



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 17, 2026 – 02:55 PM EDT

PDB ID : 9Z68 / pdb_00009z68
Title : RT XFEL structure of the dark-stable state of Photosystem II (0F, S1 rich)
at 1.97 Angstrom obtained from conventional data at 9.5 keV
Authors : Bhowmick, A.; Kern, J.; Yano, J.; Yachandra, V.K.; Minnetian, N.M.; Zhang,
M.
Deposited on : 2025-11-14
Resolution : 1.97 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

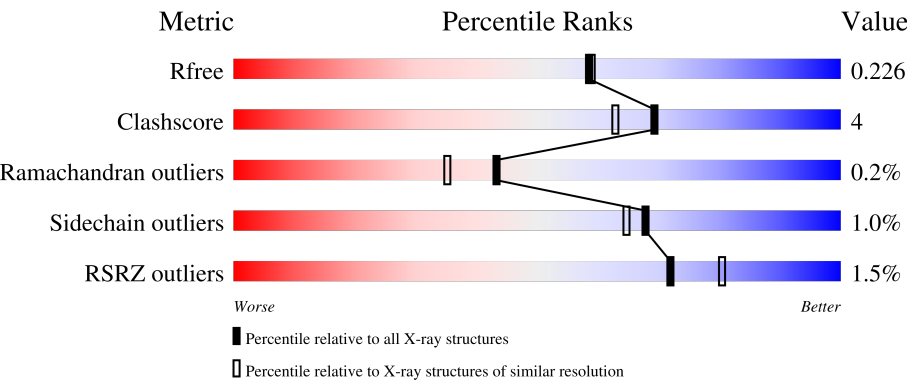
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.50

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 1.97 Å.

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



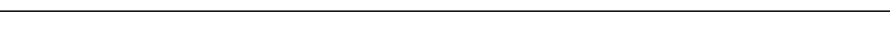
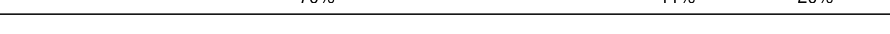
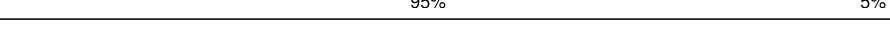
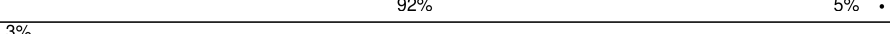
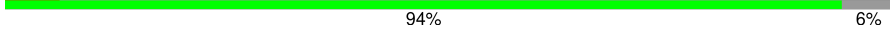
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R _{free}	180053	1506 (1.98-1.98)
Clashscore	190562	1534 (1.98-1.98)
Ramachandran outliers	187476	1518 (1.98-1.98)
Sidechain outliers	187428	1518 (1.98-1.98)
RSRZ outliers	180081	1506 (1.98-1.98)

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

Mol	Chain	Length	Quality of chain
1	A	344	92%6%.
1	a	344	% 90%7%.
2	B	510	% 91%8%.
2	b	510	2% 94%5%.

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Mol	Chain	Length	Quality of chain
3	C	461	
3	c	461	
4	D	352	
4	d	352	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	66	
7	h	66	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	46	
10	k	46	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	272	
13	o	272	
14	T	32	
14	t	32	
15	U	134	

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Mol	Chain	Length	Quality of chain
15	u	134	
16	V	163	
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
35	HEC	V	201	X	-	-	-
35	HEC	v	201	X	-	-	-

2 Entry composition [i](#)

There are 36 unique types of molecules in this entry. The entry contains 104120 atoms, of which 52077 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 1.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	334	Total	C	H	N	O	S	0	0	0
			5091	1717	2469	431	459	15			
1	a	334	Total	C	H	N	O	S	0	0	0
			5081	1714	2462	431	459	15			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
2	B	505	Total	C	H	N	O	S	0	7	0
			7903	2637	3887	670	696	13			
2	b	505	Total	C	H	N	O	S	0	1	0
			7826	2614	3842	665	692	13			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
3	C	442	Total	C	H	N	O	S	0	2	0
			6773	2249	3347	571	593	13			
3	c	451	Total	C	H	N	O	S	0	2	0
			6918	2290	3418	587	610	13			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
4	D	341	Total	C	H	N	O	S	0	0	0
			5337	1800	2620	444	461	12			
4	d	341	Total	C	H	N	O	S	0	1	0
			5349	1804	2626	444	463	12			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	82	Total	C	H	N	O	0	1	0
			1317	436	651	107	123			
5	e	82	Total	C	H	N	O	0	0	0
			1312	434	648	108	122			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	H	N	O	0	0	0
			557	187	282	45	42			
6	f	34	Total	C	H	N	O	0	0	0
			557	187	282	45	42			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	H	N	O	0	0	0
			1033	335	528	82	85			
7	h	63	Total	C	H	N	O	0	0	0
			1007	327	514	80	83			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	41	CYS	PHE	conflict	UNP Q8DJ43
h	41	CYS	PHE	conflict	UNP Q8DJ43

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	36	Total	C	H	N	O	0	0	0
			607	200	311	46	49			
8	i	36	Total	C	H	N	O	0	0	0
			607	200	311	46	49			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	H	N	O	0	0	0
			525	174	268	40	42			
9	j	36	Total	C	H	N	O	0	0	0
			525	174	268	40	42			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	K	37	Total	C	H	N	O	0	0	0
			598	204	305	43	46			
10	k	37	Total	C	H	N	O	0	0	0
			598	204	305	43	46			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
11	L	37	Total	C	H	N	O	S	0	0	0
			620	202	316	48	53	1			
11	l	36	Total	C	H	N	O		0	0	0
			600	197	304	47	52				

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
12	M	33	Total	C	H	N	O	S	0	0	0
			523	171	267	37	47	1			
12	m	32	Total	C	H	N	O	S	0	0	0
			518	168	267	36	46	1			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
13	O	244	Total	C	H	N	O	S	0	1	0
			3700	1168	1830	313	385	4			
13	o	244	Total	C	H	N	O	S	0	0	0
			3720	1170	1846	317	383	4			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
14	T	30	Total	C	H	N	O	S	0	0	0
			519	181	261	36	39	2			
14	t	30	Total	C	H	N	O	S	0	0	0
			512	180	256	36	38	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	U	97	Total	C	H	N	O	0	0	0
			1547	491	773	129	154			
15	u	97	Total	C	H	N	O	0	0	0
			1547	491	773	129	154			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
16	V	137	Total	C	H	N	O	S	0	0	0
			2135	675	1071	177	208	4			
16	v	137	Total	C	H	N	O	S	0	0	0
			2135	675	1071	177	208	4			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
17	Y	27	Total	C	H	N	O	S	0	0	0
			413	128	217	35	30	3			
17	y	30	Total	C	H	N	O	S	0	0	0
			459	144	241	35	36	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	38	Total	C	H	N	O	0	0	0
			593	188	312	45	48			
18	x	39	Total	C	H	N	O	0	0	0
			602	191	316	46	49			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
19	Z	62	Total	C	H	N	O	S	0	0	0
			995	328	516	72	77	2			
19	z	62	Total	C	H	N	O	S	0	0	0
			986	326	509	72	77	2			

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

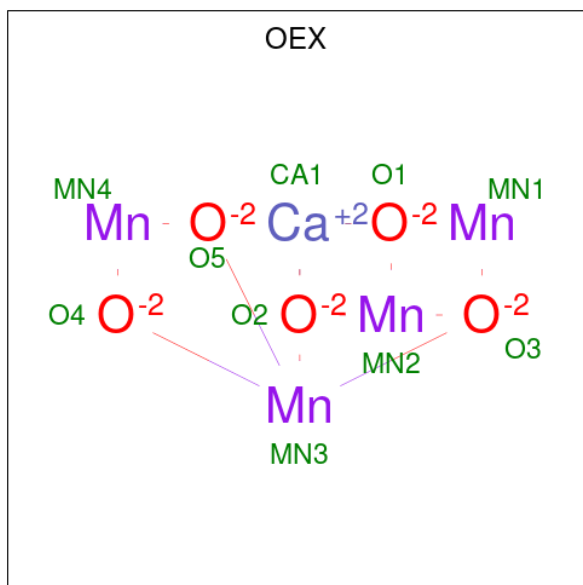
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	28	Total	C	H	N	O	0	0	0
			459	151	238	38	32			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	r	28	Total	C	H	N	O	0	0	0
			459	151	238	38	32			

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



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

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

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

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

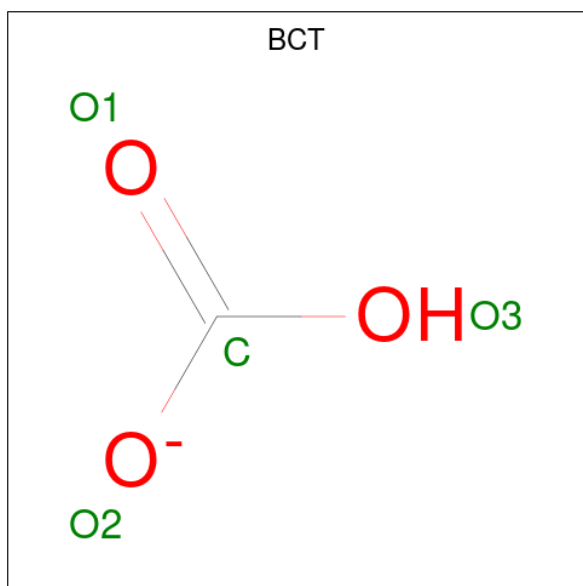
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	A	2	Total	Cl	0	0
			2	2		

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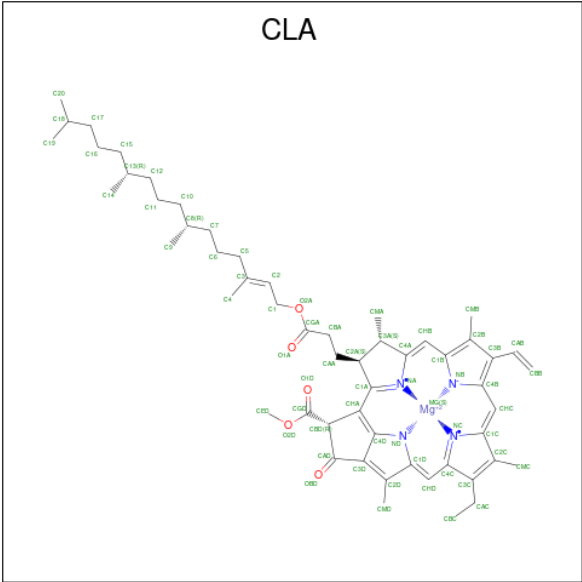
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	a	2	Total	Cl	0	0
			2	2		

- Molecule 24 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3^-).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
24	A	1	Total	C	H	O	0	0
			5	1	1	3		
24	a	1	Total	C	H	O	0	0
			5	1	1	3		

- Molecule 25 is CHLOROPHYLL A (CCD ID: CLA) (formula: $\text{C}_{55}\text{H}_{72}\text{MgN}_4\text{O}_5$).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
25	A	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	A	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	A	1	Total	C	H	Mg	N	O	0	0
			102	44	48	1	4	5		
25	A	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

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Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	B	1	Total	C	H	Mg	N	O	0	0
			119	50	59	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			117	49	58	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	D	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	D	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

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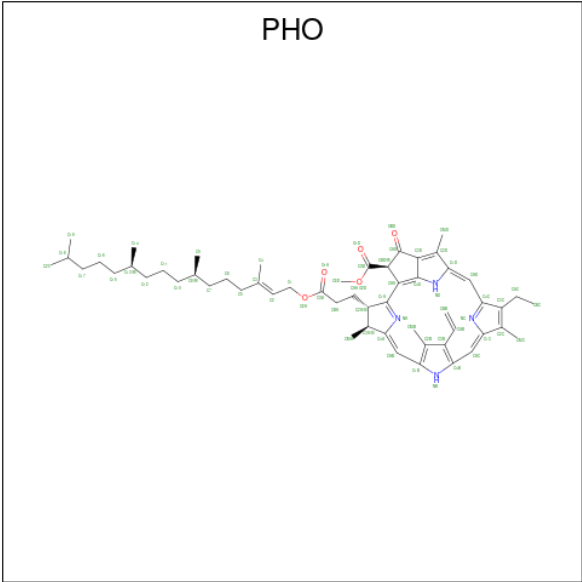
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
25	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
25	b	1	Total	C	H	Mg	N	O	0	0
			119	50	59	1	4	5		
25	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

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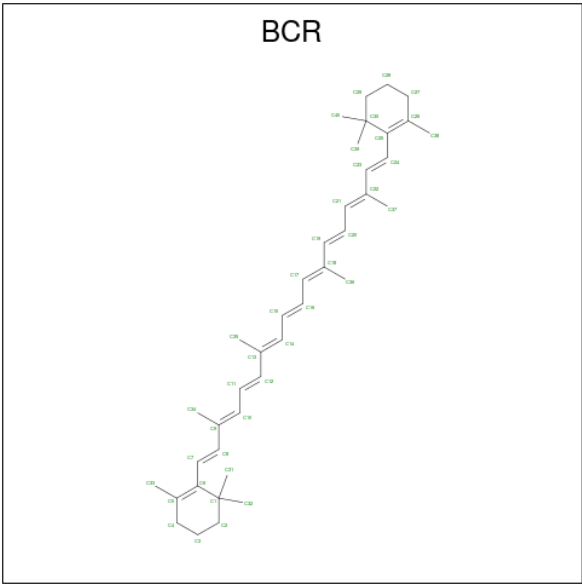
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 119	C 50	H 59	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 132	C 54	H 68	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	c	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	d	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0
25	d	1	Total 137	C 55	H 72	Mg 1	N 4	O 5	0	0

- Molecule 26 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).



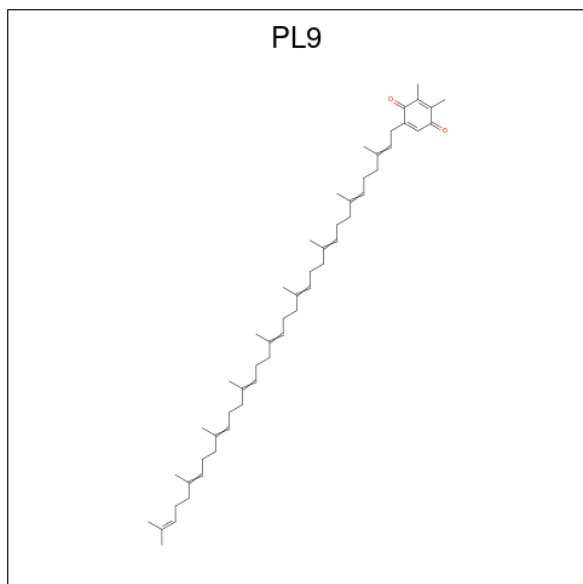
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	A	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
26	D	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
26	a	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
26	d	1	Total	C	H	N	O	0	0
			138	55	74	4	5		

- Molecule 27 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



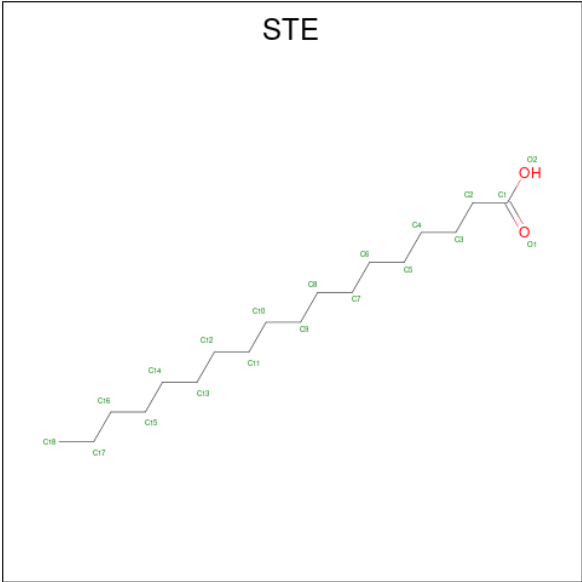
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
27	A	1	Total	C	H	0	0
			96	40	56		
27	B	1	Total	C	H	0	0
			96	40	56		
27	B	1	Total	C	H	0	0
			96	40	56		
27	B	1	Total	C	H	0	0
			96	40	56		
27	C	1	Total	C	H	0	0
			96	40	56		
27	D	1	Total	C	H	0	0
			96	40	56		
27	H	1	Total	C	H	0	0
			96	40	56		
27	K	1	Total	C	H	0	0
			96	40	56		
27	K	1	Total	C	H	0	0
			96	40	56		
27	T	1	Total	C	H	0	0
			96	40	56		
27	Y	1	Total	C	H	0	0
			96	40	56		
27	a	1	Total	C	H	0	0
			96	40	56		
27	b	1	Total	C	H	0	0
			96	40	56		
27	b	1	Total	C	H	0	0
			96	40	56		
27	b	1	Total	C	H	0	0
			96	40	56		
27	c	1	Total	C	H	0	0
			96	40	56		
27	c	1	Total	C	H	0	0
			96	40	56		
27	d	1	Total	C	H	0	0
			96	40	56		
27	h	1	Total	C	H	0	0
			96	40	56		
27	k	1	Total	C	H	0	0
			96	40	56		
27	k	1	Total	C	H	0	0
			96	40	56		
27	t	1	Total	C	H	0	0
			96	40	56		

- Molecule 28 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: $C_{53}H_{80}O_2$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
28	A	1	Total	C	H	O	0	0
			135	53	80	2		
28	D	1	Total	C	H	O	0	0
			135	53	80	2		
28	a	1	Total	C	H	O	0	0
			135	53	80	2		
28	d	1	Total	C	H	O	0	0
			135	53	80	2		

- Molecule 29 is STEARIC ACID (CCD ID: STE) (formula: $C_{18}H_{36}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C H 23 9 14	0	0
29	A	1	Total C H 50 17 33	0	0
29	A	1	Total C H 32 11 21	0	0
29	B	1	Total C H O 43 15 26 2	0	0
29	B	1	Total C H O 46 16 28 2	0	0
29	B	1	Total C H O 28 10 16 2	0	0
29	B	1	Total C H 41 15 26	0	0
29	C	1	Total C H O 34 12 20 2	0	0
29	C	1	Total C H 11 5 6	0	0
29	C	1	Total C H 17 7 10	0	0
29	C	1	Total C H 26 10 16	0	0
29	C	1	Total C H O 28 10 16 2	0	0
29	C	1	Total C H 47 16 31	0	0
29	C	1	Total C H 41 14 27	0	0

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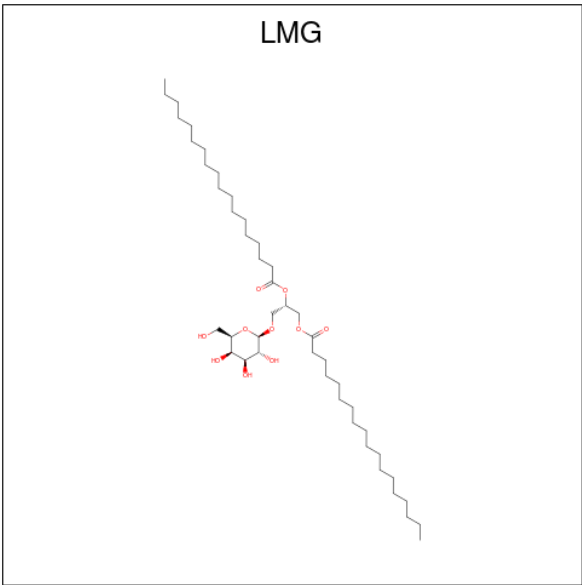
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	D	1	Total C H 26 9 17	0	0
29	E	1	Total C H O 28 10 16 2	0	0
29	E	1	Total C H 35 12 23	0	0
29	E	1	Total C H O 55 18 35 2	0	0
29	H	1	Total C H 53 18 35	0	0
29	I	1	Total C H O 43 15 26 2	0	0
29	I	1	Total C H O 37 13 22 2	0	0
29	J	1	Total C H O 28 10 16 2	0	0
29	K	1	Total C H 41 14 27	0	0
29	M	1	Total C H O 37 13 22 2	0	0
29	M	1	Total C H 26 10 16	0	0
29	M	1	Total C H 44 15 29	0	0
29	T	1	Total C H 47 16 31	0	0
29	X	1	Total C H O 55 18 35 2	0	0
29	Z	1	Total C H 50 17 33	0	0
29	a	1	Total C H O 28 10 16 2	0	0
29	b	1	Total C H O 55 18 35 2	0	0
29	b	1	Total C H O 40 14 24 2	0	0
29	b	1	Total C H 26 10 16	0	0
29	b	1	Total C H 23 8 15	0	0
29	c	1	Total C H 35 13 22	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	c	1	Total C H 53 18 35	0	0
29	d	1	Total C H O 55 18 35 2	0	0
29	d	1	Total C H O 55 18 35 2	0	0
29	d	1	Total C H O 34 12 20 2	0	0
29	e	1	Total C H 26 9 17	0	0
29	e	1	Total C H 26 9 17	0	0
29	e	1	Total C H O 31 11 18 2	0	0
29	f	1	Total C H 23 8 15	0	0
29	h	1	Total C H 29 10 19	0	0
29	h	1	Total C H 32 11 21	0	0
29	i	1	Total C H O 28 10 16 2	0	0
29	i	1	Total C H 14 6 8	0	0
29	j	1	Total C H O 28 10 16 2	0	0
29	j	1	Total C H 47 16 31	0	0
29	l	1	Total C H 53 18 35	0	0
29	m	1	Total C H O 28 10 16 2	0	0
29	t	1	Total C H O 34 12 20 2	0	0
29	t	1	Total C H 26 10 16	0	0
29	x	1	Total C H O 55 18 35 2	0	0
29	z	1	Total C H 23 9 14	0	0

- Molecule 30 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: C₄₅H₈₆O₁₀).



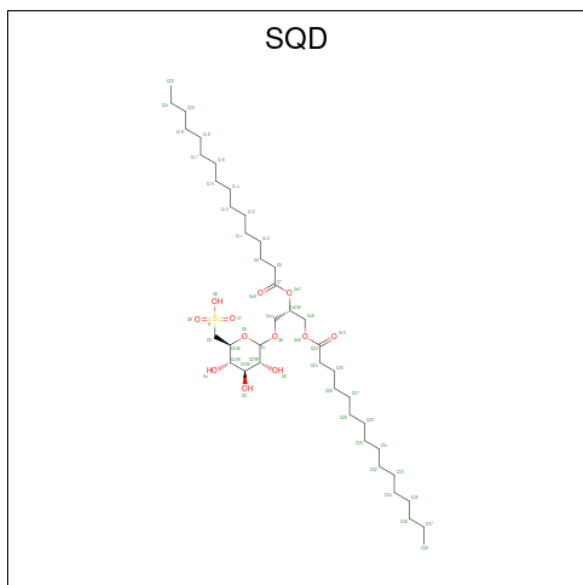
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	H	O	0	0
			114	38	66	10		
30	B	1	Total	C	H	O	0	0
			105	35	60	10		
30	B	1	Total	C	H	O	0	0
			123	41	72	10		
30	C	1	Total	C	H	O	0	0
			76	26	40	10		
30	C	1	Total	C	H	O	0	0
			114	38	66	10		
30	D	1	Total	C	H	O	0	0
			120	40	70	10		
30	D	1	Total	C	H	O	0	0
			123	41	72	10		
30	a	1	Total	C	H	O	0	0
			141	45	86	10		
30	a	1	Total	C	H	O	0	0
			117	39	68	10		
30	b	1	Total	C	H	O	0	0
			123	41	72	10		
30	b	1	Total	C	H	O	0	0
			141	45	86	10		
30	c	1	Total	C	H	O	0	0
			71	25	41	5		
30	c	1	Total	C	H	O	0	0
			108	36	62	10		
30	c	1	Total	C	H	O	0	0
			117	38	69	10		

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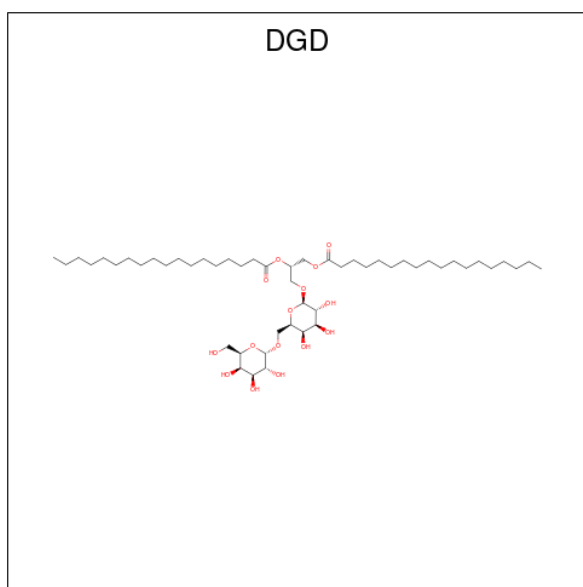
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	d	1	Total	C	H	O	0	0
			102	34	58	10		

- Molecule 31 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$).



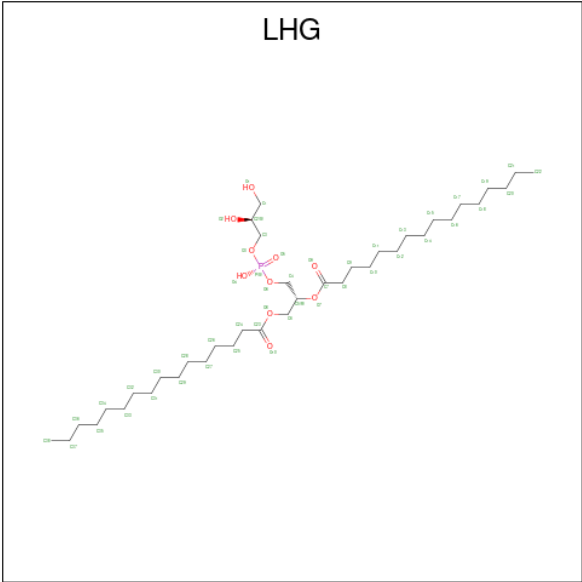
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
31	A	1	Total	C	H	O	S	0	0
			122	39	70	12	1		
31	A	1	Total	C	H	O	S	0	0
			95	30	52	12	1		
31	B	1	Total	C	H	O	S	0	0
			131	41	77	12	1		
31	D	1	Total	C	H	O	S	0	0
			81	25	45	10	1		
31	a	1	Total	C	H	O	S	0	0
			131	41	77	12	1		
31	a	1	Total	C	H	O	S	0	0
			131	41	77	12	1		
31	b	1	Total	C	H	O	S	0	0
			113	36	64	12	1		
31	f	1	Total	C	H	O	S	0	0
			89	28	48	12	1		

- Molecule 32 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



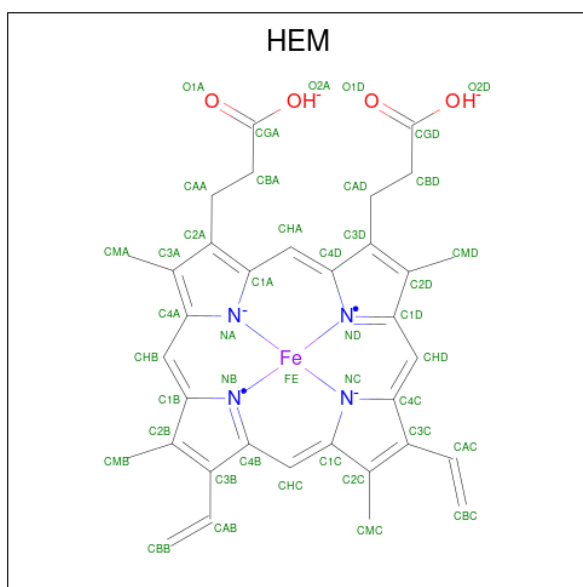
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	A	1	Total	C	H	O	0	0
			162	51	96	15		
32	C	1	Total	C	H	O	0	0
			144	47	82	15		
32	C	1	Total	C	H	O	0	0
			144	47	82	15		
32	C	1	Total	C	H	O	0	0
			144	47	82	15		
32	H	1	Total	C	H	O	0	0
			143	47	81	15		
32	c	1	Total	C	H	O	0	0
			144	47	82	15		
32	c	1	Total	C	H	O	0	0
			144	47	82	15		
32	c	1	Total	C	H	O	0	0
			144	47	82	15		
32	h	1	Total	C	H	O	0	0
			144	47	82	15		

- Molecule 33 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



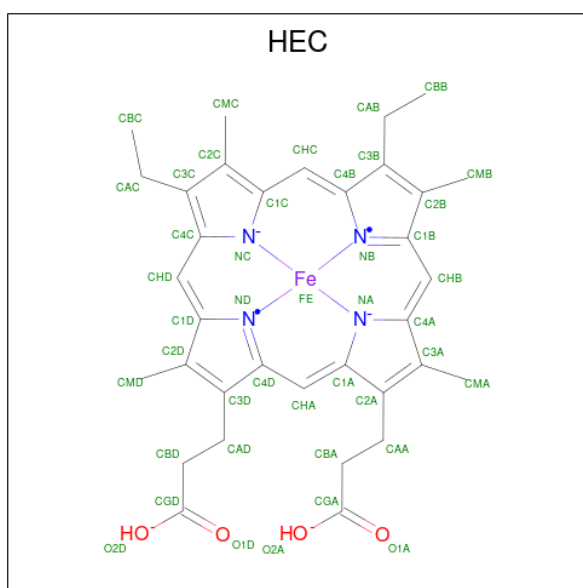
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
33	B	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	D	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	D	1	Total	C	H	O	P	0	0
			114	36	67	10	1		
33	E	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	L	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	a	1	Total	C	H	O	P	0	0
			99	31	57	10	1		
33	d	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	d	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
33	d	1	Total	C	H	O	P	0	0
			90	28	51	10	1		
33	l	1	Total	C	H	O	P	0	0
			123	38	74	10	1		

- Molecule 34 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: C₃₄H₃₂FeN₄O₄).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
34	F	1	Total 73	C 34	Fe 1	H 30	N 4	O 4	0	0
34	e	1	Total 73	C 34	Fe 1	H 30	N 4	O 4	0	0

- Molecule 35 is HEME C (CCD ID: HEC) (formula: $\text{C}_{34}\text{H}_{36}\text{FeN}_4\text{O}_4$).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
35	V	1	Total 73	C 34	Fe 1	H 30	N 4	O 4	0	0
35	v	1	Total 73	C 34	Fe 1	H 30	N 4	O 4	0	0

- Molecule 36 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	A	125	Total O 125 125	0	0
36	B	175	Total O 175 175	0	0
36	C	139	Total O 139 139	0	0
36	D	102	Total O 102 102	0	0
36	E	16	Total O 16 16	0	0
36	F	7	Total O 7 7	0	0
36	H	25	Total O 25 25	0	0
36	I	11	Total O 11 11	0	0
36	J	11	Total O 11 11	0	0
36	K	1	Total O 1 1	0	0
36	L	7	Total O 7 7	0	0
36	M	6	Total O 6 6	0	0
36	O	78	Total O 78 78	0	0
36	T	6	Total O 6 6	0	0
36	U	33	Total O 33 33	0	0
36	V	49	Total O 49 49	0	0
36	X	11	Total O 11 11	0	0
36	Z	1	Total O 1 1	0	0
36	R	2	Total O 2 2	0	0
36	a	107	Total O 107 107	0	0
36	b	150	Total O 150 150	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
36	c	130	Total 130	O 130	0	0
36	d	96	Total 96	O 96	0	0
36	e	9	Total 9	O 9	0	0
36	f	1	Total 1	O 1	0	0
36	h	10	Total 10	O 10	0	0
36	i	4	Total 4	O 4	0	0
36	j	4	Total 4	O 4	0	0
36	k	2	Total 2	O 2	0	0
36	l	10	Total 10	O 10	0	0
36	m	4	Total 4	O 4	0	0
36	o	75	Total 75	O 75	0	0
36	t	7	Total 7	O 7	0	0
36	u	48	Total 48	O 48	0	0
36	v	33	Total 33	O 33	0	0
36	x	5	Total 5	O 5	0	0
36	z	4	Total 4	O 4	0	0
36	r	1	Total 1	O 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.

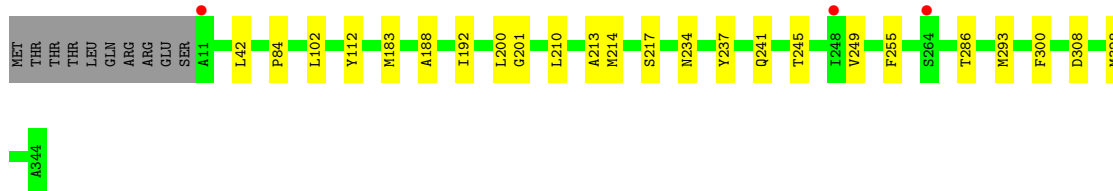
- Molecule 1: Photosystem II protein D1 1

Chain A: 



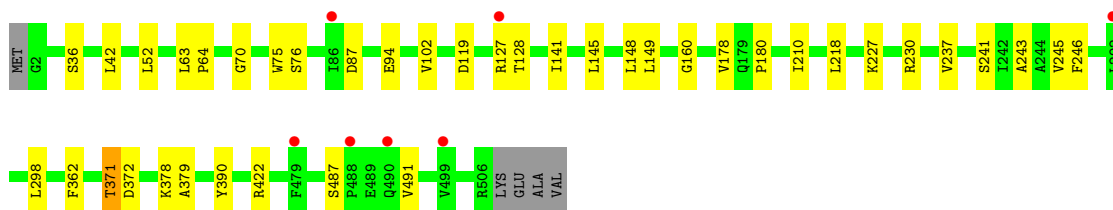
- Molecule 1: Photosystem II protein D1 1

Chain a: 

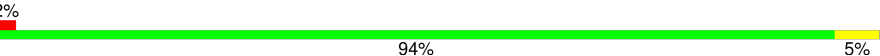


- Molecule 2: Photosystem II CP47 reaction center protein

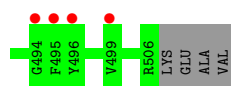
Chain B: 



- Molecule 2: Photosystem II CP47 reaction center protein

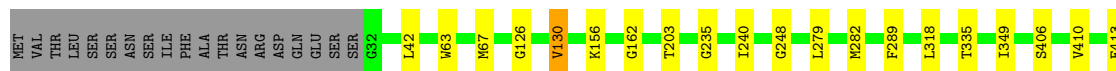
Chain b: 





- Molecule 3: Photosystem II CP43 reaction center protein

Chain C: 91%



- Molecule 3: Photosystem II CP43 reaction center protein

Chain c: 92%



- Molecule 4: Photosystem II D2 protein

Chain D: 89%



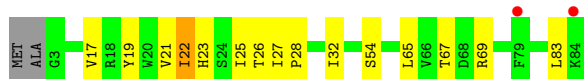
- Molecule 4: Photosystem II D2 protein

Chain d: 89%

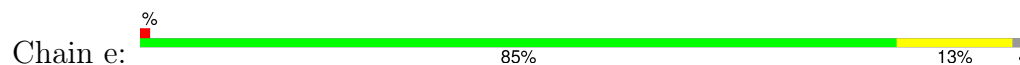


- Molecule 5: Cytochrome b559 subunit alpha

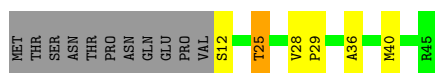
Chain E: 80%



- Molecule 5: Cytochrome b559 subunit alpha



- Molecule 6: Cytochrome b559 subunit beta



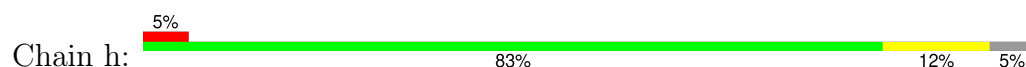
- Molecule 6: Cytochrome b559 subunit beta



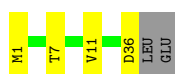
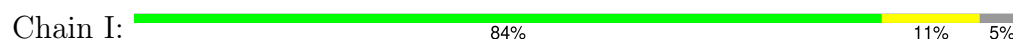
- Molecule 7: Photosystem II reaction center protein H



- Molecule 7: Photosystem II reaction center protein H

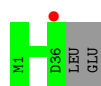


- Molecule 8: Photosystem II reaction center protein I

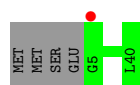
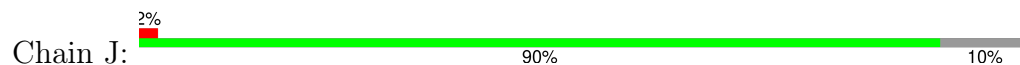


- Molecule 8: Photosystem II reaction center protein I





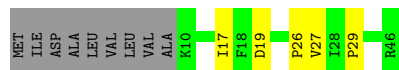
- Molecule 9: Photosystem II reaction center protein J



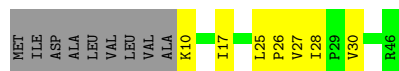
- Molecule 9: Photosystem II reaction center protein J



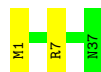
- Molecule 10: Photosystem II reaction center protein K



- Molecule 10: Photosystem II reaction center protein K



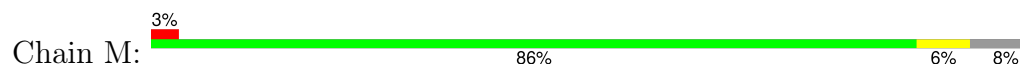
- Molecule 11: Photosystem II reaction center protein L

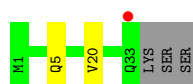


- Molecule 11: Photosystem II reaction center protein L



- Molecule 12: Photosystem II reaction center protein M





- Molecule 12: Photosystem II reaction center protein M

Chain m: 81% 8% 11%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O: 86% 10%



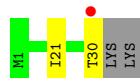
- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o: 84% 10%



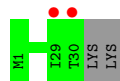
- Molecule 14: Photosystem II reaction center protein T

Chain T: 88% 6% 6%



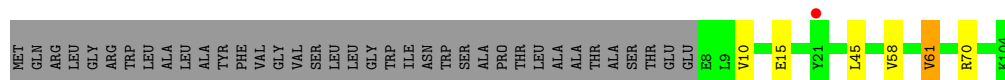
- Molecule 14: Photosystem II reaction center protein T

Chain t: 94% 6%

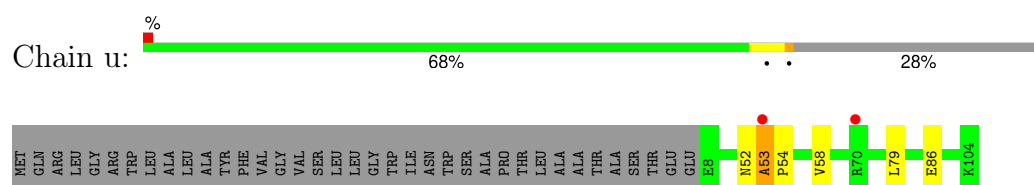


- Molecule 15: Photosystem II 12 kDa extrinsic protein

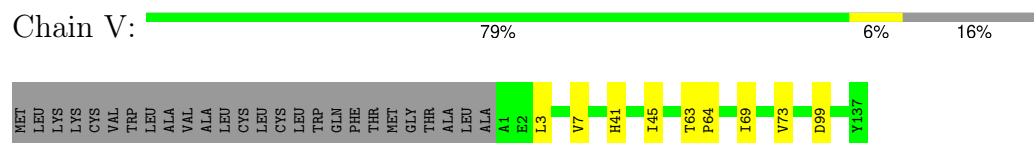
Chain U: 68% 28%



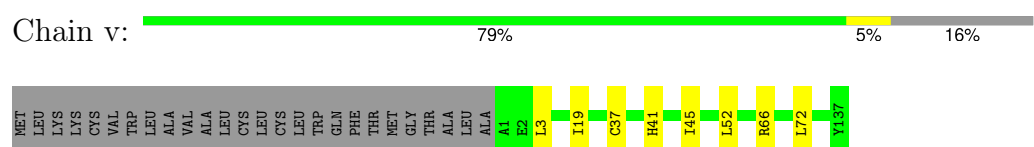
- Molecule 15: Photosystem II 12 kDa extrinsic protein



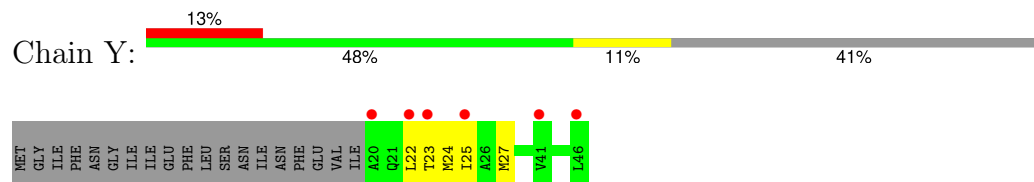
- Molecule 16: Cytochrome c-550



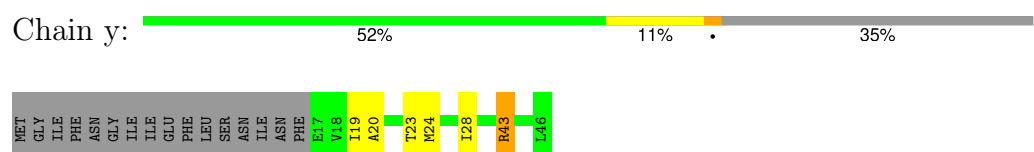
- Molecule 16: Cytochrome c-550



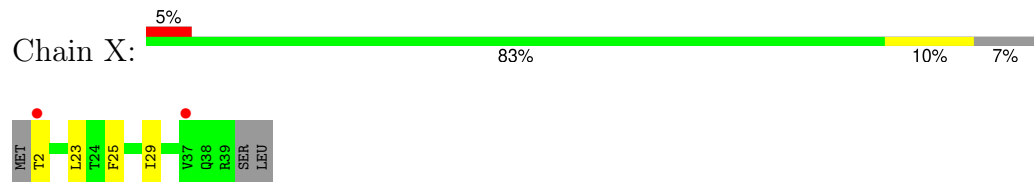
- Molecule 17: Photosystem II reaction center protein Ycf12



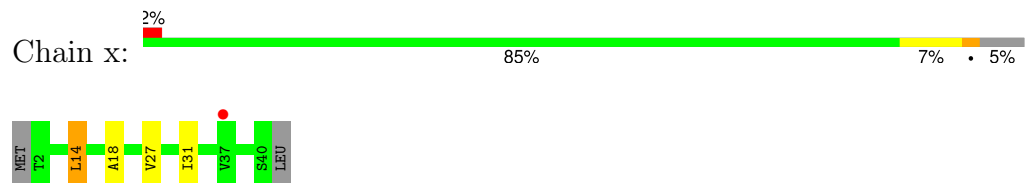
- Molecule 17: Photosystem II reaction center protein Ycf12



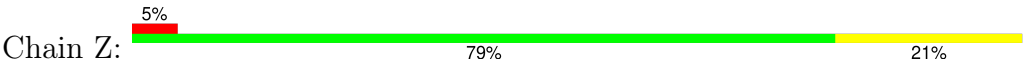
- Molecule 18: Photosystem II reaction center X protein



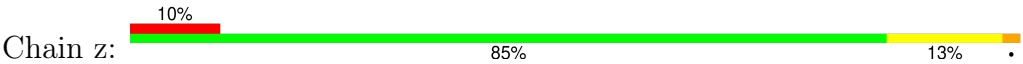
- Molecule 18: Photosystem II reaction center X protein



- Molecule 19: Photosystem II reaction center protein Z



• Molecule 19: Photosystem II reaction center protein Z



• Molecule 20: Photosystem II protein Y



• Molecule 20: Photosystem II protein Y



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	117.48Å 222.57Å 308.96Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	35.14 – 1.97 35.14 – 1.97	Depositor EDS
% Data completeness (in resolution range)	99.4 (35.14-1.97) 85.9 (35.14-1.97)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.38 (at 1.97Å)	Xtriage
Refinement program	PHENIX 2.0_5848	Depositor
R, R_{free}	0.188 , 0.226 0.188 , 0.226	Depositor DCC
R_{free} test set	5026 reflections (0.80%)	wwPDB-VP
Wilson B-factor (Å ²)	28.0	Xtriage
Anisotropy	0.247	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.34 , 43.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	104120	wwPDB-VP
Average B, all atoms (Å ²)	48.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.53% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: FME, BCT, DGD, PL9, CL, BCR, LMG, CLA, STE, FE2, OEX, LHG, PHO, HEC, HEM, SQD

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.51	0/2707	0.60	0/3692
1	a	0.48	0/2704	0.58	0/3688
2	B	0.45	0/4179	0.56	0/5693
2	b	0.42	0/4127	0.53	0/5623
3	C	0.44	0/3547	0.54	0/4830
3	c	0.39	0/3619	0.53	0/4926
4	D	0.48	0/2812	0.58	0/3832
4	d	0.44	0/2821	0.55	0/3844
5	E	0.34	0/688	0.49	0/940
5	e	0.30	0/683	0.46	0/932
6	F	0.34	0/284	0.47	0/387
6	f	0.32	0/284	0.56	0/387
7	H	0.42	0/517	0.51	0/705
7	h	0.34	0/505	0.50	0/689
8	I	0.42	0/293	0.49	0/396
8	i	0.45	0/293	0.48	0/396
9	J	0.36	0/263	0.46	0/356
9	j	0.29	0/263	0.46	0/356
10	K	0.33	0/303	0.46	0/416
10	k	0.32	0/303	0.43	0/416
11	L	0.48	0/311	0.53	0/422
11	l	0.45	0/303	0.50	0/412
12	M	0.46	0/249	0.58	0/341
12	m	0.45	0/244	0.58	0/334
13	O	0.42	0/1904	0.59	0/2585
13	o	0.42	0/1905	0.59	0/2583
14	T	0.45	0/257	0.57	0/349
14	t	0.41	0/255	0.50	0/346
15	U	0.39	0/785	0.54	0/1064
15	u	0.43	0/785	0.58	0/1064
16	V	0.43	0/1085	0.58	0/1473
16	v	0.37	0/1085	0.49	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	Y	0.31	0/197	0.41	0/264
17	y	0.24	0/219	0.43	0/294
18	X	0.33	0/284	0.46	0/384
18	x	0.28	0/289	0.40	0/391
19	Z	0.38	1/490 (0.2%)	0.43	0/669
19	z	0.24	0/488	0.44	0/666
20	R	0.26	0/227	0.41	0/313
20	r	0.23	0/227	0.32	0/313
All	All	0.43	1/42784 (0.0%)	0.54	0/58244

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	B	0	1
13	o	0	1
15	u	0	1
16	V	0	1
All	All	0	4

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	23	VAL	CA-CB	-6.18	1.51	1.54

There are no bond angle outliers.

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	422	ARG	Sidechain
16	V	63	THR	Peptide
13	o	152	ARG	Sidechain
15	u	52	ASN	Peptide

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2622	2469	2519	13	0
1	a	2619	2462	2510	20	0
2	B	4016	3887	3871	31	0
2	b	3984	3842	3842	21	0
3	C	3426	3347	3343	14	0
3	c	3500	3418	3426	17	0
4	D	2717	2620	2621	23	0
4	d	2723	2626	2627	20	0
5	E	666	651	651	12	0
5	e	664	648	648	11	0
6	F	275	282	282	3	0
6	f	275	282	282	5	0
7	H	505	528	528	5	0
7	h	493	514	514	5	0
8	I	296	311	311	1	0
8	i	296	311	311	0	0
9	J	257	268	268	0	0
9	j	257	268	268	5	0
10	K	293	305	305	4	0
10	k	293	305	305	5	0
11	L	304	316	316	3	0
11	l	296	304	304	1	0
12	M	256	267	269	3	0
12	m	251	267	267	3	0
13	O	1870	1830	1830	6	0
13	o	1874	1846	1846	6	0
14	T	258	261	261	1	0
14	t	256	256	256	0	0
15	U	774	773	773	3	0
15	u	774	773	773	5	0
16	V	1064	1071	1073	3	0
16	v	1064	1071	1073	5	0
17	Y	196	217	217	4	0
17	y	218	241	241	4	0
18	X	281	312	312	3	0
18	x	286	316	314	3	0
19	Z	479	516	516	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	z	477	509	509	5	0
20	R	221	238	238	5	0
20	r	221	238	238	4	0
21	A	10	0	0	0	0
21	a	10	0	0	0	0
22	A	1	0	0	0	0
22	a	1	0	0	0	0
23	A	2	0	0	0	0
23	a	2	0	0	0	0
24	A	4	1	1	0	0
24	a	4	1	1	0	0
25	A	249	264	264	4	0
25	B	1035	1139	1139	12	0
25	C	839	922	922	11	0
25	D	130	144	144	3	0
25	a	260	288	288	4	0
25	b	1035	1139	1139	18	0
25	c	839	919	919	15	0
25	d	130	144	144	4	0
26	A	64	74	74	1	0
26	D	64	74	74	0	0
26	a	64	74	74	0	0
26	d	64	74	74	3	0
27	A	40	56	56	0	0
27	B	120	168	168	4	0
27	C	40	56	56	1	0
27	D	40	56	56	4	0
27	H	40	56	56	2	0
27	K	80	112	112	5	0
27	T	40	56	56	4	0
27	Y	40	56	56	2	0
27	a	40	56	56	1	0
27	b	120	168	168	5	0
27	c	80	112	112	3	0
27	d	40	56	56	3	0
27	h	40	56	56	5	0
27	k	80	112	112	2	0
27	t	40	56	56	3	0
28	A	55	80	80	7	0
28	D	55	80	80	0	0
28	a	55	80	80	4	0
28	d	55	80	80	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	A	37	68	68	3	0
29	B	62	96	96	1	0
29	C	78	126	126	3	0
29	D	9	17	17	0	0
29	E	44	74	74	1	0
29	H	18	35	35	0	0
29	I	32	48	48	0	0
29	J	12	16	16	0	0
29	K	14	27	27	0	0
29	M	40	67	67	1	0
29	T	16	31	31	0	0
29	X	20	35	35	1	0
29	Z	17	33	33	0	0
29	a	12	16	16	0	0
29	b	54	90	90	1	0
29	c	31	57	57	0	0
29	d	54	90	90	1	0
29	e	31	52	52	0	0
29	f	8	15	15	0	0
29	h	21	40	40	1	0
29	i	18	24	24	0	0
29	j	28	47	47	0	0
29	l	18	35	35	0	0
29	m	12	16	16	0	0
29	t	24	36	36	0	0
29	x	20	35	35	0	0
29	z	9	14	14	0	0
30	A	48	66	66	0	0
30	B	96	132	132	9	0
30	C	84	106	106	1	0
30	D	101	142	142	3	0
30	a	104	154	154	6	0
30	b	106	158	158	3	0
30	c	124	172	172	1	0
30	d	44	58	58	1	0
31	A	95	122	124	0	0
31	B	54	77	78	1	0
31	D	36	45	46	1	0
31	a	108	154	156	1	0
31	b	49	64	65	2	0
31	f	41	48	49	1	0
32	A	66	96	96	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
32	C	186	246	246	3	0
32	H	62	81	82	0	0
32	c	186	246	246	1	0
32	h	62	82	82	0	0
33	B	49	74	74	1	0
33	D	96	141	141	1	0
33	E	49	74	74	3	0
33	L	49	74	74	3	0
33	a	42	57	57	0	0
33	d	137	199	199	5	0
33	l	49	74	74	0	0
34	F	43	30	30	3	0
34	e	43	30	30	3	0
35	V	43	30	30	0	0
35	v	43	30	30	1	0
36	A	125	0	0	1	0
36	B	175	0	0	1	0
36	C	139	0	0	1	0
36	D	102	0	0	0	0
36	E	16	0	0	0	0
36	F	7	0	0	0	0
36	H	25	0	0	0	0
36	I	11	0	0	0	0
36	J	11	0	0	0	0
36	K	1	0	0	0	0
36	L	7	0	0	0	0
36	M	6	0	0	0	0
36	O	78	0	0	0	0
36	R	2	0	0	0	0
36	T	6	0	0	0	0
36	U	33	0	0	0	0
36	V	49	0	0	0	0
36	X	11	0	0	0	0
36	Z	1	0	0	0	0
36	a	107	0	0	0	0
36	b	150	0	0	1	0
36	c	130	0	0	1	0
36	d	96	0	0	1	0
36	e	9	0	0	0	0
36	f	1	0	0	0	0
36	h	10	0	0	0	0
36	i	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	j	4	0	0	0	0
36	k	2	0	0	1	0
36	l	10	0	0	0	0
36	m	4	0	0	0	0
36	o	75	0	0	1	0
36	r	1	0	0	0	0
36	t	7	0	0	0	0
36	u	48	0	0	0	0
36	v	33	0	0	0	0
36	x	5	0	0	0	0
36	z	4	0	0	0	0
All	All	52043	52077	52178	364	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 4.

All (364) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:o:189:ARG:NH1	36:o:301:HOH:O	2.02	0.91
3:C:156:LYS:NZ	36:C:601:HOH:O	2.05	0.89
27:H:101:BCR:HC8	27:H:101:BCR:H331	1.54	0.88
27:Y:101:BCR:H322	19:Z:17:PHE:CE1	2.20	0.77
34:F:101:HEM:HBC2	34:F:101:HEM:HHD	1.68	0.76
27:Y:101:BCR:H321	27:Y:101:BCR:HC8	1.69	0.74
15:u:53:ALA:HB1	15:u:54:PRO:HD2	1.70	0.72
25:B:604:CLA:H43	25:B:605:CLA:H2	1.70	0.71
27:D:404:BCR:H392	27:D:404:BCR:H23C	1.70	0.71
34:e:102:HEM:HHD	34:e:102:HEM:HBC2	1.74	0.70
9:j:12:ILE:O	9:j:16:VAL:HG23	1.92	0.70
27:d:404:BCR:H403	27:d:404:BCR:H23C	1.72	0.70
28:A:611:PL9:C25	33:E:101:LHG:H223	2.22	0.69
27:T:101:BCR:H382	27:T:101:BCR:H23C	1.74	0.69
4:d:267:LEU:C	4:d:267:LEU:HD23	2.17	0.69
20:r:28:VAL:HG23	20:r:29:LYS:H	1.57	0.68
15:u:53:ALA:HB1	15:u:54:PRO:CD	2.24	0.68
2:B:371:THR:HG23	2:B:372:ASP:O	1.94	0.68
6:f:21:VAL:O	6:f:25:THR:HG23	1.94	0.68
29:A:618:STE:H182	29:A:619:STE:H122	1.77	0.66
25:b:614:CLA:H92	27:b:617:BCR:H362	1.79	0.65
13:O:40:ILE:HD12	13:O:95:PHE:CD1	2.32	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:U:58:VAL:O	15:U:61:VAL:HG22	1.97	0.65
25:c:501:CLA:H192	25:c:507:CLA:HBB1	1.77	0.64
25:d:403:CLA:H92	18:x:18:ALA:HB2	1.79	0.64
19:z:2:THR:HG22	19:z:3:ILE:N	2.13	0.64
19:Z:3:ILE:HA	19:Z:6:GLN:HE21	1.64	0.63
1:a:188:ALA:HB2	1:a:328:MET:HB2	1.79	0.63
4:D:286:VAL:HG21	25:D:402:CLA:HED2	1.80	0.62
2:b:29:LEU:HD23	31:b:620:SQD:C22	2.29	0.62
3:c:124:VAL:HG22	27:c:514:BCR:H362	1.81	0.62
1:a:214:MET:HE1	1:a:255:PHE:CE1	2.35	0.62
27:k:101:BCR:H321	27:k:101:BCR:HC8	1.82	0.62
6:f:28:VAL:HG22	6:f:29:PRO:HD3	1.81	0.62
3:C:279:LEU:HD23	3:C:282:MET:HE3	1.81	0.61
27:h:101:BCR:HC8	27:h:101:BCR:H331	1.82	0.60
27:H:101:BCR:H331	27:H:101:BCR:C8	2.30	0.60
30:a:616:LMG:C10	30:a:616:LMG:O8	2.49	0.60
3:c:406:SER:HA	3:c:420:VAL:HG23	1.83	0.59
1:A:188:ALA:HB2	1:A:328:MET:HB2	1.85	0.59
2:b:24:LEU:HD21	25:b:616:CLA:HAB	1.85	0.58
25:B:601:CLA:H122	25:B:601:CLA:H91	1.84	0.58
1:A:194:MET:HE1	4:D:74:LEU:HB3	1.85	0.58
15:u:86:GLU:H	15:u:86:GLU:CD	2.12	0.58
27:D:404:BCR:H331	27:D:404:BCR:C8	2.32	0.58
1:a:214:MET:SD	26:d:401:PHO:HED3	2.44	0.58
1:a:241:GLN:NE2	1:a:245:THR:HG23	2.20	0.57
13:O:54:GLU:O	13:O:63:ALA:HB1	2.04	0.57
27:t:101:BCR:HC8	27:t:101:BCR:H311	1.85	0.57
27:t:101:BCR:H23C	27:t:101:BCR:H382	1.86	0.57
5:e:68:ASP:O	5:e:72:ALA:HB2	2.05	0.57
9:j:9:PRO:HG2	9:j:12:ILE:HD12	1.87	0.56
5:E:65:LEU:O	5:E:67:THR:HG23	2.05	0.56
25:c:509:CLA:H43	25:c:509:CLA:O1A	2.05	0.56
4:d:85:MET:CE	5:e:69:ARG:HA	2.35	0.56
13:o:164:LEU:HD13	13:o:188:LYS:O	2.05	0.56
3:C:126:GLY:O	3:C:130:VAL:HG13	2.06	0.56
2:B:227:LYS:HE3	30:B:620:LMG:O3	2.06	0.56
2:b:29:LEU:HD23	31:b:620:SQD:H223	1.88	0.56
2:B:491:VAL:HG12	4:D:136:VAL:HG13	1.88	0.55
6:F:28:VAL:HB	6:F:29:PRO:HD3	1.87	0.55
34:e:102:HEM:HHC	34:e:102:HEM:HBB2	1.89	0.55
4:D:92:LEU:HD23	29:X:101:STE:H72	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:279:LEU:HD23	3:C:282:MET:CE	2.37	0.55
4:d:85:MET:HE2	5:e:69:ARG:HA	1.87	0.55
15:u:58:VAL:HG12	15:u:79:LEU:HD22	1.89	0.54
25:d:403:CLA:H93	18:x:14:LEU:CD1	2.37	0.54
19:Z:44:SER:O	19:Z:48:ILE:HG13	2.08	0.54
1:a:84:PRO:HA	1:a:112:TYR:CG	2.43	0.54
34:F:101:HEM:HBB2	34:F:101:HEM:HMB1	1.90	0.54
5:e:22:ILE:HG23	20:r:19:ALA:HB2	1.90	0.54
1:a:237:TYR:HB2	1:a:245:THR:HG21	1.89	0.54
12:M:5:GLN:HE22	29:M:103:STE:C4	2.22	0.53
19:Z:51:VAL:O	19:Z:54:VAL:O	2.26	0.53
10:K:17:ILE:N	10:K:17:ILE:HD12	2.23	0.53
17:Y:23:THR:CG2	17:Y:27:MET:HE3	2.39	0.53
28:A:611:PL9:H251	33:E:101:LHG:H223	1.90	0.53
18:X:25:PHE:O	18:X:29:ILE:HG12	2.09	0.53
5:e:23:HIS:HA	5:e:26:THR:OG1	2.09	0.53
2:b:231:MET:HE2	25:b:610:CLA:HMC2	1.90	0.52
36:A:763:HOH:O	13:O:107:THR:HG21	2.09	0.52
4:D:272:LEU:C	4:D:272:LEU:HD23	2.34	0.52
7:H:6:TRP:CZ2	7:H:10:ILE:HD11	2.45	0.52
2:B:241:SER:HB3	25:B:612:CLA:HED3	1.92	0.52
30:B:621:LMG:C43	33:L:101:LHG:H383	2.39	0.52
16:V:69:ILE:O	16:V:73:VAL:HG23	2.11	0.51
2:B:237:VAL:HG22	25:B:610:CLA:HBC2	1.93	0.51
4:D:267:LEU:C	4:D:267:LEU:HD23	2.35	0.51
27:h:101:BCR:H331	27:h:101:BCR:C8	2.41	0.50
2:B:52:LEU:HD12	13:o:59:LYS:HE2	1.93	0.50
25:b:613:CLA:H192	33:d:407:LHG:H223	1.92	0.50
10:k:10:LYS:HD2	10:k:10:LYS:N	2.26	0.50
27:B:617:BCR:H313	30:B:621:LMG:H112	1.94	0.50
34:F:101:HEM:HBB2	34:F:101:HEM:CMB	2.42	0.50
27:K:101:BCR:H331	27:K:101:BCR:C8	2.41	0.50
25:b:601:CLA:C9	27:h:101:BCR:H402	2.42	0.50
6:f:19:ARG:O	6:f:23:VAL:HG13	2.11	0.50
25:c:513:CLA:HBB1	25:c:513:CLA:HMB1	1.92	0.50
4:D:191:TRP:CE3	4:D:289:LEU:HD11	2.47	0.50
25:C:508:CLA:H191	32:C:521:DGD:HA92	1.93	0.49
15:u:53:ALA:CB	15:u:54:PRO:CD	2.89	0.49
15:U:10:VAL:HG21	15:U:15:GLU:OE2	2.11	0.49
19:Z:2:THR:HG22	19:Z:6:GLN:HE22	1.77	0.49
13:o:23:ASP:OD1	13:o:24:ASP:N	2.44	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:237:VAL:CG2	25:B:610:CLA:HBC2	2.43	0.49
25:C:506:CLA:H143	32:C:520:DGD:CGA	2.42	0.49
2:B:119:ASP:H	11:L:1:MET:HE1	1.77	0.49
4:D:286:VAL:CG2	25:D:402:CLA:HED2	2.42	0.49
17:Y:22:LEU:HA	17:Y:25:ILE:HG22	1.93	0.49
30:a:617:LMG:H121	25:c:505:CLA:H193	1.95	0.49
2:b:173:GLY:HA3	2:b:265:ILE:HD11	1.94	0.49
16:v:41:HIS:HA	16:v:45:ILE:O	2.13	0.49
2:B:127:ARG:HG2	2:B:128:THR:HG23	1.94	0.49
1:A:63:ILE:HB	3:C:335:THR:HG21	1.93	0.49
25:c:513:CLA:C4B	27:c:514:BCR:H383	2.42	0.49
1:a:192:ILE:HG13	1:a:293:MET:HE1	1.95	0.49
1:A:16:ARG:O	29:A:619:STE:H181	2.12	0.49
3:c:134:ILE:HG21	19:z:27:TYR:HB3	1.94	0.49
28:a:611:PL9:H303	4:d:41:ALA:HB1	1.95	0.48
2:B:230:ARG:NH2	30:B:620:LMG:HC5	2.28	0.48
5:E:54:SER:HB2	5:E:83:LEU:HD13	1.95	0.48
3:c:38:GLY:HA3	25:c:511:CLA:HMD2	1.94	0.48
25:C:502:CLA:H61	25:C:512:CLA:H42	1.95	0.48
12:M:20:VAL:HG11	12:m:20:VAL:CG2	2.43	0.48
5:E:22[A]:ILE:HG23	5:E:23:HIS:ND1	2.28	0.48
3:C:406:SER:HA	3:C:420:VAL:HG23	1.94	0.48
18:x:27:VAL:HG12	18:x:31:ILE:HD12	1.96	0.48
25:C:504:CLA:C9	25:C:508:CLA:H192	2.43	0.48
3:c:391[B]:ARG:HD3	36:c:709:HOH:O	2.13	0.48
1:A:271:LEU:HD11	28:A:611:PL9:HC71	1.96	0.48
3:c:308:GLU:HB2	3:c:361:PHE:CE1	2.48	0.48
4:d:307:GLU:HG3	36:d:512:HOH:O	2.13	0.48
1:A:131:TRP:CE3	1:A:132:GLU:HA	2.49	0.47
25:A:613:CLA:HHC	25:A:613:CLA:HBB1	1.95	0.47
19:z:38:GLN:O	19:z:42:LEU:HD13	2.14	0.47
25:B:611:CLA:HMB3	25:B:611:CLA:HBB1	1.95	0.47
7:h:6:TRP:CZ3	7:h:10:ILE:CD1	2.98	0.47
12:m:17:VAL:HB	12:m:18:PRO:HD3	1.96	0.47
30:D:406:LMG:H111	30:D:406:LMG:HC1	1.95	0.47
2:b:264:PRO:HG2	2:b:267:LEU:HD22	1.95	0.47
4:d:172:SER:HB2	4:d:177:ALA:HB1	1.96	0.47
27:B:618:BCR:H331	27:B:618:BCR:C8	2.44	0.47
4:D:131:GLU:O	4:D:135:LEU:HG	2.15	0.47
7:h:6:TRP:CZ3	7:h:10:ILE:HD11	2.50	0.47
29:C:518:STE:H32	27:K:101:BCR:H352	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:7:THR:O	8:I:11:VAL:HG23	2.15	0.47
17:Y:23:THR:HG23	17:Y:27:MET:HE3	1.97	0.47
25:c:503:CLA:H203	25:c:510:CLA:HAB	1.96	0.47
1:a:102:LEU:H	30:a:616:LMG:C12	2.27	0.46
1:A:84:PRO:HA	1:A:112:TYR:CG	2.51	0.46
3:c:167:VAL:HG13	25:c:512:CLA:H102	1.97	0.46
10:k:27:VAL:O	10:k:30:VAL:HG22	2.15	0.46
32:A:617:DGD:HD5	2:b:75:TRP:HB3	1.95	0.46
16:V:41:HIS:HA	16:V:45:ILE:O	2.15	0.46
31:B:624:SQD:O10	31:B:624:SQD:C44	2.64	0.46
25:C:507:CLA:H191	29:C:526:STE:H101	1.98	0.46
5:e:30:LEU:HD11	34:e:102:HEM:HBB2	1.96	0.46
4:D:209:LEU:HD23	4:D:209:LEU:C	2.41	0.46
13:o:57:LYS:O	13:o:59:LYS:N	2.48	0.46
2:b:483:ASP:OD1	2:b:483:ASP:C	2.59	0.46
5:e:81:GLU:O	5:e:84:LYS:HD3	2.16	0.46
25:C:513:CLA:H202	29:C:525:STE:H172	1.98	0.46
10:k:25:LEU:N	10:k:26:PRO:CD	2.79	0.46
16:v:37:CYS:SG	35:v:201:HEC:HMB1	2.56	0.46
4:D:148:ALA:HB3	4:D:149:PRO:CD	2.46	0.46
1:a:249:VAL:HG12	2:b:491:VAL:HG21	1.97	0.46
4:d:210:LEU:HA	4:d:213:ILE:HG22	1.98	0.46
25:C:513:CLA:H203	27:K:101:BCR:C16	2.46	0.46
3:C:349:ILE:HD12	13:O:101:ILE:HD13	1.98	0.46
19:Z:2:THR:HG22	19:Z:6:GLN:NE2	2.31	0.45
25:b:613:CLA:C19	33:d:407:LHG:H223	2.46	0.45
25:b:605:CLA:HHC	25:b:605:CLA:HBB1	1.98	0.45
3:C:203:THR:O	3:C:235:GLY:HA3	2.17	0.45
5:E:17:VAL:O	5:E:21:VAL:HG23	2.16	0.45
2:B:87:ASP:C	2:B:87:ASP:OD1	2.57	0.45
25:C:513:CLA:H203	27:K:101:BCR:C17	2.47	0.45
5:E:27:ILE:HB	5:E:28:PRO:HD3	1.99	0.45
6:f:18:VAL:HG22	31:f:101:SQD:H272	1.97	0.45
4:d:272:LEU:C	4:d:272:LEU:HD23	2.42	0.45
25:B:615:CLA:H93	25:B:615:CLA:H62	1.84	0.45
2:b:8:VAL:HG23	2:b:9:HIS:CD2	2.52	0.45
25:C:501:CLA:H203	25:C:507:CLA:H13	1.97	0.45
33:D:409:LHG:H321	14:T:21:ILE:HD11	1.98	0.45
27:T:101:BCR:H311	27:T:101:BCR:HC8	1.99	0.45
1:a:210:LEU:C	1:a:210:LEU:HD23	2.42	0.45
2:b:314:TYR:OH	2:b:334:ASP:OD2	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:d:401:PHO:H3A	25:d:402:CLA:H142	2.00	0.44
2:B:42:LEU:HD13	2:B:94:GLU:HG3	1.99	0.44
7:h:17:GLU:O	7:h:18:TYR:C	2.61	0.44
1:A:218:LEU:HD12	28:A:611:PL9:C4	2.48	0.44
25:B:602:CLA:H43	7:H:45:ILE:HG22	1.98	0.44
25:a:612:CLA:HMB3	25:a:612:CLA:HBB1	1.98	0.44
2:b:30:VAL:HG12	25:b:605:CLA:HHD	2.00	0.44
25:b:601:CLA:H92	27:h:101:BCR:H402	1.99	0.44
2:B:70:GLY:HA2	2:B:178:VAL:HG21	2.00	0.44
2:B:243:ALA:HA	2:B:246:PHE:CE2	2.53	0.44
5:E:26:THR:HA	20:R:15:ALA:HB1	1.99	0.44
6:F:36:ALA:O	6:F:40:MET:HG3	2.17	0.44
27:c:514:BCR:H24C	27:c:514:BCR:H371	1.83	0.44
5:e:17:VAL:H	9:j:7:ARG:HD2	1.82	0.44
27:T:101:BCR:HC8	27:T:101:BCR:H321	1.99	0.44
27:T:101:BCR:C8	27:T:101:BCR:H321	2.48	0.44
28:a:611:PL9:H322	28:a:611:PL9:H301	1.89	0.44
4:D:85:MET:CE	5:E:69:ARG:HA	2.48	0.43
2:B:148:LEU:HD23	2:B:210:ILE:HD11	2.00	0.43
2:B:230:ARG:HH12	30:B:620:LMG:HC1	1.83	0.43
3:C:410:VAL:HG22	3:C:413[B]:GLU:CG	2.48	0.43
12:M:20:VAL:HG11	12:m:20:VAL:HG21	2.00	0.43
25:b:602:CLA:H43	7:h:45:ILE:HG22	2.00	0.43
4:d:88:SER:HB2	5:e:69:ARG:CZ	2.48	0.43
30:C:516:LMG:O2	30:C:516:LMG:HC71	2.17	0.43
19:Z:55:GLY:O	19:Z:59:PHE:CE1	2.71	0.43
13:o:42:ARG:O	13:o:241:ALA:HA	2.18	0.43
25:A:606:CLA:HMB1	25:A:606:CLA:HBB1	2.00	0.43
25:A:607:CLA:H92	30:D:407:LMG:C25	2.48	0.43
2:B:36:SER:OG	27:B:618:BCR:H362	2.19	0.43
17:Y:24:MET:HE3	17:Y:24:MET:HA	1.99	0.43
28:A:611:PL9:C36	6:F:25:THR:HG21	2.49	0.43
30:b:623:LMG:H292	30:b:623:LMG:O9	2.19	0.43
4:d:279:LEU:HD22	26:d:401:PHO:HBC3	2.00	0.43
16:v:66:ARG:O	16:v:72:LEU:HG	2.17	0.43
2:b:8:VAL:O	25:b:614:CLA:HED2	2.18	0.43
4:D:78:VAL:HG11	4:D:114:ILE:HD12	2.01	0.43
7:H:6:TRP:CE2	7:H:10:ILE:HD11	2.53	0.43
7:H:56:ASP:OD2	18:X:2:THR:HA	2.19	0.43
15:U:70:ARG:HB3	15:U:70:ARG:NH1	2.34	0.43
4:d:148:ALA:HB3	4:d:149:PRO:HD3	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:k:17:ILE:HG12	36:k:201:HOH:O	2.18	0.43
2:B:298:LEU:HD12	2:B:298:LEU:HA	1.93	0.43
25:B:615:CLA:H91	25:B:616:CLA:H142	2.00	0.43
33:B:623:LHG:H152	33:L:101:LHG:H281	2.00	0.43
26:A:608:PHO:HBC2	26:A:608:PHO:HHD	2.01	0.43
2:B:119:ASP:H	11:L:1:MET:CE	2.31	0.43
10:K:17:ILE:N	10:K:17:ILE:CD1	2.82	0.43
30:a:616:LMG:O8	30:a:616:LMG:O9	2.37	0.43
4:d:269:PHE:CG	33:d:407:LHG:HC11	2.54	0.43
27:h:101:BCR:H20C	27:h:101:BCR:H361	1.79	0.43
1:A:121:LEU:HD23	1:A:121:LEU:HA	1.90	0.42
1:A:79:THR:HG22	4:D:315:TYR:HB2	2.01	0.42
28:A:611:PL9:H531	28:A:611:PL9:H523	1.85	0.42
13:O:27:ARG:O	13:O:27:ARG:HG2	2.19	0.42
1:a:300:PHE:HZ	32:c:521:DGD:HB61	1.84	0.42
27:a:610:BCR:H20C	27:a:610:BCR:H361	1.90	0.42
2:b:317:ASN:HA	2:b:330:MET:HE1	2.01	0.42
25:b:607:CLA:H142	25:b:613:CLA:H202	2.01	0.42
27:t:101:BCR:H331	27:t:101:BCR:HC7	1.83	0.42
17:y:20:ALA:O	17:y:24:MET:HG2	2.18	0.42
3:C:162:GLY:HA2	3:C:248:GLY:HA2	2.01	0.42
33:L:101:LHG:O10	33:L:101:LHG:HC5	2.19	0.42
1:a:234:ASN:OD1	33:d:407:LHG:O1	2.38	0.42
1:A:65:GLU:OE2	4:D:312:GLU:OE1	2.36	0.42
28:A:611:PL9:H253	33:E:101:LHG:H223	1.99	0.42
2:B:227:LYS:HE3	30:B:620:LMG:C3	2.49	0.42
30:B:620:LMG:H172	4:D:127:LEU:HD13	2.02	0.42
20:R:10:LEU:HB3	20:R:11:PRO:HD3	2.00	0.42
25:a:612:CLA:H191	31:a:615:SQD:H212	2.02	0.42
17:y:19:ILE:O	17:y:23:THR:HG22	2.19	0.42
2:B:149[A]:LEU:HD21	25:B:606:CLA:HBB2	2.02	0.42
27:K:101:BCR:H24C	27:K:101:BCR:H371	1.79	0.42
28:a:611:PL9:H152	28:a:611:PL9:H112	2.02	0.42
3:c:93:ALA:HB1	3:c:99:VAL:HG21	2.00	0.42
2:B:63:LEU:N	2:B:64:PRO:HD2	2.34	0.42
27:D:404:BCR:H20C	27:D:404:BCR:H361	1.74	0.42
19:Z:3:ILE:HD12	19:Z:3:ILE:H	1.85	0.42
1:a:241:GLN:HE22	1:a:245:THR:HG23	1.83	0.42
25:a:607:CLA:H141	30:d:411:LMG:H351	2.02	0.42
3:c:180:MET:HG2	3:c:199:ILE:O	2.18	0.42
2:B:245:VAL:HG22	25:B:612:CLA:H201	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:b:614:CLA:H93	25:b:614:CLA:H61	1.92	0.42
27:b:618:BCR:H24C	27:b:618:BCR:H371	1.92	0.42
27:b:618:BCR:H351	27:b:618:BCR:H15C	1.87	0.42
3:c:128:GLY:HA3	25:c:513:CLA:C3C	2.50	0.42
2:B:160:GLY:HA3	2:B:180:PRO:HB3	2.02	0.42
2:b:91:TRP:HE1	29:b:622:STE:H62	1.85	0.42
30:b:623:LMG:O9	30:b:623:LMG:HC91	2.20	0.42
5:e:18:ARG:HH11	20:r:23:ILE:HD11	1.85	0.42
25:B:607:CLA:H42	30:B:621:LMG:H312	2.02	0.42
5:E:32:ILE:HD12	29:E:104:STE:C6	2.50	0.42
2:b:27:THR:HG22	2:b:107:LEU:HD13	2.02	0.42
3:c:203:THR:O	3:c:235:GLY:HA3	2.20	0.42
25:c:505:CLA:HBB1	25:c:505:CLA:HMB3	2.02	0.42
29:d:410:STE:H71	29:h:104:STE:C17	2.50	0.42
2:B:378:LYS:NZ	36:B:703:HOH:O	2.53	0.42
27:b:617:BCR:H313	30:b:621:LMG:H112	2.02	0.42
20:R:16:ALA:O	20:R:20:VAL:HG23	2.20	0.41
3:c:180:MET:HE1	30:c:523:LMG:HC72	2.01	0.41
17:y:43:ARG:CZ	17:y:43:ARG:HB3	2.50	0.41
29:A:618:STE:H182	29:A:619:STE:C12	2.47	0.41
3:C:318:LEU:C	3:C:318:LEU:HD23	2.45	0.41
4:D:172:SER:HB2	4:D:177:ALA:HB1	2.02	0.41
1:a:245:THR:HB	4:d:265:ARG:HE	1.84	0.41
28:a:611:PL9:H48	4:d:39:PRO:HG3	2.02	0.41
5:e:18:ARG:HH12	6:f:15:ILE:HD12	1.85	0.41
27:k:102:BCR:H331	27:k:102:BCR:C8	2.51	0.41
2:B:379:ALA:HA	2:B:390:TYR:HB3	2.02	0.41
4:D:194:ASN:HA	4:D:295:SER:OG	2.20	0.41
25:D:403:CLA:H42	7:H:43:LEU:HD11	2.01	0.41
11:l:8:GLN:OE1	11:l:8:GLN:HA	2.21	0.41
16:v:19:ILE:HD12	16:v:19:ILE:HA	1.98	0.41
19:z:32:ASP:HA	19:z:35:ARG:HD3	2.03	0.41
2:B:141:ILE:O	2:B:145:LEU:HG	2.18	0.41
16:V:99:ASP:OD1	16:V:99:ASP:N	2.54	0.41
1:a:217:SER:HA	4:d:272:LEU:HD12	2.02	0.41
2:b:433:ASP:OD1	2:b:433:ASP:C	2.63	0.41
32:C:520:DGD:HBE2	32:C:520:DGD:HBF1	1.97	0.41
11:L:7:ARG:HG2	11:L:7:ARG:HH11	1.85	0.41
1:a:201:GLY:HA3	1:a:286:THR:HB	2.01	0.41
1:a:308:ASP:OD1	1:a:308:ASP:C	2.63	0.41
3:c:131:TYR:OH	25:c:513:CLA:HED2	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Z:16:SER:O	19:Z:20:VAL:HG23	2.20	0.41
2:b:36:SER:OG	27:b:618:BCR:H362	2.20	0.41
25:b:605:CLA:H41	25:b:605:CLA:H62	1.75	0.41
3:C:63:TRP:CZ2	3:C:67:MET:HG2	2.55	0.41
5:E:19:TYR:CE1	5:E:23:HIS:CE1	3.09	0.41
1:a:183:MET:HA	25:a:606:CLA:HMD1	2.02	0.41
3:c:109:PHE:N	3:c:110:PRO:CD	2.83	0.41
16:v:3:LEU:HD12	16:v:3:LEU:HA	1.96	0.41
2:B:218:LEU:HD12	29:B:626:STE:H21	2.02	0.41
2:B:75:TRP:HB3	30:a:616:LMG:HC8	2.03	0.41
2:B:227:LYS:CE	30:B:620:LMG:O3	2.69	0.41
27:C:514:BCR:H15C	27:C:514:BCR:H351	1.90	0.41
4:D:32:TRP:CD1	30:D:406:LMG:H172	2.56	0.41
4:D:213:ILE:HD11	4:D:253:TRP:CH2	2.56	0.41
31:D:408:SQD:H342	18:X:23:LEU:HD22	2.03	0.41
5:E:25:ILE:N	5:E:25:ILE:HD12	2.36	0.41
20:R:4:ARG:O	20:R:8:VAL:HG23	2.21	0.41
1:a:102:LEU:HB2	30:a:616:LMG:H112	2.02	0.41
25:b:610:CLA:H203	25:b:610:CLA:H162	1.93	0.41
3:c:166:ILE:HG21	25:c:512:CLA:H202	2.02	0.41
3:c:286:ALA:HB2	25:c:502:CLA:HMD2	2.02	0.41
4:d:161:PRO:HG3	4:d:170:ALA:HB2	2.01	0.41
27:d:404:BCR:H383	9:j:25:VAL:HG21	2.03	0.41
20:r:9:LEU:O	20:r:12:VAL:HG22	2.20	0.41
1:A:323:ARG:HB3	4:D:329:MET:HA	2.03	0.41
3:C:42:LEU:HD21	25:C:511:CLA:H2A	2.03	0.41
25:C:509:CLA:HBB1	25:C:509:CLA:HMB3	2.02	0.41
10:K:27:VAL:O	10:K:27:VAL:HG12	2.20	0.41
13:O:78:LEU:HB3	13:O:81:ILE:HD11	2.03	0.41
2:b:287:ARG:HD3	36:b:803:HOH:O	2.21	0.41
25:c:509:CLA:H111	25:c:509:CLA:H142	1.88	0.41
1:A:307:ILE:HG22	1:A:313:VAL:HA	2.04	0.40
2:B:102:VAL:HA	27:B:618:BCR:C40	2.51	0.40
1:a:213:ALA:HB2	4:d:275:PRO:HG2	2.03	0.40
4:d:126:MET:HE3	4:d:143:ALA:O	2.21	0.40
4:d:192:THR:HG23	25:d:402:CLA:HBC2	2.02	0.40
33:d:409:LHG:H311	33:d:409:LHG:H352	2.02	0.40
2:b:24:LEU:HD21	25:b:616:CLA:CAB	2.49	0.40
27:d:404:BCR:H403	27:d:404:BCR:C23	2.48	0.40
3:C:410:VAL:N	3:C:413[B]:GLU:HG3	2.36	0.40
4:D:49:LEU:HD13	27:D:404:BCR:C15	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:88:SER:HB2	5:E:69:ARG:CZ	2.52	0.40
2:b:62:VAL:HB	25:b:605:CLA:HED3	2.03	0.40
25:c:510:CLA:HMC1	25:c:510:CLA:HBC2	2.02	0.40
4:d:136:VAL:HG12	4:d:138:VAL:HG13	2.03	0.40
7:h:28:THR:HB	7:h:29:PRO:HD3	2.04	0.40
10:k:28:ILE:HD11	17:y:28:ILE:HD13	2.03	0.40
9:j:20:GLY:O	9:j:24:ILE:HG12	2.21	0.40
19:z:44:SER:O	19:z:48:ILE:HG13	2.22	0.40
25:A:613:CLA:H192	25:A:613:CLA:H162	1.85	0.40
5:E:22[A]:ILE:HD12	5:E:23:HIS:CE1	2.57	0.40
10:K:26:PRO:O	10:K:29:PRO:HD2	2.21	0.40
20:R:5:VAL:O	20:R:9:LEU:HG	2.22	0.40
25:b:615:CLA:HBB1	25:b:615:CLA:HHC	2.04	0.40
3:c:162:GLY:HA2	3:c:248:GLY:HA2	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	332/344 (96%)	328 (99%)	3 (1%)	1 (0%)	36	27
1	a	332/344 (96%)	326 (98%)	6 (2%)	0	100	100
2	B	510/510 (100%)	502 (98%)	8 (2%)	0	100	100
2	b	504/510 (99%)	495 (98%)	9 (2%)	0	100	100
3	C	442/461 (96%)	433 (98%)	8 (2%)	1 (0%)	43	35
3	c	451/461 (98%)	442 (98%)	8 (2%)	1 (0%)	43	35
4	D	339/352 (96%)	332 (98%)	7 (2%)	0	100	100
4	d	340/352 (97%)	334 (98%)	6 (2%)	0	100	100
5	E	81/84 (96%)	80 (99%)	1 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	e	80/84 (95%)	79 (99%)	1 (1%)	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	32 (100%)	0	0	100	100
7	H	63/66 (96%)	60 (95%)	3 (5%)	0	100	100
7	h	61/66 (92%)	56 (92%)	5 (8%)	0	100	100
8	I	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
8	i	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
9	J	34/40 (85%)	32 (94%)	2 (6%)	0	100	100
9	j	34/40 (85%)	32 (94%)	2 (6%)	0	100	100
10	K	35/46 (76%)	33 (94%)	2 (6%)	0	100	100
10	k	35/46 (76%)	35 (100%)	0	0	100	100
11	L	35/37 (95%)	35 (100%)	0	0	100	100
11	l	34/37 (92%)	34 (100%)	0	0	100	100
12	M	31/36 (86%)	31 (100%)	0	0	100	100
12	m	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
13	O	243/272 (89%)	232 (96%)	10 (4%)	1 (0%)	30	20
13	o	242/272 (89%)	231 (96%)	9 (4%)	2 (1%)	16	7
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	28/32 (88%)	27 (96%)	1 (4%)	0	100	100
15	U	95/134 (71%)	90 (95%)	5 (5%)	0	100	100
15	u	95/134 (71%)	90 (95%)	4 (4%)	1 (1%)	11	4
16	V	135/163 (83%)	130 (96%)	4 (3%)	1 (1%)	18	9
16	v	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
17	Y	25/46 (54%)	25 (100%)	0	0	100	100
17	y	28/46 (61%)	25 (89%)	2 (7%)	1 (4%)	2	0
18	X	36/41 (88%)	35 (97%)	1 (3%)	0	100	100
18	x	37/41 (90%)	37 (100%)	0	0	100	100
19	Z	60/62 (97%)	54 (90%)	6 (10%)	0	100	100
19	z	60/62 (97%)	56 (93%)	3 (5%)	1 (2%)	7	1
20	R	26/41 (63%)	26 (100%)	0	0	100	100
20	r	26/41 (63%)	22 (85%)	3 (12%)	1 (4%)	2	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	5234/5700 (92%)	5093 (97%)	130 (2%)	11 (0%)	43	35

All (11) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
16	V	64	PRO
13	o	58	ASN
15	u	53	ALA
19	z	2	THR
3	c	416	SER
17	y	43	ARG
20	r	28	VAL
13	o	73	ARG
13	O	135	SER
1	A	259	ILE

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	270/280 (96%)	269 (100%)	1 (0%)	84	82
1	a	269/280 (96%)	267 (99%)	2 (1%)	76	73
2	B	410/407 (101%)	406 (99%)	4 (1%)	68	65
2	b	403/407 (99%)	400 (99%)	3 (1%)	76	73
3	C	346/362 (96%)	342 (99%)	4 (1%)	63	58
3	c	354/362 (98%)	352 (99%)	2 (1%)	78	76
4	D	276/283 (98%)	276 (100%)	0	100	100
4	d	277/283 (98%)	275 (99%)	2 (1%)	76	73
5	E	72/73 (99%)	70 (97%)	2 (3%)	38	29
5	e	71/73 (97%)	71 (100%)	0	100	100
6	F	28/39 (72%)	26 (93%)	2 (7%)	13	5

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	f	28/39 (72%)	27 (96%)	1 (4%)	31	20
7	H	54/55 (98%)	54 (100%)	0	100	100
7	h	53/55 (96%)	52 (98%)	1 (2%)	50	44
8	I	32/34 (94%)	31 (97%)	1 (3%)	35	26
8	i	32/34 (94%)	32 (100%)	0	100	100
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	22 (92%)	2 (8%)	10	3
10	K	30/37 (81%)	29 (97%)	1 (3%)	33	23
10	k	30/37 (81%)	30 (100%)	0	100	100
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	33 (97%)	1 (3%)	37	28
12	M	28/32 (88%)	28 (100%)	0	100	100
12	m	28/32 (88%)	28 (100%)	0	100	100
13	O	206/228 (90%)	203 (98%)	3 (2%)	57	52
13	o	207/228 (91%)	203 (98%)	4 (2%)	50	44
14	T	26/28 (93%)	25 (96%)	1 (4%)	29	19
14	t	25/28 (89%)	25 (100%)	0	100	100
15	U	84/112 (75%)	82 (98%)	2 (2%)	43	35
15	u	84/112 (75%)	84 (100%)	0	100	100
16	V	117/138 (85%)	115 (98%)	2 (2%)	53	48
16	v	117/138 (85%)	116 (99%)	1 (1%)	70	67
17	Y	19/37 (51%)	19 (100%)	0	100	100
17	y	22/37 (60%)	22 (100%)	0	100	100
18	X	31/34 (91%)	31 (100%)	0	100	100
18	x	31/34 (91%)	30 (97%)	1 (3%)	34	24
19	Z	52/52 (100%)	52 (100%)	0	100	100
19	z	51/52 (98%)	51 (100%)	0	100	100
20	R	22/33 (67%)	22 (100%)	0	100	100
20	r	22/33 (67%)	21 (96%)	1 (4%)	24	13
All	All	4324/4654 (93%)	4280 (99%)	44 (1%)	68	65

All (44) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	13	LEU
2	B	76	SER
2	B	362	PHE
2	B	371	THR
2	B	487	SER
3	C	130	VAL
3	C	240	ILE
3	C	289	PHE
3	C	416	SER
5	E	22[A]	ILE
5	E	22[B]	ILE
6	F	12	SER
6	F	25	THR
8	I	36	ASP
10	K	19	ASP
13	O	78	LEU
13	O	135	SER
13	O	214	THR
14	T	30	THR
15	U	45	LEU
15	U	61	VAL
16	V	3	LEU
16	V	7	VAL
1	a	42	LEU
1	a	200	LEU
2	b	14	ASN
2	b	128	THR
2	b	294	SER
3	c	124	VAL
3	c	240	ILE
4	d	259	ILE
4	d	293	LEU
6	f	23	VAL
7	h	56	ASP
9	j	13	VAL
9	j	21	VAL
11	l	30	LEU
13	o	49	THR
13	o	59	LYS
13	o	118	LEU
13	o	134	THR
16	v	52	LEU
18	x	14	LEU

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Mol	Chain	Res	Type
20	r	22	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (35) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	261	GLN
1	A	338	ASN
2	B	282	GLN
2	B	490	GLN
3	C	373	ASN
4	D	61	HIS
4	D	332	GLN
12	M	5	GLN
12	M	28	GLN
13	O	155	ASN
13	O	231	HIS
15	U	37	GLN
19	Z	6	GLN
20	R	22	ASN
1	a	165	GLN
1	a	181	ASN
1	a	261	GLN
1	a	266	ASN
2	b	223	GLN
2	b	282	GLN
2	b	338	GLN
2	b	409	GLN
2	b	490	GLN
2	b	497	GLN
3	c	311	GLN
3	c	322	GLN
3	c	378	ASN
5	e	74	GLN
7	h	59	ASN
12	m	32	GLN
13	o	58	ASN
13	o	61	GLN
13	o	155	ASN
15	u	37	GLN
16	v	78	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
8	FME	i	1	8	8,9,10	0.58	0	8,9,11	0.77	0
14	FME	T	1	14	8,9,10	0.70	0	8,9,11	0.90	0
12	FME	m	1	12	8,9,10	0.39	0	8,9,11	1.00	0
14	FME	t	1	14	8,9,10	0.56	0	8,9,11	1.01	0
8	FME	I	1	8	8,9,10	0.47	0	8,9,11	1.12	1 (12%)
12	FME	M	1	12	8,9,10	0.57	0	8,9,11	0.87	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
8	FME	i	1	8	-	1/7/9/11	-
14	FME	T	1	14	-	1/7/9/11	-
12	FME	m	1	12	-	1/7/9/11	-
14	FME	t	1	14	-	1/7/9/11	-
8	FME	I	1	8	-	2/7/9/11	-
12	FME	M	1	12	-	0/7/9/11	-

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	I	1	FME	CG-CB-CA	2.04	119.11	112.87

There are no chirality outliers.

All (6) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
12	m	1	FME	O-C-CA-CB
8	I	1	FME	CA-CB-CG-SD
14	t	1	FME	CB-CG-SD-CE
14	T	1	FME	CB-CG-SD-CE
8	I	1	FME	C-CA-CB-CG
8	i	1	FME	CA-CB-CG-SD

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 211 ligands modelled in this entry, 6 are monoatomic - leaving 205 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	$\# Z > 2$
32	DGD	C	520	-	63,63,67	0.75	1 (1%)	77,77,81	1.06	6 (7%)
29	STE	b	626	-	7,7,19	0.36	0	6,6,19	0.77	0
29	STE	M	103	-	14,14,19	0.36	0	13,13,19	0.90	0
29	STE	A	619	-	10,10,19	0.42	0	9,9,19	0.65	0
29	STE	x	101	-	19,19,19	0.67	0	19,19,19	0.87	0
33	LHG	D	409	-	48,48,48	0.64	1 (2%)	51,54,54	0.88	1 (1%)
27	BCR	K	101	-	41,41,41	0.32	0	56,56,56	0.69	0
29	STE	C	526	-	13,13,19	0.43	0	12,12,19	0.71	0
33	LHG	D	410	-	46,46,48	0.60	0	49,52,54	0.64	1 (2%)
29	STE	M	101	-	14,14,19	0.70	0	14,14,19	1.09	1 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	SQD	A	616	-	41,43,54	1.78	8 (19%)	51,54,65	1.51	6 (11%)
29	STE	b	622	-	19,19,19	0.63	0	19,19,19	1.05	0
25	CLA	b	614	2	69,73,73	1.36	6 (8%)	82,113,113	1.38	9 (10%)
29	STE	t	103	-	9,9,19	0.53	0	8,8,19	0.42	0
27	BCR	H	101	-	41,41,41	0.58	0	56,56,56	1.07	3 (5%)
32	DGD	c	521	-	63,63,67	0.55	0	77,77,81	0.98	4 (5%)
30	LMG	a	616	-	55,55,55	0.56	0	63,63,63	1.42	9 (14%)
30	LMG	d	411	-	44,44,55	0.59	0	52,52,63	0.75	2 (3%)
28	PL9	a	611	-	55,55,55	1.14	2 (3%)	68,69,69	1.53	11 (16%)
25	CLA	C	510	3	69,73,73	1.22	10 (14%)	82,113,113	1.38	5 (6%)
29	STE	E	102	-	11,11,19	0.79	0	11,11,19	1.11	1 (9%)
28	PL9	A	611	-	55,55,55	1.14	4 (7%)	68,69,69	1.57	8 (11%)
27	BCR	b	618	-	41,41,41	0.52	0	56,56,56	0.89	1 (1%)
25	CLA	C	504	36	63,67,73	1.27	8 (12%)	74,105,113	1.44	10 (13%)
25	CLA	B	610	36	69,73,73	1.32	7 (10%)	82,113,113	1.30	9 (10%)
25	CLA	a	612	36	69,73,73	1.41	6 (8%)	82,113,113	1.24	4 (4%)
25	CLA	b	610	36	69,73,73	1.35	10 (14%)	82,113,113	1.25	8 (9%)
25	CLA	b	604	2	69,73,73	1.15	8 (11%)	82,113,113	1.50	14 (17%)
25	CLA	A	606	1	69,73,73	1.26	6 (8%)	82,113,113	1.32	6 (7%)
26	PHO	A	608	-	58,69,69	1.98	9 (15%)	55,99,99	1.85	10 (18%)
29	STE	D	411	-	8,8,19	0.44	0	7,7,19	0.63	0
33	LHG	a	614	-	41,41,48	0.62	0	44,47,54	0.65	1 (2%)
27	BCR	D	404	-	41,41,41	0.48	0	56,56,56	1.06	5 (8%)
29	STE	b	624	-	15,15,19	0.77	0	15,15,19	1.26	3 (20%)
31	SQD	A	615	-	50,52,54	1.57	7 (14%)	60,63,65	2.07	12 (20%)
25	CLA	B	612	2	69,73,73	1.16	6 (8%)	82,113,113	1.41	8 (9%)
33	LHG	d	409	-	38,38,48	0.59	0	41,44,54	0.69	0
25	CLA	b	612	2	69,73,73	1.29	10 (14%)	82,113,113	1.32	11 (13%)
32	DGD	h	102	-	63,63,67	0.57	0	77,77,81	1.01	6 (7%)
25	CLA	c	503	3	69,73,73	1.25	10 (14%)	82,113,113	1.31	8 (9%)
25	CLA	B	607	36	69,73,73	1.28	6 (8%)	82,113,113	1.38	9 (10%)
25	CLA	C	512	3	69,73,73	1.37	11 (15%)	82,113,113	1.36	8 (9%)
25	CLA	B	602	2	69,73,73	1.27	9 (13%)	82,113,113	1.19	6 (7%)
29	STE	e	104	-	12,12,19	0.69	0	12,12,19	1.19	2 (16%)
30	LMG	B	621	-	51,51,55	0.39	0	59,59,63	1.16	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	LMG	b	621	-	51,51,55	0.48	0	59,59,63	0.88	2 (3%)
33	LHG	B	623	-	48,48,48	0.55	1 (2%)	51,54,54	0.84	2 (3%)
25	CLA	d	402	4	69,73,73	1.20	9 (13%)	82,113,113	1.25	4 (4%)
25	CLA	A	607	36	69,73,73	1.22	7 (10%)	82,113,113	1.34	8 (9%)
25	CLA	c	506	3	69,73,73	1.13	6 (8%)	82,113,113	1.38	8 (9%)
29	STE	A	618	-	16,16,19	0.52	0	15,15,19	0.49	0
25	CLA	c	513	3	69,73,73	1.19	7 (10%)	82,113,113	1.18	5 (6%)
27	BCR	c	515	-	41,41,41	0.45	0	56,56,56	0.76	0
29	STE	C	525	-	15,15,19	0.39	0	14,14,19	0.73	0
25	CLA	b	608	2	69,73,73	1.19	8 (11%)	82,113,113	1.39	8 (9%)
25	CLA	c	505	3	69,73,73	1.27	11 (15%)	82,113,113	1.49	9 (10%)
25	CLA	b	605	2	69,73,73	1.33	8 (11%)	82,113,113	1.42	13 (15%)
25	CLA	C	507	36	69,73,73	1.20	8 (11%)	82,113,113	1.60	10 (12%)
25	CLA	C	501	3	69,73,73	1.49	8 (11%)	82,113,113	1.54	7 (8%)
29	STE	B	627	-	14,14,19	0.52	0	13,13,19	0.59	0
26	PHO	D	401	-	58,69,69	1.90	11 (18%)	55,99,99	1.84	10 (18%)
29	STE	e	103	-	8,8,19	0.40	0	7,7,19	0.65	0
27	BCR	b	617	-	41,41,41	0.44	0	56,56,56	0.86	4 (7%)
29	STE	C	515	-	13,13,19	0.84	0	13,13,19	0.84	0
29	STE	B	626	-	11,11,19	0.74	0	11,11,19	1.15	1 (9%)
24	BCT	A	605	22	3,3,3	0.74	0	2,3,3	2.87	1 (50%)
30	LMG	C	523	-	48,48,55	0.48	0	56,56,63	0.63	0
27	BCR	a	610	-	41,41,41	0.45	0	56,56,56	0.84	2 (3%)
25	CLA	a	609	1	69,73,73	1.44	9 (13%)	82,113,113	1.26	10 (12%)
29	STE	b	625	-	9,9,19	0.41	0	8,8,19	0.68	0
29	STE	j	101	-	11,11,19	0.79	0	11,11,19	1.03	1 (9%)
25	CLA	C	505	3	69,73,73	1.19	7 (10%)	82,113,113	1.37	9 (10%)
25	CLA	c	504	36	64,68,73	1.16	8 (12%)	76,107,113	1.34	10 (13%)
25	CLA	b	603	2	69,73,73	1.25	7 (10%)	82,113,113	1.45	9 (10%)
33	LHG	d	407	-	48,48,48	0.57	0	51,54,54	0.63	0
25	CLA	A	613	36	69,73,73	1.42	9 (13%)	82,113,113	1.42	6 (7%)
27	BCR	h	101	-	41,41,41	0.39	0	56,56,56	0.97	3 (5%)
27	BCR	b	619	-	41,41,41	0.41	0	56,56,56	1.07	3 (5%)
24	BCT	a	605	22	3,3,3	0.76	0	2,3,3	2.37	1 (50%)
25	CLA	B	614	2	69,73,73	1.15	6 (8%)	82,113,113	1.30	9 (10%)
27	BCR	d	404	-	41,41,41	0.51	0	56,56,56	1.04	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	SQD	a	615	-	52,54,54	1.65	8 (15%)	62,65,65	1.41	7 (11%)
27	BCR	k	102	-	41,41,41	0.40	0	56,56,56	0.85	1 (1%)
25	CLA	D	402	4	69,73,73	1.14	8 (11%)	82,113,113	1.40	7 (8%)
25	CLA	c	511	3	69,73,73	1.57	9 (13%)	82,113,113	1.36	8 (9%)
27	BCR	k	101	-	41,41,41	0.42	0	56,56,56	0.75	1 (1%)
29	STE	C	517	-	4,4,19	0.42	0	3,3,19	0.41	0
29	STE	C	518	-	6,6,19	0.47	0	5,5,19	0.48	0
29	STE	C	524	-	11,11,19	0.83	1 (9%)	11,11,19	1.38	1 (9%)
31	SQD	a	613	-	52,54,54	1.54	7 (13%)	62,65,65	1.84	12 (19%)
25	CLA	d	403	4	69,73,73	1.51	9 (13%)	82,113,113	1.11	6 (7%)
34	HEM	F	101	5,6	50,50,50	1.46	7 (14%)	67,82,82	1.32	11 (16%)
25	CLA	C	511	3	69,73,73	1.41	9 (13%)	82,113,113	1.43	6 (7%)
28	PL9	d	405	-	55,55,55	1.31	4 (7%)	68,69,69	1.67	15 (22%)
29	STE	E	104	-	19,19,19	0.72	0	19,19,19	0.97	1 (5%)
34	HEM	e	102	5,6	50,50,50	1.52	8 (16%)	67,82,82	1.36	11 (16%)
30	LMG	c	518	-	29,29,55	0.42	0	31,31,63	0.72	1 (3%)
25	CLA	b	607	36	69,73,73	1.33	7 (10%)	82,113,113	1.27	7 (8%)
27	BCR	B	618	-	41,41,41	0.50	0	56,56,56	1.05	3 (5%)
27	BCR	K	102	-	41,41,41	0.43	0	56,56,56	1.09	3 (5%)
30	LMG	A	614	-	48,48,55	0.48	0	56,56,63	0.87	2 (3%)
29	STE	M	102	-	9,9,19	0.36	0	8,8,19	0.89	0
29	STE	E	103	-	11,11,19	0.43	0	10,10,19	0.60	0
29	STE	J	101	-	11,11,19	0.70	0	11,11,19	1.10	1 (9%)
32	DGD	C	522	-	63,63,67	0.60	1 (1%)	77,77,81	0.81	1 (1%)
32	DGD	c	519	-	63,63,67	0.73	3 (4%)	77,77,81	0.81	2 (2%)
29	STE	d	410	-	19,19,19	0.68	0	19,19,19	0.85	0
25	CLA	c	510	3	69,73,73	1.21	8 (11%)	82,113,113	1.22	7 (8%)
25	CLA	c	507	36	69,73,73	1.25	6 (8%)	82,113,113	1.34	8 (9%)
33	LHG	d	408	-	48,48,48	0.59	0	51,54,54	0.75	1 (1%)
25	CLA	A	609	1	58,62,73	1.38	8 (13%)	68,99,113	1.26	6 (8%)
25	CLA	B	605	2	69,73,73	1.17	7 (10%)	82,113,113	1.33	7 (8%)
21	OEX	a	601	36,1,3	0,14,14	-	-	-	-	-
25	CLA	C	502	3	69,73,73	1.20	7 (10%)	82,113,113	1.33	5 (6%)
26	PHO	d	401	-	58,69,69	2.14	9 (15%)	55,99,99	1.78	10 (18%)
25	CLA	C	503	3	69,73,73	1.40	7 (10%)	82,113,113	1.52	9 (10%)
25	CLA	C	509	3	69,73,73	1.16	10 (14%)	82,113,113	1.30	7 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
29	STE	t	102	-	13,13,19	0.64	0	13,13,19	1.21	0
32	DGD	C	521	-	63,63,67	0.63	1 (1%)	77,77,81	0.76	0
25	CLA	b	602	2	69,73,73	1.22	9 (13%)	82,113,113	1.31	6 (7%)
25	CLA	a	607	36	69,73,73	1.20	10 (14%)	82,113,113	1.31	6 (7%)
29	STE	e	101	-	8,8,19	0.45	0	7,7,19	0.53	0
29	STE	A	612	-	8,8,19	0.45	0	7,7,19	0.57	0
32	DGD	A	617	-	67,67,67	0.56	0	81,81,81	0.99	4 (4%)
33	LHG	E	101	-	48,48,48	0.60	0	51,54,54	0.58	0
27	BCR	B	617	-	41,41,41	0.44	0	56,56,56	0.77	1 (1%)
25	CLA	c	501	3	69,73,73	1.22	9 (13%)	82,113,113	1.39	6 (7%)
29	STE	m	101	-	11,11,19	0.77	0	11,11,19	1.41	2 (18%)
30	LMG	a	617	-	49,49,55	0.54	1 (2%)	57,57,63	0.73	0
31	SQD	b	620	-	47,49,54	1.65	11 (23%)	57,60,65	2.00	14 (24%)
21	OEX	A	601	36,1,3	0,14,14	-	-	-	-	-
29	STE	d	412	-	13,13,19	0.72	0	13,13,19	1.14	1 (7%)
25	CLA	b	611	2	69,73,73	1.31	8 (11%)	82,113,113	1.35	9 (10%)
35	HEC	V	201	16	50,50,50	1.71	4 (8%)	68,82,82	1.41	10 (14%)
25	CLA	B	611	2	69,73,73	1.12	5 (7%)	82,113,113	1.56	10 (12%)
25	CLA	B	613	2	69,73,73	1.18	5 (7%)	82,113,113	1.30	7 (8%)
25	CLA	b	613	2	69,73,73	1.26	12 (17%)	82,113,113	1.33	8 (9%)
25	CLA	b	615	2	69,73,73	1.26	7 (10%)	82,113,113	1.22	9 (10%)
27	BCR	t	101	-	41,41,41	0.50	0	56,56,56	1.27	8 (14%)
29	STE	B	622	-	16,16,19	0.69	0	16,16,19	1.06	0
30	LMG	b	623	-	55,55,55	0.47	0	63,63,63	1.20	8 (12%)
25	CLA	C	513	3	69,73,73	1.51	8 (11%)	82,113,113	1.31	8 (9%)
29	STE	c	517	-	17,17,19	0.46	0	16,16,19	0.62	0
31	SQD	D	408	-	34,36,54	1.53	4 (11%)	42,45,65	2.15	11 (26%)
25	CLA	B	609	2	69,73,73	1.36	5 (7%)	82,113,113	1.32	6 (7%)
27	BCR	B	619	-	41,41,41	0.35	0	56,56,56	1.10	4 (7%)
29	STE	K	103	-	13,13,19	0.40	0	12,12,19	0.72	0
25	CLA	B	616	2	64,68,73	1.44	5 (7%)	76,107,113	1.45	10 (13%)
30	LMG	D	406	-	50,50,55	0.49	0	58,58,63	1.19	4 (6%)
25	CLA	B	601	36	69,73,73	1.47	8 (11%)	82,113,113	1.56	9 (10%)
27	BCR	T	101	-	41,41,41	0.49	0	56,56,56	1.11	2 (3%)
32	DGD	c	520	-	63,63,67	0.59	0	77,77,81	0.89	2 (2%)
29	STE	h	104	-	10,10,19	0.38	0	9,9,19	0.66	0
29	STE	z	101	-	8,8,19	0.47	0	7,7,19	0.53	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	LMG	D	407	-	51,51,55	0.55	0	59,59,63	0.90	3 (5%)
35	HEC	v	201	16	50,50,50	1.55	4 (8%)	68,82,82	1.27	7 (10%)
28	PL9	D	405	-	55,55,55	1.38	6 (10%)	68,69,69	1.43	8 (11%)
25	CLA	B	606	2	69,73,73	1.42	7 (10%)	82,113,113	1.42	10 (12%)
25	CLA	B	608	2	69,73,73	1.16	4 (5%)	82,113,113	1.25	7 (8%)
29	STE	a	618	-	11,11,19	0.83	0	11,11,19	0.89	0
29	STE	j	102	-	15,15,19	0.46	0	14,14,19	0.62	0
30	LMG	B	620	-	45,45,55	0.49	0	53,53,63	1.18	5 (9%)
30	LMG	C	516	-	35,35,55	0.48	0	43,43,63	1.51	8 (18%)
25	CLA	B	603	2	69,73,73	1.16	5 (7%)	82,113,113	1.37	11 (13%)
29	STE	d	406	-	19,19,19	0.76	0	19,19,19	0.93	1 (5%)
29	STE	I	102	-	14,14,19	0.80	0	14,14,19	0.95	1 (7%)
25	CLA	b	616	2	64,68,73	1.24	6 (9%)	76,107,113	1.47	13 (17%)
33	LHG	l	101	-	48,48,48	0.48	0	51,54,54	0.65	0
25	CLA	b	601	36	69,73,73	1.28	8 (11%)	82,113,113	1.41	5 (6%)
29	STE	I	101	-	16,16,19	0.73	0	16,16,19	1.02	1 (6%)
29	STE	i	101	-	11,11,19	0.78	0	11,11,19	1.05	0
29	STE	i	102	-	5,5,19	0.41	0	4,4,19	0.53	0
29	STE	H	103	-	17,17,19	0.54	0	16,16,19	0.55	0
29	STE	X	101	-	19,19,19	0.71	0	19,19,19	1.08	0
29	STE	c	516	-	12,12,19	0.46	0	11,11,19	0.63	0
25	CLA	c	509	3	69,73,73	1.20	7 (10%)	82,113,113	1.44	7 (8%)
31	SQD	B	624	-	52,54,54	1.57	7 (13%)	62,65,65	1.87	10 (16%)
25	CLA	D	403	4	69,73,73	1.32	9 (13%)	82,113,113	1.20	5 (6%)
32	DGD	H	102	-	63,63,67	0.59	0	77,77,81	0.88	3 (3%)
25	CLA	b	606	2	69,73,73	1.41	7 (10%)	82,113,113	1.60	5 (6%)
25	CLA	B	604	2	69,73,73	1.31	9 (13%)	82,113,113	1.58	9 (10%)
29	STE	Z	101	-	16,16,19	0.49	0	15,15,19	0.54	0
31	SQD	f	101	-	39,41,54	1.67	7 (17%)	49,52,65	1.89	11 (22%)
29	STE	l	102	-	17,17,19	0.45	0	16,16,19	0.64	0
25	CLA	C	506	3	69,73,73	1.28	6 (8%)	82,113,113	1.25	6 (7%)
29	STE	C	519	-	9,9,19	0.55	0	8,8,19	0.45	0
25	CLA	B	615	2	69,73,73	1.39	7 (10%)	82,113,113	1.26	5 (6%)
30	LMG	c	522	-	46,46,55	0.53	0	54,54,63	0.75	0
33	LHG	L	101	-	48,48,48	0.57	0	51,54,54	0.75	2 (3%)
25	CLA	a	606	1	69,73,73	1.27	10 (14%)	82,113,113	1.34	9 (10%)
26	PHO	a	608	-	58,69,69	1.97	12 (20%)	55,99,99	1.73	12 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	CLA	b	609	2	69,73,73	1.08	4 (5%)	82,113,113	1.33	6 (7%)
25	CLA	c	508	3	68,72,73	1.22	9 (13%)	80,111,113	1.20	8 (10%)
29	STE	B	625	-	17,17,19	0.69	0	17,17,19	1.07	1 (5%)
30	LMG	c	523	-	48,48,55	0.50	0	56,56,63	0.78	1 (1%)
25	CLA	c	512	3	69,73,73	1.24	7 (10%)	82,113,113	1.37	10 (12%)
29	STE	h	103	-	9,9,19	0.44	0	8,8,19	0.60	0
27	BCR	Y	101	-	41,41,41	0.49	0	56,56,56	0.92	0
29	STE	T	102	-	15,15,19	0.40	0	14,14,19	0.88	0
27	BCR	A	610	-	41,41,41	0.37	0	56,56,56	0.93	2 (3%)
25	CLA	c	502	3	69,73,73	1.38	7 (10%)	82,113,113	1.33	7 (8%)
27	BCR	C	514	-	41,41,41	0.41	0	56,56,56	1.06	4 (7%)
25	CLA	C	508	3	69,73,73	1.37	9 (13%)	82,113,113	1.42	8 (9%)
29	STE	f	102	-	7,7,19	0.41	0	6,6,19	0.59	0
27	BCR	c	514	-	41,41,41	0.36	0	56,56,56	0.57	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '2' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	DGD	C	520	-	-	19/51/91/95	0/2/2/2
29	STE	b	626	-	-	4/5/5/17	-
29	STE	M	103	-	-	8/12/12/17	-
29	STE	A	619	-	-	4/8/8/17	-
29	STE	x	101	-	-	10/17/17/17	-
33	LHG	D	409	-	-	12/53/53/53	-
27	BCR	K	101	-	-	5/29/63/63	0/2/2/2
29	STE	C	526	-	-	3/11/11/17	-
33	LHG	D	410	-	-	12/51/51/53	-
29	STE	M	101	-	-	9/12/12/17	-
31	SQD	A	616	-	-	11/38/58/69	0/1/1/1
29	STE	b	622	-	-	9/17/17/17	-
25	CLA	b	614	2	-	10/39/115/115	-
29	STE	t	103	-	-	4/7/7/17	-
27	BCR	H	101	-	-	4/29/63/63	0/2/2/2
32	DGD	c	521	-	-	14/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	LMG	a	616	-	-	25/50/70/70	0/1/1/1
30	LMG	d	411	-	-	10/39/59/70	0/1/1/1
28	PL9	a	611	-	-	21/53/73/73	0/1/1/1
25	CLA	C	510	3	-	5/39/115/115	-
29	STE	E	102	-	-	2/9/9/17	-
28	PL9	A	611	-	-	17/53/73/73	0/1/1/1
27	BCR	b	618	-	-	0/29/63/63	0/2/2/2
25	CLA	C	504	36	-	5/32/108/115	-
25	CLA	B	610	36	-	5/39/115/115	-
25	CLA	a	612	36	-	4/39/115/115	-
25	CLA	b	610	36	-	8/39/115/115	-
25	CLA	b	604	2	-	7/39/115/115	-
25	CLA	A	606	1	-	4/39/115/115	-
26	PHO	A	608	-	-	4/37/103/103	0/5/6/6
29	STE	D	411	-	-	3/6/6/17	-
33	LHG	a	614	-	-	20/46/46/53	-
27	BCR	D	404	-	-	2/29/63/63	0/2/2/2
29	STE	b	624	-	-	6/13/13/17	-
31	SQD	A	615	-	-	19/47/67/69	0/1/1/1
25	CLA	B	612	2	-	10/39/115/115	-
33	LHG	d	409	-	-	10/43/43/53	-
25	CLA	b	612	2	-	7/39/115/115	-
32	DGD	h	102	-	-	20/51/91/95	0/2/2/2
25	CLA	c	503	3	-	8/39/115/115	-
25	CLA	B	607	36	-	5/39/115/115	-
25	CLA	C	512	3	-	10/39/115/115	-
25	CLA	B	602	2	-	3/39/115/115	-
29	STE	e	104	-	-	4/10/10/17	-
30	LMG	B	621	-	-	20/46/66/70	0/1/1/1
30	LMG	b	621	-	-	14/46/66/70	0/1/1/1
33	LHG	B	623	-	-	17/53/53/53	-
25	CLA	d	402	4	-	4/39/115/115	-
25	CLA	A	607	36	-	7/39/115/115	-
25	CLA	c	506	3	-	12/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	STE	A	618	-	-	9/14/14/17	-
25	CLA	c	513	3	-	14/39/115/115	-
27	BCR	c	515	-	-	0/29/63/63	0/2/2/2
29	STE	C	525	-	-	6/13/13/17	-
25	CLA	b	608	2	-	2/39/115/115	-
25	CLA	c	505	3	-	8/39/115/115	-
25	CLA	b	605	2	-	3/39/115/115	-
25	CLA	C	507	36	-	7/39/115/115	-
25	CLA	C	501	3	-	1/39/115/115	-
29	STE	B	627	-	-	9/12/12/17	-
26	PHO	D	401	-	-	0/37/103/103	0/5/6/6
29	STE	e	103	-	-	4/6/6/17	-
27	BCR	b	617	-	-	2/29/63/63	0/2/2/2
29	STE	C	515	-	-	7/11/11/17	-
29	STE	B	626	-	-	2/9/9/17	-
30	LMG	C	523	-	-	16/43/63/70	0/1/1/1
33	LHG	L	101	-	-	14/53/53/53	-
27	BCR	a	610	-	-	0/29/63/63	0/2/2/2
25	CLA	a	609	1	-	12/39/115/115	-
29	STE	b	625	-	-	5/7/7/17	-
29	STE	j	101	-	-	4/9/9/17	-
25	CLA	C	505	3	-	5/39/115/115	-
25	CLA	c	504	36	-	6/33/109/115	-
25	CLA	b	603	2	-	9/39/115/115	-
33	LHG	d	407	-	-	12/53/53/53	-
25	CLA	A	613	36	-	1/39/115/115	-
27	BCR	h	101	-	-	1/29/63/63	0/2/2/2
27	BCR	b	619	-	-	0/29/63/63	0/2/2/2
27	BCR	d	404	-	-	3/29/63/63	0/2/2/2
25	CLA	B	614	2	-	9/39/115/115	-
31	SQD	a	615	-	-	23/49/69/69	0/1/1/1
27	BCR	k	102	-	-	5/29/63/63	0/2/2/2
25	CLA	D	402	4	-	4/39/115/115	-
25	CLA	c	511	3	-	5/39/115/115	-
27	BCR	k	101	-	-	7/29/63/63	0/2/2/2
29	STE	C	517	-	-	0/2/2/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	STE	C	518	-	-	3/4/4/17	-
29	STE	C	524	-	-	3/9/9/17	-
31	SQD	a	613	-	-	25/49/69/69	0/1/1/1
25	CLA	d	403	4	-	4/39/115/115	-
34	HEM	F	101	5,6	-	3/14/54/54	-
25	CLA	C	511	3	-	2/39/115/115	-
28	PL9	d	405	-	-	9/53/73/73	0/1/1/1
29	STE	E	104	-	-	11/17/17/17	-
34	HEM	e	102	5,6	-	4/14/54/54	-
30	LMG	c	518	-	-	8/31/31/70	-
25	CLA	b	607	36	-	13/39/115/115	-
27	BCR	B	618	-	-	0/29/63/63	0/2/2/2
27	BCR	K	102	-	-	5/29/63/63	0/2/2/2
30	LMG	A	614	-	-	15/43/63/70	0/1/1/1
29	STE	M	102	-	-	4/7/7/17	-
29	STE	E	103	-	-	6/9/9/17	-
29	STE	J	101	-	-	7/9/9/17	-
32	DGD	C	522	-	-	10/51/91/95	0/2/2/2
32	DGD	c	519	-	-	19/51/91/95	0/2/2/2
29	STE	d	410	-	-	7/17/17/17	-
25	CLA	c	510	3	-	5/39/115/115	-
25	CLA	c	507	36	-	6/39/115/115	-
33	LHG	d	408	-	-	14/53/53/53	-
25	CLA	A	609	1	-	2/26/102/115	-
25	CLA	B	605	2	-	11/39/115/115	-
25	CLA	C	502	3	-	13/39/115/115	-
26	PHO	d	401	-	-	5/37/103/103	0/5/6/6
25	CLA	C	503	3	-	1/39/115/115	-
25	CLA	C	509	3	-	12/39/115/115	-
29	STE	t	102	-	-	6/11/11/17	-
32	DGD	C	521	-	-	19/51/91/95	0/2/2/2
25	CLA	b	602	2	-	7/39/115/115	-
25	CLA	a	607	36	-	6/39/115/115	-
29	STE	e	101	-	-	3/6/6/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	STE	A	612	-	-	2/6/6/17	-
32	DGD	A	617	-	-	26/55/95/95	0/2/2/2
33	LHG	E	101	-	-	25/53/53/53	-
27	BCR	B	617	-	-	2/29/63/63	0/2/2/2
25	CLA	c	501	3	-	5/39/115/115	-
29	STE	m	101	-	-	3/9/9/17	-
30	LMG	a	617	-	-	20/44/64/70	0/1/1/1
31	SQD	b	620	-	-	19/44/64/69	0/1/1/1
29	STE	d	412	-	-	7/11/11/17	-
25	CLA	b	611	2	-	8/39/115/115	-
35	HEC	V	201	16	1/1/7/7	6/14/54/54	-
25	CLA	B	611	2	-	5/39/115/115	-
25	CLA	B	613	2	-	9/39/115/115	-
25	CLA	b	613	2	-	9/39/115/115	-
25	CLA	b	615	2	-	10/39/115/115	-
27	BCR	t	101	-	-	2/29/63/63	0/2/2/2
29	STE	B	622	-	-	7/14/14/17	-
30	LMG	b	623	-	-	25/50/70/70	0/1/1/1
25	CLA	C	513	3	-	9/39/115/115	-
29	STE	c	517	-	-	6/15/15/17	-
31	SQD	D	408	-	-	16/28/48/69	0/1/1/1
25	CLA	B	609	2	-	4/39/115/115	-
27	BCR	B	619	-	-	3/29/63/63	0/2/2/2
29	STE	K	103	-	-	5/11/11/17	-
25	CLA	B	616	2	-	10/33/109/115	-
30	LMG	D	406	-	-	18/45/65/70	0/1/1/1
25	CLA	B	601	36	-	14/39/115/115	-
27	BCR	T	101	-	-	4/29/63/63	0/2/2/2
32	DGD	c	520	-	-	18/51/91/95	0/2/2/2
29	STE	h	104	-	-	1/8/8/17	-
29	STE	z	101	-	-	2/6/6/17	-
30	LMG	D	407	-	-	15/46/66/70	0/1/1/1
35	HEC	v	201	16	1/1/7/7	6/14/54/54	-
28	PL9	D	405	-	-	7/53/73/73	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	B	606	2	-	11/39/115/115	-
25	CLA	B	608	2	-	2/39/115/115	-
29	STE	a	618	-	-	3/9/9/17	-
29	STE	j	102	-	-	6/13/13/17	-
30	LMG	B	620	-	-	14/40/60/70	0/1/1/1
30	LMG	C	516	-	-	14/30/50/70	0/1/1/1
25	CLA	B	603	2	-	10/39/115/115	-
29	STE	d	406	-	-	12/17/17/17	-
29	STE	I	102	-	-	4/12/12/17	-
25	CLA	b	616	2	-	12/33/109/115	-
33	LHG	l	101	-	-	22/53/53/53	-
25	CLA	b	601	36	-	10/39/115/115	-
29	STE	I	101	-	-	7/14/14/17	-
29	STE	i	101	-	-	5/9/9/17	-
29	STE	i	102	-	-	0/3/3/17	-
29	STE	H	103	-	-	8/15/15/17	-
29	STE	X	101	-	-	5/17/17/17	-
29	STE	c	516	-	-	7/10/10/17	-
25	CLA	c	509	3	-	12/39/115/115	-
31	SQD	B	624	-	-	21/49/69/69	0/1/1/1
25	CLA	D	403	4	-	7/39/115/115	-
32	DGD	H	102	-	-	17/51/91/95	0/2/2/2
25	CLA	b	606	2	-	10/39/115/115	-
25	CLA	B	604	2	-	5/39/115/115	-
29	STE	Z	101	-	-	8/14/14/17	-
31	SQD	f	101	-	-	13/36/56/69	0/1/1/1
29	STE	l	102	-	-	10/15/15/17	-
25	CLA	C	506	3	-	8/39/115/115	-
29	STE	C	519	-	-	5/7/7/17	-
25	CLA	B	615	2	-	12/39/115/115	-
30	LMG	c	522	-	-	16/41/61/70	0/1/1/1
25	CLA	a	606	1	-	3/39/115/115	-
26	PHO	a	608	-	-	0/37/103/103	0/5/6/6
25	CLA	b	609	2	-	6/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	c	508	3	-	5/38/114/115	-
29	STE	B	625	-	-	10/15/15/17	-
30	LMG	c	523	-	-	19/43/63/70	0/1/1/1
25	CLA	c	512	3	-	15/39/115/115	-
29	STE	h	103	-	-	1/7/7/17	-
27	BCR	Y	101	-	-	6/29/63/63	0/2/2/2
29	STE	T	102	-	-	6/13/13/17	-
27	BCR	A	610	-	-	1/29/63/63	0/2/2/2
25	CLA	c	502	3	-	4/39/115/115	-
27	BCR	C	514	-	-	1/29/63/63	0/2/2/2
25	CLA	C	508	3	-	6/39/115/115	-
29	STE	f	102	-	-	5/5/5/17	-
27	BCR	c	514	-	-	4/29/63/63	0/2/2/2

