



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 4, 2026 – 09:56 PM UTC

PDB ID : 6JLP / pdb_00006jlp
Title : XFEL structure of cyanobacterial photosystem II (3F state, dataset2)
Authors : Suga, M.; Shen, J.R.
Deposited on : 2019-03-06
Resolution : 2.50 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4-5-2 with Phenix2.0
Mogul : 2022.3.0, CSD as543be (2022)
Xtriage (Phenix) : 2.0
EDS : 3.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.010 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

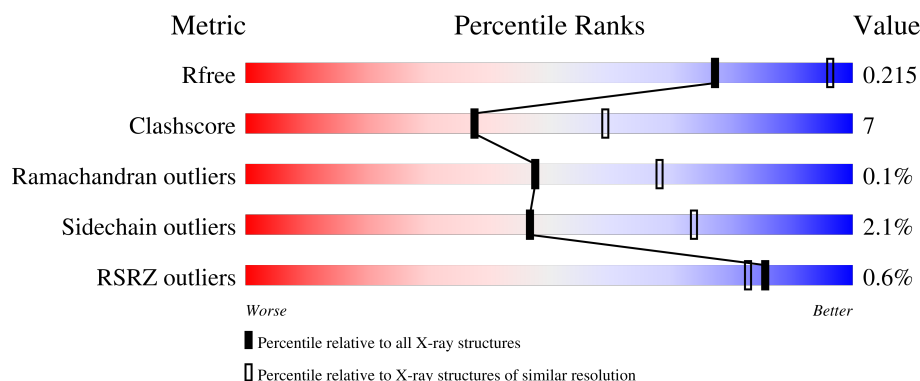
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

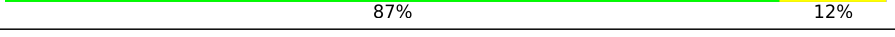
The reported resolution of this entry is 2.50 Å.

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.



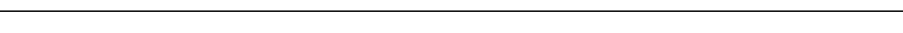
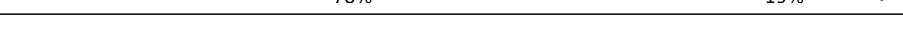
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	5829 (2.50-2.50)
Clashscore	190562	6492 (2.50-2.50)
Ramachandran outliers	187476	6378 (2.50-2.50)
Sidechain outliers	187428	6380 (2.50-2.50)
RSRZ outliers	180081	5833 (2.50-2.50)

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

Mol	Chain	Length	Quality of chain
1	A	344	
1	a	344	
2	B	505	
2	b	505	
3	C	455	

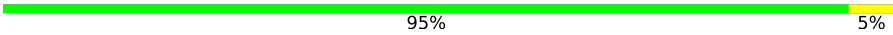
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Mol	Chain	Length	Quality of chain
3	c	455	 89% 10% .
4	D	342	 83% 17%
4	d	342	 88% 11% .
5	E	84	 76% 19% . .
5	e	84	 75% 21% .
6	F	44	 55% 23% 23%
6	f	44	 55% 18% 27% 2%
7	H	65	 80% 18% .
7	h	65	 92% 8% .
8	I	38	 87% 13%
8	i	38	 76% 21% .
9	J	39	 90% 8% .
9	j	39	 92% 8%
10	K	37	 81% 16% .
10	k	37	 78% 19% .
11	L	37	 70% 27% .
11	l	37	 89% 11%
12	M	36	 56% 28% 11% 6%
12	m	36	 75% 11% 8% 6%
13	O	244	 84% 15%
13	o	244	 84% 15%
14	T	32	 69% 22% . 6% 3%
14	t	32	 78% 12% . 6% 3%
15	U	104	 87% 7% 7%
15	u	104	 84% 7% . 7%

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Mol	Chain	Length	Quality of chain
16	V	137	
16	v	137	
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
19	Z	62	
19	z	62	
20	R	34	

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
23	CLA	A	404	X	-	-	-
23	CLA	A	405	X	-	-	-
23	CLA	A	407	X	-	-	-
23	CLA	B	602	X	-	-	-
23	CLA	B	603	X	-	-	-
23	CLA	B	604	X	-	-	-
23	CLA	B	605	X	-	-	-
23	CLA	B	606	X	-	-	-
23	CLA	B	607	X	-	-	-
23	CLA	B	608	X	-	-	-
23	CLA	B	610	X	-	-	-
23	CLA	B	611	X	-	-	-
23	CLA	B	612	X	-	-	-
23	CLA	B	613	X	-	-	-
23	CLA	B	614	X	-	-	-
23	CLA	B	615	X	-	-	-
23	CLA	B	616	X	-	-	-
23	CLA	B	617	X	-	-	-
23	CLA	C	502	X	-	-	-
23	CLA	C	504	X	-	-	-
23	CLA	C	505	X	-	-	-
23	CLA	C	506	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	C	507	X	-	-	-
23	CLA	C	508	X	-	-	-
23	CLA	C	509	X	-	-	-
23	CLA	C	510	X	-	-	-
23	CLA	C	511	X	-	-	-
23	CLA	C	512	X	-	-	-
23	CLA	C	513	X	-	-	-
23	CLA	C	514	X	-	-	-
23	CLA	D	406	X	-	-	-
23	CLA	D	407	X	-	-	-
23	CLA	a	409	X	-	-	-
23	CLA	a	412	X	-	-	-
23	CLA	b	610	X	-	-	-
23	CLA	b	611	X	-	-	-
23	CLA	b	612	X	-	-	-
23	CLA	b	613	X	-	-	-
23	CLA	b	614	X	-	-	-
23	CLA	b	615	X	-	-	-
23	CLA	b	616	X	-	-	-
23	CLA	b	618	X	-	-	-
23	CLA	b	619	X	-	-	-
23	CLA	b	620	X	-	-	-
23	CLA	b	621	X	-	-	-
23	CLA	b	622	X	-	-	-
23	CLA	b	623	X	-	-	-
23	CLA	b	624	X	-	-	-
23	CLA	b	625	X	-	-	-
23	CLA	c	505	X	-	-	-
23	CLA	c	506	X	-	-	-
23	CLA	c	507	X	-	-	-
23	CLA	c	508	X	-	-	-
23	CLA	c	509	X	-	-	-
23	CLA	c	510	X	-	-	-
23	CLA	c	511	X	-	-	-
23	CLA	c	512	X	-	-	-
23	CLA	c	513	X	-	-	-
23	CLA	c	514	X	-	-	-
23	CLA	c	515	X	-	-	-
23	CLA	c	516	X	-	-	-
23	CLA	c	517	X	-	-	-
23	CLA	d	403	X	-	-	-
23	CLA	d	404	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	d	405	X	-	-	-

2 Entry composition

There are 42 unique types of molecules in this entry. The entry contains 55697 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	334	Total	C	N	O	S	0	54	0
			3024	1969	499	538	18			
1	a	334	Total	C	N	O	S	0	56	0
			3020	1970	497	535	18			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	See sequence details	UNP P51765
a	279	PRO	ARG	See sequence details	UNP P51765

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	504	Total	C	N	O	S	0	10	0
			4021	2639	667	702	13			
2	b	503	Total	C	N	O	S	0	12	0
			4022	2644	664	701	13			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	451	Total	C	N	O	S	0	14	0
			3553	2322	592	626	13			
3	c	455	Total	C	N	O	S	0	20	0
			3641	2382	606	639	14			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	19	ASN	-	See sequence details	UNP D0VWR7
C	20	SER	-	See sequence details	UNP D0VWR7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	21	ILE	-	See sequence details	UNP D0VWR7
C	22	PHE	-	See sequence details	UNP D0VWR7
c	19	ASN	-	See sequence details	UNP D0VWR7
c	20	SER	-	See sequence details	UNP D0VWR7
c	21	ILE	-	See sequence details	UNP D0VWR7
c	22	PHE	-	See sequence details	UNP D0VWR7

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	16	0
			2849	1884	469	483	13			
4	d	341	Total	C	N	O	S	0	16	0
			2849	1884	469	483	13			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	0	2	0
			668	436	107	125			
5	e	81	Total	C	N	O	0	2	0
			670	439	107	124			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			
6	f	32	Total	C	N	O	S	0	0	0
			257	175	43	38	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	N	O	S	0	1	0
			519	346	85	86	2			
7	h	65	Total	C	N	O	S	0	0	0
			511	341	82	86	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			
8	i	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	38	Total	C	N	O	S	0	0	0
			272	182	42	47	1			
9	j	39	Total	C	N	O	S	0	0	0
			280	187	43	48	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	37	Total	C	N	O	0	0	0
			293	204	43	46			
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

There are 4 discrepancies between the modelled and reference sequences:

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			
11	l	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	34	Total	C	N	O	S	0	1	0
			274	184	40	49	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	m	34	Total	C	N	O	S	0	0	0
			269	179	40	49	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	See sequence details	UNP P12312
m	8	LEU	PHE	See sequence details	UNP P12312

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	243	Total	C	N	O	S	0	8	0
			1903	1191	315	392	5			
13	o	243	Total	C	N	O	S	0	5	0
			1891	1183	315	388	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			
14	t	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	U	97	Total	C	N	O		0	0	0
			774	491	129	154				
15	u	97	Total	C	N	O		0	0	0
			774	491	129	154				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	2	0
			1085	689	181	211	4			
16	v	137	Total	C	N	O	S	0	1	0
			1077	684	178	211	4			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	39	Total	C	N	O		0	0	0
			287	191	46	50				
18	x	38	Total	C	N	O		0	0	0
			281	188	45	48				

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	30	Total	C	N	O		98	0	0
			239	163	41	35				

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
21	A	1	Total	Fe	0	1
			2	2		
21	a	1	Total	Fe	0	1
			1	1		

- Molecule 22 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

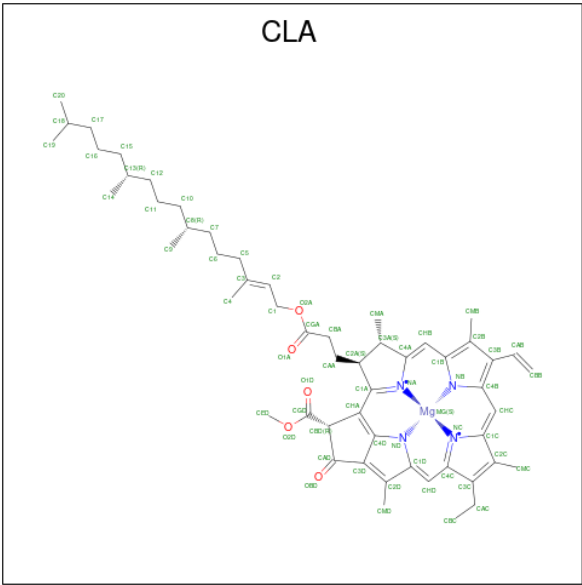
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	2	Total	Cl	0	2
			4	4		
22	U	1	Total	Cl	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	a	2	Total	Cl	0	2
			4	4		
22	v	1	Total	Cl	0	0
			1	1		

- Molecule 23 is CHLOROPHYLL A (CCD ID: CLA) (formula: C₅₅H₇₂MgN₄O₅).



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

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

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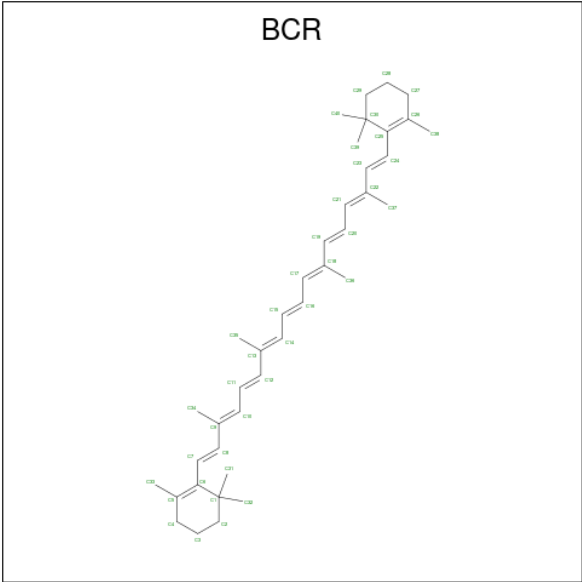
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	D	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	D	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	a	1	Total 65	C 55	Mg 1	N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

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

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



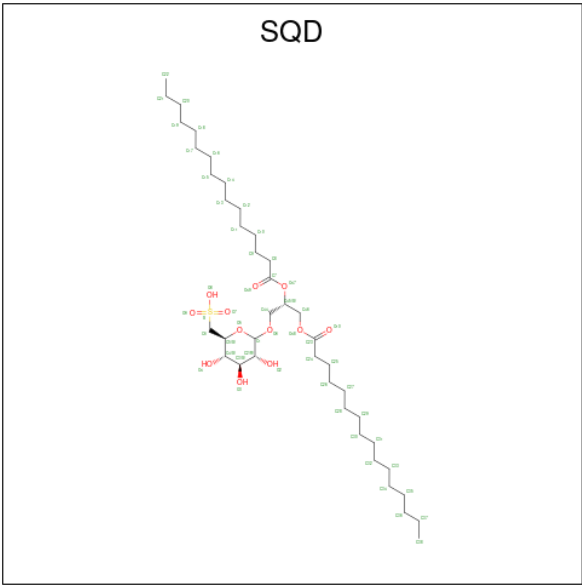
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A	1	Total C 40 40	0	0
24	B	1	Total C 40 40	0	0
24	B	1	Total C 40 40	0	0
24	B	1	Total C 40 40	0	0
24	C	1	Total C 40 40	0	0
24	D	1	Total C 40 40	0	0
24	H	1	Total C 40 40	0	0
24	K	1	Total C 40 40	0	0
24	K	1	Total C 40 40	0	0
24	T	1	Total C 40 40	0	0
24	Y	1	Total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

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

- Molecule 25 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSY L]-SN-GLYCEROL (CCD ID: SQD) (formula: C₄₁H₇₈O₁₂S).



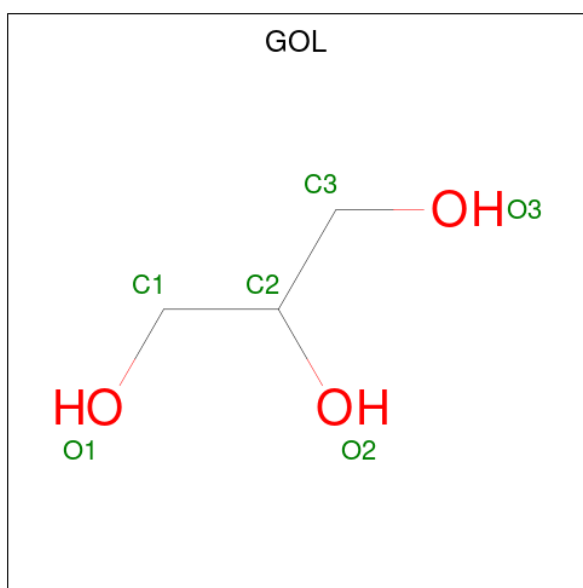
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	A	1	Total C O S 54 41 12 1	0	0
25	A	1	Total C O S 54 41 12 1	0	0
25	B	1	Total C O S 54 41 12 1	0	0

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

- Molecule 26 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



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

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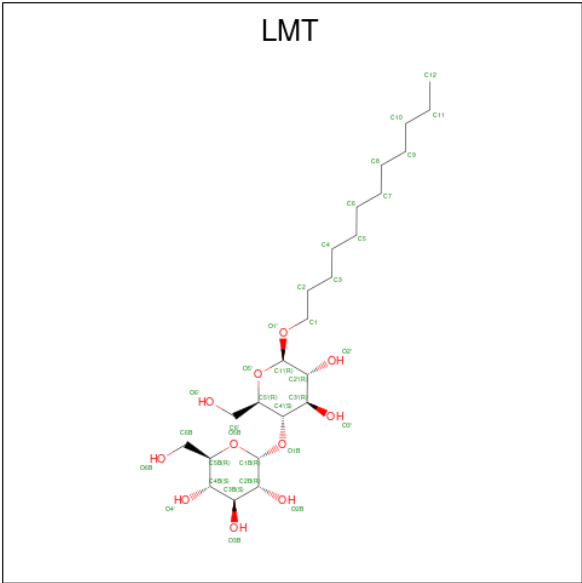
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
26	B	1	Total 6	C 3	O 3	0	0
26	B	1	Total 6	C 3	O 3	0	0
26	C	1	Total 6	C 3	O 3	0	0
26	C	1	Total 6	C 3	O 3	0	0
26	D	1	Total 6	C 3	O 3	0	0
26	F	1	Total 6	C 3	O 3	0	0
26	O	1	Total 6	C 3	O 3	0	0
26	T	1	Total 6	C 3	O 3	0	0
26	T	1	Total 6	C 3	O 3	0	0
26	V	1	Total 6	C 3	O 3	0	0
26	V	1	Total 6	C 3	O 3	0	0
26	V	1	Total 6	C 3	O 3	0	0
26	V	1	Total 6	C 3	O 3	0	0
26	V	1	Total 6	C 3	O 3	0	0
26	a	1	Total 6	C 3	O 3	0	0
26	a	1	Total 6	C 3	O 3	0	0
26	b	1	Total 6	C 3	O 3	0	0
26	b	1	Total 6	C 3	O 3	0	0
26	b	1	Total 6	C 3	O 3	0	0
26	b	1	Total 6	C 3	O 3	0	0
26	b	1	Total 6	C 3	O 3	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
26	c	1	Total	C	O	0	0
			6	3	3		
26	c	1	Total	C	O	0	0
			6	3	3		
26	c	1	Total	C	O	0	0
			6	3	3		
26	f	1	Total	C	O	0	0
			6	3	3		
26	t	1	Total	C	O	0	0
			6	3	3		
26	v	1	Total	C	O	0	0
			6	3	3		
26	v	1	Total	C	O	0	0
			6	3	3		
26	v	1	Total	C	O	0	0
			6	3	3		

- Molecule 27 is DODECYL-BETA-D-MALTOSIDE (CCD ID: LMT) (formula: C₂₄H₄₆O₁₁).



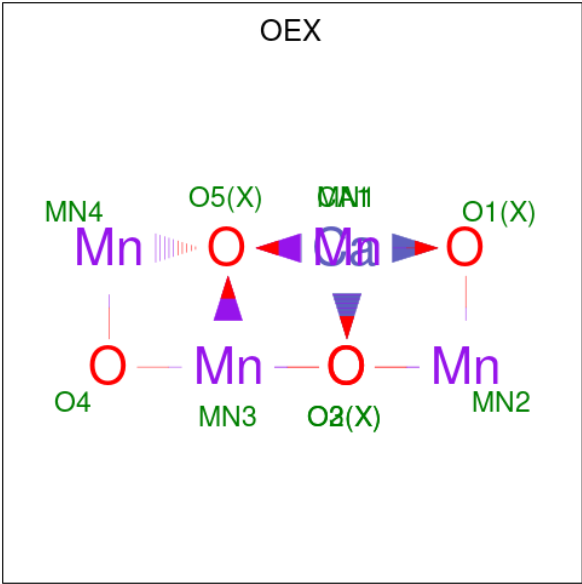
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
27	A	1	Total	C	O	0	0
			35	24	11		
27	C	1	Total	C	O	0	0
			35	24	11		
27	D	1	Total	C	O	0	0
			35	24	11		

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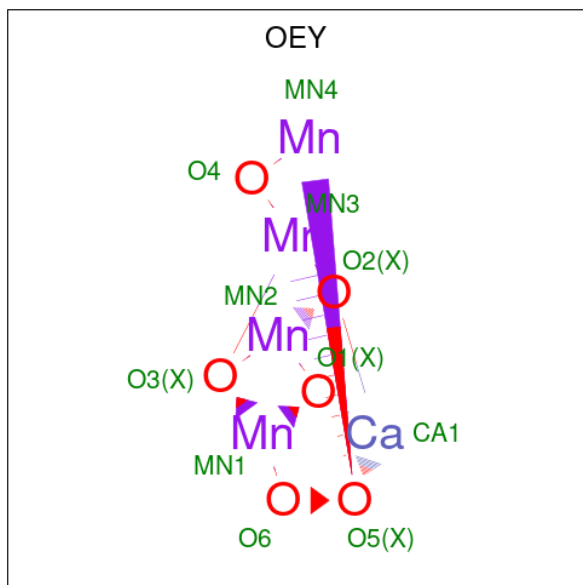
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
27	F	1	Total	C	O	0	0
			35	24	11		
27	M	1	Total	C	O	0	0
			35	24	11		
27	M	1	Total	C	O	0	0
			35	24	11		
27	M	1	Total	C	O	0	0
			35	24	11		
27	T	1	Total	C	O	0	0
			25	19	6		
27	a	1	Total	C	O	0	0
			35	24	11		
27	a	1	Total	C	O	0	0
			35	24	11		
27	b	1	Total	C	O	0	0
			25	19	6		
27	e	1	Total	C	O	0	0
			35	24	11		
27	m	1	Total	C	O	0	0
			35	24	11		
27	t	1	Total	C	O	0	0
			25	19	6		

- Molecule 28 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: CaMn_4O_5).



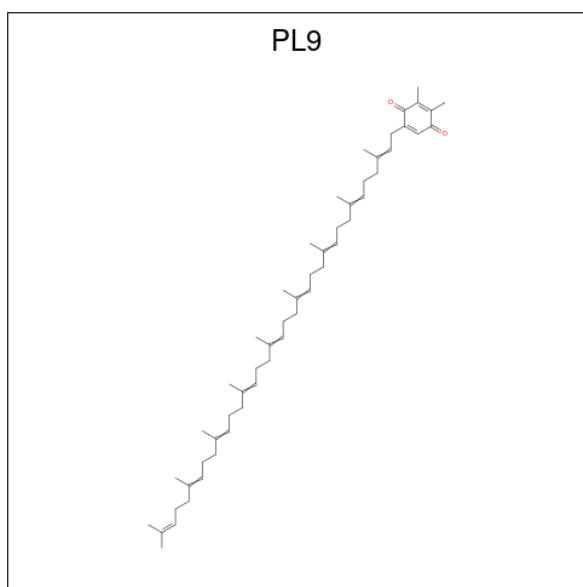
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
28	A	1	Total	Ca	Mn	O	0	1
			10	1	4	5		
28	a	1	Total	Ca	Mn	O	0	1
			10	1	4	5		

- Molecule 29 is CA-MN4-O6 CLUSTER (CCD ID: OEY) (formula: CaMn_4O_6).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
29	A	1	Total	Ca	Mn	O	0	1
			11	1	4	6		
29	a	1	Total	Ca	Mn	O	0	1
			11	1	4	6		

- Molecule 30 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: $\text{C}_{53}\text{H}_{80}\text{O}_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
30	A	1	Total	C	O	0	1
			110	106	4		
30	D	1	Total	C	O	0	1
			110	106	4		
30	a	1	Total	C	O	0	1
			110	106	4		
30	d	1	Total	C	O	0	1
			110	106	4		

- Molecule 31 is UNKNOWN LIGAND (CCD ID: UNL) (formula:).

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	A	1	Total	C	O	0	0
			28	23	5		
31	B	1	Total	C	O	0	0
			33	28	5		
31	D	2	Total	C	O	0	0
			57	51	6		
31	I	1	Total	C	O	0	0
			40	35	5		
31	J	1	Total	C		0	0
			10	10			
31	K	1	Total	C	O	0	0
			34	29	5		
31	M	1	Total	C		0	0
			10	10			
31	X	1	Total	C	O	0	0
			18	16	2		

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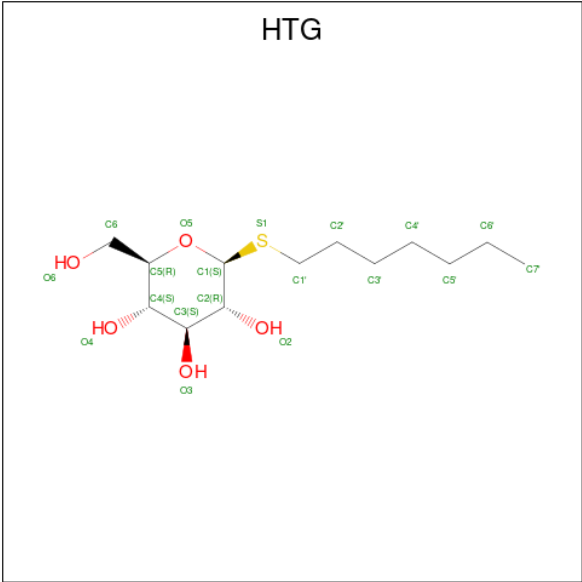
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	a	1	Total C O 30 25 5	0	0
31	b	1	Total C O 33 28 5	0	0
31	c	1	Total C O 32 27 5	0	0
31	d	3	Total C O 71 63 8	0	0
31	i	1	Total C O 40 35 5	0	0
31	j	1	Total C 10 10	0	0
31	m	1	Total C 10 10	0	0

- Molecule 32 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	B	1	Total Ca 1 1	0	0
32	C	1	Total Ca 1 1	0	0
32	F	1	Total Ca 1 1	0	0
32	O	1	Total Ca 1 1	0	0
32	b	1	Total Ca 1 1	0	0
32	c	2	Total Ca 2 2	0	0
32	f	1	Total Ca 1 1	0	0
32	o	1	Total Ca 1 1	0	0

- Molecule 33 is heptyl 1-thio-beta-D-glucopyranoside (CCD ID: HTG) (formula: C₁₃H₂₆O₅S).



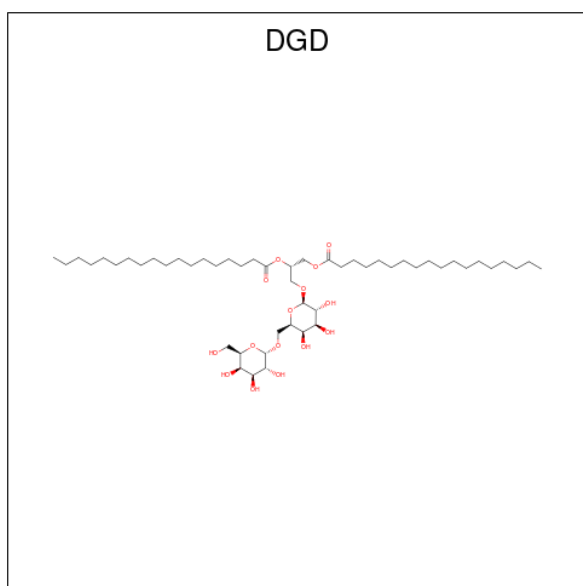
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	B	1	Total	C	O	S	0	0
			19	13	5	1		
33	B	1	Total	C	O	S	0	0
			19	13	5	1		
33	B	1	Total	C	O	S	0	0
			19	13	5	1		
33	B	1	Total	C	O	S	0	0
			19	13	5	1		
33	C	1	Total	C	O	S	0	0
			19	13	5	1		
33	C	1	Total	C	O	S	0	0
			19	13	5	1		
33	D	1	Total	C	O	S	0	0
			16	10	5	1		
33	V	1	Total	C	O	S	0	0
			19	13	5	1		
33	b	1	Total	C	O	S	0	0
			19	13	5	1		
33	b	1	Total	C	O	S	0	0
			19	13	5	1		
33	b	1	Total	C	O	S	0	0
			19	13	5	1		
33	b	1	Total	C	O	S	0	0
			19	13	5	1		
33	b	1	Total	C	O	S	0	0
			19	13	5	1		
33	c	1	Total	C	O	S	0	0
			19	13	5	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	c	1	Total	C	O	S	0	0
			19	13	5	1		
33	d	1	Total	C	O	S	0	0
			16	10	5	1		
33	o	1	Total	C	O	S	0	0
			19	13	5	1		

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



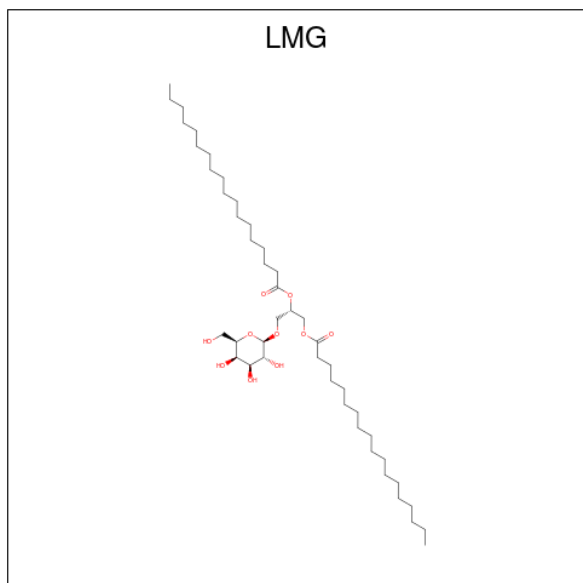
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	B	1	Total	C	O		0	0
			62	47	15			
34	C	1	Total	C	O		0	0
			62	47	15			
34	C	1	Total	C	O		0	0
			62	47	15			
34	C	1	Total	C	O		0	0
			62	47	15			
34	D	1	Total	C	O		0	0
			52	42	10			
34	c	1	Total	C	O		0	0
			62	47	15			
34	c	1	Total	C	O		0	0
			62	47	15			
34	c	1	Total	C	O		0	0
			62	47	15			

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
34	d	1	Total	C	O	0	0
			62	47	15		
34	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 35 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



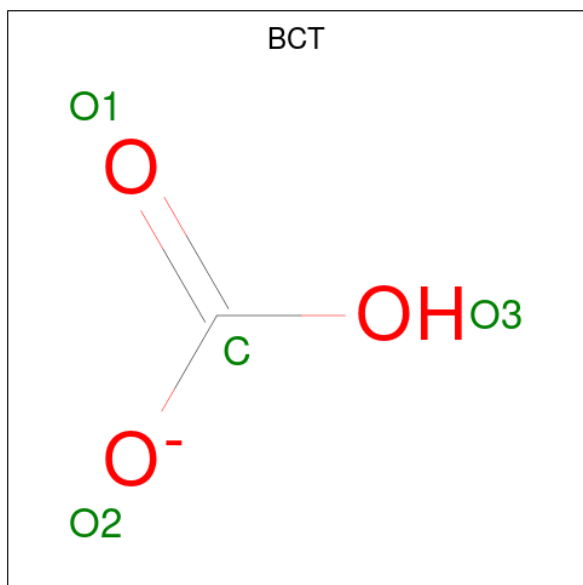
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	C	1	Total	C	O	0	0
			51	41	10		
35	C	1	Total	C	O	0	0
			51	41	10		
35	C	1	Total	C	O	0	0
			51	41	10		
35	D	1	Total	C	O	0	0
			51	41	10		
35	M	1	Total	C	O	0	0
			51	41	10		
35	Z	1	Total	C	O	0	0
			37	27	10		
35	a	1	Total	C	O	0	0
			51	41	10		
35	b	1	Total	C	O	0	0
			51	41	10		
35	c	1	Total	C	O	0	0
			51	41	10		

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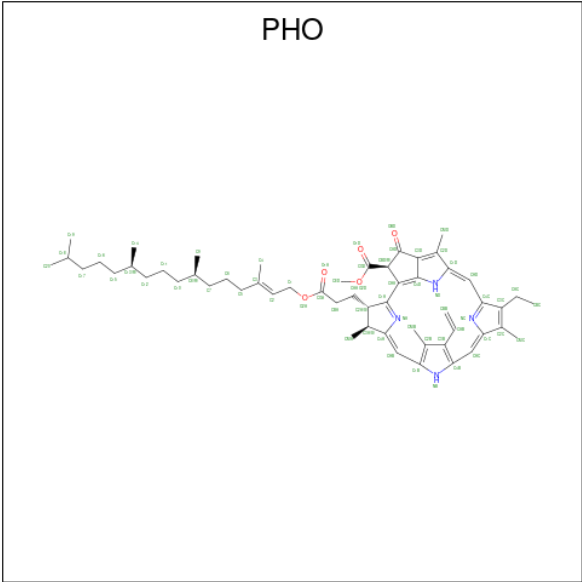
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	c	1	Total	C	O	0	0
			51	41	10		
35	d	1	Total	C	O	0	0
			51	41	10		
35	z	1	Total	C	O	0	0
			39	29	10		

- Molecule 36 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



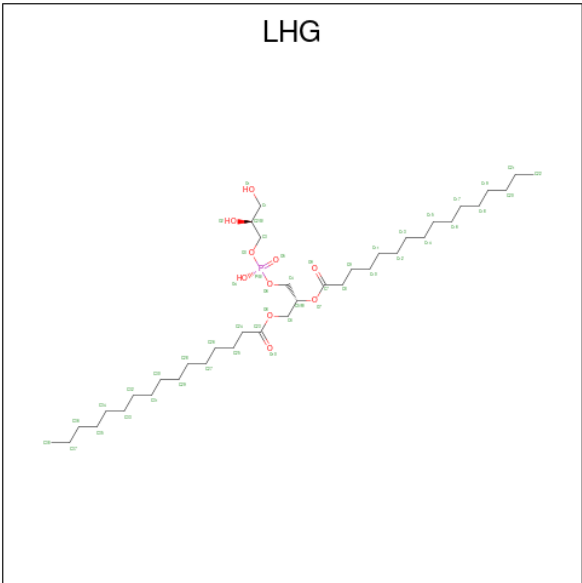
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
36	D	1	Total	C	O	0	1
			8	2	6		
36	d	1	Total	C	O	0	1
			8	2	6		

- Molecule 37 is PHEOPHYTIN A (CCD ID: PHO) (formula: $\text{C}_{55}\text{H}_{74}\text{N}_4\text{O}_5$).



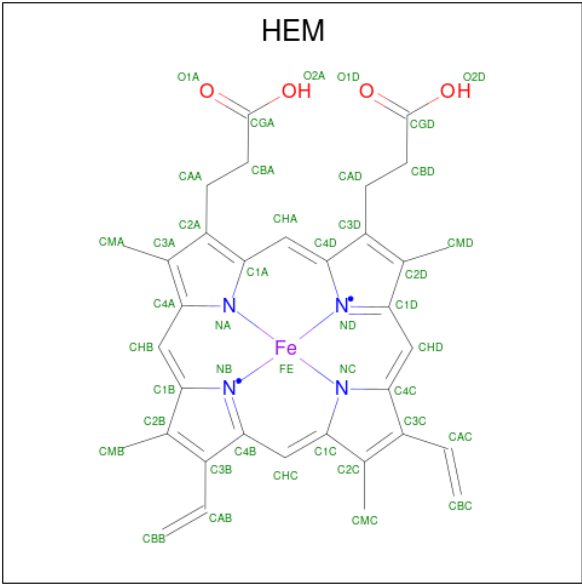
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	D	1	Total	C	N	O	0	0
			64	55	4	5		
37	D	1	Total	C	N	O	0	1
			128	110	8	10		
37	a	1	Total	C	N	O	0	0
			64	55	4	5		
37	d	1	Total	C	N	O	0	1
			128	110	8	10		

- Molecule 38 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



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

- Molecule 39 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: C₃₄H₃₂FeN₄O₄).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
39	F	1	Total	C	Fe	N	O	
			43	34	1	4	4	

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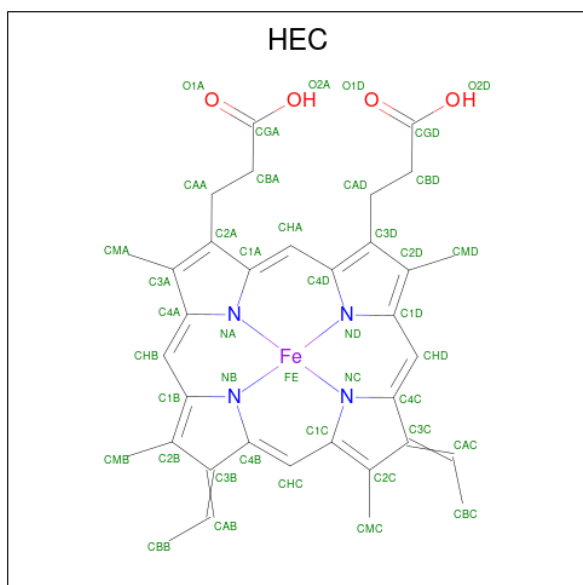
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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
39	e	1	Total	C	Fe	N	O	
			43	34	1	4	4	0

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

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

- Molecule 41 is HEME C (CCD ID: HEC) (formula: C₃₄H₃₄FeN₄O₄).



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

- Molecule 42 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
42	A	160	Total	O	0	14
			172	172		
42	B	286	Total	O	0	4
			290	290		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
42	C	218	Total 222	O 222	0	5
42	D	146	Total 150	O 150	0	5
42	E	34	Total 35	O 35	0	1
42	F	11	Total 11	O 11	0	0
42	H	40	Total 40	O 40	0	0
42	I	6	Total 6	O 6	0	0
42	J	10	Total 10	O 10	0	0
42	K	9	Total 9	O 9	0	0
42	L	15	Total 16	O 16	0	1
42	M	23	Total 23	O 23	0	0
42	O	180	Total 182	O 182	0	2
42	T	16	Total 17	O 17	0	1
42	U	79	Total 79	O 79	0	0
42	V	122	Total 124	O 124	0	2
42	Y	4	Total 4	O 4	0	0
42	X	10	Total 10	O 10	0	0
42	Z	1	Total 1	O 1	0	0
42	a	146	Total 155	O 155	0	12
42	b	259	Total 262	O 262	0	3
42	c	204	Total 209	O 209	0	6
42	d	142	Total 145	O 145	0	3

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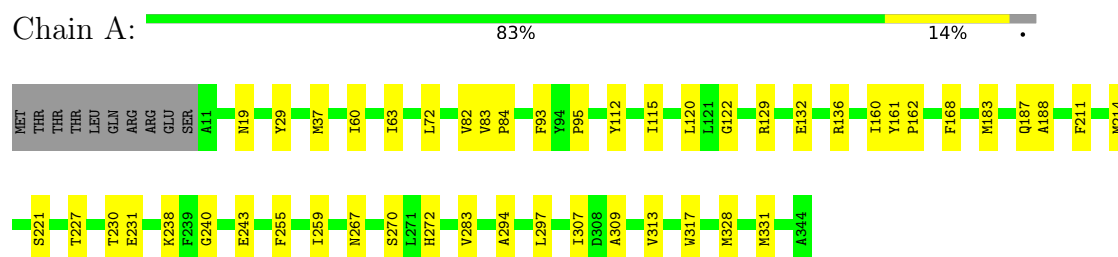
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
42	e	18	Total 18	O 18	0	0
42	f	7	Total 7	O 7	0	0
42	h	44	Total 44	O 44	0	0
42	i	4	Total 4	O 4	0	0
42	j	7	Total 7	O 7	0	0
42	k	7	Total 7	O 7	0	0
42	l	8	Total 8	O 8	0	0
42	m	13	Total 13	O 13	0	0
42	o	154	Total 154	O 154	0	0
42	t	16	Total 16	O 16	0	0
42	u	93	Total 93	O 93	0	0
42	v	79	Total 80	O 80	0	1
42	y	2	Total 2	O 2	0	0
42	x	6	Total 6	O 6	0	0

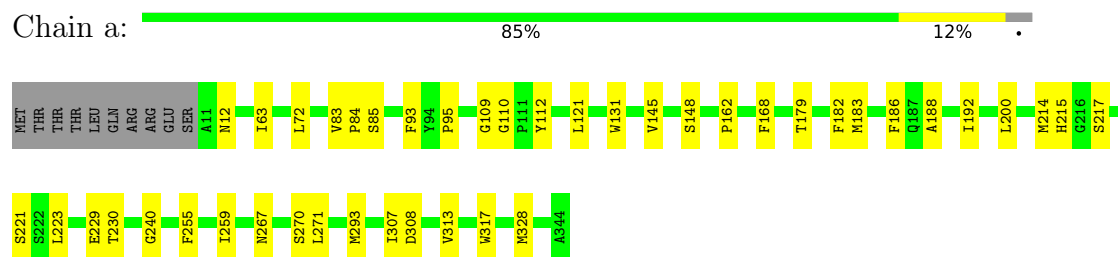
3 Residue-property plots

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.

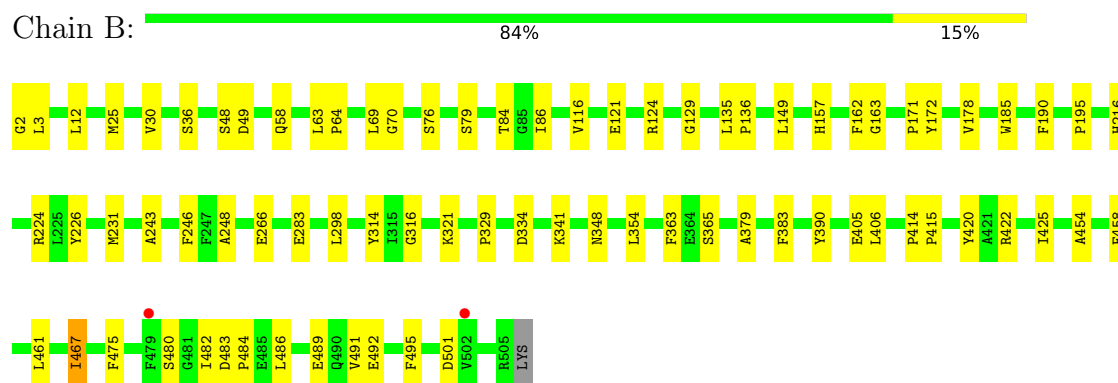
- Molecule 1: Photosystem II protein D1



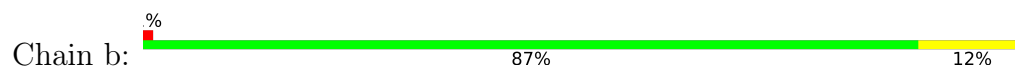
- Molecule 1: Photosystem II protein D1

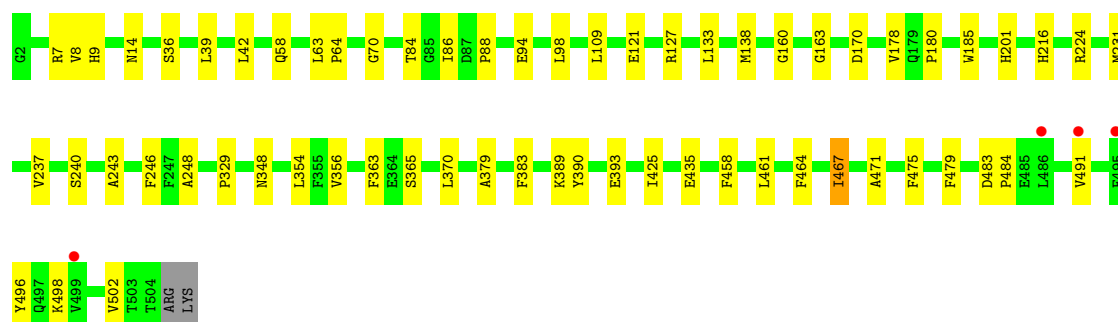


- Molecule 2: Photosystem II CP47 reaction center protein



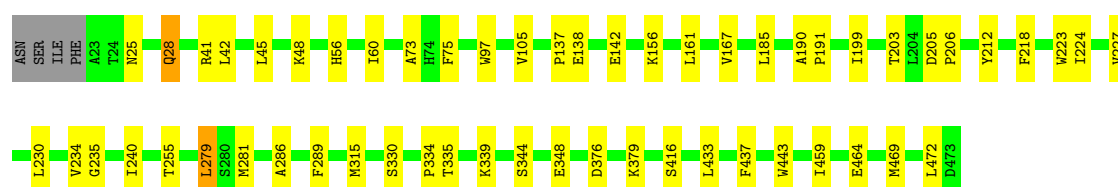
- Molecule 2: Photosystem II CP47 reaction center protein





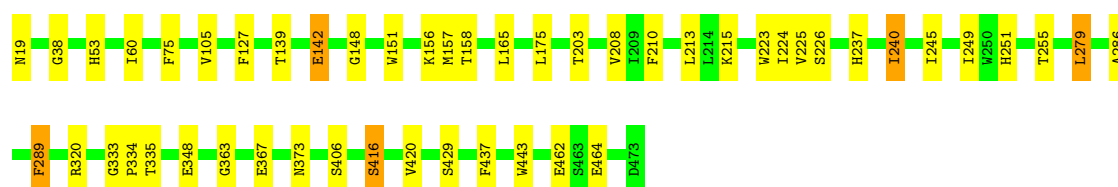
- Molecule 3: Photosystem II CP43 reaction center protein

Chain C: 87% 12%



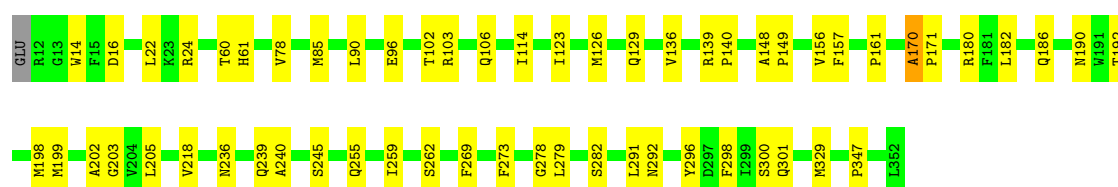
- Molecule 3: Photosystem II CP43 reaction center protein

Chain c: 89% 10%



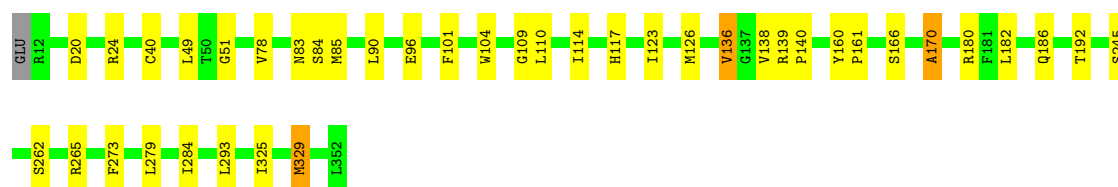
- Molecule 4: Photosystem II D2 protein

Chain D: 83% 17%

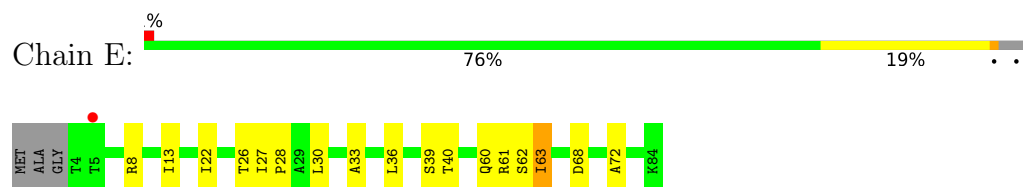


- Molecule 4: Photosystem II D2 protein

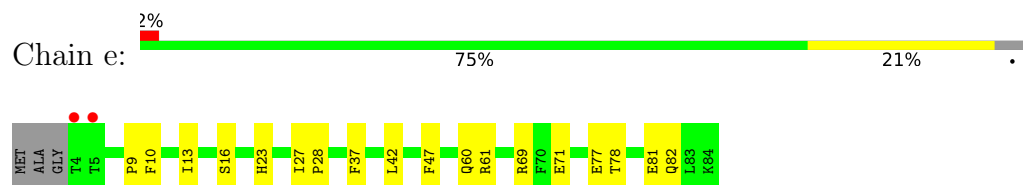
Chain d: 88% 11%



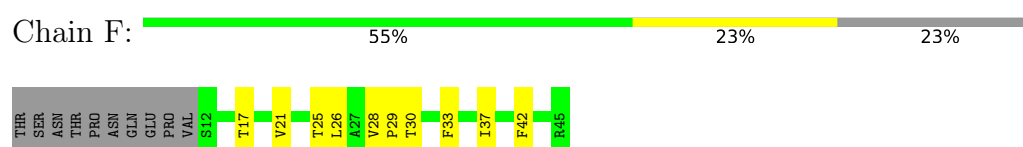
- Molecule 5: Cytochrome b559 subunit alpha



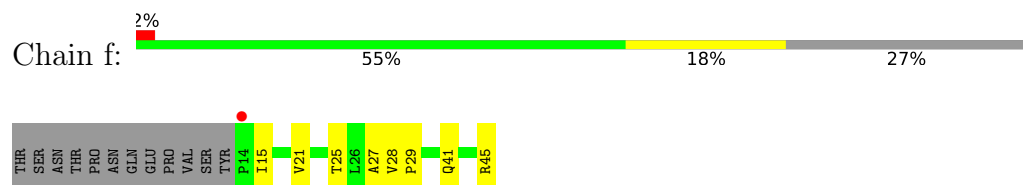
- Molecule 5: Cytochrome b559 subunit alpha



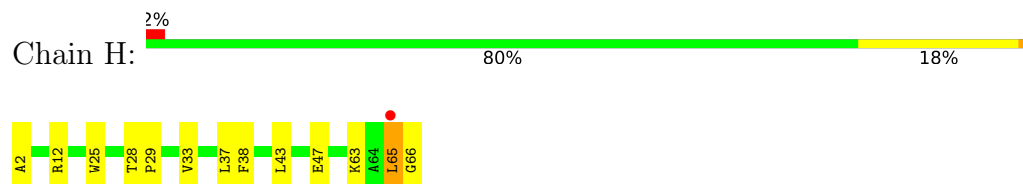
- Molecule 6: Cytochrome b559 subunit beta



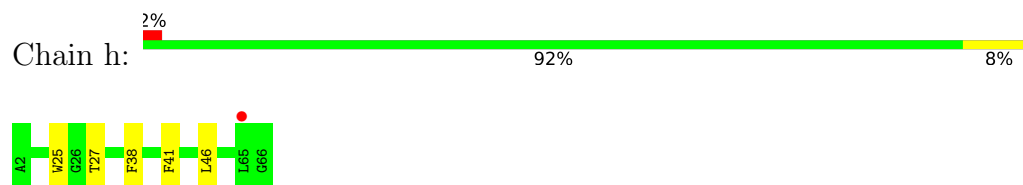
- Molecule 6: Cytochrome b559 subunit beta



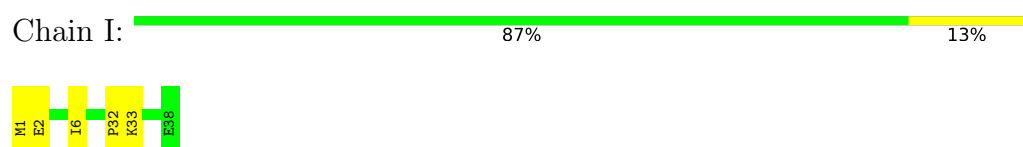
- Molecule 7: Photosystem II reaction center protein H



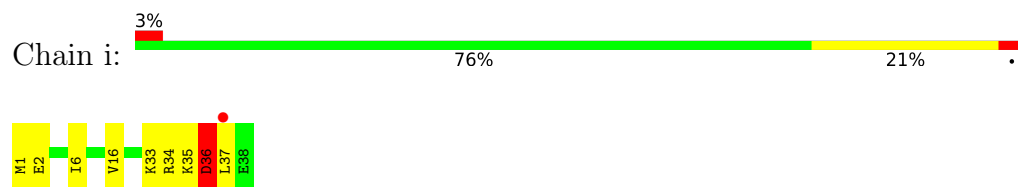
- Molecule 7: Photosystem II reaction center protein H



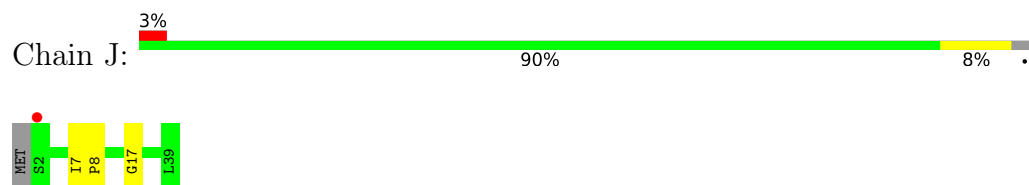
- Molecule 8: Photosystem II reaction center protein I



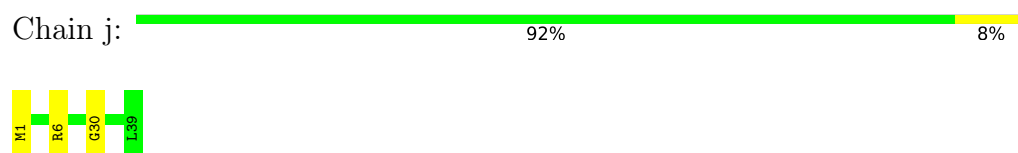
- Molecule 8: Photosystem II reaction center protein I



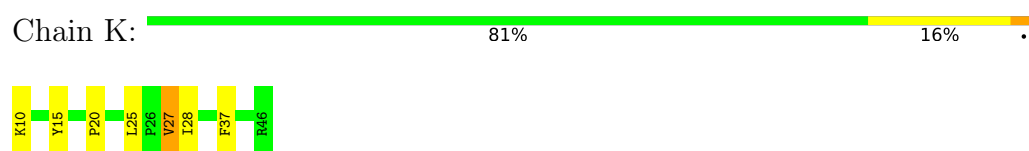
- Molecule 9: Photosystem II reaction center protein J



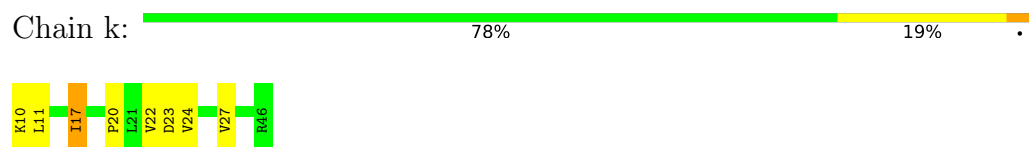
- Molecule 9: Photosystem II reaction center protein J



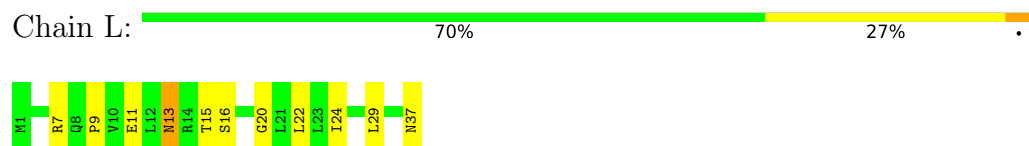
- Molecule 10: Photosystem II reaction center protein K



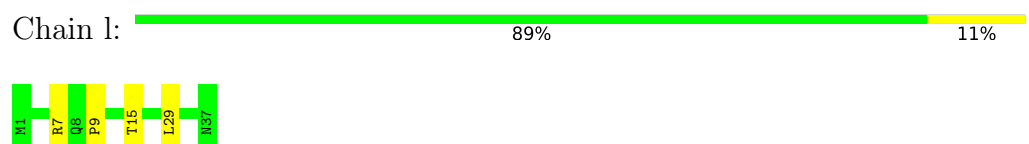
- Molecule 10: Photosystem II reaction center protein K



- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



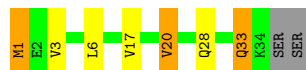
- Molecule 12: Photosystem II reaction center protein M

Chain M:  56% 28% 11% 6%



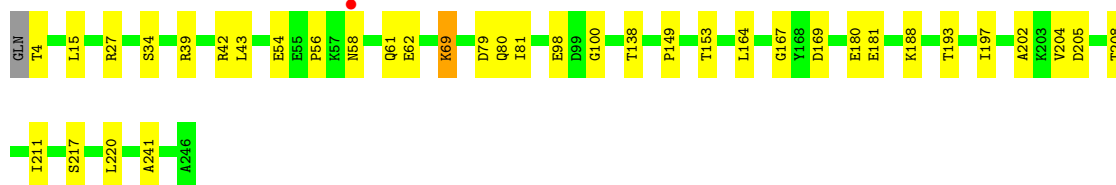
- Molecule 12: Photosystem II reaction center protein M

Chain m:  75% 11% 8% 6%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:  84% 15%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:  84% 15%



- Molecule 14: Photosystem II reaction center protein T

Chain T:  3% 69% 22% 6%



- Molecule 14: Photosystem II reaction center protein T

Chain t:  3% 78% 12% 6%



- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:  87% 7% 7%

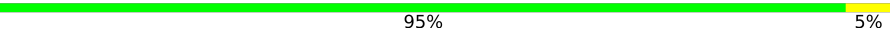


- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:  84% 7% 7%



- Molecule 16: Cytochrome c-550

Chain V:  95% 5%



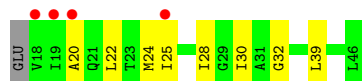
- Molecule 16: Cytochrome c-550

Chain v:  81% 19%



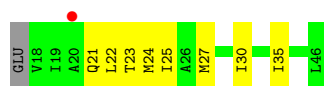
- Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y:  13% 70% 27%



- Molecule 17: Photosystem II reaction center protein Ycf12

Chain y:  3% 70% 27%

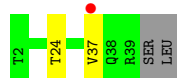
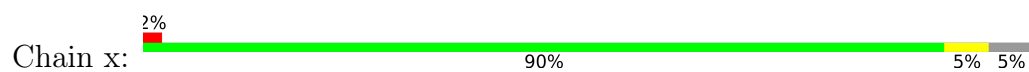


- Molecule 18: Photosystem II reaction center protein X

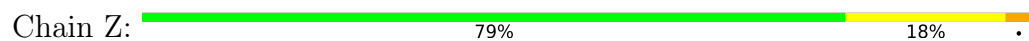
Chain X:  85% 12%



- Molecule 18: Photosystem II reaction center protein X



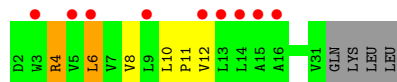
- Molecule 19: Photosystem II reaction center protein Z



- Molecule 19: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II protein Y



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	122.04Å 228.84Å 286.98Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.99 – 2.50 19.99 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.9 (19.99-2.50) 99.7 (19.99-2.50)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.57 (at 2.45Å)	Xtriage
Refinement program	PHENIX 1.9_1692	Depositor
R, R_{free}	0.151 , 0.211 0.157 , 0.215	Depositor DCC
R_{free} test set	14865 reflections (2.76%)	wwPDB-VP
Wilson B-factor (Å ²)	47.9	Xtriage
Anisotropy	0.419	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.38 , 93.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.50$, $\langle L^2 \rangle = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.97	EDS
Total number of atoms	55697	wwPDB-VP
Average B, all atoms (Å ²)	65.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.06% 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

5.1 Standard geometry

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

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	0.52	0/3126	0.81	1/4257 (0.0%)
1	a	0.53	0/3128	0.81	2/4260 (0.0%)
2	B	0.52	0/4191	0.83	2/5709 (0.0%)
2	b	0.52	0/4198	0.84	4/5720 (0.1%)
3	C	0.46	0/3678	0.83	0/5007
3	c	0.47	0/3774	0.79	2/5135 (0.0%)
4	D	0.55	0/2952	0.81	3/4021 (0.1%)
4	d	0.54	0/2952	0.84	5/4021 (0.1%)
5	E	0.45	0/693	0.84	0/944
5	e	0.43	0/695	0.83	0/948
6	F	0.55	0/284	0.80	0/387
6	f	0.55	0/265	0.80	0/360
7	H	0.46	0/535	0.80	0/728
7	h	0.43	0/524	0.84	0/713
8	I	0.48	0/311	0.80	0/419
8	i	0.48	0/311	0.79	0/419
9	J	0.46	0/278	0.73	0/376
9	j	0.45	0/286	0.79	0/386
10	K	0.48	0/303	0.85	0/416
10	k	0.49	0/303	0.86	0/416
11	L	0.55	0/319	0.74	0/433
11	l	0.51	0/319	0.68	0/433
12	M	0.62	0/270	1.11	2/368 (0.5%)
12	m	0.61	0/262	1.01	2/357 (0.6%)
13	O	0.47	0/1958	0.78	0/2654
13	o	0.45	0/1937	0.82	2/2625 (0.1%)
14	T	0.57	0/266	0.78	0/362
14	t	0.60	0/266	0.77	0/362
15	U	0.50	0/785	0.76	0/1064
15	u	0.48	0/785	0.74	0/1064
16	V	0.49	0/1109	0.79	0/1502

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.46	0/1098	0.83	1/1488 (0.1%)
17	Y	0.48	0/216	0.82	0/289
17	y	0.46	0/216	0.80	0/289
18	X	0.47	0/290	0.77	0/392
18	x	0.46	0/284	0.76	0/384
19	Z	0.39	0/490	0.77	0/669
19	z	0.40	0/490	0.83	0/669
20	R	0.34	0/245	0.70	0/338
All	All	0.50	0/44392	0.82	26/60384 (0.0%)

There are no bond length outliers.

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	d	170	ALA	CA-C-N	-6.88	112.90	119.85
4	d	170	ALA	C-N-CA	-6.88	112.90	119.85
4	d	160	TYR	CA-C-N	-6.44	113.05	119.56
4	d	160	TYR	C-N-CA	-6.44	113.05	119.56
4	d	262	SER	N-CA-C	-6.22	106.66	114.56
12	m	17	VAL	CA-C-N	-5.74	112.67	119.84
12	m	17	VAL	C-N-CA	-5.74	112.67	119.84
2	B	48	SER	CA-C-N	-5.67	117.29	122.28
2	B	48	SER	C-N-CA	-5.67	117.29	122.28
12	M	9	ILE	N-CA-C	-5.58	105.08	110.72
3	c	333	GLY	CA-C-N	5.56	125.65	119.32
3	c	333	GLY	C-N-CA	5.56	125.65	119.32
1	A	83	VAL	N-CA-C	5.53	113.39	108.63
4	D	170	ALA	CA-C-N	-5.48	114.28	119.76
4	D	170	ALA	C-N-CA	-5.48	114.28	119.76
13	o	55	GLU	CA-C-N	5.47	126.24	120.11
13	o	55	GLU	C-N-CA	5.47	126.24	120.11
12	M	13	LEU	N-CA-C	-5.33	105.64	111.82
16	v	105	ARG	N-CA-C	5.28	116.72	111.07
1	a	110	GLY	O-C-N	5.13	122.92	121.07
4	D	262	SER	N-CA-C	-5.12	107.70	114.31
2	b	170	ASP	CA-C-N	-5.09	114.57	119.87
2	b	170	ASP	C-N-CA	-5.09	114.57	119.87
2	b	163	GLY	CA-C-N	5.09	124.78	119.64
2	b	163	GLY	C-N-CA	5.09	124.78	119.64
1	a	83	VAL	N-CA-C	5.09	113.00	108.63

There are no chirality outliers.

There are no planarity outliers.

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	3024	0	2877	41	0
1	a	3020	0	2883	36	0
2	B	4021	0	3898	64	0
2	b	4022	0	3908	45	0
3	C	3553	0	3474	39	0
3	c	3641	0	3569	33	0
4	D	2849	0	2741	46	0
4	d	2849	0	2741	35	0
5	E	668	0	658	15	0
5	e	670	0	664	12	0
6	F	275	0	282	8	0
6	f	257	0	269	5	0
7	H	519	0	545	14	0
7	h	511	0	532	8	0
8	I	314	0	328	2	0
8	i	314	0	328	5	0
9	J	272	0	279	2	0
9	j	280	0	291	2	0
10	K	293	0	305	7	0
10	k	293	0	305	6	0
11	L	309	0	327	10	0
11	l	309	0	327	4	0
12	M	274	0	299	13	0
12	m	269	0	288	6	0
13	O	1903	0	1886	22	0
13	o	1891	0	1870	23	0
14	T	264	0	267	6	0
14	t	264	0	267	5	0
15	U	774	0	773	3	0
15	u	774	0	773	7	0
16	V	1085	0	1095	4	0
16	v	1077	0	1082	16	0
17	Y	215	0	246	6	0
17	y	215	0	246	6	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
18	X	287	0	317	5	0
18	x	281	0	312	2	0
19	Z	479	0	516	7	0
19	z	479	0	516	12	0
20	R	239	0	262	5	0
21	A	2	0	0	0	0
21	a	1	0	0	0	0
22	A	4	0	0	0	0
22	U	1	0	0	0	0
22	a	4	0	0	0	0
22	v	1	0	0	0	0
23	A	260	0	288	17	0
23	B	1040	0	1152	44	0
23	C	845	0	936	40	0
23	D	130	0	144	5	0
23	a	195	0	216	9	0
23	b	1040	0	1152	35	0
23	c	845	0	936	40	0
23	d	195	0	216	6	0
24	A	40	0	56	1	0
24	B	120	0	168	11	0
24	C	40	0	56	2	0
24	D	40	0	56	5	0
24	H	40	0	56	3	0
24	K	80	0	112	8	0
24	T	40	0	56	5	0
24	Y	40	0	56	5	0
24	a	40	0	56	2	0
24	b	120	0	168	7	0
24	c	80	0	112	6	0
24	d	40	0	56	3	0
24	h	40	0	56	5	0
24	k	80	0	112	5	0
24	t	40	0	56	6	0
25	A	108	0	156	7	0
25	B	54	0	78	1	0
25	F	43	0	53	2	0
25	L	54	0	78	2	0
25	a	108	0	156	1	0
25	f	43	0	53	4	0
26	A	12	0	16	1	0
26	B	36	0	48	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	C	12	0	16	1	0
26	D	6	0	8	2	0
26	F	6	0	8	0	0
26	O	6	0	8	0	0
26	T	12	0	16	4	0
26	V	30	0	40	0	0
26	a	12	0	16	1	0
26	b	30	0	40	1	0
26	c	18	0	24	2	0
26	f	6	0	8	1	0
26	t	6	0	8	1	0
26	v	18	0	24	2	0
27	A	35	0	46	2	0
27	C	35	0	46	2	0
27	D	35	0	46	0	0
27	F	35	0	46	1	0
27	M	105	0	138	6	0
27	T	25	0	35	1	0
27	a	70	0	92	4	0
27	b	25	0	35	1	0
27	e	35	0	46	0	0
27	m	35	0	46	2	0
27	t	25	0	35	0	0
28	A	10	0	0	0	0
28	a	10	0	0	0	0
29	A	11	0	0	1	0
29	a	11	0	0	1	0
30	A	110	0	160	7	0
30	D	110	0	160	5	0
30	a	110	0	160	16	0
30	d	110	0	160	3	0
31	A	28	0	0	0	0
31	B	33	0	0	0	0
31	D	57	0	0	0	0
31	I	40	0	0	0	0
31	J	10	0	0	0	0
31	K	34	0	0	0	0
31	M	10	0	0	0	0
31	X	18	0	0	0	0
31	a	30	0	0	0	0
31	b	33	0	0	0	0
31	c	32	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	d	71	0	0	0	0
31	i	40	0	0	0	0
31	j	10	0	0	0	0
31	m	10	0	0	0	0
32	B	1	0	0	0	0
32	C	1	0	0	0	0
32	F	1	0	0	0	0
32	O	1	0	0	0	0
32	b	1	0	0	0	0
32	c	2	0	0	0	0
32	f	1	0	0	0	0
32	o	1	0	0	0	0
33	B	76	0	104	2	0
33	C	38	0	52	1	0
33	D	16	0	17	3	0
33	V	19	0	26	1	0
33	b	95	0	130	3	0
33	c	38	0	52	1	0
33	d	16	0	17	2	0
33	o	19	0	26	2	0
34	B	62	0	82	2	0
34	C	186	0	246	9	0
34	D	52	0	71	5	0
34	c	186	0	246	4	0
34	d	62	0	82	6	0
34	h	62	0	82	1	0
35	C	153	0	216	7	0
35	D	51	0	72	2	0
35	M	51	0	72	3	0
35	Z	37	0	44	2	0
35	a	51	0	72	3	0
35	b	51	0	72	6	0
35	c	102	0	144	1	0
35	d	51	0	72	2	0
35	z	39	0	48	7	0
36	D	8	0	0	0	0
36	d	8	0	0	0	0
37	D	192	0	222	7	0
37	a	64	0	74	0	0
37	d	128	0	148	4	0
38	D	147	0	222	13	0
38	E	42	0	57	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
38	L	49	0	74	2	0
38	a	42	0	57	5	0
38	b	49	0	74	3	0
38	d	147	0	222	6	0
39	F	43	0	30	2	0
39	e	43	0	30	3	0
40	J	1	0	0	0	0
40	j	1	0	0	0	0
41	V	43	0	30	0	0
41	v	43	0	30	0	0
42	A	172	0	0	4	0
42	B	290	0	0	2	0
42	C	222	0	0	2	0
42	D	150	0	0	1	0
42	E	35	0	0	0	0
42	F	11	0	0	0	0
42	H	40	0	0	0	0
42	I	6	0	0	0	0
42	J	10	0	0	0	0
42	K	9	0	0	1	0
42	L	16	0	0	0	0
42	M	23	0	0	0	0
42	O	182	0	0	3	0
42	T	17	0	0	1	0
42	U	79	0	0	2	0
42	V	124	0	0	0	0
42	X	10	0	0	1	0
42	Y	4	0	0	0	0
42	Z	1	0	0	0	0
42	a	155	0	0	2	0
42	b	262	0	0	5	0
42	c	209	0	0	0	0
42	d	145	0	0	1	0
42	e	18	0	0	0	0
42	f	7	0	0	1	0
42	h	44	0	0	0	0
42	i	4	0	0	0	0
42	j	7	0	0	0	0
42	k	7	0	0	1	0
42	l	8	0	0	0	0
42	m	13	0	0	1	0
42	o	154	0	0	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
42	t	16	0	0	0	0
42	u	93	0	0	3	0
42	v	80	0	0	0	0
42	x	6	0	0	0	0
42	y	2	0	0	0	0
All	All	55697	0	54238	747	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 7.

