-C3-C5-C6
27	A1	408	PHO	C4-C3-C5-C6
27	a2	416	PHO	C4-C3-C5-C6
36	D1	408	PL9	C40-C39-C41-C42
25	b1	616	CLA	C2-C3-C5-C6
25	b2	608	CLA	C2-C3-C5-C6
25	c2	512	CLA	C2-C3-C5-C6
25	b1	615	CLA	C10-C11-C12-C13
25	B1	606	CLA	C11-C12-C13-C14
25	B1	609	CLA	C14-C13-C15-C16
25	B1	617	CLA	C11-C12-C13-C14
25	C1	507	CLA	C11-C12-C13-C14
25	C1	507	CLA	C14-C13-C15-C16

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C1	509	CLA	C11-C10-C8-C9
25	C1	509	CLA	C14-C13-C15-C16
25	C1	510	CLA	C11-C12-C13-C14
25	b1	604	CLA	C11-C12-C13-C14
25	b1	607	CLA	C6-C7-C8-C9
25	b1	608	CLA	C11-C12-C13-C14
25	b1	609	CLA	C6-C7-C8-C9
25	d1	401	CLA	C6-C7-C8-C9
25	B2	609	CLA	C11-C12-C13-C14
25	B2	614	CLA	C14-C13-C15-C16
25	B2	617	CLA	C11-C12-C13-C14
25	C2	505	CLA	C6-C7-C8-C9
25	b2	620	CLA	C11-C12-C13-C14
25	c2	505	CLA	C6-C7-C8-C9
25	c2	512	CLA	C11-C12-C13-C14
27	a1	411	PHO	C14-C13-C15-C16
27	A2	407	PHO	C6-C7-C8-C9
25	B1	607	CLA	O1A-CGA-O2A-C1
34	c1	518	DGD	C4B-C5B-C6B-C7B
25	b1	607	CLA	C3-C5-C6-C7
25	C2	511	CLA	O1D-CGD-O2D-CED
25	b2	616	CLA	O1D-CGD-O2D-CED
25	b2	613	CLA	C2A-CAA-CBA-CGA
29	c2	519	LMG	O6-C5-C6-O5
25	C2	506	CLA	C8-C10-C11-C12
25	c1	506	CLA	O1A-CGA-O2A-C1
25	b1	607	CLA	O1D-CGD-O2D-CED
25	B1	619	CLA	C1A-C2A-CAA-CBA
25	C1	502	CLA	C1A-C2A-CAA-CBA
25	C1	512	CLA	C1A-C2A-CAA-CBA
25	a1	404	CLA	C1A-C2A-CAA-CBA
25	c1	503	CLA	C1A-C2A-CAA-CBA
25	c1	505	CLA	C1A-C2A-CAA-CBA
25	c1	515	CLA	C1A-C2A-CAA-CBA
25	A2	403	CLA	C1A-C2A-CAA-CBA
25	A2	404	CLA	C1A-C2A-CAA-CBA
25	a2	405	CLA	C1A-C2A-CAA-CBA
25	b2	620	CLA	C1A-C2A-CAA-CBA
25	c2	502	CLA	C1A-C2A-CAA-CBA
25	B1	610	CLA	C16-C17-C18-C19
25	B1	615	CLA	C16-C17-C18-C19
25	B1	619	CLA	C16-C17-C18-C19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C1	502	CLA	C16-C17-C18-C20
25	c1	506	CLA	C16-C17-C18-C19
25	c1	510	CLA	C16-C17-C18-C20
34	c2	514	DGD	C2B-C1B-O2G-C2G
29	j2	101	LMG	C41-C42-C43-C44
33	D2	405	LHG	C13-C14-C15-C16
25	c1	513	CLA	C5-C6-C7-C8
25	b2	611	CLA	C15-C16-C17-C18
35	m2	104	LMT	C1-C2-C3-C4
33	B2	627	LHG	C3-O3-P-O6
33	D2	403	LHG	C3-O3-P-O6
33	d1	407	LHG	C14-C15-C16-C17
33	D2	405	LHG	C11-C12-C13-C14
34	c2	517	DGD	C4A-C5A-C6A-C7A
25	d1	406	CLA	C10-C11-C12-C13
25	B2	609	CLA	C10-C11-C12-C13
25	D2	406	CLA	C10-C11-C12-C13
25	C2	505	CLA	CBA-CGA-O2A-C1
33	D2	405	LHG	O6-C4-C5-C6
25	A1	403	CLA	O1D-CGD-O2D-CED
34	H1	101	DGD	O6E-C5E-C6E-O5E
38	v2	201	HEM	C3D-CAD-CBD-CGD
25	c1	503	CLA	C16-C17-C18-C20
25	C2	506	CLA	O1D-CGD-O2D-CED
33	D2	403	LHG	C7-C8-C9-C10
25	c2	509	CLA	CBA-CGA-O2A-C1
29	d1	408	LMG	O6-C5-C6-O5
33	B1	621	LHG	C1-C2-C3-O3
29	b1	621	LMG	C4-C5-C6-O5
25	A1	403	CLA	C15-C16-C17-C18
25	B1	605	CLA	C13-C15-C16-C17
34	h1	101	DGD	CAA-CBA-CCA-CDA
25	D1	403	CLA	O1A-CGA-O2A-C1
25	d1	404	CLA	O1A-CGA-O2A-C1
33	d1	407	LHG	C33-C34-C35-C36
25	B1	606	CLA	C16-C17-C18-C19
29	a2	412	LMG	C7-C8-C9-O8
33	A2	405	LHG	C4-C5-C6-O8
35	a2	406	LMT	C3-C4-C5-C6
25	B1	617	CLA	C8-C10-C11-C12
29	b1	631	LMG	C15-C16-C17-C18
33	L2	101	LHG	C11-C10-C9-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
29	j2	101	LMG	O6-C5-C6-O5
35	m2	103	LMT	O5B-C5B-C6B-O6B
25	b2	617	CLA	C15-C16-C17-C18
25	c2	509	CLA	C8-C10-C11-C12
35	a2	406	LMT	O5B-C5B-C6B-O6B
25	c1	505	CLA	O1A-CGA-O2A-C1
25	C2	504	CLA	CBA-CGA-O2A-C1
25	B1	612	CLA	C13-C15-C16-C17
34	c1	518	DGD	O6E-C5E-C6E-O5E
32	B1	620	GOL	O1-C1-C2-O2
32	C1	518	GOL	O1-C1-C2-O2
32	b1	618	GOL	O2-C2-C3-O3
32	a2	415	GOL	O1-C1-C2-O2
34	c1	514	DGD	C6B-C7B-C8B-C9B
25	b2	608	CLA	C10-C11-C12-C13
33	l1	102	LHG	C9-C10-C11-C12
25	b1	604	CLA	C13-C15-C16-C17
25	B2	615	CLA	C10-C11-C12-C13
29	a1	412	LMG	O6-C5-C6-O5
29	d2	407	LMG	O6-C5-C6-O5
34	h2	102	DGD	O6E-C5E-C6E-O5E
35	M1	103	LMT	O5'-C5'-C6'-O6'
25	c2	515	CLA	O1A-CGA-O2A-C1
25	b1	611	CLA	C4-C3-C5-C6
29	A1	412	LMG	C28-C29-C30-C31
33	L2	101	LHG	C23-C24-C25-C26
25	C2	509	CLA	C16-C17-C18-C19
25	B1	617	CLA	CBD-CGD-O2D-CED
25	c1	511	CLA	CBD-CGD-O2D-CED
25	C1	511	CLA	C8-C10-C11-C12
25	a2	405	CLA	C10-C11-C12-C13
34	c2	514	DGD	C4D-C5D-C6D-O5D
35	b2	621	LMT	O5'-C5'-C6'-O6'
25	C1	514	CLA	C2A-CAA-CBA-CGA
25	B2	612	CLA	C2A-CAA-CBA-CGA
25	C1	507	CLA	C2-C1-O2A-CGA
34	C1	515	DGD	C6B-C7B-C8B-C9B
25	c1	512	CLA	O1D-CGD-O2D-CED
33	d2	403	LHG	C31-C32-C33-C34
25	C1	513	CLA	CBA-CGA-O2A-C1
25	A2	404	CLA	CBA-CGA-O2A-C1
25	D2	406	CLA	CBA-CGA-O2A-C1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	509	CLA	O1A-CGA-O2A-C1
25	a2	405	CLA	O1D-CGD-O2D-CED
25	a2	405	CLA	C8-C10-C11-C12
25	b1	609	CLA	C3-C5-C6-C7
25	B1	619	CLA	C5-C6-C7-C8
29	b1	631	LMG	C2-C1-O1-C7
29	B2	621	LMG	O7-C8-C9-O8
35	M1	103	LMT	O1'-C1-C2-C3
33	B2	627	LHG	O9-C7-O7-C5
25	C2	505	CLA	O1A-CGA-O2A-C1
33	B1	621	LHG	C7-C8-C9-C10
33	b1	622	LHG	C7-C8-C9-C10
25	B1	613	CLA	C4-C3-C5-C6
36	d2	409	PL9	C40-C39-C41-C42
25	A1	405	CLA	C2C-C3C-CAC-CBC
33	b1	622	LHG	C12-C13-C14-C15
25	B1	606	CLA	C11-C12-C13-C15
25	B1	613	CLA	C11-C10-C8-C7
25	B1	617	CLA	C11-C12-C13-C15
25	B1	617	CLA	C12-C13-C15-C16
25	C1	506	CLA	C12-C13-C15-C16
25	C1	510	CLA	C11-C12-C13-C15
25	b1	604	CLA	C6-C7-C8-C10
25	b1	604	CLA	C11-C12-C13-C15
25	b1	608	CLA	C11-C10-C8-C7
25	b1	614	CLA	C11-C12-C13-C15
25	b1	616	CLA	C12-C13-C15-C16
25	b1	620	CLA	C12-C13-C15-C16
25	c1	503	CLA	C12-C13-C15-C16
25	c1	506	CLA	C11-C12-C13-C15
25	c1	511	CLA	C11-C10-C8-C7
25	c1	512	CLA	C6-C7-C8-C10
25	B2	614	CLA	C11-C12-C13-C15
25	B2	614	CLA	C12-C13-C15-C16
25	B2	619	CLA	C6-C7-C8-C10
25	C2	503	CLA	C12-C13-C15-C16
25	C2	509	CLA	C11-C12-C13-C15
25	a2	405	CLA	C6-C7-C8-C10
25	b2	612	CLA	C11-C12-C13-C15
25	b2	618	CLA	C12-C13-C15-C16
25	b2	619	CLA	C11-C10-C8-C7
25	c2	505	CLA	C11-C12-C13-C15

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	509	CLA	C11-C12-C13-C15
25	c2	512	CLA	C11-C12-C13-C15
27	A2	407	PHO	C6-C7-C8-C10
25	C1	505	CLA	C3-C5-C6-C7
25	C2	509	CLA	C3-C5-C6-C7
25	b2	612	CLA	C3-C5-C6-C7
25	B1	606	CLA	C6-C7-C8-C9
25	B1	608	CLA	C11-C10-C8-C9
25	B1	615	CLA	C11-C10-C8-C9
25	B1	617	CLA	C14-C13-C15-C16
25	C1	502	CLA	C11-C12-C13-C14
25	C1	506	CLA	C14-C13-C15-C16
25	C1	511	CLA	C14-C13-C15-C16
25	b1	604	CLA	C6-C7-C8-C9
25	b1	607	CLA	C11-C12-C13-C14
25	b1	614	CLA	C11-C12-C13-C14
25	b1	620	CLA	C14-C13-C15-C16
25	c1	507	CLA	C14-C13-C15-C16
25	c1	511	CLA	C11-C10-C8-C9
25	c1	512	CLA	C6-C7-C8-C9
25	B2	608	CLA	C11-C12-C13-C14
25	B2	614	CLA	C11-C12-C13-C14
25	C2	503	CLA	C14-C13-C15-C16
25	C2	505	CLA	C11-C10-C8-C9
25	D2	406	CLA	C11-C10-C8-C9
25	D2	406	CLA	C11-C12-C13-C14
25	b2	611	CLA	C14-C13-C15-C16
25	b2	618	CLA	C14-C13-C15-C16
25	c2	502	CLA	C14-C13-C15-C16
25	c2	509	CLA	C11-C12-C13-C14
33	L1	101	LHG	C11-C12-C13-C14
33	d1	407	LHG	C9-C10-C11-C12
25	A1	404	CLA	CBA-CGA-O2A-C1
25	C2	503	CLA	C8-C10-C11-C12
25	C1	506	CLA	C2A-CAA-CBA-CGA
34	h2	102	DGD	C3B-C4B-C5B-C6B
25	B1	608	CLA	C15-C16-C17-C18
25	B1	606	CLA	C16-C17-C18-C20
33	L1	101	LHG	C11-C10-C9-C8
25	C1	503	CLA	C3-C5-C6-C7
25	B2	617	CLA	C10-C11-C12-C13
29	j2	101	LMG	C11-C10-O7-C8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	513	CLA	C6-C7-C8-C9
37	b2	605	SQD	C11-C10-C9-C8
25	A1	406	CLA	CBA-CGA-O2A-C1
25	B2	619	CLA	C10-C11-C12-C13
25	c2	509	CLA	C15-C16-C17-C18
34	h1	101	DGD	O2G-C1B-C2B-C3B
25	c1	516	CLA	C16-C17-C18-C19
25	b1	604	CLA	C5-C6-C7-C8
25	b2	616	CLA	C10-C11-C12-C13
33	L1	101	LHG	O6-C4-C5-C6
33	d1	407	LHG	O6-C4-C5-C6
33	l1	102	LHG	O6-C4-C5-C6
33	a2	407	LHG	O6-C4-C5-C6
33	d2	403	LHG	O6-C4-C5-C6
33	l2	101	LHG	O6-C4-C5-C6
35	a2	406	LMT	C4-C5-C6-C7
25	c2	504	CLA	CBA-CGA-O2A-C1
25	C1	510	CLA	C13-C15-C16-C17
25	A2	403	CLA	C10-C11-C12-C13
25	B1	613	CLA	C2-C3-C5-C6
25	C1	506	CLA	C2-C3-C5-C6
36	d2	409	PL9	C38-C39-C41-C42
25	C1	506	CLA	O1D-CGD-O2D-CED
33	a1	407	LHG	O2-C2-C3-O3
33	d1	402	LHG	O9-C7-O7-C5
25	C1	513	CLA	C14-C13-C15-C16
25	D2	404	CLA	C14-C13-C15-C16
33	b1	622	LHG	C18-C19-C20-C21
25	C1	512	CLA	CBA-CGA-O2A-C1
25	a2	413	CLA	CBA-CGA-O2A-C1
29	c1	519	LMG	C10-C11-C12-C13
25	C1	513	CLA	O1A-CGA-O2A-C1
25	A1	406	CLA	C3A-C2A-CAA-CBA
25	C1	507	CLA	C3A-C2A-CAA-CBA
25	A2	404	CLA	C3A-C2A-CAA-CBA
25	D2	406	CLA	C3A-C2A-CAA-CBA
25	b2	620	CLA	C3A-C2A-CAA-CBA
33	L2	101	LHG	C11-C12-C13-C14
34	C1	516	DGD	C4B-C5B-C6B-C7B
37	b2	605	SQD	C24-C25-C26-C27
25	c1	506	CLA	C10-C11-C12-C13
25	d2	402	CLA	CBA-CGA-O2A-C1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
29	a1	412	LMG	C7-C8-C9-O8
33	d1	402	LHG	C4-C5-C6-O8
34	H1	101	DGD	O1G-C1G-C2G-C3G
34	h2	102	DGD	O1G-C1G-C2G-C3G
37	b2	605	SQD	C44-C45-C46-O48
33	D2	405	LHG	C30-C31-C32-C33
25	D1	402	CLA	O2A-C1-C2-C3
25	B2	614	CLA	C13-C15-C16-C17
34	C1	516	DGD	O6D-C5D-C6D-O5D
29	b1	631	LMG	O8-C28-C29-C30
25	B1	615	CLA	C4-C3-C5-C6
25	K2	101	CLA	C6-C7-C8-C9
25	b1	611	CLA	C2-C3-C5-C6
25	C1	508	CLA	O1D-CGD-O2D-CED
34	c1	518	DGD	O6D-C5D-C6D-O5D
27	A1	408	PHO	C15-C16-C17-C18
33	L1	101	LHG	C3-O3-P-O6
35	m1	101	LMT	O1'-C1-C2-C3
25	b1	609	CLA	O1D-CGD-O2D-CED
25	D2	406	CLA	C3-C5-C6-C7
33	d2	403	LHG	O1-C1-C2-O2
25	b1	619	CLA	C15-C16-C17-C18
33	D2	405	LHG	C32-C33-C34-C35
33	A2	405	LHG	O6-C4-C5-O7
33	D2	405	LHG	O6-C4-C5-O7
33	a2	407	LHG	O6-C4-C5-O7
33	d2	403	LHG	O6-C4-C5-O7
25	b2	624	CLA	CBA-CGA-O2A-C1
33	L2	101	LHG	C10-C11-C12-C13
25	b2	615	CLA	C11-C12-C13-C15
34	c1	518	DGD	C3B-C4B-C5B-C6B
25	b2	620	CLA	C5-C6-C7-C8
25	A2	404	CLA	O1A-CGA-O2A-C1
25	D2	406	CLA	O1A-CGA-O2A-C1
29	A1	412	LMG	O7-C8-C9-O8
29	B1	626	LMG	O7-C8-C9-O8
29	a2	412	LMG	O7-C8-C9-O8
33	A2	405	LHG	O7-C5-C6-O8
25	b2	609	CLA	CBD-CGD-O2D-CED
27	a1	411	PHO	C13-C15-C16-C17
25	B2	619	CLA	C8-C10-C11-C12
33	B1	621	LHG	C31-C32-C33-C34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
34	c2	514	DGD	O1B-C1B-O2G-C2G
25	c1	507	CLA	C2-C1-O2A-CGA
25	c2	507	CLA	C2-C1-O2A-CGA
33	L2	101	LHG	C15-C16-C17-C18
25	c1	512	CLA	C10-C11-C12-C13
25	B1	605	CLA	C14-C13-C15-C16
25	B1	609	CLA	C11-C10-C8-C9
25	B1	614	CLA	C6-C7-C8-C9
25	C1	509	CLA	C6-C7-C8-C9
25	b1	606	CLA	C14-C13-C15-C16
25	b1	613	CLA	C11-C12-C13-C14
25	b1	615	CLA	C11-C10-C8-C9
25	c1	507	CLA	C11-C12-C13-C14
25	d1	406	CLA	C11-C12-C13-C14
25	B2	607	CLA	C6-C7-C8-C9
25	b2	609	CLA	C11-C10-C8-C9
25	b2	616	CLA	C6-C7-C8-C9
25	b2	620	CLA	C14-C13-C15-C16
25	d2	402	CLA	C11-C10-C8-C9
33	D1	404	LHG	C30-C31-C32-C33
25	b1	613	CLA	C5-C6-C7-C8
25	b2	611	CLA	C13-C15-C16-C17
25	A1	404	CLA	C4-C3-C5-C6
25	C2	509	CLA	C2A-CAA-CBA-CGA
25	a1	403	CLA	O1D-CGD-O2D-CED
25	A1	403	CLA	C16-C17-C18-C19
25	C1	509	CLA	C16-C17-C18-C19
23	A1	401	BCR	C23-C24-C25-C26
23	D1	401	BCR	C23-C24-C25-C26
23	H1	102	BCR	C1-C6-C7-C8
23	H1	102	BCR	C5-C6-C7-C8
23	b1	603	BCR	C1-C6-C7-C8
23	d1	405	BCR	C23-C24-C25-C26
23	h1	102	BCR	C23-C24-C25-C26
23	B2	603	BCR	C23-C24-C25-C26
23	a2	402	BCR	C23-C24-C25-C26
23	a2	402	BCR	C23-C24-C25-C30
23	d2	401	BCR	C1-C6-C7-C8
25	C1	503	CLA	C8-C10-C11-C12
25	B2	617	CLA	C8-C10-C11-C12
25	b2	624	CLA	C13-C15-C16-C17
25	c1	508	CLA	C2C-C3C-CAC-CBC

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
29	b1	621	LMG	C34-C35-C36-C37
29	b1	624	LMG	C32-C33-C34-C35
25	c2	509	CLA	O1D-CGD-O2D-CED
23	K1	101	BCR	C17-C18-C19-C20
25	B1	604	CLA	C1A-C2A-CAA-CBA
25	B1	615	CLA	C15-C16-C17-C18
25	c2	510	CLA	O1D-CGD-O2D-CED
34	h1	101	DGD	C6B-C7B-C8B-C9B
25	c1	513	CLA	C11-C12-C13-C15
29	d2	407	LMG	C28-C29-C30-C31
25	b2	608	CLA	C5-C6-C7-C8
34	H1	101	DGD	C3B-C4B-C5B-C6B
25	C1	510	CLA	C8-C10-C11-C12
25	b2	606	CLA	C8-C10-C11-C12
33	D1	405	LHG	O6-C4-C5-C6
33	d1	402	LHG	O6-C4-C5-C6
33	a2	407	LHG	C11-C12-C13-C14
33	l2	101	LHG	C25-C26-C27-C28
25	A1	403	CLA	C11-C12-C13-C15
25	B1	606	CLA	C6-C7-C8-C10
25	B1	613	CLA	C11-C12-C13-C15
25	B1	614	CLA	C11-C10-C8-C7
25	B1	614	CLA	C11-C12-C13-C15
25	B1	617	CLA	C11-C10-C8-C7
25	B1	619	CLA	C12-C13-C15-C16
25	C1	508	CLA	C6-C7-C8-C10
25	C1	511	CLA	C12-C13-C15-C16
25	b1	607	CLA	C11-C12-C13-C15
25	b1	620	CLA	C11-C10-C8-C7
25	c1	506	CLA	C12-C13-C15-C16
25	c1	507	CLA	C12-C13-C15-C16
25	c1	509	CLA	C11-C12-C13-C15
25	c1	511	CLA	C11-C12-C13-C15
25	d1	406	CLA	C11-C12-C13-C15
25	A2	403	CLA	C11-C12-C13-C15
25	B2	606	CLA	C11-C10-C8-C7
25	B2	607	CLA	C6-C7-C8-C10
25	B2	610	CLA	C12-C13-C15-C16
25	B2	613	CLA	C11-C12-C13-C15
25	B2	619	CLA	C12-C13-C15-C16
25	C2	506	CLA	C12-C13-C15-C16
25	b2	608	CLA	C11-C12-C13-C15

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	609	CLA	C11-C10-C8-C7
25	b2	614	CLA	C11-C10-C8-C7
25	b2	614	CLA	C11-C12-C13-C15
25	b2	617	CLA	C11-C10-C8-C7
25	b2	620	CLA	C6-C7-C8-C10
25	b2	620	CLA	C12-C13-C15-C16
25	b2	624	CLA	C11-C10-C8-C7
25	c2	505	CLA	C12-C13-C15-C16
25	c2	508	CLA	C11-C10-C8-C7
25	c2	508	CLA	C11-C12-C13-C15
25	c2	511	CLA	C6-C7-C8-C10
25	c2	512	CLA	C12-C13-C15-C16
29	C1	520	LMG	C30-C31-C32-C33
33	D2	405	LHG	C11-C10-C9-C8
23	c2	501	BCR	C15-C16-C17-C18
25	c1	516	CLA	C16-C17-C18-C20
25	b2	615	CLA	C11-C12-C13-C14
27	a2	416	PHO	C16-C17-C18-C19
29	j2	101	LMG	O9-C10-O7-C8
34	c2	516	DGD	C1A-C2A-C3A-C4A
25	A1	404	CLA	O1A-CGA-O2A-C1
25	c1	516	CLA	C2A-CAA-CBA-CGA
25	c2	506	CLA	C2A-CAA-CBA-CGA
34	h1	101	DGD	CBB-CCB-CDB-CEB
25	A1	405	CLA	CBA-CGA-O2A-C1
25	B2	611	CLA	CBA-CGA-O2A-C1
25	b2	614	CLA	CBA-CGA-O2A-C1
25	B2	613	CLA	C8-C10-C11-C12
25	b2	606	CLA	C5-C6-C7-C8
25	B1	615	CLA	CAD-CBD-CGD-O2D
25	B1	616	CLA	CAD-CBD-CGD-O2D
25	C1	513	CLA	CAD-CBD-CGD-O2D
25	b1	614	CLA	CAD-CBD-CGD-O2D
25	c1	512	CLA	CAD-CBD-CGD-O2D
25	c1	516	CLA	CAD-CBD-CGD-O2D
25	B2	606	CLA	CAD-CBD-CGD-O2D
25	C2	504	CLA	CAD-CBD-CGD-O2D
25	C2	506	CLA	CAD-CBD-CGD-O2D
25	C2	510	CLA	CAD-CBD-CGD-O2D
25	b2	615	CLA	CAD-CBD-CGD-O2D
25	c2	502	CLA	CAD-CBD-CGD-O2D
27	d1	403	PHO	CAD-CBD-CGD-O2D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
29	c1	519	LMG	C9-C8-O7-C10
34	C1	517	DGD	C6B-C7B-C8B-C9B
25	B1	616	CLA	C8-C10-C11-C12
25	B2	608	CLA	C16-C17-C18-C19
29	b1	631	LMG	O6-C1-O1-C7
29	B2	621	LMG	O6-C1-O1-C7
37	B2	623	SQD	O5-C1-O6-C44
25	c1	512	CLA	C8-C10-C11-C12
36	D2	408	PL9	C9-C11-C12-C13
29	A1	410	LMG	O1-C7-C8-C9
29	B1	626	LMG	O1-C7-C8-C9
29	C1	520	LMG	C7-C8-C9-O8
29	a1	412	LMG	O1-C7-C8-C9
29	c1	519	LMG	O1-C7-C8-C9
33	D1	404	LHG	C4-C5-C6-O8
33	D1	405	LHG	O6-C4-C5-O7
33	l1	102	LHG	O6-C4-C5-O7
25	B1	610	CLA	C13-C15-C16-C17
25	b1	619	CLA	C5-C6-C7-C8
34	c1	514	DGD	CBB-CCB-CDB-CEB
38	E1	101	HEM	C4B-C3B-CAB-CBB
38	f1	101	HEM	C4B-C3B-CAB-CBB
38	E2	101	HEM	C4B-C3B-CAB-CBB
38	V2	201	HEM	C4B-C3B-CAB-CBB
38	e2	101	HEM	C4B-C3B-CAB-CBB
25	C1	509	CLA	C16-C17-C18-C20
25	B1	605	CLA	CHA-CBD-CGD-O1D
25	B1	605	CLA	CHA-CBD-CGD-O2D
25	B1	608	CLA	CHA-CBD-CGD-O1D
25	C1	502	CLA	CHA-CBD-CGD-O1D
25	C1	512	CLA	CHA-CBD-CGD-O1D
25	C1	512	CLA	CHA-CBD-CGD-O2D
25	a1	405	CLA	CHA-CBD-CGD-O1D
25	a1	405	CLA	CHA-CBD-CGD-O2D
25	b1	609	CLA	CHA-CBD-CGD-O1D
25	b1	609	CLA	CHA-CBD-CGD-O2D
25	c1	506	CLA	CHA-CBD-CGD-O1D
25	c1	506	CLA	CHA-CBD-CGD-O2D
25	B2	605	CLA	CHA-CBD-CGD-O2D
25	B2	608	CLA	CHA-CBD-CGD-O1D
25	B2	608	CLA	CHA-CBD-CGD-O2D
25	C2	506	CLA	CHA-CBD-CGD-O1D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C2	508	CLA	CHA-CBD-CGD-O1D
25	C2	508	CLA	CHA-CBD-CGD-O2D
25	C2	511	CLA	CHA-CBD-CGD-O1D
25	C2	511	CLA	CHA-CBD-CGD-O2D
25	b2	604	CLA	CHA-CBD-CGD-O2D
25	b2	613	CLA	CHA-CBD-CGD-O1D
25	b2	613	CLA	CHA-CBD-CGD-O2D
25	b2	614	CLA	CHA-CBD-CGD-O1D
25	b2	616	CLA	CHA-CBD-CGD-O1D
25	c2	503	CLA	CHA-CBD-CGD-O1D
25	c2	503	CLA	CHA-CBD-CGD-O2D
25	c2	504	CLA	CHA-CBD-CGD-O1D
25	c2	504	CLA	CHA-CBD-CGD-O2D
25	c2	508	CLA	CHA-CBD-CGD-O1D
25	c2	508	CLA	CHA-CBD-CGD-O2D
25	A1	406	CLA	O1A-CGA-O2A-C1
25	C1	512	CLA	O1A-CGA-O2A-C1
25	a2	413	CLA	O1A-CGA-O2A-C1
25	b2	624	CLA	O1A-CGA-O2A-C1
25	c2	504	CLA	O1A-CGA-O2A-C1
34	C1	515	DGD	C7B-C8B-C9B-CAB
34	h2	102	DGD	O1G-C1G-C2G-O2G
29	B1	626	LMG	C14-C15-C16-C17
25	d2	402	CLA	O1A-CGA-O2A-C1
32	a1	406	GOL	O1-C1-C2-O2
32	c1	521	GOL	O1-C1-C2-O2
32	c2	518	GOL	O1-C1-C2-O2
34	c2	514	DGD	C2B-C3B-C4B-C5B
25	A1	403	CLA	C11-C12-C13-C14
25	B1	614	CLA	C11-C12-C13-C14
25	B1	619	CLA	C14-C13-C15-C16
25	c1	511	CLA	C11-C12-C13-C14
25	c1	516	CLA	C11-C12-C13-C14
25	B2	619	CLA	C14-C13-C15-C16
25	b2	614	CLA	C11-C12-C13-C14
25	c2	503	CLA	C14-C13-C15-C16
25	c2	505	CLA	C14-C13-C15-C16
34	C1	516	DGD	C4D-C5D-C6D-O5D
25	B2	611	CLA	O1A-CGA-O2A-C1
25	b2	616	CLA	C8-C10-C11-C12
23	J1	101	BCR	C17-C18-C19-C20
35	l1	101	LMT	O1'-C1-C2-C3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C1	514	CLA	C1A-C2A-CAA-CBA
25	c1	516	CLA	C1A-C2A-CAA-CBA
25	D2	401	CLA	C1A-C2A-CAA-CBA
25	D2	406	CLA	C1A-C2A-CAA-CBA
25	c2	515	CLA	C1A-C2A-CAA-CBA
34	c1	518	DGD	C4D-C5D-C6D-O5D
25	C1	512	CLA	C2-C1-O2A-CGA
25	B2	609	CLA	CBD-CGD-O2D-CED
25	c1	512	CLA	CBA-CGA-O2A-C1
29	B2	621	LMG	C17-C18-C19-C20
25	d1	404	CLA	C15-C16-C17-C18
33	D2	405	LHG	C3-O3-P-O6
33	L2	101	LHG	C4-O6-P-O3
33	a2	407	LHG	C3-O3-P-O6
33	b2	625	LHG	C3-O3-P-O6
33	d2	403	LHG	C3-O3-P-O6
34	c2	517	DGD	C2B-C3B-C4B-C5B
34	C1	516	DGD	C4E-C5E-C6E-O5E
25	B1	617	CLA	O1D-CGD-O2D-CED
33	D1	404	LHG	C3-O3-P-O4
33	L1	101	LHG	C3-O3-P-O5
33	a1	407	LHG	C3-O3-P-O4
33	a1	407	LHG	C4-O6-P-O5
33	d1	402	LHG	C3-O3-P-O4
33	d1	402	LHG	C4-O6-P-O4
33	A2	405	LHG	C3-O3-P-O4
33	B2	627	LHG	C4-O6-P-O4
33	D2	403	LHG	C3-O3-P-O5
33	d2	403	LHG	C4-O6-P-O4
25	C1	508	CLA	C16-C17-C18-C19
25	b1	617	CLA	C16-C17-C18-C20
25	a2	405	CLA	C16-C17-C18-C19
25	c2	508	CLA	C16-C17-C18-C20
25	B2	605	CLA	C8-C10-C11-C12
25	B1	613	CLA	CBA-CGA-O2A-C1
25	b1	619	CLA	CBA-CGA-O2A-C1
36	d1	409	PL9	C9-C11-C12-C13
36	d1	409	PL9	C44-C46-C47-C48
25	c2	507	CLA	C6-C7-C8-C9
25	C1	502	CLA	C2A-CAA-CBA-CGA
25	c1	515	CLA	C3-C5-C6-C7
25	C1	502	CLA	C15-C16-C17-C18

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	608	CLA	C15-C16-C17-C18
25	b2	614	CLA	O1A-CGA-O2A-C1
25	A1	403	CLA	C16-C17-C18-C20
34	c1	514	DGD	C8B-C9B-CAB-CBB
25	B1	604	CLA	CAD-CBD-CGD-O1D
25	C1	503	CLA	CAD-CBD-CGD-O1D
25	C1	507	CLA	CAD-CBD-CGD-O1D
25	b1	611	CLA	CAD-CBD-CGD-O1D
25	c1	506	CLA	CAD-CBD-CGD-O1D
25	A2	404	CLA	C2-C3-C5-C6
25	B2	608	CLA	CAD-CBD-CGD-O1D
25	C2	508	CLA	CAD-CBD-CGD-O1D
25	b2	617	CLA	CAD-CBD-CGD-O1D
34	C1	515	DGD	C1A-C2A-C3A-C4A
33	d2	406	LHG	C14-C15-C16-C17
34	H1	101	DGD	CCB-CDB-CEB-CFB
25	B1	613	CLA	O1A-CGA-O2A-C1
33	l1	102	LHG	C1-C2-C3-O3
33	D2	403	LHG	C1-C2-C3-O3
25	b1	615	CLA	C11-C12-C13-C14
25	C1	512	CLA	C16-C17-C18-C20
25	b1	607	CLA	C16-C17-C18-C19
25	a2	404	CLA	C16-C17-C18-C19
25	b2	606	CLA	C16-C17-C18-C19
25	B1	610	CLA	C6-C7-C8-C10
25	B1	611	CLA	C11-C12-C13-C15
25	B1	616	CLA	C11-C10-C8-C7
25	B1	619	CLA	C6-C7-C8-C10
25	C1	509	CLA	C11-C12-C13-C15
25	C1	511	CLA	C6-C7-C8-C10
25	D1	402	CLA	C11-C12-C13-C15
25	b1	608	CLA	C6-C7-C8-C10
25	c1	507	CLA	C11-C10-C8-C7
25	d1	401	CLA	C11-C12-C13-C15
25	d1	406	CLA	C6-C7-C8-C10
25	B2	610	CLA	C11-C12-C13-C15
25	B2	611	CLA	C6-C7-C8-C10
25	B2	617	CLA	C11-C10-C8-C7
25	D2	404	CLA	C11-C10-C8-C7
25	b2	624	CLA	C3A-C2A-CAA-CBA
25	c2	502	CLA	C11-C12-C13-C15
25	c2	504	CLA	C11-C10-C8-C7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	508	CLA	C6-C7-C8-C10
25	c2	508	CLA	C12-C13-C15-C16
25	d2	405	CLA	C11-C10-C8-C7
33	L1	101	LHG	O6-C4-C5-O7
33	d1	402	LHG	O6-C4-C5-O7
33	d1	407	LHG	O6-C4-C5-O7
33	l2	101	LHG	O6-C4-C5-O7
34	H1	101	DGD	C8A-C9A-CAA-CBA
25	C1	513	CLA	C3-C5-C6-C7
25	A1	405	CLA	O1A-CGA-O2A-C1
33	D1	405	LHG	C11-C10-C9-C8
25	b1	620	CLA	C13-C15-C16-C17
34	c2	517	DGD	CCB-CDB-CEB-CFB
25	b2	620	CLA	C2A-CAA-CBA-CGA
25	A1	406	CLA	C16-C17-C18-C19
25	b1	608	CLA	C16-C17-C18-C19
25	c2	503	CLA	C3-C5-C6-C7
38	f1	101	HEM	C1A-C2A-CAA-CBA
38	f1	101	HEM	C3A-C2A-CAA-CBA
29	B1	626	LMG	O1-C7-C8-O7
29	b1	624	LMG	O1-C7-C8-O7
29	c1	519	LMG	O1-C7-C8-O7
37	b2	605	SQD	O47-C45-C46-O48
29	C1	520	LMG	C33-C34-C35-C36
34	c1	520	DGD	C8A-C9A-CAA-CBA
25	B2	610	CLA	CBA-CGA-O2A-C1
34	C1	516	DGD	C3B-C4B-C5B-C6B
25	B1	609	CLA	C15-C16-C17-C18
25	c1	511	CLA	O1D-CGD-O2D-CED
25	b2	609	CLA	O1D-CGD-O2D-CED
25	b1	619	CLA	O1A-CGA-O2A-C1
25	c1	512	CLA	O1A-CGA-O2A-C1
25	B1	606	CLA	C11-C10-C8-C9
25	C1	508	CLA	C6-C7-C8-C9
25	b1	606	CLA	C11-C10-C8-C9
25	b1	612	CLA	C14-C13-C15-C16
25	b1	616	CLA	C14-C13-C15-C16
25	c1	506	CLA	C11-C10-C8-C9
25	c1	506	CLA	C14-C13-C15-C16
25	d1	404	CLA	C11-C12-C13-C14
25	B2	612	CLA	C14-C13-C15-C16
25	b2	608	CLA	C11-C12-C13-C14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c2	511	CLA	C6-C7-C8-C9
25	c2	512	CLA	C14-C13-C15-C16
27	a2	416	PHO	C14-C13-C15-C16
25	c2	513	CLA	C3-C5-C6-C7
29	B2	620	LMG	C30-C31-C32-C33
25	B2	610	CLA	O1A-CGA-O2A-C1
23	J1	101	BCR	C18-C19-C20-C21
23	b1	602	BCR	C10-C11-C12-C13
23	c1	502	BCR	C18-C19-C20-C21
23	k1	101	BCR	C18-C19-C20-C21
23	F2	401	BCR	C18-C19-C20-C21
23	K2	102	BCR	C18-C19-C20-C21
23	c2	501	BCR	C18-C19-C20-C21
23	j2	102	BCR	C18-C19-C20-C21
23	J1	101	BCR	C7-C8-C9-C10
27	D2	407	PHO	C4-C3-C5-C6
25	B2	608	CLA	CBD-CGD-O2D-CED
33	d1	407	LHG	C11-C10-C9-C8
25	b2	614	CLA	C16-C17-C18-C19
25	c1	516	CLA	C5-C6-C7-C8
25	B2	619	CLA	C5-C6-C7-C8
37	b2	605	SQD	C46-C45-O47-C7
25	C1	509	CLA	O1A-CGA-O2A-C1
25	A2	402	CLA	CBA-CGA-O2A-C1
25	B2	608	CLA	O1D-CGD-O2D-CED
25	B2	607	CLA	C8-C10-C11-C12
25	d1	401	CLA	C2-C1-O2A-CGA
25	b2	614	CLA	C2-C1-O2A-CGA
27	A1	408	PHO	C2-C1-O2A-CGA
27	D2	407	PHO	C2-C1-O2A-CGA
25	C2	504	CLA	O1A-CGA-O2A-C1
25	K2	101	CLA	C2C-C3C-CAC-CBC
29	j2	101	LMG	C38-C39-C40-C41
34	C1	517	DGD	O6D-C5D-C6D-O5D
25	c2	513	CLA	C5-C6-C7-C8
25	B2	612	CLA	CBA-CGA-O2A-C1
25	A2	402	CLA	O1A-CGA-O2A-C1
25	A2	402	CLA	C16-C17-C18-C19
25	B2	619	CLA	C13-C15-C16-C17
25	b1	619	CLA	C4-C3-C5-C6
23	A1	401	BCR	C23-C24-C25-C30
23	B1	602	BCR	C23-C24-C25-C26

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
23	d1	405	BCR	C23-C24-C25-C30
23	h1	102	BCR	C1-C6-C7-C8
23	h1	102	BCR	C23-C24-C25-C30
23	b2	602	BCR	C23-C24-C25-C26
23	h2	101	BCR	C23-C24-C25-C30
29	M1	101	LMG	C31-C32-C33-C34
33	b1	622	LHG	C11-C12-C13-C14
34	H2	101	DGD	C2B-C3B-C4B-C5B
25	C1	508	CLA	C16-C17-C18-C20
25	B2	612	CLA	O1A-CGA-O2A-C1
34	H1	101	DGD	O1G-C1G-C2G-O2G
34	h2	102	DGD	C4B-C5B-C6B-C7B
33	D1	405	LHG	C3-O3-P-O6
33	b1	622	LHG	C3-O3-P-O6
33	d1	407	LHG	C3-O3-P-O6
33	d2	406	LHG	C3-O3-P-O6
29	B1	626	LMG	C7-C8-C9-O8
33	L1	101	LHG	C12-C13-C14-C15
25	B1	612	CLA	C5-C6-C7-C8
25	b1	609	CLA	C11-C12-C13-C15
25	c1	516	CLA	C11-C12-C13-C15
25	D2	406	CLA	C11-C12-C13-C15
25	b2	611	CLA	C12-C13-C15-C16
25	b2	616	CLA	C6-C7-C8-C10
25	c2	502	CLA	C12-C13-C15-C16
25	B1	610	CLA	C6-C7-C8-C9
25	B1	615	CLA	C14-C13-C15-C16
25	B1	617	CLA	C11-C10-C8-C9
25	d1	406	CLA	C6-C7-C8-C9
25	A2	403	CLA	C11-C12-C13-C14
25	B2	610	CLA	C11-C12-C13-C14
25	C2	506	CLA	C14-C13-C15-C16
25	A1	406	CLA	C16-C17-C18-C20
25	b1	614	CLA	C16-C17-C18-C19
25	c2	508	CLA	C16-C17-C18-C19
27	A2	407	PHO	C16-C17-C18-C19
25	C2	505	CLA	C5-C6-C7-C8
33	B1	621	LHG	C25-C26-C27-C28
25	b2	617	CLA	C2A-CAA-CBA-CGA
33	D2	405	LHG	C12-C13-C14-C15
34	H2	101	DGD	C3B-C4B-C5B-C6B
25	b1	607	CLA	C16-C17-C18-C20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
27	A1	408	PHO	C16-C17-C18-C19
33	a1	407	LHG	C12-C13-C14-C15
29	A1	412	LMG	C29-C28-O8-C9
34	C1	516	DGD	CBA-CCA-CDA-CEA
25	c1	516	CLA	C8-C10-C11-C12
25	C1	513	CLA	C12-C13-C15-C16
25	c2	506	CLA	C12-C13-C15-C16
29	I2	101	LMG	C11-C10-O7-C8
25	D2	404	CLA	C4-C3-C5-C6
25	b2	620	CLA	C4-C3-C5-C6
25	B1	615	CLA	C2-C3-C5-C6
33	b1	622	LHG	C13-C14-C15-C16
25	b1	617	CLA	C16-C17-C18-C19
25	C1	509	CLA	CBA-CGA-O2A-C1
25	a1	405	CLA	CBA-CGA-O2A-C1
34	c1	520	DGD	O6D-C5D-C6D-O5D
25	b1	616	CLA	O1A-CGA-O2A-C1
25	b1	616	CLA	CBA-CGA-O2A-C1
37	b2	605	SQD	C14-C15-C16-C17
25	b1	609	CLA	C16-C17-C18-C19
25	a2	405	CLA	C16-C17-C18-C20
25	b2	606	CLA	C16-C17-C18-C20
25	c1	503	CLA	C15-C16-C17-C18
33	D2	403	LHG	C28-C29-C30-C31
29	I2	101	LMG	O9-C10-O7-C8
33	d2	406	LHG	O6-C4-C5-C6
34	C1	515	DGD	O1A-C1A-O1G-C1G
25	c1	515	CLA	CAA-CBA-CGA-O2A
25	c1	515	CLA	C5-C6-C7-C8
25	b2	612	CLA	C10-C11-C12-C13
29	B2	621	LMG	C19-C20-C21-C22
33	b1	622	LHG	C28-C29-C30-C31
34	h1	101	DGD	C5B-C6B-C7B-C8B
25	b2	608	CLA	CBA-CGA-O2A-C1
33	d2	403	LHG	C13-C14-C15-C16
34	c2	517	DGD	CBB-CCB-CDB-CEB
33	l2	101	LHG	C26-C27-C28-C29
34	H2	101	DGD	CCB-CDB-CEB-CFB
25	C1	511	CLA	C4-C3-C5-C6
25	B2	616	CLA	C4-C3-C5-C6
27	d1	403	PHO	C15-C16-C17-C18
25	b2	608	CLA	O1A-CGA-O2A-C1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	A1	403	CLA	C2-C1-O2A-CGA
25	c1	515	CLA	C2-C1-O2A-CGA
25	a2	404	CLA	C2-C1-O2A-CGA
25	b2	615	CLA	C2-C1-O2A-CGA
34	c1	518	DGD	C8B-C9B-CAB-CBB
34	c1	514	DGD	CDB-CEB-CFB-CGB
25	C1	512	CLA	C10-C11-C12-C13
25	C1	510	CLA	C2A-CAA-CBA-CGA
25	b1	605	CLA	C2A-CAA-CBA-CGA
25	c2	502	CLA	C2A-CAA-CBA-CGA
33	L2	101	LHG	O7-C5-C6-O8
34	c1	514	DGD	C7B-C8B-C9B-CAB
25	d2	402	CLA	C3A-C2A-CAA-CBA
25	c1	513	CLA	C11-C12-C13-C14
34	c1	520	DGD	CBA-CCA-CDA-CEA
25	B1	614	CLA	CBA-CGA-O2A-C1
34	H1	101	DGD	C7A-C8A-C9A-CAA
34	H1	101	DGD	C6B-C7B-C8B-C9B
34	c2	514	DGD	CAA-CBA-CCA-CDA
25	B1	605	CLA	C6-C7-C8-C9
25	C1	505	CLA	C11-C12-C13-C14
25	C1	512	CLA	C6-C7-C8-C9
25	a1	404	CLA	C11-C10-C8-C9
25	b1	614	CLA	C14-C13-C15-C16
25	B2	608	CLA	C11-C10-C8-C9
25	B2	611	CLA	C14-C13-C15-C16
25	B2	614	CLA	C11-C10-C8-C9
25	B2	615	CLA	C14-C13-C15-C16
25	a2	405	CLA	C11-C10-C8-C9
25	b2	606	CLA	C14-C13-C15-C16
25	c2	505	CLA	C11-C10-C8-C9
27	A1	408	PHO	C11-C10-C8-C9
25	B2	605	CLA	C13-C15-C16-C17
29	B1	626	LMG	C33-C34-C35-C36
34	H1	101	DGD	C9B-CAB-CBB-CCB
25	d2	405	CLA	C15-C16-C17-C18
23	J1	101	BCR	C20-C21-C22-C37
23	b1	602	BCR	C11-C10-C9-C34
23	c1	502	BCR	C20-C21-C22-C37
23	k1	101	BCR	C20-C21-C22-C37
23	F2	401	BCR	C20-C21-C22-C37
23	K2	102	BCR	C20-C21-C22-C37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
23	c2	501	BCR	C16-C17-C18-C36
23	c2	501	BCR	C20-C21-C22-C37
23	j2	102	BCR	C20-C21-C22-C37
34	H2	101	DGD	O1G-C1G-C2G-C3G
38	v1	201	HEM	CAD-CBD-CGD-O2D
25	C1	508	CLA	C2A-CAA-CBA-CGA
33	L1	101	LHG	C9-C10-C11-C12
25	A2	402	CLA	C16-C17-C18-C20
25	d2	405	CLA	O2A-C1-C2-C3
33	D2	403	LHG	O2-C2-C3-O3
25	a1	404	CLA	CBA-CGA-O2A-C1
34	C1	515	DGD	C2A-C1A-O1G-C1G
35	C1	519	LMT	O5'-C1'-O1'-C1
25	B2	609	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	C29-C30-C31-C32
25	B1	610	CLA	C4-C3-C5-C6
25	A1	406	CLA	C1A-C2A-CAA-CBA
25	C1	504	CLA	C1A-C2A-CAA-CBA
25	C1	507	CLA	C1A-C2A-CAA-CBA
25	d1	406	CLA	C1A-C2A-CAA-CBA
25	B1	616	CLA	C12-C13-C15-C16
25	C1	503	CLA	C6-C7-C8-C10
25	C1	506	CLA	C11-C10-C8-C7
25	b1	611	CLA	C6-C7-C8-C10
25	b1	619	CLA	C12-C13-C15-C16
25	d1	401	CLA	C12-C13-C15-C16
25	B2	613	CLA	C12-C13-C15-C16
25	B2	614	CLA	C6-C7-C8-C10
25	B2	619	CLA	C11-C10-C8-C7
25	c2	503	CLA	C6-C7-C8-C10
25	c2	512	CLA	C6-C7-C8-C10
25	b2	620	CLA	C8-C10-C11-C12
23	B1	602	BCR	C9-C10-C11-C12
23	h1	102	BCR	C9-C10-C11-C12
34	c1	520	DGD	CAA-CBA-CCA-CDA
33	b1	622	LHG	C4-O6-P-O3
33	L2	101	LHG	C3-O3-P-O6
25	b1	605	CLA	CAA-CBA-CGA-O2A
25	a1	405	CLA	O1A-CGA-O2A-C1
35	m1	101	LMT	C2-C3-C4-C5
25	c2	502	CLA	C15-C16-C17-C18
25	C2	505	CLA	C2A-CAA-CBA-CGA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	B1	614	CLA	C10-C11-C12-C13
25	d2	402	CLA	C15-C16-C17-C18
38	v1	201	HEM	CAD-CBD-CGD-O1D
33	b1	622	LHG	C31-C32-C33-C34
29	j2	101	LMG	C15-C16-C17-C18
34	h1	101	DGD	C9B-CAB-CBB-CCB
33	A2	405	LHG	O6-C4-C5-C6
25	c2	508	CLA	C8-C10-C11-C12
25	C1	513	CLA	C4-C3-C5-C6
25	B1	606	CLA	C13-C15-C16-C17
25	b2	617	CLA	C8-C10-C11-C12
33	L2	101	LHG	C12-C13-C14-C15
23	J1	101	BCR	C20-C21-C22-C23
23	b1	602	BCR	C11-C10-C9-C8
23	c1	502	BCR	C20-C21-C22-C23
23	k1	101	BCR	C20-C21-C22-C23
23	F2	401	BCR	C20-C21-C22-C23
23	K2	102	BCR	C20-C21-C22-C23
23	c2	501	BCR	C16-C17-C18-C19
23	c2	501	BCR	C20-C21-C22-C23
23	j2	102	BCR	C20-C21-C22-C23
29	b1	621	LMG	O1-C7-C8-O7
37	D1	409	SQD	O6-C44-C45-O47
37	B2	623	SQD	O6-C44-C45-O47
34	c1	520	DGD	C9A-CAA-CBA-CCA
34	C1	516	DGD	CAA-CBA-CCA-CDA
25	d1	406	CLA	C13-C15-C16-C17
33	b1	622	LHG	C10-C11-C12-C13
25	B1	614	CLA	O1A-CGA-O2A-C1
33	a1	407	LHG	C1-C2-C3-O3
25	c2	504	CLA	C15-C16-C17-C18
36	D1	408	PL9	C35-C34-C36-C37
36	d1	409	PL9	C45-C44-C46-C47
36	d2	409	PL9	C35-C34-C36-C37
25	a1	403	CLA	C2-C1-O2A-CGA
25	b1	604	CLA	C2-C1-O2A-CGA
25	d1	406	CLA	C2-C1-O2A-CGA
27	A2	407	PHO	C2-C1-O2A-CGA
25	c2	511	CLA	C5-C6-C7-C8
25	b1	606	CLA	C11-C12-C13-C14
25	c1	512	CLA	C14-C13-C15-C16
25	b2	606	CLA	C11-C12-C13-C14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b2	617	CLA	C11-C12-C13-C14
35	l1	101	LMT	C1-C2-C3-C4
33	D1	405	LHG	C14-C15-C16-C17
34	H1	101	DGD	CBB-CCB-CDB-CEB
25	B2	616	CLA	C2A-CAA-CBA-CGA
25	B2	614	CLA	C16-C17-C18-C19
38	E1	101	HEM	CAA-CBA-CGA-O2A
34	h1	101	DGD	O1B-C1B-C2B-C3B
23	B1	602	BCR	C23-C24-C25-C30
23	B1	603	BCR	C23-C24-C25-C30
23	a1	401	BCR	C23-C24-C25-C30
23	b1	603	BCR	C23-C24-C25-C30
23	h1	102	BCR	C5-C6-C7-C8
23	B2	603	BCR	C23-C24-C25-C30
23	H2	103	BCR	C1-C6-C7-C8
23	K2	104	BCR	C23-C24-C25-C30
23	a2	402	BCR	C1-C6-C7-C8
23	b2	602	BCR	C23-C24-C25-C30
23	h2	101	BCR	C23-C24-C25-C26
33	B1	621	LHG	C11-C12-C13-C14
34	H1	101	DGD	O2G-C1B-C2B-C3B
33	d2	403	LHG	C16-C17-C18-C19
32	a1	406	GOL	O1-C1-C2-C3
29	a1	412	LMG	C12-C13-C14-C15
34	H1	101	DGD	C5B-C6B-C7B-C8B
23	j2	102	BCR	C17-C18-C19-C20
27	D2	407	PHO	C2-C3-C5-C6
25	B1	617	CLA	C5-C6-C7-C8
25	b1	606	CLA	C8-C10-C11-C12
29	d2	407	LMG	C8-C7-O1-C1
35	M1	102	LMT	C2-C3-C4-C5
25	b2	619	CLA	C11-C12-C13-C14
29	A1	412	LMG	O10-C28-O8-C9
25	B1	607	CLA	C11-C12-C13-C15
25	A1	406	CLA	C15-C16-C17-C18
33	L2	101	LHG	O6-C4-C5-O7
34	c2	514	DGD	C6A-C7A-C8A-C9A
25	B2	608	CLA	C2A-CAA-CBA-CGA
25	B2	605	CLA	CAA-CBA-CGA-O2A
25	C2	508	CLA	CBA-CGA-O2A-C1
34	C2	512	DGD	O6D-C5D-C6D-O5D
25	D2	404	CLA	C3-C5-C6-C7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
33	L2	101	LHG	O6-C4-C5-C6
25	C2	508	CLA	O1A-CGA-O2A-C1
36	D2	408	PL9	C25-C24-C26-C27
25	b1	612	CLA	C12-C13-C15-C16
25	c1	512	CLA	C12-C13-C15-C16
25	d1	404	CLA	C11-C12-C13-C15
25	B2	612	CLA	C11-C12-C13-C15
25	B2	612	CLA	C12-C13-C15-C16
25	C2	505	CLA	C12-C13-C15-C16
25	C2	509	CLA	C5-C6-C7-C8
33	d2	406	LHG	C33-C34-C35-C36
34	h1	101	DGD	C3B-C4B-C5B-C6B
33	a1	407	LHG	C28-C29-C30-C31
34	C1	517	DGD	C3B-C4B-C5B-C6B
33	D2	405	LHG	O7-C7-C8-C9
34	h2	102	DGD	O2G-C1B-C2B-C3B
33	l1	102	LHG	C27-C28-C29-C30
29	j2	101	LMG	C42-C43-C44-C45
33	D1	404	LHG	O7-C5-C6-O8
37	D2	402	SQD	O47-C45-C46-O48
29	C1	520	LMG	C29-C28-O8-C9
25	b1	616	CLA	C15-C16-C17-C18
25	C1	502	CLA	C3-C5-C6-C7
25	C2	507	CLA	CAA-CBA-CGA-O2A
25	C2	516	CLA	CAA-CBA-CGA-O2A
34	c1	514	DGD	O2G-C1B-C2B-C3B
34	h2	102	DGD	C8A-C9A-CAA-CBA
25	B2	614	CLA	O1A-CGA-O2A-C1
33	d1	407	LHG	O7-C7-C8-C9
25	b2	619	CLA	C4-C3-C5-C6
36	D1	408	PL9	C25-C24-C26-C27
25	d2	402	CLA	C10-C11-C12-C13
25	d2	405	CLA	C5-C6-C7-C8
25	C1	513	CLA	C2-C3-C5-C6
25	b2	620	CLA	C2-C3-C5-C6
25	B1	614	CLA	CAA-CBA-CGA-O2A
25	A2	403	CLA	C12-C13-C15-C16
25	D2	404	CLA	C12-C13-C15-C16
25	C1	507	CLA	C6-C7-C8-C9
25	C1	509	CLA	C11-C12-C13-C14
25	C1	511	CLA	C6-C7-C8-C9
25	D1	402	CLA	C11-C12-C13-C14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	b1	608	CLA	C6-C7-C8-C9
25	B2	610	CLA	C14-C13-C15-C16
25	B2	617	CLA	C11-C10-C8-C9
25	D2	404	CLA	C11-C12-C13-C14
25	a2	405	CLA	C14-C13-C15-C16
25	b2	614	CLA	C14-C13-C15-C16
25	c2	503	CLA	C11-C10-C8-C9
25	c2	508	CLA	C6-C7-C8-C9
25	c2	508	CLA	C14-C13-C15-C16
25	c2	512	CLA	C6-C7-C8-C9
38	V1	201	HEM	CAD-CBD-CGD-O2D
25	d1	401	CLA	C3A-C2A-CAA-CBA
25	C2	503	CLA	C3A-C2A-CAA-CBA
25	a2	413	CLA	C3A-C2A-CAA-CBA
34	H2	101	DGD	C6B-C7B-C8B-C9B
25	b2	610	CLA	O1A-CGA-O2A-C1
29	C1	520	LMG	O10-C28-O8-C9
29	C1	520	LMG	O7-C10-C11-C12
29	B2	621	LMG	O7-C10-C11-C12
34	h2	102	DGD	C6B-C7B-C8B-C9B
25	B1	606	CLA	CAD-CBD-CGD-O2D
25	B1	609	CLA	CAD-CBD-CGD-O2D
25	B1	610	CLA	CAD-CBD-CGD-O2D
25	B1	619	CLA	CAD-CBD-CGD-O2D
25	C1	506	CLA	CAD-CBD-CGD-O2D
25	b1	606	CLA	CAD-CBD-CGD-O2D
25	b1	612	CLA	CAD-CBD-CGD-O2D
25	c1	503	CLA	CAD-CBD-CGD-O2D
25	c1	504	CLA	CAD-CBD-CGD-O2D
25	c1	507	CLA	CAD-CBD-CGD-O2D
25	A2	402	CLA	CAD-CBD-CGD-O2D
25	B2	604	CLA	CAD-CBD-CGD-O2D
25	B2	607	CLA	CAD-CBD-CGD-O2D
25	B2	609	CLA	CAD-CBD-CGD-O2D
25	B2	611	CLA	CAD-CBD-CGD-O2D
25	B2	612	CLA	CAD-CBD-CGD-O2D
25	B2	618	CLA	CAD-CBD-CGD-O2D
25	C2	507	CLA	CAD-CBD-CGD-O2D
25	b2	606	CLA	CAD-CBD-CGD-O2D
25	b2	608	CLA	CAD-CBD-CGD-O2D
25	b2	619	CLA	CAD-CBD-CGD-O2D
25	c2	515	CLA	CAD-CBD-CGD-O2D

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
27	A1	408	PHO	CAD-CBD-CGD-O2D
27	a2	416	PHO	CAD-CBD-CGD-O2D
25	b1	613	CLA	C10-C11-C12-C13
25	B2	606	CLA	C2A-CAA-CBA-CGA
25	c2	510	CLA	C2A-CAA-CBA-CGA
25	b1	605	CLA	C8-C10-C11-C12
25	c2	511	CLA	C2-C1-O2A-CGA
25	c1	512	CLA	CAA-CBA-CGA-O2A
25	D2	401	CLA	CAA-CBA-CGA-O2A
25	c2	511	CLA	CAA-CBA-CGA-O2A
33	l1	102	LHG	O7-C7-C8-C9
29	B2	621	LMG	C18-C19-C20-C21
25	b2	610	CLA	CBA-CGA-O2A-C1
34	c2	514	DGD	C3B-C4B-C5B-C6B
29	A2	412	LMG	O6-C1-O1-C7
25	A2	403	CLA	C14-C13-C15-C16
25	b2	609	CLA	C14-C13-C15-C16
29	A1	412	LMG	C7-C8-C9-O8
29	b1	624	LMG	O1-C7-C8-C9
33	d2	403	LHG	C28-C29-C30-C31
25	B2	614	CLA	CBA-CGA-O2A-C1
34	c2	517	DGD	O6D-C5D-C6D-O5D
29	A2	412	LMG	O7-C10-C11-C12
38	E1	101	HEM	CAA-CBA-CGA-O1A
35	m1	101	LMT	C7-C8-C9-C10
25	c1	515	CLA	O2A-C1-C2-C3
25	d1	401	CLA	O2A-C1-C2-C3
25	D2	401	CLA	O2A-C1-C2-C3
25	a2	404	CLA	O2A-C1-C2-C3
33	B1	621	LHG	C15-C16-C17-C18
33	B1	621	LHG	C28-C29-C30-C31
34	C1	517	DGD	C4A-C5A-C6A-C7A
25	b1	606	CLA	C2A-CAA-CBA-CGA
25	c2	515	CLA	C2A-CAA-CBA-CGA
25	B2	614	CLA	C10-C11-C12-C13
27	A2	407	PHO	C8-C10-C11-C12
25	a1	404	CLA	O1A-CGA-O2A-C1
25	C2	507	CLA	CAA-CBA-CGA-O1A
25	b1	614	CLA	C16-C17-C18-C20
25	B2	609	CLA	C16-C17-C18-C19
34	c1	520	DGD	CBB-CCB-CDB-CEB
29	b1	631	LMG	O10-C28-C29-C30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	B1	608	CLA	CHA-CBD-CGD-O2D
25	B1	612	CLA	CHA-CBD-CGD-O1D
25	B1	613	CLA	CHA-CBD-CGD-O1D
25	B1	613	CLA	CHA-CBD-CGD-O2D
25	C1	502	CLA	CHA-CBD-CGD-O2D
25	b1	605	CLA	CHA-CBD-CGD-O2D
25	b1	611	CLA	CHA-CBD-CGD-O1D
25	b1	616	CLA	CHA-CBD-CGD-O1D
25	b1	616	CLA	CHA-CBD-CGD-O2D
25	b1	619	CLA	CHA-CBD-CGD-O2D
25	c1	509	CLA	CHA-CBD-CGD-O1D
25	c1	509	CLA	CHA-CBD-CGD-O2D
25	c1	511	CLA	CHA-CBD-CGD-O1D
25	B2	606	CLA	CHA-CBD-CGD-O2D
25	B2	613	CLA	CHA-CBD-CGD-O1D
25	B2	613	CLA	CHA-CBD-CGD-O2D
25	B2	616	CLA	CHA-CBD-CGD-O2D
25	C2	509	CLA	CHA-CBD-CGD-O1D
25	C2	509	CLA	CHA-CBD-CGD-O2D
25	C2	518	CLA	CHA-CBD-CGD-O1D
25	C2	518	CLA	CHA-CBD-CGD-O2D
25	D2	406	CLA	CHA-CBD-CGD-O1D
25	D2	406	CLA	CHA-CBD-CGD-O2D
25	b2	616	CLA	CHA-CBD-CGD-O2D
25	c2	505	CLA	CHA-CBD-CGD-O1D
25	c2	510	CLA	CHA-CBD-CGD-O1D
25	c2	510	CLA	CHA-CBD-CGD-O2D
25	c2	511	CLA	CHA-CBD-CGD-O1D
25	c2	511	CLA	CHA-CBD-CGD-O2D
25	c2	513	CLA	CHA-CBD-CGD-O1D
38	V1	201	HEM	CAD-CBD-CGD-O1D
38	f1	101	HEM	CAA-CBA-CGA-O2A
25	c2	503	CLA	C4-C3-C5-C6
25	b2	614	CLA	CAA-CBA-CGA-O2A
33	D1	404	LHG	C32-C33-C34-C35
25	B1	605	CLA	CAA-CBA-CGA-O2A
33	d2	406	LHG	O7-C7-C8-C9
29	a2	412	LMG	O1-C7-C8-O7
33	B2	627	LHG	O7-C5-C6-O8
34	C1	515	DGD	O1G-C1G-C2G-O2G
33	D2	403	LHG	C31-C32-C33-C34
25	B1	617	CLA	C15-C16-C17-C18

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	C2	505	CLA	C15-C16-C17-C18
27	D2	407	PHO	C13-C15-C16-C17
25	a1	404	CLA	C4C-C3C-CAC-CBC
25	b1	614	CLA	CAA-CBA-CGA-O2A
29	D1	406	LMG	O7-C10-C11-C12
25	B1	609	CLA	C16-C17-C18-C20
25	B2	608	CLA	C16-C17-C18-C20
27	D1	407	PHO	CHA-CBD-CGD-O1D
27	D1	407	PHO	CHA-CBD-CGD-O2D
27	d1	403	PHO	CHA-CBD-CGD-O1D
27	D2	407	PHO	CHA-CBD-CGD-O1D
33	a1	407	LHG	O1-C1-C2-O2
25	c1	503	CLA	CAA-CBA-CGA-O2A
25	C1	502	CLA	C4-C3-C5-C6
29	A1	412	LMG	C36-C37-C38-C39
33	d1	407	LHG	O9-C7-C8-C9
29	B2	620	LMG	C31-C32-C33-C34
33	l2	101	LHG	C12-C13-C14-C15
25	b1	606	CLA	C11-C12-C13-C15
25	b1	613	CLA	C11-C12-C13-C15
25	c1	506	CLA	C11-C10-C8-C7
25	c1	509	CLA	C11-C10-C8-C7
25	b2	606	CLA	C11-C12-C13-C15
25	b2	609	CLA	C11-C12-C13-C15
25	b2	610	CLA	C6-C7-C8-C10
29	M1	101	LMG	C11-C12-C13-C14
34	c2	514	DGD	O6E-C1E-O5D-C6D
25	D1	402	CLA	CAA-CBA-CGA-O2A
33	a1	407	LHG	O8-C23-C24-C25
25	C1	504	CLA	C11-C10-C8-C9
25	b1	612	CLA	C11-C10-C8-C9
25	b1	619	CLA	C11-C12-C13-C14
25	b1	619	CLA	C14-C13-C15-C16
25	d1	401	CLA	C11-C12-C13-C14
25	C2	516	CLA	CAA-CBA-CGA-O1A
23	H2	103	BCR	C9-C10-C11-C12
29	B2	620	LMG	C11-C12-C13-C14
25	C2	503	CLA	CAA-CBA-CGA-O2A
25	b2	615	CLA	CAA-CBA-CGA-O2A
33	l2	101	LHG	O7-C7-C8-C9
37	D2	402	SQD	C5-C6-S-O8
25	B1	614	CLA	C16-C17-C18-C19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	B1	608	CLA	C2A-CAA-CBA-CGA
25	b2	606	CLA	C2A-CAA-CBA-CGA
33	d1	407	LHG	C7-C8-C9-C10
34	c2	514	DGD	C8B-C9B-CAB-CBB
38	e2	101	HEM	C2A-CAA-CBA-CGA
34	c2	516	DGD	O2G-C1B-C2B-C3B
25	b1	619	CLA	C2-C3-C5-C6
36	D2	408	PL9	C23-C24-C26-C27
29	b1	621	LMG	O6-C5-C6-O5
25	c1	512	CLA	CAA-CBA-CGA-O1A
29	B2	621	LMG	O9-C10-C11-C12
34	c1	514	DGD	O1B-C1B-C2B-C3B
34	c2	516	DGD	O1B-C1B-C2B-C3B
25	b1	619	CLA	C13-C15-C16-C17
25	c2	502	CLA	C5-C6-C7-C8
33	D1	405	LHG	C12-C13-C14-C15
25	d1	401	CLA	C1A-C2A-CAA-CBA
25	C2	506	CLA	C1A-C2A-CAA-CBA
25	b2	624	CLA	C1A-C2A-CAA-CBA
25	d2	402	CLA	C1A-C2A-CAA-CBA
25	b2	615	CLA	CAA-CBA-CGA-O1A
25	c2	511	CLA	CAA-CBA-CGA-O1A
25	c1	512	CLA	C2-C1-O2A-CGA
25	b2	619	CLA	C2-C1-O2A-CGA
25	C1	504	CLA	CBA-CGA-O2A-C1
29	c2	519	LMG	C29-C28-O8-C9
25	B1	614	CLA	CAA-CBA-CGA-O1A
25	b2	614	CLA	CAA-CBA-CGA-O1A
33	D2	405	LHG	O9-C7-C8-C9
25	a2	405	CLA	C2C-C3C-CAC-CBC
33	D1	405	LHG	O7-C7-C8-C9
29	B1	626	LMG	C34-C35-C36-C37
25	b1	605	CLA	C16-C17-C18-C20
25	b1	619	CLA	C16-C17-C18-C20
25	d1	404	CLA	C16-C17-C18-C20
29	C1	520	LMG	O9-C10-C11-C12
25	B1	608	CLA	C13-C15-C16-C17
34	c1	518	DGD	CBA-CCA-CDA-CEA
25	d1	401	CLA	CAA-CBA-CGA-O2A
25	B2	615	CLA	CAA-CBA-CGA-O2A
25	B1	608	CLA	C5-C6-C7-C8
33	l2	101	LHG	O9-C7-O7-C5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
33	l1	102	LHG	O9-C7-C8-C9
33	l2	101	LHG	O9-C7-C8-C9
34	c2	514	DGD	C2E-C1E-O5D-C6D
35	C1	519	LMT	C2'-C1'-O1'-C1
25	C2	503	CLA	C13-C15-C16-C17
35	l1	101	LMT	C7-C8-C9-C10
33	B2	627	LHG	C3-O3-P-O4
33	L2	101	LHG	C3-O3-P-O5
33	d2	403	LHG	C3-O3-P-O5
27	a1	411	PHO	C16-C17-C18-C19
29	a1	412	LMG	O7-C8-C9-O8
25	D1	402	CLA	CAA-CBA-CGA-O1A
25	C2	503	CLA	CAA-CBA-CGA-O1A
29	A2	412	LMG	O9-C10-C11-C12
33	a1	407	LHG	O10-C23-C24-C25
29	C1	520	LMG	C37-C38-C39-C40
38	f1	101	HEM	CAA-CBA-CGA-O1A
23	a1	401	BCR	C23-C24-C25-C26
23	b1	603	BCR	C23-C24-C25-C26
23	K2	104	BCR	C23-C24-C25-C26
25	c1	509	CLA	C10-C11-C12-C13
25	D2	401	CLA	CAA-CBA-CGA-O1A
27	a2	416	PHO	C16-C17-C18-C20
25	B1	606	CLA	C2A-CAA-CBA-CGA
25	B1	616	CLA	C2A-CAA-CBA-CGA
25	b1	616	CLA	C2A-CAA-CBA-CGA
33	L2	101	LHG	C9-C10-C11-C12
33	a1	407	LHG	C32-C33-C34-C35
25	C1	511	CLA	C2-C3-C5-C6
25	B1	608	CLA	CAD-CBD-CGD-O1D
25	B1	612	CLA	CAD-CBD-CGD-O1D
25	B1	613	CLA	CAD-CBD-CGD-O1D
25	C1	502	CLA	CAD-CBD-CGD-O1D
25	b1	608	CLA	CAD-CBD-CGD-O1D
25	c1	509	CLA	C3-C5-C6-C7
25	b2	614	CLA	CAD-CBD-CGD-O1D
25	b2	616	CLA	CAD-CBD-CGD-O1D
25	c2	505	CLA	CAD-CBD-CGD-O1D
25	c2	506	CLA	CAD-CBD-CGD-O1D
37	D2	402	SQD	C5-C6-S-O9
37	b2	605	SQD	C44-C45-O47-C7
25	C1	504	CLA	O1A-CGA-O2A-C1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
25	c1	503	CLA	CAA-CBA-CGA-O1A
29	D1	406	LMG	O9-C10-C11-C12
33	d2	406	LHG	O9-C7-C8-C9
33	D2	405	LHG	C33-C34-C35-C36
35	a2	406	LMT	C5-C6-C7-C8
25	B2	608	CLA	C13-C15-C16-C17
25	B1	610	CLA	C11-C12-C13-C14
25	b1	604	CLA	C14-C13-C15-C16
25	d1	401	CLA	C14-C13-C15-C16
25	B2	608	CLA	C14-C13-C15-C16
25	b2	612	CLA	C14-C13-C15-C16
25	d2	402	CLA	C6-C7-C8-C9
29	a1	412	LMG	C18-C19-C20-C21
34	c2	517	DGD	CBA-CCA-CDA-CEA
25	c2	506	CLA	C14-C13-C15-C16
25	B2	618	CLA	O1A-CGA-O2A-C1
25	b1	614	CLA	CAA-CBA-CGA-O1A
29	B2	620	LMG	C29-C28-O8-C9
25	C1	502	CLA	CAA-CBA-CGA-O2A
25	c2	510	CLA	C6-C7-C8-C9
33	l2	101	LHG	C29-C30-C31-C32
36	d2	409	PL9	C25-C24-C26-C27
25	B1	610	CLA	C2-C3-C5-C6
25	C1	510	CLA	C12-C13-C15-C16
25	a1	403	CLA	C11-C10-C8-C7
25	b1	604	CLA	C12-C13-C15-C16
25	b1	606	CLA	C11-C10-C8-C7
25	b1	614	CLA	C12-C13-C15-C16
25	b1	617	CLA	C12-C13-C15-C16
25	b1	619	CLA	C11-C12-C13-C15
25	A2	402	CLA	C11-C10-C8-C7
25	B2	614	CLA	C11-C10-C8-C7
25	B2	615	CLA	C11-C10-C8-C7
25	B2	616	CLA	C2-C3-C5-C6
25	D2	401	CLA	C12-C13-C15-C16
25	D2	404	CLA	C2-C3-C5-C6
25	b2	614	CLA	C12-C13-C15-C16
25	b2	617	CLA	C6-C7-C8-C10
25	b2	617	CLA	C12-C13-C15-C16
25	b2	624	CLA	C6-C7-C8-C10
25	d2	402	CLA	C6-C7-C8-C10
25	d2	405	CLA	C12-C13-C15-C16

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
38	E2	101	HEM	C2A-CAA-CBA-CGA
25	c1	507	CLA	CAA-CBA-CGA-O2A
29	d1	408	LMG	O7-C10-C11-C12
29	c1	519	LMG	C33-C34-C35-C36
25	c1	507	CLA	CAA-CBA-CGA-O1A
33	D1	405	LHG	O9-C7-C8-C9
38	e2	101	HEM	CAA-CBA-CGA-O2A
34	c1	518	DGD	C2A-C3A-C4A-C5A
25	B1	615	CLA	CAA-CBA-CGA-O2A
25	C1	506	CLA	CAA-CBA-CGA-O2A
33	D1	404	LHG	O8-C23-C24-C25
34	C1	515	DGD	O2G-C1B-C2B-C3B
34	c2	516	DGD	C3B-C4B-C5B-C6B
35	L1	102	LMT	C3-C4-C5-C6
35	c1	517	LMT	O5'-C1'-O1'-C1
25	b1	612	CLA	C13-C15-C16-C17
27	D1	407	PHO	C8-C10-C11-C12
34	c2	514	DGD	CBA-CCA-CDA-CEA
25	B2	615	CLA	CAA-CBA-CGA-O1A
36	d1	409	PL9	C14-C16-C17-C18
36	d2	409	PL9	C29-C31-C32-C33
25	b1	619	CLA	C8-C10-C11-C12
25	c1	509	CLA	C5-C6-C7-C8
25	D2	406	CLA	C15-C16-C17-C18
25	b2	614	CLA	C13-C15-C16-C17
33	b1	622	LHG	C25-C26-C27-C28
33	l2	101	LHG	O2-C2-C3-O3
29	a2	412	LMG	O8-C28-C29-C30
33	a2	407	LHG	O7-C7-C8-C9
34	H2	101	DGD	O2G-C1B-C2B-C3B
25	D1	402	CLA	C5-C6-C7-C8
25	b1	605	CLA	C15-C16-C17-C18
25	b1	608	CLA	C13-C15-C16-C17
25	c1	510	CLA	C13-C15-C16-C17

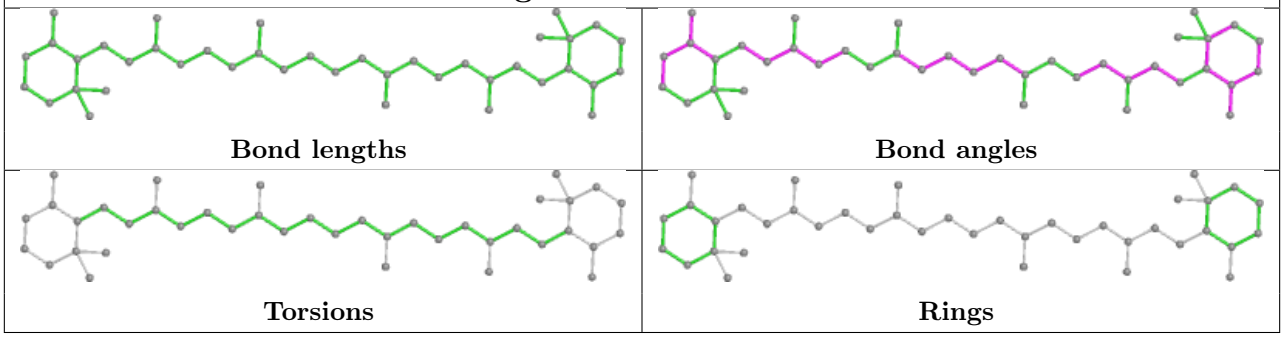
There are no ring outliers.

No monomer is involved in short contacts.

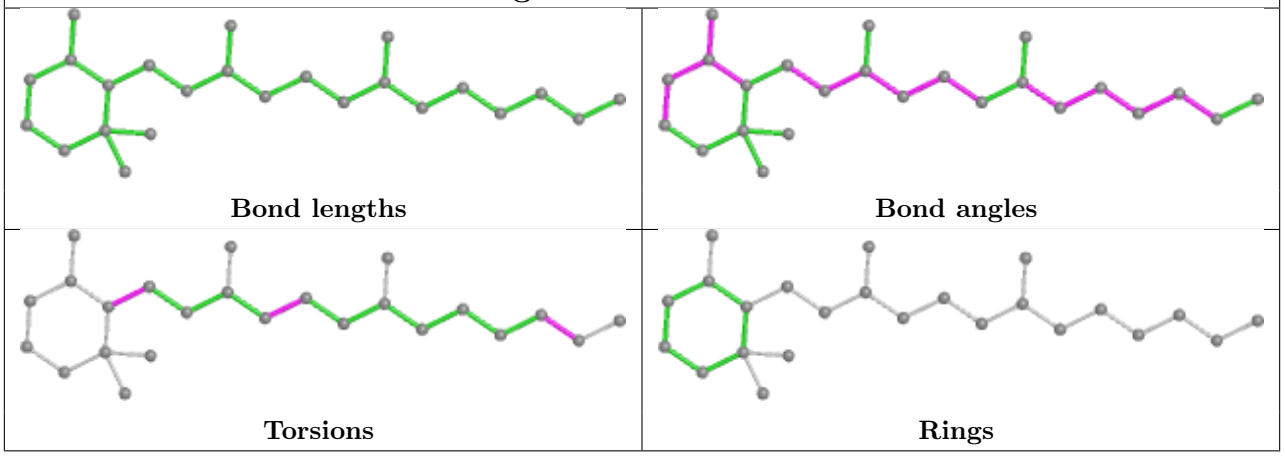
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

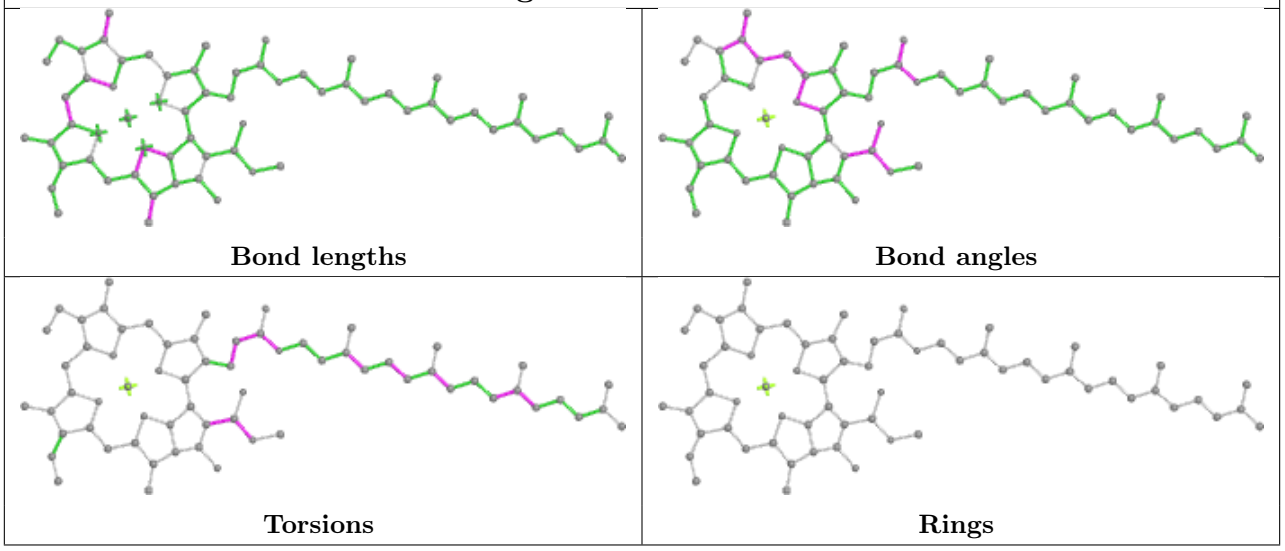
Ligand BCR B2 601



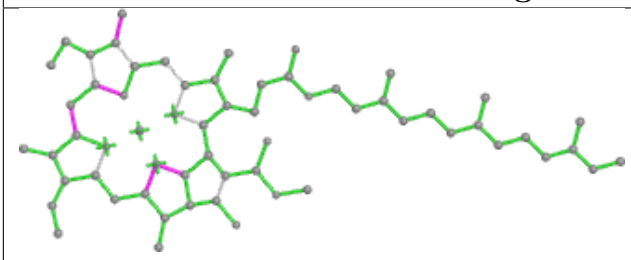
Ligand BCR H2 103



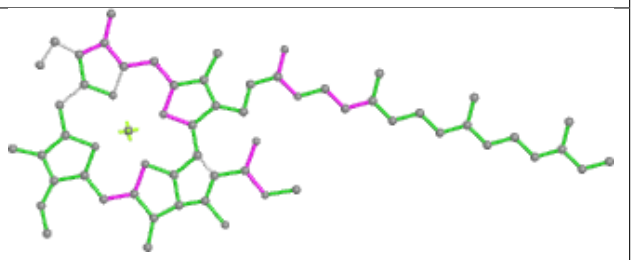
Ligand CLA C1 506



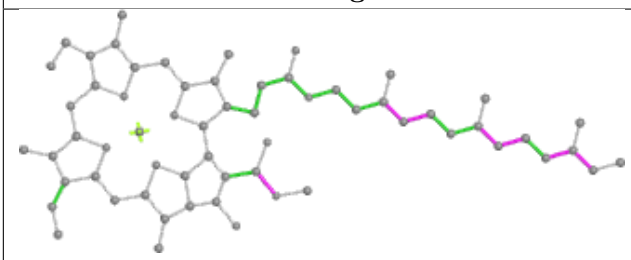
Ligand CLA D2 404



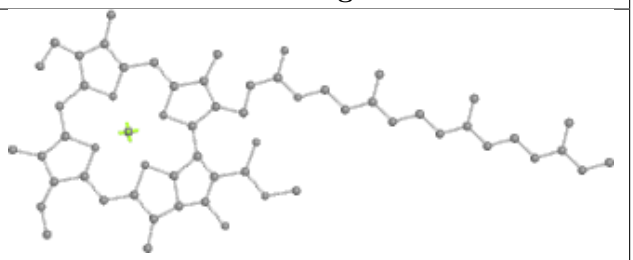
Bond lengths



Bond angles

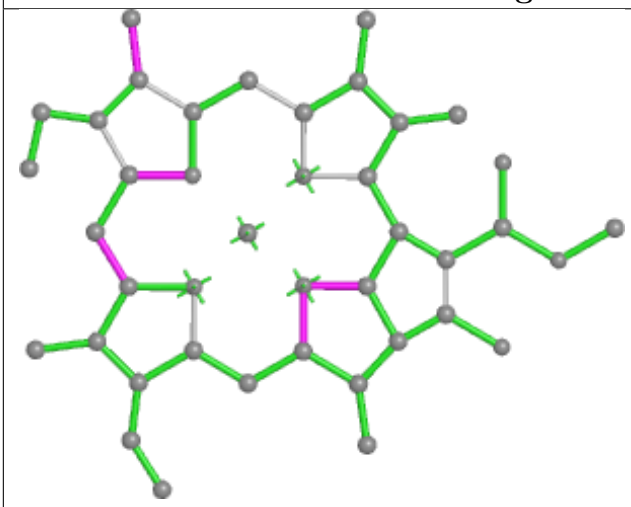


Torsions

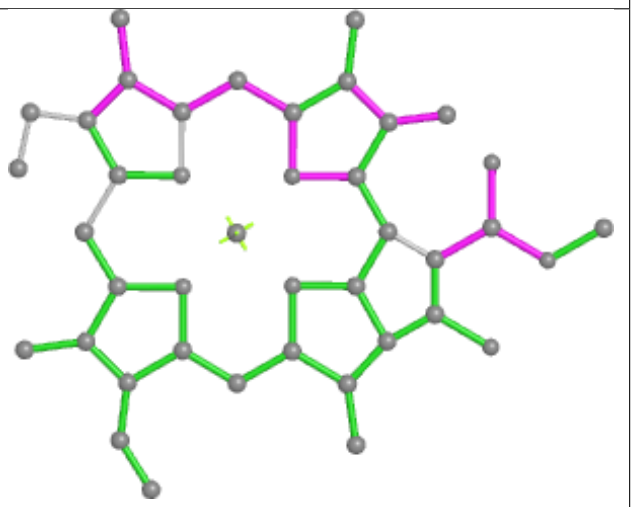


Rings

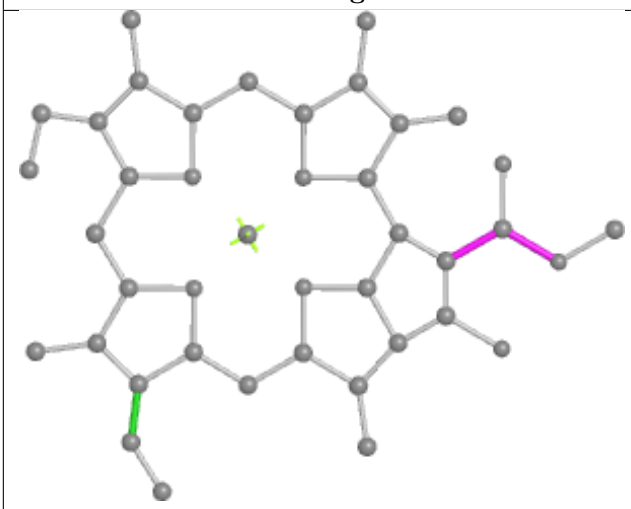
Ligand CLA C2 518



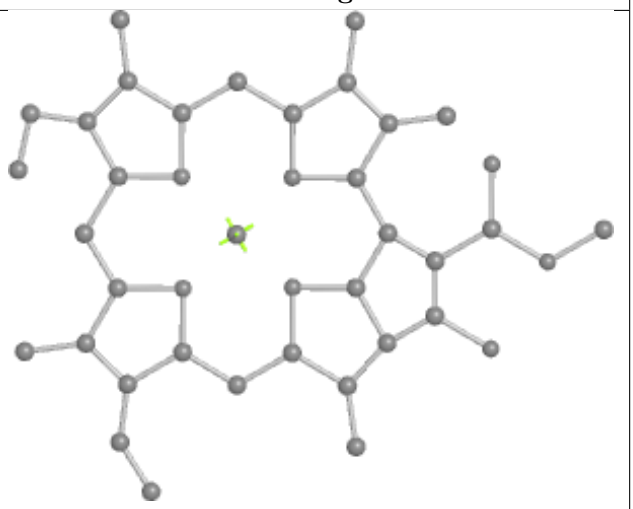
Bond lengths



Bond angles

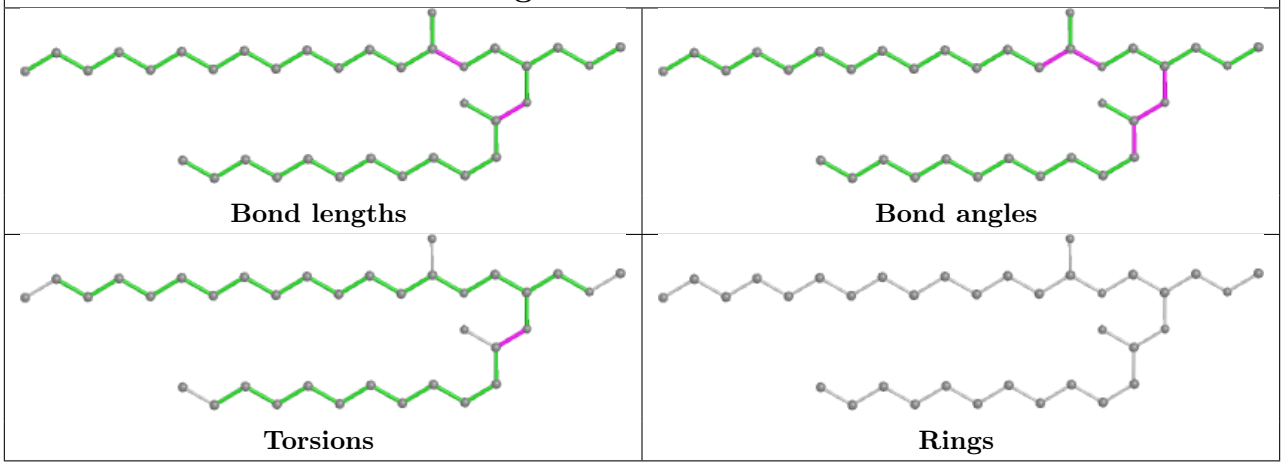


Torsions

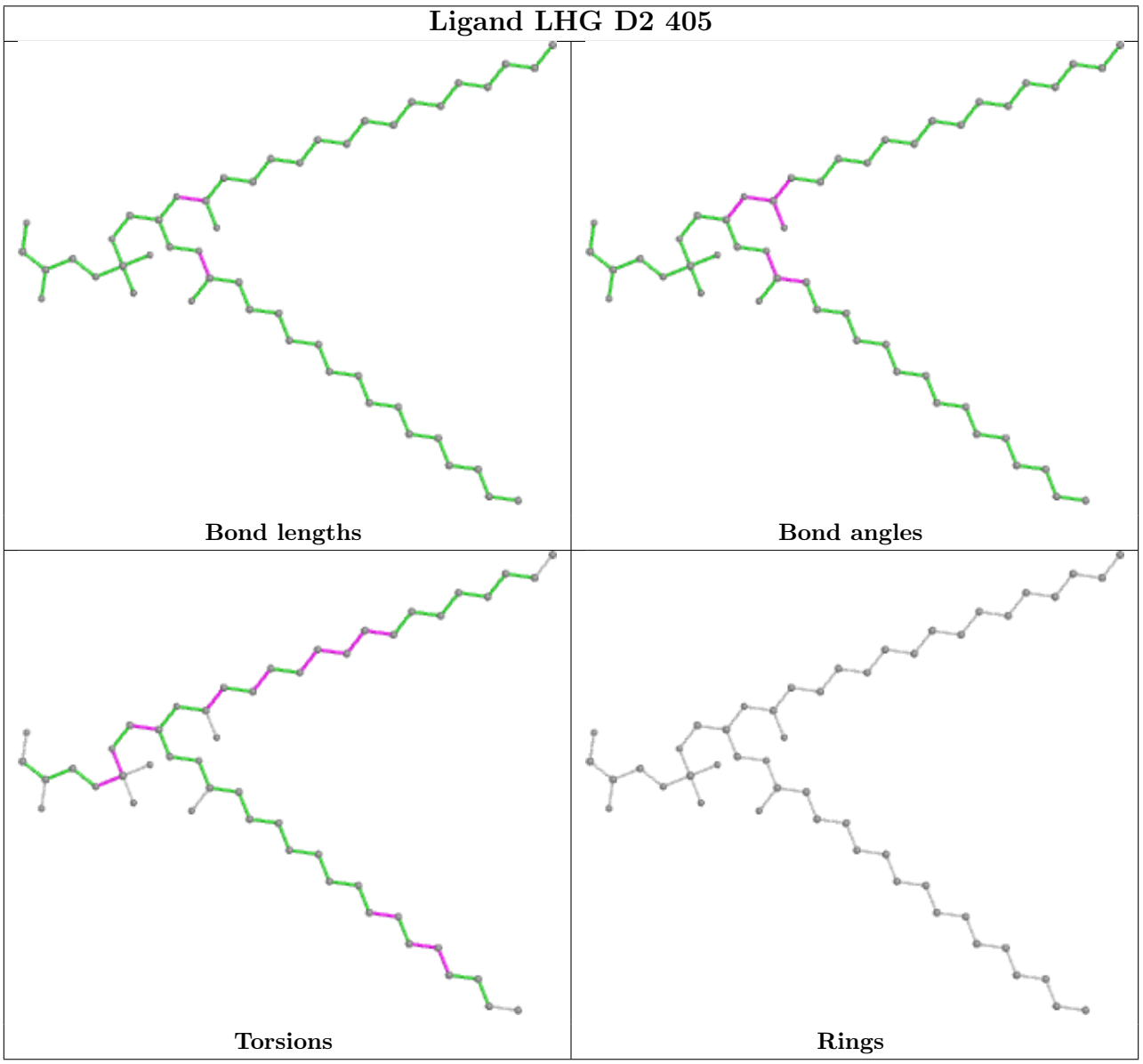


Rings

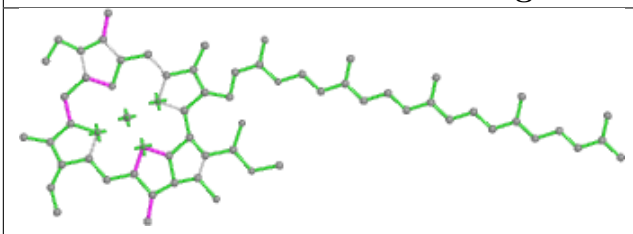
Ligand LMG d1 411



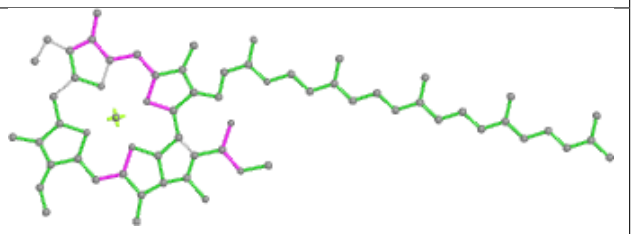
Ligand LHG D2 405



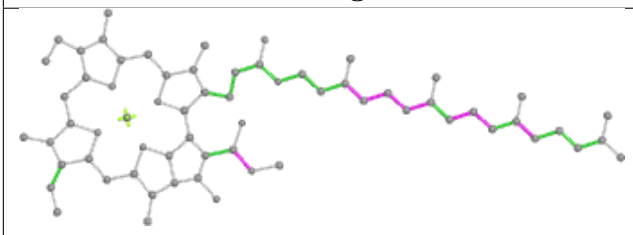
Ligand CLA C1 511



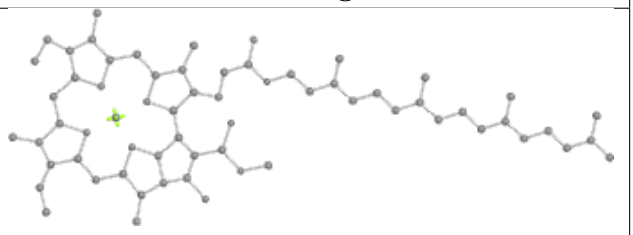
Bond lengths



Bond angles

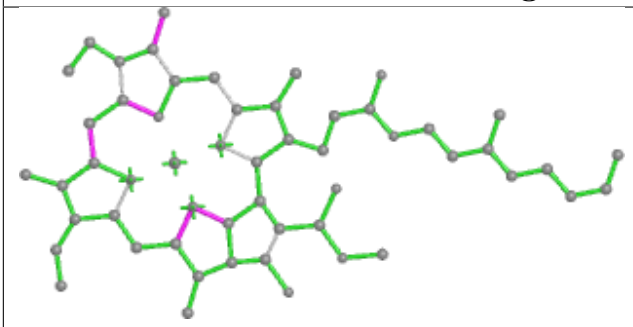


Torsions

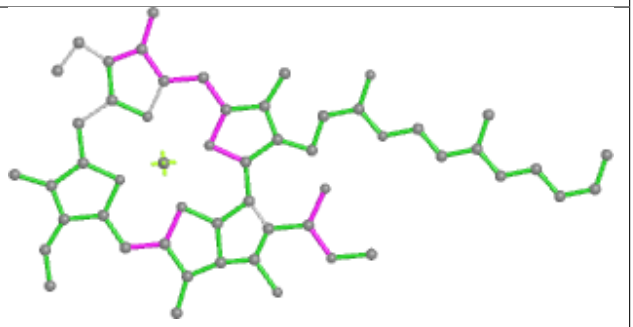


Rings

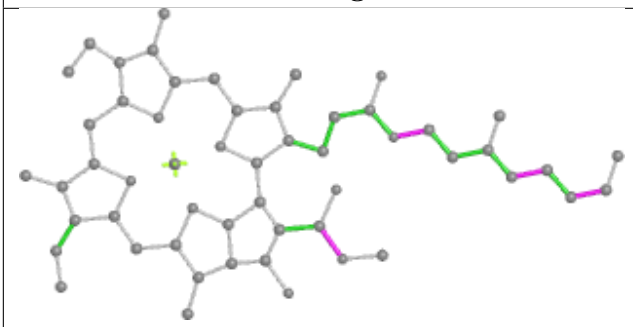
Ligand CLA c2 507



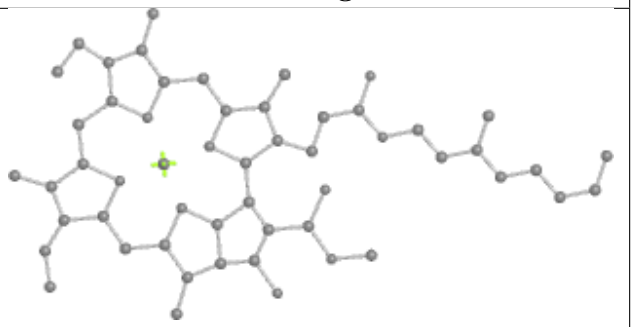
Bond lengths



Bond angles

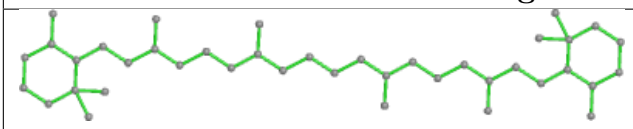


Torsions

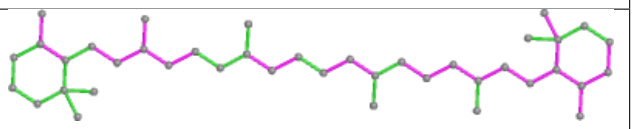


Rings

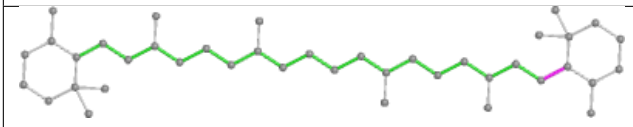
Ligand BCR a1 401



Bond lengths



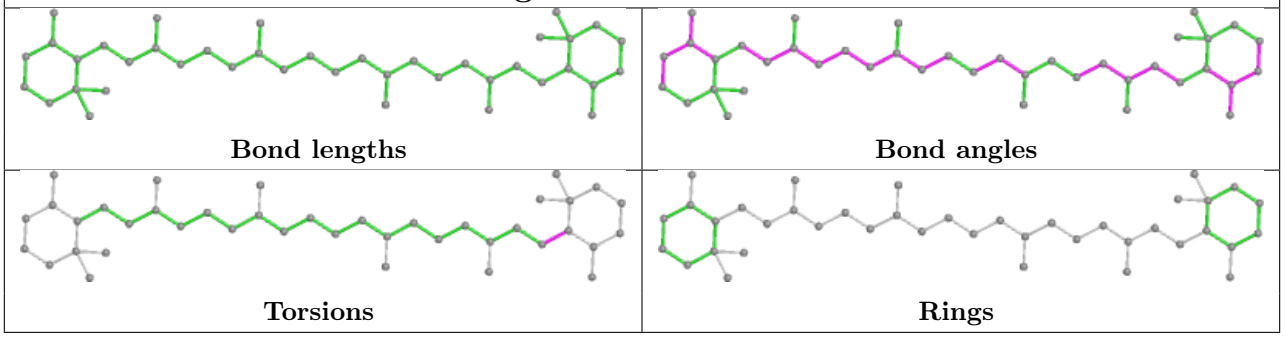
Bond angles



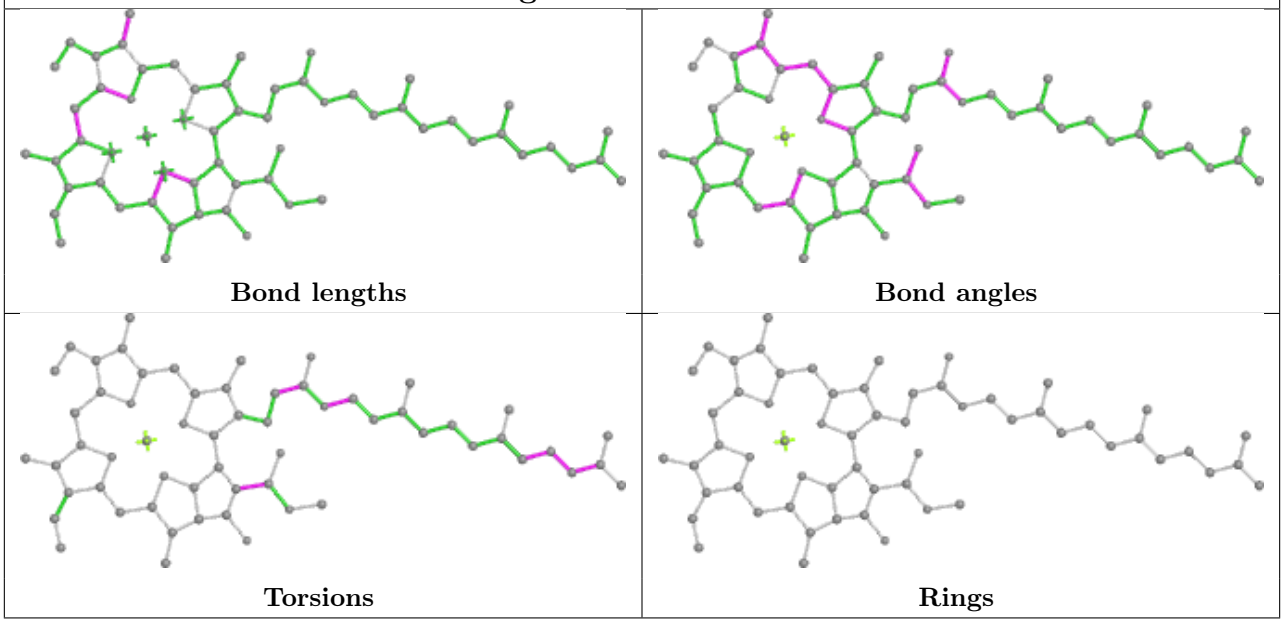
Torsions

Rings

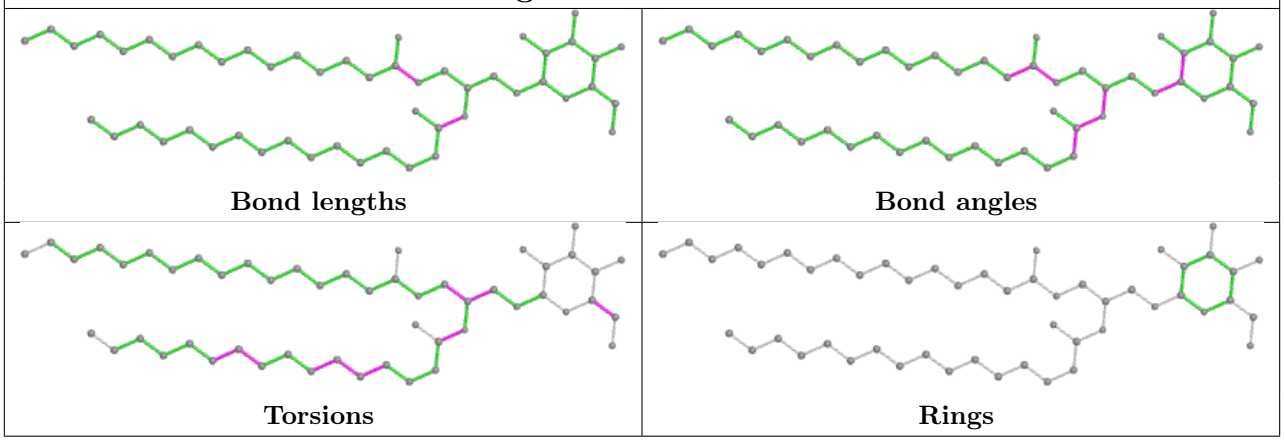
Ligand BCR B2 603



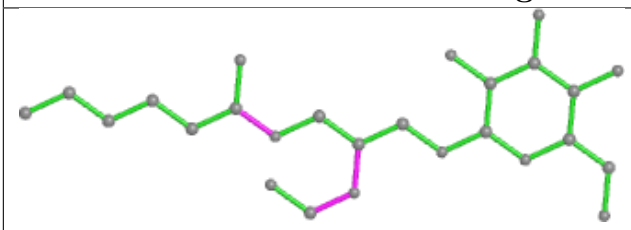
Ligand CLA b2 615



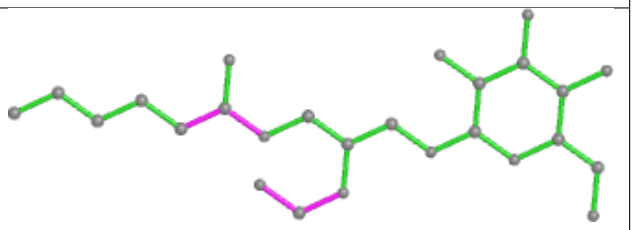
Ligand LMG a1 412



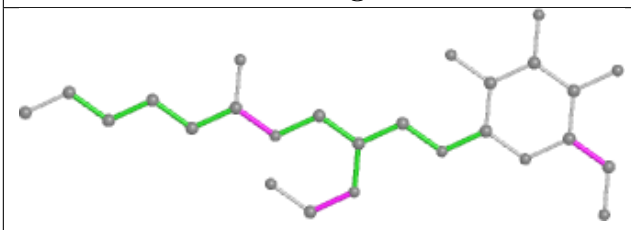
Ligand LMG c2 519



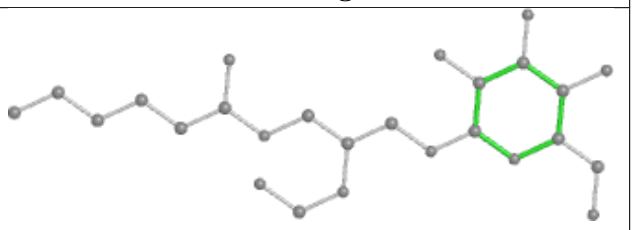
Bond lengths



Bond angles

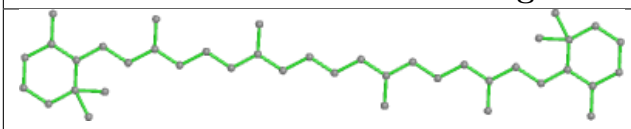


Torsions

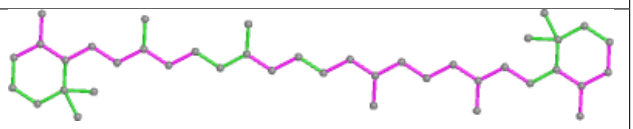


Rings

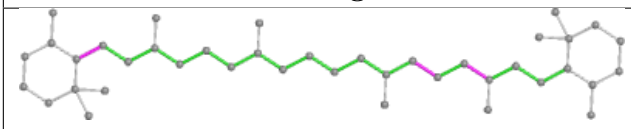
Ligand BCR k1 101



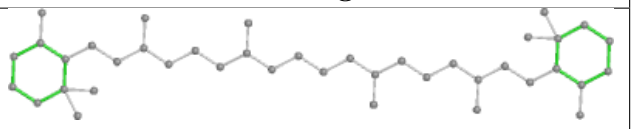
Bond lengths



Bond angles

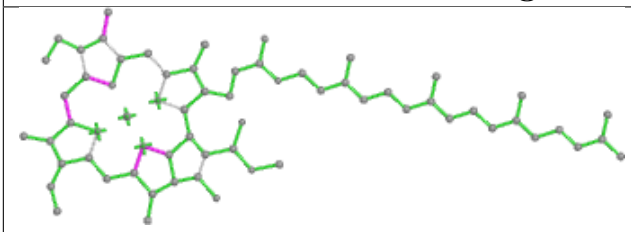


Torsions

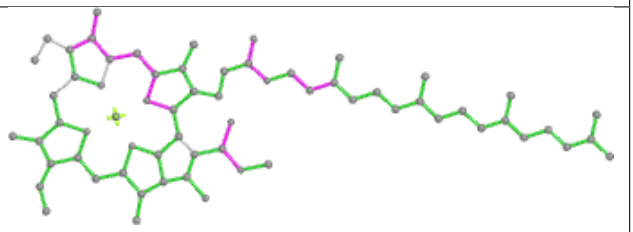


Rings

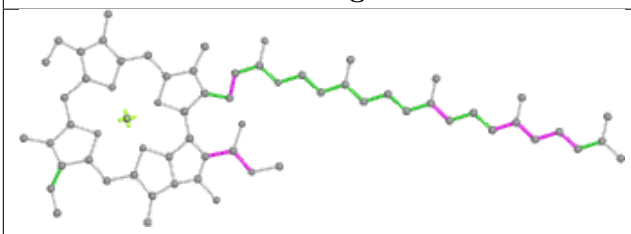
Ligand CLA b1 612



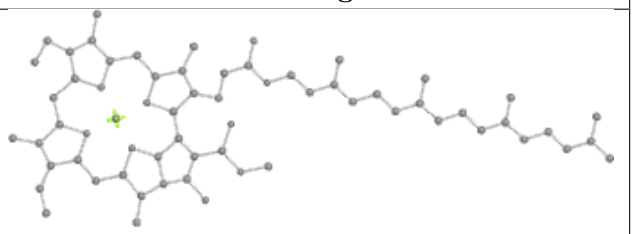
Bond lengths



Bond angles

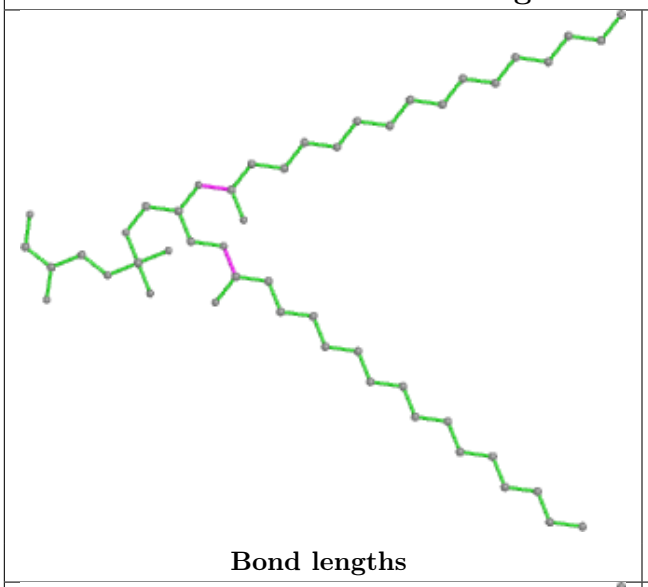


Torsions

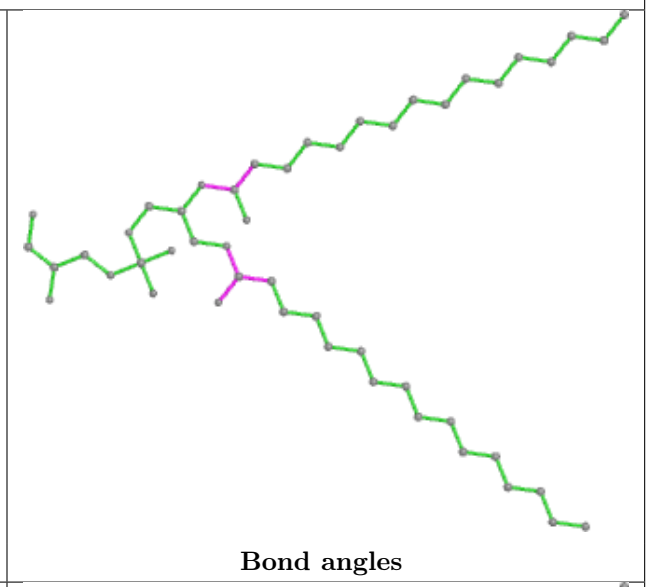


Rings

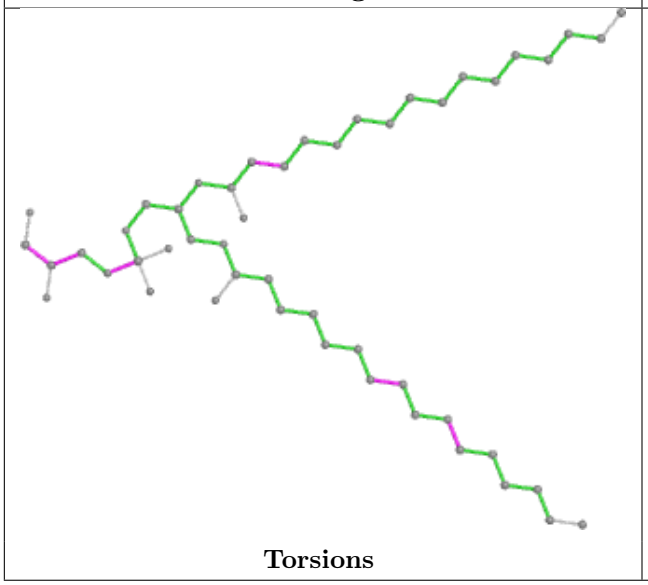
Ligand LHG D2 403



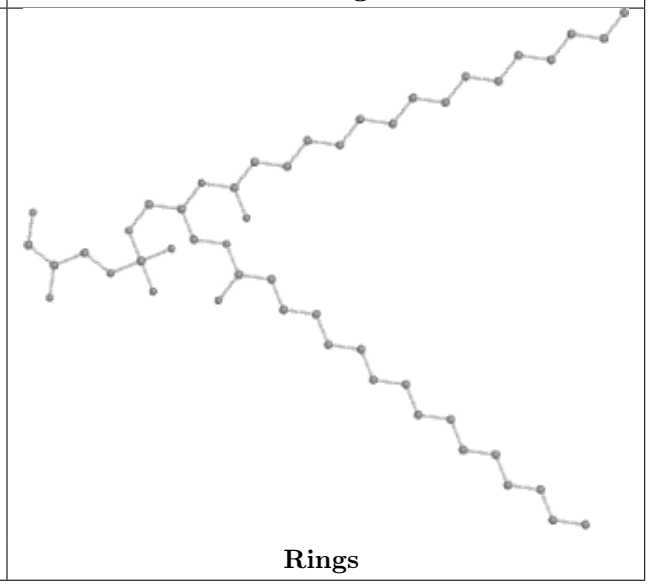
Bond lengths



Bond angles

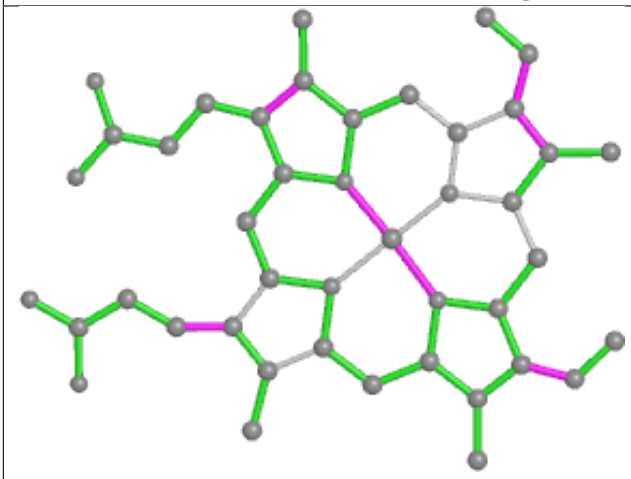


Torsions

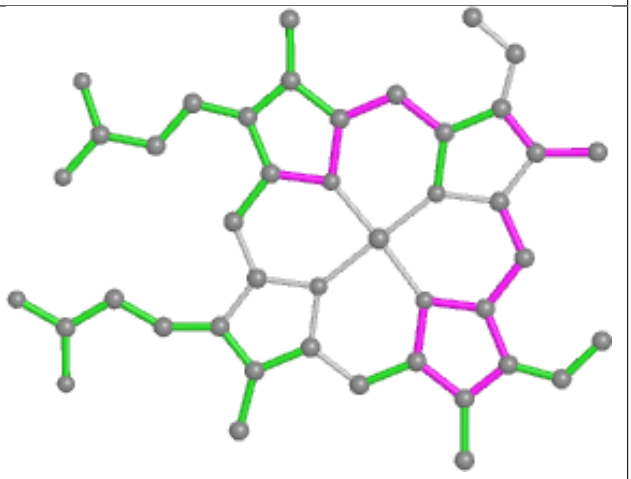


Rings

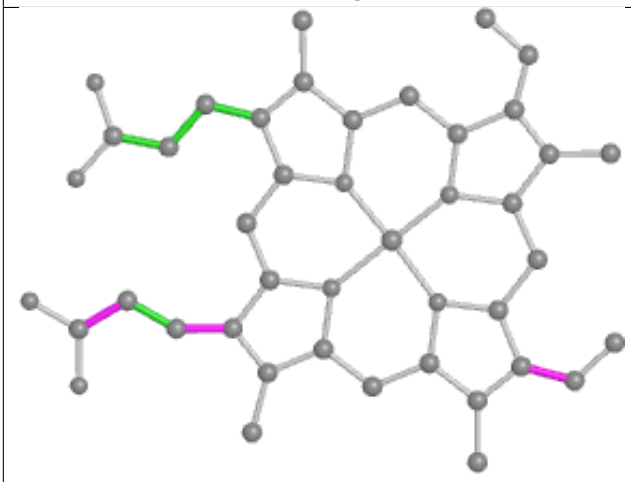
Ligand HEM f1 101



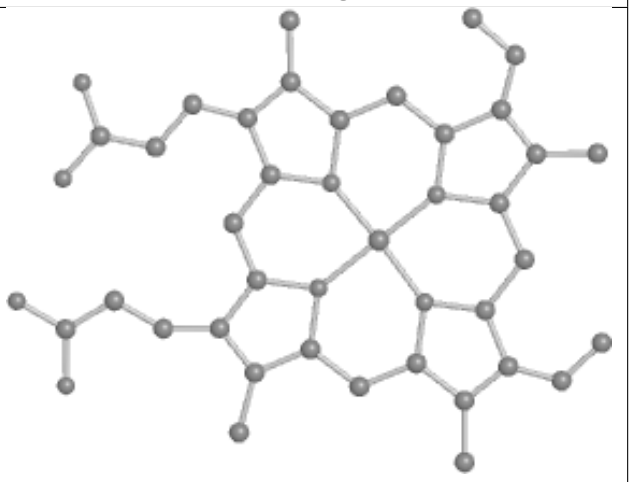
Bond lengths



Bond angles

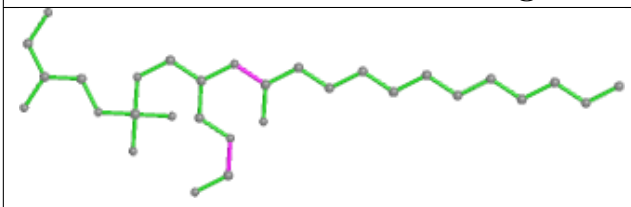


Torsions

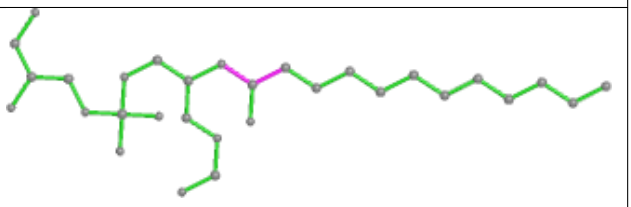


Rings

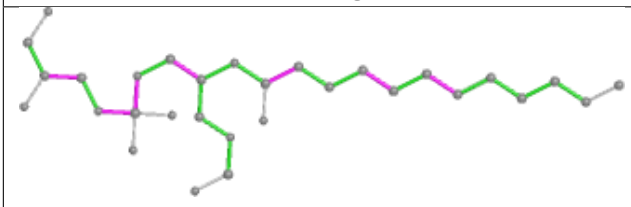
Ligand LHG a2 407



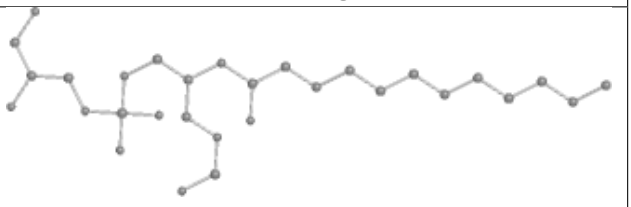
Bond lengths



Bond angles

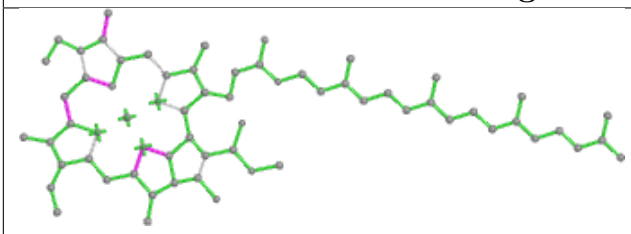


Torsions

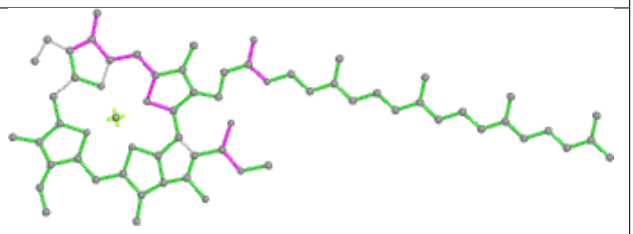


Rings

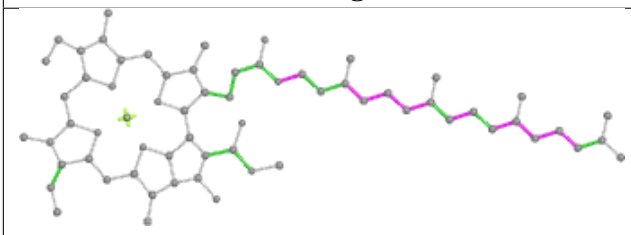
Ligand CLA b1 604



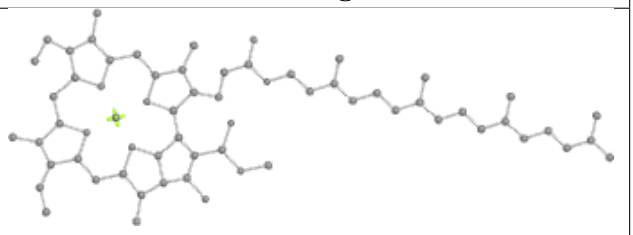
Bond lengths



Bond angles

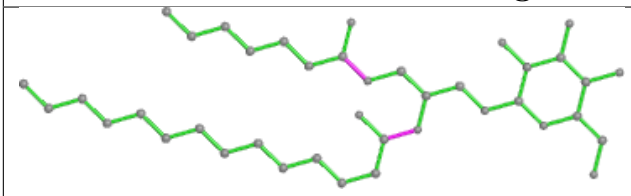


Torsions

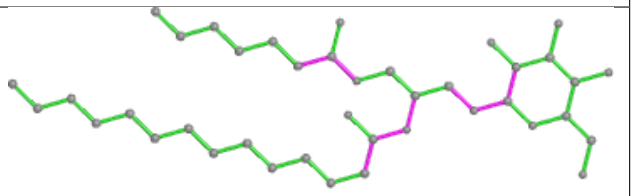


Rings

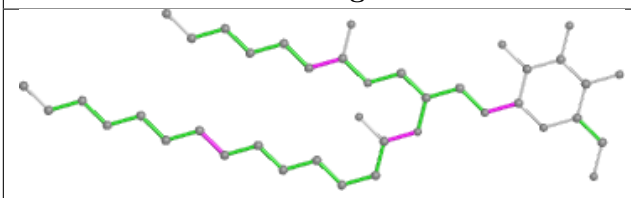
Ligand LMG b1 631



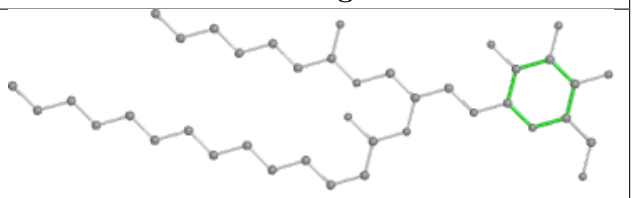
Bond lengths



Bond angles

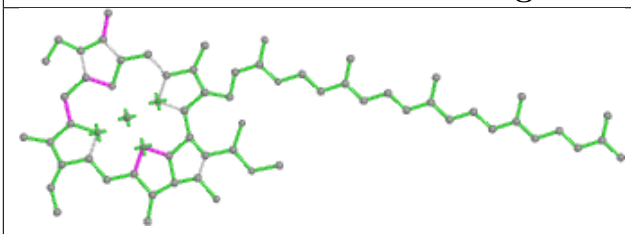


Torsions

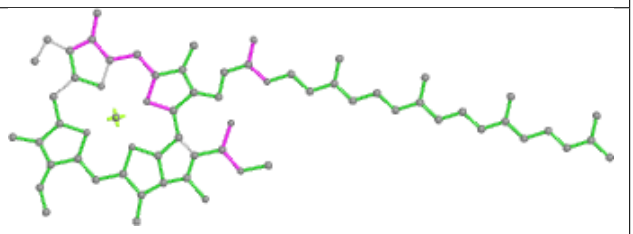


Rings

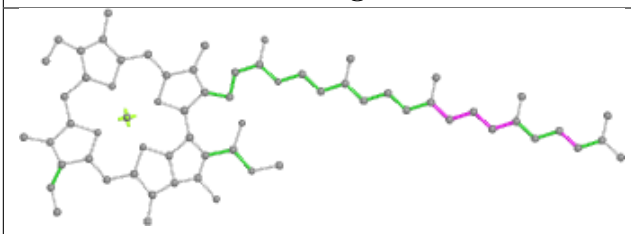
Ligand CLA B2 617



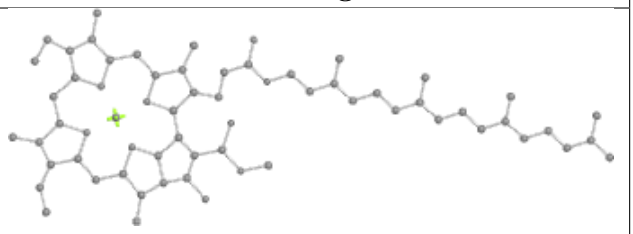
Bond lengths



Bond angles

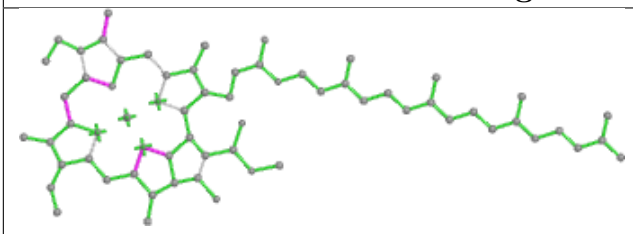


Torsions

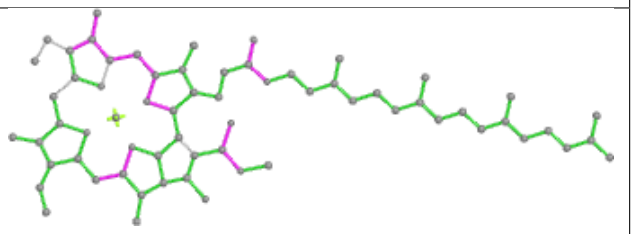


Rings

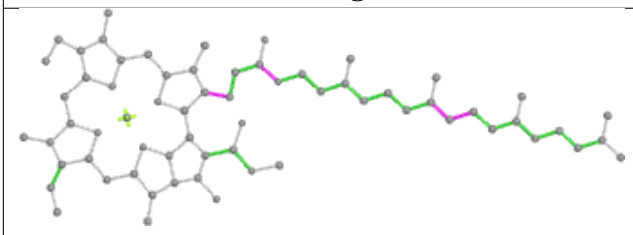
Ligand CLA C1 504



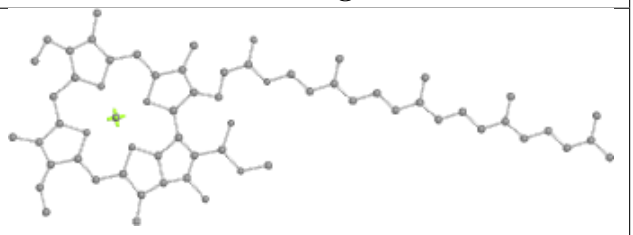
Bond lengths



Bond angles

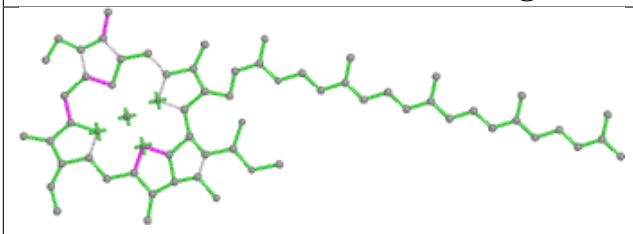


Torsions

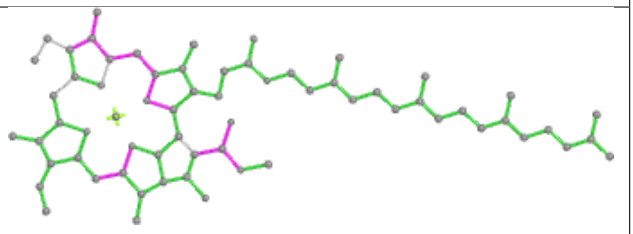


Rings

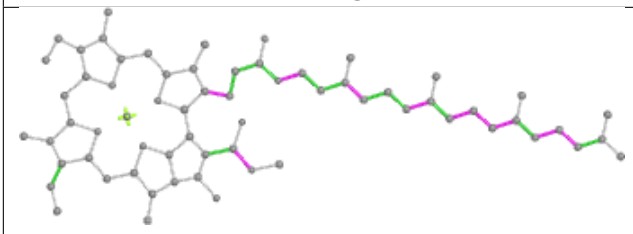
Ligand CLA d1 406



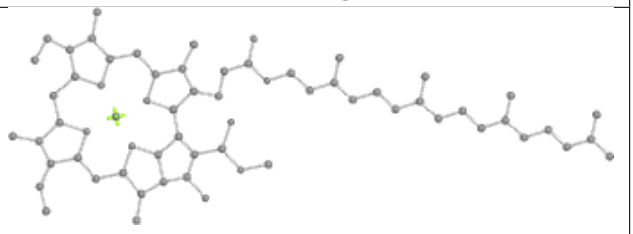
Bond lengths



Bond angles

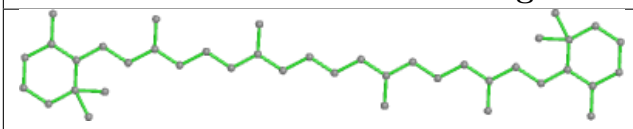


Torsions

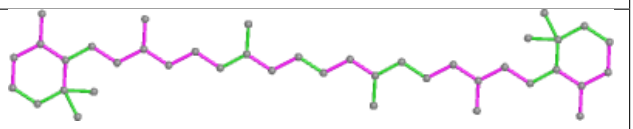


Rings

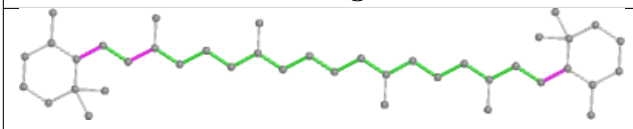
Ligand BCR b2 602



Bond lengths



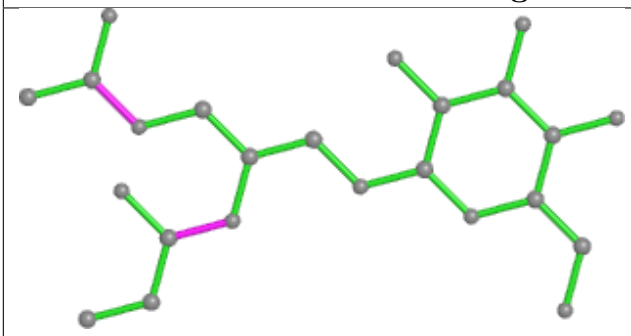
Bond angles



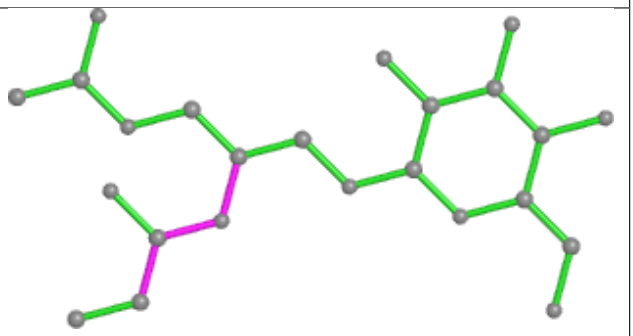
Torsions

Rings

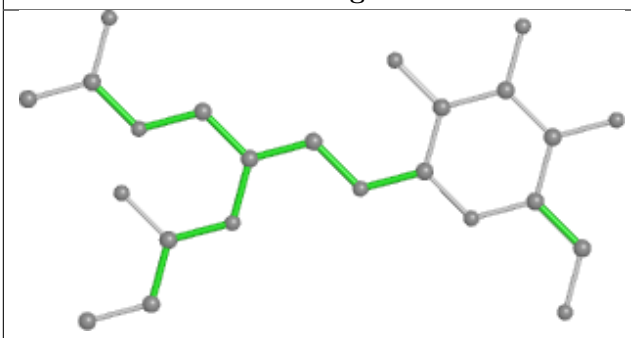
Ligand LMG C2 515



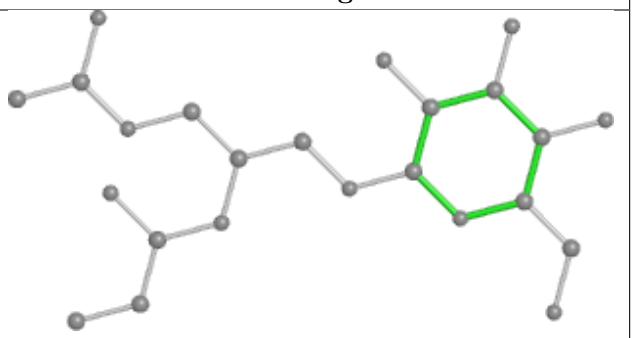
Bond lengths



Bond angles

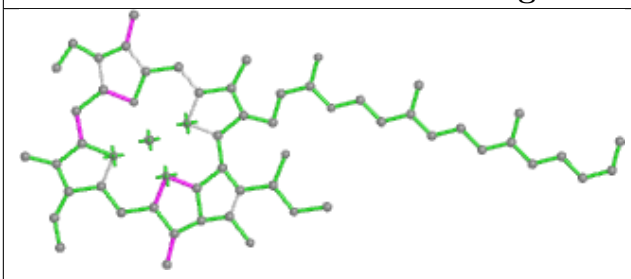


Torsions

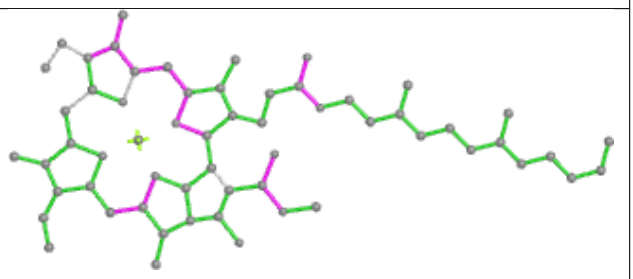


Rings

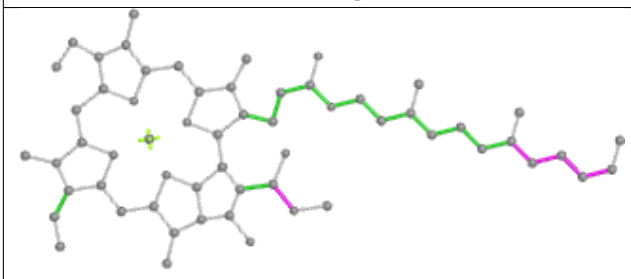
Ligand CLA b1 615



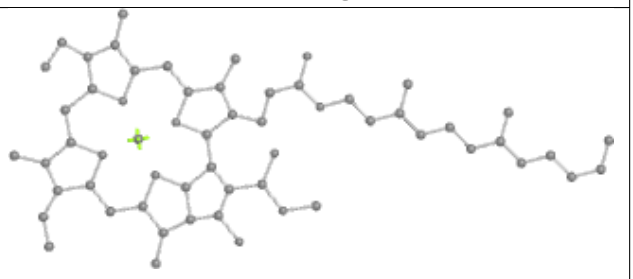
Bond lengths



Bond angles

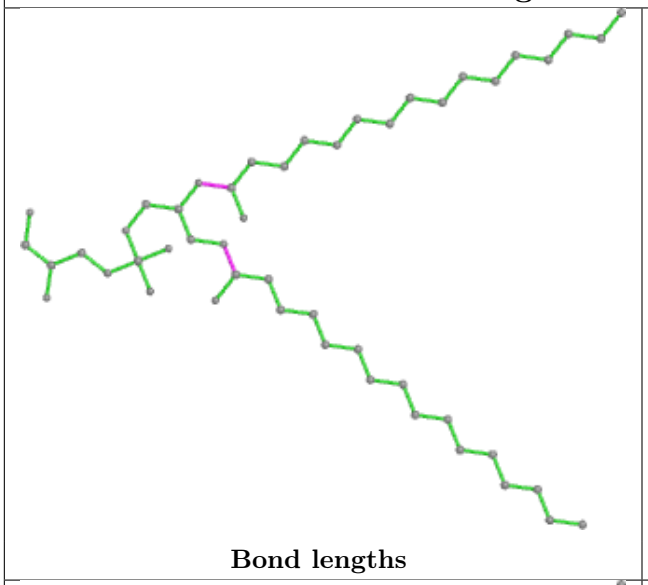


Torsions

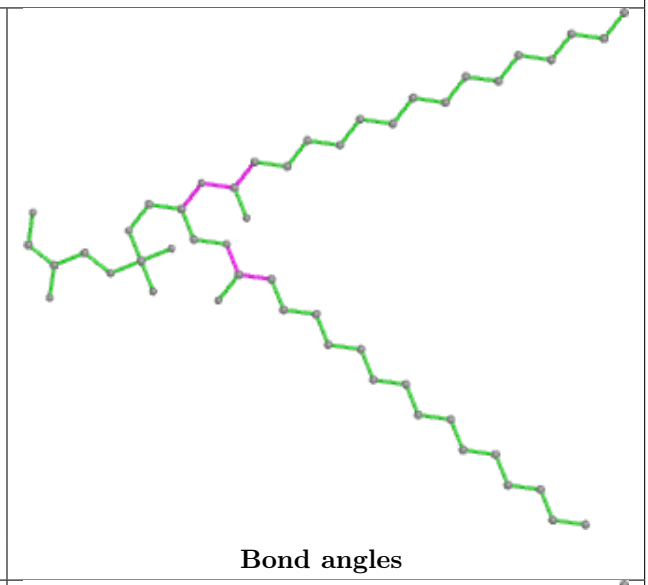


Rings

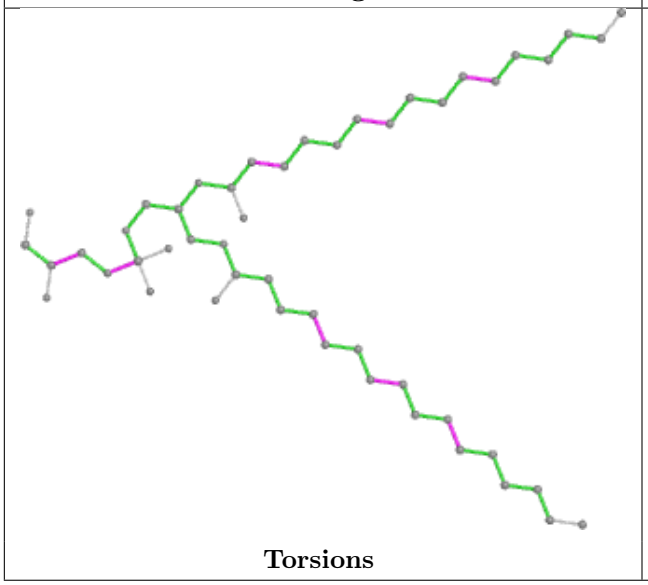
Ligand LHG B1 621



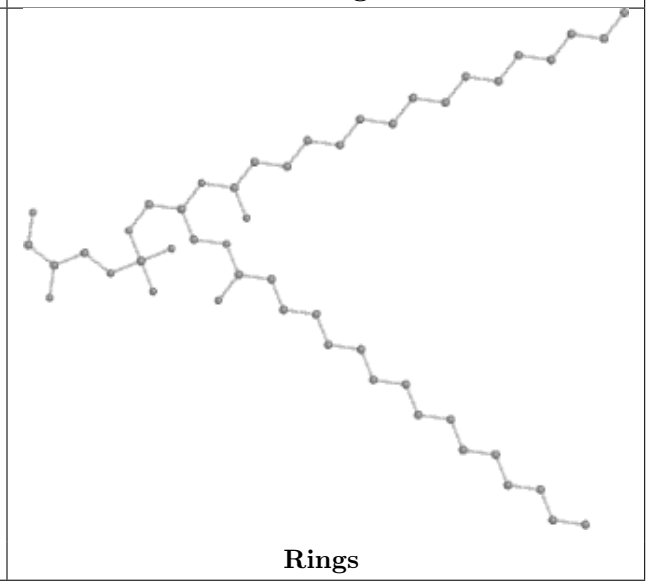
Bond lengths



Bond angles

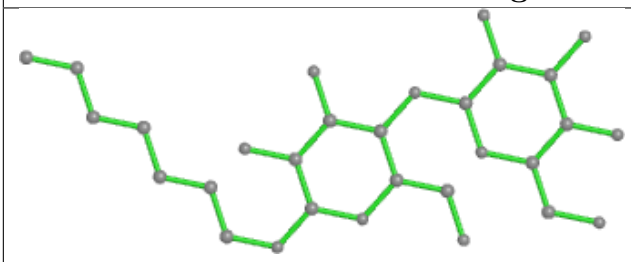


Torsions

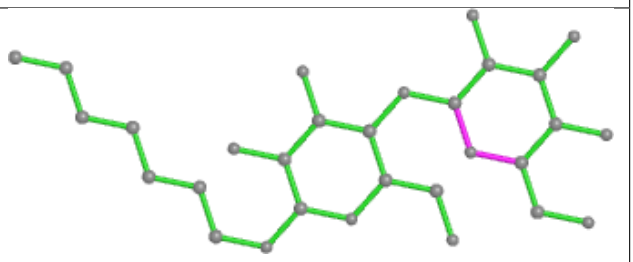


Rings

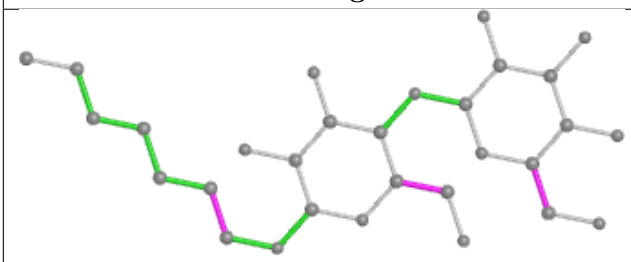
Ligand LMT m2 103



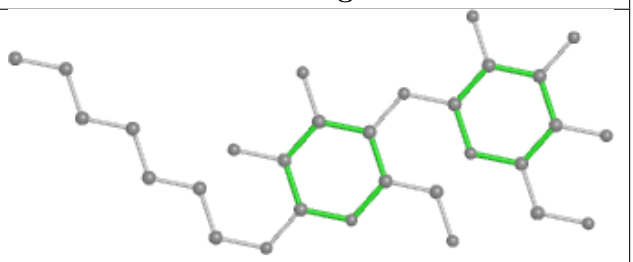
Bond lengths



Bond angles

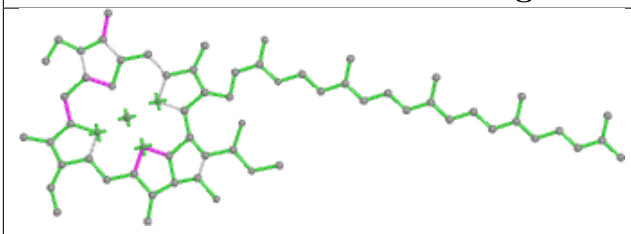


Torsions

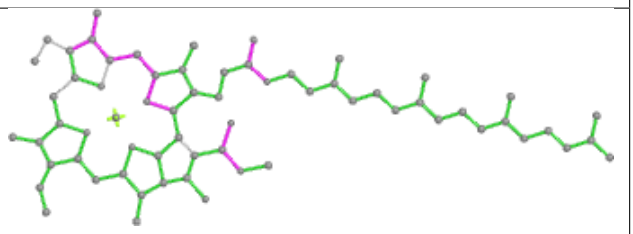


Rings

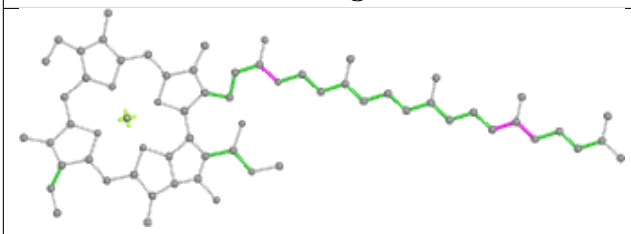
Ligand CLA B2 610



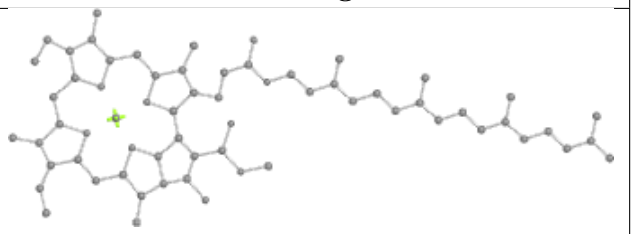
Bond lengths



Bond angles

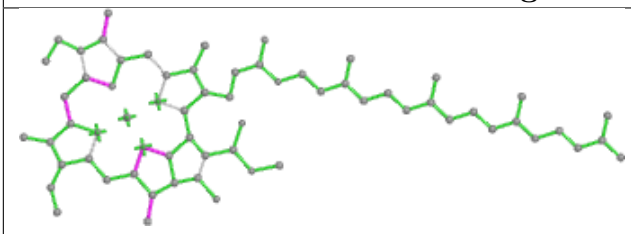


Torsions

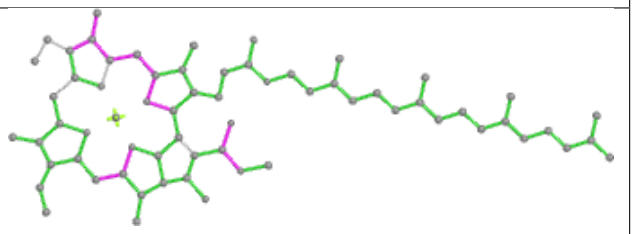


Rings

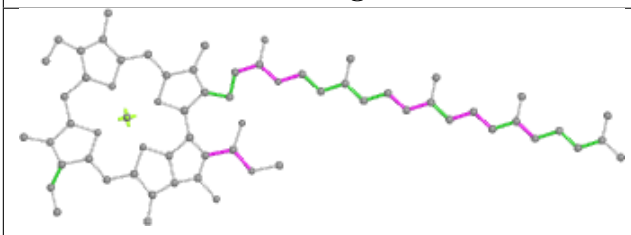
Ligand CLA c1 512



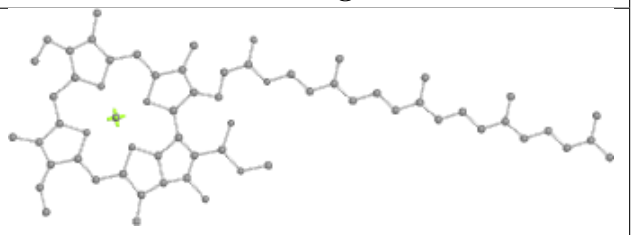
Bond lengths



Bond angles

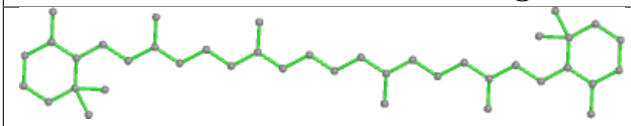


Torsions

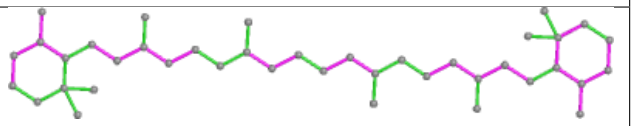


Rings

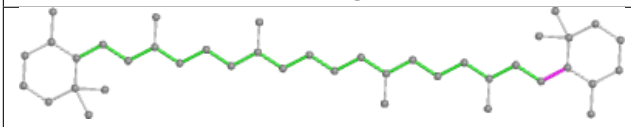
Ligand BCR B1 603



Bond lengths



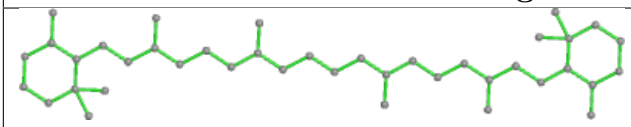
Bond angles



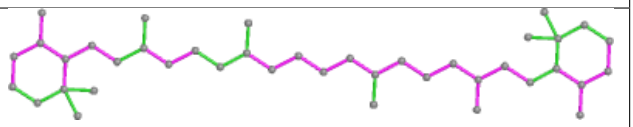
Torsions

Rings

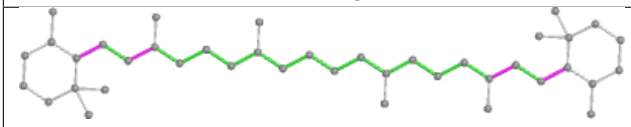
Ligand BCR d2 401



Bond lengths

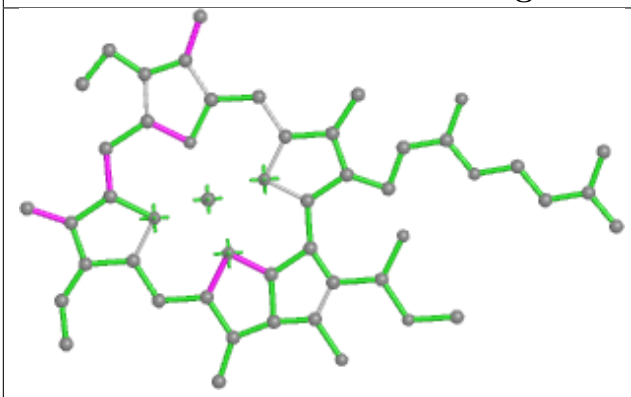
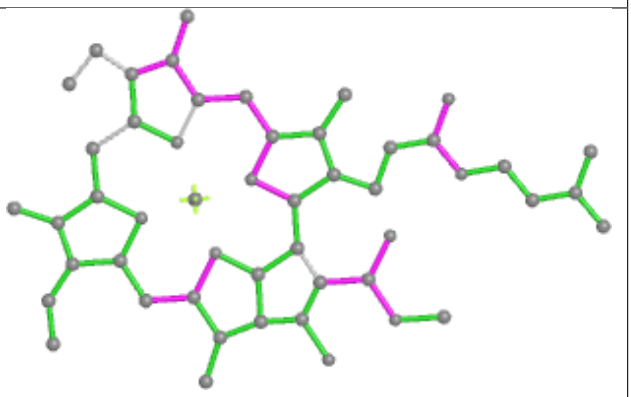
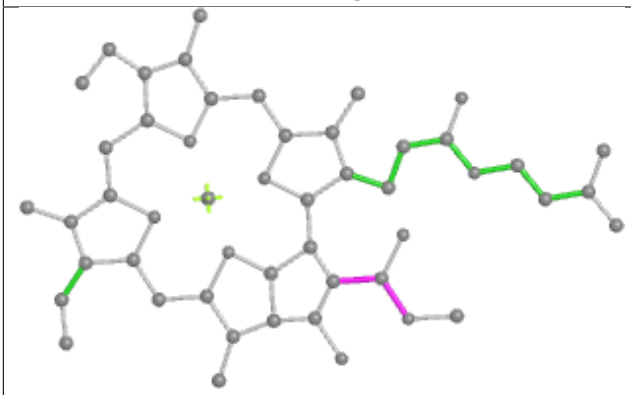
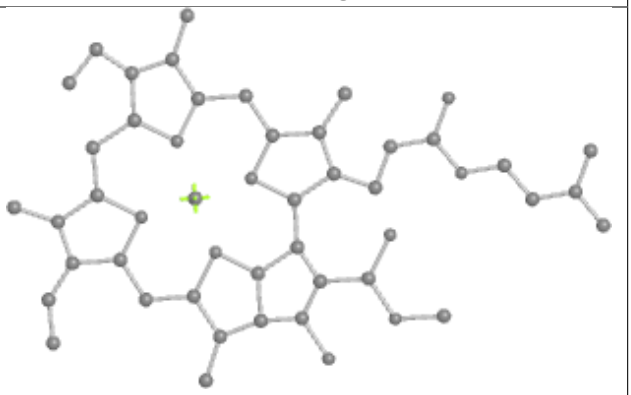


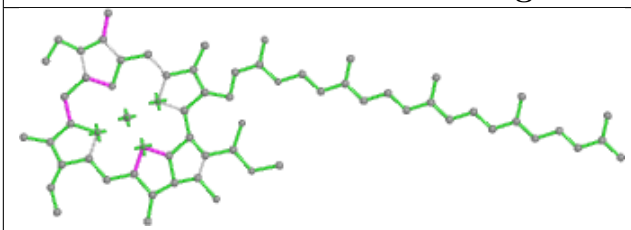
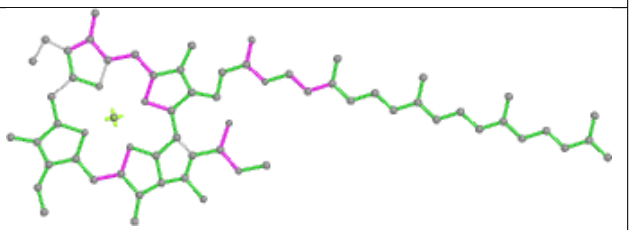
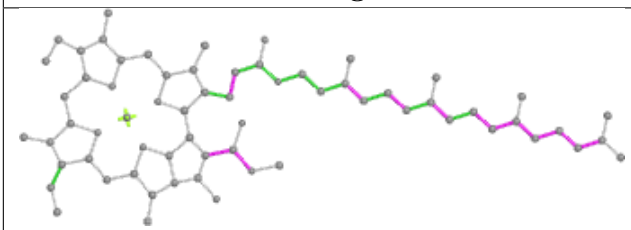
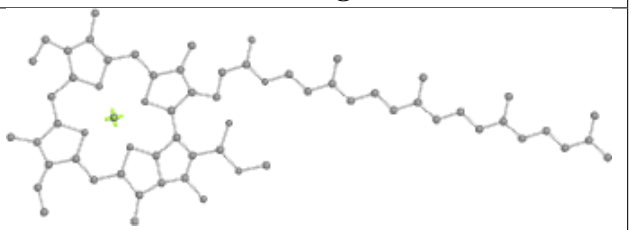
Bond angles