All (687) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	d	401	PHO	C1B-C2B	9.42	1.49	1.39
26	d	401	PHO	C3B-C4B	9.04	1.50	1.41
26	a	608	PHO	C1B-C2B	8.77	1.49	1.39
26	A	608	PHO	C3B-C4B	8.39	1.50	1.41
25	B	606	CLA	MG-NA	7.96	2.25	2.06
25	d	403	CLA	MG-ND	-7.72	1.90	2.05
26	A	608	PHO	C1B-C2B	7.57	1.47	1.39
25	C	501	CLA	MG-NA	7.46	2.24	2.06
25	b	606	CLA	MG-NA	7.46	2.24	2.06
25	a	612	CLA	MG-NA	7.25	2.23	2.06
25	c	511	CLA	MG-NA	7.24	2.23	2.06
26	a	608	PHO	C3B-C4B	7.15	1.48	1.41
35	V	201	HEC	C3D-C2D	7.01	1.51	1.36
26	D	401	PHO	C3B-C4B	6.91	1.48	1.41
25	B	616	CLA	MG-NA	6.90	2.22	2.06
35	v	201	HEC	C3D-C2D	6.79	1.51	1.36
26	D	401	PHO	C1B-C2B	6.76	1.47	1.39
25	B	609	CLA	MG-NA	6.59	2.21	2.06
25	C	513	CLA	MG-ND	6.40	2.18	2.05
25	b	611	CLA	MG-NA	6.08	2.20	2.06
34	F	101	HEM	FE-NC	5.98	2.14	1.95
25	c	502	CLA	MG-NA	5.93	2.20	2.06
25	C	513	CLA	MG-NA	5.75	2.19	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	V	201	HEC	FE-ND	5.62	2.12	1.94
34	e	102	HEM	FE-NA	5.55	2.13	1.95
25	b	614	CLA	MG-NA	5.45	2.19	2.06
25	C	508	CLA	MG-NA	5.37	2.19	2.06
25	C	503	CLA	MG-NA	5.24	2.18	2.06
25	a	609	CLA	MG-NA	5.22	2.18	2.06
25	A	613	CLA	MG-NA	5.21	2.18	2.06
25	b	610	CLA	MG-NB	-5.13	1.95	2.05
25	B	601	CLA	MG-NB	-5.09	1.95	2.05
25	B	601	CLA	MG-NA	5.03	2.18	2.06
28	d	405	PL9	C3-C4	-5.00	1.41	1.49
25	b	607	CLA	MG-NA	4.97	2.18	2.06
25	C	511	CLA	MG-NA	4.94	2.18	2.06
31	D	408	SQD	O48-C23	4.90	1.47	1.33
31	a	615	SQD	O48-C23	4.82	1.47	1.33
25	b	612	CLA	MG-NA	4.81	2.17	2.06
25	B	607	CLA	MG-NB	-4.78	1.96	2.05
31	B	624	SQD	O48-C23	4.76	1.47	1.33
31	f	101	SQD	O48-C23	4.75	1.47	1.33
25	A	609	CLA	MG-ND	-4.74	1.96	2.05
31	A	616	SQD	O48-C23	4.67	1.47	1.33
25	b	607	CLA	MG-ND	-4.67	1.96	2.05
25	C	505	CLA	MG-NA	4.64	2.17	2.06
25	A	606	CLA	MG-NA	4.60	2.17	2.06
25	b	605	CLA	MG-NA	4.57	2.17	2.06
25	c	512	CLA	MG-NB	4.57	2.14	2.05
25	B	608	CLA	MG-NA	4.57	2.17	2.06
25	D	403	CLA	MG-NA	4.55	2.17	2.06
25	c	510	CLA	MG-NA	4.51	2.17	2.06
31	A	615	SQD	O48-C23	4.49	1.46	1.33
25	a	609	CLA	C1D-ND	4.48	1.43	1.37
28	d	405	PL9	C6-C1	-4.40	1.41	1.48
31	a	613	SQD	O48-C23	4.39	1.46	1.33
25	c	502	CLA	MG-NB	-4.39	1.97	2.05
25	a	609	CLA	MG-ND	-4.39	1.97	2.05
25	C	512	CLA	MG-NC	4.36	2.16	2.06
25	b	603	CLA	MG-NA	4.34	2.16	2.06
25	B	604	CLA	MG-NA	4.32	2.16	2.06
25	B	615	CLA	MG-NA	4.32	2.16	2.06
25	B	607	CLA	MG-NA	4.31	2.16	2.06
25	B	612	CLA	MG-NA	4.24	2.16	2.06
25	B	610	CLA	MG-ND	-4.22	1.97	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	507	CLA	MG-NB	-4.22	1.97	2.05
25	b	605	CLA	MG-ND	4.21	2.14	2.05
25	C	501	CLA	C1D-ND	4.19	1.43	1.37
28	a	611	PL9	C7-C3	-4.16	1.45	1.51
25	B	616	CLA	C1D-ND	4.12	1.43	1.37
25	C	502	CLA	MG-NA	4.09	2.16	2.06
25	b	610	CLA	MG-NC	4.07	2.15	2.06
25	B	610	CLA	MG-NA	4.07	2.15	2.06
25	c	505	CLA	MG-ND	4.07	2.13	2.05
25	B	602	CLA	C1D-ND	4.06	1.43	1.37
25	C	506	CLA	MG-NA	4.05	2.15	2.06
31	b	620	SQD	O48-C23	4.04	1.45	1.33
25	C	508	CLA	C1D-ND	4.00	1.43	1.37
25	c	501	CLA	MG-NA	3.98	2.15	2.06
26	A	608	PHO	C4D-ND	-3.95	1.32	1.38
25	b	613	CLA	MG-NB	-3.94	1.98	2.05
25	B	604	CLA	MG-NC	3.93	2.15	2.06
25	B	609	CLA	C1D-ND	3.92	1.43	1.37
31	a	613	SQD	O47-C45	-3.92	1.37	1.46
25	c	511	CLA	MG-ND	-3.92	1.98	2.05
25	A	613	CLA	C1D-ND	3.92	1.43	1.37
31	A	616	SQD	O5-C1	3.90	1.51	1.41
25	C	504	CLA	MG-NB	3.89	2.13	2.05
25	D	403	CLA	C1D-ND	3.89	1.43	1.37
25	B	602	CLA	C4B-NB	3.89	1.43	1.37
31	a	615	SQD	O5-C1	3.86	1.51	1.41
25	a	606	CLA	MG-NA	3.85	2.15	2.06
31	a	615	SQD	O47-C7	3.85	1.45	1.34
25	B	610	CLA	C4B-NB	3.84	1.42	1.37
28	D	405	PL9	C3-C4	-3.81	1.43	1.49
25	B	601	CLA	C4B-NB	3.74	1.42	1.37
25	b	614	CLA	C4B-NB	3.73	1.42	1.37
25	A	613	CLA	MG-NB	3.73	2.13	2.05
25	b	615	CLA	C4B-NB	3.72	1.42	1.37
26	D	401	PHO	CBD-CGD	-3.70	1.47	1.52
25	c	502	CLA	C1D-ND	3.70	1.42	1.37
28	D	405	PL9	C6-C1	-3.70	1.42	1.48
25	b	601	CLA	C4B-NB	3.70	1.42	1.37
25	c	509	CLA	C1D-ND	3.67	1.42	1.37
26	A	608	PHO	C1D-C2D	3.66	1.43	1.39
31	b	620	SQD	O47-C7	3.65	1.44	1.34
25	b	615	CLA	MG-NA	3.65	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	f	101	SQD	O47-C7	3.64	1.44	1.34
25	B	603	CLA	MG-NA	3.63	2.14	2.06
25	b	614	CLA	C1D-ND	3.63	1.42	1.37
25	c	511	CLA	C1D-ND	3.63	1.42	1.37
25	A	606	CLA	C1D-ND	3.62	1.42	1.37
31	A	615	SQD	O47-C45	-3.62	1.38	1.46
25	C	503	CLA	MG-NB	3.61	2.12	2.05
35	v	201	HEC	FE-ND	3.58	2.05	1.94
25	b	601	CLA	C1D-ND	3.58	1.42	1.37
35	V	201	HEC	FE-NB	3.58	2.05	1.94
25	c	509	CLA	MG-NC	3.57	2.14	2.06
25	B	604	CLA	C1D-ND	3.57	1.42	1.37
26	a	608	PHO	C1D-C2D	3.56	1.43	1.39
25	B	606	CLA	C1D-ND	3.54	1.42	1.37
25	B	615	CLA	C1D-ND	3.53	1.42	1.37
25	b	616	CLA	C1D-ND	3.53	1.42	1.37
25	B	603	CLA	C1D-ND	3.53	1.42	1.37
25	C	511	CLA	MG-NC	3.53	2.14	2.06
25	B	614	CLA	C1D-ND	3.52	1.42	1.37
31	a	615	SQD	O47-C45	-3.52	1.38	1.46
25	C	511	CLA	C1B-C2B	3.51	1.51	1.43
25	b	610	CLA	C1D-ND	3.50	1.42	1.37
25	B	613	CLA	MG-NA	3.49	2.14	2.06
25	b	616	CLA	MG-NB	3.48	2.12	2.05
25	C	503	CLA	C1B-C2B	3.47	1.51	1.43
31	b	620	SQD	O5-C1	3.47	1.50	1.41
25	B	615	CLA	MG-NC	3.47	2.14	2.06
25	B	605	CLA	C1D-ND	3.46	1.42	1.37
25	C	511	CLA	C1D-ND	3.46	1.42	1.37
25	B	613	CLA	C1D-ND	3.45	1.42	1.37
25	B	612	CLA	C1D-ND	3.44	1.42	1.37
25	c	507	CLA	C1D-ND	3.43	1.42	1.37
25	B	614	CLA	MG-NA	3.42	2.14	2.06
25	d	403	CLA	C4B-NB	3.41	1.42	1.37
25	b	601	CLA	C1B-C2B	3.41	1.51	1.43
26	D	401	PHO	C4D-ND	-3.41	1.33	1.38
25	c	508	CLA	C1D-ND	3.40	1.42	1.37
25	d	403	CLA	C1D-ND	3.40	1.42	1.37
25	c	513	CLA	C1D-ND	3.40	1.42	1.37
26	D	401	PHO	C1D-C2D	3.38	1.43	1.39
25	b	612	CLA	C4B-NB	3.35	1.42	1.37
25	C	507	CLA	MG-NA	3.34	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	508	CLA	C1B-C2B	3.34	1.51	1.43
25	c	503	CLA	MG-NA	3.33	2.14	2.06
26	D	401	PHO	CMC-C2C	-3.33	1.45	1.50
25	b	613	CLA	C1D-ND	3.33	1.42	1.37
25	c	504	CLA	C4B-NB	3.32	1.42	1.37
25	a	606	CLA	MG-NB	3.32	2.12	2.05
25	B	615	CLA	C4B-NB	3.31	1.42	1.37
31	B	624	SQD	O47-C45	-3.31	1.38	1.46
25	C	511	CLA	C4B-NB	3.30	1.42	1.37
26	d	401	PHO	C1D-C2D	3.28	1.43	1.39
25	B	614	CLA	C4B-NB	3.28	1.42	1.37
25	a	607	CLA	MG-NB	3.27	2.12	2.05
25	c	501	CLA	MG-NB	-3.26	1.99	2.05
31	B	624	SQD	O47-C7	3.26	1.43	1.34
25	A	606	CLA	C1B-C2B	3.25	1.50	1.43
26	A	608	PHO	CMC-C2C	-3.25	1.45	1.50
25	b	608	CLA	MG-NA	3.25	2.14	2.06
31	A	616	SQD	O47-C7	3.24	1.43	1.34
25	C	507	CLA	C1B-C2B	3.23	1.50	1.43
25	b	602	CLA	C1D-ND	3.23	1.42	1.37
31	A	616	SQD	C24-C23	3.23	1.60	1.50
25	C	510	CLA	C1B-C2B	3.21	1.50	1.43
26	d	401	PHO	C4D-CHA	3.21	1.44	1.39
25	a	612	CLA	C1D-ND	3.20	1.42	1.37
31	D	408	SQD	C24-C23	3.19	1.60	1.50
25	A	613	CLA	C1B-C2B	3.19	1.50	1.43
31	b	620	SQD	C24-C23	3.18	1.59	1.50
25	b	602	CLA	C1B-C2B	3.18	1.50	1.43
25	C	506	CLA	C1B-C2B	3.17	1.50	1.43
25	B	615	CLA	MG-NB	3.16	2.12	2.05
25	A	607	CLA	C4B-NB	3.16	1.42	1.37
25	c	511	CLA	C4B-NB	3.16	1.42	1.37
25	c	513	CLA	C1B-C2B	3.16	1.50	1.43
31	a	613	SQD	O5-C1	3.14	1.49	1.41
25	A	613	CLA	C3B-C4B	3.13	1.51	1.42
31	A	616	SQD	O47-C45	-3.13	1.39	1.46
25	a	609	CLA	MG-NC	-3.13	1.98	2.06
25	B	611	CLA	C4B-NB	3.13	1.42	1.37
31	f	101	SQD	O47-C45	-3.12	1.39	1.46
25	b	609	CLA	C4B-NB	3.12	1.42	1.37
25	c	507	CLA	MG-NA	3.12	2.13	2.06
25	C	506	CLA	C1D-ND	3.10	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A	609	CLA	C1D-ND	3.09	1.41	1.37
26	a	608	PHO	C4D-CHA	3.09	1.44	1.39
25	c	503	CLA	C1B-C2B	3.09	1.50	1.43
25	c	501	CLA	C1D-ND	3.08	1.41	1.37
25	B	604	CLA	C4B-NB	3.08	1.41	1.37
25	b	615	CLA	C1D-ND	3.08	1.41	1.37
25	c	509	CLA	C1B-C2B	3.08	1.50	1.43
25	C	507	CLA	C1D-ND	3.08	1.41	1.37
28	a	611	PL9	C53-C6	-3.07	1.44	1.50
28	d	405	PL9	C53-C6	-3.07	1.44	1.50
25	B	615	CLA	C1B-C2B	3.05	1.50	1.43
25	C	510	CLA	C1D-ND	3.05	1.41	1.37
25	b	612	CLA	C1D-ND	3.05	1.41	1.37
25	b	615	CLA	C1B-C2B	3.04	1.50	1.43
25	a	606	CLA	C1D-ND	3.04	1.41	1.37
25	b	604	CLA	MG-NA	3.03	2.13	2.06
31	A	615	SQD	C24-C23	3.03	1.59	1.50
25	b	611	CLA	C1B-C2B	3.03	1.50	1.43
25	C	505	CLA	C1B-C2B	3.02	1.50	1.43
25	a	609	CLA	C1B-C2B	3.01	1.50	1.43
25	B	610	CLA	C1D-ND	3.01	1.41	1.37
31	A	615	SQD	O47-C7	3.01	1.42	1.34
25	C	512	CLA	MG-NB	3.00	2.11	2.05
25	b	606	CLA	C1D-ND	3.00	1.41	1.37
25	A	609	CLA	MG-NB	3.00	2.11	2.05
26	d	401	PHO	C4D-ND	-3.00	1.34	1.38
25	B	611	CLA	C1B-C2B	2.99	1.50	1.43
25	C	512	CLA	C1D-ND	2.99	1.41	1.37
25	c	503	CLA	C1D-ND	2.98	1.41	1.37
25	c	512	CLA	CHC-C1C	2.98	1.44	1.38
34	e	102	HEM	CAC-C3C	2.97	1.55	1.47
25	C	503	CLA	C1D-ND	2.97	1.41	1.37
25	c	505	CLA	CHC-C1C	2.97	1.44	1.38
25	C	513	CLA	C1B-C2B	2.96	1.50	1.43
25	d	402	CLA	MG-NB	-2.96	1.99	2.05
25	B	602	CLA	MG-NA	2.95	2.13	2.06
25	A	609	CLA	C4B-NB	2.95	1.41	1.37
25	B	616	CLA	C1B-C2B	2.95	1.50	1.43
25	B	601	CLA	C1D-ND	2.94	1.41	1.37
25	B	609	CLA	MG-NB	2.94	2.11	2.05
25	b	609	CLA	C1D-ND	2.93	1.41	1.37
25	b	612	CLA	C1B-C2B	2.93	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	B	624	SQD	C24-C23	2.93	1.59	1.50
31	b	620	SQD	O47-C45	-2.92	1.39	1.46
25	b	602	CLA	CMD-C2D	-2.92	1.44	1.50
25	b	612	CLA	MG-ND	-2.92	2.00	2.05
35	v	201	HEC	FE-NA	2.92	2.04	1.95
25	c	508	CLA	C1B-C2B	2.91	1.50	1.43
25	C	502	CLA	C1D-ND	2.91	1.41	1.37
31	a	613	SQD	O47-C7	2.91	1.42	1.34
25	b	610	CLA	C4B-NB	2.90	1.41	1.37
25	c	506	CLA	C4B-NB	2.89	1.41	1.37
25	b	616	CLA	C1B-C2B	2.89	1.49	1.43
31	f	101	SQD	O5-C1	2.89	1.49	1.41
25	b	604	CLA	MG-ND	2.89	2.11	2.05
25	d	402	CLA	C1D-ND	2.88	1.41	1.37
25	C	512	CLA	C4B-NB	2.88	1.41	1.37
25	c	509	CLA	C4B-NB	2.88	1.41	1.37
34	F	101	HEM	CAC-C3C	2.88	1.55	1.47
25	b	608	CLA	CHC-C1C	2.88	1.44	1.38
25	a	606	CLA	C1B-C2B	2.87	1.49	1.43
25	C	506	CLA	MG-NB	2.87	2.11	2.05
25	c	513	CLA	C4B-NB	2.87	1.41	1.37
25	c	503	CLA	C4B-NB	2.87	1.41	1.37
25	b	603	CLA	MG-ND	-2.87	2.00	2.05
25	B	612	CLA	C4B-NB	2.87	1.41	1.37
25	b	613	CLA	C4B-NB	2.86	1.41	1.37
31	D	408	SQD	O5-C1	2.86	1.49	1.41
25	C	512	CLA	C1B-C2B	2.86	1.49	1.43
25	b	603	CLA	C1D-ND	2.86	1.41	1.37
25	c	512	CLA	C1D-ND	2.85	1.41	1.37
25	c	506	CLA	C1B-C2B	2.85	1.49	1.43
25	b	608	CLA	C3B-C4B	2.84	1.51	1.42
31	a	615	SQD	C24-C23	2.84	1.58	1.50
25	D	403	CLA	CMD-C2D	-2.83	1.45	1.50
25	c	513	CLA	MG-NA	2.83	2.13	2.06
25	b	605	CLA	C1B-C2B	2.83	1.49	1.43
25	D	403	CLA	MG-NB	-2.82	2.00	2.05
25	a	612	CLA	C1B-C2B	2.82	1.49	1.43
25	b	605	CLA	CHC-C1C	2.82	1.44	1.38
25	c	507	CLA	C1B-C2B	2.81	1.49	1.43
25	C	509	CLA	C1D-ND	2.81	1.41	1.37
31	a	613	SQD	C24-C23	2.81	1.58	1.50
25	b	605	CLA	C4B-NB	2.81	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	601	CLA	MG-NA	2.81	2.12	2.06
25	B	605	CLA	MG-NA	2.80	2.12	2.06
25	C	506	CLA	C4B-NB	2.80	1.41	1.37
34	e	102	HEM	FE-ND	2.80	2.03	1.94
32	C	520	DGD	O3G-C3G	-2.79	1.38	1.43
25	D	402	CLA	MG-NB	2.79	2.11	2.05
25	C	510	CLA	CHC-C1C	2.79	1.44	1.38
25	B	601	CLA	C1B-C2B	2.79	1.49	1.43
25	C	508	CLA	C3B-C4B	2.78	1.50	1.42
31	f	101	SQD	C24-C23	2.78	1.58	1.50
25	B	602	CLA	C1B-C2B	2.78	1.49	1.43
25	D	403	CLA	C4B-NB	2.77	1.41	1.37
28	A	611	PL9	C36-C34	2.77	1.57	1.51
25	B	607	CLA	C1D-ND	2.77	1.41	1.37
28	A	611	PL9	C53-C6	-2.76	1.45	1.50
25	B	611	CLA	MG-NA	2.76	2.12	2.06
25	B	603	CLA	C1B-C2B	2.76	1.49	1.43
25	b	607	CLA	C1B-C2B	2.76	1.49	1.43
25	a	607	CLA	C1D-ND	2.75	1.41	1.37
25	a	606	CLA	C3B-C4B	2.75	1.50	1.42
26	D	401	PHO	C4D-CHA	2.75	1.43	1.39
25	a	607	CLA	CHC-C1C	2.74	1.44	1.38
25	b	607	CLA	C1D-ND	2.74	1.41	1.37
25	d	403	CLA	CMD-C2D	-2.74	1.45	1.50
26	d	401	PHO	CMD-C2D	-2.74	1.46	1.51
25	C	513	CLA	C1D-ND	2.73	1.41	1.37
25	b	606	CLA	C1B-C2B	2.73	1.49	1.43
25	b	605	CLA	C3B-C4B	2.73	1.50	1.42
25	c	501	CLA	C1B-C2B	2.72	1.49	1.43
28	D	405	PL9	C46-C44	-2.72	1.45	1.51
26	D	401	PHO	C3B-C2B	-2.72	1.36	1.40
25	C	508	CLA	C4B-NB	2.72	1.41	1.37
34	e	102	HEM	FE-NB	2.71	2.03	1.94
25	c	511	CLA	C1B-C2B	2.70	1.49	1.43
25	b	604	CLA	C3B-C4B	2.69	1.50	1.42
25	C	504	CLA	MG-NA	2.69	2.12	2.06
25	c	504	CLA	C1D-ND	2.68	1.41	1.37
25	B	610	CLA	C1B-C2B	2.68	1.49	1.43
25	c	508	CLA	C3B-C4B	2.68	1.50	1.42
25	B	605	CLA	C4B-NB	2.67	1.41	1.37
25	C	502	CLA	C1B-C2B	2.67	1.49	1.43
25	C	512	CLA	C3B-C4B	2.66	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	614	CLA	CHC-C1C	2.66	1.43	1.38
25	B	607	CLA	C1B-C2B	2.66	1.49	1.43
25	c	504	CLA	C1B-C2B	2.66	1.49	1.43
25	a	612	CLA	C3B-C4B	2.66	1.50	1.42
34	F	101	HEM	FE-NA	2.66	2.03	1.95
25	c	512	CLA	C1B-C2B	2.66	1.49	1.43
25	d	402	CLA	MG-ND	2.65	2.11	2.05
25	B	615	CLA	CMB-C2B	-2.65	1.45	1.50
25	C	504	CLA	C3B-C4B	2.65	1.50	1.42
25	B	605	CLA	CHC-C1C	2.64	1.43	1.38
25	b	616	CLA	MG-NA	2.64	2.12	2.06
25	B	605	CLA	C1B-C2B	2.64	1.49	1.43
31	B	624	SQD	O5-C1	2.64	1.48	1.41
31	A	615	SQD	O5-C1	2.64	1.48	1.41
25	C	504	CLA	CMB-C2B	-2.64	1.45	1.50
26	d	401	PHO	CMC-C2C	-2.64	1.46	1.50
25	D	403	CLA	CMC-C2C	-2.63	1.45	1.50
25	C	505	CLA	C1D-ND	2.63	1.41	1.37
25	c	505	CLA	C1B-C2B	2.63	1.49	1.43
25	c	506	CLA	MG-NC	2.63	2.12	2.06
25	b	615	CLA	C3B-C4B	2.62	1.50	1.42
25	C	510	CLA	MG-NA	2.62	2.12	2.06
25	C	509	CLA	MG-NA	2.61	2.12	2.06
31	A	616	SQD	O5-C5	2.61	1.50	1.44
34	e	102	HEM	CAB-C3B	2.61	1.54	1.47
25	C	503	CLA	C4B-NB	2.61	1.41	1.37
25	C	509	CLA	C1B-C2B	2.61	1.49	1.43
31	A	616	SQD	O9-S	2.61	1.52	1.45
25	c	505	CLA	CMB-C2B	-2.60	1.45	1.50
25	c	508	CLA	CHC-C1C	2.60	1.43	1.38
25	d	403	CLA	C1B-C2B	2.59	1.49	1.43
25	b	603	CLA	C4B-NB	2.59	1.41	1.37
25	C	501	CLA	C4B-NB	2.59	1.41	1.37
31	b	620	SQD	O9-S	2.59	1.52	1.45
25	B	605	CLA	C3B-C4B	2.59	1.50	1.42
25	c	508	CLA	C4B-NB	2.59	1.41	1.37
25	d	403	CLA	MG-NA	2.58	2.12	2.06
25	b	611	CLA	CHC-C1C	2.58	1.43	1.38
25	b	602	CLA	C3B-C4B	2.58	1.50	1.42
25	c	513	CLA	C3B-C4B	2.58	1.50	1.42
25	A	607	CLA	MG-NA	2.57	2.12	2.06
25	B	606	CLA	C1B-C2B	2.57	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D	403	CLA	C1B-C2B	2.57	1.49	1.43
28	D	405	PL9	C11-C9	-2.56	1.46	1.51
25	b	609	CLA	C1B-C2B	2.56	1.49	1.43
25	c	505	CLA	MG-NA	2.55	2.12	2.06
35	v	201	HEC	CMA-C3A	2.55	1.56	1.50
25	A	607	CLA	C1D-ND	2.54	1.41	1.37
25	C	512	CLA	CHC-C1C	2.54	1.43	1.38
25	b	608	CLA	MG-NC	-2.54	2.00	2.06
31	A	616	SQD	O7-S	2.54	1.52	1.45
25	B	612	CLA	CMC-C2C	-2.54	1.45	1.50
25	C	509	CLA	MG-NB	-2.53	2.00	2.05
25	C	502	CLA	C4B-NB	2.53	1.41	1.37
25	C	504	CLA	C1D-ND	2.53	1.41	1.37
25	A	609	CLA	MG-NA	2.53	2.12	2.06
25	A	606	CLA	C3B-C4B	2.52	1.50	1.42
25	C	502	CLA	C3B-C4B	2.52	1.50	1.42
25	c	510	CLA	C1D-ND	2.52	1.41	1.37
25	a	607	CLA	CMD-C2D	-2.51	1.45	1.50
25	c	511	CLA	CHC-C1C	2.51	1.43	1.38
25	C	508	CLA	C1D-C2D	2.51	1.50	1.45
26	D	401	PHO	C3D-C4D	2.50	1.44	1.41
25	a	607	CLA	MG-NA	2.50	2.12	2.06
25	D	402	CLA	CHC-C1C	2.50	1.43	1.38
25	c	505	CLA	C3B-C4B	2.50	1.50	1.42
25	B	604	CLA	C1B-C2B	2.50	1.49	1.43
25	b	608	CLA	C1B-C2B	2.50	1.49	1.43
31	a	615	SQD	O7-S	2.49	1.52	1.45
25	d	402	CLA	C1B-C2B	2.49	1.49	1.43
25	c	510	CLA	C4B-NB	2.48	1.41	1.37
25	C	508	CLA	MG-NB	2.48	2.10	2.05
34	F	101	HEM	CAB-C3B	2.48	1.54	1.47
26	A	608	PHO	CMD-C2D	-2.48	1.46	1.51
25	c	510	CLA	C1B-C2B	2.47	1.48	1.43
25	B	604	CLA	CHC-C1C	2.47	1.43	1.38
26	a	608	PHO	CMC-C2C	-2.47	1.46	1.50
28	D	405	PL9	C52-C5	-2.47	1.45	1.50
25	B	608	CLA	C1B-C2B	2.46	1.48	1.43
25	A	607	CLA	MG-NB	-2.46	2.00	2.05
25	A	607	CLA	CMD-C2D	-2.46	1.45	1.50
25	b	606	CLA	C4B-NB	2.46	1.41	1.37
25	d	402	CLA	C3B-C4B	2.46	1.49	1.42
25	C	501	CLA	C1B-C2B	2.46	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	605	CLA	MG-NC	2.45	2.12	2.06
25	b	613	CLA	MG-ND	2.45	2.10	2.05
25	c	512	CLA	C3B-C4B	2.45	1.49	1.42
25	a	606	CLA	CHC-C1C	2.44	1.43	1.38
25	A	609	CLA	C1B-C2B	2.44	1.48	1.43
25	C	511	CLA	C3B-C4B	2.44	1.49	1.42
31	a	615	SQD	O9-S	2.44	1.52	1.45
25	b	604	CLA	CHC-C1C	2.44	1.43	1.38
25	A	606	CLA	C4B-NB	2.43	1.41	1.37
25	b	604	CLA	C4B-NB	2.43	1.41	1.37
25	c	512	CLA	CMD-C2D	-2.43	1.45	1.50
25	B	609	CLA	C1B-C2B	2.43	1.48	1.43
25	C	506	CLA	C1B-NB	-2.43	1.34	1.37
25	c	513	CLA	CMB-C2B	-2.43	1.45	1.50
35	V	201	HEC	CMB-C2B	2.43	1.55	1.50
25	a	607	CLA	C1B-C2B	2.42	1.48	1.43
26	a	608	PHO	C3B-C2B	-2.42	1.37	1.40
25	B	606	CLA	C4B-NB	2.42	1.41	1.37
32	c	519	DGD	O3G-C1D	-2.42	1.36	1.40
25	C	513	CLA	C4B-NB	2.42	1.41	1.37
31	f	101	SQD	O9-S	2.42	1.51	1.45
25	C	513	CLA	C3B-C4B	2.42	1.49	1.42
25	b	612	CLA	CHC-C1C	2.42	1.43	1.38
25	b	616	CLA	C3B-C4B	2.42	1.49	1.42
25	A	613	CLA	C4B-NB	2.41	1.41	1.37
25	d	403	CLA	CMB-C2B	-2.41	1.45	1.50
25	a	607	CLA	MG-NC	2.40	2.12	2.06
31	B	624	SQD	O9-S	2.40	1.51	1.45
25	C	501	CLA	C3B-C4B	2.40	1.49	1.42
32	C	522	DGD	O2G-C2G	-2.39	1.41	1.46
25	A	606	CLA	CHC-C1C	2.39	1.43	1.38
25	A	607	CLA	C1B-C2B	2.38	1.48	1.43
25	B	613	CLA	C1B-C2B	2.38	1.48	1.43
26	d	401	PHO	C3B-C2B	-2.38	1.37	1.40
25	b	607	CLA	CMC-C2C	-2.38	1.45	1.50
25	c	510	CLA	CMB-C2B	-2.37	1.45	1.50
25	B	614	CLA	CHC-C1C	2.37	1.43	1.38
31	a	615	SQD	O5-C5	2.37	1.50	1.44
25	B	613	CLA	CMB-C2B	-2.37	1.45	1.50
25	C	501	CLA	CHC-C1C	2.36	1.43	1.38
25	B	610	CLA	C3B-C4B	2.36	1.49	1.42
25	C	510	CLA	C3B-C4B	2.36	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	507	CLA	MG-ND	-2.36	2.01	2.05
25	b	610	CLA	C3B-C4B	2.36	1.49	1.42
25	B	616	CLA	MG-NB	-2.36	2.01	2.05
25	B	612	CLA	C3B-C4B	2.36	1.49	1.42
25	C	505	CLA	C4B-NB	2.36	1.41	1.37
26	a	608	PHO	C4D-ND	-2.35	1.35	1.38
25	d	402	CLA	MG-NC	2.35	2.11	2.06
25	b	606	CLA	C3B-C4B	2.35	1.49	1.42
25	b	603	CLA	CMD-C2D	-2.35	1.45	1.50
31	b	620	SQD	C44-C45	2.35	1.58	1.50
25	c	502	CLA	CMD-C2D	-2.35	1.46	1.50
25	b	608	CLA	C1D-ND	2.35	1.40	1.37
25	C	512	CLA	CMD-C2D	-2.35	1.46	1.50
25	C	507	CLA	MG-NB	2.35	2.10	2.05
25	D	402	CLA	MG-NA	2.35	2.11	2.06
25	c	503	CLA	CMC-C2C	-2.34	1.46	1.50
25	b	606	CLA	MG-ND	2.34	2.10	2.05
25	B	616	CLA	C4B-NB	2.34	1.40	1.37
25	b	604	CLA	C1B-C2B	2.34	1.48	1.43
28	D	405	PL9	C50-C49	-2.34	1.44	1.50
25	D	402	CLA	C1B-C2B	2.34	1.48	1.43
25	a	607	CLA	C4B-NB	2.34	1.40	1.37
25	C	512	CLA	MG-NA	2.34	2.11	2.06
25	a	609	CLA	CMD-C2D	-2.34	1.46	1.50
31	b	620	SQD	O6-C44	2.34	1.47	1.43
25	b	604	CLA	MG-NB	2.33	2.10	2.05
25	B	608	CLA	C1D-ND	2.33	1.40	1.37
25	c	506	CLA	C1D-ND	2.33	1.40	1.37
25	c	511	CLA	MG-NB	2.33	2.10	2.05
25	b	609	CLA	MG-NA	2.33	2.11	2.06
25	a	607	CLA	CMB-C2B	-2.33	1.46	1.50
25	b	613	CLA	C5-C3	-2.32	1.46	1.51
25	B	604	CLA	C3B-C4B	2.32	1.49	1.42
25	b	615	CLA	CMD-C2D	-2.32	1.46	1.50
25	c	508	CLA	MG-NA	2.32	2.11	2.06
25	c	501	CLA	CMB-C2B	-2.31	1.46	1.50
25	c	501	CLA	C4B-NB	2.31	1.40	1.37
25	C	510	CLA	MG-NB	2.31	2.10	2.05
25	c	503	CLA	MG-NB	2.31	2.10	2.05
31	f	101	SQD	O7-S	2.30	1.51	1.45
25	C	507	CLA	CHC-C1C	2.30	1.43	1.38
25	b	615	CLA	CMB-C2B	-2.29	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A	608	PHO	C3D-CAD	-2.29	1.43	1.47
25	b	611	CLA	C1D-C2D	2.29	1.49	1.45
25	c	506	CLA	C3B-C4B	2.29	1.49	1.42
25	b	610	CLA	C1B-C2B	2.29	1.48	1.43
25	b	614	CLA	C3B-C4B	2.29	1.49	1.42
25	B	607	CLA	C4B-NB	2.29	1.40	1.37
28	d	405	PL9	C52-C5	-2.29	1.46	1.50
25	c	505	CLA	MG-NC	2.29	2.11	2.06
25	d	403	CLA	C3B-C4B	2.28	1.49	1.42
25	c	503	CLA	MG-NC	2.28	2.11	2.06
25	b	605	CLA	CMD-C2D	-2.28	1.46	1.50
25	C	508	CLA	CHC-C1C	2.27	1.43	1.38
25	c	504	CLA	CMD-C2D	-2.27	1.46	1.50
25	B	607	CLA	MG-NC	2.27	2.11	2.06
25	c	503	CLA	C1B-NB	-2.27	1.34	1.37
25	b	602	CLA	MG-ND	-2.26	2.01	2.05
25	c	513	CLA	CHC-C1C	2.26	1.43	1.38
25	A	613	CLA	C3C-C2C	2.26	1.41	1.36
25	b	604	CLA	C1D-ND	2.26	1.40	1.37
25	C	501	CLA	CMD-C2D	-2.26	1.46	1.50
25	b	607	CLA	CMD-C2D	-2.26	1.46	1.50
25	c	501	CLA	CHC-C4B	-2.26	1.34	1.39
25	c	505	CLA	C1D-ND	2.26	1.40	1.37
25	b	612	CLA	CMC-C2C	-2.26	1.46	1.50
25	C	503	CLA	C3B-C4B	2.26	1.49	1.42
25	C	509	CLA	CMD-C2D	-2.25	1.46	1.50
25	c	510	CLA	CHC-C1C	2.25	1.43	1.38
26	D	401	PHO	C3A-C2A	-2.25	1.52	1.54
32	c	519	DGD	O2G-C2G	-2.25	1.41	1.46
25	c	502	CLA	O2D-CGD	2.24	1.38	1.33
25	a	612	CLA	C1D-C2D	2.24	1.49	1.45
25	A	613	CLA	MG-NC	2.24	2.11	2.06
25	C	510	CLA	C4B-NB	2.24	1.40	1.37
25	b	612	CLA	C3B-C4B	2.24	1.49	1.42
25	b	611	CLA	MG-NB	2.24	2.10	2.05
31	D	408	SQD	O7-S	2.23	1.51	1.45
25	D	403	CLA	MG-ND	-2.23	2.01	2.05
32	c	519	DGD	O3G-C3G	-2.23	1.39	1.43
25	b	601	CLA	MG-NC	2.23	2.11	2.06
25	c	504	CLA	CMB-C2B	-2.22	1.46	1.50
25	c	503	CLA	C3B-C4B	2.22	1.49	1.42
25	B	601	CLA	CHC-C1C	2.22	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	602	CLA	C3B-C4B	2.22	1.49	1.42
25	D	402	CLA	C3B-C4B	2.22	1.49	1.42
31	a	613	SQD	O7-S	2.22	1.51	1.45
25	b	608	CLA	MG-NB	2.21	2.10	2.05
25	B	602	CLA	CMB-C2B	-2.21	1.46	1.50
31	a	613	SQD	O9-S	2.21	1.51	1.45
31	b	620	SQD	O7-S	2.21	1.51	1.45
25	B	614	CLA	CMC-C2C	-2.21	1.46	1.50
25	C	510	CLA	CMD-C2D	-2.21	1.46	1.50
34	e	102	HEM	C3B-C2B	-2.21	1.32	1.37
26	a	608	PHO	CMD-C2D	-2.21	1.47	1.51
25	C	504	CLA	C4B-NB	2.21	1.40	1.37
25	b	601	CLA	CMD-C2D	-2.21	1.46	1.50
25	a	609	CLA	CMC-C2C	-2.20	1.46	1.50
25	C	511	CLA	CMC-C2C	-2.20	1.46	1.50
25	C	507	CLA	C3B-C4B	2.20	1.49	1.42
26	D	401	PHO	CMD-C2D	-2.20	1.47	1.51
25	B	602	CLA	MG-NB	-2.20	2.01	2.05
25	c	502	CLA	C1B-C2B	2.20	1.48	1.43
25	C	505	CLA	CMB-C2B	-2.20	1.46	1.50
25	c	509	CLA	C3B-C4B	2.20	1.49	1.42
25	a	609	CLA	CHC-C4B	-2.19	1.34	1.39
25	B	611	CLA	C1D-C2D	2.19	1.49	1.45
25	d	402	CLA	CMB-C2B	-2.19	1.46	1.50
31	A	615	SQD	C8-C7	2.18	1.57	1.50
25	c	505	CLA	C4B-NB	2.18	1.40	1.37
26	A	608	PHO	CMB-C2B	-2.18	1.47	1.51
25	b	601	CLA	C3B-C4B	2.18	1.49	1.42
25	B	601	CLA	C3B-C4B	2.17	1.49	1.42
25	D	402	CLA	CMD-C2D	-2.17	1.46	1.50
25	c	510	CLA	C3B-C4B	2.17	1.49	1.42
26	d	401	PHO	CAC-C3C	-2.17	1.47	1.51
32	C	521	DGD	O2G-C2G	-2.17	1.41	1.46
25	C	512	CLA	CMB-C2B	-2.17	1.46	1.50
34	e	102	HEM	C2A-C3A	-2.16	1.33	1.38
25	c	505	CLA	CMC-C2C	-2.16	1.46	1.50
25	b	601	CLA	CHC-C1C	2.16	1.42	1.38
25	C	509	CLA	C3B-C4B	2.16	1.49	1.42
25	c	501	CLA	CMC-C2C	-2.16	1.46	1.50
25	C	512	CLA	C1D-C2D	2.15	1.49	1.45
25	b	612	CLA	C1B-NB	-2.15	1.35	1.37
25	C	502	CLA	MG-ND	-2.15	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	603	CLA	CMB-C2B	-2.15	1.46	1.50
26	a	608	PHO	CBD-CGD	-2.15	1.49	1.52
25	D	402	CLA	C1D-ND	2.15	1.40	1.37
31	B	624	SQD	C8-C7	2.15	1.56	1.50
25	d	403	CLA	CHC-C1C	2.14	1.42	1.38
25	C	505	CLA	C3B-C4B	2.14	1.49	1.42
25	b	611	CLA	C1D-ND	2.14	1.40	1.37
25	a	606	CLA	C4C-C3C	2.14	1.48	1.45
25	B	608	CLA	C4B-NB	2.14	1.40	1.37
25	C	509	CLA	C4B-NB	2.14	1.40	1.37
25	c	504	CLA	C1B-NB	-2.14	1.35	1.37
25	c	502	CLA	CMC-C2C	-2.13	1.46	1.50
31	b	620	SQD	C46-C45	2.13	1.57	1.50
25	b	602	CLA	MG-NB	2.13	2.10	2.05
26	a	608	PHO	CMB-C2B	-2.13	1.47	1.51
25	b	614	CLA	C1B-C2B	2.13	1.48	1.43
25	a	609	CLA	C3B-C4B	2.13	1.48	1.42
25	C	510	CLA	MG-ND	2.13	2.10	2.05
25	C	511	CLA	MG-NB	-2.13	2.01	2.05
25	A	613	CLA	CMD-C2D	-2.12	1.46	1.50
26	a	608	PHO	CAC-C3C	-2.12	1.48	1.51
25	C	502	CLA	CHC-C1C	2.12	1.42	1.38
25	c	504	CLA	CHC-C1C	2.12	1.42	1.38
25	b	610	CLA	CMD-C2D	-2.12	1.46	1.50
31	A	615	SQD	O9-S	2.12	1.51	1.45
25	b	616	CLA	CHC-C1C	2.12	1.42	1.38
25	B	609	CLA	CMD-C2D	-2.12	1.46	1.50
25	C	507	CLA	C4B-NB	2.12	1.40	1.37
25	B	606	CLA	C3B-C4B	2.11	1.48	1.42
26	a	608	PHO	C3D-C4D	2.11	1.44	1.41
25	C	505	CLA	CHC-C1C	2.11	1.42	1.38
25	D	402	CLA	MG-NC	2.11	2.11	2.06
25	C	508	CLA	C3D-C4D	2.11	1.48	1.44
25	b	606	CLA	CHC-C1C	2.11	1.42	1.38
25	b	613	CLA	C1B-C2B	2.11	1.48	1.43
34	F	101	HEM	FE-NB	2.10	2.01	1.94
25	C	510	CLA	C3D-C4D	2.10	1.48	1.44
25	b	613	CLA	C1B-NB	-2.10	1.35	1.37
25	C	504	CLA	C1B-C2B	2.10	1.48	1.43
25	c	507	CLA	CMC-C2C	-2.09	1.46	1.50
31	b	620	SQD	O5-C5	2.09	1.49	1.44
25	b	610	CLA	CHC-C1C	2.09	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	503	CLA	CMD-C2D	-2.09	1.46	1.50
25	C	501	CLA	C3D-C4D	2.08	1.48	1.44
25	c	510	CLA	MG-NC	-2.08	2.01	2.06
25	B	602	CLA	MG-NC	2.08	2.11	2.06
25	d	402	CLA	CHC-C4B	-2.08	1.34	1.39
25	c	507	CLA	C4B-NB	2.08	1.40	1.37
25	A	609	CLA	CHC-C1C	2.08	1.42	1.38
29	C	524	STE	O1-C1	2.08	1.28	1.22
25	b	613	CLA	CMD-C2D	-2.07	1.46	1.50
25	c	509	CLA	CMD-C2D	-2.07	1.46	1.50
25	c	508	CLA	MG-NB	2.07	2.09	2.05
25	b	611	CLA	C3C-C2C	2.07	1.41	1.36
25	b	603	CLA	C1B-C2B	2.07	1.48	1.43
25	C	504	CLA	CHC-C1C	2.07	1.42	1.38
25	B	601	CLA	CMB-C2B	-2.07	1.46	1.50
25	B	606	CLA	CMC-C2C	-2.07	1.46	1.50
34	e	102	HEM	CMA-C3A	2.07	1.55	1.50
25	A	609	CLA	C1B-NB	-2.07	1.35	1.37
25	C	509	CLA	CHC-C1C	2.07	1.42	1.38
33	D	409	LHG	P-O3	2.07	1.67	1.59
25	c	509	CLA	CHC-C1C	2.07	1.42	1.38
25	b	602	CLA	C4B-NB	2.06	1.40	1.37
25	B	604	CLA	CMD-C2D	-2.06	1.46	1.50
25	c	512	CLA	CMC-C2C	-2.06	1.46	1.50
25	b	608	CLA	CMB-C2B	-2.06	1.46	1.50
25	c	505	CLA	C1D-C2D	2.06	1.49	1.45
25	B	606	CLA	CHC-C1C	2.05	1.42	1.38
25	B	613	CLA	C1B-NB	-2.05	1.35	1.37
25	b	602	CLA	CMB-C2B	-2.05	1.46	1.50
25	c	511	CLA	C1D-C2D	2.05	1.49	1.45
25	a	606	CLA	C4B-NB	2.05	1.40	1.37
25	C	509	CLA	CMB-C2B	-2.05	1.46	1.50
25	b	607	CLA	C4B-NB	2.05	1.40	1.37
25	c	504	CLA	C3B-C4B	2.05	1.48	1.42
25	b	612	CLA	MG-NC	-2.04	2.01	2.06
28	A	611	PL9	C16-C14	2.04	1.55	1.51
25	A	607	CLA	CMB-C2B	-2.04	1.46	1.50
25	b	605	CLA	C1D-ND	2.04	1.40	1.37
25	b	603	CLA	C1B-NB	-2.04	1.35	1.37
25	c	501	CLA	CMD-C2D	-2.04	1.46	1.50
25	b	613	CLA	C3B-C4B	2.04	1.48	1.42
25	a	612	CLA	CHC-C1C	2.04	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	614	CLA	MG-ND	-2.04	2.01	2.05
25	b	611	CLA	C4B-NB	2.04	1.40	1.37
33	B	623	LHG	O7-C5	-2.04	1.41	1.46
26	A	608	PHO	C3B-C2B	-2.03	1.37	1.40
25	C	513	CLA	CMC-C2C	-2.03	1.46	1.50
30	a	617	LMG	O1-C7	-2.03	1.40	1.43
25	B	612	CLA	C1B-C2B	2.03	1.47	1.43
25	b	610	CLA	CMC-C2C	-2.03	1.46	1.50
25	a	607	CLA	C3B-C4B	2.03	1.48	1.42
25	b	613	CLA	MG-NC	2.03	2.11	2.06
25	C	513	CLA	CHC-C4B	-2.03	1.34	1.39
25	B	604	CLA	C1D-C2D	2.03	1.49	1.45
25	a	606	CLA	CMC-C2C	-2.03	1.46	1.50
25	B	602	CLA	MG-ND	-2.02	2.01	2.05
25	b	613	CLA	CHC-C1C	2.02	1.42	1.38
25	C	511	CLA	CMB-C2B	-2.02	1.46	1.50
25	C	503	CLA	CHC-C1C	2.02	1.42	1.38
25	c	508	CLA	CMC-C2C	-2.02	1.46	1.50
25	C	509	CLA	C3D-C4D	2.02	1.48	1.44
25	b	602	CLA	CHC-C1C	2.02	1.42	1.38
25	B	610	CLA	CMB-C2B	-2.02	1.46	1.50
25	c	508	CLA	CMD-C2D	-2.02	1.46	1.50
25	B	603	CLA	C1D-C2D	2.02	1.49	1.45
25	c	511	CLA	C3B-C4B	2.01	1.48	1.42
25	b	613	CLA	CMB-C2B	-2.01	1.46	1.50
25	d	402	CLA	CMC-C2C	-2.01	1.46	1.50
34	F	101	HEM	CMA-C3A	2.01	1.54	1.50
25	b	610	CLA	CMB-C2B	-2.01	1.46	1.50
25	D	403	CLA	C1B-NB	-2.01	1.35	1.37
25	B	611	CLA	MG-ND	2.01	2.09	2.05
25	a	606	CLA	C3C-C2C	2.01	1.41	1.36
25	c	506	CLA	CHC-C1C	2.00	1.42	1.38
28	A	611	PL9	C18-C19	2.00	1.37	1.33
34	F	101	HEM	CMD-C2D	2.00	1.54	1.50

All (912) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	606	CLA	C4A-NA-C1A	10.35	111.40	106.68
25	B	601	CLA	C4A-NA-C1A	10.01	111.25	106.68
25	B	604	CLA	C4A-NA-C1A	9.34	110.94	106.68
25	C	507	CLA	C4A-NA-C1A	8.98	110.77	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	511	CLA	C4A-NA-C1A	8.95	110.76	106.68
25	b	601	CLA	C4A-NA-C1A	8.77	110.68	106.68
31	D	408	SQD	O6-C1-C2	8.72	121.52	108.27
26	D	401	PHO	C4D-CHA-CBD	-8.69	104.29	108.45
26	a	608	PHO	C4D-CHA-CBD	-8.21	104.52	108.45
25	C	503	CLA	C4A-NA-C1A	8.15	110.40	106.68
25	B	611	CLA	C4A-NA-C1A	8.13	110.39	106.68
25	A	613	CLA	C4A-NA-C1A	8.11	110.38	106.68
31	b	620	SQD	O6-C1-C2	7.90	120.27	108.27
31	A	615	SQD	O6-C1-C2	7.63	119.86	108.27
25	c	509	CLA	C4A-NA-C1A	7.55	110.12	106.68
25	C	508	CLA	C4A-NA-C1A	7.53	110.12	106.68
25	B	616	CLA	C4A-NA-C1A	7.48	110.09	106.68
25	C	501	CLA	C4A-NA-C1A	7.42	110.06	106.68
28	A	611	PL9	C7-C3-C4	7.32	122.94	116.91
25	C	510	CLA	C4A-NA-C1A	7.17	109.95	106.68
25	A	606	CLA	C4A-NA-C1A	7.15	109.94	106.68
25	c	505	CLA	C4A-NA-C1A	7.08	109.91	106.68
31	a	613	SQD	O6-C1-C2	7.00	118.91	108.27
26	d	401	PHO	C4D-CHA-CBD	-6.93	105.13	108.45
25	d	402	CLA	C4A-NA-C1A	6.87	109.81	106.68
31	a	613	SQD	C1-O5-C5	-6.86	100.32	113.72
25	c	501	CLA	C4A-NA-C1A	6.82	109.79	106.68
25	c	502	CLA	C4A-NA-C1A	6.76	109.76	106.68
25	a	606	CLA	C4A-NA-C1A	6.75	109.76	106.68
25	B	612	CLA	C4A-NA-C1A	6.73	109.75	106.68
25	B	605	CLA	C4A-NA-C1A	6.68	109.73	106.68
30	a	616	LMG	O1-C1-C2	6.67	118.39	108.27
26	A	608	PHO	CBC-CAC-C3C	6.66	122.40	112.87
25	B	606	CLA	C4A-NA-C1A	6.65	109.71	106.68
25	C	506	CLA	C4A-NA-C1A	6.64	109.71	106.68
25	C	509	CLA	C4A-NA-C1A	6.63	109.70	106.68
25	b	614	CLA	C4A-NA-C1A	6.57	109.68	106.68
25	c	506	CLA	C4A-NA-C1A	6.50	109.64	106.68
25	B	607	CLA	C4A-NA-C1A	6.48	109.63	106.68
31	A	615	SQD	C1-O5-C5	-6.45	101.12	113.72
25	C	513	CLA	C4A-NA-C1A	6.45	109.62	106.68
25	a	612	CLA	C4A-NA-C1A	6.45	109.62	106.68
25	c	507	CLA	C4A-NA-C1A	6.44	109.61	106.68
25	c	511	CLA	C4A-NA-C1A	6.28	109.54	106.68
31	B	624	SQD	C1-O5-C5	-6.12	101.77	113.72
25	c	503	CLA	C4A-NA-C1A	6.12	109.47	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	505	CLA	C4A-NA-C1A	6.02	109.43	106.68
25	b	607	CLA	C4A-NA-C1A	6.00	109.42	106.68
25	C	502	CLA	C4A-NA-C1A	5.99	109.41	106.68
25	b	602	CLA	C4A-NA-C1A	5.96	109.40	106.68
25	C	504	CLA	C4A-NA-C1A	5.87	109.36	106.68
25	B	609	CLA	C4A-NA-C1A	5.86	109.35	106.68
25	C	512	CLA	C4A-NA-C1A	5.86	109.35	106.68
25	b	604	CLA	C4A-NA-C1A	5.80	109.32	106.68
35	V	201	HEC	C1D-ND-C4D	5.66	111.91	105.21
30	B	620	LMG	C4-C3-C2	5.64	120.73	110.83
26	A	608	PHO	C4D-CHA-CBD	-5.59	105.77	108.45
28	d	405	PL9	C7-C3-C4	5.55	121.48	116.91
25	c	513	CLA	C4A-NA-C1A	5.55	109.21	106.68
25	c	512	CLA	C4A-NA-C1A	5.38	109.13	106.68
25	B	608	CLA	C4A-NA-C1A	5.37	109.13	106.68
25	b	616	CLA	C4A-NA-C1A	5.36	109.12	106.68
25	A	609	CLA	C4A-NA-C1A	5.25	109.08	106.68
25	B	613	CLA	C4A-NA-C1A	5.24	109.07	106.68
25	B	615	CLA	C4A-NA-C1A	5.22	109.06	106.68
25	D	402	CLA	C4A-NA-C1A	5.21	109.06	106.68
25	a	607	CLA	C4A-NA-C1A	5.20	109.05	106.68
26	A	608	PHO	O1D-CGD-CBD	5.18	132.57	124.72
25	b	612	CLA	C4A-NA-C1A	5.15	109.03	106.68
31	B	624	SQD	O7-S-C6	5.13	114.42	106.76
25	c	510	CLA	C4A-NA-C1A	5.10	109.01	106.68
28	a	611	PL9	C7-C3-C4	5.08	121.09	116.91
26	d	401	PHO	O1D-CGD-CBD	5.08	132.42	124.72
25	C	501	CLA	O2D-CGD-O1D	-5.07	113.98	123.85
31	A	615	SQD	C1-C2-C3	-5.03	99.43	110.01
25	b	605	CLA	C4A-NA-C1A	4.93	108.93	106.68
30	B	621	LMG	C8-O7-C10	4.92	129.58	117.80
25	C	501	CLA	C3B-C4B-NB	-4.91	106.14	110.53
25	b	603	CLA	O2D-CGD-O1D	-4.87	114.36	123.85
25	c	504	CLA	C4A-NA-C1A	4.85	108.89	106.68
25	b	604	CLA	C3B-C4B-NB	-4.83	106.22	110.53
25	b	616	CLA	O2D-CGD-O1D	-4.82	114.46	123.85
25	b	611	CLA	C4A-NA-C1A	4.75	108.84	106.68
31	f	101	SQD	C1-O5-C5	-4.74	104.47	113.72
31	B	624	SQD	O47-C7-C8	4.72	121.70	111.48
25	b	603	CLA	C4A-NA-C1A	4.71	108.83	106.68
25	B	614	CLA	O2D-CGD-O1D	-4.67	114.76	123.85
31	D	408	SQD	O5-C1-C2	-4.64	100.84	110.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	f	101	SQD	O6-C1-C2	4.61	115.27	108.27
25	b	613	CLA	C4A-NA-C1A	4.60	108.78	106.68
25	c	501	CLA	O2D-CGD-O1D	-4.59	114.91	123.85
25	A	613	CLA	C3B-C4B-NB	-4.56	106.45	110.53
25	b	609	CLA	C4A-NA-C1A	4.56	108.76	106.68
31	f	101	SQD	O9-S-O7	-4.54	99.07	113.82
25	B	610	CLA	O2D-CGD-O1D	-4.53	115.03	123.85
31	A	615	SQD	O7-S-C6	4.51	113.49	106.76
25	b	608	CLA	O2D-CGD-O1D	-4.49	115.11	123.85
26	d	401	PHO	CBC-CAC-C3C	4.45	119.25	112.87
31	A	616	SQD	O5-C5-C4	4.43	117.68	109.70
30	C	516	LMG	C4-C3-C2	4.43	118.60	110.83
25	C	502	CLA	O2D-CGD-O1D	-4.43	115.23	123.85
31	a	615	SQD	O47-C7-C8	4.37	120.94	111.48
28	a	611	PL9	C7-C3-C2	-4.35	118.27	123.39
25	a	607	CLA	C3B-C4B-NB	-4.34	106.65	110.53
25	B	603	CLA	C4A-NA-C1A	4.33	108.65	106.68
25	b	603	CLA	C3B-C4B-NB	-4.30	106.69	110.53
25	B	612	CLA	C3B-C4B-NB	-4.27	106.72	110.53
26	A	608	PHO	O2D-CGD-O1D	-4.27	115.55	123.85
25	b	608	CLA	C4A-NA-C1A	4.26	108.62	106.68
25	b	610	CLA	C3B-C4B-NB	-4.26	106.73	110.53
31	A	616	SQD	O7-S-C6	4.25	113.09	106.76
31	a	615	SQD	O7-S-C6	4.24	113.09	106.76
25	b	603	CLA	O2D-CGD-CBD	4.21	118.58	111.23
25	C	501	CLA	O2D-CGD-CBD	4.20	118.57	111.23
25	D	402	CLA	C3B-C4B-NB	-4.20	106.78	110.53
31	B	624	SQD	O6-C1-C2	4.19	114.64	108.27
28	A	611	PL9	C7-C3-C2	-4.17	118.47	123.39
26	a	608	PHO	CMA-C3A-C4A	-4.17	105.63	114.61
25	b	606	CLA	O2D-CGD-O1D	-4.15	115.77	123.85
31	A	616	SQD	O47-C7-C8	4.15	120.45	111.48
30	D	406	LMG	O6-C1-C2	-4.15	101.85	110.37
27	B	619	BCR	C29-C30-C25	4.12	116.43	110.44
26	D	401	PHO	CMB-C2B-C3B	4.11	132.89	124.68
25	c	508	CLA	C4A-NA-C1A	4.10	108.55	106.68
25	D	403	CLA	O2D-CGD-O1D	-4.10	115.86	123.85
28	d	405	PL9	C7-C3-C2	-4.10	118.56	123.39
25	A	607	CLA	C4A-NA-C1A	4.09	108.55	106.68
25	D	403	CLA	C4A-NA-C1A	4.07	108.54	106.68
31	f	101	SQD	O7-S-C6	4.07	112.83	106.76
25	c	505	CLA	C3B-C4B-NB	-4.06	106.91	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	D	405	PL9	C7-C3-C4	4.05	120.25	116.91
31	b	620	SQD	O9-S-C6	4.02	112.75	106.76
25	A	607	CLA	O2D-CGD-O1D	-4.02	116.03	123.85
30	b	623	LMG	C3-C4-C5	-3.98	103.01	110.23
35	v	201	HEC	C1D-ND-C4D	3.97	109.91	105.21
31	b	620	SQD	O5-C1-C2	-3.96	102.24	110.37
31	A	615	SQD	O47-C7-C8	3.94	120.02	111.48
28	d	405	PL9	C37-C38-C39	-3.90	118.69	127.62
25	b	610	CLA	C4A-NA-C1A	3.89	108.45	106.68
25	B	602	CLA	O2D-CGD-O1D	-3.87	116.31	123.85
25	b	615	CLA	C3B-C4B-NB	-3.84	107.10	110.53
25	b	615	CLA	C4A-NA-C1A	3.82	108.42	106.68
25	a	607	CLA	O2D-CGD-CBD	3.80	117.87	111.23
25	c	509	CLA	O2A-CGA-O1A	-3.78	114.16	123.63
30	C	516	LMG	O6-C5-C4	3.78	116.52	109.70
26	D	401	PHO	CMA-C3A-C4A	-3.77	106.49	114.61
30	C	516	LMG	C7-O1-C1	3.77	121.87	113.80
25	b	608	CLA	CHB-C4A-NA	3.75	129.81	124.40
25	C	507	CLA	O2D-CGD-O1D	-3.74	116.56	123.85
25	C	510	CLA	C3B-C4B-NB	-3.74	107.19	110.53
31	b	620	SQD	O47-C7-C8	3.73	119.56	111.48
25	c	511	CLA	C3B-C4B-NB	-3.72	107.21	110.53
31	A	615	SQD	O9-S-O7	-3.72	101.73	113.82
25	b	608	CLA	C3B-C4B-NB	-3.71	107.22	110.53
25	b	611	CLA	O2D-CGD-O1D	-3.68	116.68	123.85
25	c	512	CLA	CHB-C4A-NA	3.67	129.69	124.40
25	A	607	CLA	O2D-CGD-CBD	3.65	117.62	111.23
25	c	505	CLA	O2D-CGD-O1D	-3.65	116.74	123.85
25	D	402	CLA	C4-C3-C5	3.64	121.55	115.23
25	C	508	CLA	O2D-CGD-O1D	-3.63	116.77	123.85
30	D	406	LMG	O6-C5-C4	3.62	116.22	109.70
25	B	605	CLA	C3B-C4B-NB	-3.62	107.30	110.53
25	B	606	CLA	O2D-CGD-O1D	-3.61	116.82	123.85
24	A	605	BCT	O2-C-O1	3.61	128.90	119.68
25	a	612	CLA	C3B-C4B-NB	-3.60	107.32	110.53
31	f	101	SQD	O5-C1-C2	-3.60	102.98	110.37
25	B	611	CLA	O2D-CGD-O1D	-3.59	116.86	123.85
25	a	609	CLA	C4A-NA-C1A	3.59	108.31	106.68
25	B	614	CLA	C4A-NA-C1A	3.58	108.31	106.68
30	b	623	LMG	C1-O6-C5	-3.57	106.74	113.72
31	D	408	SQD	C1-O5-C5	-3.57	106.76	113.72
25	c	501	CLA	O2D-CGD-CBD	3.56	117.45	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	512	CLA	O2D-CGD-O1D	-3.55	116.94	123.85
25	c	504	CLA	O2D-CGD-O1D	-3.55	116.94	123.85
30	B	621	LMG	C7-O1-C1	3.55	121.40	113.80
25	B	606	CLA	O2D-CGD-CBD	3.55	117.43	111.23
25	B	602	CLA	O2D-CGD-CBD	3.55	117.43	111.23
25	C	513	CLA	O2D-CGD-O1D	-3.53	116.97	123.85
26	d	401	PHO	O2D-CGD-O1D	-3.53	116.97	123.85
25	c	512	CLA	C3B-C4B-NB	-3.53	107.38	110.53
25	B	608	CLA	C3B-C4B-NB	-3.53	107.38	110.53
25	B	610	CLA	CHB-C4A-NA	3.52	129.49	124.40
25	b	612	CLA	O1D-CGD-CBD	3.51	131.43	124.52
25	B	610	CLA	O2A-CGA-O1A	-3.49	114.90	123.63
30	a	616	LMG	C1-C2-C3	-3.49	102.67	110.01
30	b	623	LMG	C8-O7-C10	3.48	126.12	117.80
34	F	101	HEM	CBD-CAD-C3D	-3.47	102.93	112.53
31	B	624	SQD	C3-C4-C5	3.47	116.53	110.23
31	f	101	SQD	O9-S-C6	3.47	111.94	106.76
25	b	608	CLA	O2D-CGD-CBD	3.47	117.29	111.23
31	D	408	SQD	O8-S-C6	3.47	112.67	105.97
25	d	403	CLA	C4A-NA-C1A	3.46	108.26	106.68
25	C	503	CLA	C7-C6-C5	-3.46	104.05	113.26
28	a	611	PL9	C7-C8-C9	-3.46	120.88	126.83
25	C	502	CLA	C3B-C4B-NB	-3.46	107.44	110.53
31	b	620	SQD	O2-C2-C1	3.45	118.30	110.08
31	b	620	SQD	C1-C2-C3	-3.45	102.76	110.01
25	b	612	CLA	O2D-CGD-O1D	-3.44	117.16	123.85
25	b	605	CLA	O2D-CGD-O1D	-3.43	117.17	123.85
28	A	611	PL9	C27-C28-C29	-3.43	119.78	127.62
31	b	620	SQD	O9-S-O7	-3.42	102.70	113.82
25	a	609	CLA	O2D-CGD-O1D	-3.42	117.19	123.85
25	B	611	CLA	CHB-C4A-NA	3.42	129.33	124.40
28	d	405	PL9	C40-C39-C41	3.41	121.15	115.23
25	b	605	CLA	C3B-C4B-NB	-3.40	107.49	110.53
27	C	514	BCR	C32-C1-C6	-3.40	104.91	110.24
31	a	615	SQD	O9-S-O7	-3.40	102.78	113.82
31	a	613	SQD	C1-C2-C3	-3.39	102.87	110.01
32	c	520	DGD	C3D-C4D-C5D	-3.39	104.09	110.23
25	B	603	CLA	O2D-CGD-O1D	-3.38	117.26	123.85
25	b	602	CLA	O2D-CGD-O1D	-3.37	117.28	123.85
25	b	609	CLA	CMB-C2B-C1B	-3.36	120.31	125.42
25	B	606	CLA	C3B-C4B-NB	-3.35	107.54	110.53
25	B	601	CLA	C3B-C4B-NB	-3.34	107.54	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	602	CLA	CHB-C4A-NA	3.34	129.22	124.40
25	b	614	CLA	O2A-CGA-O1A	-3.33	115.30	123.63
32	h	102	DGD	O6E-C5E-C4E	3.33	115.70	109.70
25	b	601	CLA	O2D-CGD-O1D	-3.32	117.38	123.85
27	b	619	BCR	C38-C26-C25	-3.32	120.86	124.48
25	C	509	CLA	O2D-CGD-O1D	-3.32	117.38	123.85
32	c	521	DGD	C3D-C4D-C5D	-3.30	104.24	110.23
25	b	610	CLA	O2D-CGD-O1D	-3.30	117.42	123.85
25	c	504	CLA	O2D-CGD-CBD	3.30	117.00	111.23
25	A	607	CLA	C3B-C4B-NB	-3.29	107.59	110.53
27	T	101	BCR	C38-C26-C27	-3.29	106.58	113.60
31	B	624	SQD	O48-C23-C24	3.28	121.83	111.83
25	C	511	CLA	O2D-CGD-O1D	-3.28	117.47	123.85
31	b	620	SQD	O5-C5-C4	3.27	115.59	109.70
25	a	607	CLA	CHB-C4A-NA	3.27	129.11	124.40
28	D	405	PL9	C7-C8-C9	-3.26	121.21	126.83
25	a	609	CLA	O2D-CGD-CBD	3.26	116.93	111.23
25	b	614	CLA	C3B-C4B-NB	-3.26	107.62	110.53
25	b	616	CLA	CHB-C4A-NA	3.25	129.09	124.40
32	A	617	DGD	C3G-O3G-C1D	3.25	120.76	113.80
25	c	512	CLA	C1-C2-C3	-3.24	120.88	126.20
25	C	507	CLA	CHB-C4A-NA	3.24	129.07	124.40
30	b	621	LMG	O1-C7-C8	-3.24	102.95	110.82
25	C	504	CLA	O2D-CGD-O1D	-3.23	117.55	123.85
32	C	520	DGD	C6D-O5D-C1E	3.23	120.72	113.80
32	C	520	DGD	C3D-C4D-C5D	-3.22	104.39	110.23
28	D	405	PL9	C7-C3-C2	-3.21	119.60	123.39
25	c	510	CLA	C3B-C4B-NB	-3.21	107.67	110.53
25	C	510	CLA	CHB-C4A-NA	3.19	129.00	124.40
25	C	512	CLA	C3B-C4B-NB	-3.18	107.69	110.53
25	B	616	CLA	O2A-CGA-O1A	-3.18	115.67	123.63
28	d	405	PL9	C32-C33-C34	-3.18	120.35	127.62
25	B	608	CLA	O2D-CGD-O1D	-3.17	117.67	123.85
31	a	613	SQD	O9-S-O7	-3.17	103.50	113.82
25	b	613	CLA	O2D-CGD-O1D	-3.17	117.68	123.85
30	a	616	LMG	C8-O7-C10	3.16	125.37	117.80
32	A	617	DGD	C2G-O2G-C1B	3.16	125.36	117.80
25	c	505	CLA	O2D-CGD-CBD	3.16	116.75	111.23
25	b	604	CLA	CHB-C4A-NA	3.15	128.94	124.40
26	D	401	PHO	CMA-C3A-C2A	-3.15	101.98	114.13
31	A	616	SQD	O9-S-O7	-3.15	103.59	113.82
27	K	102	BCR	C33-C5-C6	3.14	127.91	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	604	CLA	C6-C7-C8	-3.14	105.52	115.97
30	D	406	LMG	O1-C1-C2	3.14	113.04	108.27
35	V	201	HEC	CMD-C2D-C1D	3.13	129.93	125.03
25	c	503	CLA	O2D-CGD-O1D	-3.12	117.77	123.85
25	b	613	CLA	C3B-C4B-NB	-3.12	107.75	110.53
25	C	512	CLA	C1-C2-C3	-3.11	121.11	126.20
25	c	508	CLA	O2A-CGA-O1A	-3.11	115.86	123.63
25	B	610	CLA	C3B-C4B-NB	-3.08	107.78	110.53
30	B	621	LMG	O1-C7-C8	-3.08	103.33	110.82
25	B	614	CLA	O2D-CGD-CBD	3.07	116.60	111.23
25	c	509	CLA	CHB-C4A-NA	3.07	128.83	124.40
25	c	508	CLA	C3B-C4B-NB	-3.06	107.79	110.53
25	C	504	CLA	C3B-C4B-NB	-3.06	107.80	110.53
34	e	102	HEM	CHC-C1C-NC	3.05	127.78	124.45
25	b	603	CLA	CHC-C4B-NB	3.05	128.62	124.05
25	b	604	CLA	C6-C5-C3	-3.05	106.05	113.47
26	d	401	PHO	C2B-C1B-NB	-3.05	107.23	109.43
25	c	503	CLA	C7-C6-C5	-3.05	105.15	113.26
25	B	610	CLA	C4A-NA-C1A	3.04	108.06	106.68
25	c	506	CLA	CAC-C3C-C4C	3.03	128.73	124.79
25	A	606	CLA	CHB-C4A-NA	3.03	128.77	124.40
26	D	401	PHO	C1-C2-C3	-3.03	121.24	126.20
31	a	613	SQD	O9-S-C6	3.03	111.27	106.76
25	B	612	CLA	C11-C12-C13	-3.02	105.91	115.97
25	D	402	CLA	CHB-C4A-NA	3.02	128.76	124.40
25	b	614	CLA	C1-C2-C3	-3.02	121.25	126.20
25	c	510	CLA	O2D-CGD-O1D	-3.01	117.98	123.85
25	B	612	CLA	O1D-CGD-CBD	3.01	130.46	124.52
25	c	511	CLA	O2D-CGD-O1D	-3.01	117.99	123.85
25	B	610	CLA	O2D-CGD-CBD	3.01	116.49	111.23
30	a	616	LMG	C7-O1-C1	3.01	120.24	113.80
27	B	618	BCR	C29-C28-C27	-3.01	104.67	111.28
25	B	615	CLA	CHB-C4A-NA	3.01	128.74	124.40
31	A	615	SQD	O8-S-C6	3.00	111.76	105.97
25	b	602	CLA	O2D-CGD-CBD	3.00	116.47	111.23
25	a	606	CLA	O1D-CGD-CBD	3.00	130.43	124.52
25	B	604	CLA	O2D-CGD-O1D	-2.99	118.03	123.85
27	A	610	BCR	C2-C1-C6	2.99	114.78	110.44
25	d	402	CLA	O2D-CGD-O1D	-2.98	118.04	123.85
27	B	619	BCR	C33-C5-C6	-2.98	121.23	124.48
25	B	604	CLA	C3B-C4B-NB	-2.98	107.87	110.53
34	F	101	HEM	CHC-C4B-NB	2.98	127.63	124.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	611	CLA	C3B-C4B-NB	-2.97	107.88	110.53
25	b	611	CLA	O2D-CGD-CBD	2.97	116.42	111.23
25	b	616	CLA	O2D-CGD-CBD	2.96	116.41	111.23
28	a	611	PL9	C40-C39-C41	2.96	120.37	115.23
25	C	505	CLA	O2D-CGD-O1D	-2.96	118.08	123.85
25	c	506	CLA	CHB-C4A-NA	2.96	128.67	124.40
25	a	606	CLA	C3B-C4B-NB	-2.96	107.89	110.53
25	C	508	CLA	CHD-C1D-ND	-2.95	120.65	124.80
27	H	101	BCR	C2-C1-C6	2.95	114.73	110.44
25	b	609	CLA	C3B-C4B-NB	-2.95	107.90	110.53
25	b	613	CLA	CED-O2D-CGD	2.94	122.59	115.92
32	c	521	DGD	C3G-O3G-C1D	2.94	120.10	113.80
25	B	603	CLA	CHD-C1D-ND	-2.94	120.66	124.80
25	B	613	CLA	C3B-C4B-NB	-2.94	107.91	110.53
25	C	508	CLA	C3B-C4B-NB	-2.94	107.91	110.53
30	A	614	LMG	O1-C1-C2	2.94	112.73	108.27
31	B	624	SQD	C1-C2-C3	-2.93	103.84	110.01
31	a	613	SQD	C3-C4-C5	2.93	115.55	110.23
25	B	609	CLA	O2D-CGD-O1D	-2.93	118.14	123.85
25	a	607	CLA	O2D-CGD-O1D	-2.93	118.14	123.85
25	b	604	CLA	O2D-CGD-O1D	-2.93	118.15	123.85
31	D	408	SQD	O9-S-C6	2.93	111.12	106.76
30	d	411	LMG	O3-C3-C4	2.92	117.27	110.38
25	b	601	CLA	C3B-C4B-NB	-2.91	107.93	110.53
25	B	611	CLA	C3B-C4B-NB	-2.91	107.93	110.53
27	B	617	BCR	C29-C30-C25	2.90	114.66	110.44
25	B	614	CLA	C3B-C4B-NB	-2.90	107.94	110.53
25	B	603	CLA	C3B-C4B-NB	-2.90	107.94	110.53
31	D	408	SQD	O48-C23-C24	2.89	120.65	111.83
25	a	609	CLA	CMB-C2B-C1B	-2.88	121.03	125.42
25	A	609	CLA	CHB-C4A-NA	2.88	128.55	124.40
25	C	510	CLA	O2D-CGD-O1D	-2.88	118.25	123.85
24	a	605	BCT	O2-C-O1	2.87	127.03	119.68
25	c	510	CLA	CHB-C4A-NA	2.87	128.55	124.40
25	C	512	CLA	CMB-C2B-C1B	-2.87	121.05	125.42
31	a	615	SQD	C3-C4-C5	2.87	115.44	110.23
31	A	615	SQD	C44-O6-C1	-2.87	107.65	113.80
32	C	520	DGD	O3G-C1D-C2D	-2.87	103.92	108.27
25	C	510	CLA	O2A-CGA-O1A	-2.86	116.48	123.63
27	t	101	BCR	C31-C1-C6	2.86	114.72	110.24
25	b	601	CLA	CHB-C4A-NA	2.85	128.52	124.40
30	C	516	LMG	O6-C1-C2	-2.85	104.52	110.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	d	405	PL9	C42-C43-C44	-2.85	121.11	127.62
25	B	603	CLA	O2D-CGD-CBD	2.85	116.20	111.23
25	B	614	CLA	C4-C3-C5	2.84	120.16	115.23
25	B	613	CLA	C1-C2-C3	-2.84	121.54	126.20
31	f	101	SQD	O47-C7-C8	2.84	121.36	110.93
25	b	607	CLA	CHC-C4B-NB	2.83	128.30	124.05
28	d	405	PL9	C20-C19-C21	2.83	120.14	115.23
25	B	613	CLA	O2D-CGD-O1D	-2.83	118.34	123.85
26	A	608	PHO	CMB-C2B-C3B	2.83	130.34	124.68
25	c	509	CLA	O2D-CGD-O1D	-2.83	118.34	123.85
25	D	402	CLA	O2D-CGD-O1D	-2.83	118.34	123.85
25	C	506	CLA	CED-O2D-CGD	2.82	122.31	115.92
25	B	602	CLA	C4A-NA-C1A	2.81	107.96	106.68
27	K	102	BCR	C29-C30-C25	2.81	114.52	110.44
28	D	405	PL9	C42-C43-C44	-2.81	121.19	127.62
27	T	101	BCR	C2-C1-C6	2.80	114.51	110.44
31	B	624	SQD	O5-C5-C4	2.80	114.75	109.70
25	c	508	CLA	O2D-CGD-O1D	-2.80	118.40	123.85
31	b	620	SQD	O7-S-C6	2.80	110.93	106.76
34	e	102	HEM	CBD-CAD-C3D	-2.79	104.81	112.53
32	h	102	DGD	C4E-C3E-C2E	-2.79	105.93	110.83
25	b	609	CLA	O1D-CGD-CBD	2.79	130.02	124.52
25	B	603	CLA	O2A-CGA-O1A	-2.79	116.66	123.63
25	a	609	CLA	C4-C3-C5	2.78	120.06	115.23
27	t	101	BCR	C29-C28-C27	-2.78	105.16	111.28
25	b	612	CLA	C11-C12-C13	-2.78	106.72	115.97
31	f	101	SQD	O5-C5-C4	2.78	114.71	109.70
25	c	513	CLA	O2D-CGD-O1D	-2.77	118.45	123.85
34	e	102	HEM	CBA-CAA-C2A	-2.77	104.87	112.53
28	A	611	PL9	O2-C1-C2	-2.77	115.53	121.83
28	a	611	PL9	O2-C1-C2	-2.77	115.53	121.83
25	B	604	CLA	O2A-CGA-O1A	-2.76	116.72	123.63
25	D	402	CLA	O2A-CGA-O1A	-2.76	116.74	123.63
35	V	201	HEC	C4B-NB-C1B	2.75	108.47	105.21
25	B	612	CLA	O2D-CGD-O1D	-2.75	118.50	123.85
25	B	611	CLA	C11-C12-C13	-2.74	106.84	115.97
25	b	609	CLA	CHB-C4A-NA	2.74	128.36	124.40
27	C	514	BCR	C2-C1-C6	2.74	114.42	110.44
35	V	201	HEC	C1D-C2D-C3D	-2.73	104.10	106.98
25	b	610	CLA	O2A-CGA-O1A	-2.73	116.79	123.63
30	B	620	LMG	O3-C3-C2	-2.73	103.93	110.38
25	C	505	CLA	C3B-C4B-NB	-2.73	108.09	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	506	CLA	CHD-C1D-ND	-2.73	120.96	124.80
26	d	401	PHO	CAA-C2A-C3A	-2.73	105.62	113.00
26	a	608	PHO	C1-C2-C3	-2.73	121.73	126.20
25	C	501	CLA	O2A-CGA-O1A	-2.73	116.80	123.63
25	C	509	CLA	C3B-C4B-NB	-2.72	108.10	110.53
25	B	607	CLA	CHC-C4B-NB	2.72	128.13	124.05
34	e	102	HEM	C3B-C2B-C1B	2.71	108.45	106.41
27	D	404	BCR	C4-C5-C6	-2.71	119.04	122.70
25	C	504	CLA	CHD-C1D-ND	-2.71	120.99	124.80
25	b	606	CLA	O2D-CGD-CBD	2.71	115.96	111.23
25	b	604	CLA	C1-C2-C3	-2.71	121.76	126.20
25	A	607	CLA	O2A-CGA-O1A	-2.71	116.86	123.63
25	C	504	CLA	CHD-C4C-NC	2.70	128.43	124.23
25	C	512	CLA	CHB-C4A-NA	2.70	128.30	124.40
25	c	504	CLA	C3B-C4B-NB	-2.70	108.12	110.53
25	b	613	CLA	CHB-C4A-NA	2.70	128.30	124.40
27	h	101	BCR	C2-C1-C6	2.68	114.34	110.44
25	C	507	CLA	C4-C3-C5	2.68	119.89	115.23
34	F	101	HEM	C4D-ND-C1D	2.68	108.38	105.21
25	B	601	CLA	O2D-CGD-O1D	-2.68	118.63	123.85
27	D	404	BCR	C33-C5-C6	-2.68	121.56	124.48
25	c	506	CLA	C4-C3-C2	-2.68	116.75	123.63
25	b	605	CLA	O2A-CGA-O1A	-2.67	116.94	123.63
25	c	507	CLA	O2D-CGD-O1D	-2.67	118.64	123.85
25	c	507	CLA	C3B-C4B-NB	-2.67	108.14	110.53
25	C	512	CLA	O2A-CGA-O1A	-2.67	116.96	123.63
25	B	604	CLA	CHB-C4A-NA	2.66	128.25	124.40
25	B	611	CLA	C1-C2-C3	-2.66	121.84	126.20
25	C	502	CLA	O1D-CGD-CBD	2.65	129.75	124.52
25	C	504	CLA	CMB-C2B-C1B	-2.65	121.38	125.42
25	B	605	CLA	O2D-CGD-O1D	-2.65	118.69	123.85
25	c	502	CLA	C3B-C4B-NB	-2.65	108.17	110.53
25	b	607	CLA	CED-O2D-CGD	2.64	121.91	115.92
26	A	608	PHO	C1-C2-C3	-2.64	121.87	126.20
25	B	601	CLA	C1-O2A-CGA	2.64	123.04	116.65
26	d	401	PHO	C1-C2-C3	-2.64	121.87	126.20
26	a	608	PHO	CMB-C2B-C3B	2.64	129.95	124.68
25	C	513	CLA	O2A-CGA-O1A	-2.64	117.04	123.63
25	b	612	CLA	CHB-C4A-NA	2.63	128.20	124.40
32	h	102	DGD	O3D-C3D-C2D	-2.63	104.17	110.38
25	B	616	CLA	O2D-CGD-O1D	-2.63	118.72	123.85
25	c	504	CLA	CMB-C2B-C1B	-2.62	121.43	125.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	619	BCR	C29-C30-C25	2.62	114.24	110.44
28	D	405	PL9	C27-C28-C29	-2.62	121.63	127.62
25	b	612	CLA	CMB-C2B-C1B	-2.62	121.43	125.42
31	A	615	SQD	C3-C4-C5	2.61	114.97	110.23
25	C	506	CLA	CHB-C4A-NA	2.61	128.17	124.40
25	c	512	CLA	O2A-CGA-O1A	-2.61	117.09	123.63
26	A	608	PHO	CMA-C3A-C4A	-2.61	108.98	114.61
25	B	602	CLA	CMB-C2B-C1B	-2.61	121.44	125.42
25	d	403	CLA	O2D-CGD-O1D	-2.61	118.77	123.85
27	d	404	BCR	C39-C30-C25	-2.60	106.16	110.24
28	a	611	PL9	C37-C38-C39	-2.60	121.66	127.62
25	A	606	CLA	C3B-C4B-NB	-2.60	108.21	110.53
25	B	608	CLA	CHB-C4A-NA	2.60	128.15	124.40
25	b	605	CLA	CHD-C1D-ND	-2.60	121.15	124.80
25	B	614	CLA	CED-O2D-CGD	2.59	121.80	115.92
29	m	101	STE	C3-C2-C1	-2.59	107.75	114.51
25	c	503	CLA	CMB-C2B-C1B	-2.59	121.47	125.42
30	a	616	LMG	O6-C1-C2	-2.59	105.05	110.37
31	a	615	SQD	O48-C23-C24	2.59	119.72	111.83
27	A	610	BCR	C31-C1-C6	-2.59	106.19	110.24
25	b	606	CLA	C3B-C4B-NB	-2.59	108.22	110.53
25	B	615	CLA	CHC-C4B-NB	2.58	127.93	124.05
26	a	608	PHO	OBD-CAD-CBD	-2.58	122.03	125.82
25	b	612	CLA	O2A-CGA-O1A	-2.58	117.17	123.63
25	b	616	CLA	O2A-CGA-O1A	-2.58	117.17	123.63
31	A	616	SQD	C1-O5-C5	2.58	118.75	113.72
25	C	501	CLA	CHB-C1B-NB	2.58	127.91	124.05
30	D	406	LMG	C4-C3-C2	2.58	115.35	110.83
25	D	402	CLA	O2D-CGD-CBD	2.57	115.72	111.23
25	c	505	CLA	C1D-ND-C4D	2.57	108.11	106.31
30	C	516	LMG	C8-O7-C10	2.57	123.95	117.80
25	C	513	CLA	CHD-C1D-ND	-2.57	121.19	124.80
35	V	201	HEC	CHD-C4C-NC	2.57	128.52	123.86
25	b	604	CLA	C11-C12-C13	-2.56	107.44	115.97
25	b	611	CLA	CHD-C1D-C2D	2.56	130.81	125.49
25	B	604	CLA	O2D-CGD-CBD	2.56	115.71	111.23
30	A	614	LMG	C8-O7-C10	2.56	123.92	117.80
28	D	405	PL9	C12-C13-C14	-2.56	121.77	127.62
25	b	603	CLA	O2A-CGA-O1A	-2.56	117.23	123.63
25	b	616	CLA	C4-C3-C5	2.56	119.66	115.23
25	c	504	CLA	CHB-C4A-NA	2.55	128.09	124.40
35	V	201	HEC	CBD-CAD-C3D	-2.55	105.47	112.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	D	408	SQD	O9-S-O7	-2.55	105.53	113.82
25	c	513	CLA	C3B-C4B-NB	-2.55	108.25	110.53
25	c	511	CLA	CHB-C1B-NB	2.55	127.87	124.05
25	b	604	CLA	O2D-CGD-CBD	2.54	115.67	111.23
35	v	201	HEC	CBD-CAD-C3D	-2.54	105.51	112.53
25	B	614	CLA	CHB-C4A-NA	2.54	128.06	124.40
28	a	611	PL9	C22-C23-C24	-2.54	121.82	127.62
26	D	401	PHO	C4A-C3A-C2A	2.53	105.25	102.84
25	c	502	CLA	CHB-C1B-NB	2.53	127.85	124.05
25	c	509	CLA	C3B-C4B-NB	-2.53	108.27	110.53
27	a	610	BCR	C40-C30-C25	2.53	114.21	110.24
26	a	608	PHO	OBD-CAD-C3D	2.52	131.83	127.89
25	C	504	CLA	O2A-CGA-O1A	-2.52	117.33	123.63
25	c	504	CLA	CHD-C1D-ND	-2.52	121.26	124.80
31	a	613	SQD	O48-C23-C24	2.51	119.49	111.83
30	b	623	LMG	O3-C3-C4	2.51	116.29	110.38
29	b	624	STE	O2-C1-C2	2.51	121.92	114.00
31	a	613	SQD	C9-C8-C7	-2.50	104.52	113.69
25	b	609	CLA	CMB-C2B-C3B	2.50	132.44	126.55
31	b	620	SQD	C3-C4-C5	2.50	114.77	110.23
25	b	605	CLA	CAC-C3C-C4C	2.50	128.04	124.79
27	t	101	BCR	C40-C30-C25	2.49	114.15	110.24
32	c	521	DGD	O4D-C4D-C5D	2.49	115.46	109.32
25	c	506	CLA	O2D-CGD-O1D	-2.49	119.00	123.85
25	b	607	CLA	C3B-C4B-NB	-2.48	108.31	110.53
27	t	101	BCR	C38-C26-C25	2.48	127.19	124.48
31	a	613	SQD	O8-S-C6	2.48	110.76	105.97
25	b	607	CLA	O2D-CGD-O1D	-2.48	119.02	123.85
25	B	602	CLA	O2A-CGA-O1A	-2.47	117.44	123.63
31	A	615	SQD	O9-S-C6	2.47	110.45	106.76
25	B	607	CLA	C4-C3-C5	2.47	119.52	115.23
25	C	511	CLA	CHB-C4A-NA	2.47	127.96	124.40
27	D	404	BCR	C31-C1-C6	-2.47	106.38	110.24
25	c	502	CLA	O2D-CGD-O1D	-2.46	119.06	123.85
25	B	611	CLA	O2D-CGD-CBD	2.46	115.52	111.23
31	A	615	SQD	O5-C1-C2	-2.45	105.33	110.37
25	B	615	CLA	C3B-C4B-NB	-2.45	108.34	110.53
25	C	513	CLA	C3B-C4B-NB	-2.45	108.34	110.53
25	B	607	CLA	O2A-CGA-O1A	-2.45	117.51	123.63
27	H	101	BCR	C29-C30-C25	2.44	113.99	110.44
30	c	518	LMG	C8-O7-C10	2.44	123.64	117.80
32	h	102	DGD	O3D-C3D-C4D	2.44	116.13	110.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	605	CLA	C4D-CHA-C1A	2.44	124.15	121.24
25	C	508	CLA	O2D-CGD-CBD	2.44	115.49	111.23
27	t	101	BCR	C7-C8-C9	-2.44	122.63	126.23
25	C	504	CLA	C4-C3-C5	2.44	119.46	115.23
34	e	102	HEM	CAB-C3B-C2B	-2.44	120.51	128.43
25	C	511	CLA	O2D-CGD-CBD	2.44	115.49	111.23
25	C	512	CLA	O2D-CGD-O1D	-2.44	119.11	123.85
25	b	613	CLA	C1-C2-C3	-2.43	122.21	126.20
30	b	623	LMG	O7-C8-C7	-2.43	99.63	108.34
25	c	509	CLA	O2A-CGA-CBA	2.43	119.24	111.83
25	b	604	CLA	C11-C10-C8	-2.43	107.89	115.97
25	b	611	CLA	C2D-C1D-ND	-2.43	107.72	110.13
25	B	601	CLA	O2A-CGA-O1A	-2.43	117.56	123.63
32	A	617	DGD	O5D-C1E-C2E	2.43	111.96	108.27
25	b	615	CLA	CED-O2D-CGD	2.42	121.42	115.92
33	d	408	LHG	O4-P-O5	2.42	123.72	112.44
25	c	505	CLA	C1-C2-C3	-2.42	122.23	126.20
25	A	609	CLA	O2A-CGA-O1A	-2.42	117.57	123.63
30	B	620	LMG	O6-C5-C4	2.42	114.06	109.70
31	a	613	SQD	O5-C1-C2	-2.42	105.40	110.37
25	C	507	CLA	C2A-C1A-CHA	2.42	128.06	123.87
25	B	605	CLA	CAA-CBA-CGA	-2.41	106.36	113.21
26	A	608	PHO	CAA-C2A-C3A	-2.41	106.49	113.00
25	B	613	CLA	CHB-C4A-NA	2.41	127.88	124.40
25	B	613	CLA	O2A-CGA-O1A	-2.41	117.60	123.63
25	c	506	CLA	CHD-C1D-C2D	2.41	130.49	125.49
25	B	602	CLA	C3B-C4B-NB	-2.40	108.38	110.53
34	F	101	HEM	CHB-C1B-NB	2.40	127.34	124.37
30	C	516	LMG	O4-C4-C3	-2.40	104.72	110.38
25	c	505	CLA	CHB-C4A-NA	2.40	127.86	124.40
33	D	409	LHG	O4-P-O5	2.40	123.61	112.44
25	B	607	CLA	C3B-C4B-NB	-2.40	108.39	110.53
25	A	606	CLA	O1D-CGD-CBD	2.39	129.24	124.52
25	B	609	CLA	O2A-CGA-O1A	-2.39	117.66	123.63
25	a	606	CLA	O2A-CGA-O1A	-2.39	117.66	123.63
28	A	611	PL9	C36-C34-C33	-2.38	115.81	121.17
25	c	507	CLA	O2D-CGD-CBD	2.38	115.40	111.23
25	C	509	CLA	CHB-C4A-NA	2.38	127.84	124.40
27	d	404	BCR	C30-C25-C26	-2.38	119.38	122.64
25	C	503	CLA	O1D-CGD-CBD	2.38	129.21	124.52
25	B	612	CLA	O2A-CGA-O1A	-2.38	117.68	123.63
25	B	604	CLA	C2D-C1D-ND	-2.38	107.77	110.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	611	CLA	CHD-C1D-ND	-2.37	121.46	124.80
34	F	101	HEM	CHA-C4D-ND	2.37	127.30	124.37
25	a	606	CLA	CMB-C2B-C3B	2.37	132.13	126.55
25	C	506	CLA	O2D-CGD-O1D	-2.37	119.23	123.85
25	C	503	CLA	CHB-C4A-NA	2.37	127.82	124.40
34	F	101	HEM	CBA-CAA-C2A	-2.37	105.99	112.53
30	b	623	LMG	O5-C6-C5	-2.37	103.28	111.33
25	b	615	CLA	C7-C6-C5	-2.36	106.97	113.26
25	b	615	CLA	CHA-C4D-ND	2.36	137.42	132.55
25	B	606	CLA	O2A-CGA-O1A	-2.36	117.72	123.63
28	D	405	PL9	C22-C23-C24	-2.36	122.22	127.62
32	C	520	DGD	O1G-C1G-C2G	-2.36	101.59	108.40
25	B	606	CLA	CGD-CBD-CAD	-2.36	103.21	110.85
25	C	509	CLA	O1D-CGD-CBD	2.36	129.17	124.52
25	b	616	CLA	CHD-C1D-ND	-2.35	121.49	124.80
25	B	604	CLA	C6-C5-C3	-2.35	107.74	113.47
30	d	411	LMG	O3-C3-C2	-2.35	104.83	110.38
25	b	603	CLA	CHB-C1B-NB	2.35	127.58	124.05
28	d	405	PL9	C22-C23-C24	-2.35	122.25	127.62
25	c	513	CLA	O2A-CGA-O1A	-2.35	117.75	123.63
25	b	605	CLA	CHD-C1D-C2D	2.35	130.37	125.49
32	h	102	DGD	C1E-O6E-C5E	2.34	118.30	113.72
25	C	507	CLA	O1D-CGD-CBD	2.34	129.14	124.52
25	c	507	CLA	CHB-C1B-NB	2.34	127.56	124.05
25	B	608	CLA	CHD-C1D-ND	-2.34	121.51	124.80
26	d	401	PHO	CMB-C2B-C3B	2.34	129.35	124.68
25	b	616	CLA	O1D-CGD-CBD	2.34	129.12	124.52
34	F	101	HEM	C2D-C1D-ND	-2.33	107.20	109.90
25	B	614	CLA	CMB-C2B-C1B	-2.33	121.86	125.42
25	B	609	CLA	C3B-C4B-NB	-2.33	108.45	110.53
25	c	502	CLA	O2D-CGD-CBD	2.33	115.31	111.23
25	c	508	CLA	C7-C6-C5	-2.33	107.05	113.26
28	A	611	PL9	O2-C1-C6	2.33	124.19	120.48
35	v	201	HEC	CBA-CAA-C2A	-2.33	106.09	112.53
25	B	606	CLA	CHB-C1B-NB	2.33	127.54	124.05
25	b	610	CLA	CHB-C4A-NA	2.33	127.76	124.40
27	t	101	BCR	C12-C13-C14	-2.33	115.35	119.01
34	e	102	HEM	C3B-C4B-NB	-2.33	107.80	109.47
27	b	617	BCR	C33-C5-C6	-2.33	121.95	124.48
31	A	616	SQD	O48-C23-C24	2.32	118.92	111.83
25	C	509	CLA	C1-C2-C3	-2.32	122.39	126.20
31	D	408	SQD	O5-C5-C4	2.32	113.89	109.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	d	403	CLA	CHA-C1A-NA	-2.32	121.14	126.39
25	B	605	CLA	CED-O2D-CGD	2.32	121.17	115.92
25	d	403	CLA	CMB-C2B-C1B	-2.32	121.89	125.42
32	H	102	DGD	C1E-O6E-C5E	2.32	118.24	113.72
27	a	610	BCR	C2-C1-C6	2.31	113.80	110.44
34	F	101	HEM	CHD-C4C-C3C	2.31	129.11	125.21
29	M	101	STE	O2-C1-C2	2.31	121.30	114.00
25	B	612	CLA	CMB-C2B-C1B	-2.31	121.90	125.42
32	C	522	DGD	C3D-C4D-C5D	-2.31	106.05	110.23
32	h	102	DGD	C3D-C4D-C5D	-2.31	106.05	110.23
35	V	201	HEC	C3D-C4D-ND	-2.31	108.12	110.35
25	a	606	CLA	CMB-C2B-C1B	-2.31	121.90	125.42
26	d	401	PHO	CMA-C3A-C4A	-2.31	109.64	114.61
25	a	609	CLA	CMB-C2B-C3B	2.31	131.97	126.55
25	d	402	CLA	CHB-C4A-NA	2.31	127.73	124.40
25	b	612	CLA	C3B-C4B-NB	-2.31	108.47	110.53
29	d	406	STE	O2-C1-C2	2.31	121.28	114.00
26	A	608	PHO	CMA-C3A-C2A	-2.30	105.23	114.13
25	a	609	CLA	CHB-C4A-NA	2.30	127.72	124.40
25	C	513	CLA	O2D-CGD-CBD	2.30	115.25	111.23
32	c	519	DGD	O3G-C3G-C2G	-2.30	105.22	110.82
25	D	403	CLA	O2D-CGD-CBD	2.30	115.25	111.23
32	C	520	DGD	O3G-C3G-C2G	-2.30	105.22	110.82
25	c	512	CLA	CHC-C1C-NC	2.30	127.77	124.31
25	b	604	CLA	O2A-CGA-O1A	-2.30	117.88	123.63
25	b	604	CLA	CHD-C1D-ND	-2.30	121.57	124.80
25	c	506	CLA	CAC-C3C-C2C	-2.29	123.34	127.56
27	K	102	BCR	C7-C8-C9	-2.29	122.84	126.23
31	B	624	SQD	O9-S-O7	-2.29	106.37	113.82
25	b	610	CLA	CAA-CBA-CGA	-2.29	106.70	113.21
25	c	507	CLA	CHD-C1D-ND	-2.29	121.58	124.80
25	B	610	CLA	C1-C2-C3	-2.29	122.45	126.20
25	C	511	CLA	C3B-C4B-NB	-2.29	108.49	110.53
31	b	620	SQD	O48-C23-O10	-2.29	117.91	123.63
25	A	609	CLA	O2D-CGD-O1D	-2.29	119.40	123.85
25	a	609	CLA	CHA-C1A-NA	-2.29	121.22	126.39
28	d	405	PL9	C7-C8-C9	-2.28	122.90	126.83
31	f	101	SQD	O48-C23-C24	2.28	118.80	111.83
25	B	607	CLA	CED-O2D-CGD	2.28	121.09	115.92
25	A	609	CLA	O2D-CGD-CBD	2.28	115.22	111.23
35	v	201	HEC	C1D-C2D-C3D	-2.28	104.58	106.98
25	b	605	CLA	C1D-ND-C4D	2.28	107.91	106.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	607	CLA	CMB-C2B-C1B	-2.28	121.95	125.42
29	E	102	STE	O2-C1-C2	2.28	121.20	114.00
25	b	616	CLA	CMB-C2B-C1B	-2.28	121.95	125.42
30	b	623	LMG	O7-C8-C9	2.28	116.52	108.34
30	D	407	LMG	O3-C3-C2	-2.28	105.00	110.38
25	A	613	CLA	C7-C6-C5	-2.27	107.20	113.26
25	c	501	CLA	CHC-C4B-NB	2.27	127.45	124.05
34	e	102	HEM	C3C-C2C-C1C	2.27	109.19	107.05
27	B	618	BCR	C31-C1-C6	2.27	113.80	110.24
26	d	401	PHO	CMA-C3A-C2A	-2.27	105.37	114.13
26	D	401	PHO	C1-O2A-CGA	2.27	122.14	116.65
25	c	501	CLA	CHB-C4A-NA	2.27	127.67	124.40
31	a	615	SQD	O8-S-C6	2.27	110.35	105.97
31	D	408	SQD	O2-C2-C1	2.27	115.47	110.08
25	b	615	CLA	CHB-C1B-NB	2.27	127.45	124.05
27	b	617	BCR	C29-C30-C25	2.26	113.73	110.44
25	b	610	CLA	O1D-CGD-CBD	2.26	128.98	124.52
28	a	611	PL9	O2-C1-C6	2.26	124.08	120.48
25	b	616	CLA	CAA-CBA-CGA	-2.26	106.79	113.21
27	B	619	BCR	C39-C30-C25	-2.26	106.70	110.24
25	B	610	CLA	CHA-C1A-NA	-2.26	121.28	126.39
25	b	616	CLA	C1-C2-C3	-2.26	122.50	126.20
30	B	620	LMG	C8-O7-C10	2.25	123.19	117.80
25	A	607	CLA	C7-C6-C5	-2.25	107.25	113.26
34	F	101	HEM	C3D-C4D-ND	-2.25	107.70	110.17
25	B	609	CLA	C7-C6-C5	-2.25	107.26	113.26
33	B	623	LHG	C6-C5-C4	2.25	117.04	111.78
25	c	510	CLA	O2A-CGA-O1A	-2.25	118.00	123.63
25	c	511	CLA	O2D-CGD-CBD	2.25	115.16	111.23
25	b	615	CLA	CHB-C4A-NA	2.25	127.64	124.40
25	A	606	CLA	CHD-C1D-ND	-2.25	121.64	124.80
25	b	610	CLA	C1-C2-C3	-2.24	122.52	126.20
31	B	624	SQD	C9-C8-C7	-2.24	105.47	113.69
25	b	605	CLA	C1-C2-C3	-2.24	122.52	126.20
25	b	614	CLA	CMD-C2D-C1D	2.24	128.67	124.73
34	F	101	HEM	CHD-C1D-ND	2.24	126.83	124.42
25	B	616	CLA	CAC-C3C-C4C	2.24	127.70	124.79
25	b	601	CLA	O1D-CGD-CBD	2.24	128.93	124.52
29	B	626	STE	O2-C1-C2	2.23	121.06	114.00
25	B	603	CLA	CHC-C4B-NB	2.23	127.39	124.05
33	D	410	LHG	O4-P-O5	2.23	122.82	112.44
25	c	505	CLA	CMB-C2B-C1B	-2.23	122.02	125.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	F	101	HEM	C2A-C1A-NA	-2.23	107.68	110.15
25	b	613	CLA	C7-C6-C5	-2.23	107.32	113.26
32	H	102	DGD	C3G-O3G-C1D	2.23	118.57	113.80
25	A	613	CLA	CHB-C4A-NA	2.23	127.61	124.40
25	B	611	CLA	CHD-C1D-C2D	2.23	130.12	125.49
31	b	620	SQD	O48-C23-C24	2.23	118.62	111.83
28	d	405	PL9	C12-C13-C14	-2.22	122.53	127.62
32	H	102	DGD	C6E-C5E-C4E	-2.22	107.56	113.02
25	c	505	CLA	C11-C12-C13	-2.22	108.57	115.97
25	a	609	CLA	CHA-C4D-ND	2.22	137.14	132.55
33	B	623	LHG	O3-P-O5	-2.22	100.12	108.94
25	c	510	CLA	CHD-C1D-ND	-2.22	121.67	124.80
25	A	606	CLA	O2A-CGA-O1A	-2.22	118.07	123.63
25	C	508	CLA	CHD-C1D-C2D	2.22	130.11	125.49
25	c	511	CLA	CHA-C1A-NA	-2.22	121.36	126.39
30	c	523	LMG	C4-C3-C2	2.22	114.73	110.83
25	A	613	CLA	C1D-ND-C4D	2.22	107.87	106.31
25	b	605	CLA	O1D-CGD-CBD	2.21	128.88	124.52
25	b	605	CLA	CMC-C2C-C1C	2.21	128.49	125.03
31	A	615	SQD	O48-C23-C24	2.21	118.58	111.83
30	B	620	LMG	C3-C4-C5	2.21	114.24	110.23
25	C	507	CLA	CAA-CBA-CGA	-2.21	106.93	113.21
25	c	508	CLA	CHB-C4A-NA	2.21	127.58	124.40
28	a	611	PL9	O1-C4-C3	-2.21	118.41	120.73
25	B	606	CLA	C1-C2-C3	-2.21	122.58	126.20
25	B	616	CLA	CHC-C4B-NB	2.21	127.36	124.05
25	C	512	CLA	CMB-C2B-C3B	2.20	131.73	126.55
28	A	611	PL9	C40-C39-C41	2.20	119.05	115.23
26	a	608	PHO	CMA-C3A-C2A	-2.20	105.63	114.13
25	b	611	CLA	O2A-CGA-O1A	-2.20	118.12	123.63
25	a	612	CLA	CHB-C4A-NA	2.20	127.58	124.40
25	a	612	CLA	CHD-C1D-ND	-2.20	121.71	124.80
25	b	608	CLA	C6-C7-C8	-2.20	108.65	115.97
25	C	513	CLA	CHD-C1D-C2D	2.20	130.06	125.49
30	a	616	LMG	O2-C2-C1	2.20	115.31	110.08
25	C	507	CLA	CHA-C1A-NA	-2.20	121.41	126.39
25	c	503	CLA	CBC-CAC-C3C	-2.20	106.46	112.42
27	D	404	BCR	C2-C1-C6	2.20	113.63	110.44
35	v	201	HEC	CAD-CBD-CGD	-2.20	107.84	113.67
25	C	507	CLA	C11-C12-C13	-2.20	108.67	115.97
25	D	403	CLA	O1D-CGD-CBD	2.19	128.85	124.52
25	B	615	CLA	O2D-CGD-O1D	-2.19	119.58	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	D	401	PHO	OBD-CAD-CBD	-2.19	122.60	125.82
25	C	511	CLA	C1-O2A-CGA	2.19	121.95	116.65
29	e	104	STE	C3-C2-C1	-2.19	108.79	114.51
25	b	612	CLA	C16-C15-C13	-2.19	108.68	115.97
28	d	405	PL9	C8-C7-C3	2.19	117.69	112.03
27	h	101	BCR	C3-C4-C5	2.19	117.96	114.06
25	B	607	CLA	CHB-C1B-NB	2.19	127.33	124.05
27	k	102	BCR	C7-C8-C9	-2.19	123.00	126.23
25	b	615	CLA	O2D-CGD-O1D	-2.19	119.59	123.85
25	B	606	CLA	CHA-C1A-NA	-2.18	121.44	126.39
25	c	510	CLA	O1D-CGD-CBD	2.18	128.82	124.52
27	C	514	BCR	C15-C14-C13	-2.18	124.22	127.28
25	c	513	CLA	O1D-CGD-CBD	2.18	128.82	124.52
25	B	603	CLA	CHD-C1D-C2D	2.18	130.02	125.49
25	c	511	CLA	O2A-CGA-O1A	-2.18	118.17	123.63
30	a	616	LMG	O7-C8-C9	2.18	116.16	108.34
25	B	616	CLA	C3B-C4B-NB	-2.18	108.58	110.53
35	v	201	HEC	O1D-CGD-CBD	-2.18	116.19	123.09
25	b	612	CLA	CMB-C2B-C3B	2.17	131.66	126.55
25	C	504	CLA	CHB-C1B-NB	2.17	127.31	124.05
25	b	602	CLA	C3B-C4B-NB	-2.17	108.59	110.53
25	d	402	CLA	C3B-C4B-NB	-2.17	108.59	110.53
29	C	524	STE	C3-C2-C1	-2.17	108.84	114.51
25	B	607	CLA	CHD-C1D-ND	-2.17	121.75	124.80
28	a	611	PL9	C20-C19-C21	2.17	118.99	115.23
25	C	507	CLA	CHD-C1D-ND	-2.16	121.76	124.80
25	c	507	CLA	O2A-CGA-O1A	-2.16	118.21	123.63
31	a	613	SQD	C44-O6-C1	-2.16	109.16	113.80
25	C	502	CLA	O2D-CGD-CBD	2.16	115.01	111.23
26	a	608	PHO	C2B-C1B-NB	-2.16	107.87	109.43
25	C	503	CLA	C3B-C4B-NB	-2.16	108.60	110.53
27	t	101	BCR	C28-C27-C26	-2.16	110.21	114.06
29	e	104	STE	O2-C1-C2	2.16	120.81	114.00
31	D	408	SQD	C1-C2-C3	-2.16	105.48	110.01
33	a	614	LHG	C5-O7-C7	2.15	122.95	117.80
28	D	405	PL9	C37-C38-C39	-2.15	122.69	127.62
25	B	603	CLA	C4-C3-C5	2.15	118.96	115.23
25	c	508	CLA	CHD-C1D-ND	-2.15	121.78	124.80
25	B	603	CLA	CHD-C4C-NC	2.14	127.56	124.23
27	d	404	BCR	C3-C4-C5	2.14	117.87	114.06
31	b	620	SQD	O8-S-C6	2.14	110.11	105.97
26	D	401	PHO	OBD-CAD-C3D	2.14	131.23	127.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	611	CLA	CHD-C1D-ND	-2.14	121.80	124.80
31	D	408	SQD	O8-S-O9	-2.13	106.06	111.40
25	c	502	CLA	C4D-CHA-C1A	2.13	123.79	121.24
27	b	619	BCR	C4-C5-C6	-2.13	119.82	122.70
25	C	513	CLA	CHB-C4A-NA	2.13	127.47	124.40
35	V	201	HEC	CHB-C1B-NB	2.13	126.72	124.42
31	a	613	SQD	O47-C7-C8	2.13	116.09	111.48
25	C	505	CLA	C1-C2-C3	-2.13	122.71	126.20
25	A	609	CLA	CGD-CBD-CAD	-2.13	103.95	110.85
25	c	504	CLA	C7-C6-C5	-2.13	107.59	113.26
25	C	506	CLA	O2A-CGA-O1A	-2.13	118.31	123.63
26	a	608	PHO	CAA-C2A-C3A	-2.13	107.25	113.00
25	c	502	CLA	CHC-C4B-NB	2.13	127.24	124.05
31	f	101	SQD	C1-C2-C3	-2.12	105.55	110.01
25	c	503	CLA	C3B-C4B-NB	-2.12	108.64	110.53
25	a	606	CLA	O2D-CGD-O1D	-2.12	119.72	123.85
25	B	616	CLA	CMB-C2B-C3B	2.12	131.53	126.55
31	f	101	SQD	C3-C4-C5	2.12	114.07	110.23
25	b	614	CLA	CMB-C2B-C1B	-2.12	122.20	125.42
32	C	520	DGD	C3G-C2G-C1G	-2.12	106.85	111.78
26	A	608	PHO	C2B-C1B-NB	-2.12	107.90	109.43
30	a	616	LMG	O8-C9-C8	2.11	114.49	108.40
25	c	504	CLA	CHD-C4C-NC	2.11	127.51	124.23
27	t	101	BCR	C35-C13-C12	2.11	121.32	118.09
35	V	201	HEC	C2B-C1B-NB	-2.11	107.46	109.90
25	c	509	CLA	CAA-CBA-CGA	2.11	119.20	113.21
25	B	601	CLA	O2D-CGD-CBD	2.11	114.92	111.23
29	J	101	STE	O2-C1-C2	2.11	120.67	114.00
27	b	618	BCR	C31-C1-C6	2.11	113.55	110.24
34	e	102	HEM	CHD-C4C-C3C	2.11	128.76	125.21
25	b	614	CLA	O2D-CGD-O1D	-2.11	119.74	123.85
25	C	508	CLA	O2A-CGA-O1A	-2.11	118.35	123.63
25	b	603	CLA	CHA-C4D-ND	2.11	136.90	132.55
25	C	503	CLA	C6-C5-C3	2.11	118.60	113.47
25	C	505	CLA	C2D-C1D-ND	-2.11	108.04	110.13
25	b	608	CLA	O2A-CGA-O1A	-2.11	118.36	123.63
25	c	501	CLA	O2A-CGA-O1A	-2.11	118.36	123.63
32	c	521	DGD	O4E-C4E-C5E	2.10	114.51	109.32
25	b	604	CLA	C3A-C2A-C1A	2.10	104.49	101.34
25	b	607	CLA	CHA-C1A-NA	-2.10	121.63	126.39
25	b	614	CLA	CHB-C1B-NB	2.10	127.20	124.05
25	C	506	CLA	CHD-C1D-ND	-2.10	121.84	124.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	C	516	LMG	O1-C1-C2	2.09	111.45	108.27
25	C	505	CLA	CHA-C1A-NA	-2.09	121.65	126.39
34	e	102	HEM	C4C-NC-C1C	2.09	109.23	105.82
30	C	516	LMG	O3-C3-C2	-2.09	105.44	110.38
29	m	101	STE	O2-C1-C2	2.09	120.61	114.00
25	B	611	CLA	C2D-C1D-ND	-2.09	108.06	110.13
25	C	505	CLA	C11-C12-C13	-2.09	109.02	115.97
25	B	601	CLA	C4-C3-C5	2.09	118.85	115.23
25	B	614	CLA	O1D-CGD-CBD	2.09	128.64	124.52
25	a	607	CLA	O2A-CGA-O1A	-2.09	118.41	123.63
25	C	505	CLA	O2A-CGA-O1A	-2.09	118.41	123.63
26	a	608	PHO	O2A-CGA-O1A	-2.09	118.41	123.63
25	b	605	CLA	CHB-C1B-NB	2.08	127.18	124.05
25	d	403	CLA	C3B-C4B-NB	-2.08	108.67	110.53
25	B	616	CLA	CMB-C2B-C1B	-2.08	122.25	125.42
27	C	514	BCR	C29-C30-C25	2.08	113.46	110.44
27	k	101	BCR	C38-C26-C25	-2.08	122.21	124.48
32	c	519	DGD	O3G-C1D-C2D	-2.08	105.11	108.27
25	C	505	CLA	CAC-C3C-C4C	2.08	127.50	124.79
25	A	607	CLA	CHC-C4B-NB	2.08	127.17	124.05
25	B	609	CLA	CMB-C2B-C1B	-2.08	122.25	125.42
25	b	616	CLA	C3B-C4B-NB	-2.08	108.67	110.53
33	L	101	LHG	O4-P-O5	2.08	122.11	112.44
29	d	412	STE	O2-C1-C2	2.08	120.56	114.00
25	C	501	CLA	CMC-C2C-C1C	2.08	128.28	125.03
25	B	605	CLA	O1D-CGD-CBD	2.08	128.61	124.52
25	b	612	CLA	C1-C2-C3	-2.07	122.80	126.20
25	C	509	CLA	O2A-CGA-O1A	-2.07	118.46	123.63
28	d	405	PL9	C40-C39-C38	-2.07	118.32	123.63
25	B	601	CLA	CHB-C1B-NB	2.07	127.15	124.05
25	b	613	CLA	O2A-CGA-O1A	-2.06	118.46	123.63
25	a	606	CLA	CHB-C4A-NA	2.06	127.38	124.40
25	B	613	CLA	CHC-C4B-NB	2.06	127.14	124.05
25	C	508	CLA	CHB-C4A-NA	2.06	127.38	124.40
25	b	615	CLA	C11-C12-C13	-2.06	109.11	115.97
31	b	620	SQD	C46-O48-C23	-2.06	109.58	117.12
25	c	512	CLA	C4-C3-C5	2.06	118.81	115.23
25	B	604	CLA	C1-O2A-CGA	-2.06	111.66	116.65
25	B	616	CLA	C1-C2-C3	-2.06	122.82	126.20
30	D	407	LMG	C9-C8-C7	2.06	116.58	111.78
26	a	608	PHO	C3B-C4B-NB	-2.06	106.12	107.46
25	a	609	CLA	C5-C3-C2	-2.06	116.55	121.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	e	102	HEM	CHA-C4D-ND	2.05	126.91	124.37
25	C	504	CLA	CHB-C4A-NA	2.05	127.36	124.40
25	c	512	CLA	CHD-C1D-ND	-2.05	121.92	124.80
30	D	407	LMG	C1-O6-C5	2.05	117.72	113.72
29	b	624	STE	C3-C2-C1	-2.05	109.16	114.51
25	B	605	CLA	C4D-CHA-C1A	2.05	123.69	121.24
25	B	612	CLA	CHB-C4A-NA	2.05	127.36	124.40
28	d	405	PL9	O2-C1-C2	-2.05	117.17	121.83
27	H	101	BCR	C37-C22-C23	2.05	121.22	118.09
28	a	611	PL9	C42-C43-C44	-2.04	122.94	127.62
25	b	614	CLA	CHA-C4D-ND	2.04	136.77	132.55
28	A	611	PL9	C22-C23-C24	-2.04	122.95	127.62
25	B	603	CLA	CHB-C4A-NA	2.04	127.35	124.40
25	b	611	CLA	C11-C12-C13	-2.04	109.17	115.97
25	B	616	CLA	CHB-C1B-NB	2.04	127.11	124.05
35	v	201	HEC	CHA-C4D-ND	2.04	126.62	124.42
25	C	503	CLA	C4D-CHA-C1A	2.04	123.68	121.24
34	e	102	HEM	CHB-C1B-NB	2.04	126.89	124.37
25	b	606	CLA	CHB-C1B-NB	2.04	127.11	124.05
25	b	608	CLA	CHD-C4C-NC	2.04	127.40	124.23
25	b	607	CLA	CHA-C4D-ND	2.04	136.76	132.55
33	L	101	LHG	O7-C5-C4	-2.04	101.04	108.34
35	V	201	HEC	C3B-C4B-NB	-2.04	107.94	110.17
25	a	606	CLA	C14-C13-C15	-2.03	104.02	111.27
27	D	404	BCR	C29-C28-C27	-2.03	106.81	111.28
26	D	401	PHO	CBC-CAC-C3C	2.03	115.78	112.87
32	c	520	DGD	C3G-O3G-C1D	2.03	118.15	113.80
25	C	503	CLA	C1D-ND-C4D	2.03	107.74	106.31
25	b	603	CLA	CMA-C3A-C4A	2.03	117.23	111.77
25	B	610	CLA	CHD-C1D-ND	-2.03	121.94	124.80
25	b	602	CLA	CHC-C1C-NC	2.03	127.37	124.31
27	B	618	BCR	C38-C26-C25	2.03	126.70	124.48
25	d	403	CLA	CHB-C4A-NA	2.03	127.33	124.40
29	b	624	STE	O2-C1-O1	-2.03	118.11	123.33
25	B	601	CLA	CHD-C1D-ND	-2.03	121.95	124.80
26	a	608	PHO	C4A-C3A-C2A	2.03	104.77	102.84
25	B	608	CLA	C1-O2A-CGA	2.03	121.56	116.65
25	b	604	CLA	CHC-C1C-NC	2.03	127.36	124.31
25	c	507	CLA	CHD-C4C-NC	2.03	127.37	124.23
25	c	512	CLA	O1D-CGD-CBD	2.02	128.51	124.52
25	c	503	CLA	O1D-CGD-CBD	2.02	128.50	124.52
29	E	104	STE	O2-C1-C2	2.02	120.39	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	d	405	PL9	C41-C39-C38	-2.02	116.63	121.17
30	b	623	LMG	O6-C5-C6	2.02	111.44	106.44
25	B	606	CLA	C2A-C1A-CHA	2.02	127.37	123.87
27	b	617	BCR	C11-C10-C9	-2.02	124.45	127.28
25	b	616	CLA	CMB-C2B-C3B	2.02	131.29	126.55
25	A	607	CLA	CMD-C2D-C1D	-2.01	121.18	124.73
25	D	403	CLA	CHC-C4B-NB	2.01	127.07	124.05
25	A	613	CLA	C2D-C1D-ND	-2.01	108.13	110.13
25	c	503	CLA	CMB-C2B-C3B	2.01	131.29	126.55
25	B	608	CLA	CHC-C4B-NB	2.01	127.07	124.05
25	c	508	CLA	O2D-CGD-CBD	2.01	114.75	111.23
27	B	619	BCR	C27-C26-C25	-2.01	119.99	122.70
28	d	405	PL9	O2-C1-C6	2.01	123.67	120.48
29	I	101	STE	O2-C1-C2	2.01	120.34	114.00
30	b	621	LMG	O3-C3-C2	-2.01	105.64	110.38
29	B	625	STE	O2-C1-C2	2.01	120.34	114.00
25	C	503	CLA	CHC-C4B-NB	2.01	127.06	124.05
25	c	504	CLA	CMB-C2B-C3B	2.01	131.27	126.55
25	c	511	CLA	CHA-C4D-ND	2.00	136.68	132.55
27	b	617	BCR	C33-C5-C4	-2.00	109.33	113.60
32	A	617	DGD	O4D-C4D-C5D	2.00	114.26	109.32
29	I	102	STE	O2-C1-C2	2.00	120.33	114.00
29	j	101	STE	O2-C1-C2	2.00	120.33	114.00
27	h	101	BCR	C38-C26-C25	-2.00	122.30	124.48
31	a	615	SQD	O9-S-C6	2.00	109.74	106.76
30	a	616	LMG	C9-O8-C28	2.00	124.43	117.12

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
35	V	201	HEC	NA
35	v	201	HEC	NA