All (747) 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)
1:A:214[A]:MET:HG2	30:A:416[A]:PL9:H102	1.48	0.93
29:A:415[B]:OEY:O6	29:A:415[B]:OEY:O5	1.90	0.89
29:a:418[B]:OEY:O6	29:a:418[B]:OEY:O5	1.89	0.88
26:D:404:GOL:H11	12:M:1:FME:HG2	1.61	0.81
35:a:415:LMG:H221	34:c:519:DGD:HA82	1.62	0.80
23:c:509:CLA:HHC	23:c:509:CLA:HBB1	1.65	0.79
16:v:71:GLY:HA2	26:v:201:GOL:H31	1.63	0.78
38:d:411:LHG:H342	38:d:411:LHG:H151	1.66	0.77
23:C:504:CLA:HBB1	23:C:513:CLA:H41	1.66	0.77
23:C:506:CLA:CMD	23:C:508:CLA:HAB	2.16	0.75
23:C:514:CLA:H171	24:K:101:BCR:H373	1.69	0.75
2:b:491:VAL:HG12	4:d:136:VAL:HG13	1.66	0.75
23:c:509:CLA:CMD	23:c:511:CLA:HAB	2.17	0.75
23:b:614:CLA:HHC	23:b:614:CLA:HBB1	1.67	0.75
13:o:74[B]:GLU:OE1	42:o:401:HOH:O	2.05	0.74
23:B:615:CLA:H18	35:M:101:LMG:H421	1.71	0.73
24:t:102:BCR:HC8	24:t:102:BCR:H321	1.71	0.72
4:d:85:MET:HE1	4:d:96:GLU:HG2	1.72	0.72
26:D:404:GOL:O2	42:D:501:HOH:O	2.07	0.72
23:c:517:CLA:HHC	23:c:517:CLA:HBB1	1.70	0.71
16:v:78:ASN:OD1	16:v:96:ARG:NH1	2.23	0.71
23:B:616:CLA:H71	23:B:617:CLA:H192	1.73	0.71
4:d:192:THR:HG23	23:d:404:CLA:HBC2	1.73	0.70
24:d:406:BCR:H313	34:d:408:DGD:HA91	1.74	0.70
1:A:214[B]:MET:HG2	30:A:416[B]:PL9:H102	1.73	0.69
1:a:215[A]:HIS:ND1	30:a:416[A]:PL9:O1	2.24	0.69
23:c:509:CLA:HMD3	23:c:511:CLA:HAB	1.74	0.69
2:b:248:ALA:HA	23:b:612:CLA:H42	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:214[A]:MET:HG2	30:a:416[A]:PL9:H102	1.73	0.69
13:o:180:GLU:OE2	42:o:402:HOH:O	2.10	0.69
4:d:279:LEU:HD22	37:d:402[B]:PHO:HBC3	1.76	0.68
23:b:624:CLA:H2	23:b:625:CLA:HBB2	1.77	0.67
35:C:501:LMG:H211	34:C:516:DGD:HA62	1.76	0.67
3:c:225:VAL:HG13	3:c:289:PHE:HA	1.77	0.67
30:a:416[A]:PL9:H262	38:a:420:LHG:H171	1.75	0.66
16:V:96:ARG:HH21	33:V:207:HTG:H6'1	1.59	0.66
35:b:629:LMG:O2	42:b:701:HOH:O	2.12	0.66
4:D:24:ARG:HD3	18:X:37:VAL:HG22	1.77	0.66
35:b:629:LMG:H421	38:b:634:LHG:H372	1.78	0.65
3:C:286:ALA:HB2	23:C:503:CLA:HMD1	1.76	0.65
6:f:45:ARG:OXT	42:f:201:HOH:O	2.14	0.65
23:c:512:CLA:HBC3	23:c:514:CLA:H71	1.79	0.65
12:m:6:LEU:HD11	27:m:102:LMT:H11	1.78	0.64
35:C:501:LMG:H221	34:C:516:DGD:HAE1	1.79	0.64
3:c:148:GLY:O	3:c:156:LYS:NZ	2.28	0.64
23:B:617:CLA:HED2	23:B:617:CLA:H43	1.79	0.64
38:a:420:LHG:HC31	5:e:9:PRO:HA	1.78	0.64
23:C:506:CLA:HMD3	23:C:508:CLA:HAB	1.79	0.63
2:B:454:ALA:HB2	35:M:101:LMG:H172	1.79	0.63
4:D:103:ARG:NH1	4:D:106:GLN:OE1	2.30	0.63
1:a:183:MET:HA	23:a:409:CLA:HMD1	1.81	0.63
23:B:615:CLA:H42	27:M:105:LMT:H61	1.80	0.63
2:B:2:GLY:N	11:L:11:GLU:OE2	2.32	0.63
25:L:102:SQD:H1	25:L:102:SQD:H462	1.81	0.63
13:O:27:ARG:NH1	13:O:202:ALA:O	2.32	0.63
3:c:320:ARG:HB2	26:c:502:GOL:H32	1.81	0.62
26:b:604:GOL:H11	16:v:51:SER:HA	1.80	0.62
11:L:13:ASN:ND2	11:L:16:SER:H	1.98	0.62
1:a:221[B]:SER:HB2	4:d:139:ARG:O	1.99	0.62
4:D:202:ALA:HB2	30:D:409[B]:PL9:H353	1.81	0.61
35:c:522:LMG:H181	10:k:27:VAL:HG11	1.81	0.61
3:C:167:VAL:HG13	23:C:513:CLA:H71	1.81	0.61
3:c:279:LEU:HD22	23:c:513:CLA:HED2	1.81	0.61
11:L:13:ASN:HD22	11:L:16:SER:H	1.47	0.61
2:B:341:LYS:HA	2:B:405[A]:GLU:HG2	1.83	0.61
23:c:507:CLA:HBB1	23:c:507:CLA:HHC	1.82	0.61
2:B:248:ALA:HA	23:B:604:CLA:H42	1.83	0.60
12:M:33:GLN:HB2	12:m:33:GLN:HB2	1.83	0.60
30:a:416[A]:PL9:H28	38:a:420:LHG:H222	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:v:95:LEU:HD11	16:v:112:LEU:HD11	1.84	0.60
13:O:204:VAL:HG22	13:O:211:ILE:HG22	1.82	0.60
1:A:183:MET:HA	23:A:404:CLA:HMD1	1.83	0.60
4:D:157:PHE:CE2	4:D:171:PRO:HG2	2.36	0.60
2:b:383:PHE:CZ	13:o:167:GLY:HA2	2.37	0.60
1:a:307[B]:ILE:HG22	1:a:313:VAL:HA	1.83	0.59
27:a:419:LMT:O4'	42:a:501:HOH:O	2.16	0.59
23:B:616:CLA:H61	23:B:617:CLA:HBB1	1.83	0.59
1:A:267[B]:ASN:HB3	1:A:270:SER:HB3	1.85	0.59
3:c:213[B]:LEU:HD11	24:c:518:BCR:H373	1.84	0.59
23:C:514:CLA:HBB1	24:K:101:BCR:H24C	1.85	0.59
23:B:615:CLA:H93	27:M:105:LMT:H112	1.83	0.59
23:c:505:CLA:C4D	23:c:507:CLA:H2	2.33	0.59
2:B:171:PRO:HD3	7:H:66:GLY:HA2	1.83	0.59
33:D:416:HTG:H1	7:H:25:TRP:CD1	2.38	0.59
4:d:123:ILE:HD11	34:h:102:DGD:HAH1	1.85	0.58
14:T:25[A]:GLU:HG3	26:T:101:GOL:H2	1.83	0.58
23:A:407:CLA:H172	23:C:507:CLA:H142	1.85	0.58
2:b:86[A]:ILE:HD12	2:b:88:PRO:HD3	1.85	0.58
23:C:511:CLA:H192	23:C:511:CLA:HBC3	1.84	0.58
1:A:19:ASN:OD1	42:A:501:HOH:O	2.17	0.58
4:D:205:LEU:HD13	37:D:402:PHO:HAB	1.85	0.58
23:C:513:CLA:HMB3	23:C:513:CLA:H172	1.86	0.58
26:f:101:GOL:H11	16:v:27:LEU:HD21	1.86	0.58
4:D:192:THR:HG23	23:D:406:CLA:HBC2	1.85	0.57
3:C:48:LYS:HG3	3:C:138:GLU:HG3	1.85	0.57
1:a:240:GLY:HA3	14:t:29:ILE:HG23	1.87	0.57
35:a:415:LMG:H242	23:c:509:CLA:H92	1.87	0.57
4:d:24:ARG:HD3	18:x:37:VAL:HG22	1.86	0.57
2:B:224:ARG:HD3	7:H:25:TRP:CD2	2.40	0.57
1:a:72:LEU:HD11	27:a:404:LMT:H52	1.86	0.57
2:b:389:LYS:NZ	42:b:709:HOH:O	2.36	0.57
2:b:216:HIS:HE1	23:b:618:CLA:C1A	2.17	0.57
2:B:501:ASP:OD1	18:X:39:ARG:NH2	2.38	0.56
5:E:30:LEU:HD23	20:R:12:VAL:HG22	1.86	0.56
13:o:58:ASN:HD21	13:o:61:GLN:HB2	1.69	0.56
2:B:30:VAL:HG12	23:B:606:CLA:HHD	1.86	0.56
23:a:410:CLA:HMD3	4:d:182:LEU:HD11	1.86	0.56
23:A:406:CLA:HMD3	4:D:182:LEU:HD11	1.87	0.56
2:B:216:HIS:HE1	23:B:610:CLA:C1A	2.18	0.56
1:a:84:PRO:HA	1:a:112:TYR:CG	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:101:PHE:HB3	34:d:408:DGD:HG2	1.86	0.56
24:B:619:BCR:H363	24:t:102:BCR:H19C	1.88	0.56
33:d:414:HTG:H1	7:h:25:TRP:CD1	2.41	0.56
17:Y:22:LEU:HA	17:Y:25:ILE:HG22	1.88	0.56
5:E:26:THR:HB	39:F:102:HEM:HAB	1.87	0.56
10:k:11:LEU:HD11	10:k:22:VAL:HG21	1.88	0.56
23:C:510:CLA:HMB1	23:C:510:CLA:HBB1	1.88	0.55
23:c:508:CLA:H201	38:d:411:LHG:H352	1.88	0.55
1:a:271:LEU:HD11	30:a:416[A]:PL9:HC8	1.88	0.55
23:b:610:CLA:H193	24:h:101:BCR:H353	1.89	0.55
4:d:325:ILE:O	4:d:329:MET:HB3	2.06	0.55
2:B:348:ASN:HB3	2:B:354:LEU:HD11	1.89	0.55
30:A:416[A]:PL9:H512	25:F:104:SQD:H301	1.89	0.55
23:D:407:CLA:H171	18:X:15:LEU:HD13	1.87	0.55
2:b:160:GLY:HA3	2:b:180:PRO:HB3	1.89	0.55
3:C:279:LEU:HD22	23:C:510:CLA:HED2	1.87	0.55
10:k:20:PRO:HB3	17:y:21:GLN:HG3	1.87	0.55
6:f:41:GLN:OE1	9:j:30:GLY:HA3	2.06	0.55
23:C:512:CLA:H41	17:Y:39:LEU:HD13	1.89	0.55
6:f:28:VAL:HB	6:f:29:PRO:HD3	1.88	0.55
25:A:409:SQD:O7	3:C:28:GLN:NE2	2.40	0.55
2:B:243:ALA:HA	2:B:246:PHE:CE2	2.42	0.55
2:B:25:MET:HG2	24:B:618:BCR:H23C	1.88	0.55
2:B:162:PHE:O	23:B:607:CLA:HHD	2.07	0.55
8:I:2:GLU:O	8:I:6:ILE:HG12	2.06	0.55
1:A:84:PRO:HA	1:A:112:TYR:CG	2.42	0.54
23:B:607:CLA:H191	24:B:620:BCR:H363	1.87	0.54
23:B:613:CLA:CMB	23:B:615:CLA:HBB1	2.36	0.54
6:F:21:VAL:O	6:F:25:THR:HG23	2.07	0.54
12:m:3:VAL:HG11	14:t:2:GLU:HG2	1.89	0.54
9:J:17:GLY:HA3	24:Y:101:BCR:H371	1.89	0.54
3:c:215:LYS:NZ	3:c:226:SER:OG	2.30	0.54
2:B:195:PRO:HD2	7:H:65:LEU:HD11	1.90	0.54
13:o:193:THR:HG21	13:o:220:LEU:HD12	1.89	0.54
2:B:12:LEU:HB2	23:B:613:CLA:HMC2	1.90	0.54
23:c:506:CLA:H61	23:c:516:CLA:H42	1.90	0.54
23:c:516:CLA:O2D	23:c:517:CLA:HBB2	2.08	0.54
2:B:190:PHE:CZ	23:B:603:CLA:HBB1	2.43	0.54
23:b:613:CLA:HMD1	23:b:621:CLA:H203	1.90	0.54
24:T:103:BCR:HC8	24:T:103:BCR:H311	1.90	0.53
19:z:9:LEU:HD13	19:z:54:VAL:HG11	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:T:102:GOL:H2	27:m:102:LMT:H6D	1.89	0.53
15:U:51:LYS:NZ	42:U:301:HOH:O	2.24	0.53
3:c:203:THR:HG21	3:c:208:VAL:HG11	1.89	0.53
2:b:98:LEU:HD13	33:b:601:HTG:H7'1	1.90	0.53
23:C:511:CLA:H43	38:D:413:LHG:H383	1.90	0.53
23:c:513:CLA:HBB1	23:c:513:CLA:HMB1	1.91	0.53
3:c:139:THR:OG1	3:c:142:GLU:OE2	2.23	0.53
2:B:70:GLY:HA2	2:B:178:VAL:HG21	1.91	0.53
23:C:507:CLA:HMC2	23:C:508:CLA:H102	1.91	0.53
30:a:416[A]:PL9:HC2	30:a:416[A]:PL9:H103	1.91	0.53
34:d:408:DGD:HB71	34:d:408:DGD:HBW2	1.91	0.53
23:C:502:CLA:C4D	23:C:504:CLA:H2	2.39	0.53
13:O:193:THR:HG21	13:O:220:LEU:HD12	1.91	0.53
1:a:121[A]:LEU:HD11	23:c:509:CLA:H152	1.91	0.53
2:b:224:ARG:HD3	7:h:25:TRP:CE2	2.43	0.53
30:a:416[B]:PL9:H512	25:f:102:SQD:H302	1.91	0.53
19:z:37:LYS:NZ	35:z:101:LMG:HC4	2.23	0.53
3:c:223:TRP:CG	3:c:224:ILE:H	2.27	0.53
2:b:224:ARG:HD3	7:h:25:TRP:CD2	2.45	0.52
19:Z:3:ILE:O	19:Z:7:LEU:HB2	2.09	0.52
2:B:224:ARG:NH1	4:D:16:ASP:OD2	2.43	0.52
3:c:348:GLU:OE1	13:o:11:VAL:HA	2.09	0.52
2:B:314:TYR:CE2	2:B:316:GLY:HA3	2.45	0.52
13:o:204:VAL:HG22	13:o:211:ILE:HG22	1.92	0.52
1:A:160:ILE:HD11	34:C:516:DGD:HBT2	1.90	0.52
2:B:76[A]:SER:OG	33:o:301:HTG:O6	2.28	0.52
20:R:6:LEU:O	20:R:10:LEU:HB2	2.09	0.52
3:c:213[A]:LEU:HG	23:c:510:CLA:H202	1.91	0.52
4:d:40:CYS:HB3	4:d:117:HIS:O	2.10	0.52
2:B:190:PHE:HZ	23:B:603:CLA:HBB1	1.75	0.52
38:a:420:LHG:H262	38:a:420:LHG:HC61	1.91	0.52
3:C:464:GLU:OE2	4:D:245:SER:OG	2.28	0.52
26:T:101:GOL:H12	42:T:206[B]:HOH:O	2.10	0.52
1:a:192:ILE:HG13	1:a:293:MET:HE1	1.91	0.52
19:z:5:PHE:HD2	19:z:57:LEU:HB3	1.74	0.52
34:C:517:DGD:HB51	35:C:519:LMG:H392	1.90	0.52
13:O:58:ASN:HB3	42:b:908[B]:HOH:O	2.10	0.52
3:c:464:GLU:OE2	4:d:245:SER:OG	2.28	0.52
38:D:413:LHG:H132	38:D:413:LHG:H372	1.92	0.51
15:u:51:LYS:NZ	42:u:204:HOH:O	2.42	0.51
4:d:136:VAL:HG12	4:d:138:VAL:HG13	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:42:LEU:HD21	23:C:512:CLA:H2A	1.91	0.51
13:o:19:CYS:SG	13:o:46:GLN:HB2	2.50	0.51
23:A:406:CLA:HED1	34:C:518:DGD:HAE2	1.92	0.51
2:B:49:ASP:OD1	13:o:57:LYS:NZ	2.33	0.51
2:B:405[B]:GLU:OE1	13:o:60:ARG:HD3	2.11	0.51
24:D:408:BCR:H313	34:D:410:DGD:HAE2	1.91	0.51
24:k:102:BCR:H321	24:k:102:BCR:HC8	1.92	0.51
12:M:18:PRO:O	12:M:21:PHE:HB3	2.11	0.51
3:c:443:TRP:CZ2	23:c:512:CLA:HMD1	2.46	0.51
23:A:405:CLA:HED1	30:D:409[B]:PL9:H362	1.91	0.51
15:U:47:LYS:NZ	42:U:307:HOH:O	2.44	0.51
23:b:611:CLA:H41	7:h:46:LEU:HA	1.93	0.51
25:a:405:SQD:H141	24:t:102:BCR:HC41	1.93	0.51
6:F:17:THR:HG22	25:F:104:SQD:H61	1.93	0.51
2:B:124:ARG:O	7:H:12[A]:ARG:NH1	2.39	0.50
2:B:379:ALA:HA	2:B:390:TYR:HB3	1.94	0.50
3:C:443:TRP:CZ2	23:C:509:CLA:HMD1	2.46	0.50
16:v:69:ILE:O	16:v:73:VAL:HG23	2.10	0.50
1:A:72:LEU:HD13	27:A:413:LMT:H11	1.93	0.50
5:E:27:ILE:HB	5:E:28:PRO:HD3	1.93	0.50
25:A:412:SQD:H272	2:b:109:LEU:HD13	1.93	0.50
27:A:413:LMT:H71	2:b:39:LEU:HD13	1.93	0.50
2:b:379:ALA:HA	2:b:390:TYR:HB3	1.91	0.50
2:b:464:PHE:CZ	38:d:409:LHG:H252	2.47	0.50
19:z:37:LYS:HZ2	35:z:101:LMG:HC4	1.76	0.50
1:A:238[A]:LYS:NZ	42:A:509:HOH:O	2.42	0.50
5:E:40:THR:HB	20:R:4:ARG:HG2	1.93	0.50
10:k:23:ASP:OD2	17:y:21:GLN:NE2	2.44	0.50
16:v:87:GLU:CD	16:v:96:ARG:HH12	2.20	0.50
3:C:223:TRP:CG	3:C:224:ILE:H	2.30	0.50
23:c:517:CLA:H61	24:c:527:BCR:H281	1.92	0.50
1:A:63:ILE:HB	3:C:335:THR:HG21	1.94	0.50
6:F:28:VAL:HB	6:F:29:PRO:HD3	1.92	0.50
10:K:15:TYR:OH	19:Z:58:ASN:ND2	2.44	0.50
2:b:243:ALA:HA	2:b:246:PHE:CD2	2.47	0.50
5:e:60:GLN:HG2	5:e:61:ARG:N	2.26	0.50
33:b:607:HTG:O2	33:b:608:HTG:S1	2.59	0.50
17:y:22:LEU:HA	17:y:25:ILE:HG22	1.93	0.50
23:C:513:CLA:H101	23:C:514:CLA:H141	1.93	0.50
7:h:38:PHE:HB2	24:h:101:BCR:C10	2.42	0.50
2:B:36[A]:SER:OG	24:B:619:BCR:H362	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:K:20:PRO:HG2	17:Y:20:ALA:HB3	1.94	0.49
25:A:409:SQD:H291	23:C:509:CLA:H71	1.94	0.49
38:D:413:LHG:H132	38:D:413:LHG:H352	1.94	0.49
38:b:634:LHG:H112	4:d:273:PHE:CE2	2.47	0.49
30:d:407[A]:PL9:H411	11:l:29:LEU:HD23	1.92	0.49
2:b:243:ALA:HA	2:b:246:PHE:CE2	2.48	0.49
23:B:603:CLA:H171	34:B:632:DGD:HA72	1.94	0.49
1:a:72:LEU:HD22	27:a:404:LMT:O2'	2.12	0.49
24:b:626:BCR:H12C	35:b:629:LMG:C43	2.42	0.49
1:A:93:PHE:CD1	1:A:95:PRO:HD3	2.48	0.49
2:B:480[A]:SER:OG	42:B:701:HOH:O	2.19	0.49
23:B:604:CLA:H192	23:B:610:CLA:H152	1.95	0.49
12:M:5:GLN:NE2	42:m:201:HOH:O	2.45	0.49
1:a:317:TRP:CZ3	4:d:180:ARG:HD2	2.47	0.49
13:O:39:ARG:HH22	13:O:98:GLU:CD	2.21	0.49
17:y:23:THR:O	17:y:27:MET:HG3	2.12	0.49
23:C:509:CLA:HBC3	23:C:511:CLA:H71	1.94	0.49
12:M:27:VAL:HG12	12:m:28:GLN:HB3	1.94	0.49
15:u:58:VAL:HG12	15:u:79:LEU:HD22	1.94	0.49
25:A:412:SQD:H442	42:A:655:HOH:O	2.13	0.49
23:B:608:CLA:H2	35:M:101:LMG:H152	1.95	0.49
2:b:461:LEU:HD22	38:d:409:LHG:H301	1.95	0.49
35:b:629:LMG:O5	42:b:702:HOH:O	2.20	0.49
3:c:127:PHE:CE1	35:z:101:LMG:H152	2.48	0.49
3:c:75:PHE:CZ	3:c:105:VAL:HG21	2.48	0.49
10:K:25:LEU:HD22	24:Y:101:BCR:H332	1.95	0.48
18:X:29:ILE:O	18:X:33:GLN:HG2	2.13	0.48
1:a:214[B]:MET:HG2	30:a:416[B]:PL9:H102	1.94	0.48
19:z:47:TRP:CE3	35:z:101:LMG:H221	2.48	0.48
1:A:238[A]:LYS:HG2	14:T:30:THR:HG21	1.94	0.48
30:a:416[B]:PL9:H262	38:a:420:LHG:H171	1.94	0.48
2:b:138:MET:HE3	23:b:624:CLA:CHD	2.42	0.48
23:B:606:CLA:C14	23:B:611:CLA:HED2	2.44	0.48
15:u:92:VAL:HG12	15:u:97:ARG:HD2	1.95	0.48
16:v:73:VAL:HG12	16:v:77:LYS:HE3	1.95	0.48
23:c:509:CLA:H43	24:c:518:BCR:HC7	1.95	0.48
42:K:204:HOH:O	19:Z:62:VAL:HG22	2.13	0.48
16:V:126:LEU:HB3	16:V:129:LYS:HB2	1.94	0.48
30:a:416[A]:PL9:H512	25:f:102:SQD:H302	1.95	0.48
2:b:458:PHE:HB3	23:b:613:CLA:HBC2	1.95	0.48
3:c:429:SER:HA	34:c:520:DGD:HBW1	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:f:21:VAL:O	6:f:25:THR:HG23	2.13	0.48
13:o:224:ASP:HB3	13:o:227:ALA:HB3	1.94	0.48
3:C:218:PHE:CE2	35:C:501:LMG:H111	2.48	0.48
23:a:410:CLA:H91	35:d:416:LMG:H212	1.95	0.48
23:b:612:CLA:H3A	23:b:612:CLA:CGA	2.43	0.48
23:c:505:CLA:C3D	23:c:507:CLA:H2	2.43	0.48
24:B:620:BCR:H331	24:B:620:BCR:C8	2.42	0.48
12:M:20:VAL:HG22	12:m:20:VAL:HG11	1.95	0.48
17:Y:32:GLY:HA3	24:Y:101:BCR:C15	2.44	0.48
1:a:145:VAL:O	1:a:148:SER:OG	2.20	0.48
23:b:616:CLA:H42	35:b:629:LMG:H311	1.95	0.48
23:A:404:CLA:CBD	23:A:405:CLA:HAC2	2.44	0.48
2:B:243:ALA:HA	2:B:246:PHE:CD2	2.49	0.48
4:D:14:TRP:CD1	33:D:416:HTG:HO6	2.32	0.47
15:u:86:GLU:HG2	42:u:289:HOH:O	2.14	0.47
3:C:161:LEU:HD11	23:C:507:CLA:HBB1	1.96	0.47
3:C:334:PRO:HA	13:O:153:THR:OG1	2.14	0.47
34:C:517:DGD:HAW1	34:C:518:DGD:HBE1	1.96	0.47
4:D:273:PHE:CZ	38:L:101:LHG:H112	2.49	0.47
1:a:217[B]:SER:O	1:a:221[B]:SER:HB3	2.14	0.47
23:b:612:CLA:CAD	23:b:614:CLA:H12	2.45	0.47
24:t:102:BCR:HC7	24:t:102:BCR:H331	1.68	0.47
23:B:616:CLA:H2	23:B:617:CLA:HBB2	1.95	0.47
13:O:61:GLN:HG2	13:O:62:GLU:N	2.28	0.47
13:O:69:LYS:HD3	42:O:521:HOH:O	2.13	0.47
23:b:617:CLA:HAB	4:d:123:ILE:HG12	1.96	0.47
3:c:286:ALA:HB2	23:c:506:CLA:HMD1	1.95	0.47
23:B:608:CLA:C4A	23:B:608:CLA:HBA2	2.44	0.47
3:C:45:LEU:HD22	3:C:138:GLU:HG2	1.96	0.47
24:D:408:BCR:HC22	34:D:410:DGD:HA92	1.96	0.47
19:z:15:LEU:HD22	19:z:46:LEU:HD23	1.96	0.47
1:A:162:PRO:HB3	1:A:168[B]:PHE:HA	1.97	0.47
23:C:512:CLA:H111	19:Z:24:PRO:HB3	1.95	0.47
2:b:224:ARG:HH11	27:b:630:LMT:H1'	1.79	0.47
2:B:489:GLU:HB3	2:B:495:PHE:CD1	2.50	0.47
1:a:271:LEU:HD11	30:a:416[B]:PL9:HC8	1.95	0.47
23:c:509:CLA:HAA1	23:c:509:CLA:HBD	1.97	0.47
39:e:101:HEM:CAC	6:f:27:ALA:HB1	2.44	0.47
1:A:214[B]:MET:HG2	30:A:416[B]:PL9:C10	2.43	0.47
2:B:422:ARG:HH21	13:O:169:ASP:CG	2.23	0.47
3:C:433:LEU:HD22	23:C:503:CLA:HMC3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:186:GLN:HB2	23:d:404:CLA:HBC1	1.95	0.47
15:u:44:THR:OG1	16:v:83:ASP:OD2	2.20	0.47
2:B:491:VAL:HG12	4:D:136:VAL:HG13	1.97	0.47
27:C:521:LMT:H61	27:C:521:LMT:H32	1.65	0.47
23:c:512:CLA:H141	23:c:514:CLA:H203	1.97	0.47
2:B:172:TYR:OH	7:H:63:LYS:HE3	2.15	0.46
23:B:609:CLA:HAB	4:D:123:ILE:HG12	1.95	0.46
34:B:632:DGD:HAE1	4:D:123:ILE:HD11	1.97	0.46
24:C:515:BCR:H15C	24:C:515:BCR:H351	1.83	0.46
12:M:3:VAL:HG11	14:T:2:GLU:HG2	1.98	0.46
23:c:510:CLA:HBB1	23:c:510:CLA:HMB3	1.97	0.46
35:z:101:LMG:H302	35:z:101:LMG:H151	1.96	0.46
23:a:409:CLA:CBD	23:d:403:CLA:HAC2	2.46	0.46
2:b:42:LEU:HD13	2:b:94:GLU:HG3	1.98	0.46
34:d:408:DGD:HE3	34:d:408:DGD:HD4	1.96	0.46
23:A:406:CLA:H122	30:A:416[B]:PL9:H252	1.97	0.46
13:O:180:GLU:CD	13:O:180:GLU:H	2.23	0.46
1:a:229:GLU:HG3	1:a:230:THR:HG23	1.96	0.46
5:e:78:THR:O	5:e:82:GLN:HG3	2.16	0.46
15:u:76:ARG:NH2	42:u:201:HOH:O	2.30	0.46
23:b:622:CLA:OBD	23:b:623:CLA:HHC	2.16	0.46
2:B:224:ARG:HD3	7:H:25:TRP:CE2	2.51	0.46
4:D:199:MET:HG2	30:D:409[B]:PL9:H321	1.97	0.46
5:E:8:ARG:HD3	5:E:13:ILE:HG12	1.98	0.46
30:d:407[B]:PL9:H411	11:l:29:LEU:HD23	1.96	0.46
23:B:606:CLA:H62	23:B:606:CLA:H41	1.74	0.46
23:B:611:CLA:HHC	23:B:611:CLA:HBB1	1.98	0.46
3:C:137:PRO:HG3	23:C:514:CLA:HED3	1.98	0.46
23:C:509:CLA:H142	23:C:509:CLA:H111	1.71	0.46
24:H:101:BCR:H331	24:H:101:BCR:C8	2.45	0.46
10:K:28:ILE:HD11	17:Y:28:ILE:HD13	1.97	0.46
13:O:149:PRO:HB2	42:O:476:HOH:O	2.15	0.46
23:B:606:CLA:HHC	23:B:606:CLA:HBB1	1.98	0.46
1:a:85:SER:HA	1:a:109:GLY:HA3	1.98	0.46
3:c:363:GLY:O	3:c:367:GLU:HG2	2.16	0.46
2:B:422:ARG:O	2:B:425:ILE:HG12	2.16	0.46
23:B:606:CLA:HAA1	23:B:606:CLA:HBD	1.97	0.46
2:b:133:LEU:HB3	2:b:138:MET:SD	2.56	0.46
16:v:94:SER:HA	16:v:104:MET:HE2	1.98	0.46
34:C:517:DGD:HA62	34:C:517:DGD:HA31	1.59	0.45
2:b:216:HIS:CE1	23:b:618:CLA:NA	2.83	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:227:THR:HB	1:A:231:GLU:HG3	1.98	0.45
2:B:69:LEU:HD12	23:B:606:CLA:HBA1	1.98	0.45
2:B:226:TYR:HA	2:B:231:MET:HG3	1.98	0.45
3:C:330:SER:HB3	13:O:100:GLY:O	2.17	0.45
34:D:410:DGD:HA61	34:D:410:DGD:HB31	1.98	0.45
6:F:33:PHE:O	6:F:37:ILE:HG13	2.16	0.45
13:O:54:GLU:O	13:O:56:PRO:HD3	2.16	0.45
23:b:622:CLA:H18	38:d:409:LHG:H202	1.97	0.45
13:o:40:ILE:HD12	13:o:95:PHE:CD1	2.51	0.45
23:B:607:CLA:H151	23:B:617:CLA:H122	1.97	0.45
2:b:461:LEU:HD21	4:d:284:ILE:HD11	1.99	0.45
16:v:57:GLU:OE1	16:v:57:GLU:N	2.35	0.45
1:A:37:MET:HG3	1:A:122:GLY:O	2.16	0.45
23:C:503:CLA:H61	23:C:513:CLA:H42	1.98	0.45
24:H:101:BCR:H24C	24:H:101:BCR:H371	1.68	0.45
24:b:626:BCR:H24C	24:b:626:BCR:H371	1.79	0.45
3:c:334:PRO:HA	13:o:153:THR:OG1	2.17	0.45
3:c:406:SER:HA	3:c:420:VAL:HG23	1.98	0.45
4:d:83:ASN:ND2	4:d:166:SER:OG	2.50	0.45
3:C:73:ALA:HA	10:K:10:LYS:HA	1.98	0.45
34:D:410:DGD:O1B	34:D:410:DGD:O2D	2.33	0.45
17:Y:28:ILE:HG23	24:Y:101:BCR:H10C	1.99	0.45
3:c:60:ILE:HG22	23:c:507:CLA:HHD	1.99	0.45
3:c:158:THR:O	3:c:251:HIS:HB3	2.17	0.45
4:d:161:PRO:HG3	4:d:170:ALA:HB2	1.98	0.45
3:C:185:LEU:HB2	3:C:230:LEU:HD13	1.99	0.45
19:z:40:ILE:HG22	35:z:101:LMG:H121	1.99	0.45
1:A:214[B]:MET:HE2	1:A:255:PHE:CE1	2.52	0.45
3:C:344:SER:OG	3:C:348:GLU:OE2	2.34	0.45
23:a:412:CLA:H102	23:a:412:CLA:H61	1.75	0.45
1:A:240:GLY:HA3	14:T:29:ILE:HG23	1.98	0.45
23:B:605:CLA:H43	23:B:606:CLA:H2	1.98	0.45
3:C:203:THR:O	3:C:235:GLY:HA3	2.16	0.45
4:D:298:PHE:O	4:D:301:GLN:HB2	2.15	0.45
5:E:33:ALA:O	20:R:8:VAL:HG13	2.16	0.45
16:V:12:LEU:HD12	16:V:69:ILE:HB	1.99	0.45
3:c:151:TRP:HA	3:c:157:MET:HE3	1.99	0.45
16:v:71:GLY:CA	26:v:201:GOL:H31	2.43	0.45
23:A:406:CLA:H122	30:A:416[A]:PL9:H252	1.98	0.45
2:B:149:LEU:HD21	23:B:607:CLA:HBB2	1.99	0.45
2:B:461:LEU:HD22	38:D:411:LHG:H301	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:467:ILE:HG13	4:D:126:MET:HE1	1.98	0.45
11:L:13:ASN:ND2	11:L:16:SER:OG	2.50	0.45
35:Z:101:LMG:HC8	35:Z:101:LMG:H111	1.60	0.45
1:a:215[B]:HIS:ND1	30:a:416[B]:PL9:O1	2.44	0.45
2:b:201:HIS:HB2	23:b:611:CLA:CHB	2.47	0.45
23:d:403:CLA:H203	23:d:403:CLA:H162	1.78	0.45
5:e:77:GLU:O	5:e:81:GLU:HG2	2.16	0.45
16:v:109:GLU:O	16:v:113:VAL:HG23	2.16	0.45
23:A:406:CLA:H91	35:D:417:LMG:H221	1.99	0.44
23:c:510:CLA:HMC1	23:c:511:CLA:H102	1.98	0.44
24:D:408:BCR:C17	6:F:30:THR:HG23	2.47	0.44
5:E:27:ILE:CD1	39:F:102:HEM:HBC2	2.46	0.44
38:L:101:LHG:H311	12:M:21:PHE:CD2	2.52	0.44
1:a:188[A]:ALA:HB2	1:a:328:MET:HB2	1.99	0.44
23:a:412:CLA:H111	8:i:16:VAL:HG11	1.99	0.44
2:b:475:PHE:CD2	4:d:140:PRO:HG3	2.52	0.44
3:c:210:PHE:HD2	3:c:213[B]:LEU:HD12	1.82	0.44
3:c:373:ASN:HD21	26:c:528:GOL:H32	1.82	0.44
23:c:514:CLA:HED2	23:c:514:CLA:H2	1.99	0.44
1:A:136:ARG:O	8:I:32:PRO:HD3	2.17	0.44
1:A:243[B]:GLU:OE2	4:D:240[B]:ALA:HB1	2.17	0.44
1:A:307:ILE:HD13	1:A:313:VAL:HA	1.99	0.44
2:B:63:LEU:N	2:B:64:PRO:HD2	2.33	0.44
23:C:507:CLA:HBA2	23:C:508:CLA:H202	2.00	0.44
24:C:515:BCR:H11C	24:C:515:BCR:H341	1.87	0.44
4:D:259:ILE:HD11	38:D:412:LHG:H112	1.98	0.44
2:b:435[A]:GLU:OE1	42:b:703:HOH:O	2.21	0.44
23:b:624:CLA:H2	23:b:625:CLA:CBB	2.46	0.44
3:c:53:HIS:CB	23:c:516:CLA:HMD1	2.47	0.44
24:k:101:BCR:H24C	24:k:101:BCR:H371	1.66	0.44
1:A:221[A]:SER:HB2	4:D:139:ARG:O	2.18	0.44
23:B:603:CLA:H111	23:B:603:CLA:H151	1.76	0.44
23:C:513:CLA:H161	23:C:513:CLA:H122	1.81	0.44
23:a:410:CLA:HMB2	23:d:404:CLA:H122	1.99	0.44
3:c:240:ILE:HD13	3:c:240:ILE:HA	1.87	0.44
23:c:515:CLA:HMB1	24:k:101:BCR:H382	1.98	0.44
24:h:101:BCR:H20C	24:h:101:BCR:H361	1.89	0.44
19:z:47:TRP:CE2	35:z:101:LMG:H241	2.53	0.44
1:A:230:THR:O	2:B:3:LEU:HD23	2.18	0.44
38:D:413:LHG:H112	38:D:413:LHG:H382	1.98	0.44
1:a:215[B]:HIS:HA	30:a:416[B]:PL9:HC71	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:b:614:CLA:C14	23:b:619:CLA:HED2	2.48	0.44
23:c:512:CLA:H162	23:c:512:CLA:H122	1.79	0.44
3:C:240:ILE:HD13	3:C:240:ILE:HA	1.84	0.44
3:C:459:ILE:HG21	3:C:464:GLU:HG3	2.00	0.44
23:C:514:CLA:CBB	24:K:101:BCR:H24C	2.48	0.44
4:D:161:PRO:HG3	4:D:170:ALA:HB2	1.99	0.44
13:O:138:THR:HG23	42:O:466:HOH:O	2.16	0.44
20:R:10:LEU:HB3	20:R:11:PRO:HD3	2.00	0.44
1:a:162:PRO:HB3	1:a:168[A]:PHE:HA	2.00	0.44
23:a:409:CLA:HMC3	23:a:409:CLA:HBC3	1.99	0.44
2:B:383:PHE:CZ	13:O:167:GLY:HA2	2.52	0.44
3:C:75:PHE:HZ	3:C:105:VAL:HG21	1.82	0.44
4:D:85:MET:HE1	4:D:96:GLU:HG2	1.99	0.44
11:L:9:PRO:HA	27:M:105:LMT:H6D	2.00	0.44
13:O:42:ARG:O	13:O:241:ALA:HA	2.18	0.44
13:O:79:ASP:OD2	13:O:80:GLN:N	2.45	0.44
24:b:626:BCR:H15C	24:b:626:BCR:H351	1.83	0.44
3:c:245:ILE:O	3:c:249:ILE:HG13	2.18	0.44
1:A:309:ALA:HB3	16:V:1:ALA:O	2.18	0.44
24:B:619:BCR:H15C	24:B:619:BCR:H351	1.84	0.44
7:H:38:PHE:HB2	24:H:101:BCR:C10	2.48	0.44
1:a:131:TRP:CH2	23:c:509:CLA:HAA2	2.52	0.44
2:b:363:PHE:HB3	2:b:365:SER:O	2.18	0.44
23:c:517:CLA:H171	24:c:527:BCR:H373	1.99	0.44
23:C:504:CLA:CBB	23:C:513:CLA:H41	2.44	0.44
3:c:165:LEU:HD21	23:c:510:CLA:HAB	1.98	0.44
4:d:51:GLY:HA3	4:d:78:VAL:HG22	1.99	0.44
5:e:10:PHE:HE2	39:e:101:HEM:HBD2	1.82	0.44
8:i:35:LYS:O	8:i:37:LEU:N	2.51	0.44
19:z:26:ALA:HB1	19:z:36:SER:HB3	2.00	0.44
23:A:405:CLA:HMB3	23:A:405:CLA:HBB1	2.00	0.43
2:B:458:PHE:HB3	23:B:605:CLA:HBC2	2.00	0.43
3:C:97:TRP:NE1	33:C:522:HTG:O2	2.40	0.43
4:D:148:ALA:HB3	4:D:149:PRO:HD3	2.00	0.43
1:a:63:ILE:HB	3:c:335:THR:HG21	1.99	0.43
2:b:231:MET:HE2	23:b:619:CLA:HMC2	2.00	0.43
4:d:110:LEU:HB2	42:d:579:HOH:O	2.18	0.43
1:A:60:ILE:HD12	1:A:84:PRO:HD2	2.01	0.43
1:A:187:GLN:HB2	23:A:404:CLA:HAC2	2.00	0.43
25:L:102:SQD:H62	11:l:7:ARG:NH1	2.33	0.43
2:b:496:TYR:OH	2:b:502:VAL:HG13	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:c:514:CLA:H161	23:c:514:CLA:H121	1.84	0.43
37:d:402[B]:PHO:ND	37:d:402[B]:PHO:NC	2.65	0.43
1:A:317:TRP:CZ3	4:D:180:ARG:HD2	2.54	0.43
4:D:102:THR:OG1	34:D:410:DGD:HG31	2.18	0.43
4:D:269:PHE:CD2	38:D:411:LHG:HC11	2.52	0.43
5:E:68:ASP:O	5:E:72:ALA:HB2	2.17	0.43
12:M:6:LEU:HD11	27:M:104:LMT:H32	1.99	0.43
12:M:28:GLN:O	12:M:32:GLN:HG3	2.17	0.43
27:M:102:LMT:H6D	11:l:9:PRO:HA	2.00	0.43
2:b:356:VAL:HG22	2:b:370:LEU:HD11	1.99	0.43
5:E:22:ILE:O	5:E:26:THR:HG23	2.18	0.43
1:a:179:THR:O	1:a:183:MET:HG3	2.19	0.43
1:a:267[B]:ASN:HB3	1:a:270[B]:SER:OG	2.18	0.43
26:a:401:GOL:H11	12:m:1:FME:HB3	2.00	0.43
30:a:416[A]:PL9:H171	30:a:416[A]:PL9:H151	1.70	0.43
23:b:618:CLA:HMD1	7:h:27:THR:HB	2.01	0.43
23:d:404:CLA:HBA2	23:d:404:CLA:H3A	1.85	0.43
34:d:408:DGD:HAW1	25:f:102:SQD:H382	2.00	0.43
8:i:2:GLU:O	8:i:6:ILE:HG12	2.18	0.43
1:A:188[A]:ALA:HB2	1:A:328:MET:HB2	2.00	0.43
38:D:412:LHG:H192	14:T:17:PHE:HZ	1.83	0.43
1:a:214[A]:MET:HE2	1:a:255:PHE:CE1	2.53	0.43
1:a:215[A]:HIS:HA	30:a:416[A]:PL9:HC71	2.00	0.43
14:t:25[A]:GLU:HG3	26:t:103:GOL:H2	2.01	0.43
16:v:62:ALA:HB2	16:v:82:TYR:CE1	2.53	0.43
19:z:29:SER:HA	19:z:30:PRO:HD3	1.84	0.43
1:A:29:TYR:O	1:A:129:ARG:NH2	2.41	0.43
2:B:414:PRO:HB2	2:B:415:PRO:HD3	2.01	0.43
35:C:501:LMG:H382	34:C:516:DGD:HB42	2.01	0.43
1:a:182:PHE:O	1:a:186:PHE:HB2	2.19	0.43
1:A:221[B]:SER:HB2	4:D:139:ARG:O	2.18	0.43
24:A:408:BCR:H11C	24:A:408:BCR:H341	1.93	0.43
24:D:408:BCR:H15C	24:D:408:BCR:H351	1.86	0.43
35:D:417:LMG:H292	35:D:417:LMG:H152	2.01	0.43
1:a:200:LEU:HG	34:c:521:DGD:HAT2	2.01	0.43
23:b:624:CLA:H92	23:b:624:CLA:H61	1.80	0.43
10:k:24:VAL:HG13	17:y:25:ILE:HD13	2.00	0.43
1:A:331:MET:SD	4:D:347:PRO:HB2	2.59	0.43
25:A:409:SQD:H251	38:D:413:LHG:H131	2.00	0.43
23:C:514:CLA:HBA1	23:C:514:CLA:H3A	1.79	0.43
24:D:408:BCR:H17C	6:F:30:THR:HG23	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:T:103:BCR:H19C	24:b:627:BCR:H363	2.01	0.43
3:c:437:PHE:CE1	23:c:514:CLA:HMB2	2.54	0.43
9:j:6:ARG:HA	9:j:6:ARG:NH2	2.34	0.43
13:o:216:GLU:CD	13:o:234:LYS:HD2	2.44	0.43
1:A:82:VAL:HG11	1:A:115:ILE:HD12	2.01	0.43
23:A:405:CLA:H203	23:A:405:CLA:H162	1.86	0.43
2:B:334:ASP:OD2	2:B:334:ASP:N	2.52	0.43
3:C:223:TRP:CE3	3:C:224:ILE:HG12	2.54	0.43
6:F:26:LEU:HD23	6:F:26:LEU:HA	1.81	0.43
23:b:622:CLA:HBB1	23:b:622:CLA:HMB1	2.01	0.43
3:c:38:GLY:HA3	23:c:515:CLA:HMD2	2.01	0.43
23:c:509:CLA:HMD2	23:c:511:CLA:HAB	1.98	0.43
5:e:27:ILE:HB	5:e:28:PRO:HD3	2.01	0.43
13:o:42:ARG:O	13:o:241:ALA:HA	2.18	0.43
1:A:132:GLU:O	1:A:136:ARG:HG2	2.19	0.42
23:C:506:CLA:HAA1	23:C:506:CLA:HBD	2.01	0.42
38:D:413:LHG:H112	38:D:413:LHG:C38	2.50	0.42
2:b:467:ILE:HG13	4:d:126:MET:HE1	2.01	0.42
5:e:23:HIS:CD2	39:e:101:HEM:NC	2.87	0.42
8:i:33:LYS:HB3	8:i:34:ARG:H	1.64	0.42
23:A:404:CLA:H152	37:D:402:PHO:H52	2.01	0.42
3:C:472:LEU:HD11	4:D:255:GLN:HG3	2.01	0.42
4:D:190:ASN:HB2	4:D:296:TYR:CD1	2.54	0.42
4:D:279:LEU:HD22	37:D:403[A]:PHO:HBC3	2.00	0.42
23:b:610:CLA:H93	23:b:610:CLA:H111	1.78	0.42
23:c:517:CLA:C4B	24:c:527:BCR:H383	2.48	0.42
37:d:402[A]:PHO:ND	37:d:402[A]:PHO:NC	2.67	0.42
1:A:120:LEU:HD23	1:A:120:LEU:HA	1.92	0.42
2:B:406:LEU:HD23	2:B:406:LEU:HA	1.82	0.42
23:B:606:CLA:H192	23:B:606:CLA:H162	1.81	0.42
6:F:42:PHE:CZ	27:F:101:LMT:H32	2.54	0.42
13:O:205:ASP:OD1	13:O:208:THR:HG23	2.20	0.42
24:T:103:BCR:H331	24:T:103:BCR:HC7	1.51	0.42
2:b:63:LEU:N	2:b:64:PRO:HD2	2.34	0.42
2:b:498:LYS:HD2	4:d:20:ASP:HA	2.01	0.42
23:b:622:CLA:H72	23:b:622:CLA:H111	1.88	0.42
23:b:623:CLA:HAA1	23:b:623:CLA:HBD	2.01	0.42
14:t:2:GLU:H	14:t:2:GLU:CD	2.27	0.42
1:A:162:PRO:HB3	1:A:168[A]:PHE:HA	2.01	0.42
3:C:339:LYS:NZ	15:U:99:ASN:O	2.49	0.42
9:J:7:ILE:HA	9:J:8:PRO:HD3	1.92	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Z:48:ILE:O	19:Z:52:LEU:HG	2.19	0.42
1:a:308:ASP:HA	42:a:515:HOH:O	2.19	0.42
35:a:415:LMG:H182	35:a:415:LMG:H152	1.83	0.42
2:b:7:ARG:HG2	23:b:620:CLA:O2D	2.20	0.42
13:o:180:GLU:H	13:o:180:GLU:CD	2.28	0.42
14:t:18:PHE:CD1	24:t:102:BCR:H343	2.54	0.42
1:A:272[A]:HIS:CD2	4:D:218:VAL:HG21	2.54	0.42
26:A:411:GOL:H32	5:E:63:ILE:HD11	2.01	0.42
2:B:483:ASP:HA	2:B:484:PRO:HD3	1.94	0.42
13:o:85:LEU:HD12	13:o:85:LEU:HA	1.79	0.42
7:H:33:VAL:O	7:H:37:LEU:HG	2.20	0.42
24:c:527:BCR:H20C	24:c:527:BCR:H361	1.94	0.42
4:d:49:LEU:HD13	24:d:406:BCR:C15	2.49	0.42
25:f:102:SQD:H311	18:x:24:THR:HA	2.01	0.42
1:A:283:VAL:HG21	37:D:402:PHO:HBC3	2.01	0.42
23:B:615:CLA:H112	23:B:615:CLA:H71	1.87	0.42
24:B:618:BCR:H11C	24:B:618:BCR:H341	1.86	0.42
3:C:376:ASP:HB3	3:C:379:LYS:HB2	2.02	0.42
35:C:519:LMG:H171	10:K:27:VAL:HG11	2.02	0.42
37:D:402:PHO:H141	37:D:402:PHO:H162	1.83	0.42
7:H:29:PRO:O	7:H:33:VAL:HG23	2.20	0.42
13:o:40:ILE:HB	13:o:95:PHE:CE1	2.55	0.42
2:B:124:ARG:HD2	2:B:129:GLY:O	2.20	0.42
2:B:266:GLU:HB3	26:B:627:GOL:H31	2.01	0.42
3:C:218:PHE:HE2	35:C:501:LMG:H111	1.84	0.42
37:D:403[B]:PHO:H61	23:D:406:CLA:H111	2.01	0.42
12:M:25:LEU:HD23	12:M:25:LEU:HA	1.80	0.42
24:a:413:BCR:H15C	24:a:413:BCR:H351	1.92	0.42
2:B:135:LEU:HB2	2:B:136:PRO:HD3	2.01	0.42
2:B:480[B]:SER:OG	42:B:702:HOH:O	2.21	0.42
24:B:619:BCR:H24C	24:B:619:BCR:H371	1.79	0.42
4:D:22:LEU:HD23	4:D:22:LEU:HA	1.92	0.42
13:O:43:LEU:HB3	13:O:81:ILE:HB	2.02	0.42
2:b:498:LYS:HA	4:d:24:ARG:HA	2.02	0.42
23:b:619:CLA:HHC	23:b:619:CLA:HBB1	2.01	0.42
24:k:101:BCR:H11C	24:k:101:BCR:H341	1.92	0.42
13:o:46:GLN:HA	13:o:47:PRO:HD2	1.95	0.42
23:B:604:CLA:H3A	23:B:604:CLA:CGA	2.50	0.42
23:C:514:CLA:H91	24:K:101:BCR:H23C	2.01	0.42
23:c:512:CLA:H203	23:c:512:CLA:H161	1.87	0.42
23:A:405:CLA:HED2	4:D:198:MET:SD	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:482:ILE:HD12	2:B:486:LEU:HD22	2.02	0.41
23:B:615:CLA:H8	24:B:618:BCR:H362	2.02	0.41
3:C:199:ILE:HG21	3:C:234:VAL:HG21	2.02	0.41
4:D:203:GLY:HA3	4:D:278:GLY:HA3	2.02	0.41
4:D:236[B]:ASN:HB3	4:D:239[B]:GLN:HB3	2.03	0.41
18:X:33:GLN:NE2	42:X:201:HOH:O	2.48	0.41
2:b:471:ALA:HB1	4:d:140:PRO:HG2	2.02	0.41
23:b:622:CLA:H13	35:b:629:LMG:H241	2.02	0.41
23:b:624:CLA:HBA1	23:b:624:CLA:H3A	1.85	0.41
24:t:102:BCR:H24C	24:t:102:BCR:H371	1.86	0.41
25:B:621:SQD:O8	11:L:7:ARG:HD3	2.19	0.41
23:C:502:CLA:H201	23:C:508:CLA:H13	2.02	0.41
5:E:60:GLN:HG2	5:E:61:ARG:N	2.35	0.41
23:b:612:CLA:HBB1	23:b:612:CLA:H51	2.02	0.41
1:A:211[B]:PHE:CD2	30:A:416[B]:PL9:H112	2.56	0.41
3:C:56:HIS:CE1	3:C:60:ILE:HD11	2.55	0.41
3:C:205:ASP:HA	3:C:206:PRO:HD2	1.92	0.41
38:D:411:LHG:H101	38:D:411:LHG:H362	2.02	0.41
12:M:6:LEU:HD23	12:M:6:LEU:HA	1.82	0.41
13:O:197:ILE:HG13	13:O:217[B]:SER:HB3	2.01	0.41
19:Z:29:SER:HA	19:Z:30:PRO:HD3	1.84	0.41
1:a:162:PRO:HB3	1:a:168[B]:PHE:HA	2.01	0.41
23:a:410:CLA:H203	35:d:416:LMG:H412	2.03	0.41
24:b:628:BCR:H20C	24:b:628:BCR:H361	1.91	0.41
2:B:121:GLU:HA	7:H:2:ALA:HB1	2.03	0.41
23:B:611:CLA:H92	23:B:611:CLA:H61	1.84	0.41
3:C:156:LYS:HE3	42:C:775:HOH:O	2.20	0.41
4:D:186:GLN:HB2	23:D:406:CLA:HBC1	2.02	0.41
5:E:60:GLN:HG2	5:E:62[A]:SER:H	1.86	0.41
7:H:43:LEU:O	7:H:47:GLU:HG3	2.21	0.41
1:A:161:TYR:CD1	1:A:294:ALA:HA	2.56	0.41
42:A:564:HOH:O	3:C:469:MET:HE2	2.20	0.41
23:B:604:CLA:H161	23:B:604:CLA:H141	1.74	0.41
4:D:85:MET:CE	4:D:96:GLU:HG2	2.51	0.41
24:a:413:BCR:H11C	24:a:413:BCR:H341	1.88	0.41
2:b:70:GLY:HA2	2:b:178:VAL:HG11	2.02	0.41
2:b:348:ASN:HB3	2:b:354:LEU:HD11	2.02	0.41
16:v:79:PRO:HD3	16:v:94:SER:HB3	2.02	0.41
2:B:58:GLN:C	2:B:329:PRO:HB3	2.45	0.41
2:B:363:PHE:HB3	2:B:365:SER:O	2.21	0.41
3:C:190:ALA:HA	3:C:191:PRO:HD3	1.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:300:SER:OG	11:L:37:ASN:OXT	2.33	0.41
7:H:25:TRP:O	7:H:28:THR:OG1	2.36	0.41
24:K:103:BCR:H15C	24:K:103:BCR:H351	1.95	0.41
11:L:20:GLY:O	11:L:24[B]:ILE:HG13	2.20	0.41
2:b:237:VAL:CG2	23:b:619:CLA:HBC2	2.51	0.41
2:b:393:GLU:HB3	15:u:18:GLY:CA	2.50	0.41
3:c:175:LEU:HD23	3:c:237:HIS:CG	2.55	0.41
34:c:520:DGD:HB32	34:c:520:DGD:HB61	1.63	0.41
42:k:201:HOH:O	19:z:62:VAL:HG22	2.19	0.41
13:o:86:LYS:HE2	13:o:96:VAL:HG21	2.02	0.41
2:B:185:TRP:CZ2	33:B:623:HTG:H2'2	2.55	0.41
2:B:475:PHE:CG	4:D:140:PRO:HD3	2.55	0.41
24:B:618:BCR:H24C	24:B:618:BCR:H371	1.83	0.41
23:C:512:CLA:HMB1	24:K:103:BCR:H382	2.03	0.41
4:D:282:SER:OG	23:D:406:CLA:HED3	2.21	0.41
5:E:60:GLN:HG2	5:E:62[B]:SER:H	1.86	0.41
33:d:414:HTG:H1	7:h:25:TRP:CG	2.55	0.41
13:o:37:THR:HG22	13:o:246:ALA:HB3	2.01	0.41
17:y:35:ILE:HG23	19:z:25:VAL:HG23	2.03	0.41
23:A:406:CLA:H3A	23:A:406:CLA:HBA1	1.85	0.41
2:B:172:TYR:CE1	2:B:283:GLU:HB2	2.56	0.41
23:B:608:CLA:HAA1	23:B:608:CLA:HBD	2.03	0.41
23:C:506:CLA:H101	23:C:506:CLA:H61	1.89	0.41
4:D:129:GLN:NE2	37:D:403[B]:PHO:OBD	2.54	0.41
27:a:404:LMT:H6E	33:o:301:HTG:O4	2.21	0.41
2:b:483:ASP:HA	2:b:484:PRO:HD3	1.88	0.41
16:v:126:LEU:HB3	16:v:129:LYS:HB2	2.02	0.41
1:A:161:TYR:HB3	1:A:162:PRO:HD3	2.02	0.41
1:A:297:LEU:HD23	34:C:517:DGD:HBH1	2.01	0.41
2:B:162:PHE:HD1	23:B:607:CLA:HAC2	1.86	0.41
23:C:513:CLA:H41	23:C:513:CLA:H62	1.90	0.41
4:D:78:VAL:HG11	4:D:114:ILE:HD12	2.03	0.41
4:D:291:LEU:O	4:D:292:ASN:HB2	2.20	0.41
13:O:164:LEU:HB2	13:O:188:LYS:HB2	2.03	0.41
14:T:20:ALA:O	14:T:24:ARG:HB3	2.21	0.41
26:T:102:GOL:O2	27:T:104:LMT:O1'	2.35	0.41
1:a:223[B]:LEU:HD22	4:d:265:ARG:HG2	2.03	0.41
2:b:8:VAL:HG23	2:b:9:HIS:CD2	2.56	0.41
24:b:627:BCR:C8	24:b:627:BCR:H331	2.50	0.41
24:b:627:BCR:H15C	24:b:627:BCR:H351	1.88	0.41
38:b:634:LHG:H161	38:b:634:LHG:H191	1.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:c:514:CLA:H41	38:d:411:LHG:H383	2.03	0.41
4:d:293:LEU:HD12	4:d:293:LEU:HA	1.76	0.41
5:e:37:PHE:HD1	5:e:42:LEU:HD23	1.84	0.41
24:h:101:BCR:H331	24:h:101:BCR:C8	2.50	0.41
10:k:17:ILE:HD13	10:k:17:ILE:H	1.85	0.41
24:k:102:BCR:H15C	24:k:102:BCR:H351	1.80	0.41
23:A:406:CLA:H203	23:A:406:CLA:H161	1.80	0.41
2:B:116:VAL:HG21	24:B:620:BCR:H292	2.02	0.41
23:B:602:CLA:H91	23:B:602:CLA:H111	1.78	0.41
3:C:25:ASN:O	3:C:41:ARG:HD3	2.21	0.41
4:D:156:VAL:HG12	4:D:171:PRO:HG3	2.03	0.41
30:D:409[A]:PL9:H471	30:D:409[A]:PL9:H43	1.90	0.41
38:D:412:LHG:H141	11:L:22:LEU:HD21	2.02	0.41
24:K:101:BCR:H15C	24:K:101:BCR:H351	1.86	0.41
13:O:15:LEU:HD23	13:O:15:LEU:HA	1.92	0.41
2:b:185:TRP:CZ2	33:b:632:HTG:H2'1	2.55	0.41
23:b:616:CLA:HBA2	23:b:616:CLA:C4A	2.51	0.41
23:A:404:CLA:HBD	23:A:405:CLA:HAC2	2.03	0.40
25:A:409:SQD:H152	25:A:409:SQD:H122	1.82	0.40
25:A:409:SQD:H302	10:K:37:PHE:CZ	2.57	0.40
23:B:610:CLA:HBA1	23:B:610:CLA:H3A	1.96	0.40
26:C:524:GOL:H2	42:C:666:HOH:O	2.20	0.40
38:D:412:LHG:H341	24:T:103:BCR:HC21	2.03	0.40
7:h:41:PHE:HB2	24:h:101:BCR:C15	2.51	0.40
2:B:298:LEU:HD12	2:B:298:LEU:HA	1.96	0.40
23:C:507:CLA:H62	27:C:521:LMT:H92	2.02	0.40
24:K:101:BCR:H20C	24:K:101:BCR:H361	1.87	0.40
24:Y:101:BCR:H15C	24:Y:101:BCR:H351	1.86	0.40
30:a:416[B]:PL9:H171	30:a:416[B]:PL9:H151	1.62	0.40
23:b:624:CLA:HHC	23:b:624:CLA:HBB1	2.03	0.40
2:B:157:HIS:HA	2:B:163:GLY:HA3	2.04	0.40
23:B:615:CLA:C9	27:M:105:LMT:H112	2.51	0.40
3:C:437:PHE:CZ	23:C:511:CLA:HMB3	2.56	0.40
4:D:60:THR:OG1	4:D:61:HIS:HD2	2.05	0.40
33:D:416:HTG:H1'2	7:H:25:TRP:CD2	2.56	0.40
5:E:36:LEU:HA	5:E:39:SER:OG	2.21	0.40
12:M:1:FME:HE2	12:M:1:FME:HB2	1.95	0.40
23:b:623:CLA:H41	23:b:623:CLA:H62	1.65	0.40
4:d:85:MET:HE2	4:d:90:LEU:HD21	2.04	0.40
4:d:279:LEU:HD21	37:d:402[B]:PHO:HMC2	2.03	0.40
24:d:406:BCR:H15C	24:d:406:BCR:H351	1.97	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:d:408:DGD:HBT2	5:e:47:PHE:HZ	1.86	0.40
13:o:51:LEU:HD23	13:o:67:PRO:HA	2.03	0.40
2:B:420:TYR:CE1	33:B:622:HTG:H1'1	2.56	0.40
30:D:409[B]:PL9:H411	11:L:29:LEU:HD23	2.03	0.40
24:T:103:BCR:H11C	24:T:103:BCR:H341	1.78	0.40
1:a:93:PHE:CD1	1:a:95:PRO:HD3	2.57	0.40
1:a:214[B]:MET:HE2	1:a:255:PHE:CE1	2.56	0.40
2:b:58:GLN:C	2:b:329:PRO:HB3	2.47	0.40
4:d:78:VAL:HG11	4:d:114:ILE:HD12	2.04	0.40
4:d:84:SER:O	5:e:69:ARG:HB2	2.21	0.40
4:d:104:TRP:NE1	4:d:109:GLY:HA3	2.36	0.40
30:d:407[B]:PL9:H172	30:d:407[B]:PL9:H13	1.89	0.40
8:i:36:ASP:OD1	8:i:36:ASP:N	2.47	0.40
13:o:40:ILE:HG12	13:o:243:ILE:HD13	2.02	0.40
2:B:321:LYS:HE3	2:B:321:LYS:HB3	1.81	0.40
23:B:617:CLA:H111	23:B:617:CLA:H152	1.78	0.40
3:C:212:TYR:CE1	3:C:227:VAL:HA	2.57	0.40
19:Z:40:ILE:HG22	35:Z:101:LMG:H121	2.03	0.40
23:c:506:CLA:H192	33:c:524:HTG:H2'2	2.03	0.40
5:e:13:ILE:O	5:e:16:SER:HB3	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	385/344 (112%)	378 (98%)	6 (2%)	1 (0%)	36	55
1	a	385/344 (112%)	377 (98%)	7 (2%)	1 (0%)	36	55
2	B	512/505 (101%)	506 (99%)	6 (1%)	0	100	100
2	b	513/505 (102%)	498 (97%)	14 (3%)	1 (0%)	43	63

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	C	461/455 (101%)	446 (97%)	13 (3%)	2 (0%)	30	49
3	c	473/455 (104%)	455 (96%)	16 (3%)	2 (0%)	30	49
4	D	355/342 (104%)	344 (97%)	11 (3%)	0	100	100
4	d	355/342 (104%)	345 (97%)	10 (3%)	0	100	100
5	E	81/84 (96%)	78 (96%)	3 (4%)	0	100	100
5	e	81/84 (96%)	79 (98%)	2 (2%)	0	100	100
6	F	32/44 (73%)	31 (97%)	1 (3%)	0	100	100
6	f	30/44 (68%)	30 (100%)	0	0	100	100
7	H	64/65 (98%)	60 (94%)	4 (6%)	0	100	100
7	h	63/65 (97%)	57 (90%)	6 (10%)	0	100	100
8	I	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
8	i	36/38 (95%)	33 (92%)	2 (6%)	1 (3%)	4	6
9	J	36/39 (92%)	35 (97%)	1 (3%)	0	100	100
9	j	37/39 (95%)	34 (92%)	3 (8%)	0	100	100
10	K	35/37 (95%)	35 (100%)	0	0	100	100
10	k	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100
11	l	36/37 (97%)	36 (100%)	0	0	100	100
12	M	33/36 (92%)	33 (100%)	0	0	100	100
12	m	32/36 (89%)	32 (100%)	0	0	100	100
13	O	249/244 (102%)	239 (96%)	10 (4%)	0	100	100
13	o	246/244 (101%)	236 (96%)	10 (4%)	0	100	100
14	T	29/32 (91%)	29 (100%)	0	0	100	100
14	t	29/32 (91%)	29 (100%)	0	0	100	100
15	U	95/104 (91%)	92 (97%)	3 (3%)	0	100	100
15	u	95/104 (91%)	91 (96%)	4 (4%)	0	100	100
16	V	136/137 (99%)	131 (96%)	5 (4%)	0	100	100
16	v	135/137 (98%)	129 (96%)	6 (4%)	0	100	100
17	Y	27/30 (90%)	25 (93%)	2 (7%)	0	100	100
17	y	27/30 (90%)	25 (93%)	2 (7%)	0	100	100
18	X	37/40 (92%)	36 (97%)	1 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	x	36/40 (90%)	34 (94%)	2 (6%)	0	100	100
19	Z	60/62 (97%)	57 (95%)	3 (5%)	0	100	100
19	z	60/62 (97%)	57 (95%)	2 (3%)	1 (2%)	7	13
20	R	28/34 (82%)	27 (96%)	1 (4%)	0	100	100
All	All	5431/5384 (101%)	5261 (97%)	161 (3%)	9 (0%)	48	63

All (9) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416[A]	SER
3	C	416[B]	SER
2	b	127	ARG
3	c	416[A]	SER
3	c	416[B]	SER
19	z	30	PRO
8	i	36	ASP
1	a	259	ILE
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	312/279 (112%)	312 (100%)	0	100	100
1	a	312/279 (112%)	311 (100%)	1 (0%)	86	94
2	B	412/403 (102%)	407 (99%)	5 (1%)	63	83
2	b	413/403 (102%)	405 (98%)	8 (2%)	50	76
3	C	361/356 (101%)	354 (98%)	7 (2%)	50	76
3	c	371/356 (104%)	361 (97%)	10 (3%)	39	67
4	D	290/277 (105%)	288 (99%)	2 (1%)	76	89
4	d	290/277 (105%)	288 (99%)	2 (1%)	76	89

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	E	74/73 (101%)	73 (99%)	1 (1%)	59	81
5	e	74/73 (101%)	73 (99%)	1 (1%)	59	81
6	F	28/38 (74%)	28 (100%)	0	100	100
6	f	26/38 (68%)	25 (96%)	1 (4%)	29	56
7	H	55/54 (102%)	54 (98%)	1 (2%)	51	77
7	h	54/54 (100%)	54 (100%)	0	100	100
8	I	34/34 (100%)	33 (97%)	1 (3%)	37	65
8	i	34/34 (100%)	33 (97%)	1 (3%)	37	65
9	J	26/27 (96%)	26 (100%)	0	100	100
9	j	27/27 (100%)	26 (96%)	1 (4%)	30	57
10	K	30/30 (100%)	29 (97%)	1 (3%)	33	61
10	k	30/30 (100%)	28 (93%)	2 (7%)	15	31
11	L	36/35 (103%)	34 (94%)	2 (6%)	19	39
11	l	36/35 (103%)	35 (97%)	1 (3%)	38	66
12	M	31/32 (97%)	28 (90%)	3 (10%)	8	17
12	m	30/32 (94%)	28 (93%)	2 (7%)	15	31
13	O	214/207 (103%)	209 (98%)	5 (2%)	44	72
13	o	211/207 (102%)	205 (97%)	6 (3%)	38	66
14	T	27/28 (96%)	25 (93%)	2 (7%)	13	27
14	t	27/28 (96%)	25 (93%)	2 (7%)	13	27
15	U	84/89 (94%)	80 (95%)	4 (5%)	23	46
15	u	84/89 (94%)	80 (95%)	4 (5%)	23	46
16	V	119/117 (102%)	118 (99%)	1 (1%)	73	88
16	v	118/117 (101%)	115 (98%)	3 (2%)	42	69
17	Y	22/23 (96%)	20 (91%)	2 (9%)	9	19
17	y	22/23 (96%)	20 (91%)	2 (9%)	9	19
18	X	32/33 (97%)	32 (100%)	0	100	100
18	x	31/33 (94%)	31 (100%)	0	100	100
19	Z	52/52 (100%)	47 (90%)	5 (10%)	8	17
19	z	52/52 (100%)	48 (92%)	4 (8%)	12	25
20	R	25/29 (86%)	23 (92%)	2 (8%)	11	24

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	4506/4403 (102%)	4411 (98%)	95 (2%)	47 74

All (95) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	79	SER
2	B	84	THR
2	B	86	ILE
2	B	467	ILE
2	B	492	GLU
3	C	28	GLN
3	C	142	GLU
3	C	255	THR
3	C	279	LEU
3	C	281	MET
3	C	289	PHE
3	C	315	MET
4	D	90	LEU
4	D	329	MET
5	E	63	ILE
7	H	65	LEU
8	I	33	LYS
10	K	27	VAL
11	L	13	ASN
11	L	15	THR
12	M	5	GLN
12	M	9	ILE
12	M	20	VAL
13	O	4	THR
13	O	34	SER
13	O	69	LYS
13	O	181[A]	GLU
13	O	181[B]	GLU
14	T	25[A]	GLU
14	T	25[B]	GLU
15	U	8	GLU
15	U	58	VAL
15	U	59	GLU
15	U	70	ARG
16	V	42	VAL
17	Y	24	MET
17	Y	30	ILE

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Mol	Chain	Res	Type
19	Z	3	ILE
19	Z	4	LEU
19	Z	6	GLN
19	Z	7	LEU
19	Z	34	ASP
20	R	4	ARG
20	R	6	LEU
1	a	12	ASN
2	b	14	ASN
2	b	36	SER
2	b	84	THR
2	b	121	GLU
2	b	240	SER
2	b	425	ILE
2	b	467	ILE
2	b	479	PHE
3	c	19	ASN
3	c	142	GLU
3	c	240	ILE
3	c	255	THR
3	c	279	LEU
3	c	289	PHE
3	c	416[A]	SER
3	c	416[B]	SER
3	c	462[A]	GLU
3	c	462[B]	GLU
4	d	136	VAL
4	d	329	MET
5	e	71	GLU
6	f	15	ILE
8	i	36	ASP
9	j	1	MET
10	k	10	LYS
10	k	17	ILE
11	l	15	THR
12	m	20	VAL
12	m	33	GLN
13	o	4	THR
13	o	23	ASP
13	o	37	THR
13	o	118	LEU
13	o	164	LEU

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Mol	Chain	Res	Type
13	o	194	LYS
14	t	25[A]	GLU
14	t	25[B]	GLU
15	u	44	THR
15	u	58	VAL
15	u	61	VAL
15	u	86	GLU
16	v	2	GLU
16	v	6	GLU
16	v	90	GLU
17	y	24	MET
17	y	30	ILE
19	z	7	LEU
19	z	29	SER
19	z	32	ASP
19	z	34	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (42) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	75	ASN
1	A	165	GLN
2	B	53	ASN
2	B	497	GLN
3	C	44	ASN
3	C	155	ASN
3	C	201	ASN
3	C	322	GLN
3	C	418	ASN
4	D	83	ASN
4	D	186	GLN
4	D	255	GLN
4	D	332	GLN
5	E	74	GLN
11	L	13	ASN
12	M	5	GLN
13	O	124	ASN
13	O	147	ASN
15	U	81	HIS
19	Z	31	GLN
19	Z	58	ASN

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Mol	Chain	Res	Type
1	a	12	ASN
1	a	165	GLN
1	a	315	ASN
2	b	53	ASN
2	b	331	ASN
2	b	490	GLN
2	b	497	GLN
3	c	155	ASN
3	c	373	ASN
4	d	83	ASN
4	d	186	GLN
4	d	332	GLN
13	o	82	GLN
13	o	124	ASN
13	o	130	GLN
13	o	147	ASN
15	u	78	ASN
15	u	81	HIS
16	v	86	GLN
19	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	$\# Z > 2$
12	FME	m	1	12	8,9,10	0.66	0	8,9,11	1.05	1 (12%)
8	FME	I	1	8	8,9,10	0.76	0	8,9,11	1.28	2 (25%)
14	FME	T	1	14	8,9,10	0.69	0	8,9,11	1.52	3 (37%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
14	FME	t	1	14	8,9,10	0.88	0	8,9,11	1.95	4 (50%)
8	FME	i	1	8	8,9,10	0.71	0	8,9,11	1.36	2 (25%)
12	FME	M	1	12	8,9,10	0.76	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
12	FME	m	1	12	-	3/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-
14	FME	T	1	14	-	0/7/9/11	-
14	FME	t	1	14	-	1/7/9/11	-
8	FME	i	1	8	-	0/7/9/11	-
12	FME	M	1	12	-	2/7/9/11	-

There are no bond length outliers.

All (13) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	t	1	FME	CA-N-CN	-3.11	118.04	122.82
14	T	1	FME	CA-N-CN	-2.72	118.64	122.82
14	t	1	FME	O-C-CA	-2.67	117.90	124.77
12	M	1	FME	CA-N-CN	-2.47	119.02	122.82
14	T	1	FME	O-C-CA	-2.34	118.74	124.77
8	i	1	FME	CA-N-CN	-2.22	119.41	122.82
14	t	1	FME	C-CA-N	2.21	113.76	109.50
8	i	1	FME	O-C-CA	-2.20	119.12	124.77
8	I	1	FME	O-C-CA	-2.18	119.16	124.77
14	t	1	FME	O1-CN-N	-2.16	119.75	125.32
12	m	1	FME	O-C-CA	-2.07	119.44	124.77
14	T	1	FME	C-CA-N	2.04	113.44	109.50
8	I	1	FME	CA-N-CN	-2.02	119.72	122.82

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	I	1	FME	O1-CN-N-CA

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Mol	Chain	Res	Type	Atoms
12	m	1	FME	O1-CN-N-CA
12	M	1	FME	CA-CB-CG-SD
12	m	1	FME	CA-CB-CG-SD
14	t	1	FME	CB-CA-N-CN
12	m	1	FME	N-CA-CB-CG
12	M	1	FME	CB-CA-N-CN

There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
12	m	1	FME	1	0
12	M	1	FME	2	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 266 ligands modelled in this entry, 24 are monoatomic and 18 are unknown - leaving 224 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	$\# Z > 2$
36	BCT	d	401[B]	21	3,3,3	0.52	0	2,3,3	0.85	0
23	CLA	B	612	-	69,73,73	2.02	20 (28%)	82,113,113	2.65	30 (36%)
23	CLA	b	613	-	69,73,73	2.04	20 (28%)	82,113,113	2.65	29 (35%)
25	SQD	A	412	-	52,54,54	0.97	2 (3%)	62,65,65	1.13	4 (6%)
27	LMT	F	101	-	36,36,36	0.50	0	47,47,47	1.01	2 (4%)
38	LHG	d	409	-	48,48,48	0.87	3 (6%)	51,54,54	1.02	5 (9%)
23	CLA	a	409	-	69,73,73	2.07	19 (27%)	82,113,113	2.67	31 (37%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
26	GOL	O	301	-	5,5,5	0.38	0	5,5,5	0.38	0
38	LHG	D	413	-	48,48,48	0.95	2 (4%)	51,54,54	1.16	5 (9%)
23	CLA	C	502	-	69,73,73	2.03	20 (28%)	82,113,113	2.69	30 (36%)
35	LMG	d	416	40	51,51,55	0.89	2 (3%)	59,59,63	1.11	6 (10%)
23	CLA	C	504	-	69,73,73	2.08	20 (28%)	82,113,113	2.65	30 (36%)
25	SQD	f	102	-	41,43,54	1.13	2 (4%)	51,54,65	1.41	7 (13%)
26	GOL	a	402	-	5,5,5	0.40	0	5,5,5	0.23	0
33	HTG	B	623	-	19,19,19	0.98	1 (5%)	23,24,24	1.79	4 (17%)
41	HEC	v	205	16	46,50,50	1.72	10 (21%)	58,82,82	1.67	11 (18%)
27	LMT	C	521	-	36,36,36	0.49	0	47,47,47	1.07	3 (6%)
27	LMT	D	405	-	36,36,36	0.46	0	47,47,47	1.01	1 (2%)
26	GOL	C	525	-	5,5,5	0.45	0	5,5,5	0.64	0
30	PL9	A	416[A]	-	55,55,55	0.64	2 (3%)	68,69,69	1.79	21 (30%)
24	BCR	B	619	-	41,41,41	1.03	1 (2%)	56,56,56	1.52	12 (21%)
26	GOL	T	101	-	5,5,5	0.44	0	5,5,5	0.20	0
38	LHG	a	420	-	41,41,48	1.02	2 (4%)	44,47,54	1.00	3 (6%)
33	HTG	B	622	-	19,19,19	0.80	1 (5%)	23,24,24	1.62	3 (13%)
37	PHO	D	403[A]	-	58,69,69	2.78	15 (25%)	55,99,99	2.92	15 (27%)
26	GOL	t	103	-	5,5,5	0.50	0	5,5,5	0.21	0
23	CLA	D	407	-	69,73,73	2.03	21 (30%)	82,113,113	2.68	32 (39%)
23	CLA	A	405	42	69,73,73	2.00	19 (27%)	82,113,113	2.81	32 (39%)
23	CLA	B	613	-	69,73,73	1.95	19 (27%)	82,113,113	2.66	30 (36%)
26	GOL	D	404	-	5,5,5	0.46	0	5,5,5	0.46	0
35	LMG	a	415	-	51,51,55	0.91	2 (3%)	59,59,63	1.19	6 (10%)
30	PL9	D	409[B]	-	55,55,55	0.66	2 (3%)	68,69,69	1.77	19 (27%)
30	PL9	A	416[B]	-	55,55,55	0.66	2 (3%)	68,69,69	1.80	22 (32%)
25	SQD	F	104	-	41,43,54	1.11	2 (4%)	51,54,65	1.60	10 (19%)
23	CLA	b	620	-	69,73,73	1.96	19 (27%)	82,113,113	2.61	32 (39%)
35	LMG	c	523	-	51,51,55	0.95	2 (3%)	59,59,63	1.23	7 (11%)
26	GOL	A	411	-	5,5,5	0.42	0	5,5,5	0.27	0
37	PHO	D	403[B]	-	58,69,69	2.82	14 (24%)	55,99,99	2.74	13 (23%)
38	LHG	D	412	-	48,48,48	0.92	3 (6%)	51,54,54	0.83	2 (3%)
23	CLA	C	506	-	69,73,73	2.01	19 (27%)	82,113,113	2.62	29 (35%)
24	BCR	K	103	-	41,41,41	1.04	1 (2%)	56,56,56	1.52	12 (21%)
24	BCR	T	103	-	41,41,41	1.03	1 (2%)	56,56,56	1.78	16 (28%)
27	LMT	m	102	-	36,36,36	0.47	0	47,47,47	1.06	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	LMT	A	413	-	36,36,36	0.57	1 (2%)	47,47,47	1.32	7 (14%)
38	LHG	D	411	-	48,48,48	0.88	2 (4%)	51,54,54	1.05	3 (5%)
36	BCT	d	401[A]	-	3,3,3	0.54	0	2,3,3	0.85	0
28	OEX	A	414[A]	1,42,3	0,15,15	-	-	-	-	-
24	BCR	d	406	-	41,41,41	1.10	1 (2%)	56,56,56	1.64	11 (19%)
23	CLA	d	403	42	69,73,73	2.03	18 (26%)	82,113,113	2.70	32 (39%)
23	CLA	B	602	42	69,73,73	2.05	21 (30%)	82,113,113	2.69	31 (37%)
33	HTG	b	601	-	19,19,19	0.96	1 (5%)	23,24,24	1.12	2 (8%)
34	DGD	D	410	-	52,52,67	1.04	3 (5%)	60,60,81	1.19	5 (8%)
26	GOL	B	627	-	5,5,5	0.44	0	5,5,5	0.48	0
38	LHG	L	101	-	48,48,48	0.92	2 (4%)	51,54,54	1.11	6 (11%)
34	DGD	C	517	-	63,63,67	0.89	2 (3%)	77,77,81	1.08	8 (10%)
23	CLA	c	515	3	69,73,73	1.96	20 (28%)	82,113,113	2.63	30 (36%)
26	GOL	v	202	-	5,5,5	0.38	0	5,5,5	0.42	0
35	LMG	M	101	-	51,51,55	0.92	2 (3%)	59,59,63	1.09	4 (6%)
25	SQD	L	102	-	52,54,54	0.98	2 (3%)	62,65,65	1.58	11 (17%)
26	GOL	B	628	-	5,5,5	0.38	0	5,5,5	0.37	0
23	CLA	c	506	-	69,73,73	2.04	19 (27%)	82,113,113	2.52	28 (34%)
26	GOL	B	633	-	5,5,5	0.42	0	5,5,5	0.47	0
35	LMG	D	417	40	51,51,55	0.93	2 (3%)	59,59,63	0.98	4 (6%)
23	CLA	B	607	-	69,73,73	2.01	19 (27%)	82,113,113	2.72	31 (37%)
26	GOL	b	605	-	5,5,5	0.39	0	5,5,5	0.30	0
23	CLA	c	507	-	69,73,73	2.00	20 (28%)	82,113,113	2.70	29 (35%)
25	SQD	A	409	-	52,54,54	0.92	2 (3%)	62,65,65	1.43	9 (14%)
33	HTG	B	630	-	19,19,19	0.97	2 (10%)	23,24,24	1.21	1 (4%)
24	BCR	c	518	-	41,41,41	1.04	1 (2%)	56,56,56	1.59	11 (19%)
33	HTG	D	416	-	16,16,19	0.99	2 (12%)	20,21,24	1.25	1 (5%)
25	SQD	a	405	-	52,54,54	1.01	2 (3%)	62,65,65	1.14	4 (6%)
26	GOL	T	102	-	5,5,5	0.41	0	5,5,5	0.32	0
23	CLA	C	508	42	69,73,73	2.00	20 (28%)	82,113,113	2.63	31 (37%)
26	GOL	V	202	-	5,5,5	0.39	0	5,5,5	0.43	0
37	PHO	D	402	-	58,69,69	2.73	13 (22%)	55,99,99	3.05	18 (32%)
23	CLA	c	511	42	69,73,73	2.04	18 (26%)	82,113,113	2.72	28 (34%)
23	CLA	C	511	-	69,73,73	2.11	20 (28%)	82,113,113	2.64	33 (40%)
30	PL9	D	409[A]	-	55,55,55	0.65	2 (3%)	68,69,69	1.67	19 (27%)
23	CLA	A	404	-	69,73,73	2.01	20 (28%)	82,113,113	2.70	32 (39%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	B	609	-	69,73,73	2.05	21 (30%)	82,113,113	2.60	33 (40%)
24	BCR	K	101	-	41,41,41	1.07	1 (2%)	56,56,56	1.46	8 (14%)
35	LMG	C	501	-	51,51,55	0.94	2 (3%)	59,59,63	1.17	7 (11%)
37	PHO	d	402[A]	-	58,69,69	2.76	13 (22%)	55,99,99	3.03	15 (27%)
23	CLA	b	621	-	69,73,73	1.99	20 (28%)	82,113,113	2.72	33 (40%)
27	LMT	M	104	-	36,36,36	0.55	0	47,47,47	1.01	3 (6%)
36	BCT	D	401[B]	21	3,3,3	0.51	0	2,3,3	0.93	0
25	SQD	a	414	-	52,54,54	0.92	2 (3%)	62,65,65	1.50	11 (17%)
38	LHG	d	411	-	48,48,48	0.93	2 (4%)	51,54,54	1.14	4 (7%)
33	HTG	c	525	-	19,19,19	0.93	2 (10%)	23,24,24	1.35	3 (13%)
23	CLA	B	614	-	69,73,73	2.05	19 (27%)	82,113,113	2.63	31 (37%)
23	CLA	b	617	-	69,73,73	2.05	19 (27%)	82,113,113	2.56	33 (40%)
24	BCR	B	620	-	41,41,41	1.08	1 (2%)	56,56,56	1.56	10 (17%)
23	CLA	c	516	-	69,73,73	2.04	20 (28%)	82,113,113	2.76	30 (36%)
23	CLA	b	612	-	69,73,73	2.00	20 (28%)	82,113,113	2.74	32 (39%)
24	BCR	B	618	-	41,41,41	1.06	1 (2%)	56,56,56	1.44	8 (14%)
26	GOL	v	201	-	5,5,5	0.39	0	5,5,5	0.32	0
33	HTG	C	522	-	19,19,19	0.92	2 (10%)	23,24,24	1.34	2 (8%)
35	LMG	b	629	-	51,51,55	0.91	2 (3%)	59,59,63	1.09	3 (5%)
37	PHO	d	402[B]	-	58,69,69	2.78	14 (24%)	55,99,99	2.91	15 (27%)
24	BCR	c	527	-	41,41,41	1.06	1 (2%)	56,56,56	1.64	10 (17%)
23	CLA	a	410	42	69,73,73	1.99	19 (27%)	82,113,113	2.70	32 (39%)
33	HTG	o	301	-	19,19,19	1.04	1 (5%)	23,24,24	1.24	1 (4%)
27	LMT	a	404	-	36,36,36	0.58	1 (2%)	47,47,47	1.24	5 (10%)
26	GOL	c	501	-	5,5,5	0.44	0	5,5,5	0.46	0
34	DGD	c	520	-	63,63,67	0.89	2 (3%)	77,77,81	1.00	4 (5%)
24	BCR	t	102	-	41,41,41	1.01	1 (2%)	56,56,56	1.59	14 (25%)
26	GOL	f	101	32	5,5,5	0.32	0	5,5,5	0.43	0
23	CLA	C	507	-	69,73,73	2.03	19 (27%)	82,113,113	2.56	30 (36%)
26	GOL	F	103	32	5,5,5	0.38	0	5,5,5	0.30	0
33	HTG	V	207	-	19,19,19	0.95	2 (10%)	23,24,24	1.30	4 (17%)
28	OEX	a	417[A]	1,42,3	0,15,15	-	-	-	-	-
33	HTG	b	608	-	19,19,19	0.99	2 (10%)	23,24,24	1.02	1 (4%)
23	CLA	A	406	42	69,73,73	1.97	20 (28%)	82,113,113	2.70	33 (40%)
23	CLA	B	606	-	69,73,73	2.03	20 (28%)	82,113,113	2.70	29 (35%)
23	CLA	b	619	42	69,73,73	2.02	21 (30%)	82,113,113	2.63	32 (39%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	DGD	d	408	-	63,63,67	0.95	3 (4%)	77,77,81	1.30	7 (9%)
27	LMT	M	105	-	36,36,36	0.48	0	47,47,47	0.89	1 (2%)
34	DGD	h	102	-	63,63,67	0.90	3 (4%)	77,77,81	0.98	6 (7%)
23	CLA	c	513	-	69,73,73	2.07	20 (28%)	82,113,113	2.68	31 (37%)
27	LMT	t	101	-	25,25,36	0.52	0	30,30,47	0.85	1 (3%)
24	BCR	a	413	-	41,41,41	1.10	1 (2%)	56,56,56	1.45	9 (16%)
23	CLA	C	503	-	69,73,73	2.02	20 (28%)	82,113,113	2.56	29 (35%)
24	BCR	C	515	-	41,41,41	1.05	1 (2%)	56,56,56	1.65	10 (17%)
33	HTG	B	629	-	19,19,19	0.94	1 (5%)	23,24,24	1.28	1 (4%)
23	CLA	c	517	-	69,73,73	2.05	20 (28%)	82,113,113	2.62	33 (40%)
39	HEM	F	102	6,5	50,50,50	1.55	6 (12%)	67,82,82	1.73	15 (22%)
23	CLA	B	617	-	69,73,73	1.99	19 (27%)	82,113,113	2.68	30 (36%)
24	BCR	Y	101	-	41,41,41	1.05	1 (2%)	56,56,56	1.69	11 (19%)
23	CLA	A	407	-	69,73,73	2.03	21 (30%)	82,113,113	2.70	35 (42%)
23	CLA	C	512	3	69,73,73	2.08	20 (28%)	82,113,113	2.62	29 (35%)
23	CLA	b	625	-	69,73,73	2.00	20 (28%)	82,113,113	2.71	29 (35%)
23	CLA	c	510	-	69,73,73	2.00	19 (27%)	82,113,113	2.62	33 (40%)
34	DGD	B	632	-	63,63,67	0.90	2 (3%)	77,77,81	1.10	6 (7%)
26	GOL	b	606	-	5,5,5	0.38	0	5,5,5	0.29	0
30	PL9	a	416[B]	-	55,55,55	0.65	2 (3%)	68,69,69	1.85	22 (32%)
26	GOL	V	201	-	5,5,5	0.37	0	5,5,5	0.31	0
26	GOL	b	602	-	5,5,5	0.39	0	5,5,5	0.65	0
38	LHG	E	101	-	41,41,48	1.03	2 (4%)	44,47,54	1.16	4 (9%)
36	BCT	D	401[A]	21	3,3,3	0.51	0	2,3,3	1.09	0
23	CLA	C	505	42	69,73,73	2.05	19 (27%)	82,113,113	2.66	32 (39%)
23	CLA	b	611	-	69,73,73	2.06	20 (28%)	82,113,113	2.65	31 (37%)
34	DGD	C	516	-	63,63,67	0.87	2 (3%)	77,77,81	1.11	6 (7%)
24	BCR	b	627	-	41,41,41	1.02	1 (2%)	56,56,56	1.31	7 (12%)
39	HEM	e	101	6,5	50,50,50	1.54	8 (16%)	67,82,82	1.61	12 (17%)
24	BCR	h	101	-	41,41,41	1.03	1 (2%)	56,56,56	1.42	8 (14%)
24	BCR	k	101	-	41,41,41	1.06	1 (2%)	56,56,56	1.68	12 (21%)
23	CLA	b	610	42	69,73,73	2.09	21 (30%)	82,113,113	2.62	30 (36%)
23	CLA	b	618	-	69,73,73	1.99	18 (26%)	82,113,113	2.71	31 (37%)
27	LMT	e	102	-	36,36,36	0.50	1 (2%)	47,47,47	0.81	0
35	LMG	C	519	-	51,51,55	0.96	2 (3%)	59,59,63	1.06	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	d	405	-	69,73,73	2.03	19 (27%)	82,113,113	2.69	33 (40%)
23	CLA	D	406	-	69,73,73	1.99	18 (26%)	82,113,113	2.76	30 (36%)
26	GOL	b	604	-	5,5,5	0.35	0	5,5,5	0.26	0
23	CLA	B	604	-	69,73,73	2.07	19 (27%)	82,113,113	2.69	30 (36%)
23	CLA	b	624	-	69,73,73	2.00	18 (26%)	82,113,113	2.64	31 (37%)
35	LMG	Z	101	-	37,37,55	0.98	3 (8%)	45,45,63	1.34	6 (13%)
35	LMG	z	101	-	39,39,55	1.09	2 (5%)	47,47,63	1.19	3 (6%)
23	CLA	B	603	-	69,73,73	2.03	20 (28%)	82,113,113	2.73	34 (41%)
26	GOL	B	626	-	5,5,5	0.39	0	5,5,5	0.51	0
38	LHG	b	634	-	48,48,48	0.95	2 (4%)	51,54,54	1.05	2 (3%)
33	HTG	b	607	-	19,19,19	0.94	1 (5%)	23,24,24	1.63	4 (17%)
30	PL9	d	407[B]	-	55,55,55	0.67	3 (5%)	68,69,69	1.67	20 (29%)
33	HTG	b	632	-	19,19,19	1.07	2 (10%)	23,24,24	1.87	5 (21%)
41	HEC	V	206	16	46,50,50	1.73	11 (23%)	58,82,82	1.77	15 (25%)
24	BCR	b	626	-	41,41,41	1.09	1 (2%)	56,56,56	1.56	9 (16%)
26	GOL	a	401	-	5,5,5	0.40	0	5,5,5	0.49	0
23	CLA	b	622	-	69,73,73	2.04	21 (30%)	82,113,113	2.62	31 (37%)
37	PHO	a	411	-	58,69,69	2.78	13 (22%)	55,99,99	2.79	16 (29%)
23	CLA	c	514	-	69,73,73	2.05	19 (27%)	82,113,113	2.65	31 (37%)
26	GOL	c	502	-	5,5,5	0.44	0	5,5,5	0.45	0
23	CLA	B	605	-	69,73,73	1.93	20 (28%)	82,113,113	2.60	29 (35%)
30	PL9	a	416[A]	-	55,55,55	0.63	2 (3%)	68,69,69	1.93	21 (30%)
23	CLA	B	616	-	69,73,73	2.04	19 (27%)	82,113,113	2.61	29 (35%)
35	LMG	C	520	-	51,51,55	0.97	2 (3%)	59,59,63	1.09	5 (8%)
23	CLA	d	404	-	69,73,73	1.97	19 (27%)	82,113,113	2.73	32 (39%)
24	BCR	b	628	-	41,41,41	1.07	2 (4%)	56,56,56	1.26	6 (10%)
33	HTG	d	414	-	16,16,19	1.09	2 (12%)	20,21,24	1.66	2 (10%)
23	CLA	b	616	42	69,73,73	2.01	20 (28%)	82,113,113	2.63	31 (37%)
23	CLA	B	608	42	69,73,73	1.99	19 (27%)	82,113,113	2.68	32 (39%)
23	CLA	B	610	-	69,73,73	2.03	18 (26%)	82,113,113	2.63	30 (36%)
23	CLA	C	513	-	69,73,73	2.05	20 (28%)	82,113,113	2.64	30 (36%)
23	CLA	c	505	-	69,73,73	1.97	19 (27%)	82,113,113	2.61	32 (39%)
24	BCR	H	101	-	41,41,41	1.11	1 (2%)	56,56,56	1.55	9 (16%)
26	GOL	B	625	-	5,5,5	0.42	0	5,5,5	0.52	0
27	LMT	b	630	-	25,25,36	0.53	0	30,30,47	0.63	0
29	OXY	a	418[B]	1,42,3	0,16,16	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	DGD	C	518	-	63,63,67	0.91	2 (3%)	77,77,81	1.02	7 (9%)
27	LMT	M	102	-	36,36,36	0.43	0	47,47,47	0.84	0
23	CLA	B	611	42	69,73,73	2.08	20 (28%)	82,113,113	2.71	34 (41%)
34	DGD	c	521	-	63,63,67	0.85	2 (3%)	77,77,81	1.06	3 (3%)
23	CLA	C	509	-	69,73,73	2.07	20 (28%)	82,113,113	2.68	29 (35%)
23	CLA	c	509	-	69,73,73	2.05	20 (28%)	82,113,113	2.60	31 (37%)
35	LMG	c	522	-	51,51,55	0.91	2 (3%)	59,59,63	1.18	5 (8%)
24	BCR	D	408	-	41,41,41	1.05	1 (2%)	56,56,56	1.79	11 (19%)
24	BCR	k	102	-	41,41,41	1.08	1 (2%)	56,56,56	1.72	12 (21%)
26	GOL	B	624	-	5,5,5	0.40	0	5,5,5	0.33	0
34	DGD	c	519	-	63,63,67	0.84	2 (3%)	77,77,81	1.10	6 (7%)
26	GOL	v	203	-	5,5,5	0.38	0	5,5,5	0.25	0
26	GOL	C	524	-	5,5,5	0.37	0	5,5,5	0.69	0
26	GOL	A	410	-	5,5,5	0.36	0	5,5,5	0.57	0
23	CLA	b	615	-	69,73,73	2.01	20 (28%)	82,113,113	2.72	29 (35%)
26	GOL	V	204	-	5,5,5	0.41	0	5,5,5	0.25	0
33	HTG	c	524	-	19,19,19	0.98	2 (10%)	23,24,24	1.47	2 (8%)
23	CLA	C	514	-	69,73,73	2.03	21 (30%)	82,113,113	2.61	31 (37%)
23	CLA	c	508	42	69,73,73	2.00	18 (26%)	82,113,113	2.72	32 (39%)
26	GOL	c	528	-	5,5,5	0.42	0	5,5,5	0.37	0
25	SQD	B	621	-	52,54,54	0.96	2 (3%)	62,65,65	1.33	6 (9%)
23	CLA	c	512	-	69,73,73	2.05	19 (27%)	82,113,113	2.63	32 (39%)
27	LMT	T	104	-	25,25,36	0.56	1 (4%)	30,30,47	0.97	1 (3%)
27	LMT	a	419	-	36,36,36	0.44	0	47,47,47	0.83	1 (2%)
30	PL9	d	407[A]	-	55,55,55	0.67	2 (3%)	68,69,69	1.55	13 (19%)
23	CLA	b	623	-	69,73,73	1.98	18 (26%)	82,113,113	2.74	31 (37%)
38	LHG	d	410	-	48,48,48	0.89	2 (4%)	51,54,54	0.97	3 (5%)
26	GOL	b	603	-	5,5,5	0.38	0	5,5,5	0.18	0
26	GOL	V	205	-	5,5,5	0.35	0	5,5,5	0.24	0
29	OEY	A	415[B]	1,42,3	0,16,16	-	-	-	-	-
23	CLA	b	614	-	69,73,73	1.99	20 (28%)	82,113,113	2.76	31 (37%)
24	BCR	A	408	-	41,41,41	1.09	1 (2%)	56,56,56	1.27	6 (10%)
23	CLA	C	510	-	69,73,73	2.06	20 (28%)	82,113,113	2.65	32 (39%)
33	HTG	C	523	-	19,19,19	0.93	1 (5%)	23,24,24	1.67	4 (17%)
26	GOL	V	203	-	5,5,5	0.36	0	5,5,5	0.46	0
23	CLA	B	615	-	69,73,73	2.04	17 (24%)	82,113,113	2.78	31 (37%)
33	HTG	b	631	-	19,19,19	0.83	1 (5%)	23,24,24	1.27	3 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	a	412	-	69,73,73	2.03	19 (27%)	82,113,113	2.68	33 (40%)