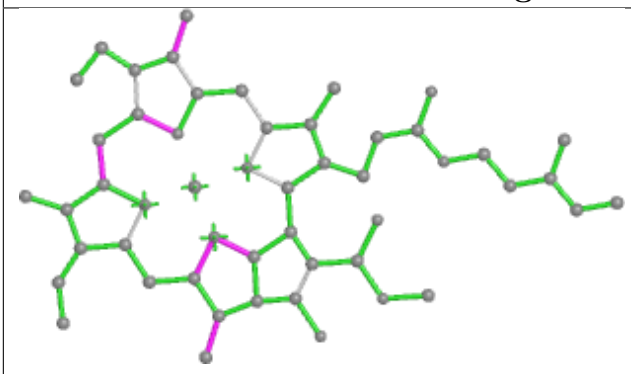
Torsions

Rings

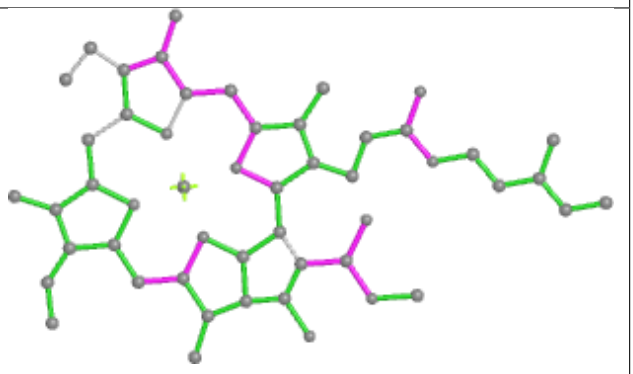
Ligand CLA C2 511	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B2 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