All (1655) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	B	601	CLA	CBA-CGA-O2A-C1
25	B	601	CLA	O1A-CGA-O2A-C1
25	B	606	CLA	C2B-C3B-CAB-CBB
25	B	606	CLA	C4B-C3B-CAB-CBB
25	B	614	CLA	CAD-CBD-CGD-O2D
25	C	507	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
25	C	507	CLA	CHA-CBD-CGD-O2D
25	C	509	CLA	CHA-CBD-CGD-O1D
25	C	509	CLA	CHA-CBD-CGD-O2D
25	a	609	CLA	C11-C12-C13-C14
25	b	614	CLA	CAD-CBD-CGD-O1D
25	b	614	CLA	CAD-CBD-CGD-O2D
25	b	616	CLA	C2B-C3B-CAB-CBB
25	b	616	CLA	C4B-C3B-CAB-CBB
25	c	507	CLA	CHA-CBD-CGD-O2D
25	c	509	CLA	CHA-CBD-CGD-O2D
25	c	512	CLA	C2B-C3B-CAB-CBB
25	c	512	CLA	C4B-C3B-CAB-CBB
27	B	619	BCR	C7-C8-C9-C10
27	D	404	BCR	C23-C24-C25-C26
27	D	404	BCR	C23-C24-C25-C30
27	H	101	BCR	C5-C6-C7-C8
27	H	101	BCR	C7-C8-C9-C10
27	H	101	BCR	C7-C8-C9-C34
27	K	102	BCR	C7-C8-C9-C10
27	K	102	BCR	C7-C8-C9-C34
27	T	101	BCR	C23-C24-C25-C26
27	Y	101	BCR	C5-C6-C7-C8
27	Y	101	BCR	C21-C22-C23-C24
27	Y	101	BCR	C37-C22-C23-C24
27	c	514	BCR	C11-C12-C13-C14
27	k	101	BCR	C1-C6-C7-C8
27	k	101	BCR	C17-C18-C19-C20
27	k	101	BCR	C36-C18-C19-C20
27	k	101	BCR	C21-C22-C23-C24
27	k	102	BCR	C7-C8-C9-C10
27	k	102	BCR	C7-C8-C9-C34
27	k	102	BCR	C21-C22-C23-C24
28	A	611	PL9	C24-C26-C27-C28
28	A	611	PL9	C27-C28-C29-C31
28	A	611	PL9	C37-C38-C39-C41
28	D	405	PL9	C32-C33-C34-C35
28	D	405	PL9	C32-C33-C34-C36
28	a	611	PL9	C7-C8-C9-C11
28	a	611	PL9	C22-C23-C24-C25
28	a	611	PL9	C27-C28-C29-C30
28	a	611	PL9	C32-C33-C34-C35
28	a	611	PL9	C42-C43-C44-C45

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Mol	Chain	Res	Type	Atoms
28	d	405	PL9	C42-C43-C44-C45
30	A	614	LMG	C11-C10-O7-C8
30	C	516	LMG	C2-C1-O1-C7
30	C	523	LMG	C11-C10-O7-C8
30	D	406	LMG	C2-C1-O1-C7
30	D	406	LMG	O6-C1-O1-C7
30	D	406	LMG	C11-C10-O7-C8
30	b	623	LMG	C2-C1-O1-C7
30	b	623	LMG	O6-C1-O1-C7
31	A	616	SQD	O6-C44-C45-O47
31	A	616	SQD	C5-C6-S-O7
31	A	616	SQD	C5-C6-S-O8
31	A	616	SQD	C5-C6-S-O9
31	B	624	SQD	C2-C1-O6-C44
31	B	624	SQD	O5-C1-O6-C44
31	B	624	SQD	C45-C46-O48-C23
31	B	624	SQD	O49-C7-O47-C45
31	D	408	SQD	O5-C1-O6-C44
31	a	613	SQD	O47-C45-C46-O48
31	a	615	SQD	O6-C44-C45-O47
31	a	615	SQD	O5-C5-C6-S
31	a	615	SQD	C5-C6-S-O7
31	a	615	SQD	C5-C6-S-O8
31	b	620	SQD	O49-C7-O47-C45
31	b	620	SQD	C8-C7-O47-C45
31	f	101	SQD	O5-C1-O6-C44
32	A	617	DGD	O6D-C1D-O3G-C3G
33	B	623	LHG	O1-C1-C2-C3
33	D	409	LHG	C3-O3-P-O4
33	D	409	LHG	C3-O3-P-O6
33	E	101	LHG	C3-O3-P-O4
33	E	101	LHG	C3-O3-P-O5
33	E	101	LHG	C4-O6-P-O3
33	E	101	LHG	C4-O6-P-O4
33	E	101	LHG	C8-C7-O7-C5
33	L	101	LHG	C4-O6-P-O3
33	L	101	LHG	C4-O6-P-O4
33	a	614	LHG	O1-C1-C2-O2
33	a	614	LHG	O1-C1-C2-C3
33	a	614	LHG	C3-O3-P-O4
33	a	614	LHG	C3-O3-P-O5
33	a	614	LHG	C3-O3-P-O6

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Mol	Chain	Res	Type	Atoms
33	a	614	LHG	O6-C4-C5-O7
33	d	408	LHG	C3-O3-P-O5
33	d	408	LHG	C4-O6-P-O3
33	d	408	LHG	C4-O6-P-O4
33	l	101	LHG	C4-O6-P-O3
33	l	101	LHG	C4-O6-P-O4
33	l	101	LHG	C4-O6-P-O5
25	C	509	CLA	O1D-CGD-O2D-CED
25	C	509	CLA	CBD-CGD-O2D-CED
25	c	509	CLA	CBD-CGD-O2D-CED
25	c	513	CLA	CBD-CGD-O2D-CED
26	d	401	PHO	CBD-CGD-O2D-CED
30	B	620	LMG	O10-C28-O8-C9
30	c	518	LMG	O10-C28-O8-C9
28	A	611	PL9	C47-C48-C49-C51
28	D	405	PL9	C47-C48-C49-C51
28	a	611	PL9	C47-C48-C49-C50
28	a	611	PL9	C47-C48-C49-C51
30	c	518	LMG	C29-C28-O8-C9
31	f	101	SQD	O10-C23-O48-C46
30	A	614	LMG	O9-C10-O7-C8
30	C	523	LMG	O9-C10-O7-C8
30	D	406	LMG	O9-C10-O7-C8
33	E	101	LHG	O9-C7-O7-C5
25	B	616	CLA	CBA-CGA-O2A-C1
30	B	620	LMG	C29-C28-O8-C9
30	B	621	LMG	C29-C28-O8-C9
31	b	620	SQD	C24-C23-O48-C46
31	f	101	SQD	C24-C23-O48-C46
31	B	624	SQD	C8-C7-O47-C45
25	c	509	CLA	O1D-CGD-O2D-CED
25	B	605	CLA	C4-C3-C5-C6
25	C	504	CLA	C4-C3-C5-C6
25	a	609	CLA	C4-C3-C5-C6
25	b	603	CLA	C4-C3-C5-C6
25	b	605	CLA	C4-C3-C5-C6
28	a	611	PL9	C20-C19-C21-C22
25	C	504	CLA	C2-C3-C5-C6
25	a	609	CLA	C2-C3-C5-C6
25	b	603	CLA	C2-C3-C5-C6
25	b	605	CLA	C2-C3-C5-C6
28	a	611	PL9	C18-C19-C21-C22

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Mol	Chain	Res	Type	Atoms
28	d	405	PL9	C38-C39-C41-C42
25	b	601	CLA	C3-C5-C6-C7
30	a	616	LMG	C29-C28-O8-C9
31	D	408	SQD	C24-C23-O48-C46
28	A	611	PL9	C27-C28-C29-C30
28	a	611	PL9	C22-C23-C24-C26
30	B	621	LMG	O10-C28-O8-C9
30	a	616	LMG	O10-C28-O8-C9
25	c	513	CLA	O1D-CGD-O2D-CED
26	d	401	PHO	O1D-CGD-O2D-CED
28	D	405	PL9	C47-C48-C49-C50
25	b	602	CLA	C3-C5-C6-C7
25	b	601	CLA	CBD-CGD-O2D-CED
33	D	409	LHG	O2-C2-C3-O3
30	b	623	LMG	C29-C28-O8-C9
25	B	616	CLA	O1A-CGA-O2A-C1
31	b	620	SQD	O10-C23-O48-C46
32	h	102	DGD	C4E-C5E-C6E-O5E
26	A	608	PHO	C2C-C3C-CAC-CBC
33	l	101	LHG	C7-C8-C9-C10
25	B	605	CLA	C2-C3-C5-C6
25	C	507	CLA	C2-C3-C5-C6
30	b	623	LMG	O10-C28-O8-C9
31	D	408	SQD	O10-C23-O48-C46
30	D	406	LMG	O6-C5-C6-O5
28	A	611	PL9	C9-C11-C12-C13
28	A	611	PL9	C34-C36-C37-C38
28	a	611	PL9	C24-C26-C27-C28
28	a	611	PL9	C39-C41-C42-C43
28	a	611	PL9	C44-C46-C47-C48
25	d	402	CLA	C3-C5-C6-C7
25	b	606	CLA	CBD-CGD-O2D-CED
25	c	508	CLA	CBD-CGD-O2D-CED
35	V	201	HEC	C2C-C3C-CAC-CBC
30	b	623	LMG	O6-C5-C6-O5
30	b	623	LMG	C4-C5-C6-O5
29	d	410	STE	C5-C6-C7-C8
25	c	506	CLA	CBA-CGA-O2A-C1
30	C	516	LMG	C29-C28-O8-C9
31	B	624	SQD	C24-C23-O48-C46
25	c	511	CLA	CBD-CGD-O2D-CED
31	B	624	SQD	O10-C23-O48-C46

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Mol	Chain	Res	Type	Atoms
25	B	614	CLA	C4-C3-C5-C6
25	C	507	CLA	C4-C3-C5-C6
25	B	614	CLA	C2-C3-C5-C6
25	B	616	CLA	C3-C5-C6-C7
25	b	616	CLA	C3-C5-C6-C7
25	B	615	CLA	C6-C7-C8-C9
25	B	615	CLA	C11-C10-C8-C9
25	C	509	CLA	C11-C10-C8-C9
25	C	512	CLA	C11-C10-C8-C9
25	b	603	CLA	C11-C12-C13-C14
25	b	606	CLA	C14-C13-C15-C16
25	b	610	CLA	C14-C13-C15-C16
25	b	613	CLA	C11-C12-C13-C14
25	b	614	CLA	C6-C7-C8-C9
25	b	615	CLA	C6-C7-C8-C9
25	c	510	CLA	C11-C10-C8-C9
25	c	512	CLA	C11-C12-C13-C14
31	f	101	SQD	C2-C1-O6-C44
31	A	616	SQD	C16-C17-C18-C19
31	b	620	SQD	C7-C8-C9-C10
32	C	520	DGD	C1B-C2B-C3B-C4B
30	C	516	LMG	O10-C28-O8-C9
27	B	619	BCR	C7-C8-C9-C34
27	T	101	BCR	C37-C22-C23-C24
27	c	514	BCR	C11-C12-C13-C35
27	d	404	BCR	C37-C22-C23-C24
27	k	101	BCR	C37-C22-C23-C24
27	k	102	BCR	C37-C22-C23-C24
32	h	102	DGD	O6E-C5E-C6E-O5E
33	B	623	LHG	C23-C24-C25-C26
25	b	614	CLA	C5-C6-C7-C8
30	c	523	LMG	C11-C10-O7-C8
31	B	624	SQD	O6-C44-C45-O47
25	B	605	CLA	C13-C15-C16-C17
25	c	508	CLA	C8-C10-C11-C12
25	c	513	CLA	C13-C15-C16-C17
30	C	523	LMG	C28-C29-C30-C31
28	A	611	PL9	C22-C23-C24-C25
25	C	506	CLA	C8-C10-C11-C12
28	a	611	PL9	C42-C43-C44-C46
25	c	504	CLA	CBD-CGD-O2D-CED
25	B	603	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
25	C	508	CLA	C12-C13-C15-C16
25	b	611	CLA	C12-C13-C15-C16
35	V	201	HEC	C4C-C3C-CAC-CBC
31	D	408	SQD	C23-C24-C25-C26
32	c	521	DGD	C1A-C2A-C3A-C4A
33	L	101	LHG	C7-C8-C9-C10
27	K	101	BCR	C13-C14-C15-C16
27	c	514	BCR	C13-C14-C15-C16
28	A	611	PL9	C19-C21-C22-C23
28	A	611	PL9	C29-C31-C32-C33
25	c	509	CLA	C13-C15-C16-C17
29	B	622	STE	C1-C2-C3-C4
30	D	406	LMG	C10-C11-C12-C13
25	c	506	CLA	O1A-CGA-O2A-C1
25	B	606	CLA	C8-C10-C11-C12
25	C	506	CLA	C15-C16-C17-C18
25	b	611	CLA	C13-C15-C16-C17
25	b	616	CLA	C8-C10-C11-C12
25	C	502	CLA	C15-C16-C17-C18
25	C	503	CLA	C5-C6-C7-C8
25	b	607	CLA	C8-C10-C11-C12
25	c	502	CLA	C15-C16-C17-C18
30	c	522	LMG	C28-C29-C30-C31
32	c	519	DGD	C1B-C2B-C3B-C4B
33	E	101	LHG	C23-C24-C25-C26
25	A	607	CLA	C15-C16-C17-C18
25	C	507	CLA	C5-C6-C7-C8
29	C	515	STE	C1-C2-C3-C4
30	d	411	LMG	C28-C29-C30-C31
31	a	613	SQD	C7-C8-C9-C10
25	B	614	CLA	C8-C10-C11-C12
25	b	607	CLA	C10-C11-C12-C13
33	D	410	LHG	C32-C33-C34-C35
25	b	601	CLA	O1D-CGD-O2D-CED
25	C	509	CLA	C10-C11-C12-C13
25	C	512	CLA	C10-C11-C12-C13
25	a	609	CLA	C8-C10-C11-C12
25	c	505	CLA	C5-C6-C7-C8
25	c	512	CLA	C13-C15-C16-C17
25	b	607	CLA	CBD-CGD-O2D-CED
30	D	407	LMG	C10-C11-C12-C13
25	C	508	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
25	b	613	CLA	C13-C15-C16-C17
25	c	509	CLA	C10-C11-C12-C13
25	d	403	CLA	C8-C10-C11-C12
32	A	617	DGD	C2A-C1A-O1G-C1G
30	a	616	LMG	C11-C10-O7-C8
33	d	409	LHG	C24-C25-C26-C27
30	a	616	LMG	O9-C10-O7-C8
30	c	523	LMG	O9-C10-O7-C8
32	A	617	DGD	O1B-C1B-O2G-C2G
25	b	606	CLA	C2A-CAA-CBA-CGA
25	c	512	CLA	CBA-CGA-O2A-C1
25	A	607	CLA	C8-C10-C11-C12
25	C	506	CLA	C13-C15-C16-C17
25	a	606	CLA	C15-C16-C17-C18
25	a	607	CLA	C15-C16-C17-C18
25	A	606	CLA	C15-C16-C17-C18
32	C	521	DGD	C7A-C8A-C9A-CAA
25	a	609	CLA	C5-C6-C7-C8
25	b	604	CLA	C15-C16-C17-C18
25	c	502	CLA	C13-C15-C16-C17
30	a	616	LMG	C10-C11-C12-C13
32	A	617	DGD	C2B-C1B-O2G-C2G
25	B	613	CLA	C11-C12-C13-C14
28	A	611	PL9	C42-C43-C44-C45
29	A	618	STE	C7-C8-C9-C10
32	C	521	DGD	C2E-C1E-O5D-C6D
25	B	605	CLA	C16-C17-C18-C20
25	D	403	CLA	C5-C6-C7-C8
32	A	617	DGD	O1A-C1A-O1G-C1G
25	B	601	CLA	C10-C11-C12-C13
25	B	613	CLA	C10-C11-C12-C13
33	D	410	LHG	O1-C1-C2-C3
33	d	409	LHG	O1-C1-C2-C3
29	a	618	STE	C1-C2-C3-C4
30	a	616	LMG	C9-C8-O7-C10
30	b	623	LMG	C9-C8-O7-C10
31	b	620	SQD	C46-C45-O47-C7
25	C	513	CLA	C16-C17-C18-C19
25	D	403	CLA	C16-C17-C18-C20
25	b	611	CLA	C16-C17-C18-C19
25	b	611	CLA	C16-C17-C18-C20
25	b	612	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
25	c	506	CLA	C16-C17-C18-C20
25	b	614	CLA	C3-C5-C6-C7
25	c	513	CLA	C3-C5-C6-C7
25	b	612	CLA	C13-C15-C16-C17
25	b	614	CLA	C8-C10-C11-C12
30	A	614	LMG	O6-C1-O1-C7
30	d	411	LMG	C10-C11-C12-C13
32	h	102	DGD	C1A-C2A-C3A-C4A
25	B	604	CLA	C13-C15-C16-C17
31	A	615	SQD	C7-C8-C9-C10
25	b	604	CLA	C3-C5-C6-C7
25	B	601	CLA	C2-C1-O2A-CGA
25	B	601	CLA	C16-C17-C18-C19
25	B	603	CLA	C16-C17-C18-C20
25	B	605	CLA	C16-C17-C18-C19
25	B	615	CLA	C16-C17-C18-C20
25	D	403	CLA	C16-C17-C18-C19
25	c	503	CLA	C5-C6-C7-C8
29	b	625	STE	C4-C5-C6-C7
29	d	410	STE	C9-C10-C11-C12
29	B	625	STE	C11-C10-C9-C8
29	C	515	STE	C3-C4-C5-C6
29	C	518	STE	C3-C4-C5-C6
29	C	519	STE	C5-C6-C7-C8
29	M	101	STE	C7-C8-C9-C10
30	B	621	LMG	C29-C30-C31-C32
31	A	615	SQD	C15-C16-C17-C18
33	E	101	LHG	C28-C29-C30-C31
29	I	101	STE	C7-C8-C9-C10
30	B	620	LMG	C29-C30-C31-C32
30	B	621	LMG	C17-C18-C19-C20
30	C	523	LMG	C15-C16-C17-C18
32	A	617	DGD	CBA-CCA-CDA-CEA
33	E	101	LHG	C24-C25-C26-C27
33	d	408	LHG	C34-C35-C36-C37
29	C	525	STE	C4-C5-C6-C7
29	K	103	STE	C10-C11-C12-C13
29	M	103	STE	C6-C7-C8-C9
30	b	621	LMG	C14-C15-C16-C17
30	b	623	LMG	C22-C23-C24-C25
30	b	623	LMG	C40-C41-C42-C43
31	f	101	SQD	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
32	C	521	DGD	C2A-C3A-C4A-C5A
33	B	623	LHG	C12-C13-C14-C15
33	D	409	LHG	C11-C10-C9-C8
33	a	614	LHG	C24-C25-C26-C27
33	B	623	LHG	O1-C1-C2-O2
29	B	627	STE	C4-C5-C6-C7
29	Z	101	STE	C6-C7-C8-C9
29	c	517	STE	C5-C6-C7-C8
33	d	407	LHG	C9-C10-C11-C12
25	A	613	CLA	C15-C16-C17-C18
25	A	607	CLA	C4B-C3B-CAB-CBB
25	a	607	CLA	C4B-C3B-CAB-CBB
25	b	601	CLA	C4B-C3B-CAB-CBB
30	a	617	LMG	C10-C11-C12-C13
29	l	102	STE	C11-C10-C9-C8
30	D	407	LMG	C13-C14-C15-C16
30	b	623	LMG	C29-C30-C31-C32
32	A	617	DGD	C9B-CAB-CBB-CCB
25	B	603	CLA	C16-C17-C18-C19
25	B	615	CLA	C16-C17-C18-C19
25	C	510	CLA	C16-C17-C18-C19
25	C	513	CLA	C16-C17-C18-C20
25	b	609	CLA	C16-C17-C18-C20
25	c	506	CLA	C16-C17-C18-C19
25	B	606	CLA	C2A-CAA-CBA-CGA
29	A	612	STE	C4-C5-C6-C7
31	b	620	SQD	C11-C12-C13-C14
25	b	601	CLA	C8-C10-C11-C12
25	B	613	CLA	C11-C10-C8-C7
25	B	615	CLA	C6-C7-C8-C10
25	b	606	CLA	C6-C7-C8-C10
29	e	101	STE	C13-C14-C15-C16
30	C	523	LMG	C37-C38-C39-C40
31	b	620	SQD	C16-C17-C18-C19
29	B	625	STE	C1-C2-C3-C4
29	B	625	STE	C7-C8-C9-C10
29	B	627	STE	C3-C4-C5-C6
30	a	616	LMG	C35-C36-C37-C38
31	B	624	SQD	C11-C12-C13-C14
31	b	620	SQD	C29-C30-C31-C32
32	C	520	DGD	C9B-CAB-CBB-CCB
25	c	512	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
25	c	508	CLA	O1D-CGD-O2D-CED
29	T	102	STE	C11-C12-C13-C14
29	x	101	STE	C3-C4-C5-C6
30	B	620	LMG	C32-C33-C34-C35
30	a	616	LMG	C29-C30-C31-C32
30	a	616	LMG	C32-C33-C34-C35
31	a	613	SQD	C15-C16-C17-C18
31	f	101	SQD	C29-C30-C31-C32
33	E	101	LHG	C17-C18-C19-C20
28	a	611	PL9	C28-C29-C31-C32
30	b	623	LMG	C14-C15-C16-C17
27	t	101	BCR	C13-C14-C15-C16
25	b	609	CLA	C16-C17-C18-C19
29	b	624	STE	C11-C10-C9-C8
29	d	410	STE	C3-C4-C5-C6
31	a	613	SQD	C27-C28-C29-C30
31	b	620	SQD	C12-C13-C14-C15
33	B	623	LHG	C29-C30-C31-C32
29	T	102	STE	C4-C5-C6-C7
29	e	103	STE	C14-C15-C16-C17
30	c	522	LMG	C36-C37-C38-C39
31	A	615	SQD	C30-C31-C32-C33
30	A	614	LMG	C10-C11-C12-C13
29	B	622	STE	C10-C11-C12-C13
29	E	104	STE	C10-C11-C12-C13
29	b	622	STE	C4-C5-C6-C7
29	c	516	STE	C7-C8-C9-C10
29	e	103	STE	C13-C14-C15-C16
30	A	614	LMG	C16-C17-C18-C19
30	b	621	LMG	C36-C37-C38-C39
30	b	623	LMG	C38-C39-C40-C41
31	A	615	SQD	C16-C17-C18-C19
32	C	522	DGD	C3A-C4A-C5A-C6A
32	H	102	DGD	C9A-CAA-CBA-CCA
32	c	519	DGD	C6B-C7B-C8B-C9B
33	d	407	LHG	C18-C19-C20-C21
30	a	617	LMG	C14-C15-C16-C17
32	C	520	DGD	CCA-CDA-CEA-CFA
33	D	410	LHG	C29-C30-C31-C32
30	b	623	LMG	C32-C33-C34-C35
35	v	201	HEC	C2C-C3C-CAC-CBC
29	J	101	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
29	J	101	STE	C6-C7-C8-C9
29	t	102	STE	C6-C7-C8-C9
30	A	614	LMG	C36-C37-C38-C39
30	D	406	LMG	C30-C31-C32-C33
30	c	523	LMG	C15-C16-C17-C18
31	A	615	SQD	C12-C13-C14-C15
31	B	624	SQD	C17-C18-C19-C20
31	a	615	SQD	C18-C19-C20-C21
32	C	521	DGD	CCA-CDA-CEA-CFA
32	c	520	DGD	CCA-CDA-CEA-CFA
33	B	623	LHG	C9-C10-C11-C12
33	l	101	LHG	C16-C17-C18-C19
25	B	601	CLA	C16-C17-C18-C20
25	B	611	CLA	C16-C17-C18-C20
25	a	607	CLA	C2B-C3B-CAB-CBB
25	b	601	CLA	C2B-C3B-CAB-CBB
27	H	101	BCR	C1-C6-C7-C8
27	Y	101	BCR	C1-C6-C7-C8
27	Y	101	BCR	C23-C24-C25-C30
27	b	617	BCR	C5-C6-C7-C8
27	k	101	BCR	C5-C6-C7-C8
27	t	101	BCR	C23-C24-C25-C26
25	B	607	CLA	C13-C15-C16-C17
29	x	101	STE	C2-C3-C4-C5
30	B	621	LMG	C31-C32-C33-C34
30	b	623	LMG	C30-C31-C32-C33
32	C	520	DGD	C6A-C7A-C8A-C9A
32	H	102	DGD	CAB-CBB-CCB-CDB
33	E	101	LHG	C15-C16-C17-C18
32	c	519	DGD	O6D-C5D-C6D-O5D
29	B	626	STE	C2-C3-C4-C5
29	b	626	STE	C12-C13-C14-C15
30	D	407	LMG	C14-C15-C16-C17
32	c	521	DGD	C2A-C3A-C4A-C5A
25	C	510	CLA	C10-C11-C12-C13
29	K	103	STE	C12-C13-C14-C15
30	D	407	LMG	C17-C18-C19-C20
33	L	101	LHG	C11-C10-C9-C8
29	K	103	STE	C14-C15-C16-C17
29	a	618	STE	C6-C7-C8-C9
25	a	606	CLA	C2C-C3C-CAC-CBC
29	E	103	STE	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
32	H	102	DGD	C6B-C7B-C8B-C9B
32	h	102	DGD	CAA-CBA-CCA-CDA
33	L	101	LHG	C17-C18-C19-C20
25	b	615	CLA	C13-C15-C16-C17
29	H	103	STE	C14-C15-C16-C17
29	d	406	STE	C2-C3-C4-C5
32	C	522	DGD	C8B-C9B-CAB-CBB
32	H	102	DGD	CCB-CDB-CEB-CFB
33	E	101	LHG	C12-C13-C14-C15
33	L	101	LHG	C14-C15-C16-C17
25	c	512	CLA	C6-C7-C8-C9
29	B	625	STE	C6-C7-C8-C9
29	C	525	STE	C5-C6-C7-C8
29	j	102	STE	C6-C7-C8-C9
30	B	620	LMG	C34-C35-C36-C37
30	D	406	LMG	C39-C40-C41-C42
31	A	615	SQD	C33-C34-C35-C36
33	l	101	LHG	C11-C12-C13-C14
29	M	103	STE	C11-C10-C9-C8
30	c	522	LMG	C12-C13-C14-C15
30	d	411	LMG	C33-C34-C35-C36
31	A	615	SQD	C11-C12-C13-C14
31	a	615	SQD	C31-C32-C33-C34
32	C	521	DGD	C4B-C5B-C6B-C7B
33	B	623	LHG	C31-C32-C33-C34
32	C	521	DGD	O6E-C1E-O5D-C6D
29	j	101	STE	C4-C5-C6-C7
30	B	620	LMG	C11-C12-C13-C14
30	c	523	LMG	C41-C42-C43-C44
33	l	101	LHG	C10-C11-C12-C13
29	M	101	STE	C9-C10-C11-C12
30	d	411	LMG	C34-C35-C36-C37
31	b	620	SQD	C18-C19-C20-C21
33	d	408	LHG	C15-C16-C17-C18
33	d	409	LHG	C34-C35-C36-C37
29	t	102	STE	C1-C2-C3-C4
30	C	523	LMG	C38-C39-C40-C41
30	b	621	LMG	C12-C13-C14-C15
31	A	616	SQD	C14-C15-C16-C17
31	a	613	SQD	C31-C32-C33-C34
31	b	620	SQD	C28-C29-C30-C31
25	c	506	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
31	a	613	SQD	C24-C23-O48-C46
30	B	620	LMG	C33-C34-C35-C36
33	d	409	LHG	C32-C33-C34-C35
32	h	102	DGD	CDA-CEA-CFA-CGA
29	E	103	STE	C11-C10-C9-C8
29	H	103	STE	C11-C12-C13-C14
29	c	517	STE	C9-C10-C11-C12
25	C	513	CLA	C8-C10-C11-C12
29	b	622	STE	C7-C8-C9-C10
32	c	520	DGD	C6A-C7A-C8A-C9A
29	C	515	STE	C11-C10-C9-C8
29	d	412	STE	C4-C5-C6-C7
29	l	102	STE	C2-C3-C4-C5
25	B	601	CLA	C5-C6-C7-C8
25	b	605	CLA	C8-C10-C11-C12
33	d	407	LHG	C28-C29-C30-C31
29	A	618	STE	C2-C3-C4-C5
30	a	616	LMG	C8-C7-O1-C1
33	l	101	LHG	C29-C30-C31-C32
25	c	512	CLA	C2A-CAA-CBA-CGA
25	B	611	CLA	C16-C17-C18-C19
25	B	616	CLA	C11-C12-C13-C14
25	B	616	CLA	C11-C12-C13-C15
25	c	511	CLA	C16-C17-C18-C20
29	A	618	STE	C9-C10-C11-C12
29	E	102	STE	C4-C5-C6-C7
29	d	412	STE	C5-C6-C7-C8
31	f	101	SQD	C27-C28-C29-C30
32	h	102	DGD	C2B-C3B-C4B-C5B
25	C	506	CLA	C4-C3-C5-C6
28	D	405	PL9	C35-C34-C36-C37
30	B	621	LMG	C32-C33-C34-C35
31	f	101	SQD	C32-C33-C34-C35
29	A	619	STE	C14-C15-C16-C17
29	E	103	STE	C12-C13-C14-C15
29	c	516	STE	C6-C7-C8-C9
30	D	407	LMG	C12-C13-C14-C15
31	b	620	SQD	C11-C10-C9-C8
32	h	102	DGD	CDB-CEB-CFB-CGB
29	E	104	STE	C4-C5-C6-C7
31	a	615	SQD	C17-C18-C19-C20
30	c	523	LMG	O6-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
31	A	616	SQD	C9-C10-C11-C12
33	E	101	LHG	C29-C30-C31-C32
25	b	606	CLA	C15-C16-C17-C18
33	d	408	LHG	C12-C13-C14-C15
30	B	621	LMG	C18-C19-C20-C21
30	b	623	LMG	C35-C36-C37-C38
32	H	102	DGD	C4B-C5B-C6B-C7B
30	C	523	LMG	C10-C11-C12-C13
25	B	612	CLA	C10-C11-C12-C13
25	c	504	CLA	O1D-CGD-O2D-CED
29	M	103	STE	C9-C10-C11-C12
29	M	103	STE	C13-C14-C15-C16
30	B	621	LMG	C37-C38-C39-C40
30	a	616	LMG	C31-C32-C33-C34
30	a	616	LMG	O7-C8-C9-O8
30	c	523	LMG	O7-C8-C9-O8
29	Z	101	STE	C5-C6-C7-C8
30	b	623	LMG	C18-C19-C20-C21
30	D	406	LMG	C4-C5-C6-O5
30	b	621	LMG	C16-C17-C18-C19
30	b	623	LMG	C17-C18-C19-C20
31	D	408	SQD	C25-C26-C27-C28
31	D	408	SQD	C34-C35-C36-C37
29	C	519	STE	C6-C7-C8-C9
29	I	102	STE	C6-C7-C8-C9
29	l	102	STE	C5-C6-C7-C8
30	B	621	LMG	C39-C40-C41-C42
29	C	526	STE	C11-C12-C13-C14
29	b	625	STE	C5-C6-C7-C8
30	B	620	LMG	C31-C32-C33-C34
31	B	624	SQD	C9-C10-C11-C12
33	B	623	LHG	C26-C27-C28-C29
25	c	506	CLA	C2-C1-O2A-CGA
25	C	510	CLA	C16-C17-C18-C20
25	c	511	CLA	C16-C17-C18-C19
25	B	605	CLA	C8-C10-C11-C12
29	Z	101	STE	C2-C3-C4-C5
29	c	517	STE	C12-C13-C14-C15
29	l	102	STE	C4-C5-C6-C7
30	C	523	LMG	C13-C14-C15-C16
30	C	523	LMG	C30-C31-C32-C33
25	A	609	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
25	C	506	CLA	C2-C3-C5-C6
29	I	102	STE	C5-C6-C7-C8
29	J	101	STE	C5-C6-C7-C8
31	B	624	SQD	C13-C14-C15-C16
32	c	520	DGD	CCB-CDB-CEB-CFB
33	l	101	LHG	C17-C18-C19-C20
33	d	408	LHG	C28-C29-C30-C31
33	L	101	LHG	C5-C6-O8-C23
31	b	620	SQD	C13-C14-C15-C16
25	b	610	CLA	C15-C16-C17-C18
29	B	622	STE	C5-C6-C7-C8
29	z	101	STE	C4-C5-C6-C7
30	C	523	LMG	C32-C33-C34-C35
31	a	613	SQD	C12-C13-C14-C15
25	B	607	CLA	C3-C5-C6-C7
25	b	615	CLA	C3-C5-C6-C7
33	D	410	LHG	C11-C12-C13-C14
29	c	517	STE	C13-C14-C15-C16
33	B	623	LHG	C17-C18-C19-C20
33	d	407	LHG	C25-C26-C27-C28
25	c	513	CLA	C1A-C2A-CAA-CBA
30	d	411	LMG	C30-C31-C32-C33
33	d	409	LHG	C29-C30-C31-C32
31	a	613	SQD	O10-C23-O48-C46
29	K	103	STE	C7-C8-C9-C10
29	b	622	STE	C14-C15-C16-C17
31	a	613	SQD	C33-C34-C35-C36
33	d	409	LHG	C30-C31-C32-C33
25	c	503	CLA	C8-C10-C11-C12
33	a	614	LHG	O6-C4-C5-C6
30	D	407	LMG	O6-C5-C6-O5
32	C	520	DGD	C7B-C8B-C9B-CAB
25	B	613	CLA	C12-C13-C15-C16
25	D	403	CLA	C11-C10-C8-C7
25	a	609	CLA	C11-C12-C13-C15
25	b	606	CLA	C12-C13-C15-C16
25	d	402	CLA	C6-C7-C8-C10
30	C	516	LMG	C16-C17-C18-C19
31	B	624	SQD	C33-C34-C35-C36
25	B	616	CLA	C5-C6-C7-C8
25	A	606	CLA	C13-C15-C16-C17
25	B	606	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
25	c	505	CLA	C13-C15-C16-C17
29	E	102	STE	C1-C2-C3-C4
33	a	614	LHG	C7-C8-C9-C10
30	D	406	LMG	C35-C36-C37-C38
25	c	505	CLA	C2-C3-C5-C6
28	A	611	PL9	C47-C48-C49-C50
30	A	614	LMG	C12-C13-C14-C15
30	b	621	LMG	C19-C20-C21-C22
31	f	101	SQD	C25-C26-C27-C28
32	A	617	DGD	C6B-C7B-C8B-C9B
25	b	610	CLA	C2A-CAA-CBA-CGA
25	B	607	CLA	C14-C13-C15-C16
25	B	615	CLA	C11-C12-C13-C14
25	D	403	CLA	C11-C10-C8-C9
25	a	607	CLA	C14-C13-C15-C16
25	a	609	CLA	C6-C7-C8-C9
25	b	607	CLA	C6-C7-C8-C9
25	c	504	CLA	C11-C10-C8-C9
25	d	402	CLA	C6-C7-C8-C9
29	I	102	STE	C9-C10-C11-C12
31	a	615	SQD	C7-C8-C9-C10
31	a	615	SQD	C32-C33-C34-C35
32	H	102	DGD	C7A-C8A-C9A-CAA
25	B	601	CLA	C13-C15-C16-C17
29	d	406	STE	C4-C5-C6-C7
31	D	408	SQD	C2-C1-O6-C44
31	A	615	SQD	C13-C14-C15-C16
32	A	617	DGD	C2A-C3A-C4A-C5A
30	D	406	LMG	O1-C7-C8-C9
30	b	623	LMG	O1-C7-C8-C9
30	c	523	LMG	C7-C8-C9-O8
31	A	615	SQD	O6-C44-C45-C46
33	a	614	LHG	C4-C5-C6-O8
29	M	103	STE	C11-C12-C13-C14
31	a	613	SQD	C11-C10-C9-C8
32	C	520	DGD	C2B-C3B-C4B-C5B
32	c	520	DGD	CAA-CBA-CCA-CDA
31	a	613	SQD	C9-C10-C11-C12
32	h	102	DGD	C7A-C8A-C9A-CAA
25	b	616	CLA	CBA-CGA-O2A-C1
30	c	523	LMG	C29-C28-O8-C9
30	B	620	LMG	O6-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
25	c	512	CLA	C16-C17-C18-C19
25	c	512	CLA	C16-C17-C18-C20
29	D	411	STE	C13-C14-C15-C16
32	c	521	DGD	C7B-C8B-C9B-CAB
25	B	615	CLA	C15-C16-C17-C18
29	M	101	STE	C11-C10-C9-C8
33	E	101	LHG	C25-C26-C27-C28
30	c	522	LMG	C29-C30-C31-C32
25	b	606	CLA	O1D-CGD-O2D-CED
25	B	606	CLA	C5-C6-C7-C8
32	C	520	DGD	O6E-C5E-C6E-O5E
25	c	505	CLA	C4-C3-C5-C6
28	d	405	PL9	C45-C44-C46-C47
25	b	611	CLA	C15-C16-C17-C18
29	d	406	STE	C12-C13-C14-C15
32	C	522	DGD	C3B-C4B-C5B-C6B
25	B	613	CLA	C16-C17-C18-C20
30	a	616	LMG	C22-C23-C24-C25
32	C	521	DGD	CAB-CBB-CCB-CDB
30	c	522	LMG	O6-C5-C6-O5
30	d	411	LMG	O6-C5-C6-O5
32	c	519	DGD	O6E-C5E-C6E-O5E
25	C	509	CLA	C13-C15-C16-C17
25	c	507	CLA	C5-C6-C7-C8
29	C	525	STE	C14-C15-C16-C17
29	E	103	STE	C14-C15-C16-C17
32	H	102	DGD	C8B-C9B-CAB-CBB
32	c	519	DGD	CBA-CCA-CDA-CEA
33	D	410	LHG	C34-C35-C36-C37
33	a	614	LHG	C11-C12-C13-C14
29	M	101	STE	C4-C5-C6-C7
30	A	614	LMG	C9-C8-O7-C10
30	B	621	LMG	C7-C8-O7-C10
29	b	622	STE	C10-C11-C12-C13
32	c	519	DGD	C9A-CAA-CBA-CCA
32	C	520	DGD	O6D-C5D-C6D-O5D
29	f	102	STE	C13-C14-C15-C16
29	t	102	STE	C3-C4-C5-C6
30	D	407	LMG	C38-C39-C40-C41
32	c	520	DGD	C6B-C7B-C8B-C9B
29	d	406	STE	C14-C15-C16-C17
32	c	521	DGD	C2B-C3B-C4B-C5B

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Mol	Chain	Res	Type	Atoms
30	a	617	LMG	C17-C18-C19-C20
31	A	615	SQD	C24-C25-C26-C27
25	b	601	CLA	C15-C16-C17-C18
29	B	625	STE	C11-C12-C13-C14
29	E	104	STE	C11-C10-C9-C8
31	B	624	SQD	C25-C26-C27-C28
30	a	617	LMG	C29-C28-O8-C9
32	c	521	DGD	C1B-C2B-C3B-C4B
32	C	521	DGD	CBA-CCA-CDA-CEA
32	C	522	DGD	C4B-C5B-C6B-C7B
32	c	519	DGD	C3B-C4B-C5B-C6B
32	h	102	DGD	CAB-CBB-CCB-CDB
33	a	614	LHG	C15-C16-C17-C18
31	b	620	SQD	C25-C26-C27-C28
33	l	101	LHG	C12-C13-C14-C15
26	d	401	PHO	C3-C5-C6-C7
25	b	607	CLA	C16-C17-C18-C19
29	Z	101	STE	C11-C12-C13-C14
30	a	617	LMG	C16-C17-C18-C19
30	c	523	LMG	C31-C32-C33-C34
33	d	407	LHG	C10-C11-C12-C13
33	l	101	LHG	C27-C28-C29-C30
29	j	101	STE	C7-C8-C9-C10
31	A	616	SQD	C19-C20-C21-C22
29	d	410	STE	C4-C5-C6-C7
30	C	523	LMG	C39-C40-C41-C42
30	b	623	LMG	C15-C16-C17-C18
32	c	521	DGD	C7A-C8A-C9A-CAA
30	C	523	LMG	O1-C7-C8-O7
31	A	615	SQD	O6-C44-C45-O47
29	l	102	STE	C6-C7-C8-C9
30	a	617	LMG	C38-C39-C40-C41
30	c	518	LMG	C11-C12-C13-C14
31	a	615	SQD	C35-C36-C37-C38
29	f	102	STE	C12-C13-C14-C15
30	b	623	LMG	C11-C12-C13-C14
32	A	617	DGD	C4B-C5B-C6B-C7B
33	d	408	LHG	C17-C18-C19-C20
25	c	511	CLA	O1D-CGD-O2D-CED
30	c	522	LMG	C40-C41-C42-C43
32	c	521	DGD	CDA-CEA-CFA-CGA
29	I	102	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
29	e	104	STE	C6-C7-C8-C9
30	c	522	LMG	C38-C39-C40-C41
31	b	620	SQD	C9-C10-C11-C12
25	B	615	CLA	C3-C5-C6-C7
33	d	407	LHG	C16-C17-C18-C19
30	A	614	LMG	C19-C20-C21-C22
32	C	521	DGD	CDA-CEA-CFA-CGA
32	C	522	DGD	C8A-C9A-CAA-CBA
29	T	102	STE	C12-C13-C14-C15
33	L	101	LHG	C19-C20-C21-C22
32	c	519	DGD	C4D-C5D-C6D-O5D
29	C	525	STE	C7-C8-C9-C10
31	D	408	SQD	C31-C32-C33-C34
32	H	102	DGD	C5B-C6B-C7B-C8B
32	h	102	DGD	O2G-C1B-C2B-C3B
28	A	611	PL9	C37-C38-C39-C40
33	d	408	LHG	C26-C27-C28-C29
35	V	201	HEC	C2B-C3B-CAB-CBB
25	B	612	CLA	C3-C5-C6-C7
29	X	101	STE	C11-C12-C13-C14
29	i	101	STE	C3-C4-C5-C6
29	l	102	STE	C15-C16-C17-C18
30	D	407	LMG	C22-C23-C24-C25
29	b	626	STE	C11-C12-C13-C14
25	B	615	CLA	C13-C15-C16-C17
25	c	509	CLA	C4-C3-C5-C6
28	a	611	PL9	C12-C11-C9-C10
25	B	604	CLA	C10-C11-C12-C13
25	b	601	CLA	C10-C11-C12-C13
29	f	102	STE	C15-C16-C17-C18
31	D	408	SQD	C29-C30-C31-C32
29	a	618	STE	C4-C5-C6-C7
29	j	102	STE	C11-C10-C9-C8
32	c	519	DGD	C3A-C4A-C5A-C6A
33	d	408	LHG	C9-C10-C11-C12
31	D	408	SQD	C45-C44-O6-C1
25	B	612	CLA	C14-C13-C15-C16
25	B	613	CLA	C14-C13-C15-C16
25	b	602	CLA	C6-C7-C8-C9
25	b	603	CLA	C6-C7-C8-C9
25	b	611	CLA	C14-C13-C15-C16
25	c	506	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
25	c	511	CLA	C11-C10-C8-C9
32	c	520	DGD	C5B-C6B-C7B-C8B
25	D	403	CLA	C10-C11-C12-C13
25	b	612	CLA	C10-C11-C12-C13
25	c	503	CLA	C15-C16-C17-C18
33	d	409	LHG	C2-C3-O3-P
29	e	104	STE	C4-C5-C6-C7
29	x	101	STE	C5-C6-C7-C8
30	a	616	LMG	C23-C24-C25-C26
32	C	521	DGD	C9B-CAB-CBB-CCB
29	H	103	STE	C1-C2-C3-C4
29	t	103	STE	C7-C8-C9-C10
35	v	201	HEC	C4C-C3C-CAC-CBC
25	b	611	CLA	C8-C10-C11-C12
30	A	614	LMG	C17-C18-C19-C20
28	a	611	PL9	C17-C18-C19-C21
29	B	625	STE	C5-C6-C7-C8
30	B	620	LMG	C30-C31-C32-C33
30	c	523	LMG	C36-C37-C38-C39
30	a	617	LMG	C2-C1-O1-C7
32	c	520	DGD	C2E-C1E-O5D-C6D
29	H	103	STE	C3-C4-C5-C6
29	H	103	STE	C7-C8-C9-C10
32	A	617	DGD	C4A-C5A-C6A-C7A
31	A	615	SQD	C17-C18-C19-C20
31	B	624	SQD	C19-C20-C21-C22
29	C	525	STE	C10-C11-C12-C13
33	E	101	LHG	C10-C11-C12-C13
33	a	614	LHG	C19-C20-C21-C22
25	A	607	CLA	C11-C10-C8-C7
25	B	612	CLA	C12-C13-C15-C16
25	B	615	CLA	C11-C12-C13-C15
25	C	509	CLA	C12-C13-C15-C16
25	a	609	CLA	C6-C7-C8-C10
25	b	603	CLA	C6-C7-C8-C10
25	b	603	CLA	C11-C10-C8-C7
25	b	607	CLA	C6-C7-C8-C10
25	b	614	CLA	C12-C13-C15-C16
25	b	615	CLA	C6-C7-C8-C10
25	c	504	CLA	C11-C10-C8-C7
25	c	506	CLA	C11-C10-C8-C7
25	c	508	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	c	513	CLA	C12-C13-C15-C16
25	B	616	CLA	C8-C10-C11-C12
29	M	102	STE	C1-C2-C3-C4
32	c	519	DGD	CDA-CEA-CFA-CGA
29	X	101	STE	C7-C8-C9-C10
30	d	411	LMG	C37-C38-C39-C40
25	b	607	CLA	C16-C17-C18-C20
29	E	103	STE	C15-C16-C17-C18
30	b	623	LMG	C24-C25-C26-C27
29	B	626	STE	C5-C6-C7-C8
29	d	406	STE	C13-C14-C15-C16
25	C	510	CLA	C4-C3-C5-C6
32	c	520	DGD	C9A-CAA-CBA-CCA
33	B	623	LHG	C13-C14-C15-C16
29	M	101	STE	C6-C7-C8-C9
32	C	521	DGD	CDB-CEB-CFB-CGB
27	K	102	BCR	C13-C14-C15-C16
30	c	523	LMG	O10-C28-O8-C9
29	T	102	STE	C9-C10-C11-C12
29	e	101	STE	C11-C12-C13-C14
32	C	521	DGD	C8B-C9B-CAB-CBB
25	b	614	CLA	C10-C11-C12-C13
29	C	518	STE	C4-C5-C6-C7
29	h	104	STE	C9-C10-C11-C12
30	c	523	LMG	C37-C38-C39-C40
32	H	102	DGD	CAA-CBA-CCA-CDA
33	D	409	LHG	C1-C2-C3-O3
30	a	617	LMG	C18-C19-C20-C21
32	A	617	DGD	C5A-C6A-C7A-C8A
32	C	521	DGD	C7B-C8B-C9B-CAB
32	c	521	DGD	CAA-CBA-CCA-CDA
25	B	606	CLA	C15-C16-C17-C18
30	a	616	LMG	C7-C8-C9-O8
31	A	616	SQD	O6-C44-C45-C46
29	e	103	STE	C11-C12-C13-C14
29	t	102	STE	C11-C10-C9-C8
31	a	615	SQD	C30-C31-C32-C33
29	M	101	STE	C10-C11-C12-C13
32	C	520	DGD	CDA-CEA-CFA-CGA
32	c	521	DGD	CBB-CCB-CDB-CEB
25	c	501	CLA	CBD-CGD-O2D-CED
25	C	505	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
29	l	102	STE	C14-C15-C16-C17
25	b	609	CLA	C4-C3-C5-C6
32	c	520	DGD	C1B-C2B-C3B-C4B
29	X	101	STE	C12-C13-C14-C15
33	l	101	LHG	C14-C15-C16-C17
25	b	609	CLA	C2-C3-C5-C6
25	c	509	CLA	C2-C3-C5-C6
28	d	405	PL9	C13-C14-C16-C17
29	M	101	STE	C5-C6-C7-C8
31	D	408	SQD	C32-C33-C34-C35
27	b	617	BCR	C1-C6-C7-C8
29	C	519	STE	C7-C8-C9-C10
31	D	408	SQD	C27-C28-C29-C30
32	A	617	DGD	C3B-C4B-C5B-C6B
32	C	521	DGD	C6B-C7B-C8B-C9B
29	C	519	STE	C11-C10-C9-C8
33	D	409	LHG	C12-C13-C14-C15
25	a	609	CLA	C13-C15-C16-C17
29	C	518	STE	C2-C3-C4-C5
29	b	622	STE	C15-C16-C17-C18
29	A	618	STE	C4-C5-C6-C7
25	B	606	CLA	C16-C17-C18-C19
29	x	101	STE	C1-C2-C3-C4
31	a	615	SQD	C23-C24-C25-C26
25	b	603	CLA	C13-C15-C16-C17
25	b	615	CLA	C8-C10-C11-C12
30	D	406	LMG	O1-C7-C8-O7
33	a	614	LHG	O7-C5-C6-O8
32	C	522	DGD	C5A-C6A-C7A-C8A
28	a	611	PL9	C4-C3-C7-C8
25	b	607	CLA	O1D-CGD-O2D-CED
30	B	621	LMG	C33-C34-C35-C36
30	a	617	LMG	C20-C21-C22-C23
25	A	606	CLA	C2C-C3C-CAC-CBC
28	d	405	PL9	C30-C29-C31-C32
29	l	102	STE	C9-C10-C11-C12
31	D	408	SQD	C45-C46-O48-C23
25	b	608	CLA	C13-C15-C16-C17
25	C	510	CLA	C2-C3-C5-C6
31	A	615	SQD	C11-C10-C9-C8
25	b	612	CLA	C16-C17-C18-C19
30	a	616	LMG	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
31	a	613	SQD	C32-C33-C34-C35
25	B	605	CLA	C11-C10-C8-C9
25	C	509	CLA	C14-C13-C15-C16
25	C	513	CLA	C11-C10-C8-C9
30	a	616	LMG	C36-C37-C38-C39
25	A	609	CLA	C5-C6-C7-C8
29	B	627	STE	C7-C8-C9-C10
29	d	410	STE	C13-C14-C15-C16
30	c	522	LMG	C34-C35-C36-C37
30	a	616	LMG	O6-C1-O1-C7
29	E	104	STE	C2-C3-C4-C5
25	B	602	CLA	C13-C15-C16-C17
29	I	101	STE	C5-C6-C7-C8
32	h	102	DGD	C3B-C4B-C5B-C6B
29	C	515	STE	C9-C10-C11-C12
29	E	103	STE	C7-C8-C9-C10
33	D	410	LHG	C17-C18-C19-C20
25	B	606	CLA	C16-C17-C18-C20
29	t	103	STE	C1-C2-C3-C4
32	H	102	DGD	C4E-C5E-C6E-O5E
29	b	624	STE	C2-C3-C4-C5
32	C	520	DGD	CDB-CEB-CFB-CGB
33	d	407	LHG	O1-C1-C2-O2
27	Y	101	BCR	C13-C14-C15-C16
25	c	510	CLA	C2-C3-C5-C6
28	d	405	PL9	C28-C29-C31-C32
32	C	520	DGD	C9A-CAA-CBA-CCA
30	D	407	LMG	C30-C31-C32-C33
29	d	410	STE	C12-C13-C14-C15
32	h	102	DGD	C8B-C9B-CAB-CBB
33	L	101	LHG	C18-C19-C20-C21
29	j	102	STE	C10-C11-C12-C13
30	D	406	LMG	C13-C14-C15-C16
30	d	411	LMG	C15-C16-C17-C18
25	b	610	CLA	C8-C10-C11-C12
29	t	103	STE	C4-C5-C6-C7
32	A	617	DGD	C7B-C8B-C9B-CAB
33	a	614	LHG	C17-C18-C19-C20
29	M	103	STE	C4-C5-C6-C7
25	C	513	CLA	CBA-CGA-O2A-C1
30	B	621	LMG	C28-C29-C30-C31
25	b	608	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
30	c	522	LMG	C31-C32-C33-C34
31	a	615	SQD	C12-C13-C14-C15
30	c	518	LMG	C29-C30-C31-C32
33	l	101	LHG	C26-C27-C28-C29
25	B	605	CLA	C11-C10-C8-C7
25	C	502	CLA	C12-C13-C15-C16
25	C	504	CLA	C11-C10-C8-C7
25	C	512	CLA	C12-C13-C15-C16
25	C	513	CLA	C11-C10-C8-C7
25	a	607	CLA	C12-C13-C15-C16
25	b	602	CLA	C11-C10-C8-C7
25	b	615	CLA	C11-C12-C13-C15
25	c	501	CLA	C11-C12-C13-C15
25	c	506	CLA	C6-C7-C8-C10
25	c	510	CLA	C11-C10-C8-C7
25	c	512	CLA	C11-C12-C13-C15
25	c	513	CLA	C11-C10-C8-C7
31	A	615	SQD	C31-C32-C33-C34
31	f	101	SQD	C24-C25-C26-C27
32	A	617	DGD	CFA-CGA-CHA-CIA
29	e	104	STE	C11-C10-C9-C8
27	T	101	BCR	C21-C22-C23-C24
30	c	518	LMG	C30-C31-C32-C33
30	a	617	LMG	O10-C28-O8-C9
32	C	521	DGD	C2G-C3G-O3G-C1D
32	C	521	DGD	C5D-C6D-O5D-C1E
32	c	520	DGD	C2G-C3G-O3G-C1D
32	c	520	DGD	C5D-C6D-O5D-C1E
30	d	411	LMG	C35-C36-C37-C38
33	l	101	LHG	C34-C35-C36-C37
25	B	603	CLA	C15-C16-C17-C18
29	j	102	STE	C5-C6-C7-C8
33	B	623	LHG	C11-C10-C9-C8
25	B	610	CLA	C16-C17-C18-C19
31	a	613	SQD	C8-C7-O47-C45
31	a	613	SQD	O49-C7-O47-C45
29	Z	101	STE	C9-C10-C11-C12
31	A	615	SQD	C28-C29-C30-C31
32	c	519	DGD	C7B-C8B-C9B-CAB
25	b	616	CLA	O1A-CGA-O2A-C1
29	C	526	STE	C9-C10-C11-C12
32	C	520	DGD	CBA-CCA-CDA-CEA

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Mol	Chain	Res	Type	Atoms
29	x	101	STE	C7-C8-C9-C10
25	C	513	CLA	O2A-C1-C2-C3
29	B	625	STE	C12-C13-C14-C15
33	L	101	LHG	C27-C28-C29-C30
30	c	523	LMG	C30-C31-C32-C33
32	H	102	DGD	O2G-C1B-C2B-C3B
25	B	614	CLA	CBD-CGD-O2D-CED
32	c	520	DGD	CAB-CBB-CCB-CDB
25	b	602	CLA	C16-C17-C18-C20
29	A	619	STE	C11-C10-C9-C8
31	D	408	SQD	O6-C44-C45-C46
29	I	101	STE	C9-C10-C11-C12
29	Z	101	STE	C12-C13-C14-C15
32	C	520	DGD	C4D-C5D-C6D-O5D
30	a	617	LMG	O6-C1-O1-C7
28	D	405	PL9	C44-C46-C47-C48
30	C	516	LMG	C7-C8-C9-O8
30	a	617	LMG	O1-C7-C8-C9
30	a	617	LMG	C7-C8-C9-O8
31	B	624	SQD	O6-C44-C45-C46
31	a	613	SQD	C44-C45-C46-O48
31	a	615	SQD	O6-C44-C45-C46
29	I	101	STE	C1-C2-C3-C4
25	B	615	CLA	C5-C6-C7-C8
34	F	101	HEM	C4C-C3C-CAC-CBC
34	e	102	HEM	C4C-C3C-CAC-CBC
25	B	613	CLA	C16-C17-C18-C19
25	B	606	CLA	C3-C5-C6-C7
25	B	609	CLA	C4-C3-C5-C6
25	c	510	CLA	C4-C3-C5-C6
28	D	405	PL9	C33-C34-C36-C37
28	d	405	PL9	C43-C44-C46-C47
30	C	516	LMG	C11-C12-C13-C14
25	B	612	CLA	C13-C15-C16-C17
30	B	621	LMG	C20-C21-C22-C23
32	C	522	DGD	CDB-CEB-CFB-CGB
32	A	617	DGD	CEB-CFB-CGB-CHB
30	a	617	LMG	O7-C8-C9-O8
25	C	509	CLA	C5-C6-C7-C8
25	C	502	CLA	C14-C13-C15-C16
25	C	506	CLA	C14-C13-C15-C16
25	b	616	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
25	c	513	CLA	C14-C13-C15-C16
30	a	617	LMG	C30-C31-C32-C33
29	f	102	STE	C14-C15-C16-C17
31	A	615	SQD	C25-C26-C27-C28
32	A	617	DGD	CDB-CEB-CFB-CGB
33	d	407	LHG	C27-C28-C29-C30
25	c	505	CLA	O1A-CGA-O2A-C1
33	E	101	LHG	C32-C33-C34-C35
33	d	407	LHG	C24-C25-C26-C27
32	c	521	DGD	C5B-C6B-C7B-C8B
33	l	101	LHG	C9-C10-C11-C12
30	A	614	LMG	C34-C35-C36-C37
31	a	613	SQD	C16-C17-C18-C19
32	A	617	DGD	CCB-CDB-CEB-CFB
33	d	408	LHG	C30-C31-C32-C33
29	B	622	STE	C12-C13-C14-C15
33	D	410	LHG	C24-C25-C26-C27
30	A	614	LMG	C35-C36-C37-C38
31	a	615	SQD	C10-C11-C12-C13
25	b	602	CLA	C16-C17-C18-C19
25	B	609	CLA	C13-C15-C16-C17
25	b	602	CLA	C13-C15-C16-C17
33	E	101	LHG	C2-C3-O3-P
31	a	615	SQD	C15-C16-C17-C18
30	c	523	LMG	C35-C36-C37-C38
25	B	612	CLA	CBD-CGD-O2D-CED
29	b	625	STE	C3-C4-C5-C6
29	c	516	STE	C4-C5-C6-C7
30	a	617	LMG	C19-C20-C21-C22
25	B	610	CLA	C16-C17-C18-C20
29	x	101	STE	C11-C10-C9-C8
32	h	102	DGD	C2A-C3A-C4A-C5A
29	b	624	STE	C11-C12-C13-C14
25	d	403	CLA	C5-C6-C7-C8
26	A	608	PHO	C4C-C3C-CAC-CBC
29	I	101	STE	C2-C3-C4-C5
30	C	516	LMG	C17-C18-C19-C20
29	j	102	STE	C12-C13-C14-C15
29	h	103	STE	C12-C13-C14-C15
25	c	505	CLA	CBA-CGA-O2A-C1
25	c	509	CLA	CAA-CBA-CGA-O2A
29	c	517	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
27	d	404	BCR	C21-C22-C23-C24
29	t	103	STE	C2-C3-C4-C5
25	C	502	CLA	C16-C17-C18-C20
29	A	612	STE	C3-C4-C5-C6
33	D	409	LHG	C15-C16-C17-C18
32	A	617	DGD	C7A-C8A-C9A-CAA
28	d	405	PL9	C47-C48-C49-C50
30	b	621	LMG	C17-C18-C19-C20
31	a	615	SQD	C5-C6-S-O9
25	c	509	CLA	C8-C10-C11-C12
32	c	520	DGD	C5A-C6A-C7A-C8A
25	B	601	CLA	C11-C10-C8-C7
25	B	602	CLA	C11-C12-C13-C15
25	B	616	CLA	C6-C7-C8-C10
25	b	603	CLA	C11-C12-C13-C15
25	b	610	CLA	C12-C13-C15-C16
29	X	101	STE	C9-C10-C11-C12
33	d	407	LHG	C12-C13-C14-C15
33	a	614	LHG	C13-C14-C15-C16
32	c	520	DGD	C3B-C4B-C5B-C6B
33	a	614	LHG	C24-C23-O8-C6
30	c	518	LMG	C15-C16-C17-C18
33	D	409	LHG	C13-C14-C15-C16
32	A	617	DGD	CEA-CFA-CGA-CHA
30	b	621	LMG	C22-C23-C24-C25
30	c	523	LMG	C11-C12-C13-C14
25	C	513	CLA	O1A-CGA-O2A-C1
29	C	524	STE	C1-C2-C3-C4
29	d	412	STE	C1-C2-C3-C4
35	V	201	HEC	C4B-C3B-CAB-CBB
29	M	103	STE	C7-C8-C9-C10
25	b	616	CLA	C4-C3-C5-C6
29	A	618	STE	C14-C15-C16-C17
30	a	616	LMG	C40-C41-C42-C43
31	B	624	SQD	C10-C11-C12-C13
30	c	523	LMG	C10-C11-C12-C13
25	A	607	CLA	C11-C10-C8-C9
25	C	504	CLA	C11-C10-C8-C9
25	C	508	CLA	C14-C13-C15-C16
25	b	602	CLA	C11-C10-C8-C9
25	b	614	CLA	C14-C13-C15-C16
25	b	615	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
32	C	522	DGD	O6D-C5D-C6D-O5D
25	b	604	CLA	C5-C6-C7-C8
29	j	101	STE	C5-C6-C7-C8
29	x	101	STE	C4-C5-C6-C7
30	b	623	LMG	C12-C13-C14-C15
32	c	519	DGD	C7A-C8A-C9A-CAA
30	D	406	LMG	C28-C29-C30-C31
33	d	407	LHG	C23-C24-C25-C26
30	b	623	LMG	C20-C21-C22-C23
32	c	520	DGD	CBA-CCA-CDA-CEA
30	C	516	LMG	O7-C8-C9-O8
30	a	617	LMG	O1-C7-C8-O7
30	b	623	LMG	O1-C7-C8-O7
25	d	403	CLA	C16-C17-C18-C19
29	B	627	STE	C11-C12-C13-C14
32	A	617	DGD	C1G-C2G-C3G-O3G
29	c	516	STE	C10-C11-C12-C13
31	A	616	SQD	C10-C11-C12-C13
29	E	104	STE	C5-C6-C7-C8
29	e	103	STE	C12-C13-C14-C15
30	c	518	LMG	C13-C14-C15-C16
33	E	101	LHG	C11-C12-C13-C14
25	B	601	CLA	CAD-CBD-CGD-O2D
25	C	502	CLA	CAD-CBD-CGD-O2D
25	c	502	CLA	CAD-CBD-CGD-O2D
25	c	504	CLA	CAD-CBD-CGD-O2D
25	A	606	CLA	C4C-C3C-CAC-CBC
33	a	614	LHG	O10-C23-O8-C6
30	a	616	LMG	C19-C20-C21-C22
30	C	523	LMG	C29-C28-O8-C9
25	C	508	CLA	C16-C17-C18-C20
31	a	615	SQD	C19-C20-C21-C22
29	c	516	STE	C5-C6-C7-C8
29	x	101	STE	C14-C15-C16-C17
29	C	519	STE	C4-C5-C6-C7
29	b	622	STE	C11-C10-C9-C8
29	b	625	STE	C2-C3-C4-C5
30	C	523	LMG	O10-C28-O8-C9
33	l	101	LHG	C35-C36-C37-C38
29	x	101	STE	C12-C13-C14-C15
30	c	522	LMG	C30-C31-C32-C33
31	b	620	SQD	C26-C27-C28-C29

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Mol	Chain	Res	Type	Atoms
25	B	601	CLA	CAD-CBD-CGD-O1D
25	B	614	CLA	CAD-CBD-CGD-O1D
25	C	502	CLA	CAD-CBD-CGD-O1D
25	b	616	CLA	CHA-CBD-CGD-O1D
25	b	616	CLA	CHA-CBD-CGD-O2D
25	c	502	CLA	CAD-CBD-CGD-O1D
25	c	504	CLA	CAD-CBD-CGD-O1D
25	c	506	CLA	CAD-CBD-CGD-O1D
25	c	507	CLA	CHA-CBD-CGD-O1D
25	c	509	CLA	CHA-CBD-CGD-O1D
26	d	401	PHO	CHA-CBD-CGD-O2D
27	h	101	BCR	C9-C10-C11-C12
27	k	101	BCR	C19-C20-C21-C22
27	k	102	BCR	C9-C10-C11-C12
33	E	101	LHG	C3-O3-P-O6
33	L	101	LHG	C4-O6-P-O5
33	d	408	LHG	C4-O6-P-O5
30	B	620	LMG	C18-C19-C20-C21
30	C	516	LMG	C29-C30-C31-C32
25	A	607	CLA	C2B-C3B-CAB-CBB
27	T	101	BCR	C23-C24-C25-C30
31	f	101	SQD	O47-C7-C8-C9
30	A	614	LMG	C33-C34-C35-C36
30	c	518	LMG	C31-C32-C33-C34
33	d	407	LHG	C17-C18-C19-C20
25	B	610	CLA	C8-C10-C11-C12
33	D	410	LHG	C2-C3-O3-P
33	B	623	LHG	C18-C19-C20-C21
29	A	619	STE	C11-C12-C13-C14
25	c	509	CLA	C16-C17-C18-C19
29	Z	101	STE	C13-C14-C15-C16
29	K	103	STE	C5-C6-C7-C8
30	D	407	LMG	C33-C34-C35-C36
31	b	620	SQD	C17-C18-C19-C20
29	b	622	STE	C11-C12-C13-C14
30	a	616	LMG	C18-C19-C20-C21
30	B	621	LMG	C40-C41-C42-C43
32	A	617	DGD	C4E-C5E-C6E-O5E
32	H	102	DGD	CCA-CDA-CEA-CFA
33	B	623	LHG	C30-C31-C32-C33
30	C	516	LMG	C7-C8-O7-C10
33	E	101	LHG	C4-C5-O7-C7

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Mol	Chain	Res	Type	Atoms
31	A	616	SQD	C11-C10-C9-C8
31	a	613	SQD	C23-C24-C25-C26
30	B	620	LMG	C12-C13-C14-C15
27	d	404	BCR	C9-C10-C11-C12
29	b	626	STE	C15-C16-C17-C18
30	A	614	LMG	C40-C41-C42-C43
25	B	604	CLA	C11-C12-C13-C14
25	B	605	CLA	C6-C7-C8-C9
25	B	610	CLA	C14-C13-C15-C16
25	a	609	CLA	C14-C13-C15-C16
25	c	503	CLA	C11-C12-C13-C14
25	c	506	CLA	C6-C7-C8-C9
25	c	508	CLA	C14-C13-C15-C16
25	B	604	CLA	C11-C12-C13-C15
25	C	512	CLA	C11-C12-C13-C15
29	C	515	STE	C7-C8-C9-C10
30	a	616	LMG	C28-C29-C30-C31
29	d	406	STE	C9-C10-C11-C12
25	C	508	CLA	C16-C17-C18-C19
25	a	612	CLA	C16-C17-C18-C20
29	f	102	STE	C11-C12-C13-C14
25	B	606	CLA	C13-C15-C16-C17
31	a	613	SQD	O6-C44-C45-O47
33	E	101	LHG	O7-C5-C6-O8
29	D	411	STE	C11-C12-C13-C14
32	h	102	DGD	C6A-C7A-C8A-C9A
29	M	102	STE	C2-C3-C4-C5
25	D	402	CLA	C2C-C3C-CAC-CBC
26	d	401	PHO	C2C-C3C-CAC-CBC
30	B	621	LMG	C36-C37-C38-C39
30	D	406	LMG	C17-C18-C19-C20
32	C	520	DGD	C4B-C5B-C6B-C7B
30	C	523	LMG	O1-C7-C8-C9
29	C	524	STE	C7-C8-C9-C10
29	b	626	STE	C13-C14-C15-C16
25	C	511	CLA	C3-C5-C6-C7
33	B	623	LHG	C11-C12-C13-C14
35	v	201	HEC	C2B-C3B-CAB-CBB
29	j	102	STE	C11-C12-C13-C14
33	B	623	LHG	C10-C11-C12-C13
31	f	101	SQD	O49-C7-C8-C9
30	a	617	LMG	C35-C36-C37-C38

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Mol	Chain	Res	Type	Atoms
29	i	101	STE	C5-C6-C7-C8
31	A	615	SQD	C26-C27-C28-C29
25	C	505	CLA	C4-C3-C5-C6
29	b	624	STE	C9-C10-C11-C12
29	B	627	STE	C5-C6-C7-C8
29	d	406	STE	C5-C6-C7-C8
25	B	614	CLA	O1D-CGD-O2D-CED
25	b	607	CLA	O1A-CGA-O2A-C1
25	c	503	CLA	C16-C17-C18-C19
25	c	506	CLA	C2C-C3C-CAC-CBC
25	B	616	CLA	C6-C7-C8-C9
25	b	603	CLA	C11-C10-C8-C9
30	a	616	LMG	C15-C16-C17-C18
25	B	612	CLA	O1D-CGD-O2D-CED
25	b	607	CLA	CBA-CGA-O2A-C1
30	c	522	LMG	C29-C28-O8-C9
25	b	601	CLA	C13-C15-C16-C17
29	d	406	STE	C15-C16-C17-C18
28	a	611	PL9	C11-C12-C13-C14
29	M	102	STE	C4-C5-C6-C7
29	d	410	STE	C7-C8-C9-C10
29	H	103	STE	C5-C6-C7-C8
29	B	627	STE	C12-C13-C14-C15
30	b	621	LMG	C29-C28-O8-C9
25	B	611	CLA	C10-C11-C12-C13
25	c	503	CLA	C10-C11-C12-C13
25	B	609	CLA	C2-C3-C5-C6
32	A	617	DGD	C5B-C6B-C7B-C8B
33	B	623	LHG	C28-C29-C30-C31
33	D	410	LHG	C35-C36-C37-C38
25	B	612	CLA	C6-C7-C8-C10
25	C	512	CLA	C11-C10-C8-C7
25	b	613	CLA	C11-C10-C8-C7
25	b	614	CLA	C6-C7-C8-C10
29	T	102	STE	C13-C14-C15-C16
32	h	102	DGD	C8A-C9A-CAA-CBA
29	J	101	STE	C2-C3-C4-C5
32	c	521	DGD	C8B-C9B-CAB-CBB
30	b	621	LMG	O10-C28-O8-C9
30	c	522	LMG	O10-C28-O8-C9
32	A	617	DGD	O2G-C2G-C3G-O3G
32	C	520	DGD	C7A-C8A-C9A-CAA

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Mol	Chain	Res	Type	Atoms
32	C	521	DGD	C5A-C6A-C7A-C8A
30	D	407	LMG	C35-C36-C37-C38
31	b	620	SQD	O5-C1-O6-C44
32	c	520	DGD	O6E-C1E-O5D-C6D
30	D	407	LMG	C18-C19-C20-C21
29	i	101	STE	O2-C1-C2-C3
32	H	102	DGD	C9B-CAB-CBB-CCB
27	K	102	BCR	C19-C20-C21-C22
25	c	513	CLA	C8-C10-C11-C12
27	K	101	BCR	C7-C8-C9-C34
29	c	517	STE	C11-C12-C13-C14
29	d	406	STE	C11-C12-C13-C14
32	c	519	DGD	C5B-C6B-C7B-C8B
31	a	613	SQD	C17-C18-C19-C20
25	b	616	CLA	C2-C3-C5-C6
25	a	612	CLA	C16-C17-C18-C19
32	C	520	DGD	CBB-CCB-CDB-CEB
29	i	101	STE	C6-C7-C8-C9
25	B	611	CLA	C8-C10-C11-C12
25	b	604	CLA	C13-C15-C16-C17
29	b	624	STE	C1-C2-C3-C4
31	a	613	SQD	O6-C44-C45-C46
33	E	101	LHG	C4-C5-C6-O8
29	d	412	STE	C2-C3-C4-C5
32	C	522	DGD	CBB-CCB-CDB-CEB
31	A	615	SQD	C9-C10-C11-C12
32	h	102	DGD	CCB-CDB-CEB-CFB
29	d	412	STE	O1-C1-C2-C3
29	i	101	STE	O1-C1-C2-C3
25	B	602	CLA	C11-C12-C13-C14
25	C	508	CLA	C6-C7-C8-C9
25	C	513	CLA	C11-C12-C13-C14
25	D	402	CLA	C11-C10-C8-C9
25	b	606	CLA	C11-C10-C8-C9
29	l	102	STE	C11-C12-C13-C14
25	C	502	CLA	CBD-CGD-O2D-CED
29	I	101	STE	O1-C1-C2-C3
35	V	201	HEC	CAD-CBD-CGD-O2D
31	B	624	SQD	C44-C45-O47-C7
31	B	624	SQD	C46-C45-O47-C7
29	d	412	STE	O2-C1-C2-C3
25	c	512	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
32	c	519	DGD	CDB-CEB-CFB-CGB
29	E	104	STE	C14-C15-C16-C17
29	I	101	STE	O2-C1-C2-C3
29	m	101	STE	O1-C1-C2-C3
25	c	512	CLA	C1A-C2A-CAA-CBA
25	a	606	CLA	C4C-C3C-CAC-CBC
31	a	613	SQD	C18-C19-C20-C21
29	A	618	STE	C11-C12-C13-C14
33	l	101	LHG	C15-C16-C17-C18
25	B	603	CLA	C2B-C3B-CAB-CBB
25	C	502	CLA	C2B-C3B-CAB-CBB
25	b	610	CLA	C2B-C3B-CAB-CBB
27	B	617	BCR	C1-C6-C7-C8
27	B	617	BCR	C5-C6-C7-C8
27	c	514	BCR	C5-C6-C7-C8
29	B	625	STE	C10-C11-C12-C13
33	d	408	LHG	O2-C2-C3-O3
29	d	406	STE	O1-C1-C2-C3
29	t	102	STE	O1-C1-C2-C3
29	E	104	STE	C3-C4-C5-C6
35	v	201	HEC	C4B-C3B-CAB-CBB
25	c	512	CLA	C3-C5-C6-C7
32	C	520	DGD	C5A-C6A-C7A-C8A
29	M	101	STE	O1-C1-C2-C3
35	v	201	HEC	CAD-CBD-CGD-O2D
25	c	513	CLA	C4-C3-C5-C6
32	h	102	DGD	CCA-CDA-CEA-CFA
29	d	406	STE	O2-C1-C2-C3
34	e	102	HEM	CAD-CBD-CGD-O1D
31	a	613	SQD	C28-C29-C30-C31
25	B	609	CLA	C11-C12-C13-C15
25	C	506	CLA	C12-C13-C15-C16
25	D	402	CLA	C12-C13-C15-C16
25	b	613	CLA	C11-C12-C13-C15
25	b	615	CLA	C11-C10-C8-C7
29	A	618	STE	C15-C16-C17-C18
29	j	101	STE	C2-C3-C4-C5
31	A	615	SQD	C14-C15-C16-C17
25	B	607	CLA	C16-C17-C18-C20
31	a	615	SQD	C11-C12-C13-C14
32	c	521	DGD	C3B-C4B-C5B-C6B
30	a	616	LMG	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
29	t	102	STE	O2-C1-C2-C3
33	D	410	LHG	C33-C34-C35-C36
29	B	625	STE	C4-C5-C6-C7
31	B	624	SQD	C15-C16-C17-C18
28	A	611	PL9	C4-C3-C7-C8
32	h	102	DGD	C3A-C4A-C5A-C6A
25	b	604	CLA	C2C-C3C-CAC-CBC
25	B	603	CLA	C13-C15-C16-C17
27	K	101	BCR	C11-C12-C13-C35
25	B	616	CLA	C10-C11-C12-C13
25	c	513	CLA	C2-C3-C5-C6
28	a	611	PL9	C2-C3-C7-C8
25	b	606	CLA	C16-C17-C18-C20
30	D	407	LMG	C20-C21-C22-C23
25	C	502	CLA	CBA-CGA-O2A-C1
30	c	523	LMG	C32-C33-C34-C35
35	V	201	HEC	CAD-CBD-CGD-O1D
25	B	612	CLA	C6-C7-C8-C9
29	J	101	STE	C7-C8-C9-C10
30	C	516	LMG	C8-C9-O8-C28
34	e	102	HEM	CAD-CBD-CGD-O2D
29	B	627	STE	C1-C2-C3-C4
32	A	617	DGD	CFB-CGB-CHB-CIB
29	E	104	STE	C13-C14-C15-C16
33	L	101	LHG	C26-C27-C28-C29
25	b	607	CLA	C4-C3-C5-C6
31	D	408	SQD	C24-C25-C26-C27
28	A	611	PL9	C33-C34-C36-C37
29	x	101	STE	C13-C14-C15-C16
30	c	522	LMG	C15-C16-C17-C18
32	c	519	DGD	CCA-CDA-CEA-CFA
25	C	502	CLA	O1A-CGA-O2A-C1
25	B	608	CLA	C5-C6-C7-C8
25	C	511	CLA	C8-C10-C11-C12
30	D	406	LMG	C29-C28-O8-C9
29	m	101	STE	O2-C1-C2-C3
29	b	624	STE	C3-C4-C5-C6
33	D	410	LHG	C27-C28-C29-C30
33	D	409	LHG	C19-C20-C21-C22
29	e	104	STE	C3-C4-C5-C6
29	E	104	STE	O2-C1-C2-C3
30	b	621	LMG	C30-C31-C32-C33

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Mol	Chain	Res	Type	Atoms
32	h	102	DGD	O1B-C1B-C2B-C3B
35	v	201	HEC	CAD-CBD-CGD-O1D
25	C	509	CLA	C8-C10-C11-C12
25	b	607	CLA	C15-C16-C17-C18
32	H	102	DGD	C5A-C6A-C7A-C8A
25	D	403	CLA	C4-C3-C5-C6
25	C	505	CLA	C2-C3-C5-C6
28	a	611	PL9	C12-C11-C9-C8
25	b	606	CLA	C16-C17-C18-C19
25	a	609	CLA	C15-C16-C17-C18
32	c	519	DGD	C4B-C5B-C6B-C7B
25	b	610	CLA	C4B-C3B-CAB-CBB
29	A	618	STE	C5-C6-C7-C8
31	f	101	SQD	C35-C36-C37-C38
25	c	513	CLA	O1A-CGA-O2A-C1
25	B	601	CLA	O1D-CGD-O2D-CED
29	M	101	STE	O2-C1-C2-C3
25	C	502	CLA	C16-C17-C18-C19
26	A	608	PHO	CHA-CBD-CGD-O1D
30	D	407	LMG	C40-C41-C42-C43
25	c	513	CLA	CBA-CGA-O2A-C1
25	B	601	CLA	CBD-CGD-O2D-CED
30	a	617	LMG	C37-C38-C39-C40
25	b	613	CLA	O1D-CGD-O2D-CED
25	b	613	CLA	C16-C17-C18-C19
28	A	611	PL9	C20-C19-C21-C22
25	C	512	CLA	C8-C10-C11-C12
29	B	622	STE	O2-C1-C2-C3
30	D	407	LMG	C37-C38-C39-C40
30	C	516	LMG	O6-C1-O1-C7
25	c	505	CLA	C15-C16-C17-C18
29	l	102	STE	C7-C8-C9-C10
25	C	507	CLA	C11-C10-C8-C7
25	a	609	CLA	C12-C13-C15-C16
25	b	612	CLA	C6-C7-C8-C10
32	C	521	DGD	C6A-C7A-C8A-C9A
32	c	520	DGD	C3A-C4A-C5A-C6A
29	X	101	STE	C15-C16-C17-C18
29	d	412	STE	C9-C10-C11-C12
31	D	408	SQD	O48-C23-C24-C25
33	d	409	LHG	C27-C28-C29-C30
25	C	505	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
30	b	621	LMG	C18-C19-C20-C21
30	B	621	LMG	C8-C7-O1-C1
29	J	101	STE	O2-C1-C2-C3
25	B	613	CLA	C2-C1-O2A-CGA
29	d	406	STE	C7-C8-C9-C10
29	B	625	STE	C9-C10-C11-C12
29	E	104	STE	O1-C1-C2-C3
32	c	519	DGD	CCB-CDB-CEB-CFB
31	a	615	SQD	C27-C28-C29-C30
25	b	616	CLA	O2A-C1-C2-C3
33	D	410	LHG	C15-C16-C17-C18
29	C	524	STE	C2-C3-C4-C5
30	B	621	LMG	C13-C14-C15-C16
30	C	523	LMG	C31-C32-C33-C34
33	B	623	LHG	C25-C26-C27-C28
25	b	604	CLA	C8-C10-C11-C12
25	B	607	CLA	C16-C17-C18-C19
29	B	622	STE	C3-C4-C5-C6
29	T	102	STE	C11-C10-C9-C8
30	D	406	LMG	C16-C17-C18-C19
25	b	610	CLA	C16-C17-C18-C20
32	c	519	DGD	C6A-C7A-C8A-C9A
29	B	622	STE	O1-C1-C2-C3
25	b	612	CLA	C3-C5-C6-C7
30	B	621	LMG	C34-C35-C36-C37
32	c	519	DGD	O6E-C1E-O5D-C6D
29	b	622	STE	C13-C14-C15-C16
31	a	615	SQD	C28-C29-C30-C31
33	d	409	LHG	C28-C29-C30-C31
25	c	507	CLA	C8-C10-C11-C12
34	e	102	HEM	C4B-C3B-CAB-CBB
31	a	613	SQD	C11-C12-C13-C14
30	b	623	LMG	C13-C14-C15-C16
30	B	620	LMG	C36-C37-C38-C39
25	B	603	CLA	C4-C3-C5-C6
25	c	507	CLA	C4-C3-C5-C6
29	J	101	STE	O1-C1-C2-C3
27	K	101	BCR	C19-C20-C21-C22
29	Z	101	STE	C10-C11-C12-C13
31	a	613	SQD	C10-C11-C12-C13
29	H	103	STE	C13-C14-C15-C16
30	b	621	LMG	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
33	D	409	LHG	C32-C33-C34-C35
33	D	409	LHG	C35-C36-C37-C38
29	C	526	STE	C15-C16-C17-C18
29	c	516	STE	C11-C10-C9-C8
25	B	615	CLA	C10-C11-C12-C13
25	B	601	CLA	C11-C10-C8-C9
25	b	612	CLA	C6-C7-C8-C9
25	b	613	CLA	C16-C17-C18-C20
31	a	615	SQD	C33-C34-C35-C36
31	a	615	SQD	C9-C10-C11-C12
30	a	616	LMG	C30-C31-C32-C33
33	E	101	LHG	C16-C17-C18-C19
33	l	101	LHG	O7-C7-C8-C9
33	l	101	LHG	C5-C6-O8-C23
25	B	603	CLA	C11-C10-C8-C7
25	b	601	CLA	C11-C12-C13-C15
25	b	609	CLA	C11-C12-C13-C15
27	A	610	BCR	C1-C6-C7-C8
27	B	619	BCR	C1-C6-C7-C8
27	K	102	BCR	C5-C6-C7-C8
25	C	506	CLA	C2-C1-O2A-CGA
25	d	402	CLA	C2-C1-O2A-CGA
32	h	102	DGD	CBA-CCA-CDA-CEA
32	H	102	DGD	O1B-C1B-C2B-C3B
33	d	409	LHG	C31-C32-C33-C34
29	b	625	STE	C7-C8-C9-C10
33	L	101	LHG	O7-C7-C8-C9
32	C	521	DGD	C5B-C6B-C7B-C8B
30	d	411	LMG	C14-C15-C16-C17
30	B	620	LMG	C17-C18-C19-C20
25	b	609	CLA	C15-C16-C17-C18
29	B	627	STE	C2-C3-C4-C5
30	b	621	LMG	C39-C40-C41-C42
32	c	521	DGD	CAB-CBB-CCB-CDB
30	D	406	LMG	O10-C28-O8-C9
25	B	603	CLA	C2-C3-C5-C6
25	c	507	CLA	C2-C3-C5-C6
29	B	627	STE	C9-C10-C11-C12
33	D	409	LHG	C25-C26-C27-C28
33	d	408	LHG	C19-C20-C21-C22
30	c	522	LMG	C11-C12-C13-C14
29	M	102	STE	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
25	C	512	CLA	C11-C12-C13-C14
25	a	612	CLA	C14-C13-C15-C16
29	e	101	STE	C15-C16-C17-C18
25	b	613	CLA	CAA-CBA-CGA-O2A
25	c	510	CLA	CAA-CBA-CGA-O2A
30	B	621	LMG	O8-C28-C29-C30
30	c	522	LMG	O7-C10-C11-C12
29	E	104	STE	C6-C7-C8-C9
30	b	621	LMG	C11-C12-C13-C14
25	C	502	CLA	C4B-C3B-CAB-CBB
34	F	101	HEM	CAD-CBD-CGD-O1D
28	A	611	PL9	C45-C44-C46-C47
29	H	103	STE	C11-C10-C9-C8
30	A	614	LMG	C18-C19-C20-C21
27	C	514	BCR	C11-C12-C13-C14
29	b	622	STE	C9-C10-C11-C12
25	c	501	CLA	C2A-CAA-CBA-CGA
25	c	501	CLA	O1D-CGD-O2D-CED
25	B	610	CLA	C15-C16-C17-C18
25	B	611	CLA	C15-C16-C17-C18
25	C	502	CLA	O1D-CGD-O2D-CED
29	D	411	STE	C14-C15-C16-C17
25	D	402	CLA	C2-C1-O2A-CGA
25	B	604	CLA	C12-C13-C15-C16
25	C	505	CLA	C12-C13-C15-C16
25	C	509	CLA	C11-C10-C8-C7
25	c	503	CLA	C11-C10-C8-C7
25	d	403	CLA	C11-C12-C13-C15
33	E	101	LHG	C13-C14-C15-C16
25	B	614	CLA	C16-C17-C18-C19
25	b	615	CLA	C16-C17-C18-C19
32	c	521	DGD	C4A-C5A-C6A-C7A
29	A	619	STE	C13-C14-C15-C16
25	c	505	CLA	C16-C17-C18-C20
31	a	613	SQD	O47-C7-C8-C9
34	F	101	HEM	CAD-CBD-CGD-O2D
25	c	512	CLA	C3A-C2A-CAA-CBA
25	c	509	CLA	CAA-CBA-CGA-O1A
25	a	607	CLA	C2C-C3C-CAC-CBC
32	H	102	DGD	CDA-CEA-CFA-CGA
33	l	101	LHG	O9-C7-C8-C9
30	a	617	LMG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
32	C	520	DGD	O6E-C1E-O5D-C6D
33	l	101	LHG	C30-C31-C32-C33
30	C	516	LMG	O7-C10-C11-C12
29	M	103	STE	C14-C15-C16-C17
32	c	520	DGD	C4A-C5A-C6A-C7A
25	B	608	CLA	C13-C15-C16-C17
25	B	614	CLA	C2A-CAA-CBA-CGA
25	B	603	CLA	C11-C10-C8-C9
25	B	605	CLA	C14-C13-C15-C16
25	C	507	CLA	C11-C10-C8-C9
25	C	512	CLA	C14-C13-C15-C16
25	b	615	CLA	C11-C10-C8-C9
25	c	501	CLA	C11-C12-C13-C14
25	c	503	CLA	C11-C10-C8-C9
25	c	513	CLA	C11-C10-C8-C9
33	a	614	LHG	O2-C2-C3-O3
29	z	101	STE	C3-C4-C5-C6
25	C	512	CLA	C16-C17-C18-C20
27	K	101	BCR	C7-C8-C9-C10
32	C	522	DGD	C4A-C5A-C6A-C7A
25	A	607	CLA	C2C-C3C-CAC-CBC
33	L	101	LHG	O9-C7-C8-C9
25	a	612	CLA	C4C-C3C-CAC-CBC
25	b	604	CLA	C4C-C3C-CAC-CBC
29	A	618	STE	C10-C11-C12-C13
30	B	621	LMG	O10-C28-C29-C30
28	d	405	PL9	C11-C12-C13-C14
29	C	515	STE	O2-C1-C2-C3
25	B	605	CLA	CAD-CBD-CGD-O2D
25	C	501	CLA	CAD-CBD-CGD-O2D
25	b	607	CLA	CAD-CBD-CGD-O2D
26	A	608	PHO	CAD-CBD-CGD-O2D
29	C	525	STE	C6-C7-C8-C9
33	E	101	LHG	C34-C35-C36-C37
25	b	613	CLA	C5-C6-C7-C8
25	C	504	CLA	C11-C12-C13-C14
32	H	102	DGD	O6E-C5E-C6E-O5E
30	c	523	LMG	O6-C1-O1-C7
29	m	101	STE	C6-C7-C8-C9
32	A	617	DGD	C8A-C9A-CAA-CBA
25	B	612	CLA	CAA-CBA-CGA-O2A
30	c	523	LMG	O8-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
33	l	101	LHG	C24-C25-C26-C27
25	C	512	CLA	C2A-CAA-CBA-CGA
30	c	522	LMG	O9-C10-C11-C12
25	B	613	CLA	CAA-CBA-CGA-O2A
31	B	624	SQD	O48-C23-C24-C25
32	C	520	DGD	O2G-C1B-C2B-C3B
29	C	515	STE	O1-C1-C2-C3
25	b	611	CLA	C10-C11-C12-C13
29	c	516	STE	C1-C2-C3-C4
33	a	614	LHG	C12-C13-C14-C15
30	C	516	LMG	O9-C10-C11-C12

There are no ring outliers.

112 monomers are involved in 171 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	C	520	DGD	2	0
29	M	103	STE	1	0
29	A	619	STE	3	0
33	D	409	LHG	1	0
27	K	101	BCR	5	0
29	C	526	STE	1	0
29	b	622	STE	1	0
25	b	614	CLA	3	0
27	H	101	BCR	2	0
32	c	521	DGD	1	0
30	a	616	LMG	5	0
30	d	411	LMG	1	0
28	a	611	PL9	4	0
28	A	611	PL9	7	0
27	b	618	BCR	3	0
25	C	504	CLA	1	0
25	B	610	CLA	2	0
25	a	612	CLA	2	0
25	b	610	CLA	2	0
25	A	606	CLA	1	0
26	A	608	PHO	1	0
27	D	404	BCR	4	0
25	B	612	CLA	2	0
33	d	409	LHG	1	0
25	c	503	CLA	1	0
25	B	607	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	C	512	CLA	1	0
25	B	602	CLA	1	0
30	B	621	LMG	3	0
30	b	621	LMG	1	0
33	B	623	LHG	1	0
25	d	402	CLA	2	0
25	A	607	CLA	1	0
29	A	618	STE	2	0
25	c	513	CLA	4	0
29	C	525	STE	1	0
25	c	505	CLA	2	0
25	b	605	CLA	4	0
25	C	507	CLA	2	0
25	C	501	CLA	1	0
27	b	617	BCR	2	0
29	B	626	STE	1	0
27	a	610	BCR	1	0
33	d	407	LHG	4	0
25	A	613	CLA	2	0
27	h	101	BCR	5	0
27	d	404	BCR	3	0
31	a	615	SQD	1	0
27	k	102	BCR	1	0
25	D	402	CLA	2	0
25	c	511	CLA	1	0
27	k	101	BCR	1	0
29	C	518	STE	1	0
25	d	403	CLA	2	0
34	F	101	HEM	3	0
25	C	511	CLA	1	0
29	E	104	STE	1	0
34	e	102	HEM	3	0
25	b	607	CLA	1	0
27	B	618	BCR	3	0
29	d	410	STE	1	0
25	c	510	CLA	2	0
25	c	507	CLA	1	0
25	B	605	CLA	1	0
25	C	502	CLA	1	0
26	d	401	PHO	3	0
25	C	509	CLA	1	0
32	C	521	DGD	1	0

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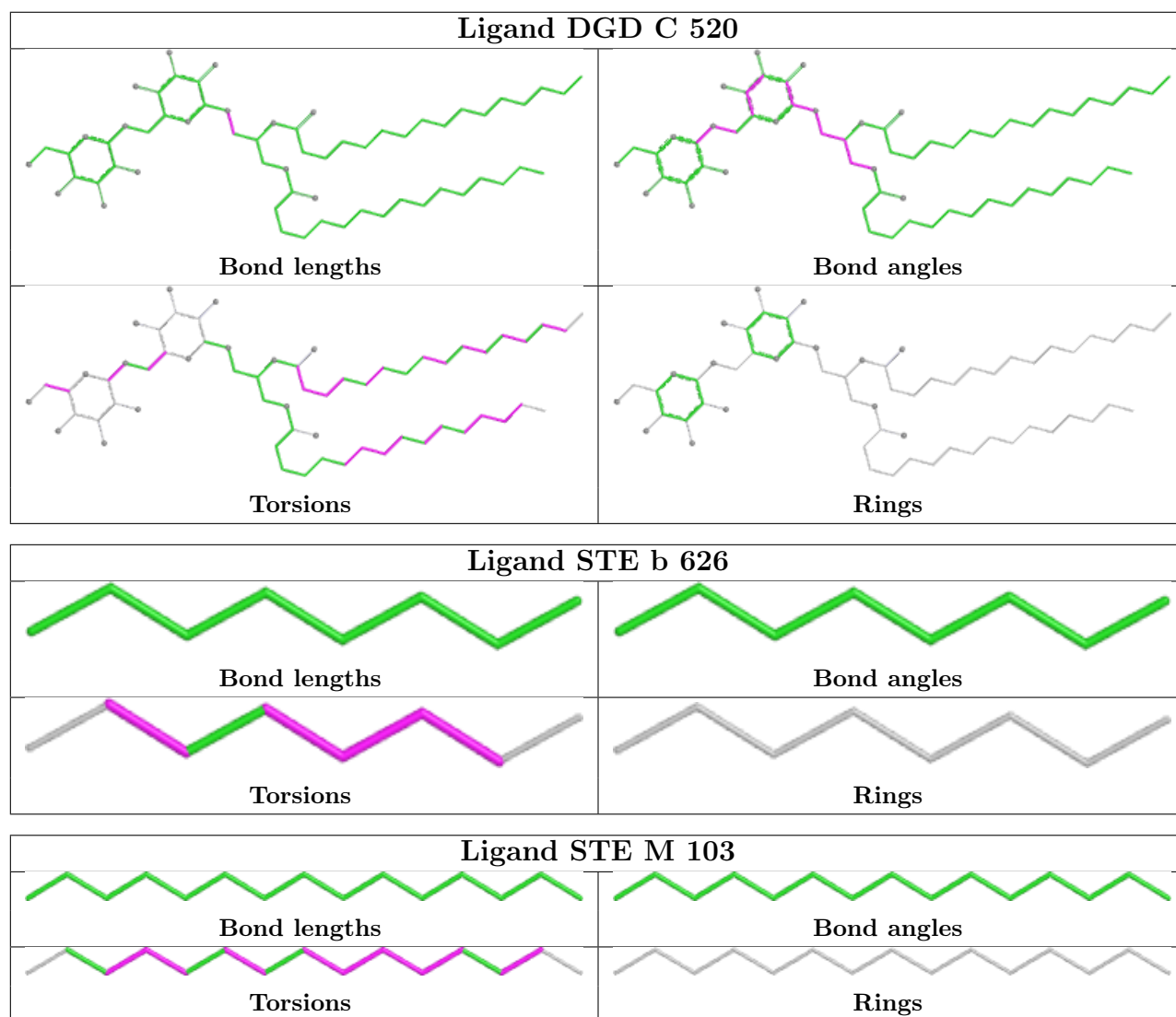
Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	b	602	CLA	1	0
25	a	607	CLA	1	0
32	A	617	DGD	1	0
33	E	101	LHG	3	0
27	B	617	BCR	1	0
25	c	501	CLA	1	0
30	a	617	LMG	1	0
31	b	620	SQD	2	0
25	B	611	CLA	1	0
25	b	613	CLA	3	0
25	b	615	CLA	1	0
27	t	101	BCR	3	0
30	b	623	LMG	2	0
25	C	513	CLA	3	0
31	D	408	SQD	1	0
25	B	616	CLA	1	0
30	D	406	LMG	2	0
25	B	601	CLA	1	0
27	T	101	BCR	4	0
29	h	104	STE	1	0
30	D	407	LMG	1	0
35	v	201	HEC	1	0
25	B	606	CLA	1	0
30	B	620	LMG	6	0
30	C	516	LMG	1	0
25	b	616	CLA	2	0
25	b	601	CLA	2	0
29	X	101	STE	1	0
25	c	509	CLA	2	0
31	B	624	SQD	1	0
25	D	403	CLA	1	0
25	B	604	CLA	1	0
31	f	101	SQD	1	0
25	C	506	CLA	1	0
25	B	615	CLA	2	0
33	L	101	LHG	3	0
25	a	606	CLA	1	0
30	c	523	LMG	1	0
25	c	512	CLA	2	0
27	Y	101	BCR	2	0
25	c	502	CLA	1	0
27	C	514	BCR	1	0

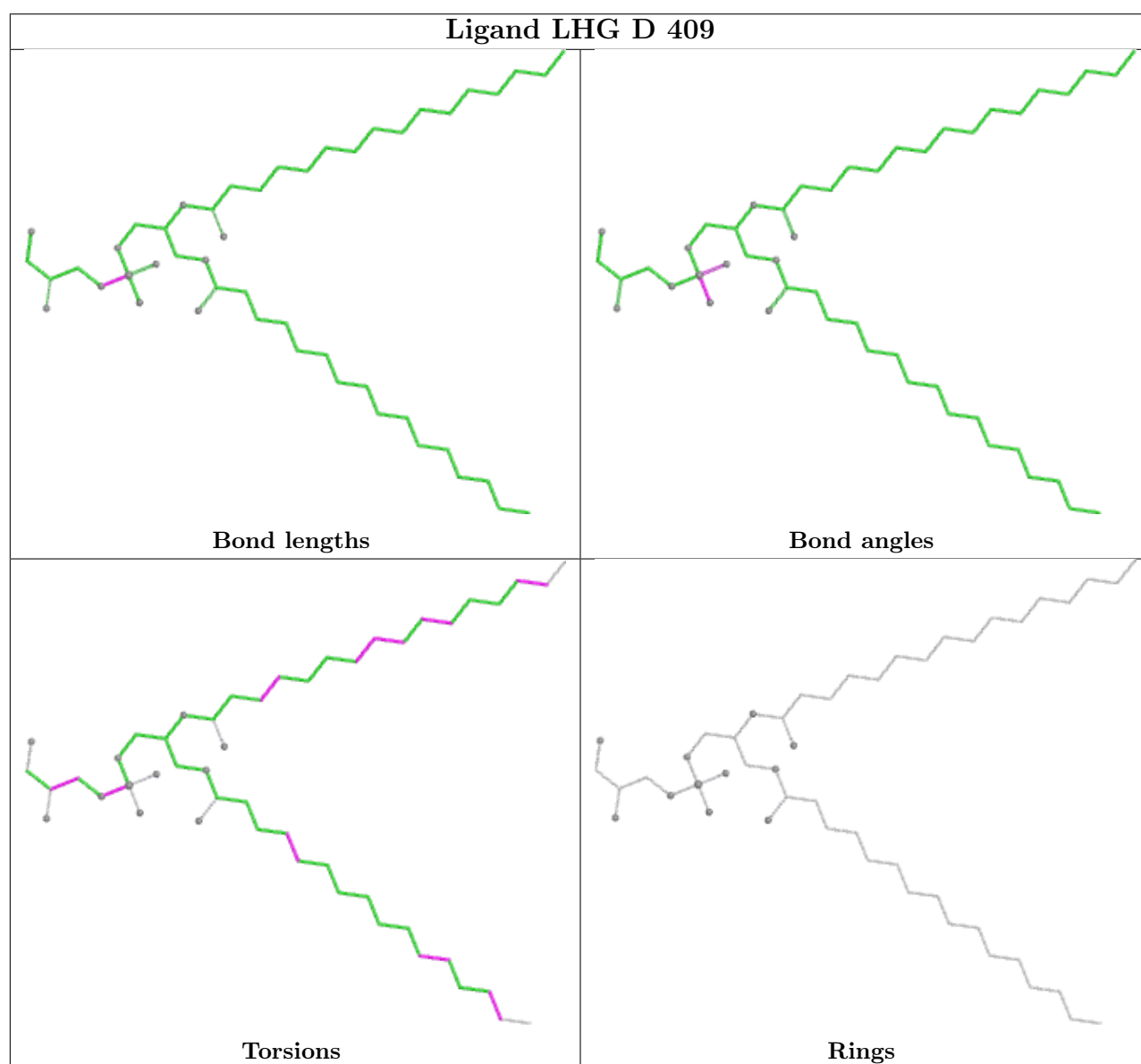
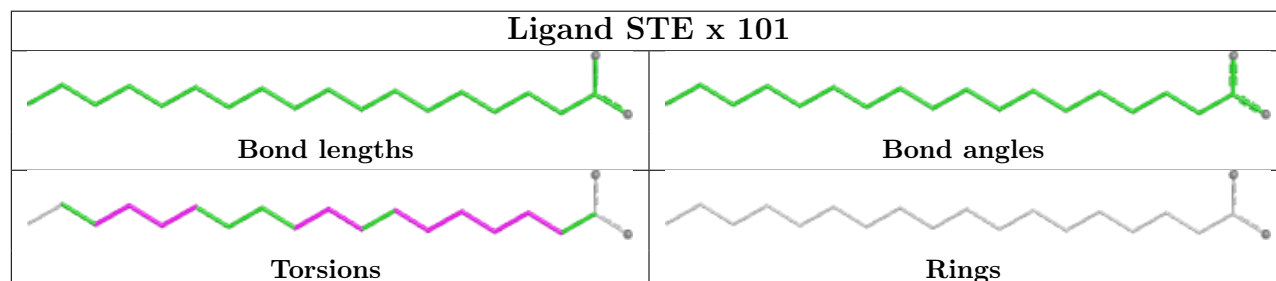
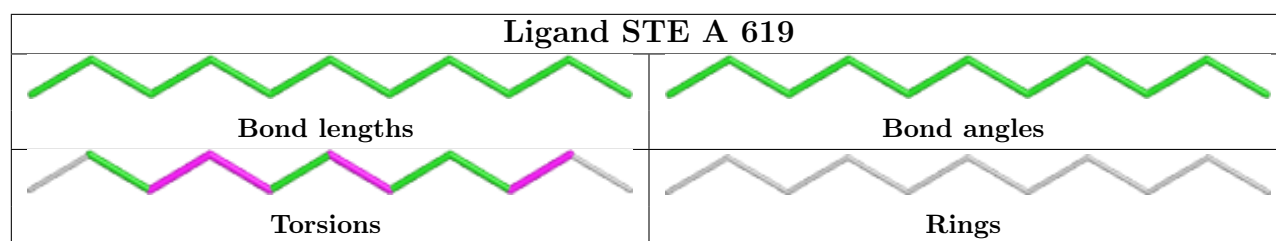
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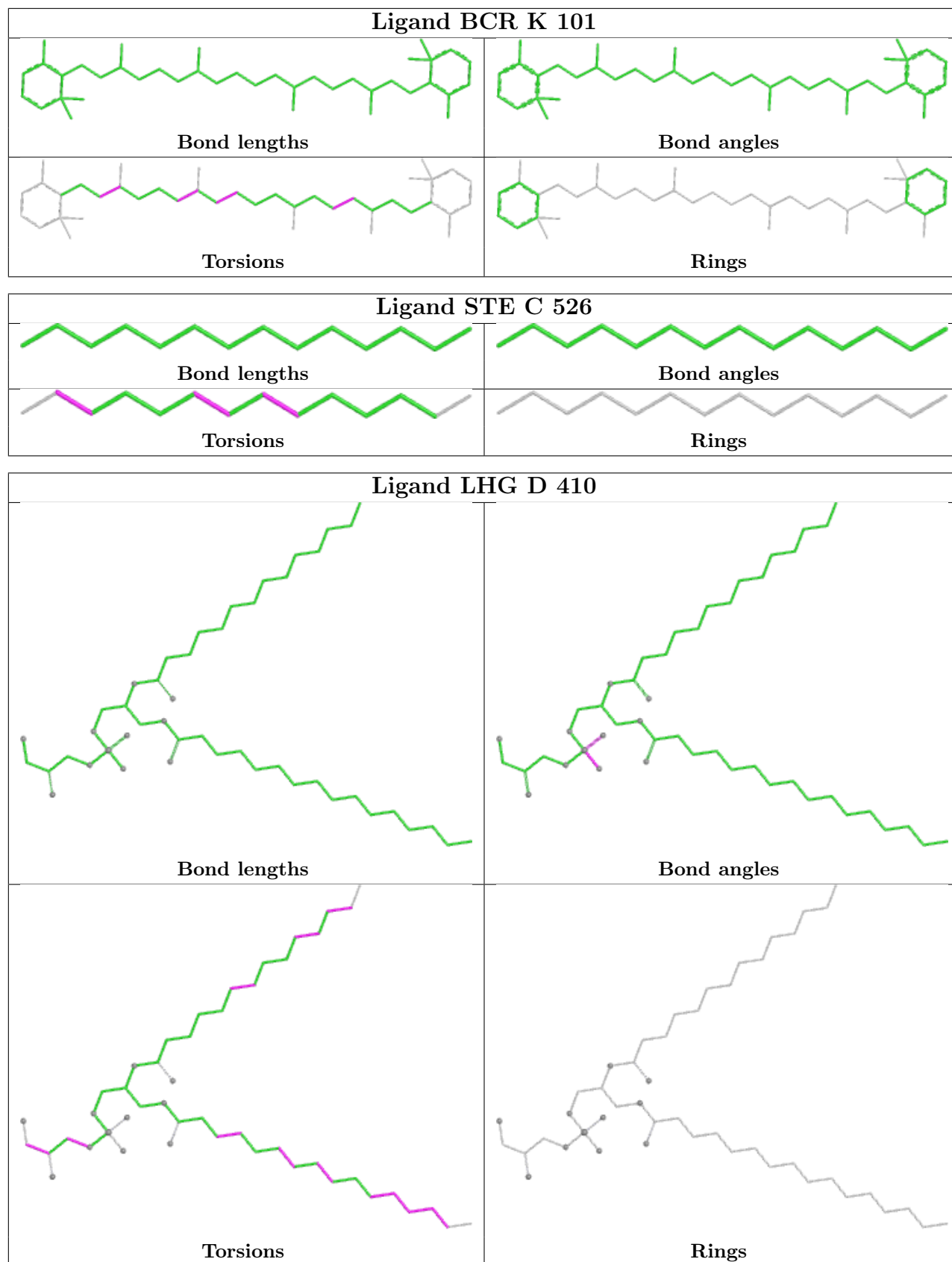
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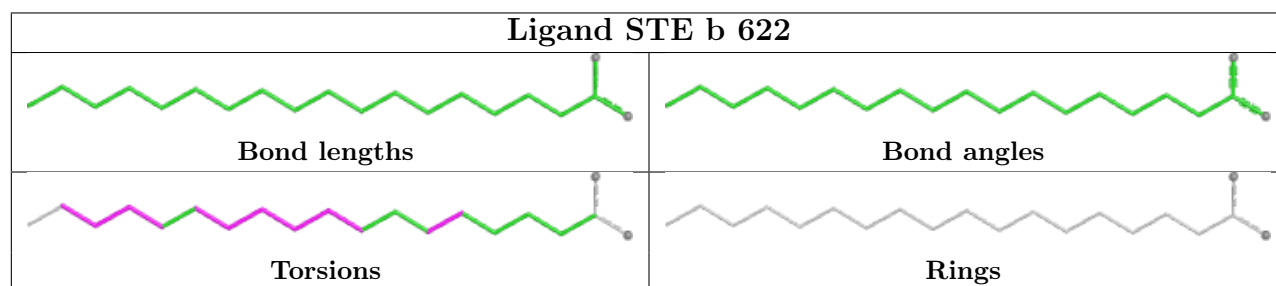
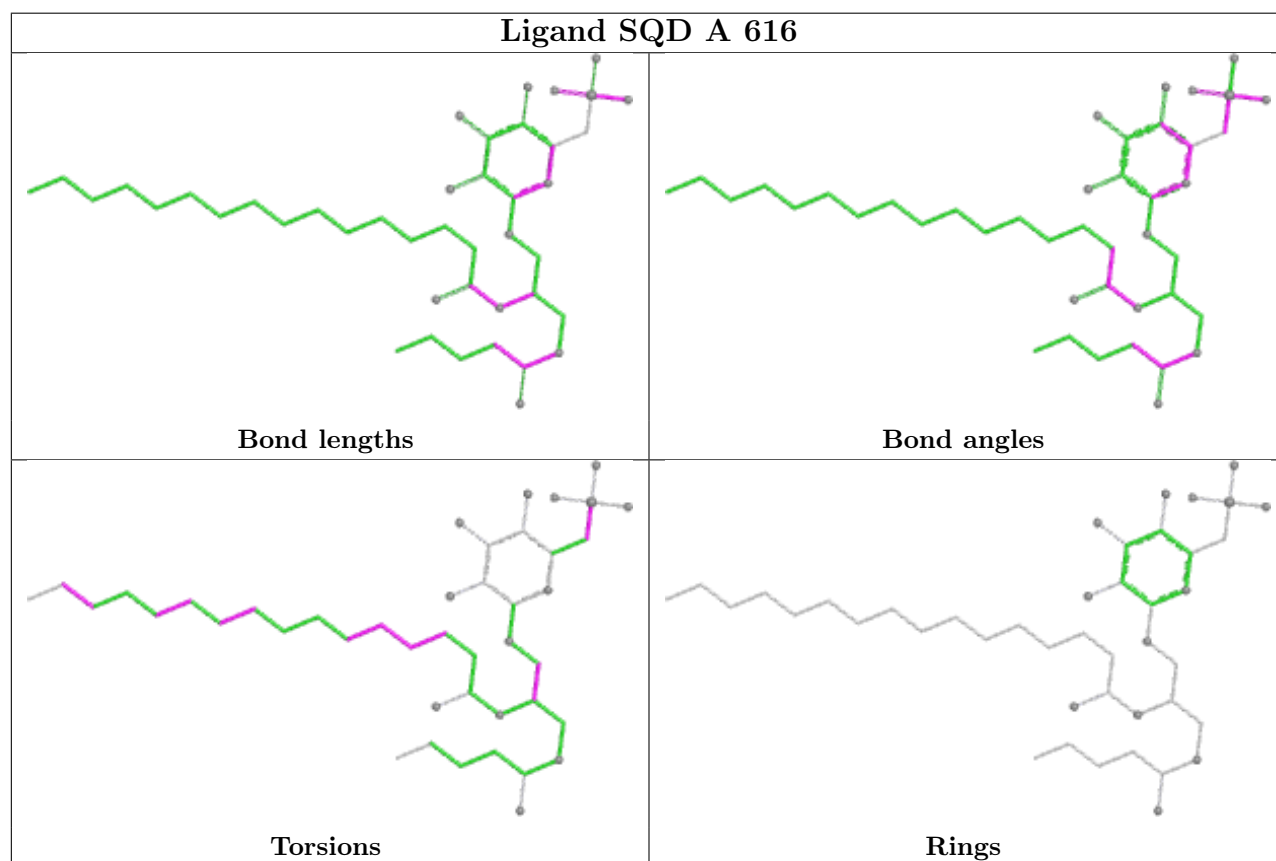
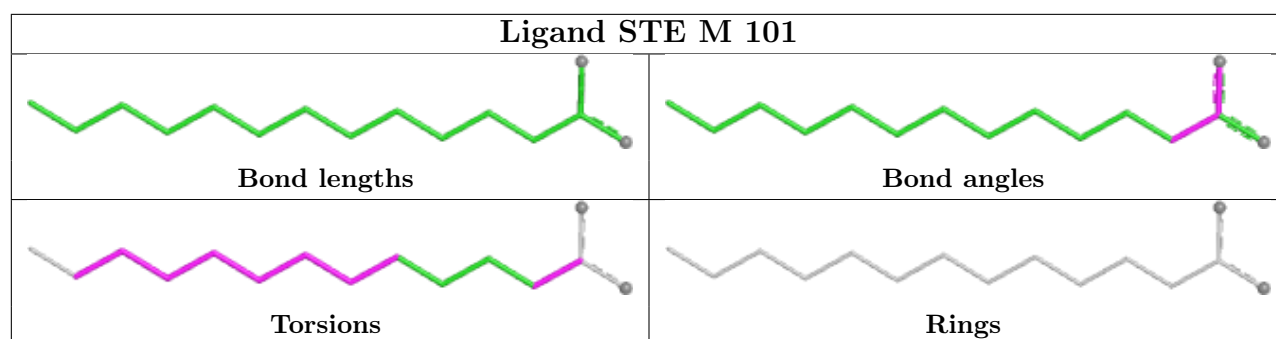
Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	C	508	CLA	2	0
27	c	514	BCR	3	0

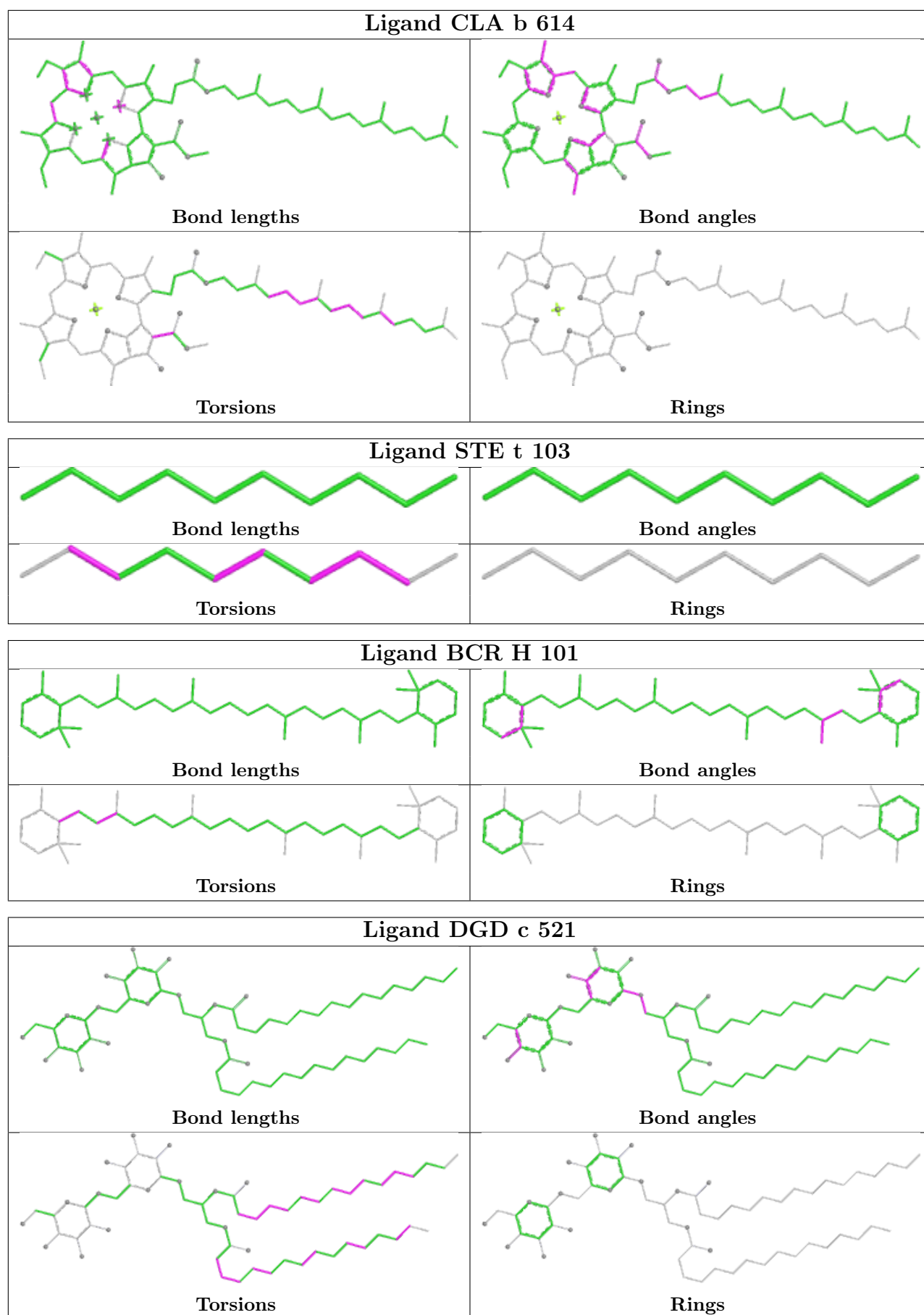
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

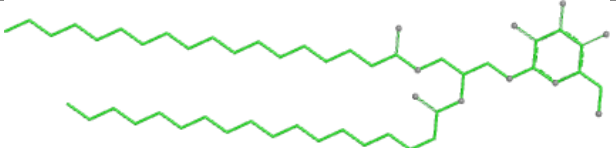
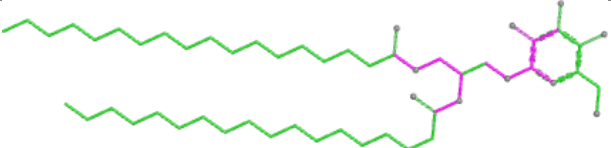


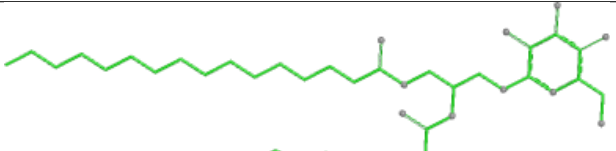
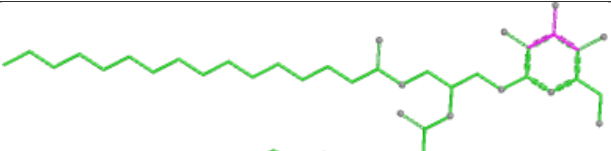
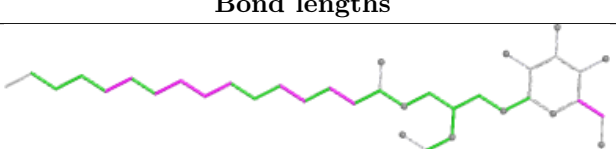
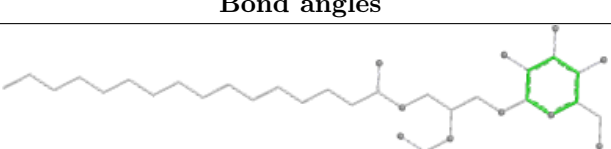


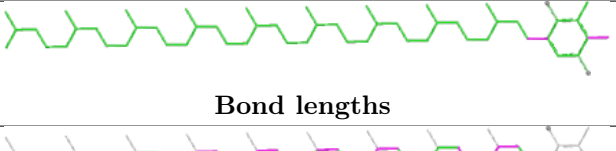
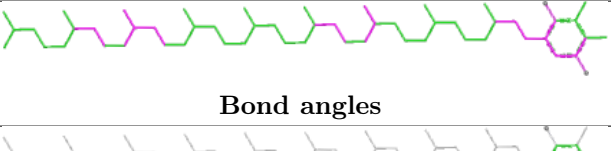


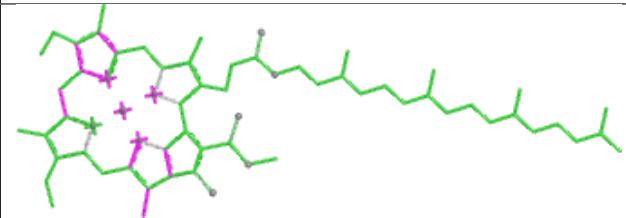
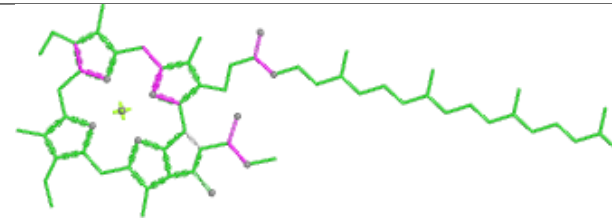
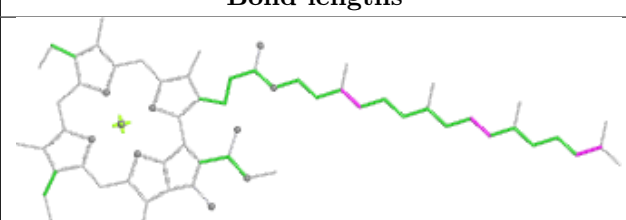
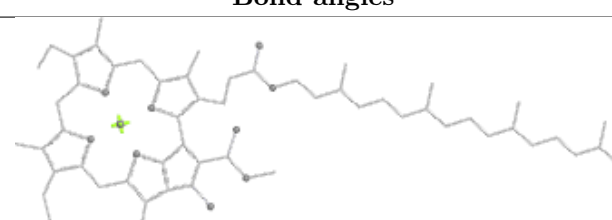


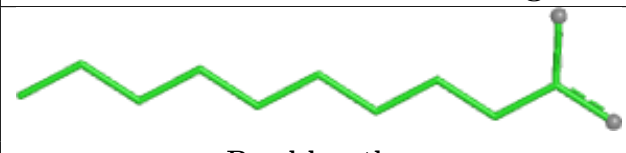
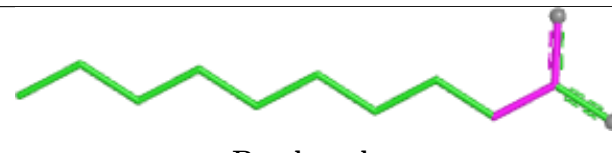
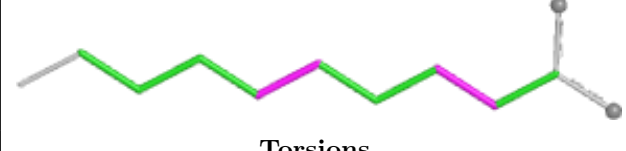
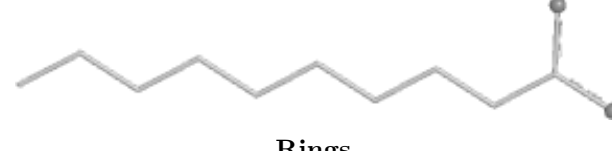


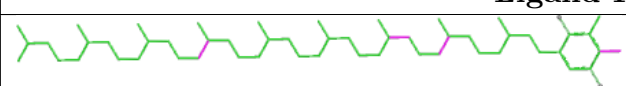
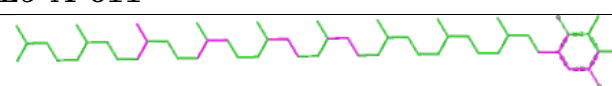
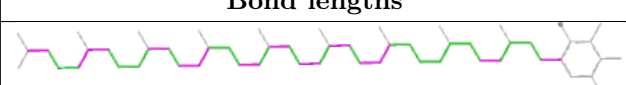
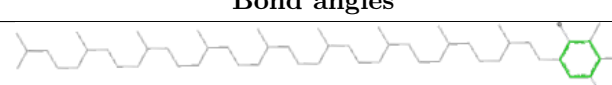
Ligand LMG a 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

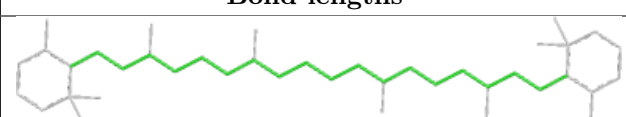
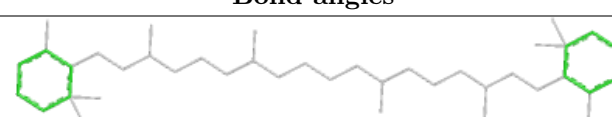
Ligand LMG d 411	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand PL9 a 611	
	
