



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 8, 2026 – 03:54 PM UTC

PDB ID : 6W1P / pdb_00006w1p
Title : RT XFEL structure of the one-flash state of Photosystem II (1F, S2-rich) at 2.26 Angstrom resolution
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Deposited on : 2020-03-04
Resolution : 2.26 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)

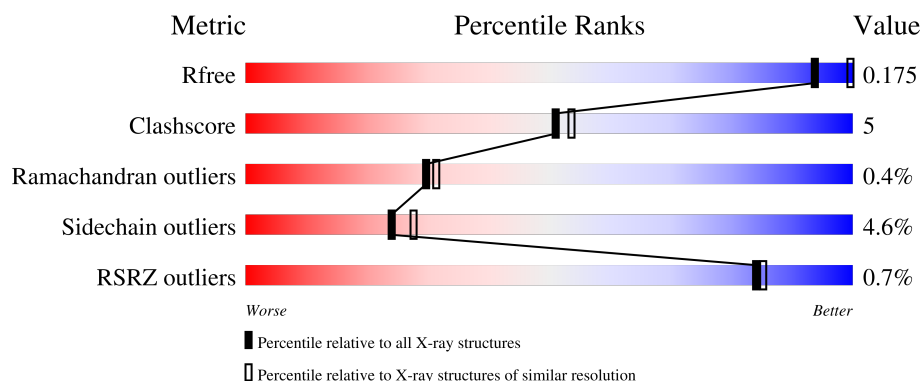
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION



The reported resolution of this entry is 2.26 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	1898 (2.26-2.26)
Clashscore	190562	2005 (2.26-2.26)
Ramachandran outliers	187476	1965 (2.26-2.26)
Sidechain outliers	187428	1966 (2.26-2.26)
RSRZ outliers	180081	1898 (2.26-2.26)




















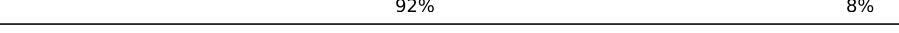





The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. 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	334	 89% 11% .
1	a	334	 89% 10% .

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CCP4 : 9.0.010 (Gargrove)
 Density-Fitness : 1.0.12
 Ideal geometry (proteins) : Engh & Huber (2001)
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.49

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Mol	Chain	Length	Quality of chain
2	B	506	 88% 11% .
2	b	506	 88% 11% .
3	C	461	 86% 9% . .
3	c	461	 85% 12% . .
4	D	352	 88% 8% .
4	d	352	 83% 12% . .
5	E	84	 86% 11% . .
5	e	84	 69% 27% . .
6	F	45	 64% 11% 24%
6	f	45	 56% 13% 7% 24%
7	H	66	 83% 15% .
7	h	66	 80% 15% 5%
8	I	38	 74% 21% 5%
8	i	38	 82% 13% 5%
9	J	40	 80% 10% 10%
9	j	40	 72% 18% 10%
10	K	46	 63% 17% 20%
10	k	46	 48% 28% . 20%
11	L	37	 92% 8%
11	l	37	 86% 11% .
12	M	36	 75% 17% 8%
12	m	36	 75% 8% 6% 11%
13	O	272	 77% 11% . 10%
13	o	272	 81% 8% 10%
14	R	40	 58% 25% . 15%

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Mol	Chain	Length	Quality of chain
14	r	40	
15	T	30	
15	t	30	
16	U	134	
16	u	134	
17	V	163	
17	v	163	
18	X	41	
18	x	41	
19	Y	46	
19	y	46	
20	Z	62	
20	z	62	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	A	402	X	-	-	-
22	CLA	A	403	X	-	-	-
22	CLA	A	405	X	-	-	-
22	CLA	B	602	X	-	-	-
22	CLA	B	603	X	-	-	-
22	CLA	B	604	X	-	-	-
22	CLA	B	605	X	-	-	-
22	CLA	B	606	X	-	-	-
22	CLA	B	607	X	-	-	-
22	CLA	B	608	X	-	-	-
22	CLA	B	611	X	-	-	-
22	CLA	B	612	X	-	-	-
22	CLA	B	613	X	-	-	-
22	CLA	B	614	X	-	-	-
22	CLA	B	615	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	B	616	X	-	-	-
22	CLA	B	617	X	-	-	-
22	CLA	C	502	X	-	-	-
22	CLA	C	503	X	-	-	-
22	CLA	C	504	X	-	-	-
22	CLA	C	505	X	-	-	-
22	CLA	C	506	X	-	-	-
22	CLA	C	507	X	-	-	-
22	CLA	C	508	X	-	-	-
22	CLA	C	509	X	-	-	-
22	CLA	C	510	X	-	-	-
22	CLA	C	511	X	-	-	-
22	CLA	C	512	X	-	-	-
22	CLA	C	513	X	-	-	-
22	CLA	D	402	X	-	-	-
22	CLA	D	403	X	-	-	-
22	CLA	D	404	X	-	-	-
22	CLA	a	402	X	-	-	-
22	CLA	a	405	X	-	-	-
22	CLA	b	601	X	-	-	-
22	CLA	b	602	X	-	-	-
22	CLA	b	603	X	-	-	-
22	CLA	b	604	X	-	-	-
22	CLA	b	605	X	-	-	-
22	CLA	b	606	X	-	-	-
22	CLA	b	607	X	-	-	-
22	CLA	b	609	X	-	-	-
22	CLA	b	610	X	-	-	-
22	CLA	b	611	X	-	-	-
22	CLA	b	612	X	-	-	-
22	CLA	b	613	X	-	-	-
22	CLA	b	614	X	-	-	-
22	CLA	b	615	X	-	-	-
22	CLA	b	616	X	-	-	-
22	CLA	c	501	X	-	-	-
22	CLA	c	502	X	-	-	-
22	CLA	c	503	X	-	-	-
22	CLA	c	504	X	-	-	-
22	CLA	c	505	X	-	-	-
22	CLA	c	506	X	-	-	-
22	CLA	c	507	X	-	-	-
22	CLA	c	508	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	c	509	X	-	-	-
22	CLA	c	510	X	-	-	-
22	CLA	c	511	X	-	-	-
22	CLA	c	512	X	-	-	-
22	CLA	c	513	X	-	-	-
22	CLA	d	403	X	-	-	-

2 Entry composition

There are 35 unique types of molecules in this entry. The entry contains 103385 atoms, of which 51555 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
			5130	1717	2508	431	459	15			
1	a	334	Total	C	H	N	O	S	0	0	0
			5118	1714	2499	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	5	0
			7864	2631	3859	666	695	13			
2	b	505	Total	C	H	N	O	S	0	0	0
			7800	2610	3822	665	690	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
			6768	2249	3342	571	593	13			
3	c	451	Total	C	H	N	O	S	0	2	0
			6913	2290	3413	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
			5330	1800	2613	444	461	12			
4	d	341	Total	C	H	N	O	S	0	1	0
			5342	1804	2619	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
			1316	436	650	107	123			
5	e	82	Total	C	H	N	O	0	0	0
			1311	434	647	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
			556	187	281	45	42			
6	f	34	Total	C	H	N	O	0	0	0
			556	187	281	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
			1042	341	532	82	85			
7	h	63	Total	C	H	N	O	0	0	0
			1016	333	518	80	83			

- 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			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I	1	FME	-	initiating methionine	UNP Q8DJZ6
i	1	FME	-	initiating methionine	UNP Q8DJZ6

- 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
			525	171	269	37	47	1			
12	m	32	Total	C	H	N	O	S	0	0	0
			518	168	267	36	46	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	1	FME	-	initiating methionine	UNP Q8DHA7
m	1	FME	-	initiating methionine	UNP Q8DHA7

- 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
			3698	1168	1828	313	385	4			
13	o	244	Total	C	H	N	O	S	0	0	0
			3718	1170	1844	317	383	4			

- Molecule 14 is a protein called Photosystem II protein Y.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	R	34	Total	C	H	N	O	0	0	0
			569	184	298	47	40			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	r	31	Total	C	H	N	O	0	0	0
			493	162	253	42	36			

- Molecule 15 is a protein called Photosystem II reaction center protein T.

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

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
T	1	FME	-	initiating methionine	UNP Q8DIQ0
t	1	FME	-	initiating methionine	UNP Q8DIQ0

- Molecule 16 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	U	97	Total	C	H	N	O	0	0	0
			1546	491	772	129	154			
16	u	97	Total	C	H	N	O	0	0	0
			1546	491	772	129	154			

- Molecule 17 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	V	137	Total	C	H	N	O	S	0	0
			2132	675	1068	177	208	4		
17	v	137	Total	C	H	N	O	S	0	0
			2132	675	1068	177	208	4		

- 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 Ycf12.

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

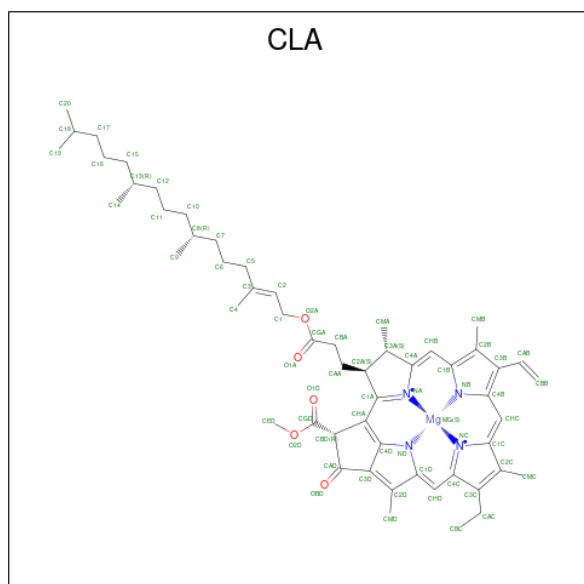
- Molecule 20 is a protein called Photosystem II reaction center protein Z.

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

- Molecule 21 is FE (II) ION (CCD ID: FE2) (formula: Fe).

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

- Molecule 22 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
22	A	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
22	A	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	A	1	Total	C	H	Mg	N	O	0	0
			102	44	48	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	B	1	Total	C	H	Mg	N	O	0	0
			119	50	59	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	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
22	C	1	Total	C	H	Mg	N	O	0	0
			117	49	58	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	C	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	D	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	D	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	D	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	a	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

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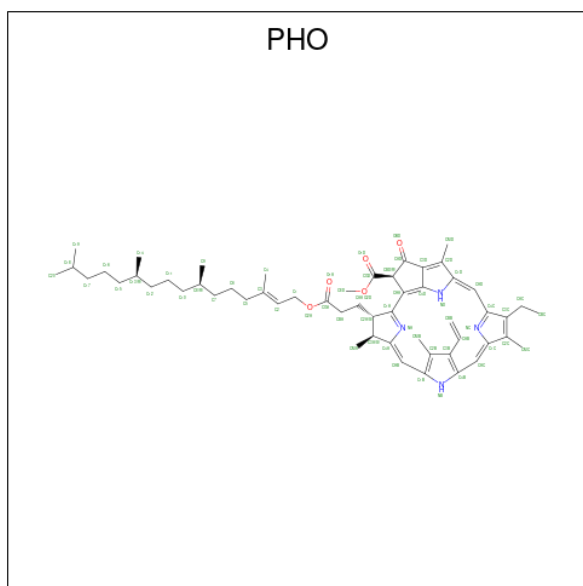
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	b	1	Total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

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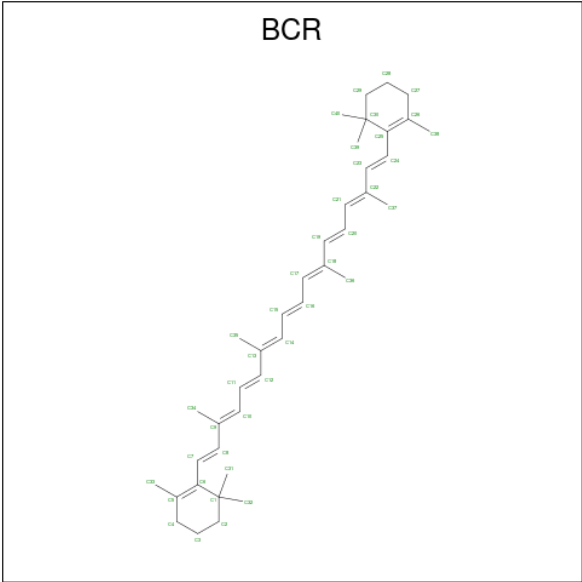
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	d	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	d	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	d	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

- Molecule 23 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).



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

- Molecule 24 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
24	A	1	Total	C	H	0	0
			96	40	56		
24	B	1	Total	C	H	0	0
			96	40	56		
24	B	1	Total	C	H	0	0
			96	40	56		
24	B	1	Total	C	H	0	0
			96	40	56		
24	C	1	Total	C	H	0	0
			96	40	56		
24	C	1	Total	C	H	0	0
			96	40	56		
24	D	1	Total	C	H	0	0
			96	40	56		
24	H	1	Total	C	H	0	0
			96	40	56		
24	K	1	Total	C	H	0	0
			96	40	56		
24	T	1	Total	C	H	0	0
			96	40	56		
24	Z	1	Total	C	H	0	0
			96	40	56		
24	a	1	Total	C	H	0	0
			96	40	56		
24	b	1	Total	C	H	0	0
			96	40	56		
24	b	1	Total	C	H	0	0
			96	40	56		

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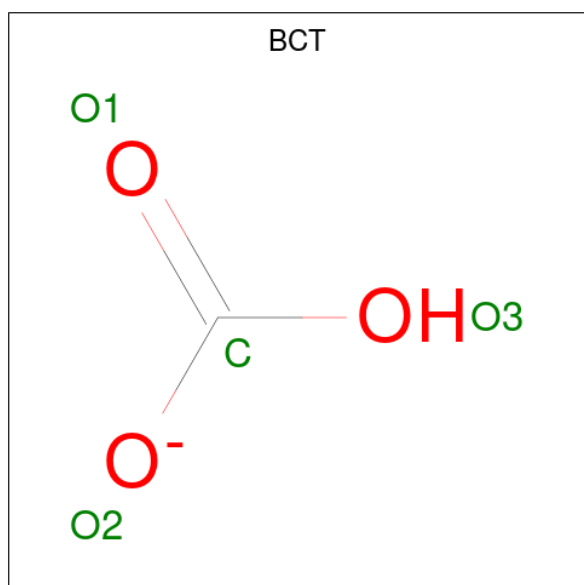
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
24	b	1	Total	C	H	0	0
			96	40	56		
24	c	1	Total	C	H	0	0
			96	40	56		
24	c	1	Total	C	H	0	0
			96	40	56		
24	d	1	Total	C	H	0	0
			96	40	56		
24	k	1	Total	C	H	0	0
			96	40	56		
24	k	1	Total	C	H	0	0
			96	40	56		
24	t	1	Total	C	H	0	0
			96	40	56		
24	x	1	Total	C	H	0	0
			96	40	56		

- Molecule 25 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

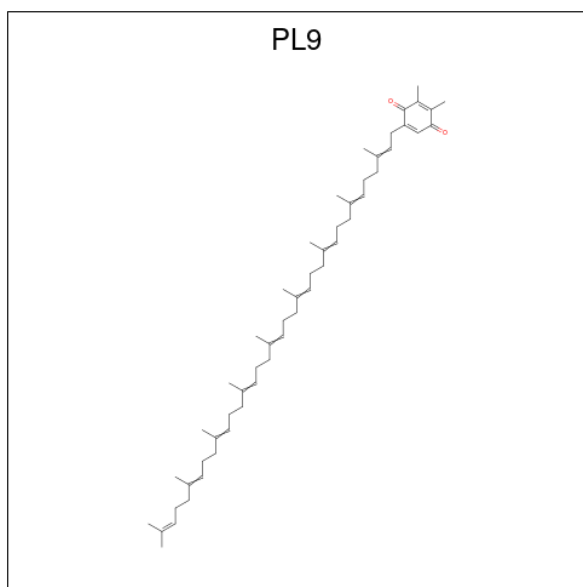
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
25	A	2	Total	Cl	0	0
			2	2		
25	a	2	Total	Cl	0	0
			2	2		

- Molecule 26 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



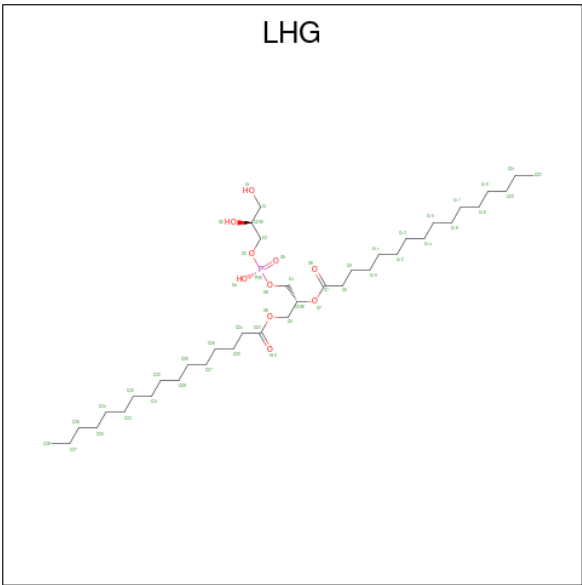
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
26	A	1	Total	C	H	O	0	0
			5	1	1	3		
26	a	1	Total	C	H	O	0	0
			5	1	1	3		

- Molecule 27 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: C₅₃H₈₀O₂) (labeled as "Ligand of Interest" by depositor).



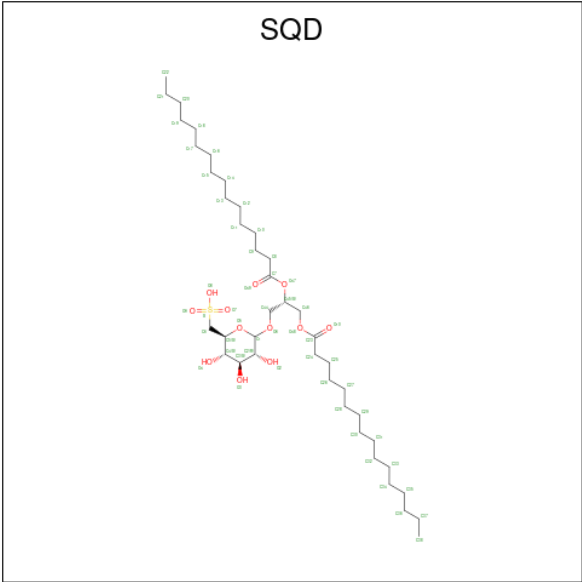
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
27	A	1	Total	C	H	O	0	0
			135	53	80	2		
27	D	1	Total	C	H	O	0	0
			135	53	80	2		
27	a	1	Total	C	H	O	0	0
			135	53	80	2		
27	d	1	Total	C	H	O	0	0
			135	53	80	2		

- Molecule 28 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



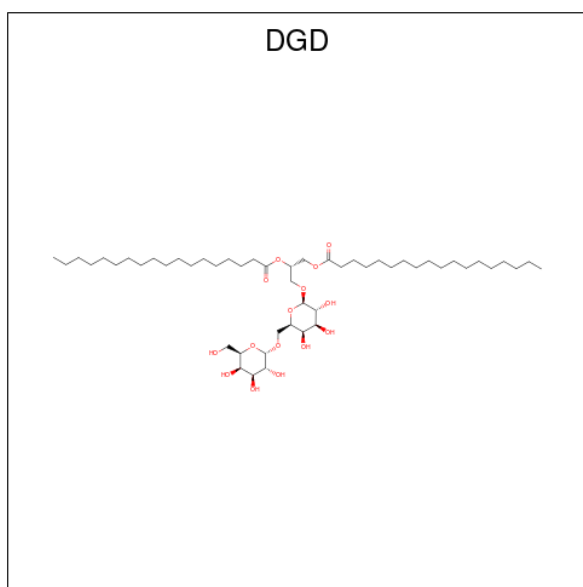
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
28	A	1	Total	C	H	O	P	0	0
			113	36	66	10	1		
28	A	1	Total	C	H	O	P	0	0
			122	38	73	10	1		
28	B	1	Total	C	H	O	P	0	0
			121	38	72	10	1		
28	D	1	Total	C	H	O	P	0	0
			121	38	72	10	1		
28	L	1	Total	C	H	O	P	0	0
			122	38	73	10	1		
28	a	1	Total	C	H	O	P	0	0
			97	31	55	10	1		
28	d	1	Total	C	H	O	P	0	0
			121	38	72	10	1		
28	d	1	Total	C	H	O	P	0	0
			121	38	72	10	1		
28	d	1	Total	C	H	O	P	0	0
			88	28	49	10	1		
28	l	1	Total	C	H	O	P	0	0
			123	38	74	10	1		

- Molecule 29 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL L]-SN-GLYCEROL (CCD ID: SQD) (formula: C₄₁H₇₈O₁₂S).



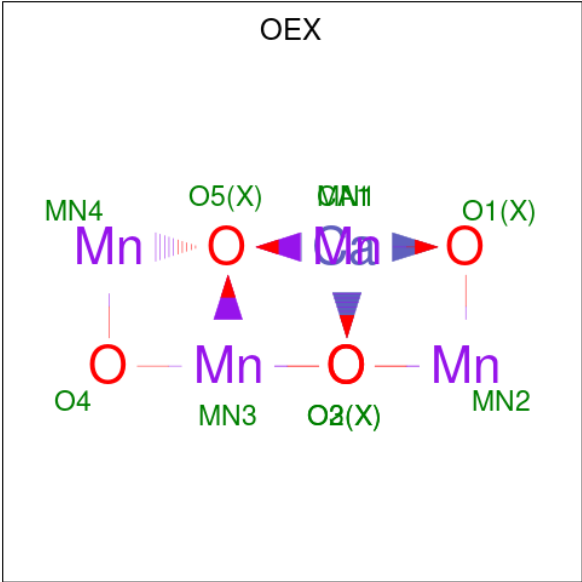
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
29	A	1	Total	C	H	O	S	0	0
			121	39	69	12	1		
29	A	1	Total	C	H	O		0	0
			104	35	65	4			
29	B	1	Total	C	H	O	S	0	0
			132	41	78	12	1		
29	F	1	Total	C	H	O	S	0	0
			81	25	45	10	1		
29	L	1	Total	C	H	O	S	0	0
			113	36	64	12	1		
29	a	1	Total	C	H	O	S	0	0
			131	41	77	12	1		
29	a	1	Total	C	H	O		0	0
			92	31	56	5			
29	f	1	Total	C	H	O	S	0	0
			89	28	48	12	1		

- Molecule 30 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: C₅₁H₉₆O₁₅).



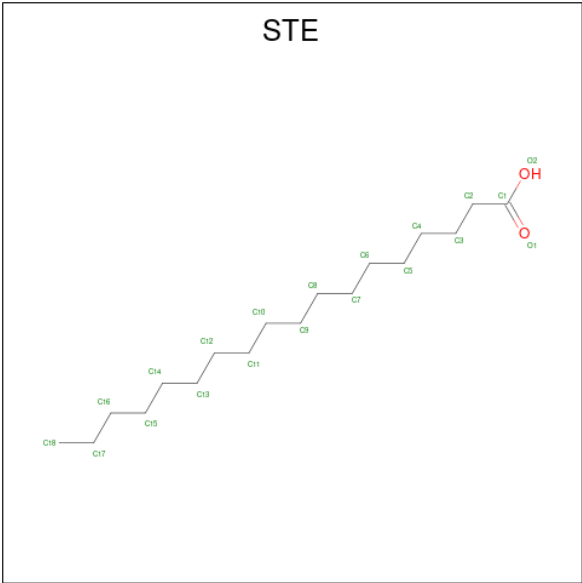
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	H	O	0	0
			161	51	95	15		
30	C	1	Total	C	H	O	0	0
			141	47	79	15		
30	C	1	Total	C	H	O	0	0
			141	47	79	15		
30	C	1	Total	C	H	O	0	0
			141	47	79	15		
30	H	1	Total	C	H	O	0	0
			141	47	79	15		
30	c	1	Total	C	H	O	0	0
			141	47	79	15		
30	c	1	Total	C	H	O	0	0
			139	47	77	15		
30	c	1	Total	C	H	O	0	0
			139	47	77	15		
30	h	1	Total	C	H	O	0	0
			140	47	78	15		

- Molecule 31 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: CaMn_4O_5).



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

- Molecule 32 is STEARIC ACID (CCD ID: STE) (formula: C₁₈H₃₆O₂).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	B	1	Total	C	H	O	0	0
			28	10	16	2		
32	B	1	Total	C	H	O	0	0
			43	15	26	2		

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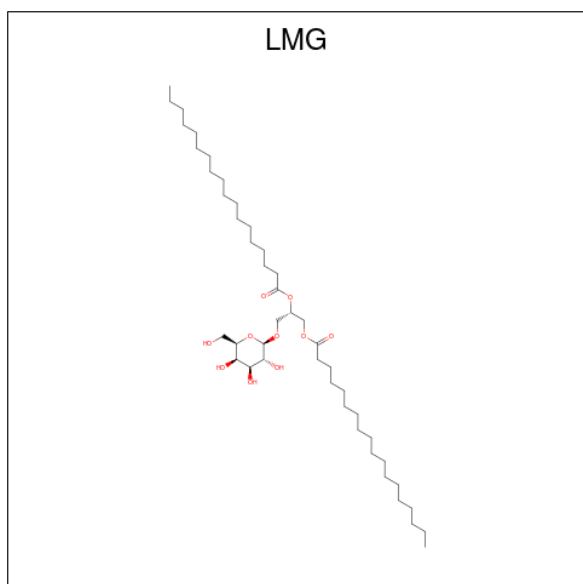
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	B	1	Total C H O 28 10 16 2	0	0
32	B	1	Total C H 47 16 31	0	0
32	B	1	Total C H 41 15 26	0	0
32	C	1	Total C H O 28 10 16 2	0	0
32	C	1	Total C H 47 16 31	0	0
32	C	1	Total C H O 28 10 16 2	0	0
32	D	1	Total C H O 55 18 35 2	0	0
32	E	1	Total C H O 28 10 16 2	0	0
32	H	1	Total C H 53 18 35	0	0
32	I	1	Total C H 41 15 26	0	0
32	J	1	Total C H O 28 10 16 2	0	0
32	L	1	Total C H O 28 10 16 2	0	0
32	M	1	Total C H O 37 13 22 2	0	0
32	M	1	Total C H 26 10 16	0	0
32	M	1	Total C H 53 18 35	0	0
32	T	1	Total C H 44 15 29	0	0
32	Z	1	Total C H 20 8 12	0	0
32	a	1	Total C H O 28 10 16 2	0	0
32	b	1	Total C H 47 16 31	0	0
32	b	1	Total C H O 55 18 35 2	0	0
32	b	1	Total C H O 40 14 24 2	0	0

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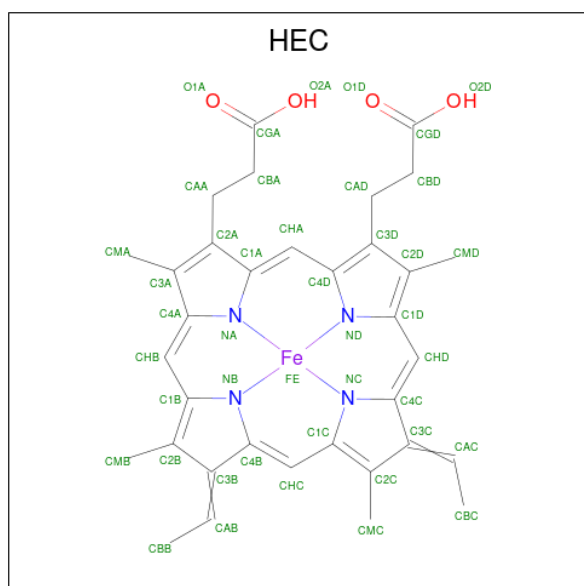
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	b	1	Total C H O 55 18 35 2	0	0
32	b	1	Total C H 26 10 16	0	0
32	b	1	Total C H O 55 18 35 2	0	0
32	c	1	Total C H O 55 18 35 2	0	0
32	d	1	Total C H O 43 15 26 2	0	0
32	h	1	Total C H 41 14 27	0	0
32	j	1	Total C H O 28 10 16 2	0	0
32	k	1	Total C H O 28 10 16 2	0	0
32	t	1	Total C H O 34 12 20 2	0	0
32	t	1	Total C H 26 10 16	0	0
32	t	1	Total C H O 46 16 28 2	0	0
32	x	1	Total C H O 55 18 35 2	0	0

- Molecule 33 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	B	1	Total 141	C 45	H 86	O 10	0	0
33	C	1	Total 112	C 38	H 64	O 10	0	0
33	D	1	Total 122	C 41	H 71	O 10	0	0
33	D	1	Total 78	C 27	H 45	O 6	0	0
33	D	1	Total 68	C 24	H 40	O 4	0	0
33	M	1	Total 122	C 41	H 71	O 10	0	0
33	Y	1	Total 114	C 38	H 66	O 10	0	0
33	b	1	Total 140	C 45	H 85	O 10	0	0
33	c	1	Total 80	C 27	H 43	O 10	0	0
33	c	1	Total 117	C 38	H 69	O 10	0	0
33	c	1	Total 116	C 39	H 67	O 10	0	0
33	d	1	Total 100	C 34	H 56	O 10	0	0
33	m	1	Total 122	C 41	H 71	O 10	0	0

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



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
34	E	1	Total	C	Fe	H	N	O	0	0
			75	34	1	32	4	4		
34	V	1	Total	C	Fe	H	N	O	0	0
			73	34	1	30	4	4		
34	e	1	Total	C	Fe	H	N	O	0	0
			75	34	1	32	4	4		
34	v	1	Total	C	Fe	H	N	O	0	0
			73	34	1	30	4	4		

- Molecule 35 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
35	A	132	Total	O	0	0
			132	132		
35	B	174	Total	O	0	0
			174	174		
35	C	139	Total	O	0	0
			139	139		
35	D	116	Total	O	0	0
			116	116		
35	E	26	Total	O	0	0
			26	26		
35	F	4	Total	O	0	0
			4	4		
35	H	16	Total	O	0	0
			16	16		
35	I	14	Total	O	0	0
			14	14		
35	J	9	Total	O	0	0
			9	9		
35	K	7	Total	O	0	0
			7	7		
35	L	9	Total	O	0	0
			9	9		
35	M	5	Total	O	0	0
			5	5		
35	O	78	Total	O	0	0
			78	78		
35	R	1	Total	O	0	0
			1	1		
35	T	9	Total	O	0	0
			9	9		
35	U	34	Total	O	0	0
			34	34		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
35	V	53	Total 53	O 53	0	0
35	X	12	Total 12	O 12	0	0
35	Y	6	Total 6	O 6	0	0
35	Z	1	Total 1	O 1	0	0
35	a	109	Total 109	O 109	0	0
35	b	134	Total 134	O 134	0	0
35	c	130	Total 130	O 130	0	0
35	d	91	Total 91	O 91	0	0
35	e	15	Total 15	O 15	0	0
35	f	8	Total 8	O 8	0	0
35	h	26	Total 26	O 26	0	0
35	i	7	Total 7	O 7	0	0
35	j	9	Total 9	O 9	0	0
35	k	6	Total 6	O 6	0	0
35	l	10	Total 10	O 10	0	0
35	m	3	Total 3	O 3	0	0
35	o	81	Total 81	O 81	0	0
35	r	7	Total 7	O 7	0	0
35	t	11	Total 11	O 11	0	0
35	u	43	Total 43	O 43	0	0
35	v	37	Total 37	O 37	0	0

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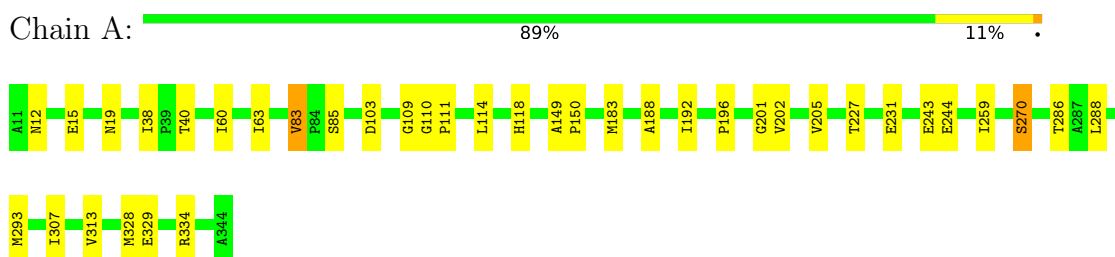
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
35	x	4	Total 4	O 4	0	0
35	y	2	Total 2	O 2	0	0
35	z	4	Total 4	O 4	0	0

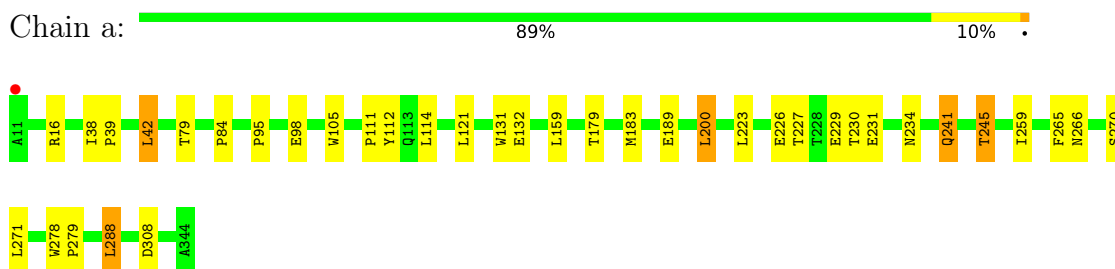
3 Residue-property plots

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

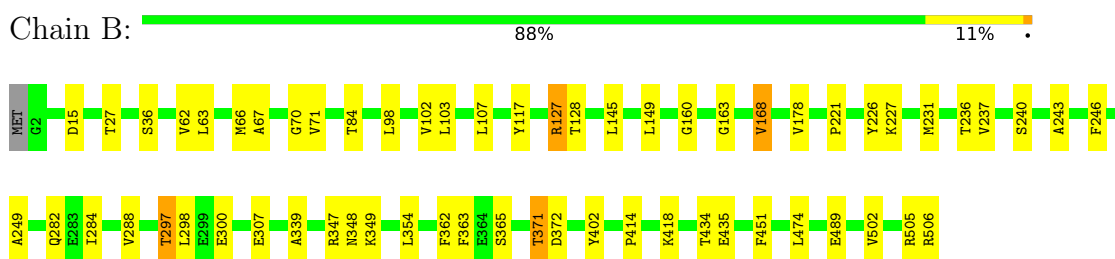
• Molecule 1: Photosystem II protein D1 1



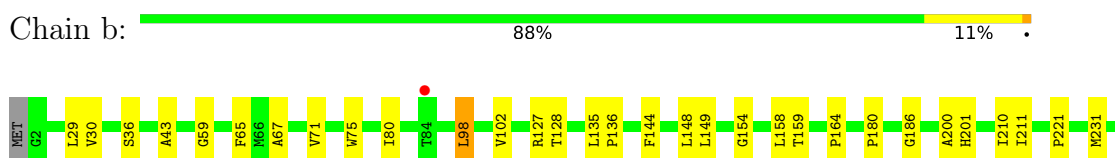
• Molecule 1: Photosystem II protein D1 1



• Molecule 2: Photosystem II CP47 reaction center protein



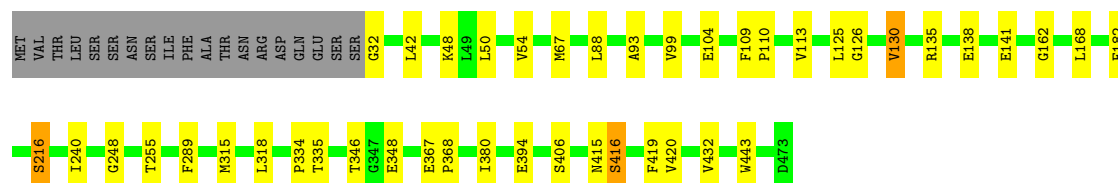
• Molecule 2: Photosystem II CP47 reaction center protein





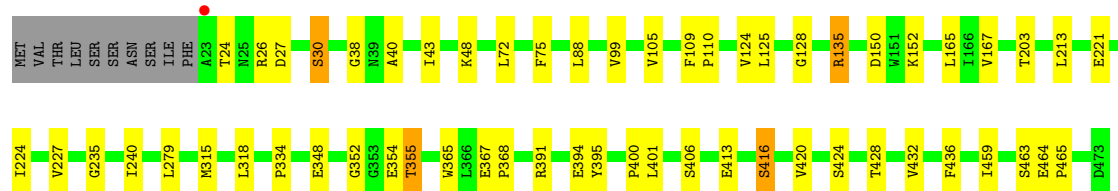
• Molecule 3: Photosystem II CP43 reaction center protein

Chain C: 86% 9% ..



• Molecule 3: Photosystem II CP43 reaction center protein

Chain c: 85% 12% ..



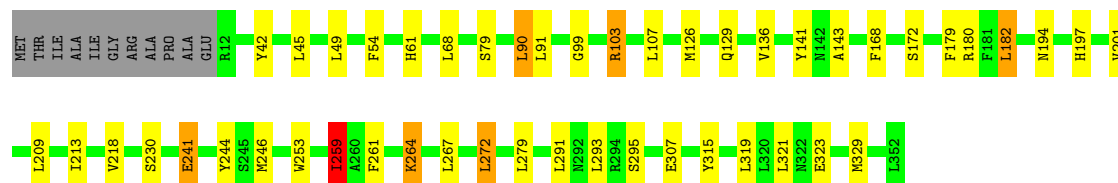
• Molecule 4: Photosystem II D2 protein

Chain D: 88% 8% .



• Molecule 4: Photosystem II D2 protein

Chain d: 83% 12% ..



• Molecule 5: Cytochrome b559 subunit alpha

Chain E: 86% 11% ..



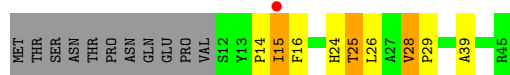
- Molecule 5: Cytochrome b559 subunit alpha



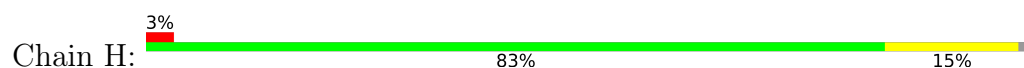
- Molecule 6: Cytochrome b559 subunit beta



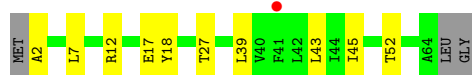
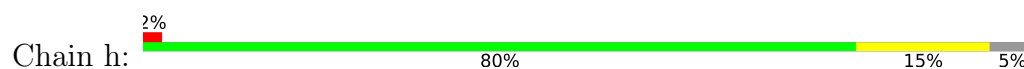
- Molecule 6: Cytochrome b559 subunit beta



- Molecule 7: Photosystem II reaction center protein H



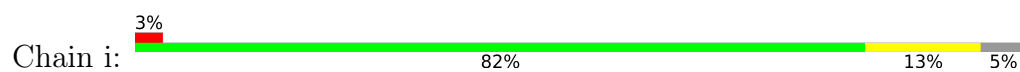
- Molecule 7: Photosystem II reaction center protein H



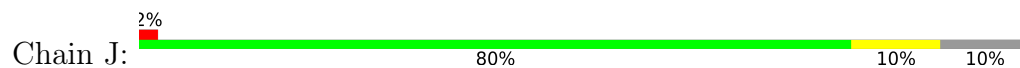
- Molecule 8: Photosystem II reaction center protein I



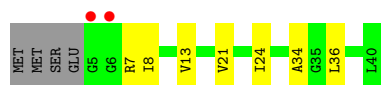
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J



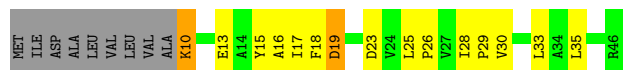
- Molecule 9: Photosystem II reaction center protein J



- Molecule 10: Photosystem II reaction center protein K



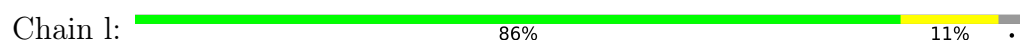
- Molecule 10: Photosystem II reaction center protein K



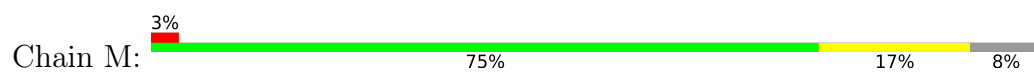
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



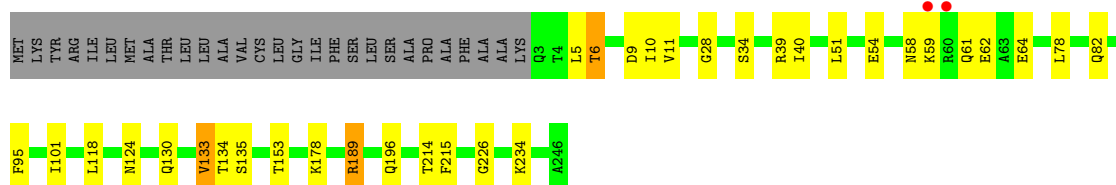
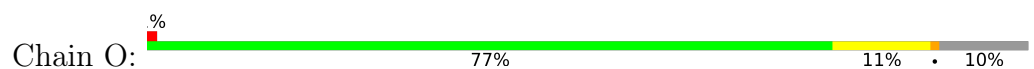
- Molecule 12: Photosystem II reaction center protein M



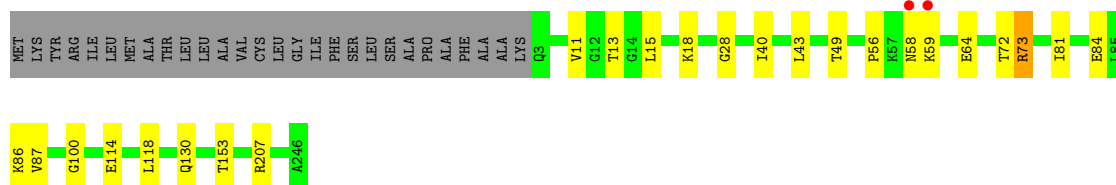
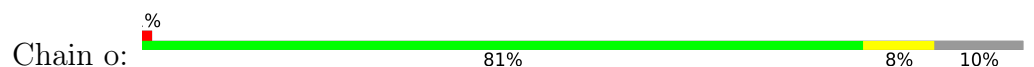
• Molecule 12: Photosystem II reaction center protein M



• Molecule 13: Photosystem II manganese-stabilizing polypeptide



• Molecule 13: Photosystem II manganese-stabilizing polypeptide



• Molecule 14: Photosystem II protein Y



• Molecule 14: Photosystem II protein Y




• Molecule 15: Photosystem II reaction center protein T

Chain T:  93% 7%



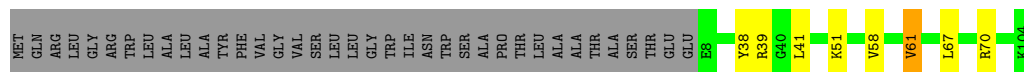
- Molecule 15: Photosystem II reaction center protein T

Chain t:  3% 87% 13%



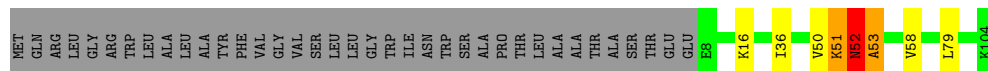
- Molecule 16: Photosystem II 12 kDa extrinsic protein

Chain U:  66% 5% 28%



- Molecule 16: Photosystem II 12 kDa extrinsic protein

Chain u:  66% 28%



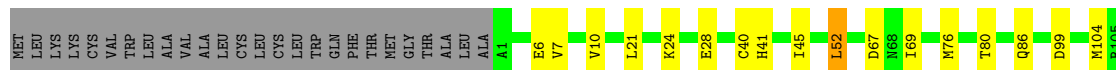
- Molecule 17: Cytochrome c-550

Chain V:  70% 13% 16%




- Molecule 17: Cytochrome c-550

Chain v:  71% 13% 16%

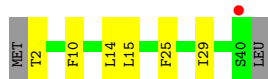
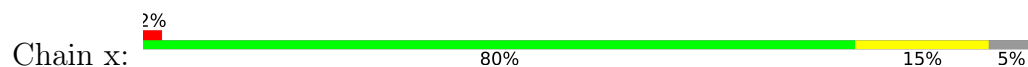


- Molecule 18: Photosystem II reaction center X protein

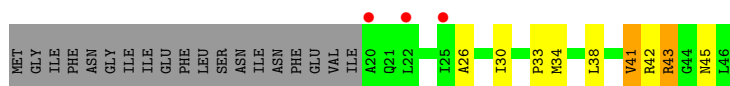
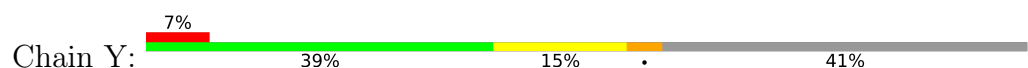
Chain X:  83% 10% 7%



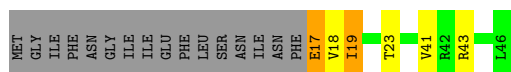
- Molecule 18: Photosystem II reaction center X protein



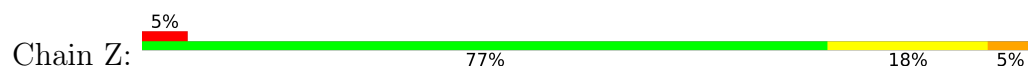
- Molecule 19: Photosystem II reaction center protein Ycf12



- Molecule 19: Photosystem II reaction center protein Ycf12



- Molecule 20: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II reaction center protein Z



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	116.96Å 221.64Å 307.89Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.54 – 2.26 33.54 – 2.26	Depositor EDS
% Data completeness (in resolution range)	99.8 (33.54-2.26) 86.7 (33.54-2.26)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.83 (at 2.27Å)	Xtriage
Refinement program	PHENIX 1.17.1_3660	Depositor
R, R_{free}	0.173 , 0.241 (Not available) , 0.175	Depositor DCC
R_{free} test set	3302 reflections (0.53%)	wwPDB-VP
Wilson B-factor (Å ²)	30.1	Xtriage
Anisotropy	0.248	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.34 , 51.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.28$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	103385	wwPDB-VP
Average B, all atoms (Å ²)	49.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.48% 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: CLA, HEC, PL9, SQD, LHG, CL, FE2, PHO, STE, BCT, FME, BCR, OEX, DGD, LMG

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	0.65	0/2707	0.75	1/3692 (0.0%)
1	a	0.63	0/2704	0.71	0/3688
2	B	0.62	0/4161	0.70	0/5669
2	b	0.60	0/4118	0.70	0/5611
3	C	0.59	0/3547	0.66	0/4830
3	c	0.55	0/3619	0.68	0/4926
4	D	0.63	0/2812	0.69	0/3832
4	d	0.62	1/2821 (0.0%)	0.72	0/3844
5	E	0.51	0/688	0.62	0/940
5	e	0.49	0/683	0.64	0/932
6	F	0.53	0/284	0.68	0/387
6	f	0.55	0/284	0.67	0/387
7	H	0.68	0/523	0.67	0/713
7	h	0.54	0/511	0.66	0/697
8	I	0.59	0/293	0.73	0/396
8	i	0.61	0/293	0.65	0/396
9	J	0.52	0/263	0.63	0/356
9	j	0.49	0/263	0.60	0/356
10	K	0.46	0/303	0.66	0/416
10	k	0.45	0/303	0.60	0/416
11	L	0.67	0/311	0.69	0/422
11	l	0.63	0/303	0.68	0/412
12	M	0.67	0/249	0.77	0/341
12	m	0.63	0/244	0.71	0/334
13	O	0.60	0/1904	0.71	0/2585
13	o	0.59	0/1905	0.70	0/2583
14	R	0.47	0/277	0.61	0/380
14	r	0.42	0/246	0.56	0/339
15	T	0.62	0/257	0.69	0/349
15	t	0.64	0/255	0.65	0/346
16	U	0.56	0/785	0.65	0/1064
16	u	0.61	0/785	0.77	2/1064 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	V	0.60	0/1085	0.69	1/1473 (0.1%)
17	v	0.58	0/1085	0.67	0/1473
18	X	0.49	0/284	0.63	0/384
18	x	0.40	0/289	0.55	0/391
19	Y	0.51	0/197	0.62	0/264
19	y	0.42	0/219	0.56	0/294
20	Z	0.47	0/490	0.58	0/669
20	z	0.41	0/488	0.55	0/666
All	All	0.59	1/42838 (0.0%)	0.69	4/58317 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	b	0	1
17	V	0	1
All	All	0	2

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	259	ILE	CG1-CD1	-5.34	1.30	1.51

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	u	52	ASN	CA-C-N	6.34	133.12	121.70
16	u	52	ASN	C-N-CA	6.34	133.12	121.70
1	A	83	VAL	N-CA-C	5.97	113.76	108.63
17	V	63	THR	C-N-CD	-5.04	104.32	125.00

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
17	V	63	THR	Peptide
2	b	186	GLY	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	2508	2519	22	0
1	a	2619	2499	2510	24	0
2	B	4005	3859	3867	41	0
2	b	3978	3822	3836	40	0
3	C	3426	3342	3343	27	0
3	c	3500	3413	3426	42	0
4	D	2717	2613	2621	22	0
4	d	2723	2619	2627	33	0
5	E	666	650	651	7	0
5	e	664	647	648	19	0
6	F	275	281	282	3	0
6	f	275	281	282	8	0
7	H	510	532	532	6	0
7	h	498	518	518	6	0
8	I	296	311	311	3	0
8	i	296	311	311	2	0
9	J	257	268	268	2	0
9	j	257	268	268	4	0
10	K	293	305	305	2	0
10	k	293	305	305	12	0
11	L	304	316	316	2	0
11	l	296	304	304	0	0
12	M	256	269	269	6	0
12	m	251	267	267	4	0
13	O	1870	1828	1830	21	0
13	o	1874	1844	1846	11	0
14	R	271	298	298	5	0
14	r	240	253	250	10	0
15	T	258	261	261	0	0
15	t	256	256	256	1	0
16	U	774	772	773	4	0
16	u	774	772	773	12	0
17	V	1064	1068	1073	12	0
17	v	1064	1068	1073	16	0
18	X	281	312	312	2	0
18	x	286	316	314	2	0
19	Y	196	217	217	5	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	y	218	241	241	3	0
20	Z	479	516	516	6	0
20	z	477	509	509	15	0
21	A	1	0	0	0	0
21	a	1	0	0	0	0
22	A	184	192	192	4	0
22	B	1035	1139	1139	18	0
22	C	839	922	922	11	0
22	D	195	216	216	6	0
22	a	195	216	216	3	0
22	b	1035	1139	1139	18	0
22	c	839	919	919	19	0
22	d	195	216	216	1	0
23	A	64	74	74	0	0
23	D	64	74	74	2	0
23	a	64	74	74	3	0
23	d	64	74	74	4	0
24	A	40	56	56	1	0
24	B	120	168	168	6	0
24	C	80	112	112	3	0
24	D	40	56	56	3	0
24	H	40	56	56	4	0
24	K	40	56	56	1	0
24	T	40	56	56	1	0
24	Z	40	56	56	3	0
24	a	40	56	56	1	0
24	b	120	168	168	5	0
24	c	80	112	112	4	0
24	d	40	56	56	3	0
24	k	80	112	112	2	0
24	t	40	56	56	4	0
24	x	40	56	56	1	0
25	A	2	0	0	0	0
25	a	2	0	0	0	0
26	A	4	1	1	0	0
26	a	4	1	1	0	0
27	A	55	80	80	3	0
27	D	55	80	80	1	0
27	a	55	80	80	1	0
27	d	55	80	80	1	0
28	A	96	139	141	1	0
28	B	49	72	74	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	D	49	72	74	1	0
28	L	49	73	74	1	0
28	a	42	55	57	0	0
28	d	137	193	199	4	0
28	l	49	74	74	1	0
29	A	91	134	134	1	0
29	B	54	78	78	0	0
29	F	36	45	45	0	0
29	L	49	64	64	1	0
29	a	90	133	133	2	0
29	f	41	48	48	0	0
30	A	66	95	96	4	0
30	C	186	237	244	3	0
30	H	62	79	81	0	0
30	c	186	233	245	2	0
30	h	62	78	81	0	0
31	A	10	0	0	0	0
31	a	10	0	0	1	0
32	B	72	115	115	1	0
32	C	40	63	63	0	0
32	D	20	35	35	1	0
32	E	12	16	16	0	0
32	H	18	35	35	1	0
32	I	15	26	26	2	0
32	J	12	16	16	1	0
32	L	12	16	16	0	0
32	M	43	73	73	1	0
32	T	15	29	29	0	0
32	Z	8	12	12	0	0
32	a	12	16	16	2	0
32	b	102	176	176	3	0
32	c	20	35	35	0	0
32	d	17	26	26	0	0
32	h	14	27	27	0	0
32	j	12	16	16	0	0
32	k	12	16	16	0	0
32	t	42	64	64	0	0
32	x	20	35	35	1	0
33	B	55	86	86	1	0
33	C	48	64	66	1	0
33	D	112	156	156	4	0
33	M	51	71	72	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
33	Y	48	66	66	1	0
33	b	55	85	86	4	0
33	c	134	179	181	0	0
33	d	44	56	58	0	0
33	m	51	71	72	0	0
34	E	43	32	32	6	0
34	V	43	30	31	5	0
34	e	43	32	32	7	0
34	v	43	30	30	2	0
35	A	132	0	0	3	0
35	B	174	0	0	7	0
35	C	139	0	0	2	0
35	D	116	0	0	3	0
35	E	26	0	0	1	0
35	F	4	0	0	0	0
35	H	16	0	0	1	0
35	I	14	0	0	1	0
35	J	9	0	0	0	0
35	K	7	0	0	0	0
35	L	9	0	0	0	0
35	M	5	0	0	0	0
35	O	78	0	0	3	0
35	R	1	0	0	0	0
35	T	9	0	0	0	0
35	U	34	0	0	1	0
35	V	53	0	0	0	0
35	X	12	0	0	0	0
35	Y	6	0	0	0	0
35	Z	1	0	0	0	0
35	a	109	0	0	3	0
35	b	134	0	0	5	0
35	c	130	0	0	8	0
35	d	91	0	0	0	0
35	e	15	0	0	0	0
35	f	8	0	0	0	0
35	h	26	0	0	2	0
35	i	7	0	0	0	0
35	j	9	0	0	2	0
35	k	6	0	0	1	0
35	l	10	0	0	0	0
35	m	3	0	0	0	0
35	o	81	0	0	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	r	7	0	0	0	0
35	t	11	0	0	0	0
35	u	43	0	0	3	0
35	v	37	0	0	0	0
35	x	4	0	0	0	0
35	y	2	0	0	0	0
35	z	4	0	0	1	0
All	All	51830	51555	51694	528	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 5.

All (528) 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)
17:V:40:CYS:SG	34:V:201:HEC:CAC	2.02	1.46
17:v:40:CYS:SG	34:v:201:HEC:CAC	2.05	1.45
17:V:40:CYS:SG	34:V:201:HEC:HAC	1.95	1.03
3:c:315:MET:SD	35:c:711:HOH:O	2.28	0.89
1:A:244:GLU:OE1	35:A:501:HOH:O	1.95	0.84
17:V:40:CYS:SG	34:V:201:HEC:C3C	2.67	0.82
34:E:101:HEC:HBC3	34:E:101:HEC:HHD	1.61	0.81
33:D:409:LMG:O4	35:D:501:HOH:O	1.98	0.80
6:f:28:VAL:HG22	6:f:29:PRO:HD3	1.64	0.80
22:c:508:CLA:HBC3	22:c:510:CLA:H92	1.66	0.77
2:b:102:VAL:HG11	22:b:606:CLA:H142	1.65	0.77
17:v:40:CYS:SG	34:v:201:HEC:C3C	2.73	0.77
13:O:40:ILE:HD12	13:O:95:PHE:CD1	2.22	0.76
9:J:15:THR:HG22	9:J:19:MET:HE2	1.68	0.75
33:D:409:LMG:O1	35:D:502:HOH:O	2.05	0.75
1:a:241:GLN:HE22	1:a:245:THR:HG23	1.52	0.74
32:B:621:STE:O1	35:B:701:HOH:O	2.06	0.74
22:B:608:CLA:H203	28:B:622:LHG:H141	1.69	0.74
1:A:334:ARG:NH2	35:A:502:HOH:O	2.22	0.72
4:d:49:LEU:HD13	24:d:405:BCR:C15	2.21	0.71
5:e:68:ASP:O	5:e:72:ALA:HB2	1.90	0.71
3:C:32:GLY:N	35:C:602:HOH:O	2.22	0.70
17:v:76:MET:HE2	17:v:112:LEU:HD22	1.72	0.70
22:c:501:CLA:H192	22:c:507:CLA:HBB1	1.73	0.70
2:b:231:MET:HG2	22:b:610:CLA:HBC3	1.71	0.69
16:u:52:ASN:OD1	35:u:201:HOH:O	2.10	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:c:391[A]:ARG:NH2	35:c:602:HOH:O	2.22	0.68
20:Z:2:THR:HG22	20:Z:6:GLN:OE1	1.94	0.68
23:a:404:PHO:HBC2	23:a:404:PHO:HHD	1.75	0.67
32:a:414:STE:O1	35:a:501:HOH:O	2.12	0.67
4:D:161:PRO:HG3	4:D:170:ALA:HB2	1.76	0.67
2:b:127:ARG:NH1	7:h:18:TYR:O	2.27	0.67
2:B:70:GLY:HA2	2:B:178:VAL:HG21	1.75	0.66
17:V:40:CYS:SG	34:V:201:HEC:CBC	2.82	0.66
2:B:506:ARG:O	35:B:702:HOH:O	2.14	0.66
22:B:603:CLA:H43	7:H:45:ILE:HG22	1.78	0.65
13:O:6:THR:HG22	13:O:9:ASP:OD2	1.97	0.65
22:A:402:CLA:HBB1	22:A:402:CLA:HMB3	1.79	0.65
2:B:127:ARG:HG3	2:B:128:THR:HG23	1.79	0.65
24:d:405:BCR:H331	24:d:405:BCR:C8	2.26	0.64
17:V:87:GLU:OE1	17:V:96:ARG:NH1	2.31	0.64
23:D:401:PHO:H3A	22:D:402:CLA:H142	1.80	0.64
7:H:41:PHE:CE1	7:H:45:ILE:HD11	2.32	0.64
1:a:266:ASN:ND2	35:a:503:HOH:O	2.25	0.63
34:V:201:HEC:HBC3	34:V:201:HEC:HMC3	1.80	0.63
22:c:508:CLA:H191	30:c:517:DGD:HA72	1.81	0.62
20:z:1:MET:O	20:z:4:LEU:N	2.32	0.62
5:e:20:TRP:CD1	9:j:8:ILE:HD12	2.35	0.62
16:u:58:VAL:HG12	16:u:79:LEU:HD22	1.81	0.62
14:r:6:LEU:HD12	14:r:10:LEU:HD23	1.82	0.62
24:H:101:BCR:H353	32:H:103:STE:H111	1.81	0.61
9:j:36:LEU:O	35:j:201:HOH:O	2.16	0.61
24:D:405:BCR:H331	24:D:405:BCR:C8	2.29	0.61
9:J:19:MET:O	9:J:23:VAL:HG23	2.01	0.61
13:O:28:GLY:O	35:O:301:HOH:O	2.16	0.61
16:u:52:ASN:CG	35:u:201:HOH:O	2.43	0.61
3:c:27:ASP:OD1	3:c:30:SER:OG	2.19	0.61
2:B:27:THR:HG22	2:B:107:LEU:HD13	1.83	0.61
16:u:52:ASN:O	16:u:52:ASN:ND2	2.34	0.60
2:b:485:GLU:OE1	35:b:701:HOH:O	2.15	0.60
22:B:616:CLA:H201	22:B:616:CLA:C1B	2.32	0.60
1:a:189:GLU:OE2	31:a:415:OEX:MN1	1.60	0.60
10:k:13:GLU:N	10:k:13:GLU:OE1	2.32	0.60
22:B:616:CLA:H93	22:B:617:CLA:C15	2.32	0.60
2:b:211:ILE:HG23	32:b:625:STE:H31	1.83	0.60
3:c:394:GLU:OE1	35:c:601:HOH:O	2.16	0.59
13:O:58:ASN:ND2	13:O:61:GLN:OE1	2.34	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:b:618:BCR:H331	24:b:618:BCR:C8	2.33	0.59
24:t:101:BCR:C8	24:t:101:BCR:H311	2.32	0.59
29:L:101:SQD:H222	2:b:29:LEU:HD23	1.84	0.59
4:d:179:PHE:HA	4:d:182:LEU:HD22	1.85	0.59
20:z:19:MET:HE1	20:z:47:TRP:HB2	1.85	0.59
13:O:124:ASN:ND2	35:O:304:HOH:O	2.36	0.58
4:D:191:TRP:CE3	4:D:289:LEU:HD11	2.39	0.58
3:c:318:LEU:C	3:c:318:LEU:HD23	2.28	0.58
22:c:510:CLA:H201	10:k:33:LEU:HD22	1.85	0.58
24:t:101:BCR:H311	24:t:101:BCR:HC8	1.84	0.58
2:b:154:GLY:HA2	2:b:158:LEU:HD12	1.84	0.58
5:e:30:LEU:HD11	34:e:101:HEC:CBB	2.34	0.58
32:a:414:STE:O2	35:a:502:HOH:O	2.18	0.57
5:e:26:THR:HB	34:e:101:HEC:HBB2	1.85	0.57
16:U:70:ARG:NH2	17:V:85:GLU:OE1	2.38	0.57
3:c:391[A]:ARG:NE	35:c:602:HOH:O	2.33	0.57
2:b:348:ASN:HB3	2:b:354:LEU:HD11	1.85	0.57
16:U:58:VAL:O	16:U:61:VAL:HG22	2.05	0.57
19:y:17:GLU:OE1	19:y:18:VAL:N	2.38	0.56
22:c:509:CLA:HMB1	22:c:509:CLA:HBB1	1.86	0.56
32:D:411:STE:H183	18:X:21:LEU:HD11	1.87	0.56
24:b:619:BCR:H331	24:b:619:BCR:C8	2.36	0.55
3:C:348:GLU:OE2	13:O:11:VAL:HA	2.06	0.55
4:d:218:VAL:HG13	4:d:244:TYR:CD1	2.42	0.55
3:c:40:ALA:O	3:c:43:ILE:HD12	2.06	0.55
3:c:406:SER:HA	3:c:420:VAL:HG23	1.88	0.55
4:d:279:LEU:HD22	23:d:401:PHO:HBC3	1.88	0.55
24:t:101:BCR:H23C	24:t:101:BCR:H382	1.89	0.54
2:B:27:THR:HG22	2:B:107:LEU:CD1	2.37	0.54
7:H:20:LYS:NZ	35:H:202:HOH:O	2.39	0.54
14:r:30:GLN:O	14:r:31:VAL:C	2.49	0.54
2:B:221:PRO:HA	22:B:610:CLA:HED3	1.88	0.54
16:U:70:ARG:NH2	35:U:201:HOH:O	2.40	0.54
13:O:82:GLN:NE2	35:O:307:HOH:O	2.41	0.54
7:H:60:VAL:HG12	7:H:60:VAL:O	2.06	0.54
2:B:168:VAL:HA	35:B:721:HOH:O	2.08	0.54
22:a:402:CLA:H143	23:a:404:PHO:H61	1.90	0.54
3:c:391[A]:ARG:HD2	3:c:395:TYR:CZ	2.42	0.54
20:z:35:ARG:N	35:z:1301:HOH:O	2.40	0.54
14:R:16:ALA:O	14:R:20:VAL:HG23	2.08	0.53
1:a:179:THR:O	1:a:183:MET:HG3	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:b:317:ASN:HA	2:b:330:MET:HE1	1.90	0.53
23:d:401:PHO:H3A	22:d:402:CLA:H142	1.89	0.53
2:B:298:LEU:HD23	2:B:402:TYR:CZ	2.42	0.53
22:C:503:CLA:H61	22:C:513:CLA:H42	1.89	0.53
16:u:52:ASN:C	16:u:52:ASN:HD22	2.15	0.53
2:B:502:VAL:HG22	2:B:502:VAL:O	2.09	0.53
14:r:18:TRP:O	14:r:22:ASN:ND2	2.41	0.53
2:B:117:TYR:HA	11:L:1:MET:HE1	1.91	0.53
23:a:404:PHO:HBC2	23:a:404:PHO:CHD	2.39	0.53
30:C:518:DGD:O2D	32:J:101:STE:H21	2.09	0.53
2:b:345:VAL:HG13	2:b:353:GLU:OE2	2.09	0.53
5:e:30:LEU:HD11	34:e:101:HEC:HBB3	1.89	0.53
1:A:270:SER:HB3	29:A:412:SQD:O49	2.09	0.53
20:Z:54:VAL:O	24:Z:101:BCR:H332	2.09	0.53
4:d:194:ASN:HA	4:d:295:SER:OG	2.08	0.53
30:A:415:DGD:HB41	32:I:101:STE:H62	1.91	0.53
3:C:126:GLY:O	3:C:130:VAL:HG13	2.09	0.53
24:C:515:BCR:H331	24:C:515:BCR:C8	2.37	0.53
4:d:267:LEU:C	4:d:267:LEU:HD23	2.33	0.53
3:c:315:MET:CE	3:c:365:TRP:HZ3	2.21	0.53
4:d:246:MET:HE3	4:d:264:LYS:HD2	1.90	0.53
2:B:347:ARG:NE	35:B:707:HOH:O	2.32	0.52
13:o:84:GLU:OE1	13:o:86:LYS:NZ	2.39	0.52
22:D:403:CLA:HBB1	22:D:403:CLA:HMB3	1.90	0.52
24:D:405:BCR:H23C	24:D:405:BCR:H392	1.92	0.52
17:V:63:THR:HG22	17:V:64:PRO:CD	2.40	0.52
5:e:27:ILE:HB	5:e:28:PRO:HD3	1.92	0.52
11:L:26:VAL:HG11	28:L:102:LHG:H202	1.91	0.52
17:V:69:ILE:O	17:V:73:VAL:HG23	2.10	0.52
2:b:67:ALA:HA	2:b:71:VAL:O	2.10	0.52
2:B:36:SER:OG	24:B:619:BCR:H362	2.10	0.52
2:b:159:THR:O	2:b:180:PRO:HB3	2.09	0.51
2:B:249:ALA:HB2	22:B:605:CLA:HBC3	1.91	0.51
16:u:52:ASN:ND2	35:u:201:HOH:O	2.42	0.51
1:A:192:ILE:HG13	1:A:293:MET:HE1	1.92	0.51
22:D:404:CLA:H141	18:X:15:LEU:HD22	1.92	0.51
13:O:133:VAL:HG12	13:O:135:SER:H	1.75	0.51
1:A:307:ILE:HG22	1:A:313:VAL:HA	1.93	0.51
22:c:509:CLA:H43	22:c:509:CLA:O1A	2.10	0.51
1:a:38:ILE:HB	1:a:39:PRO:HD3	1.92	0.51
3:C:394:GLU:OE1	35:C:601:HOH:O	2.20	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:265:PHE:CD1	1:a:271:LEU:HD23	2.45	0.51
17:v:41:HIS:HA	17:v:45:ILE:O	2.10	0.51
7:h:2:ALA:N	35:h:203:HOH:O	2.44	0.51
2:b:491:VAL:HG12	4:d:136:VAL:HG13	1.93	0.50
4:D:157:PHE:CE2	4:D:171:PRO:HG2	2.46	0.50
3:C:318:LEU:C	3:C:318:LEU:HD23	2.37	0.50
3:C:109:PHE:O	3:C:113:VAL:HG23	2.12	0.50
14:r:20:VAL:O	14:r:24:LEU:HB2	2.12	0.50
17:v:6:GLU:OE1	17:v:6:GLU:N	2.42	0.50
2:b:275:TRP:CE2	2:b:315:ILE:HG13	2.46	0.50
7:h:2:ALA:CA	35:h:203:HOH:O	2.60	0.50
20:z:15:LEU:HG	20:z:19:MET:HE2	1.94	0.50
4:D:170:ALA:HB1	4:D:171:PRO:HD2	1.93	0.50
19:Y:34:MET:O	19:Y:38:LEU:HG	2.11	0.50
16:u:50:VAL:O	16:u:53:ALA:HB3	2.12	0.50
16:U:38:TYR:HB2	16:U:41:LEU:HD12	1.93	0.50
2:B:15:ASP:OD1	35:B:703:HOH:O	2.20	0.50
5:e:20:TRP:HD1	9:j:8:ILE:HD12	1.74	0.49
22:B:602:CLA:O1D	22:B:602:CLA:H2A	2.12	0.49
3:c:352:GLY:O	3:c:355:THR:HG22	2.12	0.49
4:d:213:ILE:HD11	4:d:253:TRP:CH2	2.47	0.49
17:v:10:VAL:HG23	17:v:69:ILE:HD11	1.94	0.49
14:R:33:LYS:O	14:R:35:LEU:N	2.45	0.49
22:c:508:CLA:HBC3	22:c:510:CLA:C9	2.39	0.49
10:k:25:LEU:N	10:k:26:PRO:CD	2.76	0.49
24:Z:101:BCR:H331	24:Z:101:BCR:C8	2.43	0.49
4:d:259:ILE:HD12	28:d:408:LHG:H291	1.93	0.49
4:D:267:LEU:C	4:D:267:LEU:HD23	2.37	0.49
12:M:20:VAL:HG11	12:m:20:VAL:HG22	1.93	0.49
2:B:307:GLU:OE1	13:o:59:LYS:HG2	2.13	0.49
22:B:612:CLA:H203	22:B:614:CLA:C10	2.43	0.49
22:C:506:CLA:NC	22:C:506:CLA:H42	2.27	0.49
23:d:401:PHO:HBB1	23:d:401:PHO:HMB1	1.95	0.49
1:A:188:ALA:HB2	1:A:328:MET:HB2	1.94	0.49
24:B:619:BCR:H331	24:B:619:BCR:C8	2.42	0.49
3:c:167:VAL:HG12	22:c:512:CLA:H42	1.95	0.49
2:B:339:ALA:HB2	13:o:58:ASN:HB3	1.93	0.49
4:D:148:ALA:HB3	4:D:149:PRO:HD3	1.95	0.49
12:M:20:VAL:HG11	12:m:20:VAL:CG2	2.43	0.49
2:b:30:VAL:HG12	22:b:605:CLA:HHD	1.94	0.49
22:c:506:CLA:H141	22:c:507:CLA:H141	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:b:359:MET:HB2	2:b:425:ILE:HD12	1.93	0.48
22:b:615:CLA:HHC	22:b:615:CLA:HBB1	1.95	0.48
10:k:18:PHE:HE2	20:z:13:VAL:HG21	1.78	0.48
3:c:48:LYS:NZ	35:c:606:HOH:O	2.41	0.48
16:u:50:VAL:O	16:u:53:ALA:CB	2.61	0.48
2:B:371:THR:HG23	2:B:372:ASP:O	2.12	0.48
4:d:261:PHE:CZ	28:d:408:LHG:HC81	2.49	0.48
19:y:41:VAL:C	19:y:43:ARG:H	2.22	0.48
2:B:160:GLY:HA2	2:B:163:GLY:O	2.13	0.48
13:o:13:THR:OG1	13:o:15:LEU:HD12	2.14	0.48
3:c:315:MET:HE2	3:c:365:TRP:HZ3	1.78	0.48
18:x:10:PHE:CE2	18:x:14:LEU:HD22	2.49	0.48
34:E:101:HEC:HBB3	34:E:101:HEC:HMB1	1.96	0.48
12:M:27:VAL:HG13	32:M:104:STE:H62	1.95	0.48
3:c:348:GLU:OE2	13:o:11:VAL:HA	2.14	0.48
6:f:24:HIS:O	6:f:28:VAL:HG13	2.14	0.47
20:z:31:GLN:HG3	20:z:32:ASP:OD1	2.14	0.47
1:A:85:SER:HA	1:A:109:GLY:HA3	1.97	0.47
2:b:36:SER:OG	24:b:618:BCR:H362	2.14	0.47
4:d:79:SER:HA	4:d:172:SER:HB3	1.95	0.47
5:E:3:GLY:N	35:E:205:HOH:O	2.47	0.47
10:K:27:VAL:HG11	33:Y:101:LMG:H191	1.95	0.47
2:B:284:ILE:O	2:B:288:VAL:HG23	2.13	0.47
5:E:68:ASP:O	5:E:72:ALA:HB2	2.14	0.47
4:d:99:GLY:HA3	32:x:102:STE:H151	1.96	0.47
4:d:272:LEU:C	4:d:272:LEU:HD23	2.39	0.47
1:A:227:THR:HB	1:A:231:GLU:HG3	1.97	0.47
1:a:95:PRO:HD2	1:a:98:GLU:HG3	1.97	0.47
2:b:59:GLY:O	22:b:607:CLA:HED2	2.14	0.47
2:b:135:LEU:N	2:b:136:PRO:CD	2.78	0.47
27:d:406:PL9:H322	28:l:101:LHG:H222	1.95	0.47
2:B:226:TYR:CD2	2:B:231:MET:HB2	2.50	0.47
2:B:297:THR:HG23	2:B:300:GLU:OE1	2.15	0.47
13:O:5:LEU:HD13	13:O:10:ILE:HD11	1.96	0.47
13:O:51:LEU:HB2	13:O:234:LYS:HB3	1.96	0.47
17:V:78:ASN:OD1	17:V:96:ARG:NH1	2.43	0.47
19:Y:26:ALA:O	19:Y:30:ILE:HG22	2.15	0.47
1:a:84:PRO:HA	1:a:112:TYR:CG	2.50	0.47
1:a:105:TRP:CZ3	1:a:111:PRO:HG3	2.49	0.47
1:a:308:ASP:OD1	1:a:308:ASP:C	2.58	0.47
3:c:315:MET:CE	3:c:365:TRP:CZ3	2.98	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:68:LEU:HD23	5:e:49:THR:HG21	1.96	0.47
2:B:414:PRO:O	2:B:418:LYS:HG3	2.15	0.47
33:B:627:LMG:O10	33:B:627:LMG:C10	2.63	0.47
3:C:67:MET:HB3	3:C:88:LEU:HD12	1.96	0.47
13:O:6:THR:HG22	13:O:9:ASP:CG	2.40	0.47
2:b:43:ALA:HA	32:b:624:STE:H31	1.96	0.47
3:c:391[A]:ARG:CZ	35:c:602:HOH:O	2.60	0.47
2:B:298:LEU:HD23	2:B:402:TYR:CE1	2.50	0.47
3:c:401:LEU:N	3:c:401:LEU:HD12	2.30	0.47
17:v:28:GLU:HA	17:v:28:GLU:OE1	2.15	0.47
22:b:605:CLA:HMA1	22:b:606:CLA:H3A	1.97	0.47
24:x:101:BCR:H331	24:x:101:BCR:C8	2.45	0.47
20:z:1:MET:O	20:z:3:ILE:N	2.48	0.47
22:C:513:CLA:H43	22:C:513:CLA:O2A	2.14	0.46
4:D:218:VAL:HG22	4:D:244:TYR:CZ	2.49	0.46
2:b:221:PRO:HA	22:b:609:CLA:HED3	1.97	0.46
1:A:103:ASP:OD1	30:A:415:DGD:O2E	2.33	0.46
3:c:367:GLU:N	3:c:368:PRO:CD	2.78	0.46
17:V:122:GLU:N	17:V:123:PRO:HD2	2.29	0.46
20:Z:51:VAL:O	20:Z:54:VAL:O	2.32	0.46
3:c:315:MET:CE	35:c:711:HOH:O	2.60	0.46
3:C:334:PRO:HA	13:O:153:THR:OG1	2.15	0.46
5:E:26:THR:HB	34:E:101:HEC:HAB	1.97	0.46
30:A:415:DGD:HD5	2:b:75:TRP:HB3	1.97	0.46
2:B:349:LYS:NZ	35:B:719:HOH:O	2.48	0.46
2:B:474:LEU:O	4:D:134:ARG:NH1	2.48	0.46
4:D:296:TYR:CE2	4:D:319:LEU:HD22	2.51	0.46
2:B:149[B]:LEU:HG	22:B:605:CLA:H18	1.98	0.46
5:E:26:THR:HA	14:R:15:ALA:HB1	1.98	0.46
4:d:209:LEU:HD23	4:d:209:LEU:C	2.40	0.46
3:C:50:LEU:O	3:C:54:VAL:HG23	2.16	0.46
3:c:75:PHE:HZ	3:c:105:VAL:HG21	1.80	0.46
3:c:391[A]:ARG:NH1	35:c:609:HOH:O	2.47	0.46
3:C:415:ASN:O	3:C:416:SER:OG	2.27	0.46
2:b:201:HIS:HB2	22:b:602:CLA:CHB	2.45	0.46
4:d:42:TYR:CZ	6:f:25:THR:HG23	2.50	0.46
20:z:32:ASP:OD1	20:z:32:ASP:N	2.48	0.46
3:C:109:PHE:N	3:C:110:PRO:CD	2.79	0.46
24:K:101:BCR:H322	20:Z:17:PHE:CE2	2.51	0.46
1:a:271:LEU:HD21	27:a:410:PL9:C3	2.45	0.46
1:a:278:TRP:HB3	1:a:279:PRO:HD3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:b:249:ALA:HB2	22:b:604:CLA:HBC3	1.98	0.46
10:k:23:ASP:OD2	35:k:201:HOH:O	2.20	0.46
22:D:403:CLA:HED1	27:D:406:PL9:H372	1.97	0.46
2:b:164:PRO:HG3	22:b:606:CLA:O1D	2.16	0.46
4:d:179:PHE:O	4:d:182:LEU:HB2	2.15	0.46
30:A:415:DGD:C4B	32:I:101:STE:H62	2.46	0.45
5:E:22[A]:ILE:HG23	5:E:23:HIS:ND1	2.31	0.45
17:v:104:MET:HA	17:v:107:LEU:HD22	1.98	0.45
22:c:511:CLA:H143	20:z:20:VAL:HG13	1.96	0.45
34:e:101:HEC:CBB	34:e:101:HEC:HHC	2.47	0.45
1:A:63:ILE:HB	3:C:335:THR:HG21	1.97	0.45
2:b:248:ALA:HA	22:b:603:CLA:H42	1.99	0.45
4:d:54:PHE:HB3	5:e:47:PHE:CD2	2.52	0.45
5:e:63:ILE:HG23	5:e:64:PRO:HD2	1.99	0.45
17:v:69:ILE:HD12	17:v:69:ILE:N	2.30	0.45
33:D:407:LMG:H112	35:D:512:HOH:O	2.16	0.45
3:c:400:PRO:C	3:c:401:LEU:HD12	2.42	0.45
14:r:5:VAL:HG12	14:r:5:VAL:O	2.16	0.45
1:A:183:MET:HA	22:A:402:CLA:HMD1	1.99	0.45
2:B:103:LEU:HD21	22:B:606:CLA:HMC3	1.98	0.45
22:C:503:CLA:H141	22:C:503:CLA:H161	1.84	0.45
1:a:114:LEU:C	1:a:114:LEU:HD23	2.42	0.45
3:c:334:PRO:HA	13:o:153:THR:OG1	2.17	0.45
1:A:201:GLY:HA3	1:A:286:THR:HB	1.98	0.45
13:o:28:GLY:O	35:o:301:HOH:O	2.20	0.45
2:B:63:LEU:HA	2:B:66:MET:HE3	1.99	0.45
13:O:130:GLN:OE1	13:O:130:GLN:HA	2.16	0.45
2:b:98:LEU:HD22	2:b:102:VAL:HG23	1.99	0.45
2:B:237:VAL:HG12	22:B:613:CLA:HMD1	1.99	0.45
4:D:23:LYS:CE	4:D:135:LEU:HD21	2.47	0.45
3:c:436:PHE:HB3	22:c:510:CLA:H91	1.97	0.45
12:m:9:ILE:HG13	12:m:13:LEU:HD22	1.99	0.45
3:C:367:GLU:N	3:C:368:PRO:CD	2.80	0.44
4:D:166:SER:OG	4:D:168:PHE:HB3	2.18	0.44
34:E:101:HEC:HBC3	34:E:101:HEC:CHD	2.41	0.44
3:C:406:SER:HA	3:C:420:VAL:HG23	1.98	0.44
14:R:20:VAL:O	14:R:24:LEU:HB2	2.17	0.44
3:c:227:VAL:O	3:c:227:VAL:HG13	2.17	0.44
3:c:459:ILE:HG21	3:c:464:GLU:HG3	1.99	0.44
4:d:103:ARG:O	4:d:107:LEU:HG	2.17	0.44
4:d:241:GLU:CD	4:d:241:GLU:H	2.24	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:348:ASN:HB3	2:B:354:LEU:HD11	2.00	0.44
3:C:42:LEU:HD21	22:C:512:CLA:H2A	2.00	0.44
4:D:272:LEU:HD23	4:D:272:LEU:O	2.18	0.44
1:a:288:LEU:HG	3:c:432:VAL:HG22	2.00	0.44
5:e:64:PRO:HB2	5:e:79:PHE:CD2	2.52	0.44
22:A:402:CLA:H162	22:A:402:CLA:H203	1.80	0.44
13:O:189:ARG:NH2	13:O:226:GLY:O	2.51	0.44
1:a:234:ASN:OD1	28:d:407:LHG:HC11	2.17	0.44
3:c:150:ASP:OD2	3:c:152:LYS:HB2	2.18	0.44
16:u:58:VAL:HG12	16:u:79:LEU:CD2	2.46	0.44
22:B:605:CLA:HBD	22:B:606:CLA:H43	1.99	0.44
3:C:168:LEU:HD21	22:C:510:CLA:H61	1.99	0.44
4:D:218:VAL:HG13	4:D:244:TYR:CD1	2.53	0.44
1:A:196:PRO:HB3	30:C:519:DGD:HA92	1.99	0.44
24:B:618:BCR:H382	24:B:618:BCR:H23C	1.99	0.44
1:a:278:TRP:HB3	1:a:279:PRO:CD	2.48	0.44
27:A:410:PL9:C15	28:A:413:LHG:H372	2.47	0.44
24:B:620:BCR:C8	24:B:620:BCR:H331	2.47	0.44
3:C:162:GLY:HA2	3:C:248:GLY:HA2	1.99	0.44
4:D:218:VAL:HG22	4:D:244:TYR:CE1	2.52	0.44
4:D:272:LEU:HD23	4:D:272:LEU:C	2.42	0.44
33:b:622:LMG:C9	35:b:702:HOH:O	2.64	0.44
34:e:101:HEC:HBB3	34:e:101:HEC:HHC	2.00	0.44
3:c:391[B]:ARG:NE	3:c:391[B]:ARG:HA	2.32	0.44
5:e:81:GLU:O	5:e:84:LYS:HE2	2.18	0.44
10:k:26:PRO:O	10:k:29:PRO:HD2	2.18	0.44
27:A:410:PL9:H371	27:A:410:PL9:H351	1.84	0.44
3:C:93:ALA:HB1	3:C:99:VAL:HG11	2.00	0.44
17:V:61:LEU:HB2	17:V:82:TYR:OH	2.18	0.44
4:d:61:HIS:CE1	4:d:168:PHE:CE2	3.05	0.44
10:k:15:TYR:CZ	20:z:5:PHE:HZ	2.36	0.44
14:r:2:ASP:HB3	14:r:5:VAL:HG23	2.00	0.44
17:v:80:THR:HA	17:v:86:GLN:O	2.18	0.44
2:B:243:ALA:HA	2:B:246:PHE:CE2	2.53	0.43
2:B:363:PHE:HB3	2:B:365:SER:O	2.18	0.43
4:D:172:SER:HB2	4:D:177:ALA:HB1	1.99	0.43
1:a:270:SER:OG	29:a:411:SQD:H3	2.18	0.43
22:C:512:CLA:H143	20:Z:20:VAL:HG13	1.99	0.43
33:b:622:LMG:HC92	35:b:702:HOH:O	2.18	0.43
5:e:23:HIS:HA	5:e:26:THR:OG1	2.18	0.43
20:z:9:LEU:HD13	20:z:54:VAL:HG11	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:15:GLU:OE1	1:A:19:ASN:ND2	2.52	0.43
24:Z:101:BCR:H24C	24:Z:101:BCR:H371	1.82	0.43
2:b:148:LEU:HD23	2:b:210:ILE:HD11	2.00	0.43
2:b:249:ALA:CB	22:b:604:CLA:HBC3	2.48	0.43
22:a:403:CLA:HMD2	4:d:182:LEU:HD21	1.99	0.43
8:I:36:ASP:C	35:I:201:HOH:O	2.61	0.43
13:O:5:LEU:HD13	13:O:10:ILE:CD1	2.48	0.43
24:k:102:BCR:H321	24:k:102:BCR:HC8	1.99	0.43
8:I:7:THR:O	8:I:11:VAL:HG23	2.18	0.43
8:I:14:PHE:CZ	8:I:18:LEU:HD11	2.53	0.43
20:Z:11:ALA:O	20:Z:15:LEU:HB2	2.18	0.43
10:k:10:LYS:HD2	10:k:10:LYS:N	2.34	0.43
22:C:513:CLA:O2A	22:C:513:CLA:C4	2.65	0.43
1:a:16:ARG:HB3	1:a:16:ARG:NH1	2.33	0.43
13:o:72:THR:O	13:o:73:ARG:HB2	2.18	0.43
18:x:25:PHE:O	18:x:29:ILE:HG13	2.19	0.43
1:A:149:ALA:HB3	1:A:150:PRO:CD	2.49	0.43
2:b:451:PHE:CE2	2:b:455:HIS:CE1	3.06	0.43
24:c:515:BCR:H24C	24:c:515:BCR:H371	1.85	0.43
1:A:329:GLU:HG3	35:A:607:HOH:O	2.18	0.43
22:C:510:CLA:H91	22:C:510:CLA:H112	1.79	0.43
34:E:101:HEC:HBB3	34:E:101:HEC:CMB	2.49	0.43
24:d:405:BCR:H20C	24:d:405:BCR:H361	1.89	0.42
24:B:619:BCR:H15C	24:B:619:BCR:H351	1.84	0.42
22:b:615:CLA:H2	22:b:616:CLA:HBB2	2.01	0.42
10:k:18:PHE:CE2	20:z:13:VAL:HG21	2.54	0.42
2:B:27:THR:CG2	2:B:107:LEU:HD13	2.48	0.42
4:D:266:TRP:CD1	28:D:408:LHG:HC31	2.54	0.42
4:d:141:TYR:OH	28:d:407:LHG:O4	2.27	0.42
13:o:114:GLU:HB2	35:o:374:HOH:O	2.18	0.42
14:r:3:TRP:CD1	14:r:3:TRP:C	2.97	0.42
3:C:125:LEU:HD23	3:C:125:LEU:HA	1.89	0.42
3:C:135:ARG:O	3:C:135:ARG:HD3	2.20	0.42
7:H:38:PHE:HB2	24:H:101:BCR:C10	2.49	0.42
4:d:197:HIS:O	4:d:201:VAL:HG23	2.18	0.42
5:e:13:ILE:HG22	5:e:19:TYR:CD1	2.54	0.42
20:z:36:SER:HA	20:z:39:LEU:HD23	2.00	0.42
22:B:604:CLA:CMD	22:B:607:CLA:HMB2	2.50	0.42
1:a:200:LEU:HD13	30:c:518:DGD:HAW2	2.00	0.42
2:b:414:PRO:N	2:b:415:PRO:CD	2.83	0.42
4:d:180:ARG:C	4:d:180:ARG:HD3	2.45	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:f:28:VAL:HG22	6:f:29:PRO:CD	2.41	0.42
2:b:246:PHE:CD1	2:b:246:PHE:C	2.97	0.42
2:b:406:LEU:O	2:b:409:GLN:HG3	2.20	0.42
5:e:35:TRP:CD2	6:f:39:ALA:HB2	2.55	0.42
10:k:17:ILE:HD11	20:z:6:GLN:HG2	2.02	0.42
13:o:81:ILE:HA	13:o:100:GLY:HA3	2.01	0.42
17:v:99:ASP:OD1	17:v:99:ASP:N	2.52	0.42
22:B:614:CLA:HBB1	22:B:614:CLA:HMB3	2.02	0.42
3:C:216:SER:HB2	33:C:516:LMG:HC8	2.02	0.42
12:M:31:SER:HB2	12:m:32:GLN:OE1	2.19	0.42
22:c:501:CLA:C3D	22:c:503:CLA:H2	2.50	0.42
4:d:126:MET:HE3	4:d:143:ALA:O	2.20	0.42
4:d:126:MET:HA	4:d:129:GLN:OE1	2.18	0.42
4:d:319:LEU:O	4:d:323:GLU:HG3	2.20	0.42
4:D:272:LEU:C	4:D:272:LEU:CD2	2.93	0.42
1:A:288:LEU:HD22	3:C:432:VAL:HG22	2.01	0.42
3:c:213:LEU:HD21	24:c:515:BCR:H20C	2.02	0.42
10:k:16:ALA:O	10:k:19:ASP:HB2	2.20	0.42
14:r:24:LEU:N	14:r:25:PRO:HD2	2.35	0.42
3:C:182:PHE:CD2	22:C:503:CLA:H191	2.55	0.41
24:H:101:BCR:C8	24:H:101:BCR:H331	2.50	0.41
22:b:609:CLA:H42	32:b:623:STE:H71	2.01	0.41
17:v:69:ILE:HD12	17:v:69:ILE:H	1.84	0.41
17:v:76:MET:HE1	17:v:115:ILE:HD12	2.02	0.41
2:B:227:LYS:NZ	35:B:723:HOH:O	2.51	0.41
2:B:434:THR:OG1	13:O:178:LYS:NZ	2.52	0.41
3:C:443:TRP:CE2	22:C:509:CLA:HMD2	2.55	0.41
13:O:215:PHE:CD1	13:O:215:PHE:C	2.98	0.41
2:b:243:ALA:HA	2:b:246:PHE:CE2	2.55	0.41
33:b:622:LMG:C8	35:b:702:HOH:O	2.67	0.41
23:d:401:PHO:HBB1	23:d:401:PHO:CMB	2.50	0.41
19:y:19:ILE:C	19:y:19:ILE:HD13	2.45	0.41
1:A:114:LEU:C	1:A:114:LEU:HD23	2.46	0.41
1:A:202:VAL:HG11	22:A:403:CLA:C3D	2.50	0.41
2:B:67:ALA:HA	2:B:71:VAL:O	2.21	0.41
22:B:616:CLA:H201	22:B:616:CLA:CHB	2.50	0.41
24:T:101:BCR:C8	24:T:101:BCR:H311	2.50	0.41
19:Y:30:ILE:O	19:Y:33:PRO:HD2	2.20	0.41
1:a:131:TRP:CE3	1:a:132:GLU:HA	2.55	0.41
3:c:213:LEU:HD21	24:c:515:BCR:C20	2.50	0.41
3:c:424:SER:O	3:c:428:THR:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:91:LEU:HD12	7:h:52:THR:HG21	2.02	0.41
5:e:26:THR:HA	14:r:15:ALA:HB1	2.02	0.41
9:j:34:ALA:O	35:j:201:HOH:O	2.22	0.41
10:k:28:ILE:N	10:k:29:PRO:CD	2.82	0.41
1:A:40:THR:O	1:A:118:HIS:HB3	2.20	0.41
2:B:62:VAL:HB	22:B:606:CLA:HED3	2.02	0.41
13:O:11:VAL:O	13:O:11:VAL:HG13	2.20	0.41
1:a:79:THR:HG22	4:d:315:TYR:HB2	2.02	0.41
2:b:144:PHE:CE1	2:b:148:LEU:HD11	2.55	0.41
8:i:4:LEU:O	8:i:8:VAL:HG23	2.20	0.41
28:B:622:LHG:H222	12:M:18:PRO:HG3	2.03	0.41
23:D:401:PHO:HBC2	23:D:401:PHO:HHD	2.01	0.41
24:D:405:BCR:H382	33:D:407:LMG:H171	2.02	0.41
19:Y:42:ARG:O	19:Y:43:ARG:C	2.64	0.41
1:a:226:GLU:C	1:a:227:THR:HG23	2.45	0.41
2:b:200:ALA:O	2:b:201:HIS:C	2.61	0.41
2:b:221:PRO:HB3	22:b:609:CLA:O1D	2.20	0.41
22:b:602:CLA:H43	7:h:45:ILE:HG22	2.02	0.41
5:e:27:ILE:HD11	34:e:101:HEC:HBC3	2.03	0.41
6:f:14:PRO:O	6:f:15:ILE:HD12	2.20	0.41
24:k:103:BCR:H11C	24:k:103:BCR:H341	1.89	0.41
2:B:489:GLU:HB3	2:B:505:ARG:HH12	1.85	0.41
19:Y:41:VAL:O	19:Y:41:VAL:HG13	2.19	0.41
22:b:605:CLA:HHC	22:b:605:CLA:HBB1	2.02	0.41
22:c:504:CLA:H91	22:c:508:CLA:H192	2.03	0.41
4:d:90:LEU:HD12	4:d:90:LEU:HA	1.74	0.41
5:e:71:GLU:O	5:e:75:GLN:HG3	2.21	0.41
17:v:21:LEU:HD11	17:v:117:GLY:HA3	2.02	0.41
27:A:410:PL9:C25	22:D:402:CLA:H141	2.50	0.41
22:B:605:CLA:H92	22:B:605:CLA:H62	1.94	0.41
4:D:23:LYS:HE3	4:D:135:LEU:HD21	2.02	0.41
6:f:26:LEU:O	6:f:29:PRO:HD2	2.21	0.41
15:t:15:ALA:HA	24:t:101:BCR:H12C	2.03	0.41
4:D:100:ASP:OD1	4:D:100:ASP:C	2.63	0.41
4:D:148:ALA:HB2	4:D:276:VAL:HG13	2.03	0.41
13:O:5:LEU:CD1	13:O:10:ILE:HD11	2.51	0.41
3:c:203:THR:O	3:c:235:GLY:HA3	2.20	0.41
22:c:511:CLA:H91	22:c:511:CLA:H111	1.90	0.41
6:f:16:PHE:H	14:r:30:GLN:HE22	1.69	0.41
16:u:51:LYS:O	16:u:51:LYS:HG3	2.20	0.41
3:C:67:MET:HB3	3:C:88:LEU:CD1	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:C:515:BCR:H24C	24:C:515:BCR:H371	1.91	0.41
5:E:19:TYR:CE1	5:E:23:HIS:CE1	3.08	0.41
6:F:15:ILE:HD11	14:R:26:TYR:HB2	2.02	0.41
6:F:20:TRP:CE2	6:F:24:HIS:CE1	3.09	0.41
13:O:101:ILE:O	13:O:101:ILE:HG22	2.21	0.41
1:a:95:PRO:HG2	1:a:98:GLU:HG2	2.03	0.41
22:a:405:CLA:H42	8:i:9:TYR:CD2	2.55	0.41
24:a:406:BCR:H24C	24:a:406:BCR:H371	1.79	0.41
2:b:127:ARG:HB2	2:b:128:THR:HG23	2.03	0.41
3:c:75:PHE:CZ	3:c:105:VAL:HG21	2.56	0.41
3:c:88:LEU:HB3	22:c:503:CLA:HED3	2.02	0.41
3:c:135:ARG:CG	3:c:135:ARG:HH11	2.34	0.41
3:c:464:GLU:O	3:c:465:PRO:C	2.61	0.41
22:c:505:CLA:H43	24:c:515:BCR:HC7	2.02	0.41
3:C:419:PHE:HA	30:C:518:DGD:O3E	2.21	0.41
34:E:101:HEC:CAC	6:F:27:ALA:HB1	2.51	0.41
33:b:622:LMG:C7	35:b:702:HOH:O	2.69	0.41
3:c:109:PHE:N	3:c:110:PRO:CD	2.84	0.41
13:o:40:ILE:HG21	13:o:43:LEU:HB2	2.03	0.41
24:A:406:BCR:H24C	24:A:406:BCR:H371	1.94	0.40
2:B:145:LEU:HD11	22:B:616:CLA:CMB	2.51	0.40
2:b:280:PHE:CD2	2:b:312:TYR:HB3	2.56	0.40
16:u:36:ILE:HD13	17:v:52:LEU:HD13	2.02	0.40
3:C:48:LYS:HD2	3:C:138:GLU:HG3	2.03	0.40
24:b:617:BCR:H15C	24:b:617:BCR:H351	1.95	0.40
3:c:240:ILE:HD13	3:c:240:ILE:HA	1.91	0.40
4:d:45:LEU:HD12	4:d:45:LEU:HA	1.88	0.40
17:v:67:ASP:OD1	17:v:67:ASP:N	2.46	0.40
1:A:60:ILE:HB	1:A:83:VAL:CG1	2.51	0.40
2:B:102:VAL:HA	24:B:619:BCR:C40	2.51	0.40
2:B:451:PHE:CD1	2:B:451:PHE:C	2.98	0.40
24:C:515:BCR:H361	24:C:515:BCR:H20C	1.79	0.40
4:D:282:SER:HB2	22:D:402:CLA:O1D	2.22	0.40
7:H:6:TRP:CZ2	7:H:10:ILE:HD11	2.56	0.40
10:K:25:LEU:N	10:K:26:PRO:HD2	2.36	0.40
17:V:41:HIS:HA	17:V:45:ILE:O	2.22	0.40
2:b:65:PHE:CE2	22:b:604:CLA:HMA3	2.56	0.40
3:c:38:GLY:HA3	22:c:511:CLA:HMD2	2.03	0.40
20:z:15:LEU:HD21	20:z:46:LEU:HB3	2.03	0.40
28:B:622:LHG:H211	12:M:14:PHE:CE2	2.57	0.40
3:c:128:GLY:HA3	22:c:513:CLA:C3C	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:h:17:GLU:O	7:h:18:TYR:C	2.62	0.40
16:u:51:LYS:O	16:u:52:ASN:HB3	2.22	0.40
1:A:110:GLY:N	1:A:111:PRO:CD	2.85	0.40
5:E:27:ILE:HB	5:E:28:PRO:HD3	2.03	0.40
24:H:101:BCR:H11C	24:H:101:BCR:H341	1.98	0.40
13:O:40:ILE:HD12	13:O:95:PHE:CE1	2.55	0.40
1:a:42:LEU:CD1	29:a:413:SQD:H321	2.52	0.40
24:b:618:BCR:H11C	24:b:618:BCR:H341	1.96	0.40
22:c:510:CLA:O2A	22:c:510:CLA:H2A	2.22	0.40
5:e:23:HIS:CD2	34:e:101:HEC:NC	2.90	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	332/334 (99%)	325 (98%)	6 (2%)	1 (0%)	36	40
1	a	332/334 (99%)	326 (98%)	5 (2%)	1 (0%)	36	40
2	B	508/506 (100%)	497 (98%)	11 (2%)	0	100	100
2	b	503/506 (99%)	491 (98%)	12 (2%)	0	100	100
3	C	442/461 (96%)	428 (97%)	13 (3%)	1 (0%)	43	50
3	c	451/461 (98%)	435 (96%)	15 (3%)	1 (0%)	43	50
4	D	339/352 (96%)	330 (97%)	9 (3%)	0	100	100
4	d	340/352 (97%)	328 (96%)	12 (4%)	0	100	100
5	E	81/84 (96%)	80 (99%)	1 (1%)	0	100	100
5	e	80/84 (95%)	80 (100%)	0	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	29 (91%)	3 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	H	63/66 (96%)	58 (92%)	5 (8%)	0	100	100
7	h	61/66 (92%)	57 (93%)	4 (7%)	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%)	1 (3%)	1 (3%)	3	1
9	j	34/40 (85%)	33 (97%)	1 (3%)	0	100	100
10	K	35/46 (76%)	32 (91%)	2 (6%)	1 (3%)	3	1
10	k	35/46 (76%)	34 (97%)	1 (3%)	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%)	28 (93%)	2 (7%)	0	100	100
13	O	243/272 (89%)	228 (94%)	12 (5%)	3 (1%)	10	7
13	o	242/272 (89%)	231 (96%)	9 (4%)	2 (1%)	16	14
14	R	32/40 (80%)	28 (88%)	3 (9%)	1 (3%)	3	1
14	r	29/40 (72%)	26 (90%)	1 (3%)	2 (7%)	1	0
15	T	28/30 (93%)	28 (100%)	0	0	100	100
15	t	28/30 (93%)	27 (96%)	1 (4%)	0	100	100
16	U	95/134 (71%)	91 (96%)	4 (4%)	0	100	100
16	u	95/134 (71%)	91 (96%)	2 (2%)	2 (2%)	5	2
17	V	135/163 (83%)	130 (96%)	4 (3%)	1 (1%)	18	17
17	v	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
18	X	36/41 (88%)	34 (94%)	2 (6%)	0	100	100
18	x	37/41 (90%)	37 (100%)	0	0	100	100
19	Y	25/46 (54%)	23 (92%)	1 (4%)	1 (4%)	2	1
19	y	28/46 (61%)	25 (89%)	3 (11%)	0	100	100
20	Z	60/62 (97%)	55 (92%)	5 (8%)	0	100	100
20	z	60/62 (97%)	58 (97%)	1 (2%)	1 (2%)	7	3
All	All	5240/5666 (92%)	5062 (97%)	159 (3%)	19 (0%)	30	31

All (19) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
13	O	59	LYS
13	O	62	GLU
17	V	64	PRO
3	c	416	SER
14	r	30	GLN
14	R	34	LEU
19	Y	43	ARG
13	o	73	ARG
20	z	2	THR
10	K	16	ALA
13	o	56	PRO
14	r	31	VAL
9	J	7	ARG
1	a	259	ILE
16	u	53	ALA
13	O	133	VAL
16	u	52	ASN
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	270/270 (100%)	265 (98%)	5 (2%)	50	61
1	a	269/270 (100%)	258 (96%)	11 (4%)	27	33
2	B	408/404 (101%)	397 (97%)	11 (3%)	39	49
2	b	402/404 (100%)	391 (97%)	11 (3%)	39	49
3	C	346/362 (96%)	336 (97%)	10 (3%)	37	47
3	c	354/362 (98%)	336 (95%)	18 (5%)	21	23
4	D	276/283 (98%)	270 (98%)	6 (2%)	45	56
4	d	277/283 (98%)	264 (95%)	13 (5%)	23	26
5	E	72/73 (99%)	69 (96%)	3 (4%)	26	31
5	e	71/73 (97%)	66 (93%)	5 (7%)	14	13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	F	28/39 (72%)	27 (96%)	1 (4%)	31	39
6	f	28/39 (72%)	25 (89%)	3 (11%)	6	4
7	H	54/55 (98%)	51 (94%)	3 (6%)	19	20
7	h	53/55 (96%)	48 (91%)	5 (9%)	8	6
8	I	32/34 (94%)	30 (94%)	2 (6%)	16	16
8	i	32/34 (94%)	31 (97%)	1 (3%)	35	44
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	20 (83%)	4 (17%)	2	0
10	K	30/37 (81%)	26 (87%)	4 (13%)	4	2
10	k	30/37 (81%)	26 (87%)	4 (13%)	4	2
11	L	35/35 (100%)	34 (97%)	1 (3%)	37	47
11	l	34/35 (97%)	30 (88%)	4 (12%)	5	3
12	M	28/32 (88%)	28 (100%)	0	100	100
12	m	28/32 (88%)	26 (93%)	2 (7%)	13	12
13	O	206/228 (90%)	195 (95%)	11 (5%)	20	22
13	o	207/228 (91%)	200 (97%)	7 (3%)	32	40
14	R	28/32 (88%)	24 (86%)	4 (14%)	3	1
14	r	23/32 (72%)	17 (74%)	6 (26%)	0	0
15	T	26/26 (100%)	24 (92%)	2 (8%)	12	10
15	t	25/26 (96%)	23 (92%)	2 (8%)	11	9
16	U	84/112 (75%)	80 (95%)	4 (5%)	23	25
16	u	84/112 (75%)	81 (96%)	3 (4%)	31	39
17	V	117/138 (85%)	109 (93%)	8 (7%)	14	14
17	v	117/138 (85%)	113 (97%)	4 (3%)	32	40
18	X	31/34 (91%)	29 (94%)	2 (6%)	15	14
18	x	31/34 (91%)	29 (94%)	2 (6%)	15	14
19	Y	19/37 (51%)	17 (90%)	2 (10%)	6	4
19	y	22/37 (60%)	19 (86%)	3 (14%)	3	2
20	Z	52/52 (100%)	43 (83%)	9 (17%)	2	0
20	z	51/52 (98%)	45 (88%)	6 (12%)	5	3
All	All	4328/4622 (94%)	4126 (95%)	202 (5%)	24	26

All (202) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	38	ILE
1	A	205	VAL
1	A	243	GLU
1	A	270	SER
2	B	84	THR
2	B	98	LEU
2	B	127	ARG
2	B	168	VAL
2	B	236	THR
2	B	240	SER
2	B	282	GLN
2	B	297	THR
2	B	362	PHE
2	B	371	THR
2	B	435	GLU
3	C	104	GLU
3	C	130	VAL
3	C	141	GLU
3	C	216	SER
3	C	240	ILE
3	C	255	THR
3	C	289	PHE
3	C	315	MET
3	C	346	THR
3	C	380	ILE
4	D	43	LEU
4	D	150	ILE
4	D	209	LEU
4	D	272	LEU
4	D	329	MET
4	D	345	VAL
5	E	16	SER
5	E	22[A]	ILE
5	E	22[B]	ILE
6	F	25	THR
7	H	27	THR
7	H	56	ASP
7	H	63	LYS
8	I	4	LEU
8	I	6	ILE
10	K	11	LEU

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Mol	Chain	Res	Type
10	K	17	ILE
10	K	19	ASP
10	K	43	VAL
11	L	10	VAL
13	O	6	THR
13	O	34	SER
13	O	39	ARG
13	O	54	GLU
13	O	64	GLU
13	O	78	LEU
13	O	118	LEU
13	O	134	THR
13	O	189	ARG
13	O	196	GLN
13	O	214	THR
14	R	6	LEU
14	R	21	ARG
14	R	29	LYS
14	R	35	LEU
15	T	25	GLU
15	T	29	ILE
16	U	39	ARG
16	U	51	LYS
16	U	61	VAL
16	U	67	LEU
17	V	3	LEU
17	V	7	VAL
17	V	31	ARG
17	V	42	VAL
17	V	86	GLN
17	V	90	GLU
17	V	99	ASP
17	V	107	LEU
18	X	27	VAL
18	X	29	ILE
19	Y	41	VAL
19	Y	45	ASN
20	Z	6	GLN
20	Z	7	LEU
20	Z	14	ILE
20	Z	15	LEU
20	Z	17	PHE

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Mol	Chain	Res	Type
20	Z	35	ARG
20	Z	46	LEU
20	Z	50	LEU
20	Z	52	LEU
1	a	42	LEU
1	a	121	LEU
1	a	159	LEU
1	a	200	LEU
1	a	223	LEU
1	a	229	GLU
1	a	230	THR
1	a	231	GLU
1	a	241	GLN
1	a	245	THR
1	a	288	LEU
2	b	80	ILE
2	b	98	LEU
2	b	149	LEU
2	b	236	THR
2	b	315	ILE
2	b	362	PHE
2	b	439	SER
2	b	485	GLU
2	b	492	GLU
2	b	505	ARG
2	b	506	ARG
3	c	24	THR
3	c	26	ARG
3	c	30	SER
3	c	72	LEU
3	c	99	VAL
3	c	124	VAL
3	c	125	LEU
3	c	135	ARG
3	c	165	LEU
3	c	221	GLU
3	c	224	ILE
3	c	279	LEU
3	c	354	GLU
3	c	355	THR
3	c	413[A]	GLU
3	c	413[B]	GLU

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Mol	Chain	Res	Type
3	c	416	SER
3	c	463	SER
4	d	90	LEU
4	d	103	ARG
4	d	182	LEU
4	d	230	SER
4	d	241	GLU
4	d	259	ILE
4	d	264	LYS
4	d	272	LEU
4	d	291	LEU
4	d	293	LEU
4	d	307	GLU
4	d	321	LEU
4	d	329	MET
5	e	4	THR
5	e	39	SER
5	e	63	ILE
5	e	65	LEU
5	e	83	LEU
6	f	15	ILE
6	f	25	THR
6	f	28	VAL
7	h	7	LEU
7	h	12	ARG
7	h	27	THR
7	h	39	LEU
7	h	43	LEU
8	i	33	LYS
9	j	7	ARG
9	j	13	VAL
9	j	21	VAL
9	j	24	ILE
10	k	10	LYS
10	k	19	ASP
10	k	30	VAL
10	k	35	LEU
11	l	2	GLU
11	l	7	ARG
11	l	21	LEU
11	l	30	LEU
12	m	9	ILE

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Mol	Chain	Res	Type
12	m	13	LEU
13	o	18	LYS
13	o	49	THR
13	o	64	GLU
13	o	87	VAL
13	o	118	LEU
13	o	130	GLN
13	o	207	ARG
14	r	3	TRP
14	r	6	LEU
14	r	9	LEU
14	r	10	LEU
14	r	12	VAL
14	r	14	LEU
15	t	25	GLU
15	t	29	ILE
16	u	16	LYS
16	u	51	LYS
16	u	52	ASN
17	v	7	VAL
17	v	24	LYS
17	v	52	LEU
17	v	106	ASN
18	x	2	THR
18	x	15	LEU
19	y	17	GLU
19	y	19	ILE
19	y	23	THR
20	z	1	MET
20	z	7	LEU
20	z	14	ILE
20	z	32	ASP
20	z	42	LEU
20	z	46	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (39) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	165	GLN
1	A	338	ASN
2	B	223	GLN

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Mol	Chain	Res	Type
2	B	409	GLN
3	C	418	ASN
4	D	332	GLN
4	D	334	GLN
5	E	82	GLN
13	O	36	GLN
13	O	88	ASN
13	O	124	ASN
13	O	132	ASN
13	O	147	ASN
13	O	196	GLN
14	R	22	ASN
16	U	37	GLN
16	U	78	ASN
17	V	86	GLN
18	X	38	GLN
19	Y	21	GLN
19	Y	45	ASN
1	a	19	ASN
1	a	165	GLN
1	a	181	ASN
2	b	179	GLN
2	b	274	GLN
2	b	338	GLN
2	b	409	GLN
4	d	350	ASN
5	e	82	GLN
7	h	59	ASN
13	o	61	GLN
13	o	155	ASN
16	u	52	ASN
16	u	78	ASN
20	z	31	GLN
20	z	38	GLN
20	z	58	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	0.90	0	8,9,11	1.39	2 (25%)
15	FME	t	1	15	8,9,10	1.20	1 (12%)	8,9,11	0.74	0
15	FME	T	1	15	8,9,10	0.90	0	8,9,11	1.04	0
8	FME	I	1	8	8,9,10	1.12	1 (12%)	8,9,11	0.87	0
12	FME	m	1	12	8,9,10	1.02	1 (12%)	8,9,11	0.62	0
12	FME	M	1	12	8,9,10	1.04	0	8,9,11	1.29	1 (12%)

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	-
15	FME	t	1	15	-	2/7/9/11	-
15	FME	T	1	15	-	2/7/9/11	-
8	FME	I	1	8	-	0/7/9/11	-
12	FME	m	1	12	-	0/7/9/11	-
12	FME	M	1	12	-	1/7/9/11	-

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	t	1	FME	CA-N	-2.68	1.42	1.46
12	m	1	FME	CA-N	-2.13	1.43	1.46
8	I	1	FME	CA-N	-2.05	1.43	1.46

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	i	1	FME	CA-N-CN	-2.38	119.17	122.82
8	i	1	FME	CB-CA-N	2.31	114.73	110.52
12	M	1	FME	CB-CA-N	2.23	114.58	110.52

There are no chirality outliers.