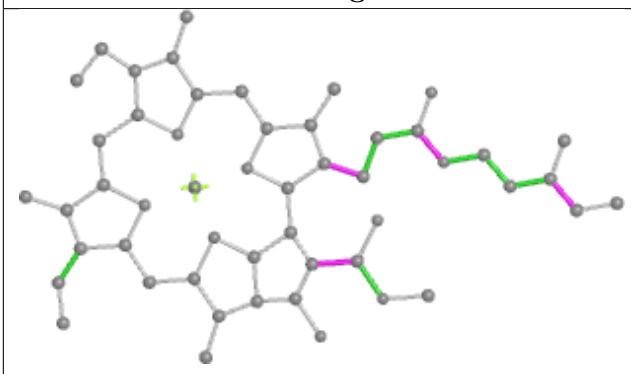
Ligand CLA A2 404



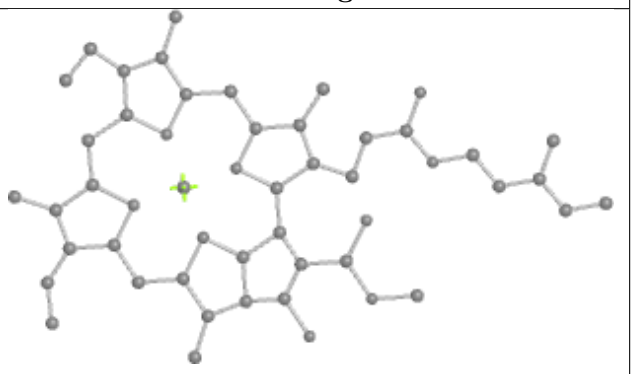
Bond lengths



Bond angles

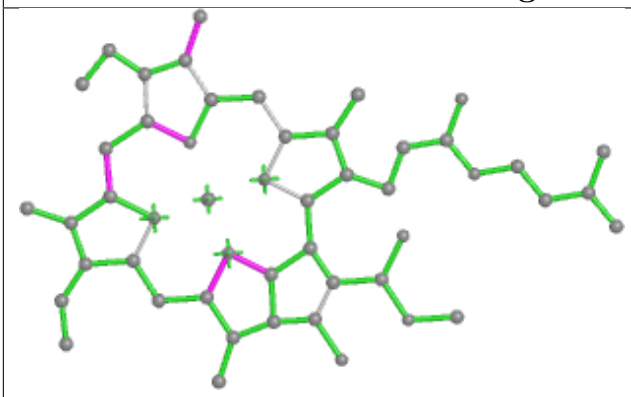


Torsions

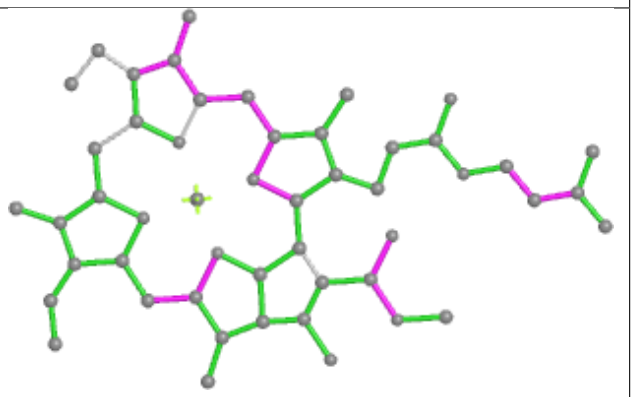


Rings

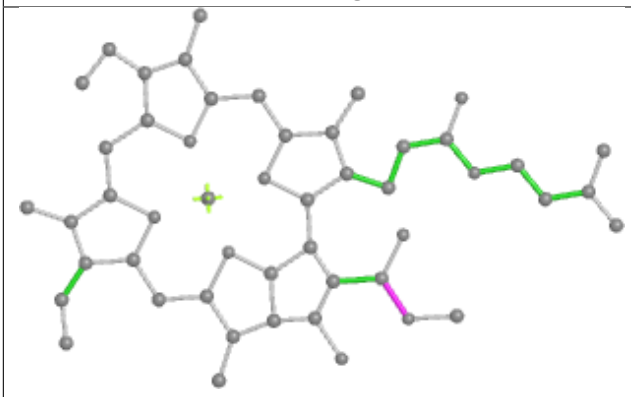
Ligand CLA d2 404



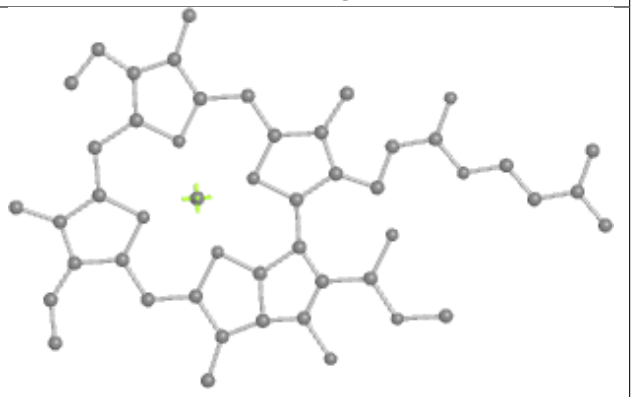
Bond lengths



Bond angles

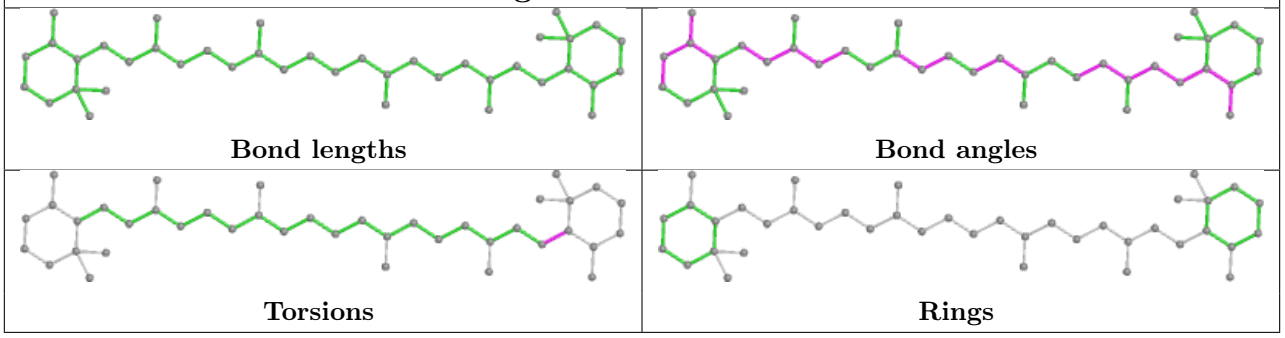


Torsions

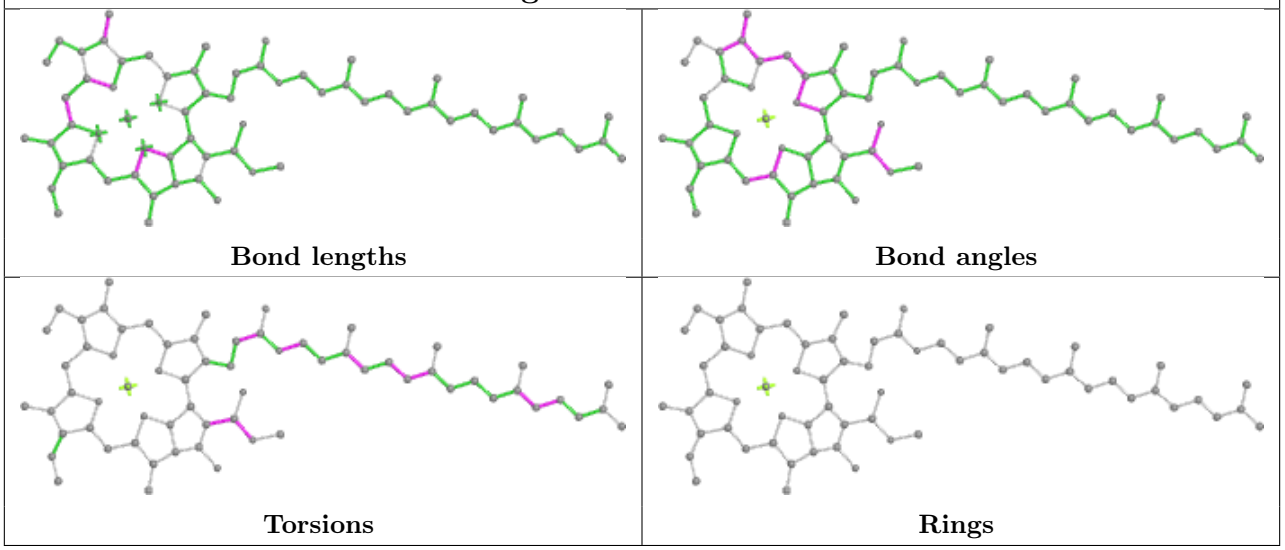


Rings

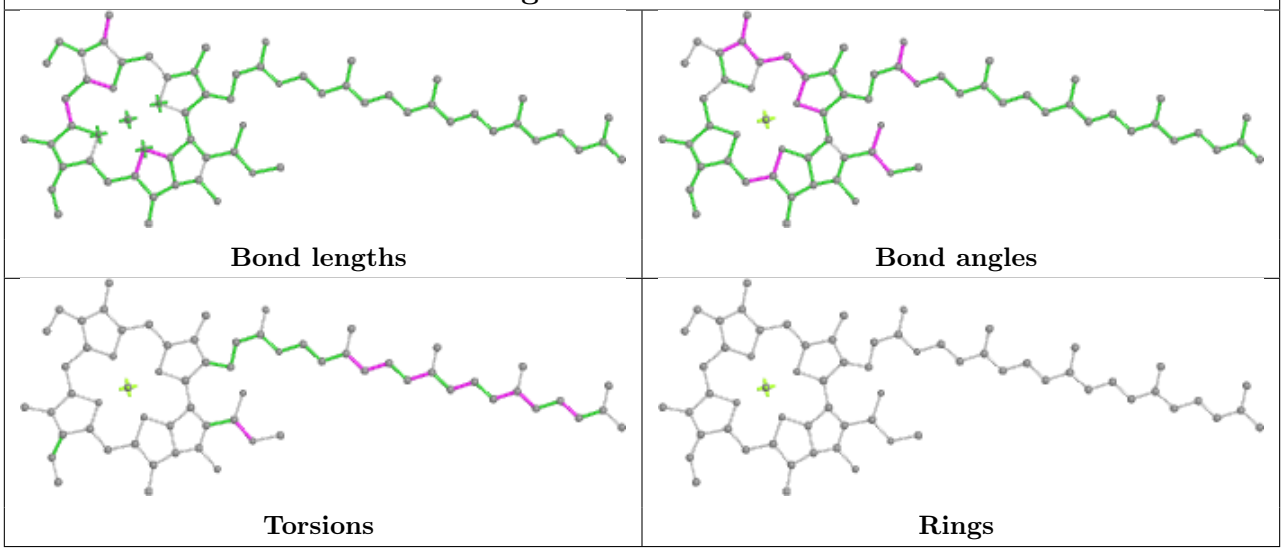
Ligand BCR A1 401



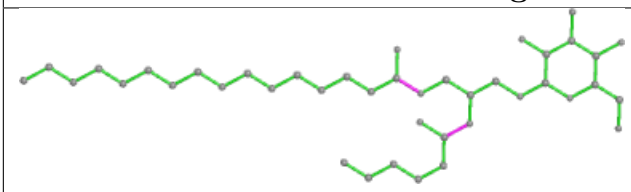
Ligand CLA c2 511



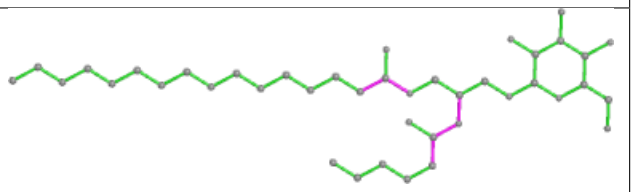
Ligand CLA c2 512



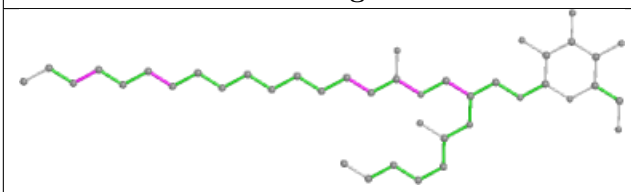
Ligand LMG A1 412



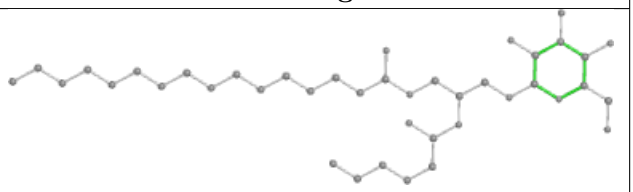
Bond lengths



Bond angles



Torsions

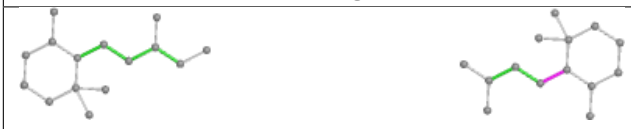


Rings

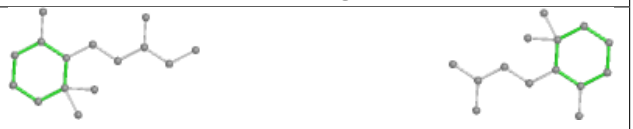
Ligand BCR K2 104

Bond lengths

Bond angles

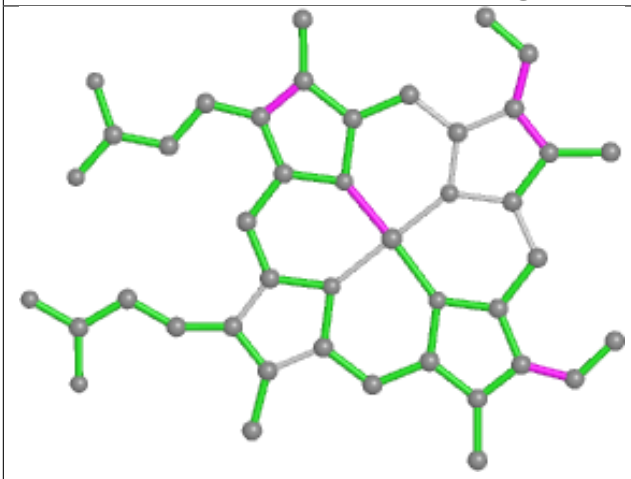


Torsions

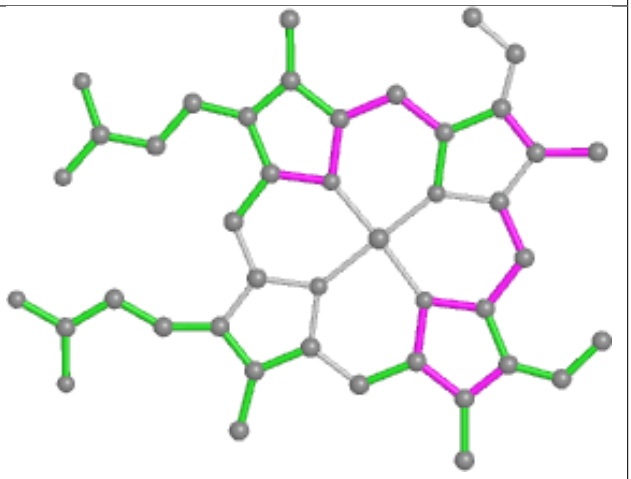


Rings

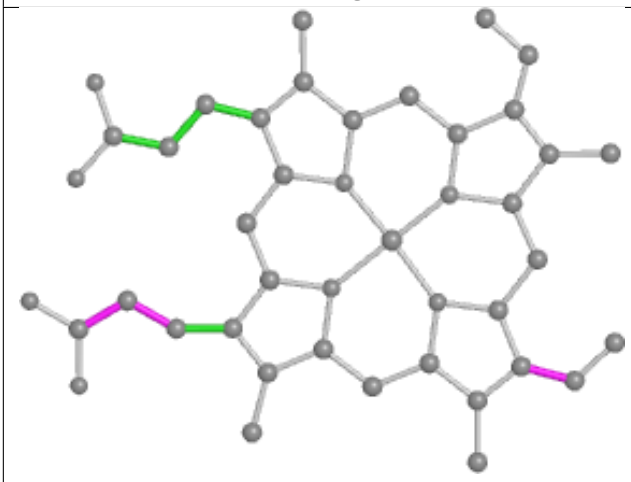
Ligand HEM e2 101



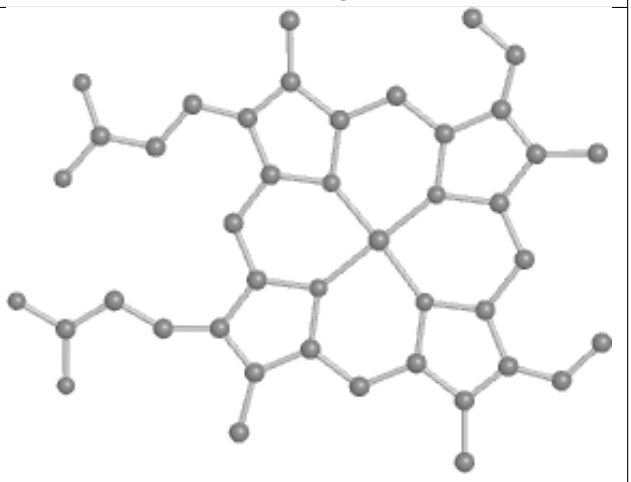
Bond lengths



Bond angles

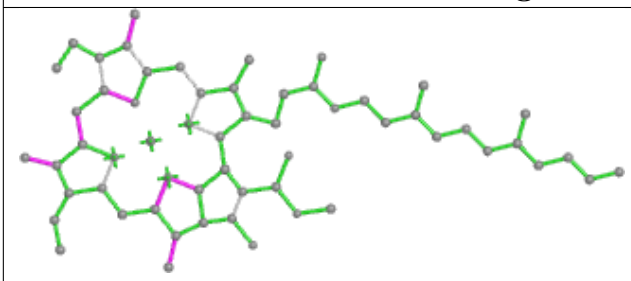


Torsions

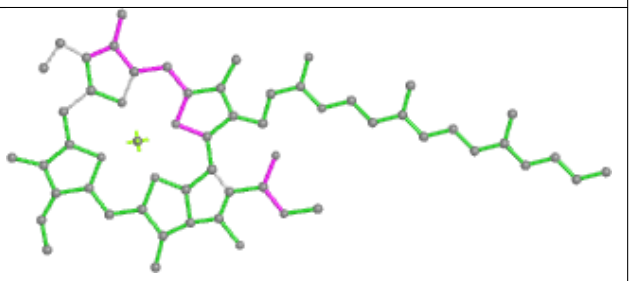


Rings

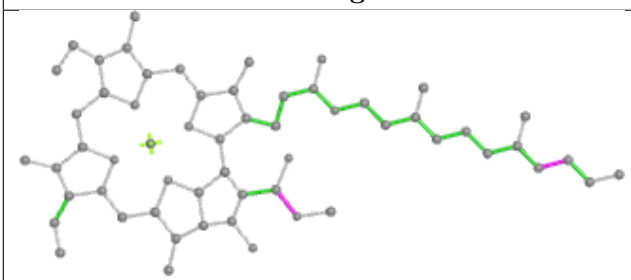
Ligand CLA B1 618



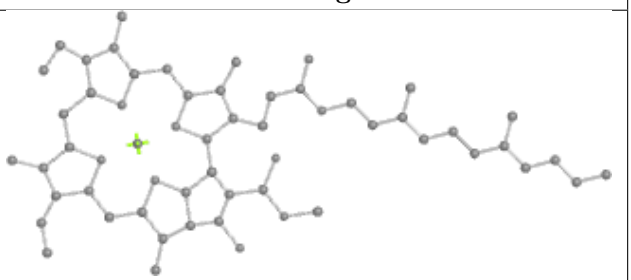
Bond lengths



Bond angles

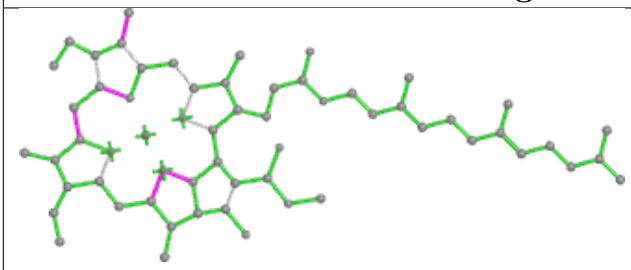


Torsions

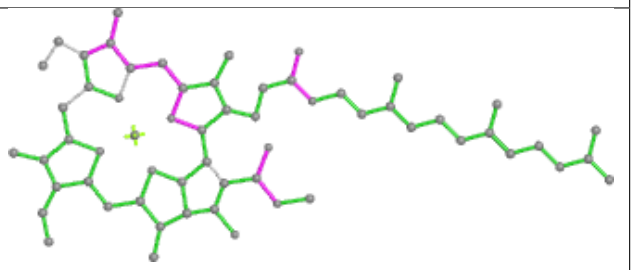


Rings

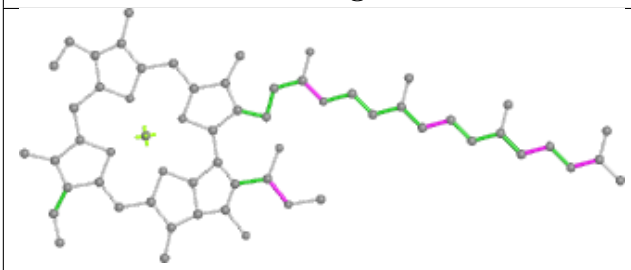
Ligand CLA B1 607



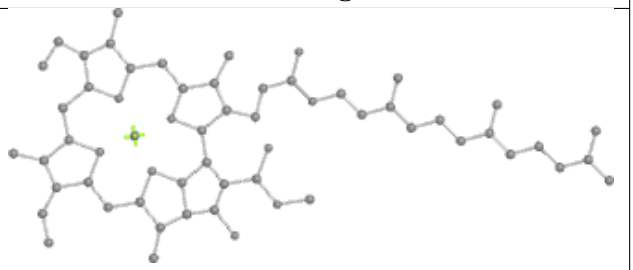
Bond lengths



Bond angles

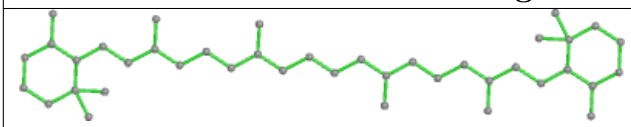


Torsions

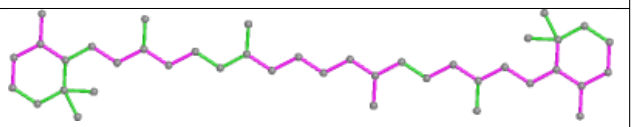


Rings

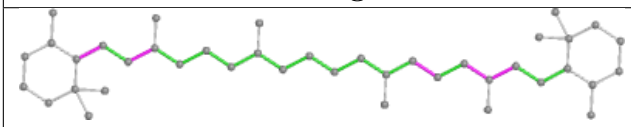
Ligand BCR F2 401



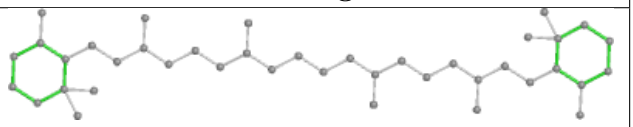
Bond lengths



Bond angles

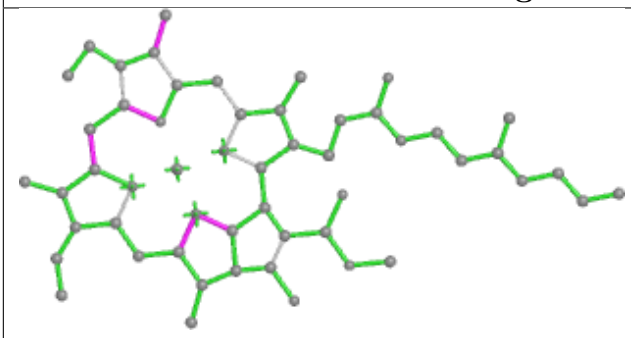


Torsions

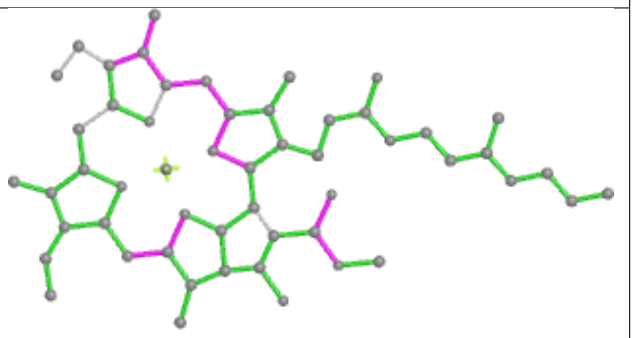


Rings

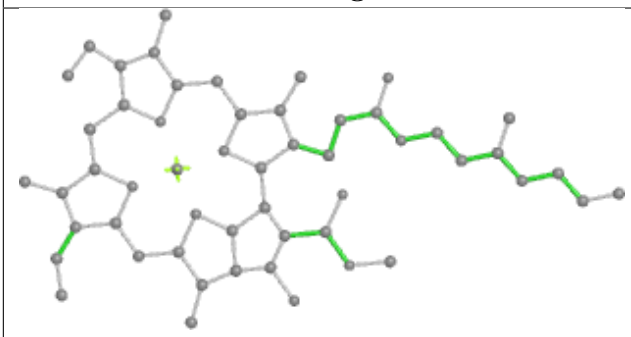
Ligand CLA C2 513



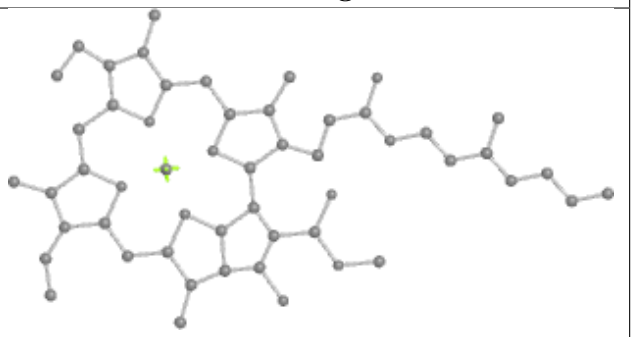
Bond lengths



Bond angles

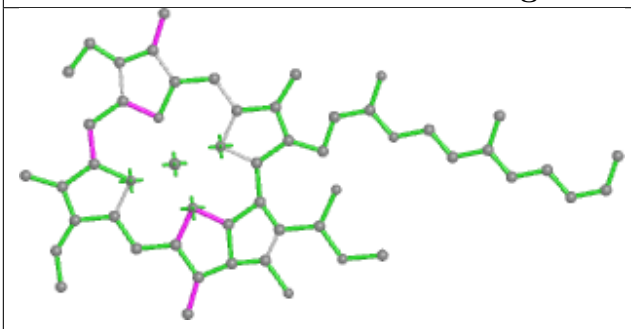


Torsions

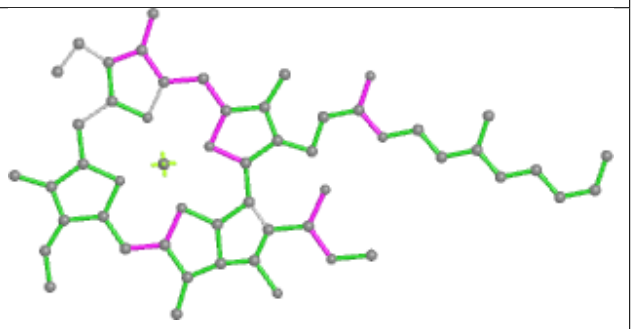


Rings

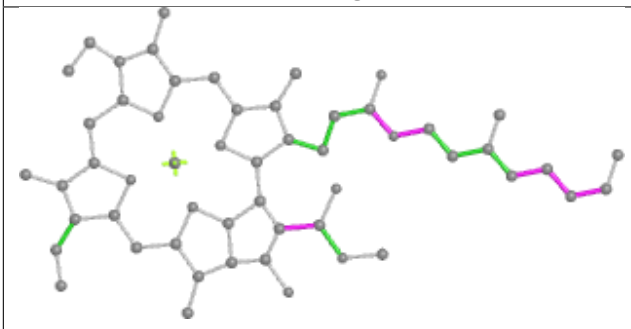
Ligand CLA c2 513



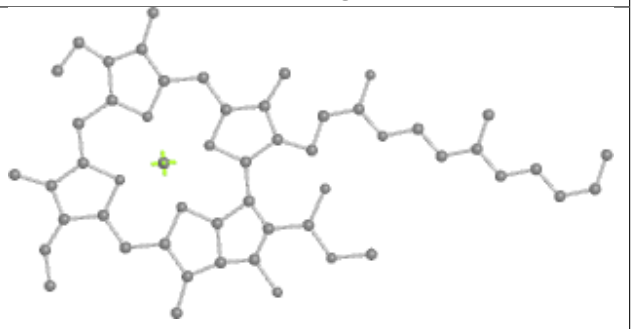
Bond lengths



Bond angles

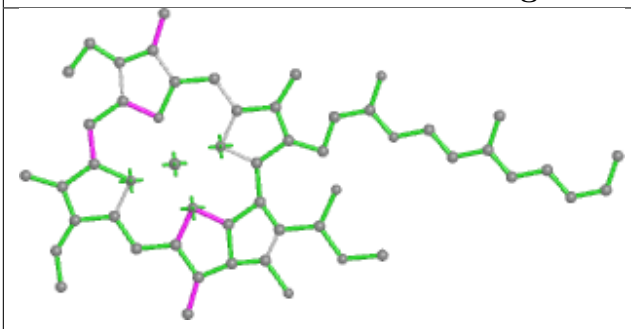


Torsions

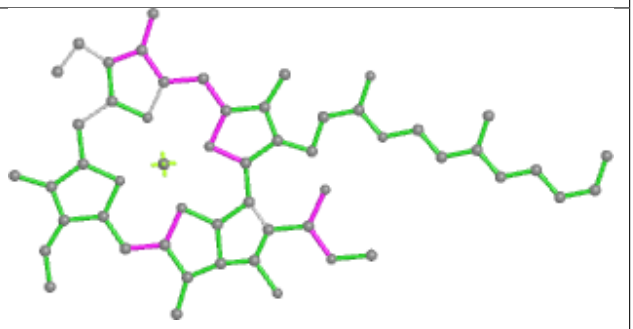


Rings

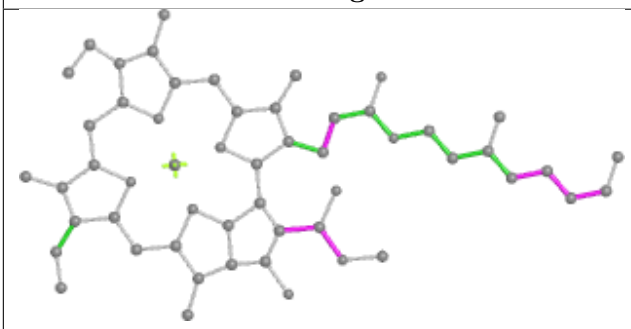
Ligand CLA c2 510



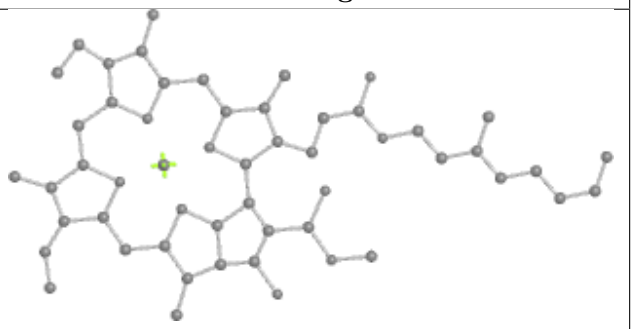
Bond lengths



Bond angles

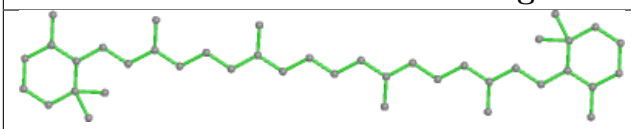


Torsions

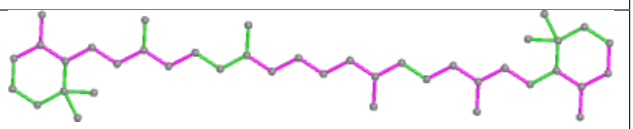


Rings

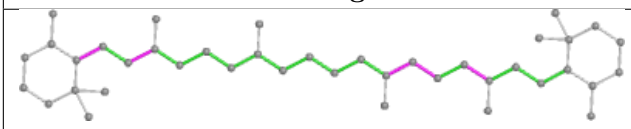
Ligand BCR J1 101



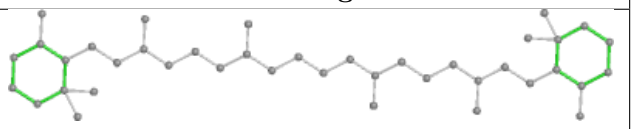
Bond lengths



Bond angles

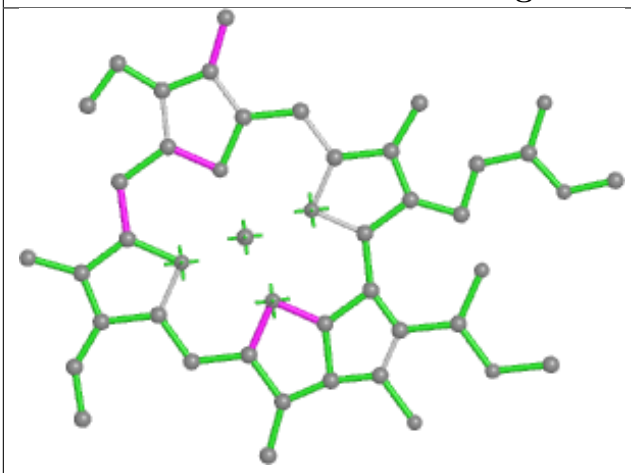


Torsions

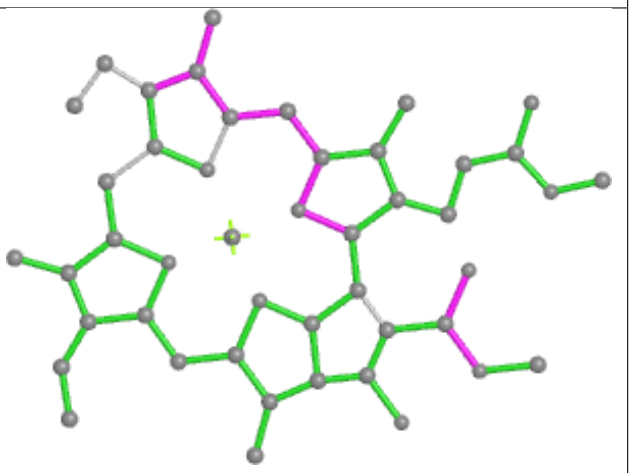


Rings

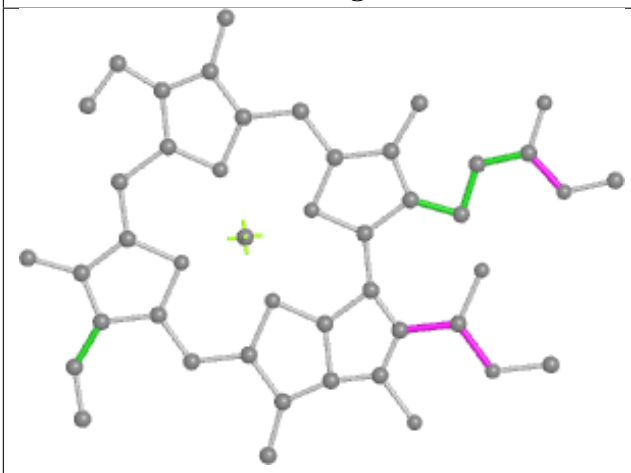
Ligand CLA C2 504



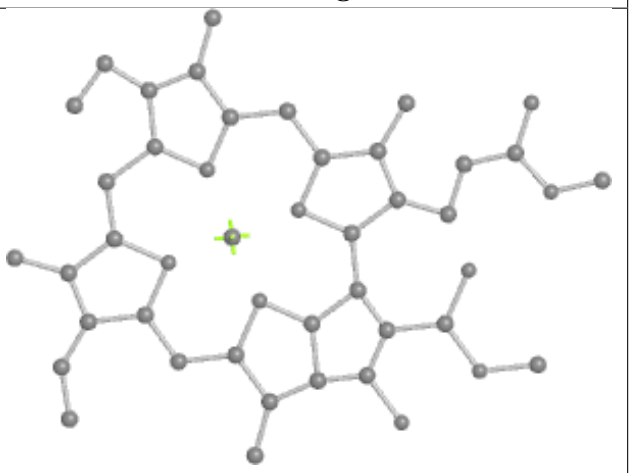
Bond lengths



Bond angles

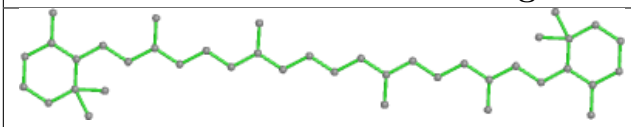


Torsions

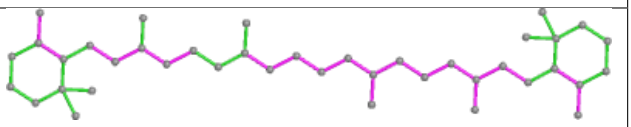


Rings

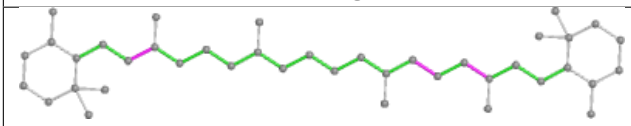
Ligand BCR c1 502



Bond lengths



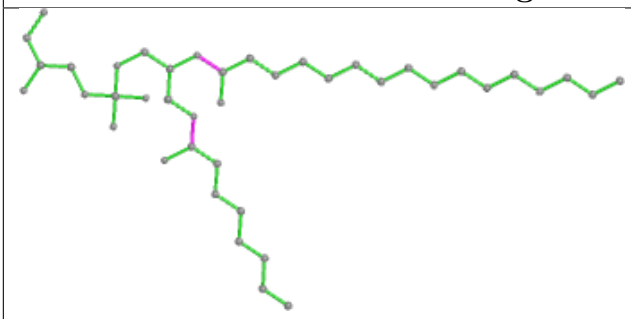
Bond angles



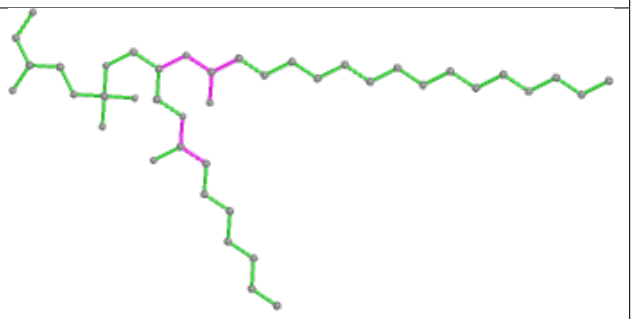
Torsions

Rings

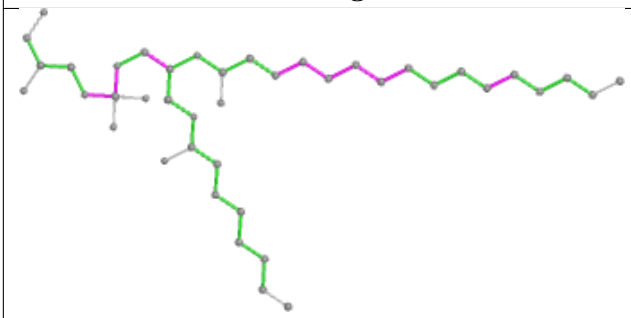
Ligand LHG L1 101



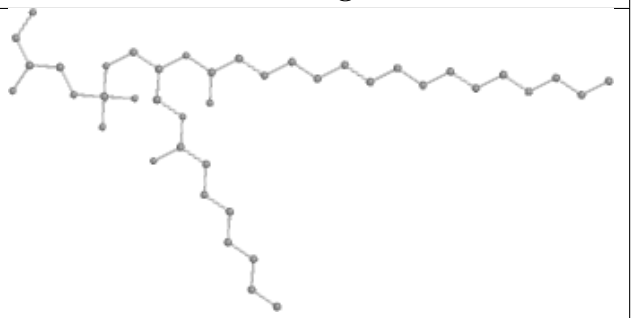
Bond lengths



Bond angles

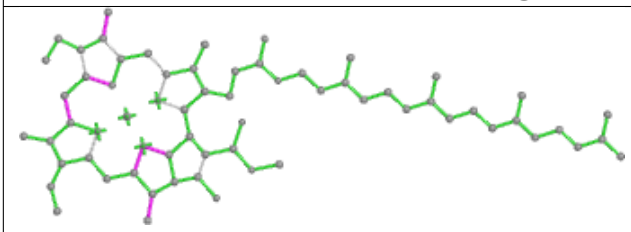


Torsions

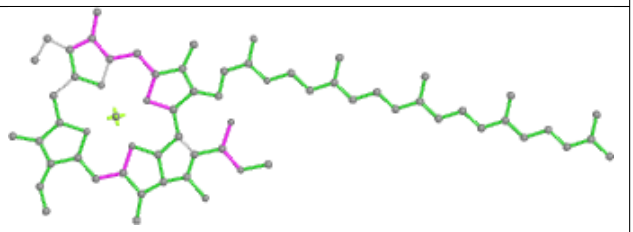


Rings

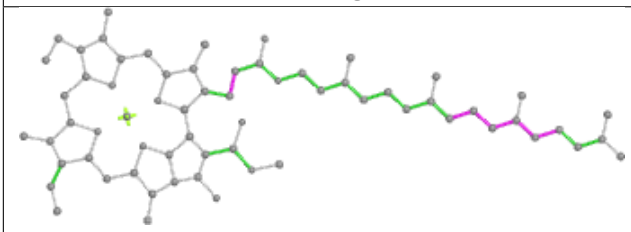
Ligand CLA C1 510



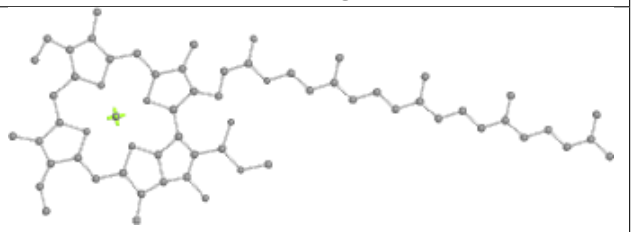
Bond lengths



Bond angles

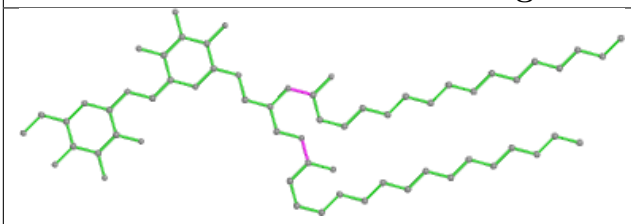


Torsions

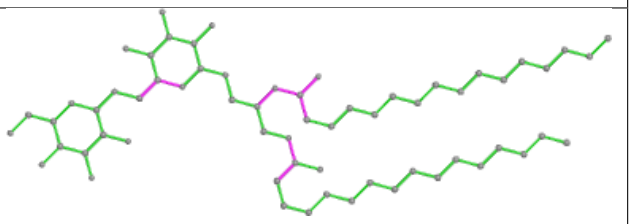


Rings

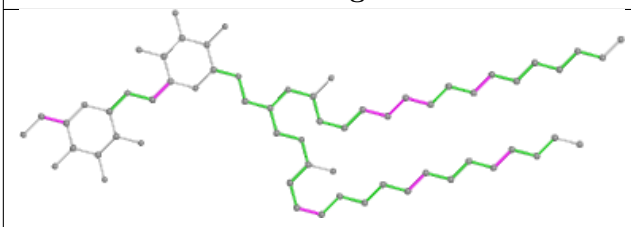
Ligand DGD c1 518



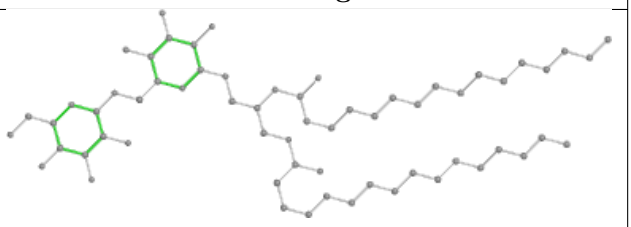
Bond lengths



Bond angles

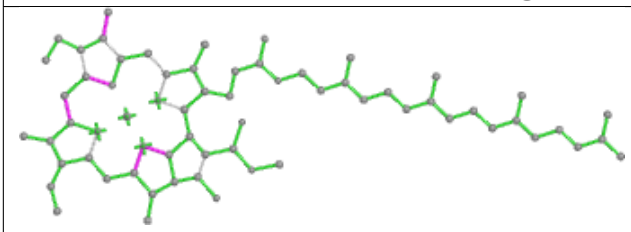


Torsions

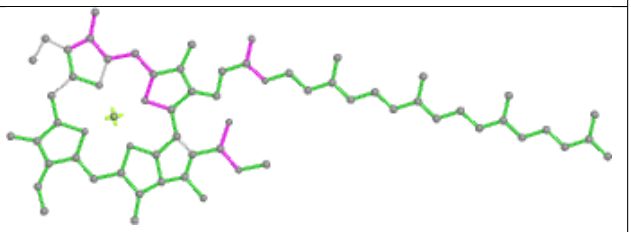


Rings

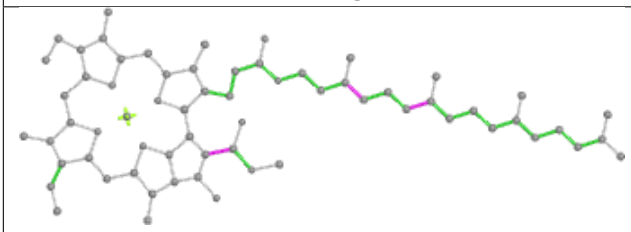
Ligand CLA b1 611



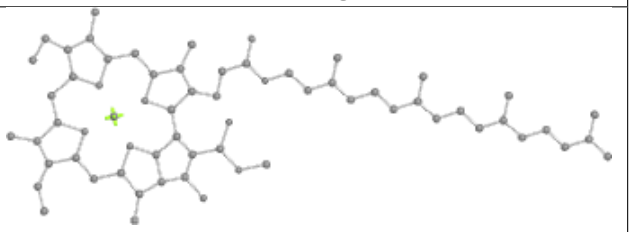
Bond lengths



Bond angles

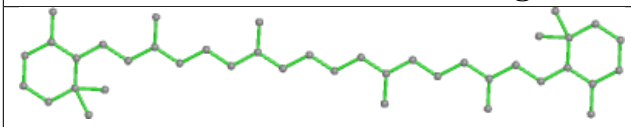


Torsions

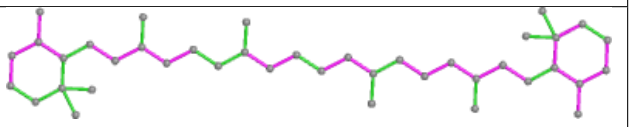


Rings

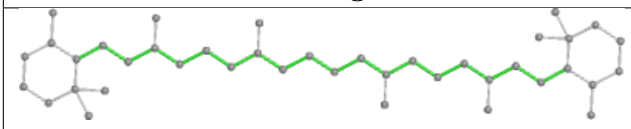
Ligand BCR B1 601



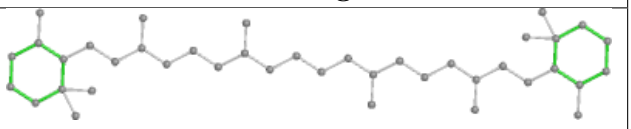
Bond lengths



Bond angles

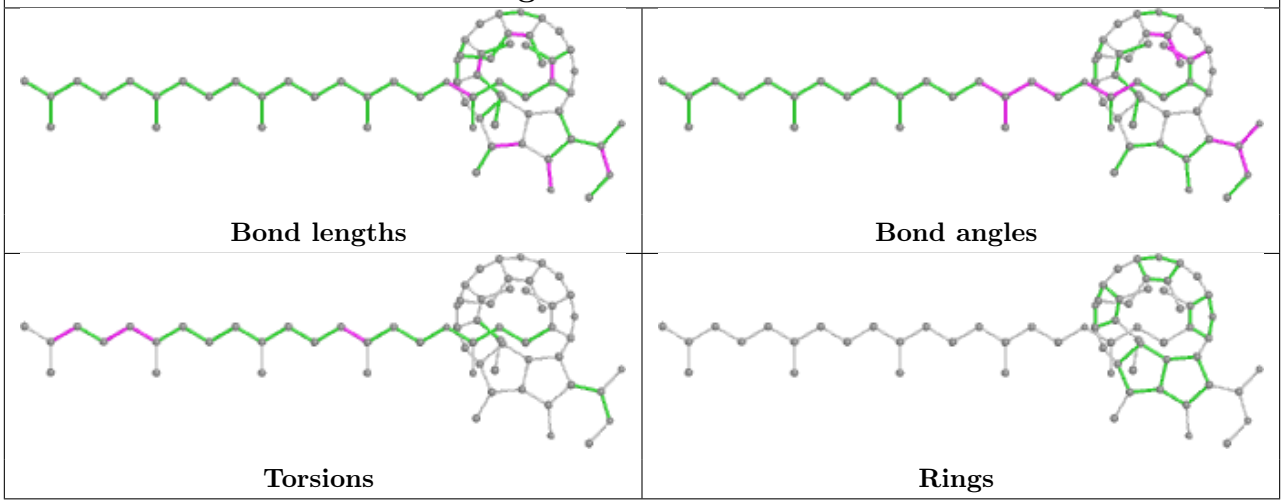


Torsions

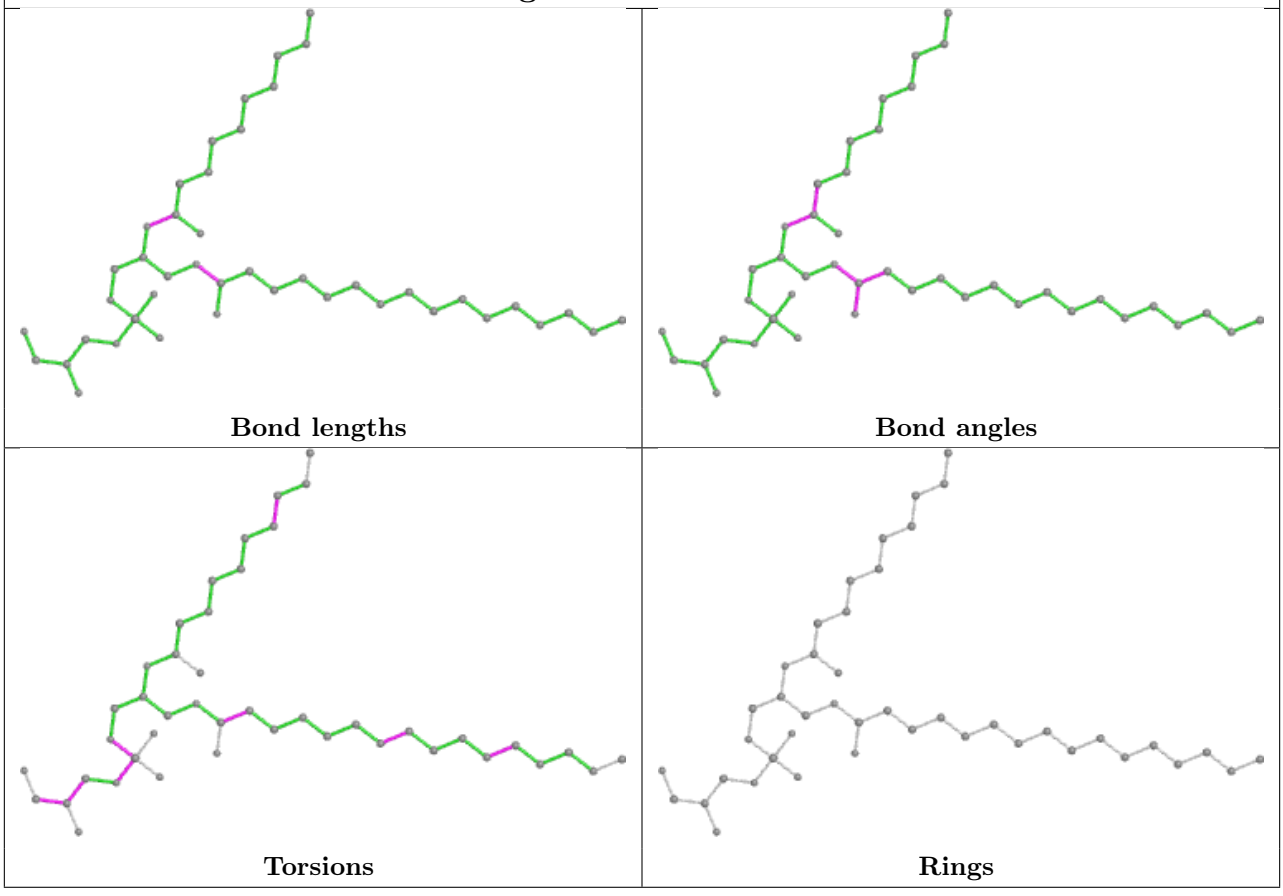


Rings

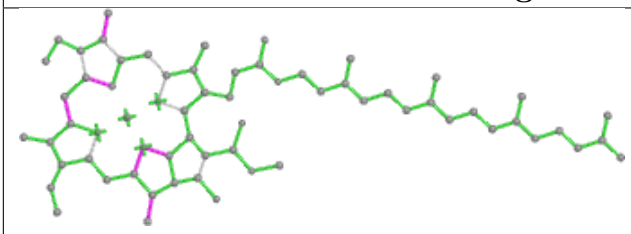
Ligand PHO a1 411



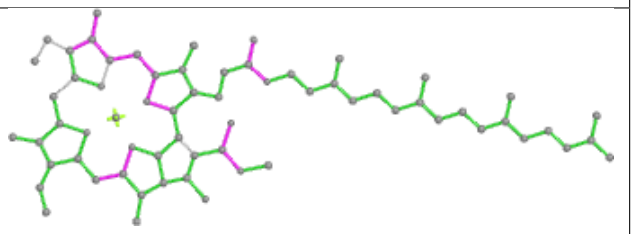
Ligand LHG a1 407



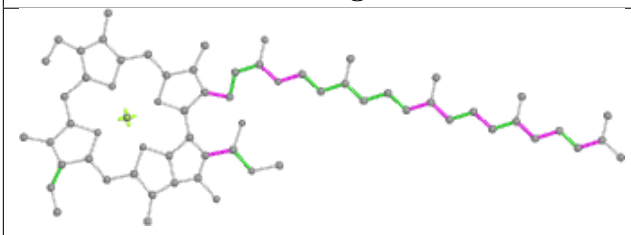
Ligand CLA C1 512



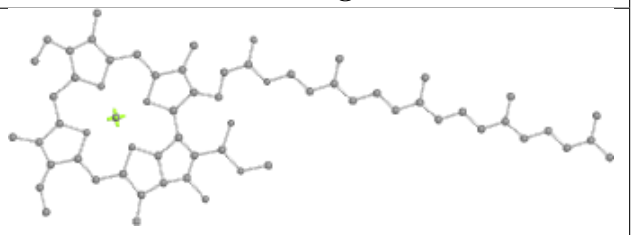
Bond lengths



Bond angles

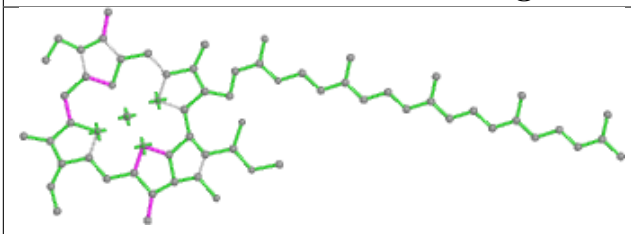


Torsions

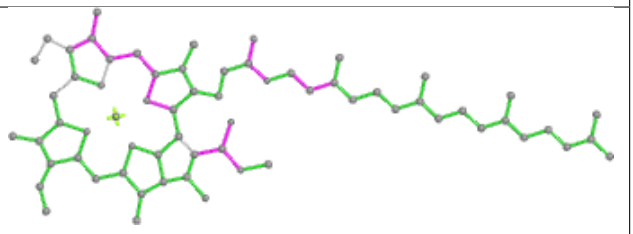


Rings

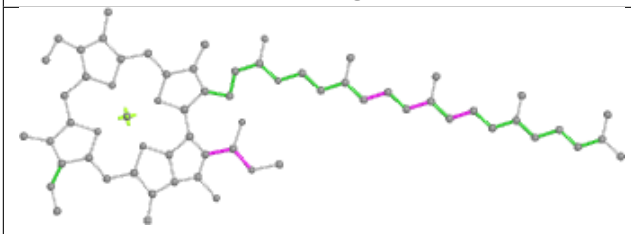
Ligand CLA B2 607



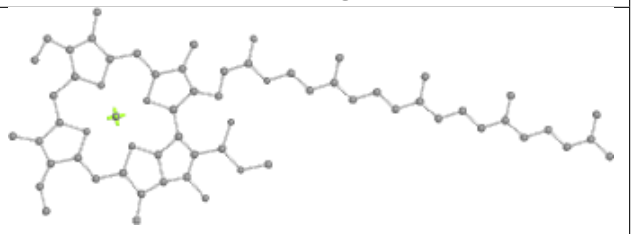
Bond lengths



Bond angles

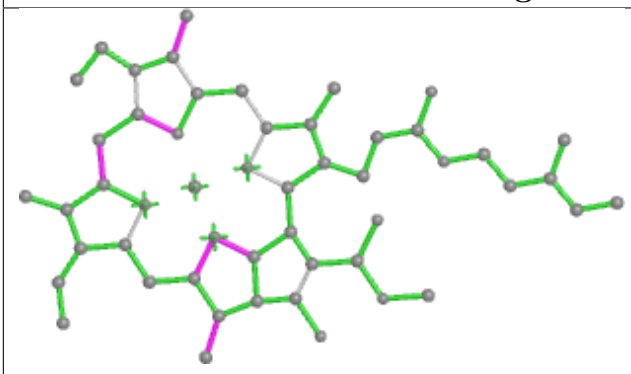


Torsions

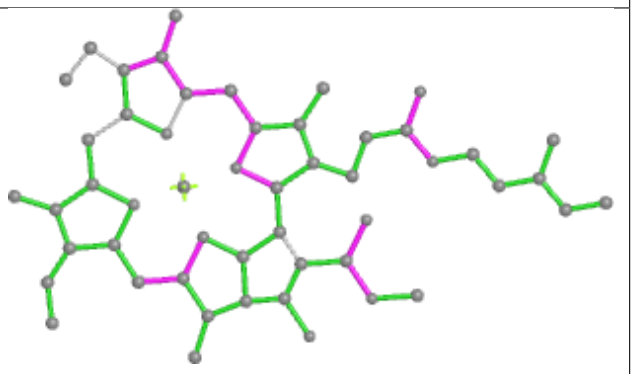


Rings

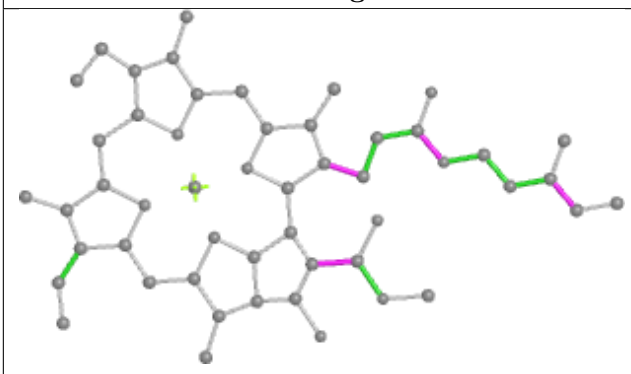
Ligand CLA A1 404



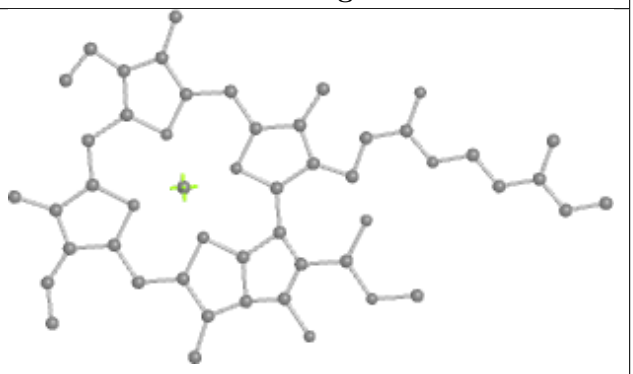
Bond lengths



Bond angles

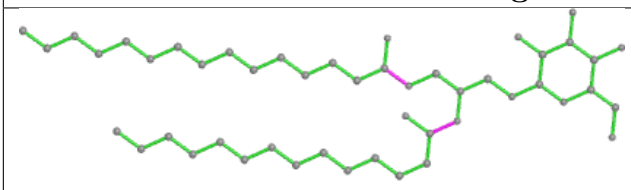


Torsions

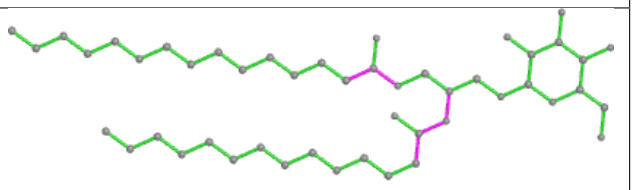


Rings

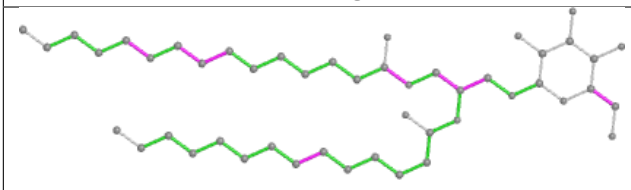
Ligand LMG B1 626



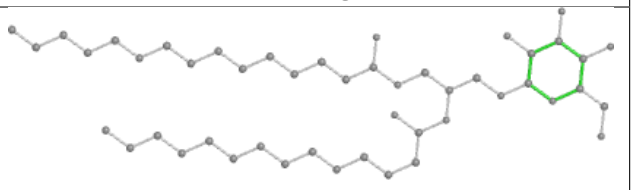
Bond lengths



Bond angles

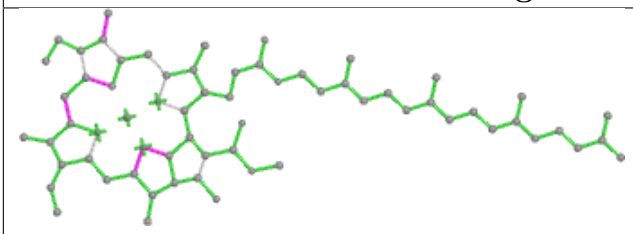


Torsions

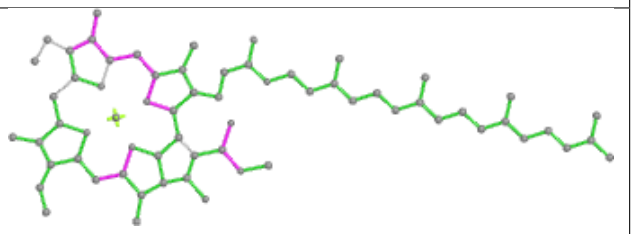


Rings

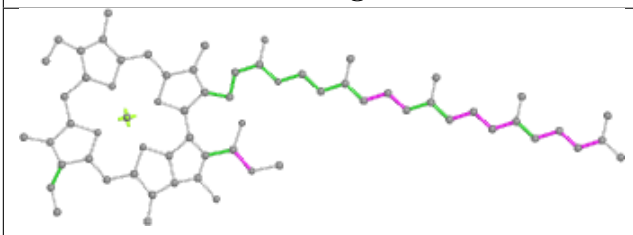
Ligand CLA C1 505



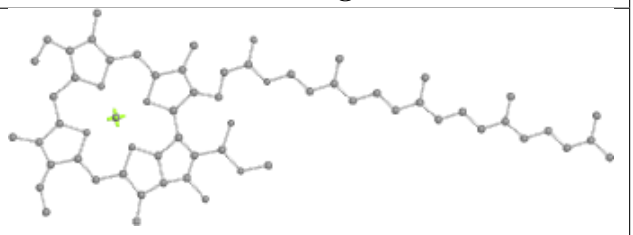
Bond lengths



Bond angles

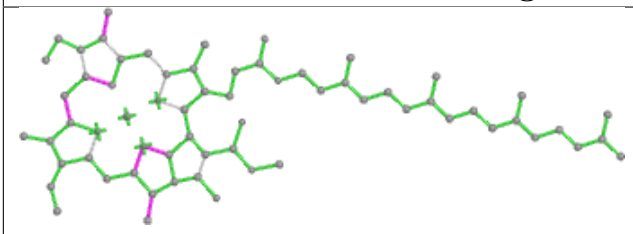


Torsions

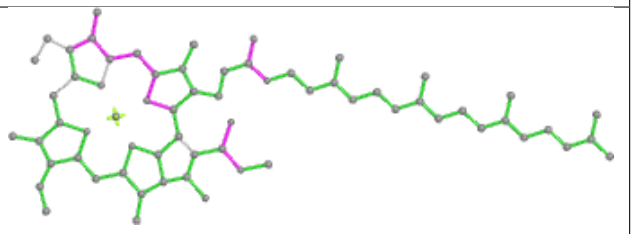


Rings

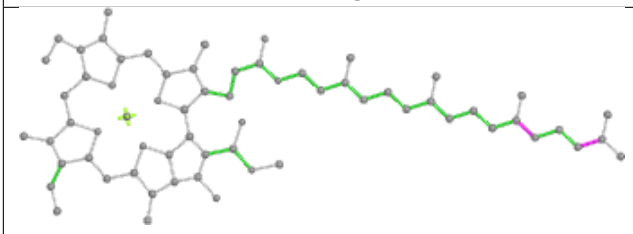
Ligand CLA b1 617



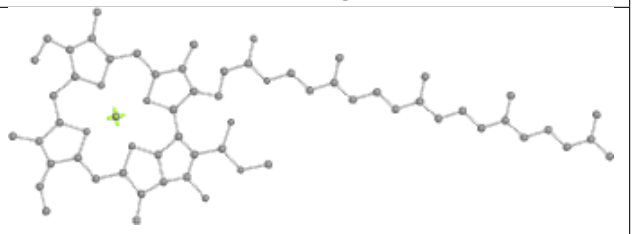
Bond lengths



Bond angles

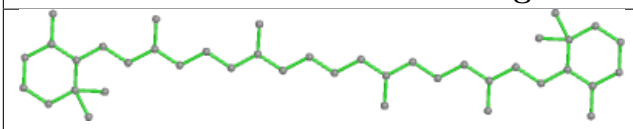


Torsions

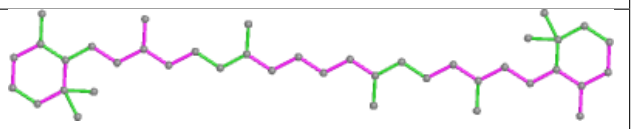


Rings

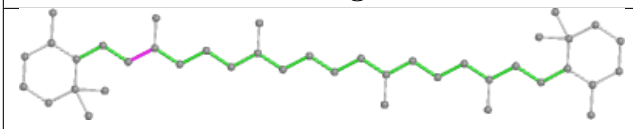
Ligand BCR B2 602



Bond lengths



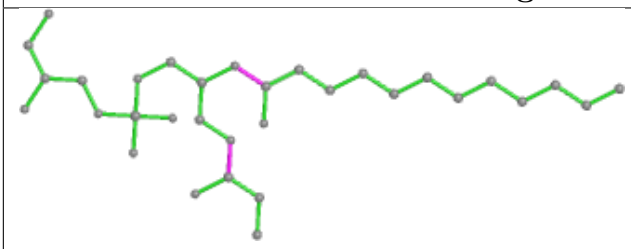
Bond angles



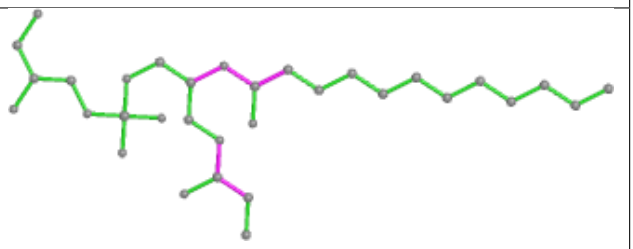
Torsions

Rings

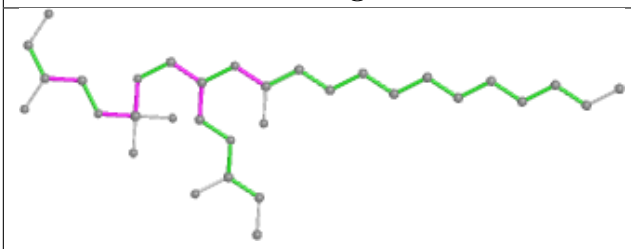
Ligand LHG d1 402



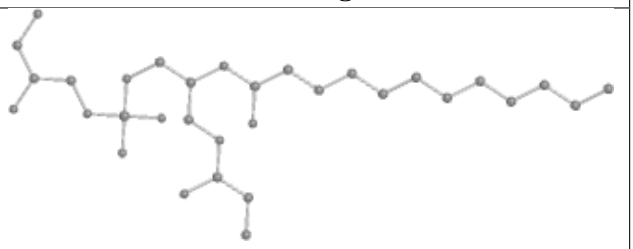
Bond lengths



Bond angles

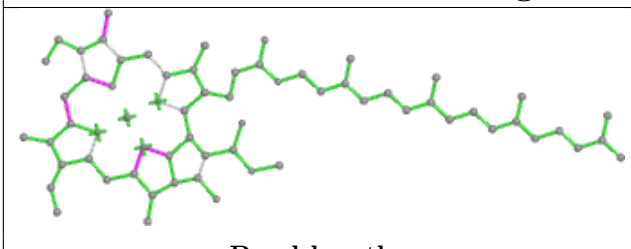


Torsions

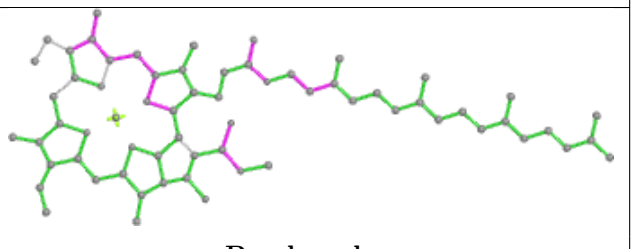


Rings

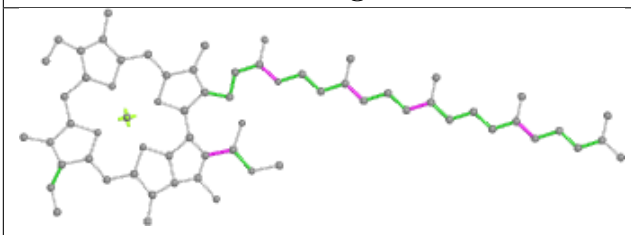
Ligand CLA B2 611



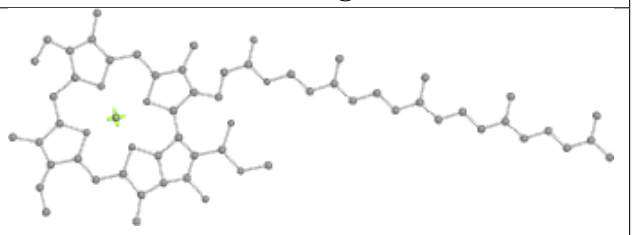
Bond lengths



Bond angles

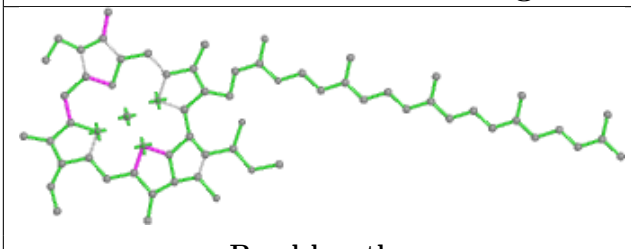


Torsions

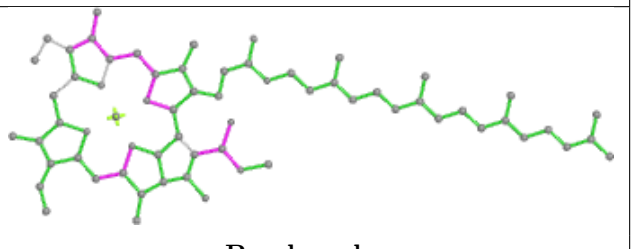


Rings

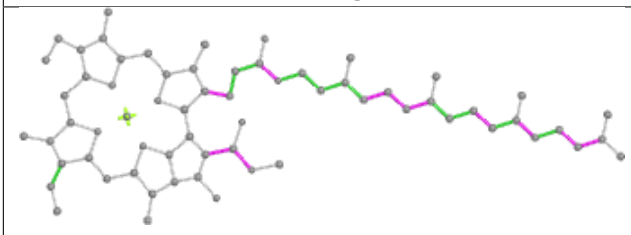
Ligand CLA B1 619



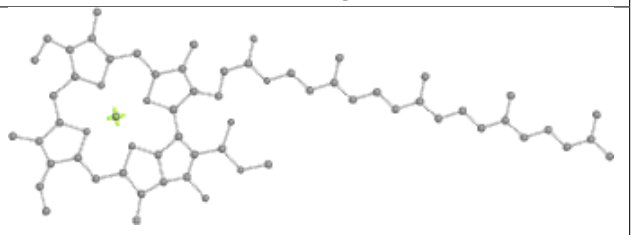
Bond lengths



Bond angles

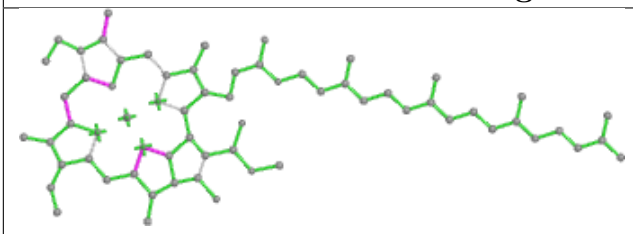


Torsions

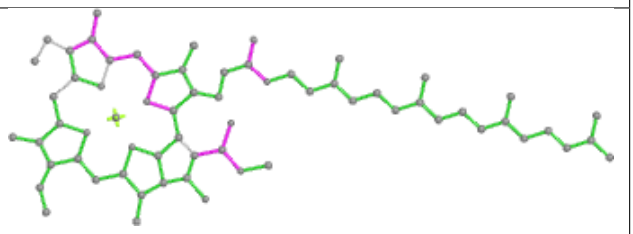


Rings

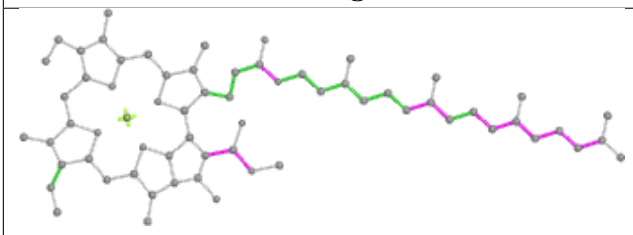
Ligand CLA C1 509



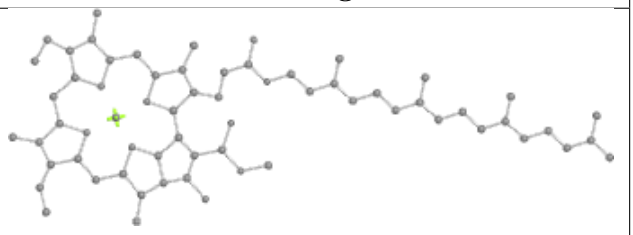
Bond lengths



Bond angles

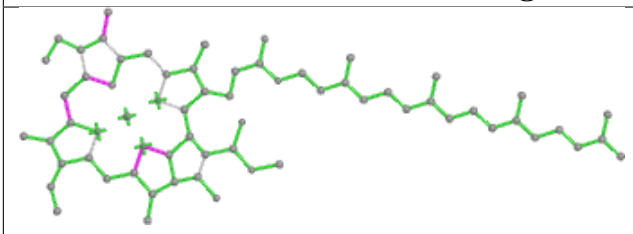


Torsions

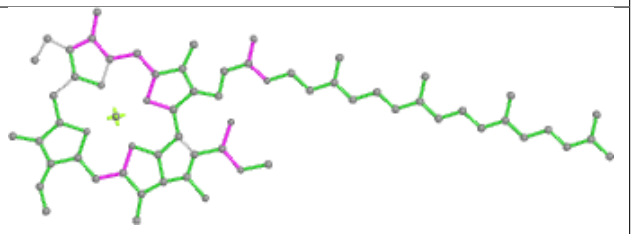


Rings

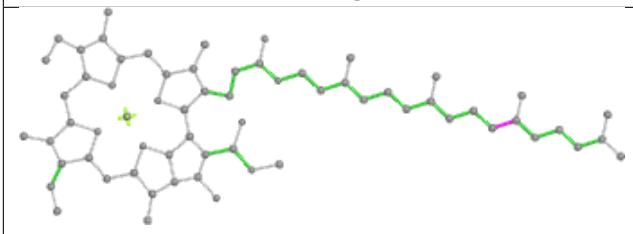
Ligand CLA b1 610



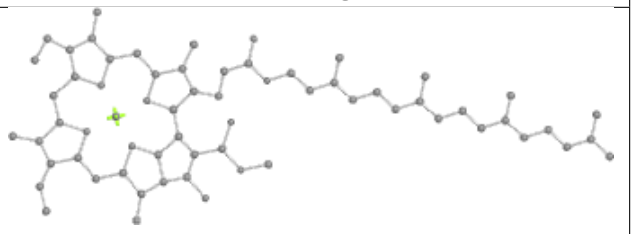
Bond lengths



Bond angles

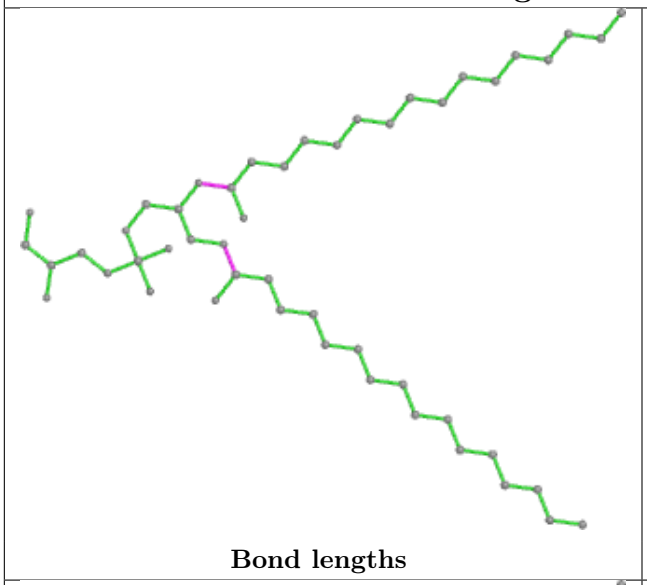


Torsions

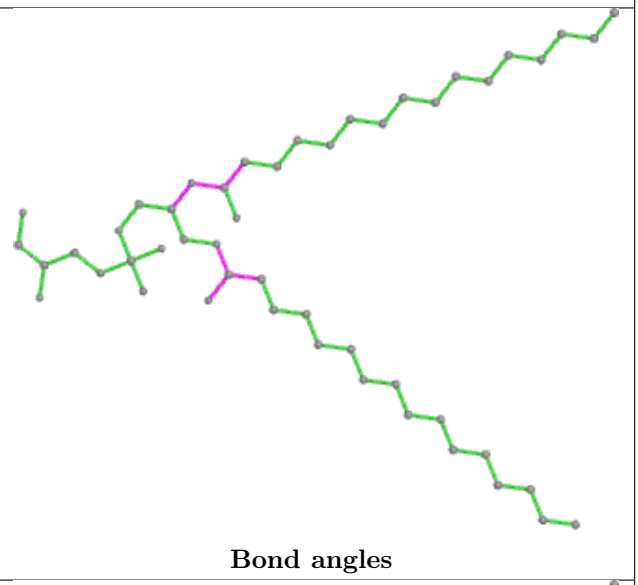


Rings

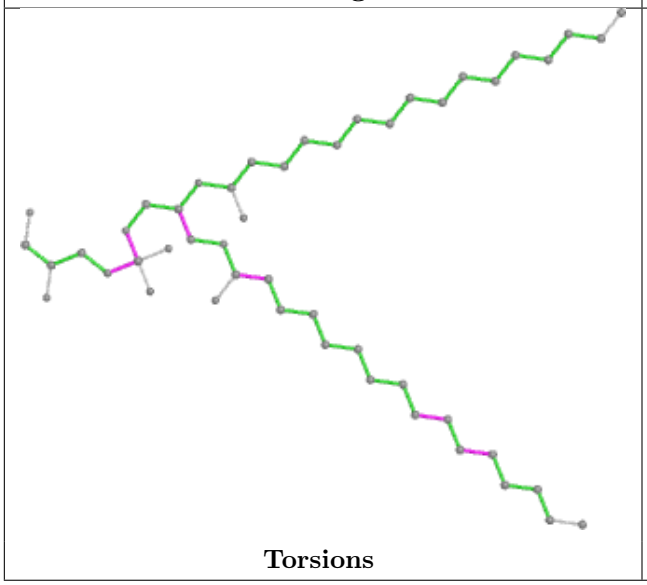
Ligand LHG D1 404



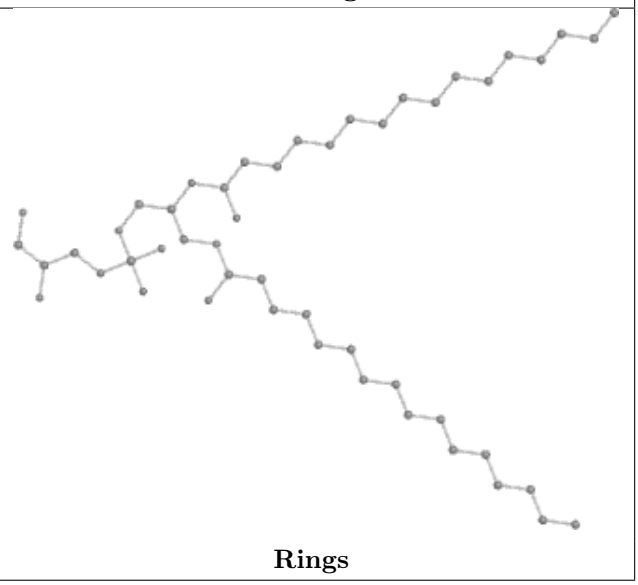
Bond lengths



Bond angles

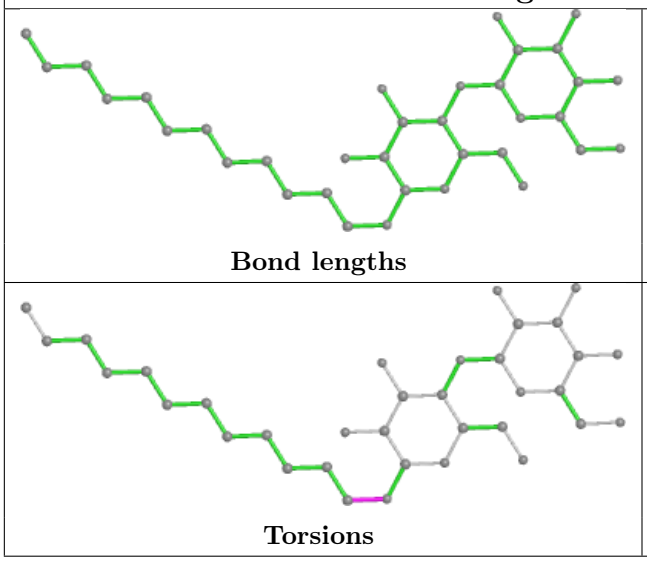


Torsions

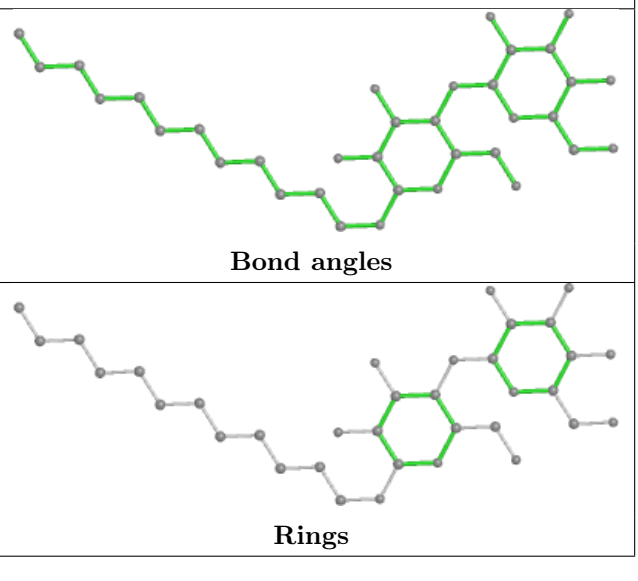


Rings

Ligand LMT b2 623



Bond lengths

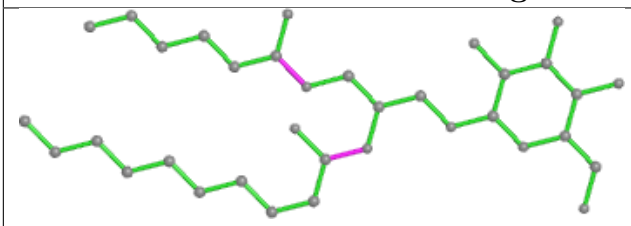


Bond angles

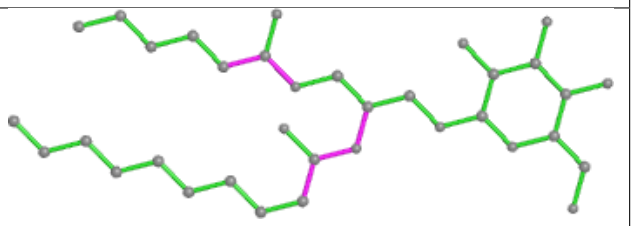
Torsions

Rings

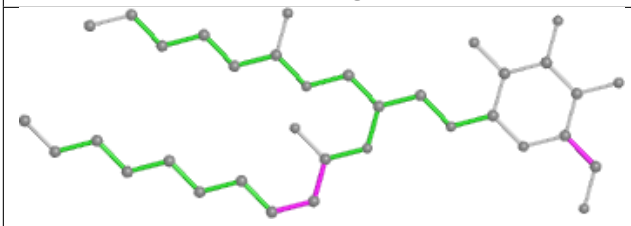
Ligand LMG D1 406



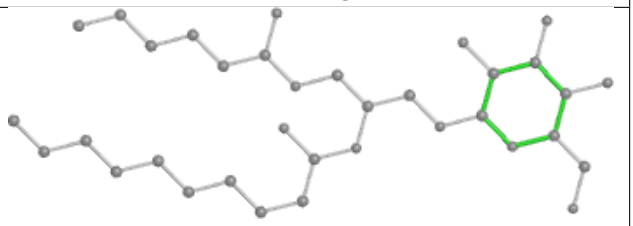
Bond lengths



Bond angles

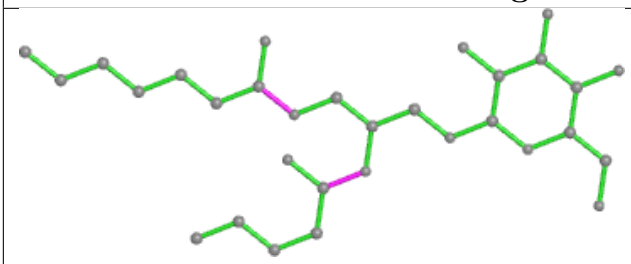


Torsions

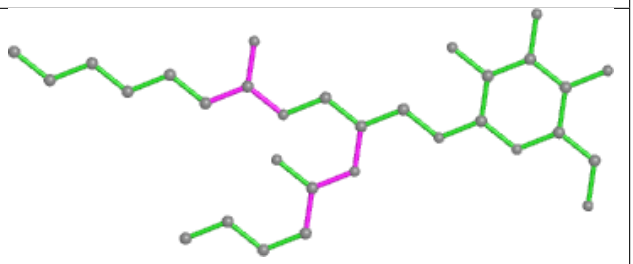


Rings

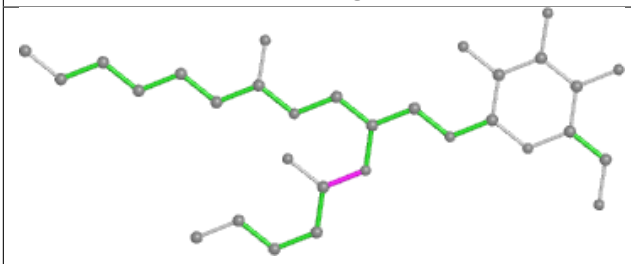
Ligand LMG B1 622



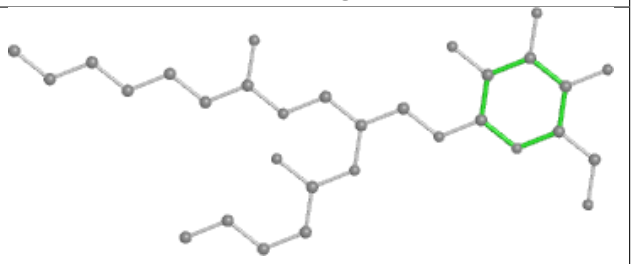
Bond lengths



Bond angles

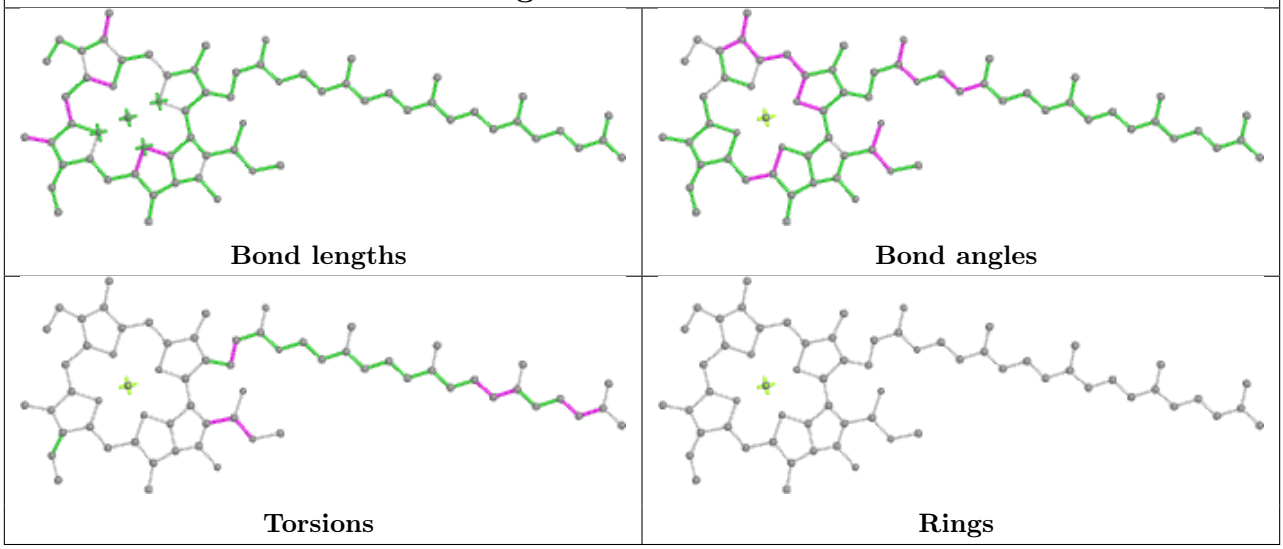


Torsions

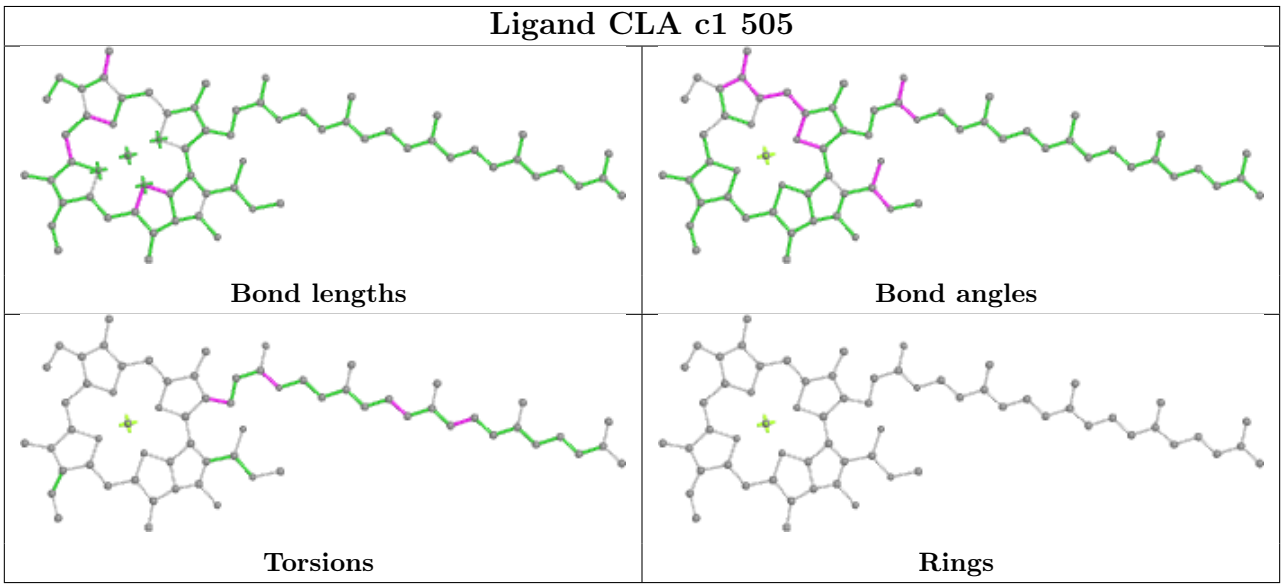


Rings

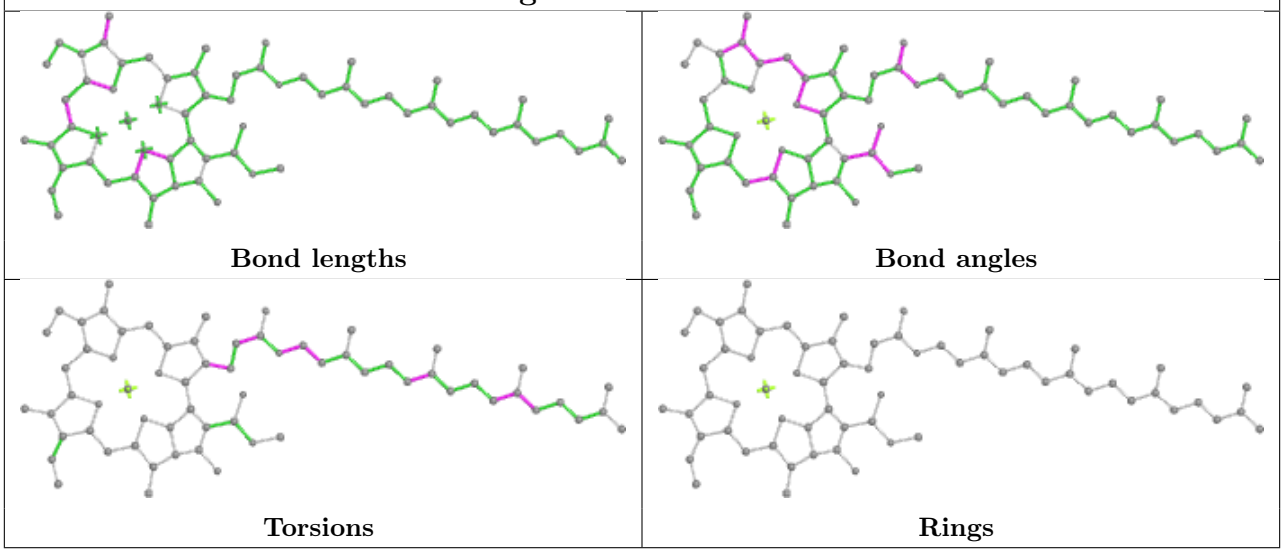
Ligand CLA B2 609



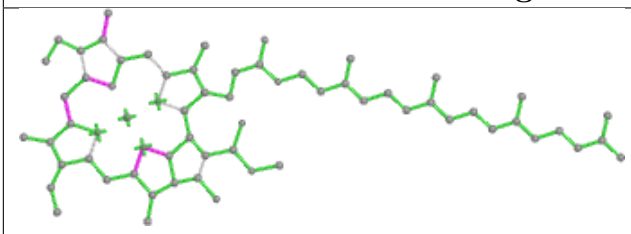
Ligand CLA c1 505



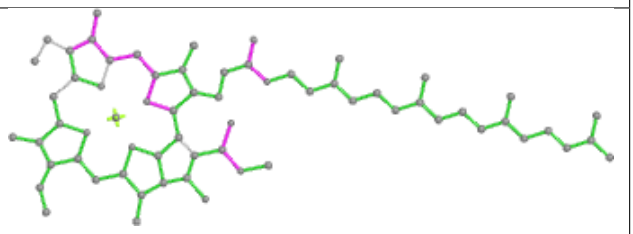
Ligand CLA d1 401



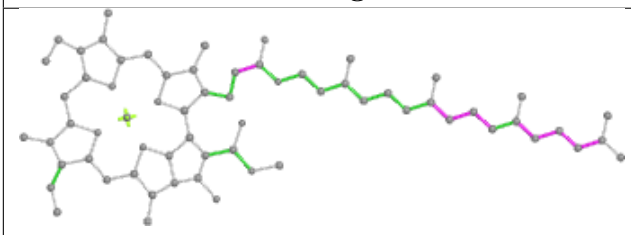
Ligand CLA B2 615



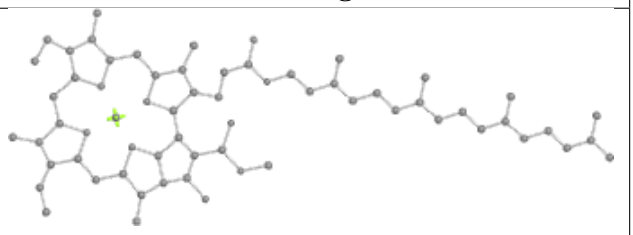
Bond lengths



Bond angles

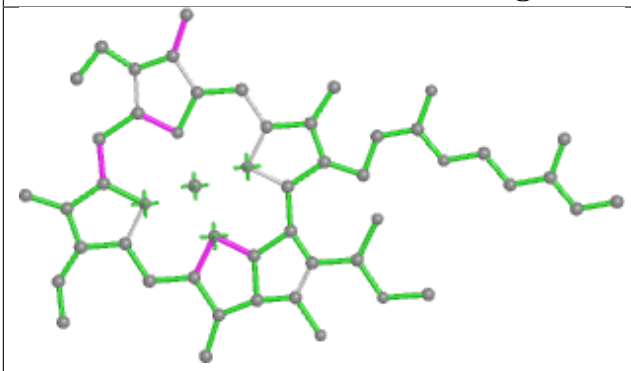


Torsions

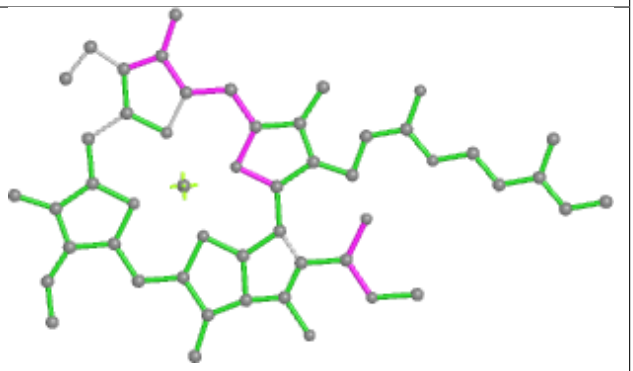


Rings

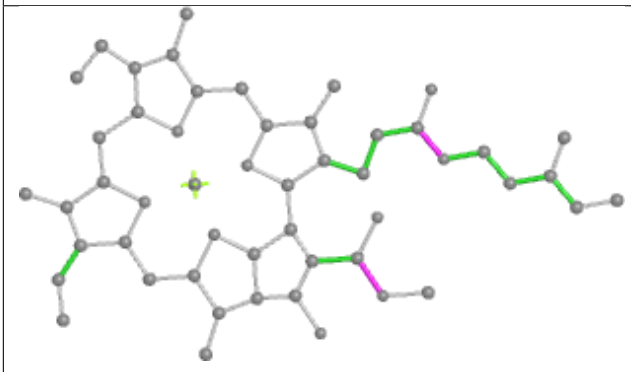
Ligand CLA D1 403



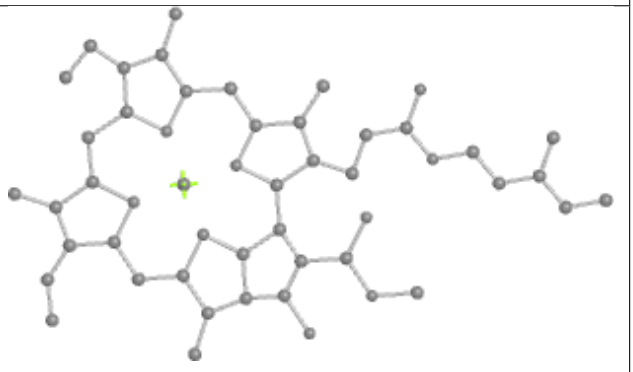
Bond lengths



Bond angles

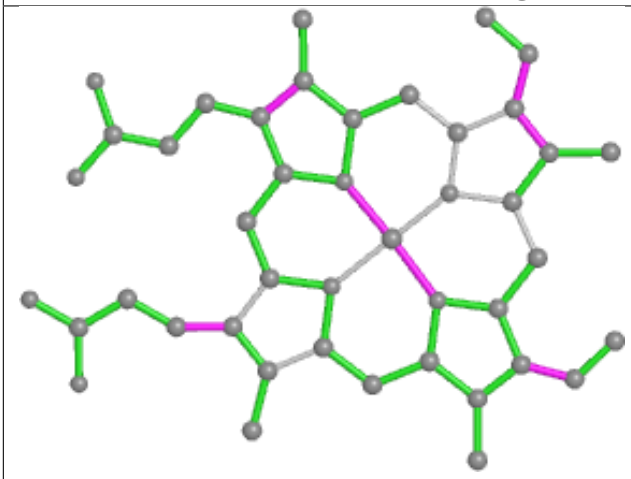


Torsions

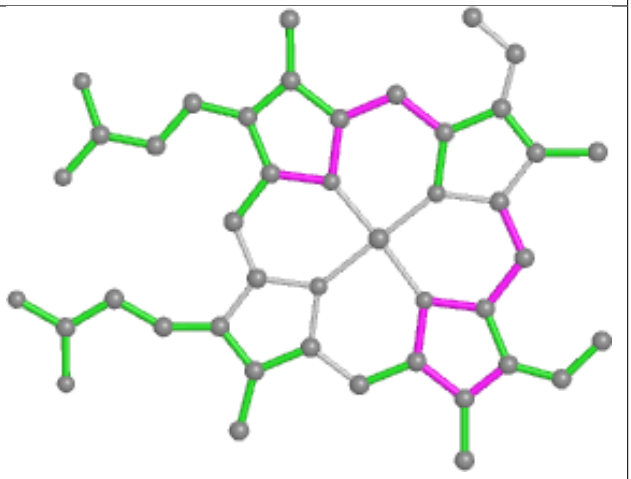


Rings

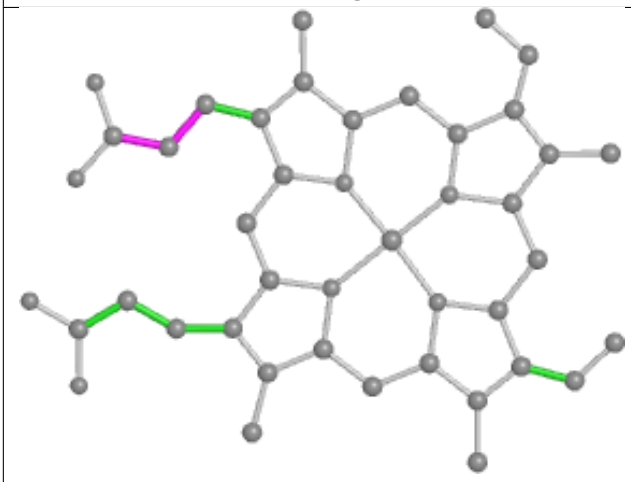
Ligand HEM v1 201



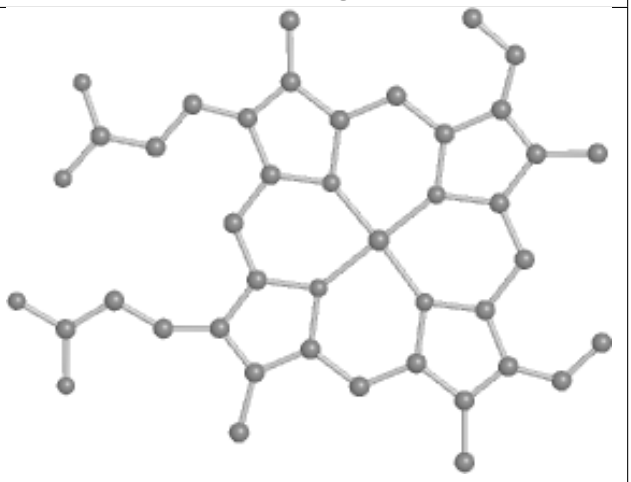
Bond lengths



Bond angles

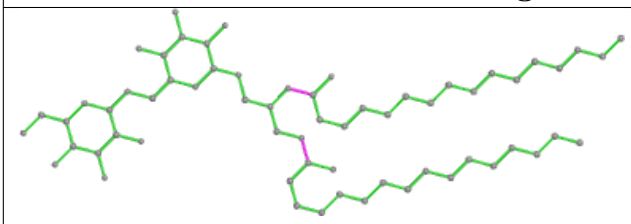


Torsions

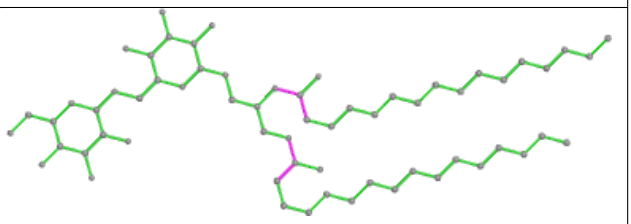


Rings

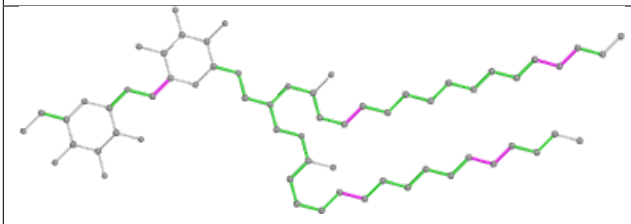
Ligand DGD c2 517



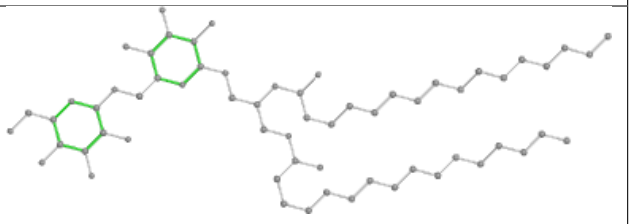
Bond lengths



Bond angles

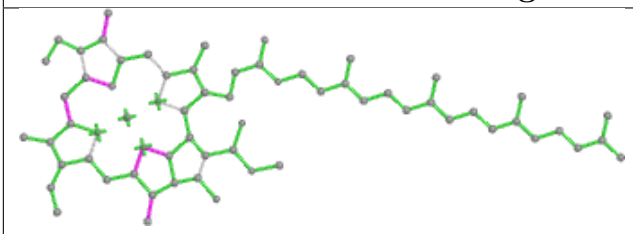


Torsions

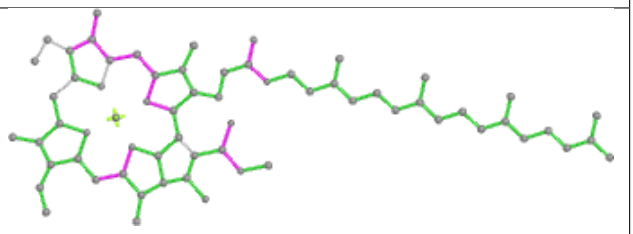


Rings

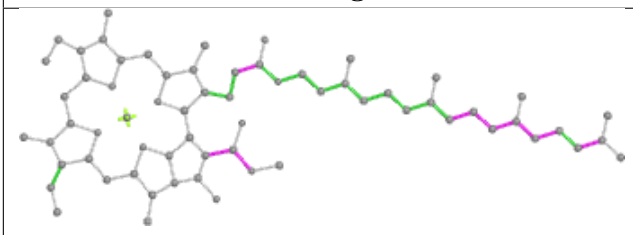
Ligand CLA b1 614



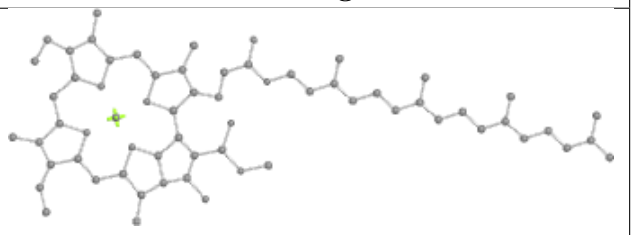
Bond lengths



Bond angles

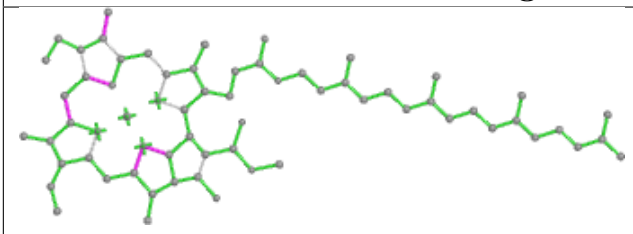


Torsions

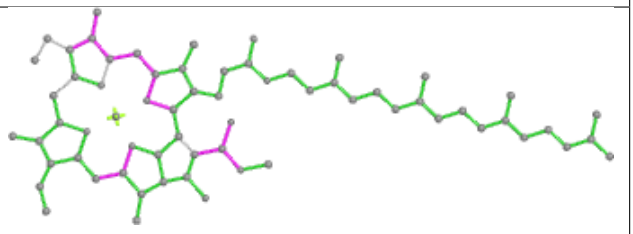


Rings

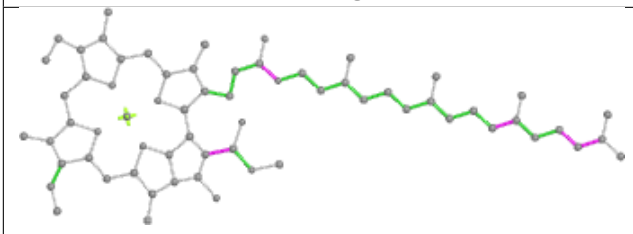
Ligand CLA d1 404



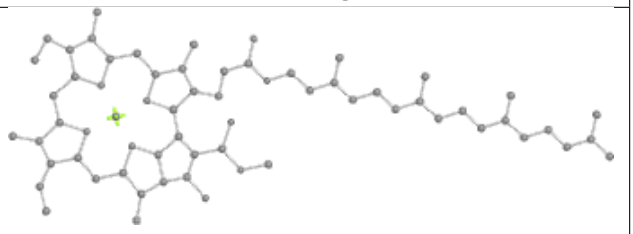
Bond lengths



Bond angles

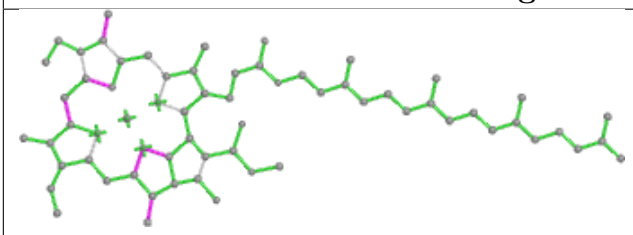


Torsions

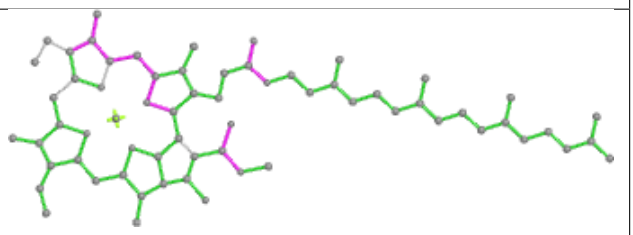


Rings

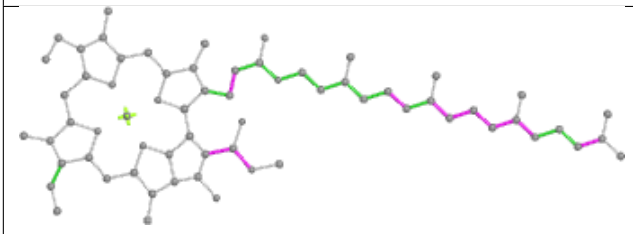
Ligand CLA b2 606



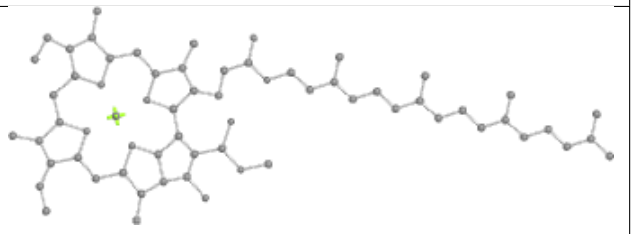
Bond lengths



Bond angles

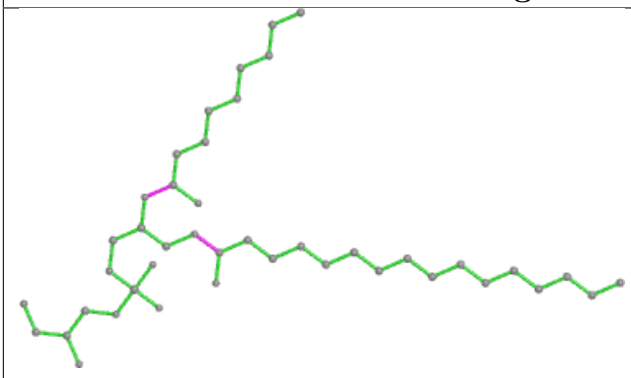


Torsions

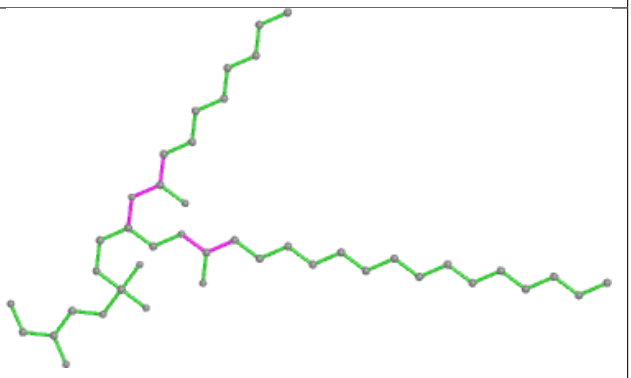


Rings

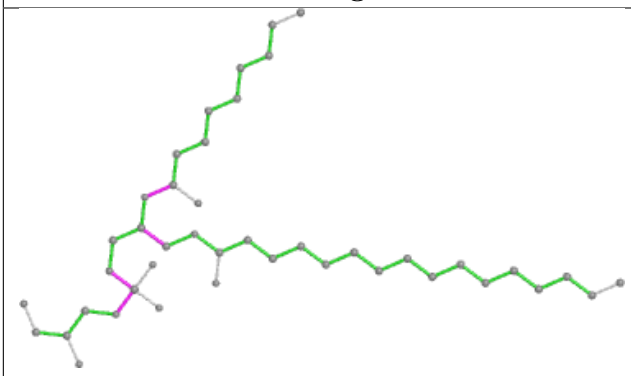
Ligand LHG B2 627



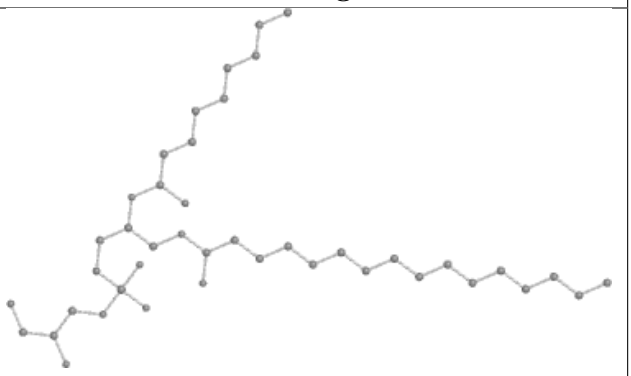
Bond lengths



Bond angles

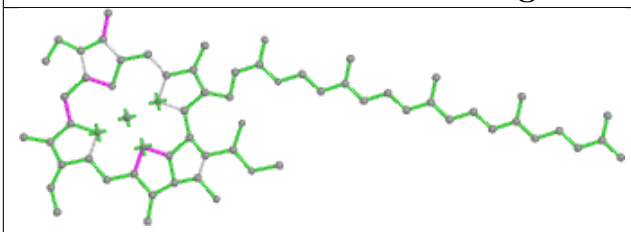


Torsions

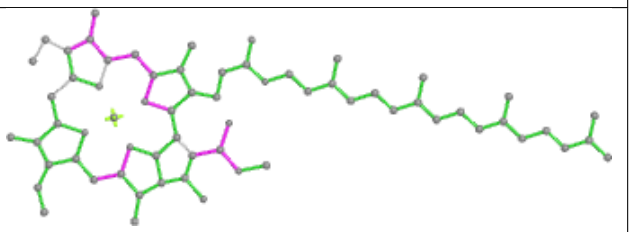


Rings

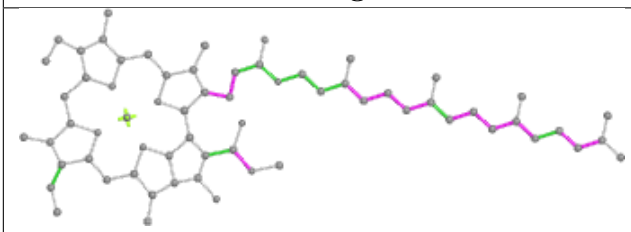
Ligand CLA b2 620



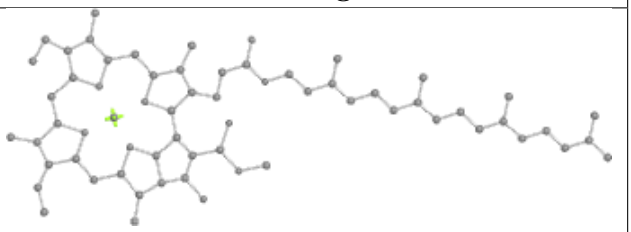
Bond lengths



Bond angles

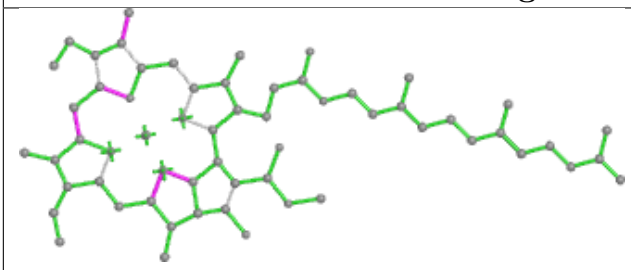


Torsions

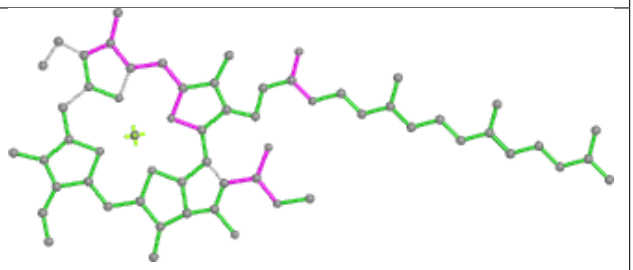


Rings

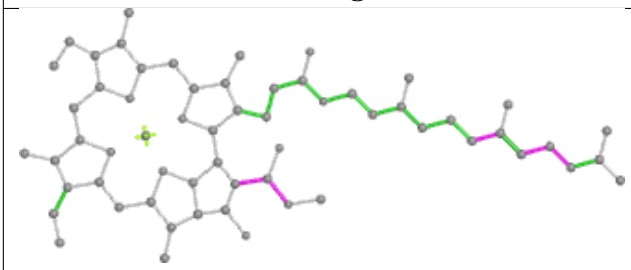
Ligand CLA b2 616



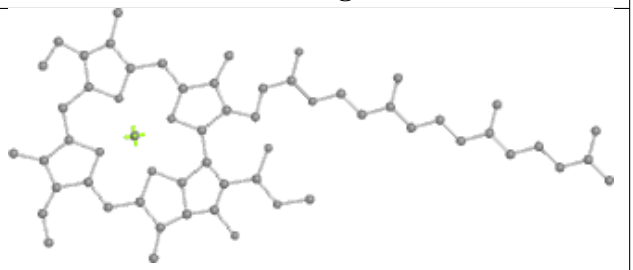
Bond lengths



Bond angles

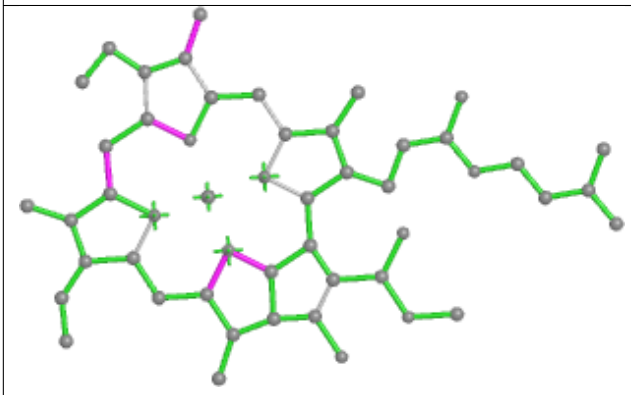


Torsions

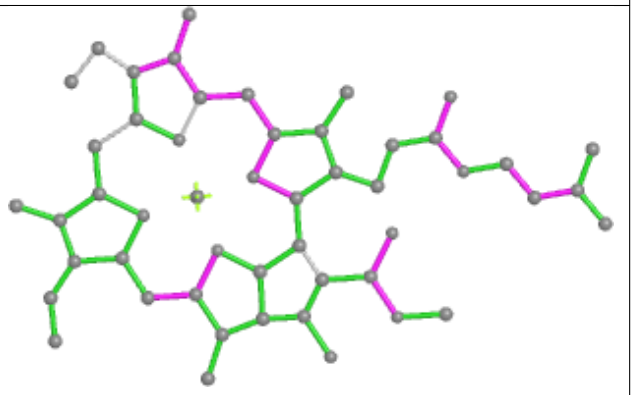


Rings

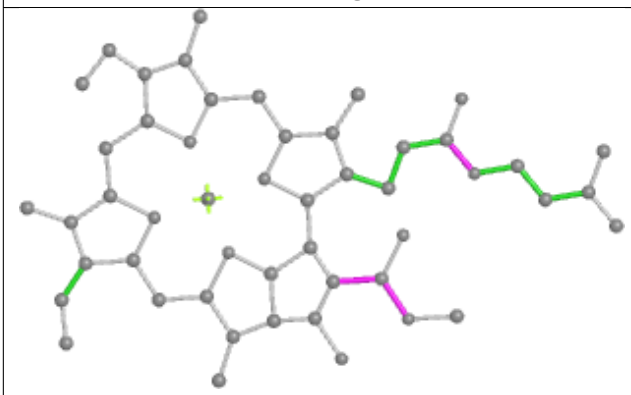
Ligand CLA C2 508



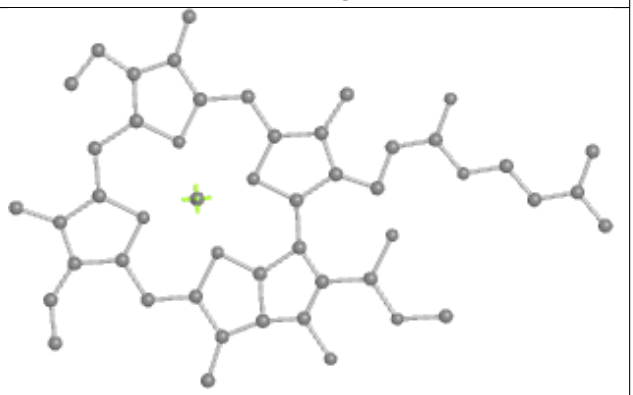
Bond lengths



Bond angles

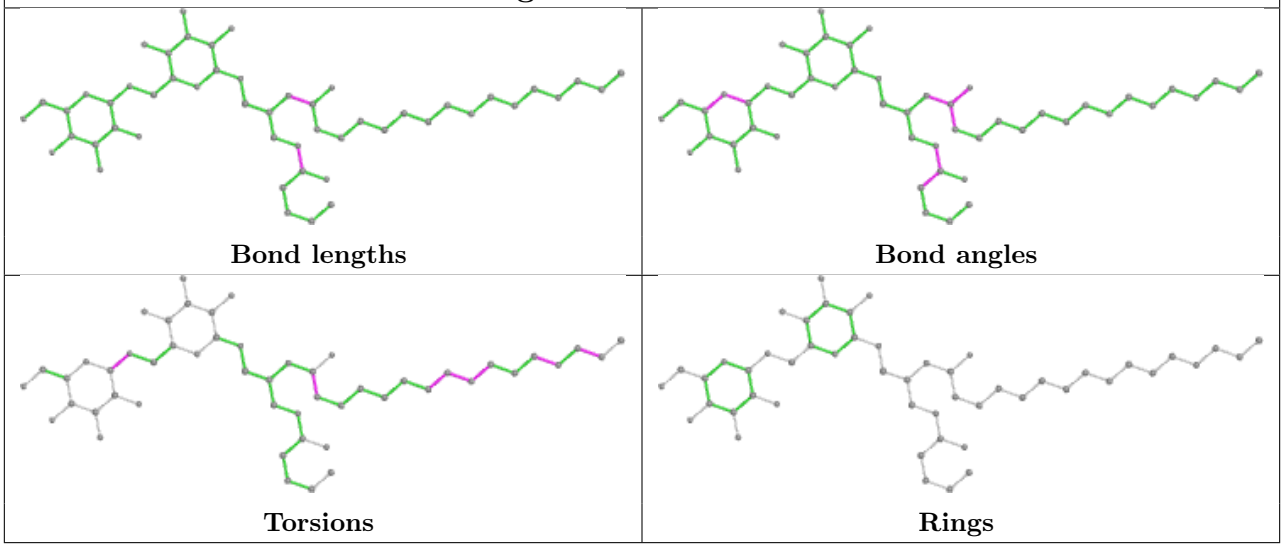


Torsions

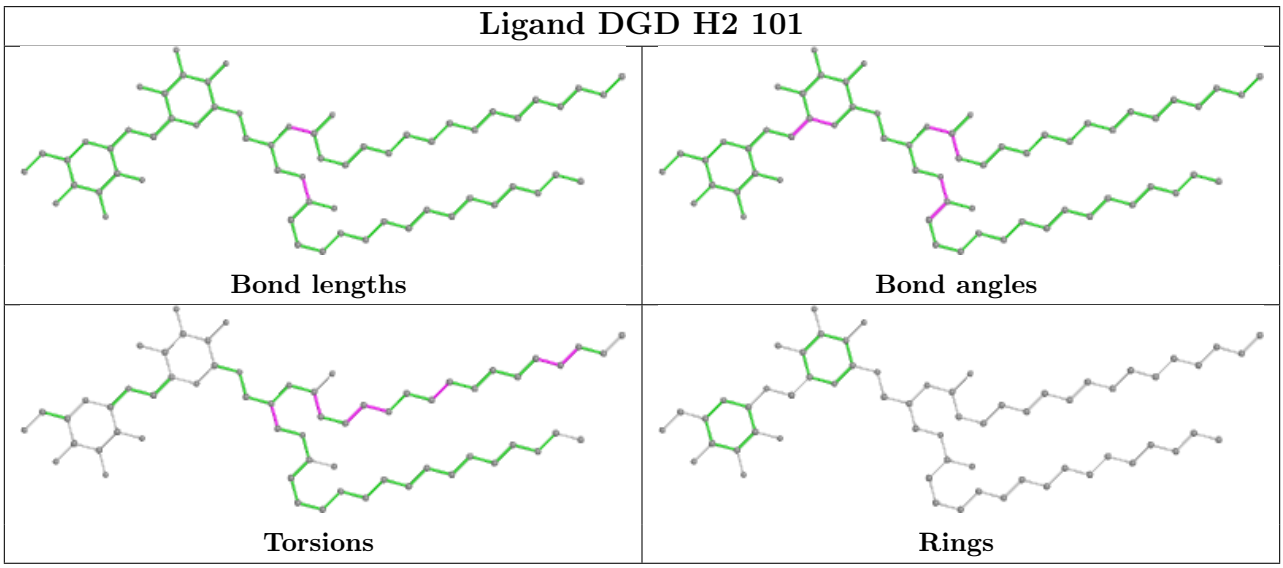


Rings

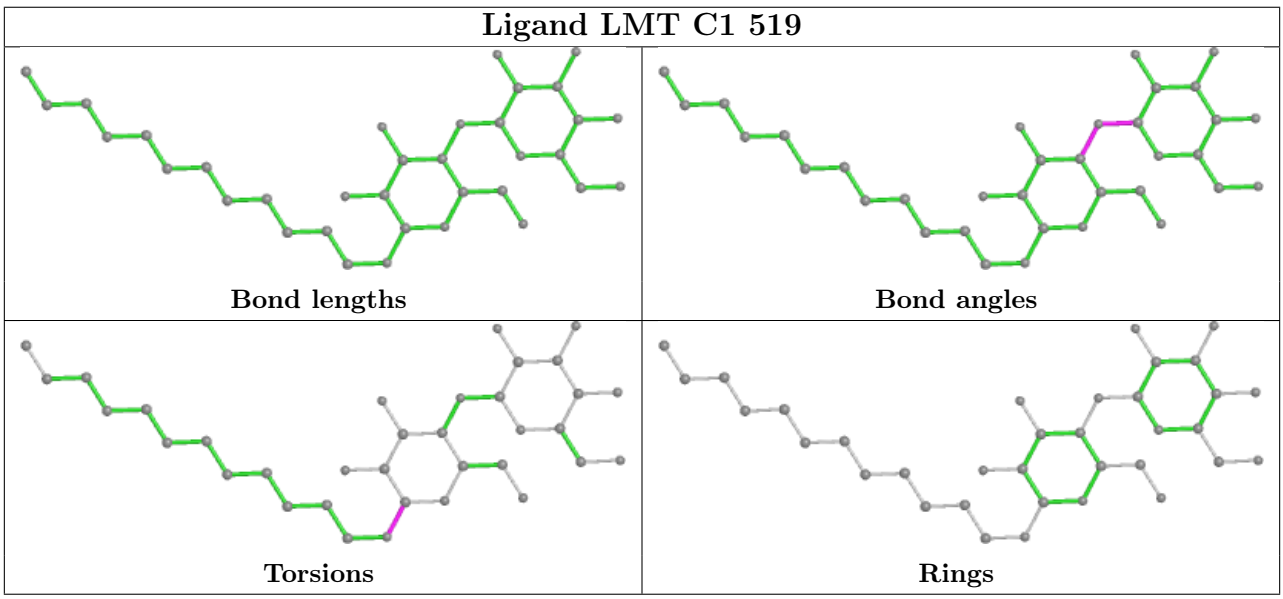
Ligand DGD c1 514



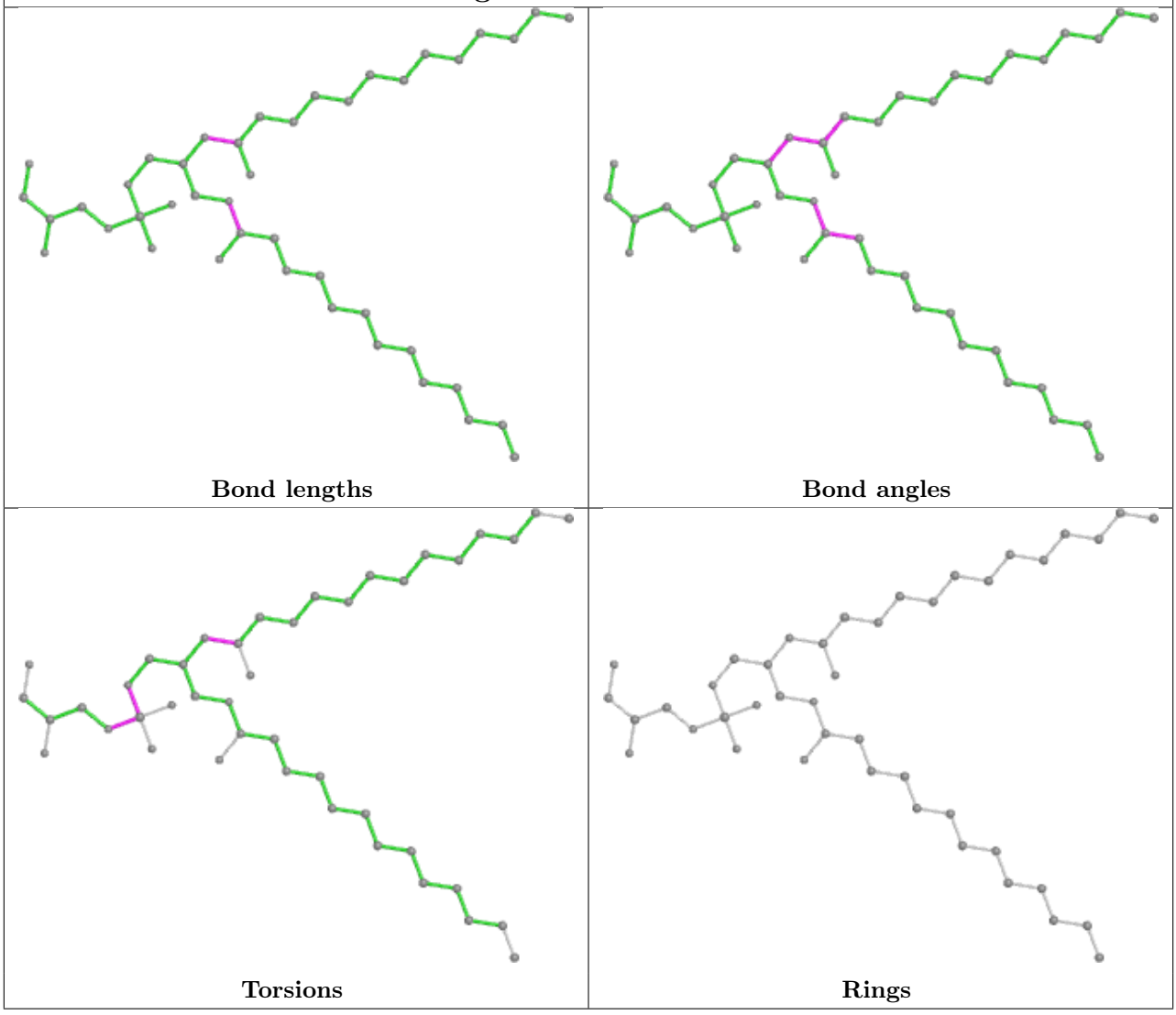
Ligand DGD H2 101



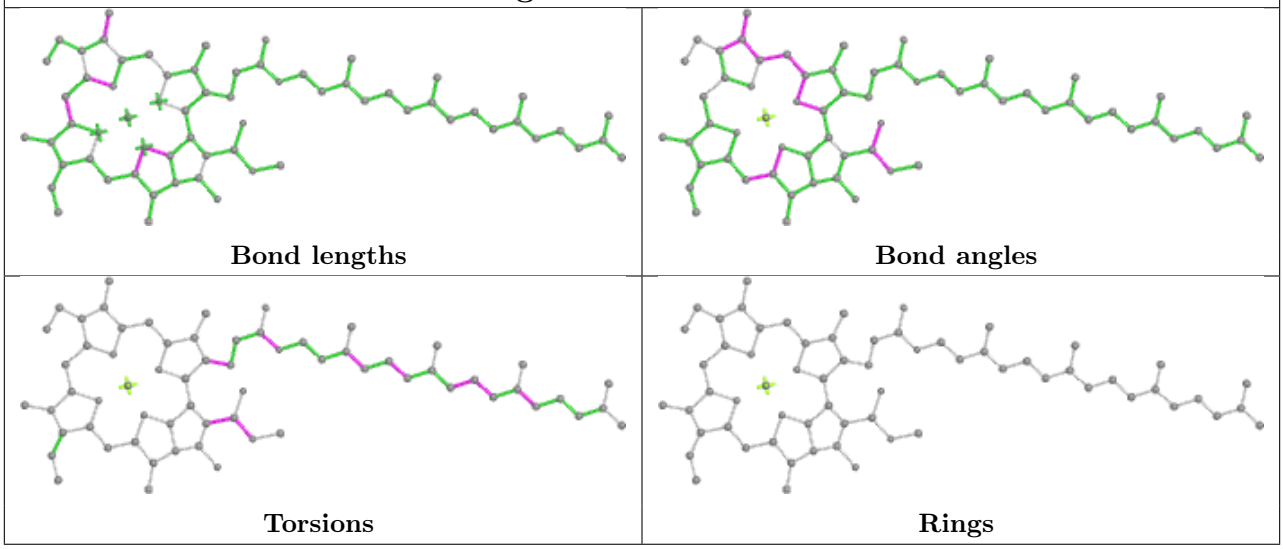
Ligand LMT C1 519



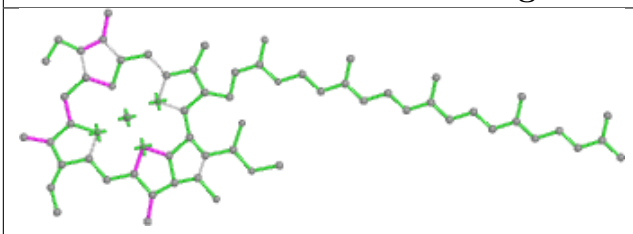
Ligand LHG b2 625



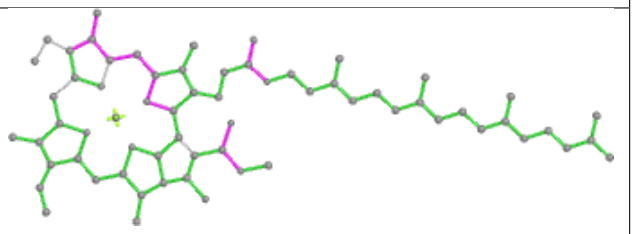
Ligand CLA C2 506



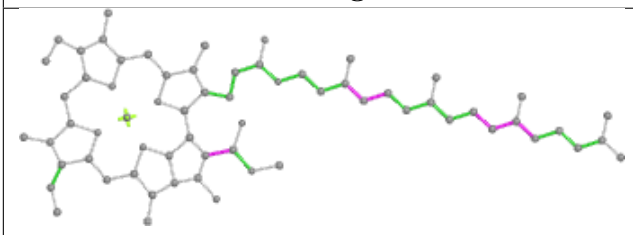
Ligand CLA b2 612



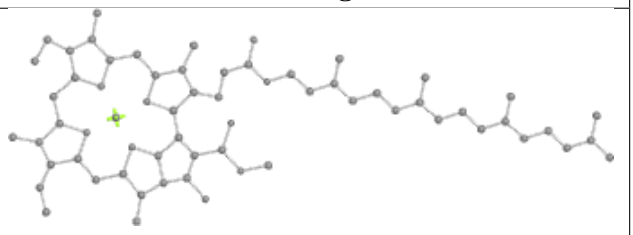
Bond lengths



Bond angles

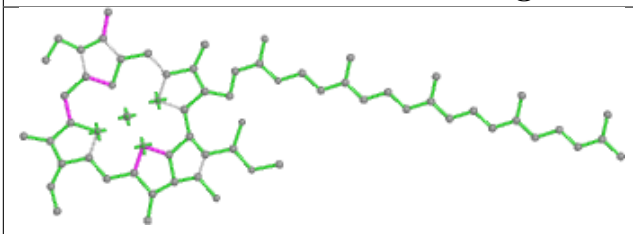


Torsions

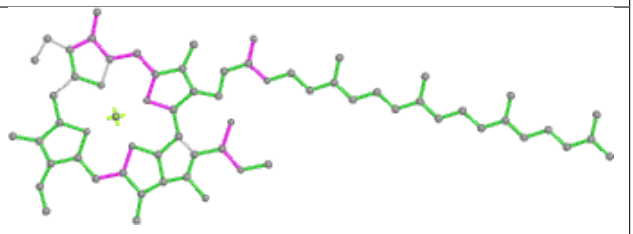


Rings

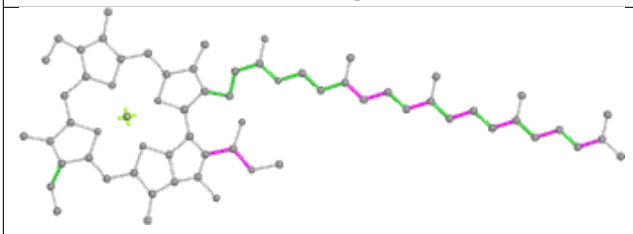
Ligand CLA B1 610



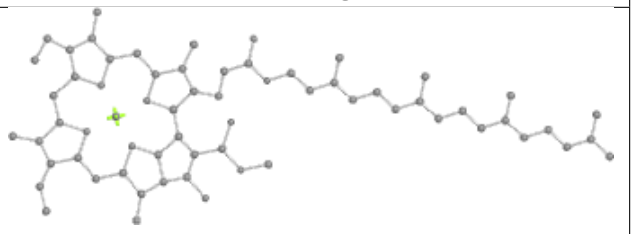
Bond lengths



Bond angles

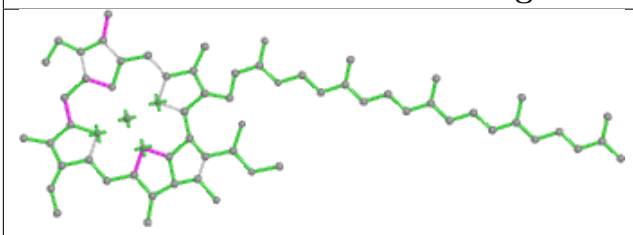


Torsions

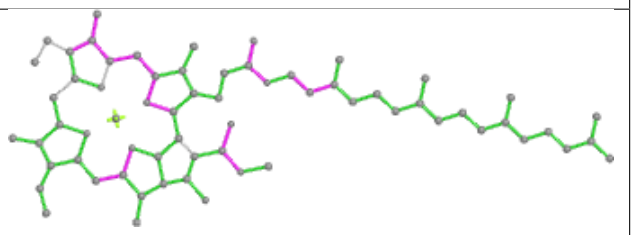


Rings

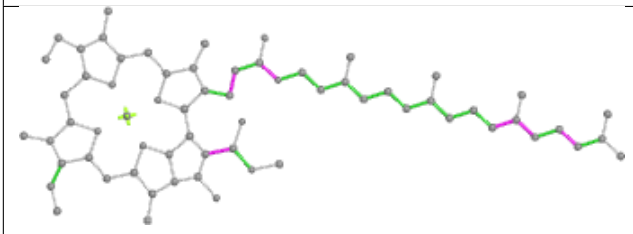
Ligand CLA B2 612



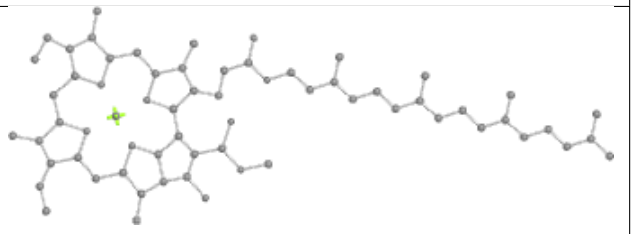
Bond lengths



Bond angles

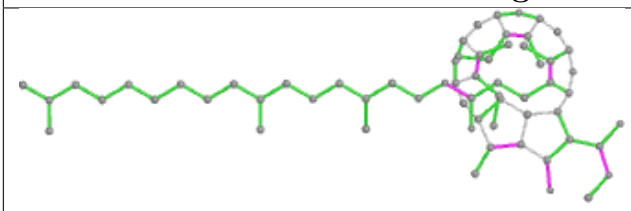


Torsions

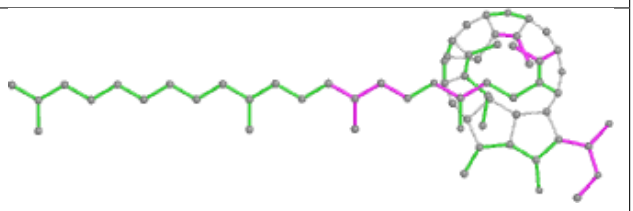


Rings

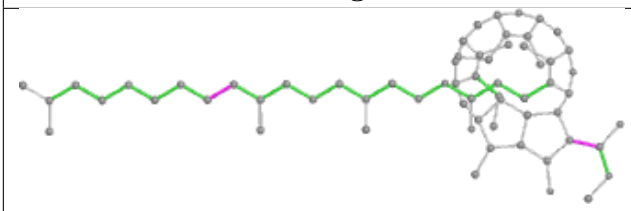
Ligand PHO D1 407



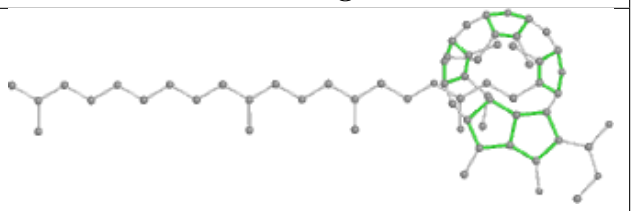
Bond lengths



Bond angles

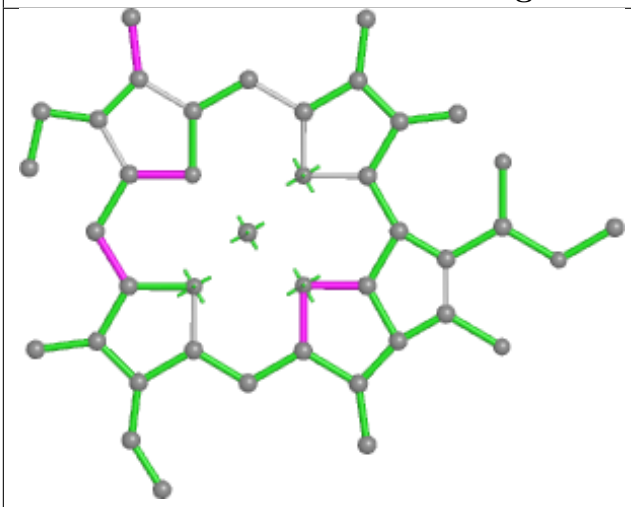


Torsions

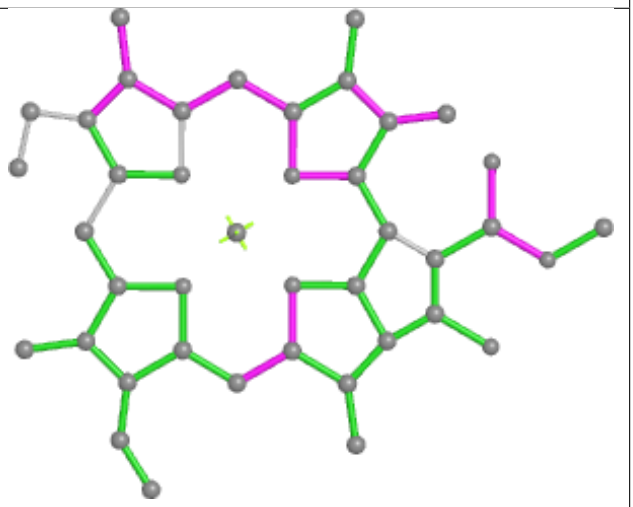


Rings

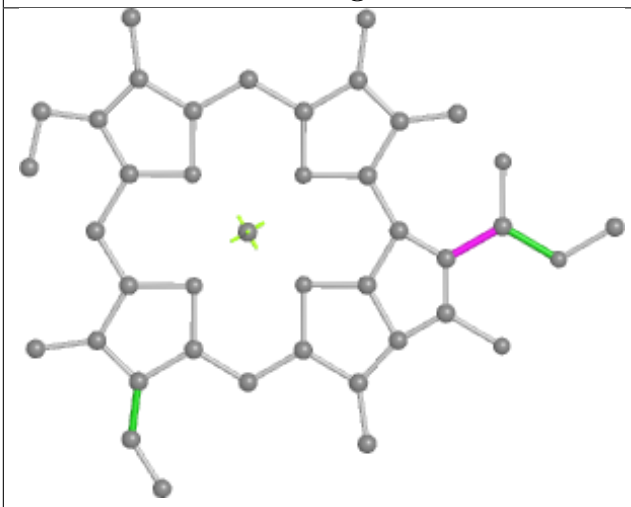
Ligand CLA B2 604



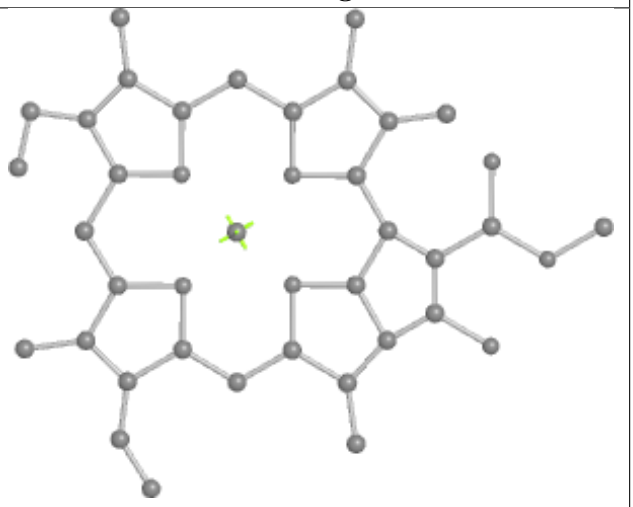
Bond lengths



Bond angles

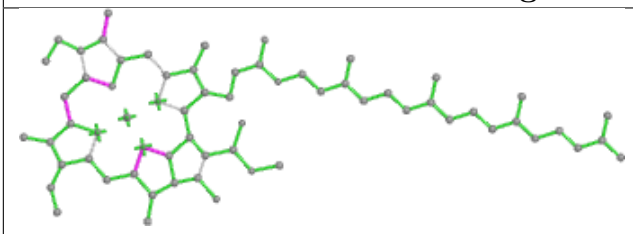


Torsions

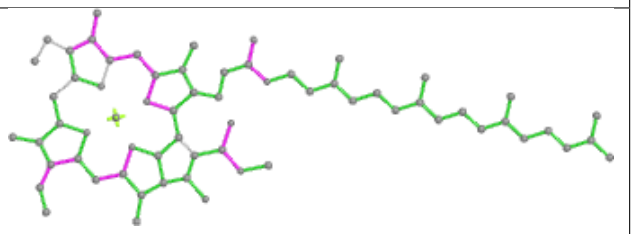


Rings

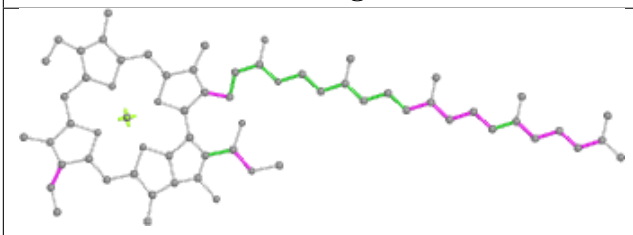
Ligand CLA a2 405



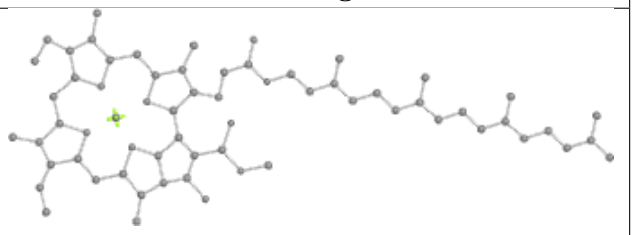
Bond lengths



Bond angles

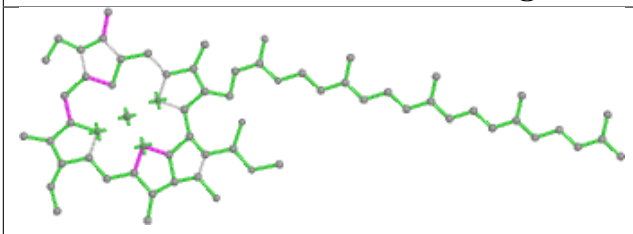


Torsions

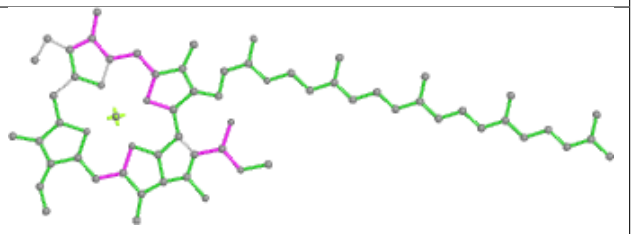


Rings

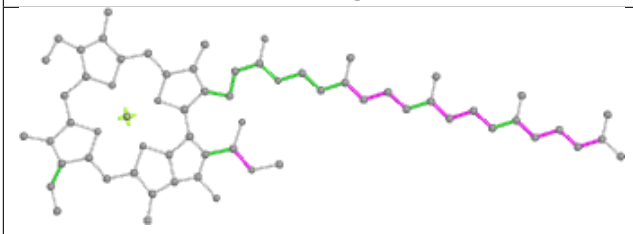
Ligand CLA b1 620



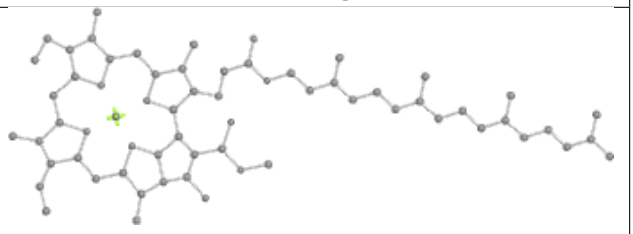
Bond lengths



Bond angles

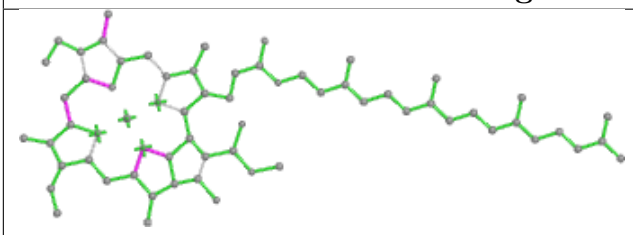


Torsions

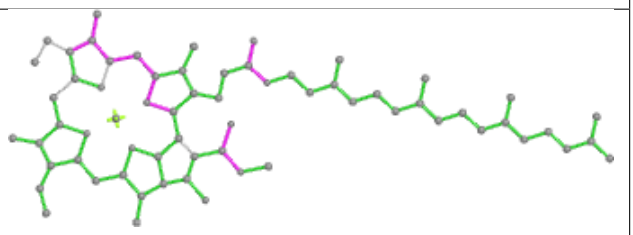


Rings

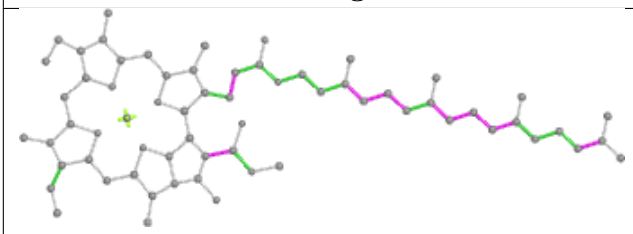
Ligand CLA C2 509



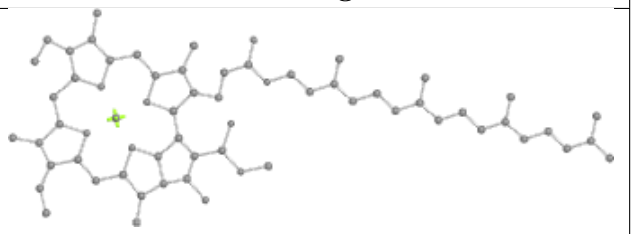
Bond lengths



Bond angles

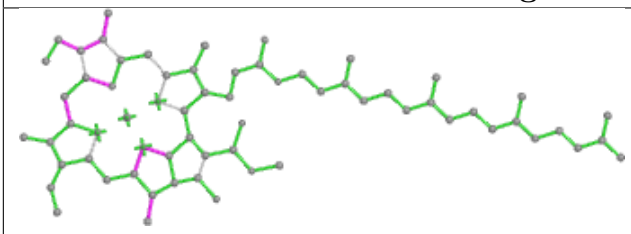


Torsions

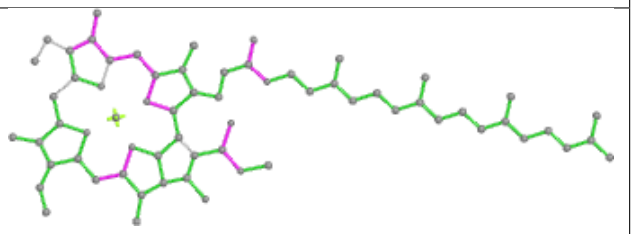


Rings

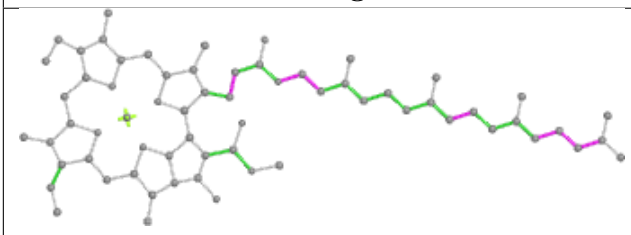
Ligand CLA a2 404



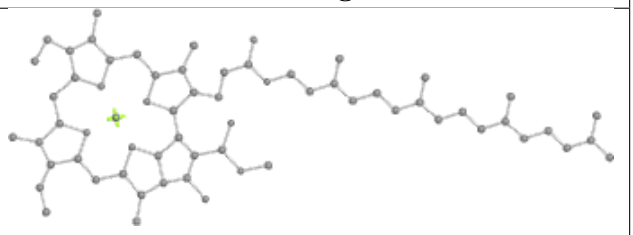
Bond lengths



Bond angles

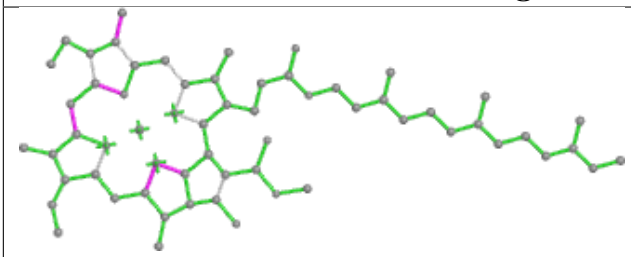


Torsions

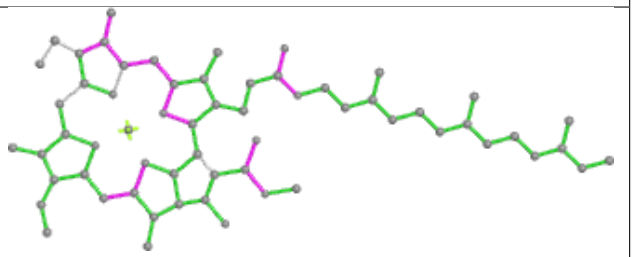


Rings

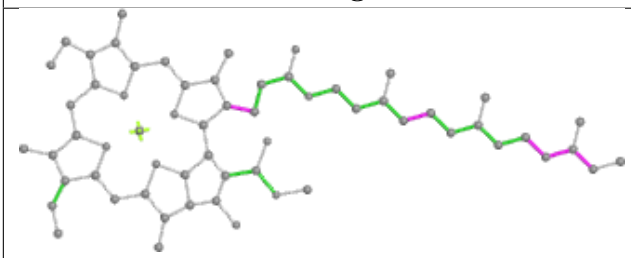
Ligand CLA A2 403



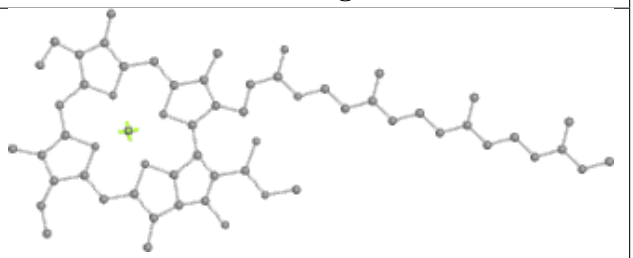
Bond lengths



Bond angles

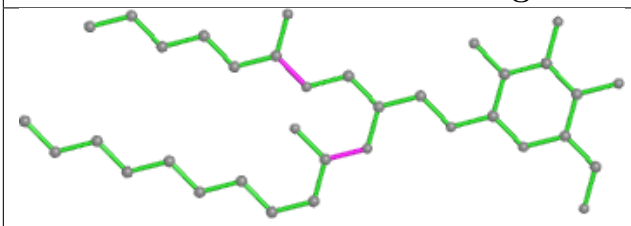


Torsions

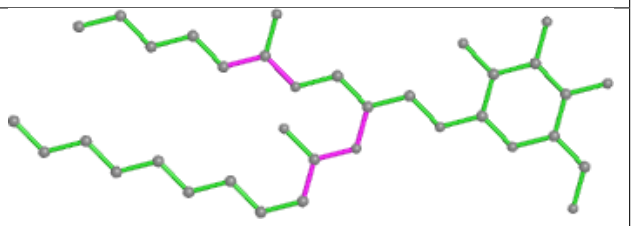


Rings

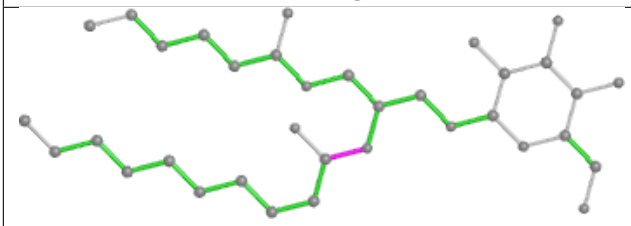
Ligand LMG F2 402



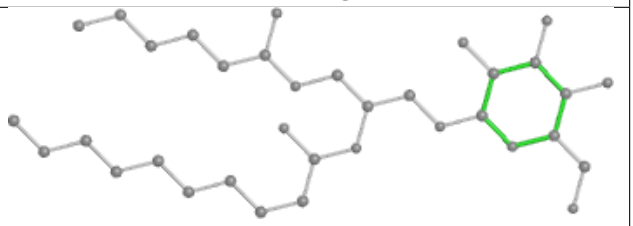
Bond lengths



Bond angles

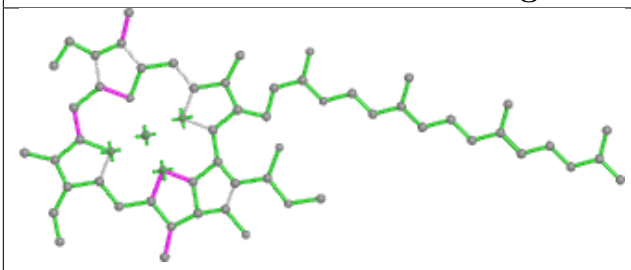


Torsions

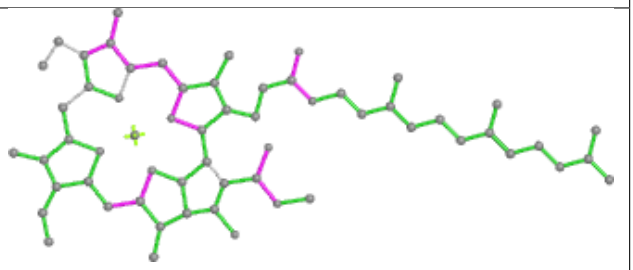


Rings

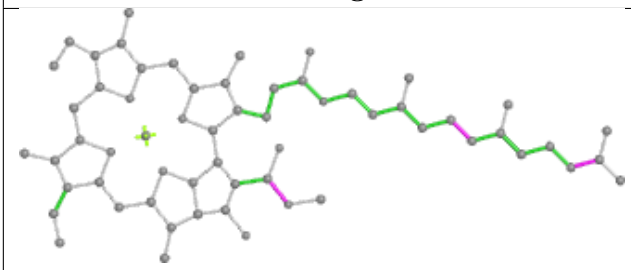
Ligand CLA c1 513



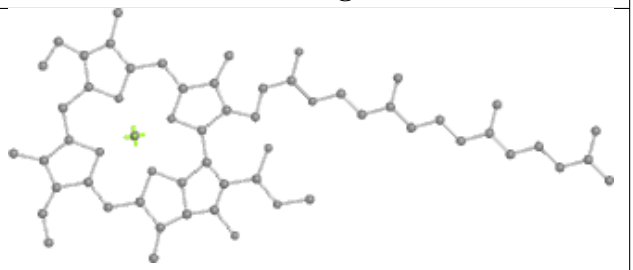
Bond lengths



Bond angles

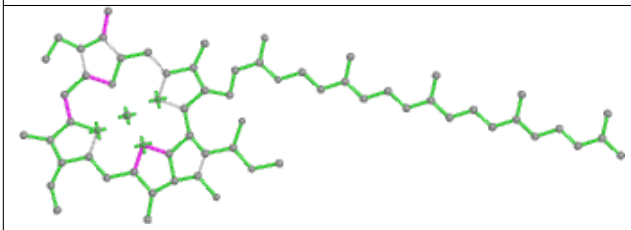


Torsions

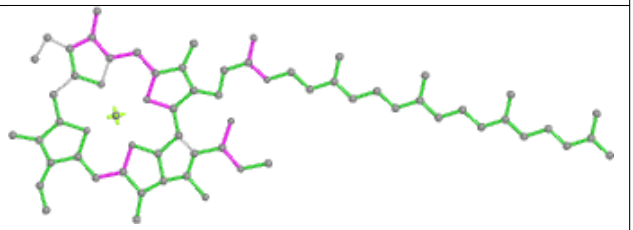


Rings

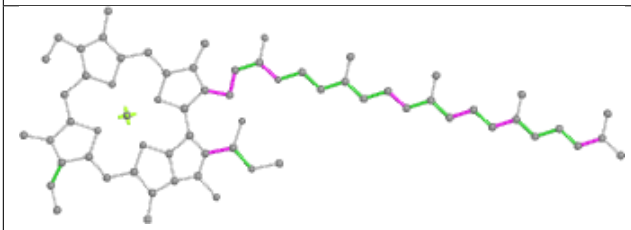
Ligand CLA c1 516



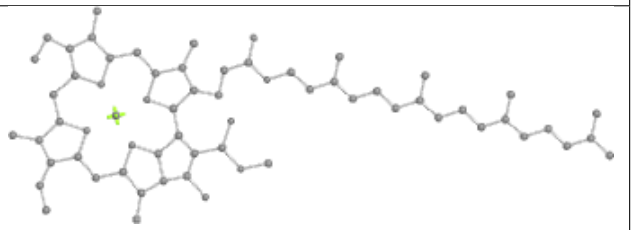
Bond lengths



Bond angles

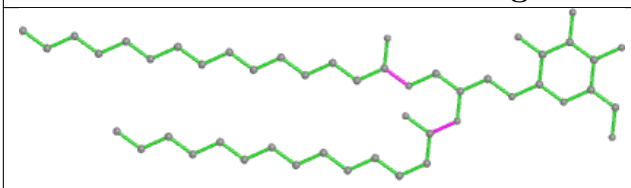


Torsions

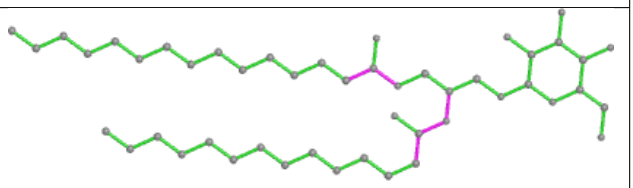


Rings

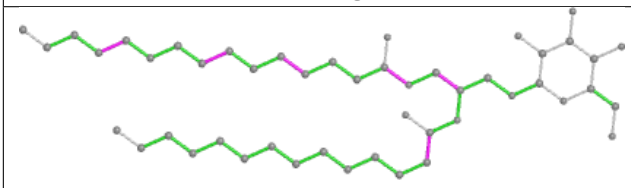
Ligand LMG C1 520



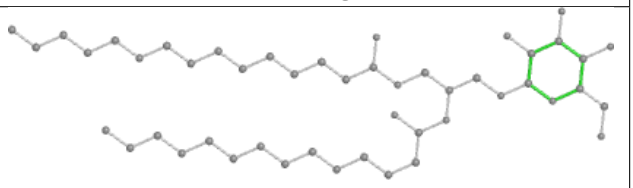
Bond lengths



Bond angles

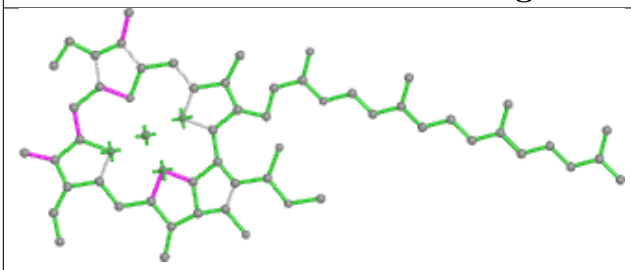


Torsions

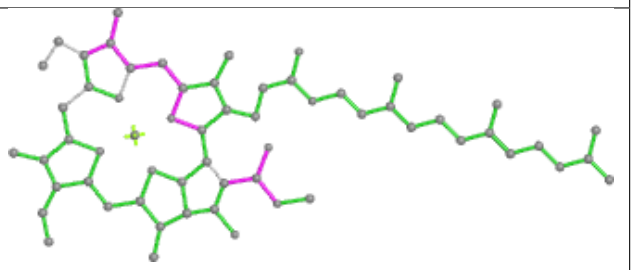


Rings

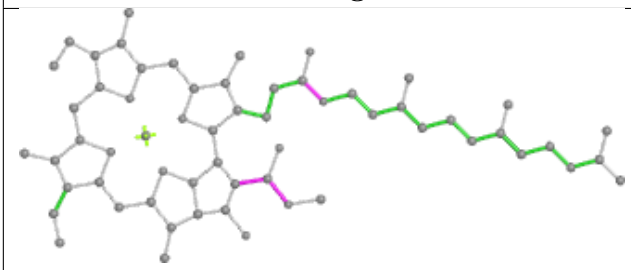
Ligand CLA B2 618



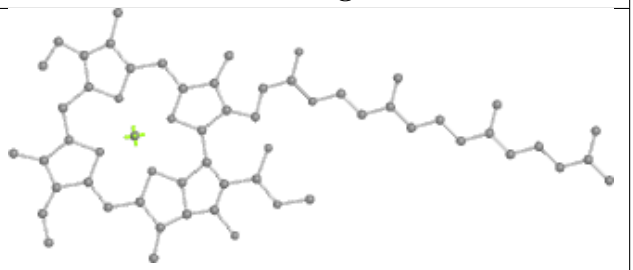
Bond lengths



Bond angles

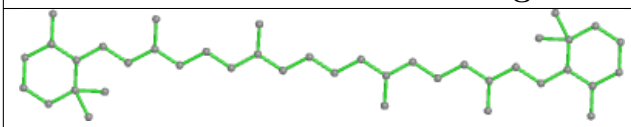


Torsions

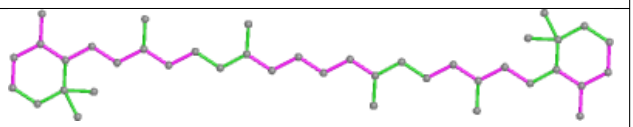


Rings

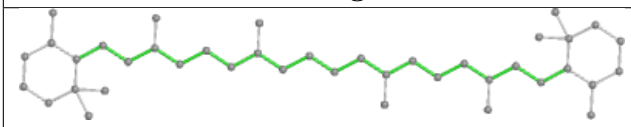
Ligand BCR C1 521



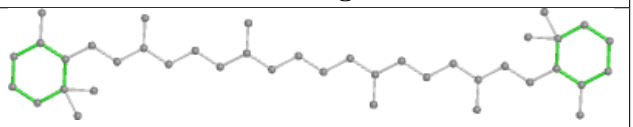
Bond lengths



Bond angles

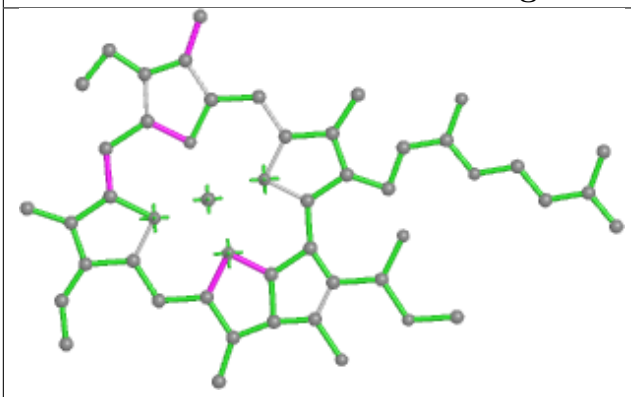


Torsions

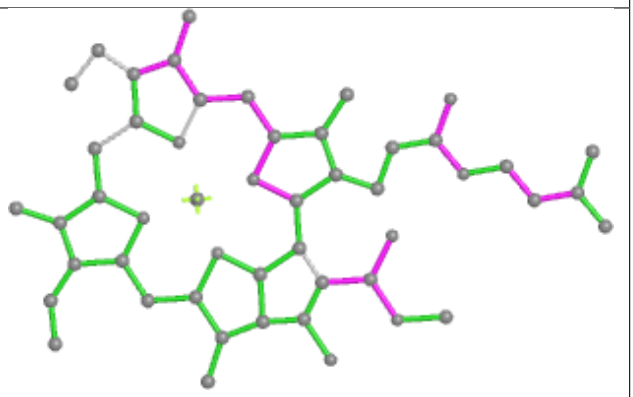


Rings

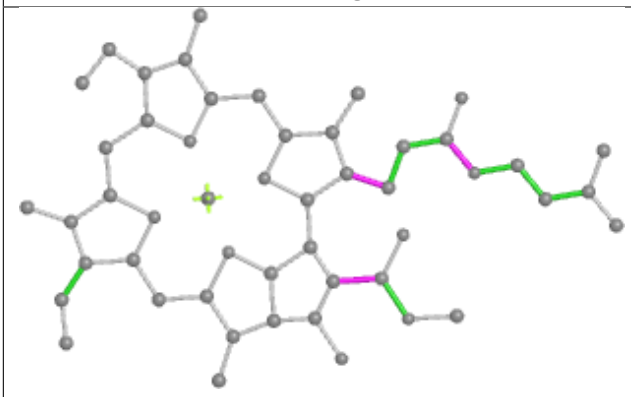
Ligand CLA a1 405



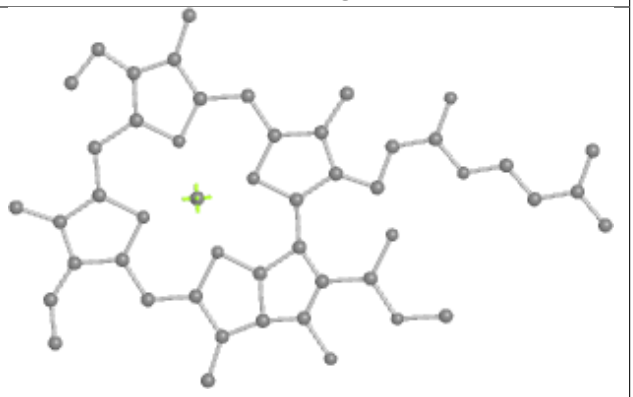
Bond lengths



Bond angles

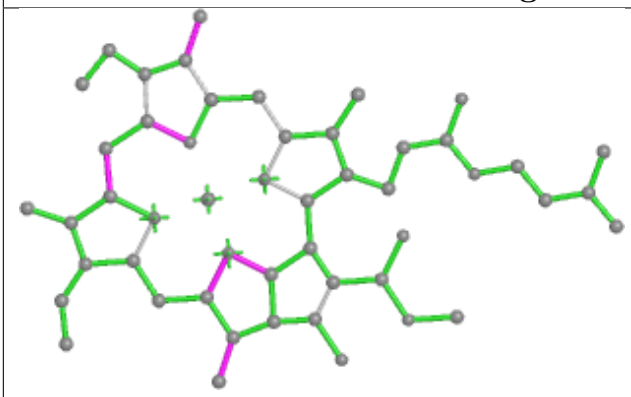


Torsions

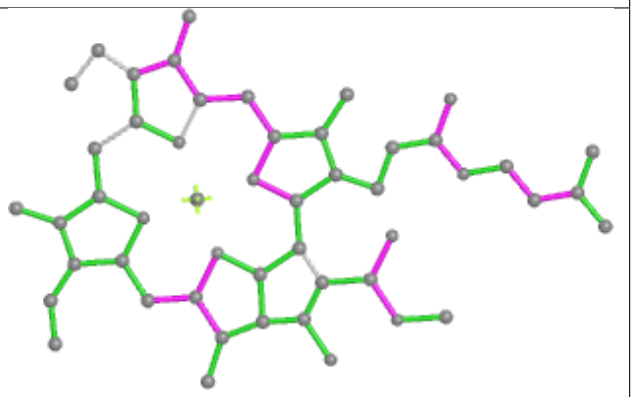


Rings

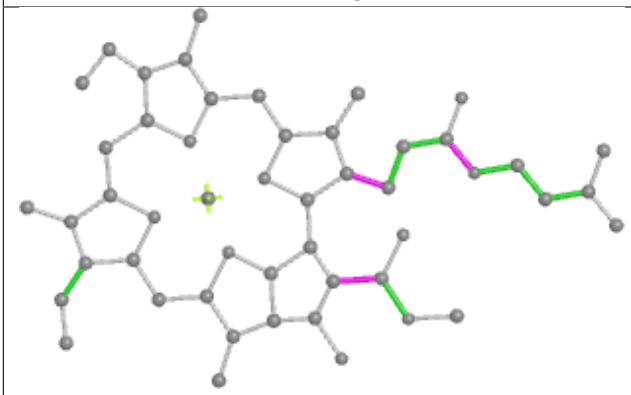
Ligand CLA a2 413



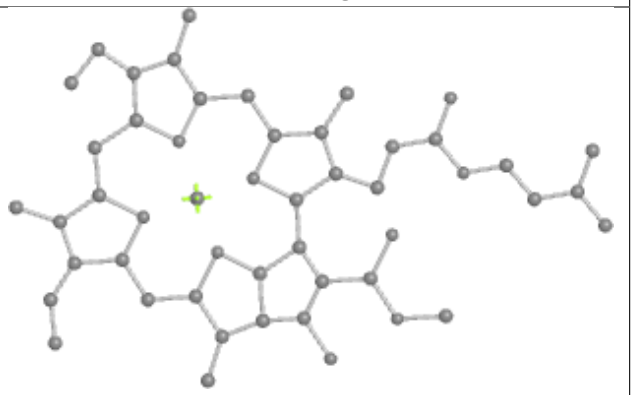
Bond lengths



Bond angles

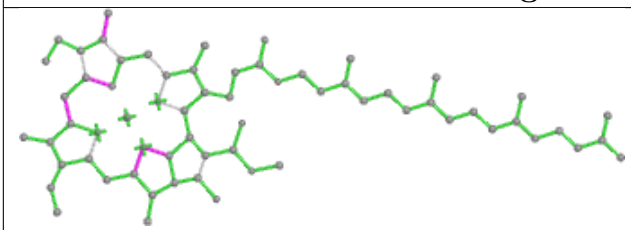


Torsions

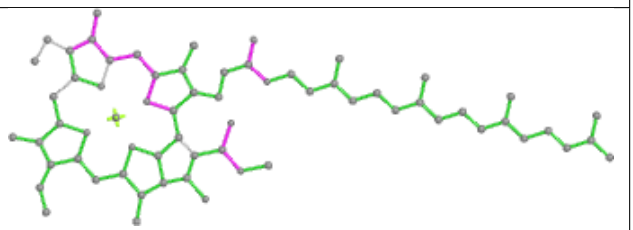


Rings

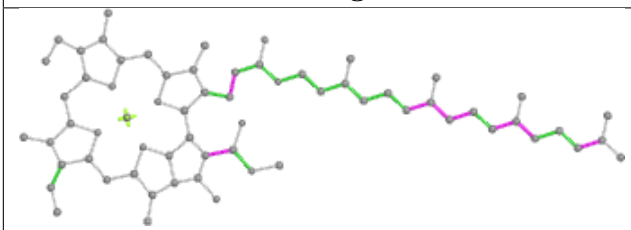
Ligand CLA c2 508



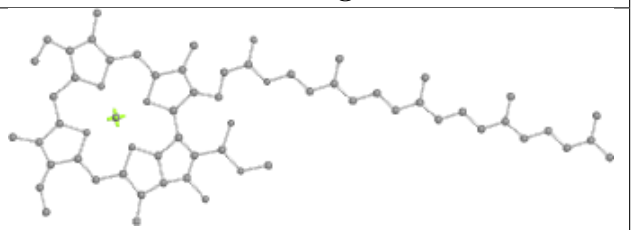
Bond lengths



Bond angles

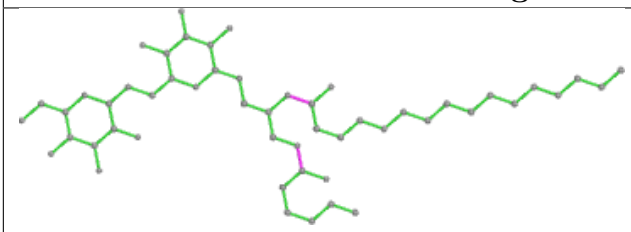


Torsions

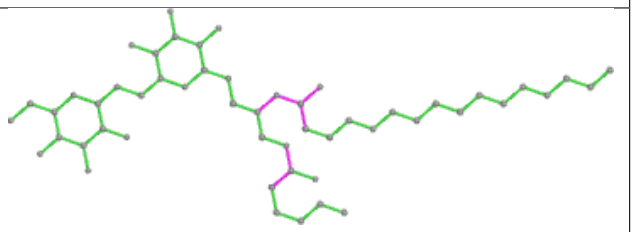


Rings

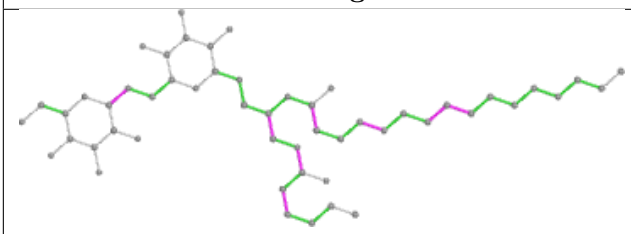
Ligand DGD C1 515



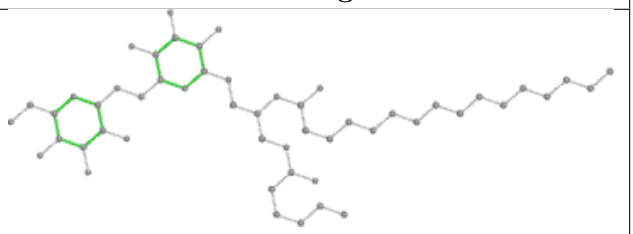
Bond lengths



Bond angles

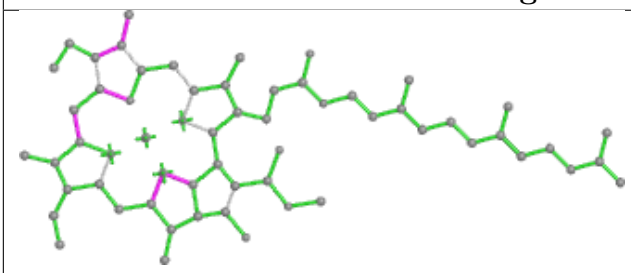


Torsions

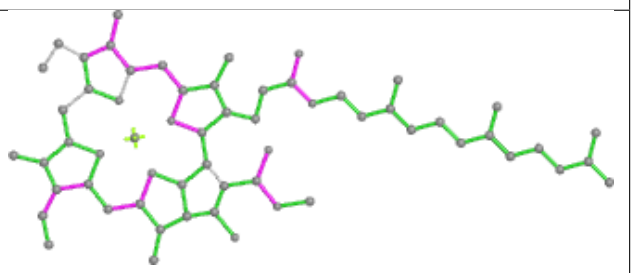


Rings

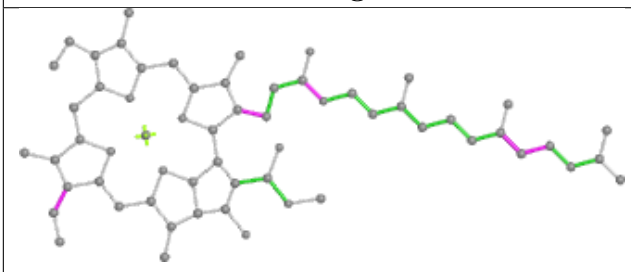
Ligand CLA a1 404



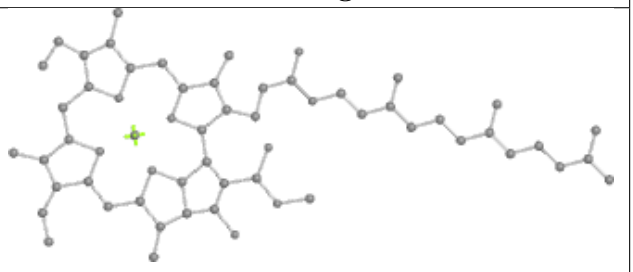
Bond lengths



Bond angles

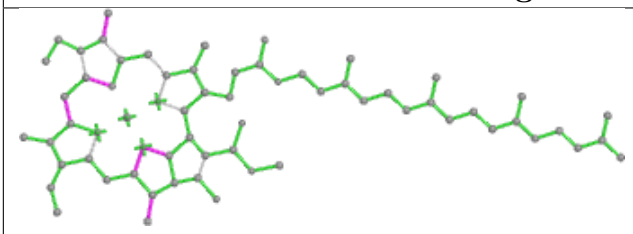


Torsions

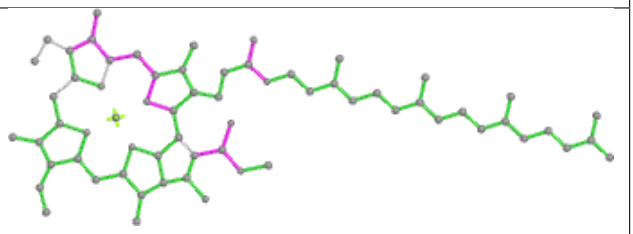


Rings

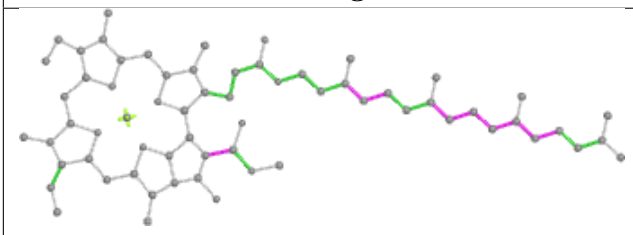
Ligand CLA B2 613



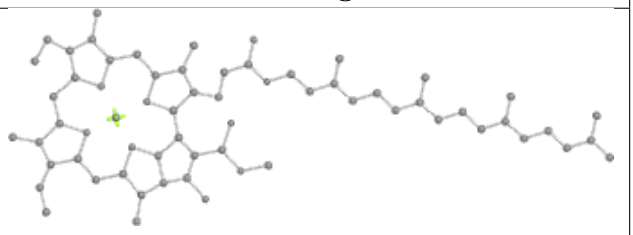
Bond lengths



Bond angles

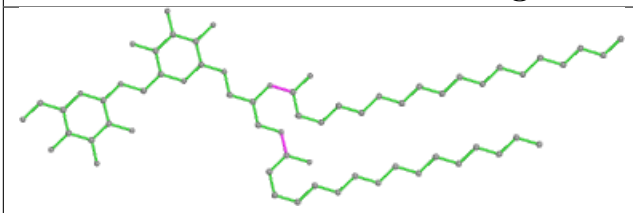


Torsions

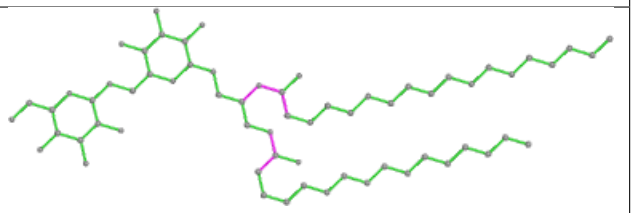


Rings

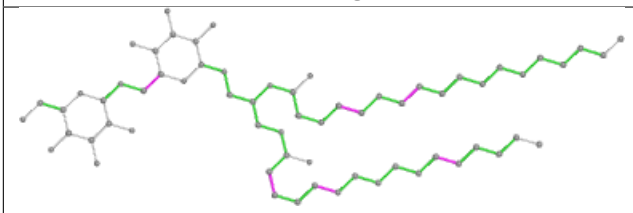
Ligand DGD C1 517



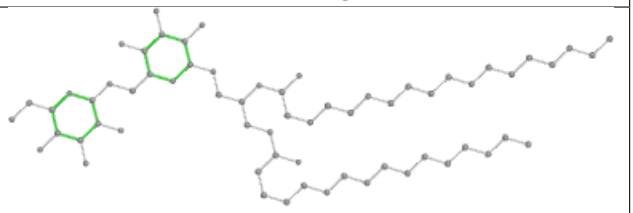
Bond lengths



Bond angles

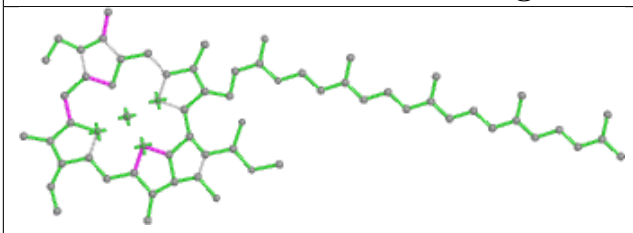


Torsions

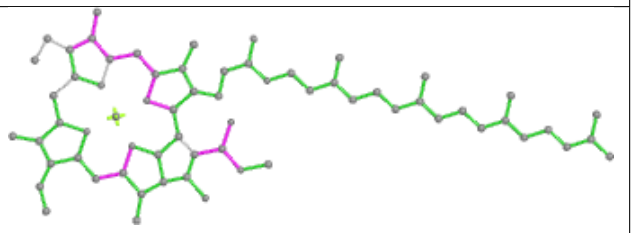


Rings

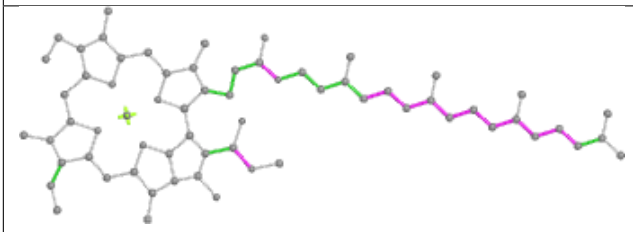
Ligand CLA B2 619



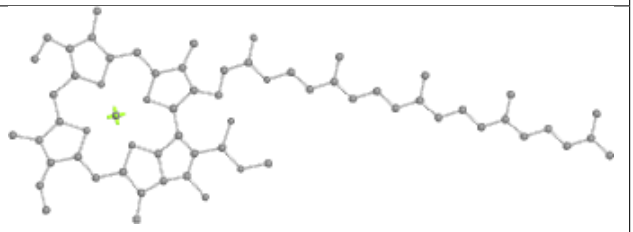
Bond lengths



Bond angles

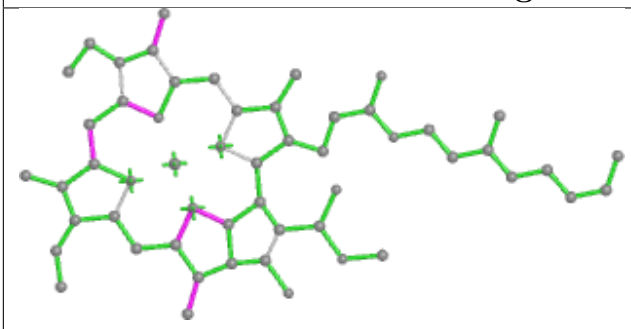


Torsions

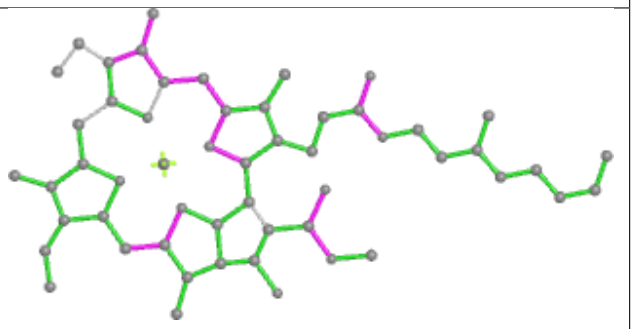


Rings

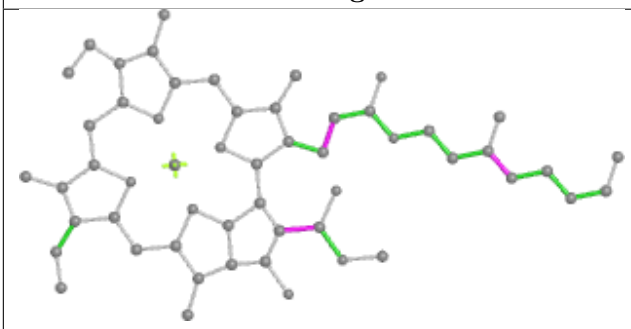
Ligand CLA B2 616



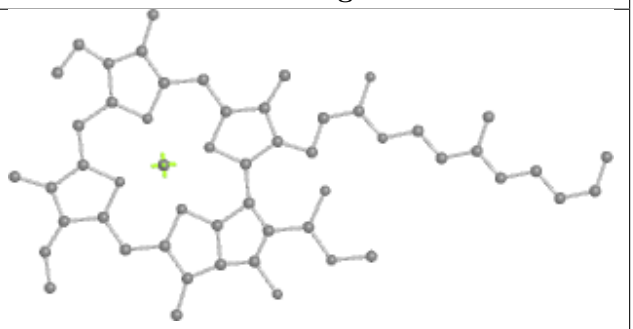
Bond lengths



Bond angles

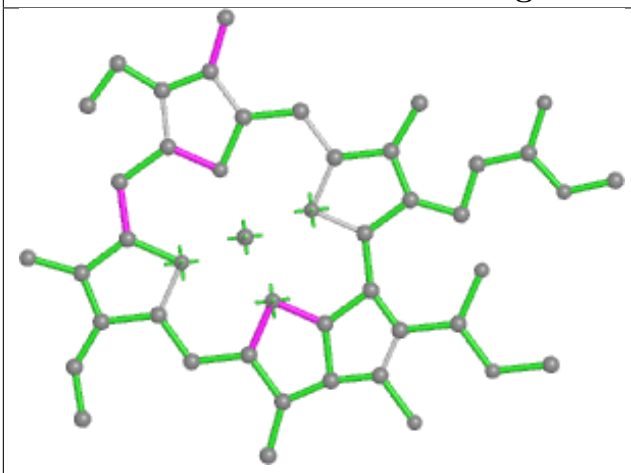


Torsions

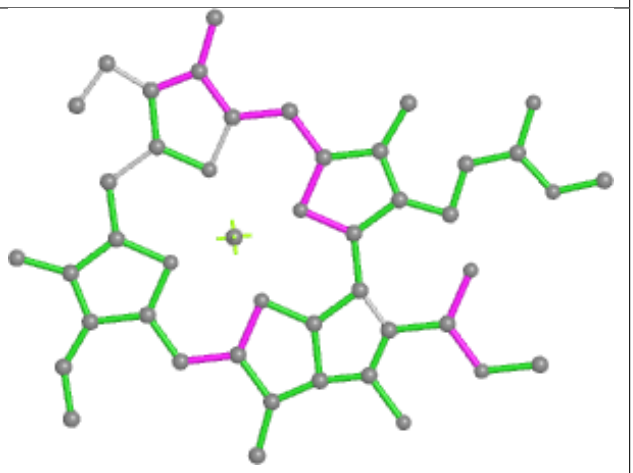


Rings

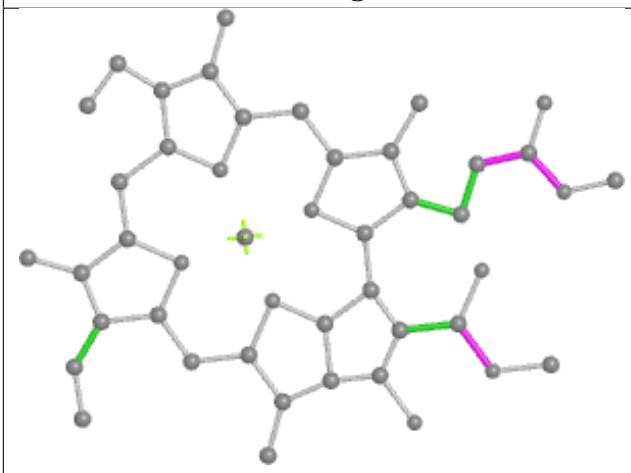
Ligand CLA C2 516



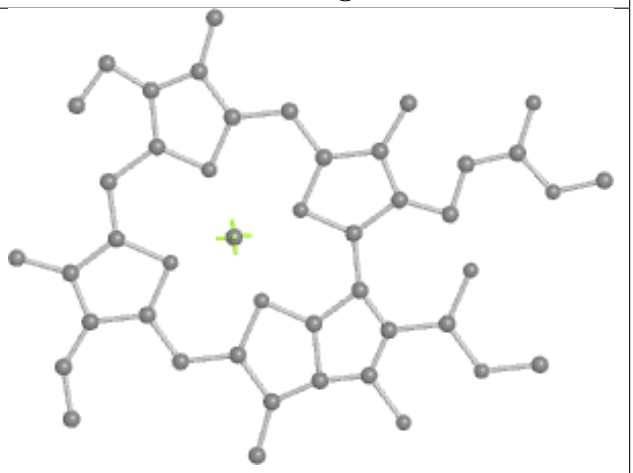
Bond lengths



Bond angles

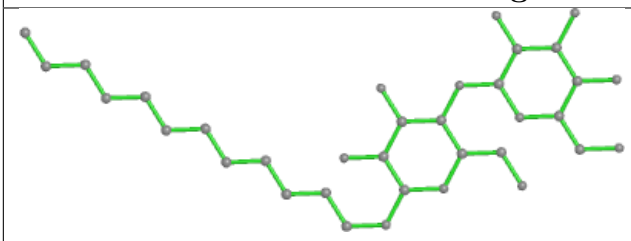


Torsions

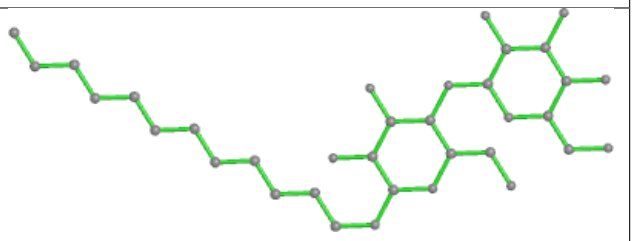


Rings

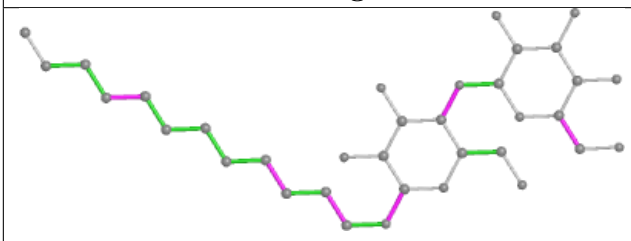
Ligand LMT m1 101



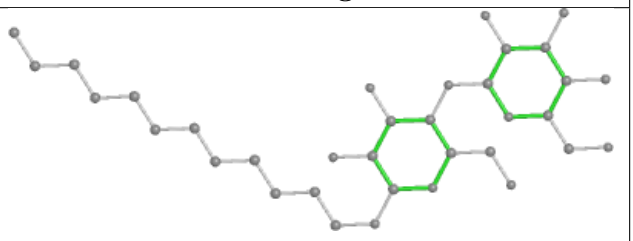
Bond lengths



Bond angles

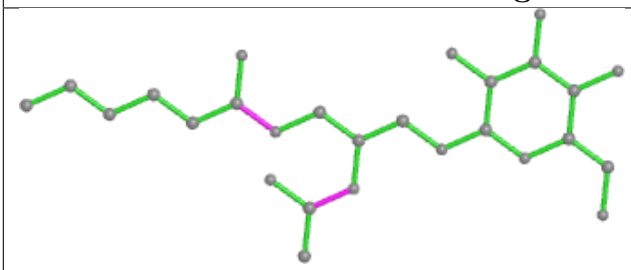


Torsions

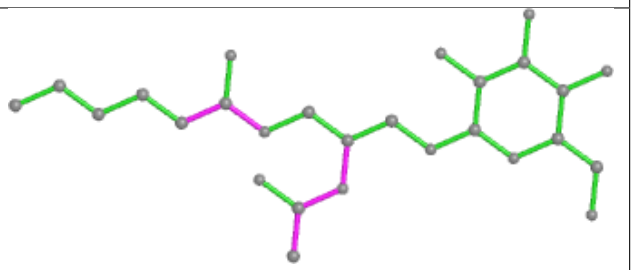


Rings

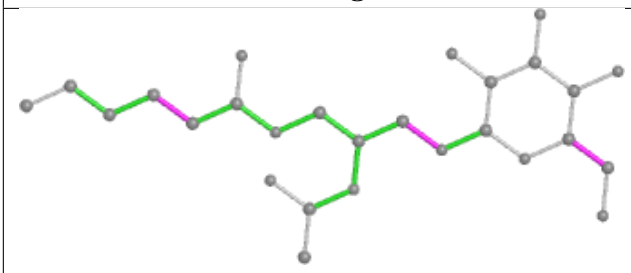
Ligand LMG d2 407



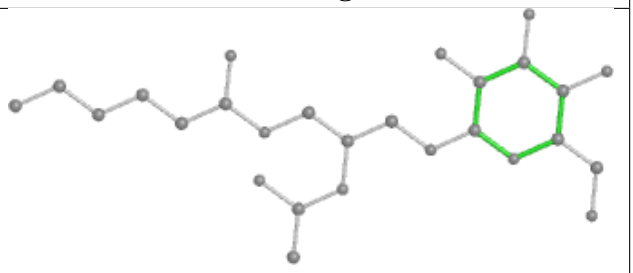
Bond lengths



Bond angles

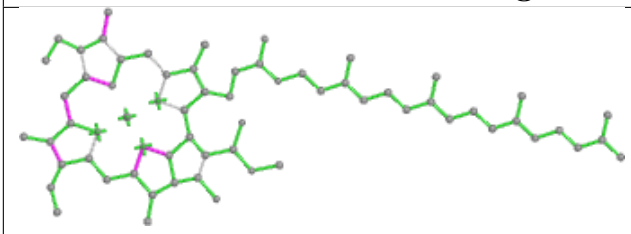


Torsions

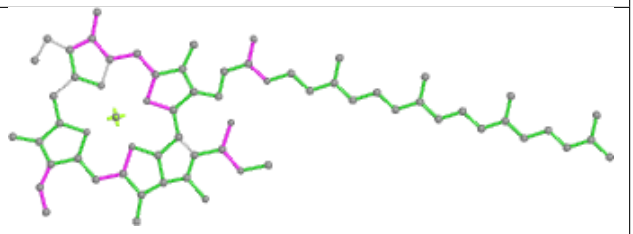


Rings

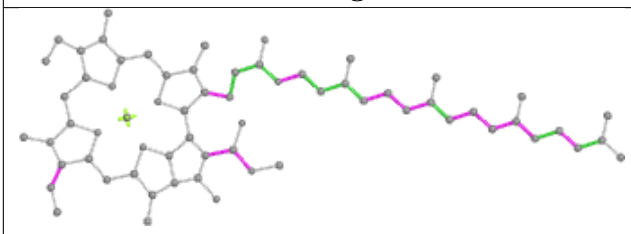
Ligand CLA C1 507



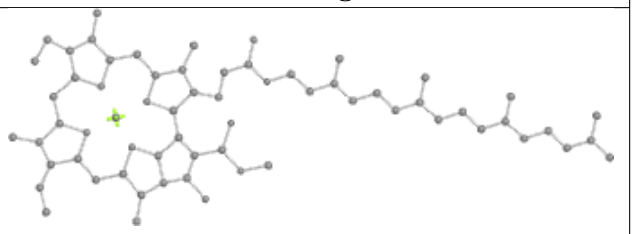
Bond lengths



Bond angles

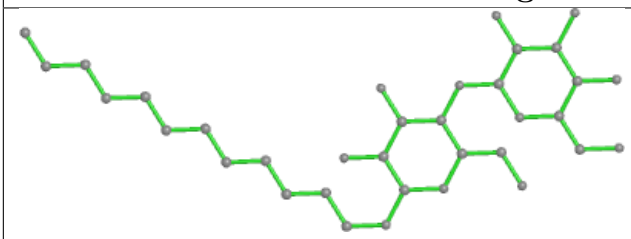


Torsions

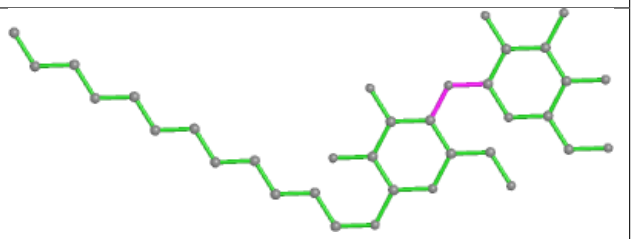


Rings

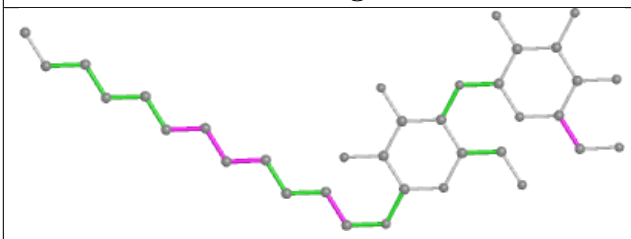
Ligand LMT a2 406



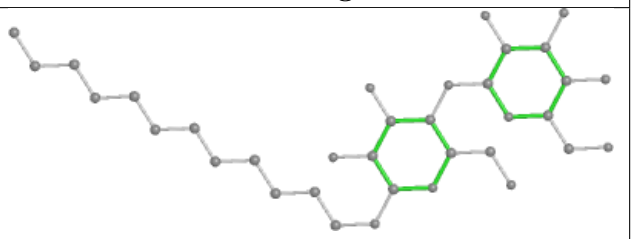
Bond lengths



Bond angles

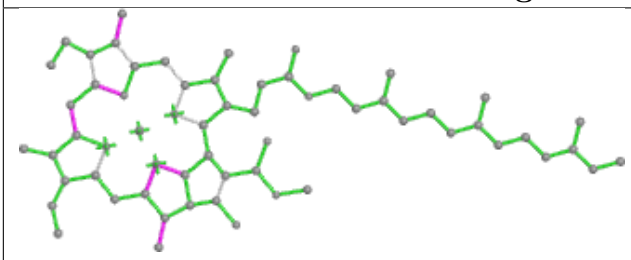


Torsions

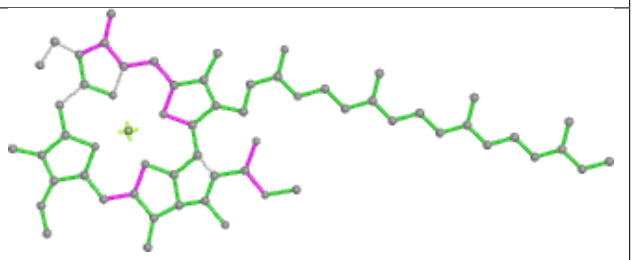


Rings

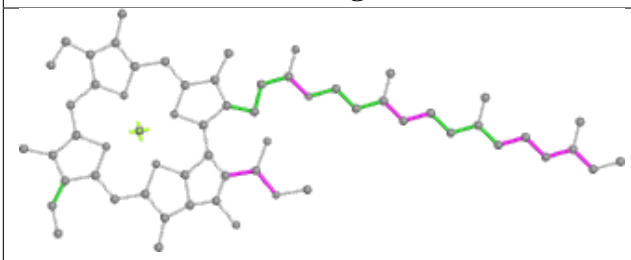
Ligand CLA C1 513



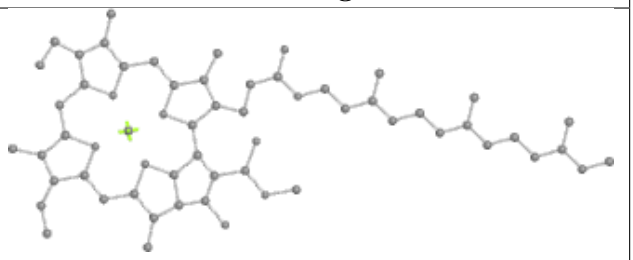
Bond lengths



Bond angles

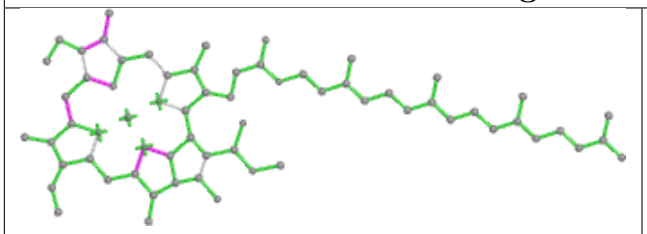


Torsions

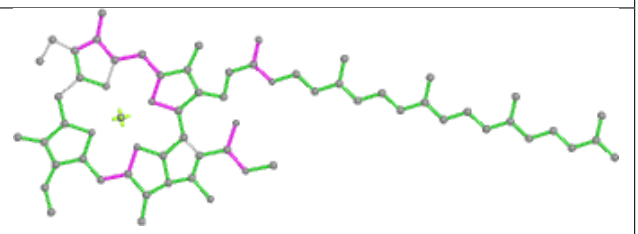


Rings

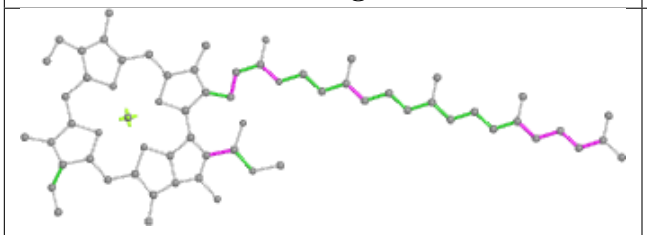
Ligand CLA b1 616



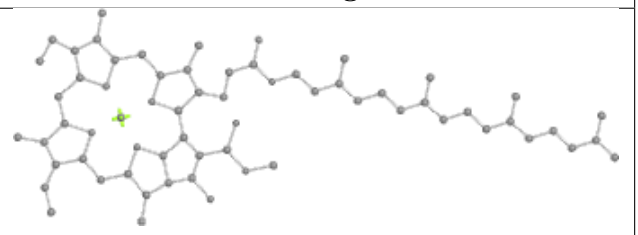
Bond lengths



Bond angles

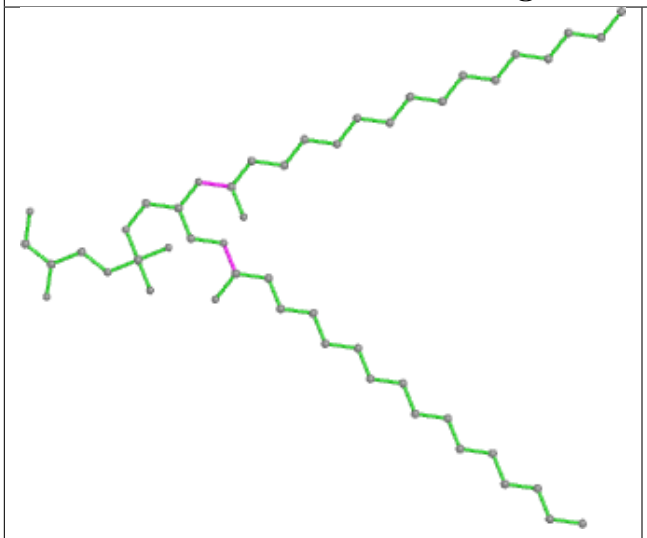


Torsions

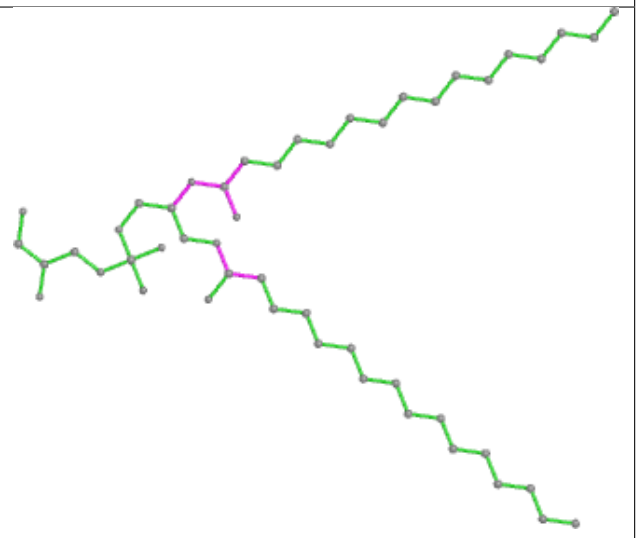


Rings

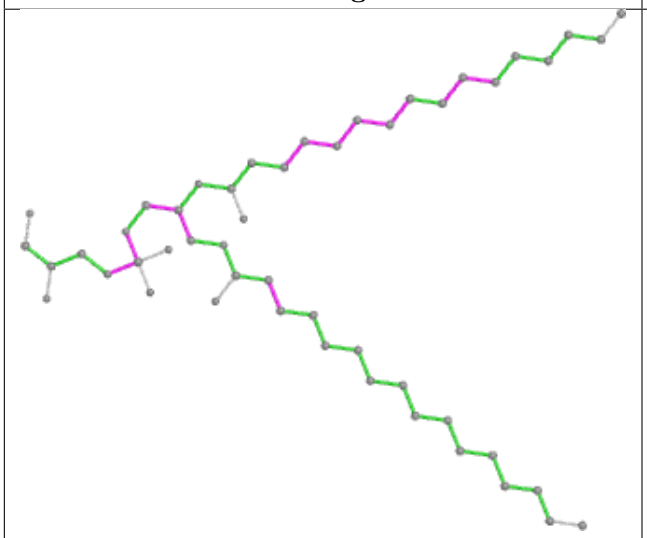
Ligand LHG L2 101



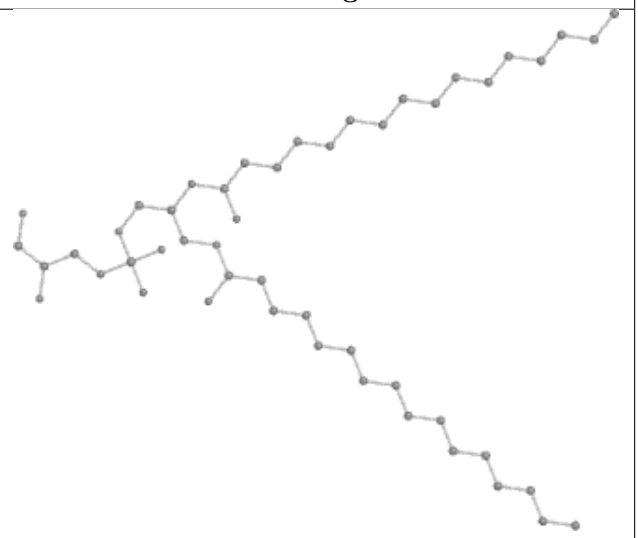
Bond lengths



Bond angles

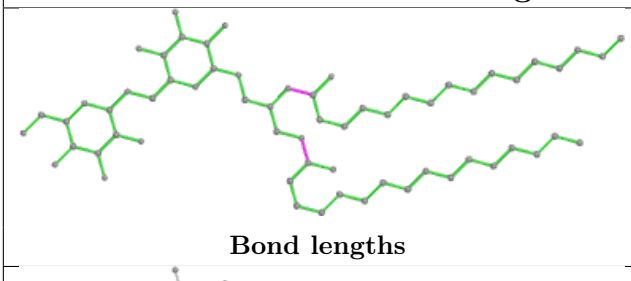


Torsions

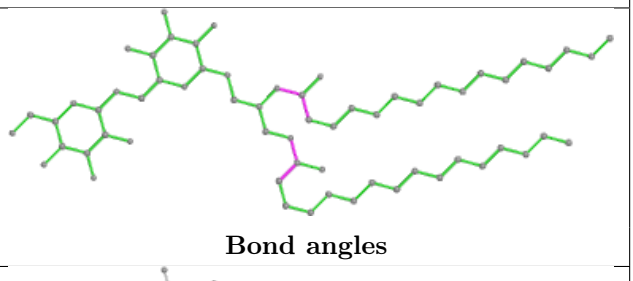


Rings

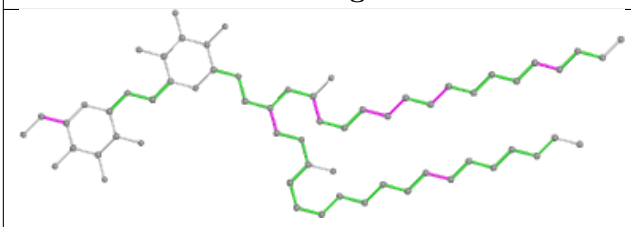
Ligand DGD h2 102



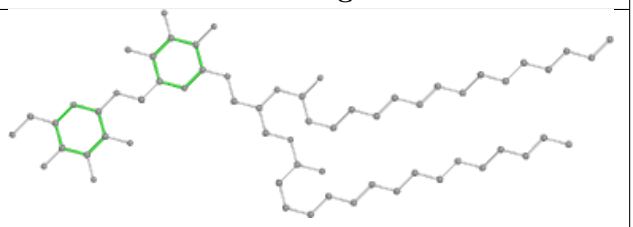
Bond lengths



Bond angles

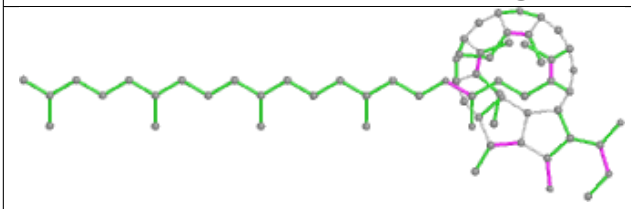


Torsions

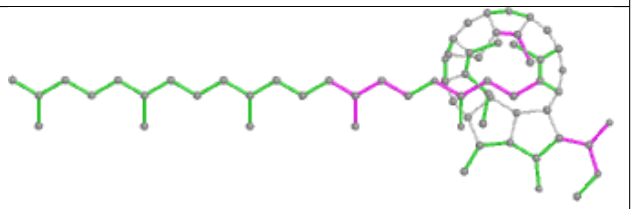


Rings

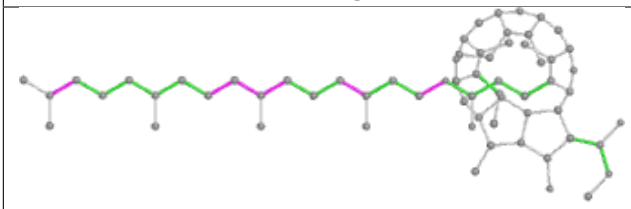
Ligand PHO A2 407



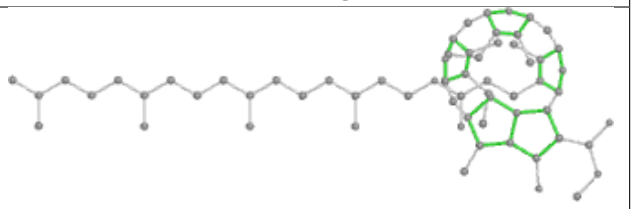
Bond lengths



Bond angles

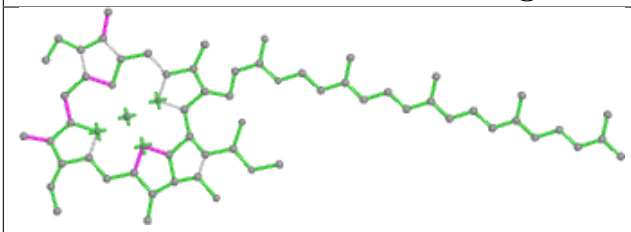


Torsions

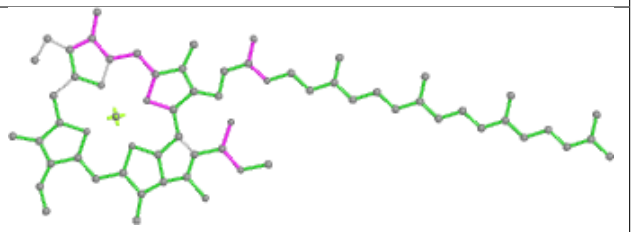


Rings

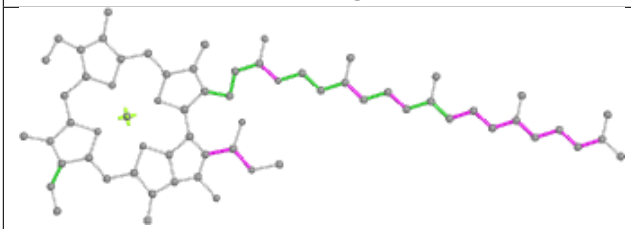
Ligand CLA b1 619



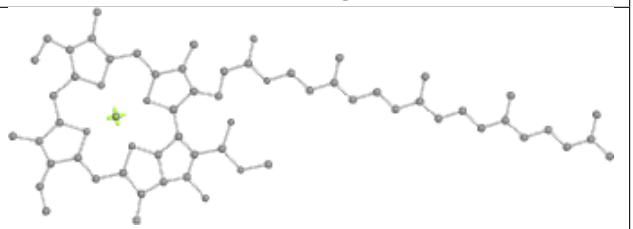
Bond lengths



Bond angles

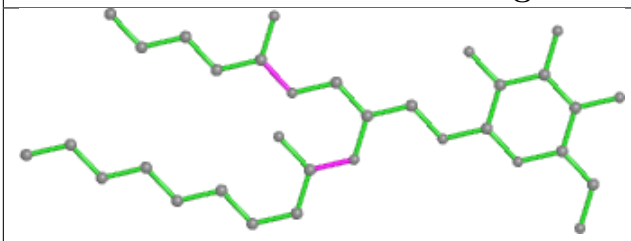


Torsions

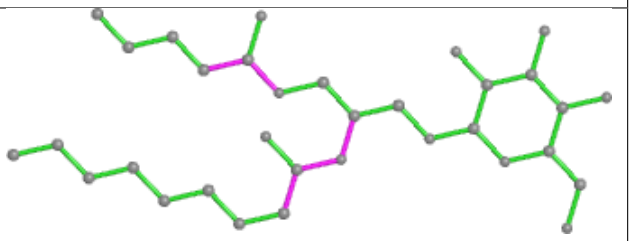


Rings

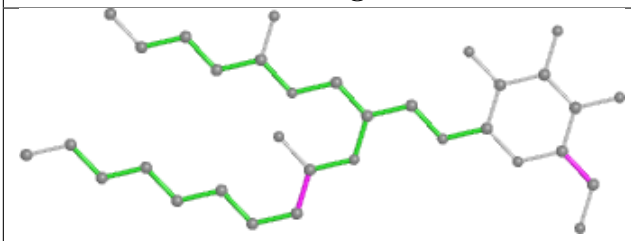
Ligand LMG d1 408



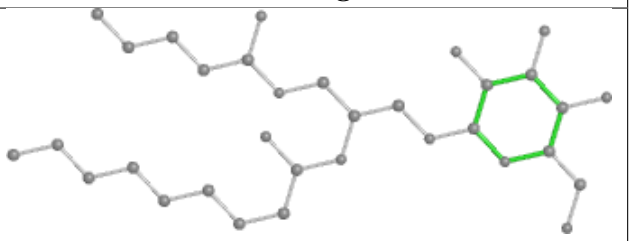
Bond lengths



Bond angles

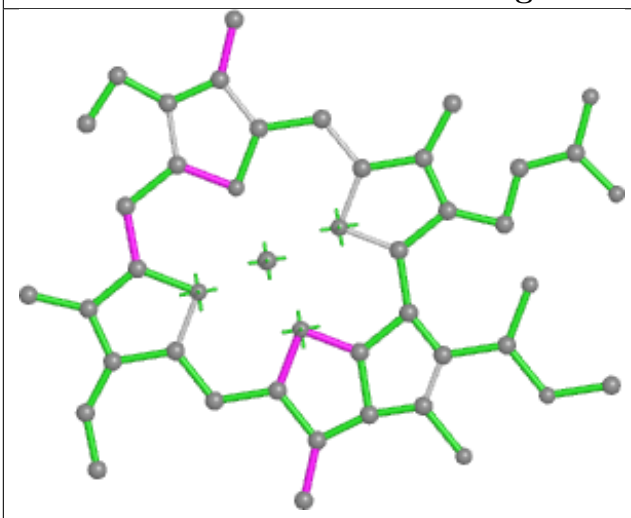


Torsions

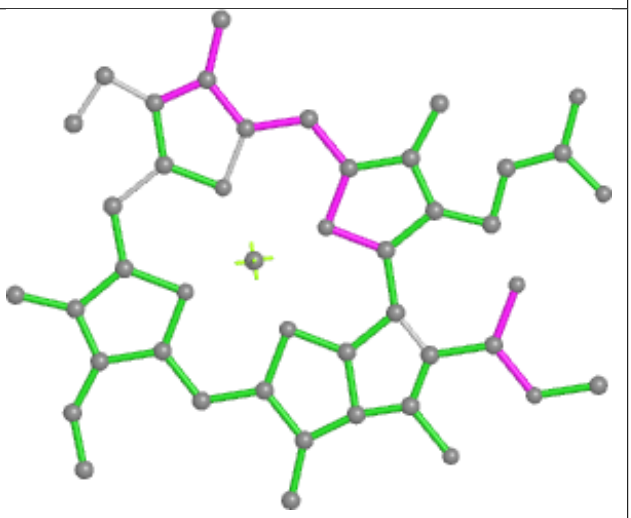


Rings

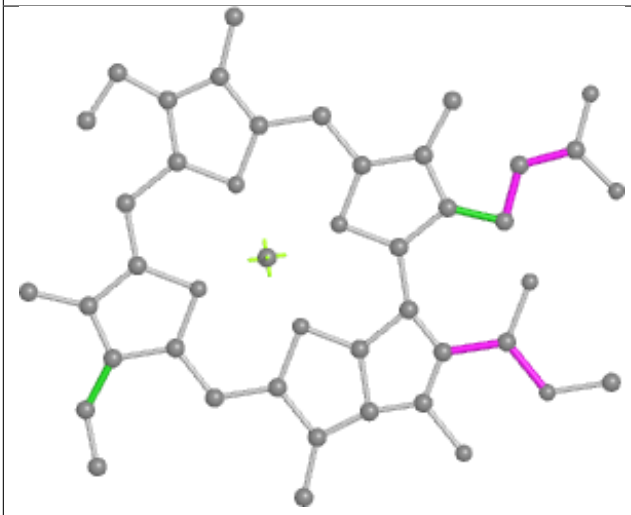
Ligand CLA C2 507



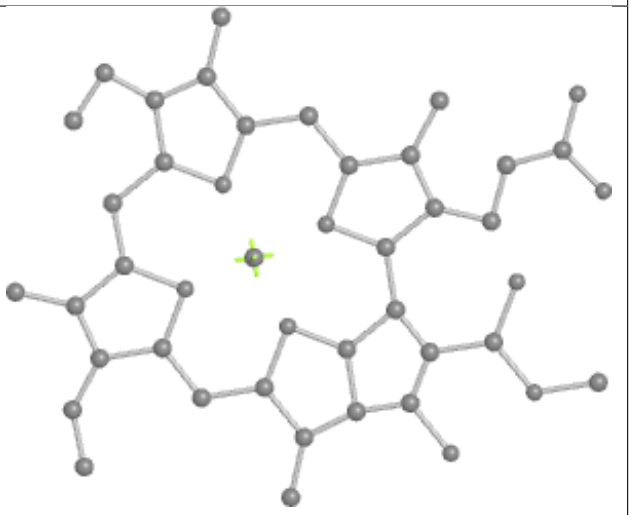
Bond lengths



Bond angles

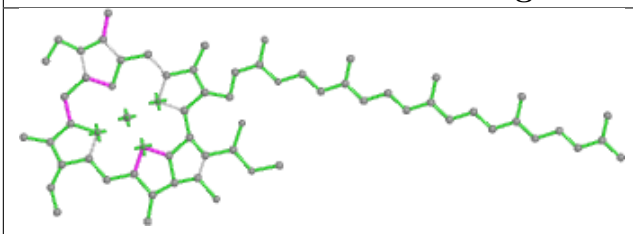


Torsions

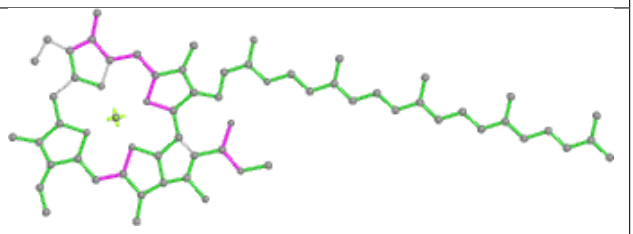


Rings

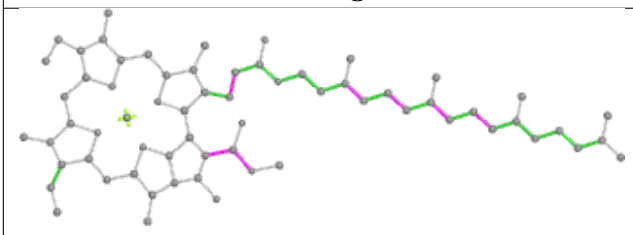
Ligand CLA B2 606



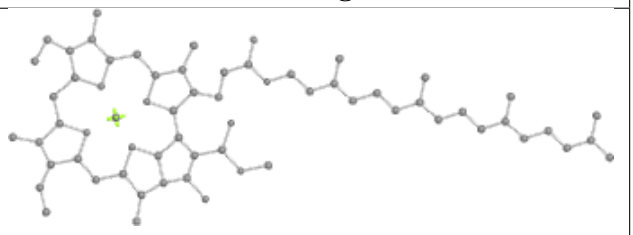
Bond lengths



Bond angles

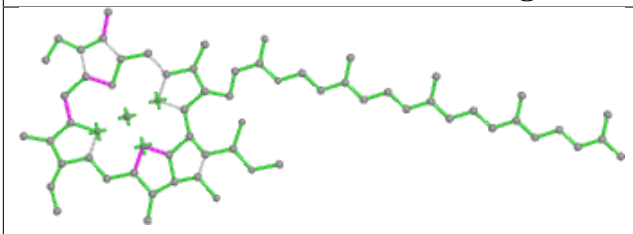


Torsions

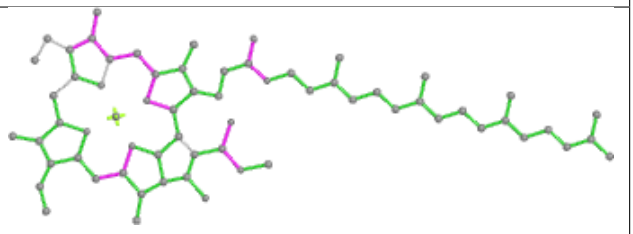


Rings

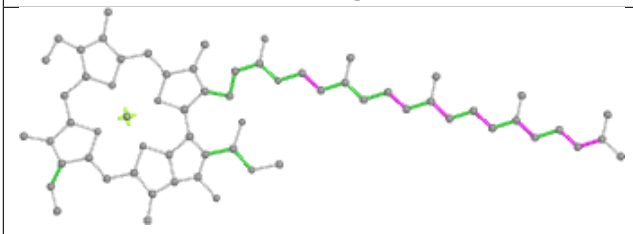
Ligand CLA d2 405



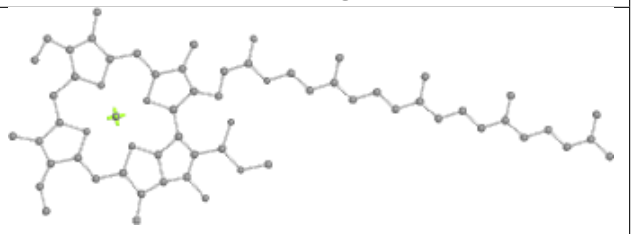
Bond lengths



Bond angles

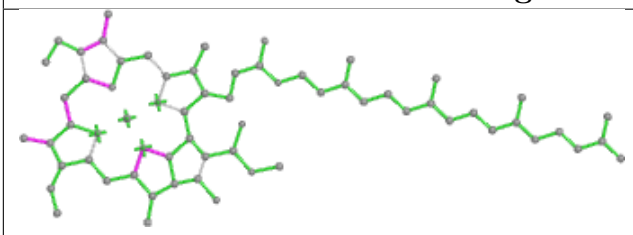


Torsions

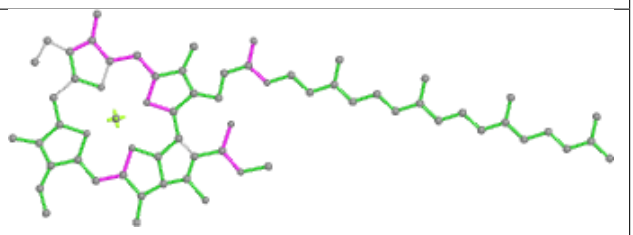


Rings

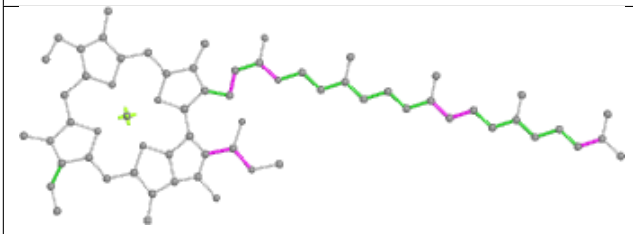
Ligand CLA A2 402



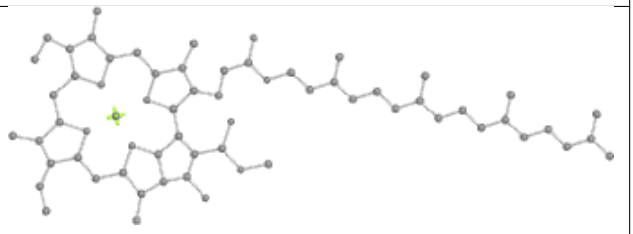
Bond lengths



Bond angles

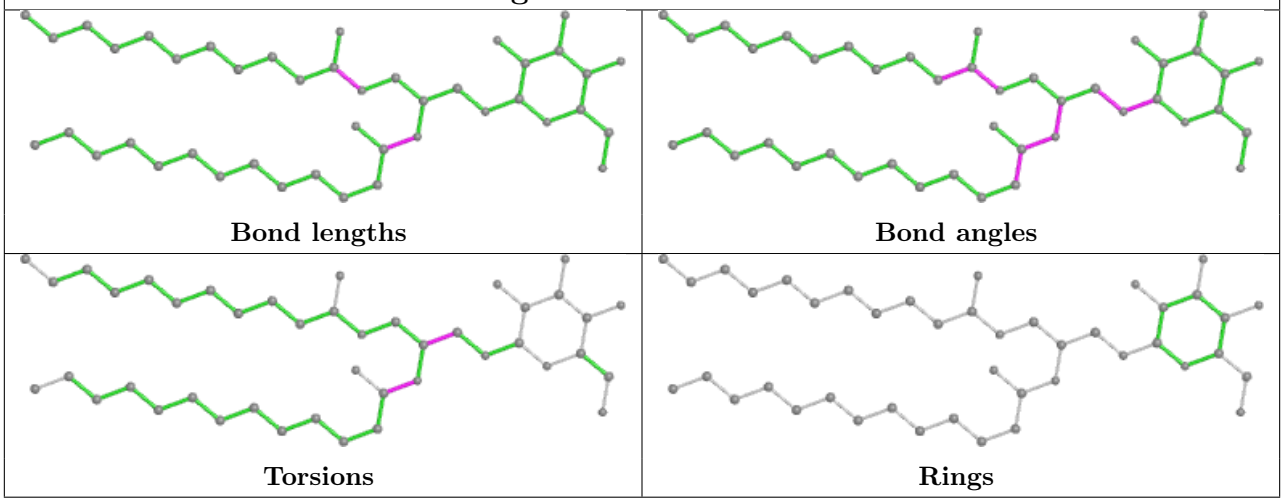


Torsions

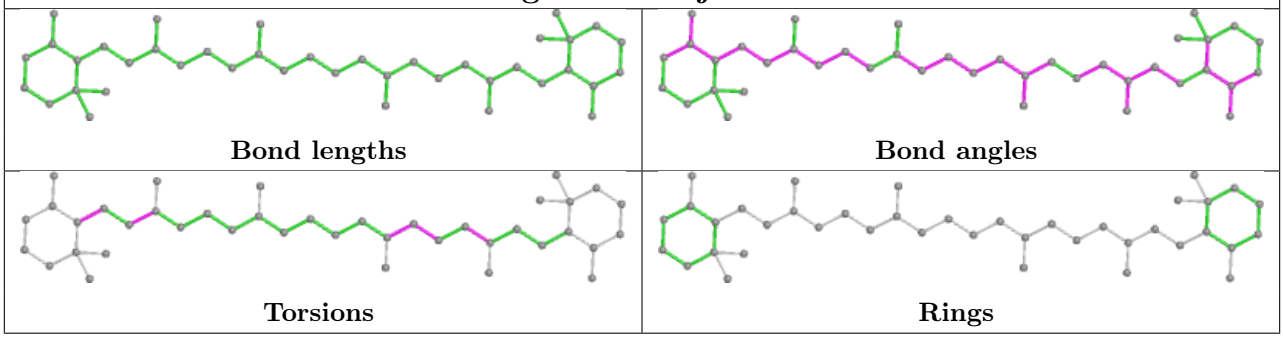


Rings

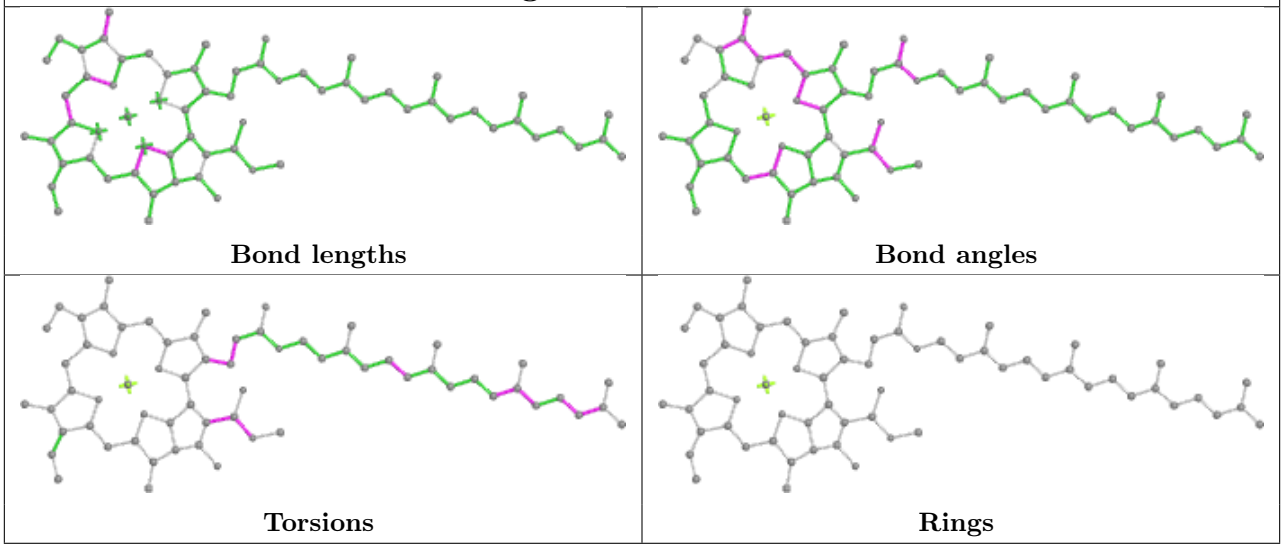
Ligand LMG A1 410



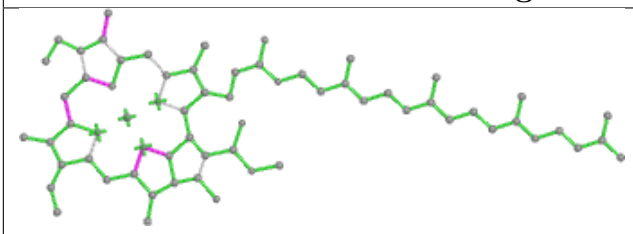
Ligand BCR j2 102



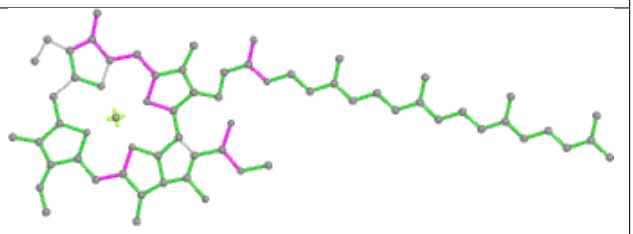
Ligand CLA c2 502



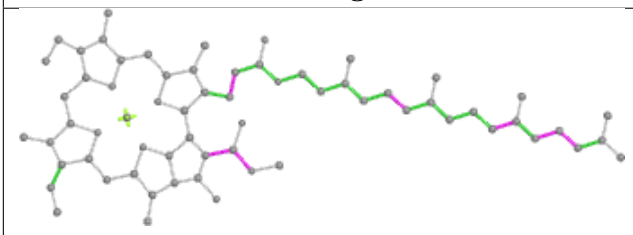
Ligand CLA B1 612



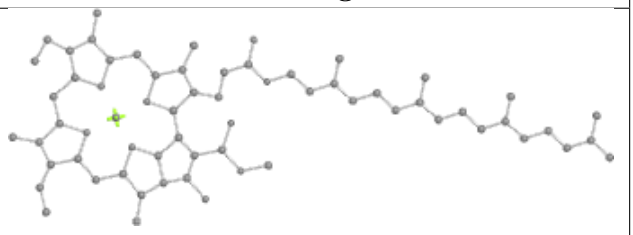
Bond lengths



Bond angles

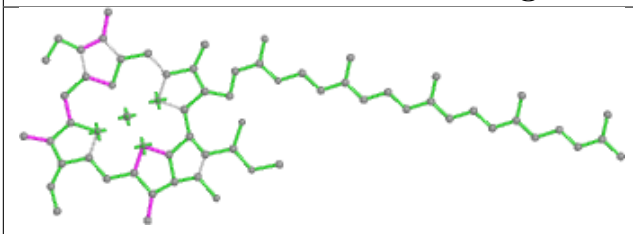


Torsions

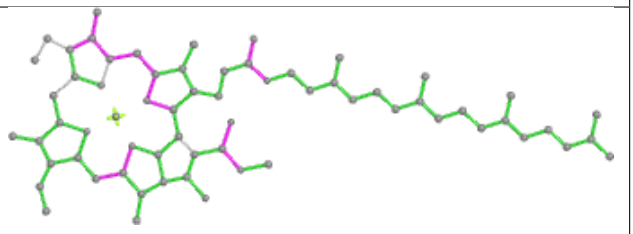


Rings

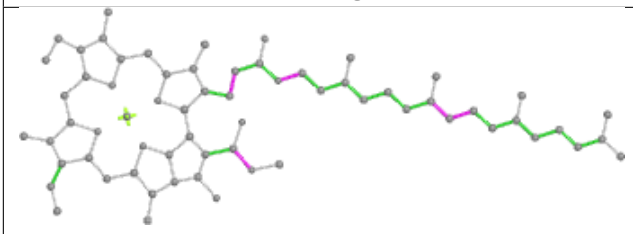
Ligand CLA a1 403



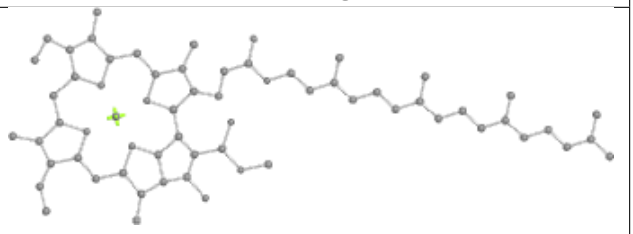
Bond lengths



Bond angles

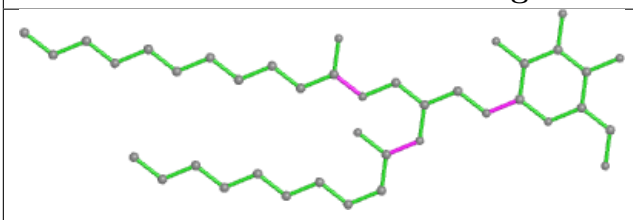


Torsions

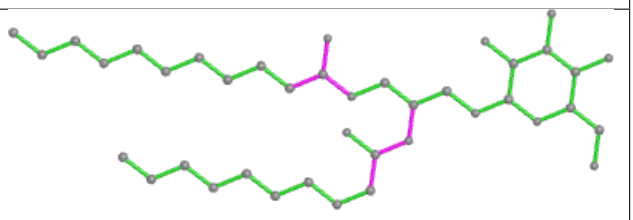


Rings

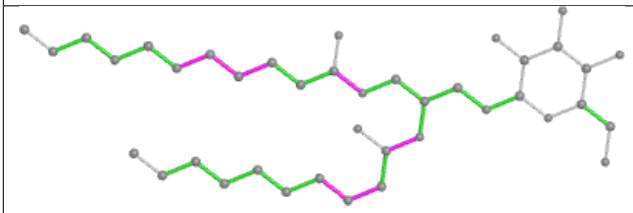
Ligand LMG B2 620



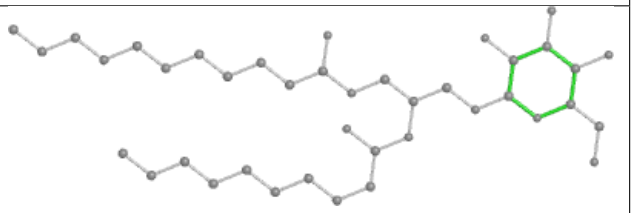
Bond lengths



Bond angles

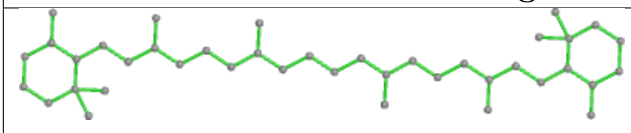


Torsions

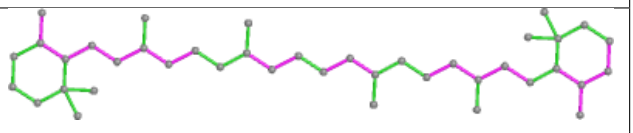


Rings

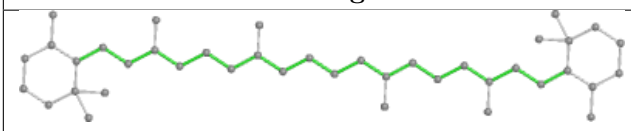
Ligand BCR z2 101



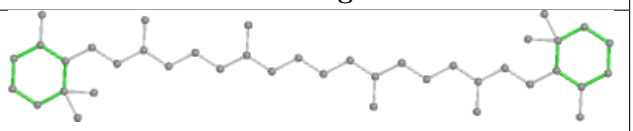
Bond lengths



Bond angles

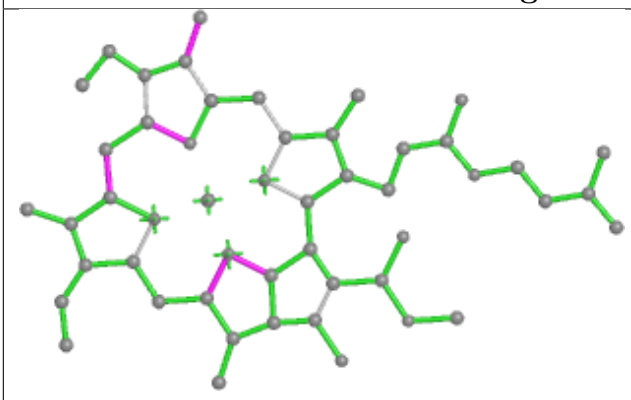


Torsions

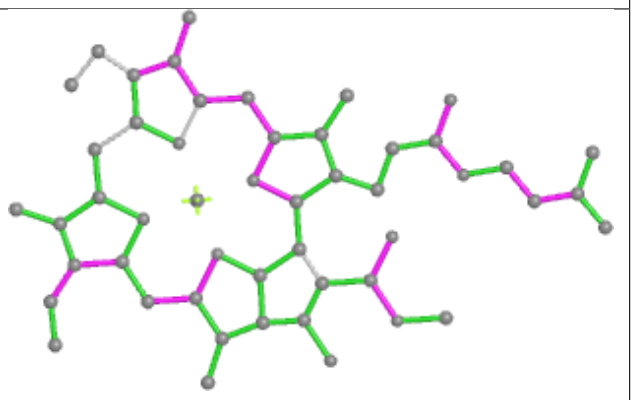


Rings

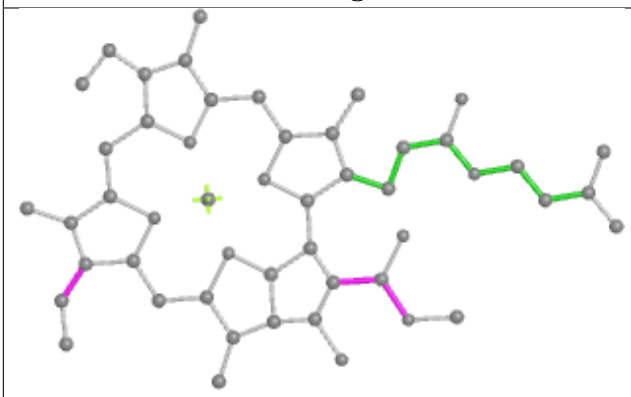
Ligand CLA c1 508



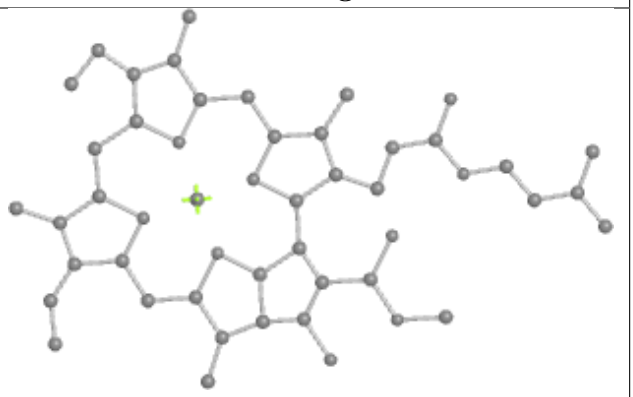
Bond lengths



Bond angles

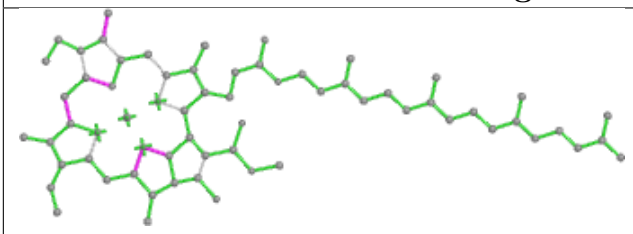


Torsions

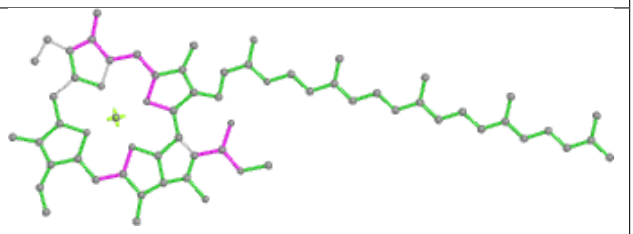


Rings

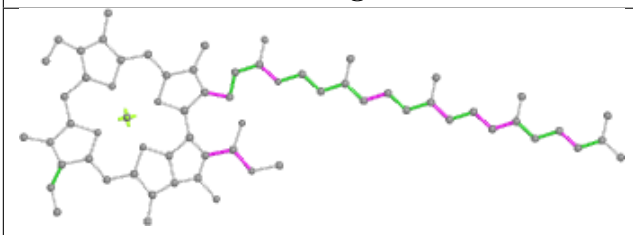
Ligand CLA D2 406



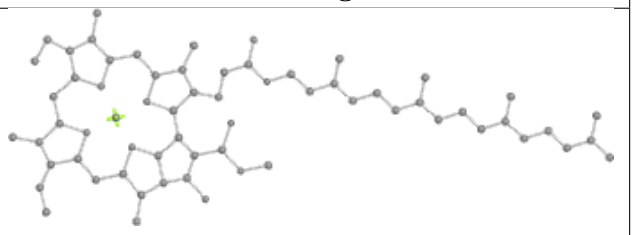
Bond lengths



Bond angles

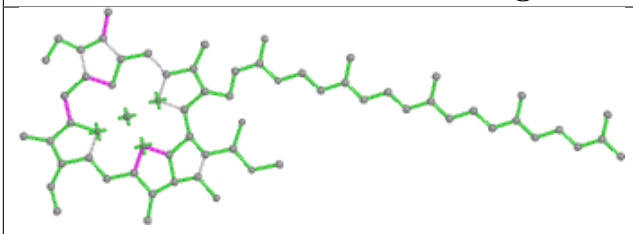


Torsions

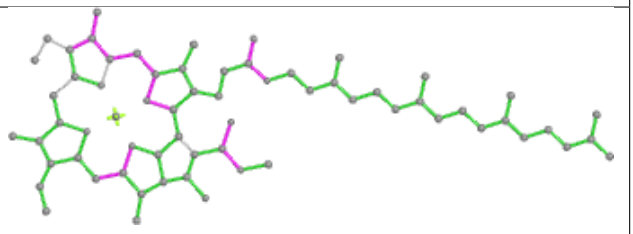


Rings

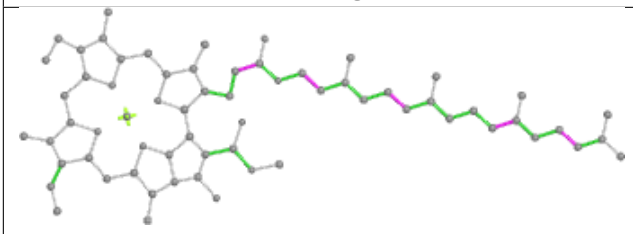
Ligand CLA D1 402



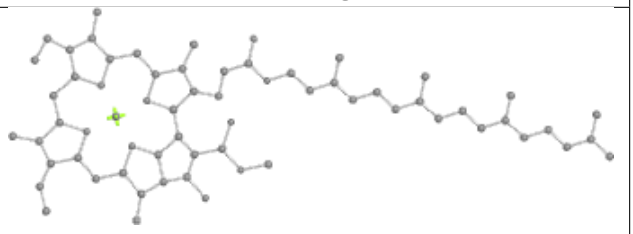
Bond lengths



Bond angles

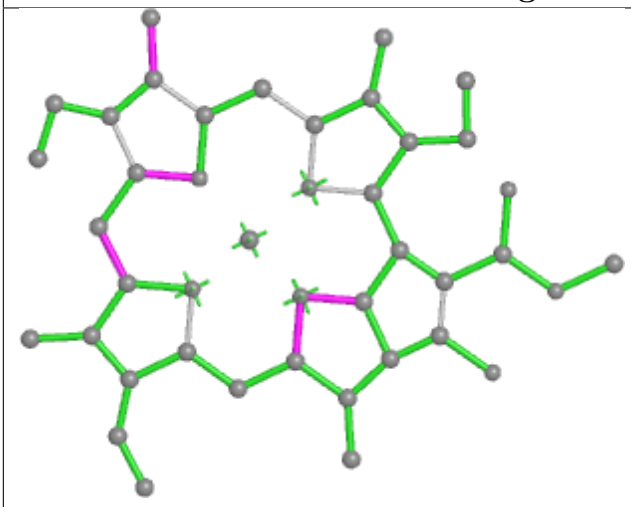


Torsions

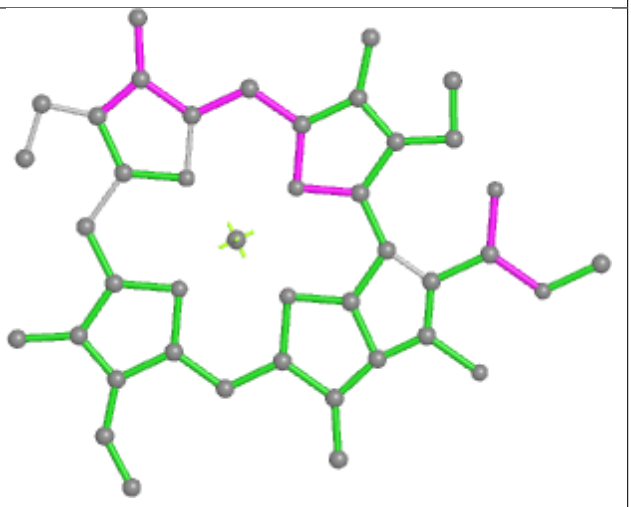


Rings

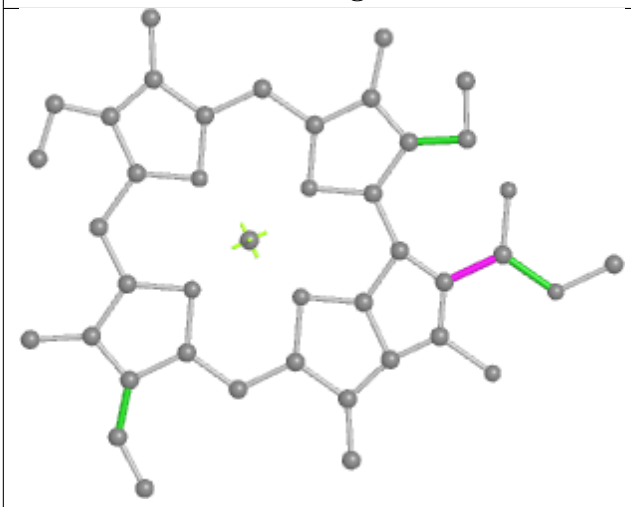
Ligand CLA b2 604



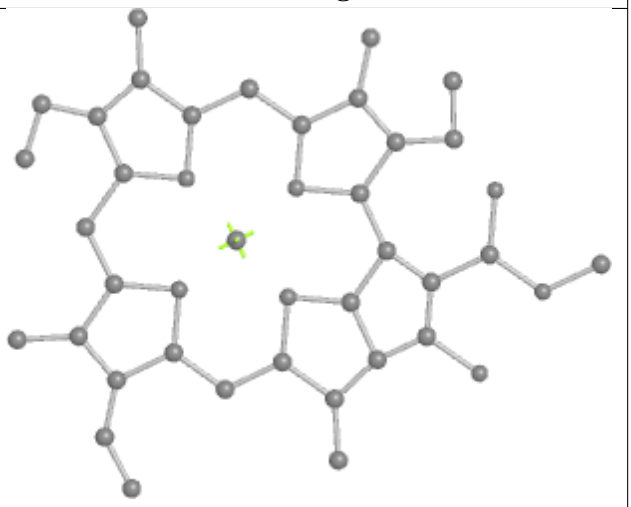
Bond lengths



Bond angles

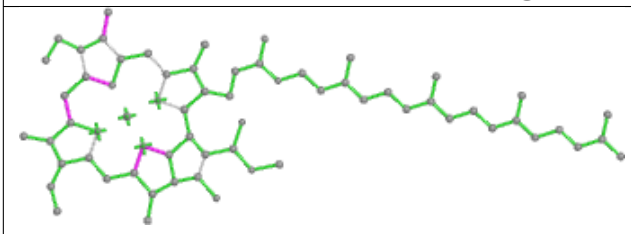


Torsions

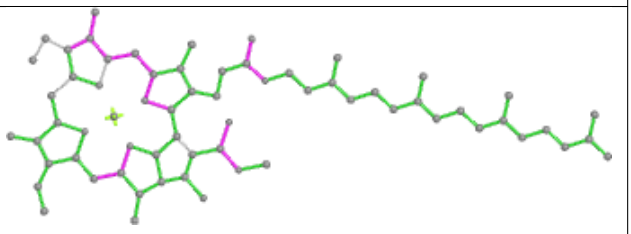


Rings

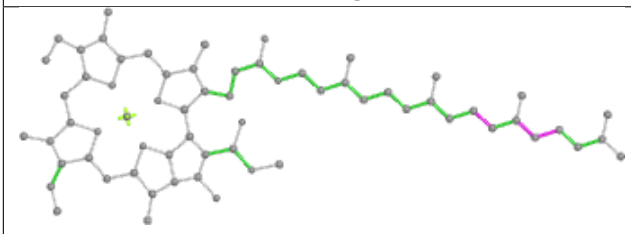
Ligand CLA b2 618



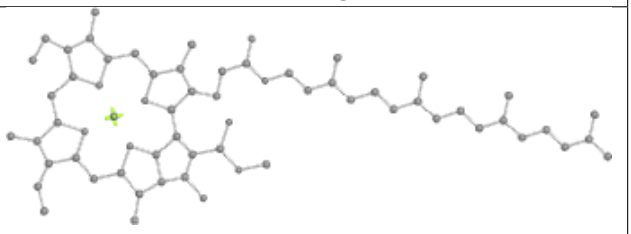
Bond lengths



Bond angles

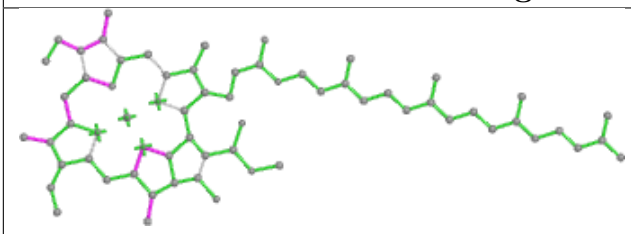


Torsions

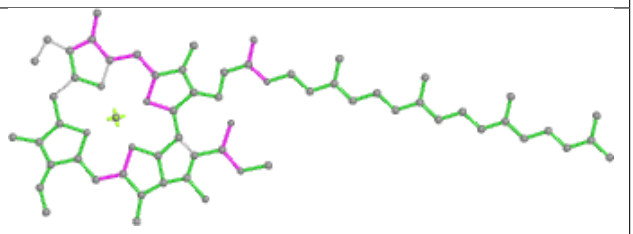


Rings

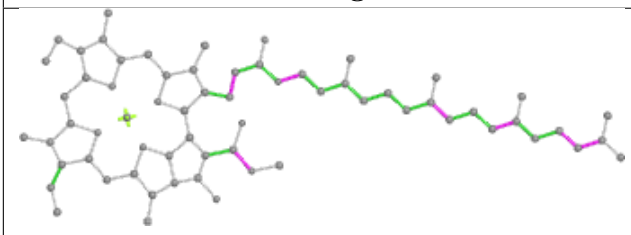
Ligand CLA A1 403



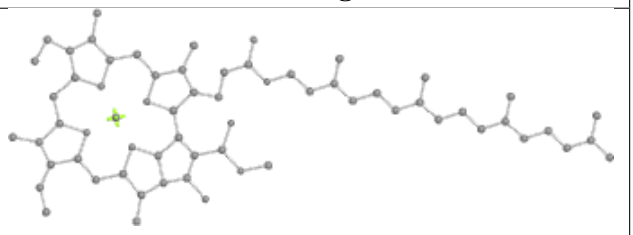
Bond lengths



Bond angles

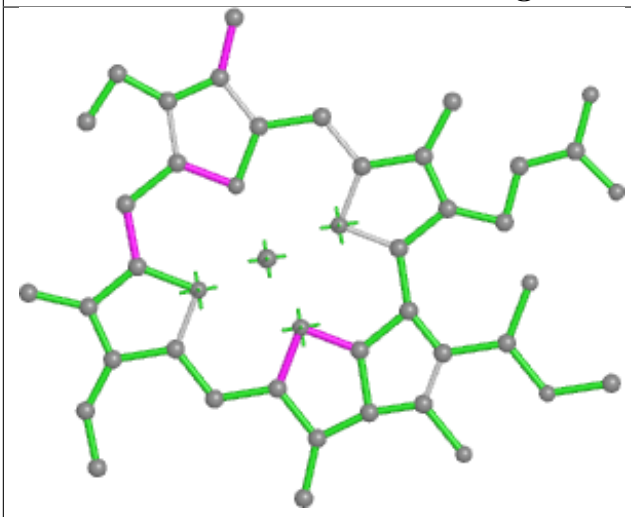


Torsions

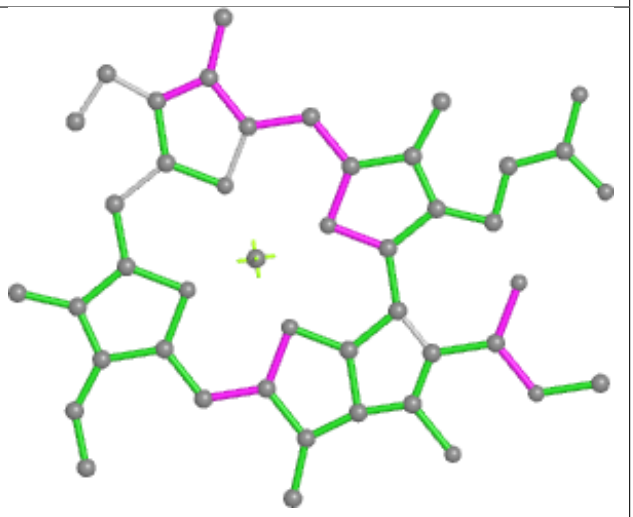


Rings

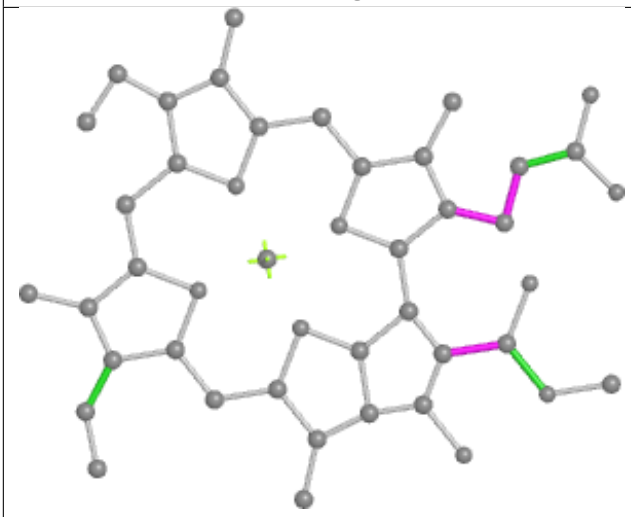
Ligand CLA C2 510



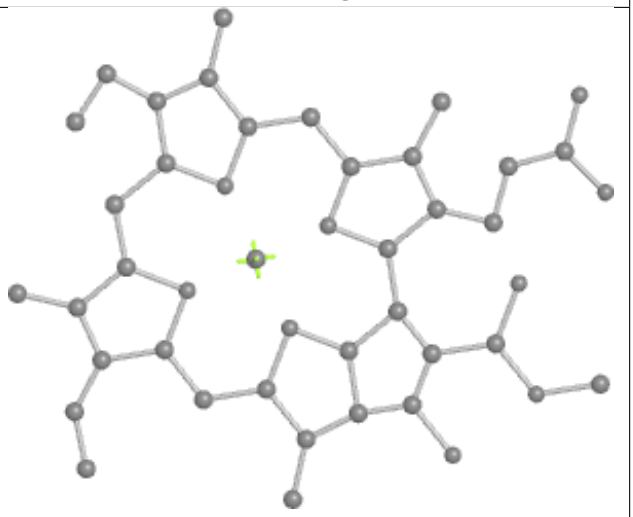
Bond lengths



Bond angles

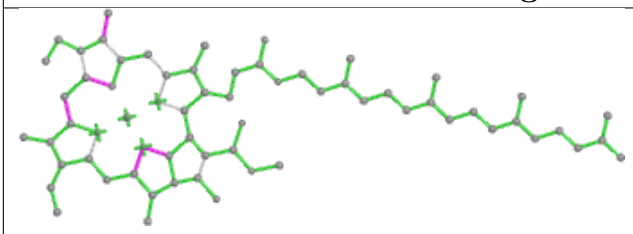


Torsions

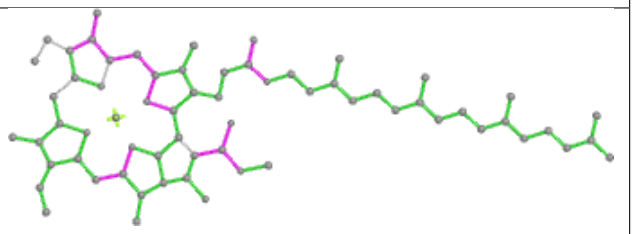


Rings

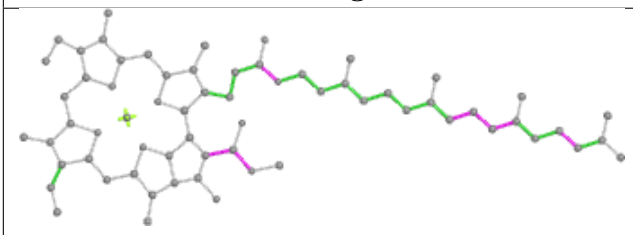
Ligand CLA c2 509



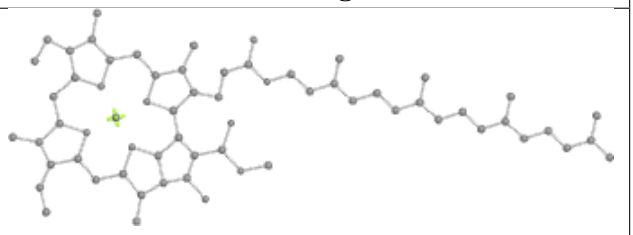
Bond lengths



Bond angles

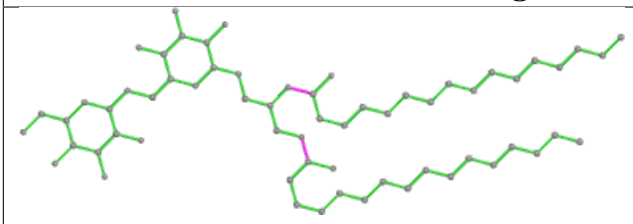


Torsions

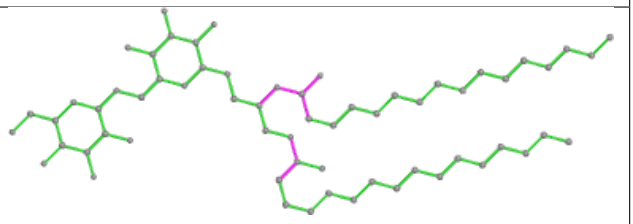


Rings

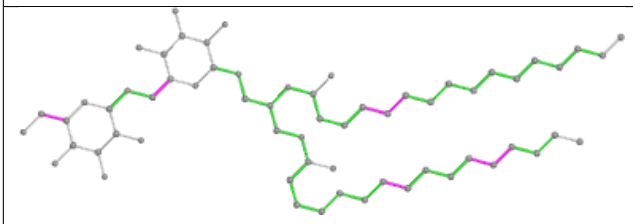
Ligand DGD C1 516



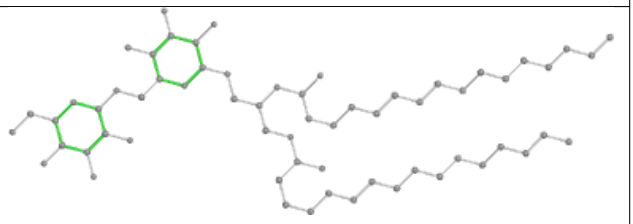
Bond lengths



Bond angles

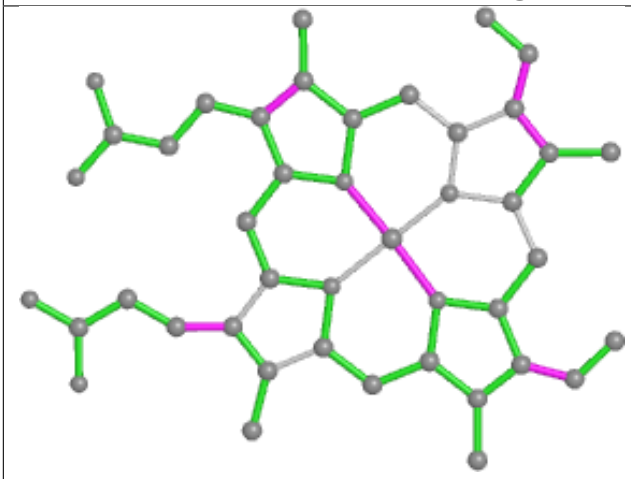


Torsions

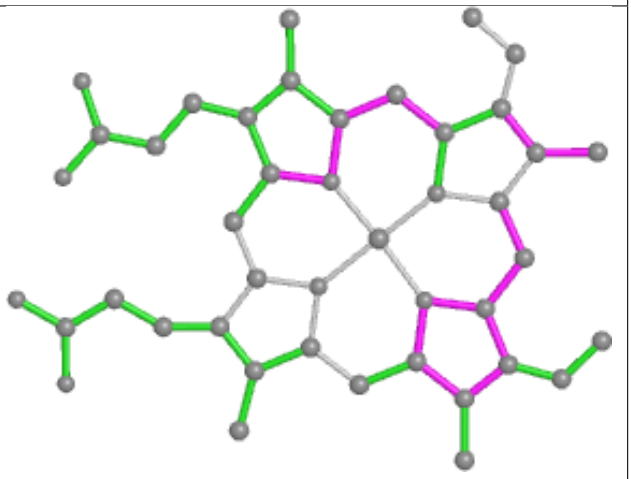


Rings

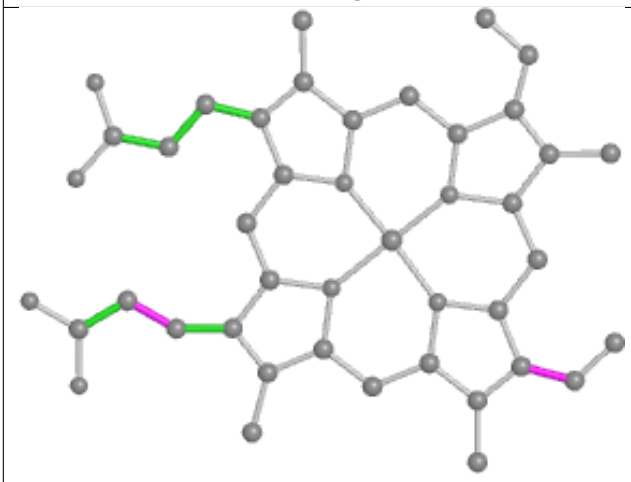
Ligand HEM E2 101



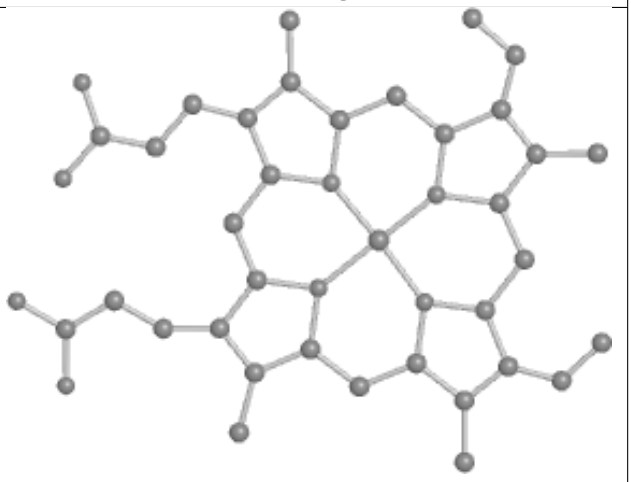
Bond lengths



Bond angles

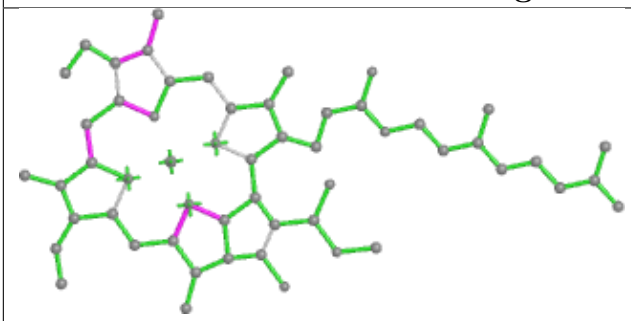


Torsions

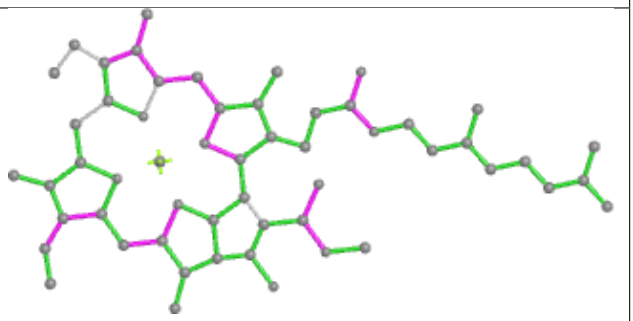


Rings

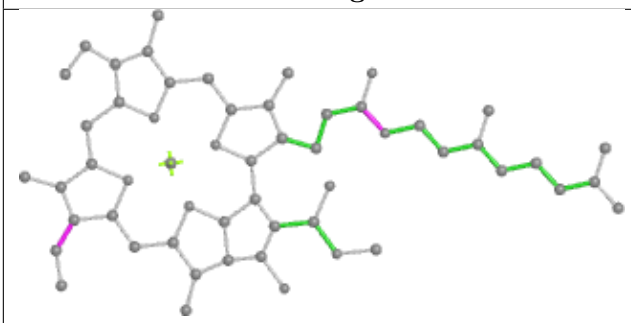
Ligand CLA A1 405



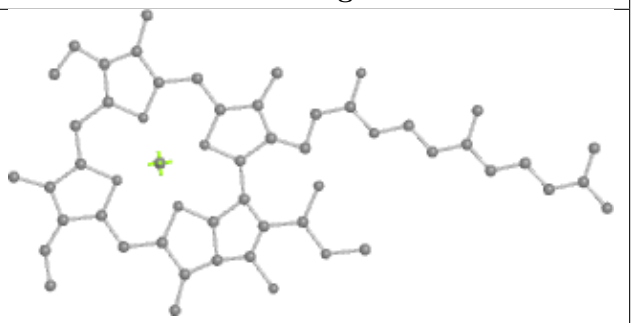
Bond lengths



Bond angles

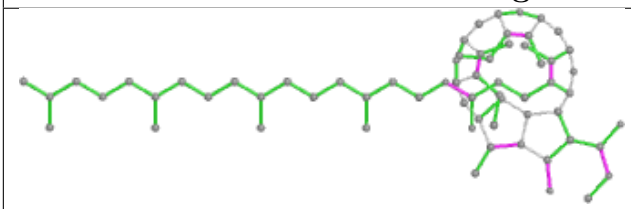


Torsions

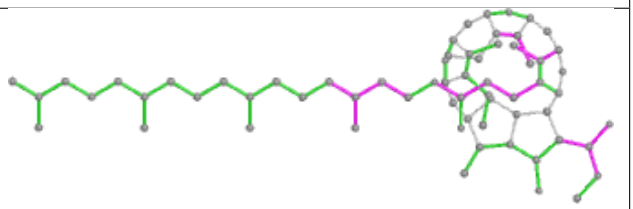


Rings

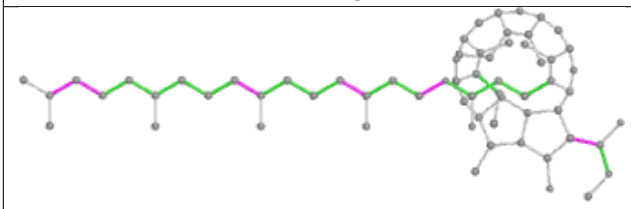
Ligand PHO A1 408



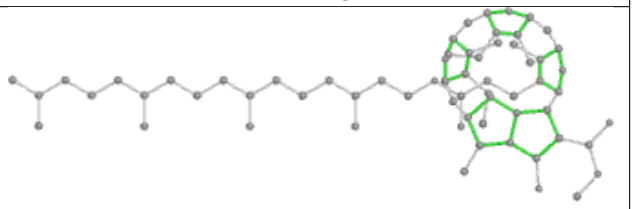
Bond lengths



Bond angles

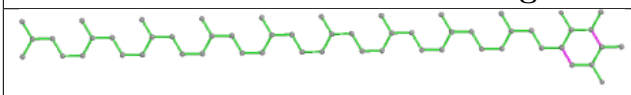


Torsions

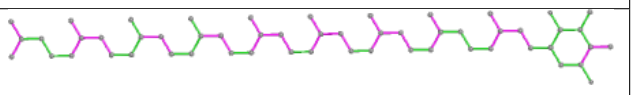


Rings

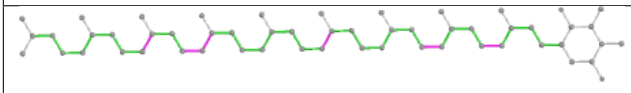
Ligand PL9 D1 408



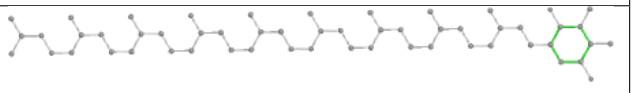
Bond lengths



Bond angles

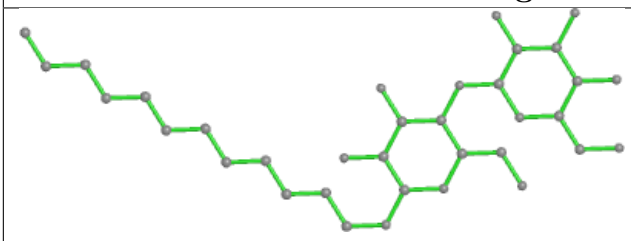


Torsions

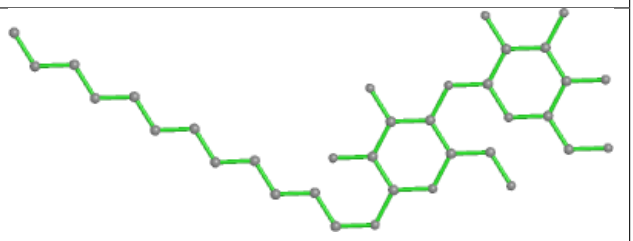


Rings

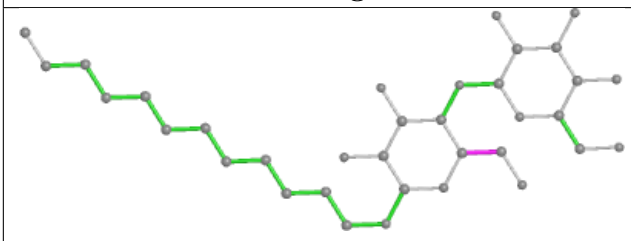
Ligand LMT b2 621



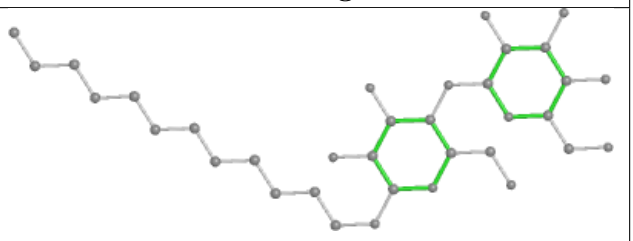
Bond lengths



Bond angles

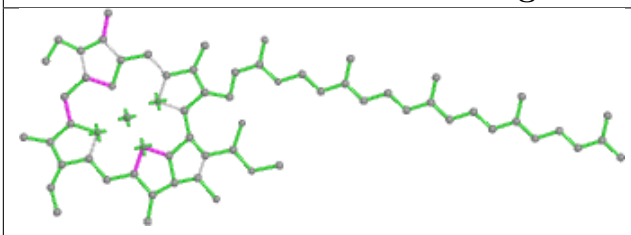


Torsions