Bond lengths	Bond angles
	
Torsions	Rings

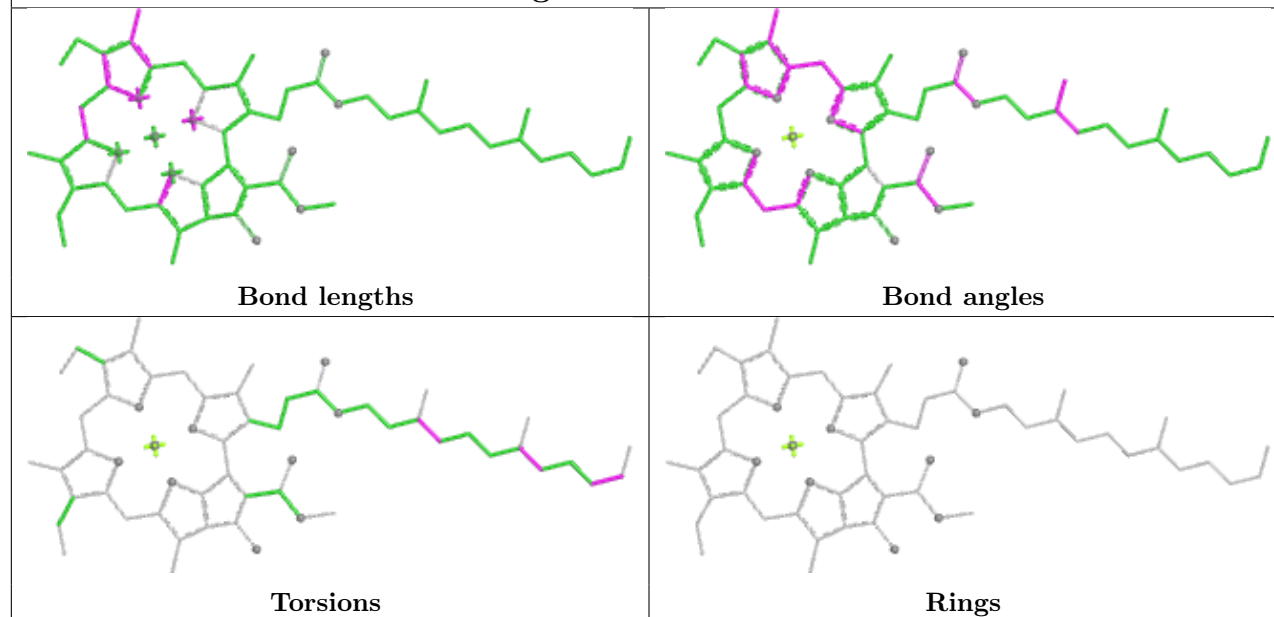
Ligand CLA C 510	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE E 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

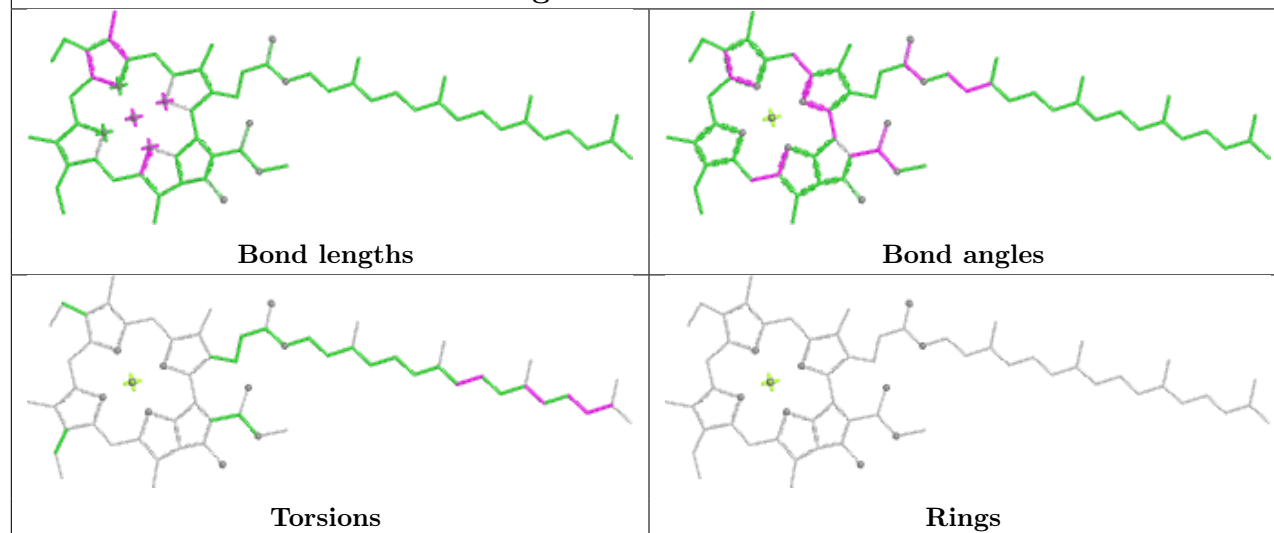
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Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR b 618	
	
Bond lengths	Bond angles
	
Torsions	Rings

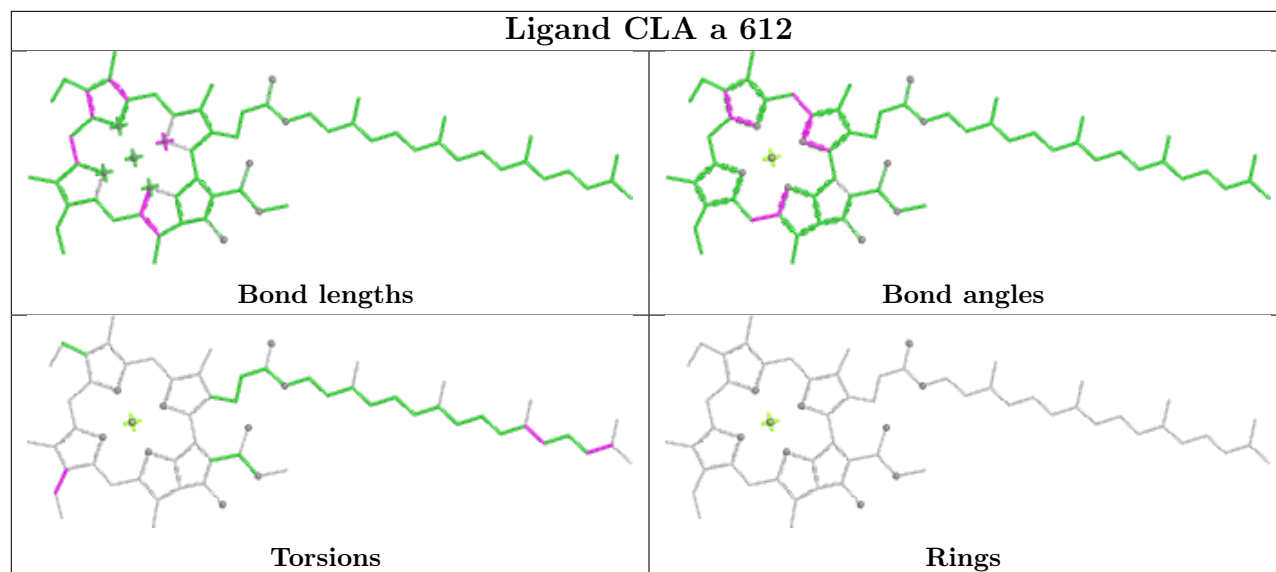
Ligand CLA C 504



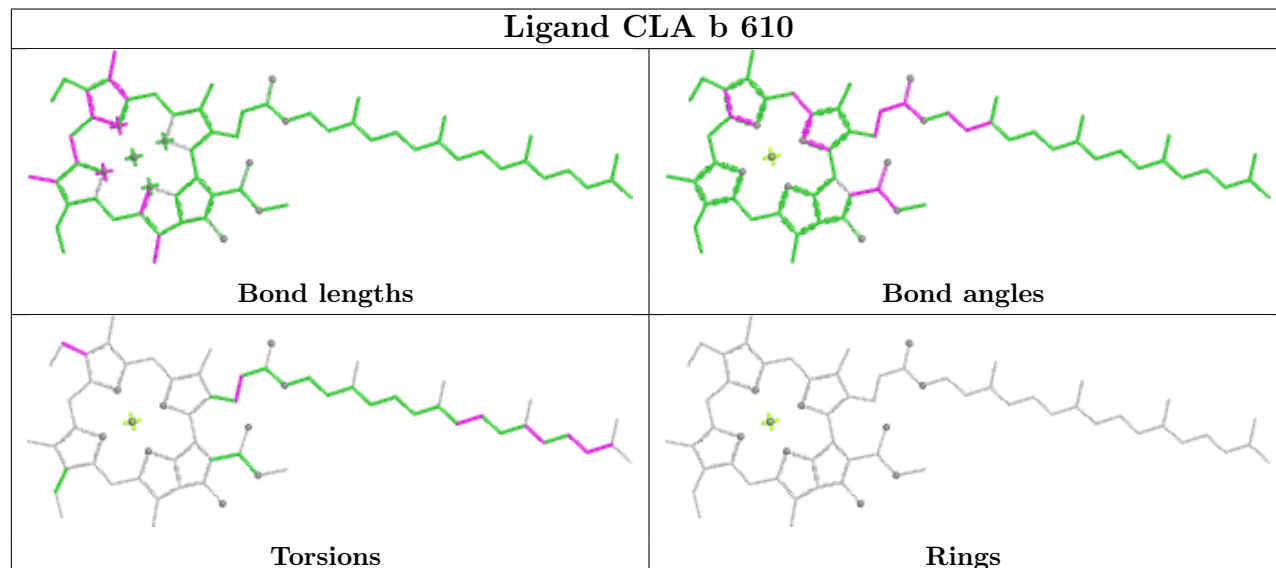
Ligand CLA B 610



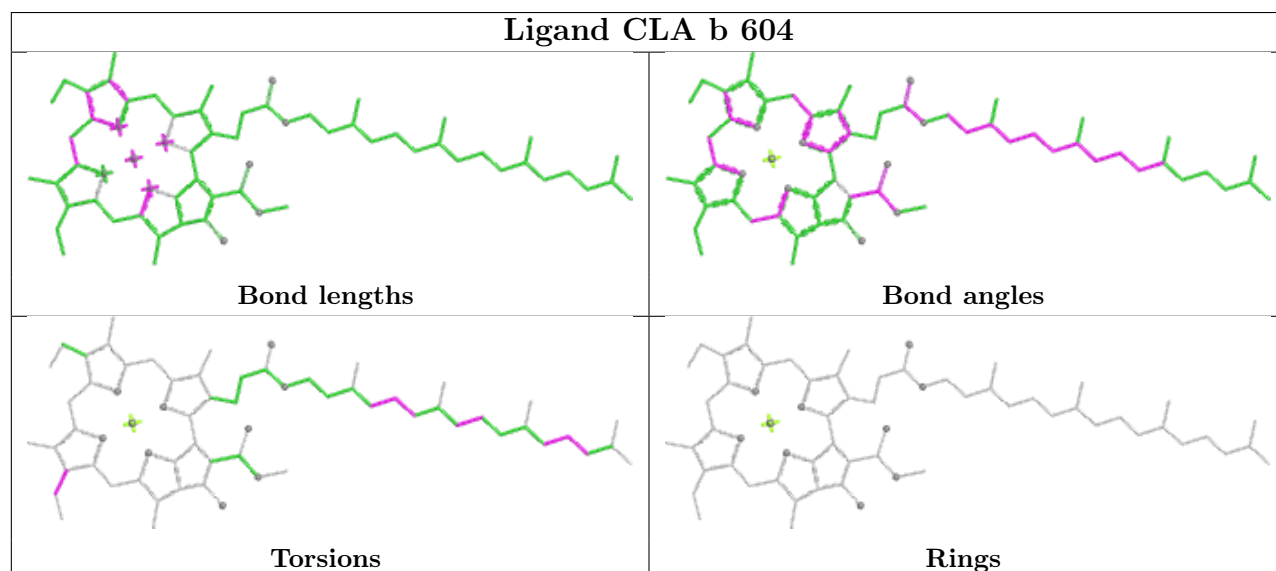
Ligand CLA a 612

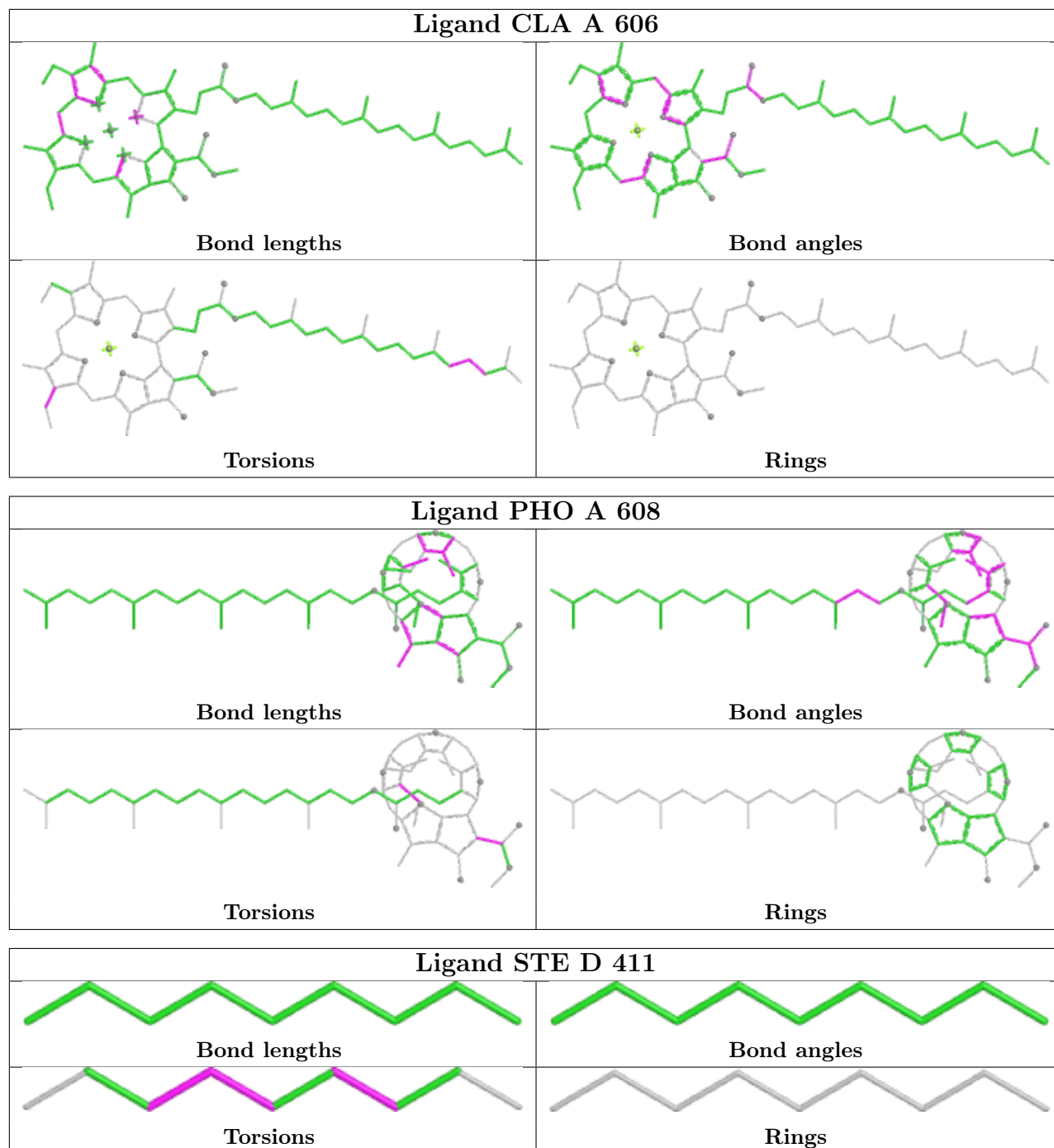


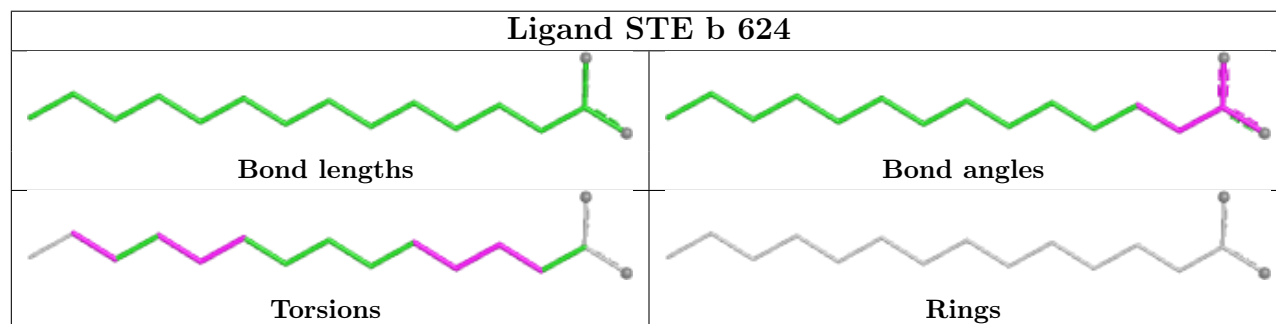
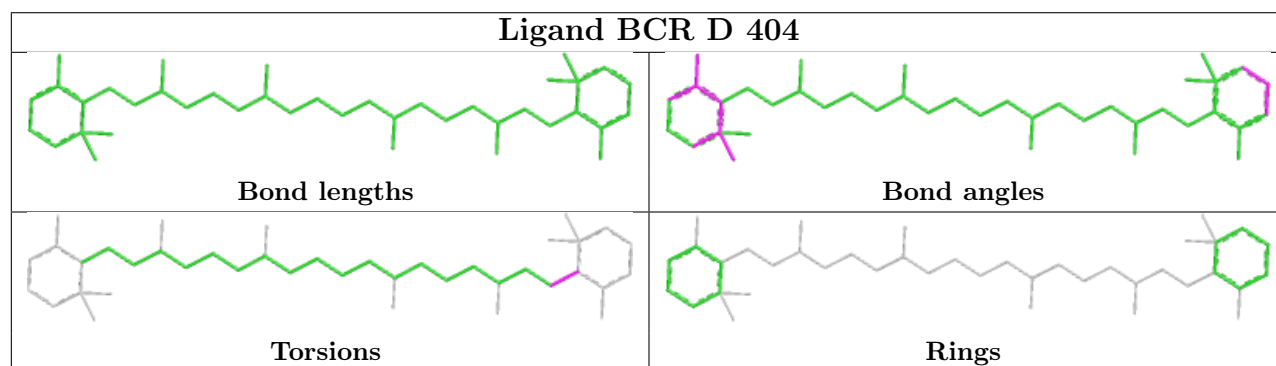
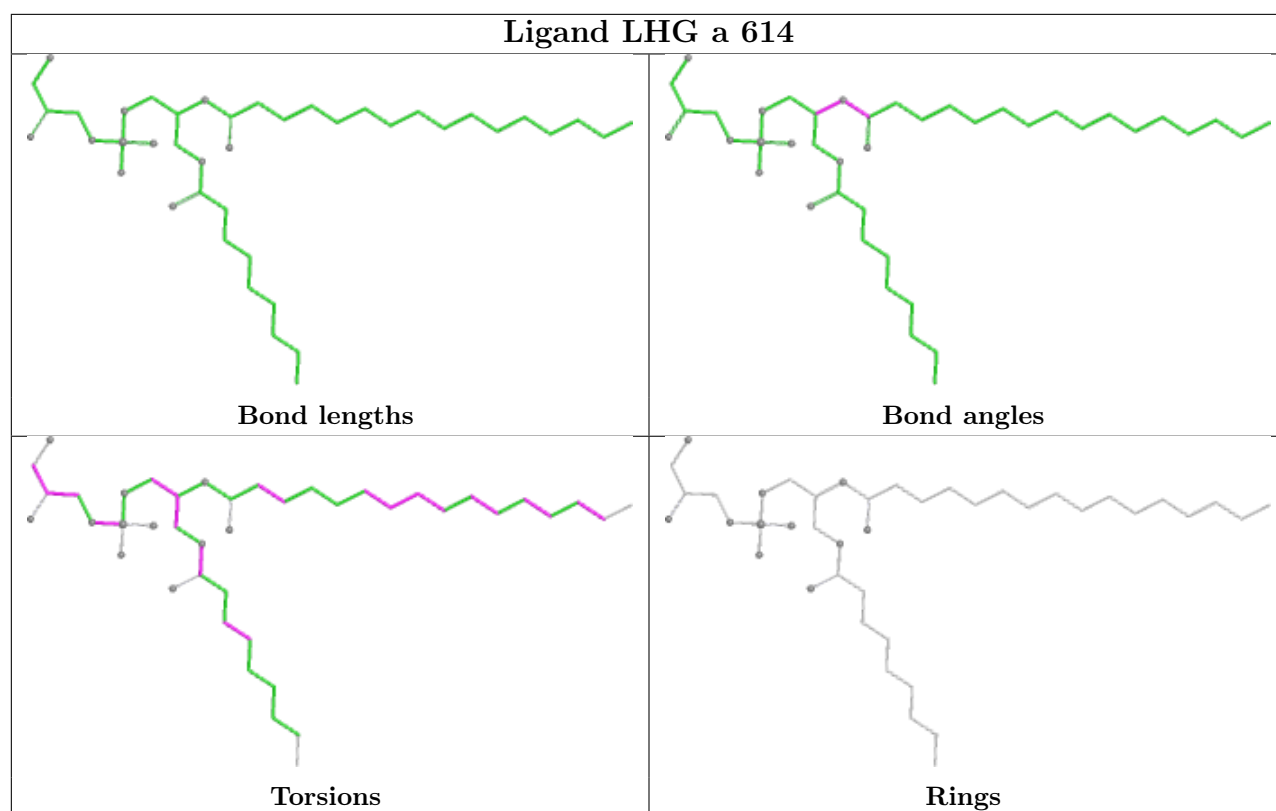
Ligand CLA b 610

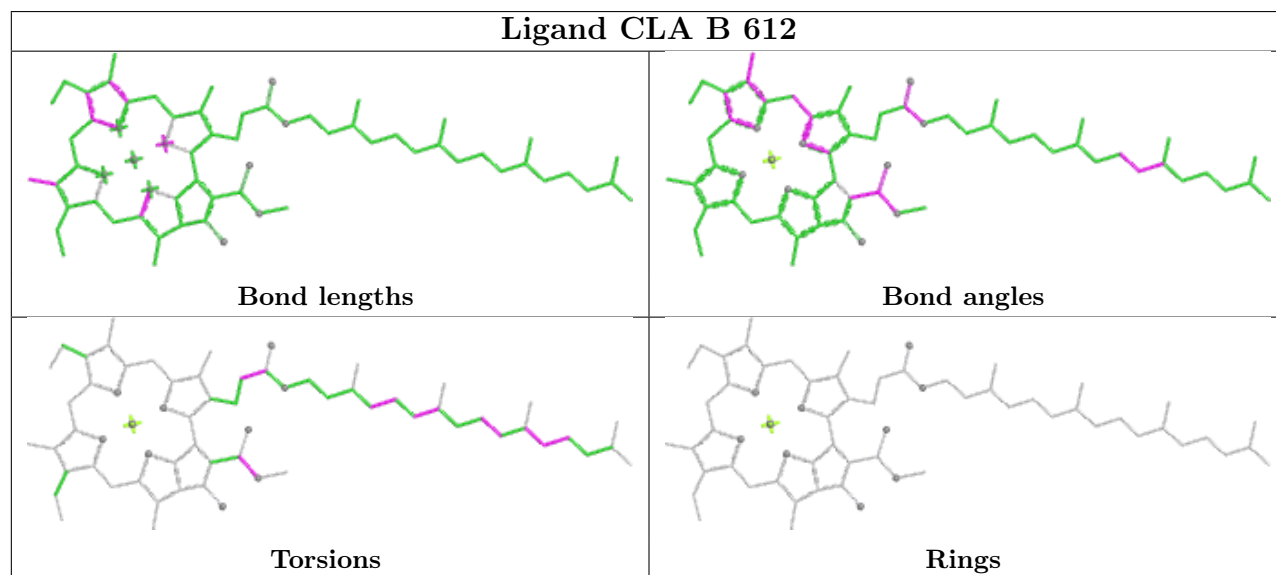
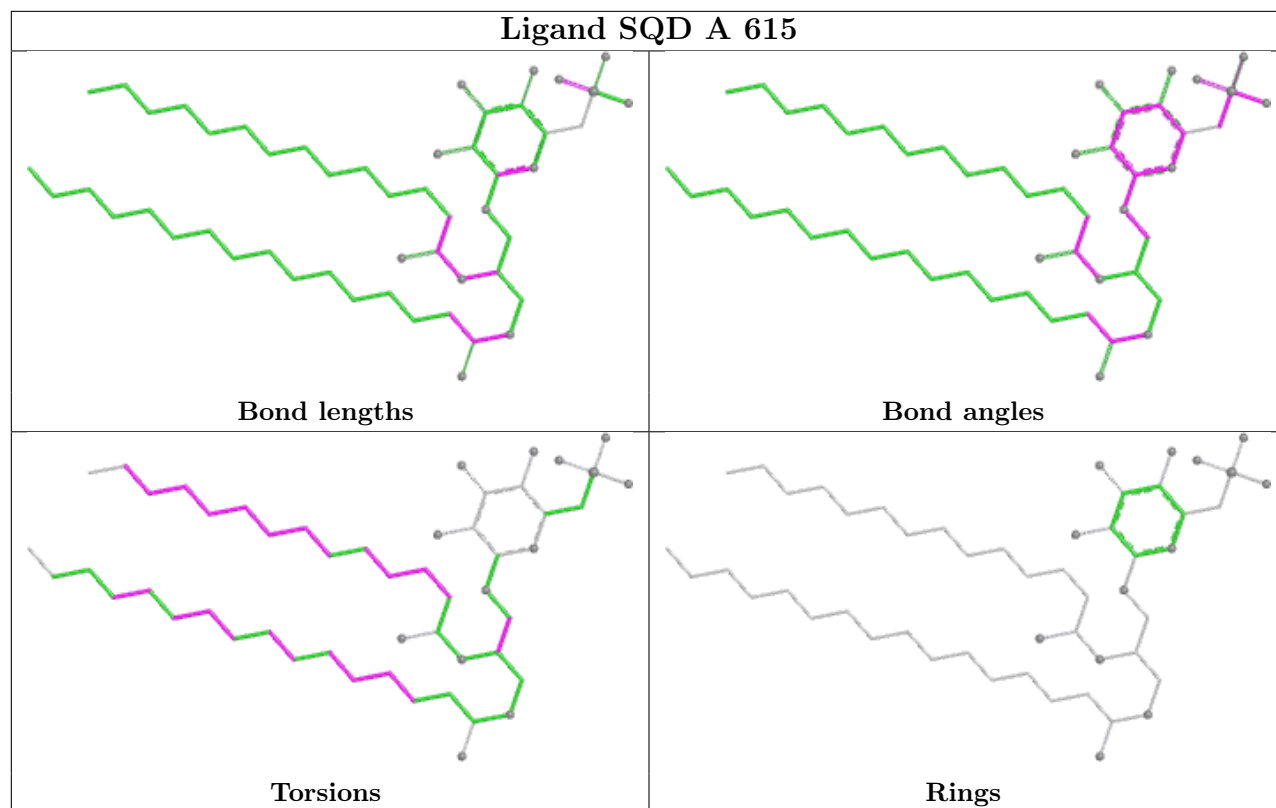


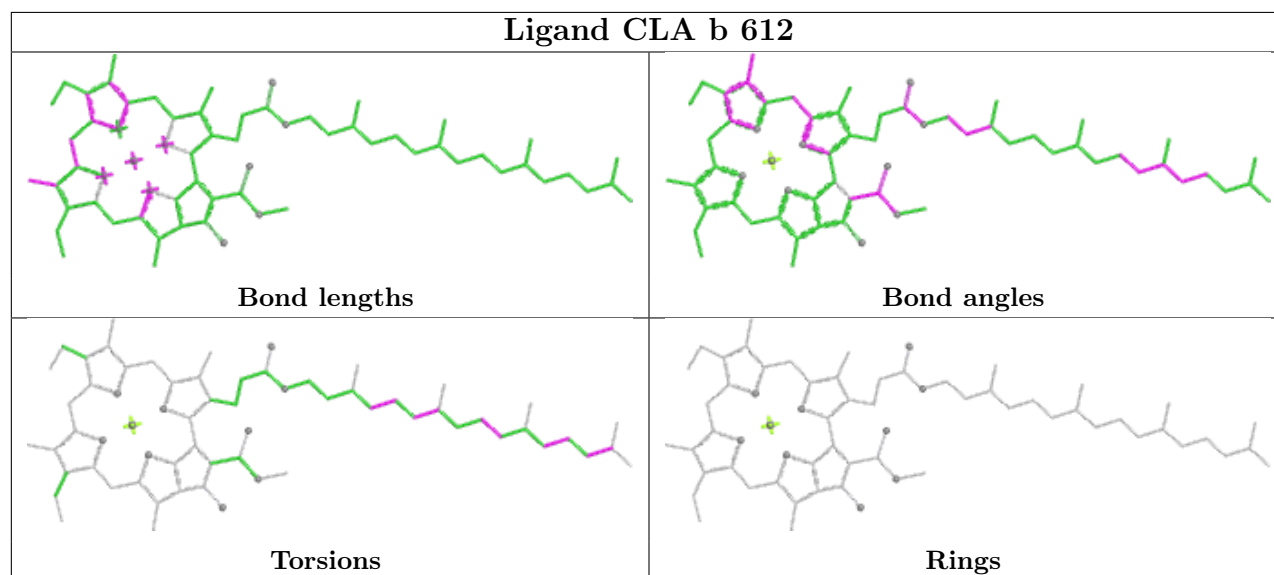
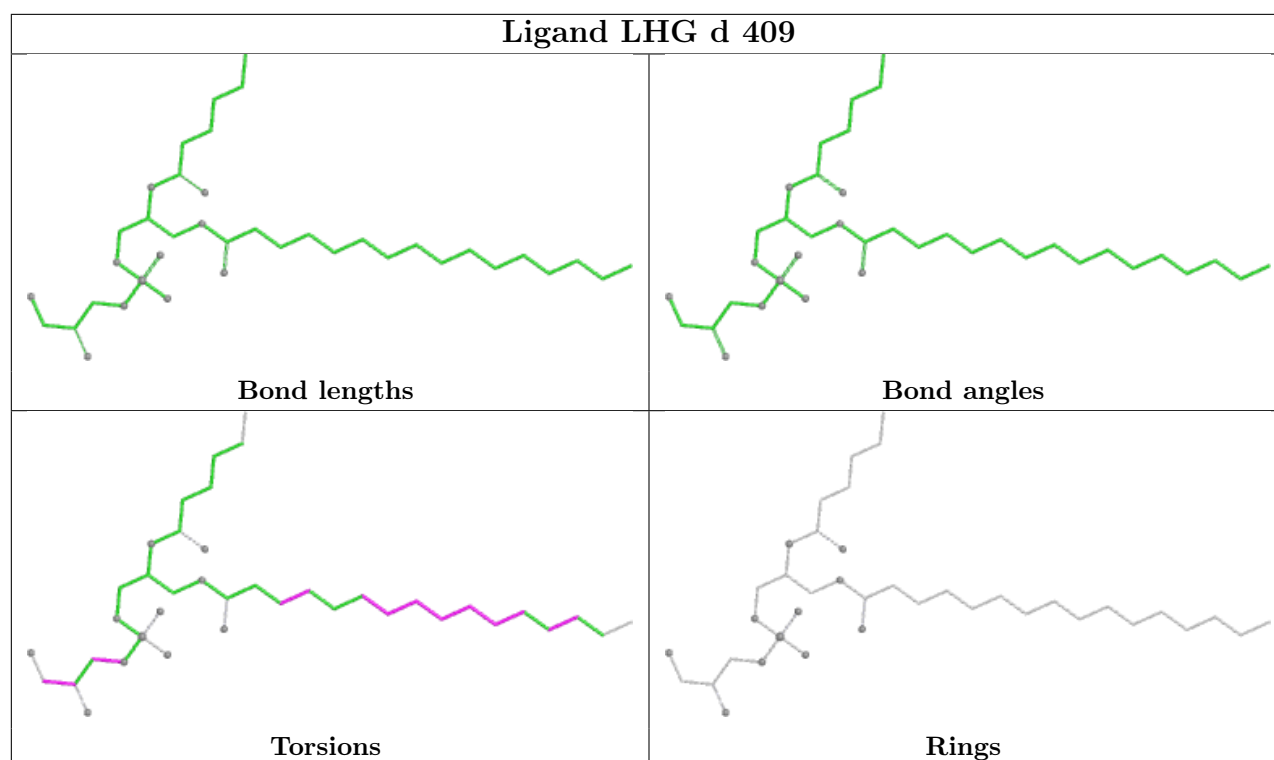
Ligand CLA b 604

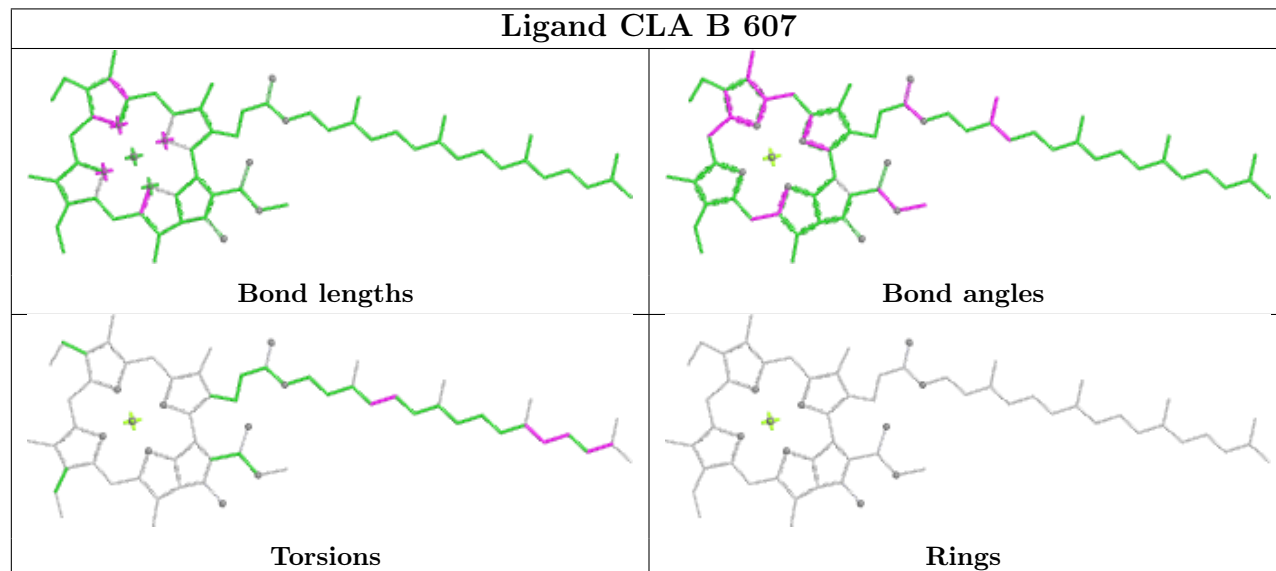
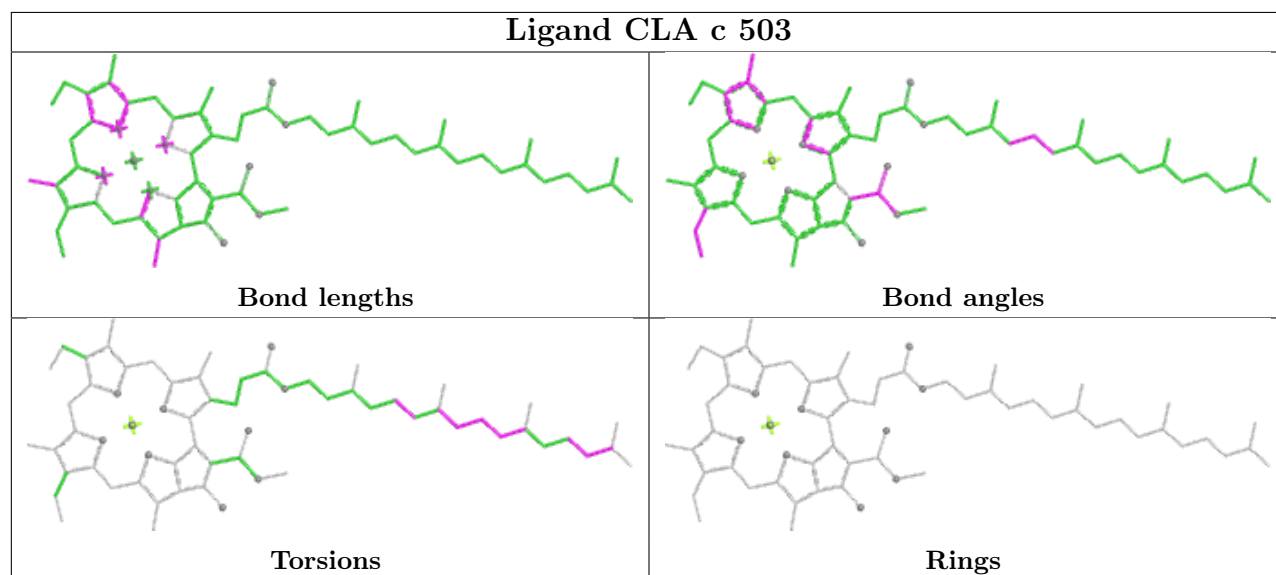
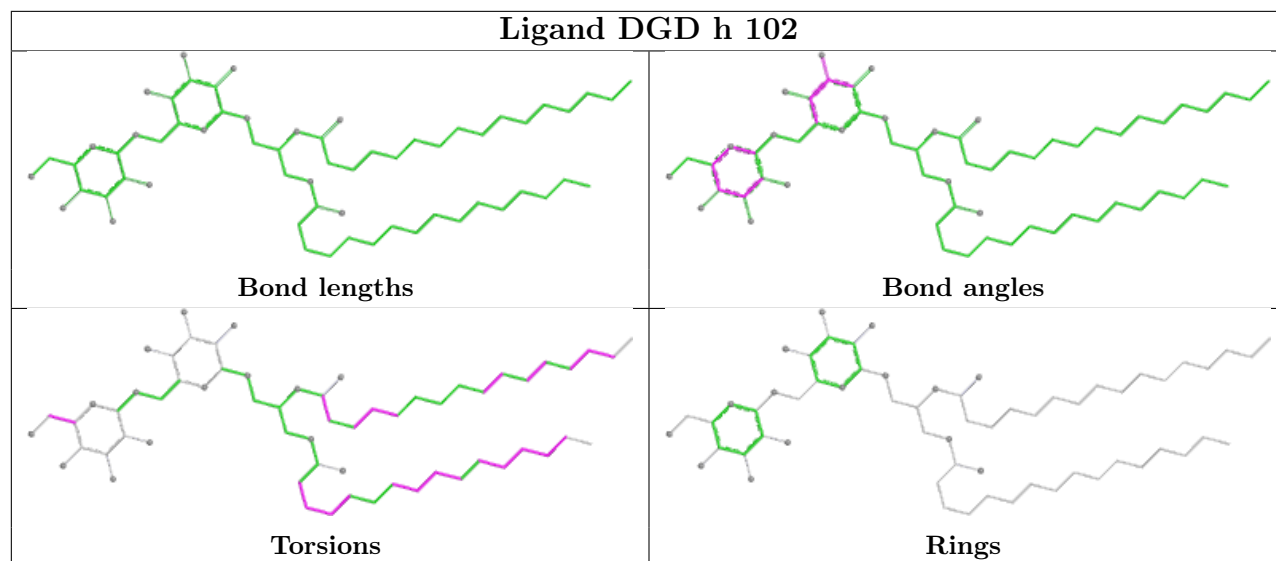


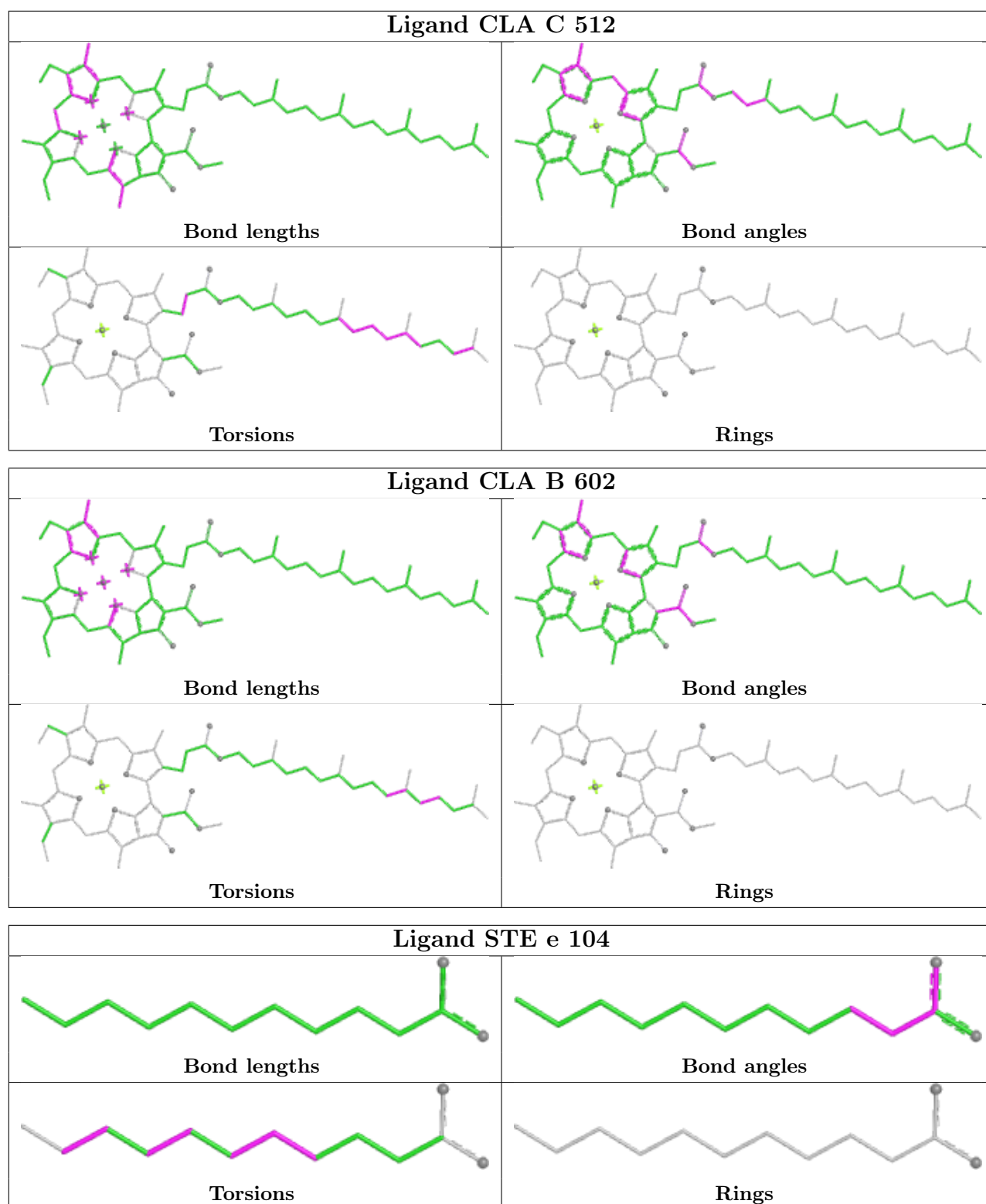


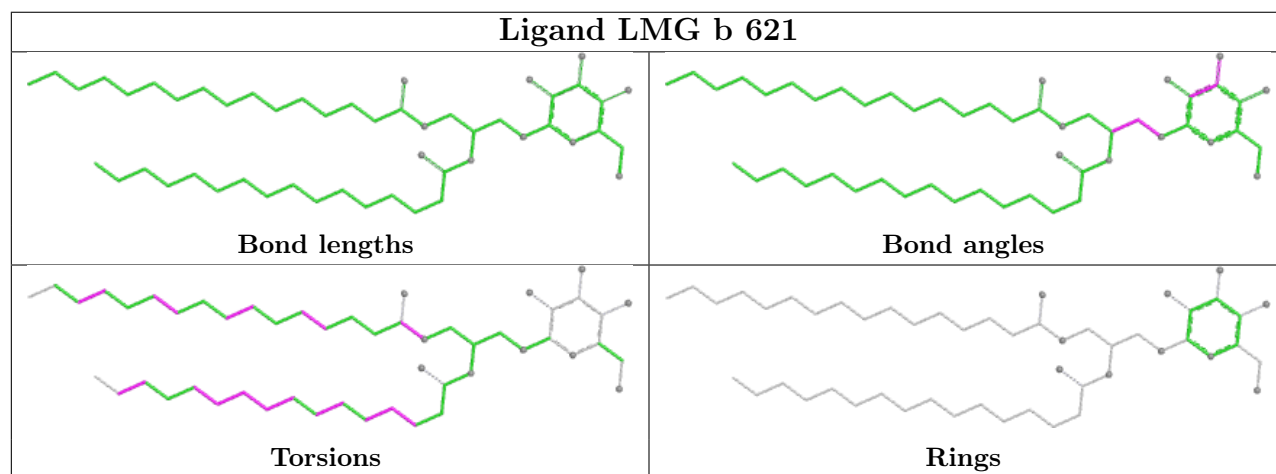
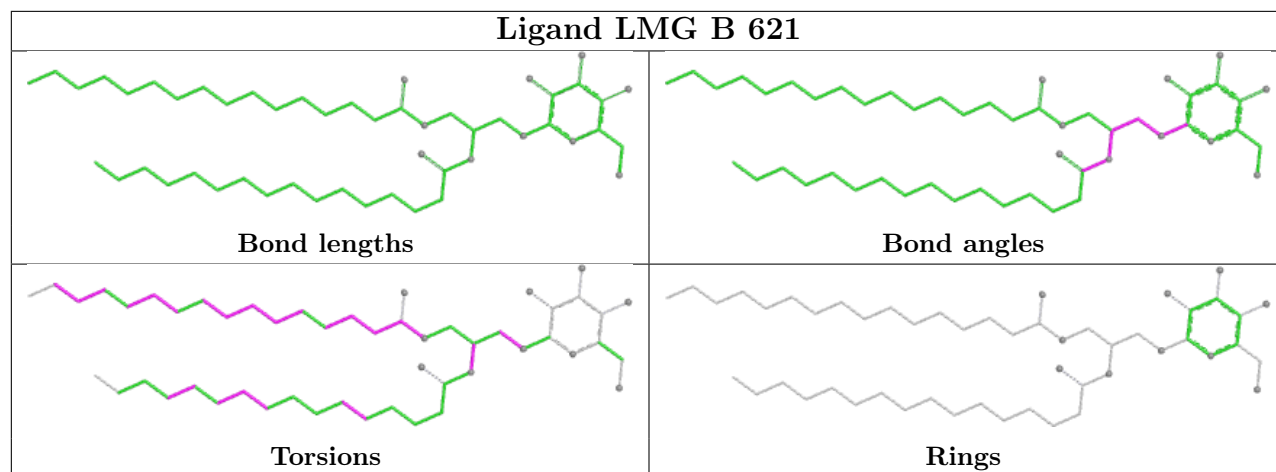


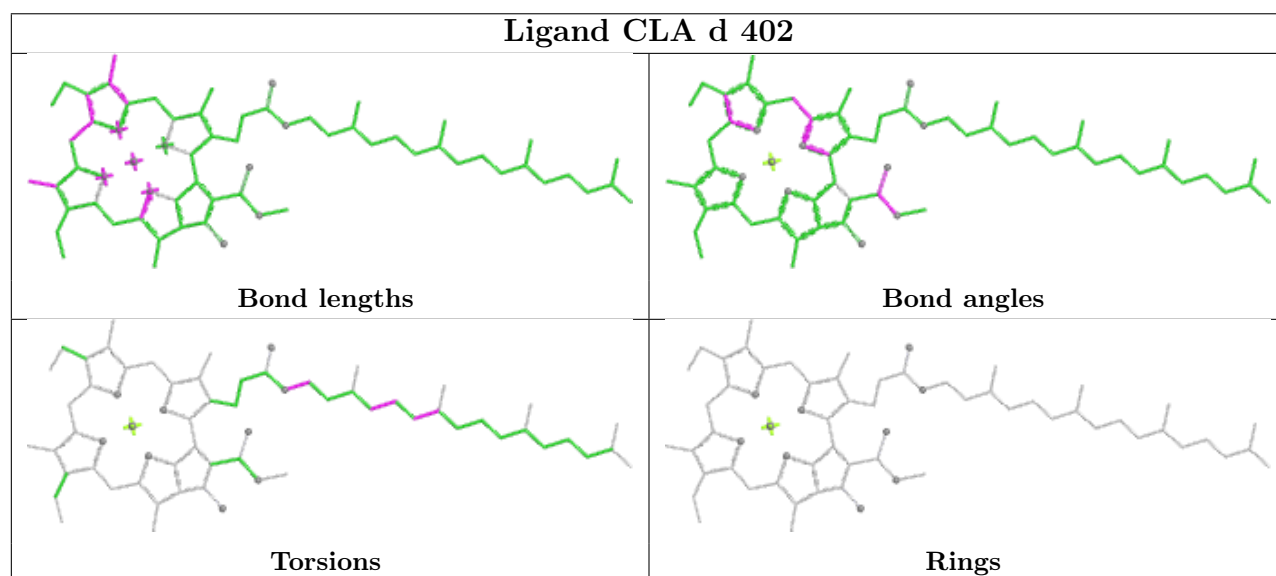
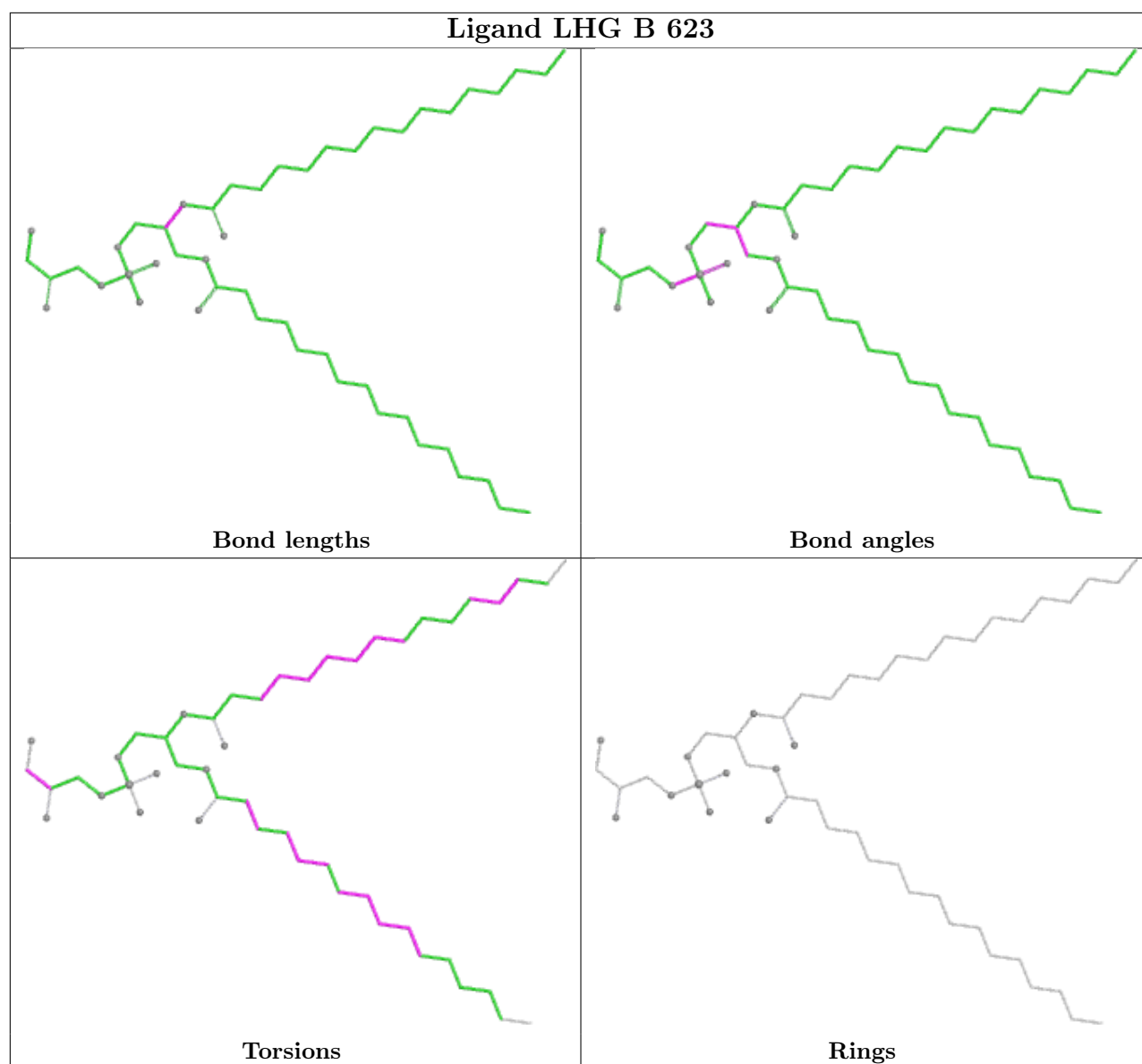


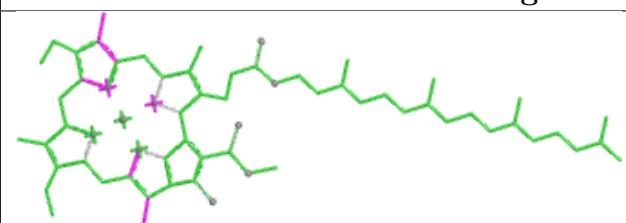
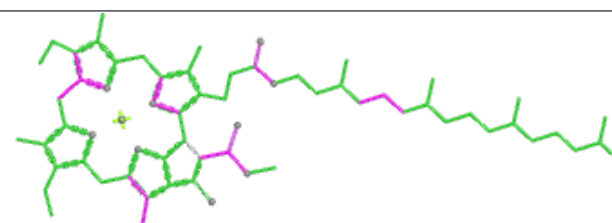
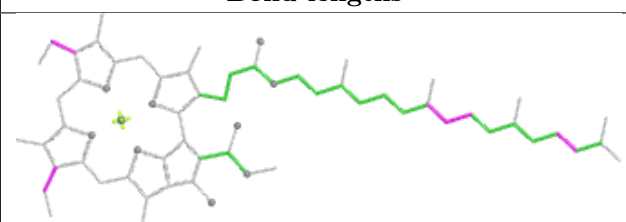
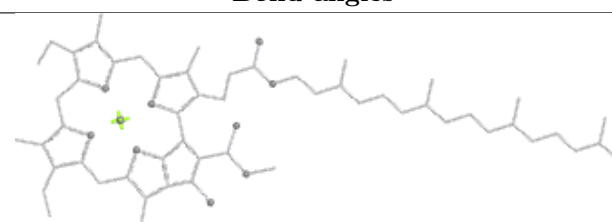


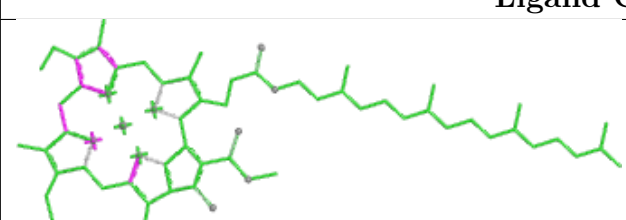
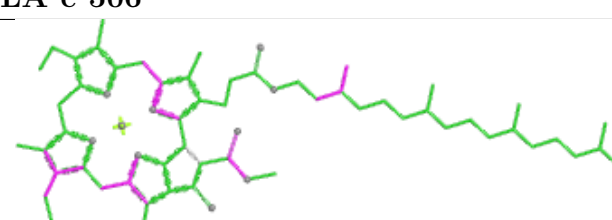
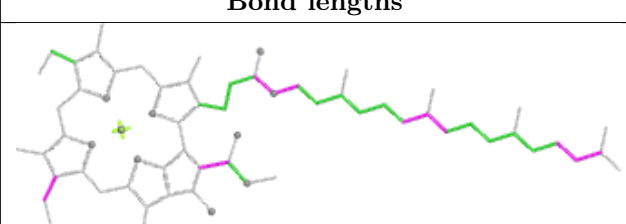
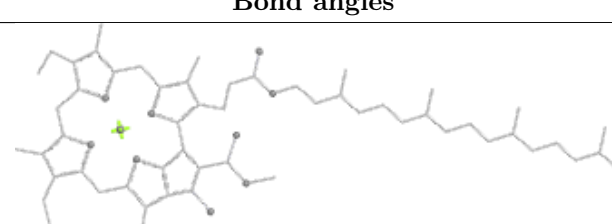


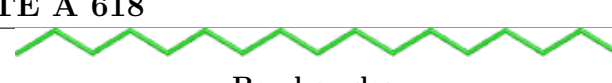


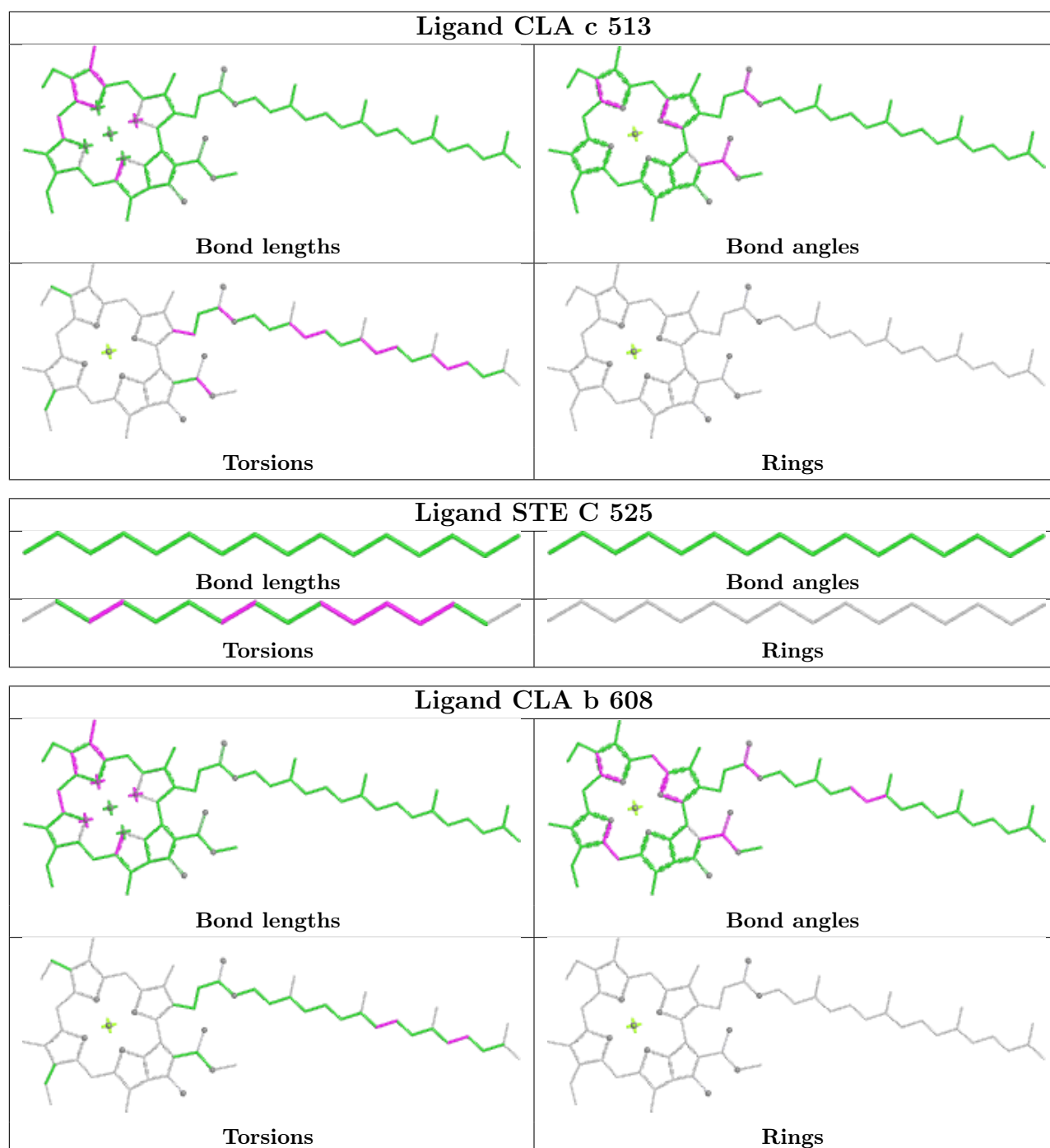




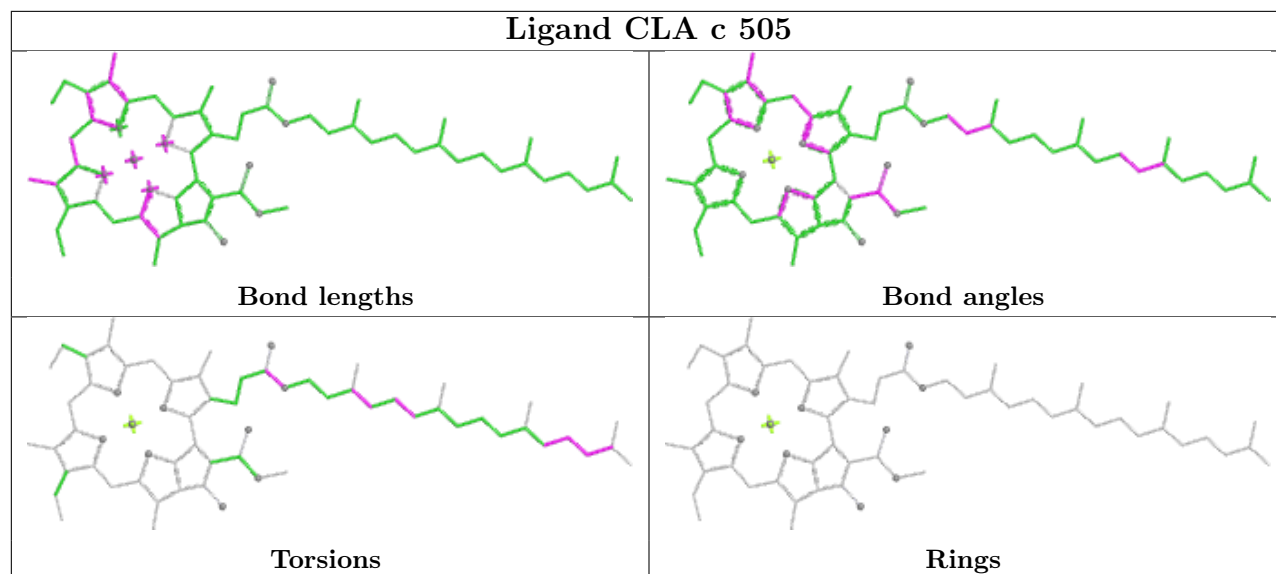
Ligand CLA A 607	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA c 506	
	
Bond lengths	Bond angles
	
Torsions	Rings

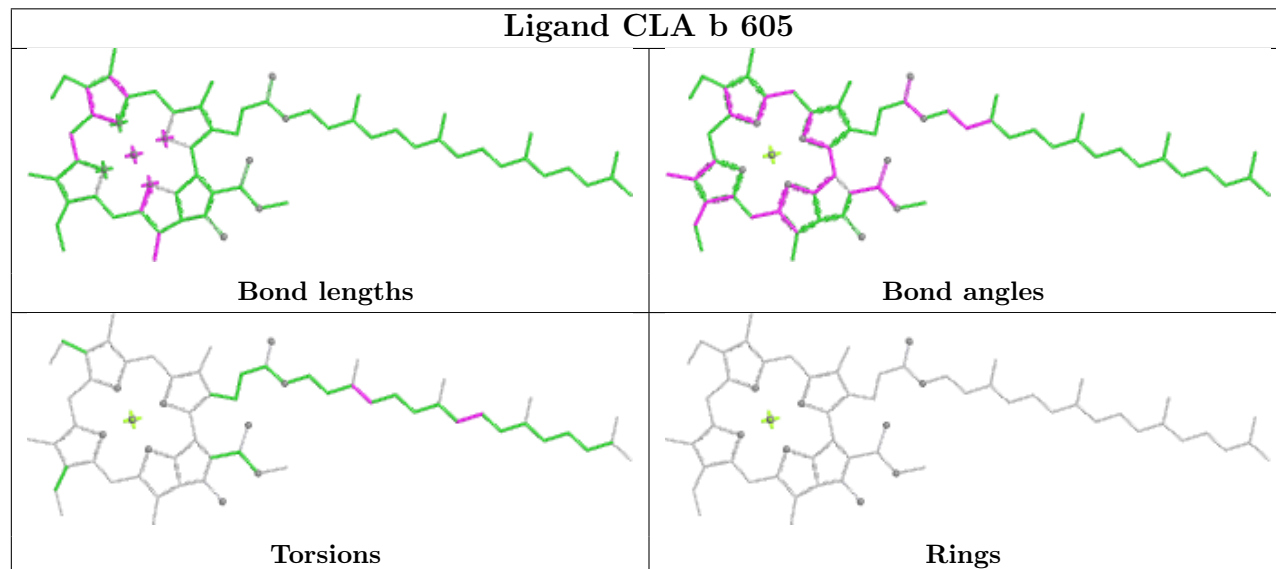
Ligand STE A 618	
	
Bond lengths	Bond angles
	
Torsions	Rings



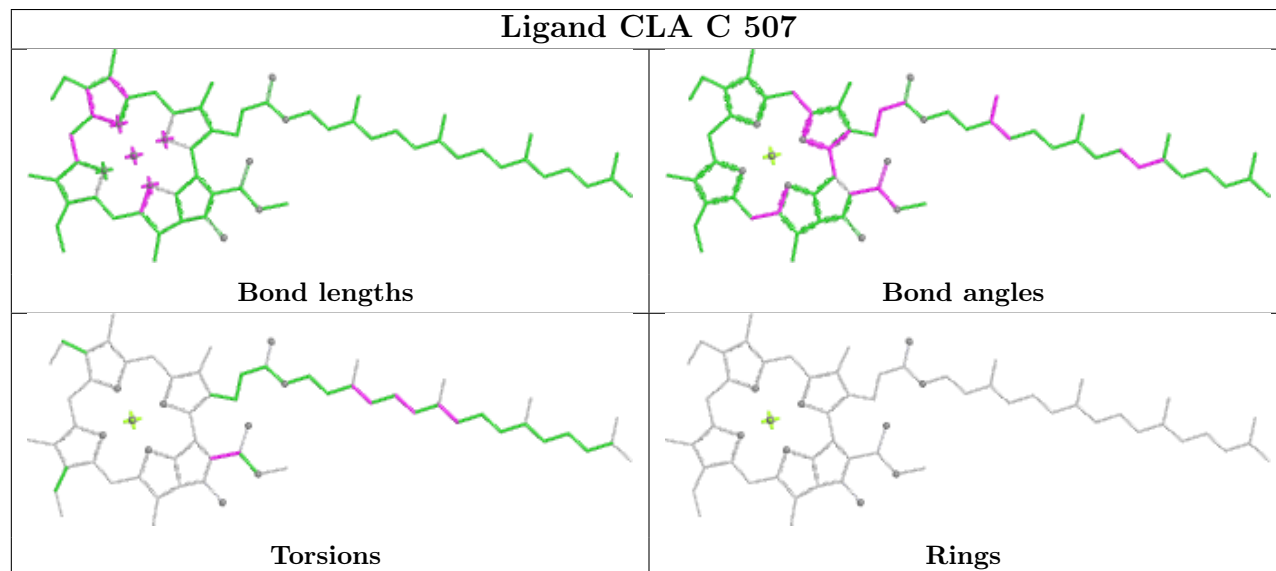
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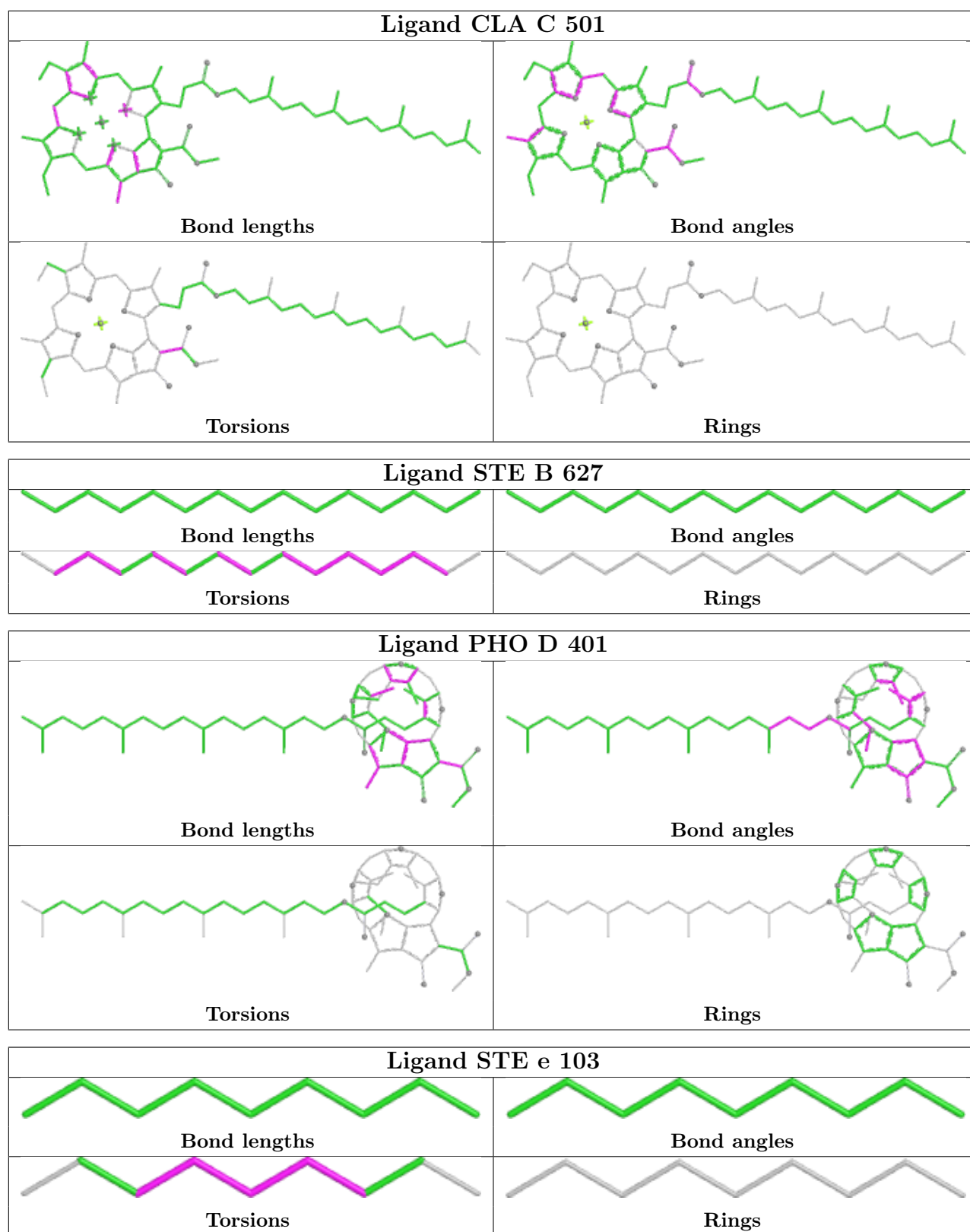


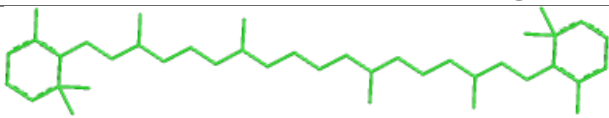
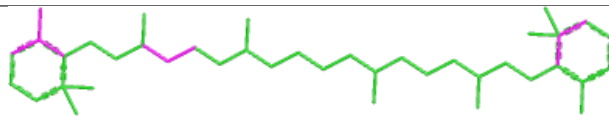
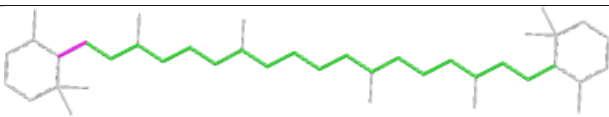
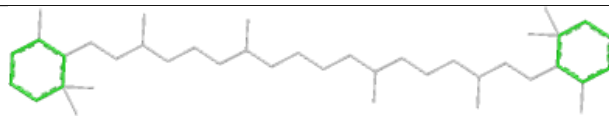
Ligand CLA b 605

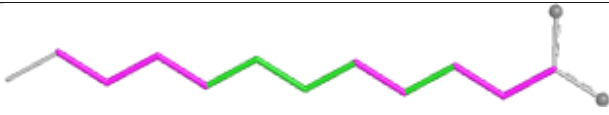
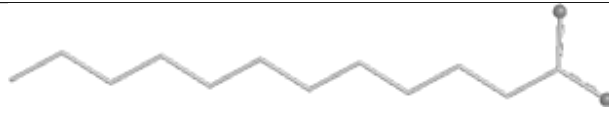


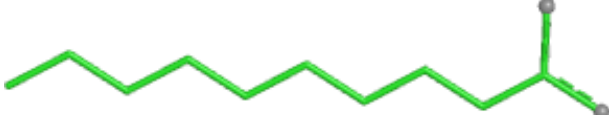
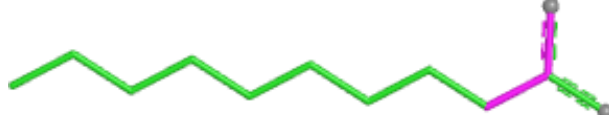
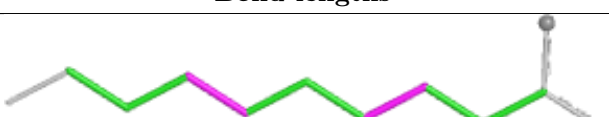
Ligand CLA C 507

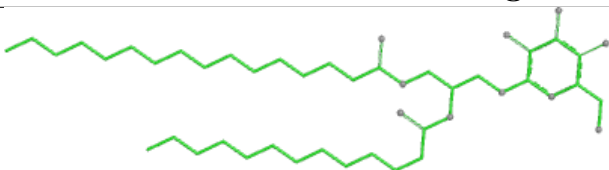
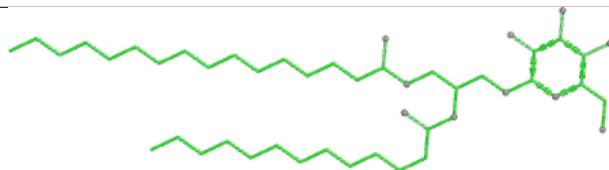
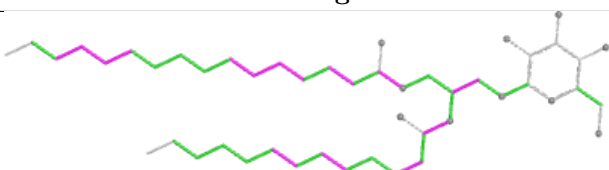
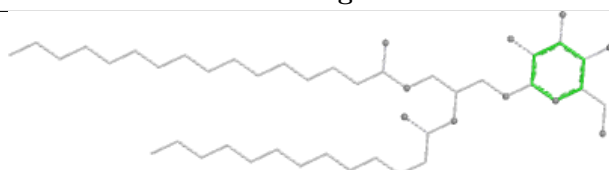


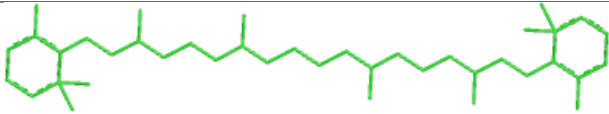
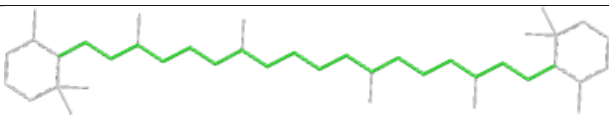
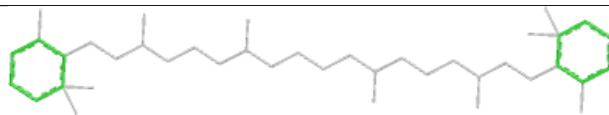


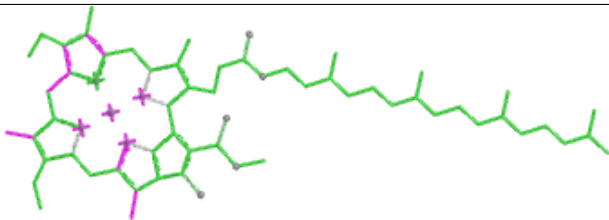
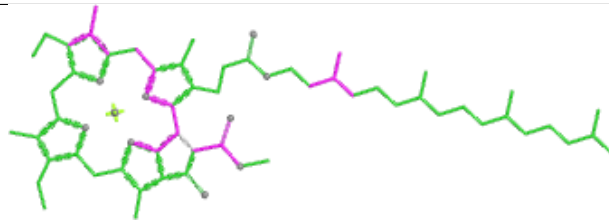
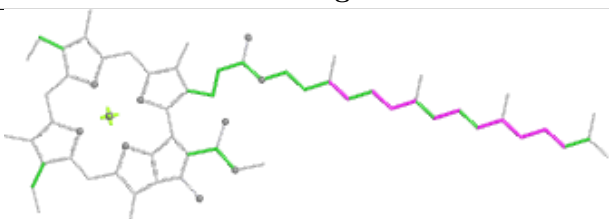
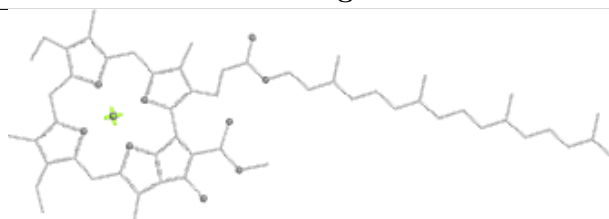
Ligand BCR b 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

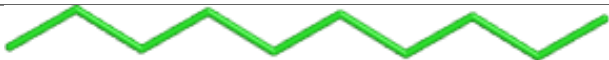
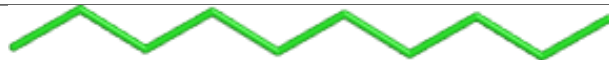
Ligand STE C 515	
	
Bond lengths	Bond angles
	
Torsions	Rings

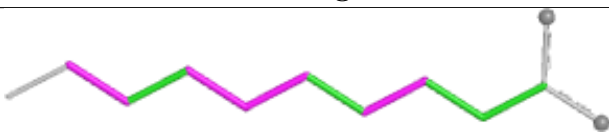
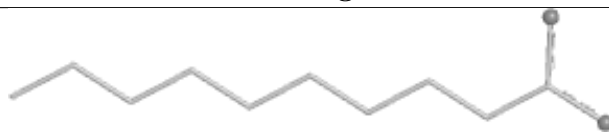
Ligand STE B 626	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMG C 523	
	
Bond lengths	Bond angles
	
Torsions	Rings

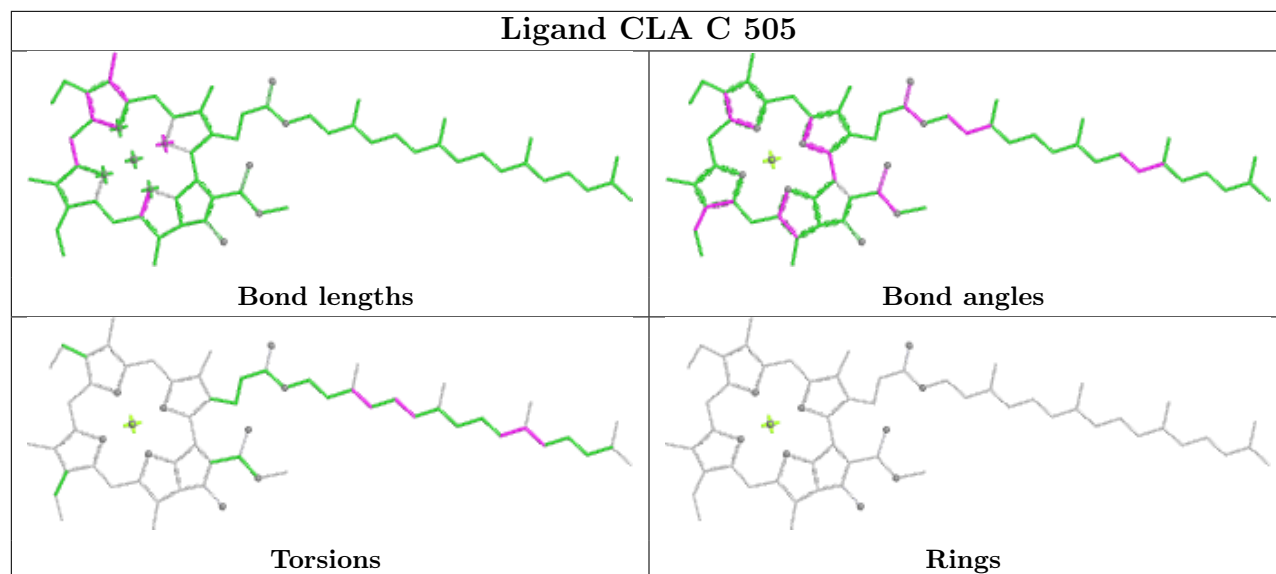
Ligand BCR a 610	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA a 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

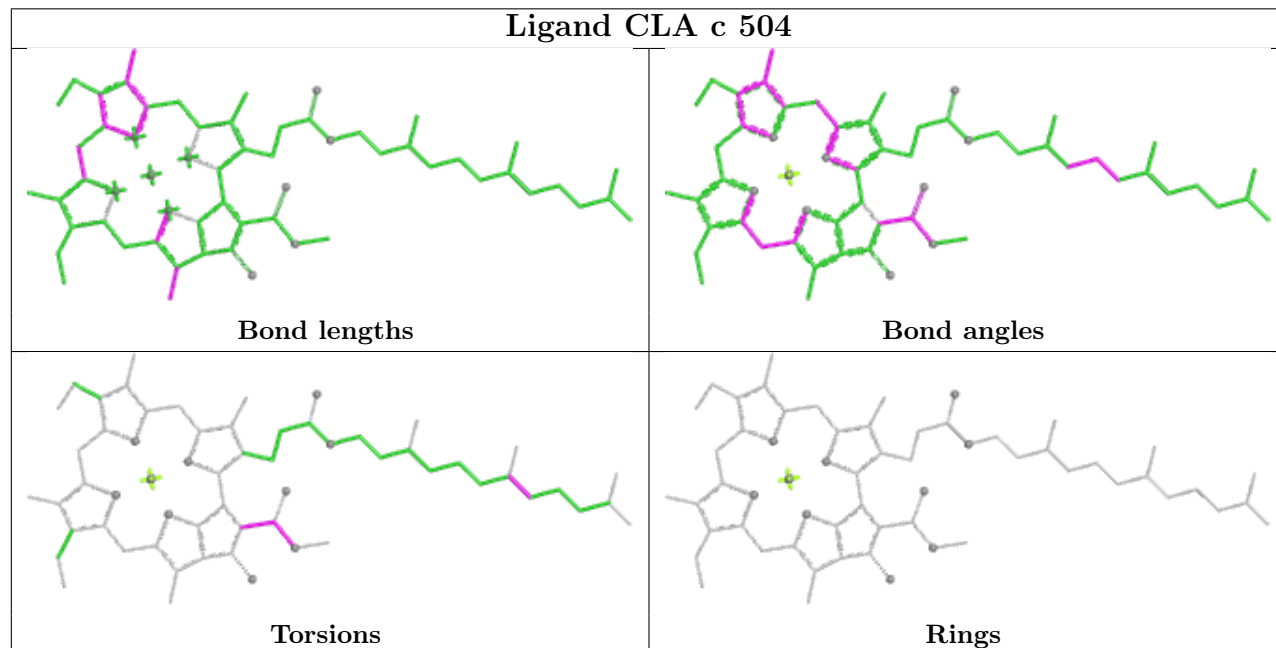
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Bond lengths	Bond angles
	
Torsions	Rings

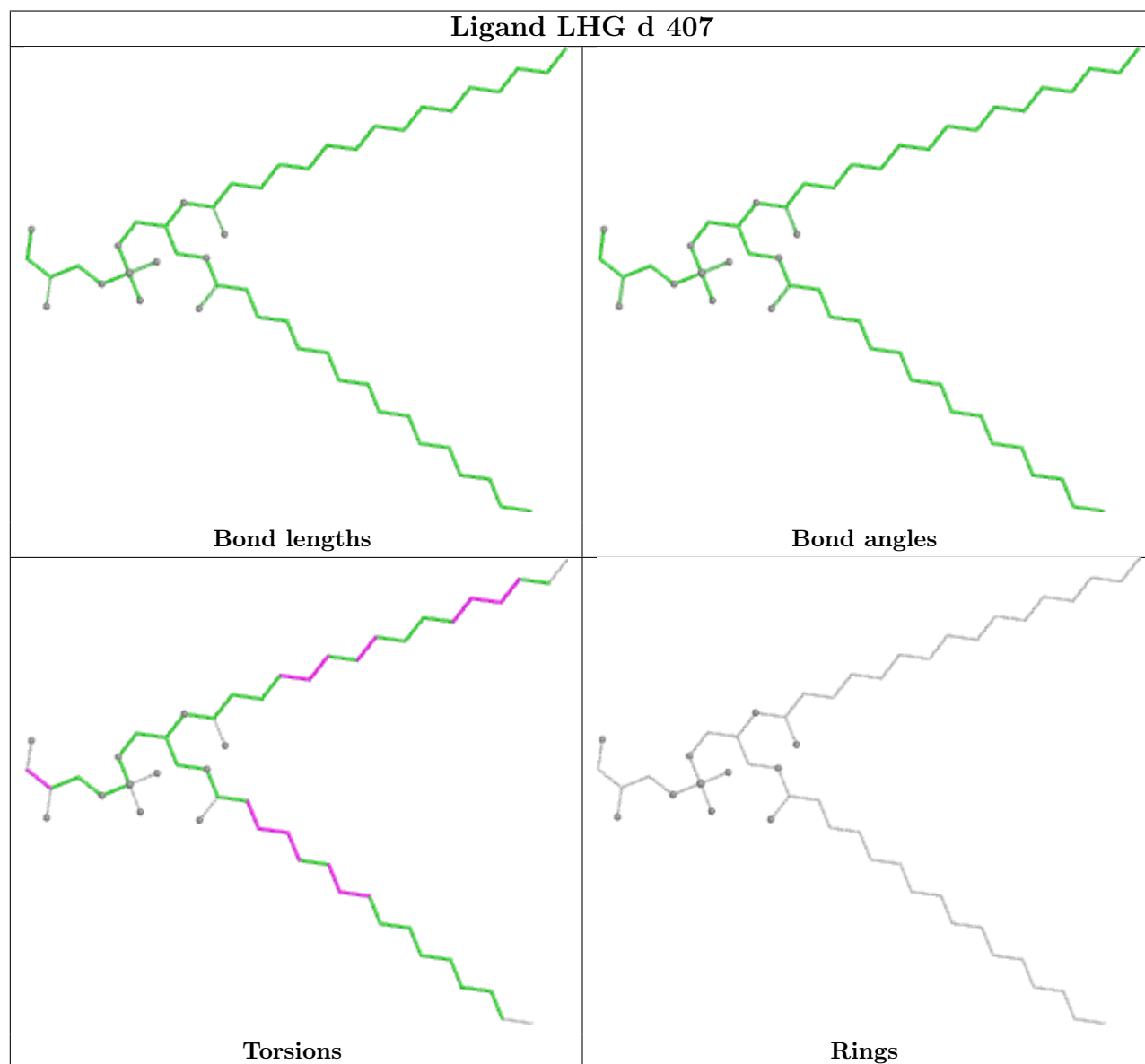
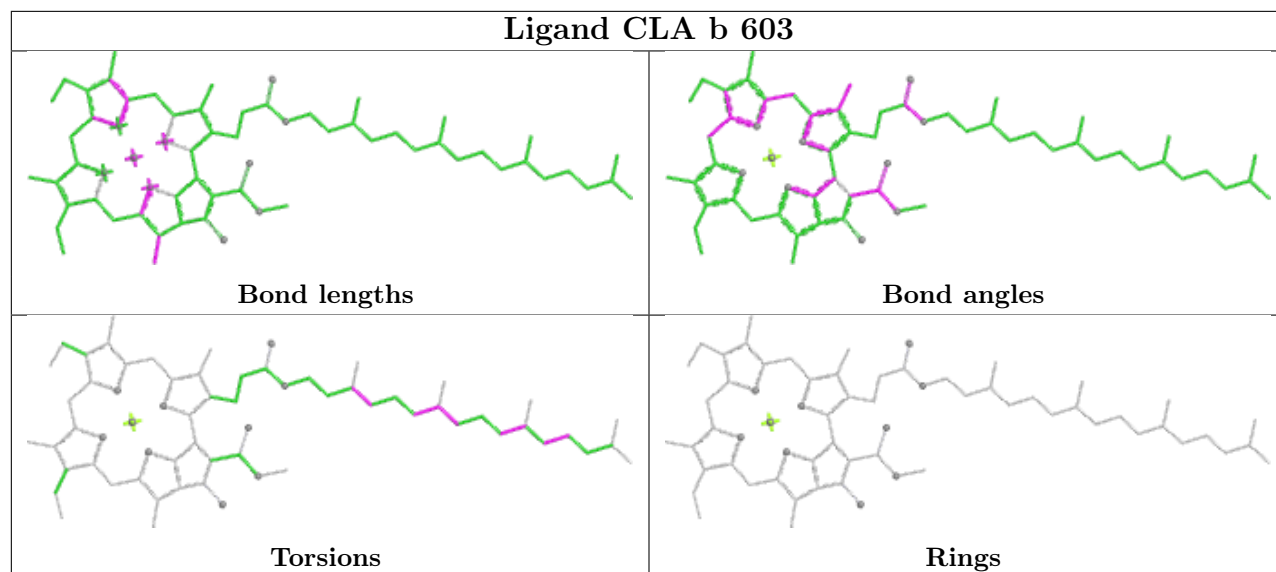
Ligand STE j 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

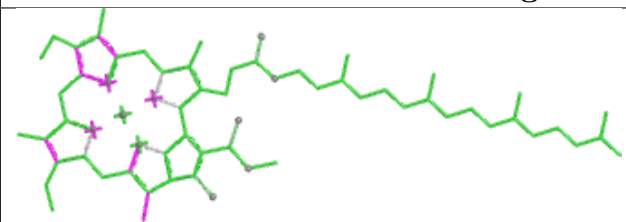
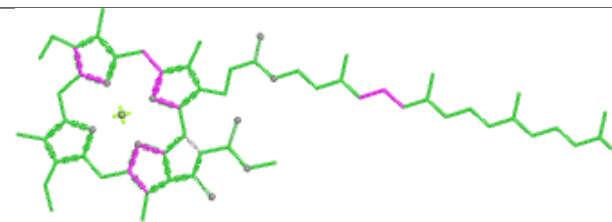
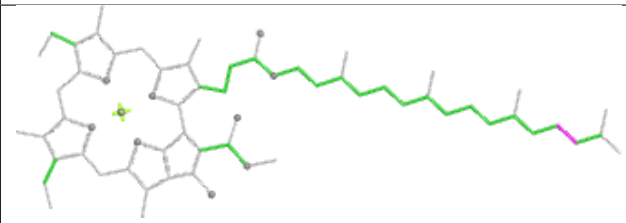
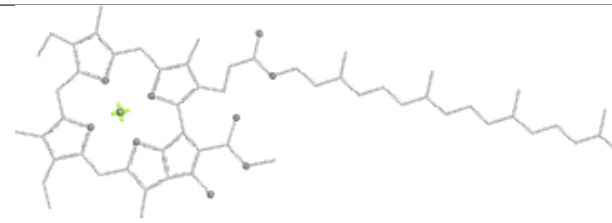
Ligand CLA C 505

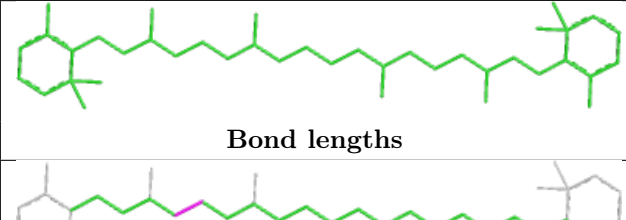
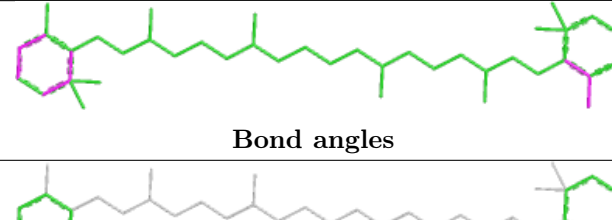
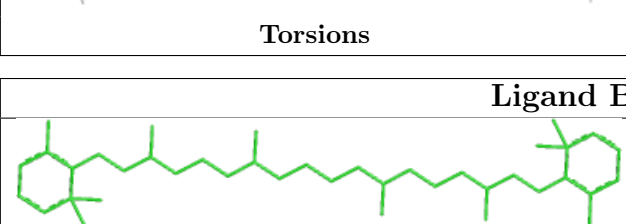
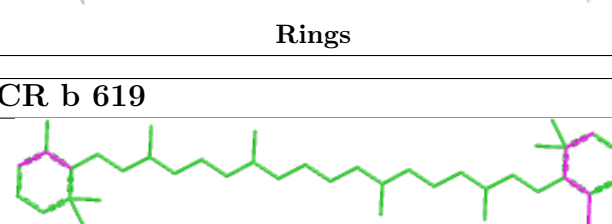


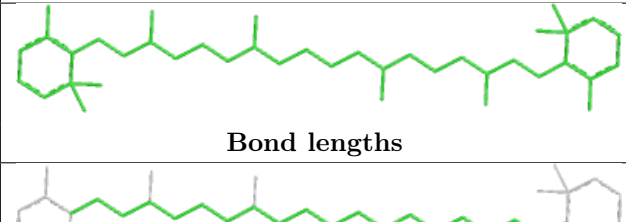
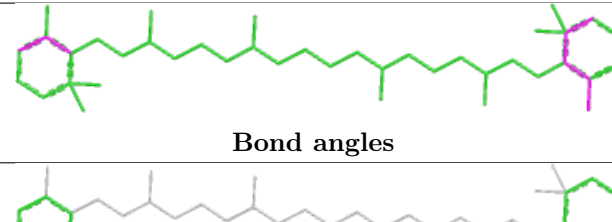
Ligand CLA c 504

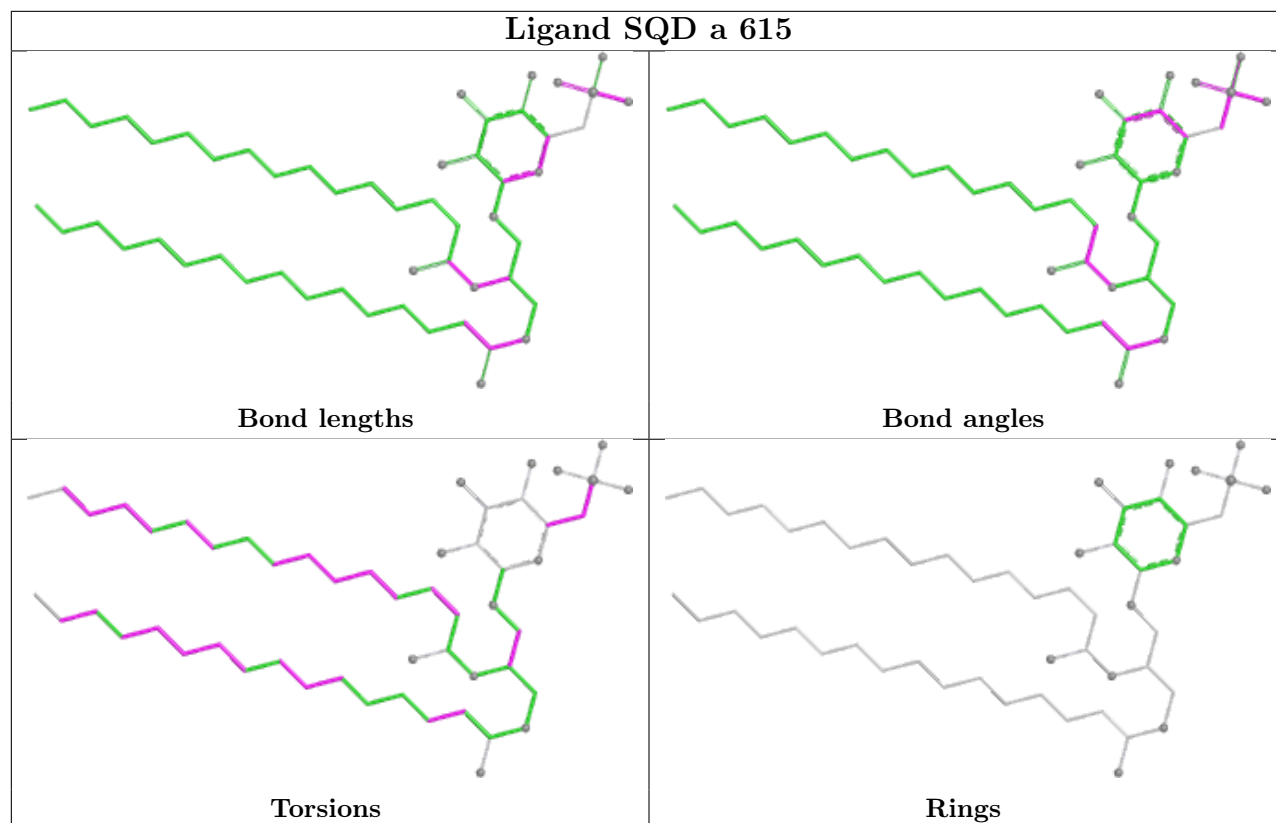
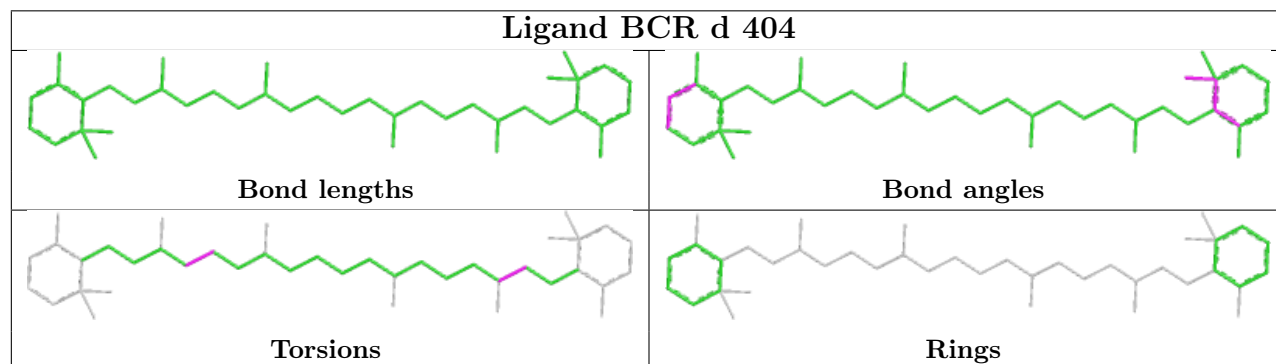
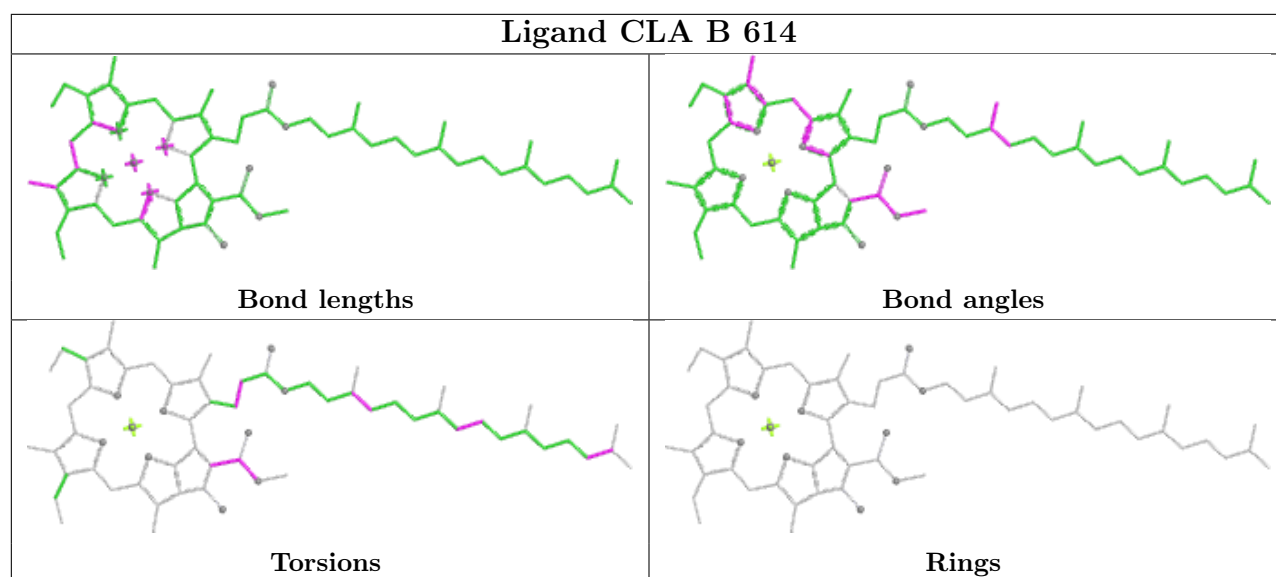




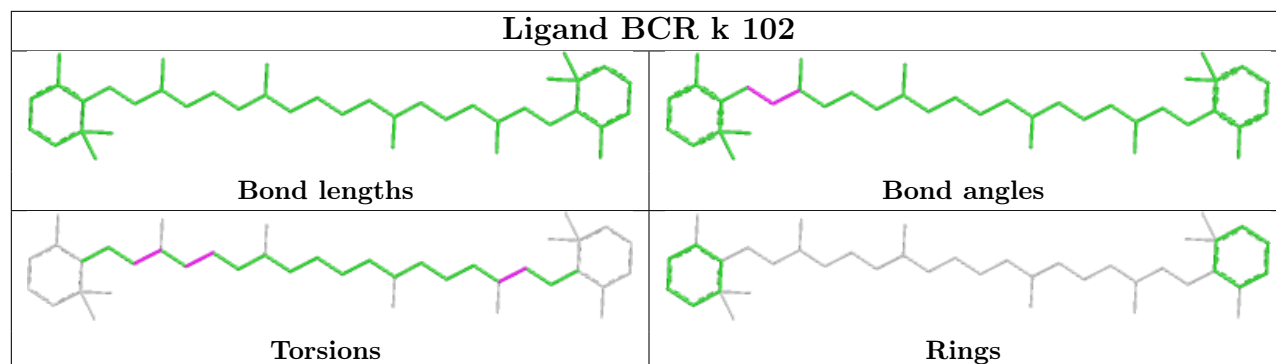
Ligand CLA A 613	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR h 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

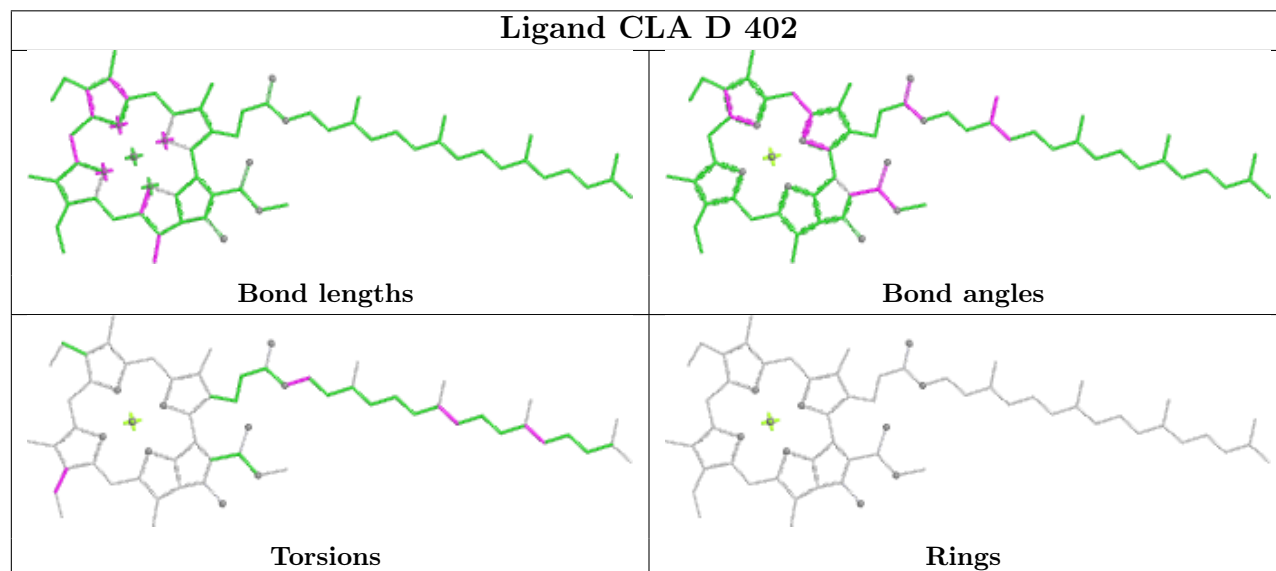
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Bond lengths	Bond angles
	
Torsions	Rings



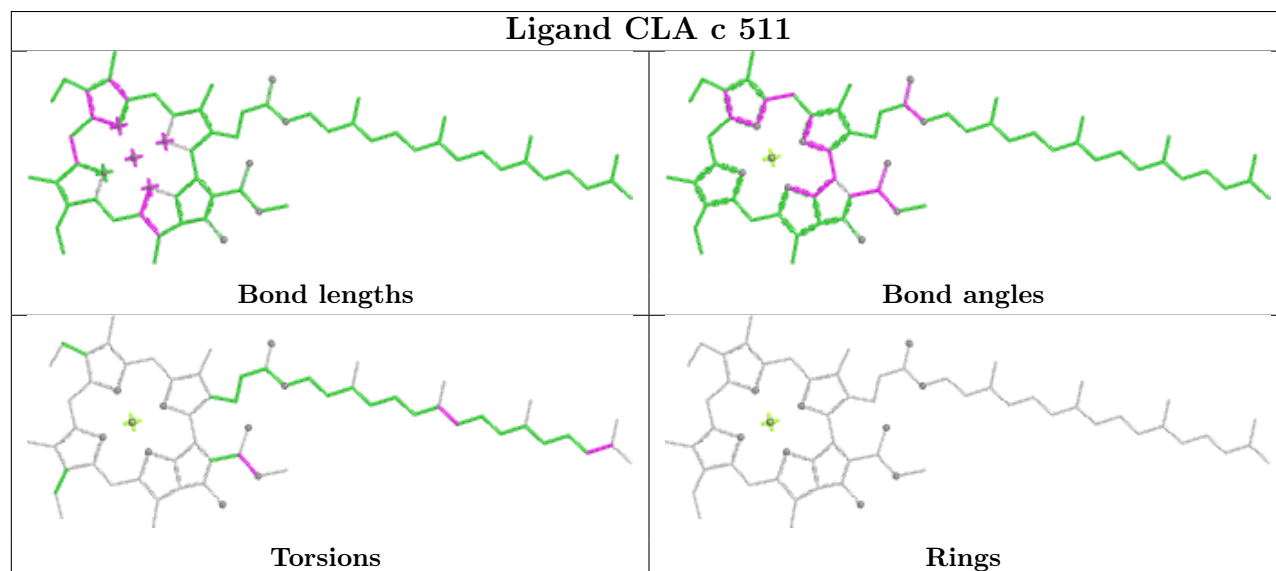
Ligand BCR k 102

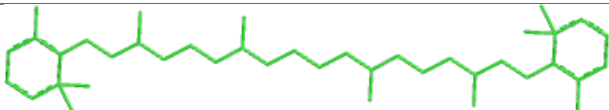
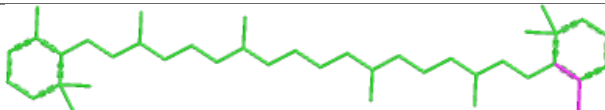
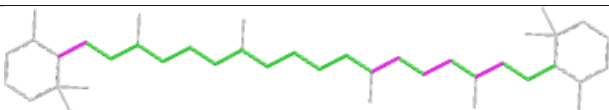
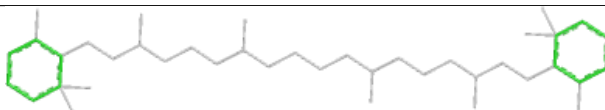


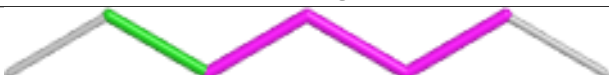
Ligand CLA D 402

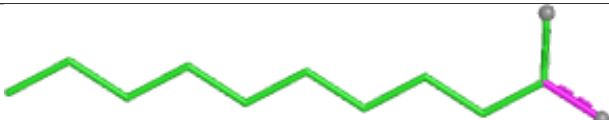
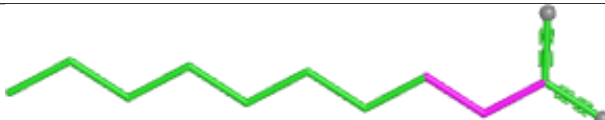
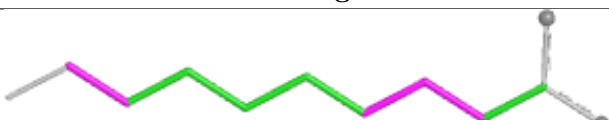
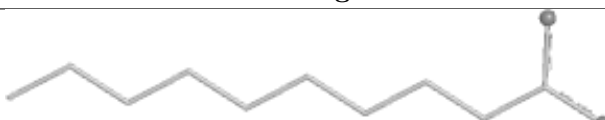


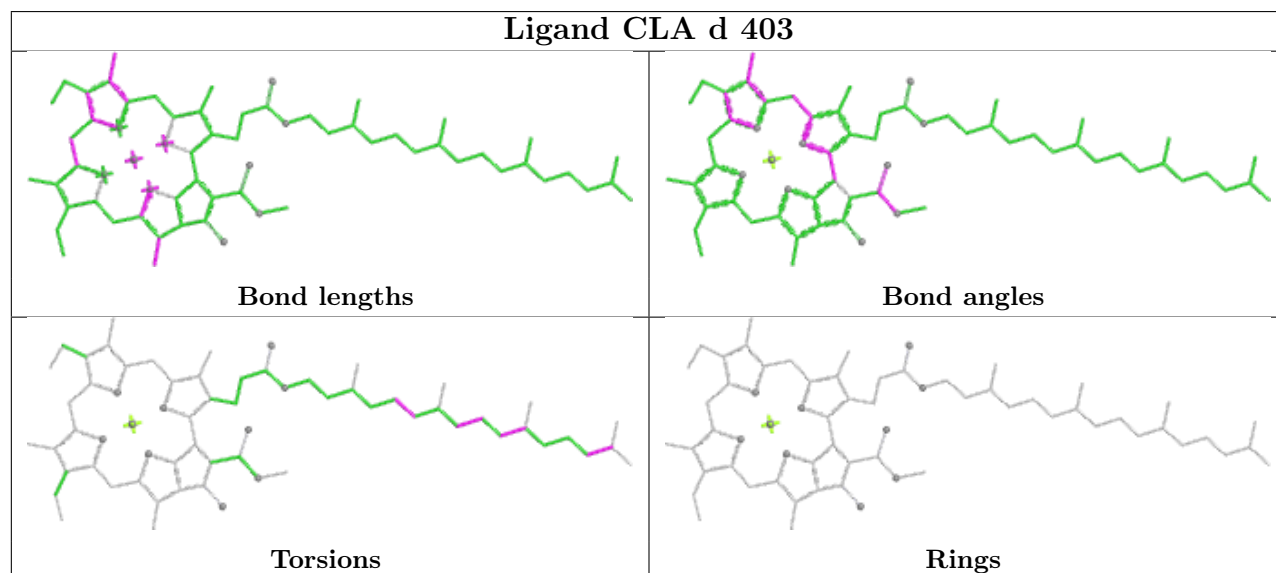
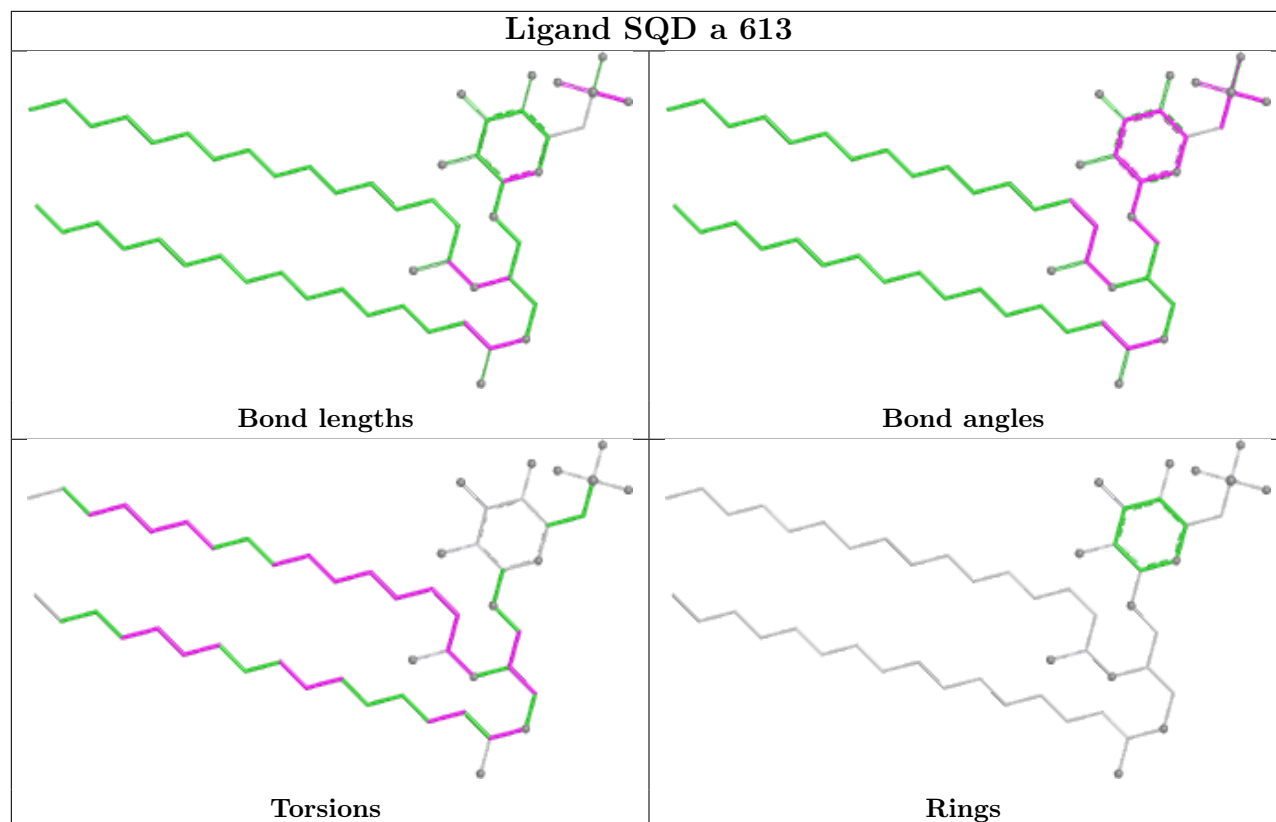
Ligand CLA c 511

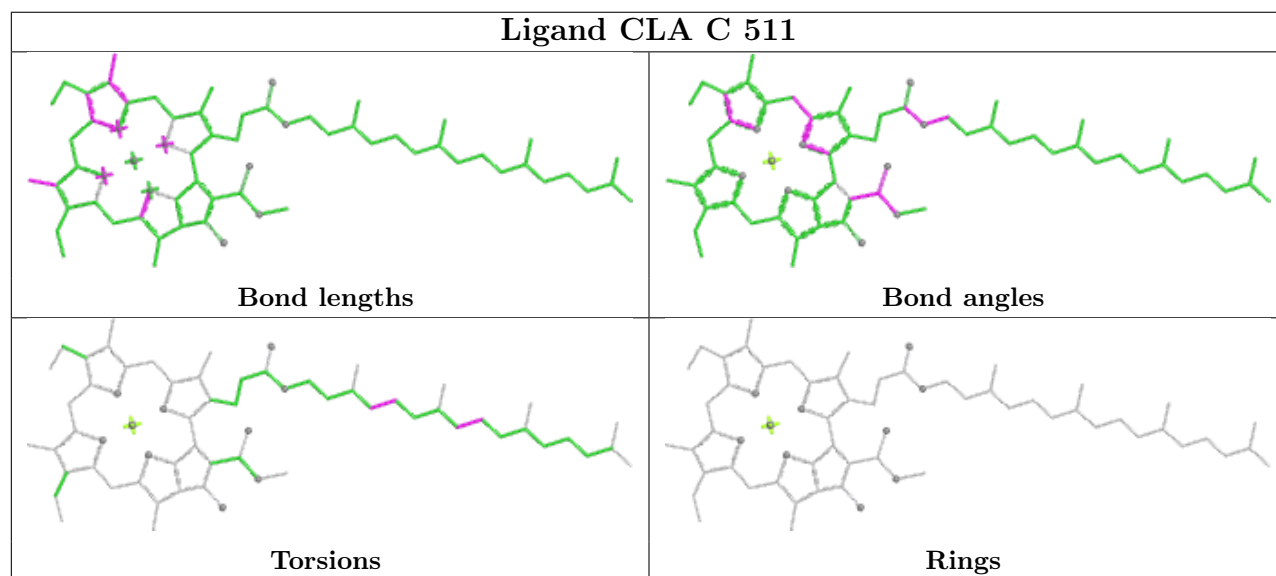
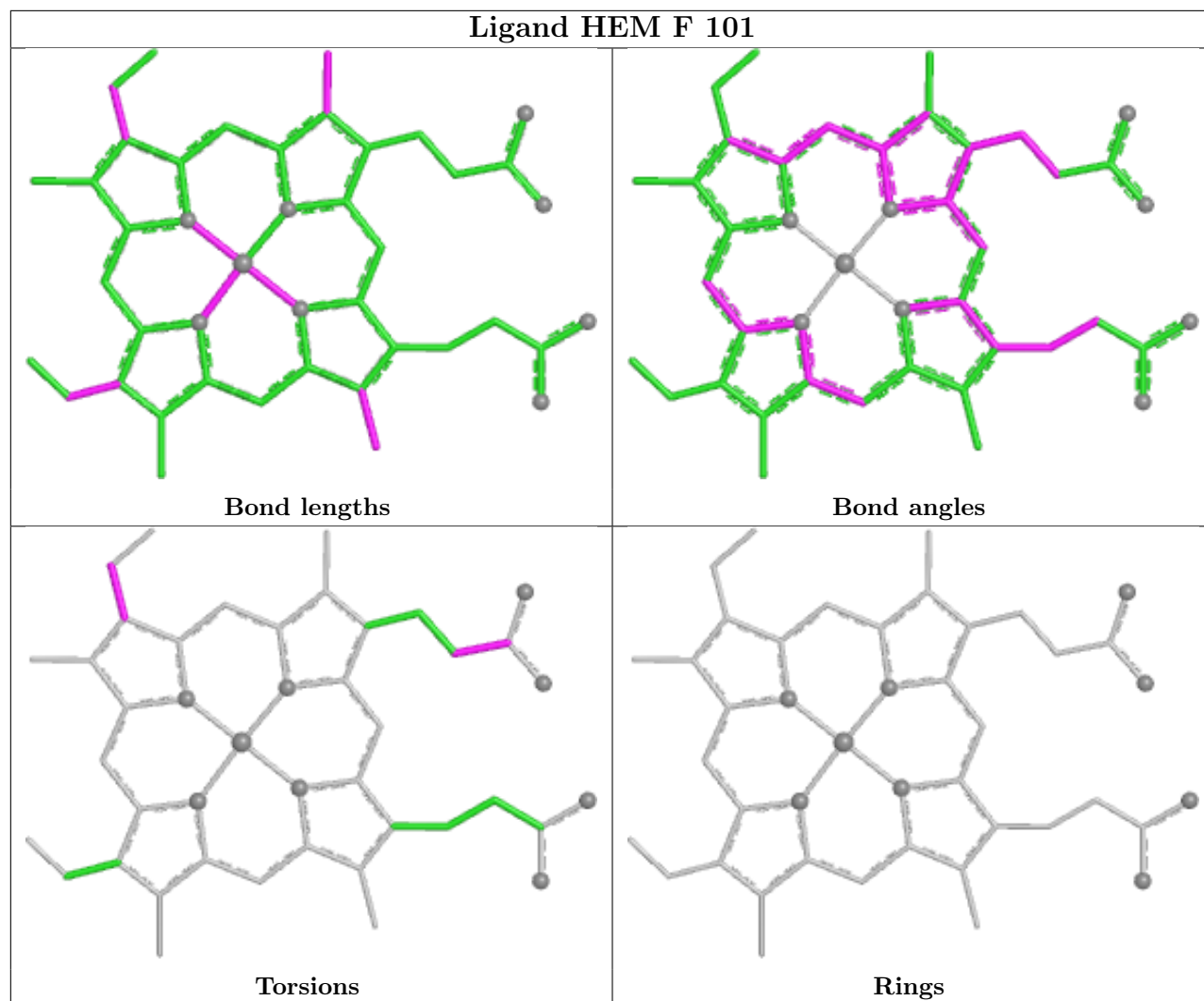