All (6) torsion outliers are listed below:

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

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 189 ligands modelled in this entry, 6 are monoatomic - leaving 183 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	$\# Z > 2$
22	CLA	b	606	-	69,73,73	1.46	5 (7%)	82,113,113	1.50	6 (7%)
32	STE	a	414	-	11,11,19	0.94	0	11,11,19	1.04	0
22	CLA	C	513	-	69,73,73	1.60	6 (8%)	82,113,113	1.50	13 (15%)
29	SQD	B	623	-	52,54,54	0.96	2 (3%)	62,65,65	1.84	11 (17%)
23	PHO	a	404	-	58,69,69	1.91	12 (20%)	55,99,99	1.76	13 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	CLA	C	503	-	69,73,73	1.27	9 (13%)	82,113,113	1.48	12 (14%)
32	STE	E	102	-	11,11,19	0.96	0	11,11,19	1.04	0
22	CLA	D	402	-	69,73,73	1.33	7 (10%)	82,113,113	1.39	10 (12%)
24	BCR	k	102	-	41,41,41	1.13	4 (9%)	56,56,56	1.22	7 (12%)
22	CLA	c	509	-	69,73,73	1.57	9 (13%)	82,113,113	1.35	6 (7%)
30	DGD	C	517	-	63,63,67	1.41	9 (14%)	77,77,81	1.35	7 (9%)
32	STE	B	621	-	16,16,19	0.81	1 (6%)	16,16,19	0.92	1 (6%)
22	CLA	b	609	-	69,73,73	1.49	9 (13%)	82,113,113	1.39	11 (13%)
33	LMG	d	410	-	44,44,55	1.03	4 (9%)	52,52,63	1.47	7 (13%)
34	HEC	E	101	6,5	46,50,50	1.89	9 (19%)	58,82,82	1.85	8 (13%)
22	CLA	c	513	-	69,73,73	1.27	10 (14%)	82,113,113	1.25	6 (7%)
32	STE	B	624	-	11,11,19	1.02	1 (9%)	11,11,19	0.88	0
33	LMG	b	622	-	55,55,55	1.43	7 (12%)	63,63,63	1.51	8 (12%)
29	SQD	a	413	-	35,35,54	1.20	2 (5%)	37,37,65	1.40	7 (18%)
28	LHG	B	622	-	48,48,48	1.07	4 (8%)	51,54,54	1.35	6 (11%)
28	LHG	l	101	-	48,48,48	0.79	0	51,54,54	1.28	4 (7%)
22	CLA	c	505	-	69,73,73	1.11	7 (10%)	82,113,113	1.28	7 (8%)
24	BCR	A	406	-	41,41,41	1.03	3 (7%)	56,56,56	1.51	10 (17%)
22	CLA	b	605	-	69,73,73	1.19	8 (11%)	82,113,113	1.43	13 (15%)
24	BCR	c	514	-	41,41,41	1.02	2 (4%)	56,56,56	1.37	9 (16%)
33	LMG	c	522	-	49,49,55	0.99	3 (6%)	57,57,63	1.37	5 (8%)
24	BCR	C	501	-	41,41,41	1.05	3 (7%)	56,56,56	1.28	6 (10%)
24	BCR	B	620	-	41,41,41	1.24	2 (4%)	56,56,56	1.45	7 (12%)
24	BCR	d	405	-	41,41,41	1.20	2 (4%)	56,56,56	1.29	7 (12%)
22	CLA	c	501	-	69,73,73	1.28	7 (10%)	82,113,113	1.46	10 (12%)
30	DGD	h	101	-	63,63,67	1.21	9 (14%)	77,77,81	1.50	14 (18%)
22	CLA	B	605	-	69,73,73	1.31	7 (10%)	82,113,113	1.66	12 (14%)
30	DGD	C	518	-	63,63,67	1.39	10 (15%)	77,77,81	1.44	10 (12%)
28	LHG	A	411	-	46,46,48	1.08	3 (6%)	49,52,54	1.22	3 (6%)
22	CLA	C	512	3	69,73,73	1.36	10 (14%)	82,113,113	1.35	7 (8%)
22	CLA	C	508	35	69,73,73	1.09	5 (7%)	82,113,113	1.30	6 (7%)
32	STE	b	624	-	19,19,19	0.94	0	19,19,19	0.82	1 (5%)
22	CLA	b	603	-	69,73,73	1.27	10 (14%)	82,113,113	1.46	14 (17%)
24	BCR	H	101	-	41,41,41	1.13	1 (2%)	56,56,56	1.49	8 (14%)
33	LMG	Y	101	-	48,48,55	1.05	4 (8%)	56,56,63	1.37	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
33	LMG	B	627	-	55,55,55	1.51	7 (12%)	63,63,63	1.61	9 (14%)
26	BCT	A	409	21	3,3,3	1.10	0	2,3,3	2.67	1 (50%)
22	CLA	B	616	-	69,73,73	1.20	6 (8%)	82,113,113	1.28	9 (10%)
22	CLA	B	607	-	69,73,73	1.53	6 (8%)	82,113,113	1.61	8 (9%)
32	STE	h	102	-	13,13,19	0.52	0	12,12,19	0.54	0
22	CLA	b	608	-	69,73,73	1.30	10 (14%)	82,113,113	1.13	7 (8%)
34	HEC	V	201	17	46,50,50	1.77	5 (10%)	58,82,82	2.30	12 (20%)
23	PHO	D	401	-	58,69,69	2.05	12 (20%)	55,99,99	1.43	10 (18%)
24	BCR	K	101	-	41,41,41	1.04	2 (4%)	56,56,56	1.27	4 (7%)
29	SQD	A	414	-	38,38,54	1.17	3 (7%)	40,40,65	1.36	4 (10%)
24	BCR	b	619	-	41,41,41	1.19	2 (4%)	56,56,56	1.38	11 (19%)
32	STE	M	104	-	17,17,19	0.44	0	16,16,19	0.84	0
22	CLA	B	617	-	64,68,73	1.37	9 (14%)	76,107,113	1.66	9 (11%)
27	PL9	D	406	-	55,55,55	1.66	7 (12%)	68,69,69	1.77	16 (23%)
32	STE	j	101	-	11,11,19	1.09	0	11,11,19	0.79	0
22	CLA	C	510	-	69,73,73	1.11	8 (11%)	82,113,113	1.32	9 (10%)
22	CLA	b	602	-	69,73,73	1.29	9 (13%)	82,113,113	1.48	9 (10%)
33	LMG	C	516	-	48,48,55	0.96	2 (4%)	56,56,63	1.27	6 (10%)
32	STE	t	102	-	13,13,19	0.69	0	13,13,19	1.29	1 (7%)
22	CLA	b	614	-	69,73,73	1.53	12 (17%)	82,113,113	1.34	10 (12%)
22	CLA	b	615	-	69,73,73	1.60	9 (13%)	82,113,113	1.32	8 (9%)
32	STE	t	104	-	17,17,19	0.75	0	17,17,19	1.15	1 (5%)
30	DGD	H	102	-	63,63,67	1.49	14 (22%)	77,77,81	1.42	11 (14%)
24	BCR	x	101	-	41,41,41	1.13	2 (4%)	56,56,56	1.28	8 (14%)
27	PL9	A	410	-	55,55,55	1.20	3 (5%)	68,69,69	1.44	12 (17%)
22	CLA	D	403	35	69,73,73	1.09	3 (4%)	82,113,113	1.27	5 (6%)
22	CLA	b	610	35	69,73,73	1.31	8 (11%)	82,113,113	1.34	12 (14%)
33	LMG	m	101	-	51,51,55	1.18	6 (11%)	59,59,63	1.49	9 (15%)
22	CLA	C	505	35	63,67,73	1.31	11 (17%)	74,105,113	1.34	7 (9%)
22	CLA	A	405	-	58,62,73	1.74	10 (17%)	68,99,113	1.38	12 (17%)
24	BCR	B	618	-	41,41,41	1.31	3 (7%)	56,56,56	1.32	9 (16%)
22	CLA	c	512	-	69,73,73	1.24	9 (13%)	82,113,113	1.46	11 (13%)
22	CLA	B	611	35	69,73,73	1.39	8 (11%)	82,113,113	1.32	9 (10%)
22	CLA	c	508	-	68,72,73	1.58	11 (16%)	80,111,113	1.37	8 (10%)
29	SQD	L	101	-	47,49,54	0.97	2 (4%)	57,60,65	2.25	15 (26%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	DGD	c	516	-	63,63,67	1.16	6 (9%)	77,77,81	1.40	9 (11%)
22	CLA	B	602	35	69,73,73	1.73	11 (15%)	82,113,113	1.30	5 (6%)
22	CLA	d	402	-	69,73,73	1.36	9 (13%)	82,113,113	1.40	9 (10%)
32	STE	b	621	-	19,19,19	0.79	1 (5%)	19,19,19	1.05	2 (10%)
32	STE	k	101	-	11,11,19	0.84	0	11,11,19	0.87	0
22	CLA	B	610	-	69,73,73	1.33	10 (14%)	82,113,113	1.28	9 (10%)
28	LHG	d	408	-	48,48,48	0.75	1 (2%)	51,54,54	1.21	4 (7%)
22	CLA	b	607	35	69,73,73	1.21	6 (8%)	82,113,113	1.40	8 (9%)
22	CLA	B	604	-	69,73,73	1.74	8 (11%)	82,113,113	1.37	12 (14%)
32	STE	C	522	-	11,11,19	0.87	0	11,11,19	0.83	0
28	LHG	a	412	-	41,41,48	1.08	4 (9%)	44,47,54	1.32	3 (6%)
24	BCR	k	103	-	41,41,41	1.02	2 (4%)	56,56,56	1.30	6 (10%)
32	STE	b	623	-	15,15,19	0.79	0	15,15,19	0.86	0
32	STE	H	103	-	17,17,19	0.58	0	16,16,19	0.53	0
32	STE	b	626	-	19,19,19	0.74	0	19,19,19	1.12	0
33	LMG	D	410	-	26,26,55	1.08	1 (3%)	26,26,63	1.13	1 (3%)
22	CLA	B	613	-	69,73,73	1.05	5 (7%)	82,113,113	1.40	10 (12%)
32	STE	C	521	-	15,15,19	0.71	0	14,14,19	0.40	0
31	OEX	A	416	3,35,1	0,15,15	-	-	-	-	-
24	BCR	Z	101	-	41,41,41	1.10	2 (4%)	56,56,56	1.47	11 (19%)
32	STE	L	103	-	11,11,19	0.81	0	11,11,19	1.25	1 (9%)
32	STE	b	620	-	15,15,19	0.65	0	14,14,19	0.62	0
29	SQD	a	411	-	52,54,54	0.95	5 (9%)	62,65,65	1.87	14 (22%)
33	LMG	D	409	-	31,31,55	1.08	4 (12%)	33,33,63	1.09	0
23	PHO	A	404	-	58,69,69	1.92	11 (18%)	55,99,99	1.58	10 (18%)
30	DGD	c	517	-	63,63,67	1.19	7 (11%)	77,77,81	1.37	9 (11%)
24	BCR	B	619	-	41,41,41	1.11	2 (4%)	56,56,56	1.27	9 (16%)
24	BCR	a	406	-	41,41,41	1.05	3 (7%)	56,56,56	1.16	4 (7%)
22	CLA	C	506	-	69,73,73	1.36	8 (11%)	82,113,113	1.29	8 (9%)
22	CLA	d	404	-	69,73,73	1.33	10 (14%)	82,113,113	1.25	10 (12%)
22	CLA	b	616	-	64,68,73	1.17	5 (7%)	76,107,113	1.39	9 (11%)
30	DGD	c	518	-	63,63,67	1.22	6 (9%)	77,77,81	1.40	9 (11%)
22	CLA	b	601	35	69,73,73	1.53	10 (14%)	82,113,113	1.35	7 (8%)
33	LMG	c	519	-	37,37,55	1.18	4 (10%)	45,45,63	1.32	6 (13%)
24	BCR	t	101	-	41,41,41	1.21	2 (4%)	56,56,56	1.29	5 (8%)
22	CLA	C	507	-	69,73,73	1.14	4 (5%)	82,113,113	1.11	7 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	BCR	C	515	-	41,41,41	1.27	5 (12%)	56,56,56	1.36	6 (10%)
22	CLA	B	612	-	69,73,73	1.21	9 (13%)	82,113,113	1.38	8 (9%)
22	CLA	B	609	-	69,73,73	1.45	8 (11%)	82,113,113	1.43	13 (15%)
32	STE	B	625	-	15,15,19	0.60	0	14,14,19	0.48	0
23	PHO	d	401	-	58,69,69	2.05	12 (20%)	55,99,99	1.68	12 (21%)
32	STE	B	601	-	11,11,19	0.82	0	11,11,19	1.31	1 (9%)
32	STE	Z	102	-	7,7,19	0.53	0	6,6,19	0.56	0
30	DGD	C	519	-	63,63,67	1.16	6 (9%)	77,77,81	1.35	10 (12%)
22	CLA	C	502	-	69,73,73	1.59	11 (15%)	82,113,113	1.33	13 (15%)
32	STE	C	520	-	11,11,19	0.79	0	11,11,19	1.37	2 (18%)
22	CLA	c	504	35	64,68,73	1.24	11 (17%)	76,107,113	1.32	8 (10%)
27	PL9	d	406	-	55,55,55	1.63	9 (16%)	68,69,69	1.77	15 (22%)
22	CLA	C	511	-	69,73,73	1.46	11 (15%)	82,113,113	1.39	8 (9%)
28	LHG	L	102	-	48,48,48	0.90	2 (4%)	51,54,54	1.25	3 (5%)
22	CLA	A	403	35	69,73,73	1.32	9 (13%)	82,113,113	1.15	6 (7%)
28	LHG	D	408	-	48,48,48	0.81	1 (2%)	51,54,54	1.36	6 (11%)
32	STE	J	101	-	11,11,19	0.69	0	11,11,19	1.32	2 (18%)
32	STE	d	411	-	16,16,19	0.79	0	16,16,19	1.01	1 (6%)
29	SQD	f	101	-	39,41,54	1.12	3 (7%)	49,52,65	1.85	11 (22%)
32	STE	D	411	-	19,19,19	0.77	1 (5%)	19,19,19	1.26	3 (15%)
33	LMG	c	521	-	48,48,55	1.17	4 (8%)	56,56,63	1.25	7 (12%)
22	CLA	c	506	-	69,73,73	1.23	9 (13%)	82,113,113	1.18	7 (8%)
22	CLA	a	402	-	69,73,73	1.41	11 (15%)	82,113,113	1.25	8 (9%)
24	BCR	b	618	-	41,41,41	1.29	3 (7%)	56,56,56	1.32	9 (16%)
22	CLA	b	611	-	69,73,73	1.20	9 (13%)	82,113,113	1.51	13 (15%)
32	STE	B	626	-	14,14,19	0.59	0	13,13,19	0.40	0
33	LMG	D	407	-	51,51,55	1.14	4 (7%)	59,59,63	1.31	6 (10%)
22	CLA	c	503	-	69,73,73	1.28	7 (10%)	82,113,113	1.55	9 (10%)
27	PL9	a	410	-	55,55,55	0.94	3 (5%)	68,69,69	1.58	11 (16%)
28	LHG	A	413	-	48,48,48	1.12	5 (10%)	51,54,54	1.26	6 (11%)
22	CLA	B	615	-	69,73,73	1.52	8 (11%)	82,113,113	1.45	8 (9%)
22	CLA	b	604	-	69,73,73	1.19	7 (10%)	82,113,113	1.56	13 (15%)
22	CLA	a	403	35	69,73,73	1.27	7 (10%)	82,113,113	1.43	15 (18%)
32	STE	M	102	-	14,14,19	0.80	0	14,14,19	0.95	0
29	SQD	A	412	-	50,52,54	1.08	4 (8%)	60,63,65	1.95	13 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	CLA	c	507	35	69,73,73	1.26	8 (11%)	82,113,113	1.40	8 (9%)
22	CLA	C	504	-	69,73,73	1.52	10 (14%)	82,113,113	1.79	12 (14%)
22	CLA	d	403	35	69,73,73	1.28	11 (15%)	82,113,113	1.40	10 (12%)
24	BCR	c	515	-	41,41,41	1.12	4 (9%)	56,56,56	1.40	7 (12%)
24	BCR	T	101	-	41,41,41	1.19	4 (9%)	56,56,56	1.31	4 (7%)
24	BCR	D	405	-	41,41,41	1.17	3 (7%)	56,56,56	1.22	6 (10%)
22	CLA	A	402	-	69,73,73	1.49	10 (14%)	82,113,113	1.17	6 (7%)
30	DGD	A	415	-	67,67,67	1.34	8 (11%)	81,81,81	1.40	14 (17%)
32	STE	M	103	-	9,9,19	0.47	0	8,8,19	0.74	0
22	CLA	b	613	-	69,73,73	1.28	10 (14%)	82,113,113	1.41	11 (13%)
28	LHG	d	409	-	38,38,48	0.95	1 (2%)	41,44,54	1.29	3 (7%)
22	CLA	C	509	-	69,73,73	1.44	10 (14%)	82,113,113	1.34	10 (12%)
32	STE	x	102	-	19,19,19	0.73	0	19,19,19	0.80	1 (5%)
31	OEX	a	415	3,35,1	0,15,15	-	-	-	-	-
22	CLA	c	502	-	69,73,73	1.21	8 (11%)	82,113,113	1.25	9 (10%)
32	STE	c	520	-	19,19,19	0.77	0	19,19,19	1.01	1 (5%)
32	STE	t	103	-	9,9,19	0.54	0	8,8,19	0.47	0
34	HEC	v	201	17	46,50,50	1.79	6 (13%)	58,82,82	2.04	9 (15%)
22	CLA	B	606	-	69,73,73	1.26	8 (11%)	82,113,113	1.34	9 (10%)
22	CLA	c	511	3	69,73,73	1.78	11 (15%)	82,113,113	1.41	7 (8%)
22	CLA	D	404	-	69,73,73	1.57	6 (8%)	82,113,113	1.43	15 (18%)
29	SQD	F	101	-	34,36,54	1.04	2 (5%)	42,45,65	1.76	9 (21%)
22	CLA	B	608	35	69,73,73	1.28	9 (13%)	82,113,113	1.51	10 (12%)
22	CLA	c	510	-	69,73,73	1.44	10 (14%)	82,113,113	1.39	8 (9%)
32	STE	I	101	-	14,14,19	0.65	0	13,13,19	0.44	0
22	CLA	C	514	-	69,73,73	1.31	8 (11%)	82,113,113	1.42	8 (9%)
22	CLA	B	603	-	69,73,73	1.31	10 (14%)	82,113,113	1.27	11 (13%)
22	CLA	a	405	-	69,73,73	1.46	12 (17%)	82,113,113	1.39	8 (9%)
34	HEC	e	101	6,5	46,50,50	1.83	6 (13%)	58,82,82	1.90	9 (15%)
33	LMG	M	101	-	51,51,55	0.99	4 (7%)	59,59,63	1.43	8 (13%)
32	STE	T	102	-	14,14,19	0.45	0	13,13,19	0.78	0
28	LHG	d	407	-	48,48,48	1.08	4 (8%)	51,54,54	1.32	5 (9%)
24	BCR	b	617	-	41,41,41	1.19	3 (7%)	56,56,56	1.48	8 (14%)
22	CLA	B	614	-	69,73,73	1.35	8 (11%)	82,113,113	1.37	9 (10%)
22	CLA	b	612	-	69,73,73	1.10	7 (10%)	82,113,113	1.22	8 (9%)
26	BCT	a	409	21	3,3,3	1.35	0	2,3,3	4.10	2 (100%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	STE	b	625	-	9,9,19	0.56	0	8,8,19	0.52	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
22	CLA	b	606	-	1/1/20/20	8/39/115/115	-
32	STE	a	414	-	-	3/9/9/17	-
22	CLA	C	513	-	1/1/20/20	20/39/115/115	-
29	SQD	B	623	-	-	20/49/69/69	0/1/1/1
23	PHO	a	404	-	-	6/37/103/103	0/5/6/6
22	CLA	C	503	-	1/1/20/20	7/39/115/115	-
32	STE	E	102	-	-	5/9/9/17	-
22	CLA	D	402	-	1/1/20/20	5/39/115/115	-
24	BCR	k	102	-	-	9/29/63/63	0/2/2/2
22	CLA	c	509	-	1/1/20/20	14/39/115/115	-
30	DGD	C	517	-	-	22/51/91/95	0/2/2/2
32	STE	B	621	-	-	6/14/14/17	-
22	CLA	b	609	-	1/1/20/20	4/39/115/115	-
33	LMG	d	410	-	-	14/39/59/70	0/1/1/1
34	HEC	E	101	6,5	-	6/14/54/54	-
22	CLA	c	513	-	1/1/20/20	10/39/115/115	-
32	STE	B	624	-	-	5/9/9/17	-
33	LMG	b	622	-	-	28/50/70/70	0/1/1/1
29	SQD	a	413	-	-	12/37/37/69	-
28	LHG	B	622	-	-	20/53/53/53	-
28	LHG	l	101	-	-	20/53/53/53	-
22	CLA	c	505	-	1/1/20/20	13/39/115/115	-
24	BCR	A	406	-	-	11/29/63/63	0/2/2/2
22	CLA	b	605	-	1/1/20/20	10/39/115/115	-
24	BCR	c	514	-	-	15/29/63/63	0/2/2/2
33	LMG	c	522	-	-	16/44/64/70	0/1/1/1
24	BCR	C	501	-	-	7/29/63/63	0/2/2/2
24	BCR	B	620	-	-	4/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	BCR	d	405	-	-	6/29/63/63	0/2/2/2
22	CLA	c	501	-	1/1/20/20	3/39/115/115	-
30	DGD	h	101	-	-	17/51/91/95	0/2/2/2
22	CLA	B	605	-	1/1/20/20	7/39/115/115	-
30	DGD	C	518	-	-	20/51/91/95	0/2/2/2
28	LHG	A	411	-	-	23/51/51/53	-
22	CLA	C	512	3	1/1/20/20	4/39/115/115	-
22	CLA	C	508	35	1/1/20/20	7/39/115/115	-
32	STE	b	624	-	-	7/17/17/17	-
22	CLA	b	603	-	1/1/20/20	10/39/115/115	-
24	BCR	H	101	-	-	6/29/63/63	0/2/2/2
33	LMG	Y	101	-	-	20/43/63/70	0/1/1/1
33	LMG	B	627	-	-	29/50/70/70	0/1/1/1
22	CLA	B	616	-	1/1/20/20	8/39/115/115	-
22	CLA	B	607	-	1/1/20/20	9/39/115/115	-
32	STE	h	102	-	-	7/11/11/17	-
22	CLA	b	608	-	-	4/39/115/115	-
34	HEC	V	201	17	-	6/14/54/54	-
23	PHO	D	401	-	-	4/37/103/103	0/5/6/6
24	BCR	K	101	-	-	12/29/63/63	0/2/2/2
29	SQD	A	414	-	-	15/39/39/69	-
24	BCR	b	619	-	-	11/29/63/63	0/2/2/2
32	STE	M	104	-	-	8/15/15/17	-
22	CLA	B	617	-	1/1/19/20	8/33/109/115	-
27	PL9	D	406	-	-	7/53/73/73	0/1/1/1
32	STE	j	101	-	-	1/9/9/17	-
22	CLA	C	510	-	1/1/20/20	18/39/115/115	-
22	CLA	b	602	-	1/1/20/20	11/39/115/115	-
33	LMG	C	516	-	-	23/43/63/70	0/1/1/1
32	STE	t	102	-	-	5/11/11/17	-
22	CLA	b	614	-	1/1/20/20	18/39/115/115	-
22	CLA	b	615	-	1/1/20/20	8/39/115/115	-
32	STE	t	104	-	-	8/15/15/17	-
30	DGD	H	102	-	-	18/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	BCR	x	101	-	-	4/29/63/63	0/2/2/2
27	PL9	A	410	-	-	25/53/73/73	0/1/1/1
22	CLA	D	403	35	1/1/20/20	5/39/115/115	-
22	CLA	b	610	35	1/1/20/20	5/39/115/115	-
33	LMG	m	101	-	-	21/46/66/70	0/1/1/1
22	CLA	C	505	35	1/1/18/20	9/32/108/115	-
22	CLA	A	405	-	1/1/17/20	4/26/102/115	-
24	BCR	B	618	-	-	6/29/63/63	0/2/2/2
22	CLA	c	512	-	1/1/20/20	24/39/115/115	-
22	CLA	B	611	35	1/1/20/20	4/39/115/115	-
22	CLA	c	508	-	1/1/19/20	16/38/114/115	-
29	SQD	L	101	-	-	21/44/64/69	0/1/1/1
30	DGD	c	516	-	-	20/51/91/95	0/2/2/2
22	CLA	B	602	35	1/1/20/20	20/39/115/115	-
22	CLA	d	402	-	-	6/39/115/115	-
32	STE	b	621	-	-	7/17/17/17	-
32	STE	k	101	-	-	3/9/9/17	-
22	CLA	B	610	-	-	3/39/115/115	-
28	LHG	d	408	-	-	20/53/53/53	-
22	CLA	b	607	35	1/1/20/20	12/39/115/115	-
22	CLA	B	604	-	1/1/20/20	11/39/115/115	-
32	STE	C	522	-	-	3/9/9/17	-
28	LHG	a	412	-	-	25/46/46/53	-
24	BCR	k	103	-	-	5/29/63/63	0/2/2/2
32	STE	b	623	-	-	5/13/13/17	-
32	STE	H	103	-	-	10/15/15/17	-
32	STE	b	626	-	-	7/17/17/17	-
33	LMG	D	410	-	-	8/22/22/70	-
22	CLA	B	613	-	1/1/20/20	5/39/115/115	-
32	STE	C	521	-	-	5/13/13/17	-
24	BCR	Z	101	-	-	8/29/63/63	0/2/2/2
32	STE	L	103	-	-	5/9/9/17	-
32	STE	b	620	-	-	6/13/13/17	-
29	SQD	a	411	-	-	21/49/69/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	LMG	D	409	-	-	16/33/33/70	-
23	PHO	A	404	-	-	2/37/103/103	0/5/6/6
30	DGD	c	517	-	-	17/51/91/95	0/2/2/2
24	BCR	B	619	-	-	9/29/63/63	0/2/2/2
24	BCR	a	406	-	-	5/29/63/63	0/2/2/2
22	CLA	C	506	-	1/1/20/20	8/39/115/115	-
22	CLA	d	404	-	-	5/39/115/115	-
22	CLA	b	616	-	1/1/19/20	8/33/109/115	-
30	DGD	c	518	-	-	19/51/91/95	0/2/2/2
22	CLA	b	601	35	1/1/20/20	16/39/115/115	-
33	LMG	c	519	-	-	7/31/51/70	0/1/1/1
24	BCR	t	101	-	-	8/29/63/63	0/2/2/2
22	CLA	C	507	-	1/1/20/20	11/39/115/115	-
24	BCR	C	515	-	-	7/29/63/63	0/2/2/2
22	CLA	B	612	-	1/1/20/20	7/39/115/115	-
22	CLA	B	609	-	-	5/39/115/115	-
32	STE	B	625	-	-	6/13/13/17	-
23	PHO	d	401	-	-	5/37/103/103	0/5/6/6
32	STE	B	601	-	-	2/9/9/17	-
32	STE	Z	102	-	-	3/5/5/17	-
30	DGD	C	519	-	-	12/51/91/95	0/2/2/2
22	CLA	C	502	-	1/1/20/20	3/39/115/115	-
32	STE	C	520	-	-	4/9/9/17	-
22	CLA	c	504	35	1/1/19/20	6/33/109/115	-
27	PL9	d	406	-	-	17/53/73/73	0/1/1/1
22	CLA	C	511	-	1/1/20/20	11/39/115/115	-
28	LHG	L	102	-	-	20/53/53/53	-
22	CLA	A	403	35	1/1/20/20	2/39/115/115	-
28	LHG	D	408	-	-	16/53/53/53	-
32	STE	J	101	-	-	8/9/9/17	-
32	STE	d	411	-	-	8/14/14/17	-
29	SQD	f	101	-	-	12/36/56/69	0/1/1/1
32	STE	D	411	-	-	11/17/17/17	-
33	LMG	c	521	-	-	23/43/63/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	c	506	-	1/1/20/20	18/39/115/115	-
22	CLA	a	402	-	1/1/20/20	3/39/115/115	-
24	BCR	b	618	-	-	1/29/63/63	0/2/2/2
22	CLA	b	611	-	1/1/20/20	6/39/115/115	-
32	STE	B	626	-	-	11/12/12/17	-
33	LMG	D	407	-	-	15/46/66/70	0/1/1/1
22	CLA	c	503	-	1/1/20/20	11/39/115/115	-
27	PL9	a	410	-	-	25/53/73/73	0/1/1/1
28	LHG	A	413	-	-	29/53/53/53	-
22	CLA	B	615	-	1/1/20/20	12/39/115/115	-
22	CLA	b	604	-	1/1/20/20	4/39/115/115	-
22	CLA	a	403	35	-	14/39/115/115	-
32	STE	M	102	-	-	5/12/12/17	-
29	SQD	A	412	-	-	18/47/67/69	0/1/1/1
22	CLA	c	507	35	1/1/20/20	14/39/115/115	-
22	CLA	C	504	-	1/1/20/20	3/39/115/115	-
22	CLA	d	403	35	1/1/20/20	9/39/115/115	-
24	BCR	c	515	-	-	5/29/63/63	0/2/2/2
24	BCR	T	101	-	-	10/29/63/63	0/2/2/2
24	BCR	D	405	-	-	5/29/63/63	0/2/2/2
22	CLA	A	402	-	1/1/20/20	2/39/115/115	-
30	DGD	A	415	-	-	27/55/95/95	0/2/2/2
32	STE	M	103	-	-	3/7/7/17	-
22	CLA	b	613	-	1/1/20/20	6/39/115/115	-
28	LHG	d	409	-	-	12/43/43/53	-
22	CLA	C	509	-	1/1/20/20	3/39/115/115	-
32	STE	x	102	-	-	14/17/17/17	-
22	CLA	c	502	-	1/1/20/20	6/39/115/115	-
32	STE	c	520	-	-	7/17/17/17	-
32	STE	t	103	-	-	5/7/7/17	-
34	HEC	v	201	17	-	6/14/54/54	-
22	CLA	B	606	-	1/1/20/20	10/39/115/115	-
22	CLA	c	511	3	1/1/20/20	14/39/115/115	-
22	CLA	D	404	-	1/1/20/20	9/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	SQD	F	101	-	-	10/28/48/69	0/1/1/1
22	CLA	B	608	35	1/1/20/20	5/39/115/115	-
22	CLA	c	510	-	1/1/20/20	12/39/115/115	-
32	STE	I	101	-	-	6/12/12/17	-
22	CLA	C	514	-	-	13/39/115/115	-
22	CLA	B	603	-	1/1/20/20	9/39/115/115	-
22	CLA	a	405	-	1/1/20/20	8/39/115/115	-
34	HEC	e	101	6,5	-	3/14/54/54	-
33	LMG	M	101	-	-	23/46/66/70	0/1/1/1
32	STE	T	102	-	-	8/12/12/17	-
28	LHG	d	407	-	-	18/53/53/53	-
24	BCR	b	617	-	-	6/29/63/63	0/2/2/2
22	CLA	B	614	-	1/1/20/20	16/39/115/115	-
22	CLA	b	612	-	1/1/20/20	10/39/115/115	-
32	STE	b	625	-	-	3/7/7/17	-

All (932) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	401	PHO	C1B-C2B	9.12	1.49	1.39
22	B	607	CLA	MG-NA	8.88	2.27	2.06
22	B	604	CLA	MG-ND	8.83	2.23	2.05
22	A	405	CLA	MG-NB	-8.54	1.88	2.05
22	D	404	CLA	MG-NB	-8.49	1.89	2.05
23	D	401	PHO	C1B-C2B	8.30	1.48	1.39
23	a	404	PHO	C1B-C2B	8.29	1.48	1.39
22	c	508	CLA	MG-NB	8.08	2.21	2.05
22	b	606	CLA	MG-NA	7.97	2.25	2.06
22	B	602	CLA	MG-NA	7.78	2.24	2.06
27	D	406	PL9	C7-C3	-7.72	1.41	1.51
23	A	404	PHO	C1B-C2B	7.66	1.47	1.39
22	C	513	CLA	MG-NB	7.65	2.21	2.05
22	b	601	CLA	MG-NA	7.54	2.24	2.06
23	d	401	PHO	C3B-C4B	7.47	1.49	1.41
22	b	615	CLA	MG-NA	7.45	2.24	2.06
23	D	401	PHO	C3B-C4B	7.39	1.49	1.41
22	c	509	CLA	MG-NB	-7.39	1.91	2.05
22	A	402	CLA	MG-NB	7.36	2.20	2.05
27	d	406	PL9	C6-C1	-7.30	1.36	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	615	CLA	MG-ND	-7.28	1.91	2.05
22	B	604	CLA	MG-NB	-7.21	1.91	2.05
23	A	404	PHO	C3B-C4B	6.84	1.48	1.41
22	B	614	CLA	MG-ND	-6.83	1.92	2.05
22	C	502	CLA	MG-NB	-6.72	1.92	2.05
23	a	404	PHO	C3B-C4B	6.68	1.48	1.41
22	c	511	CLA	MG-NA	6.46	2.21	2.06
34	V	201	HEC	CAC-C3C	6.38	1.55	1.35
22	c	511	CLA	MG-ND	6.33	2.18	2.05
34	V	201	HEC	CAB-C3B	6.27	1.55	1.35
34	v	201	HEC	CAC-C3C	6.19	1.55	1.35
22	C	511	CLA	MG-NC	6.10	2.20	2.06
22	C	504	CLA	MG-NA	6.10	2.20	2.06
22	B	602	CLA	MG-NB	-6.03	1.93	2.05
22	C	509	CLA	MG-NA	5.94	2.20	2.06
34	E	101	HEC	CAC-C3C	5.91	1.54	1.35
34	e	101	HEC	CAC-C3C	5.86	1.54	1.35
34	E	101	HEC	CAB-C3B	5.83	1.53	1.35
22	B	609	CLA	MG-NA	5.83	2.20	2.06
22	C	513	CLA	MG-NA	5.81	2.20	2.06
34	v	201	HEC	CAB-C3B	5.78	1.53	1.35
22	a	405	CLA	MG-NC	-5.77	1.92	2.06
34	e	101	HEC	CAB-C3B	5.74	1.53	1.35
22	c	511	CLA	MG-NB	-5.70	1.94	2.05
33	B	627	LMG	C4-C5	5.56	1.64	1.53
22	c	510	CLA	MG-ND	-5.43	1.95	2.05
22	B	605	CLA	MG-NA	5.31	2.18	2.06
22	D	404	CLA	MG-NC	5.10	2.18	2.06
22	c	501	CLA	MG-NB	-5.06	1.95	2.05
22	C	506	CLA	MG-NC	5.03	2.18	2.06
22	c	513	CLA	MG-ND	-5.01	1.95	2.05
22	C	504	CLA	MG-NB	4.99	2.15	2.05
22	b	615	CLA	MG-NC	-4.89	1.94	2.06
22	c	509	CLA	MG-ND	4.89	2.15	2.05
22	B	609	CLA	MG-ND	-4.89	1.96	2.05
34	e	101	HEC	C3D-C2D	4.88	1.51	1.38
22	C	512	CLA	MG-NA	4.88	2.17	2.06
24	H	101	BCR	C30-C25	-4.82	1.47	1.53
22	c	510	CLA	MG-NA	4.81	2.17	2.06
22	b	614	CLA	C1D-ND	4.79	1.44	1.37
34	E	101	HEC	C3D-C2D	4.75	1.51	1.38
30	C	519	DGD	O2G-C2G	-4.74	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	603	CLA	MG-ND	-4.71	1.96	2.05
34	v	201	HEC	C3D-C2D	4.70	1.51	1.38
22	b	609	CLA	MG-NC	4.68	2.17	2.06
22	b	614	CLA	MG-ND	-4.64	1.96	2.05
22	D	402	CLA	MG-NA	4.63	2.17	2.06
29	a	413	SQD	O47-C7	4.63	1.47	1.34
22	b	603	CLA	MG-NA	4.61	2.17	2.06
24	b	618	BCR	C30-C25	-4.60	1.47	1.53
22	b	613	CLA	MG-NC	-4.58	1.95	2.06
22	b	609	CLA	MG-ND	-4.57	1.96	2.05
22	c	503	CLA	MG-NC	4.57	2.17	2.06
24	B	618	BCR	C30-C25	-4.53	1.48	1.53
22	b	610	CLA	MG-ND	-4.52	1.96	2.05
24	d	405	BCR	C1-C6	-4.51	1.48	1.53
24	C	515	BCR	C1-C6	-4.49	1.48	1.53
22	c	507	CLA	MG-NA	4.48	2.16	2.06
22	C	506	CLA	MG-NB	-4.46	1.96	2.05
22	C	502	CLA	MG-NA	4.45	2.16	2.06
22	b	602	CLA	MG-NA	4.43	2.16	2.06
24	b	619	BCR	C30-C25	-4.43	1.48	1.53
24	B	618	BCR	C1-C6	-4.41	1.48	1.53
22	d	404	CLA	MG-NB	-4.30	1.97	2.05
22	B	617	CLA	MG-ND	4.29	2.14	2.05
22	a	402	CLA	MG-NA	4.28	2.16	2.06
22	B	608	CLA	MG-NC	4.25	2.16	2.06
34	V	201	HEC	C3D-C2D	4.23	1.49	1.38
33	D	407	LMG	C4-C5	4.23	1.62	1.53
28	d	407	LHG	O7-C5	-4.17	1.36	1.46
24	x	101	BCR	C30-C25	-4.17	1.48	1.53
24	B	620	BCR	C1-C6	-4.13	1.48	1.53
33	m	101	LMG	C4-C3	4.12	1.63	1.52
24	B	620	BCR	C30-C25	-4.10	1.48	1.53
22	B	615	CLA	MG-NA	4.09	2.16	2.06
22	b	609	CLA	C4B-NB	4.07	1.43	1.37
23	a	404	PHO	C1D-C2D	4.03	1.44	1.39
33	b	622	LMG	O6-C1	4.03	1.52	1.41
22	C	514	CLA	MG-NA	4.03	2.15	2.06
22	D	402	CLA	MG-NC	-4.01	1.96	2.06
22	D	402	CLA	CMB-C2B	-4.01	1.42	1.50
24	b	617	BCR	C1-C6	-4.00	1.48	1.53
27	D	406	PL9	C11-C9	-3.99	1.43	1.51
22	B	611	CLA	C4B-NB	3.97	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	510	CLA	C1D-ND	3.97	1.43	1.37
22	b	614	CLA	MG-NB	3.96	2.13	2.05
30	C	518	DGD	C4D-C3D	3.96	1.62	1.52
22	b	611	CLA	MG-NA	3.96	2.15	2.06
22	c	502	CLA	MG-NB	-3.95	1.98	2.05
22	B	606	CLA	MG-NB	-3.93	1.98	2.05
30	C	517	DGD	O2G-C2G	-3.93	1.37	1.46
23	d	401	PHO	C1D-C2D	3.91	1.43	1.39
30	H	102	DGD	O2G-C2G	-3.89	1.37	1.46
28	B	622	LHG	O7-C5	-3.88	1.37	1.46
28	A	411	LHG	P-O6	3.88	1.74	1.59
22	b	606	CLA	C1D-ND	3.86	1.42	1.37
22	b	613	CLA	MG-NA	3.86	2.15	2.06
22	B	611	CLA	MG-NB	-3.85	1.98	2.05
22	d	402	CLA	MG-NA	3.85	2.15	2.06
22	B	617	CLA	MG-NA	3.83	2.15	2.06
22	A	405	CLA	C1D-ND	3.82	1.42	1.37
24	t	101	BCR	C1-C6	-3.81	1.48	1.53
22	b	610	CLA	C1D-ND	3.81	1.42	1.37
22	B	602	CLA	C4B-NB	3.81	1.42	1.37
30	C	517	DGD	C6E-C5E	3.80	1.64	1.51
22	C	502	CLA	MG-ND	3.78	2.13	2.05
24	D	405	BCR	C1-C6	-3.77	1.49	1.53
22	B	616	CLA	C1D-ND	3.77	1.42	1.37
30	H	102	DGD	O5D-C1E	3.76	1.46	1.40
22	b	607	CLA	MG-ND	-3.74	1.98	2.05
22	B	611	CLA	CMB-C2B	-3.74	1.43	1.50
23	D	401	PHO	C4D-ND	-3.72	1.33	1.38
22	a	405	CLA	MG-ND	-3.72	1.98	2.05
30	c	517	DGD	O2E-C2E	-3.71	1.33	1.43
24	T	101	BCR	C30-C25	-3.69	1.49	1.53
22	a	403	CLA	MG-NC	3.69	2.15	2.06
22	a	402	CLA	C1D-ND	3.68	1.42	1.37
22	C	503	CLA	MG-NA	3.67	2.15	2.06
24	t	101	BCR	C30-C25	-3.67	1.49	1.53
24	Z	101	BCR	C30-C25	-3.66	1.49	1.53
22	B	615	CLA	C1D-ND	3.66	1.42	1.37
22	B	609	CLA	C1D-ND	3.65	1.42	1.37
22	B	610	CLA	C1B-C2B	3.64	1.51	1.43
29	B	623	SQD	O47-C7	3.64	1.44	1.34
29	A	414	SQD	O48-C23	3.63	1.43	1.33
22	b	608	CLA	C1B-C2B	3.62	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	L	101	SQD	O48-C23	3.60	1.43	1.33
24	C	515	BCR	C30-C25	-3.60	1.49	1.53
22	C	504	CLA	MG-NC	3.60	2.14	2.06
22	d	402	CLA	MG-NB	-3.59	1.98	2.05
22	B	610	CLA	CMD-C2D	-3.59	1.43	1.50
33	b	622	LMG	C7-C8	3.58	1.62	1.50
30	c	518	DGD	O5D-C1E	3.57	1.46	1.40
22	a	402	CLA	MG-NB	3.56	2.12	2.05
33	b	622	LMG	O1-C1	3.55	1.46	1.40
22	C	509	CLA	MG-ND	-3.55	1.98	2.05
24	b	617	BCR	C30-C25	-3.55	1.49	1.53
29	F	101	SQD	O48-C23	3.55	1.43	1.33
22	B	606	CLA	C1D-ND	3.55	1.42	1.37
22	B	611	CLA	MG-NA	3.54	2.14	2.06
22	C	511	CLA	C1D-ND	3.53	1.42	1.37
22	b	602	CLA	C1D-ND	3.52	1.42	1.37
22	b	605	CLA	MG-NB	3.51	2.12	2.05
22	d	403	CLA	C1D-ND	3.51	1.42	1.37
29	A	414	SQD	O47-C45	-3.51	1.41	1.47
22	B	602	CLA	C1B-C2B	3.50	1.51	1.43
22	c	501	CLA	MG-NA	3.50	2.14	2.06
22	a	405	CLA	C1D-ND	3.50	1.42	1.37
22	d	403	CLA	MG-NA	3.49	2.14	2.06
29	A	414	SQD	O47-C7	3.49	1.44	1.34
22	c	503	CLA	C1D-ND	3.48	1.42	1.37
22	B	612	CLA	MG-NA	3.48	2.14	2.06
22	b	604	CLA	C4B-NB	3.47	1.42	1.37
22	B	611	CLA	C1D-ND	3.46	1.42	1.37
29	f	101	SQD	O47-C7	3.46	1.44	1.34
22	a	403	CLA	CHC-C1C	3.45	1.45	1.38
22	a	403	CLA	C4B-NB	3.44	1.42	1.37
23	D	401	PHO	C3B-C2B	-3.44	1.35	1.40
22	b	610	CLA	MG-NB	-3.44	1.99	2.05
22	c	504	CLA	C4B-NB	3.42	1.42	1.37
23	d	401	PHO	CMC-C2C	-3.42	1.45	1.50
22	D	404	CLA	C1D-ND	3.42	1.42	1.37
22	B	602	CLA	C1D-ND	3.41	1.42	1.37
22	c	511	CLA	C1D-ND	3.40	1.42	1.37
30	H	102	DGD	C4E-C5E	3.39	1.60	1.53
22	A	403	CLA	C1D-ND	3.39	1.42	1.37
28	d	409	LHG	P-O6	3.39	1.72	1.59
22	A	403	CLA	CMD-C2D	-3.39	1.43	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	616	CLA	C1D-ND	3.39	1.42	1.37
22	B	611	CLA	MG-ND	-3.38	1.99	2.05
24	c	515	BCR	C30-C25	-3.37	1.49	1.53
22	c	511	CLA	C4B-NB	3.37	1.42	1.37
24	c	514	BCR	C30-C25	-3.37	1.49	1.53
24	B	619	BCR	C30-C25	-3.37	1.49	1.53
22	A	403	CLA	C4B-NB	3.37	1.42	1.37
30	A	415	DGD	C3E-C2E	3.37	1.61	1.52
33	b	622	LMG	C3-C2	3.37	1.61	1.52
24	k	102	BCR	C1-C6	-3.37	1.49	1.53
22	b	601	CLA	C1D-ND	3.36	1.42	1.37
22	c	506	CLA	C1D-ND	3.36	1.42	1.37
30	h	101	DGD	C4E-C5E	3.36	1.60	1.53
22	b	614	CLA	MG-NA	3.35	2.14	2.06
24	B	619	BCR	C1-C6	-3.35	1.49	1.53
22	a	402	CLA	MG-ND	-3.34	1.99	2.05
22	C	514	CLA	C1D-ND	3.34	1.42	1.37
27	d	406	PL9	C53-C6	-3.34	1.43	1.50
22	d	402	CLA	C1D-ND	3.33	1.42	1.37
27	d	406	PL9	C31-C29	-3.32	1.44	1.51
22	C	502	CLA	C1B-NB	-3.32	1.33	1.37
24	K	101	BCR	C30-C25	-3.32	1.49	1.53
22	A	403	CLA	C1B-C2B	3.32	1.50	1.43
30	A	415	DGD	C3G-C2G	3.31	1.61	1.50
22	C	514	CLA	MG-ND	3.31	2.12	2.05
33	d	410	LMG	C4-C5	3.31	1.60	1.53
22	c	509	CLA	C1B-C2B	3.30	1.50	1.43
29	f	101	SQD	O48-C23	3.30	1.43	1.33
24	D	405	BCR	C30-C25	-3.30	1.49	1.53
33	M	101	LMG	C9-C8	3.30	1.61	1.50
22	B	605	CLA	C1B-C2B	3.29	1.50	1.43
22	b	609	CLA	C1D-ND	3.29	1.42	1.37
22	b	609	CLA	CMB-C2B	-3.28	1.44	1.50
22	d	404	CLA	C1D-ND	3.28	1.42	1.37
22	C	505	CLA	C1D-ND	3.28	1.42	1.37
30	C	518	DGD	O2D-C2D	-3.28	1.34	1.43
22	C	513	CLA	MG-ND	-3.27	1.99	2.05
22	b	601	CLA	C1B-C2B	3.27	1.50	1.43
29	a	411	SQD	O48-C23	3.26	1.42	1.33
24	k	102	BCR	C30-C25	-3.25	1.49	1.53
22	B	615	CLA	MG-NC	3.25	2.14	2.06
22	C	511	CLA	MG-ND	-3.22	1.99	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	D	401	PHO	CMB-C2B	-3.20	1.45	1.51
30	c	516	DGD	O5D-C1E	3.20	1.45	1.40
24	b	619	BCR	C1-C6	-3.20	1.49	1.53
22	B	610	CLA	MG-NB	-3.19	1.99	2.05
22	c	513	CLA	C1D-ND	3.19	1.42	1.37
22	B	605	CLA	C3B-C4B	3.19	1.52	1.42
23	A	404	PHO	CMD-C2D	-3.19	1.45	1.51
23	A	404	PHO	CMA-C3A	-3.19	1.48	1.53
22	b	601	CLA	C4B-NB	3.18	1.42	1.37
22	C	506	CLA	CHC-C1C	3.18	1.44	1.38
33	m	101	LMG	C4-C5	3.17	1.59	1.53
24	d	405	BCR	C30-C25	-3.16	1.49	1.53
24	C	501	BCR	C30-C25	-3.16	1.49	1.53
22	C	508	CLA	C1B-C2B	3.15	1.50	1.43
22	C	509	CLA	C4B-NB	3.15	1.42	1.37
22	b	602	CLA	C4B-NB	3.15	1.42	1.37
24	a	406	BCR	C38-C26	-3.15	1.45	1.50
30	C	518	DGD	C6D-C5D	3.14	1.61	1.51
22	B	608	CLA	C1D-ND	3.14	1.42	1.37
22	c	506	CLA	MG-ND	-3.13	1.99	2.05
33	b	622	LMG	C1-C2	3.13	1.61	1.52
33	D	409	LMG	C7-C8	3.13	1.58	1.51
29	L	101	SQD	O47-C7	3.13	1.43	1.34
22	b	605	CLA	C3B-C4B	3.13	1.51	1.42
22	c	509	CLA	C4B-NB	3.13	1.42	1.37
22	C	502	CLA	C4B-NB	3.12	1.42	1.37
24	T	101	BCR	C1-C6	-3.12	1.49	1.53
22	A	402	CLA	C1B-C2B	3.12	1.50	1.43
22	A	405	CLA	MG-NA	-3.12	1.98	2.06
22	C	512	CLA	C1D-ND	3.11	1.41	1.37
22	B	606	CLA	C1B-C2B	3.10	1.50	1.43
28	A	413	LHG	C24-C23	3.10	1.59	1.50
22	a	403	CLA	C1D-ND	3.09	1.41	1.37
22	c	512	CLA	C4B-NB	3.09	1.41	1.37
23	A	404	PHO	C3B-C2B	-3.09	1.36	1.40
24	Z	101	BCR	C1-C6	-3.09	1.49	1.53
22	B	603	CLA	C4B-NB	3.09	1.41	1.37
22	D	403	CLA	C1D-ND	3.08	1.41	1.37
22	c	512	CLA	C1D-ND	3.08	1.41	1.37
22	a	405	CLA	CMC-C2C	-3.07	1.44	1.50
22	c	508	CLA	C1D-ND	3.06	1.41	1.37
24	K	101	BCR	C1-C6	-3.06	1.49	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	A	413	LHG	O8-C23	3.06	1.42	1.33
22	A	403	CLA	MG-ND	-3.06	1.99	2.05
22	B	612	CLA	CMD-C2D	-3.05	1.44	1.50
29	A	412	SQD	O47-C7	3.05	1.42	1.34
28	D	408	LHG	O7-C5	-3.04	1.39	1.46
22	C	511	CLA	C1B-NB	-3.03	1.33	1.37
22	C	504	CLA	C1B-C2B	3.03	1.50	1.43
22	B	612	CLA	C1D-ND	3.03	1.41	1.37
22	b	612	CLA	MG-NB	-3.03	1.99	2.05
22	d	404	CLA	C4B-NB	3.01	1.41	1.37
22	B	615	CLA	C4B-NB	3.01	1.41	1.37
22	C	509	CLA	C1D-ND	3.00	1.41	1.37
22	c	502	CLA	CMD-C2D	-3.00	1.44	1.50
22	B	617	CLA	CMC-C2C	-3.00	1.44	1.50
22	d	402	CLA	CMB-C2B	-3.00	1.44	1.50
22	b	607	CLA	CMB-C2B	-2.99	1.44	1.50
22	c	505	CLA	C1B-C2B	2.99	1.50	1.43
22	B	610	CLA	MG-NA	2.99	2.13	2.06
22	A	402	CLA	MG-ND	-2.99	1.99	2.05
33	M	101	LMG	O7-C8	-2.99	1.39	1.46
33	c	521	LMG	C7-C8	2.99	1.60	1.50
27	D	406	PL9	C52-C5	-2.98	1.44	1.50
22	B	613	CLA	C1D-ND	2.98	1.41	1.37
33	D	407	LMG	O2-C2	-2.98	1.35	1.43
30	A	415	DGD	C4D-C3D	2.97	1.60	1.52
23	a	404	PHO	CAC-C3C	-2.97	1.46	1.51
23	A	404	PHO	CMC-C2C	-2.97	1.46	1.50
22	b	614	CLA	CHC-C1C	2.97	1.44	1.38
24	a	406	BCR	C1-C6	-2.97	1.50	1.53
30	C	517	DGD	C4D-C3D	2.97	1.60	1.52
22	C	507	CLA	C4B-NB	2.96	1.41	1.37
33	d	410	LMG	O7-C8	-2.96	1.39	1.46
30	C	518	DGD	O2G-C2G	-2.96	1.39	1.46
33	Y	101	LMG	C4-C5	2.96	1.59	1.53
22	C	512	CLA	MG-NC	2.95	2.13	2.06
22	a	405	CLA	C1B-C2B	2.94	1.50	1.43
24	c	515	BCR	C1-C6	-2.93	1.50	1.53
29	A	412	SQD	O48-C23	2.93	1.41	1.33
22	b	603	CLA	MG-NB	-2.92	2.00	2.05
22	C	505	CLA	C1B-NB	-2.92	1.34	1.37
23	D	401	PHO	CMD-C2D	-2.92	1.45	1.51
22	b	616	CLA	MG-NA	2.92	2.13	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	C	518	DGD	O3D-C3D	-2.92	1.35	1.43
22	b	605	CLA	MG-ND	-2.91	2.00	2.05
22	c	507	CLA	MG-NB	-2.91	2.00	2.05
24	k	103	BCR	C30-C25	-2.91	1.50	1.53
33	B	627	LMG	C3-C2	2.91	1.59	1.52
29	a	413	SQD	O48-C23	2.91	1.41	1.33
22	b	601	CLA	MG-ND	2.91	2.11	2.05
24	x	101	BCR	C1-C6	-2.91	1.50	1.53
22	C	503	CLA	MG-ND	-2.90	2.00	2.05
22	B	616	CLA	C4B-NB	2.89	1.41	1.37
22	b	602	CLA	CMD-C2D	-2.89	1.44	1.50
22	c	512	CLA	C1B-C2B	2.89	1.49	1.43
22	c	510	CLA	CMB-C2B	-2.88	1.44	1.50
22	a	402	CLA	CMB-C2B	-2.88	1.44	1.50
33	Y	101	LMG	C1-C2	2.88	1.61	1.52
22	C	503	CLA	C1B-C2B	2.88	1.49	1.43
22	C	502	CLA	CMD-C2D	-2.87	1.44	1.50
29	B	623	SQD	O48-C23	2.87	1.41	1.33
22	c	511	CLA	CHC-C1C	2.86	1.44	1.38
33	D	410	LMG	O8-C28	2.86	1.40	1.30
33	B	627	LMG	O7-C10	2.86	1.42	1.34
22	C	505	CLA	C4B-NB	2.85	1.41	1.37
28	a	412	LHG	P-O6	2.85	1.70	1.59
33	c	521	LMG	O1-C1	2.85	1.45	1.40
22	b	604	CLA	C1B-C2B	2.85	1.49	1.43
22	D	403	CLA	C1B-NB	-2.85	1.34	1.37
22	C	512	CLA	C1B-C2B	2.85	1.49	1.43
22	B	607	CLA	C1D-ND	2.84	1.41	1.37
30	H	102	DGD	C1E-C2E	2.84	1.60	1.52
22	C	507	CLA	C1B-C2B	2.84	1.49	1.43
23	A	404	PHO	C4D-ND	-2.84	1.34	1.38
27	D	406	PL9	C35-C34	-2.84	1.43	1.50
22	B	614	CLA	C1B-NB	-2.83	1.34	1.37
22	C	506	CLA	C1D-ND	2.83	1.41	1.37
22	b	615	CLA	CMD-C2D	-2.83	1.45	1.50
22	c	508	CLA	MG-NC	2.82	2.13	2.06
30	H	102	DGD	O3G-C1D	2.82	1.44	1.40
22	B	612	CLA	C1B-C2B	2.82	1.49	1.43
22	A	405	CLA	C4B-NB	2.82	1.41	1.37
22	C	514	CLA	C1B-C2B	2.81	1.49	1.43
22	b	615	CLA	CMB-C2B	-2.81	1.45	1.50
30	c	516	DGD	O2G-C2G	-2.80	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	401	PHO	C4D-ND	-2.80	1.34	1.38
22	b	608	CLA	C4B-NB	2.80	1.41	1.37
30	C	517	DGD	C6D-C5D	2.80	1.60	1.51
27	d	406	PL9	C46-C44	-2.80	1.45	1.51
22	c	505	CLA	C4B-NB	2.80	1.41	1.37
30	A	415	DGD	C4E-C5E	2.80	1.59	1.53
34	e	101	HEC	C3B-C2B	-2.80	1.31	1.41
23	d	401	PHO	CMD-C2D	-2.79	1.46	1.51
27	D	406	PL9	C26-C24	-2.79	1.45	1.51
33	B	627	LMG	C4-C3	2.79	1.59	1.52
22	C	511	CLA	CHC-C1C	2.79	1.44	1.38
22	B	616	CLA	CMB-C2B	-2.78	1.45	1.50
22	C	513	CLA	C1B-C2B	2.78	1.49	1.43
22	b	603	CLA	C3B-C4B	2.78	1.50	1.42
22	c	507	CLA	C1B-C2B	2.77	1.49	1.43
22	b	602	CLA	C1B-C2B	2.76	1.49	1.43
22	D	402	CLA	CMD-C2D	-2.76	1.45	1.50
22	B	614	CLA	C4B-NB	2.76	1.41	1.37
22	C	505	CLA	C3B-C4B	2.76	1.50	1.42
28	A	411	LHG	O3-C3	-2.76	1.34	1.44
22	b	616	CLA	CMD-C2D	-2.75	1.45	1.50
22	b	615	CLA	MG-NB	2.75	2.11	2.05
22	c	503	CLA	MG-NA	2.75	2.12	2.06
22	B	604	CLA	C1D-ND	2.75	1.41	1.37
22	C	512	CLA	C4B-NB	2.75	1.41	1.37
22	b	611	CLA	C4B-NB	2.75	1.41	1.37
28	A	413	LHG	P-O6	2.75	1.70	1.59
33	m	101	LMG	O7-C8	-2.74	1.40	1.46
30	H	102	DGD	C6E-C5E	2.74	1.61	1.51
27	d	406	PL9	C25-C24	-2.74	1.44	1.50
22	c	505	CLA	C3B-C4B	2.74	1.50	1.42
22	b	608	CLA	MG-NA	2.74	2.12	2.06
22	C	510	CLA	C1B-C2B	2.74	1.49	1.43
24	c	514	BCR	C1-C6	-2.74	1.50	1.53
22	b	608	CLA	MG-NC	-2.73	1.99	2.06
28	a	412	LHG	O8-C23	2.73	1.41	1.33
22	b	610	CLA	C1B-C2B	2.72	1.49	1.43
22	b	612	CLA	C1B-C2B	2.72	1.49	1.43
33	c	521	LMG	C3-C2	2.72	1.59	1.52
24	A	406	BCR	C1-C6	-2.72	1.50	1.53
22	c	503	CLA	C4B-NB	2.71	1.41	1.37
22	b	613	CLA	CMD-C2D	-2.71	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	d	402	CLA	C4B-NB	2.71	1.41	1.37
22	c	505	CLA	MG-NB	2.71	2.11	2.05
22	c	506	CLA	MG-NC	2.71	2.12	2.06
22	C	510	CLA	C1D-ND	2.70	1.41	1.37
22	C	506	CLA	C4B-NB	2.70	1.41	1.37
33	b	622	LMG	C9-C8	2.70	1.59	1.50
22	c	501	CLA	CHC-C4B	-2.69	1.33	1.39
22	C	509	CLA	C1B-C2B	2.69	1.49	1.43
24	T	101	BCR	C38-C26	-2.69	1.46	1.50
27	D	406	PL9	C3-C4	-2.69	1.45	1.49
34	v	201	HEC	C3B-C2B	-2.69	1.32	1.41
22	B	617	CLA	C1D-ND	2.69	1.41	1.37
22	B	610	CLA	C4B-NB	2.68	1.41	1.37
22	b	605	CLA	C1D-ND	2.68	1.41	1.37
22	B	607	CLA	MG-NB	2.67	2.11	2.05
22	c	512	CLA	C3B-C4B	2.67	1.50	1.42
22	C	506	CLA	C1B-C2B	2.67	1.49	1.43
22	a	402	CLA	CHC-C1C	2.67	1.43	1.38
22	b	604	CLA	CMC-C2C	-2.66	1.45	1.50
27	A	410	PL9	C3-C4	-2.66	1.45	1.49
30	H	102	DGD	C4D-C3D	2.65	1.59	1.52
33	C	516	LMG	C4-C5	2.65	1.58	1.53
23	D	401	PHO	C1D-C2D	2.64	1.42	1.39
22	c	503	CLA	CMC-C2C	-2.64	1.45	1.50
22	c	512	CLA	CMB-C2B	-2.64	1.45	1.50
22	C	508	CLA	C4B-NB	2.63	1.41	1.37
22	B	617	CLA	C1B-C2B	2.63	1.49	1.43
22	c	504	CLA	MG-NA	2.62	2.12	2.06
22	c	511	CLA	C1B-C2B	2.62	1.49	1.43
33	M	101	LMG	C1-C2	2.62	1.60	1.52
22	B	610	CLA	C1D-ND	2.62	1.41	1.37
22	b	604	CLA	MG-NB	2.62	2.11	2.05
22	C	511	CLA	C1B-C2B	2.62	1.49	1.43
29	A	412	SQD	O2-C2	-2.62	1.36	1.43
33	B	627	LMG	O1-C1	2.61	1.44	1.40
22	C	512	CLA	C3B-C4B	2.61	1.50	1.42
22	a	402	CLA	CMC-C2C	-2.61	1.45	1.50
22	A	405	CLA	MG-ND	2.61	2.11	2.05
22	C	503	CLA	CMD-C2D	-2.60	1.45	1.50
30	A	415	DGD	O3G-C1D	2.60	1.44	1.40
22	C	505	CLA	CMD-C2D	-2.60	1.45	1.50
27	d	406	PL9	C7-C3	2.60	1.54	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	H	102	DGD	O4D-C4D	-2.60	1.36	1.43
22	A	402	CLA	CHC-C1C	2.60	1.43	1.38
30	C	517	DGD	C2A-C1A	-2.60	1.43	1.50
28	L	102	LHG	O8-C23	2.59	1.40	1.33
22	a	405	CLA	CMB-C2B	-2.59	1.45	1.50
22	D	403	CLA	CMD-C2D	-2.59	1.45	1.50
30	h	101	DGD	C1E-C2E	2.59	1.60	1.52
22	b	611	CLA	CMD-C2D	-2.59	1.45	1.50
22	C	512	CLA	MG-NB	-2.58	2.00	2.05
22	B	607	CLA	CHC-C1C	2.58	1.43	1.38
22	b	612	CLA	C3B-C4B	2.58	1.50	1.42
22	b	609	CLA	CMD-C2D	-2.58	1.45	1.50
22	C	511	CLA	C4B-NB	2.58	1.41	1.37
24	C	501	BCR	C1-C6	-2.58	1.50	1.53
22	b	603	CLA	CMD-C2D	-2.57	1.45	1.50
22	B	603	CLA	CMD-C2D	-2.57	1.45	1.50
22	B	603	CLA	C1B-C2B	2.57	1.49	1.43
22	b	610	CLA	CMD-C2D	-2.57	1.45	1.50
22	B	610	CLA	O2D-CGD	2.56	1.39	1.33
22	C	502	CLA	C1D-ND	2.56	1.41	1.37
22	d	404	CLA	MG-ND	-2.56	2.00	2.05
22	C	503	CLA	CMC-C2C	-2.56	1.45	1.50
22	d	403	CLA	C1B-C2B	2.56	1.49	1.43
30	C	517	DGD	C3G-C2G	2.56	1.58	1.50
30	h	101	DGD	C3G-C2G	2.56	1.58	1.50
22	c	509	CLA	CMB-C2B	-2.56	1.45	1.50
22	C	509	CLA	CHC-C1C	2.56	1.43	1.38
22	a	402	CLA	C4B-NB	2.55	1.41	1.37
22	c	501	CLA	C1B-C2B	2.55	1.49	1.43
33	C	516	LMG	C4-C3	2.55	1.59	1.52
33	m	101	LMG	C6-C5	2.55	1.60	1.51
22	B	604	CLA	CMC-C2C	-2.55	1.45	1.50
22	c	505	CLA	CMB-C2B	-2.55	1.45	1.50
22	b	605	CLA	C1B-C2B	2.55	1.49	1.43
22	B	617	CLA	CMD-C2D	-2.54	1.45	1.50
22	b	607	CLA	C4B-NB	2.54	1.41	1.37
22	B	611	CLA	C3B-C4B	2.54	1.50	1.42
22	a	403	CLA	C1B-NB	-2.53	1.34	1.37
24	A	406	BCR	C38-C26	-2.53	1.46	1.50
22	B	603	CLA	MG-NB	2.53	2.10	2.05
22	b	611	CLA	C1B-C2B	2.52	1.49	1.43
22	d	404	CLA	CMC-C2C	-2.52	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	505	CLA	MG-NC	2.52	2.12	2.06
22	c	506	CLA	C4B-NB	2.52	1.41	1.37
22	C	509	CLA	CMD-C2D	-2.52	1.45	1.50
22	B	616	CLA	C1B-C2B	2.52	1.49	1.43
22	C	503	CLA	C3B-C4B	2.51	1.50	1.42
33	m	101	LMG	O6-C1	2.51	1.48	1.41
22	c	513	CLA	C4B-NB	2.51	1.41	1.37
30	c	518	DGD	C3E-C2E	2.51	1.58	1.52
22	C	512	CLA	CMB-C2B	-2.51	1.45	1.50
22	c	509	CLA	C1D-ND	2.51	1.41	1.37
22	b	608	CLA	MG-NB	2.51	2.10	2.05
33	c	519	LMG	C6-C5	2.51	1.60	1.51
22	b	613	CLA	C1D-ND	2.50	1.41	1.37
22	b	615	CLA	CMC-C2C	-2.50	1.45	1.50
22	A	402	CLA	C3B-C4B	2.50	1.50	1.42
22	A	403	CLA	CMB-C2B	-2.50	1.45	1.50
33	m	101	LMG	O1-C7	-2.50	1.39	1.43
22	b	611	CLA	C1D-ND	2.50	1.41	1.37
22	c	513	CLA	C1B-C2B	2.50	1.49	1.43
22	c	504	CLA	C1B-C2B	2.50	1.49	1.43
22	B	612	CLA	C1B-NB	-2.49	1.34	1.37
22	B	615	CLA	CMB-C2B	-2.49	1.45	1.50
22	B	603	CLA	CMB-C2B	-2.49	1.45	1.50
28	A	413	LHG	O7-C5	-2.49	1.40	1.46
22	c	511	CLA	MG-NC	2.49	2.12	2.06
22	c	512	CLA	MG-NB	2.49	2.10	2.05
23	D	401	PHO	O2D-CGD	2.48	1.39	1.33
22	c	504	CLA	C1D-ND	2.48	1.41	1.37
23	D	401	PHO	CMC-C2C	-2.48	1.46	1.50
22	C	504	CLA	CHC-C1C	2.48	1.43	1.38
34	E	101	HEC	C3B-C2B	-2.47	1.32	1.41
30	h	101	DGD	O1G-C1G	-2.47	1.39	1.45
22	B	602	CLA	MG-NC	-2.47	2.00	2.06
22	b	614	CLA	C4B-NB	2.47	1.41	1.37
22	b	607	CLA	C3B-C4B	2.47	1.49	1.42
22	C	505	CLA	C1B-C2B	2.46	1.48	1.43
30	c	517	DGD	C6E-C5E	2.46	1.60	1.51
22	B	611	CLA	CHC-C1C	2.46	1.43	1.38
22	c	502	CLA	C3B-C4B	2.46	1.49	1.42
30	A	415	DGD	C1E-C2E	2.46	1.59	1.52
24	B	618	BCR	C38-C26	-2.46	1.47	1.50
22	C	505	CLA	O2D-CGD	2.46	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Y	101	LMG	O8-C9	-2.45	1.39	1.45
22	a	405	CLA	C1B-NB	-2.45	1.34	1.37
22	C	503	CLA	MG-NC	2.45	2.12	2.06
22	d	404	CLA	CMD-C2D	-2.44	1.45	1.50
22	c	507	CLA	CMC-C2C	-2.44	1.45	1.50
22	B	608	CLA	CMC-C2C	-2.44	1.45	1.50
22	d	403	CLA	CMA-C3A	-2.44	1.48	1.53
22	b	608	CLA	CMA-C3A	-2.44	1.48	1.53
22	d	402	CLA	C1B-C2B	2.43	1.48	1.43
22	d	403	CLA	CHD-C4C	2.43	1.44	1.39
22	B	613	CLA	C1B-C2B	2.43	1.48	1.43
34	v	201	HEC	C3C-C2C	-2.43	1.33	1.41
22	C	506	CLA	MG-ND	2.43	2.10	2.05
22	b	603	CLA	C4B-NB	2.43	1.41	1.37
22	b	602	CLA	CAC-C3C	-2.43	1.44	1.51
22	b	610	CLA	C3D-C4D	2.43	1.49	1.44
34	E	101	HEC	C3C-C2C	-2.43	1.33	1.41
22	b	614	CLA	CMD-C2D	-2.43	1.45	1.50
30	H	102	DGD	O5D-C6D	-2.42	1.39	1.43
22	a	403	CLA	MG-NB	2.42	2.10	2.05
22	B	603	CLA	C3B-C4B	2.42	1.49	1.42
27	A	410	PL9	C7-C3	-2.42	1.48	1.51
33	D	407	LMG	C1-C2	2.42	1.59	1.52
22	b	604	CLA	C1D-ND	2.42	1.41	1.37
22	b	613	CLA	CHC-C4B	-2.42	1.34	1.39
22	c	501	CLA	CAC-C3C	-2.42	1.44	1.51
22	C	514	CLA	CHC-C4B	-2.42	1.34	1.39
22	c	502	CLA	CMC-C2C	-2.42	1.45	1.50
22	b	614	CLA	C1B-C2B	2.41	1.48	1.43
22	a	402	CLA	C3B-C4B	2.41	1.49	1.42
22	b	609	CLA	C1B-C2B	2.41	1.48	1.43
22	c	512	CLA	CMC-C2C	-2.41	1.45	1.50
22	c	506	CLA	C1B-NB	-2.41	1.34	1.37
22	B	614	CLA	CMB-C2B	-2.41	1.45	1.50
22	d	404	CLA	MG-NC	-2.40	2.00	2.06
30	c	517	DGD	C4D-C5D	2.40	1.58	1.53
22	c	510	CLA	CMC-C2C	-2.40	1.45	1.50
22	b	601	CLA	O2A-CGA	2.40	1.40	1.33
22	c	508	CLA	C1B-C2B	2.40	1.48	1.43
22	A	403	CLA	C1B-NB	-2.40	1.34	1.37
22	b	609	CLA	CMC-C2C	-2.39	1.45	1.50
22	A	405	CLA	C1B-NB	-2.39	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	d	407	LHG	O8-C23	2.39	1.40	1.33
23	A	404	PHO	C1D-C2D	2.39	1.42	1.39
22	b	601	CLA	CHC-C1C	2.39	1.43	1.38
22	c	506	CLA	CMD-C2D	-2.39	1.45	1.50
23	a	404	PHO	CMD-C2D	-2.39	1.46	1.51
22	B	608	CLA	CMD-C2D	-2.39	1.45	1.50
22	d	402	CLA	C3B-C4B	2.39	1.49	1.42
22	b	603	CLA	CHC-C1C	2.38	1.43	1.38
27	d	406	PL9	C11-C9	-2.38	1.46	1.51
30	H	102	DGD	O1G-C1G	-2.38	1.39	1.45
30	h	101	DGD	O3G-C3G	-2.38	1.39	1.43
22	c	502	CLA	C1D-ND	2.38	1.41	1.37
30	c	516	DGD	O3E-C3E	-2.37	1.37	1.43
22	c	508	CLA	MG-NA	2.37	2.11	2.06
22	A	402	CLA	C1B-NB	-2.37	1.34	1.37
22	c	503	CLA	CMB-C2B	-2.37	1.45	1.50
22	C	509	CLA	MG-NB	2.37	2.10	2.05
24	C	515	BCR	C36-C18	-2.37	1.46	1.50
23	D	401	PHO	CMA-C3A	-2.37	1.49	1.53
22	B	610	CLA	CHC-C4B	-2.36	1.34	1.39
33	B	627	LMG	C14-C13	2.36	1.63	1.51
22	b	610	CLA	CMC-C2C	-2.36	1.45	1.50
22	B	617	CLA	CHC-C4B	-2.36	1.34	1.39
22	A	405	CLA	CAC-C3C	-2.36	1.45	1.51
22	D	402	CLA	C1B-C2B	2.36	1.48	1.43
22	C	502	CLA	CMC-C2C	-2.36	1.45	1.50
22	b	604	CLA	C3B-C4B	2.36	1.49	1.42
22	B	606	CLA	C1B-NB	-2.36	1.34	1.37
22	b	613	CLA	C1B-C2B	2.36	1.48	1.43
33	c	522	LMG	C4-C3	2.36	1.58	1.52
22	B	604	CLA	MG-NA	2.35	2.11	2.06
24	k	103	BCR	C1-C6	-2.35	1.50	1.53
22	a	405	CLA	CHC-C4B	-2.35	1.34	1.39
22	d	404	CLA	CHC-C4B	-2.35	1.34	1.39
22	B	608	CLA	CMB-C2B	-2.35	1.46	1.50
22	C	511	CLA	CMC-C2C	-2.35	1.46	1.50
23	A	404	PHO	C3D-C4D	2.34	1.44	1.41
22	A	402	CLA	CMC-C2C	-2.34	1.46	1.50
22	c	504	CLA	C3B-C4B	2.34	1.49	1.42
22	c	505	CLA	CMD-C2D	-2.34	1.46	1.50
22	b	611	CLA	MG-NB	-2.34	2.01	2.05
22	d	402	CLA	CHC-C1C	2.34	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	D	411	STE	C2-C1	2.34	1.56	1.50
22	b	608	CLA	C1D-C2D	2.34	1.50	1.45
22	c	503	CLA	CMD-C2D	-2.33	1.46	1.50
22	c	512	CLA	CHC-C1C	2.33	1.43	1.38
24	C	501	BCR	C38-C26	-2.33	1.47	1.50
22	a	402	CLA	C1B-C2B	2.33	1.48	1.43
23	a	404	PHO	CMC-C2C	-2.33	1.47	1.50
22	A	405	CLA	CHC-C4B	-2.33	1.34	1.39
22	c	513	CLA	CMB-C2B	-2.33	1.46	1.50
22	B	612	CLA	C3B-C4B	2.32	1.49	1.42
24	C	515	BCR	C33-C5	-2.32	1.47	1.50
29	a	411	SQD	O47-C7	2.32	1.40	1.34
30	c	516	DGD	C6D-C5D	2.32	1.58	1.51
23	D	401	PHO	CAA-C2A	-2.32	1.49	1.54
22	d	403	CLA	C1B-NB	-2.32	1.34	1.37
22	C	502	CLA	CHC-C1C	2.32	1.43	1.38
22	C	504	CLA	C4B-NB	2.31	1.40	1.37
22	b	607	CLA	CMD-C2D	-2.31	1.46	1.50
22	C	508	CLA	C1B-NB	-2.31	1.34	1.37
30	h	101	DGD	O2D-C2D	-2.31	1.37	1.43
22	b	616	CLA	C1B-NB	-2.31	1.34	1.37
22	b	606	CLA	CHC-C4B	-2.31	1.34	1.39
22	B	606	CLA	C1C-NC	-2.31	1.34	1.37
22	b	616	CLA	C3D-C4D	2.31	1.49	1.44
22	c	509	CLA	C3B-C4B	2.31	1.49	1.42
30	C	519	DGD	O6D-C5D	-2.30	1.38	1.44
22	c	508	CLA	C4B-NB	2.30	1.40	1.37
22	b	613	CLA	CMB-C2B	-2.30	1.46	1.50
30	H	102	DGD	O6D-C5D	-2.30	1.38	1.44
22	b	614	CLA	CAC-C3C	-2.30	1.45	1.51
22	b	611	CLA	C1B-NB	-2.30	1.34	1.37
30	A	415	DGD	O2G-C1B	2.30	1.40	1.34
22	b	613	CLA	C1B-NB	-2.30	1.34	1.37
22	C	513	CLA	C4B-NB	2.29	1.40	1.37
22	B	605	CLA	O2D-CGD	2.29	1.38	1.33
23	d	401	PHO	CAC-C3C	-2.29	1.47	1.51
22	A	403	CLA	MG-NC	2.29	2.11	2.06
30	C	519	DGD	C1G-C2G	2.29	1.58	1.50
27	d	406	PL9	C3-C4	-2.28	1.46	1.49
22	c	506	CLA	CHC-C4B	-2.28	1.34	1.39
24	k	102	BCR	C38-C26	-2.28	1.47	1.50
33	M	101	LMG	C3-C2	2.28	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	c	518	DGD	O4D-C4D	-2.28	1.37	1.43
22	C	514	CLA	CMB-C2B	-2.28	1.46	1.50
22	B	612	CLA	CMB-C2B	-2.27	1.46	1.50
23	d	401	PHO	O2A-C1	-2.27	1.40	1.46
22	C	505	CLA	CHC-C4B	-2.27	1.34	1.39
22	a	405	CLA	CMD-C2D	-2.27	1.46	1.50
30	C	519	DGD	O5D-C1E	2.27	1.44	1.40
34	v	201	HEC	CMD-C2D	2.27	1.55	1.50
30	c	516	DGD	C3G-C2G	2.27	1.57	1.50
22	C	512	CLA	CHC-C1C	2.27	1.43	1.38
30	c	517	DGD	O3G-C3G	-2.27	1.39	1.43
22	b	602	CLA	CMC-C2C	-2.26	1.46	1.50
22	b	614	CLA	C3B-C4B	2.26	1.49	1.42
22	B	605	CLA	C1D-ND	2.26	1.40	1.37
22	C	510	CLA	C1B-NB	-2.26	1.34	1.37
27	a	410	PL9	C40-C39	-2.26	1.45	1.50
27	d	406	PL9	C10-C9	-2.26	1.45	1.50
24	b	618	BCR	C38-C26	-2.25	1.47	1.50
22	b	607	CLA	CMC-C2C	-2.25	1.46	1.50
33	B	627	LMG	O8-C28	2.25	1.39	1.33
22	B	615	CLA	C1A-CHA	-2.25	1.33	1.43
34	e	101	HEC	CMA-C3A	2.25	1.55	1.50
22	c	504	CLA	CMB-C2B	-2.25	1.46	1.50
30	H	102	DGD	O2D-C2D	-2.25	1.37	1.43
28	L	102	LHG	O7-C5	-2.25	1.41	1.46
22	B	608	CLA	CMA-C3A	-2.25	1.48	1.53
22	B	617	CLA	C4B-NB	2.25	1.40	1.37
22	C	504	CLA	CMB-C2B	-2.24	1.46	1.50
22	B	610	CLA	C3B-C4B	2.24	1.49	1.42
22	B	614	CLA	C1B-C2B	2.24	1.48	1.43
24	A	406	BCR	C33-C5	-2.24	1.47	1.50
22	d	404	CLA	CMB-C2B	-2.24	1.46	1.50
22	C	503	CLA	CMB-C2B	-2.24	1.46	1.50
22	D	404	CLA	C3B-C4B	2.24	1.49	1.42
22	b	612	CLA	CMB-C2B	-2.24	1.46	1.50
30	c	516	DGD	O1G-C1A	2.24	1.39	1.33
22	b	611	CLA	CMB-C2B	-2.24	1.46	1.50
32	b	621	STE	C2-C1	2.24	1.55	1.50
22	c	504	CLA	O2D-CGD	2.24	1.38	1.33
22	C	505	CLA	CMB-C2B	-2.24	1.46	1.50
24	k	102	BCR	C33-C5	-2.23	1.47	1.50
22	B	602	CLA	CMB-C2B	-2.23	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	C	518	DGD	C4E-C3E	2.23	1.58	1.52
22	B	616	CLA	CHC-C1C	2.23	1.43	1.38
22	b	603	CLA	C1A-CHA	-2.23	1.33	1.43
28	a	412	LHG	C6-C5	2.23	1.57	1.50
22	c	513	CLA	CMC-C2C	-2.23	1.46	1.50
32	B	624	STE	O1-C1	2.23	1.29	1.22
22	C	509	CLA	C3B-C4B	2.22	1.49	1.42
22	b	606	CLA	C1B-C2B	2.22	1.48	1.43
22	d	402	CLA	MG-ND	2.22	2.10	2.05
24	c	515	BCR	C38-C26	-2.22	1.47	1.50
23	A	404	PHO	C4-C3	-2.22	1.45	1.50
34	E	101	HEC	CMB-C2B	2.22	1.55	1.50
22	b	603	CLA	C1D-ND	2.22	1.40	1.37
33	b	622	LMG	O1-C7	2.22	1.47	1.43
22	B	605	CLA	C4C-C3C	2.22	1.48	1.45
33	c	522	LMG	O8-C9	-2.22	1.40	1.45
22	c	510	CLA	C1B-C2B	2.22	1.48	1.43
22	B	606	CLA	C4B-NB	2.21	1.40	1.37
22	c	501	CLA	CMD-C2D	-2.21	1.46	1.50
22	c	507	CLA	MG-ND	2.21	2.10	2.05
23	d	401	PHO	C4D-CHA	2.21	1.42	1.39
22	D	404	CLA	CMC-C2C	-2.21	1.46	1.50
22	C	507	CLA	CHC-C1C	2.21	1.42	1.38
22	b	614	CLA	CMC-C2C	-2.21	1.46	1.50
22	b	603	CLA	C1B-C2B	2.21	1.48	1.43
30	C	517	DGD	O1A-C1A	2.21	1.29	1.22
22	c	513	CLA	CHC-C4B	-2.21	1.34	1.39
30	h	101	DGD	O3E-C3E	-2.21	1.37	1.43
30	C	519	DGD	O1G-C1G	-2.20	1.40	1.45
22	B	609	CLA	C1B-C2B	2.20	1.48	1.43
33	c	519	LMG	C4-C5	2.20	1.57	1.53
22	b	605	CLA	CMC-C2C	-2.20	1.46	1.50
34	E	101	HEC	CHC-C1C	-2.19	1.34	1.39
22	C	504	CLA	C3B-C4B	2.19	1.49	1.42
22	d	403	CLA	C4B-NB	2.19	1.40	1.37
22	A	405	CLA	CMC-C2C	-2.19	1.46	1.50
22	b	605	CLA	CMD-C2D	-2.19	1.46	1.50
27	a	410	PL9	C53-C6	-2.19	1.46	1.50
30	C	518	DGD	C1E-C2E	2.19	1.58	1.52
22	B	609	CLA	C4B-NB	2.19	1.40	1.37
22	B	608	CLA	CAC-C3C	-2.19	1.45	1.51
34	V	201	HEC	C3B-C2B	-2.19	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	608	CLA	C1B-NB	-2.19	1.35	1.37
30	C	519	DGD	O5D-C6D	2.19	1.47	1.43
30	A	415	DGD	C3D-C2D	2.19	1.58	1.52
22	d	403	CLA	CHC-C1C	2.19	1.42	1.38
24	b	617	BCR	C33-C5	-2.18	1.47	1.50
22	B	617	CLA	MG-NB	-2.18	2.01	2.05
22	a	403	CLA	C1B-C2B	2.18	1.48	1.43
22	c	512	CLA	CMD-C2D	-2.18	1.46	1.50
33	D	409	LMG	C9-C8	2.18	1.57	1.50
22	b	613	CLA	C5-C3	-2.17	1.46	1.51
30	H	102	DGD	C6D-C5D	2.17	1.58	1.51
33	c	519	LMG	O1-C1	2.17	1.43	1.40
22	B	610	CLA	CHD-C1D	-2.17	1.34	1.38
29	a	411	SQD	O3-C3	-2.17	1.37	1.43
22	B	605	CLA	MG-NB	2.17	2.10	2.05
22	d	403	CLA	CMB-C2B	-2.17	1.46	1.50
28	B	622	LHG	C24-C23	2.17	1.57	1.50
23	a	404	PHO	O2D-CGD	2.17	1.38	1.33
22	b	611	CLA	CAA-C2A	-2.17	1.50	1.54
22	c	513	CLA	CHC-C1C	2.17	1.42	1.38
22	c	504	CLA	MG-NC	-2.17	2.01	2.06
22	B	613	CLA	C3B-C4B	2.17	1.49	1.42
30	h	101	DGD	O5D-C1E	2.17	1.43	1.40
24	b	618	BCR	C36-C18	-2.16	1.46	1.50
22	c	508	CLA	C3B-C4B	2.16	1.49	1.42
22	b	602	CLA	C3B-C4B	2.16	1.49	1.42
34	E	101	HEC	CMD-C2D	2.16	1.55	1.50
22	B	608	CLA	MG-NB	-2.16	2.01	2.05
29	F	101	SQD	O3-C3	-2.16	1.37	1.43
24	c	515	BCR	C33-C5	-2.16	1.47	1.50
22	b	612	CLA	C4B-NB	2.16	1.40	1.37
22	c	507	CLA	CMD-C2D	-2.15	1.46	1.50
30	c	517	DGD	O4D-C4D	-2.15	1.37	1.43
22	c	506	CLA	CAC-C3C	-2.15	1.45	1.51
23	a	404	PHO	CMA-C3A	-2.15	1.49	1.53
22	c	510	CLA	CAA-C2A	-2.15	1.50	1.54
22	c	509	CLA	CMD-C2D	-2.15	1.46	1.50
22	b	608	CLA	C3B-C4B	2.15	1.49	1.42
22	c	507	CLA	C3D-C4D	2.15	1.49	1.44
22	C	502	CLA	C3B-C4B	2.15	1.49	1.42
28	d	407	LHG	C24-C23	2.15	1.56	1.50
22	C	510	CLA	O2D-CGD	2.15	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	a	405	CLA	CAC-C3C	-2.15	1.45	1.51
23	a	404	PHO	C4B-NB	2.14	1.42	1.38
28	B	622	LHG	C3-C2	2.14	1.58	1.51
22	c	502	CLA	CHC-C1C	2.14	1.42	1.38
22	c	513	CLA	C3B-C4B	2.14	1.49	1.42
22	C	504	CLA	CMD-C2D	-2.14	1.46	1.50
22	B	603	CLA	MG-NA	-2.14	2.01	2.06
22	B	607	CLA	C1B-C2B	2.14	1.48	1.43
23	D	401	PHO	CAC-C3C	-2.14	1.48	1.51
22	C	510	CLA	CMB-C2B	-2.14	1.46	1.50
22	B	602	CLA	CMC-C2C	-2.14	1.46	1.50
22	b	615	CLA	C3B-C4B	2.14	1.49	1.42
22	B	602	CLA	CHC-C1C	2.14	1.42	1.38
22	b	603	CLA	CMC-C2C	-2.14	1.46	1.50
22	A	402	CLA	MG-NA	-2.14	2.01	2.06
30	C	517	DGD	O1G-C1A	2.14	1.39	1.33
22	b	601	CLA	C3D-C4D	2.14	1.49	1.44
27	A	410	PL9	C41-C39	2.13	1.55	1.51
22	d	404	CLA	C1B-C2B	2.13	1.48	1.43
22	B	609	CLA	CMD-C2D	-2.13	1.46	1.50
22	B	612	CLA	C4B-NB	2.13	1.40	1.37
33	c	521	LMG	C1-C2	2.13	1.58	1.52
22	C	510	CLA	C4B-NB	2.13	1.40	1.37
22	b	601	CLA	CMD-C2D	-2.13	1.46	1.50
22	A	403	CLA	C3B-C4B	2.13	1.48	1.42
22	C	514	CLA	CMD-C2D	-2.13	1.46	1.50
29	f	101	SQD	O4-C4	-2.13	1.37	1.43
22	C	503	CLA	C1D-ND	2.12	1.40	1.37
22	B	608	CLA	C1B-C2B	2.12	1.48	1.43
22	B	604	CLA	C3B-C4B	2.12	1.48	1.42
22	D	402	CLA	C1D-ND	2.12	1.40	1.37
22	b	615	CLA	C1B-C2B	2.12	1.48	1.43
30	c	518	DGD	O4E-C4E	-2.12	1.37	1.43
22	c	511	CLA	C3B-C4B	2.12	1.48	1.42
22	c	508	CLA	CHC-C1C	2.12	1.42	1.38
22	c	511	CLA	CMB-C2B	-2.12	1.46	1.50
22	c	511	CLA	CMD-C2D	-2.12	1.46	1.50
22	c	509	CLA	CHC-C1C	2.11	1.42	1.38
22	B	614	CLA	CHC-C1C	2.11	1.42	1.38
22	b	602	CLA	MG-NC	-2.11	2.01	2.06
22	b	614	CLA	CMB-C2B	-2.11	1.46	1.50
33	Y	101	LMG	C3-C2	2.11	1.57	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	509	CLA	O2A-CGA	2.10	1.39	1.33
28	a	412	LHG	C24-C23	2.10	1.56	1.50
22	c	508	CLA	CMB-C2B	-2.10	1.46	1.50
22	D	404	CLA	CMB-C2B	-2.10	1.46	1.50
22	D	402	CLA	C1B-NB	-2.10	1.35	1.37
22	c	510	CLA	C3D-C4D	2.10	1.48	1.44
27	a	410	PL9	C52-C5	-2.10	1.46	1.50
28	A	413	LHG	P-O3	2.10	1.67	1.59
22	C	514	CLA	C4B-NB	2.10	1.40	1.37
22	C	506	CLA	CMC-C2C	-2.09	1.46	1.50
22	C	511	CLA	CMD-C2D	-2.09	1.46	1.50
24	C	515	BCR	C38-C26	-2.09	1.47	1.50
33	d	410	LMG	O8-C28	2.09	1.39	1.33
22	B	604	CLA	C1B-NB	-2.09	1.35	1.37
24	a	406	BCR	C30-C25	-2.09	1.51	1.53
22	C	511	CLA	C3B-C4B	2.09	1.48	1.42
30	c	517	DGD	O3D-C3D	-2.09	1.37	1.43
27	D	406	PL9	C16-C14	2.09	1.55	1.51
32	B	621	STE	C2-C1	2.09	1.55	1.50
22	C	502	CLA	C1B-C2B	2.09	1.48	1.43
34	E	101	HEC	CMA-C3A	2.09	1.55	1.50
22	C	512	CLA	CMD-C2D	-2.09	1.46	1.50
33	c	519	LMG	C1-C2	2.09	1.58	1.52
29	a	411	SQD	O5-C5	-2.09	1.39	1.44
22	C	505	CLA	CHC-C1C	2.08	1.42	1.38
22	c	504	CLA	C1B-NB	-2.08	1.35	1.37
22	a	402	CLA	C1D-C2D	2.08	1.49	1.45
24	T	101	BCR	C27-C26	-2.08	1.47	1.51
23	d	401	PHO	CAA-C2A	-2.08	1.49	1.54
34	e	101	HEC	C3C-C2C	-2.08	1.34	1.41
23	a	404	PHO	C4D-CHA	2.08	1.42	1.39
22	b	612	CLA	C1B-NB	-2.08	1.35	1.37
30	c	518	DGD	O2E-C2E	-2.08	1.37	1.43
22	B	606	CLA	C3B-C4B	2.08	1.48	1.42
22	A	405	CLA	C1B-C2B	2.08	1.48	1.43
29	A	412	SQD	O3-C3	-2.07	1.37	1.43
23	a	404	PHO	C3D-C4D	2.07	1.44	1.41
33	c	522	LMG	C3-C2	2.07	1.57	1.52
22	b	605	CLA	CHC-C4B	-2.07	1.34	1.39
22	C	504	CLA	C3D-C4D	2.07	1.48	1.44
22	b	610	CLA	CHC-C4B	-2.07	1.34	1.39
28	d	408	LHG	O7-C7	2.07	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	a	405	CLA	C3B-C4B	2.06	1.48	1.42
30	h	101	DGD	O2E-C2E	-2.06	1.37	1.43
22	b	601	CLA	C3B-C4B	2.06	1.48	1.42
22	C	507	CLA	MG-NB	-2.06	2.01	2.05
22	c	504	CLA	CHC-C1C	2.06	1.42	1.38
22	C	508	CLA	CMD-C2D	-2.06	1.46	1.50
22	B	613	CLA	C1A-CHA	-2.06	1.34	1.43
22	c	504	CLA	CMC-C2C	-2.06	1.46	1.50
22	b	615	CLA	CHC-C1C	2.06	1.42	1.38
22	c	510	CLA	CHC-C4B	-2.05	1.34	1.39
22	b	609	CLA	C3D-C4D	2.05	1.48	1.44
23	A	404	PHO	CAC-C3C	-2.05	1.48	1.51
23	d	401	PHO	CBD-CGD	-2.05	1.49	1.52
22	B	603	CLA	CHC-C1C	2.05	1.42	1.38
22	B	614	CLA	O2D-CED	-2.05	1.40	1.45
22	B	602	CLA	C1D-C2D	2.05	1.49	1.45
22	c	502	CLA	C1B-C2B	2.05	1.47	1.43
22	C	510	CLA	CMC-C2C	-2.05	1.46	1.50
22	c	508	CLA	CMC-C2C	-2.05	1.46	1.50
33	D	409	LMG	O8-C28	2.05	1.39	1.33
22	B	607	CLA	CAB-C3B	-2.05	1.41	1.47
33	d	410	LMG	O1-C7	-2.05	1.40	1.43
22	B	604	CLA	C1B-C2B	2.05	1.47	1.43
23	a	404	PHO	C1A-C2A	2.04	1.54	1.51
22	b	612	CLA	CHD-C1D	-2.04	1.34	1.38
34	V	201	HEC	C2A-C3A	-2.04	1.32	1.36
22	A	402	CLA	C1D-ND	2.04	1.40	1.37
22	b	613	CLA	O2A-CGA	2.04	1.39	1.33
24	D	405	BCR	C38-C26	-2.04	1.47	1.50
22	c	505	CLA	CAA-C2A	-2.04	1.50	1.54
22	B	616	CLA	MG-NB	2.04	2.09	2.05
28	A	411	LHG	O8-C23	2.04	1.39	1.33
22	d	403	CLA	MG-NC	-2.04	2.01	2.06
30	C	518	DGD	C1G-C2G	2.04	1.57	1.50
22	A	402	CLA	CAA-C2A	-2.04	1.50	1.54
30	c	517	DGD	O3E-C3E	-2.04	1.37	1.43
22	b	606	CLA	CMB-C2B	-2.04	1.46	1.50
22	c	508	CLA	O2A-CGA	2.04	1.39	1.33
33	D	407	LMG	O7-C10	2.04	1.40	1.34
22	B	612	CLA	CMC-C2C	-2.04	1.46	1.50
22	d	403	CLA	C3B-C4B	2.04	1.48	1.42
22	c	502	CLA	C1B-NB	-2.04	1.35	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	C	517	DGD	CDA-CCA	2.04	1.61	1.51
22	b	604	CLA	MG-NA	2.03	2.11	2.06
22	C	508	CLA	CMC-C2C	-2.03	1.46	1.50
22	B	603	CLA	C1D-ND	2.03	1.40	1.37
22	c	513	CLA	MG-NA	-2.03	2.01	2.06
30	c	518	DGD	C4D-C3D	2.03	1.57	1.52
22	c	501	CLA	CMB-C2B	-2.03	1.46	1.50
22	B	615	CLA	OBD-CAD	-2.03	1.19	1.22
28	B	622	LHG	C29-C28	2.03	1.61	1.51
22	a	405	CLA	MG-NA	2.03	2.11	2.06
22	c	506	CLA	C1B-C2B	2.03	1.47	1.43
22	C	513	CLA	C1D-ND	2.03	1.40	1.37
23	d	401	PHO	C3D-CAD	-2.02	1.43	1.47
30	C	518	DGD	O5D-C6D	-2.02	1.40	1.43
22	C	511	CLA	C3D-C4D	2.02	1.48	1.44
22	B	609	CLA	CMC-C2C	-2.02	1.46	1.50
22	b	608	CLA	CHC-C1C	2.02	1.42	1.38
22	C	510	CLA	C1D-C2D	2.01	1.49	1.45
22	B	602	CLA	C3B-C4B	2.01	1.48	1.42
22	B	613	CLA	MG-NA	2.01	2.11	2.06
30	H	102	DGD	O3G-C3G	2.01	1.47	1.43
22	c	507	CLA	CMB-C2B	-2.01	1.46	1.50
29	a	411	SQD	O47-C45	-2.01	1.41	1.46
33	D	409	LMG	O7-C10	2.01	1.39	1.34
22	B	609	CLA	CHC-C1C	2.01	1.42	1.38
30	C	518	DGD	O3G-C1D	-2.01	1.36	1.40
28	d	407	LHG	P-O6	2.01	1.67	1.59
22	c	510	CLA	CMD-C2D	-2.00	1.46	1.50
22	B	614	CLA	CAB-C3B	-2.00	1.42	1.47
22	B	606	CLA	CMC-C2C	-2.00	1.46	1.50