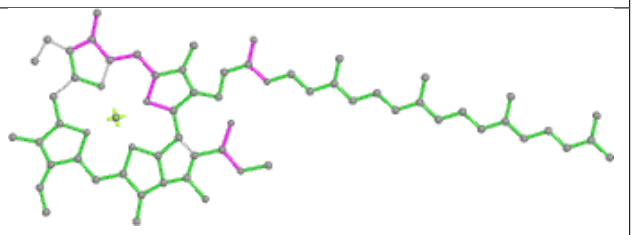


Rings

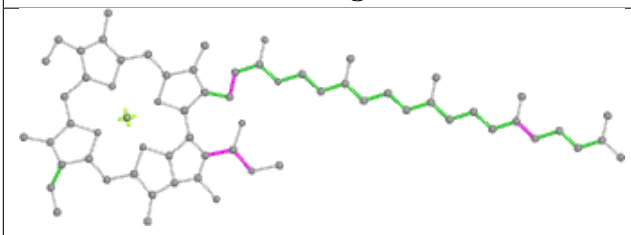
Ligand CLA b2 613



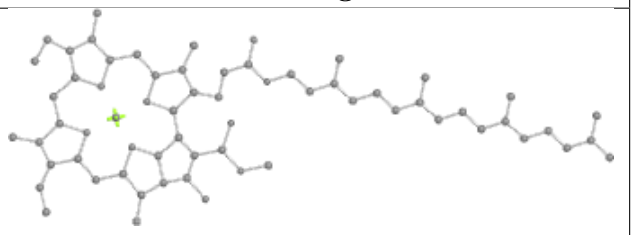
Bond lengths



Bond angles

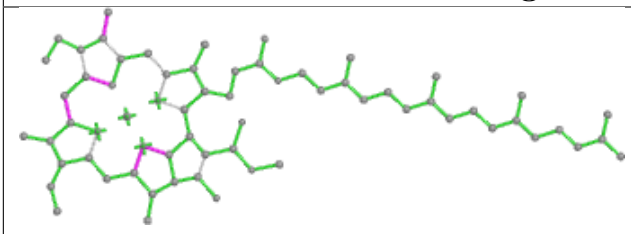


Torsions

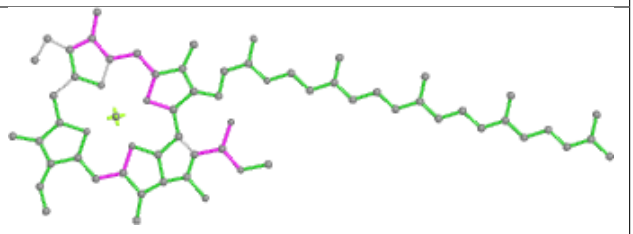


Rings

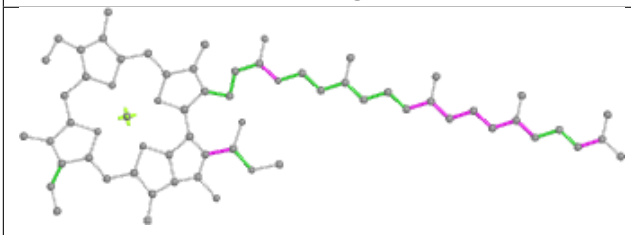
Ligand CLA c2 505



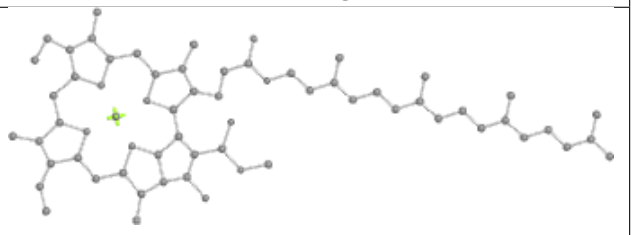
Bond lengths



Bond angles

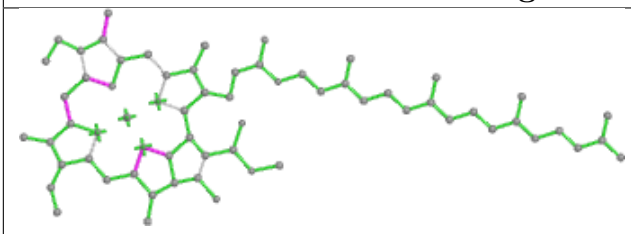


Torsions

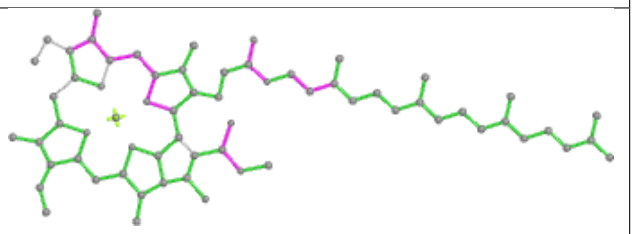


Rings

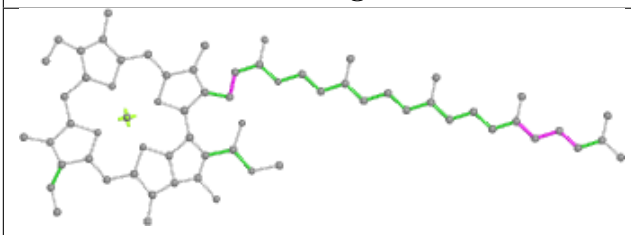
Ligand CLA b2 611



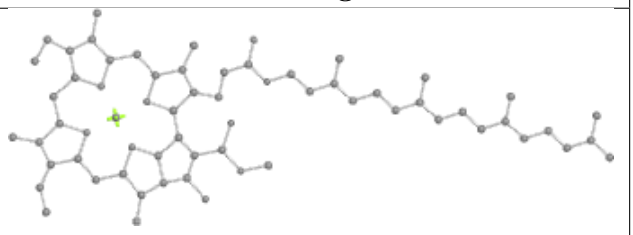
Bond lengths



Bond angles

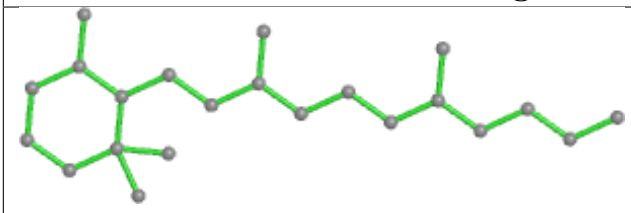


Torsions

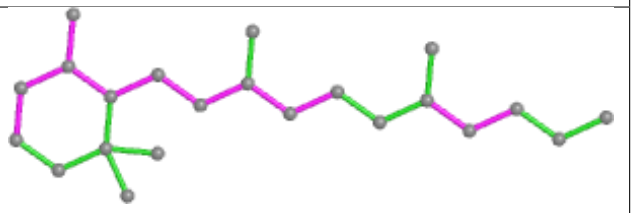


Rings

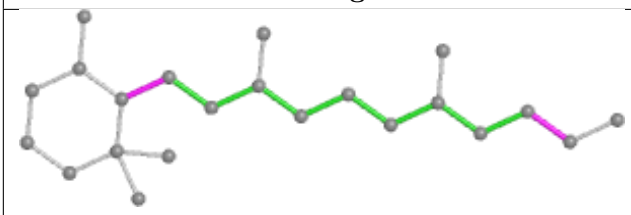
Ligand BCR H1 102



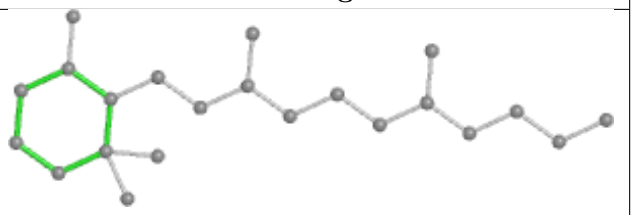
Bond lengths



Bond angles

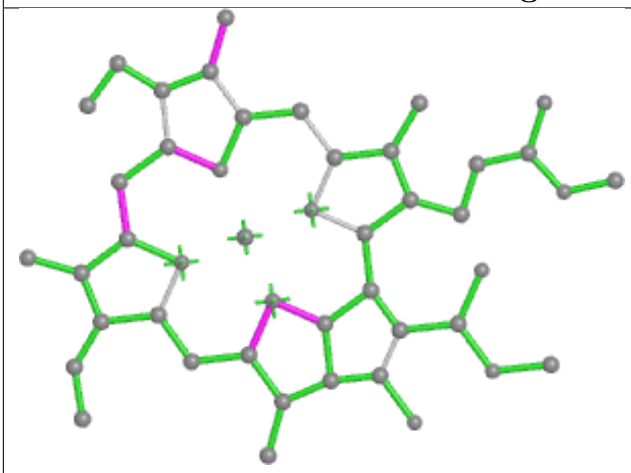


Torsions

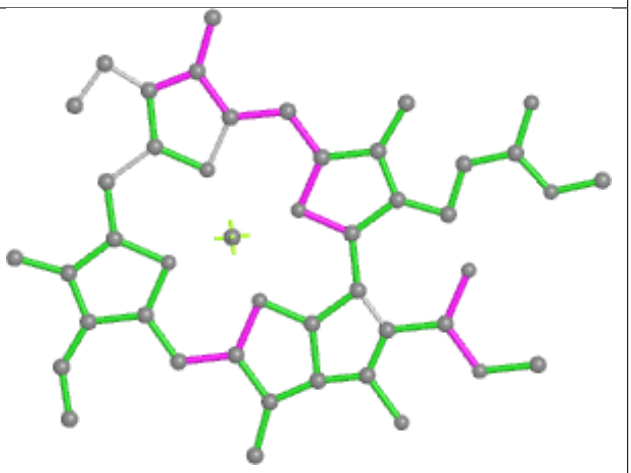


Rings

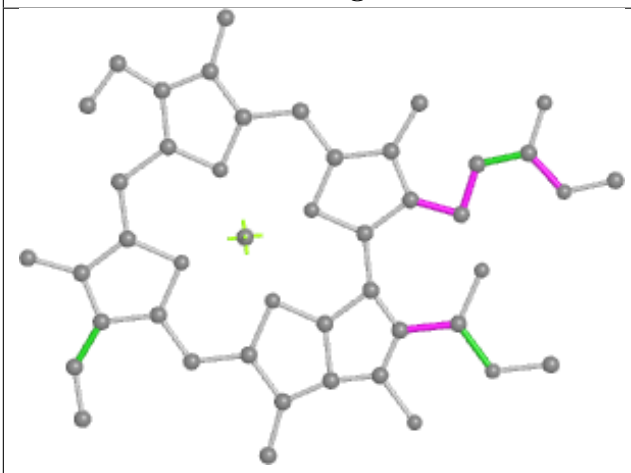
Ligand CLA c2 515



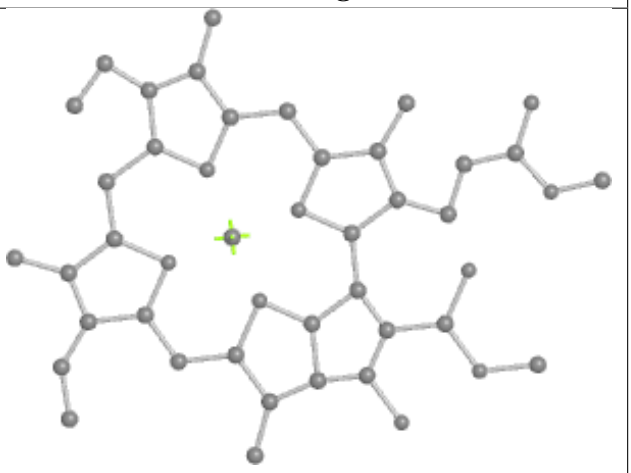
Bond lengths



Bond angles

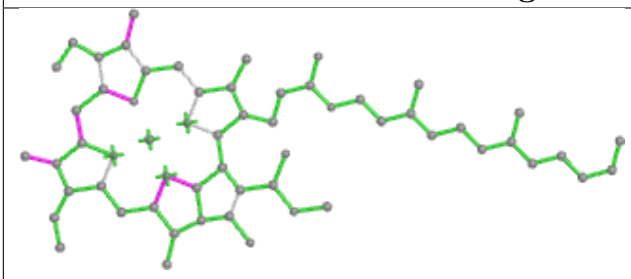


Torsions

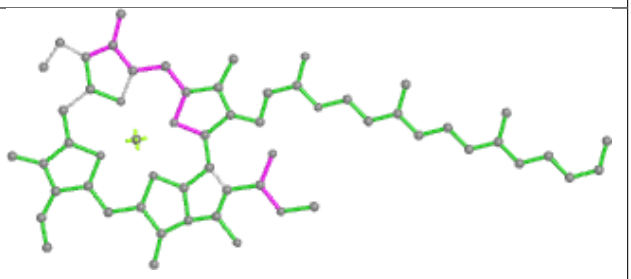


Rings

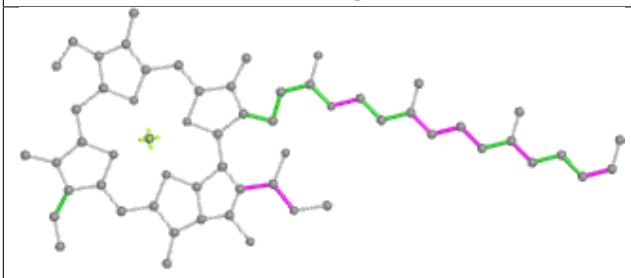
Ligand CLA b2 619



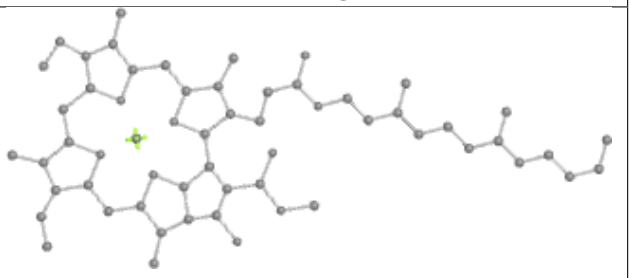
Bond lengths



Bond angles

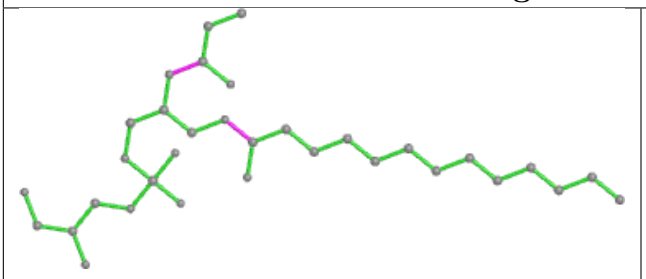


Torsions

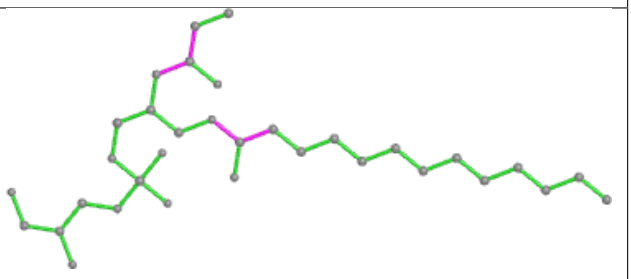


Rings

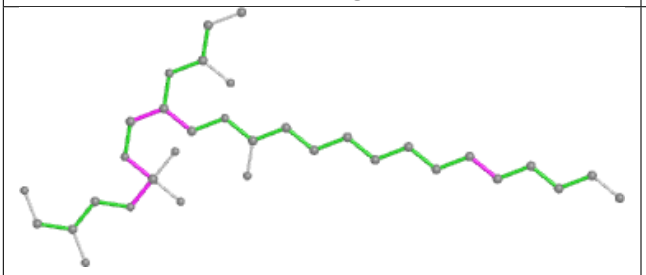
Ligand LHG A2 405



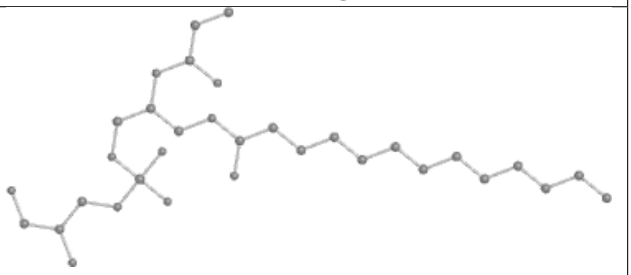
Bond lengths



Bond angles

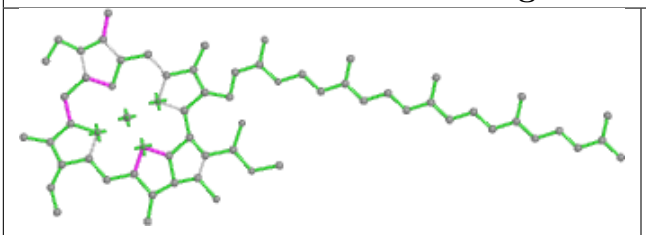


Torsions

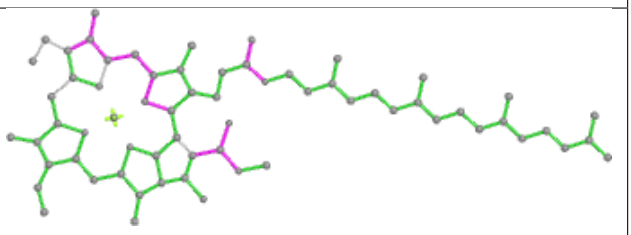


Rings

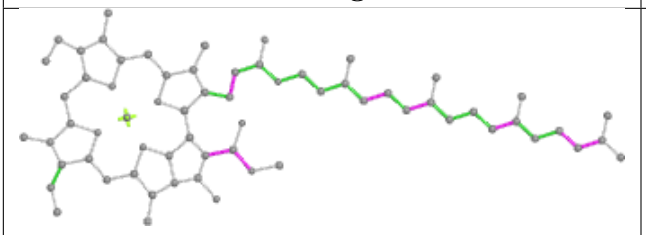
Ligand CLA b1 609



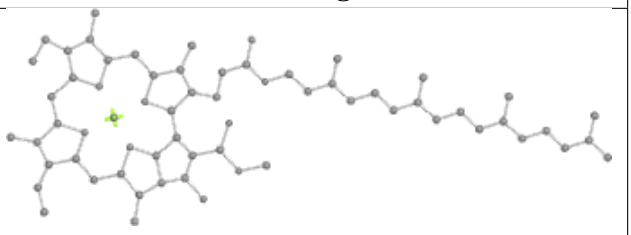
Bond lengths



Bond angles

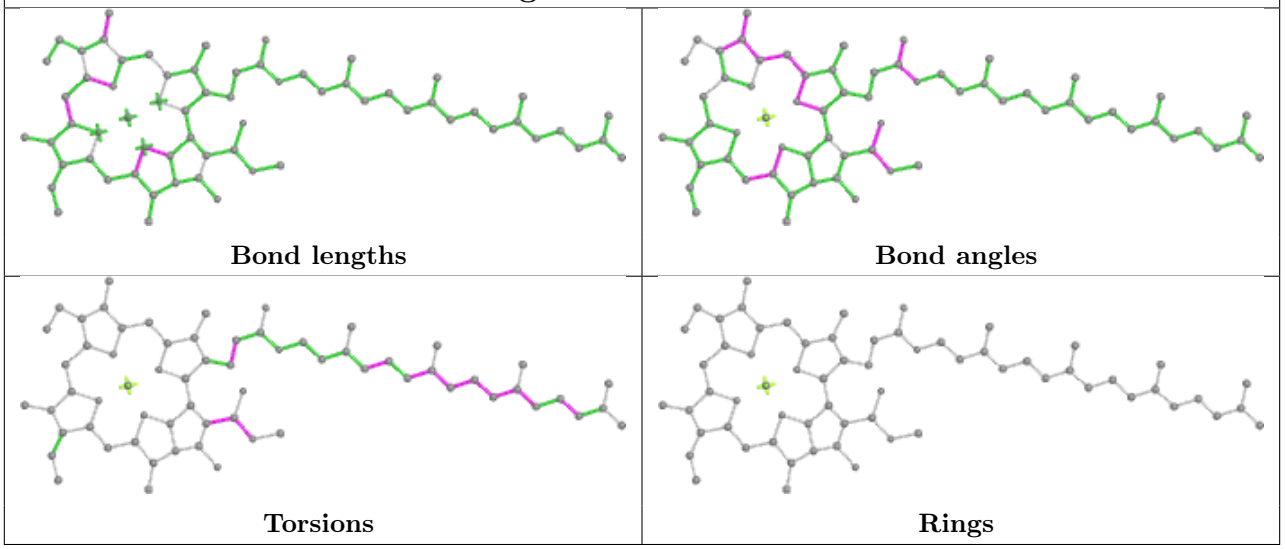


Torsions

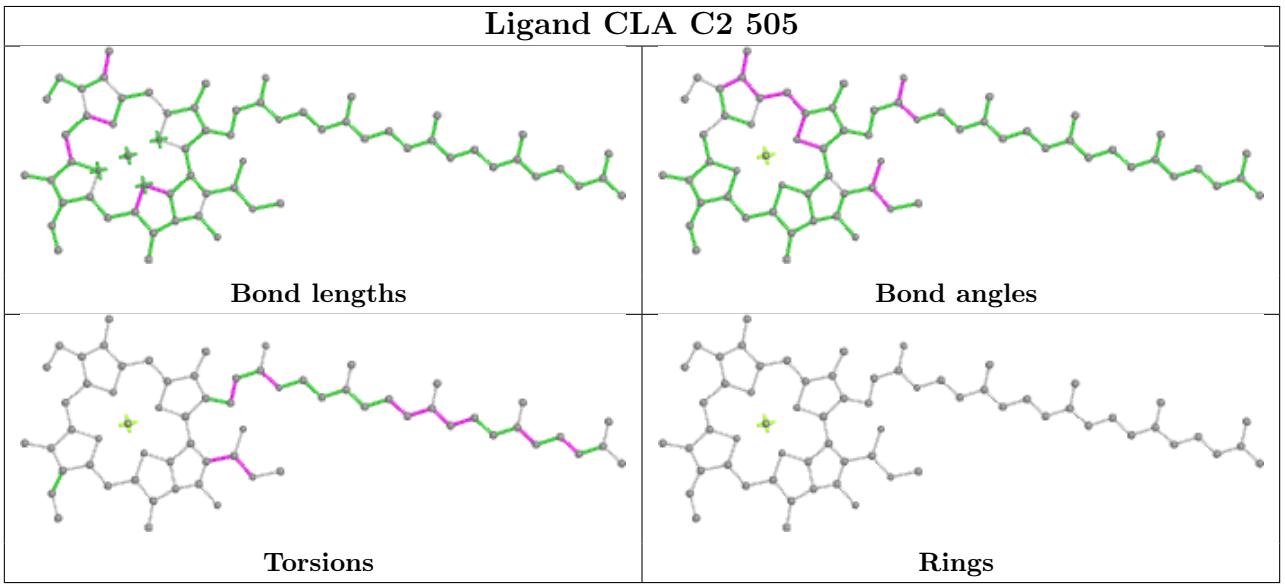


Rings

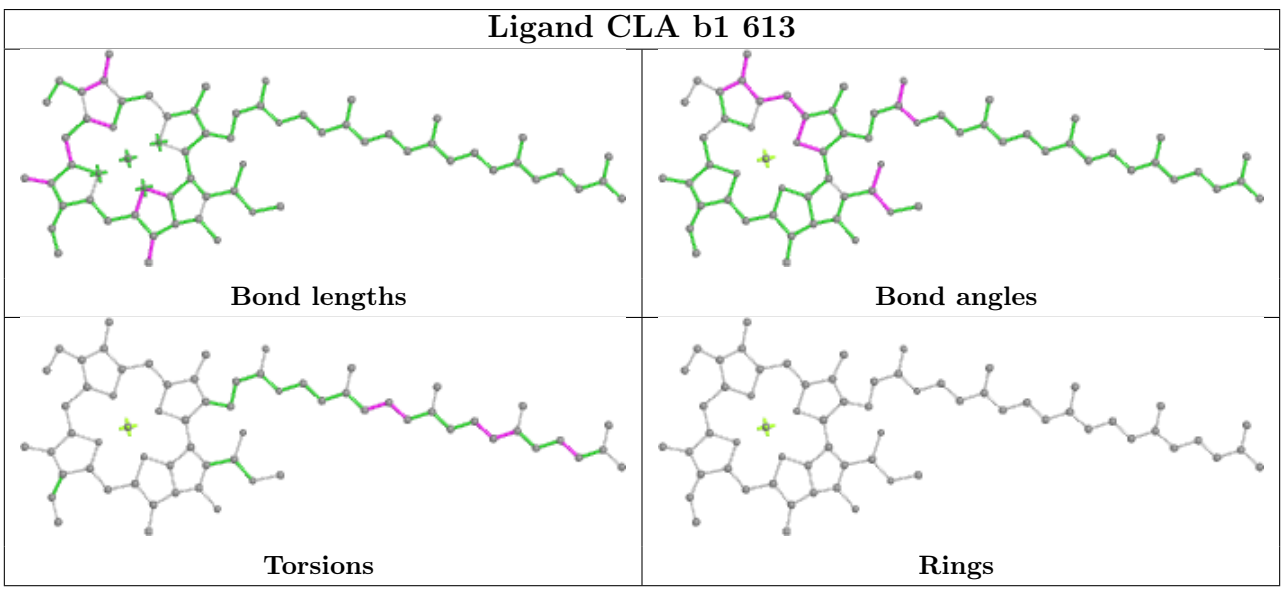
Ligand CLA b2 617



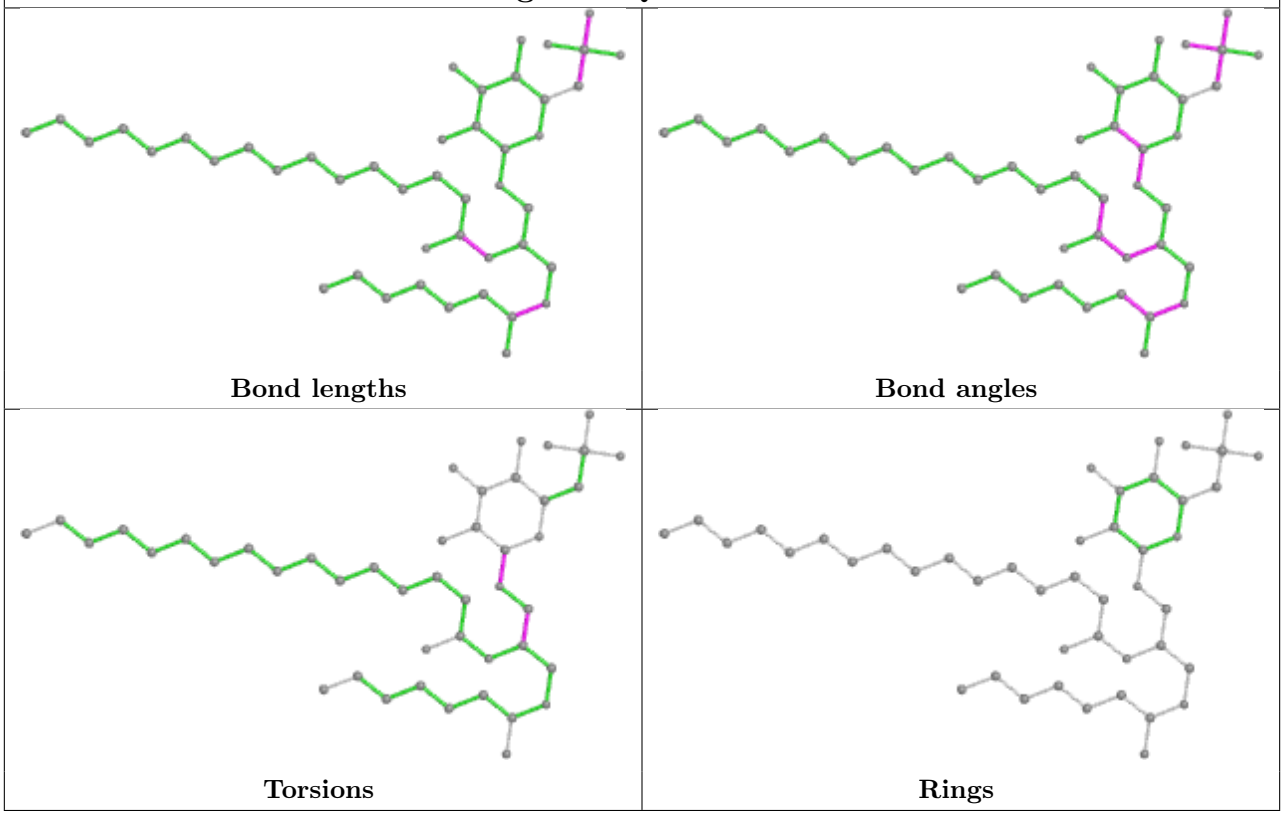
Ligand CLA C2 505



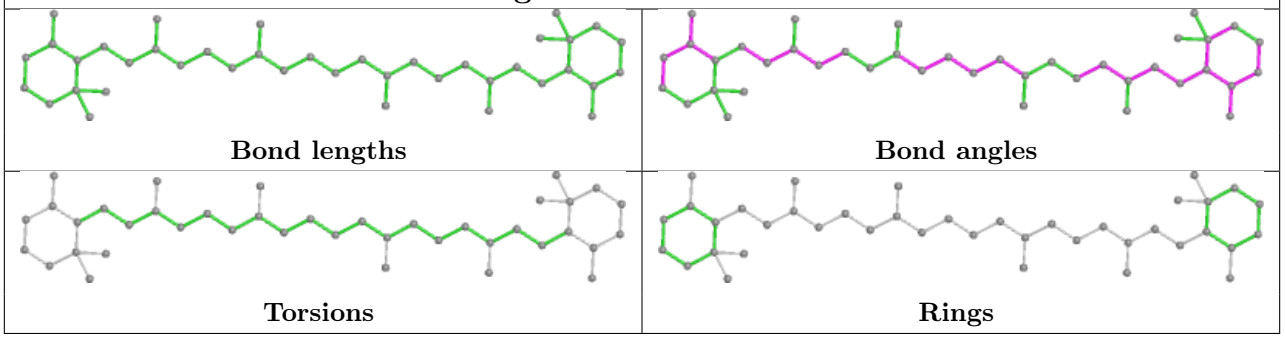
Ligand CLA b1 613



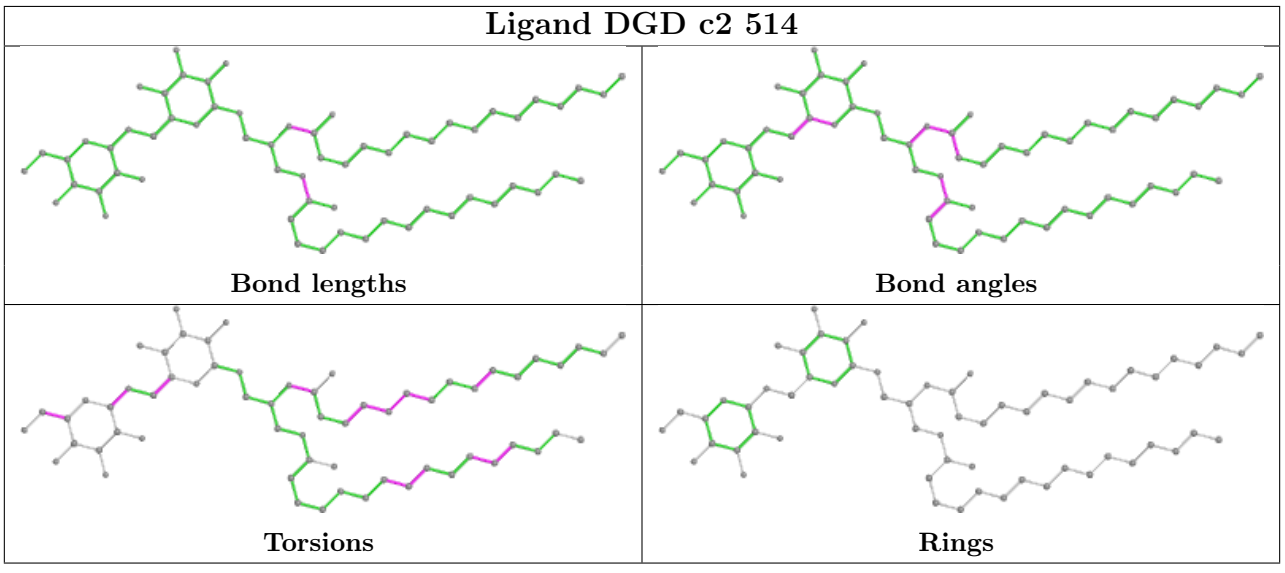
Ligand SQD B2 623



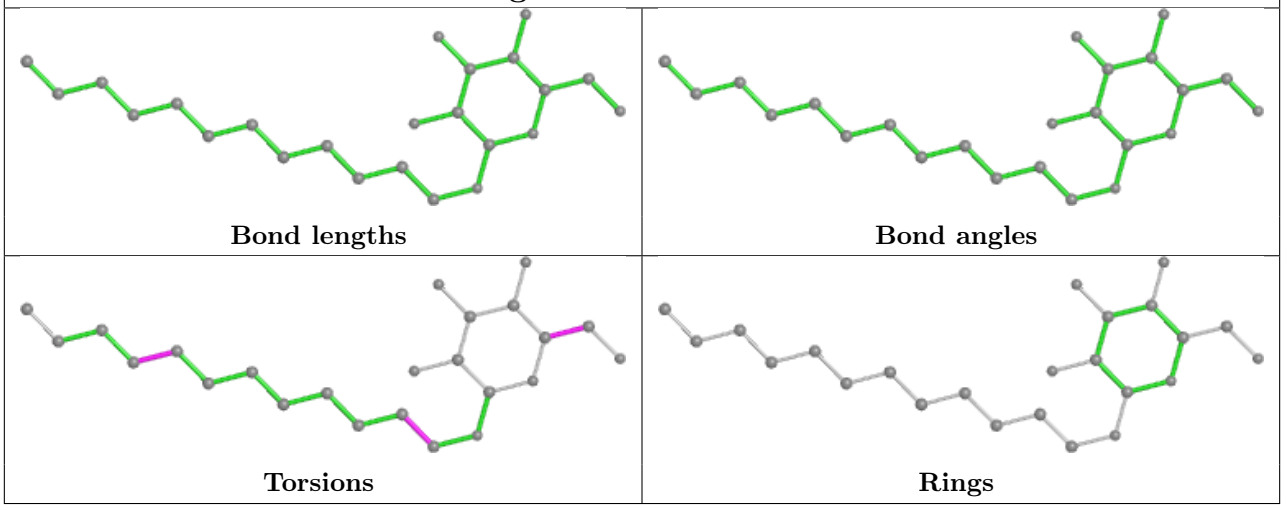
Ligand BCR A2 401



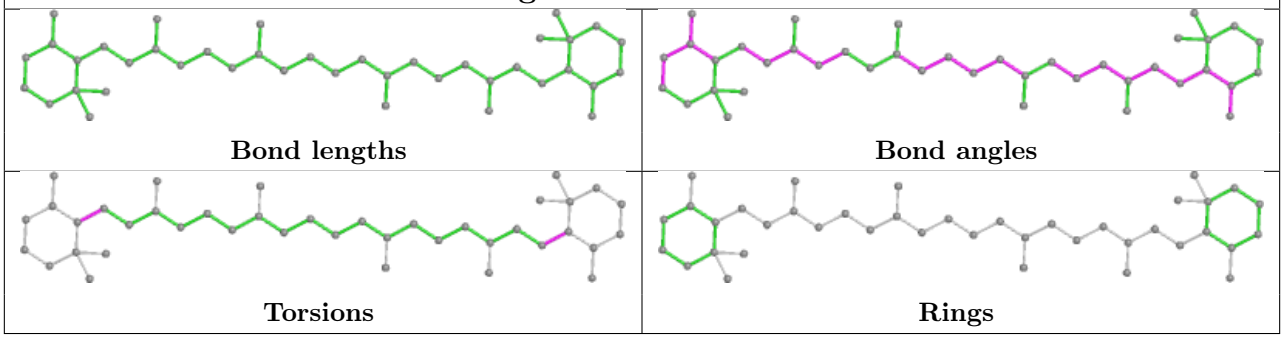
Ligand DGD c2 514



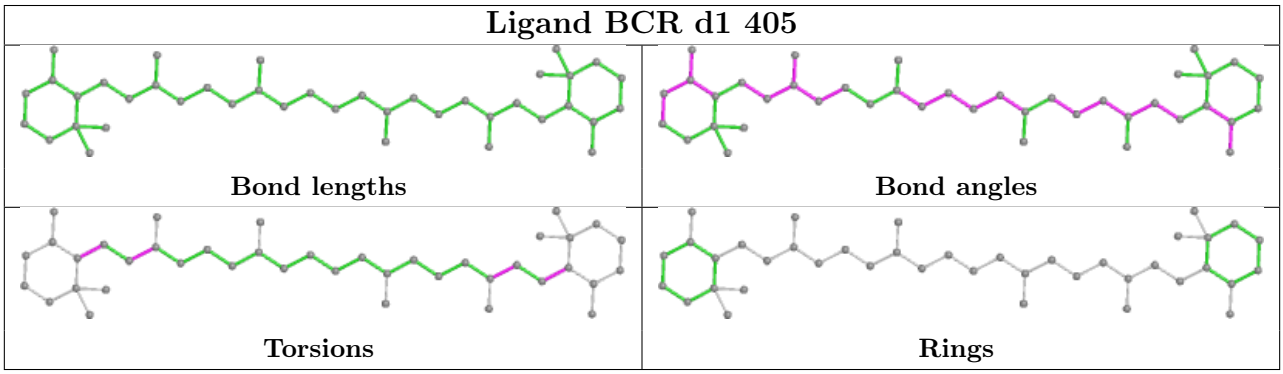
Ligand LMT M1 103



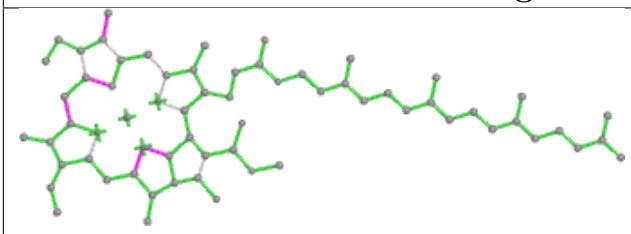
Ligand BCR a2 402



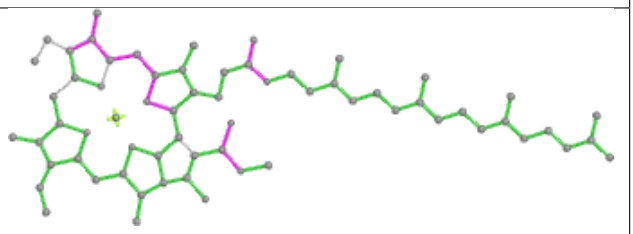
Ligand BCR d1 405



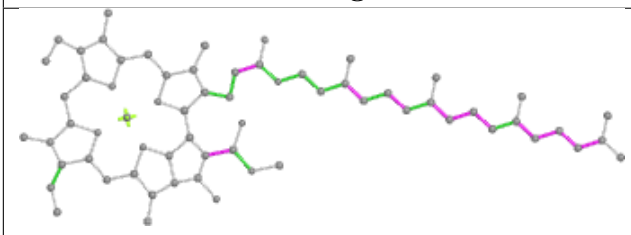
Ligand CLA B1 615



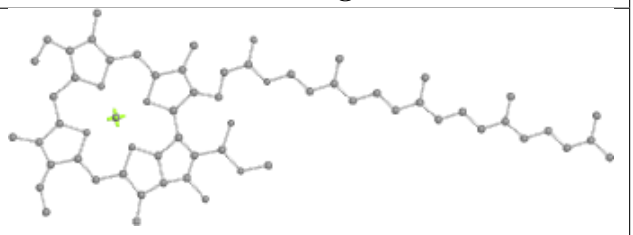
Bond lengths



Bond angles

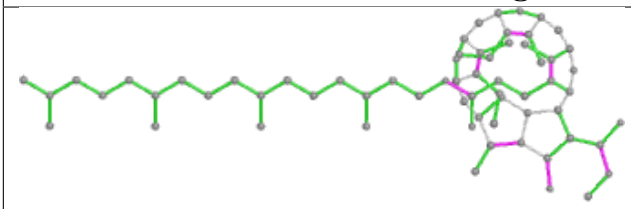


Torsions

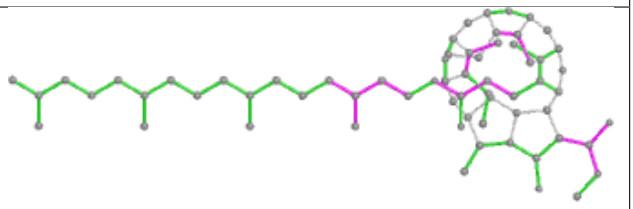


Rings

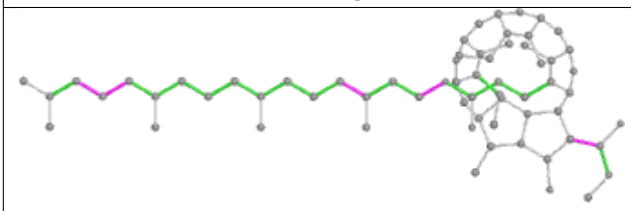
Ligand PHO D2 407



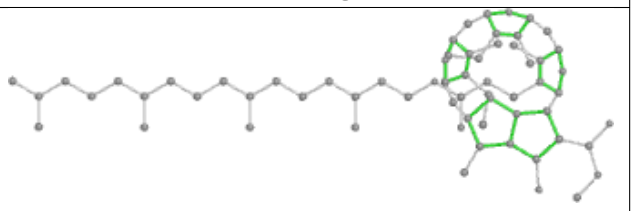
Bond lengths



Bond angles

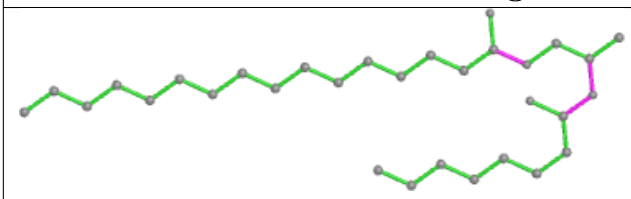


Torsions

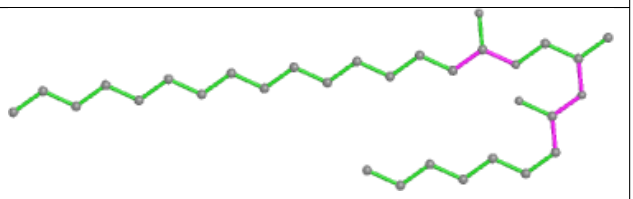


Rings

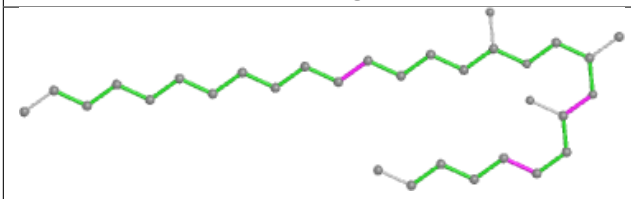
Ligand LMG M1 101



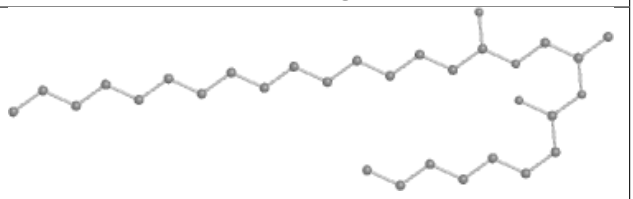
Bond lengths



Bond angles

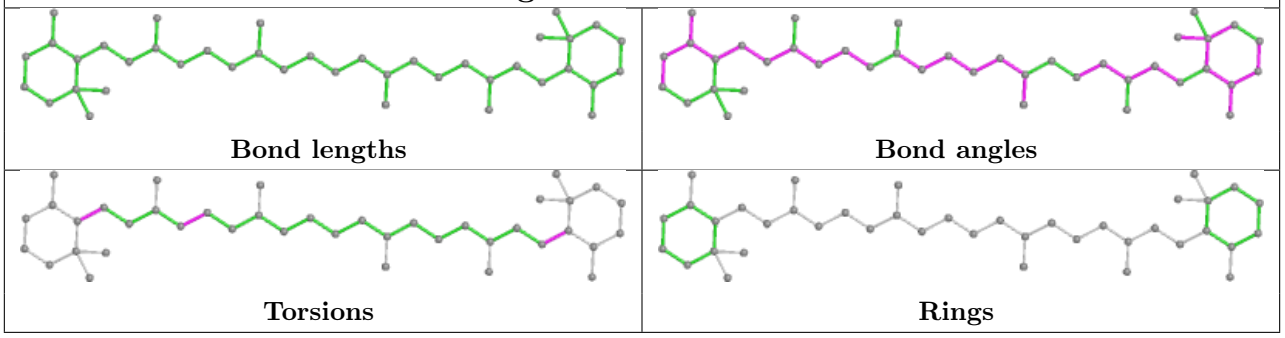


Torsions

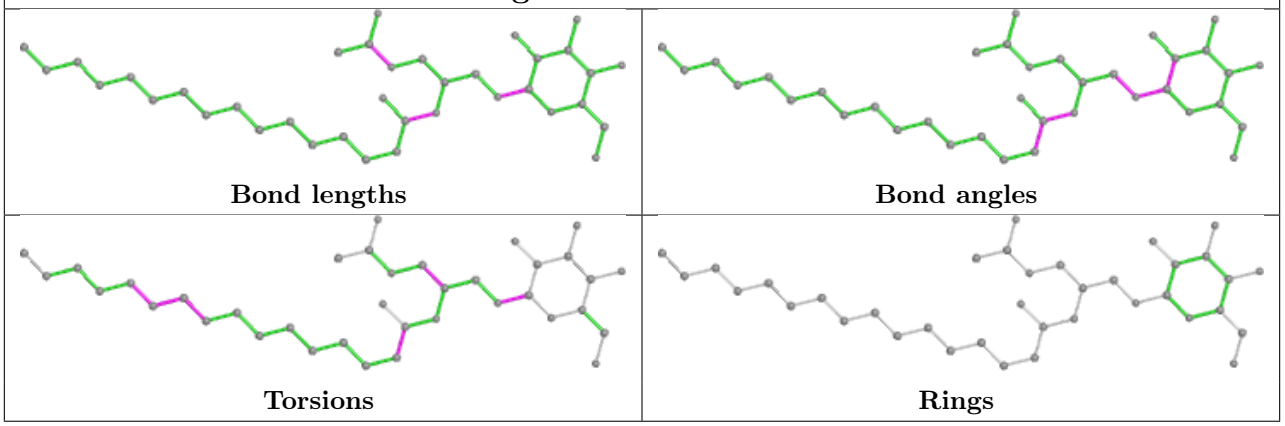


Rings

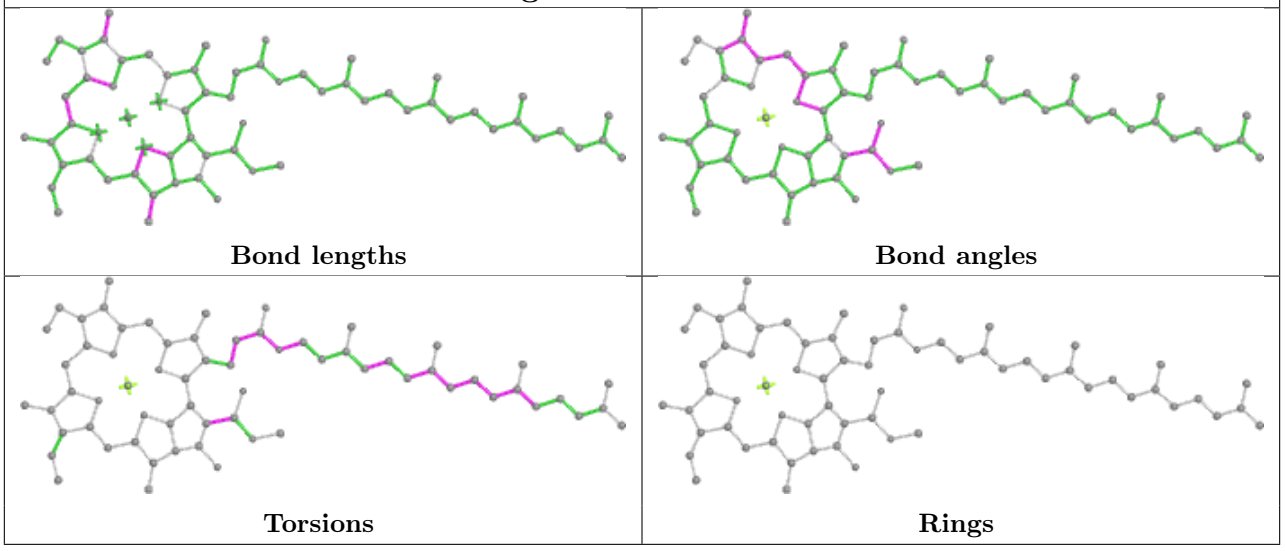
Ligand BCR h1 102



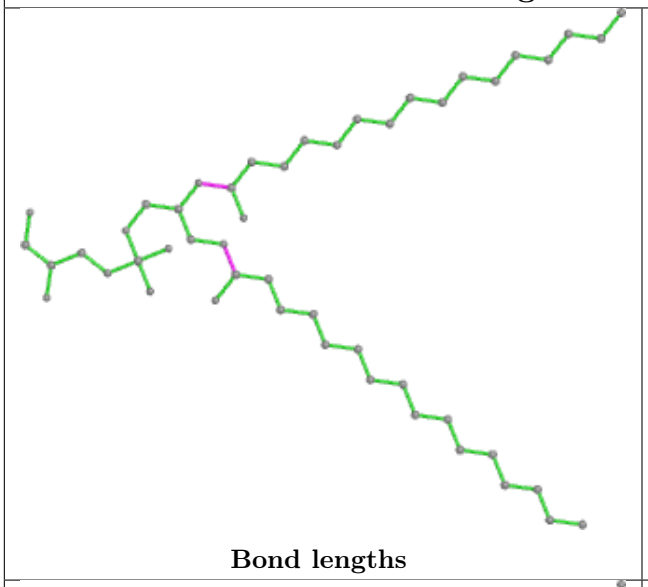
Ligand LMG B2 621



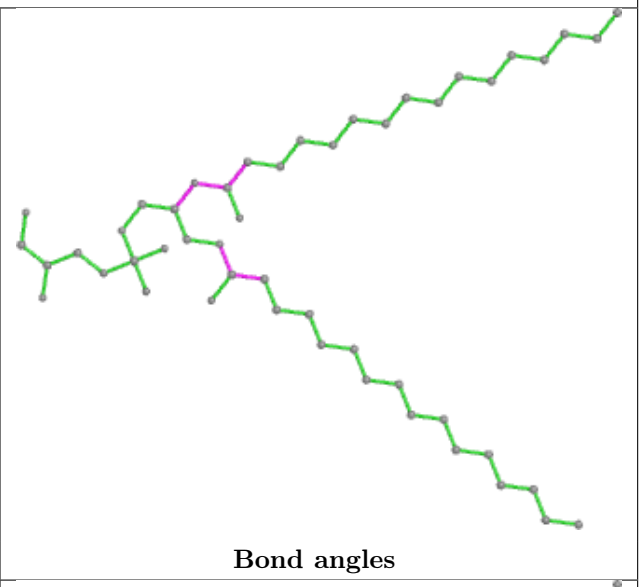
Ligand CLA c1 507



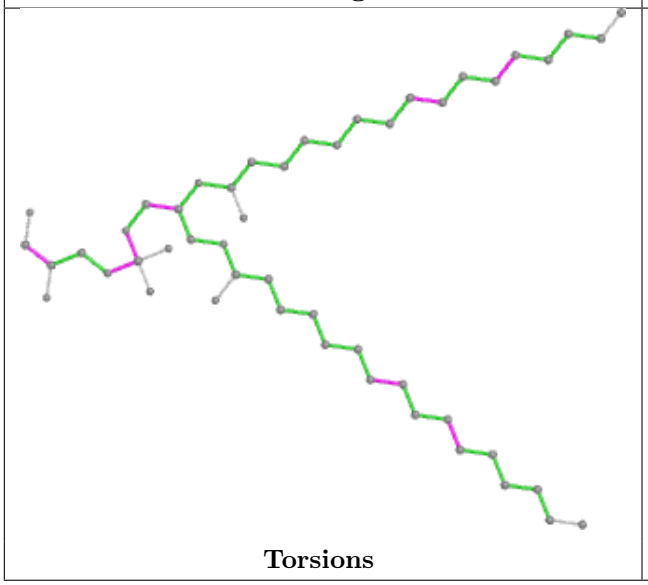
Ligand LHG d2 403



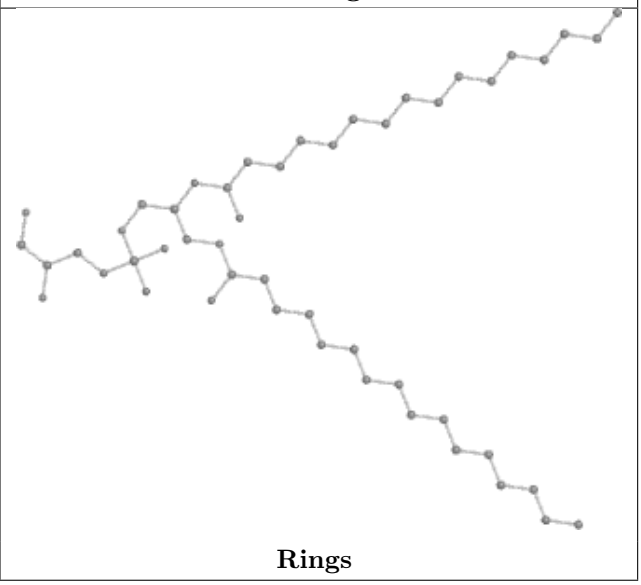
Bond lengths



Bond angles

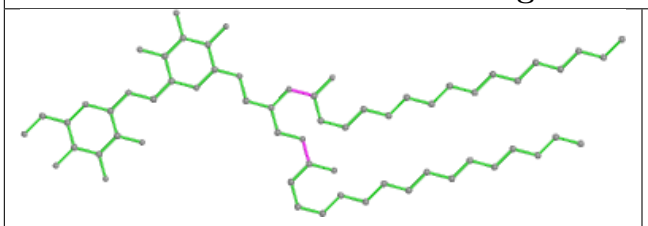


Torsions

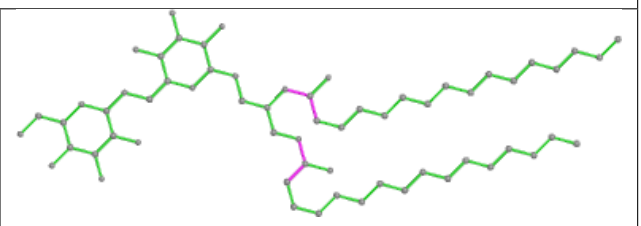


Rings

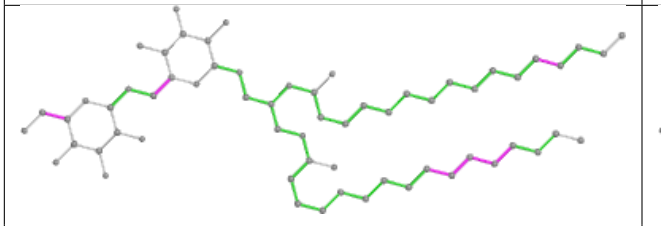
Ligand DGD c1 520



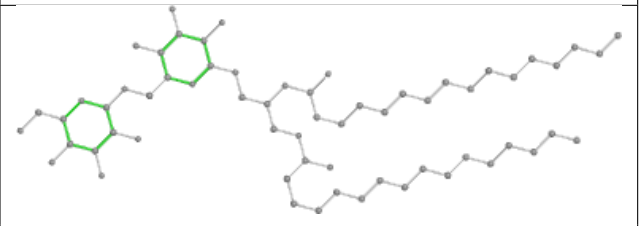
Bond lengths



Bond angles

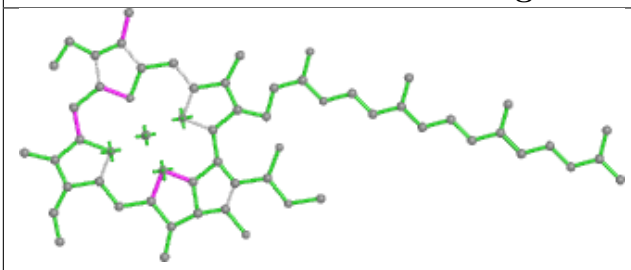


Torsions

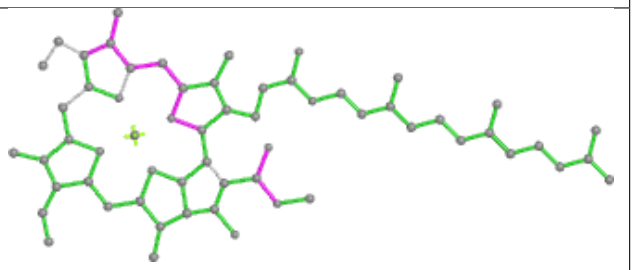


Rings

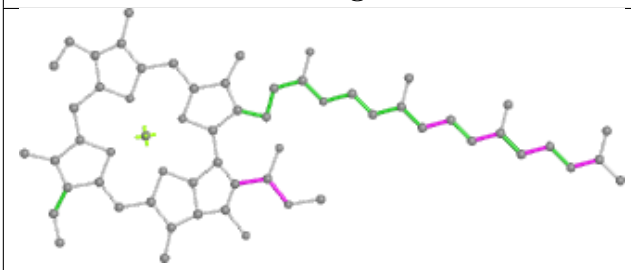
Ligand CLA C1 503



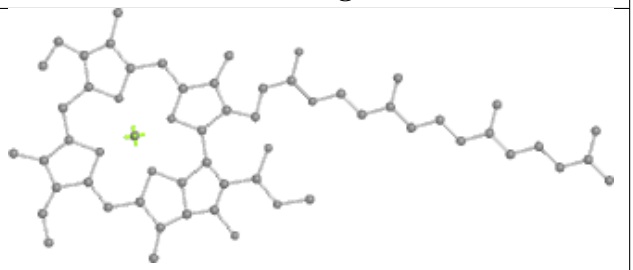
Bond lengths



Bond angles

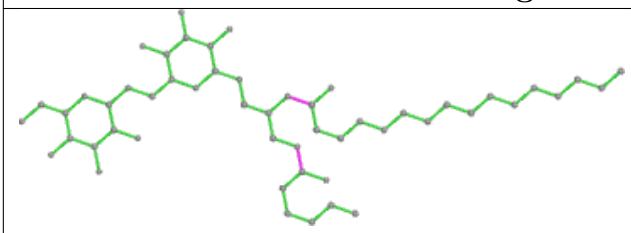


Torsions

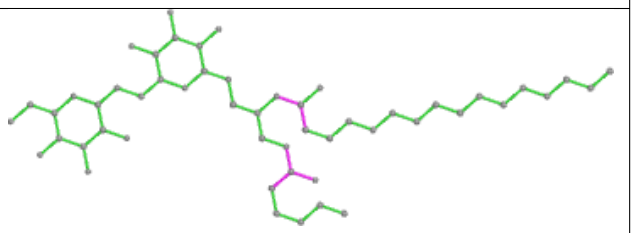


Rings

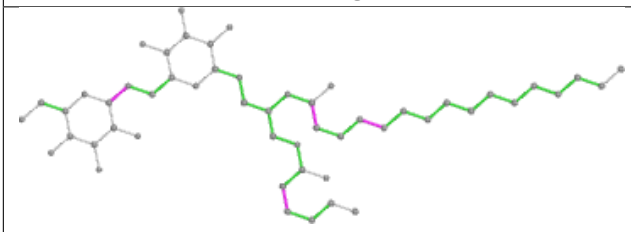
Ligand DGD c2 516



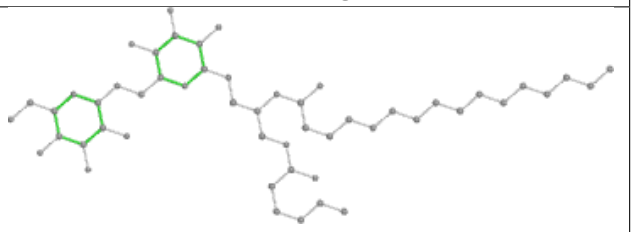
Bond lengths



Bond angles

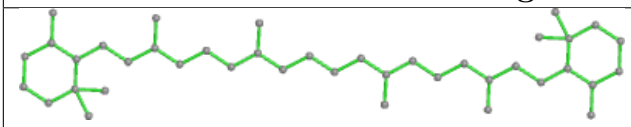


Torsions

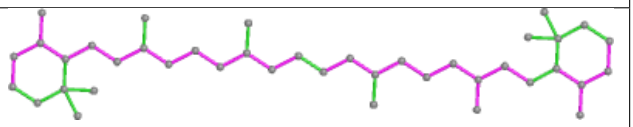


Rings

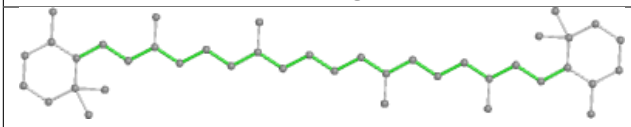
Ligand BCR k2 501



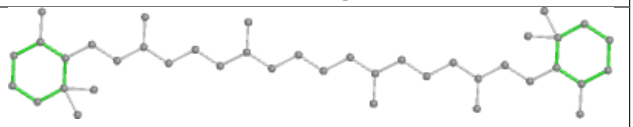
Bond lengths



Bond angles

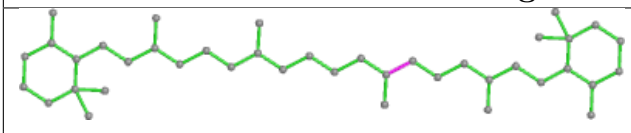


Torsions

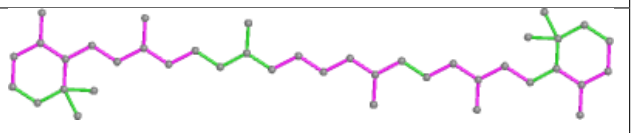


Rings

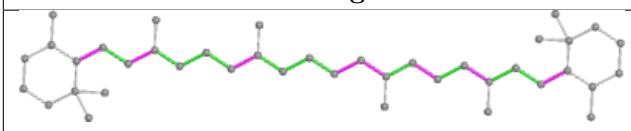
Ligand BCR c2 501



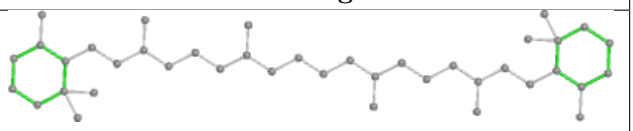
Bond lengths



Bond angles

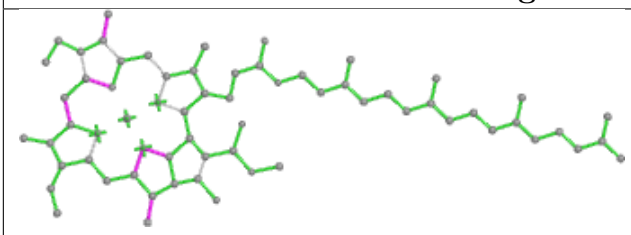


Torsions

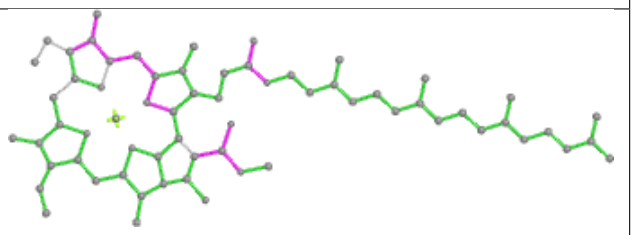


Rings

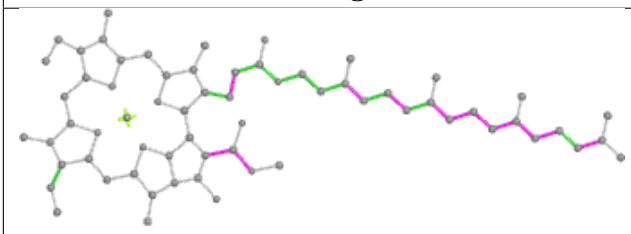
Ligand CLA b1 606



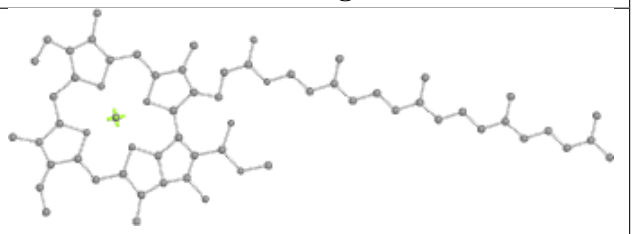
Bond lengths



Bond angles

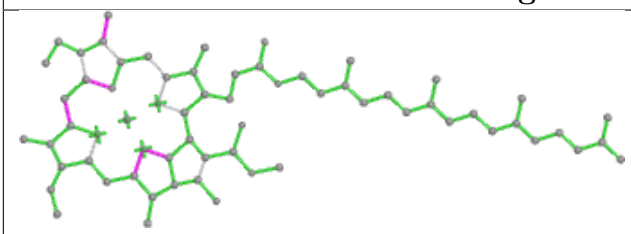


Torsions

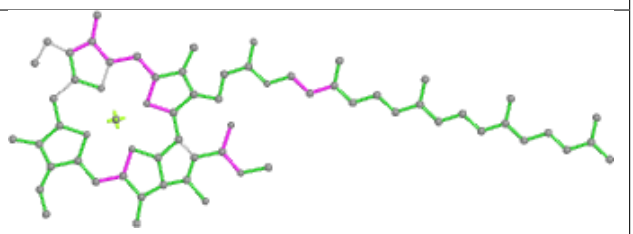


Rings

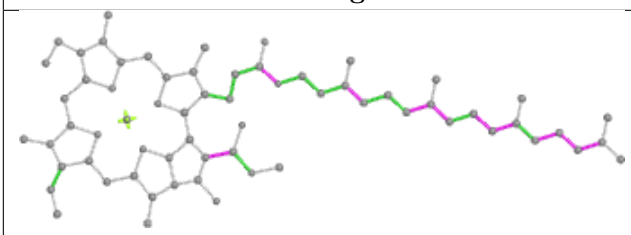
Ligand CLA b1 608



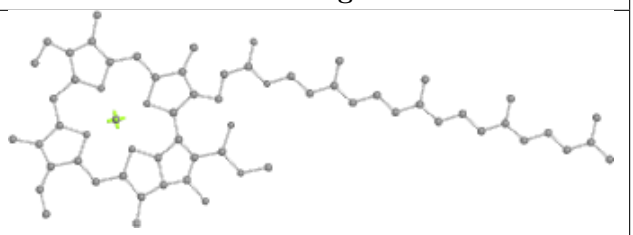
Bond lengths



Bond angles

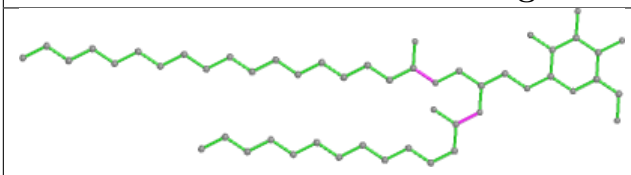


Torsions

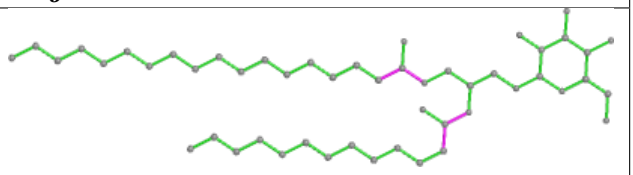


Rings

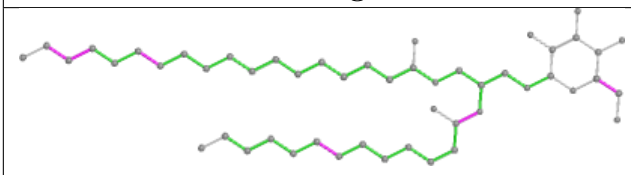
Ligand LMG j2 101



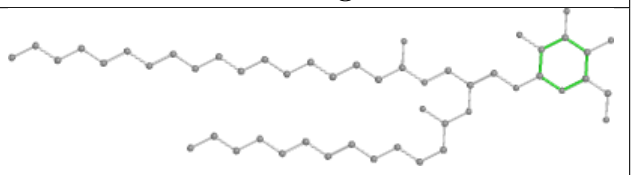
Bond lengths



Bond angles

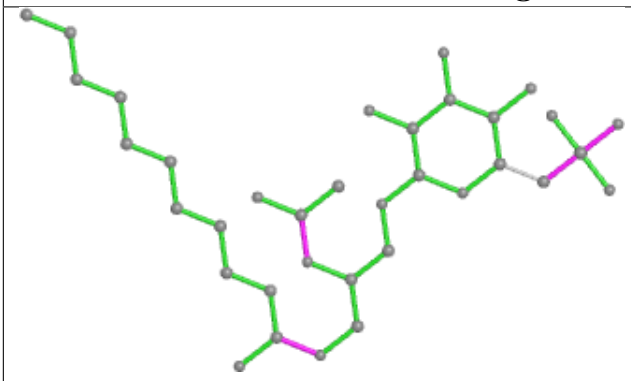


Torsions

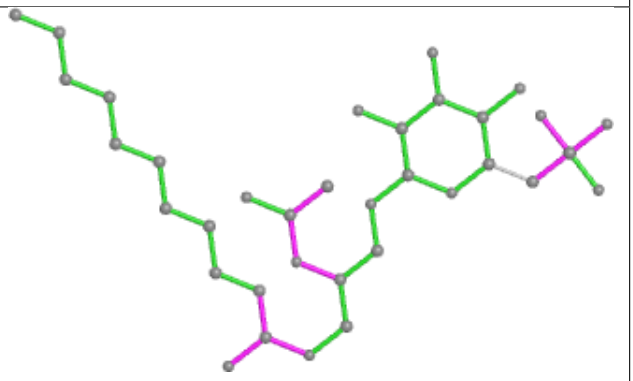


Rings

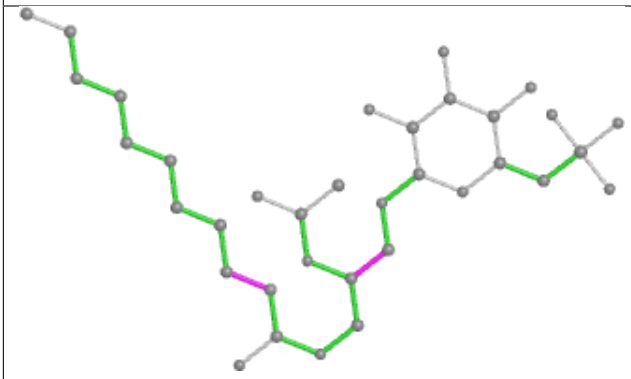
Ligand SQD D1 409



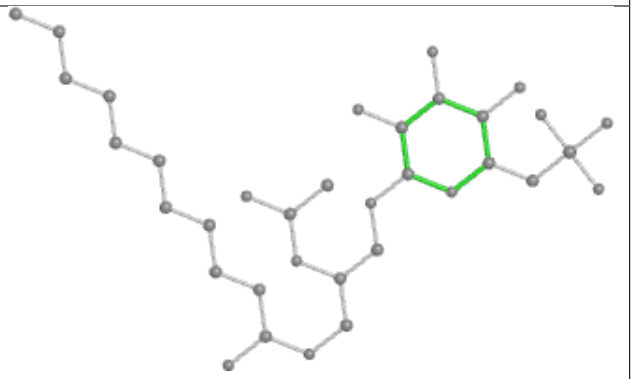
Bond lengths



Bond angles

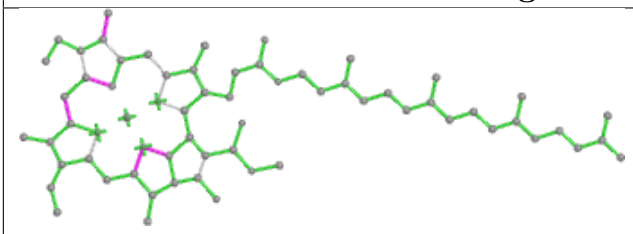


Torsions

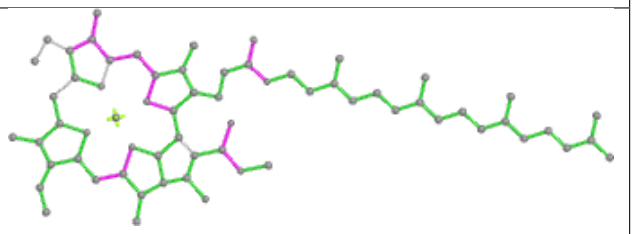


Rings

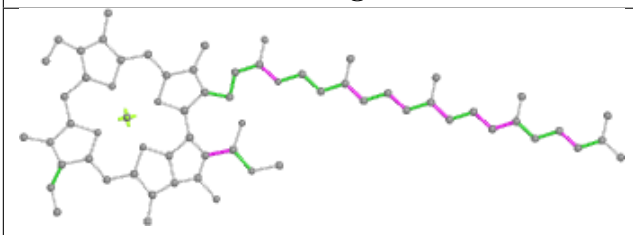
Ligand CLA b2 608



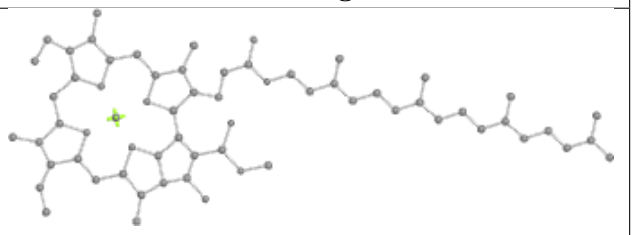
Bond lengths



Bond angles

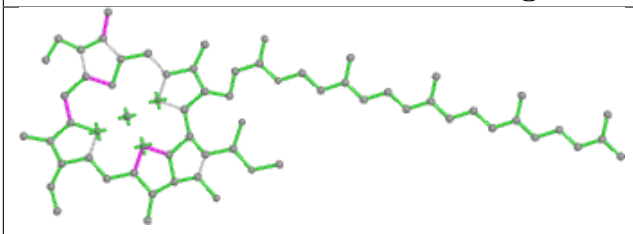


Torsions

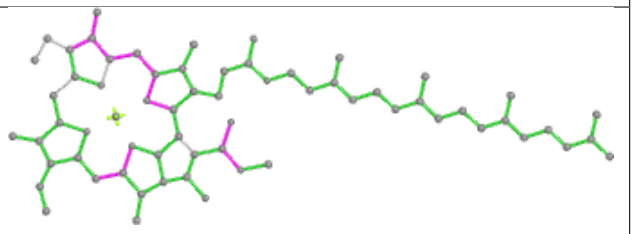


Rings

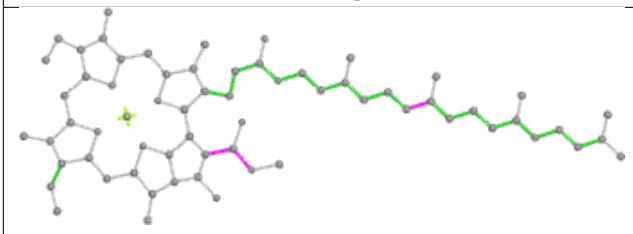
Ligand CLA c1 504



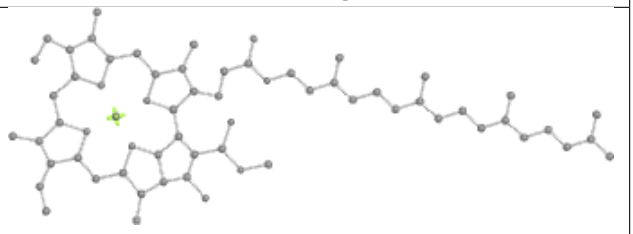
Bond lengths



Bond angles

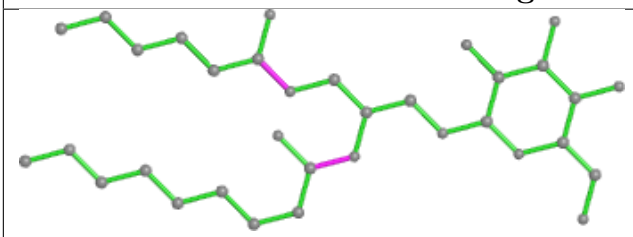


Torsions

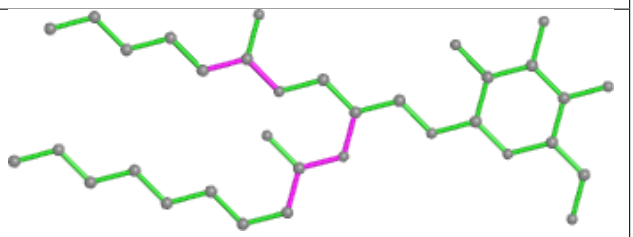


Rings

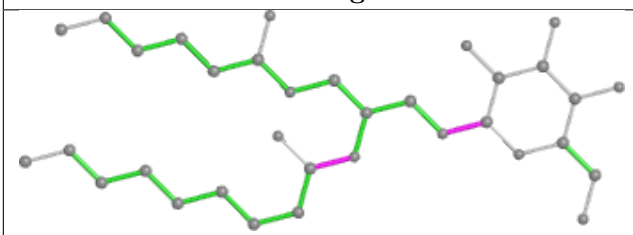
Ligand LMG I2 101



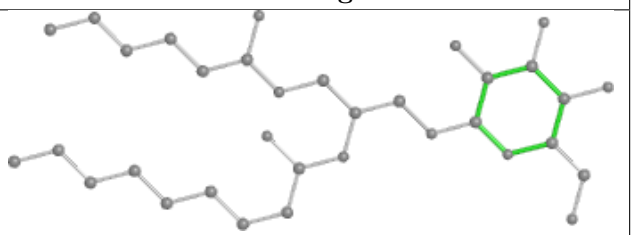
Bond lengths



Bond angles

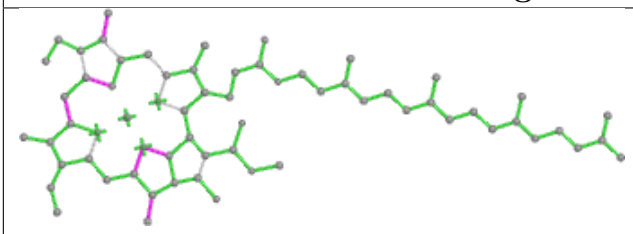


Torsions

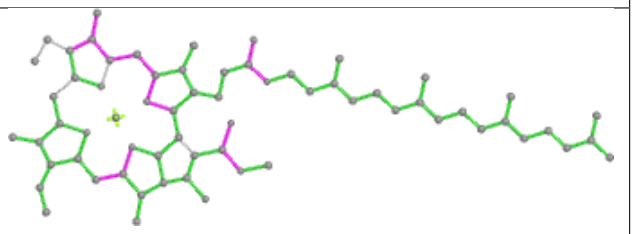


Rings

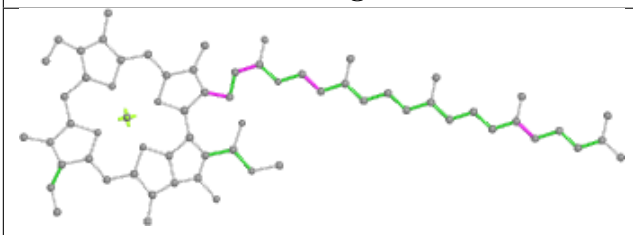
Ligand CLA D2 401



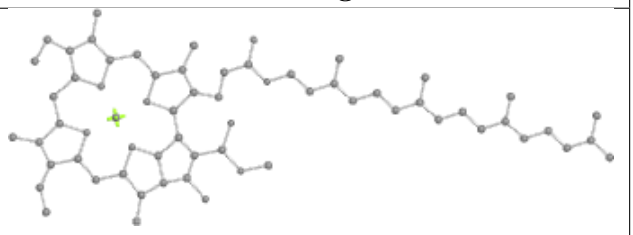
Bond lengths



Bond angles

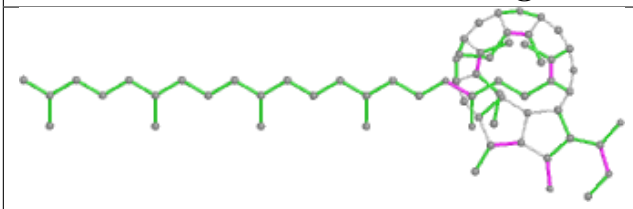


Torsions

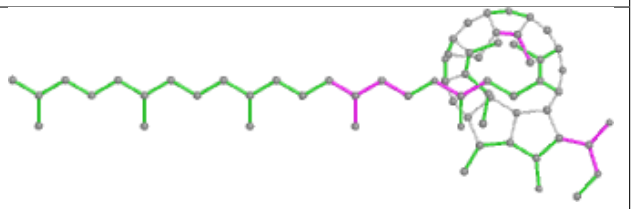


Rings

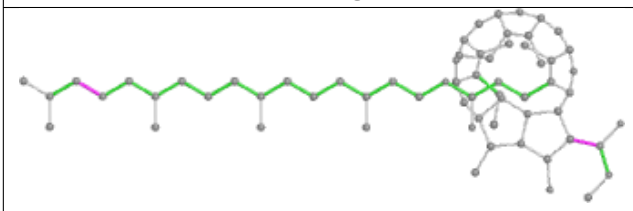
Ligand PHO d1 403



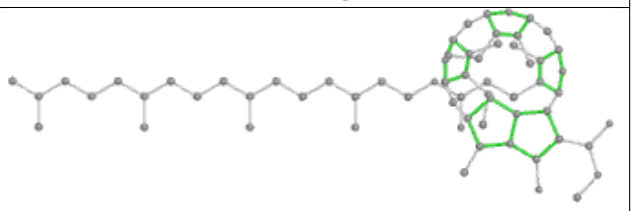
Bond lengths



Bond angles

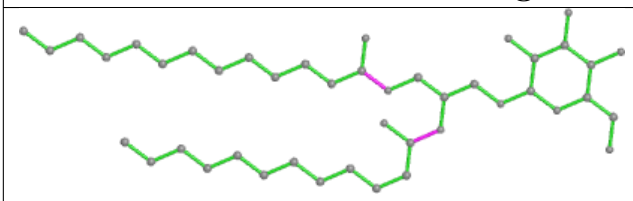


Torsions

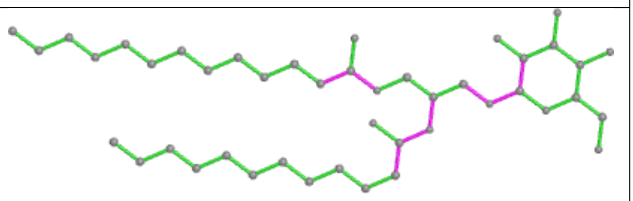


Rings

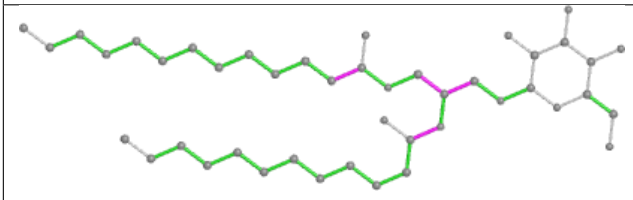
Ligand LMG a2 412



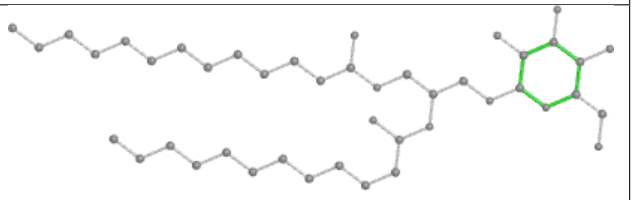
Bond lengths



Bond angles

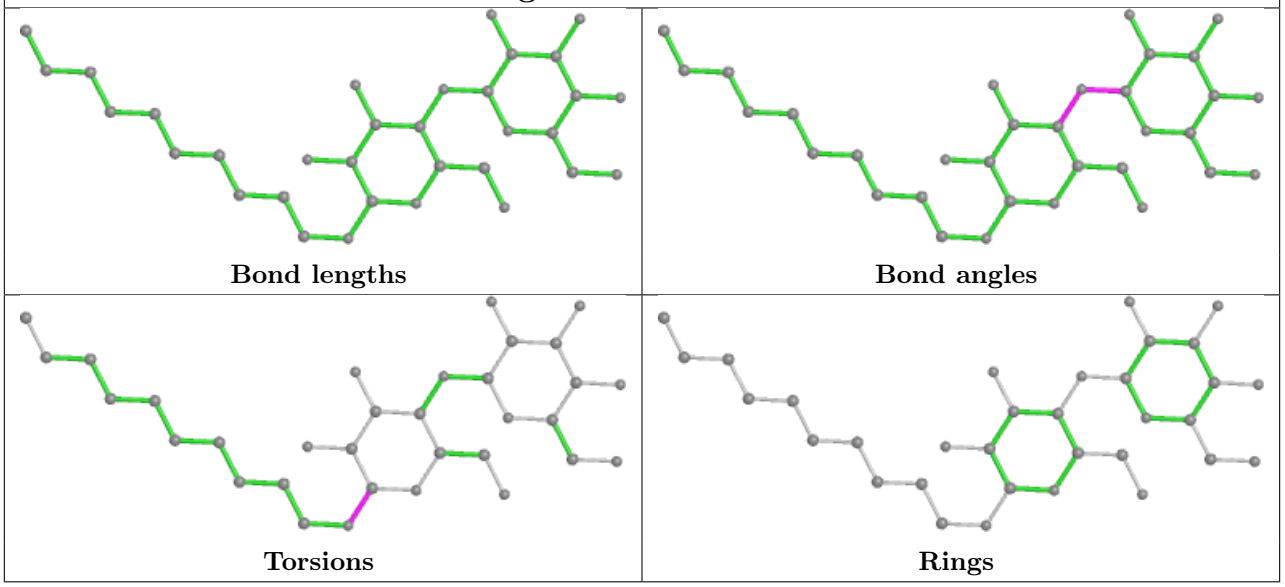


Torsions

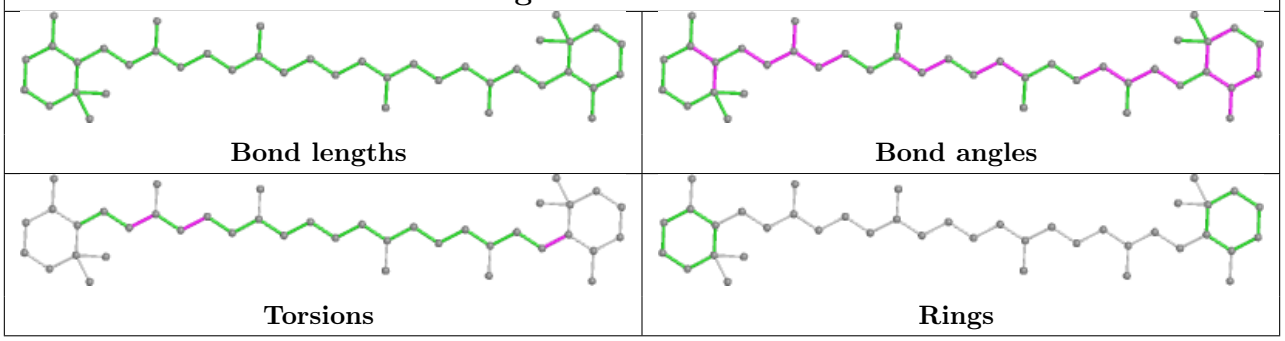


Rings

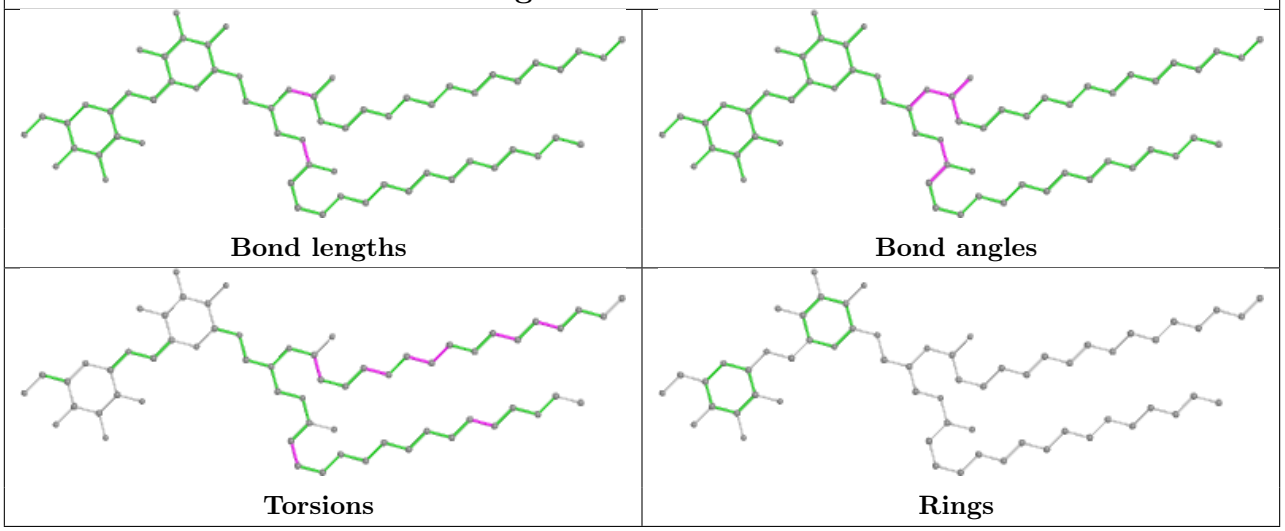
Ligand LMT c1 517



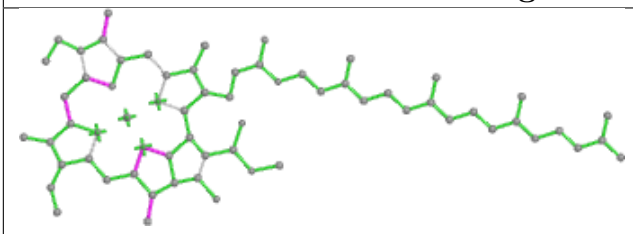
Ligand BCR B1 602



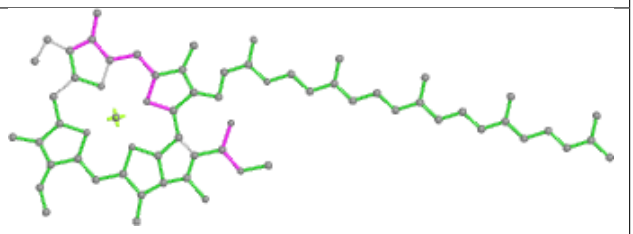
Ligand DGD h1 101



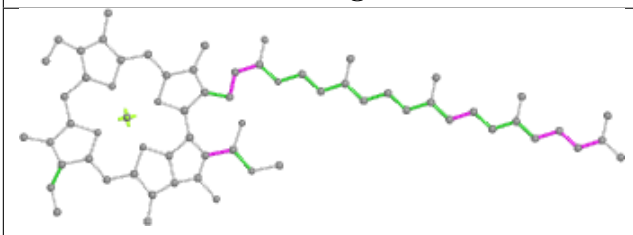
Ligand CLA b1 605



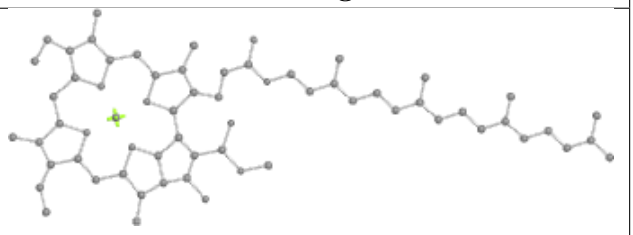
Bond lengths



Bond angles

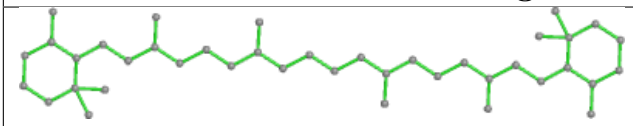


Torsions

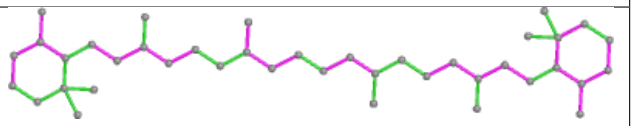


Rings

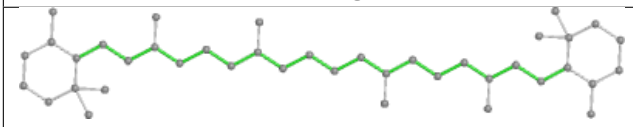
Ligand BCR b1 601



Bond lengths



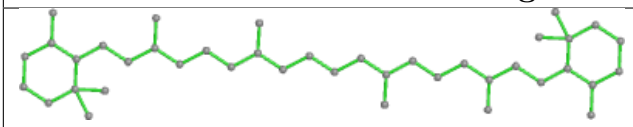
Bond angles



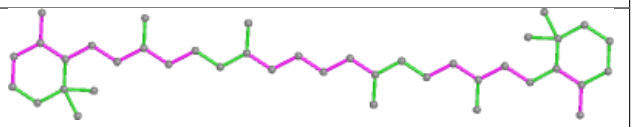
Torsions

Rings

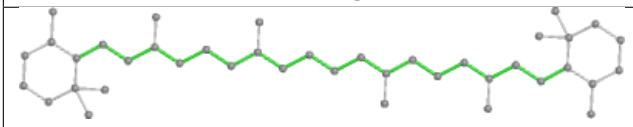
Ligand BCR c1 501



Bond lengths



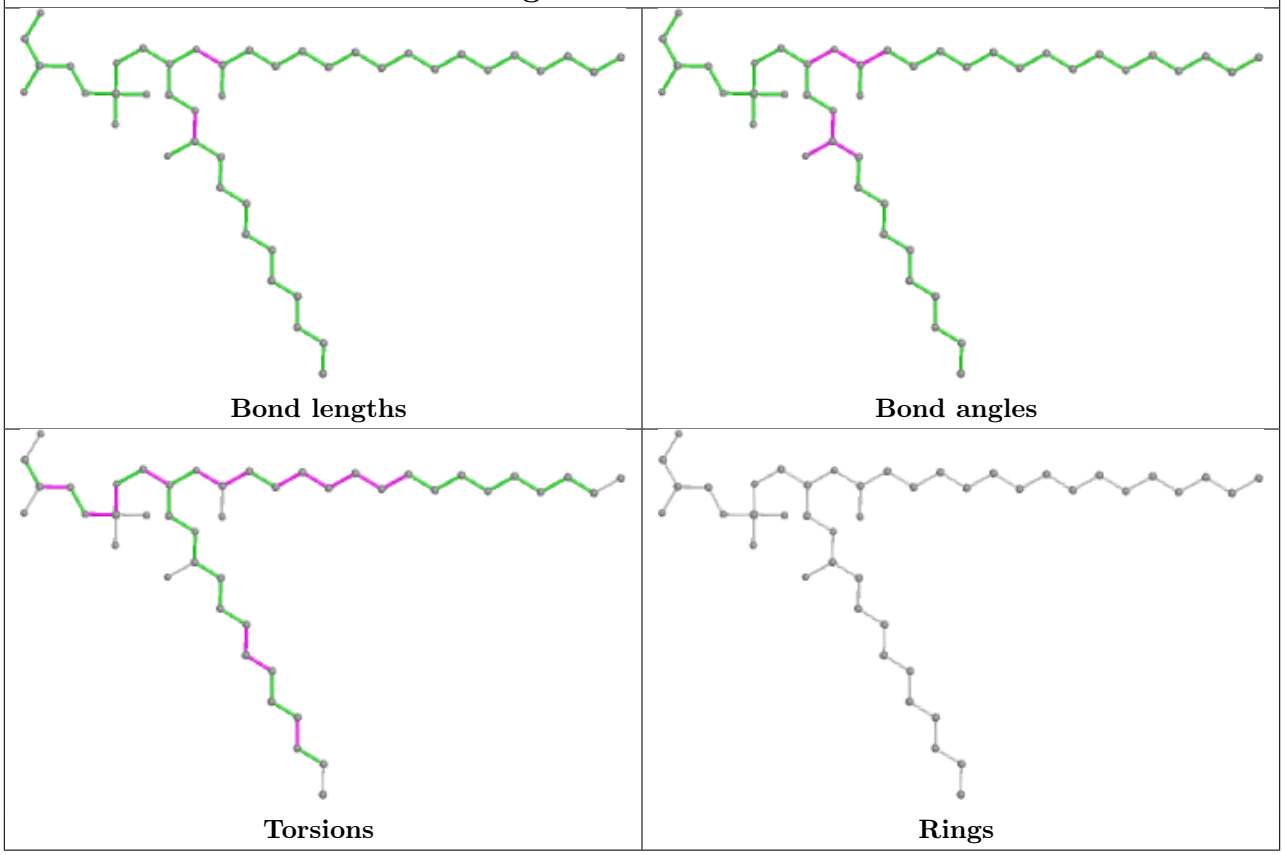
Bond angles



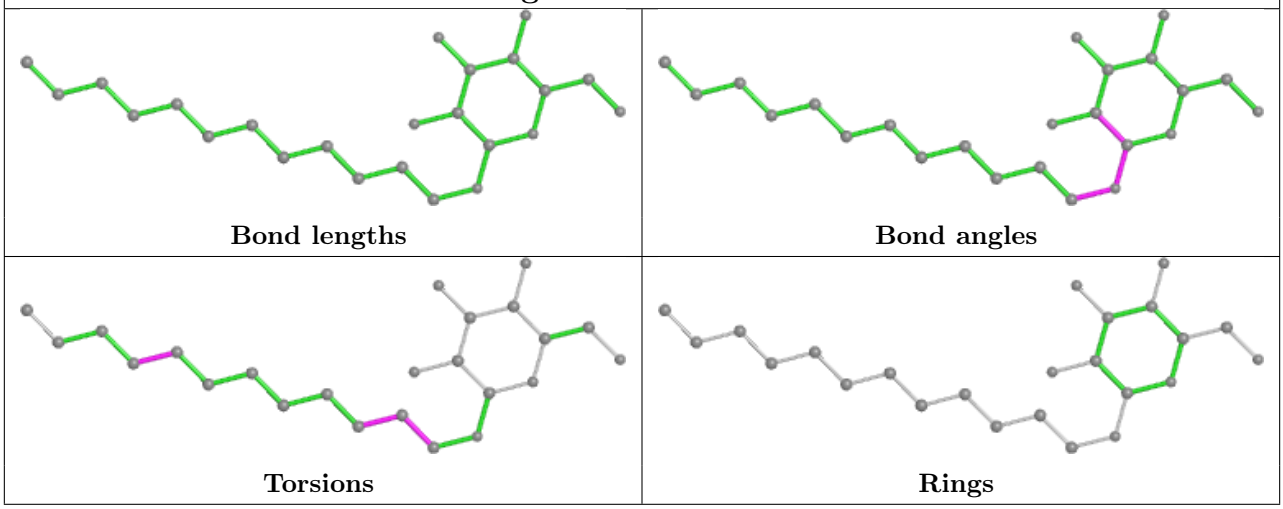
Torsions

Rings

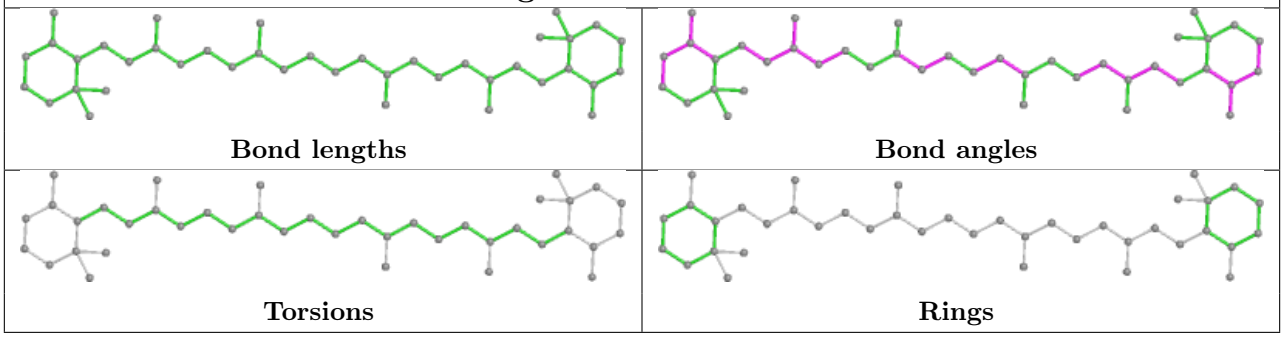
Ligand LHG l2 101



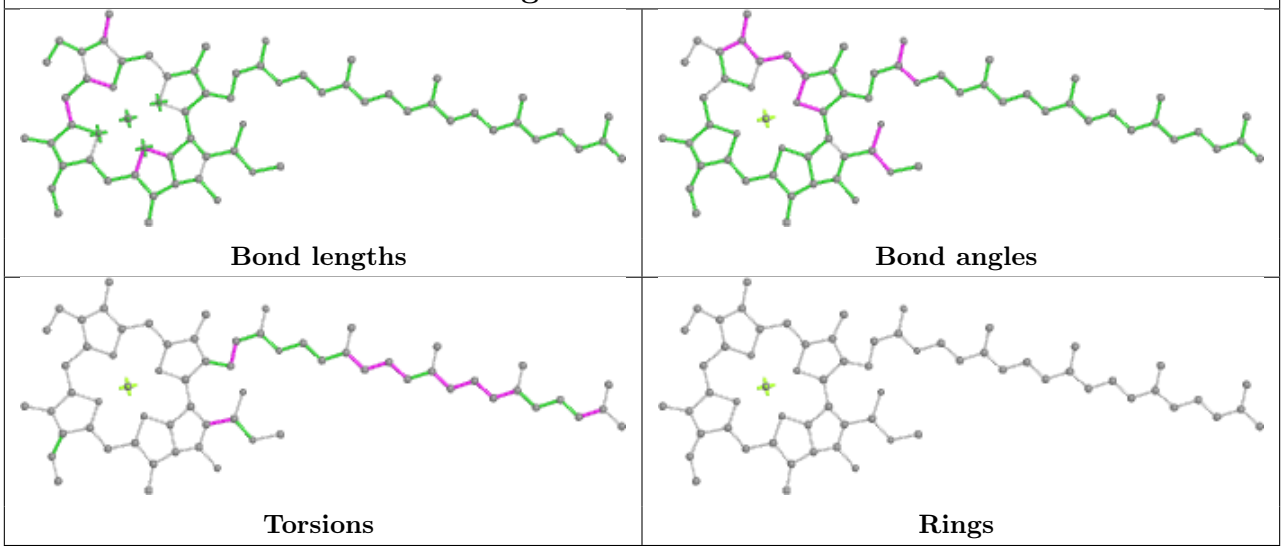
Ligand LMT l1 101



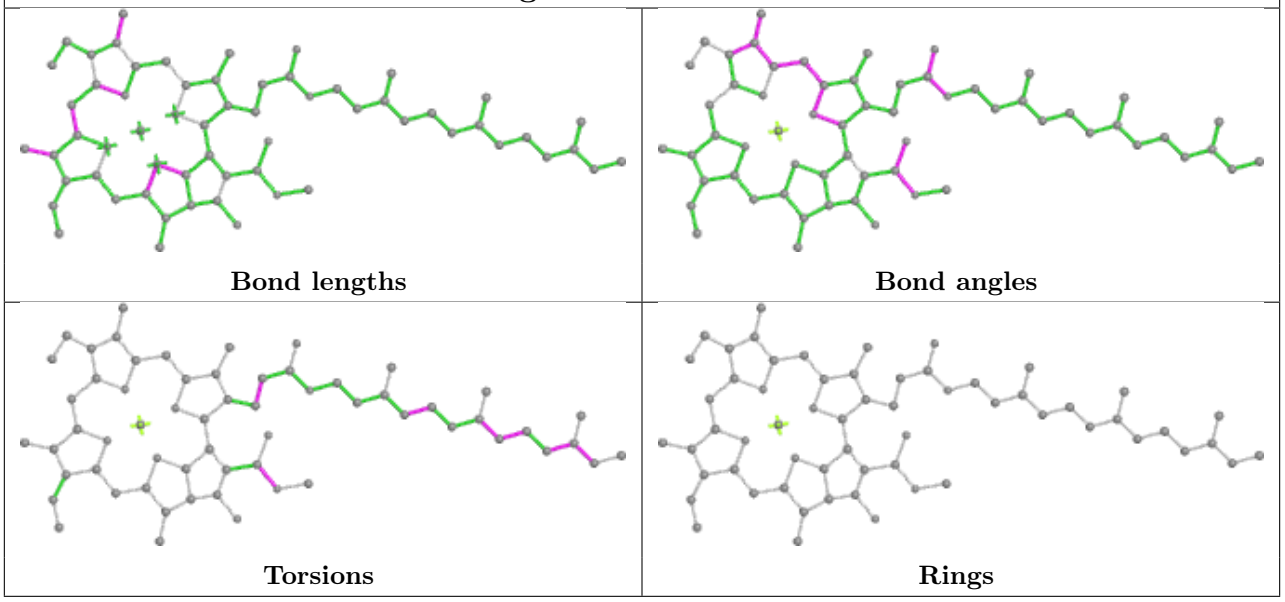
Ligand BCR b2 603



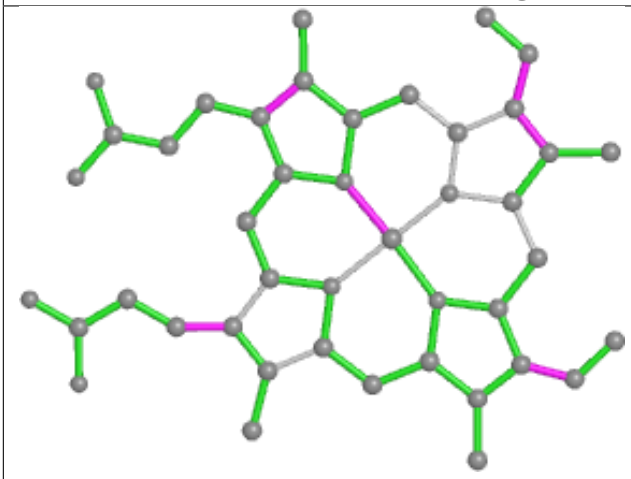
Ligand CLA c1 509



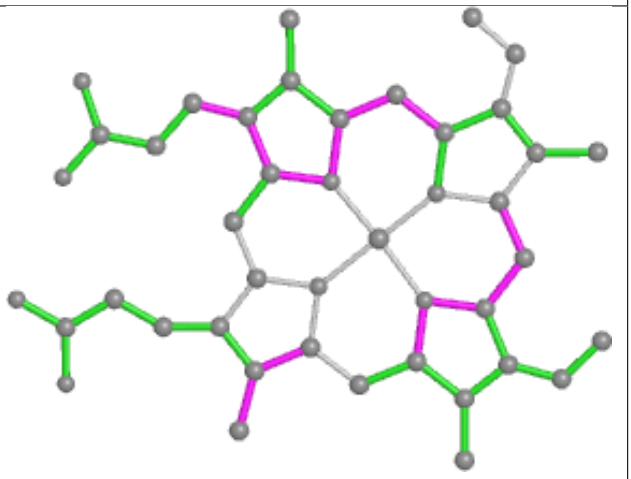
Ligand CLA b2 609



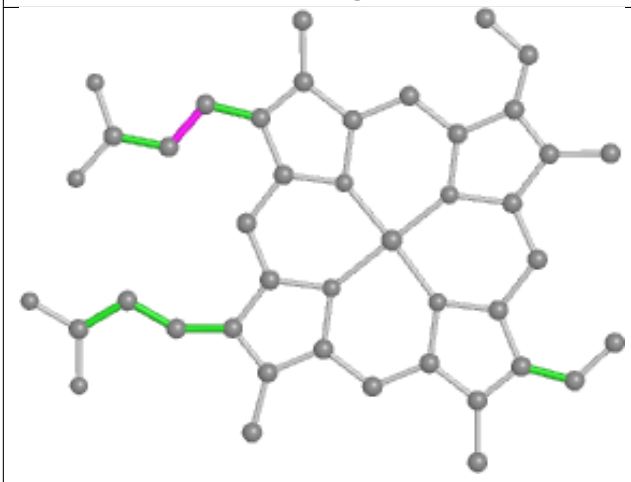
Ligand HEM v2 201



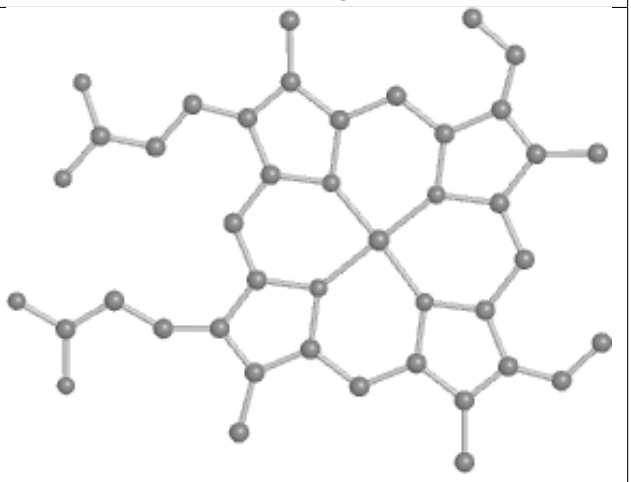
Bond lengths



Bond angles

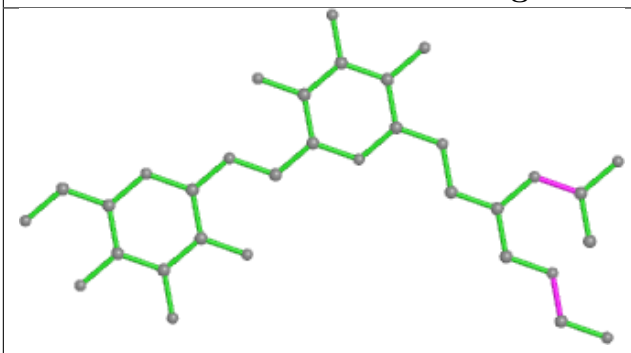


Torsions

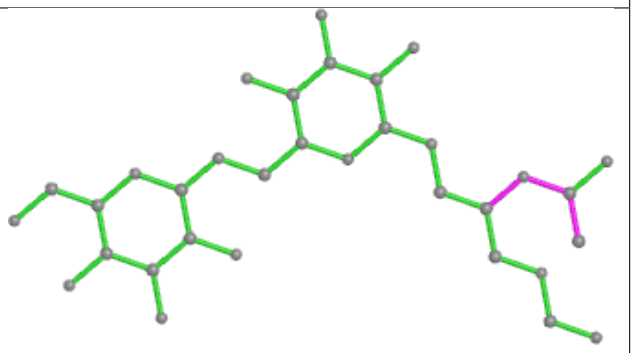


Rings

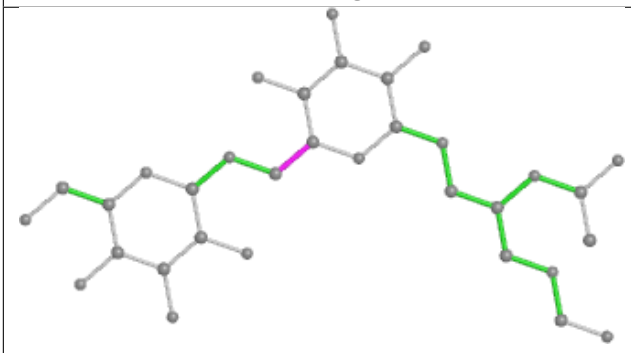
Ligand DGD C2 512



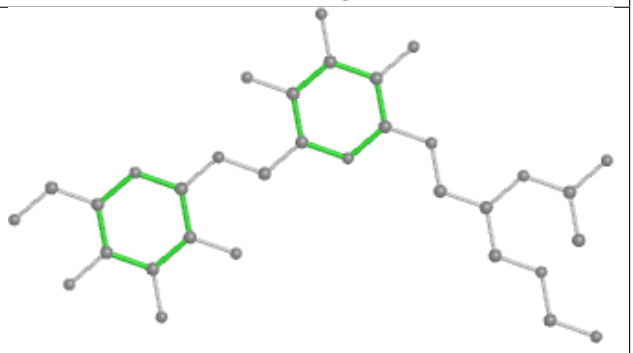
Bond lengths



Bond angles

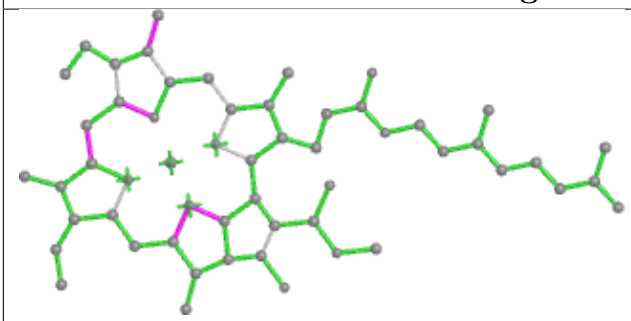


Torsions

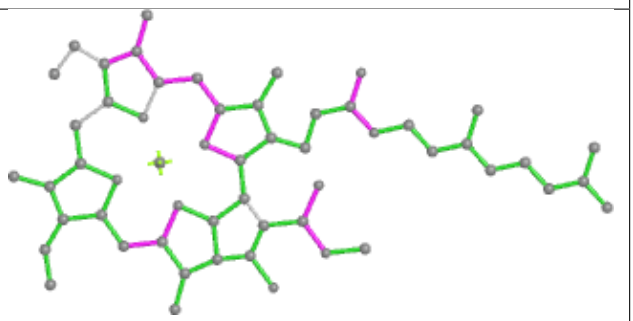


Rings

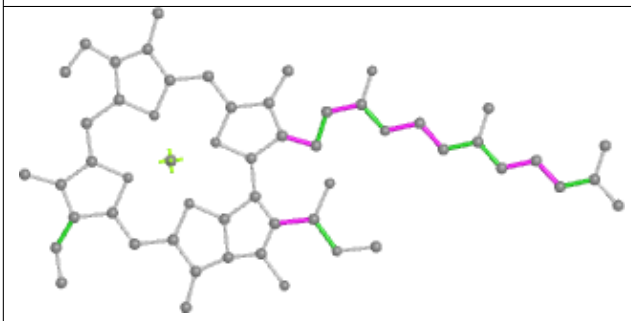
Ligand CLA c1 515



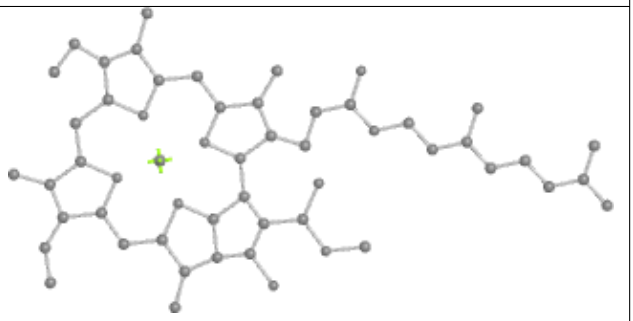
Bond lengths



Bond angles

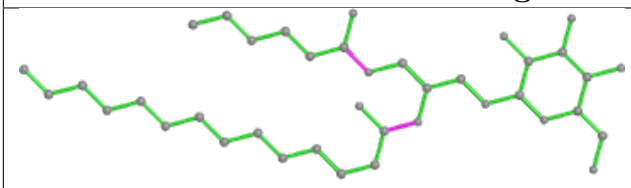


Torsions

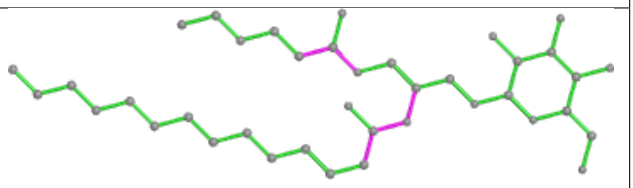


Rings

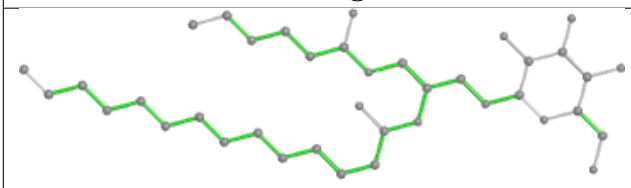
Ligand LMG b2 622



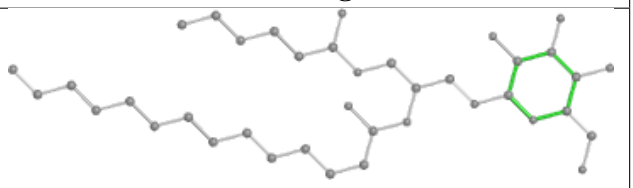
Bond lengths



Bond angles

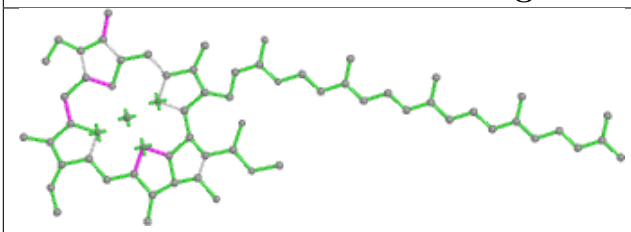


Torsions

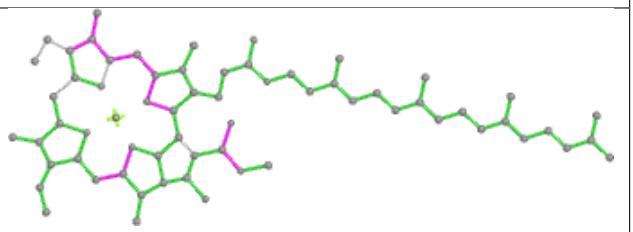


Rings

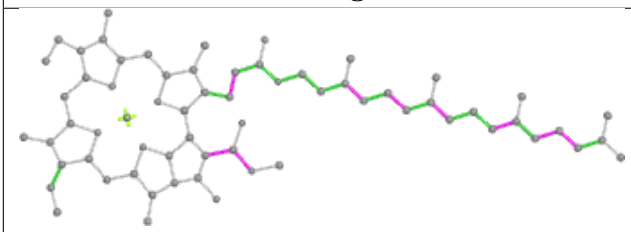
Ligand CLA B1 608



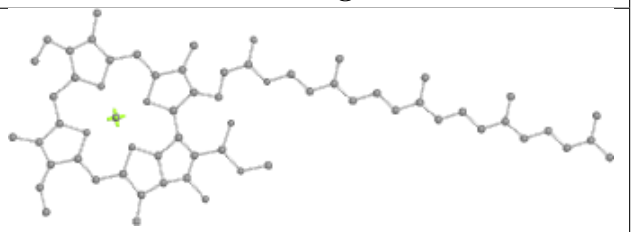
Bond lengths



Bond angles

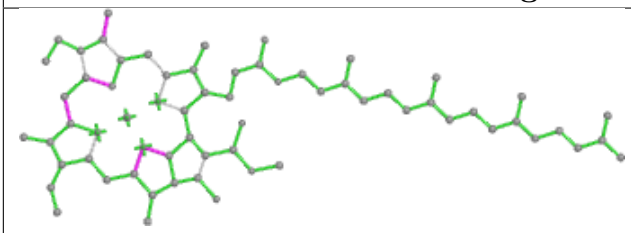


Torsions

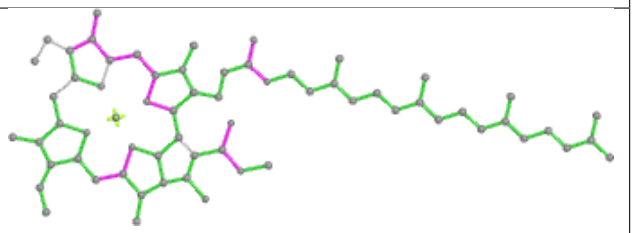


Rings

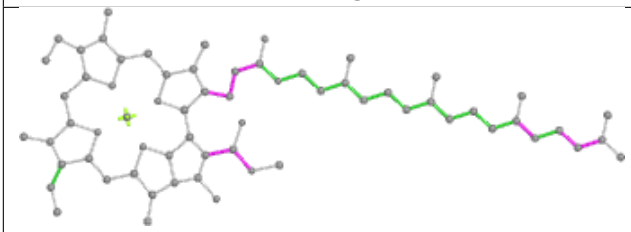
Ligand CLA c1 503



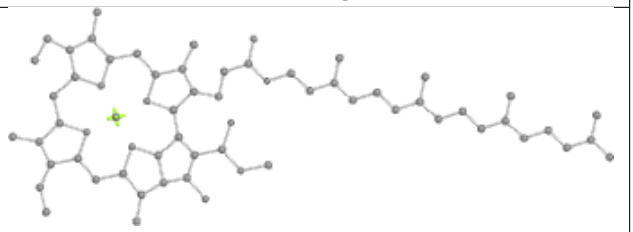
Bond lengths



Bond angles

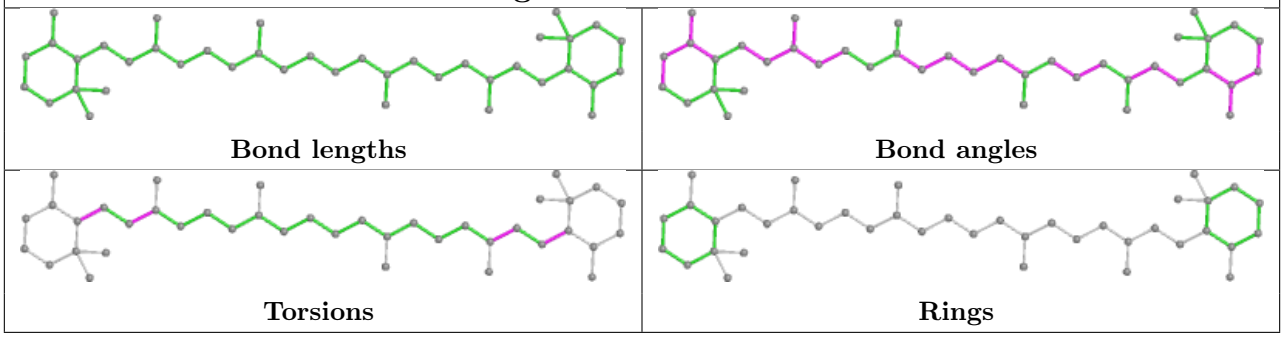


Torsions

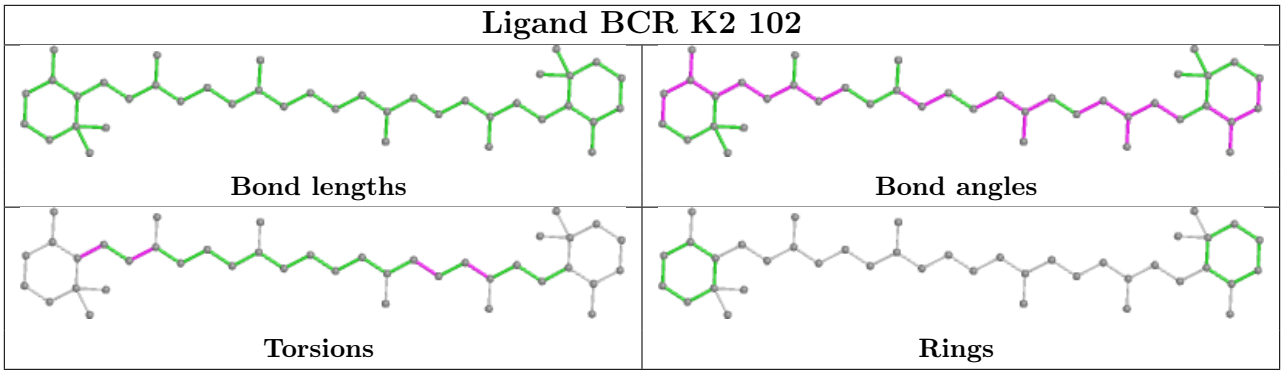


Rings

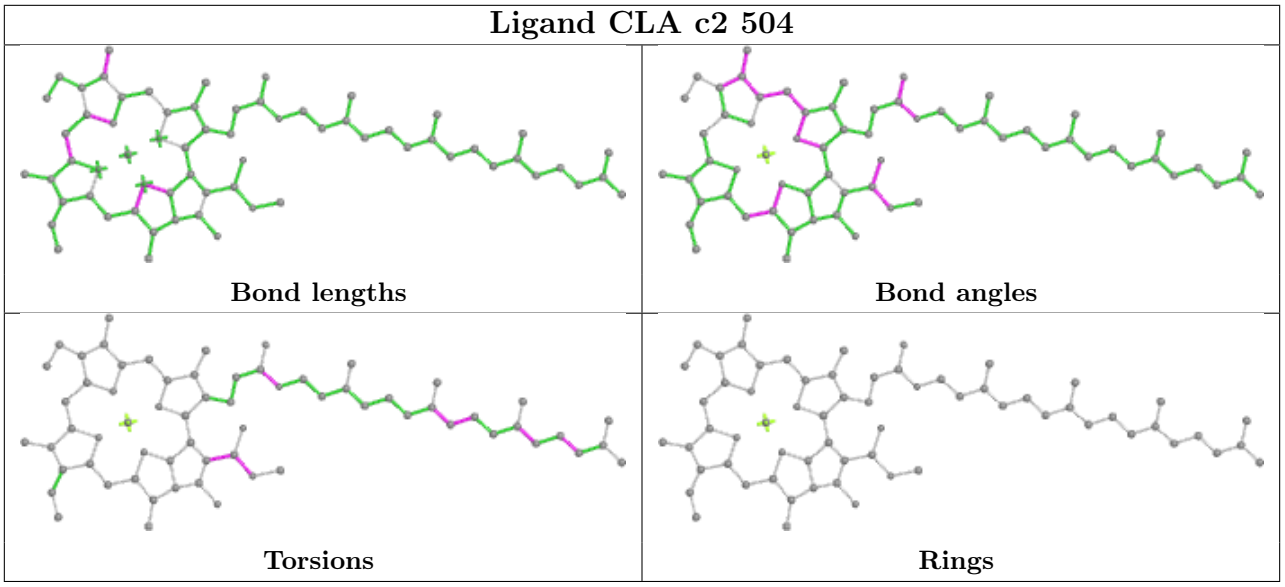
Ligand BCR D1 401



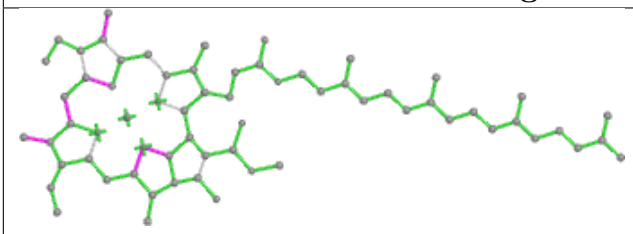
Ligand BCR K2 102



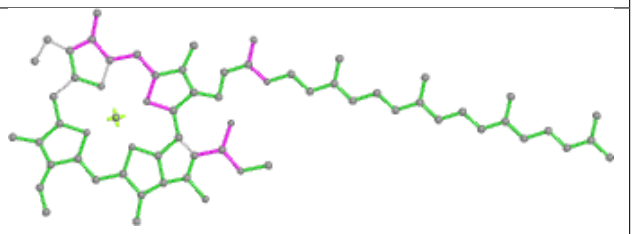
Ligand CLA c2 504



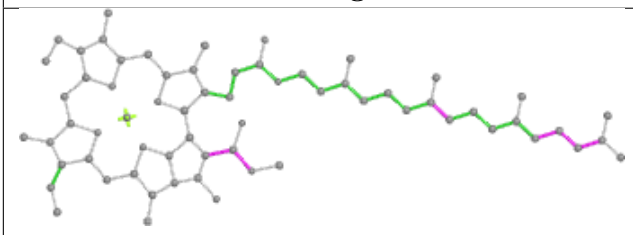
Ligand CLA c1 510



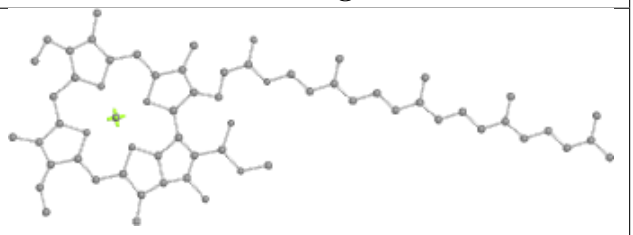
Bond lengths



Bond angles

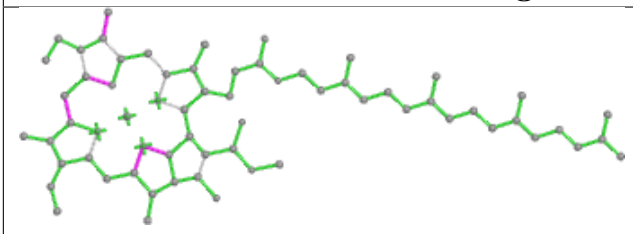


Torsions

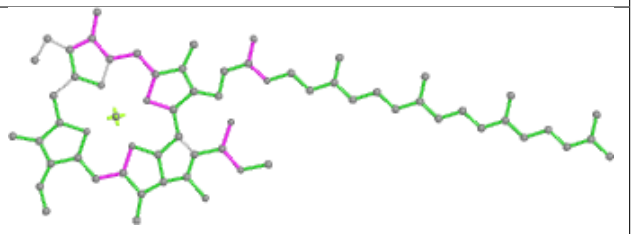


Rings

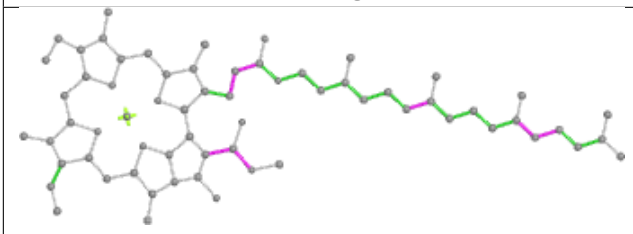
Ligand CLA B1 605



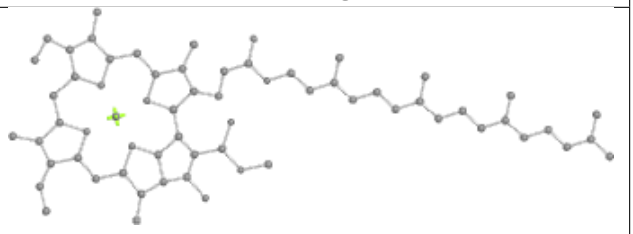
Bond lengths



Bond angles

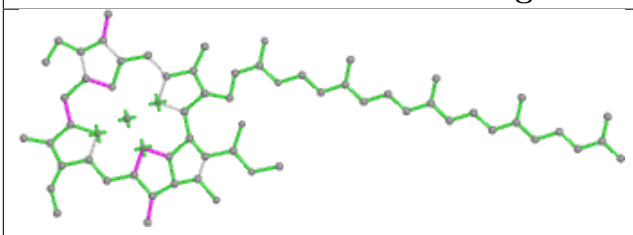


Torsions

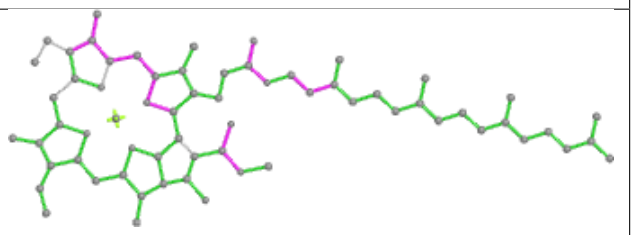


Rings

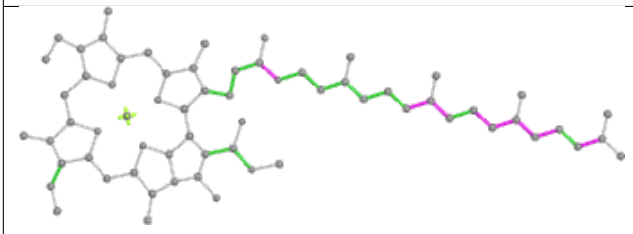
Ligand CLA B2 614



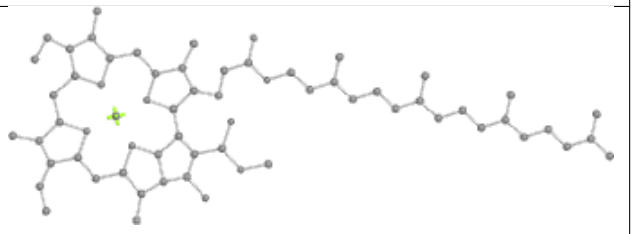
Bond lengths



Bond angles

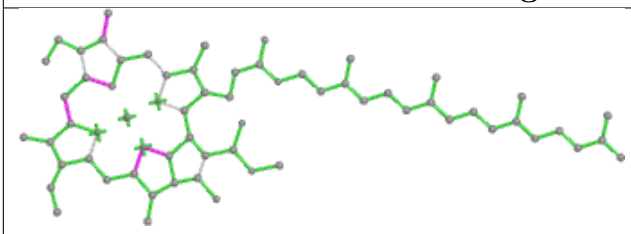


Torsions

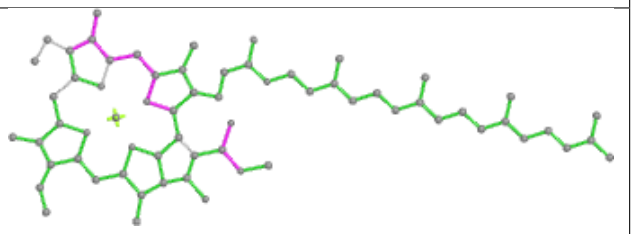


Rings

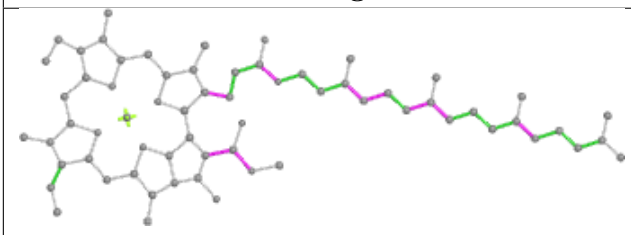
Ligand CLA c2 503



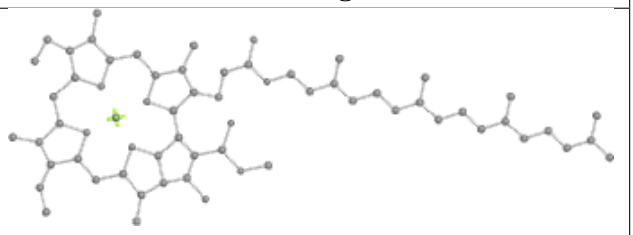
Bond lengths



Bond angles

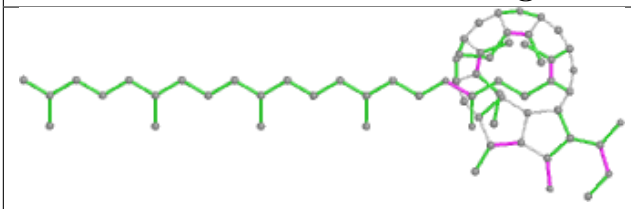


Torsions

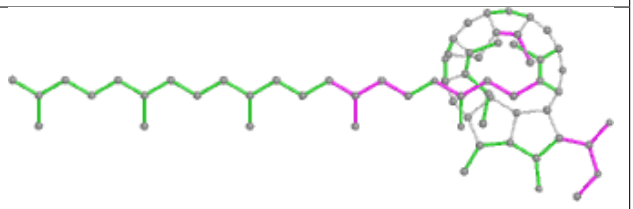


Rings

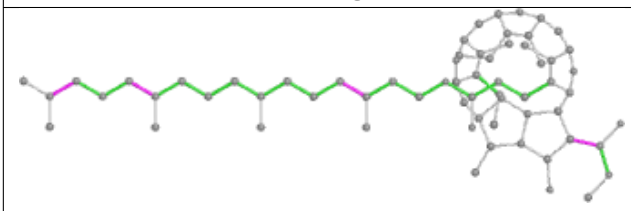
Ligand PHO a2 416



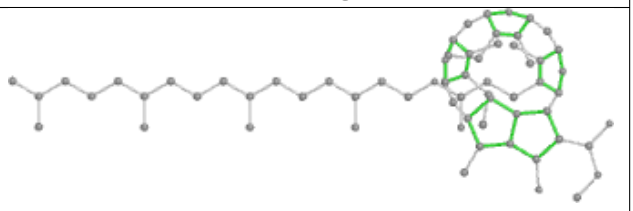
Bond lengths



Bond angles

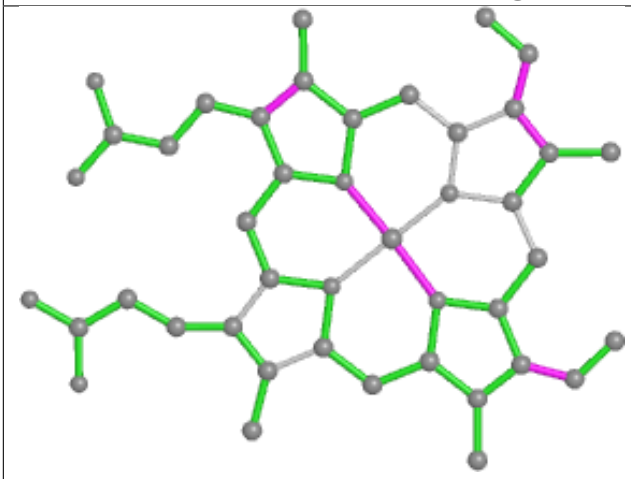


Torsions

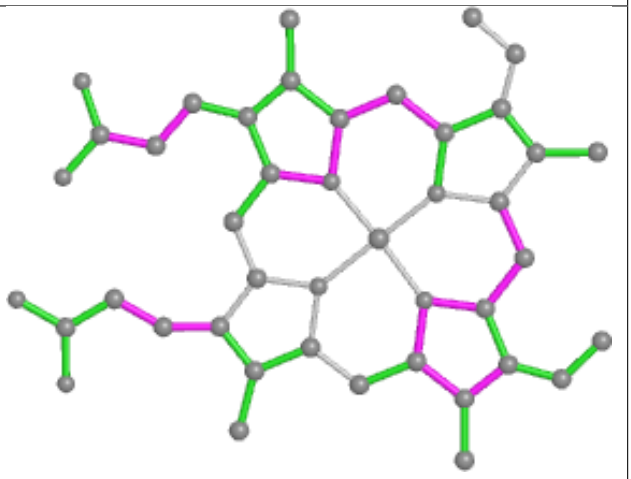


Rings

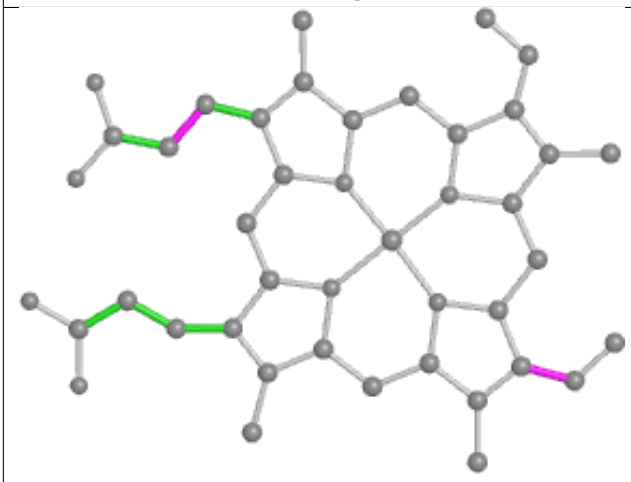
Ligand HEM V2 201



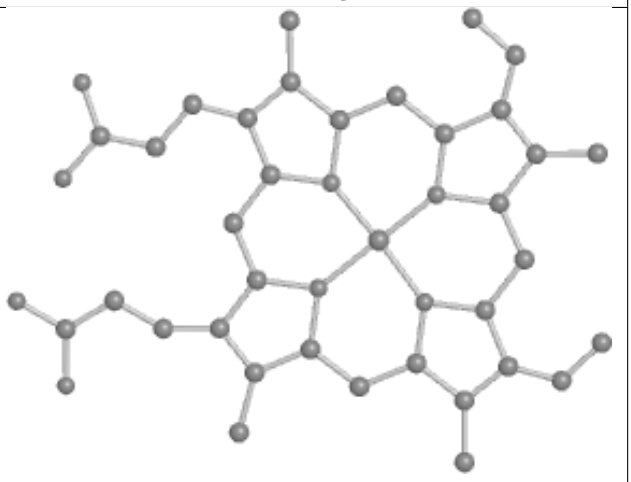
Bond lengths



Bond angles

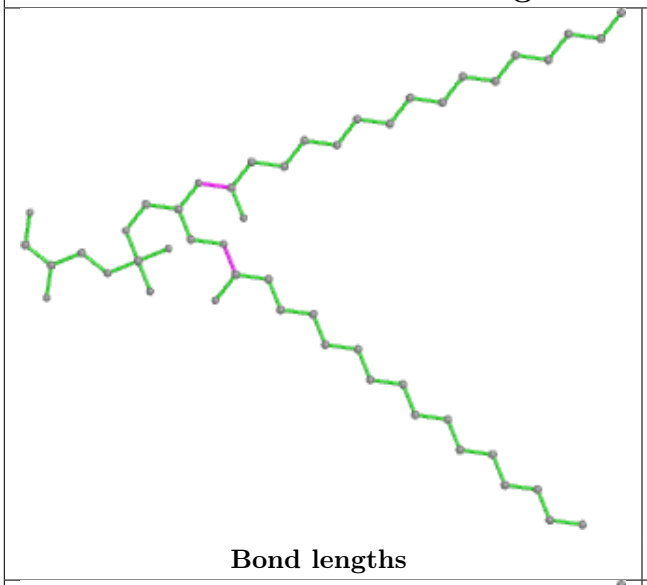


Torsions

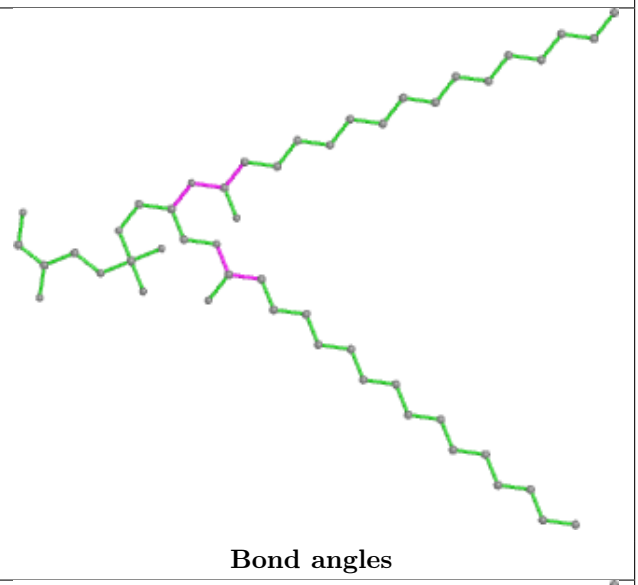


Rings

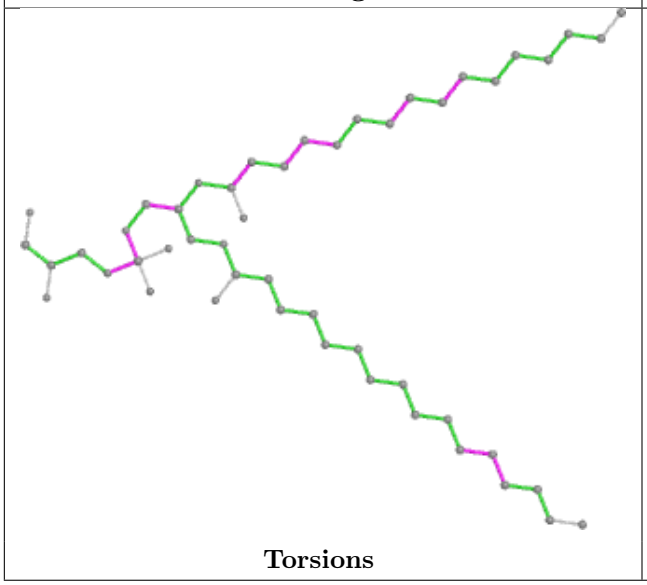
Ligand LHG D1 405



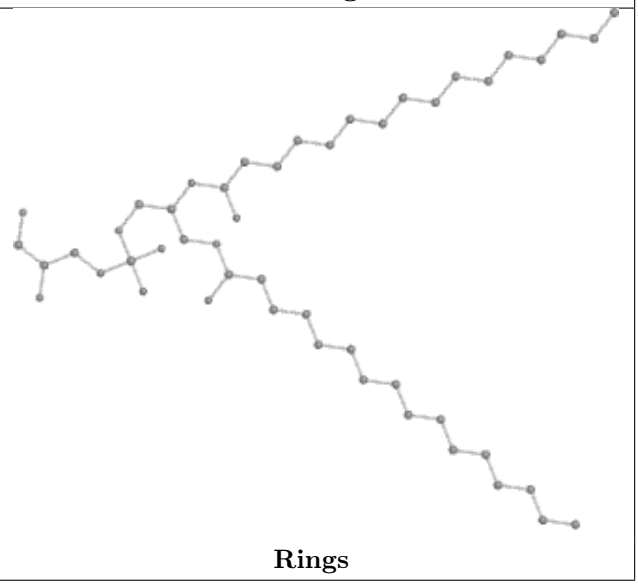
Bond lengths



Bond angles

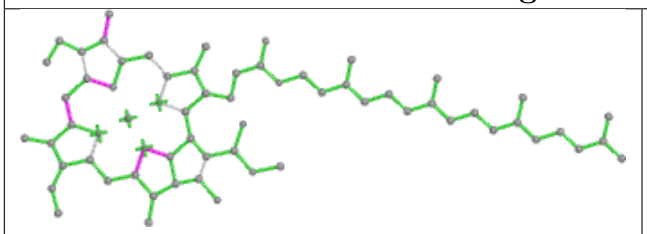


Torsions

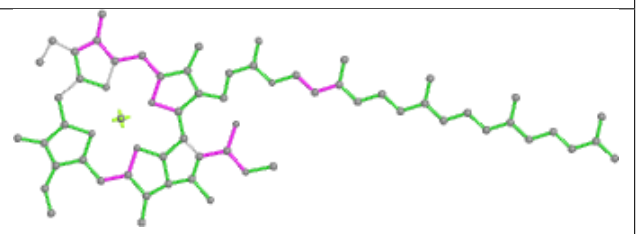


Rings

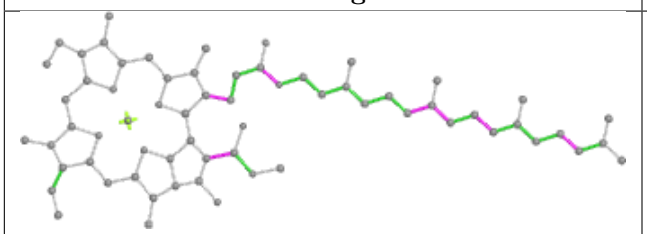
Ligand CLA d2 402



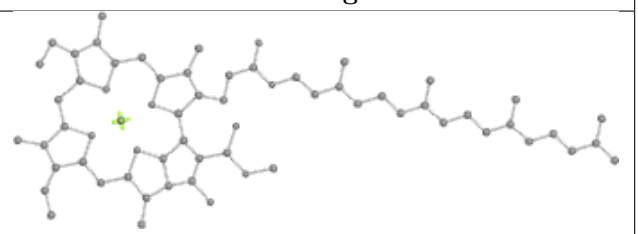
Bond lengths



Bond angles

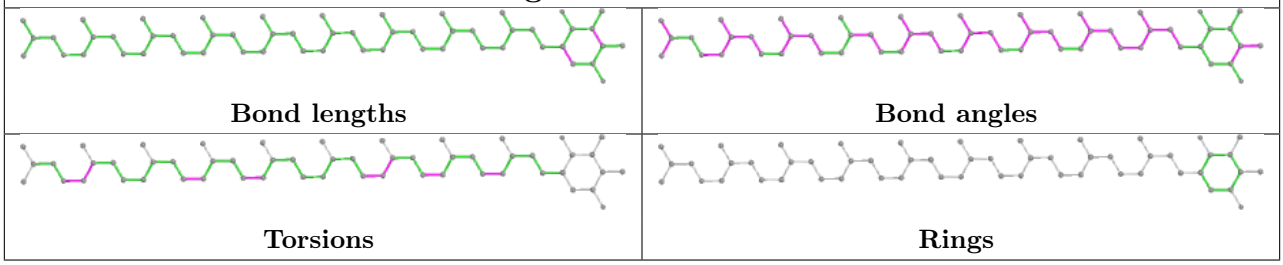


Torsions

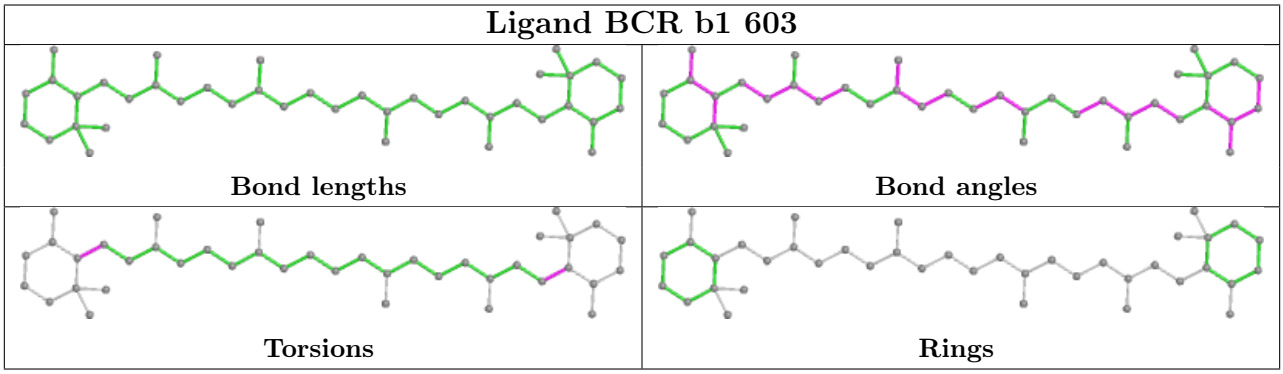


Rings

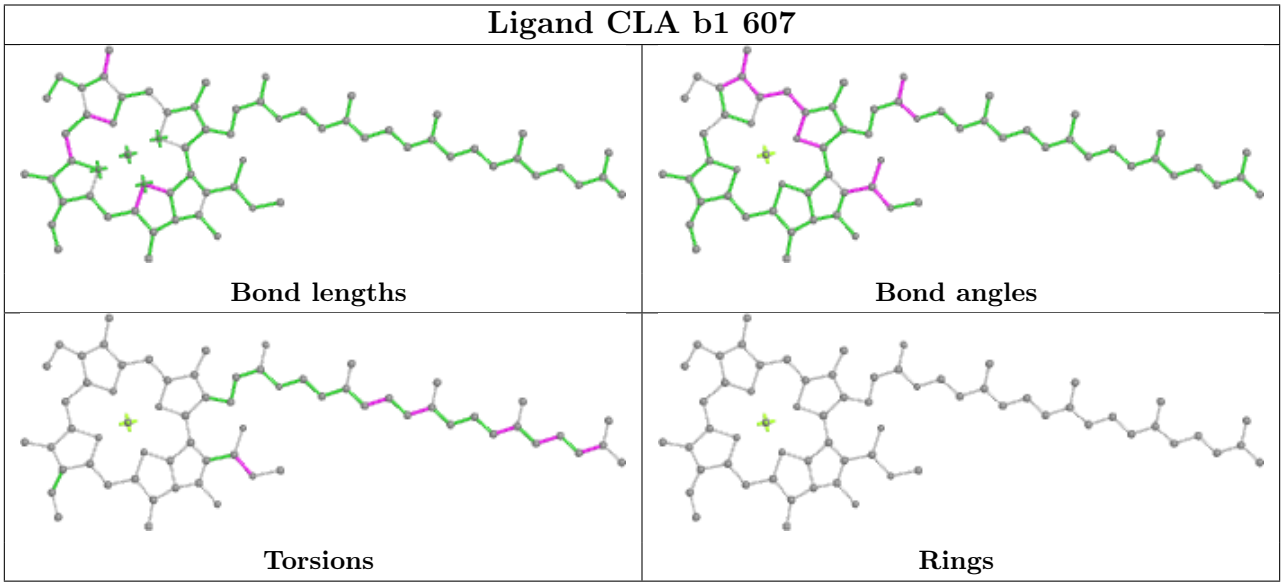
Ligand PL9 d1 409



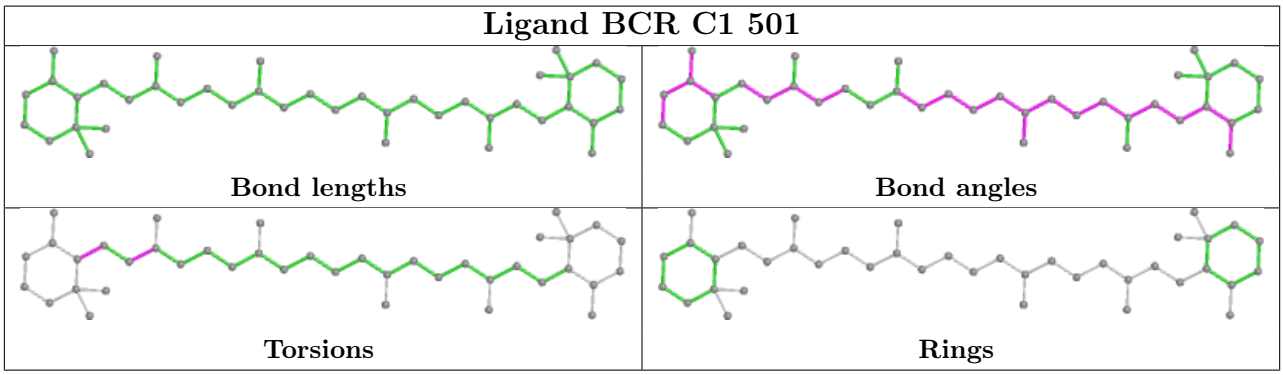
Ligand BCR b1 603



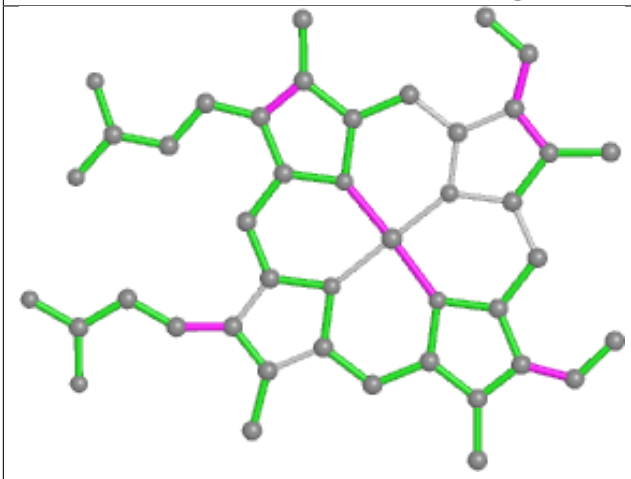
Ligand CLA b1 607



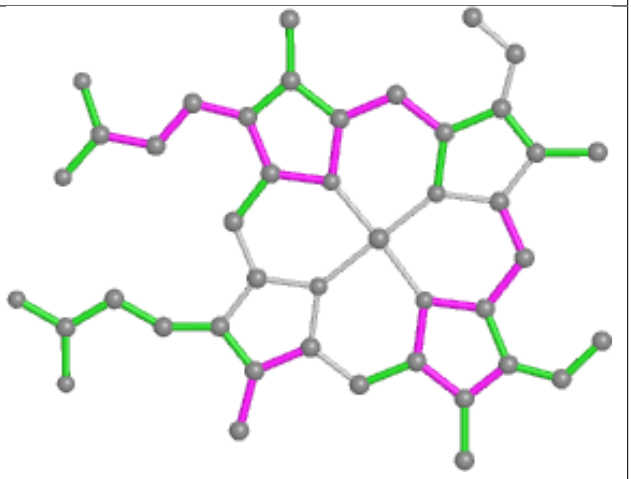
Ligand BCR C1 501



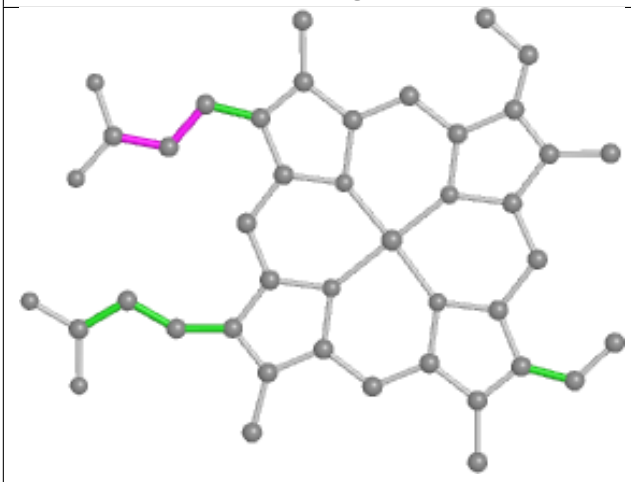
Ligand HEM V1 201



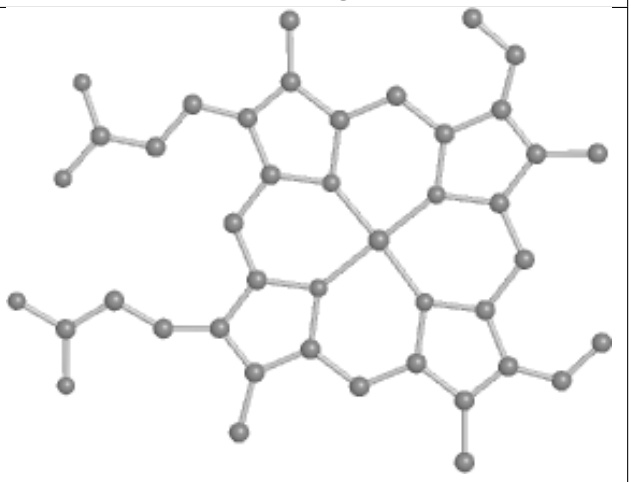
Bond lengths



Bond angles

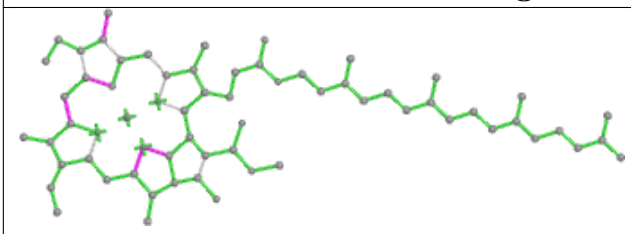


Torsions

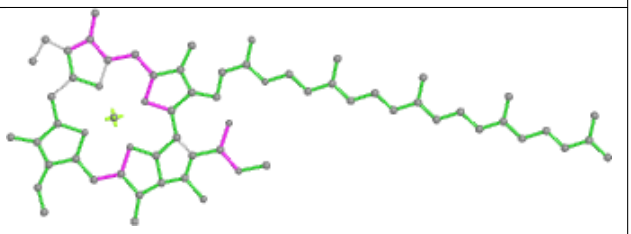


Rings

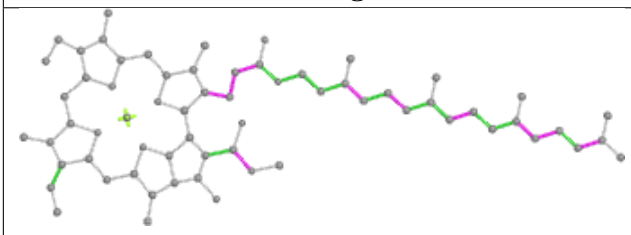
Ligand CLA C2 503



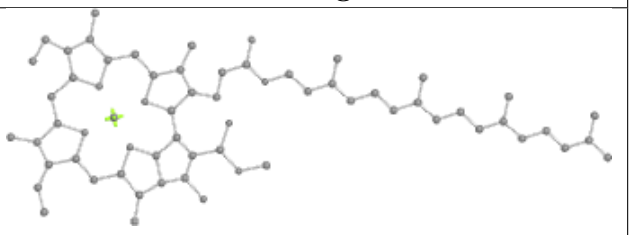
Bond lengths



Bond angles

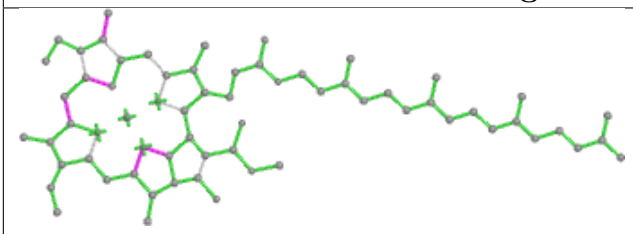


Torsions

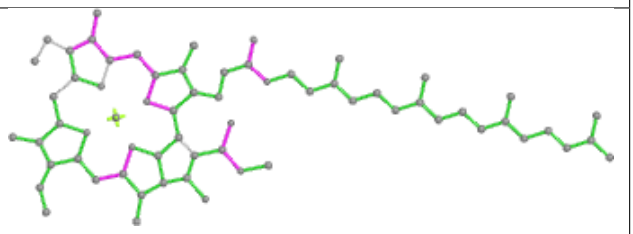


Rings

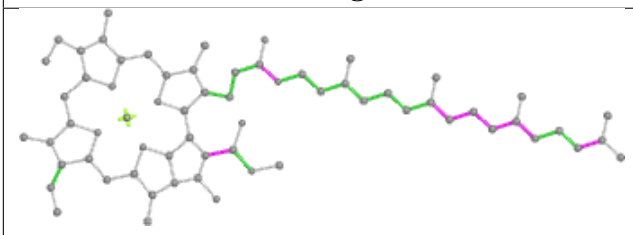
Ligand CLA c1 506



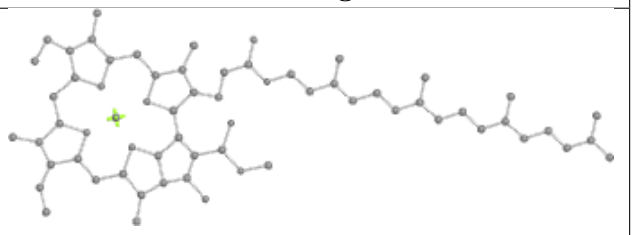
Bond lengths



Bond angles

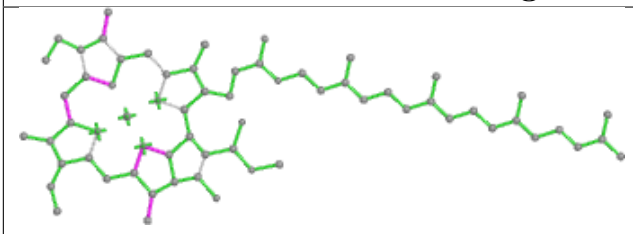


Torsions

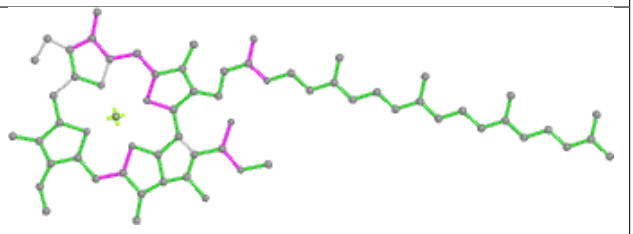


Rings

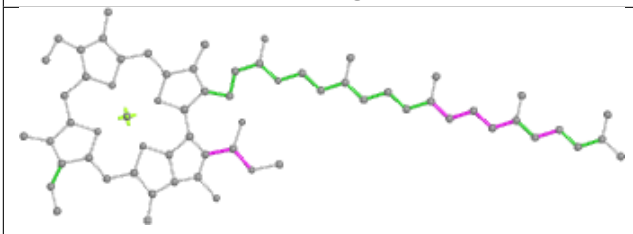
Ligand CLA c1 511



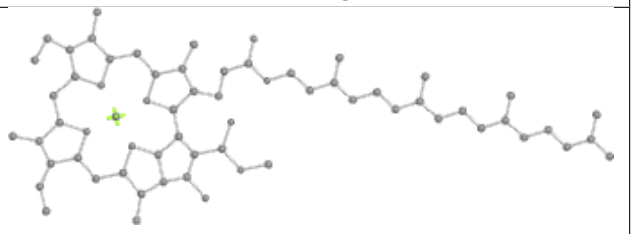
Bond lengths



Bond angles

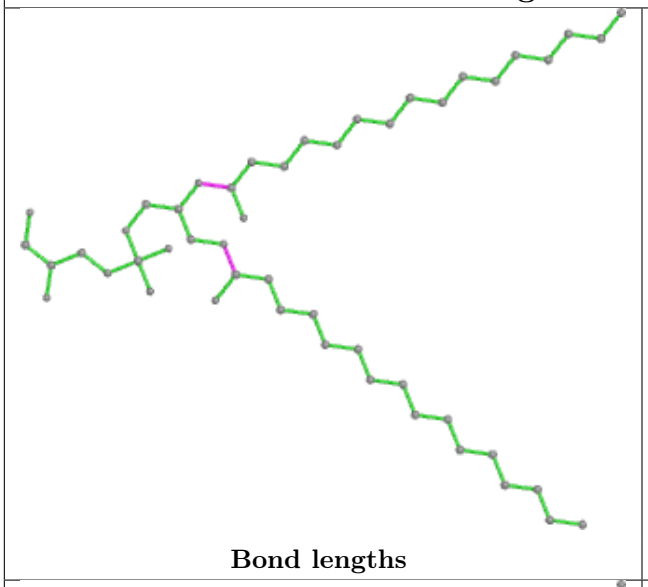


Torsions

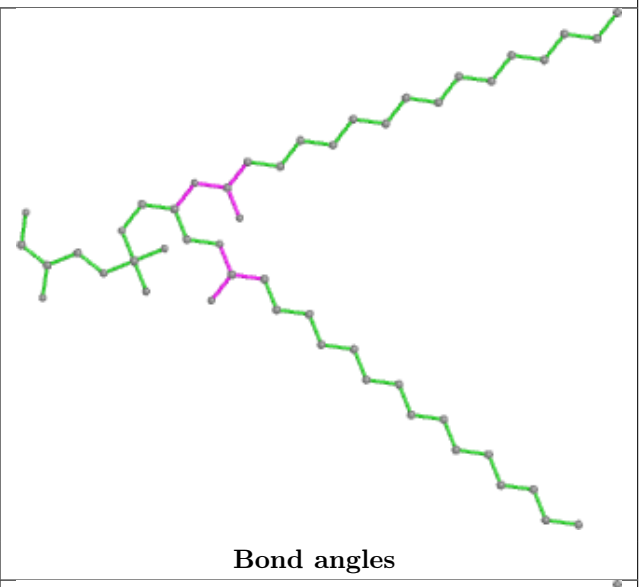


Rings

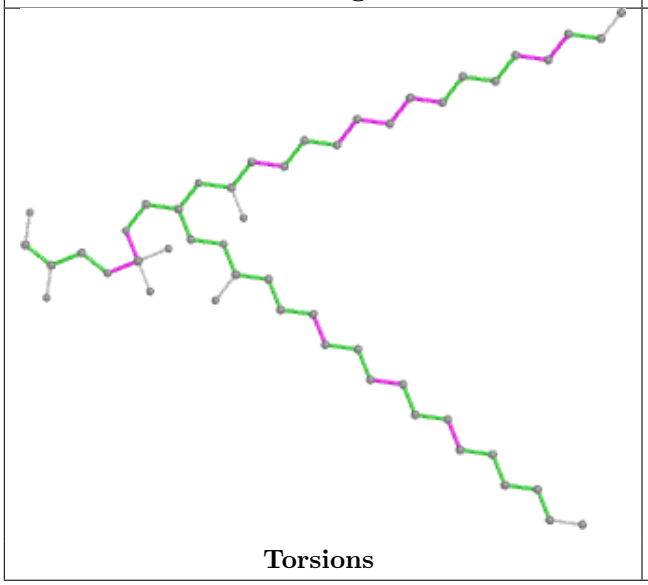
Ligand LHG b1 622



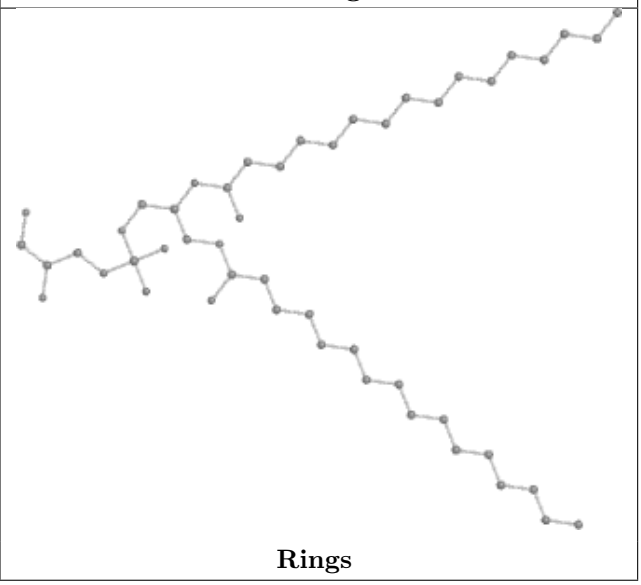
Bond lengths



Bond angles

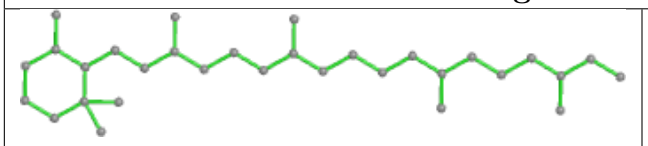


Torsions

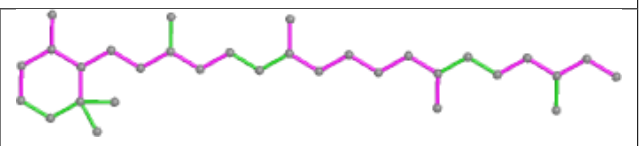


Rings

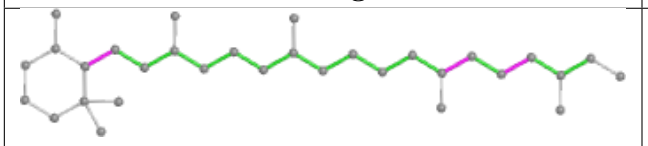
Ligand BCR K1 101



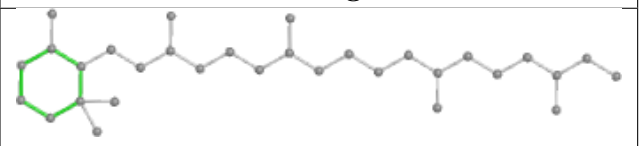
Bond lengths



Bond angles

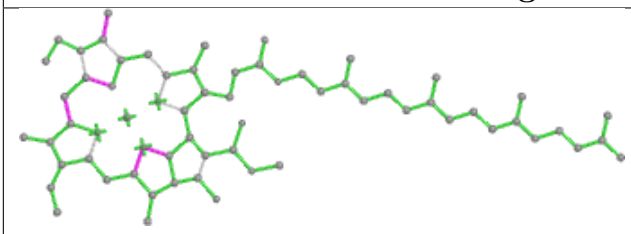


Torsions

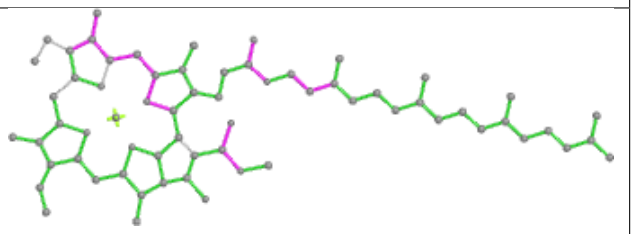


Rings

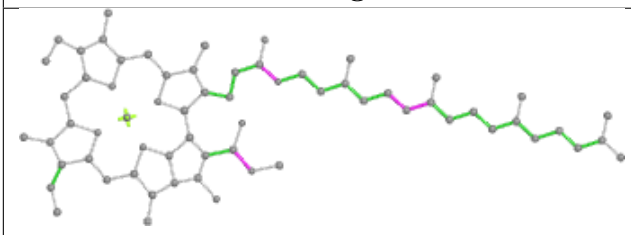
Ligand CLA b2 610



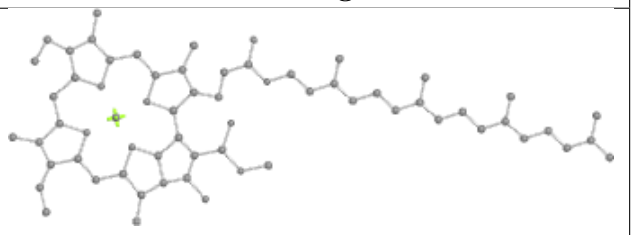
Bond lengths



Bond angles

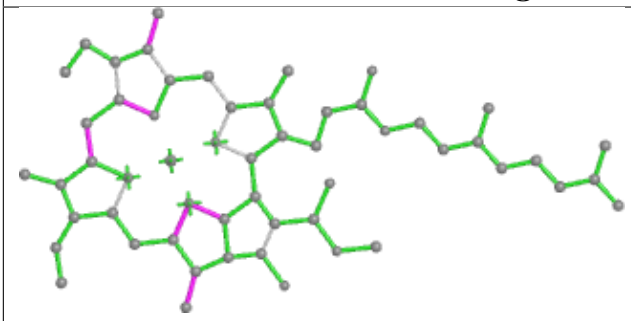


Torsions

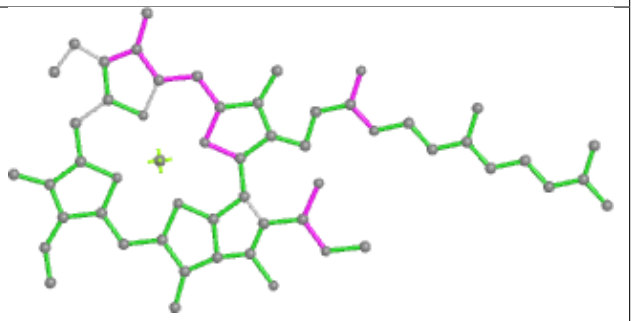


Rings

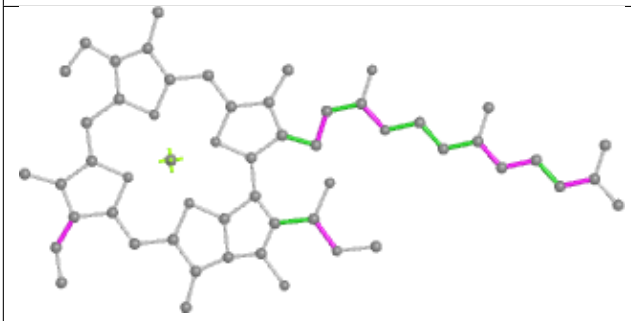
Ligand CLA K2 101



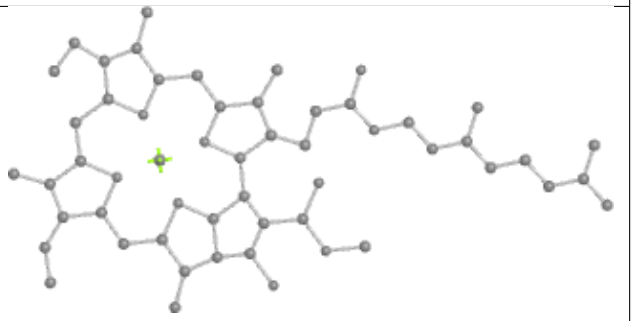
Bond lengths



Bond angles

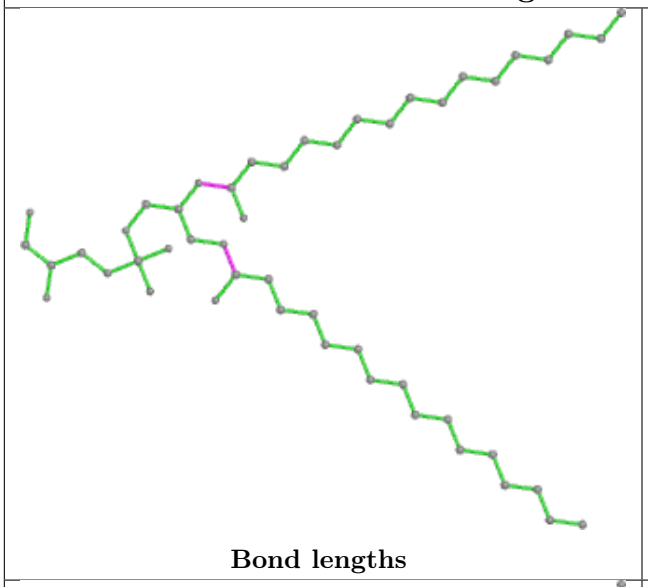


Torsions

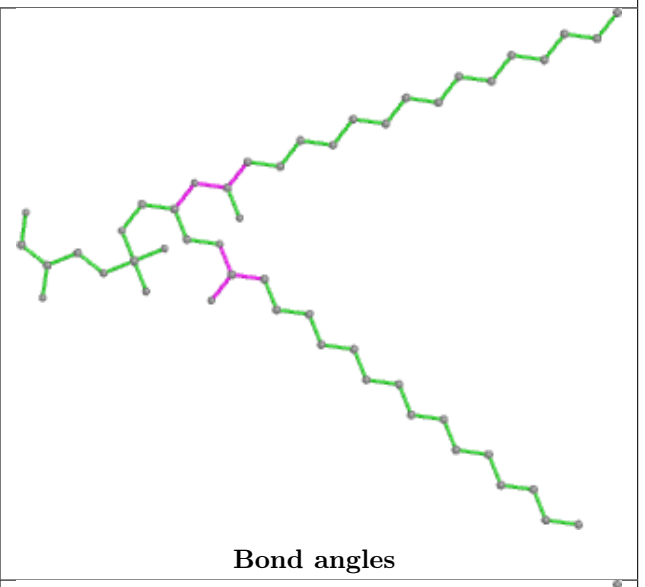


Rings

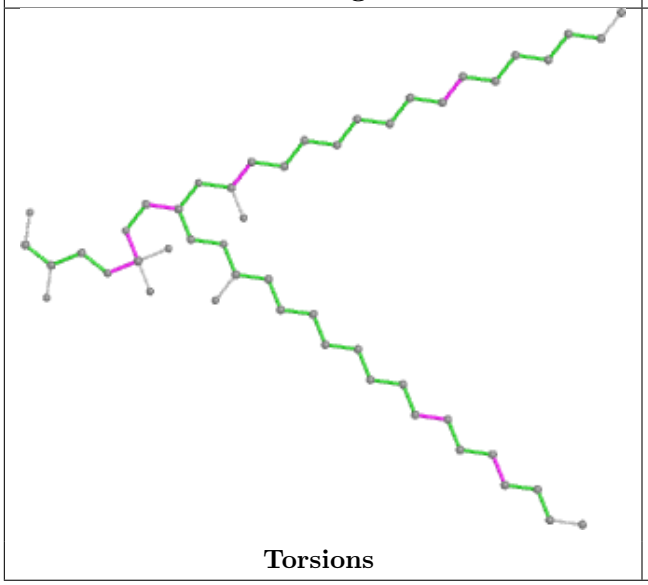
Ligand LHG d2 406



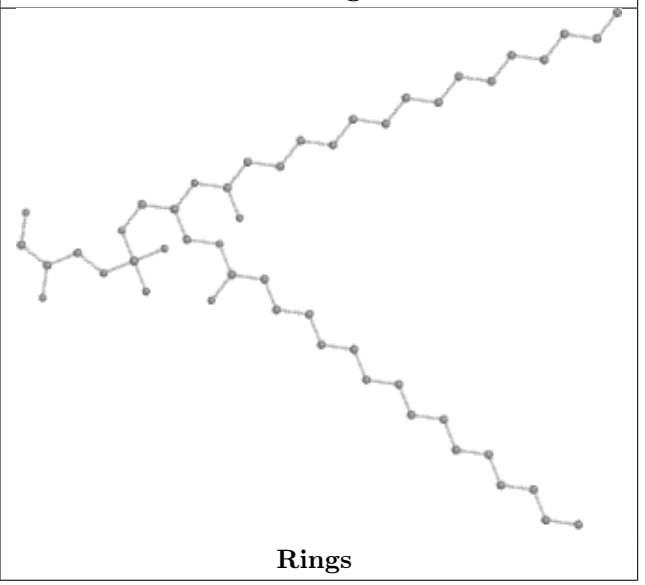
Bond lengths



Bond angles

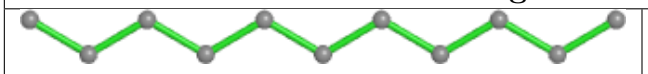


Torsions

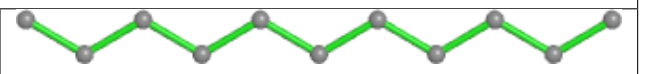


Rings

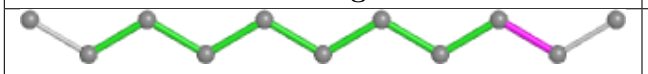
Ligand LMT M1 102



Bond lengths



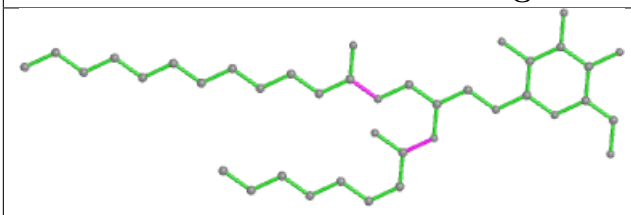
Bond angles



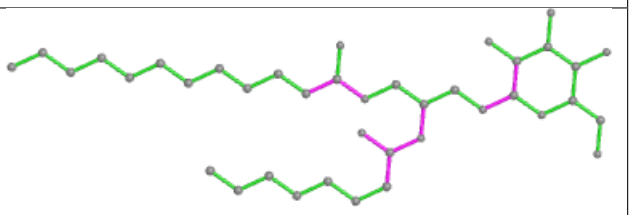
Torsions

Rings

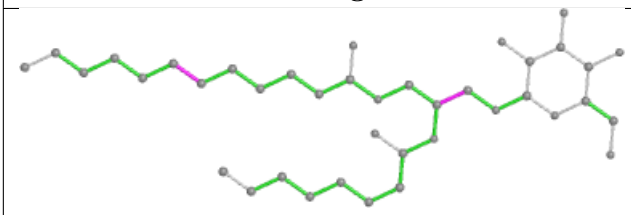
Ligand LMG b1 624



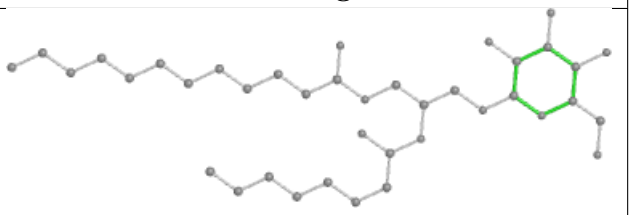
Bond lengths



Bond angles

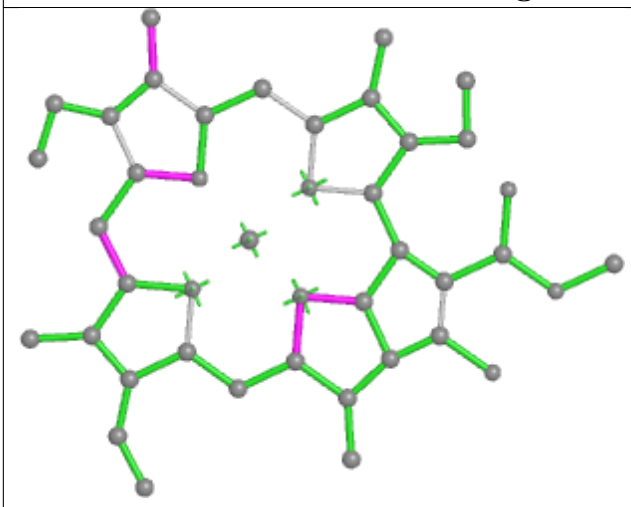


Torsions

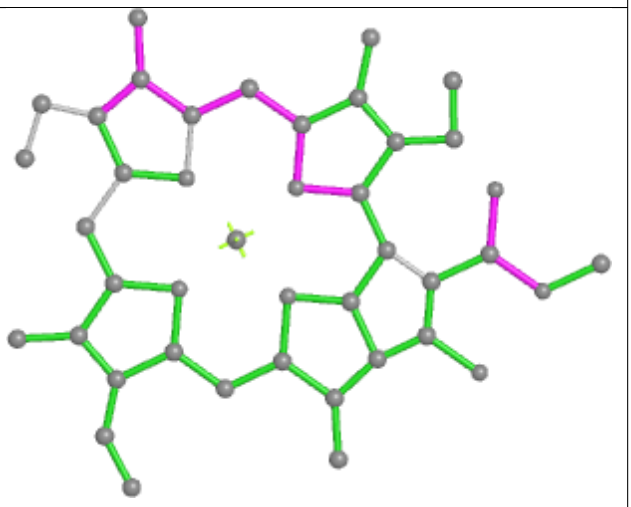


Rings

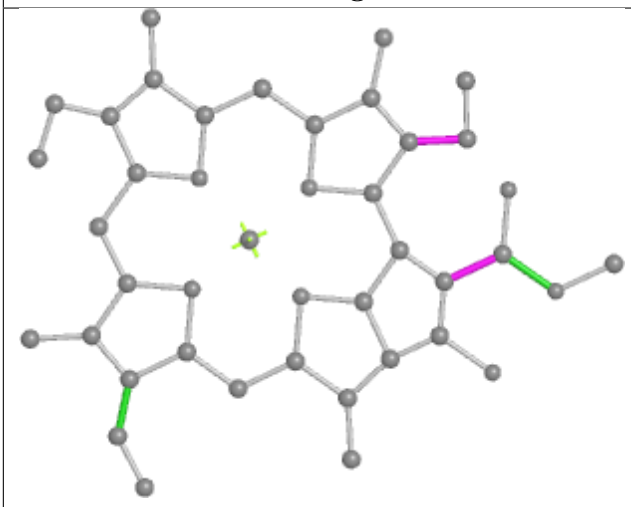
Ligand CLA B1 604



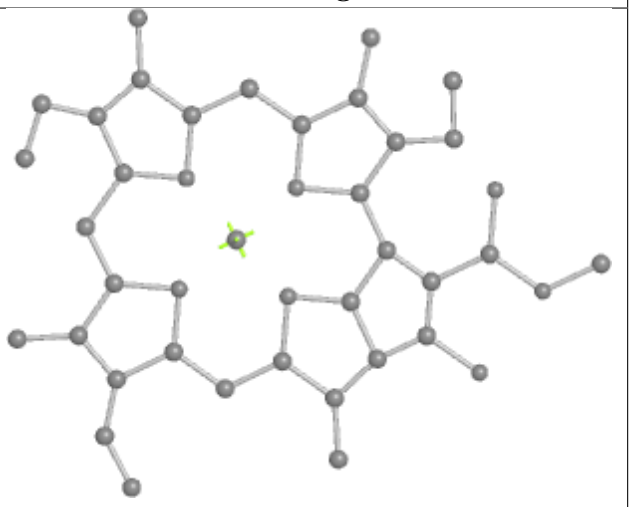
Bond lengths



Bond angles

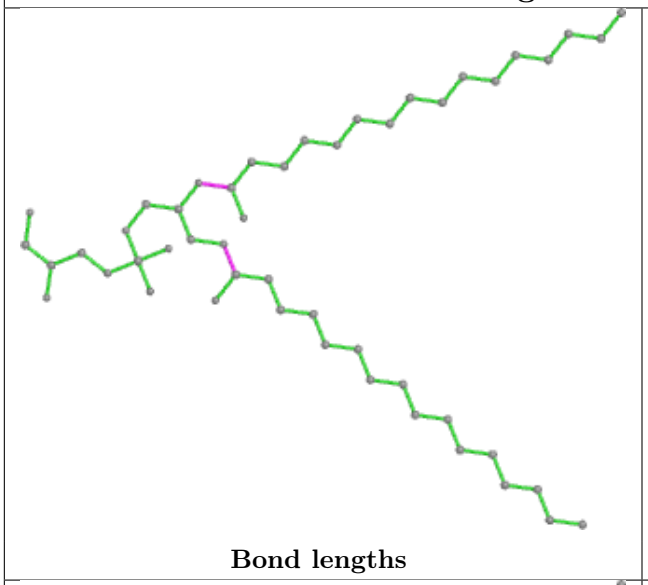


Torsions

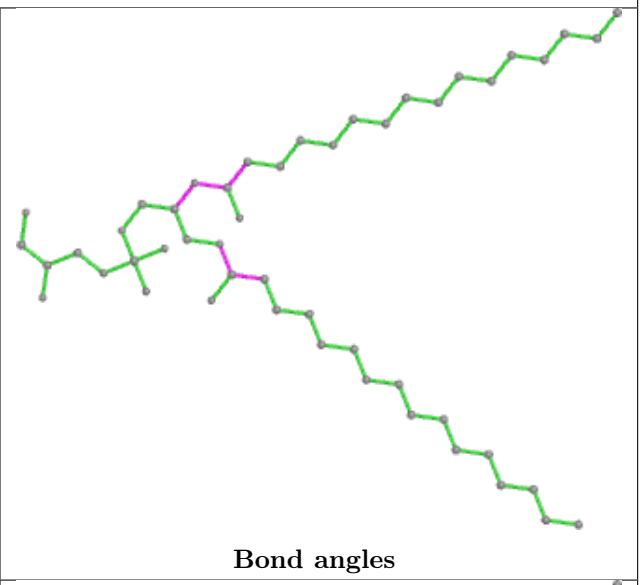


Rings

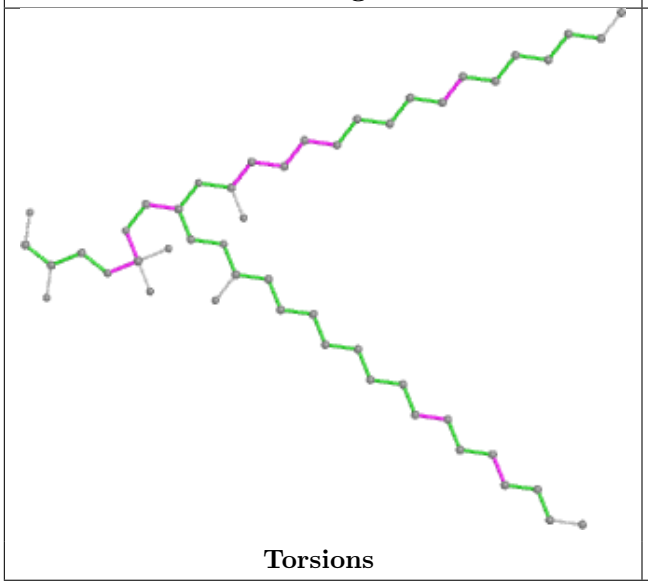
Ligand LHG d1 407



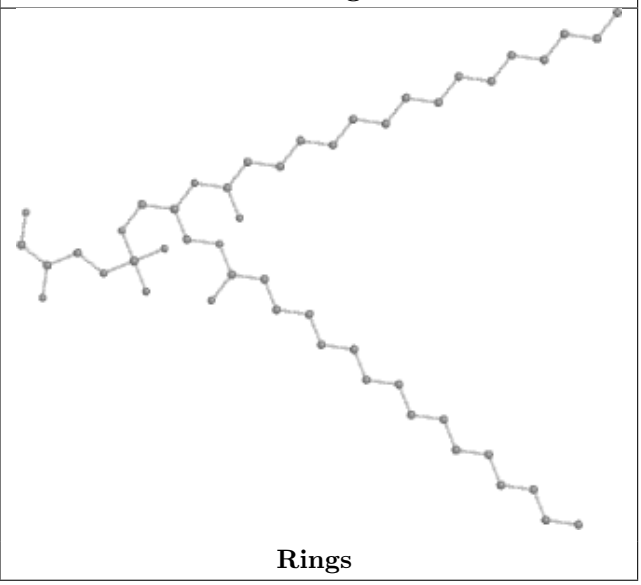
Bond lengths



Bond angles

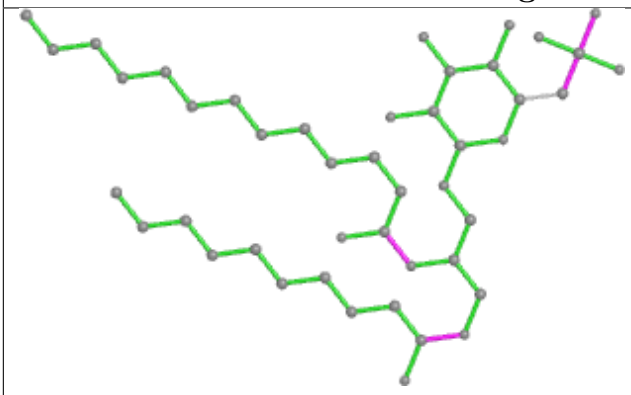


Torsions

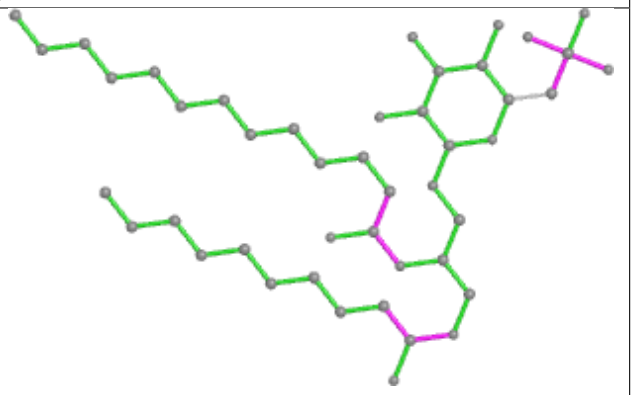


Rings

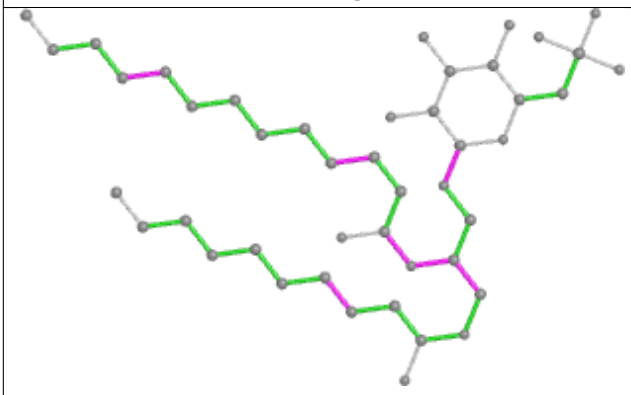
Ligand SQD b2 605



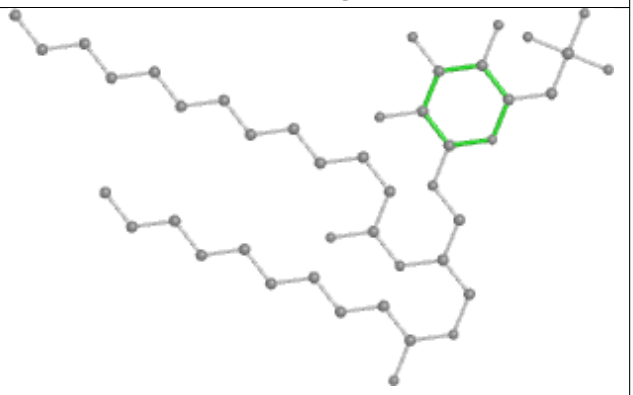
Bond lengths



Bond angles

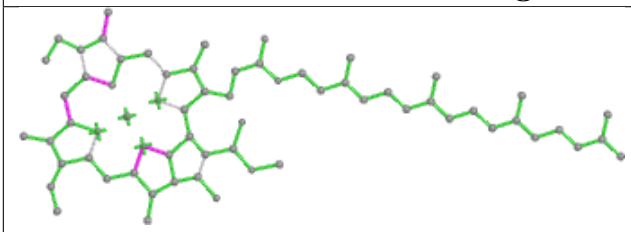


Torsions

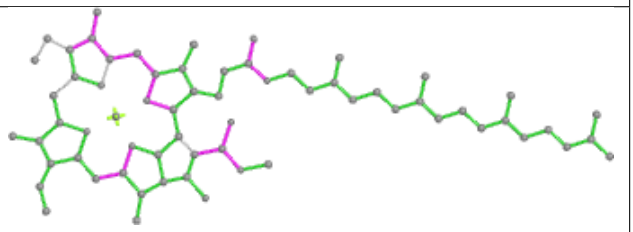


Rings

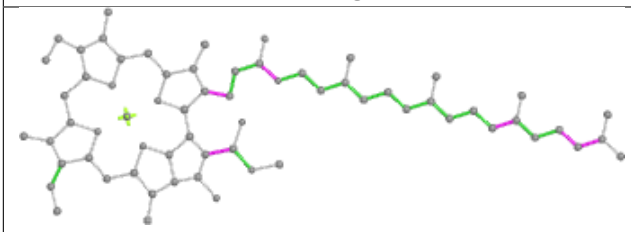
Ligand CLA A1 406



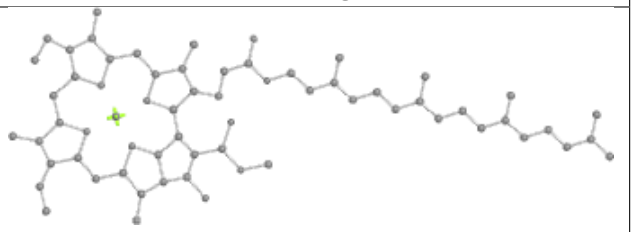
Bond lengths



Bond angles

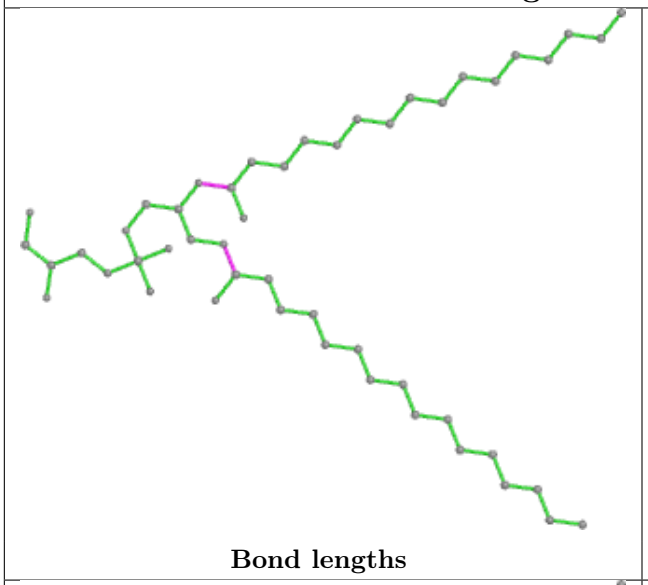


Torsions

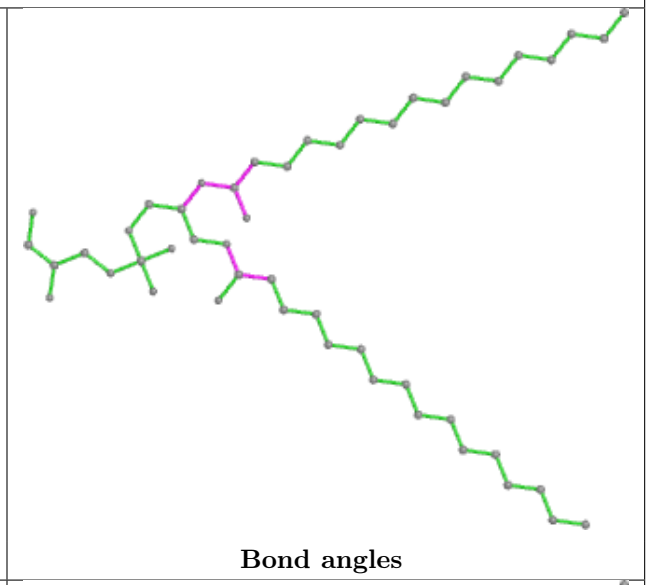


Rings

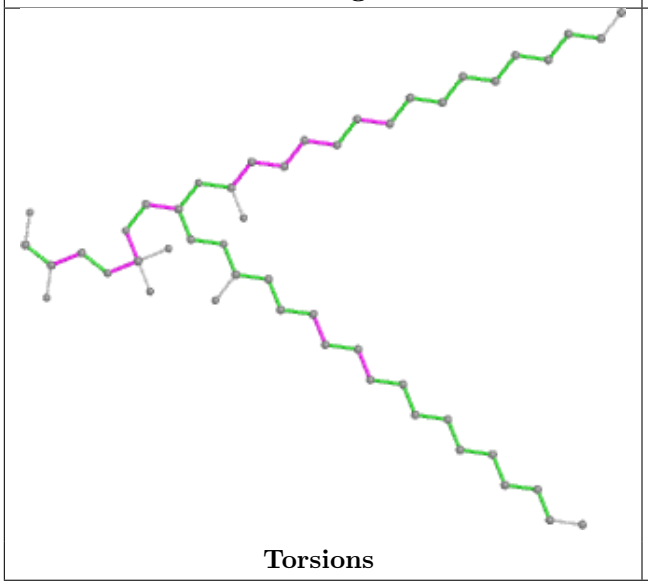
Ligand LHG l1 102



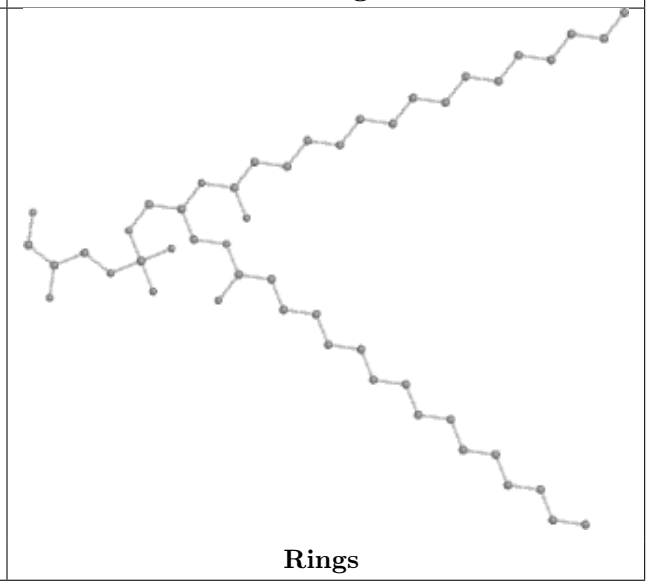
Bond lengths



Bond angles

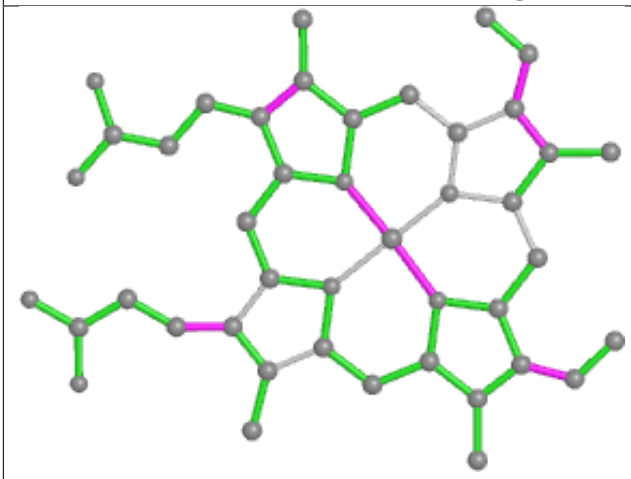


Torsions

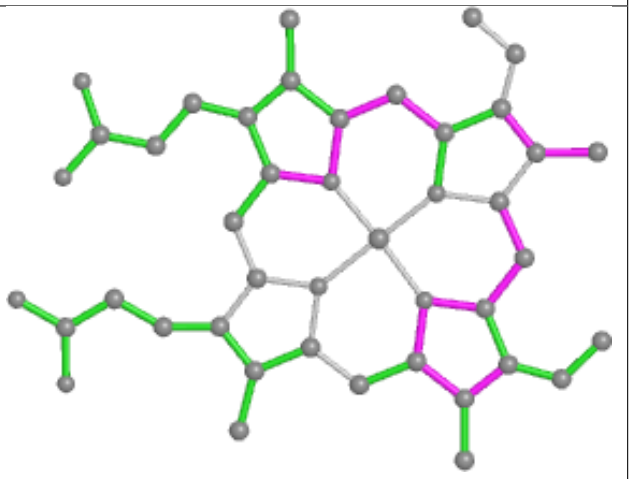


Rings

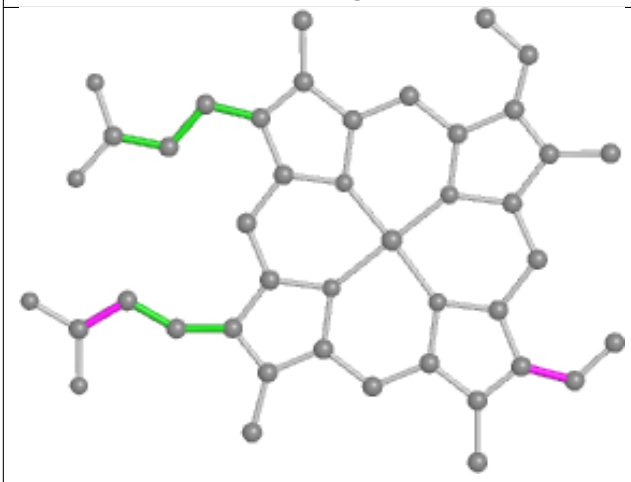
Ligand HEM E1 101



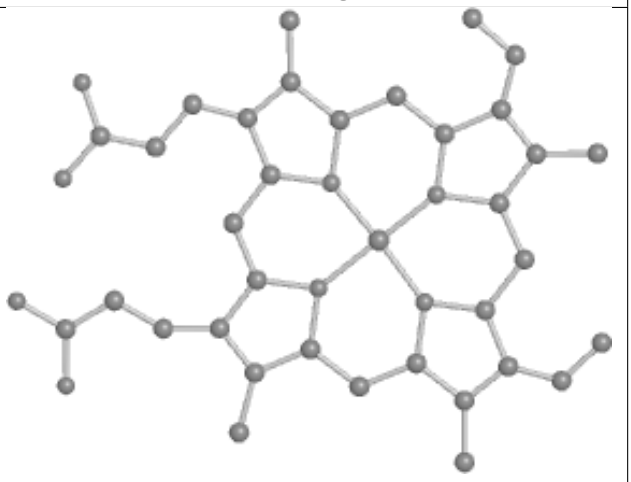
Bond lengths



Bond angles

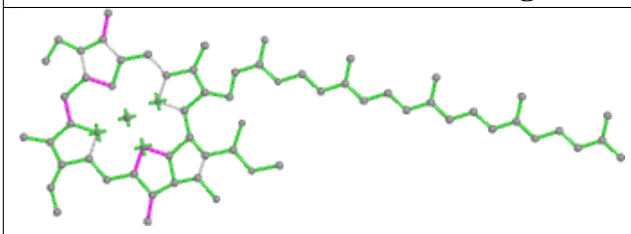


Torsions

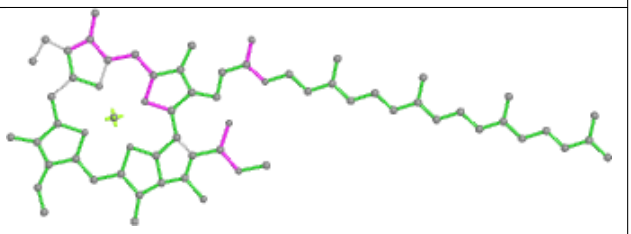


Rings

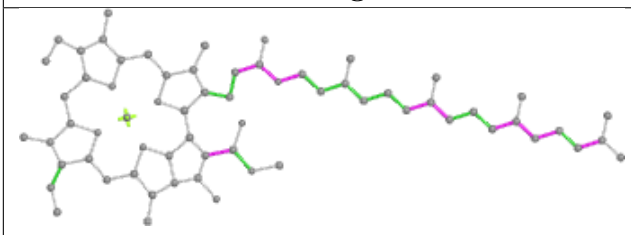
Ligand CLA b2 614



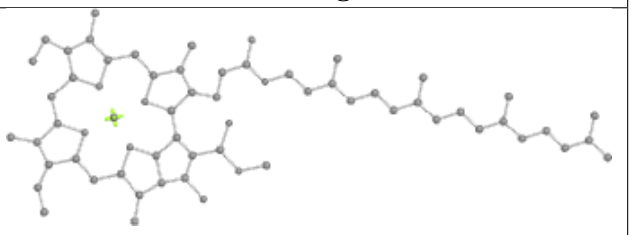
Bond lengths



Bond angles

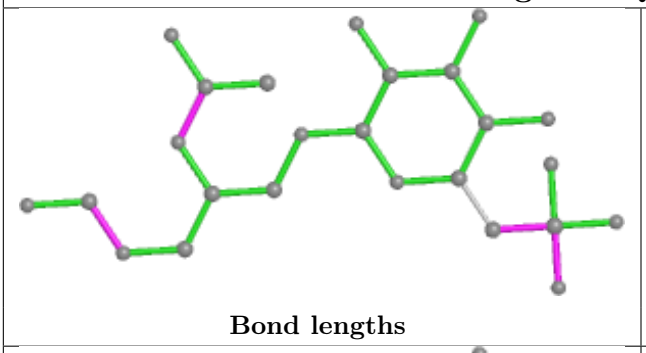


Torsions

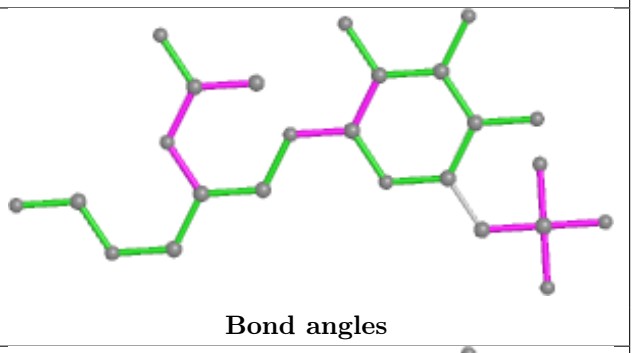


Rings

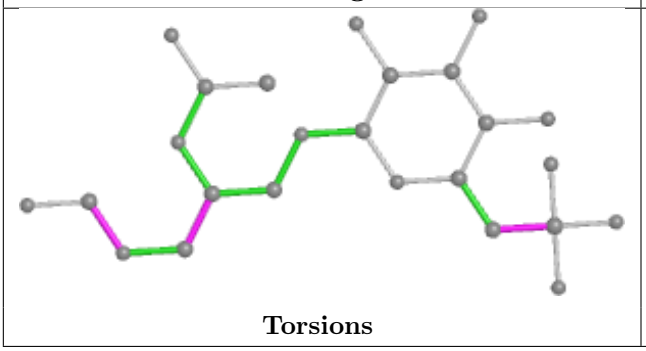
Ligand SQD D2 402



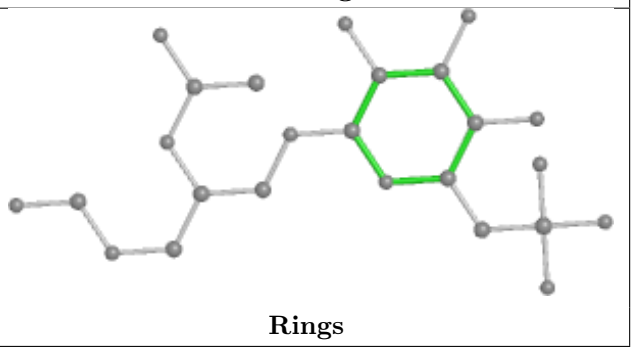
Bond lengths



Bond angles

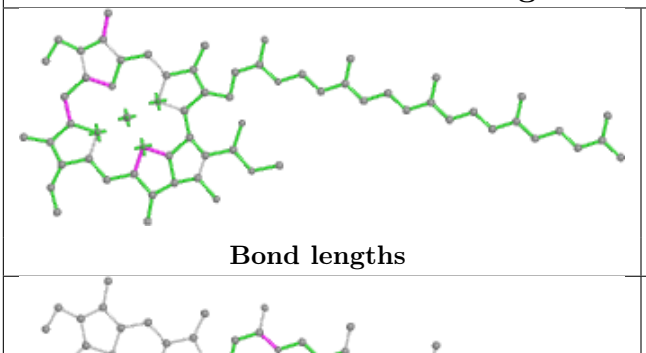


Torsions

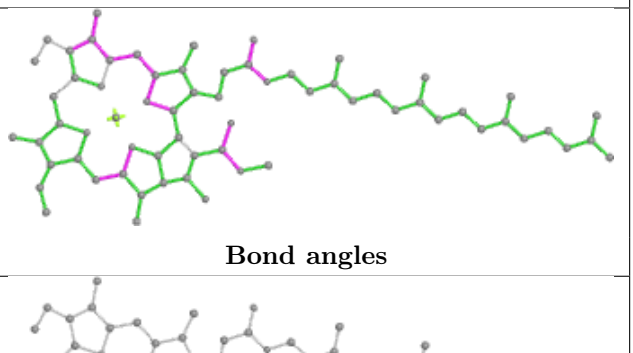


Rings

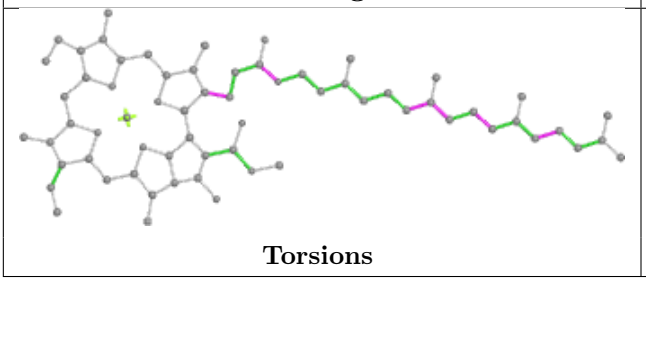
Ligand CLA b2 624



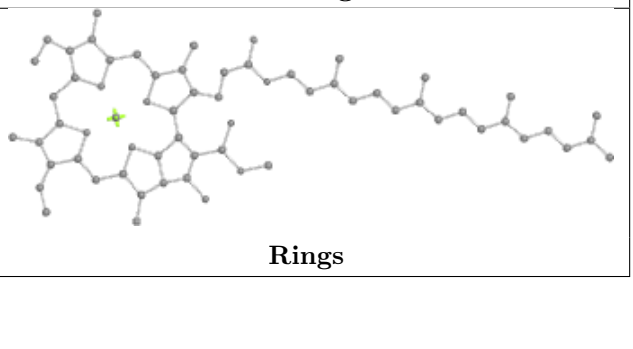
Bond lengths



Bond angles

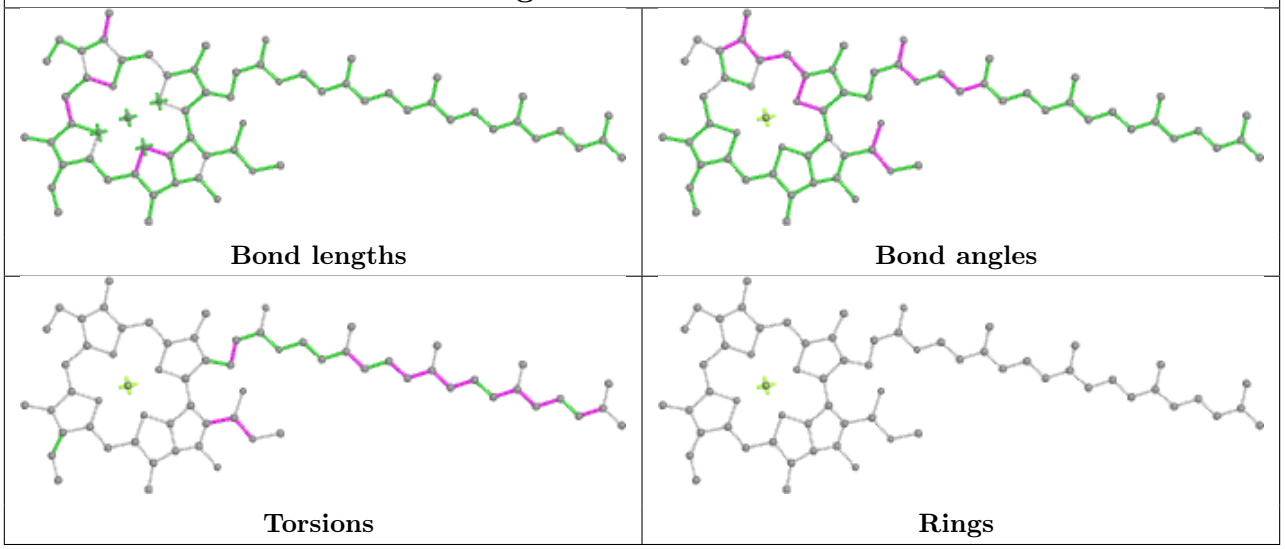


Torsions

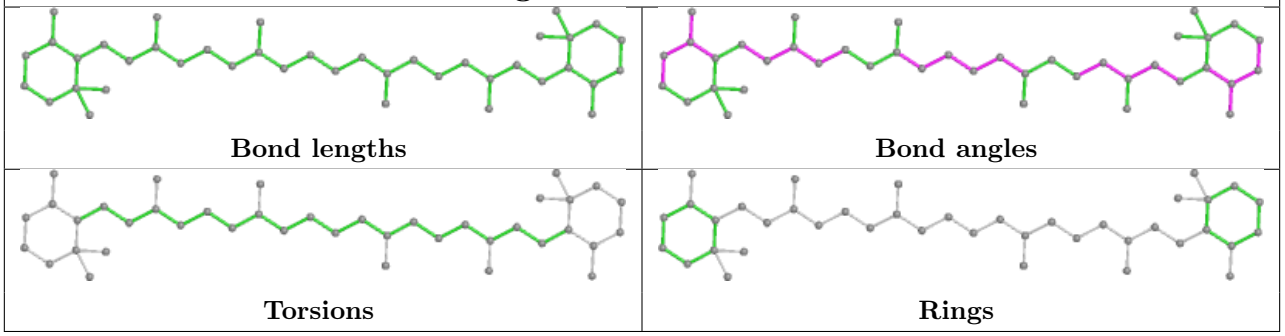


Rings

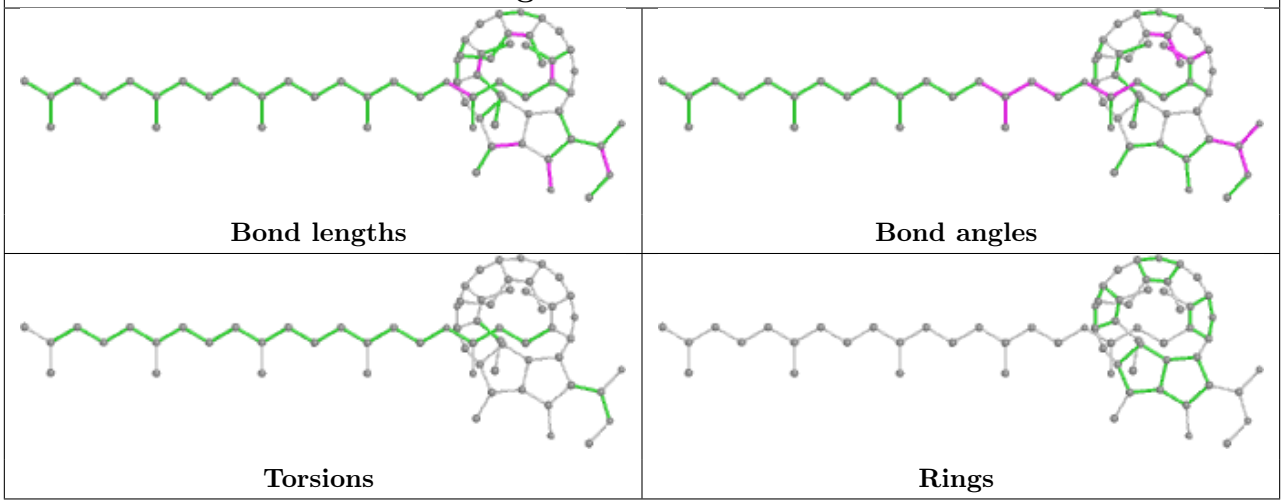
Ligand CLA B1 606



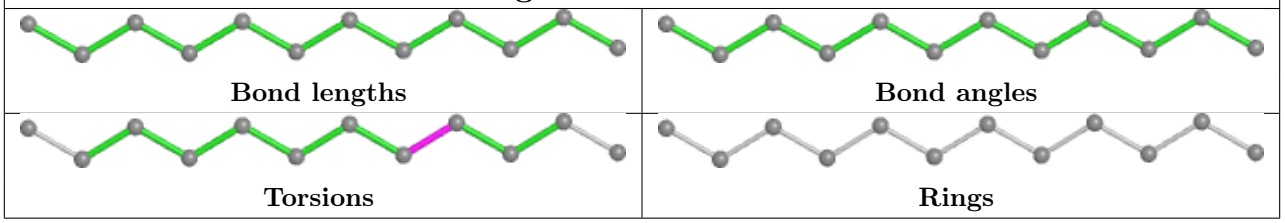
Ligand BCR C2 502



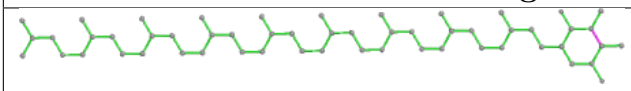
Ligand PHO d2 408



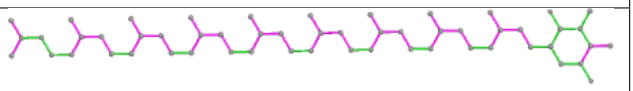
Ligand LMT L1 102



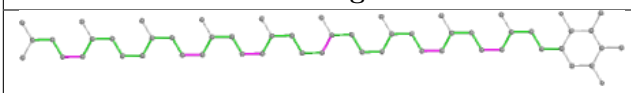
Ligand PL9 D2 408



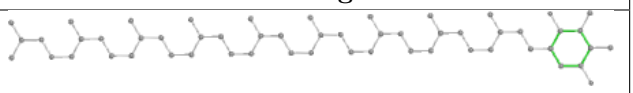
Bond lengths



Bond angles

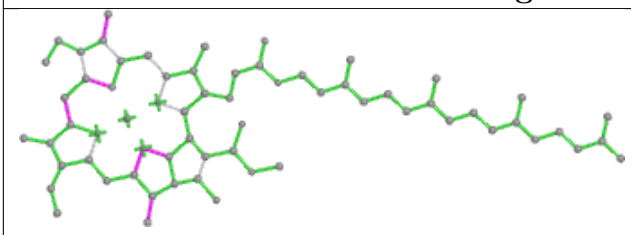


Torsions

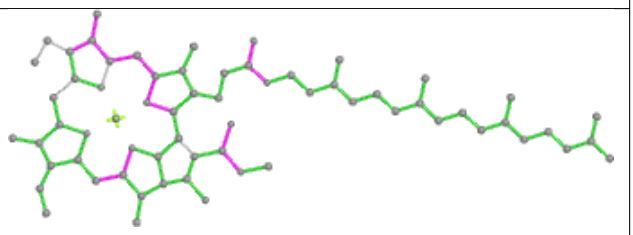


Rings

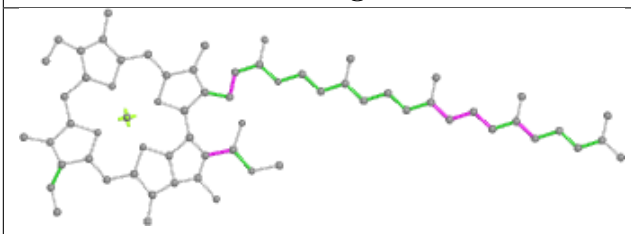
Ligand CLA B1 616



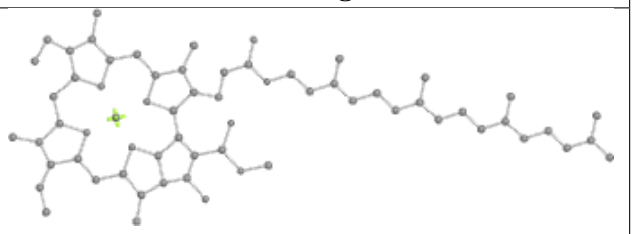
Bond lengths



Bond angles

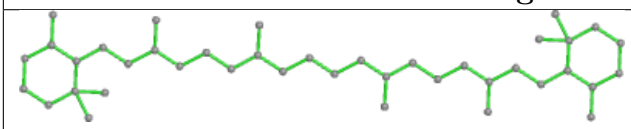


Torsions

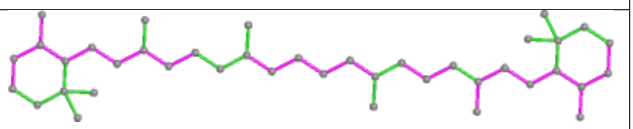


Rings

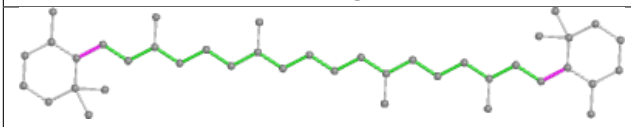
Ligand BCR h2 101



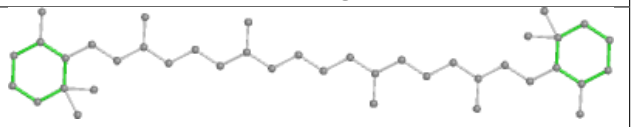
Bond lengths



Bond angles

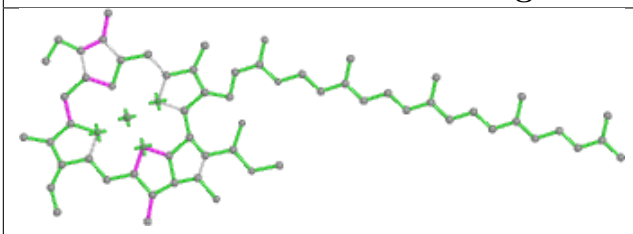


Torsions

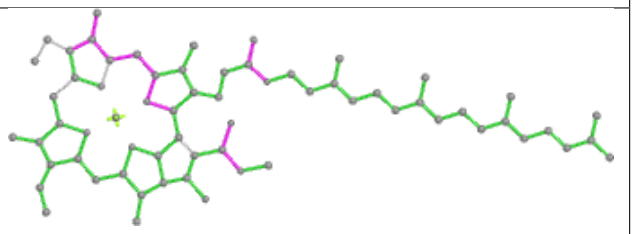


Rings

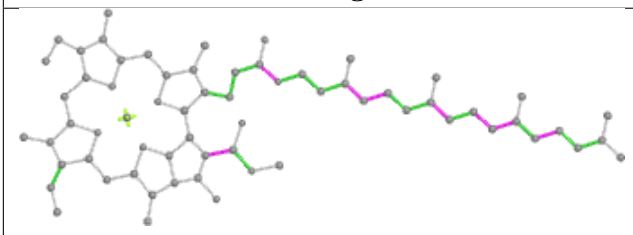
Ligand CLA B1 613



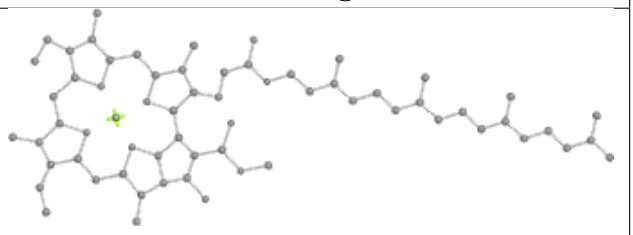
Bond lengths



Bond angles

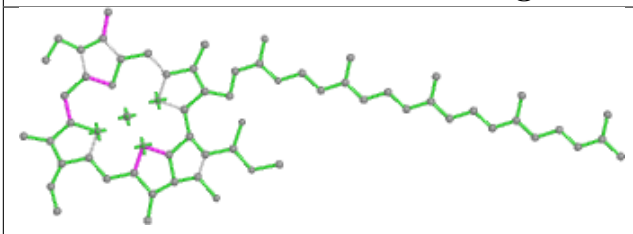


Torsions

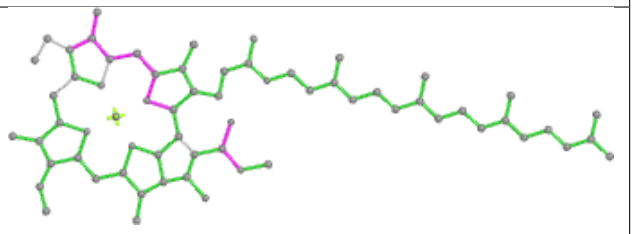


Rings

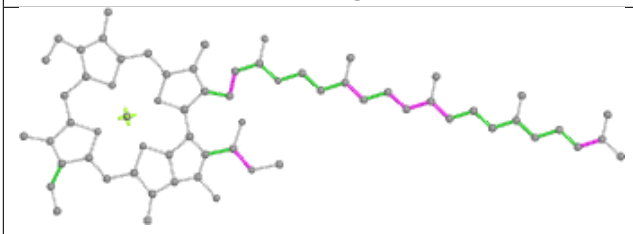
Ligand CLA C1 508



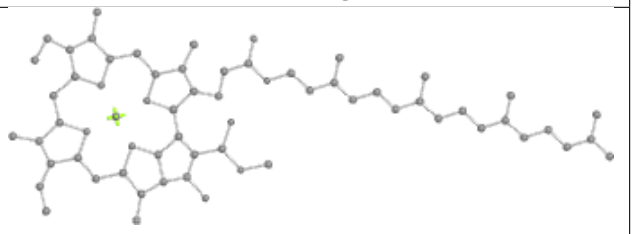
Bond lengths



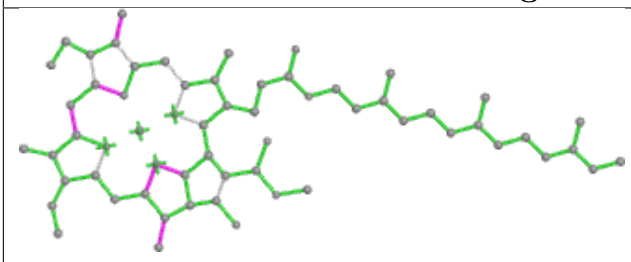
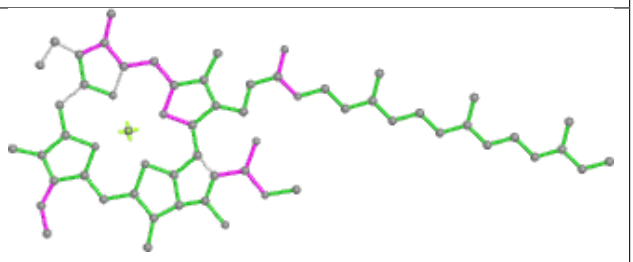
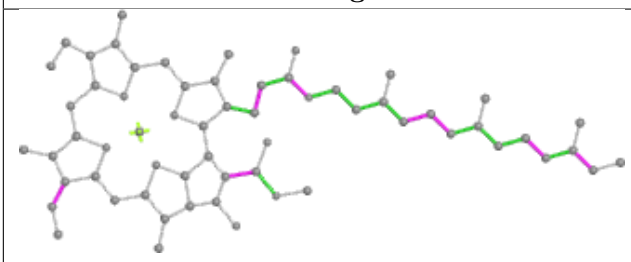
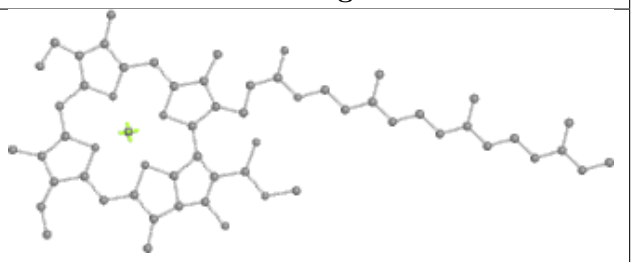
Bond angles

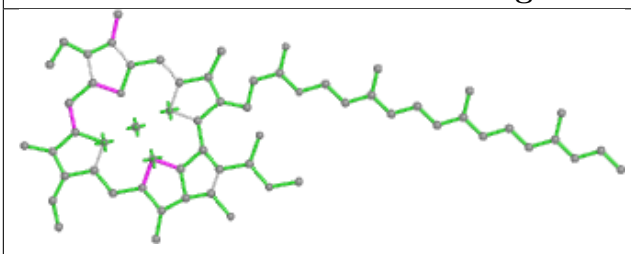
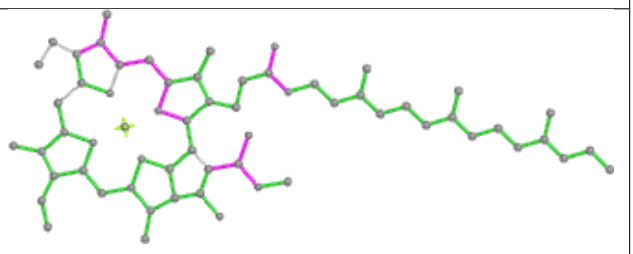
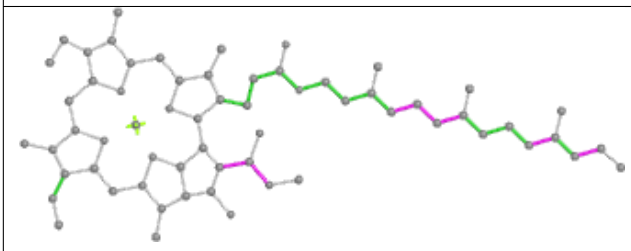
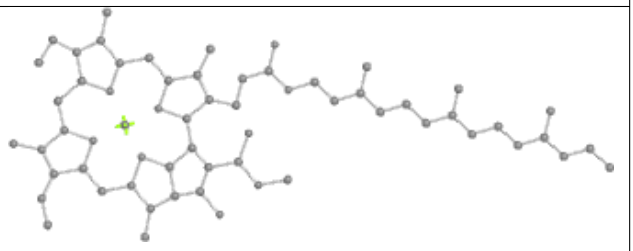


Torsions

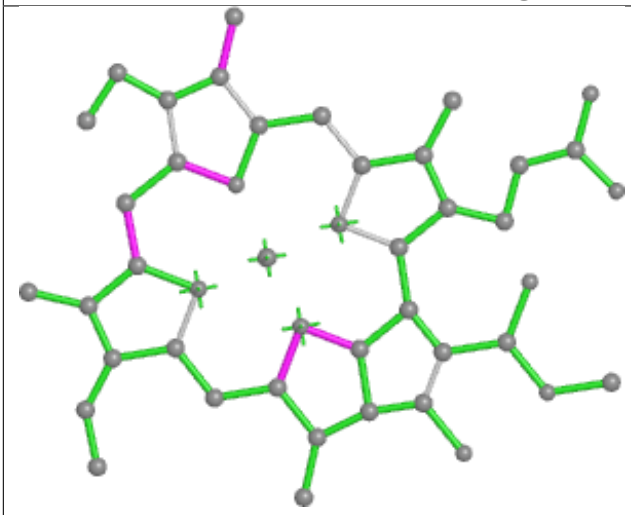


Rings

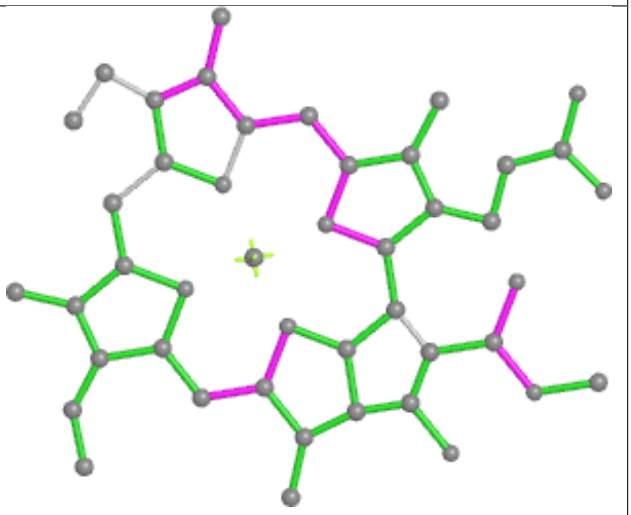
Ligand CLA c2 506	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B1 611	
	
Bond lengths	Bond angles
	
Torsions	Rings

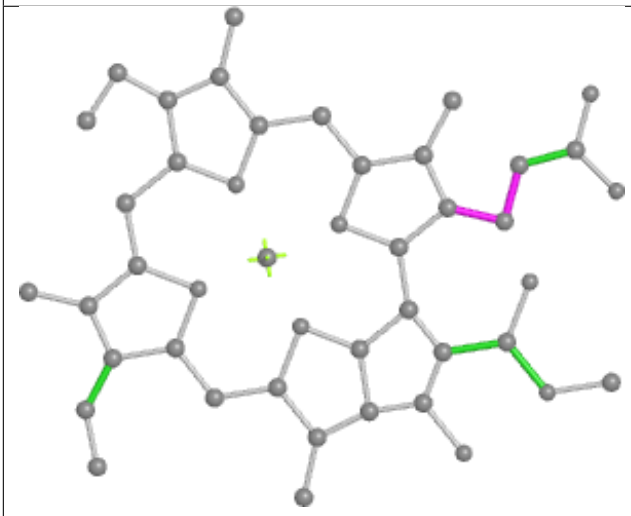
Ligand CLA C1 514



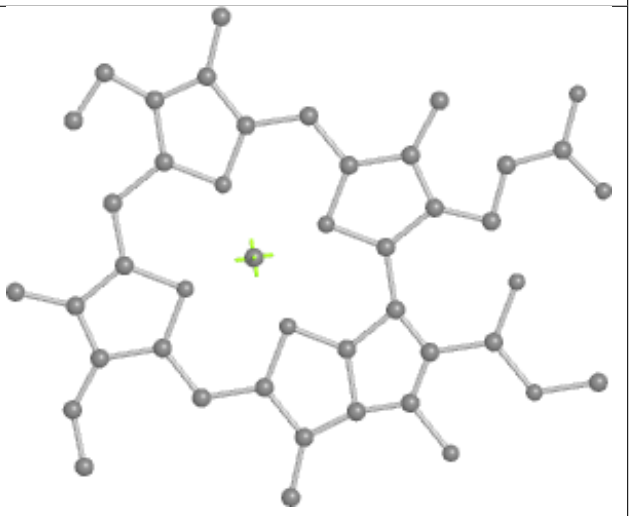
Bond lengths



Bond angles

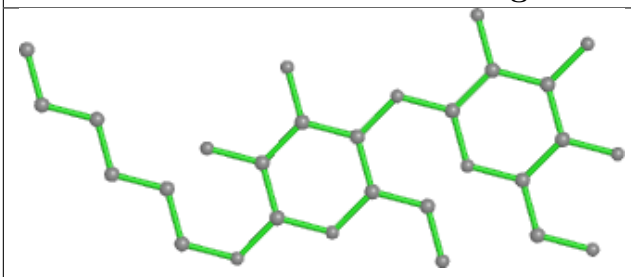


Torsions

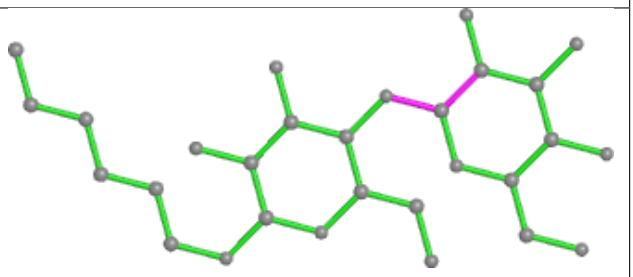


Rings

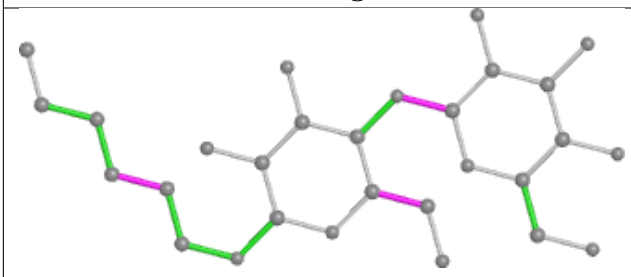
Ligand LMT m2 104



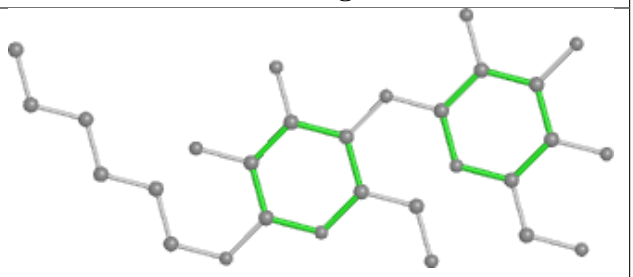
Bond lengths



Bond angles

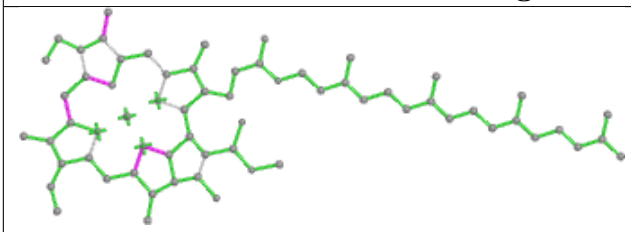


Torsions

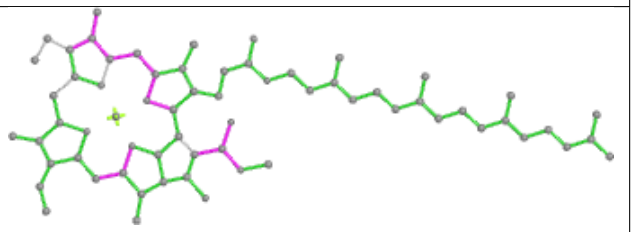


Rings

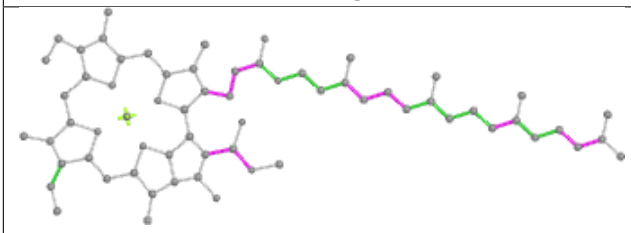
Ligand CLA C1 502



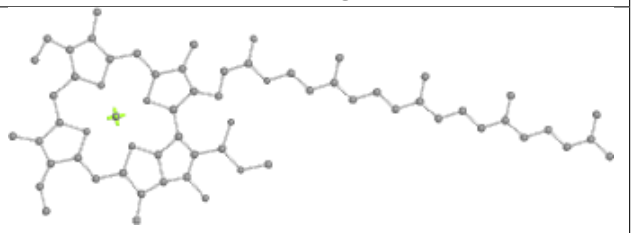
Bond lengths



Bond angles

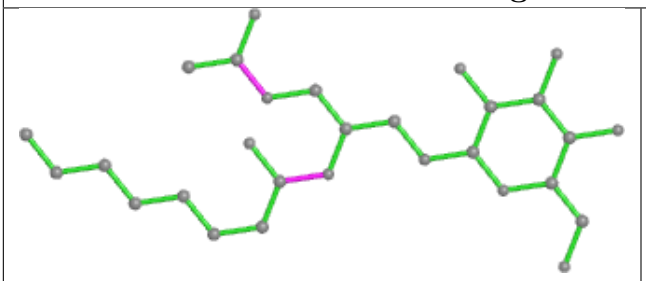


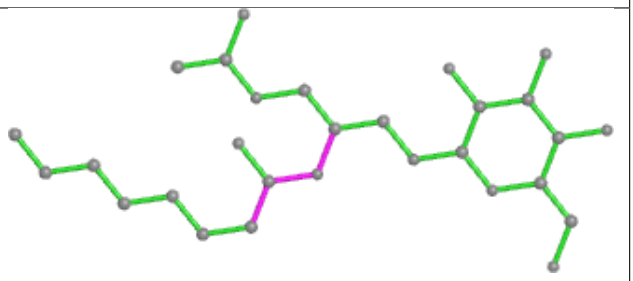
Torsions

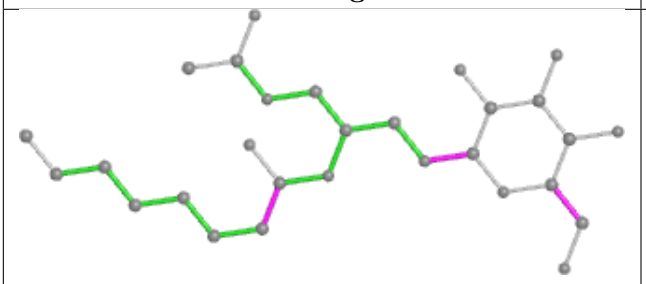


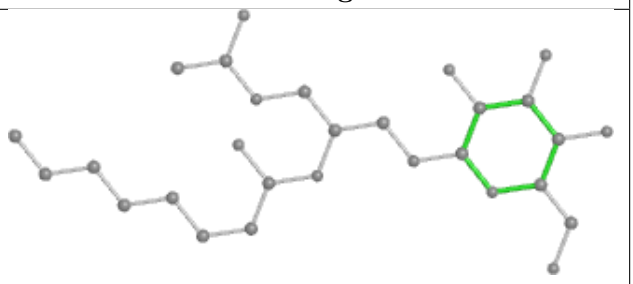
Rings

Ligand LMG A2 412

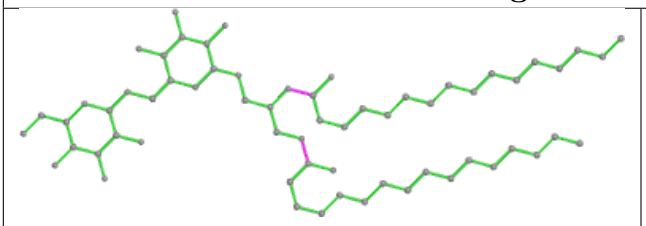

Bond lengths

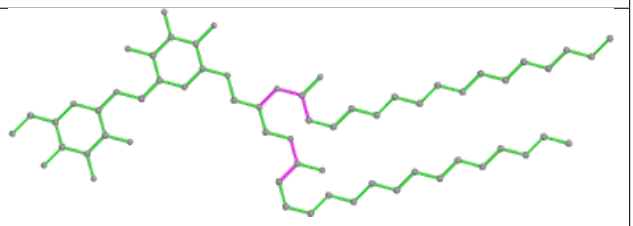

Bond angles

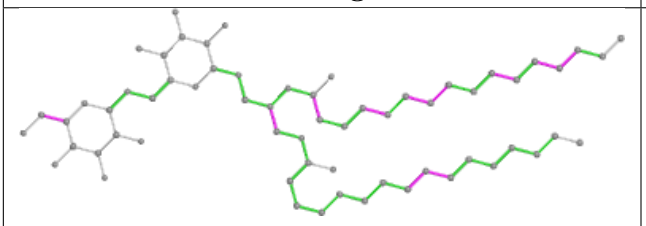

Torsions

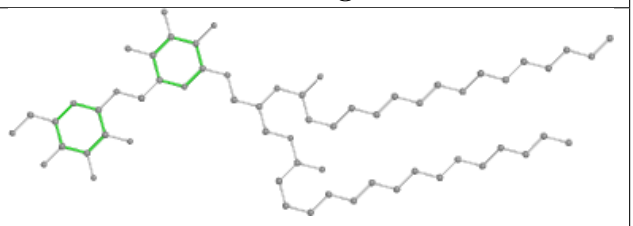

Rings

Ligand DGD H1 101

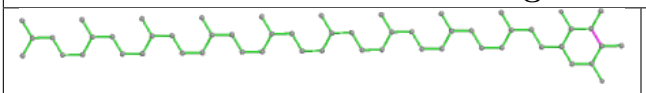

Bond lengths

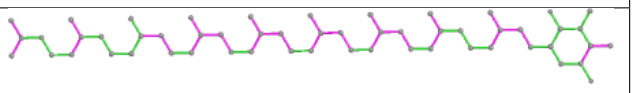

Bond angles

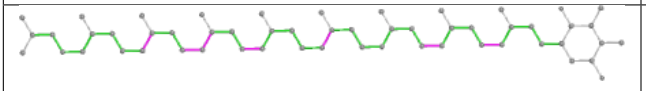

Torsions

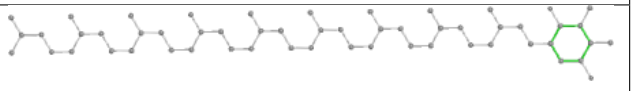

Rings

Ligand PL9 d2 409

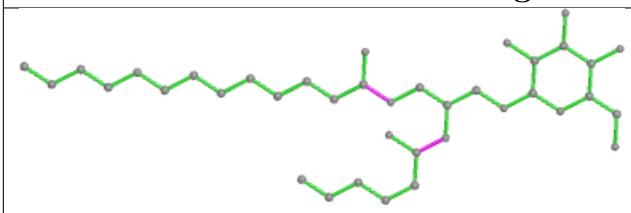

Bond lengths


Bond angles

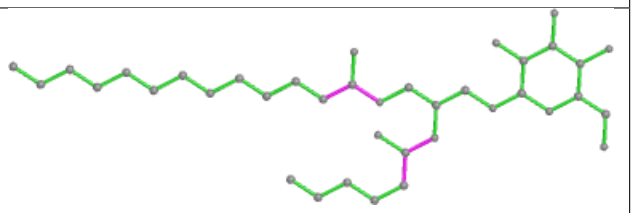

Torsions


Rings

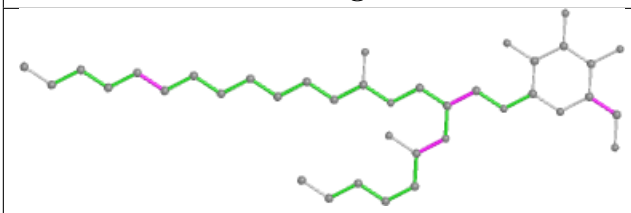
Ligand LMG b1 621



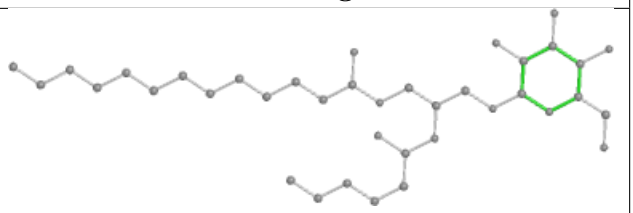
Bond lengths



Bond angles

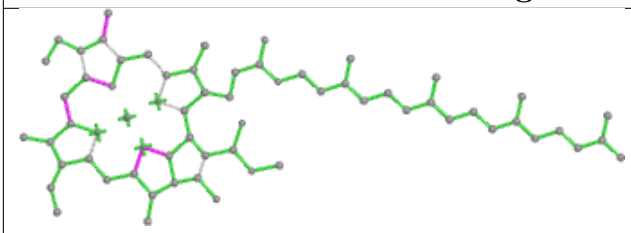


Torsions

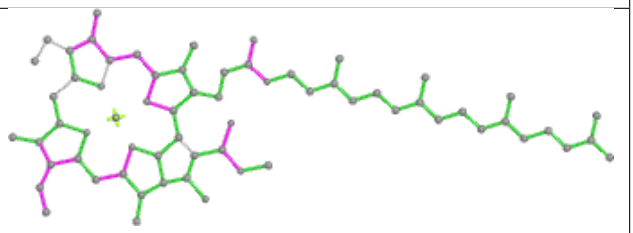


Rings

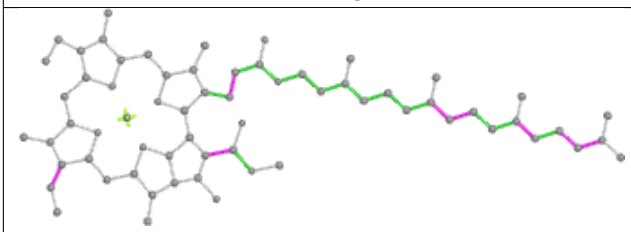
Ligand CLA B1 609



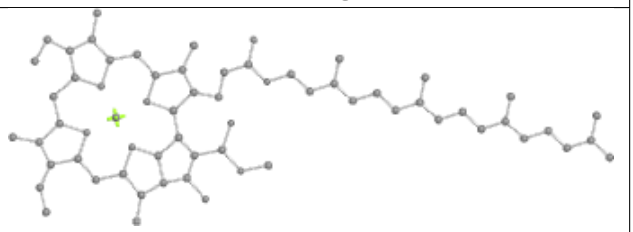
Bond lengths



Bond angles

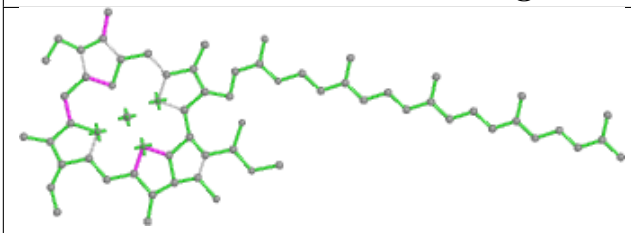


Torsions

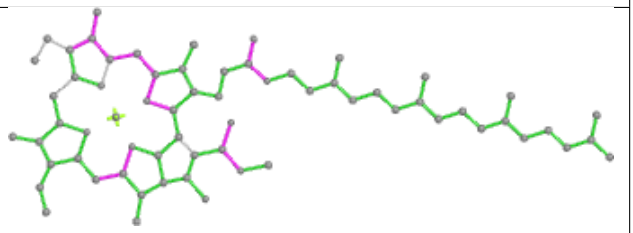


Rings

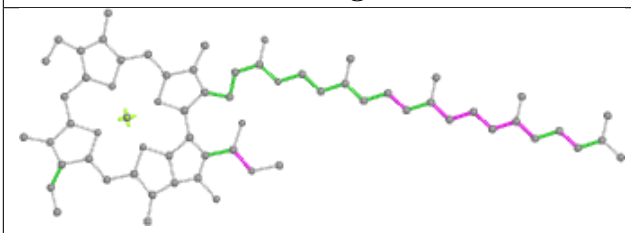
Ligand CLA B1 617



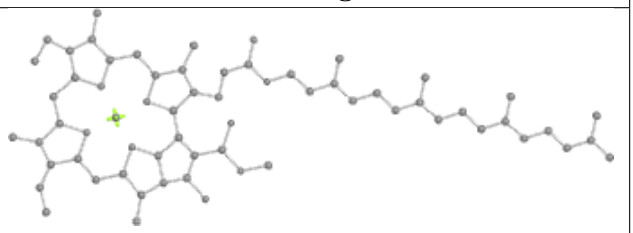
Bond lengths



Bond angles

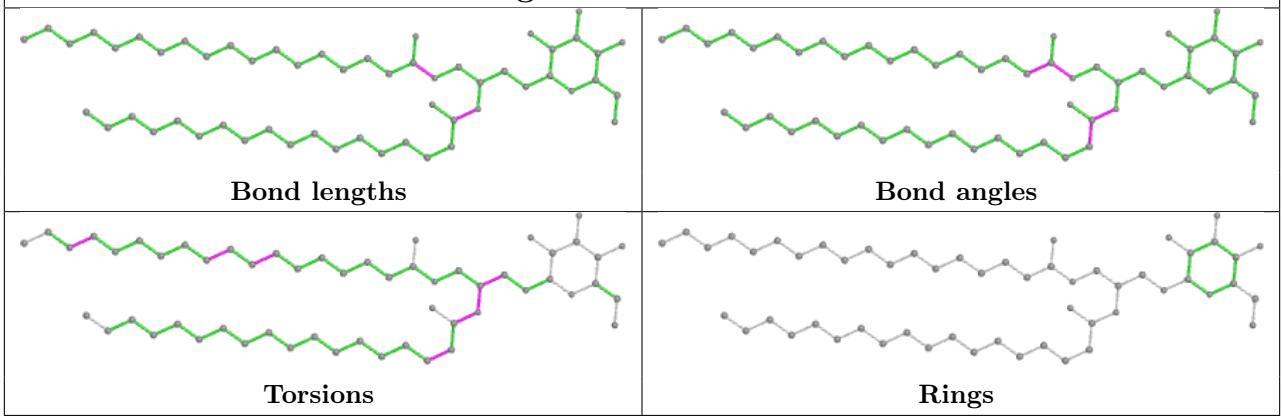


Torsions

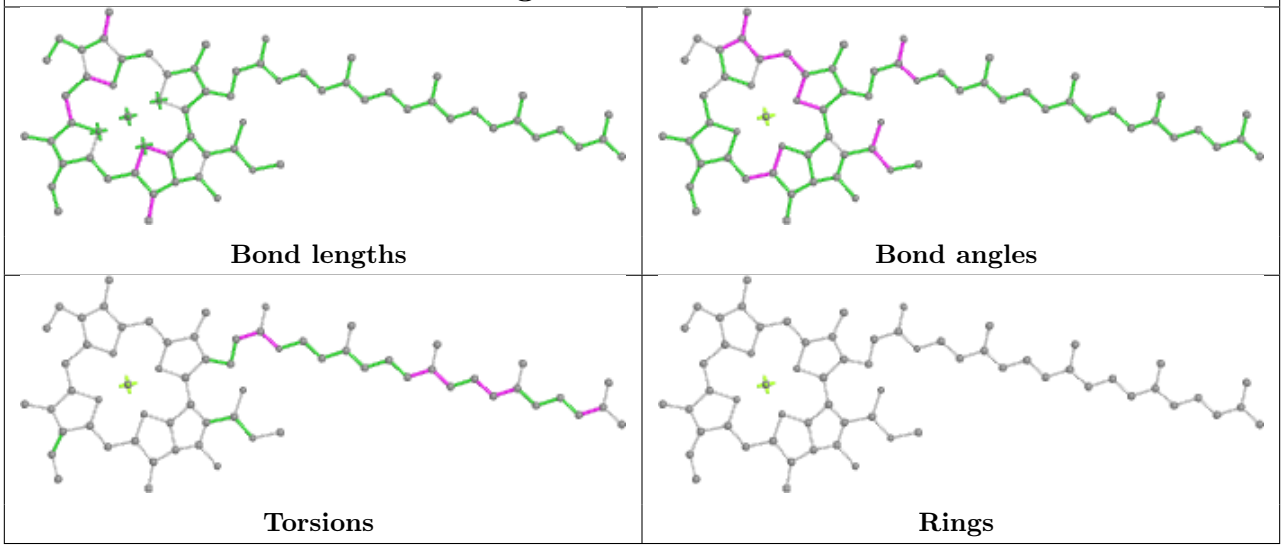


Rings

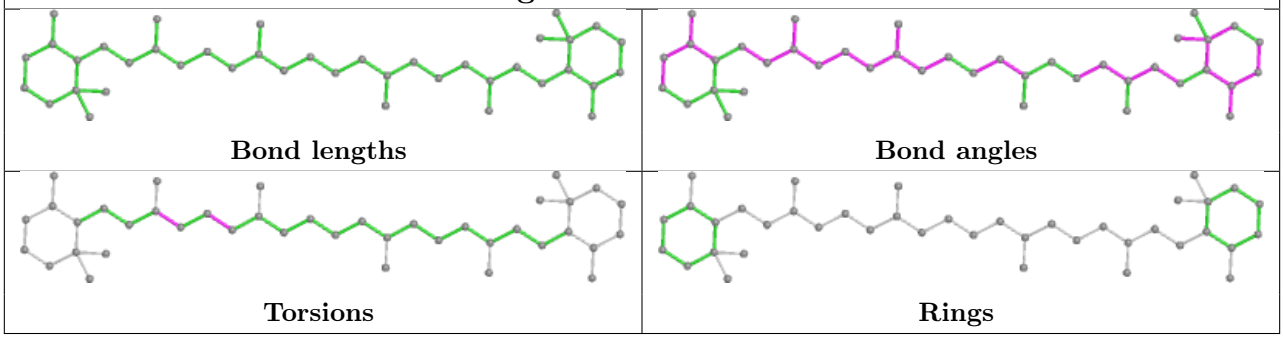
Ligand LMG c1 519



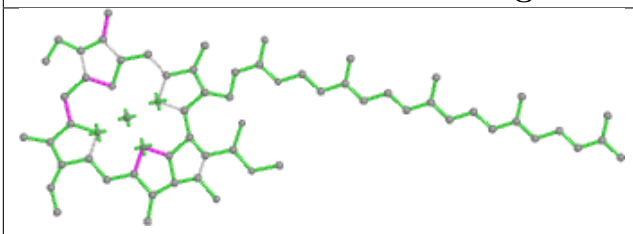
Ligand CLA B1 614



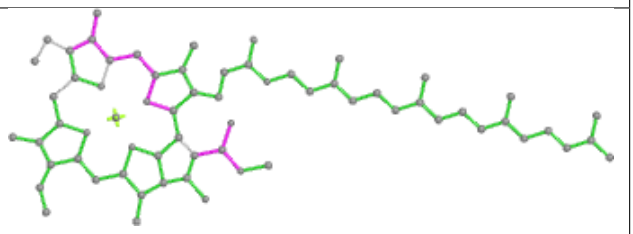
Ligand BCR b1 602



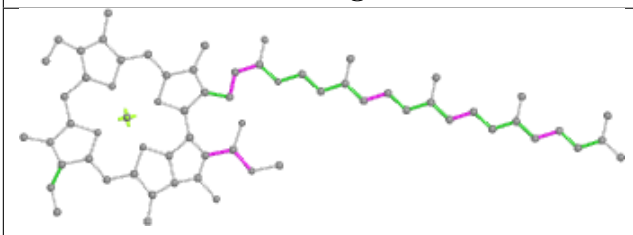
Ligand CLA B2 605



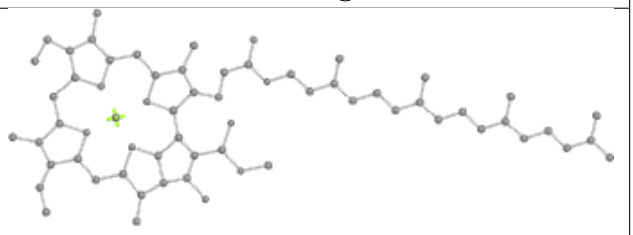
Bond lengths



Bond angles

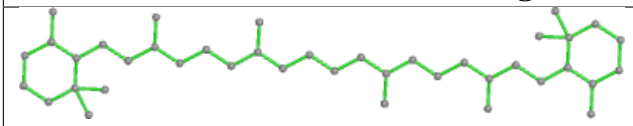


Torsions

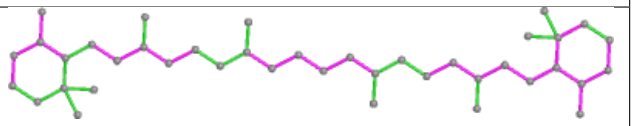


Rings

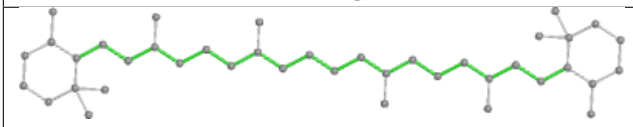
Ligand BCR b2 601



Bond lengths



Bond angles



Torsions

Rings

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	A1	344/344 (100%)	-0.30	3 (0%) 81 77	31, 48, 79, 104	0
1	A2	332/344 (96%)	0.22	5 (1%) 71 67	48, 75, 91, 112	1 (0%)
1	a1	334/344 (97%)	-0.33	1 (0%) 90 88	36, 48, 68, 105	0
1	a2	334/344 (97%)	-0.34	1 (0%) 90 88	34, 50, 83, 107	0
2	B1	483/509 (94%)	-0.02	6 (1%) 76 72	40, 63, 93, 108	0
2	B2	503/509 (98%)	0.01	5 (0%) 79 75	46, 65, 93, 112	0
2	b1	503/509 (98%)	-0.24	1 (0%) 92 90	36, 53, 80, 99	1 (0%)
2	b2	481/509 (94%)	0.12	10 (2%) 63 57	43, 70, 99, 115	0
3	C1	449/460 (97%)	-0.17	5 (1%) 77 73	33, 59, 78, 93	0
3	C2	444/460 (96%)	0.72	35 (7%) 20 17	73, 97, 117, 128	0
3	c1	449/460 (97%)	0.01	2 (0%) 89 86	41, 62, 84, 101	2 (0%)
3	c2	448/460 (97%)	0.00	6 (1%) 74 70	39, 70, 93, 110	0
4	D1	337/351 (96%)	-0.28	2 (0%) 85 82	36, 56, 88, 94	0
4	D2	340/351 (96%)	0.11	5 (1%) 71 67	51, 69, 85, 96	0
4	d1	339/351 (96%)	-0.43	2 (0%) 85 82	34, 45, 65, 94	0
4	d2	340/351 (96%)	-0.24	2 (0%) 85 82	36, 56, 88, 118	0
5	E1	61/84 (72%)	0.44	5 (8%) 19 16	64, 87, 141, 158	0
5	E2	63/84 (75%)	0.99	9 (14%) 7 7	77, 98, 131, 144	0
5	e1	57/84 (67%)	0.13	2 (3%) 47 42	49, 65, 87, 91	0
5	e2	60/84 (71%)	0.37	3 (5%) 35 30	59, 80, 144, 159	0
6	F1	28/43 (65%)	0.15	0 100 100	62, 75, 123, 131	0
6	F2	31/43 (72%)	1.06	6 (19%) 4 4	81, 92, 144, 146	0
6	f1	29/43 (67%)	-0.05	1 (3%) 48 42	50, 60, 95, 108	0
6	f2	29/43 (67%)	0.38	2 (6%) 24 21	64, 73, 128, 149	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
7	H1	60/67 (89%)	0.34	1 (1%) 69 64	70, 84, 93, 101	0
7	H2	62/67 (92%)	0.23	0 100 100	63, 75, 92, 124	0
7	h1	62/67 (92%)	-0.23	0 100 100	47, 67, 78, 84	0
7	h2	62/67 (92%)	0.42	3 (4%) 36 31	72, 87, 98, 122	0
8	I1	34/38 (89%)	-0.19	0 100 100	53, 61, 70, 71	0
8	I2	35/38 (92%)	0.51	1 (2%) 54 48	82, 93, 105, 109	0
8	i1	34/38 (89%)	-0.09	0 100 100	54, 61, 71, 76	0
8	i2	33/38 (86%)	0.02	0 100 100	60, 67, 75, 77	0
9	J1	32/39 (82%)	0.03	0 100 100	51, 65, 89, 105	0
9	J2	35/39 (89%)	0.93	5 (14%) 7 7	75, 87, 125, 136	0
9	j1	32/39 (82%)	-0.03	0 100 100	49, 63, 74, 81	0
9	j2	33/39 (84%)	0.10	0 100 100	54, 70, 88, 110	0
10	K1	37/41 (90%)	0.02	1 (2%) 56 50	56, 66, 78, 79	0
10	K2	37/41 (90%)	0.94	5 (13%) 8 8	86, 96, 111, 117	0
10	k1	37/41 (90%)	0.11	0 100 100	56, 67, 81, 81	0
10	k2	37/41 (90%)	0.56	2 (5%) 32 27	67, 76, 89, 92	0
11	L1	37/38 (97%)	-0.40	0 100 100	39, 43, 67, 77	0
11	L2	37/38 (97%)	-0.16	0 100 100	49, 56, 61, 73	0
11	l1	37/38 (97%)	-0.29	0 100 100	36, 43, 63, 73	0
11	l2	37/38 (97%)	-0.28	0 100 100	43, 47, 73, 79	0
12	M1	40/108 (37%)	-0.24	0 100 100	32, 46, 62, 66	0
12	M2	40/108 (37%)	-0.23	0 100 100	45, 54, 67, 69	0
12	m1	40/108 (37%)	-0.18	1 (2%) 58 52	34, 44, 65, 67	0
12	m2	40/108 (37%)	-0.13	1 (2%) 58 52	44, 51, 65, 71	0
13	O1	240/329 (72%)	0.06	7 (2%) 54 48	38, 61, 96, 107	0
13	O2	205/329 (62%)	0.78	27 (13%) 8 8	54, 91, 119, 151	0
13	o1	238/329 (72%)	0.29	13 (5%) 32 27	38, 76, 121, 145	0
13	o2	245/329 (74%)	0.11	12 (4%) 36 31	41, 64, 103, 127	0
14	T1	30/32 (93%)	-0.37	0 100 100	37, 44, 60, 68	0
14	T2	30/32 (93%)	-0.02	0 100 100	54, 63, 76, 82	0
14	t1	30/32 (93%)	-0.35	0 100 100	40, 46, 60, 76	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
14	t2	29/32 (90%)	-0.43	0 100 100	38, 48, 68, 84	0
15	U1	93/155 (60%)	-0.24	0 100 100	44, 59, 75, 104	0
15	U2	90/155 (58%)	0.35	3 (3%) 49 44	74, 91, 104, 115	0
15	u1	93/155 (60%)	-0.10	1 (1%) 77 73	53, 68, 88, 95	0
15	u2	93/155 (60%)	-0.31	1 (1%) 77 73	44, 58, 71, 86	0
16	V1	129/155 (83%)	0.01	1 (0%) 82 79	47, 62, 87, 93	0
16	V2	129/155 (83%)	0.77	12 (9%) 16 13	75, 96, 114, 127	0
16	v1	129/155 (83%)	0.24	5 (3%) 44 38	47, 69, 108, 124	0
16	v2	129/155 (83%)	-0.06	4 (3%) 51 46	47, 63, 90, 105	0
17	Y1	27/35 (77%)	0.05	0 100 100	64, 74, 103, 118	0
17	Y2	25/35 (71%)	0.88	0 100 100	96, 100, 107, 109	0
17	y1	27/35 (77%)	0.52	1 (3%) 45 40	64, 71, 105, 107	0
17	y2	27/35 (77%)	0.39	0 100 100	72, 79, 92, 106	0
18	X1	29/40 (72%)	1.20	5 (17%) 5 5	98, 113, 130, 135	0
18	X2	31/40 (77%)	1.30	5 (16%) 5 5	83, 101, 114, 121	0
18	x1	36/40 (90%)	0.78	6 (16%) 5 5	61, 83, 96, 102	0
18	x2	32/40 (80%)	0.83	4 (12%) 9 9	83, 104, 122, 126	0
19	S1	25/46 (54%)	0.50	1 (4%) 43 37	72, 79, 85, 98	0
19	S2	30/46 (65%)	1.27	6 (20%) 3 3	98, 114, 120, 122	0
19	s1	40/46 (86%)	0.63	2 (5%) 35 30	54, 78, 94, 95	0
19	s2	46/46 (100%)	0.83	5 (10%) 12 11	75, 90, 106, 112	0