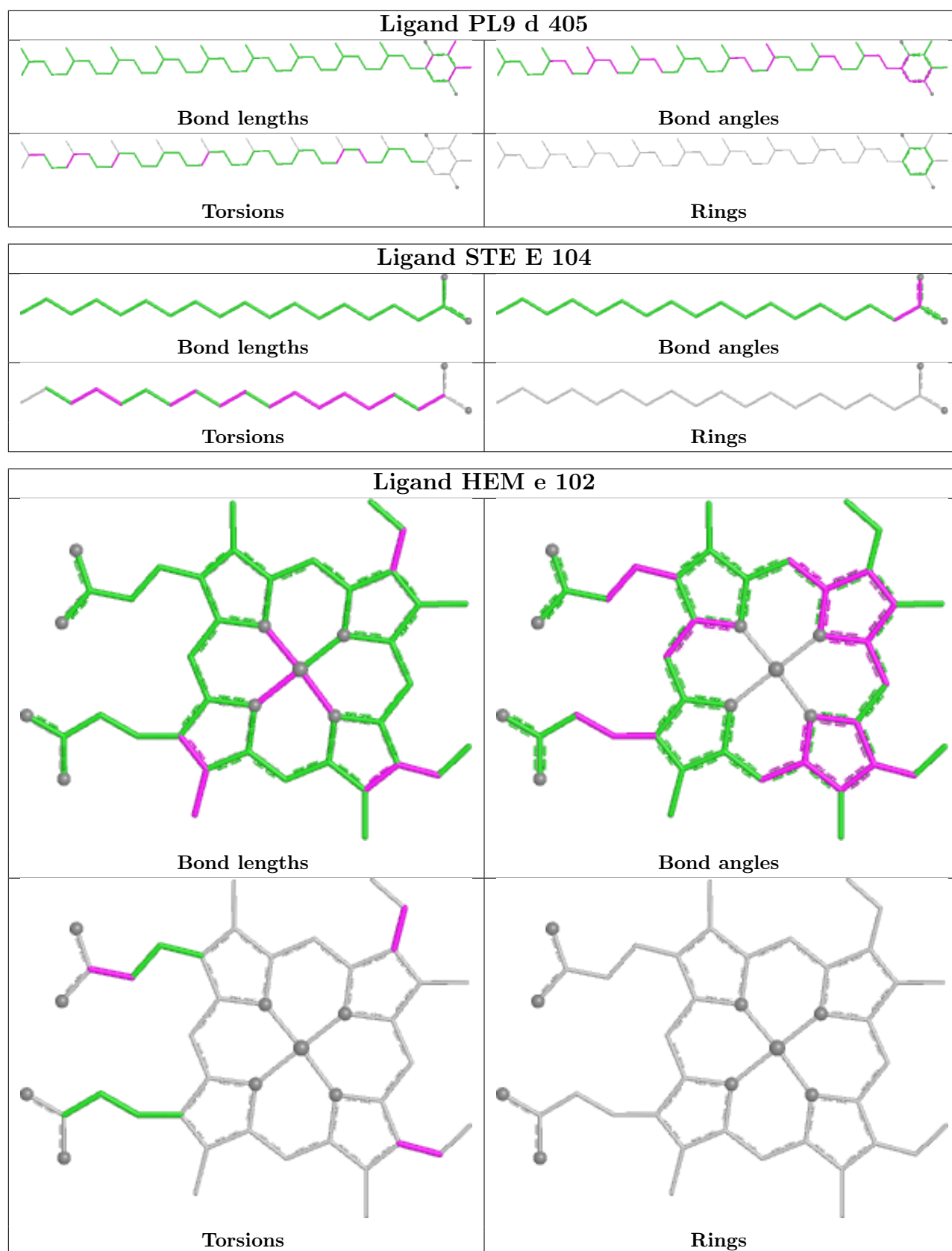
Ligand BCR k 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

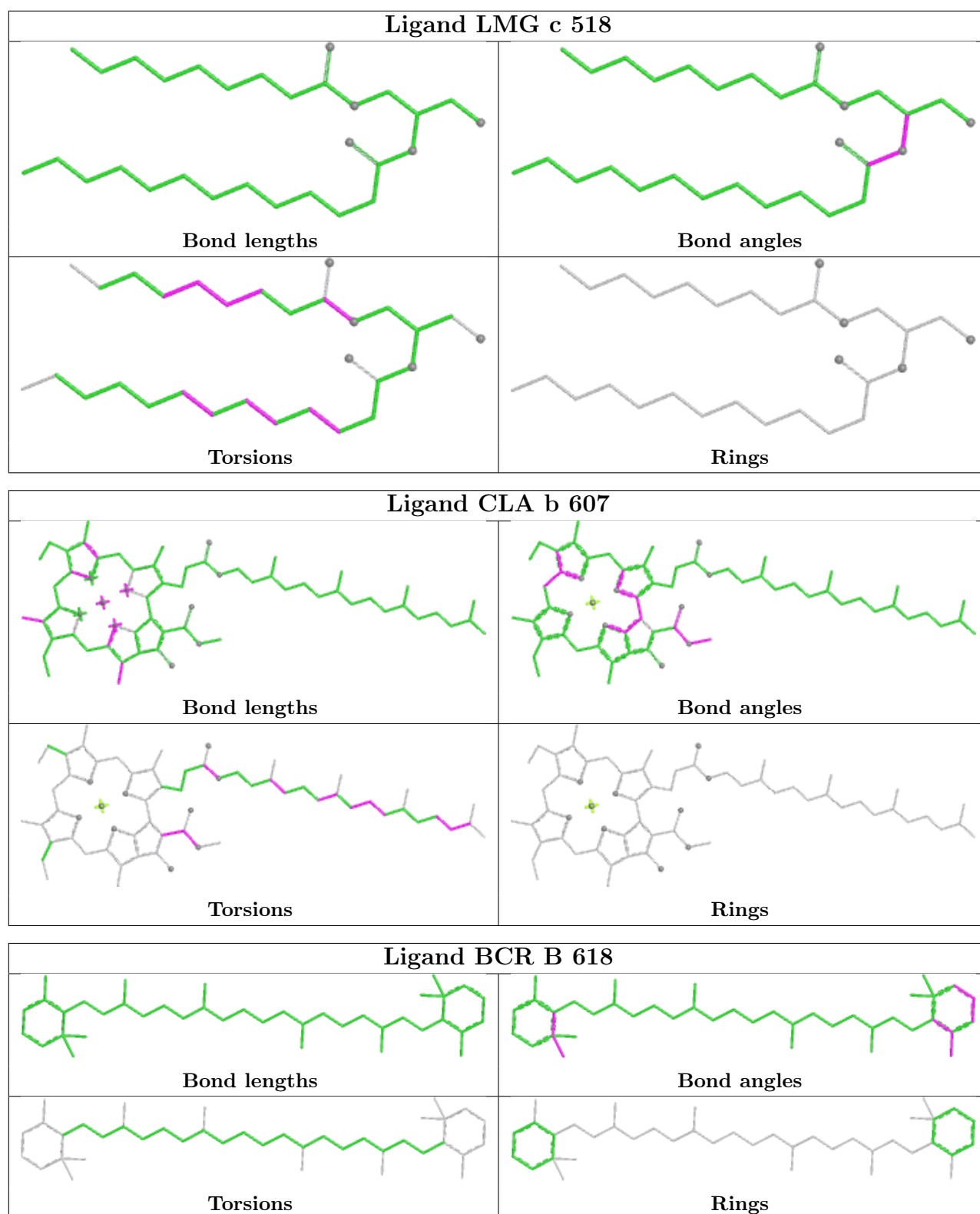
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Bond lengths	Bond angles
	
Torsions	Rings

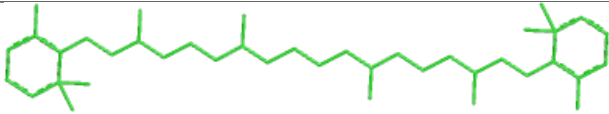
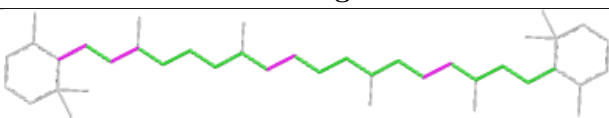
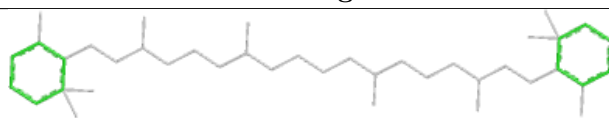
Ligand STE C 524	
	
Bond lengths	Bond angles
	
Torsions	Rings

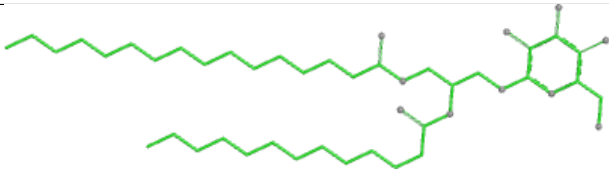
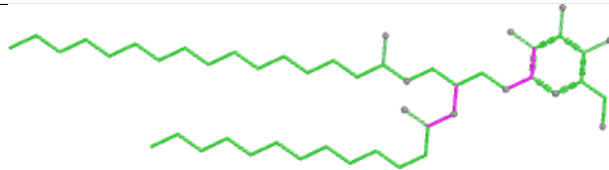
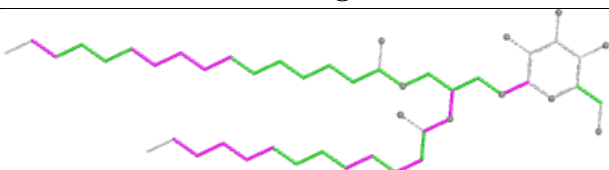
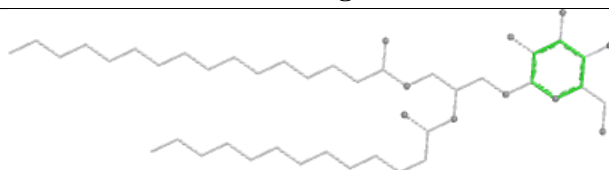


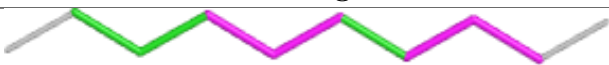


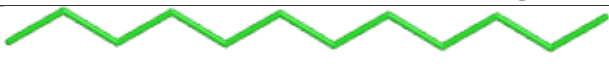
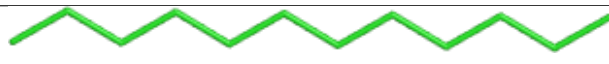


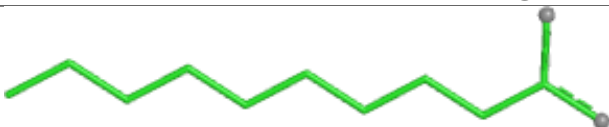
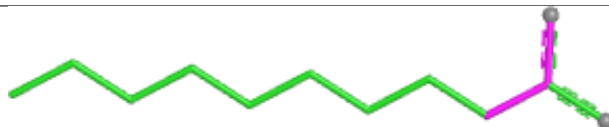
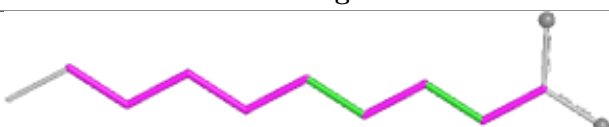
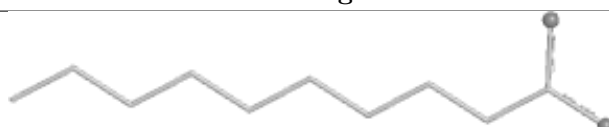


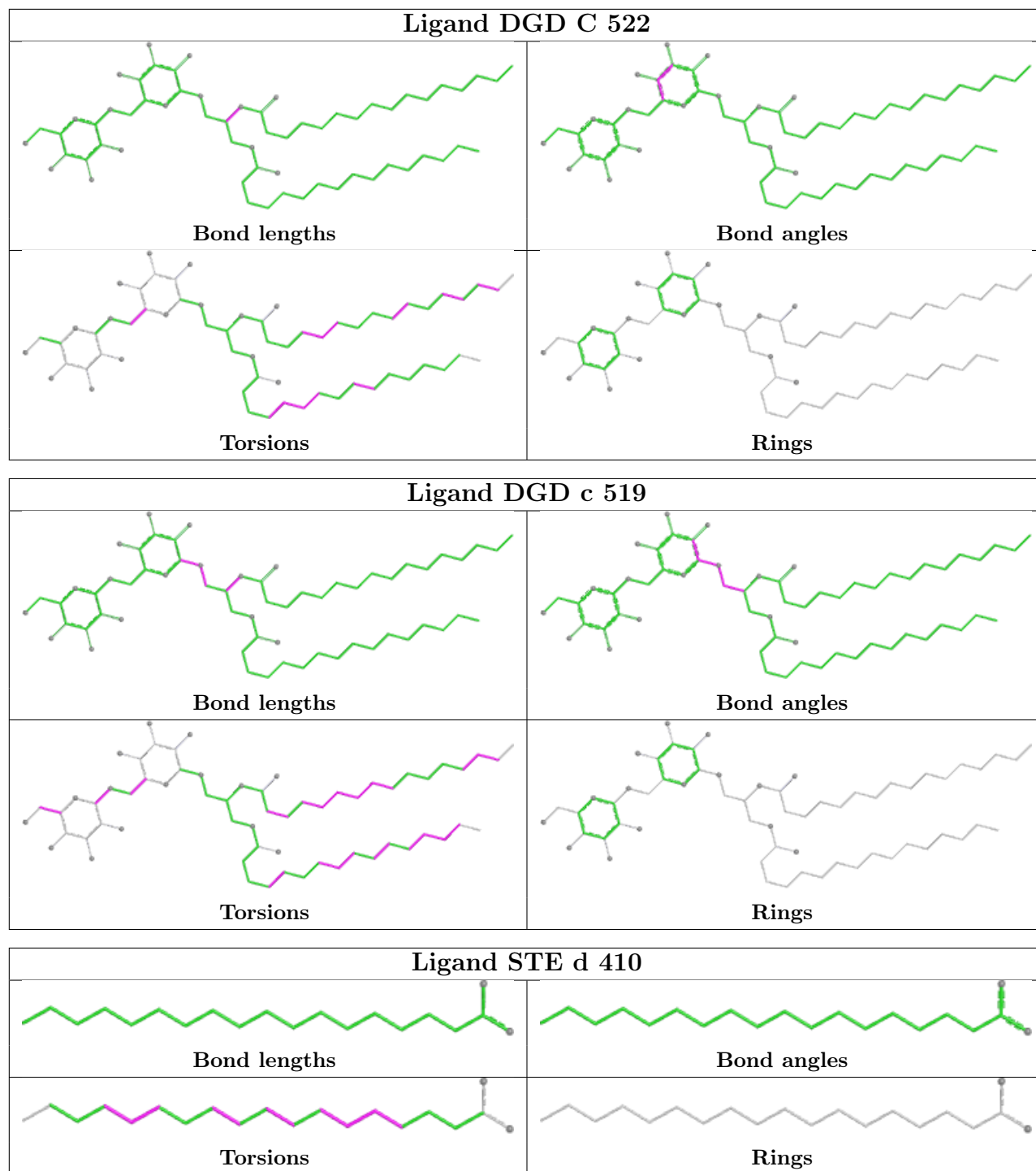
Ligand BCR K 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMG A 614	
	
Bond lengths	Bond angles
	
Torsions	Rings

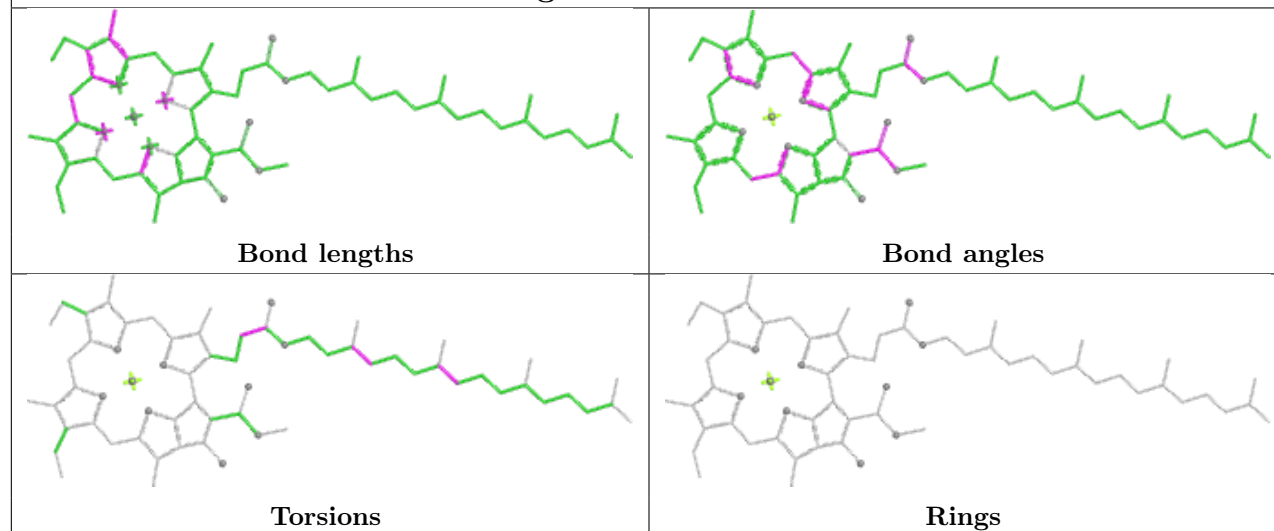
Ligand STE M 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE E 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

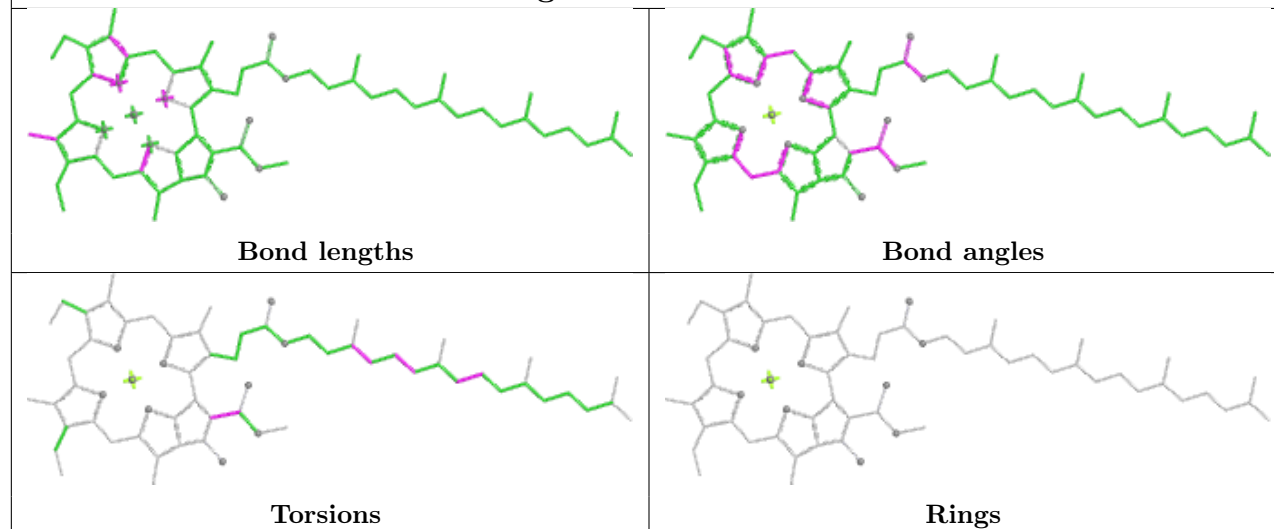
Ligand STE J 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

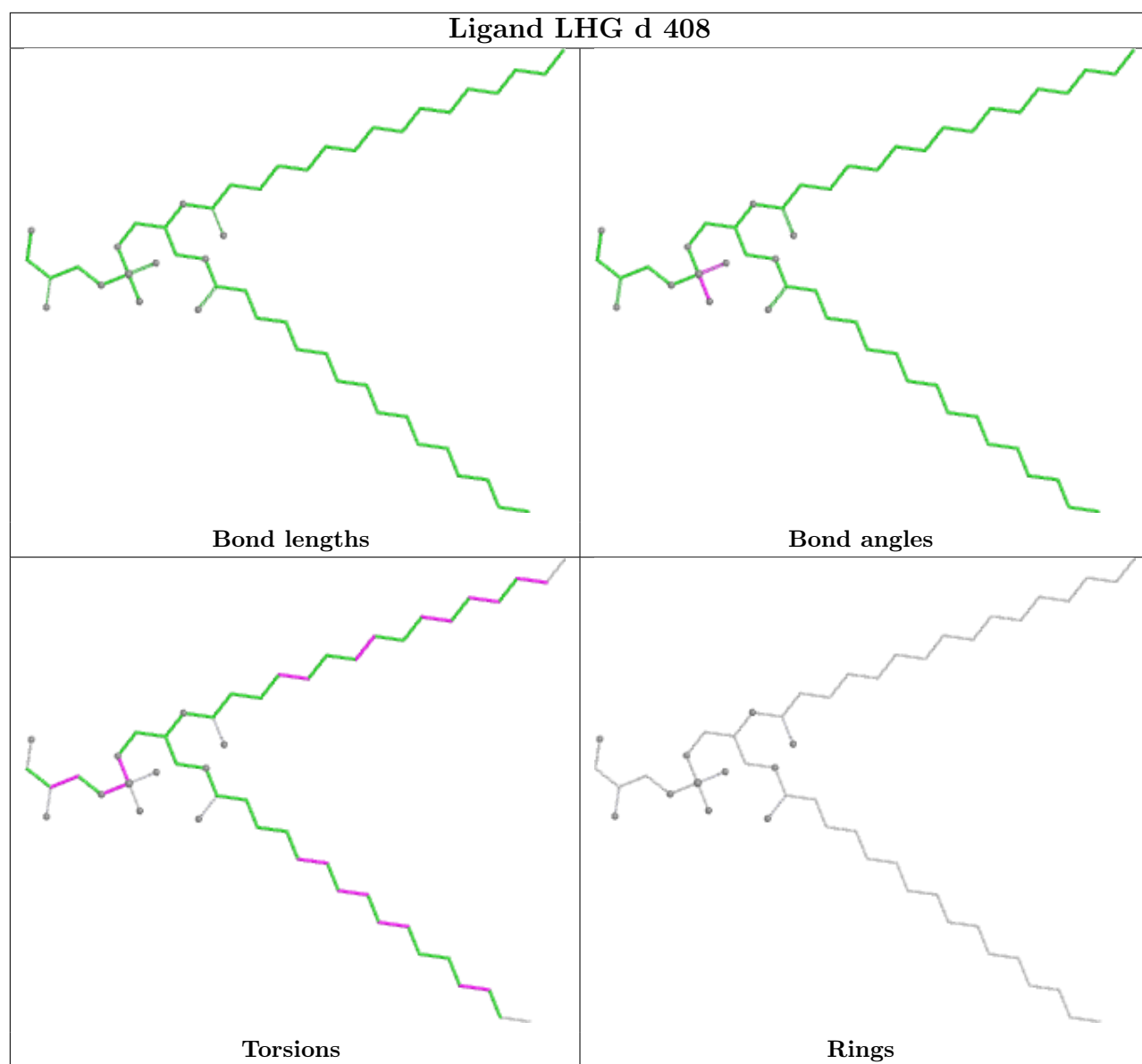


Ligand CLA c 510

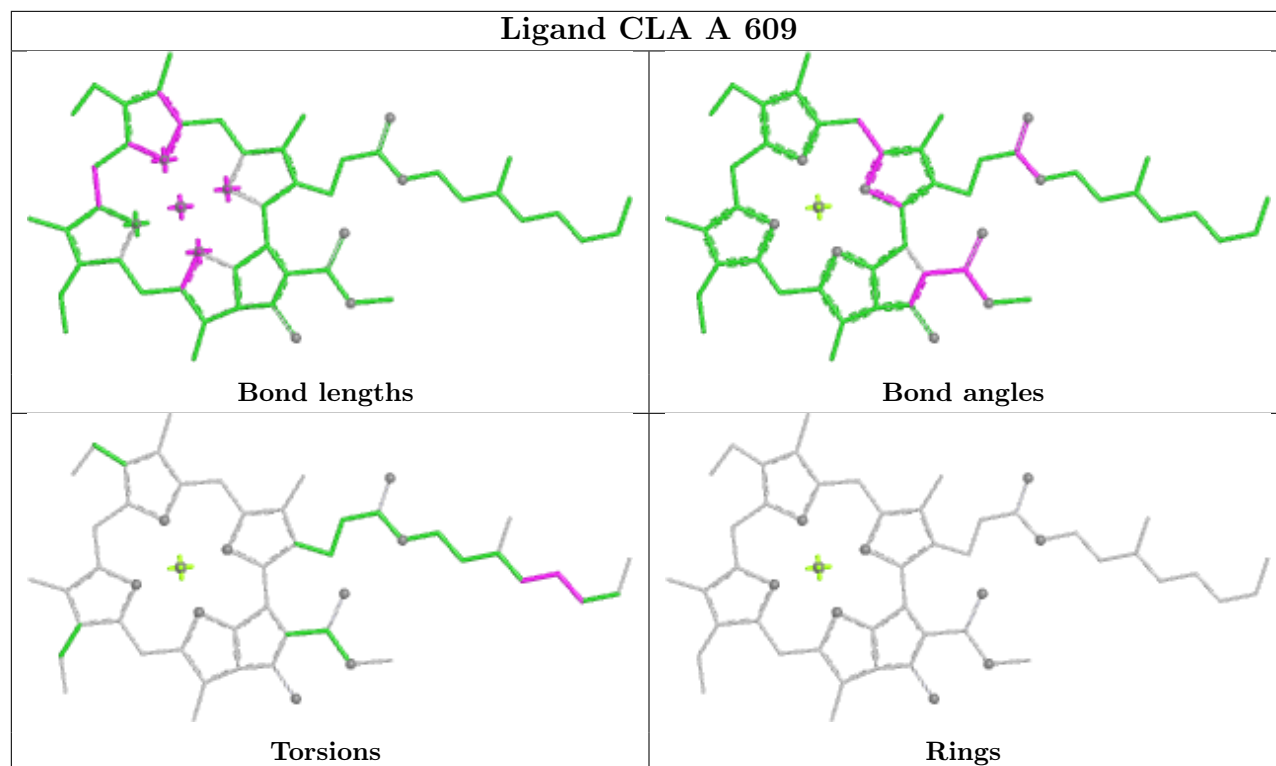


Ligand CLA c 507

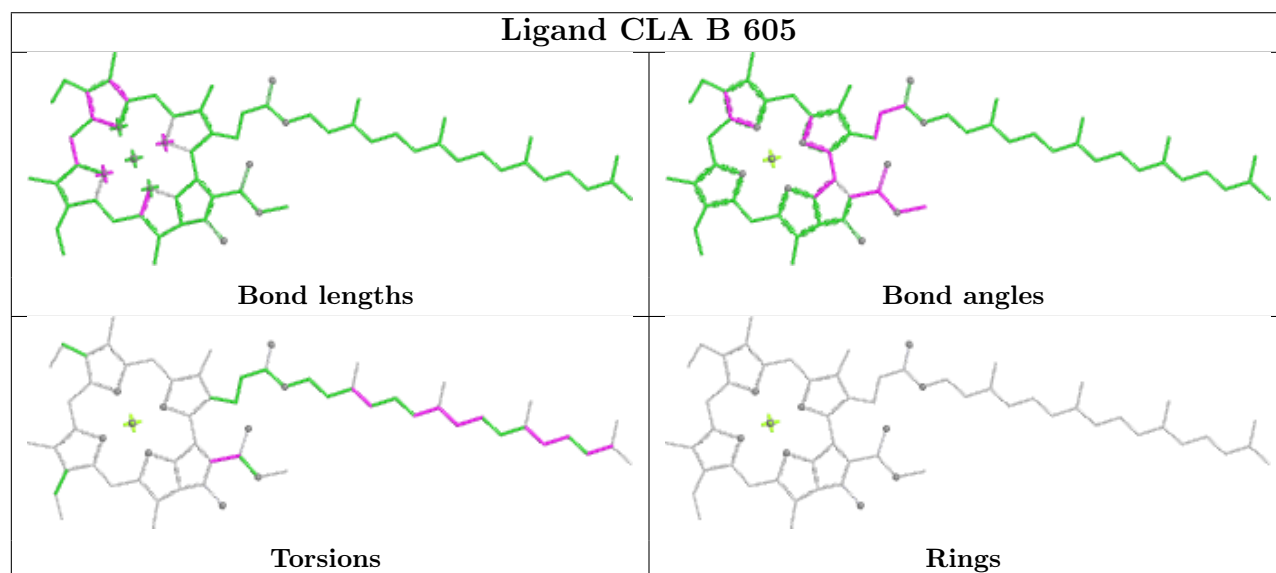


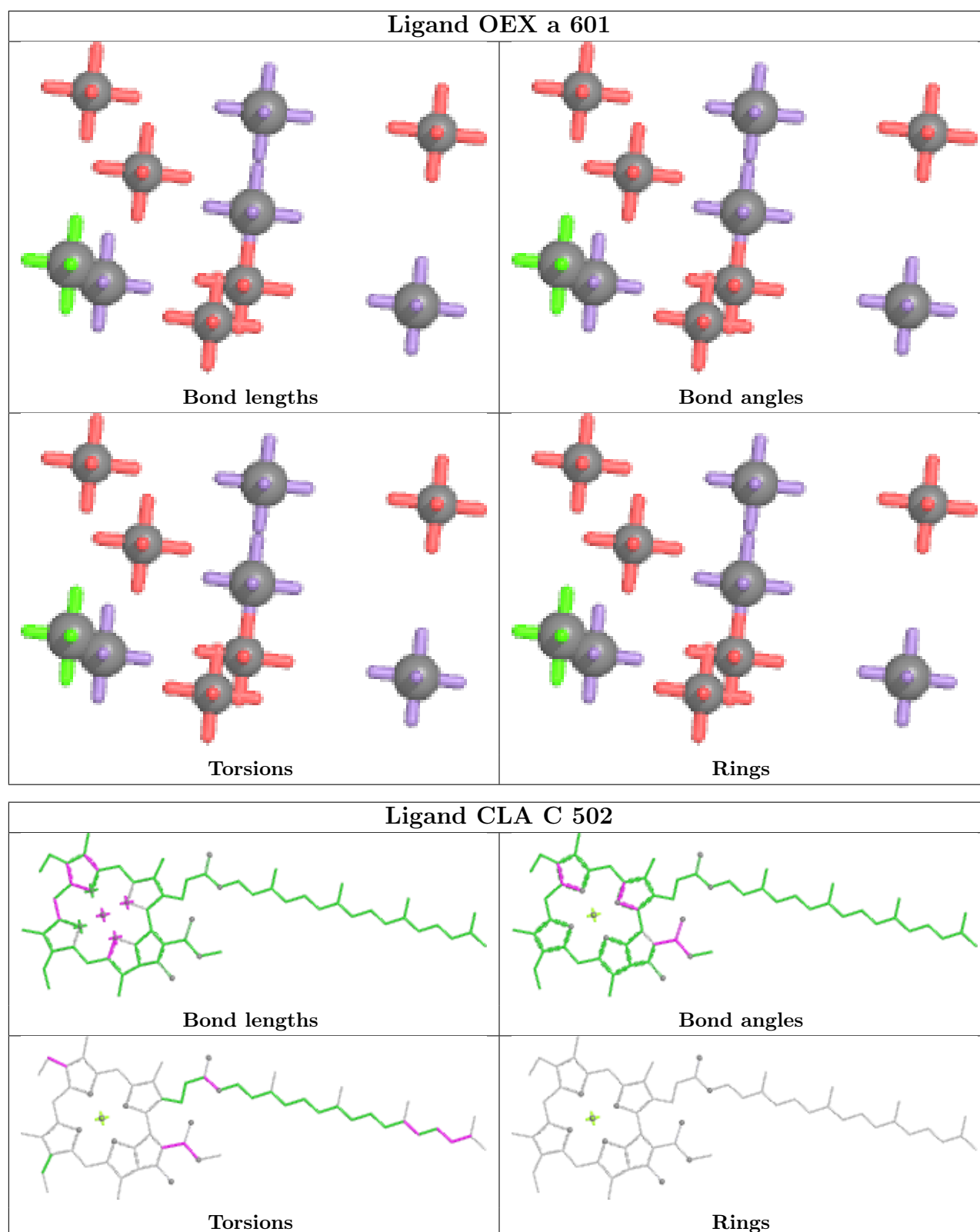


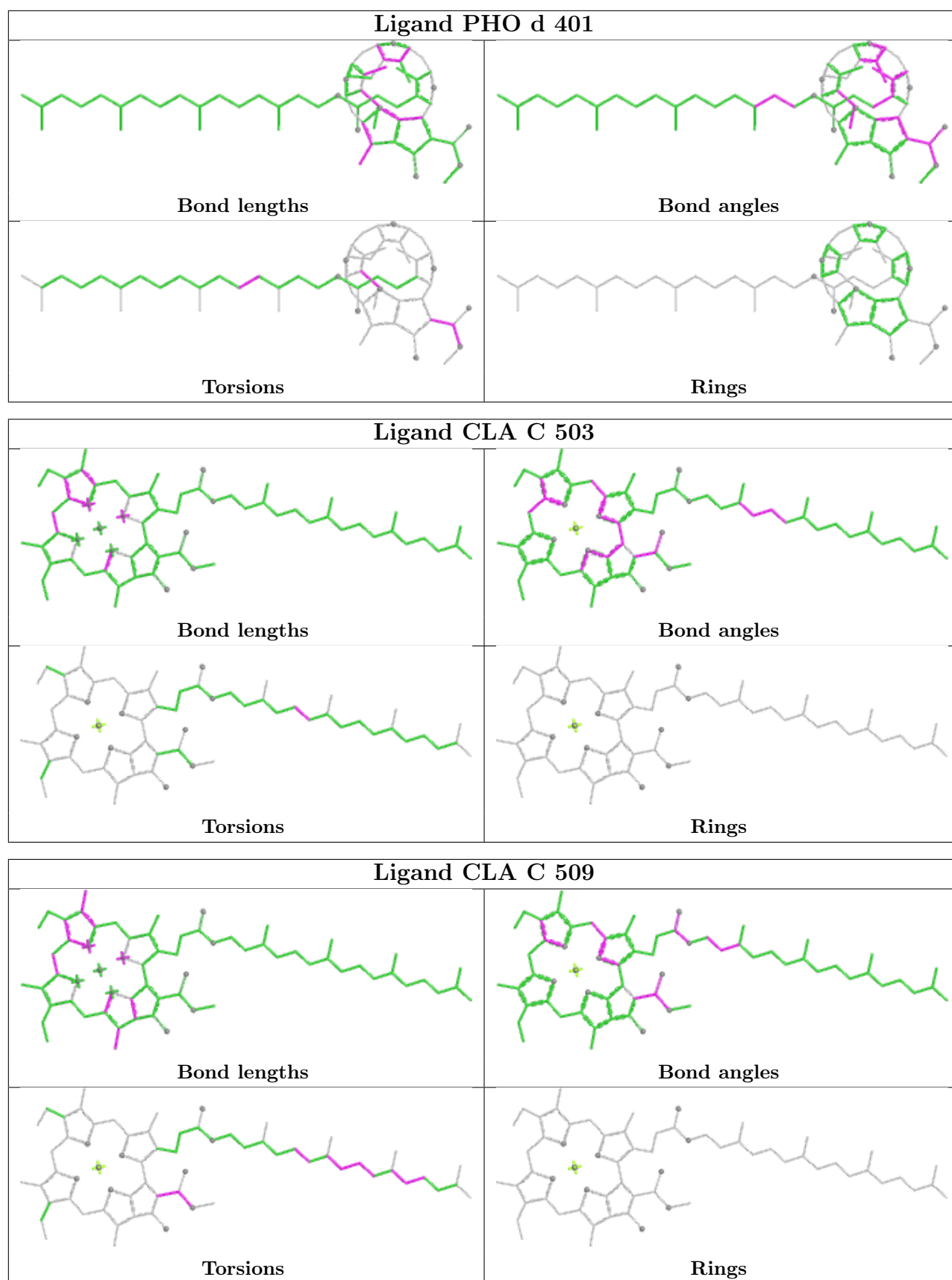
Ligand CLA A 609

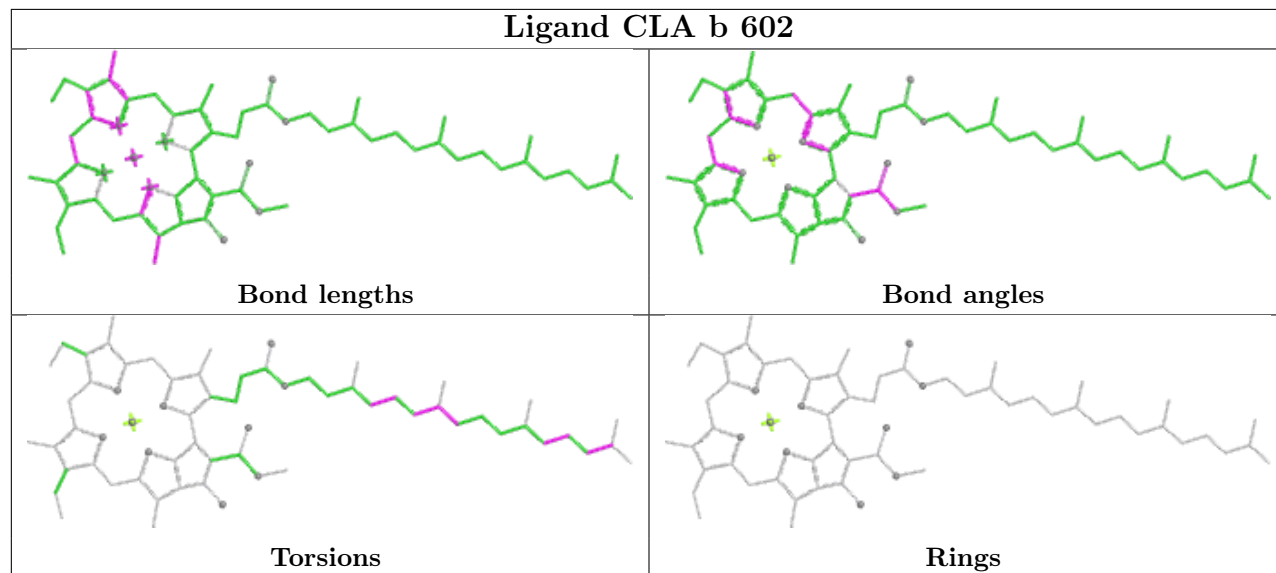
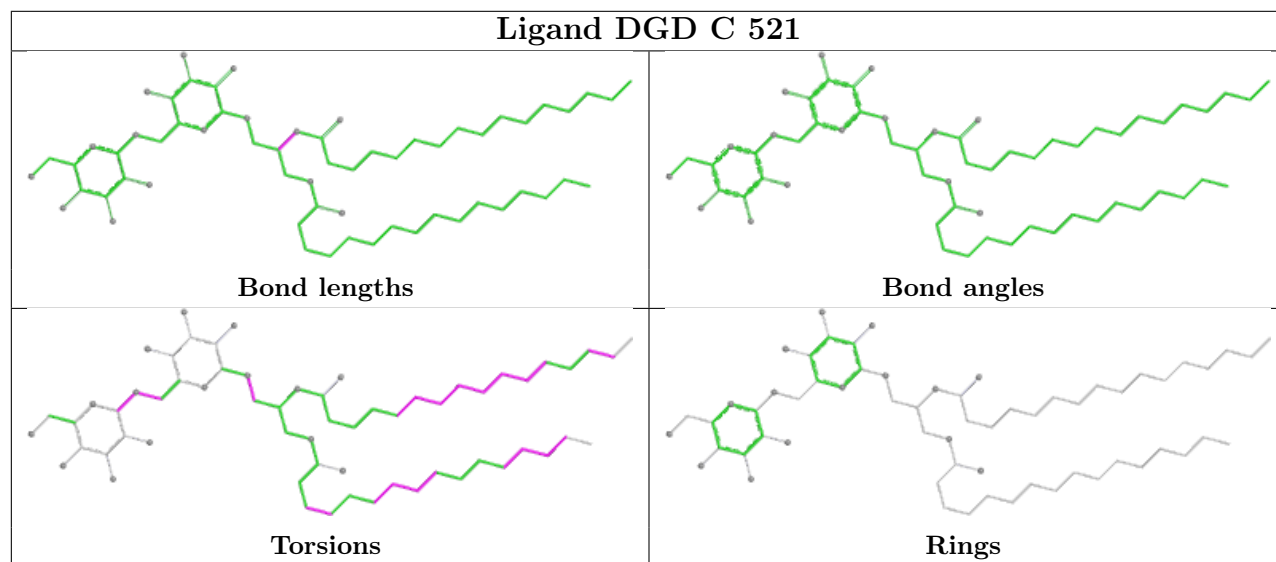
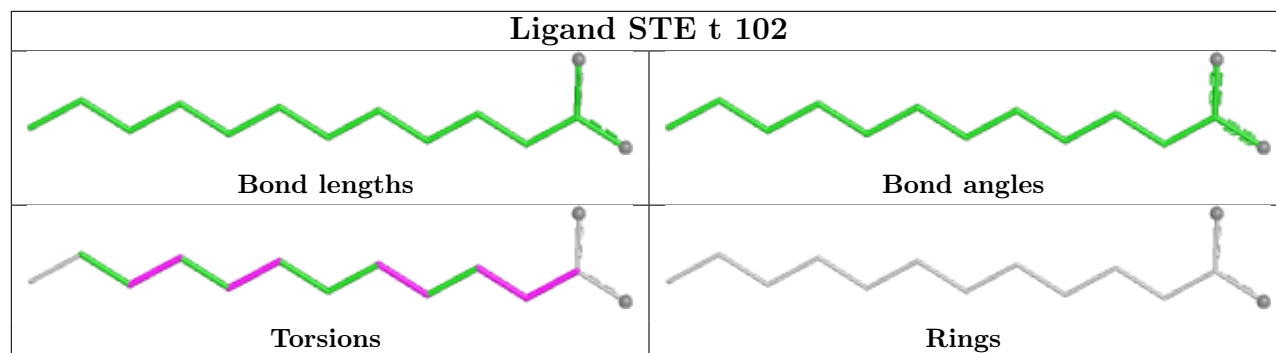


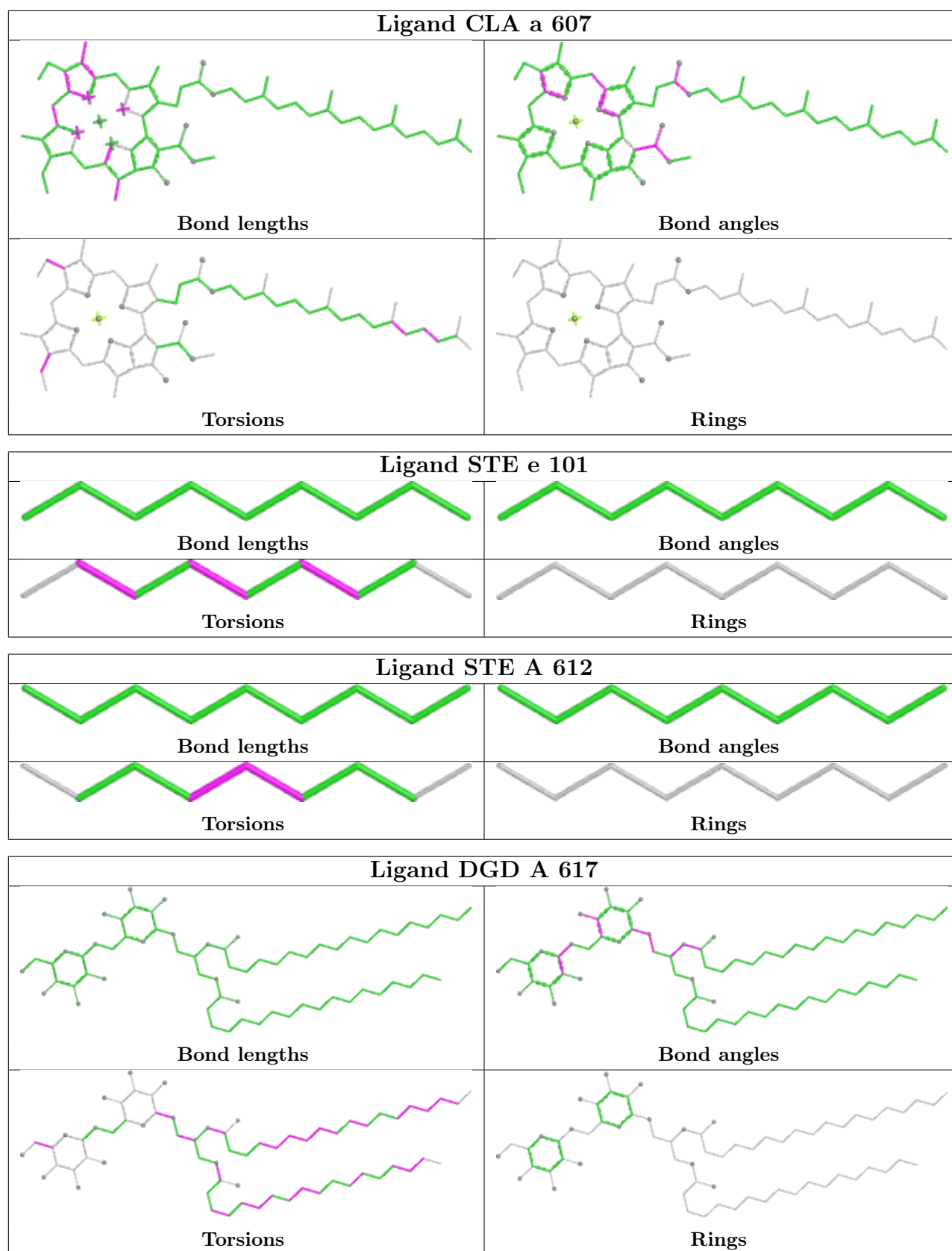
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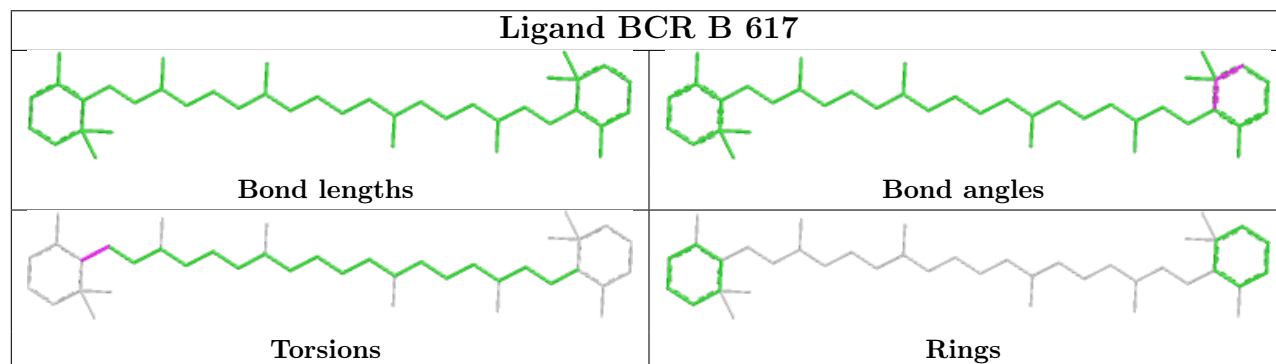
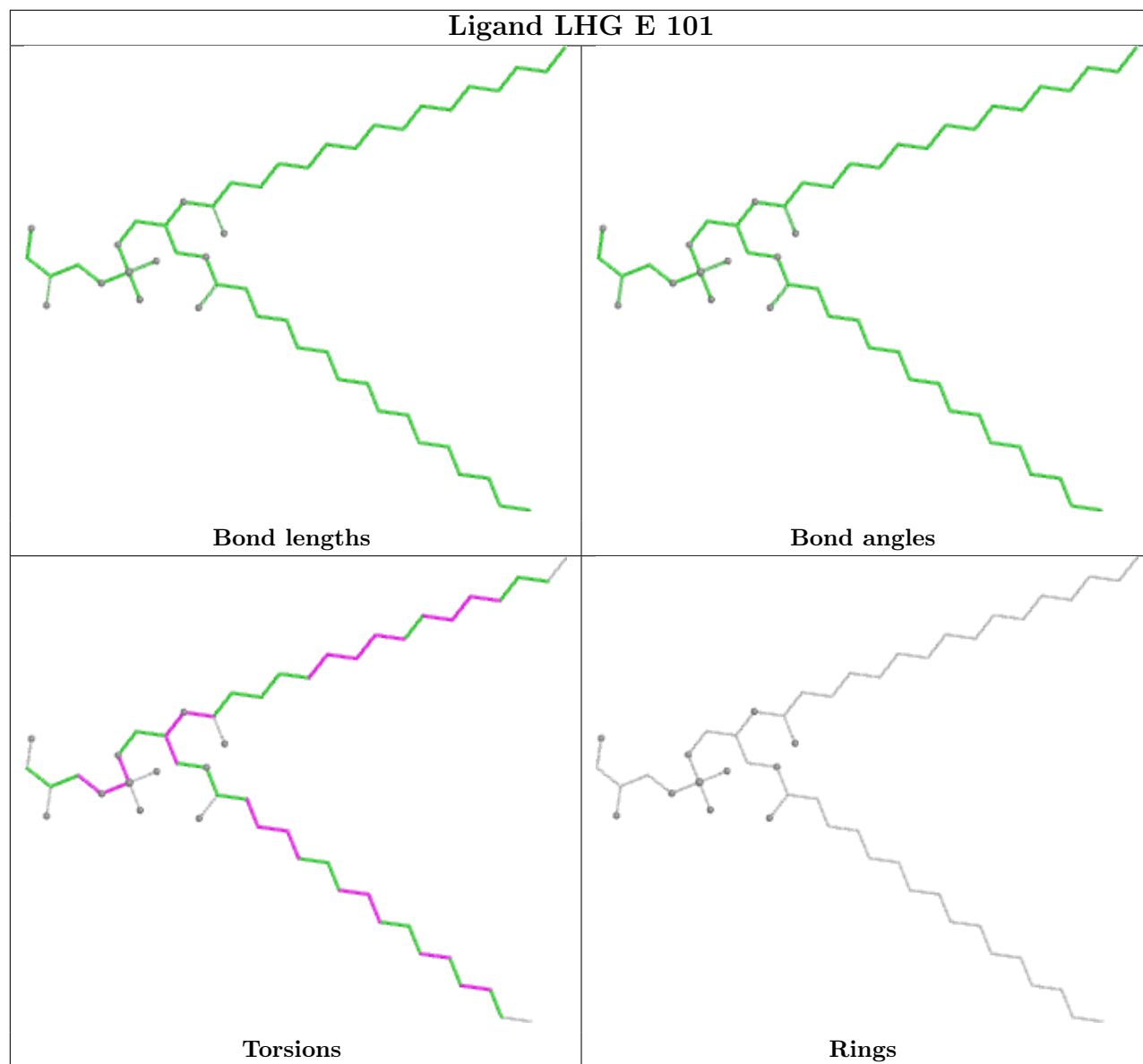


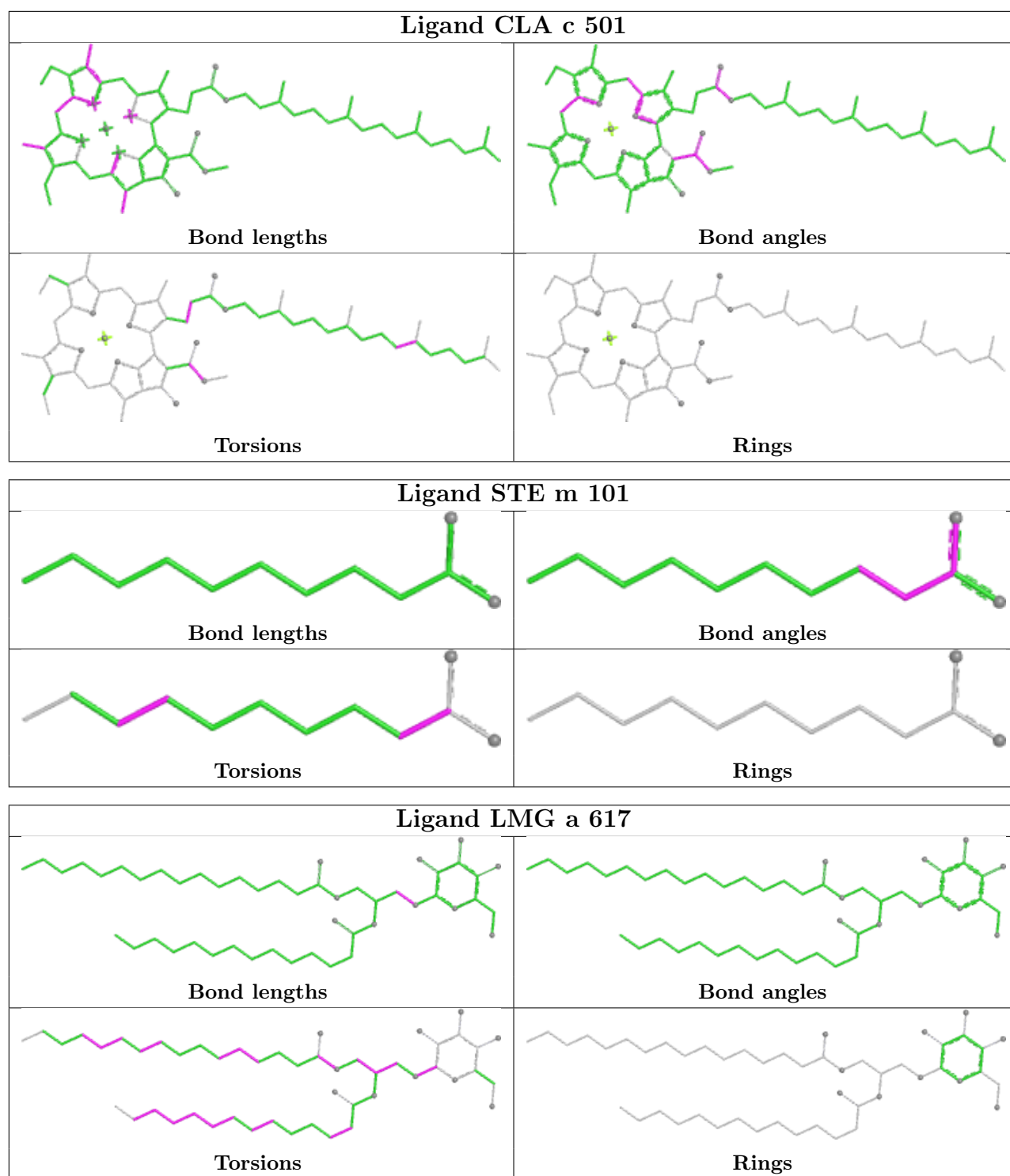


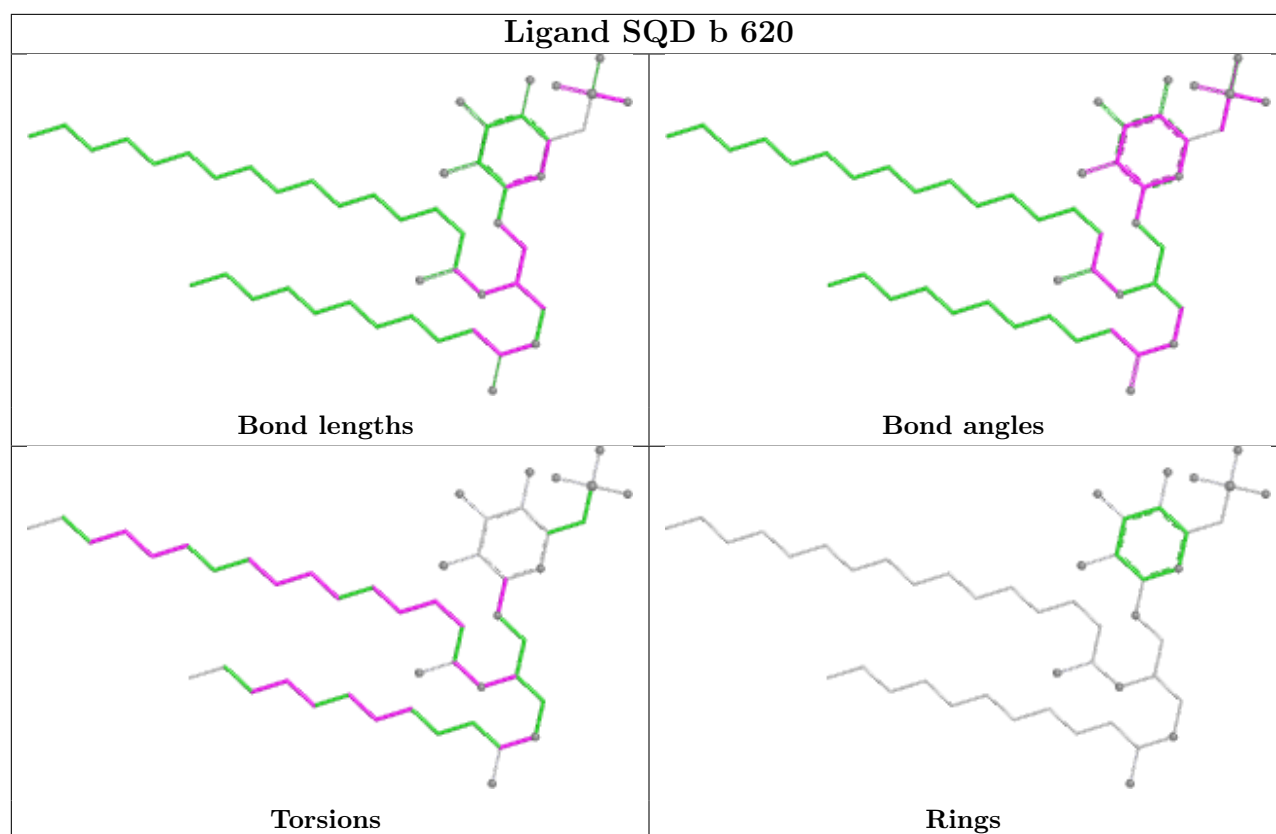


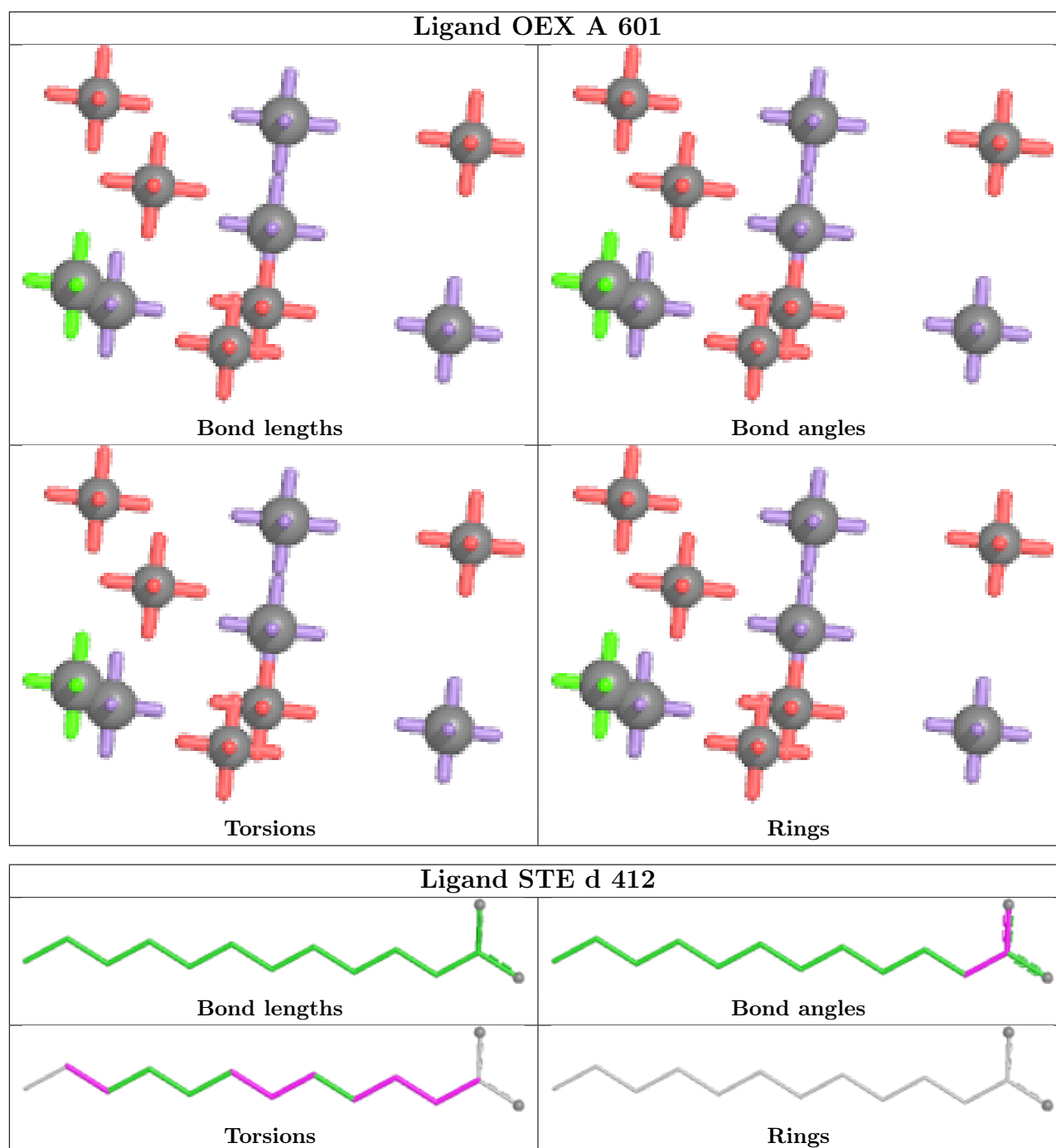




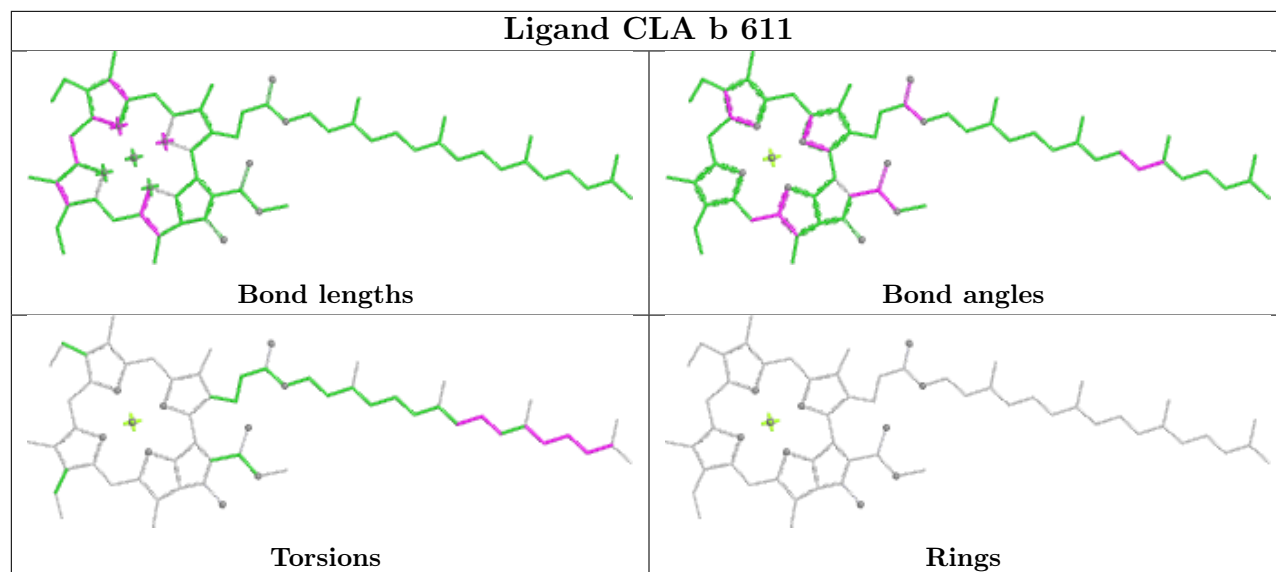




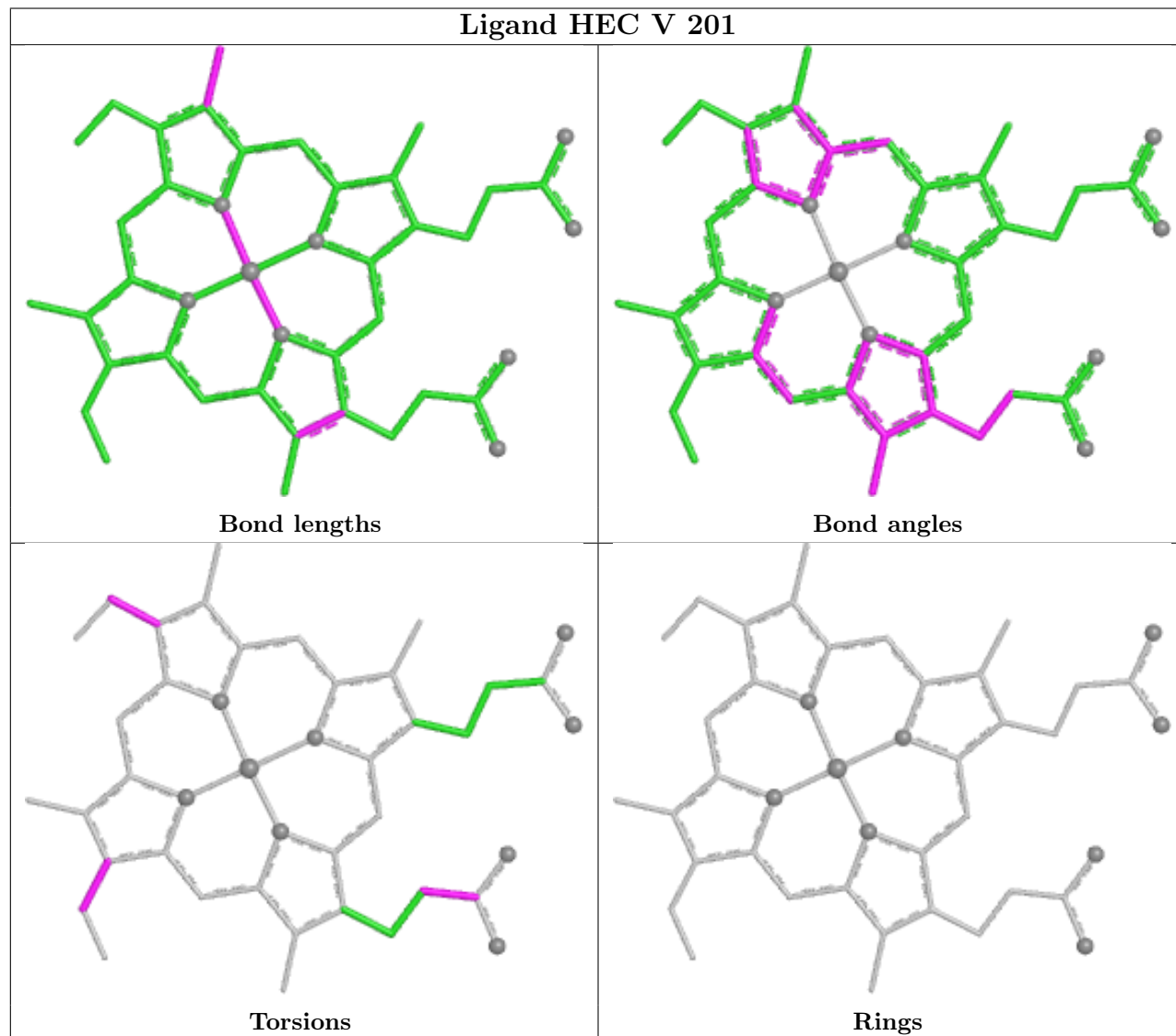


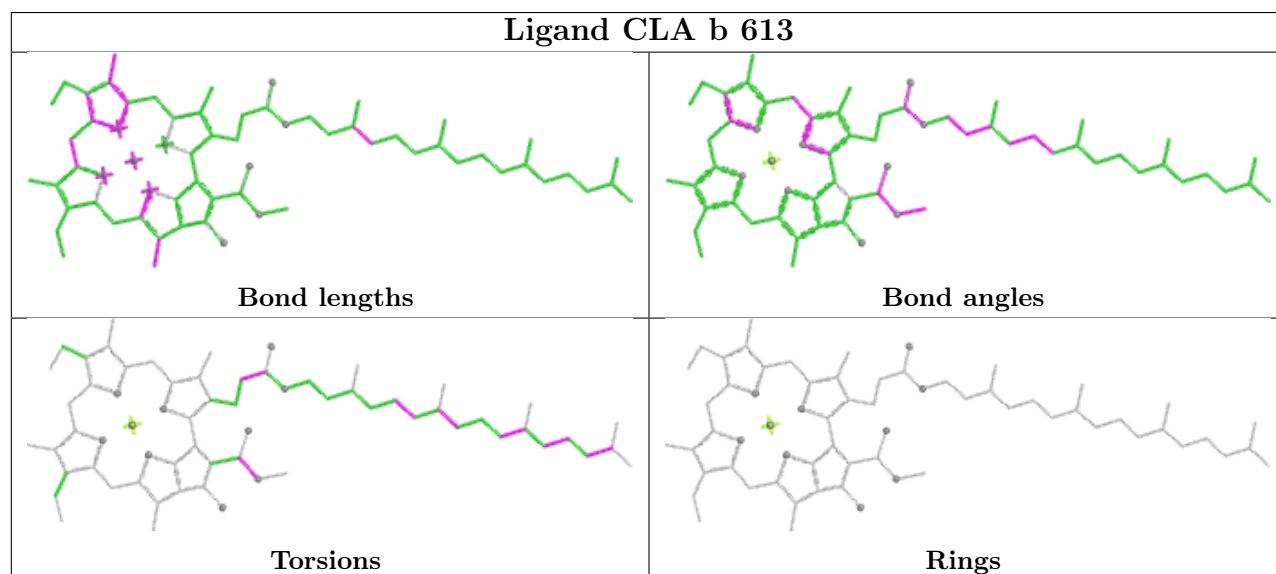
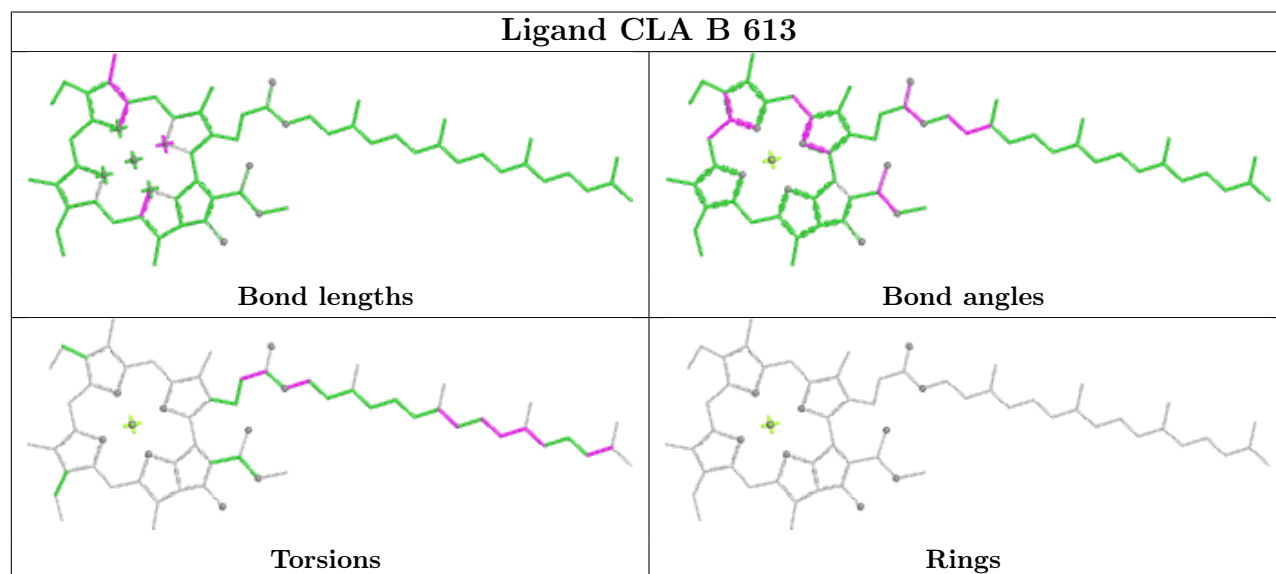
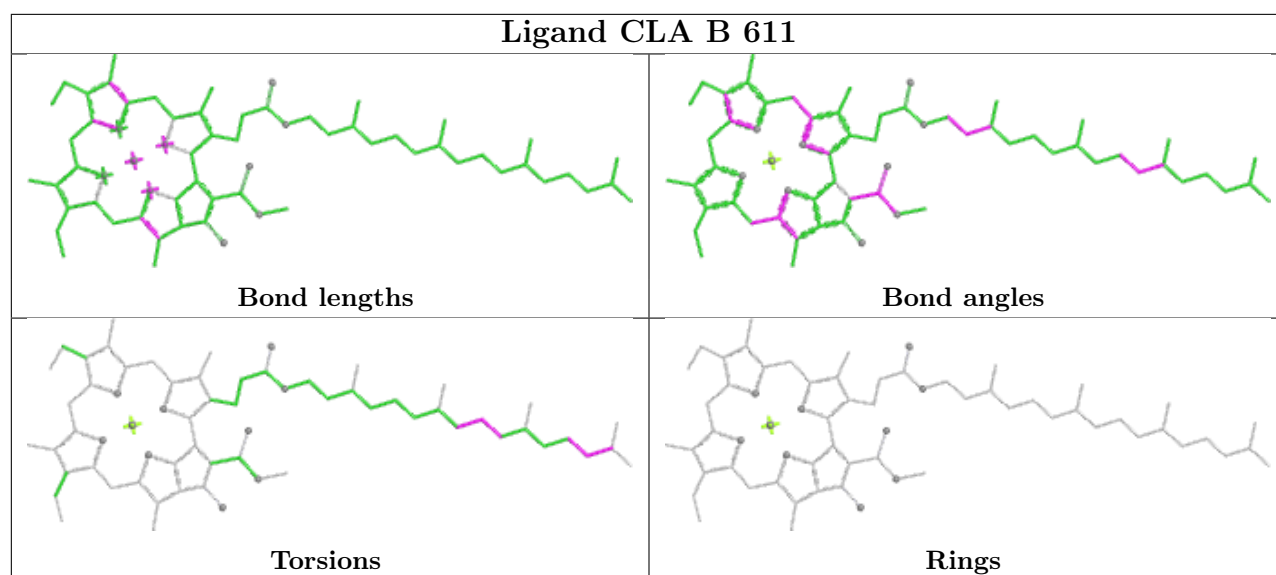


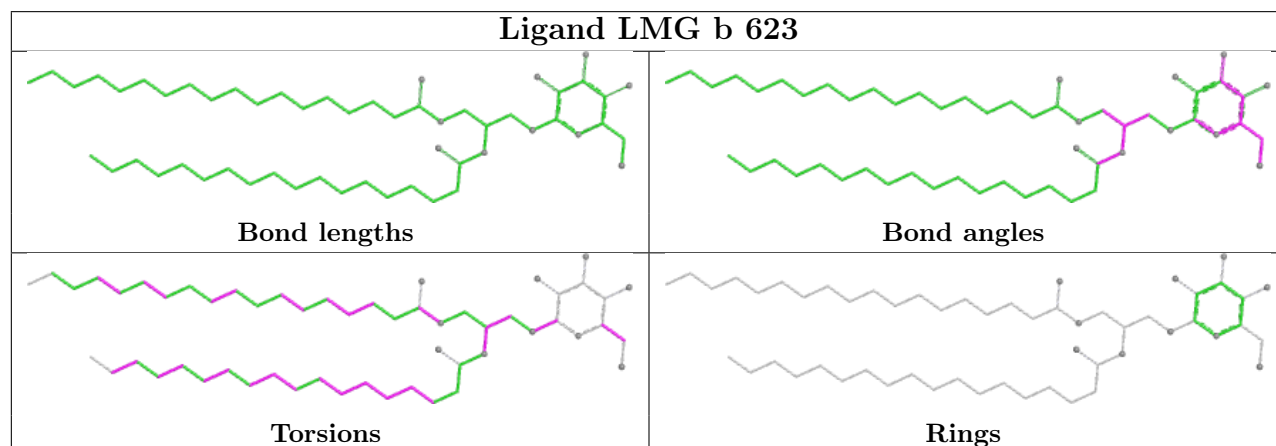
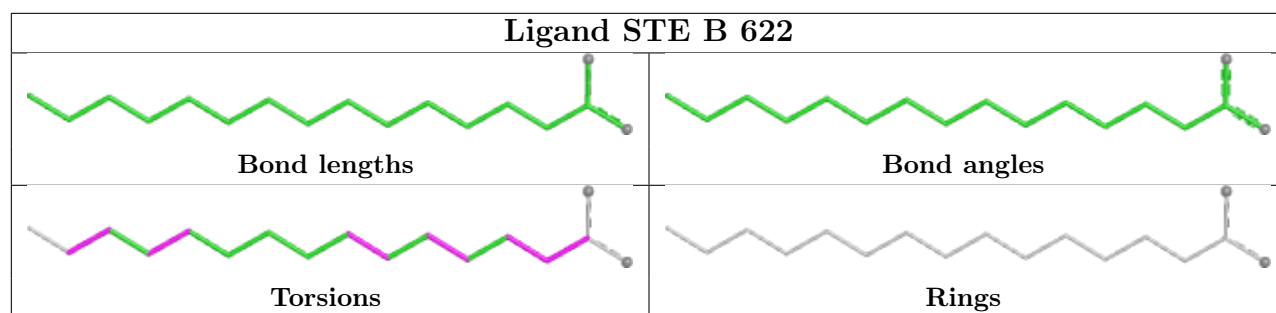
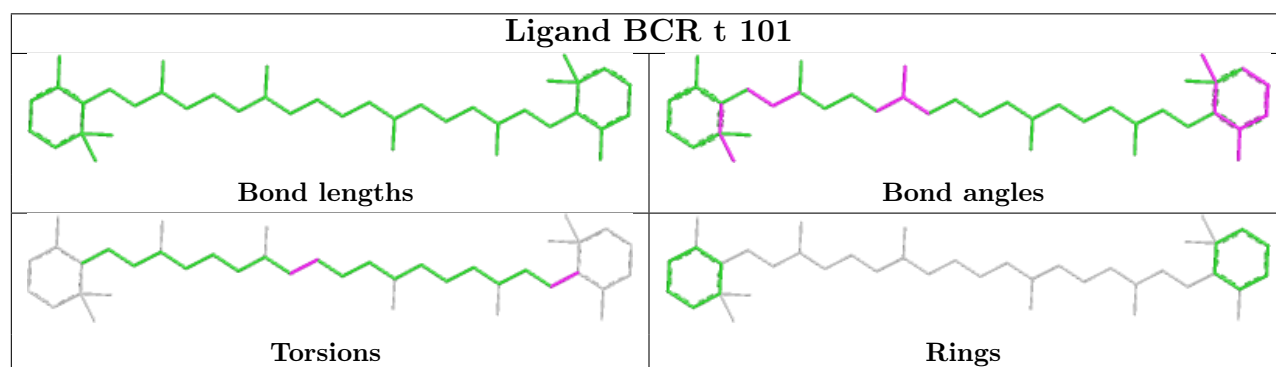
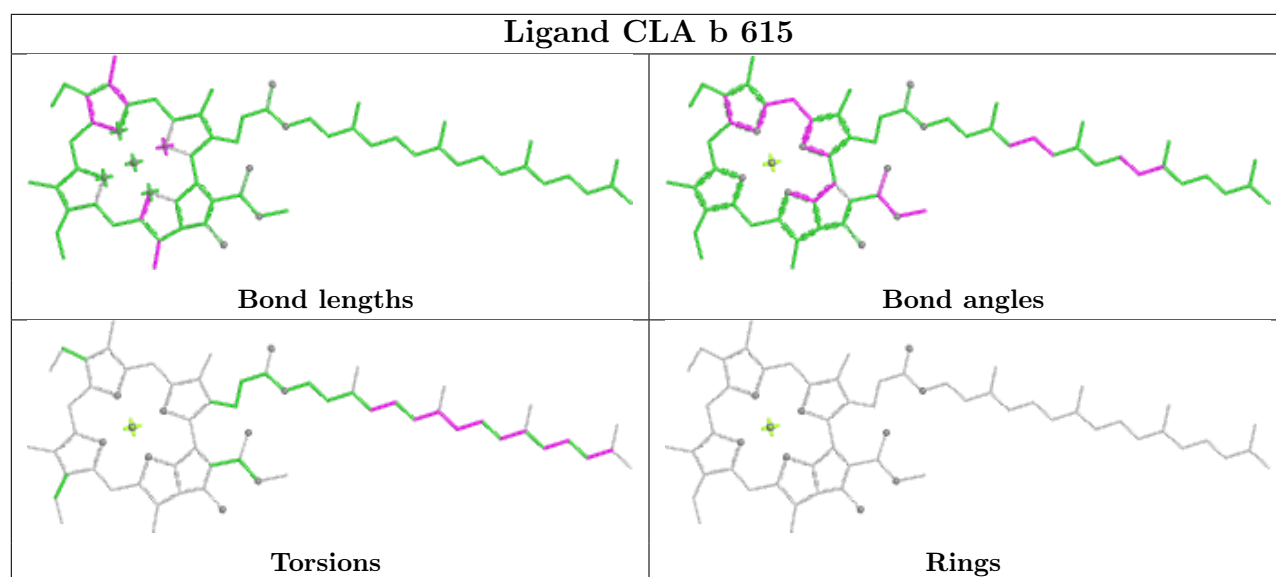
Ligand CLA b 611

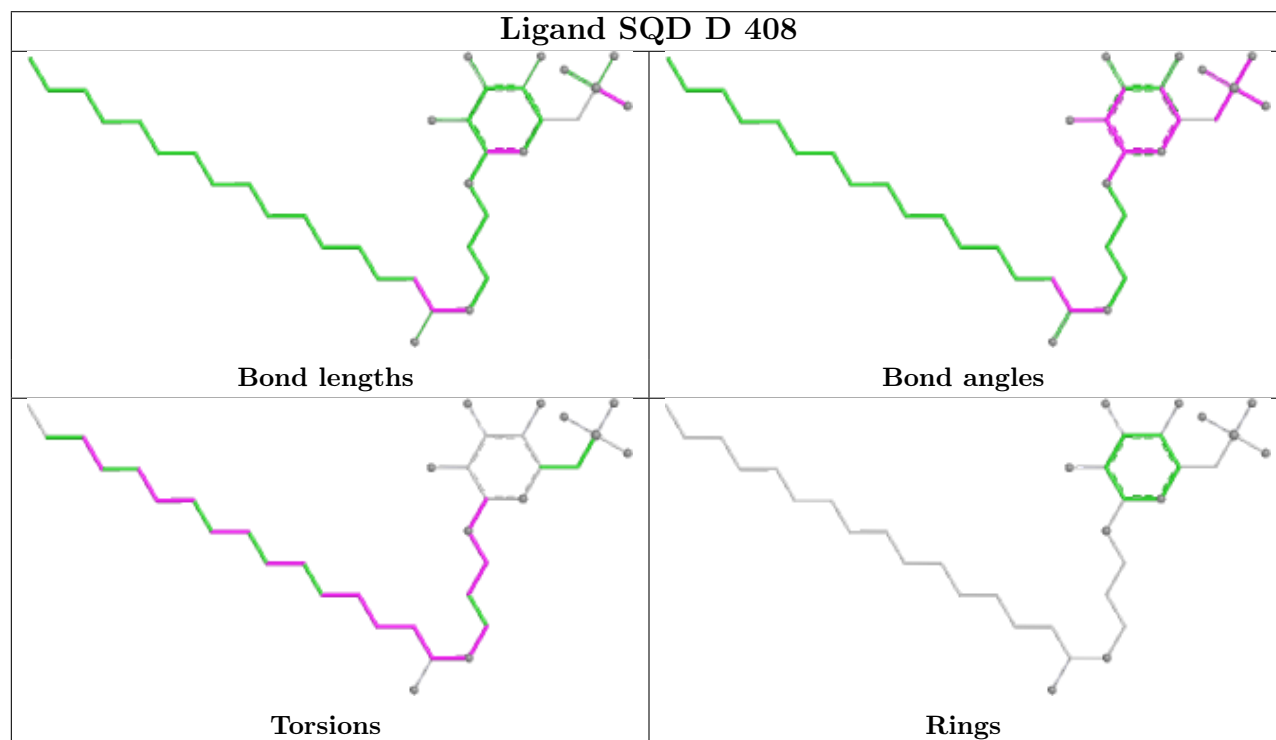
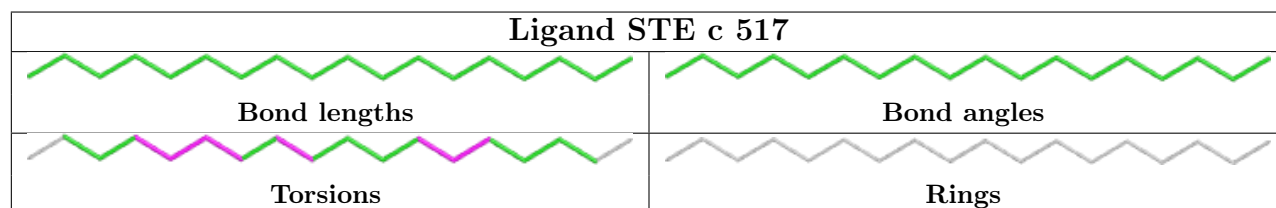
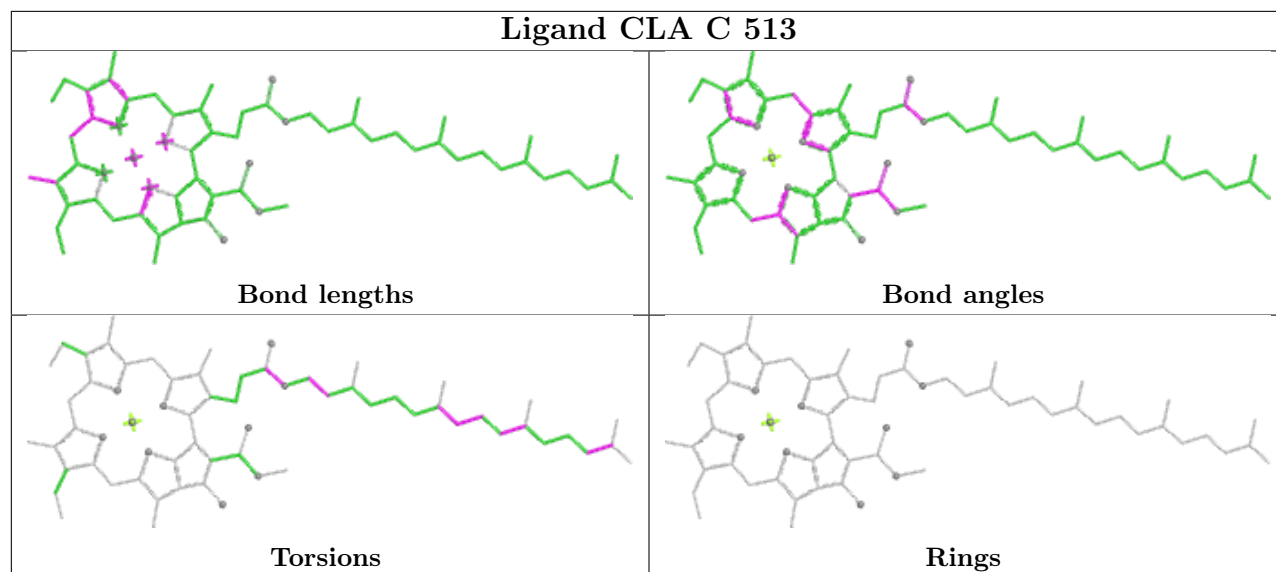


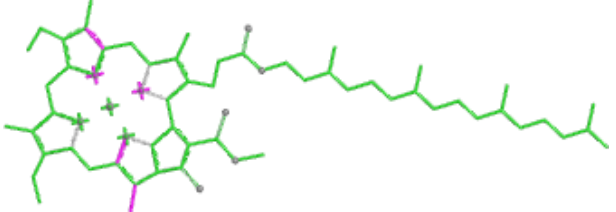
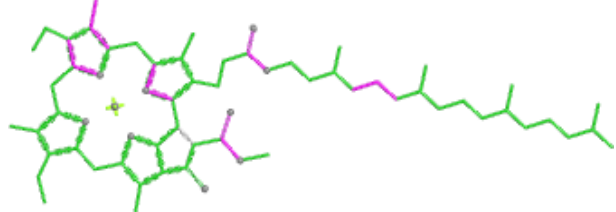
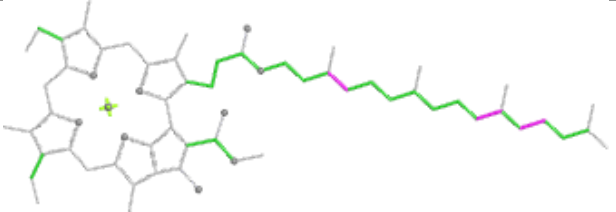
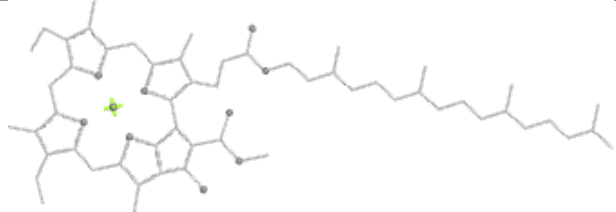
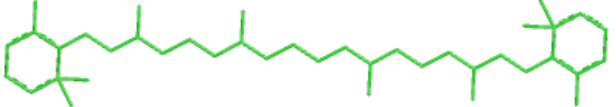
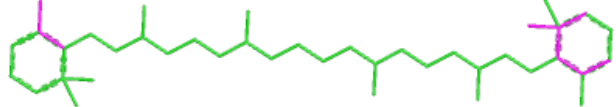
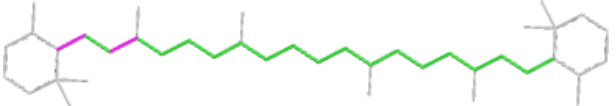
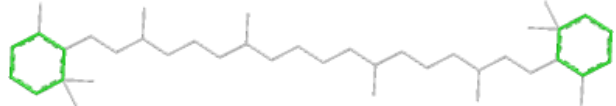
Ligand HEC V 201



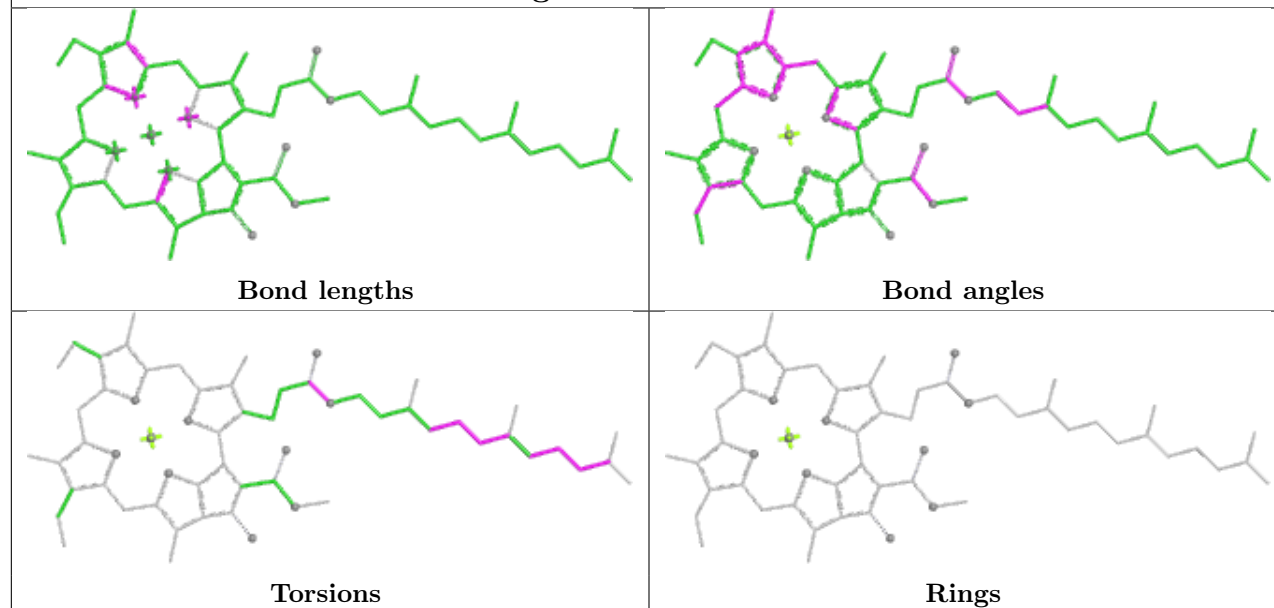




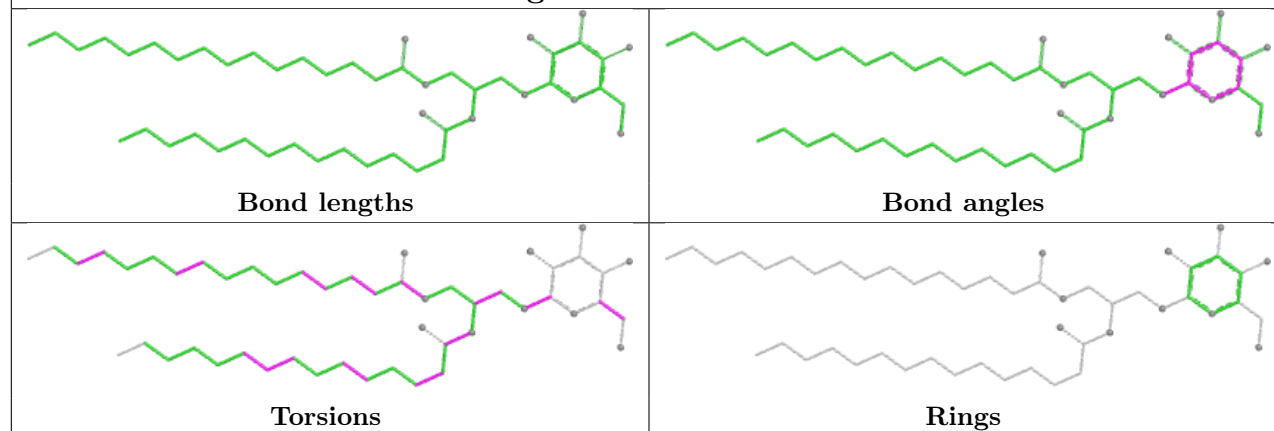


Ligand CLA B 609	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR B 619	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand STE K 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

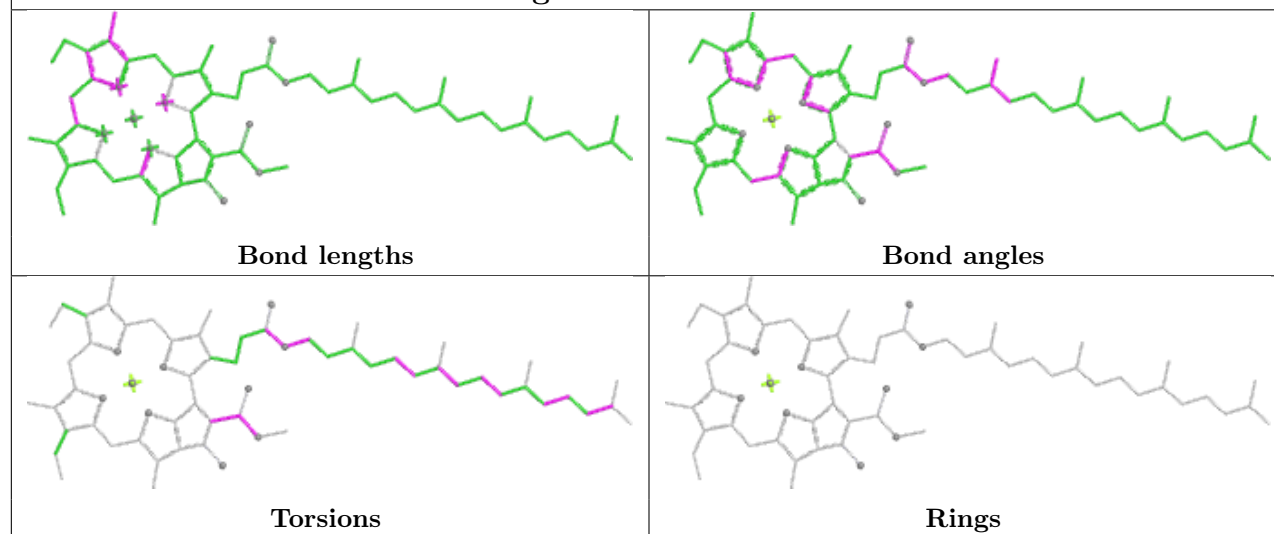
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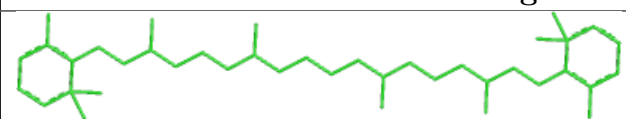
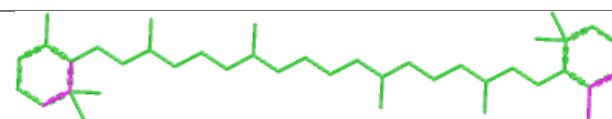
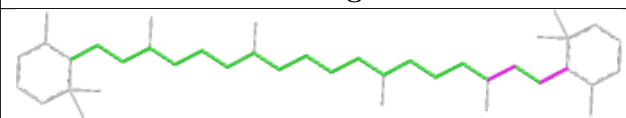
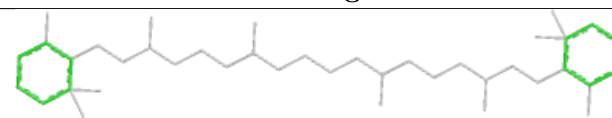


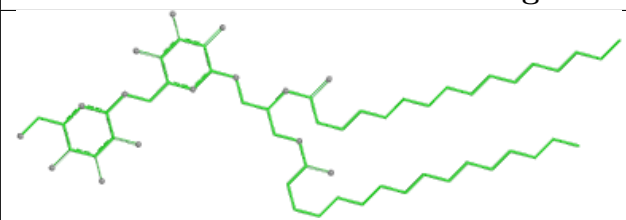
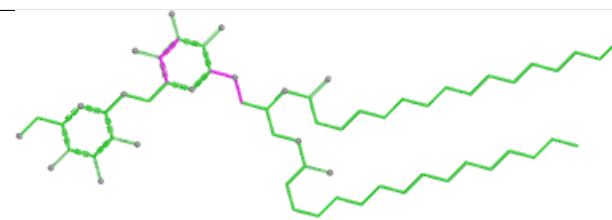
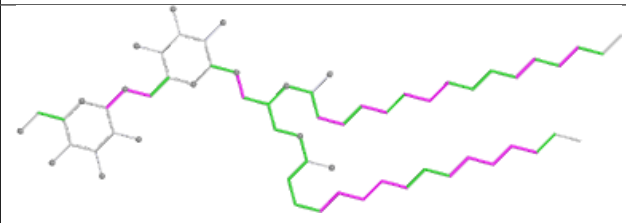
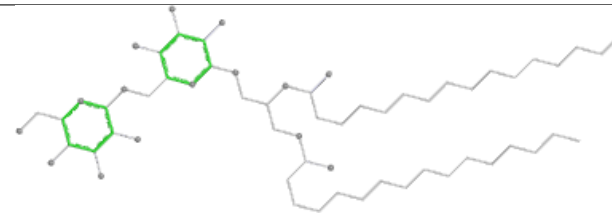
Ligand LMG D 406

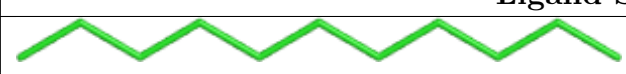
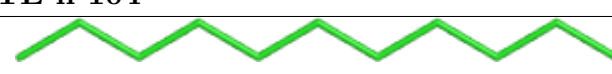
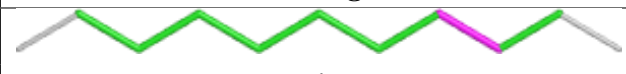


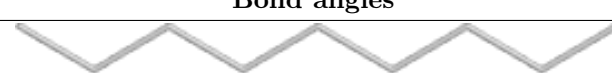
Ligand CLA B 601

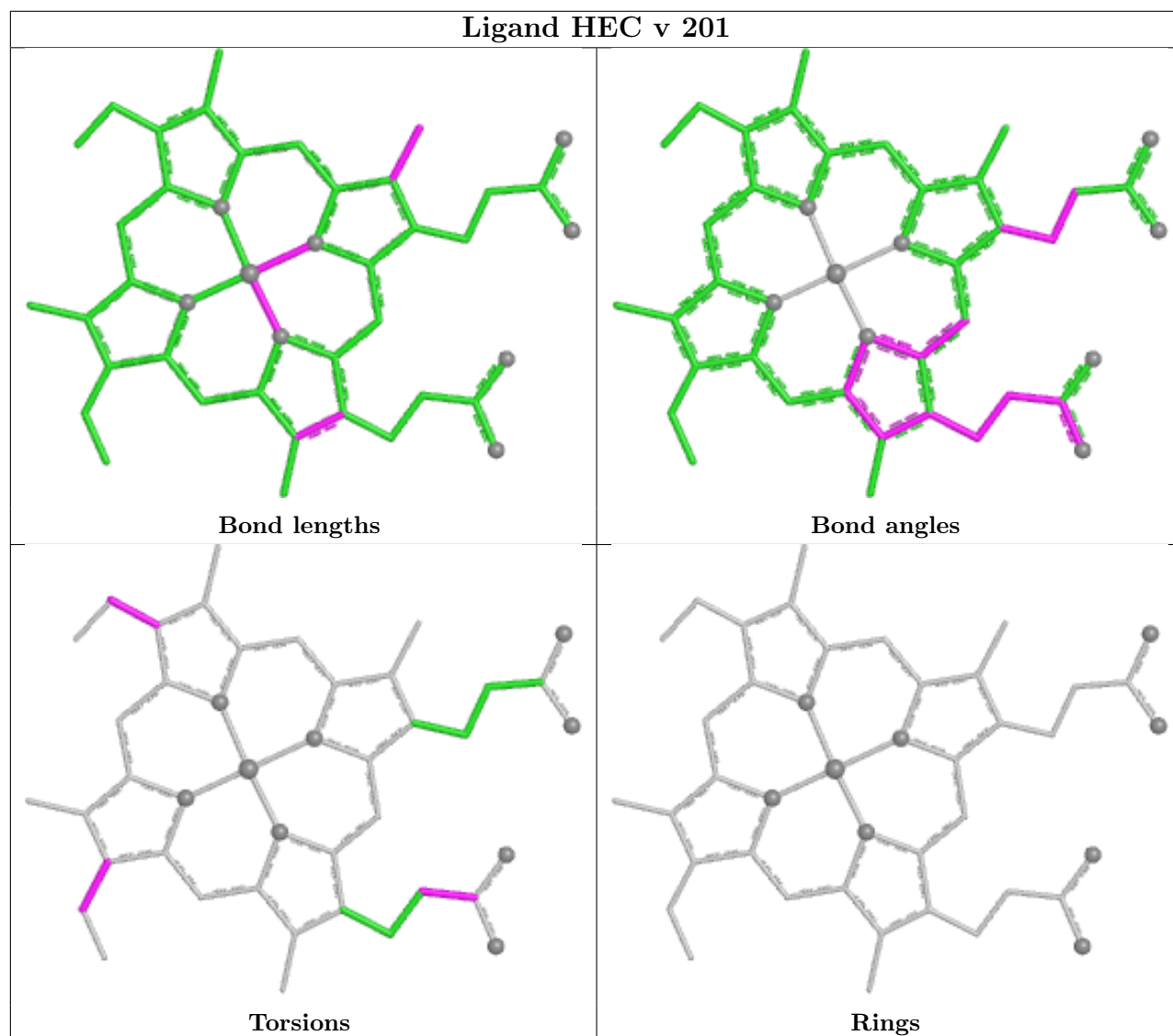
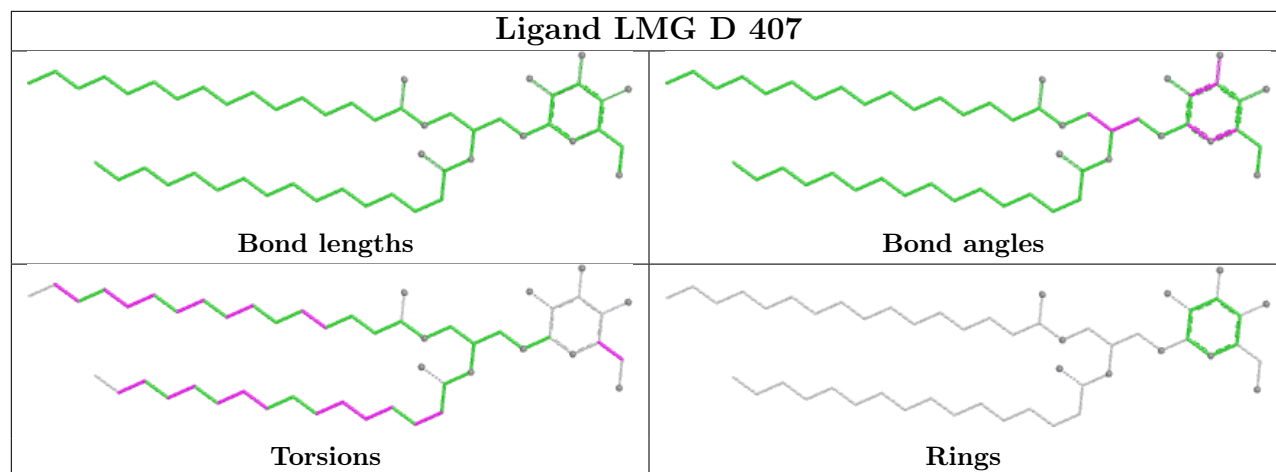


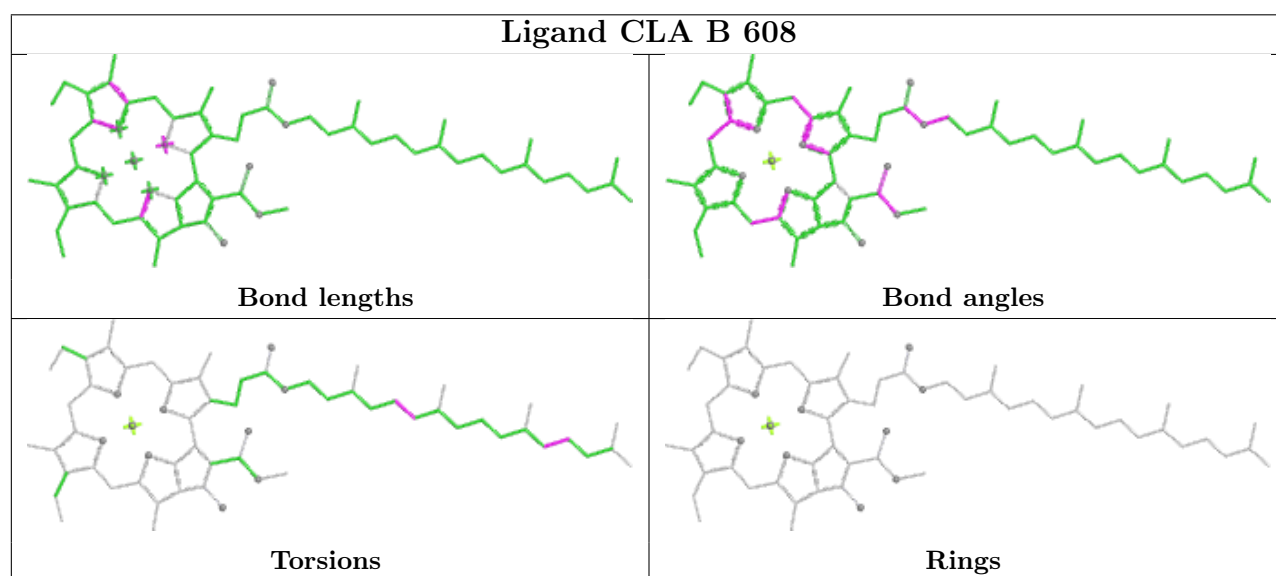
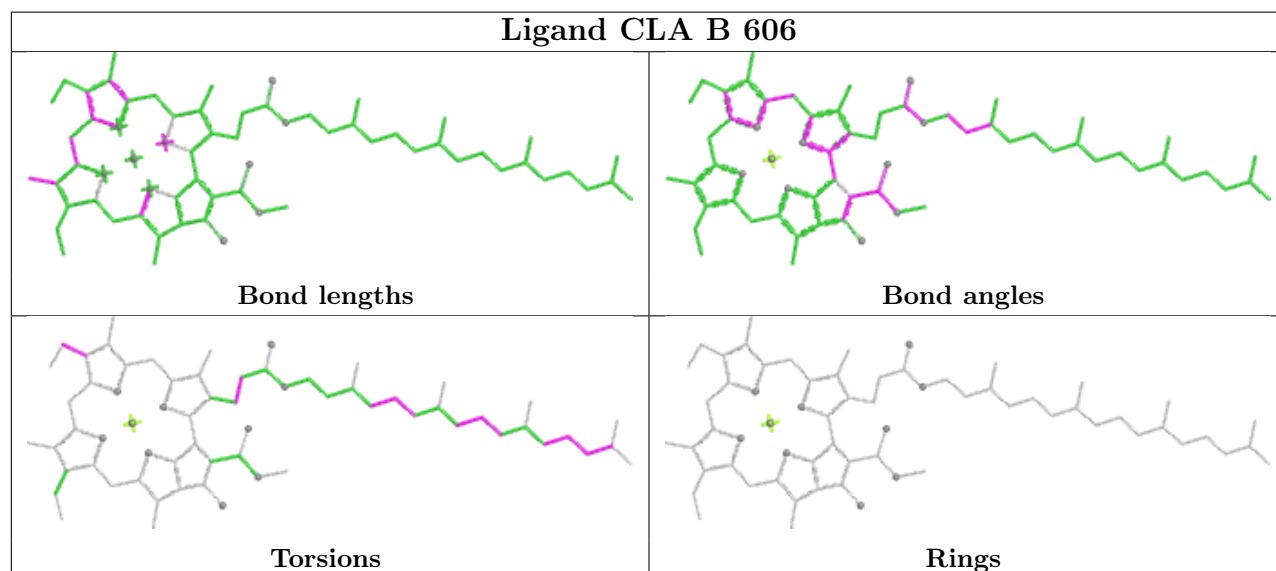
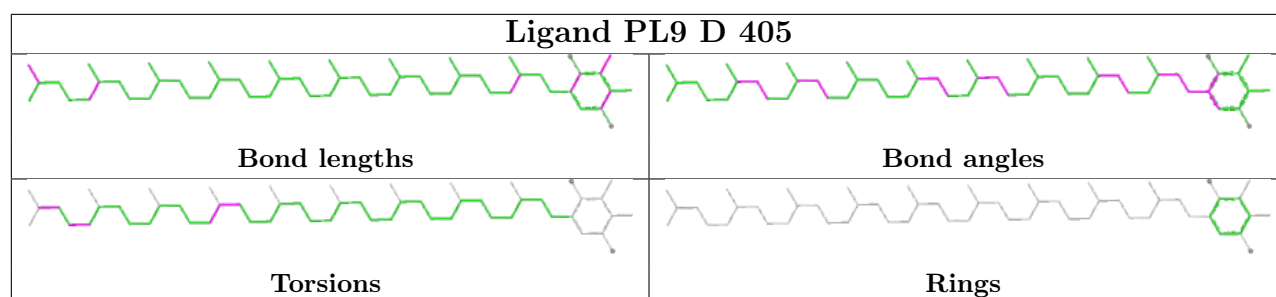
Ligand BCR T 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

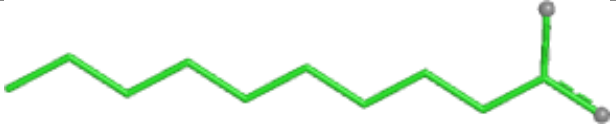
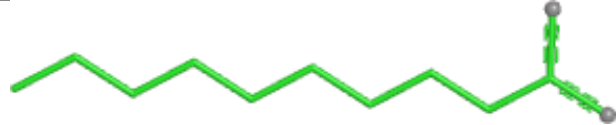
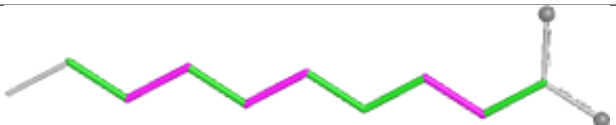
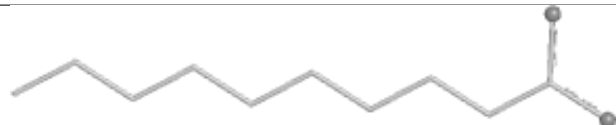
Ligand DGD c 520	
	
Bond lengths	Bond angles
	
Torsions	Rings

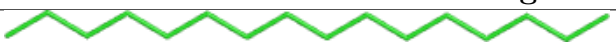
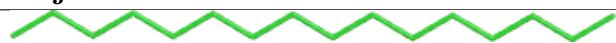
Ligand STE h 104	
	
Bond lengths	Bond angles
	
Torsions	Rings

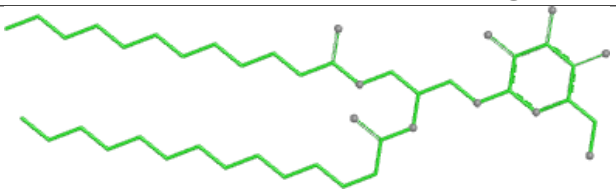
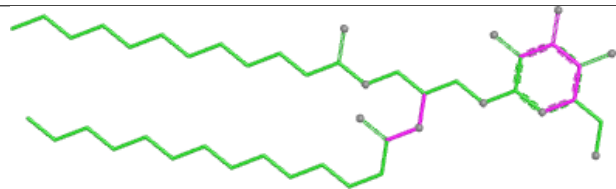
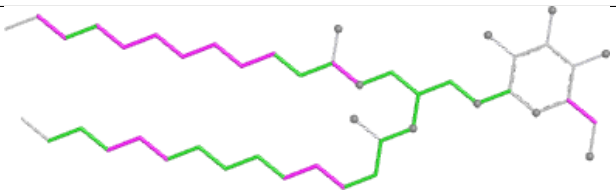
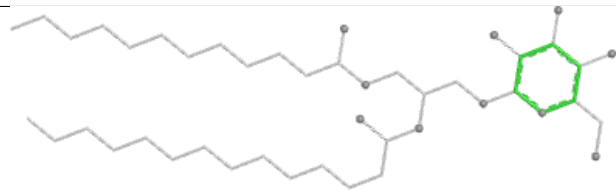
Ligand STE z 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

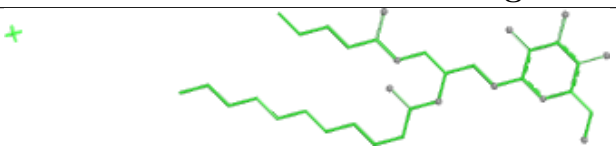
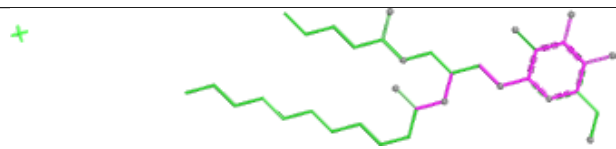
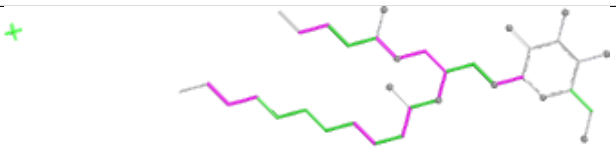
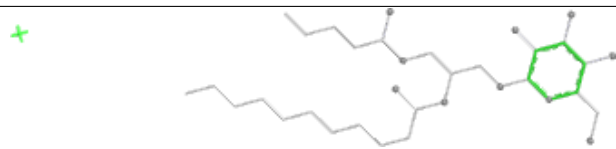


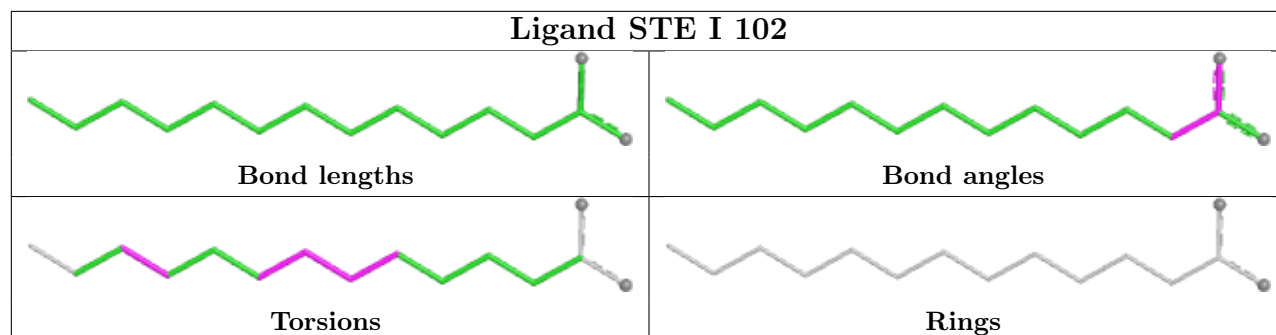
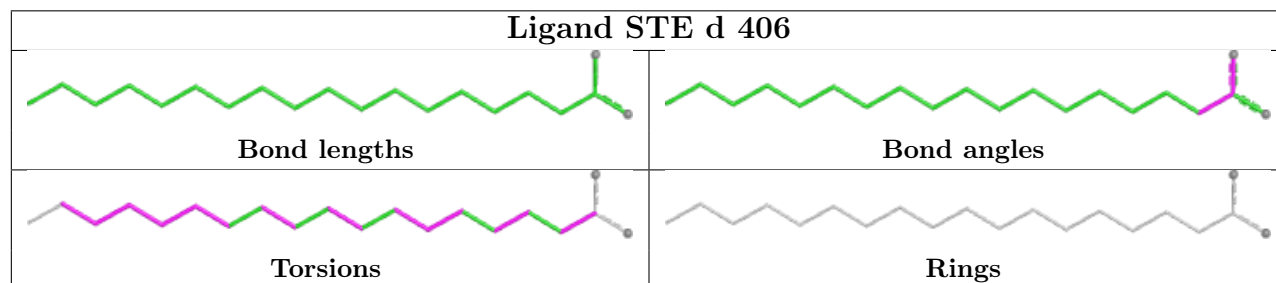
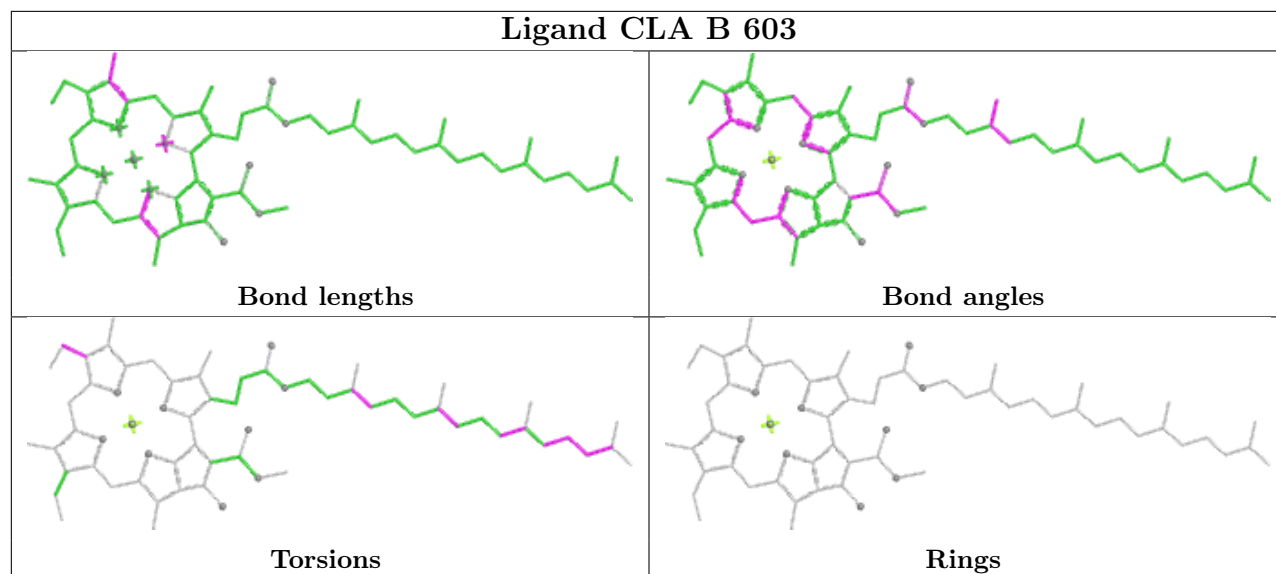


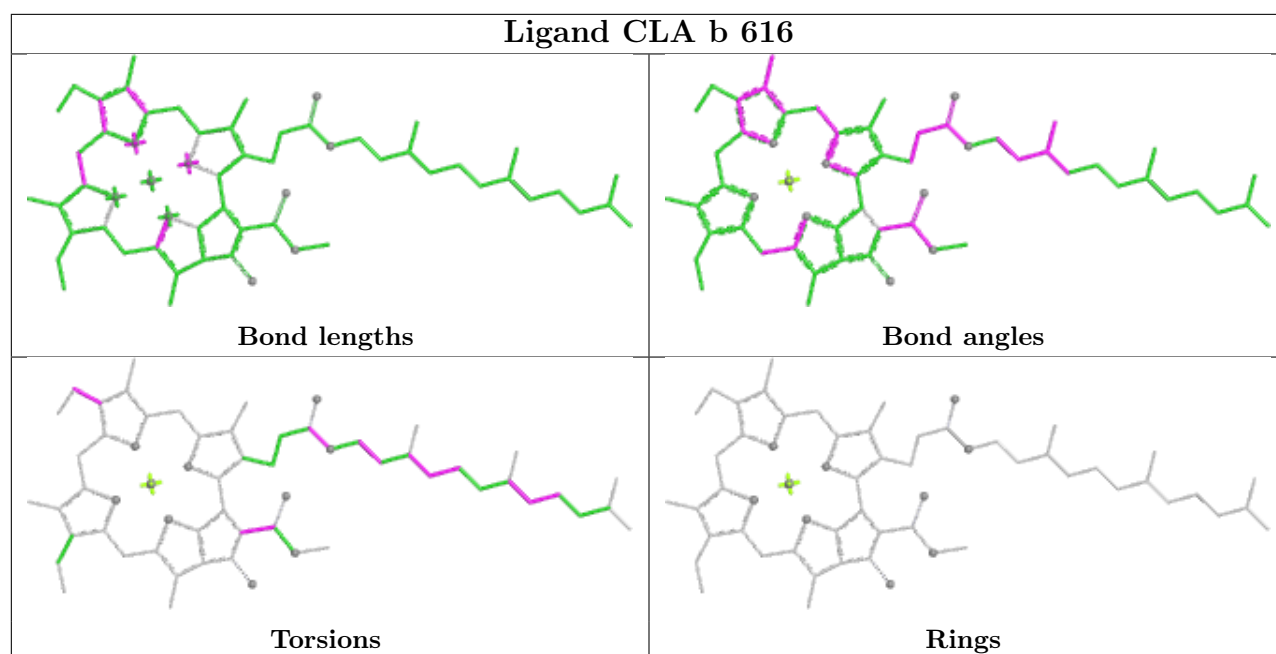
Ligand STE a 618	
 Bond lengths	 Bond angles
 Torsions	 Rings