All (1266) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	V	201	HEC	CBB-CAB-C3B	-11.30	104.85	127.43
22	C	504	CLA	C4A-NA-C1A	10.72	111.57	106.68
34	v	201	HEC	CBB-CAB-C3B	-10.00	107.45	127.43
22	B	617	CLA	C4A-NA-C1A	9.84	111.17	106.68
29	L	101	SQD	O6-C1-C2	9.63	122.90	108.27
29	A	412	SQD	O6-C1-C2	9.08	122.07	108.27
22	B	607	CLA	C4A-NA-C1A	8.63	110.61	106.68
22	B	605	CLA	C4A-NA-C1A	8.60	110.60	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	a	411	SQD	O6-C1-C2	8.46	121.12	108.27
34	E	101	HEC	CBC-CAC-C3C	-8.20	111.04	127.43
34	V	201	HEC	CBC-CAC-C3C	-8.19	111.06	127.43
34	e	101	HEC	CBC-CAC-C3C	-7.92	111.61	127.43
22	c	503	CLA	C4A-NA-C1A	7.74	110.21	106.68
22	c	507	CLA	C4A-NA-C1A	7.62	110.15	106.68
22	C	503	CLA	C4A-NA-C1A	7.37	110.04	106.68
27	d	406	PL9	C7-C3-C4	7.32	122.94	116.91
34	e	101	HEC	CBB-CAB-C3B	-7.29	112.86	127.43
22	B	608	CLA	C4A-NA-C1A	7.19	109.96	106.68
22	b	604	CLA	C4A-NA-C1A	7.10	109.92	106.68
22	d	402	CLA	C4A-NA-C1A	7.08	109.91	106.68
22	b	606	CLA	C4A-NA-C1A	6.92	109.83	106.68
22	c	511	CLA	C4A-NA-C1A	6.91	109.83	106.68
29	B	623	SQD	O6-C1-C2	6.85	118.67	108.27
22	C	512	CLA	C4A-NA-C1A	6.84	109.80	106.68
22	b	607	CLA	C4A-NA-C1A	6.81	109.78	106.68
34	v	201	HEC	CBC-CAC-C3C	-6.78	113.87	127.43
34	E	101	HEC	CBB-CAB-C3B	-6.75	113.94	127.43
22	c	509	CLA	C4A-NA-C1A	6.49	109.64	106.68
22	c	501	CLA	C4A-NA-C1A	6.43	109.61	106.68
27	D	406	PL9	C7-C3-C4	6.37	122.16	116.91
22	c	508	CLA	C4A-NA-C1A	6.35	109.58	106.68
22	C	510	CLA	C4A-NA-C1A	6.34	109.57	106.68
22	b	616	CLA	C4A-NA-C1A	6.25	109.53	106.68
22	C	511	CLA	C4A-NA-C1A	6.24	109.53	106.68
22	C	508	CLA	C4A-NA-C1A	6.21	109.51	106.68
22	B	612	CLA	C4A-NA-C1A	6.21	109.51	106.68
22	D	402	CLA	C4A-NA-C1A	6.20	109.51	106.68
22	c	510	CLA	C4A-NA-C1A	6.19	109.50	106.68
27	a	410	PL9	C7-C3-C4	6.19	122.01	116.91
22	b	601	CLA	C4A-NA-C1A	6.16	109.49	106.68
22	B	602	CLA	C4A-NA-C1A	6.14	109.48	106.68
29	f	101	SQD	O6-C1-C2	6.11	117.55	108.27
22	b	609	CLA	C4A-NA-C1A	5.90	109.37	106.68
22	C	513	CLA	C4A-NA-C1A	5.84	109.34	106.68
22	b	614	CLA	C4A-NA-C1A	5.74	109.30	106.68
22	b	602	CLA	C4A-NA-C1A	5.53	109.20	106.68
22	a	405	CLA	C4A-NA-C1A	5.52	109.20	106.68
22	C	514	CLA	C4A-NA-C1A	5.50	109.19	106.68
29	F	101	SQD	O6-C1-C2	5.45	116.55	108.27
22	B	613	CLA	C4A-NA-C1A	5.34	109.11	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	606	CLA	C4A-NA-C1A	5.27	109.08	106.68
23	A	404	PHO	C4D-CHA-CBD	-5.24	105.94	108.45
23	d	401	PHO	C4D-CHA-CBD	-5.21	105.96	108.45
22	B	615	CLA	O2D-CGD-O1D	-5.17	113.78	123.85
22	b	615	CLA	C4A-NA-C1A	5.11	109.01	106.68
33	b	622	LMG	C1-O6-C5	-5.07	103.81	113.72
22	b	606	CLA	O2D-CGD-O1D	-5.00	114.11	123.85
22	B	610	CLA	C4A-NA-C1A	4.96	108.94	106.68
22	B	607	CLA	C3B-C4B-NB	-4.94	106.12	110.53
22	b	602	CLA	O2D-CGD-O1D	-4.94	114.23	123.85
29	L	101	SQD	O47-C7-C8	4.94	122.17	111.48
29	a	413	SQD	O47-C7-C8	4.93	122.16	111.48
34	e	101	HEC	CBD-CAD-C3D	-4.91	98.95	112.53
34	E	101	HEC	CBD-CAD-C3D	-4.91	98.97	112.53
22	B	616	CLA	C4A-NA-C1A	4.89	108.91	106.68
22	D	403	CLA	C4A-NA-C1A	4.89	108.91	106.68
22	c	505	CLA	C4A-NA-C1A	4.88	108.91	106.68
23	a	404	PHO	CBC-CAC-C3C	-4.85	105.93	112.87
22	b	604	CLA	C1-C2-C3	-4.81	118.32	126.20
22	C	506	CLA	C4A-NA-C1A	4.79	108.86	106.68
22	b	611	CLA	O2D-CGD-O1D	-4.79	114.53	123.85
22	b	603	CLA	C3B-C4B-NB	-4.77	106.27	110.53
22	a	403	CLA	C4A-NA-C1A	4.77	108.85	106.68
26	a	409	BCT	O2-C-O1	4.74	131.80	119.68
22	b	605	CLA	C4A-NA-C1A	4.63	108.79	106.68
29	B	623	SQD	O47-C7-C8	4.62	121.47	111.48
22	C	514	CLA	O2D-CGD-O1D	-4.58	114.94	123.85
22	c	503	CLA	C3B-C4B-NB	-4.55	106.47	110.53
22	C	509	CLA	O2D-CGD-O1D	-4.51	115.07	123.85
22	A	402	CLA	CHB-C4A-NA	4.51	130.90	124.40
22	D	403	CLA	C3B-C4B-NB	-4.48	106.53	110.53
27	D	406	PL9	C7-C3-C2	-4.47	118.12	123.39
30	C	517	DGD	O3G-C3G-C2G	-4.45	99.98	110.82
28	a	412	LHG	O4-P-O5	4.45	133.16	112.44
28	l	101	LHG	O4-P-O5	4.44	133.10	112.44
24	b	617	BCR	C2-C1-C6	4.43	116.88	110.44
22	B	615	CLA	C3B-C4B-NB	-4.43	106.58	110.53
27	a	410	PL9	C7-C3-C2	-4.42	118.18	123.39
28	L	102	LHG	O4-P-O5	4.40	132.89	112.44
29	L	101	SQD	O9-S-C6	4.34	113.24	106.76
22	b	613	CLA	C1-C2-C3	-4.34	119.09	126.20
22	C	511	CLA	C3B-C4B-NB	-4.33	106.66	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	B	627	LMG	C1-O6-C5	-4.33	105.27	113.72
28	D	408	LHG	O4-P-O5	4.32	132.56	112.44
29	A	412	SQD	C1-C2-C3	-4.32	100.93	110.01
28	d	409	LHG	O8-C23-O10	-4.31	112.83	123.63
28	B	622	LHG	O4-P-O5	4.31	132.51	112.44
23	a	404	PHO	C4D-CHA-CBD	-4.31	106.39	108.45
29	A	412	SQD	O7-S-C6	4.30	113.18	106.76
22	b	611	CLA	C4A-NA-C1A	4.29	108.64	106.68
29	A	414	SQD	C45-O47-C7	4.27	123.94	117.78
24	B	620	BCR	C2-C1-C6	4.26	116.63	110.44
28	d	408	LHG	O4-P-O5	4.25	132.23	112.44
22	c	513	CLA	C4A-NA-C1A	4.25	108.62	106.68
22	B	615	CLA	C4A-NA-C1A	4.23	108.61	106.68
33	B	627	LMG	O6-C1-C2	-4.23	101.68	110.37
30	C	518	DGD	O3G-C3G-C2G	-4.23	100.54	110.82
29	L	101	SQD	O7-S-C6	4.22	113.05	106.76
23	d	401	PHO	C2B-C1B-NB	-4.21	106.39	109.43
33	b	622	LMG	O6-C5-C6	4.21	116.86	106.44
29	f	101	SQD	O9-S-O7	-4.18	100.21	113.82
29	B	623	SQD	O7-S-C6	4.17	112.97	106.76
22	b	610	CLA	C4A-NA-C1A	4.16	108.58	106.68
22	C	509	CLA	C4A-NA-C1A	4.10	108.55	106.68
23	D	401	PHO	C4D-CHA-CBD	-4.09	106.49	108.45
28	A	413	LHG	O4-P-O5	4.08	131.42	112.44
22	B	604	CLA	C4A-NA-C1A	4.08	108.54	106.68
22	b	615	CLA	C3B-C4B-NB	-4.07	106.90	110.53
22	C	504	CLA	C3B-C4B-NB	-4.06	106.91	110.53
33	m	101	LMG	O3-C3-C2	-4.06	100.81	110.38
22	C	513	CLA	C3B-C4B-NB	-4.05	106.92	110.53
22	c	512	CLA	O2D-CGD-O1D	-4.04	115.98	123.85
33	m	101	LMG	O1-C1-C2	-4.02	102.17	108.27
28	d	407	LHG	O4-P-O5	4.02	131.13	112.44
22	b	603	CLA	O2D-CGD-O1D	-4.01	116.05	123.85
22	c	501	CLA	O2D-CGD-O1D	-4.00	116.07	123.85
22	c	512	CLA	C1-C2-C3	-3.99	119.66	126.20
30	H	102	DGD	O3G-C3G-C2G	-3.98	101.13	110.82
30	C	517	DGD	O1G-C1A-C2A	-3.98	99.71	111.83
23	a	404	PHO	C2B-C1B-NB	-3.98	106.56	109.43
22	c	505	CLA	C3B-C4B-NB	-3.97	106.98	110.53
22	c	509	CLA	O2A-CGA-O1A	-3.97	113.69	123.63
28	d	409	LHG	O4-P-O5	3.97	130.92	112.44
29	B	623	SQD	O9-S-O7	-3.97	100.92	113.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	A	411	LHG	O4-P-O5	3.95	130.80	112.44
24	c	514	BCR	C2-C1-C6	3.94	116.17	110.44
22	C	511	CLA	O2D-CGD-O1D	-3.93	116.19	123.85
22	B	614	CLA	C4-C3-C5	3.92	122.03	115.23
22	C	506	CLA	CAC-C3C-C4C	3.92	129.89	124.79
22	B	611	CLA	C3B-C4B-NB	-3.91	107.04	110.53
29	F	101	SQD	C1-O5-C5	-3.89	106.12	113.72
22	D	404	CLA	C4A-NA-C1A	3.88	108.45	106.68
22	D	404	CLA	O2D-CGD-O1D	-3.88	116.30	123.85
24	A	406	BCR	C27-C26-C25	3.88	127.94	122.70
24	H	101	BCR	C27-C26-C25	3.86	127.92	122.70
22	b	613	CLA	CED-O2D-CGD	3.86	124.67	115.92
33	B	627	LMG	C1-C2-C3	-3.86	101.90	110.01
22	c	502	CLA	C3B-C4B-NB	-3.85	107.09	110.53
24	C	515	BCR	C2-C1-C6	3.85	116.03	110.44
22	C	513	CLA	CHB-C4A-NA	3.85	129.96	124.40
22	d	403	CLA	CHB-C4A-NA	3.85	129.96	124.40
22	b	614	CLA	C3B-C4B-NB	-3.82	107.12	110.53
22	b	606	CLA	O2D-CGD-CBD	3.81	117.90	111.23
24	H	101	BCR	C29-C30-C25	3.81	115.98	110.44
29	B	623	SQD	C1-C2-C3	-3.81	101.99	110.01
24	B	620	BCR	C29-C30-C25	3.81	115.97	110.44
29	B	623	SQD	C1-O5-C5	-3.81	106.28	113.72
29	f	101	SQD	O7-S-C6	3.81	112.44	106.76
22	B	614	CLA	C1-C2-C3	-3.81	119.96	126.20
33	d	410	LMG	O2-C2-C1	-3.79	101.05	110.08
22	B	602	CLA	O2D-CGD-O1D	-3.78	116.48	123.85
22	c	512	CLA	CHB-C4A-NA	3.74	129.79	124.40
29	A	414	SQD	O47-C7-C8	3.73	119.55	111.48
28	a	412	LHG	O8-C23-C24	3.71	123.15	111.83
22	d	403	CLA	C4A-NA-C1A	3.70	108.37	106.68
24	c	515	BCR	C2-C1-C6	3.70	115.82	110.44
22	B	606	CLA	O1D-CGD-CBD	3.70	131.81	124.52
22	B	603	CLA	CHB-C4A-NA	3.69	129.73	124.40
29	L	101	SQD	C1-C2-C3	-3.69	102.25	110.01
22	a	402	CLA	C3B-C4B-NB	-3.68	107.25	110.53
23	a	404	PHO	O2D-CGD-CBD	3.68	114.99	110.95
22	c	504	CLA	C4A-NA-C1A	3.67	108.35	106.68
22	B	609	CLA	O2D-CGD-CBD	3.67	117.64	111.23
29	L	101	SQD	O2-C2-C1	3.67	118.81	110.08
22	B	611	CLA	C4A-NA-C1A	3.66	108.35	106.68
22	a	405	CLA	O2D-CGD-O1D	-3.66	116.73	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	c	518	DGD	O3G-C3G-C2G	-3.65	101.95	110.82
22	A	402	CLA	C7-C6-C5	-3.65	103.54	113.26
22	c	510	CLA	O2D-CGD-O1D	-3.64	116.75	123.85
29	F	101	SQD	C1-C2-C3	-3.64	102.35	110.01
29	f	101	SQD	O9-S-C6	3.64	112.19	106.76
22	C	502	CLA	C3B-C4B-NB	-3.64	107.28	110.53
24	Z	101	BCR	C15-C16-C17	-3.64	116.08	123.52
22	b	613	CLA	CHB-C4A-NA	3.63	129.65	124.40
22	b	601	CLA	O2D-CGD-O1D	-3.63	116.78	123.85
30	C	518	DGD	O2D-C2D-C1D	-3.61	101.47	110.08
22	C	508	CLA	CHB-C4A-NA	3.60	129.60	124.40
27	d	406	PL9	C35-C34-C36	3.60	121.47	115.23
22	c	512	CLA	C3B-C4B-NB	-3.59	107.33	110.53
29	a	411	SQD	O47-C7-O49	-3.59	115.32	123.70
22	B	609	CLA	C6-C7-C8	-3.59	104.05	115.97
33	d	410	LMG	O1-C1-C2	-3.58	102.84	108.27
22	B	613	CLA	O2A-CGA-O1A	-3.58	114.67	123.63
22	c	505	CLA	CHB-C4A-NA	3.58	129.56	124.40
27	D	406	PL9	C37-C38-C39	-3.56	119.46	127.62
22	A	405	CLA	O2D-CGD-CBD	3.56	117.45	111.23
22	A	405	CLA	C4A-NA-C1A	3.56	108.30	106.68
22	C	502	CLA	C4A-NA-C1A	3.56	108.30	106.68
22	b	611	CLA	O2D-CGD-CBD	3.54	117.43	111.23
23	a	404	PHO	C1-C2-C3	-3.54	120.39	126.20
24	T	101	BCR	C7-C8-C9	-3.54	120.99	126.23
22	c	511	CLA	C3B-C4B-NB	-3.54	107.37	110.53
22	b	610	CLA	CHB-C4A-NA	3.53	129.50	124.40
33	B	627	LMG	O7-C10-C11	3.51	119.08	111.48
22	C	509	CLA	O2D-CGD-CBD	3.51	117.36	111.23
22	B	611	CLA	O2D-CGD-O1D	-3.51	117.02	123.85
22	C	513	CLA	C1-C2-C3	-3.51	120.45	126.20
22	C	507	CLA	C4A-NA-C1A	3.50	108.28	106.68
23	A	404	PHO	OBD-CAD-C3D	3.50	133.34	127.89
22	B	605	CLA	O2D-CGD-CBD	3.49	117.34	111.23
22	d	402	CLA	C3B-C4B-NB	-3.49	107.41	110.53
22	b	601	CLA	C3B-C4B-NB	-3.49	107.41	110.53
22	b	605	CLA	C4-C3-C5	3.49	121.28	115.23
33	b	622	LMG	C3-C4-C5	-3.49	103.91	110.23
24	b	617	BCR	C38-C26-C25	-3.48	120.68	124.48
23	D	401	PHO	C2B-C1B-NB	-3.48	106.92	109.43
22	B	615	CLA	CHC-C4B-NB	3.48	129.26	124.05
22	d	403	CLA	CHD-C1D-ND	-3.48	119.91	124.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	M	101	LMG	O6-C1-O1	-3.47	101.84	110.04
22	B	614	CLA	C4A-NA-C1A	3.47	108.26	106.68
30	C	519	DGD	O3E-C3E-C2E	-3.47	102.21	110.38
22	B	616	CLA	O2D-CGD-O1D	-3.46	117.11	123.85
22	c	513	CLA	CHB-C4A-NA	3.46	129.39	124.40
22	A	405	CLA	O2D-CGD-O1D	-3.46	117.12	123.85
24	c	515	BCR	C27-C26-C25	3.46	127.37	122.70
33	B	627	LMG	C9-C8-C7	-3.45	103.73	111.78
22	b	608	CLA	CHB-C4A-NA	3.45	129.38	124.40
22	C	504	CLA	C7-C6-C5	-3.45	104.07	113.26
24	C	501	BCR	C27-C26-C25	3.45	127.36	122.70
23	D	401	PHO	O1D-CGD-CBD	3.44	129.94	124.72
22	b	602	CLA	O2D-CGD-CBD	3.44	117.24	111.23
26	A	409	BCT	O2-C-O1	3.44	128.47	119.68
27	A	410	PL9	C36-C34-C33	-3.43	113.46	121.17
22	C	505	CLA	O2A-CGA-O1A	-3.43	115.05	123.63
30	c	518	DGD	O5D-C1E-C2E	3.43	113.48	108.27
29	L	101	SQD	O9-S-O7	-3.43	102.68	113.82
22	a	403	CLA	C3B-C4B-NB	-3.43	107.47	110.53
24	H	101	BCR	C38-C26-C25	-3.42	120.75	124.48
22	A	403	CLA	O2D-CGD-CBD	3.42	117.22	111.23
33	c	522	LMG	C1-O6-C5	-3.42	107.05	113.72
30	h	101	DGD	O6E-C5E-C4E	3.42	115.86	109.70
29	A	412	SQD	C1-O5-C5	-3.41	107.06	113.72
29	a	411	SQD	C1-C2-C3	-3.41	102.83	110.01
29	a	411	SQD	C1-O5-C5	-3.41	107.06	113.72
22	a	405	CLA	O2D-CGD-CBD	3.40	117.18	111.23
33	Y	101	LMG	O6-C1-O1	-3.40	102.00	110.04
27	D	406	PL9	C20-C19-C21	3.40	121.13	115.23
33	B	627	LMG	C7-O1-C1	3.40	121.08	113.80
22	c	512	CLA	C4A-NA-C1A	3.39	108.22	106.68
22	C	502	CLA	O2A-CGA-O1A	-3.39	115.16	123.63
22	B	615	CLA	O1D-CGD-CBD	3.38	131.19	124.52
22	b	613	CLA	C4A-NA-C1A	3.38	108.22	106.68
22	B	617	CLA	O2D-CGD-O1D	-3.38	117.28	123.85
22	D	404	CLA	CMB-C2B-C1B	-3.37	120.29	125.42
22	b	616	CLA	C3B-C4B-NB	-3.37	107.53	110.53
22	C	505	CLA	CED-O2D-CGD	3.36	123.55	115.92
29	A	412	SQD	O47-C7-C8	3.36	118.75	111.48
30	h	101	DGD	O3G-C3G-C2G	-3.36	102.66	110.82
24	t	101	BCR	C7-C8-C9	-3.36	121.27	126.23
29	A	412	SQD	O9-S-O7	-3.35	102.92	113.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	605	CLA	C1C-C2C-C3C	-3.35	103.46	106.98
22	c	506	CLA	C4A-NA-C1A	3.35	108.21	106.68
26	a	409	BCT	O3-C-O1	-3.35	111.11	119.68
24	k	103	BCR	C29-C30-C25	3.35	115.30	110.44
22	b	616	CLA	CMB-C2B-C1B	-3.34	120.33	125.42
23	A	404	PHO	C5-C3-C2	3.34	128.66	121.17
22	d	403	CLA	O2D-CGD-CBD	3.32	117.04	111.23
29	a	411	SQD	O47-C7-C8	3.32	118.67	111.48
28	A	413	LHG	O8-C23-C24	3.32	121.94	111.83
22	b	603	CLA	O2D-CGD-CBD	3.31	117.02	111.23
22	a	403	CLA	CHB-C4A-NA	3.31	129.18	124.40
27	A	410	PL9	C40-C39-C41	3.31	120.98	115.23
29	a	411	SQD	O8-S-C6	3.31	112.37	105.97
27	d	406	PL9	C7-C3-C2	-3.31	119.49	123.39
22	B	611	CLA	O2A-CGA-O1A	-3.30	115.38	123.63
22	B	608	CLA	CHB-C4A-NA	3.29	129.15	124.40
22	B	613	CLA	C3B-C4B-NB	-3.29	107.59	110.53
34	V	201	HEC	CMB-C2B-C1B	-3.29	120.41	125.42
24	c	514	BCR	C11-C10-C9	-3.28	122.68	127.28
23	d	401	PHO	CBA-CAA-C2A	-3.28	104.13	113.78
22	c	507	CLA	C3B-C4B-NB	-3.27	107.61	110.53
22	B	609	CLA	O2D-CGD-O1D	-3.27	117.47	123.85
29	L	101	SQD	O48-C23-C24	3.26	121.79	111.83
29	F	101	SQD	O8-S-C6	3.26	112.27	105.97
23	D	401	PHO	C1-C2-C3	-3.26	120.86	126.20
22	b	601	CLA	CHB-C4A-NA	3.26	129.10	124.40
23	d	401	PHO	O1D-CGD-CBD	3.25	129.66	124.72
33	m	101	LMG	C1-O6-C5	-3.25	107.37	113.72
29	A	412	SQD	O8-S-C6	3.25	112.25	105.97
24	k	103	BCR	C37-C22-C21	-3.25	117.55	122.82
22	C	504	CLA	O2D-CGD-O1D	-3.25	117.53	123.85
22	C	512	CLA	C1-C2-C3	-3.24	120.89	126.20
24	H	101	BCR	C2-C1-C6	3.24	115.14	110.44
30	c	517	DGD	O2E-C2E-C1E	-3.23	102.37	110.08
22	c	501	CLA	CED-O2D-CGD	-3.23	108.58	115.92
22	c	513	CLA	O2D-CGD-O1D	-3.23	117.56	123.85
29	F	101	SQD	O9-S-C6	3.23	111.58	106.76
22	a	402	CLA	C4A-NA-C1A	3.23	108.15	106.68
22	B	613	CLA	C1-C2-C3	-3.23	120.91	126.20
22	C	514	CLA	CHB-C4A-NA	3.22	129.05	124.40
22	b	616	CLA	O2D-CGD-O1D	-3.22	117.58	123.85
24	b	617	BCR	C11-C10-C9	-3.22	122.76	127.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	512	CLA	O2D-CGD-O1D	-3.22	117.58	123.85
30	C	519	DGD	O3G-C3G-C2G	-3.22	102.99	110.82
24	B	618	BCR	C2-C1-C6	3.22	115.11	110.44
24	c	515	BCR	C35-C13-C14	-3.21	117.61	122.82
23	d	401	PHO	C3B-C4B-NB	-3.21	105.38	107.46
22	d	404	CLA	CMB-C2B-C1B	-3.20	120.54	125.42
29	a	411	SQD	O7-S-C6	3.20	111.53	106.76
24	b	619	BCR	C29-C30-C25	3.20	115.08	110.44
22	c	513	CLA	C1-C2-C3	-3.20	120.96	126.20
24	C	501	BCR	C40-C30-C25	3.19	115.25	110.24
22	B	603	CLA	O2D-CGD-CBD	3.19	116.81	111.23
22	B	604	CLA	C16-C15-C13	-3.18	105.39	115.97
27	d	406	PL9	C40-C39-C41	3.18	120.75	115.23
24	T	101	BCR	C27-C26-C25	3.18	127.00	122.70
22	C	505	CLA	C4-C3-C5	3.17	120.73	115.23
22	c	502	CLA	C4A-NA-C1A	3.17	108.12	106.68
30	C	518	DGD	O3G-C1D-C2D	-3.17	103.46	108.27
34	v	201	HEC	CHB-C1B-NB	3.17	129.60	123.86
22	b	613	CLA	O2A-CGA-O1A	-3.16	115.72	123.63
22	a	402	CLA	O2A-CGA-O1A	-3.16	115.72	123.63
22	c	504	CLA	CMB-C2B-C1B	-3.16	120.60	125.42
30	c	516	DGD	O6D-C1D-O3G	-3.14	102.61	110.04
27	a	410	PL9	C27-C28-C29	-3.14	120.43	127.62
24	H	101	BCR	C36-C18-C17	-3.14	117.73	122.82
23	A	404	PHO	OBD-CAD-CBD	-3.13	121.23	125.82
27	d	406	PL9	C37-C38-C39	-3.13	120.45	127.62
22	b	608	CLA	O2D-CGD-CBD	3.13	116.70	111.23
22	d	402	CLA	O1D-CGD-CBD	3.13	130.69	124.52
22	b	607	CLA	CHB-C1B-NB	3.13	128.74	124.05
22	c	508	CLA	CHD-C1D-ND	-3.13	120.40	124.80
22	b	602	CLA	C1-C2-C3	-3.13	121.07	126.20
22	C	507	CLA	O1D-CGD-CBD	3.13	130.69	124.52
28	D	408	LHG	O8-C23-C24	3.13	121.36	111.83
30	h	101	DGD	C3G-C2G-C1G	-3.12	104.50	111.78
23	d	401	PHO	C1-C2-C3	-3.12	121.09	126.20
22	D	402	CLA	CMB-C2B-C1B	-3.11	120.68	125.42
29	L	101	SQD	C3-C4-C5	3.11	115.87	110.23
22	B	613	CLA	C11-C12-C13	-3.11	105.63	115.97
24	k	102	BCR	C27-C26-C25	3.11	126.91	122.70
22	B	612	CLA	O2D-CGD-O1D	-3.11	117.80	123.85
24	d	405	BCR	C24-C23-C22	-3.11	121.64	126.23
28	L	102	LHG	C20-C19-C18	-3.10	98.69	114.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	604	CLA	CHB-C4A-NA	3.10	128.88	124.40
34	E	101	HEC	CHC-C4B-NB	3.10	127.83	124.45
33	c	519	LMG	O3-C3-C2	-3.09	103.08	110.38
22	b	605	CLA	O2D-CGD-O1D	-3.09	117.83	123.85
22	a	402	CLA	O1D-CGD-CBD	3.08	130.60	124.52
24	b	617	BCR	C29-C30-C25	3.08	114.91	110.44
22	b	604	CLA	CAA-CBA-CGA	-3.08	104.47	113.21
22	b	604	CLA	C3B-C4B-NB	-3.08	107.78	110.53
22	B	607	CLA	O2A-CGA-O1A	-3.07	115.94	123.63
28	D	408	LHG	O8-C23-O10	-3.07	115.95	123.63
22	B	612	CLA	O2D-CGD-CBD	3.07	116.59	111.23
22	B	604	CLA	C3B-C4B-NB	-3.06	107.80	110.53
24	C	501	BCR	C2-C1-C6	3.05	114.87	110.44
24	C	515	BCR	C15-C16-C17	-3.05	117.28	123.52
22	d	404	CLA	CHD-C1D-ND	-3.05	120.51	124.80
22	C	513	CLA	O2A-CGA-O1A	-3.05	116.01	123.63
22	c	505	CLA	O2D-CGD-O1D	-3.05	117.92	123.85
22	b	601	CLA	O2D-CGD-CBD	3.05	116.55	111.23
33	Y	101	LMG	O1-C7-C8	-3.04	103.42	110.82
24	C	515	BCR	C27-C26-C25	3.04	126.81	122.70
30	c	518	DGD	O6E-C5E-C4E	3.04	115.18	109.70
22	B	605	CLA	C2C-C1C-NC	3.04	113.17	109.98
22	b	609	CLA	O1D-CGD-CBD	3.04	130.51	124.52
22	a	405	CLA	CHB-C4A-NA	3.03	128.78	124.40
29	A	412	SQD	O5-C1-C2	-3.03	104.15	110.37
29	L	101	SQD	O5-C5-C4	3.02	115.15	109.70
24	Z	101	BCR	C11-C10-C9	-3.02	123.04	127.28
24	A	406	BCR	C16-C15-C14	-3.02	117.33	123.52
22	c	504	CLA	O2D-CGD-CBD	3.02	116.51	111.23
23	a	404	PHO	O2D-CGD-O1D	-3.02	117.97	123.85
32	C	520	STE	O2-C1-C2	3.02	123.54	114.00
22	B	616	CLA	CHB-C4A-NA	3.02	128.76	124.40
34	V	201	HEC	CMC-C2C-C1C	-3.02	120.83	125.42
33	c	522	LMG	O6-C1-O1	-3.01	102.92	110.04
22	c	503	CLA	CHC-C4B-NB	3.01	128.57	124.05
22	B	606	CLA	O2D-CGD-O1D	-3.01	117.98	123.85
33	m	101	LMG	O7-C10-O9	-3.01	116.66	123.70
33	m	101	LMG	O1-C7-C8	-3.01	103.50	110.82
24	B	618	BCR	C27-C26-C25	3.01	126.77	122.70
30	C	518	DGD	O3E-C3E-C2E	-3.00	103.30	110.38
22	B	615	CLA	CHB-C1B-NB	3.00	128.55	124.05
27	A	410	PL9	C22-C23-C24	-3.00	120.76	127.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	512	CLA	O2A-CGA-O1A	-3.00	116.13	123.63
30	A	415	DGD	C1E-O6E-C5E	2.99	119.57	113.72
22	c	504	CLA	O2D-CGD-O1D	-2.99	118.02	123.85
22	a	403	CLA	O2D-CGD-CBD	2.99	116.45	111.23
28	l	101	LHG	O8-C23-O10	-2.99	116.15	123.63
29	a	411	SQD	O48-C23-C24	2.98	120.94	111.83
22	c	503	CLA	C4-C3-C5	2.98	120.41	115.23
27	d	406	PL9	C22-C23-C24	-2.98	120.80	127.62
22	C	503	CLA	C1D-ND-C4D	2.98	108.40	106.31
24	Z	101	BCR	C7-C8-C9	-2.97	121.84	126.23
22	a	403	CLA	C1D-ND-C4D	2.96	108.39	106.31
27	A	410	PL9	C7-C3-C4	2.96	119.34	116.91
22	b	605	CLA	C1-C2-C3	-2.95	121.37	126.20
24	k	102	BCR	C38-C26-C25	-2.95	121.27	124.48
34	e	101	HEC	CHD-C4C-NC	2.95	127.66	124.45
22	B	613	CLA	O2D-CGD-O1D	-2.95	118.11	123.85
22	A	403	CLA	O2D-CGD-O1D	-2.94	118.12	123.85
30	c	517	DGD	O6D-C1D-O3G	-2.94	103.09	110.04
33	B	627	LMG	O7-C10-O9	-2.94	116.83	123.70
22	d	403	CLA	O2D-CGD-O1D	-2.94	118.13	123.85
33	d	410	LMG	O6-C1-O1	-2.94	103.10	110.04
22	b	607	CLA	C3B-C4B-NB	-2.93	107.91	110.53
22	a	403	CLA	CMB-C2B-C1B	-2.93	120.95	125.42
22	b	609	CLA	CMB-C2B-C1B	-2.93	120.95	125.42
30	c	518	DGD	O5E-C6E-C5E	-2.93	101.35	111.33
23	a	404	PHO	CMB-C2B-C3B	2.92	130.52	124.68
24	T	101	BCR	C31-C1-C6	2.92	114.82	110.24
22	B	603	CLA	O2D-CGD-O1D	-2.91	118.17	123.85
24	b	617	BCR	C27-C26-C25	2.91	126.64	122.70
24	K	101	BCR	C15-C16-C17	-2.91	117.56	123.52
30	A	415	DGD	O1G-C1A-O1A	-2.91	116.34	123.63
22	b	615	CLA	CHB-C1B-NB	2.91	128.41	124.05
22	B	613	CLA	O1D-CGD-CBD	2.91	130.25	124.52
30	c	516	DGD	O3G-C3G-C2G	-2.90	103.75	110.82
30	A	415	DGD	O5E-C6E-C5E	-2.90	101.45	111.33
22	b	608	CLA	C3B-C4B-NB	-2.90	107.94	110.53
30	A	415	DGD	C4E-C3E-C2E	-2.90	105.74	110.83
22	d	404	CLA	CMB-C2B-C3B	2.90	133.37	126.55
22	b	610	CLA	CAA-CBA-CGA	-2.90	104.98	113.21
22	C	504	CLA	O1D-CGD-CBD	2.89	130.23	124.52
22	B	609	CLA	C4A-NA-C1A	2.89	108.00	106.68
22	B	610	CLA	O2A-CGA-O1A	-2.89	116.40	123.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	612	CLA	C3B-C4B-NB	-2.89	107.95	110.53
22	b	603	CLA	CHB-C1B-NB	2.89	128.38	124.05
22	D	403	CLA	CHB-C4A-NA	2.88	128.56	124.40
22	c	512	CLA	O1D-CGD-CBD	2.88	130.19	124.52
22	c	509	CLA	O2D-CGD-O1D	-2.87	118.25	123.85
24	D	405	BCR	C24-C23-C22	-2.87	121.98	126.23
30	H	102	DGD	C1D-C2D-C3D	-2.86	103.99	110.01
32	B	601	STE	O2-C1-C2	2.86	123.03	114.00
27	D	406	PL9	C7-C8-C9	-2.86	121.91	126.83
22	A	402	CLA	CAC-C3C-C4C	2.86	128.51	124.79
29	B	623	SQD	O8-S-C6	2.86	111.49	105.97
22	C	510	CLA	CHB-C4A-NA	2.85	128.52	124.40
30	C	517	DGD	O3E-C3E-C2E	-2.85	103.65	110.38
30	A	415	DGD	O6E-C5E-C4E	2.85	114.84	109.70
22	D	404	CLA	O2A-CGA-O1A	-2.85	116.50	123.63
22	b	616	CLA	CMB-C2B-C3B	2.85	133.25	126.55
24	x	101	BCR	C27-C26-C25	2.85	126.55	122.70
33	M	101	LMG	O7-C10-O9	-2.85	117.05	123.70
27	D	406	PL9	C40-C39-C41	2.85	120.17	115.23
22	b	604	CLA	O2A-CGA-O1A	-2.85	116.51	123.63
22	b	603	CLA	CMB-C2B-C3B	2.84	133.24	126.55
22	b	612	CLA	O2D-CGD-O1D	-2.84	118.32	123.85
30	C	519	DGD	C8B-C7B-C6B	-2.84	100.01	114.37
30	c	517	DGD	O3D-C3D-C4D	-2.84	103.68	110.38
22	b	604	CLA	CMA-C3A-C4A	2.84	119.40	111.77
22	b	602	CLA	CHB-C4A-NA	2.84	128.49	124.40
22	B	605	CLA	CMB-C2B-C1B	-2.84	121.10	125.42
27	A	410	PL9	O2-C1-C6	2.84	124.99	120.48
30	A	415	DGD	O3G-C3G-C2G	-2.84	103.92	110.82
24	t	101	BCR	C1-C6-C5	-2.83	118.76	122.64
22	B	609	CLA	C1D-ND-C4D	-2.83	104.33	106.31
30	C	518	DGD	O5D-C6D-C5D	-2.83	103.04	109.42
22	C	507	CLA	C3B-C4B-NB	-2.83	108.00	110.53
24	A	406	BCR	C30-C25-C26	-2.83	118.77	122.64
28	d	407	LHG	O8-C23-C24	2.83	120.46	111.83
22	b	611	CLA	CHB-C1B-NB	2.83	128.29	124.05
28	D	408	LHG	O7-C7-C8	-2.83	105.37	111.48
28	B	622	LHG	C11-C10-C9	-2.82	100.11	114.37
24	A	406	BCR	C2-C1-C6	2.82	114.54	110.44
33	b	622	LMG	O2-C2-C1	-2.82	103.36	110.08
30	c	518	DGD	C3D-C4D-C5D	-2.82	105.12	110.23
22	B	610	CLA	C2C-C1C-NC	2.81	112.94	109.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	v	201	HEC	C4D-ND-C1D	2.81	110.41	105.82
22	b	605	CLA	O1D-CGD-CBD	2.81	130.06	124.52
24	A	406	BCR	C38-C26-C27	-2.81	107.60	113.60
22	B	616	CLA	C3B-C4B-NB	-2.81	108.02	110.53
33	d	410	LMG	O6-C5-C4	2.81	114.76	109.70
24	Z	101	BCR	C2-C1-C6	2.80	114.51	110.44
22	C	502	CLA	CHB-C1B-NB	2.80	128.25	124.05
22	c	511	CLA	CHB-C1B-NB	2.80	128.25	124.05
22	d	404	CLA	CED-O2D-CGD	2.80	122.26	115.92
34	E	101	HEC	CMD-C2D-C1D	2.79	129.67	125.42
24	Z	101	BCR	C29-C30-C25	2.79	114.49	110.44
22	D	404	CLA	CMB-C2B-C3B	2.79	133.11	126.55
33	Y	101	LMG	O7-C10-O9	-2.79	117.19	123.70
24	B	619	BCR	C2-C1-C6	2.78	114.48	110.44
27	d	406	PL9	C36-C34-C33	-2.78	114.93	121.17
30	H	102	DGD	O6D-C1D-O3G	-2.78	103.48	110.04
29	a	413	SQD	C46-C45-C44	-2.77	105.39	111.80
28	B	622	LHG	O8-C23-C24	2.77	120.27	111.83
30	h	101	DGD	C1E-O6E-C5E	2.76	119.12	113.72
30	h	101	DGD	O6D-C1D-O3G	-2.76	103.52	110.04
22	b	616	CLA	CHB-C4A-NA	2.76	128.39	124.40
27	D	406	PL9	O2-C1-C6	2.76	124.87	120.48
24	d	405	BCR	C27-C26-C25	2.76	126.43	122.70
24	B	620	BCR	C1-C6-C5	-2.76	118.87	122.64
22	D	403	CLA	C7-C6-C5	-2.75	105.93	113.26
22	B	608	CLA	CMB-C2B-C1B	-2.75	121.23	125.42
28	d	407	LHG	O8-C23-O10	-2.75	116.75	123.63
24	K	101	BCR	C27-C26-C25	2.75	126.42	122.70
22	C	502	CLA	O2D-CGD-O1D	-2.74	118.50	123.85
24	A	406	BCR	C40-C30-C25	2.74	114.54	110.24
24	b	619	BCR	C11-C10-C9	-2.74	123.44	127.28
24	c	514	BCR	C15-C16-C17	-2.74	117.92	123.52
22	d	402	CLA	O2D-CGD-O1D	-2.74	118.52	123.85
29	A	412	SQD	O4-C4-C3	-2.74	103.93	110.38
34	V	201	HEC	CHB-C4A-NA	2.73	127.43	124.45
22	C	508	CLA	CAA-CBA-CGA	-2.73	105.45	113.21
33	D	407	LMG	C3-C4-C5	-2.73	105.28	110.23
29	a	411	SQD	O9-S-O7	-2.73	104.94	113.82
29	L	101	SQD	C45-O47-C7	2.73	124.33	117.80
22	c	502	CLA	CMB-C2B-C3B	2.73	132.97	126.55
27	D	406	PL9	C30-C29-C31	-2.73	110.49	115.23
22	B	612	CLA	C1-C2-C3	-2.73	121.73	126.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	C	519	DGD	CAB-C9B-C8B	-2.73	100.59	114.37
29	L	101	SQD	O5-C1-C2	-2.73	104.77	110.37
22	B	611	CLA	C1-C2-C3	-2.73	121.73	126.20
22	B	608	CLA	C2A-C1A-CHA	2.72	128.59	123.87
22	c	501	CLA	O2D-CGD-CBD	2.71	115.97	111.23
22	b	613	CLA	O2D-CGD-O1D	-2.71	118.57	123.85
29	a	413	SQD	O48-C23-O10	-2.71	116.85	123.63
22	B	608	CLA	O2A-CGA-O1A	-2.71	116.85	123.63
22	B	603	CLA	O2A-CGA-O1A	-2.71	116.86	123.63
22	d	402	CLA	O2A-CGA-O1A	-2.71	116.86	123.63
22	c	508	CLA	CHB-C4A-NA	2.71	128.30	124.40
22	B	609	CLA	C3B-C4B-NB	-2.70	108.12	110.53
23	d	401	PHO	CMB-C2B-C3B	2.70	130.08	124.68
24	D	405	BCR	C2-C1-C6	2.70	114.36	110.44
22	c	508	CLA	C3B-C4B-NB	-2.70	108.12	110.53
22	C	513	CLA	O2D-CGD-O1D	-2.70	118.59	123.85
22	d	403	CLA	CHD-C1D-C2D	2.70	131.09	125.49
28	A	411	LHG	O8-C23-C24	2.69	120.05	111.83
22	b	602	CLA	C3B-C4B-NB	-2.69	108.13	110.53
29	a	413	SQD	O49-C7-C8	-2.69	113.25	123.78
22	B	605	CLA	CHB-C4A-NA	2.69	128.28	124.40
27	A	410	PL9	O1-C4-C3	-2.69	117.89	120.73
23	a	404	PHO	C3B-C4B-NB	-2.69	105.71	107.46
22	b	612	CLA	CAC-C3C-C4C	2.69	128.28	124.79
30	C	517	DGD	O6D-C1D-O3G	-2.68	103.70	110.04
29	f	101	SQD	O5-C1-C2	-2.68	104.86	110.37
33	c	519	LMG	O8-C28-O10	-2.68	116.92	123.63
24	Z	101	BCR	C33-C5-C6	-2.68	121.56	124.48
29	A	412	SQD	O47-C7-O49	-2.68	117.44	123.70
32	t	104	STE	C3-C2-C1	-2.68	107.53	114.51
22	c	501	CLA	O2A-CGA-O1A	-2.67	116.94	123.63
29	B	623	SQD	C46-C45-C44	-2.67	105.56	111.78
33	d	410	LMG	O7-C10-O9	-2.67	117.47	123.70
30	C	517	DGD	O5D-C6D-C5D	-2.67	103.41	109.42
27	a	410	PL9	C21-C19-C18	-2.67	115.18	121.17
29	f	101	SQD	C1-C2-C3	-2.66	104.41	110.01
24	k	103	BCR	C27-C26-C25	2.66	126.30	122.70
24	B	619	BCR	C15-C14-C13	-2.66	123.54	127.28
24	b	618	BCR	C36-C18-C17	-2.66	118.51	122.82
22	B	604	CLA	CMB-C2B-C3B	2.66	132.80	126.55
22	B	604	CLA	CHB-C4A-NA	2.66	128.23	124.40
22	b	603	CLA	C4A-NA-C1A	2.65	107.89	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	a	402	CLA	CMB-C2B-C1B	-2.65	121.38	125.42
30	C	519	DGD	O6D-C1D-O3G	-2.65	103.78	110.04
30	H	102	DGD	C1E-O6E-C5E	2.65	118.90	113.72
22	C	502	CLA	O2D-CGD-CBD	2.65	115.86	111.23
30	h	101	DGD	O3E-C3E-C2E	-2.65	104.13	110.38
34	V	201	HEC	CHD-C4C-NC	2.65	127.34	124.45
34	e	101	HEC	CMD-C2D-C1D	2.65	129.45	125.42
22	b	610	CLA	C1D-ND-C4D	-2.64	104.46	106.31
30	h	101	DGD	C4E-C3E-C2E	-2.64	106.19	110.83
22	b	614	CLA	CHB-C4A-NA	2.64	128.21	124.40
27	a	410	PL9	C20-C19-C21	2.64	119.81	115.23
22	B	611	CLA	CHB-C4A-NA	2.64	128.21	124.40
30	C	518	DGD	CDB-CCB-CBB	-2.63	101.05	114.37
22	c	502	CLA	CMB-C2B-C1B	-2.63	121.41	125.42
22	b	607	CLA	O2D-CGD-O1D	-2.63	118.73	123.85
22	c	504	CLA	CHD-C1D-ND	-2.63	121.10	124.80
22	B	617	CLA	O2D-CGD-CBD	2.63	115.83	111.23
27	A	410	PL9	O2-C1-C2	-2.63	115.85	121.83
24	b	617	BCR	C29-C28-C27	2.63	117.06	111.28
22	B	608	CLA	CMB-C2B-C3B	2.63	132.73	126.55
22	b	602	CLA	CAC-C3C-C4C	2.63	128.21	124.79
22	B	603	CLA	C3B-C4B-NB	-2.63	108.19	110.53
22	b	610	CLA	CHA-C1A-NA	-2.62	120.45	126.39
23	d	401	PHO	O2D-CGD-O1D	-2.62	118.74	123.85
22	C	507	CLA	O2D-CGD-O1D	-2.62	118.74	123.85
22	C	512	CLA	C3B-C4B-NB	-2.62	108.19	110.53
24	B	618	BCR	C23-C22-C21	-2.62	114.89	119.01
22	B	609	CLA	CHA-C1A-NA	-2.62	120.45	126.39
22	A	405	CLA	O2A-CGA-O1A	-2.62	117.07	123.63
22	b	602	CLA	C4-C3-C5	2.62	119.78	115.23
33	c	521	LMG	O1-C1-C2	-2.62	104.30	108.27
22	a	405	CLA	O2A-CGA-O1A	-2.62	117.08	123.63
22	C	514	CLA	O2A-CGA-O1A	-2.62	117.08	123.63
22	C	514	CLA	O1D-CGD-CBD	2.62	129.68	124.52
28	d	407	LHG	C11-C10-C9	-2.62	101.15	114.37
24	H	101	BCR	C30-C25-C26	-2.61	119.07	122.64
22	d	403	CLA	C1D-ND-C4D	2.61	108.14	106.31
22	b	612	CLA	CHB-C4A-NA	2.61	128.17	124.40
22	b	614	CLA	O2A-CGA-O1A	-2.61	117.10	123.63
27	a	410	PL9	C22-C23-C24	-2.61	121.66	127.62
24	B	620	BCR	C33-C5-C6	-2.60	121.64	124.48
24	Z	101	BCR	C36-C18-C19	2.60	122.06	118.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	c	522	LMG	O8-C28-O10	-2.60	117.12	123.63
22	C	506	CLA	C3B-C4B-NB	-2.60	108.21	110.53
30	c	517	DGD	O3G-C3G-C2G	-2.60	104.50	110.82
24	x	101	BCR	C16-C15-C14	-2.60	118.20	123.52
22	B	603	CLA	CHD-C1D-ND	-2.60	121.15	124.80
34	E	101	HEC	C4D-ND-C1D	2.60	110.05	105.82
22	c	509	CLA	CHB-C4A-NA	2.60	128.15	124.40
24	c	515	BCR	C36-C18-C17	-2.59	118.61	122.82
24	B	619	BCR	C35-C13-C14	-2.59	118.61	122.82
22	C	508	CLA	CHC-C4B-NB	2.59	127.94	124.05
22	B	610	CLA	CHA-C1A-NA	-2.59	120.53	126.39
30	C	518	DGD	C1D-O6D-C5D	-2.59	108.67	113.72
28	B	622	LHG	O8-C23-O10	-2.59	117.16	123.63
22	a	403	CLA	CHD-C1D-ND	-2.58	121.17	124.80
28	d	408	LHG	C5-O7-C7	-2.58	111.62	117.80
22	A	405	CLA	CHB-C4A-NA	2.58	128.12	124.40
22	c	509	CLA	CHD-C1D-ND	-2.58	121.17	124.80
27	D	406	PL9	O2-C1-C2	-2.58	115.97	121.83
24	Z	101	BCR	C38-C26-C25	-2.58	121.67	124.48
24	A	406	BCR	C15-C16-C17	-2.58	118.25	123.52
33	D	407	LMG	O2-C2-C1	-2.58	103.94	110.08
22	d	403	CLA	CMB-C2B-C1B	-2.58	121.50	125.42
22	b	603	CLA	CMB-C2B-C1B	-2.57	121.50	125.42
22	b	610	CLA	C3B-C4B-NB	-2.57	108.23	110.53
22	B	617	CLA	CAA-CBA-CGA	-2.57	105.90	113.21
24	k	103	BCR	C2-C1-C6	2.57	114.17	110.44
33	C	516	LMG	O6-C1-O1	-2.57	103.97	110.04
22	B	604	CLA	O2D-CGD-O1D	-2.57	118.85	123.85
22	a	403	CLA	CHD-C1D-C2D	2.57	130.83	125.49
27	d	406	PL9	C30-C29-C31	-2.57	110.77	115.23
22	D	402	CLA	CED-O2D-CGD	2.57	121.74	115.92
22	b	610	CLA	C2C-C1C-NC	2.57	112.68	109.98
29	B	623	SQD	C3-C4-C5	2.57	114.88	110.23
22	B	612	CLA	CHB-C4A-NA	2.56	128.10	124.40
27	a	410	PL9	O2-C1-C6	2.56	124.56	120.48
22	a	403	CLA	C2A-C1A-CHA	2.56	128.31	123.87
22	B	605	CLA	CMB-C2B-C3B	2.56	132.58	126.55
22	b	612	CLA	O2A-CGA-O1A	-2.56	117.22	123.63
22	B	617	CLA	C3B-C4B-NB	-2.56	108.24	110.53
22	C	503	CLA	C2D-C1D-ND	-2.56	107.59	110.13
32	C	520	STE	O2-C1-O1	-2.56	116.75	123.33
27	d	406	PL9	C8-C7-C3	2.56	118.64	112.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	c	521	LMG	O2-C2-C1	-2.56	103.98	110.08
22	C	510	CLA	CMB-C2B-C1B	-2.55	121.53	125.42
30	A	415	DGD	C3E-C4E-C5E	-2.55	105.60	110.23
30	c	516	DGD	O1G-C1A-C2A	-2.55	104.05	111.83
22	c	502	CLA	CHD-C1D-ND	-2.55	121.21	124.80
22	B	614	CLA	CHA-C1A-NA	-2.55	120.61	126.39
22	c	513	CLA	C3B-C4B-NB	-2.55	108.25	110.53
22	B	607	CLA	O2D-CGD-CBD	2.54	115.68	111.23
22	A	402	CLA	C3B-C4B-NB	-2.54	108.26	110.53
33	M	101	LMG	C38-C37-C36	-2.54	101.53	114.37
22	B	603	CLA	C16-C15-C13	-2.54	107.53	115.97
23	A	404	PHO	C3D-C4D-ND	2.54	110.96	107.71
22	b	608	CLA	CHD-C1D-ND	-2.53	121.23	124.80
22	B	607	CLA	O2D-CGD-O1D	-2.53	118.92	123.85
24	B	618	BCR	C30-C25-C26	-2.53	119.18	122.64
30	c	516	DGD	CCB-CBB-CAB	-2.53	101.59	114.37
24	a	406	BCR	C2-C1-C6	2.53	114.11	110.44
22	b	605	CLA	CHB-C4A-NA	2.53	128.05	124.40
24	k	103	BCR	C11-C10-C9	-2.53	123.73	127.28
22	D	404	CLA	CED-O2D-CGD	2.53	121.65	115.92
30	A	415	DGD	CDB-CCB-CBB	-2.53	101.60	114.37
27	a	410	PL9	O2-C1-C2	-2.52	116.09	121.83
22	C	509	CLA	C3B-C4B-NB	-2.52	108.28	110.53
30	c	517	DGD	C6D-O5D-C1E	2.52	119.20	113.80
22	c	501	CLA	CHD-C1D-ND	-2.52	121.25	124.80
22	C	508	CLA	C3B-C4B-NB	-2.52	108.28	110.53
27	d	406	PL9	C50-C49-C48	-2.52	115.09	122.66
22	C	506	CLA	O1D-CGD-CBD	2.52	129.49	124.52
24	C	515	BCR	C33-C5-C6	-2.51	121.74	124.48
24	d	405	BCR	C33-C5-C6	-2.51	121.74	124.48
22	A	405	CLA	C1D-CHD-C4C	-2.51	120.68	126.02
22	c	512	CLA	CHC-C1C-NC	2.51	128.09	124.31
22	c	503	CLA	O2D-CGD-O1D	-2.51	118.97	123.85
22	C	505	CLA	CMB-C2B-C1B	-2.50	121.61	125.42
22	b	611	CLA	O2A-CGA-O1A	-2.50	117.37	123.63
30	h	101	DGD	C3D-C4D-C5D	-2.50	105.70	110.23
22	C	503	CLA	C3B-C4B-NB	-2.50	108.30	110.53
22	C	503	CLA	C2A-C1A-CHA	2.50	128.21	123.87
28	a	412	LHG	C11-C10-C9	-2.50	101.74	114.37
34	v	201	HEC	CHD-C1D-ND	2.50	128.39	123.86
22	B	606	CLA	CAA-CBA-CGA	-2.50	106.12	113.21
22	B	605	CLA	C1-O2A-CGA	-2.49	110.61	116.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	503	CLA	CHA-C1A-NA	-2.49	120.75	126.39
33	B	627	LMG	O5-C6-C5	-2.49	102.85	111.33
29	F	101	SQD	O48-C23-O10	-2.49	117.40	123.63
24	t	101	BCR	C34-C9-C10	-2.49	118.78	122.82
22	B	609	CLA	CHB-C1B-NB	2.49	127.78	124.05
30	c	518	DGD	O6D-C1D-O3G	-2.49	104.16	110.04
22	B	604	CLA	CHD-C4C-NC	2.49	128.09	124.23
24	t	101	BCR	C27-C26-C25	2.49	126.07	122.70
23	D	401	PHO	CMB-C2B-C3B	2.49	129.66	124.68
22	c	510	CLA	C3B-C4B-NB	-2.49	108.31	110.53
24	D	405	BCR	C27-C26-C25	2.49	126.07	122.70
22	b	610	CLA	C2A-C1A-CHA	2.49	128.18	123.87
22	B	610	CLA	O2D-CGD-CBD	2.49	115.58	111.23
22	B	604	CLA	CHD-C1D-ND	-2.49	121.30	124.80
33	c	521	LMG	C6-C5-C4	-2.48	106.92	113.02
22	C	503	CLA	CAC-C3C-C4C	2.48	128.02	124.79
28	d	407	LHG	O7-C7-C8	-2.48	106.11	111.48
22	b	614	CLA	O1D-CGD-CBD	2.48	129.41	124.52
30	C	519	DGD	C4D-C3D-C2D	-2.48	106.47	110.83
22	B	608	CLA	C3B-C4B-NB	-2.48	108.32	110.53
34	e	101	HEC	CHB-C1B-NB	2.48	128.35	123.86
22	B	612	CLA	CHD-C4C-NC	2.48	128.07	124.23
22	C	503	CLA	CMA-C3A-C4A	2.48	118.43	111.77
22	B	604	CLA	CMB-C2B-C1B	-2.47	121.65	125.42
23	A	404	PHO	C4-C3-C2	-2.47	117.27	123.63
22	D	402	CLA	O2D-CGD-O1D	-2.47	119.03	123.85
22	c	506	CLA	O1D-CGD-CBD	2.47	129.39	124.52
22	C	507	CLA	O2A-CGA-O1A	-2.47	117.45	123.63
22	c	510	CLA	O1D-CGD-CBD	2.47	129.38	124.52
27	D	406	PL9	C22-C23-C24	-2.47	121.98	127.62
22	b	603	CLA	CHD-C1D-ND	-2.47	121.33	124.80
27	A	410	PL9	C40-C39-C38	-2.46	117.30	123.63
22	C	505	CLA	O2D-CGD-CBD	2.46	115.54	111.23
30	c	516	DGD	O4D-C4D-C5D	-2.46	103.27	109.32
28	d	408	LHG	C18-C17-C16	-2.45	101.97	114.37
22	B	604	CLA	O2A-CGA-O1A	-2.45	117.49	123.63
30	c	517	DGD	CDB-CCB-CBB	-2.45	101.99	114.37
29	a	411	SQD	O8-S-O9	-2.45	105.28	111.40
23	A	404	PHO	O2A-CGA-O1A	-2.44	117.51	123.63
30	C	519	DGD	O2E-C2E-C3E	-2.44	104.61	110.38
24	T	101	BCR	C1-C6-C5	-2.44	119.30	122.64
22	b	613	CLA	C7-C6-C5	-2.44	106.76	113.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	L	101	SQD	O47-C7-O49	-2.44	118.00	123.70
24	b	618	BCR	C30-C25-C26	-2.44	119.30	122.64
34	V	201	HEC	CHC-C1C-NC	2.44	128.28	123.86
22	b	610	CLA	O2D-CGD-O1D	-2.44	119.10	123.85
22	b	611	CLA	CHD-C1D-C2D	2.44	130.56	125.49
24	B	620	BCR	C30-C25-C26	-2.44	119.31	122.64
23	A	404	PHO	CMB-C2B-C3B	2.44	129.55	124.68
22	B	607	CLA	CHB-C4A-NA	2.44	127.91	124.40
23	D	401	PHO	O2D-CGD-O1D	-2.43	119.11	123.85
27	D	406	PL9	C36-C34-C33	-2.43	115.71	121.17
29	f	101	SQD	C45-O47-C7	2.43	123.62	117.80
30	C	517	DGD	C6D-O5D-C1E	2.43	119.01	113.80
32	L	103	STE	O2-C1-C2	2.43	121.68	114.00
23	d	401	PHO	C4A-C3A-C2A	-2.43	100.53	102.84
24	b	619	BCR	C36-C18-C17	-2.43	118.88	122.82
22	B	617	CLA	CHC-C4B-NB	2.43	127.69	124.05
22	A	402	CLA	CHC-C1C-NC	2.43	127.97	124.31
22	B	608	CLA	O2D-CGD-O1D	-2.43	119.12	123.85
29	a	413	SQD	O48-C23-C24	2.42	119.22	111.83
24	c	514	BCR	C3-C4-C5	-2.42	109.74	114.06
30	c	517	DGD	C3E-C4E-C5E	-2.42	105.84	110.23
22	b	614	CLA	CBC-CAC-C3C	-2.42	105.86	112.42
22	c	503	CLA	C6-C5-C3	2.42	119.37	113.47
30	H	102	DGD	C6B-C5B-C4B	-2.42	102.14	114.37
29	f	101	SQD	O5-C5-C4	2.42	114.06	109.70
24	c	514	BCR	C27-C26-C25	2.42	125.97	122.70
22	B	613	CLA	CHB-C4A-NA	2.41	127.88	124.40
32	b	621	STE	O2-C1-O1	-2.41	117.12	123.33
34	V	201	HEC	C4D-ND-C1D	2.41	109.75	105.82
22	B	610	CLA	C7-C6-C5	-2.41	106.84	113.26
22	c	508	CLA	O2A-CGA-O1A	-2.41	117.60	123.63
24	H	101	BCR	C16-C15-C14	-2.41	118.59	123.52
27	D	406	PL9	C40-C39-C38	-2.41	117.44	123.63
23	a	404	PHO	C6-C5-C3	2.40	119.33	113.47
22	C	504	CLA	O2A-CGA-O1A	-2.40	117.61	123.63
22	B	616	CLA	O2A-CGA-O1A	-2.40	117.61	123.63
28	l	101	LHG	C27-C26-C25	-2.40	102.22	114.37
24	d	405	BCR	C2-C1-C6	2.40	113.93	110.44
22	b	609	CLA	CHC-C4B-NB	2.40	127.65	124.05
22	c	507	CLA	CHD-C4C-NC	2.40	127.95	124.23
22	b	611	CLA	C2D-C1D-ND	-2.40	107.75	110.13
22	c	513	CLA	O1D-CGD-CBD	2.40	129.25	124.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	D	411	STE	O2-C1-O1	-2.40	117.16	123.33
22	B	604	CLA	CHD-C1D-C2D	2.40	130.48	125.49
24	D	405	BCR	C8-C7-C6	-2.40	120.59	127.00
30	A	415	DGD	O2D-C2D-C1D	-2.39	104.37	110.08
23	d	401	PHO	C4B-NB-C1B	2.39	112.31	108.82
33	Y	101	LMG	O2-C2-C1	-2.39	104.38	110.08
33	Y	101	LMG	O8-C28-O10	-2.39	117.65	123.63
22	a	402	CLA	CHB-C4A-NA	2.39	127.85	124.40
27	a	410	PL9	C35-C34-C36	2.39	119.37	115.23
22	c	507	CLA	O2D-CGD-O1D	-2.39	119.20	123.85
22	b	616	CLA	O1D-CGD-CBD	2.39	129.23	124.52
23	A	404	PHO	C1-C2-C3	-2.39	122.29	126.20
32	t	102	STE	O2-C1-C2	2.39	121.54	114.00
22	B	614	CLA	CAC-C3C-C4C	2.39	127.89	124.79
22	B	616	CLA	O1D-CGD-CBD	2.38	129.22	124.52
22	c	504	CLA	CHB-C4A-NA	2.38	127.84	124.40
33	m	101	LMG	O8-C28-O10	-2.38	117.67	123.63
22	D	404	CLA	CHB-C4A-NA	2.38	127.84	124.40
22	b	608	CLA	C1-O2A-CGA	2.38	122.42	116.65
22	C	507	CLA	CHB-C4A-NA	2.38	127.84	124.40
22	b	605	CLA	CHC-C1C-NC	2.38	127.90	124.31
33	m	101	LMG	C38-C37-C36	-2.38	102.35	114.37
22	B	605	CLA	O2D-CGD-O1D	-2.38	119.22	123.85
22	D	404	CLA	C1-O2A-CGA	-2.38	110.90	116.65
22	b	604	CLA	CHC-C1C-NC	2.37	127.88	124.31
22	b	609	CLA	CED-O2D-CGD	2.37	121.29	115.92
22	D	402	CLA	CHB-C4A-NA	2.37	127.82	124.40
32	D	411	STE	O2-C1-C2	2.37	121.49	114.00
30	c	517	DGD	C1E-O6E-C5E	2.37	118.35	113.72
22	C	514	CLA	O2D-CGD-CBD	2.37	115.37	111.23
24	k	102	BCR	C30-C25-C26	-2.37	119.40	122.64
22	B	606	CLA	C14-C13-C15	-2.37	102.83	111.27
22	C	504	CLA	CHC-C4B-NB	2.37	127.60	124.05
22	B	617	CLA	CHB-C4A-NA	2.37	127.81	124.40
22	d	402	CLA	CMB-C2B-C1B	-2.37	121.82	125.42
22	c	506	CLA	O2D-CGD-O1D	-2.36	119.25	123.85
29	f	101	SQD	O48-C23-C24	2.36	119.03	111.83
32	d	411	STE	O2-C1-C2	2.36	121.45	114.00
32	c	520	STE	C3-C2-C1	-2.35	108.37	114.51
22	C	503	CLA	CAA-C2A-C3A	-2.35	106.64	113.00
24	c	514	BCR	C24-C23-C22	-2.35	122.75	126.23
22	c	501	CLA	C2C-C1C-NC	2.35	112.45	109.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	D	404	CLA	C3B-C4B-NB	-2.35	108.43	110.53
22	c	507	CLA	CAA-CBA-CGA	-2.35	106.54	113.21
29	f	101	SQD	C44-O6-C1	2.35	118.83	113.80
22	C	513	CLA	C6-C5-C3	-2.35	107.75	113.47
33	b	622	LMG	O8-C28-O10	-2.35	117.76	123.63
22	b	606	CLA	C1C-C2C-C3C	-2.35	104.51	106.98
22	c	508	CLA	O2D-CGD-CBD	2.35	115.33	111.23
24	b	617	BCR	C8-C7-C6	-2.35	120.73	127.00
22	B	610	CLA	O2D-CGD-O1D	-2.35	119.28	123.85
24	b	618	BCR	C11-C10-C9	-2.35	123.99	127.28
30	A	415	DGD	CBB-CAB-C9B	-2.34	102.53	114.37
22	C	505	CLA	CHA-C1A-NA	-2.34	121.10	126.39
22	b	603	CLA	CHB-C1B-C2B	-2.34	120.64	127.43
22	A	403	CLA	CHB-C4A-NA	2.34	127.77	124.40
24	A	406	BCR	C8-C7-C6	-2.33	120.76	127.00
29	F	101	SQD	O2-C2-C3	2.33	115.88	110.38
22	a	405	CLA	CMD-C2D-C3D	2.33	133.04	127.69
30	c	516	DGD	C4A-C3A-C2A	-2.33	104.56	113.13
22	b	612	CLA	CMB-C2B-C1B	-2.33	121.87	125.42
24	a	406	BCR	C27-C26-C25	2.33	125.85	122.70
29	a	413	SQD	O47-C45-C44	2.33	116.58	108.30
33	b	622	LMG	O1-C1-C2	-2.33	104.74	108.27
27	d	406	PL9	C12-C13-C14	-2.32	122.30	127.62
22	c	505	CLA	CHD-C1D-ND	-2.32	121.53	124.80
22	c	511	CLA	O2D-CGD-O1D	-2.32	119.33	123.85
24	Z	101	BCR	C36-C18-C17	-2.32	119.06	122.82
24	B	618	BCR	C33-C5-C6	-2.32	121.96	124.48
28	l	101	LHG	O8-C23-C24	2.32	118.90	111.83
23	a	404	PHO	C3D-C4D-ND	2.32	110.68	107.71
22	C	513	CLA	O2D-CGD-CBD	2.31	115.28	111.23
24	B	620	BCR	C32-C1-C6	-2.31	106.62	110.24
34	V	201	HEC	CBD-CAD-C3D	-2.31	106.14	112.53
22	B	610	CLA	C1C-C2C-C3C	-2.31	104.55	106.98
33	Y	101	LMG	C38-C37-C36	-2.31	102.69	114.37
22	D	402	CLA	C6-C5-C3	2.31	119.10	113.47
28	D	408	LHG	C20-C19-C18	-2.31	102.69	114.37
22	b	606	CLA	CHD-C4C-NC	2.31	127.81	124.23
34	V	201	HEC	CHC-C4B-C3B	2.31	129.10	125.21
29	F	101	SQD	O5-C5-C4	2.31	113.86	109.70
22	a	403	CLA	CMB-C2B-C3B	2.31	131.97	126.55
29	A	412	SQD	O2-C2-C1	2.30	115.56	110.08
22	b	609	CLA	C3B-C4B-NB	-2.30	108.47	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	615	CLA	C1-O2A-CGA	2.30	122.22	116.65
29	B	623	SQD	O48-C23-O10	-2.30	117.87	123.63
24	B	619	BCR	C15-C16-C17	-2.30	118.81	123.52
22	B	603	CLA	CMB-C2B-C1B	-2.30	121.92	125.42
30	c	517	DGD	CBB-CAB-C9B	-2.30	102.76	114.37
22	C	502	CLA	OBD-CAD-C3D	2.30	133.78	128.42
30	h	101	DGD	CDB-CCB-CBB	-2.29	102.77	114.37
29	f	101	SQD	C3-C4-C5	2.29	114.39	110.23
22	b	613	CLA	C2C-C1C-NC	2.29	112.39	109.98
30	c	518	DGD	CDB-CCB-CBB	-2.29	102.78	114.37
24	A	406	BCR	C34-C9-C8	-2.29	114.59	118.09
22	b	611	CLA	CHC-C4B-NB	2.29	127.48	124.05
32	B	621	STE	O2-C1-C2	2.29	121.23	114.00
22	A	405	CLA	CMB-C2B-C1B	-2.29	121.94	125.42
22	c	502	CLA	O2A-CGA-O1A	-2.29	117.91	123.63
33	c	521	LMG	C9-C8-C7	-2.28	106.46	111.78
24	c	514	BCR	C15-C14-C13	-2.28	124.08	127.28
24	C	501	BCR	C38-C26-C27	-2.28	108.73	113.60
30	h	101	DGD	C7B-C6B-C5B	-2.28	102.83	114.37
22	b	607	CLA	CHB-C1B-C2B	-2.28	120.80	127.43
24	B	618	BCR	C3-C4-C5	-2.28	109.99	114.06
22	a	405	CLA	C4B-C3B-C2B	-2.28	104.47	107.30
22	C	506	CLA	O2D-CGD-O1D	-2.28	119.41	123.85
33	C	516	LMG	C9-C8-C7	-2.28	106.47	111.78
22	B	609	CLA	CHB-C4A-NA	2.28	127.69	124.40
30	C	518	DGD	O6D-C1D-O3G	-2.28	104.66	110.04
22	b	612	CLA	C4A-NA-C1A	2.28	107.72	106.68
33	D	407	LMG	O4-C4-C5	2.28	114.93	109.32
23	a	404	PHO	OBD-CAD-C3D	2.28	131.44	127.89
22	b	616	CLA	CHC-C4B-NB	2.27	127.46	124.05
22	b	603	CLA	CHD-C1D-C2D	2.27	130.22	125.49
24	d	405	BCR	C8-C7-C6	-2.27	120.93	127.00
22	a	403	CLA	CAA-CBA-CGA	-2.27	106.76	113.21
22	d	404	CLA	CHB-C1B-NB	2.27	127.45	124.05
24	b	618	BCR	C27-C26-C25	2.27	125.77	122.70
22	b	612	CLA	C9-C8-C10	-2.27	103.19	111.27
22	b	607	CLA	O2A-CGA-O1A	-2.27	117.96	123.63
22	b	609	CLA	CBC-CAC-C3C	-2.27	106.27	112.42
22	b	615	CLA	CMB-C2B-C1B	-2.27	121.97	125.42
24	c	514	BCR	C38-C26-C25	-2.26	122.01	124.48
30	A	415	DGD	C3G-C2G-C1G	-2.26	106.50	111.78
27	D	406	PL9	C42-C43-C44	-2.26	122.44	127.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	620	BCR	C8-C9-C10	-2.26	115.45	119.01
22	c	503	CLA	CHB-C1B-NB	2.26	127.44	124.05
28	B	622	LHG	C18-C17-C16	-2.26	102.95	114.37
22	B	614	CLA	C3B-C4B-NB	-2.26	108.51	110.53
22	C	512	CLA	O2D-CGD-CBD	2.26	115.18	111.23
22	C	504	CLA	C3A-C2A-C1A	2.26	104.72	101.34
22	B	607	CLA	CED-O2D-CGD	2.26	121.03	115.92
24	B	619	BCR	C27-C26-C25	2.26	125.75	122.70
24	b	619	BCR	C27-C26-C25	2.26	125.75	122.70
22	D	404	CLA	CGD-CBD-CAD	-2.26	103.54	110.85
24	d	405	BCR	C16-C15-C14	-2.25	118.91	123.52
22	b	613	CLA	CAA-CBA-CGA	2.25	119.61	113.21
24	b	619	BCR	C16-C15-C14	-2.25	118.91	123.52
34	e	101	HEC	C4D-ND-C1D	2.25	109.49	105.82
22	D	404	CLA	CHC-C4B-NB	2.25	127.42	124.05
22	c	504	CLA	C1-O2A-CGA	2.25	122.09	116.65
22	B	605	CLA	CHD-C1D-ND	-2.25	121.64	124.80
29	F	101	SQD	C44-O6-C1	2.25	117.52	113.68
22	a	402	CLA	O2D-CGD-O1D	-2.25	119.48	123.85
22	D	402	CLA	C3B-C4B-NB	-2.25	108.53	110.53
24	k	103	BCR	C8-C7-C6	-2.25	121.00	127.00
27	D	406	PL9	C35-C34-C36	2.25	119.13	115.23
22	d	404	CLA	CHB-C1B-C2B	-2.25	120.91	127.43
30	h	101	DGD	CBB-CAB-C9B	-2.24	103.02	114.37
33	Y	101	LMG	C7-O1-C1	2.24	118.61	113.80
30	C	517	DGD	O2D-C2D-C1D	-2.24	104.73	110.08
22	b	606	CLA	CHB-C1B-NB	2.24	127.42	124.05
22	B	614	CLA	CMB-C2B-C1B	-2.24	122.00	125.42
34	v	201	HEC	CBD-CAD-C3D	-2.24	106.33	112.53
29	a	413	SQD	C45-O47-C7	2.24	123.17	117.80
22	B	608	CLA	CAC-C3C-C4C	2.24	127.71	124.79
27	d	406	PL9	C41-C39-C38	-2.24	116.13	121.17
24	x	101	BCR	C2-C1-C6	2.24	113.69	110.44
27	A	410	PL9	C12-C13-C14	-2.24	122.50	127.62
22	C	511	CLA	O2A-CGA-O1A	-2.24	118.03	123.63
22	A	403	CLA	CAC-C3C-C4C	2.24	127.70	124.79
22	C	509	CLA	CHB-C4A-NA	2.24	127.63	124.40
27	D	406	PL9	C32-C33-C34	-2.24	122.50	127.62
22	b	605	CLA	O1A-CGA-CBA	2.24	132.53	123.78
30	H	102	DGD	O5D-C1E-C2E	2.24	111.67	108.27
22	C	510	CLA	C3B-C4B-NB	-2.24	108.53	110.53
22	c	505	CLA	CHD-C4C-NC	2.24	127.70	124.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	c	516	DGD	O6E-C5E-C4E	2.24	113.73	109.70
22	b	605	CLA	C3B-C4B-NB	-2.23	108.53	110.53
30	C	518	DGD	C6D-O5D-C1E	2.23	118.59	113.80
22	B	617	CLA	CMA-C3A-C4A	-2.23	105.77	111.77
22	c	502	CLA	C1-O2A-CGA	2.23	122.06	116.65
22	c	507	CLA	CHD-C1D-ND	-2.23	121.66	124.80
27	A	410	PL9	C27-C28-C29	-2.23	122.51	127.62
24	A	406	BCR	C33-C5-C6	-2.23	122.05	124.48
23	d	401	PHO	CAA-CBA-CGA	-2.23	106.87	113.21
22	c	501	CLA	CHB-C4A-NA	2.23	127.62	124.40
22	b	611	CLA	C3B-C4B-NB	-2.23	108.54	110.53
22	b	602	CLA	C14-C13-C15	-2.23	103.33	111.27
22	b	614	CLA	O2D-CGD-O1D	-2.23	119.51	123.85
28	A	411	LHG	O3-P-O5	-2.23	100.10	108.94
33	c	519	LMG	C9-C8-C7	-2.23	106.59	111.78
22	C	503	CLA	C4D-CHA-C1A	2.23	123.90	121.24
33	c	522	LMG	O6-C1-C2	-2.23	105.79	110.37
30	c	518	DGD	C1D-C2D-C3D	-2.23	105.33	110.01
33	M	101	LMG	C4-C3-C2	-2.22	106.93	110.83
33	M	101	LMG	O5-C6-C5	-2.22	103.77	111.33
24	b	619	BCR	C38-C26-C25	-2.22	122.06	124.48
22	d	403	CLA	CAC-C3C-C4C	2.22	127.68	124.79
22	B	616	CLA	CHC-C4B-NB	2.22	127.38	124.05
33	D	407	LMG	O8-C28-O10	-2.22	118.07	123.63
24	x	101	BCR	C33-C5-C6	-2.22	122.06	124.48
30	c	516	DGD	O6E-C1E-O5D	-2.22	104.81	110.04
22	C	504	CLA	CMD-C2D-C3D	2.22	132.77	127.69
22	d	402	CLA	C4-C3-C5	2.22	119.08	115.23
22	A	405	CLA	CMB-C2B-C3B	2.22	131.76	126.55
22	C	512	CLA	CHB-C4A-NA	2.22	127.60	124.40
22	D	402	CLA	C2B-C1B-NB	-2.21	108.03	110.33
34	E	101	HEC	O2D-CGD-CBD	2.21	121.00	114.00
22	b	609	CLA	CHB-C4A-NA	2.21	127.59	124.40
22	c	506	CLA	CHB-C4A-NA	2.21	127.59	124.40
22	b	604	CLA	C11-C12-C13	-2.21	108.61	115.97
22	b	611	CLA	CHD-C1D-ND	-2.21	121.69	124.80
30	H	102	DGD	O2D-C2D-C1D	-2.21	104.81	110.08
22	d	402	CLA	CMD-C2D-C1D	2.21	128.62	124.73
24	B	619	BCR	C32-C1-C6	-2.21	106.78	110.24
22	c	512	CLA	CHD-C1D-C2D	2.21	130.08	125.49
22	B	603	CLA	C11-C12-C13	-2.21	108.63	115.97
29	B	623	SQD	O9-S-C6	2.21	110.05	106.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	511	CLA	O2D-CGD-CBD	2.21	115.09	111.23
22	d	404	CLA	CHA-C1A-NA	-2.21	121.39	126.39
33	b	622	LMG	O5-C6-C5	-2.21	103.82	111.33
24	k	102	BCR	C33-C5-C6	-2.21	122.08	124.48
24	C	515	BCR	C38-C26-C25	-2.20	122.08	124.48
23	D	401	PHO	CMD-C2D-C3D	2.20	129.09	124.68
32	D	411	STE	C3-C2-C1	-2.20	108.76	114.51
22	A	402	CLA	CED-O2D-CGD	2.20	120.91	115.92
23	a	404	PHO	C5-C3-C2	2.20	126.11	121.17
22	C	511	CLA	CHA-C1A-NA	-2.20	121.41	126.39
22	c	505	CLA	C11-C10-C8	-2.20	108.65	115.97
29	A	412	SQD	O5-C5-C4	2.20	113.66	109.70
30	H	102	DGD	C8B-C7B-C6B	-2.20	103.25	114.37
30	h	101	DGD	O2E-C2E-C3E	-2.20	105.20	110.38
24	k	102	BCR	C4-C5-C6	2.19	125.67	122.70
22	C	506	CLA	CMB-C2B-C3B	2.19	131.71	126.55
24	B	618	BCR	C15-C16-C17	-2.19	119.03	123.52
24	b	619	BCR	C24-C23-C22	-2.19	122.99	126.23
22	C	508	CLA	O2D-CGD-O1D	-2.19	119.58	123.85
22	B	610	CLA	C1D-ND-C4D	-2.19	104.78	106.31
22	B	609	CLA	CHD-C1D-ND	-2.19	121.72	124.80
22	c	512	CLA	CHD-C1D-ND	-2.19	121.72	124.80
28	A	413	LHG	O8-C23-O10	-2.19	118.16	123.63
32	x	102	STE	C3-C2-C1	-2.19	108.80	114.51
24	d	405	BCR	C38-C26-C25	-2.19	122.10	124.48
30	H	102	DGD	C3E-C4E-C5E	-2.19	106.27	110.23
28	B	622	LHG	O3-P-O5	-2.18	100.28	108.94
30	h	101	DGD	C1D-C2D-C3D	-2.18	105.42	110.01
24	b	618	BCR	C36-C18-C19	2.18	121.42	118.09
22	b	601	CLA	CHD-C1D-ND	-2.18	121.73	124.80
30	h	101	DGD	O6E-C1E-O5D	-2.18	104.89	110.04
34	e	101	HEC	CHC-C4B-C3B	2.18	128.89	125.21
22	c	502	CLA	O2D-CGD-O1D	-2.18	119.61	123.85
24	B	619	BCR	C29-C30-C25	2.18	113.60	110.44
29	A	414	SQD	O48-C23-O10	-2.18	118.18	123.63
23	A	404	PHO	CMA-C3A-C2A	-2.18	105.72	114.13
22	C	504	CLA	O2A-C1-C2	-2.18	99.73	108.11
22	A	403	CLA	C1-C2-C3	-2.18	122.63	126.20
22	B	606	CLA	C1-O2A-CGA	-2.18	111.38	116.65
22	b	614	CLA	CAA-C2A-C3A	2.17	118.88	113.00
27	A	410	PL9	C7-C3-C2	-2.17	120.82	123.39
28	d	408	LHG	O8-C23-C24	2.17	118.46	111.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	612	CLA	C5-C3-C2	2.17	126.04	121.17
22	d	403	CLA	O2A-CGA-O1A	-2.17	118.20	123.63
32	b	621	STE	O2-C1-C2	2.17	120.86	114.00
34	v	201	HEC	CMD-C2D-C1D	2.17	128.72	125.42
22	b	604	CLA	CMD-C2D-C3D	2.17	132.67	127.69
33	c	522	LMG	O5-C6-C5	-2.17	103.94	111.33
22	C	513	CLA	CHA-C1A-NA	-2.17	121.47	126.39
33	d	410	LMG	C3-C4-C5	-2.17	106.30	110.23
24	b	617	BCR	C3-C4-C5	-2.17	110.19	114.06
22	b	615	CLA	C2B-C1B-NB	-2.17	108.08	110.33
22	C	505	CLA	CHA-C4D-ND	2.17	137.02	132.55
29	a	411	SQD	C3-C4-C5	2.17	114.16	110.23
22	B	617	CLA	C1-O2A-CGA	2.17	121.90	116.65
22	c	511	CLA	CHD-C4C-NC	2.17	127.59	124.23
33	C	516	LMG	O8-C28-O10	-2.17	118.21	123.63
22	b	613	CLA	CHC-C1C-C2C	-2.17	120.80	126.95
22	B	613	CLA	CHD-C1D-ND	-2.16	121.76	124.80
22	B	614	CLA	C11-C10-C8	-2.16	108.78	115.97
30	A	415	DGD	O2E-C2E-C1E	-2.16	104.92	110.08
27	d	406	PL9	C31-C32-C33	-2.16	101.32	112.02
23	D	401	PHO	C3D-C4D-ND	2.16	110.48	107.71
24	b	619	BCR	C8-C7-C6	-2.16	121.22	127.00
30	C	518	DGD	C4E-C3E-C2E	-2.16	107.03	110.83
34	v	201	HEC	CHA-C4D-ND	2.16	127.78	123.86
33	M	101	LMG	C3-C4-C5	-2.16	106.32	110.23
22	c	509	CLA	O2D-CGD-CBD	2.16	115.00	111.23
22	b	609	CLA	C1D-ND-C4D	-2.15	104.80	106.31
30	A	415	DGD	CGB-CFB-CEB	-2.15	103.48	114.37
34	E	101	HEC	O1D-CGD-CBD	-2.15	116.26	123.09
22	b	605	CLA	CHC-C1C-C2C	-2.15	120.83	126.95
22	C	502	CLA	CHD-C4C-NC	2.15	127.57	124.23
24	c	514	BCR	C35-C13-C14	-2.15	119.33	122.82
22	b	603	CLA	CHD-C4C-NC	2.15	127.57	124.23
22	c	508	CLA	CHD-C4C-NC	2.15	127.56	124.23
24	Z	101	BCR	C3-C4-C5	-2.15	110.22	114.06
24	a	406	BCR	C28-C27-C26	-2.15	110.22	114.06
22	D	404	CLA	CAC-C3C-C4C	2.15	127.58	124.79
22	b	608	CLA	CHA-C1A-NA	-2.15	121.53	126.39
22	C	509	CLA	O2A-CGA-O1A	-2.15	118.26	123.63
24	b	618	BCR	C2-C1-C6	2.15	113.56	110.44
22	c	501	CLA	CHC-C4B-NB	2.15	127.27	124.05
22	a	403	CLA	C2D-C1D-ND	-2.15	108.00	110.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	a	411	SQD	C18-C17-C16	-2.15	103.52	114.37
22	b	610	CLA	CHC-C4B-NB	2.15	127.27	124.05
22	b	607	CLA	O1A-CGA-CBA	2.15	132.17	123.78
23	a	404	PHO	OBD-CAD-CBD	-2.15	122.68	125.82
22	A	405	CLA	C2C-C1C-NC	2.15	112.23	109.98
22	B	615	CLA	O2D-CGD-CBD	2.14	114.98	111.23
22	C	513	CLA	C2A-C3A-C4A	2.14	105.33	101.87
22	c	503	CLA	CAC-C3C-C4C	2.14	127.58	124.79
22	b	611	CLA	CGD-CBD-CAD	-2.14	103.92	110.85
22	b	605	CLA	CHA-C1A-NA	-2.14	121.55	126.39
24	x	101	BCR	C37-C22-C21	-2.14	119.35	122.82
22	c	502	CLA	CHD-C1D-C2D	2.14	129.93	125.49
22	C	507	CLA	C3D-C4D-ND	2.14	113.46	109.99
22	c	504	CLA	CMB-C2B-C3B	2.14	131.57	126.55
33	c	521	LMG	O7-C10-O9	-2.14	118.71	123.70
22	D	404	CLA	O1D-CGD-CBD	2.13	128.73	124.52
22	a	403	CLA	CHB-C1B-NB	2.13	127.25	124.05
30	A	415	DGD	O4D-C4D-C5D	-2.13	104.07	109.32
24	B	618	BCR	C38-C26-C25	-2.13	122.16	124.48
24	b	619	BCR	C2-C1-C6	2.13	113.54	110.44
22	b	605	CLA	CHD-C1D-ND	-2.13	121.80	124.80
22	C	509	CLA	CHA-C1A-NA	-2.13	121.56	126.39
33	m	101	LMG	O2-C2-C1	-2.13	104.99	110.08
32	J	101	STE	O2-C1-C2	2.13	120.73	114.00
24	B	618	BCR	C29-C30-C25	2.13	113.53	110.44
22	B	616	CLA	CMB-C2B-C1B	-2.13	122.18	125.42
22	b	616	CLA	CHD-C1D-ND	-2.13	121.81	124.80
22	c	507	CLA	CHC-C4B-NB	2.13	127.24	124.05
24	b	618	BCR	C15-C16-C17	-2.13	119.17	123.52
22	B	611	CLA	CHA-C1A-NA	-2.13	121.58	126.39
22	a	403	CLA	CHA-C1A-NA	-2.13	121.58	126.39
33	d	410	LMG	C40-C39-C38	-2.12	103.63	114.37
22	b	608	CLA	CHD-C1D-C2D	2.12	129.90	125.49
22	C	511	CLA	O1D-CGD-CBD	2.12	128.71	124.52
28	A	413	LHG	C20-C19-C18	-2.12	103.65	114.37
24	b	619	BCR	C36-C18-C19	2.12	121.33	118.09
24	C	501	BCR	C15-C16-C17	-2.12	119.18	123.52
22	B	609	CLA	CHD-C4C-NC	2.12	127.52	124.23
22	b	609	CLA	C5-C3-C2	2.12	125.92	121.17
28	D	408	LHG	C17-C16-C15	-2.12	103.66	114.37
22	b	603	CLA	O2A-CGA-O1A	-2.12	118.33	123.63
33	M	101	LMG	C31-C30-C29	-2.12	105.35	113.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	619	BCR	C15-C16-C17	-2.12	119.19	123.52
28	A	413	LHG	C11-C10-C9	-2.11	103.68	114.37
22	B	611	CLA	C2A-C1A-CHA	2.11	127.53	123.87
22	b	612	CLA	CMD-C2D-C3D	2.11	132.54	127.69
24	k	102	BCR	C1-C6-C5	-2.11	119.75	122.64
33	B	627	LMG	O6-C5-C4	2.11	113.51	109.70
22	C	512	CLA	C4-C3-C5	2.11	118.89	115.23
22	C	509	CLA	CHA-C4D-ND	2.11	136.91	132.55
22	C	513	CLA	CHC-C4B-NB	2.11	127.22	124.05
30	H	102	DGD	CEB-CDB-CCB	-2.11	103.70	114.37
22	B	602	CLA	O1D-CGD-CBD	2.11	128.68	124.52
22	C	502	CLA	C4-C3-C5	2.11	118.89	115.23
22	B	616	CLA	CHA-C4D-ND	2.11	136.90	132.55
22	D	404	CLA	C1-C2-C3	-2.11	122.75	126.20
23	d	401	PHO	C3D-C4D-ND	2.10	110.41	107.71
22	a	402	CLA	C1-O2A-CGA	2.10	121.75	116.65
22	b	614	CLA	C7-C6-C5	-2.10	107.65	113.26
22	b	604	CLA	CED-O2D-CGD	2.10	120.69	115.92
22	C	510	CLA	C2A-C3A-C4A	2.10	105.27	101.87
22	b	615	CLA	CHA-C1A-NA	-2.10	121.63	126.39
22	C	511	CLA	CHC-C4B-NB	2.10	127.20	124.05
28	d	409	LHG	O8-C6-C5	-2.10	102.33	108.40
22	b	603	CLA	C9-C8-C10	-2.10	103.78	111.27
22	B	604	CLA	O1D-CGD-CBD	2.10	128.66	124.52
22	C	510	CLA	C1-O2A-CGA	2.10	121.74	116.65
30	c	516	DGD	C3E-C4E-C5E	-2.10	106.42	110.23
22	b	614	CLA	CHA-C4D-ND	2.10	136.89	132.55
22	c	506	CLA	O2A-CGA-O1A	-2.10	118.37	123.63
24	Z	101	BCR	C27-C26-C25	2.10	125.54	122.70
22	a	405	CLA	C1-O2A-CGA	-2.10	111.57	116.65
22	b	615	CLA	CHD-C4C-C3C	-2.10	121.71	124.77
22	C	514	CLA	C4D-CHA-C1A	-2.10	118.74	121.24
33	C	516	LMG	C38-C37-C36	-2.10	103.76	114.37
22	C	513	CLA	CHD-C1D-ND	-2.10	121.85	124.80
33	D	407	LMG	C1-C2-C3	-2.10	105.60	110.01
22	C	502	CLA	CHB-C1B-C2B	-2.10	121.34	127.43
33	C	516	LMG	C1-C2-C3	-2.10	105.60	110.01
24	c	515	BCR	C35-C13-C12	2.10	121.29	118.09
22	c	507	CLA	O2A-CGA-O1A	-2.10	118.38	123.63
22	C	513	CLA	CMB-C2B-C1B	-2.10	122.23	125.42
24	K	101	BCR	C38-C26-C25	-2.09	122.20	124.48
28	A	413	LHG	C5-O7-C7	-2.09	112.79	117.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D	406	PL9	C12-C13-C14	-2.09	122.83	127.62
34	V	201	HEC	CAD-CBD-CGD	-2.09	108.12	113.67
33	D	410	LMG	O9-C10-C11	2.09	129.72	123.09
22	c	510	CLA	CMA-C3A-C2A	-2.09	105.90	113.98
27	d	406	PL9	C7-C8-C9	-2.09	123.23	126.83
22	B	605	CLA	O2A-CGA-O1A	-2.09	118.40	123.63
22	B	603	CLA	CHC-C1C-NC	2.09	127.45	124.31
24	C	515	BCR	C34-C9-C10	-2.09	119.44	122.82
22	B	609	CLA	C3D-C4D-ND	2.08	113.37	109.99
22	b	605	CLA	CHB-C1B-NB	2.08	127.17	124.05
22	d	402	CLA	CHA-C4D-ND	2.08	136.84	132.55
24	x	101	BCR	C11-C10-C9	-2.08	124.36	127.28
33	D	407	LMG	O1-C7-C8	-2.08	105.76	110.82
27	A	410	PL9	C8-C7-C3	2.08	117.40	112.03
27	a	410	PL9	C12-C13-C14	-2.08	122.87	127.62
30	H	102	DGD	C4E-C3E-C2E	-2.08	107.18	110.83
24	D	405	BCR	C7-C8-C9	-2.08	123.16	126.23
33	c	519	LMG	C38-C37-C36	-2.08	103.87	114.37
22	C	510	CLA	CAC-C3C-C4C	2.08	127.49	124.79
22	D	403	CLA	C1C-C2C-C3C	-2.08	104.80	106.98
24	b	618	BCR	C39-C30-C25	-2.08	106.99	110.24
24	t	101	BCR	C40-C30-C29	-2.07	101.00	108.95
22	A	405	CLA	CHC-C1C-C2C	-2.07	121.07	126.95
23	D	401	PHO	C3B-C4B-NB	-2.07	106.12	107.46
29	a	411	SQD	O5-C1-C2	-2.07	106.12	110.37
22	C	502	CLA	C4D-CHA-C1A	2.07	123.71	121.24
22	B	611	CLA	O1D-CGD-CBD	2.07	128.59	124.52
22	B	613	CLA	CBC-CAC-C3C	2.06	118.02	112.42
22	C	510	CLA	CMB-C2B-C3B	2.06	131.41	126.55
24	B	619	BCR	C33-C5-C6	-2.06	122.23	124.48
22	c	510	CLA	O2A-CGA-O1A	-2.06	118.47	123.63
30	c	518	DGD	CBB-CAB-C9B	-2.06	103.94	114.37
22	B	609	CLA	C1-O2A-CGA	2.06	121.64	116.65
28	L	102	LHG	C9-C8-C7	-2.06	106.14	113.69
22	B	602	CLA	C4-C3-C5	2.06	118.81	115.23
22	b	611	CLA	C6-C5-C3	2.06	118.49	113.47
24	a	406	BCR	C33-C5-C6	-2.06	122.24	124.48
22	B	615	CLA	C1C-C2C-C3C	-2.06	104.81	106.98
22	B	602	CLA	O2D-CGD-CBD	2.06	114.83	111.23
24	B	619	BCR	C30-C25-C26	-2.06	119.82	122.64
22	D	404	CLA	CHA-C1A-NA	-2.06	121.73	126.39
22	B	603	CLA	CMB-C2B-C3B	2.06	131.39	126.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	603	CLA	OBD-CAD-C3D	2.06	133.22	128.42
29	L	101	SQD	O47-C45-C46	2.06	115.72	108.34
22	c	510	CLA	C16-C15-C13	-2.06	109.13	115.97
33	c	519	LMG	O2-C2-C3	-2.05	105.53	110.38
22	B	606	CLA	CHC-C4B-NB	2.05	127.13	124.05
22	b	601	CLA	C1C-C2C-C3C	-2.05	104.82	106.98
22	C	509	CLA	CMB-C2B-C1B	-2.05	122.30	125.42
34	V	201	HEC	O2A-CGA-CBA	2.05	120.48	114.00
22	B	606	CLA	C2C-C1C-NC	2.05	112.14	109.98
29	A	412	SQD	O5-C1-O6	2.05	114.89	110.04
22	d	404	CLA	CAA-CBA-CGA	-2.05	107.39	113.21
22	d	404	CLA	C3D-C4D-ND	2.05	113.32	109.99
22	c	511	CLA	C11-C12-C13	-2.05	109.16	115.97
22	A	403	CLA	CMB-C2B-C1B	-2.05	122.30	125.42
22	b	604	CLA	C3A-C2A-C1A	2.05	104.41	101.34
24	c	515	BCR	C15-C14-C13	-2.05	124.41	127.28
22	C	506	CLA	CMB-C2B-C1B	-2.04	122.31	125.42
22	C	503	CLA	O2D-CGD-O1D	-2.04	119.87	123.85
34	v	201	HEC	CHA-C1A-C2A	2.04	128.09	124.86
30	C	519	DGD	O6E-C5E-C4E	2.04	113.38	109.70
22	C	504	CLA	C6-C7-C8	-2.04	109.18	115.97
29	A	414	SQD	C46-O48-C23	2.04	124.58	117.12
22	B	606	CLA	CHB-C4A-NA	2.04	127.34	124.40
22	b	610	CLA	C2D-C1D-ND	2.04	112.14	110.13
22	a	403	CLA	C3C-C4C-NC	-2.04	107.82	110.43
22	b	610	CLA	C4-C3-C5	2.04	118.77	115.23
22	c	508	CLA	CGD-CBD-CAD	-2.04	104.25	110.85
24	x	101	BCR	C24-C23-C22	-2.04	123.22	126.23
22	c	501	CLA	CHC-C1C-C2C	-2.04	121.16	126.95
22	C	510	CLA	O2D-CGD-O1D	-2.04	119.88	123.85
24	b	618	BCR	C8-C7-C6	-2.04	121.56	127.00
22	C	514	CLA	C4-C3-C5	2.04	118.76	115.23
33	c	519	LMG	C40-C39-C38	-2.03	104.08	114.37
22	C	502	CLA	CHD-C1D-ND	-2.03	121.94	124.80
22	c	512	CLA	C4-C3-C5	2.03	118.76	115.23
22	C	506	CLA	OBD-CAD-C3D	2.03	133.17	128.42
22	b	611	CLA	C1D-ND-C4D	2.03	107.74	106.31
32	b	624	STE	O2-C1-O1	-2.03	118.11	123.33
22	c	511	CLA	CMA-C3A-C4A	2.03	117.23	111.77
33	C	516	LMG	C35-C34-C33	-2.03	104.10	114.37
30	C	519	DGD	O4E-C4E-C5E	-2.03	104.32	109.32
29	a	411	SQD	O9-S-C6	2.03	109.79	106.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	401	PHO	OBD-CAD-CBD	-2.03	122.85	125.82
22	B	614	CLA	O2D-CGD-CBD	-2.03	107.68	111.23
22	A	405	CLA	CBC-CAC-C3C	-2.02	106.94	112.42
24	H	101	BCR	C16-C17-C18	-2.02	124.44	127.28
22	c	506	CLA	C3B-C4B-NB	-2.02	108.72	110.53
22	A	405	CLA	CHC-C4B-NB	2.02	127.08	124.05
22	D	402	CLA	CMB-C2B-C3B	2.02	131.30	126.55
22	b	609	CLA	C3D-C4D-ND	2.02	113.27	109.99
29	L	101	SQD	C20-C19-C18	-2.02	104.16	114.37
22	c	503	CLA	C3A-C2A-C1A	2.02	104.36	101.34
33	c	521	LMG	C40-C39-C38	-2.02	104.16	114.37
27	d	406	PL9	C15-C14-C13	-2.02	118.44	123.63
24	x	101	BCR	C16-C17-C18	-2.02	124.45	127.28
22	B	607	CLA	C7-C6-C5	-2.02	107.88	113.26
22	b	613	CLA	CMB-C2B-C1B	-2.02	122.35	125.42
32	J	101	STE	C3-C2-C1	-2.02	109.24	114.51
30	C	519	DGD	O2D-C2D-C1D	-2.02	105.27	110.08
22	C	509	CLA	CHB-C1B-NB	2.02	127.08	124.05
22	B	608	CLA	CED-O2D-CGD	2.02	120.49	115.92
24	C	501	BCR	C15-C14-C13	-2.02	124.45	127.28
22	C	502	CLA	CHD-C1D-C2D	2.02	129.68	125.49
22	C	504	CLA	C4D-C3D-CAD	-2.01	105.92	108.11
22	c	506	CLA	C4-C3-C2	-2.01	118.46	123.63
24	c	515	BCR	C30-C25-C26	-2.01	119.89	122.64
24	K	101	BCR	C8-C7-C6	-2.01	121.63	127.00
33	m	101	LMG	C9-C8-C7	-2.01	107.10	111.78
33	b	622	LMG	C6-C5-C4	-2.01	108.08	113.02
27	a	410	PL9	C37-C38-C39	-2.01	123.03	127.62
22	B	605	CLA	C11-C10-C8	-2.01	109.29	115.97
24	k	102	BCR	C8-C7-C6	-2.01	121.63	127.00
33	M	101	LMG	C23-C22-C21	-2.01	104.22	114.37
22	d	404	CLA	C1D-ND-C4D	-2.01	104.90	106.31
22	b	604	CLA	OBD-CAD-C3D	2.01	133.10	128.42
24	D	405	BCR	C33-C5-C6	-2.01	122.30	124.48
22	D	402	CLA	C4-C3-C5	2.00	118.70	115.23
22	C	503	CLA	CHB-C1B-NB	2.00	127.05	124.05
22	b	607	CLA	CHB-C4A-NA	2.00	127.29	124.40
22	c	510	CLA	CAA-C2A-C1A	-2.00	105.42	111.97
34	e	101	HEC	CBA-CAA-C2A	-2.00	107.00	112.53
33	c	521	LMG	O8-C28-O10	-2.00	118.62	123.63

All (63) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
22	A	402	CLA	ND
22	A	403	CLA	ND
22	A	405	CLA	ND
22	B	602	CLA	ND
22	B	603	CLA	ND
22	B	604	CLA	ND
22	B	605	CLA	ND
22	B	606	CLA	ND
22	B	607	CLA	ND
22	B	608	CLA	ND
22	B	611	CLA	ND
22	B	612	CLA	ND
22	B	613	CLA	ND
22	B	614	CLA	ND
22	B	615	CLA	ND
22	B	616	CLA	ND
22	B	617	CLA	ND
22	C	502	CLA	ND
22	C	503	CLA	ND
22	C	504	CLA	ND
22	C	505	CLA	ND
22	C	506	CLA	ND
22	C	507	CLA	ND
22	C	508	CLA	ND
22	C	509	CLA	ND
22	C	510	CLA	ND
22	C	511	CLA	ND
22	C	512	CLA	ND
22	C	513	CLA	ND
22	D	402	CLA	ND
22	D	403	CLA	ND
22	D	404	CLA	ND
22	a	402	CLA	ND
22	a	405	CLA	ND
22	b	601	CLA	ND
22	b	602	CLA	ND
22	b	603	CLA	ND
22	b	604	CLA	ND
22	b	605	CLA	ND
22	b	606	CLA	ND
22	b	607	CLA	ND
22	b	609	CLA	ND
22	b	610	CLA	ND

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Mol	Chain	Res	Type	Atom
22	b	611	CLA	ND
22	b	612	CLA	ND
22	b	613	CLA	ND
22	b	614	CLA	ND
22	b	615	CLA	ND
22	b	616	CLA	ND
22	c	501	CLA	ND
22	c	502	CLA	ND
22	c	503	CLA	ND
22	c	504	CLA	ND
22	c	505	CLA	ND
22	c	506	CLA	ND
22	c	507	CLA	ND
22	c	508	CLA	ND
22	c	509	CLA	ND
22	c	510	CLA	ND
22	c	511	CLA	ND
22	c	512	CLA	ND
22	c	513	CLA	ND
22	d	403	CLA	ND

All (1858) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	B	602	CLA	C1A-C2A-CAA-CBA
22	B	602	CLA	C3A-C2A-CAA-CBA
22	B	602	CLA	CAD-CBD-CGD-O1D
22	B	602	CLA	CAD-CBD-CGD-O2D
22	B	615	CLA	CAD-CBD-CGD-O1D
22	B	615	CLA	CAD-CBD-CGD-O2D
22	C	508	CLA	CHA-CBD-CGD-O1D
22	C	508	CLA	CHA-CBD-CGD-O2D
22	C	513	CLA	C2B-C3B-CAB-CBB
22	C	513	CLA	C4B-C3B-CAB-CBB
22	a	403	CLA	C4B-C3B-CAB-CBB
22	b	603	CLA	C4-C3-C5-C6
22	b	614	CLA	CAD-CBD-CGD-O1D
22	b	614	CLA	CAD-CBD-CGD-O2D
22	c	505	CLA	C2B-C3B-CAB-CBB
22	c	505	CLA	C4B-C3B-CAB-CBB
22	c	507	CLA	CHA-CBD-CGD-O1D
22	c	507	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
22	c	509	CLA	CHA-CBD-CGD-O1D
22	c	509	CLA	CHA-CBD-CGD-O2D
22	c	509	CLA	CBD-CGD-O2D-CED
24	A	406	BCR	C11-C10-C9-C34
24	A	406	BCR	C11-C12-C13-C14
24	B	618	BCR	C16-C17-C18-C36
24	B	618	BCR	C20-C21-C22-C37
24	B	619	BCR	C11-C10-C9-C8
24	B	619	BCR	C10-C11-C12-C13
24	C	501	BCR	C20-C21-C22-C37
24	C	515	BCR	C11-C12-C13-C14
24	C	515	BCR	C20-C21-C22-C37
24	D	405	BCR	C20-C21-C22-C37
24	D	405	BCR	C23-C24-C25-C26
24	H	101	BCR	C35-C13-C14-C15
24	H	101	BCR	C16-C17-C18-C36
24	H	101	BCR	C17-C18-C19-C20
24	K	101	BCR	C7-C8-C9-C34
24	K	101	BCR	C16-C17-C18-C36
24	K	101	BCR	C21-C22-C23-C24
24	K	101	BCR	C37-C22-C23-C24
24	T	101	BCR	C7-C8-C9-C10
24	Z	101	BCR	C11-C12-C13-C35
24	Z	101	BCR	C14-C15-C16-C17
24	a	406	BCR	C35-C13-C14-C15
24	b	617	BCR	C20-C21-C22-C37
24	b	617	BCR	C21-C22-C23-C24
24	b	619	BCR	C11-C12-C13-C14
24	b	619	BCR	C16-C17-C18-C36
24	b	619	BCR	C37-C22-C23-C24
24	c	514	BCR	C11-C12-C13-C14
24	c	514	BCR	C12-C13-C14-C15
24	c	514	BCR	C17-C18-C19-C20
24	c	515	BCR	C35-C13-C14-C15
24	d	405	BCR	C21-C22-C23-C24
24	d	405	BCR	C37-C22-C23-C24
24	k	102	BCR	C1-C6-C7-C8
24	k	102	BCR	C5-C6-C7-C8
24	k	102	BCR	C17-C18-C19-C20
24	k	102	BCR	C36-C18-C19-C20
24	k	103	BCR	C37-C22-C23-C24
24	t	101	BCR	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
24	t	101	BCR	C11-C12-C13-C35
24	t	101	BCR	C20-C21-C22-C37
27	A	410	PL9	C12-C13-C14-C16
27	A	410	PL9	C37-C38-C39-C40
27	A	410	PL9	C37-C38-C39-C41
27	A	410	PL9	C47-C48-C49-C51
27	D	406	PL9	C32-C33-C34-C35
27	a	410	PL9	C17-C18-C19-C20
27	a	410	PL9	C22-C23-C24-C25
27	a	410	PL9	C22-C23-C24-C26
27	a	410	PL9	C27-C28-C29-C31
27	a	410	PL9	C28-C29-C31-C32
27	a	410	PL9	C37-C38-C39-C41
27	a	410	PL9	C39-C41-C42-C43
27	d	406	PL9	C37-C38-C39-C41
27	d	406	PL9	C42-C43-C44-C45
27	d	406	PL9	C42-C43-C44-C46
28	A	411	LHG	O2-C2-C3-O3
28	A	411	LHG	C3-O3-P-O5
28	A	411	LHG	C3-O3-P-O6
28	A	413	LHG	O1-C1-C2-C3
28	B	622	LHG	O1-C1-C2-C3
28	D	408	LHG	O1-C1-C2-C3
28	D	408	LHG	O2-C2-C3-O3
28	D	408	LHG	C3-O3-P-O4
28	D	408	LHG	C3-O3-P-O5
28	D	408	LHG	C3-O3-P-O6
28	D	408	LHG	C4-O6-P-O4
28	L	102	LHG	C4-O6-P-O4
28	a	412	LHG	O1-C1-C2-C3
28	a	412	LHG	C3-O3-P-O4
28	a	412	LHG	C3-O3-P-O5
28	a	412	LHG	C3-O3-P-O6
28	a	412	LHG	O10-C23-O8-C6
28	d	407	LHG	C3-O3-P-O4
28	d	408	LHG	C4-O6-P-O3
28	d	408	LHG	C4-O6-P-O4
28	d	409	LHG	O1-C1-C2-C3
28	l	101	LHG	C4-O6-P-O3
28	l	101	LHG	C4-O6-P-O4
28	l	101	LHG	C4-O6-P-O5
29	A	414	SQD	C46-C45-O47-C7

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Mol	Chain	Res	Type	Atoms
29	B	623	SQD	C2-C1-O6-C44
29	B	623	SQD	O5-C1-O6-C44
29	B	623	SQD	O6-C44-C45-O47
29	B	623	SQD	O49-C7-O47-C45
29	B	623	SQD	C8-C7-O47-C45
29	L	101	SQD	C8-C7-O47-C45
29	L	101	SQD	O10-C23-O48-C46
29	a	411	SQD	O6-C44-C45-O47
29	a	411	SQD	C5-C6-S-O7
29	a	413	SQD	C8-C7-O47-C45
29	f	101	SQD	O5-C1-O6-C44
30	A	415	DGD	C2B-C1B-O2G-C2G
33	C	516	LMG	O6-C1-O1-C7
33	C	516	LMG	O1-C7-C8-O7
33	C	516	LMG	O9-C10-O7-C8
33	D	409	LMG	O1-C7-C8-C9
33	D	409	LMG	O1-C7-C8-O7
33	Y	101	LMG	C11-C10-O7-C8
33	c	522	LMG	O6-C1-O1-C7
33	c	522	LMG	O10-C28-O8-C9
33	c	522	LMG	C29-C28-O8-C9
34	E	101	HEC	C2B-C3B-CAB-CBB
34	E	101	HEC	C4B-C3B-CAB-CBB
34	E	101	HEC	C2C-C3C-CAC-CBC
34	E	101	HEC	C4C-C3C-CAC-CBC
34	V	201	HEC	C2B-C3B-CAB-CBB
34	V	201	HEC	C4B-C3B-CAB-CBB
34	V	201	HEC	C2C-C3C-CAC-CBC
34	V	201	HEC	C4C-C3C-CAC-CBC
34	e	101	HEC	C2C-C3C-CAC-CBC
34	e	101	HEC	C4C-C3C-CAC-CBC
34	v	201	HEC	C2B-C3B-CAB-CBB
34	v	201	HEC	C4B-C3B-CAB-CBB
34	v	201	HEC	C2C-C3C-CAC-CBC
34	v	201	HEC	C4C-C3C-CAC-CBC
22	C	514	CLA	O1D-CGD-O2D-CED
22	b	601	CLA	O1D-CGD-O2D-CED
22	C	514	CLA	CBD-CGD-O2D-CED
22	b	601	CLA	CBD-CGD-O2D-CED
27	A	410	PL9	C47-C48-C49-C50
27	a	410	PL9	C47-C48-C49-C51
28	A	413	LHG	C24-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
29	L	101	SQD	C24-C23-O48-C46
29	f	101	SQD	C24-C23-O48-C46
22	B	602	CLA	O1A-CGA-O2A-C1
28	A	413	LHG	O10-C23-O8-C6
29	f	101	SQD	O10-C23-O48-C46
33	M	101	LMG	O10-C28-O8-C9
22	c	509	CLA	O1D-CGD-O2D-CED
29	L	101	SQD	O49-C7-O47-C45
29	a	413	SQD	O49-C7-O47-C45
29	f	101	SQD	O49-C7-O47-C45
30	A	415	DGD	O1B-C1B-O2G-C2G
33	D	409	LMG	O9-C10-O7-C8
33	b	622	LMG	O9-C10-O7-C8
22	d	404	CLA	C3-C5-C6-C7
28	a	412	LHG	C24-C23-O8-C6
22	C	513	CLA	CBD-CGD-O2D-CED
22	c	506	CLA	CBD-CGD-O2D-CED
33	C	516	LMG	C11-C10-O7-C8
22	c	510	CLA	C8-C10-C11-C12
22	C	505	CLA	C4-C3-C5-C6
22	b	614	CLA	C4-C3-C5-C6
27	A	410	PL9	C40-C39-C41-C42
27	A	410	PL9	C45-C44-C46-C47
27	d	406	PL9	C40-C39-C41-C42
22	C	505	CLA	C2-C3-C5-C6
22	b	603	CLA	C2-C3-C5-C6
22	b	614	CLA	C2-C3-C5-C6
27	A	410	PL9	C43-C44-C46-C47
27	d	406	PL9	C47-C48-C49-C50
22	C	511	CLA	C3-C5-C6-C7
22	B	602	CLA	CBA-CGA-O2A-C1
33	M	101	LMG	C29-C28-O8-C9
33	Y	101	LMG	C29-C28-O8-C9
33	c	521	LMG	C29-C28-O8-C9
30	h	101	DGD	O6E-C5E-C6E-O5E
27	a	410	PL9	C42-C43-C44-C45
27	d	406	PL9	C32-C33-C34-C35
27	A	410	PL9	C22-C23-C24-C26
27	D	406	PL9	C32-C33-C34-C36
27	a	410	PL9	C17-C18-C19-C21
27	d	406	PL9	C32-C33-C34-C36
24	c	514	BCR	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
33	c	521	LMG	O10-C28-O8-C9
22	B	607	CLA	C10-C11-C12-C13
28	B	622	LHG	O2-C2-C3-O3
22	c	511	CLA	CBD-CGD-O2D-CED
29	f	101	SQD	C8-C7-O47-C45
22	b	610	CLA	C2C-C3C-CAC-CBC
30	A	415	DGD	C1B-C2B-C3B-C4B
22	C	510	CLA	CBD-CGD-O2D-CED
22	A	405	CLA	C4-C3-C5-C6
22	B	615	CLA	C4-C3-C5-C6
22	b	605	CLA	C4-C3-C5-C6
22	A	405	CLA	C2-C3-C5-C6
22	B	606	CLA	C2-C3-C5-C6
22	B	615	CLA	C2-C3-C5-C6
22	b	605	CLA	C2-C3-C5-C6
27	A	410	PL9	C33-C34-C36-C37
27	d	406	PL9	C38-C39-C41-C42
33	b	622	LMG	O10-C28-O8-C9
22	b	610	CLA	C4C-C3C-CAC-CBC
27	A	410	PL9	C19-C21-C22-C23
27	A	410	PL9	C44-C46-C47-C48
27	a	410	PL9	C9-C11-C12-C13
27	a	410	PL9	C34-C36-C37-C38
22	a	403	CLA	CBD-CGD-O2D-CED
23	d	401	PHO	CBD-CGD-O2D-CED
27	a	410	PL9	C47-C48-C49-C50
29	L	101	SQD	O5-C1-O6-C44
22	C	514	CLA	CBA-CGA-O2A-C1
22	B	605	CLA	CBD-CGD-O2D-CED
22	b	603	CLA	CBD-CGD-O2D-CED
22	c	501	CLA	CBD-CGD-O2D-CED
22	c	512	CLA	CBD-CGD-O2D-CED
33	C	516	LMG	O6-C5-C6-O5
30	h	101	DGD	C4E-C5E-C6E-O5E
30	H	102	DGD	C2B-C3B-C4B-C5B
22	b	602	CLA	CBD-CGD-O2D-CED
27	d	406	PL9	C47-C48-C49-C51
28	l	101	LHG	C7-C8-C9-C10
22	C	514	CLA	O1A-CGA-O2A-C1
28	A	411	LHG	C1-C2-C3-O3
28	B	622	LHG	C1-C2-C3-O3
28	D	408	LHG	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
22	a	405	CLA	CBA-CGA-O2A-C1
22	c	506	CLA	CBA-CGA-O2A-C1
29	B	623	SQD	C24-C23-O48-C46
22	B	614	CLA	CBD-CGD-O2D-CED
22	c	506	CLA	O1D-CGD-O2D-CED
32	b	624	STE	C4-C5-C6-C7
32	b	620	STE	C5-C6-C7-C8
22	B	606	CLA	C4-C3-C5-C6
27	A	410	PL9	C35-C34-C36-C37
27	A	410	PL9	C23-C24-C26-C27
22	A	403	CLA	C14-C13-C15-C16
22	B	603	CLA	C6-C7-C8-C9
22	B	608	CLA	C14-C13-C15-C16
22	B	612	CLA	C11-C12-C13-C14
22	B	614	CLA	C11-C12-C13-C14
22	C	503	CLA	C14-C13-C15-C16
22	C	504	CLA	C11-C10-C8-C9
22	C	510	CLA	C11-C10-C8-C9
22	C	513	CLA	C6-C7-C8-C9
22	b	604	CLA	C6-C7-C8-C9
22	b	605	CLA	C11-C10-C8-C9
22	b	606	CLA	C14-C13-C15-C16
22	c	503	CLA	C11-C12-C13-C14
22	c	508	CLA	C11-C10-C8-C9
22	c	509	CLA	C11-C12-C13-C14
22	c	511	CLA	C14-C13-C15-C16
22	c	512	CLA	C6-C7-C8-C9
33	C	516	LMG	C4-C5-C6-O5
24	B	618	BCR	C36-C18-C19-C20
24	B	620	BCR	C7-C8-C9-C34
24	B	620	BCR	C37-C22-C23-C24
24	D	405	BCR	C37-C22-C23-C24
24	K	101	BCR	C11-C12-C13-C35
24	T	101	BCR	C37-C22-C23-C24
24	Z	101	BCR	C7-C8-C9-C34
24	b	619	BCR	C11-C12-C13-C35
24	c	514	BCR	C11-C12-C13-C35
24	c	515	BCR	C36-C18-C19-C20
24	t	101	BCR	C7-C8-C9-C34
24	x	101	BCR	C37-C22-C23-C24
33	d	410	LMG	C10-C11-C12-C13
29	A	412	SQD	O6-C44-C45-O47

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Mol	Chain	Res	Type	Atoms
30	A	415	DGD	C2A-C1A-O1G-C1G
22	b	614	CLA	CBD-CGD-O2D-CED
27	A	410	PL9	C22-C23-C24-C25
27	D	406	PL9	C42-C43-C44-C45
27	a	410	PL9	C27-C28-C29-C30
27	d	406	PL9	C22-C23-C24-C25
22	C	510	CLA	C13-C15-C16-C17
22	b	601	CLA	C13-C15-C16-C17
22	c	511	CLA	C15-C16-C17-C18
28	B	622	LHG	O1-C1-C2-O2
28	d	407	LHG	C7-C8-C9-C10
29	a	413	SQD	C7-C8-C9-C10
22	C	511	CLA	C6-C7-C8-C10
22	C	511	CLA	C12-C13-C15-C16
22	b	602	CLA	C11-C12-C13-C15
22	b	614	CLA	C11-C12-C13-C15
22	b	615	CLA	C11-C12-C13-C15
33	b	622	LMG	C29-C28-O8-C9
33	m	101	LMG	C10-C11-C12-C13
24	c	514	BCR	C15-C16-C17-C18
22	C	513	CLA	O1D-CGD-O2D-CED
27	a	410	PL9	C19-C21-C22-C23
22	c	509	CLA	C13-C15-C16-C17
28	B	622	LHG	C7-C8-C9-C10
28	a	412	LHG	C23-C24-C25-C26
28	d	407	LHG	C23-C24-C25-C26
30	c	517	DGD	C1A-C2A-C3A-C4A
30	c	517	DGD	C1B-C2B-C3B-C4B
32	L	103	STE	C1-C2-C3-C4
33	B	627	LMG	C10-C11-C12-C13
29	F	101	SQD	O10-C23-O48-C46
22	B	616	CLA	C5-C6-C7-C8
22	C	504	CLA	C5-C6-C7-C8
22	C	510	CLA	C5-C6-C7-C8
22	C	510	CLA	C8-C10-C11-C12
22	b	603	CLA	C5-C6-C7-C8
22	b	608	CLA	C8-C10-C11-C12
22	c	502	CLA	C13-C15-C16-C17
22	c	511	CLA	C8-C10-C11-C12
24	C	501	BCR	C18-C19-C20-C21
24	Z	101	BCR	C10-C11-C12-C13
22	b	607	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
22	b	609	CLA	C15-C16-C17-C18
22	b	614	CLA	C5-C6-C7-C8
22	c	504	CLA	C5-C6-C7-C8
22	c	513	CLA	C5-C6-C7-C8
29	L	101	SQD	C23-C24-C25-C26
33	Y	101	LMG	C28-C29-C30-C31
33	b	622	LMG	C28-C29-C30-C31
33	d	410	LMG	C28-C29-C30-C31
22	B	617	CLA	C3-C5-C6-C7
30	C	519	DGD	C2A-C3A-C4A-C5A
32	C	522	STE	C4-C5-C6-C7
24	b	619	BCR	C22-C23-C24-C25
30	C	518	DGD	O6E-C1E-O5D-C6D
33	Y	101	LMG	O6-C1-O1-C7
22	B	602	CLA	C10-C11-C12-C13
22	B	615	CLA	C8-C10-C11-C12
22	C	506	CLA	C5-C6-C7-C8
22	C	509	CLA	C15-C16-C17-C18
22	D	404	CLA	C13-C15-C16-C17
22	a	405	CLA	C5-C6-C7-C8
22	a	405	CLA	C10-C11-C12-C13
22	b	602	CLA	C15-C16-C17-C18
22	c	503	CLA	C5-C6-C7-C8
28	A	413	LHG	O2-C2-C3-O3
28	a	412	LHG	O2-C2-C3-O3
22	c	506	CLA	O1A-CGA-O2A-C1
33	Y	101	LMG	O10-C28-O8-C9
28	L	102	LHG	C7-C8-C9-C10
29	A	412	SQD	C23-C24-C25-C26
22	B	604	CLA	C15-C16-C17-C18
22	B	614	CLA	C8-C10-C11-C12
22	b	613	CLA	C15-C16-C17-C18
22	b	615	CLA	C10-C11-C12-C13
22	C	507	CLA	C13-C15-C16-C17
22	C	514	CLA	C15-C16-C17-C18
22	D	404	CLA	C10-C11-C12-C13
22	b	603	CLA	C10-C11-C12-C13
27	d	406	PL9	C18-C19-C21-C22
32	c	520	STE	C1-C2-C3-C4
33	d	410	LMG	O6-C5-C6-O5
22	a	402	CLA	C15-C16-C17-C18
22	a	403	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
22	a	405	CLA	O1A-CGA-O2A-C1
22	b	611	CLA	C8-C10-C11-C12
22	d	403	CLA	C15-C16-C17-C18
22	C	513	CLA	C3-C5-C6-C7
32	B	621	STE	C9-C10-C11-C12
33	M	101	LMG	C28-C29-C30-C31
28	A	413	LHG	C1-C2-C3-O3
28	a	412	LHG	C1-C2-C3-O3
22	b	606	CLA	C2A-CAA-CBA-CGA
33	C	516	LMG	C29-C28-O8-C9
30	C	518	DGD	CCA-CDA-CEA-CFA
22	B	615	CLA	C13-C15-C16-C17
22	C	503	CLA	C13-C15-C16-C17
22	C	506	CLA	C10-C11-C12-C13
22	b	615	CLA	C15-C16-C17-C18
22	B	614	CLA	C10-C11-C12-C13
22	b	607	CLA	C8-C10-C11-C12
22	b	611	CLA	C13-C15-C16-C17
22	b	612	CLA	C13-C15-C16-C17
22	c	512	CLA	C13-C15-C16-C17
22	B	609	CLA	C13-C15-C16-C17
22	C	511	CLA	C13-C15-C16-C17
22	b	606	CLA	C15-C16-C17-C18
22	c	510	CLA	C15-C16-C17-C18
22	c	511	CLA	C13-C15-C16-C17
22	c	512	CLA	C8-C10-C11-C12
33	m	101	LMG	C29-C28-O8-C9
22	B	607	CLA	C15-C16-C17-C18
22	b	614	CLA	C15-C16-C17-C18
22	c	508	CLA	C8-C10-C11-C12
33	D	409	LMG	C11-C10-O7-C8
33	b	622	LMG	C11-C10-O7-C8
33	c	521	LMG	C11-C10-O7-C8
30	c	518	DGD	O1A-C1A-O1G-C1G
30	C	518	DGD	C2E-C1E-O5D-C6D
33	Y	101	LMG	C2-C1-O1-C7
22	B	602	CLA	C15-C16-C17-C18
27	a	410	PL9	C24-C26-C27-C28
22	B	606	CLA	C16-C17-C18-C19
22	C	513	CLA	C8-C10-C11-C12
24	A	406	BCR	C35-C13-C14-C15
24	A	406	BCR	C16-C17-C18-C36

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Mol	Chain	Res	Type	Atoms
24	C	501	BCR	C16-C17-C18-C36
24	C	515	BCR	C35-C13-C14-C15
24	H	101	BCR	C20-C21-C22-C37
24	a	406	BCR	C11-C10-C9-C34
24	a	406	BCR	C20-C21-C22-C37
24	b	618	BCR	C11-C10-C9-C34
24	A	406	BCR	C37-C22-C23-C24
24	B	619	BCR	C7-C8-C9-C34
24	C	515	BCR	C11-C12-C13-C35
24	T	101	BCR	C11-C12-C13-C35
24	c	514	BCR	C7-C8-C9-C34
24	k	102	BCR	C7-C8-C9-C34
22	B	607	CLA	C2A-CAA-CBA-CGA
28	d	407	LHG	O1-C1-C2-C3
33	c	521	LMG	C28-C29-C30-C31
22	C	513	CLA	O2A-C1-C2-C3
29	L	101	SQD	C46-C45-O47-C7
32	B	626	STE	C5-C6-C7-C8
22	B	615	CLA	C16-C17-C18-C20
24	B	618	BCR	C12-C13-C14-C15
24	B	620	BCR	C11-C10-C9-C8
24	B	620	BCR	C20-C21-C22-C23
24	C	501	BCR	C16-C17-C18-C19
24	C	515	BCR	C20-C21-C22-C23
24	H	101	BCR	C12-C13-C14-C15
24	K	101	BCR	C16-C17-C18-C19
24	a	406	BCR	C12-C13-C14-C15
24	b	619	BCR	C20-C21-C22-C23
24	c	514	BCR	C11-C10-C9-C8
24	t	101	BCR	C11-C10-C9-C8
33	Y	101	LMG	O9-C10-O7-C8
30	c	516	DGD	O6E-C1E-O5D-C6D
32	B	621	STE	C1-C2-C3-C4
30	c	518	DGD	CAA-CBA-CCA-CDA
23	d	401	PHO	O1D-CGD-O2D-CED
22	B	617	CLA	CBD-CGD-O2D-CED
33	D	407	LMG	C10-C11-C12-C13
33	M	101	LMG	O6-C5-C6-O5
22	c	511	CLA	O1D-CGD-O2D-CED
22	B	617	CLA	C2-C1-O2A-CGA
22	B	609	CLA	C16-C17-C18-C20
22	B	615	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
22	b	615	CLA	C16-C17-C18-C20
22	c	505	CLA	C16-C17-C18-C19
22	c	505	CLA	C16-C17-C18-C20
22	c	506	CLA	C16-C17-C18-C19
22	A	403	CLA	C8-C10-C11-C12
22	c	507	CLA	C13-C15-C16-C17
22	c	509	CLA	C10-C11-C12-C13
28	A	413	LHG	C27-C28-C29-C30
29	B	623	SQD	C17-C18-C19-C20
30	A	415	DGD	C9A-CAA-CBA-CCA
30	c	516	DGD	C4B-C5B-C6B-C7B
30	c	516	DGD	C6B-C7B-C8B-C9B
33	Y	101	LMG	C12-C13-C14-C15
33	m	101	LMG	C19-C20-C21-C22
24	c	515	BCR	C14-C15-C16-C17
28	A	413	LHG	C10-C11-C12-C13
28	A	413	LHG	C29-C30-C31-C32
28	B	622	LHG	C10-C11-C12-C13
28	L	102	LHG	C31-C32-C33-C34
28	d	408	LHG	C29-C30-C31-C32
30	C	518	DGD	C6A-C7A-C8A-C9A
30	h	101	DGD	CBA-CCA-CDA-CEA
33	B	627	LMG	C39-C40-C41-C42
33	m	101	LMG	C31-C32-C33-C34
28	a	412	LHG	C11-C12-C13-C14
28	d	407	LHG	C11-C10-C9-C8
28	d	408	LHG	C11-C12-C13-C14
33	Y	101	LMG	C32-C33-C34-C35
33	m	101	LMG	C30-C31-C32-C33
29	F	101	SQD	C27-C28-C29-C30
30	C	517	DGD	CAB-CBB-CCB-CDB
30	c	517	DGD	C2A-C3A-C4A-C5A
32	B	626	STE	C4-C5-C6-C7
32	T	102	STE	C13-C14-C15-C16
32	d	411	STE	C10-C11-C12-C13
32	h	102	STE	C11-C12-C13-C14
33	B	627	LMG	C14-C15-C16-C17
33	c	521	LMG	C31-C32-C33-C34
28	A	413	LHG	O1-C1-C2-O2
28	a	412	LHG	O1-C1-C2-O2
28	A	411	LHG	C11-C12-C13-C14
28	d	407	LHG	C25-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
29	A	414	SQD	C12-C13-C14-C15
29	B	623	SQD	C13-C14-C15-C16
30	C	517	DGD	CBA-CCA-CDA-CEA
30	h	101	DGD	C6B-C7B-C8B-C9B
32	B	601	STE	C2-C3-C4-C5
33	C	516	LMG	C12-C13-C14-C15
22	a	403	CLA	O1D-CGD-O2D-CED
22	b	601	CLA	C4B-C3B-CAB-CBB
22	c	507	CLA	C4B-C3B-CAB-CBB
22	c	512	CLA	C4B-C3B-CAB-CBB
32	J	101	STE	C1-C2-C3-C4
30	A	415	DGD	CCA-CDA-CEA-CFA
33	C	516	LMG	C16-C17-C18-C19
33	D	407	LMG	C12-C13-C14-C15
22	B	603	CLA	C16-C17-C18-C19
22	B	606	CLA	C16-C17-C18-C20
22	D	403	CLA	C16-C17-C18-C20
22	B	605	CLA	O1D-CGD-O2D-CED
29	L	101	SQD	C13-C14-C15-C16
30	A	415	DGD	C4B-C5B-C6B-C7B
30	A	415	DGD	CCB-CDB-CEB-CFB
32	x	102	STE	C2-C3-C4-C5
22	C	514	CLA	C10-C11-C12-C13
30	c	518	DGD	C4B-C5B-C6B-C7B
33	c	519	LMG	C33-C34-C35-C36
22	C	509	CLA	C12-C13-C15-C16
29	A	412	SQD	C26-C27-C28-C29
32	B	626	STE	C11-C10-C9-C8
32	H	103	STE	C5-C6-C7-C8
32	x	102	STE	C6-C7-C8-C9
33	c	522	LMG	C32-C33-C34-C35
28	A	413	LHG	C23-C24-C25-C26
28	B	622	LHG	C12-C13-C14-C15
28	d	408	LHG	C12-C13-C14-C15
30	C	517	DGD	CBB-CCB-CDB-CEB
30	C	518	DGD	CBB-CCB-CDB-CEB
30	c	516	DGD	C4A-C5A-C6A-C7A
30	c	518	DGD	C9B-CAB-CBB-CCB
30	h	101	DGD	C3B-C4B-C5B-C6B
32	B	626	STE	C12-C13-C14-C15
32	M	103	STE	C5-C6-C7-C8
33	C	516	LMG	C36-C37-C38-C39

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Mol	Chain	Res	Type	Atoms
33	D	407	LMG	C30-C31-C32-C33
33	M	101	LMG	C12-C13-C14-C15
33	M	101	LMG	C37-C38-C39-C40
28	B	622	LHG	C28-C29-C30-C31
28	d	407	LHG	C15-C16-C17-C18
22	b	604	CLA	C15-C16-C17-C18
22	C	510	CLA	O1D-CGD-O2D-CED
32	k	101	STE	C6-C7-C8-C9
32	t	102	STE	C6-C7-C8-C9
24	Z	101	BCR	C15-C16-C17-C18
22	B	603	CLA	C16-C17-C18-C20
22	c	503	CLA	C16-C17-C18-C20
22	c	504	CLA	C11-C12-C13-C14
30	c	516	DGD	O6D-C5D-C6D-O5D
28	L	102	LHG	C27-C28-C29-C30
30	C	519	DGD	CBA-CCA-CDA-CEA
33	c	521	LMG	C41-C42-C43-C44
33	d	410	LMG	C34-C35-C36-C37
28	A	413	LHG	C11-C10-C9-C8
28	A	413	LHG	C11-C12-C13-C14
32	D	411	STE	C12-C13-C14-C15
22	B	606	CLA	CBA-CGA-O2A-C1
22	c	512	CLA	CBA-CGA-O2A-C1
29	A	412	SQD	C11-C12-C13-C14
32	H	103	STE	C9-C10-C11-C12
32	d	411	STE	C5-C6-C7-C8
32	x	102	STE	C5-C6-C7-C8
33	D	407	LMG	C37-C38-C39-C40
33	M	101	LMG	C14-C15-C16-C17
33	c	521	LMG	C11-C12-C13-C14
22	B	617	CLA	C5-C6-C7-C8
22	c	510	CLA	C5-C6-C7-C8
28	A	411	LHG	C24-C25-C26-C27
28	A	411	LHG	C25-C26-C27-C28
28	A	413	LHG	C24-C25-C26-C27
28	d	407	LHG	C33-C34-C35-C36
29	A	414	SQD	C24-C25-C26-C27
29	a	411	SQD	C26-C27-C28-C29
30	C	517	DGD	C4B-C5B-C6B-C7B
30	H	102	DGD	C8B-C9B-CAB-CBB
30	H	102	DGD	CAB-CBB-CCB-CDB
30	c	516	DGD	C7B-C8B-C9B-CAB

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Mol	Chain	Res	Type	Atoms
30	c	518	DGD	CCA-CDA-CEA-CFA
32	J	101	STE	C5-C6-C7-C8
32	t	103	STE	C3-C4-C5-C6
32	x	102	STE	C4-C5-C6-C7
33	D	410	LMG	C29-C30-C31-C32
33	Y	101	LMG	C39-C40-C41-C42
28	A	411	LHG	C12-C13-C14-C15
33	B	627	LMG	C17-C18-C19-C20
33	D	409	LMG	C36-C37-C38-C39
22	B	614	CLA	O1D-CGD-O2D-CED
33	B	627	LMG	C36-C37-C38-C39
22	c	512	CLA	O1D-CGD-O2D-CED
29	L	101	SQD	C16-C17-C18-C19
29	L	101	SQD	C18-C19-C20-C21
30	c	518	DGD	C5B-C6B-C7B-C8B
32	h	102	STE	C7-C8-C9-C10
33	c	519	LMG	C34-C35-C36-C37
33	c	521	LMG	C16-C17-C18-C19
33	c	521	LMG	C30-C31-C32-C33
33	c	522	LMG	C31-C32-C33-C34
22	a	403	CLA	C2B-C3B-CAB-CBB
22	b	601	CLA	C2B-C3B-CAB-CBB
22	c	512	CLA	C2B-C3B-CAB-CBB
24	D	405	BCR	C23-C24-C25-C30
24	K	101	BCR	C1-C6-C7-C8
24	K	101	BCR	C5-C6-C7-C8
24	T	101	BCR	C1-C6-C7-C8
24	T	101	BCR	C5-C6-C7-C8
29	A	412	SQD	C16-C17-C18-C19
29	B	623	SQD	C34-C35-C36-C37
33	c	521	LMG	C33-C34-C35-C36
22	b	614	CLA	O1D-CGD-O2D-CED
33	B	627	LMG	C29-C28-O8-C9
22	c	513	CLA	C3-C5-C6-C7
28	A	413	LHG	C25-C26-C27-C28
30	C	518	DGD	CAA-CBA-CCA-CDA
32	D	411	STE	C11-C12-C13-C14
33	b	622	LMG	C19-C20-C21-C22
28	L	102	LHG	C12-C13-C14-C15
29	A	414	SQD	C32-C33-C34-C35
30	C	518	DGD	C8B-C9B-CAB-CBB
28	L	102	LHG	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
22	C	513	CLA	C10-C11-C12-C13
29	L	101	SQD	C25-C26-C27-C28
30	A	415	DGD	C5B-C6B-C7B-C8B
30	C	517	DGD	C6A-C7A-C8A-C9A
32	D	411	STE	C5-C6-C7-C8
33	b	622	LMG	C32-C33-C34-C35
27	a	410	PL9	C4-C3-C7-C8
32	B	625	STE	C5-C6-C7-C8
22	d	402	CLA	C2C-C3C-CAC-CBC
27	D	406	PL9	C30-C29-C31-C32
28	A	413	LHG	C33-C34-C35-C36
30	A	415	DGD	C7B-C8B-C9B-CAB
32	b	623	STE	C3-C4-C5-C6
32	c	520	STE	C2-C3-C4-C5
33	C	516	LMG	C38-C39-C40-C41
24	C	515	BCR	C18-C19-C20-C21
24	a	406	BCR	C18-C19-C20-C21
22	B	602	CLA	C8-C10-C11-C12
22	C	514	CLA	C8-C10-C11-C12
22	b	613	CLA	C10-C11-C12-C13
27	D	406	PL9	C38-C39-C41-C42
28	B	622	LHG	C17-C18-C19-C20
29	F	101	SQD	C30-C31-C32-C33
30	C	518	DGD	CCB-CDB-CEB-CFB
32	H	103	STE	C2-C3-C4-C5
33	C	516	LMG	C29-C30-C31-C32
33	c	521	LMG	C36-C37-C38-C39
22	c	512	CLA	O1A-CGA-O2A-C1
22	D	402	CLA	C11-C10-C8-C9
22	b	613	CLA	C6-C7-C8-C9
22	c	509	CLA	C6-C7-C8-C9
30	A	415	DGD	C9B-CAB-CBB-CCB
30	c	517	DGD	C4A-C5A-C6A-C7A
22	C	507	CLA	C8-C10-C11-C12
29	L	101	SQD	C27-C28-C29-C30
30	c	518	DGD	CBB-CCB-CDB-CEB
32	B	625	STE	C6-C7-C8-C9
32	T	102	STE	C14-C15-C16-C17
33	Y	101	LMG	C17-C18-C19-C20
33	b	622	LMG	C40-C41-C42-C43
24	D	405	BCR	C22-C23-C24-C25
24	Z	101	BCR	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
24	k	102	BCR	C14-C15-C16-C17
29	A	412	SQD	C32-C33-C34-C35
30	C	518	DGD	C3A-C4A-C5A-C6A
33	m	101	LMG	C39-C40-C41-C42
33	c	522	LMG	C2-C1-O1-C7
32	c	520	STE	C6-C7-C8-C9
33	M	101	LMG	C20-C21-C22-C23
30	C	517	DGD	O6E-C5E-C6E-O5E
33	B	627	LMG	C37-C38-C39-C40
33	Y	101	LMG	C37-C38-C39-C40
33	b	622	LMG	C11-C12-C13-C14
29	A	412	SQD	C30-C31-C32-C33
29	A	414	SQD	C10-C11-C12-C13
32	I	101	STE	C11-C10-C9-C8
33	D	407	LMG	C17-C18-C19-C20
22	B	608	CLA	C13-C15-C16-C17
22	b	612	CLA	C3-C5-C6-C7
22	b	615	CLA	C16-C17-C18-C19
30	C	517	DGD	C5B-C6B-C7B-C8B
33	d	410	LMG	C38-C39-C40-C41
28	B	622	LHG	C23-C24-C25-C26
28	a	412	LHG	C7-C8-C9-C10
28	d	409	LHG	C35-C36-C37-C38
32	Z	102	STE	C11-C12-C13-C14
22	B	612	CLA	C8-C10-C11-C12
22	c	505	CLA	C13-C15-C16-C17
33	c	521	LMG	O9-C10-O7-C8
32	h	102	STE	C9-C10-C11-C12
30	h	101	DGD	C2B-C3B-C4B-C5B
22	c	508	CLA	C13-C15-C16-C17
24	A	406	BCR	C11-C12-C13-C35
33	B	627	LMG	C16-C17-C18-C19
22	b	602	CLA	C3-C5-C6-C7
33	B	627	LMG	C8-C7-O1-C1
28	A	413	LHG	C31-C32-C33-C34
30	A	415	DGD	CBA-CCA-CDA-CEA
33	M	101	LMG	C15-C16-C17-C18
33	M	101	LMG	C33-C34-C35-C36
22	B	607	CLA	CBD-CGD-O2D-CED
29	A	412	SQD	C9-C10-C11-C12
30	A	415	DGD	C2A-C3A-C4A-C5A
30	C	517	DGD	C9B-CAB-CBB-CCB

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Mol	Chain	Res	Type	Atoms
30	c	518	DGD	C3A-C4A-C5A-C6A
33	d	410	LMG	C36-C37-C38-C39
32	b	624	STE	C1-C2-C3-C4
29	a	413	SQD	C24-C25-C26-C27
30	C	519	DGD	CAB-CBB-CCB-CDB
32	h	102	STE	C13-C14-C15-C16
32	x	102	STE	C3-C4-C5-C6
22	C	513	CLA	C5-C6-C7-C8
22	b	607	CLA	C10-C11-C12-C13
22	b	611	CLA	C15-C16-C17-C18
29	B	623	SQD	C33-C34-C35-C36
30	C	519	DGD	C6A-C7A-C8A-C9A
30	A	415	DGD	CEA-CFA-CGA-CHA
22	B	606	CLA	O1A-CGA-O2A-C1
22	B	610	CLA	C15-C16-C17-C18
22	B	613	CLA	C10-C11-C12-C13
30	c	518	DGD	C7A-C8A-C9A-CAA
33	D	410	LMG	C10-C11-C12-C13
28	d	407	LHG	C10-C11-C12-C13
32	b	620	STE	C7-C8-C9-C10
33	Y	101	LMG	C33-C34-C35-C36
28	D	408	LHG	C30-C31-C32-C33
33	b	622	LMG	C18-C19-C20-C21
22	c	505	CLA	C5-C6-C7-C8
22	D	403	CLA	C16-C17-C18-C19
32	L	103	STE	C5-C6-C7-C8
32	t	104	STE	C12-C13-C14-C15
33	m	101	LMG	C20-C21-C22-C23
30	c	516	DGD	O6E-C5E-C6E-O5E
33	b	622	LMG	O6-C5-C6-O5
32	d	411	STE	C3-C4-C5-C6
22	B	606	CLA	C5-C6-C7-C8
32	t	104	STE	C4-C5-C6-C7
33	D	407	LMG	O6-C5-C6-O5
33	c	521	LMG	O6-C5-C6-O5
22	B	603	CLA	C3-C5-C6-C7
22	D	402	CLA	C3-C5-C6-C7
29	a	411	SQD	O47-C45-C46-O48
29	A	414	SQD	C28-C29-C30-C31
32	B	624	STE	C4-C5-C6-C7
32	T	102	STE	C6-C7-C8-C9
22	C	513	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
29	a	413	SQD	C11-C10-C9-C8
30	c	518	DGD	C6B-C7B-C8B-C9B
30	h	101	DGD	CCB-CDB-CEB-CFB
33	B	627	LMG	C33-C34-C35-C36
33	c	522	LMG	C17-C18-C19-C20
29	A	412	SQD	C14-C15-C16-C17
32	t	104	STE	C9-C10-C11-C12
33	m	101	LMG	C32-C33-C34-C35
29	F	101	SQD	C28-C29-C30-C31
29	a	411	SQD	C34-C35-C36-C37
22	c	506	CLA	C16-C17-C18-C20
32	b	626	STE	C10-C11-C12-C13
32	c	520	STE	C7-C8-C9-C10
33	M	101	LMG	C13-C14-C15-C16
33	b	622	LMG	C13-C14-C15-C16
32	b	624	STE	C11-C12-C13-C14
27	d	406	PL9	C45-C44-C46-C47
22	B	614	CLA	C3-C5-C6-C7
27	d	406	PL9	C43-C44-C46-C47
28	d	407	LHG	C29-C30-C31-C32
28	l	101	LHG	C14-C15-C16-C17
30	C	518	DGD	C4A-C5A-C6A-C7A
32	b	621	STE	C6-C7-C8-C9
33	b	622	LMG	C12-C13-C14-C15
22	C	512	CLA	CBA-CGA-O2A-C1
28	A	411	LHG	C15-C16-C17-C18
30	c	517	DGD	CAA-CBA-CCA-CDA
28	a	412	LHG	C16-C17-C18-C19
29	a	413	SQD	C12-C13-C14-C15
29	a	413	SQD	C29-C30-C31-C32
30	H	102	DGD	C7A-C8A-C9A-CAA
30	c	518	DGD	C2A-C3A-C4A-C5A
33	b	622	LMG	C39-C40-C41-C42
33	M	101	LMG	C32-C33-C34-C35
22	C	505	CLA	C11-C12-C13-C14
22	c	501	CLA	O1D-CGD-O2D-CED
28	D	408	LHG	O1-C1-C2-O2
28	d	409	LHG	O1-C1-C2-O2
28	B	622	LHG	C16-C17-C18-C19
29	A	412	SQD	C33-C34-C35-C36
29	L	101	SQD	C12-C13-C14-C15
30	A	415	DGD	CDA-CEA-CFA-CGA

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Mol	Chain	Res	Type	Atoms
30	A	415	DGD	C2B-C3B-C4B-C5B
32	b	621	STE	C14-C15-C16-C17
33	b	622	LMG	C16-C17-C18-C19
22	B	608	CLA	C1A-C2A-CAA-CBA
22	C	503	CLA	C1A-C2A-CAA-CBA
22	a	405	CLA	C1A-C2A-CAA-CBA
22	c	508	CLA	C1A-C2A-CAA-CBA
22	c	512	CLA	C1A-C2A-CAA-CBA
22	c	513	CLA	C1A-C2A-CAA-CBA
22	B	617	CLA	O1D-CGD-O2D-CED
22	b	606	CLA	C8-C10-C11-C12
30	A	415	DGD	O6D-C1D-O3G-C3G
28	A	413	LHG	C12-C13-C14-C15
28	d	408	LHG	C17-C18-C19-C20
30	h	101	DGD	CAB-CBB-CCB-CDB
33	M	101	LMG	C35-C36-C37-C38
28	D	408	LHG	C12-C13-C14-C15
28	a	412	LHG	C27-C28-C29-C30
29	L	101	SQD	C24-C25-C26-C27
32	k	101	STE	C5-C6-C7-C8
33	m	101	LMG	C11-C12-C13-C14
33	M	101	LMG	C38-C39-C40-C41
22	B	603	CLA	C11-C12-C13-C15
22	B	614	CLA	C6-C7-C8-C10
22	C	506	CLA	C12-C13-C15-C16
22	C	510	CLA	C12-C13-C15-C16
22	C	514	CLA	C11-C10-C8-C7
22	b	603	CLA	C11-C10-C8-C7
22	b	606	CLA	C12-C13-C15-C16
22	c	502	CLA	C11-C12-C13-C15
22	c	506	CLA	C11-C10-C8-C7
22	c	506	CLA	C12-C13-C15-C16
22	c	513	CLA	C11-C12-C13-C15
22	d	404	CLA	C6-C7-C8-C10
28	A	413	LHG	C17-C18-C19-C20
30	c	516	DGD	C7A-C8A-C9A-CAA
22	B	607	CLA	O1D-CGD-O2D-CED
30	c	516	DGD	C3B-C4B-C5B-C6B
33	D	410	LMG	C16-C17-C18-C19
28	d	408	LHG	C7-C8-C9-C10
29	a	411	SQD	C13-C14-C15-C16
30	H	102	DGD	C8A-C9A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
33	D	407	LMG	C21-C22-C23-C24
22	c	505	CLA	C2-C3-C5-C6
22	c	510	CLA	C2-C3-C5-C6
23	A	404	PHO	C2-C3-C5-C6
30	c	517	DGD	C8A-C9A-CAA-CBA
33	D	407	LMG	C35-C36-C37-C38
22	B	602	CLA	C6-C7-C8-C9
22	B	604	CLA	C11-C10-C8-C9
22	B	605	CLA	C11-C12-C13-C14
22	B	614	CLA	C6-C7-C8-C9
22	B	616	CLA	C14-C13-C15-C16
22	C	510	CLA	C14-C13-C15-C16
22	C	511	CLA	C6-C7-C8-C9
22	C	514	CLA	C11-C10-C8-C9
22	b	609	CLA	C14-C13-C15-C16
22	b	615	CLA	C11-C12-C13-C14
22	c	507	CLA	C14-C13-C15-C16
22	c	508	CLA	C6-C7-C8-C9
22	c	510	CLA	C14-C13-C15-C16
28	B	622	LHG	C25-C26-C27-C28
28	d	408	LHG	C14-C15-C16-C17
32	x	102	STE	C11-C12-C13-C14
28	L	102	LHG	C16-C17-C18-C19
29	A	414	SQD	C24-C23-O48-C46
22	b	603	CLA	O1D-CGD-O2D-CED
33	c	521	LMG	C35-C36-C37-C38
33	D	407	LMG	C36-C37-C38-C39
33	B	627	LMG	O6-C5-C6-O5
27	A	410	PL9	C24-C26-C27-C28
29	a	411	SQD	O6-C44-C45-C46
30	A	415	DGD	C1G-C2G-C3G-O3G
33	B	627	LMG	O1-C7-C8-C9
33	C	516	LMG	O1-C7-C8-C9
33	Y	101	LMG	O1-C7-C8-C9
33	b	622	LMG	C7-C8-C9-O8
33	c	521	LMG	C7-C8-C9-O8
33	m	101	LMG	C7-C8-C9-O8
28	l	101	LHG	C15-C16-C17-C18
29	L	101	SQD	C15-C16-C17-C18
22	C	512	CLA	O1A-CGA-O2A-C1
28	d	408	LHG	C30-C31-C32-C33
32	D	411	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
32	b	625	STE	C2-C3-C4-C5
32	h	102	STE	C6-C7-C8-C9
22	b	605	CLA	C15-C16-C17-C18
32	H	103	STE	C7-C8-C9-C10
29	A	412	SQD	C24-C23-O48-C46
32	B	601	STE	C1-C2-C3-C4
33	c	519	LMG	O6-C5-C6-O5
33	c	522	LMG	C12-C13-C14-C15
33	m	101	LMG	C17-C18-C19-C20
33	m	101	LMG	C37-C38-C39-C40
28	D	408	LHG	C13-C14-C15-C16
30	h	101	DGD	C6A-C7A-C8A-C9A
33	B	627	LMG	C12-C13-C14-C15
33	Y	101	LMG	C11-C12-C13-C14
32	x	102	STE	C10-C11-C12-C13
33	D	409	LMG	C34-C35-C36-C37
24	B	619	BCR	C11-C10-C9-C34
24	k	102	BCR	C35-C13-C14-C15
24	k	103	BCR	C35-C13-C14-C15
32	d	411	STE	C2-C3-C4-C5
22	c	505	CLA	C4-C3-C5-C6
23	A	404	PHO	C4-C3-C5-C6
27	a	410	PL9	C43-C44-C46-C47
30	c	516	DGD	C4D-C5D-C6D-O5D
29	F	101	SQD	C33-C34-C35-C36
30	c	518	DGD	C6A-C7A-C8A-C9A
22	c	507	CLA	C10-C11-C12-C13
28	A	413	LHG	C15-C16-C17-C18
28	L	102	LHG	C18-C19-C20-C21
28	D	408	LHG	C9-C10-C11-C12
32	J	101	STE	C6-C7-C8-C9
32	b	623	STE	C6-C7-C8-C9
22	b	612	CLA	C8-C10-C11-C12
28	D	408	LHG	C29-C30-C31-C32
30	H	102	DGD	C3B-C4B-C5B-C6B
32	t	103	STE	C6-C7-C8-C9
33	B	627	LMG	C23-C24-C25-C26
33	M	101	LMG	C17-C18-C19-C20
32	E	102	STE	C3-C4-C5-C6
22	A	402	CLA	C15-C16-C17-C18
22	C	514	CLA	C13-C15-C16-C17
30	C	517	DGD	C9A-CAA-CBA-CCA

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Mol	Chain	Res	Type	Atoms
32	C	520	STE	C6-C7-C8-C9
22	C	513	CLA	O1A-CGA-O2A-C1
32	a	414	STE	C4-C5-C6-C7
28	A	413	LHG	C32-C33-C34-C35
28	B	622	LHG	C29-C30-C31-C32
32	B	626	STE	C6-C7-C8-C9
33	c	519	LMG	C30-C31-C32-C33
24	c	514	BCR	C10-C11-C12-C13
22	B	607	CLA	C13-C15-C16-C17
29	a	413	SQD	C17-C18-C19-C20
32	J	101	STE	C3-C4-C5-C6
33	c	522	LMG	C33-C34-C35-C36
24	T	101	BCR	C13-C14-C15-C16
22	d	402	CLA	C16-C17-C18-C20
32	T	102	STE	C12-C13-C14-C15
32	b	620	STE	C4-C5-C6-C7
33	D	409	LMG	C15-C16-C17-C18
28	d	409	LHG	C27-C28-C29-C30
33	c	521	LMG	C40-C41-C42-C43
24	C	515	BCR	C11-C10-C9-C8
24	b	619	BCR	C12-C13-C14-C15
24	b	619	BCR	C16-C17-C18-C19
28	a	412	LHG	O6-C4-C5-O7
28	D	408	LHG	C32-C33-C34-C35
32	B	625	STE	C4-C5-C6-C7
29	a	411	SQD	C24-C23-O48-C46
30	h	101	DGD	C5B-C6B-C7B-C8B
32	C	520	STE	C3-C4-C5-C6
29	A	412	SQD	C17-C18-C19-C20
29	a	411	SQD	C10-C11-C12-C13
30	C	519	DGD	C7A-C8A-C9A-CAA
33	C	516	LMG	C31-C32-C33-C34
22	B	609	CLA	C16-C17-C18-C19
28	d	407	LHG	C32-C33-C34-C35
32	B	621	STE	C2-C3-C4-C5
32	t	103	STE	C4-C5-C6-C7
33	Y	101	LMG	C30-C31-C32-C33
33	c	522	LMG	C11-C12-C13-C14
32	B	626	STE	C2-C3-C4-C5
30	H	102	DGD	C5A-C6A-C7A-C8A
30	c	518	DGD	C7B-C8B-C9B-CAB
33	B	627	LMG	C29-C30-C31-C32

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Mol	Chain	Res	Type	Atoms
32	M	104	STE	C15-C16-C17-C18
32	j	101	STE	C3-C4-C5-C6
22	c	508	CLA	C16-C17-C18-C19
32	M	103	STE	C1-C2-C3-C4
29	a	411	SQD	C17-C18-C19-C20
32	M	104	STE	C13-C14-C15-C16
32	d	411	STE	C9-C10-C11-C12
33	c	519	LMG	C32-C33-C34-C35
22	c	505	CLA	C15-C16-C17-C18
30	H	102	DGD	CDB-CEB-CFB-CGB
32	C	521	STE	C3-C4-C5-C6
32	b	624	STE	C13-C14-C15-C16
33	D	407	LMG	C19-C20-C21-C22
32	I	101	STE	C1-C2-C3-C4
28	L	102	LHG	C19-C20-C21-C22
32	T	102	STE	C4-C5-C6-C7
32	a	414	STE	C7-C8-C9-C10
27	A	410	PL9	C29-C31-C32-C33
30	H	102	DGD	C1A-C2A-C3A-C4A
30	C	519	DGD	C3B-C4B-C5B-C6B
32	B	621	STE	C6-C7-C8-C9
22	C	512	CLA	CBD-CGD-O2D-CED
28	a	412	LHG	C8-C7-O7-C5
30	c	517	DGD	CAB-CBB-CCB-CDB
32	b	620	STE	C12-C13-C14-C15
22	B	616	CLA	C3-C5-C6-C7
22	b	601	CLA	C3-C5-C6-C7
24	b	619	BCR	C14-C15-C16-C17
28	l	101	LHG	C35-C36-C37-C38
30	C	517	DGD	CDA-CEA-CFA-CGA
32	H	103	STE	C1-C2-C3-C4
22	c	510	CLA	C4-C3-C5-C6
27	A	410	PL9	C12-C11-C9-C10
28	d	409	LHG	C33-C34-C35-C36
28	B	622	LHG	C27-C28-C29-C30
32	C	521	STE	C6-C7-C8-C9
32	c	520	STE	C9-C10-C11-C12
22	B	603	CLA	C11-C12-C13-C14
22	C	506	CLA	C14-C13-C15-C16
22	C	507	CLA	C6-C7-C8-C9
22	C	511	CLA	C14-C13-C15-C16
22	a	403	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
22	b	602	CLA	C6-C7-C8-C9
22	b	603	CLA	C11-C10-C8-C9
22	b	607	CLA	C11-C10-C8-C9
22	b	612	CLA	C6-C7-C8-C9
22	b	616	CLA	C6-C7-C8-C9
22	c	502	CLA	C11-C12-C13-C14
22	c	506	CLA	C11-C10-C8-C9
22	c	511	CLA	C11-C10-C8-C9
22	c	513	CLA	C11-C12-C13-C14
22	d	403	CLA	C11-C12-C13-C14
22	B	607	CLA	C4B-C3B-CAB-CBB
22	C	505	CLA	C4B-C3B-CAB-CBB
22	b	607	CLA	C4B-C3B-CAB-CBB
30	c	516	DGD	CBA-CCA-CDA-CEA
29	a	411	SQD	C19-C20-C21-C22
22	B	602	CLA	C5-C6-C7-C8
29	f	101	SQD	C35-C36-C37-C38
33	M	101	LMG	C39-C40-C41-C42
22	a	402	CLA	C2C-C3C-CAC-CBC
22	B	602	CLA	C2A-CAA-CBA-CGA
28	l	101	LHG	C17-C18-C19-C20
32	M	102	STE	C11-C10-C9-C8
32	t	102	STE	C2-C3-C4-C5
32	t	104	STE	C10-C11-C12-C13
29	f	101	SQD	C2-C1-O6-C44
29	F	101	SQD	C25-C26-C27-C28
32	M	104	STE	C7-C8-C9-C10
33	c	522	LMG	C20-C21-C22-C23
28	a	412	LHG	O6-C4-C5-C6
29	A	412	SQD	C31-C32-C33-C34
32	B	621	STE	C12-C13-C14-C15
22	c	509	CLA	CAA-CBA-CGA-O2A
22	B	604	CLA	C11-C10-C8-C7
22	B	605	CLA	C11-C12-C13-C15
22	B	605	CLA	C12-C13-C15-C16
22	B	616	CLA	C12-C13-C15-C16
22	C	507	CLA	C6-C7-C8-C10
22	C	507	CLA	C12-C13-C15-C16
22	a	403	CLA	C12-C13-C15-C16
22	b	602	CLA	C6-C7-C8-C10
22	b	609	CLA	C12-C13-C15-C16
22	b	612	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
22	b	614	CLA	C12-C13-C15-C16
22	c	503	CLA	C11-C12-C13-C15
22	c	506	CLA	C6-C7-C8-C10
22	c	507	CLA	C6-C7-C8-C10
22	c	508	CLA	C6-C7-C8-C10
22	c	510	CLA	C12-C13-C15-C16
22	d	403	CLA	C11-C12-C13-C15
22	b	602	CLA	C13-C15-C16-C17
28	A	411	LHG	C9-C10-C11-C12
27	a	410	PL9	C45-C44-C46-C47
29	A	412	SQD	C24-C25-C26-C27
22	b	611	CLA	C2-C3-C5-C6
27	a	410	PL9	C18-C19-C21-C22
32	b	620	STE	C15-C16-C17-C18
33	b	622	LMG	C22-C23-C24-C25
29	A	414	SQD	C16-C17-C18-C19
22	b	614	CLA	CBA-CGA-O2A-C1
30	H	102	DGD	CCA-CDA-CEA-CFA
29	B	623	SQD	C35-C36-C37-C38
24	A	406	BCR	C9-C10-C11-C12
24	k	102	BCR	C19-C20-C21-C22
24	k	103	BCR	C19-C20-C21-C22
22	b	616	CLA	C11-C12-C13-C14
22	c	504	CLA	C11-C12-C13-C15
28	A	413	LHG	C35-C36-C37-C38
22	C	511	CLA	C10-C11-C12-C13
32	I	101	STE	C2-C3-C4-C5
28	L	102	LHG	C13-C14-C15-C16
29	L	101	SQD	C14-C15-C16-C17
29	F	101	SQD	C44-C45-C46-O48
30	C	517	DGD	C3B-C4B-C5B-C6B
32	x	102	STE	C12-C13-C14-C15
33	D	409	LMG	C35-C36-C37-C38
29	A	412	SQD	O6-C44-C45-C46
29	B	623	SQD	O6-C44-C45-C46
33	b	622	LMG	O1-C7-C8-C9
33	c	521	LMG	O1-C7-C8-C9
33	c	522	LMG	C39-C40-C41-C42
28	l	101	LHG	C12-C13-C14-C15
29	A	414	SQD	C7-C8-C9-C10
28	d	407	LHG	C27-C28-C29-C30
32	D	411	STE	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
32	H	103	STE	C11-C12-C13-C14
22	c	510	CLA	CBD-CGD-O2D-CED
22	c	507	CLA	C5-C6-C7-C8
22	c	508	CLA	C5-C6-C7-C8
33	c	521	LMG	C15-C16-C17-C18
30	c	518	DGD	O6D-C5D-C6D-O5D
22	C	507	CLA	C4-C3-C5-C6
22	C	511	CLA	C4-C3-C5-C6
22	b	611	CLA	C4-C3-C5-C6
30	c	518	DGD	C1A-C2A-C3A-C4A
29	A	414	SQD	C14-C15-C16-C17
22	C	507	CLA	C2-C3-C5-C6
22	C	511	CLA	C2-C3-C5-C6
27	d	406	PL9	C28-C29-C31-C32
22	B	615	CLA	C3-C5-C6-C7
33	b	622	LMG	C15-C16-C17-C18
33	D	407	LMG	C11-C12-C13-C14
22	a	403	CLA	C16-C17-C18-C20
22	d	402	CLA	C16-C17-C18-C19
28	l	101	LHG	C9-C10-C11-C12
24	A	406	BCR	C23-C24-C25-C30
24	B	618	BCR	C1-C6-C7-C8
24	B	619	BCR	C23-C24-C25-C30
24	b	617	BCR	C1-C6-C7-C8
24	c	514	BCR	C1-C6-C7-C8
24	c	514	BCR	C23-C24-C25-C30
33	m	101	LMG	C14-C15-C16-C17
28	d	408	LHG	C24-C23-O8-C6
22	B	604	CLA	C8-C10-C11-C12
28	A	411	LHG	C11-C10-C9-C8
29	a	411	SQD	C29-C30-C31-C32
30	C	518	DGD	CDB-CEB-CFB-CGB
33	c	522	LMG	C13-C14-C15-C16
30	A	415	DGD	O2G-C2G-C3G-O3G
33	B	627	LMG	O1-C7-C8-O7
33	b	622	LMG	O1-C7-C8-O7
33	c	521	LMG	O1-C7-C8-O7
33	c	522	LMG	C36-C37-C38-C39
32	d	411	STE	C6-C7-C8-C9
22	d	402	CLA	C3-C5-C6-C7
33	m	101	LMG	O9-C10-O7-C8
32	a	414	STE	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
28	d	407	LHG	C12-C13-C14-C15
30	H	102	DGD	C3A-C4A-C5A-C6A
33	D	409	LMG	C14-C15-C16-C17
33	c	522	LMG	C19-C20-C21-C22
22	D	404	CLA	C16-C17-C18-C19
28	d	409	LHG	C29-C30-C31-C32
28	l	101	LHG	C10-C11-C12-C13
30	C	519	DGD	CCB-CDB-CEB-CFB
30	c	516	DGD	C2A-C3A-C4A-C5A
32	M	104	STE	C2-C3-C4-C5
32	b	626	STE	C12-C13-C14-C15
33	C	516	LMG	C33-C34-C35-C36
29	a	411	SQD	O10-C23-O48-C46
32	b	621	STE	C15-C16-C17-C18
22	B	605	CLA	C14-C13-C15-C16
22	B	614	CLA	C14-C13-C15-C16
32	B	626	STE	C3-C4-C5-C6
32	b	624	STE	C6-C7-C8-C9
22	b	602	CLA	O1D-CGD-O2D-CED
22	B	604	CLA	C5-C6-C7-C8
28	B	622	LHG	C18-C19-C20-C21
33	D	407	LMG	C39-C40-C41-C42
24	C	501	BCR	C6-C7-C8-C9
28	L	102	LHG	C32-C33-C34-C35
32	t	103	STE	C7-C8-C9-C10
22	b	613	CLA	C16-C17-C18-C19
22	c	503	CLA	C16-C17-C18-C19
28	D	408	LHG	C25-C26-C27-C28
27	d	406	PL9	C34-C36-C37-C38
30	c	516	DGD	C8B-C9B-CAB-CBB
32	M	104	STE	C1-C2-C3-C4
33	C	516	LMG	C19-C20-C21-C22
32	b	626	STE	C14-C15-C16-C17
33	D	410	LMG	C37-C38-C39-C40
22	c	503	CLA	C13-C15-C16-C17
22	b	604	CLA	C3-C5-C6-C7
22	C	503	CLA	CBA-CGA-O2A-C1
22	b	601	CLA	CBA-CGA-O2A-C1
24	c	514	BCR	C9-C10-C11-C12
22	a	403	CLA	C16-C17-C18-C19
32	b	621	STE	C3-C4-C5-C6
29	a	411	SQD	C8-C7-O47-C45

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Mol	Chain	Res	Type	Atoms
29	A	414	SQD	C25-C26-C27-C28
34	E	101	HEC	C1A-C2A-CAA-CBA
32	d	411	STE	C12-C13-C14-C15
28	d	407	LHG	C13-C14-C15-C16
28	d	407	LHG	C34-C35-C36-C37
28	d	409	LHG	C32-C33-C34-C35
24	B	619	BCR	C16-C17-C18-C36
24	K	101	BCR	C11-C10-C9-C34
24	Z	101	BCR	C11-C10-C9-C34
24	c	515	BCR	C20-C21-C22-C37
24	d	405	BCR	C11-C10-C9-C34
24	d	405	BCR	C20-C21-C22-C37
24	t	101	BCR	C35-C13-C14-C15
24	x	101	BCR	C20-C21-C22-C37
30	c	518	DGD	C2A-C1A-O1G-C1G
22	D	403	CLA	C13-C15-C16-C17
33	d	410	LMG	C14-C15-C16-C17
22	b	616	CLA	C11-C12-C13-C15
28	d	409	LHG	O10-C23-O8-C6
22	B	606	CLA	C13-C15-C16-C17
22	D	403	CLA	C15-C16-C17-C18
32	E	102	STE	C6-C7-C8-C9
22	B	612	CLA	C11-C12-C13-C15
22	B	614	CLA	C12-C13-C15-C16
22	B	617	CLA	C6-C7-C8-C10
22	a	403	CLA	C11-C10-C8-C7
22	b	614	CLA	C11-C10-C8-C7
22	c	510	CLA	C6-C7-C8-C10
22	c	512	CLA	C6-C7-C8-C10
22	c	512	CLA	C11-C10-C8-C7
30	C	518	DGD	C9B-CAB-CBB-CCB
30	c	517	DGD	C7B-C8B-C9B-CAB
33	D	409	LMG	C16-C17-C18-C19
29	F	101	SQD	O6-C44-C45-C46
24	B	619	BCR	C11-C12-C13-C14
22	D	404	CLA	CBA-CGA-O2A-C1
32	b	626	STE	C6-C7-C8-C9
33	D	407	LMG	C15-C16-C17-C18
29	a	411	SQD	C5-C6-S-O8
30	C	518	DGD	C2G-C3G-O3G-C1D
30	c	517	DGD	C5D-C6D-O5D-C1E
32	D	411	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
22	b	615	CLA	C13-C15-C16-C17
29	f	101	SQD	C33-C34-C35-C36
22	B	612	CLA	C16-C17-C18-C20
22	A	405	CLA	C5-C6-C7-C8
28	B	622	LHG	C24-C25-C26-C27
30	C	518	DGD	CBA-CCA-CDA-CEA
22	c	513	CLA	C4-C3-C5-C6
32	M	102	STE	C4-C5-C6-C7
33	M	101	LMG	C22-C23-C24-C25
32	D	411	STE	C6-C7-C8-C9
30	H	102	DGD	C9B-CAB-CBB-CCB
32	T	102	STE	C11-C10-C9-C8
33	C	516	LMG	C14-C15-C16-C17
22	D	404	CLA	O2A-C1-C2-C3
22	C	514	CLA	C2C-C3C-CAC-CBC
33	B	627	LMG	O10-C28-O8-C9
30	h	101	DGD	C2A-C3A-C4A-C5A
22	b	614	CLA	O1A-CGA-O2A-C1
32	B	625	STE	C11-C10-C9-C8
24	H	101	BCR	C20-C21-C22-C23
24	Z	101	BCR	C16-C17-C18-C19
24	c	515	BCR	C12-C13-C14-C15
32	B	625	STE	C11-C12-C13-C14
30	c	516	DGD	O1B-C1B-O2G-C2G
32	t	104	STE	C13-C14-C15-C16
30	c	517	DGD	O6E-C1E-O5D-C6D
28	a	412	LHG	C4-C5-C6-O8
29	a	411	SQD	C44-C45-C46-O48
30	c	516	DGD	O1G-C1G-C2G-C3G
33	M	101	LMG	C7-C8-C9-O8
32	x	102	STE	C1-C2-C3-C4
22	c	509	CLA	C16-C17-C18-C19
33	D	409	LMG	C37-C38-C39-C40
32	B	626	STE	C11-C12-C13-C14
22	C	506	CLA	C4-C3-C5-C6
32	D	411	STE	C9-C10-C11-C12
22	b	605	CLA	C10-C11-C12-C13
28	a	412	LHG	O7-C5-C6-O8
30	C	517	DGD	O1G-C1G-C2G-O2G
30	c	516	DGD	O1G-C1G-C2G-O2G
33	M	101	LMG	O7-C8-C9-O8
33	Y	101	LMG	O1-C7-C8-O7

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Mol	Chain	Res	Type	Atoms
22	B	617	CLA	C6-C7-C8-C9
22	b	614	CLA	C11-C12-C13-C14
22	b	614	CLA	C14-C13-C15-C16
22	c	506	CLA	C11-C12-C13-C14
22	B	611	CLA	C16-C17-C18-C20
32	Z	102	STE	C13-C14-C15-C16
28	A	411	LHG	C28-C29-C30-C31
32	I	101	STE	C5-C6-C7-C8
22	b	601	CLA	O1A-CGA-O2A-C1
28	A	413	LHG	C7-C8-C9-C10
28	a	412	LHG	C10-C11-C12-C13
29	A	414	SQD	C9-C10-C11-C12
33	b	622	LMG	C17-C18-C19-C20
30	c	517	DGD	C2E-C1E-O5D-C6D
22	B	611	CLA	C16-C17-C18-C19
22	b	613	CLA	C16-C17-C18-C20
28	d	408	LHG	C34-C35-C36-C37
33	m	101	LMG	C13-C14-C15-C16
30	A	415	DGD	CBB-CCB-CDB-CEB
32	b	621	STE	C12-C13-C14-C15
33	C	516	LMG	C34-C35-C36-C37
22	C	510	CLA	C3-C5-C6-C7
22	c	513	CLA	C2-C3-C5-C6
30	C	517	DGD	C7A-C8A-C9A-CAA
28	d	407	LHG	O9-C7-O7-C5
33	d	410	LMG	C40-C41-C42-C43
28	d	408	LHG	C15-C16-C17-C18
32	b	623	STE	C7-C8-C9-C10
22	C	511	CLA	C16-C17-C18-C20
22	C	507	CLA	C15-C16-C17-C18
33	M	101	LMG	C16-C17-C18-C19
29	A	414	SQD	C23-C24-C25-C26
29	L	101	SQD	C7-C8-C9-C10
22	A	405	CLA	C6-C7-C8-C9
33	B	627	LMG	C35-C36-C37-C38
24	T	101	BCR	C18-C19-C20-C21
28	D	408	LHG	C11-C12-C13-C14
22	D	404	CLA	C16-C17-C18-C20
32	b	620	STE	C3-C4-C5-C6
22	B	602	CLA	C4B-C3B-CAB-CBB
33	M	101	LMG	C30-C31-C32-C33
24	K	101	BCR	C22-C23-C24-C25

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Mol	Chain	Res	Type	Atoms
24	x	101	BCR	C9-C10-C11-C12
28	A	411	LHG	C13-C14-C15-C16
28	A	413	LHG	C26-C27-C28-C29
32	b	623	STE	C11-C10-C9-C8
28	A	413	LHG	C19-C20-C21-C22
30	h	101	DGD	C3A-C4A-C5A-C6A
33	D	409	LMG	C11-C12-C13-C14
29	a	411	SQD	C5-C6-S-O9
30	c	517	DGD	C8B-C9B-CAB-CBB
22	B	603	CLA	C6-C7-C8-C10
22	B	608	CLA	C12-C13-C15-C16
22	B	609	CLA	C6-C7-C8-C10
22	C	505	CLA	C11-C10-C8-C7
22	C	506	CLA	C6-C7-C8-C10
22	C	510	CLA	C11-C10-C8-C7
22	C	510	CLA	C11-C12-C13-C15
22	C	513	CLA	C6-C7-C8-C10
22	a	403	CLA	C11-C12-C13-C15
22	b	604	CLA	C6-C7-C8-C10
22	b	605	CLA	C12-C13-C15-C16
22	b	606	CLA	C11-C12-C13-C15
22	b	607	CLA	C11-C12-C13-C15
22	b	608	CLA	C11-C10-C8-C7
22	c	505	CLA	C6-C7-C8-C10
22	c	508	CLA	C12-C13-C15-C16
22	c	512	CLA	C12-C13-C15-C16
23	a	404	PHO	C6-C7-C8-C10
30	C	517	DGD	C8B-C9B-CAB-CBB
30	c	516	DGD	C8A-C9A-CAA-CBA
29	F	101	SQD	C24-C23-O48-C46
32	H	103	STE	C4-C5-C6-C7
28	A	411	LHG	C14-C15-C16-C17
28	d	409	LHG	C2-C3-O3-P
22	c	512	CLA	C3A-C2A-CAA-CBA
22	d	404	CLA	C16-C17-C18-C19
29	B	623	SQD	C11-C12-C13-C14
28	d	408	LHG	O9-C7-O7-C5
34	E	101	HEC	C3A-C2A-CAA-CBA
22	c	509	CLA	C2A-CAA-CBA-CGA
22	C	507	CLA	C14-C13-C15-C16
22	c	506	CLA	C6-C7-C8-C9
22	c	507	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
22	C	503	CLA	O1A-CGA-O2A-C1
33	M	101	LMG	C4-C5-C6-O5
22	B	608	CLA	C15-C16-C17-C18
30	C	518	DGD	C6B-C7B-C8B-C9B
32	I	101	STE	C7-C8-C9-C10
29	F	101	SQD	C31-C32-C33-C34
33	D	409	LMG	C30-C31-C32-C33
33	d	410	LMG	C11-C12-C13-C14
32	t	103	STE	C5-C6-C7-C8
28	A	413	LHG	O7-C5-C6-O8
33	b	622	LMG	O7-C8-C9-O8
33	m	101	LMG	O7-C8-C9-O8
30	C	519	DGD	CCA-CDA-CEA-CFA
30	c	516	DGD	C2E-C1E-O5D-C6D
28	l	101	LHG	C30-C31-C32-C33
22	c	505	CLA	CBD-CGD-O2D-CED
28	A	413	LHG	C4-C5-C6-O8
28	d	408	LHG	C4-C5-C6-O8
30	C	517	DGD	O1G-C1G-C2G-C3G
33	Y	101	LMG	C7-C8-C9-O8
28	d	408	LHG	C10-C11-C12-C13
22	b	616	CLA	C10-C11-C12-C13
22	C	503	CLA	CAD-CBD-CGD-O2D
22	C	505	CLA	CAD-CBD-CGD-O2D
22	b	607	CLA	CAD-CBD-CGD-O2D
22	c	502	CLA	CAD-CBD-CGD-O2D
22	c	504	CLA	CAD-CBD-CGD-O2D
22	c	506	CLA	CAD-CBD-CGD-O2D
22	c	513	CLA	CAD-CBD-CGD-O2D
22	D	404	CLA	O1A-CGA-O2A-C1
28	A	413	LHG	C16-C17-C18-C19
22	D	404	CLA	O1D-CGD-O2D-CED
28	B	622	LHG	C24-C23-O8-C6
22	b	611	CLA	C10-C11-C12-C13
22	b	610	CLA	C16-C17-C18-C20
32	E	102	STE	C7-C8-C9-C10
22	B	615	CLA	C2A-CAA-CBA-CGA
22	C	502	CLA	C2A-CAA-CBA-CGA
22	c	508	CLA	C15-C16-C17-C18
33	m	101	LMG	O6-C5-C6-O5
28	L	102	LHG	C29-C30-C31-C32
28	L	102	LHG	O10-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
29	L	101	SQD	C29-C30-C31-C32
22	C	503	CLA	CAD-CBD-CGD-O1D
22	C	505	CLA	CAD-CBD-CGD-O1D
22	C	510	CLA	CHA-CBD-CGD-O1D
22	C	510	CLA	CHA-CBD-CGD-O2D
22	b	607	CLA	CAD-CBD-CGD-O1D
22	b	616	CLA	CHA-CBD-CGD-O1D
22	b	616	CLA	CHA-CBD-CGD-O2D
22	c	502	CLA	CAD-CBD-CGD-O1D
22	c	506	CLA	CAD-CBD-CGD-O1D
22	c	513	CLA	CAD-CBD-CGD-O1D
23	d	401	PHO	CHA-CBD-CGD-O1D
23	d	401	PHO	CHA-CBD-CGD-O2D
24	b	619	BCR	C9-C10-C11-C12
24	t	101	BCR	C13-C14-C15-C16
28	L	102	LHG	C4-O6-P-O3
28	d	408	LHG	C3-O3-P-O5
30	c	517	DGD	CDA-CEA-CFA-CGA
22	B	602	CLA	C4-C3-C5-C6
22	C	505	CLA	C2B-C3B-CAB-CBB
22	b	607	CLA	C2B-C3B-CAB-CBB
30	C	517	DGD	O1G-C1A-C2A-C3A
22	C	506	CLA	C2-C3-C5-C6
33	c	522	LMG	C29-C30-C31-C32
22	B	603	CLA	C8-C10-C11-C12
24	T	101	BCR	C7-C8-C9-C34
24	b	617	BCR	C7-C8-C9-C34
24	b	617	BCR	C11-C12-C13-C35
24	k	103	BCR	C7-C8-C9-C34
30	A	415	DGD	C6A-C7A-C8A-C9A
30	c	518	DGD	C5A-C6A-C7A-C8A
29	a	411	SQD	C11-C12-C13-C14
29	a	411	SQD	C24-C25-C26-C27
32	b	625	STE	C4-C5-C6-C7
33	C	516	LMG	C39-C40-C41-C42
22	d	403	CLA	C13-C15-C16-C17
30	C	518	DGD	C3B-C4B-C5B-C6B
33	D	409	LMG	C7-C8-O7-C10
33	b	622	LMG	C9-C8-O7-C10
33	m	101	LMG	C33-C34-C35-C36
32	M	103	STE	C7-C8-C9-C10
22	B	612	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
22	C	507	CLA	C16-C17-C18-C20
22	C	510	CLA	C16-C17-C18-C19
22	C	510	CLA	C16-C17-C18-C20
28	l	101	LHG	O6-C4-C5-C6
30	h	101	DGD	C5A-C6A-C7A-C8A
22	C	506	CLA	C6-C7-C8-C9
22	C	510	CLA	C11-C12-C13-C14
22	b	607	CLA	C6-C7-C8-C9
22	b	608	CLA	C11-C10-C8-C9
22	c	512	CLA	C11-C12-C13-C14
22	B	604	CLA	C6-C7-C8-C10
22	c	506	CLA	C11-C12-C13-C15
22	c	509	CLA	C11-C12-C13-C15
33	M	101	LMG	C19-C20-C21-C22
22	C	511	CLA	C16-C17-C18-C19
22	c	507	CLA	C16-C17-C18-C19
33	D	409	LMG	C10-C11-C12-C13
28	B	622	LHG	C19-C20-C21-C22
22	a	402	CLA	C4C-C3C-CAC-CBC
28	l	101	LHG	C28-C29-C30-C31
33	C	516	LMG	C37-C38-C39-C40
30	C	519	DGD	C4B-C5B-C6B-C7B
32	x	102	STE	C9-C10-C11-C12
33	c	521	LMG	O7-C8-C9-O8
33	D	409	LMG	C29-C28-O8-C9
32	B	624	STE	C5-C6-C7-C8
30	h	101	DGD	O2G-C1B-C2B-C3B
32	C	520	STE	C4-C5-C6-C7
22	C	514	CLA	C4C-C3C-CAC-CBC
22	d	402	CLA	C4C-C3C-CAC-CBC
30	c	517	DGD	CCA-CDA-CEA-CFA
22	c	506	CLA	C2C-C3C-CAC-CBC
30	H	102	DGD	CDA-CEA-CFA-CGA
22	C	510	CLA	C2-C1-O2A-CGA
33	c	521	LMG	C34-C35-C36-C37
27	A	410	PL9	C39-C41-C42-C43
22	b	616	CLA	C4C-C3C-CAC-CBC
29	a	413	SQD	C31-C32-C33-C34
24	c	514	BCR	C36-C18-C19-C20
28	A	411	LHG	C16-C17-C18-C19
30	C	517	DGD	C4D-C5D-C6D-O5D
30	C	518	DGD	C5D-C6D-O5D-C1E