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
23	CLA	B	612	-	1/1/15/20	3/39/115/115	-
23	CLA	b	613	-	1/1/15/20	4/39/115/115	-
25	SQD	A	412	-	-	14/49/69/69	0/1/1/1
27	LMT	F	101	-	-	4/21/61/61	0/2/2/2
38	LHG	d	409	-	-	14/53/53/53	-
23	CLA	a	409	-	1/1/15/20	4/39/115/115	-
26	GOL	O	301	-	-	0/4/4/4	-
38	LHG	D	413	-	-	17/53/53/53	-
23	CLA	C	502	-	1/1/15/20	7/39/115/115	-
35	LMG	d	416	40	-	10/46/66/70	0/1/1/1
23	CLA	C	504	-	1/1/15/20	1/39/115/115	-
25	SQD	f	102	-	-	14/38/58/69	0/1/1/1
26	GOL	a	402	-	-	2/4/4/4	-
33	HTG	B	623	-	-	3/10/30/30	0/1/1/1
41	HEC	v	205	16	-	6/14/54/54	-
27	LMT	C	521	-	-	9/21/61/61	0/2/2/2
27	LMT	D	405	-	-	11/21/61/61	0/2/2/2
26	GOL	C	525	-	-	1/4/4/4	-
30	PL9	A	416[A]	-	-	10/53/73/73	0/1/1/1
24	BCR	B	619	-	-	0/29/63/63	0/2/2/2
26	GOL	T	101	-	-	0/4/4/4	-
38	LHG	a	420	-	-	17/46/46/53	-
33	HTG	B	622	-	-	5/10/30/30	0/1/1/1
37	PHO	D	403[A]	-	-	0/37/103/103	0/5/6/6
26	GOL	t	103	-	-	0/4/4/4	-
23	CLA	D	407	-	1/1/15/20	5/39/115/115	-
23	CLA	A	405	42	1/1/15/20	5/39/115/115	-
23	CLA	B	613	-	1/1/15/20	7/39/115/115	-
26	GOL	D	404	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	LMG	a	415	-	-	19/46/66/70	0/1/1/1
30	PL9	D	409[B]	-	-	7/53/73/73	0/1/1/1
30	PL9	A	416[B]	-	-	11/53/73/73	0/1/1/1
25	SQD	F	104	-	-	13/38/58/69	0/1/1/1
23	CLA	b	620	-	1/1/15/20	8/39/115/115	-
35	LMG	c	523	-	-	5/46/66/70	0/1/1/1
26	GOL	A	411	-	-	2/4/4/4	-
37	PHO	D	403[B]	-	-	2/37/103/103	0/5/6/6
38	LHG	D	412	-	-	11/53/53/53	-
23	CLA	C	506	-	1/1/15/20	8/39/115/115	-
24	BCR	K	103	-	-	2/29/63/63	0/2/2/2
24	BCR	T	103	-	-	1/29/63/63	0/2/2/2
27	LMT	m	102	-	-	6/21/61/61	0/2/2/2
27	LMT	A	413	-	-	6/21/61/61	0/2/2/2
38	LHG	D	411	-	-	14/53/53/53	-
24	BCR	d	406	-	-	8/29/63/63	0/2/2/2
23	CLA	d	403	42	1/1/15/20	5/39/115/115	-
23	CLA	B	602	42	1/1/15/20	13/39/115/115	-
33	HTG	b	601	-	-	3/10/30/30	0/1/1/1
34	DGD	D	410	-	-	19/47/67/95	0/1/1/2
26	GOL	B	627	-	-	4/4/4/4	-
38	LHG	L	101	-	-	13/53/53/53	-
34	DGD	C	517	-	-	14/51/91/95	0/2/2/2
23	CLA	c	515	3	1/1/15/20	5/39/115/115	-
26	GOL	v	202	-	-	3/4/4/4	-
35	LMG	M	101	-	-	8/46/66/70	0/1/1/1
25	SQD	L	102	-	-	23/49/69/69	0/1/1/1
26	GOL	B	628	-	-	1/4/4/4	-
23	CLA	c	506	-	1/1/15/20	4/39/115/115	-
26	GOL	B	633	-	-	0/4/4/4	-
35	LMG	D	417	40	-	10/46/66/70	0/1/1/1
23	CLA	B	607	-	1/1/15/20	6/39/115/115	-
26	GOL	b	605	-	-	2/4/4/4	-
23	CLA	c	507	-	1/1/15/20	2/39/115/115	-
25	SQD	A	409	-	-	12/49/69/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	HTG	B	630	-	-	1/10/30/30	0/1/1/1
24	BCR	c	518	-	-	4/29/63/63	0/2/2/2
33	HTG	D	416	-	-	0/7/27/30	0/1/1/1
25	SQD	a	405	-	-	12/49/69/69	0/1/1/1
26	GOL	T	102	-	-	2/4/4/4	-
23	CLA	C	508	42	1/1/15/20	7/39/115/115	-
26	GOL	V	202	-	-	3/4/4/4	-
37	PHO	D	402	-	-	2/37/103/103	0/5/6/6
23	CLA	c	511	42	1/1/15/20	8/39/115/115	-
23	CLA	C	511	-	1/1/15/20	8/39/115/115	-
30	PL9	D	409[A]	-	-	7/53/73/73	0/1/1/1
23	CLA	A	404	-	1/1/15/20	4/39/115/115	-
23	CLA	B	609	-	-	1/39/115/115	-
24	BCR	K	101	-	-	2/29/63/63	0/2/2/2
35	LMG	C	501	-	-	17/46/66/70	0/1/1/1
37	PHO	d	402[A]	-	-	1/37/103/103	0/5/6/6
23	CLA	b	621	-	1/1/15/20	4/39/115/115	-
27	LMT	M	104	-	-	9/21/61/61	0/2/2/2
25	SQD	a	414	-	-	11/49/69/69	0/1/1/1
38	LHG	d	411	-	-	16/53/53/53	-
33	HTG	c	525	-	-	0/10/30/30	0/1/1/1
23	CLA	B	614	-	1/1/15/20	8/39/115/115	-
23	CLA	b	617	-	-	2/39/115/115	-
24	BCR	B	620	-	-	0/29/63/63	0/2/2/2
23	CLA	c	516	-	1/1/15/20	7/39/115/115	-
23	CLA	b	612	-	1/1/15/20	5/39/115/115	-
24	BCR	B	618	-	-	2/29/63/63	0/2/2/2
26	GOL	v	201	-	-	2/4/4/4	-
33	HTG	C	522	-	-	0/10/30/30	0/1/1/1
35	LMG	b	629	-	-	10/46/66/70	0/1/1/1
37	PHO	d	402[B]	-	-	1/37/103/103	0/5/6/6
24	BCR	c	527	-	-	0/29/63/63	0/2/2/2
23	CLA	a	410	42	-	4/39/115/115	-
33	HTG	o	301	-	-	3/10/30/30	0/1/1/1
27	LMT	a	404	-	-	5/21/61/61	0/2/2/2
26	GOL	c	501	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	DGD	c	520	-	-	18/51/91/95	0/2/2/2
24	BCR	t	102	-	-	3/29/63/63	0/2/2/2
26	GOL	f	101	32	-	3/4/4/4	-
23	CLA	C	507	-	1/1/15/20	10/39/115/115	-
26	GOL	F	103	32	-	0/4/4/4	-
33	HTG	V	207	-	-	4/10/30/30	0/1/1/1
33	HTG	b	608	-	-	0/10/30/30	0/1/1/1
23	CLA	A	406	42	-	4/39/115/115	-
23	CLA	B	606	-	1/1/15/20	4/39/115/115	-
23	CLA	b	619	42	1/1/15/20	5/39/115/115	-
34	DGD	d	408	-	-	24/51/91/95	0/2/2/2
27	LMT	M	105	-	-	7/21/61/61	0/2/2/2
34	DGD	h	102	-	-	9/51/91/95	0/2/2/2
23	CLA	c	513	-	1/1/15/20	16/39/115/115	-
27	LMT	t	101	-	-	7/17/37/61	0/1/1/2
24	BCR	a	413	-	-	0/29/63/63	0/2/2/2
23	CLA	C	503	-	-	7/39/115/115	-
24	BCR	C	515	-	-	6/29/63/63	0/2/2/2
33	HTG	B	629	-	-	1/10/30/30	0/1/1/1
23	CLA	c	517	-	1/1/15/20	5/39/115/115	-
39	HEM	F	102	6,5	-	8/14/54/54	-
23	CLA	B	617	-	1/1/15/20	8/39/115/115	-
24	BCR	Y	101	-	-	4/29/63/63	0/2/2/2
23	CLA	A	407	-	1/1/15/20	10/39/115/115	-
23	CLA	C	512	3	1/1/15/20	3/39/115/115	-
23	CLA	b	625	-	1/1/15/20	7/39/115/115	-
23	CLA	c	510	-	1/1/15/20	15/39/115/115	-
34	DGD	B	632	-	-	11/51/91/95	0/2/2/2
26	GOL	b	606	-	-	4/4/4/4	-
30	PL9	a	416[B]	-	-	14/53/73/73	0/1/1/1
26	GOL	V	201	-	-	2/4/4/4	-
26	GOL	b	602	-	-	0/4/4/4	-
38	LHG	E	101	-	-	18/46/46/53	-
23	CLA	C	505	42	1/1/15/20	10/39/115/115	-
23	CLA	b	611	-	1/1/15/20	3/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	DGD	C	516	-	-	16/51/91/95	0/2/2/2
24	BCR	b	627	-	-	0/29/63/63	0/2/2/2
39	HEM	e	101	6,5	-	8/14/54/54	-
24	BCR	h	101	-	-	1/29/63/63	0/2/2/2
24	BCR	k	101	-	-	0/29/63/63	0/2/2/2
23	CLA	b	610	42	1/1/15/20	13/39/115/115	-
23	CLA	b	618	-	1/1/15/20	3/39/115/115	-
27	LMT	e	102	-	-	9/21/61/61	0/2/2/2
35	LMG	C	519	-	-	9/46/66/70	0/1/1/1
23	CLA	d	405	-	1/1/15/20	7/39/115/115	-
23	CLA	D	406	-	1/1/15/20	3/39/115/115	-
26	GOL	b	604	-	-	3/4/4/4	-
23	CLA	B	604	-	1/1/15/20	6/39/115/115	-
23	CLA	b	624	-	1/1/15/20	4/39/115/115	-
35	LMG	Z	101	-	-	15/31/51/70	0/1/1/1
35	LMG	z	101	-	-	15/34/54/70	0/1/1/1
23	CLA	B	603	-	1/1/15/20	5/39/115/115	-
26	GOL	B	626	-	-	2/4/4/4	-
38	LHG	b	634	-	-	19/53/53/53	-
33	HTG	b	607	-	-	1/10/30/30	0/1/1/1
30	PL9	d	407[B]	-	-	7/53/73/73	0/1/1/1
33	HTG	b	632	-	-	4/10/30/30	0/1/1/1
41	HEC	V	206	16	-	6/14/54/54	-
24	BCR	b	626	-	-	2/29/63/63	0/2/2/2
26	GOL	a	401	-	-	1/4/4/4	-
23	CLA	b	622	-	1/1/15/20	4/39/115/115	-
37	PHO	a	411	-	-	2/37/103/103	0/5/6/6
23	CLA	c	514	-	1/1/15/20	8/39/115/115	-
26	GOL	c	502	-	-	2/4/4/4	-
23	CLA	B	605	-	1/1/15/20	1/39/115/115	-
30	PL9	a	416[A]	-	-	14/53/73/73	0/1/1/1
23	CLA	B	616	-	1/1/15/20	9/39/115/115	-
35	LMG	C	520	-	-	11/46/66/70	0/1/1/1
23	CLA	d	404	-	1/1/15/20	5/39/115/115	-
24	BCR	b	628	-	-	0/29/63/63	0/2/2/2
33	HTG	d	414	-	-	0/7/27/30	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	b	616	42	1/1/15/20	3/39/115/115	-
23	CLA	B	608	42	1/1/15/20	5/39/115/115	-
23	CLA	B	610	-	1/1/15/20	9/39/115/115	-
23	CLA	C	513	-	1/1/15/20	11/39/115/115	-
23	CLA	c	505	-	1/1/15/20	4/39/115/115	-
24	BCR	H	101	-	-	1/29/63/63	0/2/2/2
26	GOL	B	625	-	-	2/4/4/4	-
27	LMT	b	630	-	-	3/17/37/61	0/1/1/2
34	DGD	C	518	-	-	9/51/91/95	0/2/2/2
27	LMT	M	102	-	-	7/21/61/61	0/2/2/2
23	CLA	B	611	42	1/1/15/20	3/39/115/115	-
34	DGD	c	521	-	-	13/51/91/95	0/2/2/2
23	CLA	C	509	-	1/1/15/20	3/39/115/115	-
23	CLA	c	509	-	1/1/15/20	2/39/115/115	-
35	LMG	c	522	-	-	17/46/66/70	0/1/1/1
24	BCR	D	408	-	-	6/29/63/63	0/2/2/2
24	BCR	k	102	-	-	6/29/63/63	0/2/2/2
26	GOL	B	624	-	-	0/4/4/4	-
34	DGD	c	519	-	-	14/51/91/95	0/2/2/2
26	GOL	v	203	-	-	2/4/4/4	-
26	GOL	C	524	-	-	1/4/4/4	-
26	GOL	A	410	-	-	1/4/4/4	-
23	CLA	b	615	-	1/1/15/20	7/39/115/115	-
26	GOL	V	204	-	-	1/4/4/4	-
33	HTG	c	524	-	-	3/10/30/30	0/1/1/1
23	CLA	C	514	-	1/1/15/20	9/39/115/115	-
23	CLA	c	508	42	1/1/15/20	5/39/115/115	-
26	GOL	c	528	-	-	0/4/4/4	-
25	SQD	B	621	-	-	24/49/69/69	0/1/1/1
23	CLA	c	512	-	1/1/15/20	2/39/115/115	-
27	LMT	T	104	-	-	7/17/37/61	0/1/1/2
27	LMT	a	419	-	-	4/21/61/61	0/2/2/2
30	PL9	d	407[A]	-	-	8/53/73/73	0/1/1/1
23	CLA	b	623	-	1/1/15/20	17/39/115/115	-
38	LHG	d	410	-	-	11/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	GOL	b	603	-	-	0/4/4/4	-
26	GOL	V	205	-	-	4/4/4/4	-
23	CLA	b	614	-	1/1/15/20	6/39/115/115	-
24	BCR	A	408	-	-	4/29/63/63	0/2/2/2
23	CLA	C	510	-	1/1/15/20	11/39/115/115	-
33	HTG	C	523	-	-	3/10/30/30	0/1/1/1
26	GOL	V	203	-	-	1/4/4/4	-
23	CLA	B	615	-	1/1/15/20	17/39/115/115	-
33	HTG	b	631	-	-	3/10/30/30	0/1/1/1
23	CLA	a	412	-	1/1/15/20	10/39/115/115	-

All (1639) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	a	411	PHO	C1B-C2B	9.31	1.49	1.39
37	d	402[B]	PHO	C1B-C2B	9.22	1.49	1.39
37	D	403[B]	PHO	C1B-C2B	9.17	1.49	1.39
37	D	402	PHO	C1D-C2D	8.92	1.49	1.39
37	D	403[B]	PHO	C1D-C2D	8.83	1.49	1.39
37	d	402[A]	PHO	C1D-C2D	8.80	1.49	1.39
37	d	402[A]	PHO	C1B-C2B	8.77	1.49	1.39
37	d	402[B]	PHO	C1D-C2D	8.69	1.49	1.39
37	D	403[A]	PHO	C1D-C2D	8.64	1.49	1.39
37	D	402	PHO	C1B-C2B	8.63	1.49	1.39
37	D	403[A]	PHO	C1B-C2B	8.47	1.48	1.39
37	a	411	PHO	C1D-C2D	8.41	1.48	1.39
37	D	403[A]	PHO	C3B-C4B	8.14	1.49	1.41
37	d	402[A]	PHO	C3B-C4B	7.97	1.49	1.41
37	D	403[B]	PHO	C3B-C4B	7.88	1.49	1.41
37	a	411	PHO	C3B-C4B	7.85	1.49	1.41
37	D	402	PHO	C3B-C4B	7.56	1.49	1.41
37	d	402[B]	PHO	C3B-C4B	7.53	1.49	1.41
37	D	403[A]	PHO	C4D-CHA	6.98	1.50	1.39
37	D	402	PHO	C4D-CHA	6.83	1.49	1.39
37	a	411	PHO	C4D-CHA	6.82	1.49	1.39
37	d	402[B]	PHO	C3B-C2B	6.80	1.49	1.40
37	d	402[A]	PHO	C4D-CHA	6.80	1.49	1.39
37	D	403[B]	PHO	C4D-CHA	6.76	1.49	1.39
37	D	403[A]	PHO	C3B-C2B	6.62	1.49	1.40
37	d	402[B]	PHO	C4D-CHA	6.58	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	D	402	PHO	C3B-C2B	6.46	1.49	1.40
37	D	403[B]	PHO	C3B-C2B	6.45	1.49	1.40
37	d	402[A]	PHO	C3B-C2B	6.23	1.48	1.40
37	a	411	PHO	C3B-C2B	6.15	1.48	1.40
37	d	402[A]	PHO	C3D-C2D	5.74	1.49	1.39
37	D	403[B]	PHO	C3D-C2D	5.74	1.49	1.39
23	B	604	CLA	C3C-C2C	5.57	1.48	1.36
23	B	603	CLA	C3C-C2C	5.55	1.48	1.36
23	C	509	CLA	C3C-C2C	5.54	1.48	1.36
23	B	611	CLA	C3C-C2C	5.51	1.48	1.36
37	D	403[A]	PHO	C3D-C2D	5.50	1.49	1.39
23	B	616	CLA	O2D-CGD	5.49	1.46	1.33
23	B	615	CLA	C3C-C2C	5.48	1.48	1.36
23	b	610	CLA	C3C-C2C	5.48	1.48	1.36
23	b	615	CLA	C3C-C2C	5.48	1.48	1.36
23	a	412	CLA	C3C-C2C	5.45	1.48	1.36
23	A	405	CLA	C3C-C2C	5.44	1.48	1.36
23	b	622	CLA	C3C-C2C	5.43	1.48	1.36
39	e	101	HEM	FE-NB	5.42	2.11	1.94
23	C	511	CLA	C3C-C2C	5.42	1.48	1.36
23	b	622	CLA	O2D-CGD	5.41	1.46	1.33
23	C	513	CLA	C3C-C2C	5.40	1.48	1.36
23	B	607	CLA	C3C-C2C	5.40	1.48	1.36
37	D	402	PHO	C3D-C2D	5.40	1.48	1.39
37	a	411	PHO	C3D-C2D	5.38	1.48	1.39
23	C	504	CLA	C3C-C2C	5.37	1.48	1.36
23	c	507	CLA	C3C-C2C	5.37	1.48	1.36
24	k	101	BCR	C23-C22	-5.36	1.34	1.46
23	b	614	CLA	C3C-C2C	5.35	1.48	1.36
23	a	412	CLA	O2D-CGD	5.34	1.46	1.33
23	C	510	CLA	C3C-C2C	5.31	1.48	1.36
23	D	406	CLA	C3C-C2C	5.31	1.48	1.36
23	C	504	CLA	C1D-ND	5.31	1.44	1.37
37	a	411	PHO	OBD-CAD	5.30	1.29	1.22
23	b	617	CLA	C3C-C2C	5.29	1.48	1.36
23	c	514	CLA	C3C-C2C	5.29	1.48	1.36
23	c	511	CLA	CHC-C1C	5.28	1.49	1.38
24	H	101	BCR	C23-C22	-5.28	1.34	1.46
37	d	402[B]	PHO	C3D-C2D	5.27	1.48	1.39
23	B	617	CLA	C3C-C2C	5.26	1.48	1.36
23	B	614	CLA	C1D-ND	5.26	1.44	1.37
23	b	612	CLA	C3C-C2C	5.25	1.48	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	502	CLA	CHC-C1C	5.25	1.49	1.38
23	B	614	CLA	O2D-CGD	5.25	1.46	1.33
39	F	102	HEM	FE-NB	5.25	2.11	1.94
23	c	506	CLA	O2D-CGD	5.23	1.46	1.33
23	A	406	CLA	C3C-C2C	5.23	1.48	1.36
37	D	403[B]	PHO	OBD-CAD	5.23	1.29	1.22
24	K	103	BCR	C23-C22	-5.22	1.34	1.46
23	B	612	CLA	C3C-C2C	5.22	1.48	1.36
23	a	409	CLA	C3C-C2C	5.21	1.48	1.36
23	d	403	CLA	C3C-C2C	5.21	1.48	1.36
23	a	409	CLA	C1D-ND	5.21	1.44	1.37
23	c	516	CLA	C3C-C2C	5.21	1.48	1.36
23	B	604	CLA	CHC-C1C	5.20	1.48	1.38
23	d	405	CLA	C3C-C2C	5.20	1.48	1.36
23	c	513	CLA	C3C-C2C	5.20	1.48	1.36
23	c	510	CLA	O2D-CGD	5.19	1.46	1.33
23	C	514	CLA	C3C-C2C	5.19	1.48	1.36
23	b	611	CLA	C3C-C2C	5.19	1.48	1.36
23	c	508	CLA	O2D-CGD	5.19	1.46	1.33
23	C	508	CLA	CHC-C1C	5.19	1.48	1.38
23	c	512	CLA	O2D-CGD	5.19	1.46	1.33
23	b	616	CLA	C3C-C2C	5.18	1.47	1.36
24	K	101	BCR	C23-C22	-5.18	1.34	1.46
23	c	517	CLA	C3C-C2C	5.17	1.47	1.36
23	b	621	CLA	C3C-C2C	5.16	1.47	1.36
23	B	606	CLA	C3C-C2C	5.16	1.47	1.36
23	c	514	CLA	C1D-ND	5.15	1.44	1.37
23	C	508	CLA	C3C-C2C	5.15	1.47	1.36
23	c	506	CLA	C3C-C2C	5.15	1.47	1.36
23	C	503	CLA	C3C-C2C	5.14	1.47	1.36
23	C	512	CLA	C1D-ND	5.14	1.44	1.37
23	c	512	CLA	C3C-C2C	5.14	1.47	1.36
23	b	624	CLA	C3C-C2C	5.14	1.47	1.36
23	C	511	CLA	O2D-CGD	5.14	1.45	1.33
23	b	623	CLA	C3C-C2C	5.13	1.47	1.36
24	a	413	BCR	C23-C22	-5.13	1.35	1.46
23	c	511	CLA	C3C-C2C	5.13	1.47	1.36
24	k	102	BCR	C23-C22	-5.12	1.35	1.46
23	c	513	CLA	O2D-CGD	5.12	1.45	1.33
23	b	619	CLA	C3C-C2C	5.12	1.47	1.36
23	C	509	CLA	O2D-CGD	5.11	1.45	1.33
23	C	512	CLA	O2D-CGD	5.11	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	509	CLA	CHC-C1C	5.11	1.48	1.38
23	B	602	CLA	O2D-CGD	5.10	1.45	1.33
23	b	620	CLA	O2D-CGD	5.10	1.45	1.33
23	C	504	CLA	CHC-C1C	5.09	1.48	1.38
23	b	616	CLA	O2D-CGD	5.09	1.45	1.33
23	D	407	CLA	O2D-CGD	5.09	1.45	1.33
23	b	618	CLA	O2D-CGD	5.09	1.45	1.33
23	D	407	CLA	C3C-C2C	5.09	1.47	1.36
23	B	602	CLA	C3C-C2C	5.09	1.47	1.36
37	D	403[A]	PHO	O2D-CGD	5.09	1.45	1.33
37	D	403[B]	PHO	O2D-CGD	5.09	1.45	1.33
23	c	505	CLA	C3C-C2C	5.08	1.47	1.36
23	C	505	CLA	C3C-C2C	5.08	1.47	1.36
23	B	612	CLA	O2D-CGD	5.08	1.45	1.33
23	C	512	CLA	C3C-C2C	5.07	1.47	1.36
23	C	507	CLA	C3C-C2C	5.07	1.47	1.36
23	C	505	CLA	O2D-CGD	5.07	1.45	1.33
23	C	506	CLA	C3C-C2C	5.07	1.47	1.36
23	B	606	CLA	O2D-CGD	5.06	1.45	1.33
23	B	610	CLA	C3C-C2C	5.06	1.47	1.36
23	b	611	CLA	CHC-C1C	5.06	1.48	1.38
23	B	607	CLA	O2D-CGD	5.06	1.45	1.33
23	d	403	CLA	O2D-CGD	5.05	1.45	1.33
23	C	513	CLA	O2D-CGD	5.05	1.45	1.33
23	B	615	CLA	O2D-CGD	5.05	1.45	1.33
23	B	611	CLA	C1D-ND	5.04	1.44	1.37
23	B	616	CLA	CHC-C1C	5.04	1.48	1.38
23	c	507	CLA	CHC-C1C	5.04	1.48	1.38
23	c	510	CLA	C3C-C2C	5.04	1.47	1.36
23	B	614	CLA	C3C-C2C	5.04	1.47	1.36
23	b	610	CLA	O2D-CGD	5.03	1.45	1.33
37	d	402[B]	PHO	O2D-CGD	5.02	1.45	1.33
24	B	620	BCR	C23-C22	-5.02	1.35	1.46
23	c	515	CLA	C3C-C2C	5.02	1.47	1.36
23	B	609	CLA	C3C-C2C	5.02	1.47	1.36
24	Y	101	BCR	C23-C22	-5.02	1.35	1.46
23	c	516	CLA	O2D-CGD	5.02	1.45	1.33
23	d	405	CLA	O2D-CGD	5.01	1.45	1.33
23	b	613	CLA	C3C-C2C	5.01	1.47	1.36
23	c	516	CLA	CHC-C1C	5.00	1.48	1.38
23	B	617	CLA	O2D-CGD	4.99	1.45	1.33
24	c	527	BCR	C23-C22	-4.99	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	610	CLA	O2D-CGD	4.99	1.45	1.33
23	A	405	CLA	C1D-ND	4.98	1.44	1.37
24	b	628	BCR	C23-C22	-4.97	1.35	1.46
23	b	623	CLA	O2D-CGD	4.97	1.45	1.33
23	b	617	CLA	CHC-C1C	4.97	1.48	1.38
23	D	406	CLA	C1D-ND	4.96	1.44	1.37
23	a	412	CLA	C1D-ND	4.96	1.44	1.37
23	c	517	CLA	O2D-CGD	4.96	1.45	1.33
23	C	510	CLA	O2D-CGD	4.96	1.45	1.33
37	a	411	PHO	O2D-CGD	4.96	1.45	1.33
23	B	615	CLA	C1D-ND	4.96	1.44	1.37
23	b	617	CLA	O2D-CGD	4.95	1.45	1.33
23	a	410	CLA	C3C-C2C	4.95	1.47	1.36
23	b	624	CLA	C1D-ND	4.94	1.44	1.37
23	a	410	CLA	CHC-C1C	4.94	1.48	1.38
23	b	610	CLA	CHC-C1C	4.94	1.48	1.38
23	C	511	CLA	C1D-ND	4.93	1.44	1.37
23	b	625	CLA	O2D-CGD	4.93	1.45	1.33
37	d	402[A]	PHO	O2D-CGD	4.93	1.45	1.33
23	D	407	CLA	CHC-C1C	4.93	1.48	1.38
23	A	406	CLA	O2D-CGD	4.92	1.45	1.33
23	c	508	CLA	CHC-C1C	4.92	1.48	1.38
23	C	503	CLA	CHC-C1C	4.92	1.48	1.38
23	A	407	CLA	O2D-CGD	4.91	1.45	1.33
24	A	408	BCR	C23-C22	-4.91	1.35	1.46
23	b	618	CLA	C3C-C2C	4.90	1.47	1.36
37	d	402[B]	PHO	OBD-CAD	4.90	1.28	1.22
23	b	621	CLA	O2D-CGD	4.89	1.45	1.33
23	C	507	CLA	O2D-CGD	4.89	1.45	1.33
23	c	511	CLA	O2D-CGD	4.89	1.45	1.33
23	b	625	CLA	CHC-C1C	4.88	1.48	1.38
24	T	103	BCR	C23-C22	-4.88	1.35	1.46
23	c	509	CLA	C3C-C2C	4.88	1.47	1.36
23	B	603	CLA	CHC-C1C	4.88	1.48	1.38
23	b	622	CLA	C1D-ND	4.88	1.44	1.37
23	b	618	CLA	CHC-C1C	4.88	1.48	1.38
23	A	407	CLA	C3C-C2C	4.88	1.47	1.36
23	B	613	CLA	CHC-C1C	4.87	1.48	1.38
23	b	612	CLA	CHC-C1C	4.87	1.48	1.38
23	A	405	CLA	O2D-CGD	4.86	1.45	1.33
23	b	625	CLA	C3C-C2C	4.86	1.47	1.36
23	b	612	CLA	O2D-CGD	4.86	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	404	CLA	C3C-C2C	4.85	1.47	1.36
24	C	515	BCR	C23-C22	-4.85	1.35	1.46
23	B	602	CLA	C1D-ND	4.85	1.44	1.37
23	d	405	CLA	CHC-C1C	4.85	1.48	1.38
23	A	407	CLA	CHC-C1C	4.85	1.48	1.38
23	B	608	CLA	O2D-CGD	4.84	1.45	1.33
23	b	610	CLA	C1D-ND	4.84	1.44	1.37
23	A	404	CLA	C1D-ND	4.84	1.44	1.37
23	B	609	CLA	C1D-ND	4.84	1.44	1.37
23	b	611	CLA	CHD-C1D	4.84	1.47	1.38
24	b	626	BCR	C23-C22	-4.84	1.35	1.46
23	B	604	CLA	O2D-CGD	4.84	1.45	1.33
23	c	513	CLA	CHC-C1C	4.84	1.48	1.38
23	B	609	CLA	O2D-CGD	4.84	1.45	1.33
23	c	515	CLA	CHC-C1C	4.83	1.48	1.38
23	B	616	CLA	C1D-ND	4.83	1.44	1.37
23	C	506	CLA	O2D-CGD	4.83	1.45	1.33
23	d	405	CLA	C1D-ND	4.83	1.44	1.37
23	C	514	CLA	C1D-ND	4.83	1.44	1.37
23	D	406	CLA	O2D-CGD	4.82	1.45	1.33
23	b	613	CLA	O2D-CGD	4.82	1.45	1.33
23	B	605	CLA	C3C-C2C	4.82	1.47	1.36
23	b	614	CLA	CHC-C1C	4.82	1.48	1.38
23	B	616	CLA	C3C-C2C	4.81	1.47	1.36
24	B	618	BCR	C23-C22	-4.81	1.35	1.46
23	c	517	CLA	C1D-ND	4.81	1.44	1.37
23	B	602	CLA	O2A-CGA	4.81	1.47	1.33
23	B	607	CLA	CHC-C1C	4.81	1.48	1.38
23	d	403	CLA	C1D-ND	4.81	1.44	1.37
23	C	514	CLA	CHC-C1C	4.80	1.48	1.38
23	C	510	CLA	C1D-ND	4.80	1.44	1.37
23	C	509	CLA	C1D-ND	4.80	1.44	1.37
23	c	512	CLA	C1D-ND	4.80	1.44	1.37
23	C	502	CLA	C3C-C2C	4.80	1.47	1.36
23	B	611	CLA	CHC-C1C	4.79	1.48	1.38
23	C	512	CLA	CHC-C1C	4.79	1.48	1.38
23	B	608	CLA	C3C-C2C	4.79	1.47	1.36
24	d	406	BCR	C23-C22	-4.78	1.35	1.46
37	D	402	PHO	OBD-CAD	4.78	1.28	1.22
23	C	513	CLA	CHC-C1C	4.77	1.48	1.38
23	C	503	CLA	C1D-ND	4.77	1.44	1.37
24	h	101	BCR	C23-C22	-4.77	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	510	CLA	CHC-C1C	4.77	1.48	1.38
23	d	404	CLA	O2D-CGD	4.77	1.44	1.33
23	A	404	CLA	C3C-C2C	4.77	1.47	1.36
23	C	505	CLA	CHC-C1C	4.77	1.48	1.38
23	B	613	CLA	C3C-C2C	4.75	1.47	1.36
23	c	514	CLA	O2D-CGD	4.75	1.44	1.33
23	A	407	CLA	C1D-ND	4.74	1.44	1.37
23	c	507	CLA	C1D-ND	4.74	1.44	1.37
23	C	514	CLA	O2D-CGD	4.74	1.44	1.33
23	c	507	CLA	O2D-CGD	4.74	1.44	1.33
23	B	615	CLA	CHC-C1C	4.74	1.48	1.38
23	B	606	CLA	CHC-C1C	4.74	1.48	1.38
23	b	613	CLA	C1D-ND	4.74	1.44	1.37
23	c	511	CLA	C1D-ND	4.73	1.44	1.37
37	D	402	PHO	O2D-CGD	4.73	1.44	1.33
23	b	615	CLA	CHC-C1C	4.73	1.48	1.38
23	D	407	CLA	C1D-ND	4.73	1.44	1.37
23	C	504	CLA	O2D-CGD	4.73	1.44	1.33
23	B	606	CLA	C1D-ND	4.72	1.44	1.37
23	C	511	CLA	CHC-C1C	4.72	1.47	1.38
23	c	517	CLA	CHC-C1C	4.72	1.47	1.38
23	b	623	CLA	C1D-ND	4.72	1.44	1.37
23	B	603	CLA	O2D-CGD	4.72	1.44	1.33
23	B	617	CLA	CHC-C1C	4.72	1.47	1.38
24	t	102	BCR	C23-C22	-4.72	1.35	1.46
23	C	509	CLA	CHC-C1C	4.72	1.47	1.38
23	B	614	CLA	CHC-C1C	4.71	1.47	1.38
23	C	513	CLA	C1D-ND	4.71	1.44	1.37
23	c	513	CLA	C1D-ND	4.71	1.44	1.37
23	A	404	CLA	CHC-C1C	4.70	1.47	1.38
23	b	611	CLA	O2D-CGD	4.70	1.44	1.33
23	c	508	CLA	C3C-C2C	4.69	1.46	1.36
23	c	505	CLA	O2D-CGD	4.69	1.44	1.33
23	c	506	CLA	C1D-ND	4.68	1.44	1.37
23	b	614	CLA	O2D-CGD	4.67	1.44	1.33
24	c	518	BCR	C23-C22	-4.67	1.36	1.46
23	b	611	CLA	C1D-ND	4.67	1.44	1.37
23	a	409	CLA	CHC-C1C	4.67	1.47	1.38
23	B	608	CLA	CHC-C1C	4.67	1.47	1.38
24	D	408	BCR	C23-C22	-4.67	1.36	1.46
23	b	619	CLA	CHC-C1C	4.67	1.47	1.38
23	c	506	CLA	CHC-C1C	4.66	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	615	CLA	C1D-ND	4.66	1.44	1.37
23	a	412	CLA	CHC-C1C	4.66	1.47	1.38
23	b	620	CLA	C3C-C2C	4.65	1.46	1.36
23	C	506	CLA	CHC-C1C	4.64	1.47	1.38
23	B	613	CLA	O2D-CGD	4.64	1.44	1.33
23	b	616	CLA	CHC-C1C	4.64	1.47	1.38
23	C	505	CLA	C1D-ND	4.64	1.44	1.37
23	B	609	CLA	CHD-C1D	4.64	1.47	1.38
23	b	621	CLA	CHC-C1C	4.62	1.47	1.38
23	B	610	CLA	C1D-ND	4.62	1.43	1.37
23	C	502	CLA	C1D-ND	4.62	1.43	1.37
23	c	509	CLA	O2D-CGD	4.62	1.44	1.33
24	b	627	BCR	C23-C22	-4.62	1.36	1.46
23	a	410	CLA	O2D-CGD	4.61	1.44	1.33
23	b	624	CLA	O2D-CGD	4.61	1.44	1.33
23	C	511	CLA	CHD-C1D	4.61	1.47	1.38
23	C	507	CLA	CHD-C1D	4.61	1.47	1.38
23	C	508	CLA	O2D-CGD	4.60	1.44	1.33
23	b	623	CLA	CHC-C1C	4.60	1.47	1.38
23	A	404	CLA	O2D-CGD	4.59	1.44	1.33
23	B	605	CLA	CHC-C1C	4.59	1.47	1.38
23	C	507	CLA	C1D-ND	4.59	1.43	1.37
23	C	508	CLA	C1D-ND	4.59	1.43	1.37
23	C	502	CLA	O2D-CGD	4.59	1.44	1.33
23	C	507	CLA	CHC-C1C	4.59	1.47	1.38
23	B	609	CLA	CHC-C1C	4.58	1.47	1.38
23	c	513	CLA	O2A-CGA	4.58	1.46	1.33
23	A	407	CLA	CHD-C1D	4.58	1.47	1.38
23	C	503	CLA	O2D-CGD	4.58	1.44	1.33
23	B	610	CLA	CHC-C1C	4.58	1.47	1.38
23	b	615	CLA	O2D-CGD	4.57	1.44	1.33
23	d	403	CLA	O2A-CGA	4.57	1.46	1.33
25	f	102	SQD	O47-C7	4.56	1.47	1.34
23	c	515	CLA	O2D-CGD	4.56	1.44	1.33
34	D	410	DGD	O1G-C1A	4.55	1.46	1.33
23	c	509	CLA	CHD-C1D	4.55	1.47	1.38
35	z	101	LMG	O8-C28	4.55	1.46	1.33
25	A	412	SQD	O48-C23	4.54	1.46	1.33
23	B	606	CLA	CHD-C1D	4.54	1.47	1.38
23	c	514	CLA	CHD-C1D	4.53	1.47	1.38
23	c	510	CLA	CHC-C1C	4.53	1.47	1.38
23	b	617	CLA	C1D-ND	4.53	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	625	CLA	C1D-ND	4.52	1.43	1.37
23	b	619	CLA	CHD-C1D	4.52	1.47	1.38
23	B	603	CLA	C1D-ND	4.52	1.43	1.37
23	c	512	CLA	CHC-C1C	4.52	1.47	1.38
23	c	515	CLA	C1D-ND	4.52	1.43	1.37
23	b	619	CLA	O2D-CGD	4.51	1.44	1.33
23	B	612	CLA	C1D-ND	4.51	1.43	1.37
23	B	604	CLA	C1D-ND	4.51	1.43	1.37
23	B	611	CLA	O2D-CGD	4.50	1.44	1.33
23	b	620	CLA	CHD-C1D	4.50	1.47	1.38
23	c	508	CLA	C1D-ND	4.50	1.43	1.37
23	B	605	CLA	C1D-ND	4.50	1.43	1.37
25	F	104	SQD	O47-C7	4.48	1.46	1.34
23	b	613	CLA	CHC-C1C	4.48	1.47	1.38
23	B	610	CLA	O2A-CGA	4.48	1.46	1.33
23	c	512	CLA	O2A-CGA	4.48	1.46	1.33
23	c	514	CLA	CHC-C1C	4.48	1.47	1.38
23	B	610	CLA	CHD-C1D	4.47	1.47	1.38
37	D	403[A]	PHO	OBD-CAD	4.47	1.28	1.22
23	C	514	CLA	CHD-C1D	4.46	1.47	1.38
23	c	506	CLA	CHD-C1D	4.46	1.47	1.38
41	v	205	HEC	CAC-C3C	4.46	1.49	1.35
23	c	510	CLA	C1D-ND	4.46	1.43	1.37
23	B	602	CLA	CHC-C1C	4.46	1.47	1.38
23	b	619	CLA	C1D-ND	4.46	1.43	1.37
23	b	610	CLA	CHD-C1D	4.46	1.47	1.38
39	F	102	HEM	FE-NC	4.45	2.09	1.95
23	c	509	CLA	C1D-ND	4.45	1.43	1.37
23	A	405	CLA	O2A-CGA	4.45	1.46	1.33
23	a	409	CLA	CHD-C4C	4.45	1.49	1.39
23	B	604	CLA	O2A-CGA	4.45	1.46	1.33
23	c	505	CLA	CHC-C1C	4.45	1.47	1.38
34	D	410	DGD	O2G-C1B	4.44	1.46	1.34
35	C	520	LMG	O7-C10	4.44	1.46	1.34
34	d	408	DGD	O2G-C1B	4.44	1.46	1.34
23	d	404	CLA	CHC-C1C	4.44	1.47	1.38
23	b	614	CLA	C1D-ND	4.43	1.43	1.37
23	b	610	CLA	O2A-CGA	4.43	1.46	1.33
23	b	620	CLA	CHC-C1C	4.43	1.47	1.38
23	b	613	CLA	OBD-CAD	4.43	1.30	1.22
23	b	617	CLA	CHD-C1D	4.42	1.47	1.38
25	a	405	SQD	O48-C23	4.42	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	516	CLA	C1D-ND	4.41	1.43	1.37
23	A	406	CLA	CHC-C1C	4.41	1.47	1.38
23	b	624	CLA	CHC-C1C	4.41	1.47	1.38
37	d	402[A]	PHO	OBD-CAD	4.41	1.28	1.22
24	B	619	BCR	C23-C22	-4.40	1.36	1.46
35	C	519	LMG	O8-C28	4.40	1.46	1.33
34	C	518	DGD	O1G-C1A	4.40	1.46	1.33
23	C	509	CLA	CHD-C1D	4.39	1.47	1.38
23	C	502	CLA	O2A-CGA	4.39	1.46	1.33
23	D	406	CLA	CHC-C1C	4.39	1.47	1.38
23	C	512	CLA	CHD-C1D	4.38	1.47	1.38
23	B	615	CLA	O2A-CGA	4.38	1.46	1.33
23	B	609	CLA	O2A-CGA	4.37	1.46	1.33
23	C	509	CLA	O2A-CGA	4.37	1.46	1.33
23	C	513	CLA	CHD-C1D	4.37	1.46	1.38
23	D	407	CLA	CHD-C1D	4.37	1.46	1.38
23	c	505	CLA	C1D-ND	4.37	1.43	1.37
23	C	504	CLA	CHD-C1D	4.36	1.46	1.38
23	C	510	CLA	CHD-C1D	4.36	1.46	1.38
34	d	408	DGD	O1G-C1A	4.36	1.46	1.33
23	d	403	CLA	CHC-C1C	4.36	1.47	1.38
38	D	413	LHG	O7-C7	4.36	1.46	1.34
23	d	405	CLA	O2A-CGA	4.35	1.46	1.33
23	c	511	CLA	O2A-CGA	4.35	1.46	1.33
23	B	617	CLA	C1D-ND	4.35	1.43	1.37
23	C	511	CLA	CHD-C4C	4.35	1.49	1.39
37	d	402[B]	PHO	O2A-CGA	4.34	1.46	1.33
38	a	420	LHG	O8-C23	4.34	1.46	1.33
25	B	621	SQD	O47-C7	4.34	1.46	1.34
34	c	520	DGD	O1G-C1A	4.34	1.46	1.33
25	f	102	SQD	O48-C23	4.33	1.46	1.33
23	C	512	CLA	CHD-C4C	4.33	1.49	1.39
23	b	625	CLA	O2A-CGA	4.33	1.46	1.33
34	C	518	DGD	O2G-C1B	4.33	1.46	1.34
23	b	622	CLA	CHC-C1C	4.32	1.47	1.38
23	C	510	CLA	O2A-CGA	4.32	1.45	1.33
23	B	604	CLA	CHD-C1D	4.31	1.46	1.38
23	b	622	CLA	CHD-C1D	4.31	1.46	1.38
23	B	605	CLA	CHD-C1D	4.30	1.46	1.38
23	C	507	CLA	O2A-CGA	4.30	1.45	1.33
23	b	616	CLA	O2A-CGA	4.30	1.45	1.33
23	B	603	CLA	CHD-C1D	4.30	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	E	101	LHG	O8-C23	4.30	1.45	1.33
34	B	632	DGD	O1G-C1A	4.30	1.45	1.33
23	C	505	CLA	O2A-CGA	4.30	1.45	1.33
23	C	508	CLA	O2A-CGA	4.29	1.45	1.33
23	B	611	CLA	CHD-C4C	4.28	1.48	1.39
23	c	516	CLA	CHD-C1D	4.28	1.46	1.38
23	b	623	CLA	CHD-C1D	4.28	1.46	1.38
37	D	403[B]	PHO	O2A-CGA	4.28	1.45	1.33
23	c	514	CLA	CHD-C4C	4.27	1.48	1.39
35	c	523	LMG	O8-C28	4.27	1.45	1.33
41	v	205	HEC	CBC-CAC	-4.27	1.33	1.49
23	b	621	CLA	C1D-ND	4.27	1.43	1.37
38	d	411	LHG	O8-C23	4.27	1.45	1.33
38	L	101	LHG	O8-C23	4.26	1.45	1.33
23	B	607	CLA	O2A-CGA	4.26	1.45	1.33
35	M	101	LMG	O8-C28	4.26	1.45	1.33
23	b	624	CLA	O2A-CGA	4.26	1.45	1.33
23	b	610	CLA	C3D-C2D	4.26	1.50	1.39
23	B	606	CLA	O2A-CGA	4.25	1.45	1.33
23	A	406	CLA	CHD-C1D	4.25	1.46	1.38
23	c	517	CLA	O2A-CGA	4.25	1.45	1.33
23	C	503	CLA	CHD-C1D	4.25	1.46	1.38
23	b	610	CLA	CHD-C4C	4.25	1.48	1.39
25	a	405	SQD	O47-C7	4.25	1.46	1.34
23	B	607	CLA	C1D-ND	4.25	1.43	1.37
41	V	206	HEC	CBB-CAB	-4.25	1.33	1.49
23	B	605	CLA	O2D-CGD	4.25	1.43	1.33
23	b	624	CLA	C3D-C2D	4.25	1.50	1.39
23	B	611	CLA	CHD-C1D	4.25	1.46	1.38
23	C	504	CLA	CHD-C4C	4.24	1.48	1.39
41	V	206	HEC	CBC-CAC	-4.24	1.33	1.49
23	C	513	CLA	C3D-C2D	4.23	1.50	1.39
37	d	402[A]	PHO	O2A-CGA	4.23	1.45	1.33
23	b	616	CLA	CHD-C1D	4.23	1.46	1.38
23	B	617	CLA	O2A-CGA	4.23	1.45	1.33
35	C	501	LMG	O7-C10	4.23	1.46	1.34
23	c	506	CLA	O2A-CGA	4.23	1.45	1.33
23	b	624	CLA	OBD-CAD	4.23	1.29	1.22
23	d	403	CLA	CHD-C4C	4.23	1.48	1.39
23	b	618	CLA	CHD-C1D	4.23	1.46	1.38
25	L	102	SQD	O47-C7	4.23	1.46	1.34
23	c	517	CLA	CHD-C1D	4.22	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	404	CLA	CHD-C1D	4.22	1.46	1.38
23	a	410	CLA	CHD-C1D	4.22	1.46	1.38
23	C	513	CLA	O2A-CGA	4.22	1.45	1.33
23	d	403	CLA	CHD-C1D	4.22	1.46	1.38
23	A	406	CLA	C1D-ND	4.22	1.43	1.37
23	D	406	CLA	O2A-CGA	4.22	1.45	1.33
23	b	613	CLA	CHB-C1B	4.22	1.48	1.39
23	a	410	CLA	O2A-CGA	4.21	1.45	1.33
23	B	608	CLA	CHD-C1D	4.21	1.46	1.38
23	C	512	CLA	O2A-CGA	4.21	1.45	1.33
23	B	612	CLA	CHC-C1C	4.21	1.46	1.38
41	V	206	HEC	CAB-C3B	4.21	1.48	1.35
23	A	405	CLA	CHC-C1C	4.21	1.46	1.38
23	C	511	CLA	O2A-CGA	4.21	1.45	1.33
41	V	206	HEC	CAC-C3C	4.21	1.48	1.35
35	a	415	LMG	O8-C28	4.21	1.45	1.33
23	C	506	CLA	C1D-ND	4.21	1.43	1.37
23	B	613	CLA	CHB-C1B	4.21	1.48	1.39
23	d	405	CLA	CHD-C1D	4.20	1.46	1.38
23	A	404	CLA	O2A-CGA	4.20	1.45	1.33
23	B	607	CLA	CHD-C1D	4.20	1.46	1.38
23	c	509	CLA	O2A-CGA	4.20	1.45	1.33
23	A	404	CLA	CHD-C4C	4.20	1.48	1.39
23	B	612	CLA	CHD-C4C	4.20	1.48	1.39
34	C	517	DGD	O1G-C1A	4.20	1.45	1.33
23	c	510	CLA	CHD-C1D	4.19	1.46	1.38
23	C	505	CLA	C3D-C2D	4.19	1.50	1.39
23	C	502	CLA	CHD-C1D	4.18	1.46	1.38
38	b	634	LHG	O7-C7	4.18	1.46	1.34
23	b	618	CLA	C1D-ND	4.18	1.43	1.37
38	d	410	LHG	O7-C7	4.18	1.46	1.34
23	B	608	CLA	C1D-ND	4.17	1.43	1.37
34	h	102	DGD	O1G-C1A	4.17	1.45	1.33
23	B	612	CLA	C3D-C2D	4.17	1.50	1.39
23	c	516	CLA	O2A-CGA	4.17	1.45	1.33
23	C	505	CLA	CHD-C1D	4.17	1.46	1.38
23	a	409	CLA	O2D-CGD	4.17	1.43	1.33
23	B	616	CLA	O2A-CGA	4.16	1.45	1.33
37	D	402	PHO	O2A-CGA	4.16	1.45	1.33
23	B	616	CLA	C3D-C2D	4.16	1.50	1.39
38	D	412	LHG	O8-C23	4.16	1.45	1.33
23	a	409	CLA	CHD-C1D	4.16	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	512	CLA	CHD-C1D	4.16	1.46	1.38
23	C	514	CLA	O2A-CGA	4.16	1.45	1.33
23	b	621	CLA	O2A-CGA	4.16	1.45	1.33
23	B	612	CLA	CHD-C1D	4.15	1.46	1.38
23	c	505	CLA	CHD-C1D	4.15	1.46	1.38
35	C	520	LMG	O8-C28	4.15	1.45	1.33
23	c	508	CLA	O2A-CGA	4.15	1.45	1.33
35	C	501	LMG	O8-C28	4.15	1.45	1.33
38	b	634	LHG	O8-C23	4.15	1.45	1.33
25	a	414	SQD	O48-C23	4.14	1.45	1.33
23	C	503	CLA	C3D-C2D	4.14	1.50	1.39
23	B	616	CLA	CHC-C4B	4.14	1.48	1.39
23	c	515	CLA	O2A-CGA	4.14	1.45	1.33
23	b	617	CLA	O2A-CGA	4.14	1.45	1.33
34	c	521	DGD	O1G-C1A	4.14	1.45	1.33
23	C	502	CLA	CHC-C4B	4.14	1.48	1.39
35	c	523	LMG	O7-C10	4.14	1.46	1.34
38	E	101	LHG	O7-C7	4.14	1.46	1.34
35	Z	101	LMG	O7-C10	4.13	1.46	1.34
23	b	612	CLA	O2A-CGA	4.13	1.45	1.33
35	z	101	LMG	O7-C10	4.13	1.46	1.34
23	C	508	CLA	CHD-C1D	4.13	1.46	1.38
25	F	104	SQD	O48-C23	4.13	1.45	1.33
34	C	516	DGD	O2G-C1B	4.13	1.45	1.34
23	c	513	CLA	CHD-C1D	4.12	1.46	1.38
37	D	403[A]	PHO	O2A-CGA	4.12	1.45	1.33
23	b	611	CLA	O2A-CGA	4.12	1.45	1.33
23	b	617	CLA	C3D-C2D	4.12	1.50	1.39
35	c	522	LMG	O8-C28	4.12	1.45	1.33
23	a	410	CLA	OBD-CAD	4.12	1.29	1.22
23	B	603	CLA	O2A-CGA	4.11	1.45	1.33
23	d	405	CLA	C3D-C2D	4.11	1.50	1.39
23	d	403	CLA	C3D-C2D	4.11	1.50	1.39
23	b	621	CLA	CHB-C1B	4.10	1.48	1.39
23	C	507	CLA	CHD-C4C	4.10	1.48	1.39
23	c	513	CLA	CHD-C4C	4.10	1.48	1.39
23	A	404	CLA	CHD-C1D	4.10	1.46	1.38
23	B	609	CLA	CHD-C4C	4.09	1.48	1.39
23	d	404	CLA	O2A-CGA	4.09	1.45	1.33
41	v	205	HEC	CBB-CAB	-4.09	1.34	1.49
23	C	506	CLA	CHD-C1D	4.09	1.46	1.38
23	c	511	CLA	CHD-C1D	4.09	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	D	406	CLA	CHD-C4C	4.08	1.48	1.39
23	b	618	CLA	C3D-C2D	4.08	1.50	1.39
23	a	412	CLA	O2A-CGA	4.08	1.45	1.33
25	A	412	SQD	O47-C7	4.08	1.45	1.34
23	C	504	CLA	C3D-C2D	4.08	1.50	1.39
23	c	511	CLA	CHC-C4B	4.08	1.48	1.39
23	B	614	CLA	O2A-CGA	4.08	1.45	1.33
34	c	519	DGD	O1G-C1A	4.08	1.45	1.33
23	B	614	CLA	CHD-C1D	4.08	1.46	1.38
23	B	602	CLA	CHD-C1D	4.07	1.46	1.38
23	C	507	CLA	C3D-C2D	4.07	1.50	1.39
23	C	506	CLA	O2A-CGA	4.07	1.45	1.33
35	D	417	LMG	O7-C10	4.07	1.45	1.34
23	C	514	CLA	CHD-C4C	4.07	1.48	1.39
23	C	506	CLA	CHB-C1B	4.06	1.48	1.39
23	B	610	CLA	CHD-C4C	4.06	1.48	1.39
23	B	606	CLA	CHC-C4B	4.06	1.48	1.39
23	D	407	CLA	CHD-C4C	4.06	1.48	1.39
23	b	620	CLA	C1D-ND	4.06	1.43	1.37
23	b	620	CLA	O2A-CGA	4.06	1.45	1.33
23	b	611	CLA	OBD-CAD	4.06	1.29	1.22
23	b	613	CLA	CHD-C1D	4.06	1.46	1.38
23	b	623	CLA	O2A-CGA	4.05	1.45	1.33
23	c	516	CLA	CHD-C4C	4.05	1.48	1.39
23	c	510	CLA	CHB-C1B	4.05	1.48	1.39
23	D	407	CLA	O2A-CGA	4.05	1.45	1.33
41	v	205	HEC	CAB-C3B	4.05	1.48	1.35
23	b	624	CLA	CHB-C1B	4.05	1.48	1.39
35	d	416	LMG	O8-C28	4.05	1.45	1.33
23	A	407	CLA	O2A-CGA	4.05	1.45	1.33
23	C	511	CLA	OBD-CAD	4.05	1.29	1.22
23	c	517	CLA	CHD-C4C	4.04	1.48	1.39
23	C	510	CLA	C3D-C2D	4.04	1.50	1.39
23	c	517	CLA	C3D-C2D	4.04	1.50	1.39
23	a	412	CLA	CHD-C1D	4.04	1.46	1.38
23	b	615	CLA	O2A-CGA	4.04	1.45	1.33
25	L	102	SQD	O48-C23	4.04	1.45	1.33
38	a	420	LHG	O7-C7	4.03	1.45	1.34
23	B	614	CLA	CHB-C1B	4.03	1.48	1.39
23	C	503	CLA	O2A-CGA	4.03	1.45	1.33
23	b	625	CLA	CHD-C1D	4.03	1.46	1.38
38	D	413	LHG	O8-C23	4.02	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	612	CLA	C1D-ND	4.02	1.43	1.37
23	B	613	CLA	CHD-C1D	4.02	1.46	1.38
23	C	512	CLA	C3D-C2D	4.02	1.50	1.39
23	B	614	CLA	CHD-C4C	4.02	1.48	1.39
23	c	513	CLA	OBD-CAD	4.02	1.29	1.22
25	A	409	SQD	O48-C23	4.02	1.45	1.33
23	c	513	CLA	CHB-C1B	4.02	1.48	1.39
23	B	617	CLA	CHD-C1D	4.02	1.46	1.38
34	C	516	DGD	O1G-C1A	4.01	1.45	1.33
23	C	504	CLA	CHC-C4B	4.01	1.48	1.39
23	c	505	CLA	CHB-C1B	4.01	1.48	1.39
23	c	510	CLA	O2A-CGA	4.01	1.45	1.33
23	C	505	CLA	CHD-C4C	4.01	1.48	1.39
39	e	101	HEM	FE-NC	4.01	2.08	1.95
23	C	513	CLA	CHD-C4C	4.01	1.48	1.39
23	b	612	CLA	CHD-C1D	4.01	1.46	1.38
23	B	612	CLA	O2A-CGA	4.01	1.45	1.33
35	b	629	LMG	O8-C28	4.00	1.45	1.33
35	D	417	LMG	O8-C28	4.00	1.45	1.33
23	b	617	CLA	CHC-C4B	4.00	1.48	1.39
23	b	611	CLA	CHD-C4C	4.00	1.48	1.39
35	C	519	LMG	O7-C10	4.00	1.45	1.34
23	b	615	CLA	CHD-C1D	4.00	1.46	1.38
23	c	514	CLA	CHB-C1B	4.00	1.48	1.39
23	c	514	CLA	O2A-CGA	3.99	1.45	1.33
23	B	608	CLA	O2A-CGA	3.99	1.45	1.33
23	b	616	CLA	C3D-C2D	3.99	1.49	1.39
23	b	616	CLA	C1D-ND	3.99	1.43	1.37
23	B	611	CLA	CHC-C4B	3.99	1.48	1.39
35	M	101	LMG	O7-C10	3.99	1.45	1.34
23	b	621	CLA	C3D-C2D	3.99	1.49	1.39
38	D	411	LHG	O8-C23	3.99	1.45	1.33
23	c	506	CLA	C3D-C2D	3.99	1.49	1.39
23	B	603	CLA	CHC-C4B	3.99	1.48	1.39
34	h	102	DGD	O2G-C1B	3.98	1.45	1.34
23	b	619	CLA	CHD-C4C	3.98	1.48	1.39
23	b	622	CLA	CHD-C4C	3.98	1.48	1.39
23	c	512	CLA	C3D-C2D	3.98	1.49	1.39
23	a	409	CLA	C3D-C2D	3.98	1.49	1.39
23	B	603	CLA	OBD-CAD	3.97	1.29	1.22
25	B	621	SQD	O48-C23	3.97	1.44	1.33
23	C	510	CLA	CHD-C4C	3.97	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	a	412	CLA	C3D-C2D	3.97	1.49	1.39
23	c	505	CLA	O2A-CGA	3.97	1.44	1.33
23	c	506	CLA	CHB-C1B	3.97	1.48	1.39
33	o	301	HTG	C1'-S1	-3.97	1.75	1.81
23	C	509	CLA	OBD-CAD	3.97	1.29	1.22
23	B	610	CLA	C3D-C2D	3.96	1.49	1.39
38	d	411	LHG	O7-C7	3.96	1.45	1.34
23	A	406	CLA	C3D-C2D	3.96	1.49	1.39
23	c	515	CLA	CHD-C4C	3.96	1.48	1.39
35	d	416	LMG	O7-C10	3.96	1.45	1.34
23	C	511	CLA	C3D-C2D	3.96	1.49	1.39
23	c	511	CLA	CHD-C4C	3.96	1.48	1.39
23	c	507	CLA	CHD-C1D	3.96	1.46	1.38
25	A	409	SQD	O47-C7	3.96	1.45	1.34
23	A	404	CLA	C3D-C2D	3.95	1.49	1.39
34	c	521	DGD	O2G-C1B	3.95	1.45	1.34
23	B	614	CLA	C3D-C2D	3.95	1.49	1.39
34	B	632	DGD	O2G-C1B	3.95	1.45	1.34
23	B	613	CLA	O2A-CGA	3.95	1.44	1.33
23	b	618	CLA	O2A-CGA	3.95	1.44	1.33
23	c	509	CLA	CHD-C4C	3.95	1.48	1.39
23	b	620	CLA	CHB-C1B	3.94	1.48	1.39
23	A	405	CLA	C3D-C2D	3.94	1.49	1.39
35	a	415	LMG	O7-C10	3.94	1.45	1.34
23	B	602	CLA	CHD-C4C	3.94	1.48	1.39
23	B	612	CLA	OBD-CAD	3.94	1.29	1.22
23	B	604	CLA	CHD-C4C	3.94	1.48	1.39
23	c	515	CLA	CHD-C1D	3.94	1.46	1.38
23	a	409	CLA	OBD-CAD	3.94	1.29	1.22
23	d	404	CLA	CHD-C4C	3.94	1.48	1.39
23	c	516	CLA	C3D-C2D	3.93	1.49	1.39
34	c	520	DGD	O2G-C1B	3.93	1.45	1.34
23	C	502	CLA	CHD-C4C	3.93	1.48	1.39
23	C	504	CLA	O2A-CGA	3.93	1.44	1.33
23	B	615	CLA	C3D-C2D	3.93	1.49	1.39
23	b	613	CLA	O2A-CGA	3.93	1.44	1.33
23	c	508	CLA	CHB-C1B	3.93	1.48	1.39
23	b	614	CLA	CHD-C1D	3.93	1.46	1.38
23	a	412	CLA	CHD-C4C	3.93	1.48	1.39
23	A	407	CLA	C3D-C2D	3.93	1.49	1.39
23	B	604	CLA	CHC-C4B	3.92	1.48	1.39
23	B	602	CLA	CHB-C1B	3.92	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	604	CLA	C1B-NB	-3.92	1.32	1.37
23	C	509	CLA	CHD-C4C	3.91	1.48	1.39
23	c	507	CLA	CHC-C4B	3.91	1.48	1.39
23	C	503	CLA	CHD-C4C	3.91	1.48	1.39
23	c	508	CLA	CHD-C4C	3.91	1.48	1.39
35	b	629	LMG	O7-C10	3.90	1.45	1.34
23	b	617	CLA	CHD-C4C	3.90	1.48	1.39
23	b	623	CLA	CHB-C1B	3.90	1.48	1.39
23	C	514	CLA	C3D-C2D	3.90	1.49	1.39
34	C	517	DGD	O2G-C1B	3.90	1.45	1.34
23	B	606	CLA	CHD-C4C	3.90	1.48	1.39
23	B	611	CLA	C3D-C2D	3.90	1.49	1.39
23	b	612	CLA	C3D-C2D	3.90	1.49	1.39
23	c	508	CLA	C3D-C2D	3.90	1.49	1.39
23	A	406	CLA	CHD-C4C	3.90	1.48	1.39
23	c	506	CLA	CHD-C4C	3.90	1.48	1.39
23	B	608	CLA	CHD-C4C	3.89	1.48	1.39
23	C	503	CLA	CHB-C1B	3.89	1.48	1.39
23	B	607	CLA	CHD-C4C	3.89	1.48	1.39
23	C	511	CLA	CHB-C1B	3.89	1.48	1.39
23	b	618	CLA	CHB-C1B	3.88	1.48	1.39
23	b	622	CLA	O2A-CGA	3.88	1.44	1.33
23	b	619	CLA	O2A-CGA	3.87	1.44	1.33
23	C	508	CLA	CHD-C4C	3.87	1.48	1.39
23	B	615	CLA	CHD-C4C	3.87	1.48	1.39
23	b	622	CLA	CHB-C1B	3.86	1.48	1.39
23	c	509	CLA	CHC-C4B	3.86	1.48	1.39
25	a	414	SQD	O47-C7	3.86	1.45	1.34
23	B	615	CLA	CHB-C1B	3.86	1.48	1.39
23	B	610	CLA	CHB-C1B	3.86	1.48	1.39
23	C	509	CLA	C3D-C2D	3.86	1.49	1.39
23	b	625	CLA	C3D-C2D	3.86	1.49	1.39
23	c	512	CLA	CHB-C1B	3.86	1.48	1.39
23	c	512	CLA	OBD-CAD	3.86	1.29	1.22
23	B	611	CLA	O2A-CGA	3.86	1.44	1.33
23	c	510	CLA	CHD-C4C	3.86	1.48	1.39
35	c	522	LMG	O7-C10	3.85	1.45	1.34
23	b	610	CLA	CHC-C4B	3.85	1.48	1.39
23	d	405	CLA	CHD-C4C	3.85	1.48	1.39
23	B	609	CLA	C3D-C2D	3.85	1.49	1.39
23	C	509	CLA	CHB-C1B	3.84	1.48	1.39
23	d	404	CLA	C3D-C2D	3.84	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	511	CLA	OBD-CAD	3.84	1.29	1.22
23	c	507	CLA	O2A-CGA	3.84	1.44	1.33
23	A	407	CLA	CHD-C4C	3.83	1.47	1.39
23	b	621	CLA	OBD-CAD	3.83	1.29	1.22
23	c	517	CLA	OBD-CAD	3.83	1.29	1.22
34	c	519	DGD	O2G-C1B	3.83	1.45	1.34
23	C	512	CLA	CHB-C1B	3.83	1.48	1.39
23	B	608	CLA	C1B-NB	-3.82	1.32	1.37
23	c	508	CLA	CHD-C1D	3.82	1.45	1.38
23	B	613	CLA	C1D-ND	3.82	1.42	1.37
23	b	623	CLA	CHD-C4C	3.82	1.47	1.39
23	b	620	CLA	C3D-C2D	3.82	1.49	1.39
23	C	510	CLA	OBD-CAD	3.82	1.29	1.22
23	A	407	CLA	CHC-C4B	3.81	1.48	1.39
23	a	409	CLA	O2A-CGA	3.81	1.44	1.33
23	B	611	CLA	OBD-CAD	3.81	1.29	1.22
23	b	613	CLA	C3D-C2D	3.81	1.49	1.39
23	b	614	CLA	CHB-C1B	3.81	1.48	1.39
23	D	407	CLA	C3D-C2D	3.80	1.49	1.39
23	b	625	CLA	CHB-C1B	3.80	1.47	1.39
23	c	508	CLA	CHC-C4B	3.80	1.47	1.39
23	A	406	CLA	O2A-CGA	3.80	1.44	1.33
23	b	615	CLA	CHD-C4C	3.80	1.47	1.39
23	b	615	CLA	CHB-C1B	3.80	1.47	1.39
23	B	613	CLA	C3D-C2D	3.80	1.49	1.39
23	a	410	CLA	C1D-ND	3.80	1.42	1.37
23	c	514	CLA	C3D-C2D	3.79	1.49	1.39
23	b	619	CLA	CHC-C4B	3.79	1.47	1.39
23	c	516	CLA	OBD-CAD	3.79	1.29	1.22
23	b	616	CLA	CHB-C1B	3.79	1.47	1.39
23	D	406	CLA	C3D-C2D	3.79	1.49	1.39
23	b	615	CLA	OBD-CAD	3.79	1.29	1.22
23	C	510	CLA	CHB-C1B	3.78	1.47	1.39
23	b	614	CLA	O2A-CGA	3.78	1.44	1.33
23	B	616	CLA	CHD-C1D	3.78	1.45	1.38
23	B	602	CLA	C3D-C2D	3.77	1.49	1.39
23	c	511	CLA	C3D-C2D	3.77	1.49	1.39
23	B	613	CLA	CHD-C4C	3.77	1.47	1.39
23	B	605	CLA	CHD-C4C	3.77	1.47	1.39
23	C	506	CLA	CHD-C4C	3.77	1.47	1.39
23	c	515	CLA	C3D-C2D	3.77	1.49	1.39
23	c	505	CLA	CHD-C4C	3.77	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	405	CLA	CHD-C1D	3.76	1.45	1.38
23	b	622	CLA	C3D-C2D	3.76	1.49	1.39
23	b	621	CLA	CHC-C4B	3.76	1.47	1.39
23	c	517	CLA	CHC-C4B	3.76	1.47	1.39
23	D	407	CLA	OBD-CAD	3.76	1.29	1.22
23	a	410	CLA	CHD-C4C	3.76	1.47	1.39
23	c	507	CLA	CHD-C4C	3.76	1.47	1.39
23	C	507	CLA	CHB-C1B	3.76	1.47	1.39
23	C	504	CLA	OBD-CAD	3.76	1.28	1.22
23	c	505	CLA	C3D-C2D	3.75	1.49	1.39
23	B	613	CLA	CHC-C4B	3.75	1.47	1.39
23	c	509	CLA	CHB-C1B	3.75	1.47	1.39
23	A	407	CLA	OBD-CAD	3.75	1.28	1.22
23	C	508	CLA	C3D-C2D	3.75	1.49	1.39
23	B	614	CLA	CHC-C4B	3.75	1.47	1.39
23	c	506	CLA	CHC-C4B	3.75	1.47	1.39
23	C	505	CLA	OBD-CAD	3.75	1.28	1.22
23	b	614	CLA	C3D-C2D	3.74	1.49	1.39
38	d	409	LHG	O8-C23	3.74	1.44	1.33
23	c	512	CLA	CHD-C4C	3.74	1.47	1.39
23	B	616	CLA	OBD-CAD	3.72	1.28	1.22
23	C	508	CLA	CHC-C4B	3.72	1.47	1.39
23	c	513	CLA	C3D-C2D	3.72	1.49	1.39
37	a	411	PHO	O2A-CGA	3.72	1.44	1.33
23	b	621	CLA	CHD-C1D	3.72	1.45	1.38
23	b	617	CLA	OBD-CAD	3.72	1.28	1.22
23	B	614	CLA	OBD-CAD	3.71	1.28	1.22
23	b	611	CLA	CHC-C4B	3.71	1.47	1.39
23	A	405	CLA	CHD-C4C	3.71	1.47	1.39
23	D	406	CLA	CHD-C1D	3.71	1.45	1.38
23	C	502	CLA	C3D-C2D	3.71	1.49	1.39
23	d	404	CLA	C1B-NB	-3.71	1.33	1.37
23	C	514	CLA	CHC-C4B	3.71	1.47	1.39
23	d	405	CLA	CHC-C4B	3.71	1.47	1.39
23	c	514	CLA	OBD-CAD	3.71	1.28	1.22
23	b	611	CLA	C3D-C2D	3.70	1.49	1.39
23	B	602	CLA	OBD-CAD	3.70	1.28	1.22
23	b	623	CLA	C3D-C2D	3.70	1.49	1.39
23	B	607	CLA	CHB-C1B	3.70	1.47	1.39
23	b	617	CLA	CHB-C1B	3.70	1.47	1.39
23	C	510	CLA	CHC-C4B	3.70	1.47	1.39
23	b	618	CLA	CHD-C4C	3.70	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	513	CLA	CHC-C4B	3.69	1.47	1.39
23	c	514	CLA	CHC-C4B	3.69	1.47	1.39
23	d	404	CLA	C1D-ND	3.69	1.42	1.37
23	C	504	CLA	CHB-C1B	3.68	1.47	1.39
23	C	514	CLA	OBD-CAD	3.68	1.28	1.22
23	B	605	CLA	CHB-C1B	3.68	1.47	1.39
33	b	632	HTG	C1'-S1	-3.68	1.76	1.81
23	C	511	CLA	CHC-C4B	3.68	1.47	1.39
23	B	615	CLA	CHD-C1D	3.67	1.45	1.38
23	C	502	CLA	OBD-CAD	3.67	1.28	1.22
23	B	608	CLA	CHB-C1B	3.67	1.47	1.39
23	B	606	CLA	C3D-C2D	3.67	1.49	1.39
23	a	410	CLA	C3D-C2D	3.67	1.49	1.39
23	c	510	CLA	OBD-CAD	3.67	1.28	1.22
23	B	608	CLA	CHC-C4B	3.67	1.47	1.39
23	c	509	CLA	OBD-CAD	3.67	1.28	1.22
23	b	620	CLA	OBD-CAD	3.66	1.28	1.22
23	b	612	CLA	CHD-C4C	3.66	1.47	1.39
23	b	620	CLA	CHD-C4C	3.66	1.47	1.39
23	C	513	CLA	OBD-CAD	3.66	1.28	1.22
23	b	619	CLA	C3D-C2D	3.66	1.49	1.39
23	b	624	CLA	CHD-C1D	3.66	1.45	1.38
23	B	604	CLA	C3D-C2D	3.66	1.49	1.39
23	b	616	CLA	CHD-C4C	3.66	1.47	1.39
23	a	409	CLA	CHB-C1B	3.65	1.47	1.39
23	B	615	CLA	OBD-CAD	3.65	1.28	1.22
23	b	615	CLA	C3D-C2D	3.65	1.49	1.39
38	L	101	LHG	O7-C7	3.65	1.44	1.34
23	C	513	CLA	CHC-C4B	3.65	1.47	1.39
23	C	506	CLA	OBD-CAD	3.65	1.28	1.22
23	A	406	CLA	OBD-CAD	3.65	1.28	1.22
23	c	507	CLA	C3D-C2D	3.64	1.48	1.39
23	b	612	CLA	CHB-C1B	3.64	1.47	1.39
23	B	603	CLA	CHD-C4C	3.64	1.47	1.39
23	B	616	CLA	CHD-C4C	3.63	1.47	1.39
23	c	516	CLA	CHC-C4B	3.63	1.47	1.39
23	D	407	CLA	CHC-C4B	3.63	1.47	1.39
23	b	624	CLA	CHD-C4C	3.63	1.47	1.39
23	d	405	CLA	OBD-CAD	3.63	1.28	1.22
23	B	605	CLA	O2A-CGA	3.62	1.43	1.33
23	b	610	CLA	OBD-CAD	3.62	1.28	1.22
23	B	611	CLA	CHB-C1B	3.62	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	607	CLA	C3D-C2D	3.62	1.48	1.39
23	b	613	CLA	CHD-C4C	3.62	1.47	1.39
23	C	506	CLA	C3D-C2D	3.61	1.48	1.39
23	B	606	CLA	CHB-C1B	3.61	1.47	1.39
23	b	624	CLA	CHC-C4B	3.61	1.47	1.39
23	C	502	CLA	CHB-C1B	3.61	1.47	1.39
23	B	607	CLA	CHC-C4B	3.61	1.47	1.39
23	C	505	CLA	CHB-C1B	3.60	1.47	1.39
23	C	503	CLA	OBD-CAD	3.60	1.28	1.22
23	C	513	CLA	CHB-C1B	3.60	1.47	1.39
23	b	623	CLA	OBD-CAD	3.60	1.28	1.22
38	d	410	LHG	O8-C23	3.59	1.43	1.33
23	b	611	CLA	CHB-C1B	3.59	1.47	1.39
23	b	614	CLA	OBD-CAD	3.59	1.28	1.22
23	B	617	CLA	C3D-C2D	3.59	1.48	1.39
23	B	610	CLA	OBD-CAD	3.59	1.28	1.22
23	b	616	CLA	OBD-CAD	3.59	1.28	1.22
23	c	507	CLA	OBD-CAD	3.58	1.28	1.22
23	c	510	CLA	C1B-NB	-3.58	1.33	1.37
23	B	617	CLA	CHB-C1B	3.58	1.47	1.39
23	a	409	CLA	CHC-C4B	3.58	1.47	1.39
23	C	514	CLA	CHB-C1B	3.58	1.47	1.39
23	b	616	CLA	CHC-C4B	3.58	1.47	1.39
23	c	511	CLA	CHB-C1B	3.58	1.47	1.39
23	B	607	CLA	OBD-CAD	3.57	1.28	1.22
23	B	617	CLA	CHC-C4B	3.57	1.47	1.39
23	b	625	CLA	CHD-C4C	3.57	1.47	1.39
38	D	412	LHG	O7-C7	3.57	1.44	1.34
23	B	609	CLA	OBD-CAD	3.57	1.28	1.22
23	b	625	CLA	OBD-CAD	3.57	1.28	1.22
23	b	623	CLA	CHC-C4B	3.57	1.47	1.39
23	C	503	CLA	CHC-C4B	3.57	1.47	1.39
23	b	625	CLA	CHC-C4B	3.57	1.47	1.39
23	B	612	CLA	CHB-C1B	3.56	1.47	1.39
23	C	512	CLA	OBD-CAD	3.56	1.28	1.22
23	c	516	CLA	CHB-C1B	3.55	1.47	1.39
23	b	619	CLA	CHB-C1B	3.55	1.47	1.39
23	b	618	CLA	CHC-C4B	3.55	1.47	1.39
23	C	508	CLA	OBD-CAD	3.54	1.28	1.22
23	C	512	CLA	CHC-C4B	3.54	1.47	1.39
23	b	618	CLA	OBD-CAD	3.54	1.28	1.22
23	B	603	CLA	C3D-C2D	3.54	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	b	607	HTG	C1'-S1	-3.54	1.76	1.81
23	B	617	CLA	CHD-C4C	3.54	1.47	1.39
23	B	608	CLA	C3D-C2D	3.54	1.48	1.39
23	c	515	CLA	CHB-C1B	3.54	1.47	1.39
23	b	613	CLA	CHC-C4B	3.53	1.47	1.39
23	B	603	CLA	CHB-C1B	3.53	1.47	1.39
23	B	609	CLA	C4B-NB	-3.53	1.33	1.37
23	b	614	CLA	CHD-C4C	3.53	1.47	1.39
23	a	409	CLA	C4C-C3C	3.53	1.51	1.45
23	B	602	CLA	CHC-C4B	3.52	1.47	1.39
23	c	506	CLA	OBD-CAD	3.51	1.28	1.22
23	C	505	CLA	CHC-C4B	3.50	1.47	1.39
23	B	615	CLA	C1B-NB	-3.50	1.33	1.37
23	b	614	CLA	CHC-C4B	3.49	1.47	1.39
23	b	612	CLA	CHC-C4B	3.49	1.47	1.39
33	b	601	HTG	C1'-S1	-3.49	1.76	1.81
23	D	407	CLA	CHB-C1B	3.49	1.47	1.39
38	D	411	LHG	O7-C7	3.48	1.44	1.34
23	C	506	CLA	CHC-C4B	3.48	1.47	1.39
23	a	412	CLA	CHB-C1B	3.48	1.47	1.39
23	B	616	CLA	CHB-C1B	3.48	1.47	1.39
33	d	414	HTG	C1'-S1	-3.48	1.76	1.81
23	D	406	CLA	CHB-C1B	3.47	1.47	1.39
23	B	613	CLA	OBD-CAD	3.47	1.28	1.22
23	d	404	CLA	CHB-C1B	3.47	1.47	1.39
23	c	508	CLA	OBD-CAD	3.47	1.28	1.22
23	d	403	CLA	CHB-C1B	3.47	1.47	1.39
39	F	102	HEM	C4D-ND	-3.46	1.34	1.40
23	a	410	CLA	CHB-C1B	3.46	1.47	1.39
23	c	510	CLA	CHC-C4B	3.46	1.47	1.39
39	e	101	HEM	C1B-NB	-3.46	1.34	1.40
23	b	615	CLA	CHC-C4B	3.46	1.47	1.39
23	c	510	CLA	C3D-C2D	3.46	1.48	1.39
23	A	404	CLA	OBD-CAD	3.45	1.28	1.22
23	b	619	CLA	OBD-CAD	3.45	1.28	1.22
23	a	410	CLA	CHC-C4B	3.45	1.47	1.39
23	C	509	CLA	CHC-C4B	3.45	1.47	1.39
23	d	404	CLA	CHC-C4B	3.44	1.47	1.39
23	B	605	CLA	C3D-C2D	3.44	1.48	1.39
23	B	604	CLA	CHB-C1B	3.44	1.47	1.39
23	c	505	CLA	C1B-NB	-3.44	1.33	1.37
23	B	606	CLA	OBD-CAD	3.43	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	609	CLA	CHB-C1B	3.43	1.47	1.39
23	B	613	CLA	C1B-NB	-3.42	1.33	1.37
23	A	406	CLA	CHC-C4B	3.42	1.47	1.39
23	c	517	CLA	CHB-C1B	3.42	1.47	1.39
23	a	412	CLA	CHC-C4B	3.41	1.47	1.39
23	C	508	CLA	CHB-C1B	3.41	1.47	1.39
23	C	505	CLA	C1B-NB	-3.40	1.33	1.37
23	C	506	CLA	C1B-NB	-3.40	1.33	1.37
23	B	615	CLA	CHC-C4B	3.39	1.47	1.39
23	c	515	CLA	OBD-CAD	3.39	1.28	1.22
23	B	612	CLA	CHC-C4B	3.38	1.47	1.39
23	c	505	CLA	CHC-C4B	3.38	1.47	1.39
33	B	629	HTG	C1'-S1	-3.38	1.76	1.81
23	c	515	CLA	CHC-C4B	3.38	1.47	1.39
23	B	616	CLA	C1B-NB	-3.38	1.33	1.37
23	C	507	CLA	CHC-C4B	3.38	1.47	1.39
38	d	409	LHG	O7-C7	3.37	1.43	1.34
23	d	404	CLA	C4B-NB	-3.36	1.33	1.37
23	d	405	CLA	C1B-NB	-3.35	1.33	1.37
23	b	612	CLA	C1B-NB	-3.35	1.33	1.37
23	b	612	CLA	OBD-CAD	3.34	1.28	1.22
23	A	405	CLA	CHB-C1B	3.33	1.46	1.39
23	D	406	CLA	CHC-C4B	3.33	1.46	1.39
23	C	507	CLA	OBD-CAD	3.33	1.28	1.22
23	b	610	CLA	CHB-C1B	3.33	1.46	1.39
23	b	619	CLA	C1B-NB	-3.33	1.33	1.37
23	A	405	CLA	OBD-CAD	3.33	1.28	1.22
33	B	630	HTG	C1'-S1	-3.32	1.76	1.81
23	b	615	CLA	C1B-NB	-3.32	1.33	1.37
23	d	405	CLA	CHB-C1B	3.32	1.46	1.39
23	c	507	CLA	CHB-C1B	3.32	1.46	1.39
23	a	412	CLA	C4B-NB	-3.32	1.33	1.37
23	B	610	CLA	CHC-C4B	3.31	1.46	1.39
23	A	407	CLA	CHB-C1B	3.31	1.46	1.39
23	B	611	CLA	C1B-NB	-3.31	1.33	1.37
33	V	207	HTG	C1'-S1	-3.31	1.76	1.81
23	c	509	CLA	C1B-NB	-3.30	1.33	1.37
23	B	605	CLA	CHC-C4B	3.30	1.46	1.39
23	a	410	CLA	C1B-NB	-3.30	1.33	1.37
23	B	617	CLA	OBD-CAD	3.29	1.28	1.22
23	C	507	CLA	C1B-NB	-3.29	1.33	1.37
23	c	505	CLA	OBD-CAD	3.29	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	609	CLA	CHC-C4B	3.29	1.46	1.39
23	b	620	CLA	CHC-C4B	3.28	1.46	1.39
23	B	605	CLA	OBD-CAD	3.28	1.28	1.22
23	c	512	CLA	CHC-C4B	3.28	1.46	1.39
39	e	101	HEM	C4D-ND	-3.28	1.34	1.40
39	F	102	HEM	C1B-NB	-3.27	1.34	1.40
23	b	613	CLA	C1B-C2B	3.27	1.50	1.43
23	d	403	CLA	OBD-CAD	3.27	1.28	1.22
23	B	602	CLA	C1B-C2B	3.26	1.50	1.43
33	b	608	HTG	C1'-S1	-3.26	1.76	1.81
33	B	623	HTG	C1'-S1	-3.24	1.76	1.81
23	b	622	CLA	CHC-C4B	3.22	1.46	1.39
33	c	524	HTG	C1'-S1	-3.22	1.76	1.81
23	c	509	CLA	C3D-C2D	3.21	1.47	1.39
23	B	608	CLA	C4B-NB	-3.20	1.33	1.37
33	c	525	HTG	C1'-S1	-3.20	1.76	1.81
23	A	404	CLA	CHB-C1B	3.20	1.46	1.39
23	B	607	CLA	C1B-NB	-3.19	1.33	1.37
23	A	405	CLA	C4B-NB	-3.19	1.33	1.37
23	A	405	CLA	CHC-C4B	3.19	1.46	1.39
23	b	611	CLA	C1B-NB	-3.18	1.33	1.37
23	b	622	CLA	OBD-CAD	3.18	1.28	1.22
23	b	617	CLA	C1B-NB	-3.18	1.33	1.37
23	C	506	CLA	C1B-C2B	3.17	1.50	1.43
23	d	403	CLA	CHC-C4B	3.17	1.46	1.39
23	a	412	CLA	OBD-CAD	3.17	1.27	1.22
23	B	603	CLA	C1B-NB	-3.17	1.33	1.37
23	A	406	CLA	CHB-C1B	3.16	1.46	1.39
23	b	623	CLA	C1B-NB	-3.15	1.33	1.37
23	D	406	CLA	C4B-NB	-3.15	1.33	1.37
23	c	516	CLA	C1B-NB	-3.14	1.33	1.37
23	c	516	CLA	C4B-NB	-3.14	1.33	1.37
23	b	621	CLA	CHD-C4C	3.14	1.46	1.39
33	C	523	HTG	C1'-S1	-3.14	1.77	1.81
23	A	404	CLA	CHC-C4B	3.14	1.46	1.39
23	D	406	CLA	C1B-NB	-3.14	1.33	1.37
23	b	616	CLA	C1B-NB	-3.13	1.33	1.37
23	a	412	CLA	C1B-NB	-3.12	1.33	1.37
23	c	512	CLA	C1B-NB	-3.12	1.33	1.37
23	b	622	CLA	C1B-NB	-3.11	1.33	1.37
23	A	404	CLA	C1B-NB	-3.11	1.33	1.37
23	B	617	CLA	C4B-NB	-3.11	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	502	CLA	C1C-C2C	3.10	1.50	1.44
33	C	522	HTG	C1'-S1	-3.10	1.77	1.81
23	b	622	CLA	C1B-C2B	3.10	1.50	1.43
23	b	612	CLA	C4B-NB	-3.10	1.33	1.37
23	c	508	CLA	C1B-NB	-3.10	1.33	1.37
23	c	517	CLA	C4B-NB	-3.09	1.33	1.37
23	D	406	CLA	OBD-CAD	3.08	1.27	1.22
23	c	505	CLA	C4B-NB	-3.08	1.33	1.37
23	b	610	CLA	C1B-NB	-3.06	1.33	1.37
23	d	403	CLA	C4B-NB	-3.05	1.33	1.37
23	d	403	CLA	C1B-NB	-3.05	1.33	1.37
23	B	612	CLA	C1B-NB	-3.05	1.33	1.37
23	C	510	CLA	C4B-NB	-3.05	1.33	1.37
23	B	605	CLA	C4D-CHA	3.04	1.48	1.38
23	B	612	CLA	C4B-NB	-3.04	1.33	1.37
23	C	508	CLA	C1B-NB	-3.03	1.33	1.37
23	b	625	CLA	C1B-NB	-3.03	1.33	1.37
23	c	507	CLA	C1B-NB	-3.02	1.33	1.37
23	b	614	CLA	C1B-NB	-3.02	1.33	1.37
23	b	624	CLA	C1B-C2B	3.02	1.50	1.43
23	c	513	CLA	C1B-NB	-3.02	1.33	1.37
23	B	610	CLA	C1B-C2B	3.02	1.50	1.43
23	b	621	CLA	C4B-NB	-3.01	1.33	1.37
23	b	621	CLA	C1C-C2C	3.00	1.50	1.44
23	c	509	CLA	C4C-C3C	2.99	1.50	1.45
23	C	505	CLA	C4B-NB	-2.99	1.33	1.37
23	c	511	CLA	C1C-C2C	2.99	1.50	1.44
23	a	409	CLA	C4B-NB	-2.99	1.33	1.37
23	D	407	CLA	C4B-NB	-2.99	1.33	1.37
23	B	615	CLA	C4B-NB	-2.99	1.33	1.37
23	C	511	CLA	C4C-C3C	2.98	1.50	1.45
23	C	512	CLA	C1B-C2B	2.97	1.50	1.43
23	d	403	CLA	C1B-C2B	2.97	1.50	1.43
33	b	631	HTG	C1'-S1	-2.97	1.77	1.81
23	C	508	CLA	C4D-CHA	2.97	1.48	1.38
23	C	502	CLA	C1B-NB	-2.97	1.34	1.37
23	d	404	CLA	OBD-CAD	2.95	1.27	1.22
23	b	614	CLA	C4D-CHA	2.95	1.48	1.38
23	A	405	CLA	C1B-NB	-2.95	1.34	1.37
23	C	512	CLA	C4D-CHA	2.95	1.48	1.38
23	a	410	CLA	C4B-NB	-2.95	1.34	1.37
23	c	506	CLA	C4D-CHA	2.94	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	512	CLA	C1B-C2B	2.94	1.50	1.43
23	B	608	CLA	OBD-CAD	2.94	1.27	1.22
41	v	205	HEC	C1D-ND	-2.93	1.34	1.39
23	b	613	CLA	C4B-NB	-2.93	1.34	1.37
23	d	404	CLA	C4C-C3C	2.93	1.50	1.45
23	c	511	CLA	C4D-CHA	2.93	1.48	1.38
33	D	416	HTG	C1'-S1	-2.93	1.77	1.81
23	A	407	CLA	C1B-NB	-2.93	1.34	1.37
23	C	511	CLA	C1B-NB	-2.92	1.34	1.37
23	B	605	CLA	C1B-C2B	2.92	1.50	1.43
23	C	513	CLA	C1B-NB	-2.92	1.34	1.37
23	b	625	CLA	C1B-C2B	2.92	1.50	1.43
23	C	514	CLA	C1B-NB	-2.91	1.34	1.37
33	B	622	HTG	C1'-S1	-2.91	1.77	1.81
23	c	517	CLA	C1B-NB	-2.91	1.34	1.37
39	F	102	HEM	C1C-C2C	-2.91	1.39	1.45
23	B	606	CLA	C1C-C2C	2.90	1.50	1.44
23	b	613	CLA	C1B-NB	-2.90	1.34	1.37
23	b	615	CLA	C4B-NB	-2.89	1.34	1.37
23	B	617	CLA	C1B-NB	-2.89	1.34	1.37
23	c	514	CLA	C4B-NB	-2.88	1.34	1.37
23	b	619	CLA	C4B-NB	-2.88	1.34	1.37
23	C	512	CLA	C4B-NB	-2.87	1.34	1.37
23	b	618	CLA	C1B-NB	-2.87	1.34	1.37
23	b	613	CLA	C4D-CHA	2.87	1.48	1.38
23	A	404	CLA	C4B-NB	-2.87	1.34	1.37
23	d	405	CLA	C4B-NB	-2.87	1.34	1.37
23	B	611	CLA	C4B-NB	-2.87	1.34	1.37
23	C	504	CLA	C1B-NB	-2.87	1.34	1.37
23	c	514	CLA	C1B-NB	-2.87	1.34	1.37
23	c	515	CLA	C4B-NB	-2.87	1.34	1.37
23	b	620	CLA	C1B-C2B	2.86	1.49	1.43
23	b	625	CLA	C4B-NB	-2.86	1.34	1.37
23	B	602	CLA	C1B-NB	-2.86	1.34	1.37
23	B	614	CLA	C1B-NB	-2.86	1.34	1.37
23	c	513	CLA	C1B-C2B	2.86	1.49	1.43
23	C	507	CLA	C4B-NB	-2.86	1.34	1.37
23	B	607	CLA	C4B-NB	-2.86	1.34	1.37
23	a	409	CLA	C1B-C2B	2.86	1.49	1.43
23	c	514	CLA	C1B-C2B	2.85	1.49	1.43
23	c	506	CLA	C4B-NB	-2.84	1.34	1.37
23	b	610	CLA	C4B-NB	-2.84	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	623	CLA	C1B-C2B	2.84	1.49	1.43
23	c	508	CLA	C4B-NB	-2.84	1.34	1.37
23	B	611	CLA	C4D-CHA	2.83	1.48	1.38
23	A	407	CLA	C1B-C2B	2.83	1.49	1.43
23	A	404	CLA	C4C-C3C	2.83	1.49	1.45
23	B	602	CLA	C4B-NB	-2.82	1.34	1.37
23	C	509	CLA	C1B-C2B	2.82	1.49	1.43
23	B	604	CLA	OBD-CAD	2.81	1.27	1.22
23	B	610	CLA	C1B-NB	-2.81	1.34	1.37
23	C	503	CLA	C4B-NB	-2.81	1.34	1.37
23	A	406	CLA	C3B-C4B	2.80	1.50	1.42
23	D	406	CLA	C1B-C2B	2.80	1.49	1.43
23	C	510	CLA	C1B-NB	-2.79	1.34	1.37
23	c	513	CLA	C4D-CHA	2.78	1.47	1.38
23	c	514	CLA	C4D-CHA	2.78	1.47	1.38
23	b	622	CLA	C4B-NB	-2.78	1.34	1.37
23	b	621	CLA	C1B-C2B	2.77	1.49	1.43
23	c	509	CLA	C1B-C2B	2.77	1.49	1.43
23	b	621	CLA	C1B-NB	-2.77	1.34	1.37
23	B	611	CLA	C3B-C4B	2.77	1.50	1.42
23	B	608	CLA	C4D-CHA	2.76	1.47	1.38
23	C	513	CLA	C1B-C2B	2.76	1.49	1.43
23	A	406	CLA	C1B-NB	-2.76	1.34	1.37
23	c	505	CLA	C4D-CHA	2.76	1.47	1.38
23	c	512	CLA	C4C-C3C	2.76	1.49	1.45
30	d	407[B]	PL9	C6-C5	2.76	1.48	1.35
23	B	617	CLA	C1B-C2B	2.75	1.49	1.43
23	b	617	CLA	C4D-CHA	2.75	1.47	1.38
30	a	416[B]	PL9	C6-C5	2.75	1.48	1.35
23	C	513	CLA	C4D-CHA	2.75	1.47	1.38
30	a	416[A]	PL9	C6-C5	2.74	1.48	1.35
23	B	613	CLA	C1B-C2B	2.74	1.49	1.43
23	B	604	CLA	C4B-NB	-2.74	1.34	1.37
23	C	511	CLA	C4D-CHA	2.74	1.47	1.38
23	c	511	CLA	C4B-NB	-2.74	1.34	1.37
23	B	610	CLA	C4B-NB	-2.74	1.34	1.37
23	c	513	CLA	C4B-NB	-2.74	1.34	1.37
30	D	409[A]	PL9	C6-C5	2.74	1.48	1.35
30	A	416[B]	PL9	C6-C5	2.73	1.48	1.35
23	c	516	CLA	C4D-CHA	2.73	1.47	1.38
23	B	617	CLA	C4D-CHA	2.73	1.47	1.38
23	B	603	CLA	C1B-C2B	2.73	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	506	CLA	C4B-NB	-2.72	1.34	1.37
23	B	607	CLA	C4D-CHA	2.72	1.47	1.38
23	b	614	CLA	C1B-C2B	2.72	1.49	1.43
23	b	615	CLA	C1B-C2B	2.72	1.49	1.43
35	Z	101	LMG	O8-C28	2.72	1.46	1.33
23	B	605	CLA	C1B-NB	-2.72	1.34	1.37
23	b	611	CLA	C4B-NB	-2.72	1.34	1.37
23	a	409	CLA	C4D-CHA	2.71	1.47	1.38
37	D	403[A]	PHO	CHA-CBD	-2.71	1.48	1.51
30	A	416[A]	PL9	C6-C5	2.71	1.48	1.35
23	C	514	CLA	C4D-CHA	2.71	1.47	1.38
23	B	609	CLA	C4D-CHA	2.71	1.47	1.38
23	b	625	CLA	C4D-CHA	2.71	1.47	1.38
23	B	612	CLA	C1B-C2B	2.71	1.49	1.43
27	a	404	LMT	O1'-C1'	2.70	1.44	1.40
23	C	511	CLA	C1B-C2B	2.70	1.49	1.43
23	C	510	CLA	C4D-CHA	2.70	1.47	1.38
23	c	506	CLA	C1B-C2B	2.70	1.49	1.43
23	c	516	CLA	C1C-C2C	2.70	1.50	1.44
30	d	407[A]	PL9	C6-C5	2.70	1.48	1.35
23	B	614	CLA	C1C-C2C	2.70	1.50	1.44
23	b	620	CLA	C4D-CHA	2.69	1.47	1.38
23	A	406	CLA	C4B-NB	-2.69	1.34	1.37
23	b	619	CLA	C1B-C2B	2.69	1.49	1.43
23	B	609	CLA	C1B-NB	-2.69	1.34	1.37
23	C	504	CLA	C1C-C2C	2.69	1.50	1.44
23	C	510	CLA	C1B-C2B	2.69	1.49	1.43
23	b	614	CLA	C1C-C2C	2.69	1.50	1.44
23	C	503	CLA	C1B-C2B	2.68	1.49	1.43
23	C	509	CLA	C4B-NB	-2.68	1.34	1.37
23	d	404	CLA	C3D-C4D	-2.68	1.38	1.44
23	d	405	CLA	C4D-CHA	2.68	1.47	1.38
23	B	610	CLA	C4D-CHA	2.68	1.47	1.38
23	C	510	CLA	C1C-C2C	2.68	1.50	1.44
23	C	508	CLA	C4B-NB	-2.67	1.34	1.37
23	B	616	CLA	C4D-CHA	2.67	1.47	1.38
23	A	405	CLA	C4D-CHA	2.67	1.47	1.38
23	B	613	CLA	C1C-C2C	2.67	1.49	1.44
23	C	505	CLA	C4D-CHA	2.67	1.47	1.38
23	A	407	CLA	C4B-NB	-2.66	1.34	1.37
23	b	616	CLA	C1B-C2B	2.66	1.49	1.43
23	B	617	CLA	C3D-C4D	-2.66	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	505	CLA	C1B-C2B	2.66	1.49	1.43
30	D	409[B]	PL9	C6-C5	2.66	1.48	1.35
41	V	206	HEC	C4B-NB	-2.65	1.34	1.39
23	C	511	CLA	C4B-NB	-2.65	1.34	1.37
23	b	622	CLA	C4D-CHA	2.65	1.47	1.38
23	C	512	CLA	C1B-NB	-2.65	1.34	1.37
23	b	612	CLA	C1B-C2B	2.65	1.49	1.43
23	b	620	CLA	C1B-NB	-2.65	1.34	1.37
37	a	411	PHO	C3A-C2A	-2.65	1.52	1.54
23	b	621	CLA	C4D-CHA	2.65	1.47	1.38
23	C	512	CLA	C4C-C3C	2.64	1.49	1.45
23	C	502	CLA	C4D-CHA	2.64	1.47	1.38
23	a	409	CLA	C1B-NB	-2.64	1.34	1.37
23	c	510	CLA	C1B-C2B	2.64	1.49	1.43
23	B	606	CLA	C1B-C2B	2.64	1.49	1.43
23	C	503	CLA	C4D-CHA	2.64	1.47	1.38
23	A	405	CLA	C1B-C2B	2.64	1.49	1.43
41	V	206	HEC	C4D-ND	-2.63	1.34	1.39
23	b	613	CLA	C4C-C3C	2.63	1.49	1.45
23	b	616	CLA	C4D-CHA	2.63	1.47	1.38
23	B	602	CLA	C4D-CHA	2.63	1.47	1.38
23	b	610	CLA	C4D-CHA	2.63	1.47	1.38
23	b	622	CLA	C4C-C3C	2.63	1.49	1.45
23	c	517	CLA	C1C-C2C	2.63	1.49	1.44
23	c	507	CLA	C4B-NB	-2.63	1.34	1.37
23	B	608	CLA	C1B-C2B	2.63	1.49	1.43
23	B	612	CLA	C4D-CHA	2.62	1.47	1.38
23	b	619	CLA	C4C-C3C	2.62	1.49	1.45
23	B	603	CLA	C1C-C2C	2.62	1.49	1.44
23	C	509	CLA	C1B-NB	-2.62	1.34	1.37
23	B	615	CLA	C4D-CHA	2.62	1.47	1.38
23	C	509	CLA	C4D-CHA	2.61	1.47	1.38
23	C	507	CLA	C4D-CHA	2.61	1.47	1.38
23	a	412	CLA	C1B-C2B	2.61	1.49	1.43
23	B	604	CLA	C1C-C2C	2.61	1.49	1.44
23	c	517	CLA	C3B-C4B	2.60	1.50	1.42
23	b	624	CLA	C4D-CHA	2.60	1.47	1.38
23	d	403	CLA	C4D-CHA	2.60	1.47	1.38
23	b	614	CLA	C3B-C4B	2.60	1.50	1.42
23	b	615	CLA	C4D-CHA	2.60	1.47	1.38
23	a	410	CLA	C4D-CHA	2.59	1.47	1.38
23	B	606	CLA	C1B-NB	-2.59	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	502	CLA	C3B-C4B	2.59	1.50	1.42
23	b	610	CLA	C3B-C4B	2.59	1.50	1.42
33	c	524	HTG	C1-S1	-2.59	1.76	1.80
23	B	611	CLA	C4C-C3C	2.58	1.49	1.45
23	D	407	CLA	C1B-NB	-2.58	1.34	1.37
23	b	613	CLA	C1C-C2C	2.58	1.49	1.44
23	B	616	CLA	C1C-C2C	2.58	1.49	1.44
23	B	607	CLA	C4C-C3C	2.58	1.49	1.45
23	D	407	CLA	C1B-C2B	2.58	1.49	1.43
23	C	505	CLA	C4C-C3C	2.58	1.49	1.45
23	c	510	CLA	C4B-NB	-2.58	1.34	1.37
23	b	619	CLA	C4D-CHA	2.57	1.47	1.38
23	b	611	CLA	C4D-CHA	2.57	1.47	1.38
23	c	508	CLA	C4D-CHA	2.57	1.47	1.38
23	C	510	CLA	C4C-C3C	2.57	1.49	1.45
23	B	610	CLA	C3D-C4D	-2.57	1.38	1.44
23	c	517	CLA	C4D-CHA	2.57	1.47	1.38
23	B	606	CLA	C3B-C4B	2.57	1.50	1.42
23	B	614	CLA	C1B-C2B	2.57	1.49	1.43
23	c	509	CLA	C4D-CHA	2.57	1.47	1.38
23	C	506	CLA	C4C-C3C	2.56	1.49	1.45
23	B	614	CLA	C4B-NB	-2.56	1.34	1.37
23	c	510	CLA	C3D-C4D	-2.56	1.38	1.44
23	B	606	CLA	C4B-NB	-2.55	1.34	1.37
23	C	504	CLA	C4D-CHA	2.55	1.47	1.38
23	b	615	CLA	C1C-C2C	2.55	1.49	1.44
23	B	616	CLA	C4B-NB	-2.55	1.34	1.37
23	c	512	CLA	C4B-NB	-2.55	1.34	1.37
23	D	407	CLA	C4D-CHA	2.55	1.47	1.38
23	a	410	CLA	C1C-C2C	2.55	1.49	1.44
34	D	410	DGD	O3G-C1D	2.55	1.44	1.40
23	c	507	CLA	C4D-CHA	2.55	1.47	1.38
41	v	205	HEC	C1B-NB	-2.54	1.34	1.39
23	b	617	CLA	C4B-NB	-2.54	1.34	1.37
23	C	514	CLA	C4B-NB	-2.54	1.34	1.37
23	A	404	CLA	C1B-C2B	2.54	1.49	1.43
23	A	407	CLA	C4D-CHA	2.54	1.47	1.38
23	c	511	CLA	C1B-C2B	2.54	1.49	1.43
23	C	505	CLA	C1C-C2C	2.54	1.49	1.44
37	d	402[B]	PHO	C3A-C2A	-2.53	1.52	1.54
37	D	403[B]	PHO	CHA-CBD	-2.53	1.48	1.51
23	c	512	CLA	C4D-CHA	2.53	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	e	101	HEM	C1C-C2C	-2.52	1.40	1.45
41	V	206	HEC	C1B-NB	-2.52	1.34	1.39
37	d	402[B]	PHO	CHA-CBD	-2.52	1.48	1.51
23	b	618	CLA	C1B-C2B	2.52	1.49	1.43
37	D	402	PHO	CHA-CBD	-2.52	1.48	1.51
23	b	616	CLA	C4B-NB	-2.52	1.34	1.37
23	B	604	CLA	C4D-CHA	2.52	1.47	1.38
23	a	412	CLA	C4D-CHA	2.51	1.47	1.38
23	c	516	CLA	C4C-C3C	2.51	1.49	1.45
23	C	514	CLA	C3B-C4B	2.51	1.50	1.42
23	B	613	CLA	C4B-NB	-2.51	1.34	1.37
23	A	406	CLA	C1B-C2B	2.51	1.49	1.43
23	c	511	CLA	C1B-NB	-2.51	1.34	1.37
23	b	610	CLA	C1C-C2C	2.51	1.49	1.44
23	C	514	CLA	C1B-C2B	2.51	1.49	1.43
23	c	507	CLA	C1C-C2C	2.51	1.49	1.44
23	B	613	CLA	C4D-CHA	2.51	1.47	1.38
23	C	513	CLA	C1C-C2C	2.50	1.49	1.44
23	c	515	CLA	C1B-C2B	2.50	1.49	1.43
23	B	612	CLA	C4C-C3C	2.50	1.49	1.45
23	b	612	CLA	C1C-C2C	2.50	1.49	1.44
23	c	515	CLA	C4D-CHA	2.49	1.47	1.38
23	c	508	CLA	C1C-C2C	2.49	1.49	1.44
23	B	614	CLA	C4D-CHA	2.49	1.46	1.38
23	b	612	CLA	C4D-CHA	2.49	1.46	1.38
23	C	505	CLA	C3B-C2B	2.49	1.49	1.41
23	C	507	CLA	C4C-C3C	2.49	1.49	1.45
23	c	513	CLA	C1C-C2C	2.49	1.49	1.44
23	B	616	CLA	C1B-C2B	2.49	1.49	1.43
23	B	603	CLA	C4C-C3C	2.48	1.49	1.45
37	D	403[A]	PHO	C3A-C2A	-2.48	1.52	1.54
37	d	402[A]	PHO	C4B-NB	-2.48	1.34	1.38
23	B	603	CLA	C4D-CHA	2.48	1.46	1.38
23	b	620	CLA	C4B-NB	-2.48	1.34	1.37
23	C	502	CLA	C1B-C2B	2.48	1.49	1.43
23	B	610	CLA	C4C-C3C	2.48	1.49	1.45
23	c	512	CLA	C3D-C4D	-2.48	1.38	1.44
41	V	206	HEC	C1D-ND	-2.48	1.34	1.39
23	B	606	CLA	C4D-CHA	2.48	1.46	1.38
23	C	505	CLA	C1B-C2B	2.48	1.48	1.43
23	c	509	CLA	C3D-C4D	-2.47	1.38	1.44
37	d	402[A]	PHO	C3A-C2A	-2.47	1.52	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	611	CLA	C1C-C2C	2.47	1.49	1.44
23	D	407	CLA	C4C-C3C	2.47	1.49	1.45
23	B	615	CLA	C1B-C2B	2.47	1.48	1.43
23	a	410	CLA	C3D-C4D	-2.46	1.38	1.44
23	B	603	CLA	C3D-C4D	-2.46	1.38	1.44
23	C	510	CLA	C3B-C2B	2.46	1.49	1.41
23	C	507	CLA	C3D-C4D	-2.46	1.38	1.44
23	b	618	CLA	C1C-C2C	2.46	1.49	1.44
23	B	609	CLA	C1B-C2B	2.46	1.48	1.43
27	A	413	LMT	O1'-C1'	2.46	1.44	1.40
23	b	614	CLA	C3D-C4D	-2.46	1.38	1.44
23	C	502	CLA	C4C-C3C	2.46	1.49	1.45
23	C	504	CLA	C1B-C2B	2.45	1.48	1.43
23	b	611	CLA	C4C-C3C	2.45	1.49	1.45
23	A	405	CLA	C3B-C2B	2.45	1.49	1.41
23	c	508	CLA	C3D-C4D	-2.45	1.38	1.44
23	C	508	CLA	C1C-C2C	2.45	1.49	1.44
23	c	513	CLA	C3D-C4D	-2.45	1.38	1.44
23	b	624	CLA	C4B-NB	-2.45	1.34	1.37
23	B	605	CLA	C3B-C2B	2.45	1.49	1.41
23	d	404	CLA	C4D-CHA	2.45	1.46	1.38
23	C	506	CLA	C4D-CHA	2.45	1.46	1.38
23	c	505	CLA	C4C-C3C	2.45	1.49	1.45
23	A	404	CLA	C1C-C2C	2.44	1.49	1.44
23	a	410	CLA	C3B-C4B	2.44	1.49	1.42
23	c	516	CLA	C1B-C2B	2.44	1.48	1.43
23	B	605	CLA	C1C-C2C	2.44	1.49	1.44
23	c	507	CLA	C1B-C2B	2.44	1.48	1.43
23	B	616	CLA	C3B-C4B	2.44	1.49	1.42
23	D	406	CLA	C3D-C4D	-2.44	1.38	1.44
23	c	517	CLA	C4C-C3C	2.44	1.49	1.45
23	d	405	CLA	C3B-C4B	2.44	1.49	1.42
23	B	609	CLA	C3D-C4D	-2.44	1.38	1.44
23	c	506	CLA	C3B-C4B	2.44	1.49	1.42
23	d	405	CLA	C1B-C2B	2.44	1.48	1.43
23	D	406	CLA	C4C-C3C	2.43	1.49	1.45
23	C	504	CLA	C4B-NB	-2.43	1.34	1.37
23	c	509	CLA	C1C-C2C	2.43	1.49	1.44
23	B	609	CLA	C4C-C3C	2.43	1.49	1.45
23	A	406	CLA	C4D-CHA	2.43	1.46	1.38
23	b	622	CLA	C3D-C4D	-2.43	1.38	1.44
23	c	507	CLA	C3B-C4B	2.42	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	507	CLA	C3D-C4D	-2.42	1.38	1.44
23	B	604	CLA	C3D-C4D	-2.42	1.38	1.44
23	b	618	CLA	C3D-C4D	-2.42	1.38	1.44
23	c	515	CLA	C1B-NB	-2.42	1.34	1.37
23	D	406	CLA	C4D-CHA	2.42	1.46	1.38
23	C	509	CLA	C3B-C4B	2.42	1.49	1.42
23	B	605	CLA	C4B-NB	-2.42	1.34	1.37
23	B	606	CLA	C4C-C3C	2.42	1.49	1.45
23	b	617	CLA	C1B-C2B	2.42	1.48	1.43
23	C	503	CLA	C1C-C2C	2.42	1.49	1.44
23	C	509	CLA	C1C-C2C	2.41	1.49	1.44
23	B	614	CLA	C4C-C3C	2.41	1.49	1.45
23	b	618	CLA	C4D-CHA	2.41	1.46	1.38
23	c	513	CLA	C3B-C2B	2.41	1.49	1.41
23	b	621	CLA	C3B-C4B	2.41	1.49	1.42
23	C	512	CLA	C3B-C2B	2.41	1.49	1.41
23	b	611	CLA	C1B-C2B	2.41	1.48	1.43
23	A	405	CLA	C1C-C2C	2.41	1.49	1.44
23	b	617	CLA	C3B-C4B	2.41	1.49	1.42
23	b	623	CLA	C4D-CHA	2.40	1.46	1.38
23	b	623	CLA	C4B-NB	-2.40	1.34	1.37
33	D	416	HTG	C1-S1	-2.40	1.76	1.80
23	b	621	CLA	C3B-C2B	2.40	1.49	1.41
23	c	517	CLA	C1B-C2B	2.40	1.48	1.43
23	c	512	CLA	C3B-C2B	2.39	1.49	1.41
23	C	504	CLA	C3B-C4B	2.39	1.49	1.42
23	B	605	CLA	C3D-C4D	-2.39	1.38	1.44
23	b	618	CLA	C4B-NB	-2.39	1.34	1.37
37	a	411	PHO	CHA-CBD	-2.38	1.48	1.51
23	C	504	CLA	C4C-C3C	2.38	1.49	1.45
23	C	503	CLA	C4C-C3C	2.38	1.49	1.45
23	A	404	CLA	C4D-CHA	2.38	1.46	1.38
23	C	513	CLA	C4C-C3C	2.38	1.49	1.45
23	C	503	CLA	C3B-C4B	2.38	1.49	1.42
23	B	609	CLA	C1C-C2C	2.38	1.49	1.44
23	B	607	CLA	C1B-C2B	2.38	1.48	1.43
23	C	513	CLA	C3B-C4B	2.37	1.49	1.42
23	b	612	CLA	C4C-C3C	2.37	1.49	1.45
23	b	622	CLA	C3B-C2B	2.37	1.49	1.41
23	C	508	CLA	C1B-C2B	2.37	1.48	1.43
23	c	509	CLA	C3B-C4B	2.37	1.49	1.42
23	A	406	CLA	C1C-C2C	2.37	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	515	CLA	C3B-C4B	2.37	1.49	1.42
23	b	610	CLA	C4C-C3C	2.37	1.49	1.45
23	c	510	CLA	C4D-CHA	2.37	1.46	1.38
23	D	406	CLA	C3B-C2B	2.37	1.49	1.41
23	C	509	CLA	C4C-C3C	2.37	1.49	1.45
23	B	609	CLA	C1C-NC	-2.37	1.34	1.37
23	b	625	CLA	C3B-C4B	2.36	1.49	1.42
37	D	403[A]	PHO	C1B-NB	-2.36	1.34	1.38
23	A	407	CLA	C3B-C4B	2.36	1.49	1.42
23	c	514	CLA	C4C-C3C	2.36	1.49	1.45
23	C	513	CLA	C4B-NB	-2.36	1.34	1.37
23	C	509	CLA	C3B-C2B	2.36	1.49	1.41
23	d	404	CLA	C1B-C2B	2.36	1.48	1.43
23	c	506	CLA	C3D-C4D	-2.36	1.38	1.44
23	B	608	CLA	C3D-C4D	-2.36	1.38	1.44
23	a	412	CLA	C3D-C4D	-2.36	1.38	1.44
23	b	619	CLA	C3B-C4B	2.36	1.49	1.42
23	b	616	CLA	C3D-C4D	-2.35	1.38	1.44
23	B	615	CLA	C3B-C2B	2.35	1.49	1.41
23	c	508	CLA	C3B-C2B	2.35	1.49	1.41
37	D	403[A]	PHO	C4B-NB	-2.35	1.34	1.38
23	b	617	CLA	C1C-C2C	2.35	1.49	1.44
23	B	608	CLA	C4C-C3C	2.35	1.49	1.45
23	C	503	CLA	C3B-C2B	2.34	1.49	1.41
23	c	505	CLA	C1C-C2C	2.34	1.49	1.44
23	A	407	CLA	C3D-C4D	-2.34	1.38	1.44
23	C	505	CLA	C3D-C4D	-2.34	1.38	1.44
23	C	503	CLA	C1B-NB	-2.34	1.34	1.37
23	b	620	CLA	C3D-C4D	-2.34	1.38	1.44
37	a	411	PHO	C4B-NB	-2.33	1.34	1.38
23	A	404	CLA	C3B-C2B	2.33	1.49	1.41
23	C	503	CLA	C3D-C4D	-2.33	1.38	1.44
23	b	619	CLA	C3D-C4D	-2.33	1.38	1.44
23	C	513	CLA	C3B-C2B	2.33	1.49	1.41
23	c	516	CLA	C3B-C4B	2.33	1.49	1.42
23	C	502	CLA	C3D-C4D	-2.32	1.39	1.44
23	c	517	CLA	C3D-C4D	-2.32	1.39	1.44
23	C	514	CLA	C3D-C4D	-2.32	1.39	1.44
23	d	403	CLA	C3D-C4D	-2.32	1.39	1.44
41	v	205	HEC	C4D-ND	-2.32	1.35	1.39
37	D	403[B]	PHO	C4B-NB	-2.32	1.34	1.38
23	C	511	CLA	C3B-C4B	2.32	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	511	CLA	C1C-C2C	2.32	1.49	1.44
23	d	403	CLA	C3B-C2B	2.31	1.49	1.41
23	B	611	CLA	C1B-C2B	2.31	1.48	1.43
23	c	513	CLA	C4C-C3C	2.31	1.49	1.45
23	c	515	CLA	C3B-C2B	2.31	1.49	1.41
23	B	615	CLA	C1C-C2C	2.31	1.49	1.44
23	c	515	CLA	C3D-C4D	-2.31	1.39	1.44
23	b	612	CLA	C3D-C4D	-2.31	1.39	1.44
23	b	610	CLA	C1B-C2B	2.31	1.48	1.43
23	b	617	CLA	C4C-C3C	2.31	1.49	1.45
23	C	512	CLA	C3B-C4B	2.31	1.49	1.42
23	b	619	CLA	C3B-C2B	2.31	1.48	1.41
23	B	604	CLA	C3B-C4B	2.30	1.49	1.42
23	B	602	CLA	C1C-C2C	2.30	1.49	1.44
23	b	618	CLA	C3B-C4B	2.30	1.49	1.42
23	C	510	CLA	C3D-C4D	-2.30	1.39	1.44
23	B	602	CLA	C1C-NC	-2.30	1.34	1.37
23	b	616	CLA	C3B-C4B	2.30	1.49	1.42
23	B	616	CLA	C3D-C4D	-2.29	1.39	1.44
23	b	623	CLA	C1C-C2C	2.29	1.49	1.44
23	A	407	CLA	C1C-C2C	2.29	1.49	1.44
23	B	617	CLA	C3B-C4B	2.29	1.49	1.42
23	d	404	CLA	C1C-C2C	2.29	1.49	1.44
23	A	406	CLA	C3D-C4D	-2.29	1.39	1.44
23	b	611	CLA	C3D-C4D	-2.29	1.39	1.44
23	B	608	CLA	C1C-C2C	2.29	1.49	1.44
23	B	603	CLA	C3B-C4B	2.28	1.49	1.42
23	D	407	CLA	C3B-C4B	2.28	1.49	1.42
23	b	625	CLA	C3D-C4D	-2.28	1.39	1.44
23	b	615	CLA	C3D-C4D	-2.28	1.39	1.44
23	b	620	CLA	C4C-C3C	2.28	1.48	1.45
39	e	101	HEM	C1D-ND	-2.28	1.34	1.38
23	C	508	CLA	C4C-C3C	2.27	1.48	1.45
23	B	612	CLA	C3D-C4D	-2.27	1.39	1.44
23	b	624	CLA	C1B-NB	-2.27	1.34	1.37
23	B	613	CLA	C4C-C3C	2.27	1.48	1.45
23	b	617	CLA	C3D-C4D	-2.27	1.39	1.44
23	b	616	CLA	C4C-C3C	2.27	1.48	1.45
23	b	622	CLA	C1C-C2C	2.27	1.49	1.44
23	c	514	CLA	C3B-C2B	2.27	1.48	1.41
23	C	512	CLA	C1C-C2C	2.27	1.49	1.44
23	B	604	CLA	C1B-C2B	2.27	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	607	CLA	C1C-C2C	2.27	1.49	1.44
23	C	511	CLA	C3B-C2B	2.26	1.48	1.41
23	c	508	CLA	C1B-C2B	2.26	1.48	1.43
23	C	506	CLA	C3D-C4D	-2.26	1.39	1.44
23	B	613	CLA	C3B-C2B	2.26	1.48	1.41
23	c	514	CLA	C3D-C4D	-2.26	1.39	1.44
33	b	632	HTG	C1-S1	-2.26	1.76	1.80
23	b	624	CLA	C4C-C3C	2.26	1.48	1.45
23	B	611	CLA	C3D-C4D	-2.25	1.39	1.44
23	b	615	CLA	C3B-C4B	2.25	1.49	1.42
23	b	624	CLA	C3B-C4B	2.25	1.49	1.42
37	d	402[B]	PHO	C4B-NB	-2.25	1.34	1.38
37	d	402[A]	PHO	CHA-CBD	-2.25	1.49	1.51
23	B	614	CLA	C3B-C2B	2.25	1.48	1.41
23	D	407	CLA	C1C-C2C	2.25	1.49	1.44
23	C	507	CLA	C1B-C2B	2.25	1.48	1.43
23	c	505	CLA	C3B-C2B	2.24	1.48	1.41
37	D	403[B]	PHO	C1B-NB	-2.24	1.34	1.38
23	B	613	CLA	C3D-C4D	-2.24	1.39	1.44
33	b	608	HTG	C1-S1	-2.24	1.77	1.80
33	d	414	HTG	C1-S1	-2.24	1.77	1.80
23	B	611	CLA	C3B-C2B	2.24	1.48	1.41
23	C	511	CLA	C3D-C4D	-2.24	1.39	1.44
23	C	514	CLA	C4C-C3C	2.24	1.48	1.45
23	B	617	CLA	C3B-C2B	2.24	1.48	1.41
23	b	614	CLA	C4B-NB	-2.24	1.34	1.37
23	C	514	CLA	C1C-C2C	2.24	1.49	1.44
37	d	402[B]	PHO	C1B-NB	-2.23	1.34	1.38
23	C	504	CLA	C3D-C4D	-2.23	1.39	1.44
23	A	404	CLA	C3D-C4D	-2.23	1.39	1.44
23	a	410	CLA	C1B-C2B	2.23	1.48	1.43
23	b	610	CLA	C3D-C4D	-2.23	1.39	1.44
23	B	606	CLA	C3B-C2B	2.23	1.48	1.41
23	c	512	CLA	C1C-C2C	2.23	1.49	1.44
23	B	616	CLA	C4C-C3C	2.22	1.48	1.45
23	b	620	CLA	C3B-C2B	2.22	1.48	1.41
23	C	508	CLA	C3D-C4D	-2.22	1.39	1.44
41	v	205	HEC	C1D-C2D	2.22	1.48	1.43
33	C	522	HTG	C1-S1	-2.21	1.77	1.80
23	a	412	CLA	C3B-C4B	2.21	1.49	1.42
37	D	402	PHO	C3A-C2A	-2.21	1.52	1.54
37	D	403[B]	PHO	C3A-C2A	-2.21	1.52	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	407	CLA	C3B-C2B	2.21	1.48	1.41
37	d	402[A]	PHO	C1B-NB	-2.21	1.34	1.38
23	c	511	CLA	C3B-C4B	2.21	1.49	1.42
23	b	614	CLA	C3B-C2B	2.21	1.48	1.41
23	a	409	CLA	O2D-CED	-2.21	1.40	1.45
23	c	515	CLA	C1C-C2C	2.20	1.49	1.44
23	b	611	CLA	C3B-C2B	2.20	1.48	1.41
23	D	407	CLA	C1D-C2D	2.20	1.49	1.45
23	b	612	CLA	C3B-C2B	2.19	1.48	1.41
23	a	409	CLA	C3B-C2B	2.19	1.48	1.41
23	c	507	CLA	C4C-C3C	2.19	1.48	1.45
23	c	505	CLA	C3D-C4D	-2.19	1.39	1.44
41	v	205	HEC	C4A-C3A	-2.19	1.41	1.45
23	A	407	CLA	C4C-C3C	2.19	1.48	1.45
30	D	409[A]	PL9	C2-C3	2.19	1.40	1.34
23	B	609	CLA	C3B-C2B	2.19	1.48	1.41
23	a	409	CLA	C1C-C2C	2.19	1.49	1.44
23	B	603	CLA	C3B-C2B	2.18	1.48	1.41
23	b	611	CLA	C3B-C4B	2.18	1.49	1.42
23	b	613	CLA	C3B-C2B	2.18	1.48	1.41
33	V	207	HTG	C1-S1	-2.18	1.77	1.80
39	e	101	HEM	C3C-C4C	-2.17	1.42	1.46
23	B	609	CLA	C3B-C4B	2.17	1.49	1.42
38	d	409	LHG	O7-C5	-2.17	1.41	1.46
41	V	206	HEC	C1D-C2D	2.17	1.48	1.43
23	C	510	CLA	C3B-C4B	2.17	1.49	1.42
23	B	607	CLA	C3D-C4D	-2.16	1.39	1.44
23	c	516	CLA	C3D-C4D	-2.16	1.39	1.44
23	B	612	CLA	C1C-C2C	2.16	1.48	1.44
23	B	608	CLA	C3B-C2B	2.16	1.48	1.41
37	D	403[A]	PHO	C3D-C4D	-2.16	1.38	1.41
23	D	407	CLA	C3D-C4D	-2.16	1.39	1.44
23	C	509	CLA	C3D-C4D	-2.16	1.39	1.44
39	e	101	HEM	C3B-C4B	2.16	1.49	1.44
23	C	512	CLA	C3D-C4D	-2.16	1.39	1.44
23	B	602	CLA	C4C-C3C	2.16	1.48	1.45
23	c	510	CLA	C3B-C2B	2.15	1.48	1.41
23	b	622	CLA	C3B-C4B	2.15	1.49	1.42
23	C	514	CLA	C3B-C2B	2.15	1.48	1.41
23	C	506	CLA	C3B-C2B	2.15	1.48	1.41
23	b	613	CLA	C3D-C4D	-2.15	1.39	1.44
37	d	402[B]	PHO	CBD-CGD	-2.15	1.49	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	602	CLA	C3B-C4B	2.15	1.49	1.42
30	d	407[A]	PL9	C2-C3	2.15	1.40	1.34
23	B	604	CLA	C3B-C2B	2.15	1.48	1.41
24	b	628	BCR	C30-C25	-2.14	1.51	1.53
23	d	404	CLA	C3B-C2B	2.14	1.48	1.41
34	h	102	DGD	O5D-C1E	2.14	1.43	1.40
23	A	407	CLA	C1D-C2D	2.14	1.49	1.45
23	B	606	CLA	C3D-C4D	-2.14	1.39	1.44
23	b	616	CLA	C1D-C2D	2.14	1.49	1.45
23	b	622	CLA	C1C-NC	-2.14	1.34	1.37
23	B	603	CLA	C4B-NB	-2.14	1.35	1.37
23	c	513	CLA	C3B-C4B	2.14	1.49	1.42
23	A	404	CLA	C1D-C2D	2.13	1.49	1.45
23	d	403	CLA	C1C-NC	-2.13	1.34	1.37
23	A	406	CLA	C1C-NC	-2.13	1.34	1.37
23	C	506	CLA	C1C-C2C	2.13	1.48	1.44
23	b	612	CLA	C3B-C4B	2.13	1.48	1.42
41	V	206	HEC	C4A-C3A	-2.12	1.41	1.45
23	b	613	CLA	C3B-C4B	2.12	1.48	1.42
23	A	406	CLA	C4C-C3C	2.12	1.48	1.45
23	a	412	CLA	C3B-C2B	2.12	1.48	1.41
23	b	625	CLA	C3B-C2B	2.12	1.48	1.41
23	C	513	CLA	C3D-C4D	-2.11	1.39	1.44
23	b	623	CLA	C3B-C2B	2.11	1.48	1.41
30	a	416[A]	PL9	C2-C3	2.11	1.39	1.34
23	B	612	CLA	C3B-C2B	2.11	1.48	1.41
23	b	610	CLA	C3B-C2B	2.11	1.48	1.41
30	a	416[B]	PL9	C2-C3	2.11	1.39	1.34
23	B	602	CLA	C3D-C4D	-2.11	1.39	1.44
23	C	508	CLA	C3B-C4B	2.10	1.48	1.42
23	d	405	CLA	C4C-C3C	2.10	1.48	1.45
23	b	616	CLA	C1C-C2C	2.10	1.48	1.44
23	b	615	CLA	C4C-C3C	2.10	1.48	1.45
23	b	621	CLA	C3D-C4D	-2.10	1.39	1.44
30	A	416[B]	PL9	C2-C3	2.10	1.39	1.34
23	b	615	CLA	C3B-C2B	2.10	1.48	1.41
23	B	612	CLA	C3B-C4B	2.10	1.48	1.42
27	T	104	LMT	O1'-C1'	2.09	1.43	1.40
33	c	525	HTG	C1-S1	-2.09	1.77	1.80
23	b	625	CLA	C4C-C3C	2.09	1.48	1.45
23	C	507	CLA	C1C-C2C	2.09	1.48	1.44
23	C	502	CLA	C3B-C2B	2.09	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	D	402	PHO	C1D-ND	-2.09	1.34	1.38
41	V	206	HEC	C1A-C2A	-2.09	1.41	1.45
39	F	102	HEM	C1D-ND	-2.08	1.34	1.38
30	d	407[B]	PL9	C2-C3	2.08	1.39	1.34
37	D	403[B]	PHO	C1D-ND	-2.08	1.34	1.38
30	A	416[A]	PL9	C2-C3	2.08	1.39	1.34
23	c	506	CLA	C3B-C2B	2.08	1.48	1.41
23	c	514	CLA	C3B-C4B	2.08	1.48	1.42
38	D	412	LHG	O7-C5	-2.08	1.41	1.46
23	B	610	CLA	C3B-C4B	2.08	1.48	1.42
23	b	610	CLA	C1D-C2D	2.08	1.49	1.45
23	b	624	CLA	C1C-C2C	2.07	1.48	1.44
23	b	619	CLA	C1D-C2D	2.07	1.49	1.45
23	C	507	CLA	C3B-C2B	2.07	1.48	1.41
23	c	506	CLA	C1B-NB	-2.06	1.35	1.37
23	B	611	CLA	C1D-C2D	2.06	1.49	1.45
35	Z	101	LMG	O1-C1	2.06	1.43	1.40
23	a	410	CLA	C3B-C2B	2.06	1.48	1.41
23	C	504	CLA	C3B-C2B	2.06	1.48	1.41
23	B	614	CLA	C3B-C4B	2.06	1.48	1.42
23	D	407	CLA	C3B-C2B	2.06	1.48	1.41
23	C	514	CLA	C1D-C2D	2.05	1.49	1.45
23	c	506	CLA	C1C-NC	-2.05	1.34	1.37
23	B	602	CLA	C3B-C2B	2.05	1.48	1.41
23	c	510	CLA	C3B-C4B	2.05	1.48	1.42
23	A	405	CLA	C4C-C3C	2.05	1.48	1.45
27	e	102	LMT	O1'-C1'	2.05	1.43	1.40
23	a	412	CLA	C1C-C2C	2.05	1.48	1.44
23	B	605	CLA	C3B-C4B	2.05	1.48	1.42
23	B	617	CLA	C1C-NC	-2.04	1.34	1.37
23	c	509	CLA	C3B-C2B	2.04	1.48	1.41
23	d	405	CLA	C1C-C2C	2.04	1.48	1.44
23	c	509	CLA	CBD-CAD	-2.04	1.47	1.56
23	B	605	CLA	C4C-C3C	2.03	1.48	1.45
23	C	502	CLA	C4B-NB	-2.03	1.35	1.37
30	d	407[B]	PL9	C2-C1	-2.03	1.39	1.44
23	b	619	CLA	C1C-C2C	2.03	1.48	1.44
23	C	508	CLA	C3B-C2B	2.03	1.48	1.41
23	B	607	CLA	C3B-C2B	2.03	1.48	1.41
23	b	614	CLA	C4C-C3C	2.03	1.48	1.45
23	b	621	CLA	C1C-NC	-2.02	1.34	1.37
34	d	408	DGD	O5D-C1E	2.02	1.43	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	623	CLA	C3D-C4D	-2.02	1.39	1.44
23	c	507	CLA	C3B-C2B	2.02	1.48	1.41
37	D	403[A]	PHO	C1D-ND	-2.02	1.35	1.38
37	D	402	PHO	C4B-NB	-2.02	1.35	1.38
23	c	510	CLA	C4C-C3C	2.02	1.48	1.45
23	c	517	CLA	C3B-C2B	2.02	1.48	1.41
23	b	625	CLA	C1C-NC	-2.02	1.34	1.37
23	c	511	CLA	C3D-C4D	-2.02	1.39	1.44
23	b	620	CLA	C3B-C4B	2.01	1.48	1.42
23	c	515	CLA	C4C-C3C	2.01	1.48	1.45
37	a	411	PHO	C1B-NB	-2.01	1.35	1.38
23	A	405	CLA	C3D-C4D	-2.01	1.39	1.44
23	d	405	CLA	C1D-C2D	2.01	1.49	1.45
41	v	205	HEC	C1A-C2A	-2.01	1.41	1.45
30	D	409[B]	PL9	C2-C3	2.01	1.39	1.34
33	B	630	HTG	C1-S1	-2.01	1.77	1.80
23	c	516	CLA	C3B-C2B	2.00	1.47	1.41