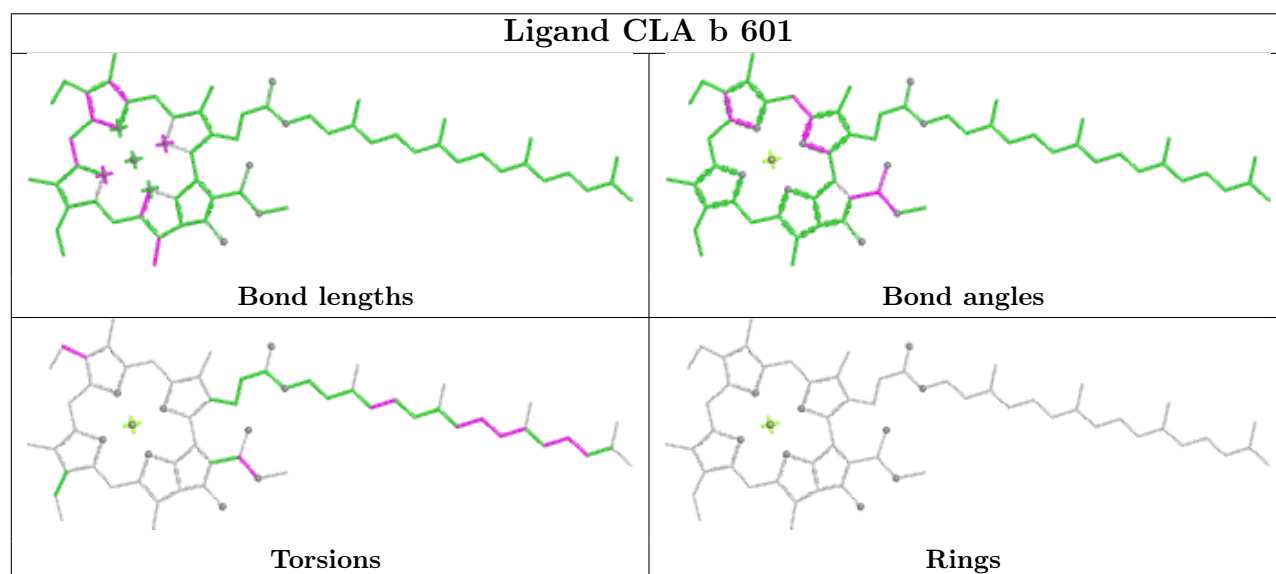
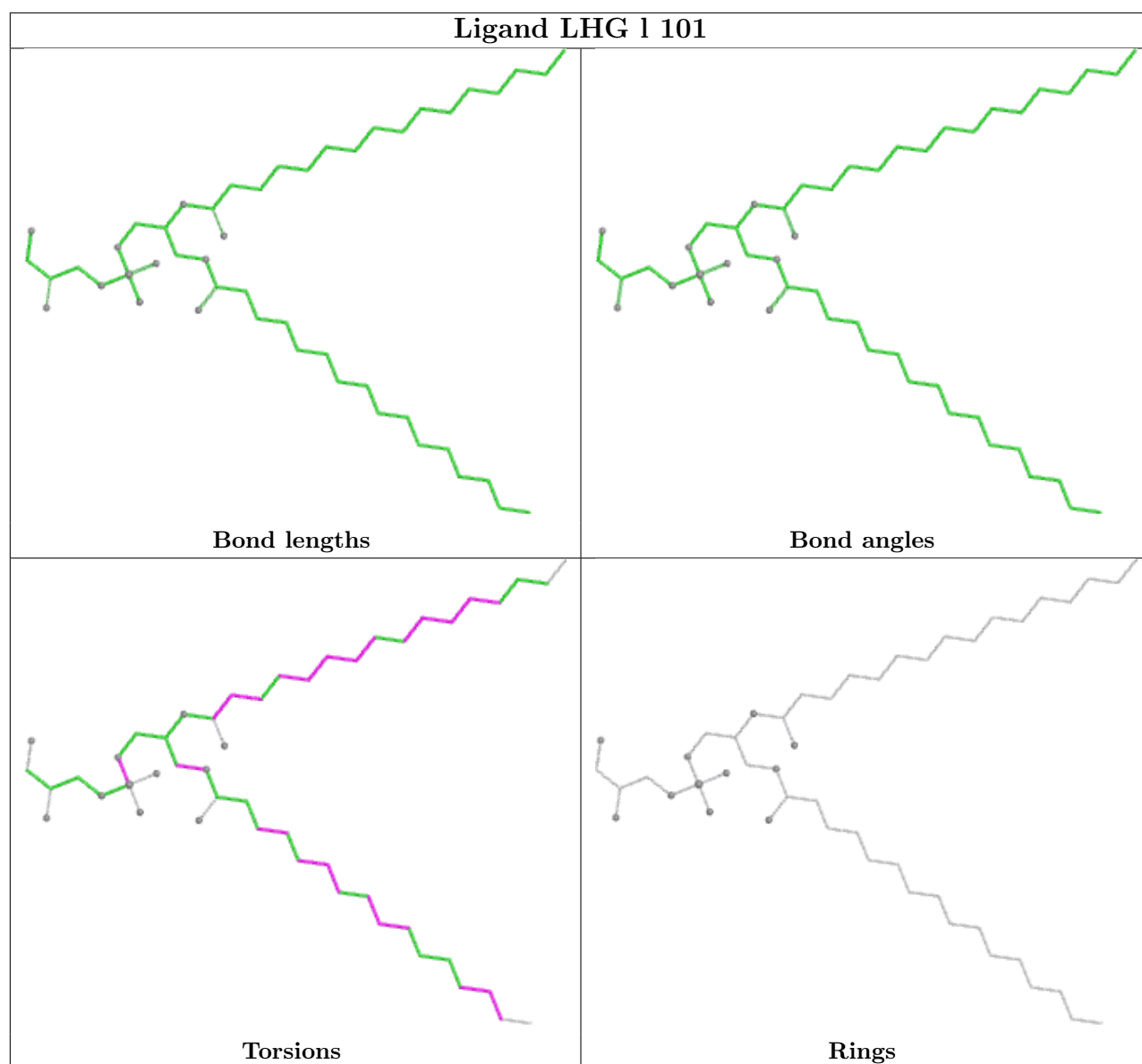
Ligand STE j 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

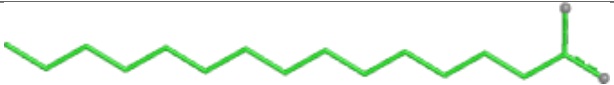
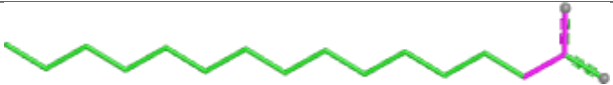
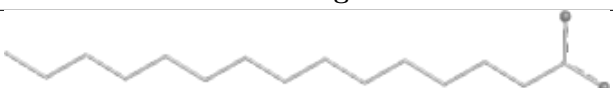
Ligand LMG B 620	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMG C 516	
 Bond lengths	 Bond angles
 Torsions	 Rings







Ligand STE I 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

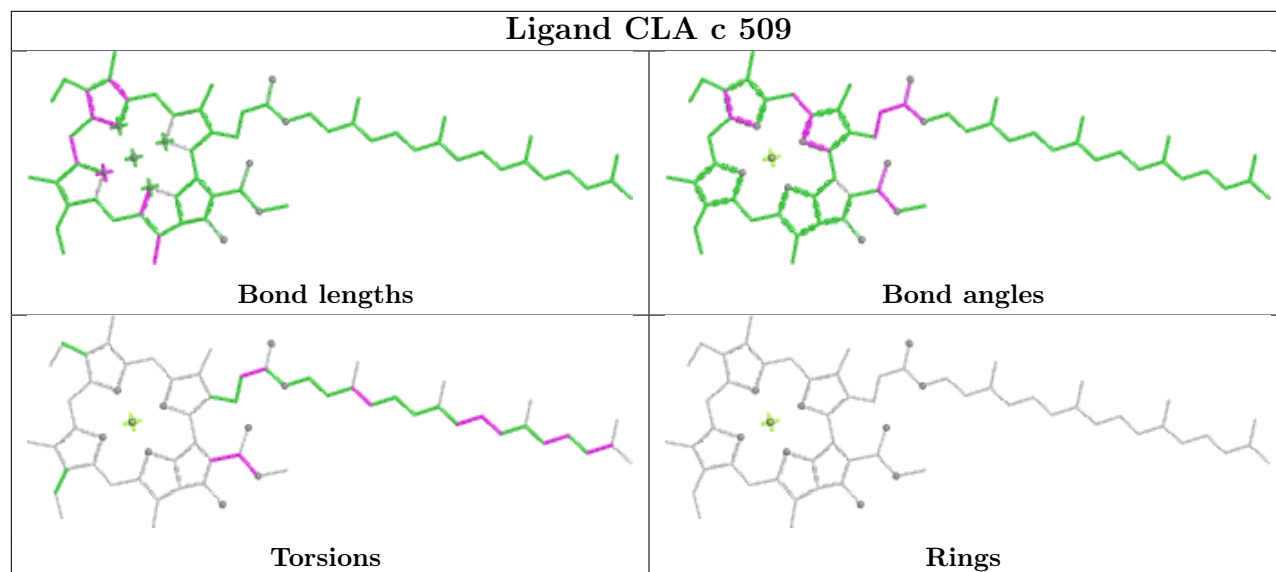
Ligand STE i 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand STE H 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

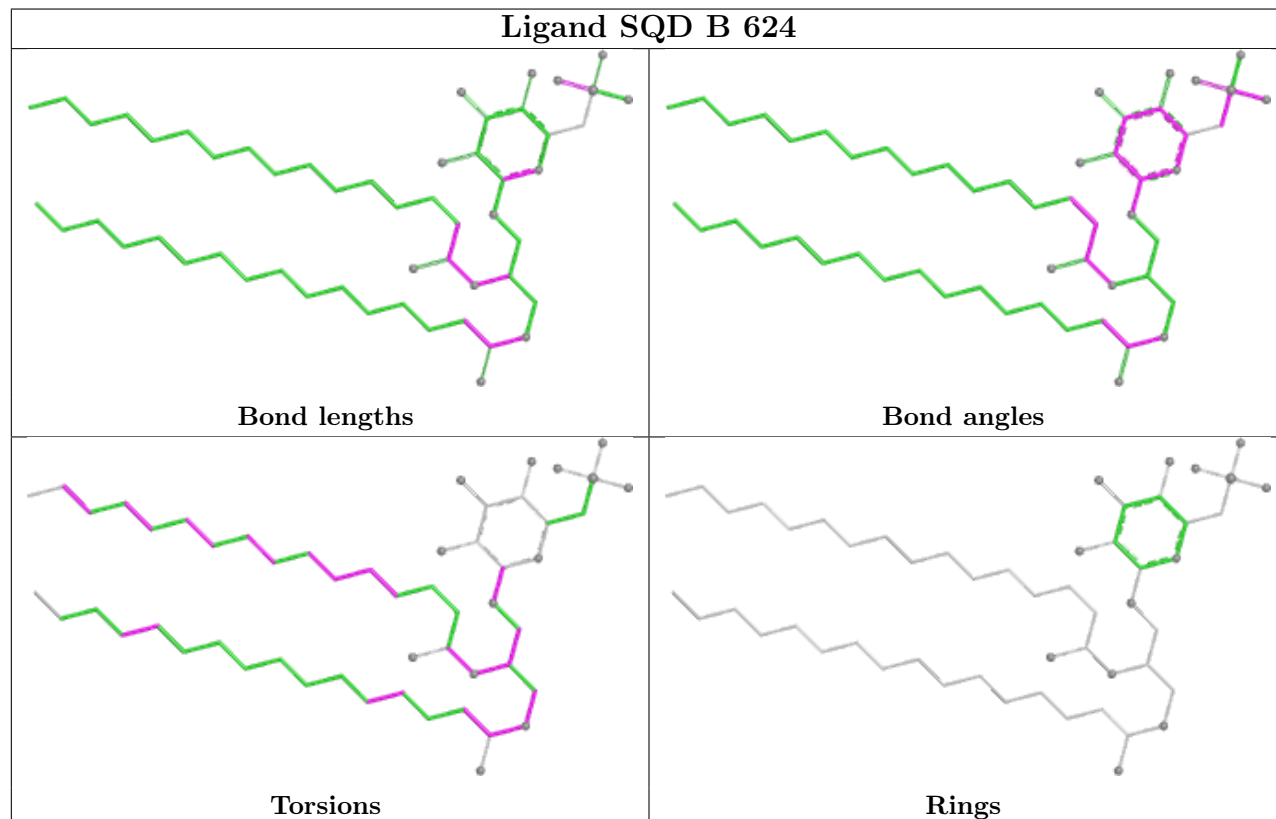
Ligand STE X 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

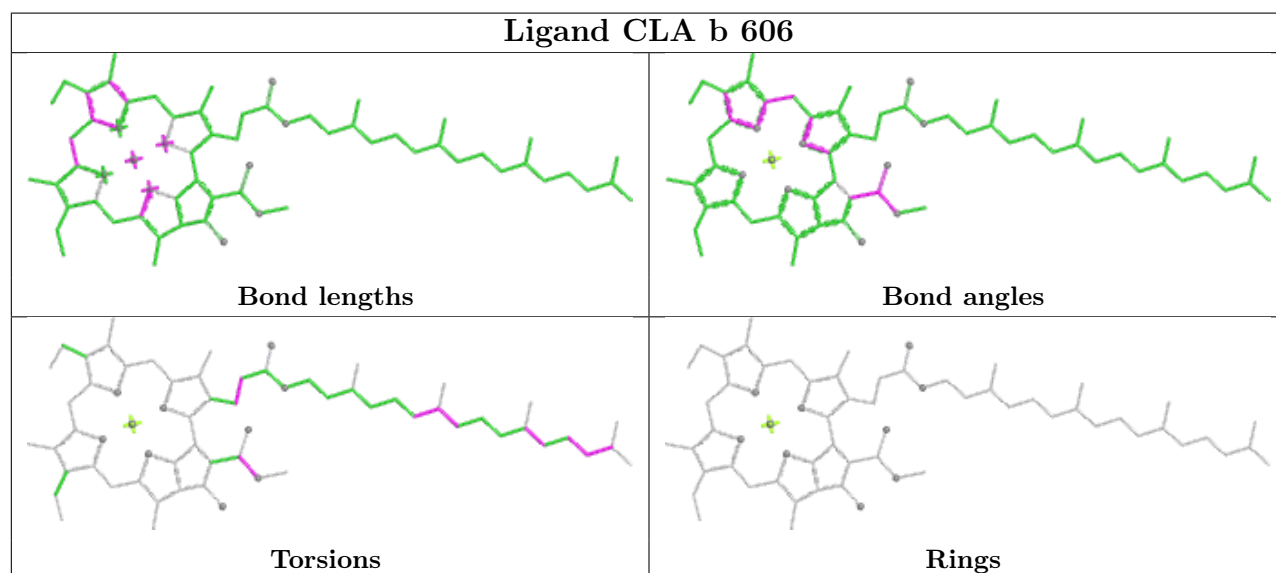
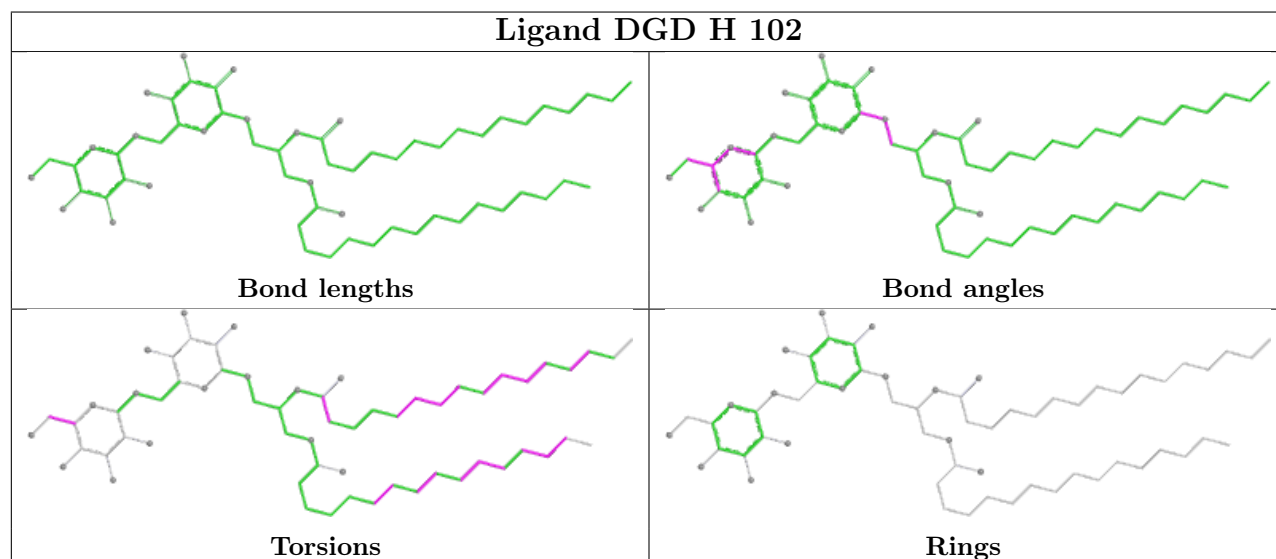
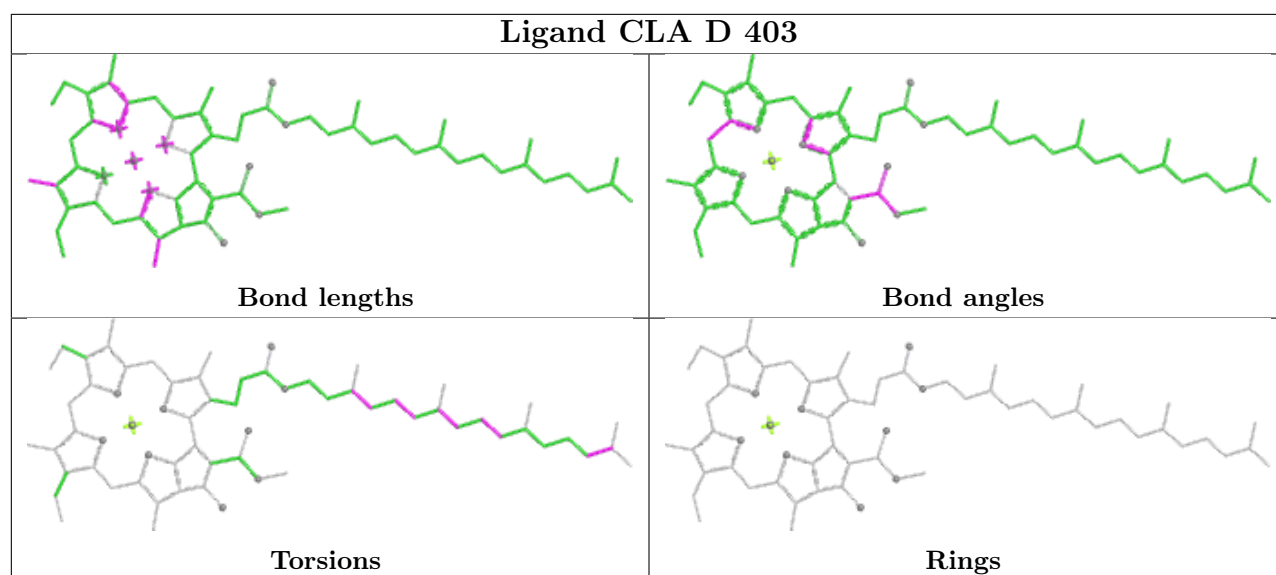
Ligand STE c 516	
 Bond lengths	 Bond angles
 Torsions	 Rings

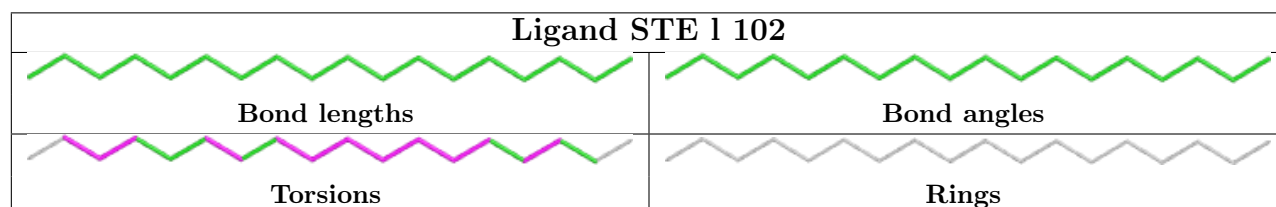
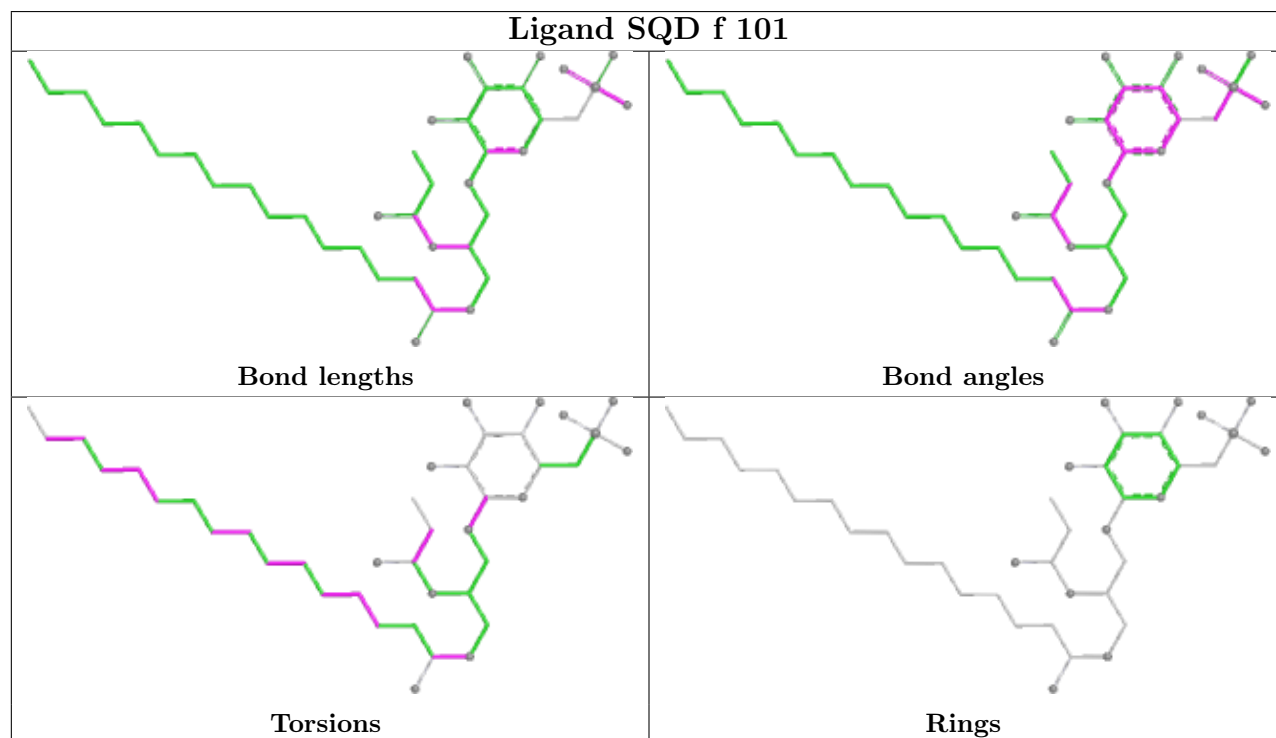
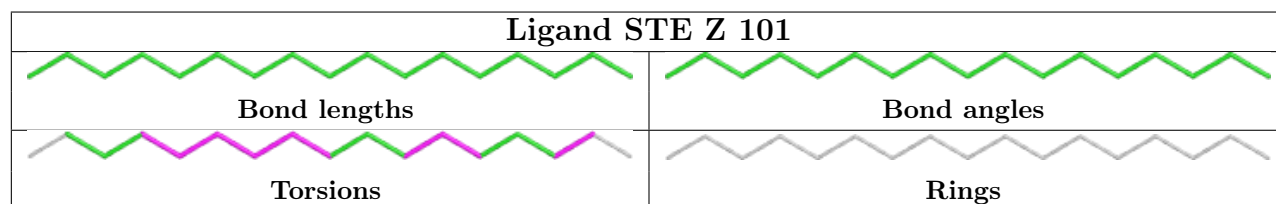
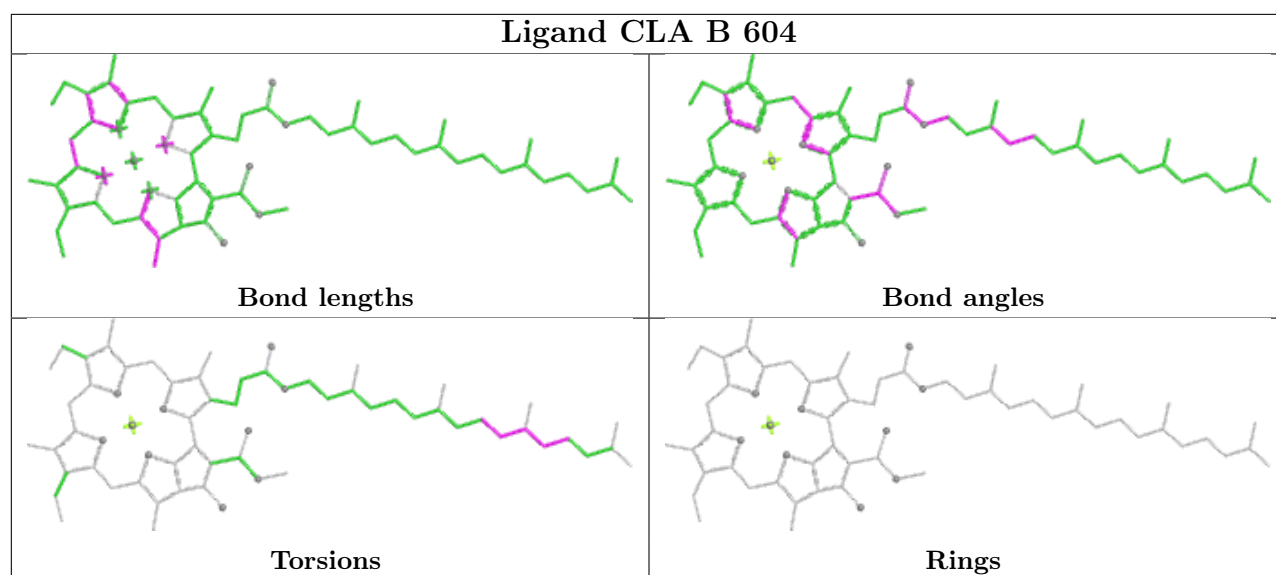
Ligand CLA c 509

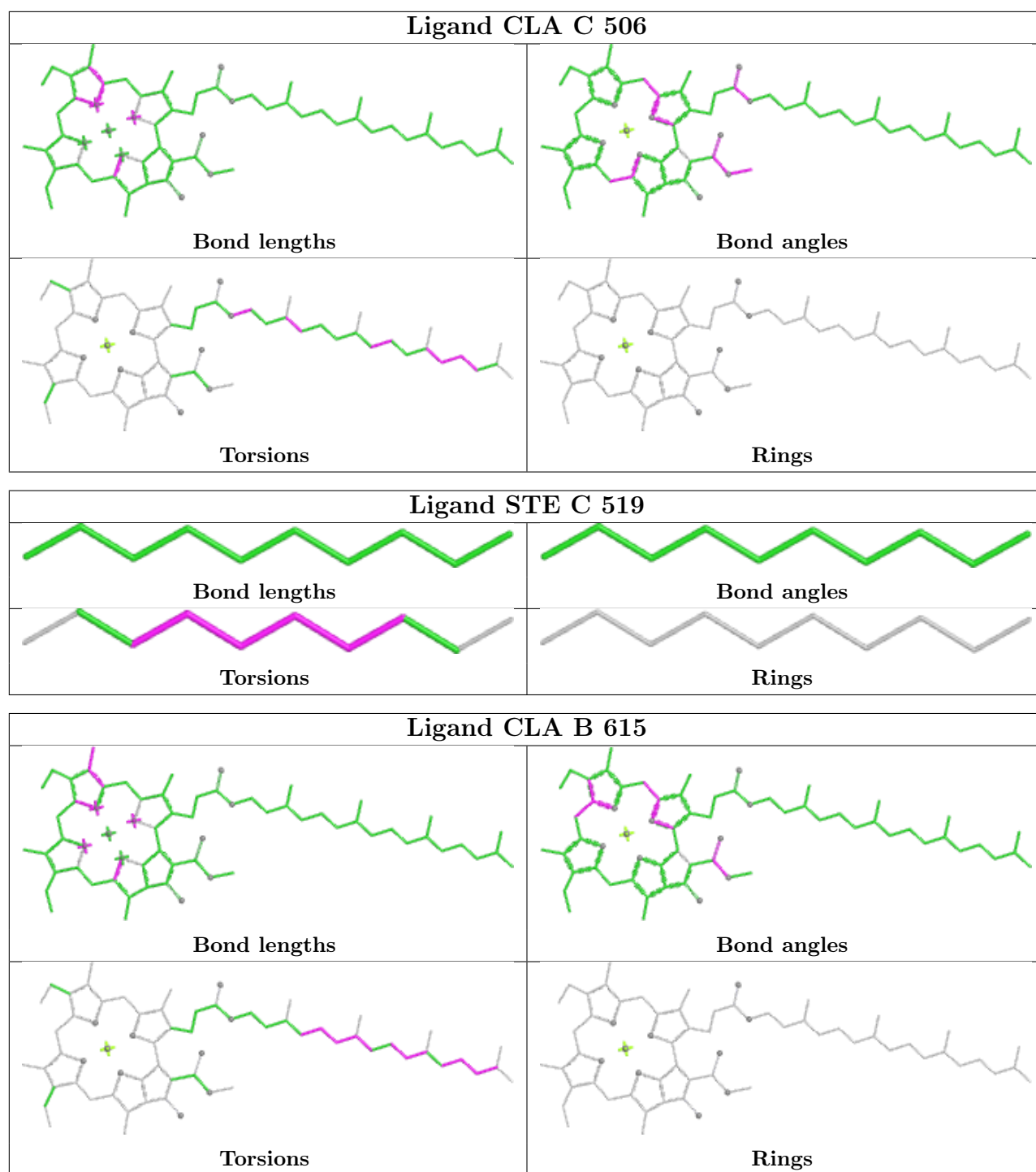


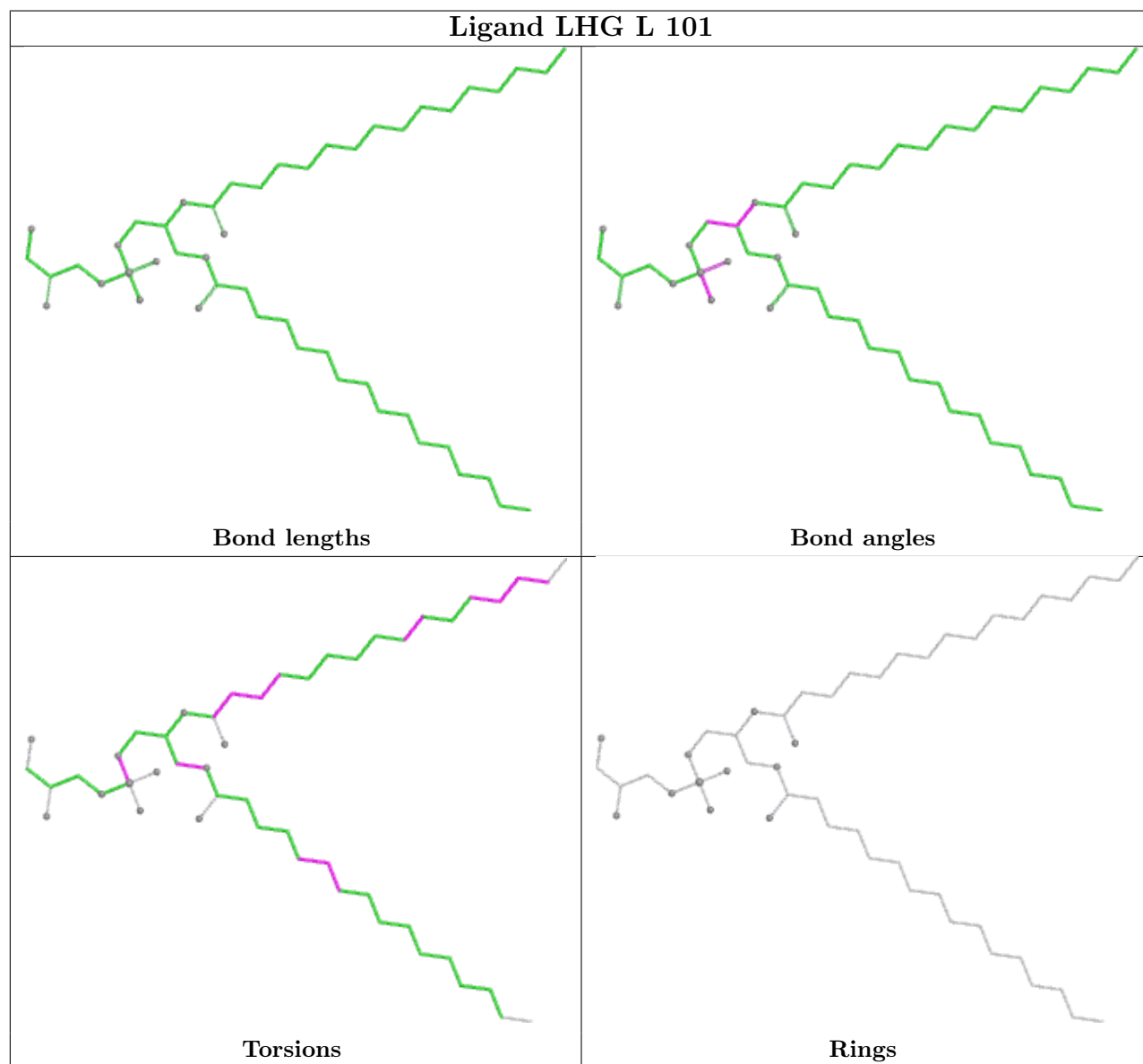
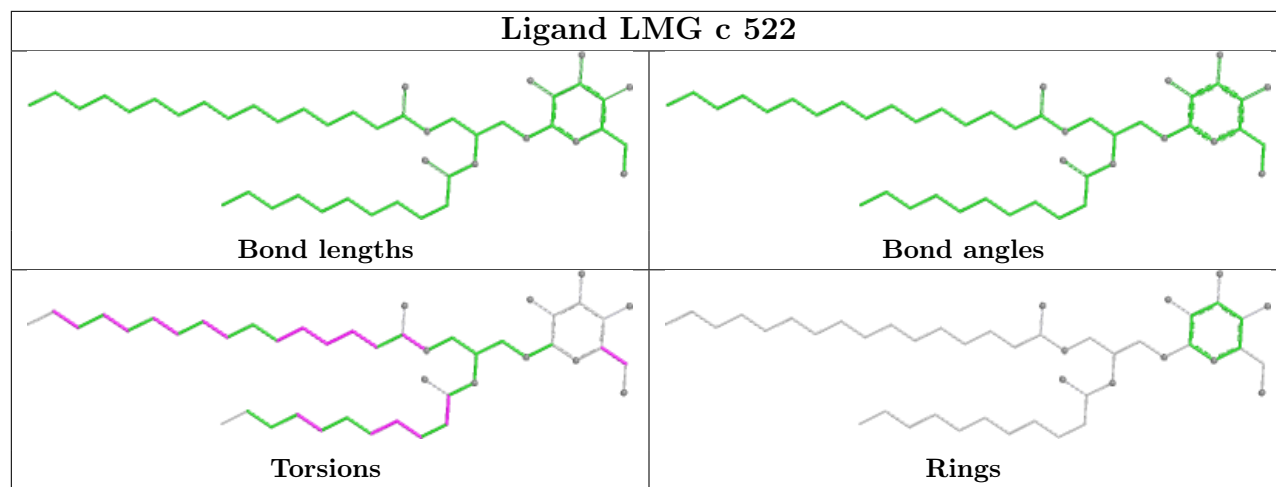
Ligand SQD B 624



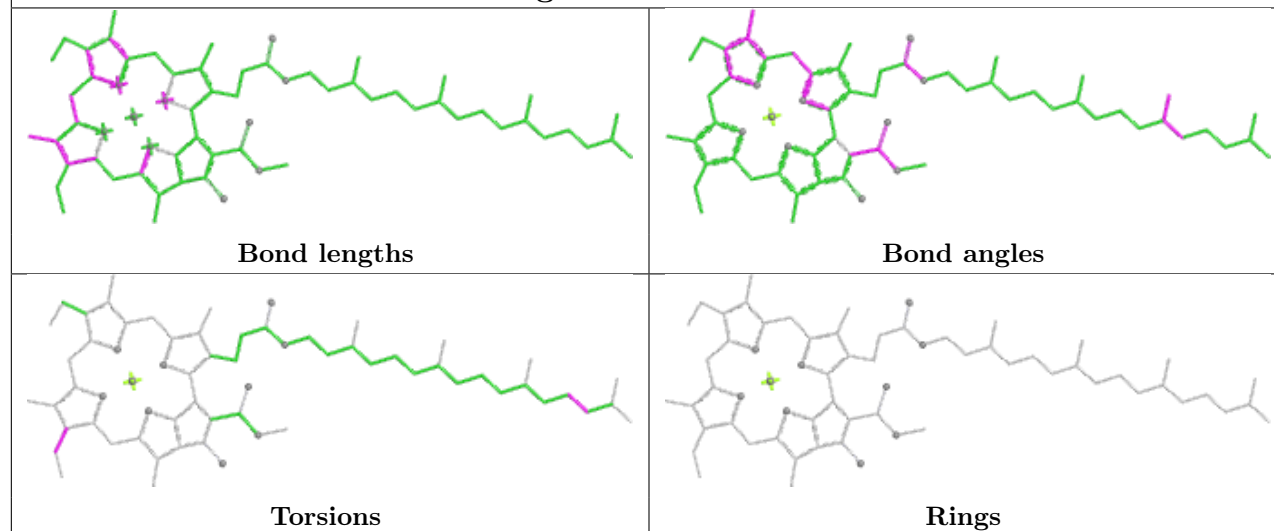




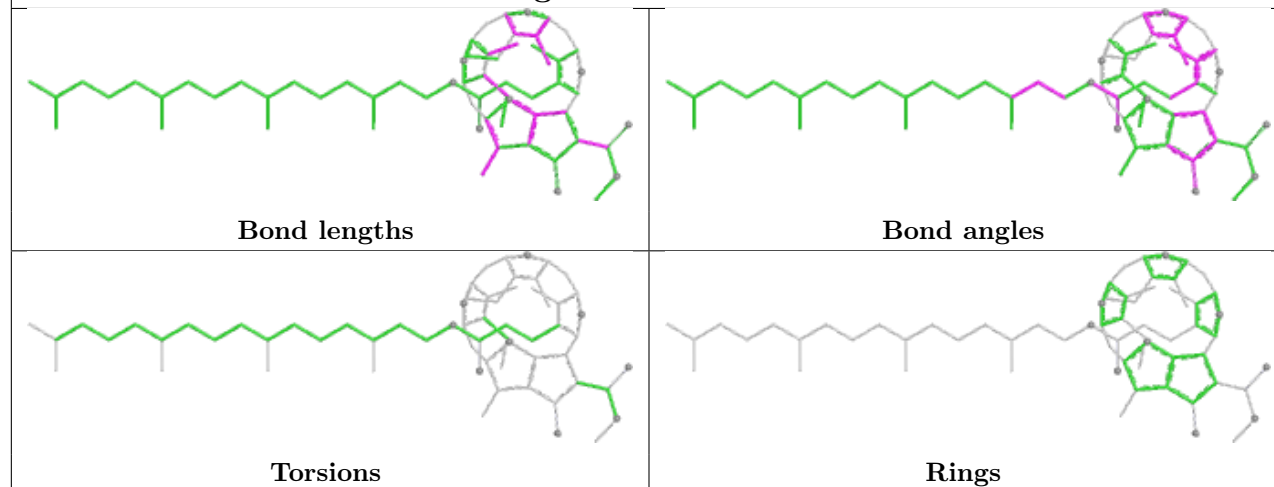




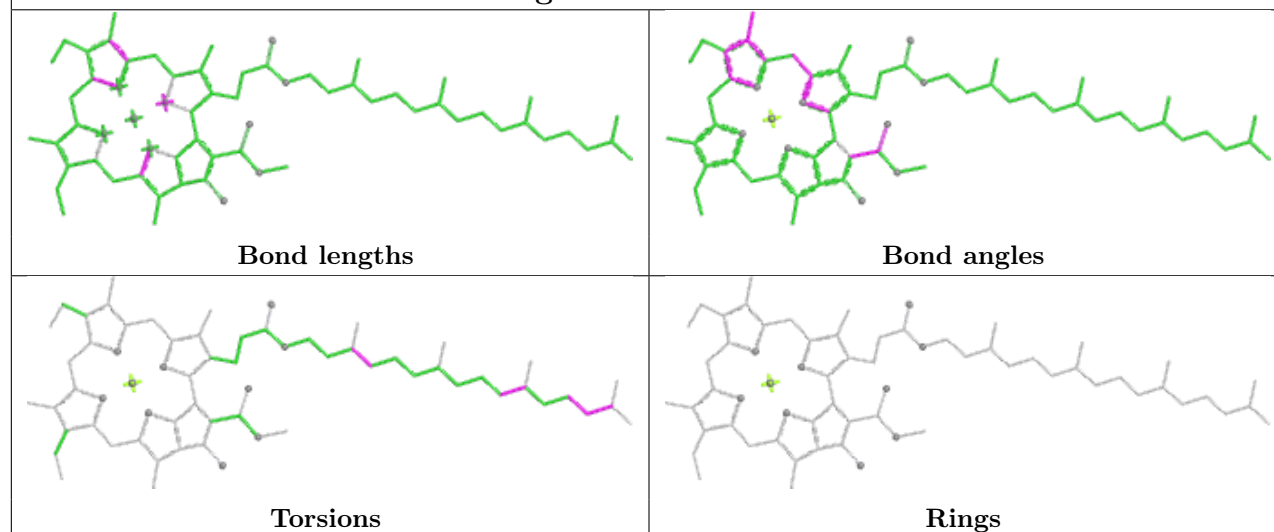
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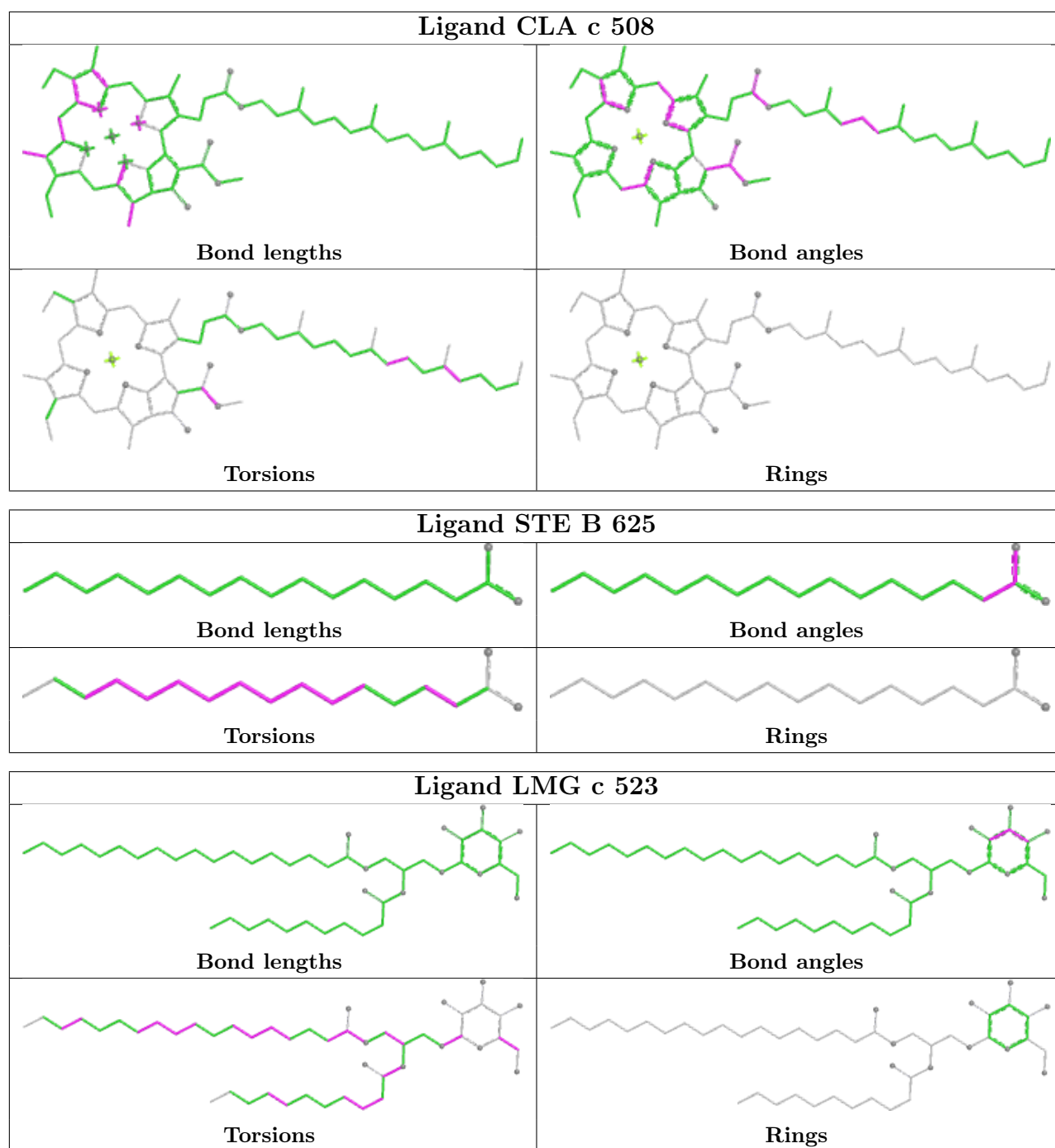


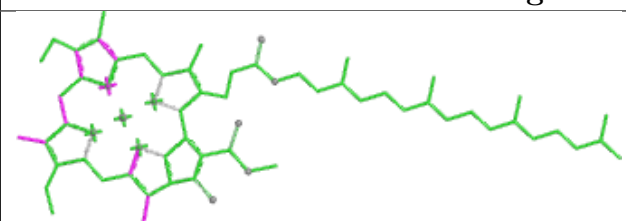
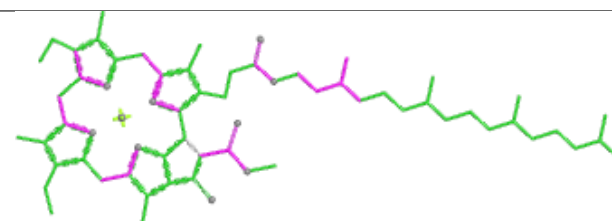
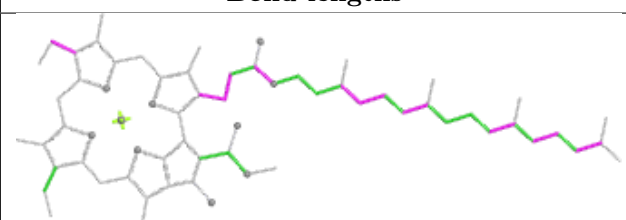
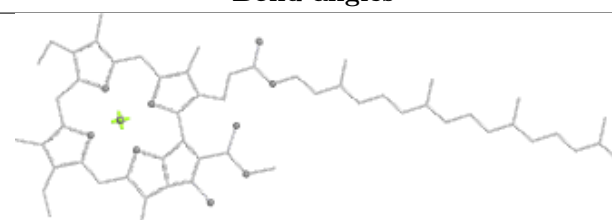
Ligand PHO a 608



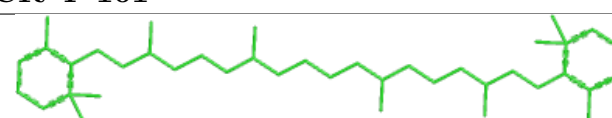
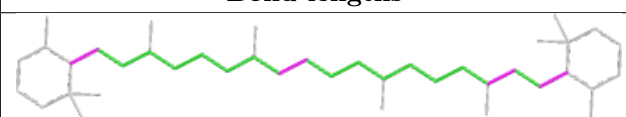
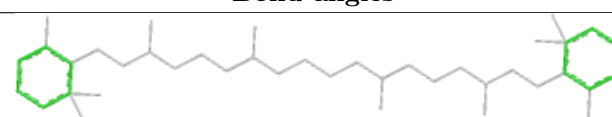
Ligand CLA b 609

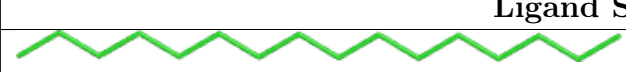
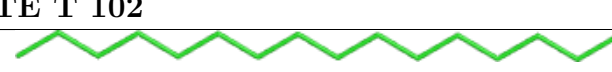


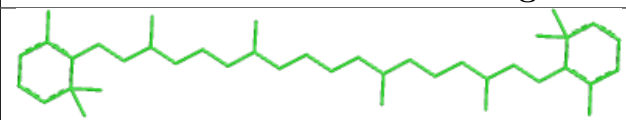
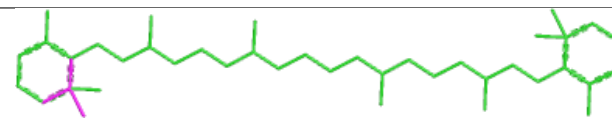
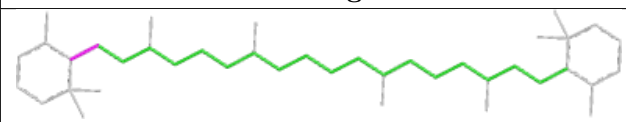
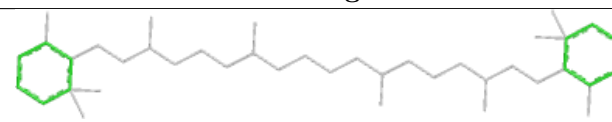


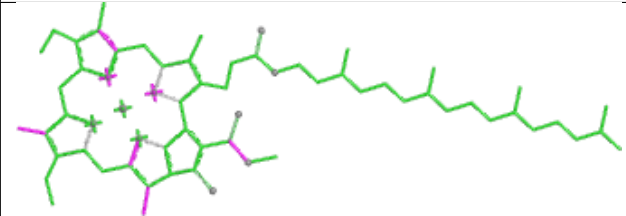
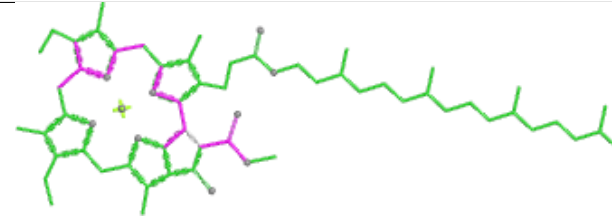
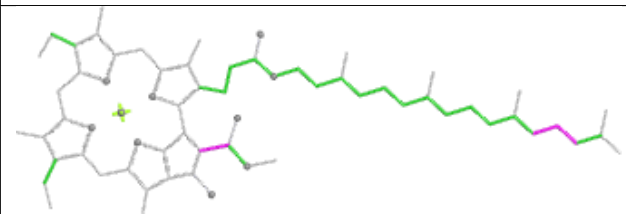
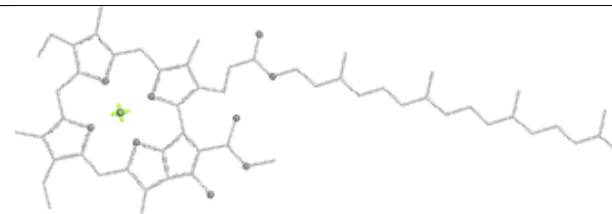
Ligand CLA c 512	
	
Bond lengths	Bond angles
	
Torsions	Rings

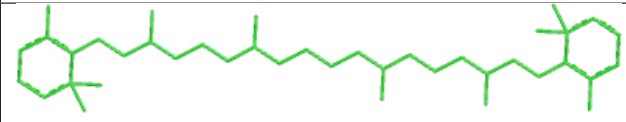
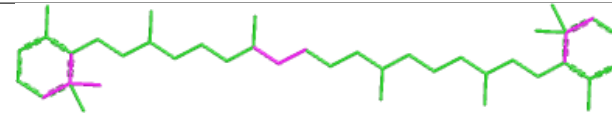
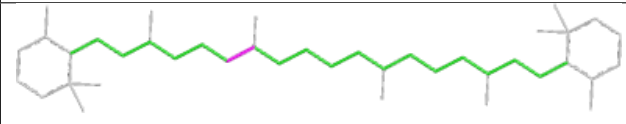
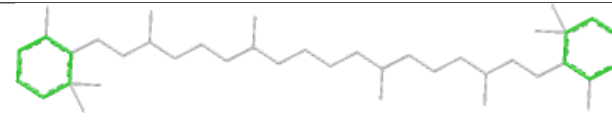
Ligand STE h 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

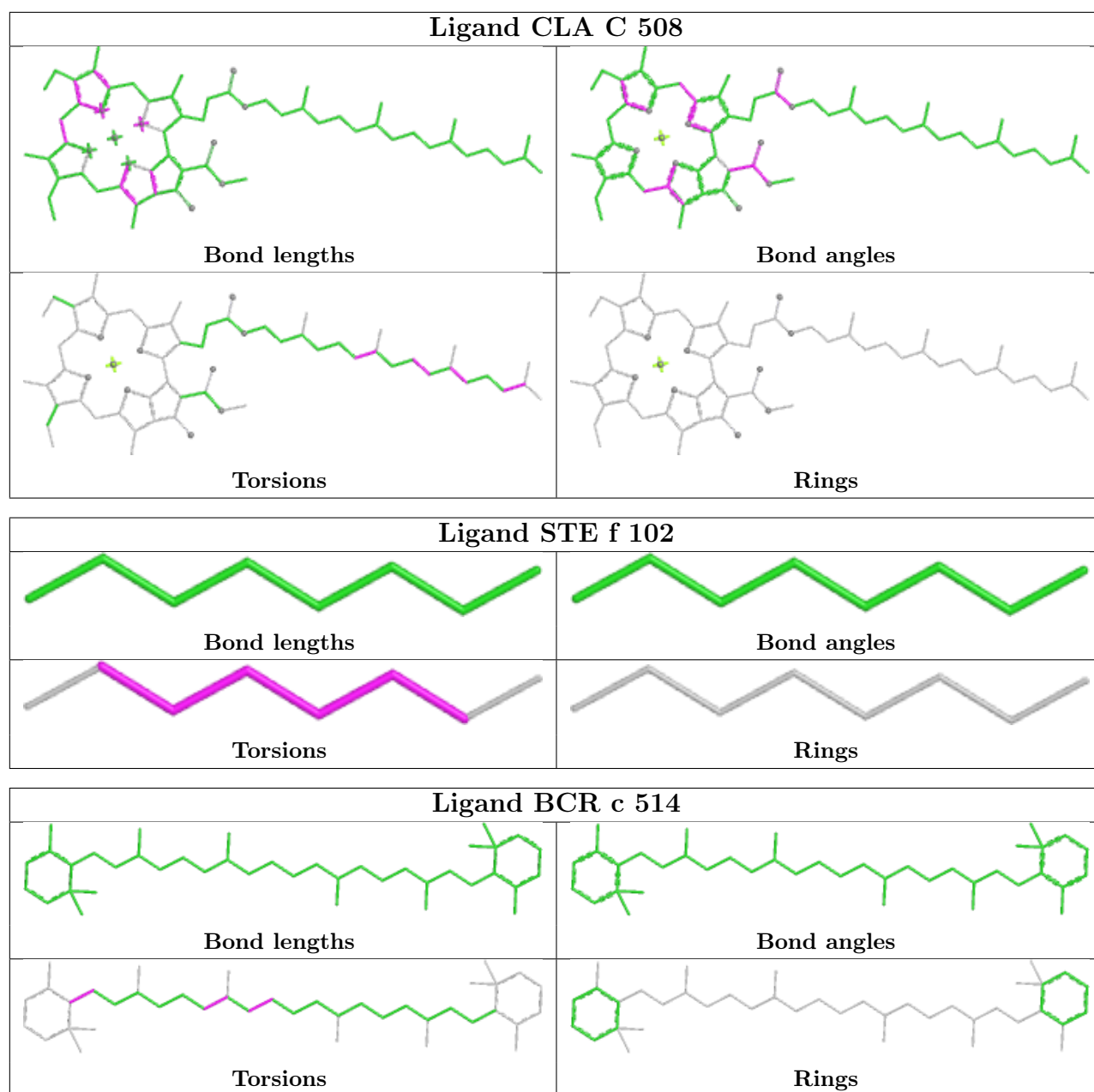
Ligand BCR Y 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE T 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR A 610	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA c 502	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR C 514	
	
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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	334/344 (97%)	-0.38	1 (0%) 90 93	27, 32, 56, 82	0
1	a	334/344 (97%)	-0.30	3 (0%) 81 86	28, 35, 65, 83	0
2	B	505/510 (99%)	-0.22	7 (1%) 73 81	20, 37, 66, 104	5 (0%)
2	b	505/510 (99%)	-0.06	8 (1%) 70 79	30, 41, 76, 116	1 (0%)
3	C	442/461 (95%)	-0.16	0 100 100	19, 41, 58, 86	1 (0%)
3	c	451/461 (97%)	-0.02	4 (0%) 81 86	22, 46, 67, 98	2 (0%)
4	D	341/352 (96%)	-0.38	1 (0%) 90 93	27, 35, 54, 86	0
4	d	341/352 (96%)	-0.19	2 (0%) 85 90	29, 40, 67, 84	1 (0%)
5	E	82/84 (97%)	0.48	2 (2%) 59 69	34, 59, 74, 83	1 (1%)
5	e	82/84 (97%)	0.67	1 (1%) 76 83	46, 68, 88, 94	0
6	F	34/45 (75%)	0.15	0 100 100	42, 50, 70, 86	0
6	f	34/45 (75%)	0.41	0 100 100	49, 60, 86, 95	0
7	H	65/66 (98%)	0.04	2 (3%) 51 61	39, 47, 62, 76	0
7	h	63/66 (95%)	0.49	3 (4%) 35 45	48, 58, 69, 76	0
8	I	35/38 (92%)	-0.21	0 100 100	37, 43, 69, 77	0
8	i	35/38 (92%)	0.01	1 (2%) 53 63	38, 45, 77, 91	0
9	J	36/40 (90%)	0.39	1 (2%) 55 65	42, 58, 81, 106	0
9	j	36/40 (90%)	0.40	0 100 100	46, 63, 90, 99	0
10	K	37/46 (80%)	0.27	0 100 100	50, 60, 78, 80	0
10	k	37/46 (80%)	0.41	0 100 100	57, 64, 79, 87	0
11	L	37/37 (100%)	-0.34	0 100 100	29, 34, 63, 68	0
11	l	36/37 (97%)	-0.34	0 100 100	31, 36, 72, 81	0
12	M	32/36 (88%)	-0.18	1 (3%) 51 61	33, 38, 59, 75	0
12	m	31/36 (86%)	-0.23	0 100 100	33, 39, 52, 64	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	-0.04	4 (1%) 70 79	27, 46, 84, 130	1 (0%)
13	o	244/272 (89%)	0.00	4 (1%) 70 79	29, 45, 81, 130	0
14	T	29/32 (90%)	-0.31	1 (3%) 48 58	31, 35, 61, 79	0
14	t	29/32 (90%)	-0.12	2 (6%) 23 30	31, 37, 75, 87	0
15	U	97/134 (72%)	0.01	1 (1%) 79 86	36, 47, 74, 91	0
15	u	97/134 (72%)	-0.05	2 (2%) 63 72	34, 45, 57, 83	0
16	V	137/163 (84%)	-0.15	0 100 100	33, 44, 57, 70	0
16	v	137/163 (84%)	0.15	0 100 100	39, 54, 73, 83	0
17	Y	27/46 (58%)	1.49	6 (22%) 2 2	60, 79, 103, 106	0
17	y	30/46 (65%)	0.85	0 100 100	70, 81, 92, 103	0
18	X	38/41 (92%)	0.33	2 (5%) 32 41	47, 59, 81, 88	0
18	x	39/41 (95%)	0.38	1 (2%) 57 67	58, 69, 88, 102	0
19	Z	62/62 (100%)	0.85	3 (4%) 35 45	62, 76, 122, 126	0
19	z	62/62 (100%)	1.09	6 (9%) 13 19	68, 84, 115, 132	0
20	R	28/41 (68%)	1.07	3 (10%) 11 15	69, 79, 90, 98	0
20	r	28/41 (68%)	1.89	10 (35%) 1 1	83, 105, 124, 139	0
All	All	5293/5700 (92%)	-0.04	82 (1%) 72 80	19, 43, 80, 139	12 (0%)

All (82) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	c	24	THR	4.9
20	r	28	VAL	4.7
19	z	33	TRP	4.7
20	r	29	LYS	4.4
1	A	265	PHE	4.4
14	t	30	THR	4.1
13	o	58	ASN	4.1
17	Y	22	LEU	4.1
7	h	64	ALA	4.0
17	Y	20	ALA	3.9
2	b	499	VAL	3.9
19	Z	62	VAL	3.9
2	b	495	PHE	3.6
1	a	248	ILE	3.6
13	O	56	PRO	3.4

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Mol	Chain	Res	Type	RSRZ
19	Z	33	TRP	3.4
3	c	23	ALA	3.4
1	a	11	ALA	3.2
19	z	40	ILE	3.2
15	u	53	ALA	3.1
5	E	79	PHE	3.1
3	c	134	ILE	3.1
2	B	479[A]	PHE	3.1
2	b	84	THR	3.0
7	h	21	VAL	3.0
1	a	264	SER	2.9
13	o	63	ALA	2.9
20	r	27	ALA	2.9
20	r	10	LEU	2.9
19	Z	30	PRO	2.9
20	r	3	TRP	2.9
18	X	2	THR	2.8
20	R	28	VAL	2.8
2	b	494	GLY	2.8
17	Y	25	ILE	2.8
14	t	29	ILE	2.8
2	b	496	TYR	2.7
18	x	37	VAL	2.7
2	B	292	LEU	2.7
2	B	488	PRO	2.7
2	b	488	PRO	2.7
5	E	84	LYS	2.7
20	R	7	VAL	2.7
14	T	30	THR	2.6
5	e	79	PHE	2.5
19	z	62	VAL	2.5
20	r	12	VAL	2.5
13	O	60	ARG	2.5
20	r	14	LEU	2.4
2	B	499	VAL	2.4
13	O	59	LYS	2.4
19	z	3	ILE	2.4
8	i	36	ASP	2.3
2	b	127	ARG	2.3
2	B	127	ARG	2.3
19	z	30	PRO	2.3
18	X	37	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
20	r	20	VAL	2.3
13	o	59	LYS	2.2
19	z	29	SER	2.2
20	R	27	ALA	2.2
3	c	147	PHE	2.2
2	B	490	GLN	2.2
2	B	86	ILE	2.2
7	h	6	TRP	2.2
12	M	33	GLN	2.2
4	D	238	THR	2.2
20	r	18	TRP	2.1
7	H	66	GLY	2.1
4	d	103	ARG	2.1
20	r	9	LEU	2.1
13	o	57	LYS	2.1
4	d	97	ALA	2.1
17	Y	23	THR	2.1
2	b	373	LYS	2.1
9	J	5	GLY	2.1
13	O	58	ASN	2.1
7	H	65	LEU	2.1
17	Y	46	LEU	2.1
15	U	21	TYR	2.0
17	Y	41	VAL	2.0
15	u	70	ARG	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
12	FME	M	1	10/11	0.93	0.10	39,47,63,67	0
14	FME	T	1	10/11	0.93	0.09	32,46,62,62	0
14	FME	t	1	10/11	0.94	0.08	31,43,64,64	0
8	FME	i	1	10/11	0.96	0.08	40,48,61,62	0
12	FME	m	1	10/11	0.97	0.06	36,44,61,64	0
8	FME	I	1	10/11	0.97	0.06	40,49,62,64	0

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
29	STE	C	517	5/20	0.58	0.28	52,60,72,72	0
29	STE	C	519	10/20	0.58	0.19	52,69,83,90	0
29	STE	A	618	17/20	0.63	0.16	54,69,86,87	0
29	STE	H	103	18/20	0.63	0.21	56,76,85,90	0
29	STE	C	526	14/20	0.64	0.20	61,81,104,110	0
29	STE	A	619	11/20	0.64	0.18	49,75,94,95	0
29	STE	j	102	16/20	0.66	0.20	65,83,104,106	0
29	STE	c	517	18/20	0.69	0.19	58,84,99,99	0
29	STE	i	101	12/20	0.70	0.12	66,85,100,107	0
29	STE	h	103	10/20	0.70	0.20	65,83,91,91	0
29	STE	B	627	15/20	0.71	0.22	43,63,78,82	0
29	STE	I	101	17/20	0.71	0.16	58,73,86,88	0
29	STE	E	104	20/20	0.71	0.14	50,70,84,84	0
29	STE	D	411	9/20	0.72	0.17	53,68,76,78	0
29	STE	C	515	14/20	0.72	0.18	51,70,78,81	0
29	STE	K	103	14/20	0.73	0.14	55,70,85,90	0
28	PL9	A	611	55/55	0.73	0.19	47,69,90,93	0
29	STE	e	101	9/20	0.73	0.22	63,82,95,97	0
30	LMG	D	406	50/55	0.73	0.15	46,69,110,117	0
33	LHG	a	614	42/49	0.73	0.17	54,89,110,121	0
28	PL9	a	611	55/55	0.74	0.19	49,73,91,93	0
29	STE	b	624	16/20	0.75	0.19	57,70,92,93	0
29	STE	a	618	12/20	0.76	0.12	52,70,78,80	0
30	LMG	c	518	30/55	0.76	0.17	46,81,105,108	0
30	LMG	c	523	48/55	0.76	0.15	49,76,93,106	0
33	LHG	E	101	49/49	0.76	0.15	51,83,108,119	0
30	LMG	C	516	36/55	0.76	0.15	47,64,79,82	0
30	LMG	b	623	55/55	0.77	0.17	54,74,94,104	0
29	STE	f	102	8/20	0.77	0.21	60,74,82,84	0
29	STE	t	103	10/20	0.77	0.16	45,60,72,74	0
29	STE	E	103	12/20	0.77	0.17	67,84,109,110	0
29	STE	Z	101	17/20	0.77	0.20	53,78,97,99	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
30	LMG	a	616	55/55	0.78	0.14	41,60,81,89	0
29	STE	E	102	12/20	0.78	0.18	62,81,97,98	0
29	STE	d	410	20/20	0.78	0.14	56,73,90,95	0
29	STE	d	412	14/20	0.79	0.14	62,75,87,89	0
29	STE	B	626	12/20	0.79	0.15	51,65,78,78	0
29	STE	C	518	7/20	0.79	0.18	53,71,77,77	0
29	STE	c	516	13/20	0.80	0.17	65,78,84,85	0
29	STE	e	103	9/20	0.80	0.18	62,79,88,88	0
29	STE	T	102	16/20	0.80	0.17	40,53,94,96	0
32	DGD	A	617	66/66	0.81	0.13	49,64,92,97	0
29	STE	d	406	20/20	0.81	0.14	49,61,77,77	0
29	STE	z	101	9/20	0.81	0.22	53,78,83,84	0
30	LMG	B	620	45/55	0.82	0.14	38,60,99,115	0
29	STE	j	101	12/20	0.82	0.13	53,64,72,73	0
29	STE	J	101	12/20	0.82	0.13	52,63,68,70	0
29	STE	A	612	9/20	0.82	0.15	56,70,82,83	0
29	STE	i	102	6/20	0.82	0.16	51,66,80,80	0
29	STE	b	625	10/20	0.83	0.14	49,62,72,74	0
29	STE	e	104	13/20	0.83	0.16	72,92,102,105	0
31	SQD	a	615	54/54	0.84	0.13	41,62,100,110	0
29	STE	C	524	12/20	0.84	0.14	41,51,60,61	0
31	SQD	f	101	41/54	0.85	0.14	63,87,99,106	0
29	STE	h	104	11/20	0.86	0.16	61,76,79,81	0
31	SQD	A	616	43/54	0.86	0.11	42,59,92,104	0
30	LMG	C	523	48/55	0.86	0.13	48,74,91,94	0
25	CLA	b	601	65/65	0.86	0.12	50,71,93,106	0
29	STE	x	101	20/20	0.86	0.12	45,61,79,80	0
29	STE	b	626	8/20	0.86	0.13	45,64,69,70	0
29	STE	I	102	15/20	0.86	0.13	45,56,74,75	0
29	STE	M	101	15/20	0.87	0.12	38,49,61,62	0
29	STE	B	625	18/20	0.87	0.11	41,55,71,78	0
31	SQD	B	624	54/54	0.87	0.10	40,57,78,85	0
30	LMG	c	522	46/55	0.87	0.13	48,74,89,90	0
29	STE	X	101	20/20	0.88	0.11	39,53,68,76	0
25	CLA	B	601	65/65	0.88	0.11	40,64,90,94	0
29	STE	M	102	10/20	0.88	0.14	47,57,60,64	0
29	STE	M	103	15/20	0.88	0.13	41,57,86,88	0
29	STE	C	525	16/20	0.88	0.11	43,56,60,64	0
30	LMG	b	621	51/55	0.89	0.10	37,51,66,77	0
30	LMG	B	621	51/55	0.89	0.10	33,52,69,73	0
29	STE	B	622	17/20	0.89	0.10	38,51,65,66	0
29	STE	b	622	20/20	0.89	0.10	39,55,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
30	LMG	A	614	48/55	0.89	0.11	38,59,72,80	0
27	BCR	K	101	40/40	0.89	0.12	52,64,73,77	0
24	BCT	A	605	4/4	0.90	0.13	31,35,38,46	0
31	SQD	D	408	36/54	0.90	0.12	51,76,91,95	0
31	SQD	a	613	54/54	0.90	0.11	39,69,92,97	0
27	BCR	d	404	40/40	0.90	0.11	40,55,85,89	0
31	SQD	b	620	49/54	0.90	0.09	41,60,79,87	0
27	BCR	h	101	40/40	0.90	0.10	42,59,75,76	0
29	STE	m	101	12/20	0.90	0.10	47,57,62,67	0
29	STE	t	102	14/20	0.90	0.10	42,52,57,63	0
30	LMG	a	617	49/55	0.90	0.10	40,59,77,85	0
27	BCR	k	101	40/40	0.91	0.10	52,66,77,78	0
27	BCR	H	101	40/40	0.91	0.09	36,49,64,65	0
25	CLA	C	513	65/65	0.91	0.10	49,68,97,101	0
29	STE	l	102	18/20	0.91	0.12	36,49,76,77	0
27	BCR	Y	101	40/40	0.91	0.10	46,58,70,74	0
27	BCR	c	514	40/40	0.91	0.12	57,70,78,79	0
32	DGD	H	102	62/66	0.91	0.09	33,47,61,62	0
32	DGD	h	102	62/66	0.91	0.10	38,52,63,66	0
25	CLA	c	512	65/65	0.91	0.10	49,64,93,99	0
25	CLA	c	513	65/65	0.91	0.11	51,73,100,105	0
27	BCR	C	514	40/40	0.92	0.10	30,42,55,57	0
32	DGD	C	521	62/66	0.92	0.10	36,53,99,109	0
27	BCR	c	515	40/40	0.92	0.10	36,47,60,61	0
33	LHG	d	409	39/49	0.92	0.10	36,51,74,80	0
27	BCR	K	102	40/40	0.93	0.10	45,57,70,73	0
27	BCR	B	617	40/40	0.93	0.08	33,41,50,53	0
27	BCR	b	619	40/40	0.93	0.09	35,48,62,68	0
27	BCR	B	618	40/40	0.93	0.07	28,38,49,50	0
25	CLA	c	503	65/65	0.93	0.08	38,48,57,62	0
27	BCR	D	404	40/40	0.93	0.11	37,47,91,96	0
30	LMG	d	411	44/55	0.93	0.10	42,60,87,96	0
32	DGD	c	520	62/66	0.93	0.09	41,56,90,95	0
31	SQD	A	615	52/54	0.93	0.09	33,62,85,96	0
24	BCT	a	605	4/4	0.93	0.11	37,39,47,57	0
30	LMG	D	407	51/55	0.93	0.11	35,60,82,85	0
33	LHG	d	407	49/49	0.93	0.10	37,51,70,73	0
25	CLA	C	512	65/65	0.93	0.09	44,59,92,99	0
26	PHO	d	401	64/64	0.94	0.07	32,42,50,58	0
27	BCR	A	610	40/40	0.94	0.07	31,39,49,51	0
27	BCR	b	618	40/40	0.94	0.07	28,40,52,55	0
25	CLA	b	616	60/65	0.94	0.09	34,47,94,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	DGD	C	522	62/66	0.94	0.09	33,49,79,93	0
25	CLA	C	511	65/65	0.94	0.09	41,54,68,70	0
27	BCR	B	619	40/40	0.94	0.08	31,45,58,64	0
25	CLA	c	506	65/65	0.94	0.10	37,50,90,94	0
33	LHG	B	623	49/49	0.94	0.09	32,44,62,70	0
25	CLA	c	509	65/65	0.94	0.09	39,51,67,70	0
25	CLA	C	510	65/65	0.94	0.07	38,48,67,71	0
27	BCR	k	102	40/40	0.94	0.10	49,60,75,82	0
25	CLA	b	606	65/65	0.94	0.08	32,42,71,74	0
25	CLA	c	504	60/65	0.95	0.08	36,49,81,84	0
25	CLA	c	505	65/65	0.95	0.08	34,44,68,78	0
25	CLA	C	506	65/65	0.95	0.10	33,47,84,89	0
25	CLA	c	507	65/65	0.95	0.08	36,47,58,61	0
25	CLA	c	508	64/65	0.95	0.09	37,51,98,106	0
27	BCR	t	101	40/40	0.95	0.06	30,40,56,57	0
25	CLA	C	508	65/65	0.95	0.08	34,46,106,111	0
28	PL9	D	405	55/55	0.95	0.06	26,34,44,46	0
25	CLA	c	510	65/65	0.95	0.07	38,52,66,75	0
28	PL9	d	405	55/55	0.95	0.06	29,37,45,45	0
25	CLA	c	511	65/65	0.95	0.09	46,59,77,79	0
25	CLA	C	509	65/65	0.95	0.08	33,48,63,68	0
25	CLA	B	603	65/65	0.95	0.07	26,34,63,65	0
25	CLA	d	403	65/65	0.95	0.10	35,52,91,98	0
26	PHO	A	608	64/64	0.95	0.06	27,36,45,50	0
26	PHO	a	608	64/64	0.95	0.07	27,34,38,43	0
25	CLA	B	604	65/65	0.95	0.08	25,33,67,71	0
25	CLA	B	606	65/65	0.95	0.08	28,37,70,76	0
25	CLA	B	609	65/65	0.95	0.08	29,41,62,65	0
25	CLA	a	607	65/65	0.95	0.09	31,44,98,100	0
25	CLA	C	501	65/65	0.95	0.07	30,39,51,56	0
25	CLA	b	602	65/65	0.95	0.09	33,46,64,66	0
25	CLA	C	502	65/65	0.95	0.07	33,44,59,59	0
25	CLA	b	609	65/65	0.95	0.08	36,49,69,75	0
25	CLA	b	610	65/65	0.95	0.08	31,41,50,51	0
25	CLA	b	612	65/65	0.95	0.07	28,36,47,49	0
27	BCR	T	101	40/40	0.95	0.07	31,40,53,54	0
32	DGD	c	521	62/66	0.95	0.08	36,57,81,89	0
25	CLA	b	614	65/65	0.95	0.08	29,40,76,79	0
27	BCR	a	610	40/40	0.95	0.07	27,37,47,48	0
33	LHG	D	410	47/49	0.95	0.09	33,53,82,86	0
27	BCR	b	617	40/40	0.95	0.06	33,42,50,51	0
25	CLA	C	503	65/65	0.95	0.07	37,45,53,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
25	CLA	c	502	65/65	0.95	0.08	36,47,67,71	0
33	LHG	d	408	49/49	0.95	0.08	32,43,53,59	0
25	CLA	C	504	59/65	0.95	0.09	35,46,89,94	0
25	CLA	D	403	65/65	0.96	0.09	31,45,121,130	0
25	CLA	a	606	65/65	0.96	0.06	25,33,45,54	0
25	CLA	B	616	60/65	0.96	0.08	28,41,92,100	0
25	CLA	a	609	65/65	0.96	0.09	26,38,77,85	0
25	CLA	a	612	65/65	0.96	0.06	25,32,45,49	0
25	CLA	A	607	65/65	0.96	0.10	26,38,102,112	0
25	CLA	B	605	65/65	0.96	0.07	25,35,44,46	0
25	CLA	b	603	65/65	0.96	0.07	30,40,71,77	0
25	CLA	B	602	65/65	0.96	0.07	30,39,61,64	0
26	PHO	D	401	64/64	0.96	0.06	24,31,36,39	0
25	CLA	b	607	65/65	0.96	0.08	26,37,68,71	0
25	CLA	b	608	65/65	0.96	0.07	34,45,66,67	0
25	CLA	B	607	65/65	0.96	0.07	25,35,59,63	0
32	DGD	C	520	62/66	0.96	0.08	27,42,77,83	0
25	CLA	C	505	65/65	0.96	0.08	29,40,69,74	0
25	CLA	b	611	65/65	0.96	0.07	28,37,52,53	0
25	CLA	A	613	65/65	0.96	0.06	24,32,49,55	0
32	DGD	c	519	62/66	0.96	0.08	28,43,80,84	0
25	CLA	b	613	65/65	0.96	0.08	27,35,75,79	0
25	CLA	C	507	65/65	0.96	0.07	31,42,61,68	0
25	CLA	b	615	65/65	0.96	0.07	31,43,62,67	0
25	CLA	B	610	65/65	0.96	0.06	27,34,41,44	0
25	CLA	c	501	65/65	0.96	0.07	34,44,54,56	0
25	CLA	B	611	65/65	0.96	0.06	25,32,48,52	0
33	LHG	L	101	49/49	0.96	0.07	31,42,55,66	0
25	CLA	B	612	65/65	0.96	0.06	24,33,46,49	0
25	CLA	B	613	65/65	0.96	0.07	24,32,65,71	0
25	CLA	B	614	65/65	0.96	0.08	28,39,80,88	0
25	CLA	B	615	65/65	0.96	0.07	27,38,58,61	0
33	LHG	l	101	49/49	0.96	0.07	34,47,59,72	0
34	HEM	F	101	43/43	0.96	0.09	46,53,66,68	0
25	CLA	D	402	65/65	0.97	0.06	23,32,56,58	0
25	CLA	B	608	65/65	0.97	0.06	28,38,56,61	0
25	CLA	A	606	65/65	0.97	0.06	24,30,46,52	0
25	CLA	b	604	65/65	0.97	0.07	28,38,69,79	0
33	LHG	D	409	49/49	0.97	0.06	29,41,50,53	0
25	CLA	d	402	65/65	0.97	0.06	27,34,66,67	0
25	CLA	b	605	65/65	0.97	0.06	28,37,48,50	0
34	HEM	e	102	43/43	0.97	0.09	56,66,83,84	0

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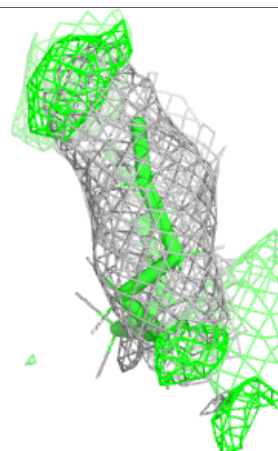
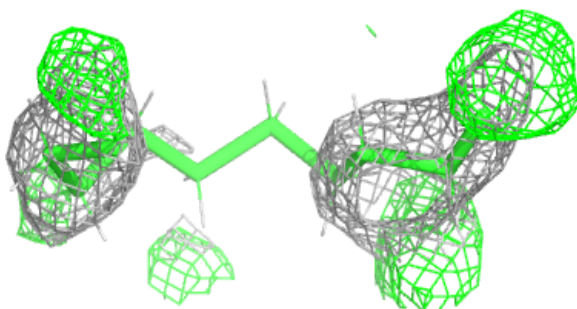
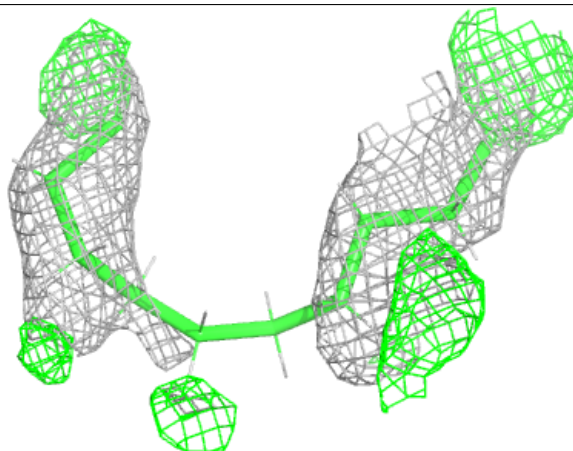
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
23	CL	a	603	1/1	0.98	0.04	28,28,28,28	0
25	CLA	A	609	54/65	0.98	0.06	24,33,63,64	0
35	HEC	V	201	43/43	0.98	0.05	29,34,40,41	0
35	HEC	v	201	43/43	0.98	0.06	33,38,48,49	0
21	OEX	A	601	10/10	0.99	0.04	27,29,30,30	0
23	CL	a	604	1/1	0.99	0.09	28,28,28,28	0
22	FE2	a	602	1/1	0.99	0.02	35,35,35,35	0
23	CL	A	603	1/1	0.99	0.03	28,28,28,28	0
23	CL	A	604	1/1	0.99	0.04	28,28,28,28	0
21	OEX	a	601	10/10	1.00	0.02	26,28,30,32	0
22	FE2	A	602	1/1	1.00	0.02	30,30,30,30	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.

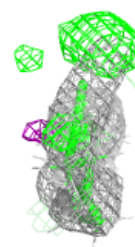
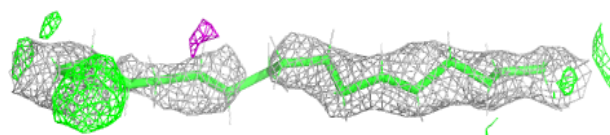
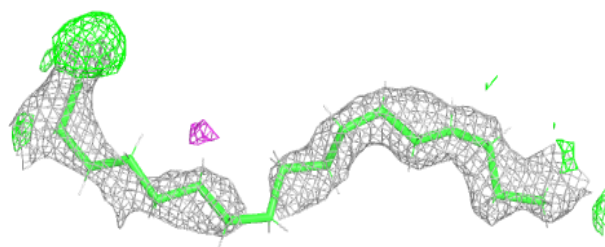
Electron density around STE C 519:

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

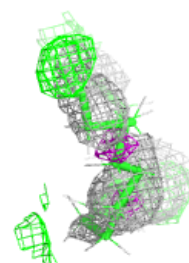
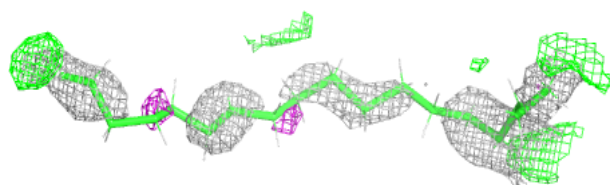
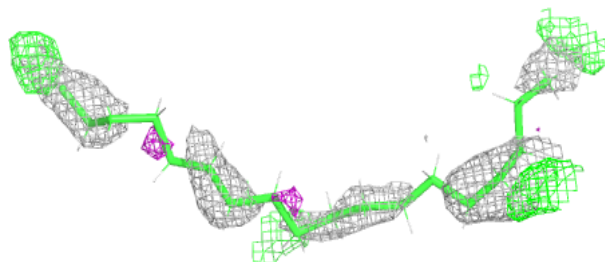


Electron density around STE A 618:

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

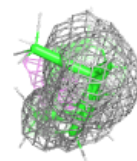
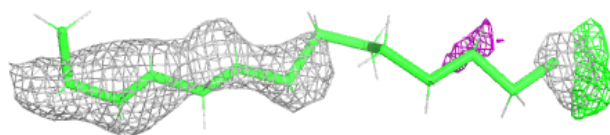
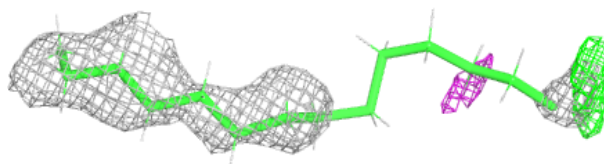
**Electron density around STE H 103:**

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

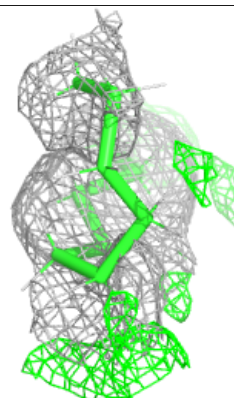
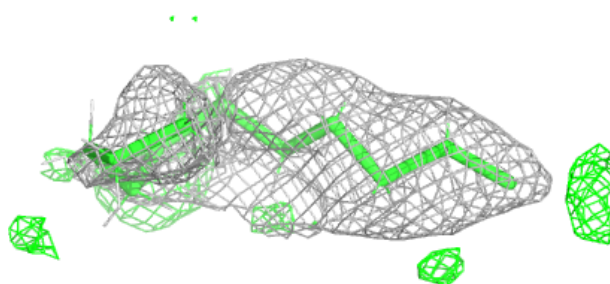
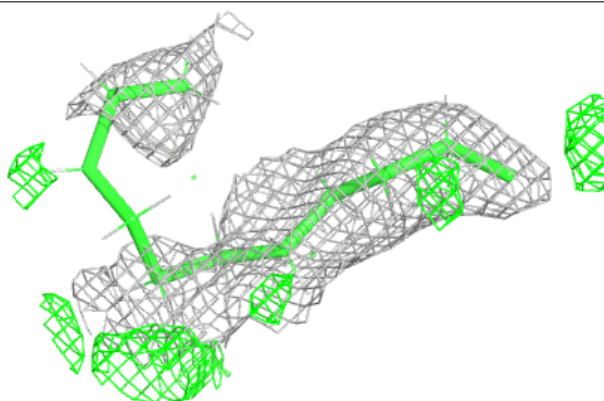


Electron density around STE C 526:

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

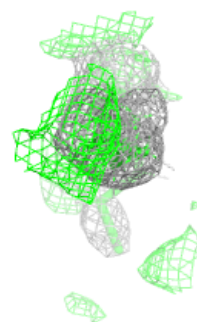
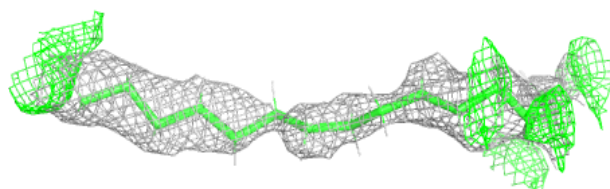
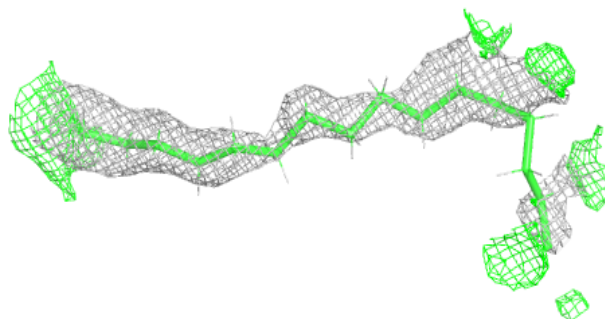
**Electron density around STE A 619:**

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

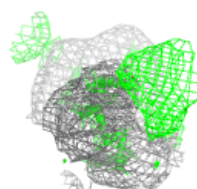
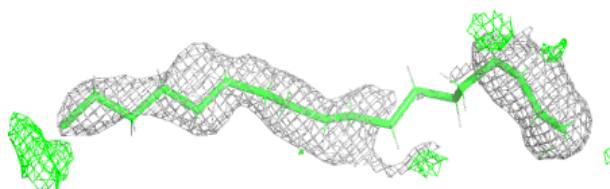
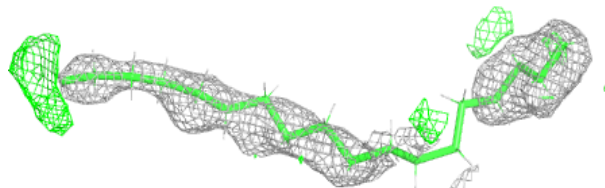


Electron density around STE j 102:

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

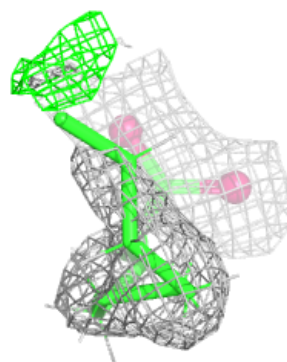
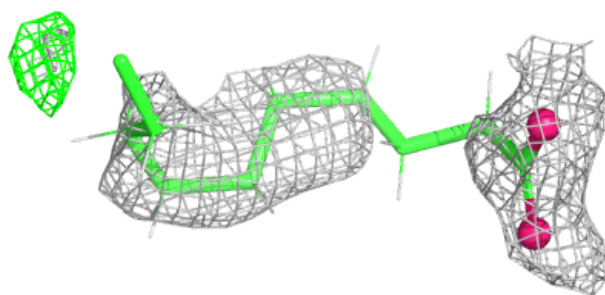
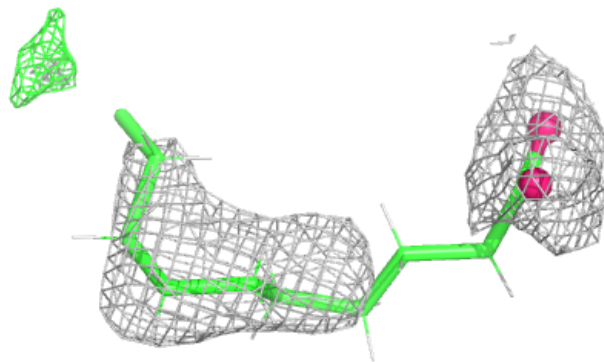
**Electron density around STE c 517:**

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

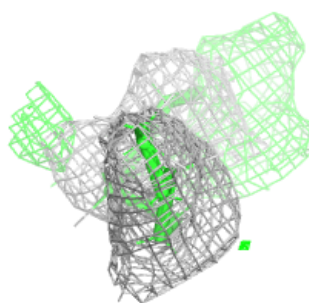
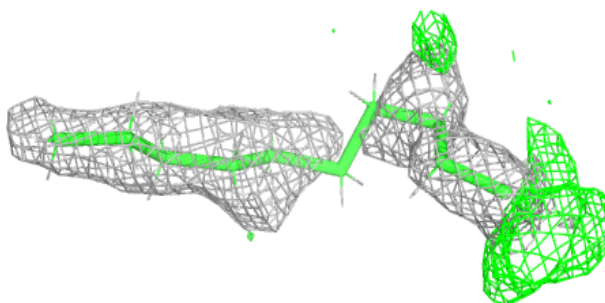
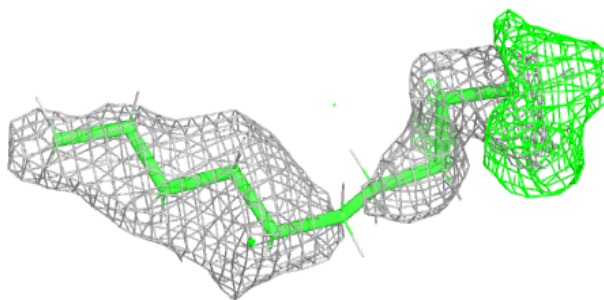


Electron density around STE i 101:

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and green (positive)

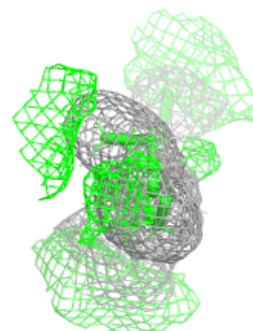
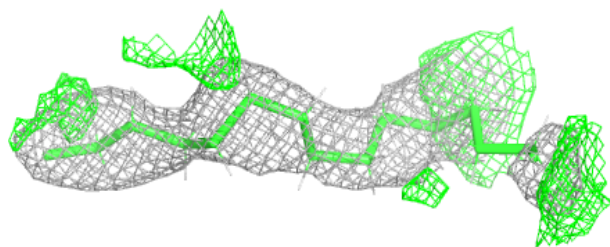
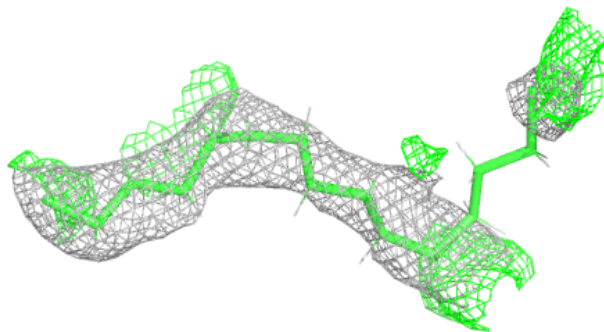
**Electron density around STE h 103:**

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and green (positive)

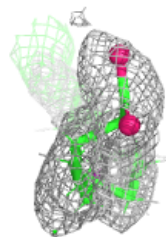
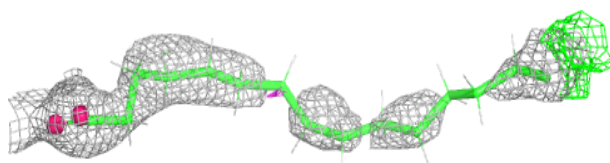
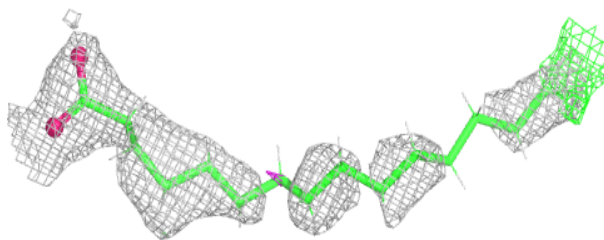


Electron density around STE B 627:

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and green (positive)

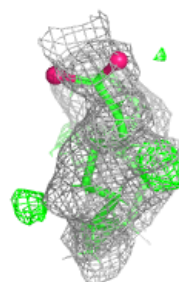
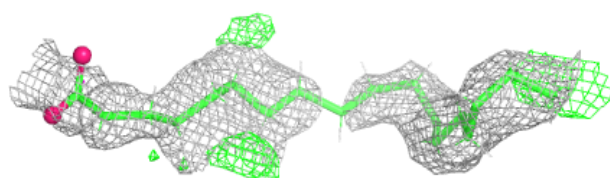
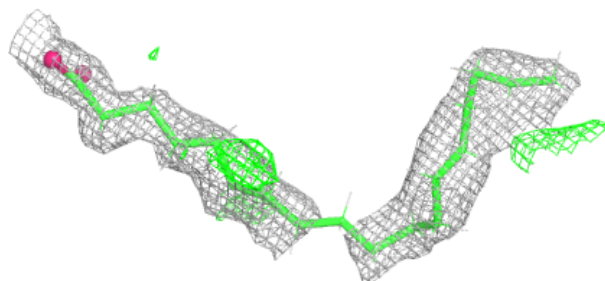
**Electron density around STE I 101:**

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

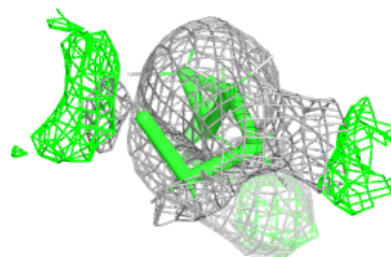
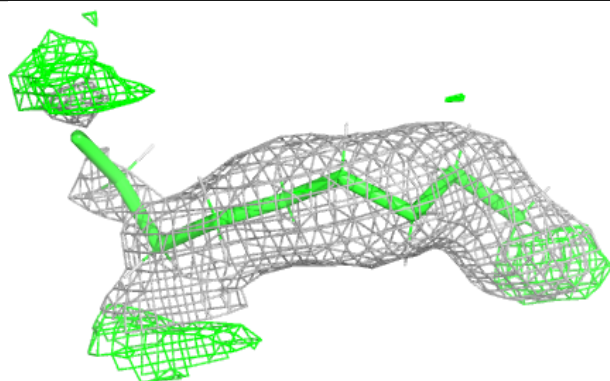
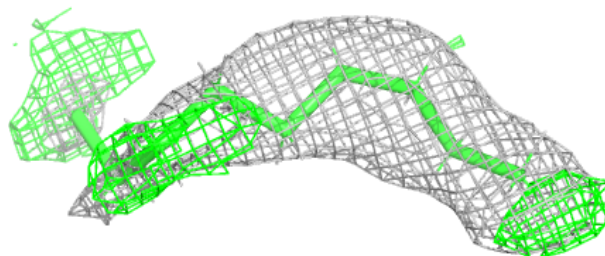


Electron density around STE E 104:

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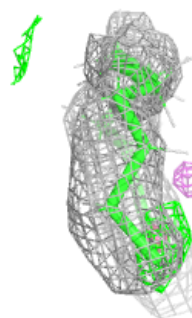
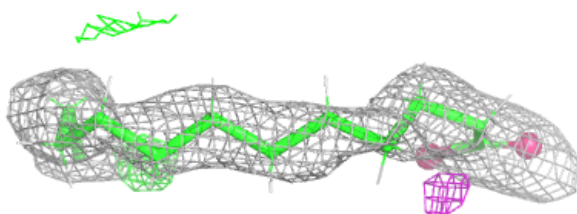
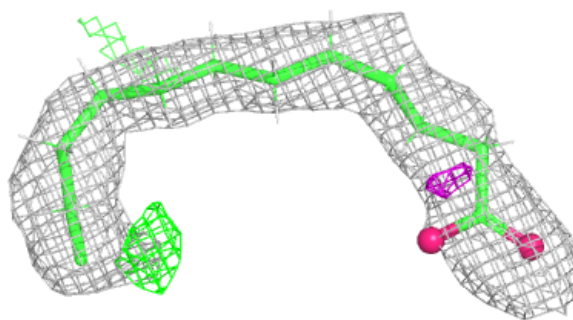
**Electron density around STE D 411:**

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

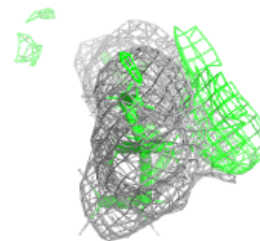
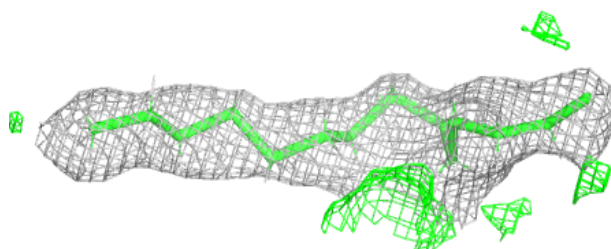
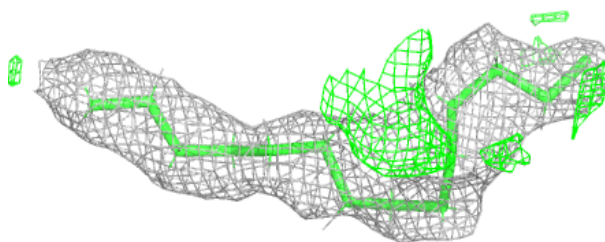


Electron density around STE C 515:

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

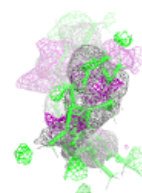
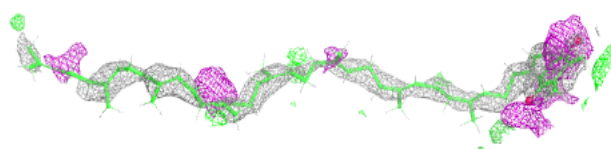
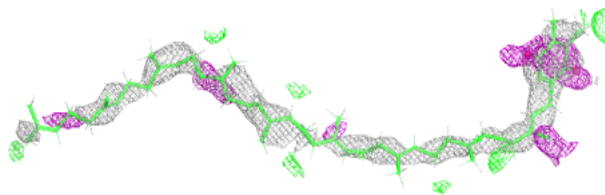
**Electron density around STE K 103:**

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

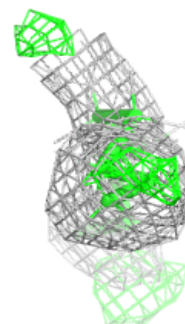
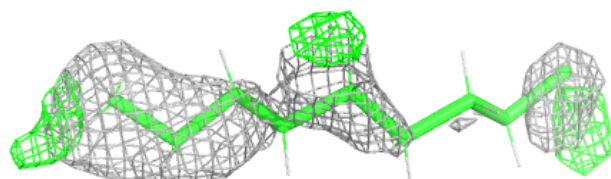
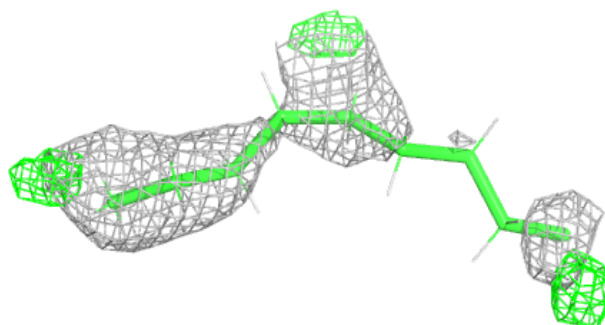


Electron density around PL9 A 611:

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

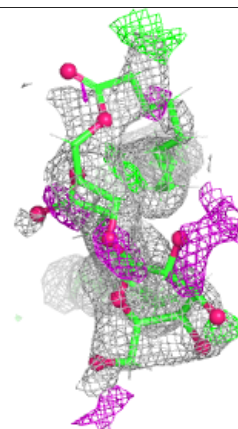
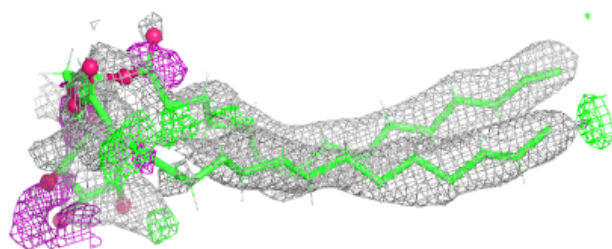
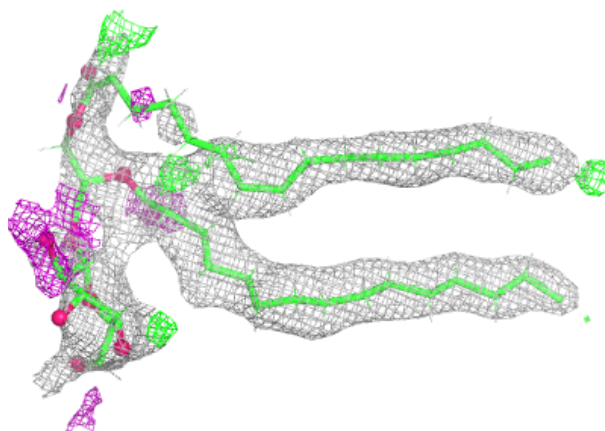
**Electron density around STE e 101:**

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

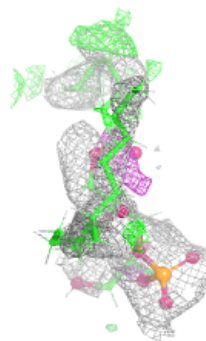
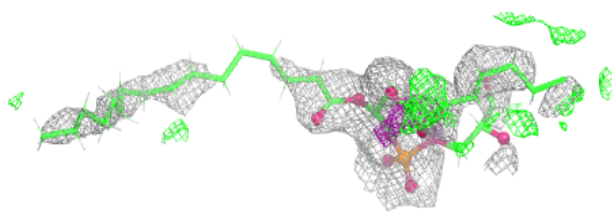
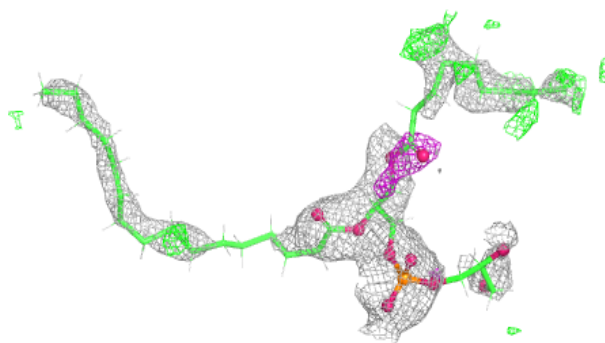


Electron density around LMG D 406:

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

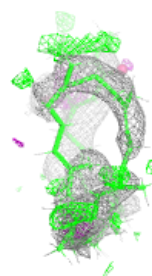
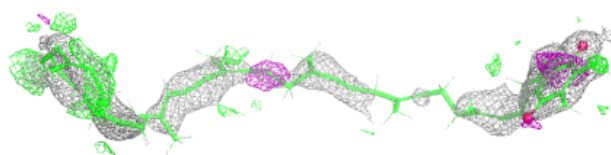
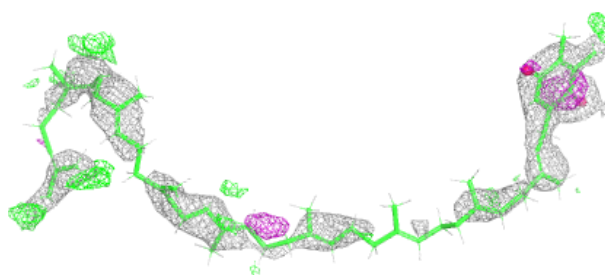
**Electron density around LHG a 614:**

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

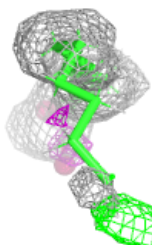
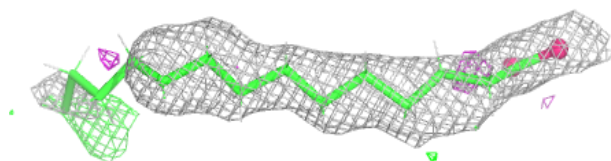
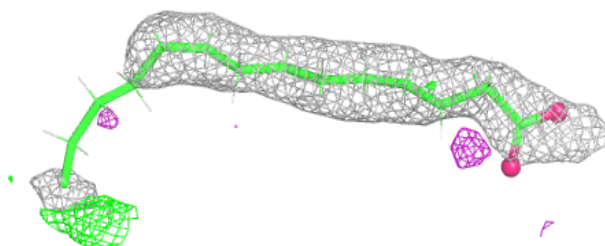


Electron density around PL9 a 611:

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

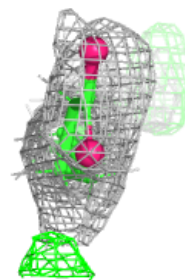
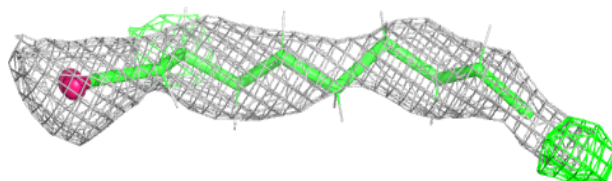
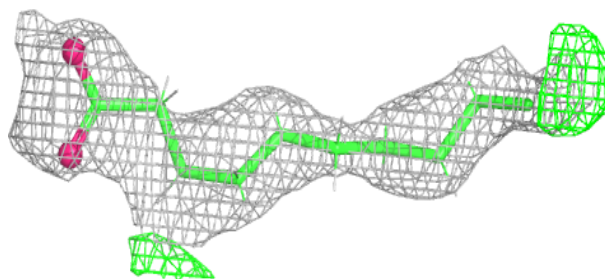
**Electron density around STE b 624:**

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

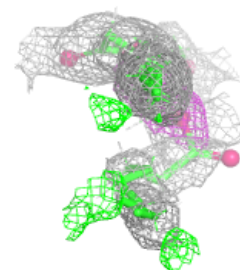
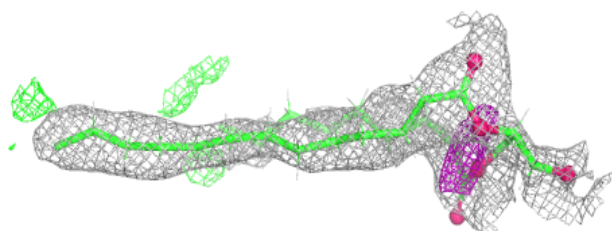
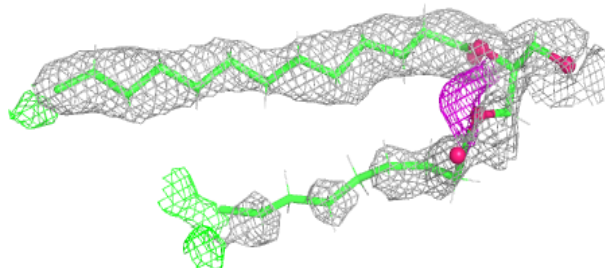


Electron density around STE a 618:

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

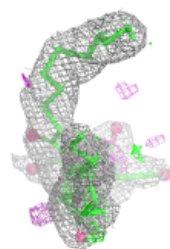
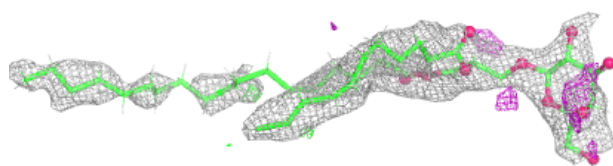
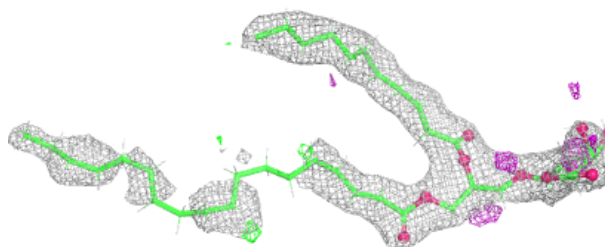
**Electron density around LMG c 518:**

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



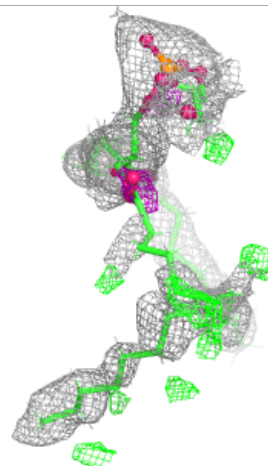
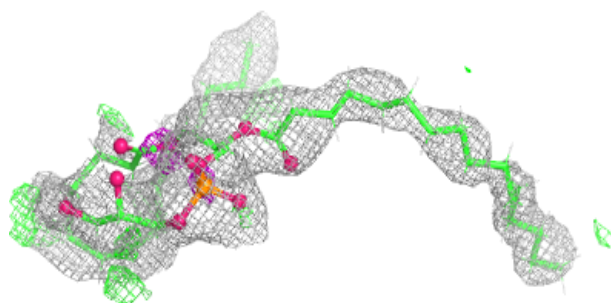
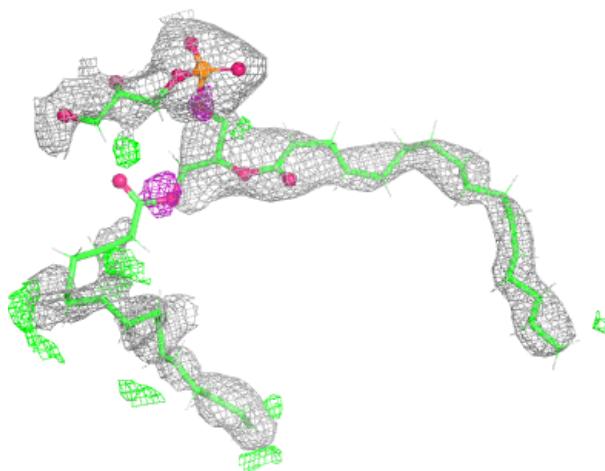
Electron density around LMG c 523:

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



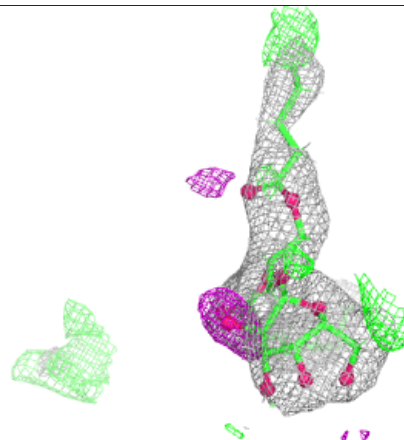
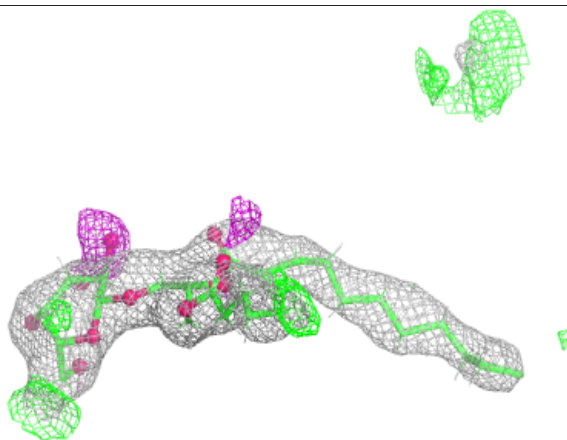
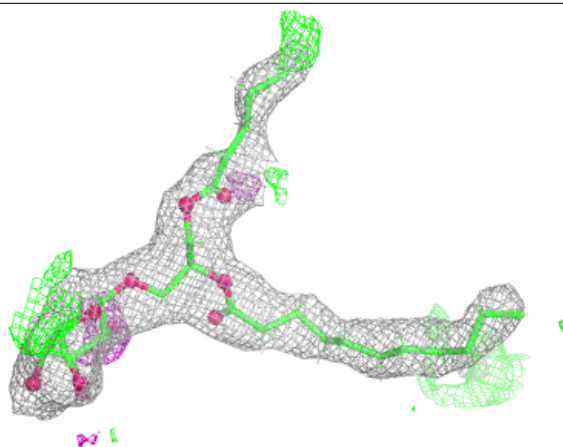
Electron density around LHG E 101:

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

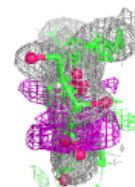
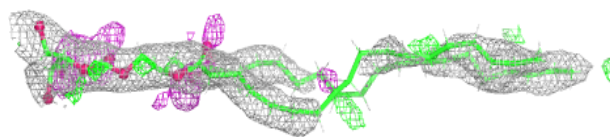
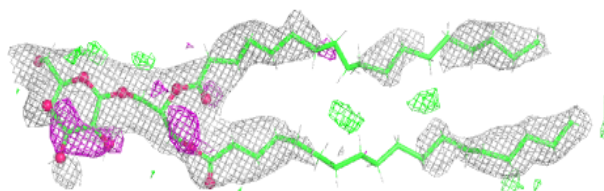


Electron density around LMG C 516:

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

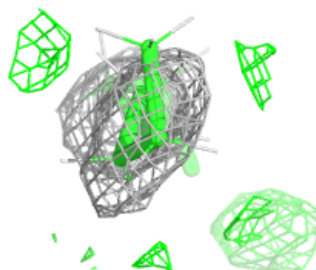
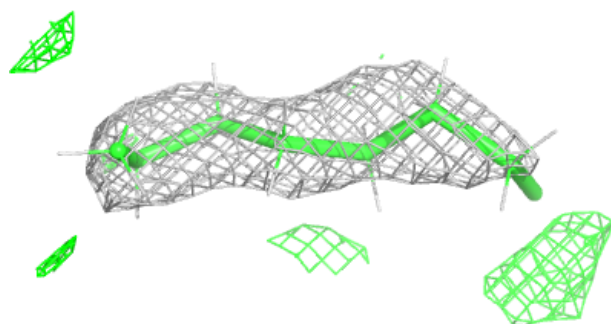
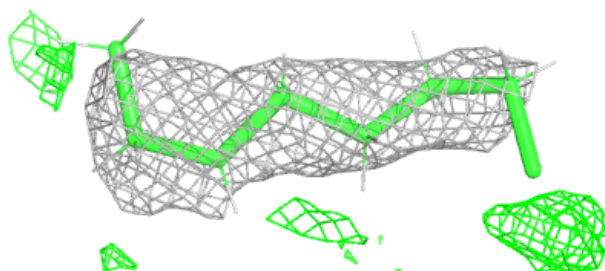
**Electron density around LMG b 623:**

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

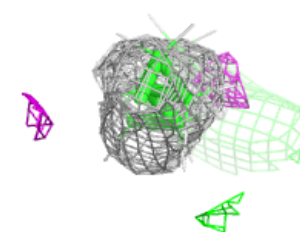
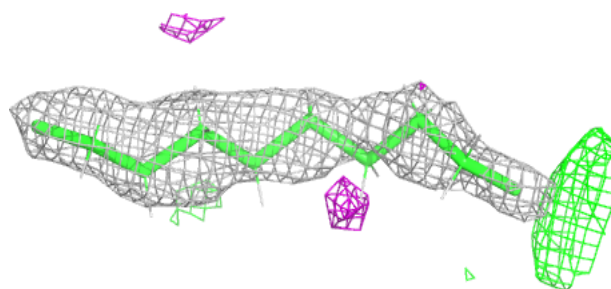
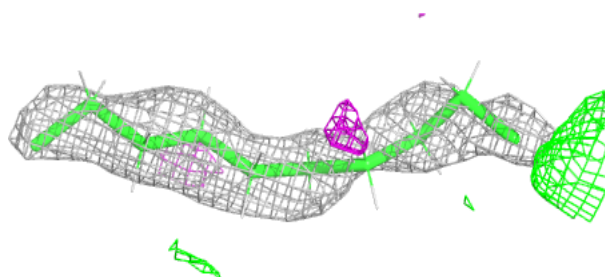


Electron density around STE f 102:

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

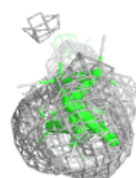
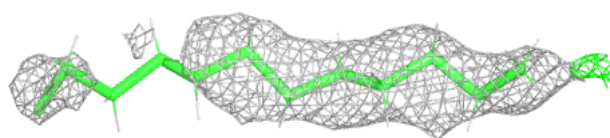
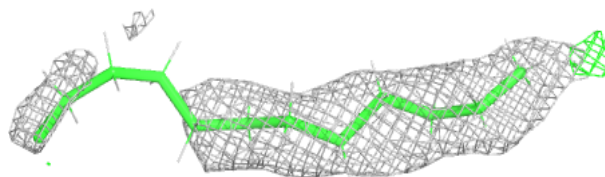
**Electron density around STE t 103:**

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

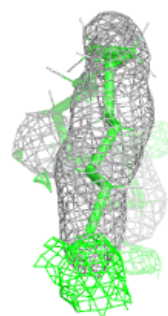
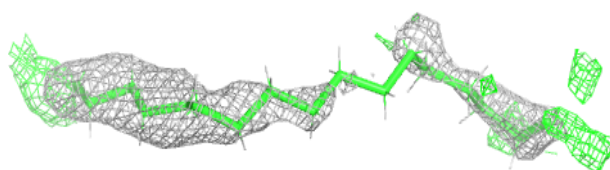
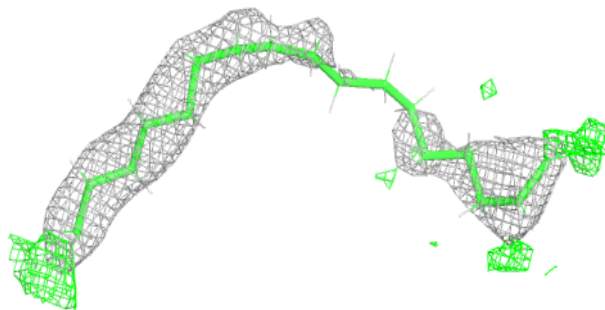


Electron density around STE E 103:

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

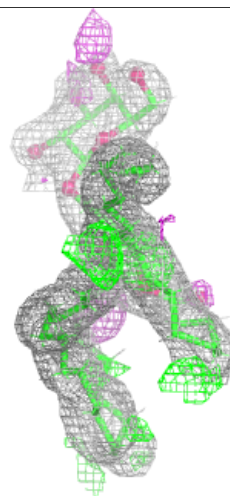
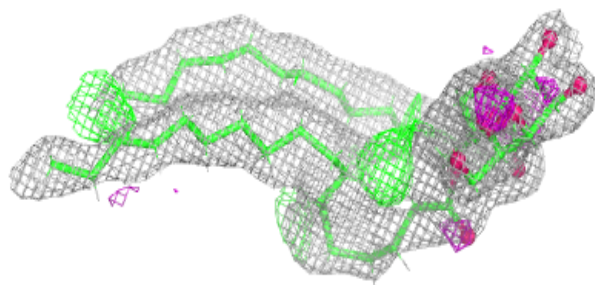
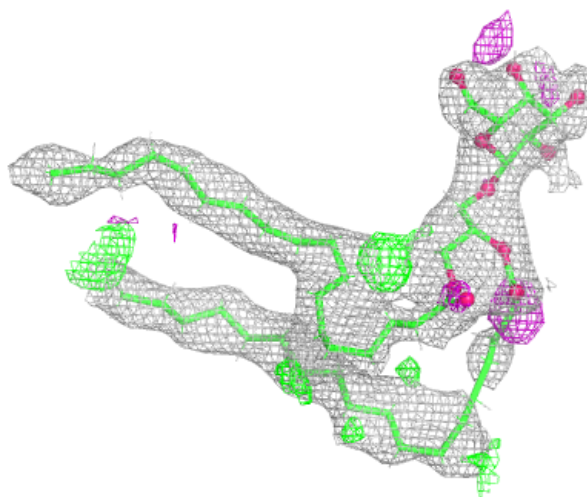
**Electron density around STE Z 101:**