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Mol	Chain	Res	Type	Atoms
30	c	517	DGD	C2G-C3G-O3G-C1D
22	B	616	CLA	C10-C11-C12-C13
22	b	609	CLA	O1D-CGD-O2D-CED
24	C	501	BCR	C9-C10-C11-C12
29	A	412	SQD	C12-C13-C14-C15
32	B	624	STE	C3-C4-C5-C6
27	a	410	PL9	C35-C34-C36-C37
29	a	413	SQD	C14-C15-C16-C17
32	H	103	STE	C10-C11-C12-C13
32	C	521	STE	C10-C11-C12-C13
28	d	407	LHG	O1-C1-C2-O2
33	d	410	LMG	C35-C36-C37-C38
22	C	509	CLA	C14-C13-C15-C16
22	a	403	CLA	C14-C13-C15-C16
22	b	606	CLA	C11-C12-C13-C14
22	c	510	CLA	C6-C7-C8-C9
22	c	511	CLA	C11-C12-C13-C14
23	a	404	PHO	C6-C7-C8-C9
29	L	101	SQD	C10-C11-C12-C13
22	b	605	CLA	O1D-CGD-O2D-CED
30	C	517	DGD	O6D-C5D-C6D-O5D
23	a	404	PHO	C2C-C3C-CAC-CBC
22	c	503	CLA	C4B-C3B-CAB-CBB
28	B	622	LHG	C33-C34-C35-C36
29	a	411	SQD	C11-C10-C9-C8
33	b	622	LMG	C30-C31-C32-C33
27	a	410	PL9	C32-C33-C34-C35
32	C	521	STE	C4-C5-C6-C7
22	C	513	CLA	C4-C3-C5-C6
22	c	512	CLA	C4-C3-C5-C6
30	c	517	DGD	CDB-CEB-CFB-CGB
32	B	626	STE	C9-C10-C11-C12
30	H	102	DGD	C4B-C5B-C6B-C7B
22	B	617	CLA	O1A-CGA-O2A-C1
22	c	507	CLA	O1A-CGA-O2A-C1
27	A	410	PL9	C34-C36-C37-C38
22	B	606	CLA	C10-C11-C12-C13
22	c	512	CLA	C15-C16-C17-C18
22	C	508	CLA	C16-C17-C18-C20
28	l	101	LHG	C11-C12-C13-C14
22	B	607	CLA	C12-C13-C15-C16
22	B	612	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	b	607	CLA	C6-C7-C8-C10
22	c	510	CLA	C11-C12-C13-C15
22	d	403	CLA	C12-C13-C15-C16
30	C	517	DGD	CCA-CDA-CEA-CFA
32	C	521	STE	C13-C14-C15-C16
32	H	103	STE	C15-C16-C17-C18
33	c	519	LMG	C29-C28-O8-C9
28	L	102	LHG	C30-C31-C32-C33
32	J	101	STE	C2-C3-C4-C5
32	M	104	STE	C11-C10-C9-C8
33	D	407	LMG	C33-C34-C35-C36
22	c	511	CLA	C16-C17-C18-C20
33	c	521	LMG	C13-C14-C15-C16
33	C	516	LMG	O10-C28-O8-C9
33	Y	101	LMG	O7-C8-C9-O8
32	h	102	STE	C12-C13-C14-C15
33	B	627	LMG	C22-C23-C24-C25
22	B	602	CLA	C2-C3-C5-C6
27	a	410	PL9	C33-C34-C36-C37
30	H	102	DGD	CCB-CDB-CEB-CFB
33	b	622	LMG	C36-C37-C38-C39
22	c	506	CLA	C13-C15-C16-C17
32	M	104	STE	C4-C5-C6-C7
24	k	103	BCR	C20-C21-C22-C37
30	C	518	DGD	O6D-C1D-O3G-C3G
30	C	518	DGD	O1B-C1B-O2G-C2G
32	M	102	STE	C9-C10-C11-C12
33	c	521	LMG	C39-C40-C41-C42
34	v	201	HEC	CAD-CBD-CGD-O1D
32	t	102	STE	C3-C4-C5-C6
22	B	614	CLA	C2-C1-O2A-CGA
22	d	402	CLA	C2-C1-O2A-CGA
24	T	101	BCR	C9-C10-C11-C12
32	C	522	STE	C6-C7-C8-C9
22	b	614	CLA	C13-C15-C16-C17
22	c	506	CLA	C10-C11-C12-C13
28	A	411	LHG	C2-C3-O3-P
32	B	624	STE	O2-C1-C2-C3
28	d	408	LHG	C31-C32-C33-C34
29	f	101	SQD	C29-C30-C31-C32
33	D	407	LMG	C38-C39-C40-C41
28	B	622	LHG	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
30	A	415	DGD	C4E-C5E-C6E-O5E
33	B	627	LMG	C21-C22-C23-C24
22	b	610	CLA	C15-C16-C17-C18
22	c	508	CLA	C4-C3-C5-C6
27	a	410	PL9	C40-C39-C41-C42
22	c	512	CLA	C2-C3-C5-C6
30	H	102	DGD	O1B-C1B-C2B-C3B
28	d	409	LHG	C4-C5-C6-O8
22	B	604	CLA	O1D-CGD-O2D-CED
32	B	624	STE	O1-C1-C2-C3
32	D	411	STE	O1-C1-C2-C3
22	B	602	CLA	C14-C13-C15-C16
22	B	604	CLA	C6-C7-C8-C9
22	B	615	CLA	C6-C7-C8-C9
22	C	505	CLA	C11-C10-C8-C9
22	C	508	CLA	C11-C10-C8-C9
22	C	508	CLA	C11-C12-C13-C14
22	D	403	CLA	C14-C13-C15-C16
22	b	601	CLA	C14-C13-C15-C16
22	b	603	CLA	C14-C13-C15-C16
22	b	612	CLA	C14-C13-C15-C16
22	C	508	CLA	C16-C17-C18-C19
32	t	104	STE	C5-C6-C7-C8
22	b	601	CLA	C10-C11-C12-C13
22	C	502	CLA	CBA-CGA-O2A-C1
29	B	623	SQD	C44-C45-O47-C7
33	B	627	LMG	C9-C8-O7-C10
29	A	414	SQD	C30-C31-C32-C33
30	C	518	DGD	C5A-C6A-C7A-C8A
32	T	102	STE	C7-C8-C9-C10
33	D	410	LMG	C12-C13-C14-C15
22	c	509	CLA	C16-C17-C18-C20
32	x	102	STE	C13-C14-C15-C16
22	C	513	CLA	C2-C3-C5-C6
22	c	508	CLA	C2-C3-C5-C6
30	C	519	DGD	C4A-C5A-C6A-C7A
22	C	502	CLA	O1A-CGA-O2A-C1
34	v	201	HEC	CAD-CBD-CGD-O2D
32	H	103	STE	C12-C13-C14-C15
22	d	403	CLA	C1A-C2A-CAA-CBA
28	L	102	LHG	C15-C16-C17-C18
22	c	511	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
22	d	403	CLA	C16-C17-C18-C19
28	l	101	LHG	O6-C4-C5-O7
30	A	415	DGD	CEB-CFB-CGB-CHB
22	B	602	CLA	C2B-C3B-CAB-CBB
22	B	607	CLA	C2B-C3B-CAB-CBB
22	c	503	CLA	C2B-C3B-CAB-CBB
22	c	507	CLA	C2B-C3B-CAB-CBB
24	A	406	BCR	C23-C24-C25-C26
24	K	101	BCR	C23-C24-C25-C30
24	b	617	BCR	C5-C6-C7-C8
24	c	514	BCR	C5-C6-C7-C8
24	c	514	BCR	C23-C24-C25-C26
24	d	405	BCR	C23-C24-C25-C26
24	d	405	BCR	C23-C24-C25-C30
32	D	411	STE	O2-C1-C2-C3
32	b	626	STE	O1-C1-C2-C3
28	A	413	LHG	C28-C29-C30-C31
32	b	621	STE	C11-C10-C9-C8
28	a	412	LHG	C2-C3-O3-P
33	Y	101	LMG	C38-C39-C40-C41
30	h	101	DGD	C7A-C8A-C9A-CAA
32	c	520	STE	O1-C1-C2-C3
22	a	405	CLA	C4-C3-C5-C6
32	b	625	STE	C5-C6-C7-C8
22	a	405	CLA	C2-C3-C5-C6
22	c	507	CLA	CBA-CGA-O2A-C1
33	D	410	LMG	O9-C10-C11-C12
22	B	604	CLA	C12-C13-C15-C16
22	C	513	CLA	C11-C12-C13-C15
22	D	402	CLA	C12-C13-C15-C16
22	b	606	CLA	C6-C7-C8-C10
22	b	612	CLA	C12-C13-C15-C16
22	c	503	CLA	C11-C10-C8-C7
22	c	512	CLA	C11-C12-C13-C15
32	J	101	STE	O1-C1-C2-C3
32	J	101	STE	O2-C1-C2-C3
29	L	101	SQD	C26-C27-C28-C29
33	d	410	LMG	C29-C30-C31-C32
32	M	104	STE	C10-C11-C12-C13
28	d	408	LHG	C25-C26-C27-C28
32	M	102	STE	O1-C1-C2-C3
34	V	201	HEC	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
28	A	411	LHG	C31-C32-C33-C34
27	A	410	PL9	C30-C29-C31-C32
27	A	410	PL9	C12-C11-C9-C8
22	c	512	CLA	C5-C6-C7-C8
22	b	601	CLA	C16-C17-C18-C20
22	B	605	CLA	C10-C11-C12-C13
22	c	503	CLA	C15-C16-C17-C18
22	c	510	CLA	O1D-CGD-O2D-CED
28	A	411	LHG	C26-C27-C28-C29
32	B	626	STE	C10-C11-C12-C13
22	b	601	CLA	C8-C10-C11-C12
22	b	608	CLA	C16-C17-C18-C19
28	a	412	LHG	C28-C29-C30-C31
27	D	406	PL9	C45-C44-C46-C47
34	V	201	HEC	CAD-CBD-CGD-O1D
30	A	415	DGD	CDB-CEB-CFB-CGB
32	b	626	STE	O2-C1-C2-C3
22	c	504	CLA	C8-C10-C11-C12
27	A	410	PL9	C7-C8-C9-C11
32	b	623	STE	C2-C3-C4-C5
33	b	622	LMG	C34-C35-C36-C37
33	B	627	LMG	C42-C43-C44-C45
32	c	520	STE	O2-C1-C2-C3
30	h	101	DGD	O1A-C1A-O1G-C1G
22	c	512	CLA	C2A-CAA-CBA-CGA
33	B	627	LMG	C30-C31-C32-C33
28	d	408	LHG	O1-C1-C2-O2
28	A	411	LHG	O6-C4-C5-O7
22	D	404	CLA	C4-C3-C5-C6
29	B	623	SQD	C10-C11-C12-C13
33	D	410	LMG	O7-C10-C11-C12
30	H	102	DGD	O2G-C1B-C2B-C3B
30	A	415	DGD	C6B-C7B-C8B-C9B
33	B	627	LMG	C18-C19-C20-C21
30	A	415	DGD	O1A-C1A-O1G-C1G
22	B	603	CLA	C15-C16-C17-C18
22	c	505	CLA	O1D-CGD-O2D-CED
32	M	102	STE	O2-C1-C2-C3
23	D	401	PHO	CHA-CBD-CGD-O2D
23	a	404	PHO	CHA-CBD-CGD-O1D
24	A	406	BCR	C20-C21-C22-C37
24	B	619	BCR	C35-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
24	K	101	BCR	C35-C13-C14-C15
22	B	612	CLA	C13-C15-C16-C17
30	c	518	DGD	CBA-CCA-CDA-CEA
28	l	101	LHG	C13-C14-C15-C16
33	b	622	LMG	C14-C15-C16-C17
28	l	101	LHG	C34-C35-C36-C37
29	f	101	SQD	C27-C28-C29-C30
32	B	621	STE	C7-C8-C9-C10
33	b	622	LMG	C24-C25-C26-C27
22	B	610	CLA	C4-C3-C5-C6
28	L	102	LHG	C11-C12-C13-C14
22	c	504	CLA	C10-C11-C12-C13
33	D	410	LMG	C36-C37-C38-C39
33	c	519	LMG	C40-C41-C42-C43
32	J	101	STE	C4-C5-C6-C7
24	t	101	BCR	C9-C10-C11-C12
28	d	409	LHG	C23-C24-C25-C26
30	c	517	DGD	C9A-CAA-CBA-CCA
22	B	615	CLA	C11-C10-C8-C9
22	C	514	CLA	C6-C7-C8-C9
22	b	602	CLA	C11-C12-C13-C14
22	b	602	CLA	C14-C13-C15-C16
22	b	605	CLA	C14-C13-C15-C16
22	c	505	CLA	C6-C7-C8-C9
23	D	401	PHO	C14-C13-C15-C16
28	A	411	LHG	C35-C36-C37-C38
30	C	517	DGD	C5D-C6D-O5D-C1E
32	L	103	STE	C6-C7-C8-C9
33	B	627	LMG	C11-C12-C13-C14
32	t	104	STE	O2-C1-C2-C3
22	B	616	CLA	O1A-CGA-O2A-C1
29	a	413	SQD	C9-C10-C11-C12
22	C	507	CLA	C16-C17-C18-C19
22	c	507	CLA	C16-C17-C18-C20
32	B	626	STE	C7-C8-C9-C10
22	B	606	CLA	C8-C10-C11-C12
22	B	613	CLA	CBA-CGA-O2A-C1
30	c	516	DGD	O1G-C1A-C2A-C3A
22	B	613	CLA	O1A-CGA-O2A-C1
28	A	411	LHG	C23-C24-C25-C26
22	c	511	CLA	CBA-CGA-O2A-C1
29	B	623	SQD	C46-C45-O47-C7

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Mol	Chain	Res	Type	Atoms
33	C	516	LMG	C7-C8-O7-C10
32	L	103	STE	C3-C4-C5-C6
32	E	102	STE	O2-C1-C2-C3
22	B	614	CLA	C16-C17-C18-C19
30	C	519	DGD	O6D-C5D-C6D-O5D
22	b	616	CLA	C2C-C3C-CAC-CBC
32	Z	102	STE	C14-C15-C16-C17
22	c	513	CLA	C2C-C3C-CAC-CBC
29	B	623	SQD	C24-C25-C26-C27
22	c	508	CLA	C10-C11-C12-C13
30	c	518	DGD	CDA-CEA-CFA-CGA
22	C	508	CLA	C5-C6-C7-C8
23	D	401	PHO	C2C-C3C-CAC-CBC
30	A	415	DGD	CFA-CGA-CHA-CIA
32	x	102	STE	C15-C16-C17-C18
32	h	102	STE	C10-C11-C12-C13
30	C	519	DGD	C2A-C1A-O1G-C1G
30	H	102	DGD	C9A-CAA-CBA-CCA
32	t	104	STE	O1-C1-C2-C3
24	C	501	BCR	C14-C15-C16-C17
22	B	609	CLA	C6-C7-C8-C9
22	C	512	CLA	C11-C10-C8-C9
22	a	403	CLA	C6-C7-C8-C9
22	b	607	CLA	C11-C12-C13-C14
22	b	610	CLA	C14-C13-C15-C16
22	b	614	CLA	C11-C10-C8-C9
22	c	503	CLA	C11-C10-C8-C9
22	c	512	CLA	C14-C13-C15-C16
32	k	101	STE	C7-C8-C9-C10
28	l	101	LHG	O7-C7-C8-C9
22	c	509	CLA	CAA-CBA-CGA-O1A
28	A	411	LHG	O6-C4-C5-C6
24	k	102	BCR	C21-C22-C23-C24
27	d	406	PL9	C15-C14-C16-C17
32	C	522	STE	C5-C6-C7-C8
22	b	601	CLA	C2A-CAA-CBA-CGA
22	B	602	CLA	C11-C10-C8-C7
22	B	604	CLA	C11-C12-C13-C15
22	C	504	CLA	C11-C10-C8-C7
22	C	513	CLA	C12-C13-C15-C16
22	D	402	CLA	C6-C7-C8-C10
22	a	405	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	b	602	CLA	C12-C13-C15-C16
22	b	603	CLA	C6-C7-C8-C10
22	c	508	CLA	C11-C10-C8-C7
22	c	511	CLA	C11-C12-C13-C15
22	c	511	CLA	C12-C13-C15-C16
23	D	401	PHO	C12-C13-C15-C16
24	B	618	BCR	C5-C6-C7-C8
24	B	619	BCR	C23-C24-C25-C26
29	B	623	SQD	C9-C10-C11-C12
33	B	627	LMG	C13-C14-C15-C16
22	B	602	CLA	C2-C1-O2A-CGA
22	C	513	CLA	C2-C1-O2A-CGA
33	d	410	LMG	O7-C10-C11-C12
22	B	616	CLA	CBA-CGA-O2A-C1
22	B	614	CLA	C16-C17-C18-C20
32	L	103	STE	C4-C5-C6-C7
27	D	406	PL9	C28-C29-C31-C32
28	A	413	LHG	C18-C19-C20-C21
22	B	604	CLA	C2A-CAA-CBA-CGA
22	c	501	CLA	C2A-CAA-CBA-CGA
33	B	627	LMG	C11-C10-O7-C8
33	d	410	LMG	C39-C40-C41-C42
33	m	101	LMG	O8-C28-C29-C30
28	L	102	LHG	C34-C35-C36-C37
27	A	410	PL9	C4-C3-C7-C8
32	I	101	STE	C10-C11-C12-C13
22	B	614	CLA	CAA-CBA-CGA-O2A
28	a	412	LHG	O8-C23-C24-C25
29	a	411	SQD	O47-C7-C8-C9
22	c	511	CLA	O1A-CGA-O2A-C1
22	C	510	CLA	C10-C11-C12-C13
29	f	101	SQD	C30-C31-C32-C33
22	C	513	CLA	C13-C15-C16-C17
22	b	605	CLA	C8-C10-C11-C12
29	L	101	SQD	C9-C10-C11-C12
23	a	404	PHO	C14-C13-C15-C16
29	A	412	SQD	O47-C7-C8-C9
33	m	101	LMG	C15-C16-C17-C18
28	a	412	LHG	C19-C20-C21-C22
32	T	102	STE	C5-C6-C7-C8
22	B	611	CLA	C4B-C3B-CAB-CBB
29	A	412	SQD	O47-C45-C46-O48

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Mol	Chain	Res	Type	Atoms
27	A	410	PL9	C46-C47-C48-C49
32	E	102	STE	O1-C1-C2-C3
24	A	406	BCR	C17-C18-C19-C20
22	b	613	CLA	C13-C15-C16-C17
32	t	102	STE	O2-C1-C2-C3
22	b	614	CLA	C2A-CAA-CBA-CGA
22	d	403	CLA	C4C-C3C-CAC-CBC
32	d	411	STE	C11-C10-C9-C8
27	d	406	PL9	C27-C28-C29-C30
22	B	613	CLA	CAA-CBA-CGA-O2A
32	B	625	STE	C14-C15-C16-C17
22	D	402	CLA	C2-C1-O2A-CGA
22	B	614	CLA	C11-C12-C13-C15
22	B	616	CLA	C11-C12-C13-C15
22	b	601	CLA	C6-C7-C8-C10
22	b	605	CLA	C11-C10-C8-C7
22	d	403	CLA	C16-C17-C18-C20
22	b	601	CLA	O2A-C1-C2-C3
33	C	516	LMG	C9-C8-O7-C10
28	L	102	LHG	C9-C10-C11-C12
27	a	410	PL9	C29-C31-C32-C33
23	d	401	PHO	C3A-C2A-CAA-CBA
32	D	411	STE	C2-C3-C4-C5
22	C	513	CLA	C16-C17-C18-C19
22	b	612	CLA	CAA-CBA-CGA-O2A
24	T	101	BCR	C12-C13-C14-C15
24	x	101	BCR	C11-C10-C9-C8
32	t	102	STE	O1-C1-C2-C3
32	b	621	STE	C5-C6-C7-C8
22	a	403	CLA	C11-C12-C13-C14
22	b	601	CLA	C6-C7-C8-C9
22	c	508	CLA	C14-C13-C15-C16
22	c	512	CLA	C11-C10-C8-C9
22	d	404	CLA	C6-C7-C8-C9
28	a	412	LHG	O10-C23-C24-C25
28	d	409	LHG	O10-C23-C24-C25
29	a	413	SQD	O10-C23-C24-C25
30	C	517	DGD	O1B-C1B-C2B-C3B
22	B	610	CLA	C2-C3-C5-C6
22	b	612	CLA	C10-C11-C12-C13
29	B	623	SQD	O5-C5-C6-S
28	l	101	LHG	O10-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
29	B	623	SQD	O10-C23-O48-C46
32	b	624	STE	O2-C1-C2-C3
29	A	414	SQD	C44-C45-O47-C7
24	b	619	BCR	C21-C22-C23-C24
32	x	102	STE	C7-C8-C9-C10
23	a	404	PHO	C5-C6-C7-C8
28	d	408	LHG	O7-C5-C6-O8
28	A	411	LHG	C29-C30-C31-C32
29	f	101	SQD	C32-C33-C34-C35
32	C	520	STE	C7-C8-C9-C10
22	B	614	CLA	CAA-CBA-CGA-O1A
22	c	508	CLA	CBD-CGD-O2D-CED
30	c	516	DGD	C1G-C2G-C3G-O3G
30	h	101	DGD	C1G-C2G-C3G-O3G
22	B	613	CLA	CAA-CBA-CGA-O1A
32	b	626	STE	C9-C10-C11-C12
22	c	512	CLA	CAD-CBD-CGD-O2D
22	d	404	CLA	CAD-CBD-CGD-O2D
30	C	517	DGD	O2G-C1B-C2B-C3B
32	x	102	STE	O2-C1-C2-C3
33	B	627	LMG	C34-C35-C36-C37
22	B	611	CLA	C8-C10-C11-C12
22	A	402	CLA	C2-C1-O2A-CGA
22	b	615	CLA	C2-C1-O2A-CGA
33	d	410	LMG	C30-C31-C32-C33
28	d	407	LHG	C18-C19-C20-C21
34	e	101	HEC	CAD-CBD-CGD-O2D
22	c	502	CLA	C4C-C3C-CAC-CBC
28	L	102	LHG	O7-C7-C8-C9
33	m	101	LMG	C12-C13-C14-C15
32	b	624	STE	O1-C1-C2-C3
22	B	602	CLA	CAA-CBA-CGA-O2A
33	B	627	LMG	O8-C28-C29-C30
22	b	612	CLA	CAA-CBA-CGA-O1A

There are no ring outliers.

115 monomers are involved in 190 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	b	606	CLA	3	0
32	a	414	STE	2	0
22	C	513	CLA	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	a	404	PHO	3	0
22	C	503	CLA	3	0
22	D	402	CLA	3	0
24	k	102	BCR	1	0
22	c	509	CLA	2	0
32	B	621	STE	1	0
22	b	609	CLA	3	0
34	E	101	HEC	6	0
22	c	513	CLA	1	0
33	b	622	LMG	4	0
29	a	413	SQD	1	0
28	B	622	LHG	3	0
28	l	101	LHG	1	0
22	c	505	CLA	1	0
24	A	406	BCR	1	0
22	b	605	CLA	3	0
24	B	620	BCR	1	0
24	d	405	BCR	3	0
22	c	501	CLA	2	0
22	B	605	CLA	4	0
30	C	518	DGD	2	0
22	C	512	CLA	2	0
32	b	624	STE	1	0
22	b	603	CLA	1	0
24	H	101	BCR	4	0
33	Y	101	LMG	1	0
33	B	627	LMG	1	0
22	B	616	CLA	4	0
22	B	607	CLA	1	0
34	V	201	HEC	5	0
23	D	401	PHO	2	0
24	K	101	BCR	1	0
24	b	619	BCR	1	0
32	M	104	STE	1	0
22	B	617	CLA	1	0
27	D	406	PL9	1	0
22	C	510	CLA	2	0
22	b	602	CLA	2	0
33	C	516	LMG	1	0
22	b	615	CLA	2	0
24	x	101	BCR	1	0
27	A	410	PL9	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	D	403	CLA	2	0
22	b	610	CLA	1	0
24	B	618	BCR	1	0
22	c	512	CLA	1	0
22	c	508	CLA	4	0
29	L	101	SQD	1	0
22	B	602	CLA	1	0
22	d	402	CLA	1	0
22	B	610	CLA	1	0
28	d	408	LHG	2	0
22	b	607	CLA	1	0
22	B	604	CLA	1	0
24	k	103	BCR	1	0
32	b	623	STE	1	0
32	H	103	STE	1	0
22	B	613	CLA	1	0
24	Z	101	BCR	3	0
29	a	411	SQD	1	0
33	D	409	LMG	2	0
30	c	517	DGD	1	0
24	B	619	BCR	4	0
24	a	406	BCR	1	0
22	C	506	CLA	1	0
22	b	616	CLA	1	0
30	c	518	DGD	1	0
24	t	101	BCR	4	0
24	C	515	BCR	3	0
22	B	612	CLA	1	0
23	d	401	PHO	4	0
30	C	519	DGD	1	0
22	c	504	CLA	1	0
27	d	406	PL9	1	0
28	L	102	LHG	1	0
22	A	403	CLA	1	0
28	D	408	LHG	1	0
32	J	101	STE	1	0
32	D	411	STE	1	0
22	c	506	CLA	1	0
22	a	402	CLA	1	0
24	b	618	BCR	3	0
33	D	407	LMG	2	0
22	c	503	CLA	2	0

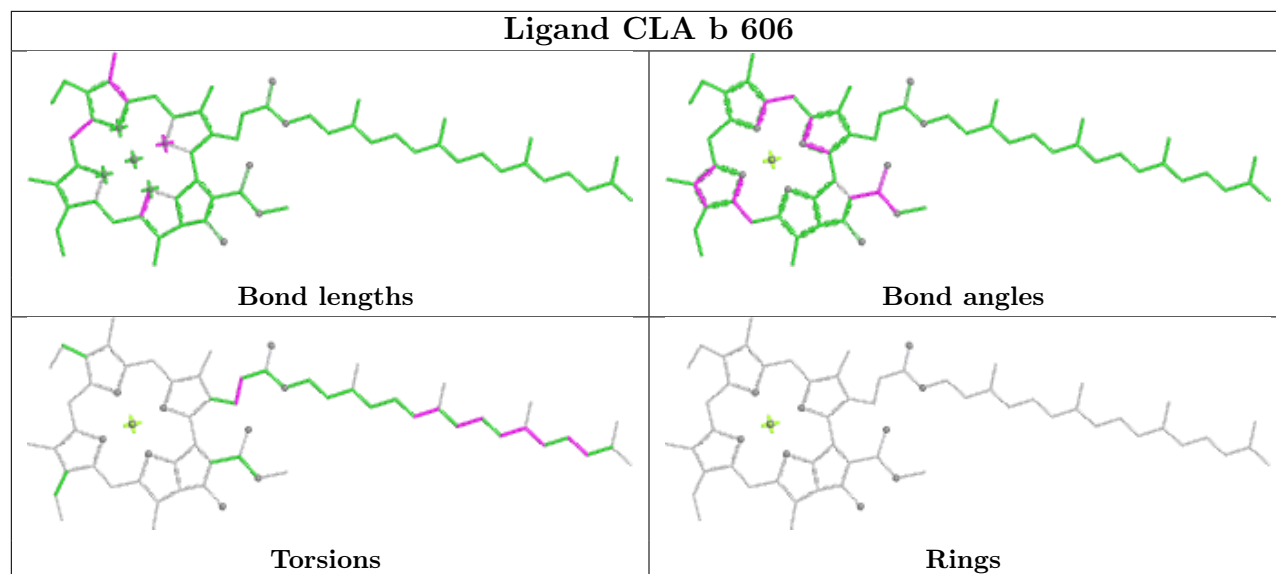
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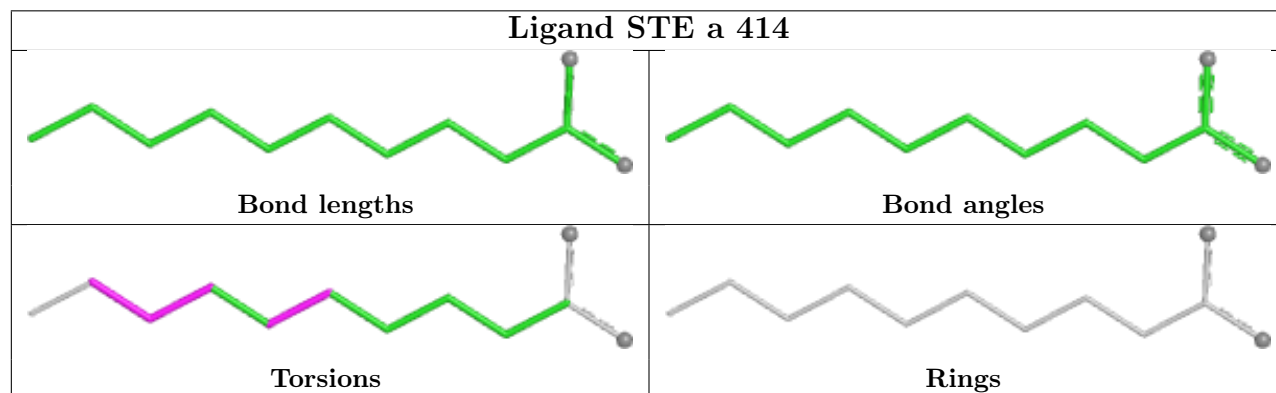
Mol	Chain	Res	Type	Clashes	Symm-Clashes
27	a	410	PL9	1	0
28	A	413	LHG	1	0
22	b	604	CLA	3	0
22	a	403	CLA	1	0
29	A	412	SQD	1	0
22	c	507	CLA	2	0
24	c	515	BCR	4	0
24	T	101	BCR	1	0
24	D	405	BCR	3	0
22	A	402	CLA	3	0
30	A	415	DGD	4	0
22	C	509	CLA	1	0
32	x	102	STE	1	0
31	a	415	OEX	1	0
34	v	201	HEC	2	0
22	B	606	CLA	3	0
22	c	511	CLA	3	0
22	D	404	CLA	1	0
22	B	608	CLA	1	0
22	c	510	CLA	5	0
32	I	101	STE	2	0
22	B	603	CLA	1	0
22	a	405	CLA	1	0
34	e	101	HEC	7	0
28	d	407	LHG	2	0
24	b	617	BCR	1	0
22	B	614	CLA	2	0
32	b	625	STE	1	0

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

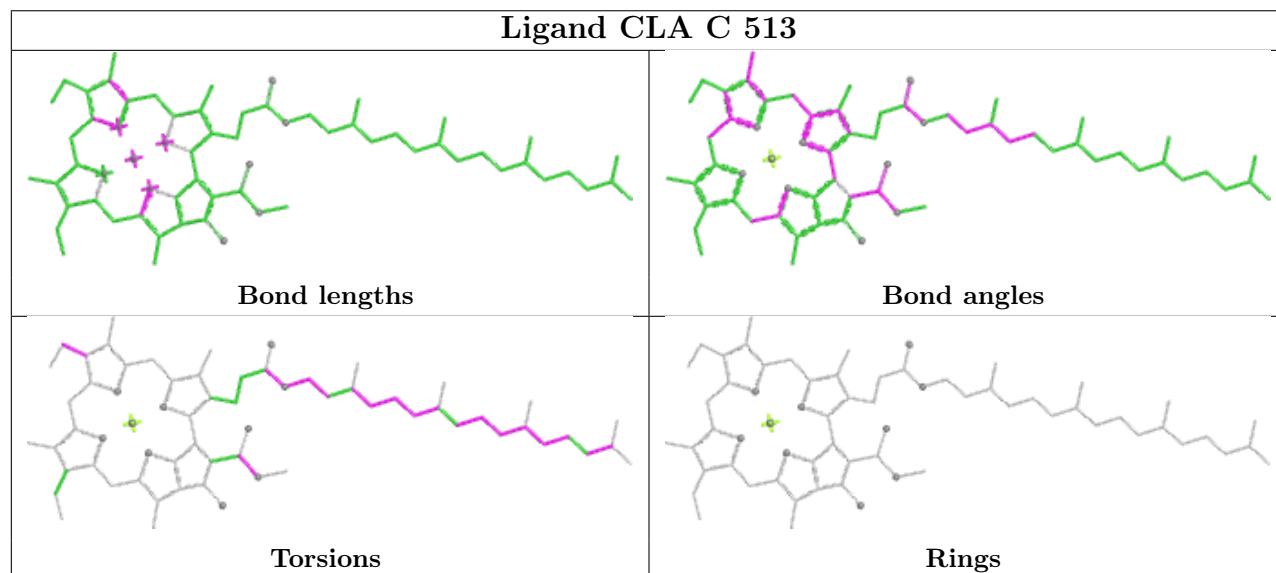
Ligand CLA b 606

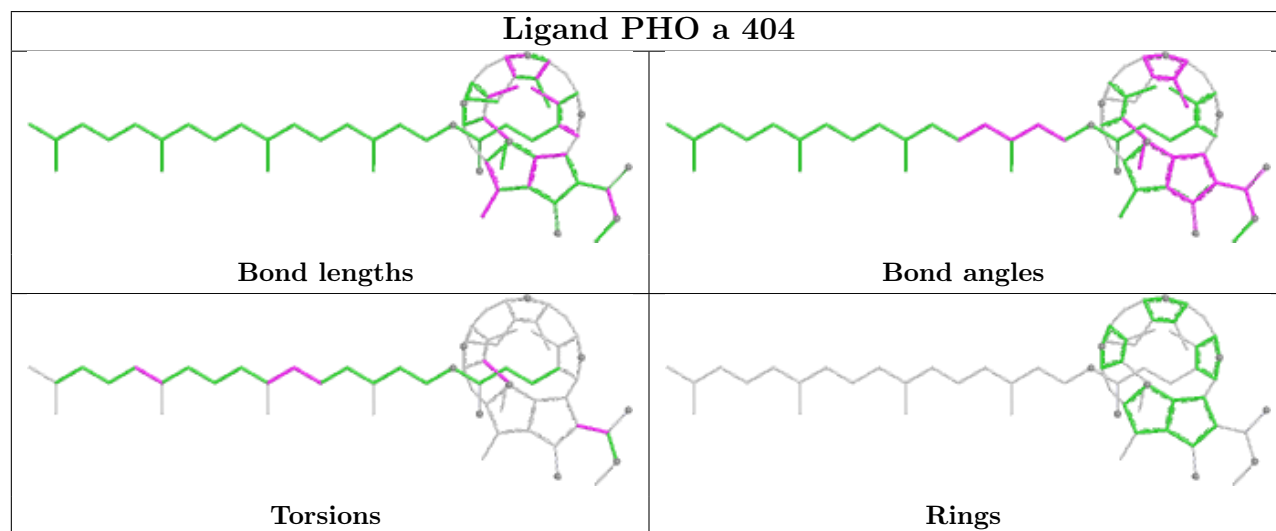
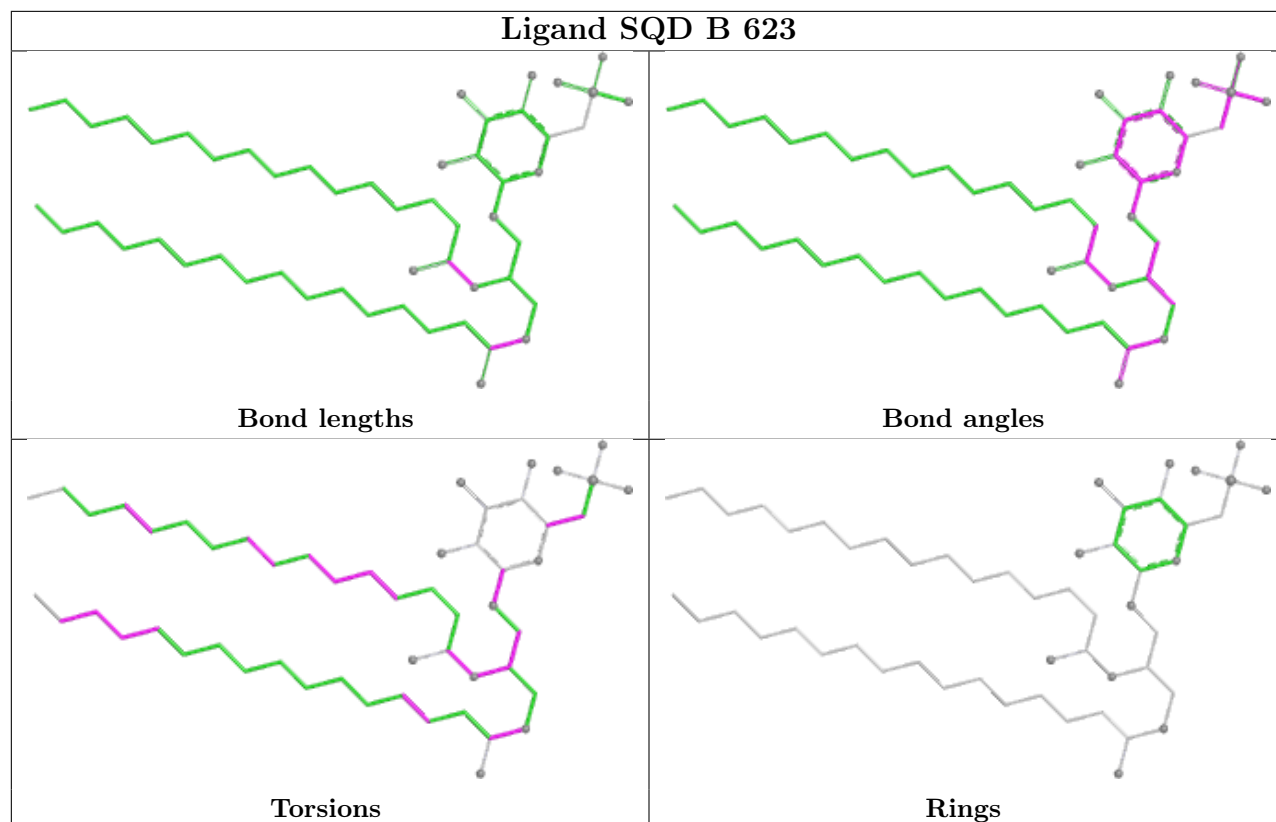


Ligand STE a 414

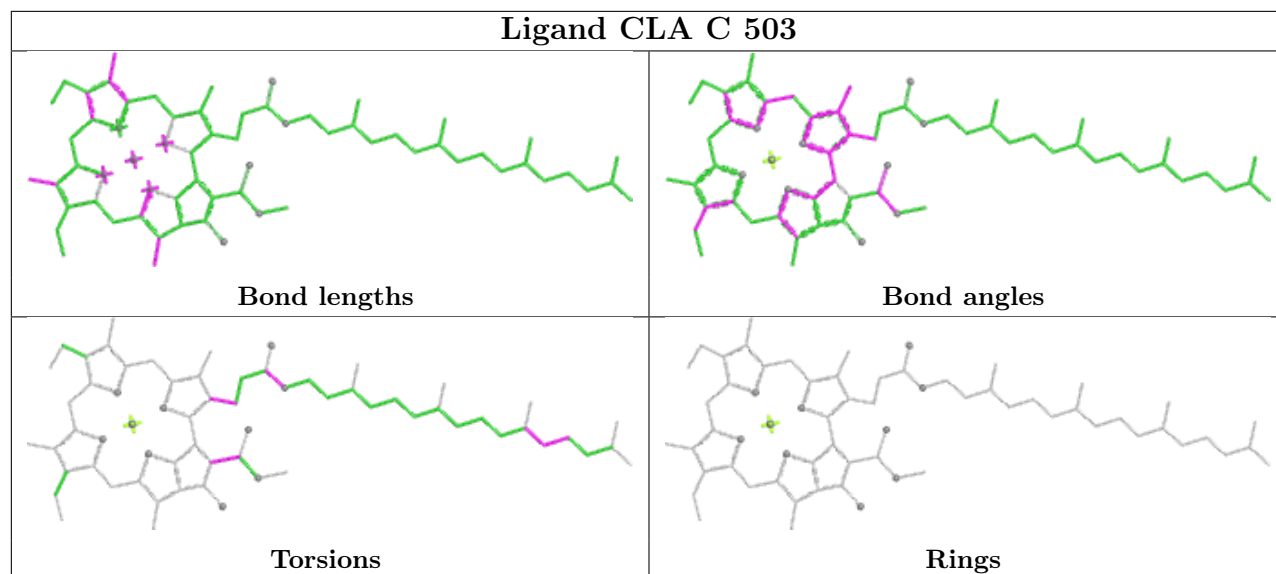


Ligand CLA C 513

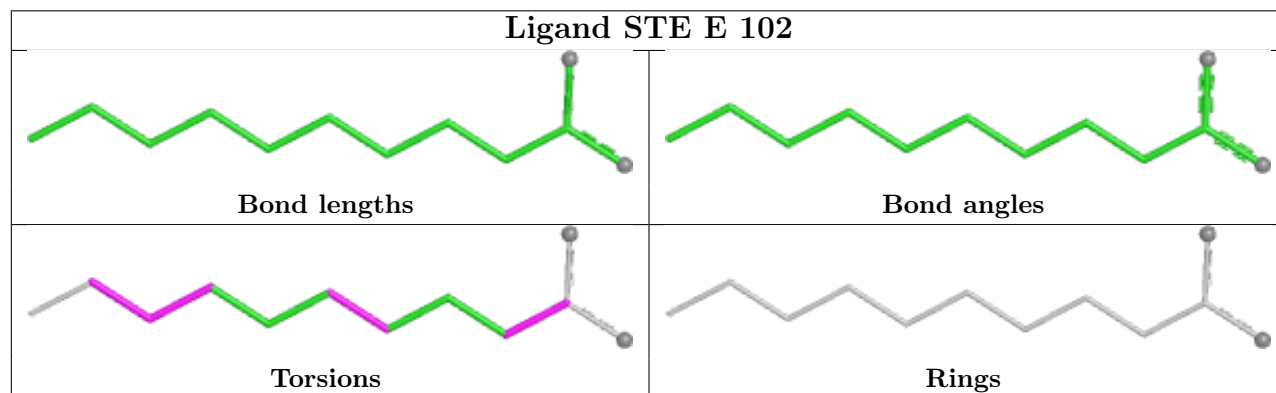




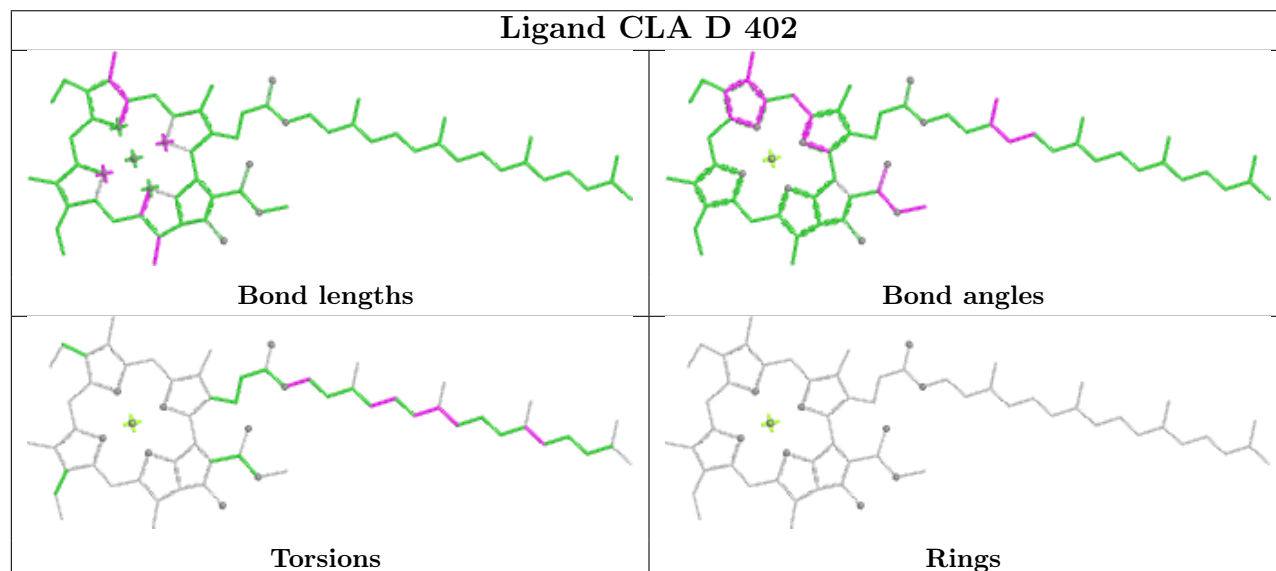
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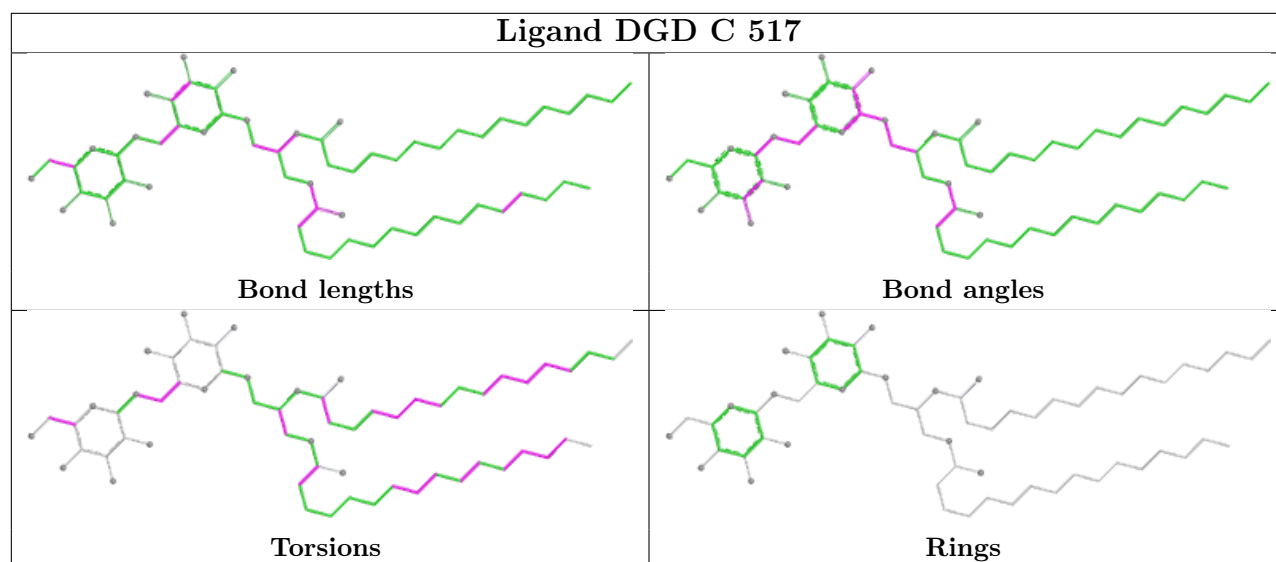
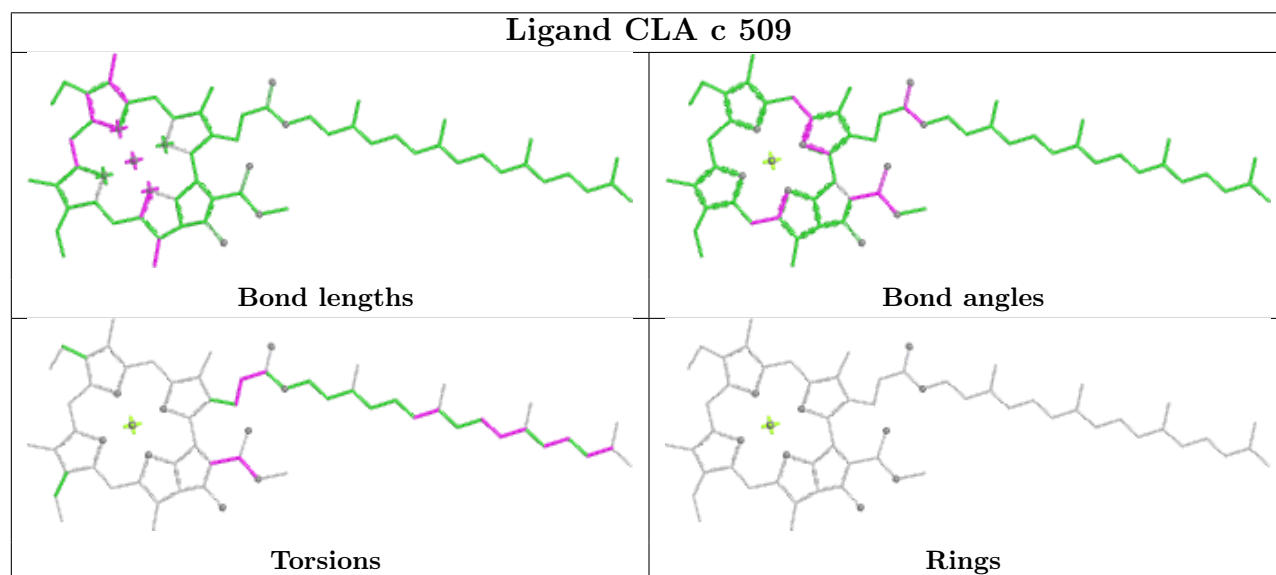
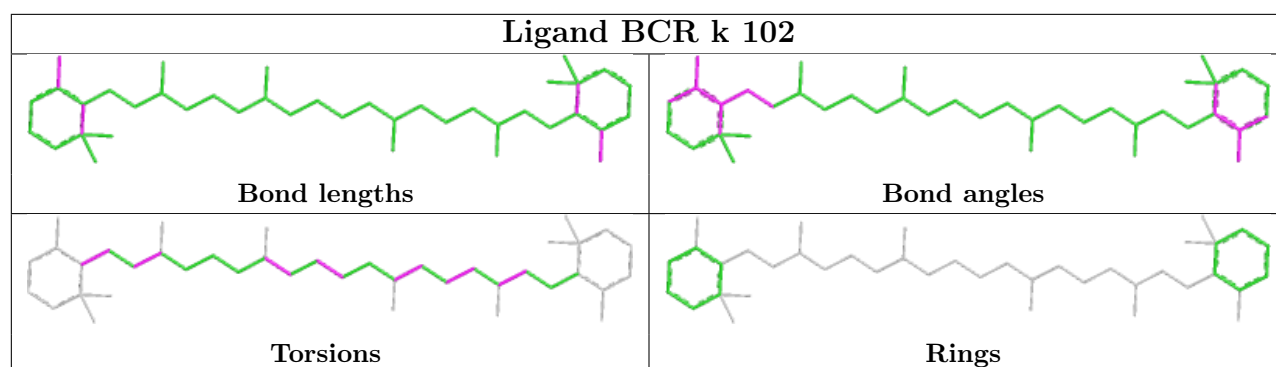


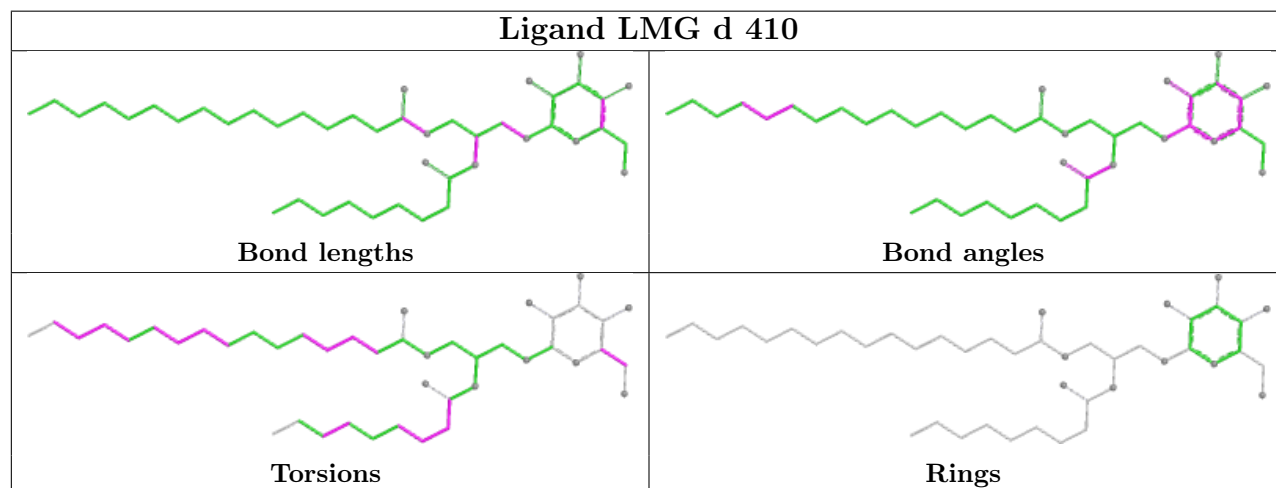
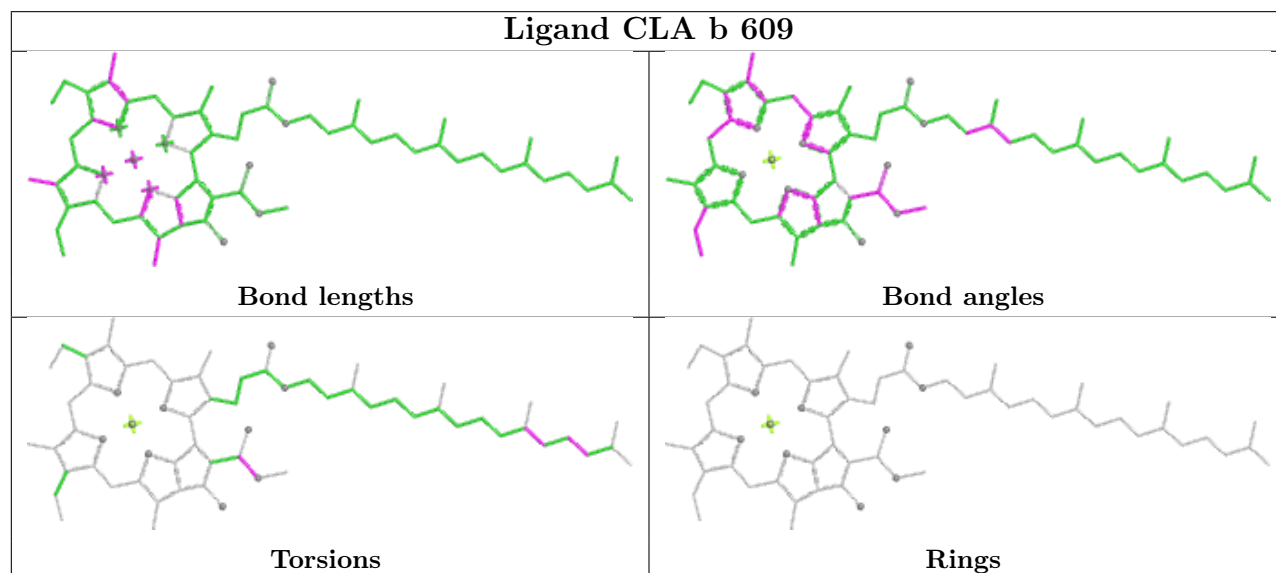
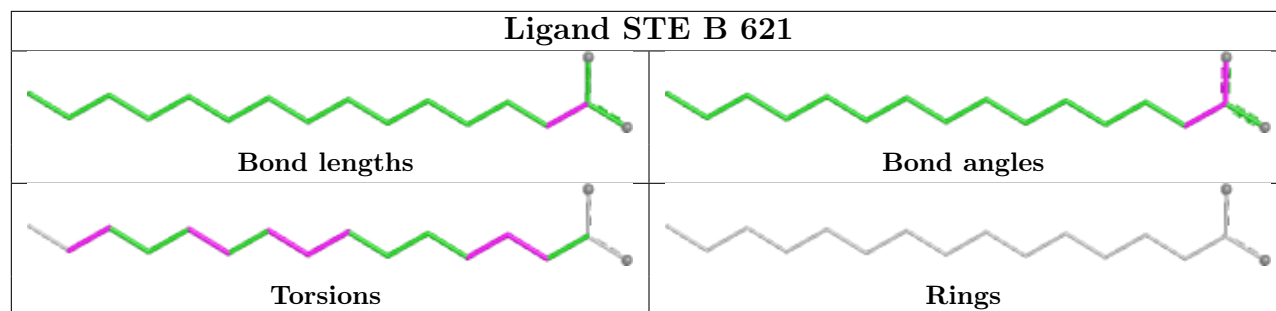
Ligand STE E 102



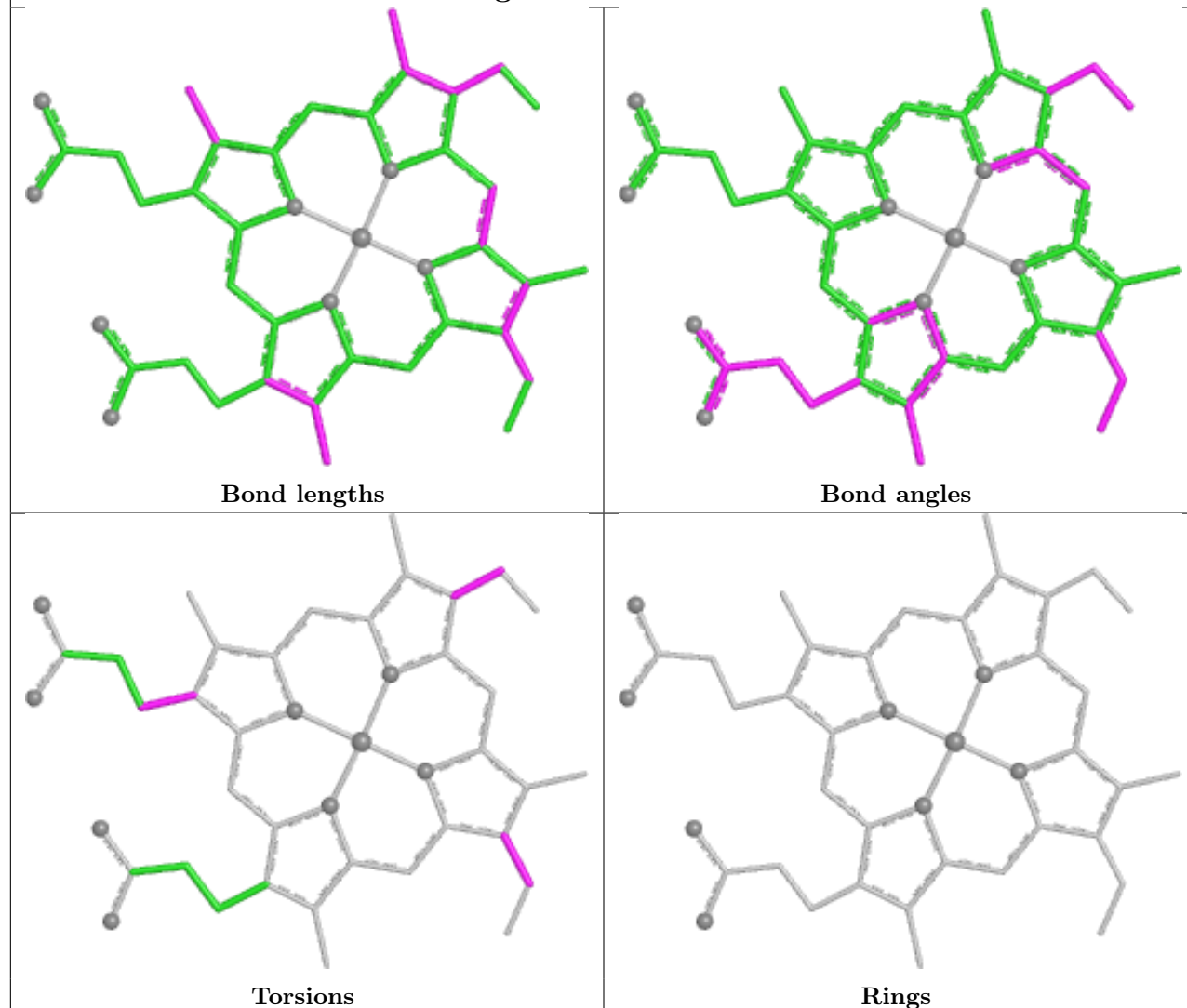
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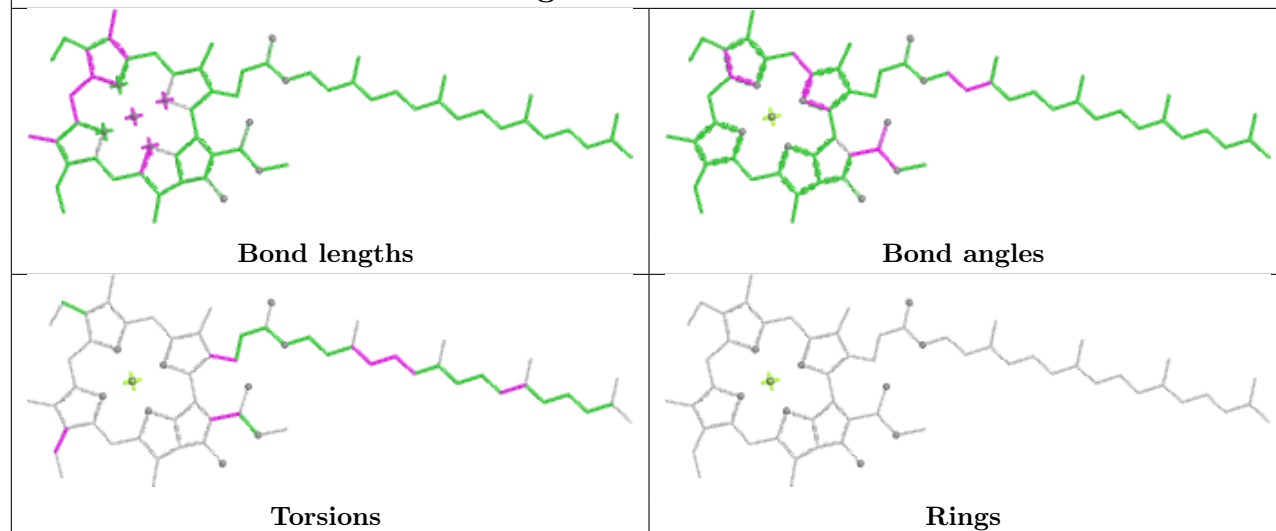


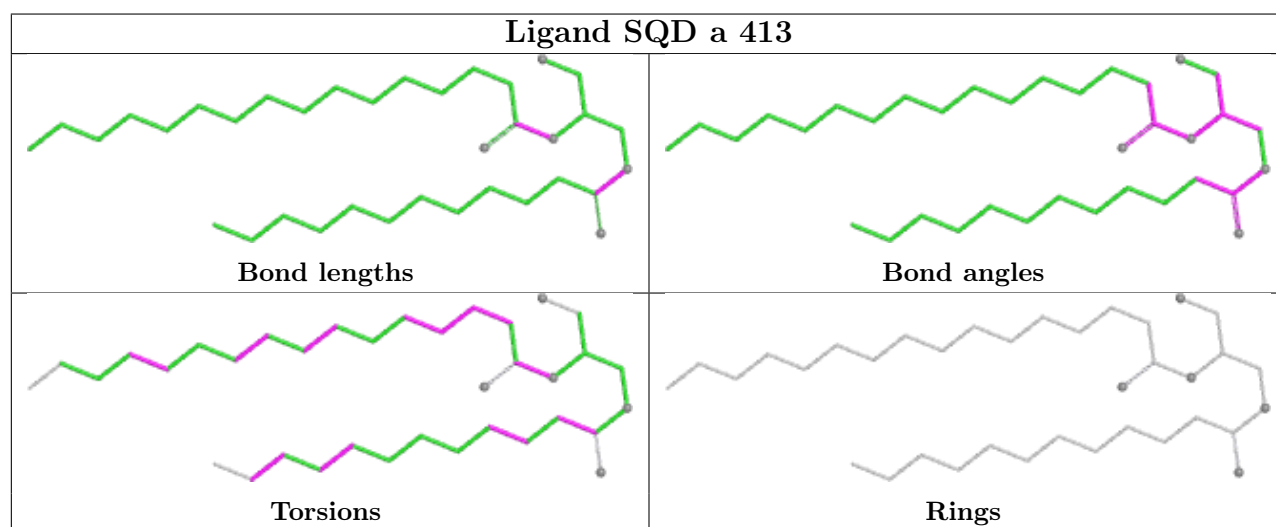
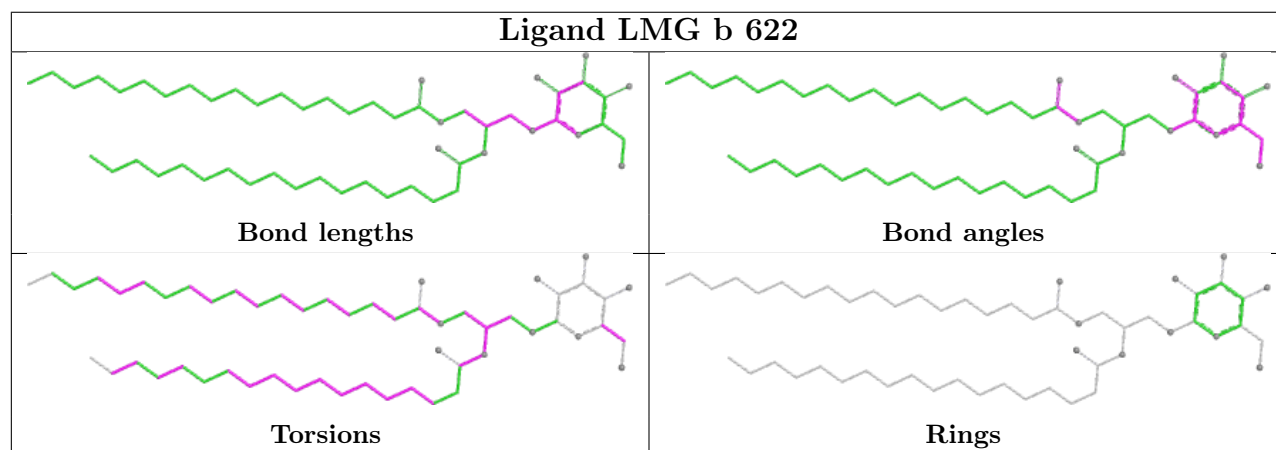
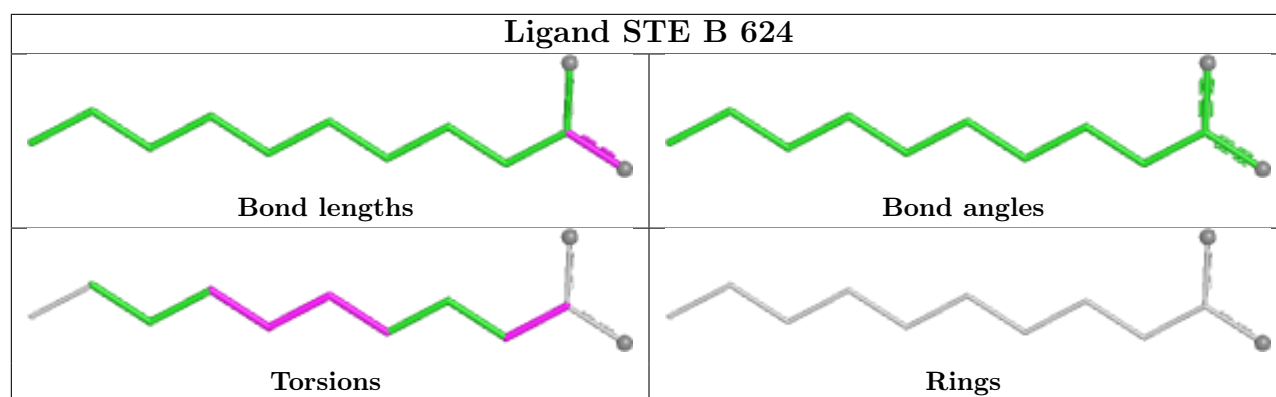


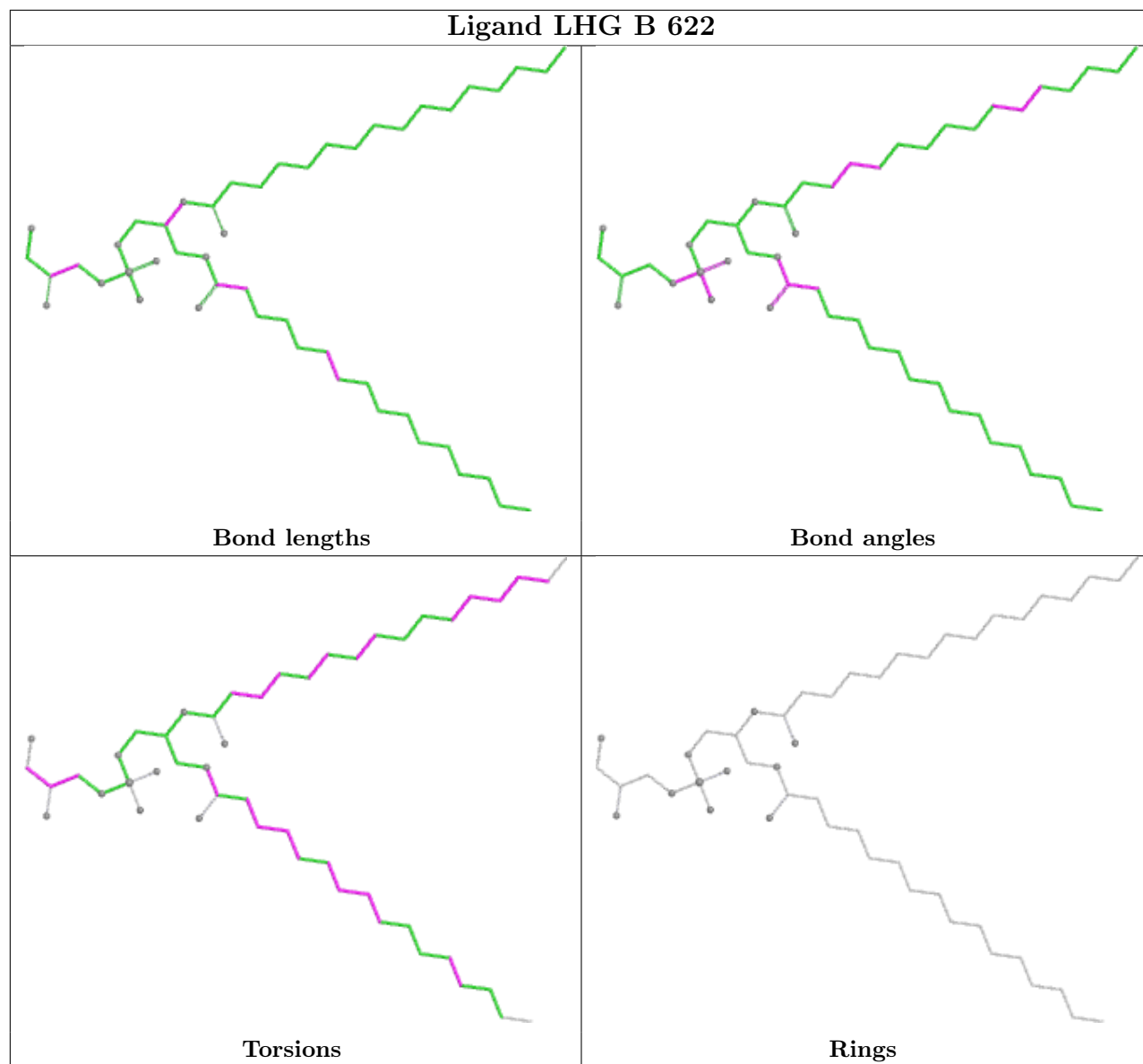
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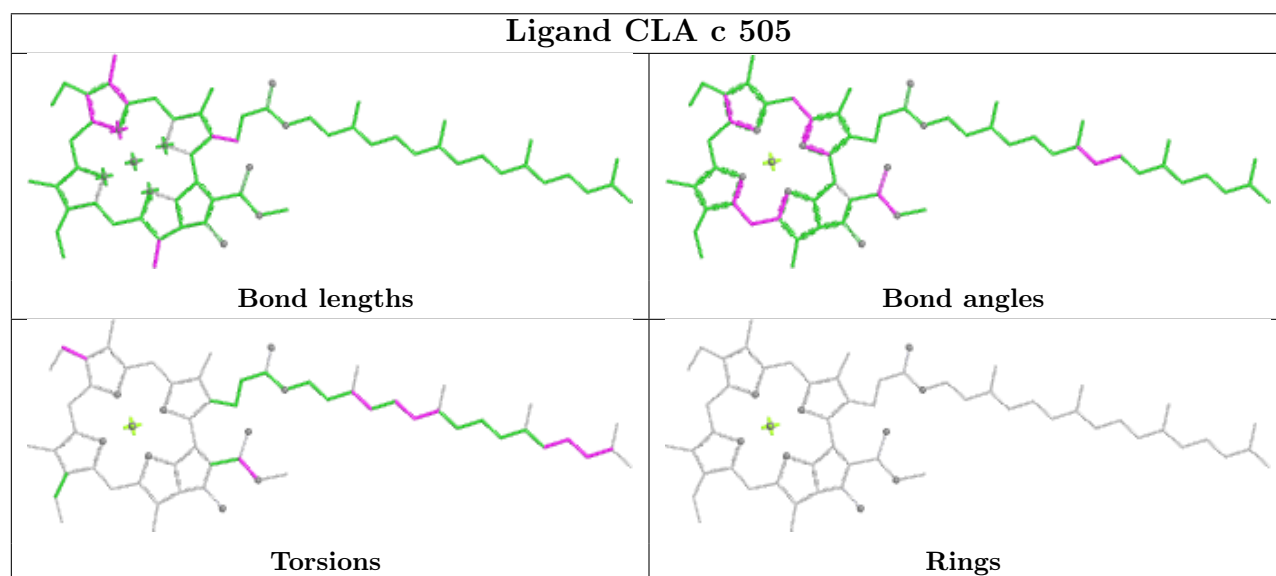
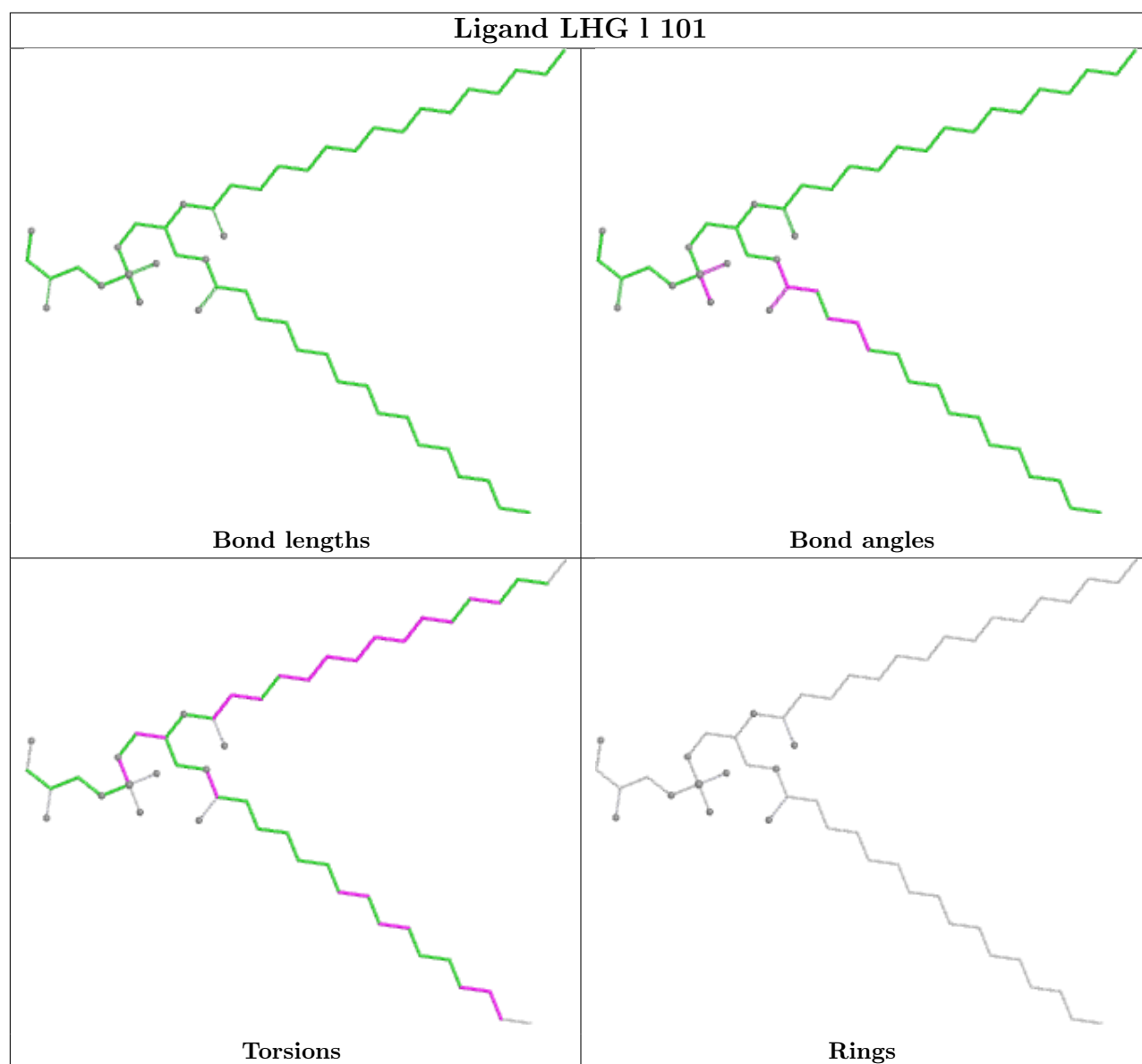


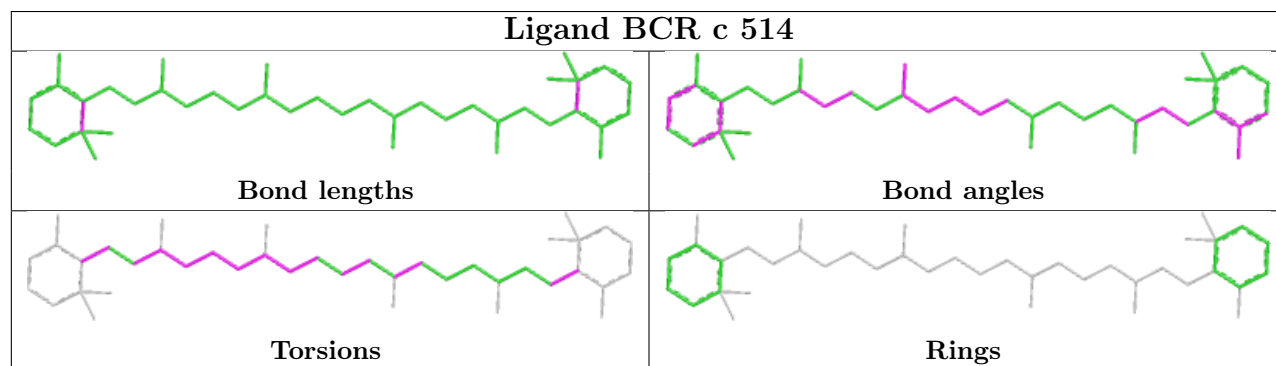
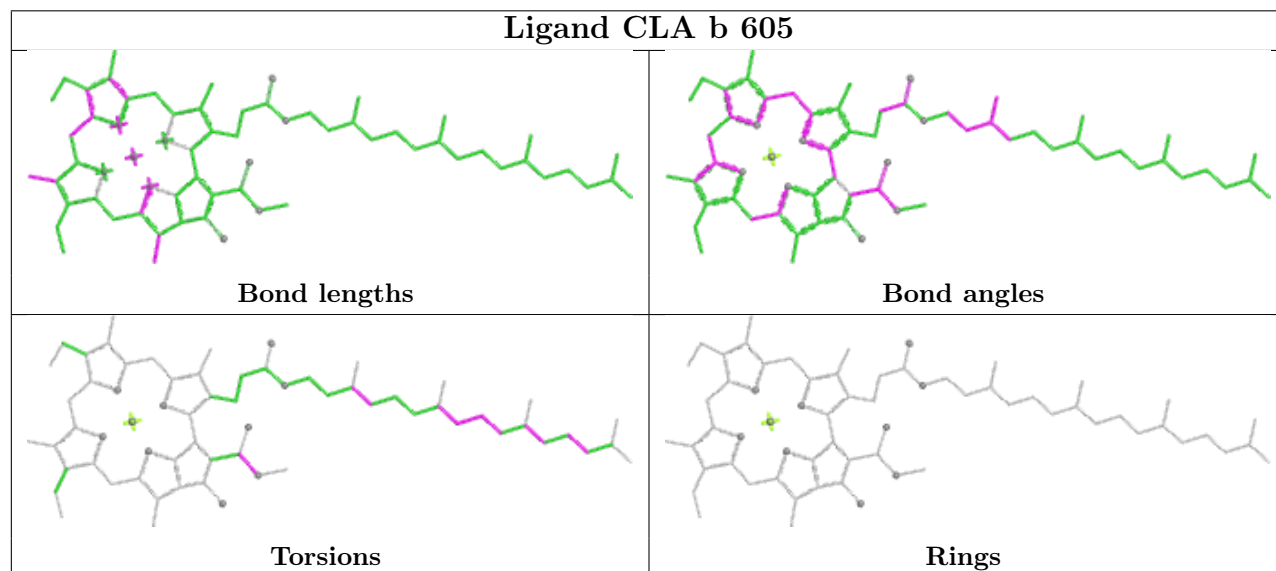
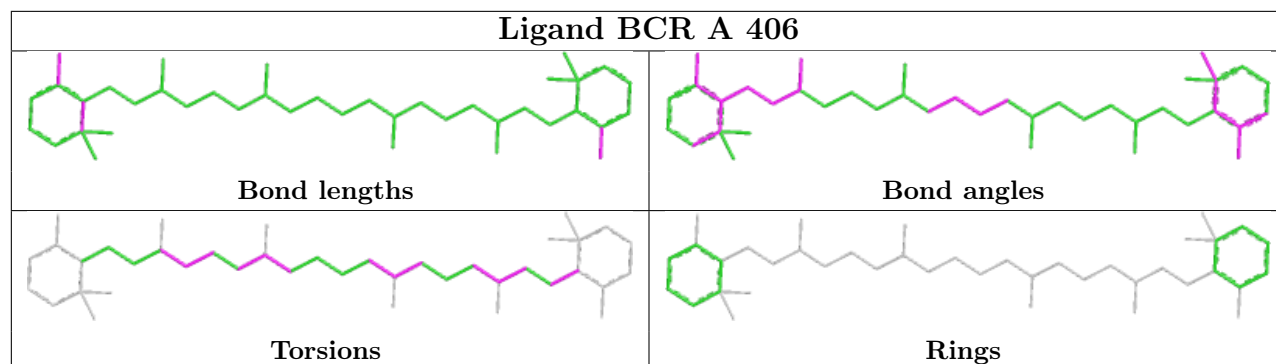
Ligand CLA c 513

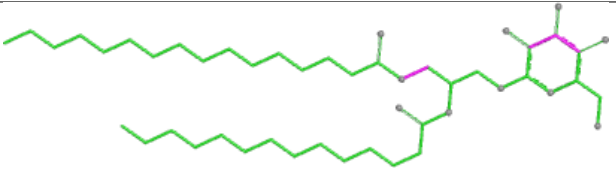
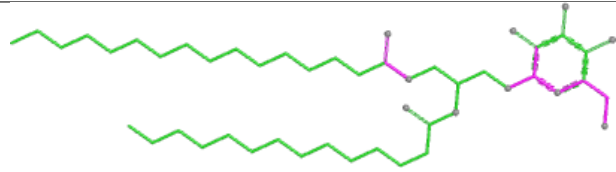
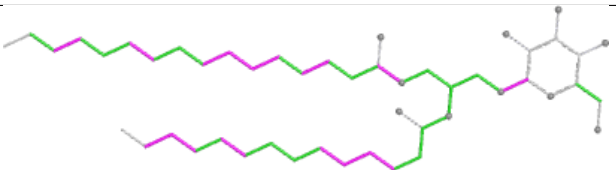
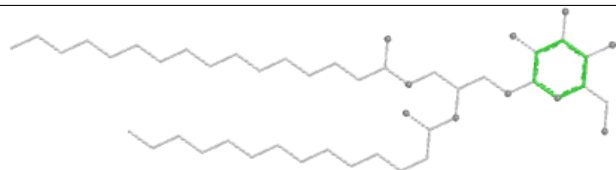


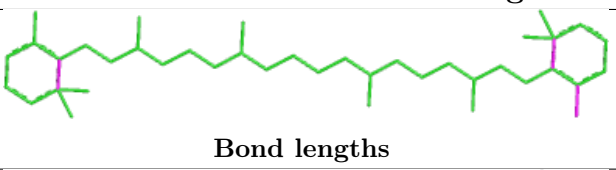
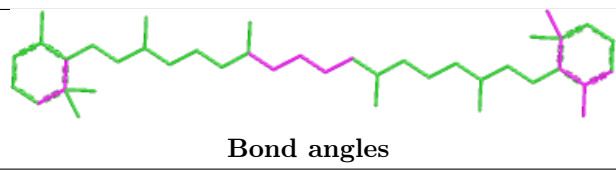
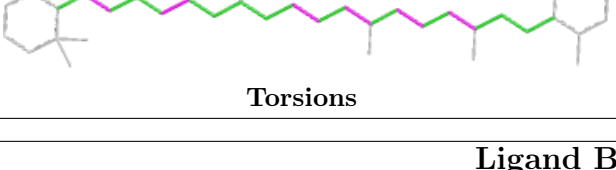
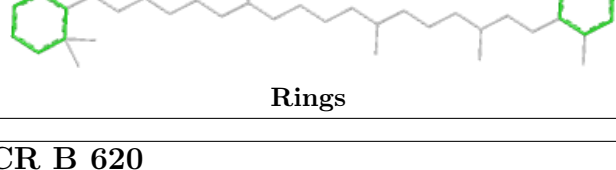


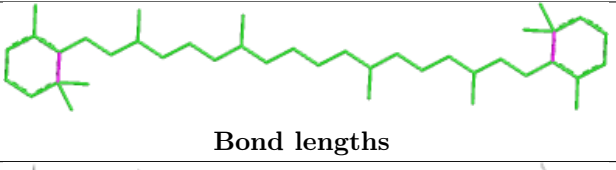
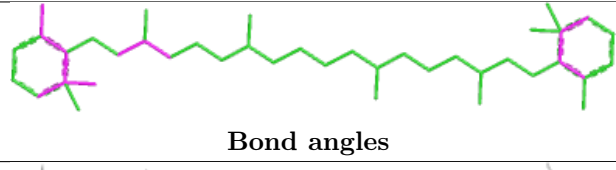
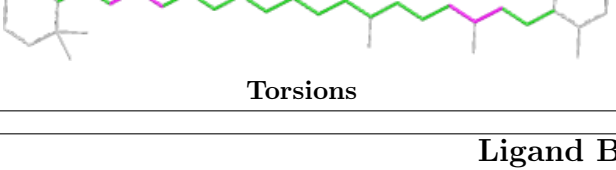



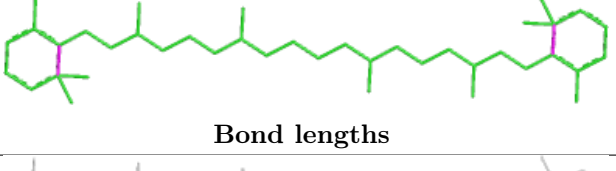
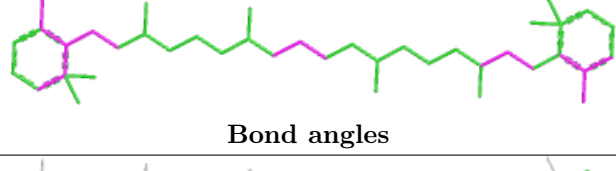






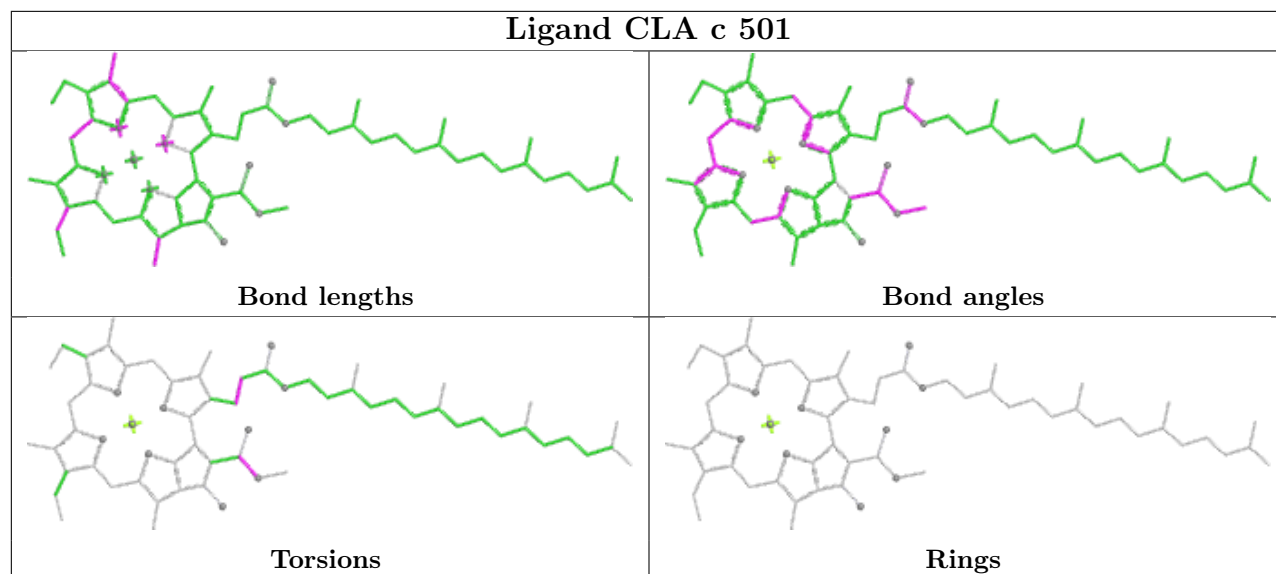
Ligand LMG c 522	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR C 501	
	
Bond lengths	Bond angles
	
Torsions	Rings

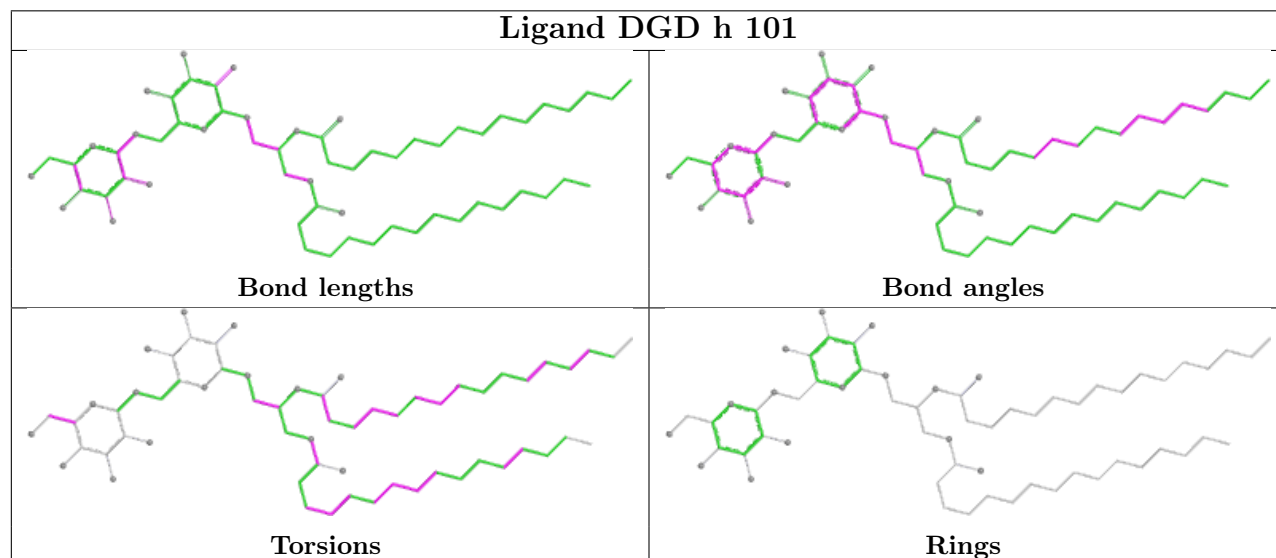
Ligand BCR B 620	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR d 405	
	
Bond lengths	Bond angles
	
Torsions	Rings

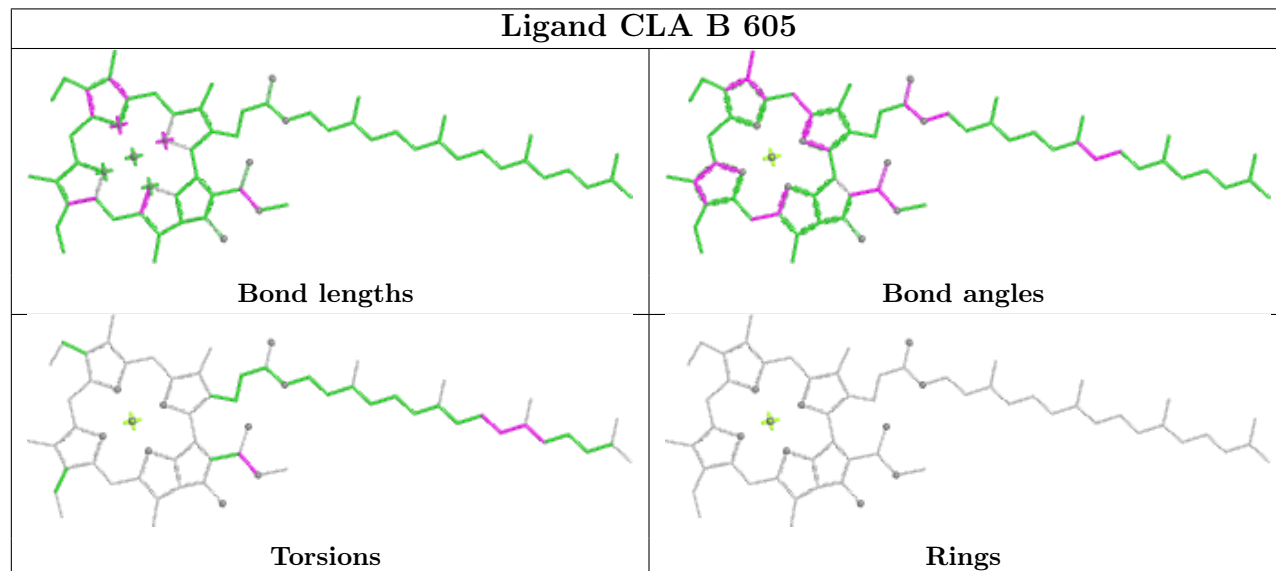
Ligand CLA c 501

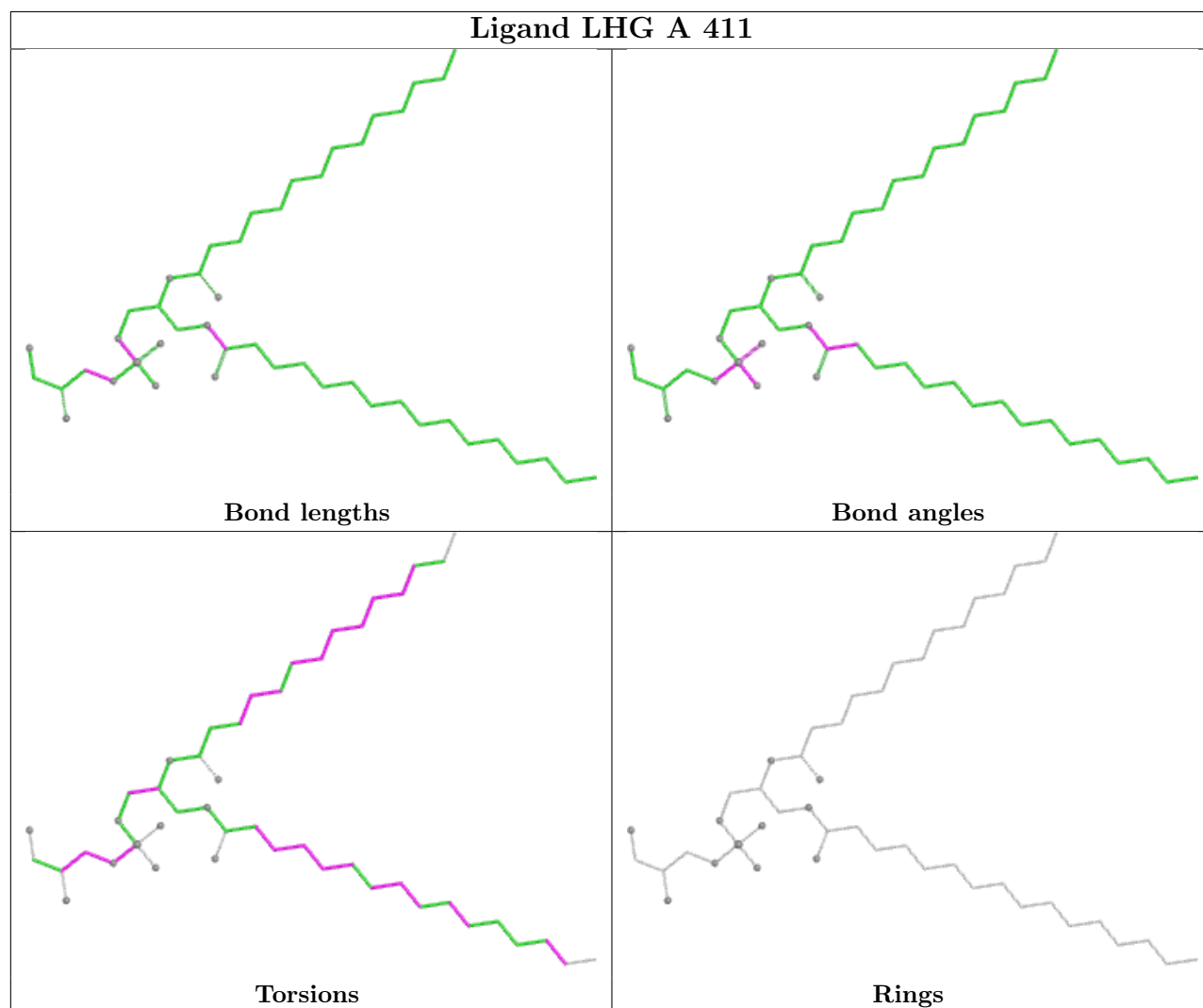
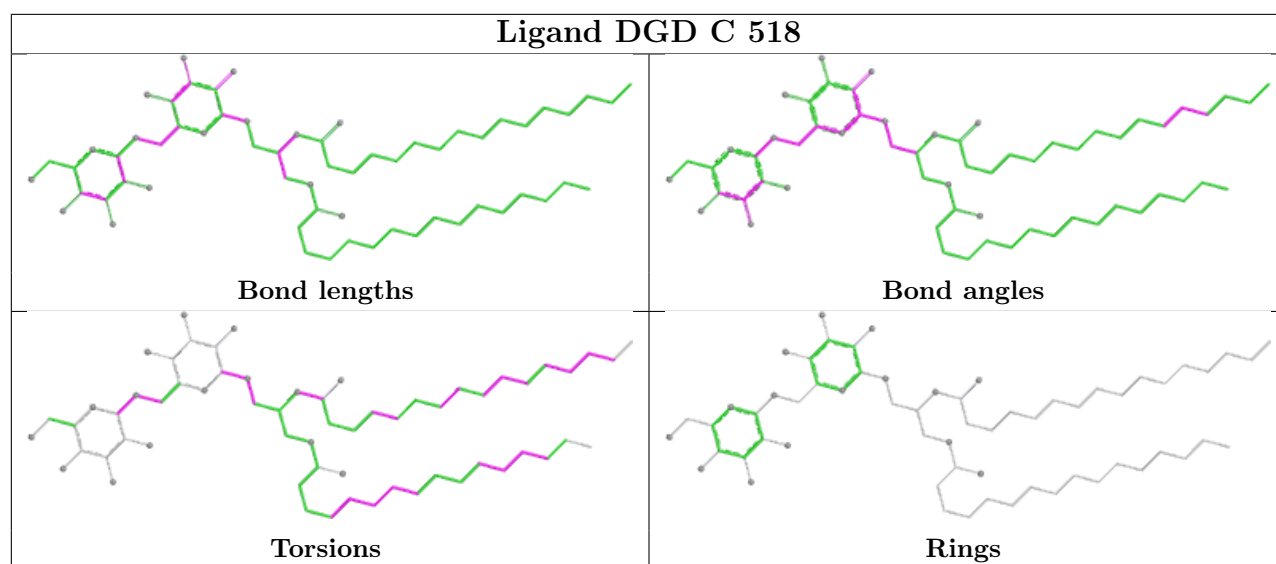


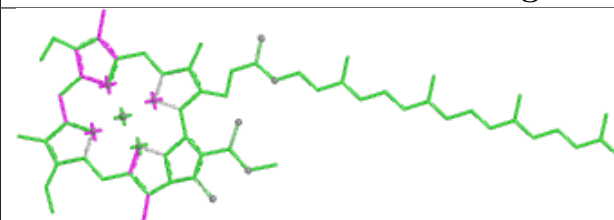
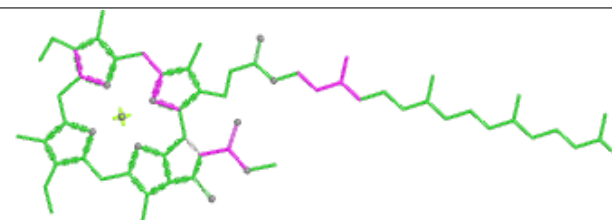
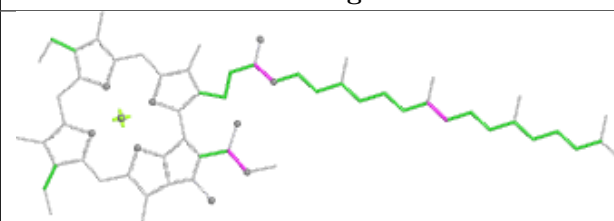
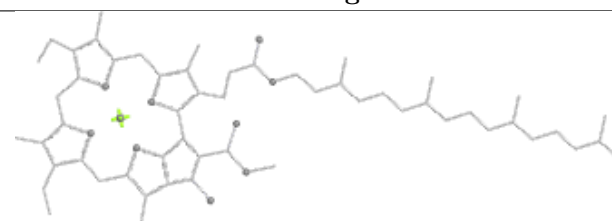
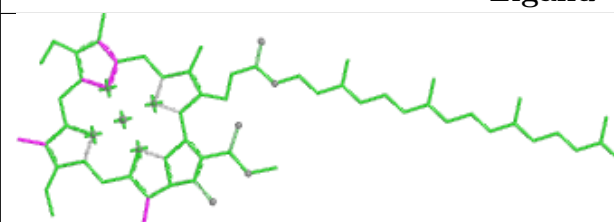
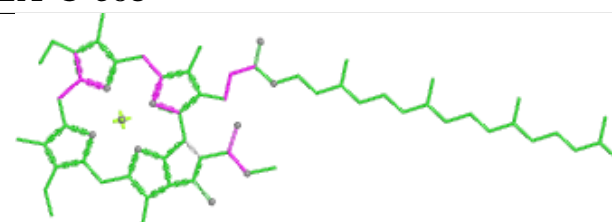
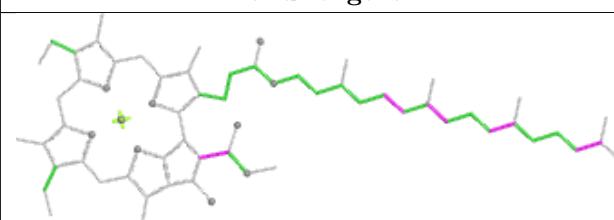
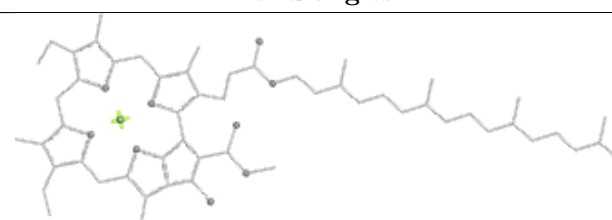
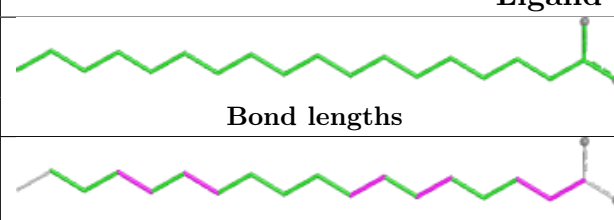
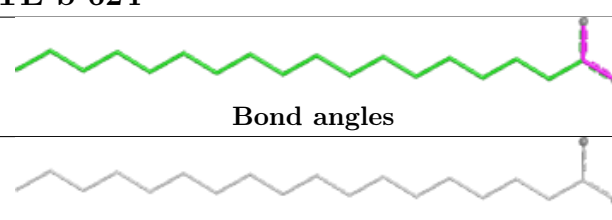
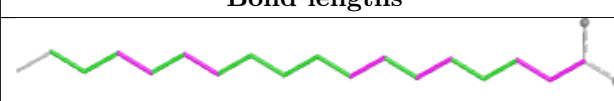
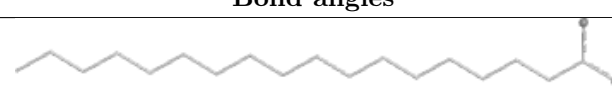
Ligand DGD h 101

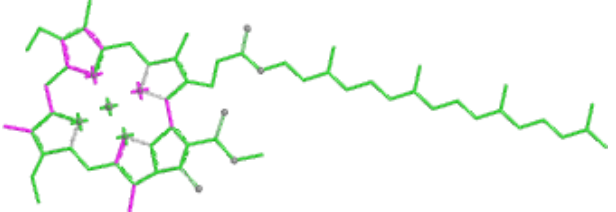
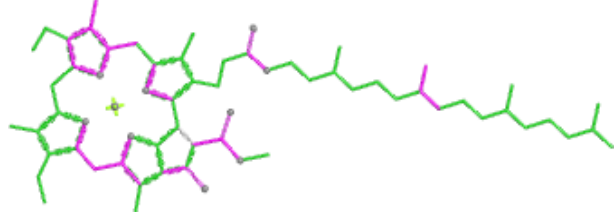
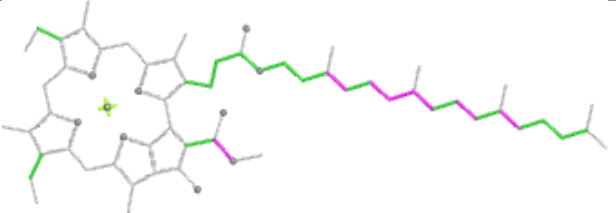
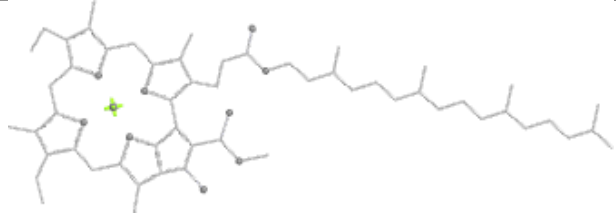
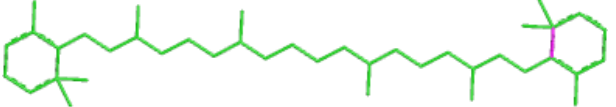
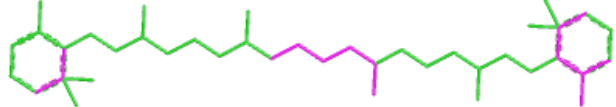

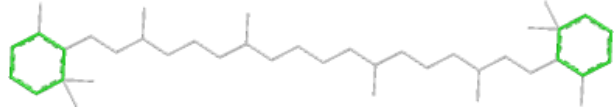
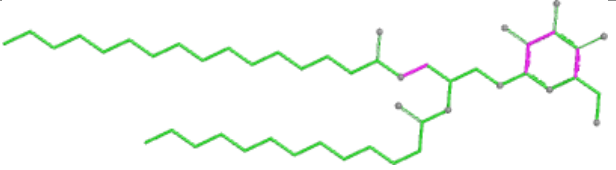
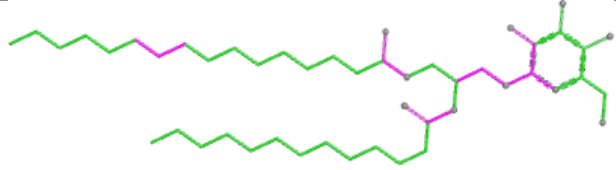
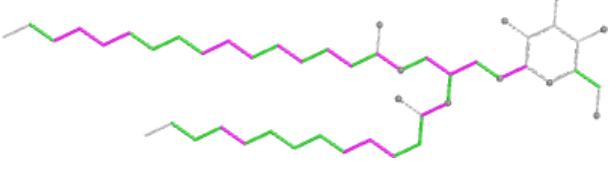
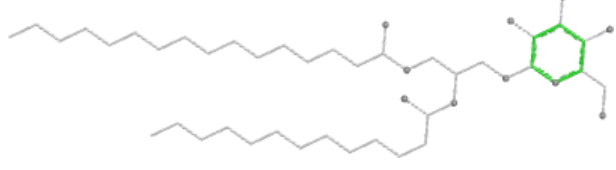


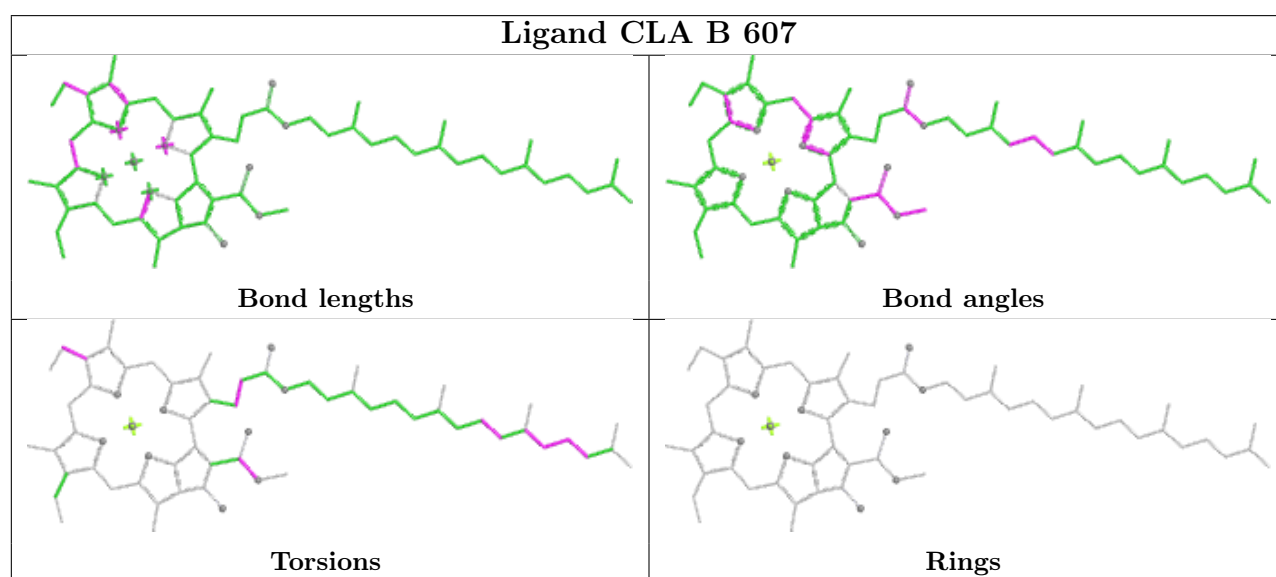
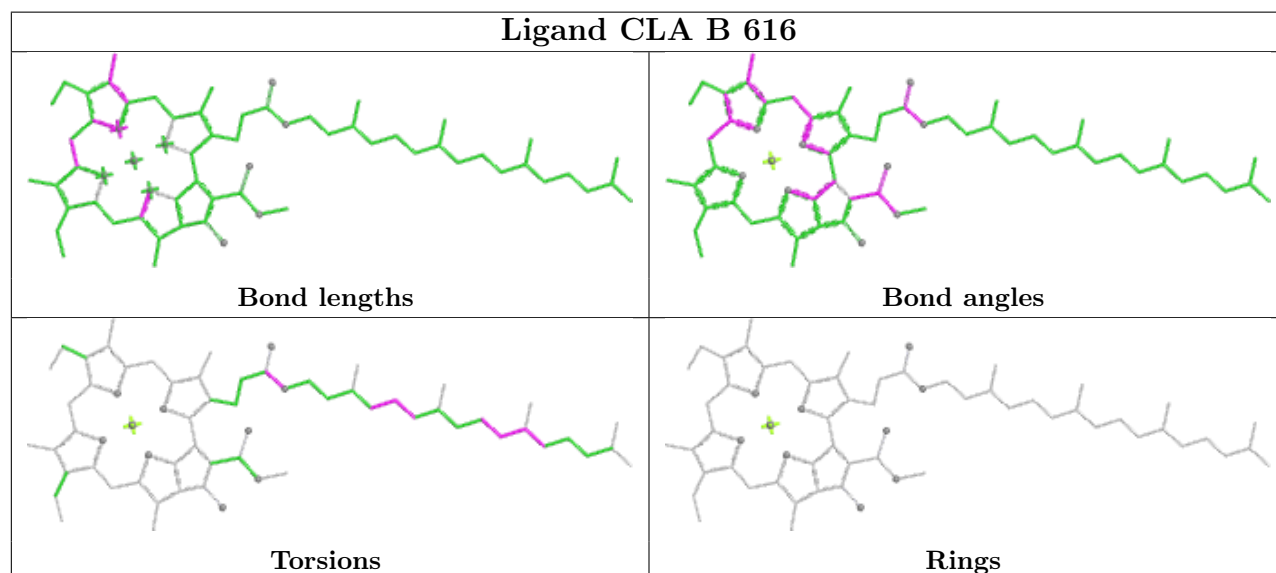
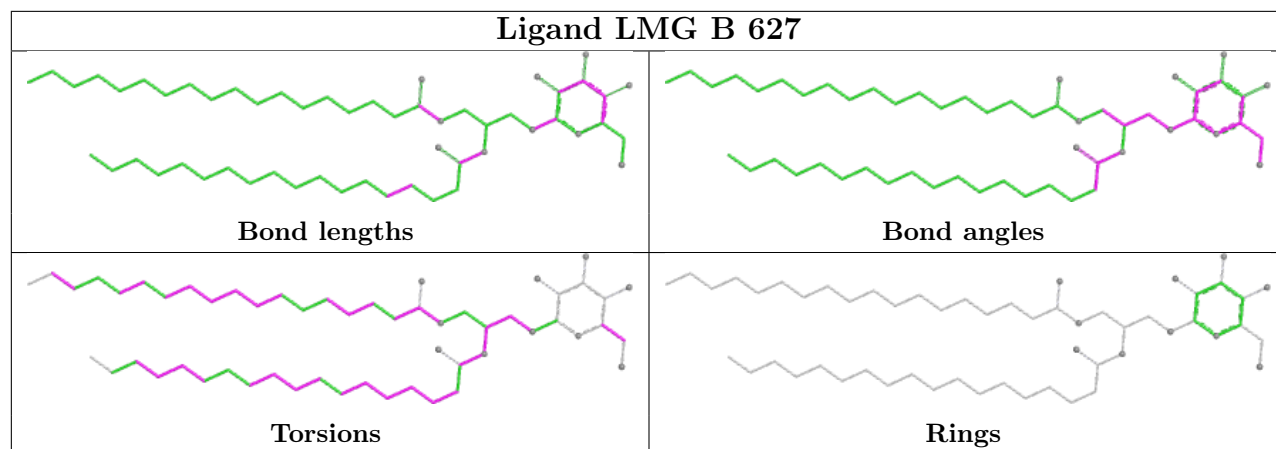
Ligand CLA B 605

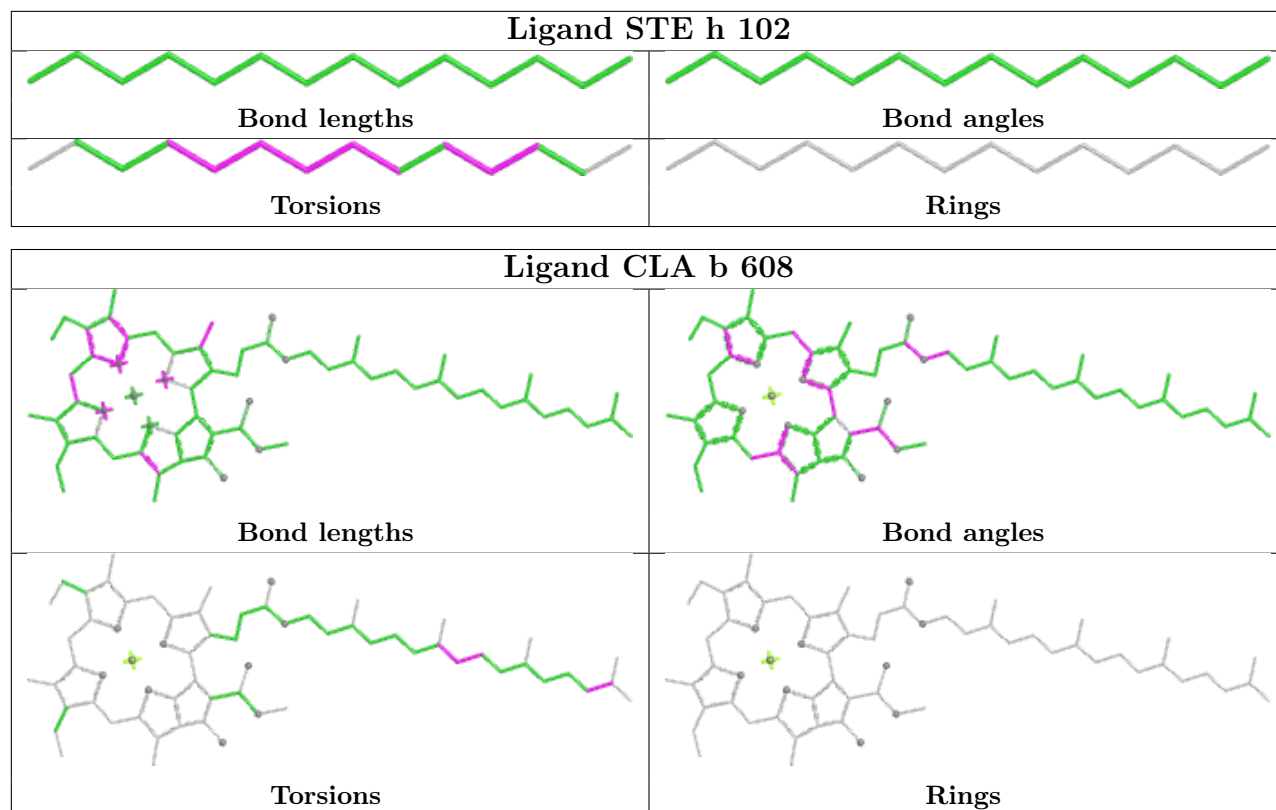




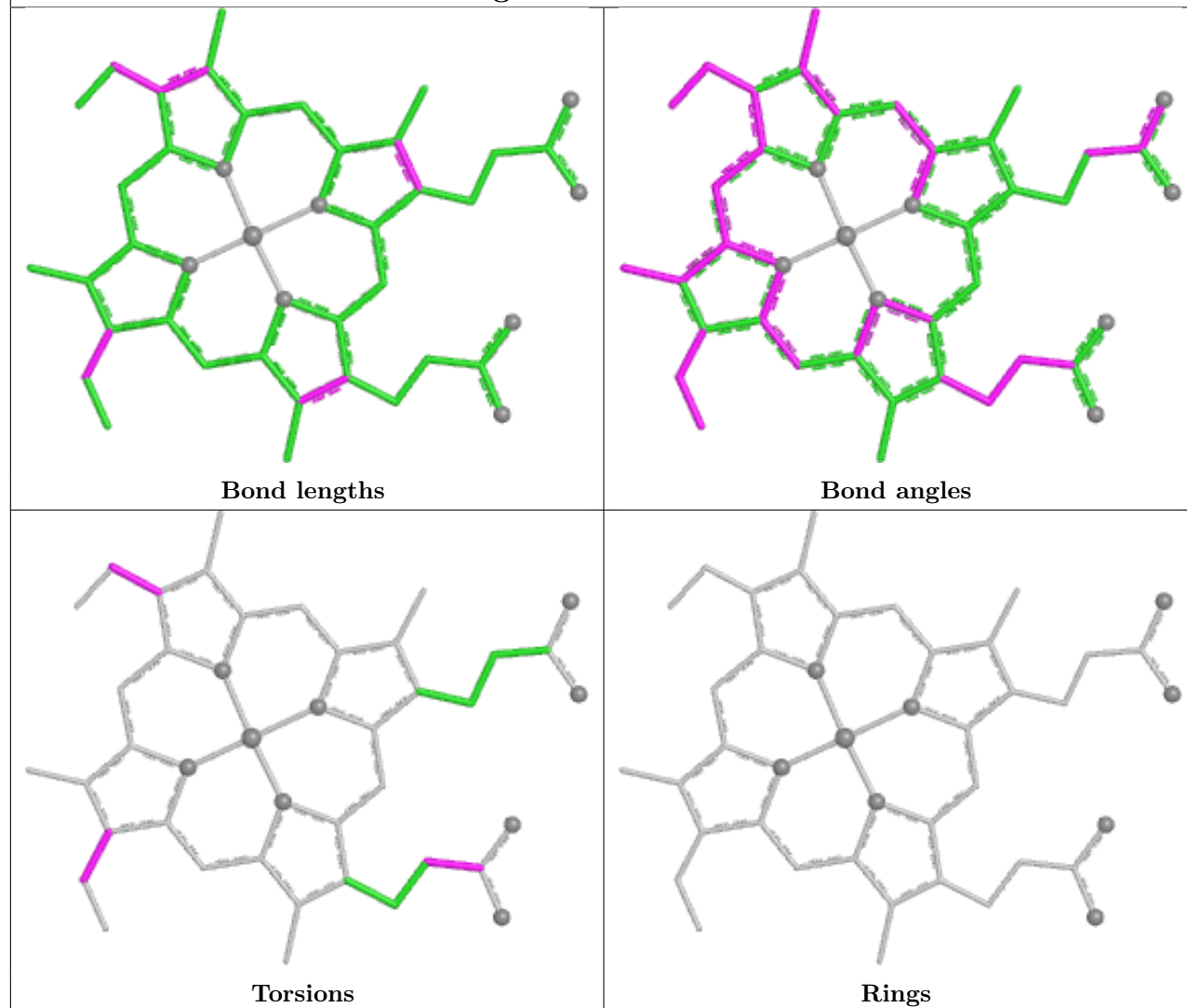
Ligand CLA C 512	
	
Bond lengths	Bond angles
	
Torsions	Rings
Ligand CLA C 508	
	
Bond lengths	Bond angles
	
Torsions	Rings
Ligand STE b 624	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA b 603	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand BCR H 101	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand LMG Y 101	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

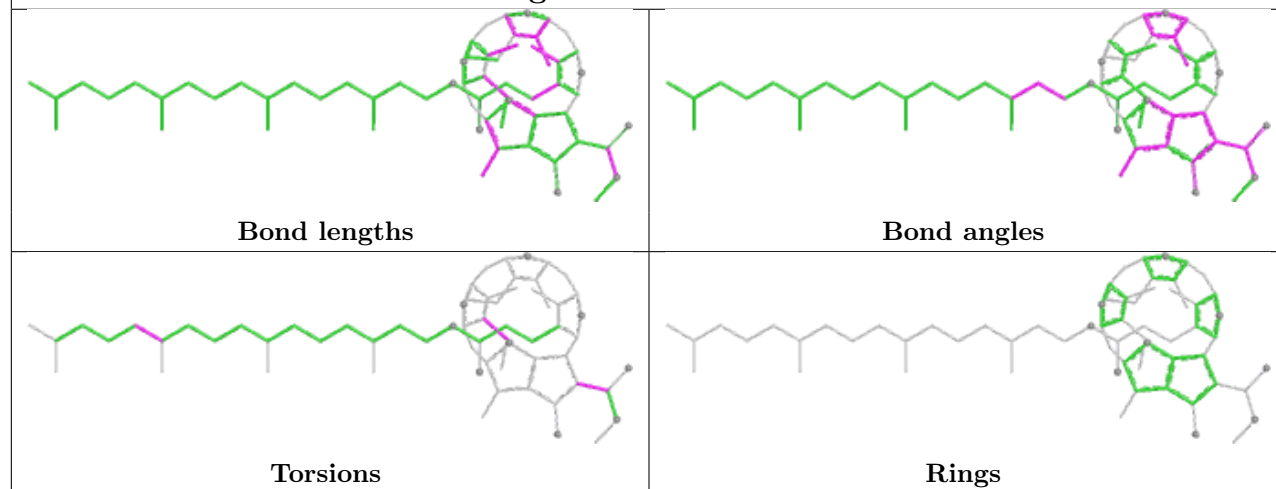


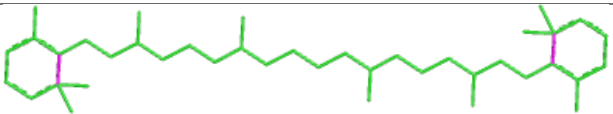
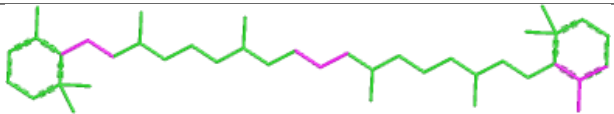
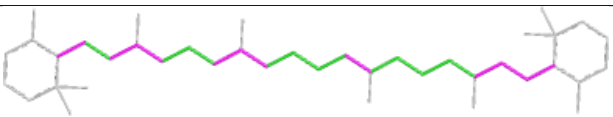
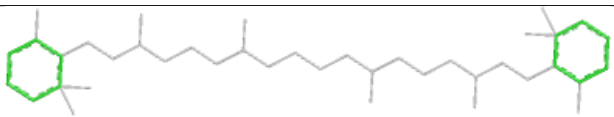