20	W1	21/25 (84%)	0.52	1 (4%) 36 31	71, 79, 86, 90	0
20	W2	21/25 (84%)	0.39	0 100 100	66, 76, 84, 89	0
20	w1	25/25 (100%)	0.73	3 (12%) 10 9	73, 79, 96, 101	0
20	w2	20/25 (80%)	0.76	3 (15%) 6 6	91, 96, 103, 111	0
21	Q2	111/218 (50%)	1.18	17 (15%) 6 6	122, 132, 145, 151	0
21	q1	105/218 (48%)	0.96	17 (16%) 5 5	103, 125, 138, 144	0
22	Z2	59/62 (95%)	1.10	11 (18%) 4 4	108, 121, 134, 140	0
22	z2	59/62 (95%)	0.75	4 (6%) 25 21	83, 101, 116, 127	0
All	All	10516/12316 (85%)	0.09	316 (3%) 52 47	31, 66, 113, 159	4 (0%)

All (316) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	C2	392	ALA	8.0
13	o2	195	GLY	7.5
13	o1	195	GLY	6.5
18	X2	17	ALA	6.1
13	O1	195	GLY	5.8
3	C2	434	GLY	5.8
13	O2	195	GLY	5.4
5	E2	23	HIS	4.8
21	q1	147	GLY	4.8
18	x1	26	THR	4.6
13	o2	200	ALA	4.6
20	w1	2	ALA	4.5
13	o1	216	VAL	4.4
3	C2	247	GLY	4.4
13	o1	201	VAL	4.3
4	D2	324	GLY	4.3
13	O2	240	TYR	4.2
1	a1	344	ALA	4.1
18	X2	13	SER	4.1
5	E2	22	ILE	4.1
13	o1	200	ALA	4.0
3	C2	232	ASP	4.0
9	J2	35	GLY	4.0
2	b2	408	ASN	3.9
19	s2	5	ALA	3.9
3	C2	254	THR	3.9
6	F2	16	PHE	3.9
13	O2	200	ALA	3.8
13	o2	201	VAL	3.8
21	Q2	146	VAL	3.8
3	c2	194	GLY	3.8
13	O1	200	ALA	3.7
15	U2	76	LYS	3.7
22	z2	42	THR	3.7
21	Q2	154	SER	3.7
13	O1	214	VAL	3.7
6	F2	15	ILE	3.7
13	O2	178(D)	ALA	3.7
21	Q2	170	GLN	3.7
21	Q2	214	SER	3.7
3	C2	273	SER	3.6
13	o2	214	VAL	3.6
13	o2	213	GLY	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	e1	23	HIS	3.6
21	Q2	148	THR	3.5
19	S2	8	LEU	3.5
21	q1	152	VAL	3.4
13	O2	238	VAL	3.4
22	Z2	56	VAL	3.4
19	s1	7	ALA	3.4
20	w1	1	ALA	3.4
3	C2	407	VAL	3.4
21	q1	214	SER	3.4
20	w2	5	ALA	3.3
13	O1	216	VAL	3.3
3	C2	159	THR	3.3
4	d2	66	SER	3.3
1	A2	170	ASP	3.3
13	O2	209	ASN	3.3
13	O1	201	VAL	3.2
18	X2	19	VAL	3.2
2	B1	339	ALA	3.2
15	U2	78	TYR	3.2
18	x1	20	LEU	3.2
13	O2	218	GLU	3.2
3	C1	208	ILE	3.2
16	v1	39	SER	3.2
16	V2	98	SER	3.2
5	e2	20	TRP	3.2
13	O2	239	PHE	3.2
18	x1	30	ILE	3.1
3	C2	141	GLU	3.1
2	b2	431	GLU	3.1
16	V2	78	ASN	3.1
1	A1	12	SER	3.1
21	Q2	110	ASN	3.0
4	D2	176	ALA	3.0
16	V2	127	ALA	3.0
2	b2	197	GLY	3.0
3	c2	209	ILE	3.0
13	O2	241	ALA	3.0
5	E1	19	TYR	3.0
16	V2	75	TYR	2.9
10	k2	44	GLY	2.9
7	H1	22	ALA	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	Q2	217	GLY	2.9
21	q1	148	THR	2.9
16	V1	40	CYS	2.9
21	Q2	149	LEU	2.9
3	c1	145	SER	2.9
5	e2	19	TYR	2.9
2	B1	408	ASN	2.9
3	C2	128	GLY	2.9
5	E1	41	GLY	2.9
16	V2	40	CYS	2.9
3	C2	161	LEU	2.9
5	e2	77	ASP	2.8
13	O1	220	LEU	2.8
13	o2	220	LEU	2.8
3	C2	122	SER	2.8
22	z2	34	SER	2.8
2	B2	339	ALA	2.8
21	Q2	160	ALA	2.8
13	O2	42	ASP	2.8
21	q1	144	LEU	2.8
2	B1	201	HIS	2.8
22	Z2	33	TRP	2.8
1	A1	253	GLY	2.8
16	v1	97	SER	2.7
18	X2	21	VAL	2.7
19	S2	14	ALA	2.7
21	q1	129	ALA	2.7
21	q1	145	ALA	2.7
2	b2	186	GLY	2.7
3	C1	145	SER	2.7
6	F2	35	GLY	2.7
2	B1	431	GLU	2.7
13	o1	178(E)	VAL	2.7
13	o2	178(E)	VAL	2.7
4	d1	177	ALA	2.7
19	S1	8	LEU	2.7
21	q1	141	ALA	2.7
16	v2	98	SER	2.7
21	Q2	151	SER	2.7
13	o2	218	GLU	2.6
19	s2	37	ALA	2.6
3	C2	335	THR	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	q1	201	LEU	2.6
19	S2	21	ALA	2.6
3	C2	160	ILE	2.6
13	O2	85	LEU	2.6
4	D1	177	ALA	2.6
19	s2	4	ALA	2.6
3	C2	129	GLY	2.6
18	X1	27	GLY	2.6
22	Z2	4	ILE	2.6
18	x2	33	SER	2.6
22	Z2	16	SER	2.6
18	x2	32	VAL	2.6
20	W1	23	ALA	2.6
9	J2	23	THR	2.6
3	C2	222	GLY	2.6
21	q1	217	GLY	2.6
2	B1	86	SER	2.5
13	O2	198	GLU	2.5
21	q1	182	ARG	2.5
10	K2	36	ALA	2.5
22	Z2	60	PHE	2.5
13	O2	140	THR	2.5
15	U2	77	LYS	2.5
15	u1	69	GLU	2.5
18	X1	12	TRP	2.5
21	q1	158	SER	2.5
13	O2	142	LEU	2.5
20	w2	6	VAL	2.5
21	Q2	191	ARG	2.5
22	Z2	20	ILE	2.5
13	O2	220	LEU	2.5
9	J2	13	VAL	2.5
18	x1	21	VAL	2.5
19	s1	17	ALA	2.5
3	C2	196	ILE	2.5
16	V2	39	SER	2.5
13	o2	216	VAL	2.5
2	B1	154	GLY	2.5
3	C2	261	ARG	2.4
6	F2	32	PHE	2.4
4	D1	331	ALA	2.4
13	o2	132	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	X2	18	ALA	2.4
19	S2	25	ALA	2.4
2	b2	166	ILE	2.4
3	C2	347	GLY	2.4
22	Z2	55	GLY	2.4
16	V2	38	SER	2.4
2	b2	144	VAL	2.4
3	C2	378	ASN	2.4
3	C2	194	GLY	2.4
6	f2	17	THR	2.4
13	o1	196	ARG	2.4
21	Q2	150	ARG	2.4
13	O2	71	MET	2.4
5	E2	24	SER	2.4
18	X1	21	VAL	2.4
22	Z2	44	SER	2.4
2	b2	128	THR	2.4
3	c2	245	VAL	2.4
6	F2	20	TRP	2.4
10	k2	43	VAL	2.4
7	h2	60	ILE	2.4
13	O2	126	VAL	2.3
3	C2	209	ILE	2.3
13	o1	178(D)	ALA	2.3
16	v1	98	SER	2.3
16	v2	38	SER	2.3
3	C2	352	GLY	2.3
13	O2	144	GLY	2.3
21	Q2	124	GLU	2.3
21	q1	200	ARG	2.3
1	A2	97	TRP	2.3
2	b2	156	PHE	2.3
19	s2	34	PHE	2.3
3	C2	55	ALA	2.3
6	f1	35	GLY	2.3
12	m2	14	GLY	2.3
13	o1	213	GLY	2.3
16	V2	17	GLY	2.3
13	O2	51	LEU	2.3
16	V2	32	LEU	2.3
1	A2	319	ASP	2.3
21	q1	143	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	B2	284	ILE	2.3
10	K1	44	GLY	2.3
3	C1	213	LEU	2.3
13	o1	220	LEU	2.3
19	S2	6	LEU	2.3
1	a2	228	THR	2.3
4	D2	102	THR	2.3
9	J2	14	VAL	2.3
13	O2	216	VAL	2.3
22	z2	40	ILE	2.3
2	B2	403	GLY	2.3
12	m1	14	GLY	2.3
22	Z2	59	SER	2.3
3	C2	67	MET	2.2
15	u2	80	ASP	2.2
21	q1	160	ALA	2.2
7	h2	26	GLY	2.2
22	Z2	39	SER	2.2
2	b2	184	ALA	2.2
21	Q2	141	ALA	2.2
16	v1	43	GLY	2.2
16	V2	61	LEU	2.2
19	S2	15	LEU	2.2
13	o1	218	GLU	2.2
21	q1	168	GLU	2.2
3	C2	39	ASN	2.2
13	O2	202	ASN	2.2
3	C2	319	VAL	2.2
6	f2	31	VAL	2.2
3	C2	49	LEU	2.2
5	E2	18	ARG	2.2
13	o2	196	ARG	2.2
4	D2	172	SER	2.2
2	B2	416	THR	2.2
13	O2	77	THR	2.2
13	o1	99	ASP	2.2
5	E1	25	ILE	2.2
4	D2	92	LEU	2.2
3	c2	141	GLU	2.1
22	z2	38	SER	2.1
17	y1	31	THR	2.1
3	C2	233	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	K2	18	PHE	2.1
13	O2	197	ILE	2.1
13	o2	0	GLN	2.1
18	X1	32	VAL	2.1
6	F2	36	ALA	2.1
8	I2	11	CYS	2.1
20	w2	3	TRP	2.1
13	O2	-2	THR	2.1
2	B2	194	ASN	2.1
3	C2	61	VAL	2.1
3	C2	208	ILE	2.1
18	X1	22	ILE	2.1
22	Z2	51	VAL	2.1
2	b1	161	LEU	2.1
10	K2	34	LEU	2.1
21	Q2	144	LEU	2.1
3	C2	260	ALA	2.1
3	C2	263	ALA	2.1
3	C1	338	GLY	2.1
3	c1	193	GLY	2.1
1	A2	105	TRP	2.1
9	J2	9	PRO	2.1
16	v2	41	HIS	2.1
3	c2	159	THR	2.1
5	E1	24	SER	2.1
5	E2	27	ILE	2.1
13	o1	214	VAL	2.1
1	A2	256	GLY	2.1
10	K2	14	THR	2.1
16	V2	46	THR	2.1
5	E2	25	ILE	2.1
13	O2	194	SER	2.1
5	E2	59	ASN	2.1
16	v1	15	ASN	2.1
18	x1	23	LEU	2.1
4	d1	176	ALA	2.1
13	O1	178(D)	ALA	2.1
3	C2	248	GLY	2.1
5	E2	28	PRO	2.0
1	A1	6	GLU	2.0
7	h2	9	GLU	2.0
20	w1	3	TRP	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	o1	-2	THR	2.0
5	E1	21	VAL	2.0
5	E2	21	VAL	2.0
13	O2	201	VAL	2.0
16	V2	126	GLN	2.0
18	x2	20	LEU	2.0
21	q1	122	ARG	2.0
5	e1	45	ASP	2.0
4	d2	331	ALA	2.0
19	s2	3	ALA	2.0
18	x2	4	THR	2.0
10	K2	33	LEU	2.0
13	O2	214	VAL	2.0
18	x1	32	VAL	2.0
21	Q2	156	VAL	2.0
2	b2	200	SER	2.0
16	v2	39	SER	2.0
3	C1	39	ASN	2.0
3	C2	294	ASN	2.0
3	c2	142	ASP	2.0
21	Q2	189	ALA	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	UNL	I2	102	17/-	0.49	0.11	80,92,102,103	0
28	UNL	k2	505	6/-	0.51	0.10	70,80,84,87	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
28	UNL	I2	103	14/-	0.55	0.10	62,93,102,104	0
32	GOL	a1	406	6/6	0.55	0.11	68,75,86,90	0
28	UNL	a2	409	18/-	0.57	0.10	61,74,86,90	0
28	UNL	C2	501	6/-	0.57	0.10	72,74,78,87	0
28	UNL	J2	101	10/-	0.57	0.12	71,82,86,88	0
28	UNL	b1	623	11/-	0.58	0.12	59,74,83,84	0
23	BCR	K1	101	31/40	0.59	0.12	64,82,93,96	0
28	UNL	D1	410	6/-	0.59	0.14	59,62,66,66	0
28	UNL	F2	403	16/-	0.59	0.15	51,76,86,89	0
28	UNL	A2	409	10/-	0.60	0.14	72,82,85,87	0
28	UNL	c2	520	15/-	0.60	0.12	86,97,106,108	0
28	UNL	B1	624	18/-	0.61	0.10	43,71,79,81	0
28	UNL	H2	102	5/-	0.62	0.14	72,81,84,85	0
28	UNL	K2	103	5/-	0.63	0.16	79,83,88,90	0
25	CLA	b2	604	42/65	0.63	0.13	82,109,116,127	0
25	CLA	C2	518	41/65	0.63	0.12	105,121,127,134	0
28	UNL	d2	410	13/-	0.63	0.12	74,92,108,111	0
28	UNL	C2	517	18/-	0.63	0.13	74,83,87,89	0
28	UNL	b1	629	15/-	0.63	0.10	46,59,71,83	0
28	UNL	m2	102	18/-	0.64	0.09	46,65,79,79	0
29	LMG	C2	515	24/55	0.64	0.10	82,97,104,105	0
28	UNL	k2	502	9/-	0.64	0.09	72,78,84,86	0
28	UNL	d1	410	12/-	0.65	0.13	49,72,77,79	0
28	UNL	X2	101	7/-	0.65	0.24	83,85,91,93	0
28	UNL	B2	626	15/-	0.66	0.10	79,83,92,95	0
29	LMG	I2	101	34/55	0.66	0.13	82,103,109,114	0
25	CLA	C2	510	45/65	0.66	0.14	107,116,121,126	0
33	LHG	B2	627	42/49	0.66	0.10	67,88,120,132	0
35	LMT	m2	104	29/35	0.66	0.12	49,104,119,122	0
23	BCR	K2	102	40/40	0.67	0.13	84,99,113,115	0
33	LHG	b2	625	43/49	0.68	0.10	62,87,109,126	0
32	GOL	C1	518	6/6	0.68	0.11	65,73,77,81	0
39	CA	o2	401	1/1	0.68	0.18	101,101,101,101	0
33	LHG	d1	402	32/49	0.69	0.14	45,63,76,86	0
28	UNL	B1	623	16/-	0.69	0.09	53,68,72,74	0
32	GOL	B1	620	6/6	0.69	0.10	63,75,81,82	0
35	LMT	b2	621	35/35	0.69	0.11	69,110,123,123	0
24	CL	A2	410	1/1	0.69	0.08	87,87,87,87	0
28	UNL	t1	101	18/-	0.69	0.10	43,60,66,67	0
29	LMG	j2	101	50/55	0.70	0.12	60,78,97,107	0
29	LMG	F2	402	35/55	0.70	0.11	68,81,91,92	0
28	UNL	j1	101	17/-	0.70	0.11	60,69,71,77	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
33	LHG	a2	407	30/49	0.70	0.13	55,75,94,102	0
28	UNL	b2	607	12/-	0.71	0.12	64,75,80,87	0
25	CLA	C2	503	65/65	0.71	0.12	94,104,112,116	0
25	CLA	D2	404	61/65	0.71	0.11	67,87,113,120	0
28	UNL	a2	401	18/-	0.71	0.11	46,56,70,86	0
28	UNL	k2	504	9/-	0.71	0.09	66,74,80,88	0
25	CLA	K2	101	55/65	0.71	0.10	86,98,104,109	0
28	UNL	a2	410	8/-	0.71	0.10	61,68,70,76	0
28	UNL	i2	101	14/-	0.72	0.07	62,66,73,75	0
28	UNL	M2	101	11/-	0.72	0.07	59,68,73,74	0
35	LMT	c1	517	33/35	0.72	0.12	63,100,117,119	0
25	CLA	c2	513	54/65	0.73	0.10	75,94,102,105	0
23	BCR	c2	501	40/40	0.73	0.13	66,82,89,92	0
28	UNL	b1	626	13/-	0.73	0.08	53,64,83,86	0
32	GOL	C2	514	6/6	0.73	0.09	87,93,100,101	0
35	LMT	m2	103	30/35	0.73	0.14	52,89,111,113	0
23	BCR	K2	104	29/40	0.73	0.10	92,100,109,112	0
28	UNL	b1	630	17/-	0.73	0.09	48,57,74,75	0
29	LMG	d1	411	35/55	0.74	0.11	58,76,94,99	0
23	BCR	z2	101	40/40	0.74	0.12	80,95,100,101	0
28	UNL	m2	101	18/-	0.74	0.09	44,57,79,85	0
28	UNL	B2	625	18/-	0.74	0.09	37,56,68,68	0
29	LMG	A1	412	41/55	0.74	0.11	50,75,96,100	0
29	LMG	b1	621	38/55	0.74	0.10	52,63,76,82	0
23	BCR	F2	401	40/40	0.75	0.11	67,81,107,113	0
29	LMG	B2	621	37/55	0.75	0.10	53,68,80,96	0
25	CLA	C2	505	65/65	0.75	0.12	78,100,112,118	0
28	UNL	A2	408	18/-	0.75	0.10	62,83,92,93	0
23	BCR	B1	602	40/40	0.75	0.11	49,62,74,78	0
33	LHG	A2	405	33/49	0.75	0.10	70,80,90,97	0
23	BCR	C2	502	40/40	0.75	0.13	95,106,118,120	0
28	UNL	k2	503	6/-	0.76	0.09	67,76,79,80	0
23	BCR	J1	101	40/40	0.76	0.10	50,70,86,88	0
35	LMT	i2	102	7/35	0.76	0.08	68,71,76,79	0
29	LMG	A2	412	29/55	0.76	0.10	86,94,100,102	0
32	GOL	b1	618	6/6	0.76	0.08	60,69,80,80	0
25	CLA	C2	509	65/65	0.76	0.12	90,101,106,108	0
35	LMT	C1	519	35/35	0.77	0.10	57,76,85,93	0
35	LMT	M1	103	24/35	0.77	0.10	42,68,97,101	0
35	LMT	T1	101	12/35	0.77	0.10	46,51,54,56	0
25	CLA	C2	511	50/65	0.77	0.11	85,93,100,104	0
23	BCR	k1	101	40/40	0.77	0.11	56,70,82,85	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	B1	604	42/65	0.77	0.11	83,98,107,113	0
28	UNL	B2	622	17/-	0.77	0.09	57,71,76,78	0
25	CLA	C1	512	65/65	0.77	0.10	63,82,102,121	0
25	CLA	c1	516	65/65	0.77	0.11	66,82,104,109	0
35	LMT	a2	406	35/35	0.78	0.11	43,80,92,94	0
28	UNL	b1	627	16/-	0.78	0.09	42,56,75,77	0
25	CLA	B1	611	62/65	0.78	0.10	58,78,87,89	0
25	CLA	c1	515	55/65	0.78	0.10	69,82,90,94	0
29	LMG	b1	624	39/55	0.78	0.12	58,73,84,87	0
37	SQD	D1	409	35/54	0.78	0.11	61,75,92,97	0
28	UNL	W2	101	9/-	0.78	0.08	64,77,83,87	0
25	CLA	C2	504	46/65	0.79	0.11	72,88,95,96	0
25	CLA	C1	513	61/65	0.79	0.10	49,68,74,78	0
28	UNL	a2	411	11/-	0.79	0.07	51,55,65,67	0
25	CLA	C2	507	45/65	0.79	0.11	73,93,102,113	0
23	BCR	b2	603	40/40	0.80	0.10	60,74,102,104	0
23	BCR	H2	103	24/40	0.80	0.12	65,76,82,85	0
23	BCR	j2	102	40/40	0.80	0.11	59,75,86,87	0
25	CLA	c2	515	46/65	0.80	0.11	81,100,104,109	0
29	LMG	C1	520	48/55	0.80	0.08	59,69,78,86	0
29	LMG	a1	412	51/55	0.80	0.10	54,67,77,91	0
25	CLA	C2	513	53/65	0.80	0.11	78,91,106,110	0
23	BCR	H1	102	22/40	0.80	0.12	75,88,95,100	0
23	BCR	D1	401	40/40	0.80	0.10	54,67,89,95	0
23	BCR	b2	602	40/40	0.81	0.10	51,70,78,82	0
25	CLA	C2	506	65/65	0.81	0.10	78,90,97,100	0
23	BCR	b1	602	40/40	0.81	0.10	35,57,65,73	0
25	CLA	C2	508	50/65	0.81	0.13	87,103,112,115	0
34	DGD	H2	101	62/66	0.81	0.09	51,74,83,85	0
25	CLA	C2	516	46/65	0.81	0.10	70,92,97,100	0
28	UNL	d2	411	12/-	0.81	0.08	55,67,73,79	0
29	LMG	b2	622	39/55	0.81	0.10	47,60,85,90	0
25	CLA	C1	514	45/65	0.82	0.10	73,84,92,96	0
32	GOL	c2	518	6/6	0.82	0.11	50,55,59,64	0
25	CLA	d2	404	50/65	0.82	0.10	57,74,83,88	0
35	LMT	m1	101	35/35	0.82	0.11	44,80,103,112	0
25	CLA	B2	604	41/65	0.82	0.09	68,79,92,97	0
28	UNL	x1	101	15/-	0.82	0.09	55,73,79,82	0
25	CLA	c2	509	65/65	0.82	0.08	54,70,82,85	0
23	BCR	C1	521	40/40	0.82	0.10	59,68,80,84	0
34	DGD	C2	512	33/66	0.82	0.10	63,77,83,93	0
29	LMG	B1	622	31/55	0.82	0.11	66,74,81,83	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
37	SQD	B2	623	45/54	0.82	0.10	58,79,89,96	0
37	SQD	b2	605	45/54	0.82	0.08	54,83,114,124	0
29	LMG	B1	626	48/55	0.82	0.09	55,70,89,94	0
25	CLA	B2	611	65/65	0.83	0.10	51,73,81,86	0
23	BCR	B2	602	40/40	0.83	0.10	47,59,80,86	0
29	LMG	B2	620	40/55	0.83	0.09	62,74,97,98	0
25	CLA	c1	503	65/65	0.83	0.10	55,66,71,75	0
25	CLA	C1	502	65/65	0.83	0.09	51,63,68,70	0
35	LMT	b2	623	35/35	0.83	0.08	63,90,98,101	0
28	UNL	B1	625	7/-	0.83	0.08	45,52,55,63	0
25	CLA	b2	618	65/65	0.83	0.10	68,82,90,92	0
23	BCR	h2	101	40/40	0.83	0.10	71,85,107,109	0
28	UNL	b1	625	10/-	0.83	0.10	50,62,68,69	0
23	BCR	c1	502	40/40	0.83	0.10	57,66,72,72	0
29	LMG	b1	631	40/55	0.83	0.10	29,52,85,92	0
38	HEM	E1	101	43/43	0.83	0.13	108,134,152,155	0
29	LMG	c1	519	55/55	0.83	0.08	47,70,84,91	0
28	UNL	m1	102	6/-	0.84	0.08	54,55,63,66	0
28	UNL	a1	409	11/-	0.84	0.06	43,51,60,63	0
25	CLA	c2	512	65/65	0.84	0.09	61,76,86,93	0
23	BCR	d2	401	40/40	0.84	0.09	48,67,81,85	0
25	CLA	B2	606	65/65	0.84	0.09	53,67,75,78	0
23	BCR	k2	501	40/40	0.84	0.09	61,84,95,98	0
25	CLA	b2	610	65/65	0.84	0.09	60,82,90,92	0
25	CLA	b1	604	65/65	0.84	0.10	52,78,110,115	0
37	SQD	D2	402	25/54	0.84	0.09	85,90,96,98	0
25	CLA	c2	502	65/65	0.84	0.09	60,78,85,90	0
35	LMT	l1	101	24/35	0.84	0.08	42,55,89,90	0
38	HEM	V2	201	43/43	0.84	0.12	83,98,102,107	0
38	HEM	e2	101	43/43	0.84	0.11	126,145,163,171	0
25	CLA	A2	403	61/65	0.84	0.11	80,89,98,102	0
25	CLA	D1	403	51/65	0.85	0.09	64,74,88,90	0
29	LMG	a2	412	44/55	0.85	0.09	55,70,78,93	0
25	CLA	b2	609	61/65	0.85	0.10	77,89,95,100	0
25	CLA	A2	404	51/65	0.85	0.08	47,58,70,73	0
25	CLA	C1	509	65/65	0.85	0.09	48,59,71,80	0
28	UNL	B2	624	8/-	0.85	0.07	46,51,54,55	0
25	CLA	b2	619	59/65	0.85	0.10	71,80,106,109	0
23	BCR	c1	501	40/40	0.85	0.08	56,66,79,82	0
32	GOL	i1	101	6/6	0.85	0.12	55,57,60,64	0
25	CLA	c2	506	61/65	0.85	0.10	55,70,77,83	0
32	GOL	a2	415	6/6	0.85	0.14	47,55,59,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	c2	508	65/65	0.85	0.10	68,78,84,88	0
28	UNL	b1	628	10/-	0.85	0.08	51,57,61,67	0
25	CLA	B2	610	65/65	0.85	0.09	44,59,82,86	0
25	CLA	c1	508	50/65	0.85	0.10	57,66,77,81	0
25	CLA	c1	510	65/65	0.85	0.08	41,54,62,72	0
25	CLA	c1	513	60/65	0.85	0.07	49,59,71,72	0
34	DGD	c1	520	62/66	0.85	0.09	36,59,73,87	0
25	CLA	B1	609	65/65	0.85	0.10	54,71,81,90	0
25	CLA	C1	506	65/65	0.85	0.09	49,62,70,73	0
34	DGD	c2	516	52/66	0.86	0.10	37,63,71,75	0
34	DGD	c2	517	62/66	0.86	0.08	45,57,70,75	0
25	CLA	c1	509	65/65	0.86	0.10	51,62,68,72	0
29	LMG	A1	410	43/55	0.86	0.08	52,59,65,76	0
25	CLA	a2	405	65/65	0.86	0.09	51,60,81,87	0
25	CLA	c1	505	65/65	0.86	0.09	47,70,79,88	0
28	UNL	t1	102	9/-	0.86	0.08	45,57,68,69	0
34	DGD	C1	517	64/66	0.86	0.08	38,55,75,92	0
38	HEM	E2	101	43/43	0.86	0.13	116,132,146,152	0
25	CLA	B1	606	65/65	0.86	0.10	60,71,77,82	0
29	LMG	d2	407	27/55	0.86	0.09	49,60,64,70	0
39	CA	O1	401	1/1	0.86	0.06	82,82,82,82	0
25	CLA	c2	504	65/65	0.86	0.10	46,78,92,100	0
23	BCR	b2	601	40/40	0.87	0.09	51,61,69,72	0
34	DGD	c1	514	51/66	0.87	0.09	46,54,62,64	0
25	CLA	b1	609	65/65	0.87	0.10	42,58,84,104	0
25	CLA	b2	624	65/65	0.87	0.08	47,60,75,82	0
25	CLA	b1	619	65/65	0.87	0.10	48,62,81,85	0
27	PHO	D2	407	64/64	0.87	0.08	58,68,81,83	0
25	CLA	b2	606	65/65	0.87	0.11	68,77,84,90	0
25	CLA	C1	511	65/65	0.87	0.10	45,56,62,68	0
35	LMT	L1	102	12/35	0.87	0.07	35,45,59,62	0
29	LMG	M1	101	31/55	0.87	0.09	41,52,63,70	0
25	CLA	c2	507	54/65	0.87	0.10	76,81,86,92	0
25	CLA	B1	618	58/65	0.87	0.10	53,64,80,86	0
29	LMG	c2	519	26/55	0.87	0.07	58,67,73,74	0
28	UNL	l1	103	12/-	0.87	0.08	35,47,53,55	0
25	CLA	b2	613	65/65	0.87	0.10	59,84,96,99	0
25	CLA	c1	507	65/65	0.88	0.09	49,62,72,80	0
23	BCR	B2	603	40/40	0.88	0.08	46,59,76,81	0
25	CLA	B2	612	65/65	0.88	0.10	58,64,71,83	0
25	CLA	c2	511	65/65	0.88	0.10	54,65,72,75	0
25	CLA	B2	619	65/65	0.88	0.07	46,55,63,71	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	B1	605	65/65	0.88	0.09	60,75,87,88	0
25	CLA	C1	505	65/65	0.88	0.08	43,55,64,68	0
34	DGD	C1	515	52/66	0.88	0.09	36,58,67,71	0
25	CLA	c1	512	65/65	0.88	0.10	36,50,57,60	0
36	PL9	D2	408	55/55	0.88	0.09	43,59,64,74	0
27	PHO	D1	407	63/64	0.88	0.08	40,56,63,67	0
23	BCR	C1	501	40/40	0.88	0.08	47,61,72,75	0
25	CLA	C1	507	65/65	0.88	0.09	46,67,86,105	0
25	CLA	b2	616	60/65	0.88	0.09	51,64,82,82	0
25	CLA	b1	616	65/65	0.88	0.09	39,46,57,69	0
23	BCR	A2	401	40/40	0.88	0.12	58,84,90,91	0
23	BCR	d1	405	40/40	0.88	0.09	38,51,94,99	0
25	CLA	B1	617	65/65	0.88	0.08	59,67,74,75	0
25	CLA	B2	605	65/65	0.88	0.07	63,71,77,82	0
25	CLA	c1	506	65/65	0.88	0.08	40,54,68,73	0
25	CLA	B2	614	65/65	0.89	0.08	46,58,66,68	0
25	CLA	B2	616	54/65	0.89	0.08	43,51,57,59	0
34	DGD	c1	518	62/66	0.89	0.07	41,61,69,79	0
25	CLA	B2	617	65/65	0.89	0.08	52,63,70,74	0
25	CLA	B2	618	60/65	0.89	0.08	59,65,80,85	0
36	PL9	d1	409	55/55	0.89	0.09	28,41,50,61	0
25	CLA	b2	617	65/65	0.89	0.08	47,58,65,72	0
36	PL9	d2	409	55/55	0.89	0.09	33,44,56,57	0
25	CLA	B1	610	65/65	0.89	0.09	46,58,73,76	0
25	CLA	a1	404	60/65	0.89	0.10	49,57,82,89	0
23	BCR	B1	603	40/40	0.89	0.07	45,56,78,85	0
33	LHG	D1	404	49/49	0.89	0.09	48,60,84,90	0
25	CLA	B1	607	60/65	0.89	0.09	45,56,68,72	0
28	UNL	A1	409	14/-	0.89	0.06	44,48,57,68	0
23	BCR	B1	601	40/40	0.89	0.08	41,55,65,65	0
25	CLA	c2	505	65/65	0.89	0.08	48,61,71,80	0
25	CLA	d1	406	65/65	0.89	0.08	44,58,94,99	0
25	CLA	C1	508	65/65	0.89	0.09	47,66,76,80	0
25	CLA	c2	503	65/65	0.90	0.10	53,62,83,89	0
23	BCR	B2	601	40/40	0.90	0.07	41,56,66,68	0
29	LMG	D1	406	35/55	0.90	0.08	50,57,71,74	0
33	LHG	D2	405	49/49	0.90	0.07	52,60,66,68	0
33	LHG	L2	101	49/49	0.90	0.08	42,57,70,78	0
25	CLA	B1	616	65/65	0.90	0.08	39,49,58,66	0
23	BCR	b1	603	40/40	0.90	0.08	40,58,69,77	0
33	LHG	d2	403	49/49	0.90	0.08	42,59,69,73	0
25	CLA	b2	611	65/65	0.90	0.10	66,72,80,83	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
34	DGD	C1	516	62/66	0.90	0.07	44,53,60,61	0
31	BCT	a1	413	4/4	0.90	0.07	43,48,48,50	0
34	DGD	H1	101	62/66	0.90	0.08	50,71,84,89	0
25	CLA	b2	612	65/65	0.90	0.08	39,54,64,70	0
25	CLA	A1	405	55/65	0.90	0.08	38,46,59,65	0
25	CLA	c2	510	54/65	0.90	0.10	64,69,77,79	0
25	CLA	B2	607	65/65	0.90	0.08	49,59,73,78	0
25	CLA	B2	609	65/65	0.90	0.08	51,67,76,82	0
34	DGD	c2	514	62/66	0.90	0.07	47,59,67,69	0
25	CLA	b1	611	65/65	0.90	0.08	37,59,68,73	0
25	CLA	B1	619	65/65	0.90	0.08	32,50,57,73	0
25	CLA	A2	402	65/65	0.90	0.09	47,57,69,77	0
33	LHG	B1	621	49/49	0.90	0.08	41,57,67,73	0
25	CLA	b1	617	65/65	0.90	0.07	47,56,65,68	0
25	CLA	b2	614	65/65	0.91	0.08	51,66,73,75	0
25	CLA	d1	401	65/65	0.91	0.08	30,36,44,47	0
25	CLA	B2	615	65/65	0.91	0.07	44,56,73,86	0
25	CLA	d2	405	65/65	0.91	0.08	34,44,61,77	0
25	CLA	B1	615	65/65	0.91	0.08	35,47,73,80	0
33	LHG	d2	406	49/49	0.91	0.07	36,50,59,66	0
25	CLA	c1	504	65/65	0.91	0.09	36,53,83,98	0
25	CLA	b2	620	65/65	0.91	0.09	42,56,63,72	0
25	CLA	D2	401	65/65	0.91	0.08	43,53,71,76	0
23	BCR	a1	401	40/40	0.91	0.08	47,56,64,65	0
36	PL9	D1	408	55/55	0.91	0.08	28,42,52,63	0
25	CLA	D2	406	65/65	0.91	0.07	45,57,65,67	0
24	CL	a1	402	1/1	0.91	0.05	49,49,49,49	0
23	BCR	h1	102	40/40	0.91	0.08	53,60,67,69	0
25	CLA	b1	606	65/65	0.91	0.09	44,53,61,63	0
29	LMG	d1	408	33/55	0.91	0.08	41,50,61,63	0
25	CLA	A1	404	51/65	0.91	0.07	37,48,58,70	0
25	CLA	C1	510	65/65	0.91	0.09	47,59,77,82	0
25	CLA	B1	612	65/65	0.91	0.10	52,66,71,77	0
38	HEM	f1	101	43/43	0.91	0.11	62,82,124,136	0
38	HEM	v1	201	43/43	0.91	0.10	60,66,72,75	0
34	DGD	h2	102	62/66	0.91	0.08	47,67,82,96	0
25	CLA	C1	503	60/65	0.91	0.07	38,53,67,73	0
25	CLA	C1	504	65/65	0.91	0.07	49,64,74,77	0
35	LMT	M1	102	11/35	0.91	0.08	47,52,56,58	0
25	CLA	b1	620	65/65	0.91	0.08	31,43,56,60	0
27	PHO	A2	407	64/64	0.92	0.08	53,64,72,80	0
25	CLA	b1	612	65/65	0.92	0.07	45,54,60,68	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
27	PHO	d2	408	64/64	0.92	0.08	45,56,62,64	0
33	LHG	D2	403	49/49	0.92	0.07	45,60,68,73	0
31	BCT	A2	413	4/4	0.92	0.07	65,69,71,72	0
25	CLA	b2	608	65/65	0.92	0.08	65,77,85,86	0
25	CLA	b1	615	59/65	0.92	0.08	31,43,58,64	0
25	CLA	B2	613	65/65	0.92	0.07	41,52,68,70	0
23	BCR	a2	402	40/40	0.92	0.07	33,51,62,67	0
32	GOL	c1	521	6/6	0.92	0.08	54,56,60,65	0
25	CLA	b1	607	65/65	0.92	0.08	33,46,69,76	0
24	CL	A1	402	1/1	0.92	0.12	39,39,39,39	0
25	CLA	d1	404	65/65	0.92	0.07	31,43,49,51	0
25	CLA	b1	610	65/65	0.92	0.07	37,47,56,63	0
25	CLA	B1	613	65/65	0.92	0.08	38,49,57,64	0
27	PHO	d1	403	64/64	0.92	0.07	32,41,50,54	0
33	LHG	b1	622	49/49	0.92	0.09	36,49,57,69	0
34	DGD	h1	101	62/66	0.92	0.07	37,48,59,65	0
25	CLA	D1	402	65/65	0.93	0.06	31,40,58,63	0
23	BCR	A1	401	40/40	0.93	0.07	36,48,54,58	0
23	BCR	b1	601	40/40	0.93	0.07	36,47,56,57	0
25	CLA	a1	405	50/65	0.93	0.07	25,33,49,55	0
25	CLA	B1	614	65/65	0.93	0.07	43,55,62,67	0
25	CLA	B2	608	65/65	0.93	0.07	43,53,70,76	0
26	OEX	A2	406	10/10	0.93	0.09	68,84,93,94	0
25	CLA	a2	404	65/65	0.93	0.07	30,42,52,53	0
25	CLA	b1	605	65/65	0.93	0.07	38,52,60,66	0
33	LHG	l2	101	44/49	0.93	0.06	36,53,66,72	0
25	CLA	a2	413	50/65	0.93	0.06	33,46,57,66	0
38	HEM	V1	201	43/43	0.93	0.08	35,61,66,71	0
25	CLA	c1	511	65/65	0.93	0.08	38,53,71,78	0
27	PHO	a2	416	64/64	0.93	0.07	35,46,53,62	0
33	LHG	L1	101	41/49	0.93	0.06	30,46,61,85	0
33	LHG	a1	407	43/49	0.93	0.06	36,52,66,70	0
31	BCT	A1	413	4/4	0.93	0.06	54,60,62,63	0
25	CLA	b1	613	65/65	0.93	0.07	36,44,54,68	0
33	LHG	d1	407	49/49	0.93	0.07	34,44,53,67	0
25	CLA	d2	402	65/65	0.94	0.06	24,37,48,52	0
25	CLA	b2	615	60/65	0.94	0.07	45,54,67,74	0
25	CLA	a1	403	65/65	0.94	0.07	29,37,48,51	0
25	CLA	A1	406	65/65	0.94	0.07	28,37,46,55	0
33	LHG	l1	102	49/49	0.94	0.07	25,43,67,75	0
27	PHO	A1	408	64/64	0.94	0.07	30,42,50,56	0
25	CLA	B1	608	65/65	0.94	0.07	46,58,71,81	0

Continued on next page...

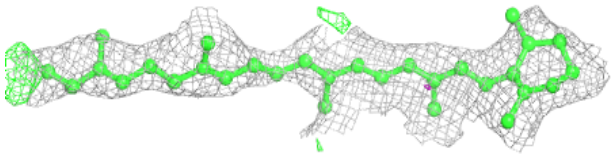
Continued from previous page...

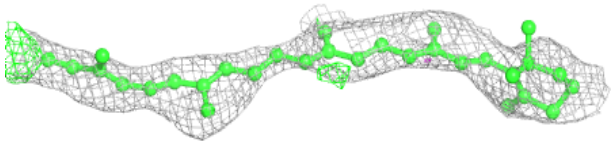
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
27	PHO	a1	411	64/64	0.94	0.06	33,41,47,50	0
38	HEM	v2	201	43/43	0.94	0.09	47,60,66,78	0
33	LHG	D1	405	49/49	0.94	0.06	35,45,54,56	0
25	CLA	b1	614	65/65	0.94	0.08	35,45,54,56	0
25	CLA	A1	403	65/65	0.95	0.06	27,37,49,54	0
25	CLA	b1	608	65/65	0.95	0.07	37,48,58,63	0
31	BCT	a2	417	4/4	0.96	0.05	59,65,67,73	0
26	OEX	A1	407	10/10	0.97	0.08	45,49,63,68	0
30	FE	A1	411	1/1	0.97	0.02	52,52,52,52	0
30	FE	a1	410	1/1	0.98	0.07	49,49,49,49	0
30	FE	a2	414	1/1	0.98	0.03	57,57,57,57	0
26	OEX	a2	408	10/10	0.98	0.07	42,49,58,61	0
26	OEX	a1	408	10/10	0.98	0.08	39,49,62,70	0
24	CL	a2	403	1/1	0.98	0.03	37,37,37,37	0
30	FE	A2	411	1/1	0.99	0.04	63,63,63,63	0

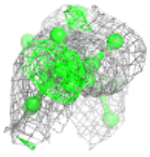
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around BCR K1 101:

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

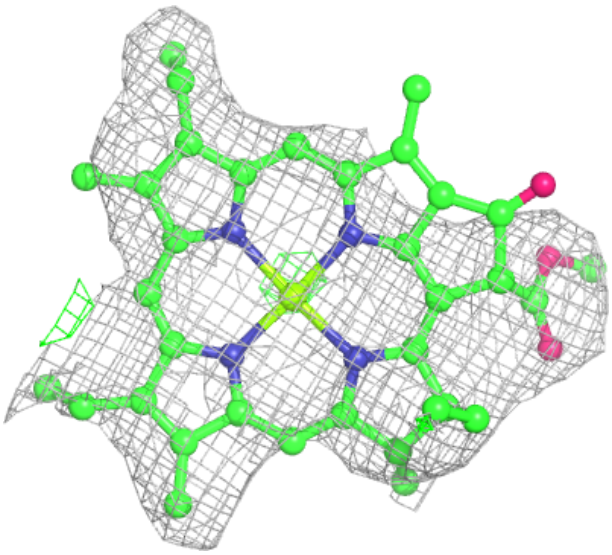


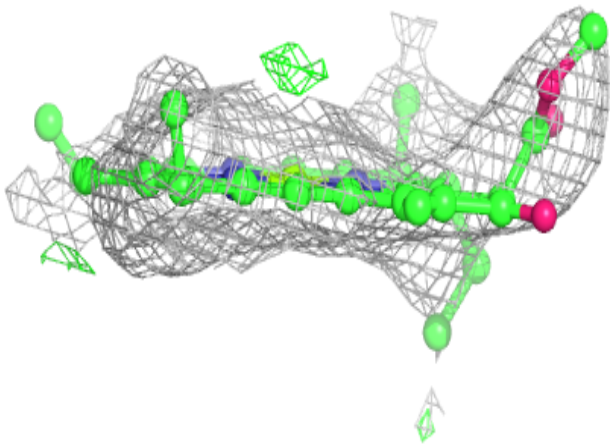


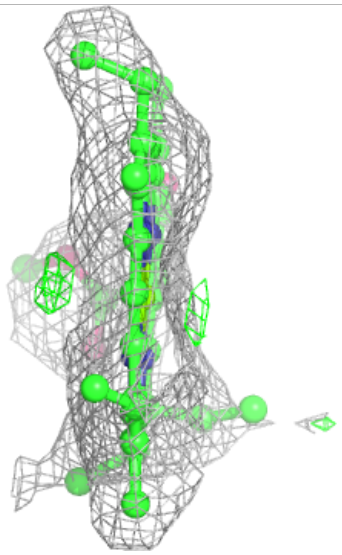


Electron density around CLA b2 604:

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

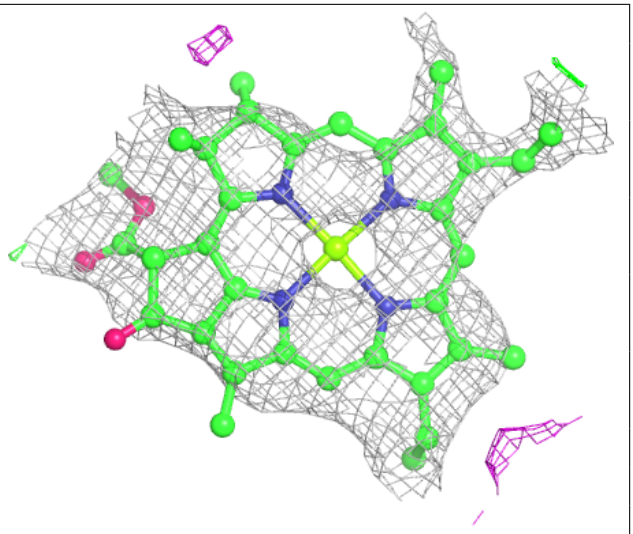


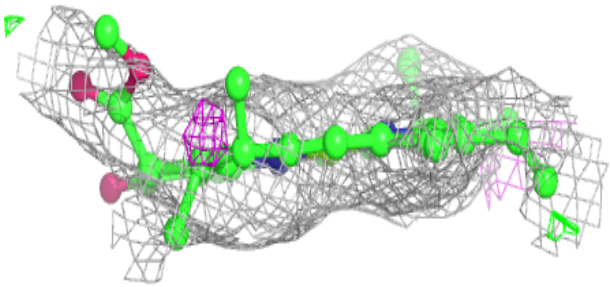


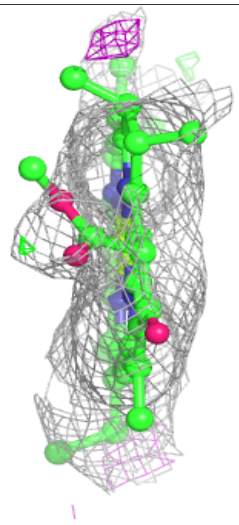


Electron density around CLA C2 518:

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

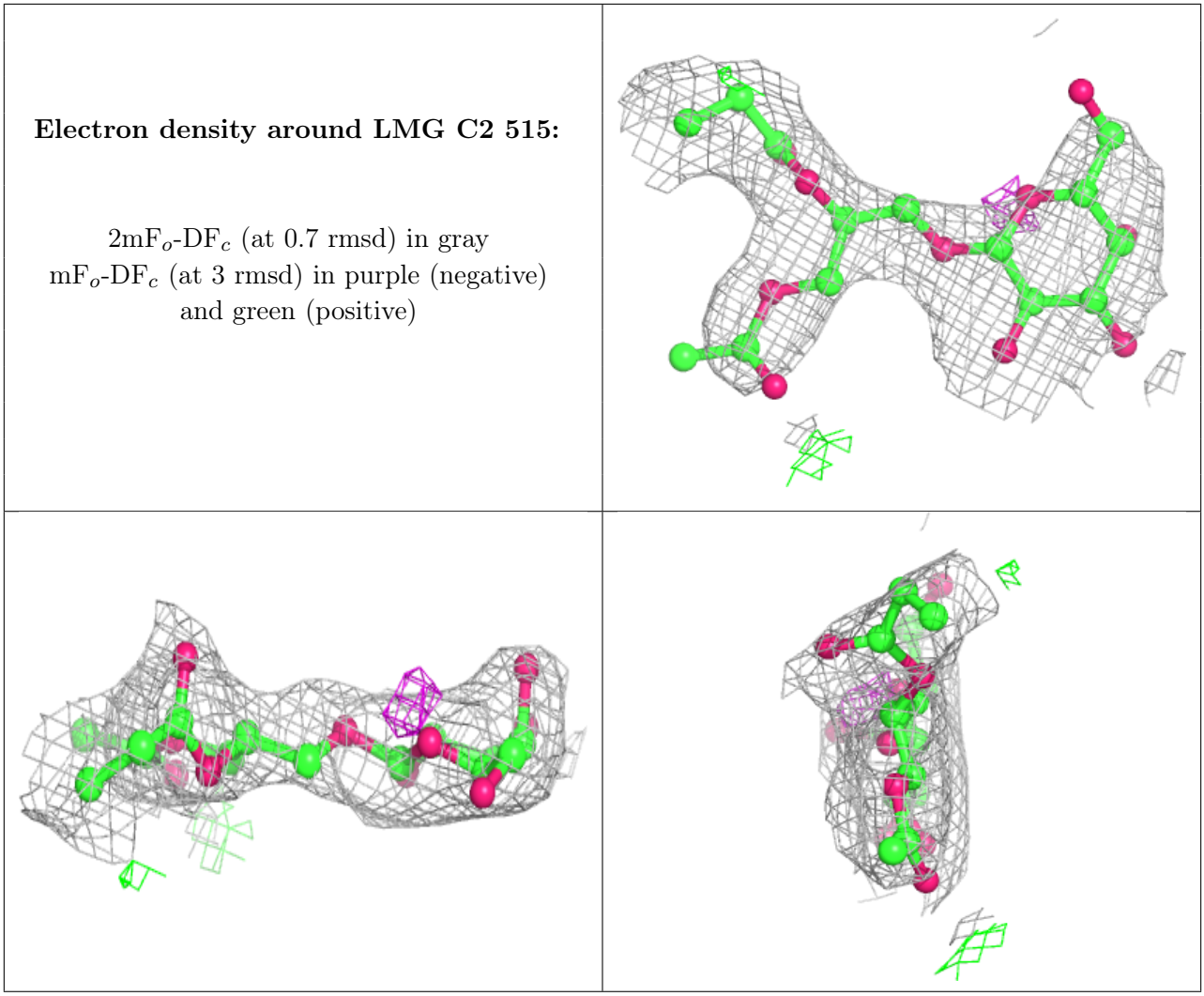






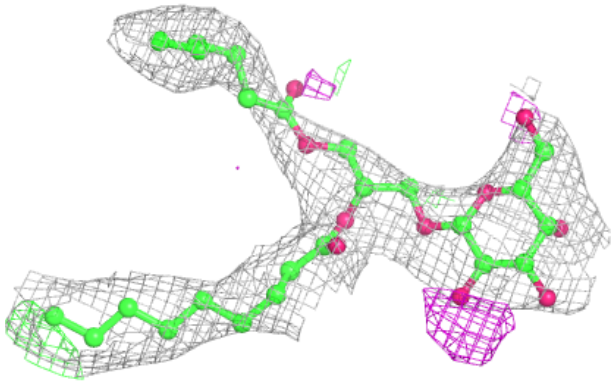
Electron density around LMG C2 515:

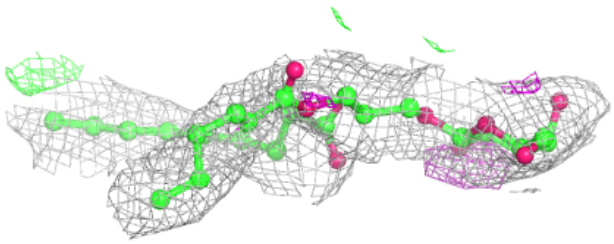
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

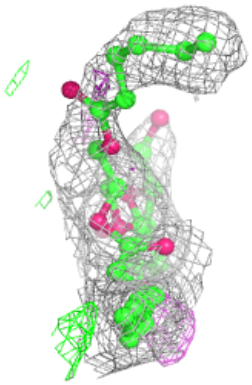


Electron density around LMG I2 101:

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

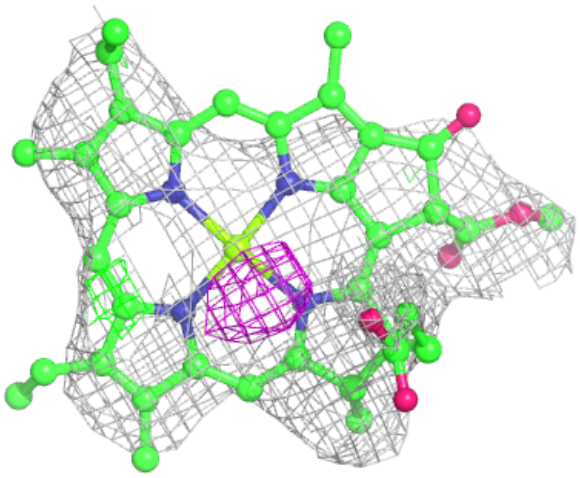


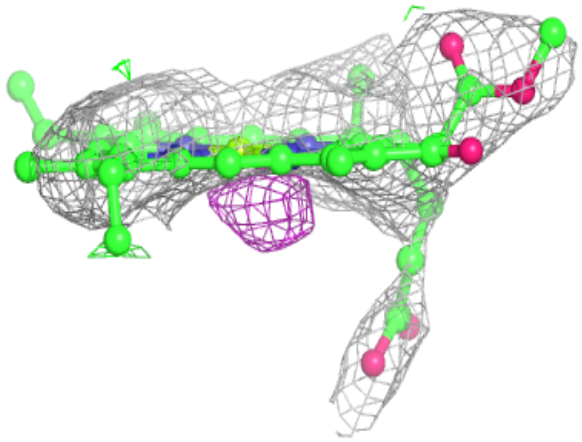


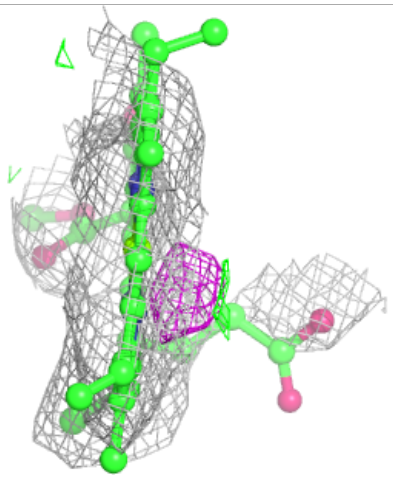


Electron density around CLA C2 510:

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

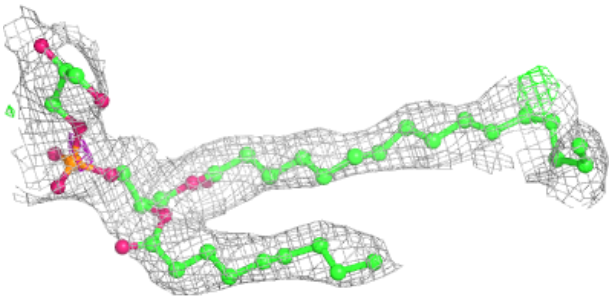


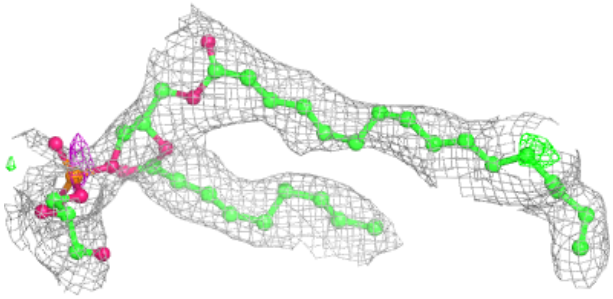


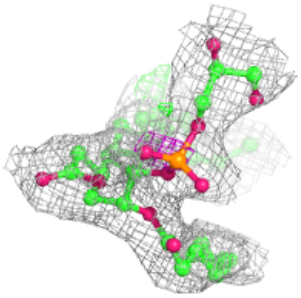


Electron density around LHG B2 627:

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

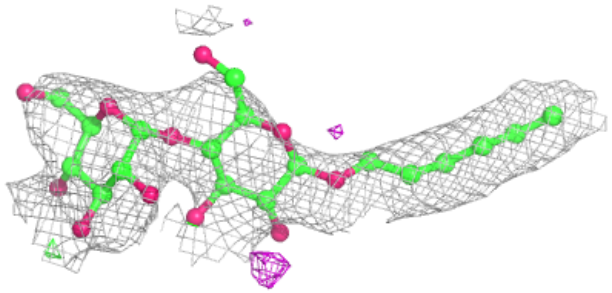


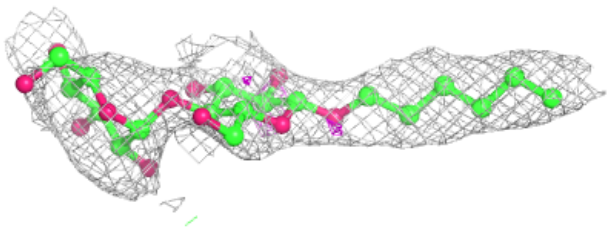


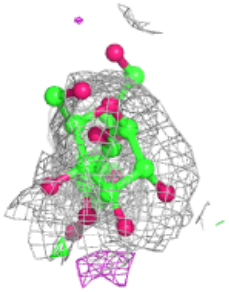


Electron density around LMT m2 104:

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

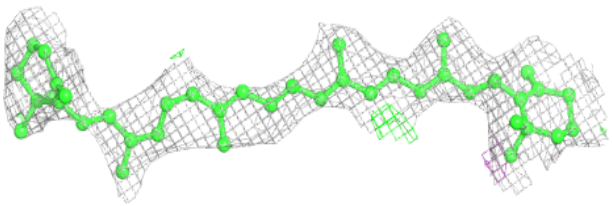


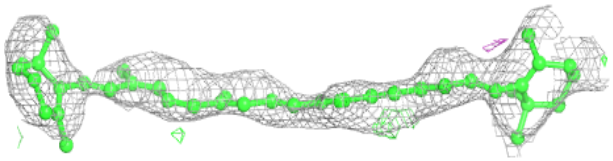


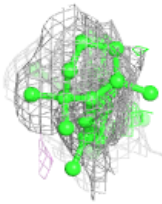


Electron density around BCR K2 102:

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

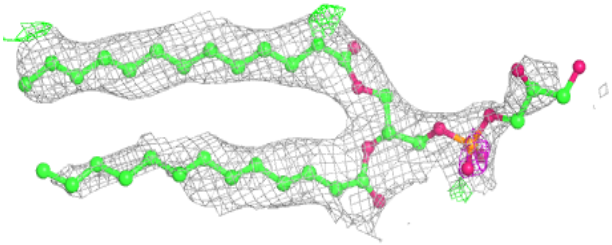


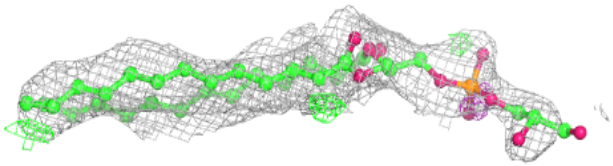


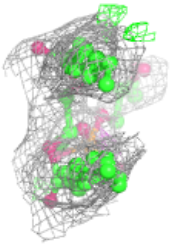


Electron density around LHG b2 625:

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

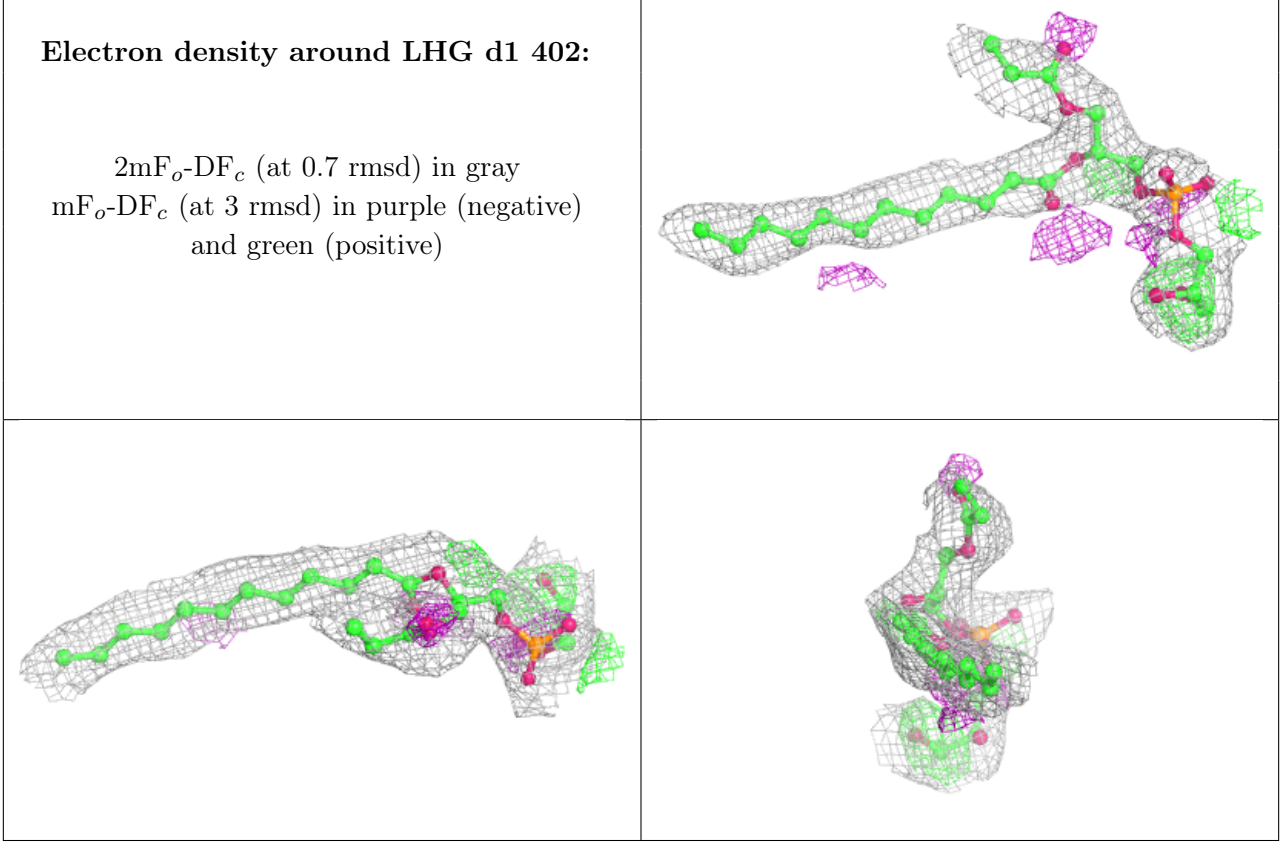






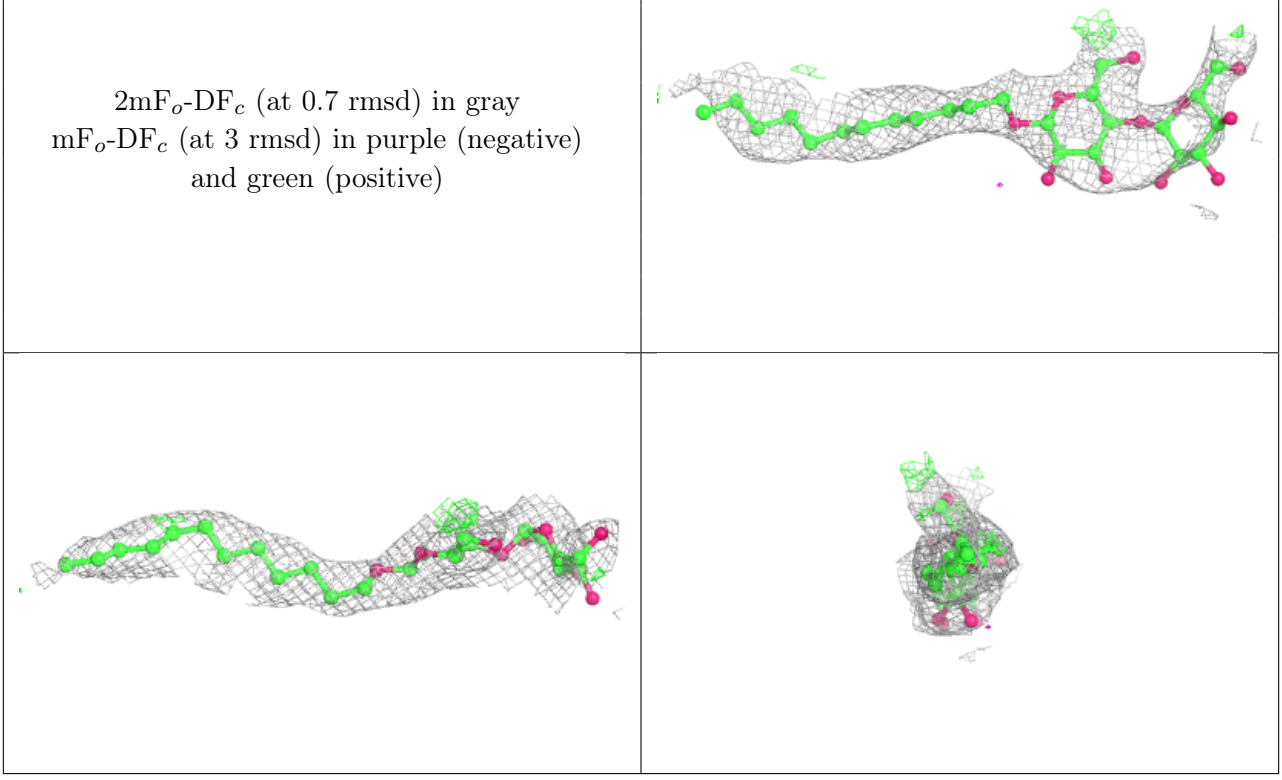
Electron density around LHG d1 402:

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



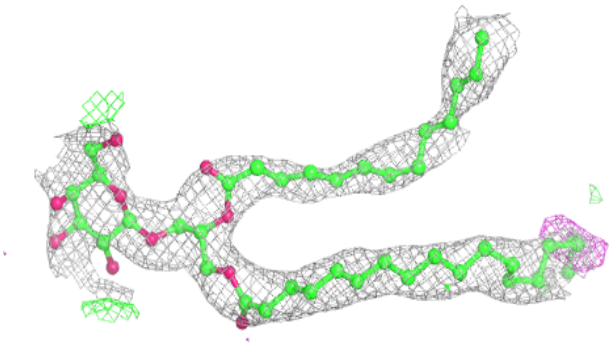
Electron density around LMT b2 621:

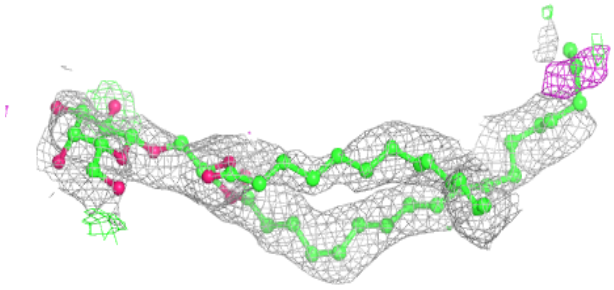
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around LMG j2 101:

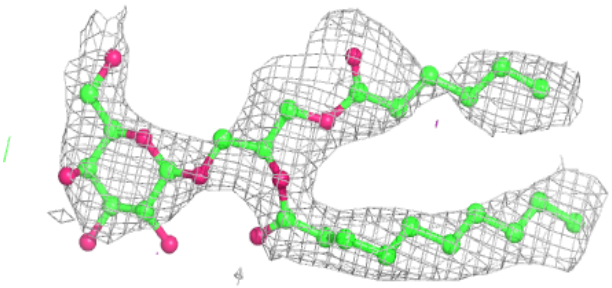
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

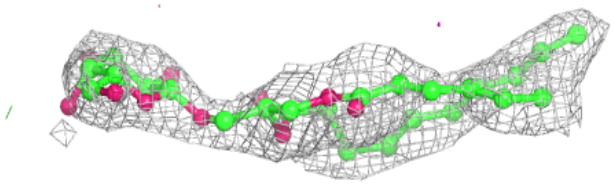


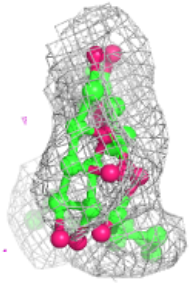


Electron density around LMG F2 402:

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

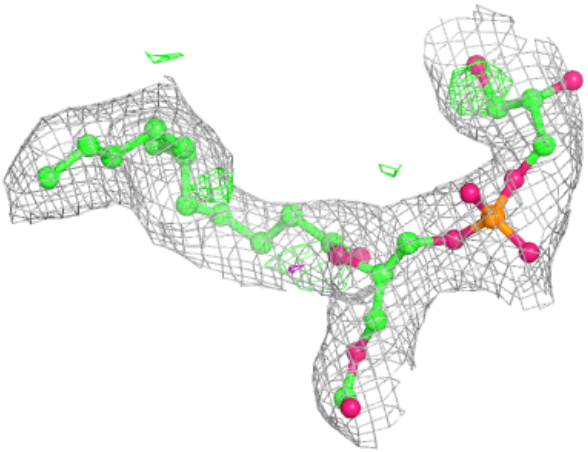


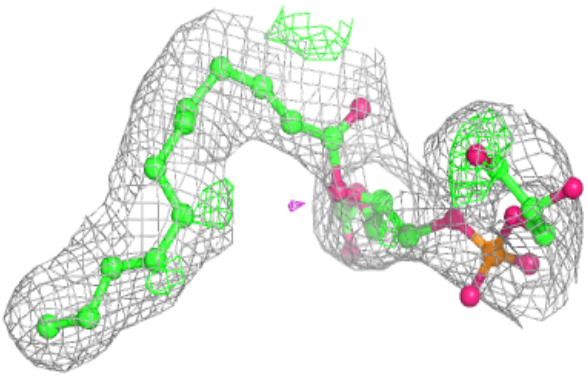


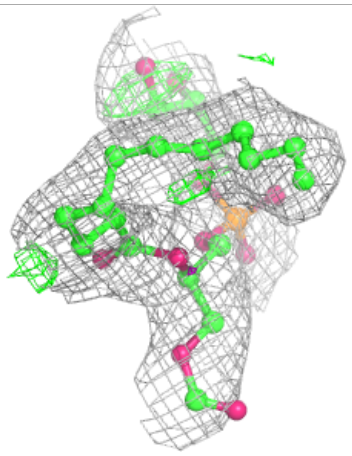


Electron density around LHG a2 407:

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

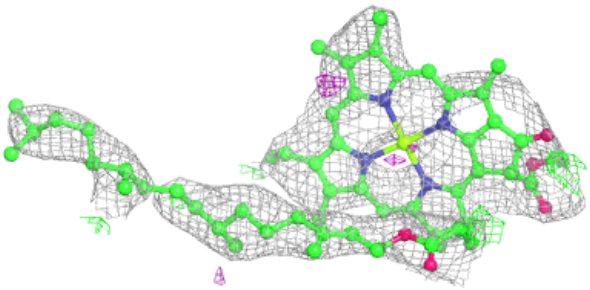


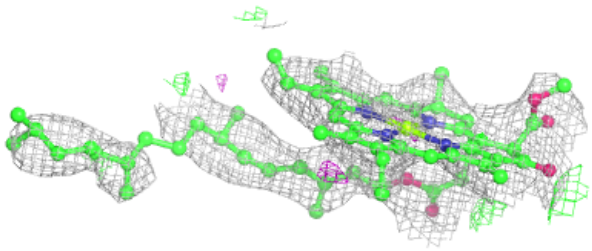


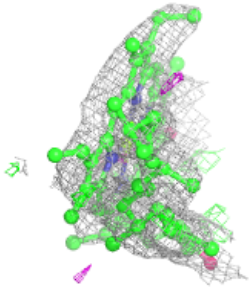


Electron density around CLA C2 503:

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

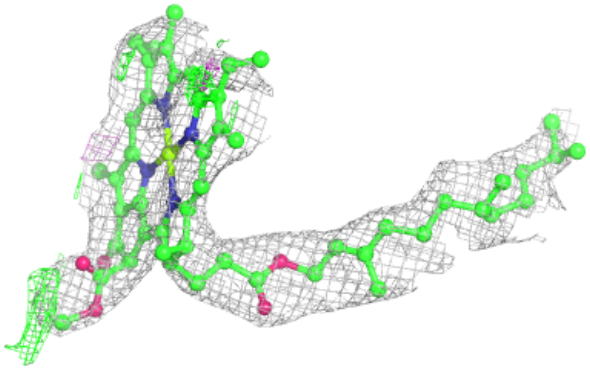


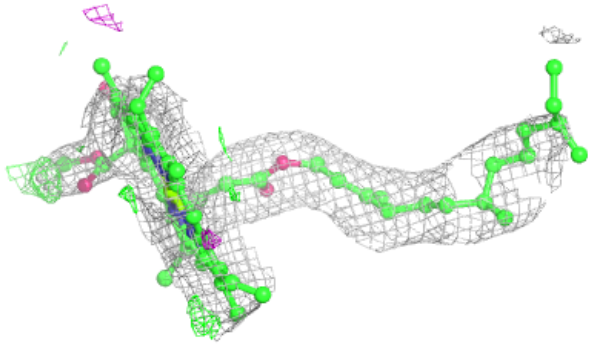


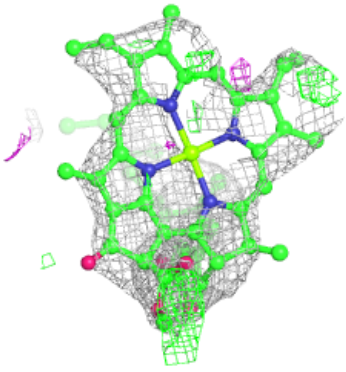


Electron density around CLA D2 404:

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

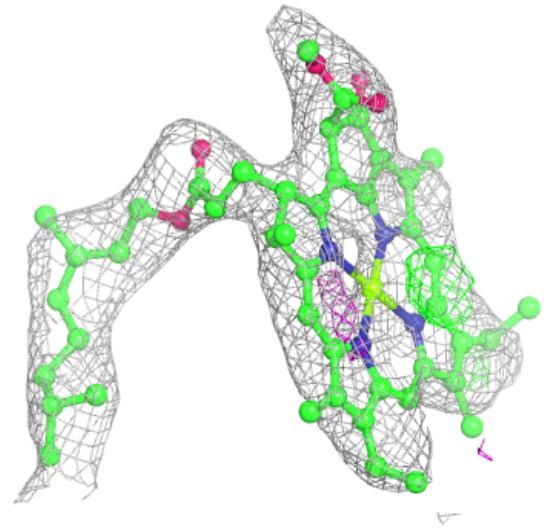


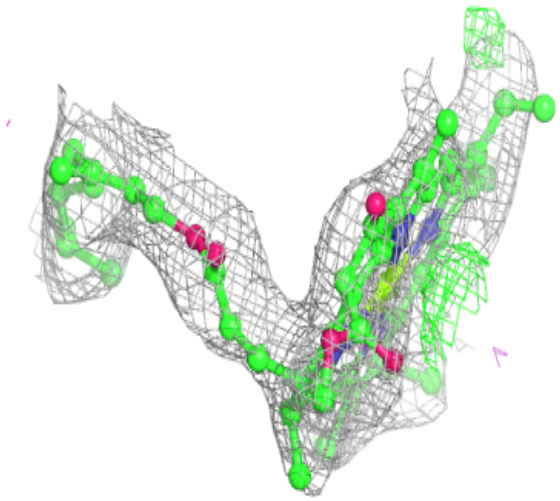


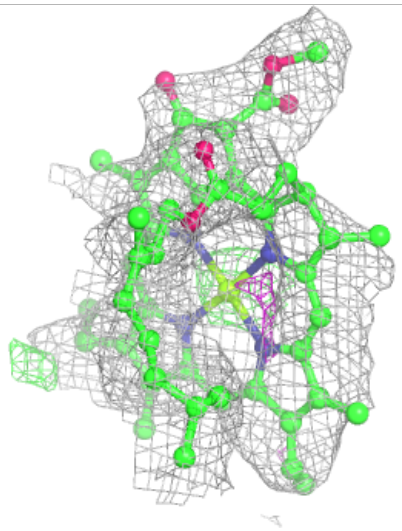


Electron density around CLA K2 101:

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

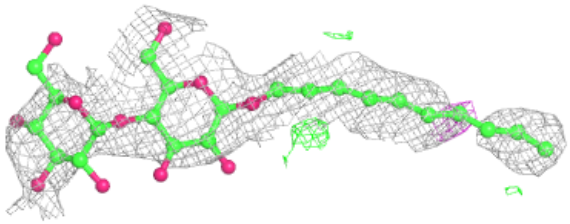


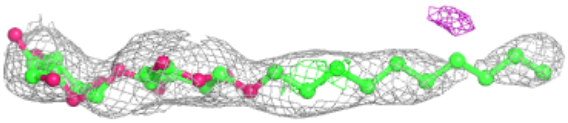


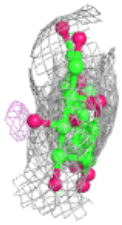


Electron density around LMT c1 517:

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

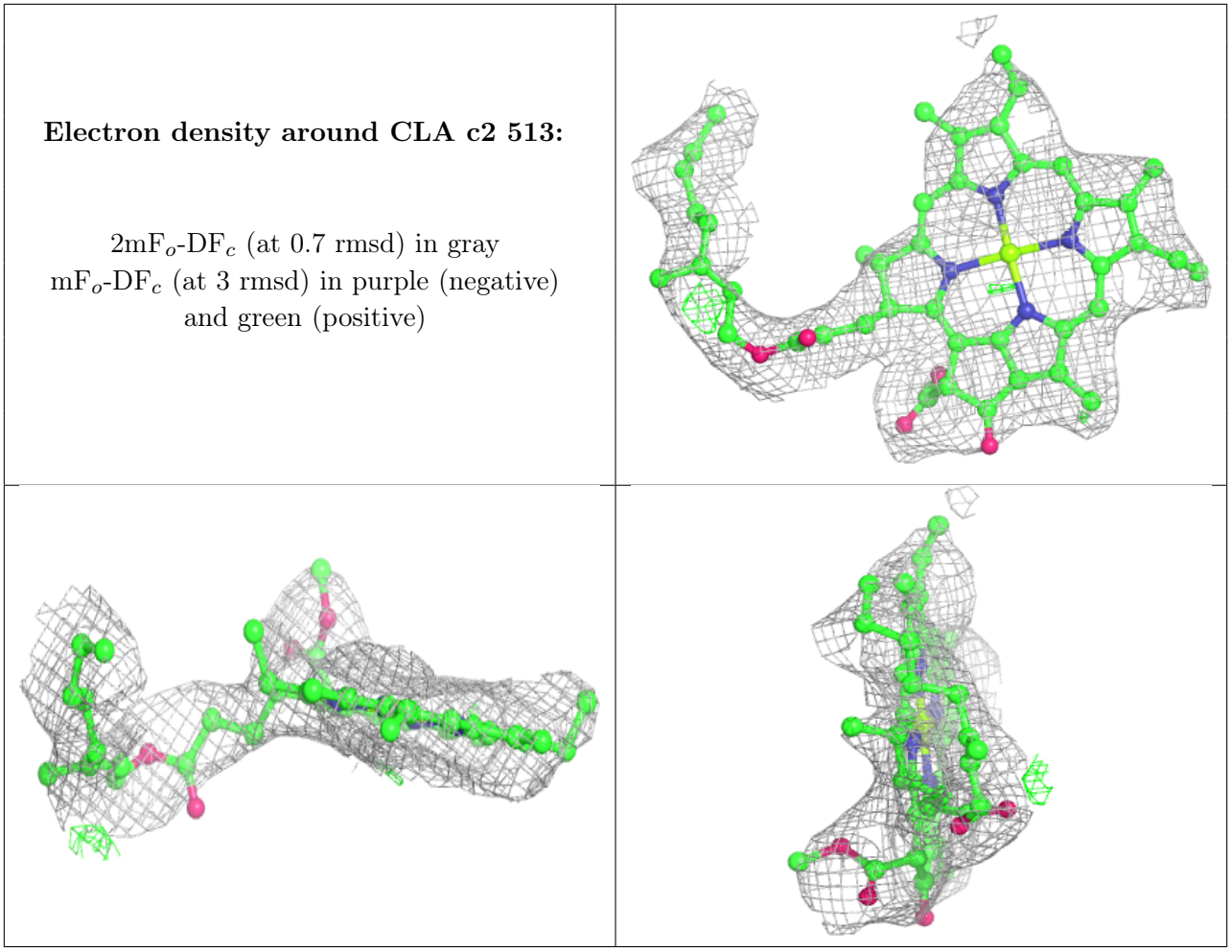






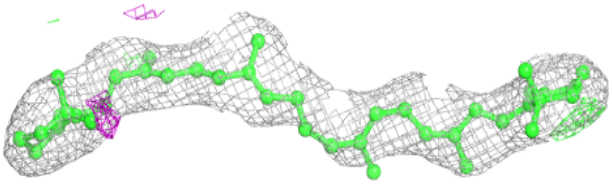
Electron density around CLA c2 513:

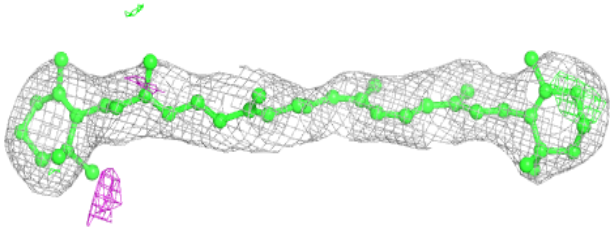
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

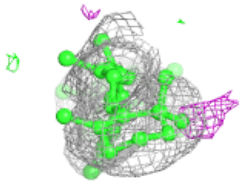


Electron density around BCR c2 501:

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

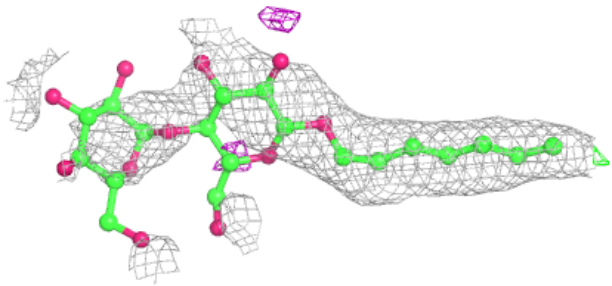


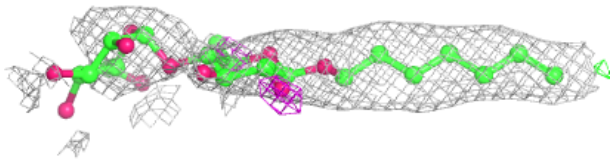




Electron density around LMT m2 103:

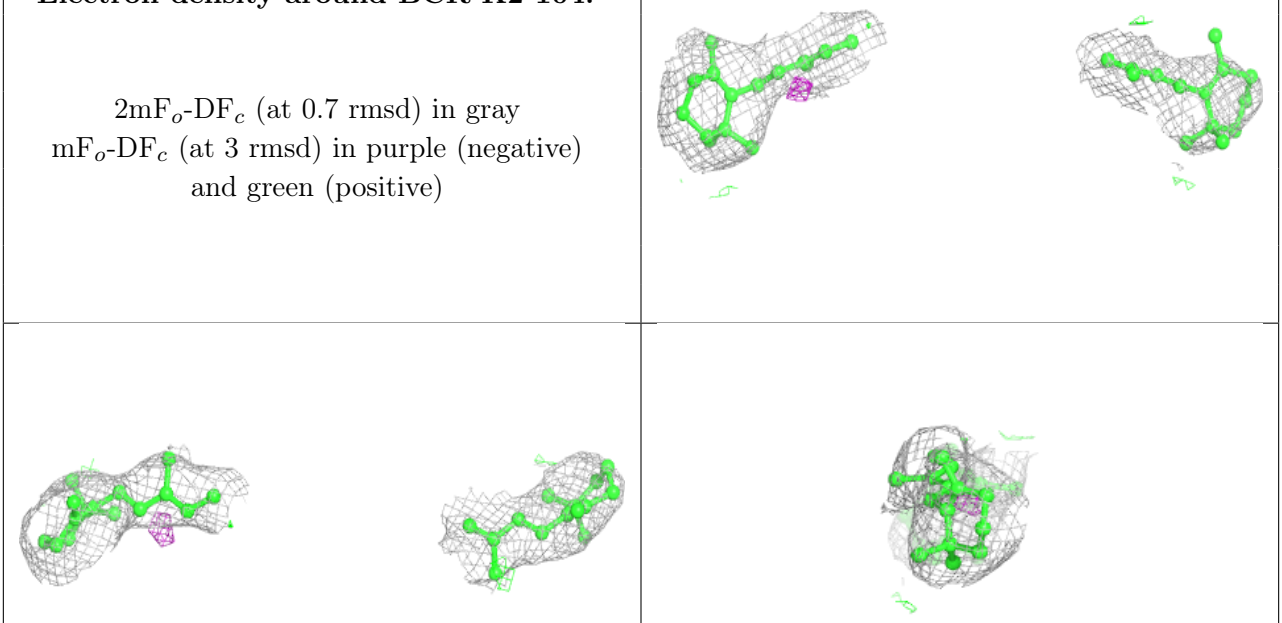
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





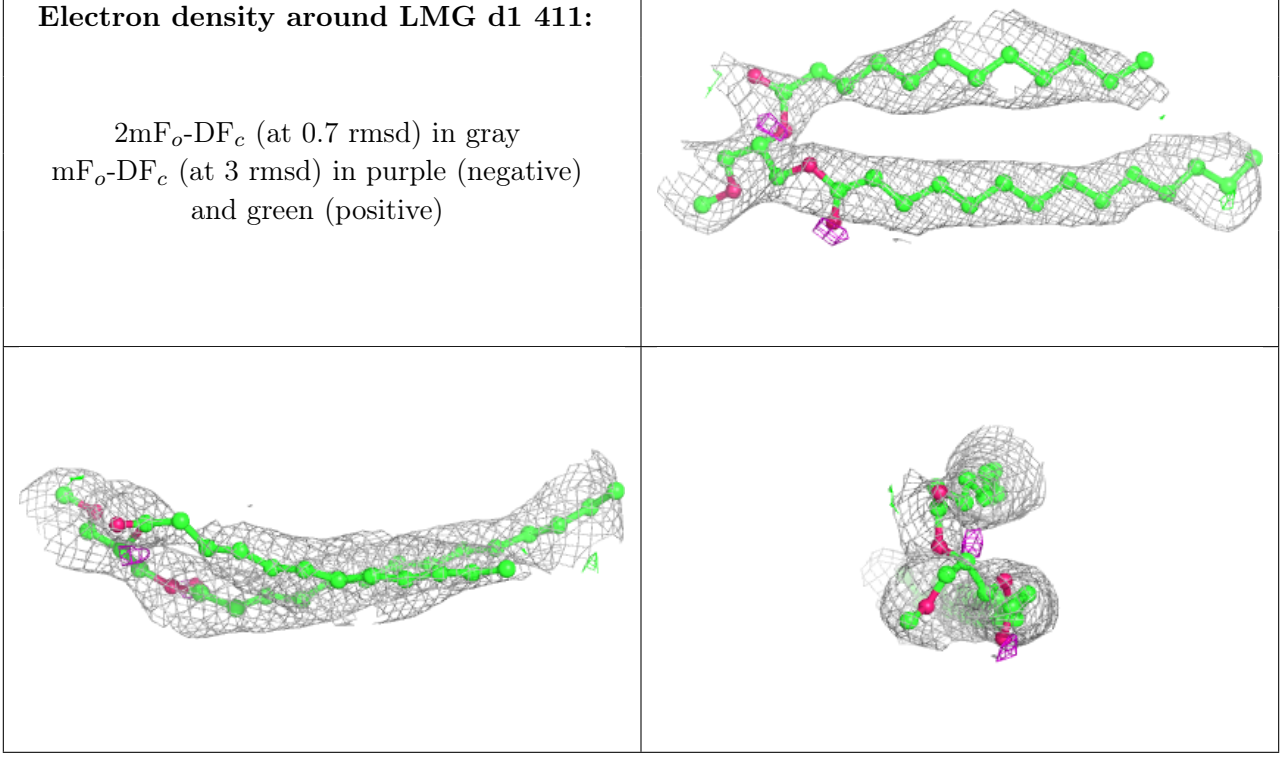
Electron density around BCR K2 104:

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



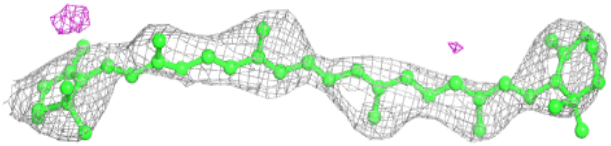
Electron density around LMG d1 411:

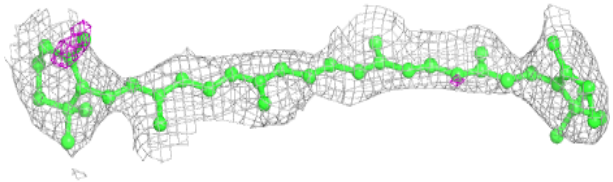
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

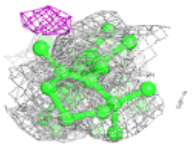


Electron density around BCR z2 101:

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

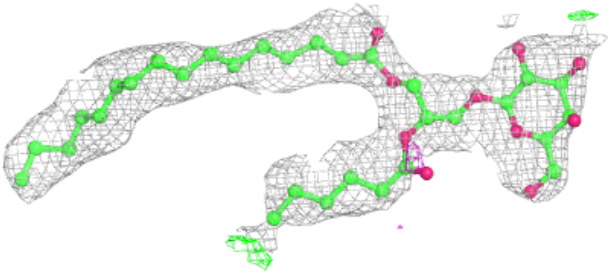


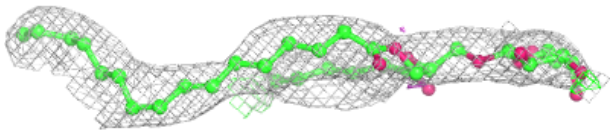


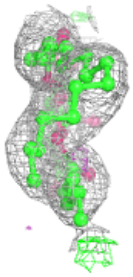


Electron density around LMG A1 412:

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

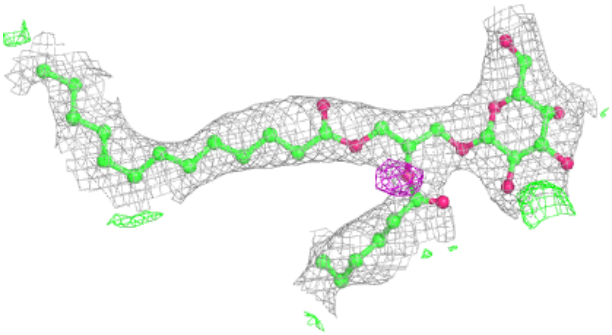


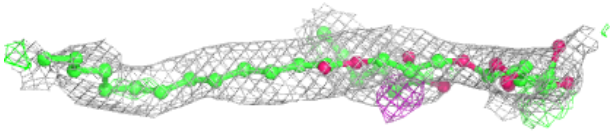


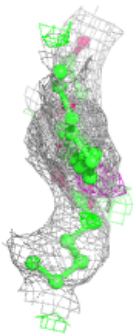


Electron density around LMG b1 621:

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

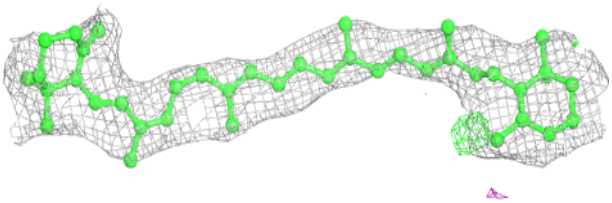


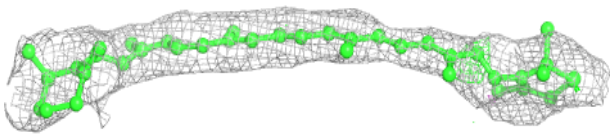


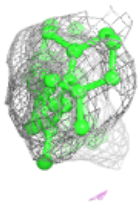


Electron density around BCR F2 401:

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

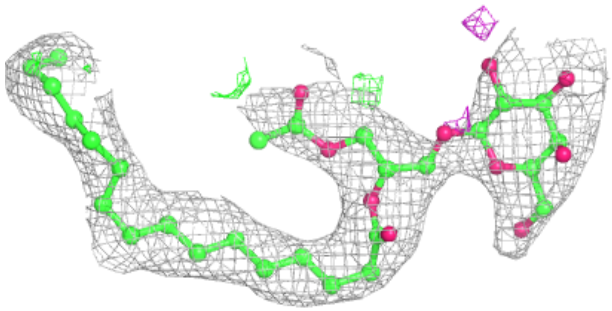


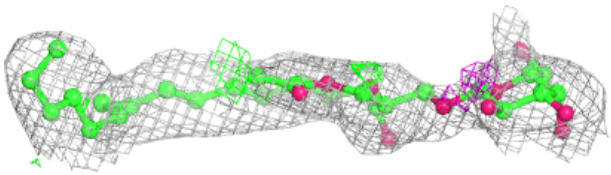


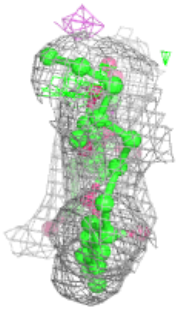


Electron density around LMG B2 621:

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

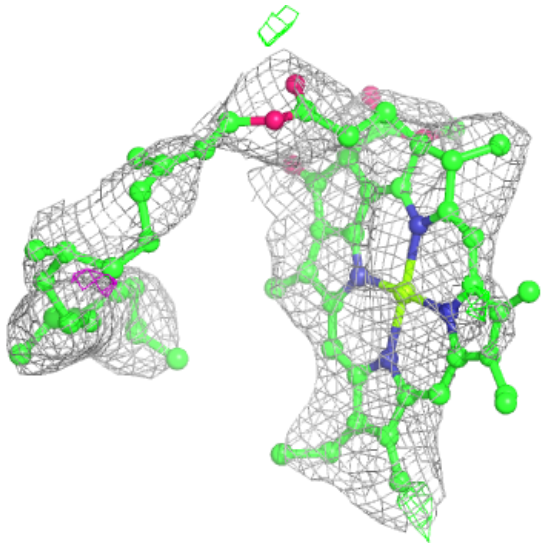


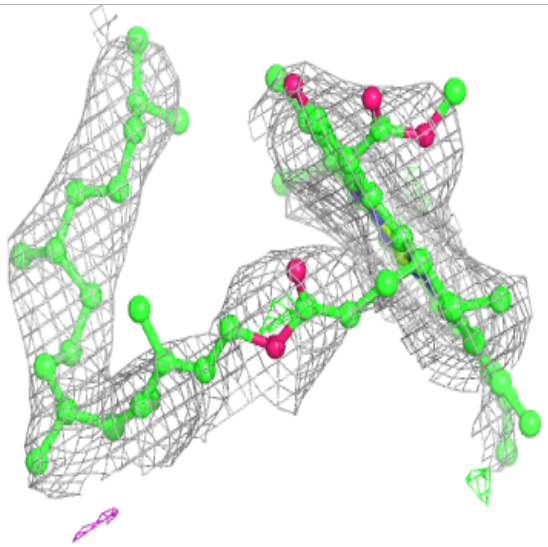


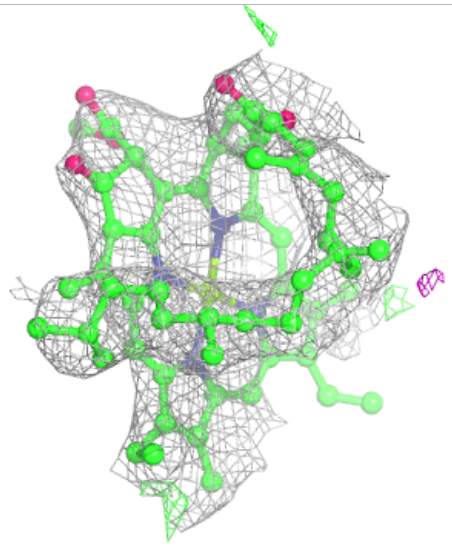


Electron density around CLA C2 505:

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

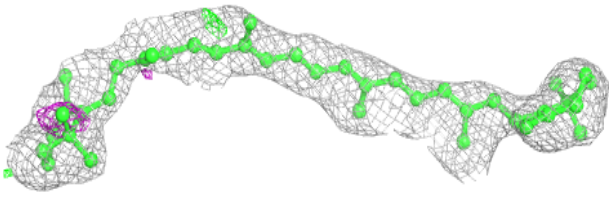


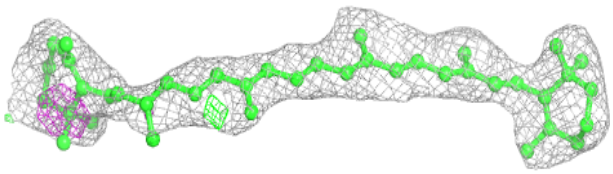


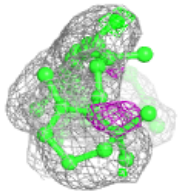


Electron density around BCR B1 602:

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

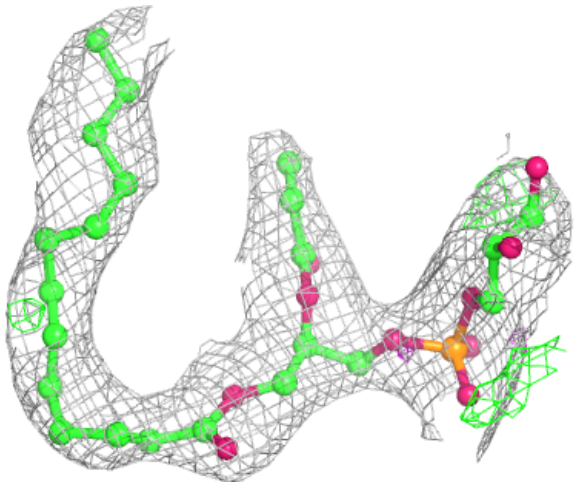


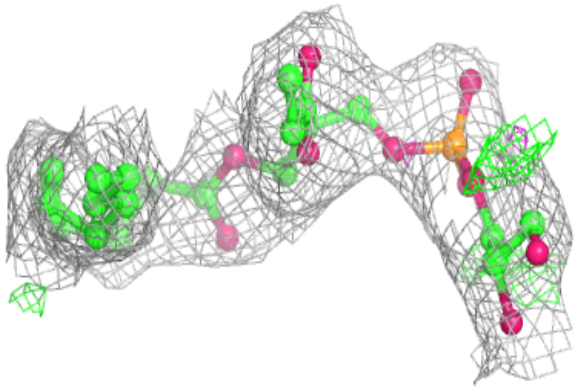


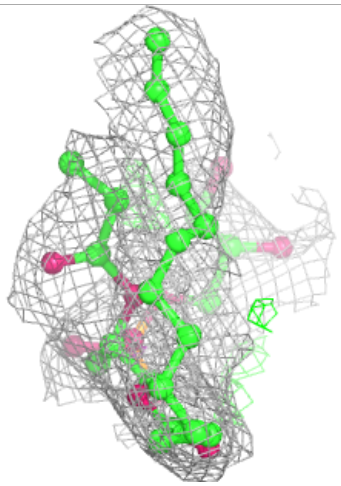


Electron density around LHG A2 405:

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

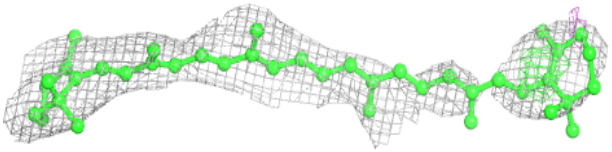


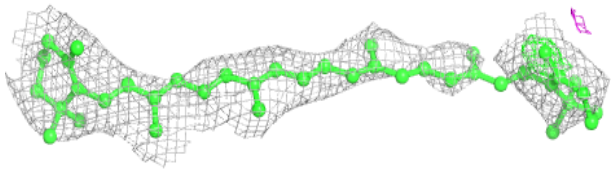


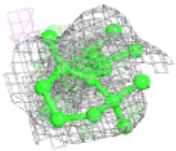


Electron density around BCR C2 502:

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

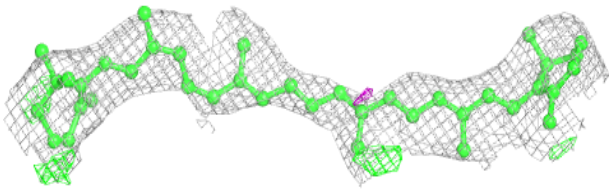


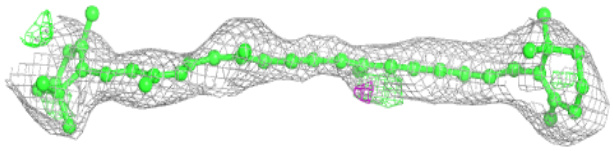


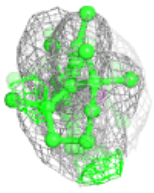


Electron density around BCR J1 101:

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

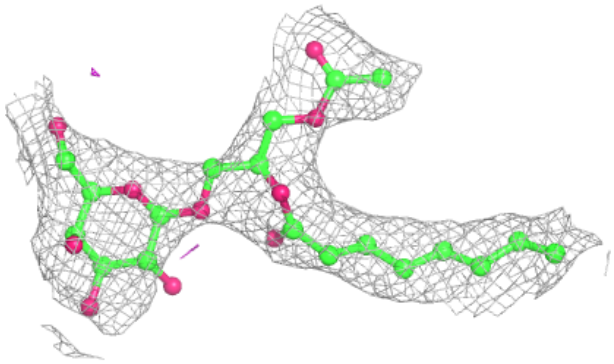


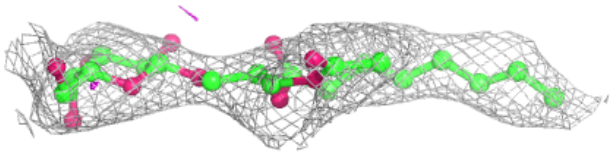




Electron density around LMG A2 412:

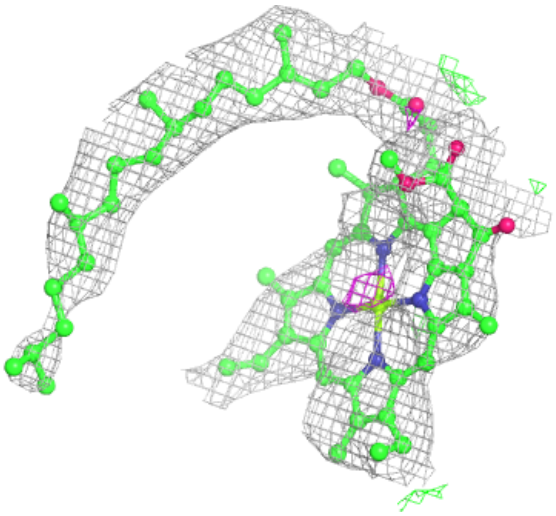
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

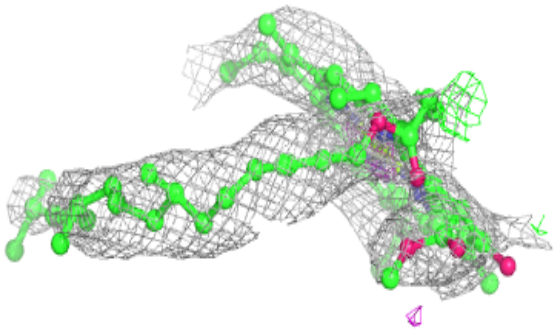


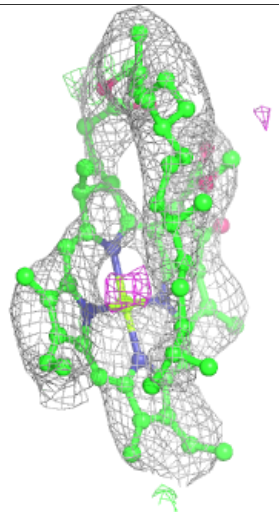


Electron density around CLA C2 509:

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

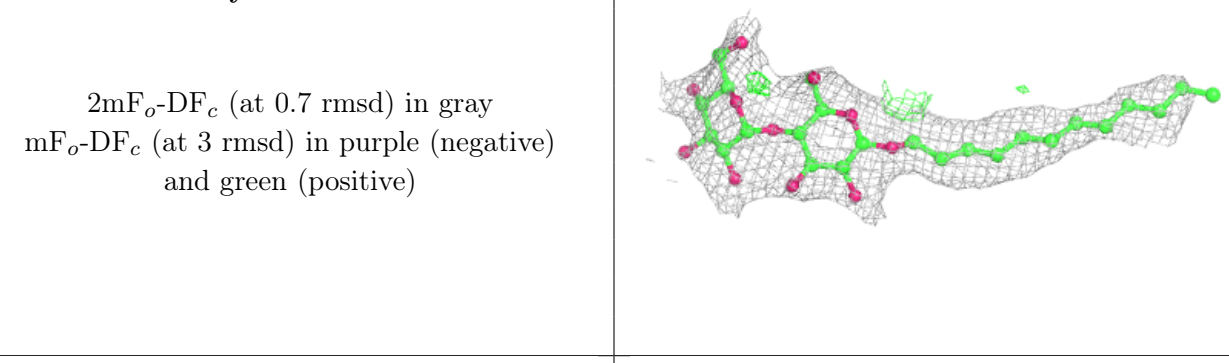






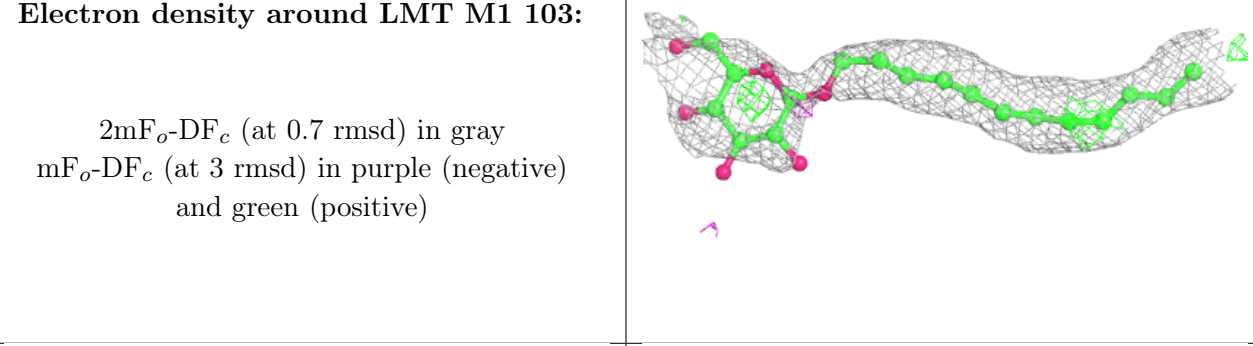
Electron density around LMT C1 519:

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



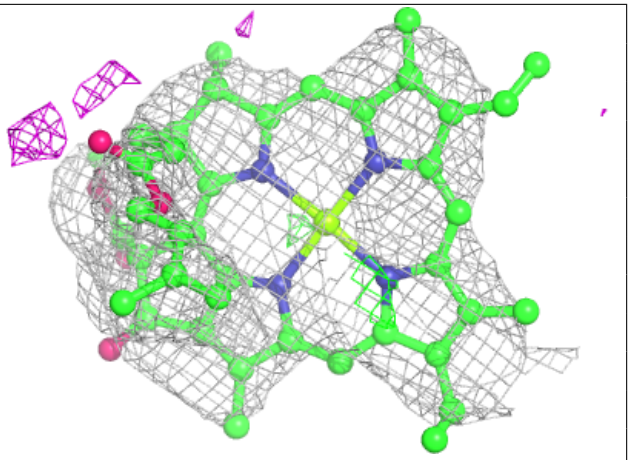
Electron density around LMT M1 103:

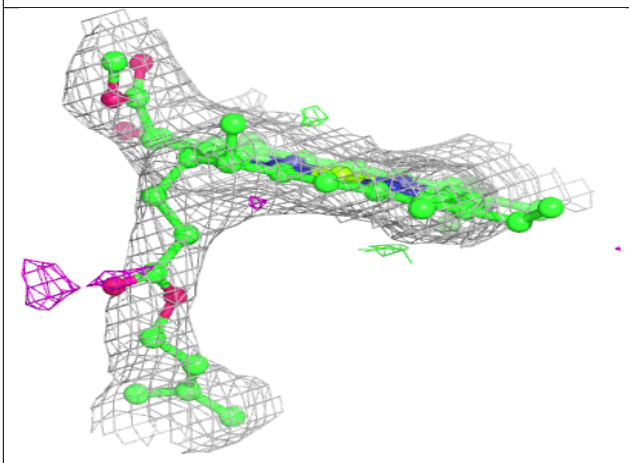
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

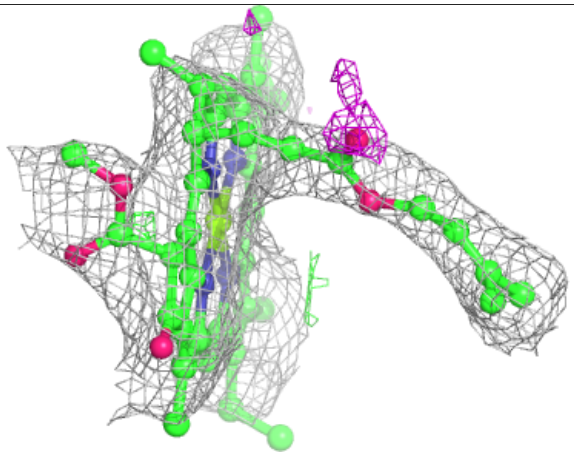


Electron density around CLA C2 511:

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

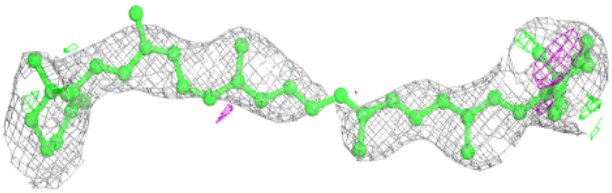


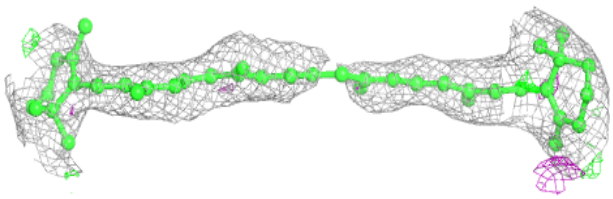


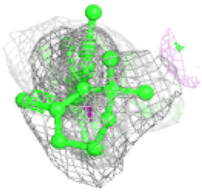


Electron density around BCR k1 101:

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

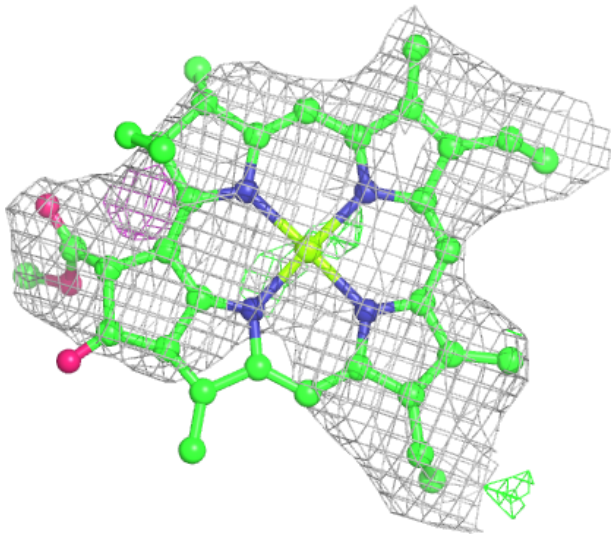


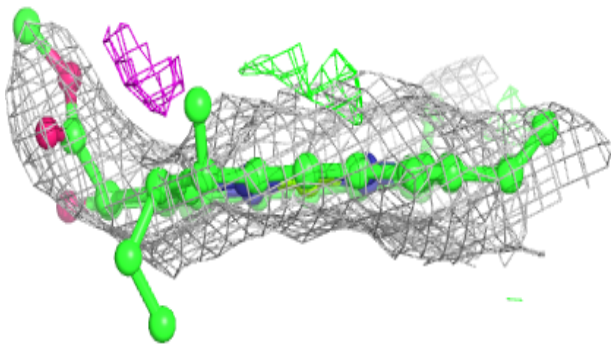


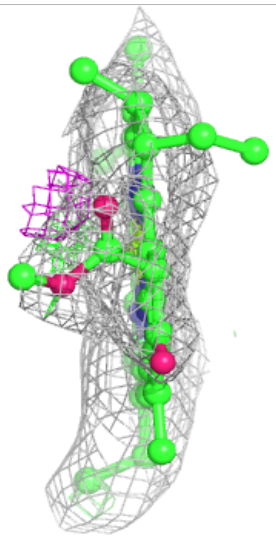


Electron density around CLA B1 604:

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

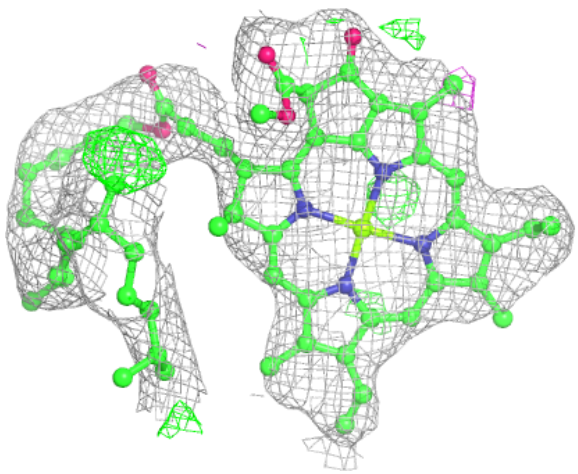


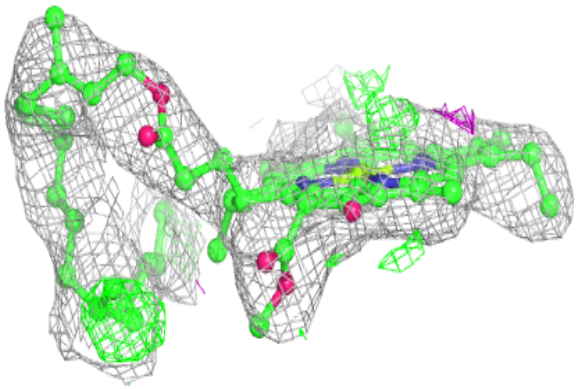


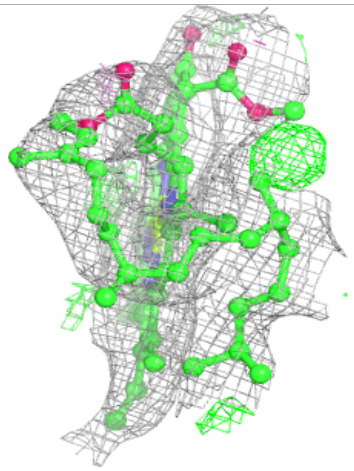


Electron density around CLA C1 512:

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

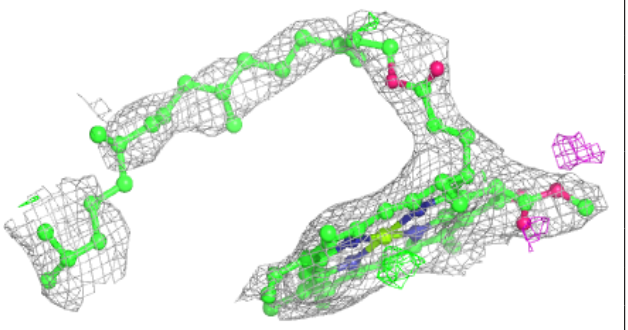


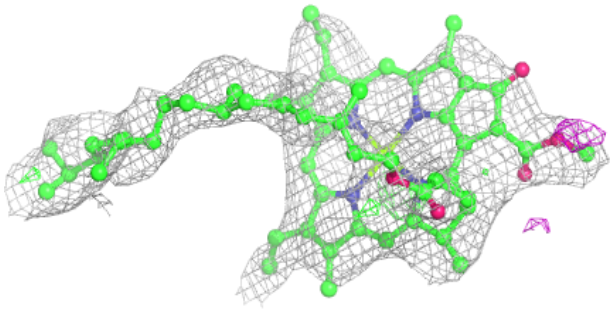


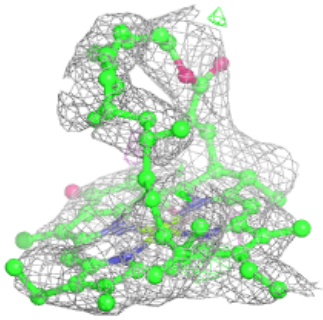


Electron density around CLA c1 516:

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

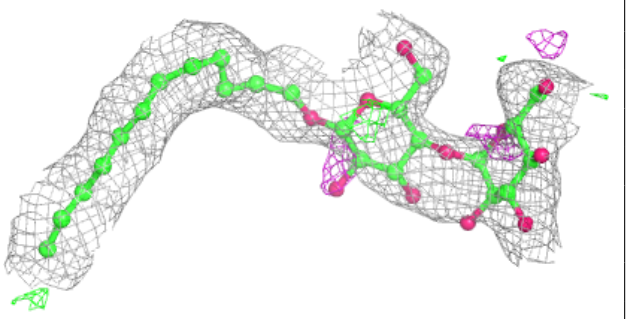


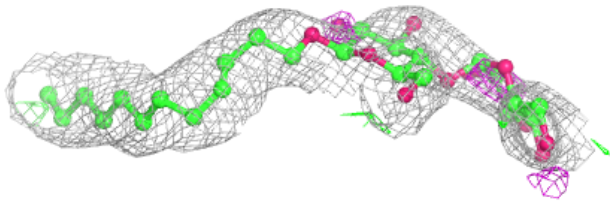


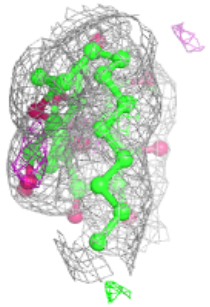


Electron density around LMT a2 406:

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

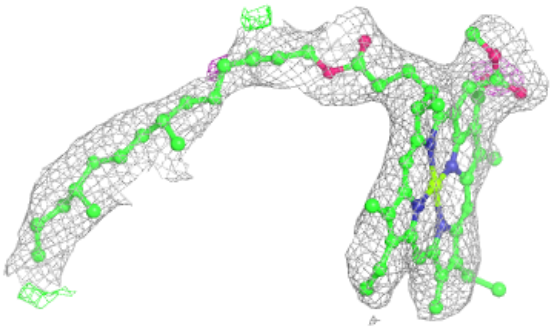


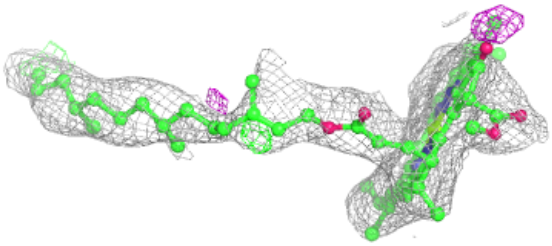


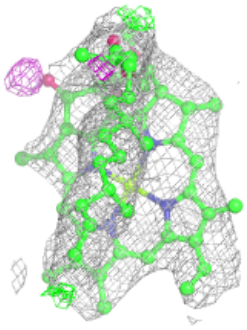


Electron density around CLA B1 611:

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

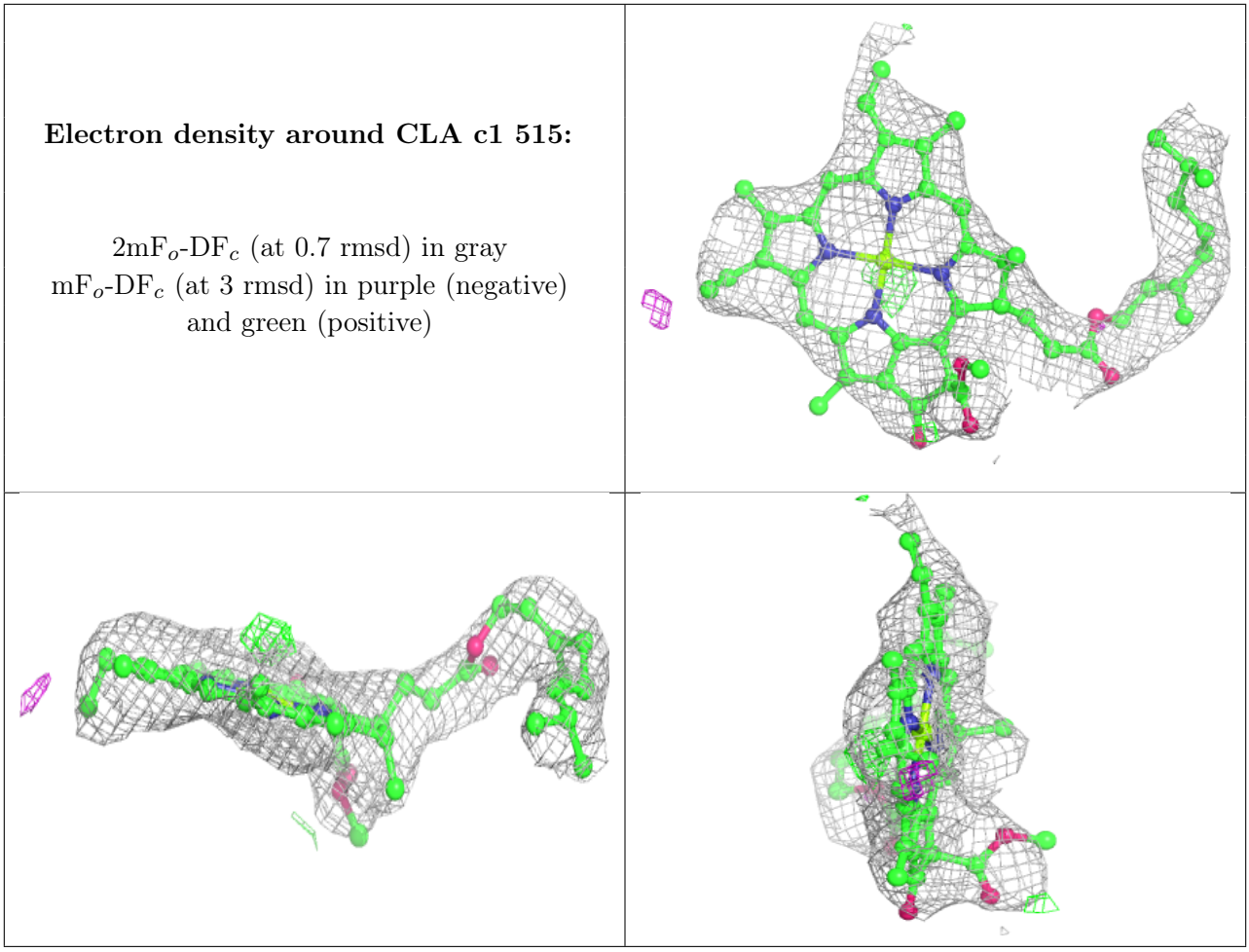






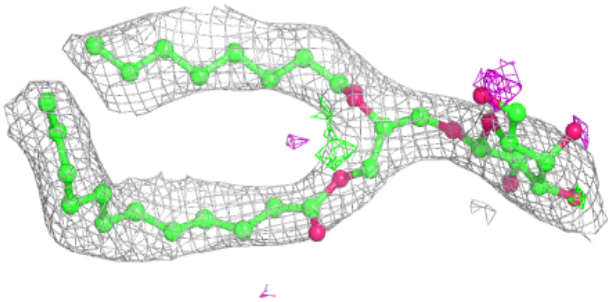
Electron density around CLA c1 515:

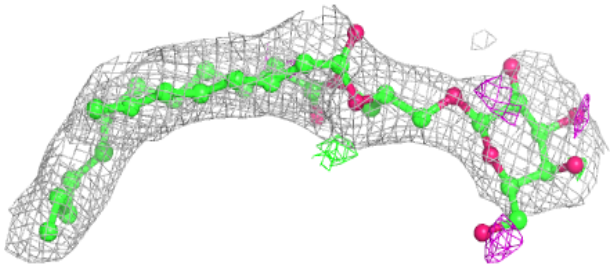
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

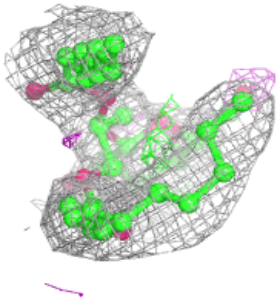


Electron density around LMG b1 624:

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

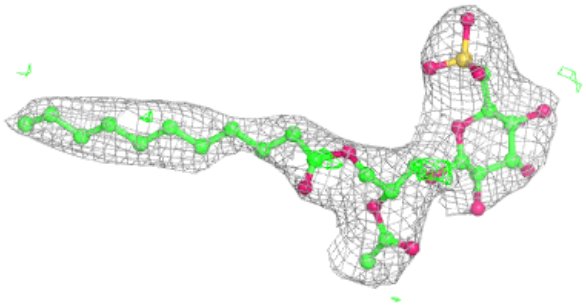


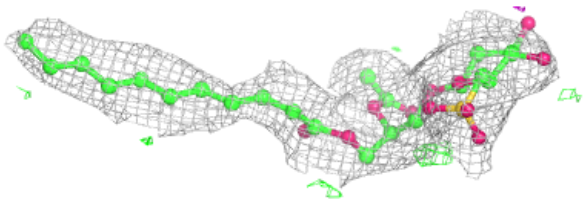


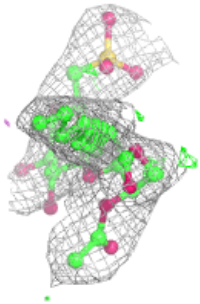


Electron density around SQD D1 409:

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

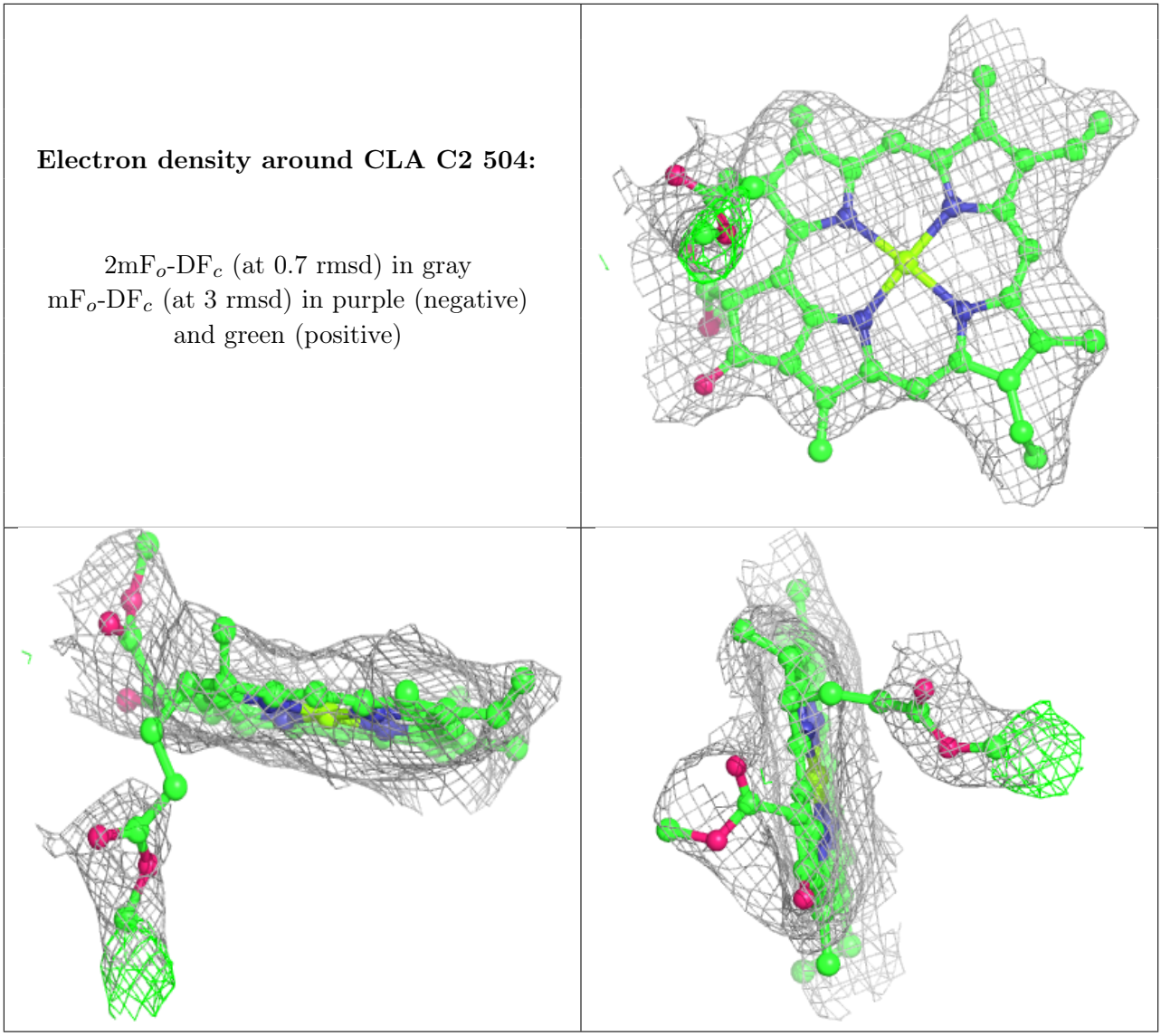






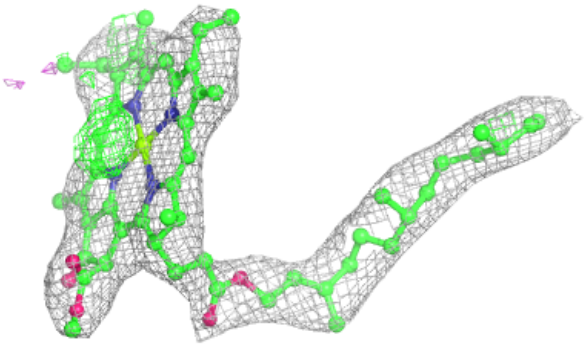
Electron density around CLA C2 504:

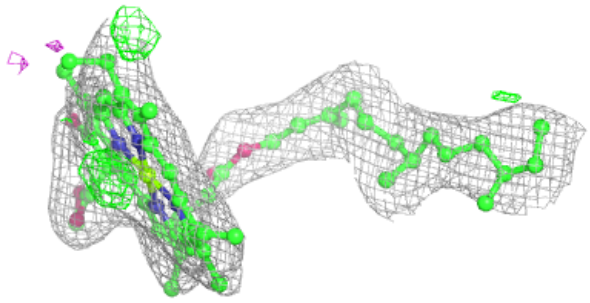
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

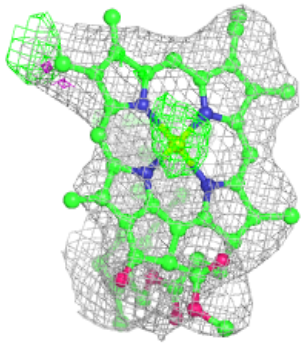


Electron density around CLA C1 513:

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

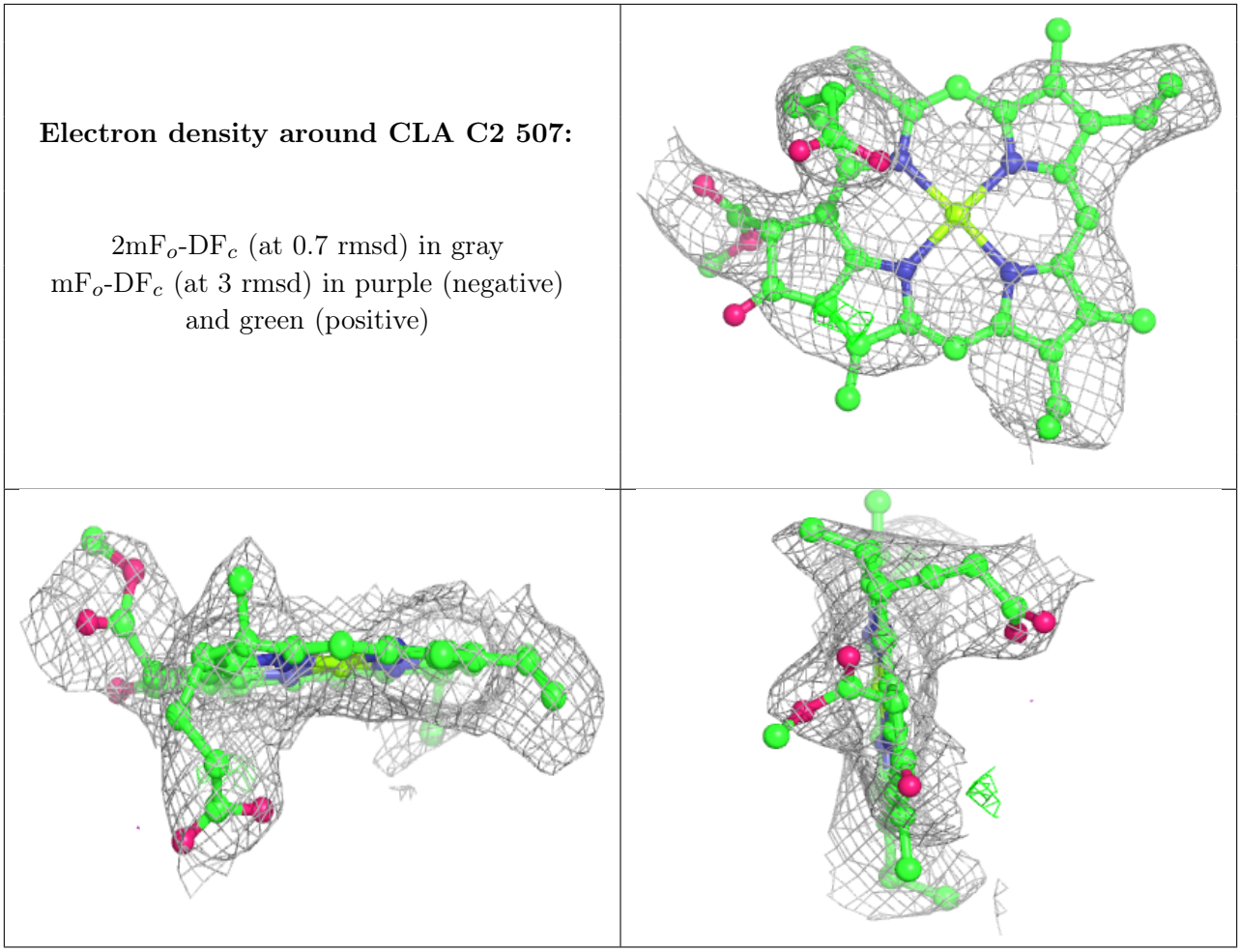






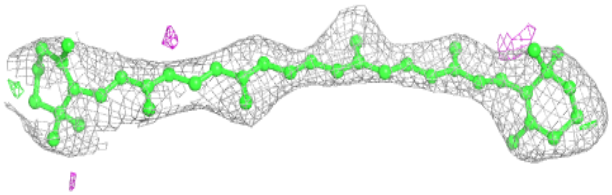
Electron density around CLA C2 507:

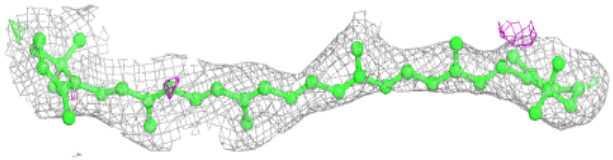
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

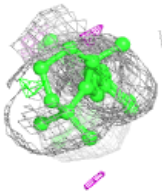


Electron density around BCR b2 603:

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

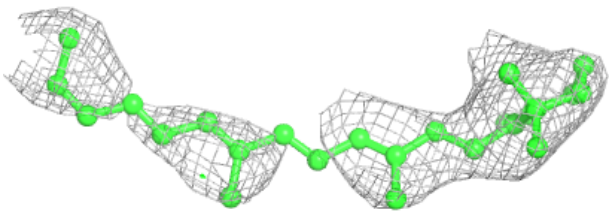


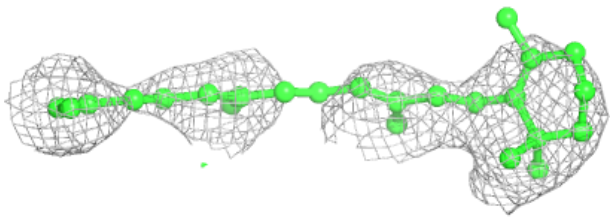


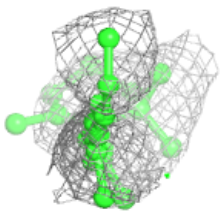


Electron density around BCR H2 103:

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

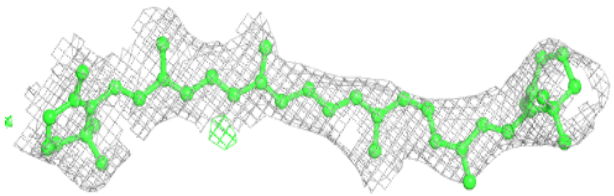


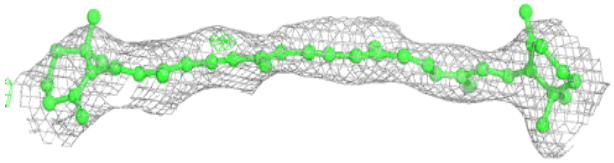


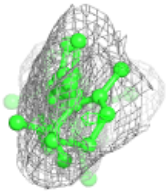


Electron density around BCR j2 102:

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

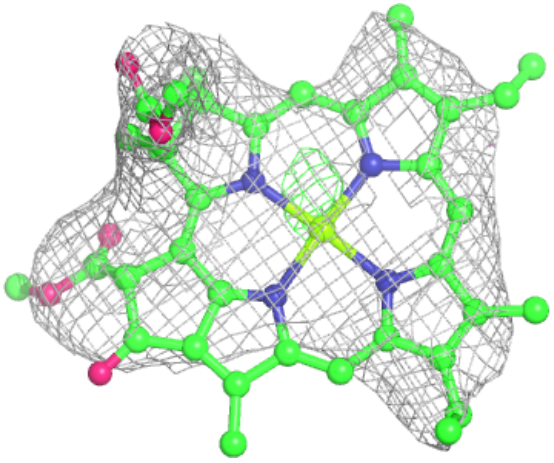


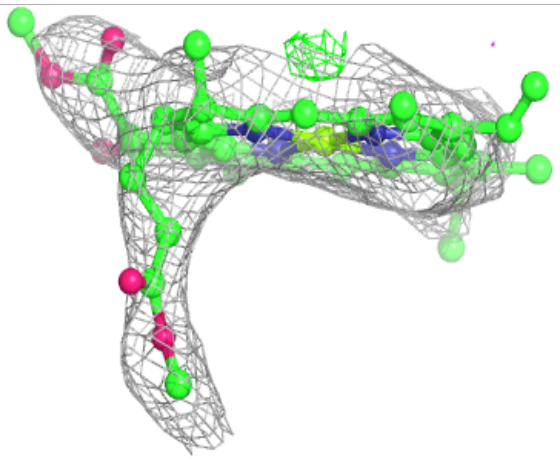


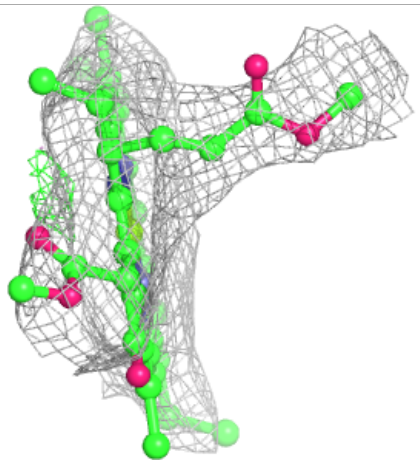


Electron density around CLA c2 515:

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

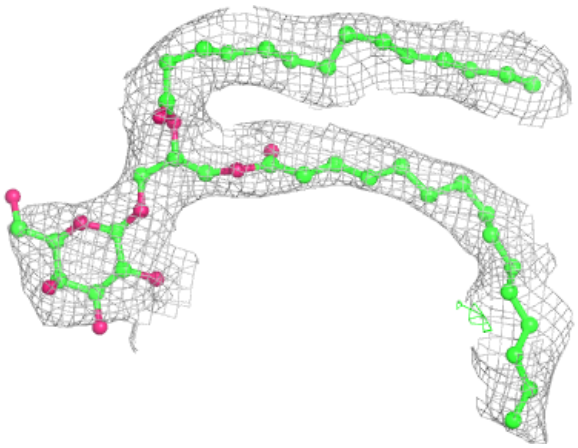


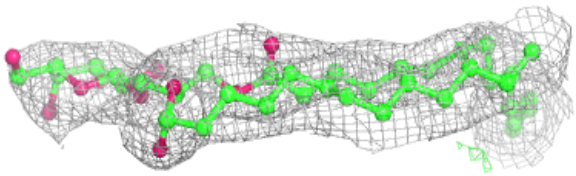


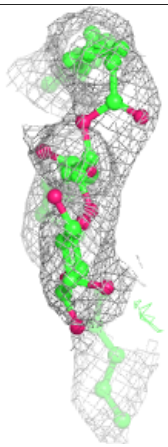


Electron density around LMG C1 520:

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

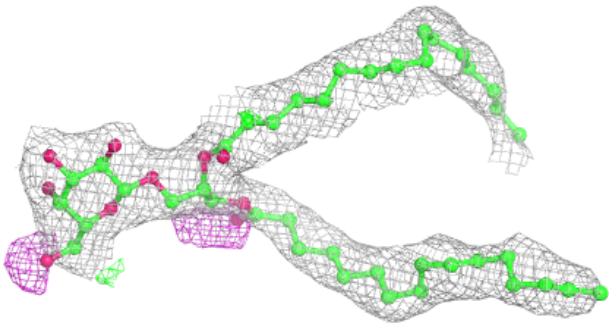


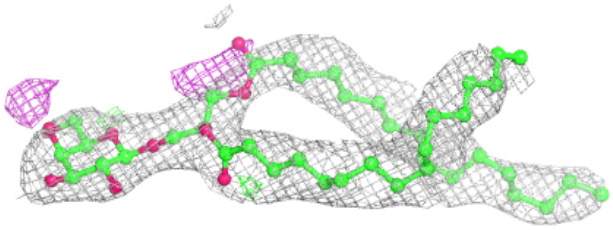


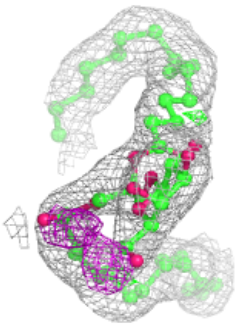


Electron density around LMG a1 412:

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

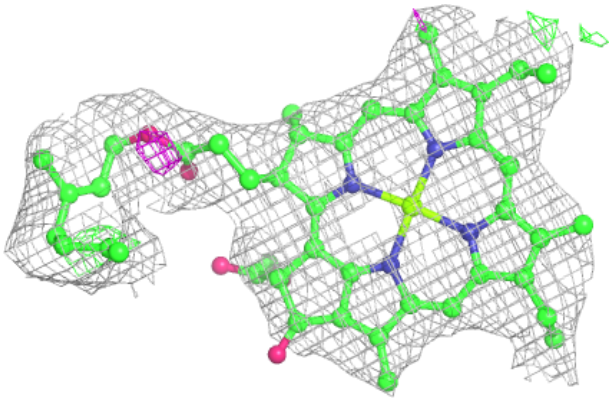


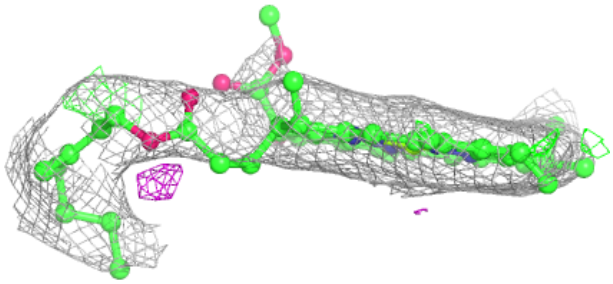


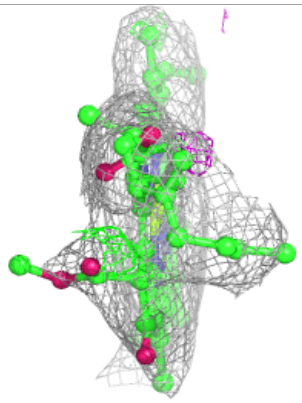


Electron density around CLA C2 513:

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

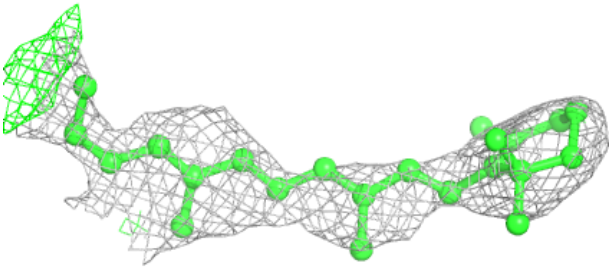


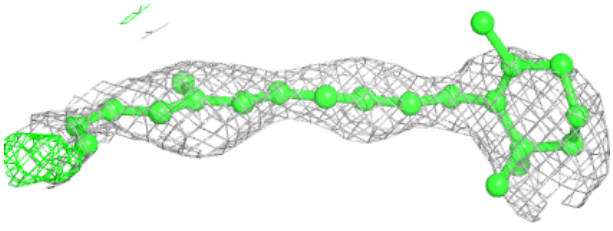


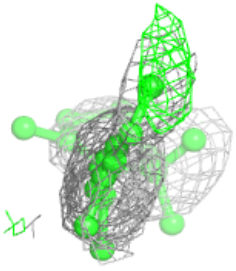


Electron density around BCR H1 102:

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

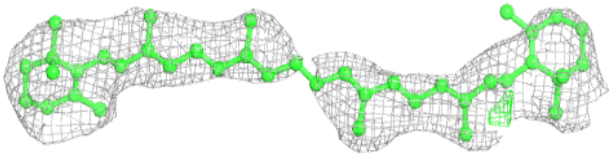


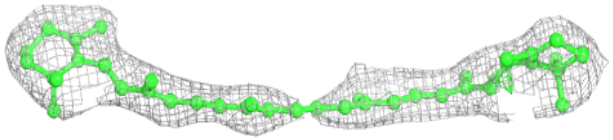


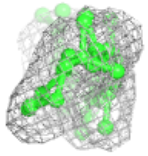


Electron density around BCR D1 401:

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

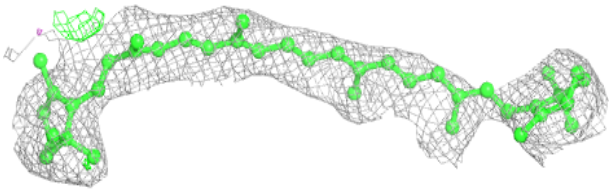


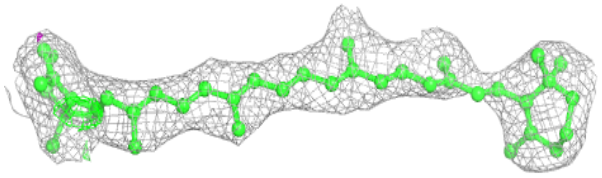


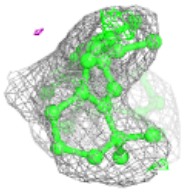


Electron density around BCR b2 602:

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

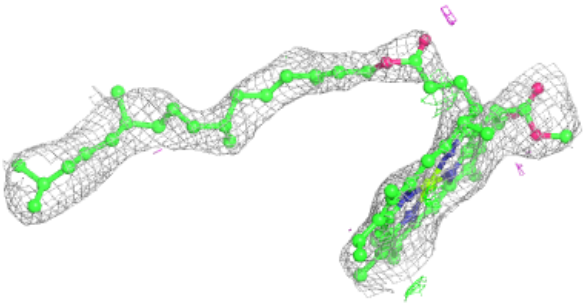


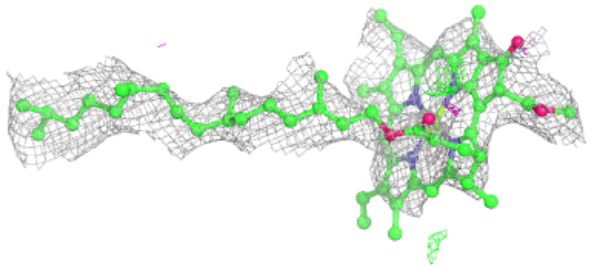


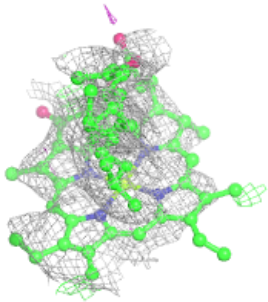


Electron density around CLA C2 506:

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

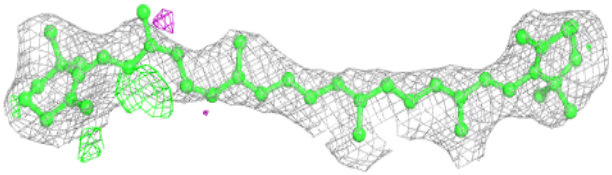


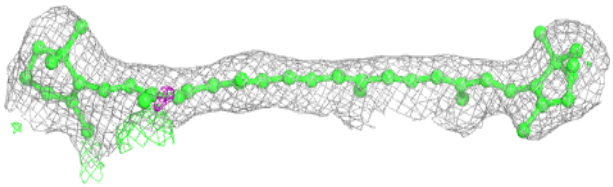


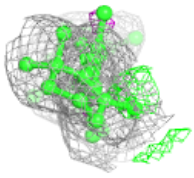


Electron density around BCR b1 602:

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

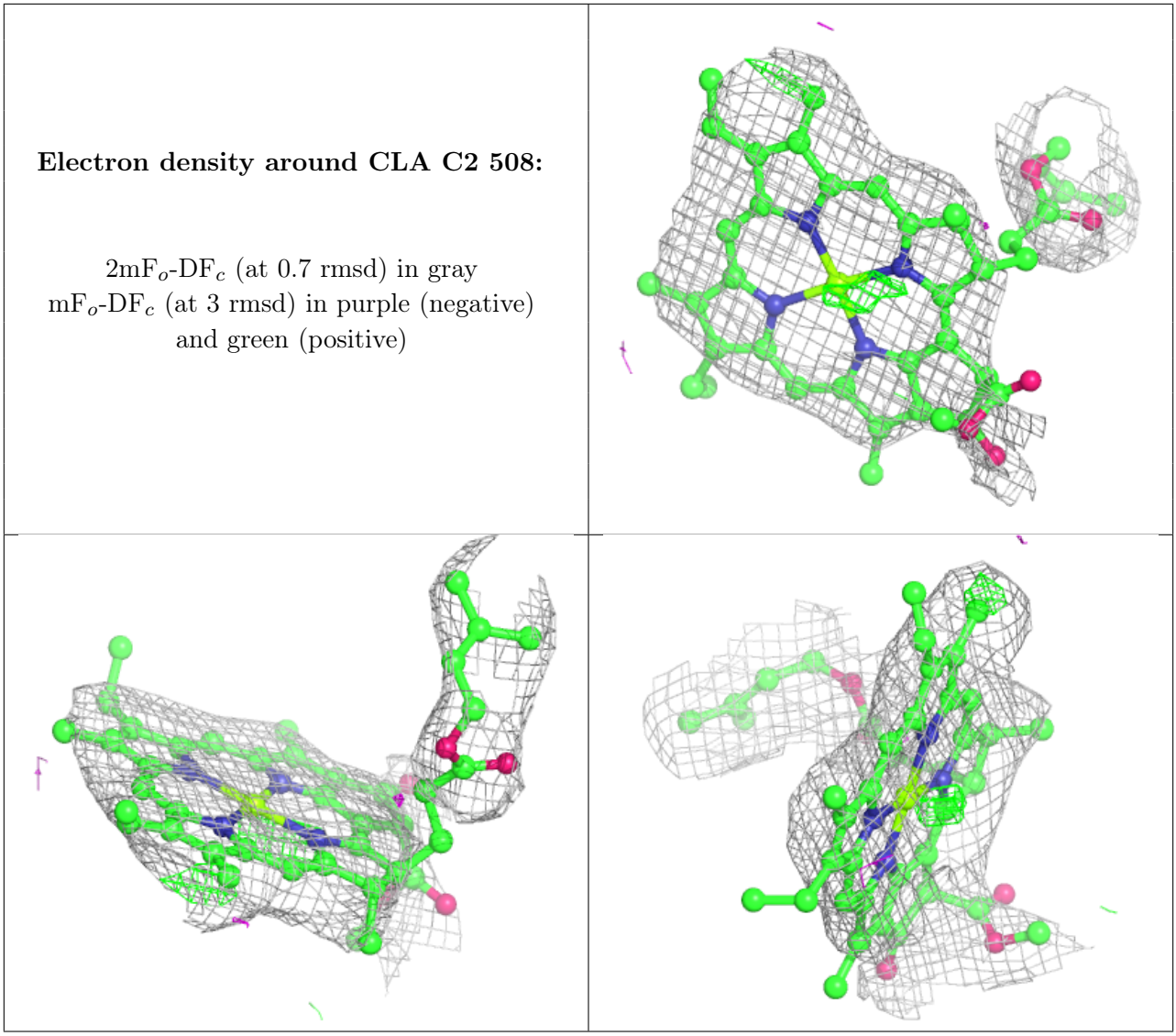






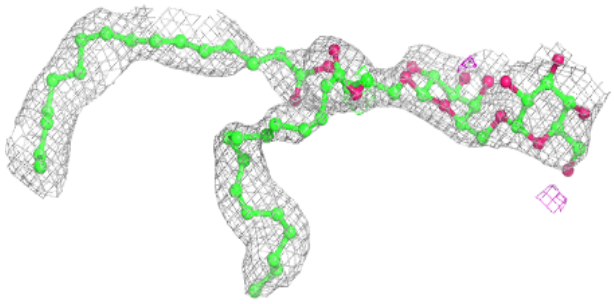
Electron density around CLA C2 508:

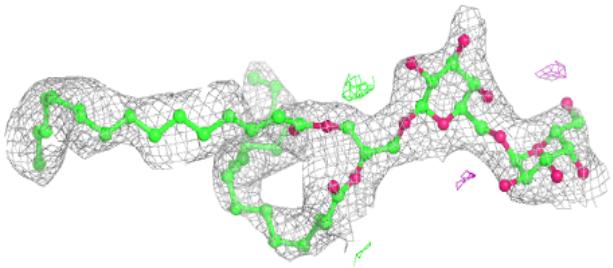
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

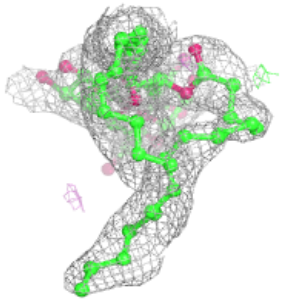


Electron density around DGD H2 101:

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

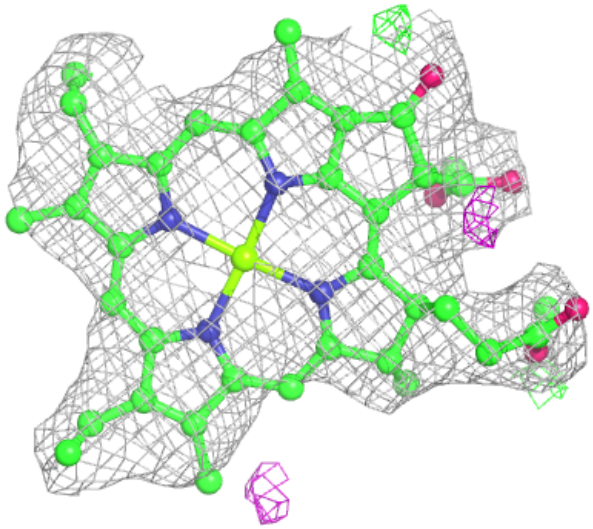


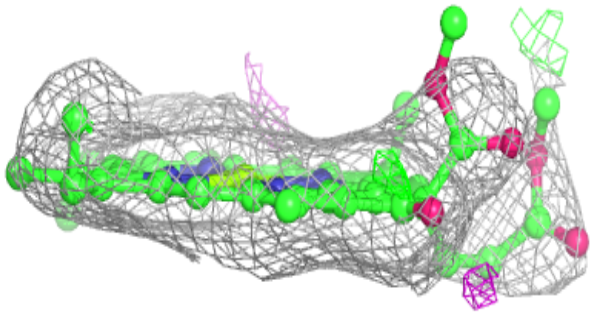


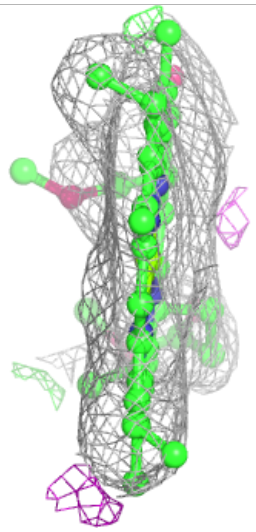


Electron density around CLA C2 516:

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

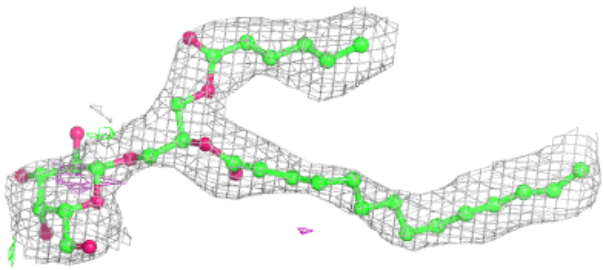


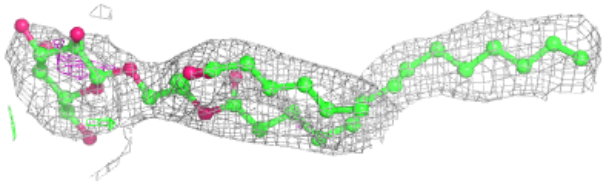




Electron density around LMG b2 622:

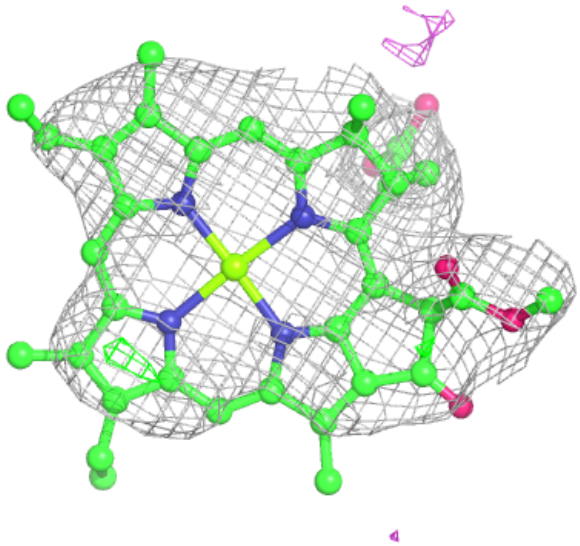
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

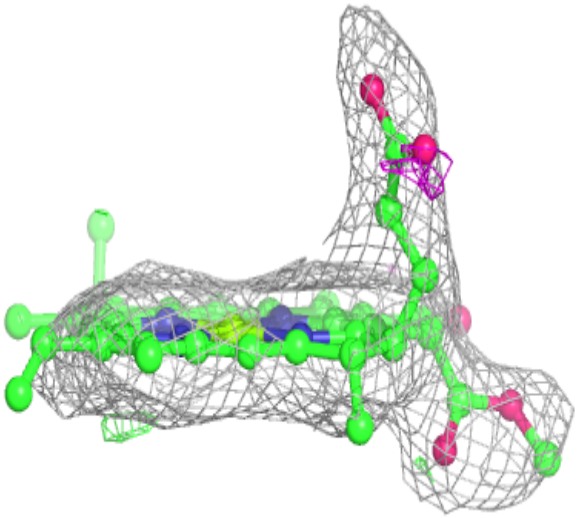




Electron density around CLA C1 514:

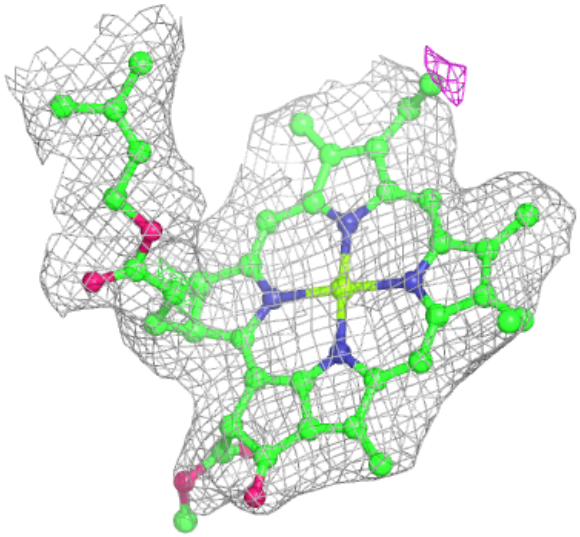
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

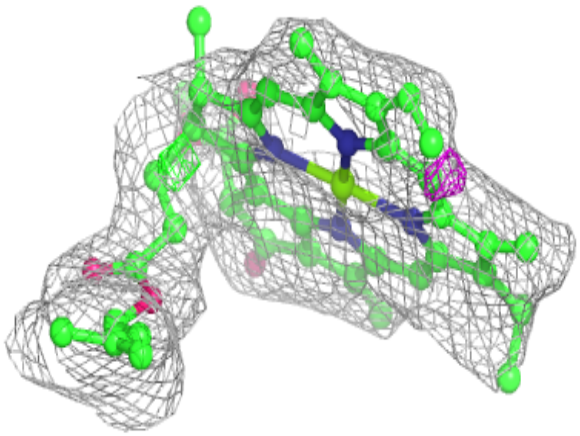


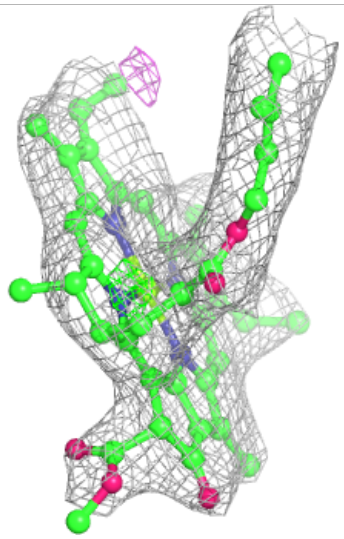


Electron density around CLA d2 404:

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

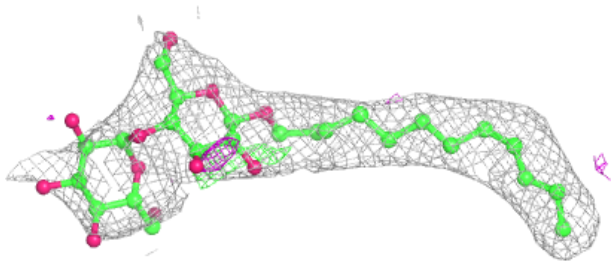


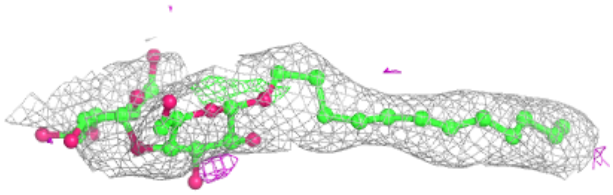


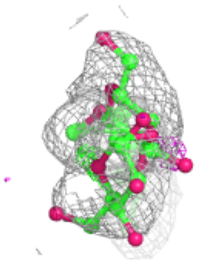


Electron density around LMT m1 101:

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

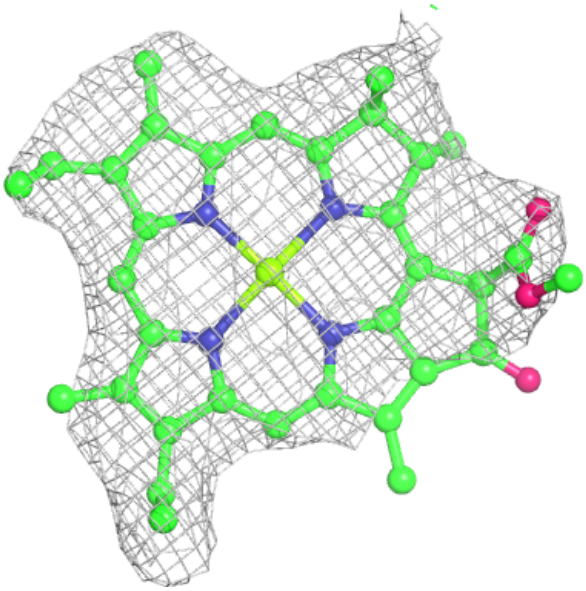


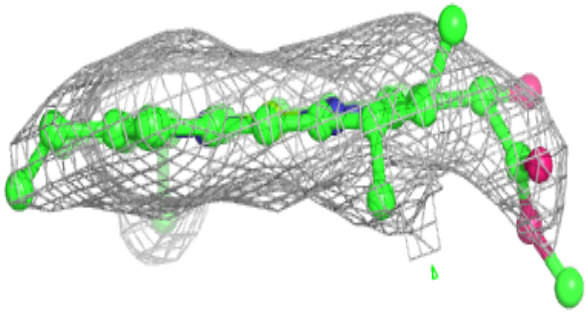


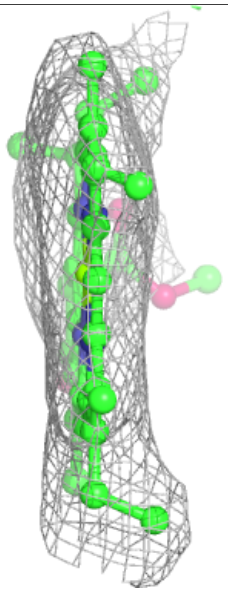


Electron density around CLA B2 604:

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

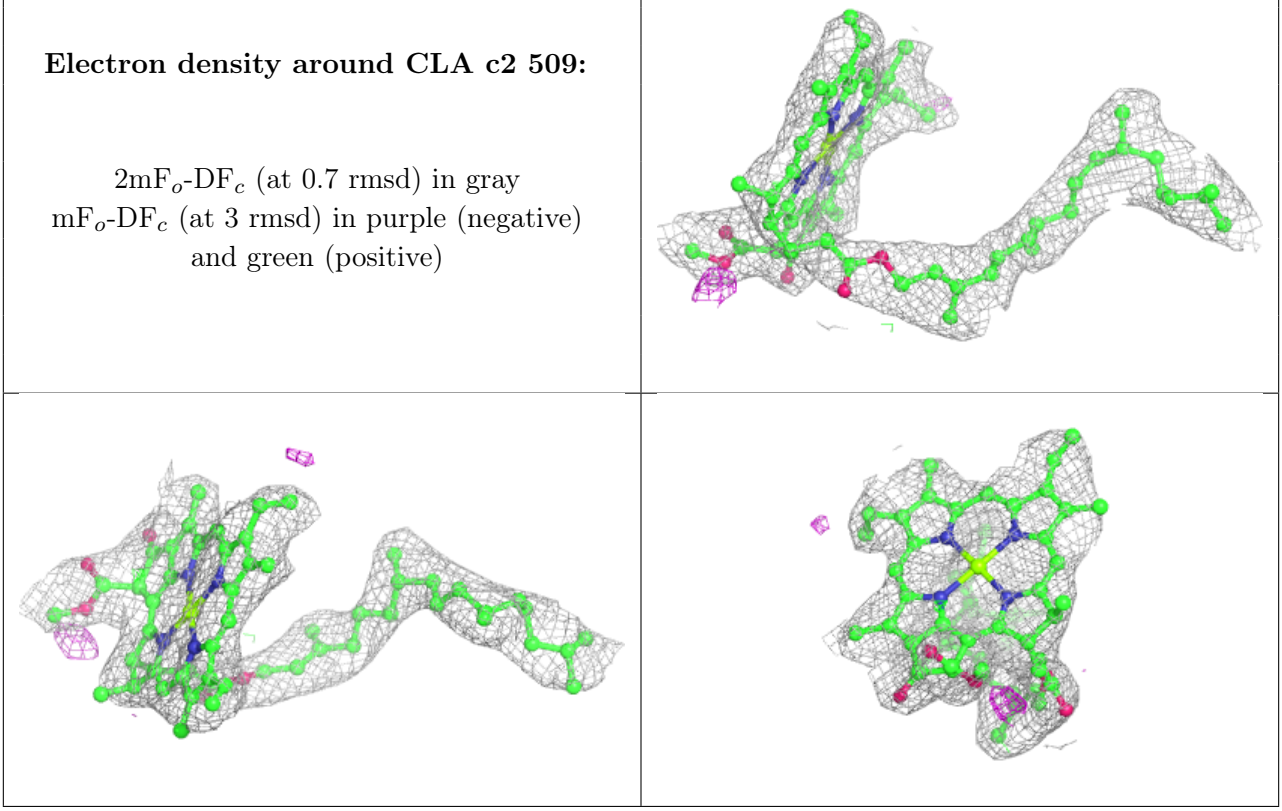






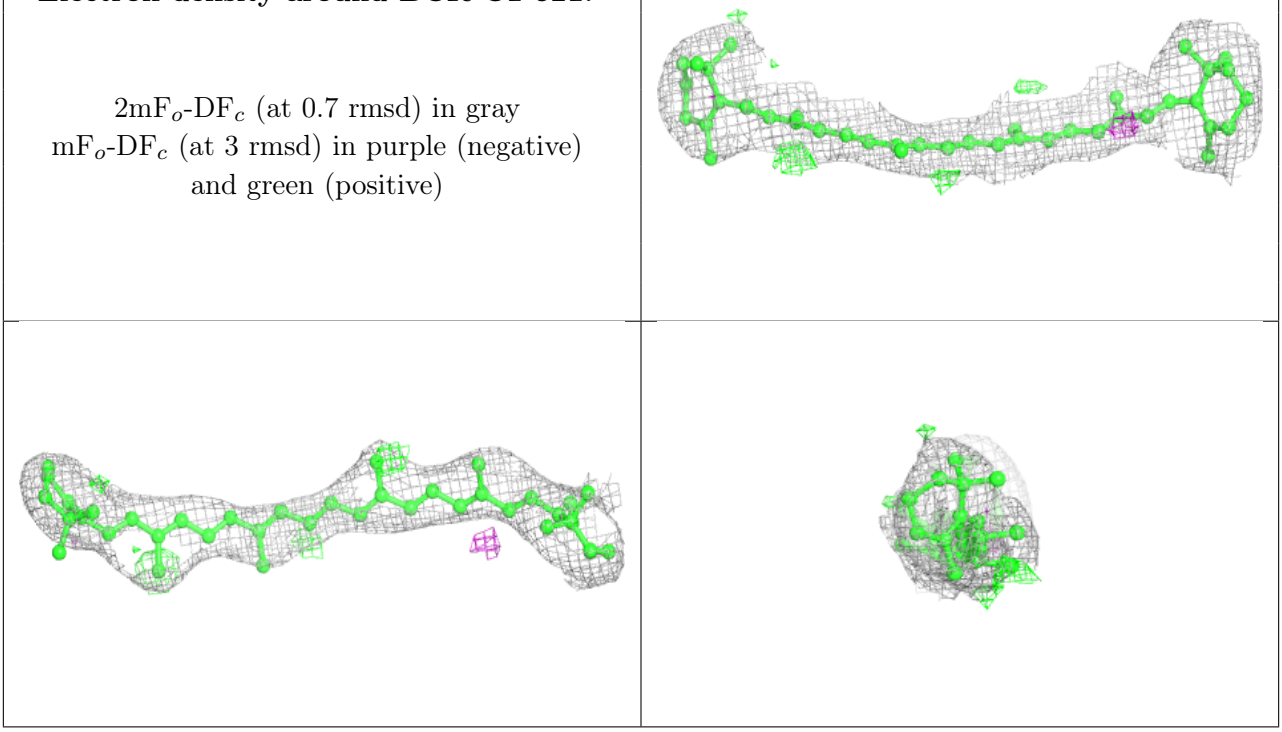
Electron density around CLA c2 509:

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



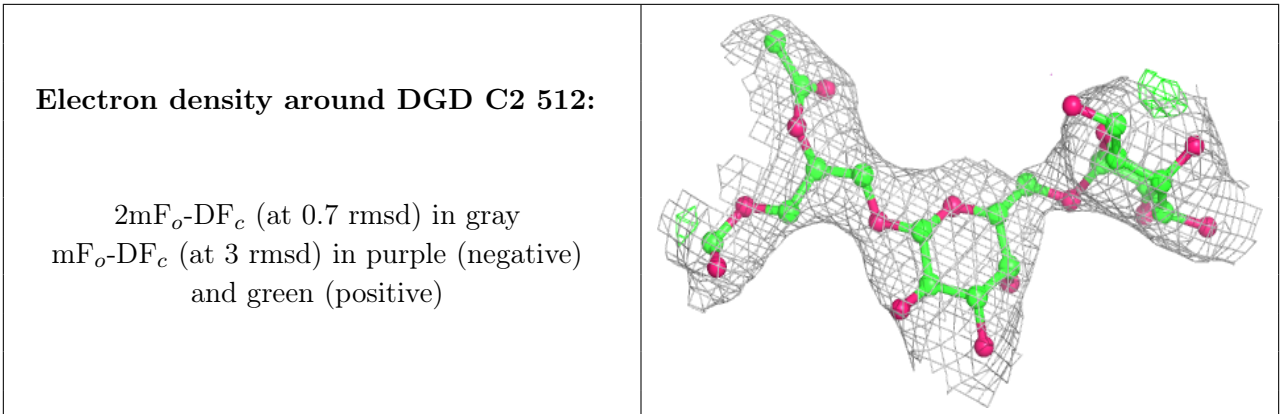
Electron density around BCR C1 521:

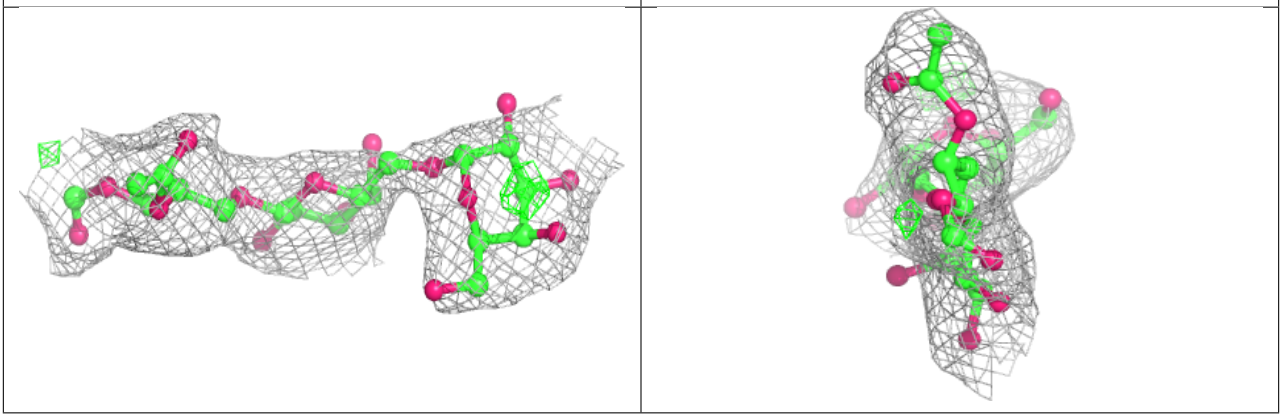
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around DGD C2 512:

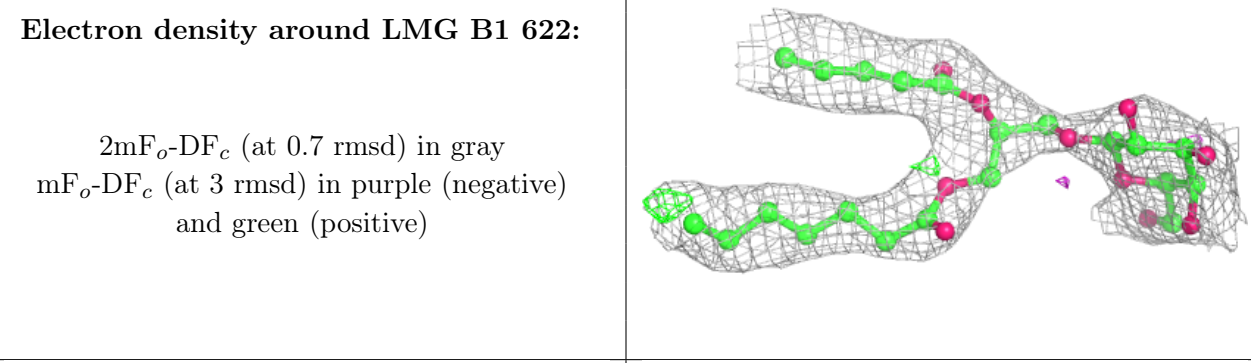
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

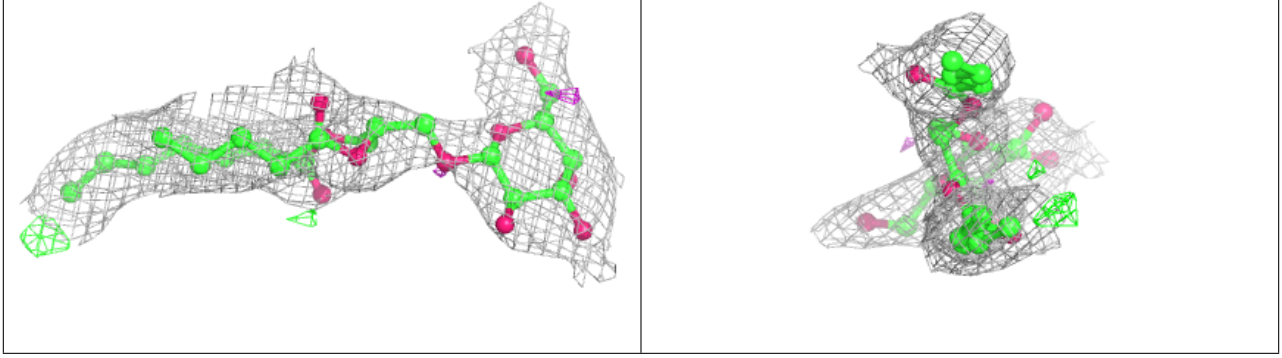




Electron density around LMG B1 622:

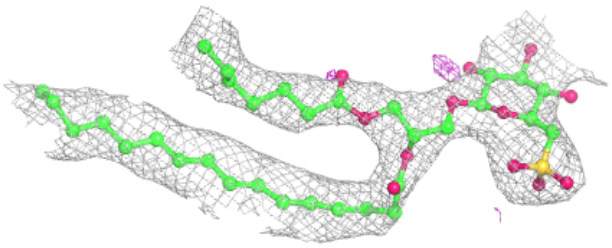
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

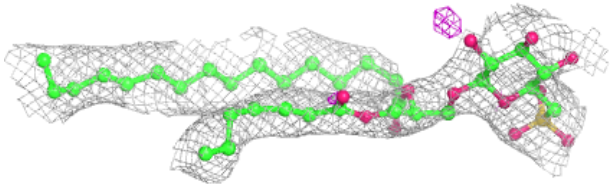


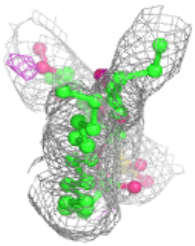


Electron density around SQD B2 623:

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

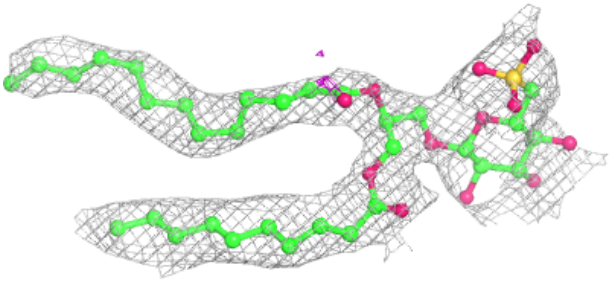


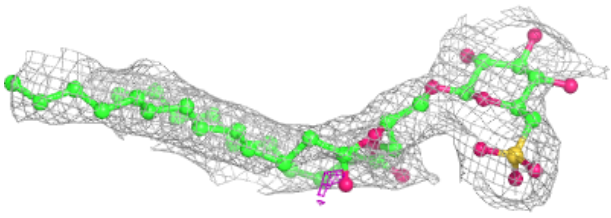


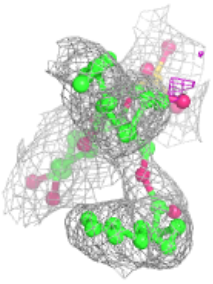


Electron density around SQD b2 605:

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

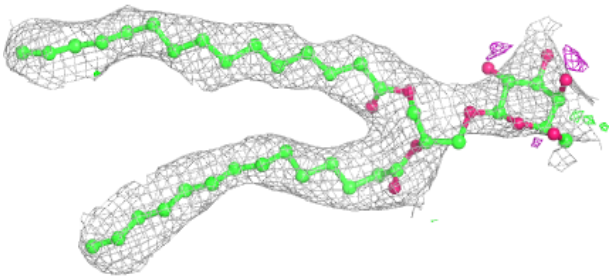


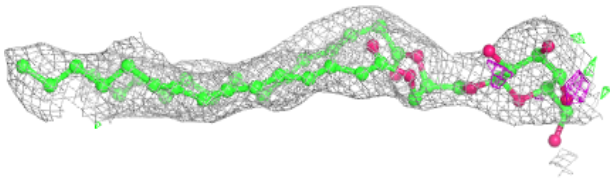


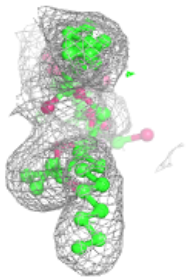


Electron density around LMG B1 626:

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

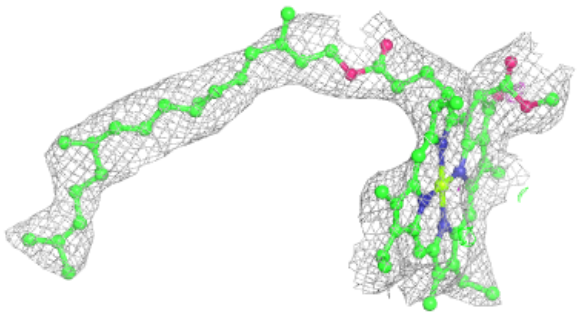


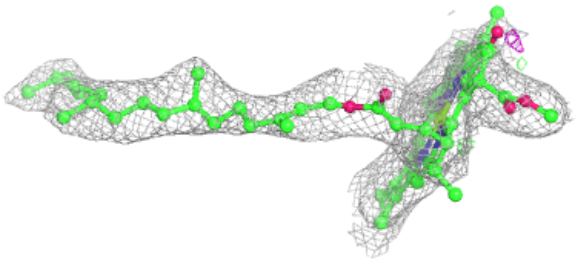


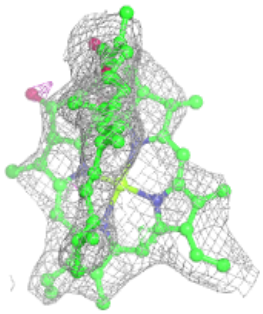


Electron density around CLA B2 611:

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

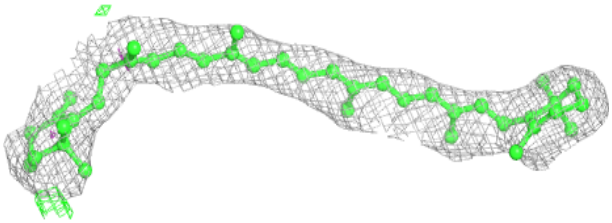


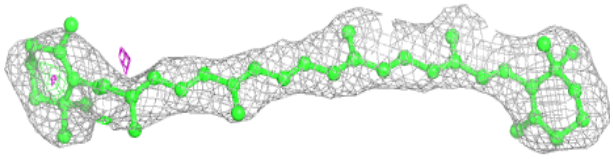


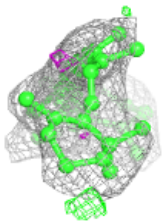


Electron density around BCR B2 602:

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

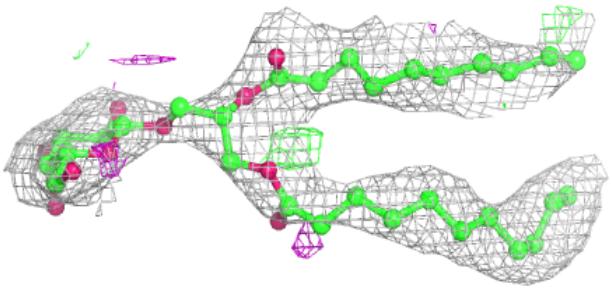


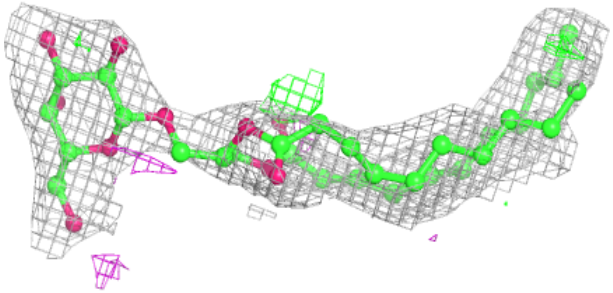


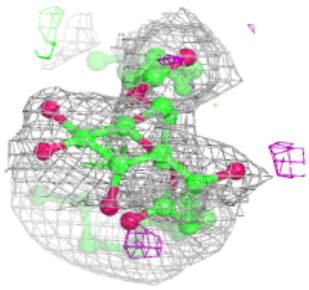


Electron density around LMG B2 620:

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

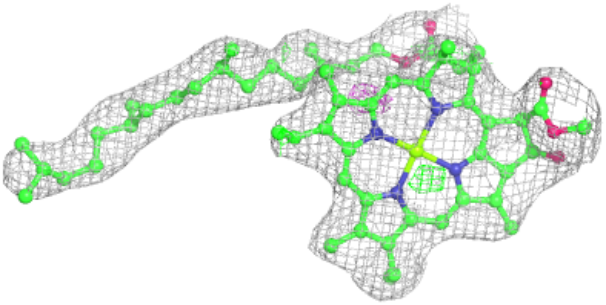


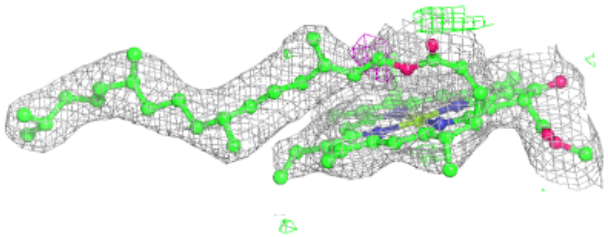


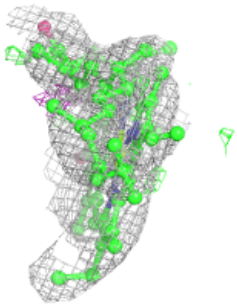


Electron density around CLA c1 503:

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

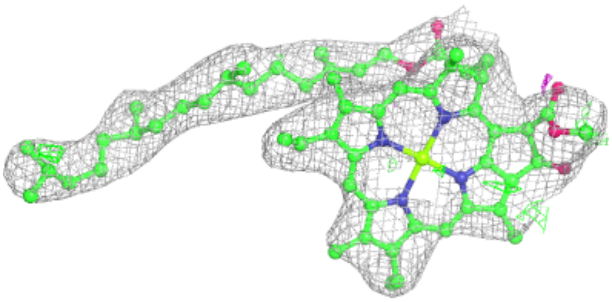


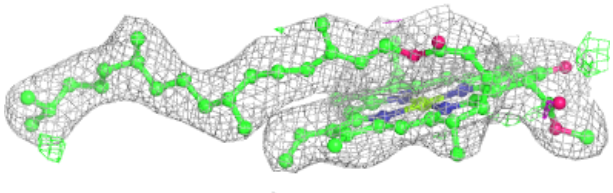


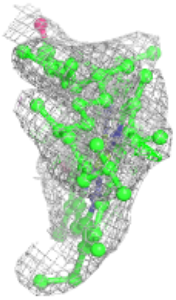


Electron density around CLA C1 502:

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

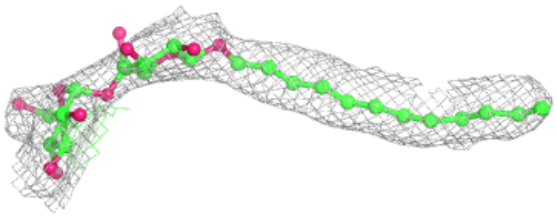


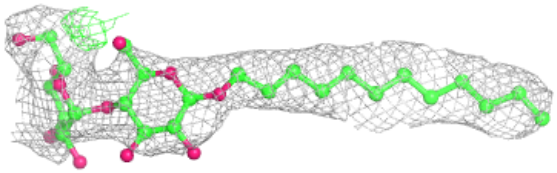


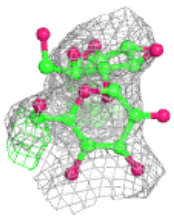


Electron density around LMT b2 623:

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

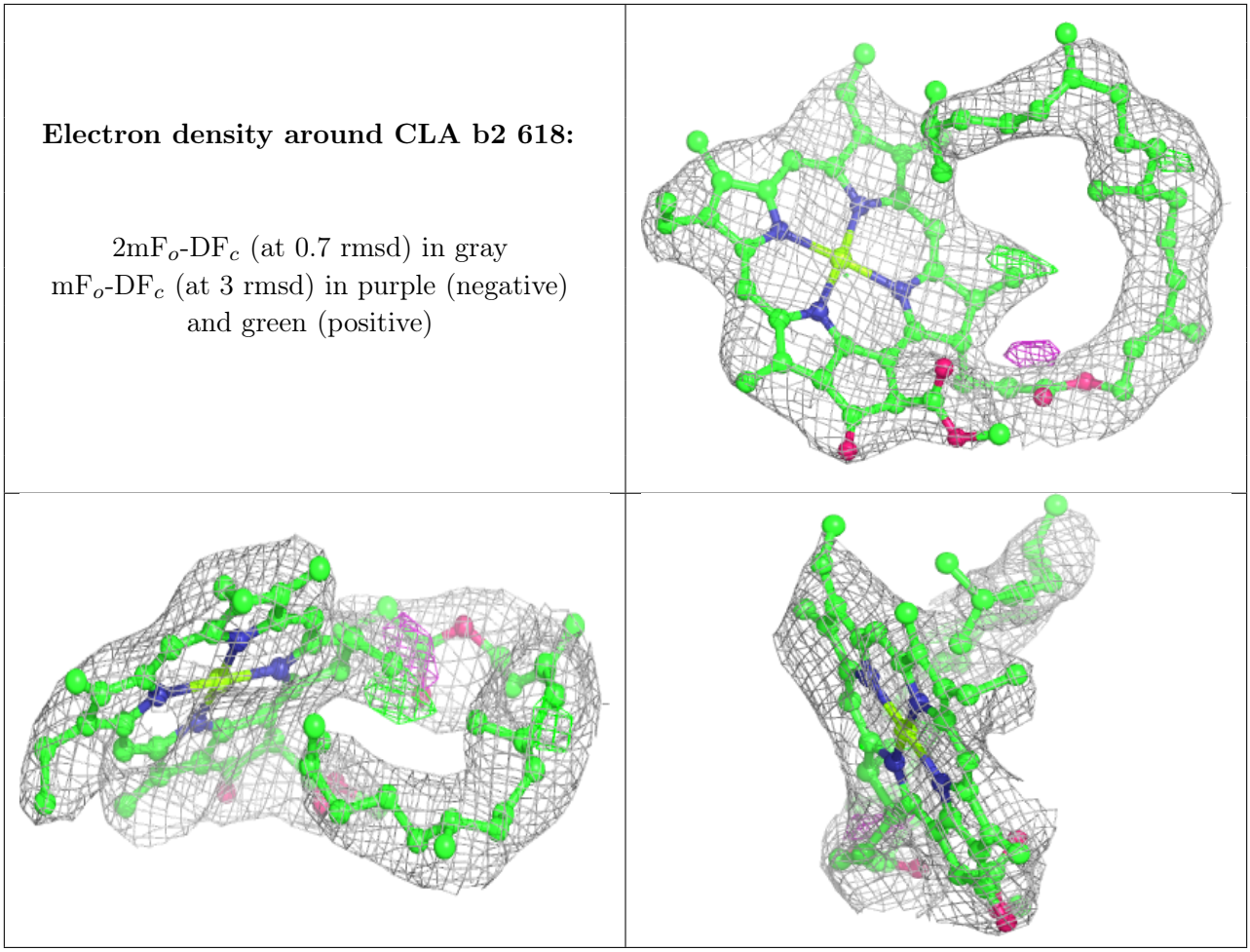






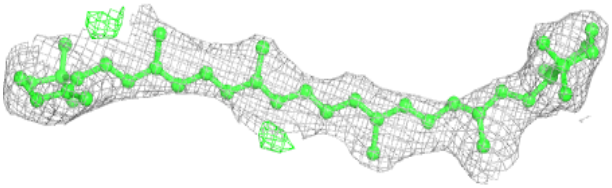
Electron density around CLA b2 618:

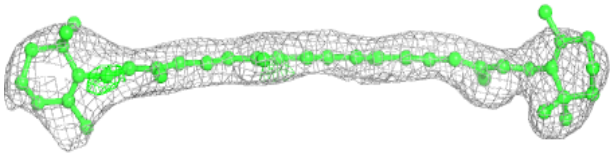
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

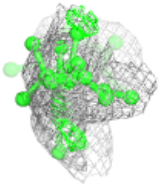


Electron density around BCR h2 101:

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

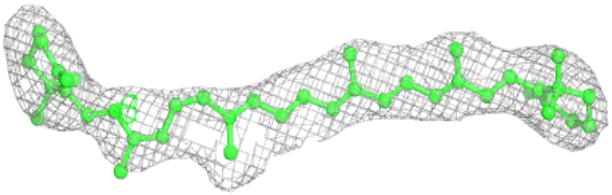


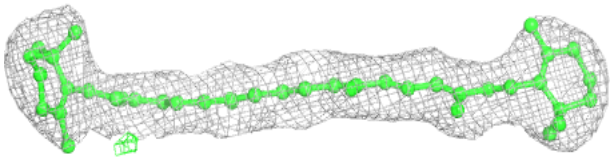


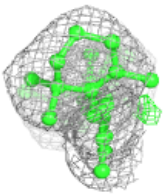


Electron density around BCR c1 502:

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

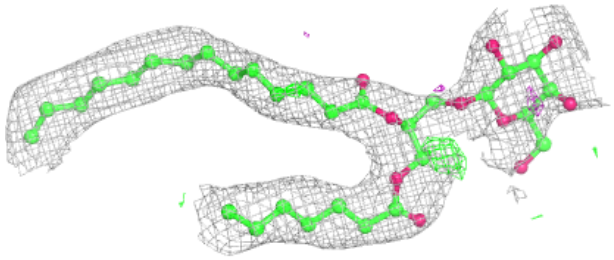


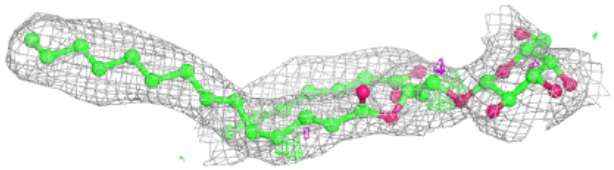


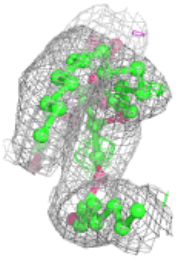


Electron density around LMG b1 631:

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

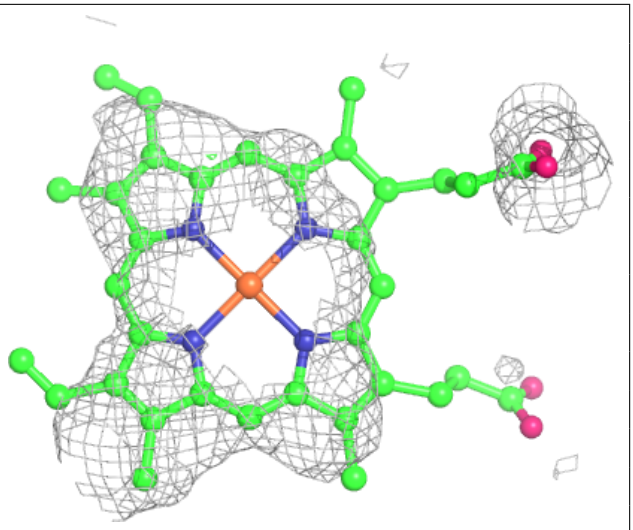


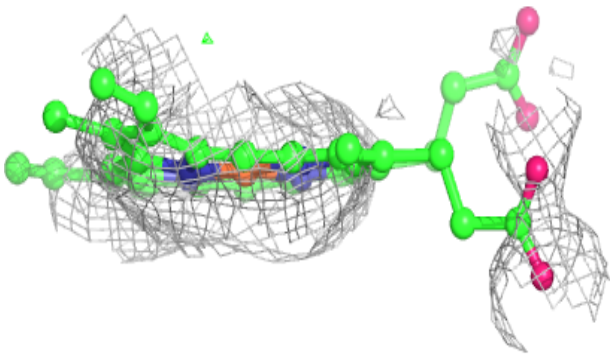


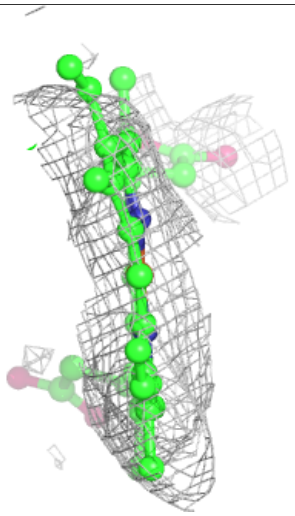


Electron density around HEM E1 101:

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

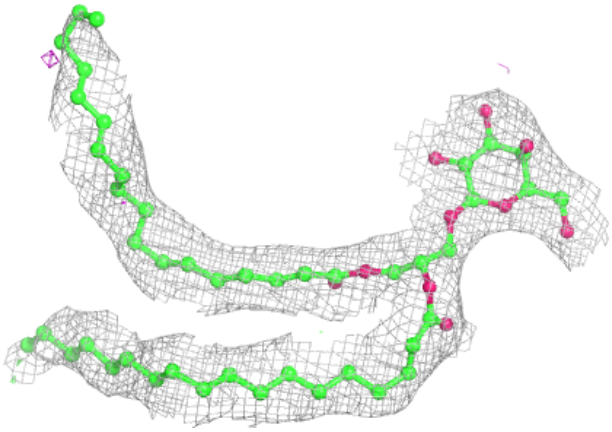


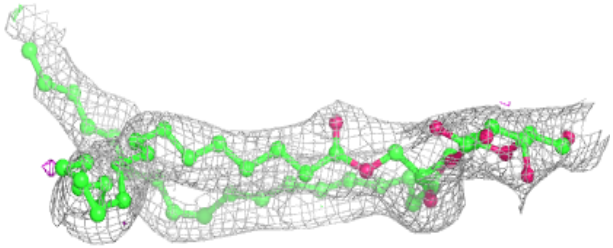




Electron density around LMG c1 519:

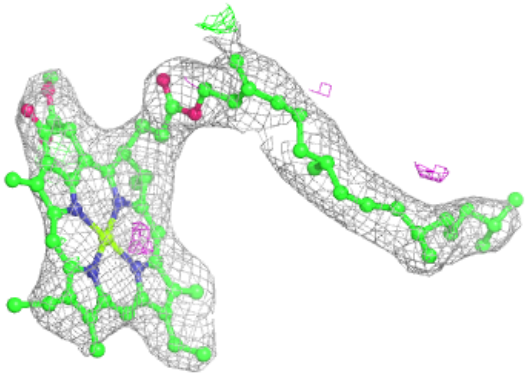
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

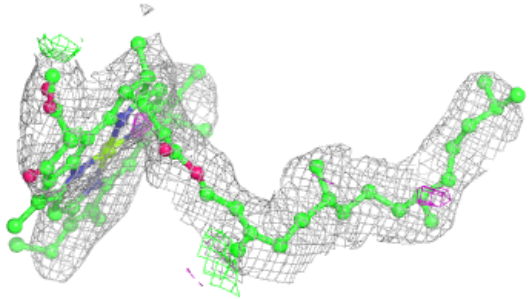


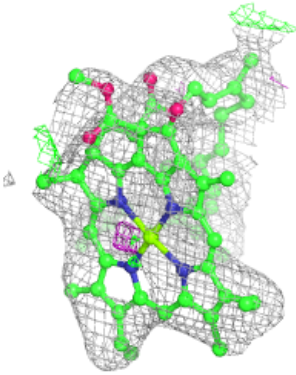


Electron density around CLA c2 512:

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

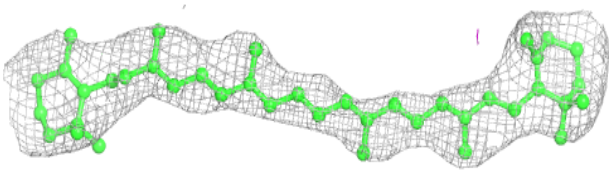


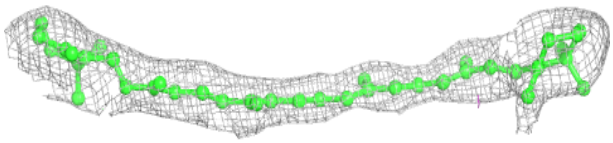


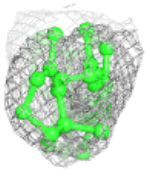


Electron density around BCR d2 401:

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

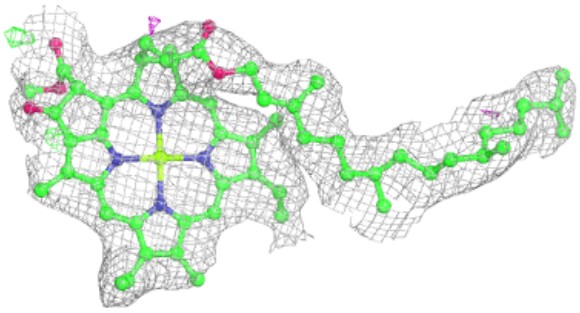


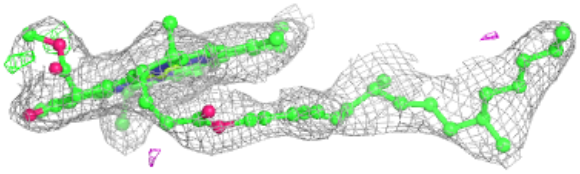


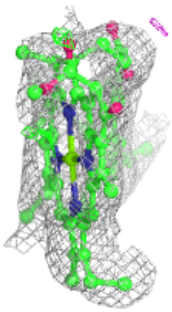


Electron density around CLA B2 606:

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

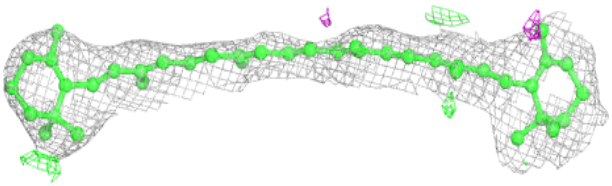


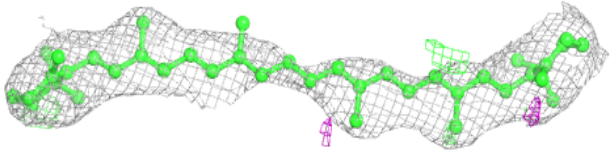


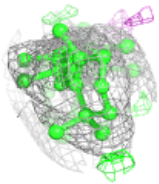


Electron density around BCR k2 501:

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

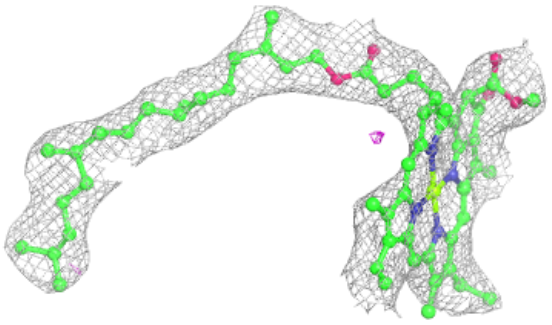


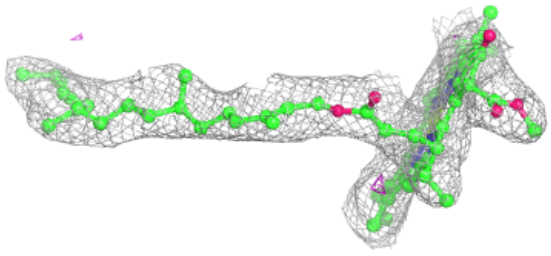


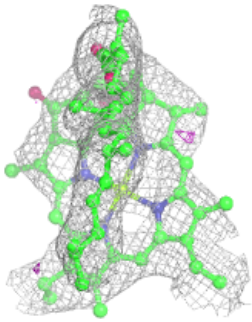


Electron density around CLA b2 610:

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

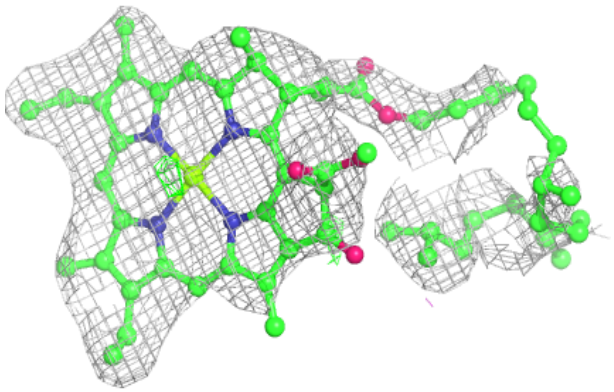


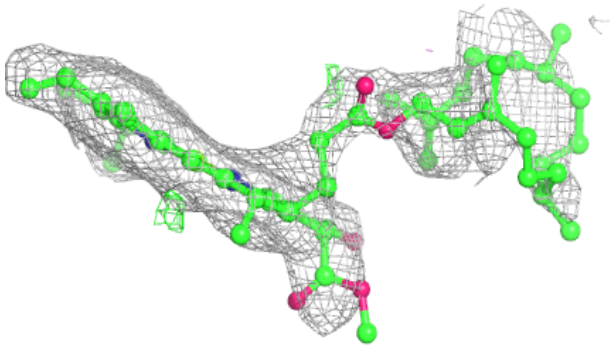


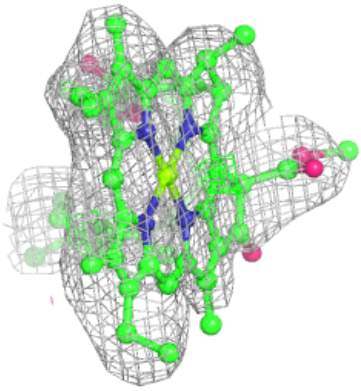


Electron density around CLA b1 604:

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

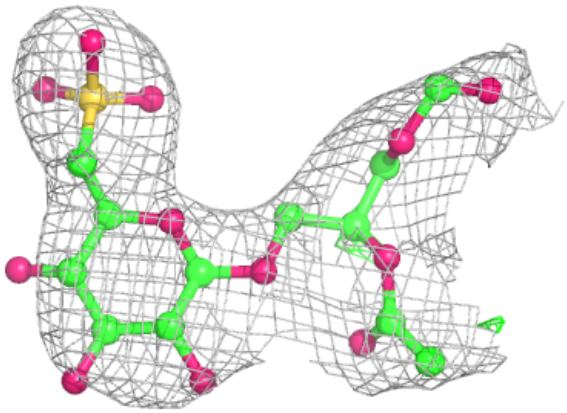


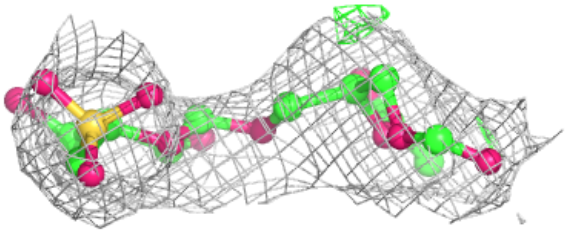


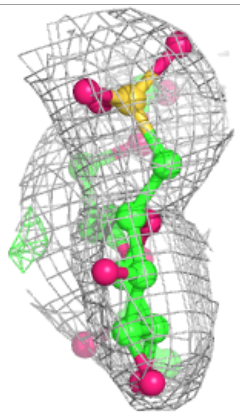


Electron density around SQD D2 402:

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

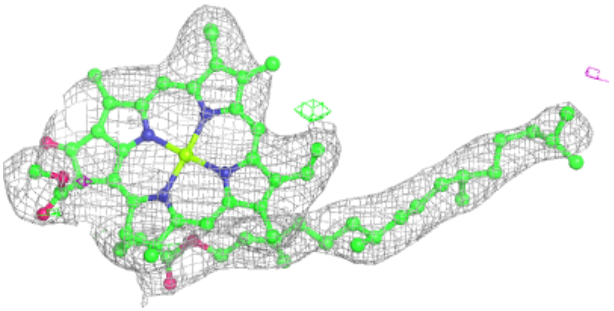


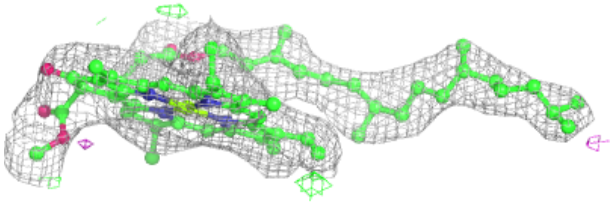


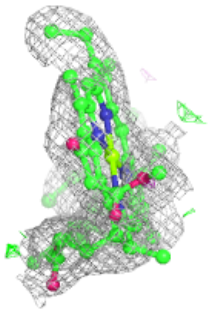


Electron density around CLA c2 502:

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

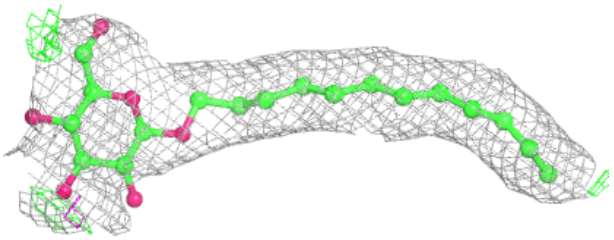


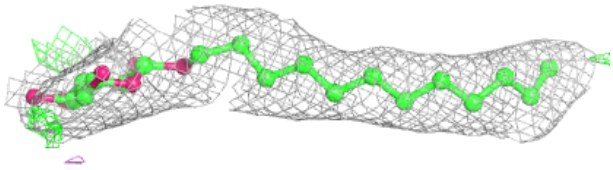


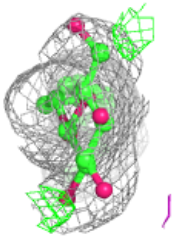


Electron density around LMT l1 101:

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

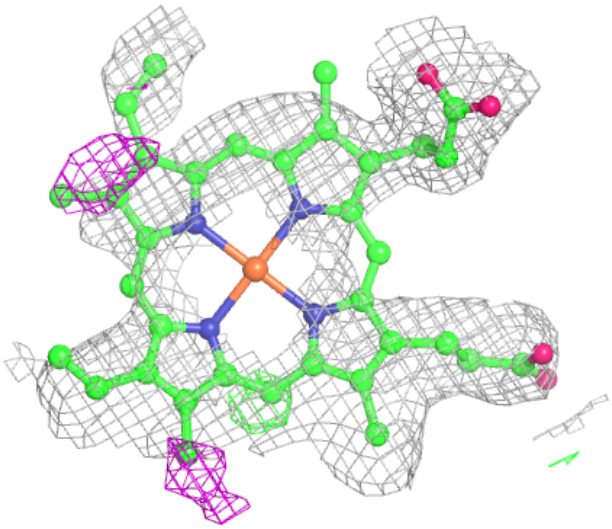


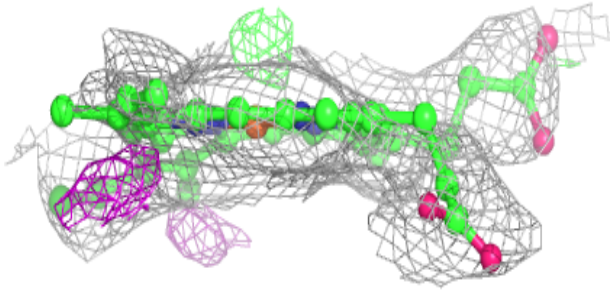


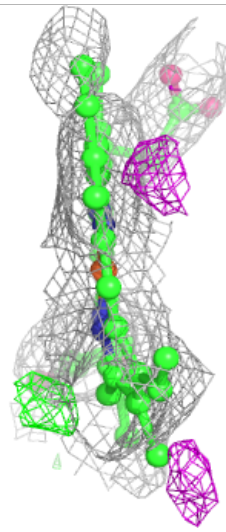


Electron density around HEM V2 201:

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

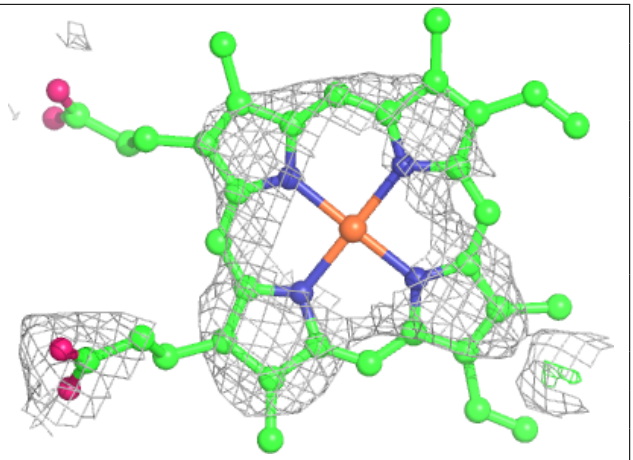


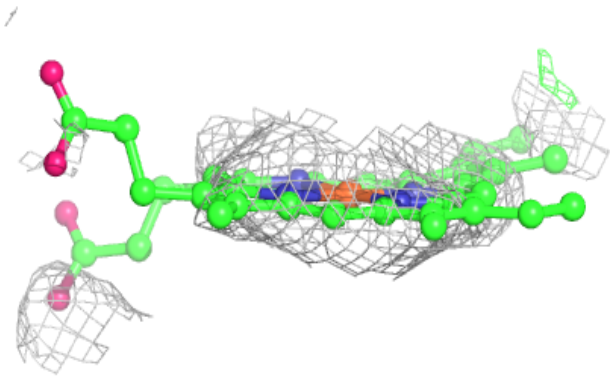


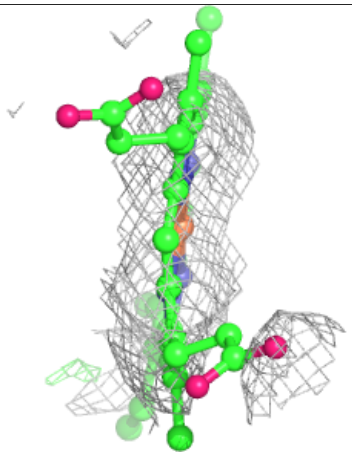


Electron density around HEM e2 101:

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

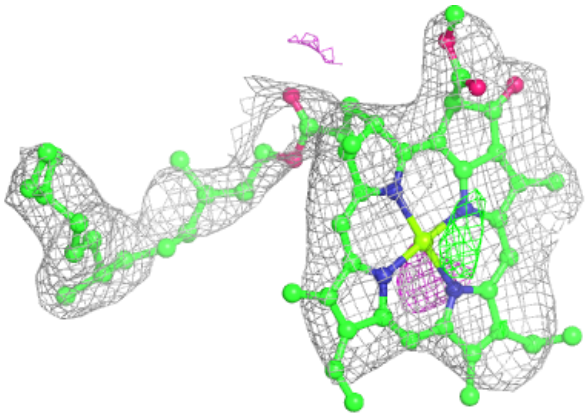


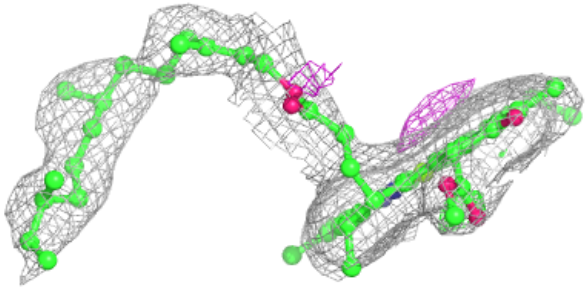


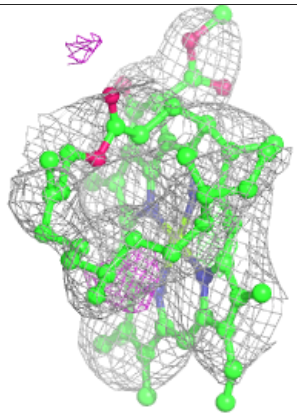


Electron density around CLA A2 403:

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

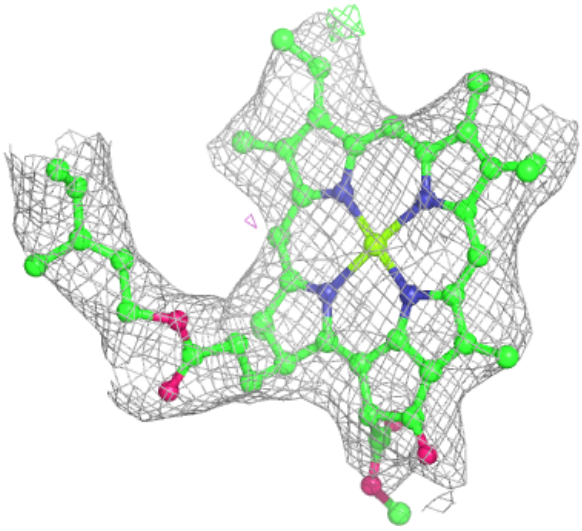


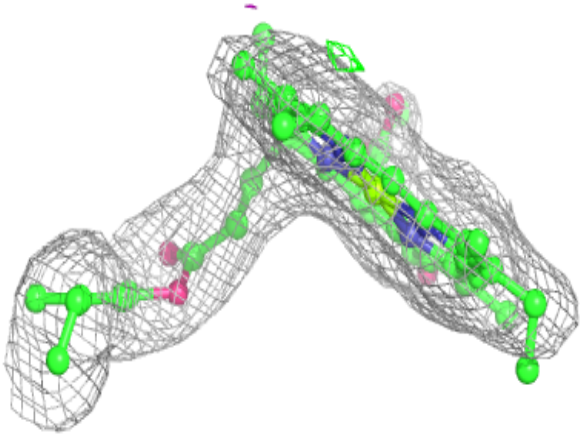


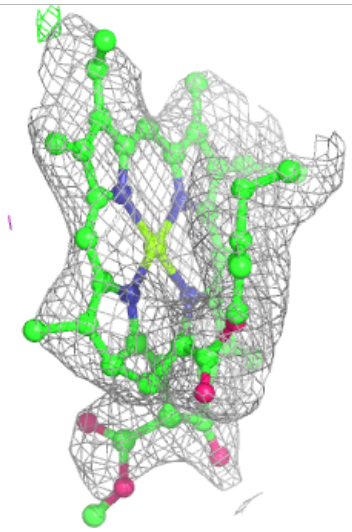


Electron density around CLA D1 403:

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

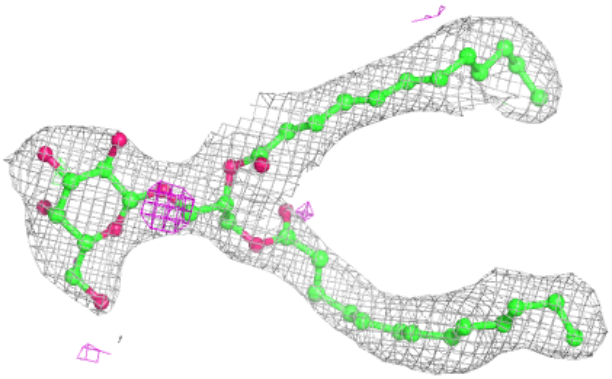


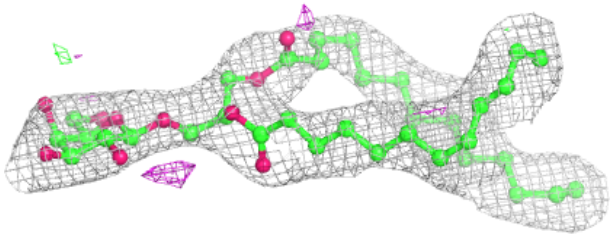


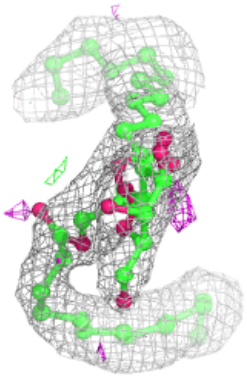


Electron density around LMG a2 412:

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

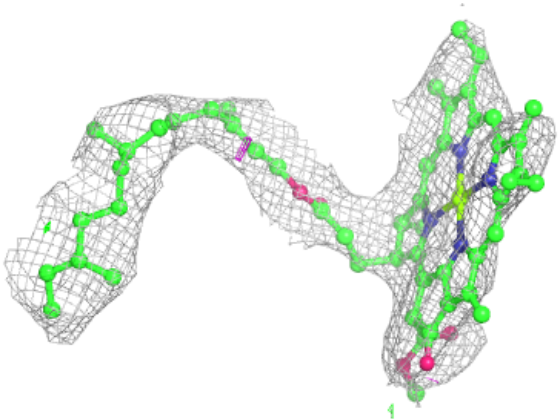


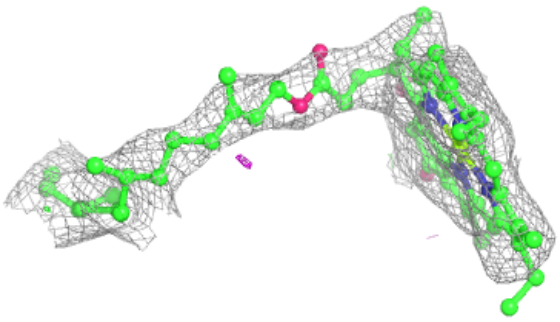


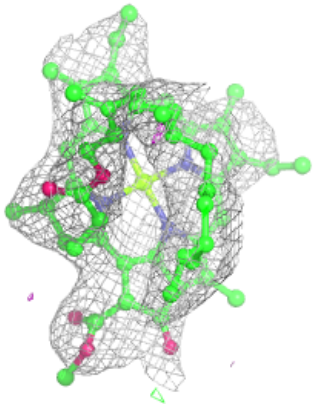


Electron density around CLA b2 609:

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

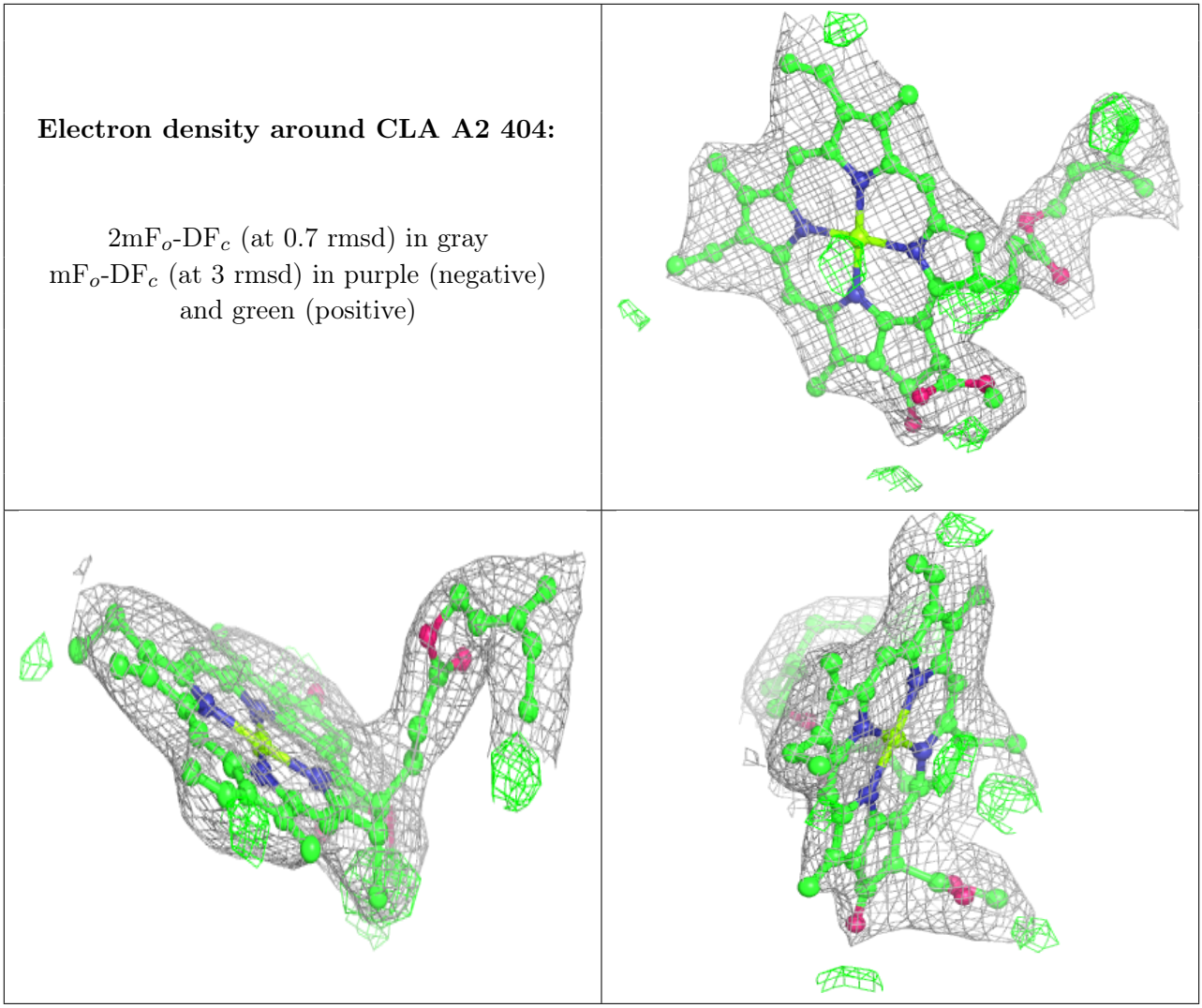






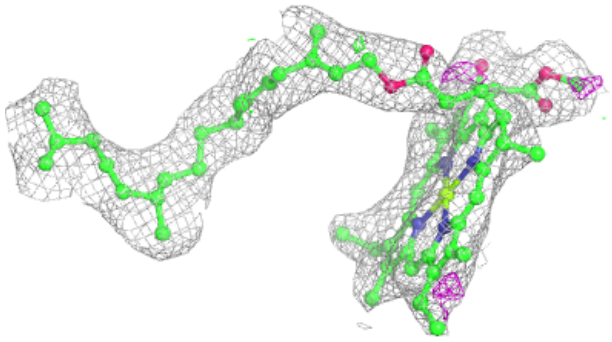
Electron density around CLA A2 404:

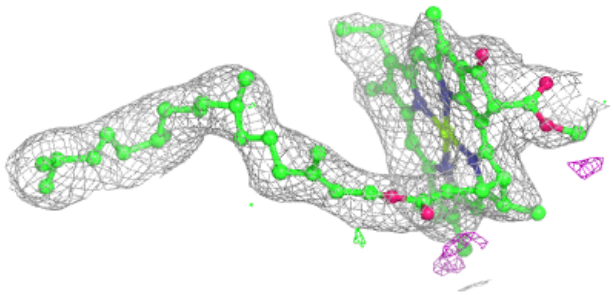
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

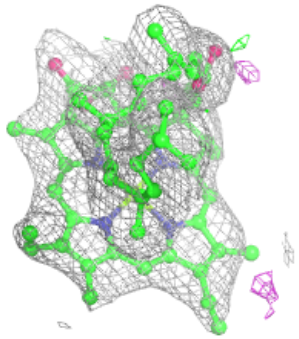


Electron density around CLA C1 509:

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

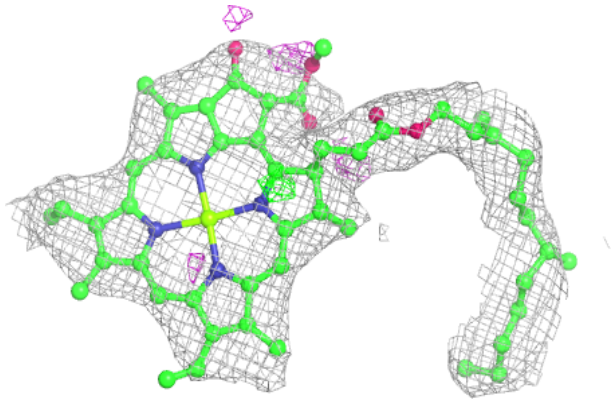


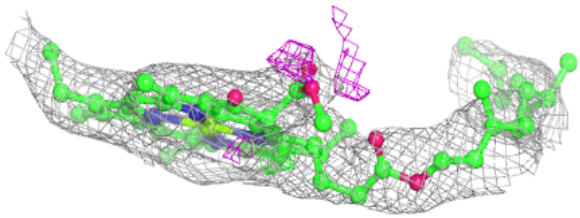


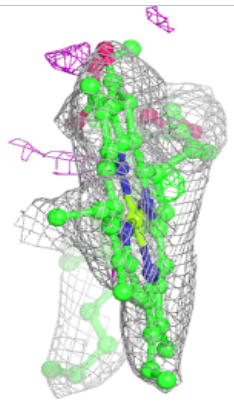


Electron density around CLA b2 619:

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

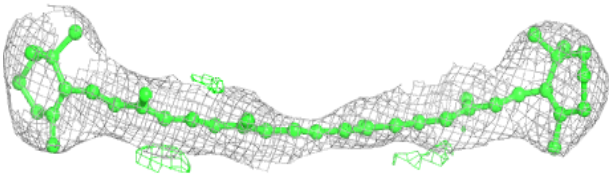


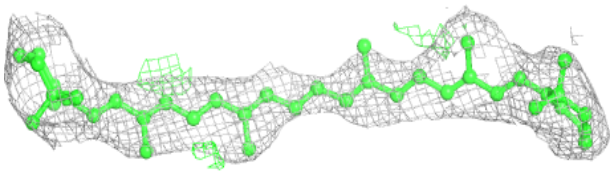


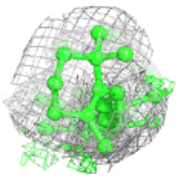


Electron density around BCR c1 501:

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

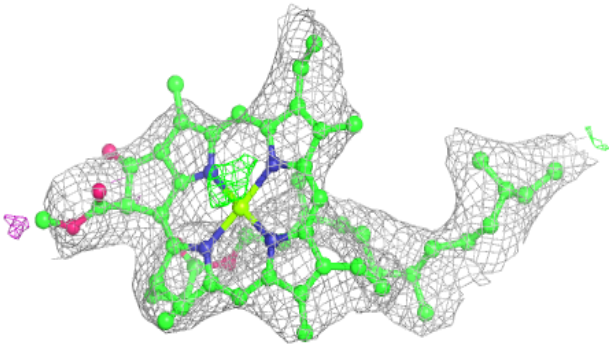


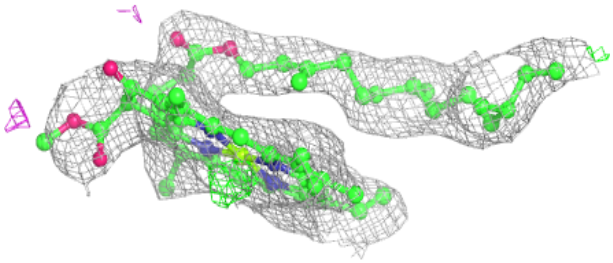


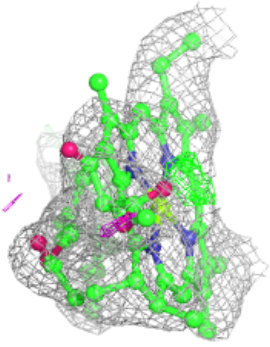


Electron density around CLA c2 506:

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

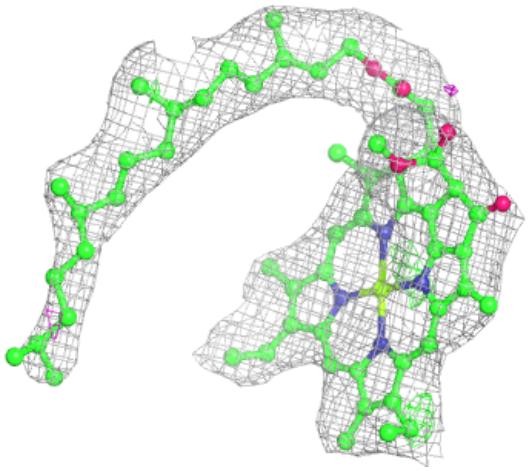


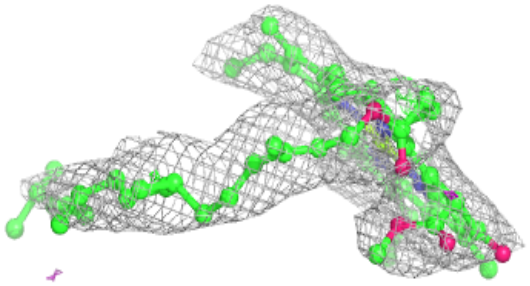


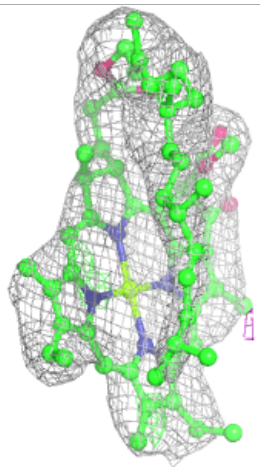


Electron density around CLA c2 508:

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

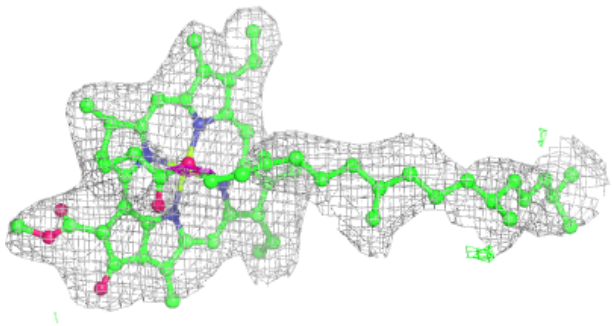


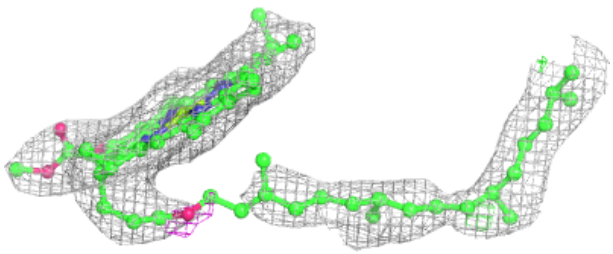


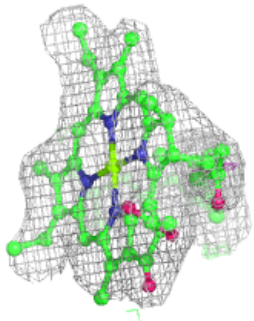


Electron density around CLA B2 610:

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

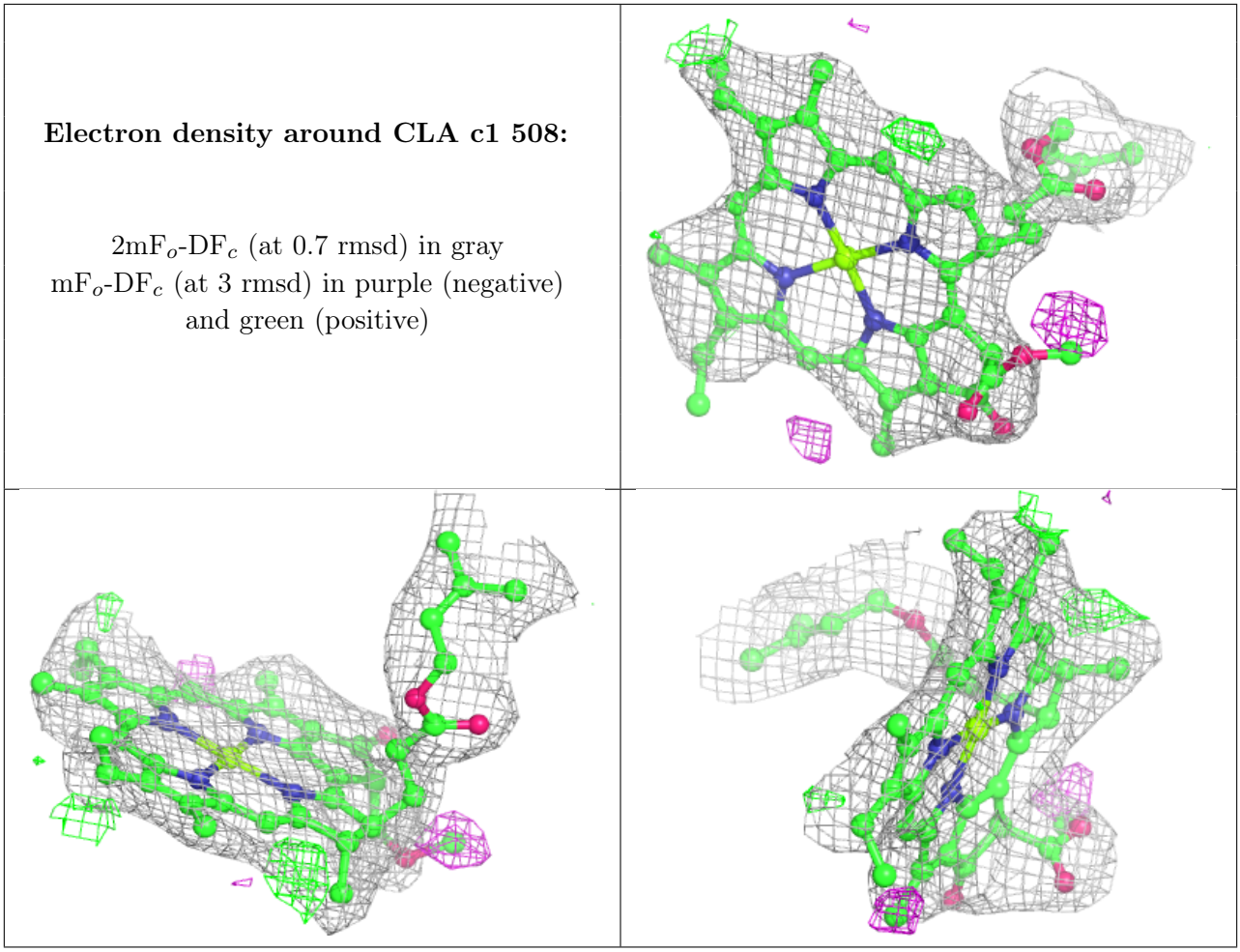






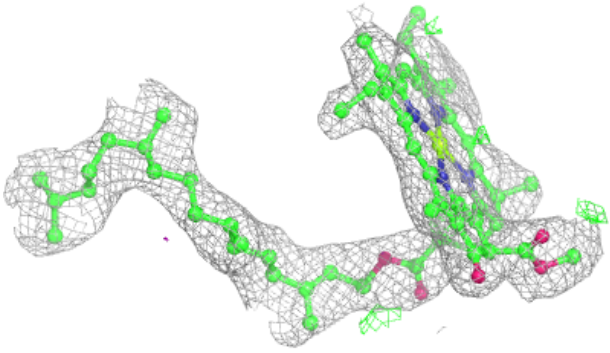
Electron density around CLA c1 508:

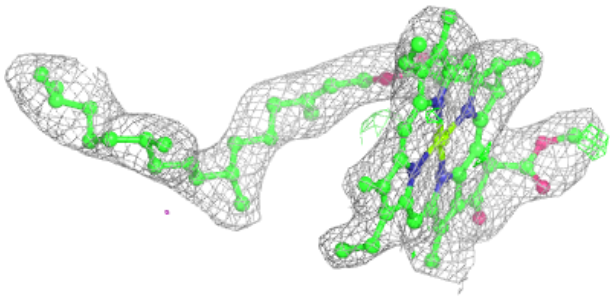
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

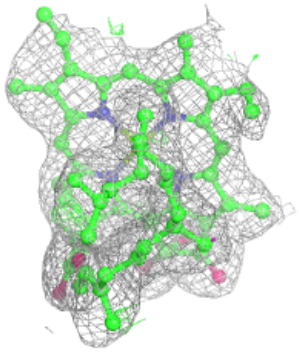


Electron density around CLA c1 510:

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

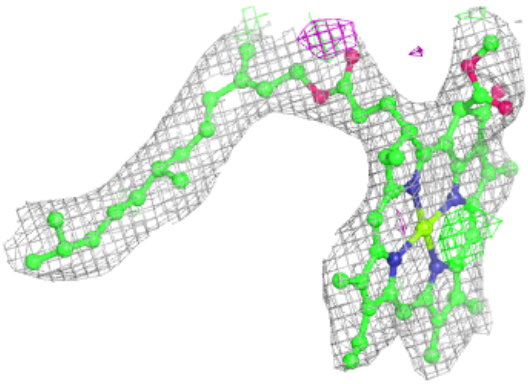


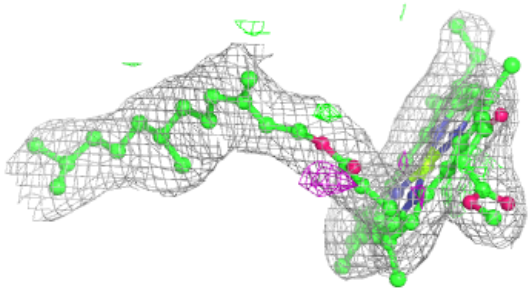


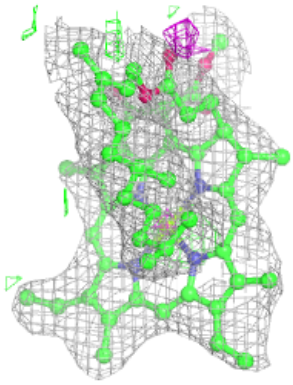


Electron density around CLA c1 513:

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

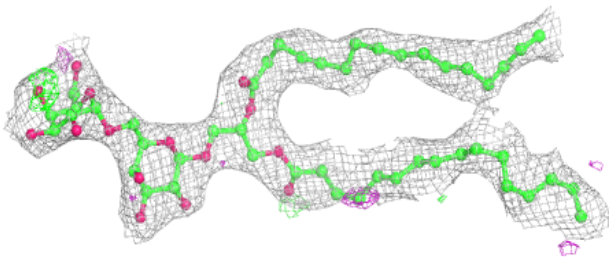


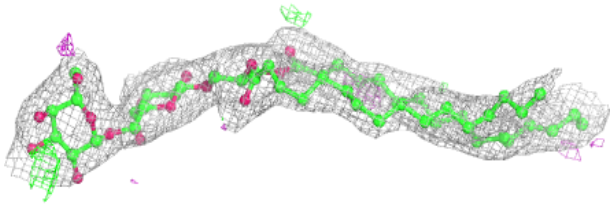


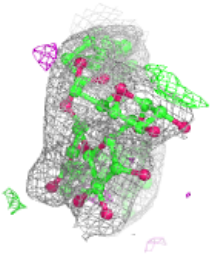


Electron density around DGD c1 520:

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

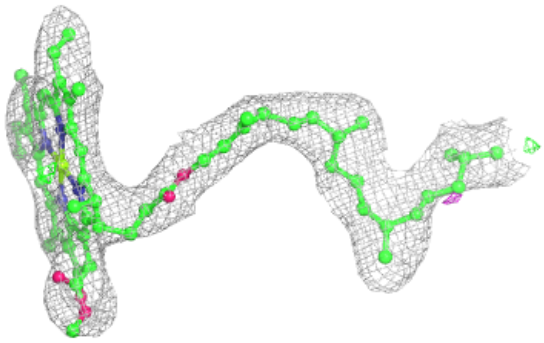


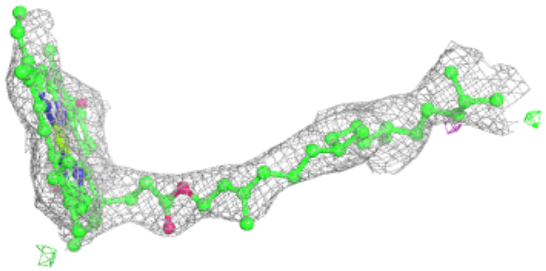


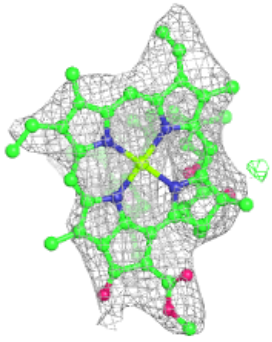


Electron density around CLA B1 609:

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

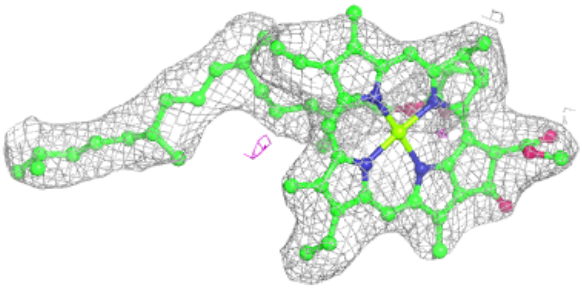


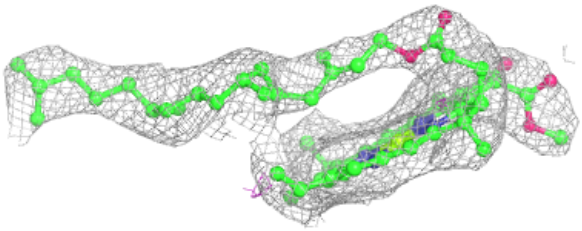


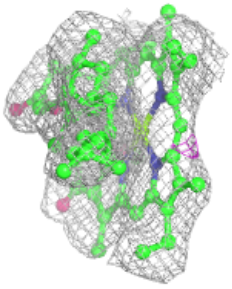


Electron density around CLA C1 506:

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

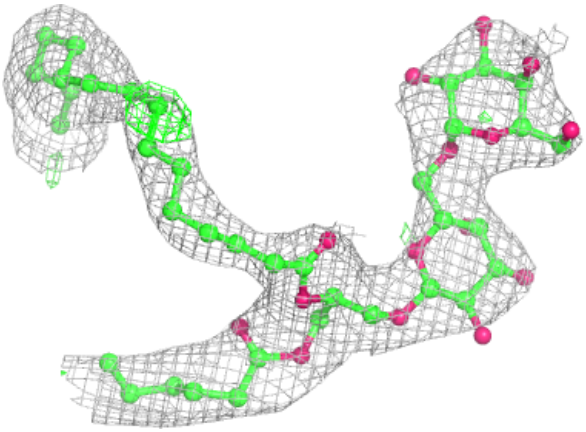


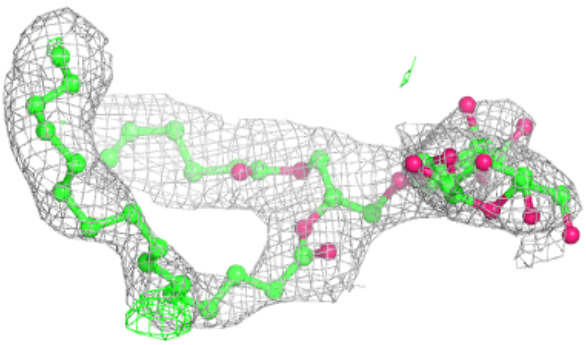


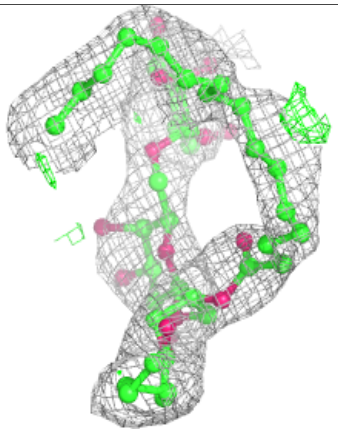


Electron density around DGD c2 516:

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

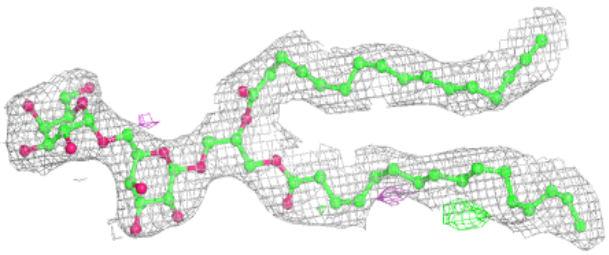


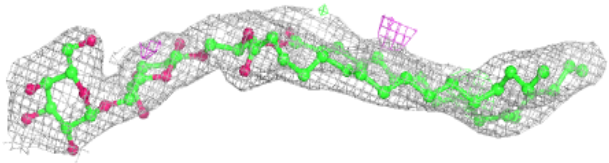


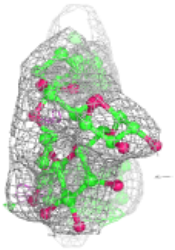


Electron density around DGD c2 517:

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

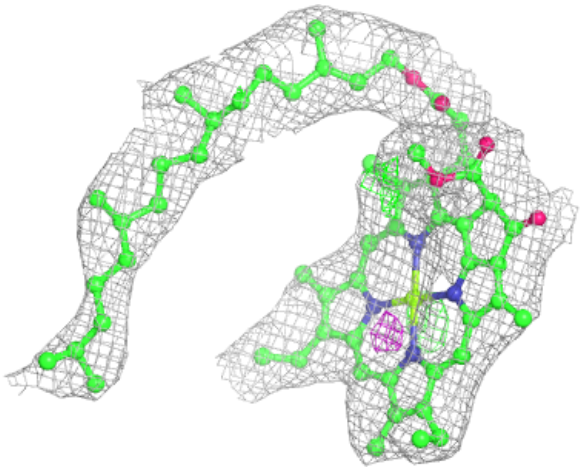


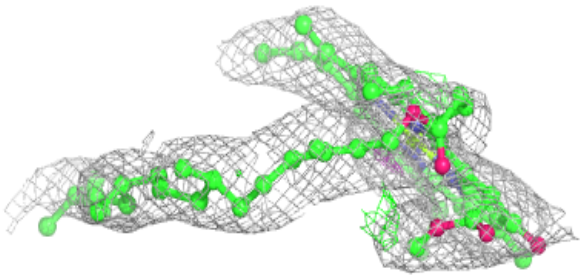


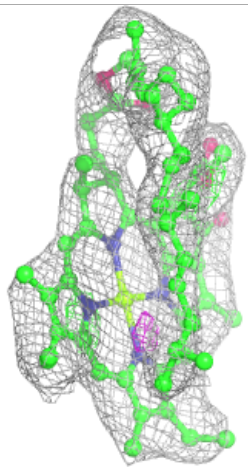


Electron density around CLA c1 509:

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

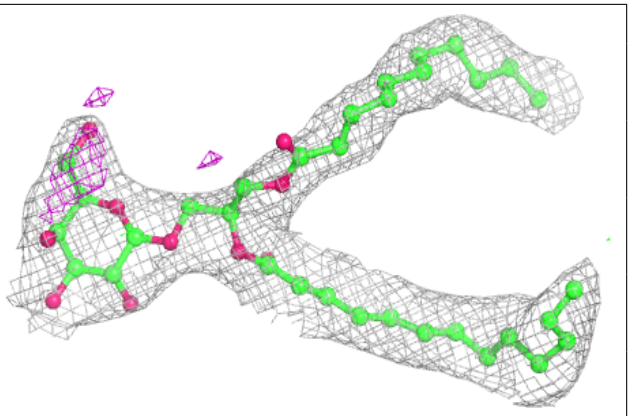


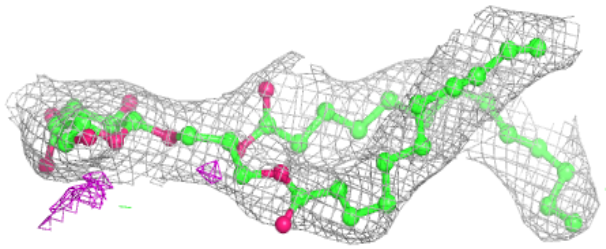


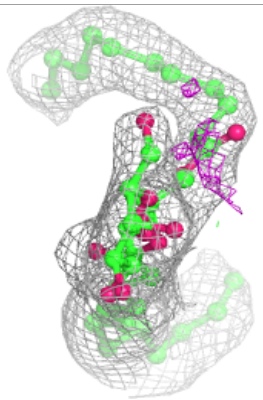


Electron density around LMG A1 410:

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

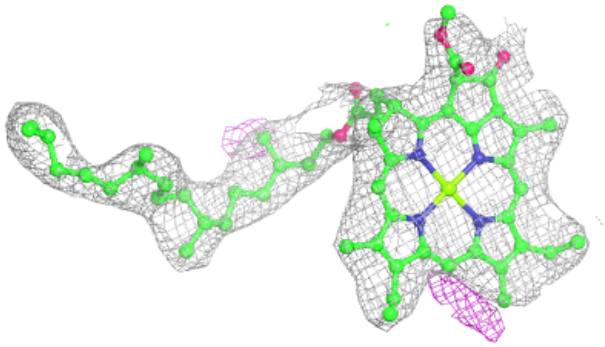


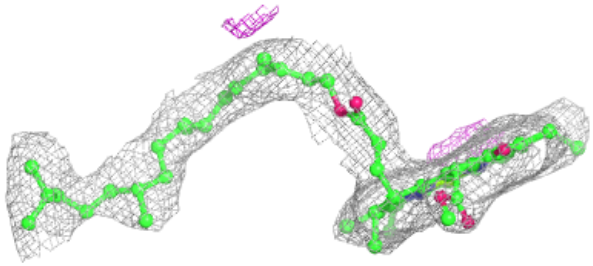


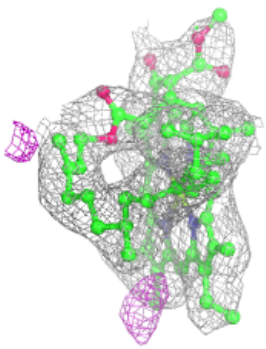


Electron density around CLA a2 405:

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

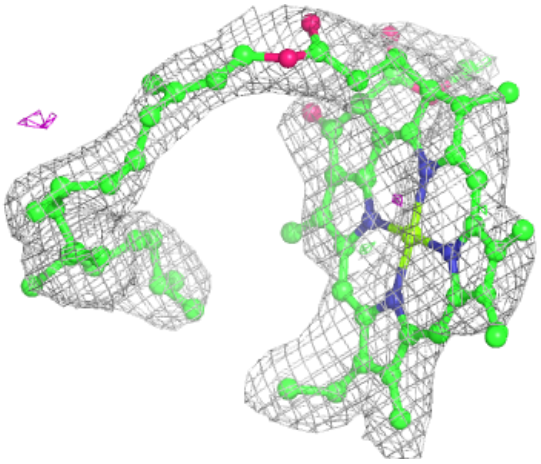


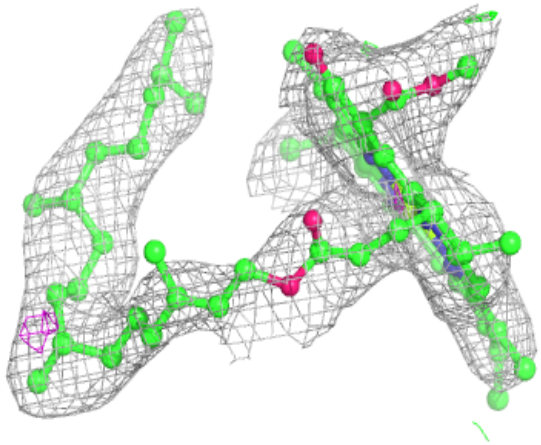


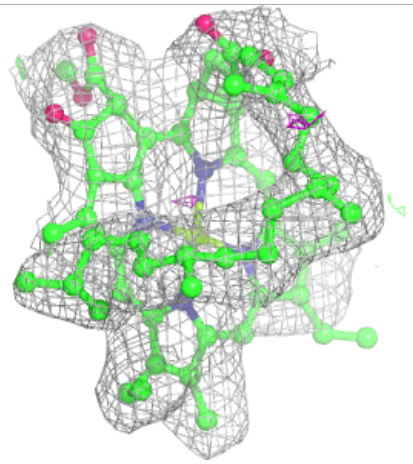


Electron density around CLA c1 505:

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

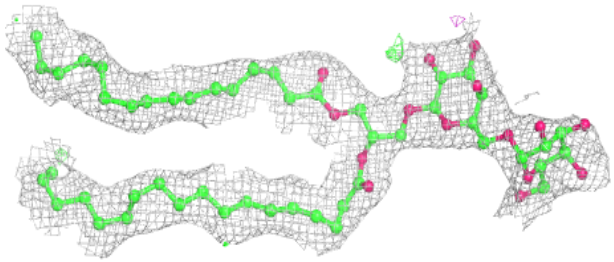


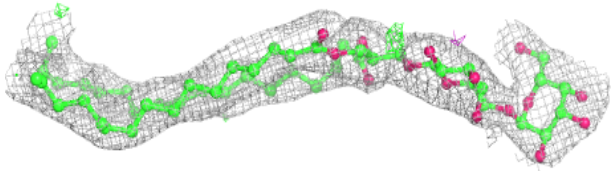


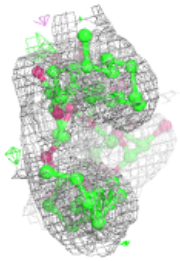


Electron density around DGD C1 517:

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

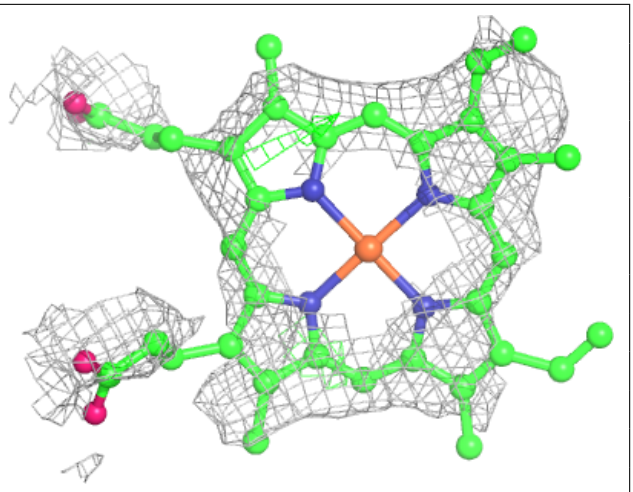


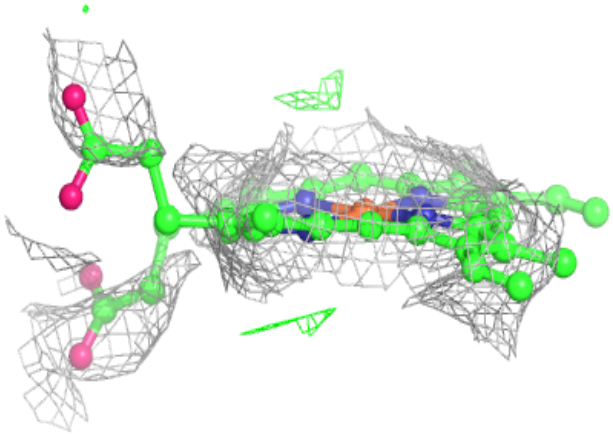


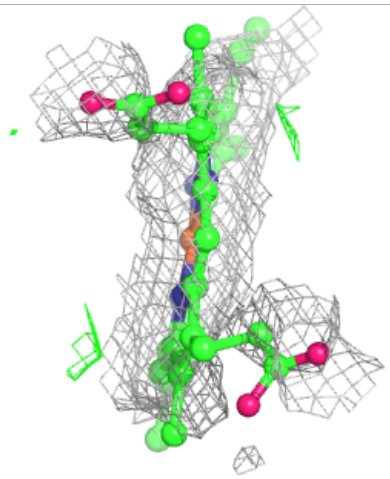


Electron density around HEM E2 101:

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

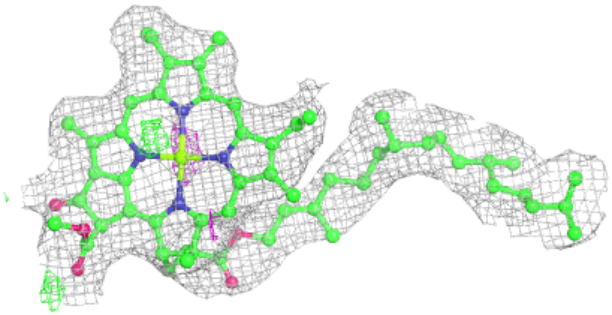


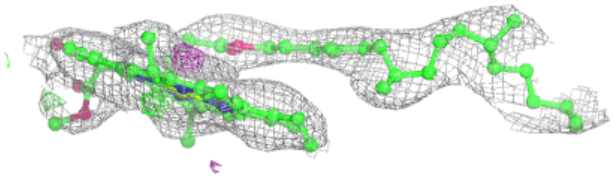


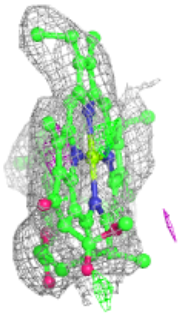


Electron density around CLA B1 606:

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

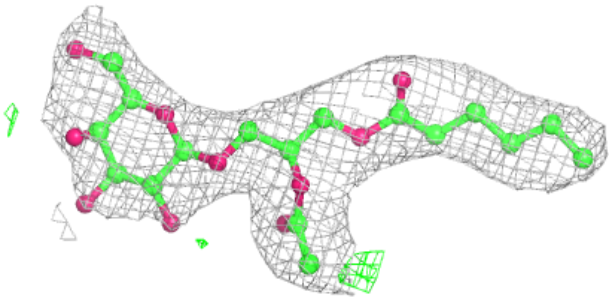


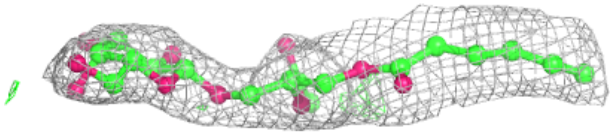


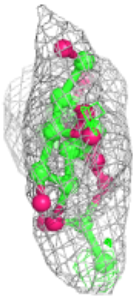


Electron density around LMG d2 407:

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

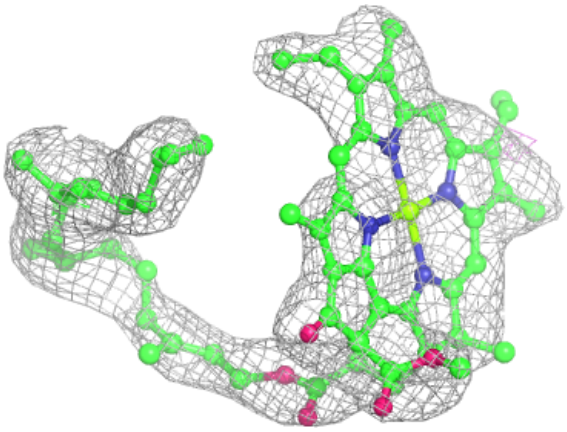


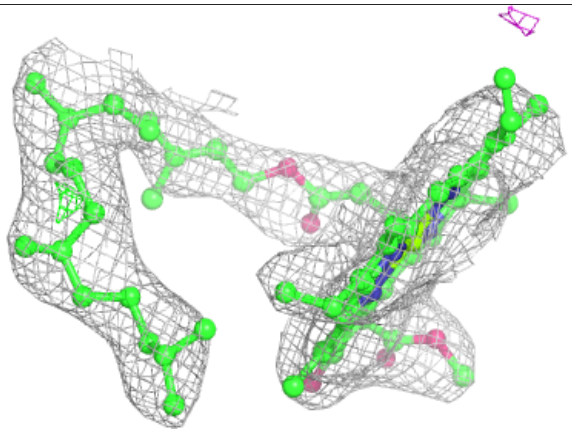


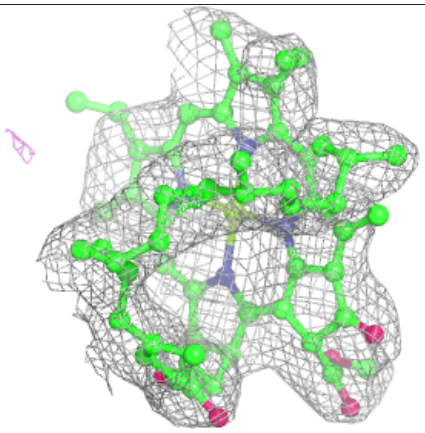


Electron density around CLA c2 504:

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

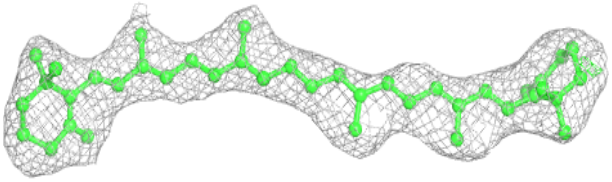


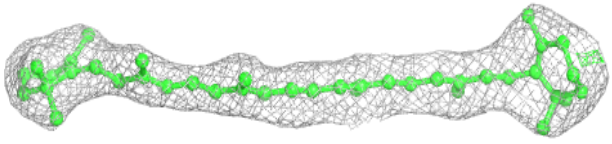


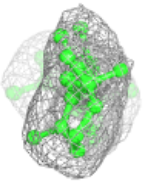


Electron density around BCR b2 601:

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

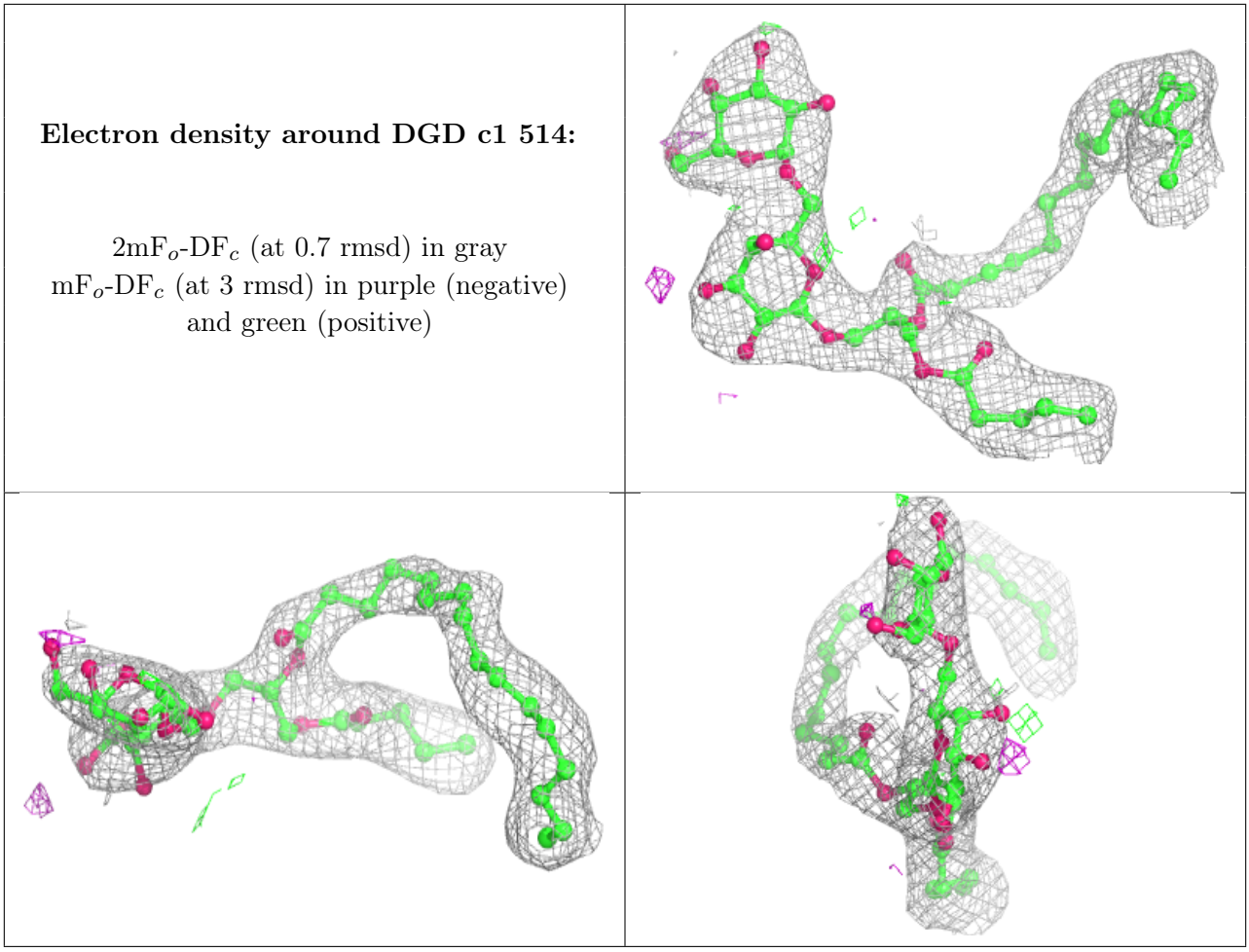






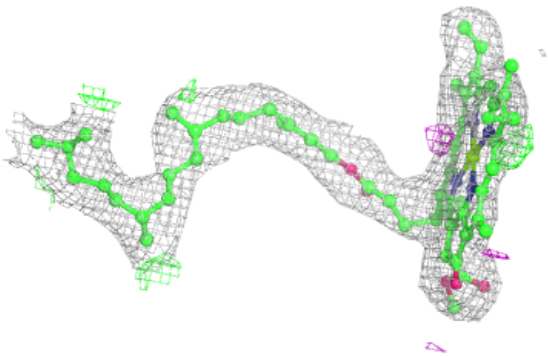
Electron density around DGD c1 514:

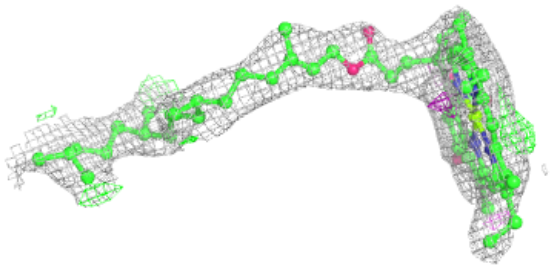
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

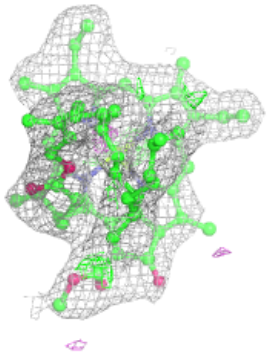


Electron density around CLA b1 609:

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

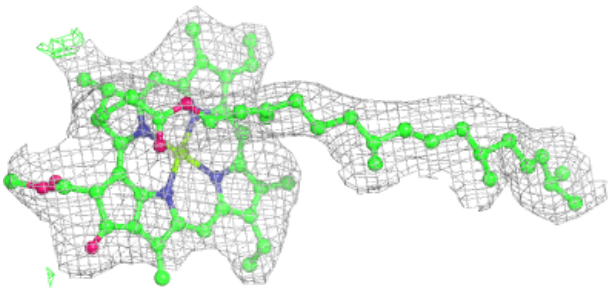


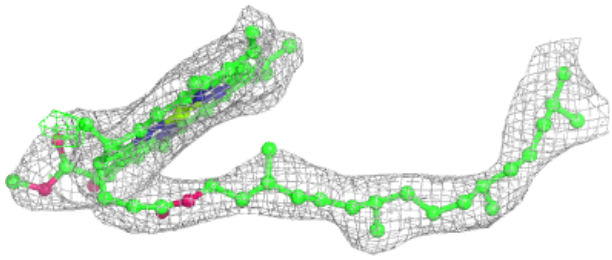


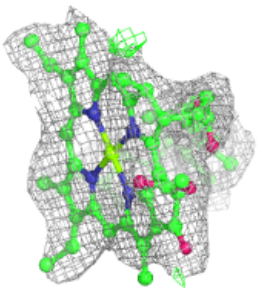


Electron density around CLA b2 624:

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

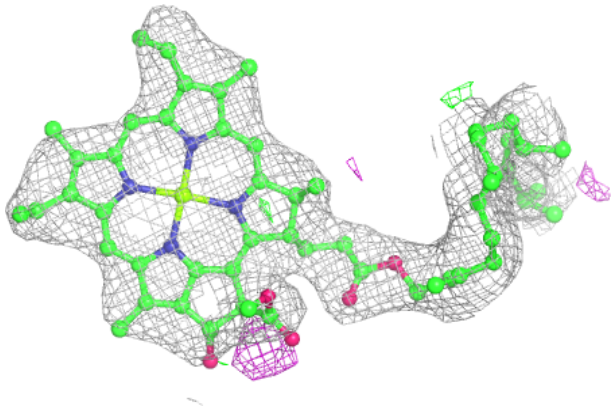


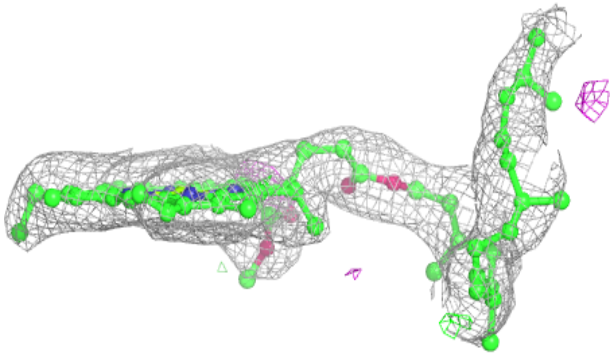


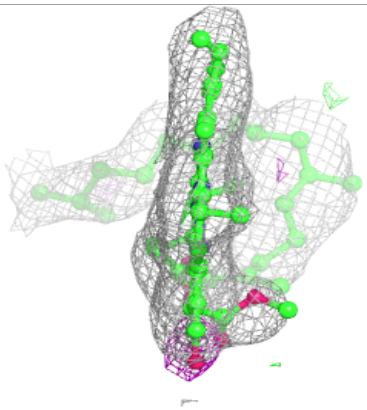


Electron density around CLA b1 619:

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

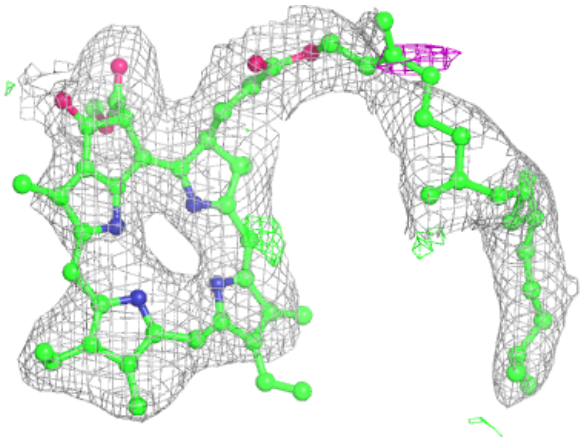


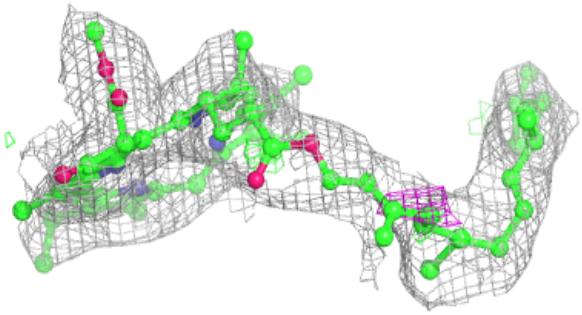


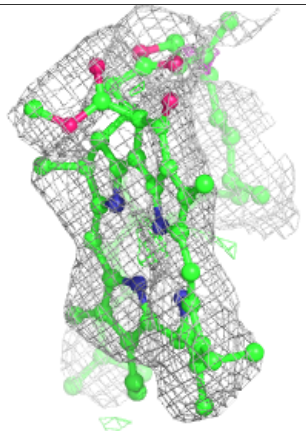


Electron density around PHO D2 407:

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

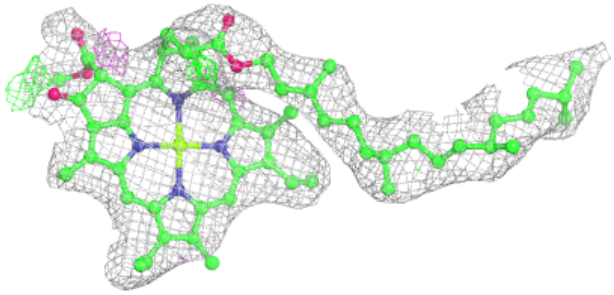


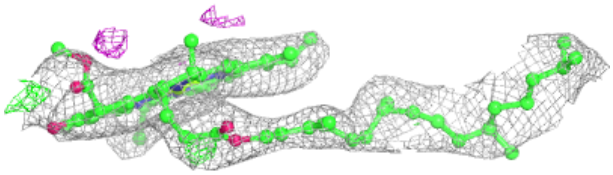


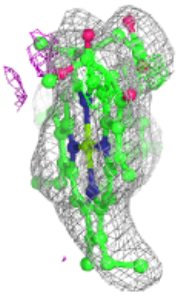


Electron density around CLA b2 606:

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

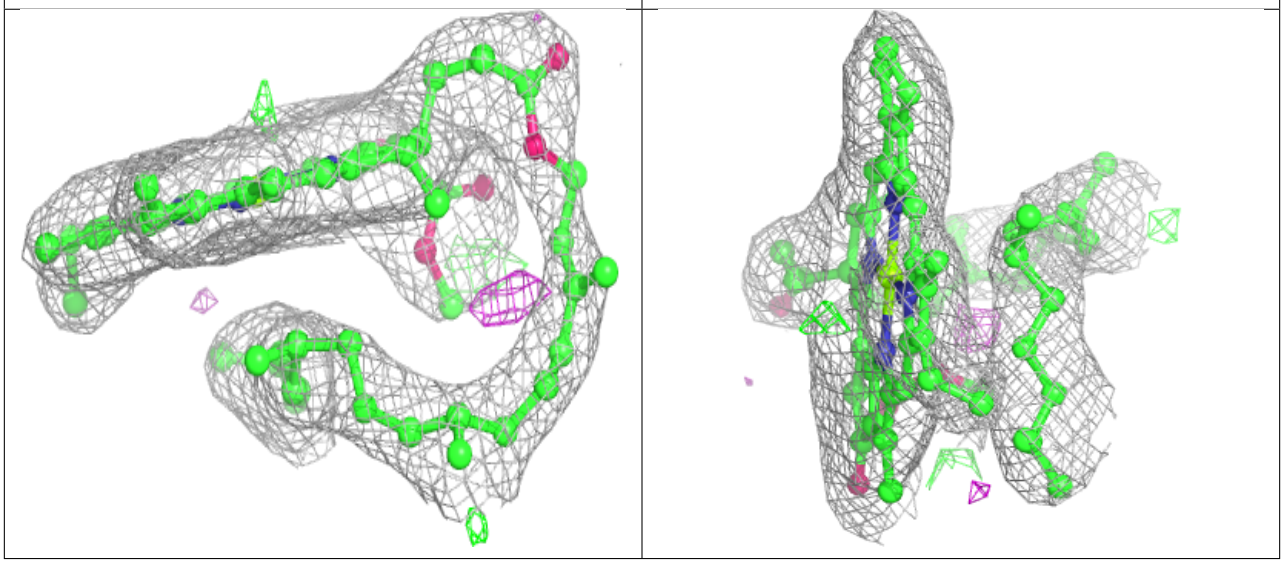






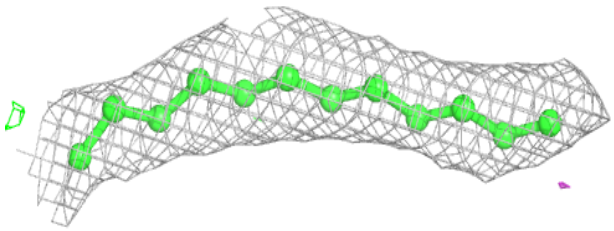
Electron density around CLA C1 511:

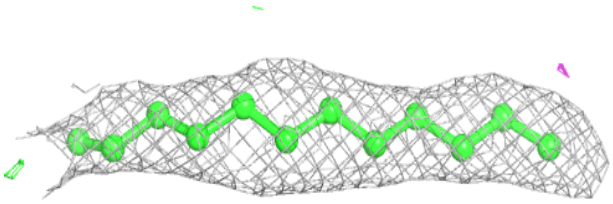
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

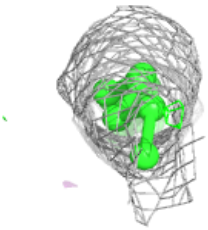


Electron density around LMT L1 102:

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

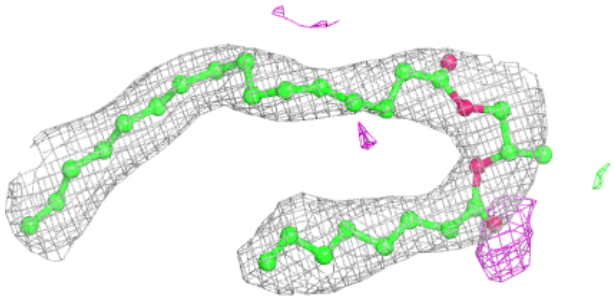


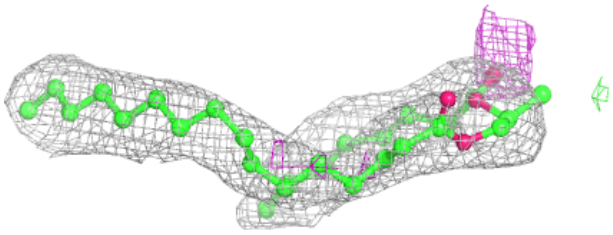


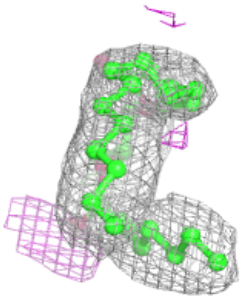


Electron density around LMG M1 101:

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

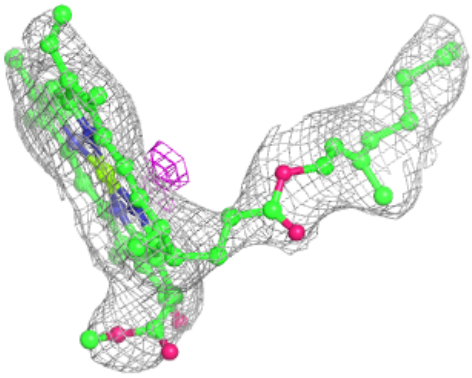


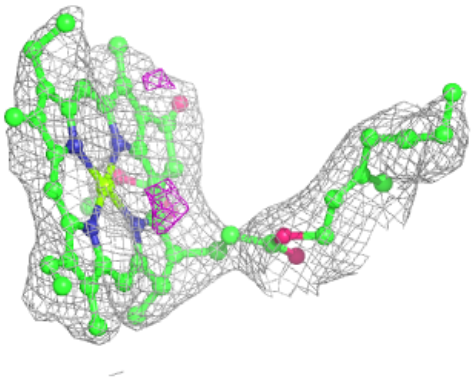


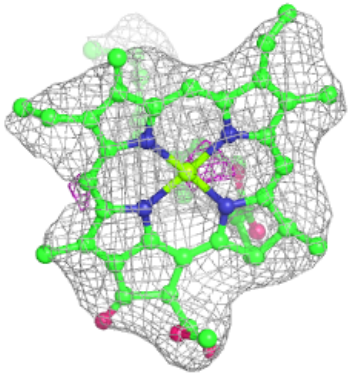


Electron density around CLA c2 507:

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

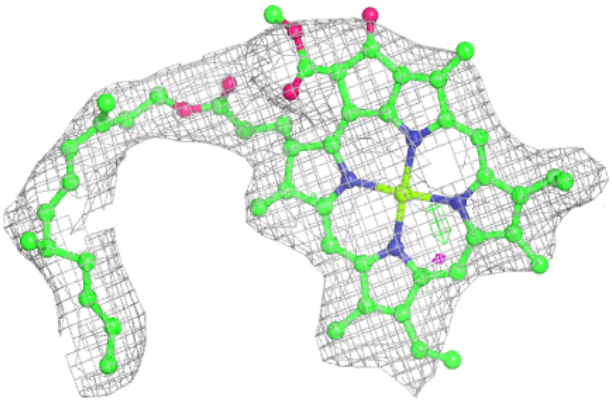


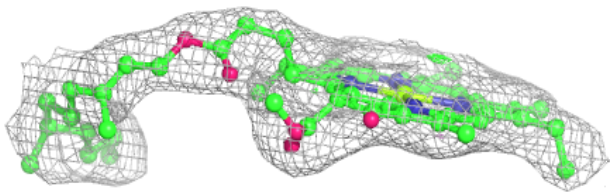


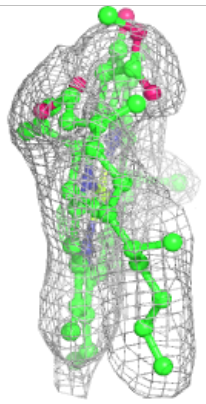


Electron density around CLA B1 618:

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

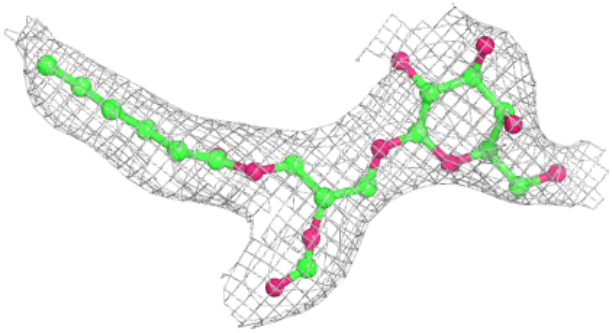


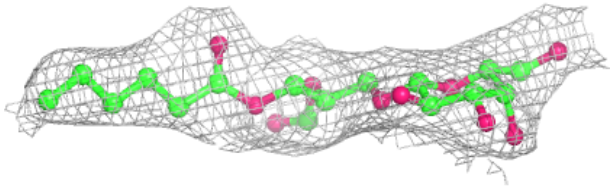


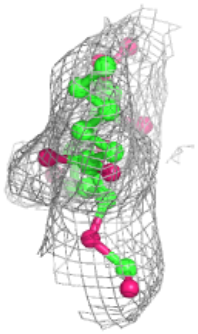


Electron density around LMG c2 519:

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

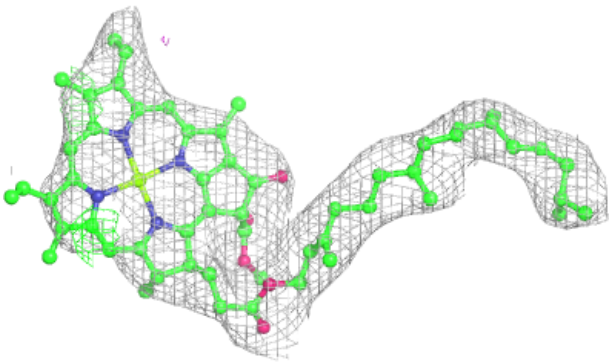


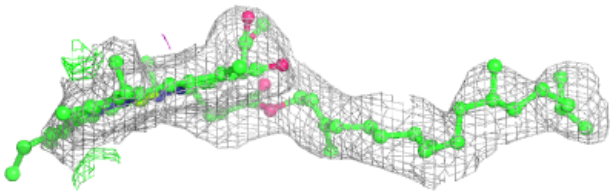


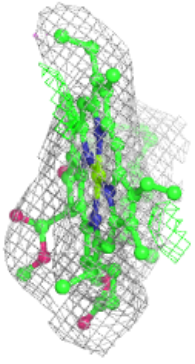


Electron density around CLA b2 613:

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

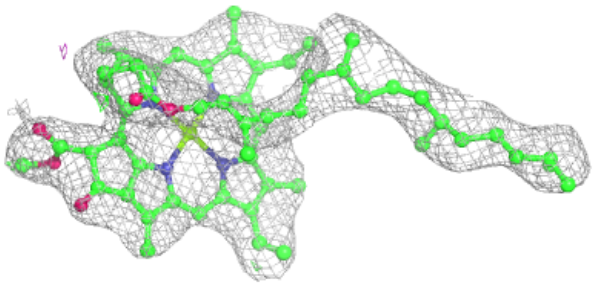


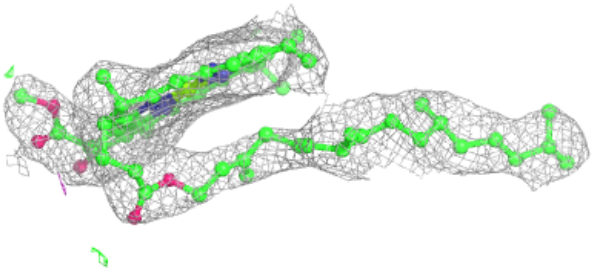


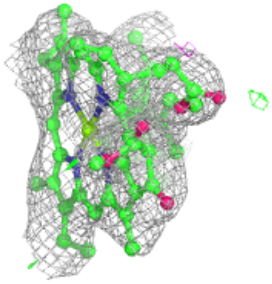


Electron density around CLA c1 507:

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

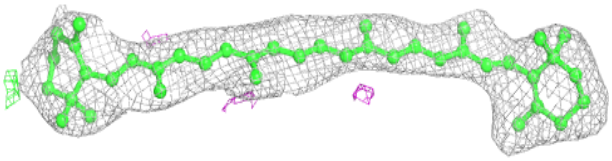


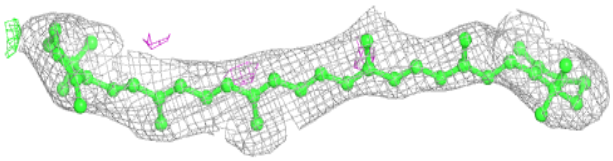


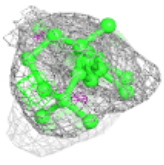


Electron density around BCR B2 603:

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

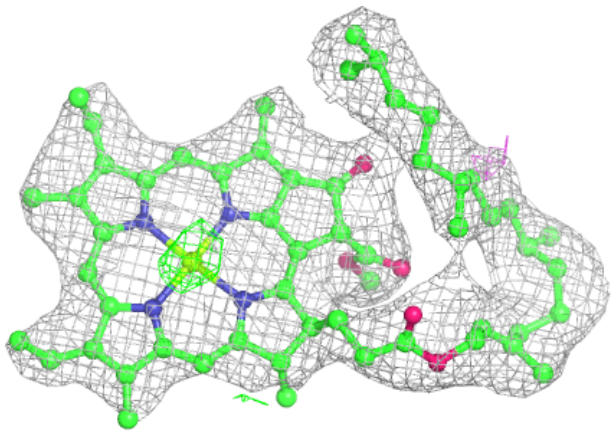


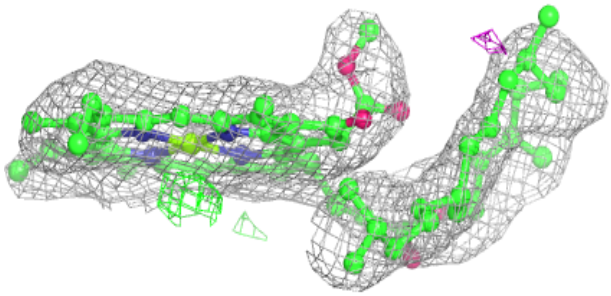


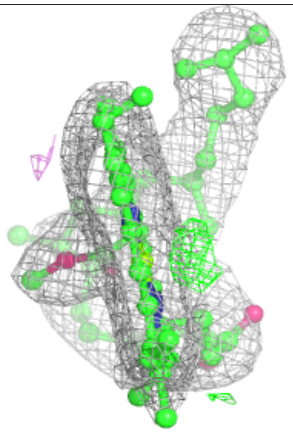


Electron density around CLA B2 612:

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

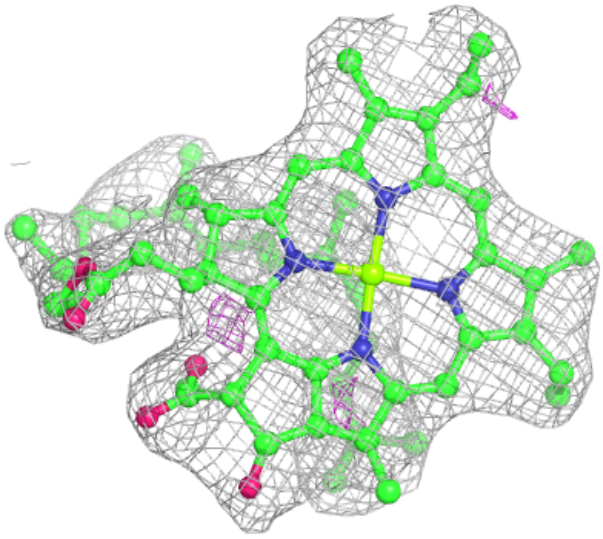


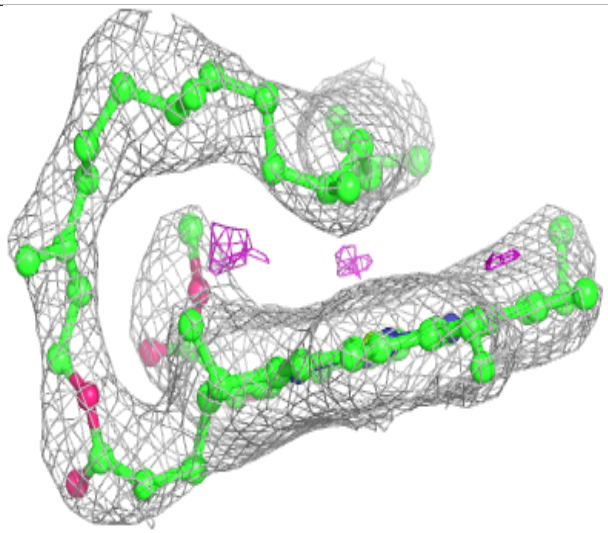


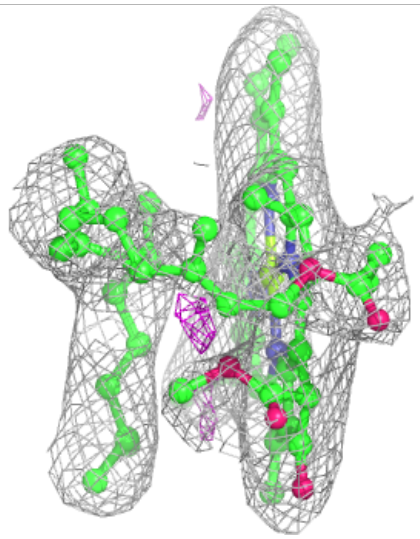


Electron density around CLA c2 511:

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

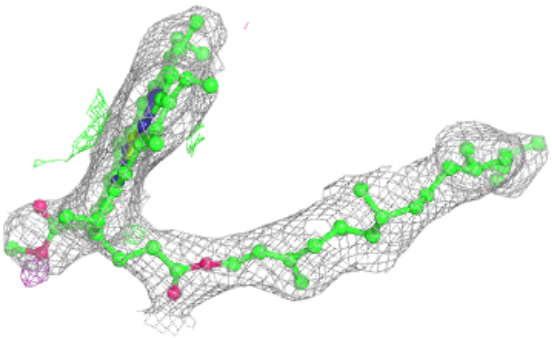


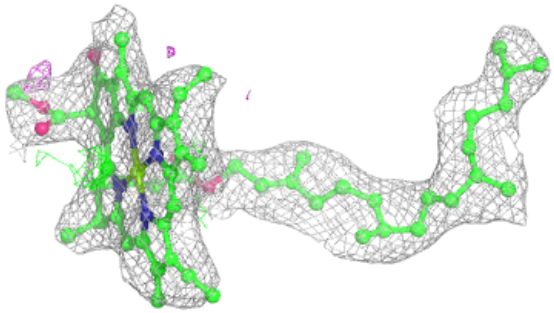


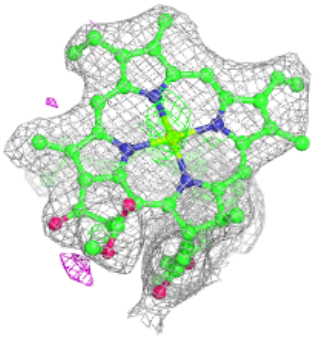


Electron density around CLA B2 619:

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

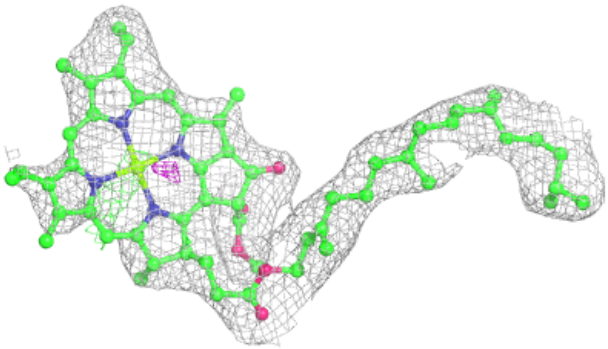


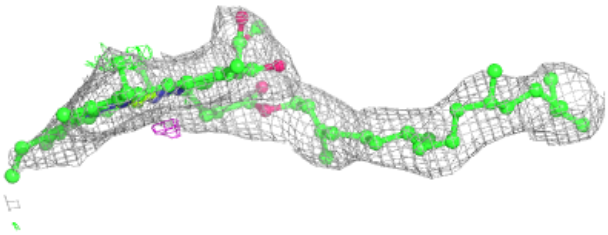


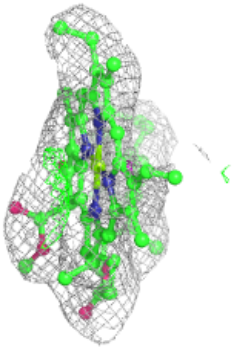


Electron density around CLA B1 605:

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

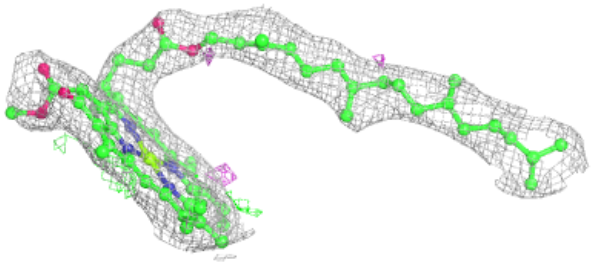


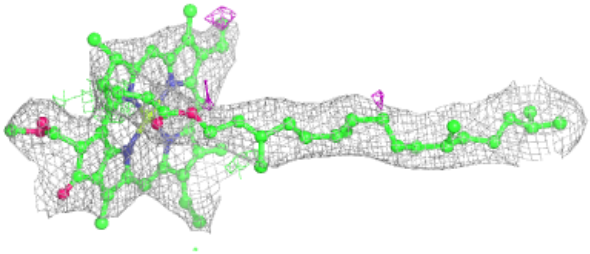


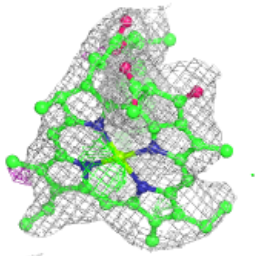


Electron density around CLA C1 505:

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

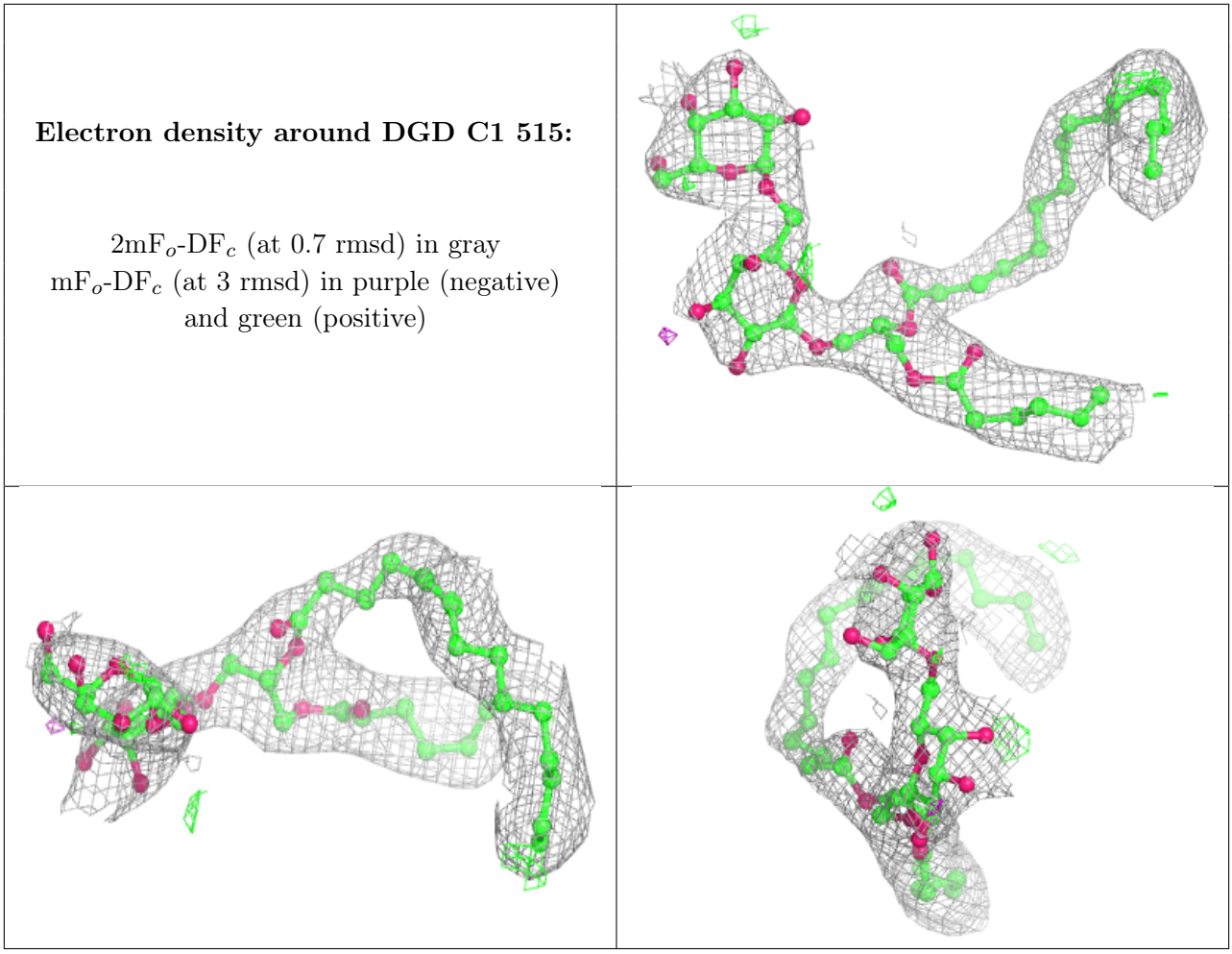






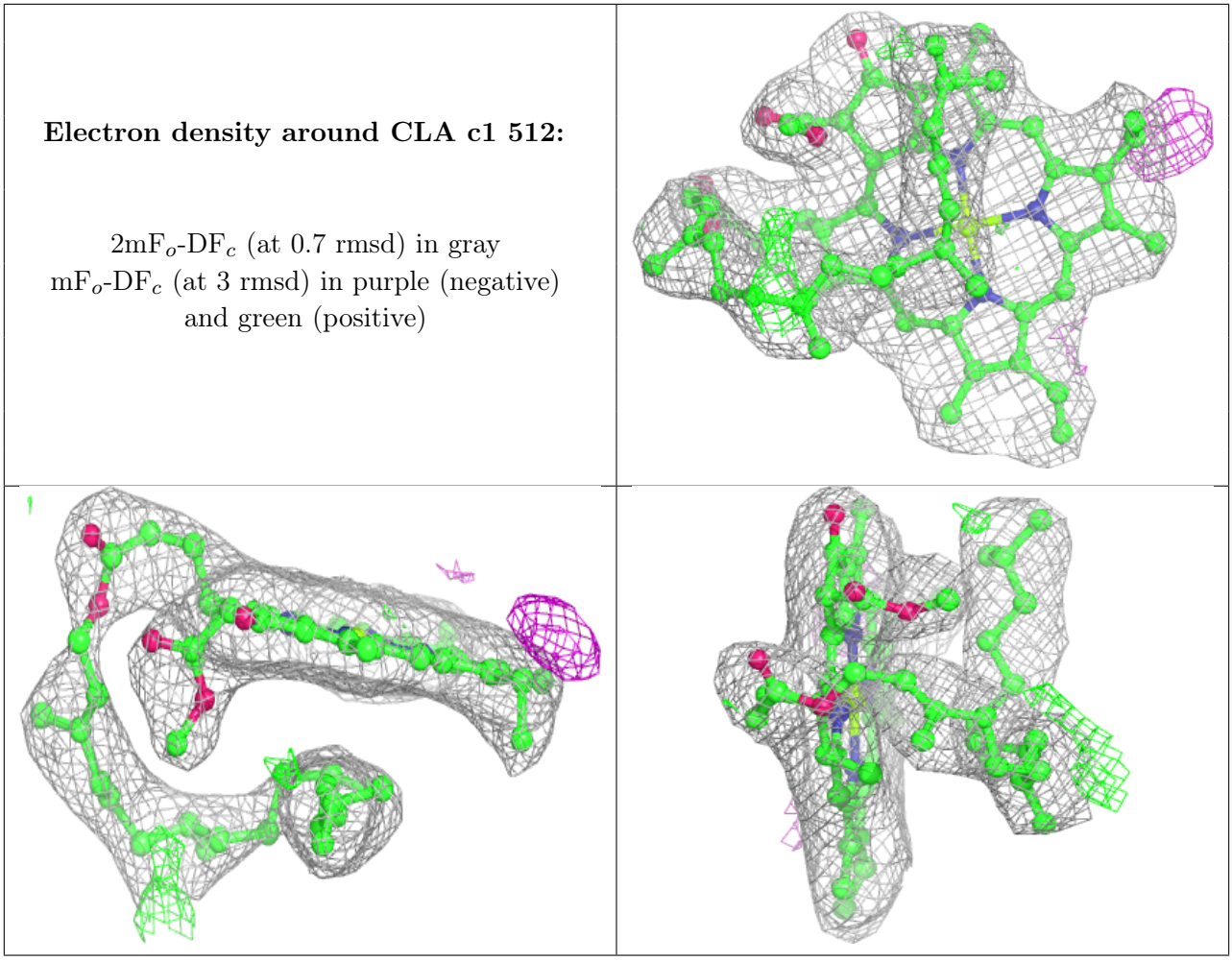
Electron density around DGD C1 515:

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



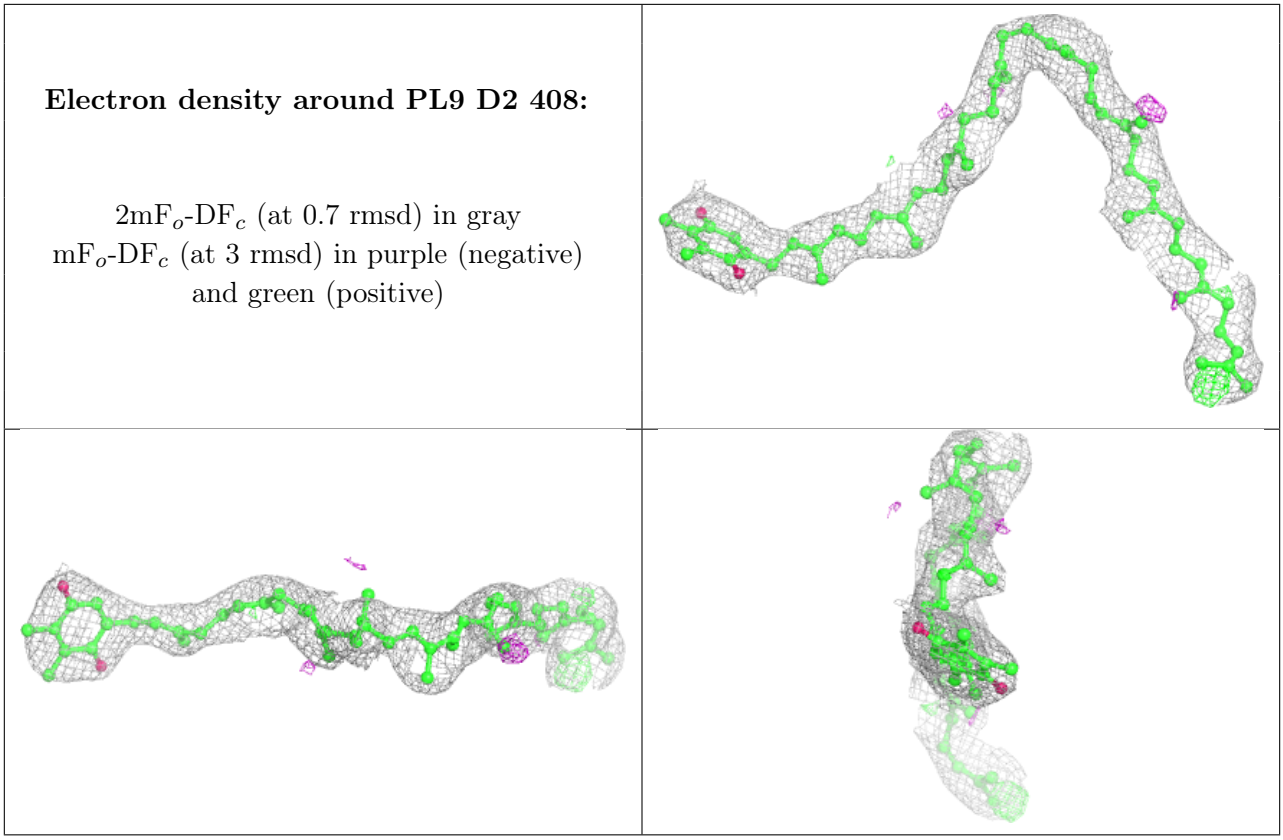
Electron density around CLA c1 512:

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



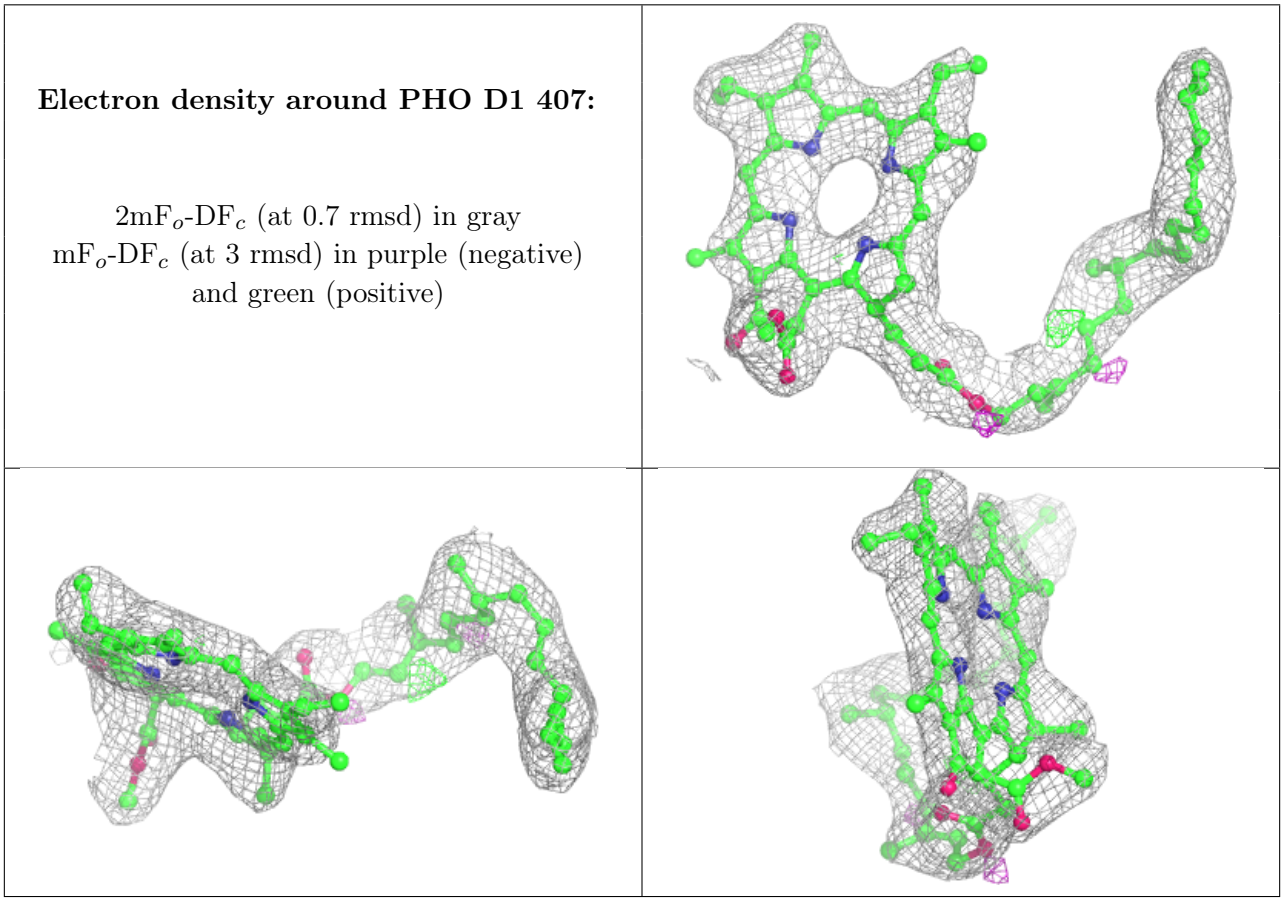
Electron density around PL9 D2 408:

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



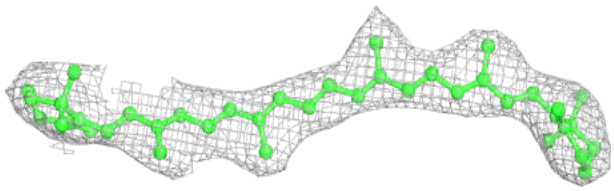
Electron density around PHO D1 407:

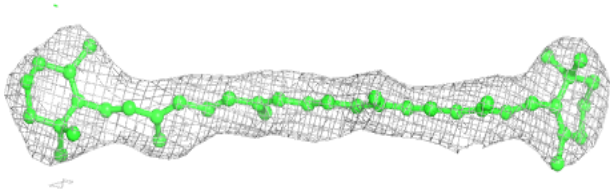
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

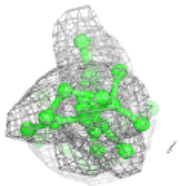


Electron density around BCR C1 501:

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

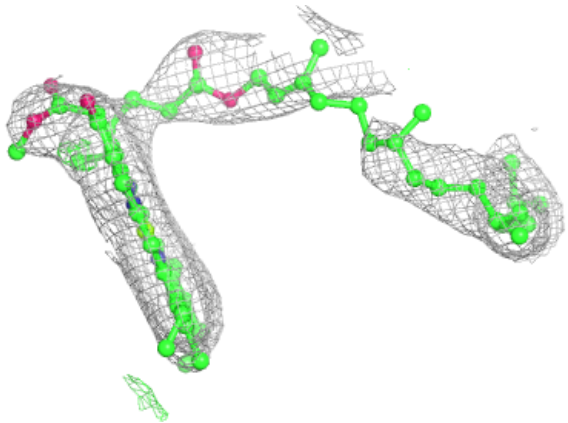


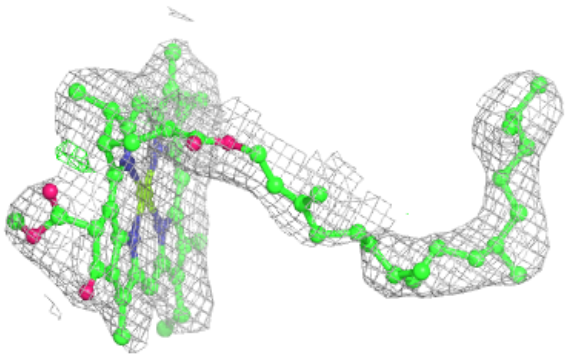


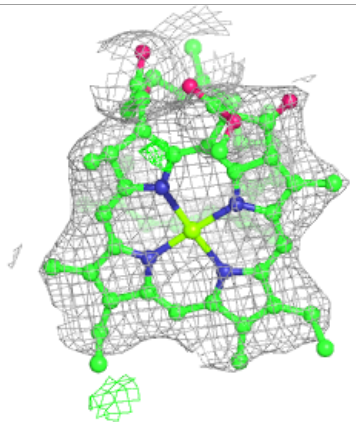


Electron density around CLA C1 507:

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

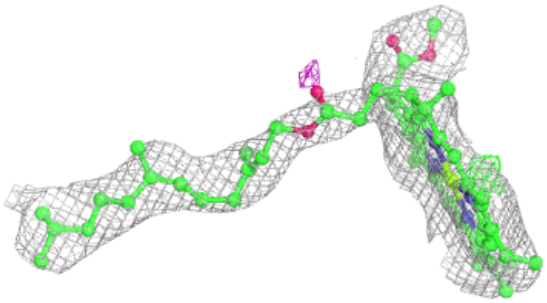


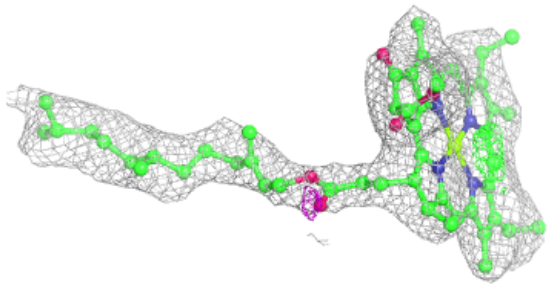


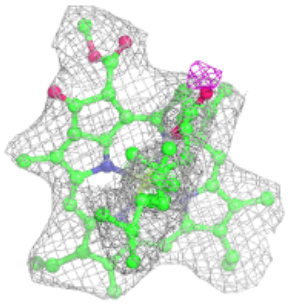


Electron density around CLA b2 616:

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

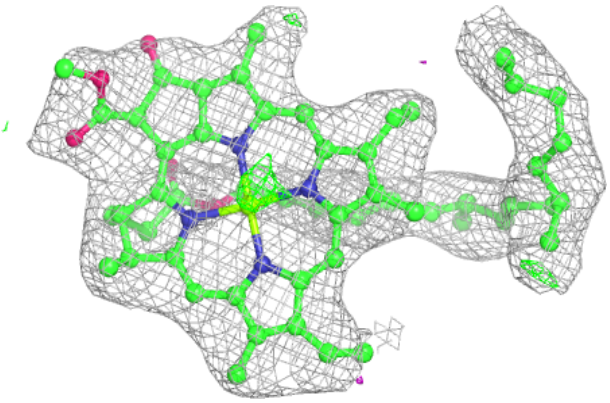


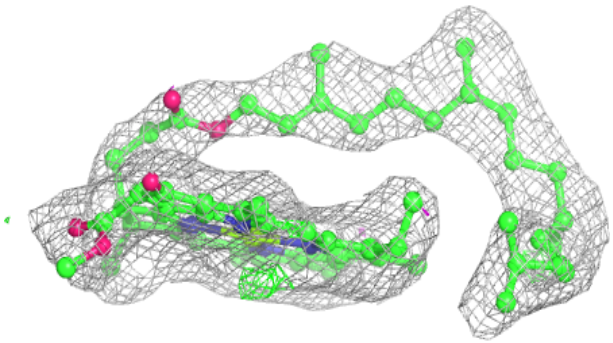


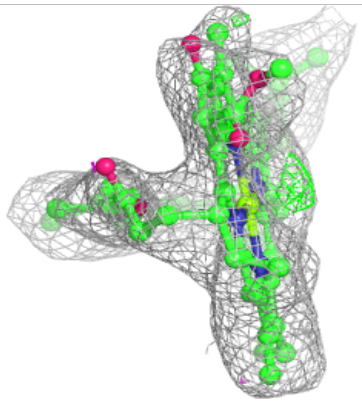


Electron density around CLA b1 616:

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

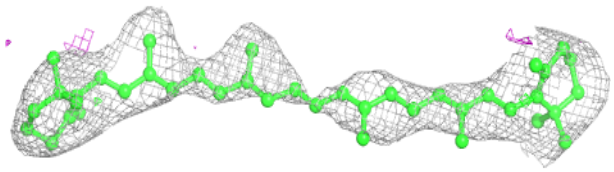


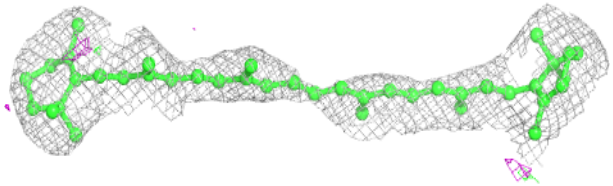


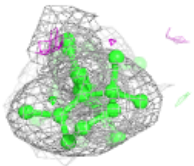


Electron density around BCR A2 401:

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

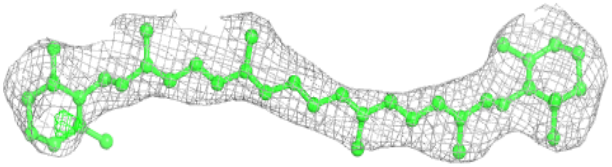


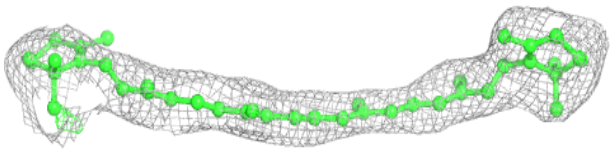


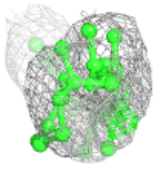


Electron density around BCR d1 405:

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

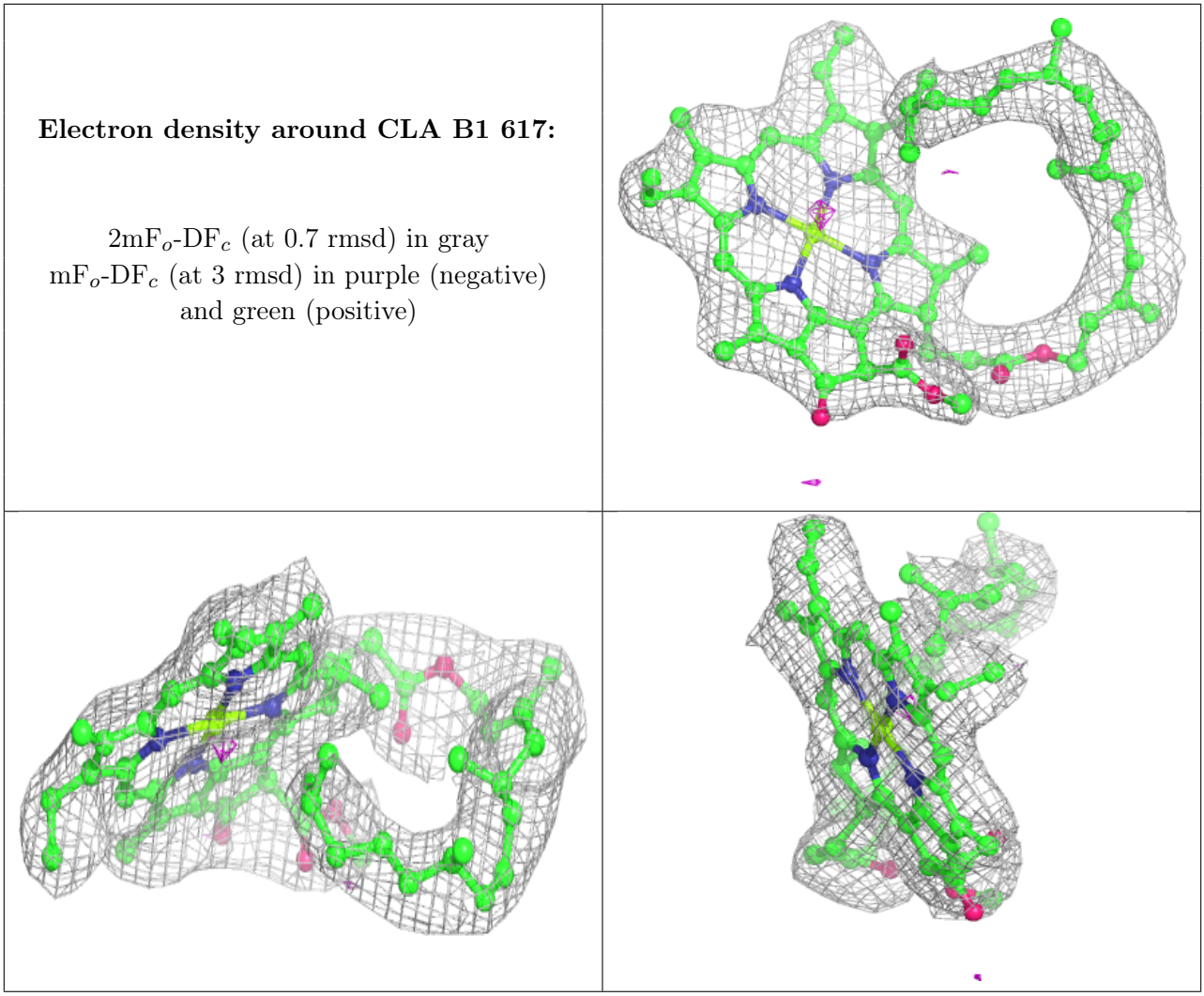






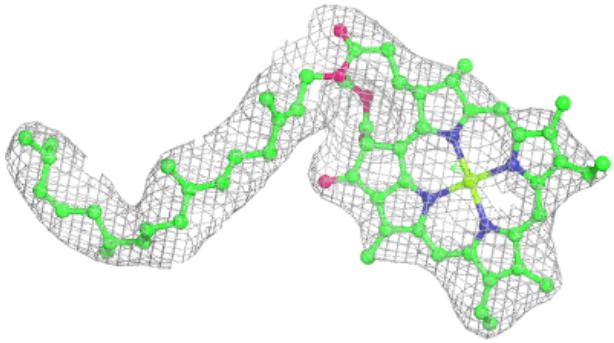
Electron density around CLA B1 617:

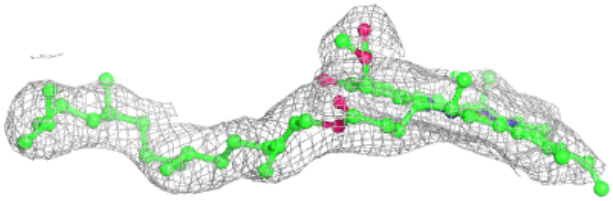
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

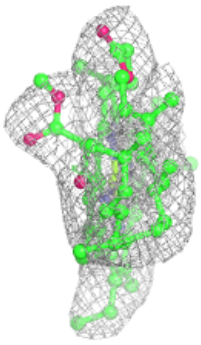


Electron density around CLA B2 605:

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

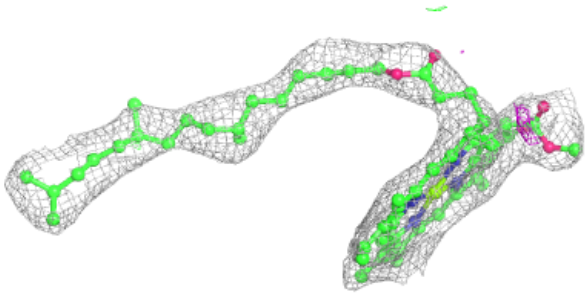


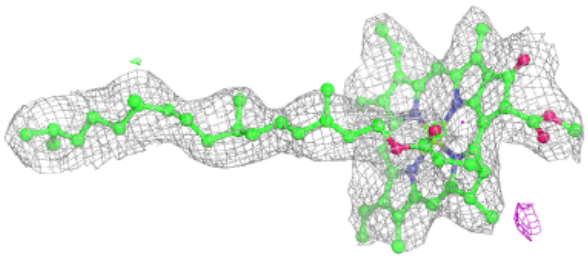


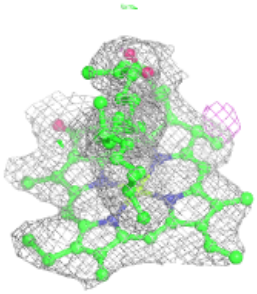


Electron density around CLA c1 506:

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

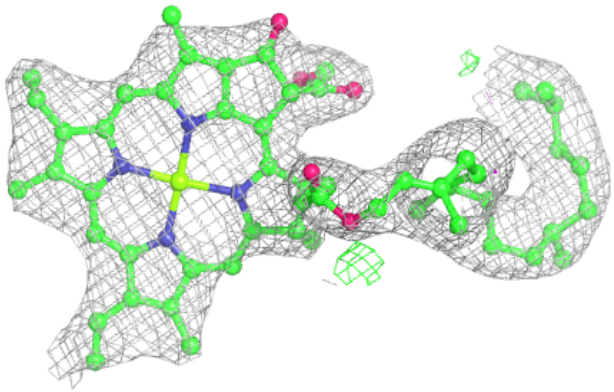


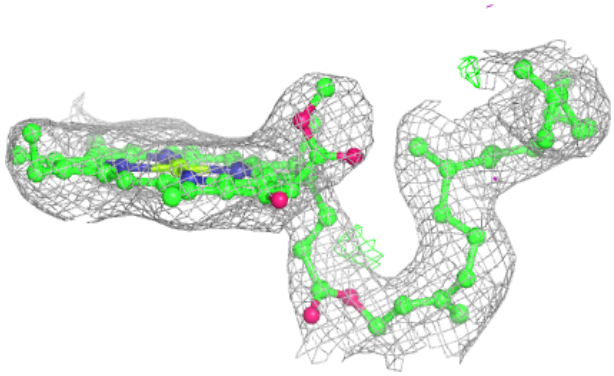


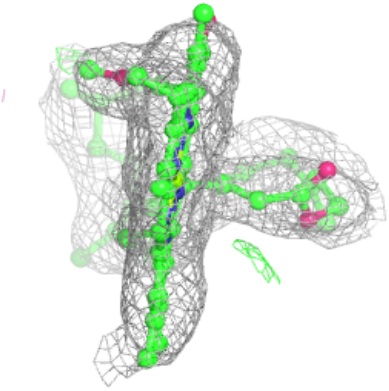


Electron density around CLA B2 614:

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

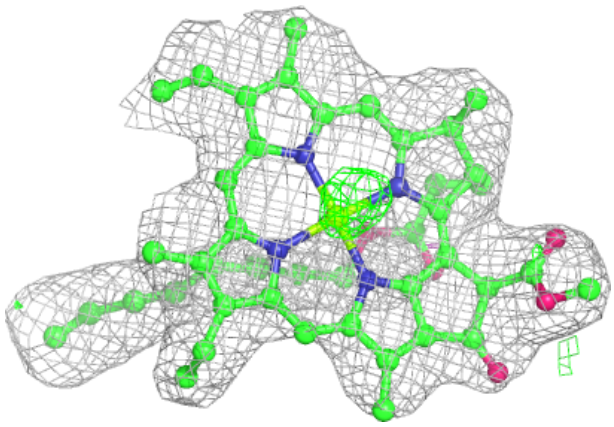


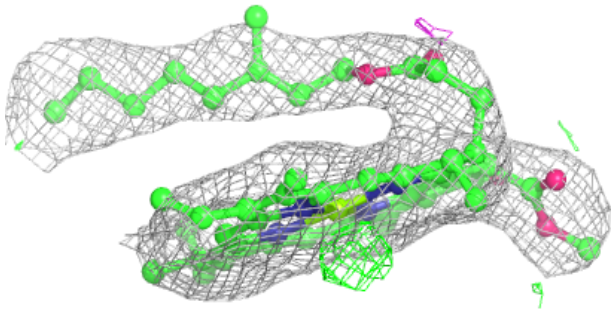


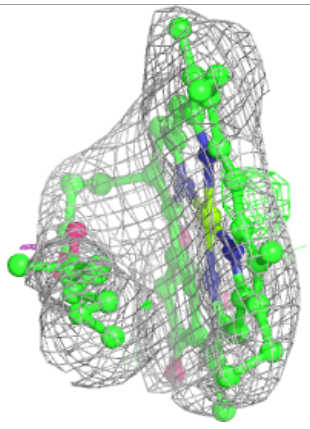


Electron density around CLA B2 616:

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

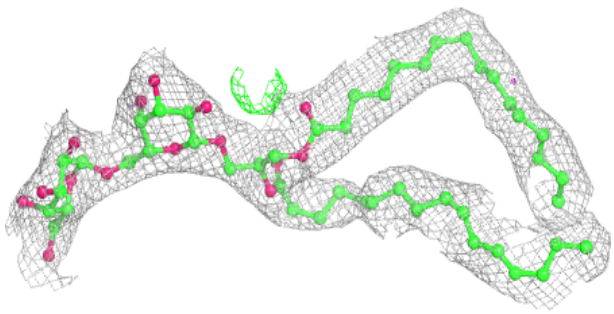


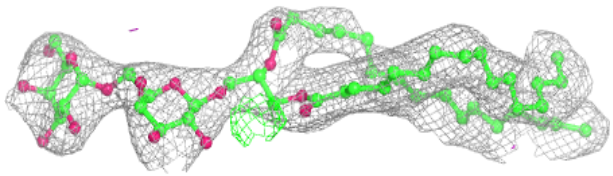


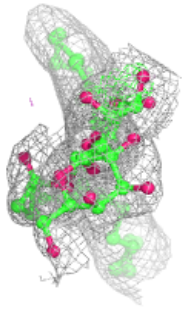


Electron density around DGD c1 518:

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

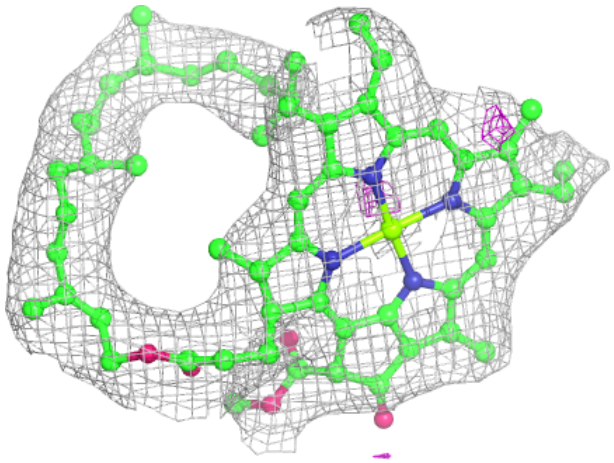


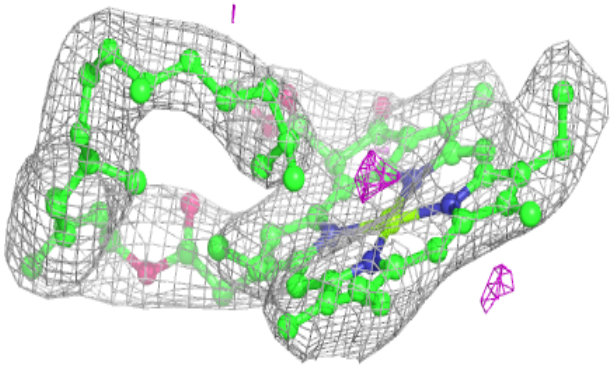




Electron density around CLA B2 617:

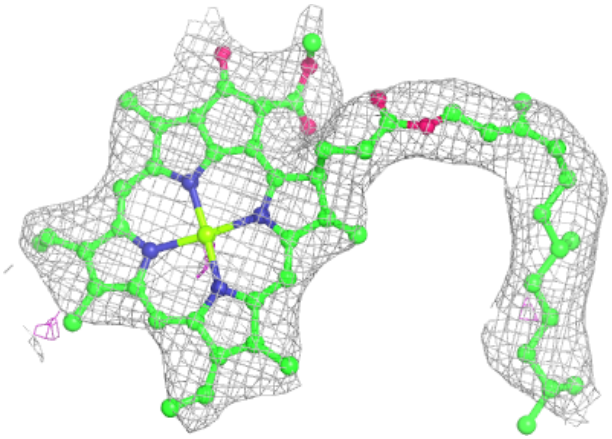
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

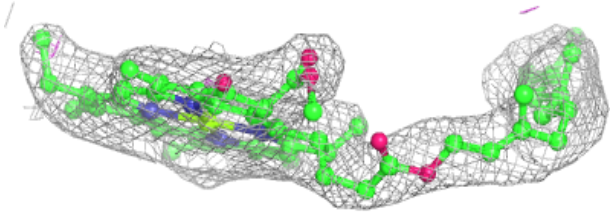


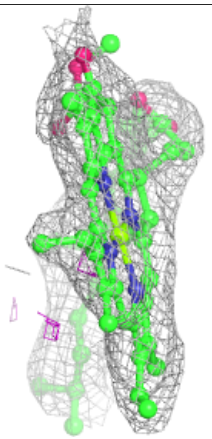


Electron density around CLA B2 618:

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

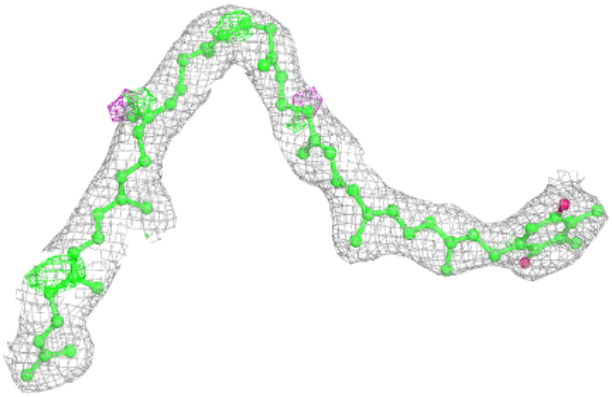


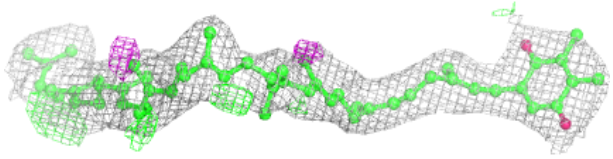




Electron density around PL9 d1 409:

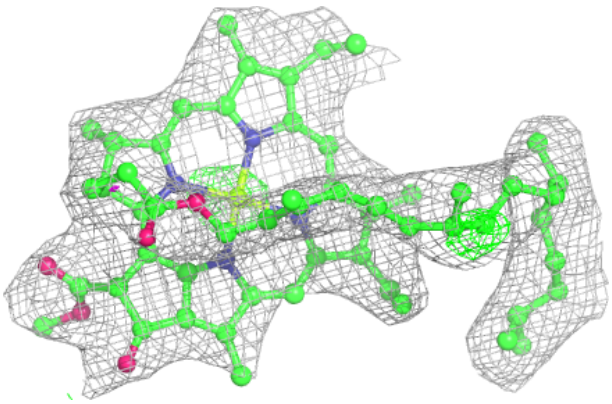
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

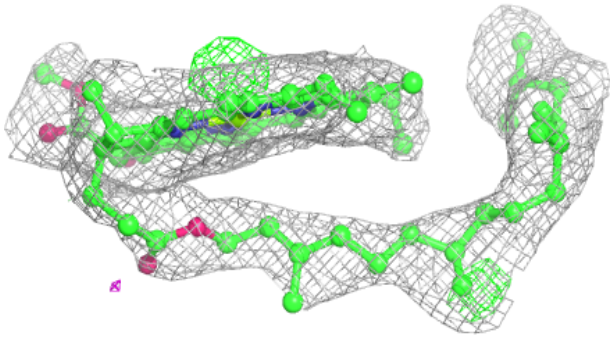


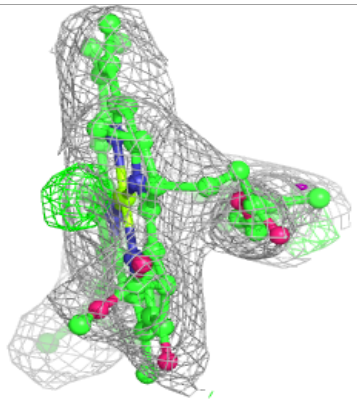


Electron density around CLA b2 617:

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

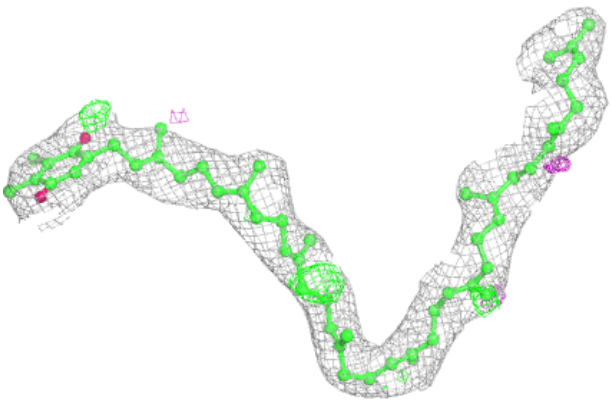


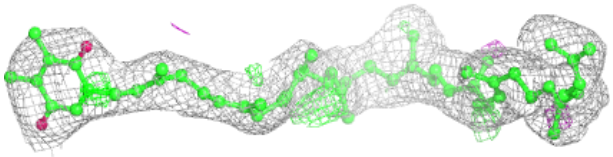




Electron density around PL9 d2 409:

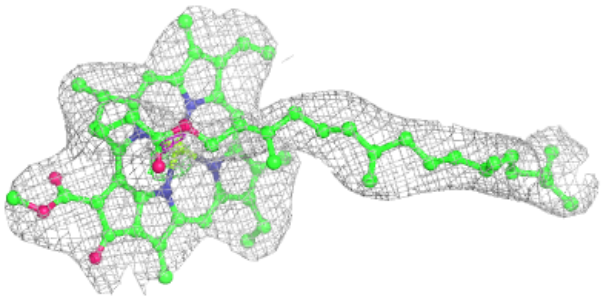
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

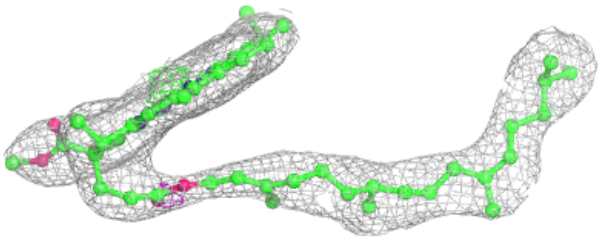


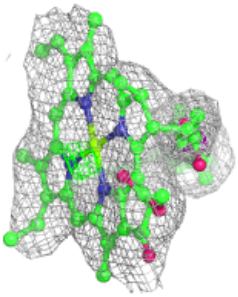


Electron density around CLA B1 610:

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

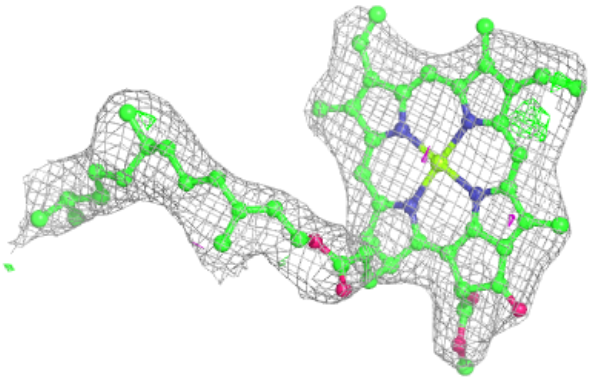


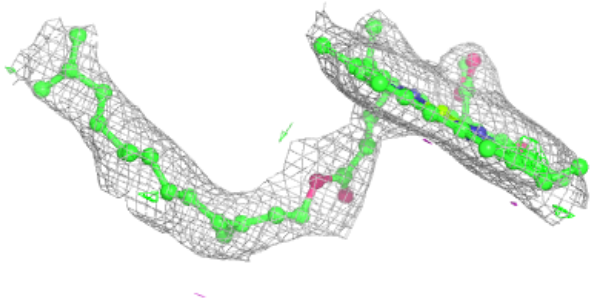


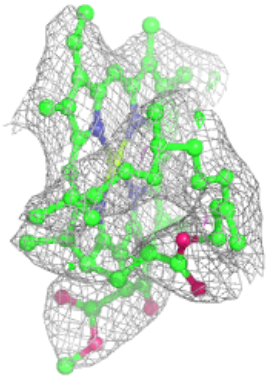


Electron density around CLA a1 404:

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

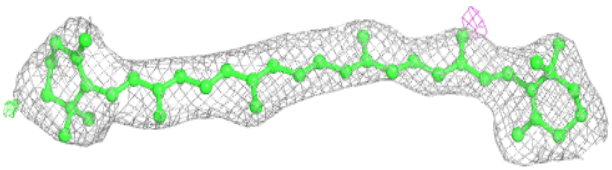


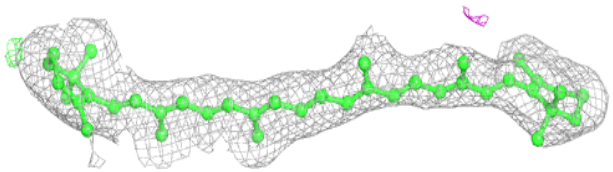


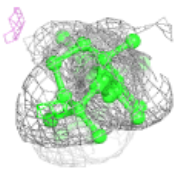


Electron density around BCR B1 603:

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

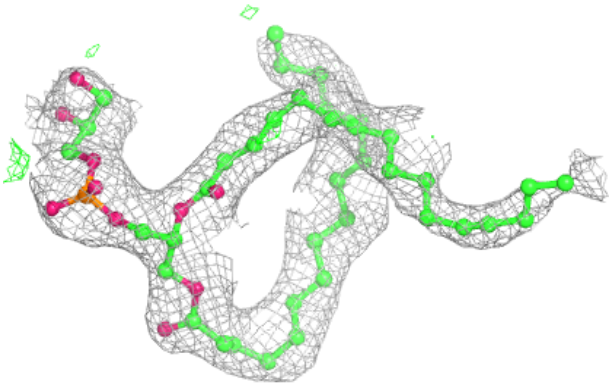


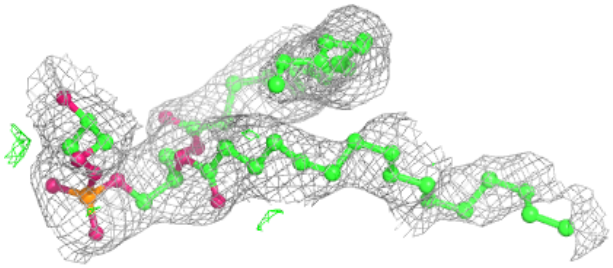


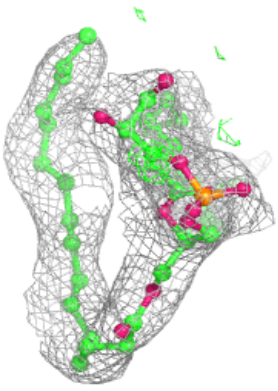


Electron density around LHG D1 404:

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

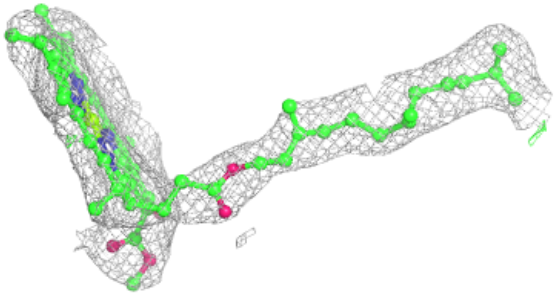


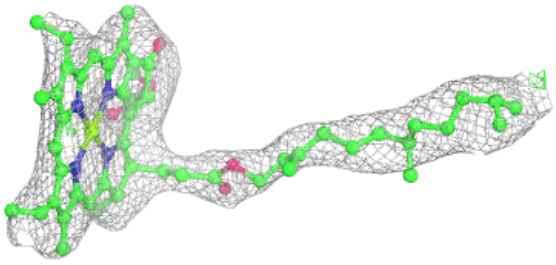


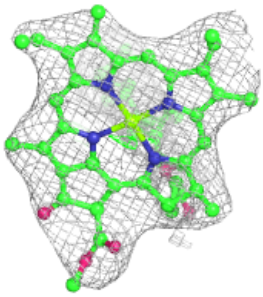


Electron density around CLA B1 607:

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

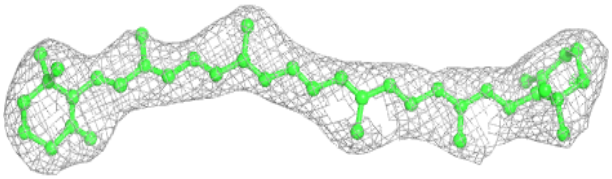


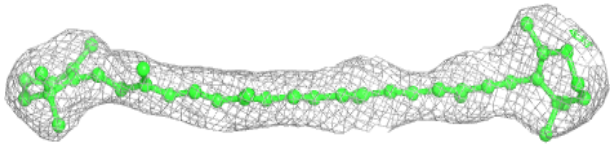


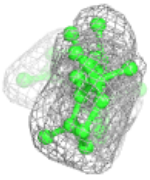


Electron density around BCR B1 601:

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

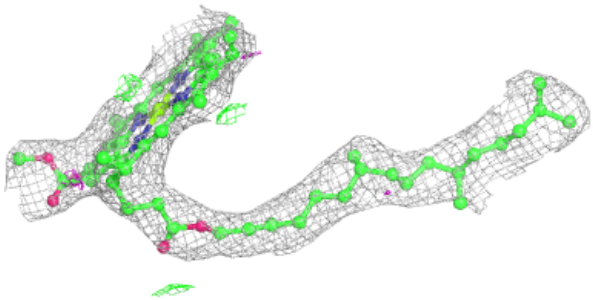


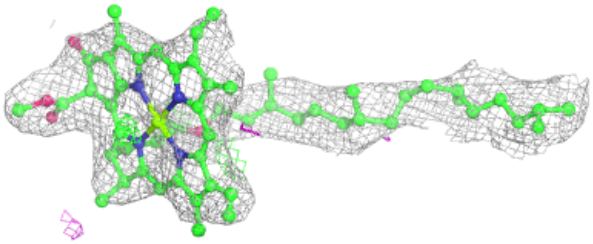


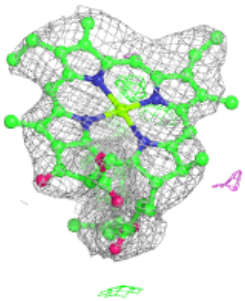


Electron density around CLA c2 505:

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

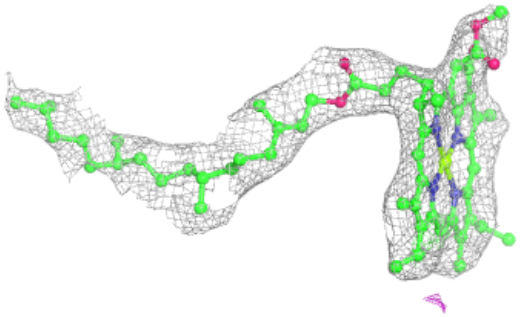


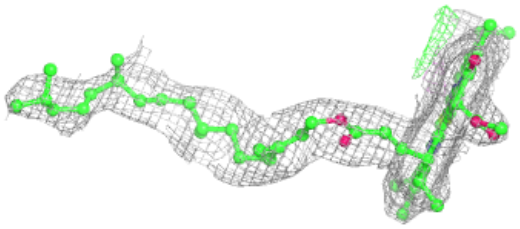


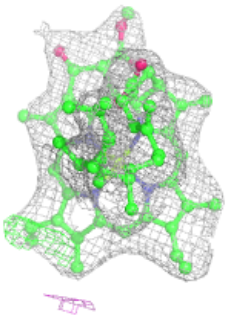


Electron density around CLA d1 406:

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

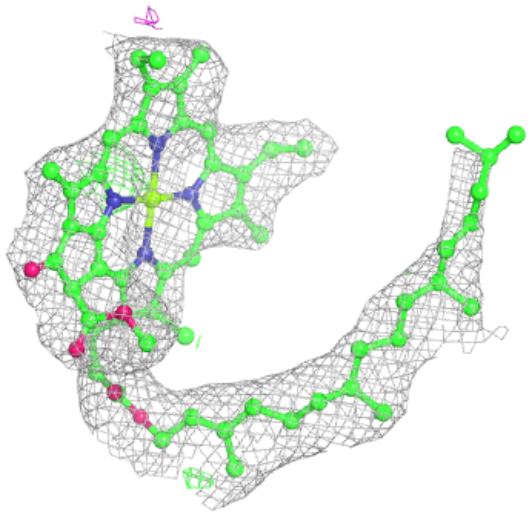


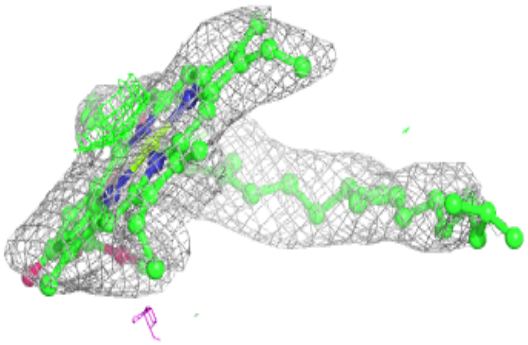


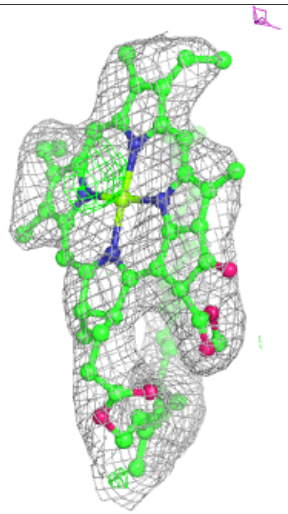


Electron density around CLA C1 508:

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

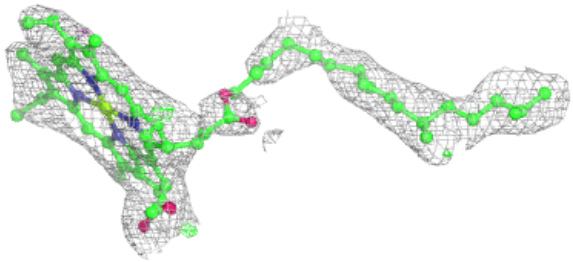


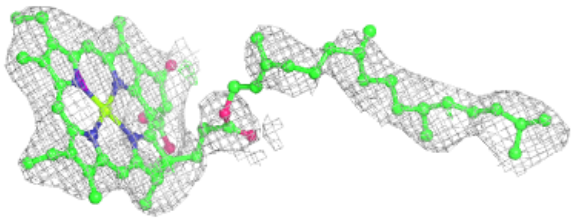


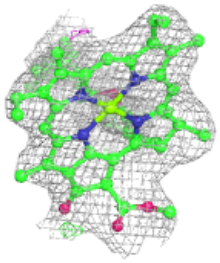


Electron density around CLA c2 503:

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

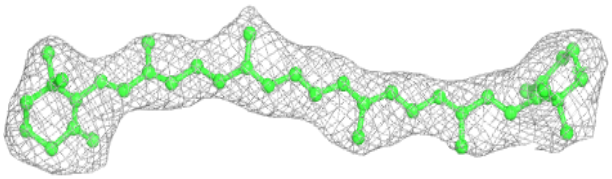


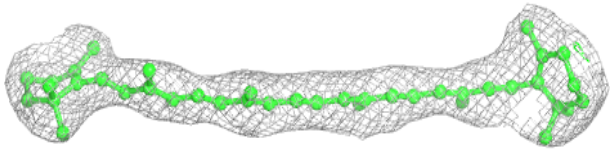


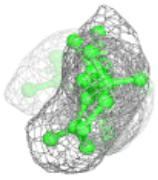


Electron density around BCR B2 601:

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

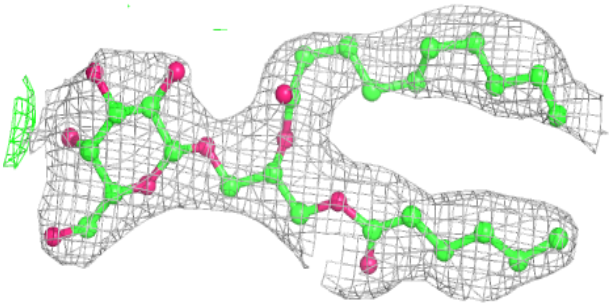


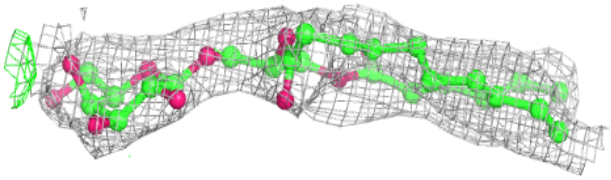


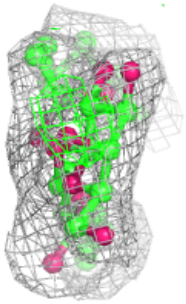


Electron density around LMG D1 406:

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

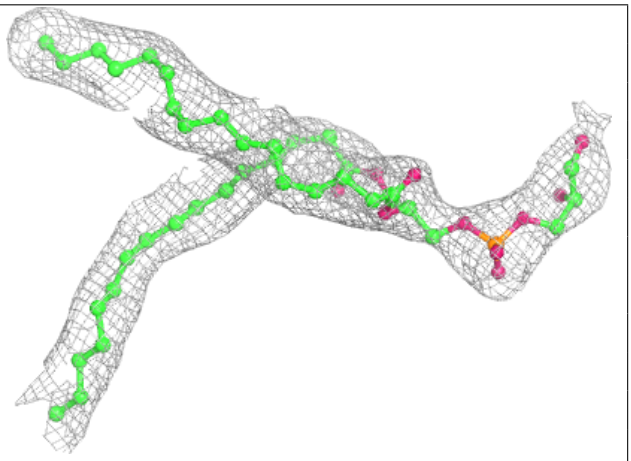


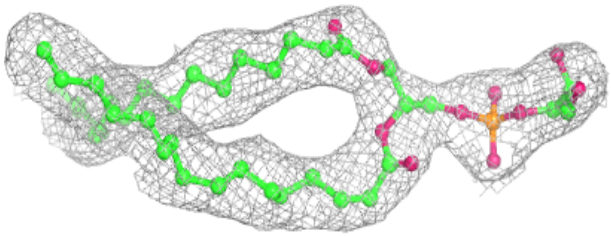


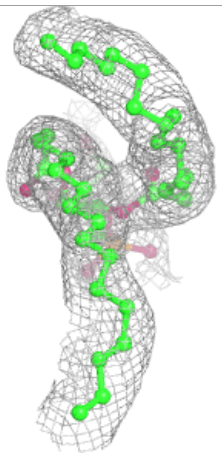


Electron density around LHG D2 405:

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

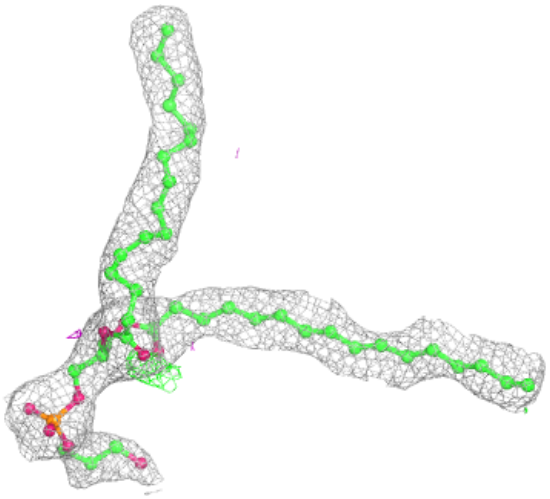


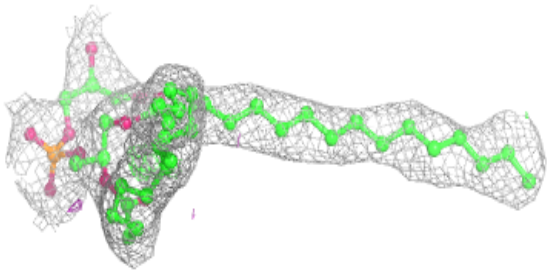


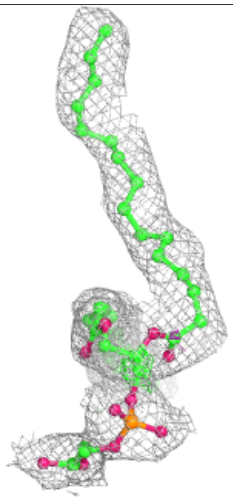


Electron density around LHG L2 101:

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

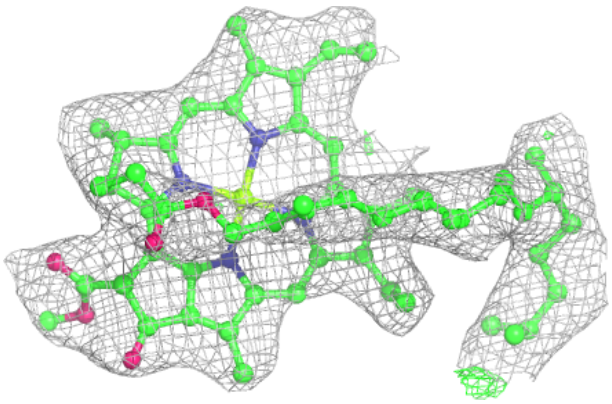


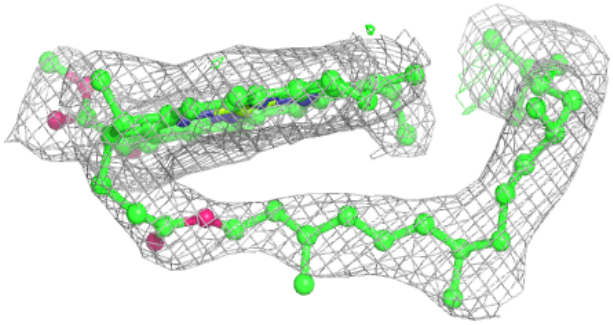


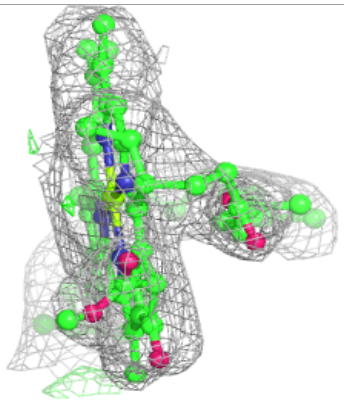


Electron density around CLA B1 616:

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

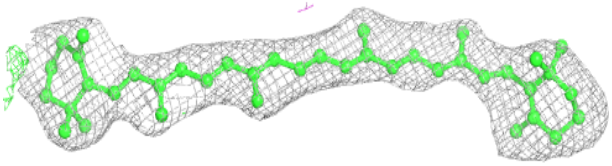


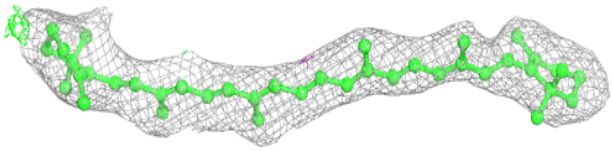


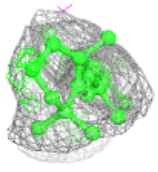


Electron density around BCR b1 603:

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

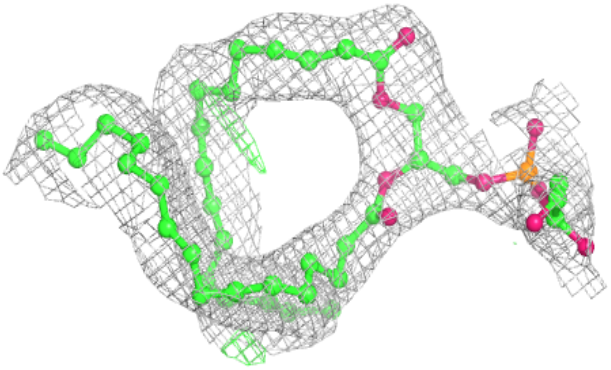


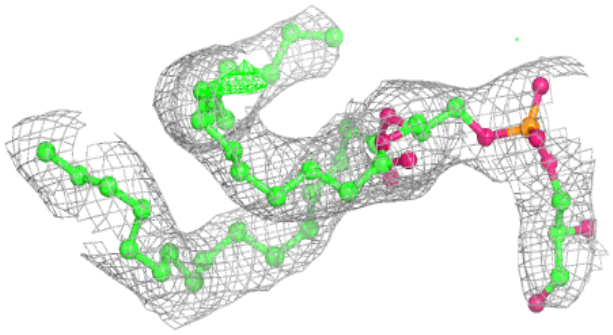


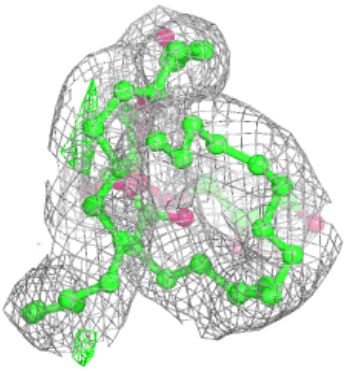


Electron density around LHG d2 403:

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

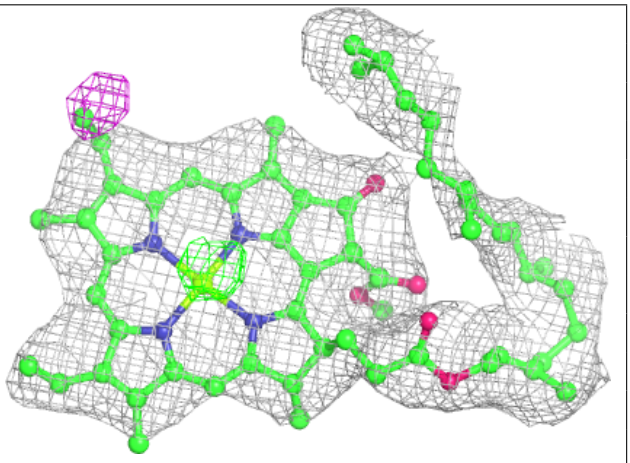


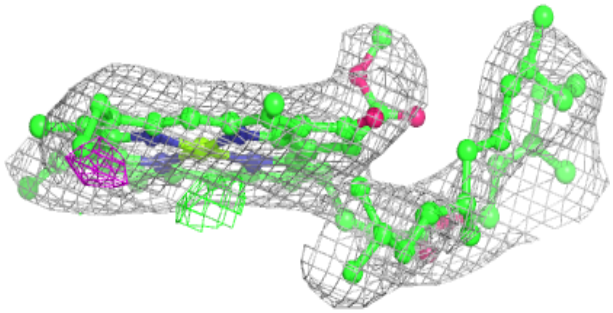


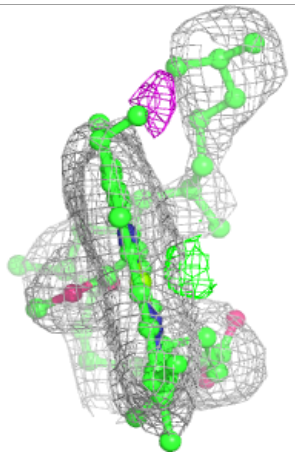


Electron density around CLA b2 611:

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

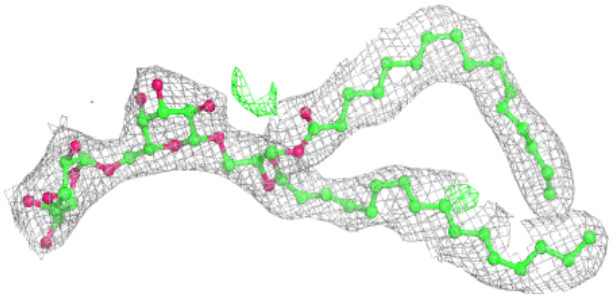


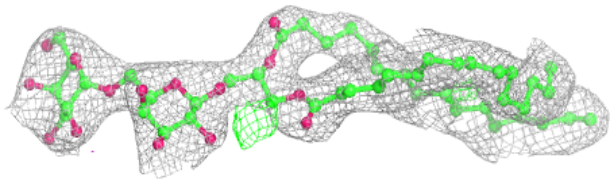


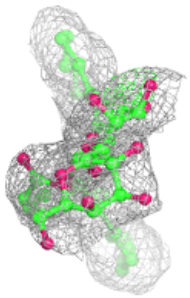


Electron density around DGD C1 516:

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

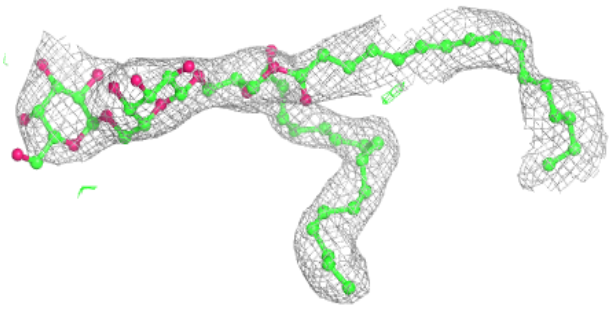


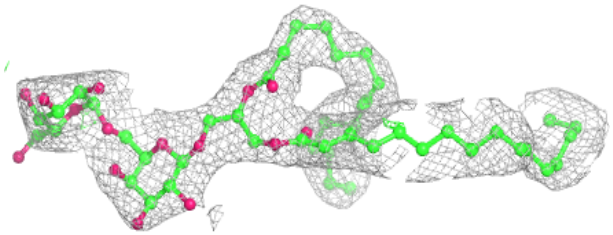


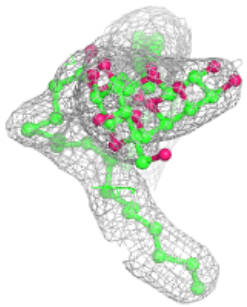


Electron density around DGD H1 101:

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

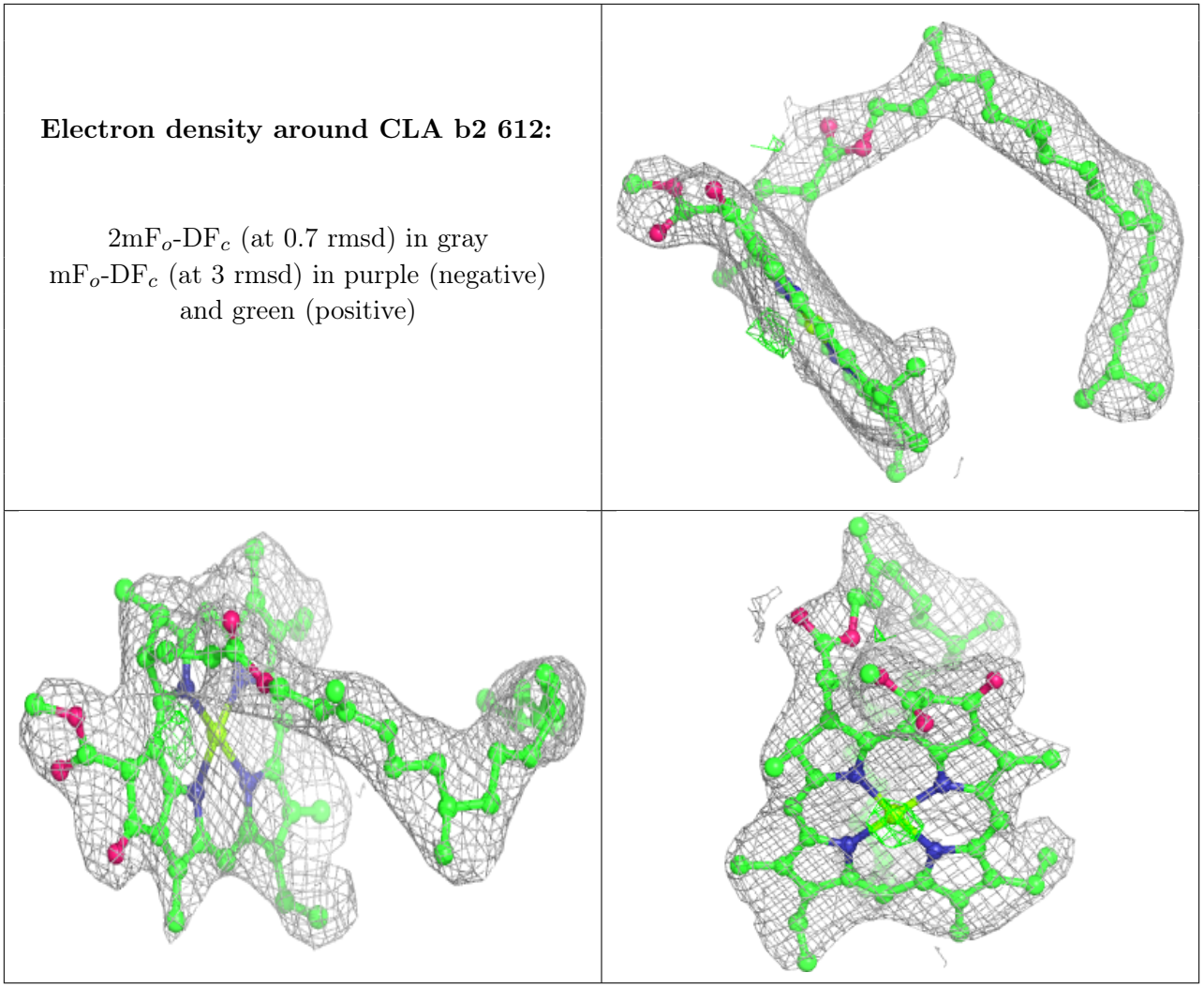






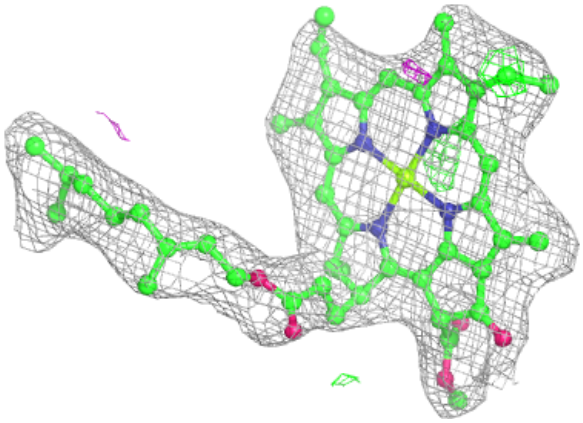
Electron density around CLA b2 612:

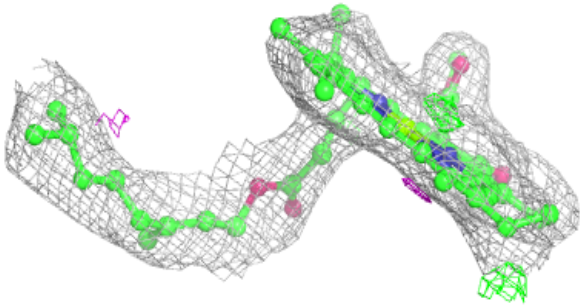
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

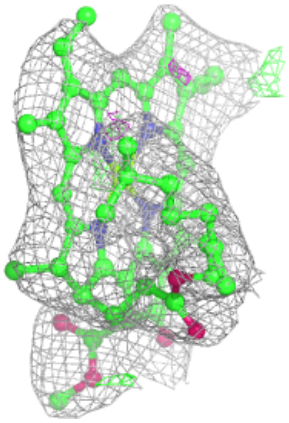


Electron density around CLA A1 405:

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

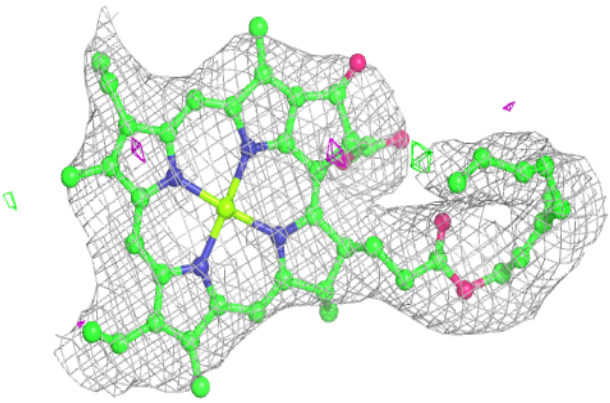


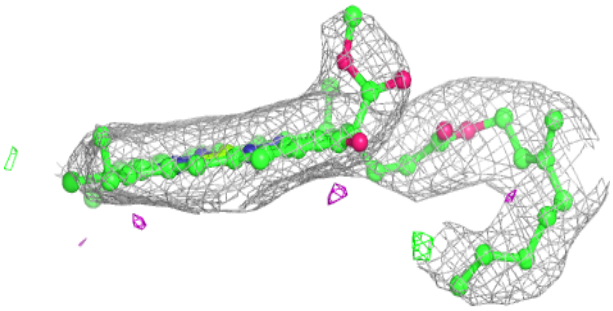


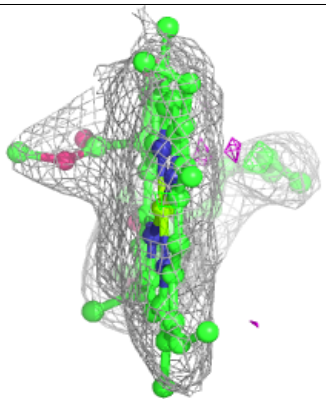


Electron density around CLA c2 510:

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

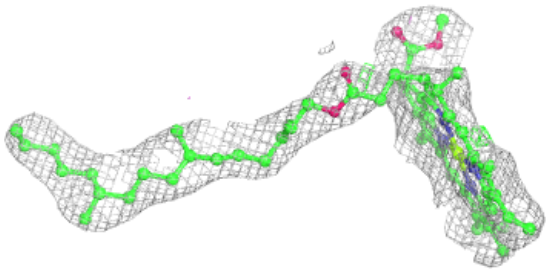


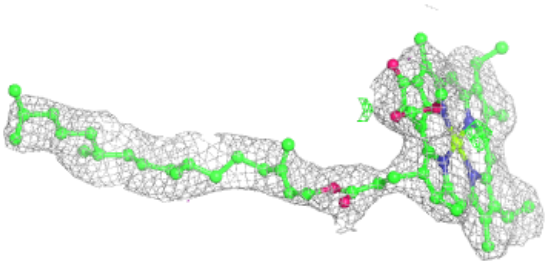


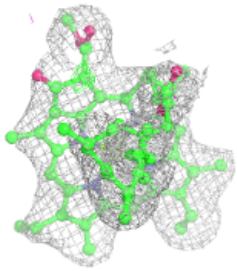


Electron density around CLA B2 607:

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

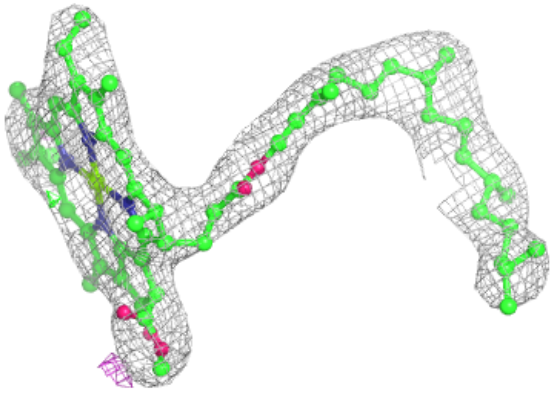


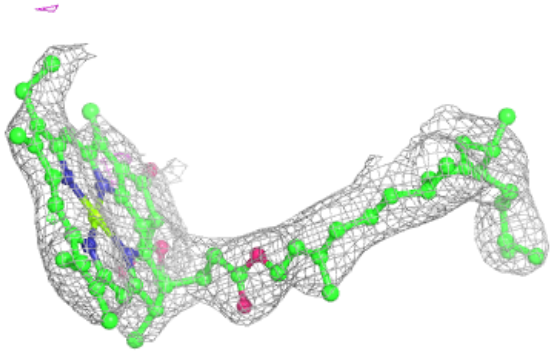


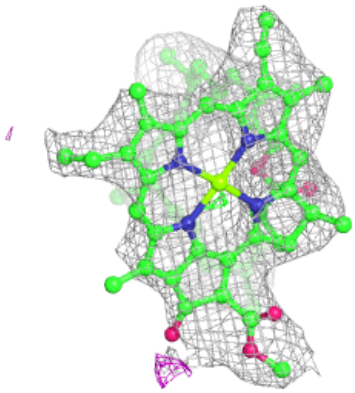


Electron density around CLA B2 609:

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

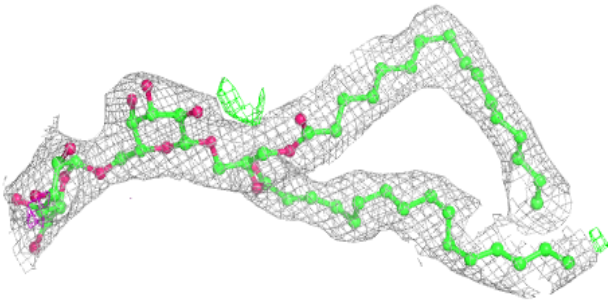


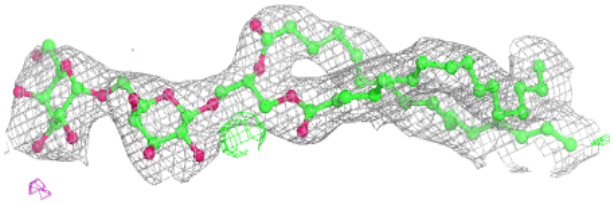


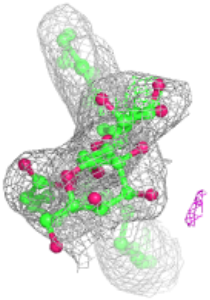


Electron density around DGD c2 514:

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

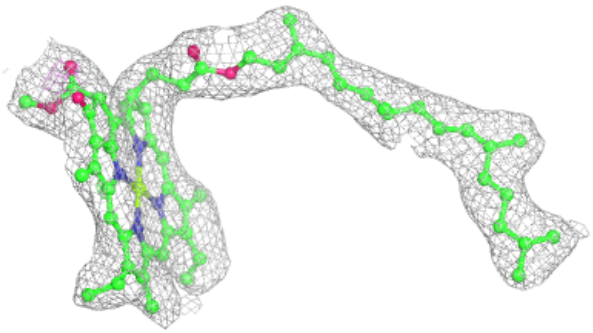


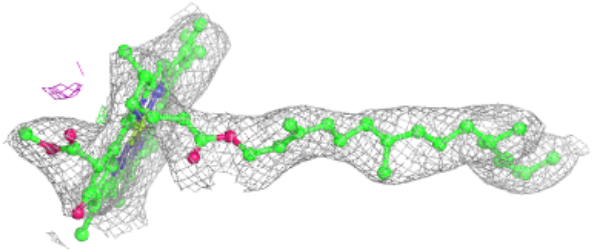


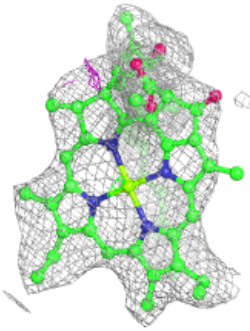


Electron density around CLA b1 611:

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

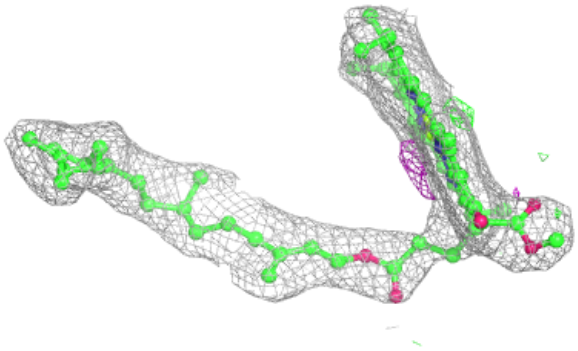


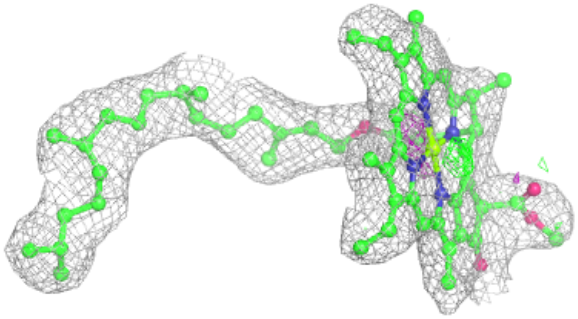


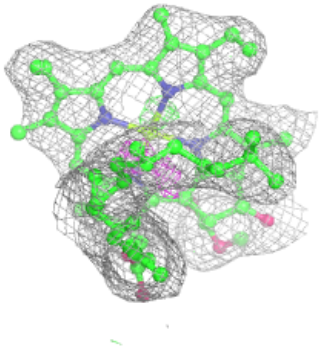


Electron density around CLA B1 619:

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

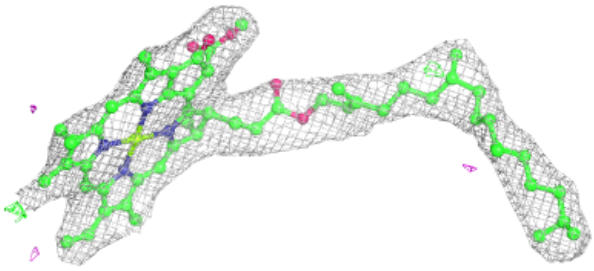


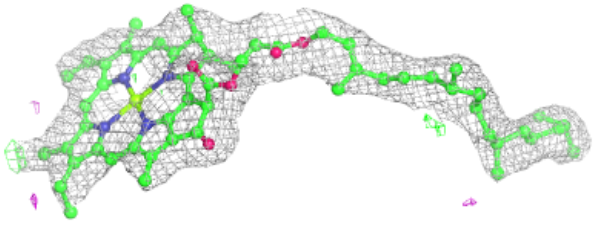


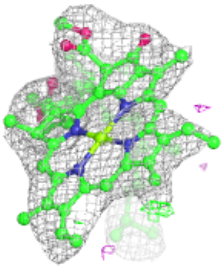


Electron density around CLA A2 402:

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

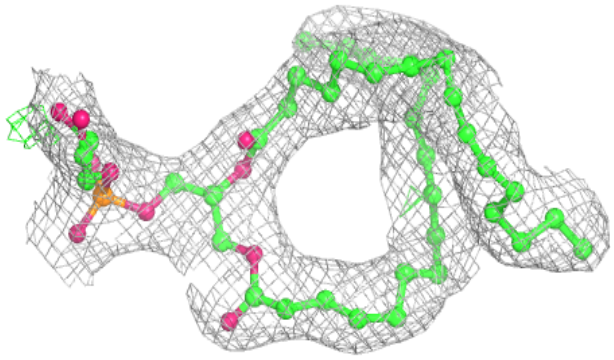


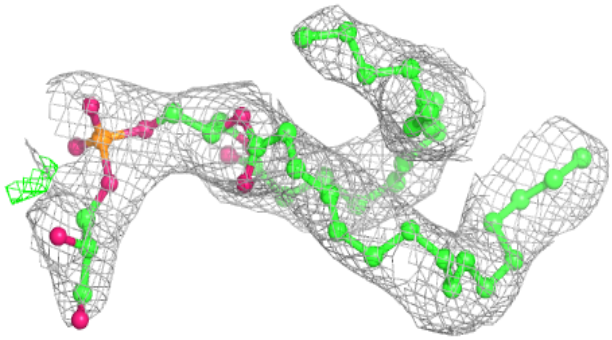


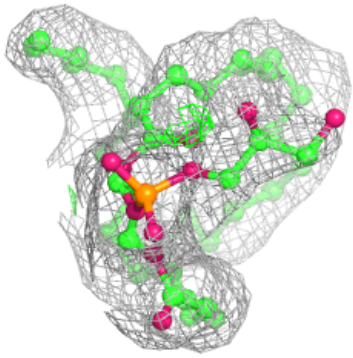


Electron density around LHG B1 621:

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

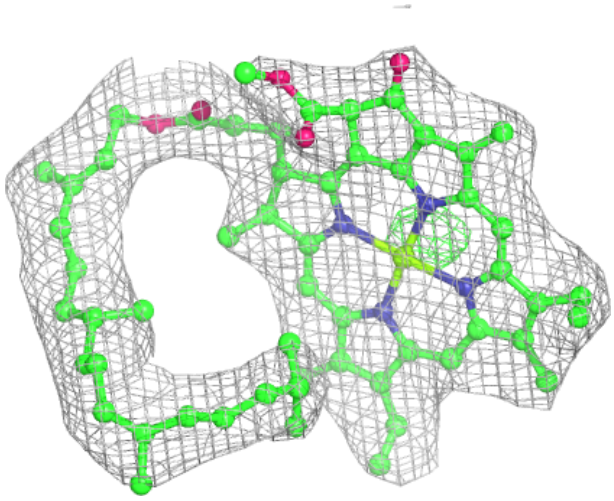


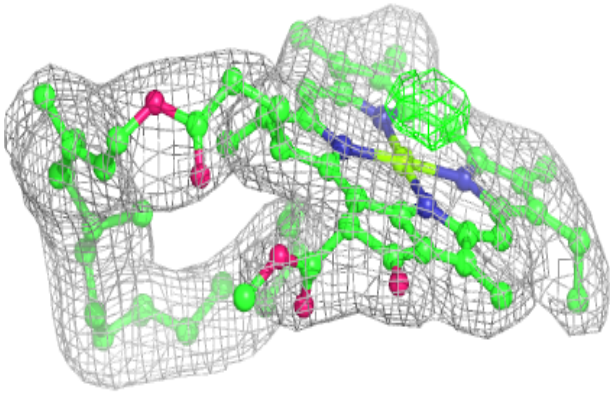


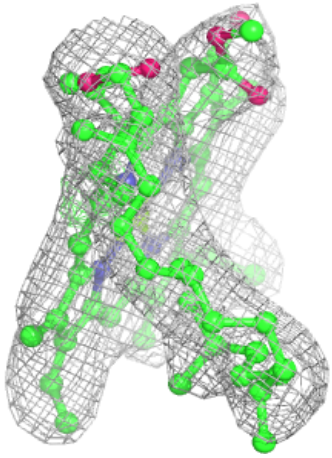


Electron density around CLA b1 617:

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

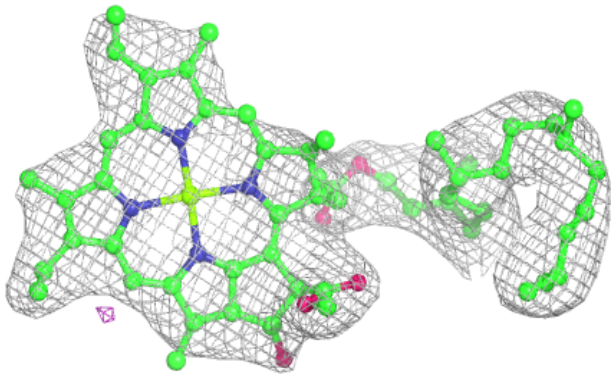


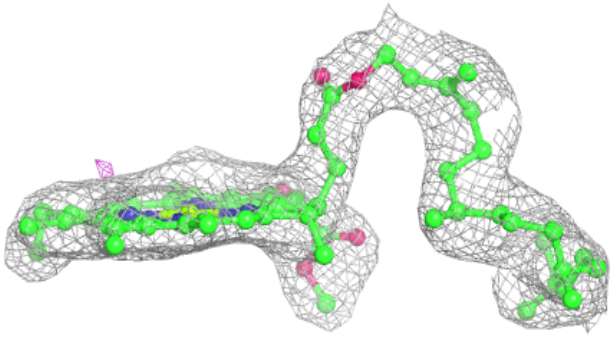


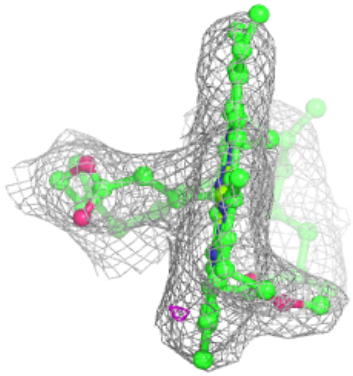


Electron density around CLA b2 614:

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

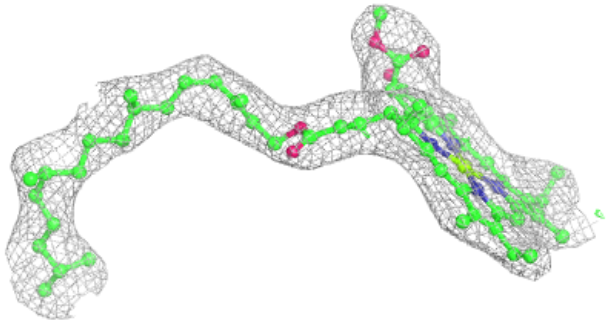


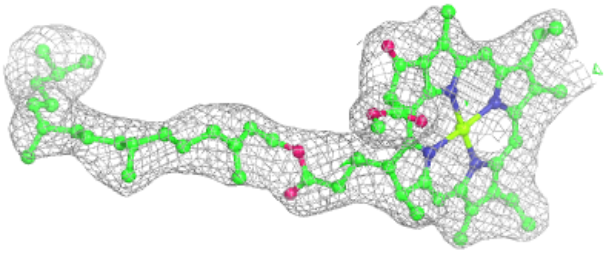


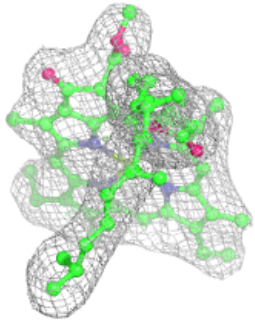


Electron density around CLA d1 401:

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

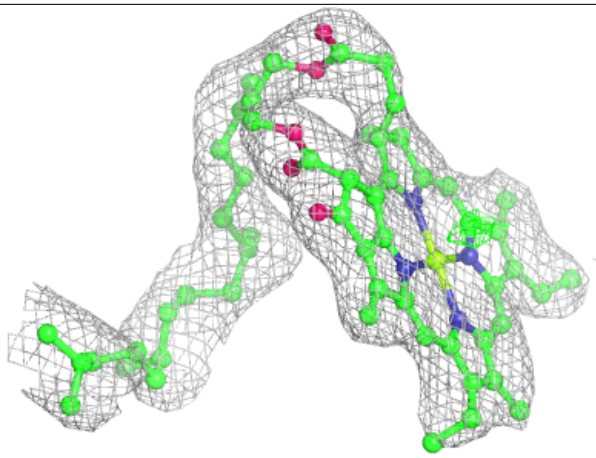


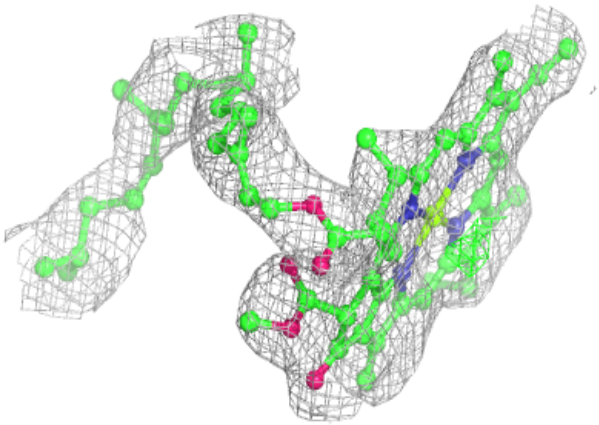


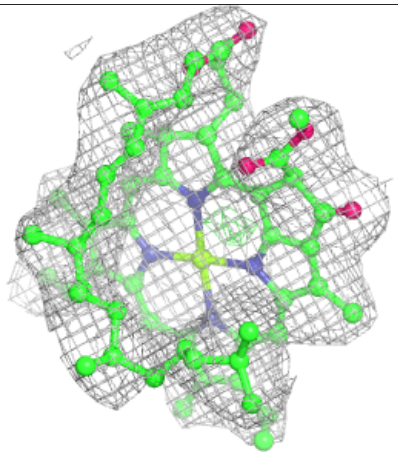


Electron density around CLA B2 615:

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

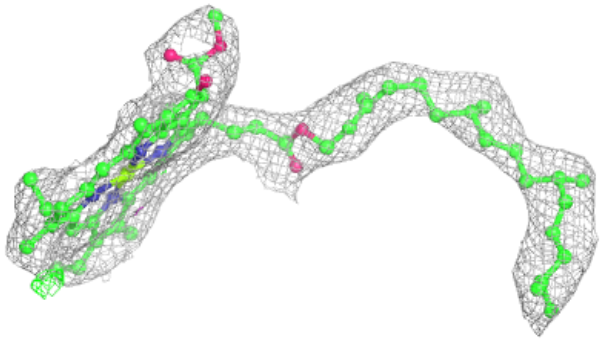


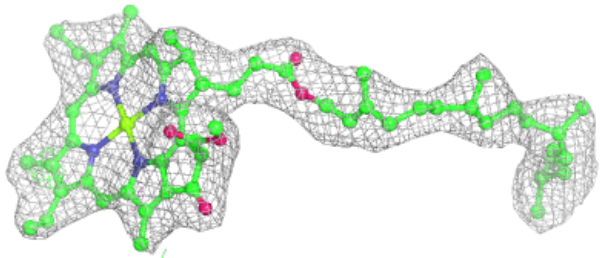


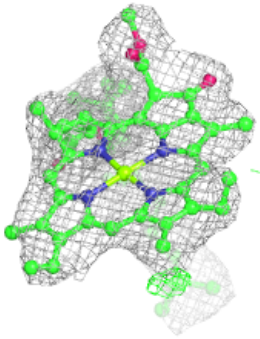


Electron density around CLA d2 405:

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

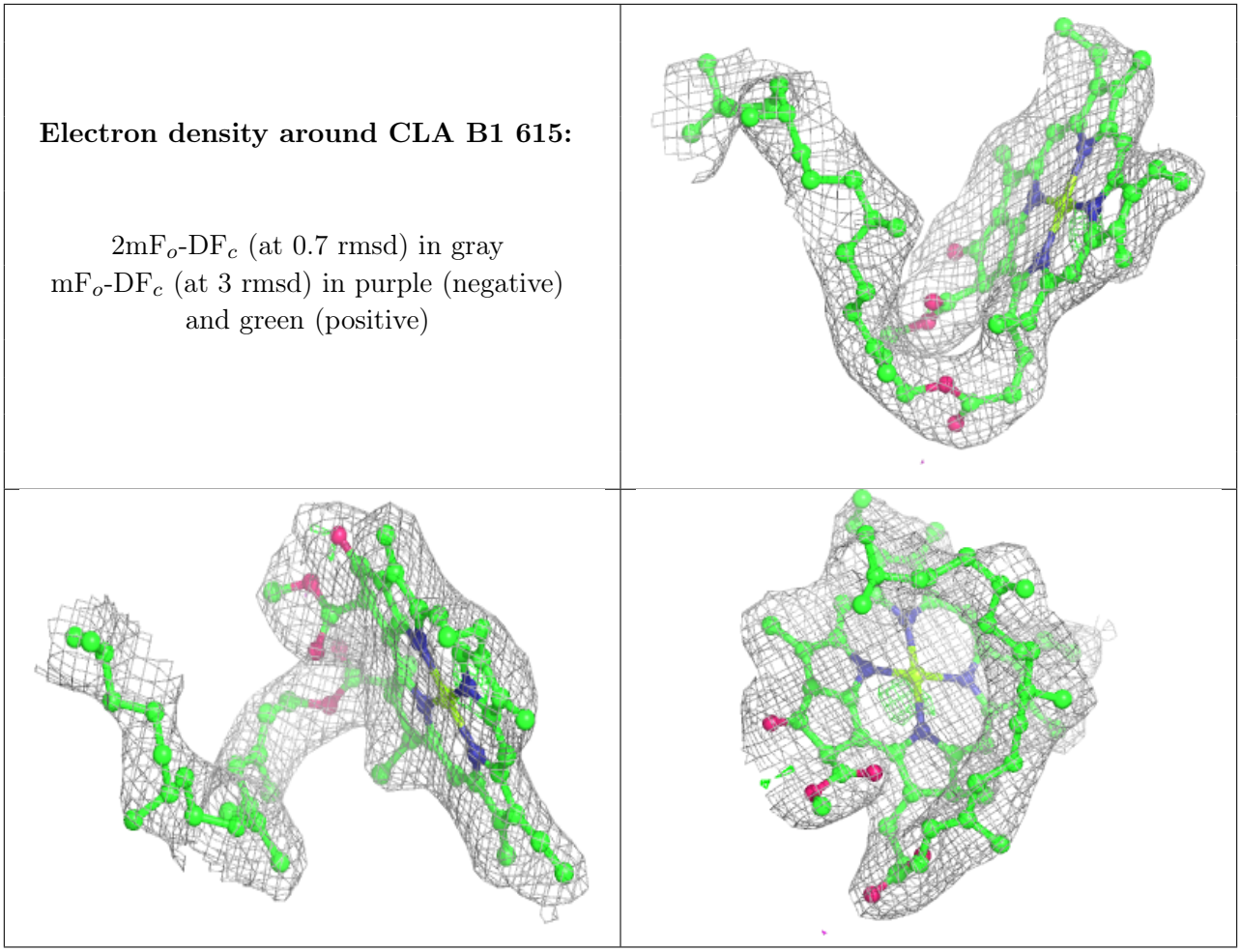






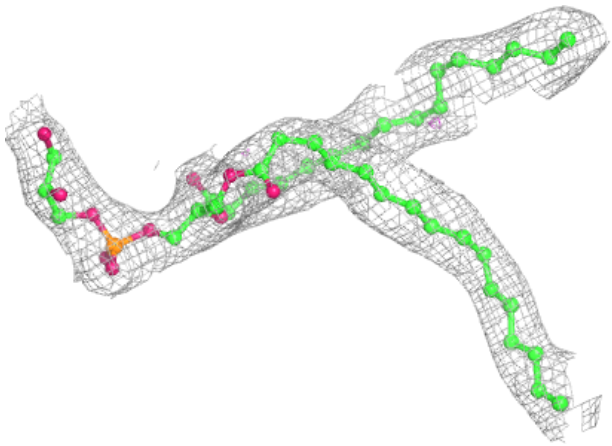
Electron density around CLA B1 615:

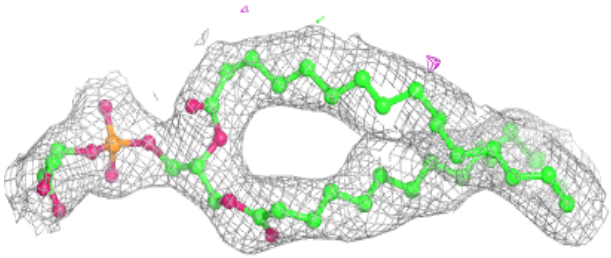
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

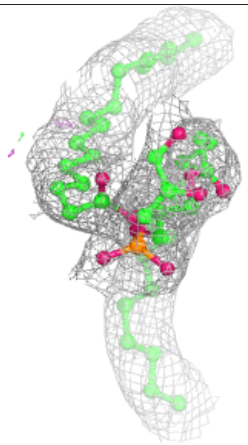


Electron density around LHG d2 406:

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

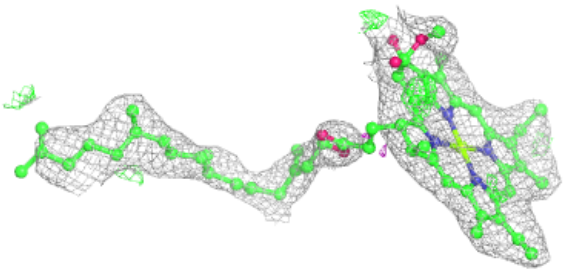


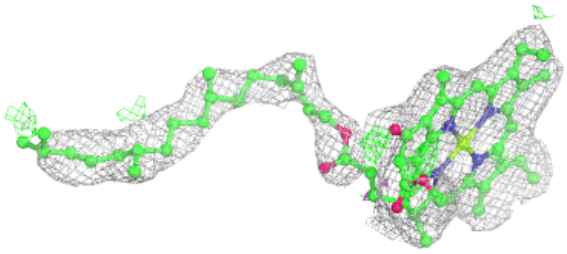


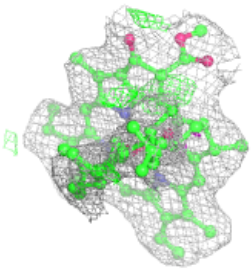


Electron density around CLA c1 504:

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

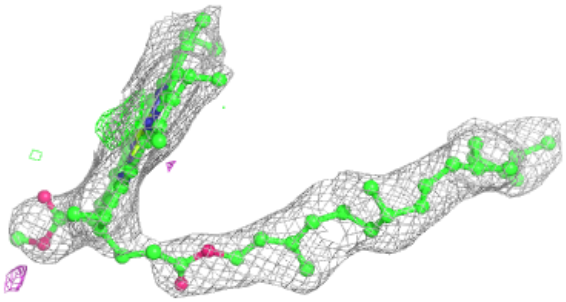


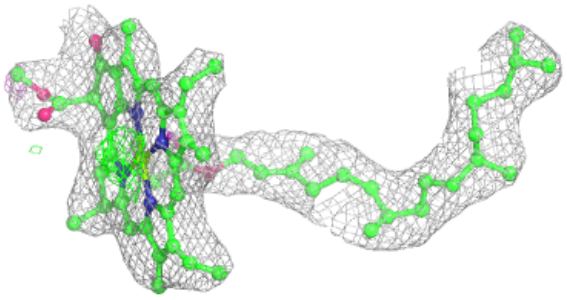


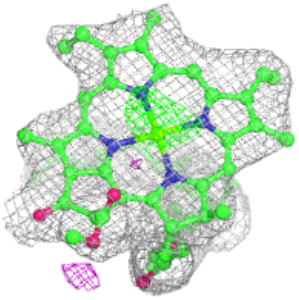


Electron density around CLA b2 620:

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

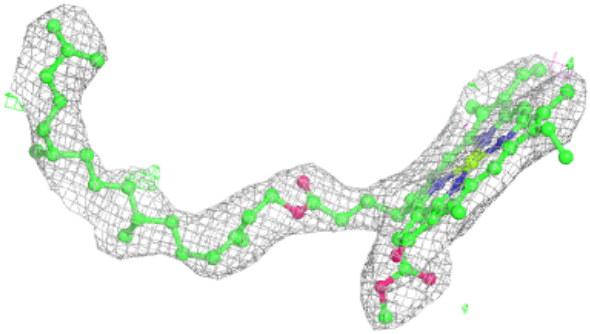


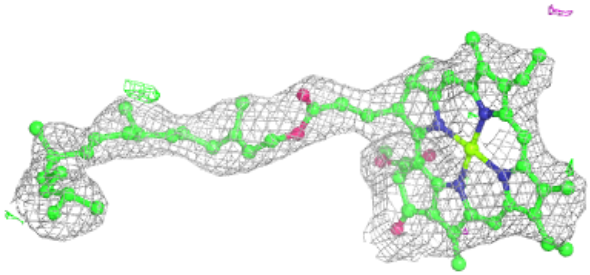


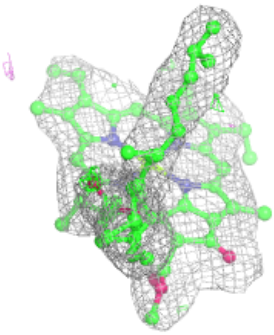


Electron density around CLA D2 401:

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

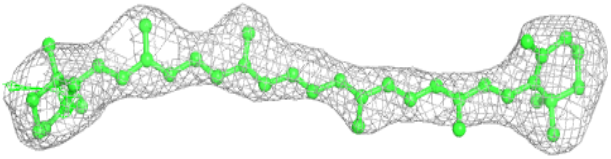


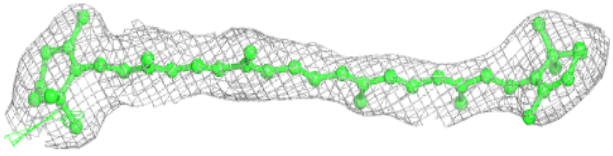


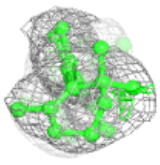


Electron density around BCR a1 401:

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

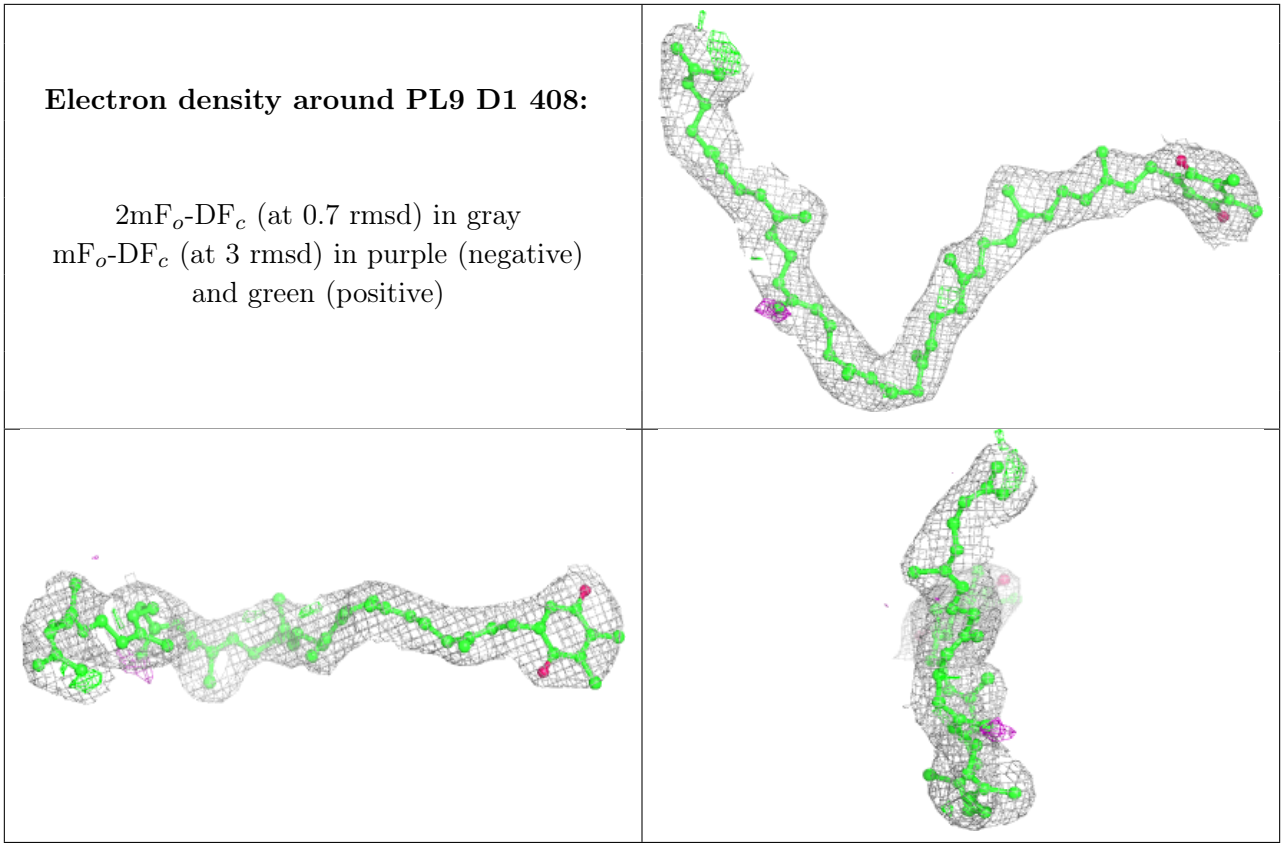






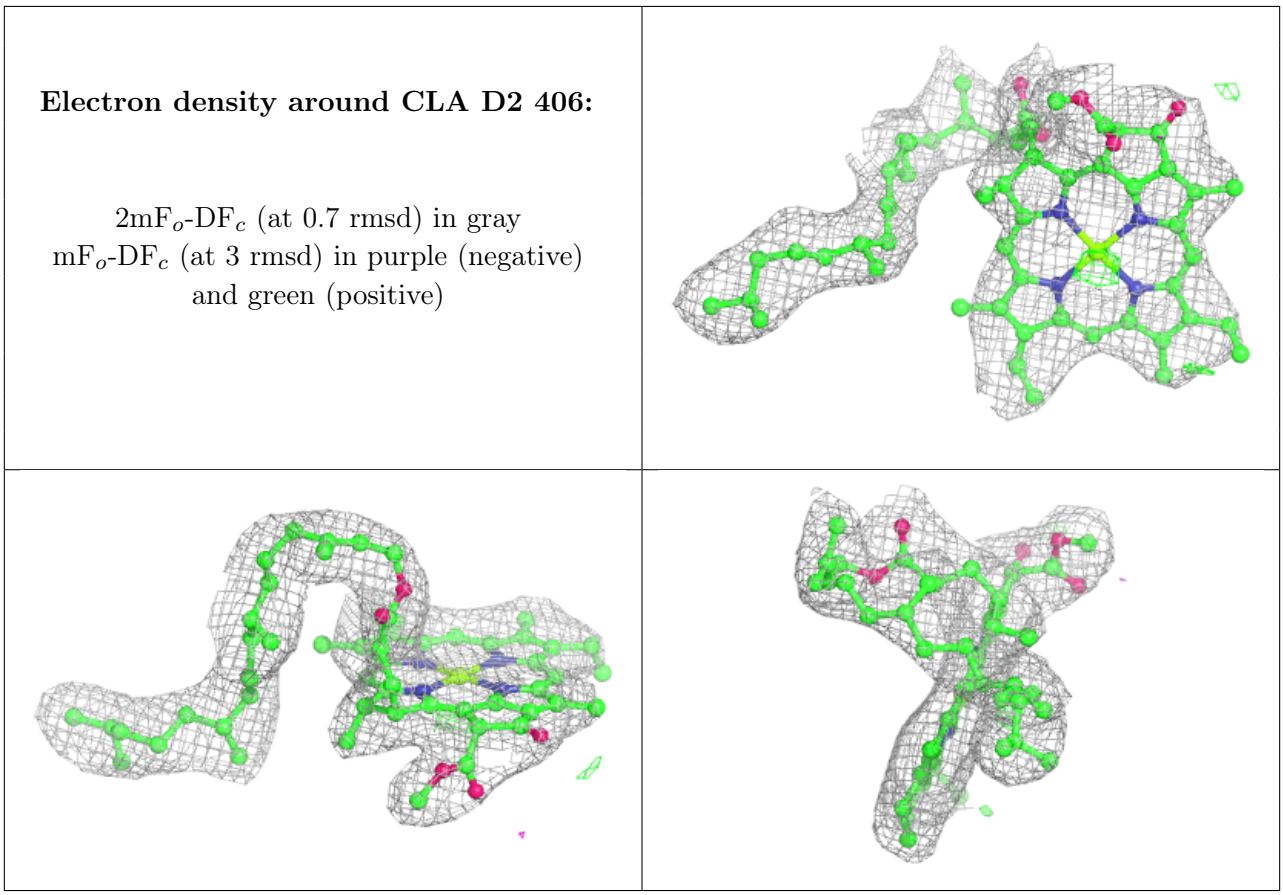
Electron density around PL9 D1 408:

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



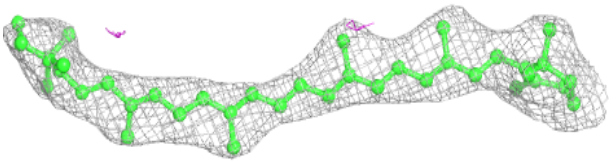
Electron density around CLA D2 406:

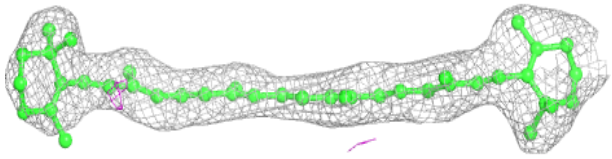
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

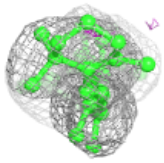


Electron density around BCR h1 102:

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

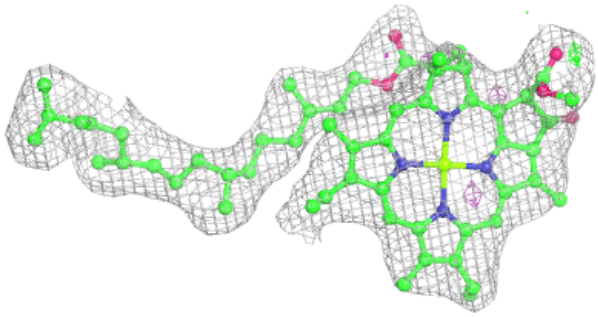


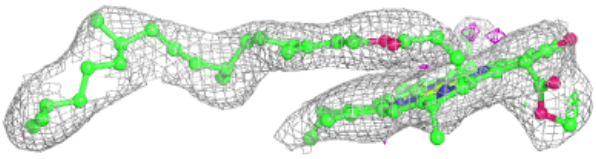


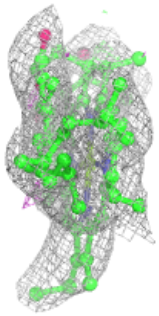


Electron density around CLA b1 606:

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

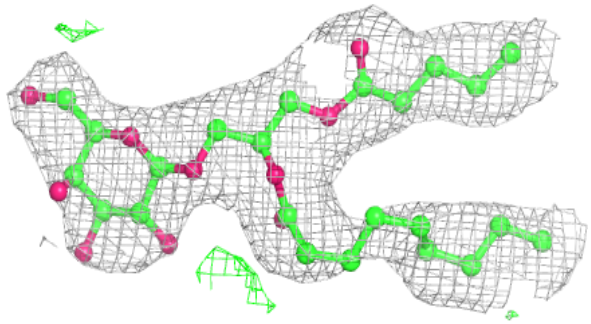


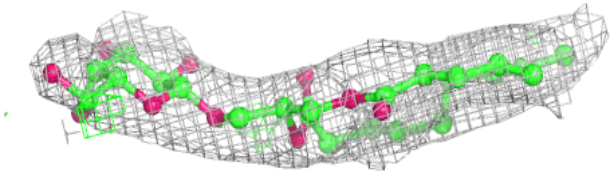


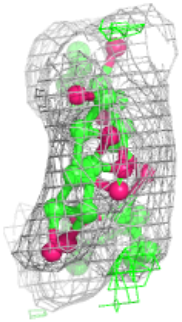


Electron density around LMG d1 408:

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

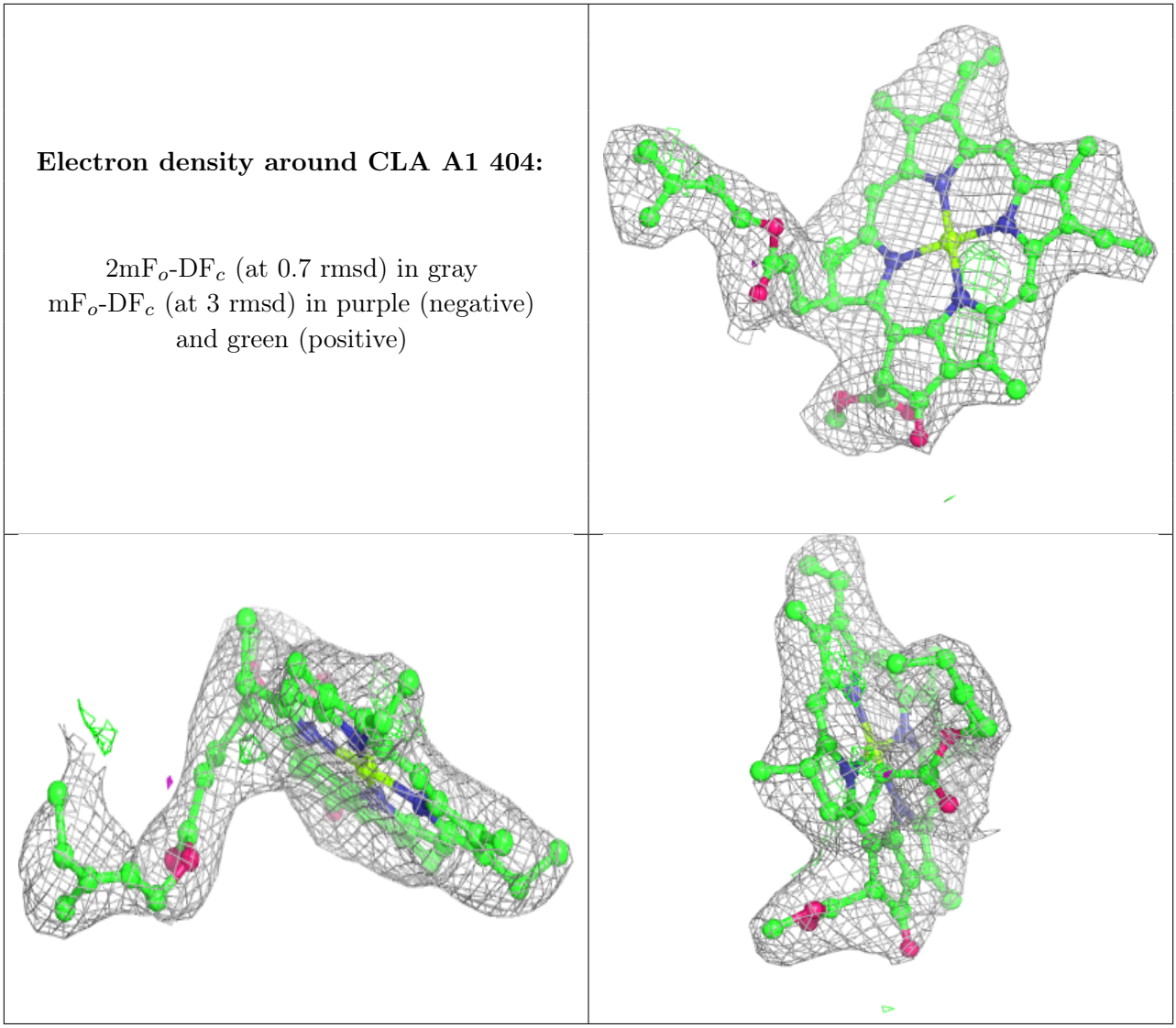






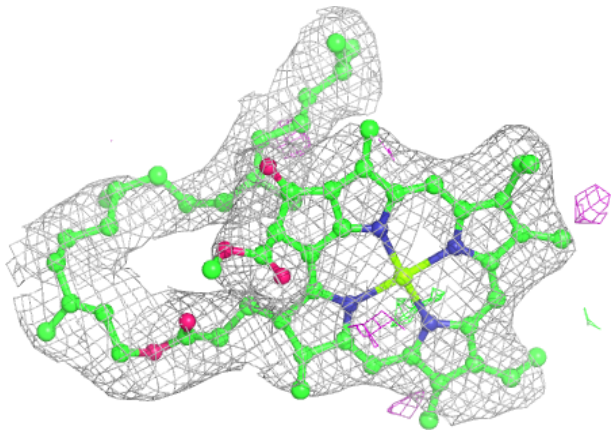
Electron density around CLA A1 404:

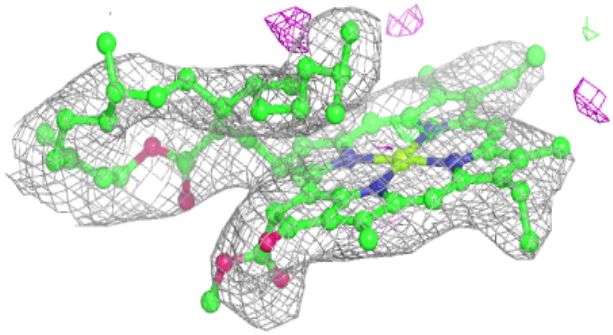
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

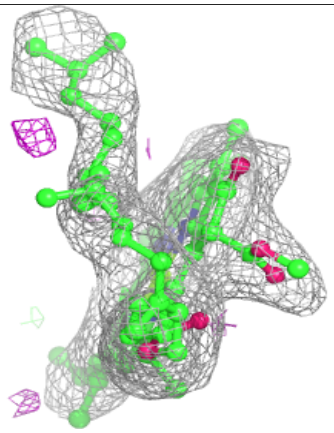


Electron density around CLA C1 510:

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

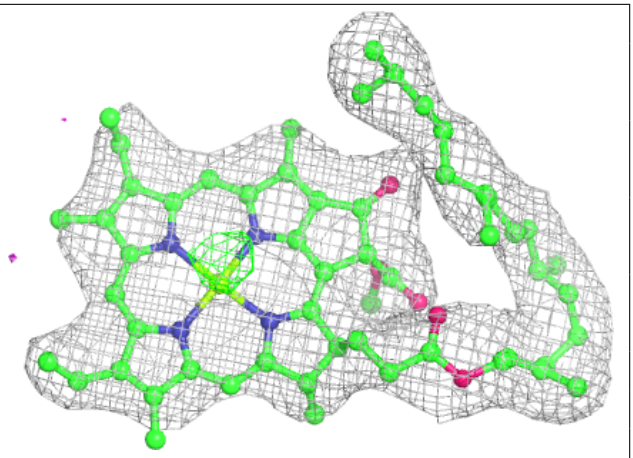


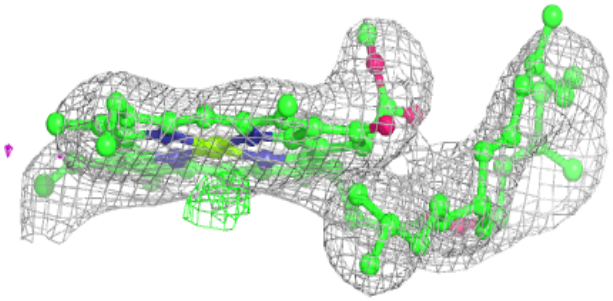


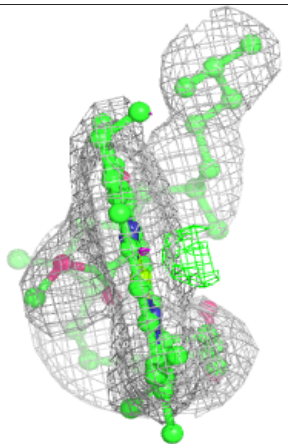


Electron density around CLA B1 612:

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

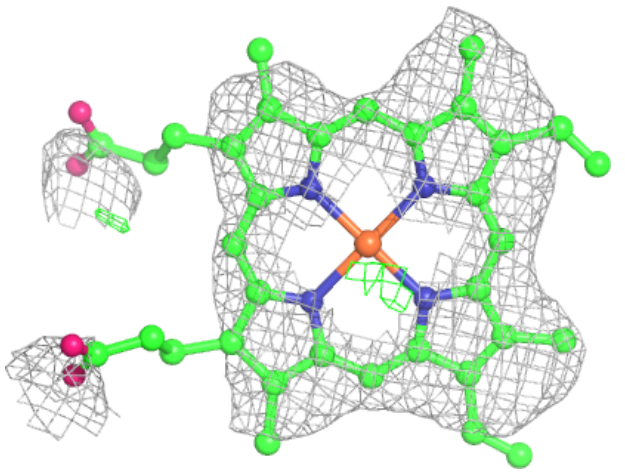


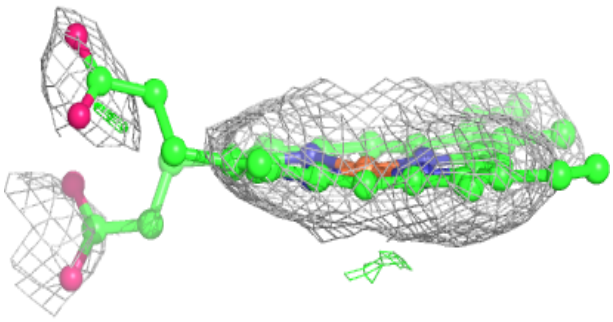


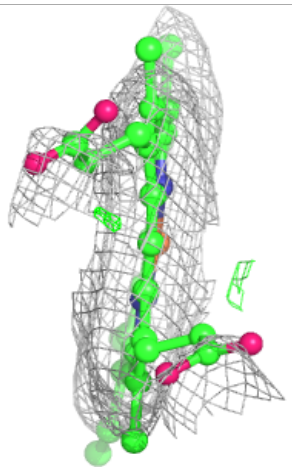


Electron density around HEM f1 101:

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

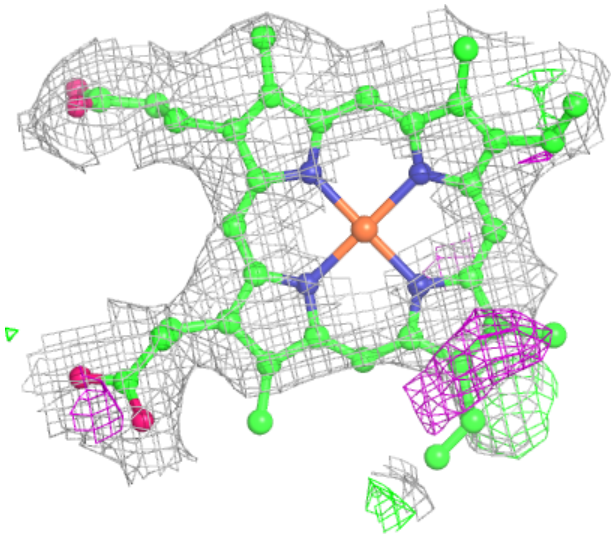


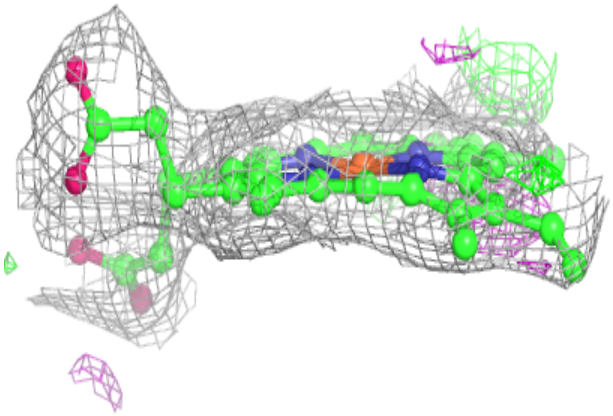


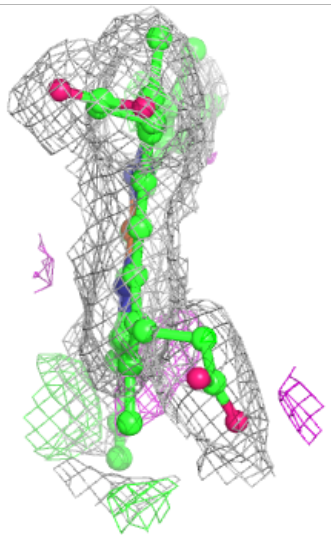


Electron density around HEM v1 201:

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

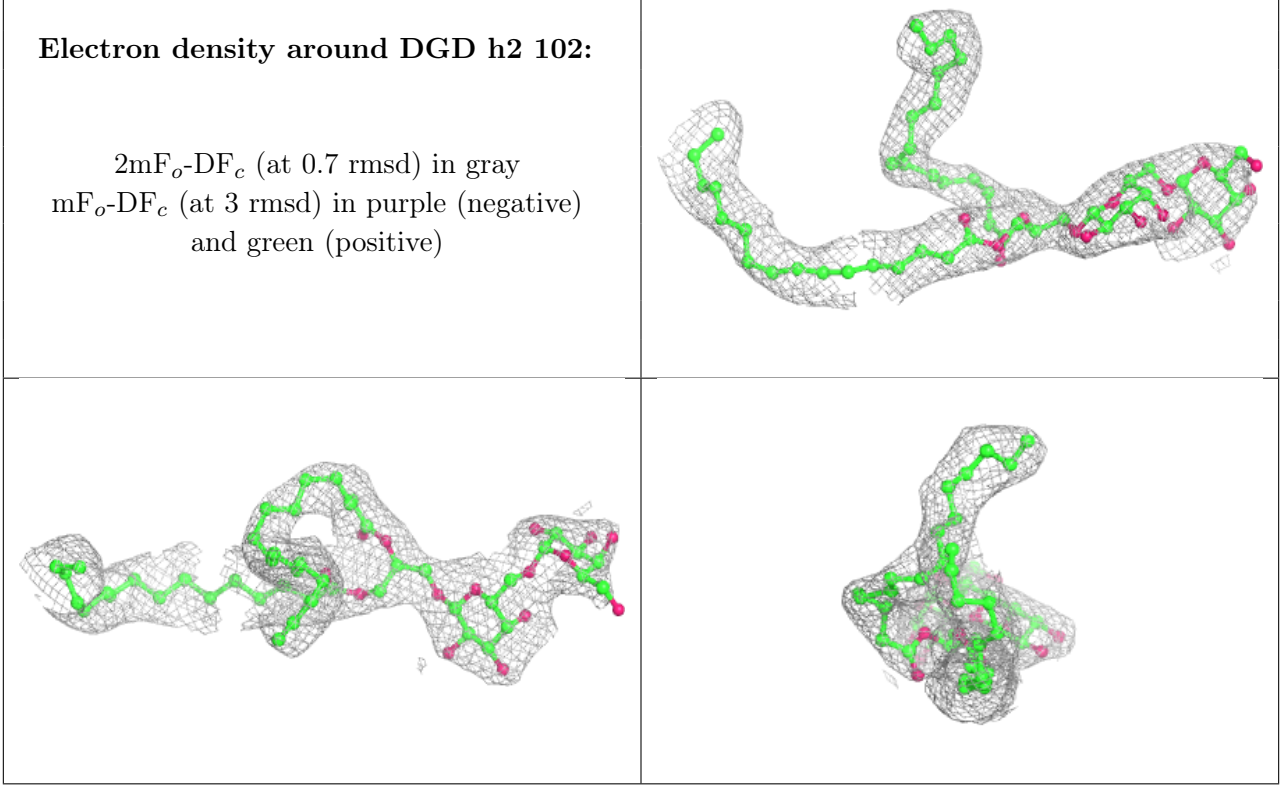






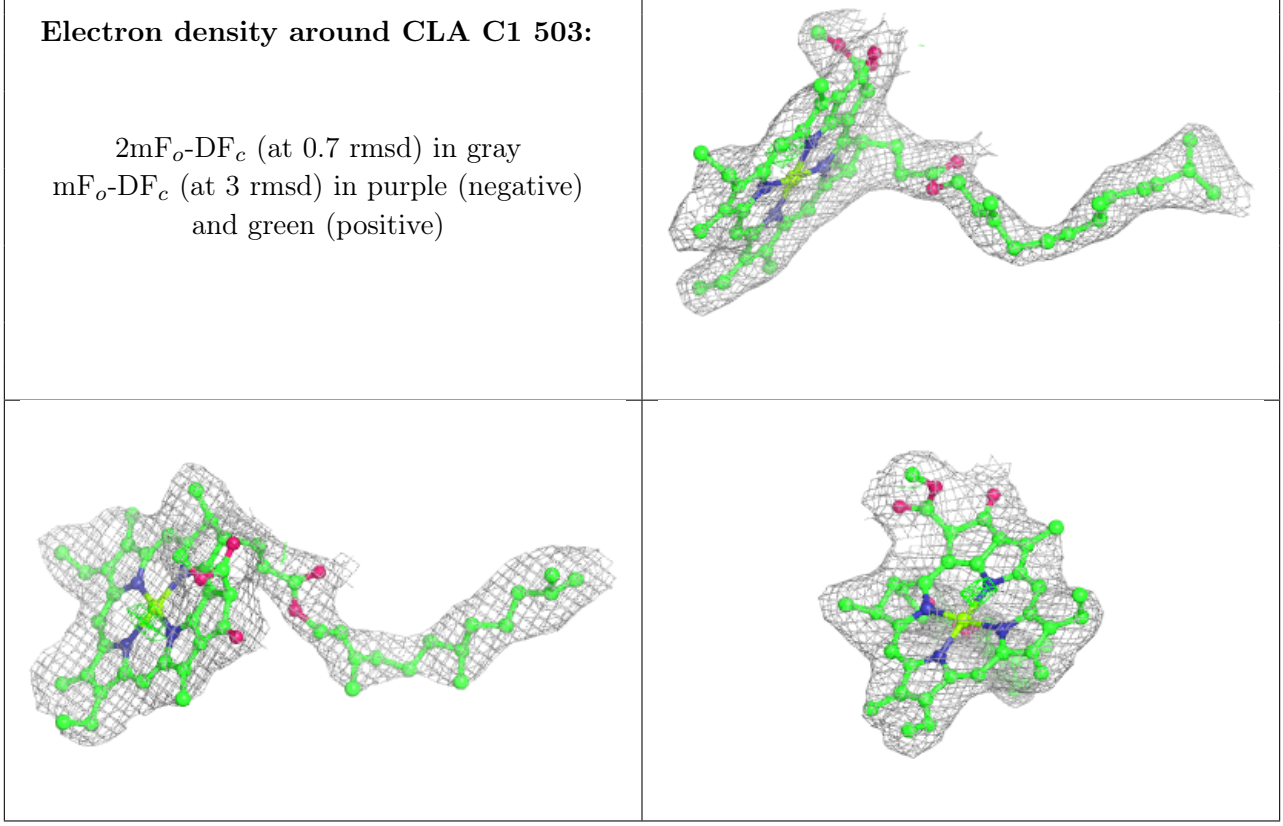
Electron density around DGD h2 102:

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



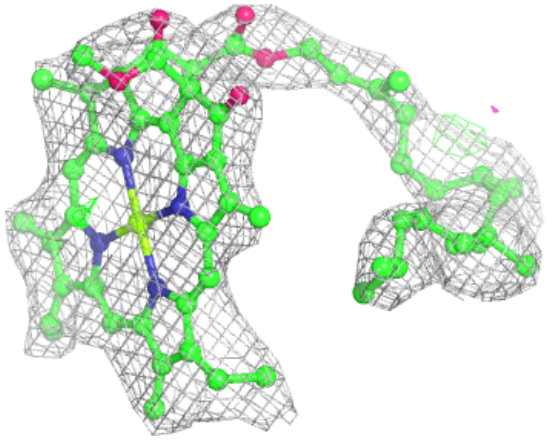
Electron density around CLA C1 503:

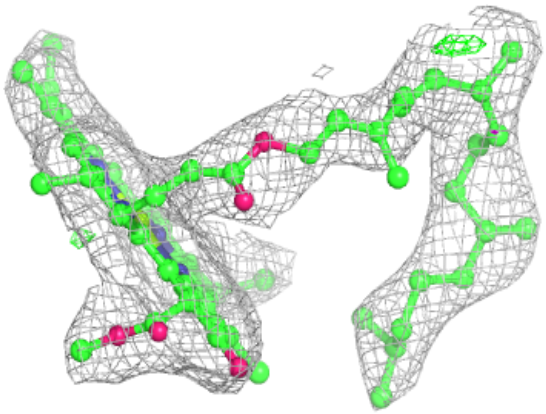
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

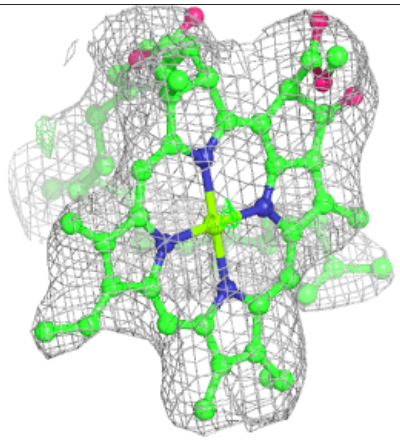


Electron density around CLA C1 504:

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

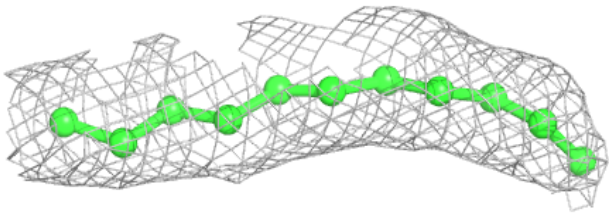


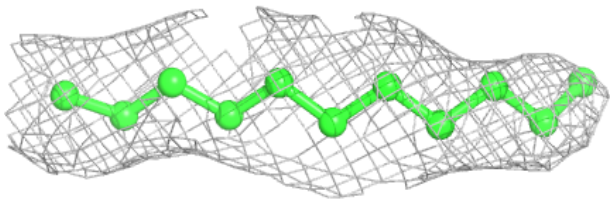


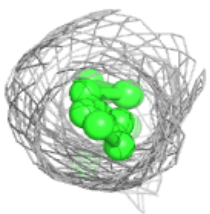


Electron density around LMT M1 102:

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

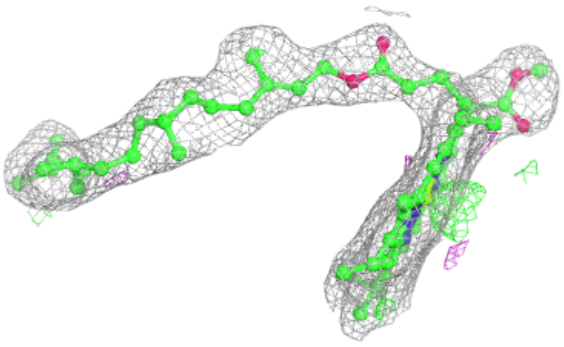


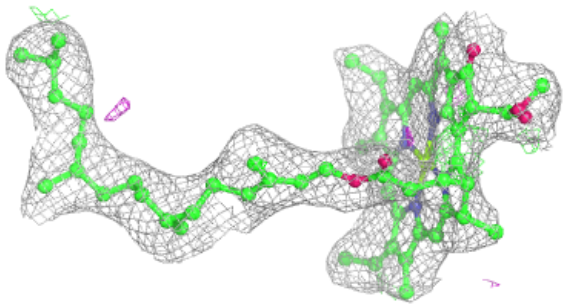


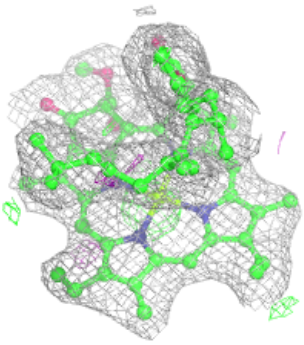


Electron density around CLA b1 620:

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

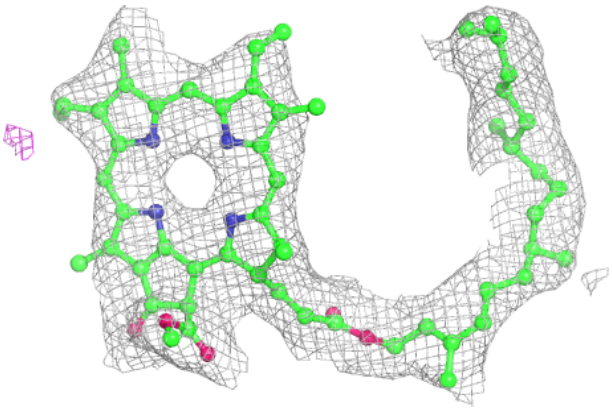


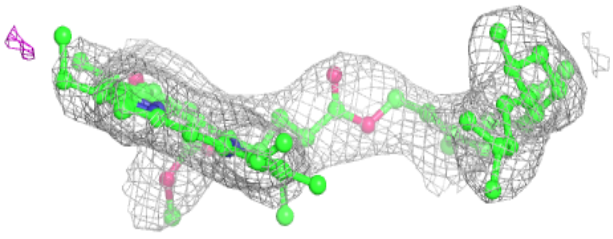


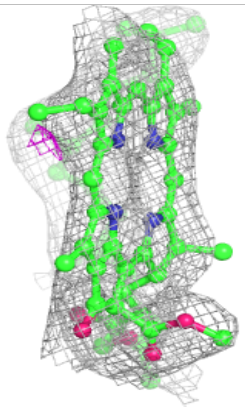


Electron density around PHO A2 407:

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

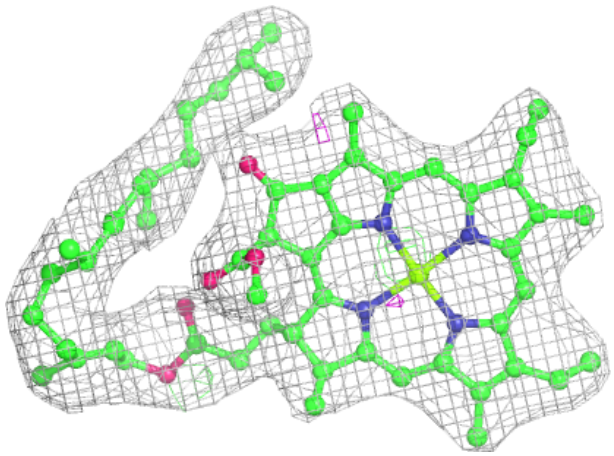


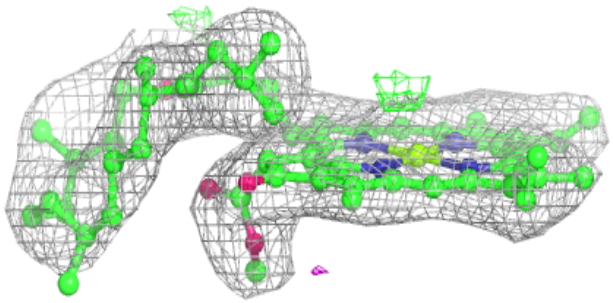


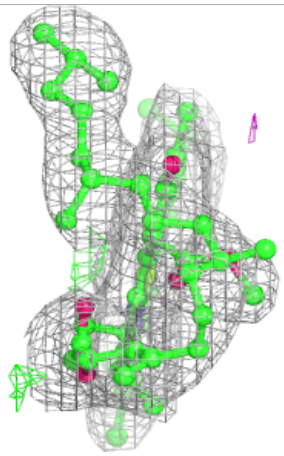


Electron density around CLA b1 612:

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

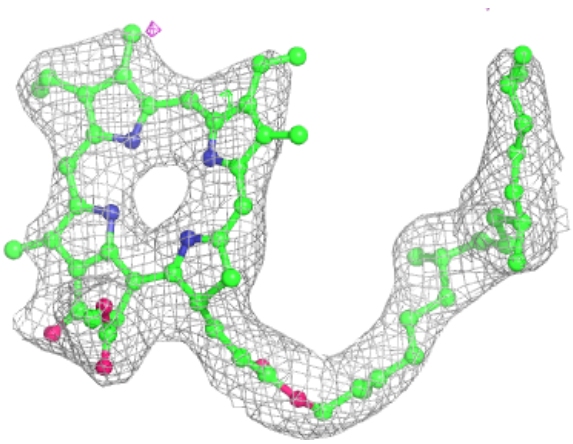


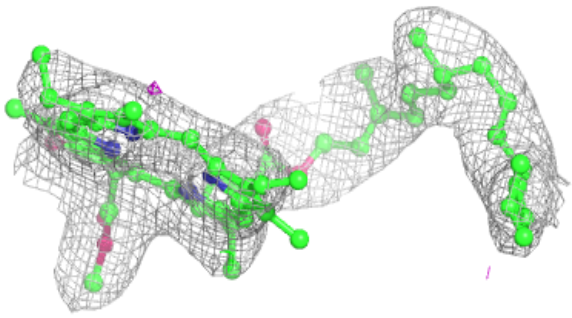


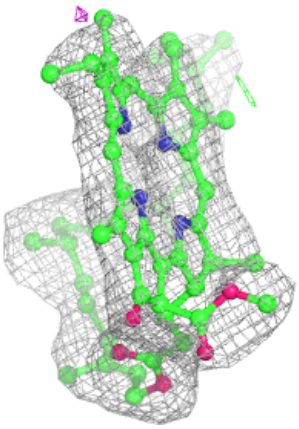


Electron density around PHO d2 408:

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

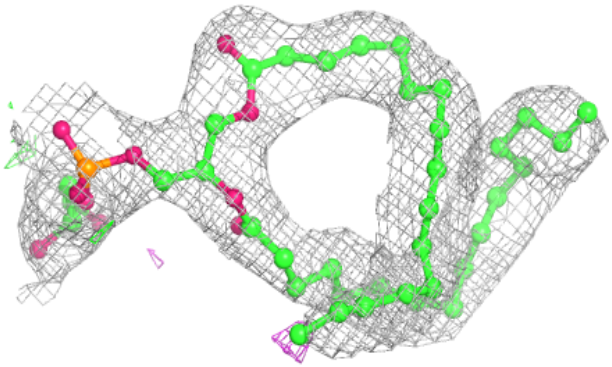


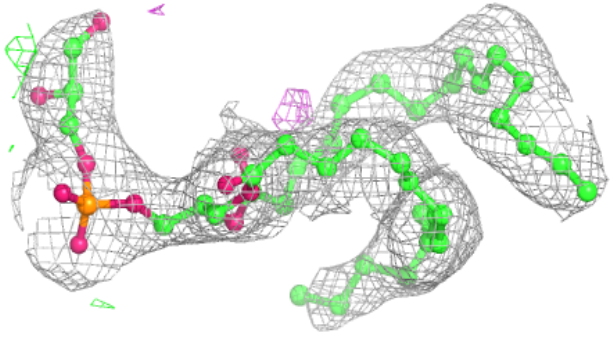


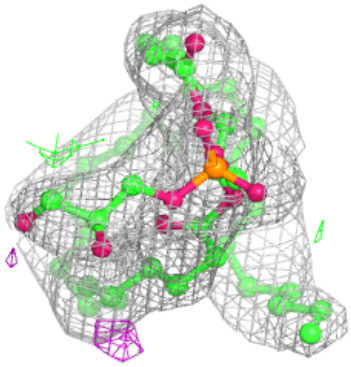


Electron density around LHG D2 403:

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

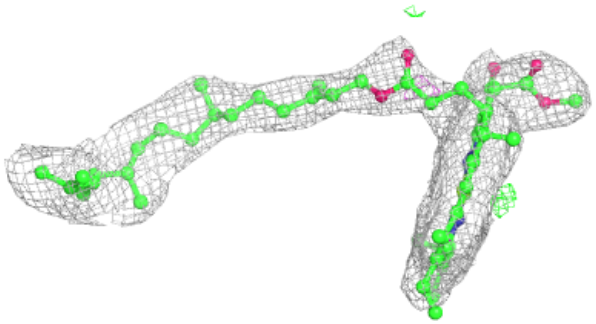


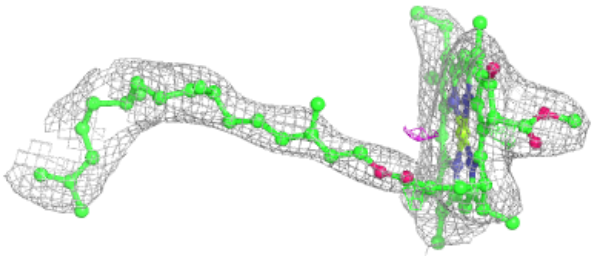


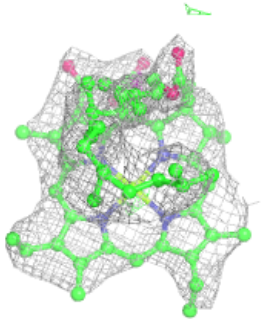


Electron density around CLA b2 608:

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

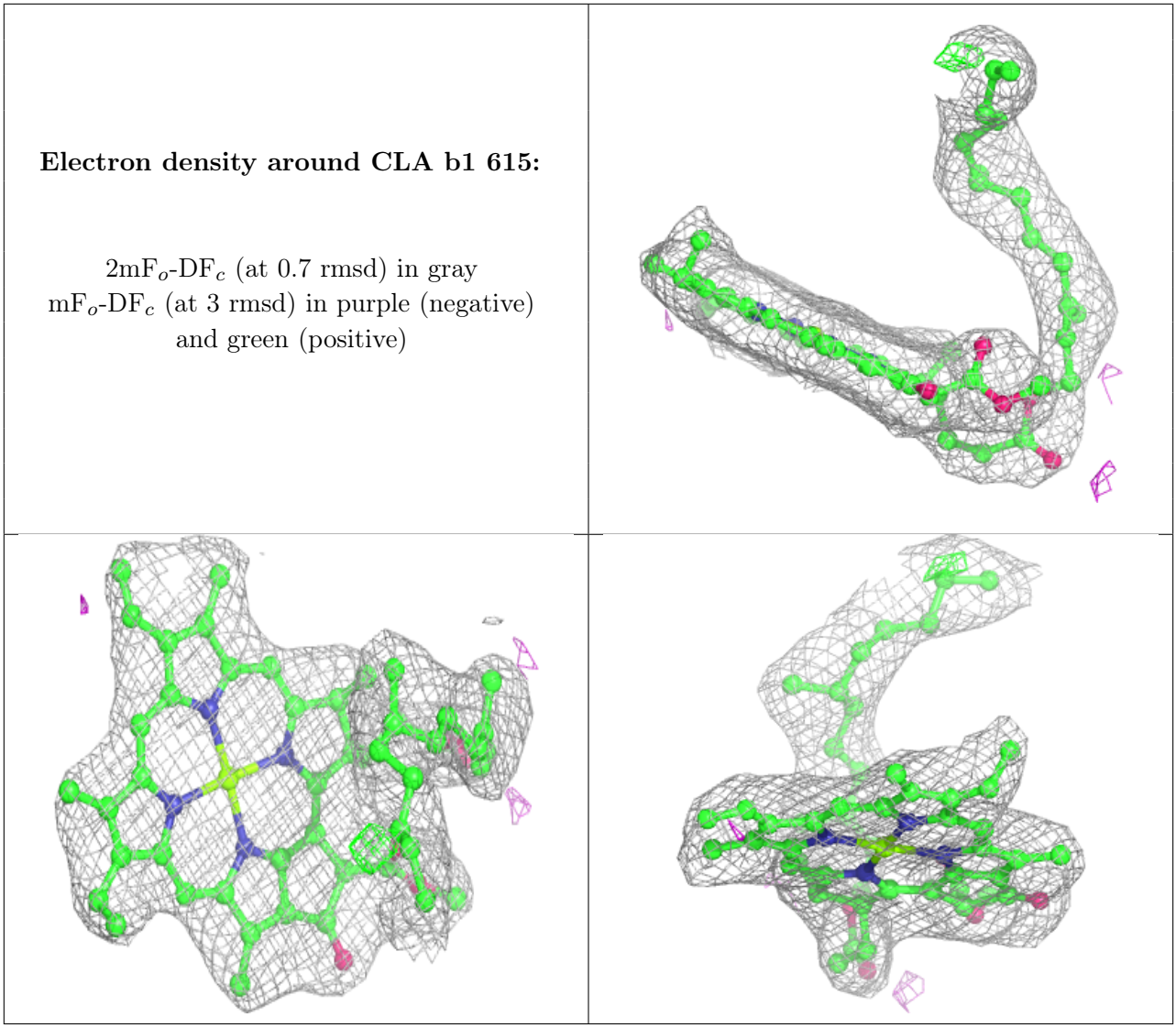






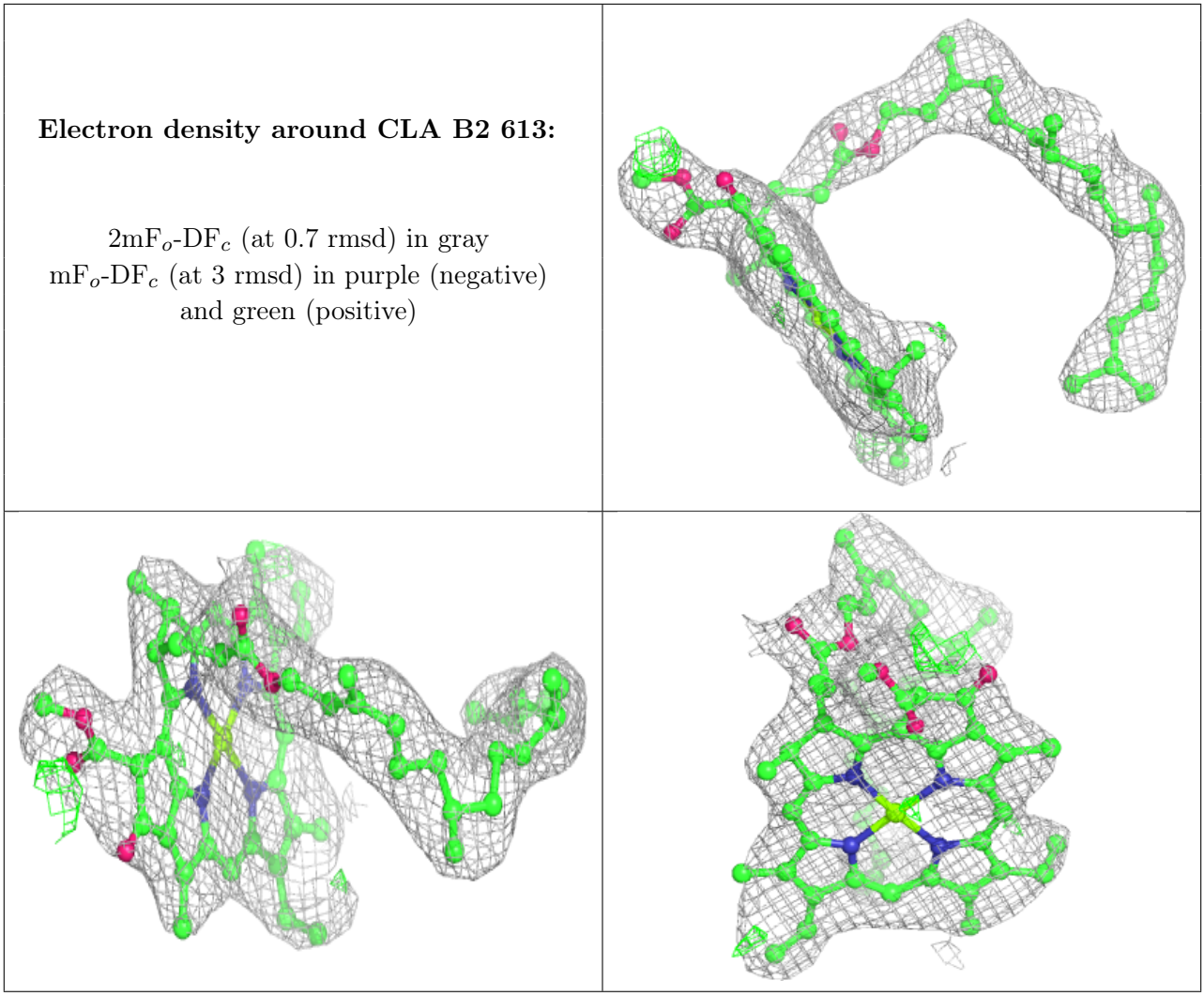
Electron density around CLA b1 615:

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



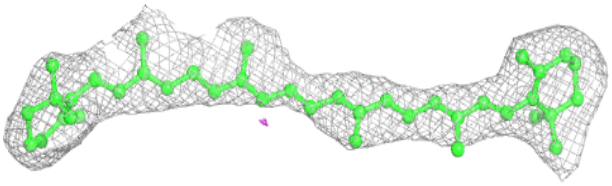
Electron density around CLA B2 613:

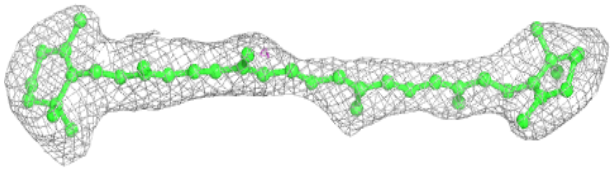
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

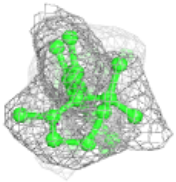


Electron density around BCR a2 402:

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

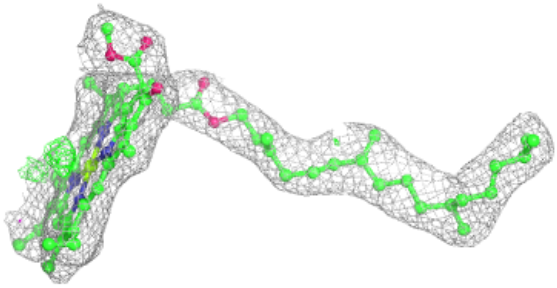


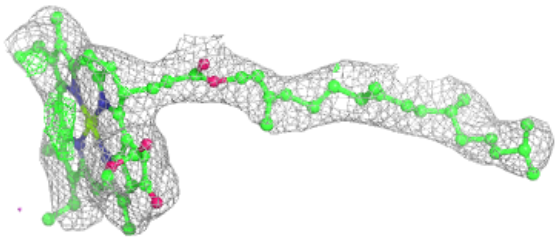


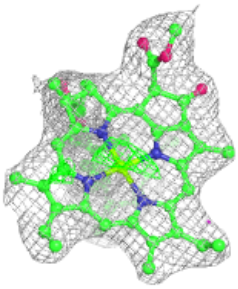


Electron density around CLA b1 607:

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

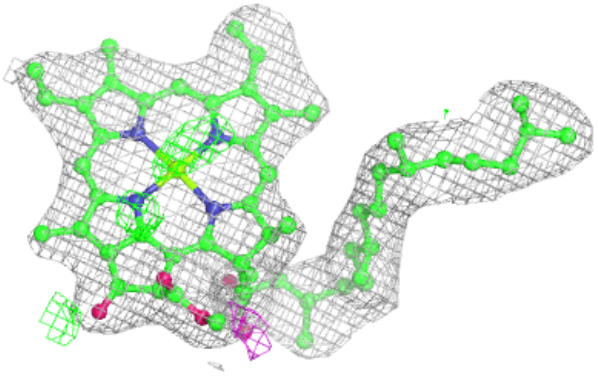


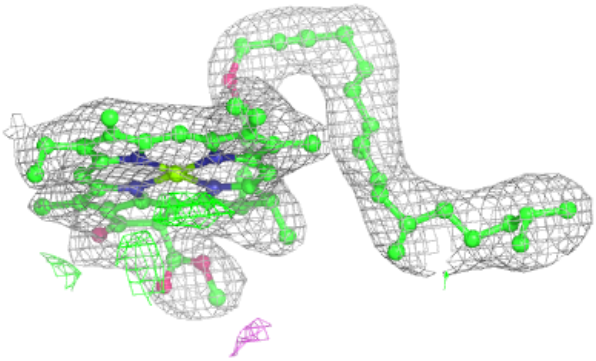


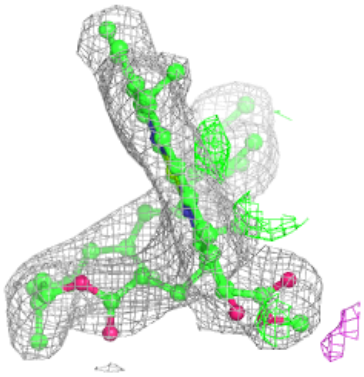


Electron density around CLA d1 404:

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

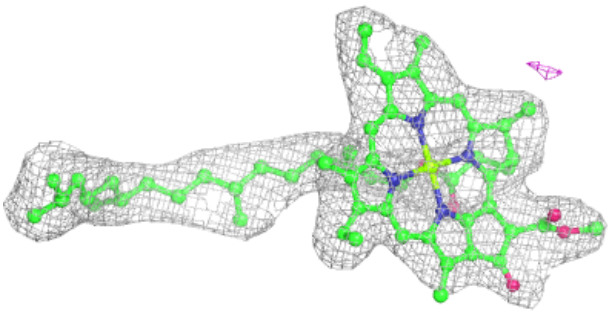


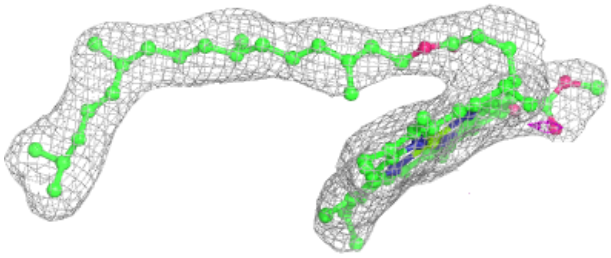


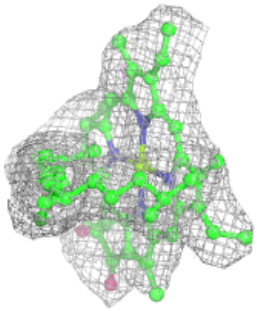


Electron density around CLA b1 610:

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

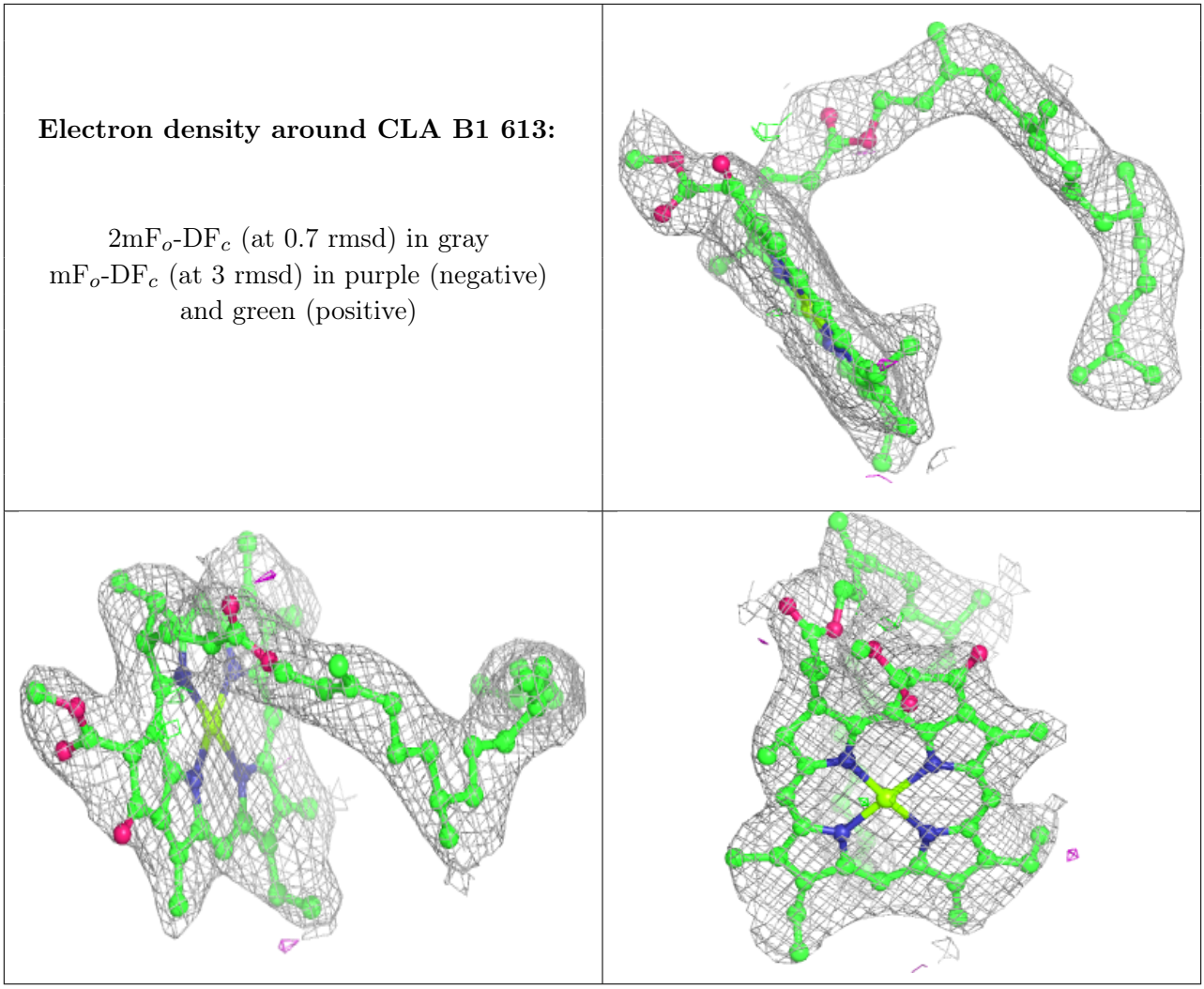






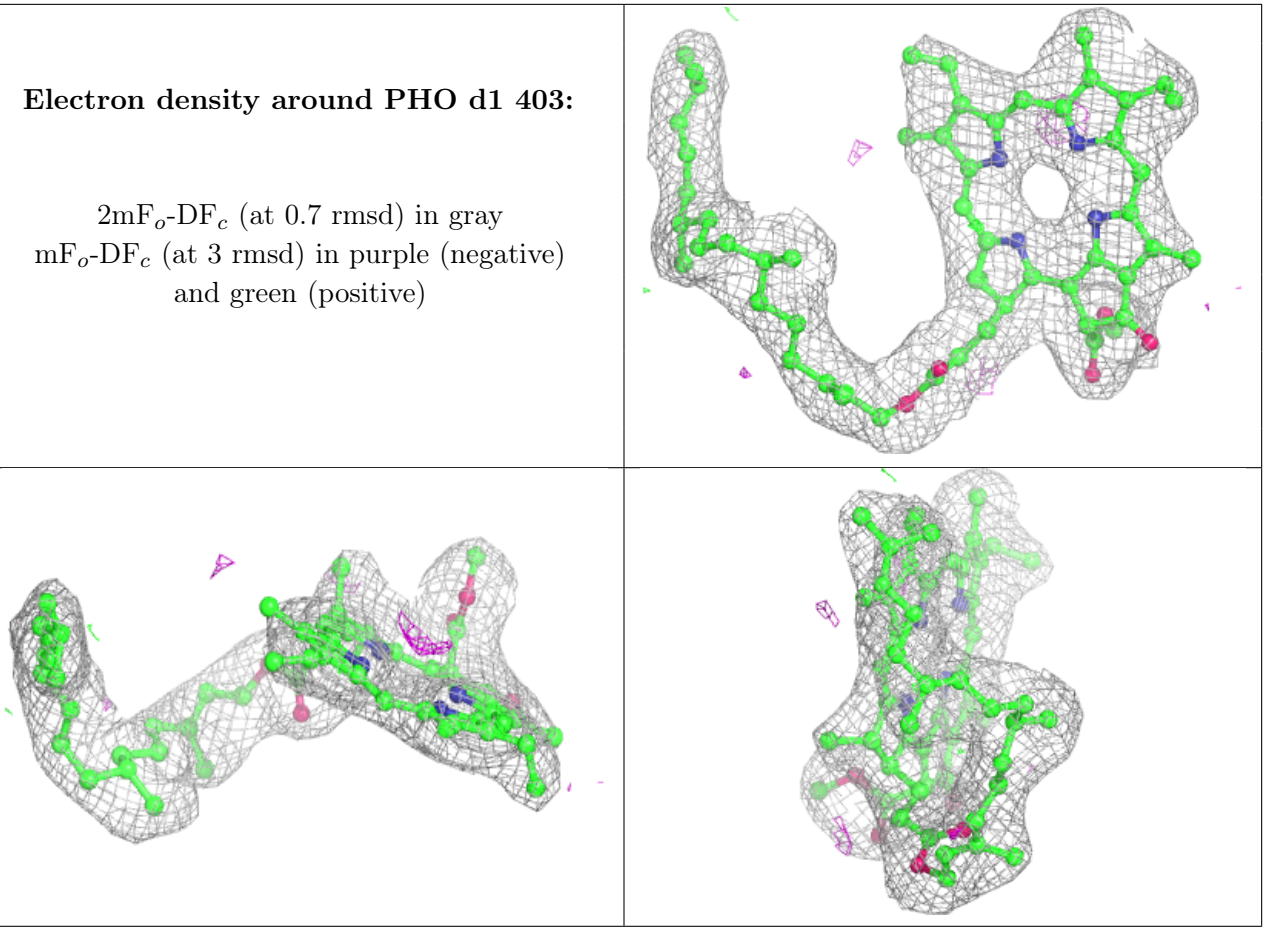
Electron density around CLA B1 613:

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



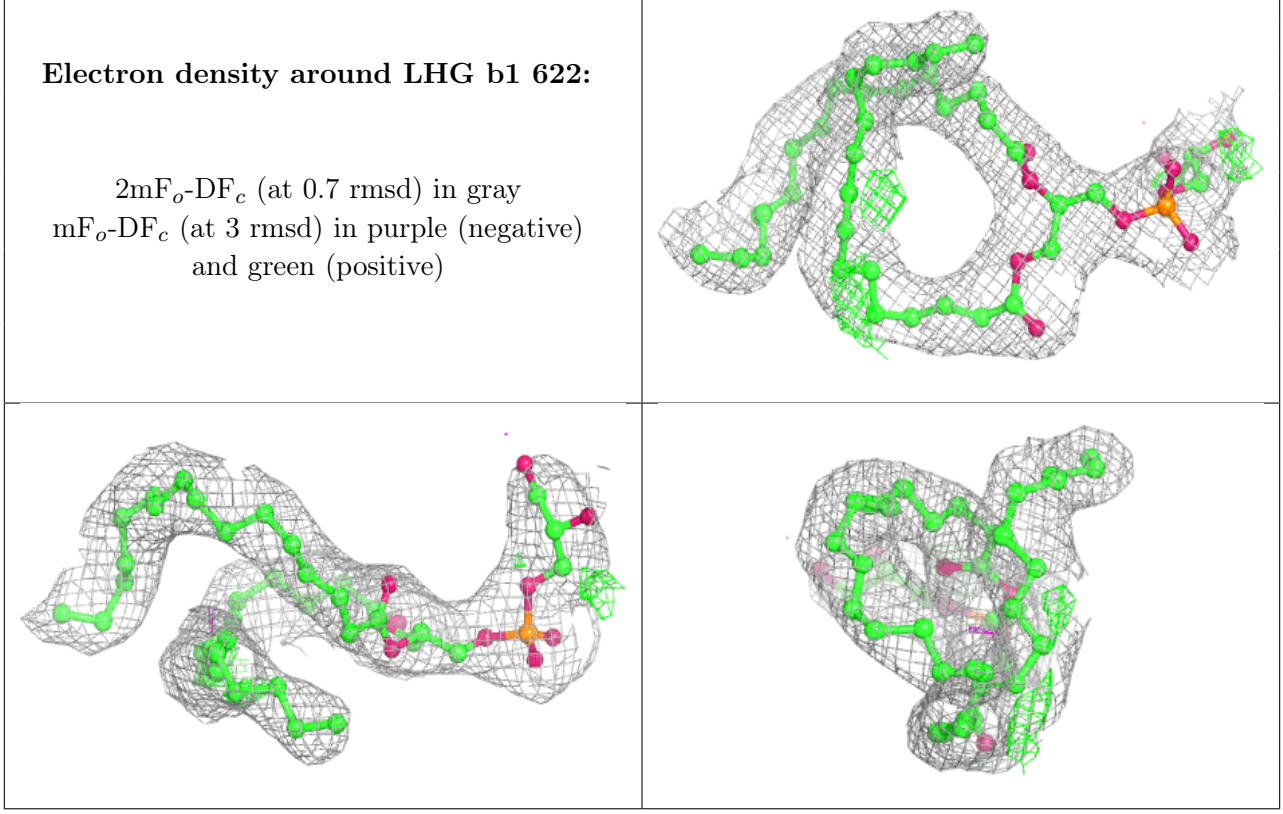
Electron density around PHO d1 403:

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



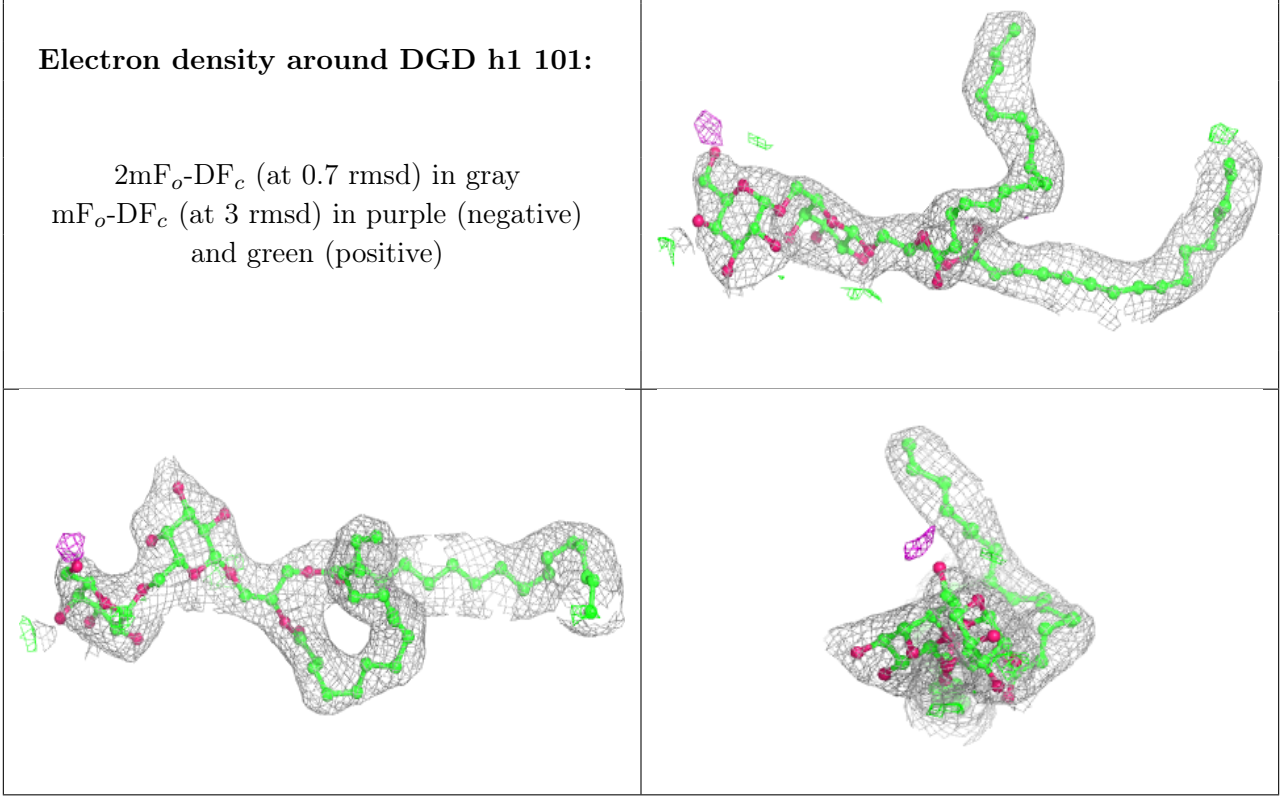
Electron density around LHG b1 622:

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



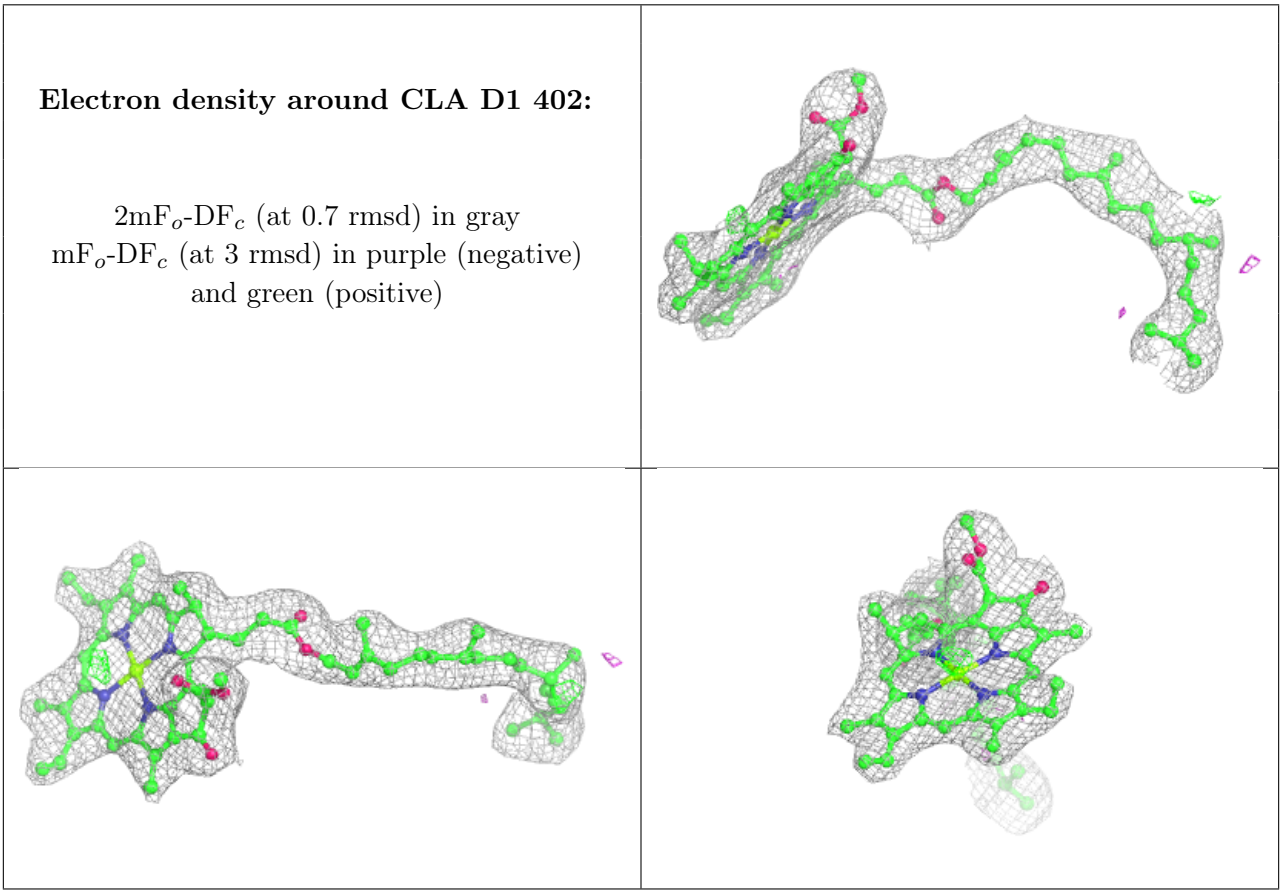
Electron density around DGD h1 101:

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



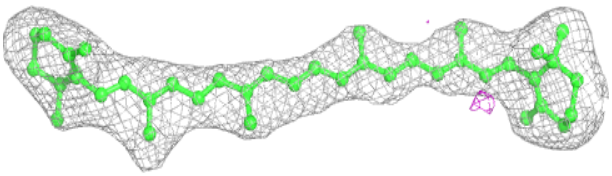
Electron density around CLA D1 402:

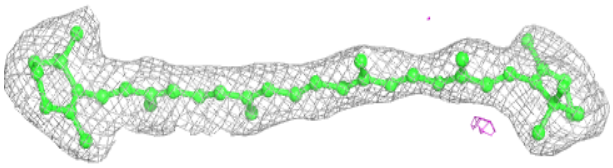
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

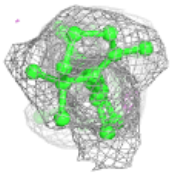


Electron density around BCR A1 401:

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

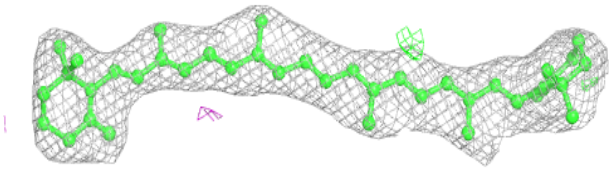


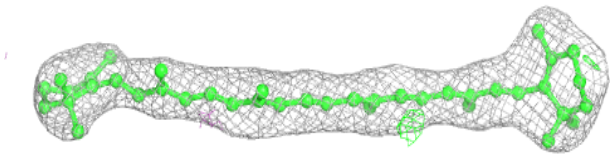


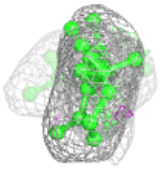


Electron density around BCR b1 601:

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

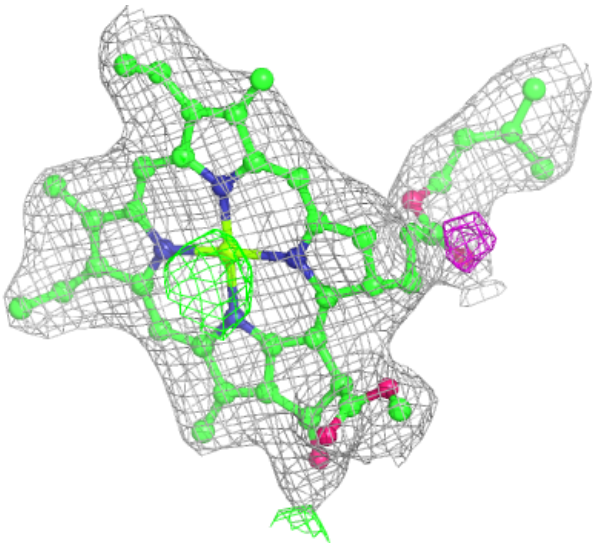


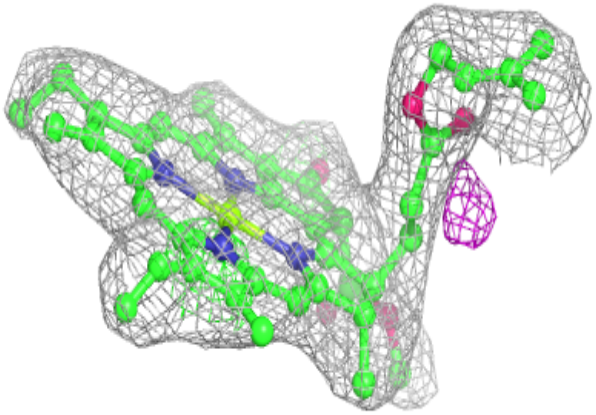


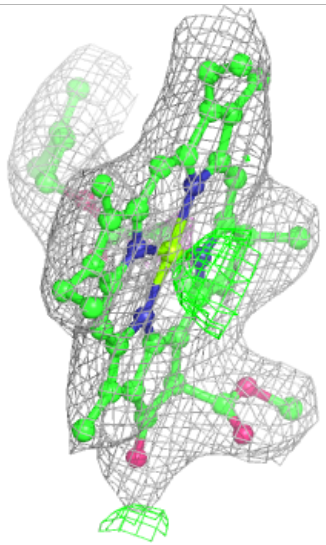


Electron density around CLA a1 405:

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

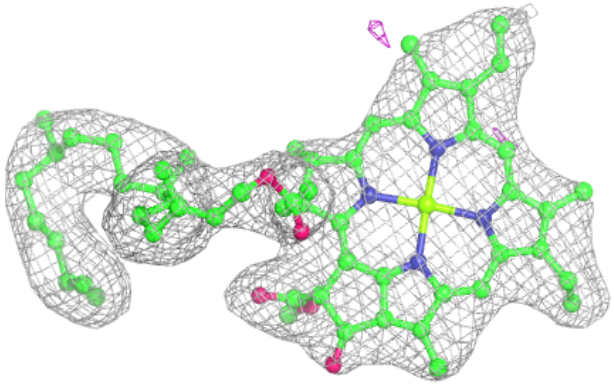


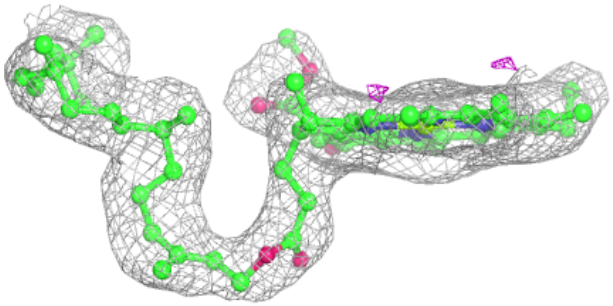


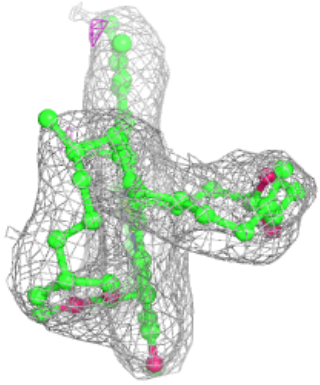


Electron density around CLA B1 614:

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

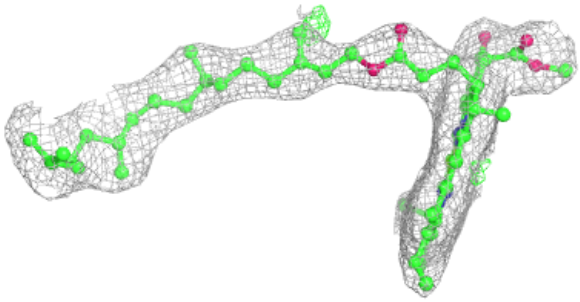


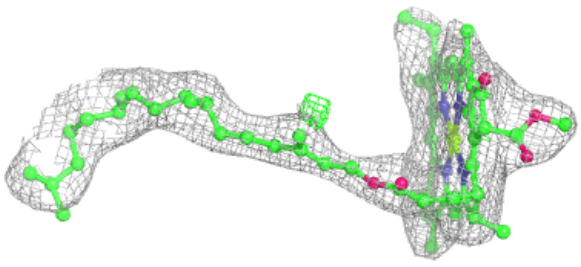


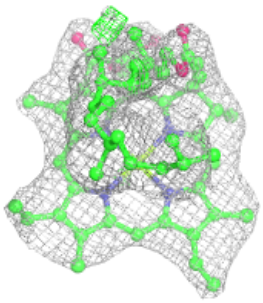


Electron density around CLA B2 608:

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

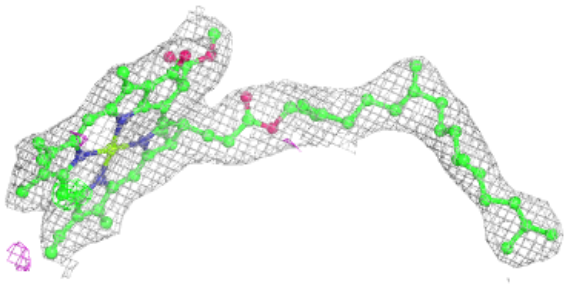


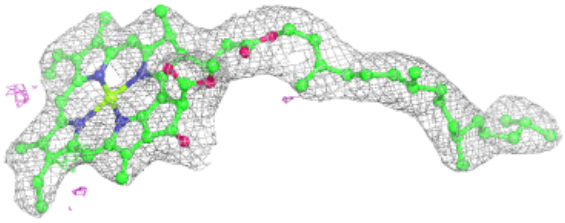


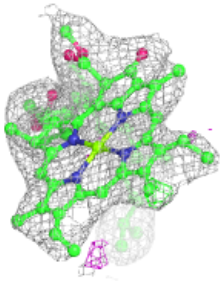


Electron density around CLA a2 404:

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

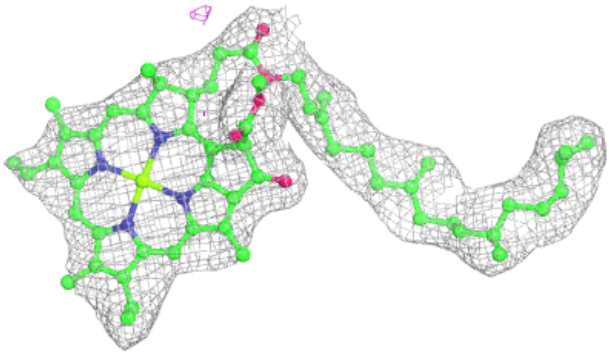


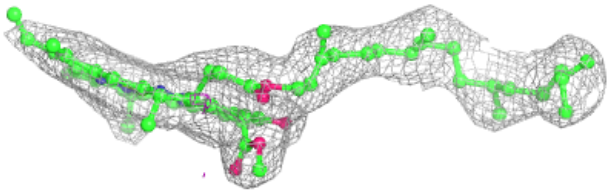


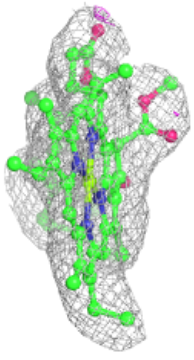


Electron density around CLA b1 605:

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

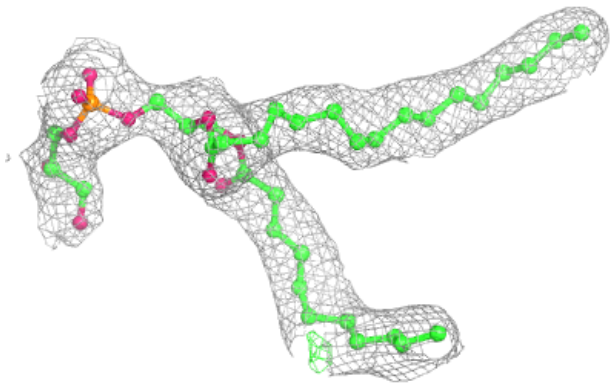


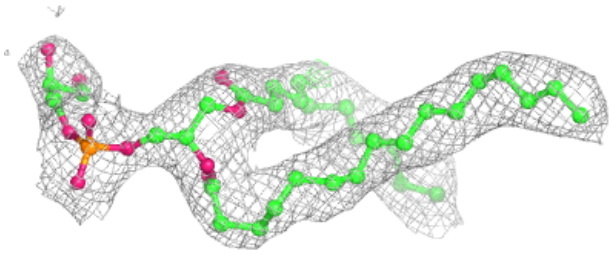




Electron density around LHG l2 101:

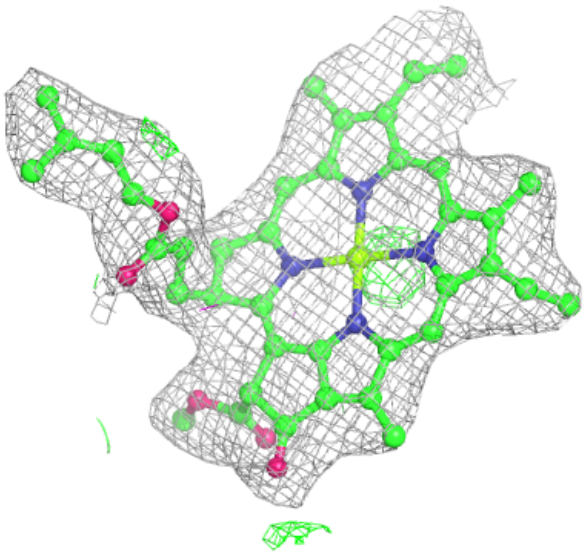
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

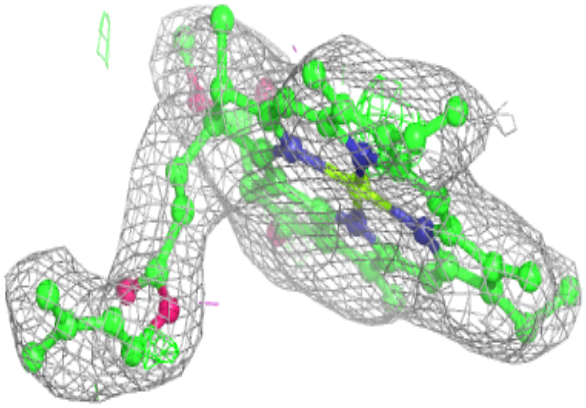


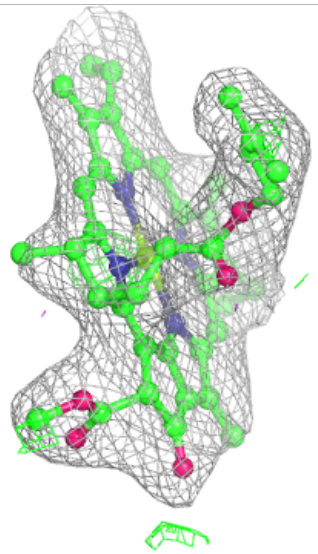


Electron density around CLA a2 413:

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

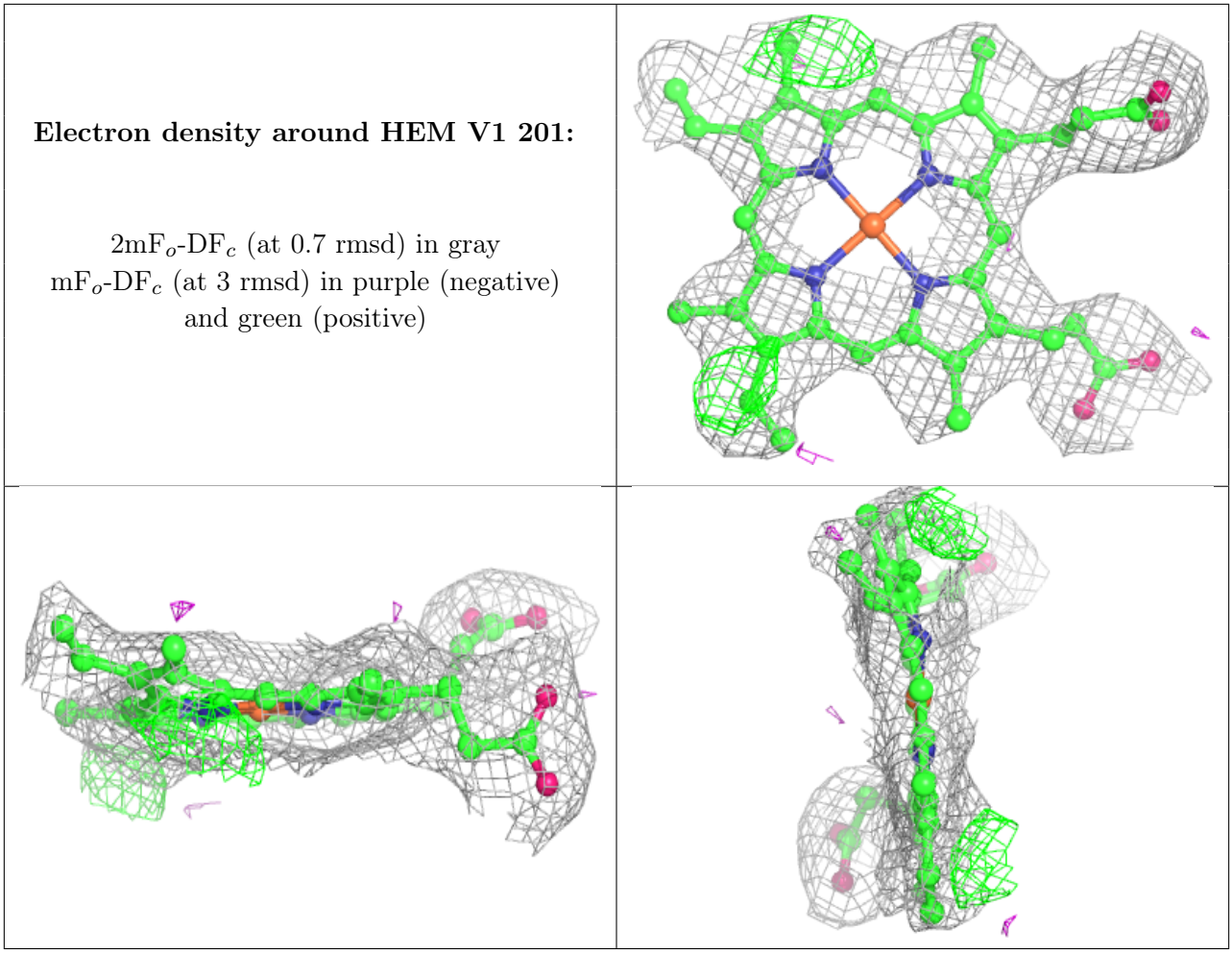






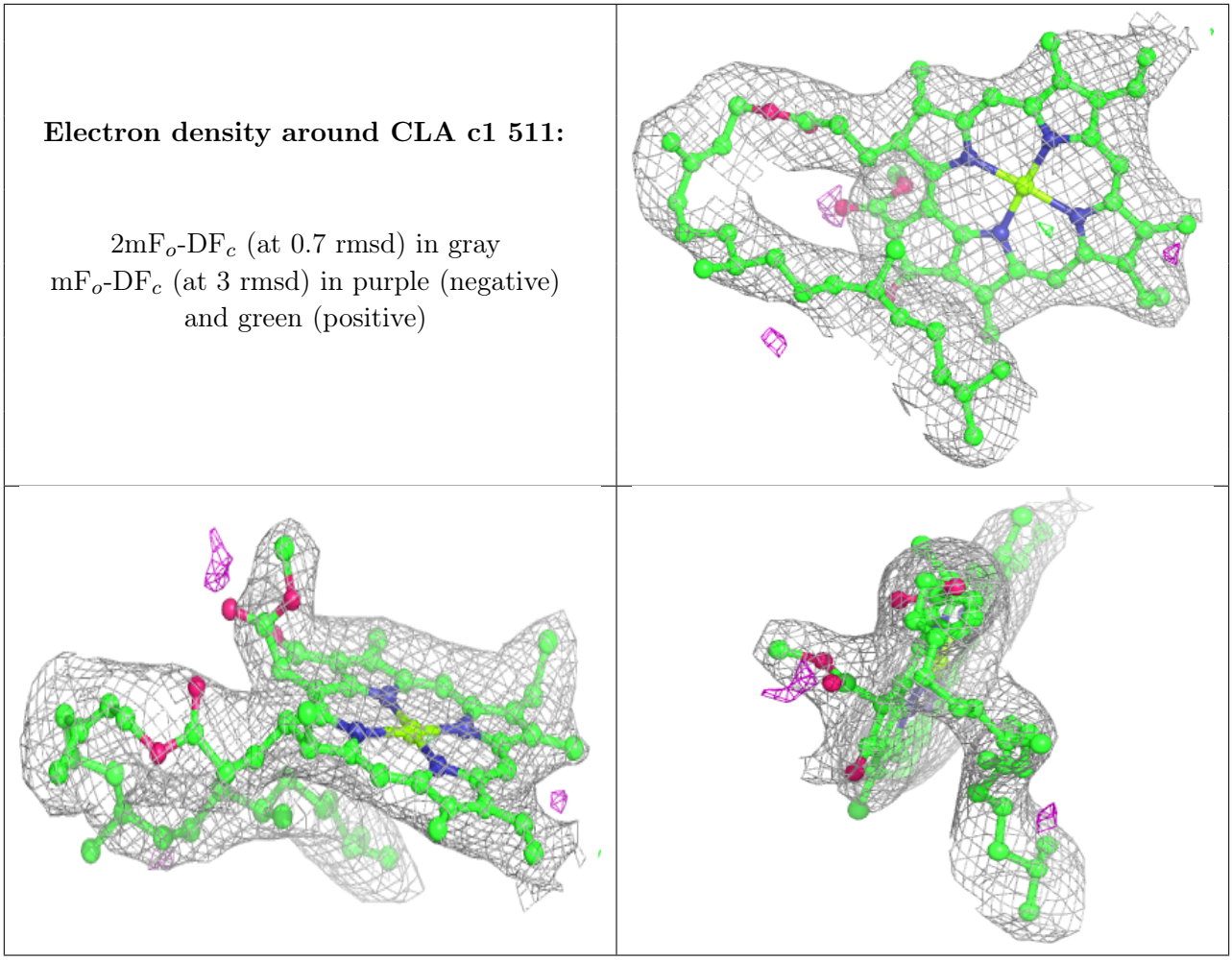
Electron density around HEM V1 201:

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



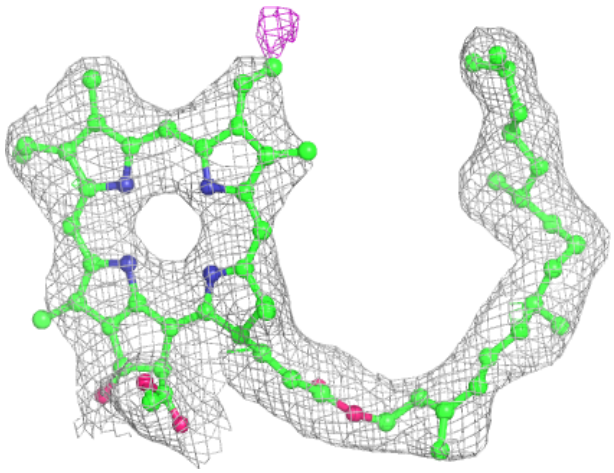
Electron density around CLA c1 511:

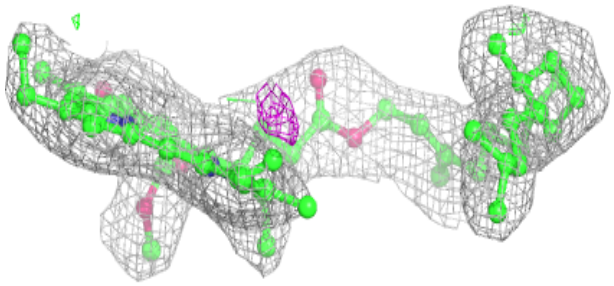
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

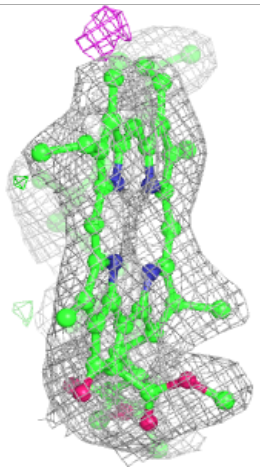


Electron density around PHO a2 416:

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

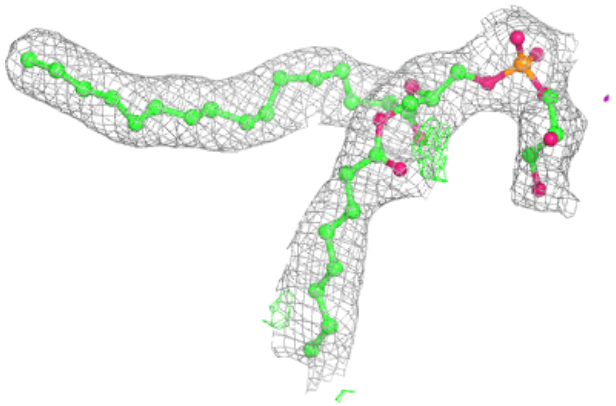


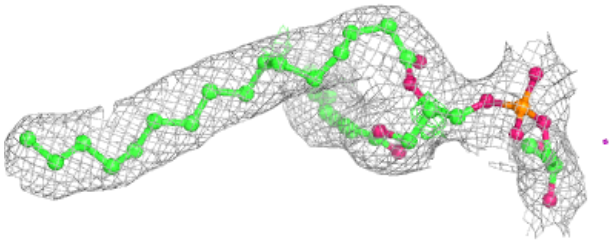


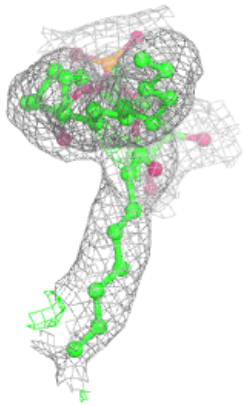


Electron density around LHG L1 101:

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

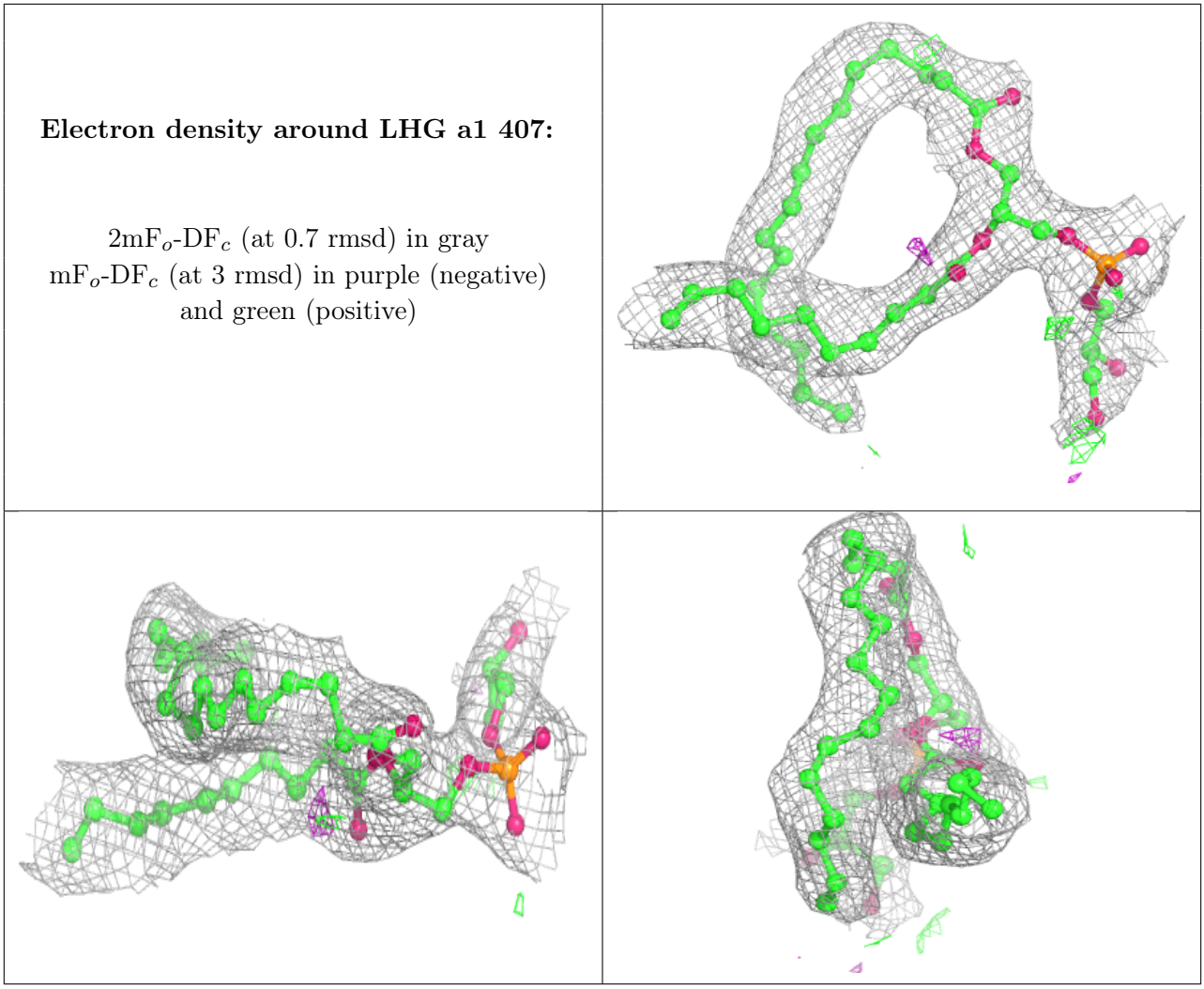






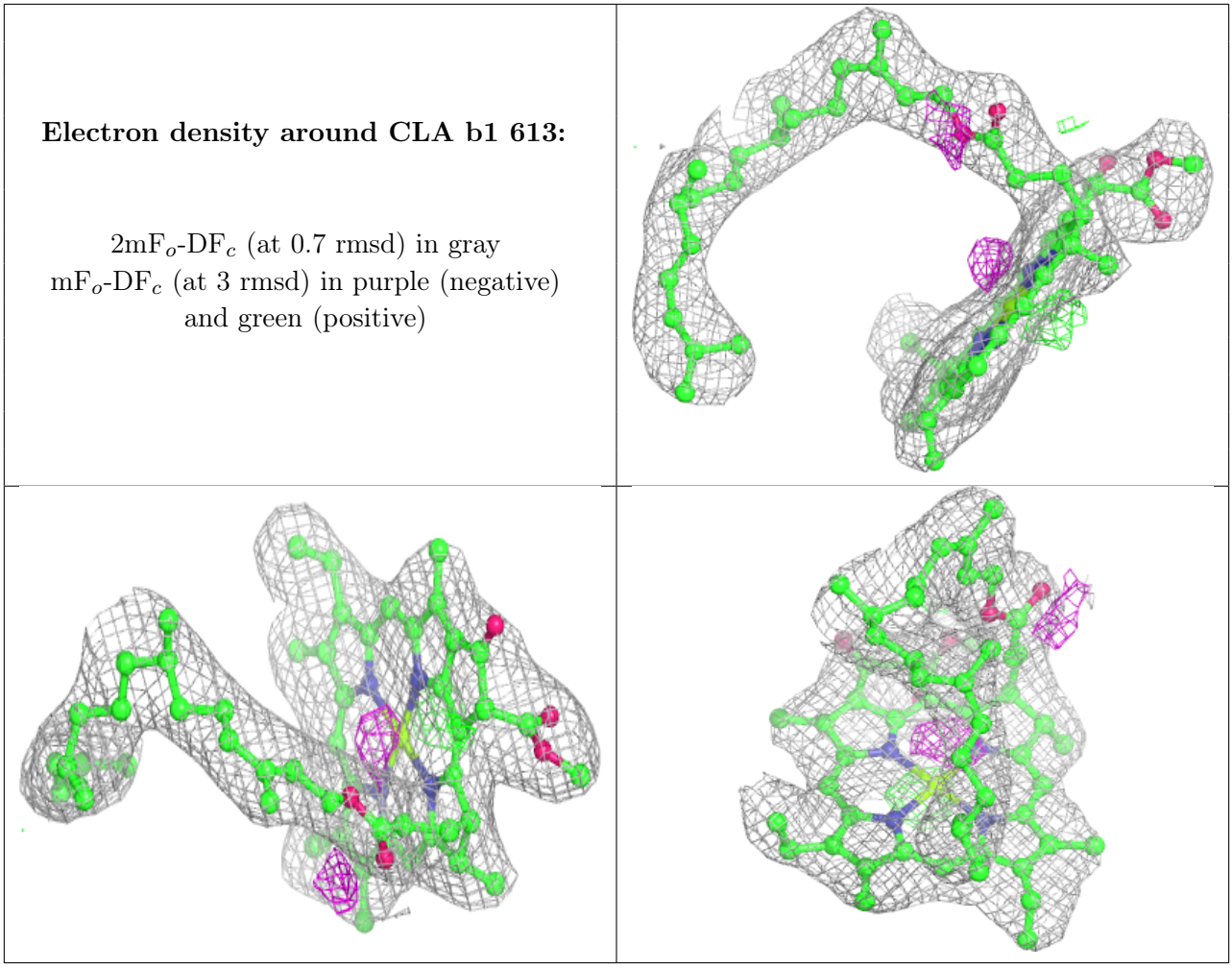
Electron density around LHG a1 407:

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



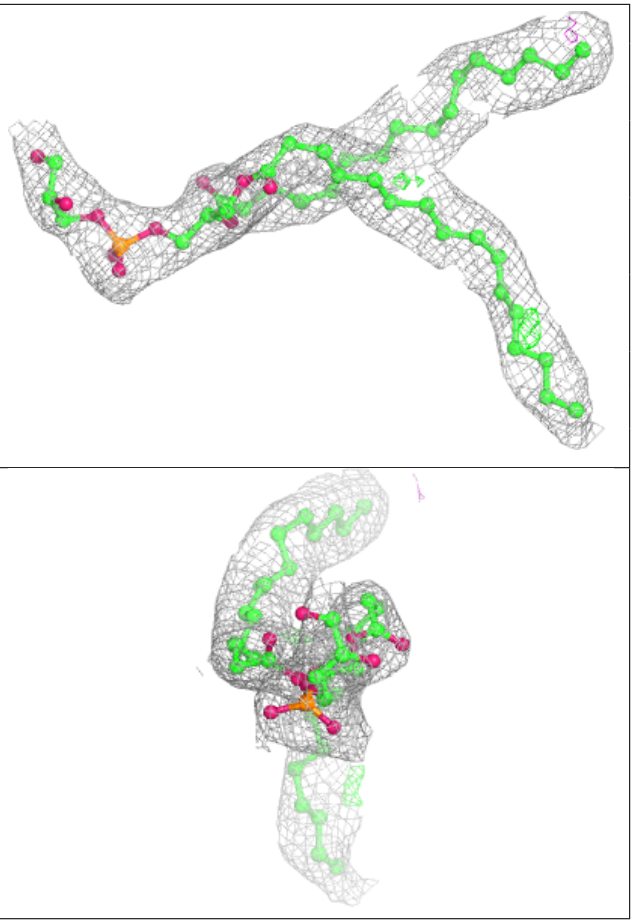
Electron density around CLA b1 613:

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



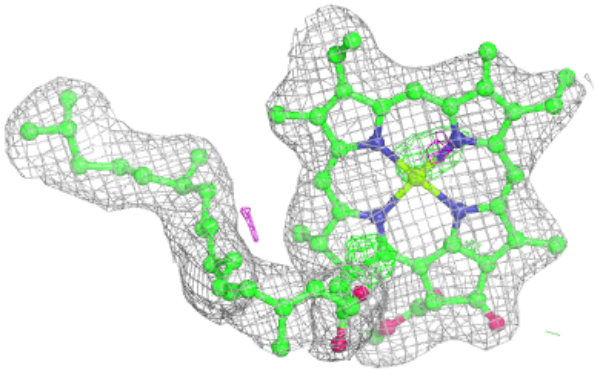
Electron density around LHG d1 407:

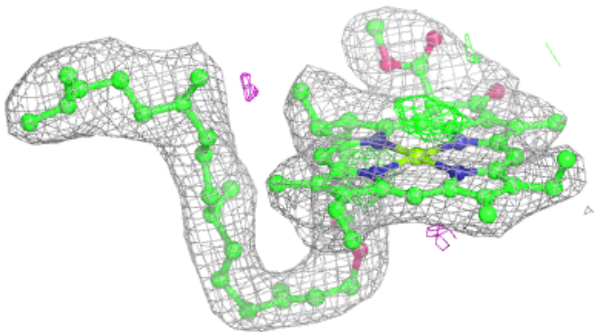
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

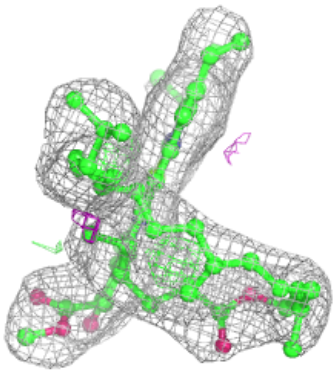


Electron density around CLA d2 402:

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

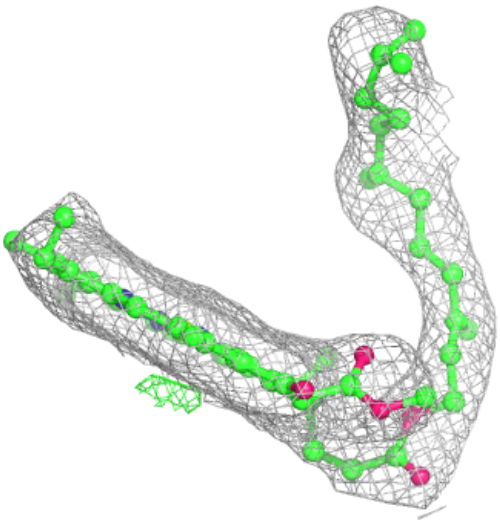


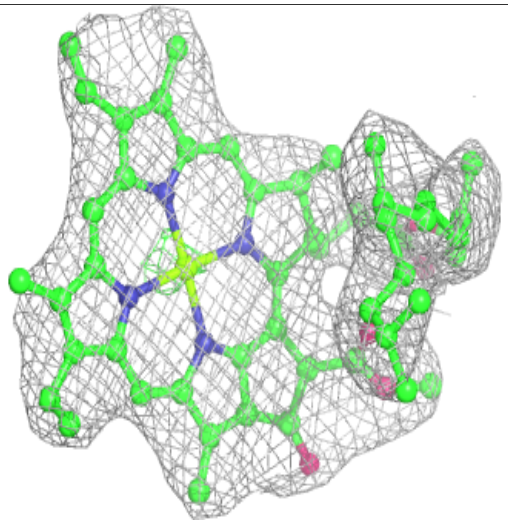


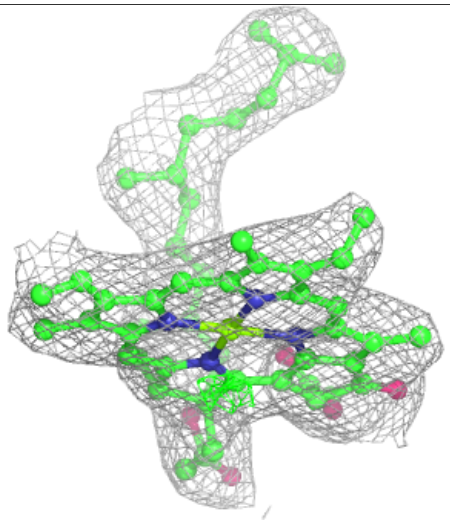


Electron density around CLA b2 615:

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

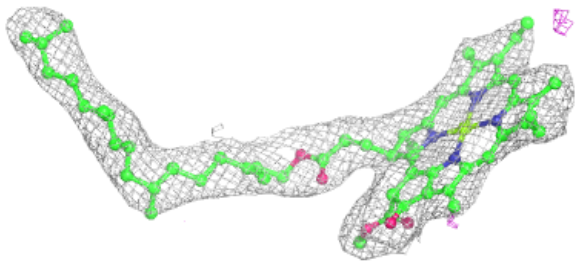


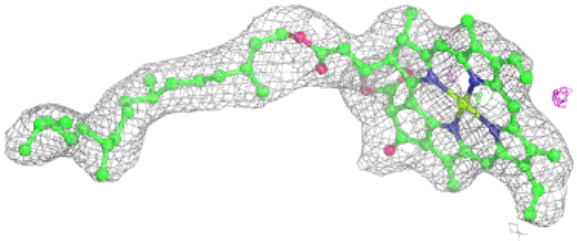


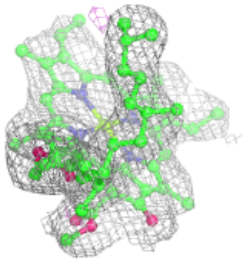


Electron density around CLA a1 403:

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

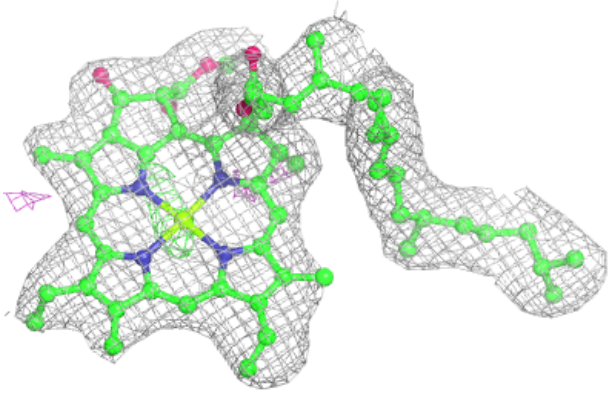


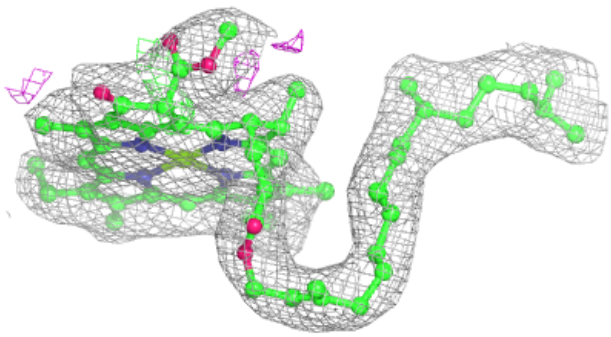


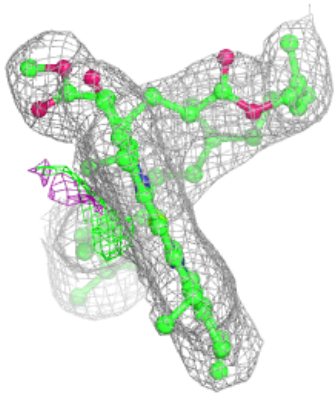


Electron density around CLA A1 406:

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

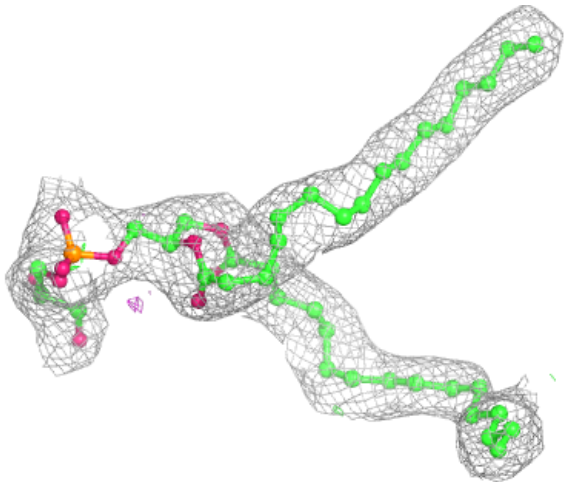


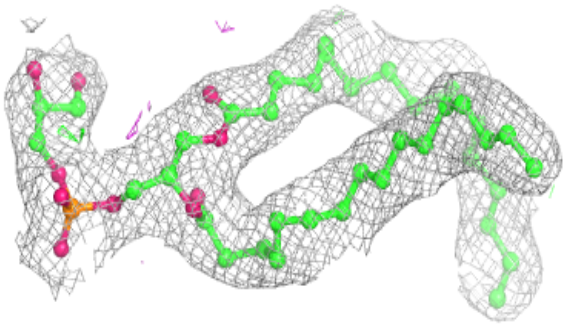




Electron density around LHG l1 102:

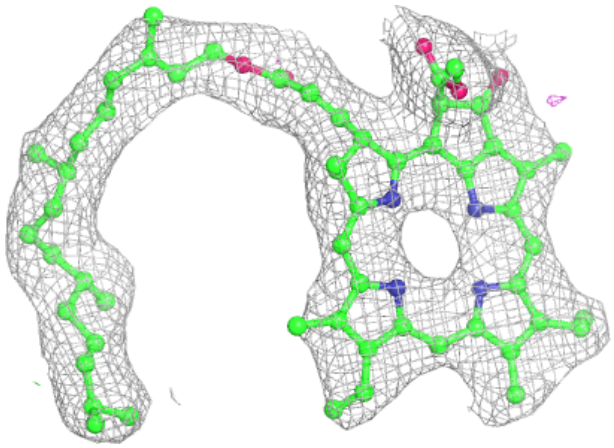
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

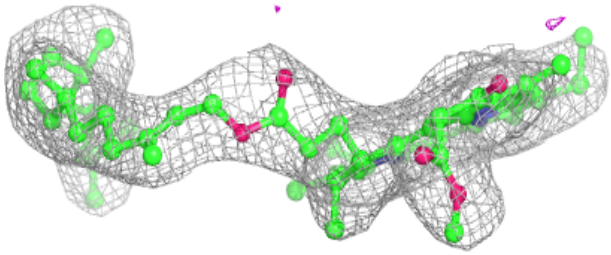


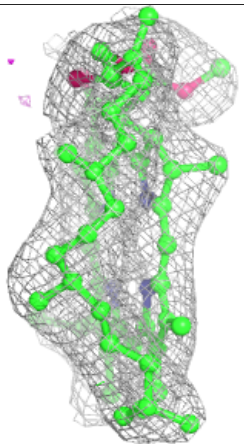


Electron density around PHO A1 408:

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

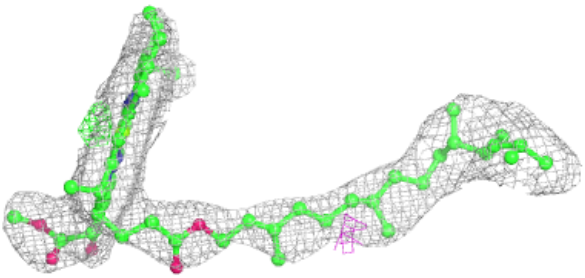


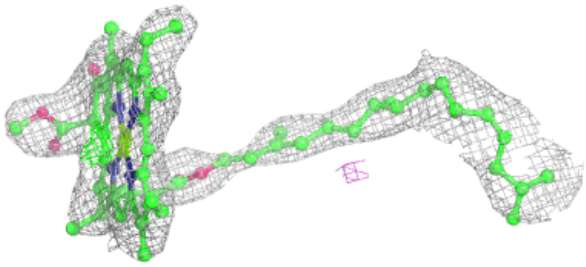


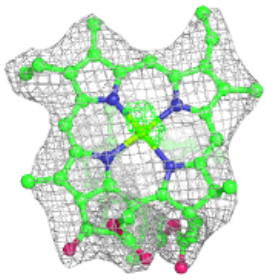


Electron density around CLA B1 608:

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

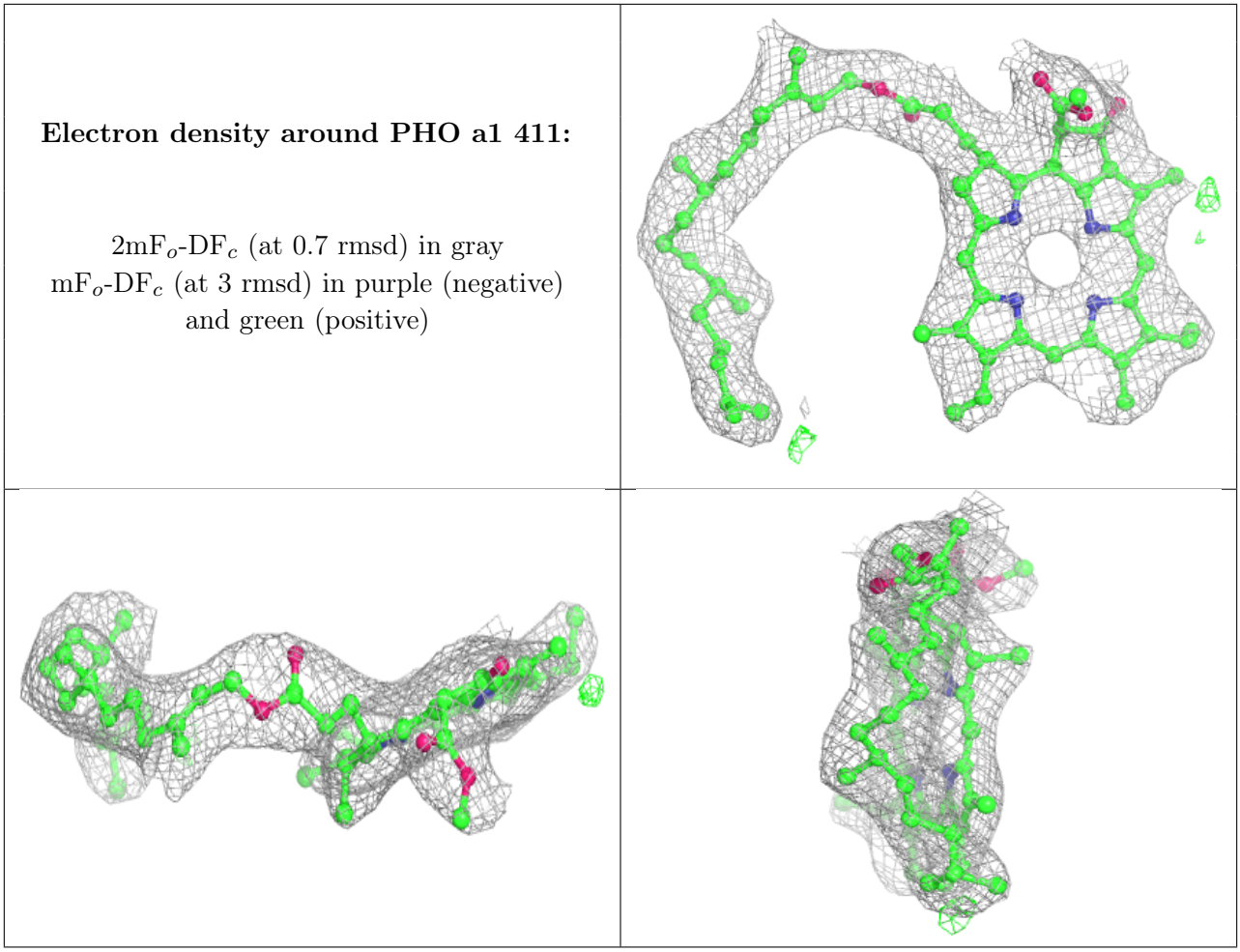






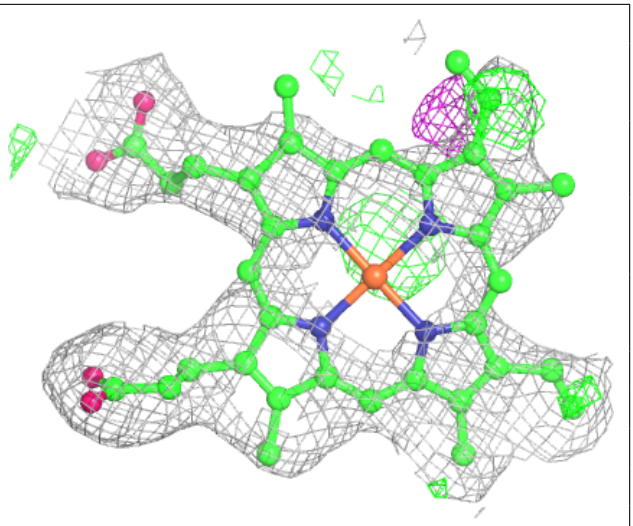
Electron density around PHO a1 411:

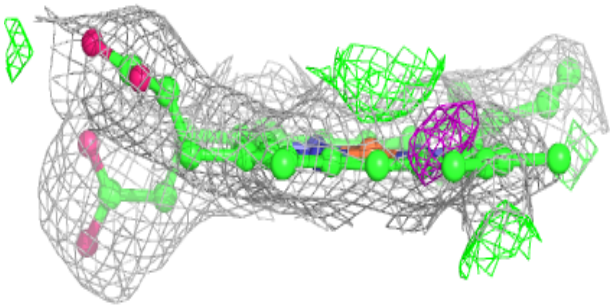
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

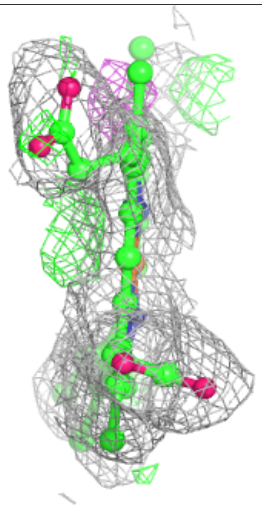


Electron density around HEM v2 201:

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

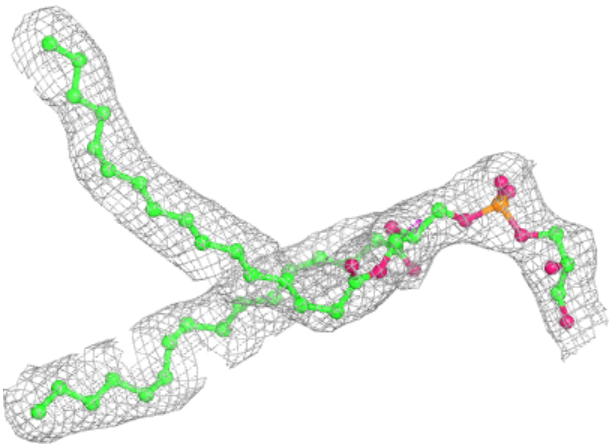


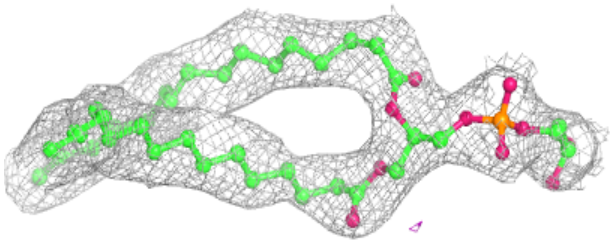


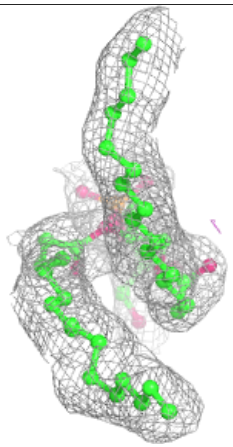


Electron density around LHG D1 405:

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

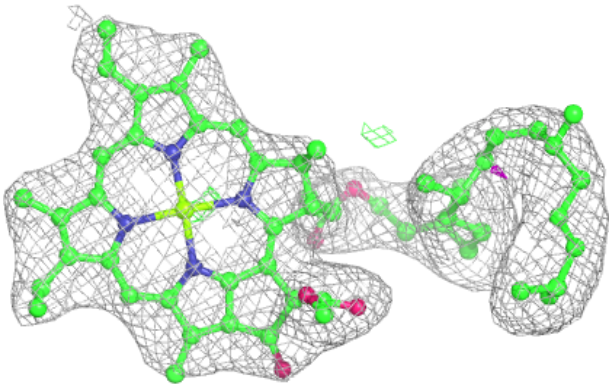


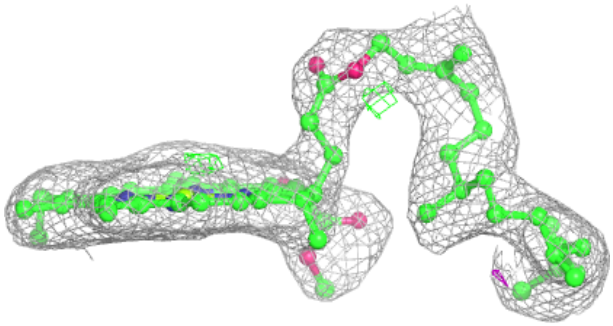


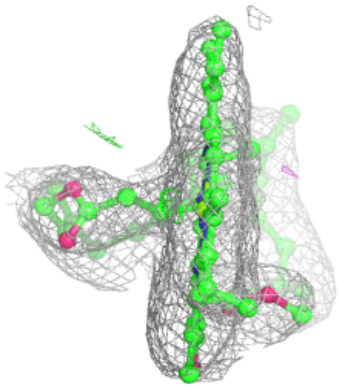


Electron density around CLA b1 614:

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

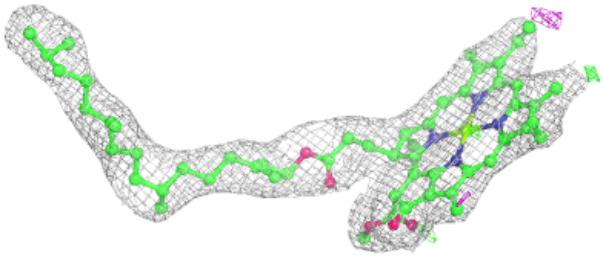


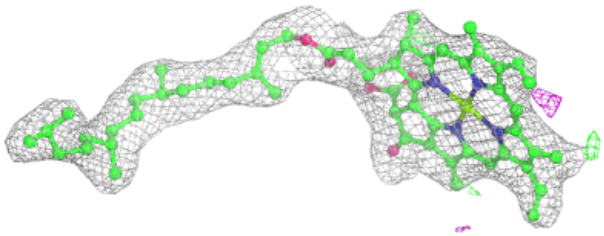


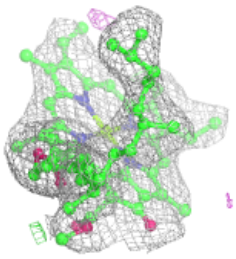


Electron density around CLA A1 403:

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

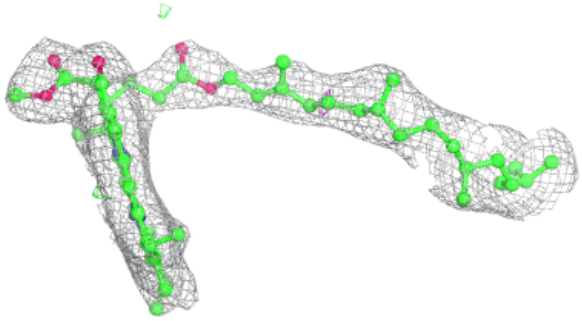


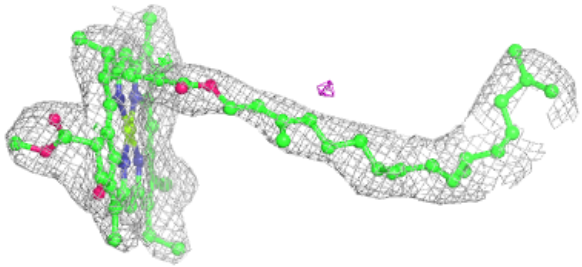


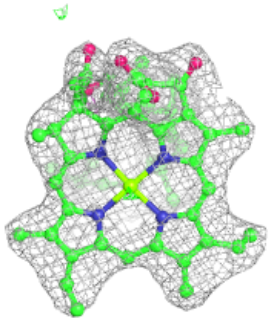


Electron density around CLA b1 608:

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







6.5 Other polymers (i)

There are no such residues in this entry.