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



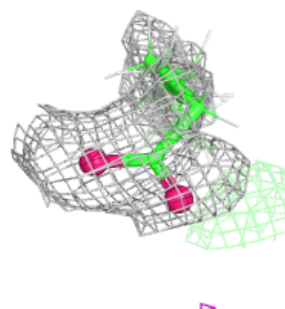
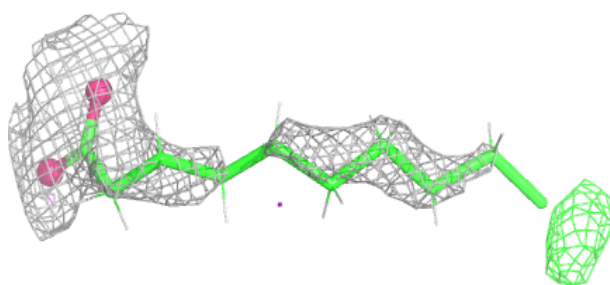
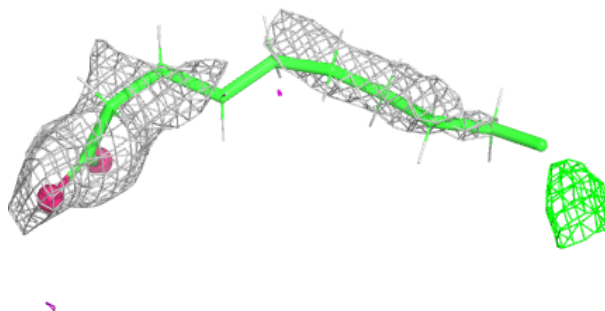
Electron density around LMG a 616:

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

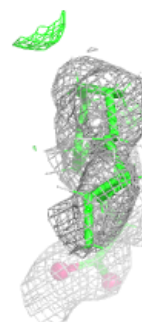
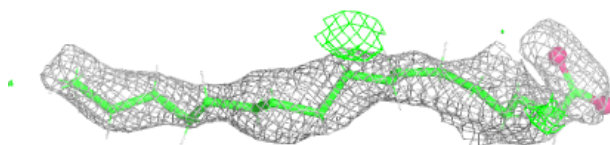
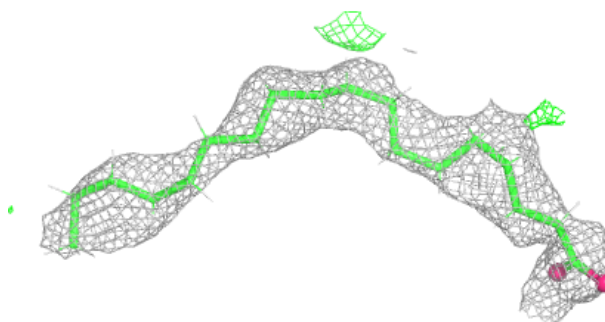


Electron density around STE E 102:

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

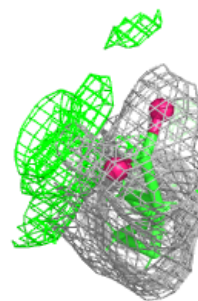
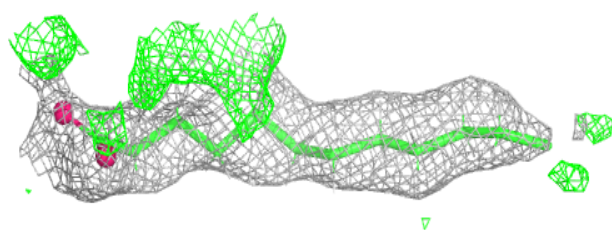
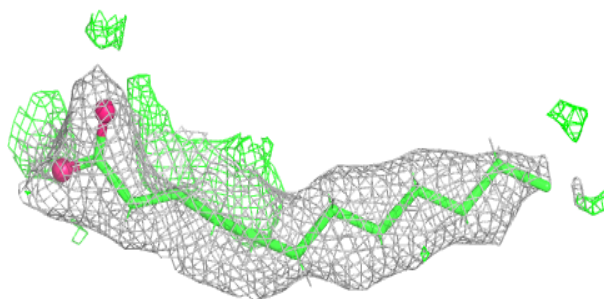
**Electron density around STE d 410:**

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

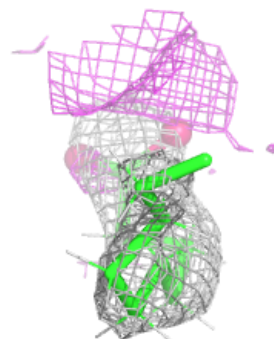
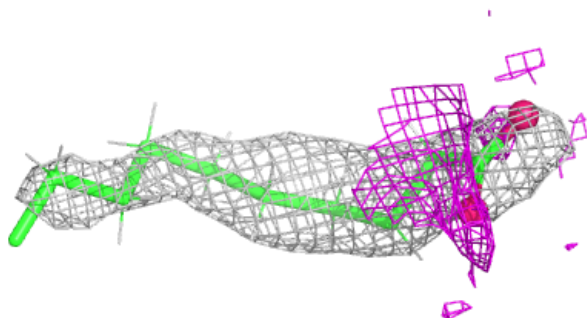
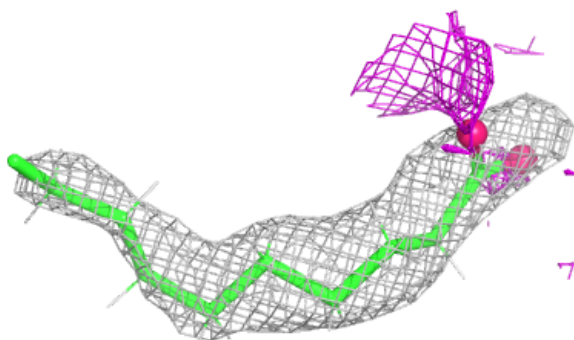


Electron density around STE d 412:

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

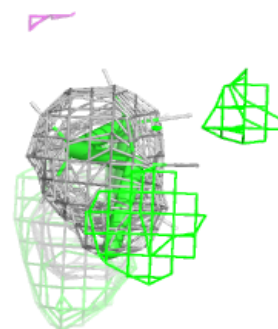
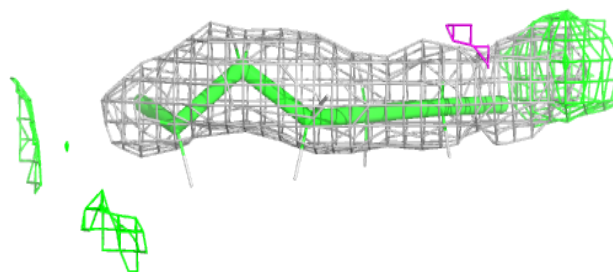
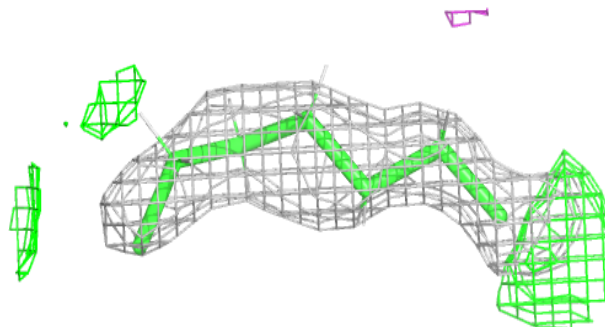
**Electron density around STE B 626:**

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

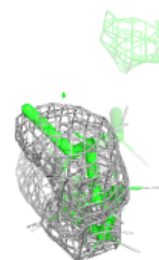
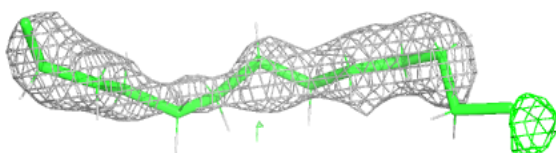
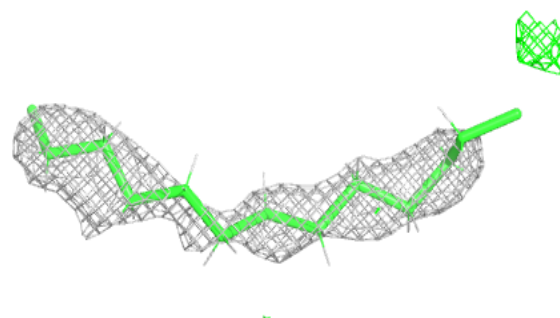


Electron density around STE C 518:

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

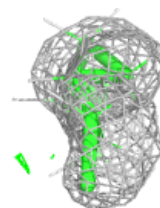
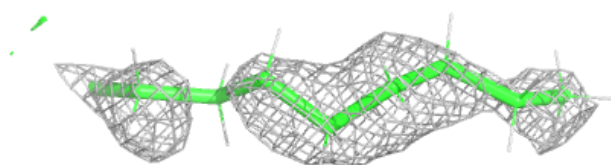
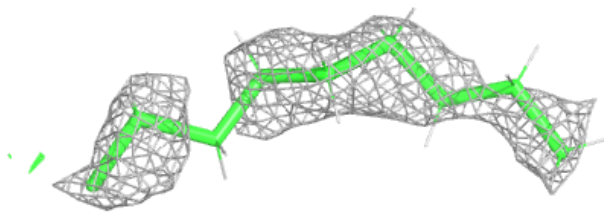
**Electron density around STE c 516:**

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

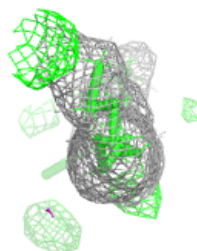
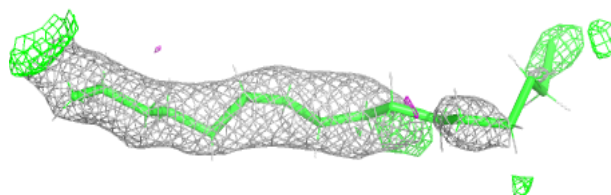
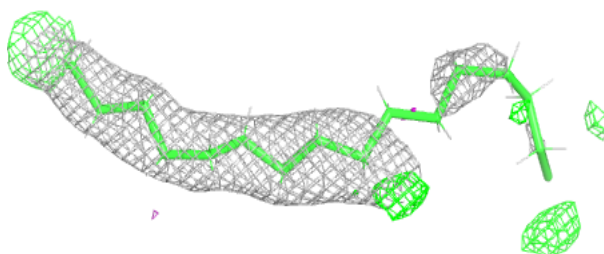


Electron density around STE e 103:

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

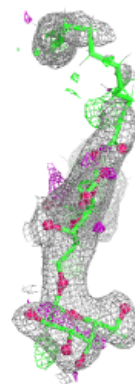
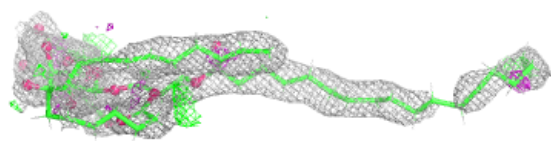
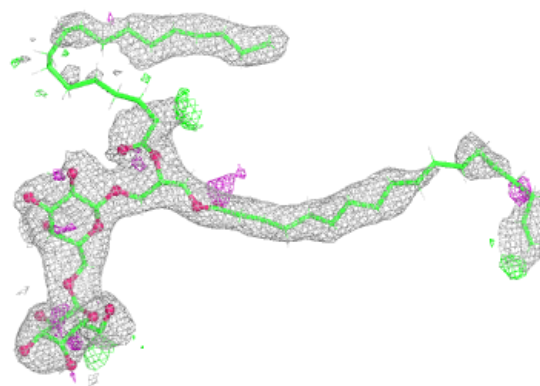
**Electron density around STE T 102:**

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

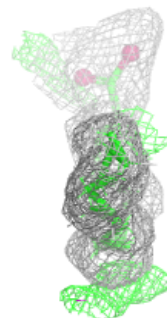
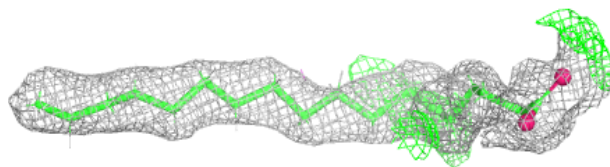
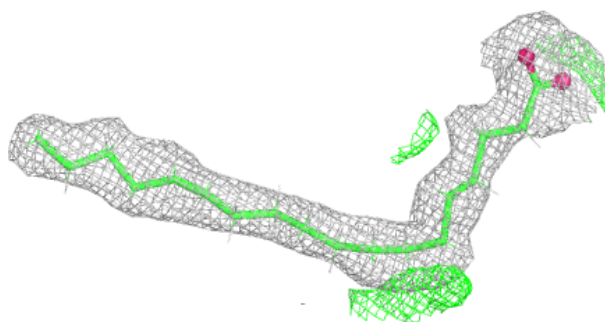


Electron density around DGD A 617:

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

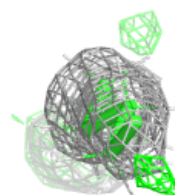
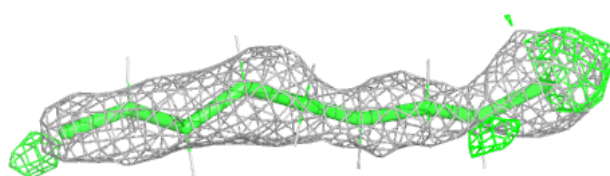
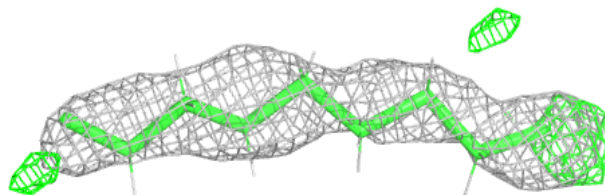
**Electron density around STE d 406:**

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

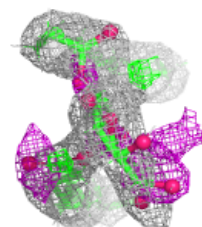
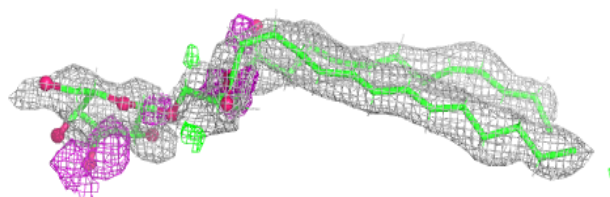
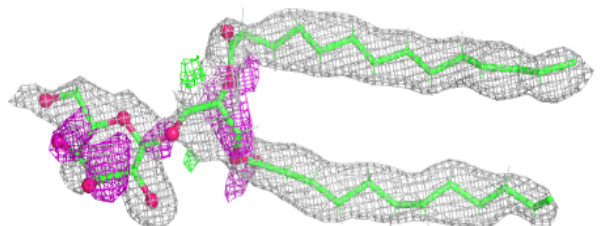


Electron density around STE z 101:

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

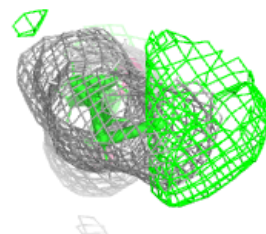
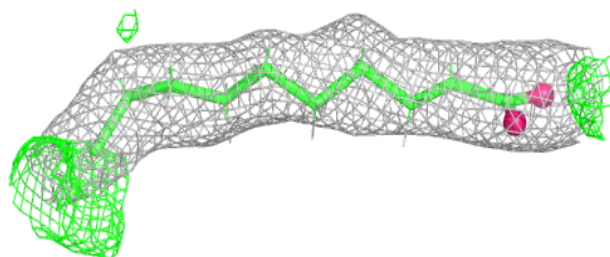
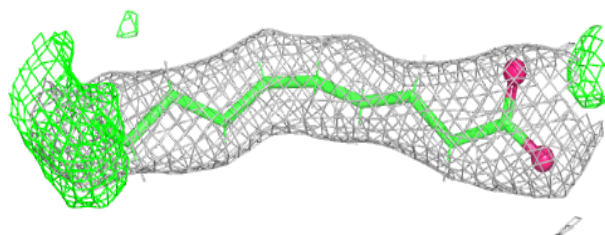
**Electron density around LMG B 620:**

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

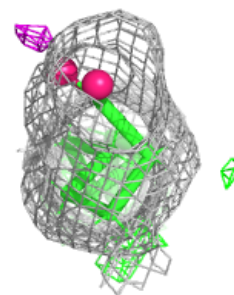
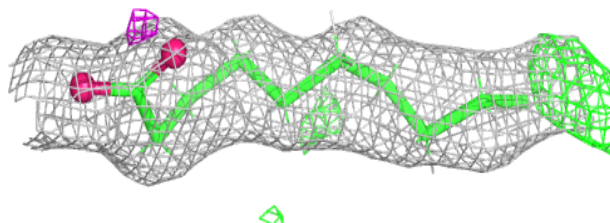
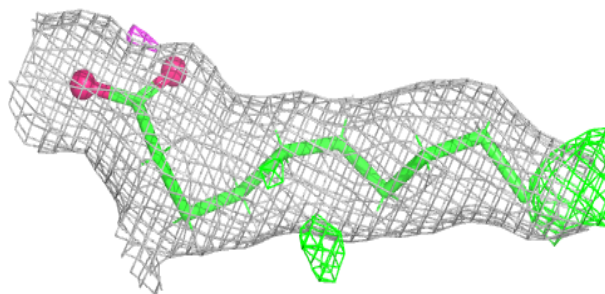


Electron density around STE j 101:

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

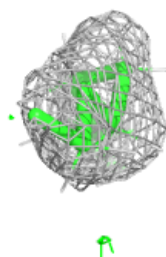
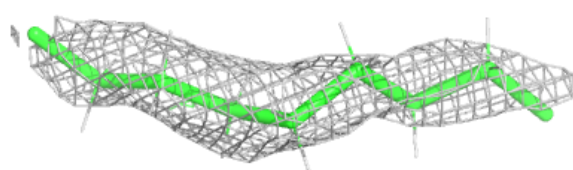
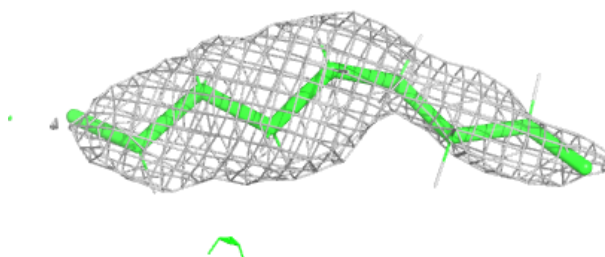
**Electron density around STE J 101:**

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

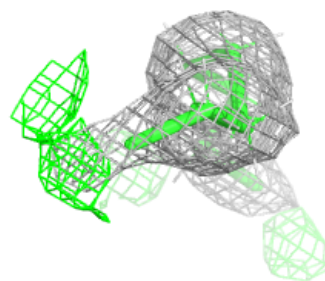
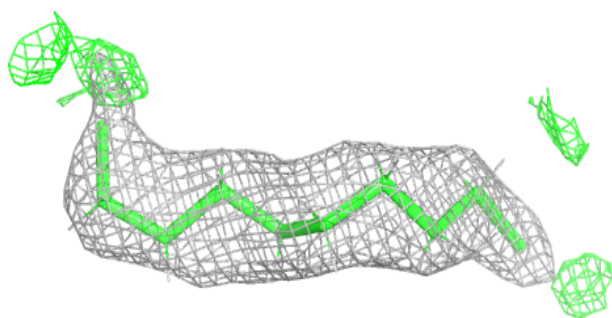
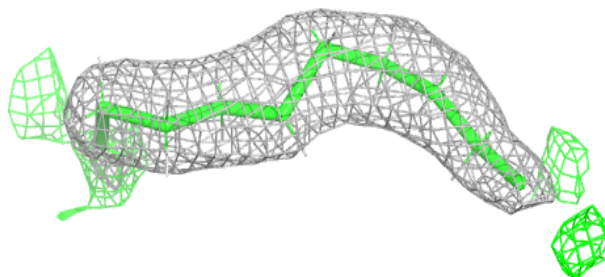


Electron density around STE A 612:

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

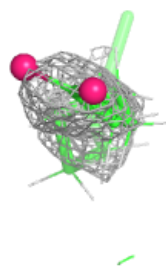
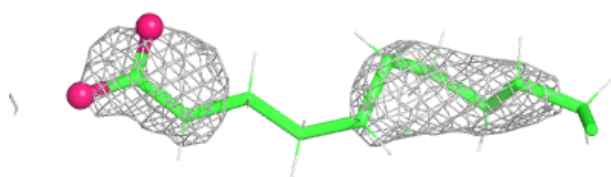
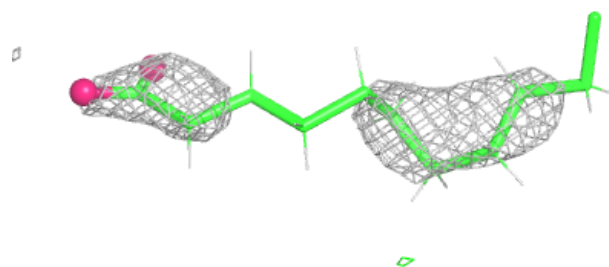
**Electron density around STE b 625:**

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

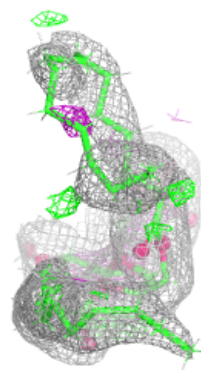
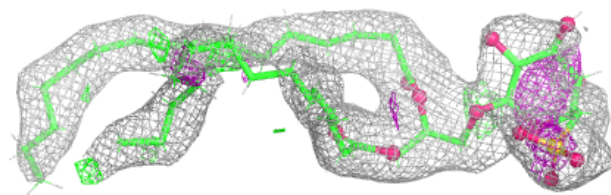
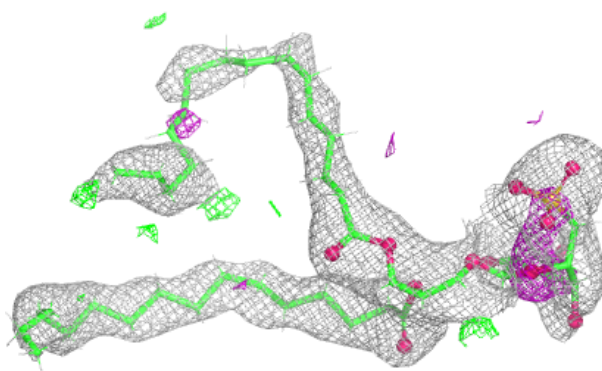


Electron density around STE e 104:

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

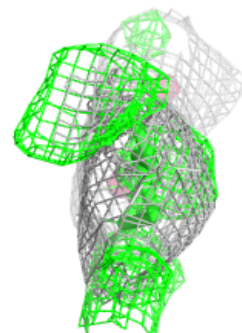
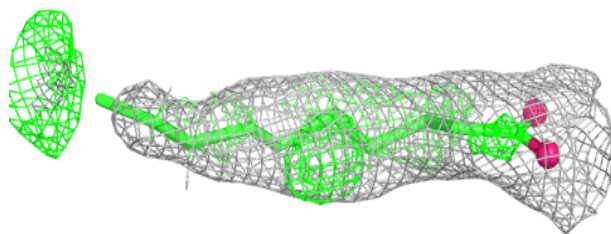
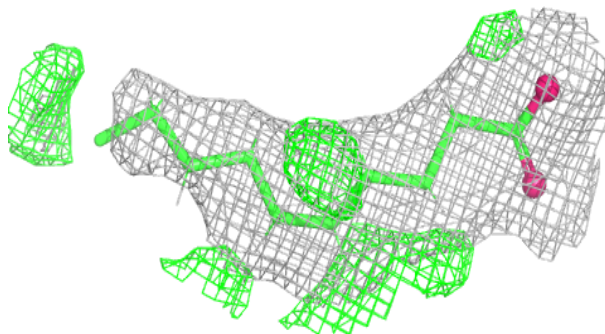
**Electron density around SQD a 615:**

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

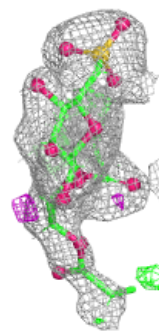
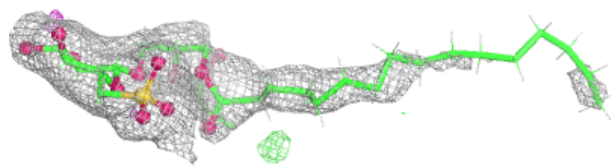
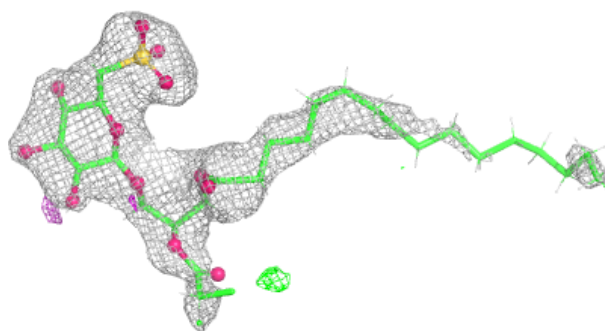


Electron density around STE C 524:

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

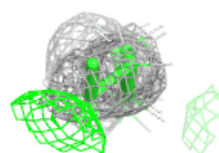
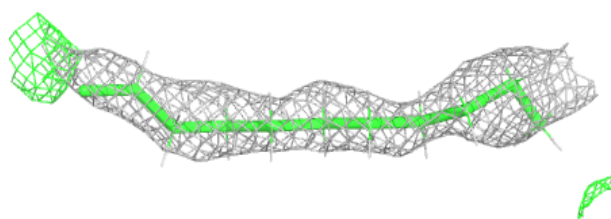
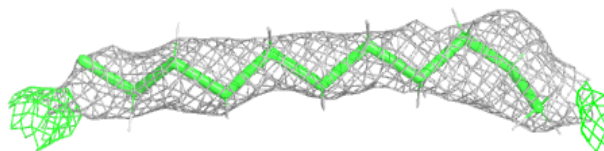
**Electron density around SQD f 101:**

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

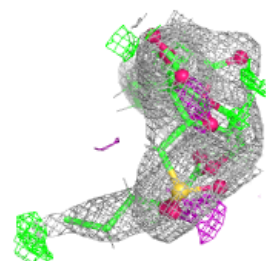
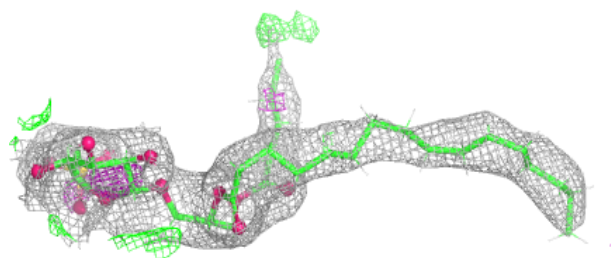
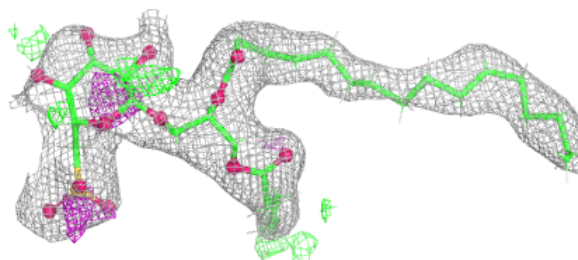


Electron density around STE h 104:

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

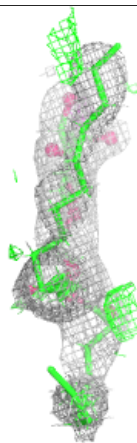
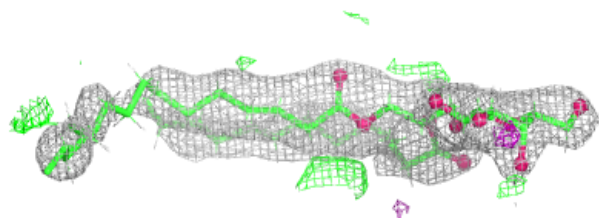
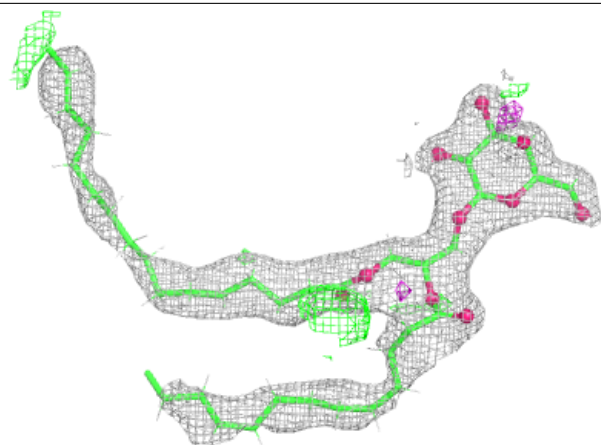
**Electron density around SQD A 616:**

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

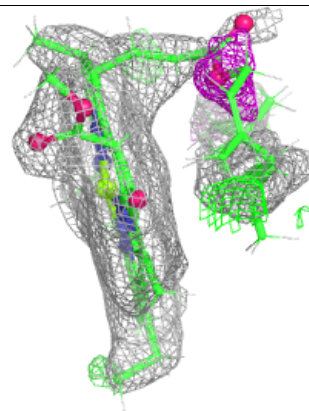
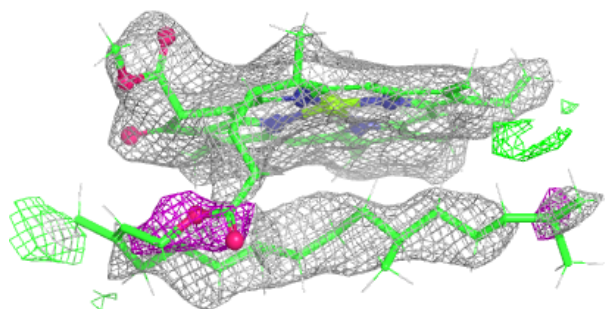
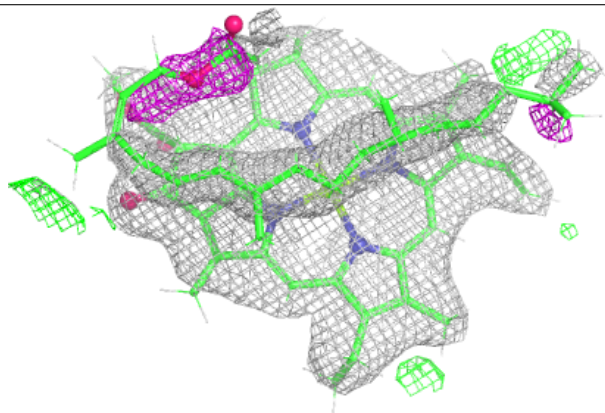


Electron density around LMG C 523:

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

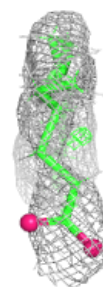
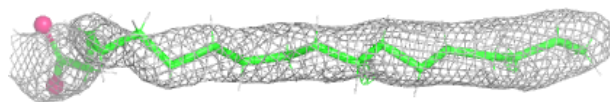
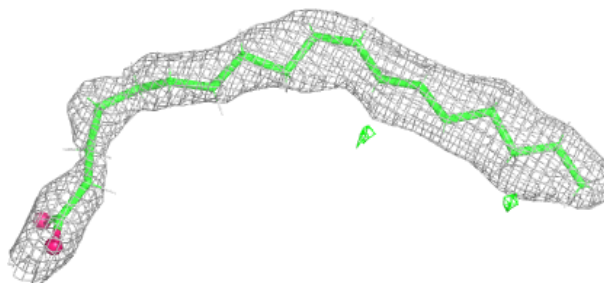
**Electron density around CLA b 601:**

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

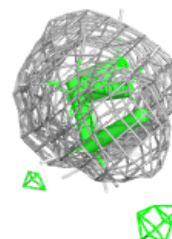
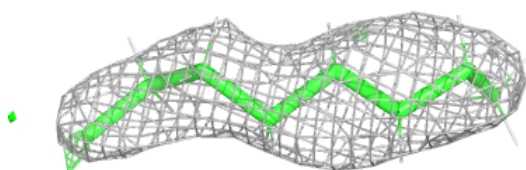
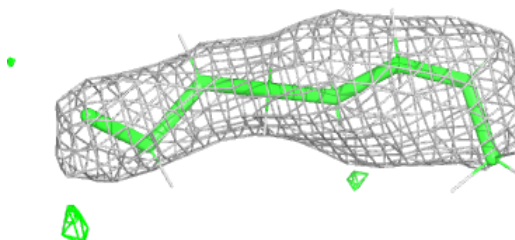


Electron density around STE x 101:

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

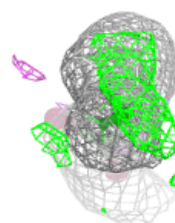
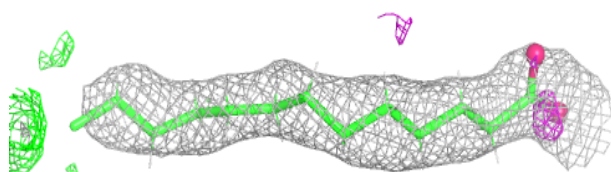
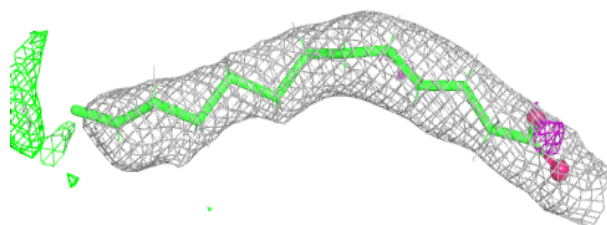
**Electron density around STE b 626:**

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

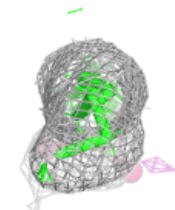
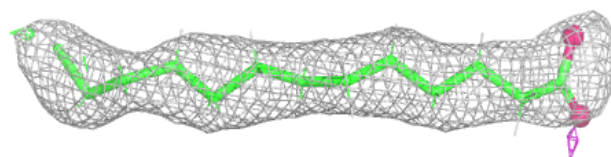
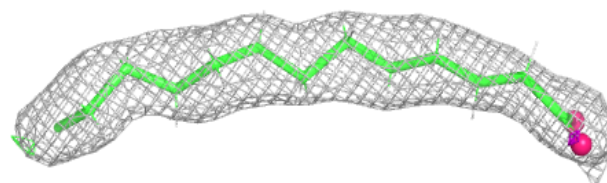


Electron density around STE I 102:

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

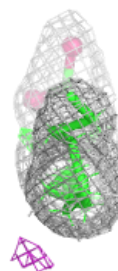
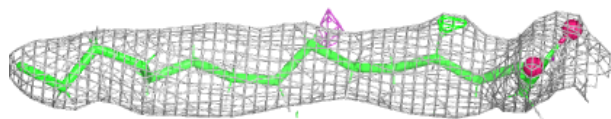
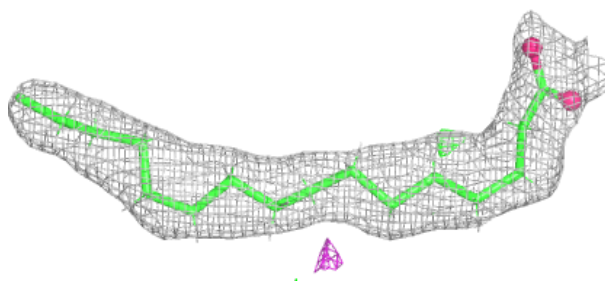
**Electron density around STE M 101:**

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

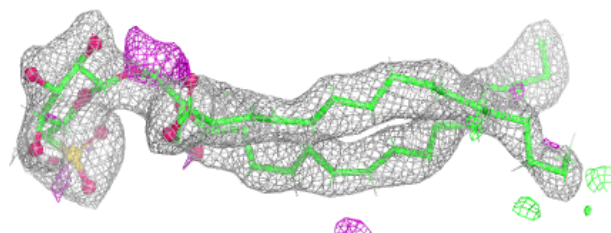
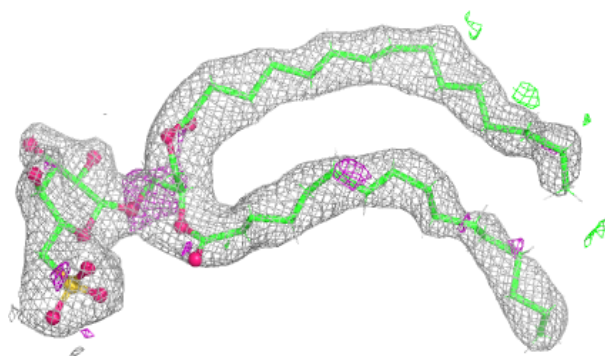


Electron density around STE B 625:

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

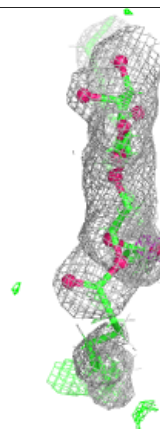
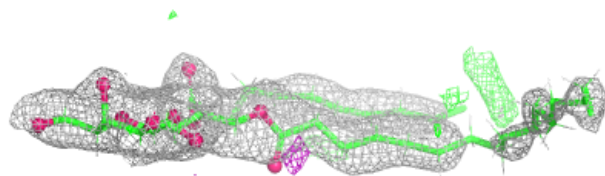
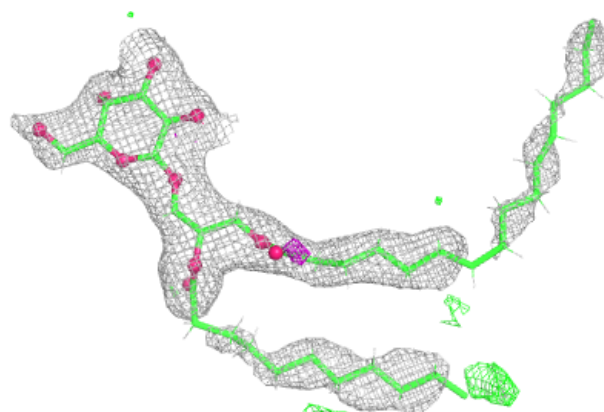
**Electron density around SQD B 624:**

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

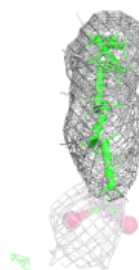
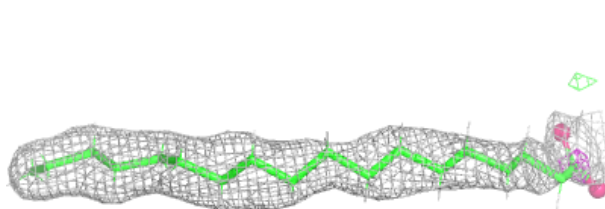
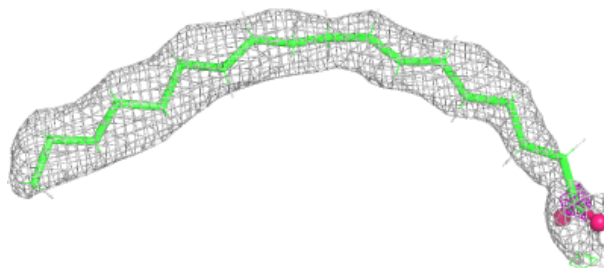


Electron density around LMG c 522:

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

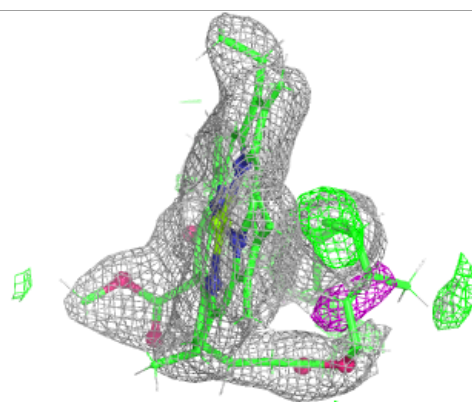
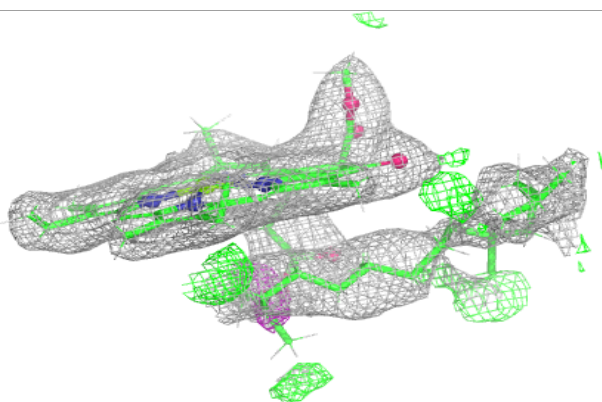
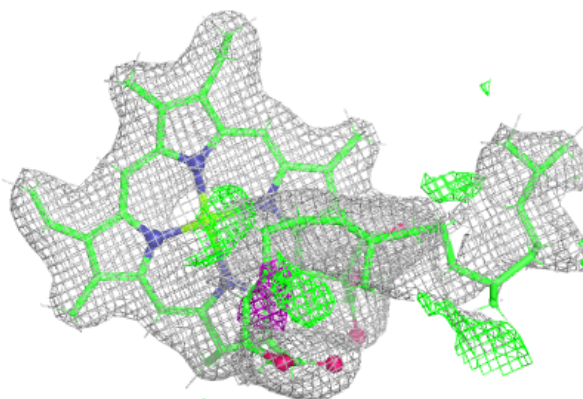
**Electron density around STE X 101:**

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

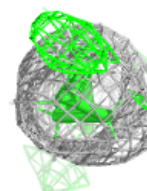
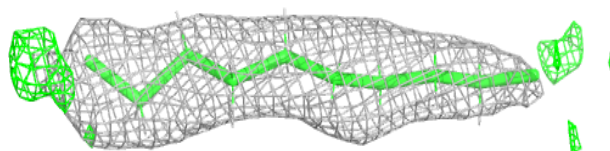
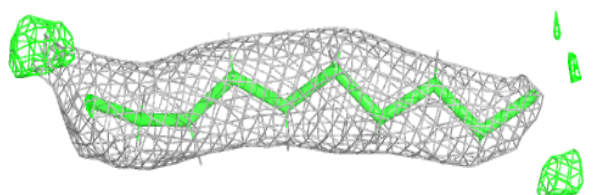


Electron density around CLA B 601:

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

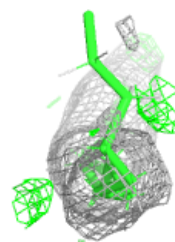
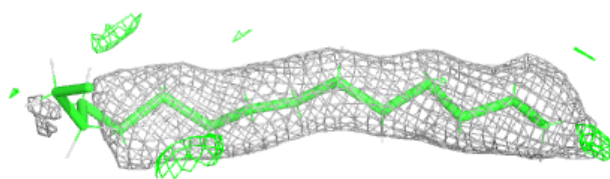
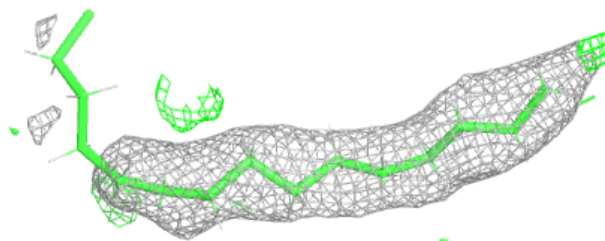
**Electron density around STE M 102:**

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

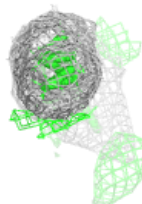
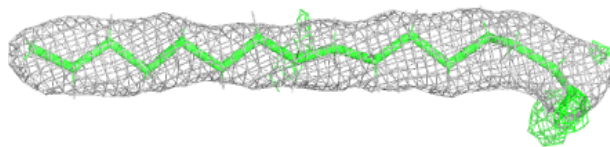
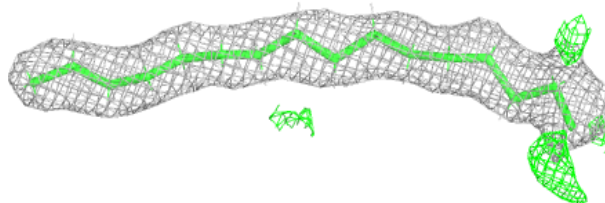


Electron density around STE M 103:

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

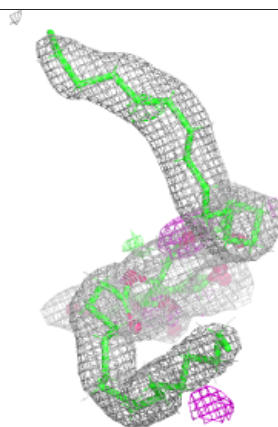
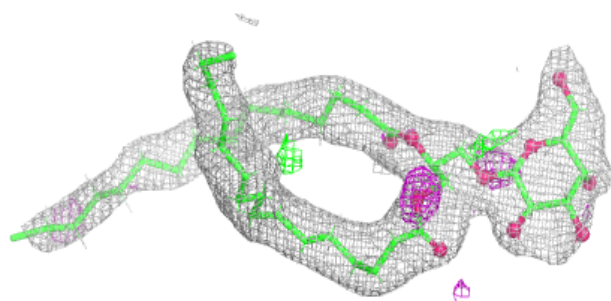
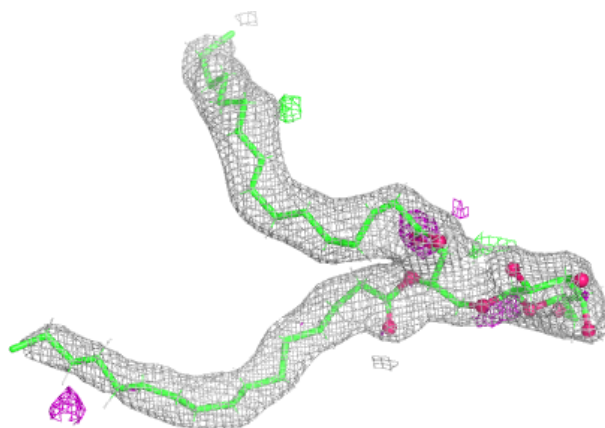
**Electron density around STE C 525:**

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

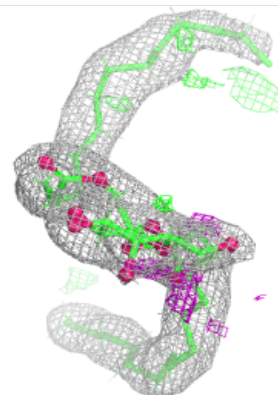
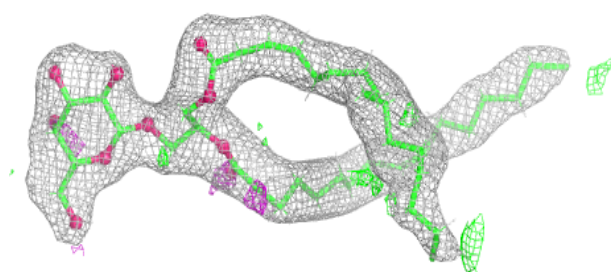
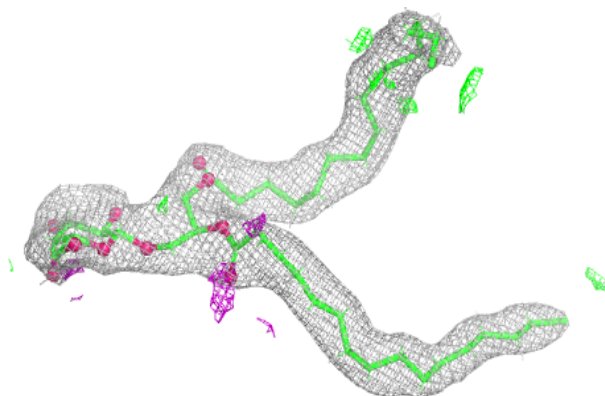


Electron density around LMG b 621:

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

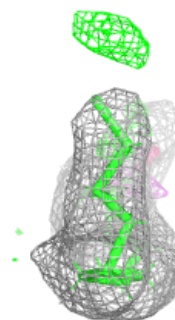
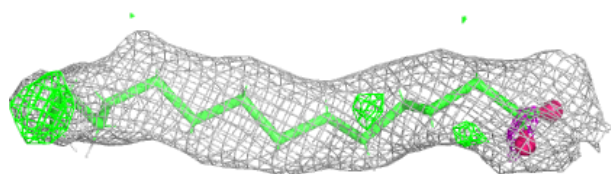
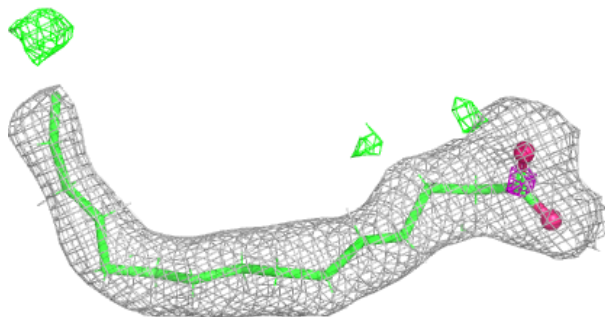
**Electron density around LMG B 621:**

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

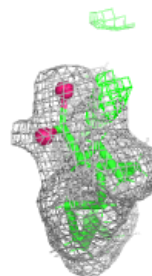
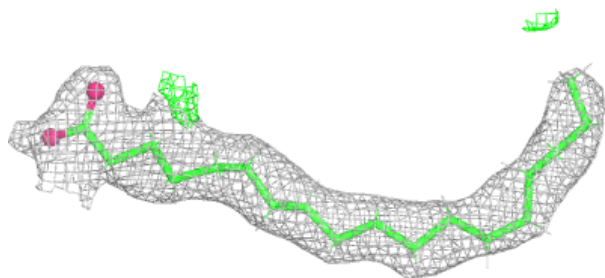


Electron density around STE B 622:

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

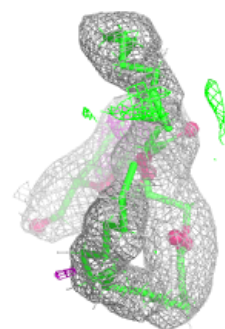
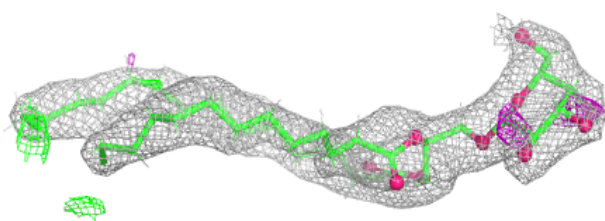
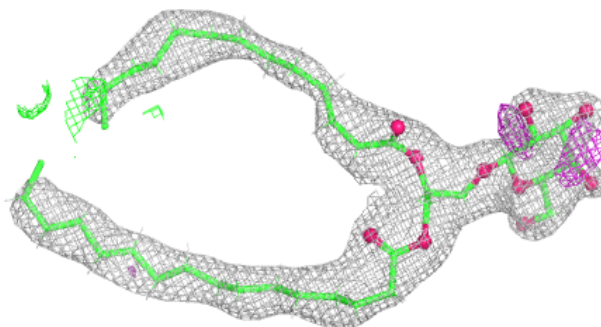
**Electron density around STE b 622:**

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

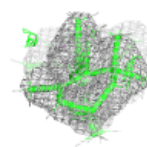
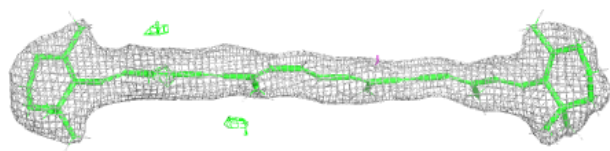
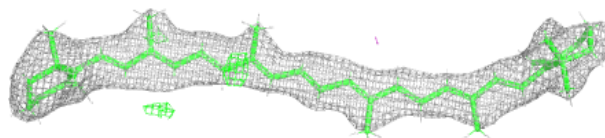


Electron density around LMG A 614:

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

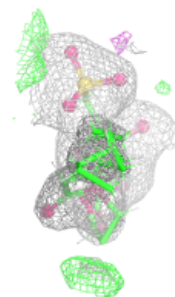
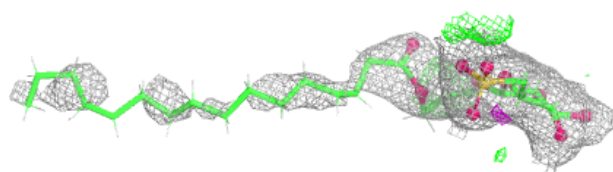
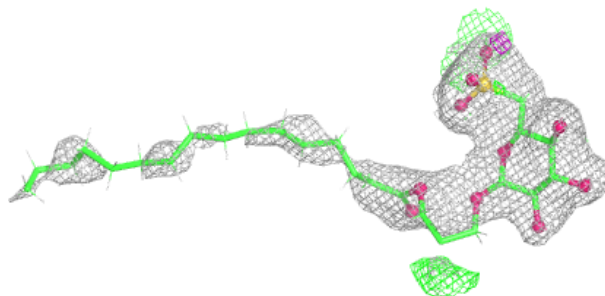
**Electron density around BCR K 101:**

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



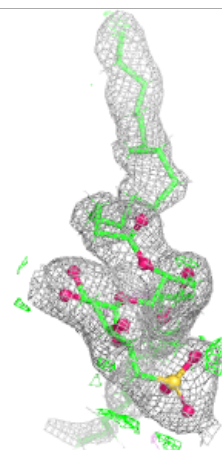
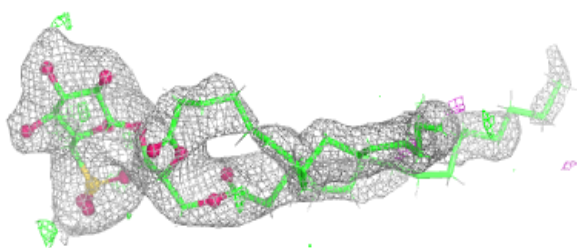
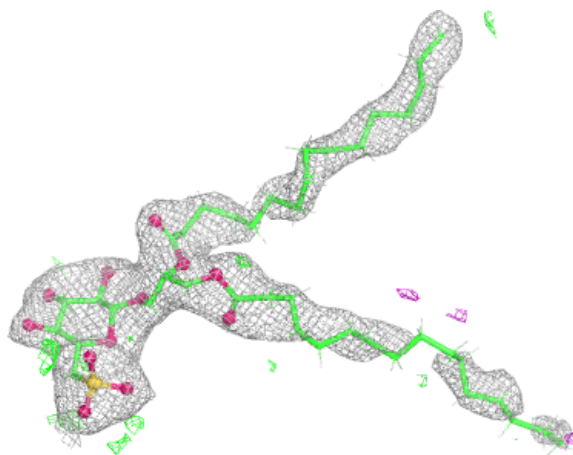
Electron density around SQD D 408:

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



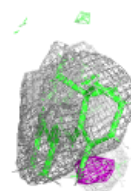
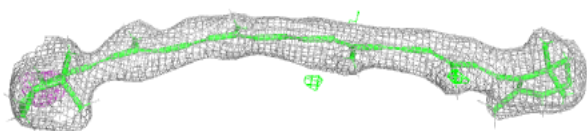
Electron density around SQD a 613:

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

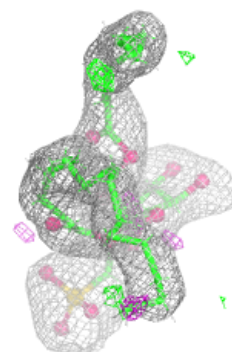
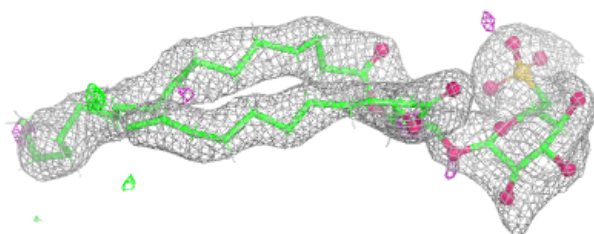
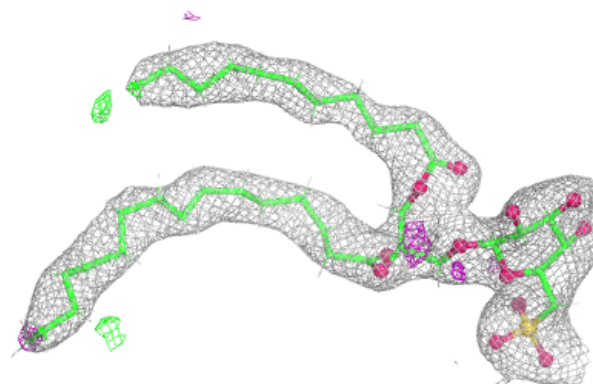


Electron density around BCR d 404:

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

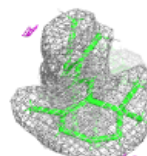
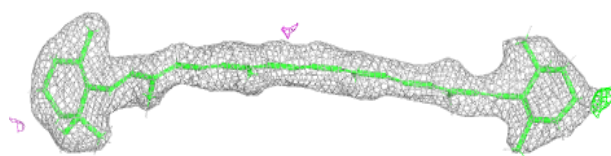
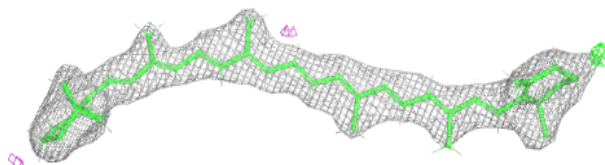
**Electron density around SQD b 620:**

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

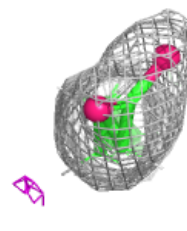
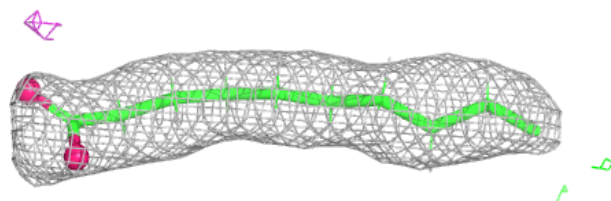
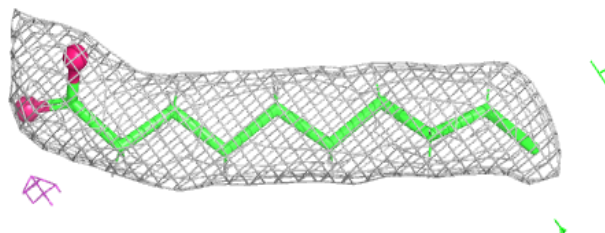


Electron density around BCR h 101:

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

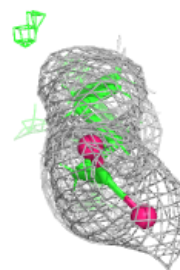
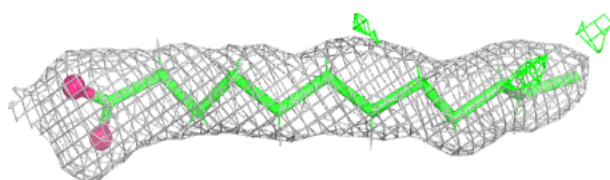
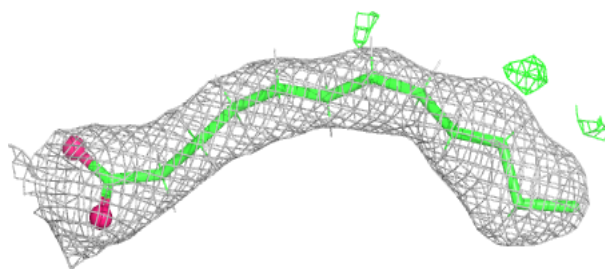
**Electron density around STE m 101:**

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

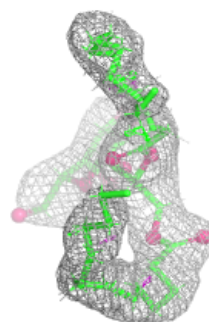
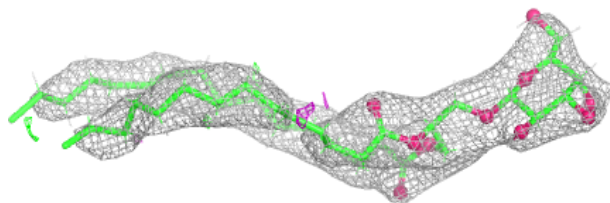
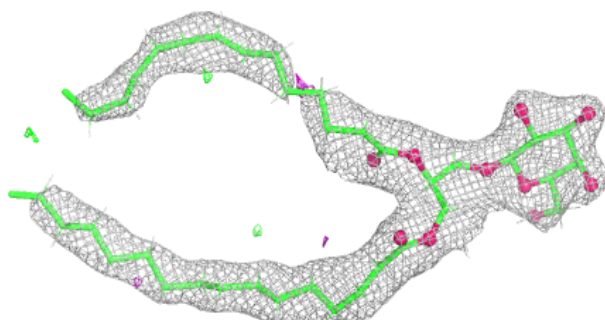


Electron density around STE t 102:

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

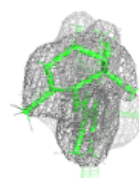
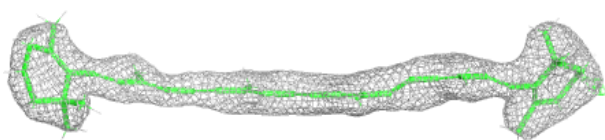
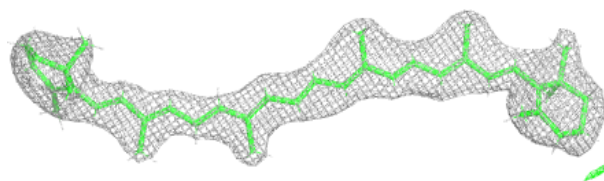
**Electron density around LMG a 617:**

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

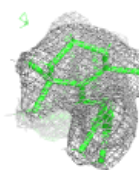
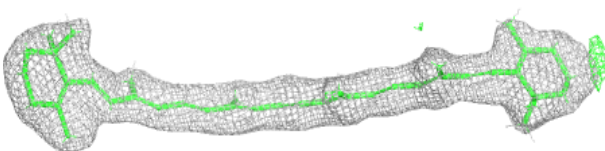
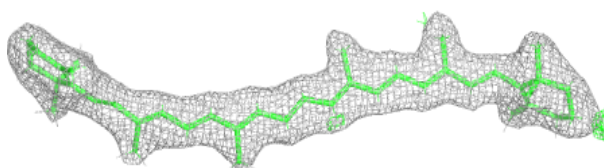


Electron density around BCR k 101:

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

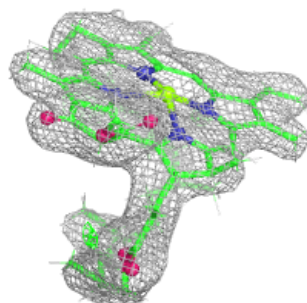
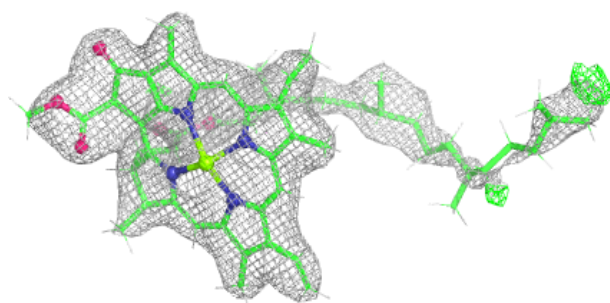
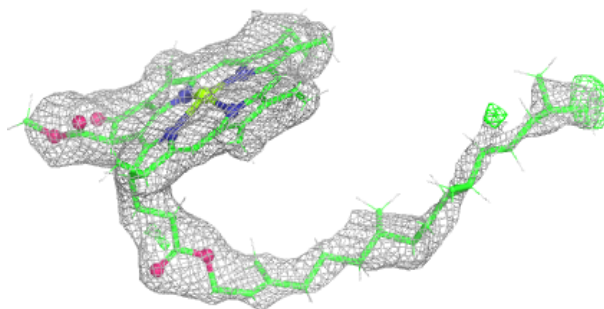
**Electron density around BCR H 101:**

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

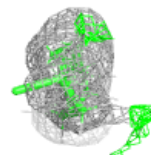
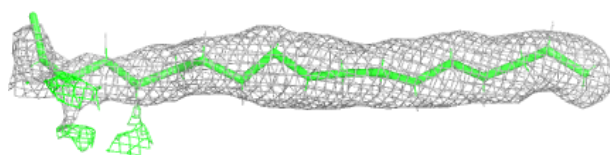
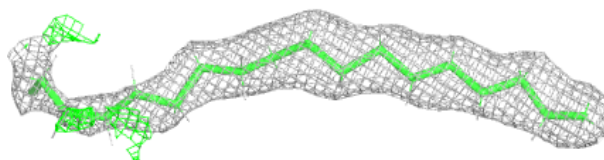


Electron density around CLA C 513:

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

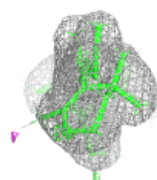
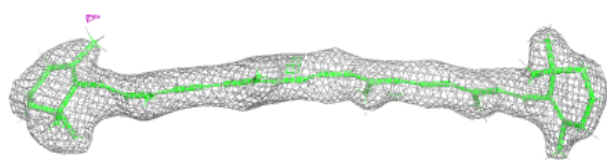
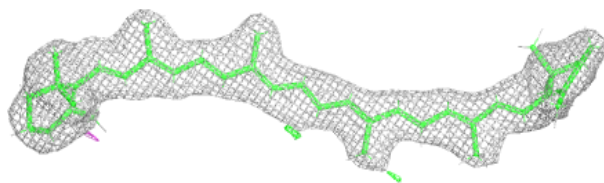
**Electron density around STE I 102:**

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

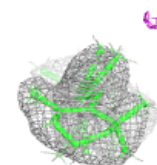
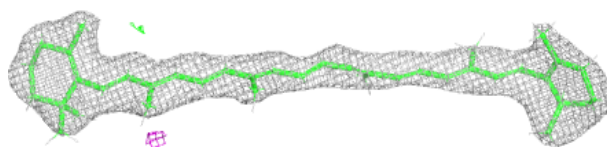
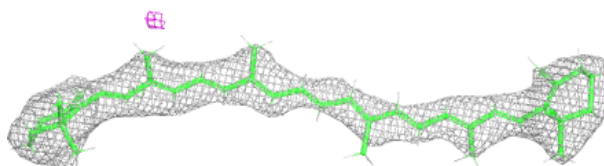


Electron density around BCR Y 101:

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

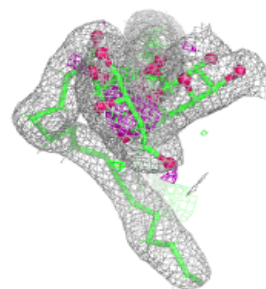
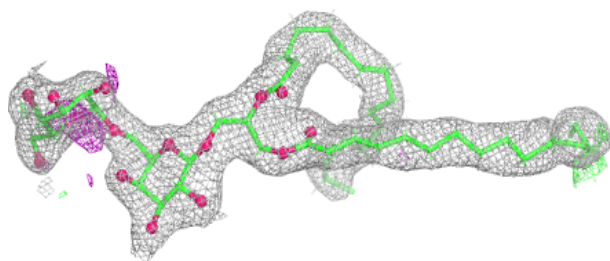
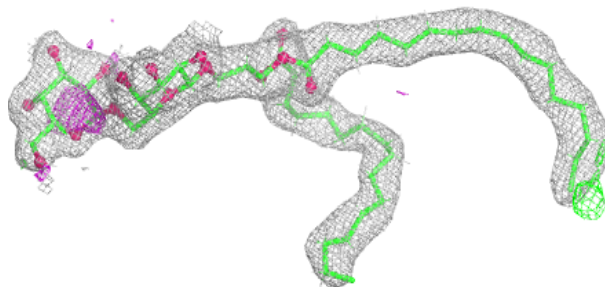
**Electron density around BCR c 514:**

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

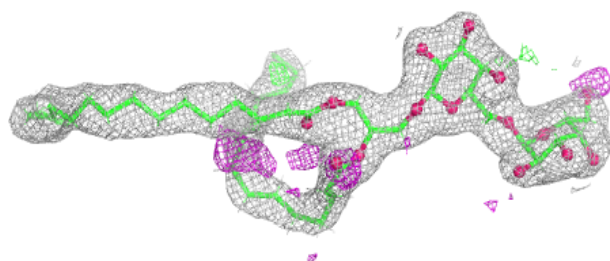
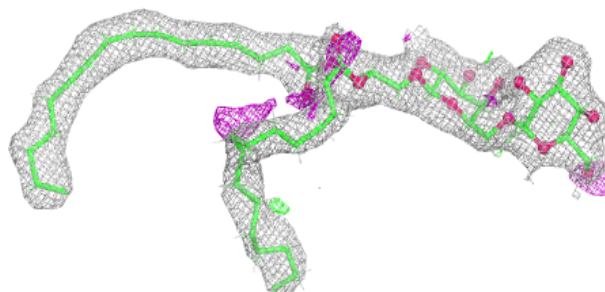


Electron density around DGD H 102:

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

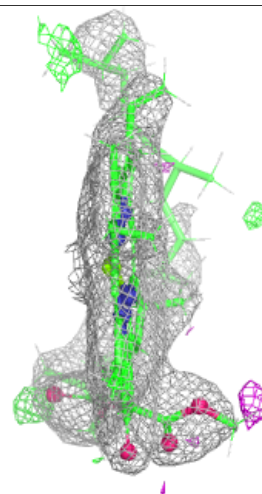
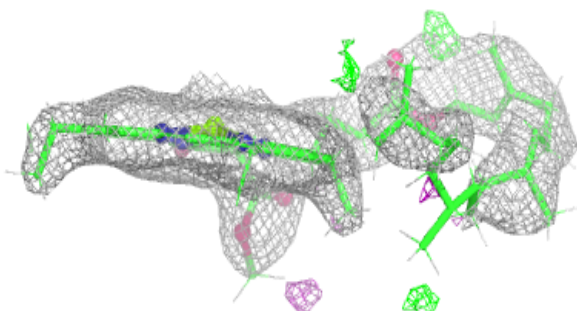
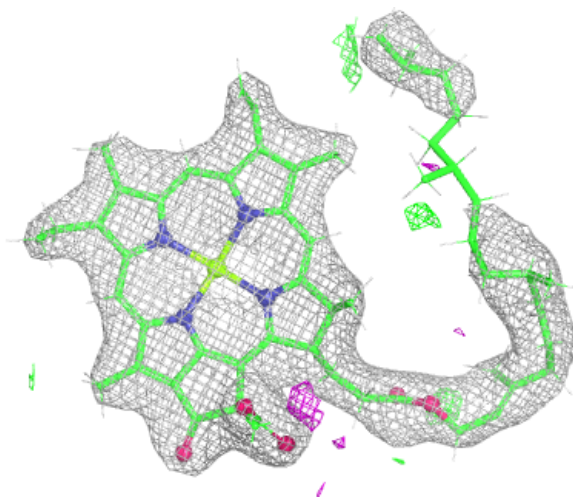
**Electron density around DGD h 102:**

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



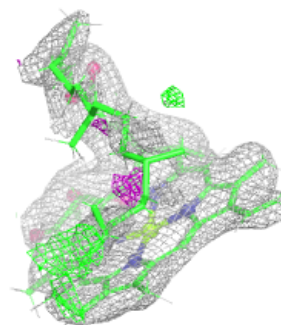
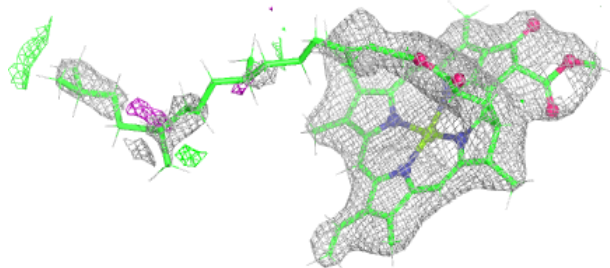
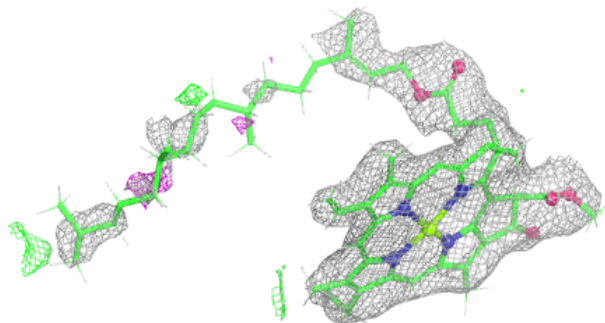
Electron density around CLA c 512:

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

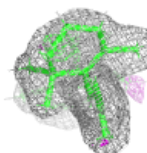
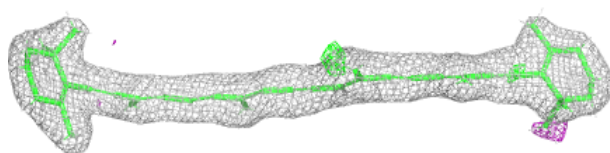
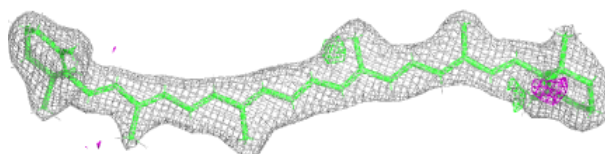


Electron density around CLA c 513:

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

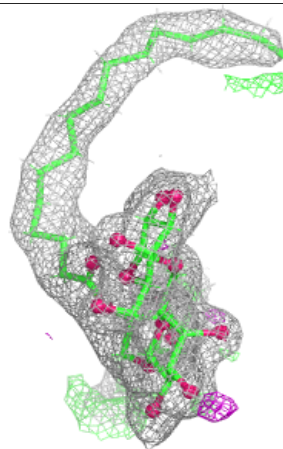
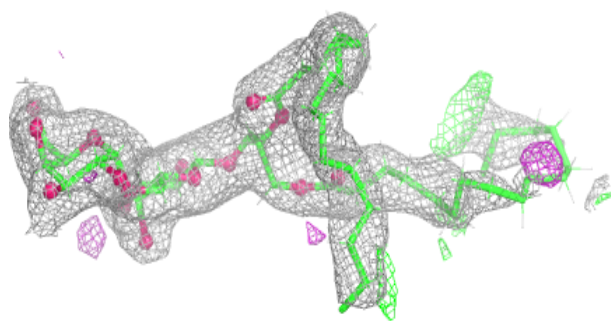
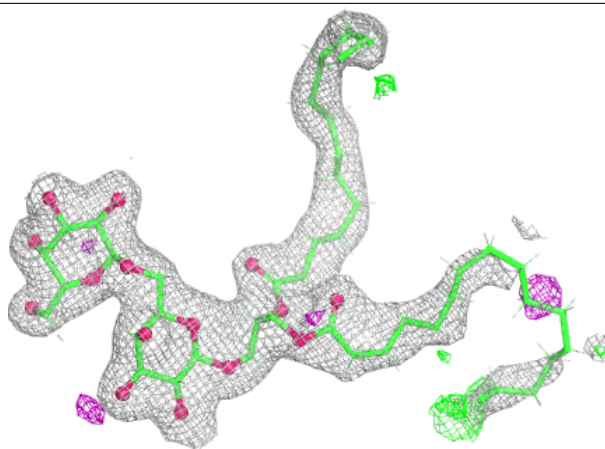
**Electron density around BCR C 514:**

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



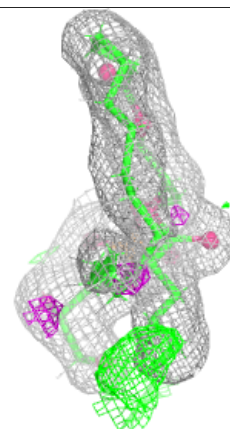
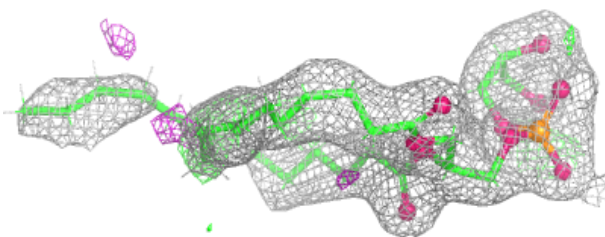
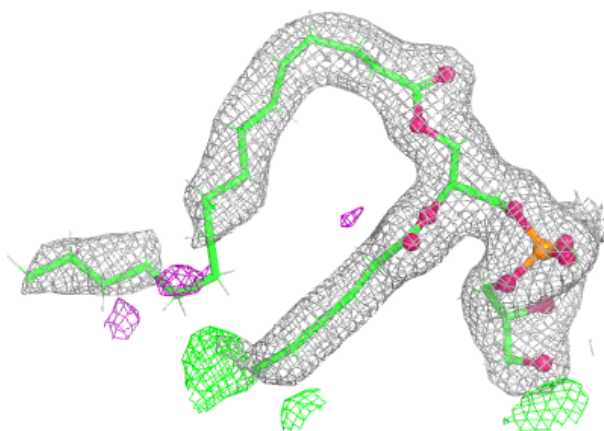
Electron density around DGD C 521:

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

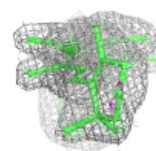
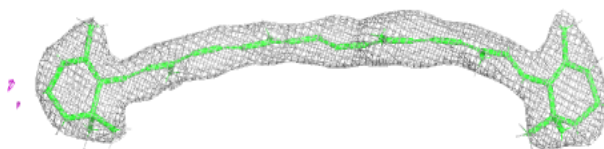


Electron density around LHG d 409:

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

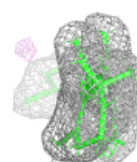
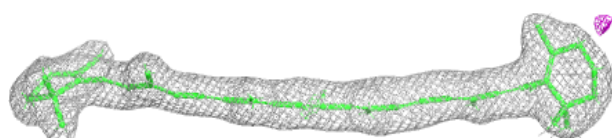
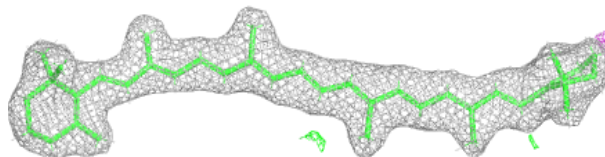
**Electron density around BCR K 102:**

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

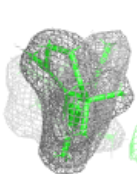
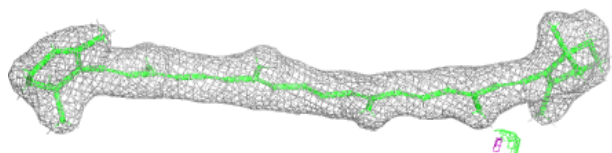
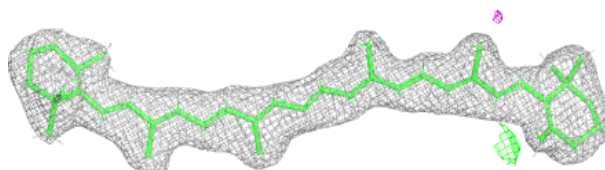


Electron density around BCR B 617:

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

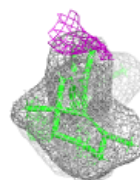
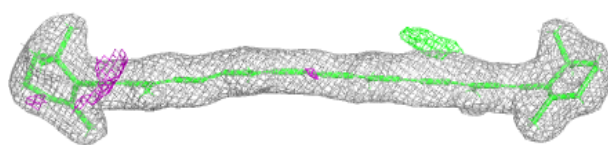
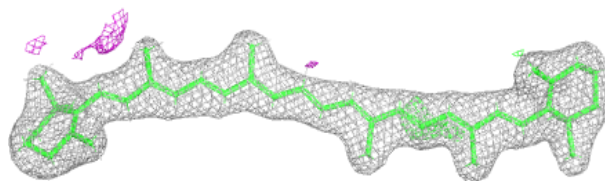
**Electron density around BCR b 619:**

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

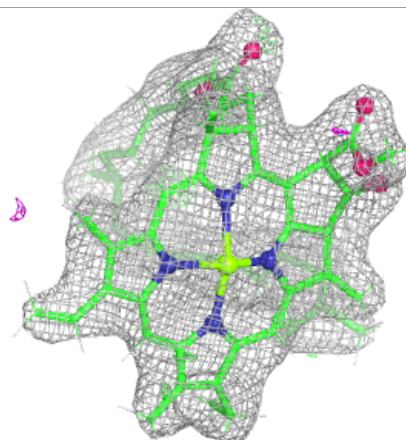
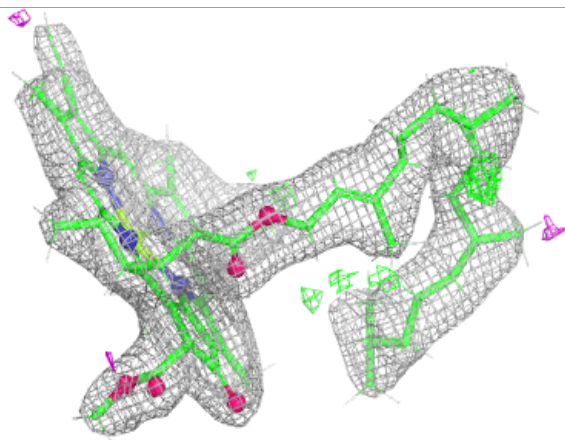
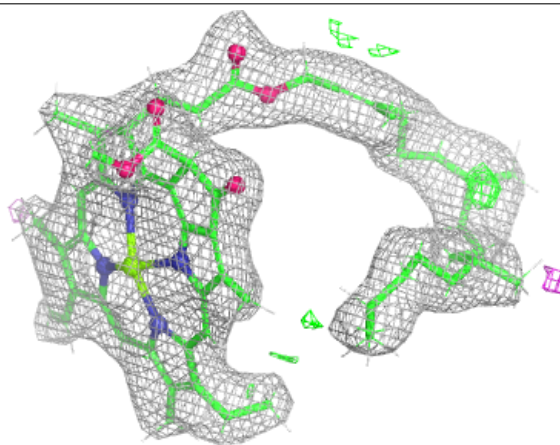


Electron density around BCR B 618:

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

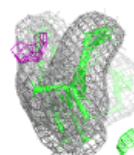
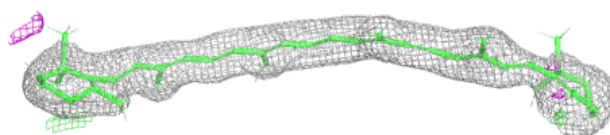
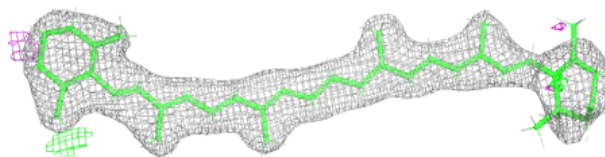
**Electron density around CLA c 503:**

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

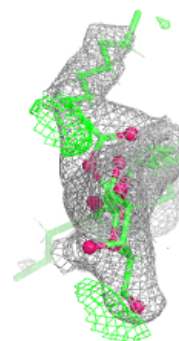
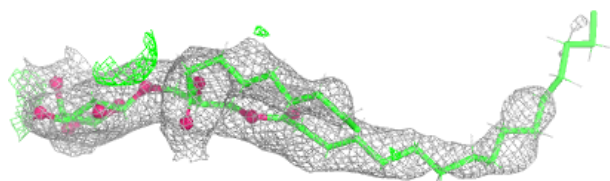
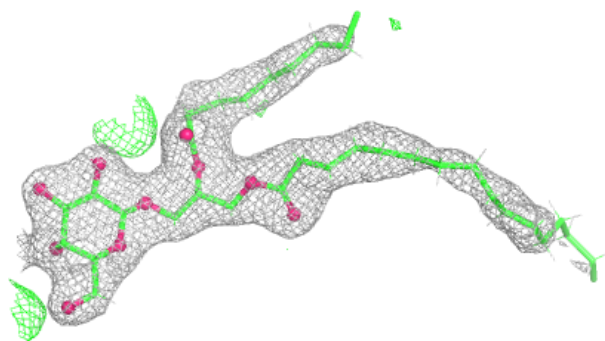


Electron density around BCR D 404:

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

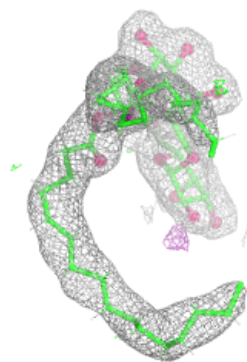
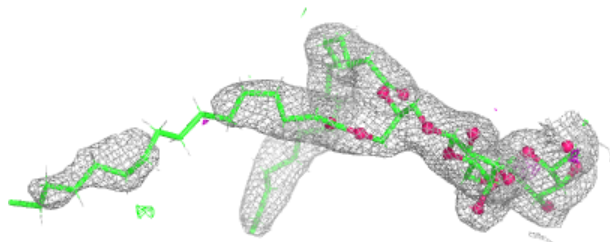
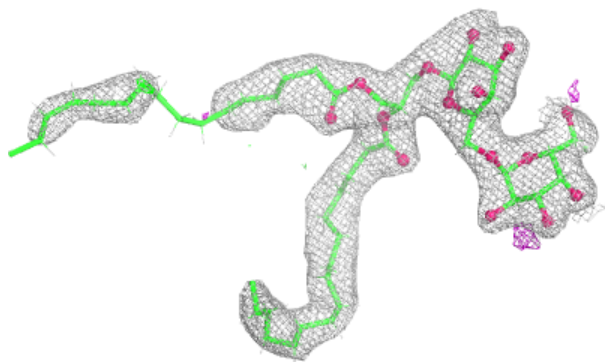
**Electron density around LMG d 411:**

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



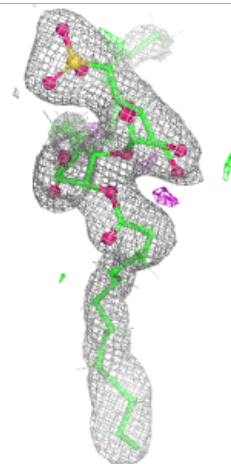
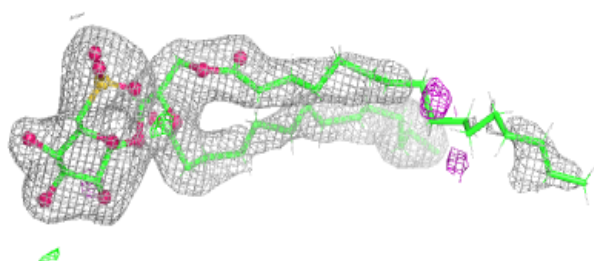
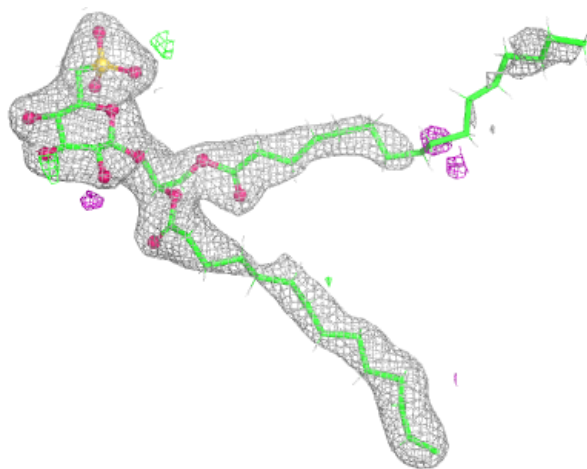
Electron density around DGD c 520:

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



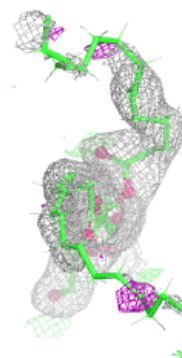
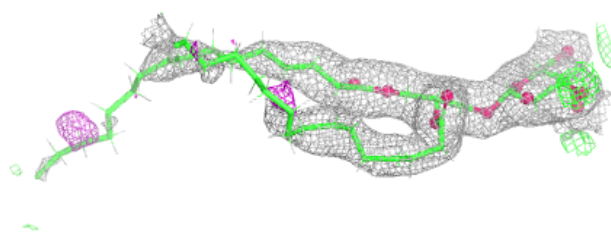
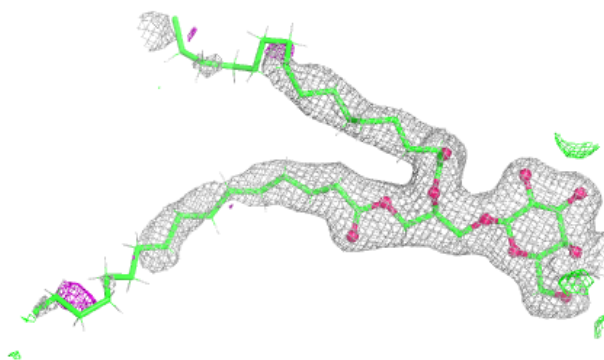
Electron density around SQD A 615:

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

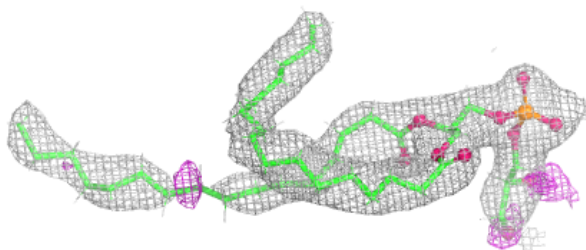
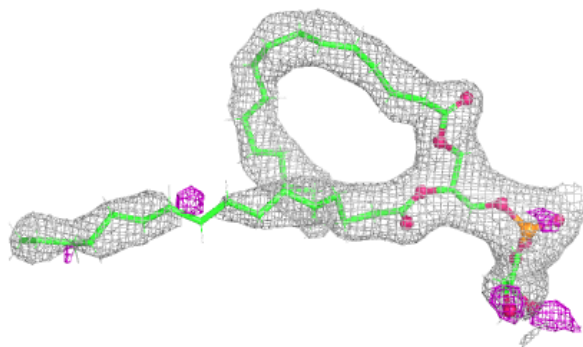


Electron density around LMG D 407:

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

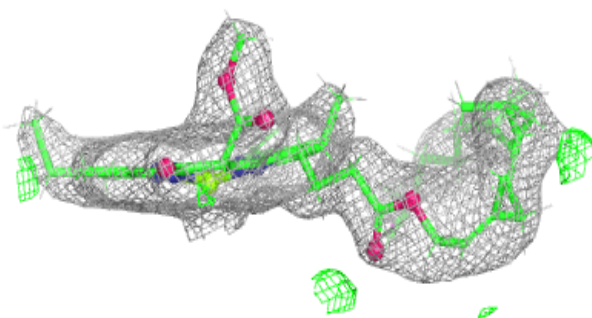
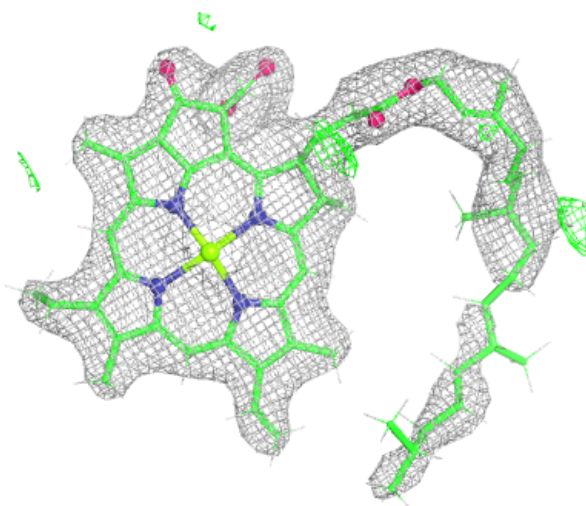
**Electron density around LHG d 407:**

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



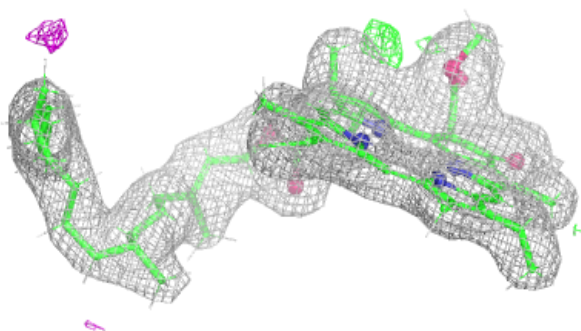
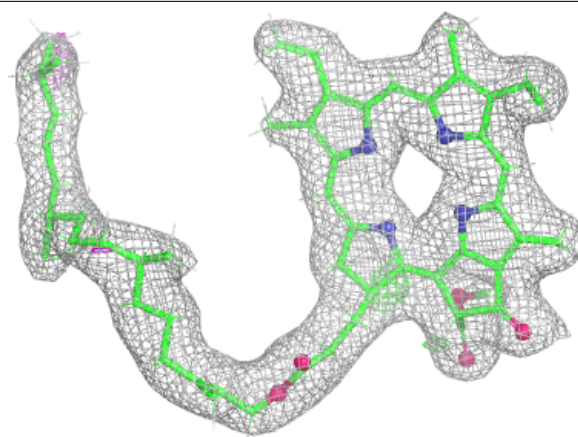
Electron density around CLA C 512:

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

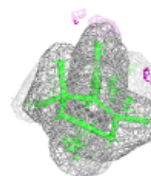
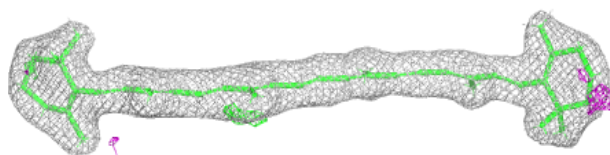
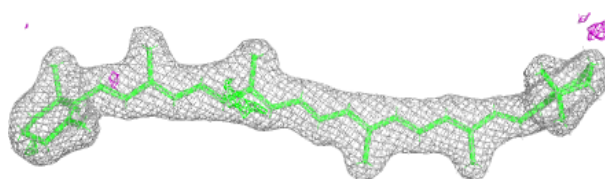


Electron density around PHO d 401:

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

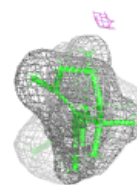
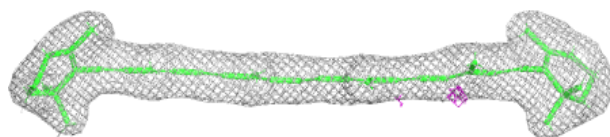
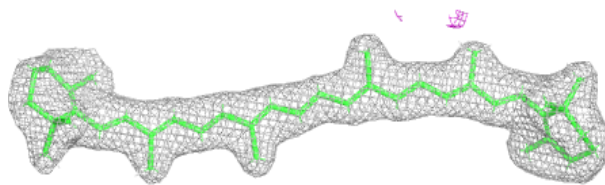
**Electron density around BCR A 610:**

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



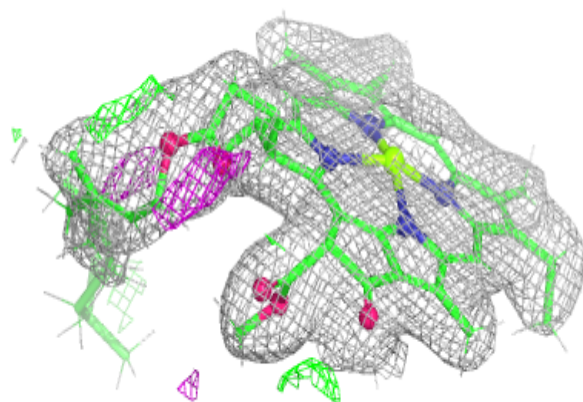
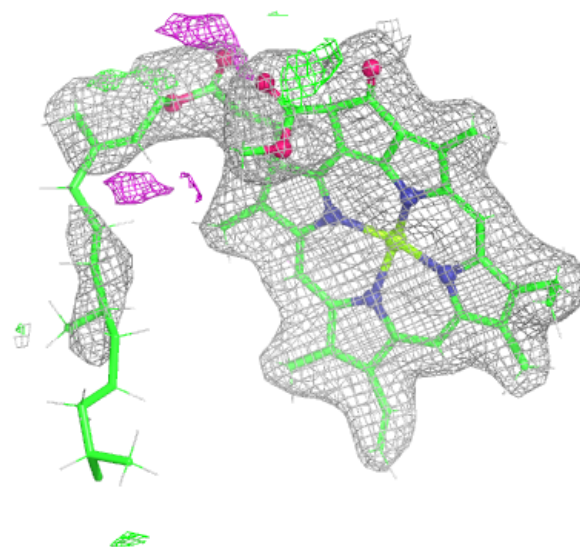
Electron density around BCR b 618:

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



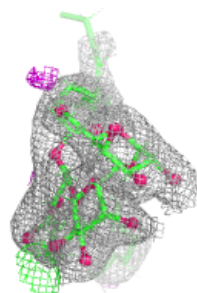
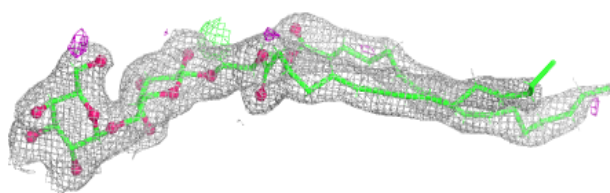
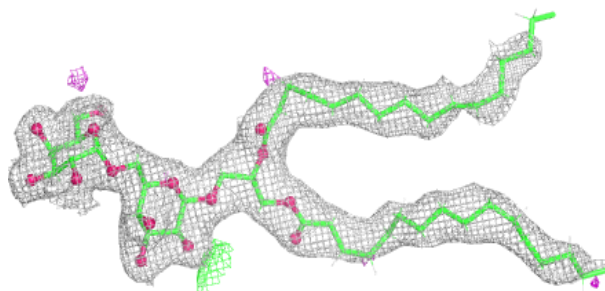
Electron density around CLA b 616:

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

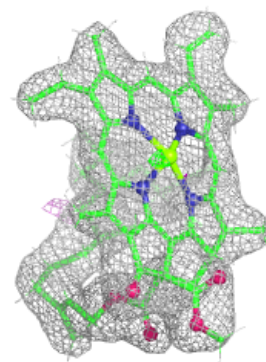
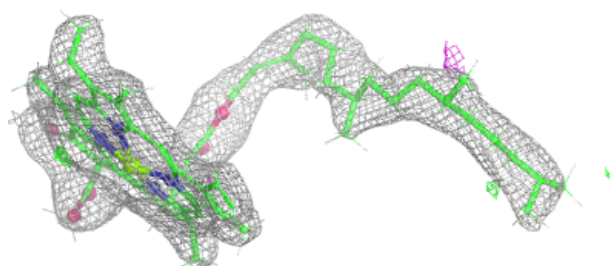
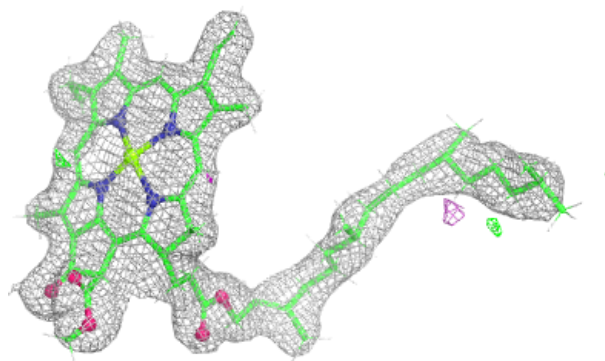


Electron density around DGD C 522:

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

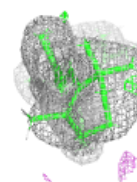
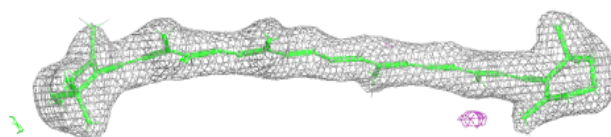
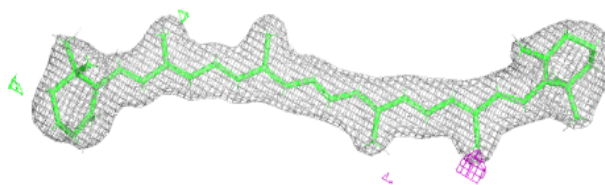
**Electron density around CLA C 511:**

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

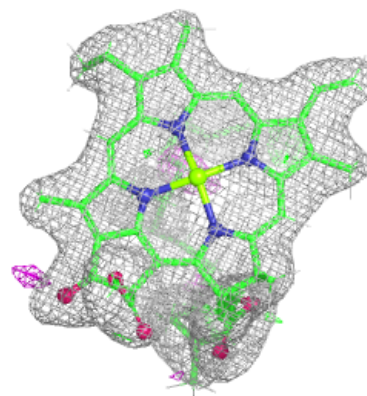
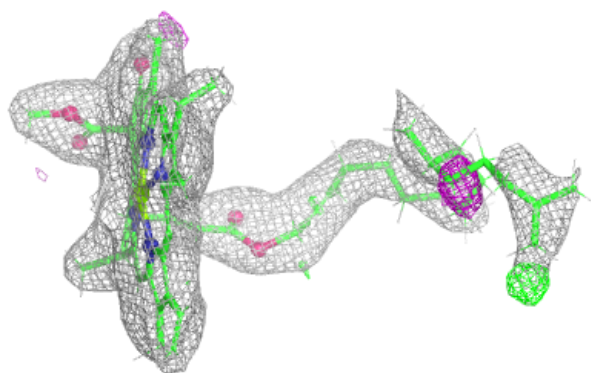
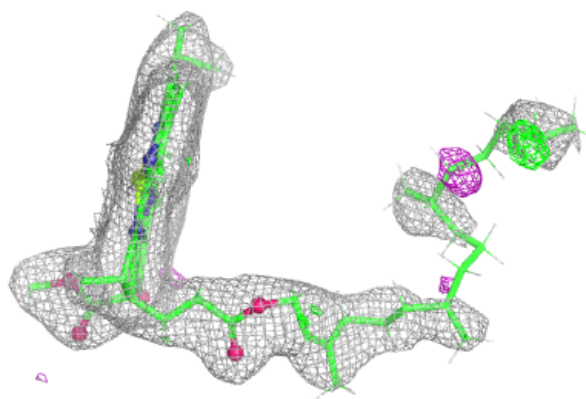


Electron density around BCR B 619:

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

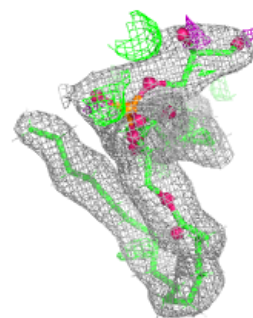
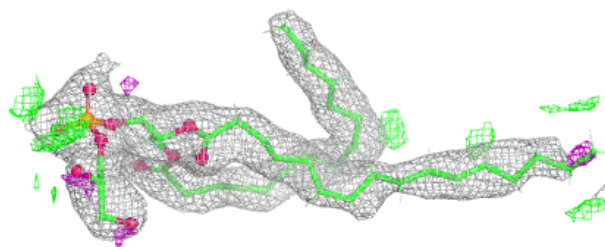
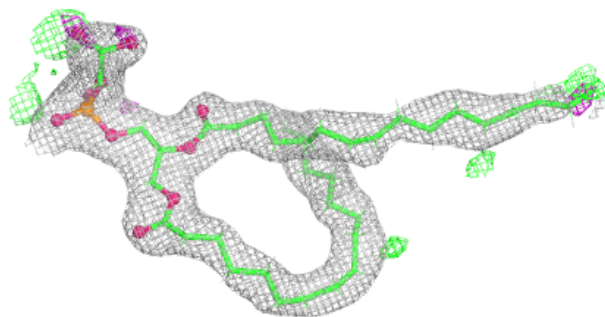
**Electron density around CLA c 506:**

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



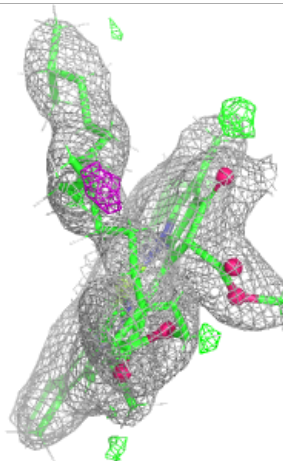
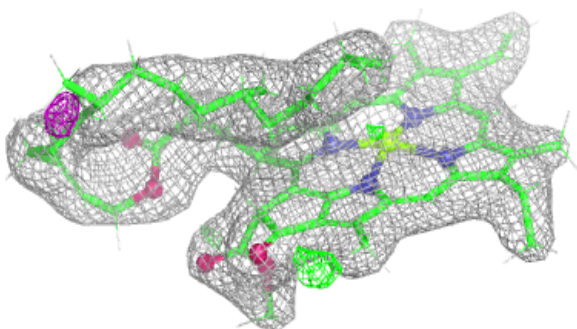
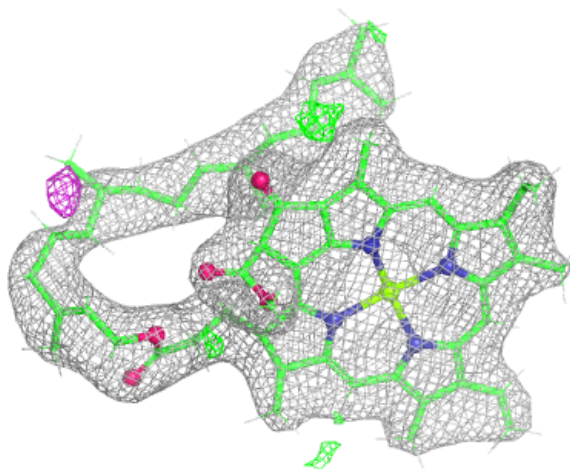
Electron density around LHG B 623:

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



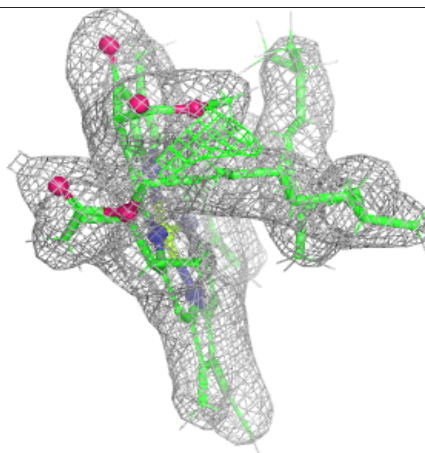
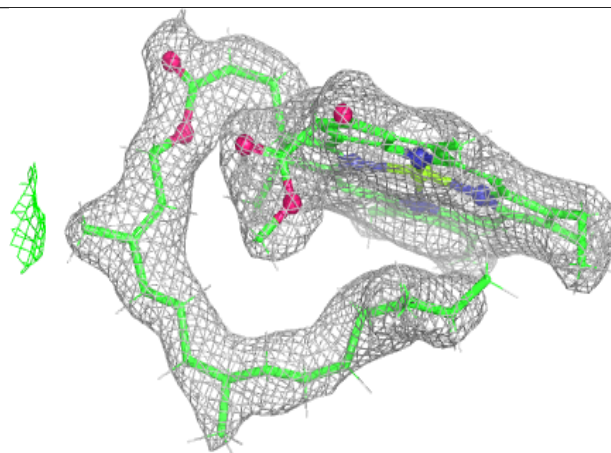
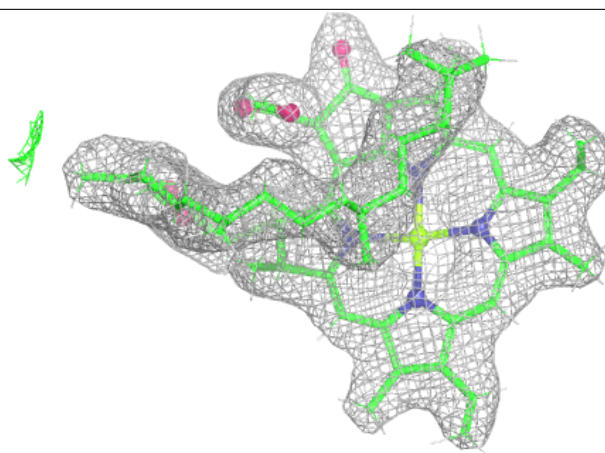
Electron density around CLA c 509:

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

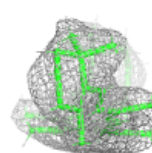
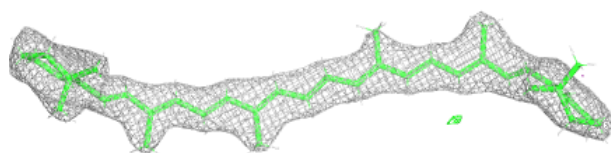
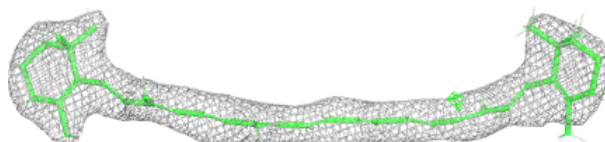


Electron density around CLA C 510:

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

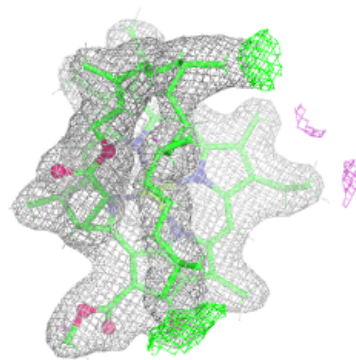
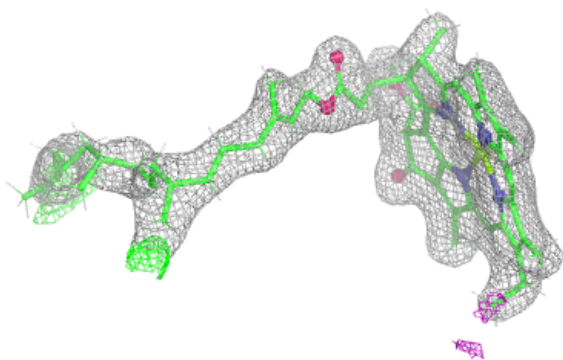
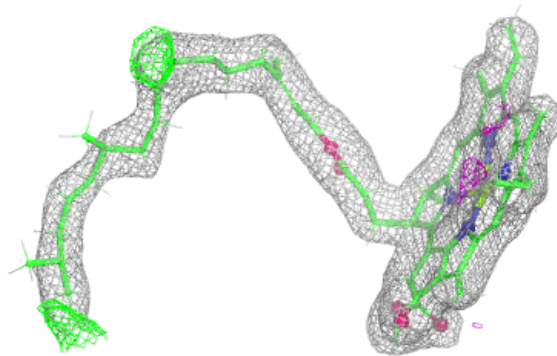
**Electron density around BCR k 102:**

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

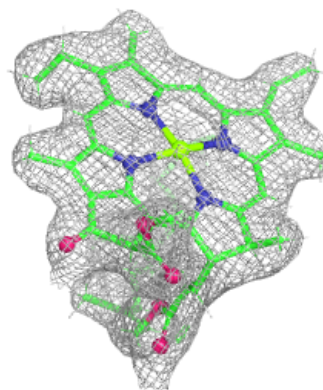
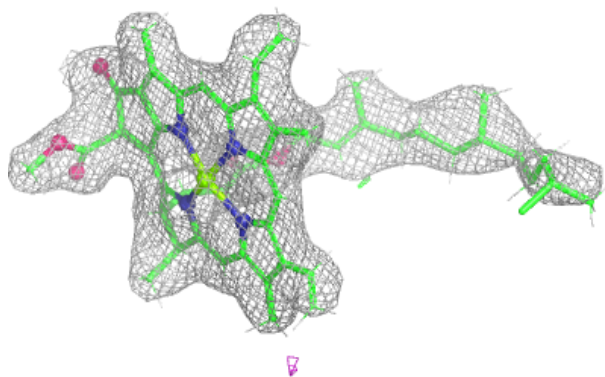
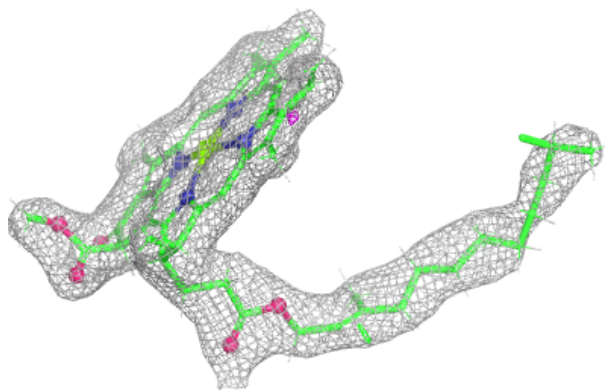


Electron density around CLA b 606:

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

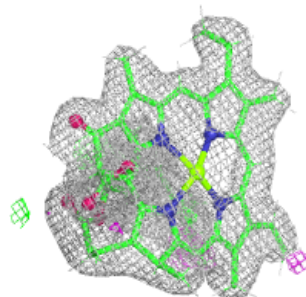
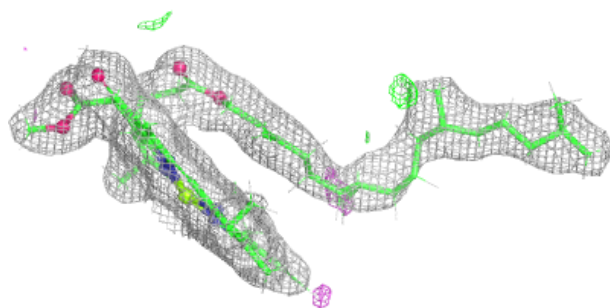
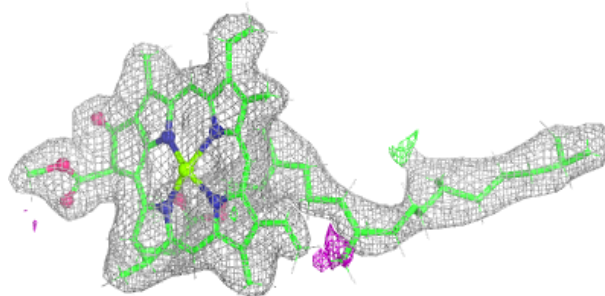
**Electron density around CLA c 504:**

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

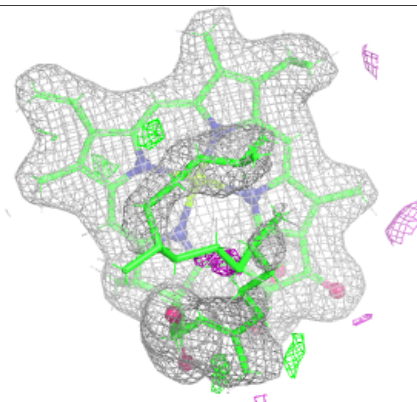
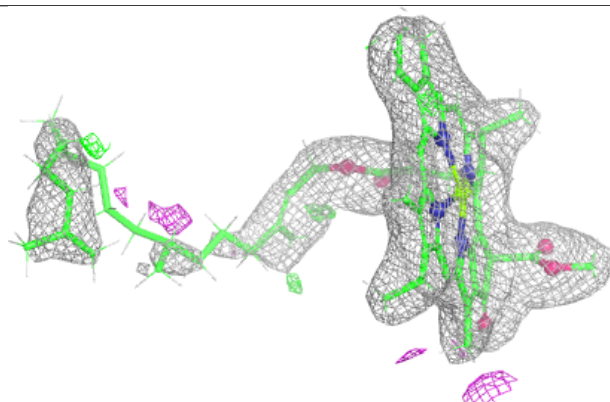
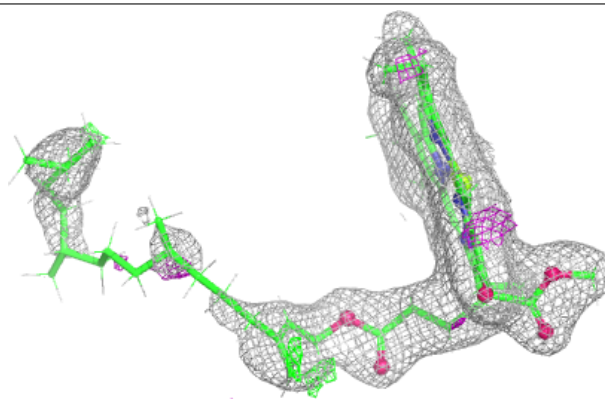


Electron density around CLA c 505:

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

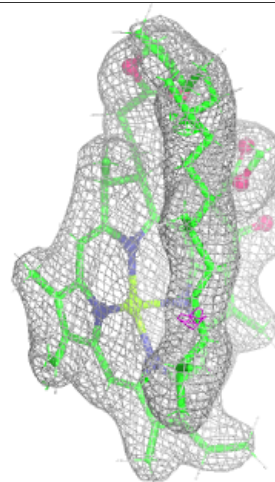
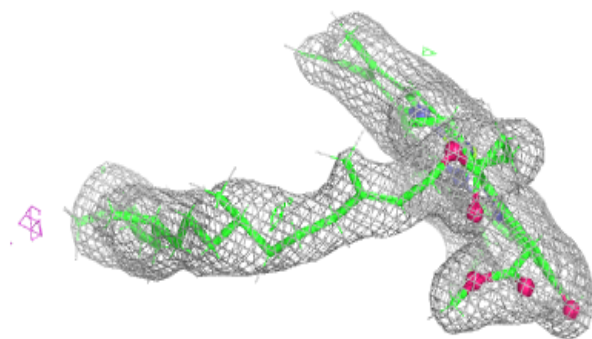
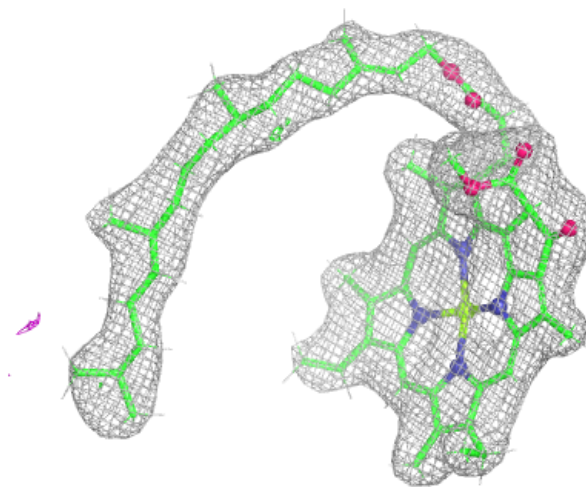
**Electron density around CLA C 506:**

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



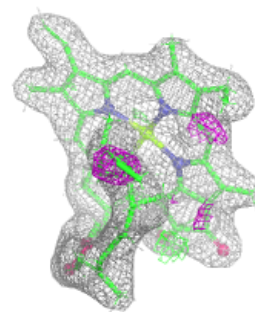
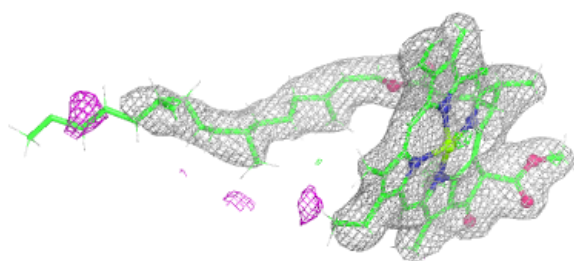
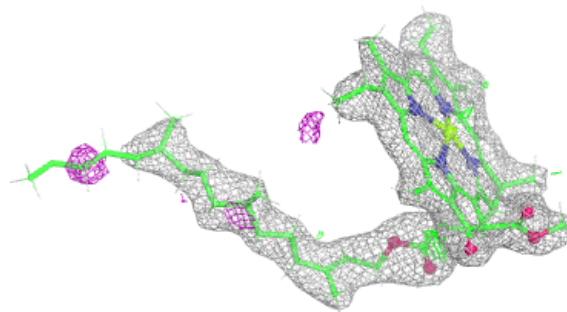
Electron density around CLA c 507:

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

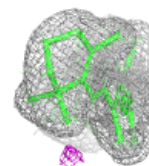
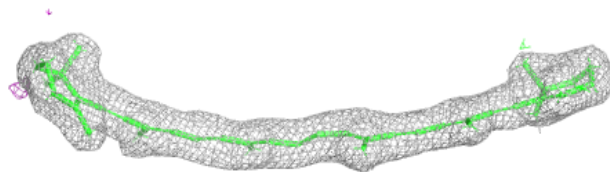
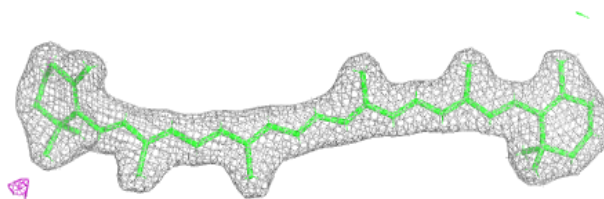


Electron density around CLA c 508:

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

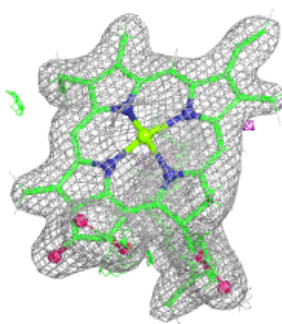
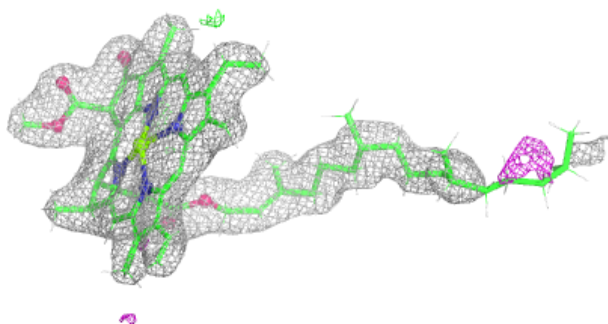
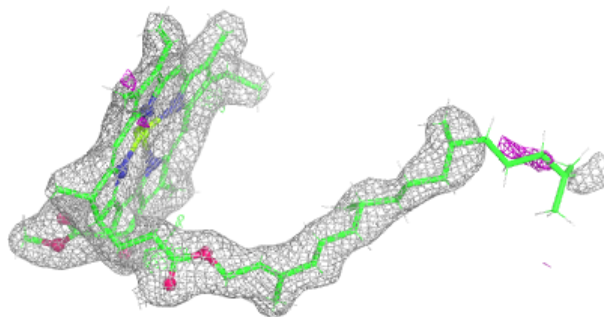
**Electron density around BCR t 101:**

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

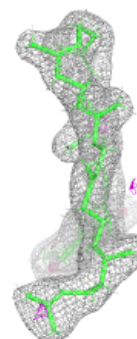
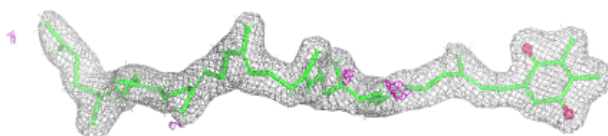
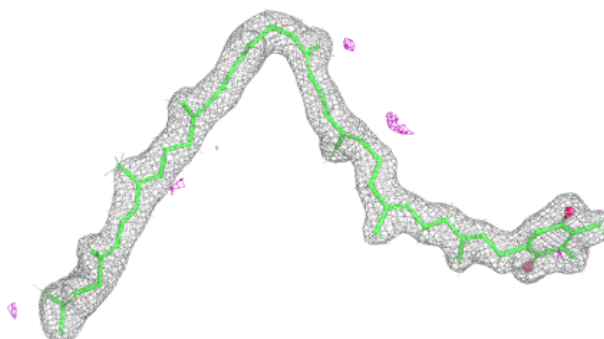