All (2985) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	d	402[B]	PHO	C2D-C1D-ND	11.47	117.72	109.43
37	a	411	PHO	C2D-C1D-ND	11.26	117.57	109.43
37	D	403[A]	PHO	C2D-C1D-ND	11.24	117.56	109.43
37	d	402[A]	PHO	C2D-C1D-ND	10.79	117.23	109.43
37	D	402	PHO	C2D-C1D-ND	10.71	117.17	109.43
37	D	403[B]	PHO	C2D-C1D-ND	10.61	117.09	109.43
23	a	410	CLA	C1D-ND-C4D	-10.27	99.10	106.31
23	B	606	CLA	C1D-ND-C4D	-10.22	99.14	106.31
23	B	615	CLA	C1D-ND-C4D	-10.16	99.18	106.31
23	A	406	CLA	C1D-ND-C4D	-9.98	99.31	106.31
23	C	504	CLA	C1D-ND-C4D	-9.90	99.36	106.31
23	B	613	CLA	C1D-ND-C4D	-9.89	99.38	106.31
23	c	515	CLA	C1D-ND-C4D	-9.87	99.38	106.31
23	B	602	CLA	C1D-ND-C4D	-9.77	99.46	106.31
23	b	624	CLA	C1D-ND-C4D	-9.74	99.48	106.31
23	b	621	CLA	C1D-ND-C4D	-9.74	99.48	106.31
23	D	407	CLA	C1D-ND-C4D	-9.73	99.49	106.31
23	C	509	CLA	C1D-ND-C4D	-9.72	99.49	106.31
23	C	502	CLA	C1D-ND-C4D	-9.71	99.50	106.31
23	b	614	CLA	C1D-ND-C4D	-9.67	99.52	106.31
23	A	405	CLA	C1D-ND-C4D	-9.67	99.53	106.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	623	CLA	C1D-ND-C4D	-9.66	99.54	106.31
23	b	615	CLA	C1D-ND-C4D	-9.58	99.59	106.31
23	b	625	CLA	C1D-ND-C4D	-9.57	99.60	106.31
23	c	507	CLA	C1D-ND-C4D	-9.51	99.64	106.31
23	B	603	CLA	C1D-ND-C4D	-9.49	99.65	106.31
23	D	406	CLA	C1D-ND-C4D	-9.46	99.67	106.31
23	B	607	CLA	C1D-ND-C4D	-9.43	99.70	106.31
23	c	511	CLA	C1D-ND-C4D	-9.38	99.73	106.31
23	b	618	CLA	C1D-ND-C4D	-9.35	99.75	106.31
23	B	611	CLA	C1D-ND-C4D	-9.30	99.79	106.31
23	c	508	CLA	C1D-ND-C4D	-9.28	99.80	106.31
23	A	407	CLA	C1D-ND-C4D	-9.27	99.81	106.31
23	c	510	CLA	C1D-ND-C4D	-9.18	99.87	106.31
23	a	412	CLA	C1D-ND-C4D	-9.18	99.87	106.31
23	b	612	CLA	C1D-ND-C4D	-9.16	99.88	106.31
23	c	517	CLA	C1D-ND-C4D	-9.16	99.89	106.31
23	c	516	CLA	C1D-ND-C4D	-9.16	99.89	106.31
23	C	510	CLA	C1D-ND-C4D	-9.12	99.92	106.31
23	B	612	CLA	C1D-ND-C4D	-9.10	99.93	106.31
23	d	405	CLA	C1D-ND-C4D	-9.10	99.93	106.31
23	C	512	CLA	C1D-ND-C4D	-9.09	99.93	106.31
23	b	620	CLA	C1D-ND-C4D	-9.07	99.95	106.31
23	B	610	CLA	C1D-ND-C4D	-9.07	99.95	106.31
23	d	403	CLA	C1D-ND-C4D	-9.05	99.97	106.31
23	C	506	CLA	C1D-ND-C4D	-9.04	99.97	106.31
23	c	505	CLA	C1D-ND-C4D	-9.00	100.00	106.31
23	C	511	CLA	C1D-ND-C4D	-8.99	100.00	106.31
23	C	503	CLA	C1D-ND-C4D	-8.99	100.01	106.31
23	c	513	CLA	C1D-ND-C4D	-8.96	100.02	106.31
23	C	514	CLA	C1D-ND-C4D	-8.94	100.04	106.31
23	B	614	CLA	C1D-ND-C4D	-8.93	100.05	106.31
37	d	402[A]	PHO	O2D-CGD-CBD	8.92	120.75	110.95
23	b	610	CLA	C1D-ND-C4D	-8.91	100.06	106.31
23	b	616	CLA	C1D-ND-C4D	-8.90	100.06	106.31
23	B	616	CLA	C1D-ND-C4D	-8.90	100.07	106.31
37	D	402	PHO	O2D-CGD-CBD	8.88	120.71	110.95
23	d	404	CLA	C1D-ND-C4D	-8.88	100.08	106.31
23	B	604	CLA	C1D-ND-C4D	-8.86	100.09	106.31
23	b	619	CLA	C1D-ND-C4D	-8.85	100.10	106.31
23	a	409	CLA	C1D-ND-C4D	-8.84	100.11	106.31
23	B	608	CLA	C1D-ND-C4D	-8.83	100.12	106.31
23	C	508	CLA	C1D-ND-C4D	-8.80	100.14	106.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	611	CLA	C1D-ND-C4D	-8.80	100.14	106.31
23	C	513	CLA	C1D-ND-C4D	-8.79	100.15	106.31
37	D	402	PHO	C3B-C4B-NB	8.78	113.19	107.46
23	B	617	CLA	C1D-ND-C4D	-8.75	100.17	106.31
23	B	609	CLA	C1D-ND-C4D	-8.72	100.19	106.31
23	c	506	CLA	C1D-ND-C4D	-8.69	100.21	106.31
23	c	512	CLA	C1D-ND-C4D	-8.65	100.24	106.31
23	C	505	CLA	C1D-ND-C4D	-8.61	100.27	106.31
23	c	514	CLA	C1D-ND-C4D	-8.57	100.30	106.31
23	b	617	CLA	C1D-ND-C4D	-8.57	100.30	106.31
23	c	509	CLA	C1D-ND-C4D	-8.48	100.36	106.31
23	b	622	CLA	C1D-ND-C4D	-8.47	100.37	106.31
23	b	613	CLA	C1D-ND-C4D	-8.33	100.46	106.31
23	C	507	CLA	C1D-ND-C4D	-8.29	100.50	106.31
23	A	404	CLA	C1D-ND-C4D	-8.21	100.55	106.31
37	a	411	PHO	O2D-CGD-CBD	7.94	119.67	110.95
37	d	402[B]	PHO	O2D-CGD-CBD	7.80	119.52	110.95
23	d	404	CLA	C4A-NA-C1A	-7.73	103.15	106.68
37	d	402[A]	PHO	C3B-C4B-NB	7.71	112.49	107.46
23	B	605	CLA	C1D-ND-C4D	-7.63	100.96	106.31
37	d	402[B]	PHO	C3B-C4B-NB	7.56	112.39	107.46
23	b	621	CLA	CHD-C4C-C3C	-7.56	113.75	124.77
37	D	403[A]	PHO	O2D-CGD-CBD	7.49	119.18	110.95
23	A	404	CLA	CMD-C2D-C1D	7.23	137.47	124.73
37	d	402[A]	PHO	C2B-C1B-NB	7.22	114.65	109.43
37	D	403[A]	PHO	C3B-C4B-NB	7.20	112.16	107.46
23	c	507	CLA	CMD-C2D-C1D	7.11	137.25	124.73
23	B	611	CLA	CMD-C2D-C1D	7.09	137.22	124.73
23	c	509	CLA	C4A-NA-C1A	-7.03	103.47	106.68
37	D	403[B]	PHO	C3B-C4B-NB	7.00	112.02	107.46
23	c	510	CLA	CMD-C2D-C1D	6.99	137.03	124.73
23	C	508	CLA	CMD-C2D-C1D	6.94	136.95	124.73
23	b	615	CLA	CMD-C2D-C1D	6.89	136.87	124.73
23	B	615	CLA	C2D-C1D-ND	6.88	116.94	110.13
37	D	403[B]	PHO	O2D-CGD-CBD	6.87	118.49	110.95
23	B	605	CLA	CMD-C2D-C1D	6.85	136.79	124.73
23	b	621	CLA	C2D-C1D-ND	6.83	116.88	110.13
23	b	619	CLA	CMD-C2D-C1D	6.82	136.73	124.73
23	B	603	CLA	CMD-C2D-C1D	6.81	136.72	124.73
23	b	611	CLA	C4A-NA-C1A	-6.80	103.58	106.68
23	b	612	CLA	C4A-NA-C1A	-6.79	103.58	106.68
23	D	406	CLA	CMD-C2D-C1D	6.78	136.67	124.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	509	CLA	CMD-C2D-C1D	6.76	136.63	124.73
23	B	617	CLA	CMD-C2D-C1D	6.74	136.60	124.73
23	B	604	CLA	CMD-C2D-C1D	6.73	136.58	124.73
23	c	511	CLA	CHD-C4C-C3C	-6.71	114.98	124.77
23	B	614	CLA	CMD-C2D-C1D	6.70	136.53	124.73
23	b	611	CLA	CMD-C2D-C1D	6.70	136.53	124.73
37	D	403[A]	PHO	C2B-C1B-NB	6.70	114.27	109.43
23	b	622	CLA	CMD-C2D-C1D	6.68	136.49	124.73
23	c	508	CLA	CMD-C2D-C1D	6.68	136.49	124.73
23	c	516	CLA	O2D-CGD-CBD	6.68	122.90	111.23
23	b	616	CLA	CMD-C2D-C1D	6.68	136.49	124.73
23	A	405	CLA	C2D-C1D-ND	6.67	116.73	110.13
23	b	614	CLA	CHD-C4C-C3C	-6.67	115.05	124.77
23	c	513	CLA	CMD-C2D-C1D	6.64	136.41	124.73
23	D	407	CLA	CMD-C2D-C1D	6.63	136.41	124.73
23	c	511	CLA	CMD-C2D-C1D	6.63	136.40	124.73
23	c	514	CLA	CMD-C2D-C1D	6.59	136.34	124.73
23	C	502	CLA	CMD-C2D-C1D	6.59	136.33	124.73
37	D	402	PHO	C2B-C1B-NB	6.59	114.19	109.43
23	B	608	CLA	CMD-C2D-C1D	6.58	136.31	124.73
37	a	411	PHO	C3B-C4B-NB	6.57	111.74	107.46
23	C	502	CLA	O2D-CGD-CBD	6.54	122.67	111.23
23	B	616	CLA	C4A-NA-C1A	-6.53	103.70	106.68
23	a	409	CLA	CMD-C2D-C1D	6.50	136.17	124.73
23	B	607	CLA	CMD-C2D-C1D	6.48	136.15	124.73
23	b	614	CLA	CMD-C2D-C1D	6.48	136.14	124.73
23	b	623	CLA	O2D-CGD-CBD	6.46	122.53	111.23
23	b	623	CLA	C2D-C1D-ND	6.46	116.52	110.13
23	c	507	CLA	CHD-C4C-C3C	-6.45	115.37	124.77
23	B	606	CLA	CMD-C2D-C1D	6.43	136.05	124.73
23	B	615	CLA	CHD-C4C-C3C	-6.42	115.41	124.77
23	b	610	CLA	O2D-CGD-CBD	6.42	122.46	111.23
23	A	404	CLA	C4A-NA-C1A	-6.41	103.76	106.68
23	b	625	CLA	C2D-C1D-ND	6.40	116.47	110.13
23	A	407	CLA	CMD-C2D-C1D	6.39	135.98	124.73
23	b	615	CLA	CHD-C4C-C3C	-6.38	115.47	124.77
23	b	624	CLA	C2D-C1D-ND	6.38	116.44	110.13
23	C	508	CLA	CHD-C4C-C3C	-6.37	115.48	124.77
23	a	410	CLA	C2D-C1D-ND	6.36	116.42	110.13
23	b	625	CLA	CHD-C4C-C3C	-6.34	115.53	124.77
23	C	507	CLA	CMD-C2D-C1D	6.33	135.87	124.73
23	B	616	CLA	CHD-C4C-C3C	-6.32	115.56	124.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	511	CLA	CMD-C2D-C1D	6.32	135.85	124.73
23	B	613	CLA	C2D-C1D-ND	6.31	116.37	110.13
23	C	514	CLA	CMD-C2D-C1D	6.30	135.82	124.73
23	c	508	CLA	C2D-C1D-ND	6.30	116.36	110.13
23	b	624	CLA	CHD-C4C-C3C	-6.29	115.60	124.77
23	B	602	CLA	O2D-CGD-CBD	6.29	122.23	111.23
23	c	511	CLA	C2D-C1D-ND	6.26	116.32	110.13
23	b	623	CLA	CHD-C4C-C3C	-6.25	115.66	124.77
23	d	404	CLA	CMD-C2D-C1D	6.24	135.72	124.73
23	a	410	CLA	CMD-C2D-C1D	6.24	135.72	124.73
23	d	405	CLA	CMD-C2D-C1D	6.24	135.72	124.73
23	B	610	CLA	CMD-C2D-C1D	6.23	135.70	124.73
23	c	511	CLA	O2D-CGD-CBD	6.22	122.11	111.23
23	a	409	CLA	C4A-NA-C1A	-6.21	103.85	106.68
23	C	512	CLA	CMD-C2D-C1D	6.20	135.66	124.73
23	C	506	CLA	CMD-C2D-C1D	6.19	135.63	124.73
37	d	402[B]	PHO	C2B-C1B-NB	6.18	113.90	109.43
23	b	613	CLA	CMD-C2D-C1D	6.18	135.61	124.73
23	C	504	CLA	CHD-C4C-C3C	-6.17	115.77	124.77
23	b	624	CLA	CMD-C2D-C1D	6.17	135.60	124.73
23	B	602	CLA	CMD-C2D-C1D	6.17	135.59	124.73
23	b	618	CLA	CHD-C4C-C3C	-6.16	115.79	124.77
23	b	614	CLA	C2D-C1D-ND	6.16	116.22	110.13
23	b	618	CLA	C2D-C1D-ND	6.15	116.22	110.13
23	B	615	CLA	CMD-C2D-C1D	6.15	135.56	124.73
23	c	515	CLA	CHD-C4C-C3C	-6.14	115.82	124.77
23	C	506	CLA	C4A-NA-C1A	-6.14	103.88	106.68
23	C	504	CLA	C2D-C1D-ND	6.14	116.20	110.13
23	c	517	CLA	CMD-C2D-C1D	6.13	135.52	124.73
23	B	602	CLA	CHD-C4C-C3C	-6.13	115.84	124.77
23	c	508	CLA	CHD-C4C-C3C	-6.13	115.84	124.77
23	B	617	CLA	CHD-C4C-C3C	-6.12	115.85	124.77
23	B	603	CLA	C4A-NA-C1A	-6.12	103.89	106.68
23	C	510	CLA	CMD-C2D-C1D	6.11	135.49	124.73
23	C	513	CLA	O2D-CGD-CBD	6.11	121.91	111.23
23	b	612	CLA	O2D-CGD-CBD	6.10	121.89	111.23
23	c	505	CLA	C2D-C1D-ND	6.10	116.16	110.13
23	B	603	CLA	CHD-C4C-C3C	-6.09	115.89	124.77
23	A	406	CLA	C2D-C1D-ND	6.09	116.15	110.13
23	b	610	CLA	CMD-C2D-C1D	6.08	135.43	124.73
23	B	614	CLA	C2D-C1D-ND	6.07	116.13	110.13
23	C	505	CLA	CMD-C2D-C1D	6.07	135.41	124.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	606	CLA	C2D-C1D-ND	6.06	116.12	110.13
23	B	614	CLA	CHD-C4C-C3C	-6.06	115.94	124.77
23	b	613	CLA	O2D-CGD-CBD	6.06	121.82	111.23
23	C	513	CLA	CHD-C4C-C3C	-6.04	115.96	124.77
23	B	604	CLA	O2D-CGD-CBD	6.03	121.78	111.23
23	A	405	CLA	CMD-C2D-C1D	6.03	135.35	124.73
23	B	617	CLA	O2D-CGD-CBD	6.03	121.77	111.23
23	c	516	CLA	C4A-NA-C1A	-6.03	103.93	106.68
23	b	625	CLA	CMD-C2D-C1D	6.02	135.34	124.73
23	B	604	CLA	CHD-C4C-C3C	-6.02	115.99	124.77
23	D	406	CLA	C2D-C1D-ND	6.02	116.08	110.13
23	B	607	CLA	C2D-C1D-ND	6.01	116.08	110.13
23	C	504	CLA	CMD-C2D-C1D	6.01	135.32	124.73
24	D	408	BCR	C7-C8-C9	-6.01	117.34	126.23
37	d	402[B]	PHO	C4D-ND-C1D	-6.00	101.68	108.87
23	C	509	CLA	CMD-C2D-C1D	5.99	135.28	124.73
23	B	606	CLA	CHD-C4C-C3C	-5.99	116.04	124.77
25	L	102	SQD	O6-C1-C2	5.99	117.37	108.27
23	C	508	CLA	C2D-C1D-ND	5.99	116.05	110.13
23	a	410	CLA	CHD-C4C-C3C	-5.98	116.06	124.77
23	d	405	CLA	C2D-C1D-ND	5.97	116.04	110.13
23	A	405	CLA	CHD-C4C-C3C	-5.97	116.07	124.77
23	C	502	CLA	C2D-C1D-ND	5.96	116.02	110.13
37	a	411	PHO	C2B-C1B-NB	5.95	113.73	109.43
23	B	617	CLA	C4A-NA-C1A	-5.94	103.97	106.68
23	b	623	CLA	CMD-C2D-C1D	5.94	135.19	124.73
23	b	615	CLA	C2D-C1D-ND	5.94	116.00	110.13
23	c	513	CLA	CHD-C4C-C3C	-5.93	116.12	124.77
23	B	602	CLA	C2D-C1D-ND	5.93	116.00	110.13
23	b	618	CLA	C4A-NA-C1A	-5.93	103.97	106.68
23	c	515	CLA	C2D-C1D-ND	5.93	115.99	110.13
23	C	503	CLA	CHD-C4C-C3C	-5.93	116.13	124.77
23	c	505	CLA	CMD-C2D-C1D	5.92	135.15	124.73
23	d	403	CLA	C2D-C1D-ND	5.92	115.98	110.13
23	C	502	CLA	CHD-C4C-C3C	-5.91	116.16	124.77
37	D	403[A]	PHO	C4D-ND-C1D	-5.91	101.79	108.87
23	c	506	CLA	CHD-C4C-C3C	-5.90	116.17	124.77
23	C	513	CLA	C2D-C1D-ND	5.90	115.96	110.13
23	B	613	CLA	CHD-C4C-C3C	-5.89	116.19	124.77
23	C	509	CLA	C2D-C1D-ND	5.89	115.95	110.13
23	c	507	CLA	C2D-C1D-ND	5.88	115.95	110.13
23	C	505	CLA	C2D-C1D-ND	5.87	115.94	110.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	509	CLA	O2D-CGD-CBD	5.85	121.47	111.23
23	C	512	CLA	C2D-C1D-ND	5.85	115.92	110.13
23	C	509	CLA	CHD-C4C-C3C	-5.85	116.25	124.77
23	c	507	CLA	C4A-NA-C1A	-5.84	104.01	106.68
37	d	402[A]	PHO	C4D-ND-C1D	-5.84	101.87	108.87
39	F	102	HEM	CHC-C4B-NB	5.83	130.70	124.42
23	B	609	CLA	CMD-C2D-C1D	5.83	134.99	124.73
23	D	406	CLA	C4A-NA-C1A	-5.83	104.02	106.68
23	a	412	CLA	C2D-C1D-ND	5.82	115.89	110.13
23	B	617	CLA	C2D-C1D-ND	5.80	115.87	110.13
23	B	603	CLA	C2D-C1D-ND	5.80	115.86	110.13
23	d	403	CLA	CMD-C2D-C1D	5.80	134.94	124.73
23	C	508	CLA	O2D-CGD-CBD	5.79	121.36	111.23
23	D	407	CLA	C2D-C1D-ND	5.79	115.85	110.13
23	C	505	CLA	O2D-CGD-CBD	5.78	121.34	111.23
23	b	622	CLA	CHD-C4C-C3C	-5.77	116.36	124.77
23	B	608	CLA	C2D-C1D-ND	5.77	115.84	110.13
23	d	404	CLA	C2C-C1C-NC	5.77	116.04	109.98
23	B	607	CLA	O2D-CGD-CBD	5.77	121.31	111.23
23	B	611	CLA	C2D-C1D-ND	5.76	115.83	110.13
23	c	515	CLA	CMD-C2D-C1D	5.76	134.87	124.73
23	B	616	CLA	C2D-C1D-ND	5.76	115.83	110.13
23	B	613	CLA	O2D-CGD-CBD	5.74	121.27	111.23
23	A	406	CLA	CMD-C2D-C1D	5.74	134.84	124.73
23	a	412	CLA	CMD-C2D-C1D	5.74	134.84	124.73
23	C	510	CLA	C2D-C1D-ND	5.74	115.81	110.13
23	B	615	CLA	O2D-CGD-CBD	5.73	121.25	111.23
23	a	412	CLA	CHD-C4C-C3C	-5.73	116.42	124.77
23	b	616	CLA	C2D-C1D-ND	5.72	115.79	110.13
23	B	607	CLA	C4A-NA-C1A	-5.72	104.07	106.68
23	c	516	CLA	C2D-C1D-ND	5.72	115.78	110.13
23	d	403	CLA	CHD-C4C-C3C	-5.72	116.44	124.77
37	D	403[B]	PHO	C2B-C1B-NB	5.72	113.56	109.43
23	b	616	CLA	CHD-C4C-C3C	-5.71	116.44	124.77
23	c	505	CLA	CHD-C4C-C3C	-5.71	116.45	124.77
23	b	614	CLA	O2D-CGD-CBD	5.71	121.21	111.23
23	B	604	CLA	C4A-NA-C1A	-5.71	104.08	106.68
23	C	506	CLA	CHD-C4C-C3C	-5.69	116.47	124.77
23	C	503	CLA	C2D-C1D-ND	5.69	115.75	110.13
23	c	508	CLA	O2D-CGD-CBD	5.69	121.17	111.23
23	b	618	CLA	CMD-C2D-C1D	5.68	134.74	124.73
37	D	402	PHO	C4D-ND-C1D	-5.68	102.06	108.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	512	CLA	C2D-C1D-ND	5.68	115.75	110.13
23	A	407	CLA	C2D-C1D-ND	5.68	115.74	110.13
23	c	516	CLA	CHD-C4C-C3C	-5.68	116.50	124.77
23	b	612	CLA	C2D-C1D-ND	5.67	115.74	110.13
23	d	405	CLA	CHD-C4C-C3C	-5.67	116.51	124.77
23	b	613	CLA	CHD-C4C-C3C	-5.66	116.52	124.77
23	b	625	CLA	O2D-CGD-CBD	5.66	121.12	111.23
23	C	514	CLA	CHD-C4C-C3C	-5.65	116.54	124.77
23	a	409	CLA	C2C-C1C-NC	5.64	115.91	109.98
23	b	617	CLA	CMD-C2D-C1D	5.64	134.66	124.73
23	B	605	CLA	O2D-CGD-CBD	5.64	121.09	111.23
23	b	613	CLA	C2D-C1D-ND	5.63	115.69	110.13
23	b	625	CLA	C4A-NA-C1A	-5.63	104.11	106.68
23	A	406	CLA	CHD-C4C-C3C	-5.63	116.57	124.77
23	b	619	CLA	C4A-NA-C1A	-5.62	104.11	106.68
23	c	510	CLA	CHD-C4C-C3C	-5.62	116.58	124.77
23	C	504	CLA	C4A-NA-C1A	-5.62	104.11	106.68
23	B	612	CLA	C2D-C1D-ND	5.60	115.67	110.13
23	b	617	CLA	C4A-NA-C1A	-5.60	104.12	106.68
23	c	517	CLA	CHD-C4C-C3C	-5.60	116.61	124.77
23	b	617	CLA	CHD-C4C-C3C	-5.60	116.61	124.77
33	d	414	HTG	C1'-S1-C1	5.59	112.53	100.45
23	c	509	CLA	O2D-CGD-CBD	5.59	121.01	111.23
23	c	512	CLA	CMD-C2D-C1D	5.58	134.56	124.73
23	c	512	CLA	O2D-CGD-CBD	5.57	120.98	111.23
23	c	512	CLA	CHD-C4C-C3C	-5.57	116.65	124.77
23	b	620	CLA	C2D-C1D-ND	5.57	115.64	110.13
23	b	610	CLA	CHD-C4C-C3C	-5.57	116.65	124.77
23	c	512	CLA	C2C-C1C-NC	5.57	115.83	109.98
23	c	514	CLA	CHD-C4C-C3C	-5.57	116.66	124.77
23	c	516	CLA	CMD-C2D-C1D	5.57	134.53	124.73
23	B	611	CLA	CHD-C4C-C3C	-5.56	116.66	124.77
23	b	612	CLA	CMD-C2D-C1D	5.56	134.52	124.73
23	b	618	CLA	O2D-CGD-CBD	5.56	120.94	111.23
23	c	506	CLA	CMD-C2D-C1D	5.55	134.51	124.73
23	c	510	CLA	C2D-C1D-ND	5.55	115.62	110.13
23	c	516	CLA	C2B-C1B-NB	5.53	116.06	110.33
23	B	616	CLA	CMD-C2D-C1D	5.53	134.47	124.73
37	D	403[B]	PHO	C4D-ND-C1D	-5.53	102.25	108.87
23	C	510	CLA	CHD-C4C-C3C	-5.53	116.72	124.77
24	Y	101	BCR	C33-C5-C6	-5.52	118.46	124.48
23	d	405	CLA	C4A-NA-C1A	-5.51	104.17	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	512	CLA	CHD-C4C-C3C	-5.51	116.74	124.77
23	A	407	CLA	CHD-C4C-C3C	-5.50	116.75	124.77
23	b	620	CLA	CMD-C2D-C1D	5.50	134.41	124.73
23	B	612	CLA	C4A-NA-C1A	-5.49	104.17	106.68
23	D	406	CLA	CHD-C4C-C3C	-5.49	116.77	124.77
37	D	402	PHO	C3D-C4D-ND	5.48	114.74	107.71
23	b	617	CLA	C2D-C1D-ND	5.48	115.55	110.13
25	f	102	SQD	O47-C7-C8	5.47	123.32	111.48
37	D	403[B]	PHO	C3D-C4D-ND	5.47	114.72	107.71
23	c	513	CLA	C2D-C1D-ND	5.46	115.53	110.13
37	d	402[A]	PHO	C3D-C4D-ND	5.45	114.70	107.71
23	c	516	CLA	C3B-C2B-C1B	-5.45	100.75	107.17
23	B	612	CLA	CMD-C2D-C1D	5.45	134.32	124.73
23	B	610	CLA	CHD-C4C-C3C	-5.44	116.83	124.77
23	c	509	CLA	CHD-C4C-C3C	-5.44	116.84	124.77
23	D	406	CLA	C2C-C1C-NC	5.44	115.70	109.98
23	c	506	CLA	C2D-C1D-ND	5.42	115.49	110.13
23	B	610	CLA	C2D-C1D-ND	5.41	115.48	110.13
23	C	503	CLA	CMD-C2D-C1D	5.40	134.24	124.73
23	b	622	CLA	C2C-C1C-NC	5.39	115.65	109.98
23	b	614	CLA	C4A-NA-C1A	-5.39	104.22	106.68
23	C	506	CLA	O2D-CGD-CBD	5.39	120.65	111.23
33	c	524	HTG	C1'-S1-C1	5.38	112.08	100.45
23	b	612	CLA	CHD-C4C-C3C	-5.38	116.93	124.77
23	B	605	CLA	CHD-C4C-C3C	-5.38	116.93	124.77
37	a	411	PHO	C4D-ND-C1D	-5.37	102.44	108.87
23	d	405	CLA	O2D-CGD-CBD	5.37	120.62	111.23
23	b	610	CLA	C4A-NA-C1A	-5.37	104.23	106.68
23	B	607	CLA	CHD-C4C-C3C	-5.37	116.94	124.77
23	C	511	CLA	C1-C2-C3	-5.37	117.40	126.20
23	b	622	CLA	C2D-C1D-ND	5.36	115.44	110.13
23	b	619	CLA	CHD-C4C-C3C	-5.35	116.97	124.77
23	B	612	CLA	O2D-CGD-CBD	5.34	120.57	111.23
23	C	507	CLA	C4A-NA-C1A	-5.34	104.24	106.68
23	B	611	CLA	C2B-C1B-NB	5.33	115.86	110.33
23	c	513	CLA	C4A-NA-C1A	-5.33	104.25	106.68
23	b	613	CLA	C2C-C1C-NC	5.33	115.58	109.98
37	D	403[A]	PHO	C1-C2-C3	-5.32	117.48	126.20
23	A	405	CLA	C3D-C2D-C1D	-5.32	98.57	105.83
23	C	506	CLA	C2C-C1C-NC	5.32	115.57	109.98
23	b	616	CLA	C4A-NA-C1A	-5.32	104.25	106.68
23	c	517	CLA	C2D-C1D-ND	5.31	115.38	110.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	609	CLA	CHD-C4C-C3C	-5.31	117.04	124.77
23	B	605	CLA	C2D-C1D-ND	5.30	115.38	110.13
23	B	610	CLA	C4A-NA-C1A	-5.30	104.26	106.68
23	b	611	CLA	CHD-C4C-C3C	-5.29	117.06	124.77
23	c	514	CLA	C2C-C1C-NC	5.28	115.53	109.98
23	c	511	CLA	C3B-C2B-C1B	-5.28	100.94	107.17
23	c	509	CLA	C2C-C1C-NC	5.28	115.53	109.98
23	B	604	CLA	C2D-C1D-ND	5.27	115.34	110.13
23	C	511	CLA	O2D-CGD-CBD	5.27	120.44	111.23
23	C	514	CLA	C2B-C1B-NB	5.27	115.79	110.33
23	b	620	CLA	CHD-C4C-C3C	-5.27	117.09	124.77
23	C	514	CLA	C2D-C1D-ND	5.27	115.34	110.13
23	b	620	CLA	O2D-CGD-CBD	5.27	120.44	111.23
23	a	412	CLA	O2D-CGD-CBD	5.26	120.43	111.23
23	C	510	CLA	C1-C2-C3	-5.26	117.58	126.20
23	B	612	CLA	CHD-C4C-C3C	-5.26	117.10	124.77
23	D	407	CLA	CHD-C4C-C3C	-5.26	117.10	124.77
23	B	608	CLA	CHD-C4C-C3C	-5.26	117.11	124.77
23	d	404	CLA	C2D-C1D-ND	5.26	115.33	110.13
37	D	403[A]	PHO	C3D-C4D-ND	5.25	114.44	107.71
23	b	610	CLA	C2D-C1D-ND	5.25	115.32	110.13
33	b	607	HTG	C1'-S1-C1	5.25	111.78	100.45
23	B	603	CLA	O2D-CGD-CBD	5.25	120.40	111.23
23	A	405	CLA	O2D-CGD-CBD	5.25	120.40	111.23
23	B	610	CLA	C2C-C1C-NC	5.25	115.49	109.98
23	d	403	CLA	C2C-C1C-NC	5.24	115.49	109.98
23	b	621	CLA	O2D-CGD-CBD	5.23	120.38	111.23
23	A	405	CLA	C2C-C1C-NC	5.23	115.48	109.98
23	B	609	CLA	C2D-C1D-ND	5.22	115.30	110.13
23	b	619	CLA	C2D-C1D-ND	5.22	115.29	110.13
23	d	405	CLA	C2B-C1B-NB	5.22	115.74	110.33
23	c	506	CLA	C4A-NA-C1A	-5.22	104.30	106.68
23	B	609	CLA	O2D-CGD-CBD	5.21	120.34	111.23
23	B	613	CLA	CMD-C2D-C1D	5.21	133.91	124.73
23	C	505	CLA	C4A-NA-C1A	-5.20	104.31	106.68
33	B	622	HTG	C1'-S1-C1	5.19	111.66	100.45
23	B	609	CLA	C2C-C1C-NC	5.19	115.43	109.98
23	B	608	CLA	C4A-NA-C1A	-5.19	104.31	106.68
23	C	511	CLA	C2D-C1D-ND	5.19	115.26	110.13
23	B	614	CLA	C2C-C1C-NC	5.19	115.43	109.98
23	C	505	CLA	CHD-C4C-C3C	-5.17	117.23	124.77
33	C	522	HTG	C1'-S1-C1	5.16	111.60	100.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	606	CLA	C4A-NA-C1A	-5.16	104.33	106.68
23	C	507	CLA	C2D-C1D-ND	5.15	115.22	110.13
25	F	104	SQD	O47-C7-C8	5.15	122.61	111.48
37	d	402[B]	PHO	C3D-C4D-ND	5.14	114.30	107.71
23	B	602	CLA	C2C-C1C-NC	5.14	115.38	109.98
37	d	402[A]	PHO	C1-C2-C3	-5.14	117.78	126.20
23	B	612	CLA	C2C-C1C-NC	5.13	115.37	109.98
23	B	611	CLA	C4A-NA-C1A	-5.13	104.34	106.68
23	C	507	CLA	CHD-C4C-C3C	-5.12	117.30	124.77
23	b	611	CLA	C3B-C2B-C1B	-5.12	101.14	107.17
23	C	513	CLA	C4A-NA-C1A	-5.11	104.35	106.68
23	c	517	CLA	C4A-NA-C1A	-5.11	104.35	106.68
23	A	405	CLA	C3B-C2B-C1B	-5.10	101.15	107.17
23	A	404	CLA	C2C-C1C-NC	5.10	115.33	109.98
23	C	508	CLA	C3B-C2B-C1B	-5.09	101.17	107.17
23	c	508	CLA	C3D-C2D-C1D	-5.08	98.89	105.83
23	B	605	CLA	C2C-C1C-NC	5.07	115.31	109.98
23	C	506	CLA	C2D-C1D-ND	5.06	115.14	110.13
23	a	409	CLA	C3B-C2B-C1B	-5.06	101.20	107.17
23	A	406	CLA	C3D-C4D-ND	5.06	118.22	109.99
23	D	407	CLA	C3B-C2B-C1B	-5.06	101.20	107.17
23	B	615	CLA	C4A-NA-C1A	-5.06	104.37	106.68
23	D	407	CLA	O2D-CGD-CBD	5.06	120.08	111.23
23	C	514	CLA	C3B-C2B-C1B	-5.06	101.21	107.17
23	C	511	CLA	CHD-C4C-C3C	-5.06	117.40	124.77
23	C	505	CLA	C3B-C2B-C1B	-5.06	101.21	107.17
23	b	620	CLA	C2C-C1C-NC	5.05	115.28	109.98
23	C	505	CLA	C2B-C1B-NB	5.04	115.55	110.33
23	a	409	CLA	C2D-C1D-ND	5.03	115.11	110.13
23	B	607	CLA	C2C-C1C-NC	5.03	115.27	109.98
33	C	523	HTG	C1-O5-C5	5.03	121.59	112.56
23	C	512	CLA	C3B-C2B-C1B	-5.03	101.24	107.17
23	b	610	CLA	C2B-C1B-NB	5.03	115.54	110.33
23	c	510	CLA	C2C-C1C-NC	5.03	115.26	109.98
23	B	606	CLA	C3D-C4D-ND	5.02	118.14	109.99
23	c	514	CLA	C2D-C1D-ND	5.01	115.09	110.13
23	c	513	CLA	O2D-CGD-CBD	5.01	119.98	111.23
33	b	632	HTG	O5-C1-C2	5.01	117.22	110.32
23	C	502	CLA	C4A-NA-C1A	-5.01	104.39	106.68
23	A	407	CLA	C4A-NA-C1A	-5.00	104.40	106.68
23	A	407	CLA	C3B-C2B-C1B	-5.00	101.28	107.17
23	B	609	CLA	C3B-C2B-C1B	-5.00	101.28	107.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	405	CLA	C1C-C2C-C3C	-5.00	101.72	106.98
23	c	515	CLA	C3B-C2B-C1B	-4.99	101.29	107.17
23	B	606	CLA	C3B-C2B-C1B	-4.98	101.29	107.17
23	b	625	CLA	C3D-C2D-C1D	-4.98	99.03	105.83
23	d	404	CLA	O2D-CGD-CBD	4.98	119.94	111.23
23	A	407	CLA	O2D-CGD-CBD	4.97	119.92	111.23
23	c	505	CLA	O2D-CGD-CBD	4.97	119.92	111.23
23	c	508	CLA	C4A-NA-C1A	-4.97	104.41	106.68
23	a	410	CLA	C3D-C4D-ND	4.97	118.06	109.99
23	A	404	CLA	C3B-C2B-C1B	-4.96	101.32	107.17
23	b	623	CLA	C3D-C2D-C1D	-4.96	99.06	105.83
23	b	613	CLA	C4A-NA-C1A	-4.96	104.42	106.68
23	C	510	CLA	C3B-C2B-C1B	-4.96	101.33	107.17
23	c	507	CLA	C3B-C2B-C1B	-4.95	101.34	107.17
23	B	604	CLA	C2B-C1B-NB	4.95	115.46	110.33
23	b	611	CLA	C2B-C1B-NB	4.95	115.45	110.33
23	c	507	CLA	C2B-C1B-NB	4.95	115.45	110.33
23	A	406	CLA	C2B-C1B-NB	4.94	115.45	110.33
23	a	410	CLA	C4A-NA-C1A	-4.94	104.42	106.68
23	C	507	CLA	C2C-C1C-NC	4.94	115.17	109.98
23	B	615	CLA	C3D-C2D-C1D	-4.94	99.09	105.83
23	c	517	CLA	C3B-C2B-C1B	-4.94	101.35	107.17
23	b	624	CLA	C2C-C1C-NC	4.93	115.16	109.98
23	B	608	CLA	C2C-C1C-NC	4.93	115.16	109.98
23	C	513	CLA	C2B-C1B-NB	4.92	115.43	110.33
23	B	617	CLA	C3B-C2B-C1B	-4.91	101.38	107.17
23	c	517	CLA	C2B-C1B-NB	4.91	115.42	110.33
23	C	512	CLA	C2B-C1B-NB	4.91	115.42	110.33
23	d	403	CLA	C3B-C2B-C1B	-4.90	101.39	107.17
23	a	410	CLA	C2B-C1B-NB	4.90	115.41	110.33
24	k	102	BCR	C33-C5-C6	-4.90	119.14	124.48
23	B	614	CLA	C4A-NA-C1A	-4.89	104.45	106.68
23	C	508	CLA	C3D-C2D-C1D	-4.89	99.16	105.83
23	B	614	CLA	C3D-C2D-C1D	-4.89	99.16	105.83
23	c	514	CLA	C4A-NA-C1A	-4.89	104.45	106.68
23	C	513	CLA	CMD-C2D-C1D	4.88	133.33	124.73
23	A	404	CLA	C2B-C1B-NB	4.88	115.39	110.33
23	B	617	CLA	C3D-C2D-C1D	-4.88	99.17	105.83
33	B	623	HTG	C1'-S1-C1	4.88	110.98	100.45
23	c	505	CLA	C4A-NA-C1A	-4.87	104.45	106.68
34	d	408	DGD	O6E-C5E-C4E	4.87	118.48	109.70
23	C	504	CLA	O2D-CGD-CBD	4.87	119.74	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	606	CLA	C2B-C1B-NB	4.87	115.37	110.33
24	C	515	BCR	C7-C8-C9	-4.87	119.04	126.23
23	C	511	CLA	C2C-C1C-NC	4.87	115.09	109.98
23	C	505	CLA	C3D-C2D-C1D	-4.86	99.20	105.83
23	b	618	CLA	C3D-C2D-C1D	-4.85	99.21	105.83
23	b	615	CLA	C4A-NA-C1A	-4.85	104.47	106.68
23	b	619	CLA	C2C-C1C-NC	4.85	115.07	109.98
23	b	615	CLA	C3B-C2B-C1B	-4.84	101.46	107.17
23	B	616	CLA	C2B-C1B-NB	4.84	115.35	110.33
23	b	619	CLA	C3B-C2B-C1B	-4.84	101.46	107.17
25	B	621	SQD	O47-C7-C8	4.84	121.95	111.48
23	A	407	CLA	C2B-C1B-NB	4.83	115.34	110.33
23	C	505	CLA	C2C-C1C-NC	4.83	115.06	109.98
23	B	608	CLA	O2D-CGD-CBD	4.83	119.67	111.23
23	B	613	CLA	C3D-C4D-ND	4.83	117.84	109.99
23	b	618	CLA	C2C-C1C-NC	4.83	115.05	109.98
23	b	616	CLA	C2C-C1C-NC	4.83	115.05	109.98
23	d	403	CLA	C3D-C2D-C1D	-4.82	99.25	105.83
23	a	410	CLA	C3B-C2B-C1B	-4.82	101.48	107.17
23	B	608	CLA	C3D-C2D-C1D	-4.82	99.25	105.83
23	D	406	CLA	C3B-C2B-C1B	-4.82	101.49	107.17
24	k	101	BCR	C20-C21-C22	-4.82	120.52	127.28
23	c	511	CLA	C3D-C2D-C1D	-4.82	99.25	105.83
23	c	505	CLA	C2C-C1C-NC	4.81	115.03	109.98
23	b	612	CLA	C2C-C1C-NC	4.81	115.03	109.98
23	b	615	CLA	C2B-C1B-NB	4.81	115.31	110.33
23	D	407	CLA	C3D-C4D-ND	4.80	117.80	109.99
23	d	404	CLA	C3D-C4D-ND	4.80	117.80	109.99
23	b	621	CLA	C3C-C4C-NC	4.80	116.58	110.43
23	b	617	CLA	O2D-CGD-CBD	4.80	119.62	111.23
24	k	102	BCR	C15-C14-C13	-4.80	120.55	127.28
23	C	513	CLA	C3B-C2B-C1B	-4.80	101.51	107.17
23	c	505	CLA	C3D-C2D-C1D	-4.80	99.28	105.83
23	C	509	CLA	C4A-NA-C1A	-4.80	104.49	106.68
23	D	407	CLA	C2B-C1B-NB	4.80	115.30	110.33
23	B	616	CLA	C3B-C2B-C1B	-4.80	101.52	107.17
23	B	611	CLA	C3B-C2B-C1B	-4.80	101.52	107.17
37	d	402[B]	PHO	C1-C2-C3	-4.80	118.34	126.20
23	c	515	CLA	C2B-C1B-NB	4.79	115.30	110.33
23	B	612	CLA	C3B-C2B-C1B	-4.79	101.52	107.17
23	A	404	CLA	C2D-C1D-ND	4.79	114.87	110.13
23	C	510	CLA	O2D-CGD-CBD	4.79	119.60	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	509	CLA	C2B-C1B-NB	4.78	115.29	110.33
33	D	416	HTG	C1'-S1-C1	4.78	110.78	100.45
38	D	413	LHG	O7-C7-C8	4.78	121.83	111.48
23	D	406	CLA	C3D-C2D-C1D	-4.78	99.31	105.83
23	B	605	CLA	C4A-NA-C1A	-4.78	104.50	106.68
23	b	611	CLA	C2D-C1D-ND	4.77	114.85	110.13
23	b	619	CLA	C2B-C1B-NB	4.77	115.27	110.33
23	b	624	CLA	C3D-C2D-C1D	-4.77	99.32	105.83
25	A	409	SQD	O47-C7-C8	4.77	121.80	111.48
23	d	405	CLA	C3B-C2B-C1B	-4.76	101.55	107.17
23	c	513	CLA	C2C-C1C-NC	4.76	114.98	109.98
23	A	405	CLA	C2B-C1B-NB	4.76	115.26	110.33
23	b	621	CLA	C3D-C2D-C1D	-4.76	99.34	105.83
41	V	206	HEC	CBB-CAB-C3B	-4.76	117.93	127.43
23	b	623	CLA	C3B-C2B-C1B	-4.75	101.56	107.17
23	a	412	CLA	C2C-C1C-NC	4.75	114.97	109.98
23	B	609	CLA	C4A-NA-C1A	-4.75	104.51	106.68
23	c	514	CLA	O2D-CGD-CBD	4.75	119.53	111.23
23	c	517	CLA	C3D-C4D-ND	4.74	117.70	109.99
23	b	611	CLA	C3D-C4D-ND	4.74	117.70	109.99
23	c	515	CLA	C3D-C4D-ND	4.74	117.69	109.99
23	c	513	CLA	C3B-C2B-C1B	-4.74	101.58	107.17
41	V	206	HEC	CHC-C4B-NB	4.74	129.61	124.45
23	B	611	CLA	O2D-CGD-CBD	4.73	119.50	111.23
23	C	509	CLA	C3D-C4D-ND	4.73	117.67	109.99
34	d	408	DGD	O2G-C1B-C2B	4.73	121.71	111.48
35	c	523	LMG	O7-C10-C11	4.73	121.71	111.48
23	d	403	CLA	C1C-C2C-C3C	-4.73	102.01	106.98
23	c	512	CLA	C4A-NA-C1A	-4.72	104.52	106.68
23	C	511	CLA	C4A-NA-C1A	-4.72	104.53	106.68
23	a	412	CLA	C3B-C2B-C1B	-4.72	101.61	107.17
23	b	610	CLA	C3D-C4D-ND	4.72	117.65	109.99
23	C	510	CLA	C2C-C1C-NC	4.72	114.94	109.98
23	A	404	CLA	CHD-C4C-C3C	-4.71	117.90	124.77
23	c	512	CLA	C3D-C2D-C1D	-4.71	99.40	105.83
23	B	609	CLA	C2B-C1B-NB	4.71	115.21	110.33
23	A	406	CLA	C4A-NA-C1A	-4.71	104.53	106.68
23	b	614	CLA	C3D-C2D-C1D	-4.71	99.41	105.83
23	c	514	CLA	C3B-C2B-C1B	-4.71	101.62	107.17
23	B	615	CLA	C3B-C2B-C1B	-4.71	101.62	107.17
23	D	406	CLA	O2D-CGD-CBD	4.70	119.45	111.23
23	B	604	CLA	C3B-C2B-C1B	-4.70	101.63	107.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	B	623	HTG	O5-C1-C2	4.70	116.80	110.32
23	B	611	CLA	C3D-C2D-C1D	-4.70	99.42	105.83
23	b	610	CLA	C3B-C2B-C1B	-4.70	101.64	107.17
23	C	513	CLA	C2C-C1C-NC	4.69	114.91	109.98
23	C	504	CLA	C3B-C2B-C1B	-4.69	101.64	107.17
23	d	405	CLA	C3D-C2D-C1D	-4.69	99.43	105.83
23	b	618	CLA	C3D-C4D-ND	4.68	117.60	109.99
23	c	515	CLA	C4A-NA-C1A	-4.68	104.54	106.68
23	C	504	CLA	C2B-C1B-NB	4.68	115.18	110.33
23	C	504	CLA	C3D-C4D-ND	4.68	117.59	109.99
23	C	504	CLA	C3D-C2D-C1D	-4.68	99.45	105.83
23	c	505	CLA	C3B-C2B-C1B	-4.67	101.66	107.17
23	c	507	CLA	C3D-C2D-C1D	-4.67	99.45	105.83
33	b	632	HTG	C1'-S1-C1	4.67	110.54	100.45
23	d	404	CLA	C3B-C2B-C1B	-4.67	101.67	107.17
23	A	407	CLA	C3D-C2D-C1D	-4.66	99.47	105.83
23	B	607	CLA	C3B-C2B-C1B	-4.66	101.68	107.17
23	B	608	CLA	C3B-C2B-C1B	-4.66	101.68	107.17
23	d	404	CLA	CHD-C4C-C3C	-4.66	117.98	124.77
23	C	504	CLA	C2C-C1C-NC	4.66	114.87	109.98
37	D	403[B]	PHO	C1-C2-C3	-4.66	118.57	126.20
23	C	509	CLA	C3B-C2B-C1B	-4.65	101.68	107.17
23	b	617	CLA	C2B-C1B-NB	4.65	115.15	110.33
23	b	612	CLA	C3D-C4D-ND	4.65	117.55	109.99
23	B	603	CLA	C3D-C2D-C1D	-4.65	99.48	105.83
41	v	205	HEC	CBB-CAB-C3B	-4.65	118.14	127.43
23	b	622	CLA	C3B-C4B-NB	4.65	114.68	110.53
23	A	406	CLA	CHD-C1D-ND	-4.64	118.27	124.80
23	C	507	CLA	O2D-CGD-CBD	4.64	119.35	111.23
23	d	403	CLA	C2B-C1B-NB	4.64	115.14	110.33
23	b	624	CLA	C3D-C4D-ND	4.64	117.53	109.99
23	b	615	CLA	C2C-C1C-NC	4.64	114.85	109.98
23	c	516	CLA	C2C-C1C-NC	4.63	114.85	109.98
23	B	602	CLA	C3D-C4D-ND	4.63	117.52	109.99
23	b	615	CLA	C3D-C2D-C1D	-4.63	99.51	105.83
23	B	613	CLA	C2C-C1C-NC	4.63	114.84	109.98
23	a	412	CLA	C2B-C1B-NB	4.63	115.12	110.33
23	B	612	CLA	C2B-C1B-NB	4.62	115.12	110.33
23	C	512	CLA	C4A-NA-C1A	-4.62	104.57	106.68
23	A	407	CLA	C3D-C4D-ND	4.62	117.49	109.99
23	A	406	CLA	O2D-CGD-CBD	4.62	119.30	111.23
23	C	511	CLA	C3D-C4D-ND	4.62	117.49	109.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	612	CLA	C3D-C4D-ND	4.62	117.49	109.99
23	c	506	CLA	C3B-C2B-C1B	-4.61	101.73	107.17
23	B	610	CLA	C3D-C4D-ND	4.61	117.49	109.99
30	D	409[B]	PL9	C42-C43-C44	-4.61	117.07	127.62
23	C	514	CLA	O2D-CGD-CBD	4.61	119.29	111.23
23	b	620	CLA	C3D-C4D-ND	4.61	117.48	109.99
23	a	410	CLA	C3D-C2D-C1D	-4.60	99.55	105.83
23	d	403	CLA	C3B-C4B-NB	4.60	114.64	110.53
23	C	502	CLA	C3D-C4D-ND	4.59	117.45	109.99
23	A	407	CLA	C2C-C1C-NC	4.59	114.80	109.98
23	c	510	CLA	C3D-C2D-C1D	-4.59	99.57	105.83
23	c	507	CLA	O2D-CGD-CBD	4.58	119.24	111.23
23	a	410	CLA	O2D-CGD-CBD	4.58	119.23	111.23
23	c	507	CLA	C1D-CHD-C4C	-4.58	116.29	126.02
23	a	412	CLA	C3D-C2D-C1D	-4.58	99.58	105.83
23	b	611	CLA	O2D-CGD-CBD	4.58	119.23	111.23
23	C	511	CLA	C2B-C1B-NB	4.57	115.06	110.33
37	a	411	PHO	C3D-C4D-ND	4.56	113.56	107.71
23	c	517	CLA	O2D-CGD-CBD	4.56	119.21	111.23
23	C	514	CLA	C3D-C4D-ND	4.56	117.40	109.99
23	b	616	CLA	C3D-C2D-C1D	-4.56	99.61	105.83
23	b	622	CLA	C3B-C2B-C1B	-4.56	101.79	107.17
23	b	619	CLA	C3D-C4D-ND	4.56	117.40	109.99
23	C	508	CLA	C2B-C1B-NB	4.56	115.05	110.33
23	C	512	CLA	C2C-C1C-NC	4.56	114.77	109.98
23	c	516	CLA	C3D-C4D-ND	4.56	117.40	109.99
24	b	626	BCR	C15-C14-C13	-4.56	120.89	127.28
23	b	616	CLA	C3B-C2B-C1B	-4.56	101.80	107.17
23	b	615	CLA	O2D-CGD-CBD	4.55	119.19	111.23
23	b	620	CLA	C4A-NA-C1A	-4.55	104.60	106.68
23	C	506	CLA	C3D-C4D-ND	4.55	117.39	109.99
23	B	606	CLA	O2D-CGD-CBD	4.54	119.17	111.23
23	C	502	CLA	C3D-C2D-C1D	-4.54	99.64	105.83
34	c	519	DGD	O2G-C1B-C2B	4.53	121.29	111.48
23	C	514	CLA	C4A-NA-C1A	-4.53	104.61	106.68
23	B	617	CLA	C2B-C1B-NB	4.53	115.02	110.33
23	B	613	CLA	C3D-C2D-C1D	-4.53	99.65	105.83
24	c	527	BCR	C15-C14-C13	-4.53	120.93	127.28
23	A	406	CLA	C3B-C2B-C1B	-4.52	101.84	107.17
23	b	622	CLA	C3D-C2D-C1D	-4.52	99.66	105.83
23	b	621	CLA	C3B-C2B-C1B	-4.52	101.84	107.17
35	a	415	LMG	O7-C10-C11	4.52	121.26	111.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	617	CLA	C3B-C2B-C1B	-4.52	101.84	107.17
23	b	612	CLA	C3B-C2B-C1B	-4.52	101.84	107.17
23	b	613	CLA	C1-C2-C3	-4.52	118.79	126.20
23	C	503	CLA	C3B-C2B-C1B	-4.52	101.84	107.17
23	C	511	CLA	C3B-C2B-C1B	-4.52	101.85	107.17
23	b	615	CLA	CHD-C1D-ND	-4.52	118.45	124.80
23	c	512	CLA	C3B-C2B-C1B	-4.51	101.85	107.17
23	a	409	CLA	C3D-C4D-ND	4.51	117.32	109.99
23	A	405	CLA	C3D-C4D-ND	4.51	117.32	109.99
23	d	403	CLA	C3D-C4D-ND	4.51	117.31	109.99
23	B	607	CLA	CHD-C1D-ND	-4.51	118.46	124.80
23	b	614	CLA	C2C-C1C-NC	4.50	114.71	109.98
23	b	616	CLA	CHD-C1D-ND	-4.50	118.47	124.80
24	d	406	BCR	C33-C5-C6	-4.50	119.57	124.48
23	b	625	CLA	C3B-C2B-C1B	-4.50	101.86	107.17
23	c	509	CLA	C3D-C4D-ND	4.50	117.30	109.99
23	B	607	CLA	C3D-C2D-C1D	-4.50	99.69	105.83
23	b	613	CLA	C3D-C2D-C1D	-4.50	99.69	105.83
23	B	617	CLA	C2C-C1C-NC	4.50	114.70	109.98
23	B	606	CLA	C3D-C2D-C1D	-4.50	99.69	105.83
37	D	402	PHO	C1A-C2A-C3A	-4.49	98.56	102.84
23	B	605	CLA	C3D-C2D-C1D	-4.49	99.70	105.83
24	K	101	BCR	C7-C8-C9	-4.49	119.59	126.23
23	C	513	CLA	C3D-C2D-C1D	-4.49	99.70	105.83
23	B	603	CLA	C2C-C1C-NC	4.49	114.70	109.98
23	B	610	CLA	C3B-C2B-C1B	-4.48	101.89	107.17
23	C	510	CLA	C4A-NA-C1A	-4.48	104.64	106.68
23	C	503	CLA	C3D-C4D-ND	4.48	117.27	109.99
23	B	602	CLA	C3B-C2B-C1B	-4.48	101.89	107.17
23	B	603	CLA	C3D-C4D-ND	4.47	117.26	109.99
23	b	616	CLA	C3D-C4D-ND	4.47	117.26	109.99
33	B	630	HTG	C1'-S1-C1	4.47	110.11	100.45
23	A	404	CLA	CAC-C3C-C4C	4.47	130.61	124.79
23	C	510	CLA	C2B-C1B-NB	4.47	114.96	110.33
23	b	621	CLA	C1-C2-C3	-4.47	118.88	126.20
23	A	406	CLA	C2C-C1C-NC	4.47	114.67	109.98
23	c	511	CLA	C4A-NA-C1A	-4.46	104.64	106.68
23	C	512	CLA	C3D-C2D-C1D	-4.46	99.74	105.83
23	b	623	CLA	C2C-C1C-NC	4.46	114.67	109.98
23	c	511	CLA	CHD-C1D-ND	-4.46	118.52	124.80
23	C	509	CLA	C2C-C1C-NC	4.46	114.67	109.98
23	B	611	CLA	C3D-C4D-ND	4.46	117.23	109.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	623	CLA	C3D-C4D-ND	4.46	117.23	109.99
23	D	407	CLA	CHD-C1D-ND	-4.45	118.54	124.80
23	D	407	CLA	C3D-C2D-C1D	-4.45	99.76	105.83
23	C	510	CLA	C3D-C2D-C1D	-4.45	99.76	105.83
23	d	405	CLA	C3D-C4D-ND	4.45	117.22	109.99
23	C	509	CLA	C3D-C2D-C1D	-4.45	99.76	105.83
23	d	404	CLA	C2B-C1B-NB	4.45	114.94	110.33
23	c	508	CLA	C3B-C2B-C1B	-4.44	101.93	107.17
23	c	514	CLA	C2B-C1B-NB	4.44	114.93	110.33
23	C	507	CLA	C3D-C2D-C1D	-4.44	99.77	105.83
23	b	621	CLA	CMD-C2D-C1D	4.44	132.55	124.73
23	B	609	CLA	C3D-C4D-ND	4.44	117.21	109.99
23	c	508	CLA	CHD-C1D-ND	-4.44	118.56	124.80
23	b	614	CLA	C3D-C4D-ND	4.44	117.20	109.99
25	B	621	SQD	O6-C1-C2	4.44	115.01	108.27
23	c	507	CLA	C3D-C4D-ND	4.44	117.20	109.99
23	B	606	CLA	CHD-C1D-ND	-4.43	118.56	124.80
23	A	404	CLA	C3D-C4D-ND	4.43	117.19	109.99
23	b	622	CLA	C2B-C1B-NB	4.43	114.92	110.33
23	b	624	CLA	C3B-C2B-C1B	-4.43	101.95	107.17
23	D	406	CLA	C3D-C4D-ND	4.43	117.18	109.99
23	C	510	CLA	C3D-C4D-ND	4.42	117.18	109.99
23	B	610	CLA	C3D-C2D-C1D	-4.42	99.80	105.83
23	c	517	CLA	C2C-C1C-NC	4.42	114.63	109.98
30	A	416[B]	PL9	C7-C3-C4	4.42	120.55	116.91
23	B	616	CLA	O2D-CGD-CBD	4.42	118.96	111.23
23	B	611	CLA	CHD-C1D-ND	-4.42	118.58	124.80
23	a	409	CLA	C1-C2-C3	-4.42	118.96	126.20
23	a	409	CLA	C2B-C1B-NB	4.42	114.91	110.33
25	a	414	SQD	O47-C7-C8	4.42	121.03	111.48
25	a	414	SQD	O6-C1-C2	4.41	114.98	108.27
23	c	511	CLA	C2B-C1B-NB	4.41	114.90	110.33
23	a	410	CLA	CHD-C1D-ND	-4.41	118.59	124.80
23	B	604	CLA	C3D-C4D-ND	4.41	117.16	109.99
23	a	412	CLA	C3D-C4D-ND	4.41	117.15	109.99
24	d	406	BCR	C7-C8-C9	-4.41	119.72	126.23
35	C	501	LMG	O7-C10-C11	4.40	121.00	111.48
23	B	615	CLA	C2B-C1B-NB	4.40	114.89	110.33
23	b	620	CLA	C3B-C2B-C1B	-4.40	101.98	107.17
23	B	613	CLA	C3B-C2B-C1B	-4.40	101.98	107.17
23	C	507	CLA	C3D-C4D-ND	4.40	117.14	109.99
23	B	602	CLA	C3D-C2D-C1D	-4.40	99.83	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	610	CLA	CMB-C2B-C1B	4.40	132.12	125.42
23	B	616	CLA	C3D-C2D-C1D	-4.40	99.83	105.83
23	c	510	CLA	C3D-C4D-ND	4.40	117.13	109.99
23	a	412	CLA	C1D-CHD-C4C	-4.39	116.68	126.02
23	B	615	CLA	C3D-C4D-ND	4.39	117.13	109.99
23	B	607	CLA	C3D-C4D-ND	4.39	117.12	109.99
23	C	512	CLA	C1D-CHD-C4C	-4.38	116.70	126.02
37	D	402	PHO	CBC-CAC-C3C	-4.38	106.60	112.87
35	C	520	LMG	O7-C10-C11	4.38	120.96	111.48
23	b	613	CLA	C3B-C2B-C1B	-4.38	102.01	107.17
23	C	503	CLA	C3D-C2D-C1D	-4.38	99.86	105.83
23	C	508	CLA	C2C-C1C-NC	4.37	114.58	109.98
23	a	409	CLA	CHD-C4C-C3C	-4.37	118.40	124.77
23	C	506	CLA	C3B-C2B-C1B	-4.37	102.02	107.17
23	b	619	CLA	O2D-CGD-CBD	4.37	118.87	111.23
23	C	508	CLA	C4A-NA-C1A	-4.37	104.69	106.68
23	b	625	CLA	C2B-C1B-NB	4.37	114.86	110.33
23	c	506	CLA	C2C-C1C-NC	4.37	114.57	109.98
23	b	616	CLA	C2B-C1B-NB	4.37	114.86	110.33
23	b	615	CLA	C3D-C4D-ND	4.37	117.08	109.99
23	b	625	CLA	C3D-C4D-ND	4.36	117.08	109.99
23	B	615	CLA	C2C-C1C-NC	4.36	114.56	109.98
23	C	514	CLA	C2C-C1C-NC	4.36	114.56	109.98
23	B	603	CLA	C3B-C2B-C1B	-4.35	102.04	107.17
23	b	612	CLA	C1D-CHD-C4C	-4.35	116.77	126.02
24	H	101	BCR	C38-C26-C25	-4.35	119.73	124.48
23	C	503	CLA	C2C-C1C-NC	4.35	114.55	109.98
23	D	407	CLA	C2C-C1C-NC	4.35	114.55	109.98
23	d	404	CLA	CHD-C1D-ND	-4.35	118.68	124.80
23	b	617	CLA	C3D-C4D-ND	4.35	117.05	109.99
23	b	621	CLA	C3D-C4D-ND	4.35	117.05	109.99
23	C	513	CLA	C3D-C4D-ND	4.34	117.05	109.99
23	A	406	CLA	C3D-C2D-C1D	-4.34	99.90	105.83
23	b	612	CLA	C2B-C1B-NB	4.34	114.83	110.33
23	b	622	CLA	C4A-NA-C1A	-4.34	104.70	106.68
23	B	606	CLA	C2C-C1C-NC	4.34	114.54	109.98
23	d	404	CLA	C1C-C2C-C3C	-4.33	102.42	106.98
23	C	503	CLA	O2D-CGD-CBD	4.33	118.81	111.23
23	b	616	CLA	O2D-CGD-CBD	4.33	118.81	111.23
23	A	405	CLA	CBC-CAC-C3C	-4.33	100.68	112.42
23	c	513	CLA	C2B-C1B-NB	4.33	114.81	110.33
23	D	406	CLA	C1-C2-C3	-4.33	119.11	126.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	508	CLA	C2C-C1C-NC	4.33	114.53	109.98
23	d	405	CLA	CHD-C1D-ND	-4.32	118.72	124.80
23	C	505	CLA	CHD-C1D-ND	-4.32	118.72	124.80
23	b	619	CLA	C3D-C2D-C1D	-4.31	99.95	105.83
24	H	101	BCR	C24-C23-C22	-4.31	119.86	126.23
23	b	617	CLA	C3D-C2D-C1D	-4.31	99.95	105.83
23	D	406	CLA	C2B-C1B-NB	4.31	114.80	110.33
23	c	512	CLA	C3D-C4D-ND	4.31	116.99	109.99
23	b	621	CLA	C1D-CHD-C4C	-4.30	116.87	126.02
23	b	614	CLA	O2D-CGD-O1D	-4.30	115.47	123.85
23	c	507	CLA	C2C-C1C-NC	4.30	114.50	109.98
23	c	513	CLA	C3D-C2D-C1D	-4.30	99.96	105.83
23	C	502	CLA	C2B-C1B-NB	4.29	114.78	110.33
27	D	405	LMT	O1B-C4'-C3'	4.29	118.14	107.23
23	B	607	CLA	C1-C2-C3	-4.29	119.17	126.20
23	D	406	CLA	C1C-C2C-C3C	-4.29	102.47	106.98
23	B	612	CLA	CHD-C1D-ND	-4.29	118.77	124.80
24	T	103	BCR	C33-C5-C6	-4.29	119.80	124.48
34	D	410	DGD	O2G-C1B-C2B	4.29	120.76	111.48
23	C	514	CLA	C3D-C2D-C1D	-4.29	99.98	105.83
23	B	608	CLA	CHD-C1D-ND	-4.28	118.78	124.80
23	C	506	CLA	C3C-C4C-NC	4.28	115.91	110.43
23	b	614	CLA	CHD-C1D-ND	-4.27	118.79	124.80
25	A	409	SQD	O6-C1-C2	4.27	114.76	108.27
23	c	515	CLA	C3D-C2D-C1D	-4.27	100.00	105.83
23	c	506	CLA	C3D-C4D-ND	4.27	116.93	109.99
23	b	624	CLA	CHD-C1D-ND	-4.27	118.79	124.80
23	B	609	CLA	C3D-C2D-C1D	-4.27	100.00	105.83
23	B	605	CLA	C1C-C2C-C3C	-4.27	102.49	106.98
23	C	503	CLA	C1-C2-C3	-4.27	119.21	126.20
23	C	502	CLA	O2D-CGD-O1D	-4.27	115.55	123.85
33	B	629	HTG	C1'-S1-C1	4.26	109.66	100.45
23	A	404	CLA	CHD-C1D-ND	-4.26	118.81	124.80
23	d	403	CLA	CHD-C1D-ND	-4.26	118.81	124.80
23	c	514	CLA	C3D-C4D-ND	4.26	116.91	109.99
23	c	510	CLA	CHD-C1D-ND	-4.26	118.81	124.80
27	a	404	LMT	C1'-O5'-C5'	4.25	122.03	113.72
23	C	503	CLA	C4A-NA-C1A	-4.25	104.74	106.68
23	B	605	CLA	C3B-C2B-C1B	-4.25	102.16	107.17
23	B	616	CLA	C3D-C4D-ND	4.25	116.90	109.99
23	B	610	CLA	O2D-CGD-CBD	4.25	118.66	111.23
23	D	407	CLA	C4A-NA-C1A	-4.25	104.74	106.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	E	101	LHG	O7-C7-C8	4.25	120.67	111.48
24	B	618	BCR	C33-C5-C6	-4.24	119.86	124.48
23	b	614	CLA	C2B-C1B-NB	4.24	114.72	110.33
23	c	512	CLA	C3B-C4B-NB	4.24	114.31	110.53
24	b	626	BCR	C33-C5-C6	-4.23	119.86	124.48
23	C	504	CLA	CHD-C1D-ND	-4.23	118.85	124.80
23	C	509	CLA	CHD-C1D-ND	-4.23	118.85	124.80
23	c	512	CLA	C1C-C2C-C3C	-4.23	102.53	106.98
27	a	404	LMT	O5'-C5'-C4'	4.23	118.47	109.72
23	c	513	CLA	C3D-C4D-ND	4.23	116.86	109.99
23	D	406	CLA	CHD-C1D-ND	-4.23	118.86	124.80
23	B	605	CLA	C3B-C4B-NB	4.23	114.30	110.53
33	C	523	HTG	C1'-S1-C1	4.22	109.57	100.45
23	C	512	CLA	O2D-CGD-CBD	4.22	118.61	111.23
23	b	620	CLA	C3D-C2D-C1D	-4.21	100.08	105.83
23	c	512	CLA	C2B-C1B-NB	4.21	114.70	110.33
23	C	503	CLA	C1D-CHD-C4C	-4.21	117.06	126.02
23	B	607	CLA	C2B-C1B-NB	4.21	114.69	110.33
23	a	409	CLA	CHD-C1D-ND	-4.21	118.88	124.80
23	C	512	CLA	C3D-C4D-ND	4.21	116.83	109.99
23	B	603	CLA	CHD-C1D-ND	-4.21	118.88	124.80
23	d	403	CLA	O2D-CGD-CBD	4.21	118.58	111.23
23	c	508	CLA	C3D-C4D-ND	4.21	116.82	109.99
23	C	505	CLA	C3D-C4D-ND	4.20	116.82	109.99
23	c	509	CLA	C3C-C4C-NC	4.20	115.81	110.43
23	c	506	CLA	O2D-CGD-CBD	4.20	118.57	111.23
23	C	502	CLA	CHD-C1D-ND	-4.20	118.89	124.80
23	B	617	CLA	C1D-CHD-C4C	-4.20	117.09	126.02
25	L	102	SQD	O47-C7-C8	4.20	120.56	111.48
23	C	502	CLA	C2C-C1C-NC	4.20	114.39	109.98
33	c	525	HTG	C1'-S1-C1	4.19	109.51	100.45
34	c	521	DGD	O2G-C1B-C2B	4.19	120.55	111.48
23	b	615	CLA	C1D-CHD-C4C	-4.19	117.11	126.02
23	A	407	CLA	CHD-C1D-ND	-4.19	118.91	124.80
38	d	411	LHG	O7-C7-C8	4.19	120.54	111.48
23	B	612	CLA	C3D-C2D-C1D	-4.19	100.11	105.83
23	c	506	CLA	C3D-C2D-C1D	-4.19	100.11	105.83
23	A	405	CLA	CHD-C1D-ND	-4.19	118.91	124.80
23	C	507	CLA	CHD-C1D-ND	-4.19	118.91	124.80
23	b	610	CLA	C2C-C1C-NC	4.19	114.38	109.98
23	c	505	CLA	C3D-C4D-ND	4.18	116.79	109.99
23	c	507	CLA	C3C-C4C-NC	4.18	115.79	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	502	CLA	CMC-C2C-C1C	4.18	131.57	125.03
23	B	604	CLA	CHD-C1D-ND	-4.18	118.92	124.80
41	v	205	HEC	CHC-C4B-NB	4.18	129.00	124.45
23	b	624	CLA	CMB-C2B-C1B	4.18	131.78	125.42
23	d	405	CLA	C2C-C1C-NC	4.18	114.37	109.98
23	d	404	CLA	C3D-C2D-C1D	-4.17	100.13	105.83
23	C	502	CLA	C3B-C2B-C1B	-4.17	102.25	107.17
23	B	614	CLA	C1C-C2C-C3C	-4.17	102.59	106.98
23	b	614	CLA	C3B-C2B-C1B	-4.17	102.26	107.17
23	b	617	CLA	C2C-C1C-NC	4.16	114.36	109.98
23	B	604	CLA	C3D-C2D-C1D	-4.16	100.15	105.83
23	C	514	CLA	CHD-C1D-ND	-4.16	118.95	124.80
23	c	516	CLA	C3D-C2D-C1D	-4.15	100.17	105.83
23	B	613	CLA	C3C-C4C-NC	4.15	115.75	110.43
23	B	608	CLA	C3D-C4D-ND	4.15	116.73	109.99
23	A	404	CLA	C3D-C2D-C1D	-4.15	100.17	105.83
23	C	507	CLA	C3B-C2B-C1B	-4.15	102.28	107.17
23	c	510	CLA	O2D-CGD-CBD	4.15	118.48	111.23
23	c	509	CLA	C3B-C2B-C1B	-4.15	102.28	107.17
23	B	604	CLA	C2C-C1C-NC	4.14	114.33	109.98
35	d	416	LMG	O7-C10-C11	4.14	120.44	111.48
23	B	602	CLA	C1D-CHD-C4C	-4.14	117.22	126.02
23	A	406	CLA	CMB-C2B-C1B	4.14	131.72	125.42
23	B	603	CLA	C2B-C1B-NB	4.14	114.62	110.33
23	c	510	CLA	C3B-C4B-NB	4.14	114.22	110.53
23	B	616	CLA	C1D-CHD-C4C	-4.14	117.22	126.02
23	B	616	CLA	C2C-C1C-NC	4.14	114.33	109.98
23	B	611	CLA	C2C-C1C-NC	4.13	114.33	109.98
23	c	515	CLA	CHD-C1D-ND	-4.13	118.99	124.80
23	b	620	CLA	CAC-C3C-C4C	4.13	130.16	124.79
23	c	511	CLA	C3D-C4D-ND	4.13	116.70	109.99
23	B	615	CLA	CHD-C1D-ND	-4.13	118.99	124.80
23	b	624	CLA	C4A-NA-C1A	-4.13	104.80	106.68
23	b	611	CLA	CHD-C1D-ND	-4.12	119.00	124.80
23	b	614	CLA	C1D-CHD-C4C	-4.12	117.26	126.02
24	C	515	BCR	C33-C5-C6	-4.12	119.98	124.48
23	c	509	CLA	C1D-CHD-C4C	-4.12	117.27	126.02
33	o	301	HTG	C1'-S1-C1	4.12	109.34	100.45
23	C	512	CLA	C3B-C4B-NB	4.12	114.21	110.53
23	B	615	CLA	C1D-CHD-C4C	-4.12	117.27	126.02
23	C	503	CLA	C2B-C1B-NB	4.12	114.59	110.33
23	B	613	CLA	CHD-C1D-ND	-4.11	119.02	124.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	409	CLA	C1C-C2C-C3C	-4.11	102.66	106.98
23	a	412	CLA	C1C-C2C-C3C	-4.11	102.66	106.98
23	b	610	CLA	CHD-C1D-ND	-4.10	119.03	124.80
23	B	608	CLA	C1C-C2C-C3C	-4.10	102.66	106.98
23	c	514	CLA	C3D-C2D-C1D	-4.10	100.23	105.83
23	B	608	CLA	C2B-C1B-NB	4.10	114.58	110.33
23	b	613	CLA	C3B-C4B-NB	4.10	114.19	110.53
34	c	520	DGD	O2G-C1B-C2B	4.10	120.35	111.48
30	d	407[B]	PL9	C42-C43-C44	-4.10	118.24	127.62
23	C	504	CLA	C1D-CHD-C4C	-4.10	117.31	126.02
23	b	621	CLA	C2B-C1B-NB	4.10	114.58	110.33
23	d	403	CLA	C4A-NA-C1A	-4.10	104.81	106.68
23	B	613	CLA	C1-C2-C3	-4.09	119.49	126.20
23	b	612	CLA	C3D-C2D-C1D	-4.09	100.24	105.83
23	b	620	CLA	C1-C2-C3	-4.09	119.49	126.20
23	b	610	CLA	C3D-C2D-C1D	-4.09	100.25	105.83
24	Y	101	BCR	C16-C17-C18	-4.09	121.54	127.28
23	C	506	CLA	CAC-C3C-C4C	4.09	130.11	124.79
23	B	602	CLA	C3B-C4B-NB	4.08	114.17	110.53
23	c	510	CLA	C1C-C2C-C3C	-4.08	102.69	106.98
23	b	625	CLA	C1D-CHD-C4C	-4.08	117.35	126.02
23	B	614	CLA	C3B-C2B-C1B	-4.08	102.36	107.17
23	b	624	CLA	C2B-C1B-NB	4.08	114.55	110.33
23	B	610	CLA	C2B-C1B-NB	4.07	114.55	110.33
23	c	514	CLA	C3B-C4B-NB	4.07	114.16	110.53
23	B	609	CLA	C1D-CHD-C4C	-4.07	117.37	126.02
23	C	508	CLA	C3C-C4C-NC	4.06	115.63	110.43
23	C	509	CLA	C3B-C4B-NB	4.06	114.15	110.53
39	e	101	HEM	CHC-C4B-NB	4.05	128.78	124.42
23	c	513	CLA	C1-O2A-CGA	4.05	126.45	116.65
23	A	404	CLA	C1C-C2C-C3C	-4.05	102.72	106.98
30	a	416[B]	PL9	C7-C8-C9	-4.04	119.86	126.83
23	B	617	CLA	C3D-C4D-ND	4.04	116.56	109.99
23	b	623	CLA	C2B-C1B-NB	4.04	114.52	110.33
30	a	416[A]	PL9	C22-C23-C24	-4.04	118.37	127.62
23	b	619	CLA	CHD-C1D-ND	-4.04	119.12	124.80
23	c	515	CLA	C1D-CHD-C4C	-4.04	117.44	126.02
23	b	611	CLA	C2C-C1C-NC	4.04	114.22	109.98
23	c	517	CLA	CHD-C1D-ND	-4.04	119.12	124.80
23	C	505	CLA	C3B-C4B-NB	4.04	114.13	110.53
23	c	506	CLA	C2B-C1B-NB	4.04	114.51	110.33
23	B	614	CLA	C3C-C4C-NC	4.03	115.60	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	405	CLA	C3B-C4B-NB	4.03	114.13	110.53
23	b	613	CLA	C3C-C4C-NC	4.03	115.59	110.43
23	C	510	CLA	CHD-C1D-ND	-4.03	119.14	124.80
34	d	408	DGD	C3E-C4E-C5E	4.03	117.53	110.23
23	b	623	CLA	C1-C2-C3	-4.03	119.60	126.20
23	b	618	CLA	C1C-C2C-C3C	-4.03	102.75	106.98
23	b	618	CLA	C3C-C4C-NC	4.02	115.59	110.43
23	c	508	CLA	C1D-CHD-C4C	-4.02	117.47	126.02
23	c	514	CLA	C1D-CHD-C4C	-4.02	117.47	126.02
23	B	614	CLA	CHD-C1D-ND	-4.02	119.14	124.80
25	F	104	SQD	O5-C5-C4	4.02	116.95	109.70
23	C	511	CLA	C3D-C2D-C1D	-4.02	100.34	105.83
23	c	517	CLA	C1D-CHD-C4C	-4.02	117.48	126.02
23	B	609	CLA	C1C-C2C-C3C	-4.02	102.75	106.98
38	b	634	LHG	O7-C7-C8	4.02	120.17	111.48
23	b	622	CLA	C3D-C4D-ND	4.02	116.52	109.99
23	B	605	CLA	C1-C2-C3	-4.02	119.62	126.20
23	B	614	CLA	C3D-C4D-ND	4.01	116.51	109.99
23	c	517	CLA	C3D-C2D-C1D	-4.01	100.36	105.83
23	c	513	CLA	C1-C2-C3	-4.01	119.63	126.20
23	B	610	CLA	CHD-C1D-ND	-4.01	119.16	124.80
23	c	507	CLA	CHD-C1D-ND	-4.00	119.17	124.80
23	B	608	CLA	C1D-CHD-C4C	-4.00	117.51	126.02
23	b	614	CLA	C3C-C4C-NC	4.00	115.56	110.43
23	C	511	CLA	CHD-C1D-ND	-4.00	119.17	124.80
30	a	416[A]	PL9	C32-C33-C34	-4.00	118.47	127.62
23	c	516	CLA	C1C-C2C-C3C	-4.00	102.78	106.98
23	c	516	CLA	C1D-CHD-C4C	-4.00	117.53	126.02
23	c	513	CLA	C1D-CHD-C4C	-4.00	117.53	126.02
23	c	511	CLA	CMB-C2B-C1B	4.00	131.50	125.42
23	B	607	CLA	C1C-C2C-C3C	-4.00	102.78	106.98
23	C	508	CLA	CHD-C1D-ND	-3.99	119.19	124.80
35	C	519	LMG	O7-C10-C11	3.99	120.11	111.48
23	b	624	CLA	C3C-C4C-NC	3.99	115.54	110.43
23	A	405	CLA	C1D-CHD-C4C	-3.98	117.55	126.02
23	c	505	CLA	C2B-C1B-NB	3.98	114.45	110.33
23	b	612	CLA	CHD-C1D-ND	-3.98	119.20	124.80
25	A	412	SQD	O47-C7-C8	3.98	120.08	111.48
23	c	513	CLA	CHD-C1D-ND	-3.97	119.21	124.80
23	A	404	CLA	CAA-C2A-C3A	-3.97	102.26	113.00
24	h	101	BCR	C38-C26-C25	-3.97	120.15	124.48
23	b	612	CLA	C1C-C2C-C3C	-3.97	102.80	106.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	616	CLA	C3C-C4C-NC	3.97	115.51	110.43
23	C	504	CLA	C3C-C4C-NC	3.97	115.51	110.43
23	c	511	CLA	C3C-C4C-NC	3.97	115.51	110.43
23	c	514	CLA	C1-C2-C3	-3.96	119.70	126.20
23	A	404	CLA	C1D-CHD-C4C	-3.96	117.60	126.02
23	c	509	CLA	C2B-C1B-NB	3.96	114.43	110.33
23	C	512	CLA	CAC-C3C-C4C	3.96	129.94	124.79
23	c	505	CLA	CHD-C1D-ND	-3.96	119.23	124.80
23	d	405	CLA	C1D-CHD-C4C	-3.96	117.61	126.02
23	c	513	CLA	C1C-C2C-C3C	-3.96	102.82	106.98
23	b	613	CLA	C1C-C2C-C3C	-3.95	102.82	106.98
23	A	404	CLA	C3B-C4B-NB	3.95	114.06	110.53
23	B	605	CLA	C2B-C1B-NB	3.95	114.42	110.33
23	c	509	CLA	C2D-C1D-ND	3.95	114.03	110.13
23	c	512	CLA	C1D-CHD-C4C	-3.95	117.63	126.02
23	c	509	CLA	CMB-C2B-C1B	3.94	131.42	125.42
23	d	404	CLA	O2A-CGA-CBA	3.94	123.85	111.83
23	c	508	CLA	CMC-C2C-C1C	3.94	131.19	125.03
23	C	513	CLA	C1D-CHD-C4C	-3.94	117.65	126.02
23	b	610	CLA	C1D-CHD-C4C	-3.94	117.65	126.02
23	B	602	CLA	C2B-C1B-NB	3.94	114.41	110.33
23	b	612	CLA	CAA-C2A-C3A	-3.93	102.37	113.00
23	C	508	CLA	C3D-C4D-ND	3.93	116.38	109.99
24	k	101	BCR	C15-C14-C13	-3.93	121.76	127.28
23	C	505	CLA	C1C-C2C-C3C	-3.93	102.84	106.98
34	D	410	DGD	C1D-C2D-C3D	3.93	118.28	110.01
23	D	406	CLA	C3B-C4B-NB	3.93	114.04	110.53
23	A	406	CLA	C1C-C2C-C3C	-3.93	102.85	106.98
23	d	403	CLA	C1D-CHD-C4C	-3.93	117.67	126.02
23	b	617	CLA	CHD-C1D-ND	-3.93	119.27	124.80
23	b	625	CLA	CHD-C1D-ND	-3.93	119.27	124.80
23	c	514	CLA	C1C-C2C-C3C	-3.92	102.85	106.98
23	b	618	CLA	C3B-C2B-C1B	-3.92	102.54	107.17
23	d	403	CLA	CBC-CAC-C3C	-3.92	101.79	112.42
23	C	514	CLA	C1D-CHD-C4C	-3.92	117.69	126.02
23	c	511	CLA	C1-C2-C3	-3.91	119.79	126.20
23	c	509	CLA	CAC-C3C-C4C	3.91	129.87	124.79
23	b	622	CLA	C1D-CHD-C4C	-3.90	117.72	126.02
23	C	506	CLA	C1D-CHD-C4C	-3.90	117.73	126.02
23	B	612	CLA	C1C-C2C-C3C	-3.90	102.88	106.98
23	c	511	CLA	C2C-C1C-NC	3.89	114.07	109.98
23	c	508	CLA	C2B-C1B-NB	3.89	114.36	110.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	410	CLA	C2C-C1C-NC	3.89	114.07	109.98
23	B	603	CLA	C3C-C4C-NC	3.89	115.41	110.43
23	b	618	CLA	CHD-C1D-ND	-3.89	119.33	124.80
23	C	508	CLA	C1D-CHD-C4C	-3.88	117.76	126.02
35	Z	101	LMG	O7-C10-C11	3.88	119.88	111.48
23	b	621	CLA	C2C-C1C-NC	3.88	114.06	109.98
24	b	626	BCR	C7-C8-C9	-3.88	120.50	126.23
23	b	625	CLA	C2C-C1C-NC	3.88	114.06	109.98
23	B	602	CLA	C3C-C4C-NC	3.88	115.40	110.43
23	D	407	CLA	CMB-C2B-C1B	3.88	131.32	125.42
23	C	514	CLA	C1-C2-C3	-3.87	119.85	126.20
23	b	614	CLA	C1C-C2C-C3C	-3.87	102.91	106.98
23	B	607	CLA	C1D-CHD-C4C	-3.87	117.79	126.02
27	A	413	LMT	O5'-C5'-C4'	3.87	117.72	109.72
23	b	616	CLA	C3C-C4C-NC	3.87	115.39	110.43
23	B	614	CLA	C2B-C1B-NB	3.87	114.34	110.33
23	B	603	CLA	C1D-CHD-C4C	-3.87	117.80	126.02
23	b	620	CLA	C2B-C1B-NB	3.87	114.33	110.33
23	b	616	CLA	C1C-C2C-C3C	-3.86	102.92	106.98
23	b	615	CLA	C3C-C4C-NC	3.86	115.38	110.43
23	C	507	CLA	C1C-C2C-C3C	-3.86	102.92	106.98
23	C	507	CLA	C2B-C1B-NB	3.86	114.33	110.33
23	b	625	CLA	C3C-C4C-NC	3.86	115.37	110.43
23	b	618	CLA	O2D-CGD-O1D	-3.85	116.35	123.85
23	c	516	CLA	CHD-C1D-ND	-3.85	119.38	124.80
23	b	620	CLA	C3C-C4C-NC	3.85	115.36	110.43
23	c	515	CLA	O2D-CGD-CBD	3.85	117.96	111.23
23	B	604	CLA	C1D-CHD-C4C	-3.85	117.84	126.02
23	b	623	CLA	C1D-CHD-C4C	-3.85	117.85	126.02
23	B	602	CLA	CHD-C1D-ND	-3.84	119.39	124.80
23	c	506	CLA	CHD-C1D-ND	-3.84	119.39	124.80
24	B	620	BCR	C15-C14-C13	-3.84	121.89	127.28
23	B	612	CLA	C1-C2-C3	-3.84	119.91	126.20
23	B	610	CLA	C1C-C2C-C3C	-3.84	102.94	106.98
23	c	510	CLA	C2B-C1B-NB	3.83	114.30	110.33
23	a	409	CLA	C3D-C2D-C1D	-3.83	100.60	105.83
23	b	620	CLA	CHD-C1D-ND	-3.83	119.41	124.80
35	M	101	LMG	O8-C28-C29	3.83	123.51	111.83
33	b	631	HTG	C1'-S1-C1	3.83	108.72	100.45
23	B	606	CLA	C1D-CHD-C4C	-3.83	117.88	126.02
23	B	612	CLA	C3B-C4B-NB	3.83	113.95	110.53
23	b	622	CLA	C3C-C4C-NC	3.83	115.33	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	A	416[B]	PL9	C7-C3-C2	-3.83	118.88	123.39
23	b	615	CLA	C1C-C2C-C3C	-3.82	102.96	106.98
23	a	412	CLA	C3B-C4B-NB	3.82	113.94	110.53
23	B	615	CLA	C1C-C2C-C3C	-3.82	102.96	106.98
23	C	509	CLA	C1D-CHD-C4C	-3.82	117.90	126.02
23	C	513	CLA	C3C-C4C-NC	3.82	115.32	110.43
23	c	511	CLA	C1D-CHD-C4C	-3.82	117.91	126.02
23	B	602	CLA	C1C-C2C-C3C	-3.82	102.97	106.98
23	b	623	CLA	O2D-CGD-O1D	-3.81	116.42	123.85
24	T	103	BCR	C11-C10-C9	-3.81	121.93	127.28
23	b	612	CLA	C3B-C4B-NB	3.81	113.93	110.53
23	b	611	CLA	C3D-C2D-C1D	-3.81	100.63	105.83
23	c	506	CLA	C1D-CHD-C4C	-3.81	117.93	126.02
23	b	622	CLA	C1C-C2C-C3C	-3.81	102.98	106.98
23	c	508	CLA	C1C-C2C-C3C	-3.80	102.98	106.98
23	a	409	CLA	C3B-C4B-NB	3.80	113.92	110.53
34	C	516	DGD	O2G-C1B-C2B	3.80	119.70	111.48
23	c	508	CLA	C3C-C4C-NC	3.80	115.30	110.43
23	b	613	CLA	C3D-C4D-ND	3.80	116.16	109.99
23	c	510	CLA	C3B-C2B-C1B	-3.79	102.70	107.17
23	b	623	CLA	CHD-C1D-ND	-3.79	119.46	124.80
34	C	517	DGD	O2G-C1B-C2B	3.79	119.68	111.48
23	B	611	CLA	C1D-CHD-C4C	-3.79	117.96	126.02
23	B	605	CLA	C1D-CHD-C4C	-3.79	117.97	126.02
23	B	610	CLA	C1D-CHD-C4C	-3.79	117.97	126.02
23	C	511	CLA	C3B-C4B-NB	3.78	113.91	110.53
23	c	512	CLA	C3C-C4C-NC	3.78	115.27	110.43
39	e	101	HEM	CHD-C1D-ND	3.78	128.49	124.42
23	b	623	CLA	C3C-C4C-NC	3.78	115.27	110.43
23	B	607	CLA	C3C-C4C-NC	3.78	115.27	110.43
23	C	505	CLA	C1D-CHD-C4C	-3.78	117.99	126.02
23	c	506	CLA	C3C-C4C-NC	3.78	115.27	110.43
23	c	511	CLA	CMC-C2C-C1C	3.77	130.93	125.03
24	D	408	BCR	C29-C30-C25	3.77	115.92	110.44
23	B	604	CLA	O2D-CGD-O1D	-3.77	116.51	123.85
23	b	623	CLA	C1C-C2C-C3C	-3.77	103.02	106.98
23	b	623	CLA	C4A-NA-C1A	-3.77	104.96	106.68
23	B	604	CLA	C1C-C2C-C3C	-3.76	103.02	106.98
23	A	407	CLA	CMB-C2B-C1B	3.76	131.15	125.42
23	B	617	CLA	C3C-C4C-NC	3.76	115.25	110.43
25	L	102	SQD	C3-C4-C5	3.76	117.05	110.23
25	A	412	SQD	O48-C23-C24	3.75	123.28	111.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	625	CLA	C3B-C4B-NB	3.75	113.88	110.53
23	B	613	CLA	C4A-NA-C1A	-3.75	104.97	106.68
25	a	405	SQD	O47-C7-C8	3.75	119.59	111.48
23	C	512	CLA	CHD-C1D-ND	-3.74	119.53	124.80
23	c	506	CLA	CMB-C2B-C1B	3.74	131.12	125.42
23	C	503	CLA	C3C-C4C-NC	3.74	115.22	110.43
23	c	510	CLA	C4B-C3B-C2B	-3.74	102.65	107.30
24	t	102	BCR	C33-C5-C6	-3.74	120.41	124.48
23	B	617	CLA	CHD-C1D-ND	-3.74	119.54	124.80
23	c	514	CLA	CHD-C1D-ND	-3.73	119.55	124.80
23	C	510	CLA	C1C-C2C-C3C	-3.73	103.05	106.98
23	B	605	CLA	C3C-C4C-NC	3.73	115.21	110.43
23	c	510	CLA	C4A-NA-C1A	-3.73	104.98	106.68
24	T	103	BCR	C21-C20-C19	-3.73	112.40	123.20
23	b	624	CLA	C1D-CHD-C4C	-3.73	118.10	126.02
27	C	521	LMT	C1'-O5'-C5'	3.72	120.99	113.72
23	c	515	CLA	C2C-C1C-NC	3.72	113.89	109.98
41	V	206	HEC	CHA-C1A-NA	3.72	128.50	124.45
23	b	612	CLA	O2D-CGD-O1D	-3.72	116.61	123.85
24	T	103	BCR	C15-C16-C17	-3.72	115.91	123.52
23	b	618	CLA	C2B-C1B-NB	3.72	114.18	110.33
23	c	505	CLA	O2D-CGD-O1D	-3.71	116.63	123.85
24	c	518	BCR	C15-C14-C13	-3.71	122.08	127.28
23	B	610	CLA	C3B-C4B-NB	3.71	113.84	110.53
23	c	505	CLA	C3C-C4C-NC	3.70	115.18	110.43
23	b	610	CLA	O2D-CGD-O1D	-3.70	116.64	123.85
23	a	409	CLA	C1D-CHD-C4C	-3.70	118.15	126.02
23	b	613	CLA	CAC-C3C-C4C	3.70	129.61	124.79
23	A	407	CLA	CAC-C3C-C4C	3.70	129.60	124.79
23	a	409	CLA	CAA-C2A-C3A	-3.70	103.01	113.00
39	F	102	HEM	CAD-CBD-CGD	3.69	123.47	113.67
23	a	412	CLA	C4A-NA-C1A	-3.69	105.00	106.68
30	A	416[B]	PL9	C37-C38-C39	-3.69	119.18	127.62
23	A	407	CLA	C1C-C2C-C3C	-3.69	103.10	106.98
23	b	613	CLA	C2B-C1B-NB	3.68	114.14	110.33
23	C	502	CLA	C3C-C4C-NC	3.68	115.15	110.43
23	B	614	CLA	C3B-C4B-NB	3.68	113.81	110.53
23	c	507	CLA	C1-C2-C3	-3.68	120.17	126.20
23	b	619	CLA	CAC-C3C-C4C	3.68	129.58	124.79
23	c	510	CLA	C1D-CHD-C4C	-3.68	118.20	126.02
23	D	407	CLA	C4-C3-C5	3.67	121.61	115.23
23	b	624	CLA	O2D-CGD-CBD	3.67	117.65	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	619	CLA	C1D-CHD-C4C	-3.67	118.21	126.02
23	b	610	CLA	C1C-C2C-C3C	-3.67	103.12	106.98
23	b	618	CLA	C1D-CHD-C4C	-3.67	118.22	126.02
24	d	406	BCR	C38-C26-C25	-3.67	120.48	124.48
23	B	606	CLA	C1C-C2C-C3C	-3.67	103.12	106.98
23	a	410	CLA	C3C-C4C-NC	3.66	115.12	110.43
39	e	101	HEM	CHD-C4C-NC	3.66	128.44	124.45
23	C	510	CLA	C3C-C4C-NC	3.66	115.12	110.43
23	a	412	CLA	C1-C2-C3	-3.65	120.21	126.20
23	b	617	CLA	C1-C2-C3	-3.65	120.22	126.20
23	b	617	CLA	C1D-CHD-C4C	-3.65	118.27	126.02
23	c	505	CLA	C1C-C2C-C3C	-3.65	103.14	106.98
23	a	412	CLA	CHD-C1D-ND	-3.64	119.67	124.80
23	B	615	CLA	C3C-C4C-NC	3.64	115.10	110.43
30	A	416[A]	PL9	C7-C3-C4	3.64	119.91	116.91
23	b	612	CLA	C3C-C4C-NC	3.64	115.09	110.43
23	b	621	CLA	C4C-C3C-C2C	-3.64	101.60	106.89
23	C	506	CLA	CHD-C1D-ND	-3.63	119.69	124.80
23	C	502	CLA	C1C-C2C-C3C	-3.63	103.16	106.98
23	c	505	CLA	C1D-CHD-C4C	-3.63	118.30	126.02
23	B	615	CLA	C3B-C4B-NB	3.63	113.77	110.53
24	K	103	BCR	C7-C8-C9	-3.63	120.86	126.23
23	C	511	CLA	C4-C3-C5	3.63	121.53	115.23
24	c	527	BCR	C16-C17-C18	-3.63	122.19	127.28
30	a	416[B]	PL9	C32-C33-C34	-3.63	119.32	127.62
23	B	603	CLA	C1C-C2C-C3C	-3.63	103.17	106.98
23	C	513	CLA	C1C-C2C-C3C	-3.63	103.17	106.98
23	A	404	CLA	O2D-CGD-CBD	3.63	117.57	111.23
23	B	612	CLA	C3C-C4C-NC	3.63	115.08	110.43
23	b	613	CLA	C1D-CHD-C4C	-3.62	118.32	126.02
23	b	621	CLA	C4-C3-C5	3.62	121.52	115.23
23	C	506	CLA	C3D-C2D-C1D	-3.62	100.89	105.83
23	b	611	CLA	C3C-C4C-NC	3.62	115.06	110.43
23	B	604	CLA	C3C-C4C-NC	3.62	115.06	110.43
23	c	513	CLA	C3B-C4B-NB	3.61	113.75	110.53
23	C	503	CLA	CHD-C1D-ND	-3.61	119.72	124.80
23	B	614	CLA	O2D-CGD-CBD	3.61	117.54	111.23
23	C	509	CLA	C3C-C4C-NC	3.61	115.05	110.43
23	b	618	CLA	C1-C2-C3	-3.61	120.29	126.20
23	C	502	CLA	C1D-CHD-C4C	-3.60	118.36	126.02
23	b	624	CLA	C3B-C4B-NB	3.60	113.74	110.53
23	c	515	CLA	C1-C2-C3	-3.60	120.30	126.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	a	416[A]	PL9	C7-C3-C4	3.60	119.87	116.91
23	a	410	CLA	O2D-CGD-O1D	-3.60	116.85	123.85
23	C	503	CLA	CAC-C3C-C4C	3.59	129.47	124.79
23	B	613	CLA	C1C-C2C-C3C	-3.59	103.20	106.98
23	d	405	CLA	C1C-C2C-C3C	-3.59	103.20	106.98
23	c	517	CLA	C1C-C2C-C3C	-3.59	103.21	106.98
25	a	405	SQD	O8-S-C6	3.59	112.90	105.97
30	D	409[B]	PL9	C40-C39-C41	3.59	121.45	115.23
23	d	403	CLA	C1-C2-C3	-3.58	120.33	126.20
23	C	513	CLA	CHD-C1D-ND	-3.58	119.76	124.80
30	A	416[A]	PL9	C32-C33-C34	-3.57	119.44	127.62
23	b	625	CLA	C4C-C3C-C2C	-3.57	101.69	106.89
30	d	407[B]	PL9	C7-C8-C9	-3.57	120.68	126.83
24	H	101	BCR	C7-C8-C9	-3.57	120.96	126.23
23	b	616	CLA	CMB-C2B-C1B	3.56	130.84	125.42
35	c	522	LMG	O8-C28-C29	3.56	122.69	111.83
33	b	632	HTG	C1-O5-C5	3.56	118.94	112.56
23	C	504	CLA	C1C-C2C-C3C	-3.55	103.24	106.98
30	A	416[A]	PL9	C7-C3-C2	-3.55	119.20	123.39
23	B	616	CLA	CHD-C1D-ND	-3.55	119.81	124.80
27	A	413	LMT	C1'-O5'-C5'	3.55	120.65	113.72
23	C	507	CLA	CAC-C3C-C4C	3.55	129.41	124.79
23	C	511	CLA	C1C-C2C-C3C	-3.55	103.25	106.98
23	b	620	CLA	C3B-C4B-NB	3.54	113.69	110.53
23	c	516	CLA	C1-C2-C3	-3.54	120.39	126.20
41	V	206	HEC	CHD-C4C-NC	3.54	128.31	124.45
23	b	619	CLA	C3C-C4C-NC	3.54	114.97	110.43
23	B	602	CLA	CMB-C2B-C1B	3.54	130.81	125.42
25	a	405	SQD	O48-C23-C24	3.54	122.62	111.83
23	b	622	CLA	CHD-C1D-ND	-3.54	119.83	124.80
23	C	510	CLA	C1D-CHD-C4C	-3.54	118.51	126.02
23	c	511	CLA	C1C-C2C-C3C	-3.53	103.26	106.98
30	a	416[A]	PL9	C7-C8-C9	-3.53	120.74	126.83
23	B	606	CLA	C3C-C4C-NC	3.53	114.96	110.43
35	b	629	LMG	O8-C28-C29	3.53	122.60	111.83
23	C	513	CLA	C3B-C4B-NB	3.53	113.68	110.53
23	c	505	CLA	CAC-C3C-C4C	3.53	129.38	124.79
23	B	604	CLA	O2A-CGA-CBA	3.53	122.59	111.83
23	A	407	CLA	C1D-CHD-C4C	-3.53	118.52	126.02
30	a	416[A]	PL9	C15-C14-C16	3.53	121.35	115.23
23	a	410	CLA	C1C-C2C-C3C	-3.53	103.27	106.98
23	b	615	CLA	C3B-C4B-NB	3.53	113.68	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	507	CLA	C1D-CHD-C4C	-3.53	118.53	126.02
23	C	506	CLA	C4C-C3C-C2C	-3.52	101.76	106.89
23	C	509	CLA	C1C-C2C-C3C	-3.52	103.28	106.98
34	c	519	DGD	C2G-O2G-C1B	-3.52	109.37	117.80
23	C	511	CLA	C1D-CHD-C4C	-3.52	118.54	126.02
23	d	405	CLA	CBC-CAC-C3C	-3.52	102.89	112.42
23	c	513	CLA	C3C-C4C-NC	3.51	114.93	110.43
30	D	409[B]	PL9	C27-C28-C29	-3.51	119.59	127.62
35	c	522	LMG	O7-C10-C11	3.51	119.08	111.48
23	c	505	CLA	C3B-C4B-NB	3.51	113.66	110.53
23	c	510	CLA	C1-C2-C3	-3.51	120.45	126.20
23	d	404	CLA	C3C-C4C-NC	3.50	114.92	110.43
38	D	411	LHG	O8-C23-C24	3.50	122.52	111.83
23	B	609	CLA	CHD-C1D-ND	-3.50	119.87	124.80
35	z	101	LMG	O7-C10-C11	3.50	119.06	111.48
23	A	405	CLA	CAA-C2A-C3A	-3.50	103.54	113.00
23	b	621	CLA	CHD-C4C-NC	3.50	129.66	124.23
23	C	506	CLA	C2B-C1B-NB	3.50	113.95	110.33
23	A	406	CLA	CBC-CAC-C3C	-3.50	102.94	112.42
30	d	407[A]	PL9	C42-C43-C44	-3.50	119.62	127.62
23	B	609	CLA	C3B-C4B-NB	3.49	113.65	110.53
23	B	611	CLA	C1-C2-C3	-3.49	120.48	126.20
23	C	506	CLA	CMB-C2B-C1B	3.49	130.73	125.42
37	d	402[A]	PHO	C1A-C2A-C3A	-3.48	99.52	102.84
30	a	416[A]	PL9	C7-C3-C2	-3.48	119.28	123.39
23	B	605	CLA	CHD-C1D-ND	-3.48	119.90	124.80
23	C	514	CLA	C1C-C2C-C3C	-3.48	103.32	106.98
23	b	614	CLA	C4-C3-C5	3.48	121.27	115.23
23	c	506	CLA	C1-C2-C3	-3.48	120.50	126.20
23	C	506	CLA	C3B-C4B-NB	3.47	113.63	110.53
23	b	622	CLA	C4B-C3B-C2B	-3.47	102.98	107.30
24	k	101	BCR	C24-C23-C22	-3.47	121.10	126.23
23	b	614	CLA	C1-C2-C3	-3.47	120.51	126.20
37	d	402[A]	PHO	O2D-CGD-O1D	-3.47	117.09	123.85
23	d	404	CLA	C3B-C4B-NB	3.47	113.63	110.53
23	c	507	CLA	C4C-C3C-C2C	-3.47	101.84	106.89
23	b	620	CLA	C1C-C2C-C3C	-3.47	103.33	106.98
23	C	505	CLA	C3C-C4C-NC	3.47	114.87	110.43
23	D	406	CLA	C1D-CHD-C4C	-3.47	118.65	126.02
41	v	205	HEC	CHA-C1A-NA	3.47	128.23	124.45
23	A	407	CLA	C3C-C4C-NC	3.46	114.86	110.43
30	a	416[A]	PL9	C17-C18-C19	-3.46	119.71	127.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	d	408	DGD	O5D-C1E-C2E	3.46	113.52	108.27
23	B	604	CLA	CAA-C2A-C3A	-3.46	103.66	113.00
23	D	407	CLA	C1D-CHD-C4C	-3.45	118.68	126.02
24	K	103	BCR	C33-C5-C6	-3.45	120.72	124.48
24	k	102	BCR	C16-C17-C18	-3.45	122.44	127.28
37	D	403[A]	PHO	C1A-C2A-C3A	-3.45	99.55	102.84
23	C	507	CLA	C1-C2-C3	-3.45	120.54	126.20
24	D	408	BCR	C28-C27-C26	-3.45	107.91	114.06
23	B	608	CLA	CBC-CAC-C3C	-3.44	103.08	112.42
34	h	102	DGD	O2G-C1B-C2B	3.44	118.93	111.48
23	B	608	CLA	CAA-C2A-C3A	-3.44	103.70	113.00
23	A	405	CLA	C4A-NA-C1A	-3.44	105.11	106.68
23	D	406	CLA	C3C-C4C-NC	3.44	114.83	110.43
23	c	509	CLA	C4C-C3C-C2C	-3.43	101.89	106.89
23	b	621	CLA	CMC-C2C-C1C	3.43	130.39	125.03
23	B	615	CLA	O2D-CGD-O1D	-3.43	117.17	123.85
23	B	614	CLA	C1D-CHD-C4C	-3.43	118.73	126.02
30	a	416[B]	PL9	C22-C23-C24	-3.43	119.78	127.62
23	b	613	CLA	CMC-C2C-C1C	3.43	130.39	125.03
23	b	617	CLA	C3C-C4C-NC	3.43	114.82	110.43
34	B	632	DGD	O2G-C1B-C2B	3.42	118.89	111.48
30	D	409[B]	PL9	C7-C8-C9	-3.42	120.93	126.83
37	a	411	PHO	CMA-C3A-C4A	-3.42	107.24	114.61
24	b	627	BCR	C15-C14-C13	-3.42	122.48	127.28
23	B	609	CLA	C3C-C4C-NC	3.42	114.81	110.43
30	a	416[B]	PL9	C7-C3-C4	3.42	119.72	116.91
23	b	617	CLA	C1C-C2C-C3C	-3.41	103.39	106.98
23	B	608	CLA	C4-C3-C5	3.41	121.15	115.23
23	B	616	CLA	CMB-C2B-C1B	3.41	130.61	125.42
23	b	616	CLA	CAA-C2A-C3A	-3.41	103.78	113.00
23	a	410	CLA	C1D-CHD-C4C	-3.41	118.78	126.02
24	t	102	BCR	C3-C4-C5	-3.41	107.98	114.06
23	B	606	CLA	CMB-C2B-C1B	3.41	130.60	125.42
23	c	516	CLA	C3C-C4C-NC	3.41	114.79	110.43
24	D	408	BCR	C38-C26-C25	-3.40	120.77	124.48
23	B	611	CLA	O2A-CGA-CBA	3.40	122.21	111.83
37	D	403[B]	PHO	C1A-C2A-C3A	-3.40	99.60	102.84
23	b	624	CLA	C1C-C2C-C3C	-3.40	103.40	106.98
23	b	618	CLA	CMB-C2B-C1B	3.40	130.59	125.42
23	c	517	CLA	C3C-C4C-NC	3.40	114.78	110.43
30	a	416[B]	PL9	C7-C3-C2	-3.39	119.39	123.39
38	a	420	LHG	O7-C7-C8	3.39	118.82	111.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	511	CLA	CHD-C4C-NC	3.39	129.49	124.23
23	B	610	CLA	C3C-C4C-NC	3.39	114.77	110.43
23	D	407	CLA	C1C-C2C-C3C	-3.39	103.42	106.98
23	b	611	CLA	C1D-CHD-C4C	-3.39	118.82	126.02
23	b	620	CLA	C1D-CHD-C4C	-3.39	118.82	126.02
23	B	615	CLA	CHD-C4C-NC	3.38	129.48	124.23
37	a	411	PHO	O1D-CGD-CBD	-3.38	119.59	124.72
23	A	404	CLA	O2A-CGA-CBA	3.38	122.15	111.83
23	a	409	CLA	CMB-C2B-C1B	3.38	130.57	125.42
23	c	514	CLA	C3C-C4C-NC	3.38	114.76	110.43
24	c	518	BCR	C16-C17-C18	-3.38	122.54	127.28
24	K	103	BCR	C20-C21-C22	-3.38	122.54	127.28
23	a	409	CLA	CHC-C1C-C2C	-3.38	117.36	126.95
39	F	102	HEM	CHD-C1D-ND	3.37	128.05	124.42
23	c	515	CLA	CHD-C4C-NC	3.37	129.46	124.23
23	B	605	CLA	C4B-C3B-C2B	-3.37	103.11	107.30
23	b	616	CLA	C1D-CHD-C4C	-3.37	118.86	126.02
23	B	611	CLA	C4C-C3C-C2C	-3.37	101.99	106.89
23	A	405	CLA	CHD-C4C-NC	3.37	129.45	124.23
24	B	619	BCR	C28-C27-C26	-3.37	108.05	114.06
23	B	608	CLA	CMC-C2C-C1C	3.37	130.29	125.03
23	C	506	CLA	C1C-C2C-C3C	-3.36	103.45	106.98
24	D	408	BCR	C33-C5-C6	-3.36	120.82	124.48
23	C	513	CLA	C1-C2-C3	-3.35	120.70	126.20
23	A	407	CLA	CMC-C2C-C1C	3.35	130.27	125.03
23	b	619	CLA	C1C-C2C-C3C	-3.35	103.46	106.98
30	D	409[A]	PL9	C42-C43-C44	-3.35	119.96	127.62
23	d	405	CLA	C3B-C4B-NB	3.35	113.52	110.53
30	a	416[A]	PL9	C37-C38-C39	-3.35	119.97	127.62
23	D	407	CLA	CAC-C3C-C4C	3.34	129.14	124.79
23	b	625	CLA	CAC-C3C-C4C	3.34	129.14	124.79
23	C	507	CLA	CAA-C2A-C3A	-3.34	103.96	113.00
23	c	515	CLA	C3C-C4C-NC	3.34	114.71	110.43
23	C	510	CLA	C3B-C4B-NB	3.34	113.52	110.53
30	a	416[B]	PL9	C27-C28-C29	-3.34	119.97	127.62
23	C	510	CLA	O2D-CGD-O1D	-3.34	117.34	123.85
23	b	619	CLA	C3B-C4B-NB	3.34	113.51	110.53
25	f	102	SQD	C1-O5-C5	3.34	120.24	113.72
23	b	622	CLA	C1-C2-C3	-3.34	120.73	126.20
23	D	407	CLA	C3C-C4C-NC	3.34	114.71	110.43
23	B	610	CLA	CHC-C1C-C2C	-3.34	117.47	126.95
23	A	406	CLA	C3C-C4C-NC	3.33	114.70	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	407	CLA	O2D-CGD-O1D	-3.33	117.36	123.85
25	a	414	SQD	O8-S-C6	3.33	112.40	105.97
23	c	509	CLA	CHD-C1D-ND	-3.33	120.12	124.80
23	B	612	CLA	C1D-CHD-C4C	-3.33	118.94	126.02
23	B	608	CLA	C3B-C4B-NB	3.33	113.50	110.53
24	B	620	BCR	C28-C27-C26	-3.33	108.12	114.06
23	b	617	CLA	O2D-CGD-O1D	-3.32	117.38	123.85
23	c	517	CLA	CMB-C2B-C1B	3.32	130.48	125.42
24	B	619	BCR	C29-C30-C25	3.32	115.27	110.44
24	T	103	BCR	C12-C13-C14	-3.32	113.78	119.01
23	b	614	CLA	CHD-C4C-NC	3.32	129.38	124.23
23	c	506	CLA	CAC-C3C-C4C	3.32	129.11	124.79
23	b	620	CLA	CMB-C2B-C1B	3.32	130.48	125.42
23	C	507	CLA	CBC-CAC-C3C	-3.32	103.42	112.42
30	a	416[A]	PL9	C27-C28-C29	-3.32	120.03	127.62
23	A	406	CLA	C4-C3-C5	3.32	120.99	115.23
23	b	615	CLA	C1-C2-C3	-3.31	120.77	126.20
30	A	416[B]	PL9	C20-C19-C21	3.31	120.98	115.23
30	d	407[A]	PL9	C37-C38-C39	-3.31	120.05	127.62
23	a	412	CLA	C3C-C4C-NC	3.31	114.67	110.43
23	c	510	CLA	C3C-C4C-NC	3.31	114.67	110.43
34	C	518	DGD	O2G-C1B-C2B	3.31	118.64	111.48
23	B	603	CLA	O2D-CGD-O1D	-3.31	117.41	123.85
24	a	413	BCR	C33-C5-C6	-3.30	120.88	124.48
23	b	611	CLA	O2D-CGD-O1D	-3.30	117.42	123.85
24	D	408	BCR	C15-C14-C13	-3.30	122.64	127.28
23	B	605	CLA	C3D-C4D-ND	3.30	115.36	109.99
23	B	613	CLA	C4-C3-C5	3.30	120.96	115.23
23	c	506	CLA	C4C-C3C-C2C	-3.30	102.08	106.89
23	d	404	CLA	CAC-C3C-C4C	3.30	129.08	124.79
23	b	619	CLA	C1-C2-C3	-3.30	120.79	126.20
23	B	603	CLA	CAA-C2A-C3A	-3.30	104.08	113.00
23	C	514	CLA	C3C-C4C-NC	3.30	114.66	110.43
23	C	508	CLA	C1C-C2C-C3C	-3.30	103.51	106.98
30	A	416[A]	PL9	C37-C38-C39	-3.30	120.08	127.62
23	B	605	CLA	O2D-CGD-O1D	-3.30	117.43	123.85
23	C	511	CLA	C3C-C4C-NC	3.29	114.65	110.43
39	e	101	HEM	CAD-CBD-CGD	3.29	122.40	113.67
23	B	617	CLA	C4C-C3C-C2C	-3.29	102.10	106.89
23	B	605	CLA	O2A-CGA-O1A	-3.29	115.40	123.63
39	F	102	HEM	C1B-NB-C4B	3.29	109.10	105.21
23	b	613	CLA	CHD-C1D-ND	-3.29	120.17	124.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	D	409[A]	PL9	C37-C38-C39	-3.29	120.10	127.62
23	B	617	CLA	C3B-C4B-NB	3.28	113.46	110.53
23	b	613	CLA	CMB-C2B-C1B	3.28	130.42	125.42
24	C	515	BCR	C15-C14-C13	-3.28	122.67	127.28
23	B	607	CLA	O2D-CGD-O1D	-3.28	117.46	123.85
23	c	512	CLA	C4B-C3B-C2B	-3.28	103.22	107.30
23	b	621	CLA	C3B-C4B-NB	3.28	113.46	110.53
23	c	509	CLA	C1C-C2C-C3C	-3.28	103.53	106.98
30	a	416[B]	PL9	C42-C43-C44	-3.28	120.12	127.62
25	a	414	SQD	C1-C2-C3	-3.27	103.13	110.01
23	B	605	CLA	O2A-CGA-CBA	3.27	121.81	111.83
24	B	620	BCR	C38-C26-C25	-3.27	120.92	124.48
25	B	621	SQD	O7-S-C6	3.27	111.64	106.76
23	B	614	CLA	C4B-C3B-C2B	-3.27	103.24	107.30
30	D	409[B]	PL9	C22-C23-C24	-3.27	120.15	127.62
23	B	606	CLA	CMC-C2C-C1C	3.26	130.14	125.03
38	L	101	LHG	O7-C7-C8	3.26	118.54	111.48
23	b	622	CLA	CHC-C1C-C2C	-3.26	117.68	126.95
30	a	416[B]	PL9	C15-C14-C16	3.26	120.89	115.23
23	B	607	CLA	C4-C3-C5	3.26	120.88	115.23
23	b	611	CLA	C1-C2-C3	-3.26	120.86	126.20
23	b	624	CLA	C4C-C3C-C2C	-3.26	102.15	106.89
23	b	625	CLA	O2A-CGA-CBA	3.26	121.76	111.83
23	C	505	CLA	CAC-C3C-C4C	3.26	129.03	124.79
23	b	622	CLA	C4C-C3C-C2C	-3.26	102.15	106.89
38	L	101	LHG	O8-C23-C24	3.25	121.76	111.83
25	A	409	SQD	C45-O47-C7	-3.25	110.01	117.80
23	C	502	CLA	CAC-C3C-C4C	3.25	129.02	124.79
23	B	608	CLA	C3C-C4C-NC	3.25	114.60	110.43
35	C	519	LMG	O8-C28-C29	3.25	121.75	111.83
23	c	512	CLA	CHD-C1D-ND	-3.25	120.23	124.80
24	K	101	BCR	C38-C26-C25	-3.25	120.94	124.48
34	C	518	DGD	O1G-C1A-C2A	3.25	121.74	111.83
23	b	615	CLA	C4-C3-C5	3.25	120.87	115.23
33	b	607	HTG	O5-C5-C4	3.25	115.55	109.70
35	C	501	LMG	O1-C1-C2	3.25	113.20	108.27
23	C	507	CLA	C3C-C4C-NC	3.24	114.59	110.43
23	C	503	CLA	C4C-C3C-C2C	-3.24	102.17	106.89
23	D	406	CLA	CHC-C1C-C2C	-3.24	117.74	126.95
23	B	611	CLA	C3C-C4C-NC	3.24	114.58	110.43
23	C	512	CLA	C1C-C2C-C3C	-3.24	103.57	106.98
23	d	404	CLA	C1-C2-C3	-3.24	120.89	126.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	409	CLA	C3C-C4C-NC	3.24	114.58	110.43
23	c	514	CLA	C4-C3-C5	3.24	120.84	115.23
23	d	404	CLA	O2A-CGA-O1A	-3.24	115.53	123.63
23	c	516	CLA	CBC-CAC-C3C	-3.24	103.65	112.42
23	B	602	CLA	O2A-CGA-CBA	3.23	121.69	111.83
23	a	412	CLA	CBC-CAC-C3C	-3.23	103.66	112.42
30	a	416[B]	PL9	C17-C18-C19	-3.23	120.23	127.62
23	B	617	CLA	C1C-C2C-C3C	-3.23	103.58	106.98
23	d	403	CLA	CHC-C1C-C2C	-3.23	117.77	126.95
23	B	611	CLA	CAA-C2A-C3A	-3.23	104.28	113.00
33	b	608	HTG	C1'-S1-C1	3.23	107.42	100.45
33	V	207	HTG	C1'-S1-C1	3.22	107.41	100.45
23	b	612	CLA	C4B-C3B-C2B	-3.22	103.30	107.30
23	c	512	CLA	CHC-C1C-C2C	-3.22	117.79	126.95
23	B	615	CLA	C1-O2A-CGA	3.22	124.45	116.65
23	B	613	CLA	CMC-C2C-C1C	3.22	130.07	125.03
23	b	611	CLA	CAA-C2A-C3A	-3.22	104.30	113.00
23	d	405	CLA	CHD-C4C-NC	3.22	129.22	124.23
23	d	404	CLA	C1D-CHD-C4C	-3.22	119.18	126.02
30	d	407[B]	PL9	C27-C28-C29	-3.22	120.26	127.62
35	M	101	LMG	O7-C10-C11	3.22	118.44	111.48
30	d	407[A]	PL9	C27-C28-C29	-3.21	120.28	127.62
23	C	511	CLA	CAC-C3C-C4C	3.21	128.97	124.79
30	a	416[A]	PL9	C42-C43-C44	-3.21	120.28	127.62
23	b	621	CLA	CHD-C1D-ND	-3.21	120.29	124.80
39	e	101	HEM	CHA-C4D-ND	3.21	128.34	124.37
24	A	408	BCR	C33-C5-C6	-3.21	120.98	124.48
23	C	512	CLA	C1-C2-C3	-3.21	120.94	126.20
24	c	527	BCR	C11-C10-C9	-3.21	122.78	127.28
23	A	406	CLA	C1D-CHD-C4C	-3.21	119.20	126.02
23	C	509	CLA	C4B-C3B-C2B	-3.21	103.31	107.30
23	B	615	CLA	O2A-CGA-CBA	3.21	121.61	111.83
25	F	104	SQD	C1-O5-C5	3.21	119.98	113.72
24	h	101	BCR	C10-C11-C12	-3.20	113.93	123.20
23	B	613	CLA	C3B-C4B-NB	3.20	113.39	110.53
23	B	605	CLA	CAC-C3C-C4C	3.20	128.95	124.79
23	d	403	CLA	CHD-C4C-NC	3.20	129.19	124.23
23	A	407	CLA	C3B-C4B-NB	3.20	113.39	110.53
23	c	507	CLA	C4-C3-C5	3.20	120.78	115.23
23	c	510	CLA	CHC-C1C-C2C	-3.20	117.86	126.95
23	b	623	CLA	CMC-C2C-C1C	3.20	130.03	125.03
23	A	407	CLA	C4-C3-C5	3.19	120.77	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	605	CLA	CMC-C2C-C1C	3.19	130.02	125.03
23	B	612	CLA	CAC-C3C-C4C	3.19	128.94	124.79
23	B	611	CLA	CAC-C3C-C4C	3.19	128.94	124.79
23	C	508	CLA	C4C-C3C-C2C	-3.19	102.25	106.89
23	B	613	CLA	C2A-C1A-CHA	-3.19	118.34	123.87
37	d	402[B]	PHO	C1A-C2A-C3A	-3.19	99.81	102.84