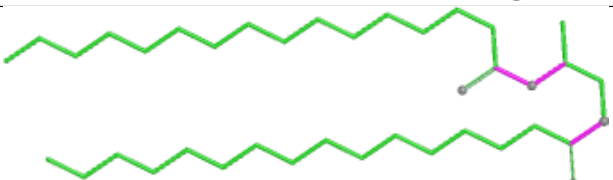
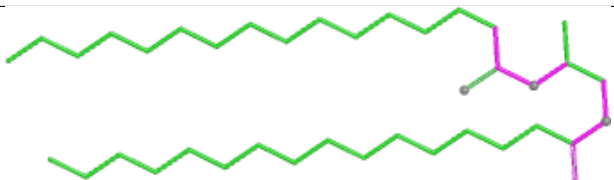
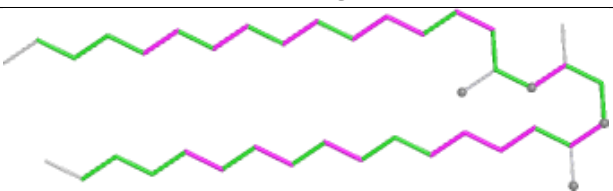
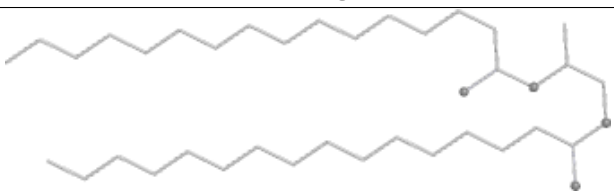
Ligand HEC V 201

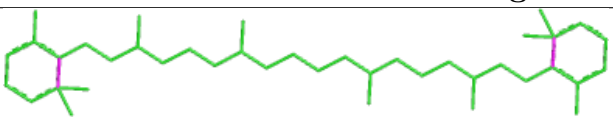
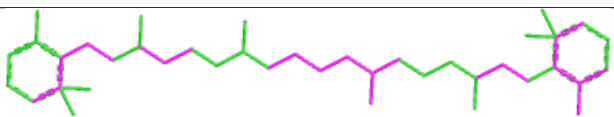
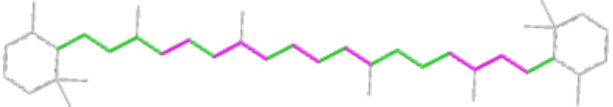
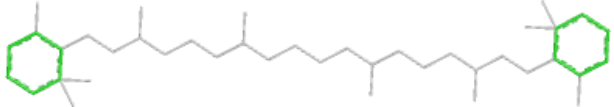




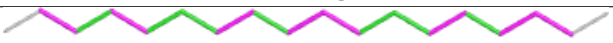

Ligand PHO D 401

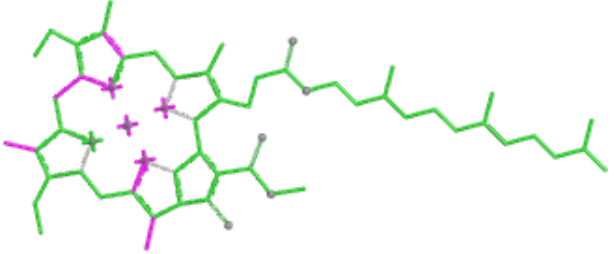
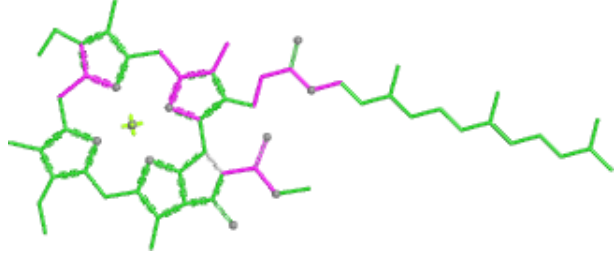
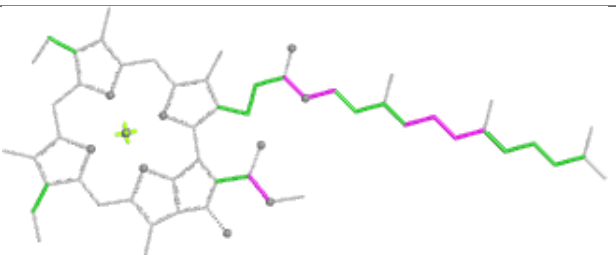
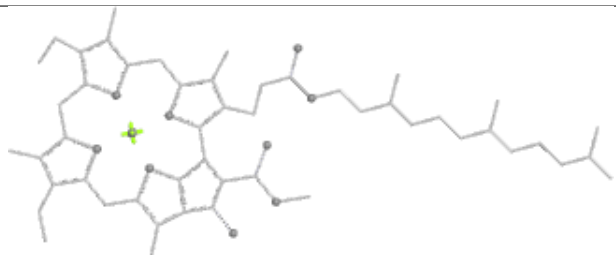
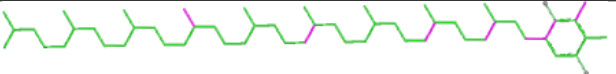
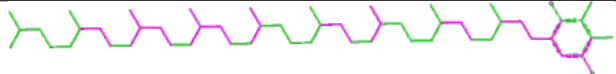
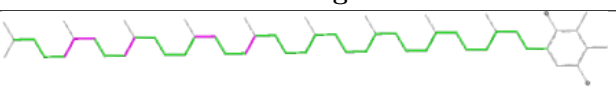
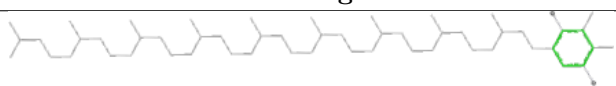
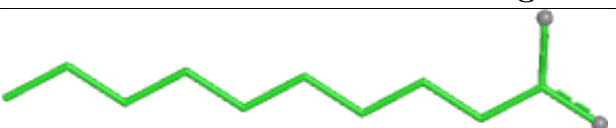
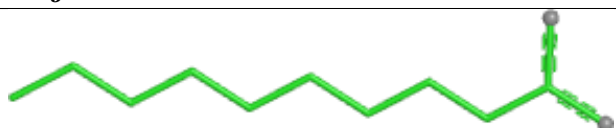
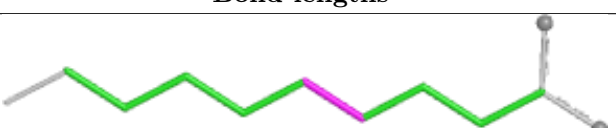
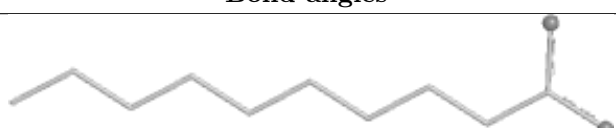


Ligand BCR K 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

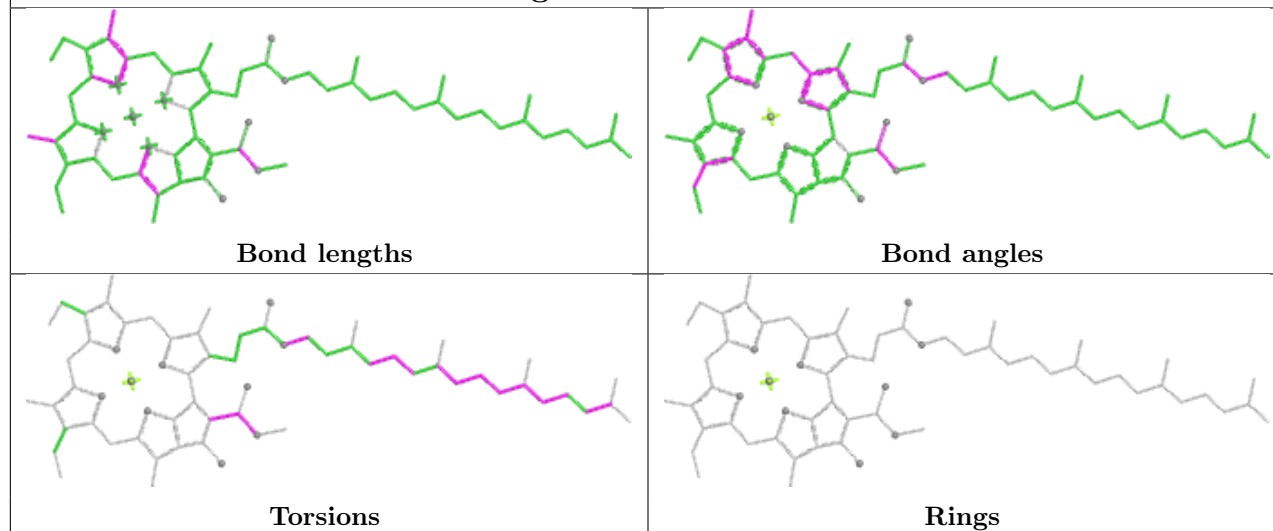
Ligand SQD A 414	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR b 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

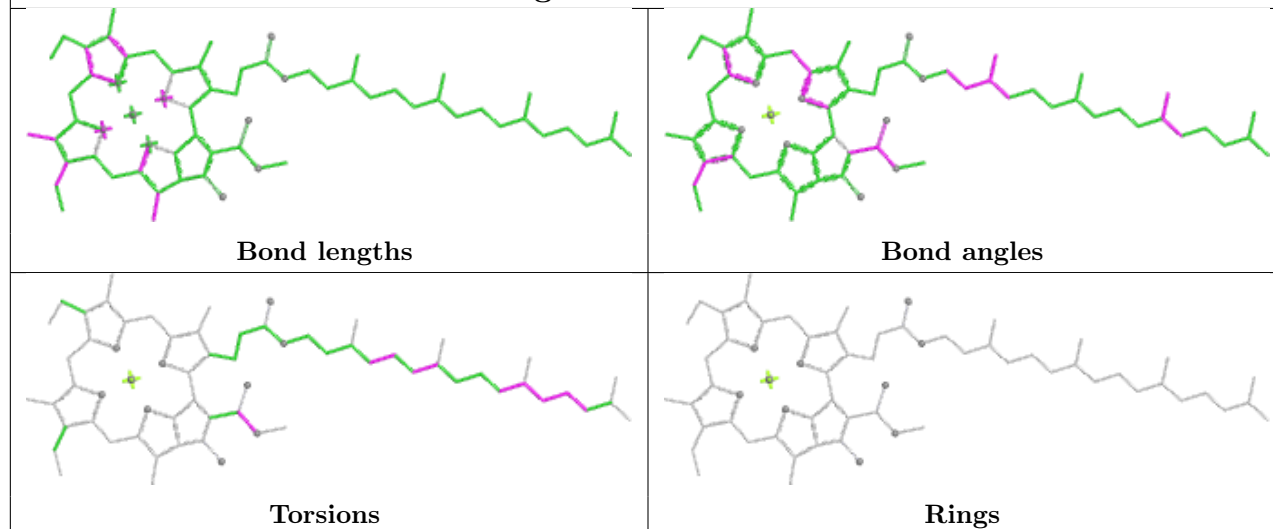
Ligand STE M 104	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 617	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand PL9 D 406	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand STE j 101	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

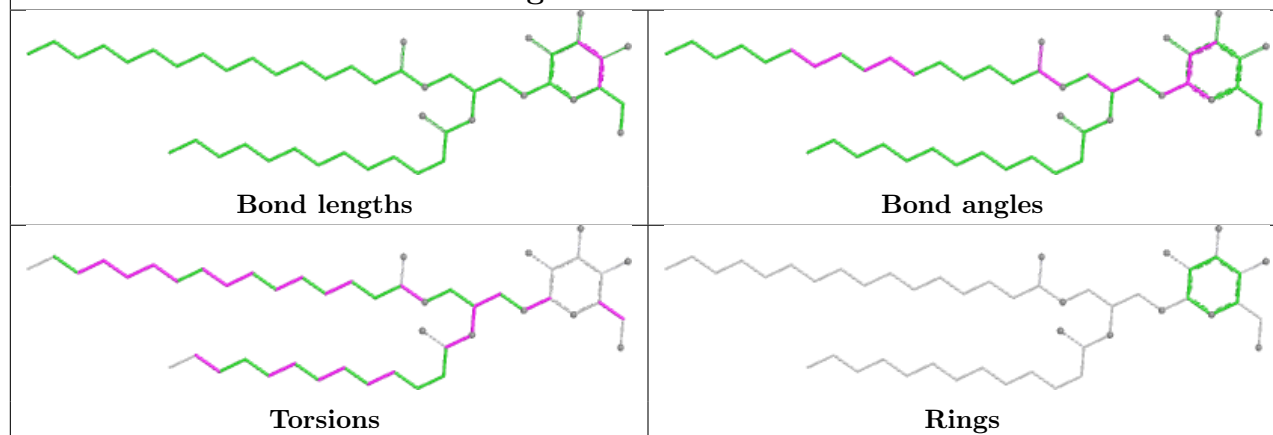
Ligand CLA C 510

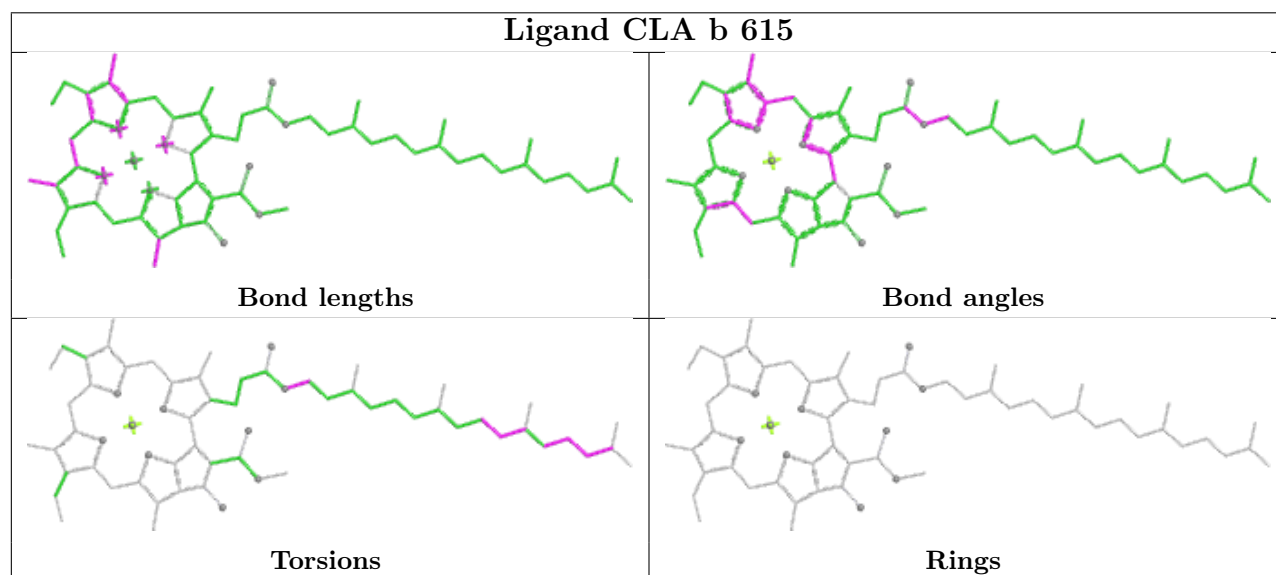
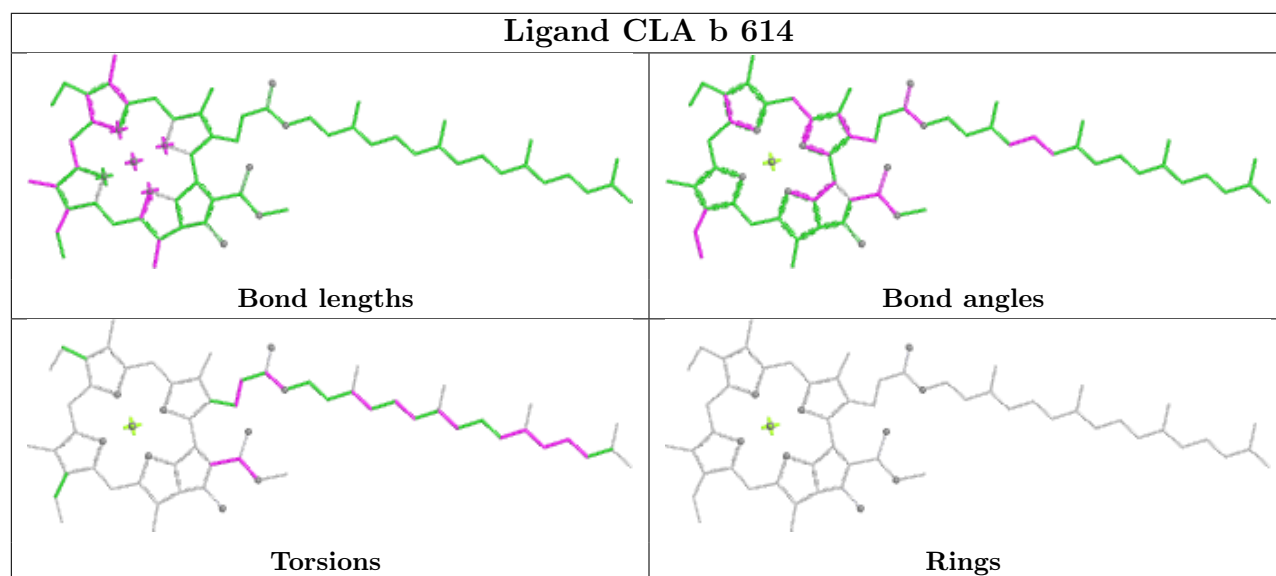
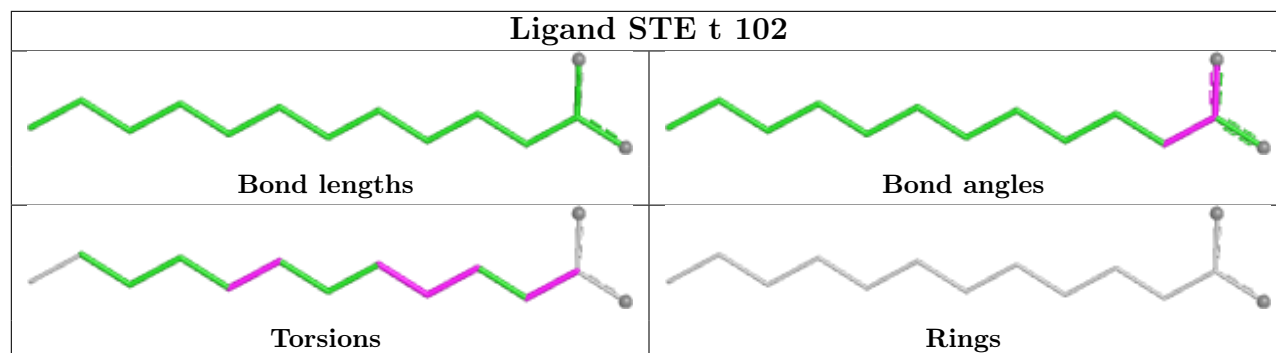


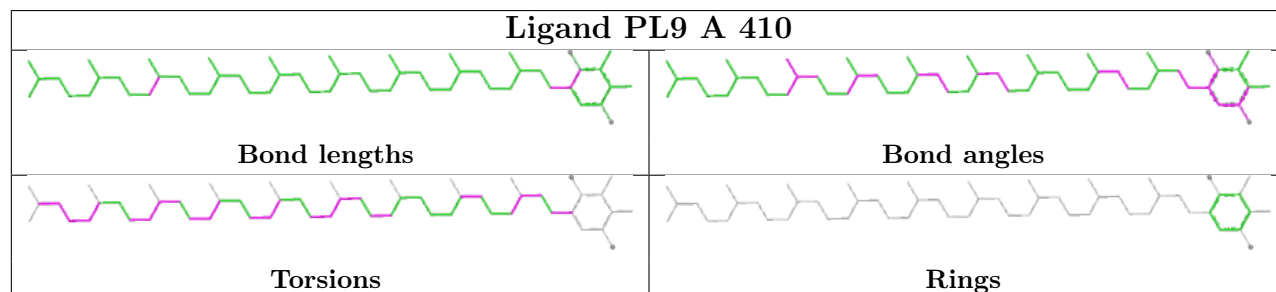
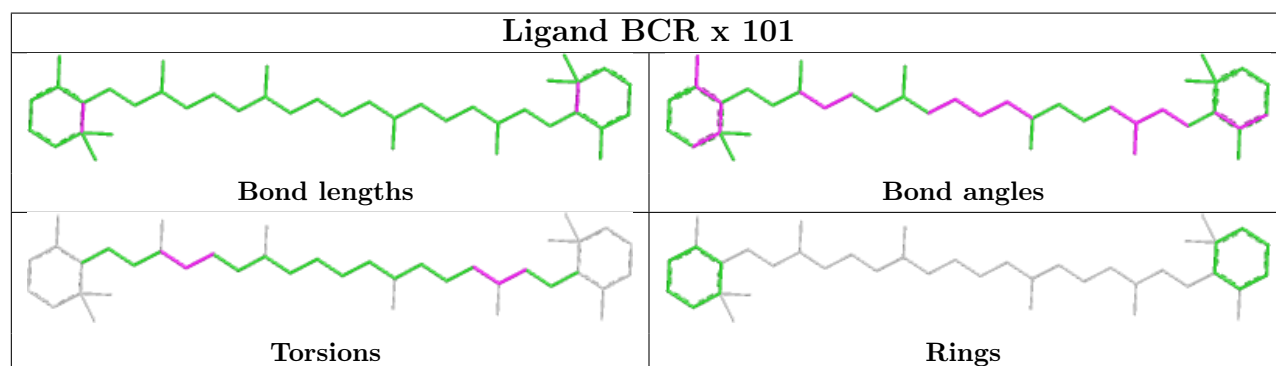
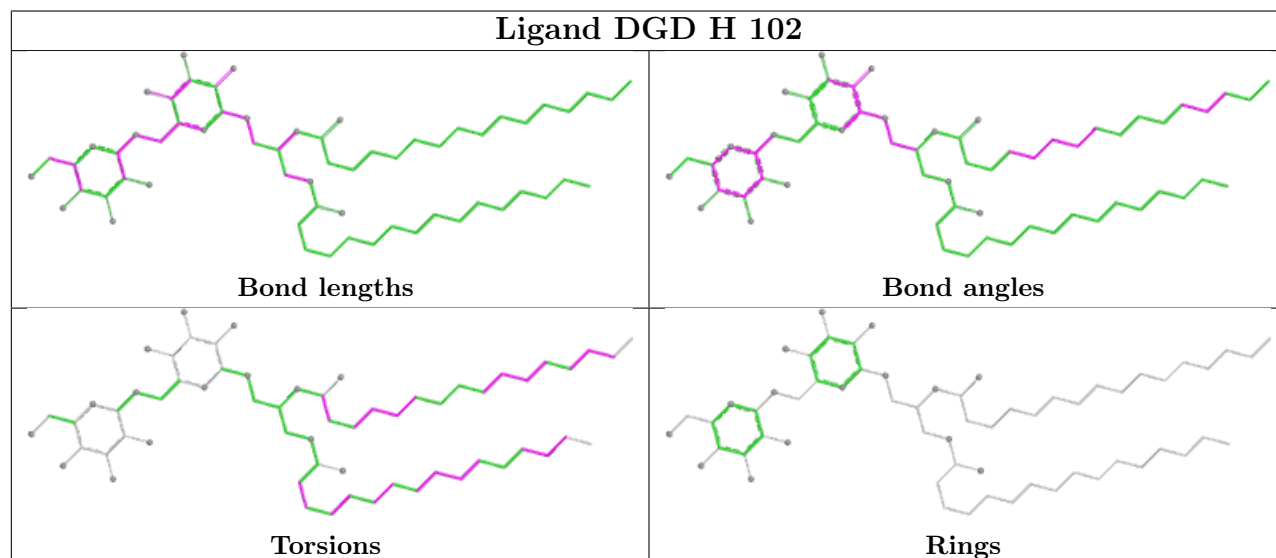
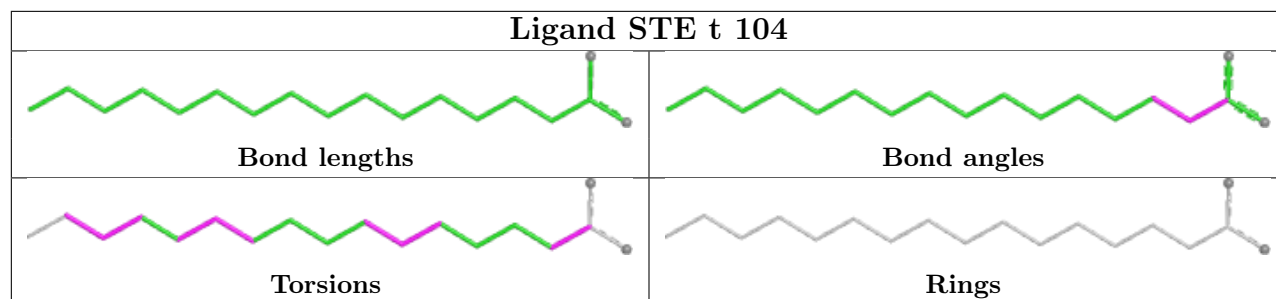
Ligand CLA b 602

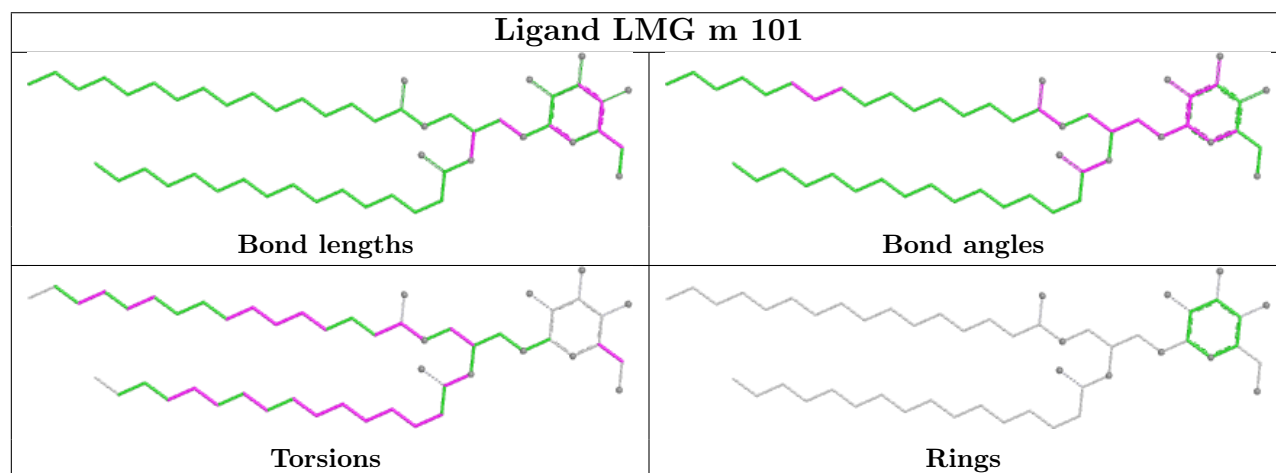
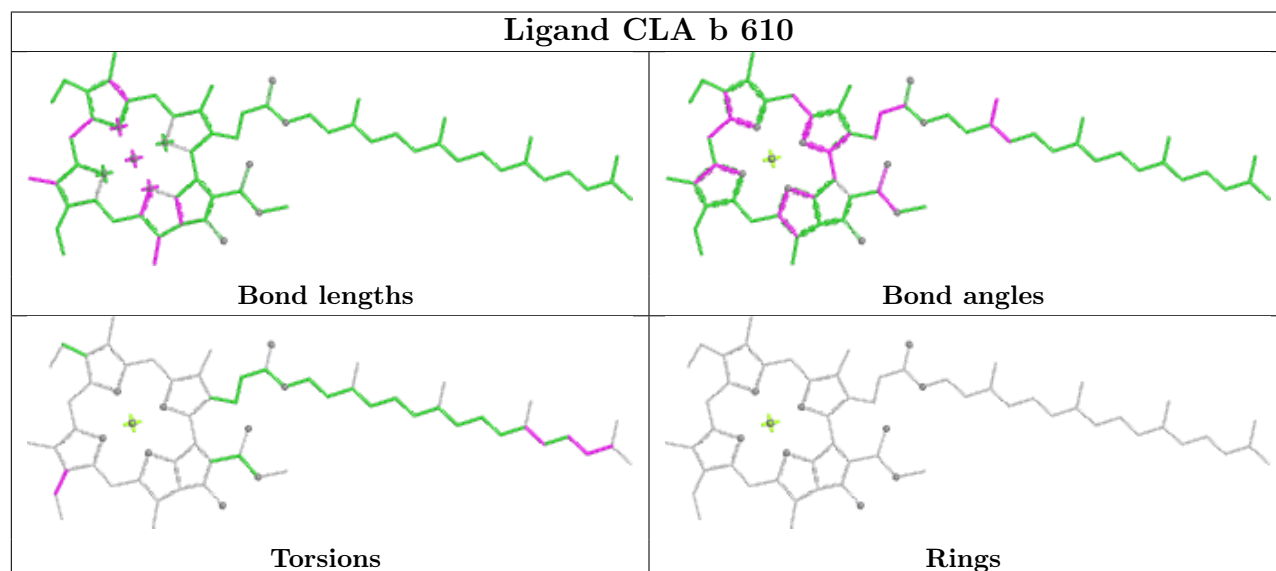
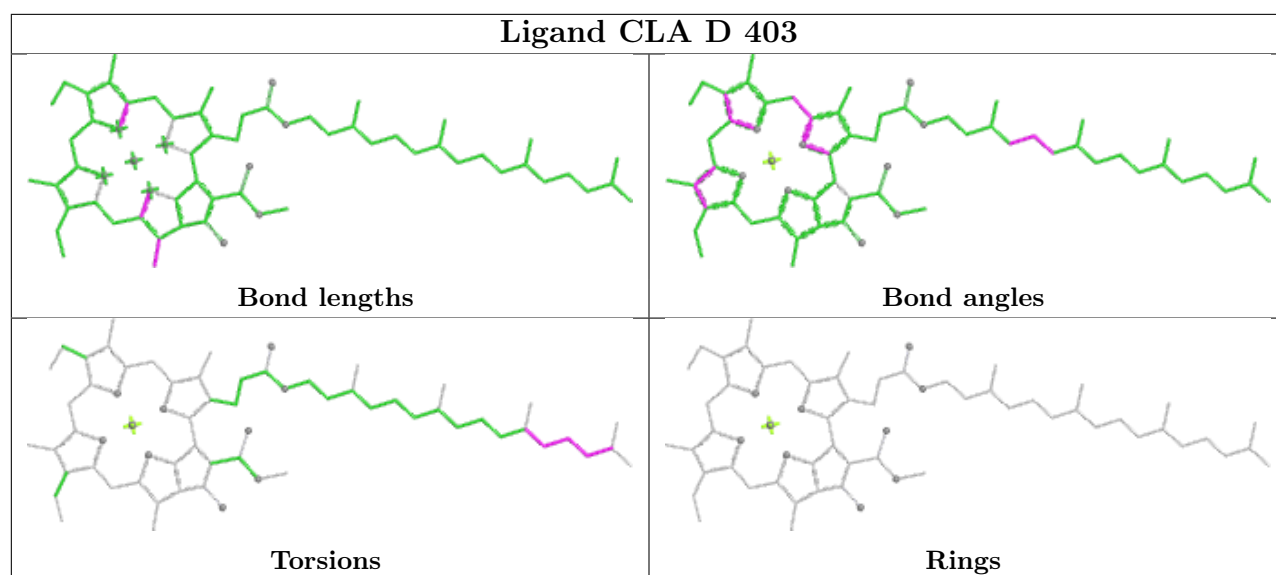


Ligand LMG C 516

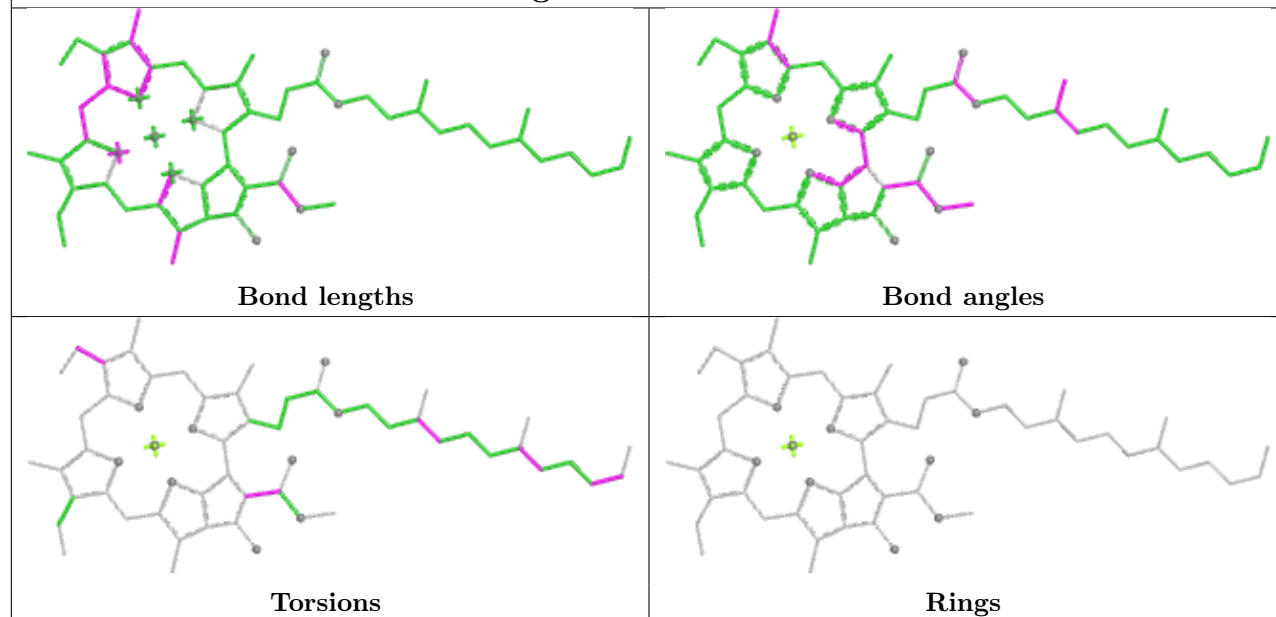




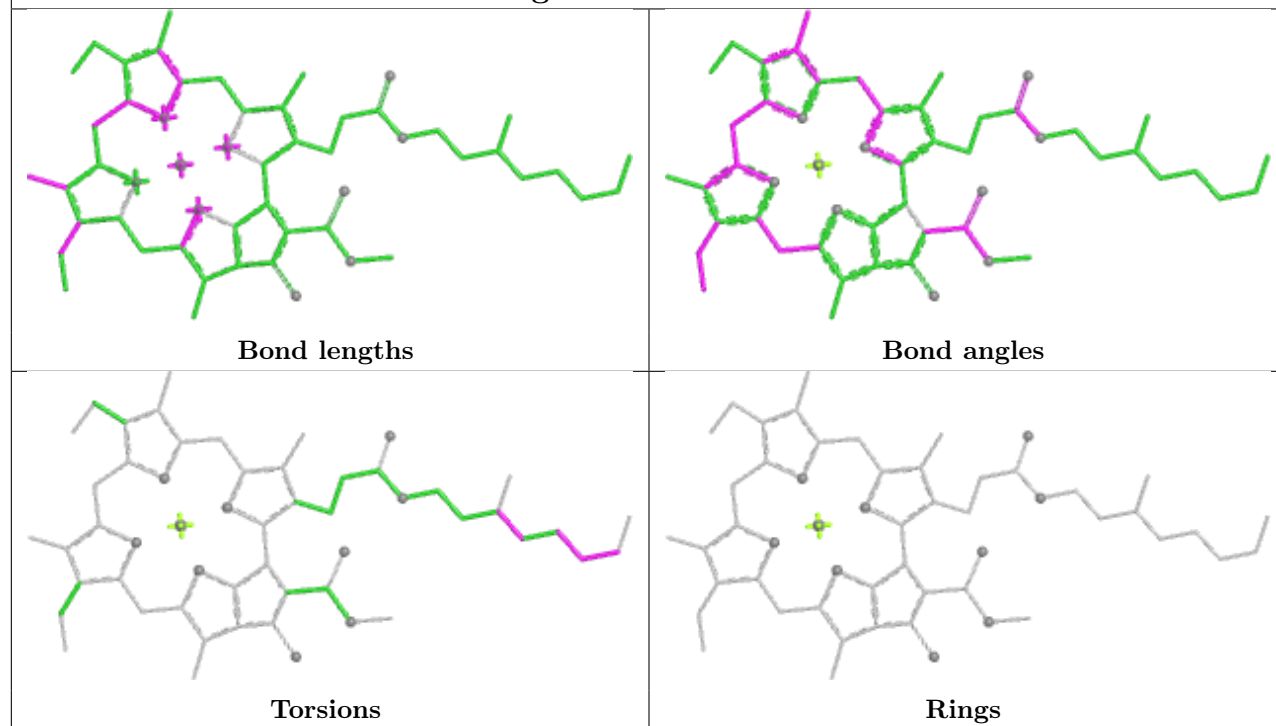


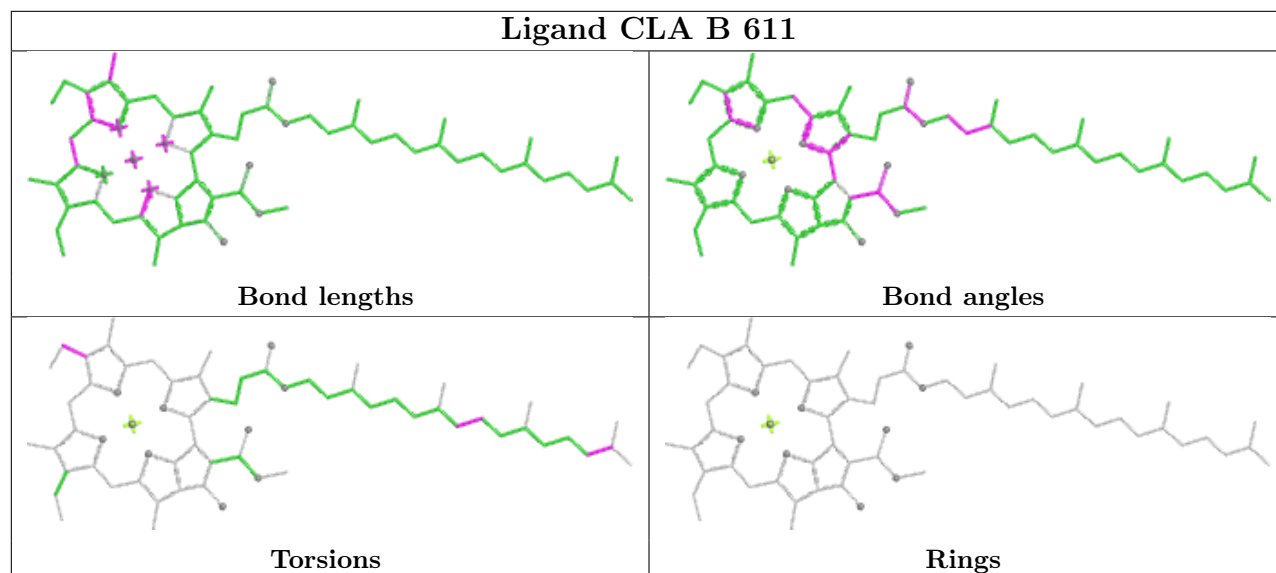
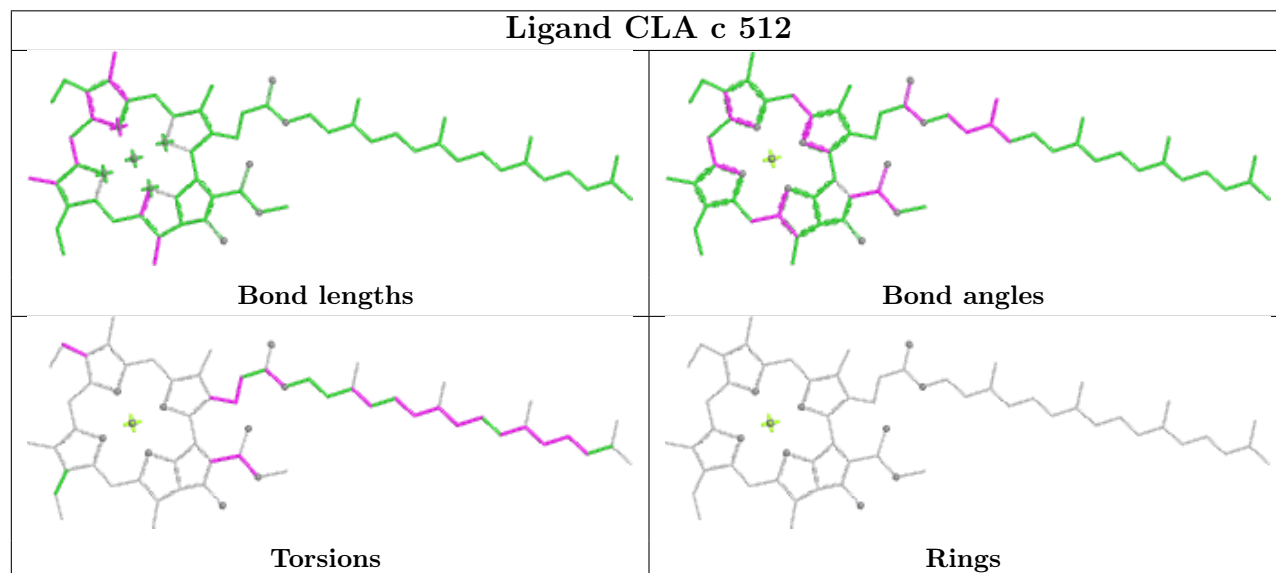
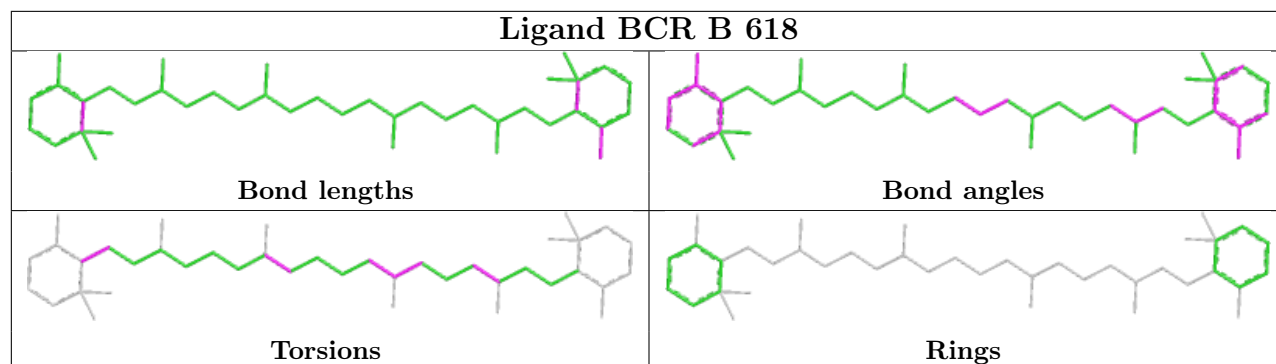


Ligand CLA C 505

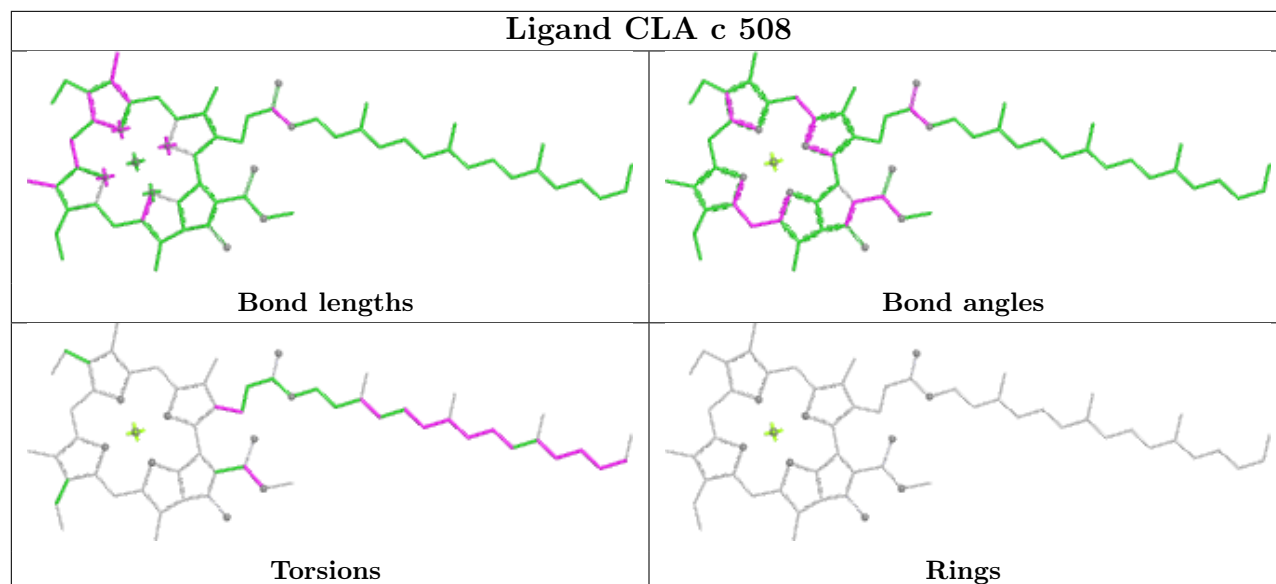


Ligand CLA A 405

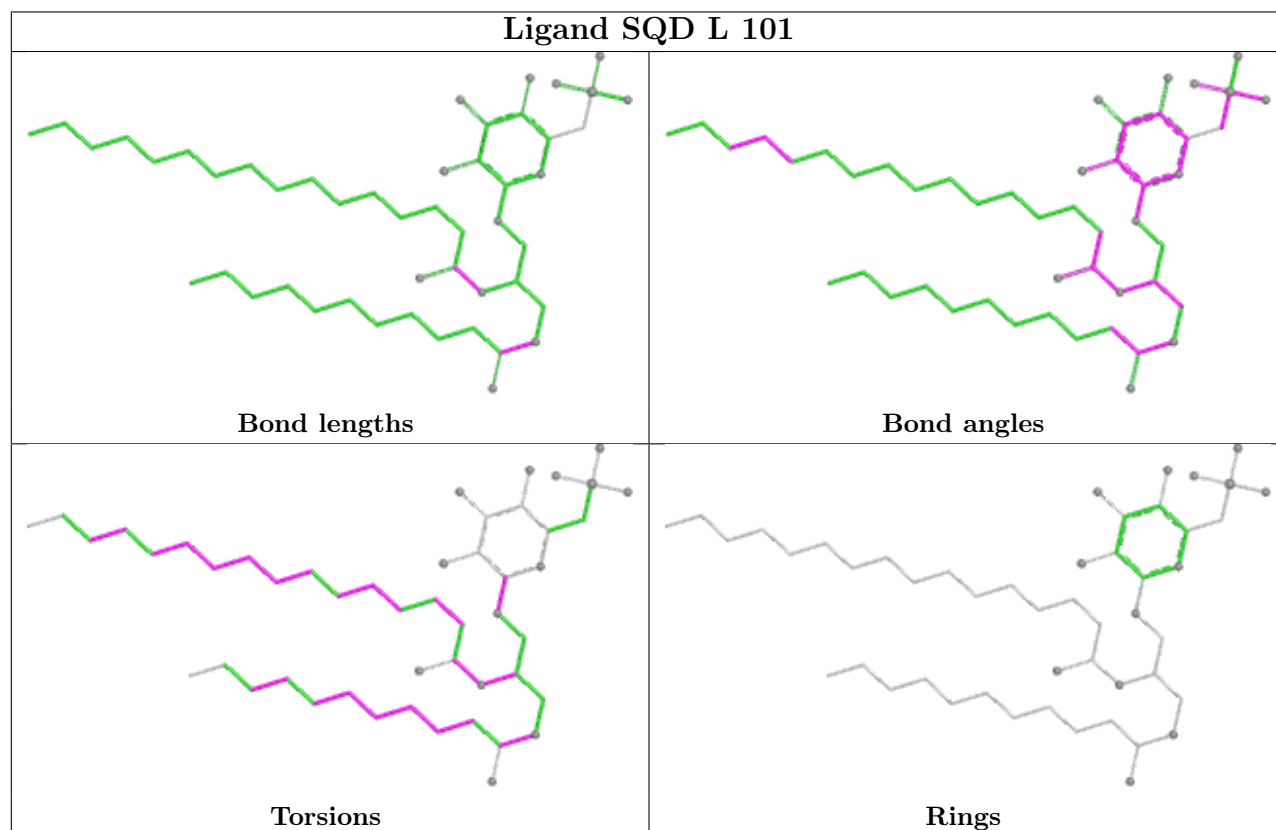


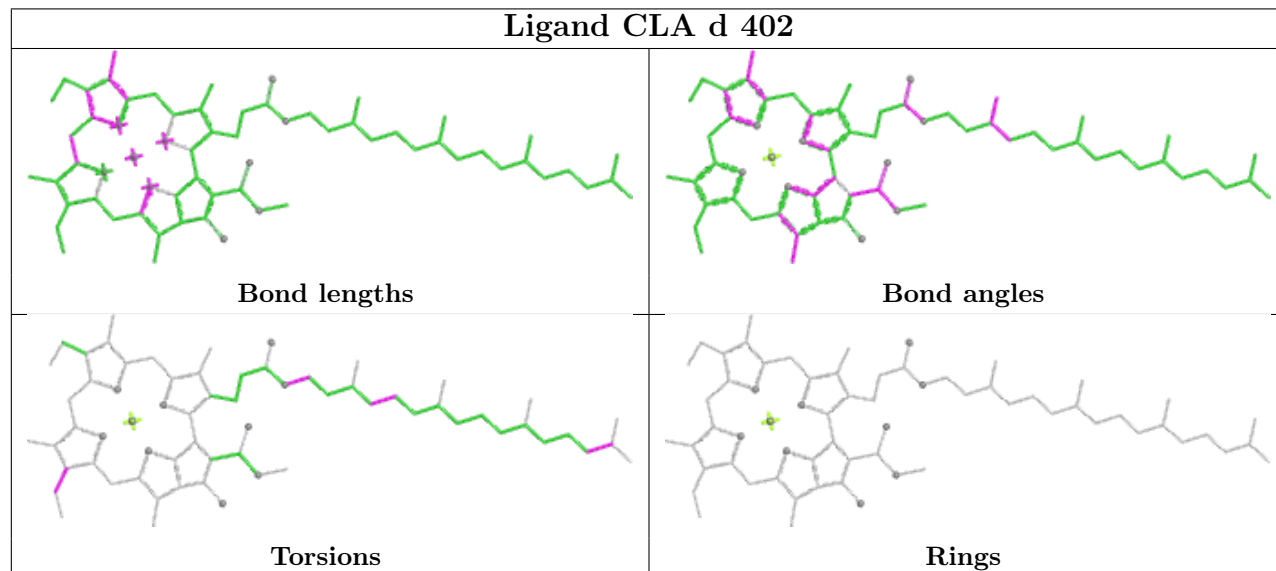
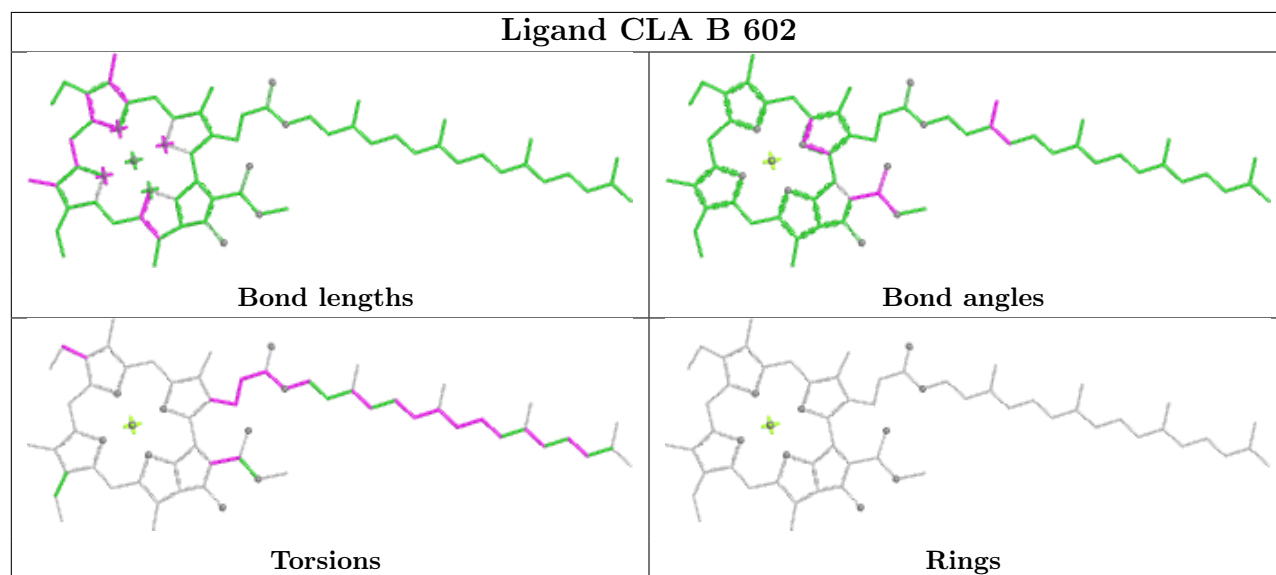
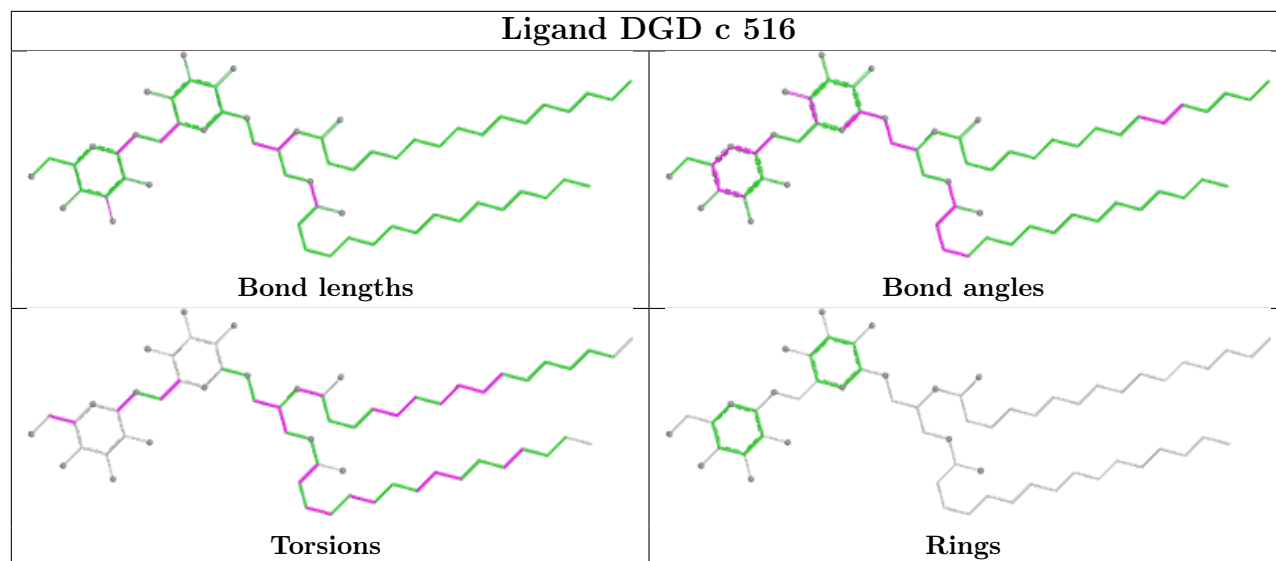


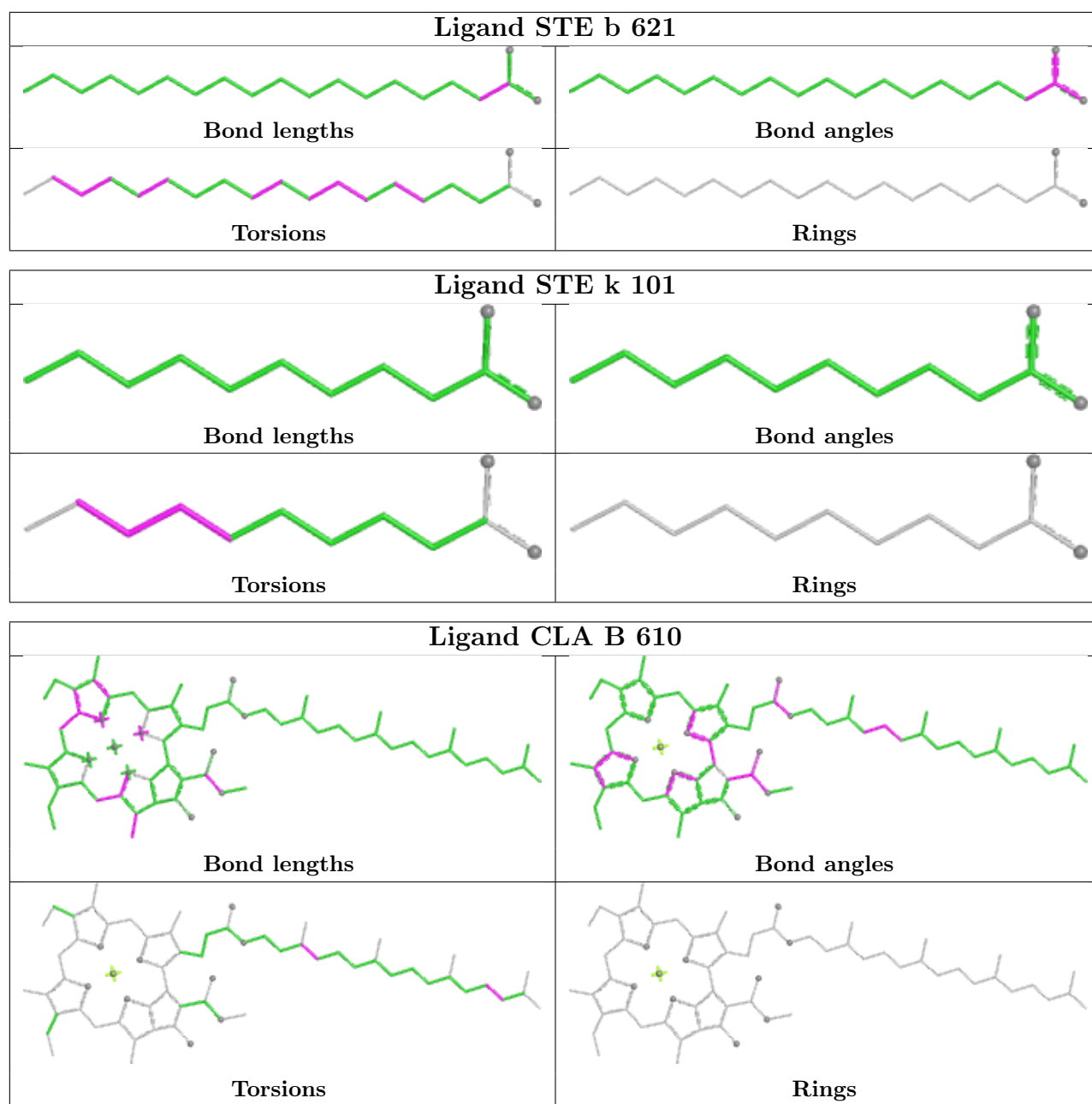
Ligand CLA c 508

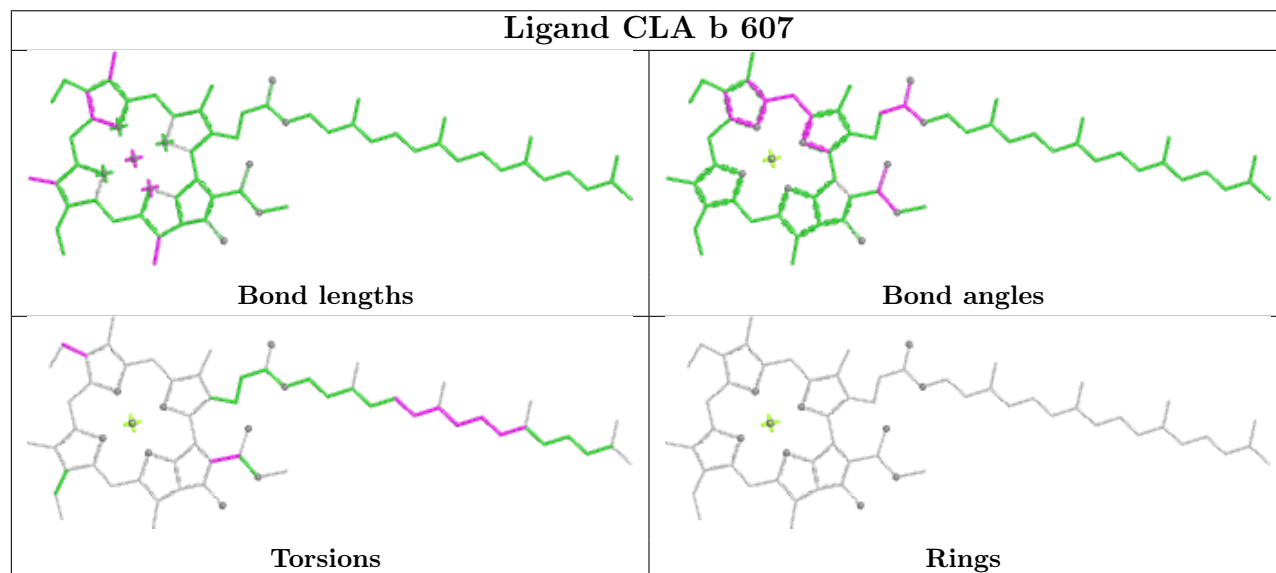
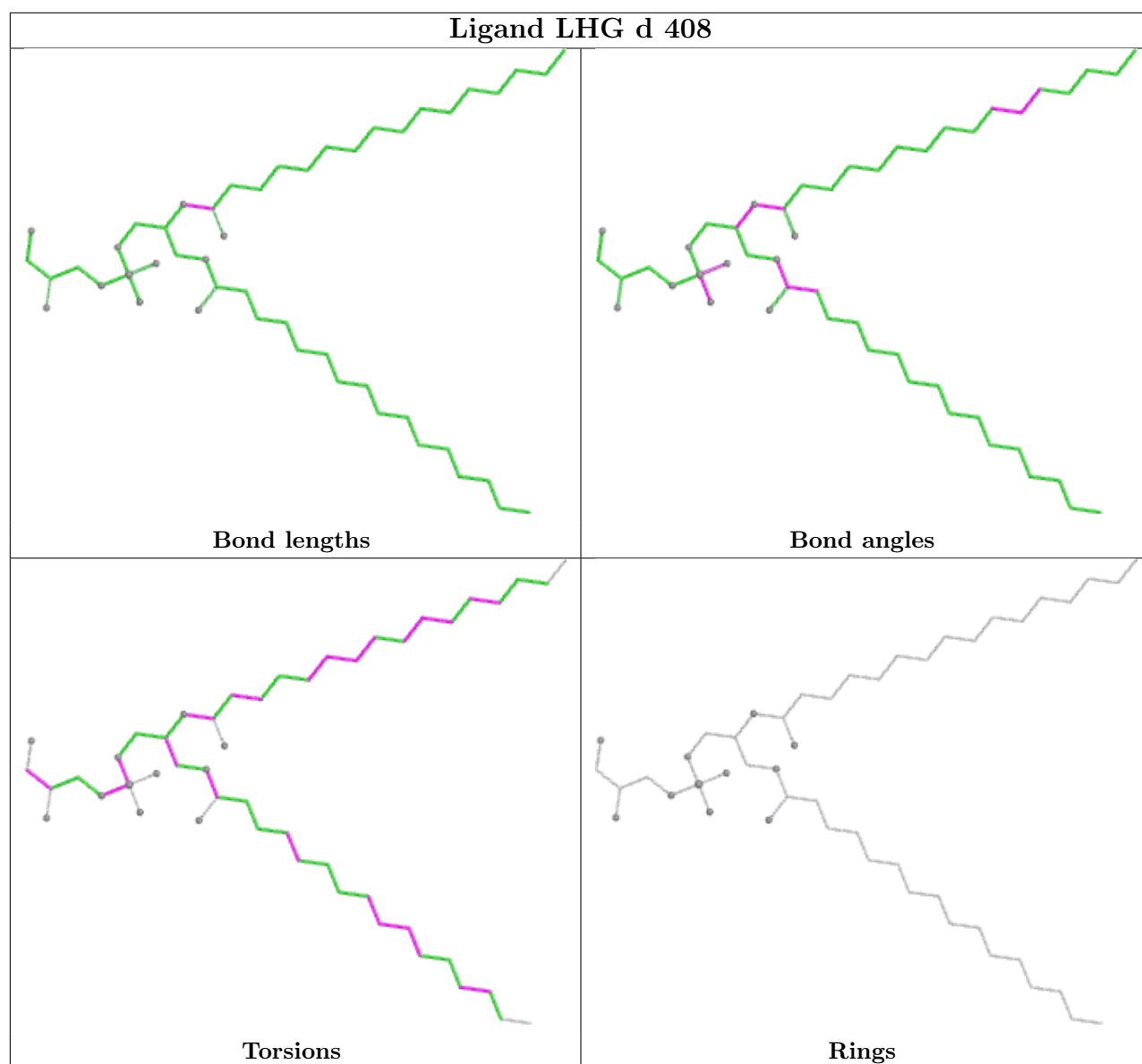


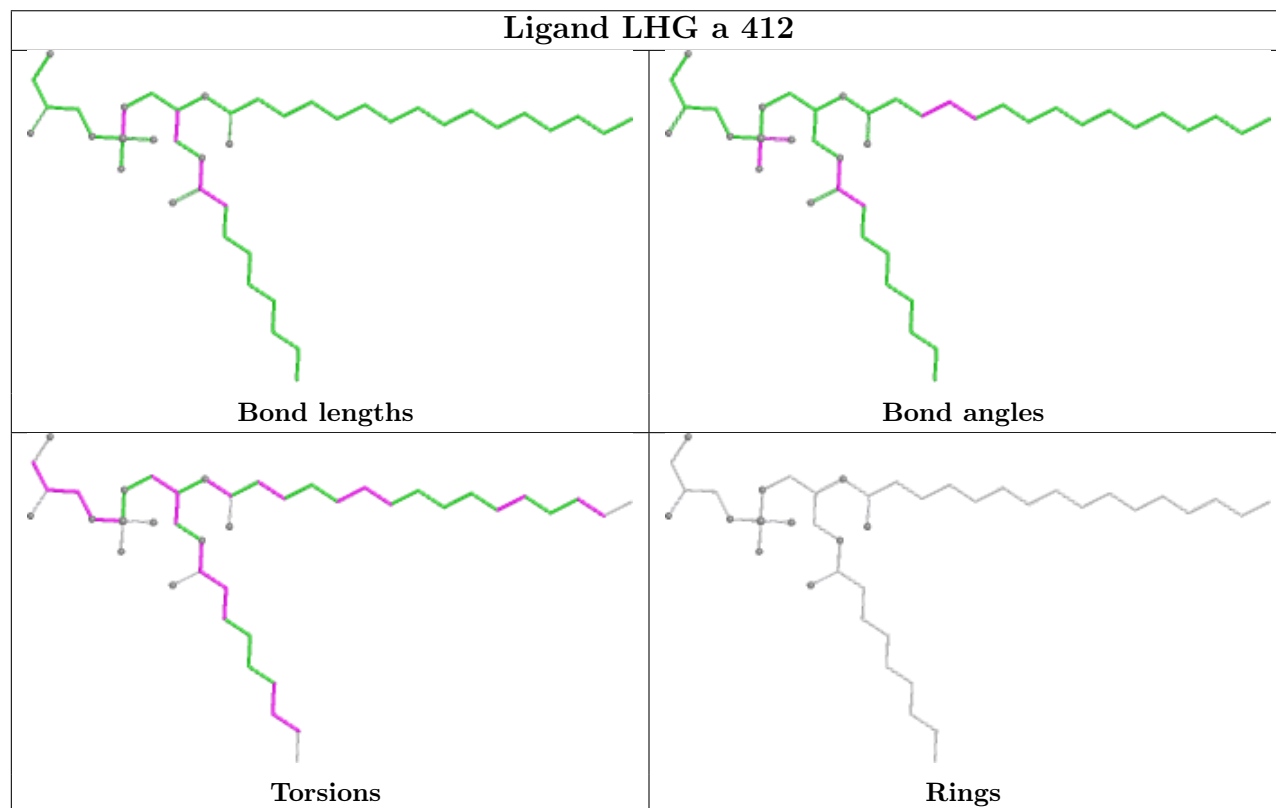
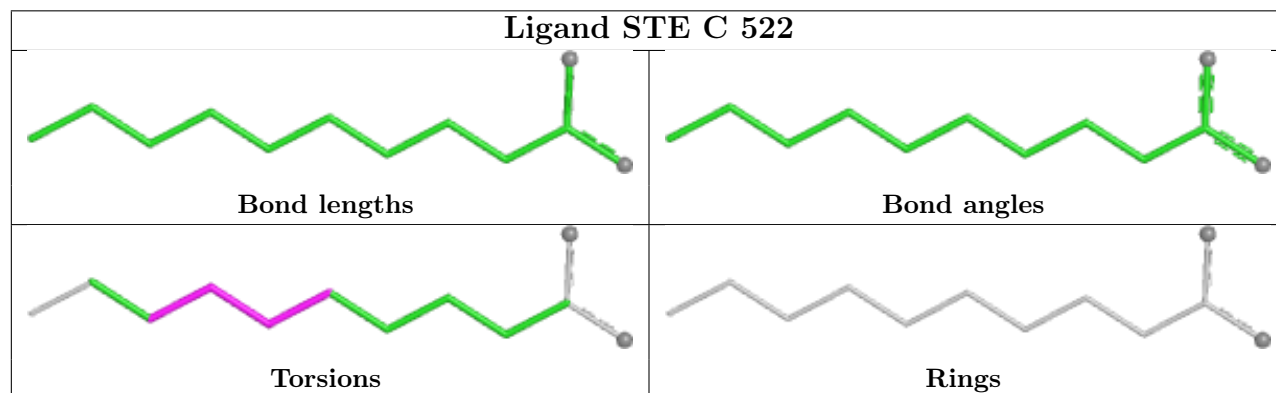
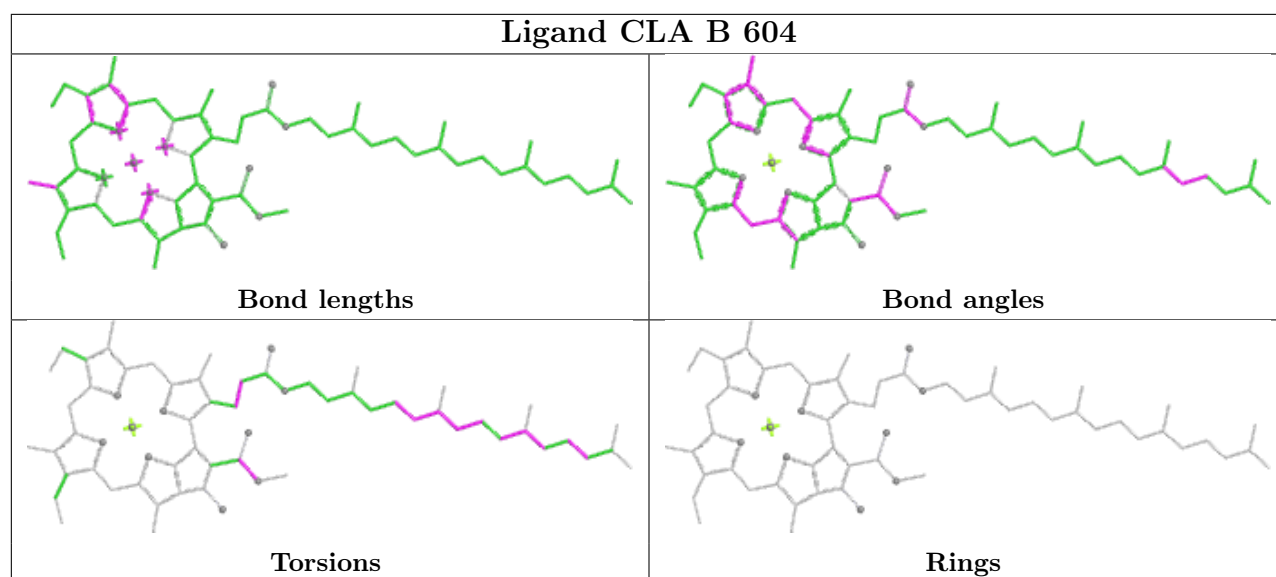
Ligand SQD L 101

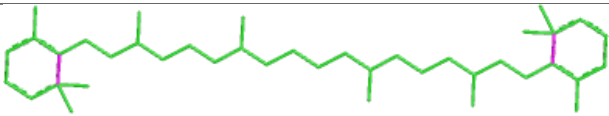
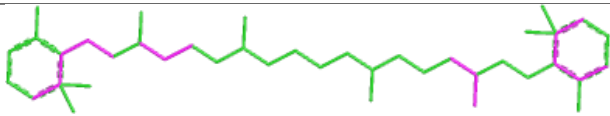
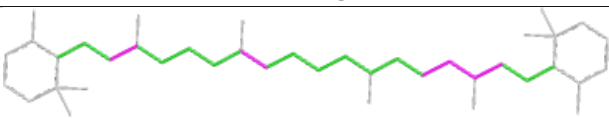
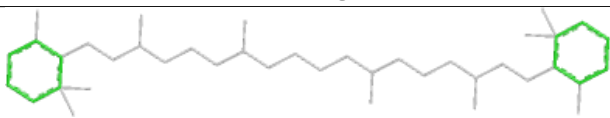





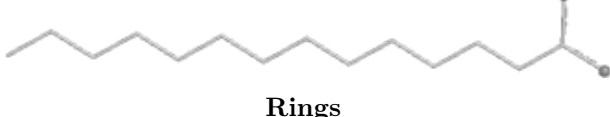








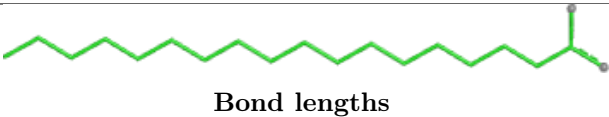
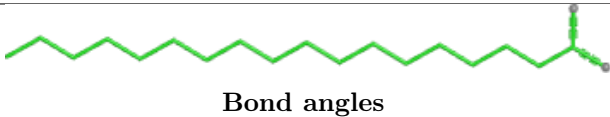




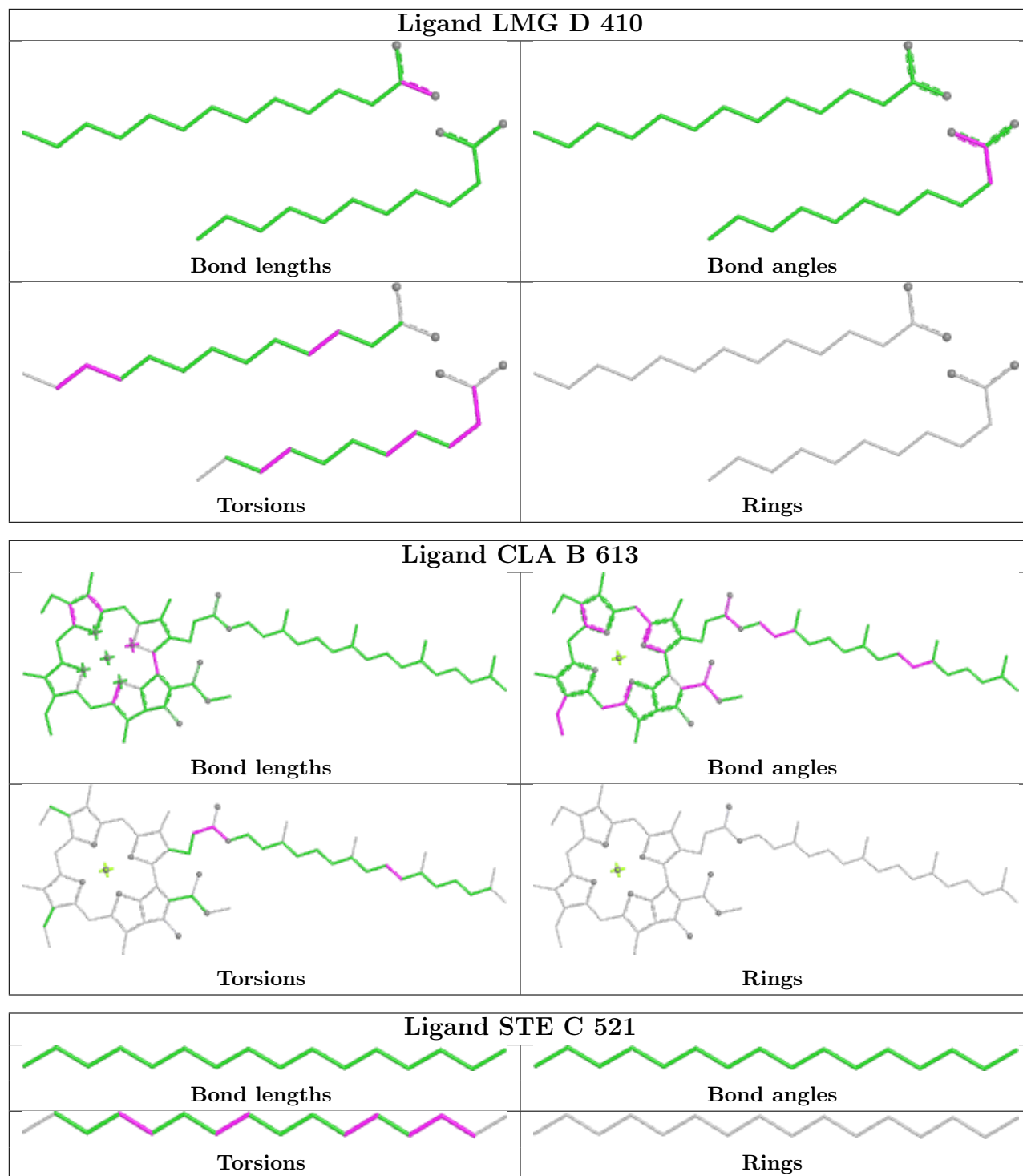


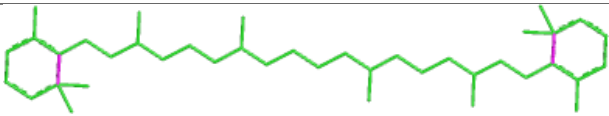
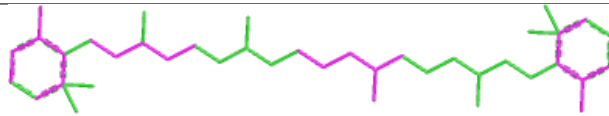
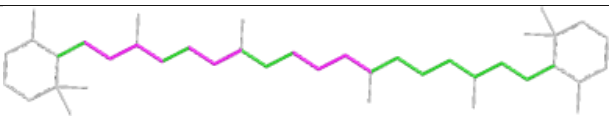
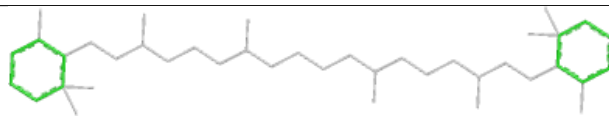
Ligand BCR k 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

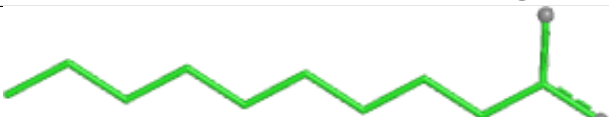
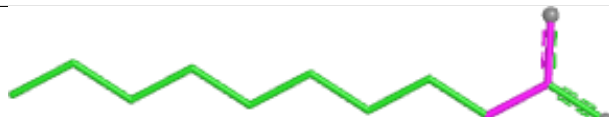
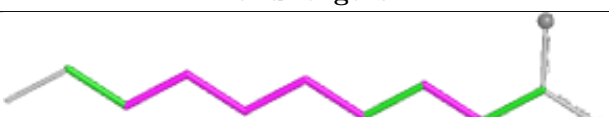
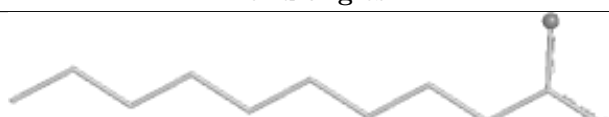
Ligand STE b 623	
	
Bond lengths	Bond angles
	
Torsions	Rings



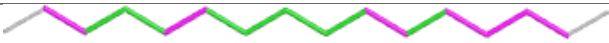

Ligand STE H 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

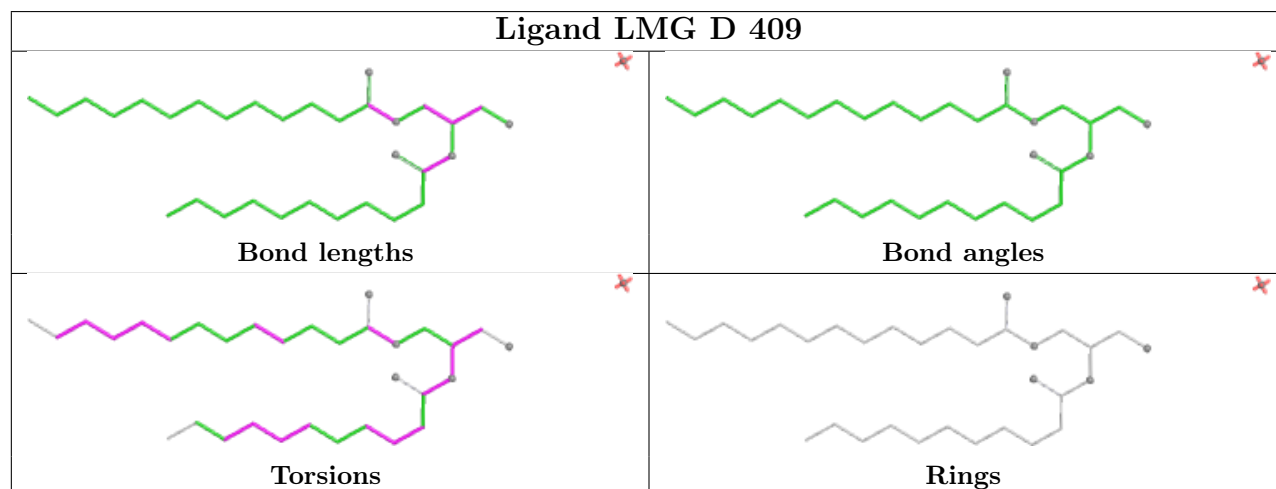
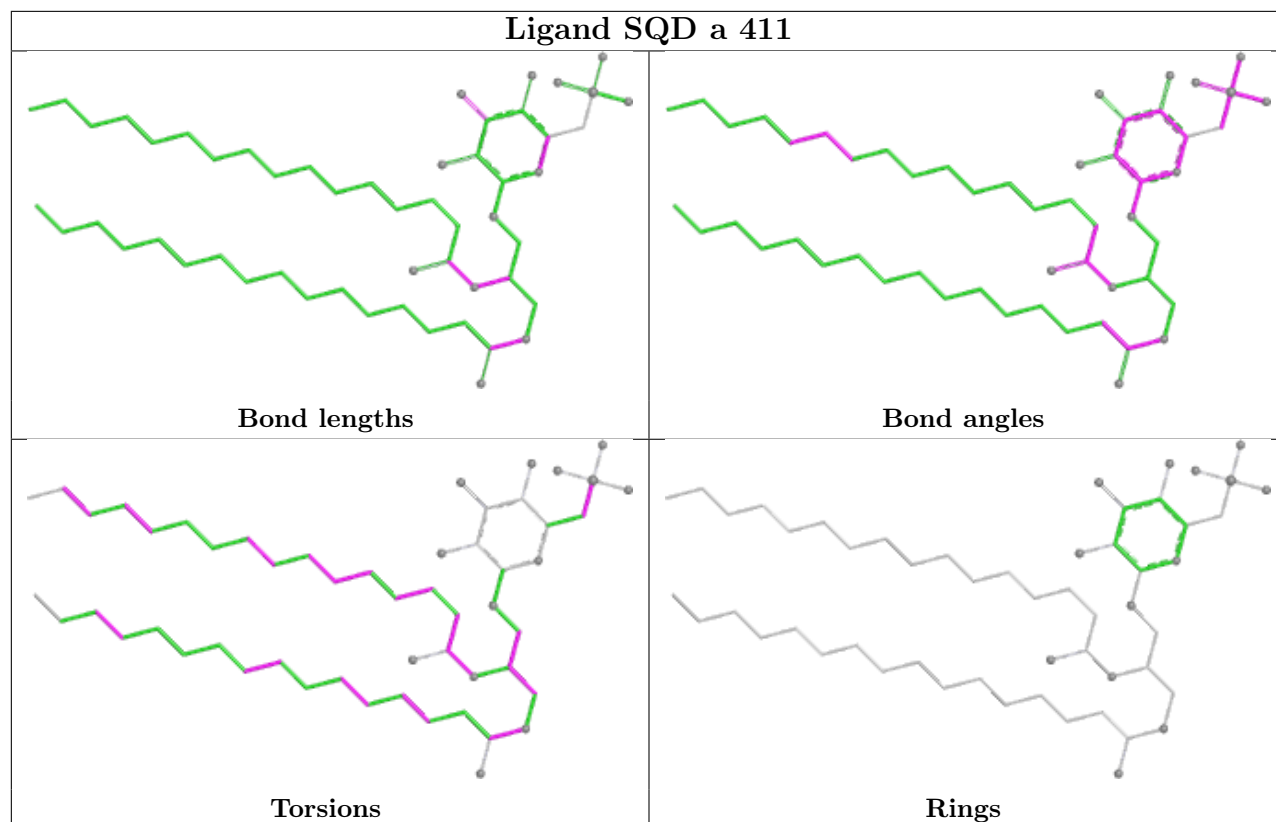
Ligand STE b 626	
	
Bond lengths	Bond angles
	
Torsions	Rings

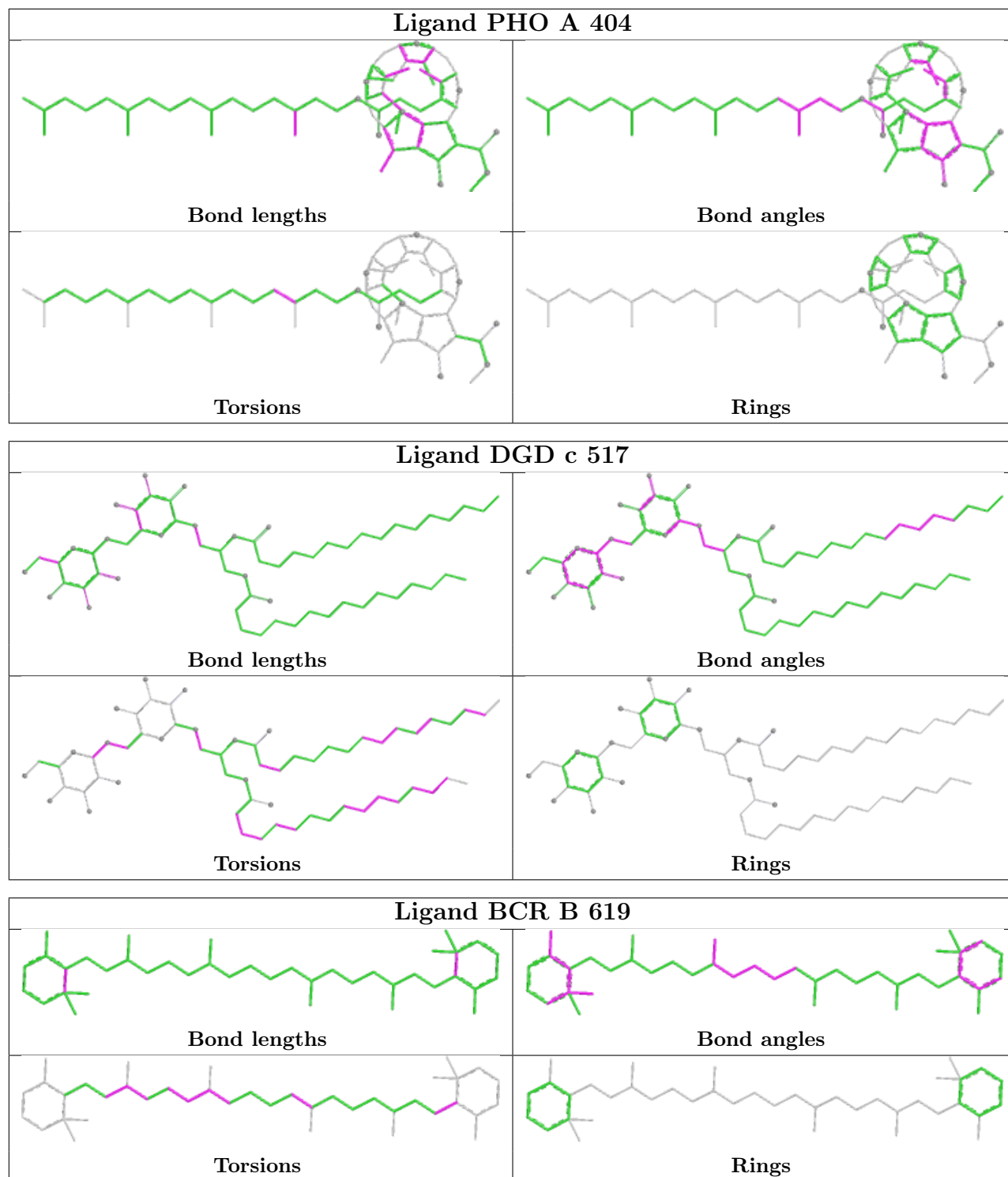


Ligand BCR Z 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

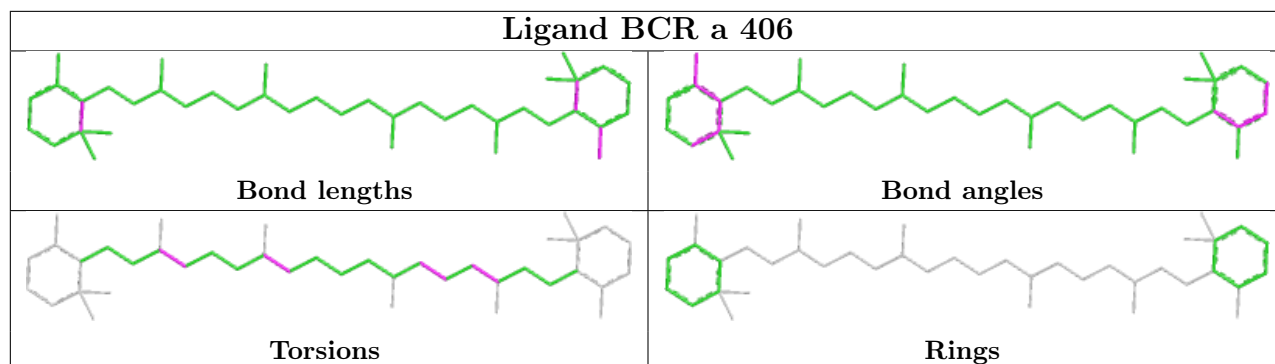
Ligand STE L 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE b 620	
	
Bond lengths	Bond angles
	
Torsions	Rings

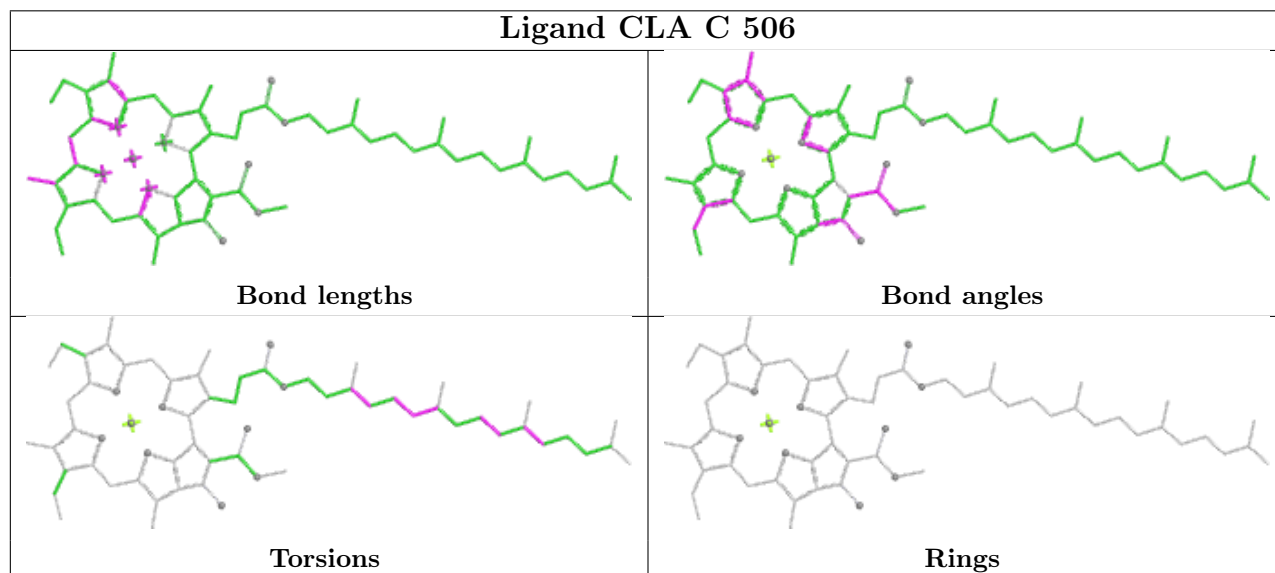




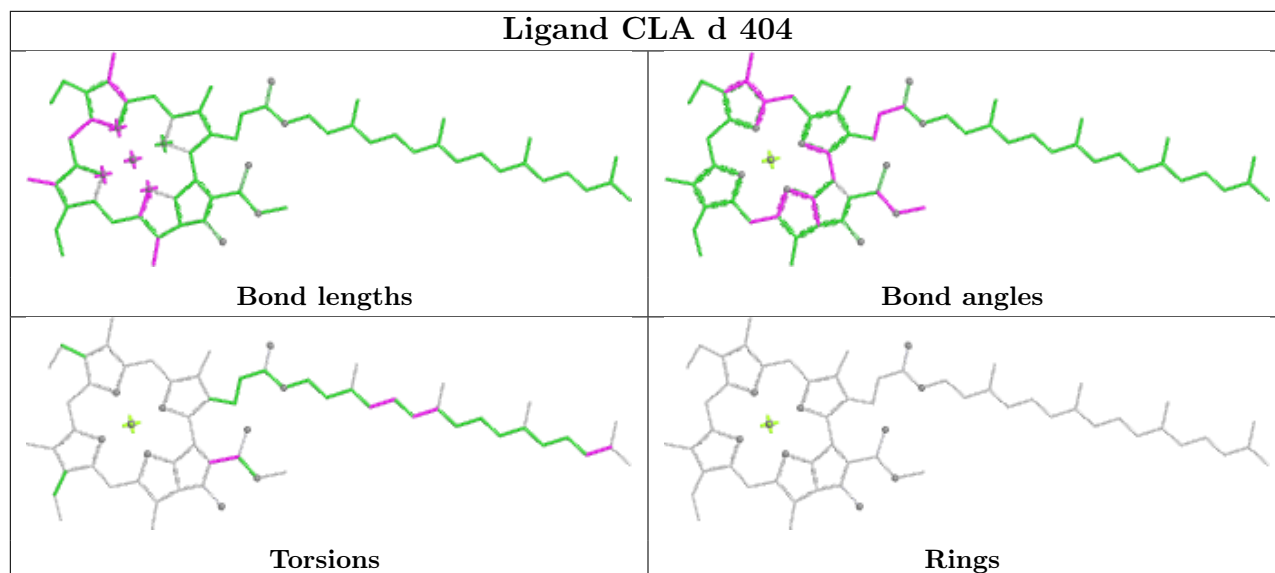
Ligand BCR a 406



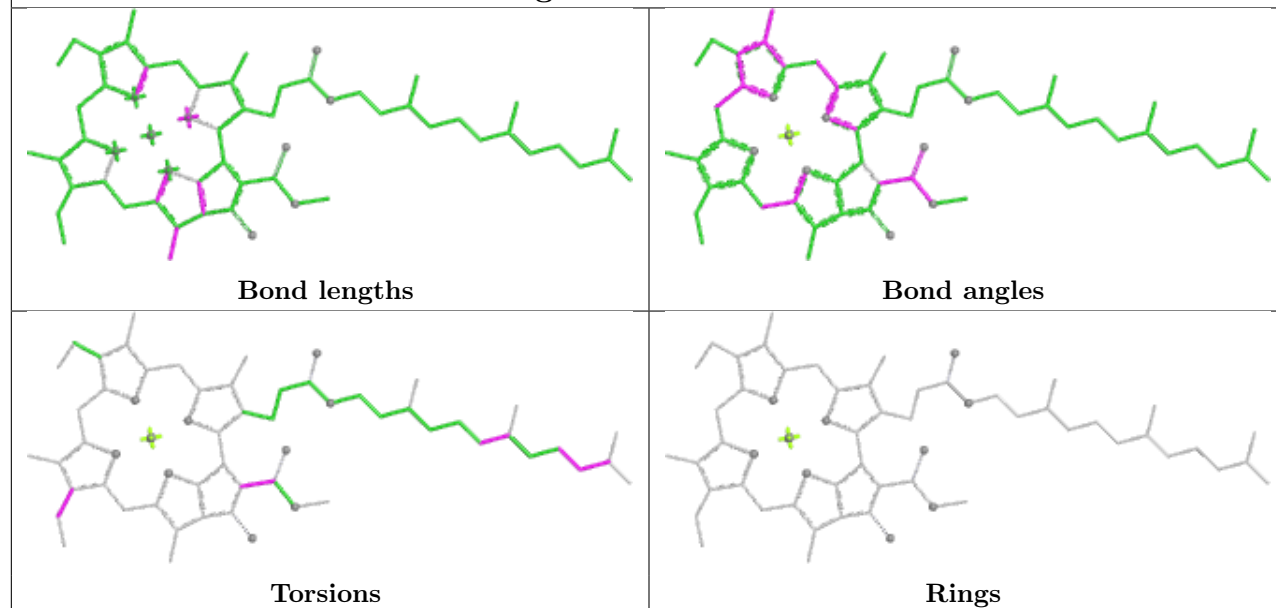
Ligand CLA C 506



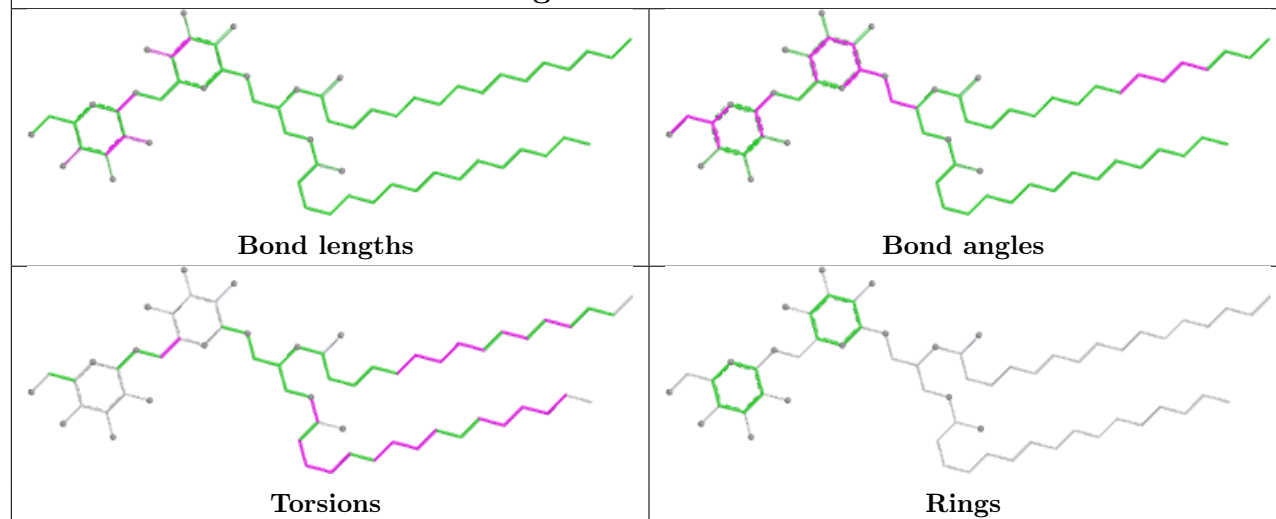
Ligand CLA d 404



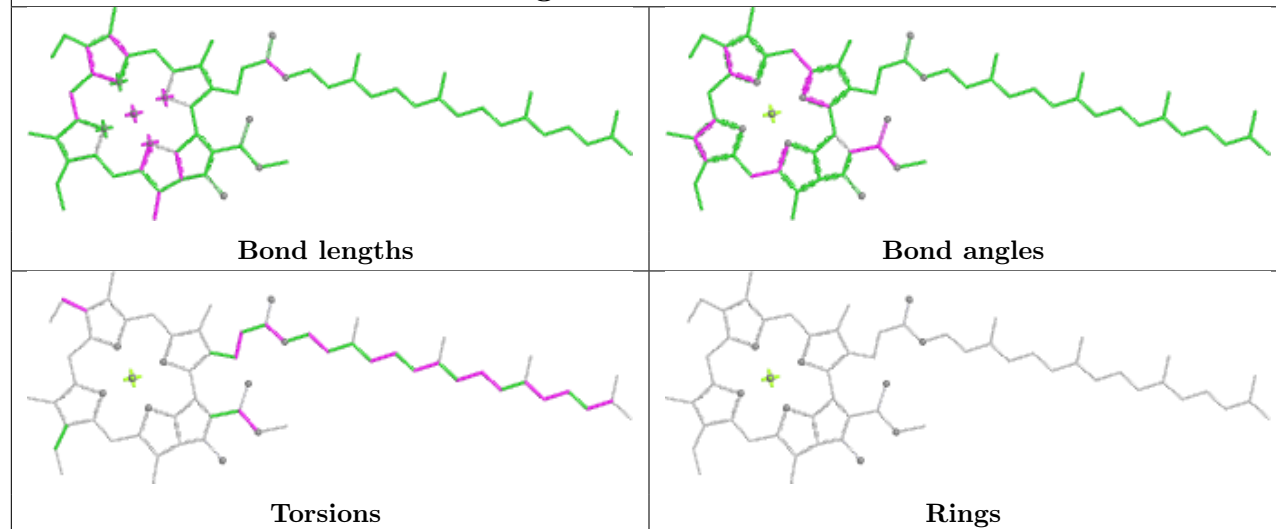
Ligand CLA b 616

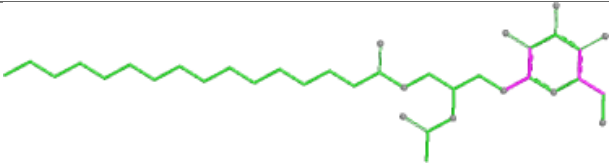
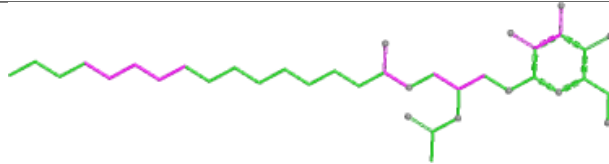
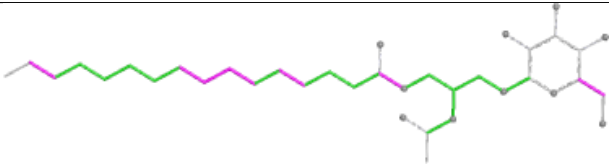
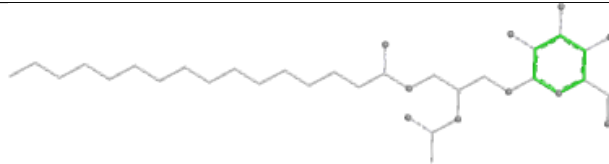


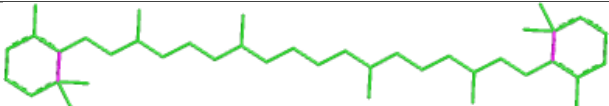
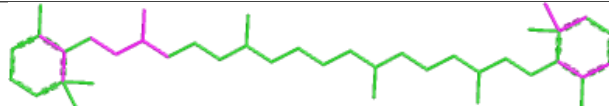
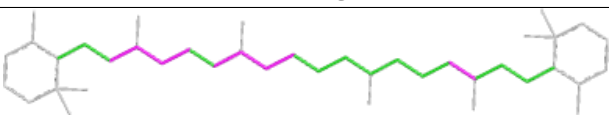
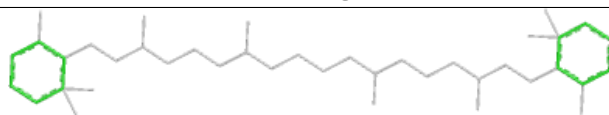
Ligand DGD c 518

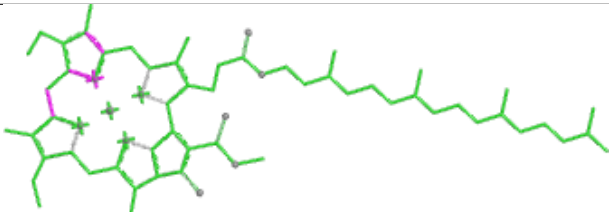
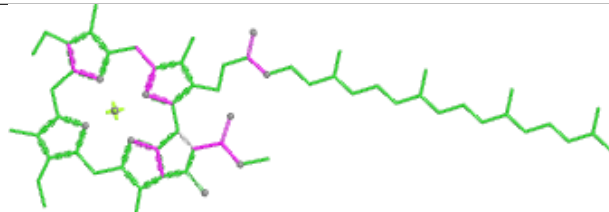
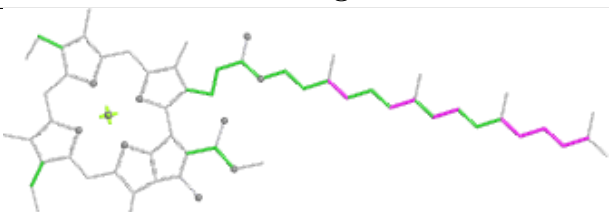
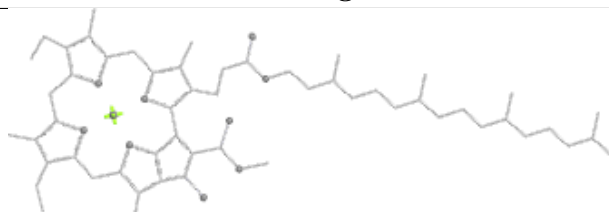


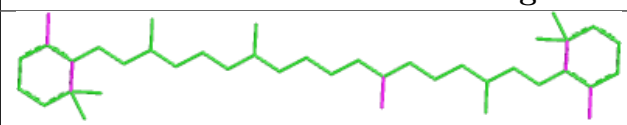
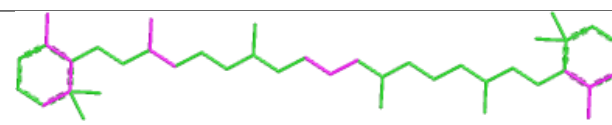
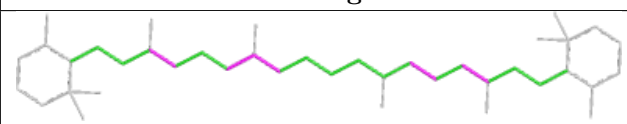
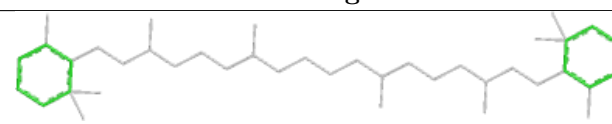
Ligand CLA b 601

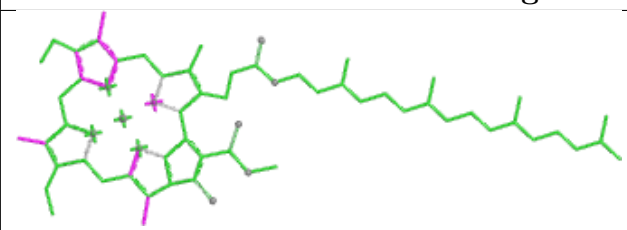
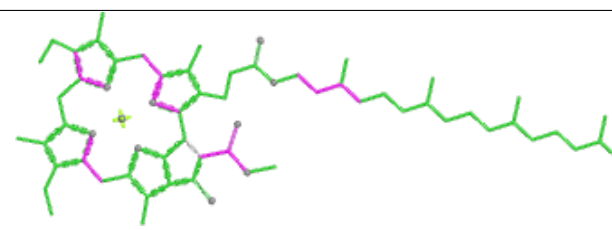
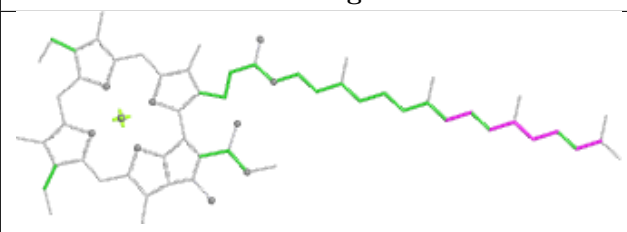
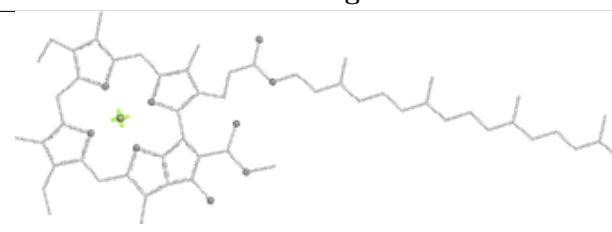


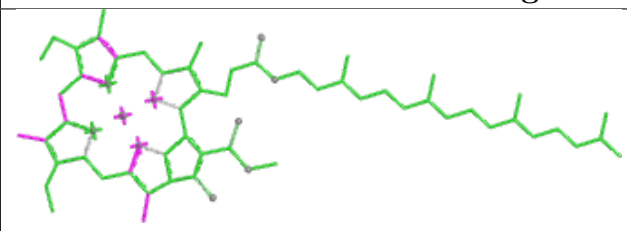
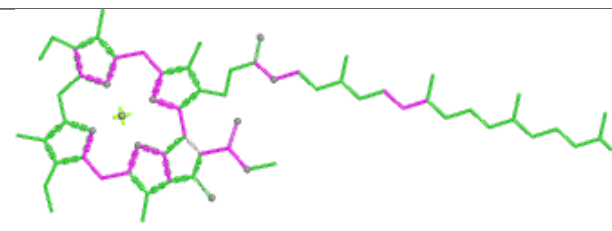
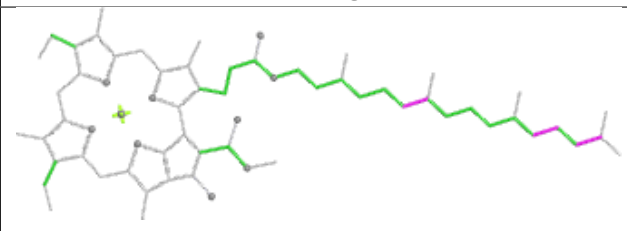
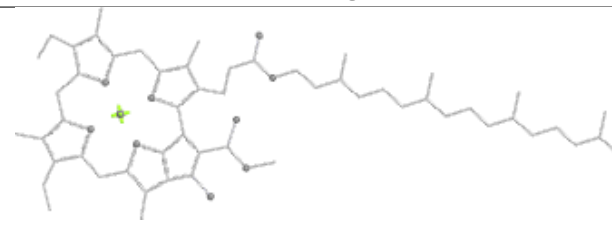
Ligand LMG c 519	
	
Bond lengths	Bond angles
	
Torsions	Rings





Ligand BCR t 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

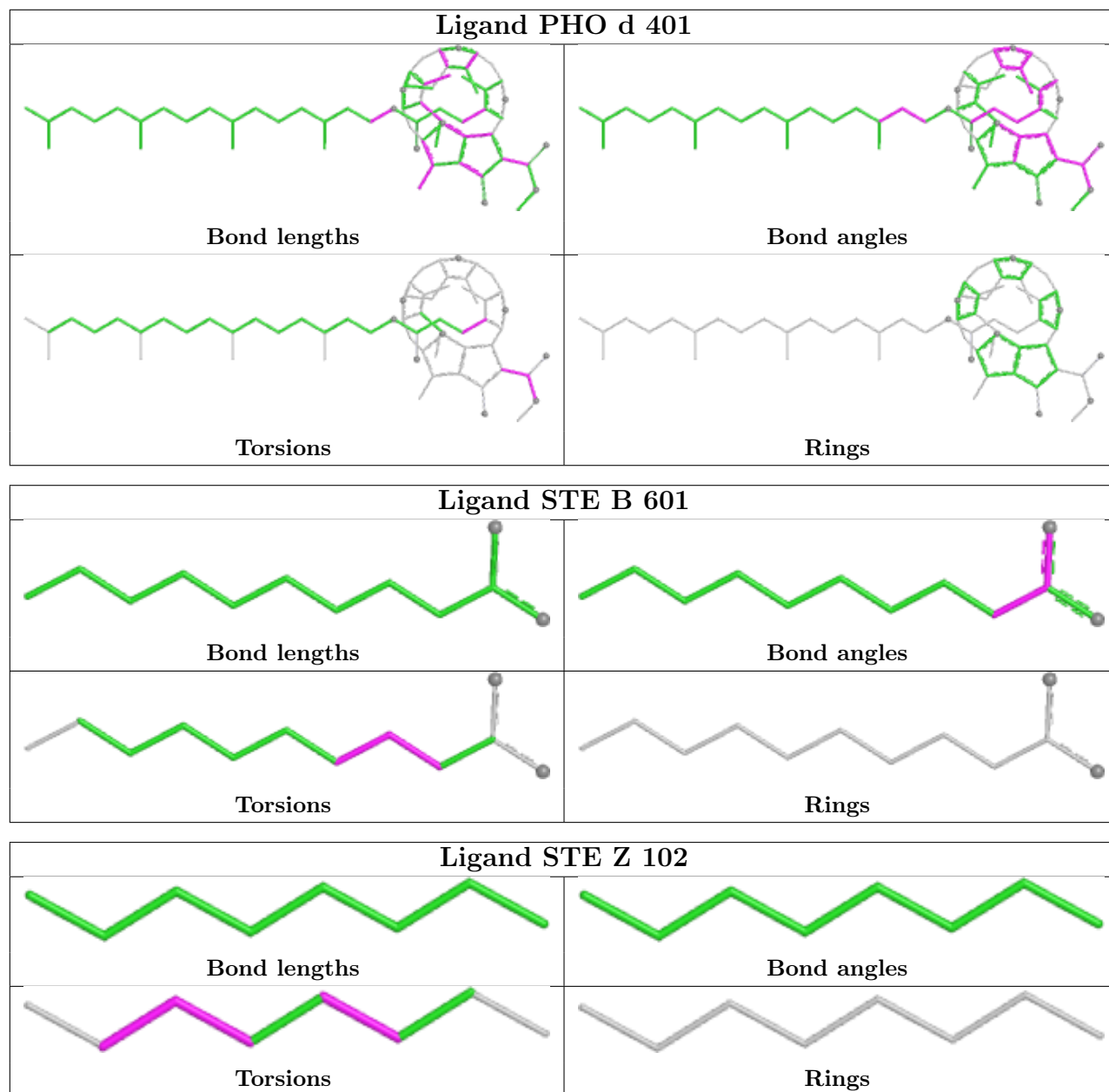
Ligand CLA C 507	
	
Bond lengths	Bond angles
	
Torsions	Rings

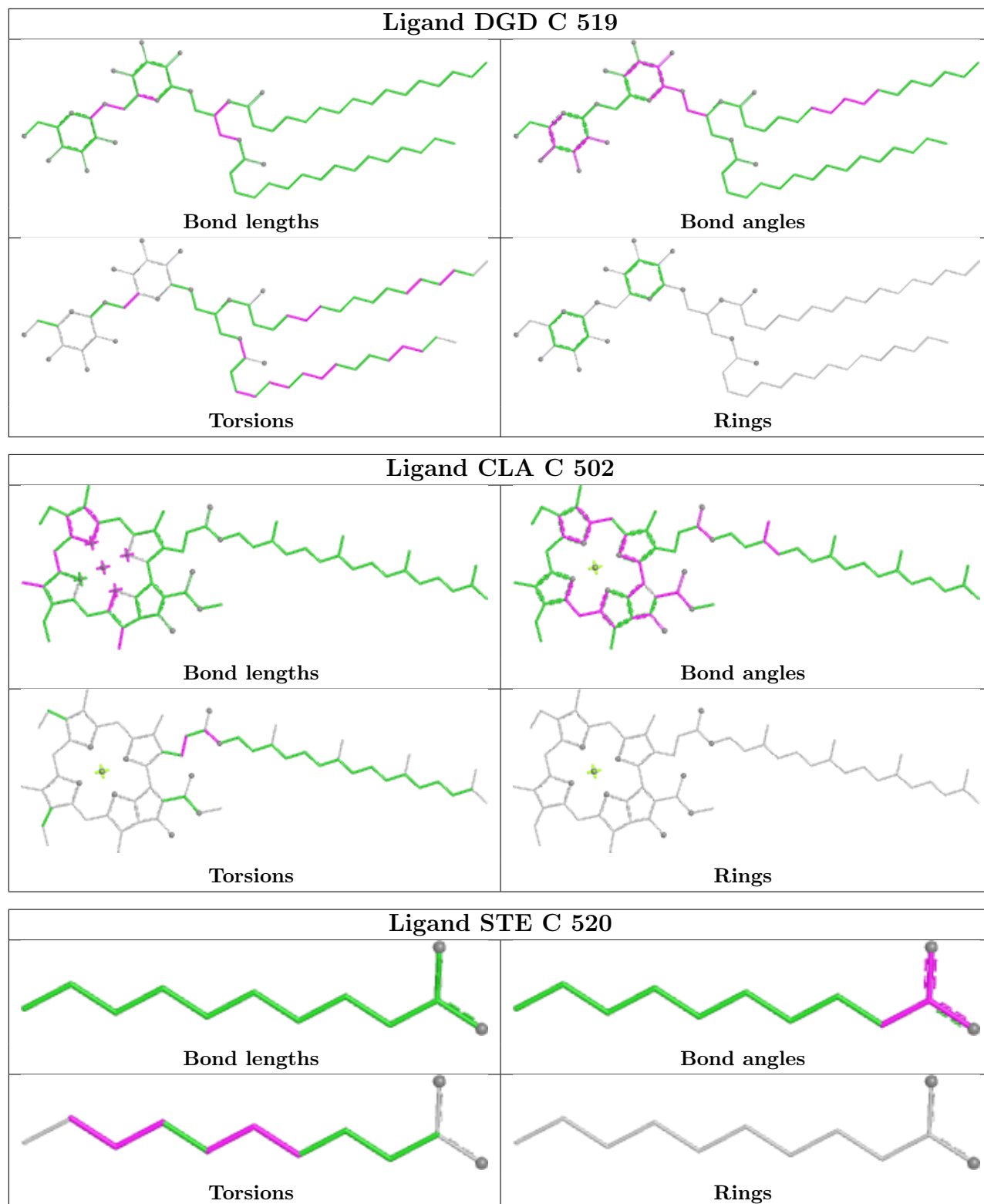
Ligand BCR C 515	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 612	
	
Bond lengths	Bond angles
	
Torsions	Rings

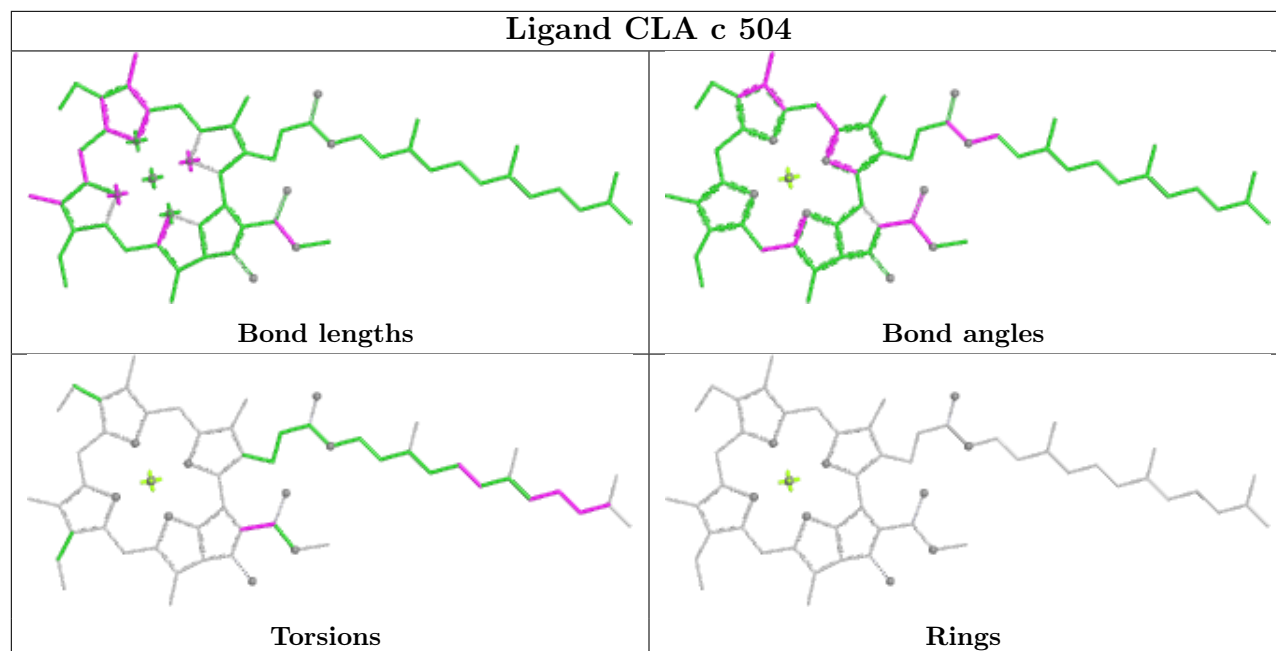
Ligand CLA B 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE B 625	
	
Bond lengths	Bond angles
	
Torsions	Rings

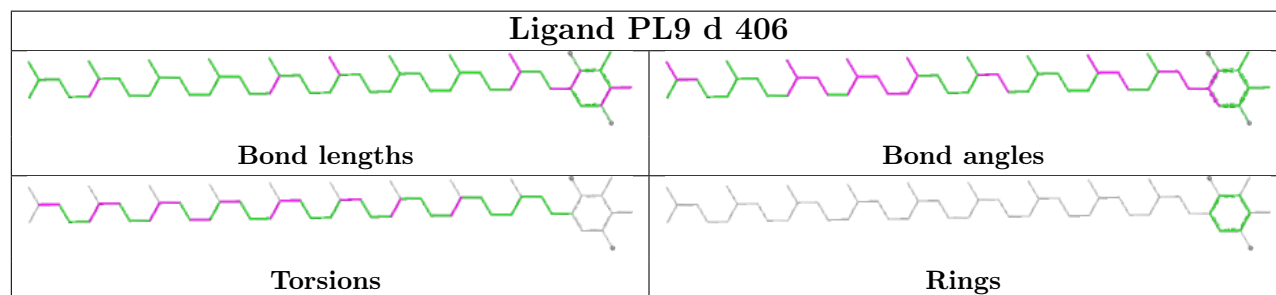




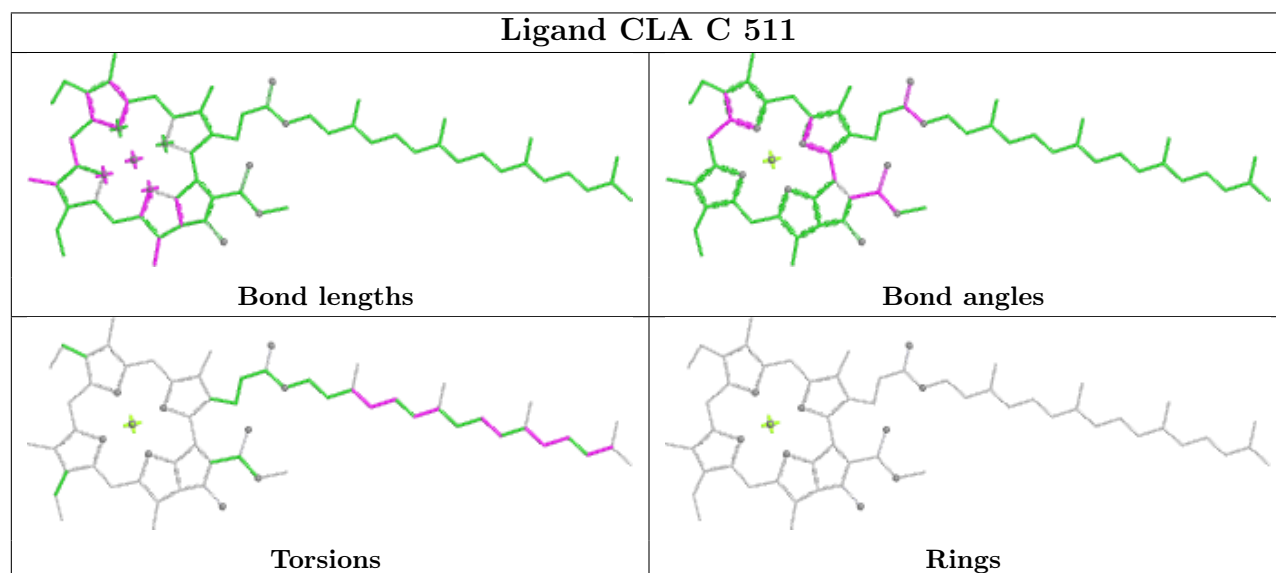
Ligand CLA c 504

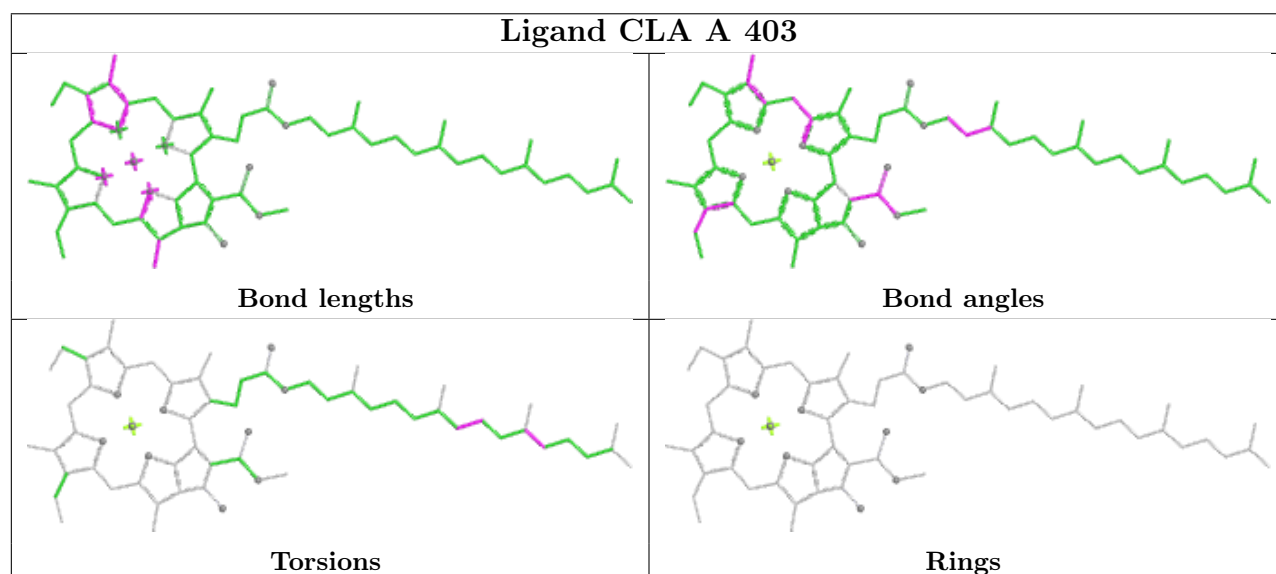
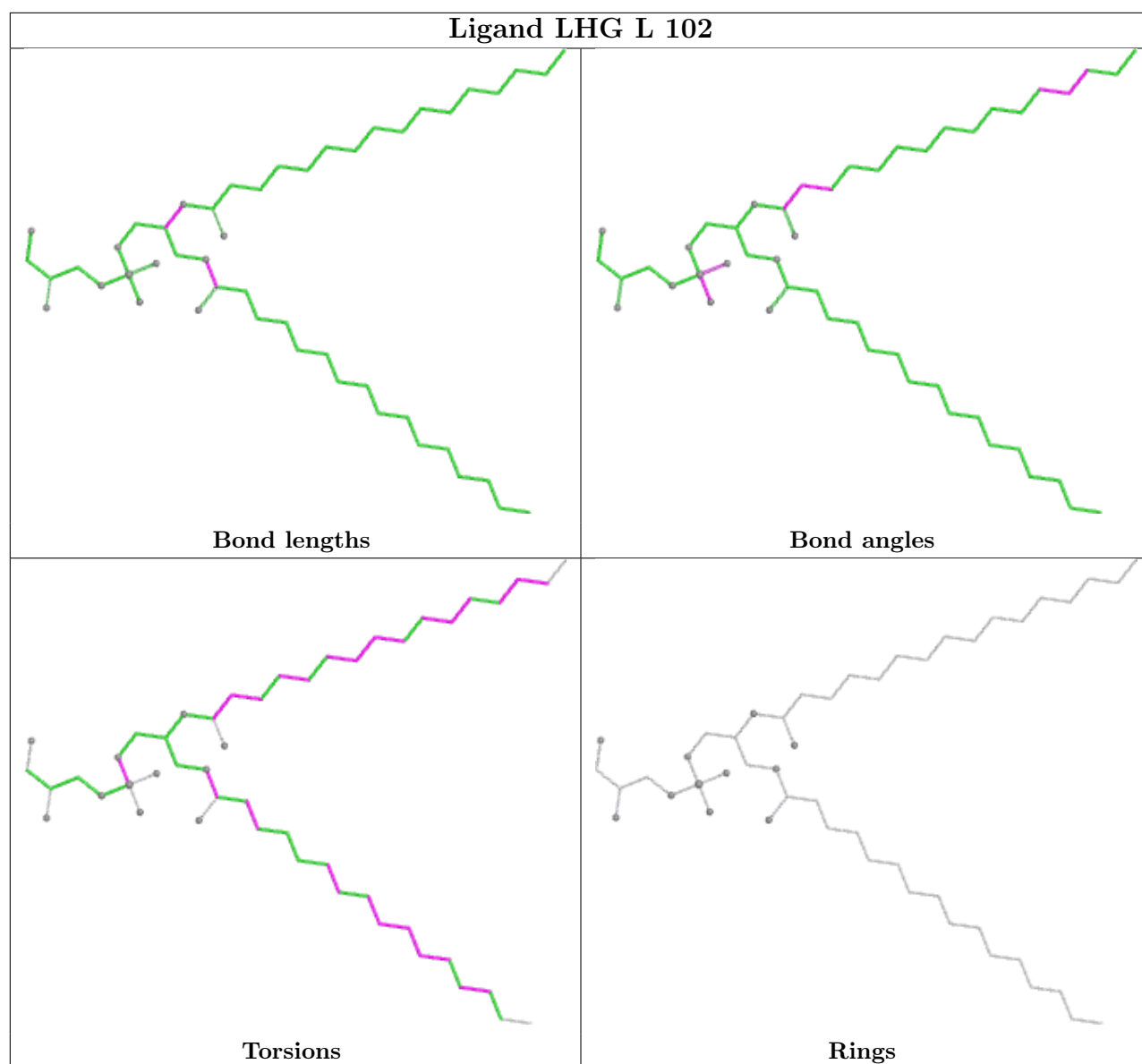