Electron density around CLA C 508:

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

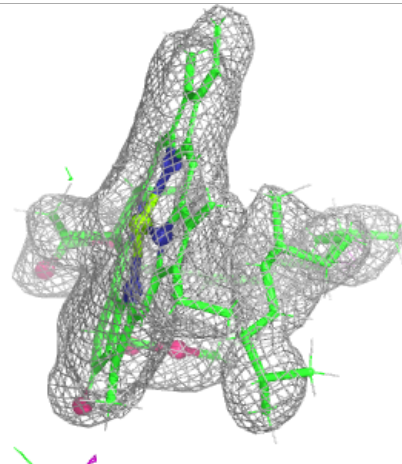
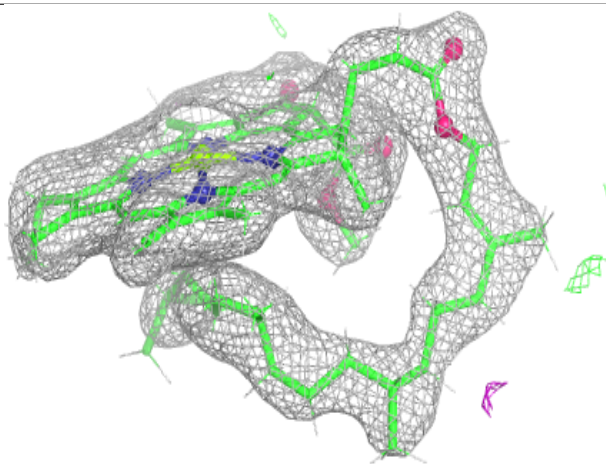
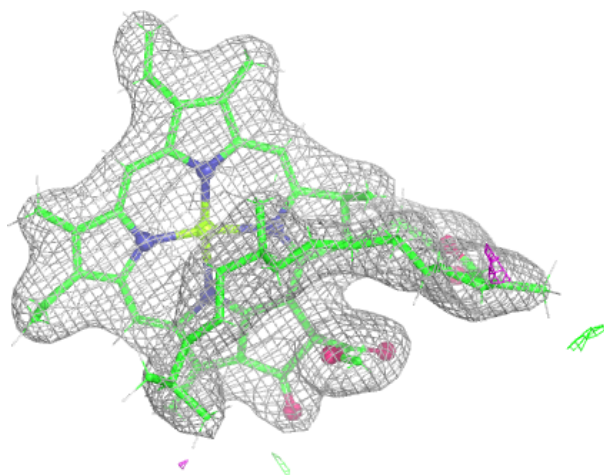
**Electron density around PL9 D 405:**

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



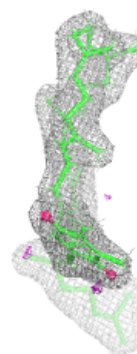
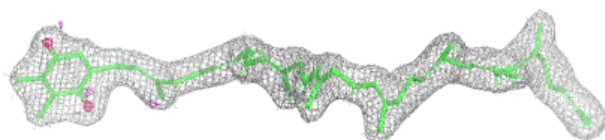
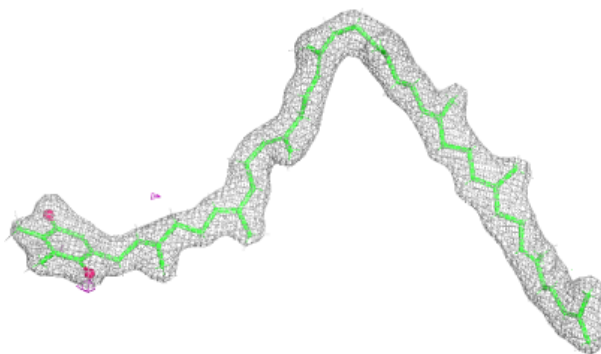
Electron density around CLA c 510:

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

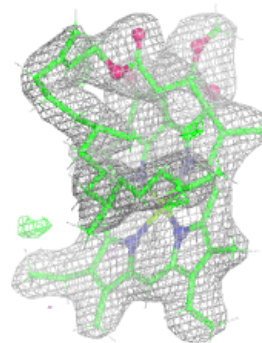
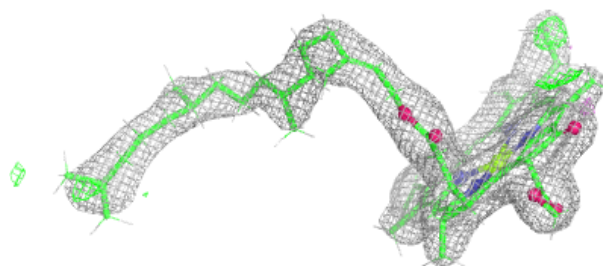
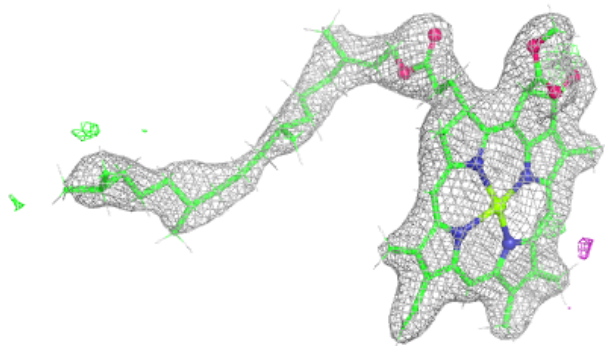


Electron density around PL9 d 405:

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

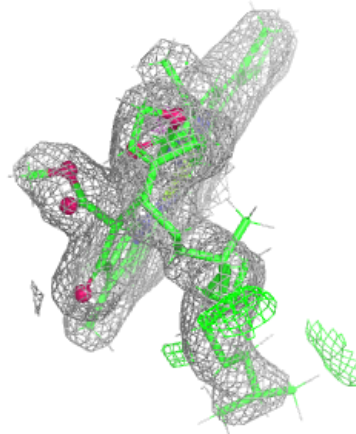
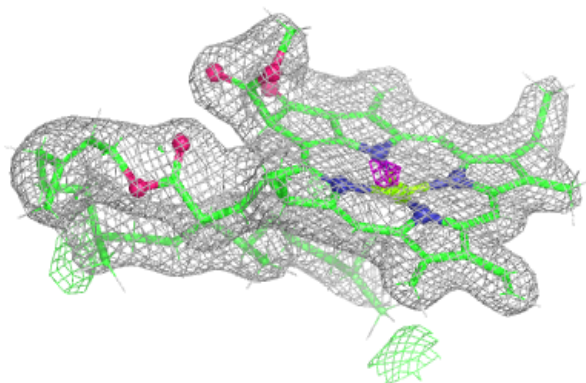
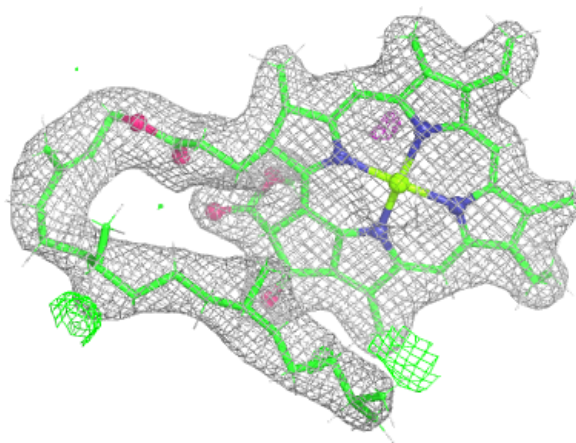
**Electron density around CLA c 511:**

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



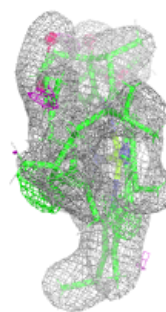
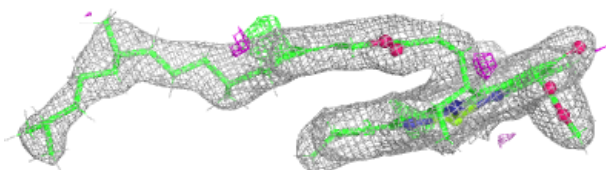
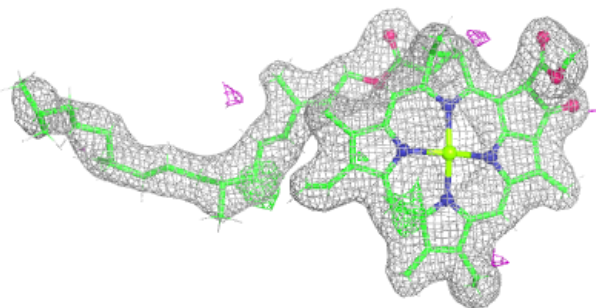
Electron density around CLA C 509:

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

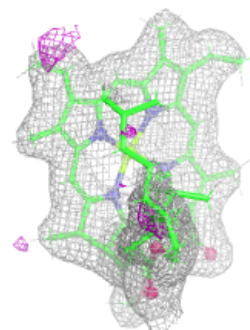
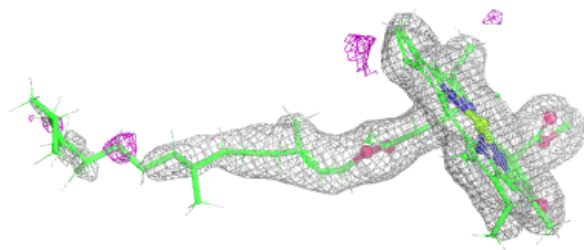
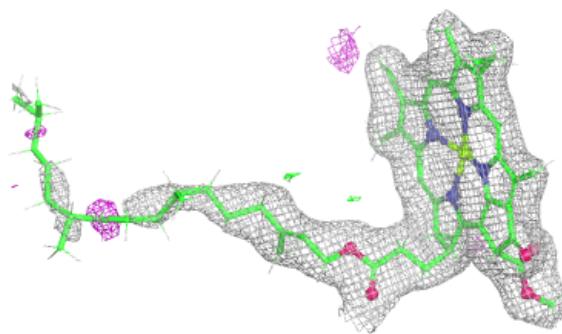


Electron density around CLA B 603:

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

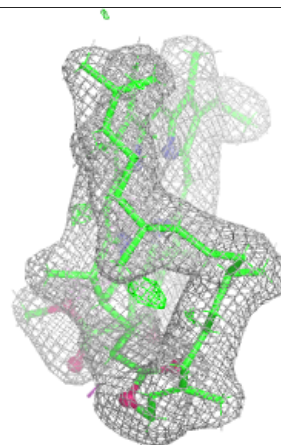
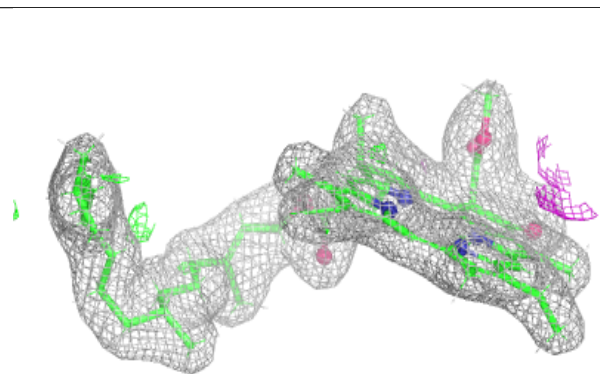
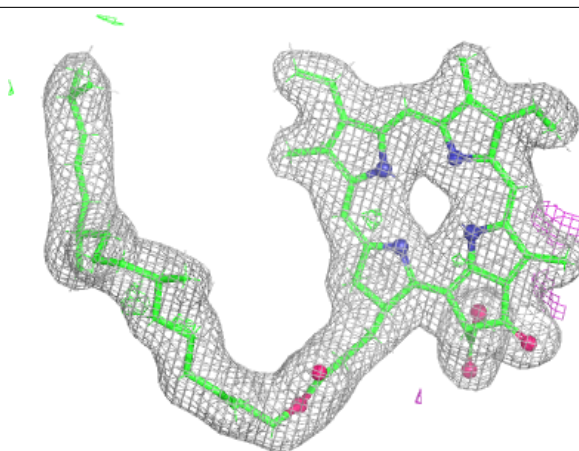
**Electron density around CLA d 403:**

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



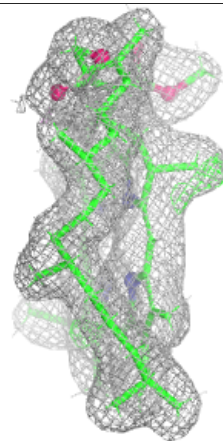
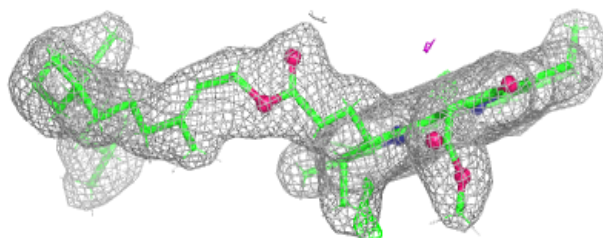
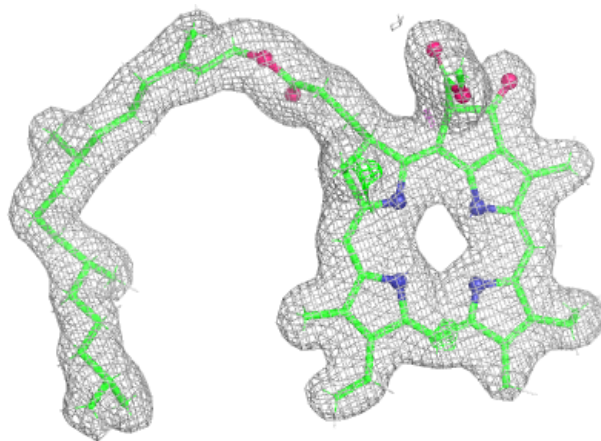
Electron density around PHO A 608:

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



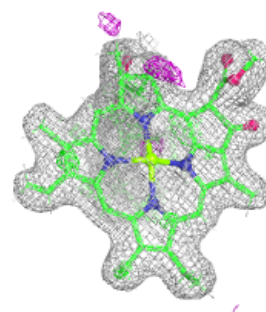
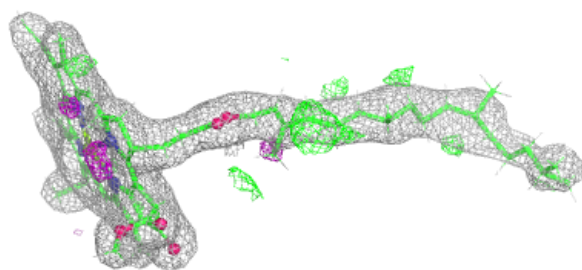
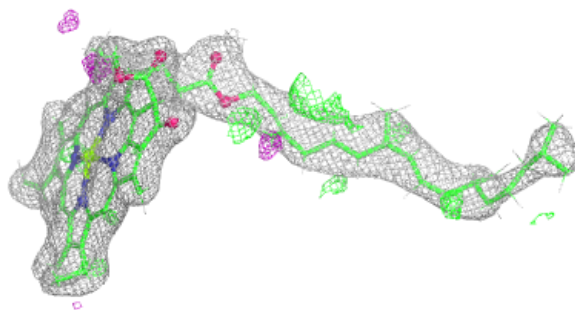
Electron density around PHO a 608:

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



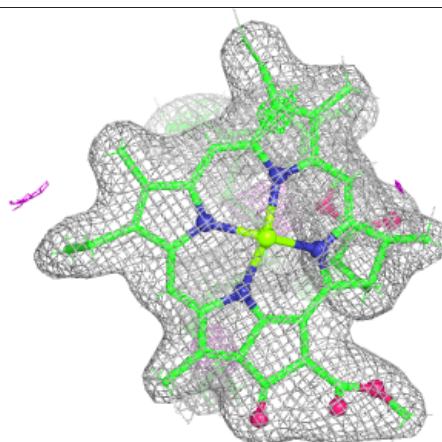
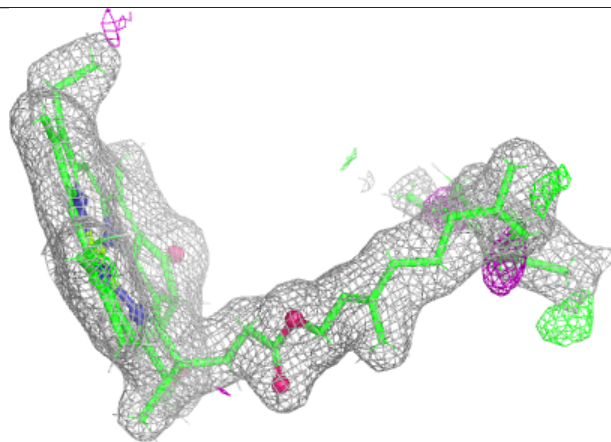
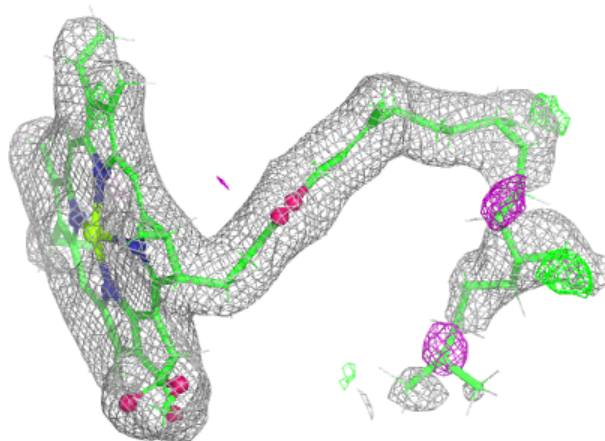
Electron density around CLA B 604:

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

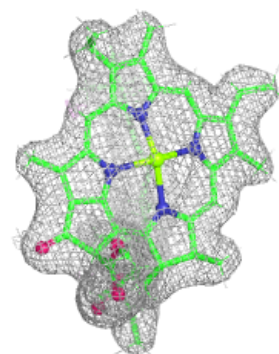
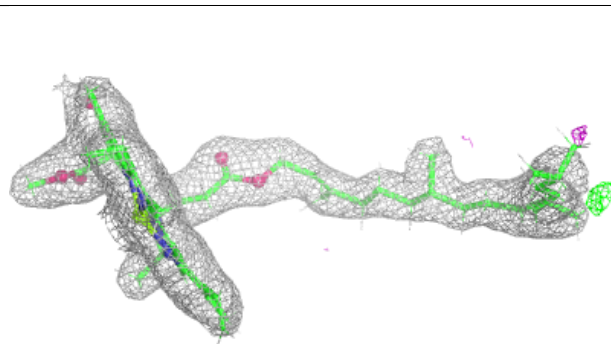
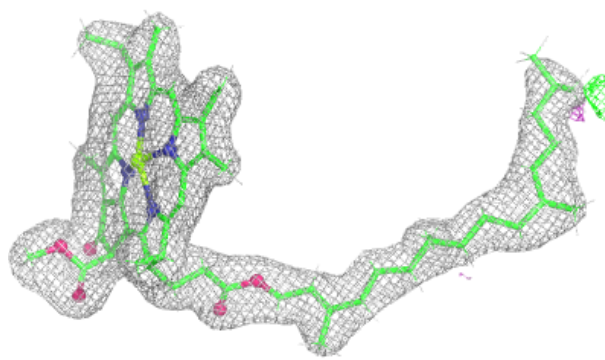


Electron density around CLA B 606:

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

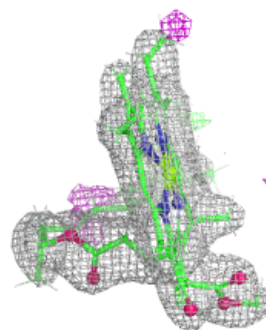
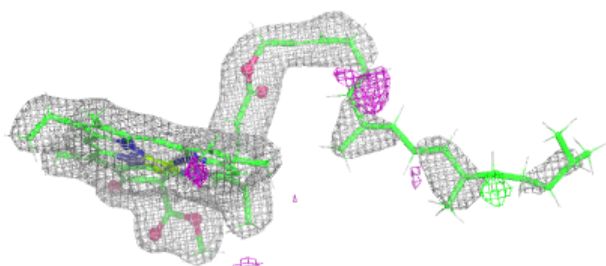
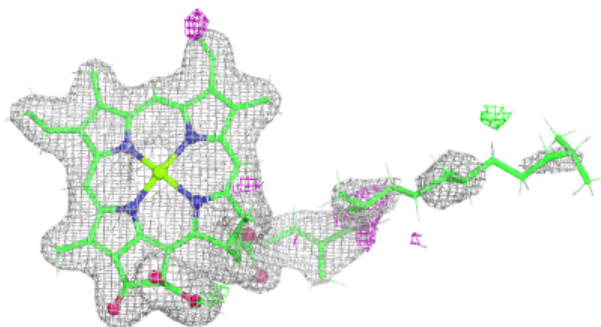
**Electron density around CLA B 609:**

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

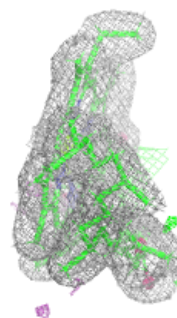
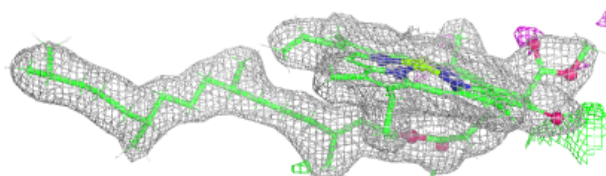
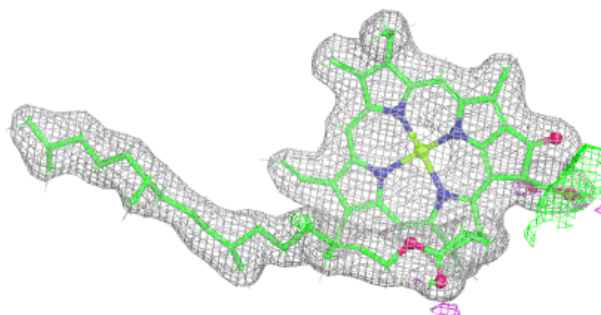


Electron density around CLA a 607:

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

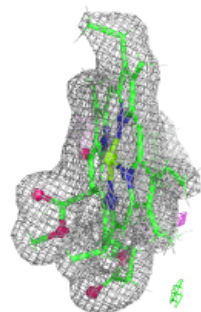
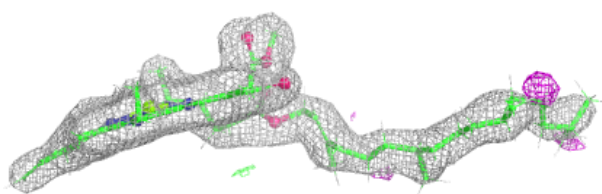
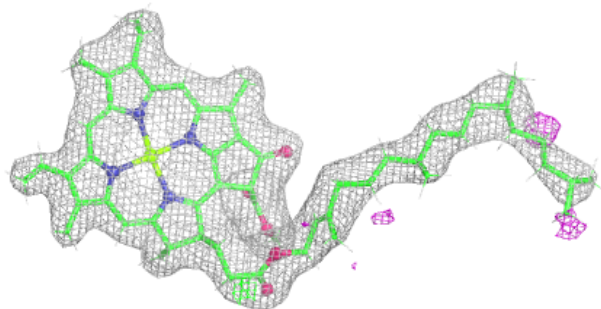
**Electron density around CLA C 501:**

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

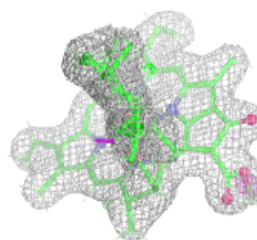
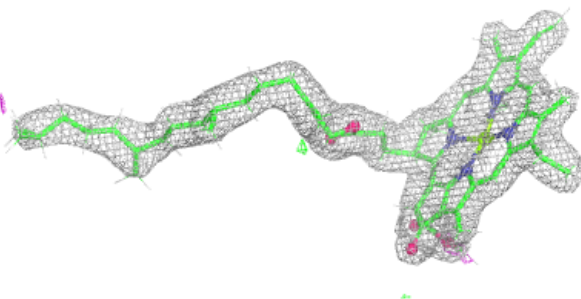
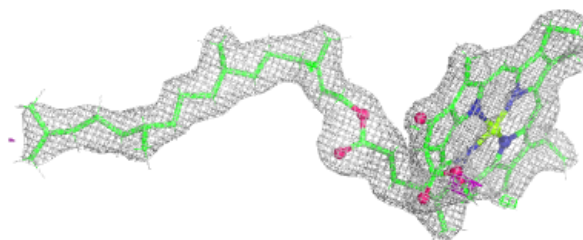


Electron density around CLA b 602:

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

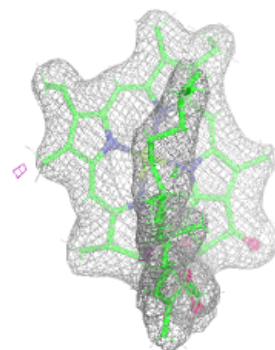
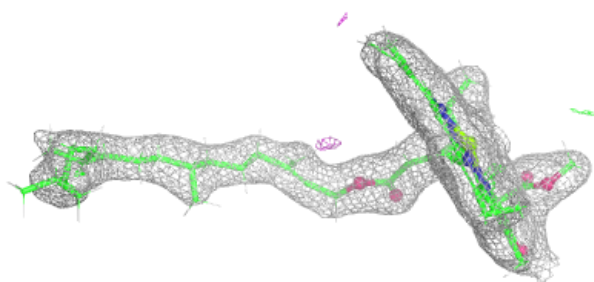
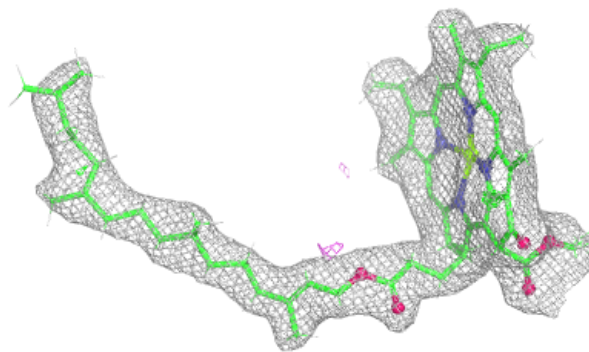
**Electron density around CLA C 502:**

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

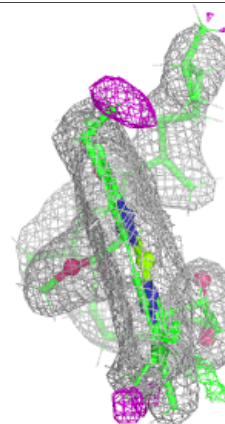
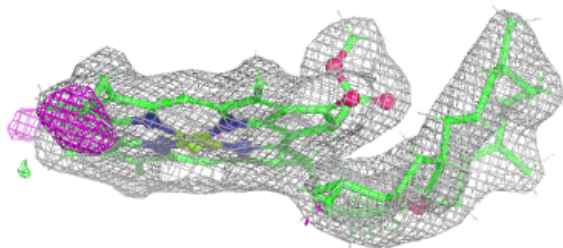
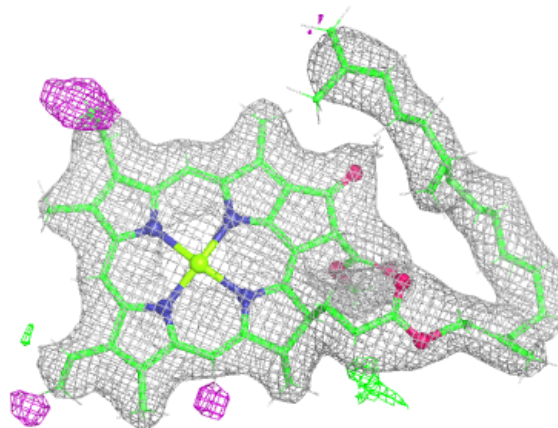


Electron density around CLA b 609:

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

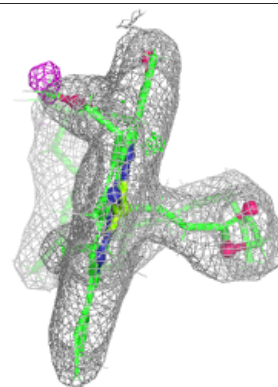
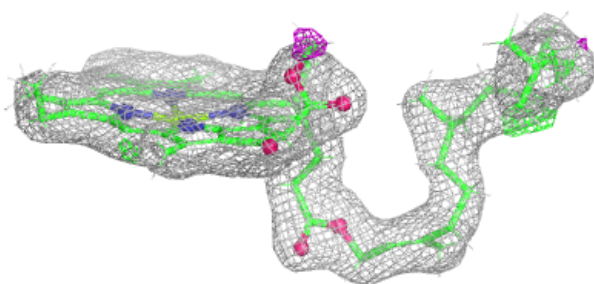
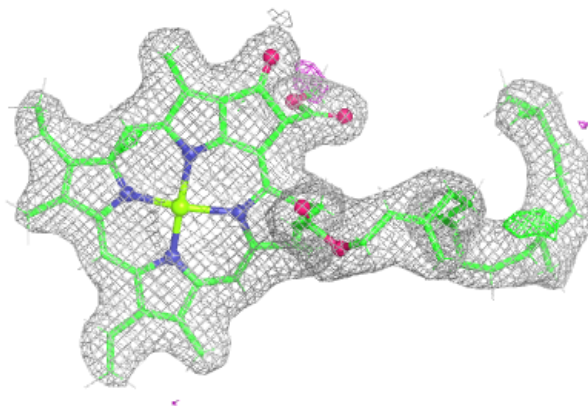
**Electron density around CLA b 610:**

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

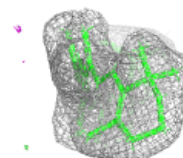
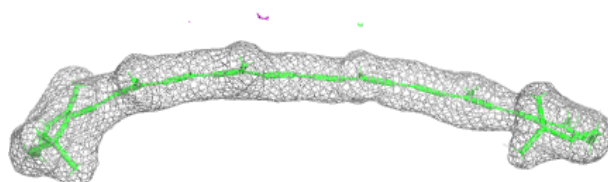
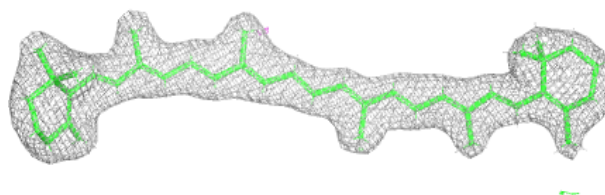


Electron density around CLA b 612:

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

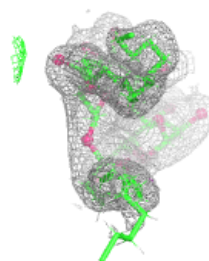
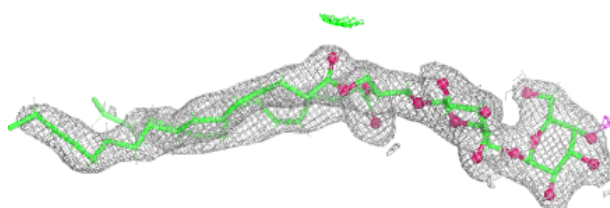
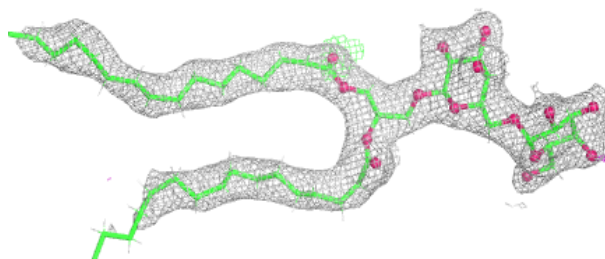
**Electron density around BCR T 101:**

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

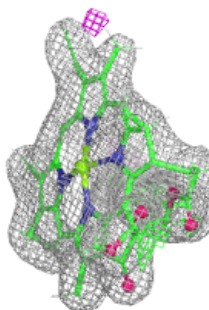
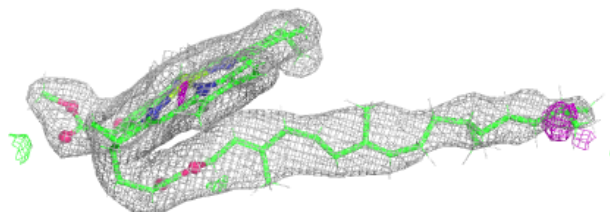
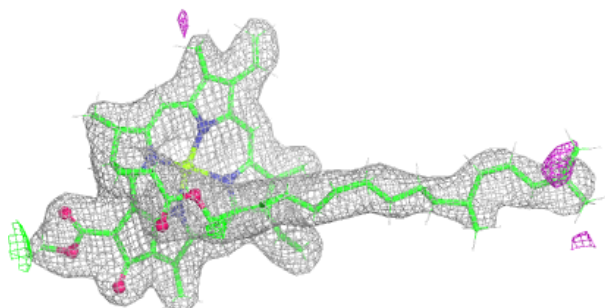


Electron density around DGD c 521:

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

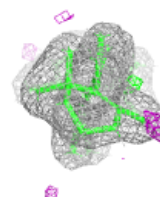
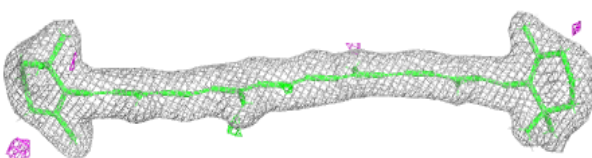
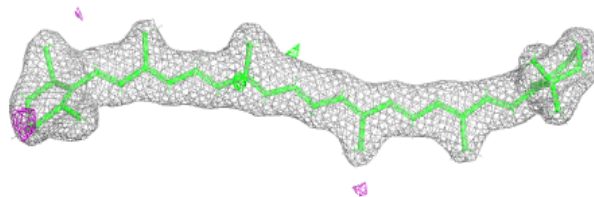
**Electron density around CLA b 614:**

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

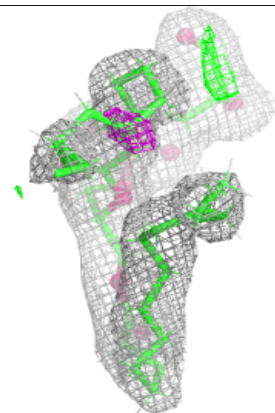
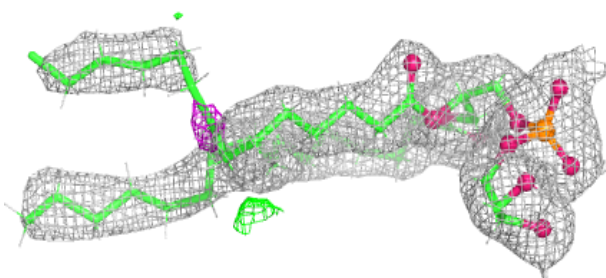
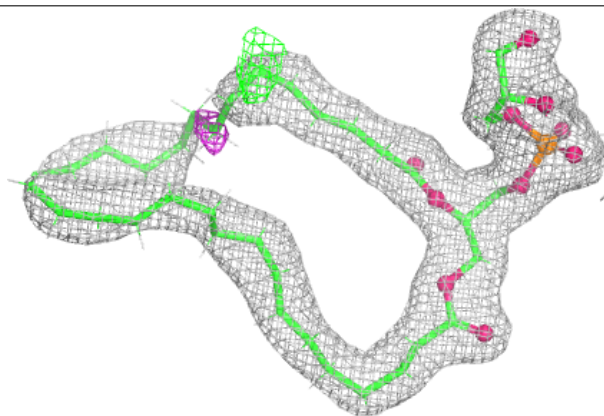


Electron density around BCR a 610:

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

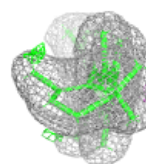
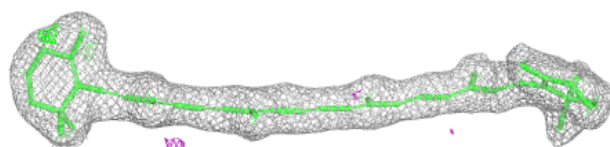
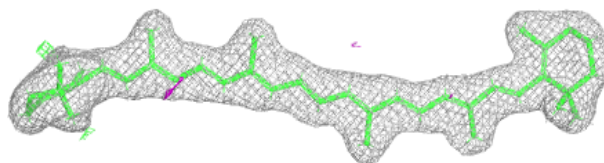
**Electron density around LHG D 410:**

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



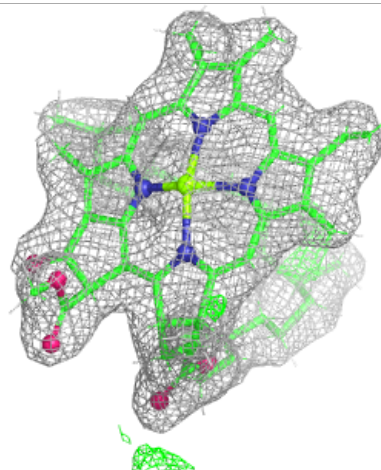
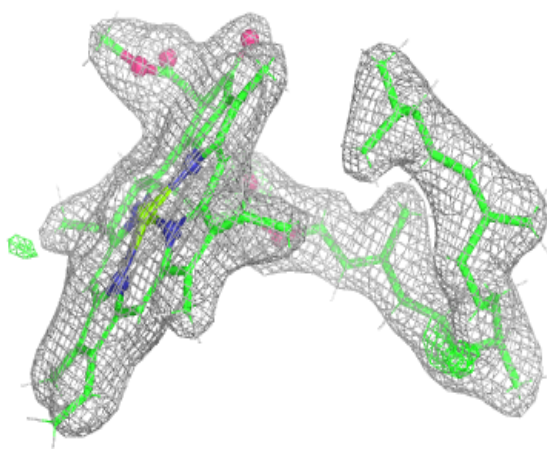
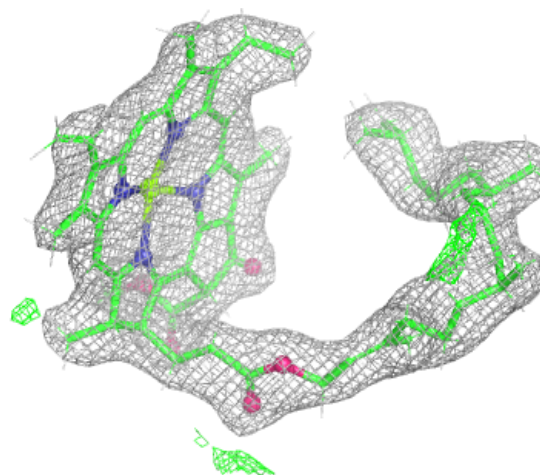
Electron density around BCR b 617:

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



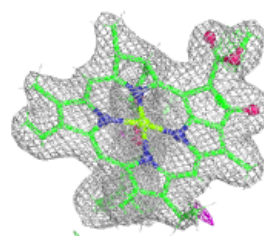
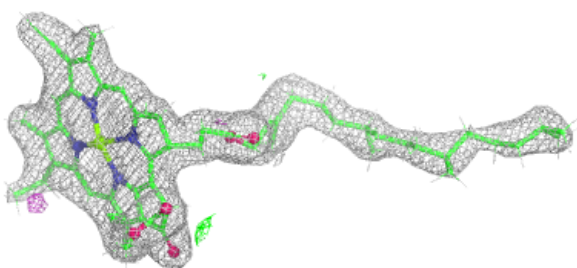
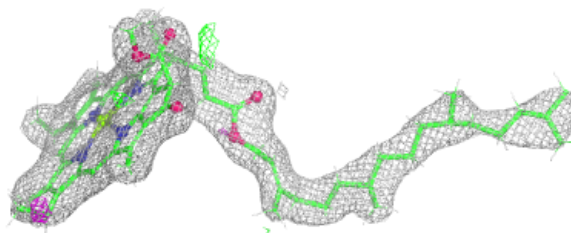
Electron density around CLA C 503:

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



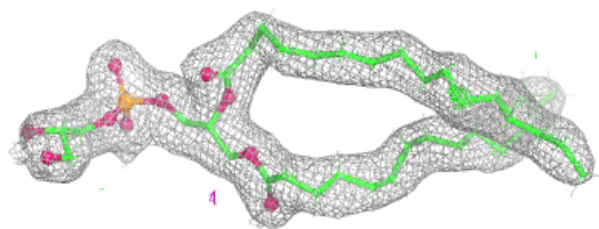
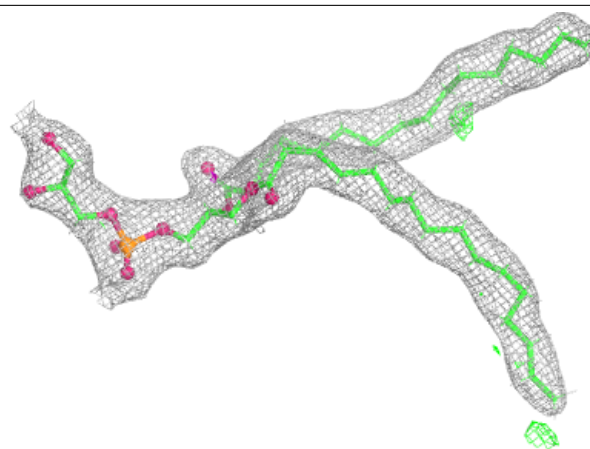
Electron density around CLA c 502:

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

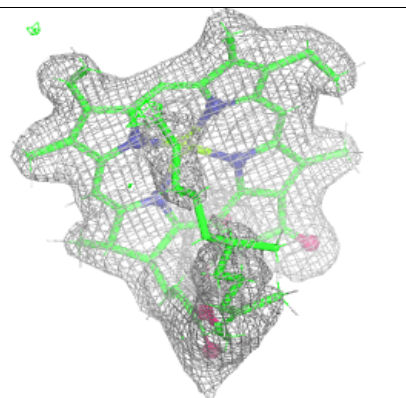
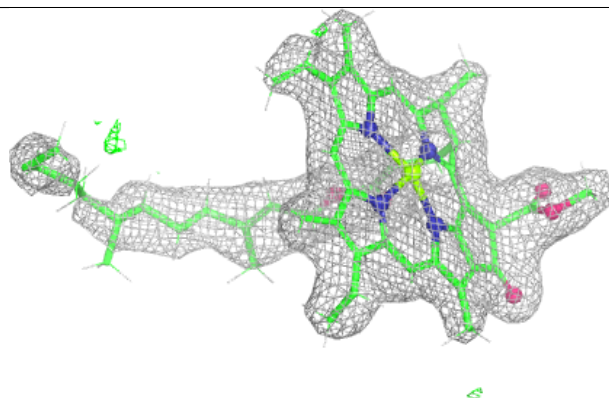
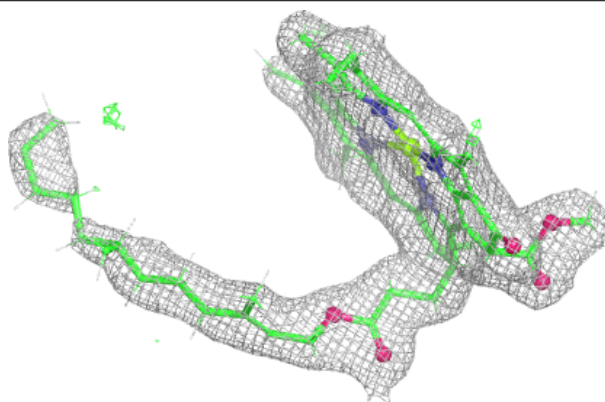


Electron density around LHG d 408:

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

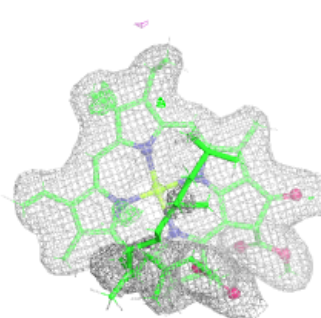
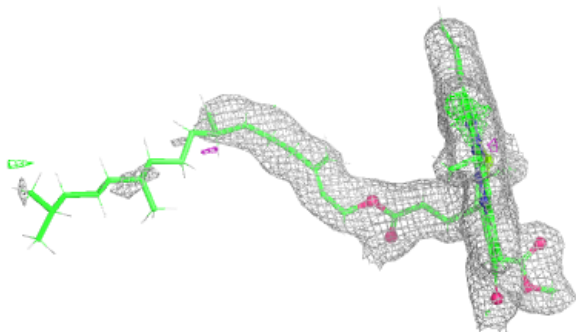
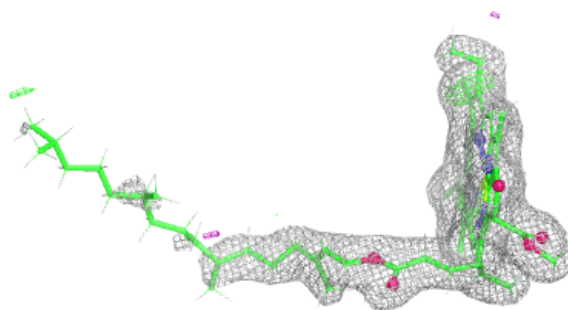
**Electron density around CLA C 504:**

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

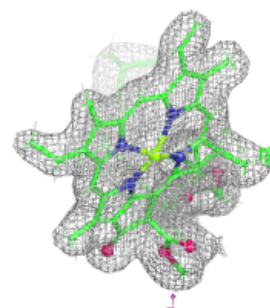
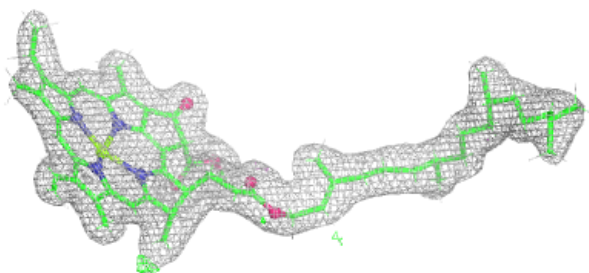
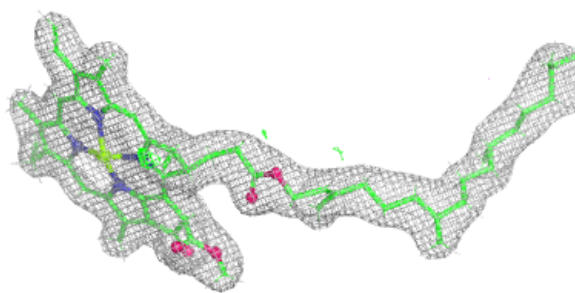


Electron density around CLA D 403:

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

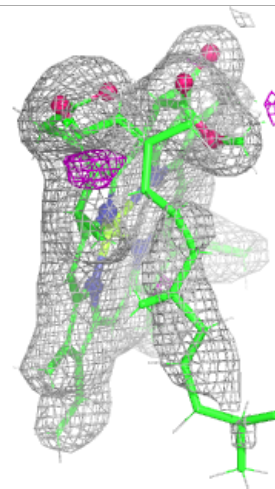
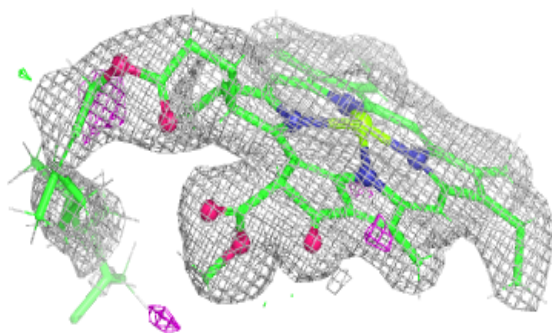
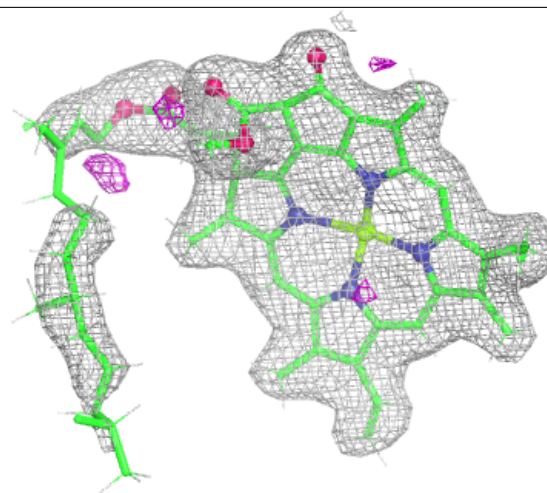
**Electron density around CLA a 606:**

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



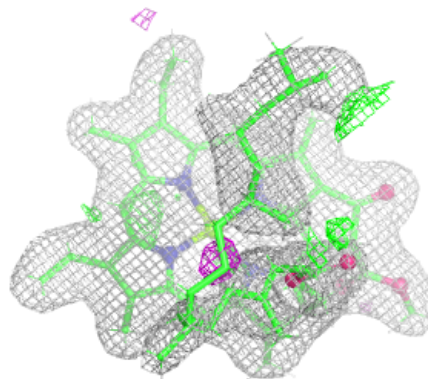
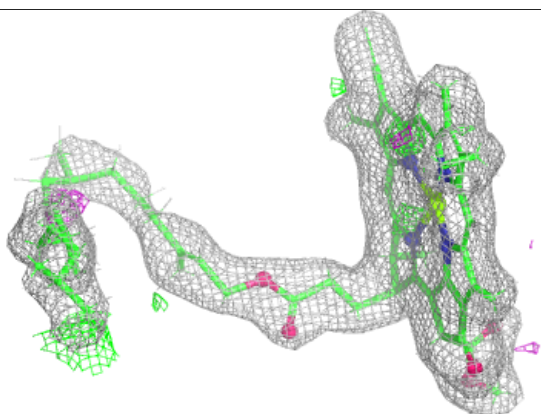
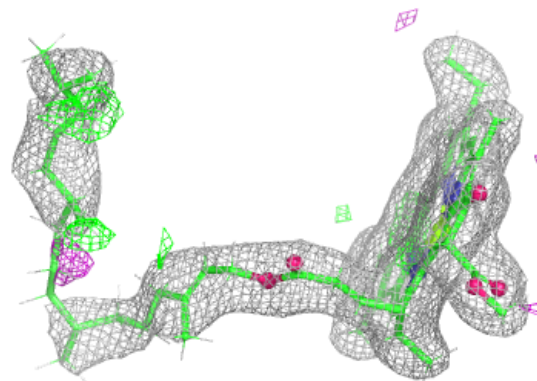
Electron density around CLA B 616:

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

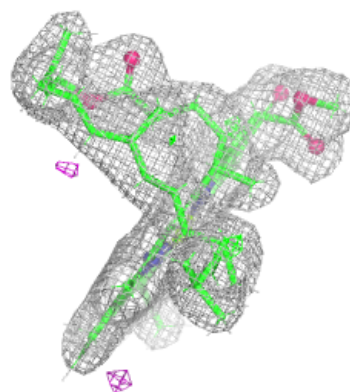
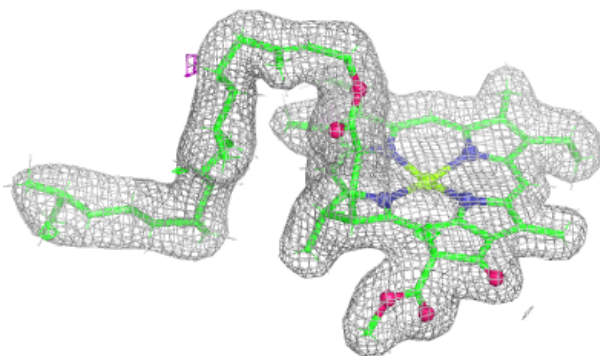
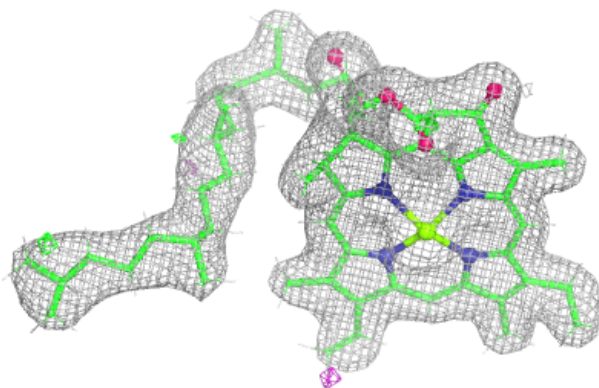


Electron density around CLA a 609:

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

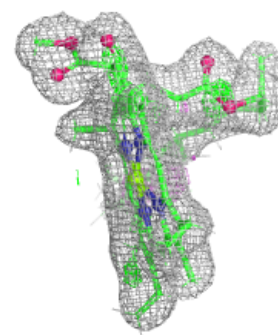
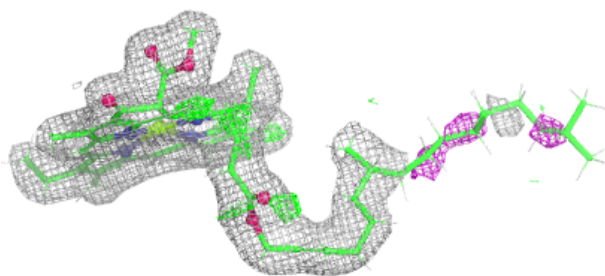
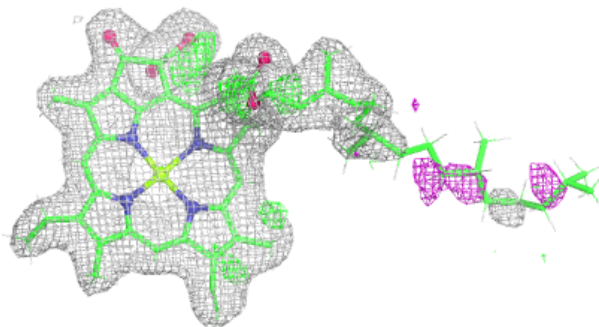
**Electron density around CLA a 612:**

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

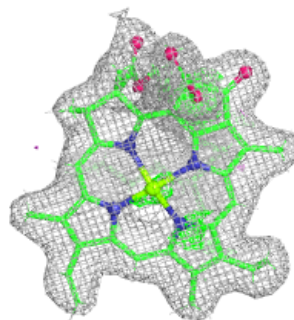
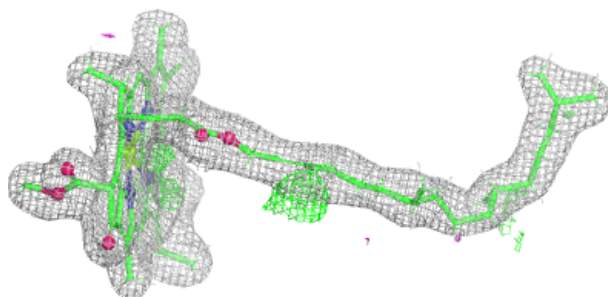
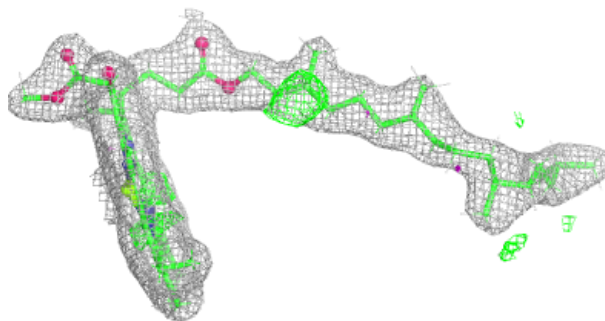


Electron density around CLA A 607:

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

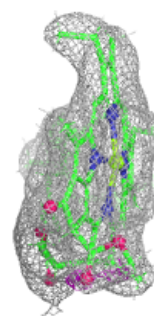
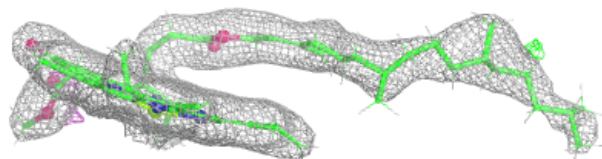
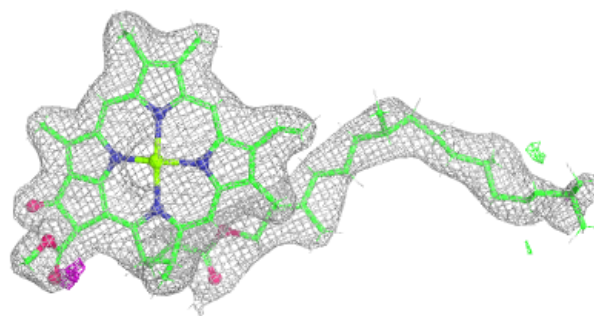
**Electron density around CLA B 605:**

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

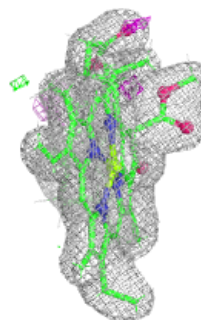
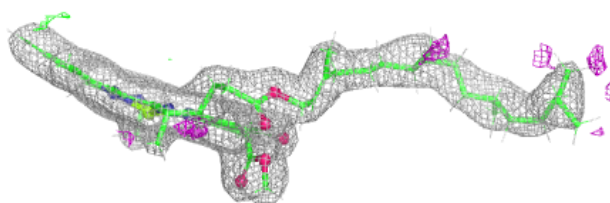
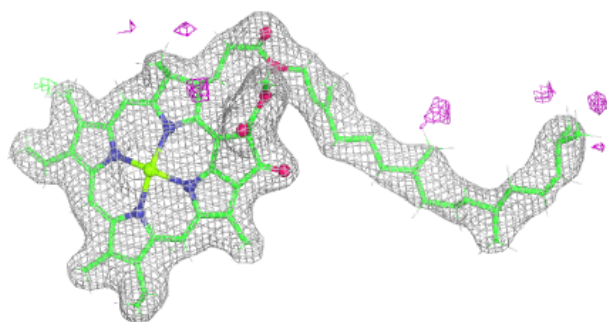


Electron density around CLA b 603:

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

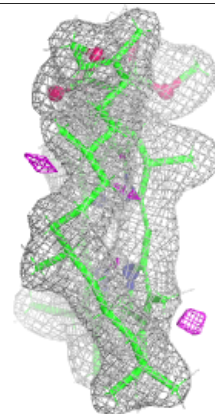
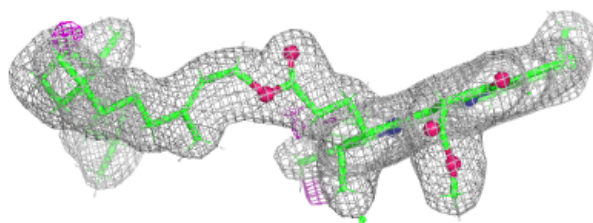
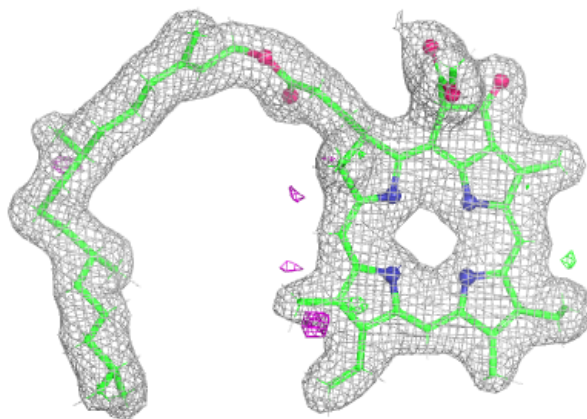
**Electron density around CLA B 602:**

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

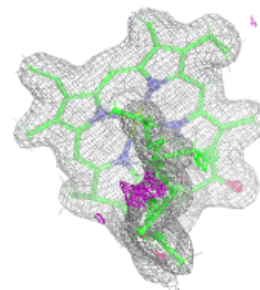
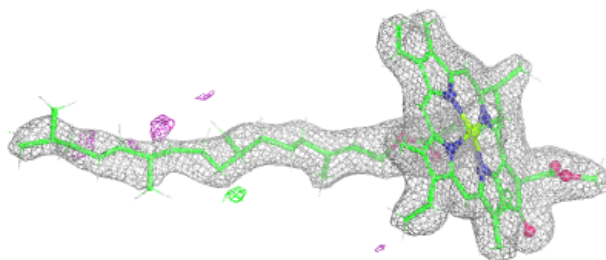
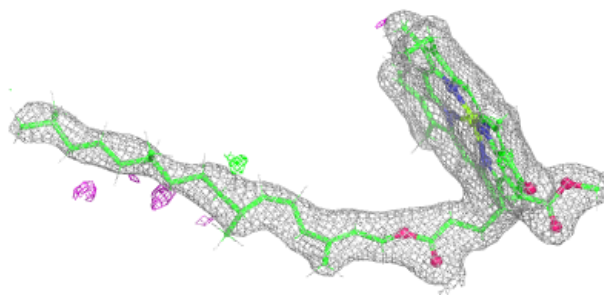


Electron density around PHO D 401:

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

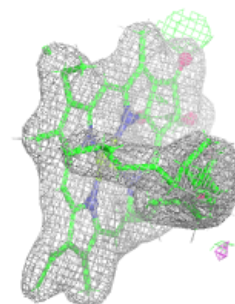
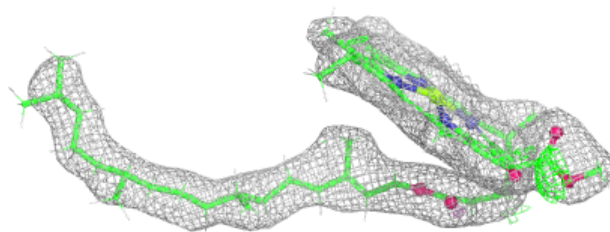
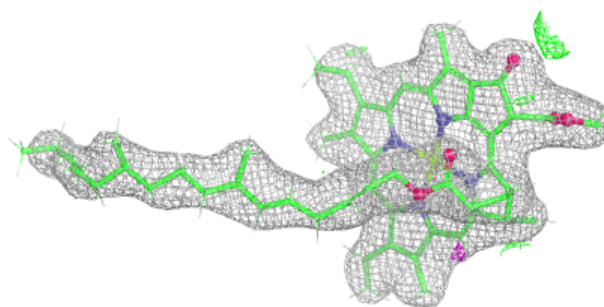
**Electron density around CLA b 607:**

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

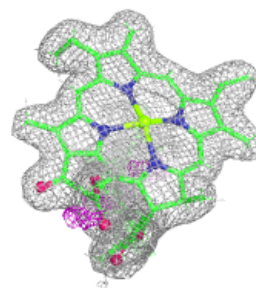
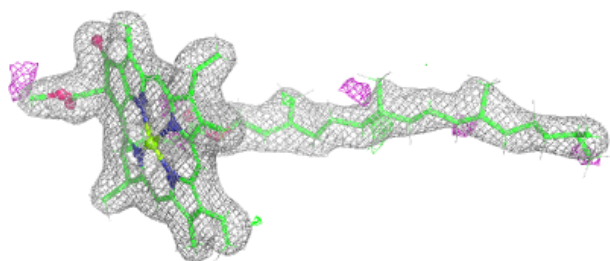
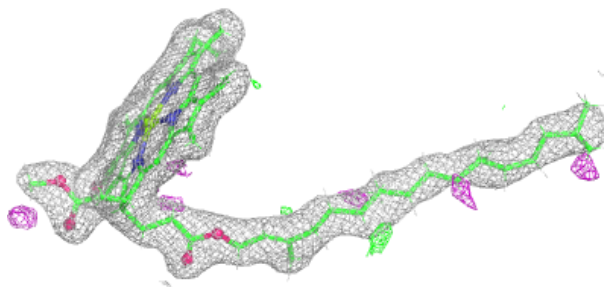


Electron density around CLA b 608:

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

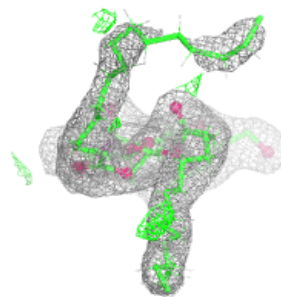
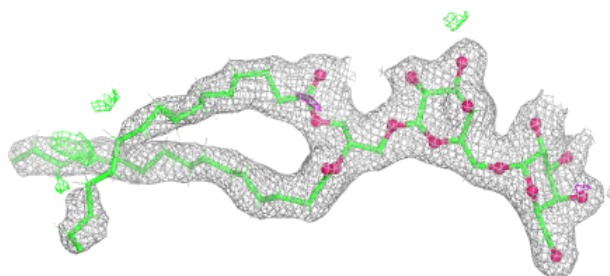
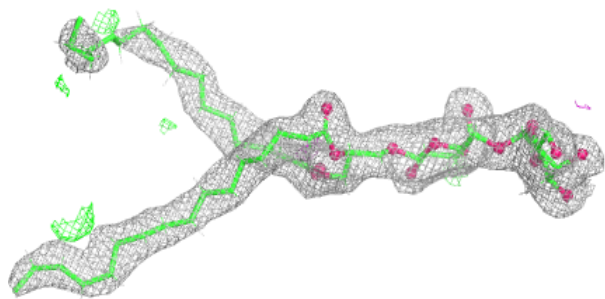
**Electron density around CLA B 607:**

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

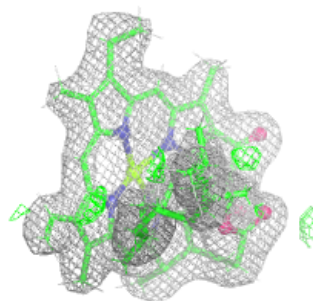
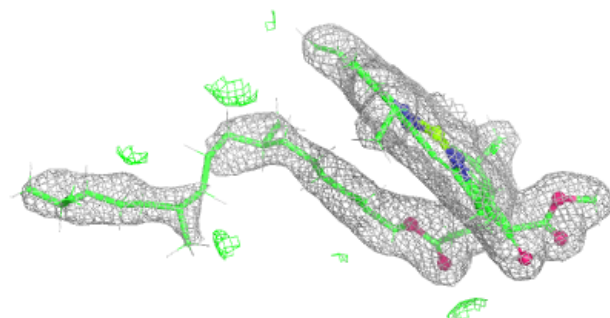
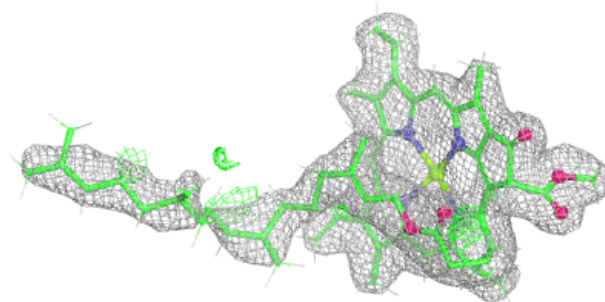


Electron density around DGD C 520:

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

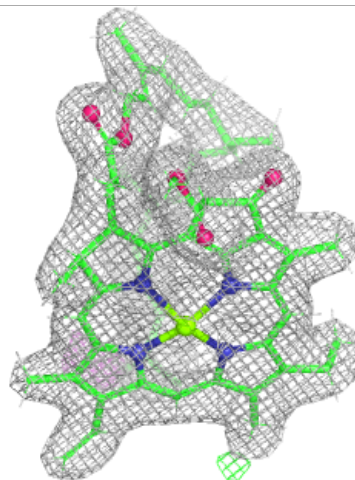
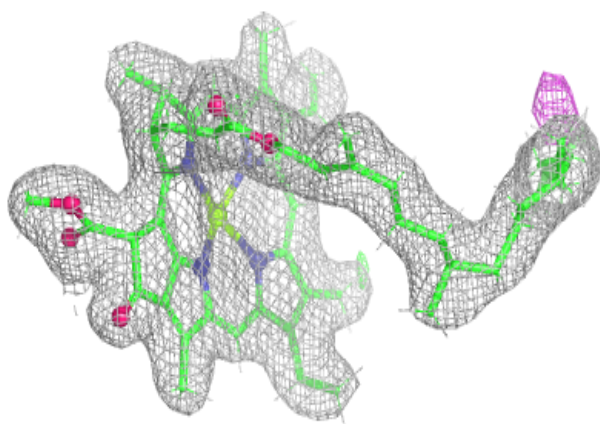
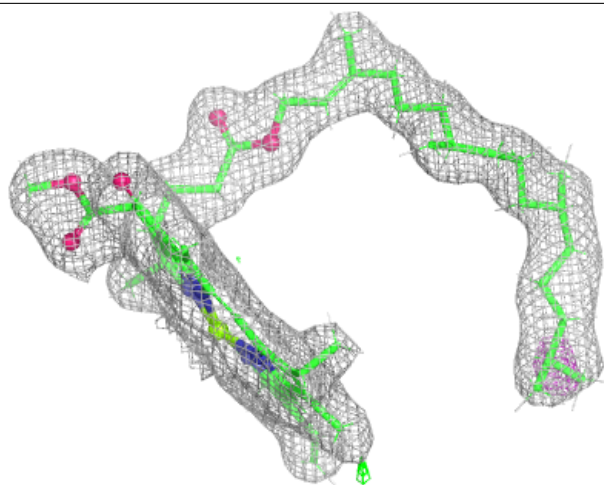
**Electron density around CLA C 505:**

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



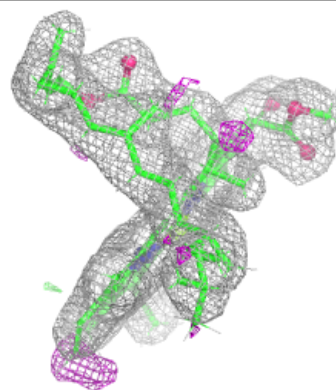
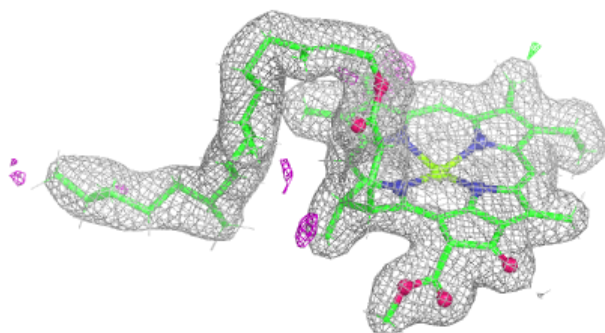
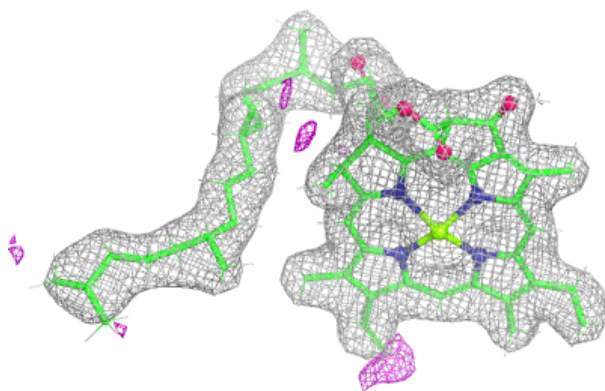
Electron density around CLA b 611:

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

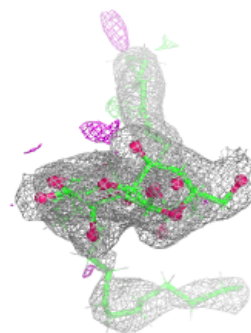
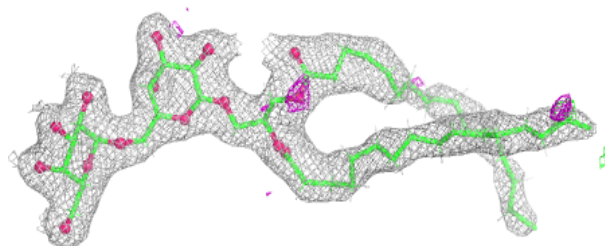
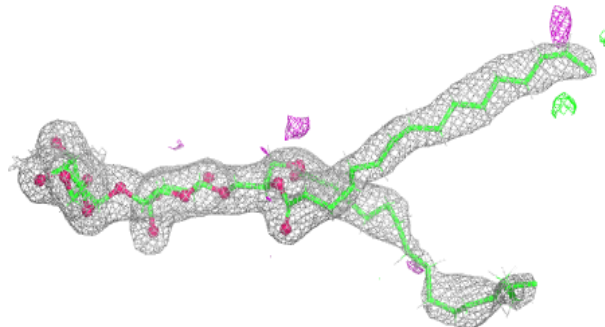


Electron density around CLA A 613:

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

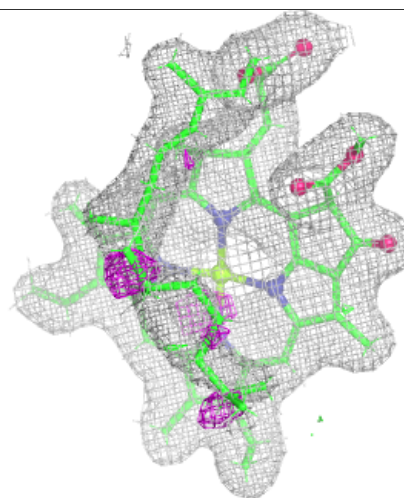
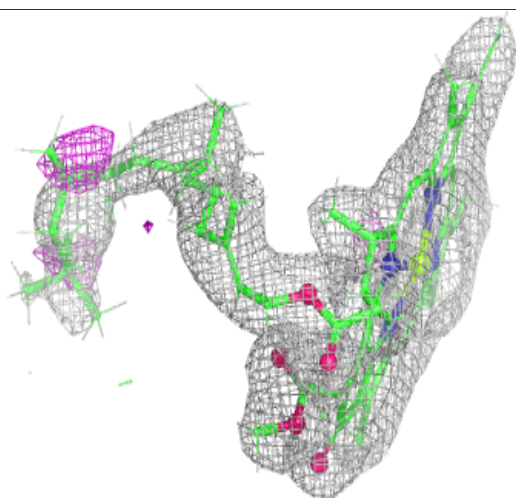
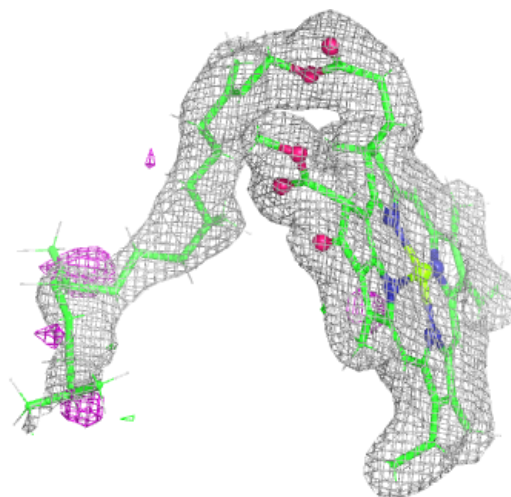
**Electron density around DGD c 519:**

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



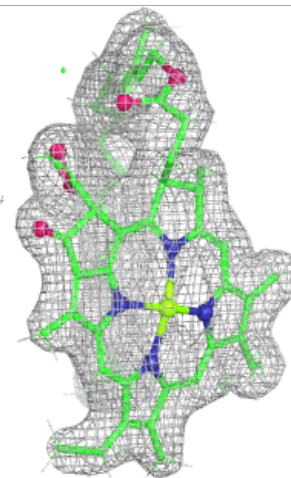
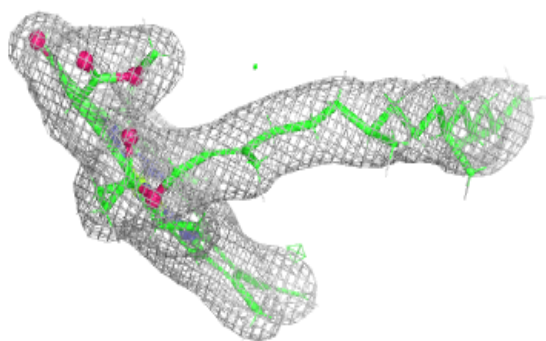
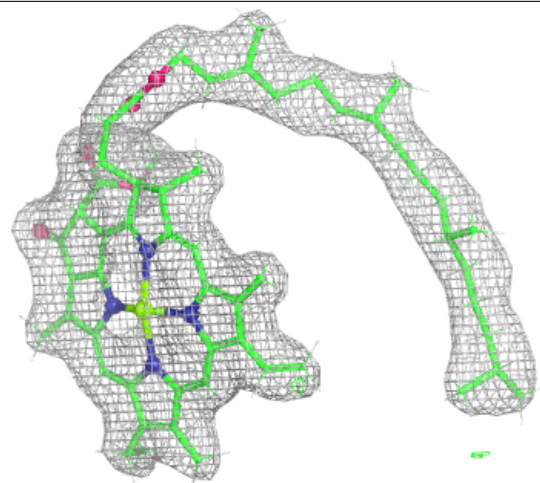
Electron density around CLA b 613:

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



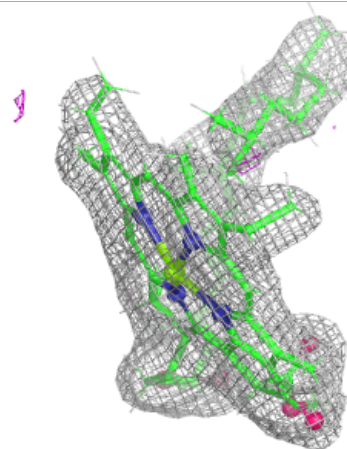
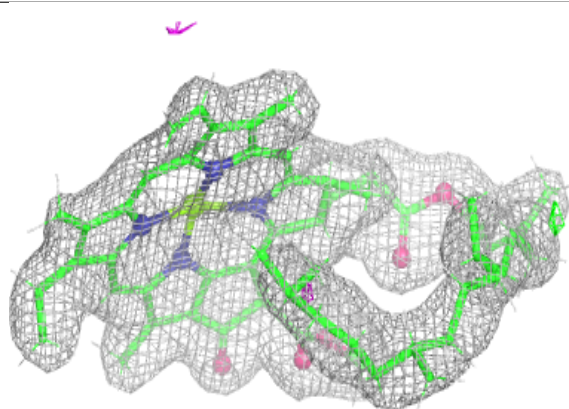
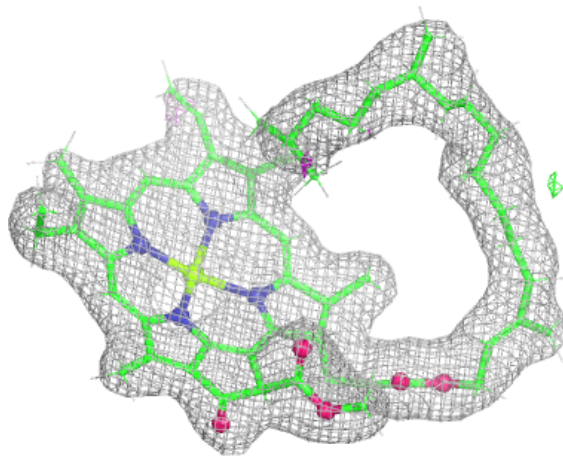
Electron density around CLA C 507:

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



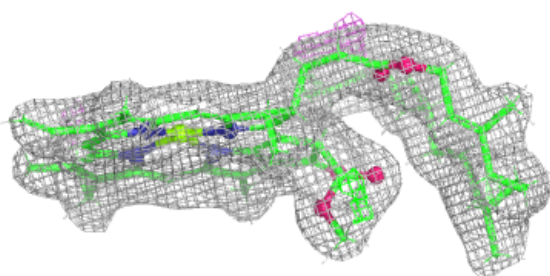
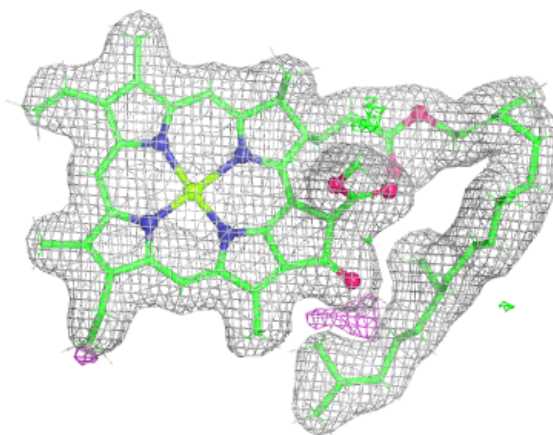
Electron density around CLA b 615:

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

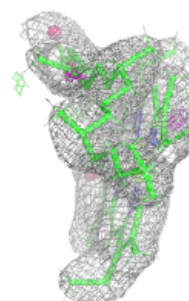
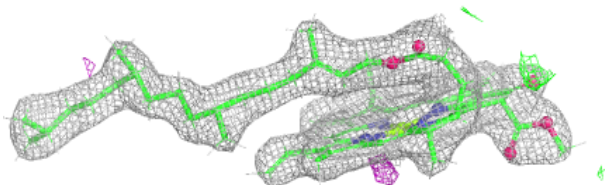
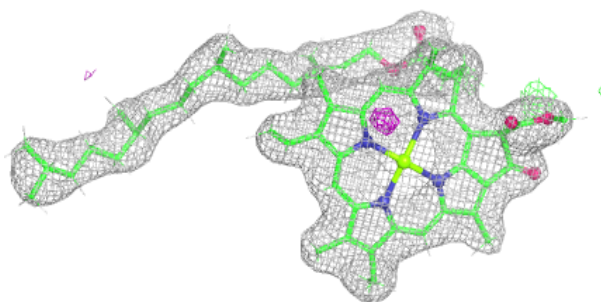


Electron density around CLA B 610:

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

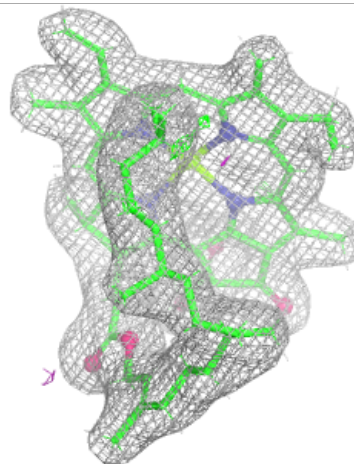
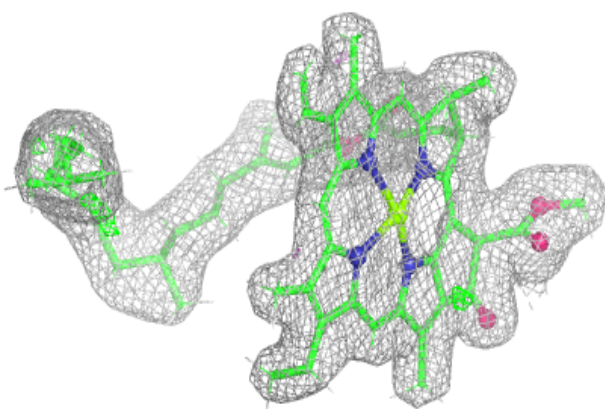
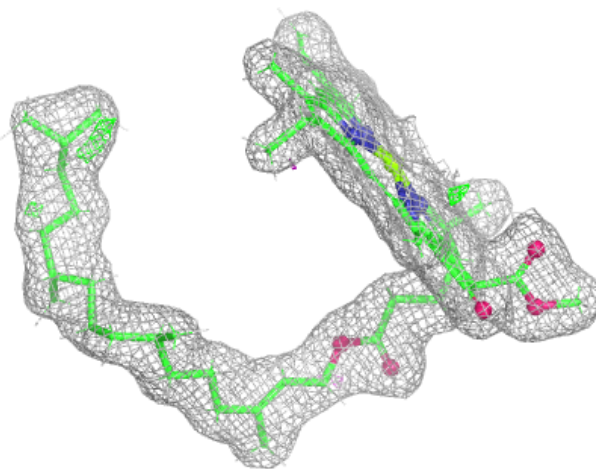
**Electron density around CLA c 501:**

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



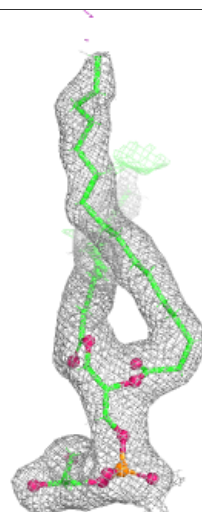
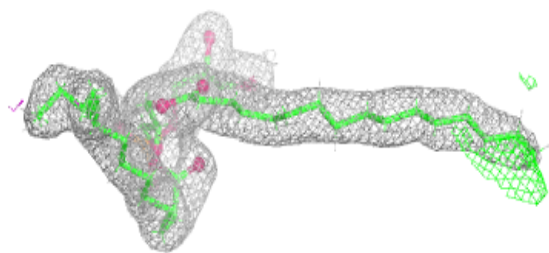
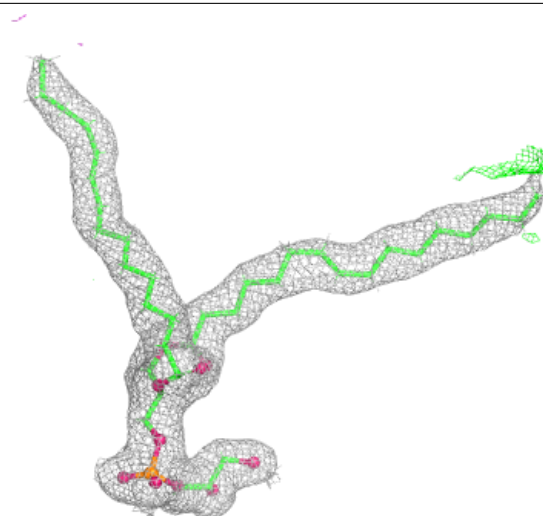
Electron density around CLA B 611:

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



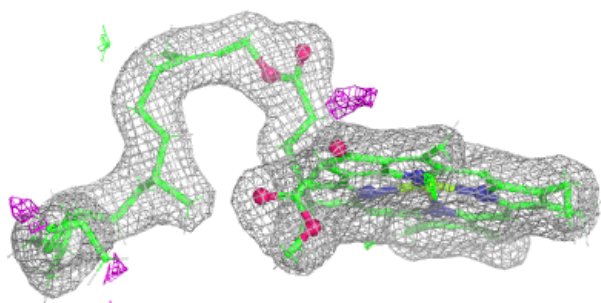
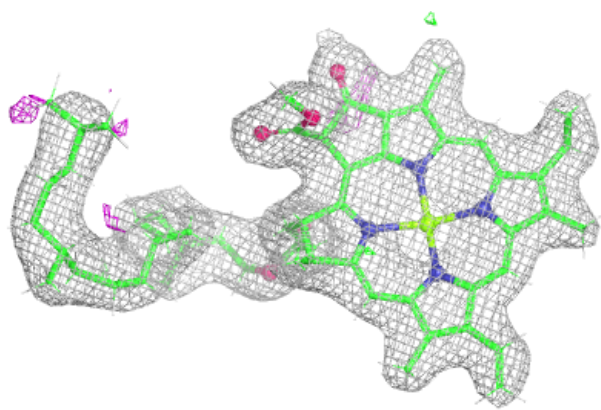
Electron density around LHG L 101:

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



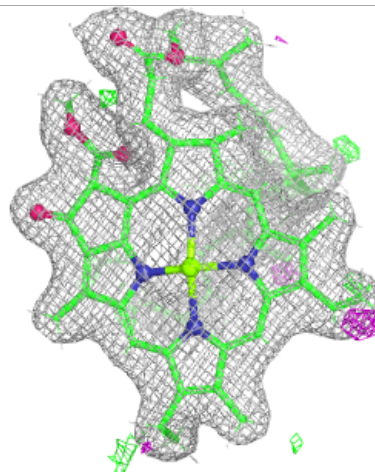
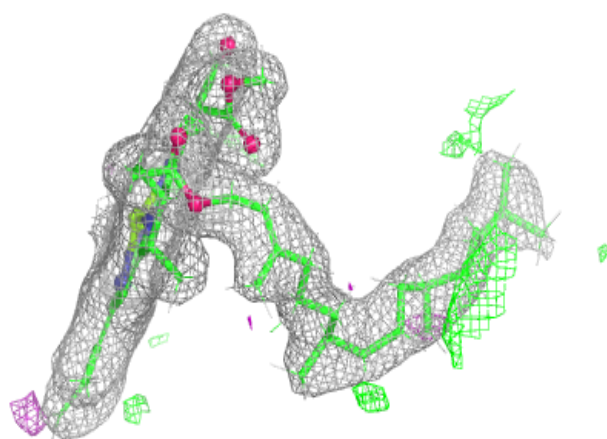
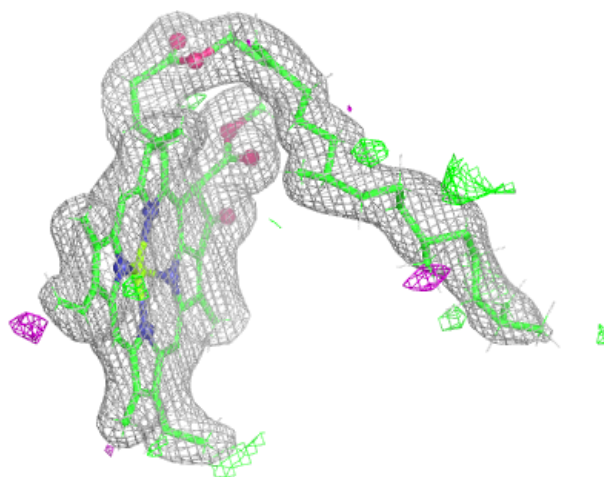
Electron density around CLA B 612:

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



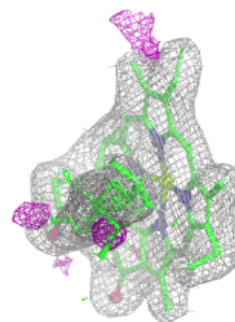
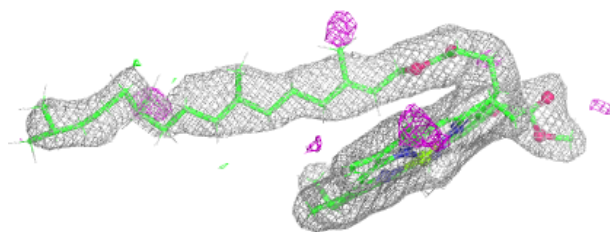
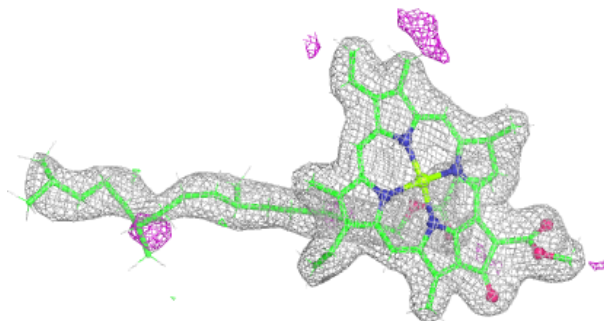
Electron density around CLA B 613:

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



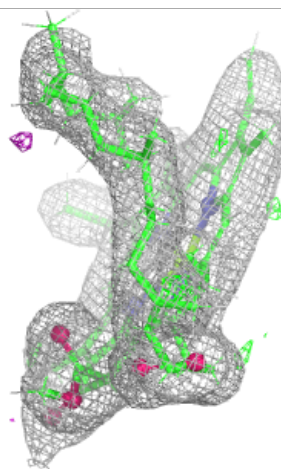
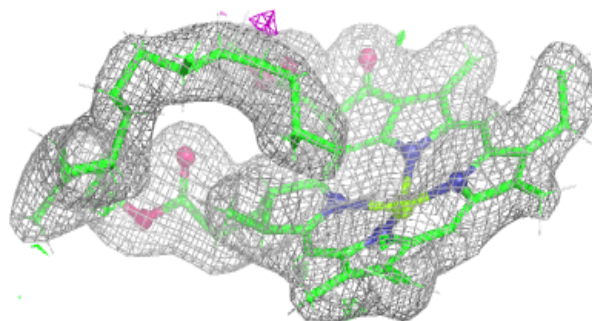
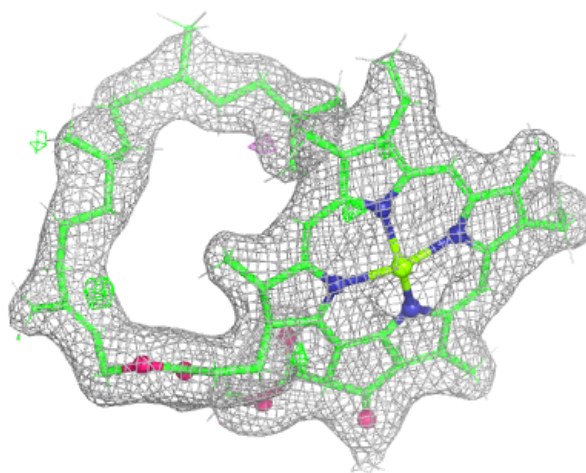
Electron density around CLA B 614:

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



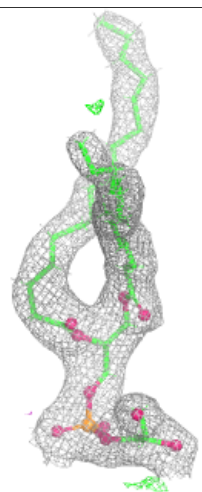
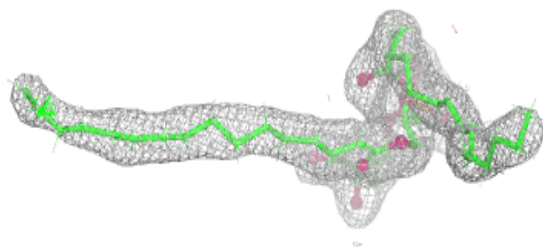
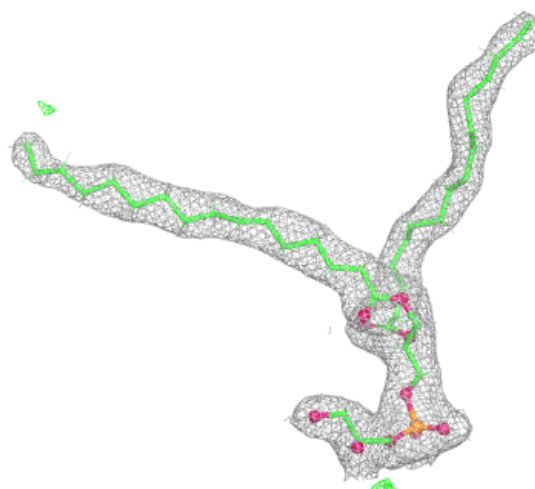
Electron density around CLA B 615:

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



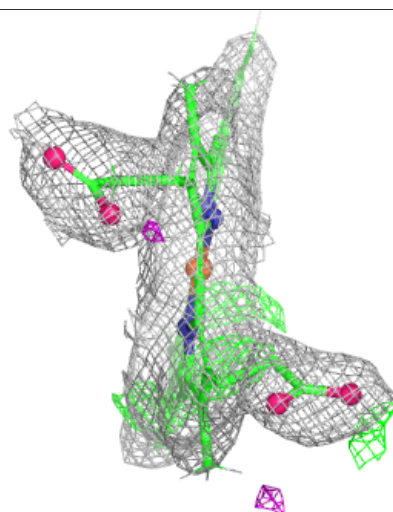
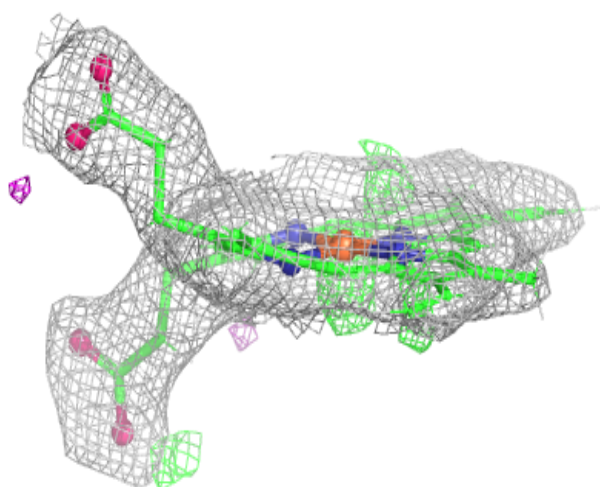
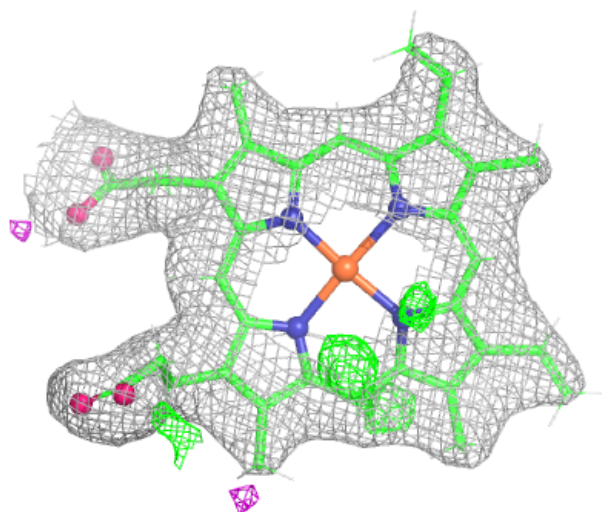
Electron density around LHG 1 101:

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



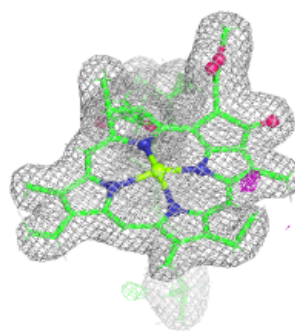
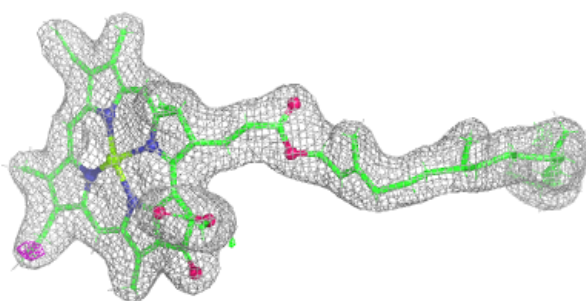
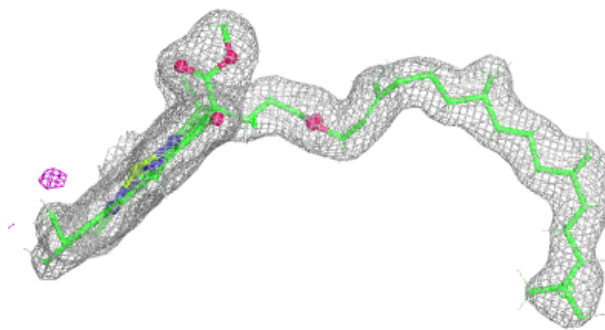
Electron density around HEM F 101:

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

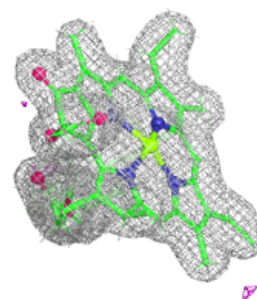
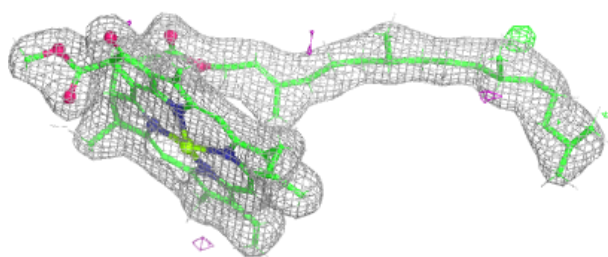
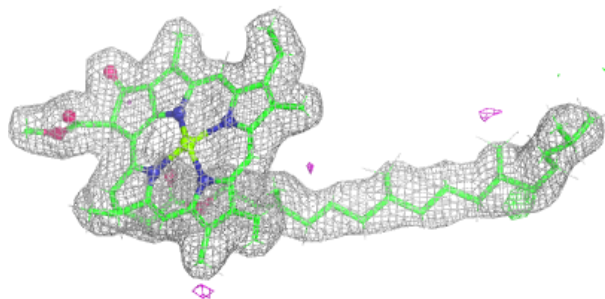


Electron density around CLA D 402:

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

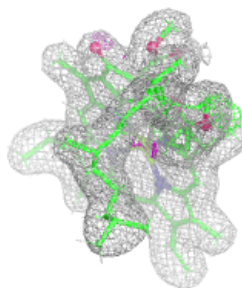
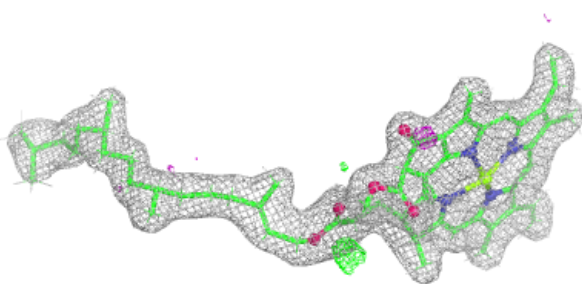
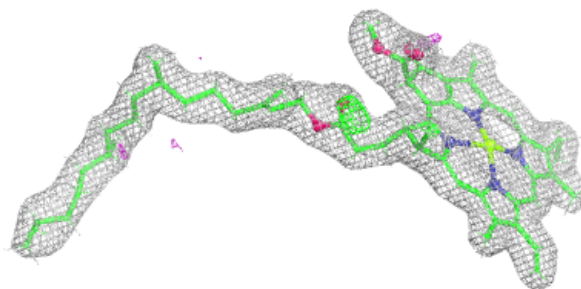
**Electron density around CLA B 608:**

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

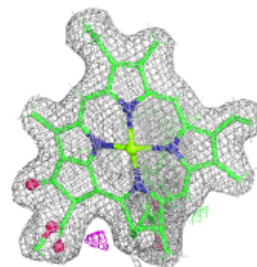
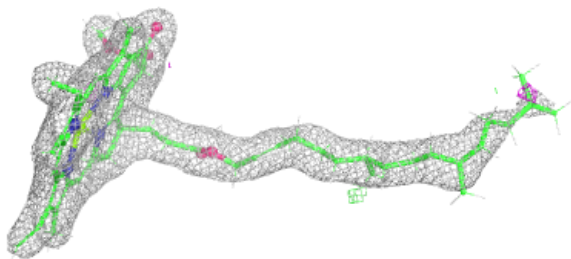
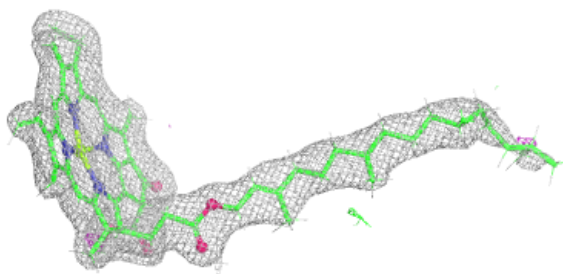


Electron density around CLA A 606:

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

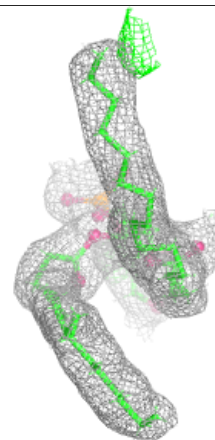
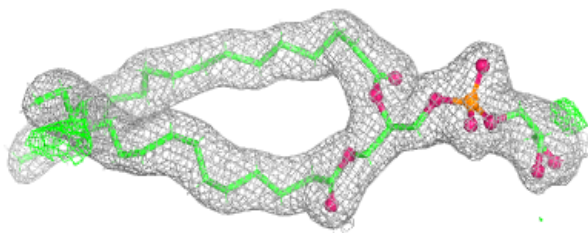
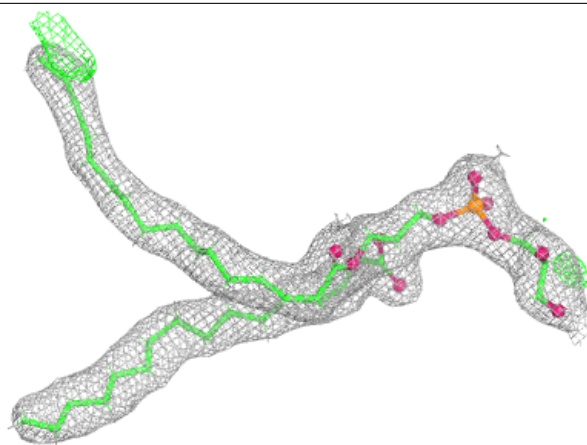
**Electron density around CLA b 604:**

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



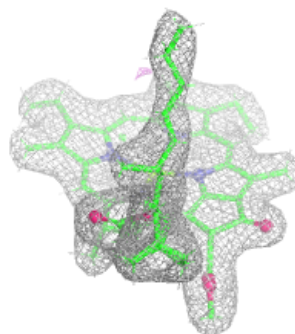
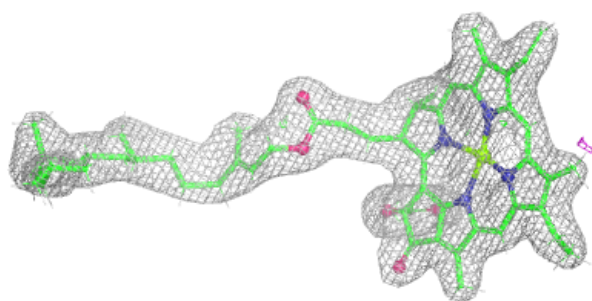
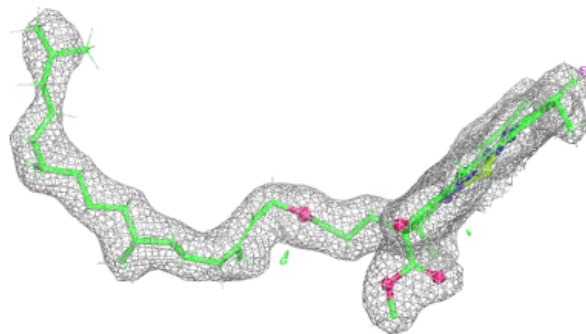
Electron density around LHG D 409:

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

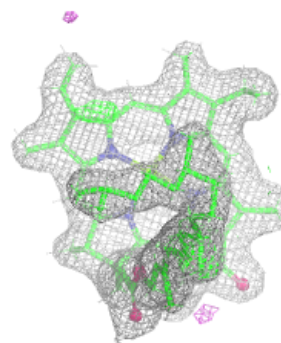
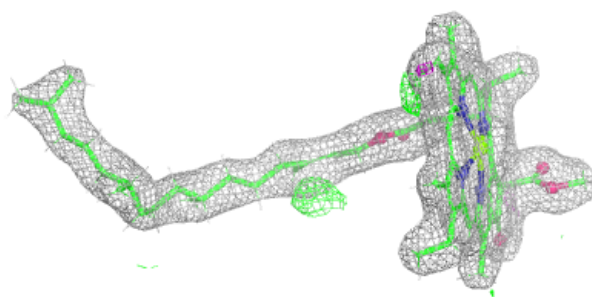
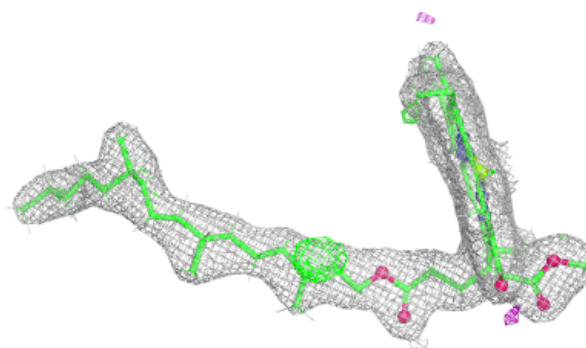


Electron density around CLA d 402:

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

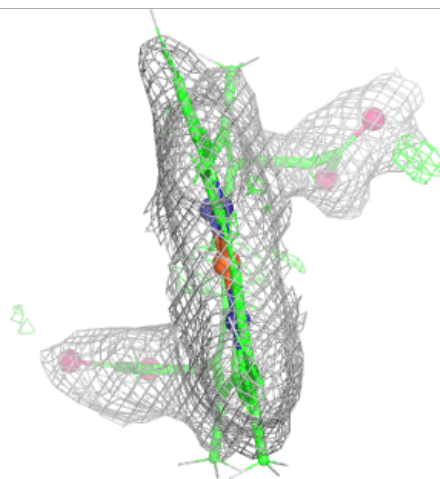
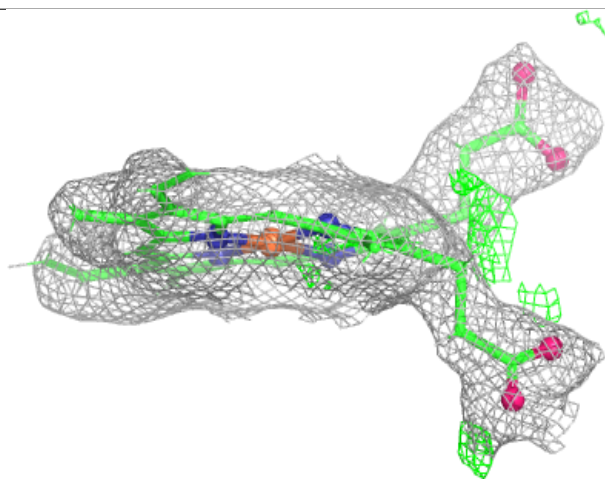
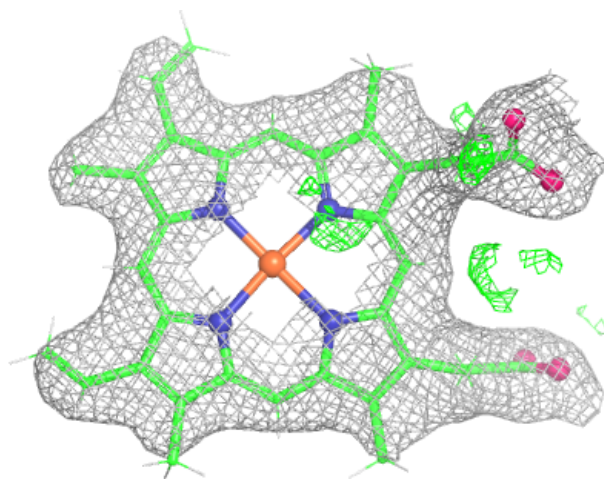
**Electron density around CLA b 605:**

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



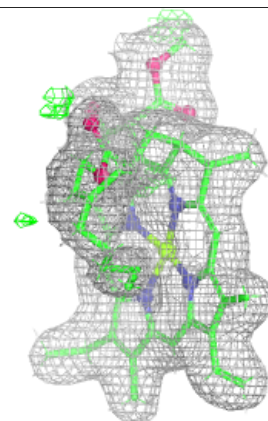
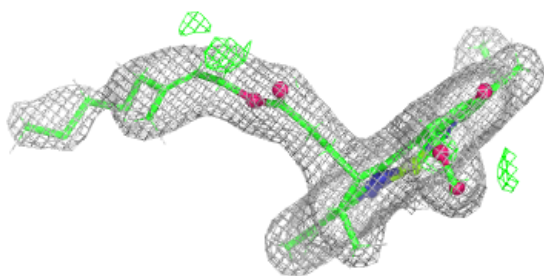
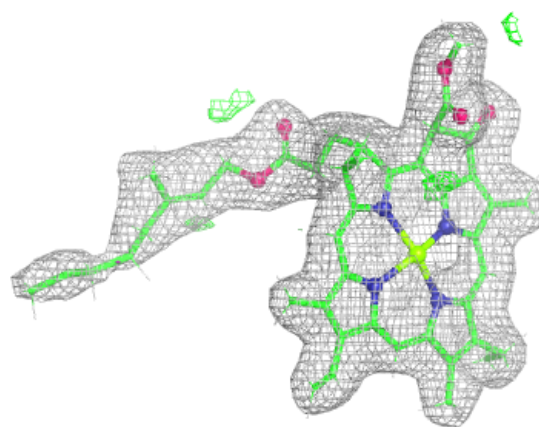
Electron density around HEM e 102:

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



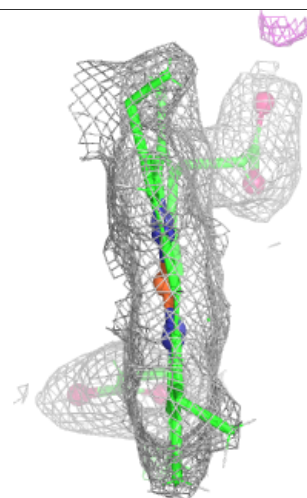
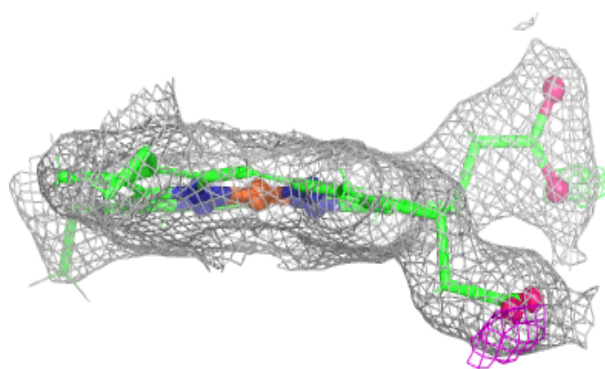
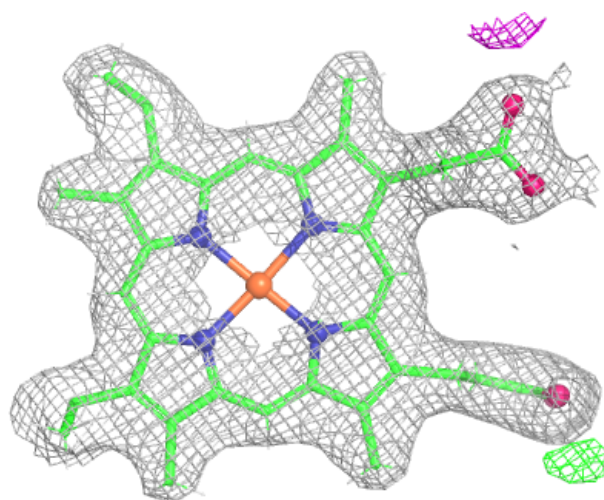
Electron density around CLA A 609:

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



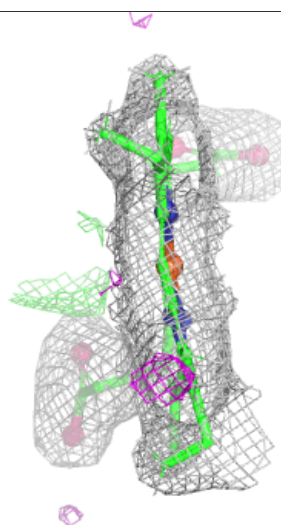
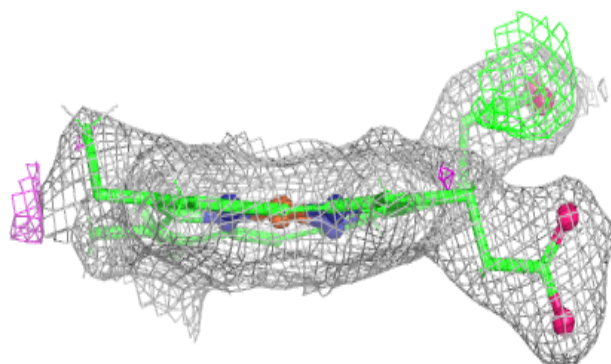
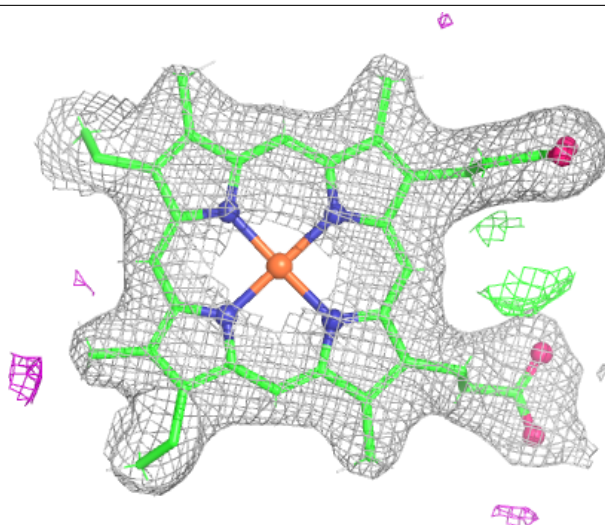
Electron density around HEC V 201:

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



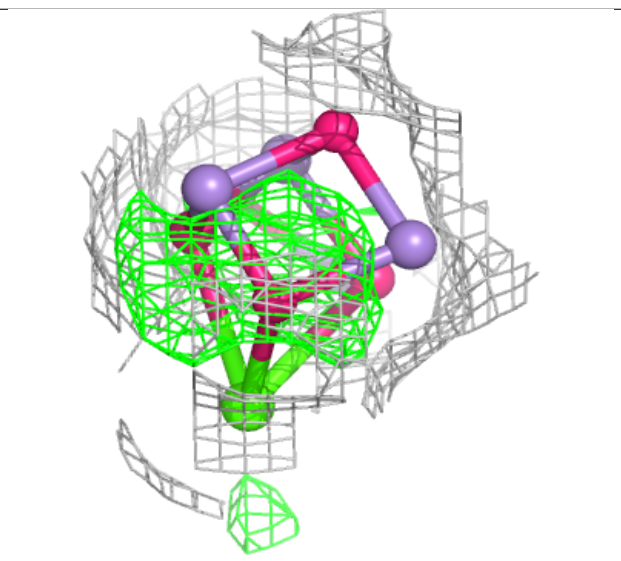
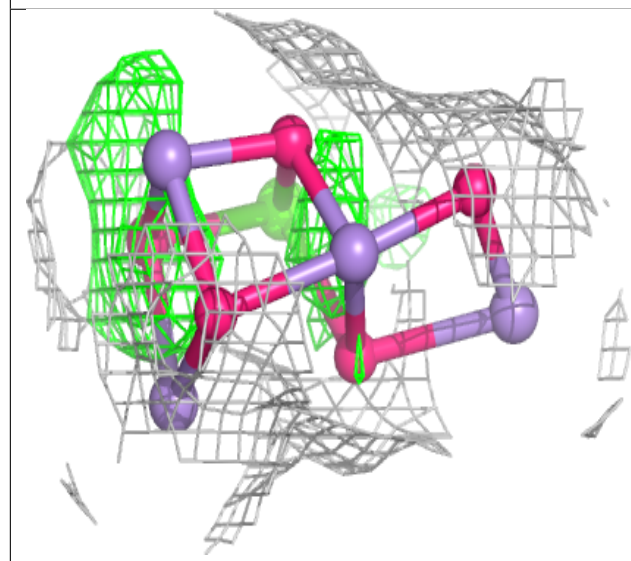
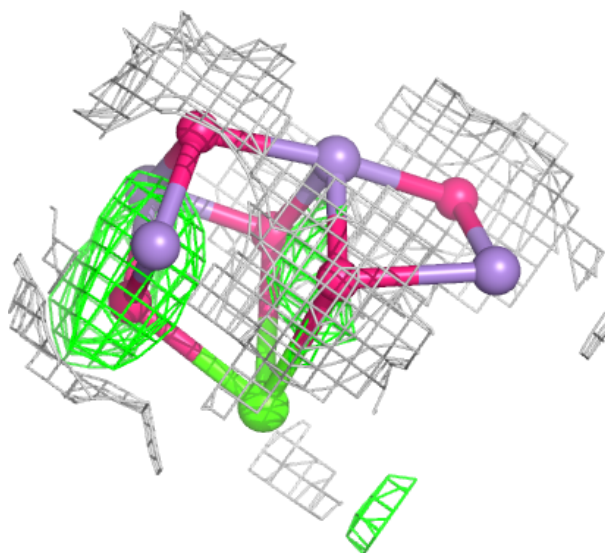
Electron density around HEC v 201:

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



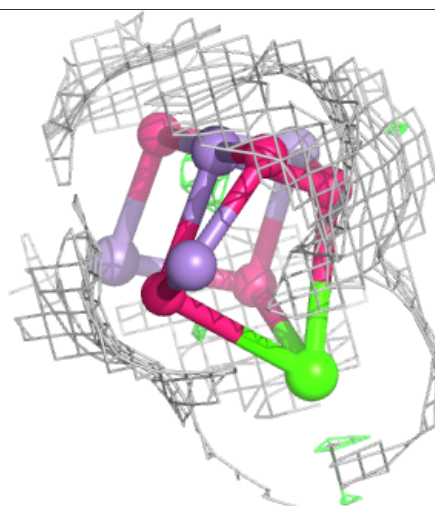
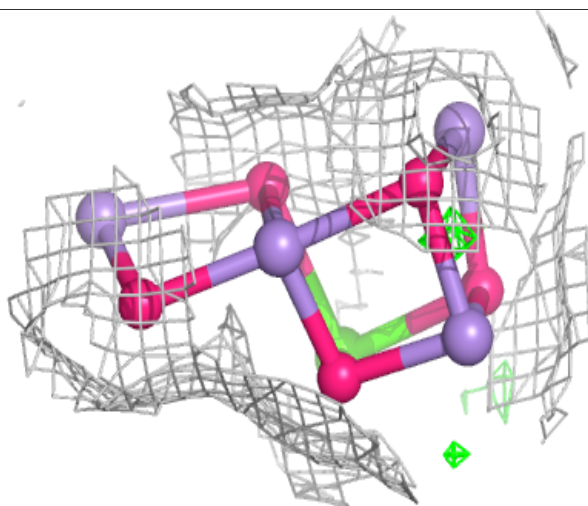
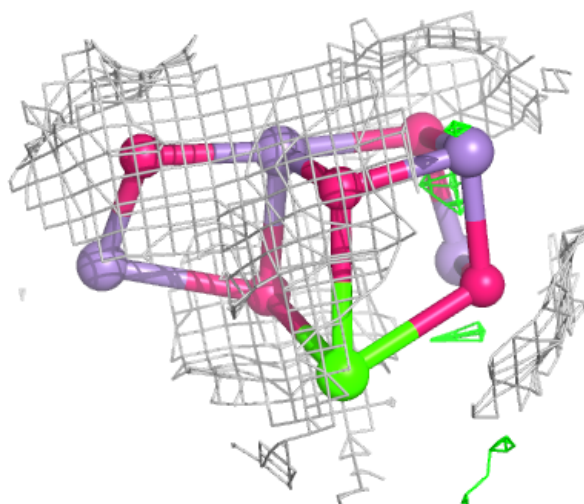
Electron density around OEX A 601:

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



Electron density around OEX a 601:

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



6.5 Other polymers ⓘ

There are no such residues in this entry.