38	D	411	LHG	O7-C7-C8	3.18	118.37	111.48
23	C	511	CLA	C4B-C3B-C2B	-3.18	103.34	107.30
23	B	614	CLA	C1-C2-C3	-3.18	120.98	126.20
30	A	416[B]	PL9	C32-C33-C34	-3.18	120.34	127.62
23	b	625	CLA	O2D-CGD-O1D	-3.18	117.66	123.85
33	c	525	HTG	C1-O5-C5	3.18	118.27	112.56
23	a	410	CLA	CAA-C2A-C3A	-3.18	104.41	113.00
23	d	403	CLA	C4B-C3B-C2B	-3.18	103.35	107.30
23	B	613	CLA	C2B-C1B-NB	3.18	113.62	110.33
23	a	412	CLA	CMB-C2B-C1B	3.18	130.25	125.42
23	B	612	CLA	CMB-C2B-C1B	3.17	130.25	125.42
23	b	619	CLA	C4C-C3C-C2C	-3.17	102.28	106.89
23	b	618	CLA	O2A-CGA-CBA	3.17	121.50	111.83
23	b	618	CLA	CMC-C2C-C1C	3.17	129.99	125.03
23	C	512	CLA	C3C-C4C-NC	3.17	114.49	110.43
23	b	615	CLA	CHD-C4C-NC	3.17	129.14	124.23
23	B	606	CLA	O2A-CGA-O1A	-3.17	115.71	123.63
23	A	405	CLA	CHC-C1C-C2C	-3.17	117.95	126.95
24	B	619	BCR	C15-C14-C13	-3.17	122.84	127.28
37	D	403[A]	PHO	C4-C3-C5	3.16	120.72	115.23
23	B	606	CLA	O2A-CGA-CBA	3.16	121.48	111.83
23	b	623	CLA	C3B-C4B-NB	3.16	113.35	110.53
30	D	409[B]	PL9	C10-C9-C11	3.16	120.71	115.23
25	A	409	SQD	O48-C23-C24	3.16	121.47	111.83
23	A	405	CLA	C3C-C4C-NC	3.16	114.48	110.43
23	B	613	CLA	O2D-CGD-O1D	-3.16	117.70	123.85
23	b	613	CLA	C4B-C3B-C2B	-3.16	103.38	107.30
23	C	507	CLA	CHC-C1C-C2C	-3.16	117.97	126.95
23	C	505	CLA	CBC-CAC-C3C	-3.16	103.86	112.42
24	H	101	BCR	C16-C17-C18	-3.16	122.85	127.28
23	c	514	CLA	CBC-CAC-C3C	-3.16	103.87	112.42
23	B	606	CLA	C2A-C1A-CHA	-3.15	118.39	123.87
23	C	503	CLA	C3B-C4B-NB	3.15	113.34	110.53
23	d	405	CLA	O2D-CGD-O1D	-3.15	117.72	123.85
23	a	412	CLA	CHC-C1C-C2C	-3.15	118.00	126.95
23	c	506	CLA	C1C-C2C-C3C	-3.15	103.67	106.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	A	416[A]	PL9	C20-C19-C21	3.15	120.69	115.23
24	Y	101	BCR	C15-C14-C13	-3.15	122.87	127.28
39	F	102	HEM	CHD-C4C-NC	3.14	127.88	124.45
23	D	406	CLA	CMB-C2B-C1B	3.14	130.21	125.42
23	a	412	CLA	C4-C3-C5	3.14	120.68	115.23
23	a	409	CLA	O2D-CGD-CBD	3.14	116.72	111.23
23	B	616	CLA	CAC-C3C-C4C	3.14	128.87	124.79
23	C	504	CLA	CMB-C2B-C1B	3.14	130.20	125.42
23	b	625	CLA	CHD-C4C-NC	3.14	129.09	124.23
23	b	613	CLA	O2A-CGA-CBA	3.14	121.40	111.83
38	D	411	LHG	O8-C23-O10	-3.14	115.78	123.63
23	b	614	CLA	C4B-C3B-C2B	-3.14	103.40	107.30
23	c	514	CLA	CHC-C1C-C2C	-3.14	118.04	126.95
23	C	507	CLA	C4-C3-C5	3.13	120.67	115.23
24	t	102	BCR	C21-C20-C19	-3.13	114.13	123.20
37	d	402[A]	PHO	C4-C3-C5	3.13	120.66	115.23
23	c	513	CLA	O2A-CGA-CBA	3.13	121.38	111.83
23	B	608	CLA	CAC-C3C-C4C	3.13	128.86	124.79
25	F	104	SQD	C3-C4-C5	3.13	115.91	110.23
30	A	416[B]	PL9	C22-C23-C24	-3.13	120.46	127.62
23	b	619	CLA	O2A-CGA-CBA	3.13	121.37	111.83
23	c	517	CLA	CAC-C3C-C4C	3.13	128.86	124.79
23	a	409	CLA	O2A-CGA-CBA	3.12	121.36	111.83
23	b	611	CLA	C4C-C3C-C2C	-3.12	102.35	106.89
23	b	610	CLA	C3C-C4C-NC	3.12	114.43	110.43
23	C	505	CLA	C4B-C3B-C2B	-3.12	103.42	107.30
37	d	402[B]	PHO	C4-C3-C5	3.12	120.64	115.23
23	B	602	CLA	C4C-C3C-C2C	-3.12	102.35	106.89
23	B	616	CLA	C1C-C2C-C3C	-3.12	103.70	106.98
23	B	613	CLA	C1D-CHD-C4C	-3.12	119.39	126.02
37	D	403[A]	PHO	CMB-C2B-C3B	3.12	130.91	124.68
35	D	417	LMG	O7-C10-C11	3.12	118.22	111.48
23	c	512	CLA	C1-C2-C3	-3.11	121.09	126.20
23	b	620	CLA	O2D-CGD-O1D	-3.11	117.79	123.85
23	b	623	CLA	CHD-C4C-NC	3.11	129.06	124.23
24	K	101	BCR	C15-C14-C13	-3.11	122.91	127.28
23	b	612	CLA	CAC-C3C-C4C	3.11	128.84	124.79
23	b	625	CLA	C4B-C3B-C2B	-3.11	103.44	107.30
23	B	616	CLA	C4C-C3C-C2C	-3.11	102.36	106.89
24	b	627	BCR	C29-C30-C25	3.11	114.96	110.44
24	c	527	BCR	C28-C27-C26	-3.11	108.51	114.06
23	C	507	CLA	C3B-C4B-NB	3.11	113.31	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	a	416[A]	PL9	C20-C19-C21	3.11	120.62	115.23
24	k	102	BCR	C24-C23-C22	-3.11	121.64	126.23
30	D	409[A]	PL9	C7-C8-C9	-3.10	121.48	126.83
23	B	605	CLA	CHC-C1C-C2C	-3.10	118.13	126.95
23	B	616	CLA	CMC-C2C-C1C	3.10	129.88	125.03
34	D	410	DGD	O1G-C1A-C2A	3.10	121.28	111.83
23	c	510	CLA	O2A-CGA-CBA	3.10	121.28	111.83
30	A	416[A]	PL9	C22-C23-C24	-3.09	120.54	127.62
30	a	416[A]	PL9	C10-C9-C11	3.09	120.60	115.23
23	d	405	CLA	CHC-C1C-C2C	-3.09	118.17	126.95
35	c	523	LMG	C3-C4-C5	3.09	115.83	110.23
35	c	523	LMG	O6-C5-C4	3.09	115.26	109.70
34	B	632	DGD	C3G-O3G-C1D	-3.09	107.18	113.80
23	c	514	CLA	O2A-CGA-CBA	3.09	121.24	111.83
35	a	415	LMG	C8-O7-C10	-3.08	110.41	117.80
23	b	613	CLA	O2D-CGD-O1D	-3.08	117.84	123.85
23	B	608	CLA	C1-C2-C3	-3.08	121.15	126.20
23	c	515	CLA	C4C-C3C-C2C	-3.08	102.41	106.89
23	c	517	CLA	CMC-C2C-C1C	3.08	129.85	125.03
30	a	416[B]	PL9	C10-C9-C11	3.08	120.57	115.23
23	B	612	CLA	CHC-C1C-C2C	-3.08	118.20	126.95
23	B	606	CLA	CHD-C4C-NC	3.08	129.00	124.23
23	d	403	CLA	C3C-C4C-NC	3.08	114.37	110.43
23	B	607	CLA	C3B-C4B-NB	3.08	113.28	110.53
23	B	615	CLA	C4B-C3B-C2B	-3.08	103.48	107.30
23	B	614	CLA	O2A-CGA-CBA	3.08	121.21	111.83
23	b	621	CLA	C4A-NA-C1A	-3.07	105.28	106.68
23	a	412	CLA	C4B-C3B-C2B	-3.07	103.48	107.30
23	d	404	CLA	C4B-C3B-C2B	-3.07	103.48	107.30
23	C	510	CLA	CAC-C3C-C4C	3.07	128.78	124.79
30	D	409[A]	PL9	C10-C9-C11	3.07	120.56	115.23
30	A	416[B]	PL9	C27-C28-C29	-3.07	120.60	127.62
35	c	523	LMG	C8-O7-C10	-3.07	110.45	117.80
35	b	629	LMG	O8-C28-O10	-3.07	115.96	123.63
23	b	611	CLA	CAC-C3C-C4C	3.07	128.78	124.79
23	d	405	CLA	CAC-C3C-C4C	3.07	128.78	124.79
23	C	509	CLA	C4C-C3C-C2C	-3.07	102.43	106.89
23	b	620	CLA	CHC-C1C-C2C	-3.06	118.24	126.95
24	t	102	BCR	C11-C10-C9	-3.06	122.98	127.28
23	c	509	CLA	CHC-C1C-C2C	-3.06	118.24	126.95
23	A	404	CLA	C3C-C4C-NC	3.06	114.35	110.43
23	A	404	CLA	CMC-C2C-C1C	3.06	129.82	125.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	406	CLA	C1-C2-C3	-3.06	121.19	126.20
23	D	406	CLA	O2A-CGA-CBA	3.06	121.16	111.83
24	t	102	BCR	C15-C16-C17	-3.06	117.26	123.52
23	B	611	CLA	CHC-C1C-C2C	-3.06	118.26	126.95
23	b	620	CLA	C4C-C3C-C2C	-3.06	102.44	106.89
38	d	410	LHG	O7-C7-C8	3.06	118.09	111.48
23	c	514	CLA	C4B-C3B-C2B	-3.05	103.50	107.30
23	C	504	CLA	C4C-C3C-C2C	-3.05	102.45	106.89
23	C	503	CLA	C1C-C2C-C3C	-3.05	103.77	106.98
39	e	101	HEM	CBD-CAD-C3D	-3.05	104.10	112.53
23	B	613	CLA	C4C-C3C-C2C	-3.05	102.45	106.89
23	b	621	CLA	C4B-C3B-C2B	-3.05	103.51	107.30
23	b	621	CLA	C1C-C2C-C3C	-3.05	103.77	106.98
30	A	416[A]	PL9	C7-C8-C9	-3.05	121.58	126.83
30	d	407[B]	PL9	C17-C18-C19	-3.05	120.65	127.62
23	b	618	CLA	CBC-CAC-C3C	-3.05	104.16	112.42
23	b	616	CLA	CHC-C1C-C2C	-3.04	118.30	126.95
38	E	101	LHG	O8-C23-C24	3.04	121.12	111.83
30	A	416[A]	PL9	C27-C28-C29	-3.04	120.66	127.62
23	B	602	CLA	C4A-NA-C1A	-3.04	105.29	106.68
23	B	611	CLA	C4B-C3B-C2B	-3.04	103.52	107.30
23	B	604	CLA	CHD-C4C-NC	3.04	128.95	124.23
23	c	513	CLA	CHD-C4C-NC	3.04	128.95	124.23
35	b	629	LMG	O7-C10-C11	3.04	118.05	111.48
24	c	518	BCR	C38-C26-C25	-3.04	121.17	124.48
30	D	409[B]	PL9	C12-C13-C14	-3.04	120.67	127.62
24	b	628	BCR	C2-C1-C6	3.03	114.85	110.44
23	A	407	CLA	CAA-C2A-C3A	-3.03	104.80	113.00
39	e	101	HEM	C1B-NB-C4B	3.03	108.80	105.21
23	C	507	CLA	C4B-C3B-C2B	-3.03	103.53	107.30
23	A	404	CLA	CHC-C1C-C2C	-3.03	118.33	126.95
23	c	510	CLA	CBC-CAC-C3C	-3.03	104.20	112.42
30	A	416[A]	PL9	C42-C43-C44	-3.03	120.69	127.62
23	c	516	CLA	CMB-C2B-C1B	3.03	130.03	125.42
30	d	407[B]	PL9	C37-C38-C39	-3.03	120.69	127.62
23	B	607	CLA	CHC-C1C-C2C	-3.03	118.34	126.95
41	V	206	HEC	CBC-CAC-C3C	-3.03	121.38	127.43
23	d	404	CLA	CHC-C1C-C2C	-3.03	118.35	126.95
23	D	406	CLA	C4B-C3B-C2B	-3.03	103.54	107.30
23	B	616	CLA	CHD-C4C-NC	3.02	128.92	124.23
23	c	515	CLA	CAC-C3C-C4C	3.02	128.72	124.79
23	C	506	CLA	CHC-C1C-C2C	-3.02	118.36	126.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	610	CLA	CHD-C4C-NC	3.02	128.92	124.23
23	B	603	CLA	C4C-C3C-C2C	-3.02	102.49	106.89
23	b	623	CLA	O2A-CGA-CBA	3.02	121.05	111.83
34	B	632	DGD	C2G-O2G-C1B	-3.02	110.57	117.80
23	c	505	CLA	CBC-CAC-C3C	-3.02	104.23	112.42
23	a	412	CLA	CHD-C4C-NC	3.02	128.91	124.23
23	c	516	CLA	O2D-CGD-O1D	-3.02	117.98	123.85
23	b	611	CLA	C1C-C2C-C3C	-3.01	103.81	106.98
23	c	505	CLA	CHC-C1C-C2C	-3.01	118.38	126.95
33	B	623	HTG	C1-C2-C3	3.01	116.44	110.55
23	B	617	CLA	CHD-C4C-NC	3.01	128.90	124.23
23	C	504	CLA	O2D-CGD-O1D	-3.01	117.99	123.85
23	C	510	CLA	C1-O2A-CGA	3.01	123.94	116.65
24	K	101	BCR	C16-C17-C18	-3.01	123.06	127.28
23	b	622	CLA	O2A-CGA-CBA	3.01	121.01	111.83
24	B	618	BCR	C7-C8-C9	-3.01	121.78	126.23
23	c	515	CLA	CBC-CAC-C3C	-3.01	104.26	112.42
23	B	602	CLA	C4B-C3B-C2B	-3.01	103.56	107.30
23	b	622	CLA	O2D-CGD-CBD	3.01	116.49	111.23
23	c	510	CLA	O2A-CGA-O1A	-3.00	116.11	123.63
23	a	409	CLA	O2A-CGA-O1A	-3.00	116.11	123.63
24	h	101	BCR	C7-C8-C9	-3.00	121.79	126.23
23	C	513	CLA	C4C-C3C-C2C	-3.00	102.52	106.89
23	C	508	CLA	CHD-C4C-NC	3.00	128.88	124.23
23	b	620	CLA	O2A-CGA-CBA	3.00	120.99	111.83
23	B	602	CLA	O2D-CGD-O1D	-3.00	118.01	123.85
34	B	632	DGD	O1G-C1A-C2A	3.00	120.98	111.83
23	C	509	CLA	O2D-CGD-O1D	-3.00	118.01	123.85
23	d	405	CLA	C3C-C4C-NC	2.99	114.27	110.43
23	c	505	CLA	C4C-C3C-C2C	-2.99	102.53	106.89
23	B	614	CLA	CMC-C2C-C1C	2.99	129.71	125.03
23	B	608	CLA	C4B-C3B-C2B	-2.99	103.58	107.30
37	d	402[A]	PHO	CMB-C2B-C3B	2.99	130.66	124.68
23	c	508	CLA	CAC-C3C-C4C	2.99	128.68	124.79
23	D	407	CLA	C4C-C3C-C2C	-2.99	102.54	106.89
23	B	604	CLA	C4B-C3B-C2B	-2.99	103.59	107.30
23	c	515	CLA	O2A-CGA-CBA	2.99	120.94	111.83
24	k	101	BCR	C16-C17-C18	-2.99	123.09	127.28
23	b	624	CLA	CHD-C4C-NC	2.99	128.86	124.23
25	F	104	SQD	O6-C1-C2	2.99	112.81	108.27
23	C	510	CLA	CMC-C2C-C1C	2.99	129.70	125.03
23	c	508	CLA	CHD-C4C-NC	2.99	128.86	124.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	406	BCR	C24-C23-C22	-2.98	121.82	126.23
23	B	602	CLA	CHC-C1C-C2C	-2.98	118.47	126.95
23	B	612	CLA	C4C-C3C-C2C	-2.98	102.55	106.89
23	b	614	CLA	C3B-C4B-NB	2.98	113.19	110.53
23	c	513	CLA	C4B-C3B-C2B	-2.98	103.59	107.30
25	a	414	SQD	C45-O47-C7	-2.98	110.66	117.80
24	c	527	BCR	C33-C5-C6	-2.98	121.23	124.48
23	C	512	CLA	C4B-C3B-C2B	-2.98	103.60	107.30
27	T	104	LMT	C1'-O5'-C5'	2.98	119.53	113.72
23	b	619	CLA	C4B-C3B-C2B	-2.98	103.60	107.30
23	c	507	CLA	CHD-C4C-NC	2.97	128.84	124.23
23	B	615	CLA	C4-C3-C5	2.97	120.39	115.23
23	a	409	CLA	C4-C3-C5	2.97	120.39	115.23
35	z	101	LMG	O8-C28-C29	2.97	120.89	111.83
23	A	404	CLA	C4B-C3B-C2B	-2.97	103.61	107.30
23	c	508	CLA	O2D-CGD-O1D	-2.97	118.07	123.85
24	B	619	BCR	C33-C5-C6	-2.97	121.25	124.48
23	C	512	CLA	CHC-C1C-C2C	-2.97	118.52	126.95
23	C	508	CLA	CMB-C2B-C1B	2.97	129.94	125.42
30	a	416[B]	PL9	C20-C19-C21	2.96	120.37	115.23
23	B	604	CLA	O2A-CGA-O1A	-2.96	116.22	123.63
23	c	507	CLA	C1C-C2C-C3C	-2.96	103.86	106.98
24	B	619	BCR	C2-C1-C6	2.96	114.74	110.44
23	b	614	CLA	C4C-C3C-C2C	-2.96	102.58	106.89
23	a	410	CLA	CHD-C4C-NC	2.96	128.82	124.23
23	C	506	CLA	C4B-C3B-C2B	-2.96	103.62	107.30
23	c	515	CLA	C3B-C4B-NB	2.96	113.17	110.53
23	b	613	CLA	CHC-C1C-C2C	-2.95	118.55	126.95
23	b	621	CLA	O2D-CGD-O1D	-2.95	118.10	123.85
23	C	508	CLA	C1-C2-C3	-2.95	121.36	126.20
23	C	509	CLA	CHC-C1C-C2C	-2.95	118.56	126.95
30	d	407[B]	PL9	C20-C19-C21	2.95	120.35	115.23
23	A	406	CLA	O2D-CGD-O1D	-2.95	118.10	123.85
23	C	511	CLA	C4C-C3C-C2C	-2.95	102.60	106.89
23	c	516	CLA	C3B-C4B-NB	2.95	113.16	110.53
23	b	621	CLA	O2A-CGA-CBA	2.95	120.82	111.83
23	C	514	CLA	CHD-C4C-NC	2.95	128.80	124.23
23	D	407	CLA	C3B-C4B-NB	2.95	113.16	110.53
23	A	405	CLA	C4B-C3B-C2B	-2.94	103.64	107.30
23	b	610	CLA	C4-C3-C5	2.94	120.34	115.23
23	C	503	CLA	O2A-CGA-CBA	2.94	120.81	111.83
35	z	101	LMG	C8-O7-C10	-2.94	110.75	117.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	616	CLA	C4C-C3C-C2C	-2.94	102.61	106.89
23	c	512	CLA	C4C-C3C-C2C	-2.94	102.61	106.89
23	b	617	CLA	O2A-CGA-CBA	2.94	120.81	111.83
23	b	624	CLA	CHC-C1C-C2C	-2.94	118.59	126.95
24	K	103	BCR	C24-C23-C22	-2.94	121.88	126.23
24	C	515	BCR	C37-C22-C23	2.94	122.58	118.09
23	c	506	CLA	CHC-C1C-C2C	-2.94	118.59	126.95
23	C	513	CLA	C4B-C3B-C2B	-2.94	103.65	107.30
23	a	410	CLA	O2A-CGA-CBA	2.94	120.79	111.83
23	c	517	CLA	C1-C2-C3	-2.94	121.39	126.20
23	d	403	CLA	CAA-C2A-C3A	-2.94	105.06	113.00
30	A	416[B]	PL9	C12-C13-C14	-2.94	120.90	127.62
23	B	609	CLA	C1-C2-C3	-2.94	121.39	126.20
23	A	407	CLA	C1-C2-C3	-2.93	121.39	126.20
33	B	622	HTG	C1-O5-C5	2.93	117.82	112.56
23	B	617	CLA	CHC-C1C-C2C	-2.93	118.62	126.95
23	C	513	CLA	CHC-C1C-C2C	-2.93	118.62	126.95
23	b	618	CLA	C4B-C3B-C2B	-2.93	103.66	107.30
23	c	509	CLA	C3D-C2D-C1D	-2.93	101.83	105.83
23	D	406	CLA	O2D-CGD-O1D	-2.93	118.15	123.85
23	b	615	CLA	C4C-C3C-C2C	-2.93	102.63	106.89
23	C	512	CLA	CHD-C4C-NC	2.93	128.77	124.23
24	t	102	BCR	C15-C14-C13	2.92	131.38	127.28
23	c	508	CLA	C4-C3-C5	2.92	120.30	115.23
23	a	410	CLA	C4C-C3C-C2C	-2.92	102.64	106.89
23	B	602	CLA	CHD-C4C-NC	2.92	128.76	124.23
24	T	103	BCR	C35-C13-C12	2.92	122.55	118.09
23	C	512	CLA	C4C-C3C-C2C	-2.92	102.64	106.89
23	B	611	CLA	CHD-C4C-NC	2.92	128.76	124.23
30	D	409[A]	PL9	C22-C23-C24	-2.92	120.94	127.62
23	c	513	CLA	CMC-C2C-C1C	2.92	129.59	125.03
23	C	505	CLA	CHC-C1C-C2C	-2.92	118.66	126.95
23	A	406	CLA	CAA-C2A-C3A	-2.92	105.11	113.00
23	c	510	CLA	CHD-C4C-NC	2.92	128.75	124.23
24	c	527	BCR	C20-C21-C22	-2.91	123.19	127.28
30	D	409[A]	PL9	C27-C28-C29	-2.91	120.95	127.62
23	b	625	CLA	C1-C2-C3	-2.91	121.42	126.20
23	a	412	CLA	CAA-C2A-C3A	-2.91	105.13	113.00
23	B	616	CLA	O2D-CGD-O1D	-2.91	118.18	123.85
23	c	515	CLA	C4-C3-C5	2.91	120.28	115.23
23	B	612	CLA	C4B-C3B-C2B	-2.91	103.68	107.30
27	M	104	LMT	O1B-C1B-C2B	2.91	115.25	108.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	513	CLA	O2A-CGA-CBA	2.91	120.69	111.83
23	b	624	CLA	CBC-CAC-C3C	-2.90	104.55	112.42
24	H	101	BCR	C10-C11-C12	-2.90	114.79	123.20
23	C	513	CLA	O2D-CGD-O1D	-2.90	118.20	123.85
25	L	102	SQD	O48-C23-C24	2.90	120.68	111.83
23	A	406	CLA	CHD-C4C-NC	2.90	128.73	124.23
23	b	613	CLA	C4C-C3C-C2C	-2.90	102.67	106.89
23	b	623	CLA	CBC-CAC-C3C	-2.90	104.56	112.42
23	B	615	CLA	CHC-C1C-C2C	-2.90	118.71	126.95
24	K	103	BCR	C10-C11-C12	-2.90	114.81	123.20
23	A	404	CLA	CAA-C2A-C1A	-2.90	102.48	111.97
23	a	410	CLA	O2A-CGA-O1A	-2.90	116.39	123.63
23	C	514	CLA	O2D-CGD-O1D	-2.90	118.21	123.85
23	D	407	CLA	O2D-CGD-O1D	-2.90	118.21	123.85
23	C	512	CLA	O2A-CGA-CBA	2.89	120.66	111.83
23	c	515	CLA	C1C-C2C-C3C	-2.89	103.94	106.98
30	a	416[B]	PL9	C37-C38-C39	-2.89	121.01	127.62
23	C	513	CLA	CHD-C4C-NC	2.89	128.71	124.23
24	Y	101	BCR	C10-C11-C12	-2.89	114.83	123.20
23	C	511	CLA	CHC-C1C-C2C	-2.89	118.74	126.95
23	d	405	CLA	C4B-C3B-C2B	-2.89	103.71	107.30
23	b	617	CLA	C4C-C3C-C2C	-2.89	102.69	106.89
24	c	518	BCR	C33-C5-C6	-2.89	121.33	124.48
33	C	523	HTG	O5-C5-C4	2.89	114.90	109.70
23	c	505	CLA	C4B-C3B-C2B	-2.89	103.71	107.30
23	C	502	CLA	CBC-CAC-C3C	-2.89	104.60	112.42
23	c	516	CLA	CHD-C4C-NC	2.89	128.71	124.23
23	C	510	CLA	C4C-C3C-C2C	-2.88	102.69	106.89
23	b	612	CLA	CBC-CAC-C3C	-2.88	104.60	112.42
23	b	615	CLA	C4B-C3B-C2B	-2.88	103.72	107.30
23	B	613	CLA	CAC-C3C-C4C	2.88	128.54	124.79
23	B	611	CLA	C3B-C4B-NB	2.88	113.10	110.53
23	C	509	CLA	CHD-C4C-NC	2.88	128.70	124.23
23	B	607	CLA	C4C-C3C-C2C	-2.88	102.69	106.89
23	c	517	CLA	C4C-C3C-C2C	-2.88	102.69	106.89
37	D	402	PHO	O1D-CGD-CBD	-2.88	120.35	124.72
37	D	402	PHO	CMA-C3A-C4A	-2.88	108.40	114.61
23	c	516	CLA	C4-C3-C5	2.88	120.23	115.23
23	c	511	CLA	C4C-C3C-C2C	-2.88	102.70	106.89
23	C	502	CLA	CHD-C4C-NC	2.88	128.70	124.23
23	a	410	CLA	CMC-C2C-C1C	2.88	129.53	125.03
23	C	514	CLA	CBC-CAC-C3C	-2.88	104.61	112.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	603	CLA	CHD-C4C-NC	2.88	128.70	124.23
23	B	611	CLA	C1C-C2C-C3C	-2.88	103.95	106.98
23	B	609	CLA	CHC-C1C-C2C	-2.88	118.77	126.95
23	c	517	CLA	O2A-CGA-CBA	2.88	120.61	111.83
23	C	504	CLA	CHD-C4C-NC	2.88	128.69	124.23
24	c	518	BCR	C37-C22-C23	2.88	122.48	118.09
33	b	601	HTG	C1'-S1-C1	2.88	106.66	100.45
23	B	615	CLA	C4C-C3C-C2C	-2.87	102.71	106.89
23	B	604	CLA	C4C-C3C-C2C	-2.87	102.71	106.89
23	b	610	CLA	C3B-C4B-NB	2.87	113.09	110.53
24	b	627	BCR	C38-C26-C25	-2.87	121.35	124.48
23	d	404	CLA	O2D-CGD-O1D	-2.87	118.26	123.85
23	b	610	CLA	C4B-C3B-C2B	-2.87	103.74	107.30
23	A	405	CLA	C1-C2-C3	-2.87	121.50	126.20
24	b	626	BCR	C16-C17-C18	-2.87	123.26	127.28
23	a	412	CLA	O2D-CGD-O1D	-2.86	118.27	123.85
23	B	614	CLA	CHC-C1C-C2C	-2.86	118.81	126.95
23	b	620	CLA	C4B-C3B-C2B	-2.86	103.74	107.30
30	d	407[A]	PL9	C40-C39-C41	2.86	120.19	115.23
41	v	205	HEC	CBC-CAC-C3C	-2.86	121.72	127.43
24	c	518	BCR	C11-C10-C9	-2.86	123.27	127.28
23	B	610	CLA	O2D-CGD-O1D	-2.86	118.29	123.85
24	k	101	BCR	C11-C10-C9	-2.86	123.27	127.28
23	b	623	CLA	C2A-C1A-CHA	-2.86	118.91	123.87
23	b	625	CLA	CHC-C1C-C2C	-2.86	118.83	126.95
23	B	613	CLA	CMB-C2B-C1B	2.85	129.76	125.42
23	b	615	CLA	CHC-C1C-C2C	-2.85	118.84	126.95
23	B	604	CLA	C3B-C4B-NB	2.85	113.08	110.53
25	f	102	SQD	O5-C5-C4	2.85	114.84	109.70
23	c	511	CLA	O2D-CGD-O1D	-2.85	118.30	123.85
24	a	413	BCR	C20-C21-C22	-2.85	123.28	127.28
35	Z	101	LMG	C9-O8-C28	2.85	124.12	117.08
23	c	507	CLA	CMB-C2B-C1B	2.85	129.76	125.42
23	B	603	CLA	CHC-C1C-C2C	-2.85	118.86	126.95
23	C	503	CLA	C4B-C3B-C2B	-2.85	103.76	107.30
23	c	509	CLA	C4B-C3B-C2B	-2.85	103.76	107.30
23	C	503	CLA	CHD-C4C-NC	2.85	128.64	124.23
23	B	609	CLA	C4C-C3C-C2C	-2.85	102.75	106.89
23	b	614	CLA	C2A-C1A-CHA	-2.85	118.93	123.87
23	B	609	CLA	O2A-CGA-CBA	2.84	120.51	111.83
38	D	413	LHG	O8-C23-C24	2.84	120.51	111.83
23	B	603	CLA	C4B-C3B-C2B	-2.84	103.77	107.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	514	CLA	CHC-C1C-C2C	-2.84	118.89	126.95
23	c	508	CLA	CBC-CAC-C3C	-2.83	104.74	112.42
23	b	618	CLA	CHD-C4C-NC	2.83	128.62	124.23
23	B	603	CLA	C3B-C4B-NB	2.83	113.06	110.53
41	V	206	HEC	CMD-C2D-C1D	2.83	129.73	125.42
30	d	407[B]	PL9	C40-C39-C41	2.83	120.14	115.23
38	d	411	LHG	O8-C23-C24	2.83	120.47	111.83
23	B	614	CLA	O2A-CGA-O1A	-2.83	116.55	123.63
23	b	614	CLA	CMB-C2B-C1B	2.83	129.73	125.42
23	b	619	CLA	CHC-C1C-C2C	-2.83	118.91	126.95
23	C	502	CLA	C4B-C3B-C2B	-2.83	103.78	107.30
23	c	517	CLA	CHD-C4C-NC	2.82	128.61	124.23
25	F	104	SQD	O48-C23-C24	2.82	120.44	111.83
23	B	608	CLA	CHC-C1C-C2C	-2.82	118.93	126.95
34	C	516	DGD	O1G-C1A-O1A	-2.82	116.57	123.63
24	B	620	BCR	C36-C18-C19	2.82	122.40	118.09
23	c	513	CLA	CHC-C1C-C2C	-2.82	118.94	126.95
23	b	612	CLA	CHC-C1C-C2C	-2.82	118.94	126.95
23	C	514	CLA	C4C-C3C-C2C	-2.82	102.79	106.89
30	a	416[A]	PL9	C35-C34-C36	2.81	120.11	115.23
23	d	405	CLA	CAA-C2A-C3A	-2.81	105.39	113.00
38	d	409	LHG	O7-C7-O9	-2.81	117.13	123.70
24	k	102	BCR	C38-C26-C25	-2.81	121.42	124.48
23	A	406	CLA	CHC-C1C-C2C	-2.81	118.96	126.95
23	A	407	CLA	C2A-C1A-CHA	-2.81	118.99	123.87
24	B	618	BCR	C16-C17-C18	-2.81	123.34	127.28
23	b	623	CLA	CMB-C2B-C1B	2.81	129.69	125.42
38	b	634	LHG	O8-C23-C24	2.81	120.40	111.83
23	B	614	CLA	C4C-C3C-C2C	-2.81	102.81	106.89
23	c	508	CLA	C4B-C3B-C2B	-2.81	103.81	107.30
37	d	402[A]	PHO	CMA-C3A-C4A	-2.81	108.56	114.61
23	D	406	CLA	C4C-C3C-C2C	-2.81	102.81	106.89
23	c	516	CLA	CHC-C1C-C2C	-2.81	118.98	126.95
24	B	618	BCR	C38-C26-C25	-2.80	121.42	124.48
23	b	623	CLA	O2A-CGA-O1A	-2.80	116.61	123.63
23	C	514	CLA	C3B-C4B-NB	2.80	113.03	110.53
23	B	609	CLA	O2D-CGD-O1D	-2.80	118.39	123.85
23	c	514	CLA	CHD-C4C-NC	2.80	128.58	124.23
23	D	406	CLA	CAA-C2A-C3A	-2.80	105.42	113.00
23	A	406	CLA	C4C-C3C-C2C	-2.80	102.82	106.89
30	a	416[A]	PL9	C25-C24-C26	2.80	120.08	115.23
23	c	506	CLA	CHD-C4C-NC	2.80	128.57	124.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	d	407[B]	PL9	C12-C13-C14	-2.80	121.22	127.62
23	b	616	CLA	C3B-C4B-NB	2.79	113.03	110.53
23	b	615	CLA	O2D-CGD-O1D	-2.79	118.41	123.85
23	B	606	CLA	O2D-CGD-O1D	-2.79	118.41	123.85
34	C	517	DGD	O1G-C1A-C2A	2.79	120.35	111.83
23	C	512	CLA	CBC-CAC-C3C	-2.79	104.85	112.42
23	b	617	CLA	CHD-C4C-NC	2.79	128.56	124.23
39	e	101	HEM	C4D-ND-C1D	2.79	108.51	105.21
23	B	604	CLA	C2A-C1A-CHA	-2.79	119.03	123.87
23	B	610	CLA	C4C-C3C-C2C	-2.79	102.83	106.89
34	c	521	DGD	O1G-C1A-C2A	2.79	120.33	111.83
30	A	416[B]	PL9	C42-C43-C44	-2.79	121.24	127.62
23	C	506	CLA	C1-O2A-CGA	2.79	123.40	116.65
30	a	416[B]	PL9	C35-C34-C36	2.79	120.07	115.23
23	C	510	CLA	C4B-C3B-C2B	-2.79	103.84	107.30
23	d	405	CLA	CMB-C2B-C1B	2.78	129.66	125.42
23	C	505	CLA	CMC-C2C-C1C	2.78	129.38	125.03
23	C	503	CLA	CHC-C1C-C2C	-2.78	119.04	126.95
23	B	610	CLA	CAC-C3C-C4C	2.78	128.41	124.79
30	D	409[A]	PL9	C40-C39-C41	2.78	120.05	115.23
23	c	514	CLA	C4C-C3C-C2C	-2.78	102.85	106.89
23	A	406	CLA	C3B-C4B-NB	2.78	113.01	110.53
23	C	503	CLA	O2D-CGD-O1D	-2.78	118.44	123.85
23	b	611	CLA	C1-O2A-CGA	2.78	123.38	116.65
27	m	102	LMT	C1B-O5B-C5B	2.78	119.14	113.72
23	b	618	CLA	C3B-C4B-NB	2.78	113.01	110.53
23	b	622	CLA	CED-O2D-CGD	2.78	122.21	115.92
23	B	617	CLA	C1-O2A-CGA	2.78	123.37	116.65
24	b	628	BCR	C24-C23-C22	-2.77	122.13	126.23
24	t	102	BCR	C1-C6-C7	2.77	123.17	115.65
23	C	506	CLA	O2D-CGD-O1D	-2.77	118.45	123.85
23	C	504	CLA	O2A-CGA-CBA	2.77	120.28	111.83
23	b	612	CLA	CMC-C2C-C1C	2.77	129.36	125.03
24	C	515	BCR	C21-C20-C19	-2.77	115.17	123.20
23	b	623	CLA	C4C-C3C-C2C	-2.77	102.86	106.89
23	b	615	CLA	C1-O2A-CGA	2.77	123.36	116.65
23	b	618	CLA	C4C-C3C-C2C	-2.77	102.86	106.89
35	Z	101	LMG	C1-O6-C5	2.77	119.13	113.72
23	C	505	CLA	O2D-CGD-O1D	-2.77	118.46	123.85
23	c	517	CLA	C2A-C1A-CHA	-2.77	119.06	123.87
23	B	609	CLA	CAA-C2A-C3A	-2.76	105.53	113.00
23	c	512	CLA	C4-C3-C5	2.76	120.02	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	508	CLA	C4C-C3C-C2C	-2.76	102.87	106.89
23	B	617	CLA	O2A-CGA-CBA	2.76	120.26	111.83
24	B	619	BCR	C37-C22-C21	-2.76	118.34	122.82
37	D	402	PHO	C4-C3-C5	2.76	120.02	115.23
38	d	409	LHG	O8-C23-C24	2.76	120.25	111.83
23	B	610	CLA	CMA-C3A-C4A	-2.76	104.35	111.77
23	A	407	CLA	CHC-C1C-C2C	-2.76	119.11	126.95
24	D	408	BCR	C10-C11-C12	-2.75	115.22	123.20
23	c	516	CLA	O2A-CGA-CBA	2.75	120.23	111.83
24	K	101	BCR	C33-C5-C6	-2.75	121.48	124.48
23	C	510	CLA	O2A-CGA-CBA	2.75	120.22	111.83
23	B	603	CLA	CMB-C2B-C1B	2.75	129.60	125.42
25	L	102	SQD	C1-C2-C3	-2.75	104.23	110.01
23	a	409	CLA	C4C-C3C-C2C	-2.75	102.89	106.89
23	C	514	CLA	CAC-C3C-C4C	2.74	128.36	124.79
23	D	407	CLA	CAA-C2A-C3A	-2.74	105.59	113.00
25	f	102	SQD	O47-C7-O49	-2.74	117.30	123.70
23	c	516	CLA	O1D-CGD-CBD	-2.74	119.12	124.52
41	v	205	HEC	CBA-CAA-C2A	-2.74	104.97	112.53
23	D	407	CLA	CHC-C1C-C2C	-2.74	119.17	126.95
34	C	516	DGD	C3G-C2G-C1G	-2.74	105.41	111.78
39	F	102	HEM	CHB-C1B-NB	2.73	127.75	124.37
23	B	617	CLA	C4B-C3B-C2B	-2.73	103.90	107.30
23	C	508	CLA	O2D-CGD-O1D	-2.73	118.53	123.85
23	b	617	CLA	CHC-C1C-C2C	-2.73	119.19	126.95
30	d	407[A]	PL9	C12-C13-C14	-2.73	121.38	127.62
23	a	410	CLA	C2A-C1A-CHA	-2.73	119.13	123.87
34	D	410	DGD	O6D-C5D-C6D	2.73	112.11	106.69
23	B	609	CLA	CBC-CAC-C3C	-2.73	105.03	112.42
23	a	409	CLA	C2A-C1A-CHA	-2.73	119.13	123.87
23	A	407	CLA	C4C-C3C-C2C	-2.73	102.92	106.89
23	B	614	CLA	CHD-C4C-NC	2.73	128.46	124.23
23	b	620	CLA	O2A-CGA-O1A	-2.73	116.81	123.63
23	b	610	CLA	C2A-C1A-CHA	-2.73	119.14	123.87
34	c	519	DGD	O2G-C1B-O1B	-2.72	117.33	123.70
23	B	606	CLA	CAC-C3C-C4C	2.72	128.33	124.79
23	C	502	CLA	CMB-C2B-C1B	2.72	129.57	125.42
23	D	406	CLA	CBC-CAC-C3C	-2.72	105.04	112.42
25	A	409	SQD	O8-S-C6	2.72	111.23	105.97
37	D	403[B]	PHO	C4-C3-C5	2.72	119.95	115.23
23	C	507	CLA	C4C-C3C-C2C	-2.72	102.93	106.89
23	b	610	CLA	CHC-C1C-C2C	-2.72	119.21	126.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	609	CLA	C4B-C3B-C2B	-2.72	103.92	107.30
25	B	621	SQD	O48-C23-C24	2.72	120.13	111.83
38	D	412	LHG	O8-C23-C24	2.72	120.13	111.83
24	C	515	BCR	C11-C10-C9	-2.72	123.46	127.28
23	a	409	CLA	CAA-C2A-C1A	-2.72	103.06	111.97
23	c	511	CLA	C4-C3-C5	2.72	119.95	115.23
35	d	416	LMG	C4-C3-C2	-2.72	106.06	110.83
33	d	414	HTG	C1-O5-C5	2.72	117.44	112.56
30	D	409[B]	PL9	C37-C38-C39	-2.72	121.41	127.62
30	D	409[A]	PL9	C25-C24-C26	2.71	119.94	115.23
23	c	508	CLA	C2A-C1A-CHA	-2.71	119.16	123.87
23	B	611	CLA	O2A-CGA-O1A	-2.71	116.84	123.63
41	v	205	HEC	CHD-C4C-NC	2.71	127.41	124.45
24	T	103	BCR	C16-C17-C18	-2.71	123.47	127.28
23	b	622	CLA	CMB-C2B-C1B	2.71	129.55	125.42
30	A	416[A]	PL9	C12-C13-C14	-2.71	121.42	127.62
23	B	613	CLA	O2A-CGA-CBA	2.71	120.10	111.83
23	b	623	CLA	CHC-C1C-C2C	-2.71	119.25	126.95
23	b	610	CLA	CMC-C2C-C1C	2.71	129.27	125.03
23	b	624	CLA	C4B-C3B-C2B	-2.71	103.94	107.30
23	b	618	CLA	O2A-CGA-O1A	-2.71	116.86	123.63
23	C	514	CLA	O2A-CGA-CBA	2.70	120.08	111.83
30	A	416[A]	PL9	C53-C6-C1	2.70	120.81	115.28
23	b	612	CLA	C4C-C3C-C2C	-2.70	102.96	106.89
23	A	406	CLA	C4B-C3B-C2B	-2.70	103.94	107.30
30	a	416[A]	PL9	C40-C39-C41	2.70	119.92	115.23
30	d	407[A]	PL9	C15-C14-C16	2.70	119.92	115.23
23	c	515	CLA	CHC-C1C-C2C	-2.70	119.27	126.95
30	a	416[B]	PL9	C25-C24-C26	2.70	119.91	115.23
23	c	517	CLA	CAA-C2A-C3A	-2.70	105.71	113.00
30	a	416[B]	PL9	C40-C39-C41	2.70	119.91	115.23
23	c	505	CLA	O2A-CGA-O1A	-2.70	116.88	123.63
23	B	610	CLA	C4B-C3B-C2B	-2.69	103.95	107.30
23	b	618	CLA	CHC-C1C-C2C	-2.69	119.30	126.95
30	a	416[A]	PL9	C53-C6-C1	2.69	120.78	115.28
24	D	408	BCR	C24-C23-C22	-2.69	122.26	126.23
23	C	502	CLA	C4C-C3C-C2C	-2.69	102.98	106.89
23	C	504	CLA	C4-C3-C5	2.69	119.89	115.23
24	T	103	BCR	C1-C6-C7	2.69	122.94	115.65
23	C	508	CLA	CHC-C1C-C2C	-2.68	119.32	126.95
23	D	406	CLA	CHD-C4C-NC	2.68	128.39	124.23
23	B	610	CLA	CHD-C4C-NC	2.68	128.39	124.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	509	CLA	CMD-C2D-C3D	-2.68	121.54	127.69
23	C	505	CLA	C4C-C3C-C2C	-2.68	102.99	106.89
23	B	617	CLA	O1D-CGD-CBD	-2.68	119.23	124.52
23	B	606	CLA	C4C-C3C-C2C	-2.68	102.99	106.89
23	a	412	CLA	C4C-C3C-C2C	-2.68	102.99	106.89
23	B	609	CLA	CHB-C4A-NA	2.68	128.27	124.40
23	b	612	CLA	C2A-C1A-CHA	-2.68	119.22	123.87
23	C	512	CLA	CMC-C2C-C1C	2.68	129.22	125.03
27	M	104	LMT	O5'-C5'-C4'	2.68	115.26	109.72
23	A	407	CLA	CHD-C4C-NC	2.68	128.38	124.23
23	c	508	CLA	C3B-C4B-NB	2.68	112.92	110.53
24	A	408	BCR	C8-C7-C6	-2.67	119.85	127.00
24	k	101	BCR	C10-C11-C12	-2.67	115.45	123.20
23	c	505	CLA	CHD-C4C-NC	2.67	128.38	124.23
39	F	102	HEM	CBA-CAA-C2A	-2.67	105.14	112.53
23	b	611	CLA	CHC-C1C-C2C	-2.67	119.35	126.95
24	K	101	BCR	C11-C10-C9	-2.67	123.53	127.28
23	D	407	CLA	C2A-C1A-CHA	-2.67	119.24	123.87
30	A	416[A]	PL9	C15-C14-C16	2.67	119.86	115.23
23	b	617	CLA	C4B-C3B-C2B	-2.67	103.99	107.30
23	C	514	CLA	CMB-C2B-C1B	2.67	129.48	125.42
37	d	402[A]	PHO	C4D-CHA-CBD	2.66	109.73	108.45
23	b	617	CLA	C3B-C4B-NB	2.66	112.91	110.53
23	B	613	CLA	C4B-C3B-C2B	-2.66	103.99	107.30
23	C	503	CLA	CMB-C2B-C1B	2.66	129.47	125.42
23	a	412	CLA	CMA-C3A-C2A	-2.66	103.69	113.98
23	A	405	CLA	O2A-CGA-CBA	2.66	119.94	111.83
24	k	102	BCR	C21-C20-C19	-2.66	115.50	123.20
23	b	610	CLA	C4C-C3C-C2C	-2.66	103.02	106.89
23	c	513	CLA	C4C-C3C-C2C	-2.66	103.02	106.89
23	d	403	CLA	C2A-C1A-CHA	-2.66	119.25	123.87
37	D	403[A]	PHO	O2D-CGD-O1D	-2.66	118.68	123.85
23	C	505	CLA	CAA-C2A-C3A	-2.66	105.82	113.00
23	c	509	CLA	C1-C2-C3	-2.66	121.85	126.20
30	A	416[A]	PL9	C45-C44-C46	2.66	119.84	115.23
23	d	404	CLA	C2A-C1A-CHA	-2.66	119.26	123.87
23	C	504	CLA	CHC-C1C-C2C	-2.65	119.40	126.95
23	b	612	CLA	O2A-CGA-CBA	2.65	119.93	111.83
23	a	412	CLA	CHB-C4A-NA	2.65	128.23	124.40
23	c	505	CLA	CMC-C2C-C1C	2.65	129.18	125.03
30	A	416[A]	PL9	C17-C18-C19	-2.65	121.56	127.62
24	k	101	BCR	C34-C9-C8	2.65	122.14	118.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	513	CLA	C4-C3-C5	2.65	119.83	115.23
23	b	614	CLA	CHC-C1C-C2C	-2.65	119.42	126.95
23	b	614	CLA	CMC-C2C-C1C	2.65	129.17	125.03
23	C	511	CLA	O2A-CGA-CBA	2.65	119.91	111.83
23	C	510	CLA	C4-C3-C5	2.65	119.82	115.23
23	A	405	CLA	O2A-CGA-O1A	-2.64	117.01	123.63
23	D	406	CLA	C4-C3-C5	2.64	119.82	115.23
37	d	402[B]	PHO	O2A-CGA-CBA	2.64	119.90	111.83
24	b	628	BCR	C3-C4-C5	-2.64	109.34	114.06
23	c	507	CLA	CAC-C3C-C4C	2.64	128.23	124.79
23	b	610	CLA	CAC-C3C-C4C	2.64	128.23	124.79
34	h	102	DGD	O1G-C1A-C2A	2.64	119.89	111.83
24	c	518	BCR	C3-C4-C5	-2.64	109.35	114.06
24	H	101	BCR	C16-C15-C14	-2.64	118.12	123.52
30	a	416[A]	PL9	C30-C29-C31	2.64	119.81	115.23
23	B	612	CLA	C2A-C1A-CHA	-2.64	119.29	123.87
23	C	503	CLA	CBC-CAC-C3C	-2.64	105.27	112.42
35	a	415	LMG	O8-C28-C29	2.64	119.88	111.83
24	k	102	BCR	C10-C11-C12	-2.64	115.56	123.20
30	A	416[A]	PL9	C25-C24-C26	2.64	119.81	115.23
23	B	615	CLA	CBC-CAC-C3C	-2.64	105.27	112.42
38	d	409	LHG	O8-C23-O10	-2.64	117.03	123.63
23	B	615	CLA	C2A-C1A-CHA	-2.64	119.29	123.87
27	t	101	LMT	C1'-O5'-C5'	2.63	118.86	113.72
35	C	501	LMG	O8-C28-C29	2.63	119.86	111.83
23	D	406	CLA	C2A-C1A-CHA	-2.63	119.30	123.87
30	d	407[A]	PL9	C20-C19-C21	2.63	119.80	115.23
24	K	101	BCR	C23-C24-C25	-2.63	119.97	127.00
23	c	515	CLA	CMC-C2C-C1C	2.63	129.15	125.03
23	A	404	CLA	O2A-CGA-O1A	-2.63	117.05	123.63
23	b	611	CLA	C3B-C4B-NB	2.63	112.88	110.53
24	B	620	BCR	C10-C11-C12	-2.63	115.58	123.20
23	b	622	CLA	CHD-C4C-NC	2.63	128.31	124.23
37	a	411	PHO	CBA-CAA-C2A	-2.63	106.04	113.78
30	D	409[B]	PL9	C53-C6-C1	2.63	120.66	115.28
23	B	603	CLA	C1-C2-C3	-2.63	121.89	126.20
23	B	615	CLA	CAA-C2A-C3A	-2.63	105.90	113.00
30	D	409[B]	PL9	C32-C33-C34	-2.63	121.61	127.62
37	D	402	PHO	C1-C2-C3	-2.63	121.89	126.20
23	A	407	CLA	C4B-C3B-C2B	-2.63	104.04	107.30
23	A	405	CLA	CMA-C3A-C2A	-2.63	103.83	113.98
23	b	618	CLA	C4-C3-C5	2.62	119.78	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	603	CLA	C2A-C1A-CHA	-2.62	119.31	123.87
30	A	416[B]	PL9	C17-C18-C19	-2.62	121.62	127.62
23	B	603	CLA	CMA-C3A-C2A	-2.62	103.84	113.98
23	B	609	CLA	CAC-C3C-C4C	2.62	128.20	124.79
23	B	608	CLA	CHD-C4C-NC	2.62	128.29	124.23
37	D	402	PHO	C16-C15-C13	-2.62	107.26	115.97
23	b	616	CLA	C2A-C1A-CHA	-2.62	119.32	123.87
30	A	416[B]	PL9	C53-C6-C1	2.62	120.64	115.28
23	B	613	CLA	CHC-C1C-C2C	-2.62	119.51	126.95
23	c	509	CLA	C3B-C4B-NB	2.62	112.87	110.53
30	d	407[A]	PL9	C10-C9-C11	2.62	119.77	115.23
23	B	607	CLA	CMB-C2B-C1B	2.62	129.40	125.42
38	L	101	LHG	C5-O7-C7	-2.62	111.54	117.80
23	c	513	CLA	O2D-CGD-O1D	-2.61	118.76	123.85
24	C	515	BCR	C15-C16-C17	-2.61	118.17	123.52
23	D	407	CLA	C1-C2-C3	-2.61	121.92	126.20
30	A	416[B]	PL9	C15-C14-C16	2.61	119.76	115.23
24	c	518	BCR	C21-C20-C19	-2.61	115.64	123.20
23	c	507	CLA	CHC-C1C-C2C	-2.61	119.54	126.95
23	b	611	CLA	C4-C3-C5	2.61	119.75	115.23
30	d	407[A]	PL9	C53-C6-C1	2.61	120.62	115.28
23	c	516	CLA	CMC-C2C-C1C	2.61	129.11	125.03
30	A	416[B]	PL9	C45-C44-C46	2.61	119.75	115.23
23	a	410	CLA	C4B-C3B-C2B	-2.61	104.06	107.30
23	C	512	CLA	C4-C3-C5	2.60	119.75	115.23
23	a	410	CLA	CMB-C2B-C1B	2.60	129.38	125.42
25	L	102	SQD	C44-O6-C1	-2.60	108.22	113.80
23	c	514	CLA	CMB-C2B-C1B	2.60	129.38	125.42
23	B	617	CLA	CBC-CAC-C3C	-2.60	105.37	112.42
23	C	510	CLA	CHC-C1C-C2C	-2.60	119.56	126.95
23	C	513	CLA	C4-C3-C5	2.60	119.74	115.23
23	b	616	CLA	C4B-C3B-C2B	-2.60	104.07	107.30
25	A	409	SQD	O47-C7-O49	-2.60	117.63	123.70
23	b	617	CLA	O2A-CGA-O1A	-2.60	117.13	123.63
35	C	520	LMG	O8-C28-C29	2.60	119.75	111.83
23	B	607	CLA	CAC-C3C-C4C	2.60	128.17	124.79
23	B	614	CLA	C7-C6-C5	-2.60	106.34	113.26
24	t	102	BCR	C7-C6-C5	-2.60	115.57	121.56
23	c	510	CLA	C4C-C3C-C2C	-2.60	103.11	106.89
25	a	414	SQD	O48-C23-C24	2.59	119.75	111.83
24	T	103	BCR	C7-C6-C5	-2.59	115.58	121.56
23	B	607	CLA	C4B-C3B-C2B	-2.59	104.08	107.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	404	CLA	C4C-C3C-C2C	-2.59	103.12	106.89
23	c	506	CLA	C3B-C4B-NB	2.59	112.84	110.53
23	c	515	CLA	O2D-CGD-O1D	-2.59	118.80	123.85
23	c	516	CLA	CBA-CAA-C2A	-2.59	106.08	113.79
25	A	412	SQD	O48-C23-O10	-2.59	117.15	123.63
23	B	610	CLA	CBC-CAC-C3C	-2.59	105.40	112.42
27	C	521	LMT	O1B-C4'-C3'	2.59	113.81	107.23
24	d	406	BCR	C37-C22-C23	2.59	122.04	118.09
23	d	403	CLA	C1-O2A-CGA	2.59	122.92	116.65
24	a	413	BCR	C11-C10-C9	-2.58	123.65	127.28
24	c	518	BCR	C7-C8-C9	-2.58	122.41	126.23
23	b	625	CLA	CMB-C2B-C1B	2.58	129.35	125.42
23	b	616	CLA	CBC-CAC-C3C	-2.58	105.42	112.42
30	A	416[B]	PL9	C30-C29-C31	2.58	119.71	115.23
25	a	414	SQD	C44-O6-C1	-2.58	108.26	113.80
23	B	606	CLA	C3B-C4B-NB	2.58	112.83	110.53
23	d	404	CLA	CMC-C2C-C1C	2.58	129.06	125.03
24	K	103	BCR	C2-C1-C6	2.58	114.19	110.44
23	B	617	CLA	CMB-C2B-C1B	2.58	129.34	125.42
39	F	102	HEM	CBD-CAD-C3D	-2.58	105.41	112.53
23	c	517	CLA	O2D-CGD-O1D	-2.57	118.84	123.85
23	c	508	CLA	CHC-C1C-C2C	-2.57	119.63	126.95
23	b	621	CLA	O2A-CGA-O1A	-2.57	117.19	123.63
23	C	504	CLA	C3B-C4B-NB	2.57	112.83	110.53
30	D	409[B]	PL9	C17-C18-C19	-2.57	121.74	127.62
23	c	516	CLA	C4C-C3C-C2C	-2.57	103.15	106.89
23	c	507	CLA	O2A-CGA-CBA	2.57	119.67	111.83
23	D	407	CLA	CHB-C4A-NA	2.57	128.11	124.40
23	b	620	CLA	CMC-C2C-C1C	2.57	129.05	125.03
33	V	207	HTG	C1-C2-C3	-2.57	105.53	110.55
23	b	620	CLA	CBC-CAC-C3C	-2.57	105.46	112.42
23	a	412	CLA	CMA-C3A-C4A	-2.57	104.87	111.77
23	B	608	CLA	C1-O2A-CGA	2.57	122.86	116.65
24	k	101	BCR	C36-C18-C19	2.56	122.00	118.09
23	c	506	CLA	O2A-CGA-CBA	2.56	119.65	111.83
24	K	103	BCR	C29-C30-C25	2.56	114.16	110.44
23	a	409	CLA	O2D-CGD-O1D	-2.56	118.86	123.85
23	b	617	CLA	CMA-C3A-C4A	-2.56	104.89	111.77
23	d	405	CLA	C4C-C3C-C2C	-2.56	103.17	106.89
24	h	101	BCR	C20-C21-C22	-2.56	123.69	127.28
30	D	409[B]	PL9	C51-C49-C50	2.56	120.48	114.59
23	b	611	CLA	C2A-C1A-CHA	-2.56	119.43	123.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	505	CLA	O2A-CGA-CBA	2.56	119.63	111.83
25	F	104	SQD	O47-C7-O49	-2.56	117.73	123.70
33	V	207	HTG	O5-C5-C4	2.56	114.31	109.70
23	b	619	CLA	CMA-C3A-C4A	-2.56	104.90	111.77
24	a	413	BCR	C16-C17-C18	-2.56	123.69	127.28
23	B	614	CLA	C4-C3-C5	2.56	119.67	115.23
23	a	409	CLA	CAC-C3C-C4C	2.55	128.11	124.79
24	h	101	BCR	C11-C10-C9	-2.55	123.70	127.28
23	A	405	CLA	O2D-CGD-O1D	-2.55	118.88	123.85
23	d	403	CLA	C4-C3-C5	2.55	119.66	115.23
23	D	407	CLA	CHD-C4C-NC	2.55	128.19	124.23
23	B	603	CLA	C4-C3-C5	2.55	119.66	115.23
23	B	616	CLA	C11-C10-C8	-2.55	107.49	115.97
25	L	102	SQD	O7-S-C6	2.55	110.56	106.76
23	C	509	CLA	C2A-C1A-CHA	-2.55	119.44	123.87
35	c	522	LMG	O8-C28-O10	-2.55	117.25	123.63
23	B	610	CLA	O2A-CGA-CBA	2.55	119.60	111.83
30	A	416[A]	PL9	C30-C29-C31	2.55	119.65	115.23
30	a	416[B]	PL9	C53-C6-C1	2.55	120.49	115.28
23	C	511	CLA	C4-C3-C2	-2.55	117.09	123.63
23	b	616	CLA	CED-O2D-CGD	2.55	121.69	115.92
35	c	523	LMG	O8-C28-C29	2.54	119.59	111.83
24	B	618	BCR	C21-C20-C19	-2.54	115.83	123.20
23	b	622	CLA	O2A-CGA-O1A	-2.54	117.26	123.63
23	b	624	CLA	CAC-C3C-C4C	2.54	128.10	124.79
23	B	604	CLA	CMC-C2C-C1C	2.54	129.01	125.03
23	B	616	CLA	CHC-C1C-C2C	-2.54	119.72	126.95
37	d	402[B]	PHO	CMB-C2B-C3B	2.54	129.76	124.68
24	K	101	BCR	C20-C21-C22	-2.54	123.71	127.28
23	b	624	CLA	C11-C10-C8	-2.54	107.52	115.97
23	c	508	CLA	CAA-C2A-C3A	-2.54	106.13	113.00
23	d	405	CLA	O2A-CGA-CBA	2.54	119.58	111.83
37	a	411	PHO	OBD-CAD-C3D	-2.54	123.93	127.89
23	a	409	CLA	C4B-C3B-C2B	-2.54	104.14	107.30
33	B	622	HTG	C1-C2-C3	2.54	115.51	110.55
23	c	517	CLA	CHC-C1C-C2C	-2.54	119.73	126.95
23	C	505	CLA	C4-C3-C5	2.54	119.63	115.23
23	C	510	CLA	CHD-C4C-NC	2.54	128.17	124.23
23	b	616	CLA	CHD-C4C-NC	2.54	128.17	124.23
24	B	619	BCR	C31-C1-C6	-2.54	106.26	110.24
39	F	102	HEM	CHA-C1A-NA	2.54	128.46	123.86
30	d	407[B]	PL9	C30-C29-C31	2.54	119.63	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	v	205	HEC	C4C-NC-C1C	2.54	109.95	105.82
24	a	413	BCR	C15-C14-C13	-2.53	123.72	127.28
23	B	616	CLA	C4B-C3B-C2B	-2.53	104.15	107.30
23	c	515	CLA	C4B-C3B-C2B	-2.53	104.15	107.30
34	C	517	DGD	O3G-C1D-C2D	2.53	112.12	108.27
23	B	604	CLA	CHC-C1C-C2C	-2.53	119.75	126.95
23	C	509	CLA	C1-C2-C3	-2.53	122.05	126.20
24	K	103	BCR	C31-C1-C6	-2.53	106.27	110.24
38	d	411	LHG	C5-O7-C7	-2.53	111.74	117.80
23	A	404	CLA	C4C-C3C-C2C	-2.53	103.21	106.89
24	c	518	BCR	C23-C24-C25	-2.53	120.24	127.00
25	a	414	SQD	O47-C7-O49	-2.53	117.80	123.70
23	B	609	CLA	CHD-C4C-NC	2.53	128.15	124.23
23	D	406	CLA	O2A-CGA-O1A	-2.53	117.31	123.63
24	B	618	BCR	C34-C9-C10	-2.52	118.73	122.82
37	D	402	PHO	O2D-CGD-O1D	-2.52	118.94	123.85
37	D	403[A]	PHO	C4D-CHA-CBD	2.52	109.66	108.45
23	C	514	CLA	C4B-C3B-C2B	-2.52	104.17	107.30
23	B	614	CLA	CAA-C2A-C3A	-2.52	106.19	113.00
23	A	406	CLA	C2A-C1A-CHA	-2.52	119.50	123.87
23	B	609	CLA	CMB-C2B-C1B	2.52	129.25	125.42
30	D	409[A]	PL9	C12-C13-C14	-2.52	121.86	127.62
24	a	413	BCR	C8-C7-C6	-2.52	120.28	127.00
23	b	612	CLA	O2A-CGA-O1A	-2.52	117.34	123.63
23	C	504	CLA	C4B-C3B-C2B	-2.51	104.18	107.30
38	a	420	LHG	O8-C23-C24	2.51	119.50	111.83
35	M	101	LMG	O8-C28-O10	-2.51	117.35	123.63
25	a	405	SQD	O48-C23-O10	-2.51	117.35	123.63
38	d	409	LHG	O7-C7-C8	2.51	116.91	111.48
23	a	410	CLA	CHC-C1C-C2C	-2.51	119.82	126.95
23	B	611	CLA	O2D-CGD-O1D	-2.51	118.97	123.85
37	a	411	PHO	C1A-C2A-C3A	-2.51	100.45	102.84
23	C	512	CLA	O2D-CGD-O1D	-2.51	118.97	123.85
24	Y	101	BCR	C21-C20-C19	-2.51	115.94	123.20
23	c	511	CLA	O1D-CGD-CBD	-2.50	119.58	124.52
23	C	507	CLA	CHD-C4C-NC	2.50	128.11	124.23
41	V	206	HEC	C2A-C1A-NA	-2.50	107.91	110.32
23	b	622	CLA	C4-C3-C5	2.50	119.57	115.23
23	b	625	CLA	C2A-C1A-CHA	-2.50	119.53	123.87
23	c	509	CLA	O1D-CGD-CBD	-2.49	119.60	124.52
23	B	616	CLA	C1-C2-C3	-2.49	122.11	126.20
30	A	416[B]	PL9	C25-C24-C26	2.49	119.55	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	618	CLA	C2A-C1A-CHA	-2.49	119.54	123.87
34	C	516	DGD	O1G-C1A-C2A	2.49	119.43	111.83
23	B	617	CLA	O2D-CGD-O1D	-2.49	119.00	123.85
23	B	606	CLA	CHC-C1C-C2C	-2.49	119.87	126.95
23	B	602	CLA	C2A-C1A-CHA	-2.49	119.55	123.87
25	A	409	SQD	O48-C23-O10	-2.49	117.40	123.63
25	L	102	SQD	O47-C7-O49	-2.49	117.89	123.70
23	B	610	CLA	C1-O2A-CGA	2.49	122.67	116.65
24	D	408	BCR	C21-C20-C19	-2.49	115.99	123.20
24	A	408	BCR	C29-C30-C25	2.49	114.05	110.44
37	a	411	PHO	CBC-CAC-C3C	-2.49	109.31	112.87
24	H	101	BCR	C11-C10-C9	-2.48	123.79	127.28
23	C	506	CLA	C2A-C1A-CHA	-2.48	119.56	123.87
23	c	512	CLA	CHD-C4C-NC	2.48	128.08	124.23
34	c	519	DGD	O1G-C1A-C2A	2.48	119.40	111.83
30	D	409[A]	PL9	C20-C19-C21	2.48	119.53	115.23
24	t	102	BCR	C29-C28-C27	-2.48	105.82	111.28
39	e	101	HEM	CHB-C1B-NB	2.48	127.44	124.37
23	c	510	CLA	C4-C3-C5	2.48	119.53	115.23
27	A	413	LMT	C1B-O5B-C5B	2.48	118.56	113.72
30	D	409[A]	PL9	C17-C18-C19	-2.48	121.96	127.62
41	V	206	HEC	CHB-C1B-NB	2.48	128.35	123.86
23	C	512	CLA	CMB-C2B-C1B	2.48	129.19	125.42
23	b	625	CLA	C1C-C2C-C3C	-2.47	104.38	106.98
34	B	632	DGD	O1G-C1A-O1A	-2.47	117.44	123.63
23	B	605	CLA	C4-C3-C5	2.47	119.52	115.23
30	A	416[B]	PL9	C7-C8-C9	-2.47	122.57	126.83
23	B	613	CLA	CHD-C4C-NC	2.47	128.07	124.23
23	b	615	CLA	O2A-CGA-CBA	2.47	119.37	111.83
35	a	415	LMG	C7-O1-C1	-2.47	108.50	113.80
25	f	102	SQD	O48-C23-C24	2.47	119.37	111.83
23	b	619	CLA	CHD-C4C-NC	2.47	128.06	124.23
23	A	406	CLA	O2A-CGA-O1A	-2.47	117.45	123.63
23	C	514	CLA	CAA-C2A-C3A	-2.47	106.33	113.00
24	d	406	BCR	C29-C30-C25	2.47	114.03	110.44
24	Y	101	BCR	C37-C22-C23	2.47	121.86	118.09
23	b	612	CLA	CMA-C3A-C2A	-2.47	104.44	113.98
23	C	514	CLA	CMC-C2C-C1C	2.47	128.89	125.03
23	B	608	CLA	O1D-CGD-CBD	-2.47	119.66	124.52
30	a	416[A]	PL9	C51-C49-C50	2.46	120.26	114.59
23	A	406	CLA	CMC-C2C-C1C	2.46	128.88	125.03
23	B	616	CLA	C3B-C4B-NB	2.46	112.73	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	Z	101	LMG	C8-O7-C10	-2.46	111.91	117.80
23	b	623	CLA	C4B-C3B-C2B	-2.46	104.24	107.30
23	c	517	CLA	C4B-C3B-C2B	-2.46	104.24	107.30
23	D	407	CLA	O2A-CGA-O1A	-2.46	117.48	123.63
23	B	608	CLA	CMB-C2B-C1B	2.46	129.16	125.42
23	B	612	CLA	CMC-C2C-C1C	2.46	128.87	125.03
24	Y	101	BCR	C8-C7-C6	-2.45	120.44	127.00
23	b	625	CLA	C4-C3-C5	2.45	119.49	115.23
23	c	514	CLA	O2A-CGA-O1A	-2.45	117.49	123.63
27	F	101	LMT	O5'-C5'-C4'	2.45	114.79	109.72
23	a	412	CLA	O2A-CGA-CBA	2.45	119.31	111.83
38	D	413	LHG	O8-C23-O10	-2.45	117.50	123.63
23	B	612	CLA	O2D-CGD-O1D	-2.45	119.08	123.85
23	b	623	CLA	CAA-C2A-C3A	-2.45	106.39	113.00
41	v	205	HEC	CHA-C4D-ND	2.45	128.30	123.86
23	c	507	CLA	C3B-C4B-NB	2.44	112.71	110.53
23	c	517	CLA	C4-C3-C5	2.44	119.47	115.23
34	d	408	DGD	O1G-C1A-C2A	2.44	119.28	111.83
41	V	206	HEC	O2D-CGD-CBD	2.44	121.71	114.00
23	B	609	CLA	CMA-C3A-C4A	-2.44	105.21	111.77
23	D	407	CLA	CBC-CAC-C3C	-2.44	105.81	112.42
30	A	416[A]	PL9	C8-C7-C3	2.44	118.34	112.03
23	C	514	CLA	C4-C3-C5	2.44	119.46	115.23
37	D	403[B]	PHO	O2A-CGA-CBA	2.44	119.27	111.83
23	b	610	CLA	CAA-C2A-C3A	-2.44	106.41	113.00
23	C	513	CLA	CBC-CAC-C3C	-2.44	105.81	112.42
23	C	502	CLA	C2A-C1A-CHA	-2.44	119.64	123.87
23	b	614	CLA	O2A-CGA-O1A	-2.44	117.53	123.63
23	b	621	CLA	CMA-C3A-C4A	-2.44	105.22	111.77
23	a	409	CLA	C7-C6-C5	-2.43	106.77	113.26
24	c	527	BCR	C29-C30-C25	2.43	113.97	110.44
35	c	523	LMG	O7-C10-O9	-2.43	118.02	123.70
24	T	103	BCR	C37-C22-C23	2.43	121.80	118.09
23	c	508	CLA	O2A-CGA-CBA	2.43	119.25	111.83
23	C	503	CLA	CMC-C2C-C1C	2.43	128.83	125.03
23	C	504	CLA	CMC-C2C-C1C	2.43	128.83	125.03
23	C	502	CLA	C1-C2-C3	-2.42	122.22	126.20
23	B	606	CLA	C4B-C3B-C2B	-2.42	104.29	107.30
33	C	523	HTG	O5-C1-C2	2.42	113.66	110.32
27	A	413	LMT	C6'-C5'-C4'	-2.42	106.56	113.38
23	a	410	CLA	C3B-C4B-NB	2.42	112.69	110.53
23	c	512	CLA	O2D-CGD-O1D	-2.42	119.13	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	407	CLA	CMC-C2C-C1C	2.42	128.82	125.03
30	D	409[A]	PL9	C53-C6-C1	2.42	120.24	115.28
24	t	102	BCR	C12-C13-C14	-2.42	115.20	119.01
25	F	104	SQD	O7-S-C6	2.42	110.37	106.76
35	a	415	LMG	O6-C5-C4	2.42	114.06	109.70
23	C	509	CLA	C4-C3-C5	2.42	119.42	115.23
30	d	407[B]	PL9	C15-C14-C16	2.42	119.42	115.23
23	C	509	CLA	O2A-CGA-CBA	2.42	119.20	111.83
34	h	102	DGD	O1G-C1A-O1A	-2.42	117.59	123.63
23	c	513	CLA	CAC-C3C-C4C	2.41	127.93	124.79
23	c	517	CLA	C3B-C4B-NB	2.41	112.69	110.53
23	B	605	CLA	C4C-C3C-C2C	-2.41	103.38	106.89
23	C	508	CLA	O2A-CGA-O1A	-2.41	117.59	123.63
24	b	628	BCR	C21-C20-C19	-2.41	116.21	123.20
30	D	409[A]	PL9	C32-C33-C34	-2.41	122.10	127.62
23	b	612	CLA	CHD-C4C-NC	2.41	127.97	124.23
23	b	618	CLA	CAC-C3C-C4C	2.41	127.93	124.79
23	B	616	CLA	C2A-C1A-CHA	-2.41	119.68	123.87
23	B	608	CLA	C4C-C3C-C2C	-2.41	103.38	106.89
23	B	602	CLA	O1D-CGD-CBD	-2.41	119.77	124.52
23	B	604	CLA	C1-O2A-CGA	2.41	122.48	116.65
30	A	416[B]	PL9	C40-C39-C41	2.41	119.41	115.23
23	c	511	CLA	O2A-CGA-CBA	2.41	119.17	111.83
30	D	409[A]	PL9	C2-C1-C6	2.41	121.86	119.00
23	C	507	CLA	C2A-C1A-CHA	-2.41	119.69	123.87
23	C	508	CLA	CMC-C2C-C1C	2.40	128.79	125.03
35	D	417	LMG	O8-C28-C29	2.40	119.15	111.83
23	b	617	CLA	C11-C12-C13	-2.40	107.99	115.97
23	C	511	CLA	CHD-C4C-NC	2.40	127.95	124.23
30	D	409[B]	PL9	C25-C24-C26	2.40	119.39	115.23
23	b	611	CLA	CMB-C2B-C1B	2.40	129.07	125.42
24	B	619	BCR	C37-C22-C23	2.39	121.75	118.09
25	a	414	SQD	O9-S-C6	2.39	110.33	106.76
23	b	611	CLA	C4B-C3B-C2B	-2.39	104.33	107.30
23	b	620	CLA	C2A-C1A-CHA	-2.39	119.71	123.87
30	D	409[B]	PL9	C45-C44-C46	2.39	119.38	115.23
30	d	407[B]	PL9	C51-C49-C50	2.39	120.09	114.59
23	C	506	CLA	C4-C3-C5	2.39	119.38	115.23
24	k	102	BCR	C34-C9-C8	2.39	121.74	118.09
37	d	402[B]	PHO	O1D-CGD-CBD	-2.39	121.10	124.72
37	d	402[B]	PHO	CMA-C3A-C4A	-2.39	109.46	114.61
24	b	626	BCR	C31-C1-C6	-2.39	106.49	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	628	BCR	C8-C7-C6	-2.39	120.62	127.00
23	C	511	CLA	O2D-CGD-O1D	-2.39	119.20	123.85
23	b	617	CLA	CBC-CAC-C3C	-2.39	105.94	112.42
30	a	416[B]	PL9	C30-C29-C31	2.39	119.37	115.23
23	b	619	CLA	CAA-C2A-C3A	-2.39	106.55	113.00
23	c	515	CLA	O2A-CGA-O1A	-2.39	117.66	123.63
35	C	501	LMG	C7-O1-C1	-2.39	108.68	113.80
23	b	616	CLA	O2A-CGA-CBA	2.39	119.11	111.83
23	b	610	CLA	CMB-C2B-C1B	2.39	129.05	125.42
30	d	407[B]	PL9	C10-C9-C11	2.39	119.37	115.23
24	T	103	BCR	C2-C1-C6	2.38	113.90	110.44
23	b	619	CLA	O2A-CGA-O1A	-2.38	117.67	123.63
23	d	404	CLA	CMB-C2B-C1B	2.38	129.05	125.42
23	d	404	CLA	CMA-C3A-C2A	-2.38	104.77	113.98
23	c	512	CLA	CAC-C3C-C4C	2.38	127.89	124.79
23	d	405	CLA	CMC-C2C-C1C	2.38	128.75	125.03
23	B	614	CLA	CAC-C3C-C4C	2.38	127.88	124.79
23	c	512	CLA	O2A-CGA-CBA	2.38	119.09	111.83
23	B	610	CLA	C1-C2-C3	-2.38	122.30	126.20
23	b	624	CLA	O2D-CGD-O1D	-2.38	119.22	123.85
30	D	409[B]	PL9	C20-C19-C21	2.37	119.35	115.23
25	F	104	SQD	C44-O6-C1	-2.37	108.70	113.80
23	B	612	CLA	C4-C3-C5	2.37	119.35	115.23
23	C	502	CLA	C3B-C4B-NB	2.37	112.65	110.53
23	C	510	CLA	CMB-C2B-C1B	2.37	129.03	125.42
23	d	405	CLA	C4-C3-C5	2.37	119.34	115.23
30	A	416[A]	PL9	C10-C9-C11	2.37	119.34	115.23
23	A	405	CLA	CMA-C3A-C4A	-2.37	105.40	111.77
24	T	103	BCR	C7-C8-C9	-2.37	122.73	126.23
23	b	617	CLA	CAC-C3C-C4C	2.37	127.87	124.79
23	C	505	CLA	O2A-CGA-CBA	2.37	119.06	111.83
27	C	521	LMT	O5'-C5'-C4'	2.37	114.62	109.72
23	c	507	CLA	C4B-C3B-C2B	-2.37	104.36	107.30
38	L	101	LHG	O8-C23-O10	-2.37	117.71	123.63
23	C	511	CLA	C6-C7-C8	-2.37	108.10	115.97
23	c	506	CLA	C4B-C3B-C2B	-2.37	104.36	107.30
30	D	409[B]	PL9	C15-C14-C16	2.36	119.33	115.23
33	b	601	HTG	C1-O5-C5	2.36	116.80	112.56
23	A	406	CLA	CAC-C3C-C4C	2.36	127.86	124.79
25	A	409	SQD	C1-C2-C3	-2.36	105.04	110.01
23	C	505	CLA	CHD-C4C-NC	2.36	127.89	124.23
23	b	624	CLA	O2A-CGA-CBA	2.36	119.03	111.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	613	CLA	O2A-CGA-O1A	-2.36	117.72	123.63
24	B	618	BCR	C24-C23-C22	-2.36	122.74	126.23
23	b	614	CLA	O2A-CGA-CBA	2.36	119.03	111.83
24	h	101	BCR	C29-C30-C25	2.36	113.87	110.44
23	C	502	CLA	CAA-C2A-C3A	-2.36	106.62	113.00
23	b	613	CLA	CHD-C4C-NC	2.36	127.89	124.23
24	h	101	BCR	C24-C23-C22	-2.36	122.75	126.23
24	k	101	BCR	C2-C1-C6	2.36	113.86	110.44
23	C	508	CLA	C4-C3-C5	2.36	119.32	115.23
24	d	406	BCR	C16-C15-C14	-2.36	118.70	123.52
38	d	410	LHG	O8-C23-O10	-2.35	117.74	123.63
37	D	403[A]	PHO	O2A-CGA-CBA	2.35	119.01	111.83
23	C	504	CLA	C1-C2-C3	-2.35	122.34	126.20
23	C	511	CLA	C2A-C1A-CHA	-2.35	119.79	123.87
23	b	619	CLA	C4-C3-C5	2.35	119.31	115.23
24	Y	101	BCR	C15-C16-C17	-2.35	118.71	123.52
24	k	102	BCR	C32-C1-C6	-2.35	106.56	110.24
33	b	631	HTG	C1-O5-C5	2.35	116.78	112.56
38	d	410	LHG	O8-C23-C24	2.35	119.00	111.83
23	B	604	CLA	C4-C3-C5	2.35	119.30	115.23
23	c	512	CLA	CAA-C2A-C3A	-2.35	106.66	113.00
23	B	611	CLA	C11-C12-C13	-2.35	108.16	115.97
23	C	513	CLA	O1D-CGD-CBD	-2.35	119.89	124.52
30	D	409[A]	PL9	C15-C14-C16	2.35	119.30	115.23
23	c	512	CLA	O1D-CGD-CBD	-2.35	119.89	124.52
23	b	611	CLA	CHD-C4C-NC	2.35	127.87	124.23
23	C	510	CLA	C2A-C1A-CHA	-2.35	119.80	123.87
23	D	407	CLA	C4B-C3B-C2B	-2.34	104.39	107.30
23	d	403	CLA	C4C-C3C-C2C	-2.34	103.48	106.89
23	c	506	CLA	C2A-C1A-CHA	-2.34	119.80	123.87
24	b	626	BCR	C10-C11-C12	-2.34	116.42	123.20
34	C	517	DGD	C1E-O6E-C5E	-2.34	109.15	113.72
23	c	517	CLA	O2A-CGA-O1A	-2.34	117.77	123.63
23	b	622	CLA	CAC-C3C-C4C	2.34	127.83	124.79
23	C	511	CLA	CMB-C2B-C1B	2.34	128.98	125.42
23	c	506	CLA	O2D-CGD-O1D	-2.34	119.30	123.85
23	B	605	CLA	CHD-C4C-NC	2.34	127.85	124.23
23	c	515	CLA	CMB-C2B-C1B	2.33	128.97	125.42
23	D	407	CLA	O2A-CGA-CBA	2.33	118.95	111.83
41	V	206	HEC	C4B-NB-C1B	2.33	109.62	105.82
25	B	621	SQD	O47-C7-O49	-2.33	118.25	123.70
41	v	205	HEC	O2D-CGD-CBD	2.33	121.37	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	515	BCR	C24-C23-C22	-2.33	122.79	126.23
23	c	508	CLA	C1-C2-C3	-2.33	122.38	126.20
23	C	508	CLA	O2A-CGA-CBA	2.33	118.93	111.83
23	A	404	CLA	CMD-C2D-C3D	-2.33	122.36	127.69
30	d	407[A]	PL9	C22-C23-C24	-2.33	122.30	127.62
23	B	602	CLA	CBC-CAC-C3C	-2.32	106.12	112.42
23	a	410	CLA	C4-C3-C5	2.32	119.26	115.23
30	d	407[B]	PL9	C45-C44-C46	2.32	119.26	115.23
23	c	511	CLA	CHC-C1C-C2C	-2.32	120.35	126.95
23	a	412	CLA	C2A-C1A-CHA	-2.32	119.84	123.87
38	d	411	LHG	O7-C7-O9	-2.32	118.28	123.70
34	c	519	DGD	O3G-C3G-C2G	-2.32	105.18	110.82
37	D	403[B]	PHO	O2D-CGD-O1D	-2.32	119.33	123.85
23	A	407	CLA	O2A-CGA-O1A	-2.32	117.83	123.63
23	B	606	CLA	C4-C3-C5	2.32	119.25	115.23
30	A	416[A]	PL9	C40-C39-C41	2.32	119.25	115.23
23	a	410	CLA	CAC-C3C-C4C	2.32	127.81	124.79
24	c	527	BCR	C8-C7-C6	-2.32	120.81	127.00
23	b	617	CLA	CMB-C2B-C1B	2.32	128.95	125.42
30	D	409[A]	PL9	C45-C44-C46	2.32	119.25	115.23
30	D	409[A]	PL9	C7-C3-C2	-2.31	120.66	123.39
23	C	507	CLA	O2D-CGD-O1D	-2.31	119.34	123.85
35	C	519	LMG	C8-O7-C10	-2.31	112.26	117.80
23	c	516	CLA	C4B-C3B-C2B	-2.31	104.43	107.30
23	B	617	CLA	CAC-C3C-C4C	2.31	127.80	124.79
23	c	510	CLA	CAA-C2A-C3A	-2.31	106.76	113.00
23	c	509	CLA	O2D-CGD-O1D	-2.31	119.35	123.85
23	B	607	CLA	C2A-C1A-CHA	-2.31	119.86	123.87
35	d	416	LMG	O8-C28-O10	-2.31	117.85	123.63
34	C	516	DGD	C4E-C3E-C2E	-2.31	106.78	110.83
37	D	403[B]	PHO	CMC-C2C-C1C	2.31	128.88	124.73
24	H	101	BCR	C21-C20-C19	-2.31	116.52	123.20
23	B	612	CLA	CHD-C4C-NC	2.30	127.80	124.23
23	B	608	CLA	C2A-C1A-CHA	-2.30	119.87	123.87
34	c	520	DGD	O2G-C1B-O1B	-2.30	118.32	123.70
23	c	509	CLA	C1-O2A-CGA	2.30	122.22	116.65
23	b	617	CLA	C2A-C1A-CHA	-2.30	119.87	123.87
23	C	514	CLA	C2A-C1A-CHA	-2.30	119.88	123.87
34	C	518	DGD	O6D-C5D-C6D	2.30	111.25	106.69
23	d	403	CLA	O2A-CGA-CBA	2.30	118.84	111.83
24	b	627	BCR	C3-C4-C5	-2.30	109.96	114.06
23	c	509	CLA	C4-C3-C5	2.30	119.22	115.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	512	CLA	C2A-C1A-CHA	-2.30	119.88	123.87
23	b	619	CLA	CMC-C2C-C1C	2.30	128.62	125.03
25	L	102	SQD	O8-S-C6	2.30	110.41	105.97
23	A	407	CLA	CHB-C4A-NA	2.30	127.71	124.40
23	c	507	CLA	C2A-C1A-CHA	-2.30	119.88	123.87
24	d	406	BCR	C29-C28-C27	-2.30	106.23	111.28
35	a	415	LMG	O7-C10-O9	-2.29	118.34	123.70
23	B	611	CLA	C6-C7-C8	-2.29	108.34	115.97
37	d	402[B]	PHO	O2D-CGD-O1D	-2.29	119.39	123.85
27	m	102	LMT	O5'-C5'-C4'	2.29	114.46	109.72
23	B	603	CLA	CAC-C3C-C4C	2.29	127.77	124.79
23	B	607	CLA	CHD-C4C-NC	2.29	127.78	124.23
25	f	102	SQD	O7-S-C6	2.29	110.17	106.76
37	D	402	PHO	C1-O2A-CGA	2.29	122.19	116.65
23	C	506	CLA	CMC-C2C-C1C	2.29	128.61	125.03
30	D	409[A]	PL9	C35-C34-C36	2.29	119.20	115.23
23	b	612	CLA	C7-C6-C5	-2.28	107.17	113.26
34	c	520	DGD	C2G-O2G-C1B	-2.28	112.33	117.80
23	B	616	CLA	C4-C3-C5	2.28	119.19	115.23
23	c	514	CLA	C2A-C1A-CHA	-2.28	119.90	123.87
23	C	507	CLA	CMC-C2C-C1C	2.28	128.60	125.03
37	D	402	PHO	CMB-C2B-C3B	2.28	129.24	124.68
23	c	511	CLA	CAC-C3C-C4C	2.28	127.76	124.79
23	C	513	CLA	O2A-CGA-O1A	-2.28	117.92	123.63
35	Z	101	LMG	O6-C5-C4	2.28	113.81	109.70
23	B	609	CLA	C2A-C1A-CHA	-2.28	119.91	123.87
37	d	402[A]	PHO	O2A-CGA-CBA	2.28	118.79	111.83
24	K	103	BCR	C15-C16-C17	-2.28	118.86	123.52
23	c	515	CLA	C2A-C1A-CHA	-2.28	119.91	123.87
23	C	513	CLA	CAC-C3C-C4C	2.28	127.75	124.79
23	B	602	CLA	C1-O2A-CGA	2.28	122.17	116.65
23	C	511	CLA	CMC-C2C-C1C	2.28	128.59	125.03
30	a	416[B]	PL9	C51-C49-C50	2.28	119.83	114.59
23	A	404	CLA	C2A-C1A-CHA	-2.28	119.92	123.87
23	b	613	CLA	C6-C5-C3	-2.28	107.93	113.47
23	b	616	CLA	C4-C3-C5	2.27	119.18	115.23
24	d	406	BCR	C28-C27-C26	-2.27	110.00	114.06
23	B	607	CLA	O2A-CGA-CBA	2.27	118.77	111.83
23	c	514	CLA	CAC-C3C-C4C	2.27	127.75	124.79
23	c	517	CLA	CBC-CAC-C3C	-2.27	106.26	112.42
23	a	412	CLA	C1-O2A-CGA	2.27	122.15	116.65
23	a	410	CLA	CMA-C3A-C2A	-2.27	105.20	113.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	505	CLA	C2A-C1A-CHA	-2.27	119.93	123.87
23	a	410	CLA	CBC-CAC-C3C	-2.27	106.27	112.42
41	v	205	HEC	C2A-C1A-NA	-2.27	108.13	110.32
23	d	404	CLA	C4-C3-C5	2.27	119.17	115.23
39	F	102	HEM	O2A-CGA-CBA	2.27	121.17	114.00
23	b	616	CLA	CMA-C3A-C2A	-2.27	105.22	113.98
23	b	619	CLA	CMB-C2B-C1B	2.27	128.87	125.42
23	C	502	CLA	C1-O2A-CGA	2.27	122.14	116.65
23	b	613	CLA	O2A-CGA-O1A	-2.27	117.96	123.63
35	C	501	LMG	C8-O7-C10	-2.27	112.37	117.80
23	B	603	CLA	C1-O2A-CGA	2.26	122.13	116.65
24	k	101	BCR	C33-C5-C6	-2.26	122.01	124.48
23	C	502	CLA	CHC-C1C-C2C	-2.26	120.51	126.95
23	B	603	CLA	CMC-C2C-C1C	2.26	128.57	125.03
38	D	412	LHG	O8-C23-O10	-2.26	117.98	123.63
30	a	416[A]	PL9	C45-C44-C46	2.26	119.15	115.23
23	c	510	CLA	CAC-C3C-C4C	2.26	127.72	124.79
23	C	506	CLA	C1-C2-C3	-2.26	122.50	126.20
30	a	416[B]	PL9	C45-C44-C46	2.25	119.14	115.23
34	h	102	DGD	C2G-O2G-C1B	-2.25	112.40	117.80
23	A	404	CLA	C7-C6-C5	-2.25	107.25	113.26
23	b	615	CLA	CMC-C2C-C1C	2.25	128.56	125.03
23	c	507	CLA	O2D-CGD-O1D	-2.25	119.46	123.85
30	d	407[A]	PL9	C45-C44-C46	2.25	119.14	115.23
23	B	607	CLA	CBC-CAC-C3C	-2.25	106.31	112.42
37	a	411	PHO	C4-C3-C5	2.25	119.14	115.23
37	D	402	PHO	CBA-CAA-C2A	-2.25	107.14	113.78
23	b	617	CLA	CMC-C2C-C1C	2.25	128.55	125.03
24	c	527	BCR	C35-C13-C14	-2.25	119.17	122.82
23	c	512	CLA	O2A-CGA-O1A	-2.25	118.00	123.63
23	B	611	CLA	CMA-C3A-C4A	-2.25	105.73	111.77
27	a	419	LMT	C1B-O1B-C4'	-2.25	112.65	117.98
23	C	508	CLA	O1D-CGD-CBD	-2.25	120.09	124.52
25	a	414	SQD	O6-C44-C45	-2.25	105.36	110.82
23	C	512	CLA	O2A-CGA-O1A	-2.25	118.01	123.63
35	d	416	LMG	O7-C10-O9	-2.25	118.46	123.70
23	b	625	CLA	CBC-CAC-C3C	-2.25	106.33	112.42
23	B	609	CLA	CMC-C2C-C1C	2.24	128.54	125.03
23	A	404	CLA	CHD-C4C-NC	2.24	127.71	124.23
23	C	504	CLA	C2A-C1A-CHA	-2.24	119.97	123.87
23	C	504	CLA	CAC-C3C-C4C	2.24	127.71	124.79
23	B	603	CLA	C11-C12-C13	-2.24	108.51	115.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	D	409[B]	PL9	C7-C3-C2	-2.24	120.75	123.39
23	B	612	CLA	CMA-C3A-C4A	-2.24	105.75	111.77
23	C	505	CLA	C1-O2A-CGA	2.24	122.07	116.65
30	d	407[B]	PL9	C7-C3-C2	-2.24	120.75	123.39
23	B	606	CLA	CAA-C2A-C3A	-2.24	106.95	113.00
34	d	408	DGD	O2G-C1B-O1B	-2.24	118.47	123.70
23	c	513	CLA	CBC-CAC-C3C	-2.24	106.35	112.42
24	K	103	BCR	C28-C27-C26	-2.24	110.07	114.06
39	e	101	HEM	C4C-NC-C1C	2.24	109.47	105.82
24	A	408	BCR	C15-C16-C17	-2.23	118.95	123.52
39	F	102	HEM	C2A-C1A-NA	-2.23	107.67	110.15
23	C	503	CLA	C2A-C1A-CHA	-2.23	119.99	123.87
23	b	621	CLA	CHB-C4A-NA	2.23	127.62	124.40
23	B	603	CLA	C11-C10-C8	-2.23	108.54	115.97
23	c	510	CLA	CGD-CBD-CAD	-2.23	103.62	110.85
23	A	405	CLA	CHB-C4A-NA	2.23	127.62	124.40
23	b	623	CLA	CHB-C4A-NA	2.23	127.62	124.40
23	d	404	CLA	CBC-CAC-C3C	-2.23	106.37	112.42
24	Y	101	BCR	C28-C27-C26	-2.23	110.08	114.06
23	b	619	CLA	C2A-C1A-CHA	-2.23	120.00	123.87
23	B	613	CLA	CBC-CAC-C3C	-2.23	106.38	112.42
23	B	604	CLA	CHB-C1B-C2B	-2.23	120.96	127.43
34	C	518	DGD	O1G-C1A-O1A	-2.23	118.06	123.63
25	a	414	SQD	O48-C23-O10	-2.22	118.06	123.63
23	b	611	CLA	C7-C6-C5	-2.22	107.33	113.26
23	c	514	CLA	C4-C3-C2	-2.22	117.92	123.63
23	B	615	CLA	CED-O2D-CGD	2.22	120.95	115.92
23	b	614	CLA	OBD-CAD-C3D	-2.22	123.22	128.42
34	C	517	DGD	O1G-C1A-O1A	-2.22	118.07	123.63
30	a	416[A]	PL9	C12-C13-C14	-2.22	122.54	127.62
24	Y	101	BCR	C23-C24-C25	-2.22	121.07	127.00
23	B	610	CLA	C2A-C1A-CHA	-2.22	120.02	123.87
23	d	403	CLA	O2D-CGD-O1D	-2.22	119.53	123.85
23	C	502	CLA	O2A-CGA-CBA	2.21	118.58	111.83
23	b	624	CLA	C4-C3-C5	2.21	119.07	115.23
23	c	508	CLA	OBD-CAD-C3D	-2.21	123.25	128.42
23	c	505	CLA	CAA-C2A-C3A	-2.21	107.02	113.00
23	d	405	CLA	C2A-C1A-CHA	-2.21	120.03	123.87
37	D	402	PHO	O2A-CGA-CBA	2.21	118.57	111.83
23	b	612	CLA	C4-C3-C5	2.21	119.06	115.23
23	B	611	CLA	CHB-C4A-NA	2.21	127.59	124.40
23	b	621	CLA	C2A-C1A-CHA	-2.21	120.03	123.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	628	BCR	C38-C26-C25	-2.21	122.07	124.48
23	A	407	CLA	CMA-C3A-C4A	-2.21	105.84	111.77
41	v	205	HEC	CHD-C1D-ND	2.21	127.86	123.86
33	b	632	HTG	C1-C2-C3	2.20	114.86	110.55
23	C	513	CLA	CHB-C4A-NA	2.20	127.58	124.40
24	A	408	BCR	C20-C21-C22	-2.20	124.19	127.28
24	t	102	BCR	C2-C3-C4	-2.20	106.43	111.28
30	a	416[B]	PL9	C12-C13-C14	-2.20	122.58	127.62
27	M	105	LMT	C1B-O5B-C5B	2.20	118.02	113.72
23	a	410	CLA	C1-C2-C3	-2.20	122.59	126.20
23	B	603	CLA	O2A-CGA-CBA	2.20	118.55	111.83
23	A	405	CLA	C4-C3-C5	2.20	119.05	115.23
24	B	619	BCR	C24-C23-C22	-2.20	122.98	126.23
23	B	603	CLA	OBD-CAD-C3D	-2.20	123.28	128.42
30	A	416[B]	PL9	C35-C34-C36	2.20	119.05	115.23
30	D	409[B]	PL9	C2-C1-C6	2.20	121.61	119.00
23	d	404	CLA	CAA-C2A-C3A	-2.20	107.06	113.00
23	B	602	CLA	CHB-C4A-NA	2.20	127.57	124.40
23	A	407	CLA	CMA-C3A-C2A	-2.20	105.49	113.98
39	e	101	HEM	CHA-C1A-NA	2.20	127.84	123.86
23	B	615	CLA	CMC-C2C-C1C	2.19	128.46	125.03
23	B	605	CLA	CHA-C1A-NA	-2.19	121.42	126.39
24	b	627	BCR	C8-C7-C6	-2.19	121.14	127.00
25	A	409	SQD	C44-O6-C1	-2.19	109.10	113.80
30	d	407[B]	PL9	C47-C48-C49	-2.19	120.33	127.64
34	c	521	DGD	O2G-C1B-O1B	-2.19	118.58	123.70
23	C	505	CLA	O1D-CGD-CBD	-2.19	120.20	124.52
35	C	519	LMG	O8-C28-O10	-2.19	118.16	123.63
23	a	412	CLA	CAC-C3C-C4C	2.19	127.64	124.79
23	B	612	CLA	O2A-CGA-CBA	2.19	118.50	111.83
37	D	403[A]	PHO	C4A-C3A-C2A	-2.19	100.76	102.84
23	c	509	CLA	C2A-C1A-CHA	-2.19	120.07	123.87
23	b	610	CLA	C1-O2A-CGA	2.18	121.94	116.65
30	A	416[B]	PL9	C10-C9-C11	2.18	119.02	115.23
30	A	416[B]	PL9	C47-C48-C49	-2.18	120.36	127.64
35	Z	101	LMG	C1-C2-C3	2.18	114.60	110.01
23	c	513	CLA	O2A-CGA-O1A	-2.18	118.17	123.63
23	C	506	CLA	CHD-C4C-NC	2.18	127.61	124.23
41	V	206	HEC	CHB-C4A-NA	2.18	126.83	124.45
24	B	620	BCR	C36-C18-C17	-2.18	119.28	122.82
23	A	405	CLA	C4C-C3C-C2C	-2.18	103.72	106.89
23	b	613	CLA	O1D-CGD-CBD	-2.18	120.22	124.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	403	CLA	CMB-C2B-C1B	2.18	128.74	125.42
30	A	416[B]	PL9	C8-C7-C3	2.18	117.67	112.03
27	a	404	LMT	C6'-C5'-C4'	-2.18	107.25	113.38
23	c	509	CLA	O2A-CGA-CBA	2.18	118.48	111.83
23	b	614	CLA	CAA-C2A-C3A	-2.18	107.11	113.00
34	c	520	DGD	O1G-C1A-C2A	2.18	118.48	111.83
23	B	602	CLA	CAC-C3C-C4C	2.18	127.62	124.79
24	B	619	BCR	C21-C20-C19	-2.18	116.89	123.20
23	b	621	CLA	OBD-CAD-C3D	-2.18	123.33	128.42
23	d	405	CLA	O2A-CGA-O1A	-2.17	118.19	123.63
38	d	409	LHG	O4-P-O5	2.17	122.55	112.44
30	D	409[A]	PL9	C51-C49-C50	2.17	119.59	114.59
24	H	101	BCR	C29-C30-C25	2.17	113.59	110.44
23	b	616	CLA	CAC-C3C-C4C	2.17	127.61	124.79
23	b	621	CLA	C11-C10-C8	-2.17	108.75	115.97
23	c	516	CLA	CAA-C2A-C3A	-2.17	107.13	113.00
33	C	522	HTG	C1-O5-C5	2.17	116.45	112.56
25	A	412	SQD	O6-C44-C45	-2.17	105.54	110.82
23	A	407	CLA	O2A-CGA-CBA	2.17	118.45	111.83
23	b	621	CLA	CHC-C1C-C2C	-2.17	120.78	126.95
35	c	522	LMG	O6-C5-C4	2.17	113.61	109.70
39	e	101	HEM	C2A-C1A-NA	-2.17	107.75	110.15
23	c	510	CLA	C2A-C1A-CHA	-2.17	120.11	123.87
25	L	102	SQD	O48-C23-O10	-2.17	118.21	123.63
24	c	527	BCR	C38-C26-C25	-2.16	122.12	124.48
24	a	413	BCR	C36-C18-C19	2.16	121.39	118.09
23	A	404	CLA	CAA-CBA-CGA	-2.16	107.06	113.21
35	C	520	LMG	C3-C4-C5	2.16	114.16	110.23
35	D	417	LMG	O8-C28-O10	-2.16	118.22	123.63
23	b	611	CLA	O2A-CGA-CBA	2.16	118.43	111.83
24	b	626	BCR	C24-C23-C22	-2.16	123.03	126.23
30	A	416[A]	PL9	C35-C34-C36	2.16	118.98	115.23
27	A	413	LMT	C4B-C3B-C2B	-2.16	107.03	110.83
37	d	402[A]	PHO	C4A-C3A-C2A	-2.16	100.78	102.84
23	B	615	CLA	O2A-CGA-O1A	-2.16	118.22	123.63
23	b	624	CLA	CMC-C2C-C1C	2.16	128.41	125.03
38	D	413	LHG	C6-C5-C4	-2.16	106.75	111.78
38	E	101	LHG	O8-C23-O10	-2.16	118.23	123.63
23	A	404	CLA	C1-C2-C3	-2.16	122.66	126.20
27	F	101	LMT	C1B-O5B-C5B	2.16	117.93	113.72
27	a	404	LMT	O1'-C1'-C2'	2.15	111.55	108.27
23	c	505	CLA	CMB-C2B-C1B	2.15	128.70	125.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	619	BCR	C10-C11-C12	-2.15	116.96	123.20
23	c	505	CLA	C1-C2-C3	-2.15	122.67	126.20
24	D	408	BCR	C3-C4-C5	-2.15	110.22	114.06
23	B	602	CLA	C4-C3-C5	2.15	118.97	115.23
25	F	104	SQD	C1-C2-C3	-2.15	105.48	110.01
39	F	102	HEM	CHC-C4B-C3B	-2.15	120.78	125.07
23	c	507	CLA	CMC-C2C-C1C	2.15	128.40	125.03
23	c	513	CLA	C2A-C1A-CHA	-2.15	120.14	123.87
24	a	413	BCR	C34-C9-C8	2.15	121.37	118.09
24	T	103	BCR	C34-C9-C10	-2.15	119.34	122.82
24	C	515	BCR	C16-C17-C18	-2.15	124.27	127.28
38	E	101	LHG	C5-O7-C7	-2.15	112.66	117.80
23	c	511	CLA	O2A-CGA-O1A	-2.14	118.26	123.63
30	A	416[B]	PL9	C51-C49-C50	2.14	119.52	114.59
23	B	608	CLA	CED-O2D-CGD	2.14	120.78	115.92
35	C	501	LMG	O7-C10-O9	-2.14	118.69	123.70
27	A	413	LMT	O5B-C5B-C4B	2.14	113.56	109.70
23	C	513	CLA	CMC-C2C-C1C	2.14	128.38	125.03
23	c	514	CLA	O1D-CGD-CBD	-2.14	120.29	124.52
23	c	510	CLA	CMC-C2C-C1C	2.14	128.38	125.03
23	b	620	CLA	CHD-C4C-NC	2.14	127.55	124.23
34	c	519	DGD	O1G-C1A-O1A	-2.14	118.28	123.63
23	A	405	CLA	C2A-C1A-CHA	-2.14	120.16	123.87
24	b	626	BCR	C29-C30-C25	2.14	113.55	110.44
24	t	102	BCR	C40-C30-C25	-2.14	106.89	110.24
30	d	407[B]	PL9	C7-C3-C4	2.14	118.67	116.91
30	d	407[A]	PL9	C25-C24-C26	2.14	118.94	115.23
37	D	403[B]	PHO	CMB-C2B-C3B	2.14	128.95	124.68
23	B	614	CLA	CHB-C4A-NA	2.14	127.48	124.40
34	h	102	DGD	C3G-O3G-C1D	-2.14	109.22	113.80
38	D	413	LHG	O7-C7-O9	-2.14	118.71	123.70
23	b	622	CLA	C2A-C1A-CHA	-2.13	120.16	123.87
23	c	508	CLA	O2A-CGA-O1A	-2.13	118.29	123.63
23	d	405	CLA	C1-C2-C3	-2.13	122.70	126.20
23	C	504	CLA	O2A-CGA-O1A	-2.13	118.30	123.63
23	b	615	CLA	CBC-CAC-C3C	-2.13	106.64	112.42
23	B	607	CLA	CMC-C2C-C1C	2.13	128.36	125.03
30	d	407[B]	PL9	C22-C23-C24	-2.13	122.75	127.62
24	D	408	BCR	C38-C26-C27	2.13	118.13	113.60
33	B	623	HTG	C3-C4-C5	-2.13	106.38	110.23
23	b	624	CLA	C6-C7-C8	-2.12	108.90	115.97
23	C	505	CLA	C2A-C1A-CHA	-2.12	120.18	123.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	509	CLA	CMB-C2B-C1B	2.12	128.65	125.42
33	b	632	HTG	C3-C4-C5	-2.12	106.38	110.23
23	C	504	CLA	CAA-CBA-CGA	-2.12	107.18	113.21
23	A	406	CLA	CHB-C4A-NA	2.12	127.46	124.40
23	B	614	CLA	OBD-CAD-C3D	-2.12	123.46	128.42
23	C	511	CLA	CED-O2D-CGD	2.12	120.72	115.92
24	c	518	BCR	C34-C9-C8	2.12	121.32	118.09
23	c	506	CLA	CED-O2D-CGD	2.12	120.72	115.92
24	k	102	BCR	C40-C30-C25	-2.12	106.92	110.24
23	b	620	CLA	CHB-C4A-NA	2.12	127.45	124.40
23	B	612	CLA	O1D-CGD-CBD	-2.12	120.34	124.52
24	K	103	BCR	C15-C14-C13	-2.12	124.31	127.28
24	k	102	BCR	C8-C7-C6	-2.12	121.35	127.00
23	b	618	CLA	C4-C3-C2	-2.11	118.20	123.63
23	b	611	CLA	CMD-C2D-C3D	-2.11	122.84	127.69
23	B	611	CLA	CHB-C1B-C2B	-2.11	121.29	127.43
33	c	524	HTG	C1-O5-C5	2.11	116.35	112.56
24	a	413	BCR	C38-C26-C25	-2.11	122.18	124.48
23	B	617	CLA	OBD-CAD-C3D	-2.11	123.48	128.42
24	B	618	BCR	C15-C14-C13	-2.11	124.32	127.28
23	b	615	CLA	O2A-CGA-O1A	-2.11	118.35	123.63
23	A	406	CLA	CAA-CBA-CGA	2.11	119.20	113.21
23	b	619	CLA	O2D-CGD-O1D	-2.11	119.74	123.85
23	C	511	CLA	O1D-CGD-CBD	-2.11	120.36	124.52
23	b	610	CLA	CHB-C4A-NA	2.11	127.44	124.40
37	D	403[A]	PHO	CMA-C3A-C4A	-2.11	110.07	114.61
25	B	621	SQD	O48-C23-O10	-2.11	118.36	123.63
24	b	627	BCR	C37-C22-C23	2.11	121.31	118.09
23	c	508	CLA	C11-C10-C8	-2.11	108.96	115.97
23	b	622	CLA	C11-C10-C8	-2.11	108.96	115.97
23	c	505	CLA	C4-C3-C5	2.11	118.89	115.23
34	d	408	DGD	C1E-O6E-C5E	2.11	117.83	113.72
33	b	631	HTG	C1-C2-C3	2.11	114.67	110.55
23	b	621	CLA	CMB-C2B-C1B	2.11	128.62	125.42
30	a	416[B]	PL9	C10-C9-C8	-2.10	118.22	123.63
23	c	506	CLA	CMC-C2C-C1C	2.10	128.32	125.03
34	C	516	DGD	O6D-C1D-O3G	-2.10	105.08	110.04
27	A	413	LMT	C1B-O1B-C4'	-2.10	113.00	117.98
23	C	508	CLA	CAC-C3C-C4C	2.10	127.52	124.79
30	a	416[A]	PL9	C8-C7-C3	2.10	117.46	112.03
23	C	508	CLA	CHB-C1B-C2B	-2.10	121.33	127.43
23	a	409	CLA	CHB-C4A-NA	2.10	127.43	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	d	407[B]	PL9	C35-C34-C36	2.10	118.87	115.23
35	C	520	LMG	C8-O7-C10	-2.10	112.77	117.80
23	B	615	CLA	CAC-C3C-C4C	2.10	127.52	124.79
23	C	508	CLA	CHB-C4A-NA	2.10	127.43	124.40
23	b	624	CLA	CHB-C4A-NA	2.10	127.42	124.40
23	c	505	CLA	OBD-CAD-C3D	-2.10	123.52	128.42
23	b	622	CLA	CBC-CAC-C3C	-2.09	106.74	112.42
23	d	404	CLA	CHA-C1A-NA	-2.09	121.65	126.39
23	d	405	CLA	CHC-C1C-NC	2.09	127.47	124.31
23	C	507	CLA	C1-O2A-CGA	2.09	121.72	116.65
23	A	406	CLA	O2A-CGA-CBA	2.09	118.22	111.83
23	b	617	CLA	CHB-C1B-C2B	-2.09	121.35	127.43
23	b	619	CLA	CBC-CAC-C3C	-2.09	106.75	112.42
37	a	411	PHO	C1-O2A-CGA	2.09	121.71	116.65
35	d	416	LMG	O4-C4-C3	-2.09	105.45	110.38
23	c	512	CLA	CGD-CBD-CAD	-2.09	104.08	110.85
23	c	510	CLA	CED-O2D-CGD	2.09	120.66	115.92
35	D	417	LMG	O6-C5-C4	2.09	113.46	109.70
23	A	404	CLA	CHB-C4A-NA	2.09	127.41	124.40
23	b	623	CLA	CAC-C3C-C4C	2.09	127.51	124.79
34	D	410	DGD	O6D-C1D-C2D	2.09	114.66	110.37
23	c	513	CLA	CMB-C2B-C1B	2.09	128.60	125.42
24	d	406	BCR	C21-C20-C19	-2.09	117.16	123.20
23	C	507	CLA	O2A-CGA-CBA	2.08	118.19	111.83
30	D	409[B]	PL9	C47-C48-C49	-2.08	120.69	127.64
23	B	611	CLA	CAA-CBA-CGA	-2.08	107.29	113.21
23	c	509	CLA	CHA-C1A-NA	-2.08	121.67	126.39
23	b	615	CLA	CMB-C2B-C1B	2.08	128.59	125.42
33	c	525	HTG	O5-C5-C4	2.08	113.45	109.70
23	C	509	CLA	O2A-CGA-O1A	-2.08	118.42	123.63
23	b	617	CLA	CHB-C4A-NA	2.08	127.40	124.40
25	L	102	SQD	O6-C44-C45	2.08	115.88	110.82
23	b	612	CLA	C1-C2-C3	-2.08	122.79	126.20
23	B	608	CLA	O2A-CGA-O1A	-2.08	118.43	123.63
24	B	620	BCR	C8-C9-C10	-2.08	115.74	119.01
23	c	517	CLA	CHB-C4A-NA	2.08	127.40	124.40
24	d	406	BCR	C40-C30-C25	-2.08	106.98	110.24
25	f	102	SQD	C4-C3-C2	-2.08	107.18	110.83
24	t	102	BCR	C28-C27-C26	-2.08	110.35	114.06
33	b	607	HTG	C1-O5-C5	2.07	116.28	112.56
23	C	510	CLA	C11-C12-C13	-2.07	109.08	115.97
34	C	517	DGD	O2G-C1B-O1B	-2.07	118.86	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	403	CLA	O2A-CGA-O1A	-2.07	118.45	123.63
39	F	102	HEM	O2D-CGD-CBD	2.07	120.55	114.00
24	C	515	BCR	C20-C21-C22	-2.07	124.37	127.28
35	c	523	LMG	O8-C28-O10	-2.07	118.45	123.63
23	B	617	CLA	CHA-C1A-NA	-2.07	121.70	126.39
23	b	625	CLA	OBD-CAD-C3D	-2.07	123.58	128.42
24	B	620	BCR	C16-C17-C18	-2.07	124.38	127.28
38	L	101	LHG	O7-C7-O9	-2.07	118.87	123.70
35	C	519	LMG	O7-C10-O9	-2.07	118.88	123.70
23	B	614	CLA	CBC-CAC-C3C	-2.06	106.83	112.42
39	F	102	HEM	C4B-C3B-C2B	-2.06	105.38	107.28
23	C	503	CLA	O2A-CGA-O1A	-2.06	118.47	123.63
23	b	622	CLA	CMA-C3A-C4A	-2.06	106.23	111.77
35	c	522	LMG	C8-O7-C10	-2.06	112.86	117.80
23	d	403	CLA	CMA-C3A-C2A	-2.06	106.01	113.98
23	B	611	CLA	C4-C3-C5	2.06	118.81	115.23
23	B	617	CLA	CED-O2D-CGD	2.06	120.59	115.92
23	B	611	CLA	CHC-C1C-NC	2.06	127.42	124.31
30	d	407[B]	PL9	C25-C24-C26	2.06	118.80	115.23
23	B	605	CLA	OBD-CAD-C3D	-2.06	123.60	128.42
23	b	616	CLA	CHB-C1B-C2B	-2.06	121.45	127.43
34	C	517	DGD	C2G-O2G-C1B	-2.06	112.87	117.80
23	B	609	CLA	C4-C3-C5	2.06	118.80	115.23
24	k	101	BCR	C7-C8-C9	-2.06	123.19	126.23
30	a	416[B]	PL9	C8-C7-C3	2.06	117.35	112.03
23	c	510	CLA	O2D-CGD-O1D	-2.06	119.85	123.85
24	B	620	BCR	C24-C23-C22	-2.06	123.19	126.23
34	C	518	DGD	O3G-C3G-C2G	-2.05	105.82	110.82
24	Y	101	BCR	C40-C30-C25	-2.05	107.03	110.24
41	V	206	HEC	CHA-C4D-ND	2.05	127.58	123.86
30	A	416[A]	PL9	C51-C49-C50	2.05	119.31	114.59
23	C	510	CLA	O2A-CGA-O1A	-2.05	118.50	123.63
24	B	619	BCR	C7-C8-C9	-2.05	123.20	126.23
24	B	620	BCR	C29-C30-C25	2.05	113.41	110.44
27	a	404	LMT	C1B-O1B-C4'	-2.05	113.12	117.98
23	c	507	CLA	O2A-CGA-O1A	-2.05	118.51	123.63
38	L	101	LHG	O4-P-O5	2.05	121.97	112.44
24	k	101	BCR	C23-C24-C25	-2.05	121.53	127.00
37	d	402[B]	PHO	O2A-CGA-O1A	-2.05	118.51	123.63
35	C	501	LMG	O8-C28-O10	-2.04	118.52	123.63
27	M	104	LMT	C1B-O5B-C5B	2.04	117.71	113.72
23	A	407	CLA	C1-O2A-CGA	2.04	121.60	116.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	604	CLA	CBC-CAC-C3C	-2.04	106.88	112.42
35	d	416	LMG	O8-C28-C29	2.04	118.06	111.83
23	d	403	CLA	CAA-CBA-CGA	2.04	119.00	113.21
34	h	102	DGD	C6D-C5D-C4D	2.04	116.35	112.07
37	a	411	PHO	O2A-CGA-CBA	2.04	118.06	111.83
38	a	420	LHG	C5-O7-C7	-2.04	112.92	117.80
23	B	616	CLA	O2A-CGA-O1A	-2.04	118.53	123.63
23	B	602	CLA	CAA-C2A-C3A	-2.04	107.49	113.00
23	b	624	CLA	C1-O2A-CGA	2.04	121.58	116.65
24	b	626	BCR	C36-C18-C19	2.04	121.20	118.09
23	c	517	CLA	CHB-C1B-C2B	-2.04	121.52	127.43
23	C	506	CLA	O2A-CGA-CBA	2.04	118.04	111.83
23	c	511	CLA	CBC-CAC-C3C	-2.04	106.90	112.42
23	B	609	CLA	O2A-CGA-O1A	-2.03	118.54	123.63
23	d	405	CLA	C1-O2A-CGA	2.03	121.57	116.65
34	C	517	DGD	O6E-C5E-C6E	2.03	111.48	106.44
23	A	405	CLA	CAA-CBA-CGA	2.03	118.98	113.21
23	b	620	CLA	CMA-C3A-C4A	-2.03	106.31	111.77
35	C	520	LMG	O7-C10-O9	-2.03	118.96	123.70
24	h	101	BCR	C16-C17-C18	-2.03	124.43	127.28
23	C	509	CLA	CBC-CAC-C3C	-2.03	106.92	112.42
23	b	616	CLA	O2D-CGD-O1D	-2.03	119.90	123.85
23	c	512	CLA	CMB-C2B-C1B	2.03	128.51	125.42
23	D	406	CLA	CMA-C3A-C4A	-2.03	106.32	111.77
23	C	514	CLA	CHB-C1B-C2B	-2.03	121.54	127.43
23	C	509	CLA	O1D-CGD-CBD	-2.03	120.52	124.52
23	c	514	CLA	C6-C7-C8	-2.03	109.23	115.97
35	M	101	LMG	O1-C7-C8	-2.02	105.90	110.82
24	T	103	BCR	C15-C14-C13	2.02	130.12	127.28
30	d	407[A]	PL9	C35-C34-C36	2.02	118.74	115.23
27	m	102	LMT	C1-O1'-C1'	-2.02	110.22	113.68
34	B	632	DGD	O6E-C5E-C6E	2.02	111.45	106.44
41	V	206	HEC	CHD-C1D-ND	2.02	127.53	123.86
23	C	505	CLA	C1-C2-C3	-2.02	122.89	126.20
23	C	511	CLA	CBC-CAC-C3C	-2.02	106.94	112.42
24	k	102	BCR	C35-C13-C12	2.02	121.17	118.09
23	B	610	CLA	O2A-CGA-O1A	-2.02	118.58	123.63
23	b	621	CLA	CAC-C3C-C2C	2.02	131.27	127.56
23	b	620	CLA	C7-C6-C5	-2.02	107.88	113.26
39	F	102	HEM	C4C-CHD-C1D	-2.02	121.73	126.02
23	b	610	CLA	O2A-CGA-CBA	2.02	117.99	111.83
23	c	510	CLA	CMB-C2B-C1B	2.02	128.49	125.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	508	CLA	CHA-C1A-NA	-2.02	121.83	126.39
41	V	206	HEC	CHB-C1B-C2B	-2.02	121.57	127.43
24	t	102	BCR	C37-C22-C23	2.02	121.17	118.09
24	A	408	BCR	C21-C20-C19	-2.01	117.37	123.20
23	A	407	CLA	CBC-CAC-C3C	-2.01	106.96	112.42
37	a	411	PHO	C4A-C3A-C2A	-2.01	100.92	102.84
23	C	508	CLA	OBD-CAD-C3D	-2.01	123.71	128.42
33	V	207	HTG	O5-C1-C2	-2.01	107.54	110.32
24	K	103	BCR	C38-C26-C25	-2.01	122.29	124.48
23	C	505	CLA	CMB-C2B-C3B	2.01	131.28	126.55
23	B	607	CLA	CAA-C2A-C3A	-2.01	107.56	113.00
33	b	607	HTG	C6-C5-C4	-2.01	108.08	113.02
24	T	103	BCR	C10-C11-C12	-2.01	117.37	123.20
41	V	206	HEC	CAD-C3D-C4D	2.01	128.87	124.94
30	d	407[B]	PL9	C32-C33-C34	-2.01	123.02	127.62
23	c	509	CLA	CHD-C4C-NC	2.01	127.35	124.23
34	C	518	DGD	O6E-C1E-O5D	-2.01	105.30	110.04
23	b	614	CLA	C1-O2A-CGA	2.01	121.51	116.65
23	c	512	CLA	C1-O2A-CGA	2.01	121.51	116.65
23	B	607	CLA	O2A-CGA-O1A	-2.00	118.61	123.63
23	C	510	CLA	CHB-C4A-NA	2.00	127.29	124.40
34	C	518	DGD	O6E-C5E-C6E	2.00	111.40	106.44
24	T	103	BCR	C28-C27-C26	-2.00	110.49	114.06
24	b	627	BCR	C39-C30-C25	-2.00	107.11	110.24