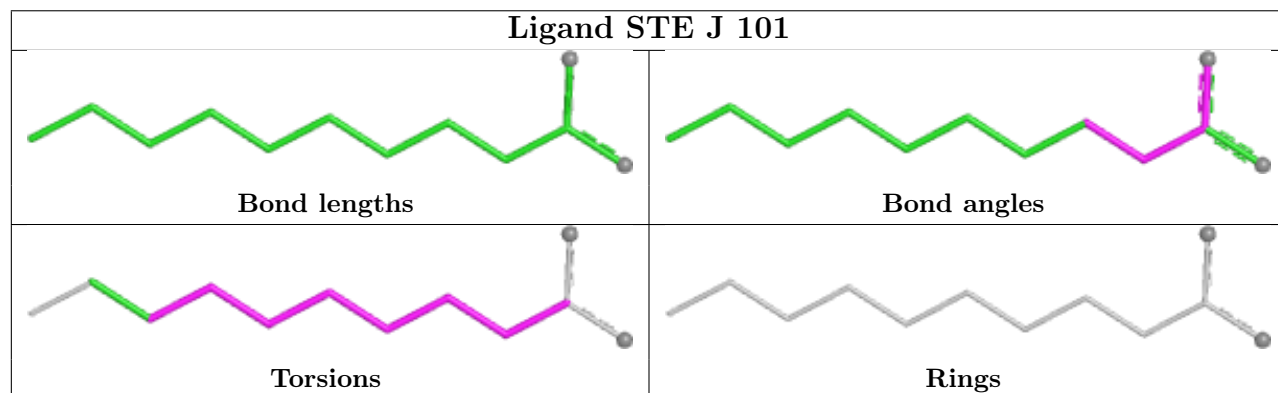
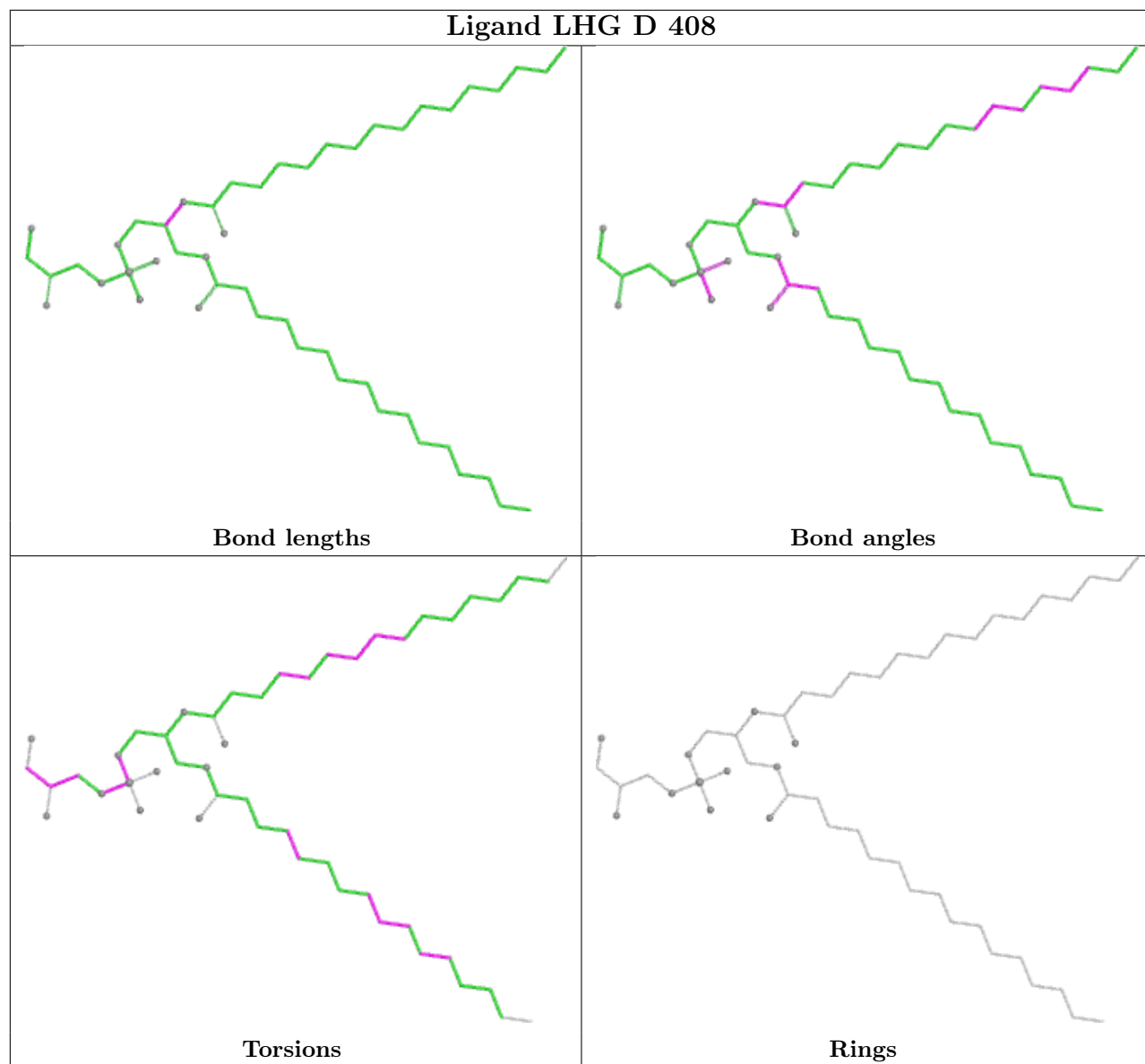
Ligand PL9 d 406

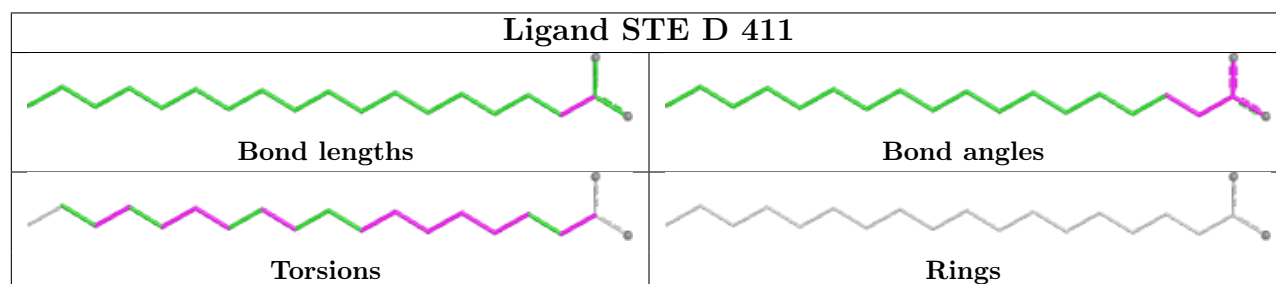
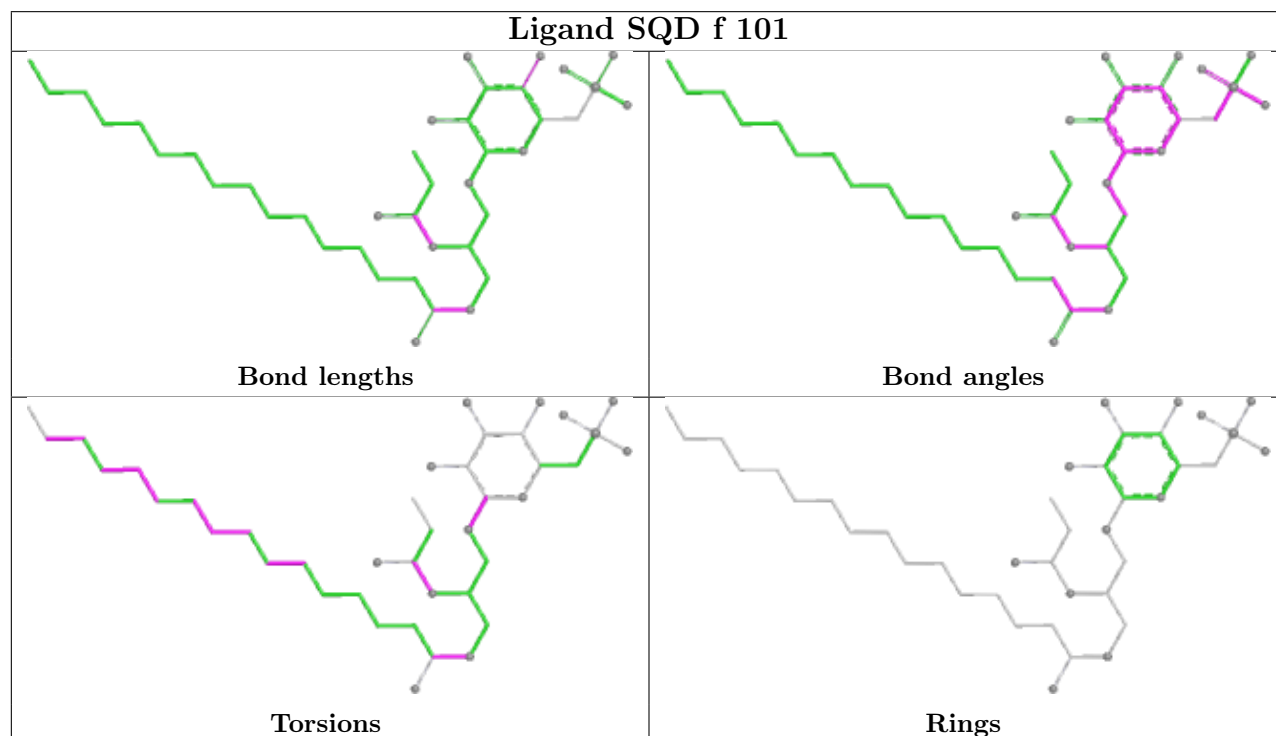
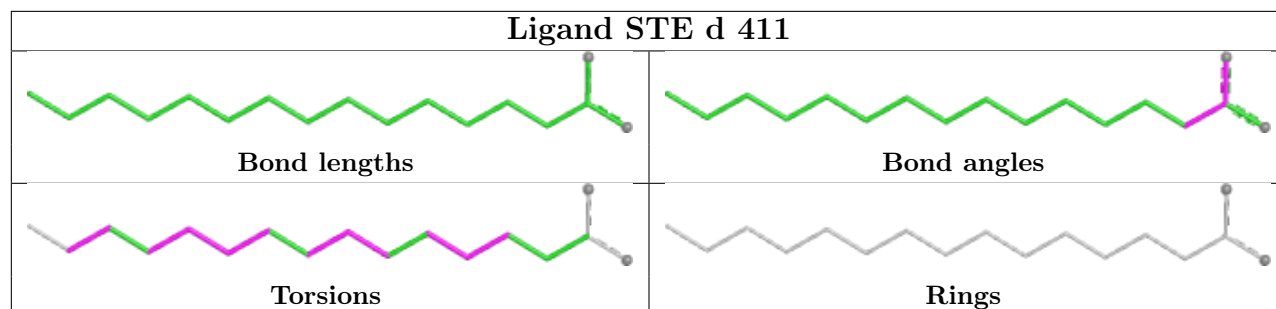


Ligand CLA C 511

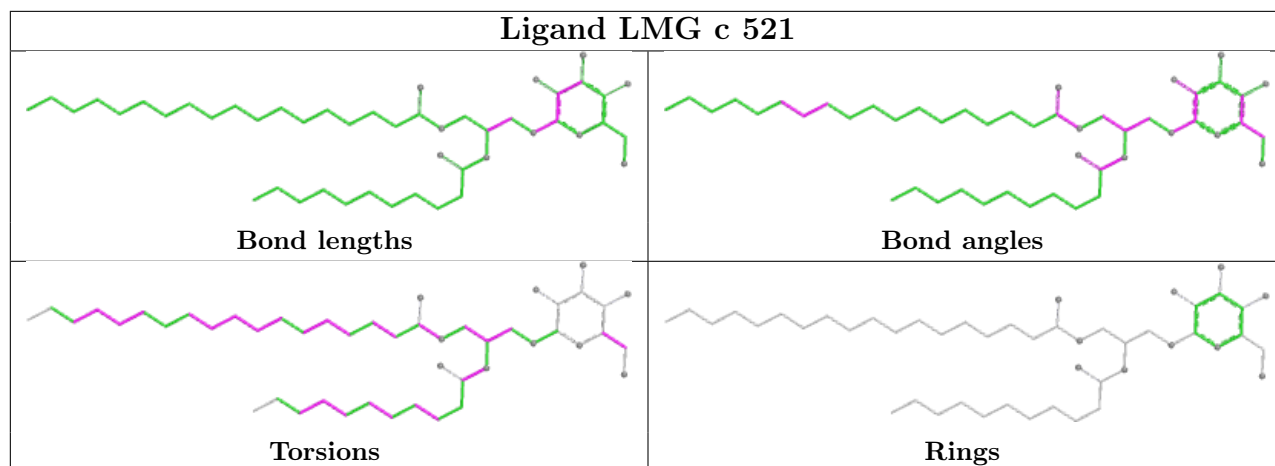




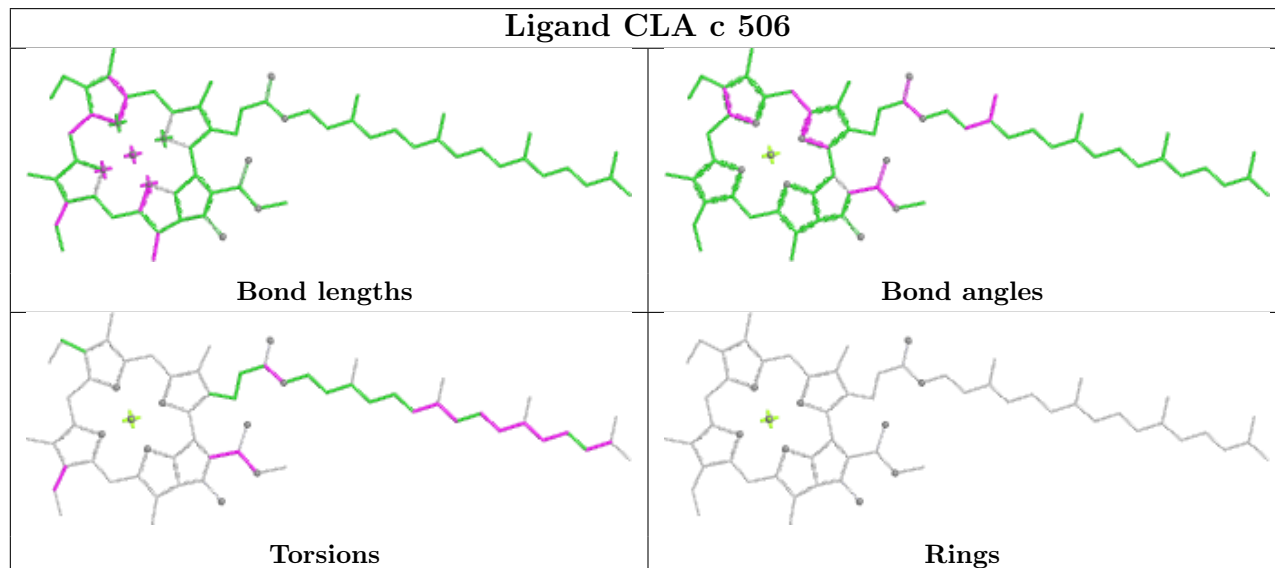




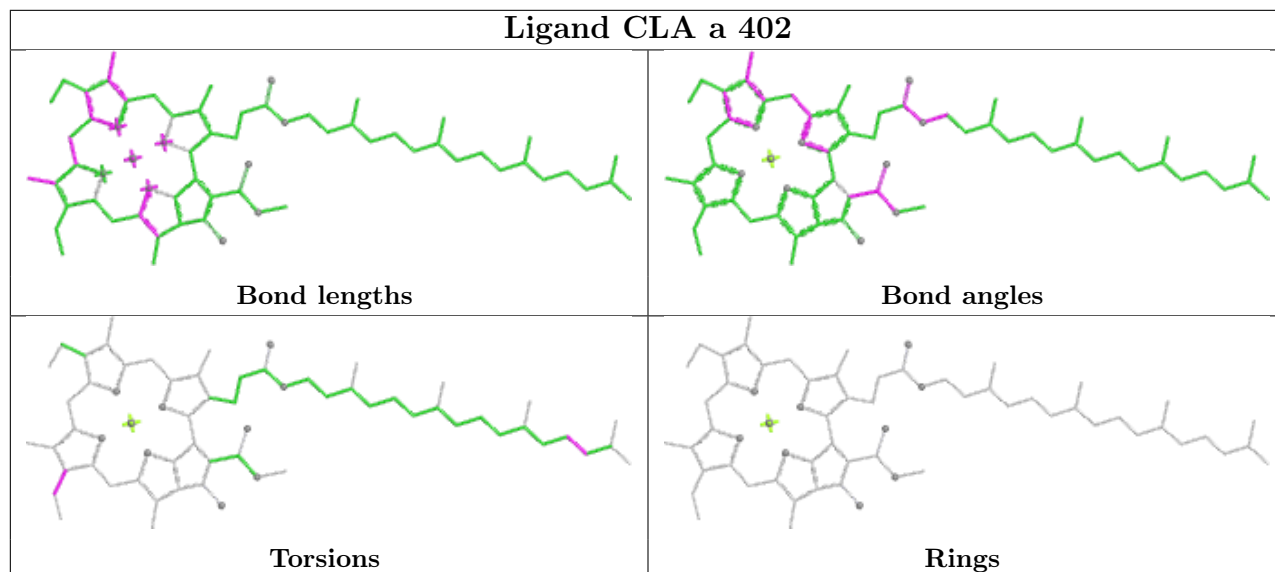
Ligand LMG c 521

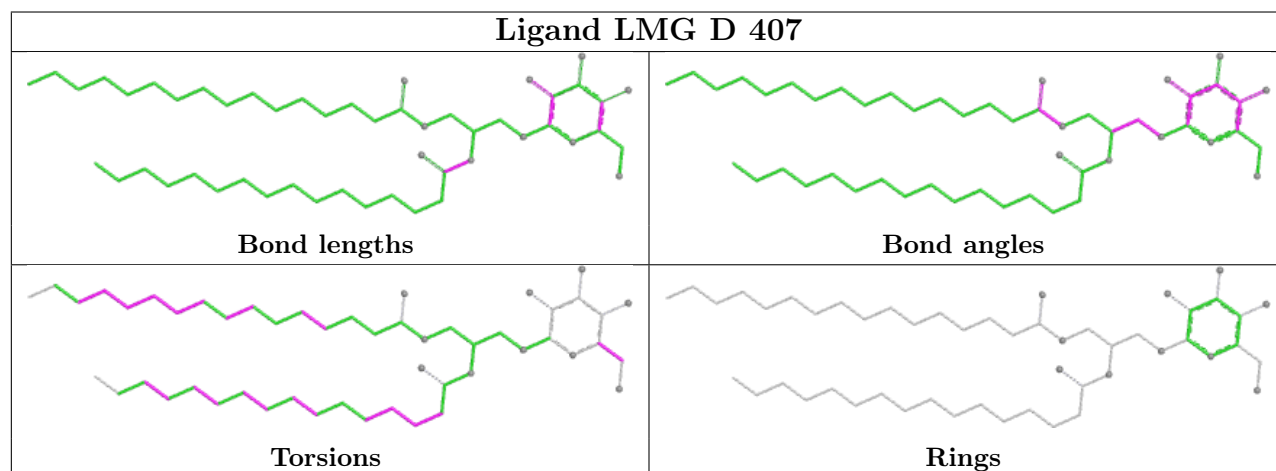
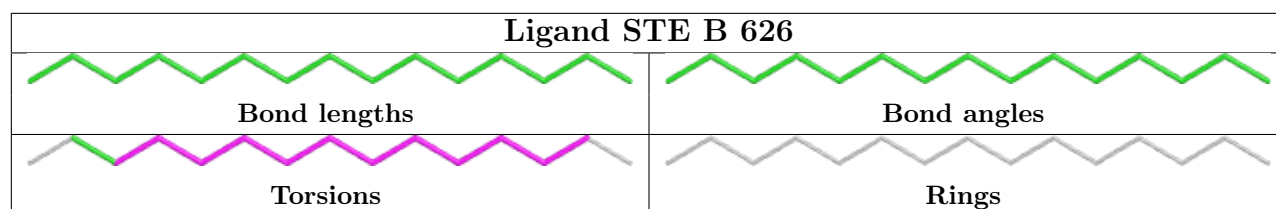
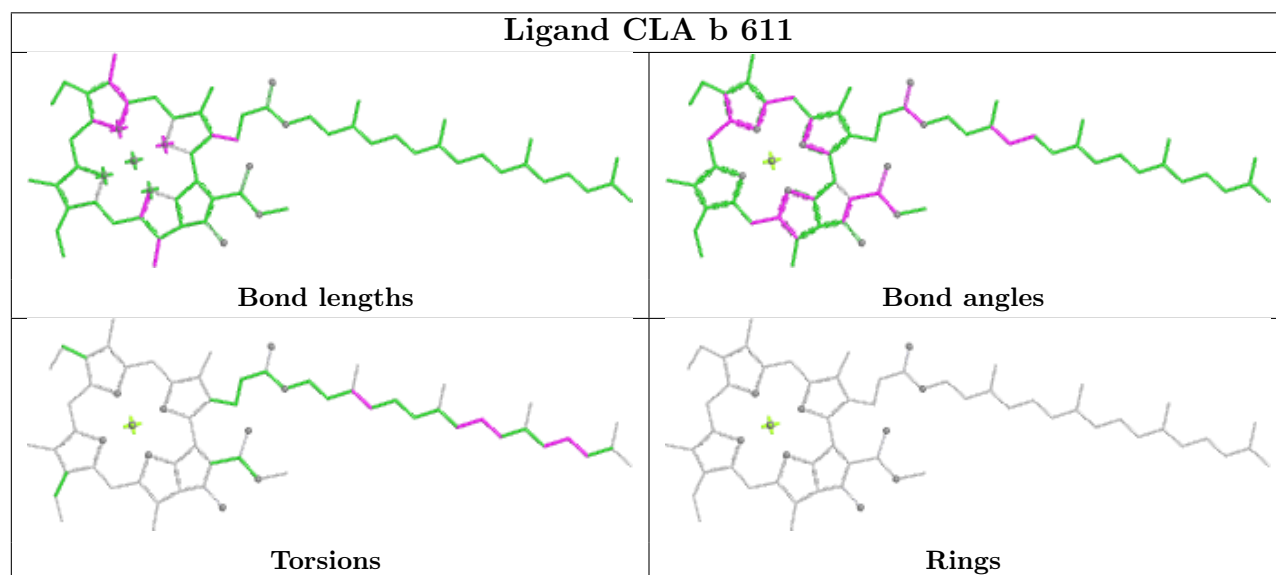
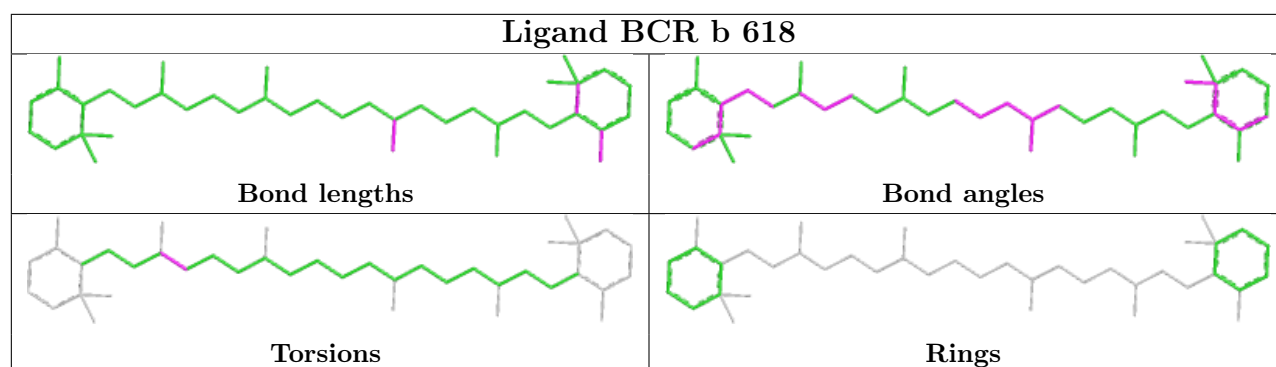


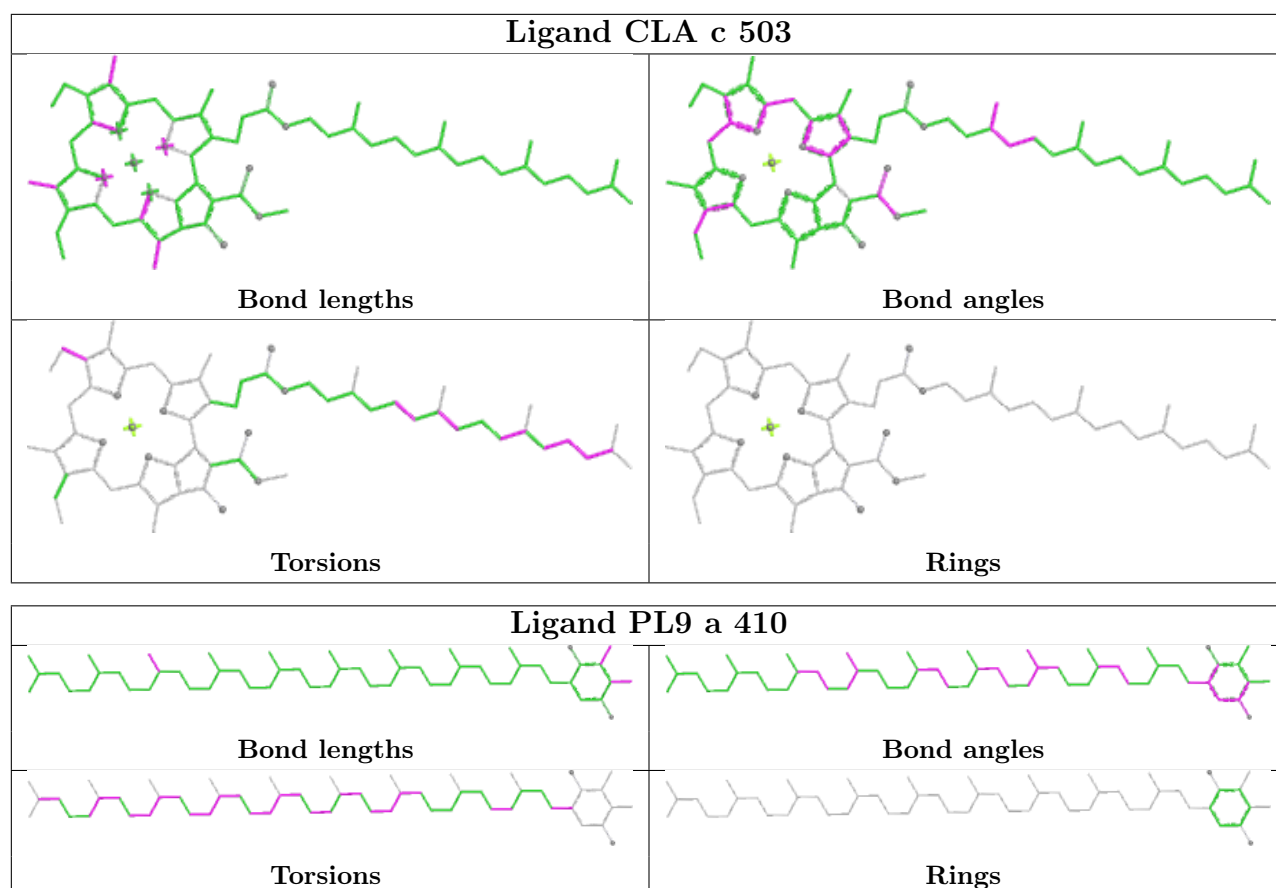
Ligand CLA c 506

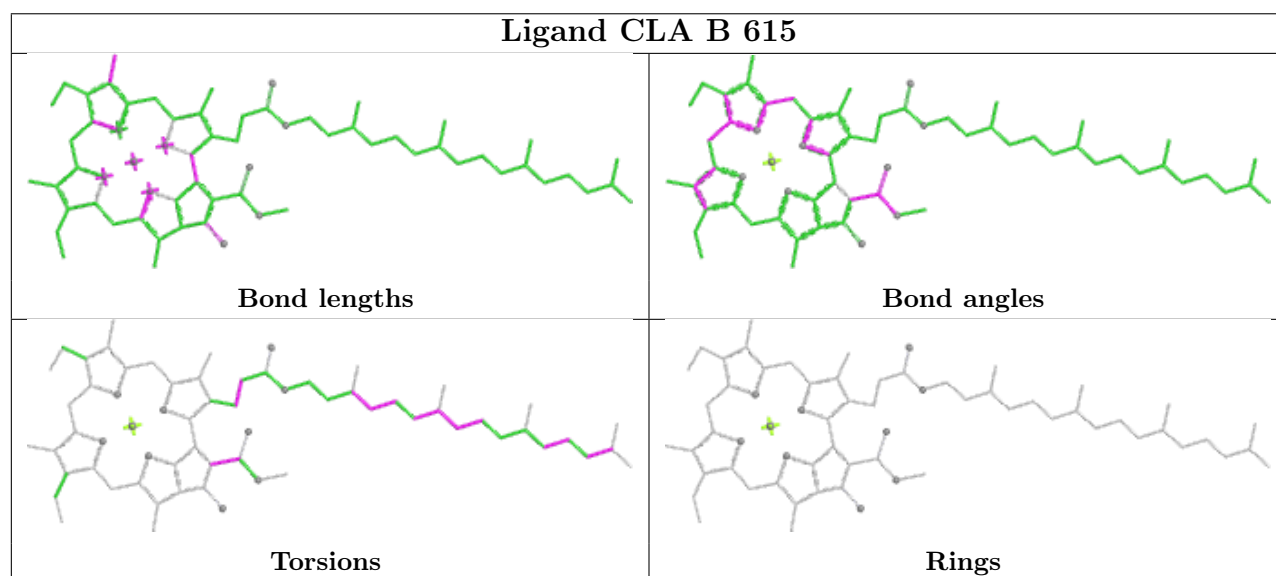
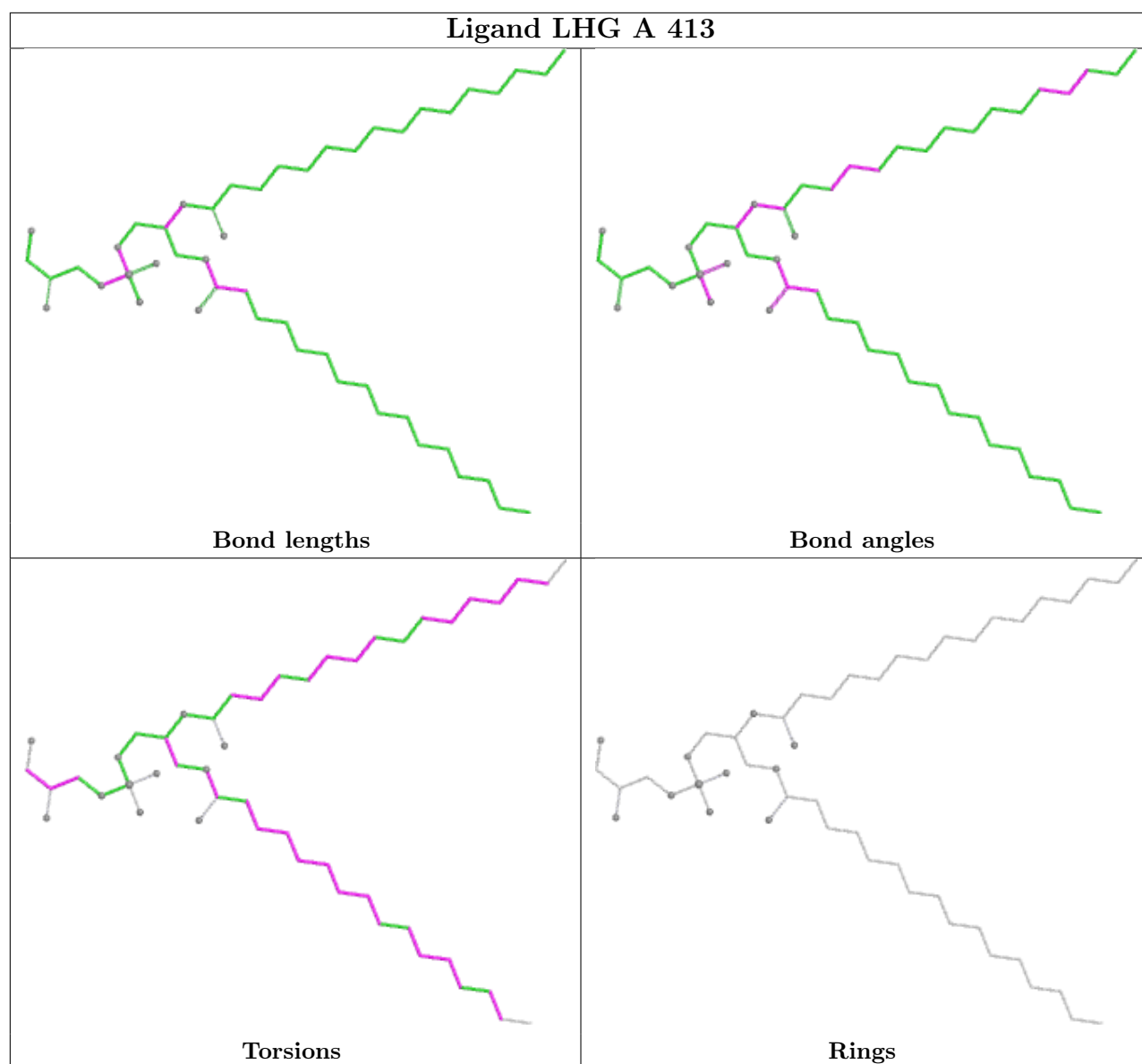


Ligand CLA a 402

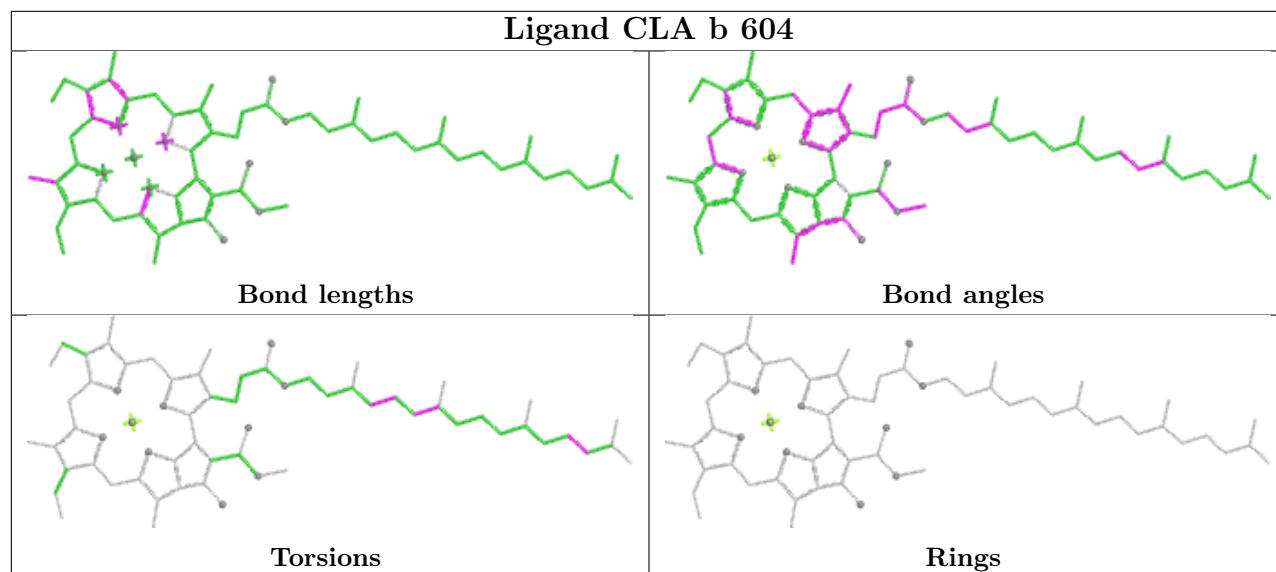




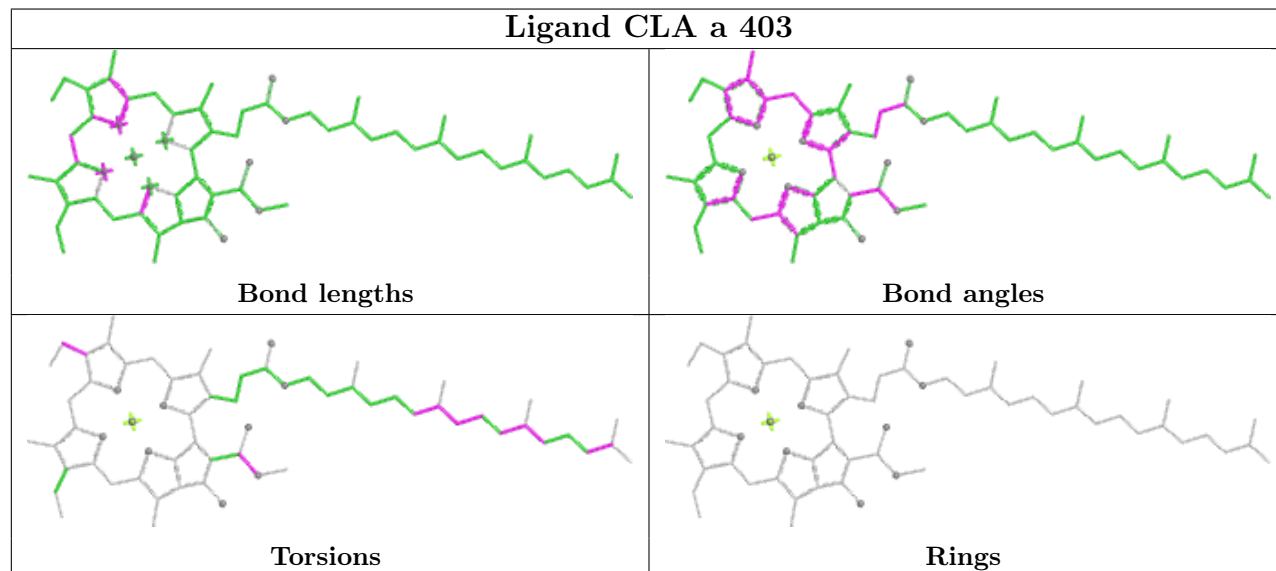




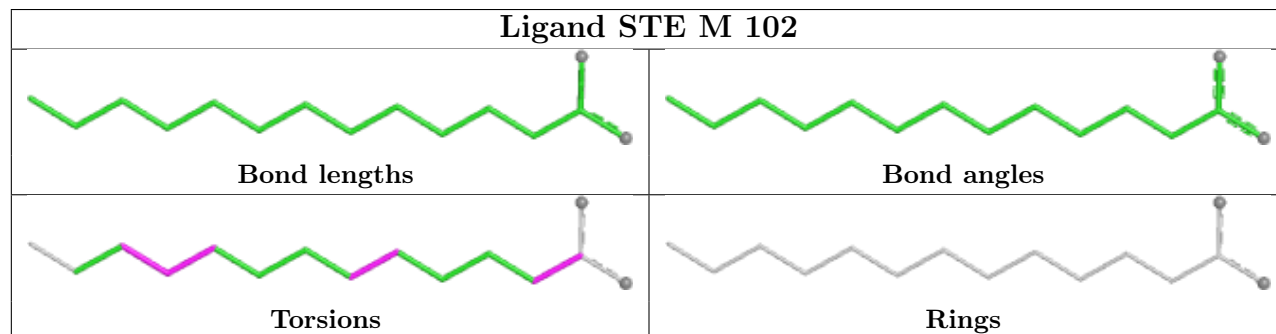
Ligand CLA b 604

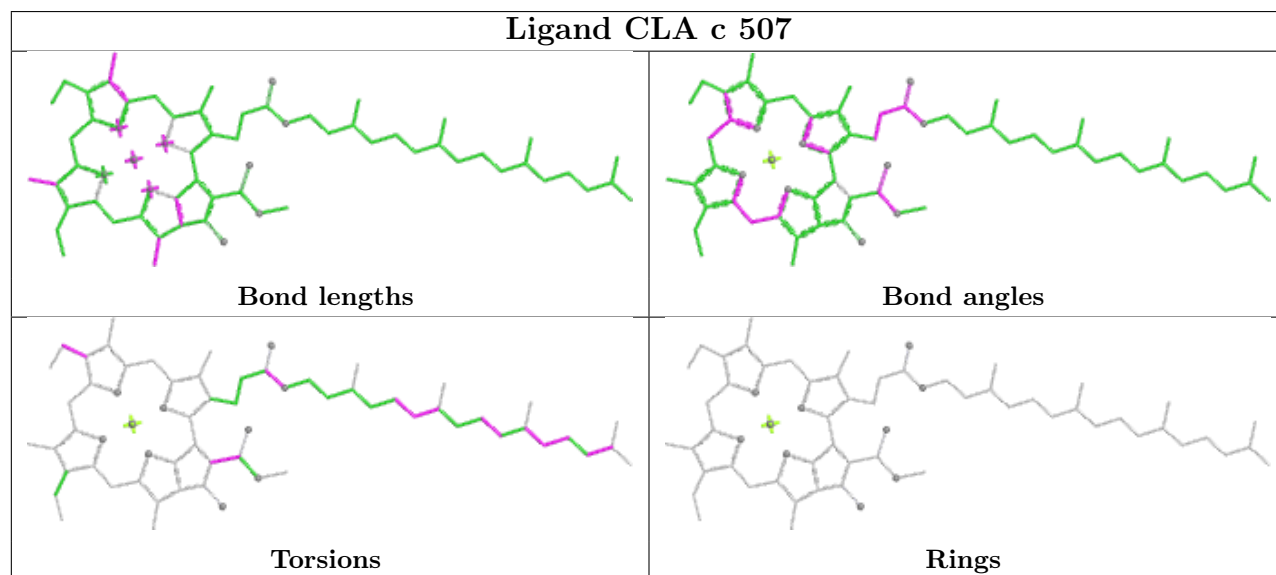
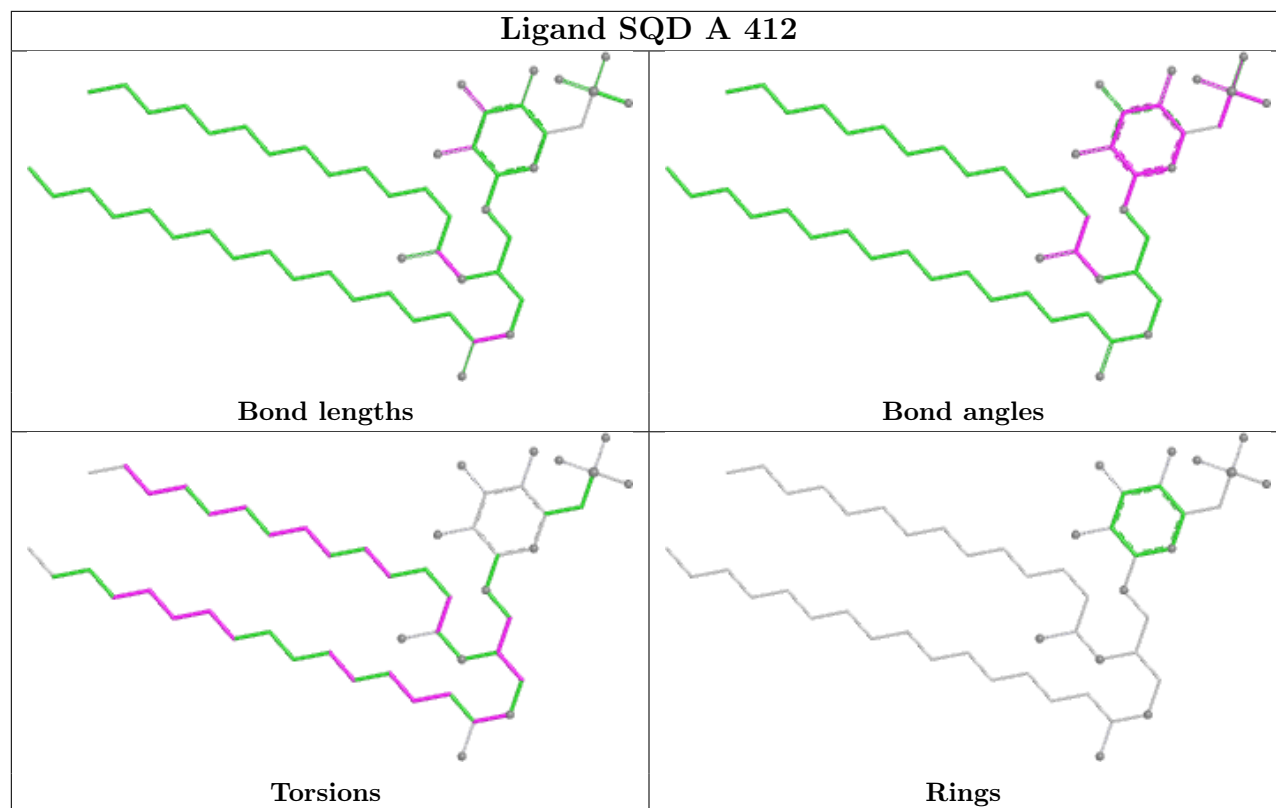


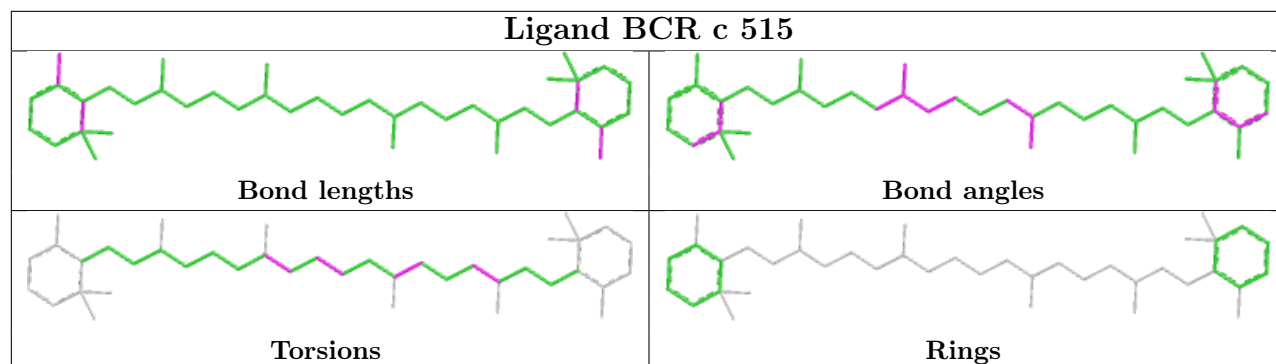
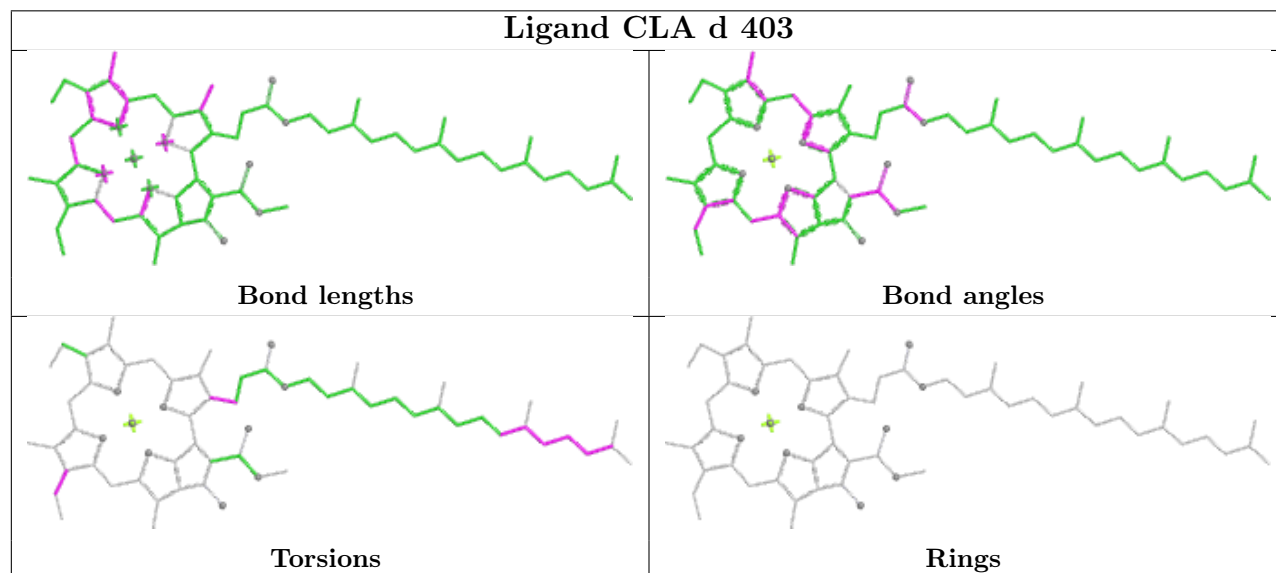
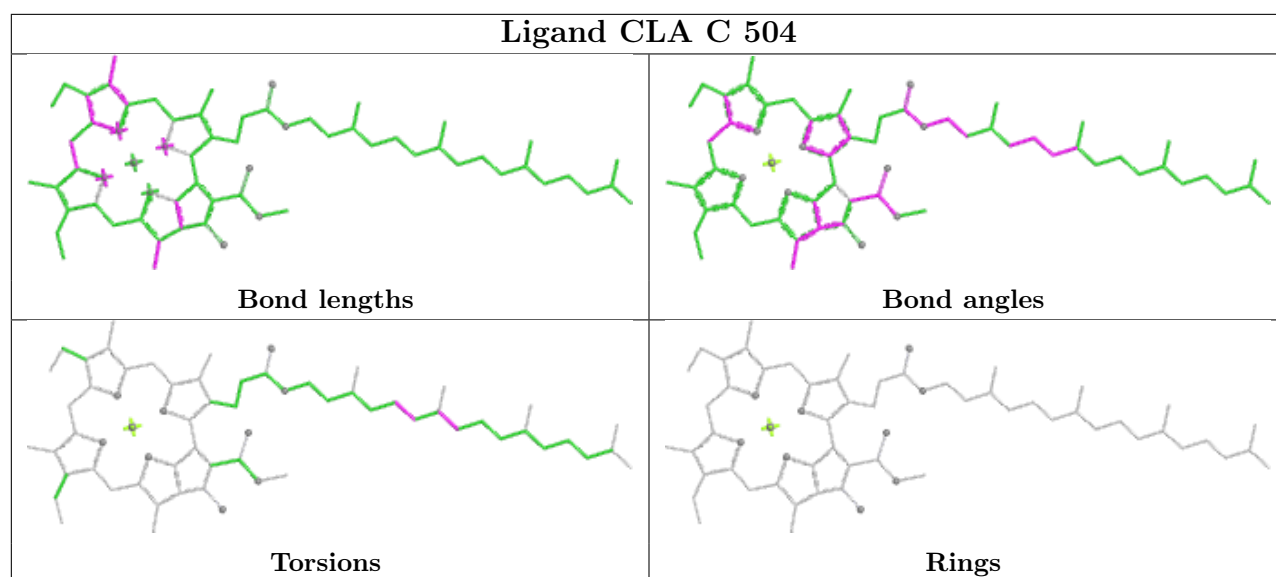
Ligand CLA a 403

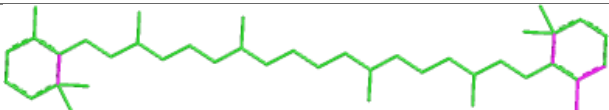
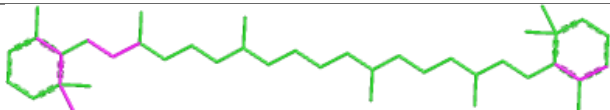
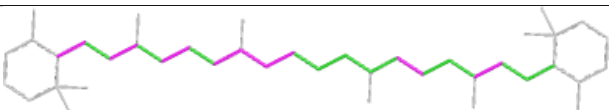
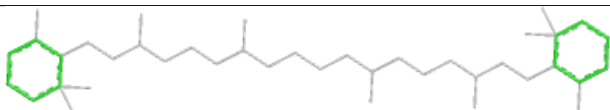




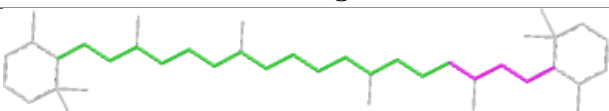
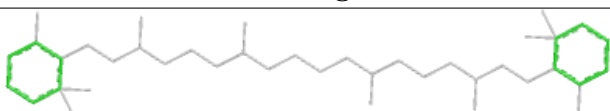
Ligand STE M 102

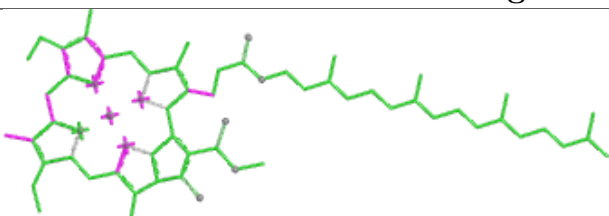
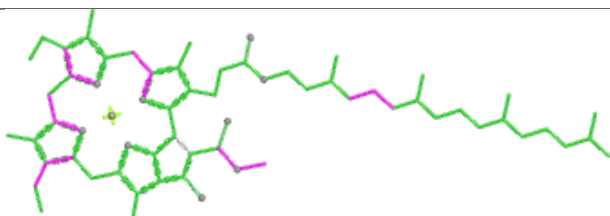
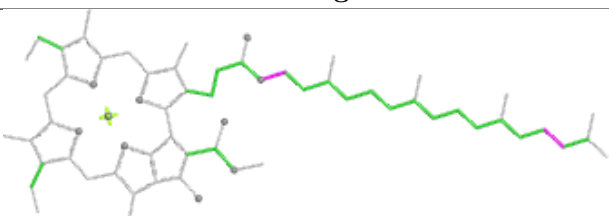
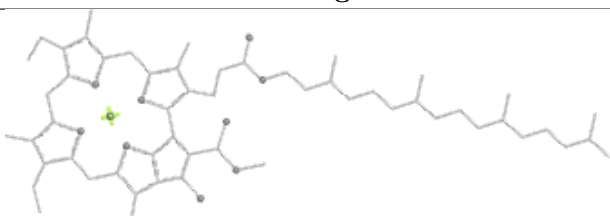


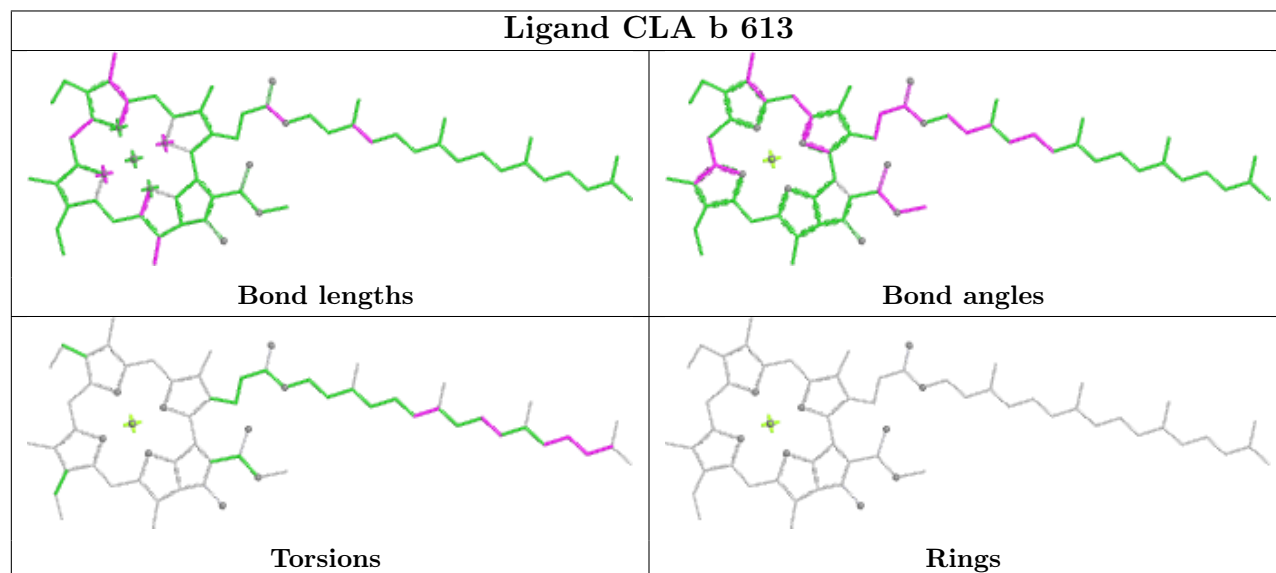
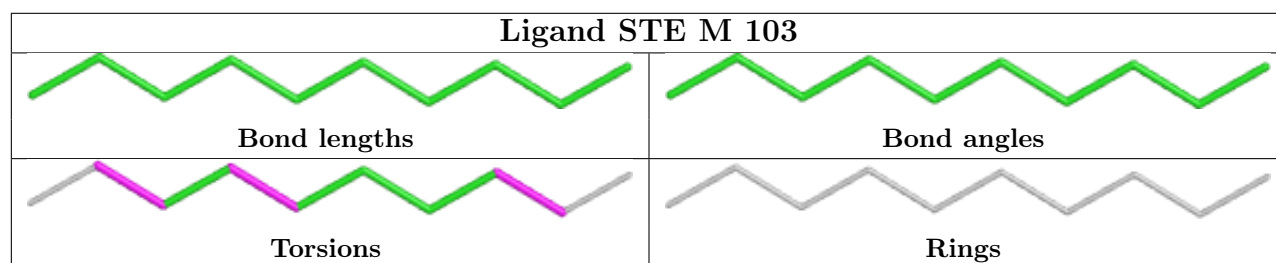
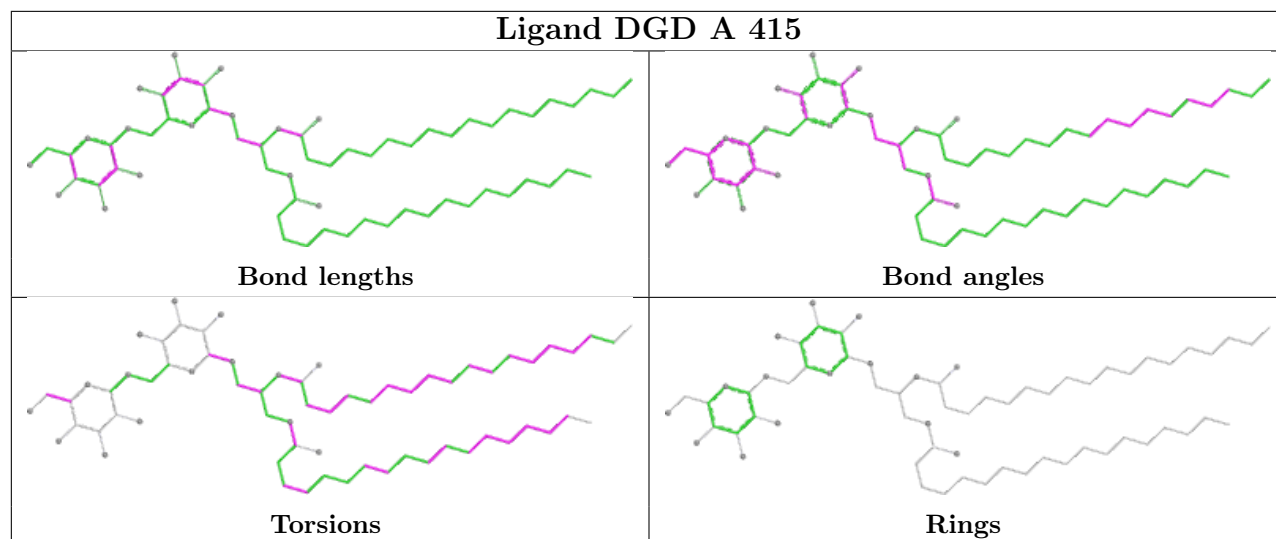


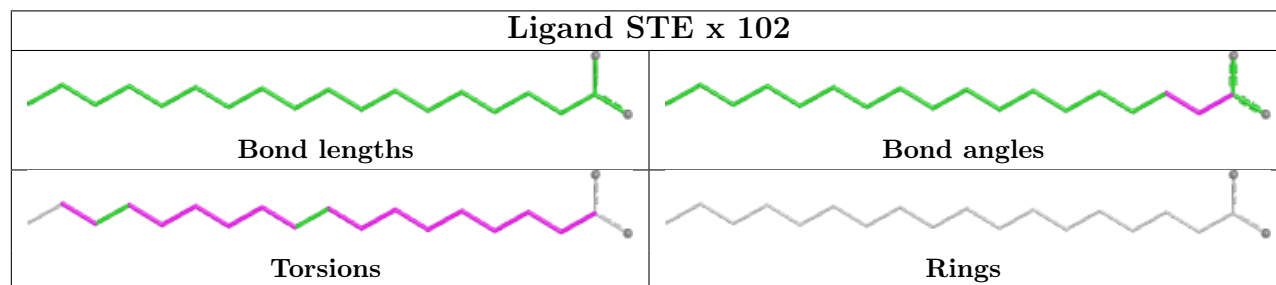
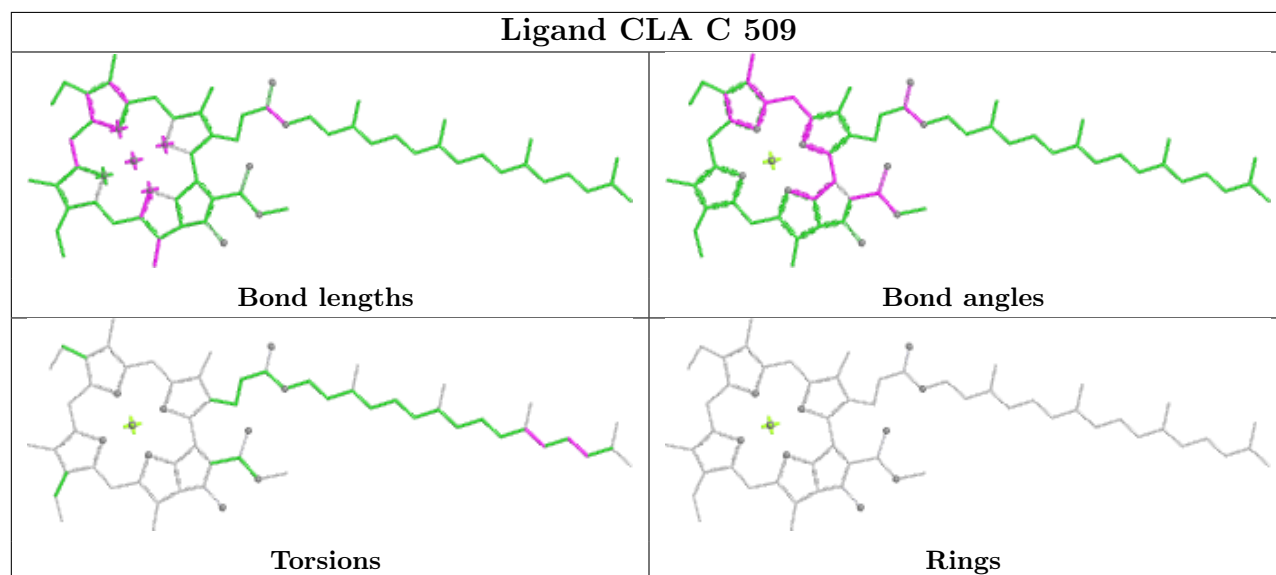
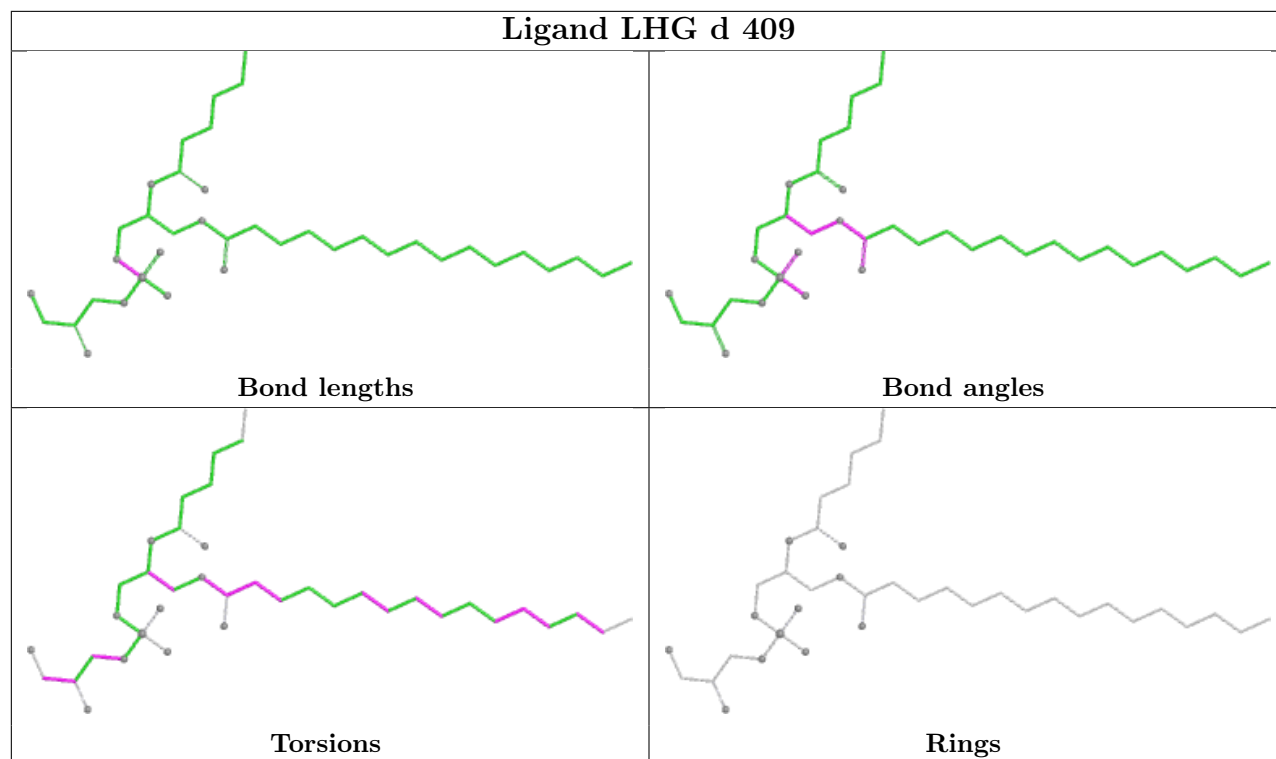


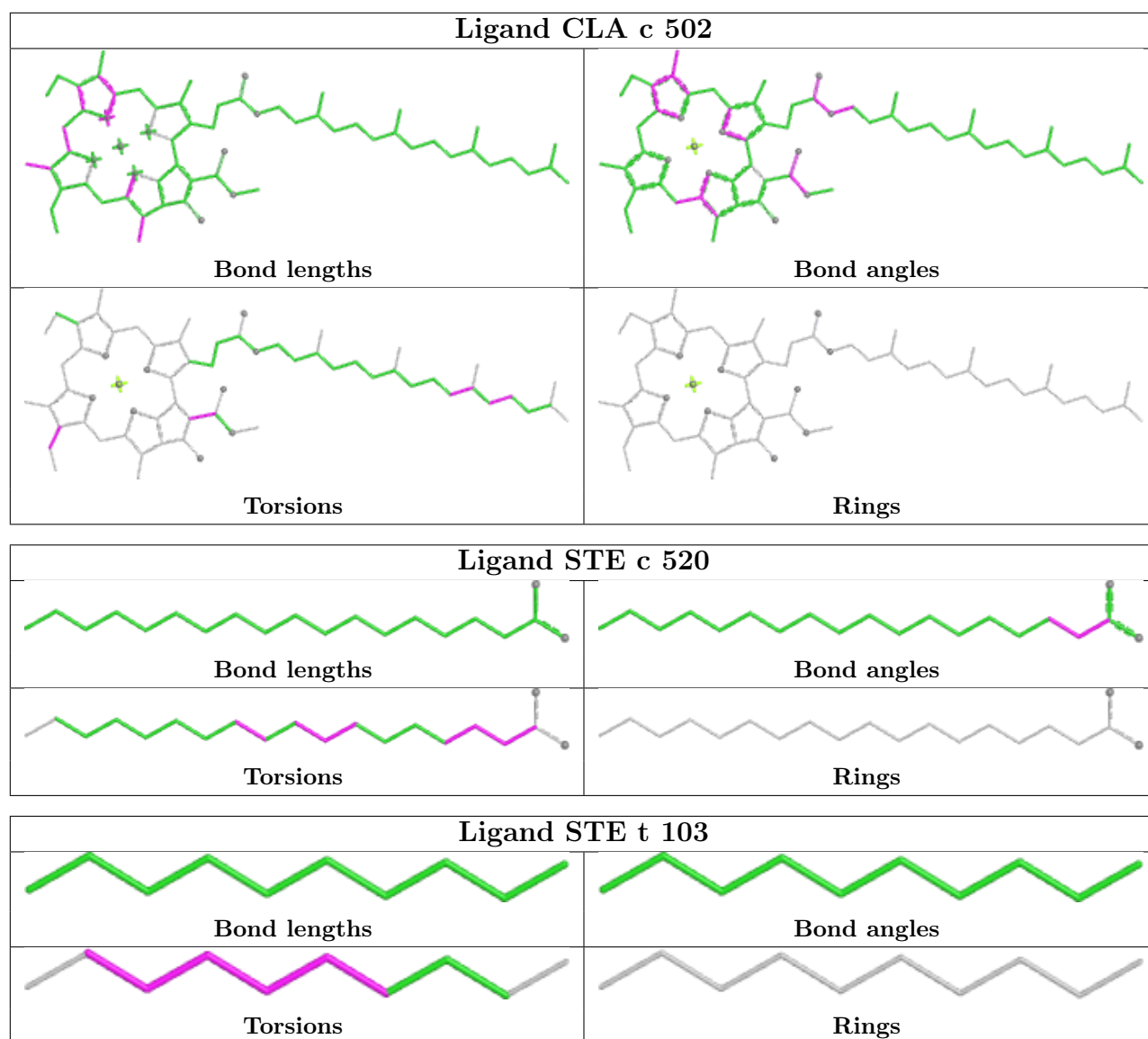
Ligand BCR T 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR D 405	
	
Bond lengths	Bond angles
	
Torsions	Rings

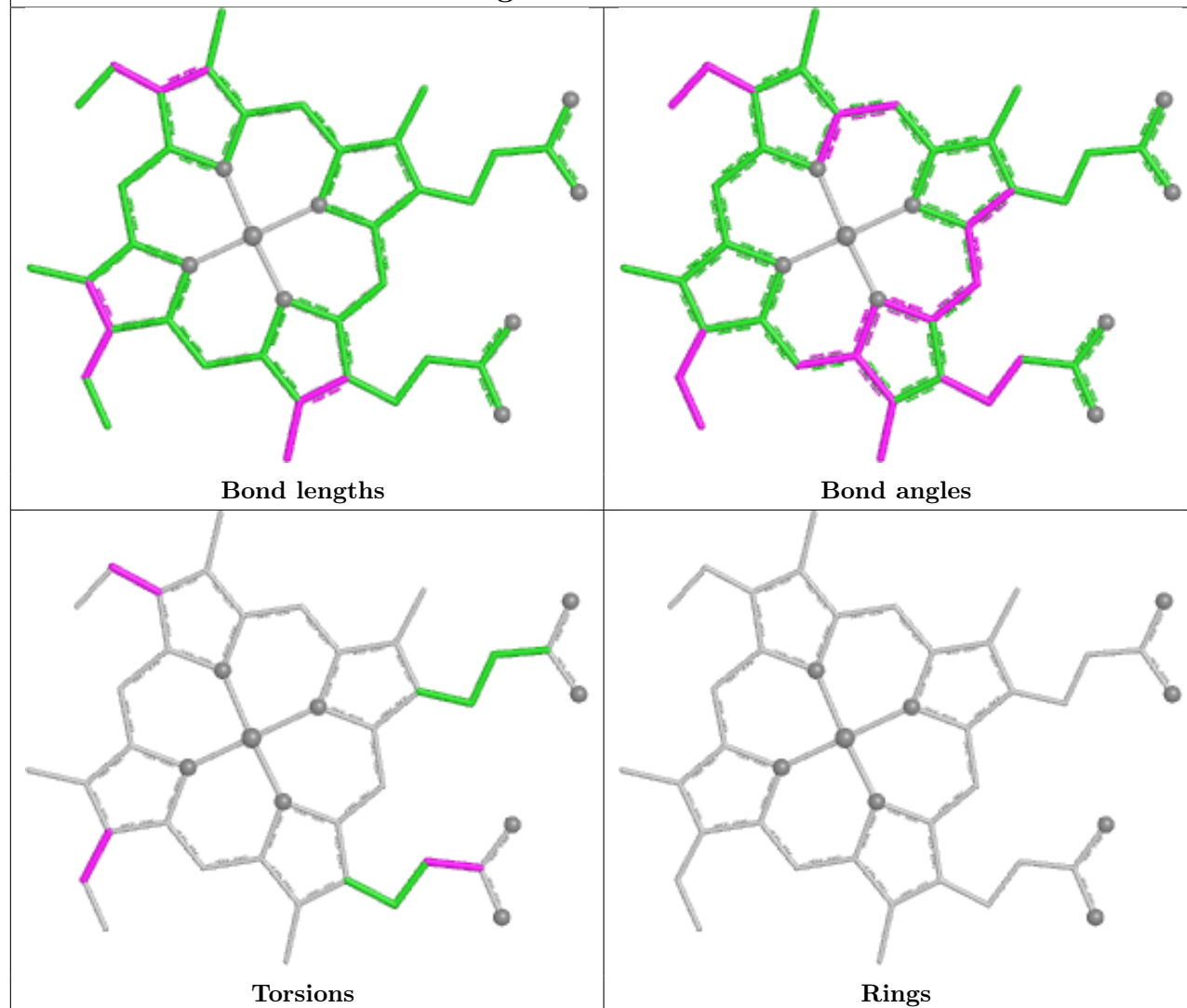
Ligand CLA A 402	
	
Bond lengths	Bond angles
	
Torsions	Rings



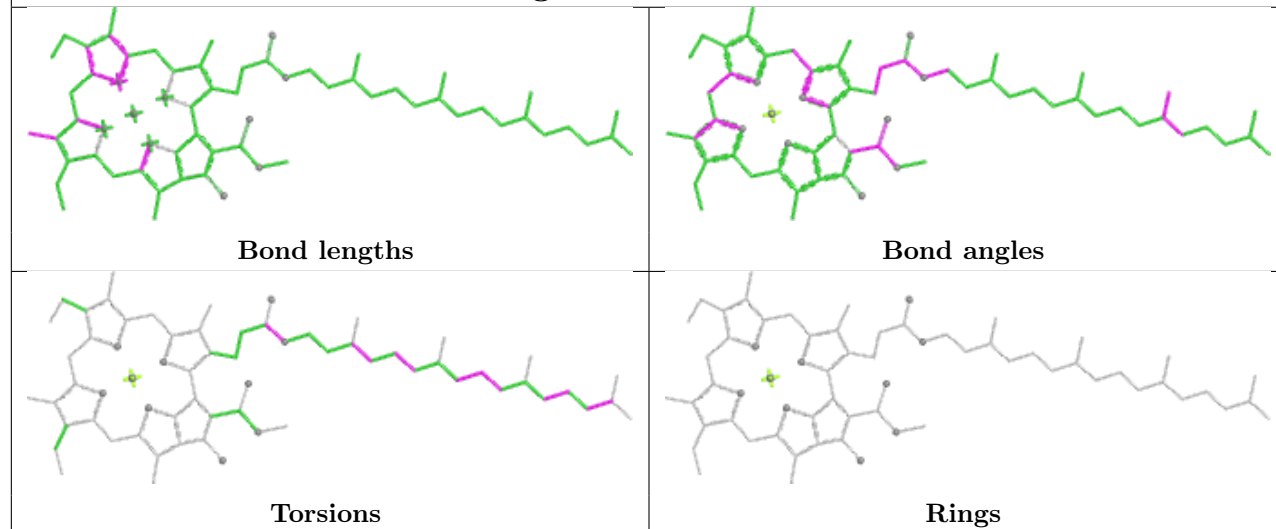




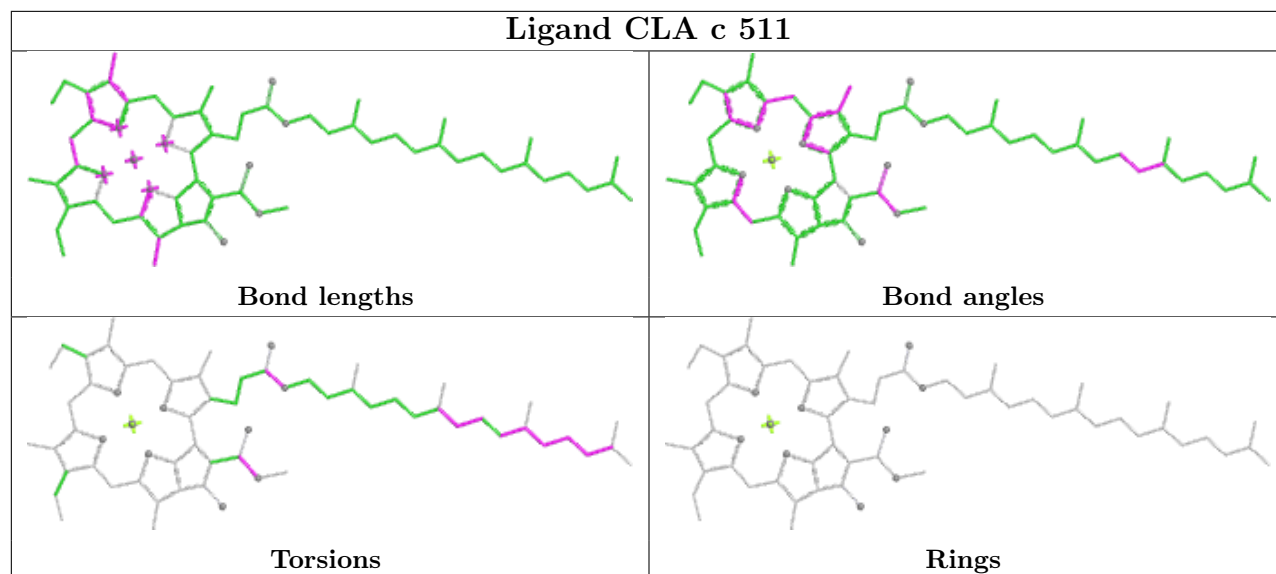
Ligand HEC v 201



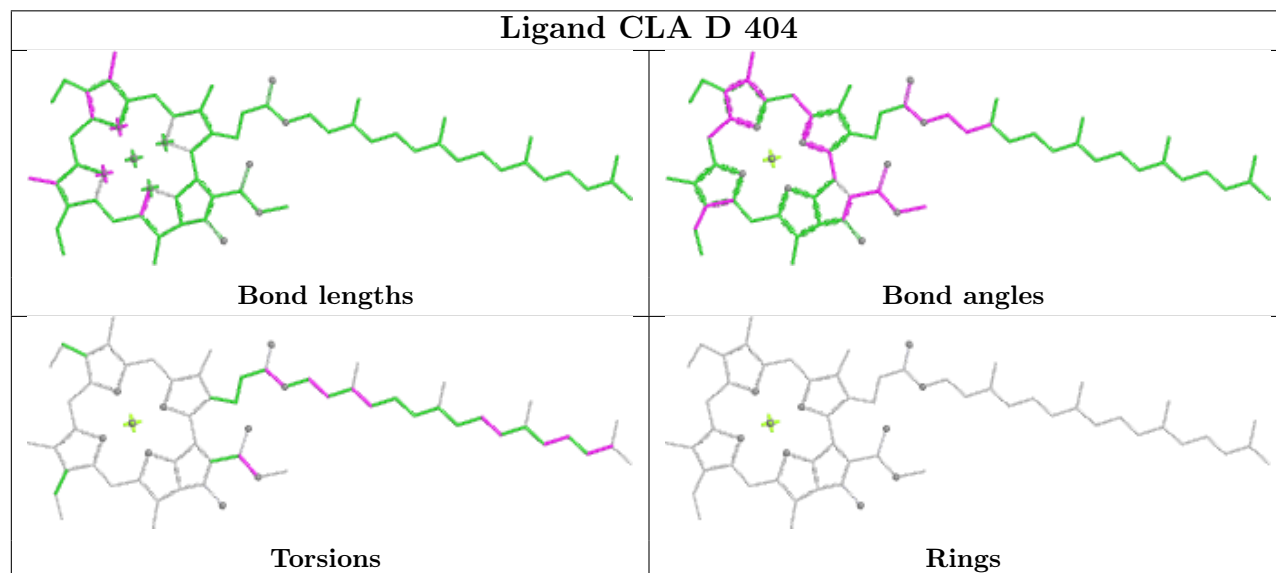
Ligand CLA B 606

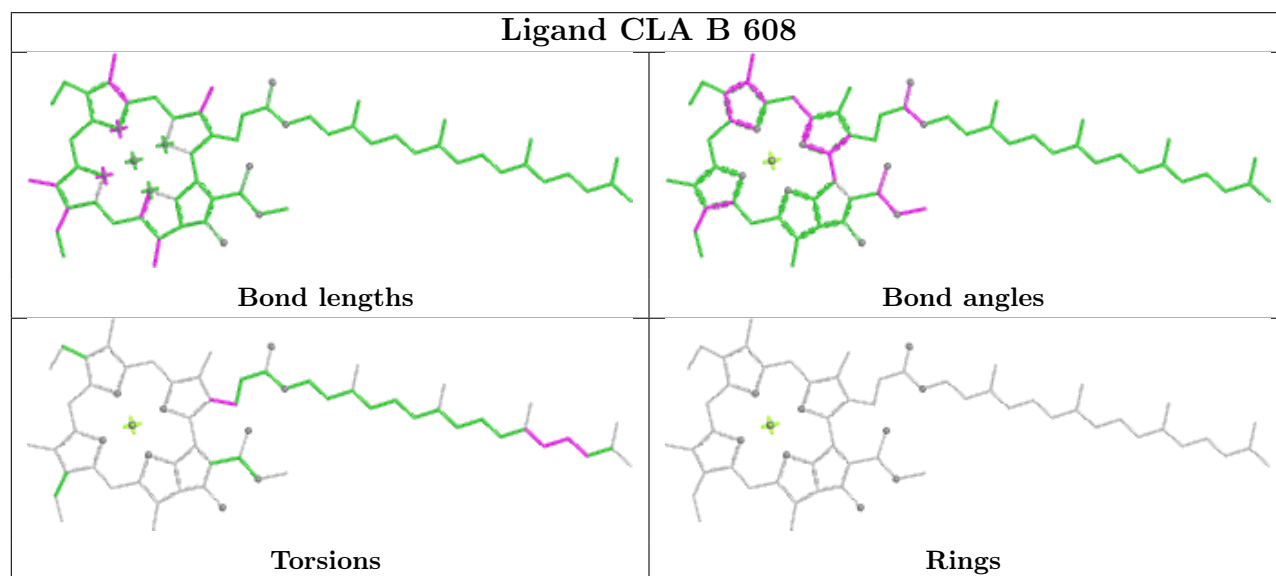
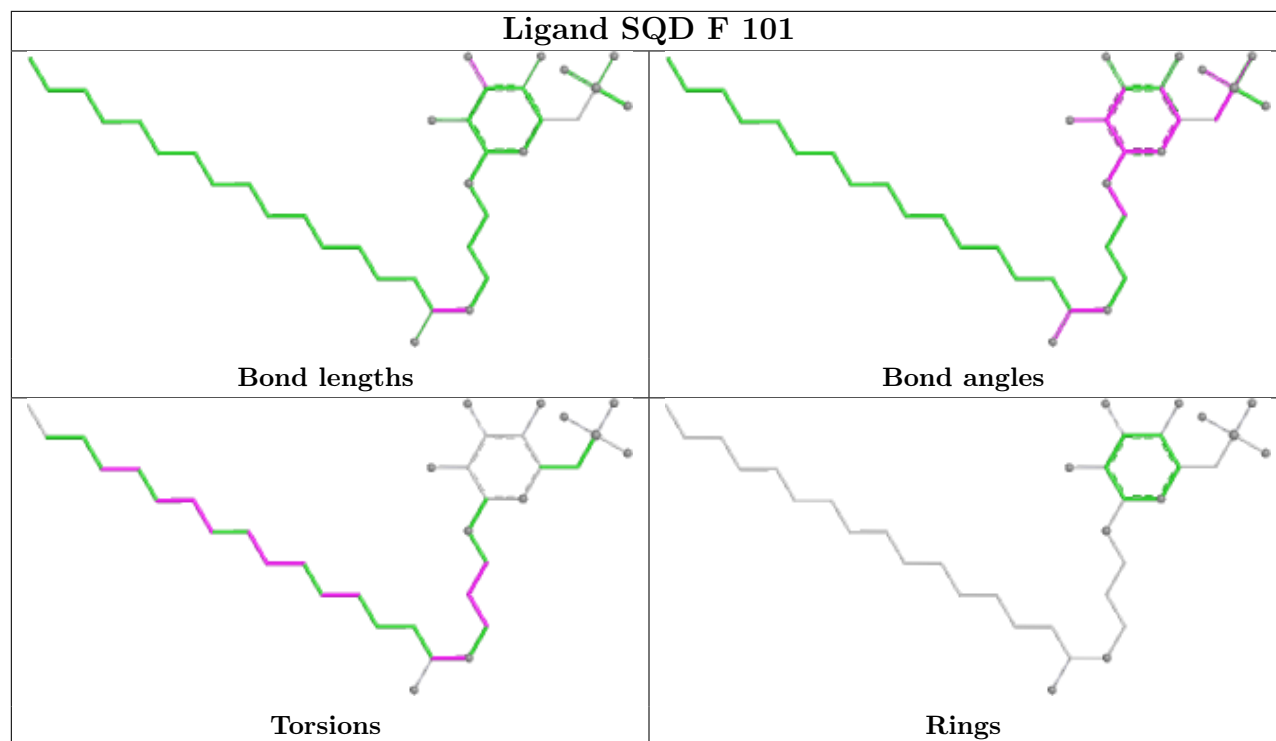


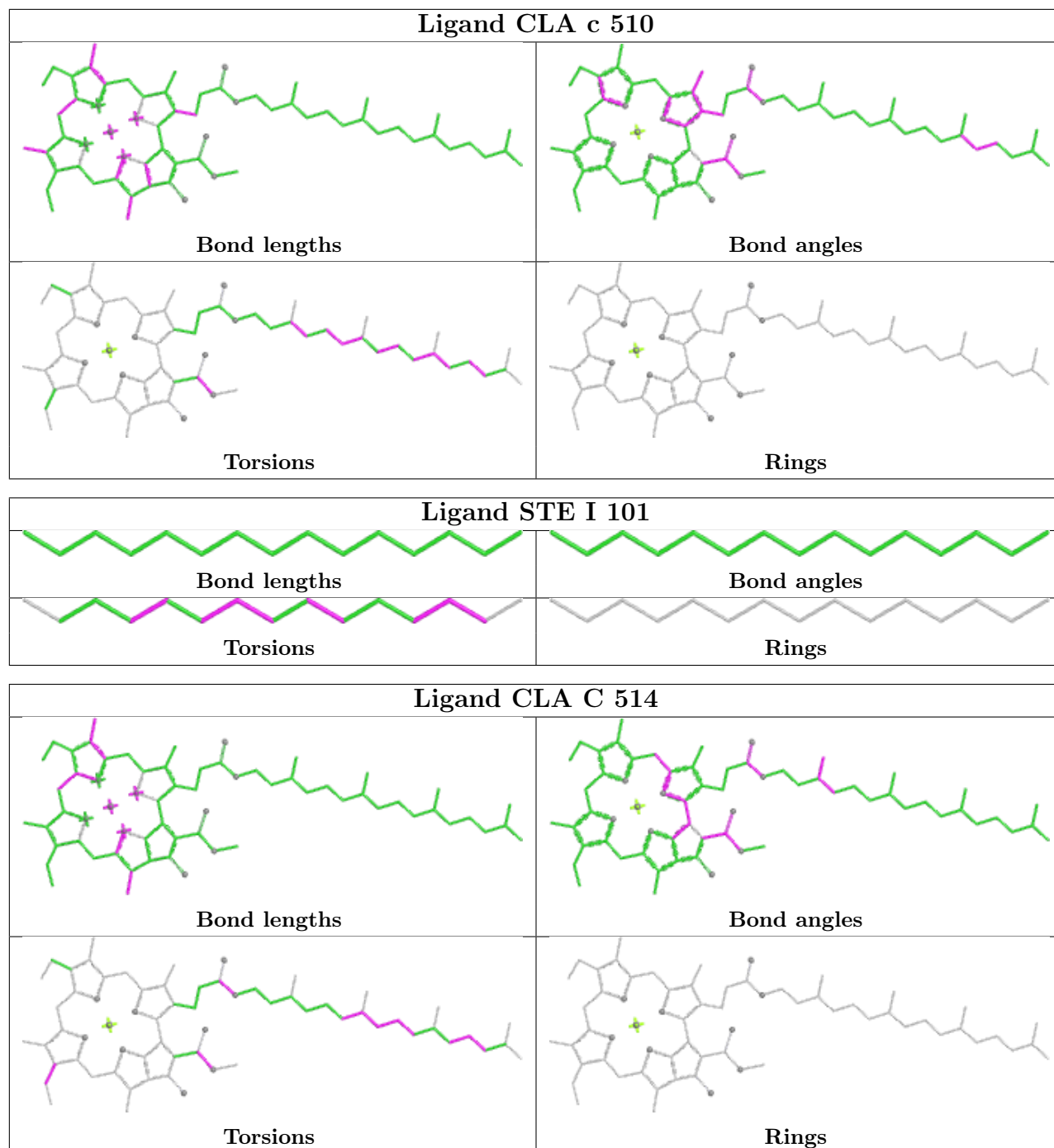
Ligand CLA c 511

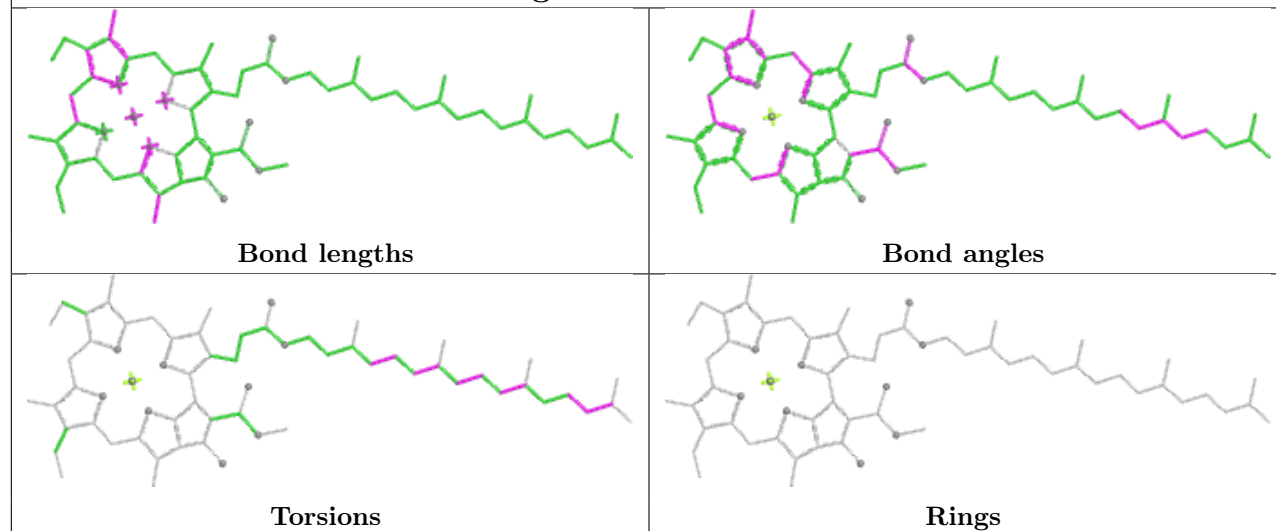
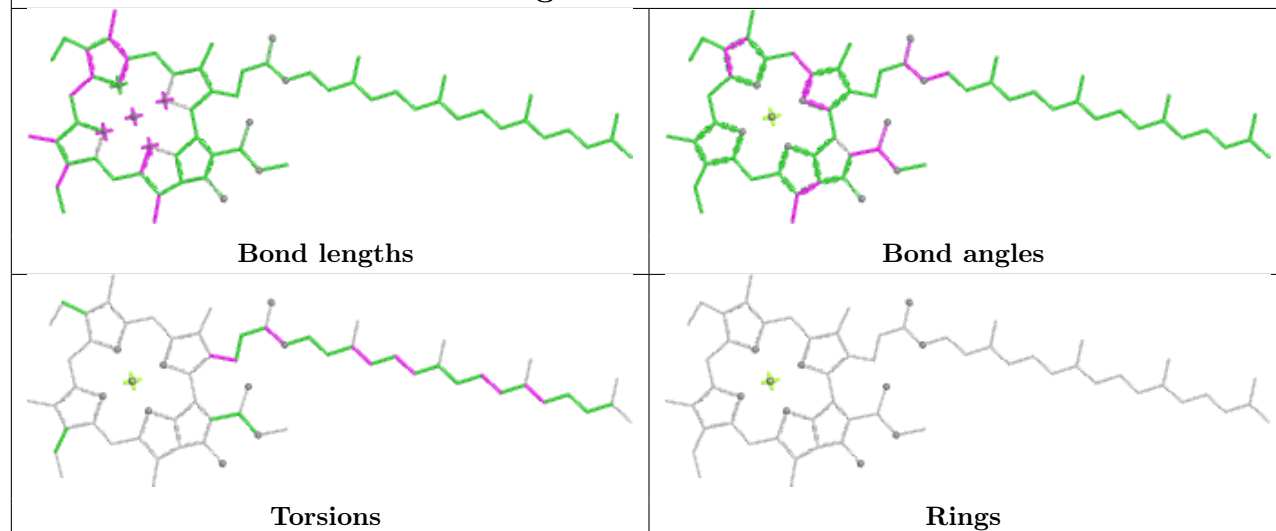


Ligand CLA D 404

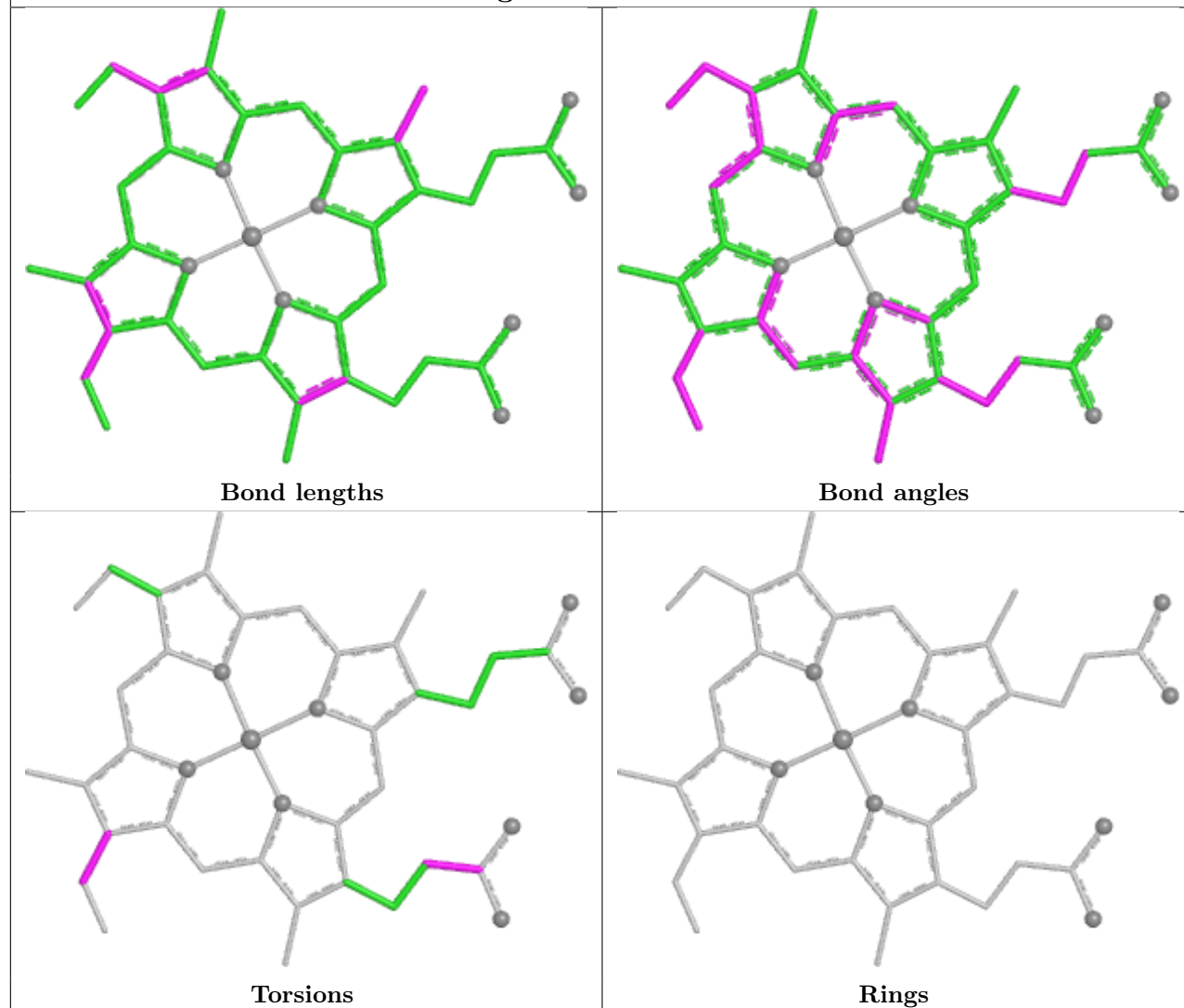




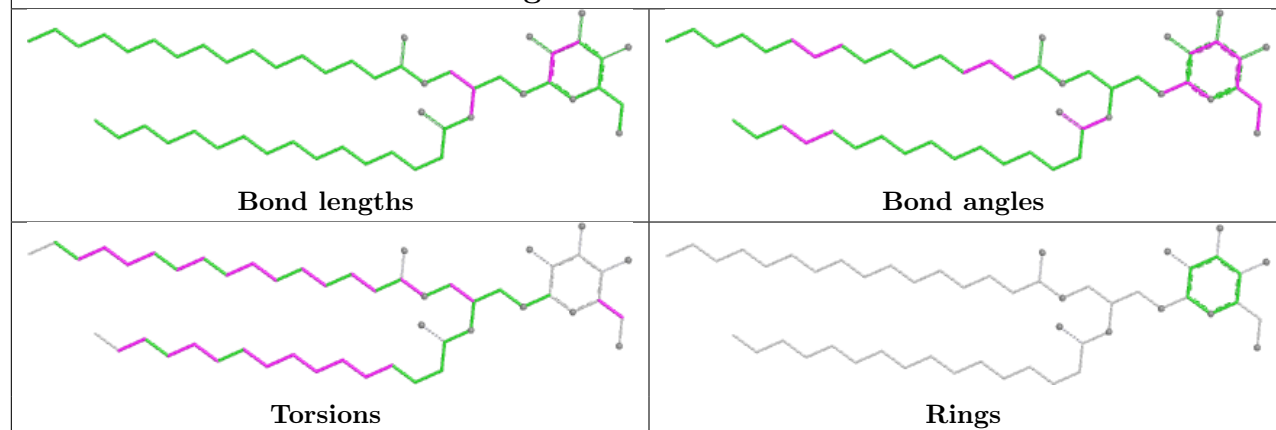


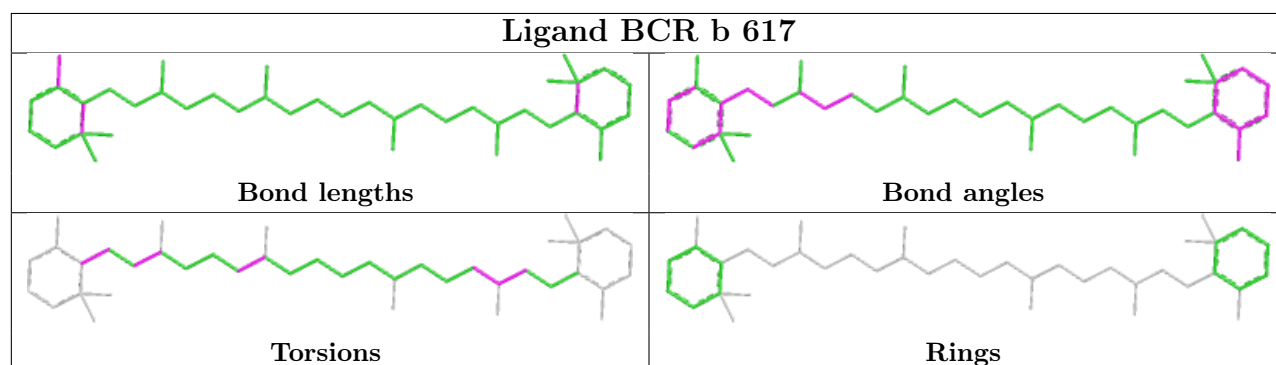
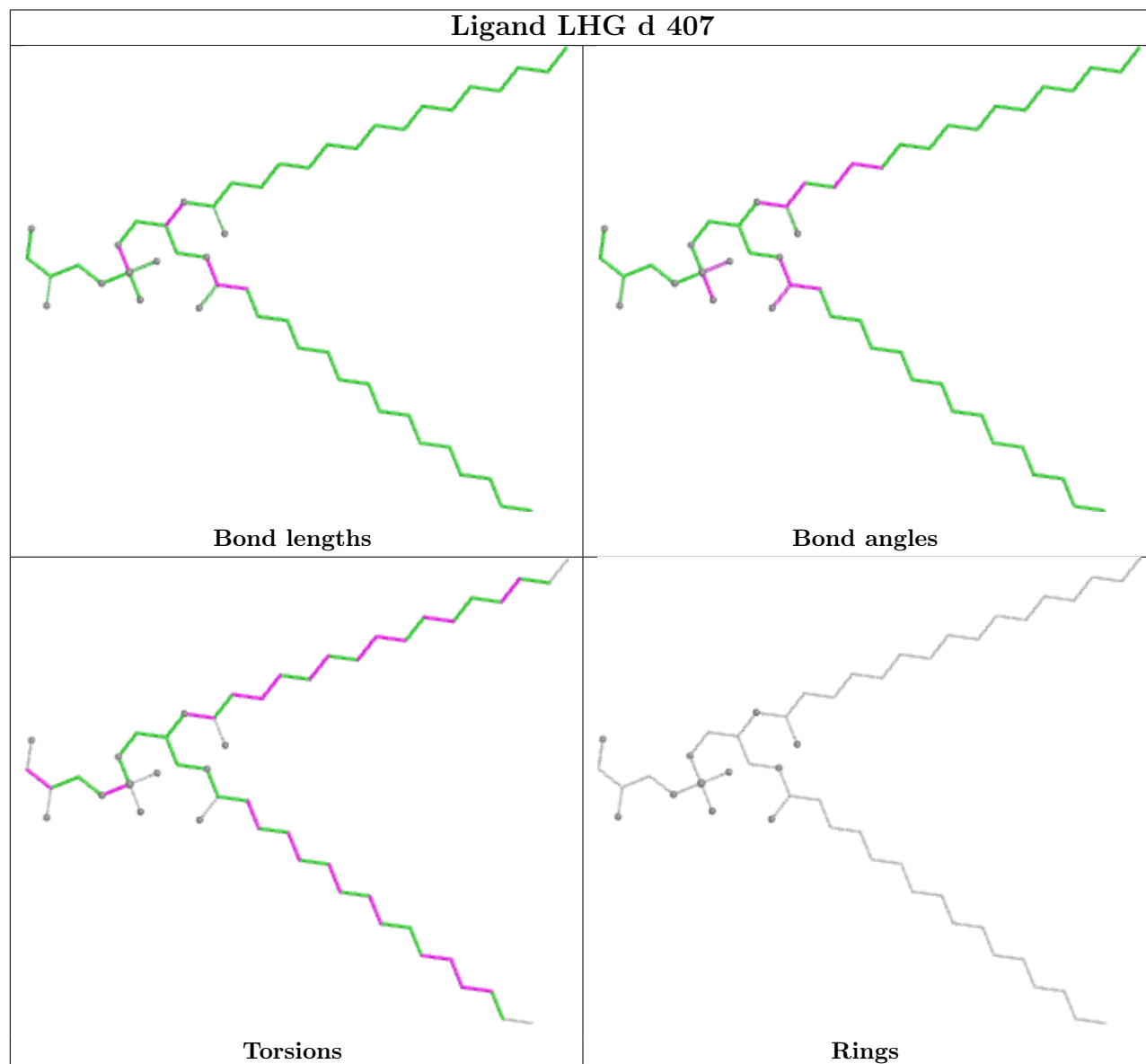
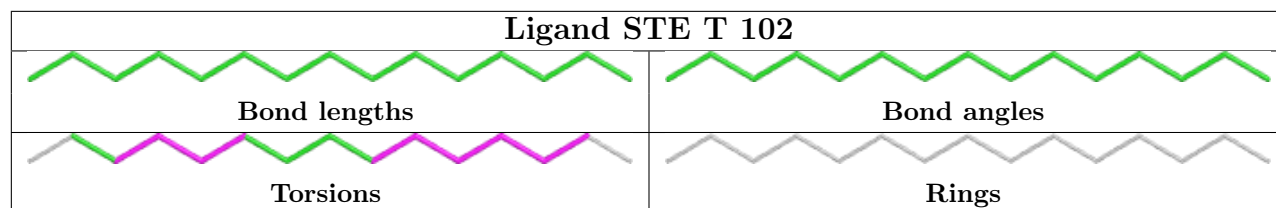
Ligand CLA B 603**Ligand CLA a 405**

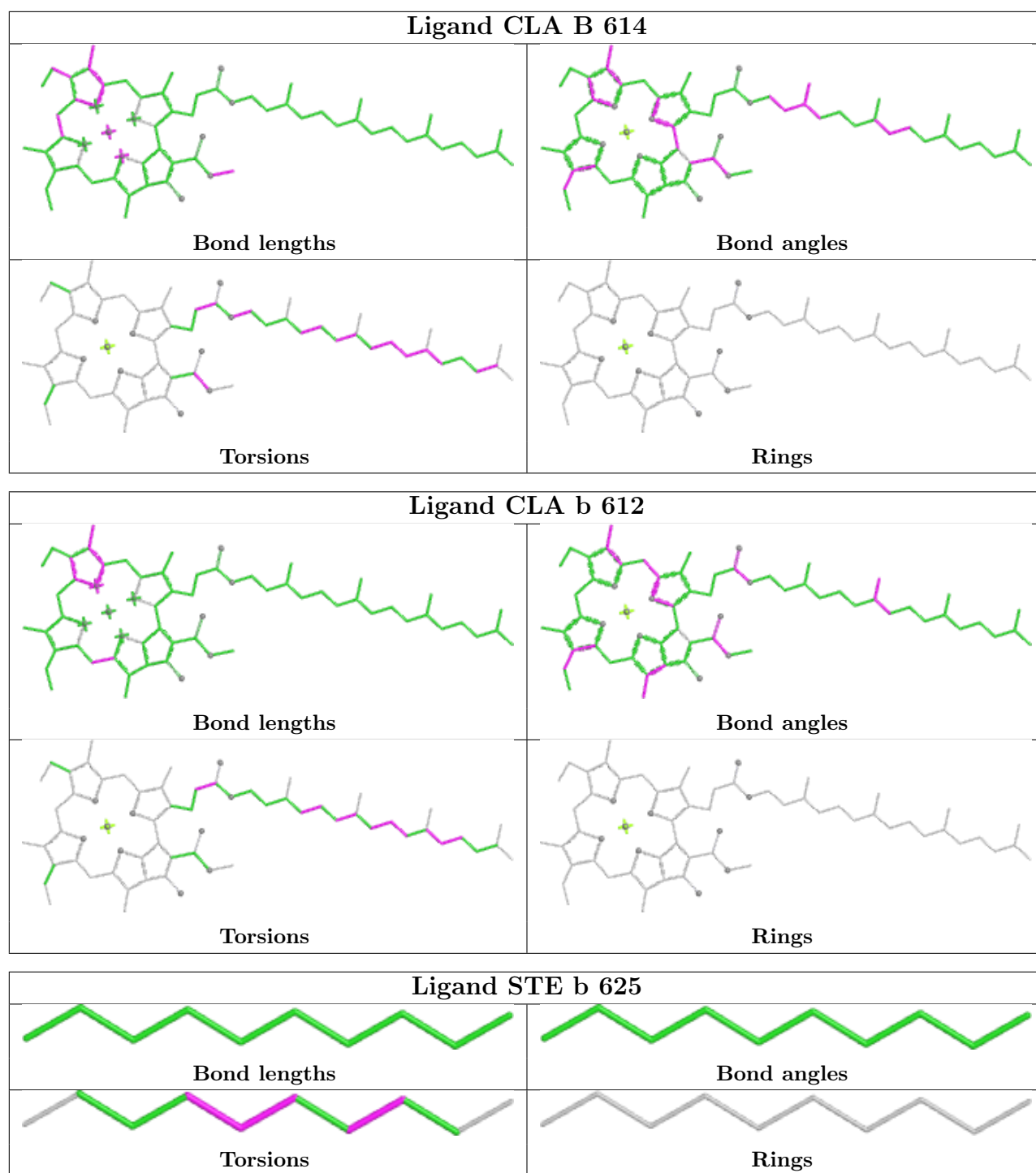
Ligand HEC e 101



Ligand LMG M 101







5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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	334/334 (100%)	-0.67	0 100 100	27, 34, 54, 81	0
1	a	334/334 (100%)	-0.56	1 (0%) 90 90	27, 36, 63, 91	0
2	B	505/506 (99%)	-0.52	0 100 100	19, 39, 66, 95	4 (0%)
2	b	505/506 (99%)	-0.38	2 (0%) 88 89	29, 42, 77, 117	0
3	C	442/461 (95%)	-0.46	0 100 100	18, 42, 60, 90	1 (0%)
3	c	451/461 (97%)	-0.39	1 (0%) 91 92	21, 46, 67, 98	2 (0%)
4	D	341/352 (96%)	-0.65	0 100 100	26, 36, 52, 93	0
4	d	341/352 (96%)	-0.50	0 100 100	27, 40, 64, 94	1 (0%)
5	E	82/84 (97%)	-0.05	1 (1%) 76 77	34, 56, 75, 89	1 (1%)
5	e	82/84 (97%)	0.18	1 (1%) 76 77	47, 65, 84, 94	0
6	F	34/45 (75%)	-0.31	0 100 100	39, 49, 70, 77	0
6	f	34/45 (75%)	-0.11	1 (2%) 53 54	46, 55, 84, 91	0
7	H	65/66 (98%)	-0.37	2 (3%) 51 51	37, 46, 66, 89	0
7	h	63/66 (95%)	-0.07	1 (1%) 70 71	46, 59, 70, 79	0
8	I	35/38 (92%)	-0.39	0 100 100	38, 45, 75, 84	0
8	i	35/38 (92%)	-0.17	1 (2%) 53 54	37, 48, 88, 99	0
9	J	36/40 (90%)	-0.16	1 (2%) 55 55	40, 55, 79, 97	0
9	j	36/40 (90%)	-0.02	2 (5%) 30 28	44, 57, 92, 105	0
10	K	37/46 (80%)	-0.15	0 100 100	50, 58, 82, 84	0
10	k	37/46 (80%)	-0.02	0 100 100	51, 61, 74, 87	0
11	L	37/37 (100%)	-0.66	0 100 100	28, 35, 72, 85	0
11	l	36/37 (97%)	-0.56	0 100 100	30, 37, 76, 89	0
12	M	32/36 (88%)	-0.47	1 (3%) 51 51	32, 41, 64, 78	0
12	m	31/36 (86%)	-0.57	0 100 100	32, 41, 58, 82	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	-0.29	2 (0%) 82 84	27, 48, 89, 134	1 (0%)
13	o	244/272 (89%)	-0.32	2 (0%) 82 84	30, 45, 85, 128	0
14	R	34/40 (85%)	0.77	2 (5%) 28 26	61, 80, 102, 112	0
14	r	31/40 (77%)	1.42	6 (19%) 3 2	79, 102, 118, 137	0
15	T	29/30 (96%)	-0.64	0 100 100	30, 38, 71, 84	0
15	t	29/30 (96%)	-0.46	1 (3%) 48 48	32, 39, 90, 98	0
16	U	97/134 (72%)	-0.32	0 100 100	36, 50, 75, 92	0
16	u	97/134 (72%)	-0.38	0 100 100	34, 46, 63, 88	0
17	V	137/163 (84%)	-0.47	0 100 100	34, 46, 62, 81	0
17	v	137/163 (84%)	-0.25	0 100 100	36, 52, 75, 86	0
18	X	38/41 (92%)	-0.19	0 100 100	45, 56, 79, 86	0
18	x	39/41 (95%)	0.10	1 (2%) 57 58	54, 66, 94, 110	0
19	Y	27/46 (58%)	0.85	3 (11%) 10 9	59, 77, 100, 106	0
19	y	30/46 (65%)	0.50	0 100 100	63, 79, 92, 108	0
20	Z	62/62 (100%)	0.57	3 (4%) 35 35	57, 73, 117, 133	0
20	z	62/62 (100%)	0.53	4 (6%) 25 23	55, 78, 115, 124	0
All	All	5302/5666 (93%)	-0.37	39 (0%) 84 85	18, 44, 80, 137	10 (0%)

All (39) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	o	58	ASN	4.8
7	H	66	GLY	4.1
20	z	33	TRP	3.9
14	r	32	GLN	3.9
14	R	35	LEU	3.8
5	e	79	PHE	3.5
18	x	40	SER	3.5
15	t	30	THR	3.4
3	c	23	ALA	3.4
20	Z	62	VAL	3.2
1	a	11	ALA	3.2
14	r	31	VAL	3.2
19	Y	20	ALA	3.1
12	M	33	GLN	3.0
2	b	495	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
13	O	60	ARG	3.0
8	i	36	ASP	2.8
19	Y	22	LEU	2.8
7	h	41	PHE	2.7
20	Z	33	TRP	2.7
9	J	5	GLY	2.6
20	z	30	PRO	2.5
14	r	14	LEU	2.5
20	z	60	PHE	2.4
19	Y	25	ILE	2.3
20	Z	41	PHE	2.3
14	r	20	VAL	2.3
5	E	3	GLY	2.3
13	O	59	LYS	2.3
9	j	6	GLY	2.2
2	b	84	THR	2.2
9	j	5	GLY	2.2
14	r	18	TRP	2.1
14	R	6	LEU	2.0
6	f	15	ILE	2.0
20	z	62	VAL	2.0
7	H	41	PHE	2.0
13	o	59	LYS	2.0
14	r	3	TRP	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
15	FME	t	1	10/11	0.94	0.08	36,49,70,70	0
15	FME	T	1	10/11	0.95	0.07	33,45,71,71	0
12	FME	m	1	10/11	0.96	0.08	36,55,70,84	0
8	FME	i	1	10/11	0.96	0.07	45,57,75,77	0
12	FME	M	1	10/11	0.96	0.09	45,54,77,86	0
8	FME	I	1	10/11	0.97	0.07	42,54,64,72	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
32	STE	H	103	18/20	0.73	0.19	42,77,99,99	0
32	STE	I	101	15/20	0.76	0.18	44,58,80,81	0
32	STE	b	626	20/20	0.76	0.17	46,73,96,101	0
32	STE	B	625	16/20	0.78	0.15	47,64,74,78	0
28	LHG	A	413	49/49	0.78	0.16	56,78,116,120	0
32	STE	k	101	12/20	0.78	0.13	49,73,89,92	0
32	STE	b	625	10/20	0.80	0.15	44,54,67,68	0
32	STE	E	102	12/20	0.80	0.16	50,78,89,94	0
32	STE	a	414	12/20	0.80	0.13	45,68,75,81	0
33	LMG	c	521	48/55	0.80	0.15	40,79,111,123	0
28	LHG	a	412	42/49	0.81	0.14	54,83,108,130	0
33	LMG	b	622	55/55	0.81	0.16	47,74,101,110	0
32	STE	b	624	20/20	0.81	0.15	46,70,82,93	0
32	STE	B	626	15/20	0.82	0.18	42,65,83,83	0
32	STE	J	101	12/20	0.83	0.15	48,62,72,84	0
32	STE	T	102	15/20	0.83	0.14	42,58,81,89	0
32	STE	j	101	12/20	0.83	0.14	39,61,75,80	0
32	STE	C	521	16/20	0.83	0.13	43,59,70,71	0
32	STE	b	620	16/20	0.83	0.15	33,55,75,78	0
32	STE	B	601	12/20	0.83	0.17	48,70,94,97	0
29	SQD	a	413	36/54	0.84	0.14	27,65,92,100	0
30	DGD	A	415	66/66	0.84	0.12	44,65,85,95	0
33	LMG	B	627	55/55	0.84	0.13	34,60,84,99	0
33	LMG	D	409	33/55	0.84	0.13	34,56,86,94	0
32	STE	c	520	20/20	0.84	0.12	42,61,83,84	0
32	STE	h	102	14/20	0.84	0.15	47,67,84,84	0
32	STE	L	103	12/20	0.85	0.17	52,64,88,89	0
27	PL9	A	410	55/55	0.85	0.14	37,69,85,95	0
29	SQD	A	414	39/54	0.85	0.13	37,66,87,95	0
32	STE	b	623	16/20	0.86	0.13	49,62,84,86	0
33	LMG	Y	101	48/55	0.86	0.12	43,75,97,104	0
22	CLA	b	601	65/65	0.87	0.11	46,71,90,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	STE	d	411	17/20	0.87	0.13	44,58,70,77	0
32	STE	t	104	18/20	0.88	0.11	42,62,76,80	0
32	STE	x	102	20/20	0.88	0.12	36,63,81,81	0
32	STE	C	522	12/20	0.88	0.11	33,45,57,61	0
27	PL9	a	410	55/55	0.88	0.13	41,70,89,102	0
33	LMG	D	410	28/55	0.88	0.12	31,51,69,73	0
32	STE	C	520	12/20	0.88	0.11	37,53,65,75	0
32	STE	Z	102	8/20	0.88	0.13	43,60,72,72	0
33	LMG	c	519	37/55	0.88	0.11	43,67,84,87	0
29	SQD	B	623	54/54	0.88	0.10	34,65,92,110	0
32	STE	b	621	20/20	0.89	0.10	37,58,76,81	0
33	LMG	C	516	48/55	0.89	0.10	36,58,77,83	0
33	LMG	c	522	49/55	0.89	0.10	32,58,90,114	0
32	STE	t	102	14/20	0.90	0.09	35,53,60,65	0
32	STE	M	104	18/20	0.90	0.11	37,54,88,89	0
29	SQD	f	101	41/54	0.90	0.12	60,81,107,111	0
29	SQD	L	101	49/54	0.90	0.10	45,61,96,100	0
32	STE	D	411	20/20	0.90	0.10	35,55,70,74	0
24	BCR	Z	101	40/40	0.90	0.11	38,60,75,77	0
32	STE	t	103	10/20	0.91	0.10	41,58,70,73	0
29	SQD	F	101	36/54	0.91	0.11	46,73,94,100	0
24	BCR	c	514	40/40	0.91	0.09	45,58,79,80	0
32	STE	B	621	17/20	0.91	0.09	35,53,68,75	0
32	STE	M	103	10/20	0.91	0.11	35,45,55,66	0
32	STE	B	624	12/20	0.91	0.10	35,53,67,74	0
24	BCR	D	405	40/40	0.92	0.09	28,47,85,101	0
29	SQD	a	411	54/54	0.92	0.10	41,67,95,97	0
24	BCR	K	101	40/40	0.92	0.09	40,56,73,77	0
22	CLA	C	514	65/65	0.92	0.10	44,64,100,106	0
22	CLA	B	602	65/65	0.92	0.10	34,60,89,98	0
33	LMG	M	101	51/55	0.92	0.09	33,52,76,86	0
30	DGD	C	518	62/66	0.92	0.10	34,53,108,130	0
30	DGD	h	101	62/66	0.92	0.09	33,51,67,72	0
24	BCR	d	405	40/40	0.92	0.10	31,52,87,102	0
24	BCR	k	102	40/40	0.92	0.10	46,63,80,82	0
24	BCR	x	101	40/40	0.92	0.09	37,56,74,79	0
22	CLA	c	513	65/65	0.93	0.10	44,68,109,121	0
22	CLA	c	512	65/65	0.93	0.10	45,61,100,112	0
24	BCR	b	617	40/40	0.93	0.08	27,45,60,60	0
24	BCR	H	101	40/40	0.93	0.08	32,48,64,73	0
30	DGD	c	517	62/66	0.93	0.09	33,55,98,104	0
32	STE	M	102	15/20	0.93	0.10	36,49,63,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
33	LMG	m	101	51/55	0.93	0.08	34,54,73,90	0
29	SQD	A	412	52/54	0.94	0.09	36,61,94,98	0
24	BCR	B	618	40/40	0.94	0.08	26,43,64,65	0
24	BCR	b	619	40/40	0.94	0.08	33,50,65,70	0
24	BCR	B	619	40/40	0.94	0.07	23,39,54,57	0
24	BCR	B	620	40/40	0.94	0.08	24,47,67,76	0
24	BCR	C	501	40/40	0.94	0.09	40,53,72,81	0
33	LMG	D	407	51/55	0.94	0.10	31,58,97,101	0
24	BCR	k	103	40/40	0.94	0.09	39,55,69,76	0
24	BCR	C	515	40/40	0.94	0.08	27,45,58,67	0
22	CLA	c	511	65/65	0.94	0.09	38,56,77,82	0
22	CLA	C	513	65/65	0.94	0.10	38,56,101,105	0
30	DGD	H	102	62/66	0.94	0.08	29,47,62,66	0
22	CLA	b	606	65/65	0.94	0.07	28,43,79,93	0
30	DGD	c	518	62/66	0.94	0.09	28,56,95,100	0
24	BCR	A	406	40/40	0.94	0.07	24,38,47,56	0
33	LMG	d	410	44/55	0.94	0.10	36,55,89,104	0
28	LHG	d	407	49/49	0.94	0.10	34,52,74,84	0
22	CLA	c	506	65/65	0.95	0.09	30,54,101,105	0
24	BCR	a	406	40/40	0.95	0.06	23,38,49,54	0
22	CLA	c	508	64/65	0.95	0.08	32,46,83,100	0
24	BCR	b	618	40/40	0.95	0.06	27,42,54,58	0
30	DGD	C	517	62/66	0.95	0.09	22,43,84,95	0
22	CLA	c	509	65/65	0.95	0.09	33,51,70,75	0
30	DGD	C	519	62/66	0.95	0.09	28,54,75,83	0
22	CLA	c	510	65/65	0.95	0.08	33,51,65,73	0
30	DGD	c	516	62/66	0.95	0.09	23,45,81,92	0
24	BCR	c	515	40/40	0.95	0.07	30,44,65,69	0
22	CLA	C	508	65/65	0.95	0.07	26,45,61,66	0
22	CLA	C	510	65/65	0.95	0.08	28,48,68,74	0
22	CLA	C	512	65/65	0.95	0.09	35,55,72,85	0
24	BCR	t	101	40/40	0.95	0.06	29,42,56,57	0
22	CLA	d	404	65/65	0.95	0.08	32,52,97,105	0
26	BCT	A	409	4/4	0.95	0.08	26,33,35,42	0
22	CLA	B	607	65/65	0.95	0.07	22,38,76,83	0
27	PL9	D	406	55/55	0.95	0.07	23,37,53,55	0
22	CLA	B	617	60/65	0.95	0.09	26,43,92,113	0
28	LHG	A	411	47/49	0.95	0.09	31,52,79,95	0
22	CLA	a	405	65/65	0.95	0.08	22,42,90,105	0
22	CLA	C	506	65/65	0.95	0.08	23,41,72,82	0
22	CLA	C	507	65/65	0.95	0.08	27,48,95,114	0
28	LHG	d	409	39/49	0.95	0.08	32,51,66,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
28	LHG	l	101	49/49	0.95	0.08	25,48,61,78	0
22	CLA	b	616	60/65	0.95	0.08	29,48,91,98	0
22	CLA	c	503	65/65	0.95	0.08	35,48,61,67	0
22	CLA	c	504	60/65	0.95	0.07	33,48,83,88	0
22	CLA	c	505	65/65	0.95	0.08	30,45,72,77	0
24	BCR	T	101	40/40	0.95	0.06	28,44,60,68	0
22	CLA	A	403	65/65	0.96	0.08	22,37,87,101	0
22	CLA	C	509	65/65	0.96	0.07	34,46,105,121	0
27	PL9	d	406	55/55	0.96	0.06	19,37,48,56	0
22	CLA	B	610	65/65	0.96	0.06	26,38,61,72	0
22	CLA	C	511	65/65	0.96	0.07	29,48,70,77	0
28	LHG	B	622	49/49	0.96	0.08	31,47,68,81	0
28	LHG	L	102	49/49	0.96	0.06	27,42,59,71	0
22	CLA	B	611	65/65	0.96	0.07	21,34,48,55	0
22	CLA	B	614	65/65	0.96	0.07	22,36,73,83	0
22	CLA	d	402	65/65	0.96	0.07	21,37,65,68	0
22	CLA	d	403	65/65	0.96	0.07	20,34,52,56	0
22	CLA	B	615	65/65	0.96	0.08	26,41,84,94	0
23	PHO	a	404	64/64	0.96	0.06	21,33,41,46	0
23	PHO	d	401	64/64	0.96	0.06	26,42,52,62	0
22	CLA	D	402	65/65	0.96	0.06	17,32,59,66	0
22	CLA	D	404	65/65	0.96	0.08	24,46,105,117	0
22	CLA	a	403	65/65	0.96	0.08	25,43,98,116	0
22	CLA	B	616	65/65	0.96	0.07	27,40,69,86	0
22	CLA	A	402	65/65	0.96	0.06	21,29,43,61	0
22	CLA	b	602	65/65	0.96	0.07	24,46,67,75	0
22	CLA	b	604	65/65	0.96	0.07	23,40,82,97	0
22	CLA	b	605	65/65	0.96	0.07	23,38,53,61	0
22	CLA	C	502	65/65	0.96	0.06	25,37,54,57	0
22	CLA	b	608	65/65	0.96	0.07	27,44,70,75	0
22	CLA	b	609	65/65	0.96	0.07	27,47,81,86	0
22	CLA	b	610	65/65	0.96	0.07	27,40,52,62	0
22	CLA	b	611	65/65	0.96	0.06	21,36,56,68	0
22	CLA	b	612	65/65	0.96	0.07	22,36,52,56	0
22	CLA	b	614	65/65	0.96	0.07	23,42,80,89	0
22	CLA	b	615	65/65	0.96	0.07	28,43,64,70	0
22	CLA	C	503	65/65	0.96	0.07	32,45,65,79	0
22	CLA	c	501	65/65	0.96	0.07	28,44,56,68	0
22	CLA	c	502	65/65	0.96	0.07	32,47,64,70	0
22	CLA	C	504	65/65	0.96	0.06	33,47,56,61	0
22	CLA	C	505	59/65	0.96	0.07	28,45,82,99	0
22	CLA	B	605	65/65	0.96	0.07	23,36,74,84	0