All (65) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	A	404	CLA	ND
23	A	405	CLA	ND
23	A	407	CLA	ND
23	B	602	CLA	ND
23	B	603	CLA	ND
23	B	604	CLA	ND
23	B	605	CLA	ND
23	B	606	CLA	ND
23	B	607	CLA	ND
23	B	608	CLA	ND
23	B	610	CLA	ND
23	B	611	CLA	ND
23	B	612	CLA	ND
23	B	613	CLA	ND

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Mol	Chain	Res	Type	Atom
23	B	614	CLA	ND
23	B	615	CLA	ND
23	B	616	CLA	ND
23	B	617	CLA	ND
23	C	502	CLA	ND
23	C	504	CLA	ND
23	C	505	CLA	ND
23	C	506	CLA	ND
23	C	507	CLA	ND
23	C	508	CLA	ND
23	C	509	CLA	ND
23	C	510	CLA	ND
23	C	511	CLA	ND
23	C	512	CLA	ND
23	C	513	CLA	ND
23	C	514	CLA	ND
23	D	406	CLA	ND
23	D	407	CLA	ND
23	a	409	CLA	ND
23	a	412	CLA	ND
23	b	610	CLA	ND
23	b	611	CLA	ND
23	b	612	CLA	ND
23	b	613	CLA	ND
23	b	614	CLA	ND
23	b	615	CLA	ND
23	b	616	CLA	ND
23	b	618	CLA	ND
23	b	619	CLA	ND
23	b	620	CLA	ND
23	b	621	CLA	ND
23	b	622	CLA	ND
23	b	623	CLA	ND
23	b	624	CLA	ND
23	b	625	CLA	ND
23	c	505	CLA	ND
23	c	506	CLA	ND
23	c	507	CLA	ND
23	c	508	CLA	ND
23	c	509	CLA	ND
23	c	510	CLA	ND
23	c	511	CLA	ND

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Mol	Chain	Res	Type	Atom
23	c	512	CLA	ND
23	c	513	CLA	ND
23	c	514	CLA	ND
23	c	515	CLA	ND
23	c	516	CLA	ND
23	c	517	CLA	ND
23	d	403	CLA	ND
23	d	404	CLA	ND
23	d	405	CLA	ND

All (1359) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	B	602	CLA	C11-C10-C8-C9
23	B	607	CLA	C4B-C3B-CAB-CBB
23	B	610	CLA	C2B-C3B-CAB-CBB
23	B	610	CLA	C4B-C3B-CAB-CBB
23	B	615	CLA	CAD-CBD-CGD-O1D
23	B	615	CLA	CAD-CBD-CGD-O2D
23	B	616	CLA	C11-C12-C13-C15
23	C	503	CLA	C2B-C3B-CAB-CBB
23	C	503	CLA	C4B-C3B-CAB-CBB
23	C	508	CLA	C2B-C3B-CAB-CBB
23	C	508	CLA	C4B-C3B-CAB-CBB
23	C	508	CLA	CHA-CBD-CGD-O1D
23	C	508	CLA	CHA-CBD-CGD-O2D
23	C	510	CLA	C2-C1-O2A-CGA
23	D	407	CLA	C4B-C3B-CAB-CBB
23	b	616	CLA	C4B-C3B-CAB-CBB
23	b	623	CLA	CAD-CBD-CGD-O1D
23	b	623	CLA	CAD-CBD-CGD-O2D
23	c	506	CLA	C2B-C3B-CAB-CBB
23	c	506	CLA	C4B-C3B-CAB-CBB
23	c	508	CLA	C4-C3-C5-C6
23	c	510	CLA	C1A-C2A-CAA-CBA
23	c	510	CLA	C3A-C2A-CAA-CBA
23	c	511	CLA	C2B-C3B-CAB-CBB
23	c	511	CLA	C4B-C3B-CAB-CBB
23	c	511	CLA	CHA-CBD-CGD-O1D
23	c	511	CLA	CHA-CBD-CGD-O2D
23	c	513	CLA	C2-C1-O2A-CGA
23	c	513	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
23	c	513	CLA	CHA-CBD-CGD-O2D
23	c	516	CLA	C2B-C3B-CAB-CBB
23	c	516	CLA	C4B-C3B-CAB-CBB
23	d	405	CLA	C4B-C3B-CAB-CBB
24	C	515	BCR	C7-C8-C9-C10
24	D	408	BCR	C7-C8-C9-C10
24	D	408	BCR	C21-C22-C23-C24
24	Y	101	BCR	C1-C6-C7-C8
24	Y	101	BCR	C5-C6-C7-C8
24	Y	101	BCR	C21-C22-C23-C24
24	d	406	BCR	C7-C8-C9-C10
24	d	406	BCR	C21-C22-C23-C24
24	d	406	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	C21-C22-C23-C24
25	A	412	SQD	O6-C44-C45-O47
25	A	412	SQD	O5-C5-C6-S
25	B	621	SQD	O5-C1-O6-C44
25	B	621	SQD	O49-C7-O47-C45
25	B	621	SQD	C5-C6-S-O7
25	B	621	SQD	C5-C6-S-O8
25	B	621	SQD	C5-C6-S-O9
25	F	104	SQD	O49-C7-O47-C45
25	F	104	SQD	C5-C6-S-O7
25	F	104	SQD	C5-C6-S-O8
25	F	104	SQD	C5-C6-S-O9
25	L	102	SQD	O5-C1-O6-C44
25	L	102	SQD	O49-C7-O47-C45
25	a	405	SQD	O6-C44-C45-O47
25	a	405	SQD	O5-C5-C6-S
25	a	405	SQD	C5-C6-S-O7
25	a	405	SQD	C5-C6-S-O8
25	a	405	SQD	C5-C6-S-O9
25	f	102	SQD	O49-C7-O47-C45
25	f	102	SQD	C8-C7-O47-C45
25	f	102	SQD	C5-C6-S-O7
25	f	102	SQD	C5-C6-S-O8
25	f	102	SQD	C5-C6-S-O9
26	A	411	GOL	C1-C2-C3-O3
26	B	625	GOL	O1-C1-C2-O2
26	B	625	GOL	O1-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
26	B	626	GOL	O1-C1-C2-O2
26	B	626	GOL	O1-C1-C2-C3
26	B	627	GOL	O1-C1-C2-C3
26	D	404	GOL	C1-C2-C3-O3
26	T	102	GOL	O1-C1-C2-C3
26	V	202	GOL	C1-C2-C3-O3
26	V	205	GOL	O1-C1-C2-C3
26	a	402	GOL	O1-C1-C2-C3
26	b	604	GOL	O2-C2-C3-O3
26	b	605	GOL	O1-C1-C2-C3
26	b	606	GOL	O1-C1-C2-O2
26	b	606	GOL	O1-C1-C2-C3
26	f	101	GOL	O1-C1-C2-C3
26	v	202	GOL	O1-C1-C2-C3
26	v	203	GOL	O1-C1-C2-C3
27	A	413	LMT	C2'-C1'-O1'-C1
27	A	413	LMT	O5'-C1'-O1'-C1
27	F	101	LMT	O5'-C1'-O1'-C1
27	M	104	LMT	O5'-C1'-O1'-C1
27	a	404	LMT	C2'-C1'-O1'-C1
27	a	404	LMT	O5'-C1'-O1'-C1
27	b	630	LMT	C2'-C1'-O1'-C1
27	b	630	LMT	O5'-C1'-O1'-C1
30	a	416[A]	PL9	C12-C11-C9-C10
33	B	622	HTG	C2'-C1'-S1-C1
33	B	623	HTG	O5-C1-S1-C1'
34	D	410	DGD	C2B-C1B-O2G-C2G
34	d	408	DGD	C2B-C1B-O2G-C2G
34	d	408	DGD	O1B-C1B-O2G-C2G
34	d	408	DGD	O6E-C1E-O5D-C6D
35	C	501	LMG	C11-C10-O7-C8
35	C	520	LMG	C11-C10-O7-C8
35	Z	101	LMG	O6-C1-O1-C7
35	Z	101	LMG	O9-C10-O7-C8
35	Z	101	LMG	C11-C10-O7-C8
35	z	101	LMG	O9-C10-O7-C8
38	D	411	LHG	C4-O6-P-O5
38	D	412	LHG	C3-O3-P-O6
38	D	412	LHG	C4-O6-P-O3
38	D	412	LHG	C4-O6-P-O4
38	D	413	LHG	C4-O6-P-O4
38	E	101	LHG	C3-O3-P-O6

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Mol	Chain	Res	Type	Atoms
38	E	101	LHG	C4-O6-P-O5
38	L	101	LHG	C4-O6-P-O3
38	L	101	LHG	C4-O6-P-O4
38	L	101	LHG	C4-O6-P-O5
38	a	420	LHG	C3-O3-P-O6
38	a	420	LHG	C4-O6-P-O3
38	a	420	LHG	O10-C23-O8-C6
38	a	420	LHG	C24-C23-O8-C6
38	b	634	LHG	O1-C1-C2-C3
38	b	634	LHG	C4-O6-P-O3
38	b	634	LHG	C4-O6-P-O4
38	b	634	LHG	C4-O6-P-O5
38	d	410	LHG	O2-C2-C3-O3
38	d	410	LHG	C3-O3-P-O4
38	d	410	LHG	C3-O3-P-O6
38	d	411	LHG	C4-O6-P-O4
39	F	102	HEM	C2B-C3B-CAB-CBB
39	F	102	HEM	C4B-C3B-CAB-CBB
39	F	102	HEM	C2C-C3C-CAC-CBC
41	V	206	HEC	C2B-C3B-CAB-CBB
41	V	206	HEC	C2C-C3C-CAC-CBC
41	V	206	HEC	C4C-C3C-CAC-CBC
41	v	205	HEC	C2B-C3B-CAB-CBB
41	v	205	HEC	C2C-C3C-CAC-CBC
27	D	405	LMT	C3'-C4'-O1B-C1B
38	E	101	LHG	O10-C23-O8-C6
23	c	505	CLA	CBD-CGD-O2D-CED
27	C	521	LMT	O5B-C1B-O1B-C4'
34	D	410	DGD	O1B-C1B-O2G-C2G
35	C	501	LMG	O9-C10-O7-C8
35	C	520	LMG	O9-C10-O7-C8
23	A	407	CLA	C3-C5-C6-C7
23	B	615	CLA	C3-C5-C6-C7
23	B	617	CLA	C3-C5-C6-C7
23	D	407	CLA	C3-C5-C6-C7
23	b	623	CLA	C3-C5-C6-C7
23	c	510	CLA	C3-C5-C6-C7
38	E	101	LHG	C24-C23-O8-C6
23	c	515	CLA	CBD-CGD-O2D-CED
25	B	621	SQD	C8-C7-O47-C45
25	F	104	SQD	C8-C7-O47-C45
25	L	102	SQD	C8-C7-O47-C45

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Mol	Chain	Res	Type	Atoms
35	z	101	LMG	C11-C10-O7-C8
23	B	606	CLA	C4-C3-C5-C6
23	b	614	CLA	C4-C3-C5-C6
23	b	623	CLA	C4-C3-C5-C6
30	a	416[A]	PL9	C20-C19-C21-C22
30	a	416[B]	PL9	C25-C24-C26-C27
23	B	606	CLA	C2-C3-C5-C6
23	b	623	CLA	C2-C3-C5-C6
23	c	508	CLA	C2-C3-C5-C6
30	a	416[A]	PL9	C18-C19-C21-C22
34	B	632	DGD	O6E-C5E-C6E-O5E
27	M	104	LMT	O5'-C5'-C6'-O6'
27	C	521	LMT	C3'-C4'-O1B-C1B
23	C	510	CLA	CBD-CGD-O2D-CED
35	c	522	LMG	C11-C10-O7-C8
23	B	615	CLA	C4-C3-C5-C6
30	A	416[A]	PL9	C25-C24-C26-C27
30	a	416[A]	PL9	C15-C14-C16-C17
30	a	416[A]	PL9	C25-C24-C26-C27
30	a	416[B]	PL9	C12-C11-C9-C10
30	a	416[B]	PL9	C15-C14-C16-C17
30	a	416[B]	PL9	C20-C19-C21-C22
30	A	416[A]	PL9	C23-C24-C26-C27
30	A	416[B]	PL9	C23-C24-C26-C27
30	a	416[A]	PL9	C13-C14-C16-C17
30	a	416[A]	PL9	C23-C24-C26-C27
30	a	416[B]	PL9	C13-C14-C16-C17
35	z	101	LMG	O6-C5-C6-O5
30	D	409[B]	PL9	C39-C41-C42-C43
30	a	416[B]	PL9	C14-C16-C17-C18
30	d	407[A]	PL9	C39-C41-C42-C43
34	B	632	DGD	C4E-C5E-C6E-O5E
27	C	521	LMT	O5'-C5'-C6'-O6'
33	C	523	HTG	O5-C5-C6-O6
23	C	510	CLA	O1A-CGA-O2A-C1
27	C	521	LMT	O5'-C1'-O1'-C1
27	T	104	LMT	O5'-C1'-O1'-C1
27	a	419	LMT	O5'-C1'-O1'-C1
27	e	102	LMT	O5'-C1'-O1'-C1
27	t	101	LMT	O5'-C1'-O1'-C1
34	D	410	DGD	O6D-C1D-O3G-C3G
35	C	520	LMG	O6-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
23	C	510	CLA	CBA-CGA-O2A-C1
33	B	623	HTG	O5-C5-C6-O6
27	M	102	LMT	O5B-C5B-C6B-O6B
38	E	101	LHG	C1-C2-C3-O3
38	D	413	LHG	C24-C23-O8-C6
38	d	411	LHG	C24-C23-O8-C6
33	B	623	HTG	C4-C5-C6-O6
30	A	416[B]	PL9	C25-C24-C26-C27
23	B	615	CLA	C2-C3-C5-C6
23	b	612	CLA	C2-C3-C5-C6
23	b	614	CLA	C2-C3-C5-C6
30	a	416[B]	PL9	C18-C19-C21-C22
30	a	416[B]	PL9	C23-C24-C26-C27
23	c	513	CLA	CBD-CGD-O2D-CED
23	C	502	CLA	C11-C12-C13-C14
23	c	510	CLA	C6-C7-C8-C9
23	c	505	CLA	O1D-CGD-O2D-CED
23	c	515	CLA	O1D-CGD-O2D-CED
27	C	521	LMT	C2'-C1'-O1'-C1
27	F	101	LMT	C2'-C1'-O1'-C1
27	T	104	LMT	C2'-C1'-O1'-C1
27	a	419	LMT	C2'-C1'-O1'-C1
27	e	102	LMT	C2'-C1'-O1'-C1
27	t	101	LMT	C2'-C1'-O1'-C1
34	D	410	DGD	C2D-C1D-O3G-C3G
35	Z	101	LMG	C10-C11-C12-C13
24	C	515	BCR	C7-C8-C9-C34
24	D	408	BCR	C7-C8-C9-C34
24	D	408	BCR	C37-C22-C23-C24
24	K	101	BCR	C37-C22-C23-C24
24	Y	101	BCR	C37-C22-C23-C24
24	d	406	BCR	C7-C8-C9-C34
24	k	102	BCR	C37-C22-C23-C24
27	M	102	LMT	C4B-C5B-C6B-O6B
25	B	621	SQD	C7-C8-C9-C10
38	D	413	LHG	O10-C23-O8-C6
38	d	411	LHG	O10-C23-O8-C6
35	c	522	LMG	O9-C10-O7-C8
34	d	408	DGD	O6D-C5D-C6D-O5D
26	f	101	GOL	O1-C1-C2-O2
27	m	102	LMT	O5'-C5'-C6'-O6'
23	a	409	CLA	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
27	M	104	LMT	C4'-C5'-C6'-O6'
23	b	615	CLA	C12-C13-C15-C16
23	b	623	CLA	C12-C13-C15-C16
23	b	612	CLA	C4-C3-C5-C6
35	Z	101	LMG	O6-C5-C6-O5
27	D	405	LMT	O1'-C1-C2-C3
35	a	415	LMG	C17-C18-C19-C20
30	d	407[B]	PL9	C39-C41-C42-C43
23	B	615	CLA	C8-C10-C11-C12
35	C	520	LMG	C10-C11-C12-C13
35	C	520	LMG	C28-C29-C30-C31
23	b	624	CLA	C10-C11-C12-C13
23	B	615	CLA	C10-C11-C12-C13
23	b	612	CLA	C5-C6-C7-C8
23	b	623	CLA	C5-C6-C7-C8
25	A	412	SQD	C23-C24-C25-C26
38	D	411	LHG	C23-C24-C25-C26
27	D	405	LMT	O5'-C1'-O1'-C1
34	d	408	DGD	C4E-C5E-C6E-O5E
23	A	407	CLA	C13-C15-C16-C17
23	C	502	CLA	C15-C16-C17-C18
23	b	615	CLA	C13-C15-C16-C17
23	c	514	CLA	C8-C10-C11-C12
23	C	513	CLA	CBA-CGA-O2A-C1
23	c	516	CLA	CBA-CGA-O2A-C1
34	c	519	DGD	O6D-C5D-C6D-O5D
23	B	602	CLA	C10-C11-C12-C13
23	B	612	CLA	C15-C16-C17-C18
23	C	507	CLA	C13-C15-C16-C17
27	C	521	LMT	C5'-C4'-O1B-C1B
23	c	513	CLA	CBA-CGA-O2A-C1
23	C	514	CLA	CBD-CGD-O2D-CED
23	c	510	CLA	CBD-CGD-O2D-CED
27	T	104	LMT	O1'-C1-C2-C3
27	a	404	LMT	C3-C4-C5-C6
23	c	513	CLA	O1A-CGA-O2A-C1
23	B	605	CLA	C3-C5-C6-C7
23	a	412	CLA	C3-C5-C6-C7
23	A	407	CLA	C8-C10-C11-C12
23	C	505	CLA	C15-C16-C17-C18
23	C	509	CLA	C10-C11-C12-C13
23	c	517	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
35	b	629	LMG	C30-C31-C32-C33
38	D	412	LHG	C32-C33-C34-C35
23	B	614	CLA	CBD-CGD-O2D-CED
34	C	516	DGD	O6D-C5D-C6D-O5D
27	M	105	LMT	O5'-C5'-C6'-O6'
23	B	617	CLA	C10-C11-C12-C13
23	A	407	CLA	C10-C11-C12-C13
23	B	616	CLA	C8-C10-C11-C12
23	a	412	CLA	C15-C16-C17-C18
34	c	519	DGD	C4D-C5D-C6D-O5D
34	d	408	DGD	C4D-C5D-C6D-O5D
23	C	507	CLA	C5-C6-C7-C8
23	B	617	CLA	C6-C7-C8-C9
23	b	623	CLA	C11-C10-C8-C9
27	D	405	LMT	C2'-C1'-O1'-C1
27	M	102	LMT	C2'-C1'-O1'-C1
27	M	104	LMT	C2'-C1'-O1'-C1
34	C	517	DGD	C2E-C1E-O5D-C6D
34	c	519	DGD	C2E-C1E-O5D-C6D
34	c	520	DGD	C2E-C1E-O5D-C6D
35	Z	101	LMG	C2-C1-O1-C7
23	A	404	CLA	C13-C15-C16-C17
30	a	416[A]	PL9	C9-C11-C12-C13
30	a	416[B]	PL9	C9-C11-C12-C13
35	z	101	LMG	C4-C5-C6-O5
38	E	101	LHG	O2-C2-C3-O3
23	b	620	CLA	C16-C17-C18-C19
23	c	508	CLA	C15-C16-C17-C18
23	c	513	CLA	C3-C5-C6-C7
33	C	523	HTG	S1-C1'-C2'-C3'
23	B	607	CLA	C2A-CAA-CBA-CGA
23	C	508	CLA	C2A-CAA-CBA-CGA
23	B	615	CLA	C5-C6-C7-C8
26	B	627	GOL	C1-C2-C3-O3
26	V	201	GOL	O1-C1-C2-C3
26	V	205	GOL	C1-C2-C3-O3
26	b	604	GOL	O1-C1-C2-C3
26	b	604	GOL	C1-C2-C3-O3
26	b	606	GOL	C1-C2-C3-O3
26	c	502	GOL	O1-C1-C2-C3
26	v	201	GOL	O1-C1-C2-C3
38	D	411	LHG	O1-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
38	D	413	LHG	O1-C1-C2-C3
38	a	420	LHG	O1-C1-C2-C3
38	d	409	LHG	O1-C1-C2-C3
38	d	411	LHG	O1-C1-C2-C3
23	C	503	CLA	C16-C17-C18-C19
23	a	412	CLA	C16-C17-C18-C19
23	C	510	CLA	O1D-CGD-O2D-CED
23	c	516	CLA	O1A-CGA-O2A-C1
38	a	420	LHG	C11-C12-C13-C14
27	M	102	LMT	O5'-C1'-O1'-C1
34	C	517	DGD	O6E-C1E-O5D-C6D
33	b	632	HTG	C1'-C2'-C3'-C4'
34	C	516	DGD	C4D-C5D-C6D-O5D
23	C	511	CLA	CBA-CGA-O2A-C1
34	d	408	DGD	C2A-C1A-O1G-C1G
23	b	617	CLA	C13-C15-C16-C17
23	B	617	CLA	C2-C1-O2A-CGA
23	b	610	CLA	C2-C1-O2A-CGA
38	a	420	LHG	C24-C25-C26-C27
34	D	410	DGD	C2A-C3A-C4A-C5A
34	d	408	DGD	C8B-C9B-CAB-CBB
35	Z	101	LMG	C19-C20-C21-C22
38	D	411	LHG	C34-C35-C36-C37
23	b	624	CLA	C5-C6-C7-C8
23	C	513	CLA	O1A-CGA-O2A-C1
25	A	409	SQD	C14-C15-C16-C17
27	e	102	LMT	C4-C5-C6-C7
27	t	101	LMT	C3-C4-C5-C6
33	B	622	HTG	C2'-C3'-C4'-C5'
34	B	632	DGD	C7A-C8A-C9A-CAA
34	C	517	DGD	C9A-CAA-CBA-CCA
35	C	501	LMG	C14-C15-C16-C17
35	C	501	LMG	C32-C33-C34-C35
35	M	101	LMG	C29-C30-C31-C32
26	A	411	GOL	O2-C2-C3-O3
26	B	627	GOL	O1-C1-C2-O2
26	B	627	GOL	O2-C2-C3-O3
26	D	404	GOL	O2-C2-C3-O3
26	T	102	GOL	O1-C1-C2-O2
26	V	205	GOL	O2-C2-C3-O3
26	a	402	GOL	O1-C1-C2-O2
26	b	605	GOL	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
26	v	201	GOL	O1-C1-C2-O2
26	v	203	GOL	O1-C1-C2-O2
38	d	411	LHG	O1-C1-C2-O2
35	C	519	LMG	C12-C13-C14-C15
23	B	603	CLA	C4B-C3B-CAB-CBB
23	C	506	CLA	C4B-C3B-CAB-CBB
23	d	404	CLA	C4B-C3B-CAB-CBB
34	D	410	DGD	C3B-C4B-C5B-C6B
35	C	519	LMG	C11-C12-C13-C14
23	C	503	CLA	C16-C17-C18-C20
23	b	615	CLA	C2A-CAA-CBA-CGA
23	c	513	CLA	C12-C13-C15-C16
33	b	631	HTG	C2'-C3'-C4'-C5'
34	C	517	DGD	C4B-C5B-C6B-C7B
25	a	414	SQD	C11-C12-C13-C14
34	C	517	DGD	CBB-CCB-CDB-CEB
23	B	602	CLA	C3-C5-C6-C7
23	C	513	CLA	C3-C5-C6-C7
25	A	409	SQD	C16-C17-C18-C19
34	c	521	DGD	CBA-CCA-CDA-CEA
34	d	408	DGD	CAA-CBA-CCA-CDA
35	M	101	LMG	C33-C34-C35-C36
27	T	104	LMT	C1-C2-C3-C4
23	b	610	CLA	C8-C10-C11-C12
24	T	103	BCR	C13-C14-C15-C16
23	a	412	CLA	C16-C17-C18-C20
23	b	613	CLA	C13-C15-C16-C17
23	C	506	CLA	CBD-CGD-O2D-CED
38	d	410	LHG	C1-C2-C3-O3
35	a	415	LMG	C7-C8-C9-O8
34	d	408	DGD	C2A-C3A-C4A-C5A
35	a	415	LMG	C12-C13-C14-C15
23	C	510	CLA	C3-C5-C6-C7
25	A	409	SQD	C9-C10-C11-C12
25	L	102	SQD	C12-C13-C14-C15
25	a	414	SQD	C33-C34-C35-C36
25	f	102	SQD	C24-C25-C26-C27
34	c	520	DGD	C9A-CAA-CBA-CCA
35	D	417	LMG	C19-C20-C21-C22
23	C	511	CLA	O1A-CGA-O2A-C1
34	c	521	DGD	C5B-C6B-C7B-C8B
25	F	104	SQD	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
34	c	519	DGD	C8A-C9A-CAA-CBA
35	d	416	LMG	C38-C39-C40-C41
23	b	624	CLA	C16-C17-C18-C19
35	a	415	LMG	C10-C11-C12-C13
23	B	607	CLA	C2B-C3B-CAB-CBB
23	D	407	CLA	C2B-C3B-CAB-CBB
23	b	616	CLA	C2B-C3B-CAB-CBB
23	d	405	CLA	C2B-C3B-CAB-CBB
35	c	522	LMG	C34-C35-C36-C37
35	d	416	LMG	C16-C17-C18-C19
27	T	104	LMT	C7-C8-C9-C10
27	t	101	LMT	C7-C8-C9-C10
34	C	517	DGD	C8B-C9B-CAB-CBB
35	d	416	LMG	C15-C16-C17-C18
38	D	413	LHG	C29-C30-C31-C32
25	L	102	SQD	C35-C36-C37-C38
25	L	102	SQD	C29-C30-C31-C32
27	T	104	LMT	C4-C5-C6-C7
34	d	408	DGD	O1A-C1A-O1G-C1G
27	C	521	LMT	O5B-C5B-C6B-O6B
25	a	405	SQD	C25-C26-C27-C28
38	L	101	LHG	C14-C15-C16-C17
30	a	416[A]	PL9	C12-C11-C9-C8
23	b	620	CLA	C16-C17-C18-C20
27	t	101	LMT	C11-C10-C9-C8
34	D	410	DGD	C8B-C9B-CAB-CBB
23	c	510	CLA	CBA-CGA-O2A-C1
23	c	515	CLA	CBA-CGA-O2A-C1
23	a	410	CLA	C14-C13-C15-C16
23	b	619	CLA	C11-C12-C13-C14
23	c	513	CLA	C11-C10-C8-C9
23	b	623	CLA	C13-C15-C16-C17
27	T	104	LMT	C11-C10-C9-C8
34	c	519	DGD	O6E-C1E-O5D-C6D
34	c	520	DGD	O6E-C1E-O5D-C6D
34	d	408	DGD	O6D-C1D-O3G-C3G
25	L	102	SQD	C32-C33-C34-C35
38	b	634	LHG	C10-C11-C12-C13
34	d	408	DGD	C2E-C1E-O5D-C6D
23	B	614	CLA	C13-C15-C16-C17
34	C	516	DGD	C4B-C5B-C6B-C7B
34	C	518	DGD	CAA-CBA-CCA-CDA

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Mol	Chain	Res	Type	Atoms
34	d	408	DGD	C5A-C6A-C7A-C8A
35	z	101	LMG	C12-C13-C14-C15
25	A	409	SQD	C8-C7-O47-C45
35	a	415	LMG	C11-C10-O7-C8
23	c	512	CLA	C15-C16-C17-C18
35	a	415	LMG	O9-C10-O7-C8
25	a	414	SQD	C9-C10-C11-C12
24	C	515	BCR	C11-C12-C13-C35
35	d	416	LMG	C14-C15-C16-C17
34	D	410	DGD	C1B-C2B-C3B-C4B
25	a	414	SQD	C30-C31-C32-C33
34	c	520	DGD	C4A-C5A-C6A-C7A
23	b	610	CLA	C16-C17-C18-C20
23	B	610	CLA	C4-C3-C5-C6
30	d	407[A]	PL9	C13-C14-C16-C17
25	A	412	SQD	C11-C12-C13-C14
35	a	415	LMG	C33-C34-C35-C36
25	A	412	SQD	C18-C19-C20-C21
34	c	519	DGD	C7B-C8B-C9B-CAB
38	d	409	LHG	C25-C26-C27-C28
25	a	414	SQD	C27-C28-C29-C30
38	d	411	LHG	C31-C32-C33-C34
39	F	102	HEM	C4C-C3C-CAC-CBC
23	b	624	CLA	C16-C17-C18-C20
34	D	410	DGD	C6A-C7A-C8A-C9A
38	L	101	LHG	C12-C13-C14-C15
38	b	634	LHG	C32-C33-C34-C35
35	c	523	LMG	C10-C11-C12-C13
35	C	520	LMG	C14-C15-C16-C17
38	d	411	LHG	C29-C30-C31-C32
27	D	405	LMT	O5B-C5B-C6B-O6B
27	b	630	LMT	C3'-C4'-O1B-C1B
34	c	521	DGD	C7B-C8B-C9B-CAB
34	c	521	DGD	CBB-CCB-CDB-CEB
23	b	623	CLA	C10-C11-C12-C13
38	L	101	LHG	C13-C14-C15-C16
23	C	502	CLA	CBD-CGD-O2D-CED
23	a	409	CLA	C4C-C3C-CAC-CBC
27	a	419	LMT	C6-C7-C8-C9
35	z	101	LMG	C15-C16-C17-C18
30	d	407[A]	PL9	C43-C44-C46-C47
23	B	613	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
34	C	516	DGD	O6E-C5E-C6E-O5E
25	a	414	SQD	C29-C30-C31-C32
35	M	101	LMG	C35-C36-C37-C38
25	B	621	SQD	C34-C35-C36-C37
23	c	510	CLA	C15-C16-C17-C18
27	e	102	LMT	C4'-C5'-C6'-O6'
33	b	632	HTG	O5-C5-C6-O6
26	V	202	GOL	O2-C2-C3-O3
26	V	205	GOL	O1-C1-C2-O2
26	c	502	GOL	O1-C1-C2-O2
26	v	202	GOL	O1-C1-C2-O2
38	D	411	LHG	O1-C1-C2-O2
23	c	515	CLA	O1A-CGA-O2A-C1
34	c	521	DGD	C6B-C7B-C8B-C9B
23	B	610	CLA	C1A-C2A-CAA-CBA
23	C	502	CLA	C1A-C2A-CAA-CBA
23	C	507	CLA	C1A-C2A-CAA-CBA
23	c	512	CLA	C1A-C2A-CAA-CBA
34	d	408	DGD	C9B-CAB-CBB-CCB
38	D	411	LHG	C27-C28-C29-C30
38	L	101	LHG	O6-C4-C5-C6
38	b	634	LHG	O6-C4-C5-C6
33	c	524	HTG	C2'-C3'-C4'-C5'
38	a	420	LHG	C14-C15-C16-C17
23	A	407	CLA	C6-C7-C8-C10
23	B	612	CLA	C12-C13-C15-C16
23	B	615	CLA	C12-C13-C15-C16
23	C	506	CLA	C11-C12-C13-C15
23	b	610	CLA	C6-C7-C8-C10
23	c	513	CLA	C6-C7-C8-C10
33	b	632	HTG	S1-C1'-C2'-C3'
27	M	104	LMT	O5B-C5B-C6B-O6B
30	D	409[A]	PL9	C15-C14-C16-C17
23	B	610	CLA	C2-C3-C5-C6
37	D	402	PHO	C2-C3-C5-C6
35	b	629	LMG	C38-C39-C40-C41
35	C	501	LMG	C36-C37-C38-C39
23	a	412	CLA	C10-C11-C12-C13
23	b	610	CLA	C10-C11-C12-C13
23	B	615	CLA	C14-C13-C15-C16
23	C	506	CLA	C11-C12-C13-C14
23	b	610	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
23	c	513	CLA	C14-C13-C15-C16
25	L	102	SQD	C10-C11-C12-C13
25	a	405	SQD	C31-C32-C33-C34
35	d	416	LMG	O6-C5-C6-O5
25	A	409	SQD	C15-C16-C17-C18
35	C	520	LMG	C37-C38-C39-C40
23	C	512	CLA	CBA-CGA-O2A-C1
25	L	102	SQD	C24-C23-O48-C46
38	d	410	LHG	C24-C23-O8-C6
23	a	410	CLA	C10-C11-C12-C13
34	c	519	DGD	O6E-C5E-C6E-O5E
35	D	417	LMG	O6-C5-C6-O5
25	F	104	SQD	C31-C32-C33-C34
34	d	408	DGD	C2D-C1D-O3G-C3G
33	b	601	HTG	S1-C1'-C2'-C3'
38	E	101	LHG	C23-C24-C25-C26
25	B	621	SQD	C44-C45-C46-O48
25	a	405	SQD	O6-C44-C45-C46
25	a	414	SQD	O6-C44-C45-C46
34	D	410	DGD	O1G-C1G-C2G-C3G
35	c	522	LMG	C7-C8-C9-O8
33	b	631	HTG	C3'-C4'-C5'-C6'
27	m	102	LMT	C9-C10-C11-C12
23	B	611	CLA	C16-C17-C18-C19
23	B	611	CLA	C16-C17-C18-C20
23	b	610	CLA	C16-C17-C18-C19
27	M	104	LMT	C11-C10-C9-C8
34	C	517	DGD	C8A-C9A-CAA-CBA
38	D	411	LHG	C24-C25-C26-C27
27	A	413	LMT	O5B-C5B-C6B-O6B
38	D	413	LHG	C28-C29-C30-C31
23	B	602	CLA	C15-C16-C17-C18
23	D	407	CLA	C8-C10-C11-C12
23	C	503	CLA	C3-C5-C6-C7
34	c	521	DGD	C7A-C8A-C9A-CAA
30	D	409[B]	PL9	C15-C14-C16-C17
23	C	511	CLA	C2-C3-C5-C6
30	D	409[B]	PL9	C13-C14-C16-C17
30	d	407[B]	PL9	C13-C14-C16-C17
23	b	623	CLA	C15-C16-C17-C18
24	b	626	BCR	C36-C18-C19-C20
25	f	102	SQD	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
24	K	101	BCR	C21-C22-C23-C24
23	C	512	CLA	O1A-CGA-O2A-C1
34	h	102	DGD	CAA-CBA-CCA-CDA
35	a	415	LMG	C31-C32-C33-C34
23	B	611	CLA	C2A-CAA-CBA-CGA
23	C	504	CLA	C8-C10-C11-C12
25	A	412	SQD	C24-C25-C26-C27
25	B	621	SQD	C46-C45-O47-C7
25	B	621	SQD	C32-C33-C34-C35
33	b	601	HTG	C2'-C3'-C4'-C5'
35	a	415	LMG	C29-C30-C31-C32
25	A	412	SQD	C30-C31-C32-C33
35	C	520	LMG	C13-C14-C15-C16
38	d	411	LHG	C33-C34-C35-C36
24	h	101	BCR	C9-C10-C11-C12
25	A	412	SQD	C7-C8-C9-C10
23	c	510	CLA	O1A-CGA-O2A-C1
23	C	514	CLA	C3-C5-C6-C7
34	c	519	DGD	C2A-C3A-C4A-C5A
38	b	634	LHG	C27-C28-C29-C30
23	b	625	CLA	C10-C11-C12-C13
35	c	522	LMG	C16-C17-C18-C19
23	c	514	CLA	CBA-CGA-O2A-C1
35	C	501	LMG	C30-C31-C32-C33
35	a	415	LMG	C35-C36-C37-C38
30	d	407[A]	PL9	C15-C14-C16-C17
25	F	104	SQD	C32-C33-C34-C35
34	c	520	DGD	C8B-C9B-CAB-CBB
25	A	412	SQD	C15-C16-C17-C18
34	h	102	DGD	C5B-C6B-C7B-C8B
38	b	634	LHG	C28-C29-C30-C31
35	b	629	LMG	C40-C41-C42-C43
38	d	410	LHG	O10-C23-O8-C6
34	D	410	DGD	C7A-C8A-C9A-CAA
35	D	417	LMG	C13-C14-C15-C16
35	Z	101	LMG	O1-C7-C8-O7
25	B	621	SQD	C11-C10-C9-C8
23	c	513	CLA	O1D-CGD-O2D-CED
27	D	405	LMT	C2-C3-C4-C5
34	c	520	DGD	C3B-C4B-C5B-C6B
25	A	409	SQD	O49-C7-O47-C45
38	D	411	LHG	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
38	b	634	LHG	C9-C10-C11-C12
25	B	621	SQD	C33-C34-C35-C36
25	L	102	SQD	C28-C29-C30-C31
33	b	601	HTG	C3'-C4'-C5'-C6'
34	c	521	DGD	C2A-C1A-O1G-C1G
34	B	632	DGD	CDA-CEA-CFA-CGA
27	M	104	LMT	C2B-C1B-O1B-C4'
25	L	102	SQD	O10-C23-O48-C46
34	C	516	DGD	C1A-C2A-C3A-C4A
34	C	518	DGD	C6B-C7B-C8B-C9B
23	c	510	CLA	O1D-CGD-O2D-CED
23	B	616	CLA	C4-C3-C5-C6
23	C	511	CLA	C4-C3-C5-C6
34	c	519	DGD	C8B-C9B-CAB-CBB
27	e	102	LMT	C9-C10-C11-C12
26	V	204	GOL	O2-C2-C3-O3
26	b	606	GOL	O2-C2-C3-O3
27	M	104	LMT	C2-C1-O1'-C1'
38	b	634	LHG	O1-C1-C2-O2
23	A	407	CLA	C6-C7-C8-C9
23	b	610	CLA	C11-C10-C8-C9
23	b	615	CLA	C14-C13-C15-C16
23	c	513	CLA	C6-C7-C8-C9
23	c	514	CLA	C11-C12-C13-C14
23	c	513	CLA	C13-C15-C16-C17
23	B	617	CLA	C4B-C3B-CAB-CBB
23	b	611	CLA	C4B-C3B-CAB-CBB
23	b	615	CLA	C4B-C3B-CAB-CBB
23	b	625	CLA	C4B-C3B-CAB-CBB
23	b	619	CLA	C16-C17-C18-C20
33	b	607	HTG	C4'-C5'-C6'-C7'
25	B	621	SQD	C9-C10-C11-C12
25	f	102	SQD	C26-C27-C28-C29
34	c	519	DGD	C9A-CAA-CBA-CCA
38	b	634	LHG	C11-C12-C13-C14
35	C	519	LMG	C28-C29-C30-C31
35	c	522	LMG	C10-C11-C12-C13
25	a	405	SQD	C28-C29-C30-C31
23	B	602	CLA	C11-C12-C13-C15
23	a	410	CLA	C11-C10-C8-C7
25	a	405	SQD	C23-C24-C25-C26
35	d	416	LMG	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
23	B	610	CLA	C3A-C2A-CAA-CBA
23	b	618	CLA	C3A-C2A-CAA-CBA
30	d	407[B]	PL9	C45-C44-C46-C47
23	b	621	CLA	C8-C10-C11-C12
35	C	501	LMG	C33-C34-C35-C36
35	c	522	LMG	C38-C39-C40-C41
24	t	102	BCR	C13-C14-C15-C16
23	C	509	CLA	C3-C5-C6-C7
23	B	613	CLA	C8-C10-C11-C12
24	A	408	BCR	C36-C18-C19-C20
34	B	632	DGD	C5B-C6B-C7B-C8B
33	o	301	HTG	C4'-C5'-C6'-C7'
34	h	102	DGD	CDA-CEA-CFA-CGA
23	c	514	CLA	O1A-CGA-O2A-C1
23	B	614	CLA	O1D-CGD-O2D-CED
35	a	415	LMG	C14-C15-C16-C17
35	C	519	LMG	C35-C36-C37-C38
35	d	416	LMG	C10-C11-C12-C13
25	A	412	SQD	O6-C44-C45-C46
25	L	102	SQD	C44-C45-C46-O48
35	Z	101	LMG	O1-C7-C8-C9
35	c	522	LMG	O1-C7-C8-C9
38	E	101	LHG	C4-C5-C6-O8
25	B	621	SQD	C17-C18-C19-C20
30	d	407[A]	PL9	C45-C44-C46-C47
37	D	402	PHO	C4-C3-C5-C6
34	d	408	DGD	C2B-C3B-C4B-C5B
23	B	616	CLA	C2-C3-C5-C6
27	M	105	LMT	C5-C6-C7-C8
23	C	514	CLA	O1D-CGD-O2D-CED
24	B	618	BCR	C1-C6-C7-C8
24	C	515	BCR	C1-C6-C7-C8
24	d	406	BCR	C23-C24-C25-C30
23	a	412	CLA	CBA-CGA-O2A-C1
38	D	413	LHG	C10-C11-C12-C13
38	d	411	LHG	C35-C36-C37-C38
23	d	405	CLA	CBD-CGD-O2D-CED
38	D	411	LHG	C15-C16-C17-C18
34	C	517	DGD	C4A-C5A-C6A-C7A
35	b	629	LMG	C37-C38-C39-C40
38	a	420	LHG	C25-C26-C27-C28
23	C	514	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
25	a	414	SQD	O6-C44-C45-O47
25	f	102	SQD	O6-C44-C45-O47
35	c	522	LMG	O1-C7-C8-O7
35	c	522	LMG	O7-C8-C9-O8
38	D	413	LHG	O7-C5-C6-O8
38	d	411	LHG	O7-C5-C6-O8
30	A	416[A]	PL9	C4-C3-C7-C8
30	A	416[B]	PL9	C4-C3-C7-C8
30	a	416[A]	PL9	C4-C3-C7-C8
33	V	207	HTG	O5-C1-S1-C1'
35	M	101	LMG	C15-C16-C17-C18
23	c	514	CLA	C4-C3-C5-C6
23	c	514	CLA	C2-C3-C5-C6
30	D	409[A]	PL9	C13-C14-C16-C17
23	b	619	CLA	C16-C17-C18-C19
38	E	101	LHG	C16-C17-C18-C19
34	C	517	DGD	C1A-C2A-C3A-C4A
25	f	102	SQD	C25-C26-C27-C28
27	m	102	LMT	C1-C2-C3-C4
33	o	301	HTG	C3'-C4'-C5'-C6'
30	D	409[A]	PL9	C9-C11-C12-C13
34	c	520	DGD	C9B-CAB-CBB-CCB
35	b	629	LMG	C36-C37-C38-C39
35	z	101	LMG	C13-C14-C15-C16
34	c	520	DGD	C2A-C3A-C4A-C5A
23	c	516	CLA	C15-C16-C17-C18
34	C	516	DGD	C3A-C4A-C5A-C6A
26	C	524	GOL	O1-C1-C2-O2
26	c	501	GOL	O1-C1-C2-O2
38	D	413	LHG	O1-C1-C2-O2
38	a	420	LHG	O1-C1-C2-O2
38	d	409	LHG	O1-C1-C2-O2
34	B	632	DGD	O2G-C1B-C2B-C3B
30	D	409[A]	PL9	C28-C29-C31-C32
23	C	510	CLA	C13-C15-C16-C17
34	h	102	DGD	C9B-CAB-CBB-CCB
23	B	610	CLA	CBA-CGA-O2A-C1
23	b	610	CLA	CBA-CGA-O2A-C1
25	B	621	SQD	C24-C23-O48-C46
35	C	501	LMG	C10-C11-C12-C13
27	M	102	LMT	C11-C10-C9-C8
34	c	521	DGD	O1A-C1A-O1G-C1G

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Mol	Chain	Res	Type	Atoms
23	B	614	CLA	C15-C16-C17-C18
23	B	616	CLA	C12-C13-C15-C16
27	e	102	LMT	C1-C2-C3-C4
35	C	519	LMG	C29-C30-C31-C32
38	d	409	LHG	C11-C10-C9-C8
38	d	409	LHG	C15-C16-C17-C18
38	d	411	LHG	C11-C10-C9-C8
27	a	404	LMT	C2-C3-C4-C5
35	c	522	LMG	C21-C22-C23-C24
24	K	103	BCR	C17-C18-C19-C20
23	B	615	CLA	CBA-CGA-O2A-C1
23	C	514	CLA	CBA-CGA-O2A-C1
34	C	516	DGD	C5B-C6B-C7B-C8B
23	a	412	CLA	O1A-CGA-O2A-C1
34	c	520	DGD	C2G-C3G-O3G-C1D
34	c	520	DGD	C5D-C6D-O5D-C1E
25	F	104	SQD	C30-C31-C32-C33
34	C	516	DGD	C1B-C2B-C3B-C4B
23	B	602	CLA	C2A-CAA-CBA-CGA
23	A	405	CLA	C2C-C3C-CAC-CBC
34	c	519	DGD	CAB-CBB-CCB-CDB
23	B	610	CLA	O1A-CGA-O2A-C1
30	d	407[B]	PL9	C43-C44-C46-C47
39	e	101	HEM	C2C-C3C-CAC-CBC
26	c	501	GOL	O1-C1-C2-C3
26	v	202	GOL	C1-C2-C3-O3
33	B	622	HTG	C4-C5-C6-O6
25	L	102	SQD	C46-C45-O47-C7
23	B	615	CLA	O1A-CGA-O2A-C1
34	B	632	DGD	C5A-C6A-C7A-C8A
23	A	406	CLA	C13-C15-C16-C17
34	c	520	DGD	C6A-C7A-C8A-C9A
23	C	510	CLA	C10-C11-C12-C13
38	b	634	LHG	O6-C4-C5-O7
34	d	408	DGD	C3A-C4A-C5A-C6A
27	M	105	LMT	O5'-C1'-O1'-C1
25	F	104	SQD	C44-C45-C46-O48
30	D	409[A]	PL9	C39-C41-C42-C43
35	z	101	LMG	O1-C7-C8-C9
38	D	413	LHG	C4-C5-C6-O8
38	d	411	LHG	C4-C5-C6-O8
23	B	617	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
25	L	102	SQD	C27-C28-C29-C30
38	L	101	LHG	C35-C36-C37-C38
30	A	416[A]	PL9	C15-C14-C16-C17
30	D	409[A]	PL9	C45-C44-C46-C47
23	d	403	CLA	C2C-C3C-CAC-CBC
34	C	518	DGD	C2A-C3A-C4A-C5A
33	V	207	HTG	C2-C1-S1-C1'
25	L	102	SQD	O47-C45-C46-O48
34	D	410	DGD	O1G-C1G-C2G-O2G
35	C	501	LMG	O1-C7-C8-O7
35	z	101	LMG	O1-C7-C8-O7
23	C	513	CLA	C6-C7-C8-C9
34	d	408	DGD	C4A-C5A-C6A-C7A
38	b	634	LHG	C31-C32-C33-C34
23	b	610	CLA	O1A-CGA-O2A-C1
35	D	417	LMG	C12-C13-C14-C15
35	M	101	LMG	C16-C17-C18-C19
27	a	404	LMT	C6-C7-C8-C9
33	B	629	HTG	C2'-C3'-C4'-C5'
25	a	414	SQD	C15-C16-C17-C18
23	C	514	CLA	O1A-CGA-O2A-C1
35	z	101	LMG	C16-C17-C18-C19
35	C	501	LMG	C2-C1-O1-C7
38	d	411	LHG	C7-C8-C9-C10
23	c	513	CLA	C15-C16-C17-C18
35	C	520	LMG	C29-C30-C31-C32
35	D	417	LMG	C34-C35-C36-C37
35	c	523	LMG	C37-C38-C39-C40
23	c	517	CLA	C3-C5-C6-C7
35	M	101	LMG	C36-C37-C38-C39
25	B	621	SQD	O10-C23-O48-C46
34	C	517	DGD	C3A-C4A-C5A-C6A
35	Z	101	LMG	C4-C5-C6-O5
24	K	103	BCR	C36-C18-C19-C20
25	A	412	SQD	C24-C23-O48-C46
38	E	101	LHG	C26-C27-C28-C29
30	D	409[B]	PL9	C35-C34-C36-C37
23	A	407	CLA	C15-C16-C17-C18
34	C	518	DGD	C8A-C9A-CAA-CBA
24	A	408	BCR	C17-C18-C19-C20
27	t	101	LMT	C2-C3-C4-C5
38	d	409	LHG	C26-C27-C28-C29

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Mol	Chain	Res	Type	Atoms
23	C	506	CLA	O1D-CGD-O2D-CED
23	C	502	CLA	C11-C12-C13-C15
23	b	625	CLA	C12-C13-C15-C16
23	c	510	CLA	C6-C7-C8-C10
23	c	511	CLA	C11-C10-C8-C7
27	D	405	LMT	C5-C6-C7-C8
23	A	405	CLA	C15-C16-C17-C18
23	B	604	CLA	C13-C15-C16-C17
35	a	415	LMG	C18-C19-C20-C21
38	E	101	LHG	C24-C25-C26-C27
35	C	520	LMG	C4-C5-C6-O5
35	a	415	LMG	C30-C31-C32-C33
27	A	413	LMT	O1'-C1-C2-C3
41	V	206	HEC	C4B-C3B-CAB-CBB
41	v	205	HEC	C4B-C3B-CAB-CBB
41	v	205	HEC	C4C-C3C-CAC-CBC
35	a	415	LMG	O6-C5-C6-O5
38	L	101	LHG	O6-C4-C5-O7
38	a	420	LHG	C8-C7-O7-C5
23	C	502	CLA	C2A-CAA-CBA-CGA
23	B	616	CLA	C14-C13-C15-C16
23	a	410	CLA	C11-C10-C8-C9
23	b	625	CLA	C14-C13-C15-C16
24	H	101	BCR	C9-C10-C11-C12
25	A	409	SQD	O5-C5-C6-S
34	D	410	DGD	C2B-C3B-C4B-C5B
38	d	411	LHG	C25-C26-C27-C28
25	F	104	SQD	O47-C45-C46-O48
25	L	102	SQD	O6-C44-C45-O47
34	C	516	DGD	O2G-C2G-C3G-O3G
35	a	415	LMG	O7-C8-C9-O8
38	E	101	LHG	O7-C5-C6-O8
34	C	516	DGD	C1G-C2G-C3G-O3G
34	d	408	DGD	O1G-C1G-C2G-C3G
35	C	501	LMG	O1-C7-C8-C9
35	z	101	LMG	C7-C8-C9-O8
38	d	409	LHG	C33-C34-C35-C36
35	M	101	LMG	C40-C41-C42-C43
23	B	602	CLA	CAD-CBD-CGD-O2D
23	B	606	CLA	CAD-CBD-CGD-O2D
23	C	503	CLA	CAD-CBD-CGD-O2D
23	b	614	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
23	c	506	CLA	CAD-CBD-CGD-O2D
23	c	510	CLA	CAD-CBD-CGD-O2D
38	D	413	LHG	C30-C31-C32-C33
27	M	104	LMT	O5B-C1B-O1B-C4'
34	C	516	DGD	O6E-C1E-O5D-C6D
23	c	513	CLA	C10-C11-C12-C13
35	d	416	LMG	C35-C36-C37-C38
23	b	620	CLA	C8-C10-C11-C12
25	A	412	SQD	O10-C23-O48-C46
27	m	102	LMT	C2-C3-C4-C5
23	B	602	CLA	CAD-CBD-CGD-O1D
23	B	606	CLA	CAD-CBD-CGD-O1D
23	C	503	CLA	CAD-CBD-CGD-O1D
23	C	505	CLA	CAD-CBD-CGD-O1D
23	C	510	CLA	CHA-CBD-CGD-O1D
23	C	510	CLA	CHA-CBD-CGD-O2D
23	b	610	CLA	CAD-CBD-CGD-O1D
23	b	613	CLA	CHA-CBD-CGD-O1D
23	b	614	CLA	CAD-CBD-CGD-O1D
23	c	506	CLA	CAD-CBD-CGD-O1D
23	c	510	CLA	CAD-CBD-CGD-O1D
38	D	411	LHG	C3-O3-P-O6
38	D	412	LHG	C3-O3-P-O4
38	D	412	LHG	C4-O6-P-O5
38	D	413	LHG	C4-O6-P-O3
38	E	101	LHG	C3-O3-P-O5
38	a	420	LHG	C3-O3-P-O5
38	a	420	LHG	C4-O6-P-O5
38	d	411	LHG	C4-O6-P-O3
30	A	416[B]	PL9	C15-C14-C16-C17
30	a	416[A]	PL9	C45-C44-C46-C47
23	B	603	CLA	C2B-C3B-CAB-CBB
23	C	506	CLA	C2B-C3B-CAB-CBB
23	d	404	CLA	C2B-C3B-CAB-CBB
34	C	516	DGD	C3B-C4B-C5B-C6B
38	D	412	LHG	C26-C27-C28-C29
33	V	207	HTG	C4'-C5'-C6'-C7'
30	A	416[B]	PL9	C43-C44-C46-C47
34	C	518	DGD	C9A-CAA-CBA-CCA
24	c	518	BCR	C7-C8-C9-C34
38	d	411	LHG	C2-C3-O3-P
38	a	420	LHG	O9-C7-O7-C5

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Mol	Chain	Res	Type	Atoms
25	F	104	SQD	C26-C27-C28-C29
34	h	102	DGD	O2G-C1B-C2B-C3B
26	V	201	GOL	O1-C1-C2-O2
26	A	410	GOL	C1-C2-C3-O3
27	M	105	LMT	C11-C10-C9-C8
25	B	621	SQD	C12-C13-C14-C15
23	C	502	CLA	O1D-CGD-O2D-CED
23	B	602	CLA	C8-C10-C11-C12
34	c	520	DGD	C4B-C5B-C6B-C7B
35	b	629	LMG	C10-C11-C12-C13
23	B	602	CLA	C11-C12-C13-C14
23	B	603	CLA	C14-C13-C15-C16
23	B	612	CLA	C14-C13-C15-C16
23	b	622	CLA	C6-C7-C8-C9
23	b	623	CLA	C11-C12-C13-C14
35	C	501	LMG	C39-C40-C41-C42
23	A	407	CLA	C12-C13-C15-C16
23	C	505	CLA	C12-C13-C15-C16
23	D	406	CLA	C12-C13-C15-C16
23	b	623	CLA	C11-C12-C13-C15
35	c	522	LMG	C36-C37-C38-C39
27	C	521	LMT	C3-C4-C5-C6
35	C	501	LMG	O6-C1-O1-C7
34	C	518	DGD	CBA-CCA-CDA-CEA
34	C	518	DGD	C2A-C1A-O1G-C1G
34	C	518	DGD	O1A-C1A-O1G-C1G
34	B	632	DGD	C7B-C8B-C9B-CAB
38	L	101	LHG	C17-C18-C19-C20
34	C	516	DGD	C2E-C1E-O5D-C6D
23	c	507	CLA	C5-C6-C7-C8
23	c	517	CLA	C4-C3-C5-C6
34	c	520	DGD	C7A-C8A-C9A-CAA
23	B	613	CLA	O1D-CGD-O2D-CED
25	B	621	SQD	O47-C45-C46-O48
23	b	610	CLA	CAA-CBA-CGA-O2A
34	B	632	DGD	C6B-C7B-C8B-C9B
33	B	622	HTG	C1'-C2'-C3'-C4'
23	B	602	CLA	CAA-CBA-CGA-O2A
23	b	621	CLA	CBD-CGD-O2D-CED
34	C	517	DGD	CAB-CBB-CCB-CDB
30	A	416[A]	PL9	C13-C14-C16-C17
35	b	629	LMG	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
25	L	102	SQD	O6-C44-C45-C46
30	a	416[A]	PL9	C14-C16-C17-C18
34	h	102	DGD	CCA-CDA-CEA-CFA
33	C	523	HTG	C4-C5-C6-O6
25	a	405	SQD	C45-C44-O6-C1
35	z	101	LMG	C8-C7-O1-C1
23	B	604	CLA	C5-C6-C7-C8
27	e	102	LMT	C5-C6-C7-C8
23	c	505	CLA	C2A-CAA-CBA-CGA
35	d	416	LMG	C29-C30-C31-C32
23	b	625	CLA	C4-C3-C5-C6
30	A	416[B]	PL9	C45-C44-C46-C47
33	B	622	HTG	C4'-C5'-C6'-C7'
30	A	416[B]	PL9	C13-C14-C16-C17
30	a	416[A]	PL9	C43-C44-C46-C47
38	D	413	LHG	C12-C13-C14-C15
23	b	620	CLA	C4B-C3B-CAB-CBB
38	L	101	LHG	C26-C27-C28-C29
23	b	623	CLA	CBD-CGD-O2D-CED
23	B	617	CLA	C8-C10-C11-C12
30	D	409[B]	PL9	C45-C44-C46-C47
23	c	517	CLA	C2-C3-C5-C6
30	A	416[A]	PL9	C43-C44-C46-C47
30	D	409[B]	PL9	C43-C44-C46-C47
34	c	521	DGD	C3A-C4A-C5A-C6A
23	d	405	CLA	O1D-CGD-O2D-CED
34	C	517	DGD	C6B-C7B-C8B-C9B
35	C	519	LMG	C31-C32-C33-C34
34	D	410	DGD	O2G-C2G-C3G-O3G
35	c	523	LMG	O7-C8-C9-O8
23	B	608	CLA	C3A-C2A-CAA-CBA
23	C	514	CLA	C3A-C2A-CAA-CBA
23	b	625	CLA	C2-C3-C5-C6
30	d	407[B]	PL9	C28-C29-C31-C32
34	D	410	DGD	C7B-C8B-C9B-CAB
35	a	415	LMG	C34-C35-C36-C37
35	b	629	LMG	C39-C40-C41-C42
25	L	102	SQD	C33-C34-C35-C36
35	a	415	LMG	C36-C37-C38-C39
23	A	404	CLA	C16-C17-C18-C19
23	C	507	CLA	C16-C17-C18-C20
38	D	413	LHG	C2-C3-O3-P

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Mol	Chain	Res	Type	Atoms
33	c	524	HTG	C3'-C4'-C5'-C6'
23	a	412	CLA	C4-C3-C5-C6
39	e	101	HEM	C3D-CAD-CBD-CGD
23	b	621	CLA	O1D-CGD-O2D-CED
30	d	407[A]	PL9	C28-C29-C31-C32
27	M	102	LMT	O5'-C5'-C6'-O6'
38	D	413	LHG	C9-C10-C11-C12
25	A	409	SQD	C10-C11-C12-C13
23	B	602	CLA	C14-C13-C15-C16
23	B	604	CLA	C14-C13-C15-C16
23	B	610	CLA	C6-C7-C8-C9
23	C	505	CLA	C11-C12-C13-C14
23	C	511	CLA	C6-C7-C8-C9
23	D	407	CLA	C6-C7-C8-C9
23	b	620	CLA	C11-C12-C13-C14
26	V	203	GOL	O1-C1-C2-C3
25	A	412	SQD	C26-C27-C28-C29
38	D	411	LHG	C28-C29-C30-C31
23	d	405	CLA	C4-C3-C5-C6
23	a	409	CLA	C13-C15-C16-C17
23	a	412	CLA	C2-C3-C5-C6
30	a	416[B]	PL9	C43-C44-C46-C47
26	V	202	GOL	O1-C1-C2-O2
23	c	505	CLA	C1A-C2A-CAA-CBA
25	A	409	SQD	C12-C13-C14-C15
23	C	505	CLA	C2B-C3B-CAB-CBB
23	C	507	CLA	C2B-C3B-CAB-CBB
23	b	620	CLA	C2B-C3B-CAB-CBB
23	b	625	CLA	C2B-C3B-CAB-CBB
24	A	408	BCR	C1-C6-C7-C8
24	B	618	BCR	C5-C6-C7-C8
24	C	515	BCR	C5-C6-C7-C8
24	c	518	BCR	C1-C6-C7-C8
24	d	406	BCR	C1-C6-C7-C8
24	d	406	BCR	C23-C24-C25-C26
24	k	102	BCR	C23-C24-C25-C30
27	M	102	LMT	C6-C7-C8-C9
38	d	409	LHG	C32-C33-C34-C35
23	C	509	CLA	C13-C15-C16-C17
39	F	102	HEM	CAD-CBD-CGD-O1D
23	b	610	CLA	C4-C3-C5-C6
30	a	416[B]	PL9	C45-C44-C46-C47

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Mol	Chain	Res	Type	Atoms
23	b	614	CLA	C8-C10-C11-C12
23	A	406	CLA	C11-C10-C8-C7
23	b	613	CLA	C11-C12-C13-C15
23	c	510	CLA	C11-C10-C8-C7
23	d	404	CLA	C11-C12-C13-C15
35	c	522	LMG	C33-C34-C35-C36
23	B	615	CLA	C2A-CAA-CBA-CGA
25	F	104	SQD	O6-C44-C45-O47
38	D	412	LHG	C9-C10-C11-C12
27	M	105	LMT	C4'-C5'-C6'-O6'
35	C	501	LMG	C13-C14-C15-C16
30	a	416[B]	PL9	C4-C3-C7-C8
35	a	415	LMG	C19-C20-C21-C22
38	b	634	LHG	C30-C31-C32-C33
38	D	412	LHG	C33-C34-C35-C36
38	d	409	LHG	C1-C2-C3-O3
38	d	409	LHG	C7-C8-C9-C10
23	C	508	CLA	C4-C3-C5-C6
23	C	514	CLA	C4-C3-C5-C6
30	A	416[A]	PL9	C30-C29-C31-C32
30	D	409[B]	PL9	C33-C34-C36-C37
23	c	517	CLA	C2-C1-O2A-CGA
23	A	404	CLA	C15-C16-C17-C18
24	b	626	BCR	C17-C18-C19-C20
23	B	604	CLA	C16-C17-C18-C20
23	B	614	CLA	C10-C11-C12-C13
34	c	519	DGD	C4B-C5B-C6B-C7B
23	B	604	CLA	C6-C7-C8-C9
23	B	616	CLA	C11-C12-C13-C14
23	C	513	CLA	C11-C10-C8-C9
34	C	516	DGD	C7B-C8B-C9B-CAB
35	D	417	LMG	C30-C31-C32-C33
41	V	206	HEC	CAD-CBD-CGD-O2D
25	f	102	SQD	C33-C34-C35-C36
27	A	413	LMT	C6-C7-C8-C9
34	c	520	DGD	C3A-C4A-C5A-C6A
30	A	416[A]	PL9	C45-C44-C46-C47
30	A	416[B]	PL9	C30-C29-C31-C32
30	D	409[A]	PL9	C35-C34-C36-C37
30	a	416[B]	PL9	C12-C11-C9-C8
27	t	101	LMT	C4-C5-C6-C7
27	M	105	LMT	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
25	f	102	SQD	O6-C44-C45-C46
30	A	416[A]	PL9	C19-C21-C22-C23
30	A	416[B]	PL9	C19-C21-C22-C23
23	d	403	CLA	C15-C16-C17-C18
23	c	509	CLA	O1A-CGA-O2A-C1
23	b	619	CLA	C2A-CAA-CBA-CGA
23	b	623	CLA	C2A-CAA-CBA-CGA
35	c	522	LMG	C32-C33-C34-C35
26	a	401	GOL	O2-C2-C3-O3
27	F	101	LMT	O1'-C1-C2-C3
23	C	507	CLA	C4-C3-C5-C6
30	A	416[A]	PL9	C20-C19-C21-C22
39	F	102	HEM	CAD-CBD-CGD-O2D
23	A	406	CLA	C16-C17-C18-C20
34	c	520	DGD	C2B-C3B-C4B-C5B
23	A	407	CLA	C4B-C3B-CAB-CBB
23	B	608	CLA	C4B-C3B-CAB-CBB
23	B	615	CLA	C4B-C3B-CAB-CBB
23	C	505	CLA	C4B-C3B-CAB-CBB
23	C	507	CLA	C4B-C3B-CAB-CBB
23	B	615	CLA	C16-C17-C18-C19
27	D	405	LMT	C6-C7-C8-C9
37	D	403[B]	PHO	CHA-CBD-CGD-O1D
37	D	403[B]	PHO	CHA-CBD-CGD-O2D
23	A	405	CLA	O1A-CGA-O2A-C1
34	C	518	DGD	C3B-C4B-C5B-C6B
35	D	417	LMG	C21-C22-C23-C24
38	D	413	LHG	C13-C14-C15-C16
23	d	403	CLA	C16-C17-C18-C20
23	C	513	CLA	C4-C3-C5-C6
30	A	416[B]	PL9	C20-C19-C21-C22
35	Z	101	LMG	O7-C8-C9-O8
35	z	101	LMG	O7-C8-C9-O8
23	B	602	CLA	C11-C10-C8-C7
23	d	405	CLA	C11-C10-C8-C7
25	L	102	SQD	C11-C12-C13-C14
27	a	419	LMT	C7-C8-C9-C10
35	d	416	LMG	C36-C37-C38-C39
41	V	206	HEC	CAD-CBD-CGD-O1D
23	C	507	CLA	C6-C7-C8-C9
23	c	511	CLA	C11-C10-C8-C9
27	m	102	LMT	C4'-C5'-C6'-O6'