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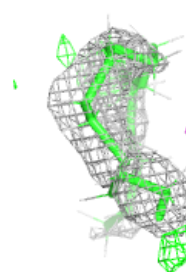
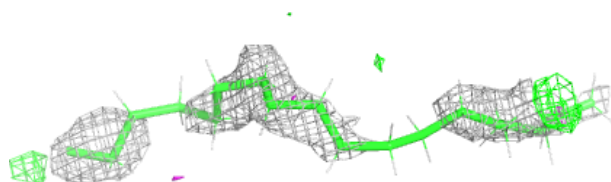
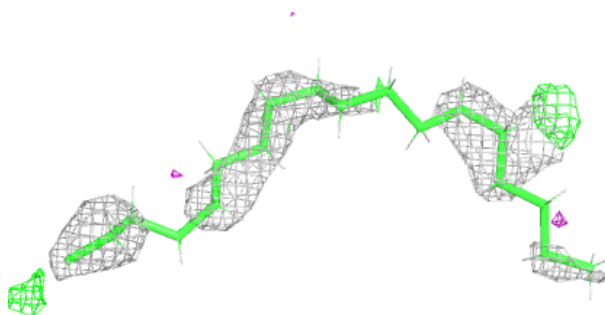
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
22	CLA	B	606	65/65	0.96	0.07	22,36,52,56	0
22	CLA	c	507	65/65	0.96	0.07	28,48,63,65	0
34	HEC	e	101	43/43	0.96	0.09	44,61,79,83	0
22	CLA	B	609	65/65	0.97	0.05	23,36,56,62	0
22	CLA	A	405	54/65	0.97	0.06	20,36,63,73	0
22	CLA	D	403	65/65	0.97	0.06	20,33,54,61	0
22	CLA	b	607	65/65	0.97	0.07	21,39,70,81	0
26	BCT	a	409	4/4	0.97	0.07	31,31,44,52	0
22	CLA	B	603	65/65	0.97	0.07	23,41,59,61	0
23	PHO	A	404	64/64	0.97	0.06	21,30,42,45	0
23	PHO	D	401	64/64	0.97	0.05	22,35,45,50	0
22	CLA	a	402	65/65	0.97	0.05	19,33,47,55	0
22	CLA	B	612	65/65	0.97	0.05	22,34,50,54	0
22	CLA	B	613	65/65	0.97	0.06	20,34,53,58	0
22	CLA	B	604	65/65	0.97	0.07	23,36,64,67	0
28	LHG	D	408	49/49	0.97	0.06	24,41,54,60	0
22	CLA	b	613	65/65	0.97	0.07	23,37,82,87	0
22	CLA	B	608	65/65	0.97	0.06	20,36,65,71	0
22	CLA	b	603	65/65	0.97	0.07	24,40,71,82	0
34	HEC	E	101	43/43	0.97	0.07	36,50,69,75	0
28	LHG	d	408	49/49	0.97	0.07	27,43,59,66	0
34	HEC	V	201	43/43	0.98	0.07	25,37,45,53	0
34	HEC	v	201	43/43	0.98	0.06	32,39,52,59	0
25	CL	A	408	1/1	0.99	0.03	32,32,32,32	0
25	CL	a	407	1/1	0.99	0.03	32,32,32,32	0
25	CL	a	408	1/1	0.99	0.10	32,32,32,32	0
25	CL	A	407	1/1	0.99	0.03	32,32,32,32	0
21	FE2	a	401	1/1	1.00	0.02	38,38,38,38	0
21	FE2	A	401	1/1	1.00	0.01	30,30,30,30	0
31	OEX	A	416	10/10	1.00	0.03	25,31,33,37	0
31	OEX	a	415	10/10	1.00	0.03	22,30,32,33	0

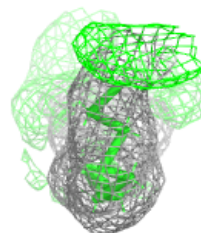
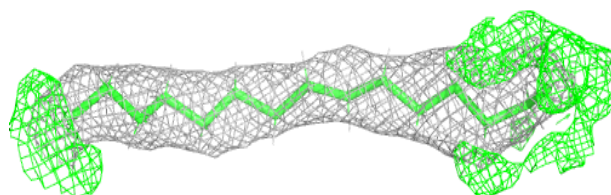
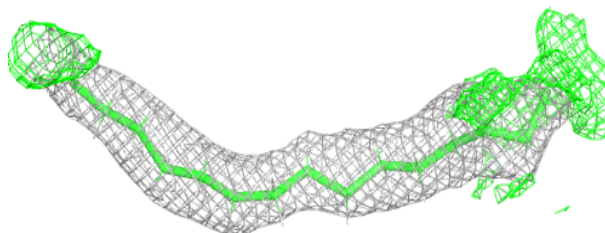
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around STE H 103:

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

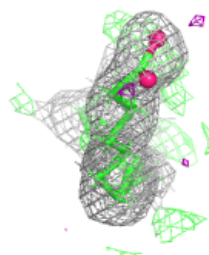
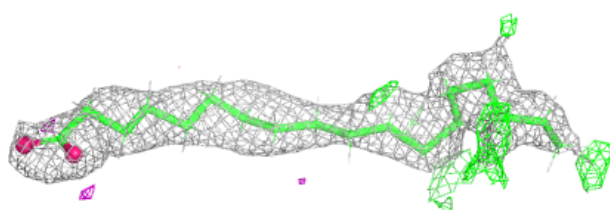
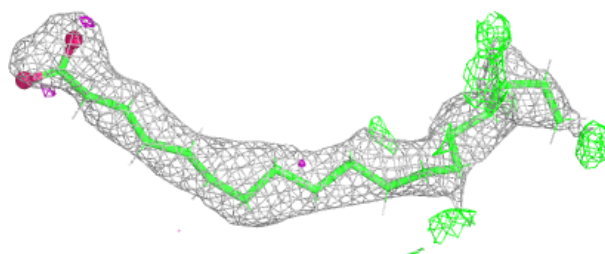
**Electron density around STE I 101:**

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

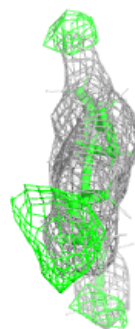
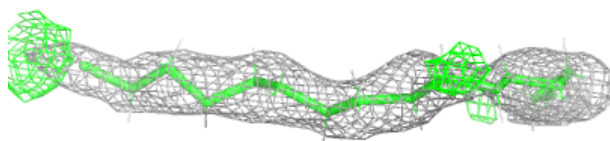
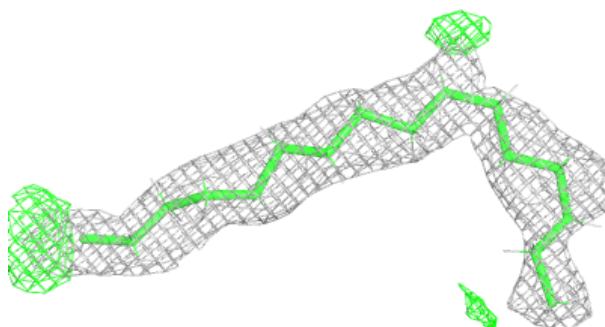


Electron density around STE b 626:

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

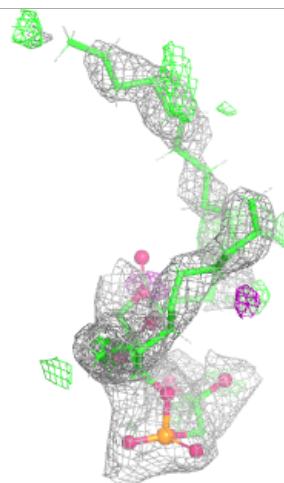
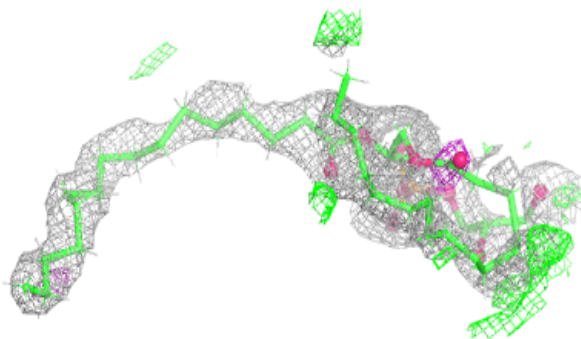
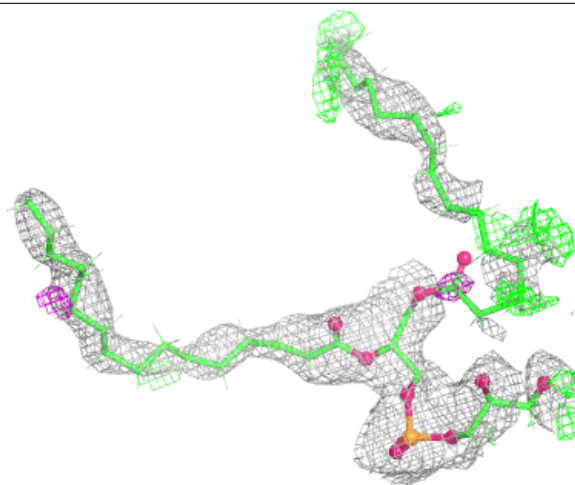
**Electron density around STE B 625:**

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



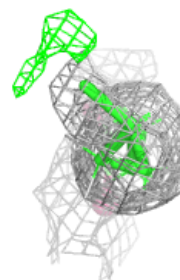
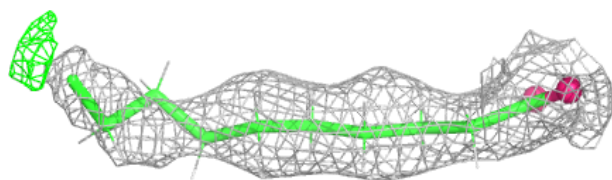
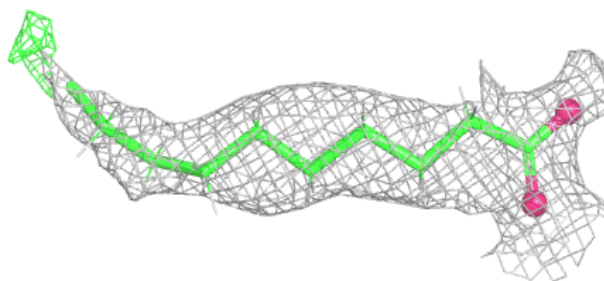
Electron density around LHG A 413:

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

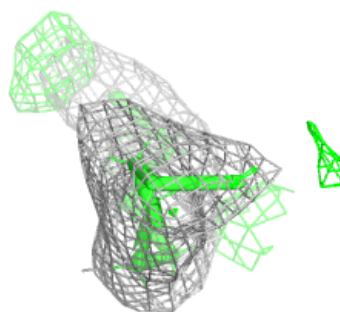
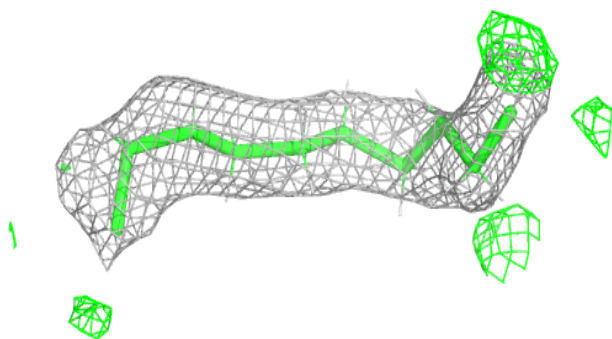
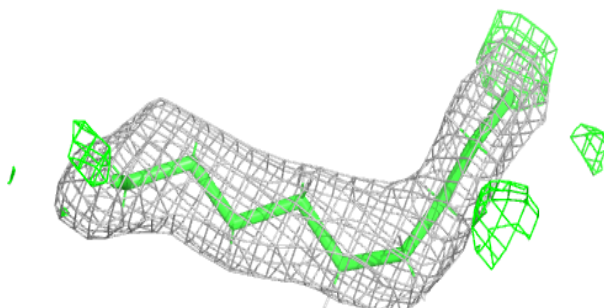


Electron density around STE k 101:

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

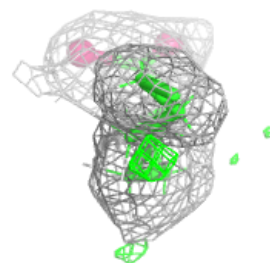
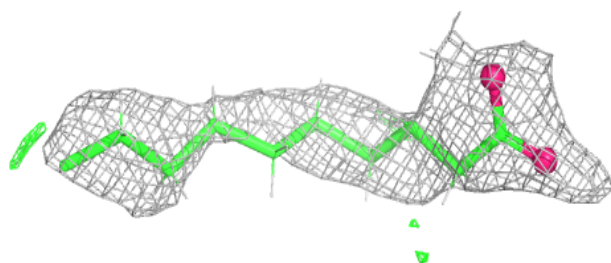
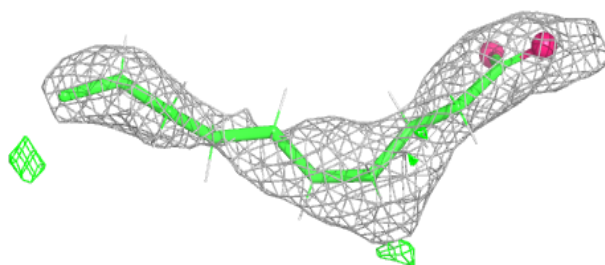
**Electron density around STE b 625:**

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

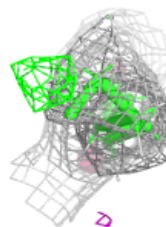
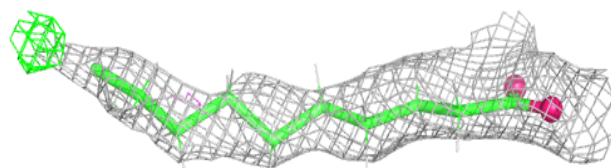
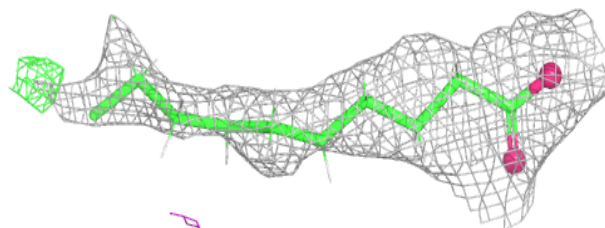


Electron density around STE E 102:

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

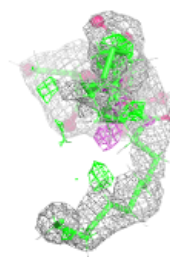
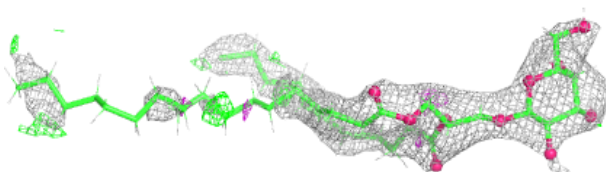
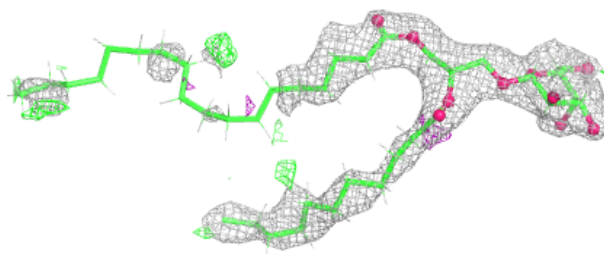
**Electron density around STE a 414:**

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

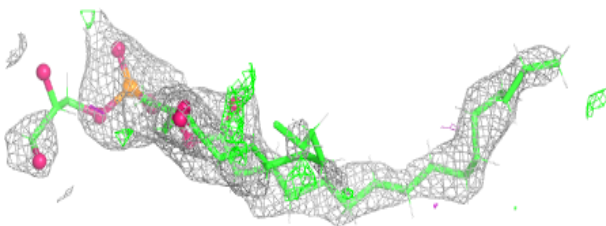
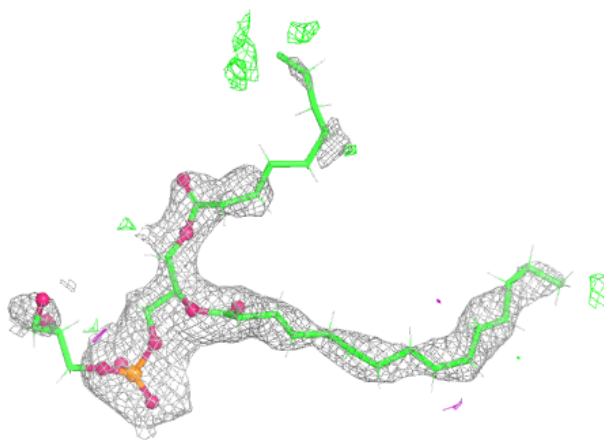


Electron density around LMG c 521:

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

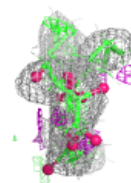
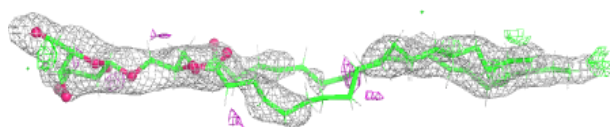
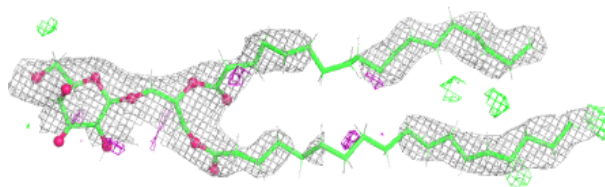
**Electron density around LHG a 412:**

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

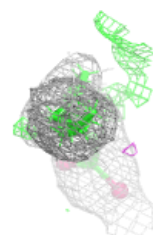
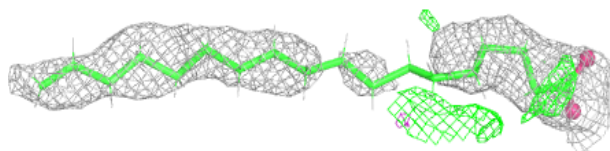
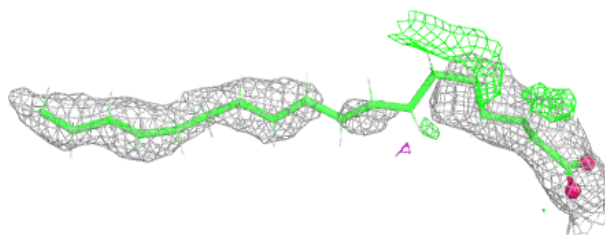


Electron density around LMG b 622:

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

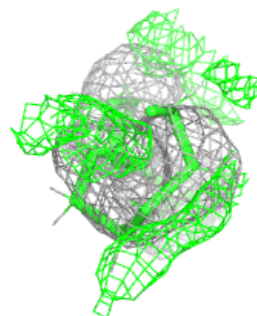
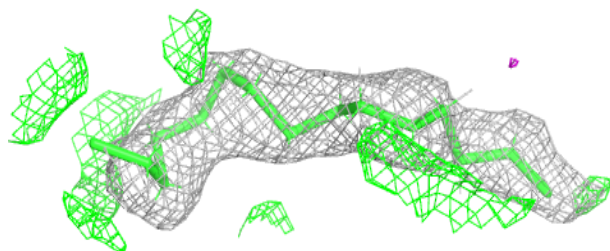
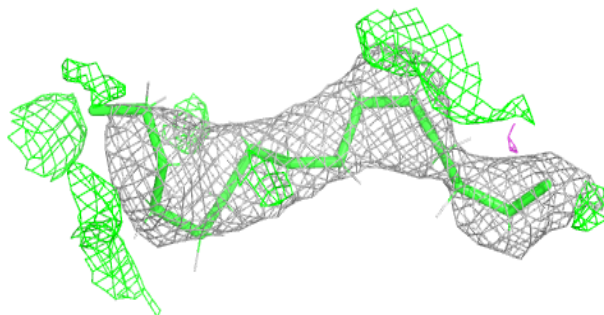
**Electron density around STE b 624:**

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

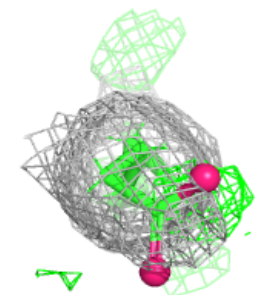
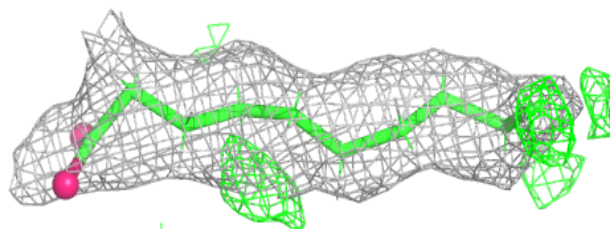
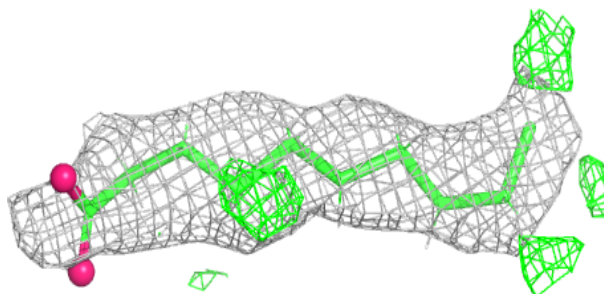


Electron density around STE B 626:

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

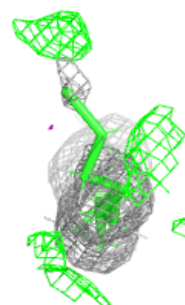
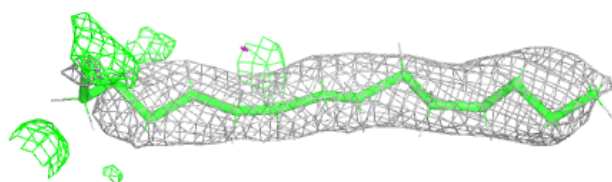
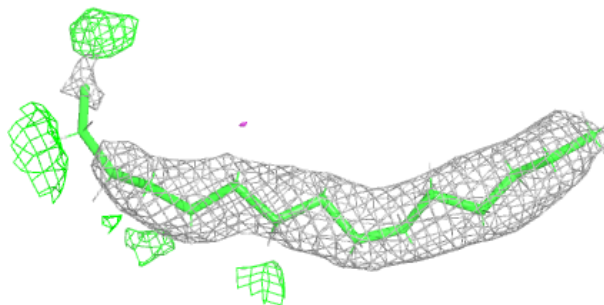
**Electron density around STE J 101:**

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

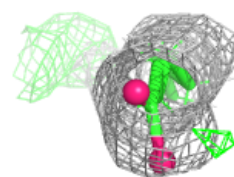
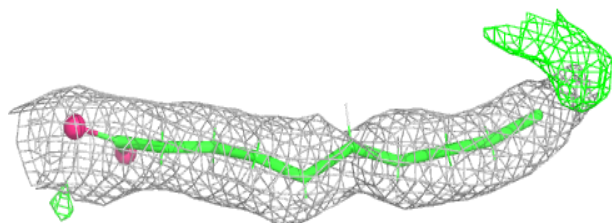
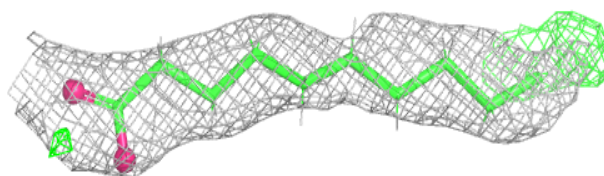


Electron density around STE T 102:

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

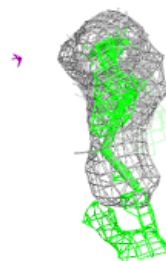
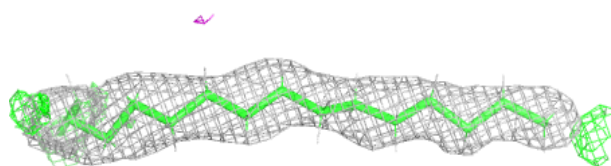
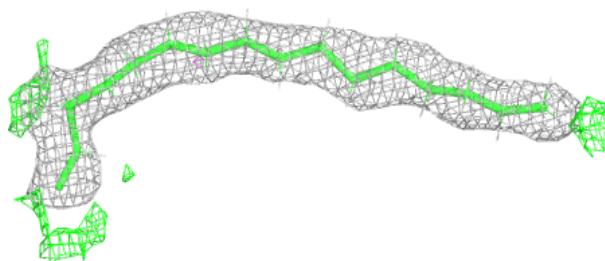
**Electron density around STE j 101:**

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

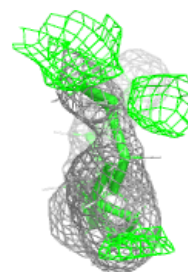
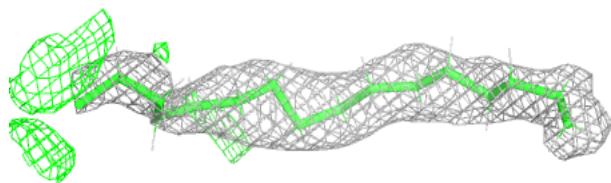
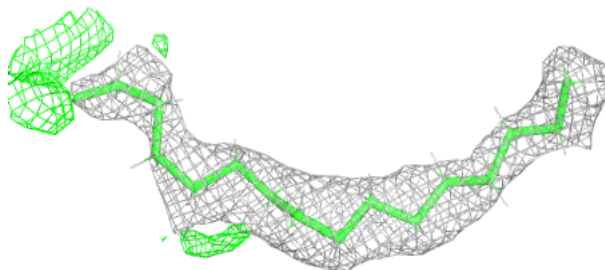


Electron density around STE C 521:

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

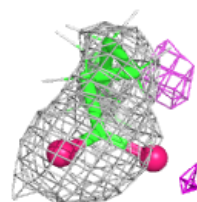
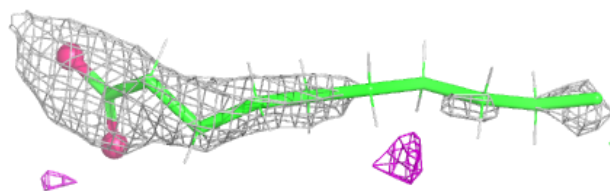
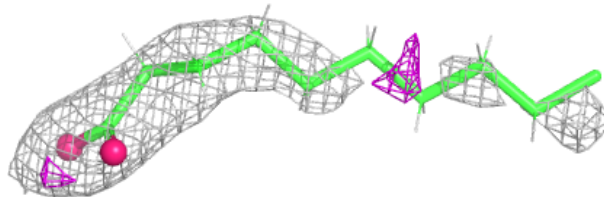
**Electron density around STE b 620:**

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



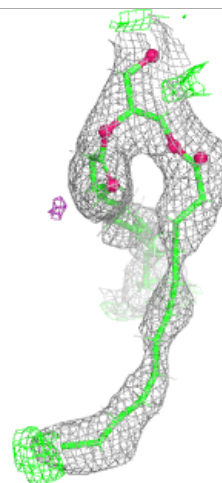
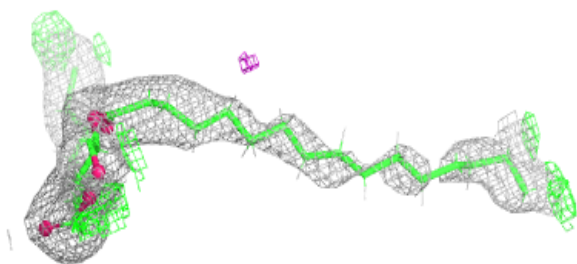
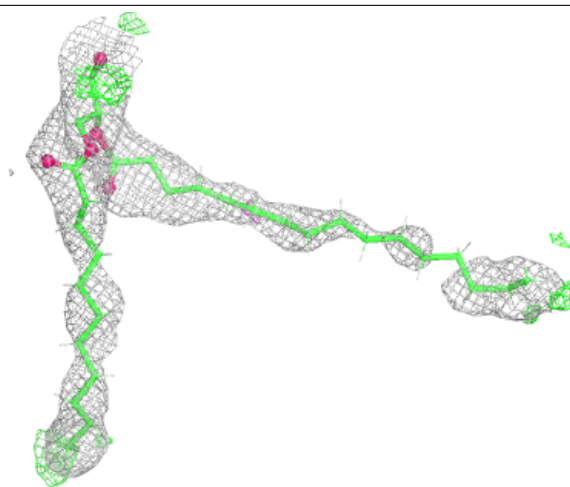
Electron density around STE B 601:

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



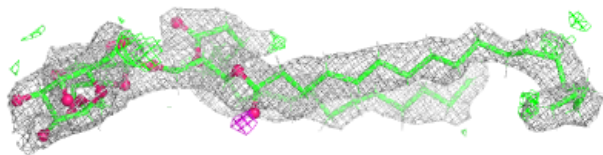
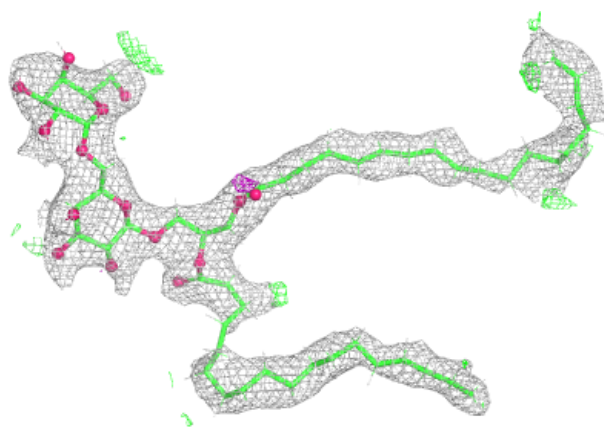
Electron density around SQD a 413:

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

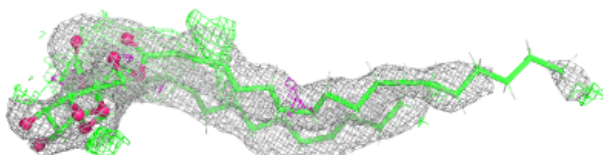
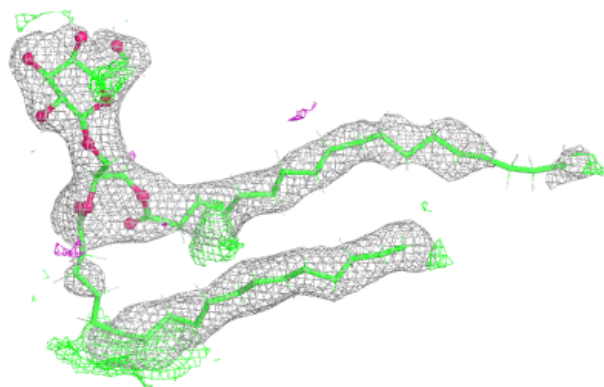


Electron density around DGD A 415:

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

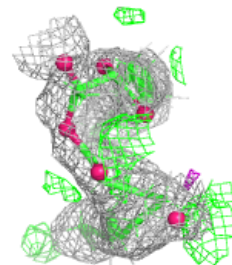
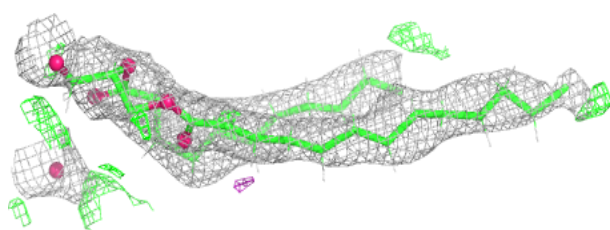
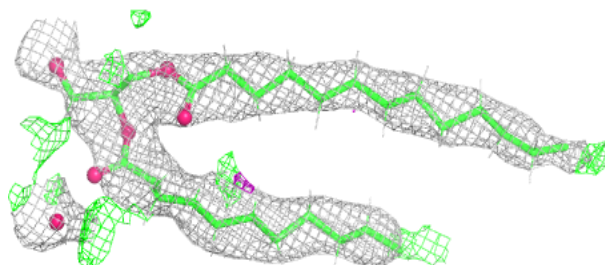
**Electron density around LMG B 627:**

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

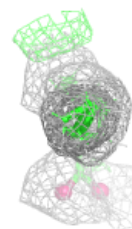
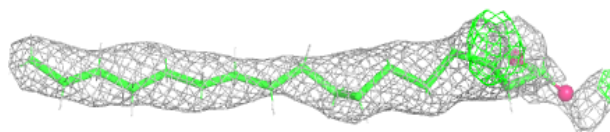
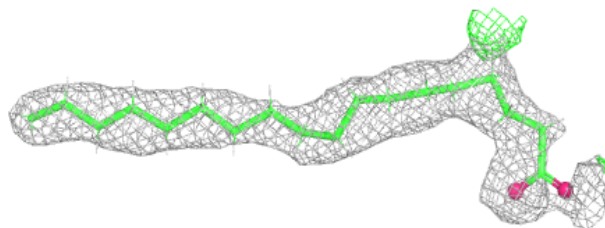


Electron density around LMG D 409:

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

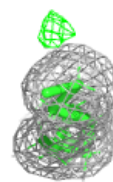
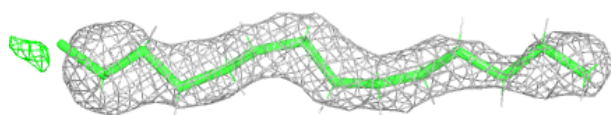
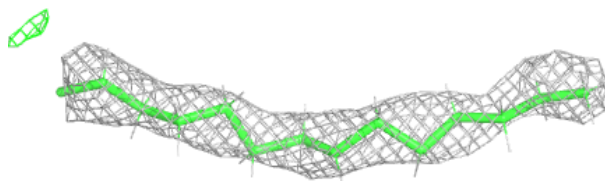
**Electron density around STE c 520:**

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

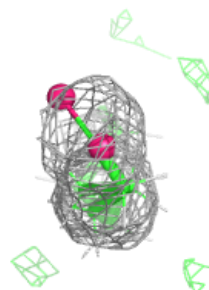
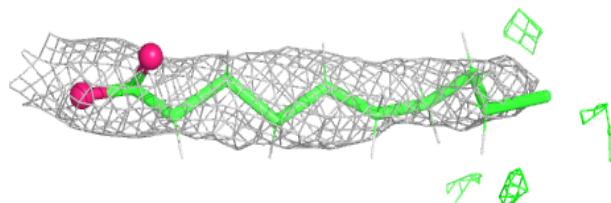
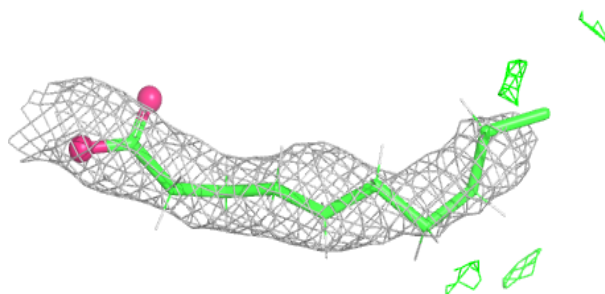


Electron density around STE h 102:

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

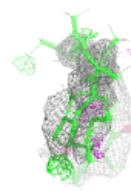
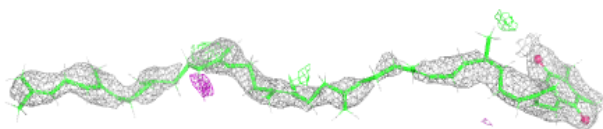
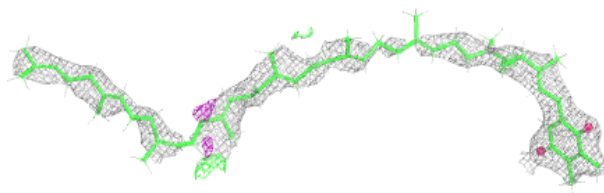
**Electron density around STE L 103:**

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



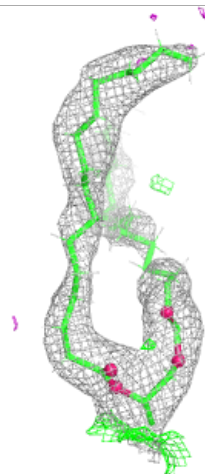
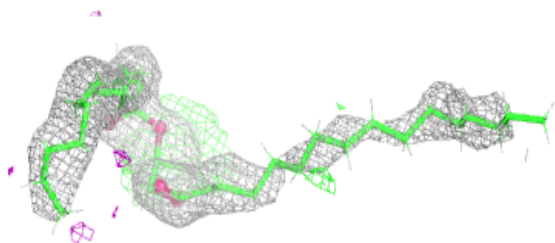
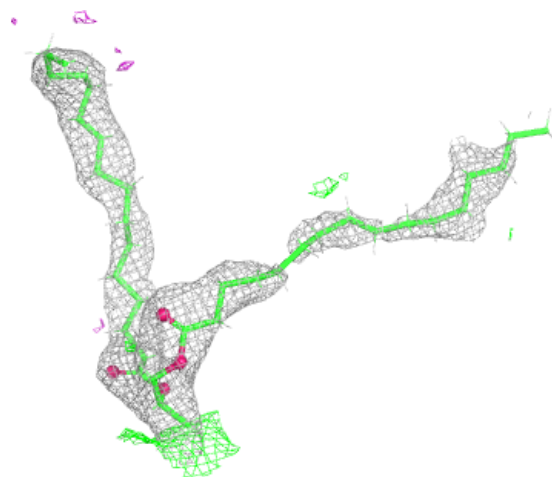
Electron density around PL9 A 410:

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



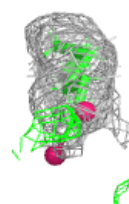
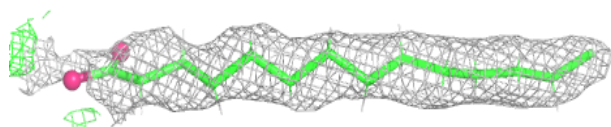
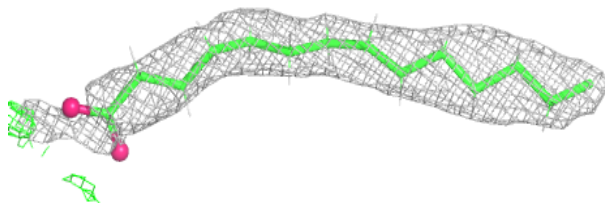
Electron density around SQD A 414:

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



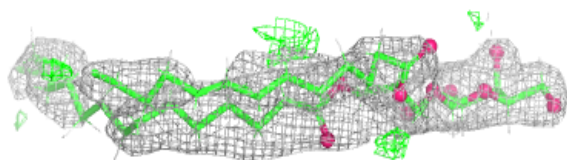
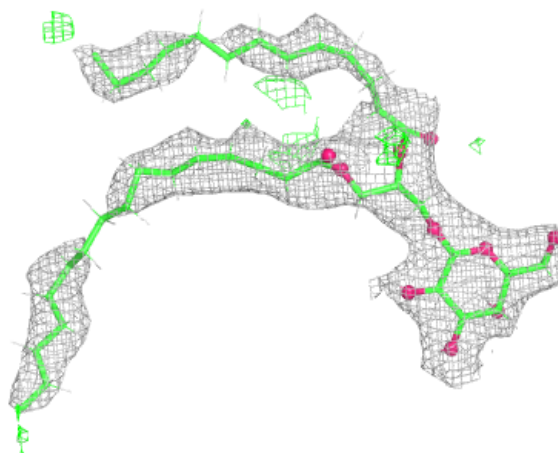
Electron density around STE b 623:

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



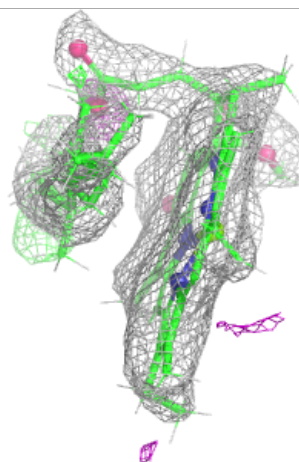
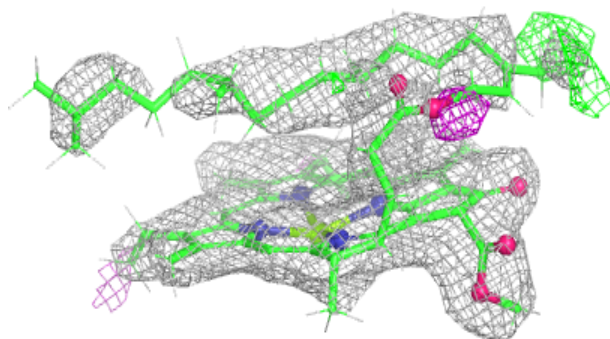
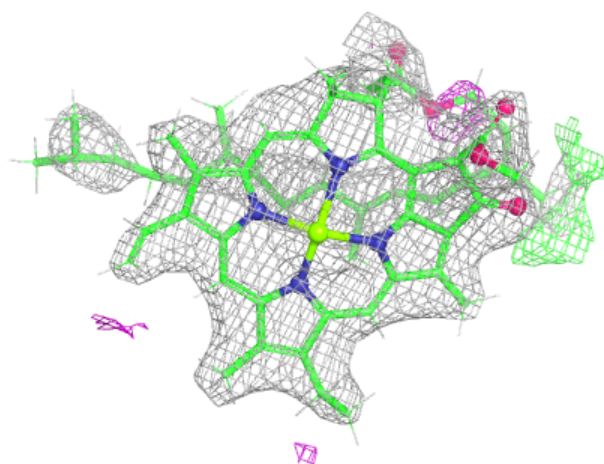
Electron density around LMG Y 101:

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



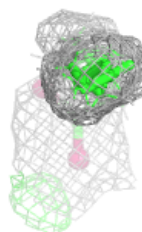
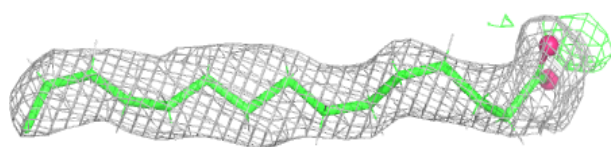
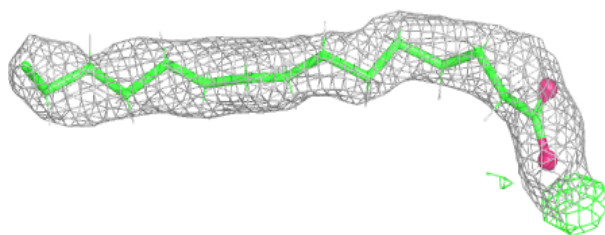
Electron density around CLA b 601:

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

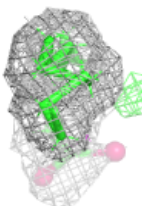
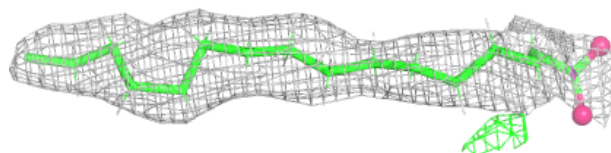
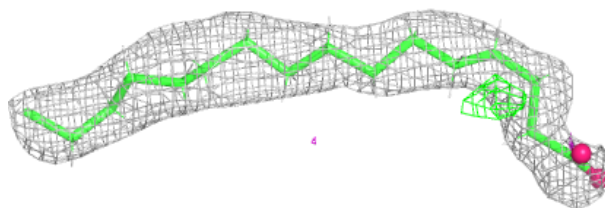


Electron density around STE d 411:

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

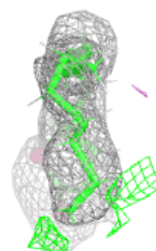
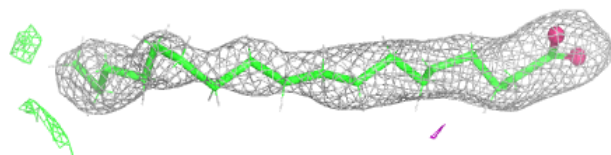
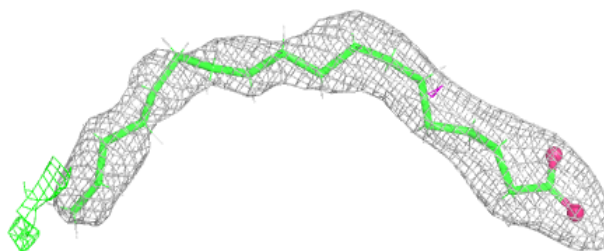
**Electron density around STE t 104:**

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

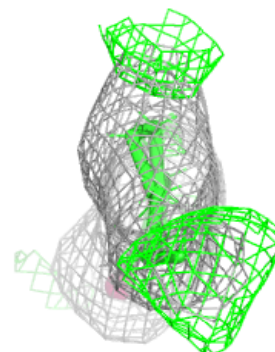
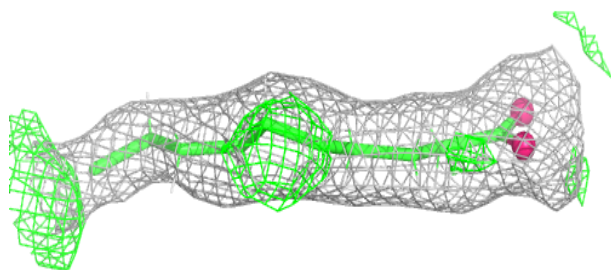
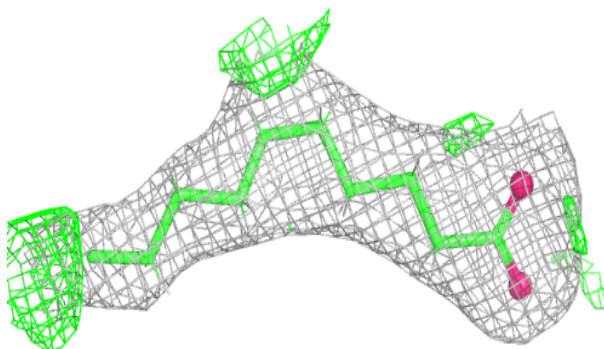


Electron density around STE x 102:

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

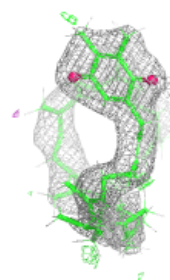
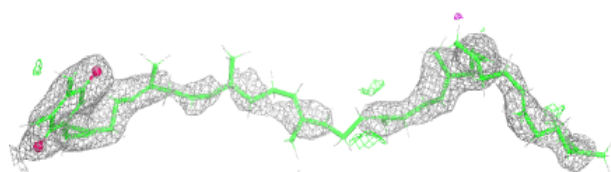
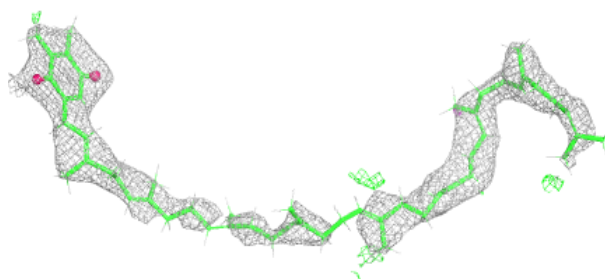
**Electron density around STE C 522:**

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

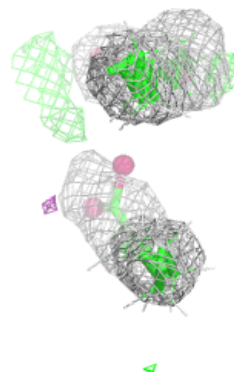
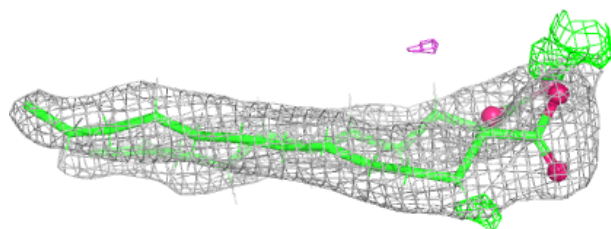
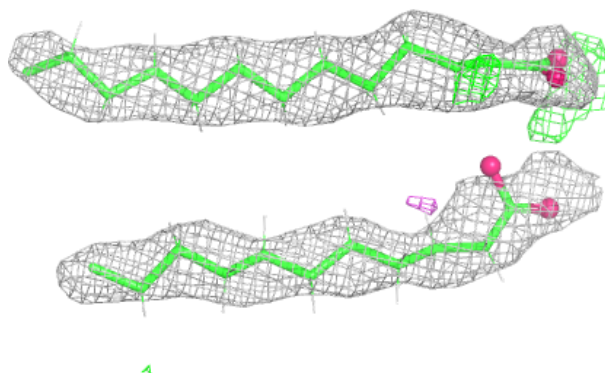


Electron density around PL9 a 410:

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

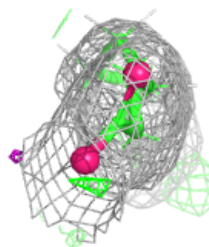
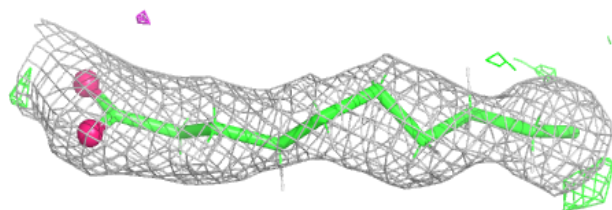
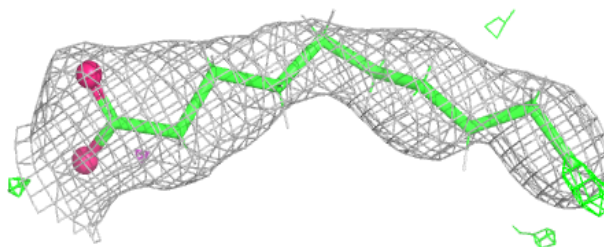
**Electron density around LMG D 410:**

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

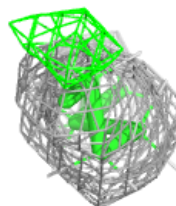
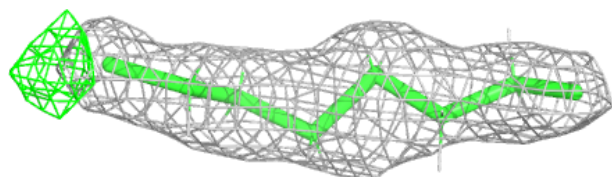
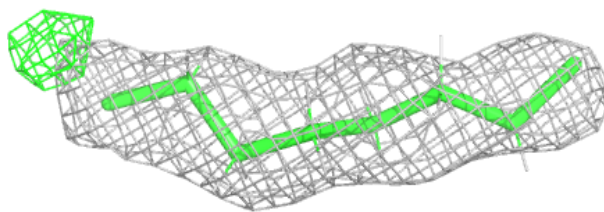


Electron density around STE C 520:

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

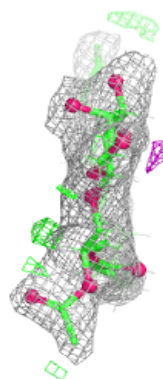
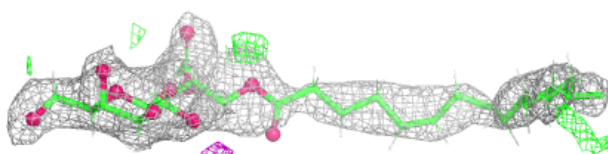
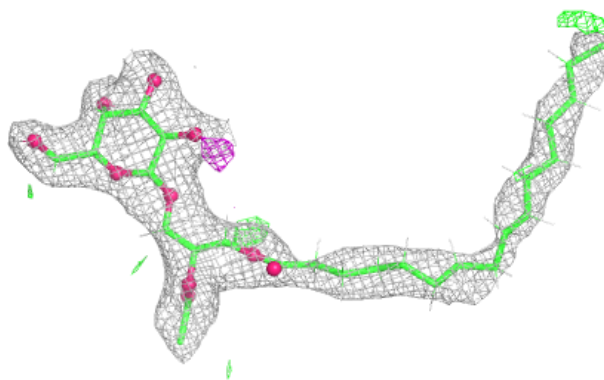
**Electron density around STE Z 102:**

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

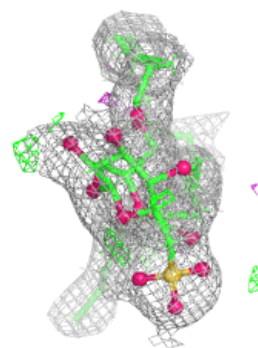
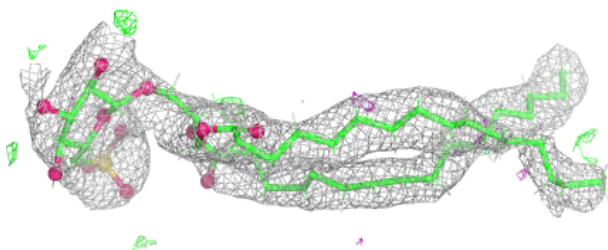
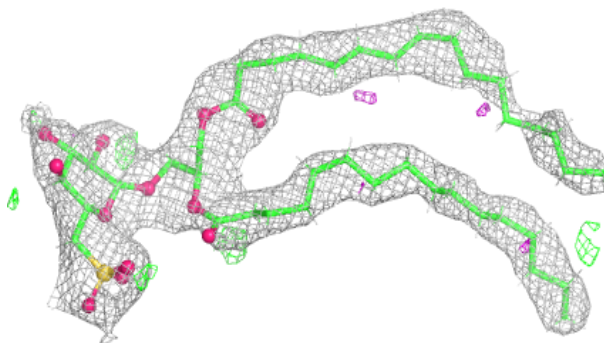


Electron density around LMG c 519:

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

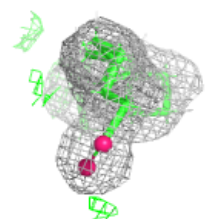
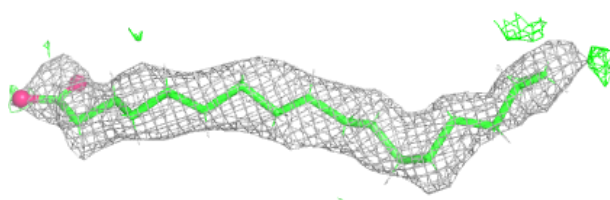
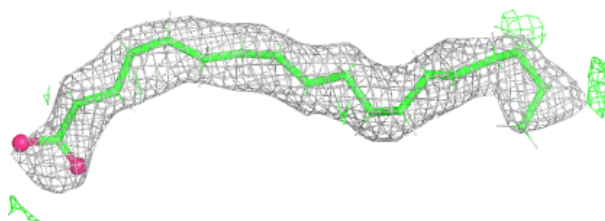
**Electron density around SQD B 623:**

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

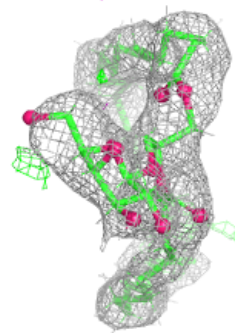
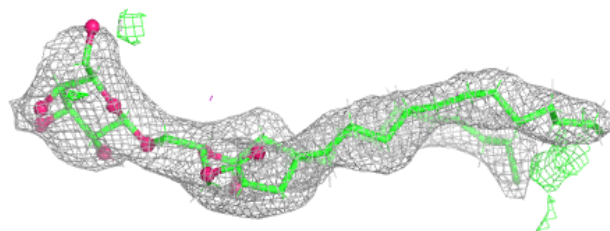
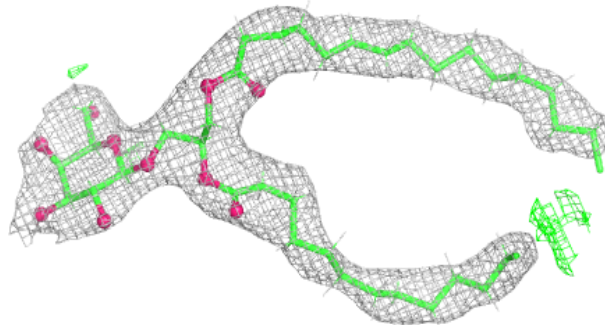


Electron density around STE b 621:

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

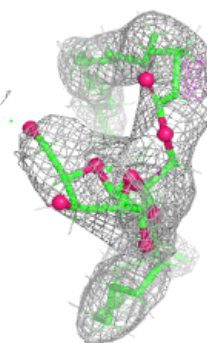
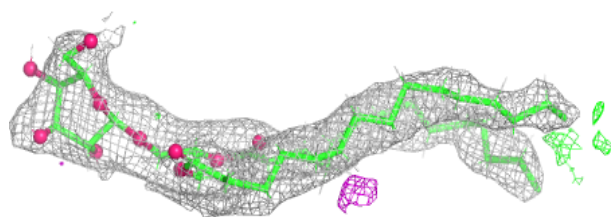
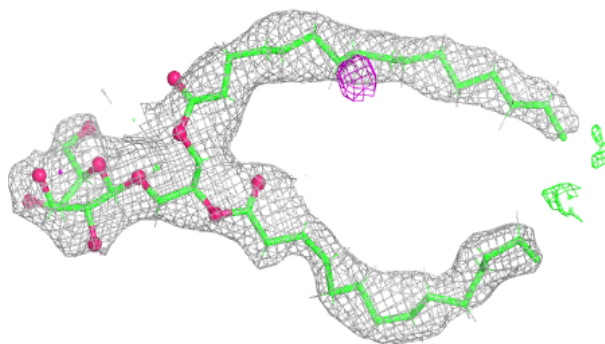
**Electron density around LMG C 516:**

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

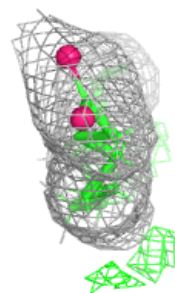
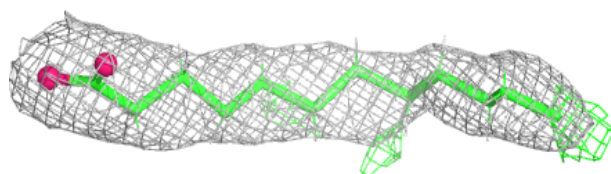
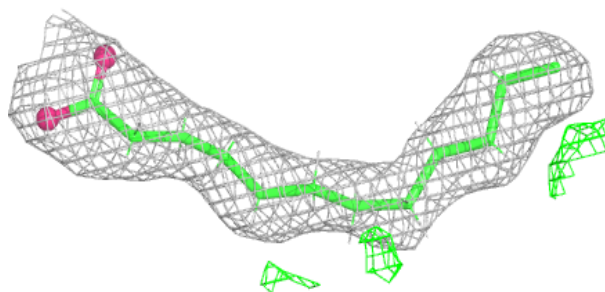


Electron density around LMG c 522:

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

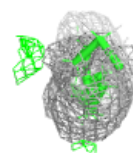
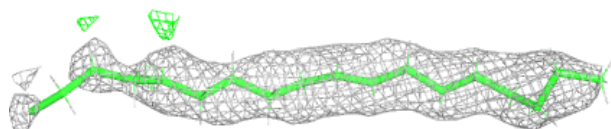
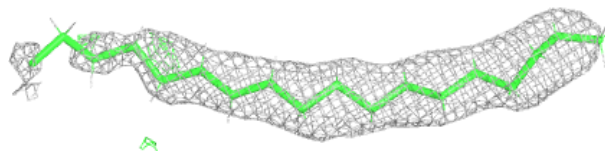
**Electron density around STE t 102:**

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

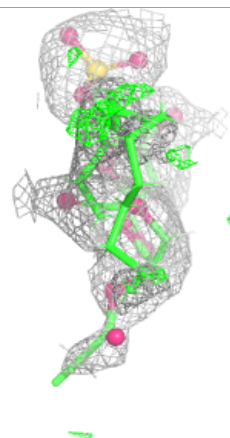
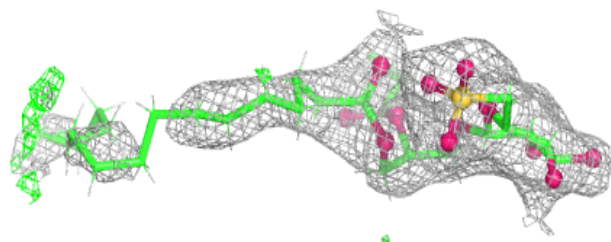
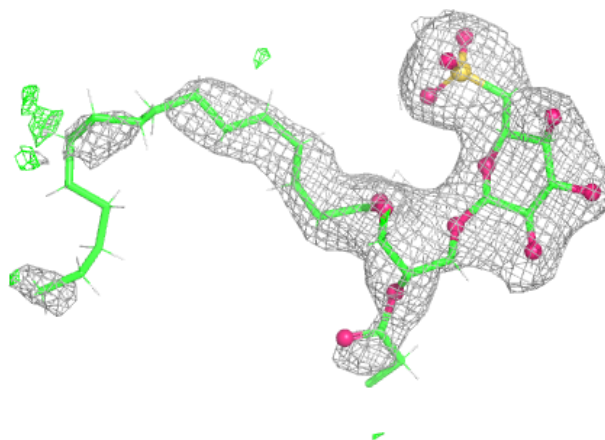


Electron density around STE M 104:

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

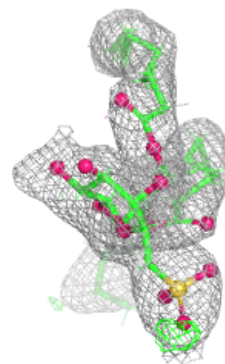
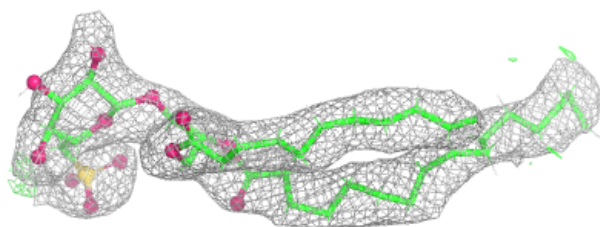
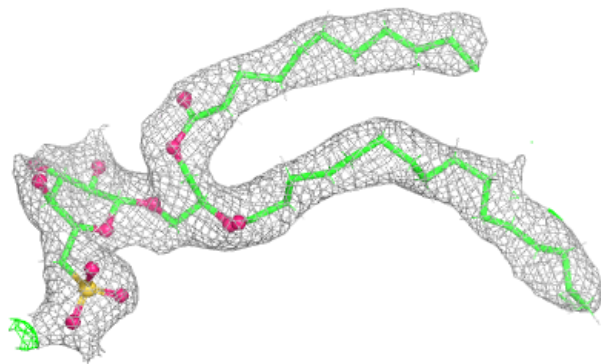
**Electron density around SQD f 101:**

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

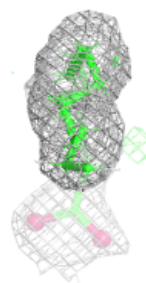
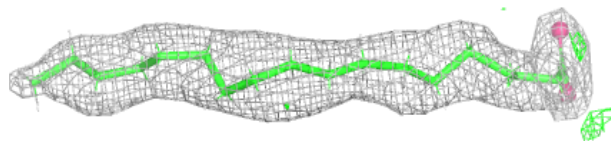
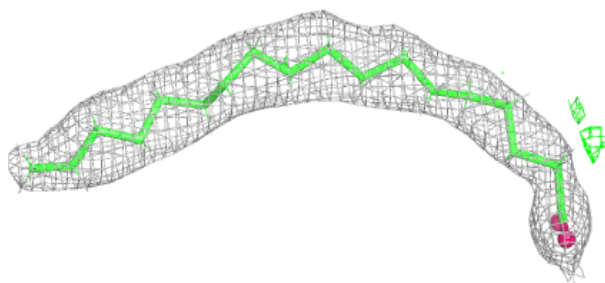


Electron density around SQD L 101:

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

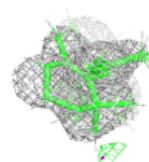
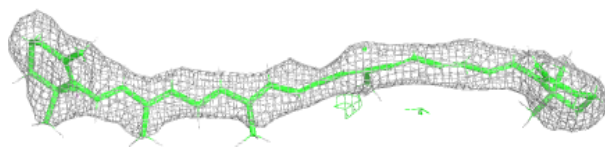
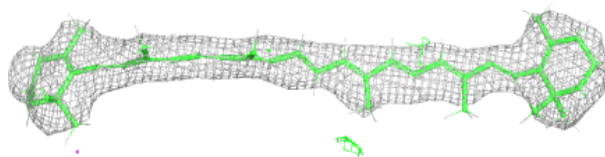
**Electron density around STE D 411:**

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

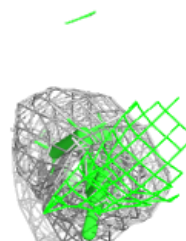
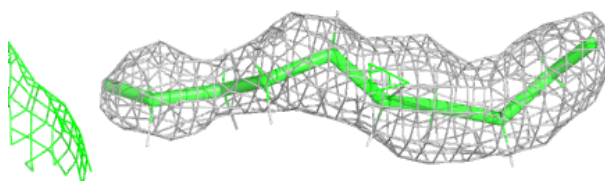
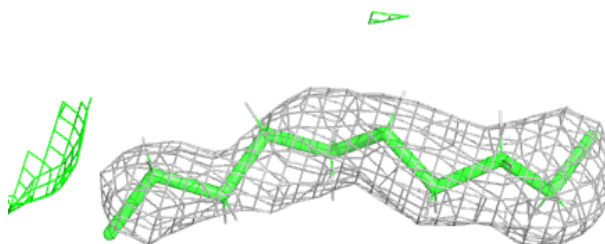


Electron density around BCR Z 101:

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

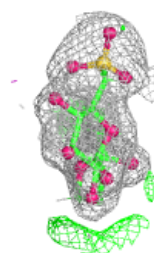
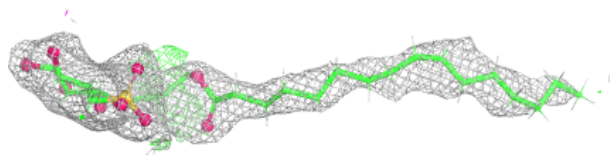
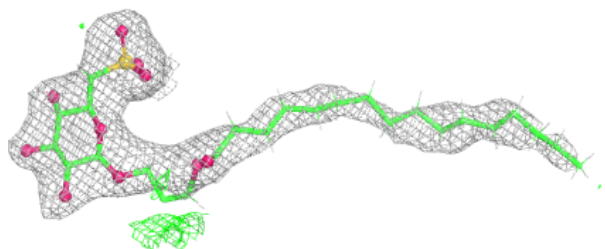
**Electron density around STE t 103:**

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

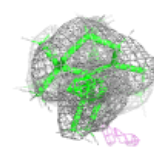
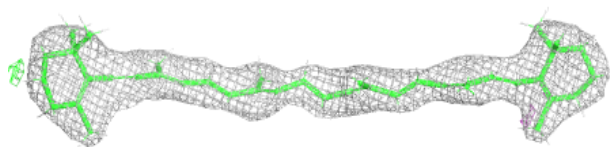


Electron density around SQD F 101:

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

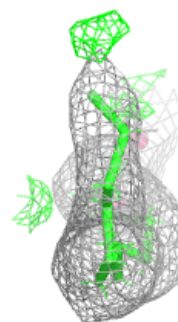
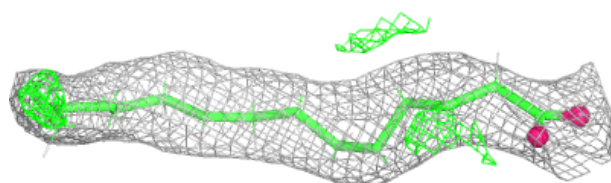
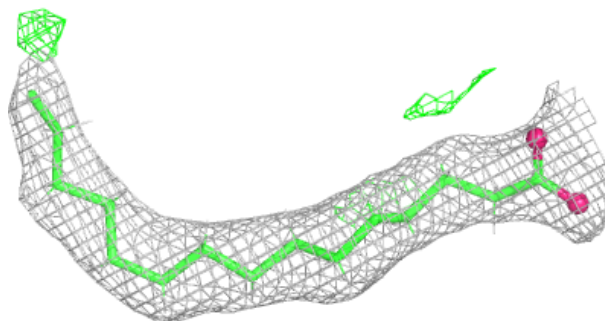
**Electron density around BCR c 514:**

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

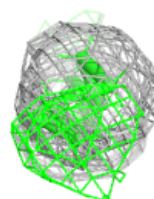
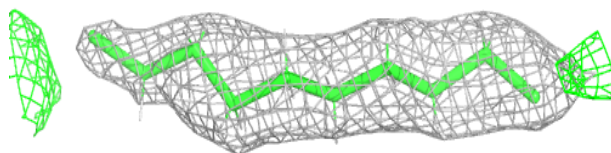
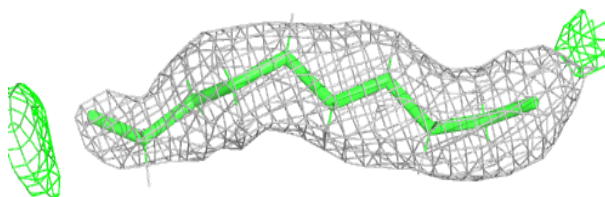


Electron density around STE B 621:

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

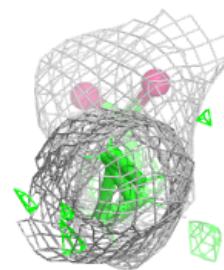
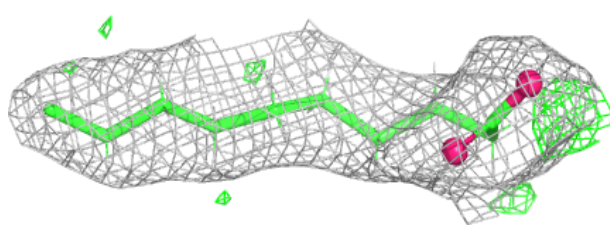
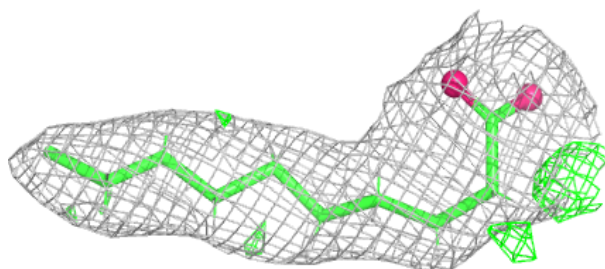
**Electron density around STE M 103:**

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

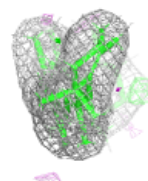
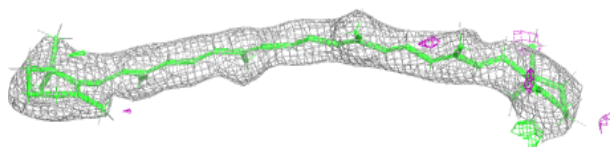
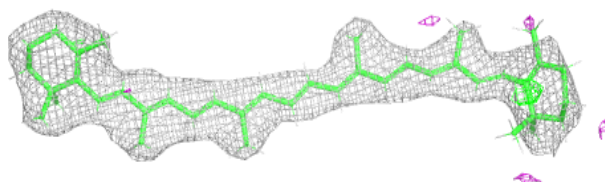


Electron density around STE B 624:

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

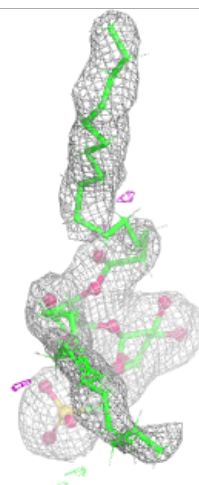
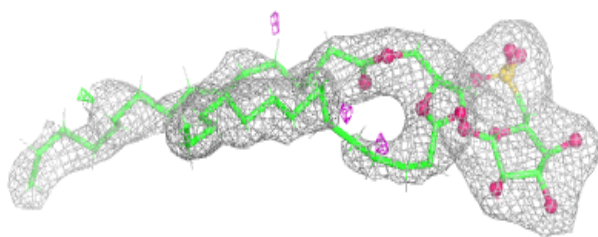
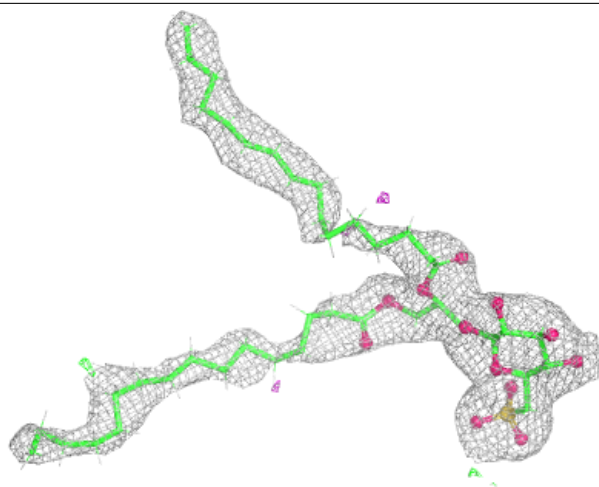
**Electron density around BCR D 405:**

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



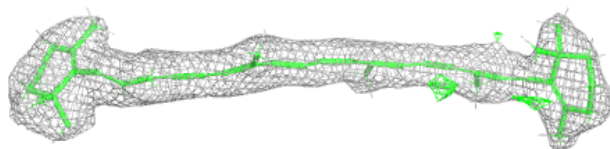
Electron density around SQD a 411:

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

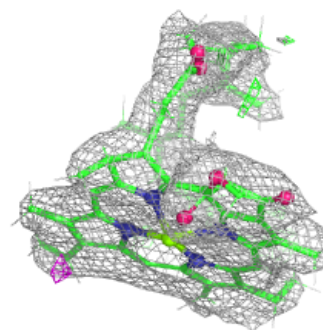
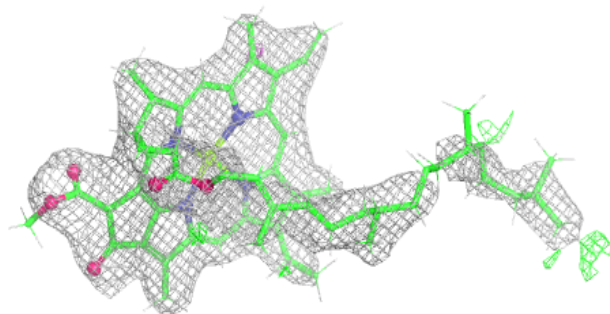
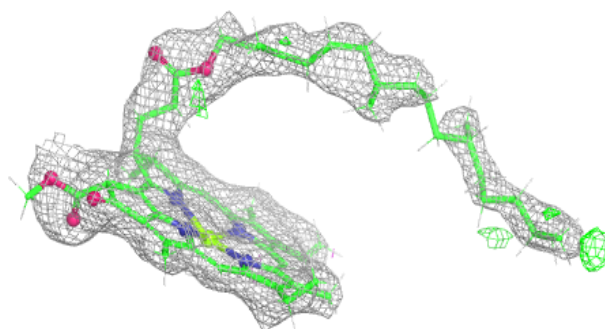


Electron density around BCR K 101:

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

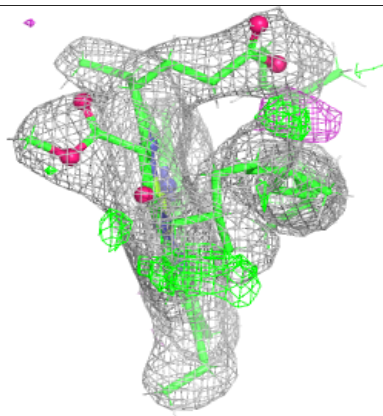
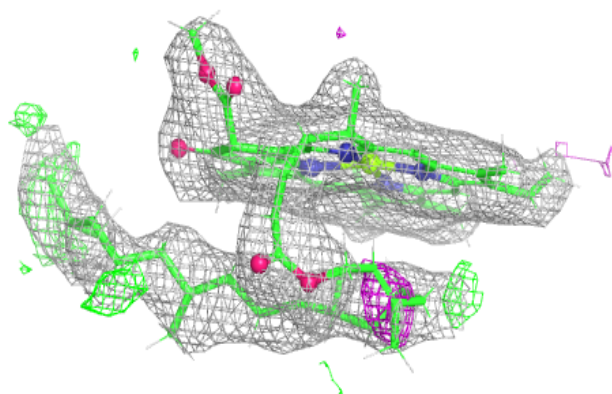
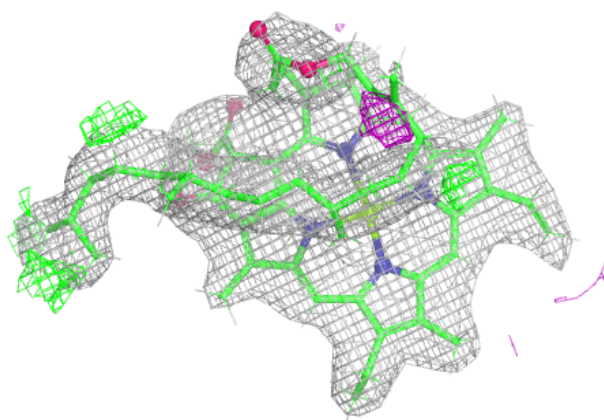
**Electron density around CLA C 514:**

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

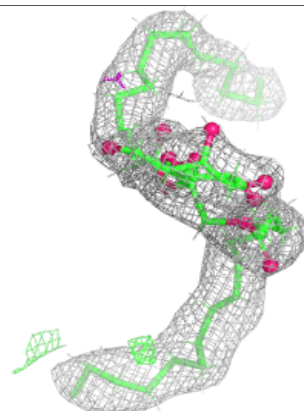
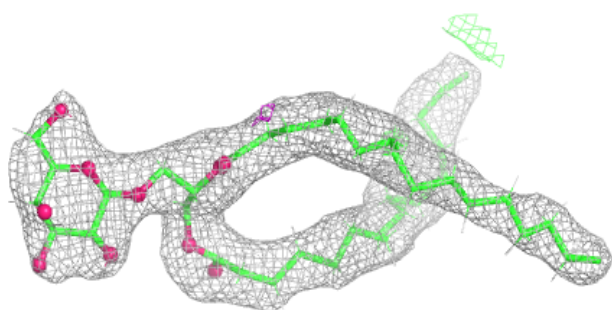
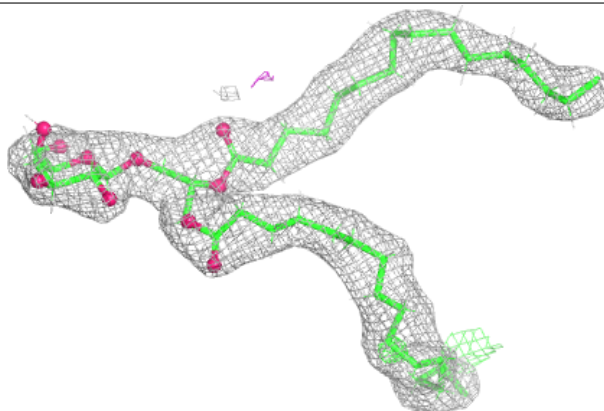


Electron density around CLA B 602:

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

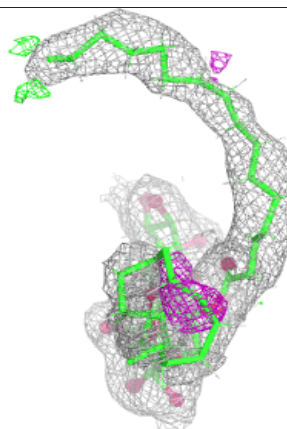
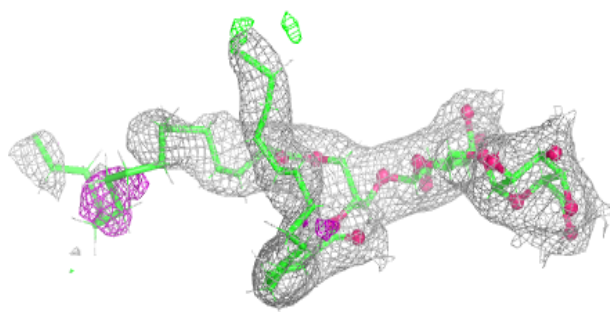
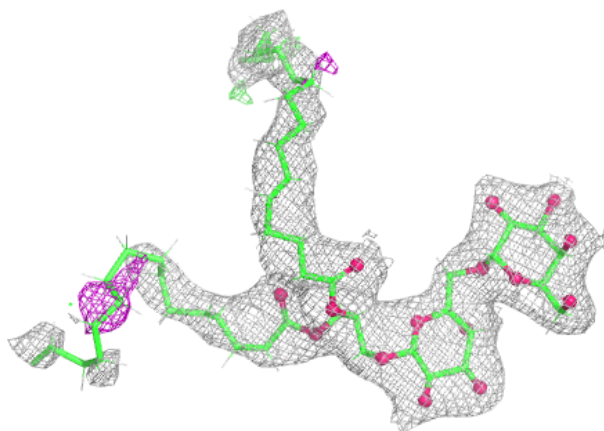
**Electron density around LMG M 101:**

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

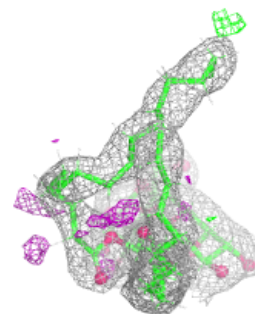
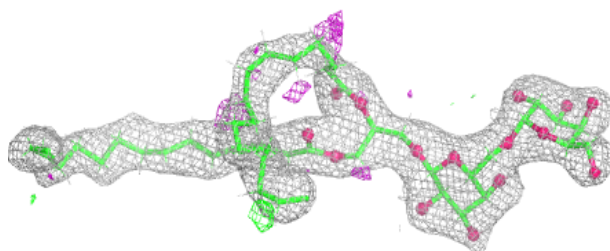
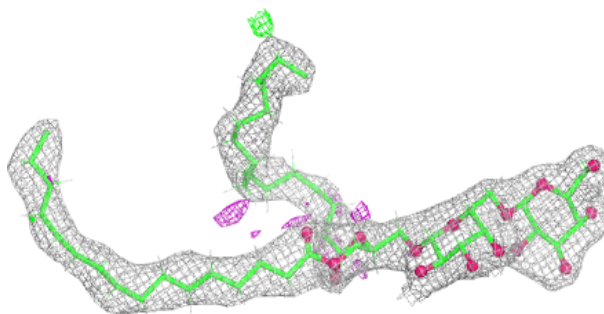


Electron density around DGD C 518:

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

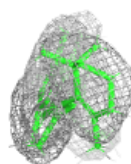
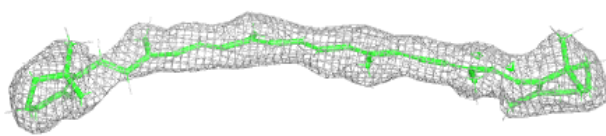
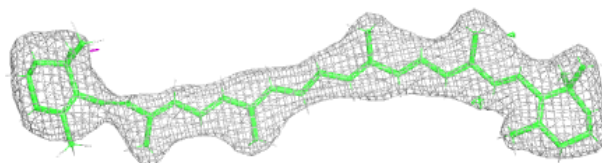
**Electron density around DGD h 101:**

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

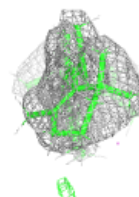
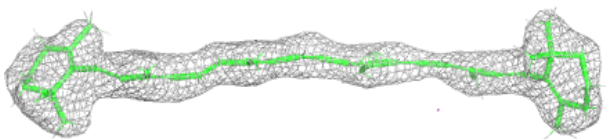
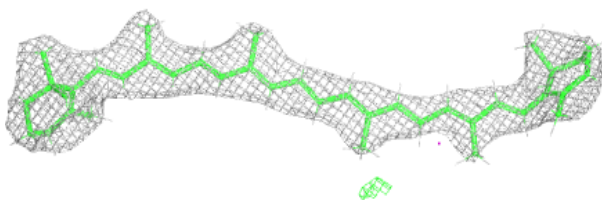


Electron density around BCR d 405:

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

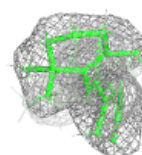
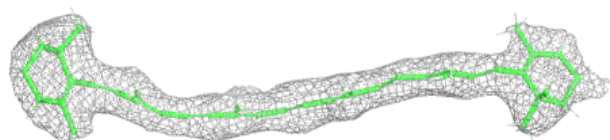
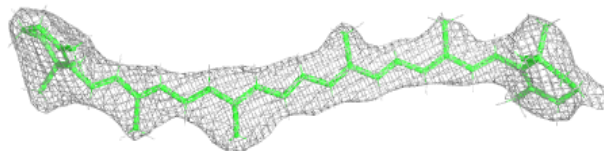
**Electron density around BCR k 102:**

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

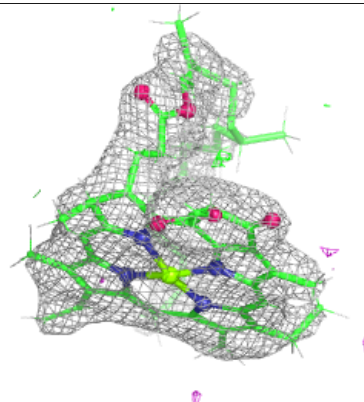
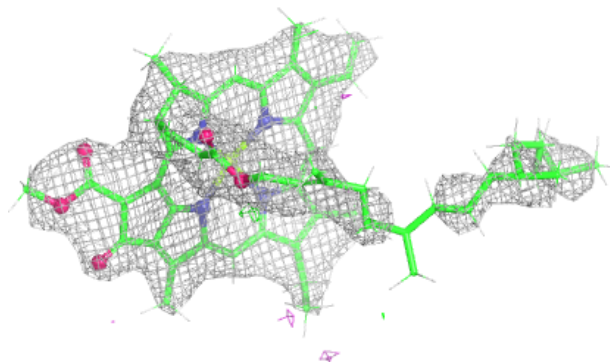
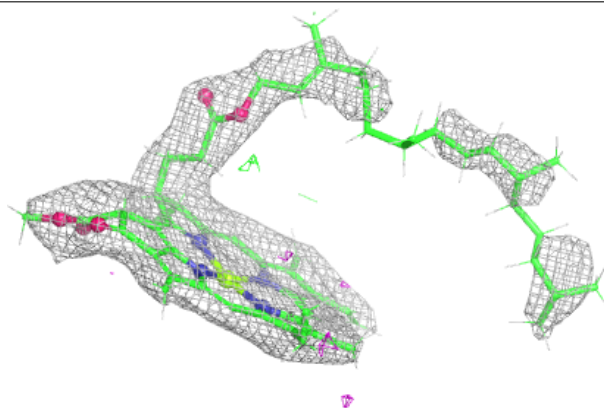


Electron density around BCR x 101:

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

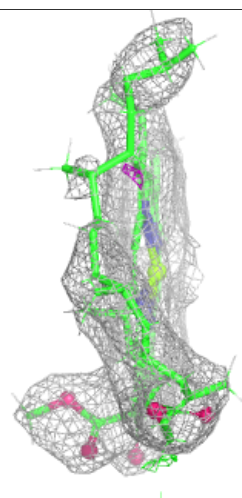
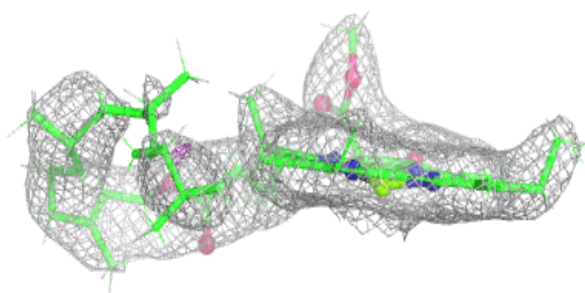
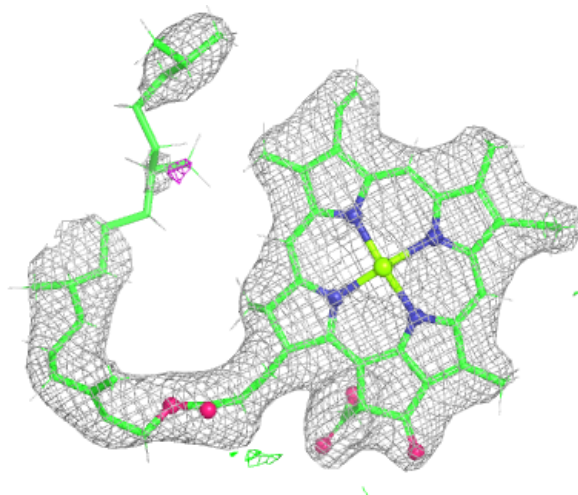
**Electron density around CLA c 513:**

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



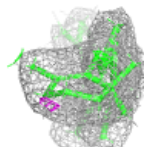
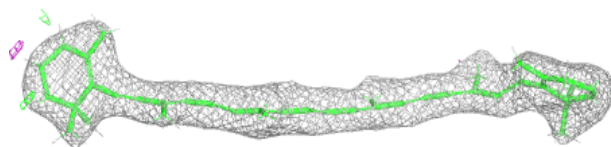
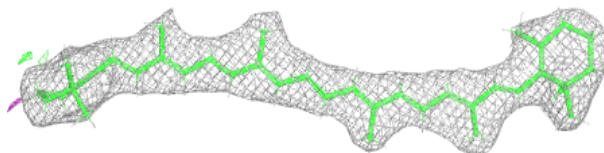
Electron density around CLA c 512:

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

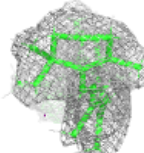
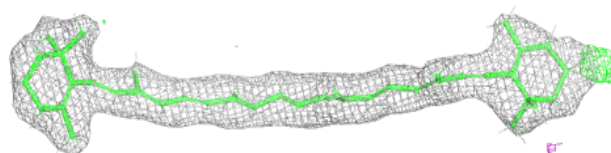
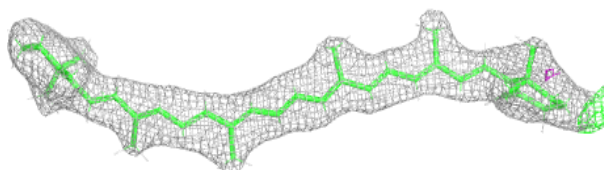


Electron density around BCR b 617:

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

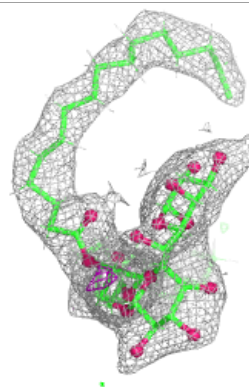
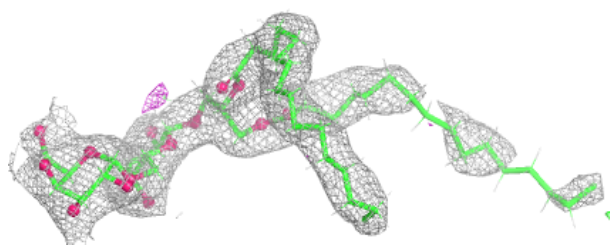
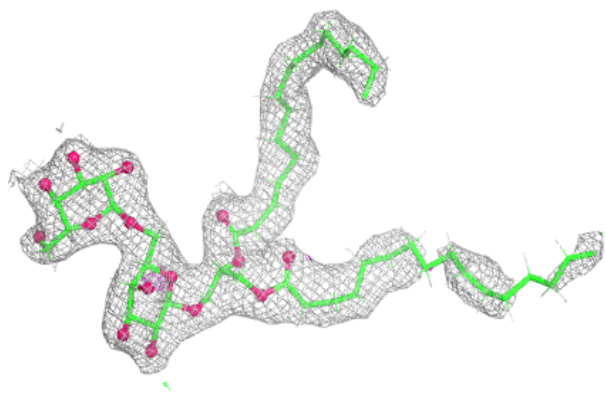
**Electron density around BCR H 101:**

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

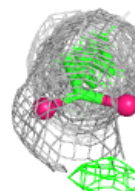
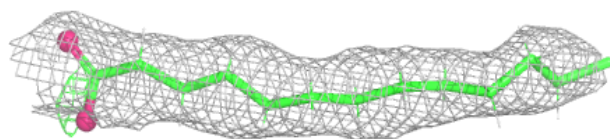
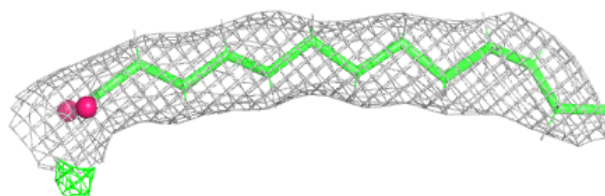


Electron density around DGD c 517:

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

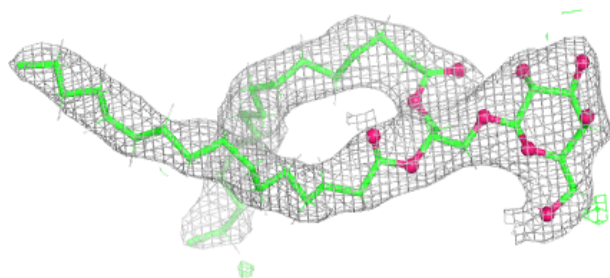
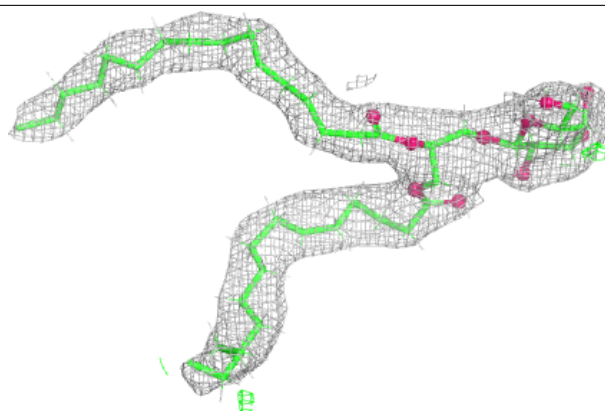
**Electron density around STE M 102:**

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



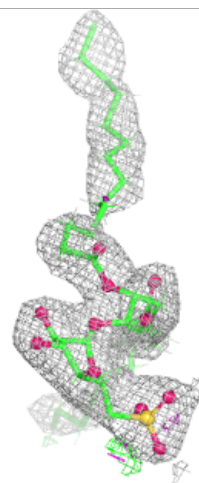
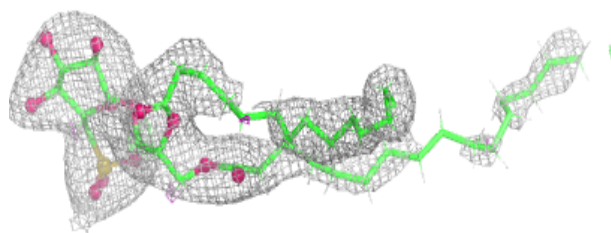
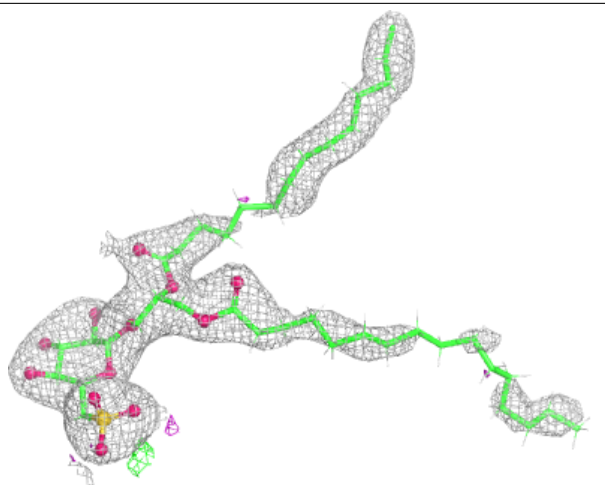
Electron density around LMG m 101:

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



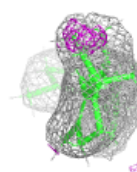
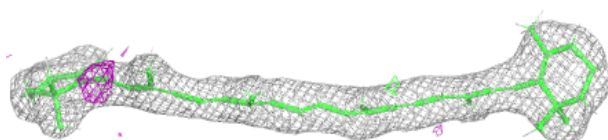
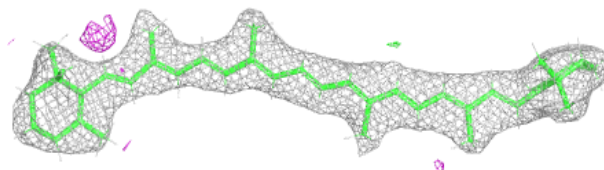
Electron density around SQD A 412:

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

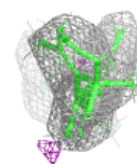
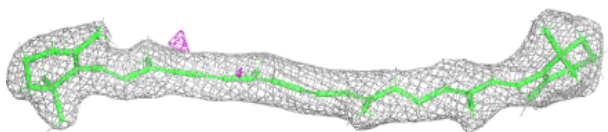
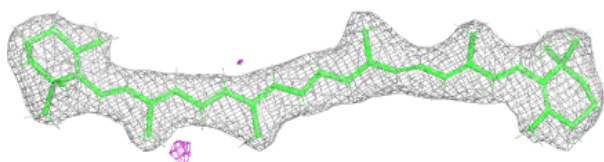


Electron density around BCR B 618:

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

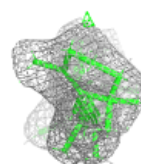
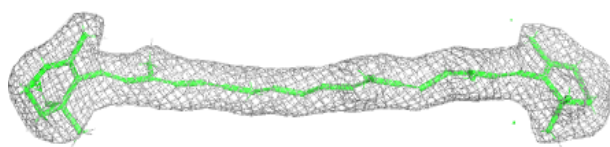
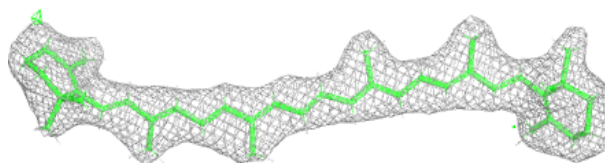
**Electron density around BCR b 619:**

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

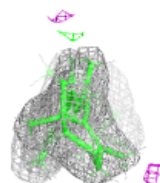
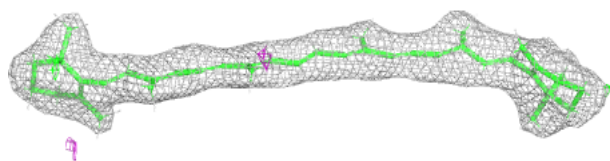


Electron density around BCR B 619:

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

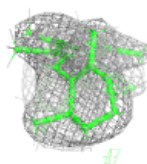
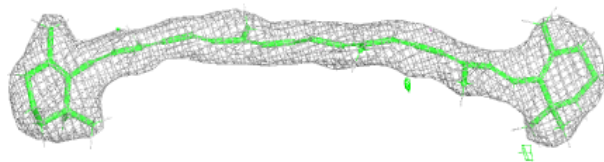
**Electron density around BCR B 620:**

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

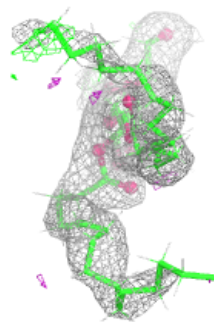
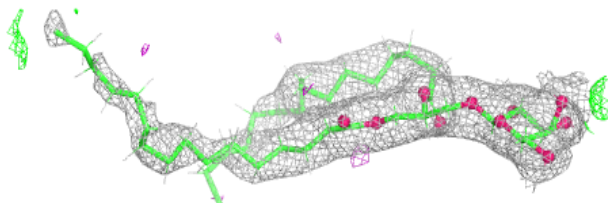
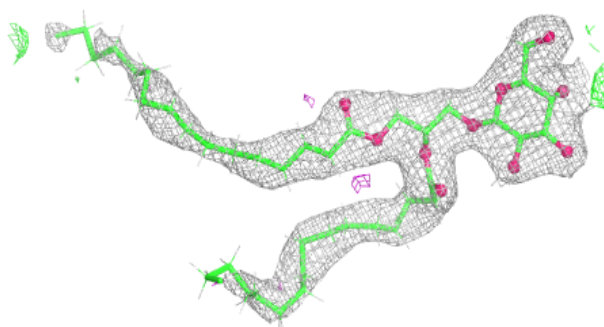


Electron density around BCR C 501:

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

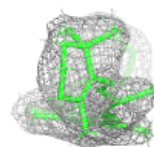
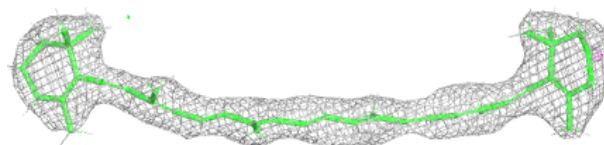
**Electron density around LMG D 407:**

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

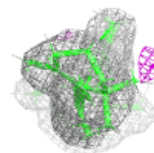
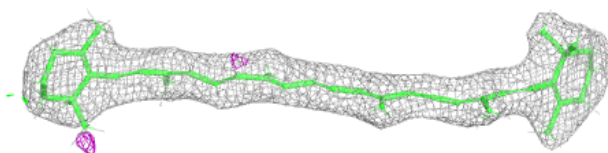


Electron density around BCR k 103:

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

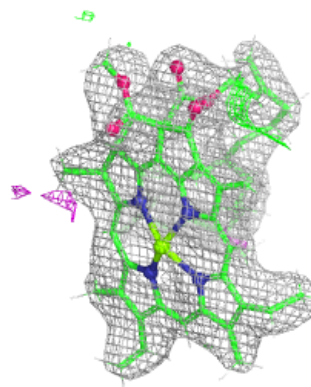
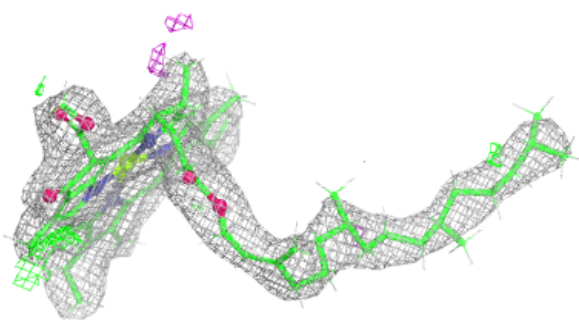
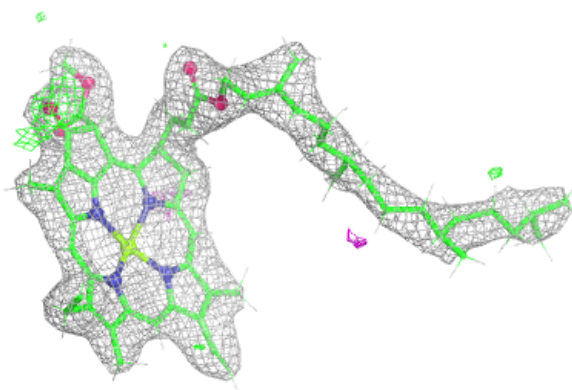
**Electron density around BCR C 515:**

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



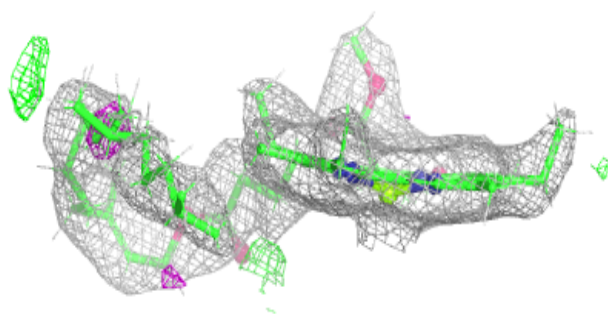
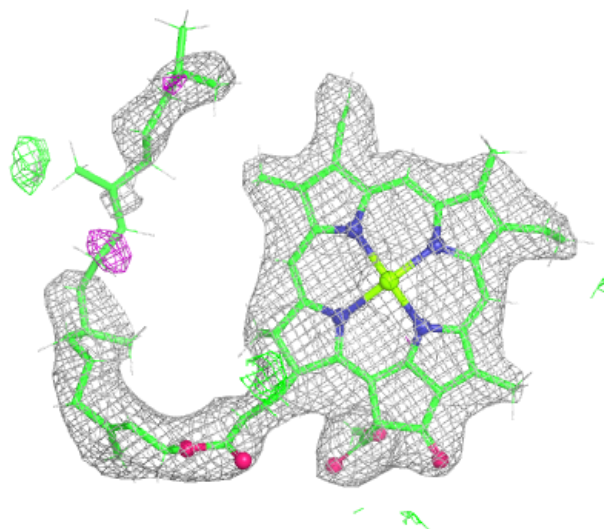
Electron density around CLA c 511:

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



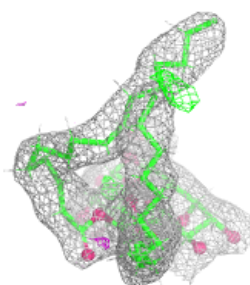
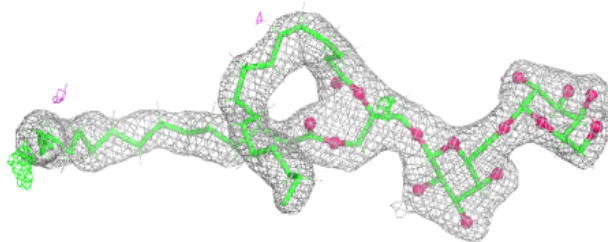
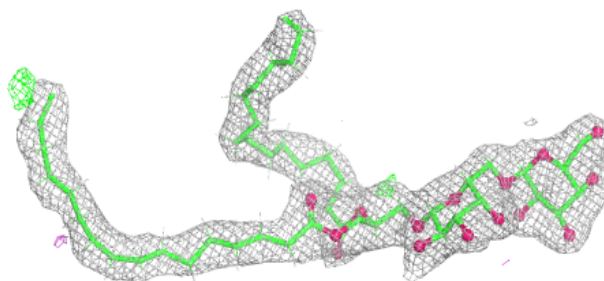
Electron density around CLA C 513:

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

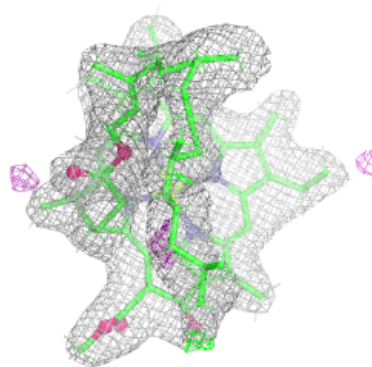
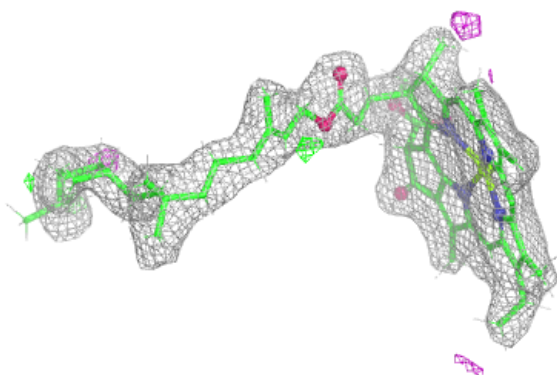
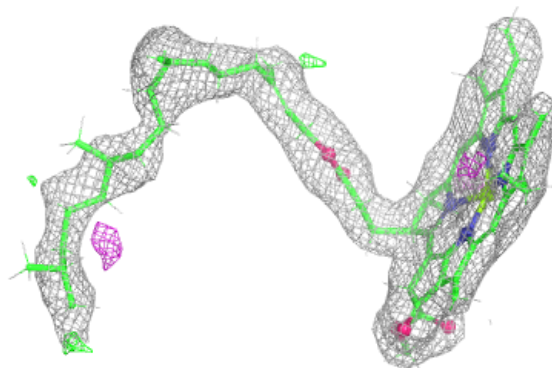


Electron density around DGD H 102:

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

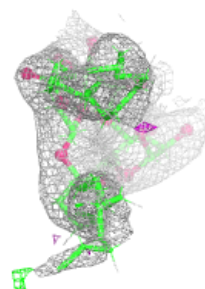
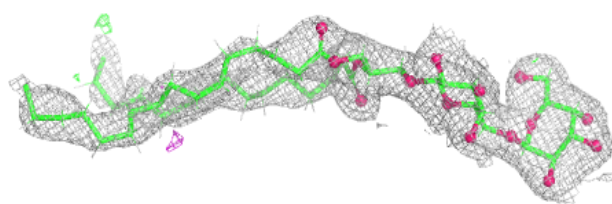
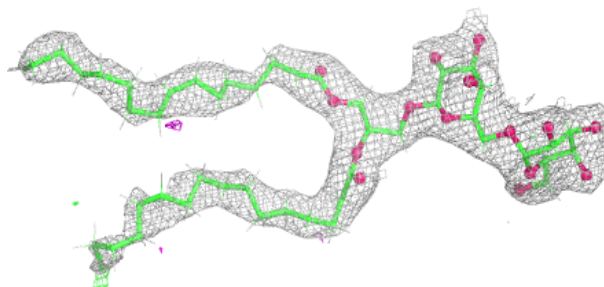
**Electron density around CLA b 606:**

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

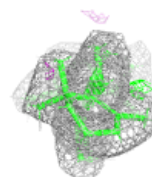
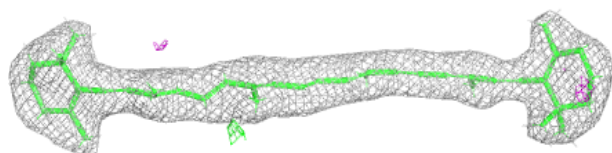
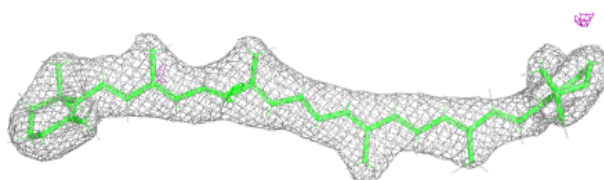


Electron density around DGD c 518:

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

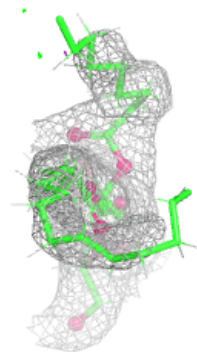
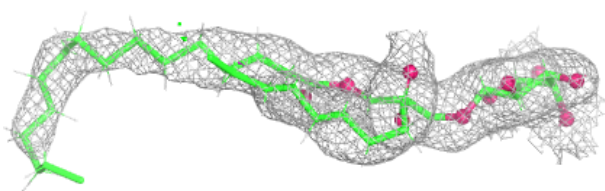
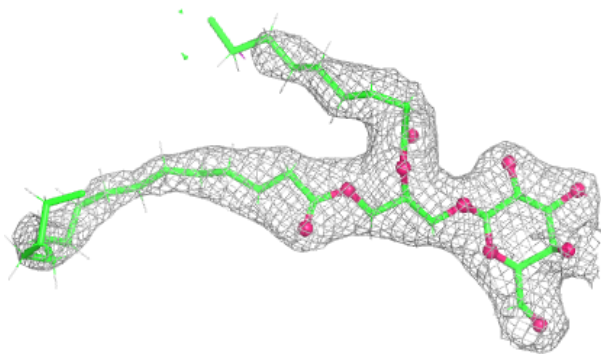
**Electron density around BCR A 406:**

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

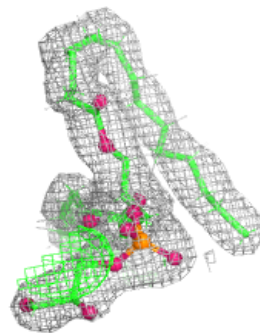
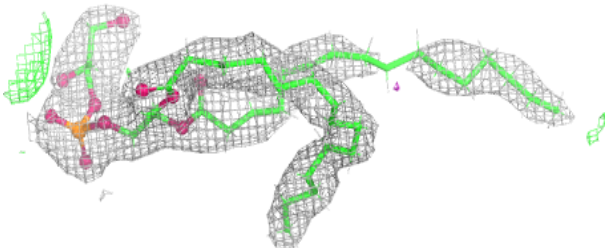
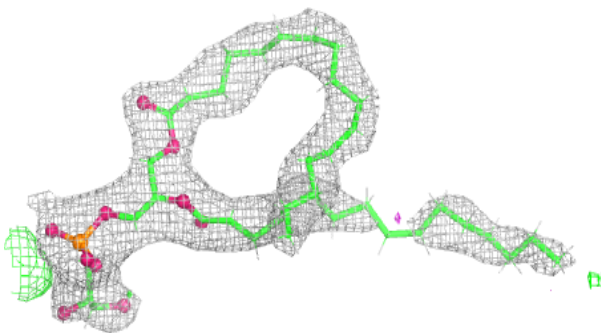


Electron density around LMG d 410:

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

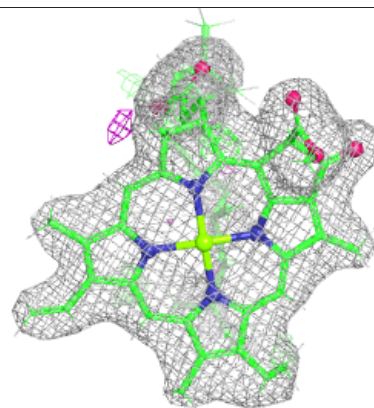
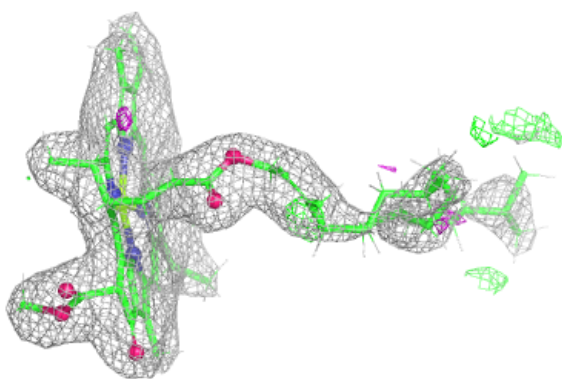
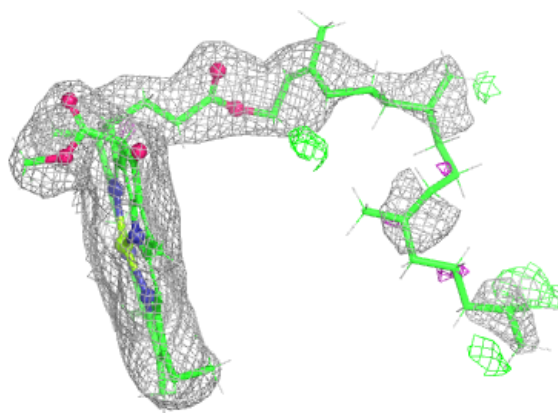
**Electron density around LHG d 407:**

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

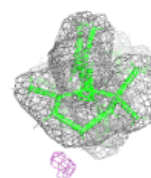
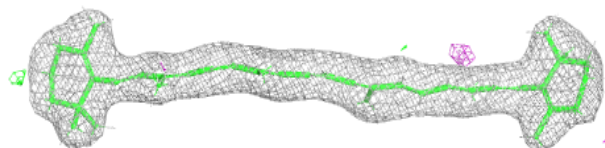
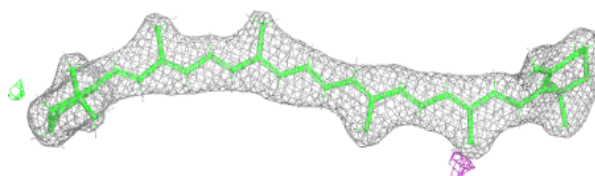


Electron density around CLA c 506:

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

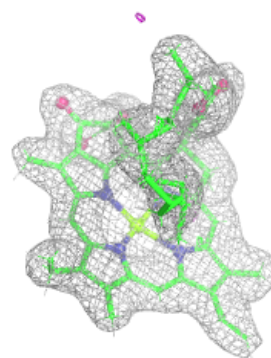
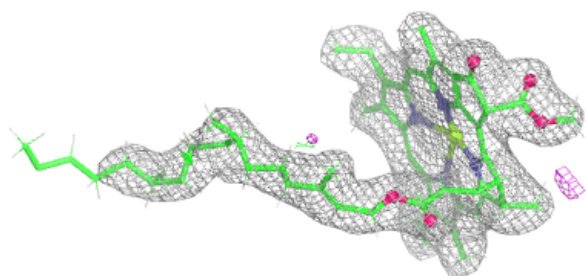
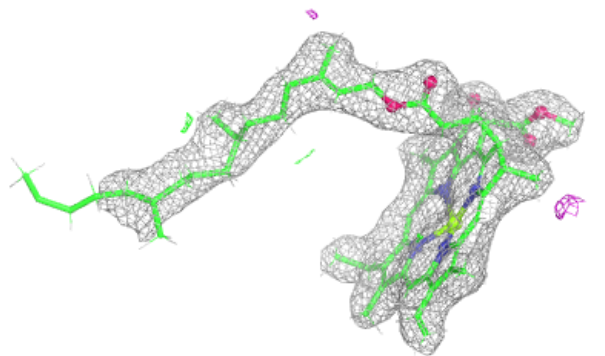
**Electron density around BCR a 406:**

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

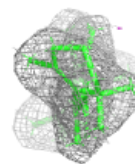
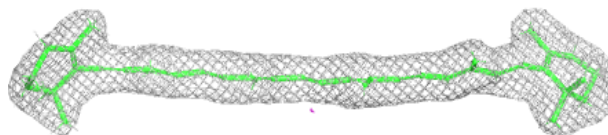
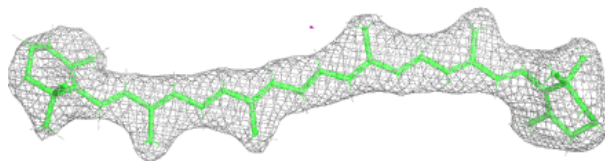


Electron density around CLA c 508:

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

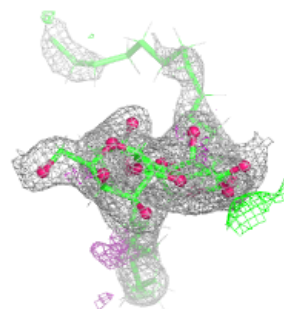
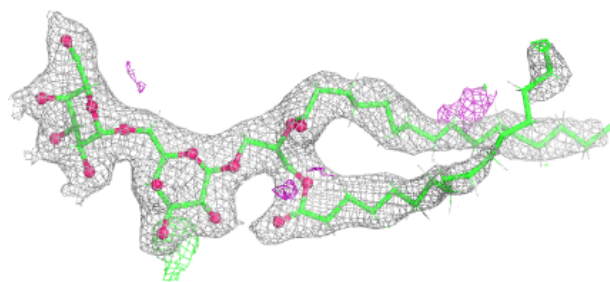
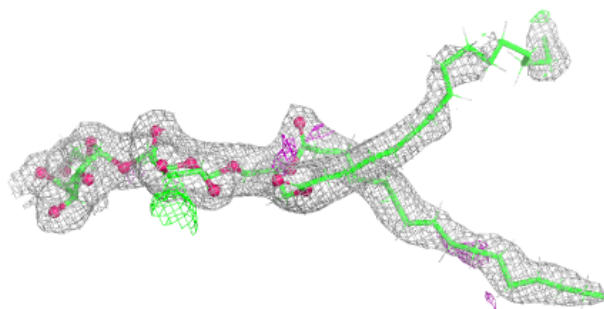
**Electron density around BCR b 618:**

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



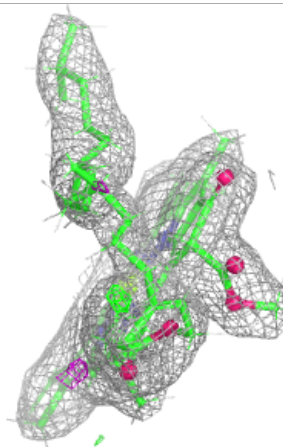
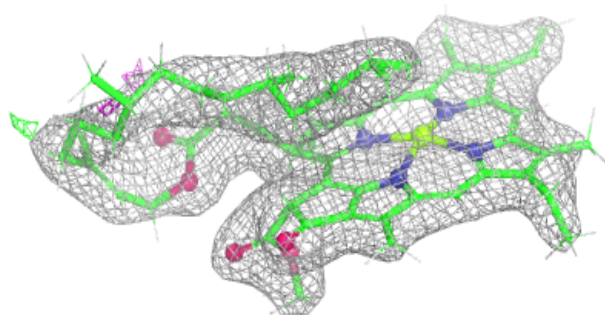
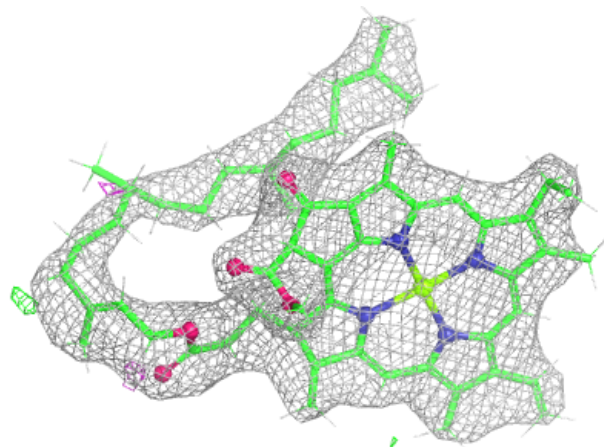
Electron density around DGD C 517:

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



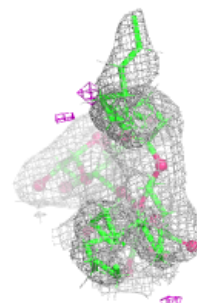
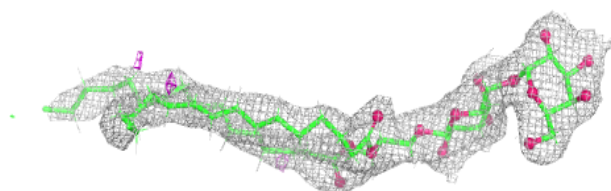
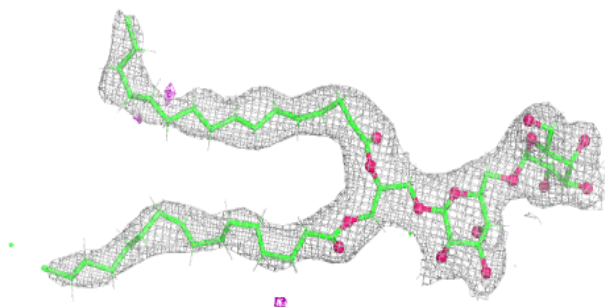
Electron density around CLA c 509:

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



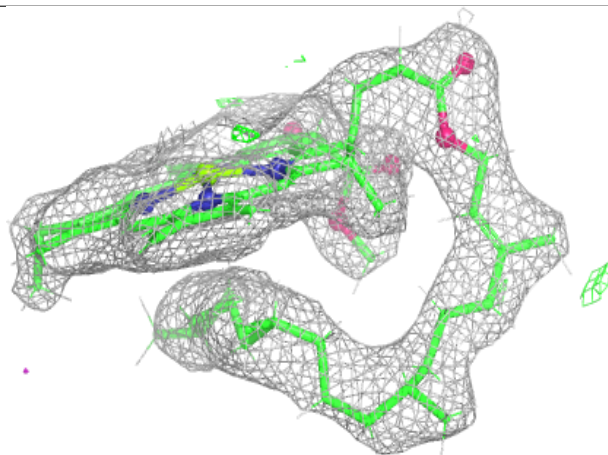
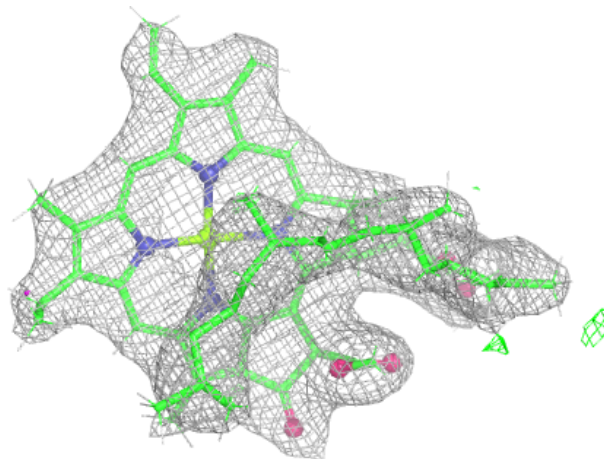
Electron density around DGD C 519:

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



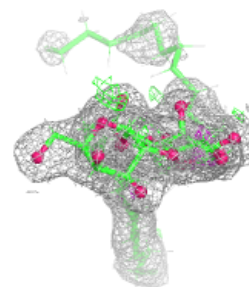
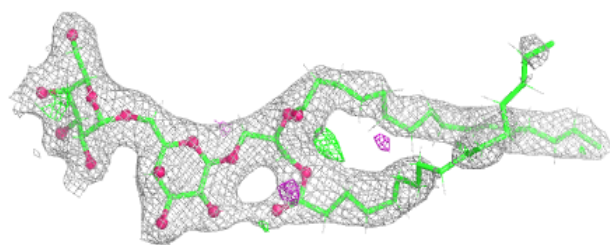
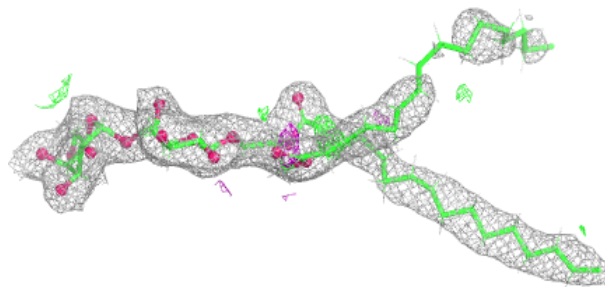
Electron density around CLA c 510:

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

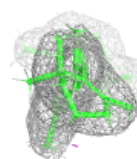
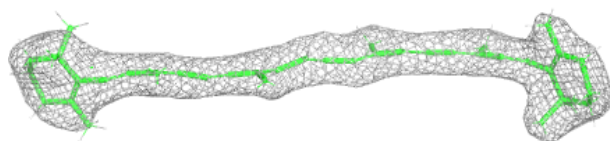
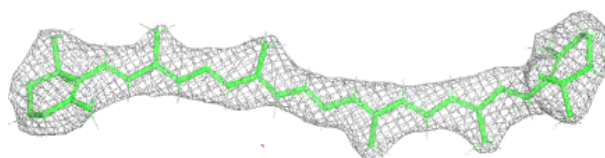


Electron density around DGD c 516:

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

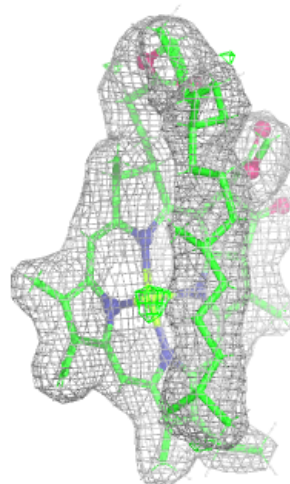
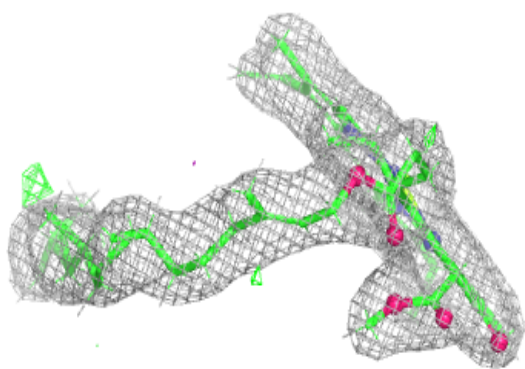
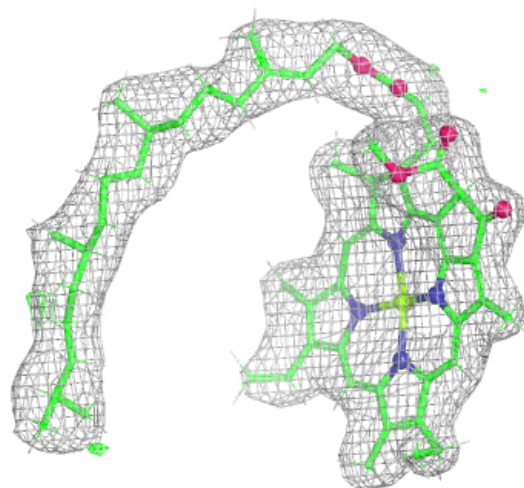
**Electron density around BCR c 515:**

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



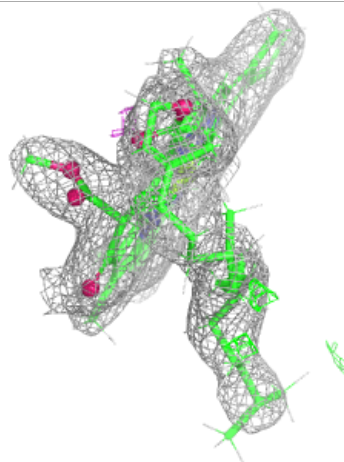
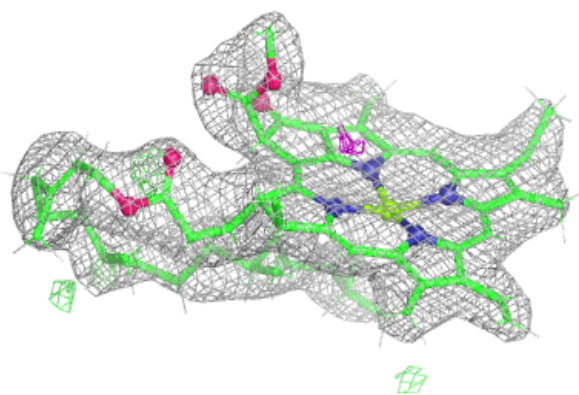
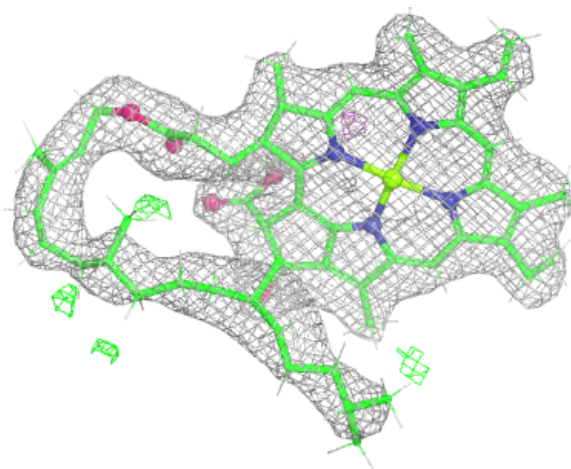
Electron density around CLA C 508:

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



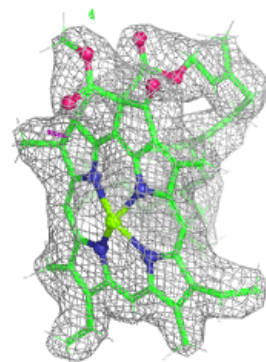
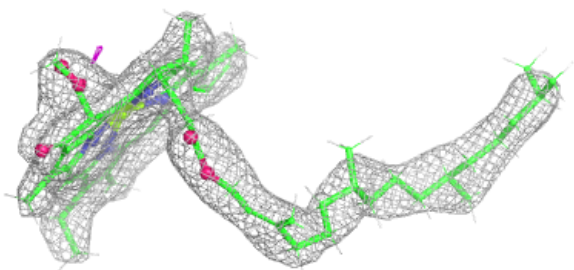
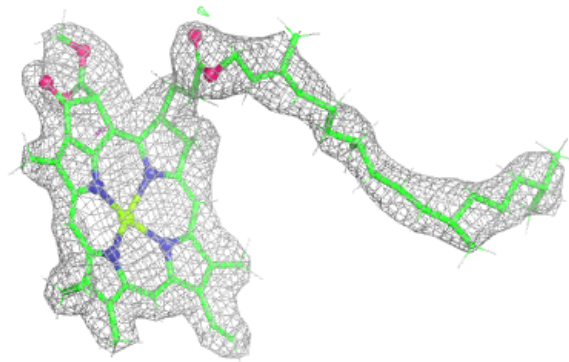
Electron density around CLA C 510:

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

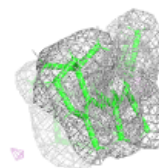
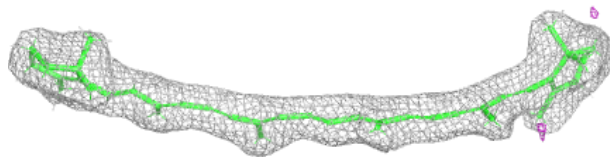
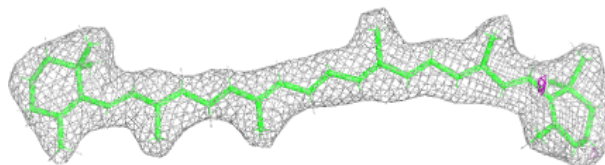


Electron density around CLA C 512:

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

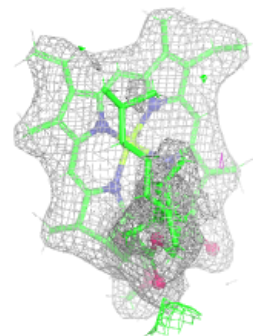
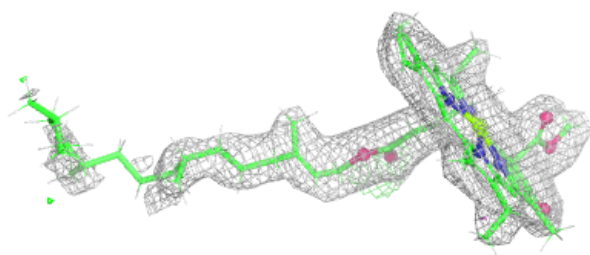
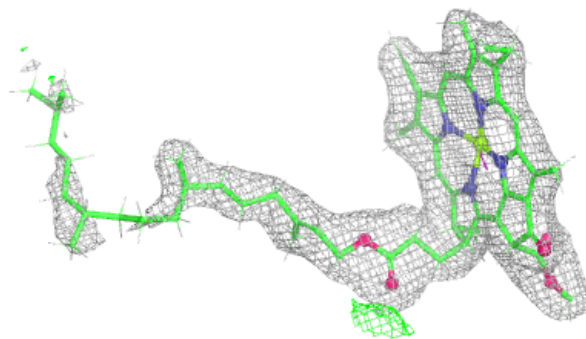
**Electron density around BCR t 101:**

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



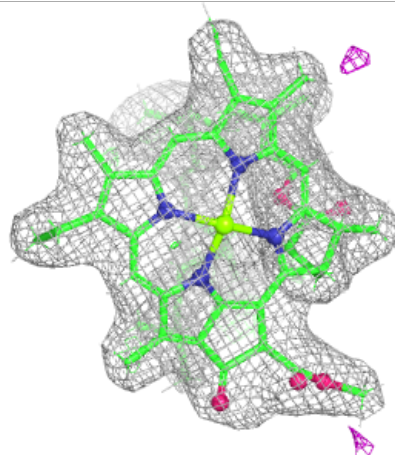
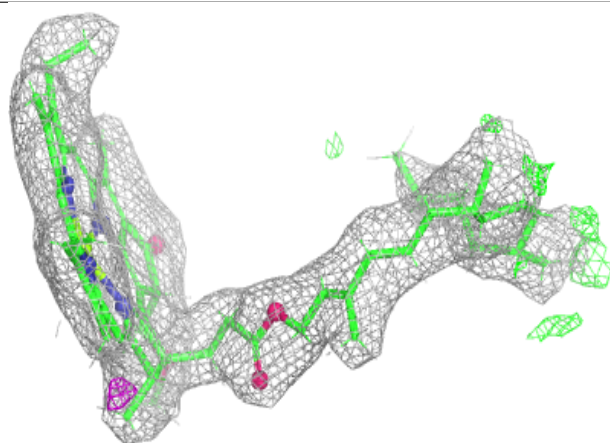
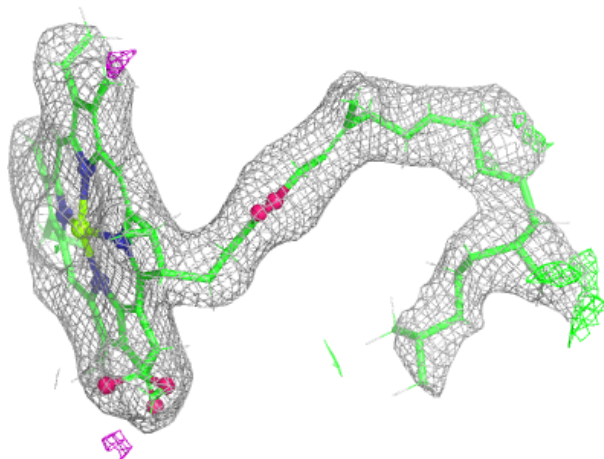
Electron density around CLA d 404:

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



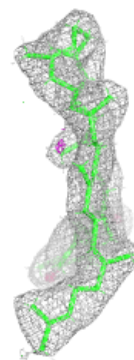
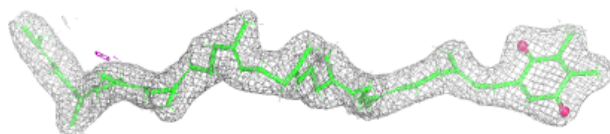
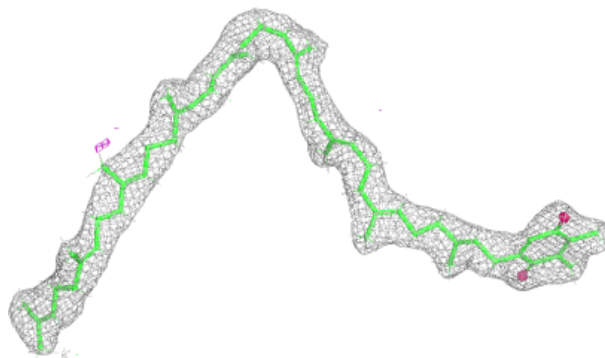
Electron density around CLA B 607:

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



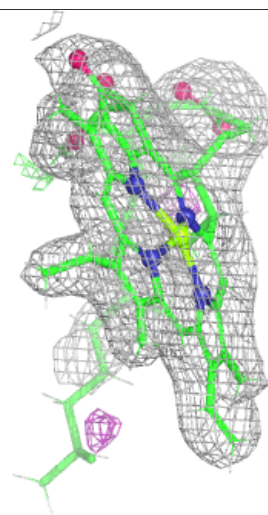
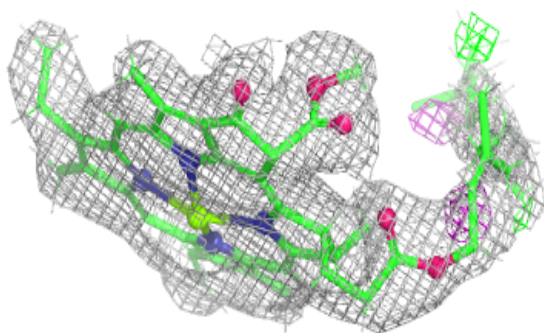
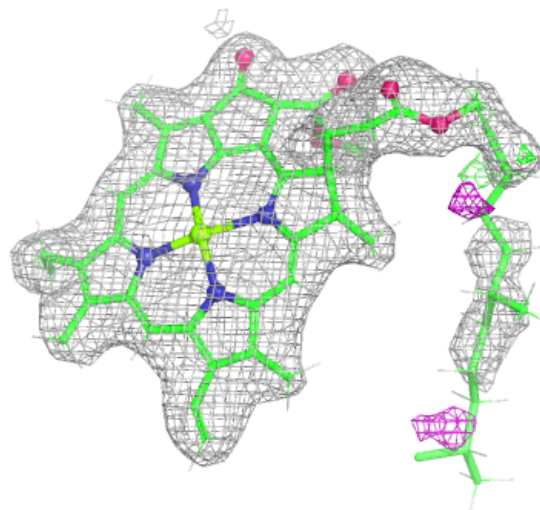
Electron density around PL9 D 406:

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



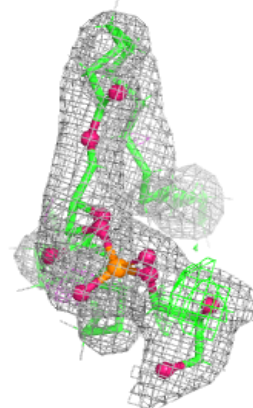
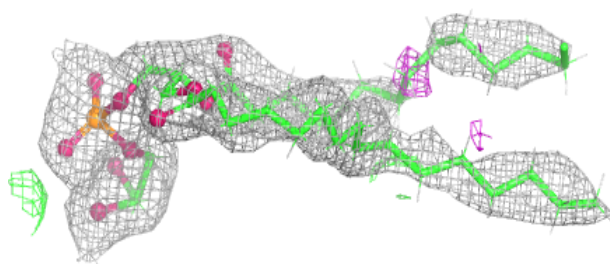
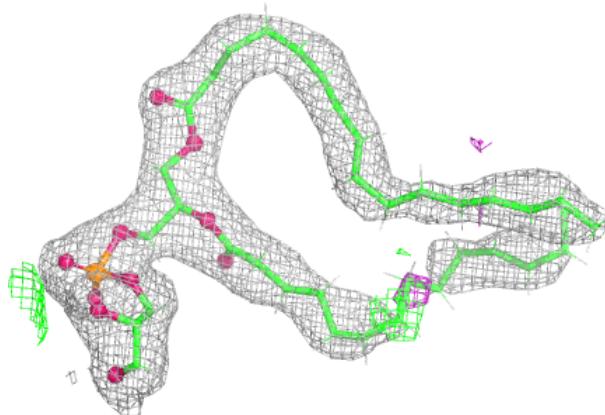
Electron density around CLA B 617:

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

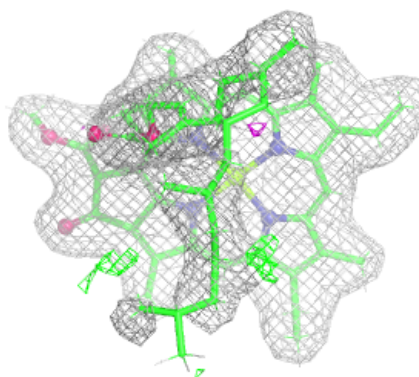
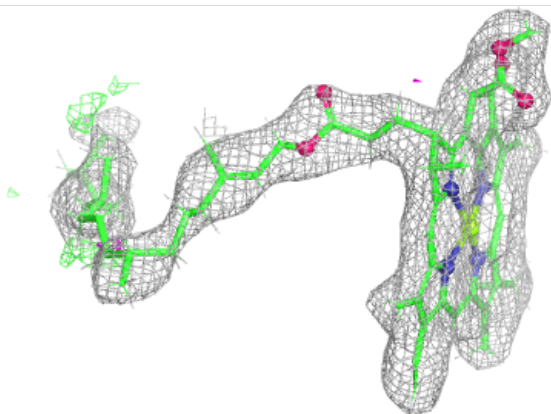
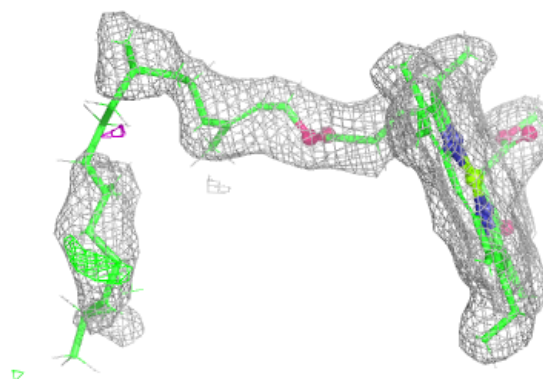


Electron density around LHG A 411:

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

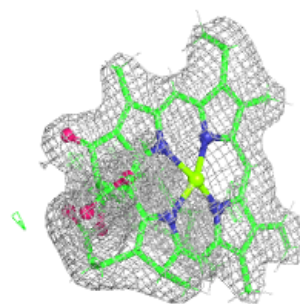
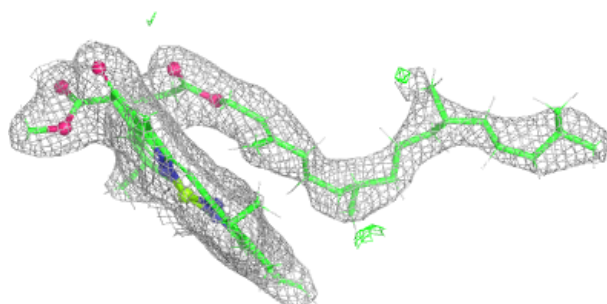
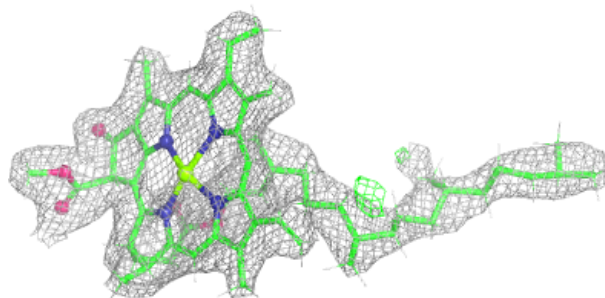
**Electron density around CLA a 405:**

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

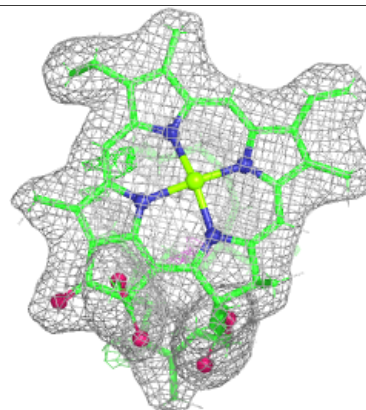
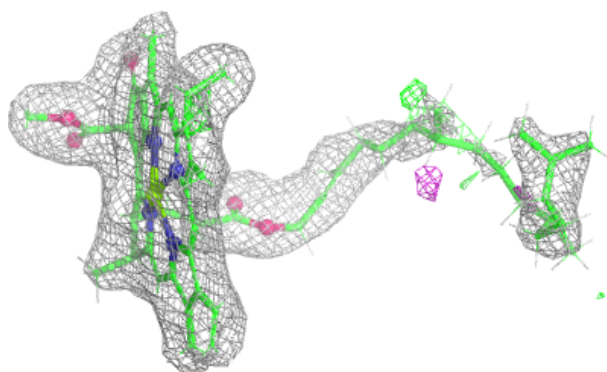
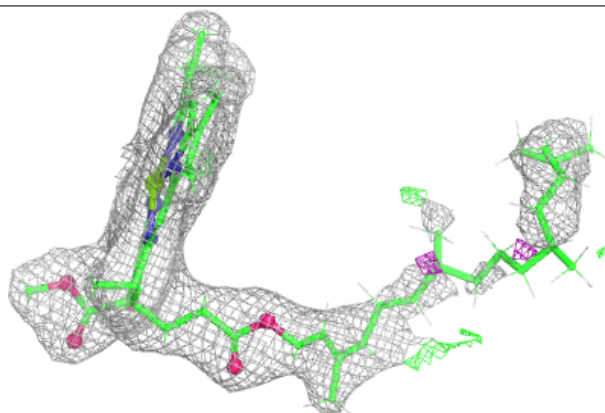


Electron density around CLA C 506:

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

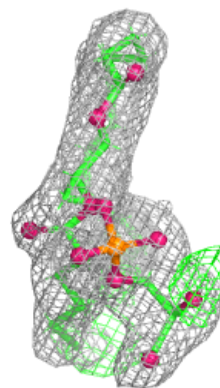
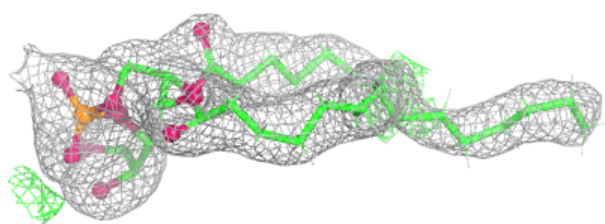
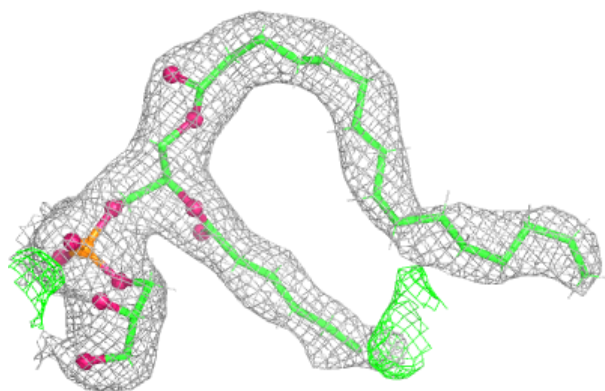
**Electron density around CLA C 507:**

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



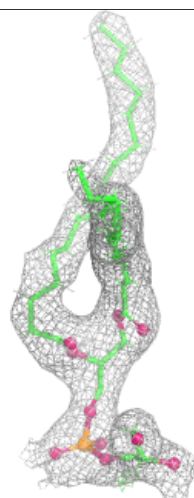
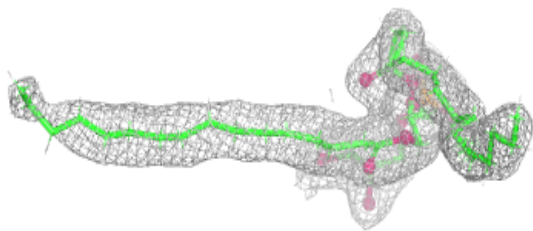
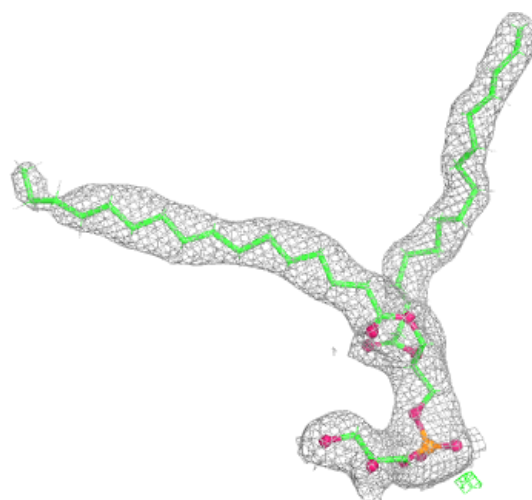
Electron density around LHG d 409:

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



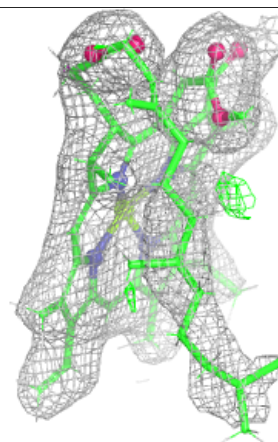
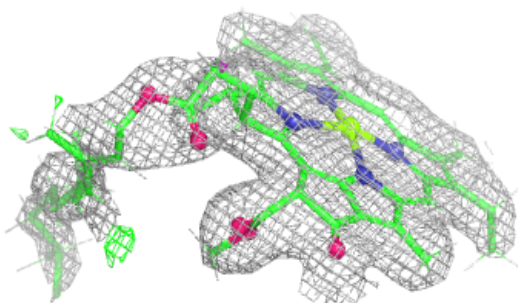
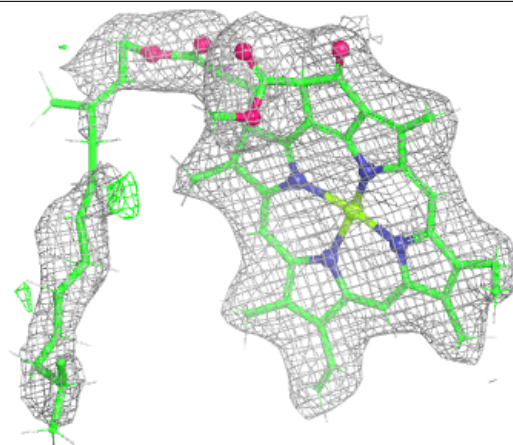
Electron density around LHG 1 101:

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



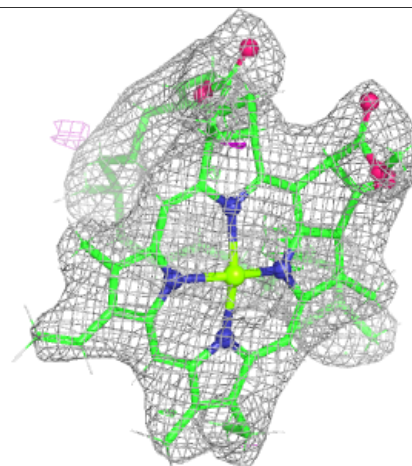
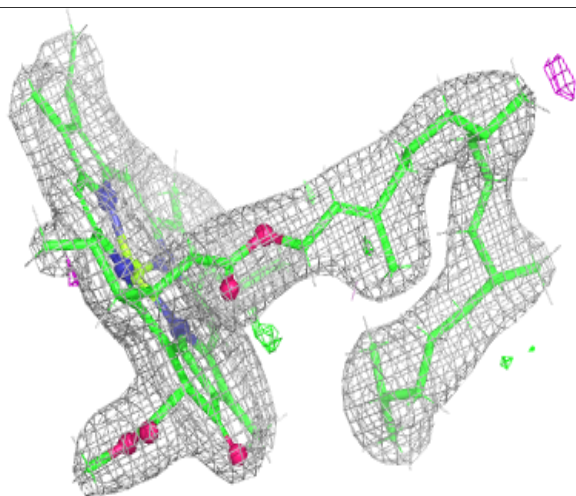
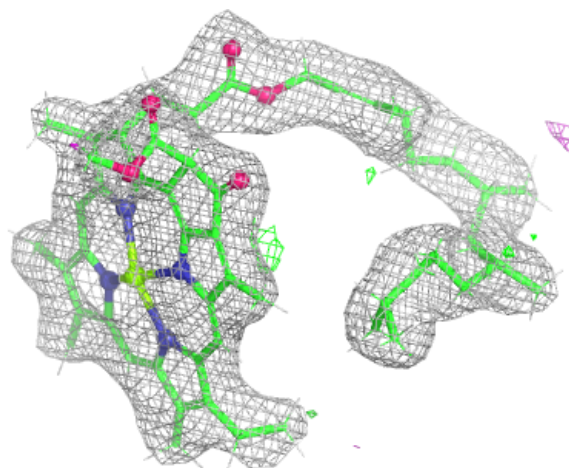
Electron density around CLA b 616:

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



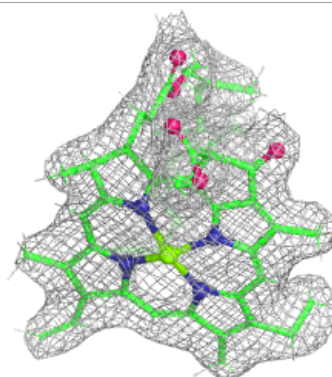
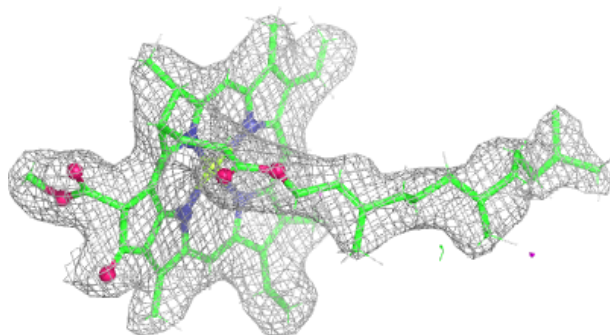
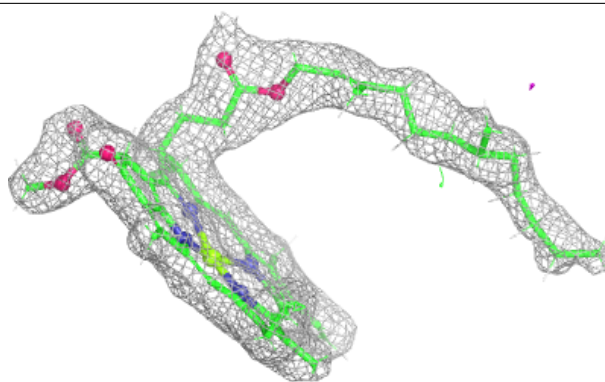
Electron density around CLA c 503:

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

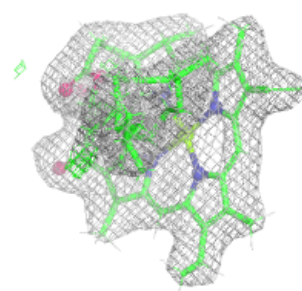
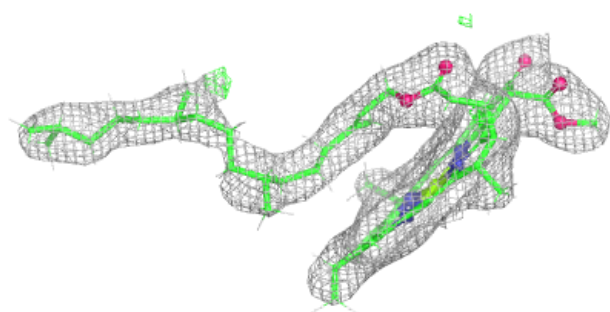
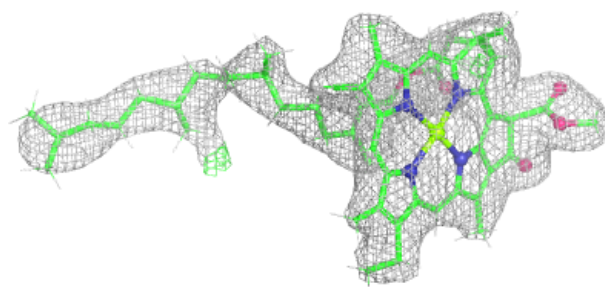


Electron density around CLA c 504:

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

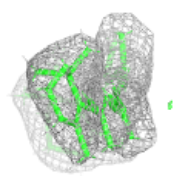
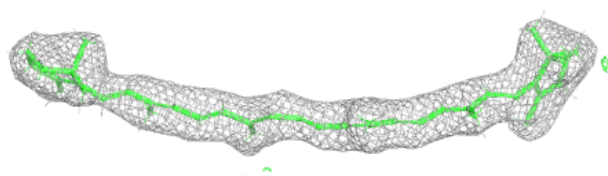
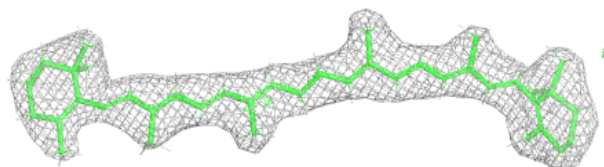
**Electron density around CLA c 505:**

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

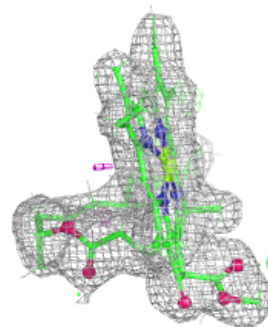
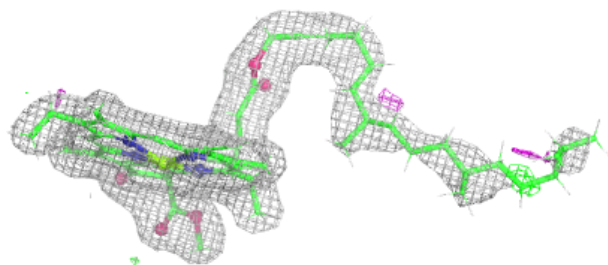
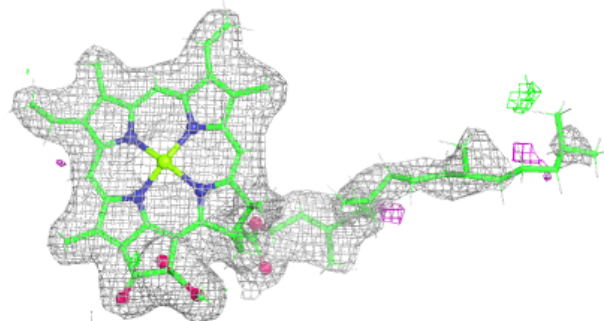


Electron density around BCR T 101:

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

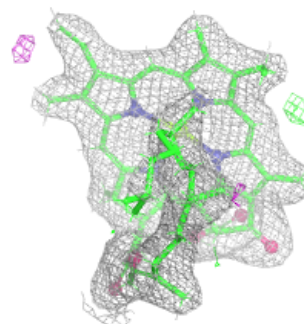
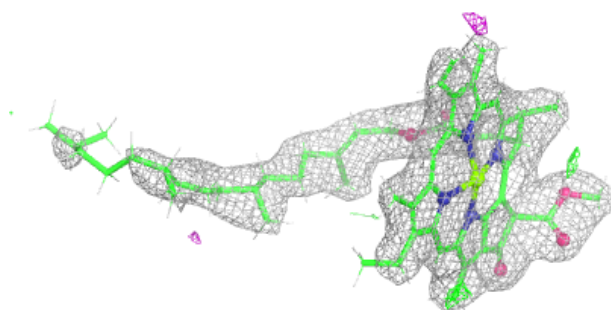
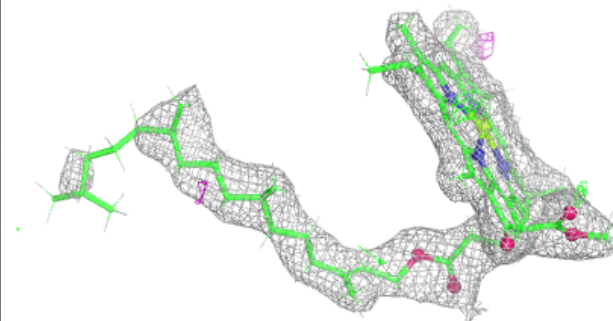
**Electron density around CLA A 403:**

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

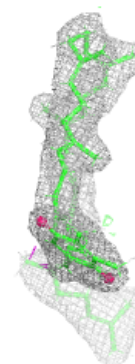
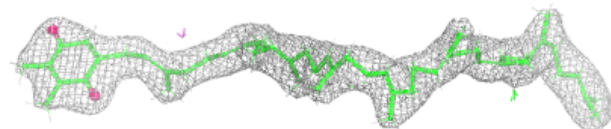
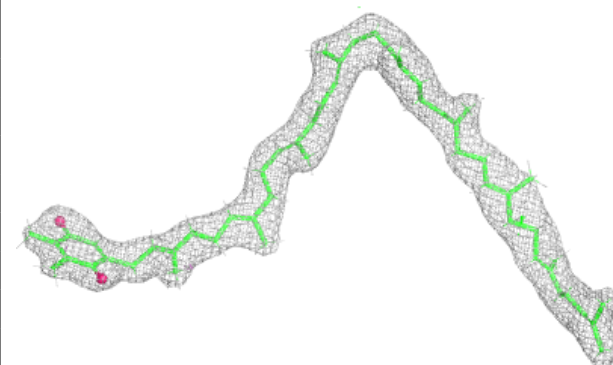


Electron density around CLA C 509:

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

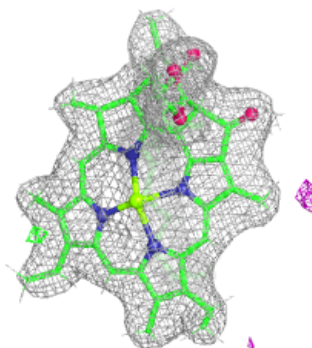
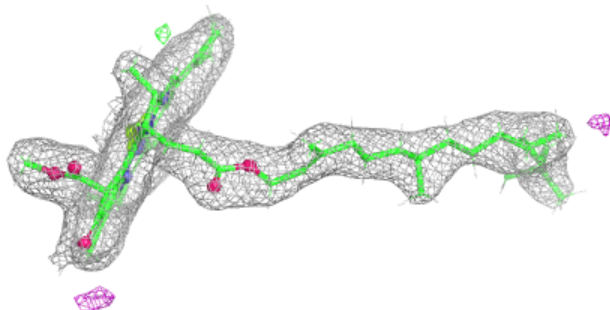
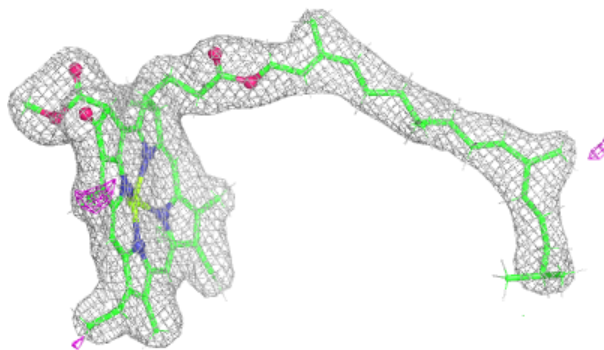
**Electron density around PL9 d 406:**

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



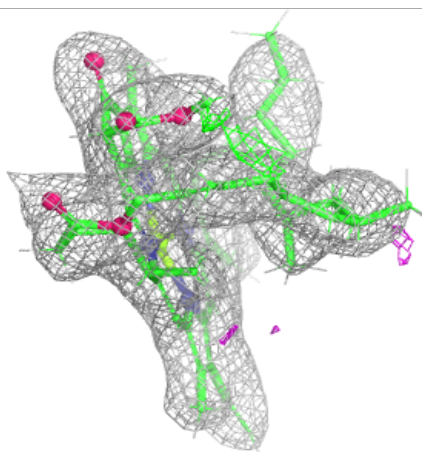
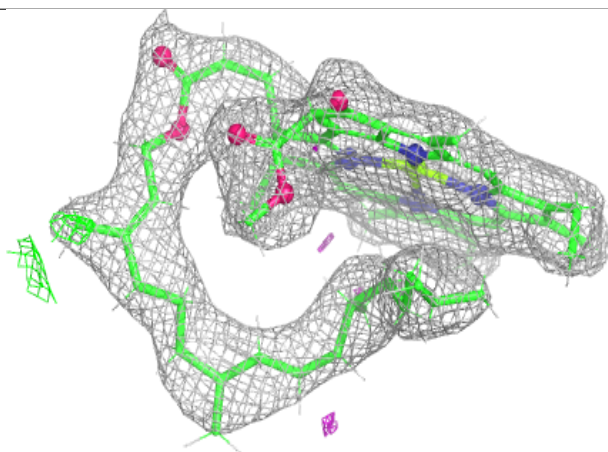
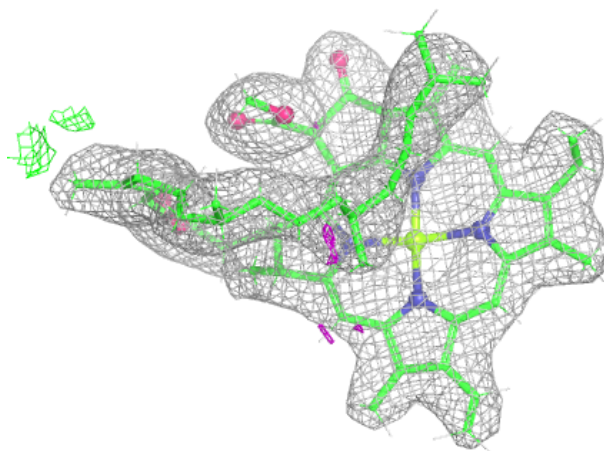
Electron density around CLA B 610:

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



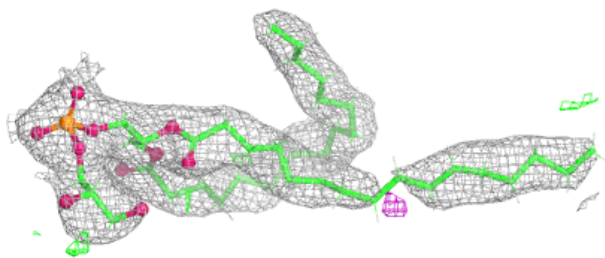
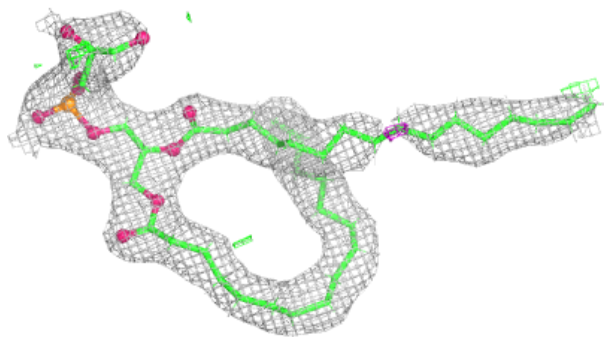
Electron density around CLA C 511:

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



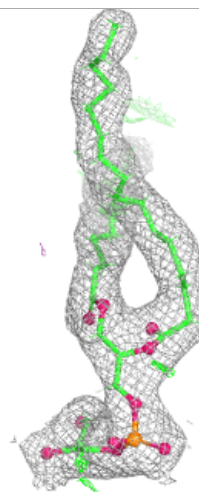
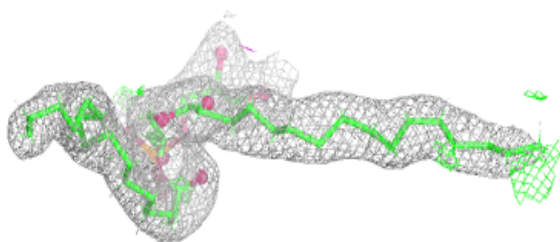
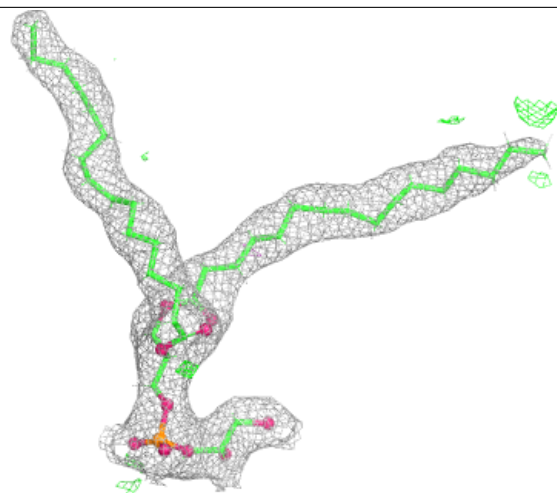
Electron density around LHG B 622:

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



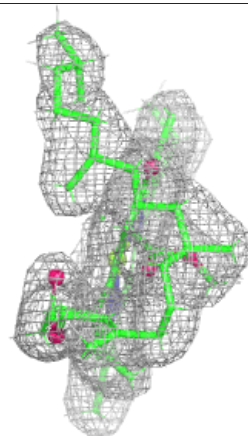
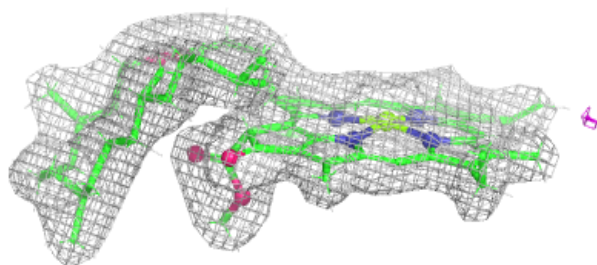
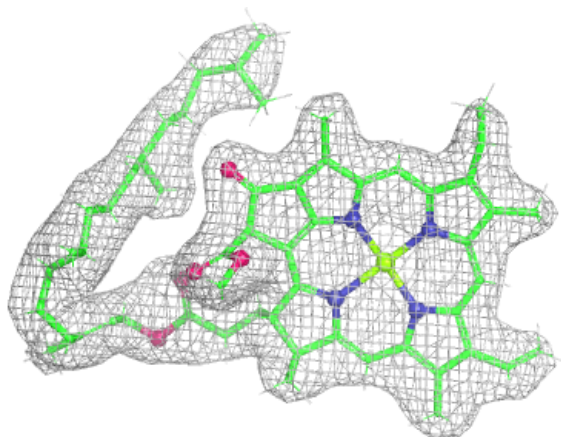
Electron density around LHG L 102:

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



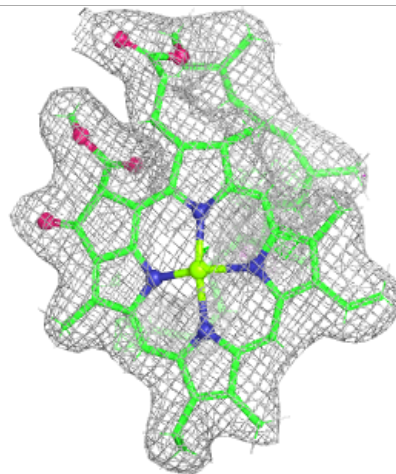
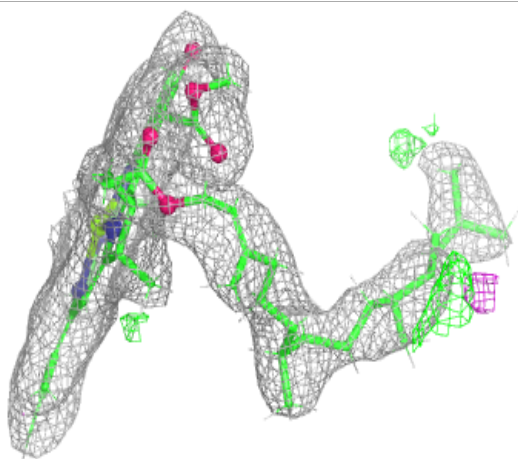
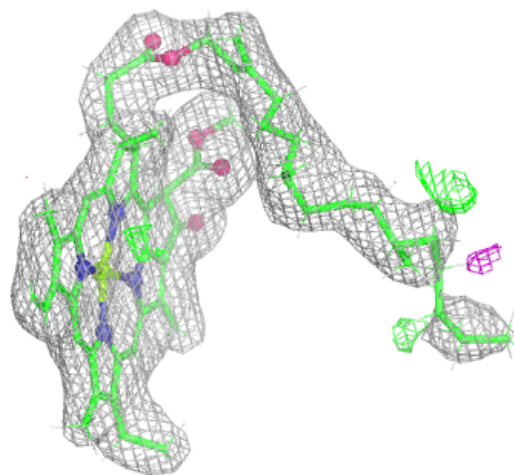
Electron density around CLA B 611:

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



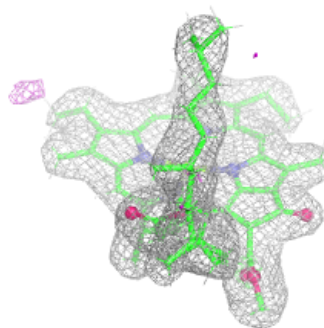
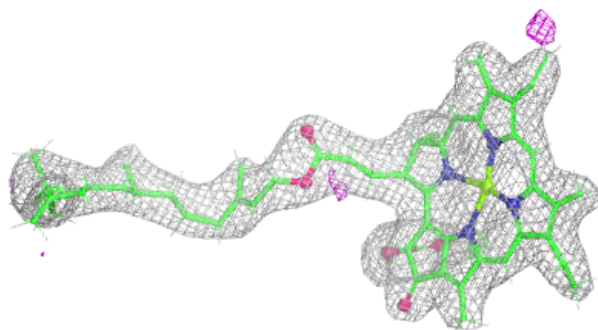
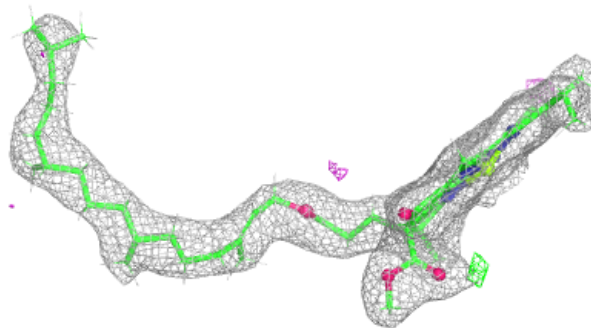
Electron density around CLA B 614:

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

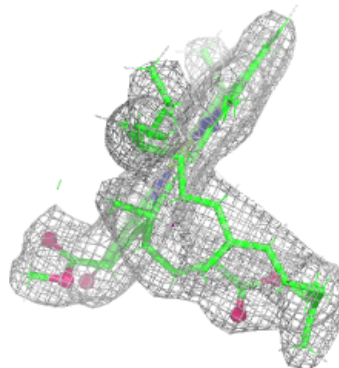
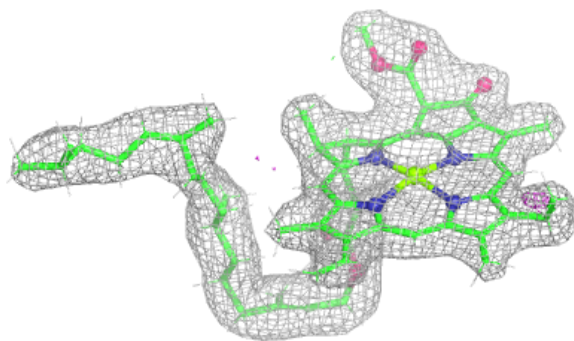
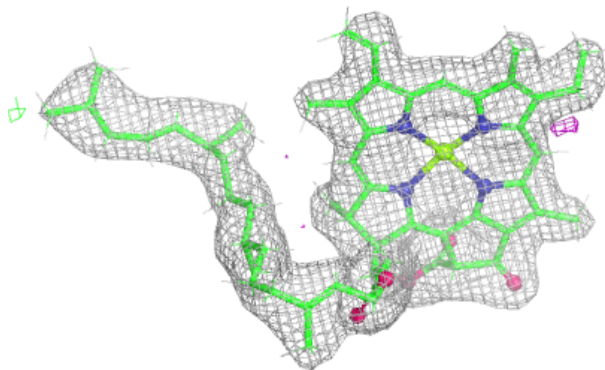


Electron density around CLA d 402:

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

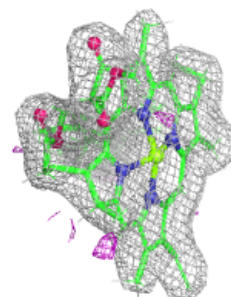
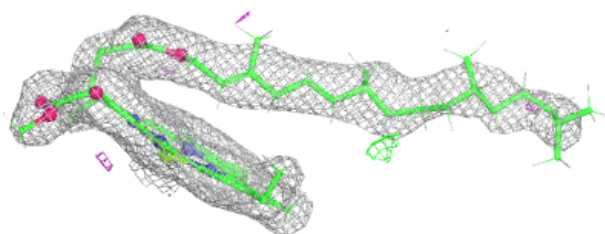
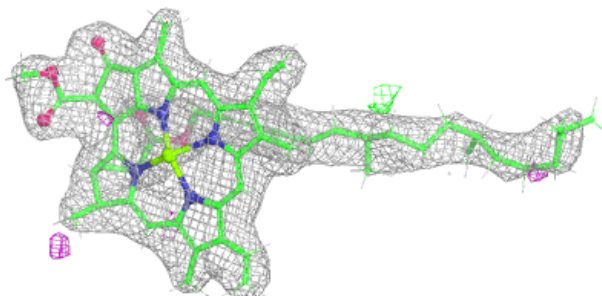
**Electron density around CLA d 403:**

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

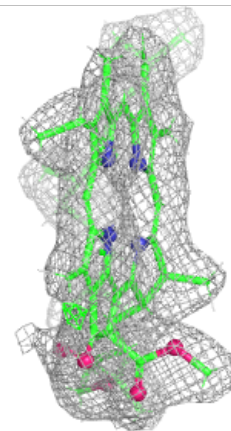
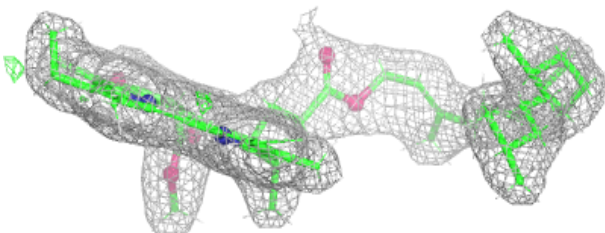
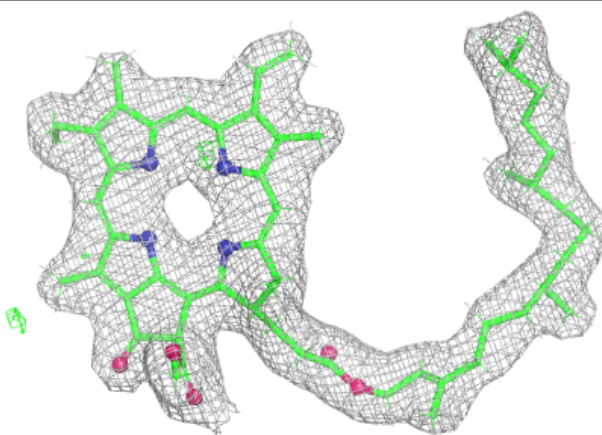


Electron density around CLA B 615:

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

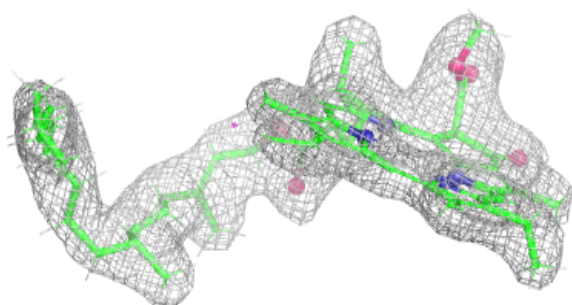
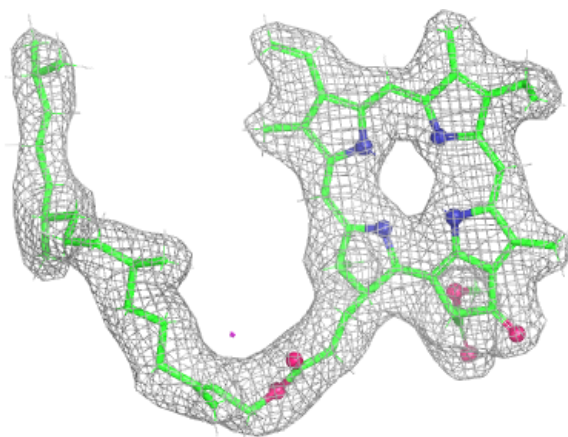
**Electron density around PHO a 404:**

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



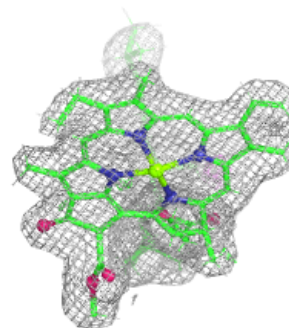
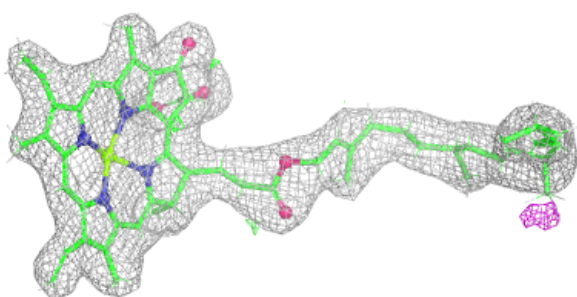
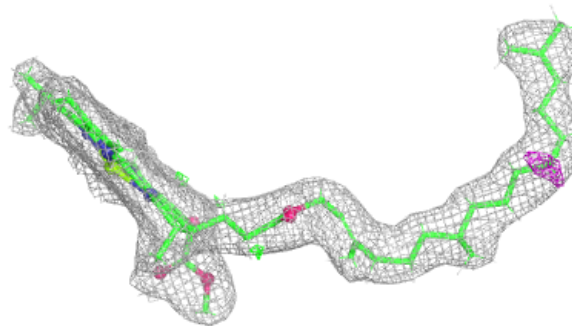
Electron density around PHO d 401:

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

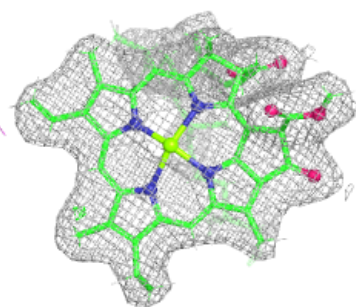
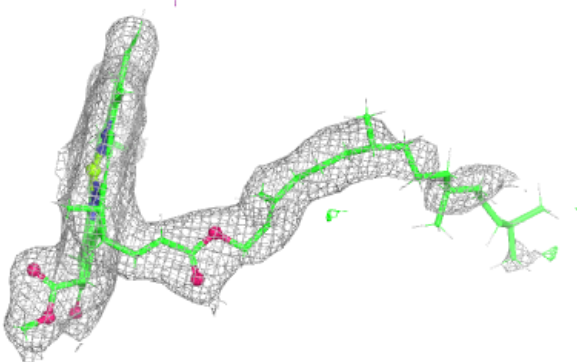
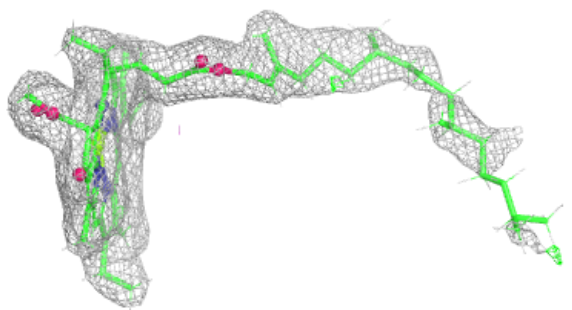


Electron density around CLA D 402:

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

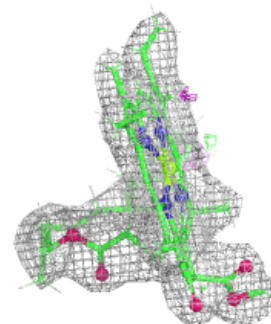
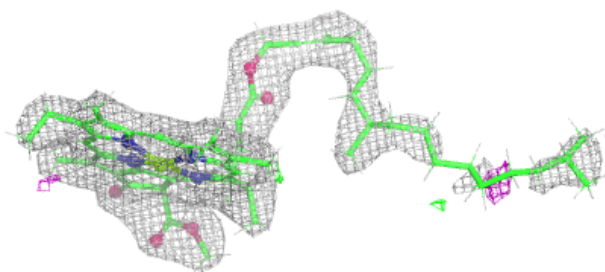
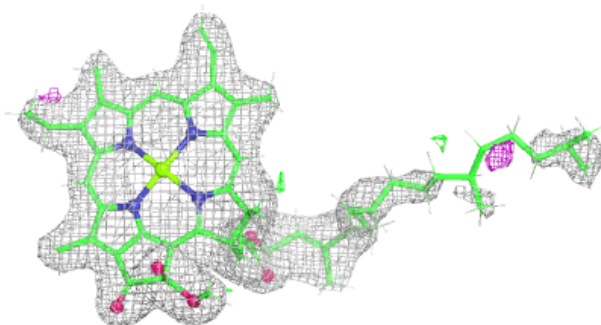
**Electron density around CLA D 404:**

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



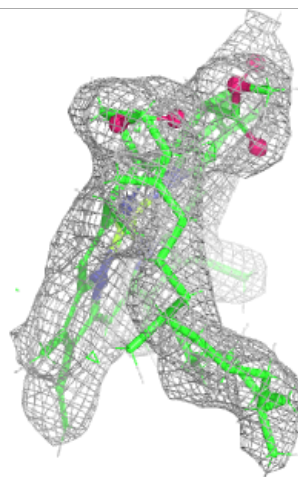
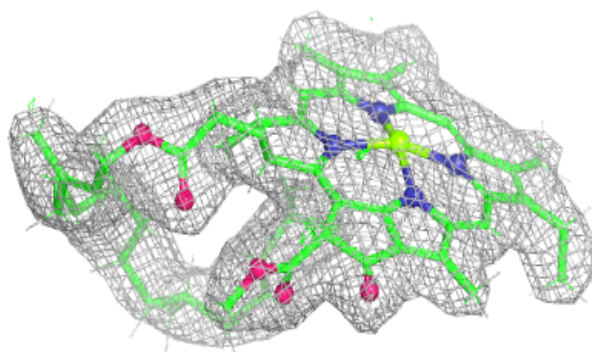
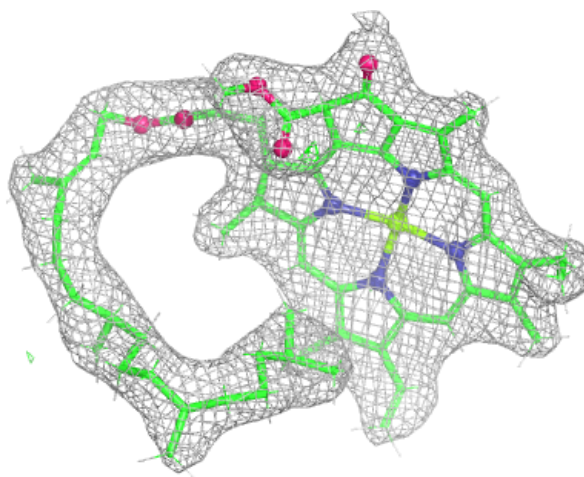
Electron density around CLA a 403:

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



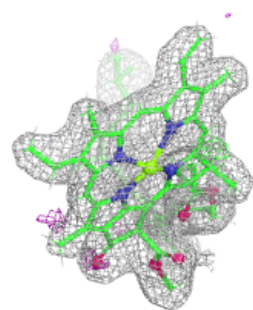
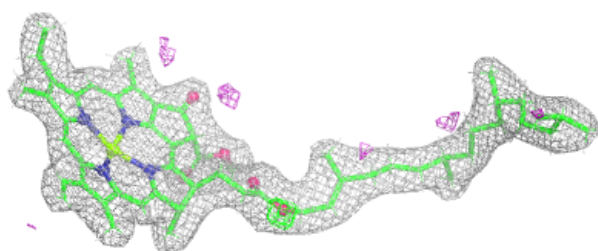
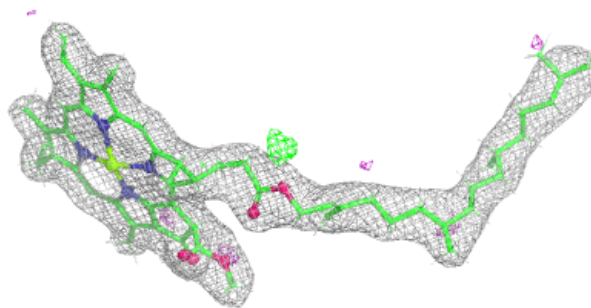
Electron density around CLA B 616:

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

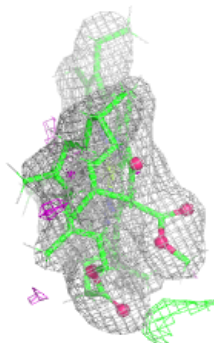
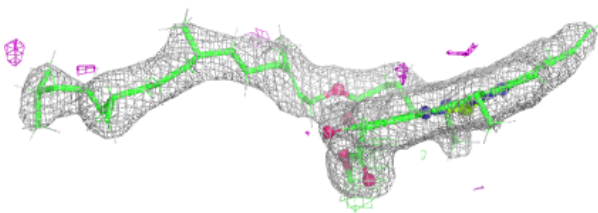
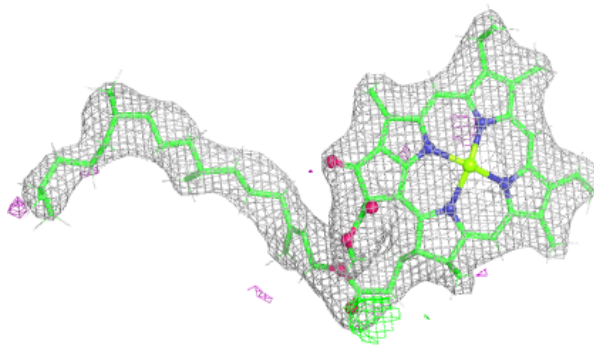


Electron density around CLA A 402:

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

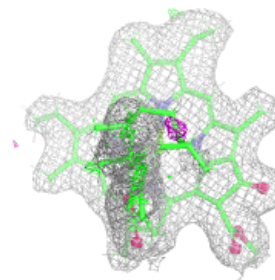
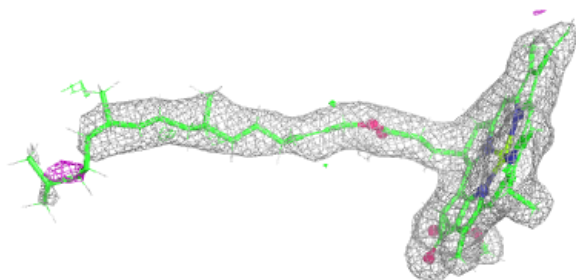
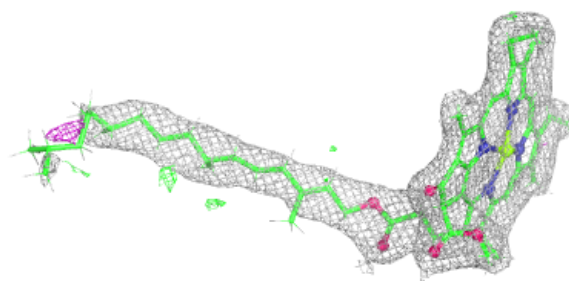
**Electron density around CLA b 602:**

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

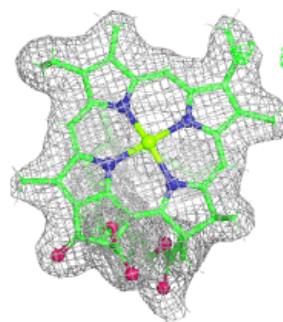
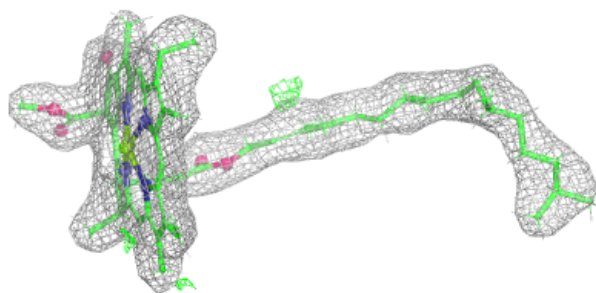
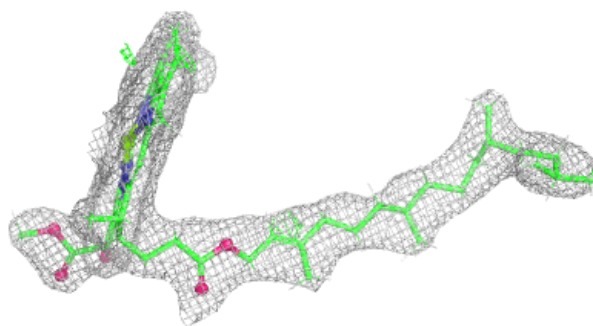


Electron density around CLA b 604:

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

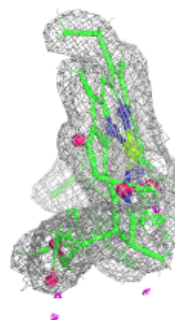
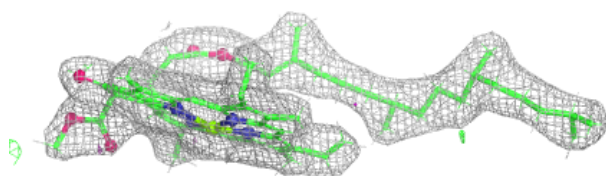
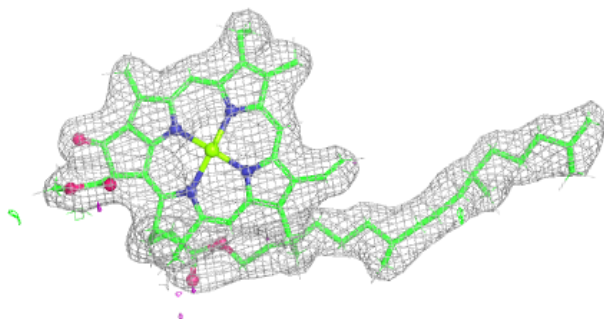
**Electron density around CLA b 605:**

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

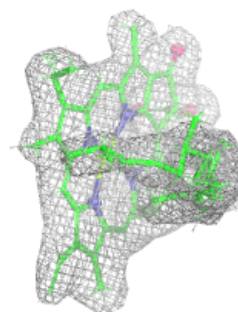
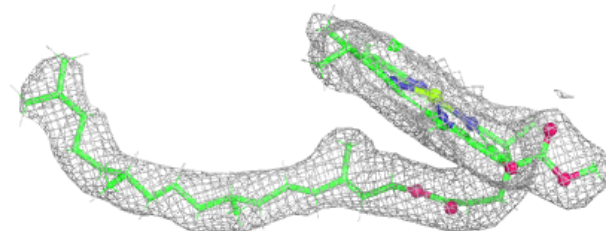
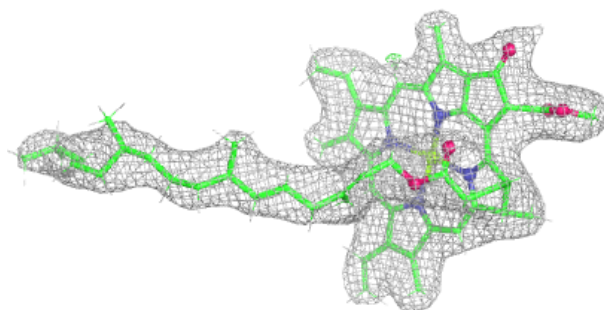


Electron density around CLA C 502:

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

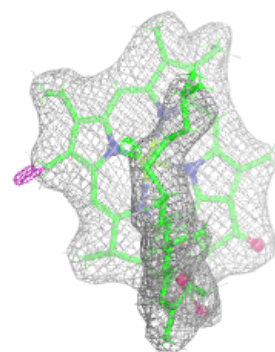
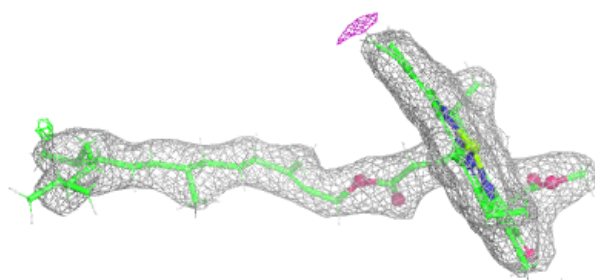
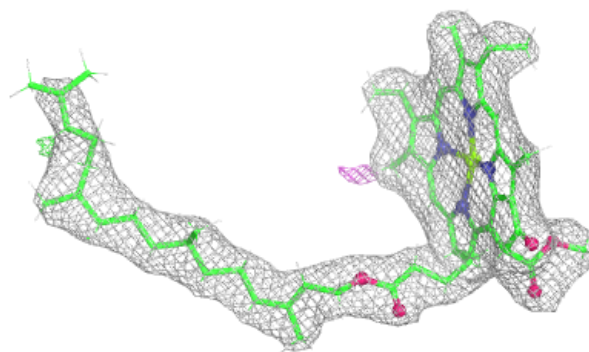
**Electron density around CLA b 608:**

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

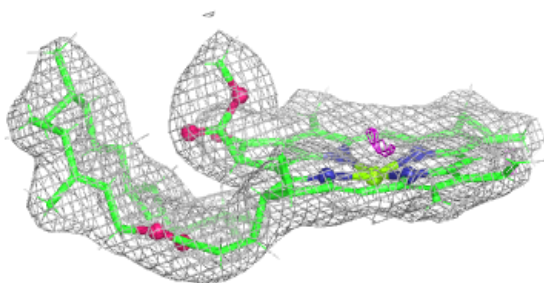
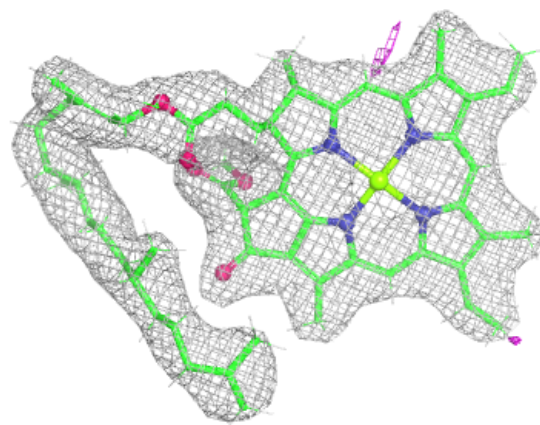


Electron density around CLA b 609:

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

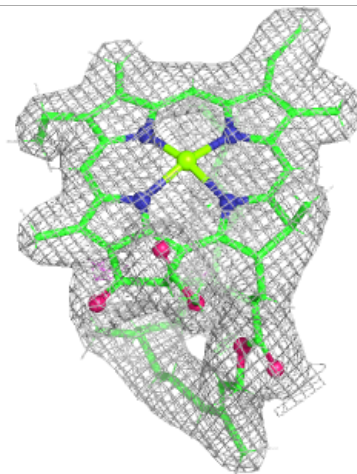
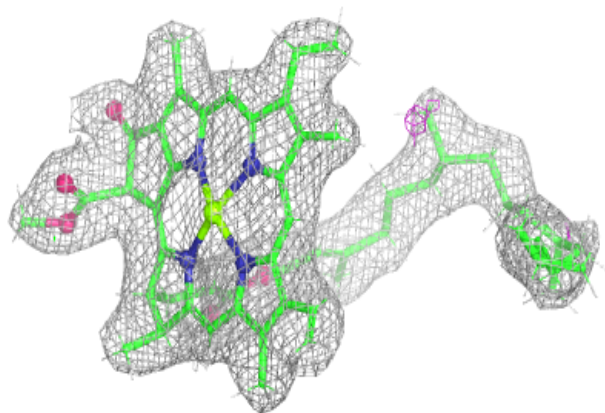
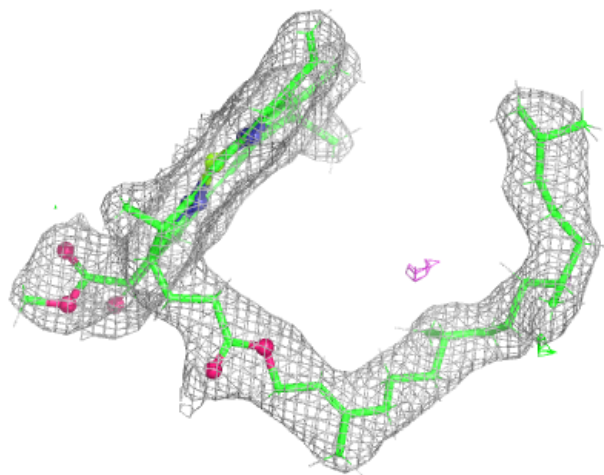
**Electron density around CLA b 610:**

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



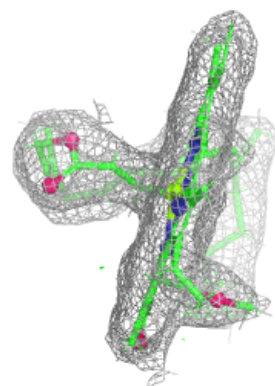
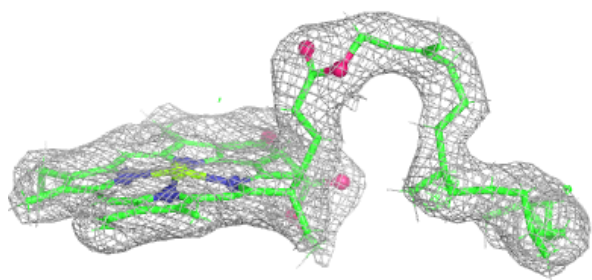
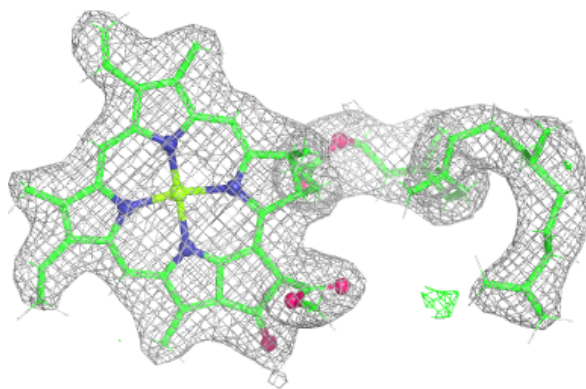
Electron density around CLA b 611:

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

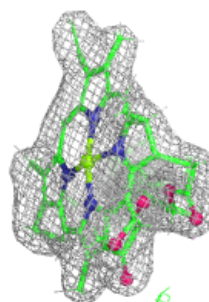
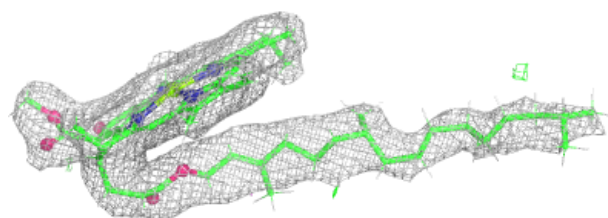
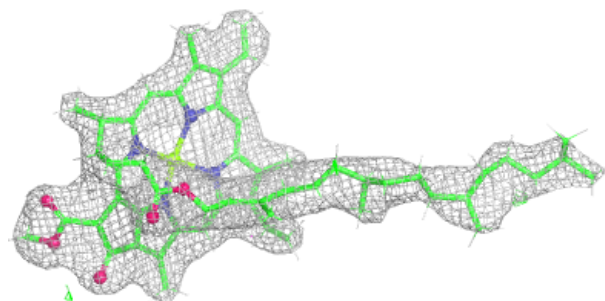


Electron density around CLA b 612:

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

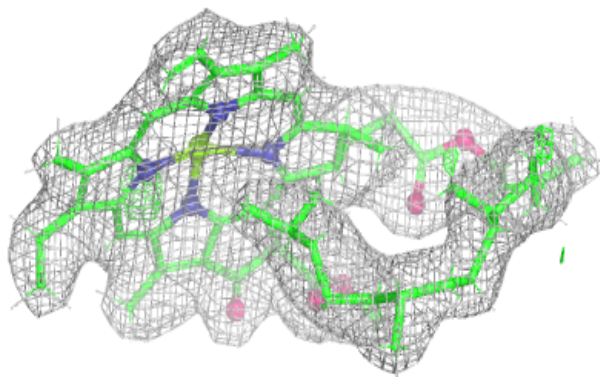
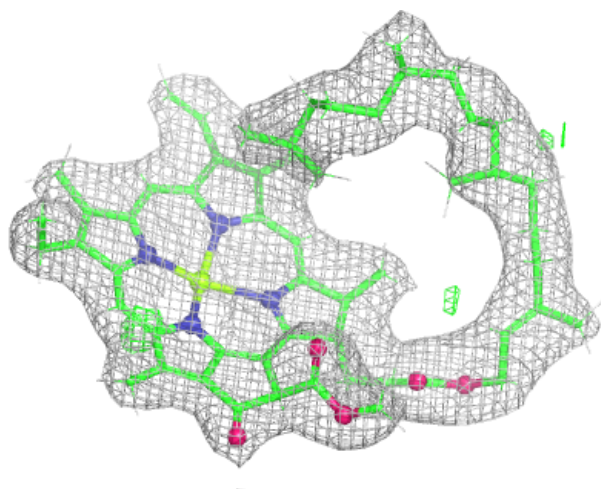
**Electron density around CLA b 614:**

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



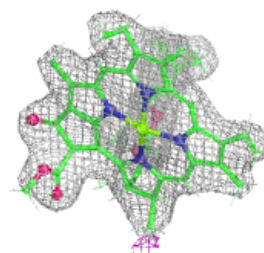
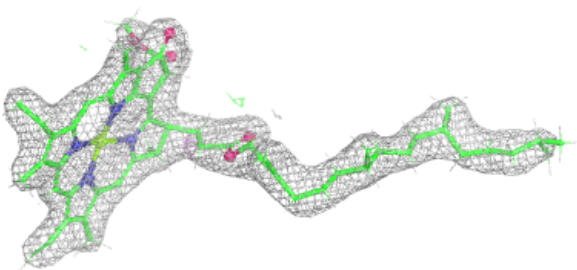
Electron density around CLA b 615:

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

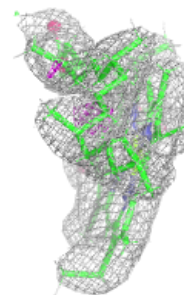
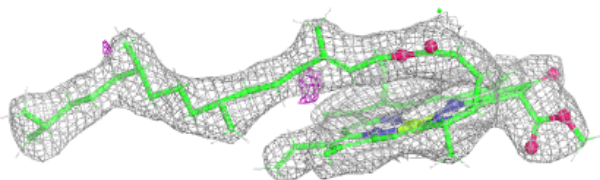
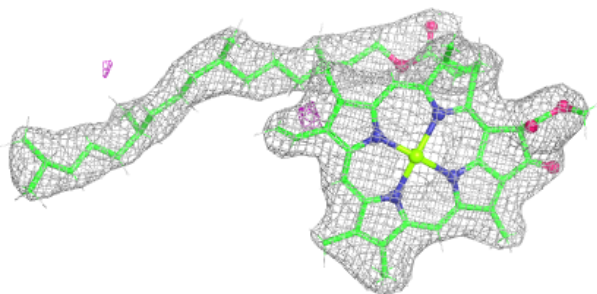


Electron density around CLA C 503:

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

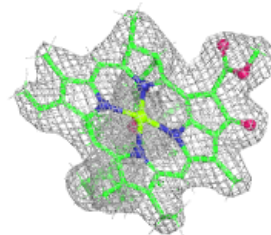
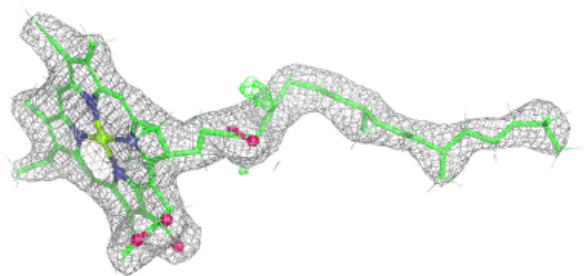
**Electron density around CLA c 501:**

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



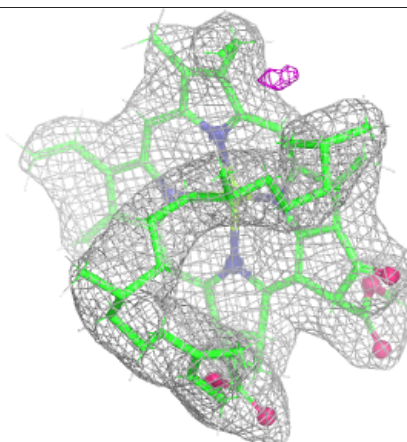
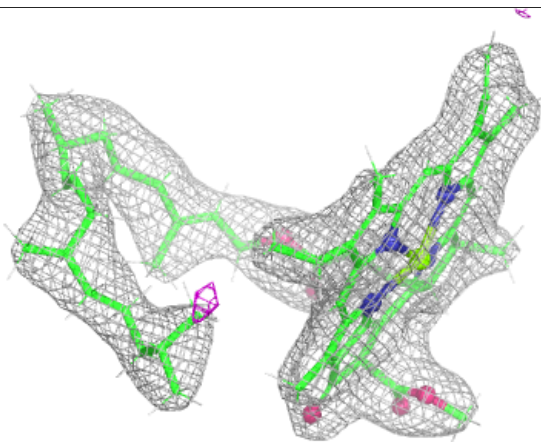
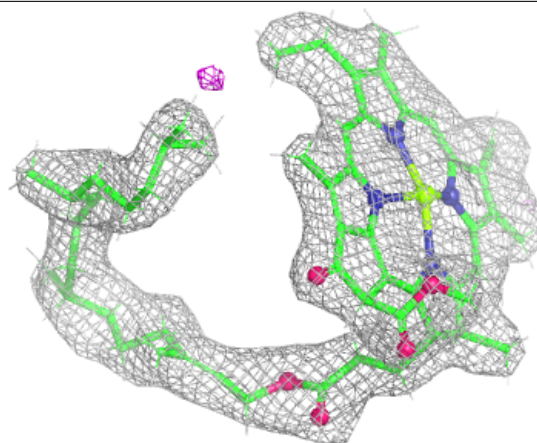
Electron density around CLA c 502:

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

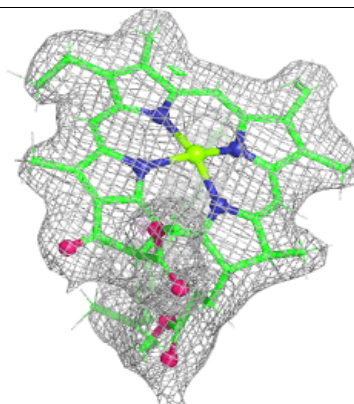
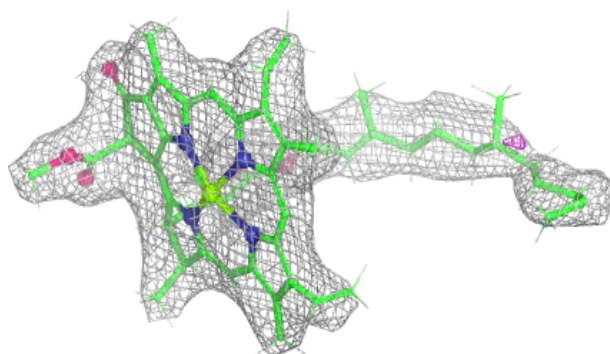
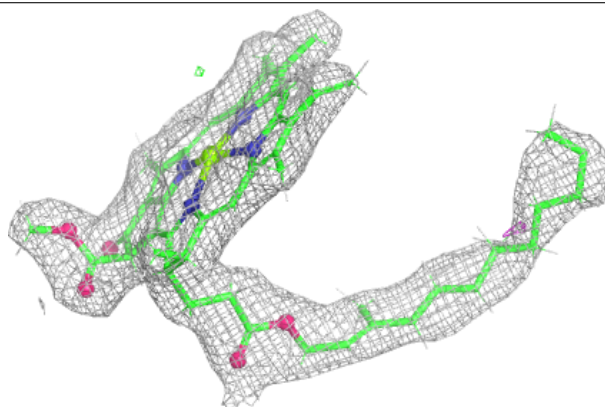


Electron density around CLA C 504:

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

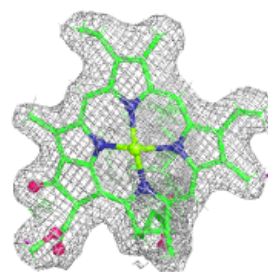
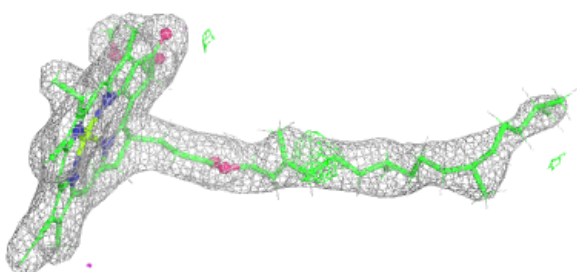
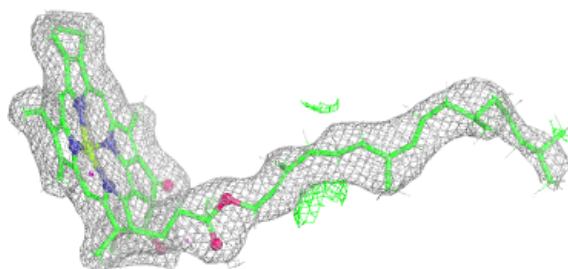
**Electron density around CLA C 505:**

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

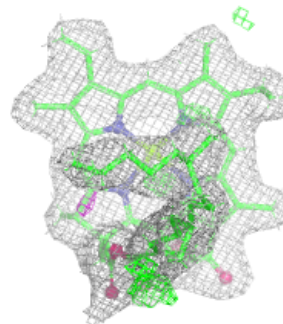
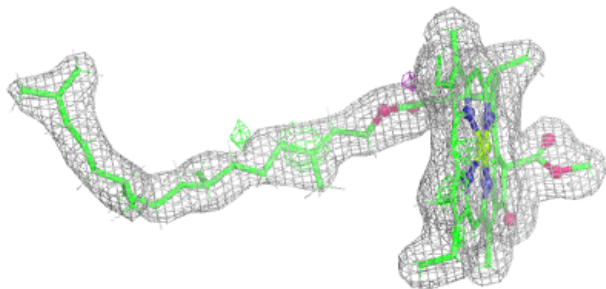
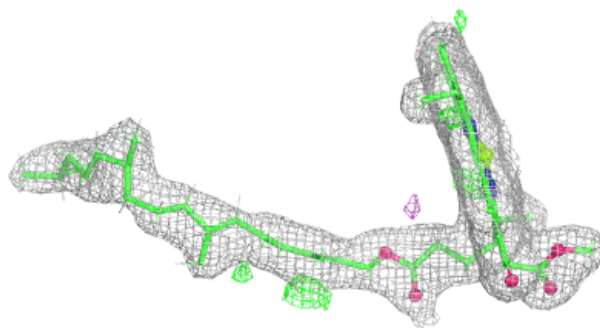


Electron density around CLA B 605:

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

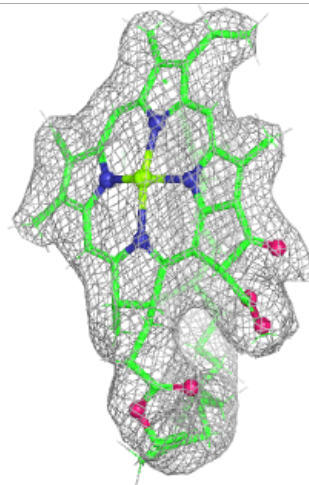
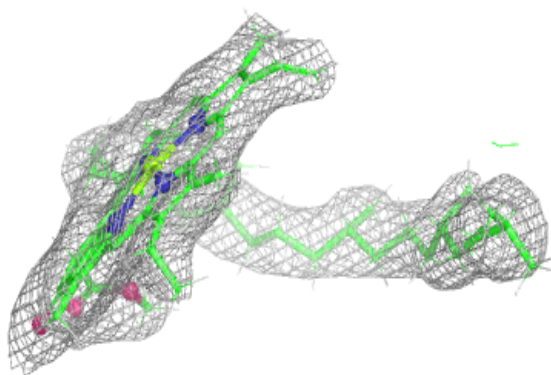
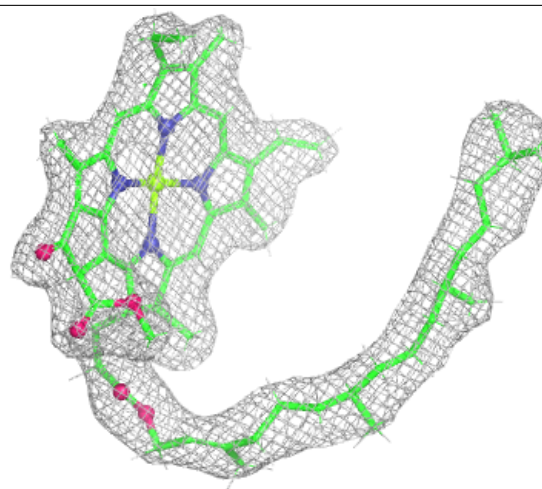
**Electron density around CLA B 606:**

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



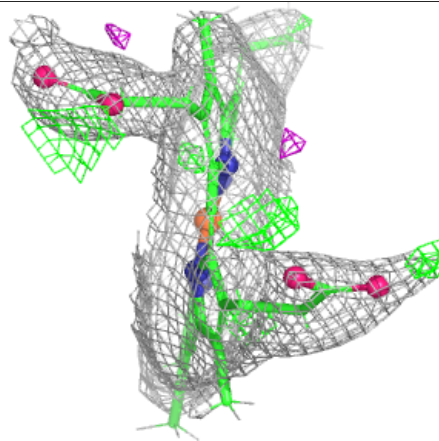
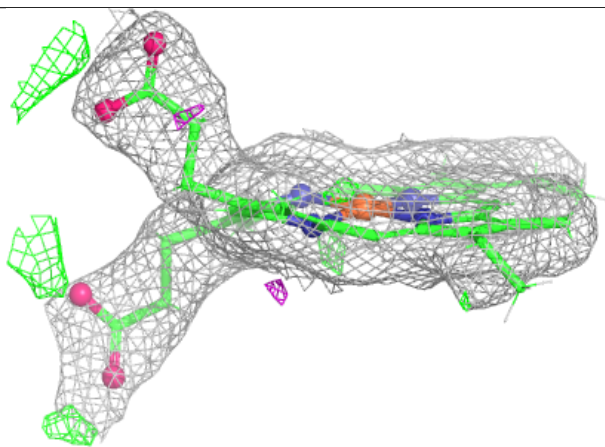
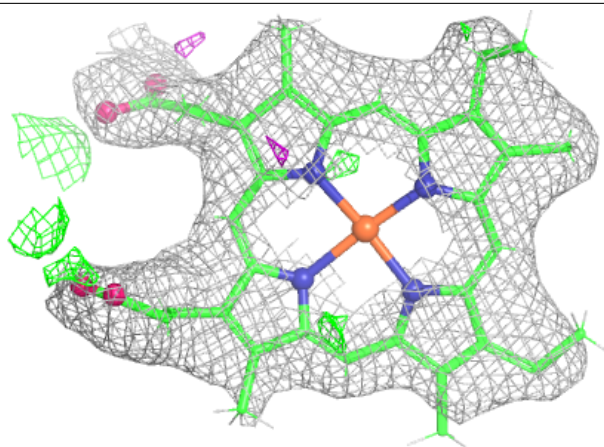
Electron density around CLA c 507:

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

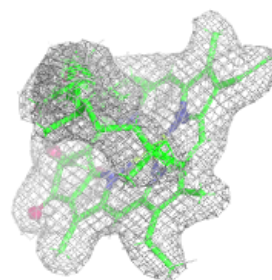
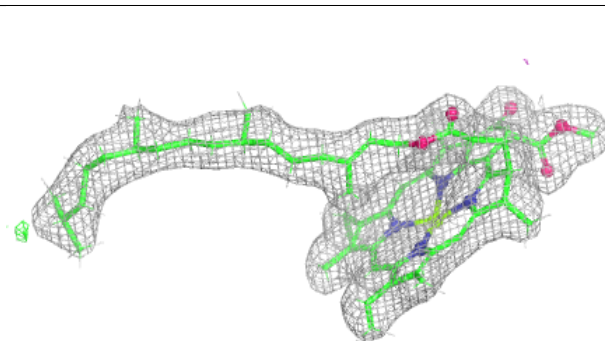
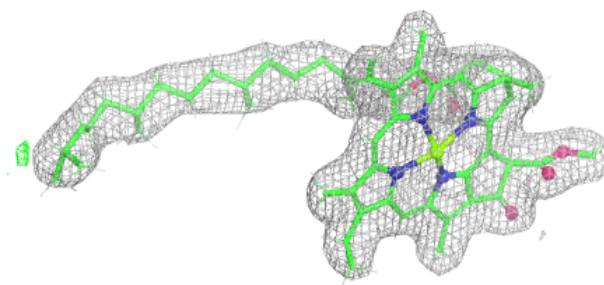


Electron density around HEC e 101:

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

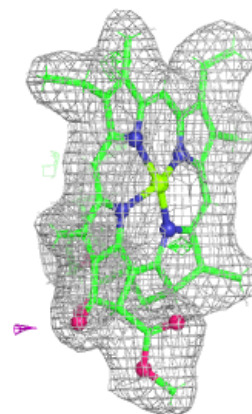
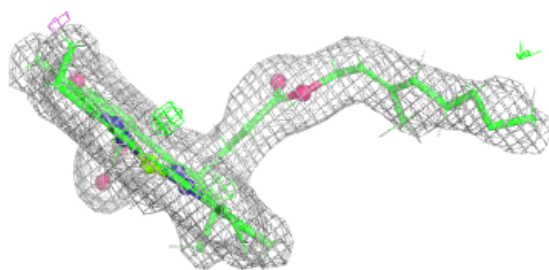
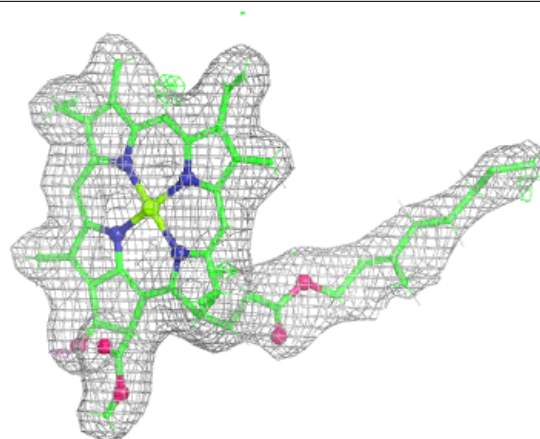
**Electron density around CLA B 609:**

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

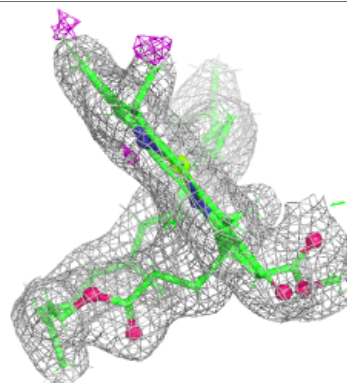
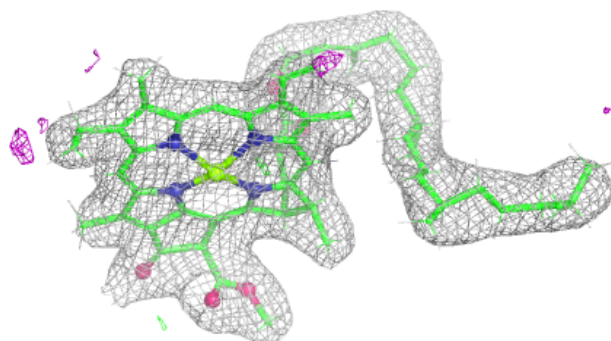
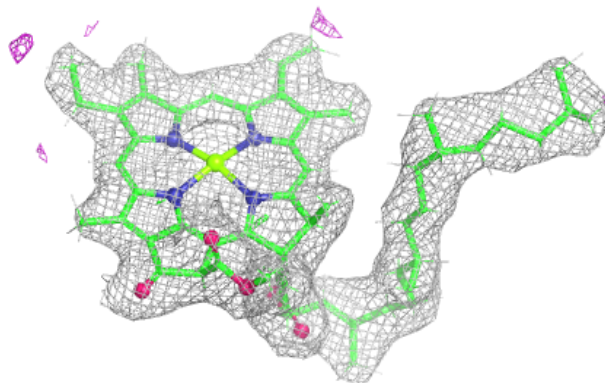


Electron density around CLA A 405:

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

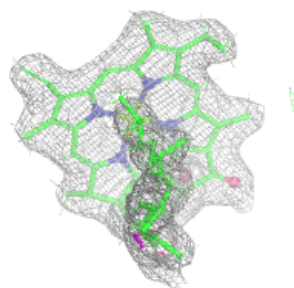
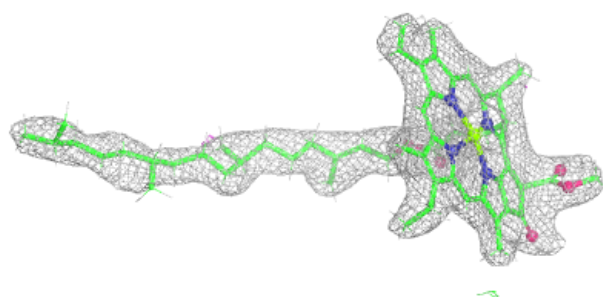
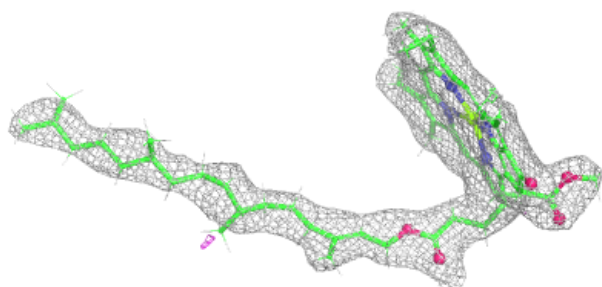
**Electron density around CLA D 403:**

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

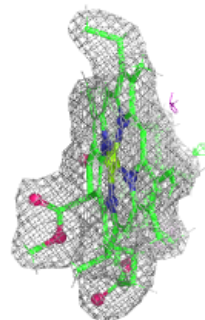
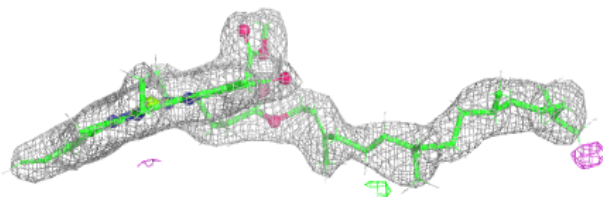
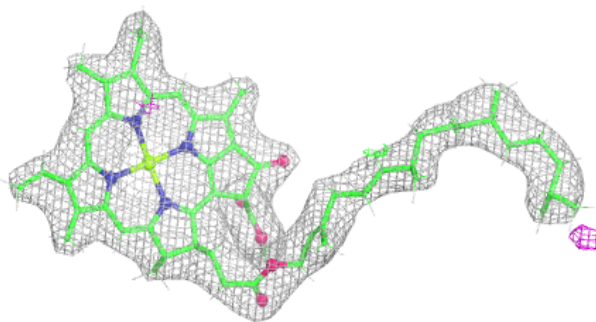


Electron density around CLA b 607:

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

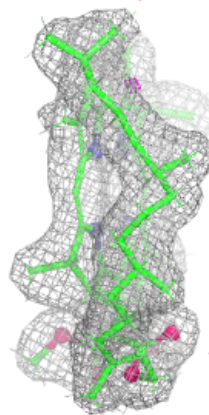
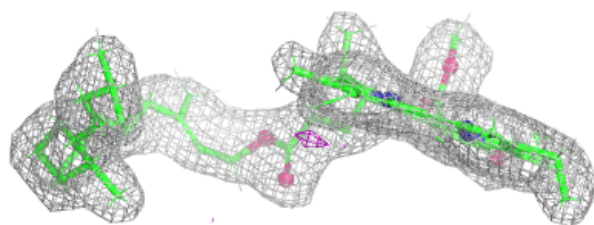
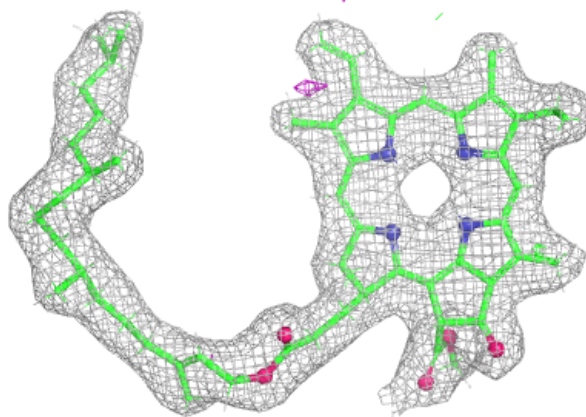
**Electron density around CLA B 603:**

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



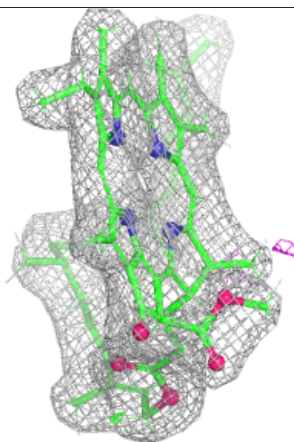
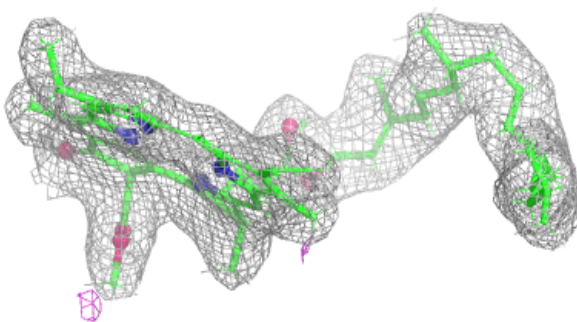
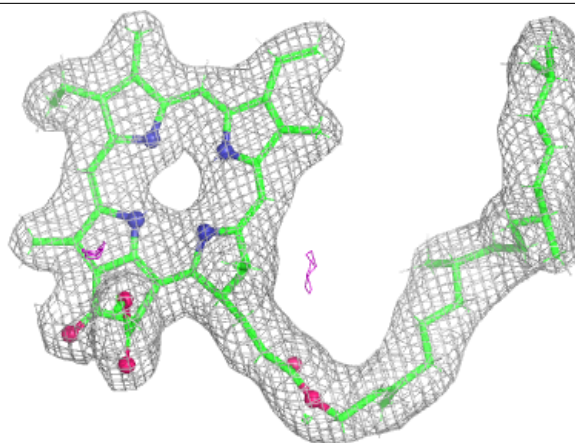
Electron density around PHO A 404:

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

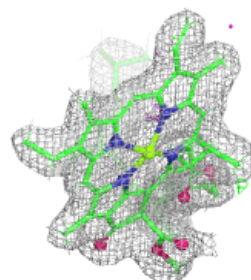
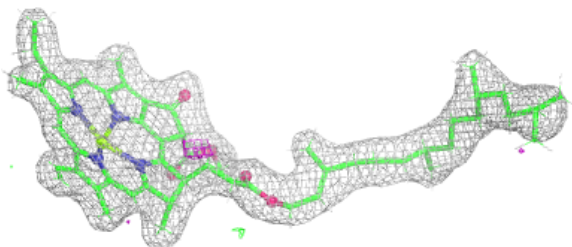
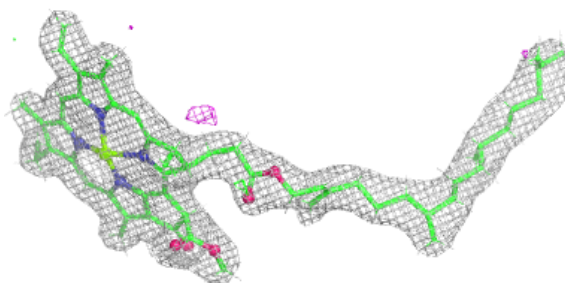


Electron density around PHO D 401:

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

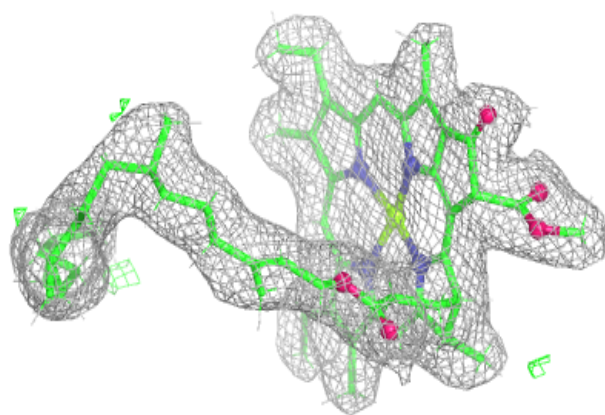
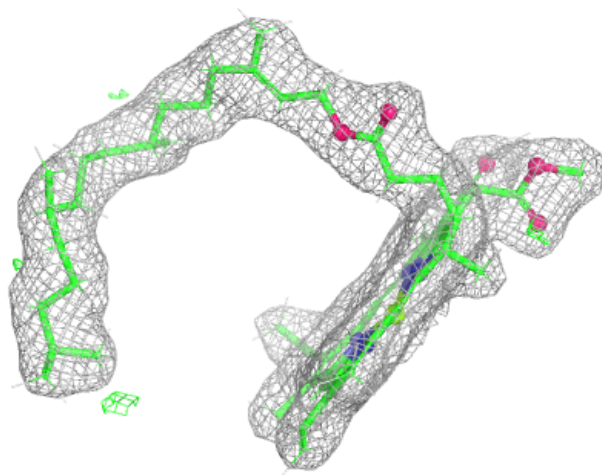
**Electron density around CLA a 402:**

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



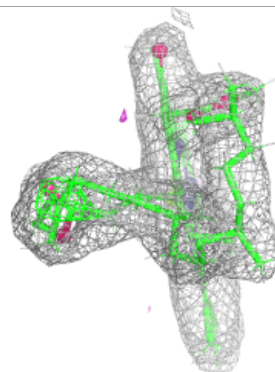
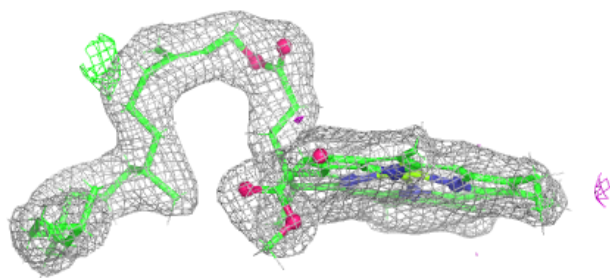
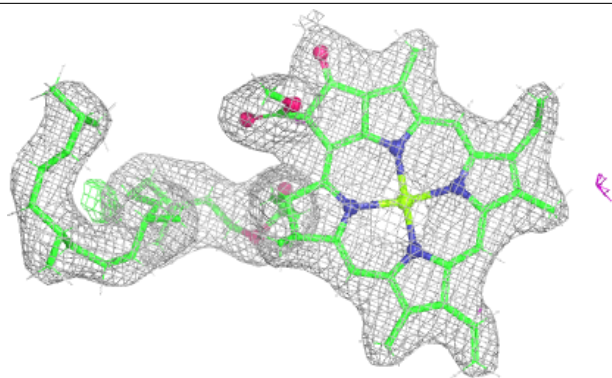
Electron density around CLA B 612:

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

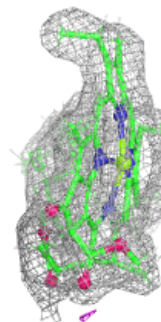
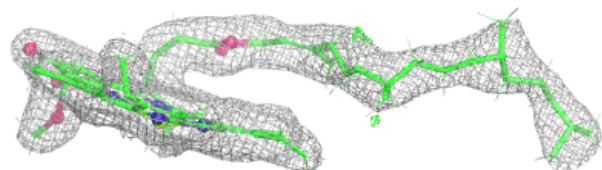
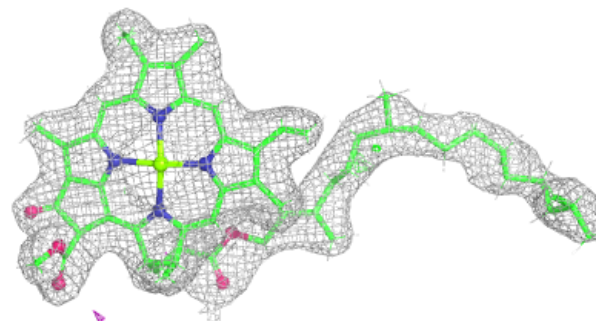


Electron density around CLA B 613:

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

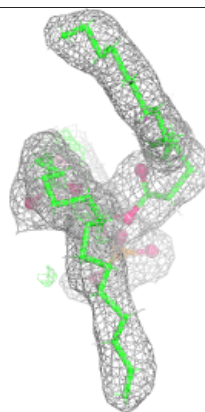
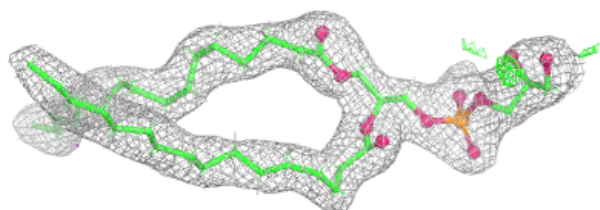
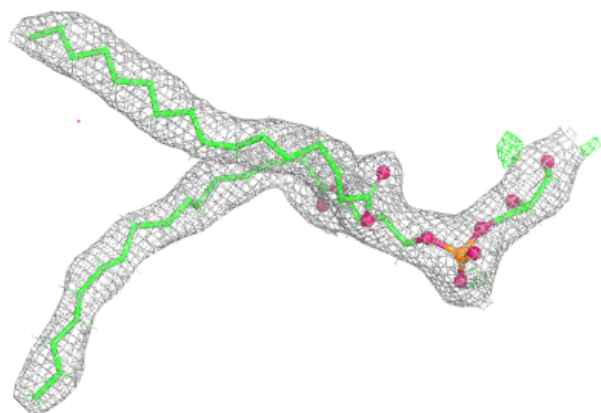
**Electron density around CLA B 604:**

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



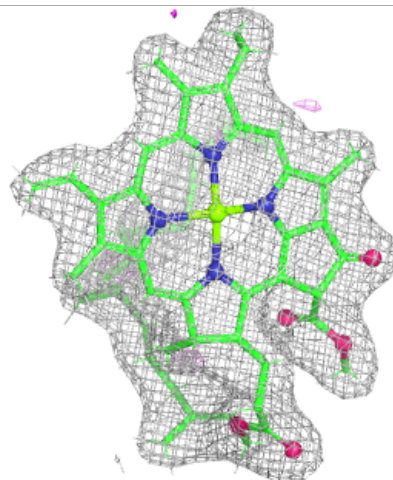
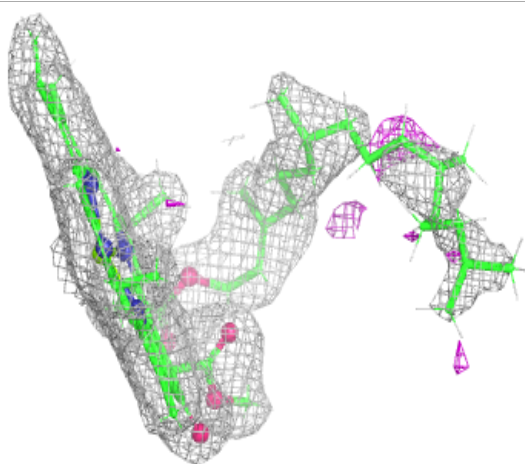
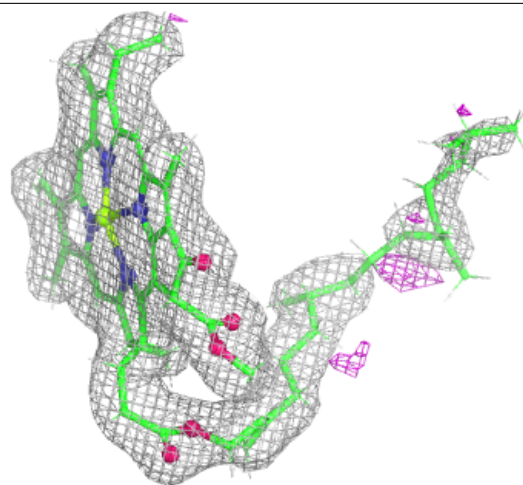
Electron density around LHG D 408:

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



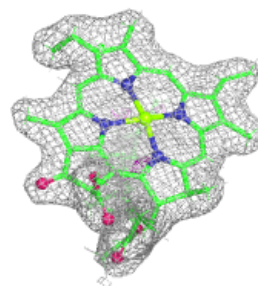
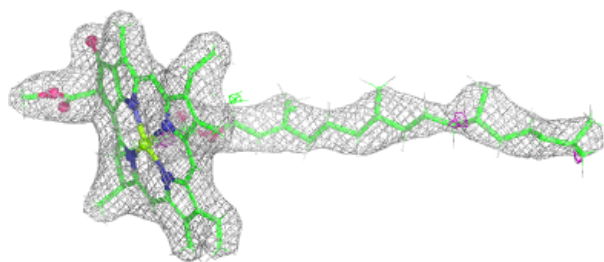
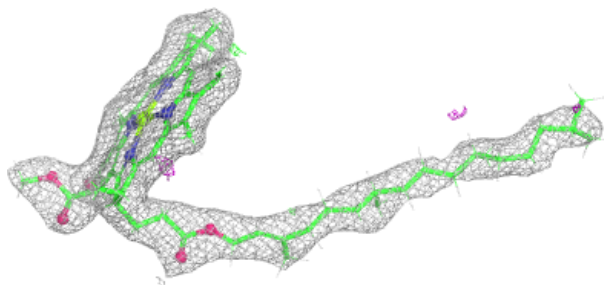
Electron density around CLA b 613:

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

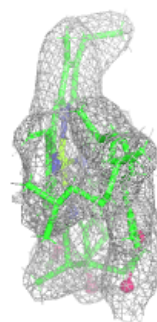
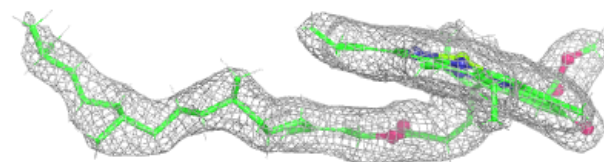
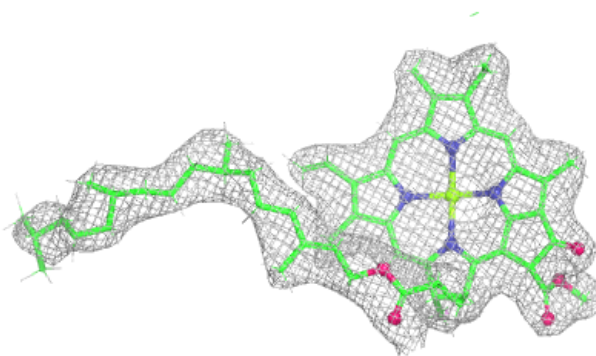


Electron density around CLA B 608:

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

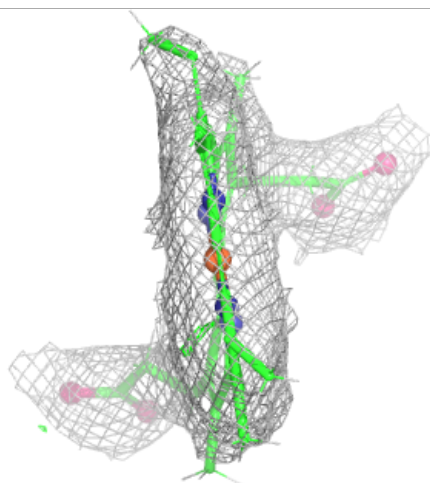
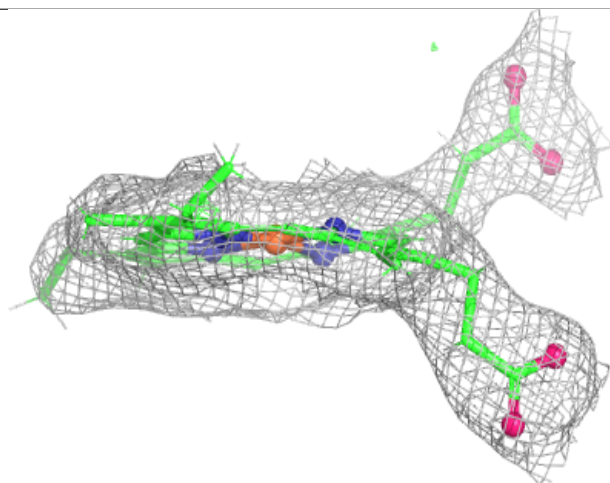
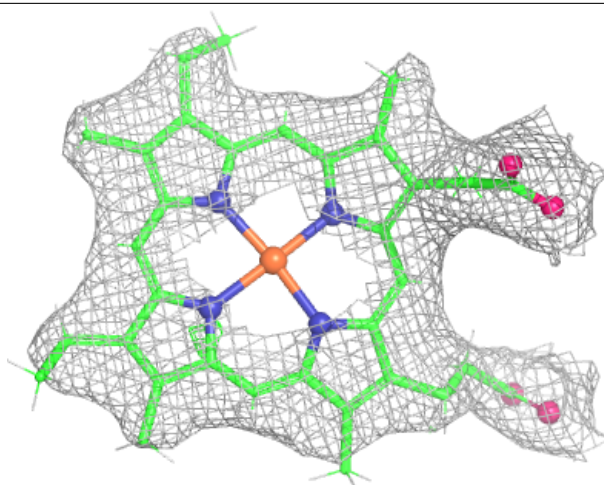
**Electron density around CLA b 603:**

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



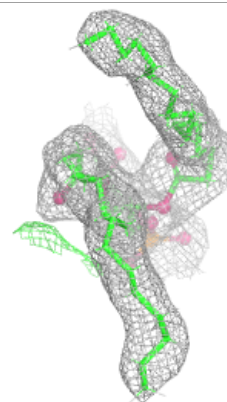
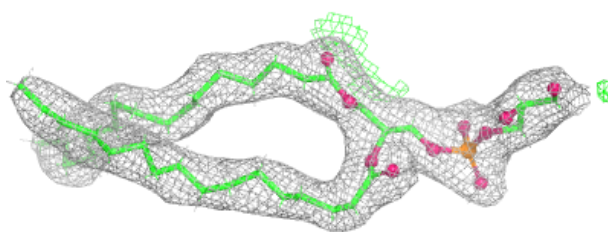
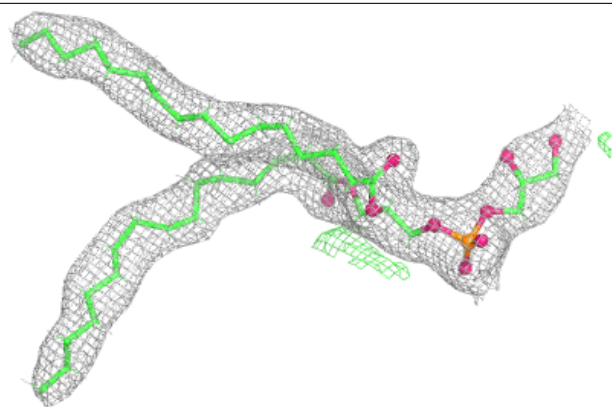
Electron density around HEC E 101:

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



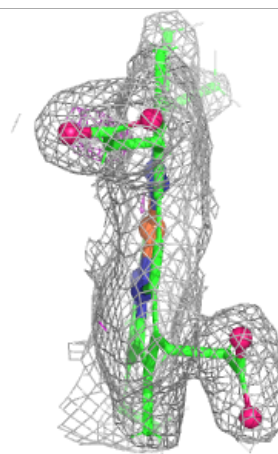
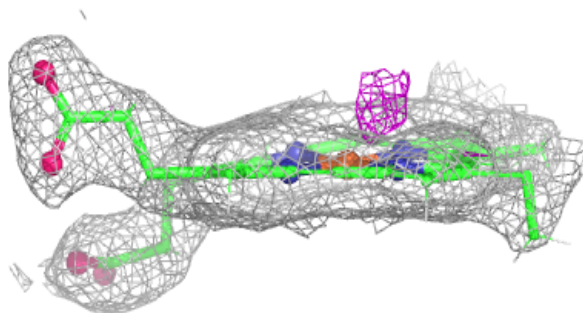
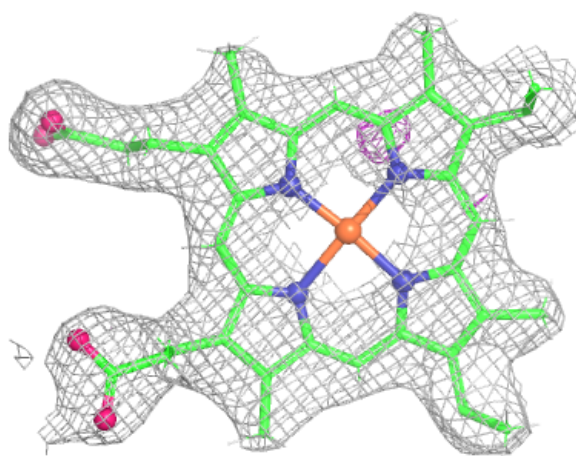
Electron density around LHG d 408:

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



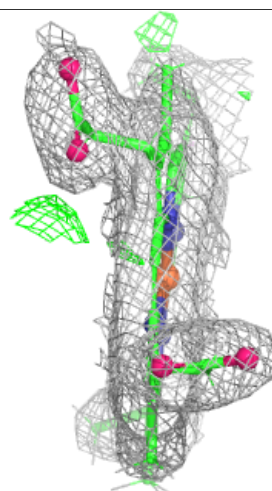
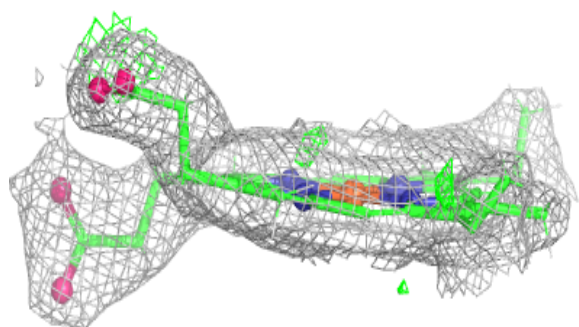
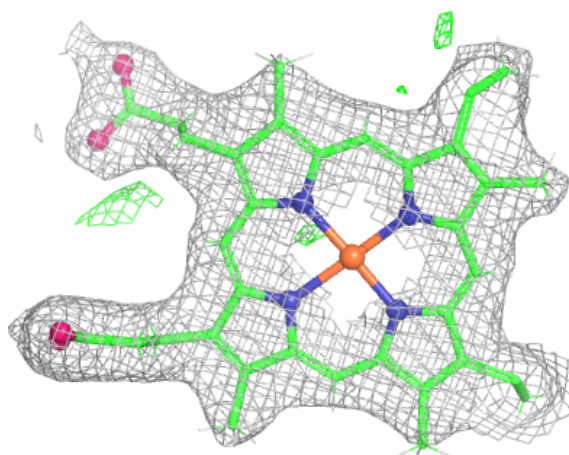
Electron density around HEC V 201:

$2mF_o-DF_c$ (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)



6.5 Other polymers [i](#)

There are no such residues in this entry.