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Mol	Chain	Res	Type	Atoms
25	B	621	SQD	C45-C44-O6-C1
34	C	516	DGD	C5D-C6D-O5D-C1E
34	c	519	DGD	C5D-C6D-O5D-C1E
35	D	417	LMG	C14-C15-C16-C17
23	C	514	CLA	C2-C1-O2A-CGA
23	b	622	CLA	C2-C1-O2A-CGA
23	c	515	CLA	C2-C1-O2A-CGA
25	B	621	SQD	C19-C20-C21-C22
27	D	405	LMT	C2B-C1B-O1B-C4'
23	b	617	CLA	C4-C3-C5-C6
35	C	519	LMG	O10-C28-O8-C9
27	M	105	LMT	C2'-C1'-O1'-C1
35	b	629	LMG	C29-C30-C31-C32
35	z	101	LMG	C18-C19-C20-C21
27	C	521	LMT	C4'-C5'-C6'-O6'
38	a	420	LHG	C13-C14-C15-C16
38	D	412	LHG	C31-C32-C33-C34
38	E	101	LHG	C11-C12-C13-C14
35	C	501	LMG	C21-C22-C23-C24
34	c	521	DGD	CAB-CBB-CCB-CDB
23	b	616	CLA	C3-C5-C6-C7
23	B	607	CLA	C13-C15-C16-C17
30	a	416[A]	PL9	C39-C41-C42-C43
35	Z	101	LMG	C7-C8-C9-O8
23	C	506	CLA	O1A-CGA-O2A-C1
23	B	607	CLA	C10-C11-C12-C13
39	e	101	HEM	C4C-C3C-CAC-CBC
26	B	628	GOL	O2-C2-C3-O3
26	C	525	GOL	O1-C1-C2-O2
26	f	101	GOL	O2-C2-C3-O3
34	d	408	DGD	C7B-C8B-C9B-CAB
38	d	409	LHG	C13-C14-C15-C16
23	b	619	CLA	C15-C16-C17-C18
38	D	411	LHG	C25-C26-C27-C28
27	m	102	LMT	C11-C10-C9-C8
38	a	420	LHG	O8-C23-C24-C25
38	E	101	LHG	C15-C16-C17-C18
38	b	634	LHG	C17-C18-C19-C20
37	d	402[B]	PHO	C8-C10-C11-C12
34	c	520	DGD	O2G-C1B-C2B-C3B
38	b	634	LHG	O7-C7-C8-C9
24	C	515	BCR	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
24	c	518	BCR	C7-C8-C9-C10
23	b	621	CLA	C3-C5-C6-C7
23	b	620	CLA	O1A-CGA-O2A-C1
23	C	513	CLA	CAA-CBA-CGA-O2A
38	d	409	LHG	O8-C23-C24-C25
23	B	604	CLA	C6-C7-C8-C10
23	C	507	CLA	C6-C7-C8-C10
23	C	513	CLA	C11-C10-C8-C7
23	b	612	CLA	C6-C7-C8-C10
23	c	507	CLA	C6-C7-C8-C10
23	c	514	CLA	C12-C13-C15-C16
23	A	407	CLA	C2B-C3B-CAB-CBB
23	B	608	CLA	C2B-C3B-CAB-CBB
23	B	615	CLA	C2B-C3B-CAB-CBB
23	B	617	CLA	C2B-C3B-CAB-CBB
23	D	406	CLA	C2B-C3B-CAB-CBB
23	b	611	CLA	C2B-C3B-CAB-CBB
23	b	615	CLA	C2B-C3B-CAB-CBB
23	d	403	CLA	C2B-C3B-CAB-CBB
24	A	408	BCR	C5-C6-C7-C8
24	D	408	BCR	C23-C24-C25-C26
24	D	408	BCR	C23-C24-C25-C30
24	c	518	BCR	C5-C6-C7-C8
24	d	406	BCR	C5-C6-C7-C8
24	k	102	BCR	C23-C24-C25-C26
24	t	102	BCR	C1-C6-C7-C8
24	t	102	BCR	C5-C6-C7-C8
23	C	511	CLA	CAA-CBA-CGA-O2A
35	Z	101	LMG	O7-C10-C11-C12
23	B	614	CLA	C2-C1-O2A-CGA
23	C	513	CLA	C2-C1-O2A-CGA
23	c	508	CLA	C2-C1-O2A-CGA
23	b	611	CLA	O1A-CGA-O2A-C1
25	L	102	SQD	C24-C25-C26-C27
34	h	102	DGD	C6A-C7A-C8A-C9A
27	F	101	LMT	C1-C2-C3-C4
33	V	207	HTG	C2'-C1'-S1-C1
33	b	631	HTG	C2'-C1'-S1-C1
33	b	632	HTG	C2'-C1'-S1-C1
33	c	524	HTG	C2'-C1'-S1-C1
23	B	603	CLA	C2A-CAA-CBA-CGA
27	D	405	LMT	O5B-C1B-O1B-C4'

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Mol	Chain	Res	Type	Atoms
38	D	411	LHG	C13-C14-C15-C16
23	B	616	CLA	C5-C6-C7-C8
25	A	409	SQD	C18-C19-C20-C21
38	d	410	LHG	C14-C15-C16-C17
34	d	408	DGD	CAB-CBB-CCB-CDB
33	B	630	HTG	S1-C1'-C2'-C3'
27	A	413	LMT	C11-C10-C9-C8
23	d	405	CLA	C15-C16-C17-C18
34	D	410	DGD	O1G-C1A-C2A-C3A
34	c	521	DGD	O1G-C1A-C2A-C3A
38	E	101	LHG	C11-C10-C9-C8
34	B	632	DGD	O1B-C1B-C2B-C3B
38	d	410	LHG	C28-C29-C30-C31
30	d	407[B]	PL9	C15-C14-C16-C17
38	E	101	LHG	O8-C23-C24-C25
38	L	101	LHG	O7-C7-C8-C9
30	d	407[A]	PL9	C18-C19-C21-C22
37	a	411	PHO	C2-C3-C5-C6
35	c	523	LMG	C31-C32-C33-C34
23	b	623	CLA	C8-C10-C11-C12
35	c	522	LMG	C19-C20-C21-C22
25	L	102	SQD	C7-C8-C9-C10
23	b	620	CLA	CBA-CGA-O2A-C1
23	B	613	CLA	C3-C5-C6-C7
38	D	411	LHG	C11-C12-C13-C14
23	C	505	CLA	C14-C13-C15-C16
23	b	618	CLA	C6-C7-C8-C9
23	c	510	CLA	C11-C10-C8-C9
23	c	510	CLA	C13-C15-C16-C17
35	c	522	LMG	O7-C10-C11-C12
34	D	410	DGD	C1G-C2G-C3G-O3G
23	B	603	CLA	C8-C10-C11-C12
23	C	512	CLA	C1A-C2A-CAA-CBA
23	D	406	CLA	C4B-C3B-CAB-CBB
23	c	508	CLA	C4B-C3B-CAB-CBB
23	d	404	CLA	C1A-C2A-CAA-CBA
23	A	405	CLA	CBA-CGA-O2A-C1
37	a	411	PHO	C4-C3-C5-C6
38	D	412	LHG	C13-C14-C15-C16
23	d	403	CLA	C4C-C3C-CAC-CBC
23	B	614	CLA	CAA-CBA-CGA-O2A
23	c	514	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
34	d	408	DGD	O2G-C1B-C2B-C3B
38	d	410	LHG	C34-C35-C36-C37
25	A	409	SQD	O6-C44-C45-O47
25	B	621	SQD	C35-C36-C37-C38
25	L	102	SQD	C11-C10-C9-C8
34	B	632	DGD	CCA-CDA-CEA-CFA
23	a	409	CLA	C16-C17-C18-C19
35	C	519	LMG	C16-C17-C18-C19
23	C	510	CLA	C8-C10-C11-C12
23	B	608	CLA	C4-C3-C5-C6
23	C	505	CLA	C4-C3-C5-C6
30	d	407[A]	PL9	C30-C29-C31-C32
25	a	414	SQD	C35-C36-C37-C38
23	C	507	CLA	C2-C1-O2A-CGA
25	f	102	SQD	O47-C7-C8-C9
23	C	511	CLA	C6-C7-C8-C10
25	L	102	SQD	C31-C32-C33-C34
35	Z	101	LMG	C13-C14-C15-C16
23	A	405	CLA	C4C-C3C-CAC-CBC
41	v	205	HEC	CAD-CBD-CGD-O2D
38	d	410	LHG	C11-C10-C9-C8
23	B	616	CLA	C10-C11-C12-C13
37	d	402[A]	PHO	C2C-C3C-CAC-CBC
33	o	301	HTG	C2'-C3'-C4'-C5'
23	b	614	CLA	C16-C17-C18-C19
39	e	101	HEM	CAA-CBA-CGA-O1A
23	b	615	CLA	C10-C11-C12-C13
30	a	416[B]	PL9	C35-C34-C36-C37
25	a	405	SQD	O48-C23-C24-C25
35	D	417	LMG	O7-C10-C11-C12
35	c	523	LMG	C28-C29-C30-C31
34	C	517	DGD	C6A-C7A-C8A-C9A
23	C	513	CLA	C10-C11-C12-C13
25	B	621	SQD	C15-C16-C17-C18
38	D	413	LHG	C25-C26-C27-C28
34	D	410	DGD	O1A-C1A-C2A-C3A
38	b	634	LHG	C23-C24-C25-C26
39	e	101	HEM	CAA-CBA-CGA-O2A
35	C	520	LMG	C38-C39-C40-C41
27	e	102	LMT	O5'-C5'-C6'-O6'
35	C	519	LMG	C29-C28-O8-C9
23	A	406	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
23	B	607	CLA	C11-C12-C13-C14
23	B	615	CLA	C6-C7-C8-C9
23	b	612	CLA	C6-C7-C8-C9
34	c	521	DGD	O1A-C1A-C2A-C3A
38	a	420	LHG	O10-C23-C24-C25
35	b	629	LMG	C4-C5-C6-O5
34	C	516	DGD	C4A-C5A-C6A-C7A
23	c	511	CLA	C5-C6-C7-C8
38	d	410	LHG	C16-C17-C18-C19
34	h	102	DGD	C7A-C8A-C9A-CAA
23	C	505	CLA	C13-C15-C16-C17
35	C	501	LMG	C31-C32-C33-C34
23	B	613	CLA	O1A-CGA-O2A-C1
23	b	618	CLA	O1A-CGA-O2A-C1
39	F	102	HEM	CAA-CBA-CGA-O2A
34	c	519	DGD	CCA-CDA-CEA-CFA
23	B	613	CLA	CBA-CGA-O2A-C1
23	c	509	CLA	CBA-CGA-O2A-C1
23	C	511	CLA	CAA-CBA-CGA-O1A
35	Z	101	LMG	O9-C10-C11-C12
35	c	522	LMG	O9-C10-C11-C12
38	b	634	LHG	O9-C7-C8-C9
38	d	409	LHG	O10-C23-C24-C25
27	D	405	LMT	C4-C5-C6-C7
38	d	409	LHG	C24-C25-C26-C27
25	A	409	SQD	C45-C44-O6-C1
34	D	410	DGD	C2G-C3G-O3G-C1D
34	h	102	DGD	C2G-C3G-O3G-C1D
25	A	412	SQD	C16-C17-C18-C19
39	e	101	HEM	CAD-CBD-CGD-O2D
23	C	513	CLA	CAA-CBA-CGA-O1A
23	d	404	CLA	CAA-CBA-CGA-O2A
23	c	511	CLA	C2A-CAA-CBA-CGA
23	a	412	CLA	C8-C10-C11-C12
39	e	101	HEM	C2B-C3B-CAB-CBB
27	e	102	LMT	C2B-C1B-O1B-C4'
34	c	520	DGD	O1B-C1B-C2B-C3B
38	E	101	LHG	O10-C23-C24-C25
23	B	608	CLA	CAD-CBD-CGD-O2D
23	C	505	CLA	CAD-CBD-CGD-O2D
23	b	613	CLA	CAD-CBD-CGD-O2D
23	b	622	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
23	C	508	CLA	C5-C6-C7-C8
35	a	415	LMG	O8-C28-C29-C30
41	v	205	HEC	CAD-CBD-CGD-O1D
34	C	517	DGD	C1B-C2B-C3B-C4B
25	a	414	SQD	C26-C27-C28-C29
23	b	623	CLA	C2-C1-O2A-CGA
23	c	516	CLA	C2-C1-O2A-CGA
39	e	101	HEM	CAD-CBD-CGD-O1D
34	c	520	DGD	C8A-C9A-CAA-CBA
23	C	506	CLA	CAA-CBA-CGA-O2A
23	b	622	CLA	CAA-CBA-CGA-O2A
35	C	501	LMG	O8-C28-C29-C30
35	z	101	LMG	O7-C10-C11-C12
23	B	609	CLA	C16-C17-C18-C19
30	A	416[B]	PL9	C26-C27-C28-C29
30	d	407[B]	PL9	C11-C12-C13-C14
23	A	404	CLA	C2A-CAA-CBA-CGA
34	c	521	DGD	O6D-C5D-C6D-O5D
39	F	102	HEM	CAA-CBA-CGA-O1A
38	L	101	LHG	O9-C7-C8-C9
23	B	613	CLA	CAA-CBA-CGA-O2A
23	c	516	CLA	CAA-CBA-CGA-O2A
25	B	621	SQD	O48-C23-C24-C25
23	B	614	CLA	CAA-CBA-CGA-O1A
25	f	102	SQD	O49-C7-C8-C9
34	d	408	DGD	O1B-C1B-C2B-C3B
35	D	417	LMG	C20-C21-C22-C23
35	M	101	LMG	O8-C28-C29-C30

There are no ring outliers.

175 monomers are involved in 410 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	b	613	CLA	2	0
25	A	412	SQD	2	0
27	F	101	LMT	1	0
38	d	409	LHG	3	0
23	a	409	CLA	3	0
38	D	413	LHG	6	0
23	C	502	CLA	2	0
35	d	416	LMG	2	0
23	C	504	CLA	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	f	102	SQD	4	0
33	B	623	HTG	1	0
27	C	521	LMT	2	0
30	A	416[A]	PL9	3	0
24	B	619	BCR	4	0
26	T	101	GOL	2	0
38	a	420	LHG	5	0
33	B	622	HTG	1	0
37	D	403[A]	PHO	1	0
26	t	103	GOL	1	0
23	D	407	CLA	1	0
23	A	405	CLA	6	0
23	B	613	CLA	2	0
26	D	404	GOL	2	0
35	a	415	LMG	3	0
30	D	409[B]	PL9	4	0
30	A	416[B]	PL9	4	0
25	F	104	SQD	2	0
23	b	620	CLA	1	0
26	A	411	GOL	1	0
37	D	403[B]	PHO	2	0
38	D	412	LHG	4	0
23	C	506	CLA	4	0
24	K	103	BCR	2	0
24	T	103	BCR	5	0
27	m	102	LMT	2	0
27	A	413	LMT	2	0
38	D	411	LHG	3	0
24	d	406	BCR	3	0
23	d	403	CLA	2	0
23	B	602	CLA	1	0
33	b	601	HTG	1	0
34	D	410	DGD	5	0
26	B	627	GOL	1	0
38	L	101	LHG	2	0
34	C	517	DGD	4	0
23	c	515	CLA	2	0
35	M	101	LMG	3	0
25	L	102	SQD	2	0
23	c	506	CLA	3	0
35	D	417	LMG	2	0
23	B	607	CLA	5	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	c	507	CLA	4	0
25	A	409	SQD	5	0
24	c	518	BCR	2	0
33	D	416	HTG	3	0
25	a	405	SQD	1	0
26	T	102	GOL	2	0
23	C	508	CLA	5	0
37	D	402	PHO	4	0
23	c	511	CLA	4	0
23	C	511	CLA	4	0
30	D	409[A]	PL9	1	0
23	A	404	CLA	5	0
23	B	609	CLA	1	0
24	K	101	BCR	6	0
35	C	501	LMG	5	0
37	d	402[A]	PHO	1	0
23	b	621	CLA	1	0
27	M	104	LMT	1	0
38	d	411	LHG	3	0
23	b	617	CLA	1	0
24	B	620	BCR	3	0
23	c	516	CLA	3	0
23	b	612	CLA	4	0
24	B	618	BCR	4	0
26	v	201	GOL	2	0
33	C	522	HTG	1	0
35	b	629	LMG	6	0
37	d	402[B]	PHO	3	0
24	c	527	BCR	4	0
23	a	410	CLA	4	0
33	o	301	HTG	2	0
27	a	404	LMT	3	0
34	c	520	DGD	2	0
24	t	102	BCR	6	0
26	f	101	GOL	1	0
23	C	507	CLA	5	0
33	V	207	HTG	1	0
33	b	608	HTG	1	0
23	A	406	CLA	7	0
23	B	606	CLA	8	0
23	b	619	CLA	4	0
34	d	408	DGD	6	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
27	M	105	LMT	4	0
34	h	102	DGD	1	0
23	c	513	CLA	2	0
24	a	413	BCR	2	0
23	C	503	CLA	3	0
24	C	515	BCR	2	0
23	c	517	CLA	5	0
39	F	102	HEM	2	0
23	B	617	CLA	6	0
24	Y	101	BCR	5	0
23	A	407	CLA	1	0
23	C	512	CLA	4	0
23	b	625	CLA	2	0
23	c	510	CLA	4	0
34	B	632	DGD	2	0
30	a	416[B]	PL9	7	0
23	b	611	CLA	2	0
34	C	516	DGD	4	0
24	b	627	BCR	3	0
39	e	101	HEM	3	0
24	h	101	BCR	5	0
24	k	101	BCR	3	0
23	b	610	CLA	2	0
23	b	618	CLA	3	0
35	C	519	LMG	2	0
23	D	406	CLA	4	0
26	b	604	GOL	1	0
23	B	604	CLA	4	0
23	b	624	CLA	6	0
35	Z	101	LMG	2	0
35	z	101	LMG	7	0
23	B	603	CLA	4	0
38	b	634	LHG	3	0
33	b	607	HTG	1	0
30	d	407[B]	PL9	2	0
33	b	632	HTG	1	0
24	b	626	BCR	3	0
26	a	401	GOL	1	0
23	b	622	CLA	5	0
23	c	514	CLA	6	0
26	c	502	GOL	1	0
23	B	605	CLA	2	0

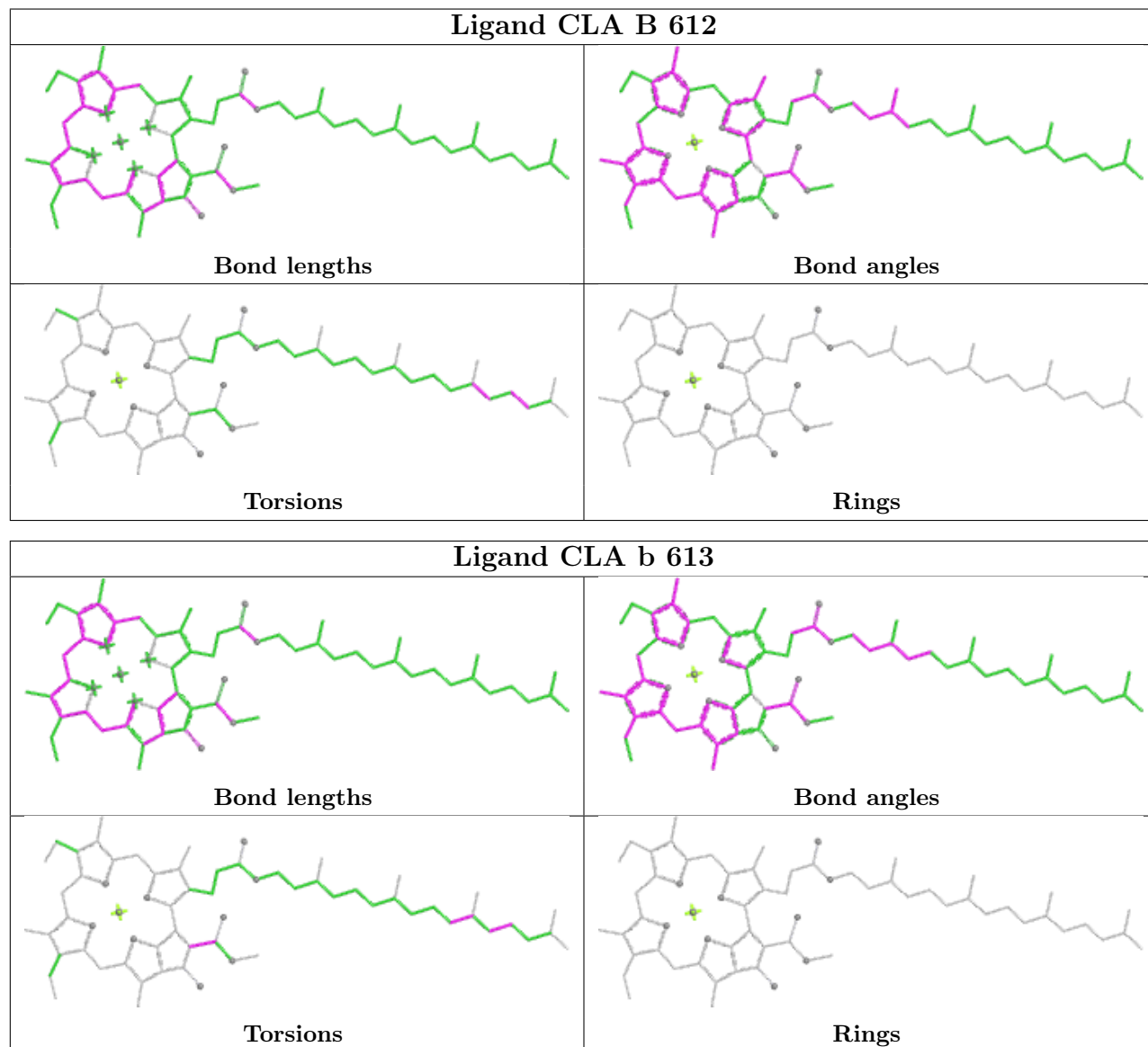
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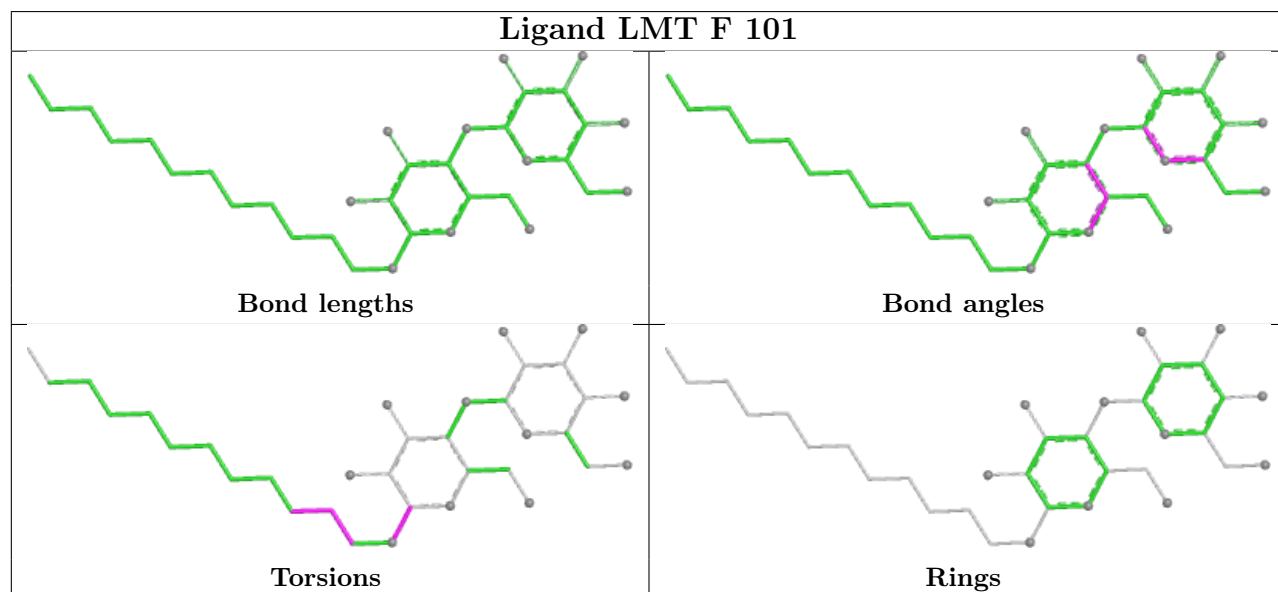
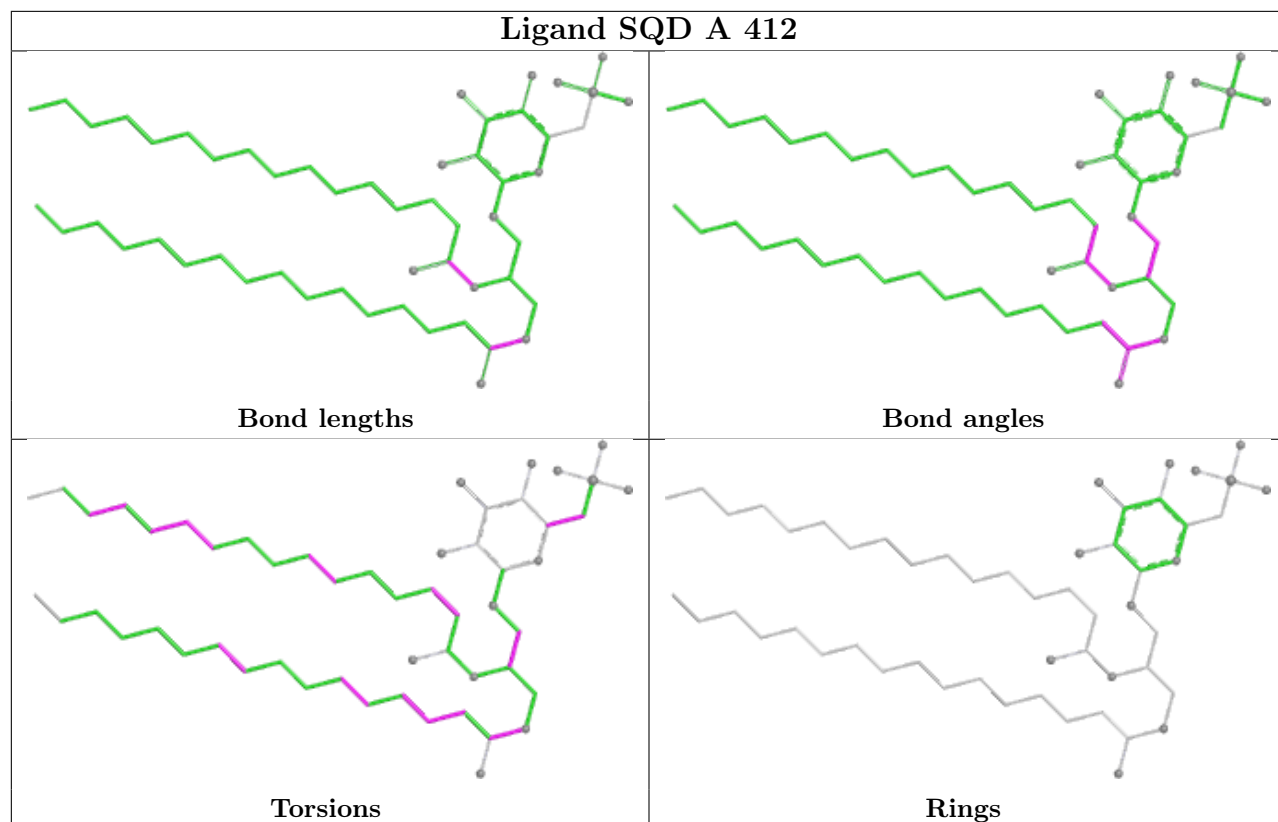
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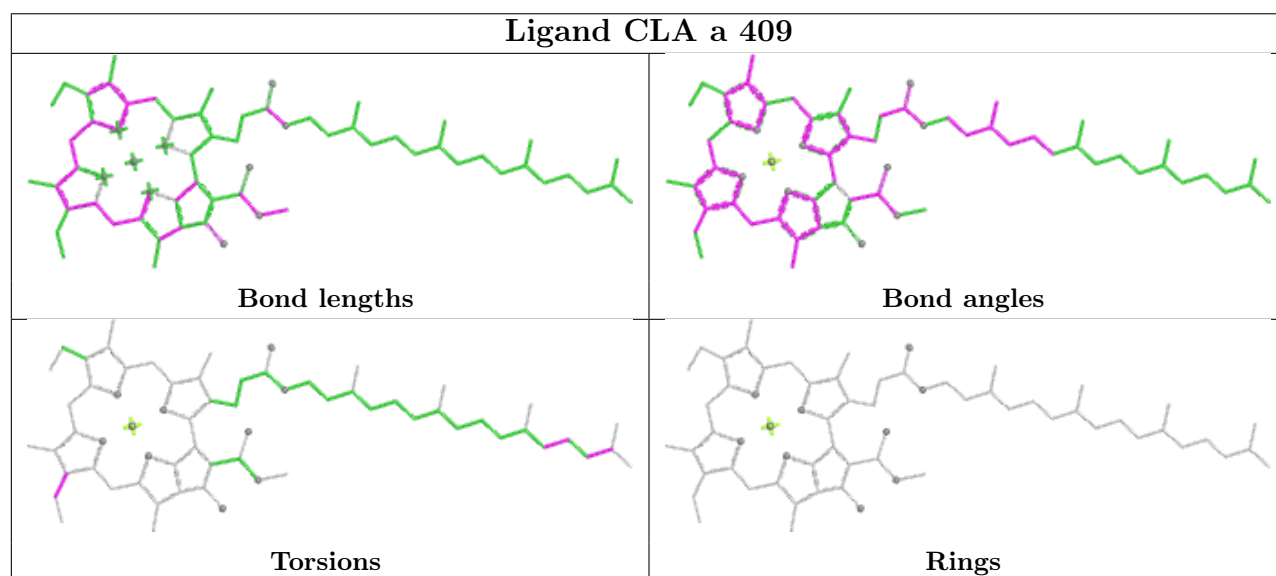
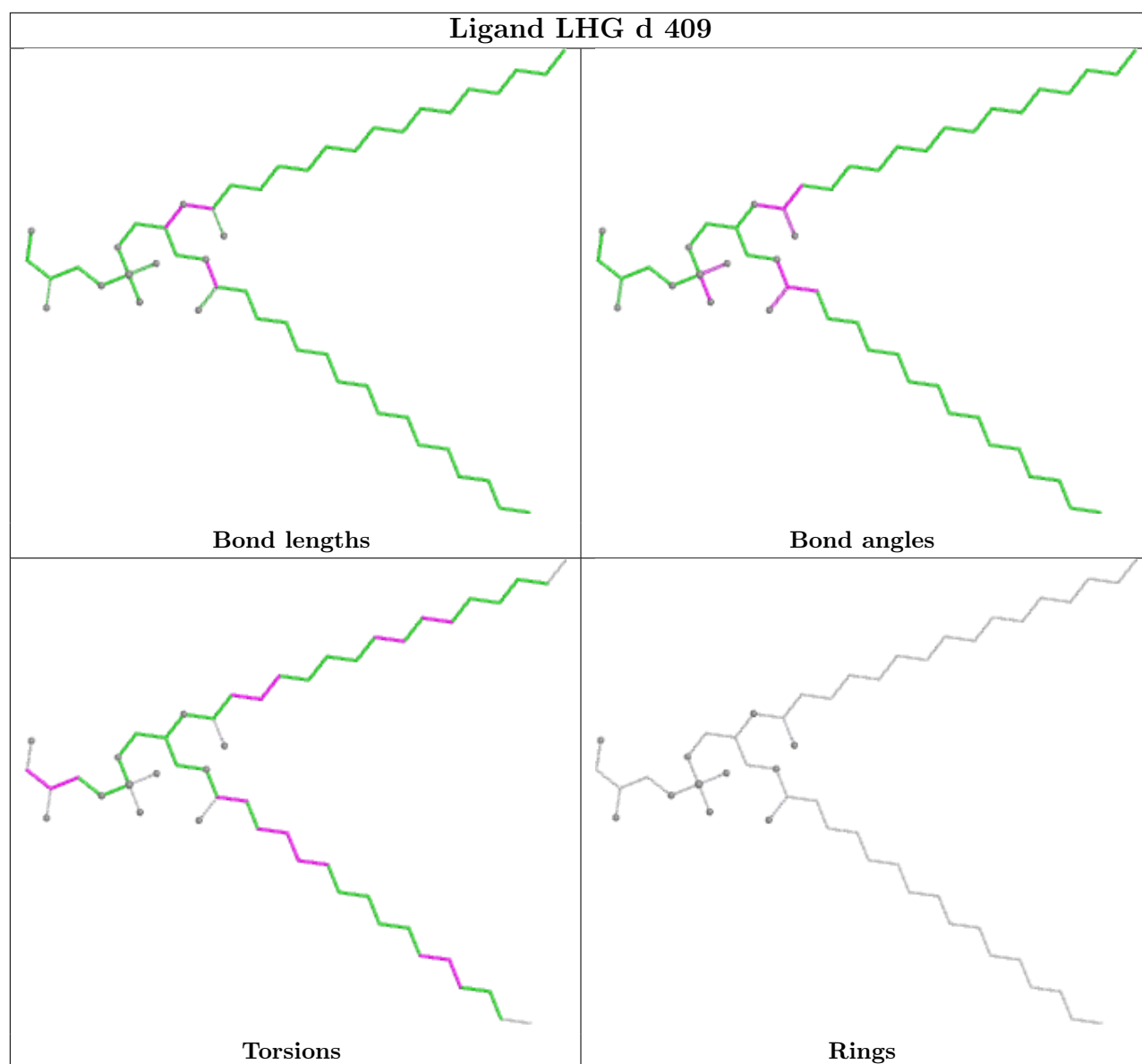
Mol	Chain	Res	Type	Clashes	Symm-Clashes
30	a	416[A]	PL9	9	0
23	B	616	CLA	3	0
23	d	404	CLA	4	0
24	b	628	BCR	1	0
33	d	414	HTG	2	0
23	b	616	CLA	2	0
23	B	608	CLA	3	0
23	B	610	CLA	3	0
23	C	513	CLA	8	0
23	c	505	CLA	2	0
24	H	101	BCR	3	0
27	b	630	LMT	1	0
29	a	418[B]	OEY	1	0
34	C	518	DGD	2	0
27	M	102	LMT	1	0
23	B	611	CLA	3	0
34	c	521	DGD	1	0
23	C	509	CLA	4	0
23	c	509	CLA	9	0
35	c	522	LMG	1	0
24	D	408	BCR	5	0
24	k	102	BCR	2	0
34	c	519	DGD	1	0
26	C	524	GOL	1	0
33	c	524	HTG	1	0
23	C	514	CLA	7	0
23	c	508	CLA	1	0
26	c	528	GOL	1	0
25	B	621	SQD	1	0
23	c	512	CLA	5	0
27	T	104	LMT	1	0
27	a	419	LMT	1	0
30	d	407[A]	PL9	1	0
23	b	623	CLA	3	0
29	A	415[B]	OEY	1	0
23	b	614	CLA	3	0
24	A	408	BCR	1	0
23	C	510	CLA	2	0
23	B	615	CLA	7	0
23	a	412	CLA	2	0

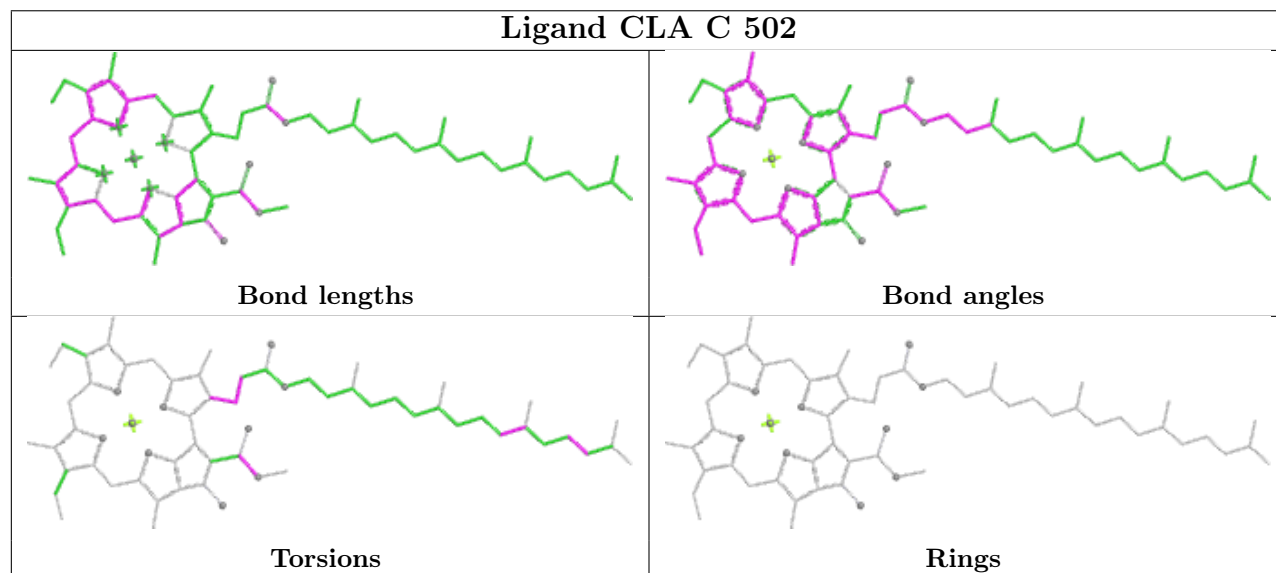
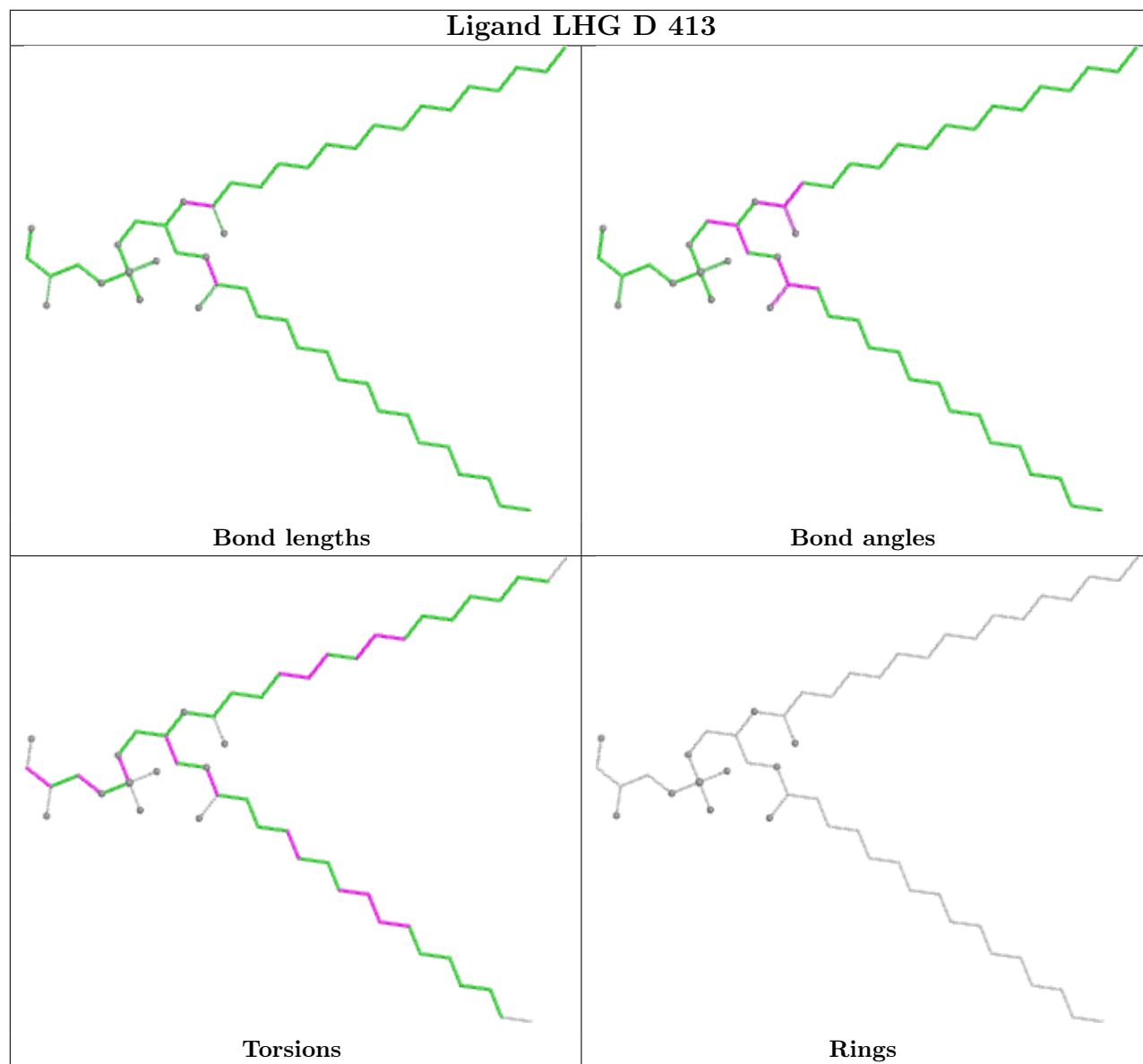
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In

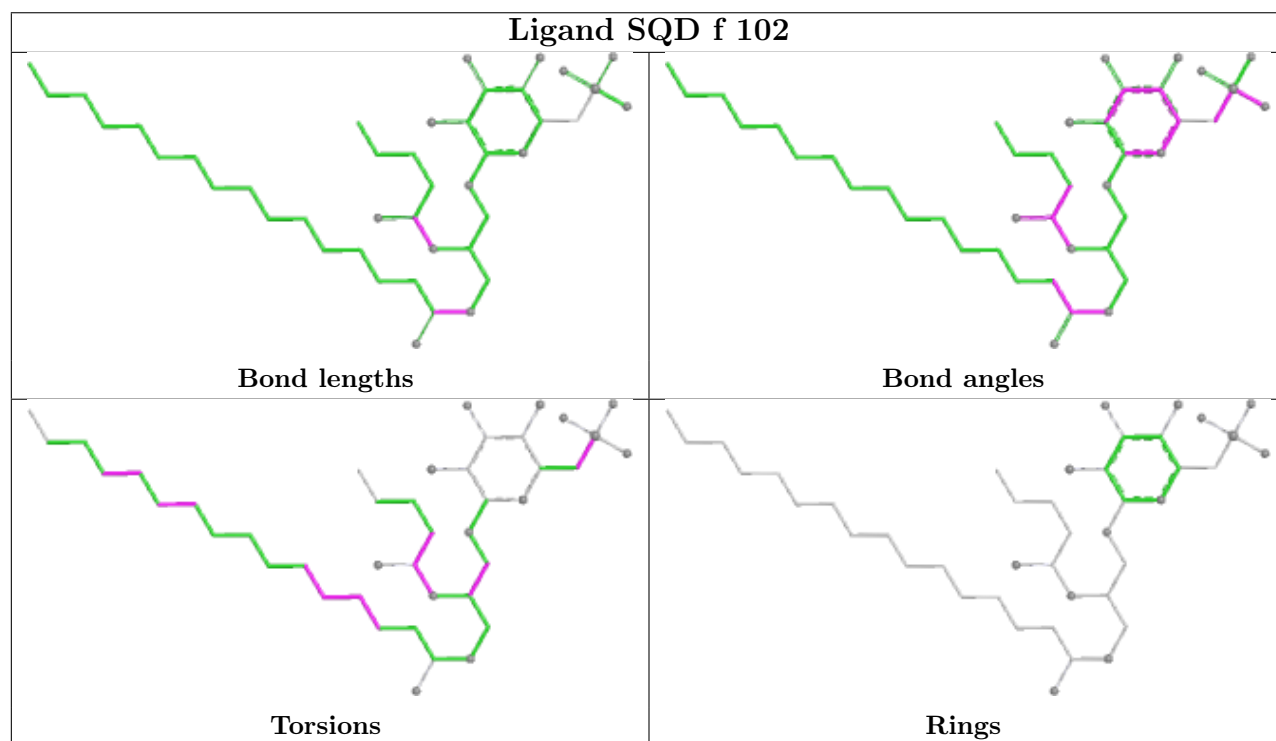
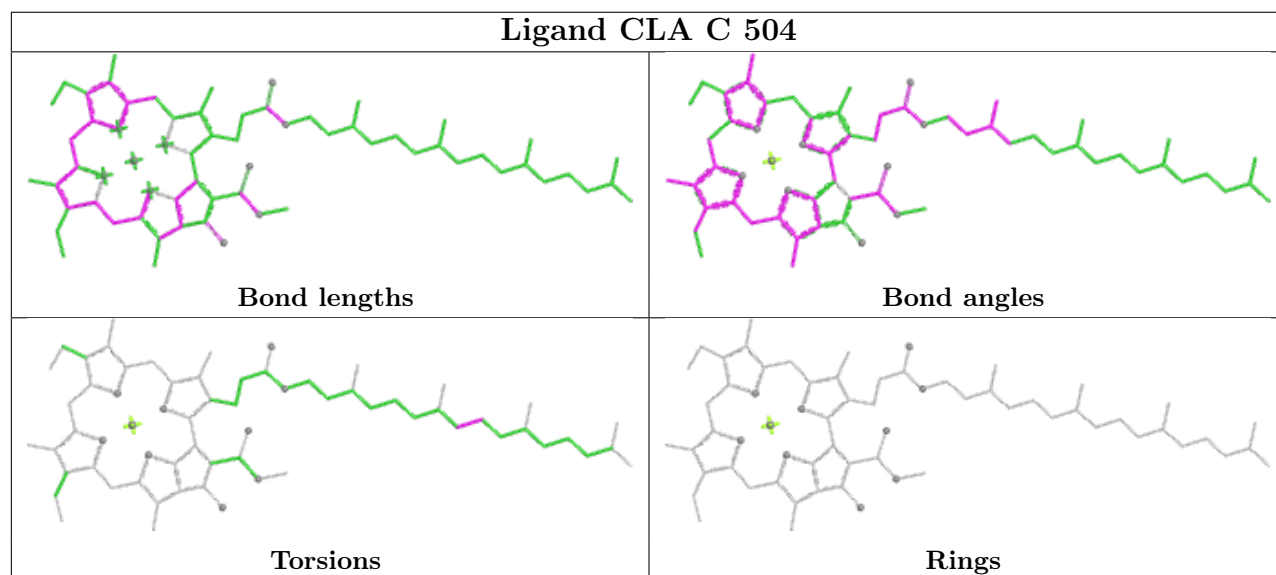
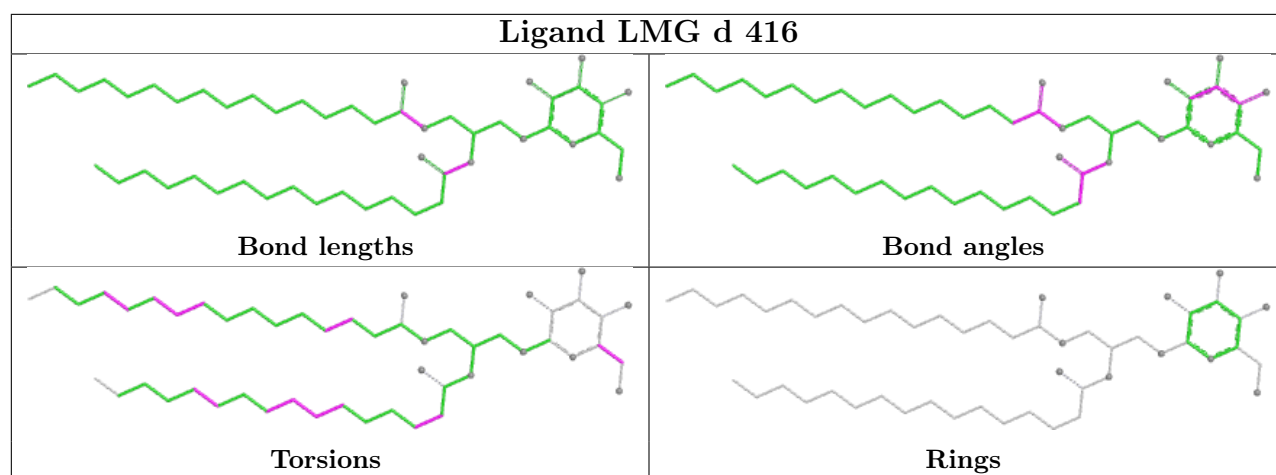
addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. 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.

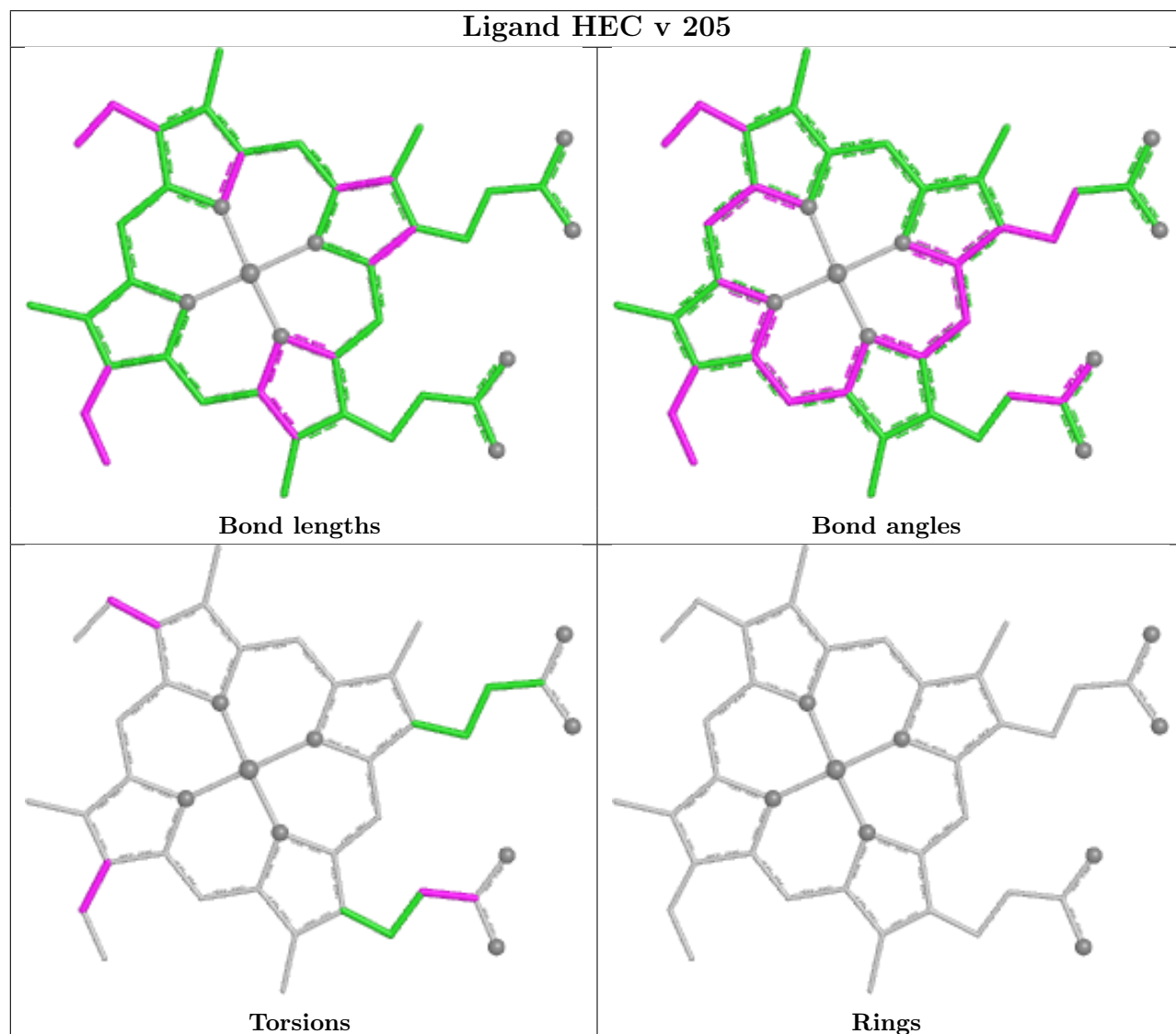
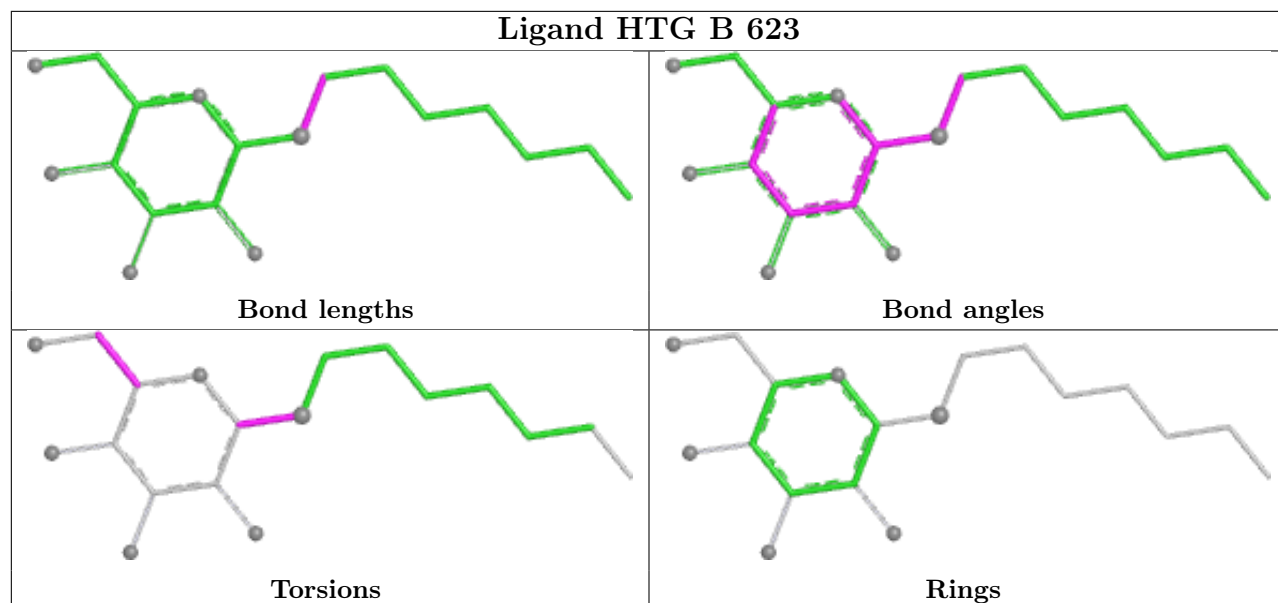


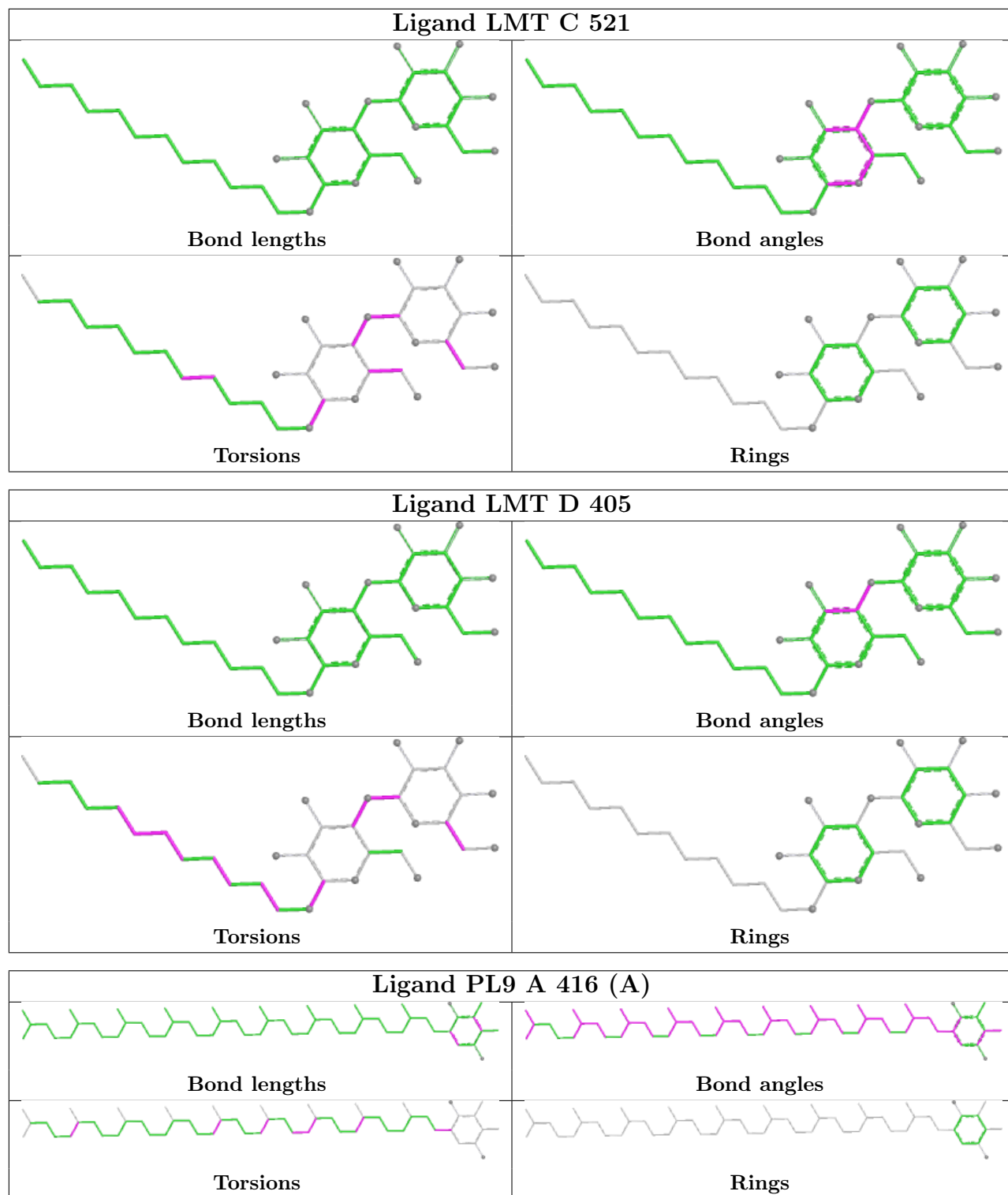


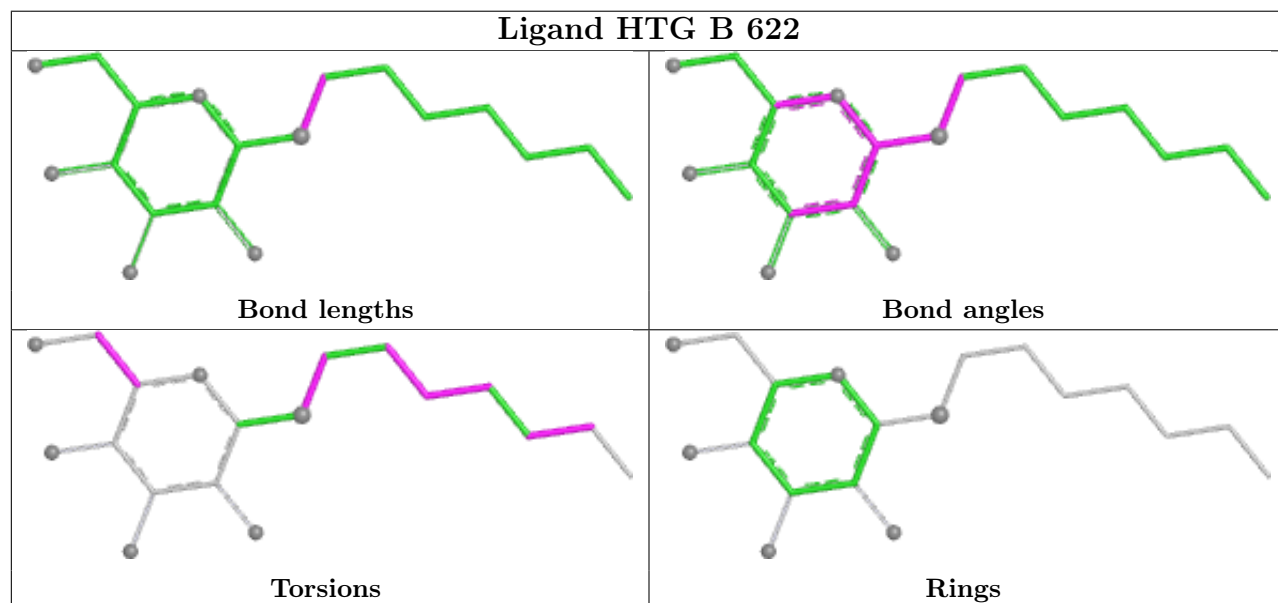
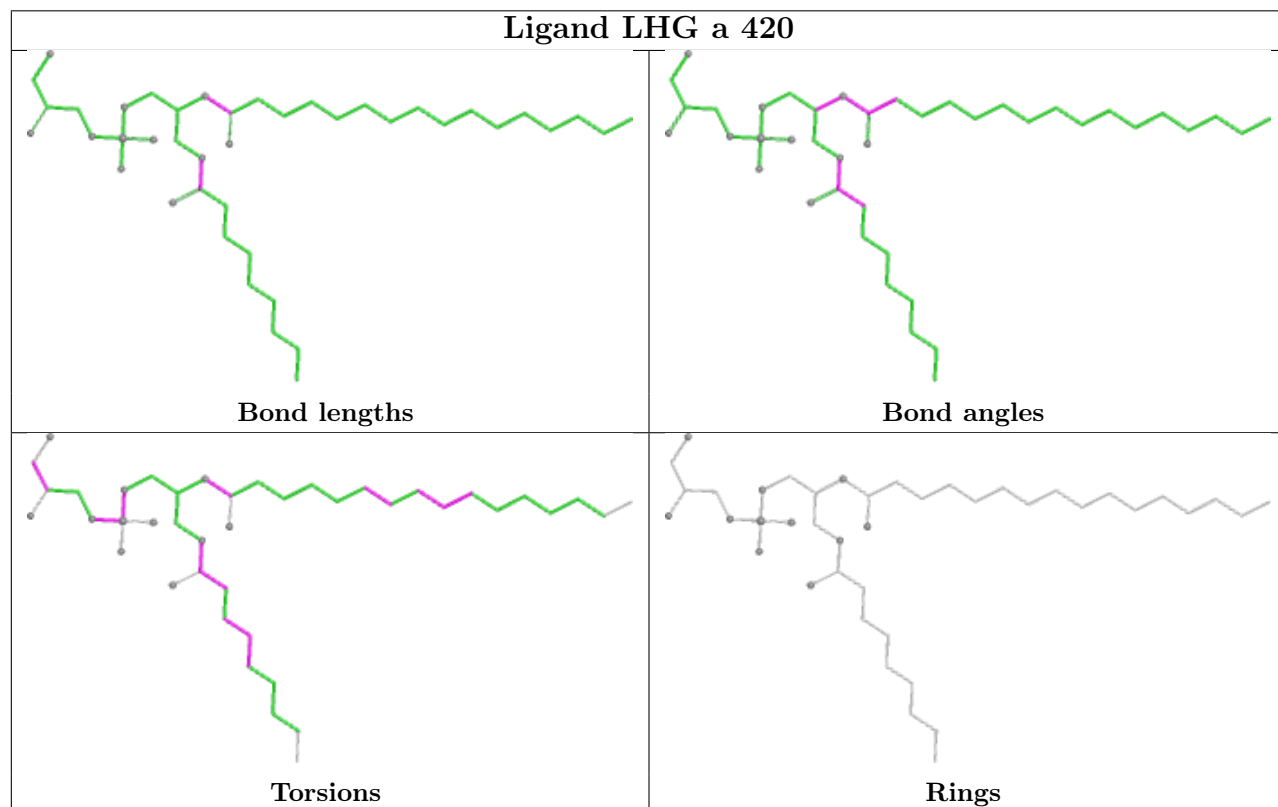
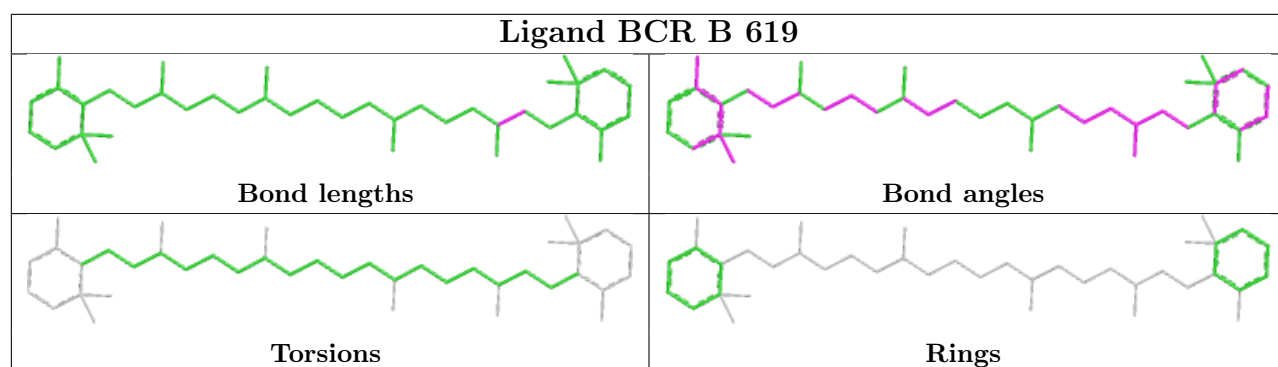


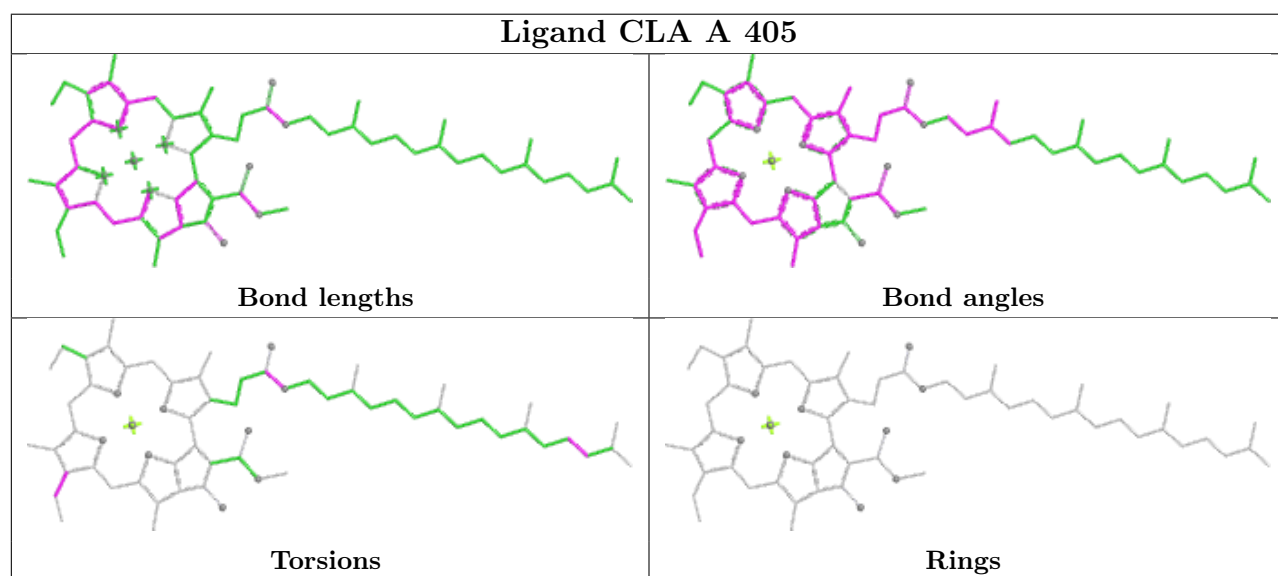
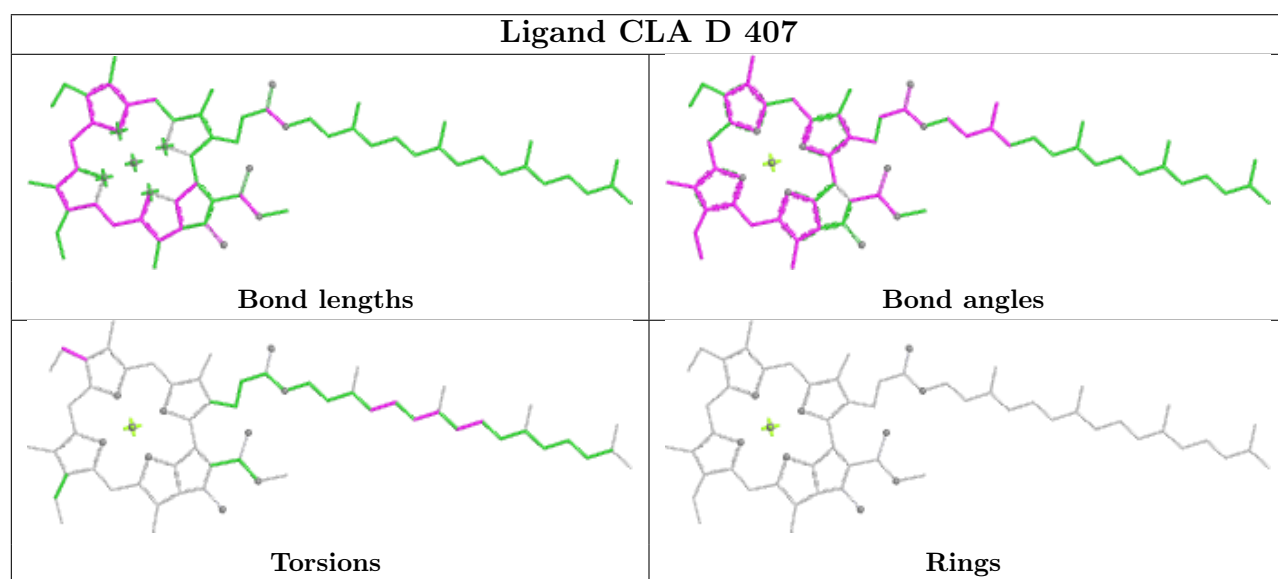
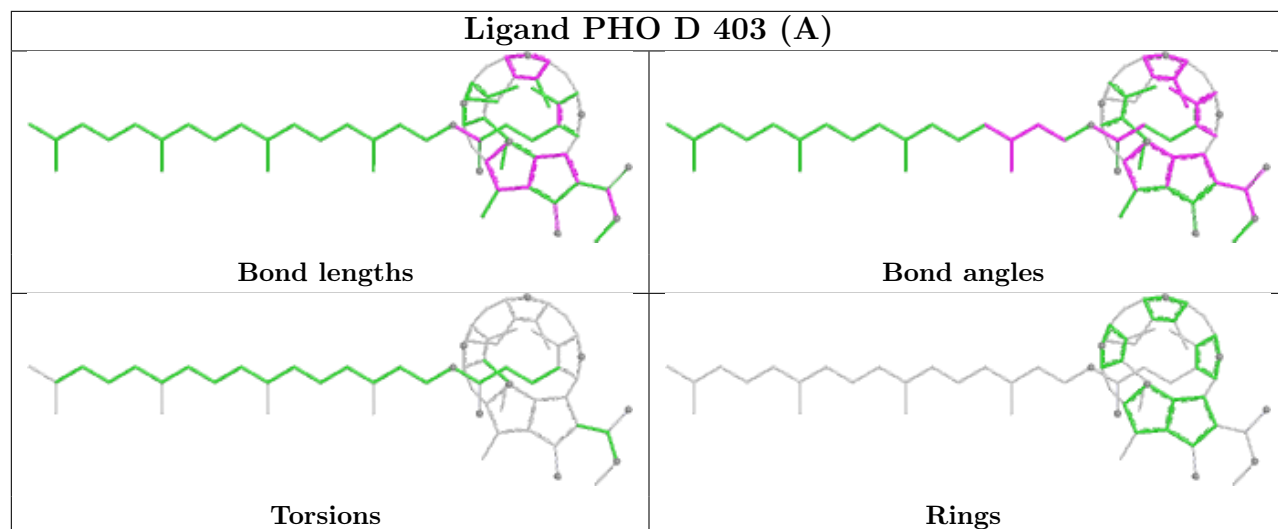


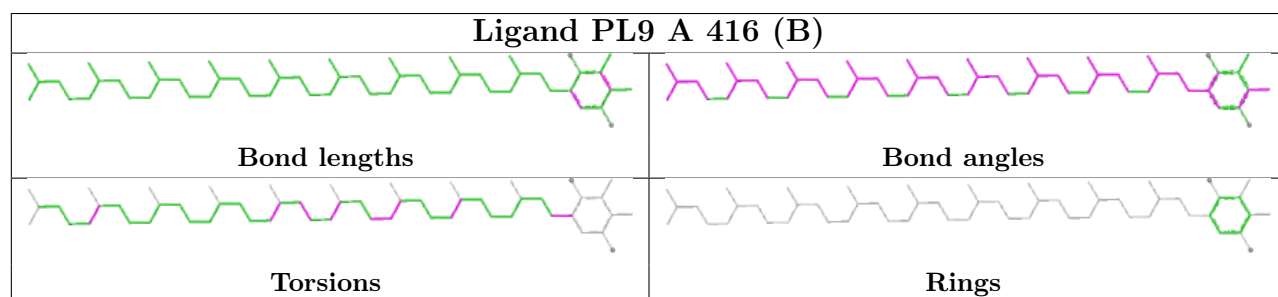
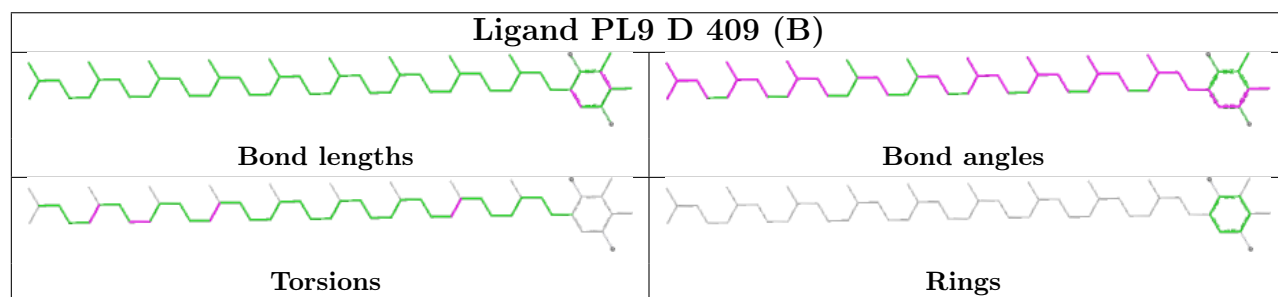
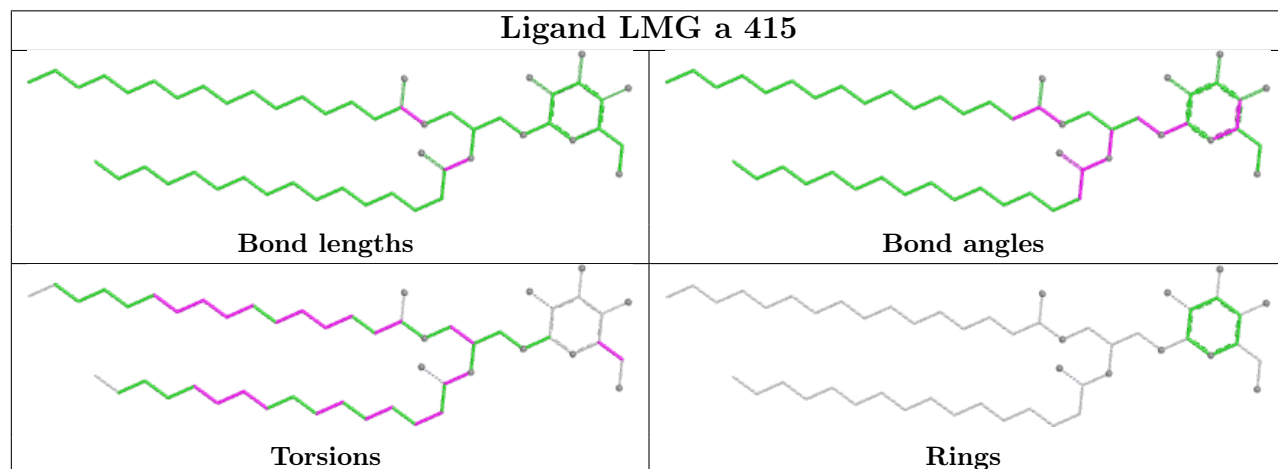
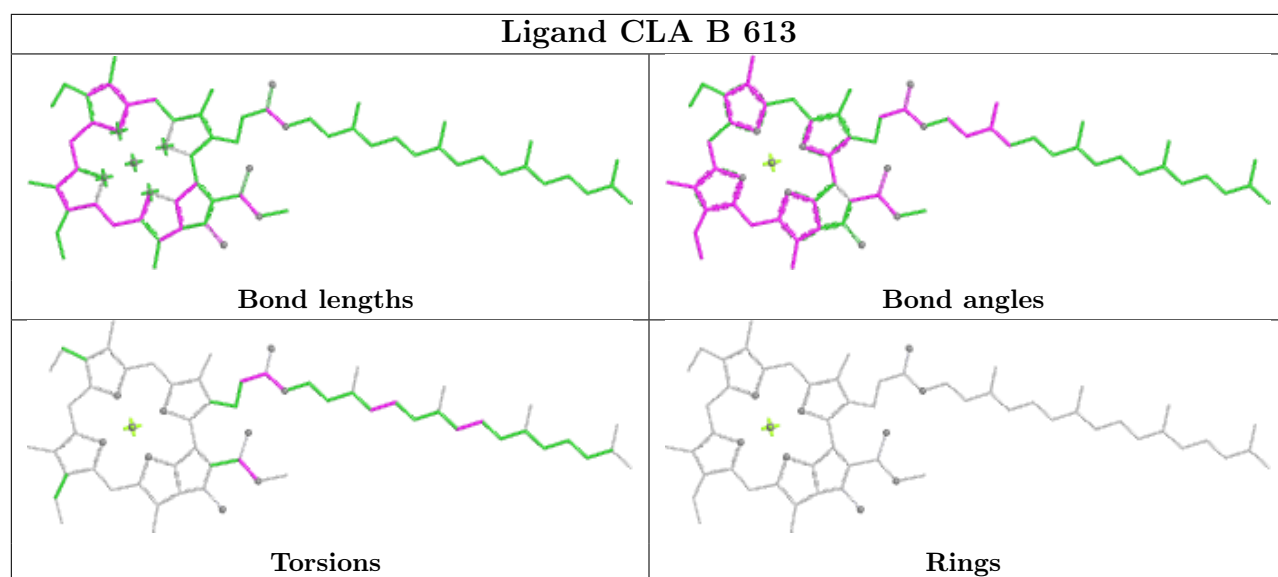


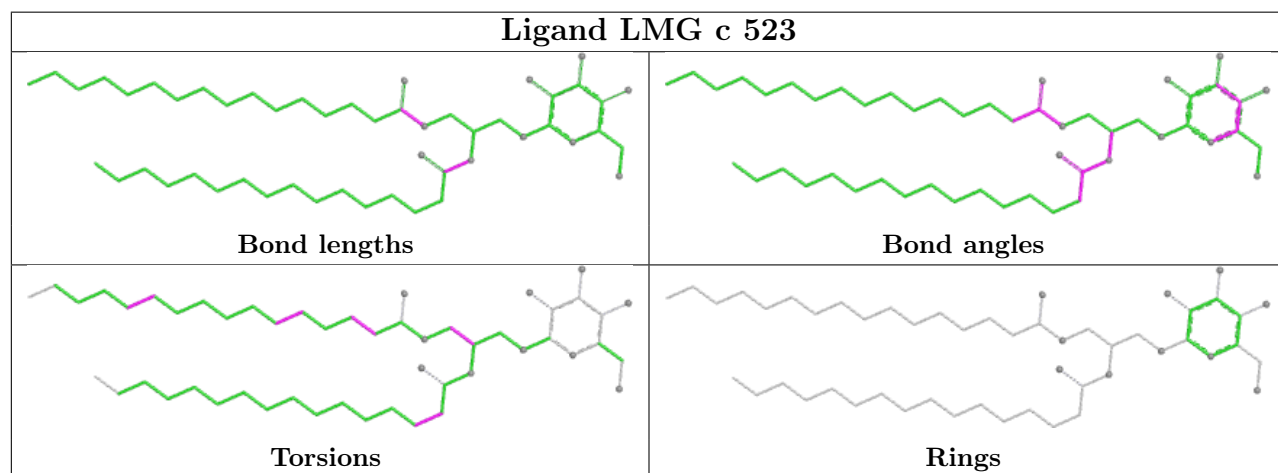
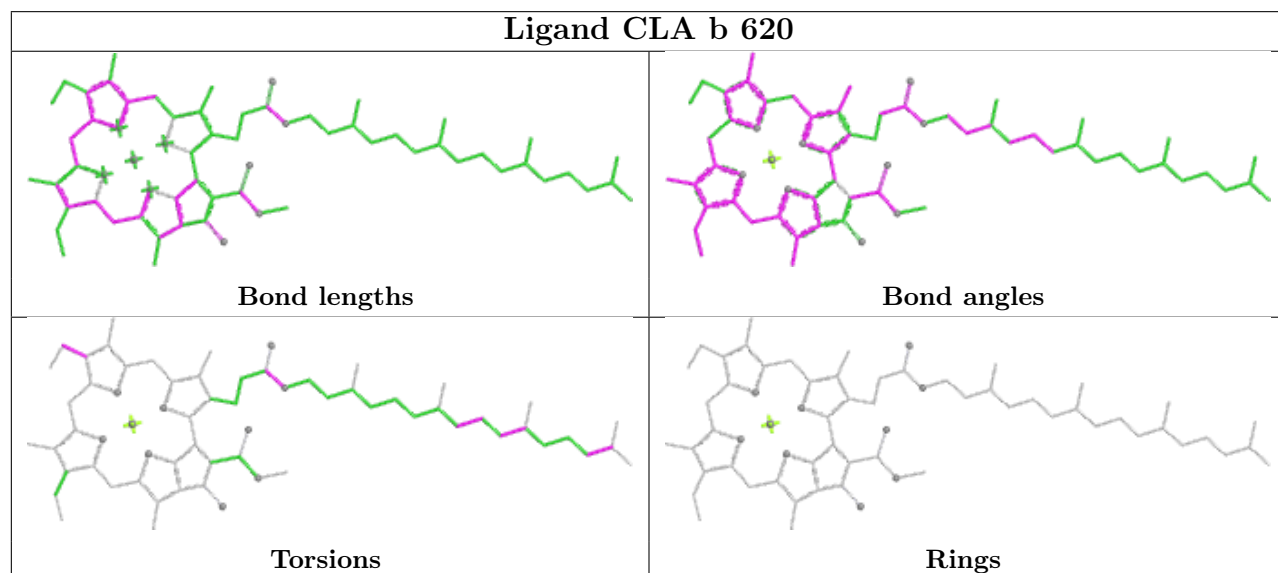
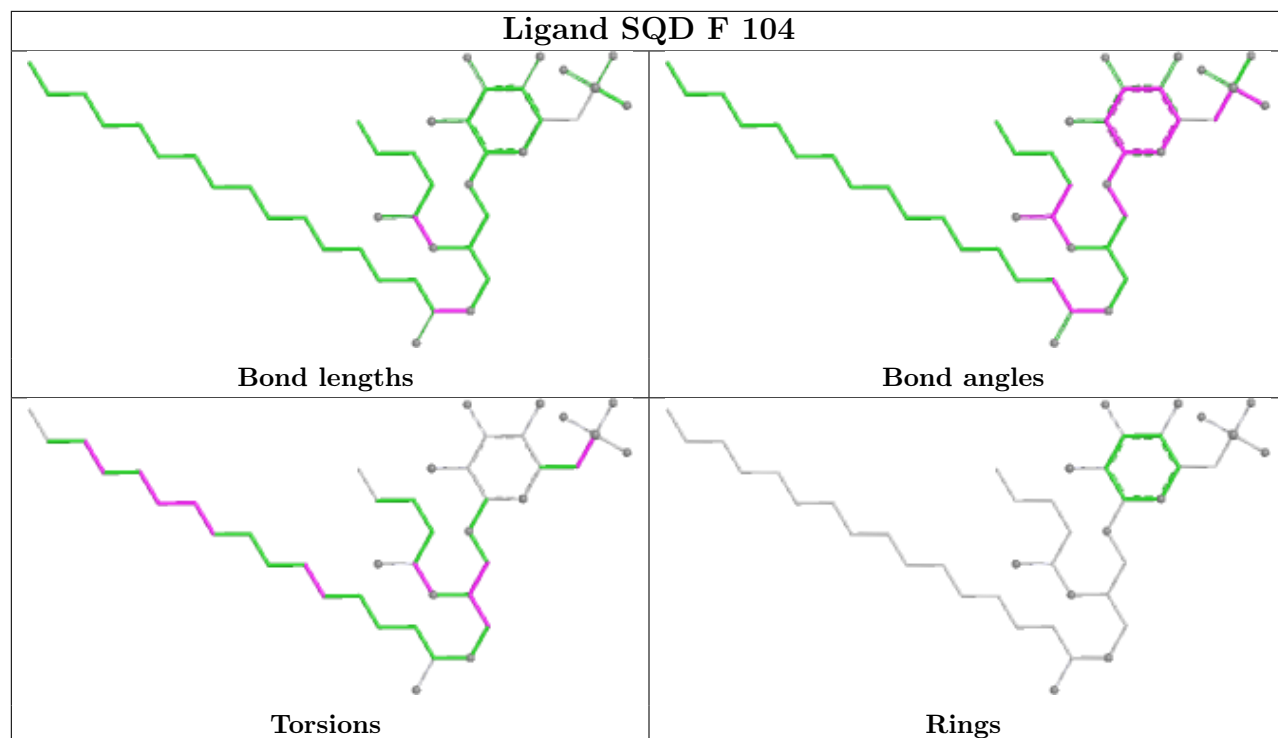


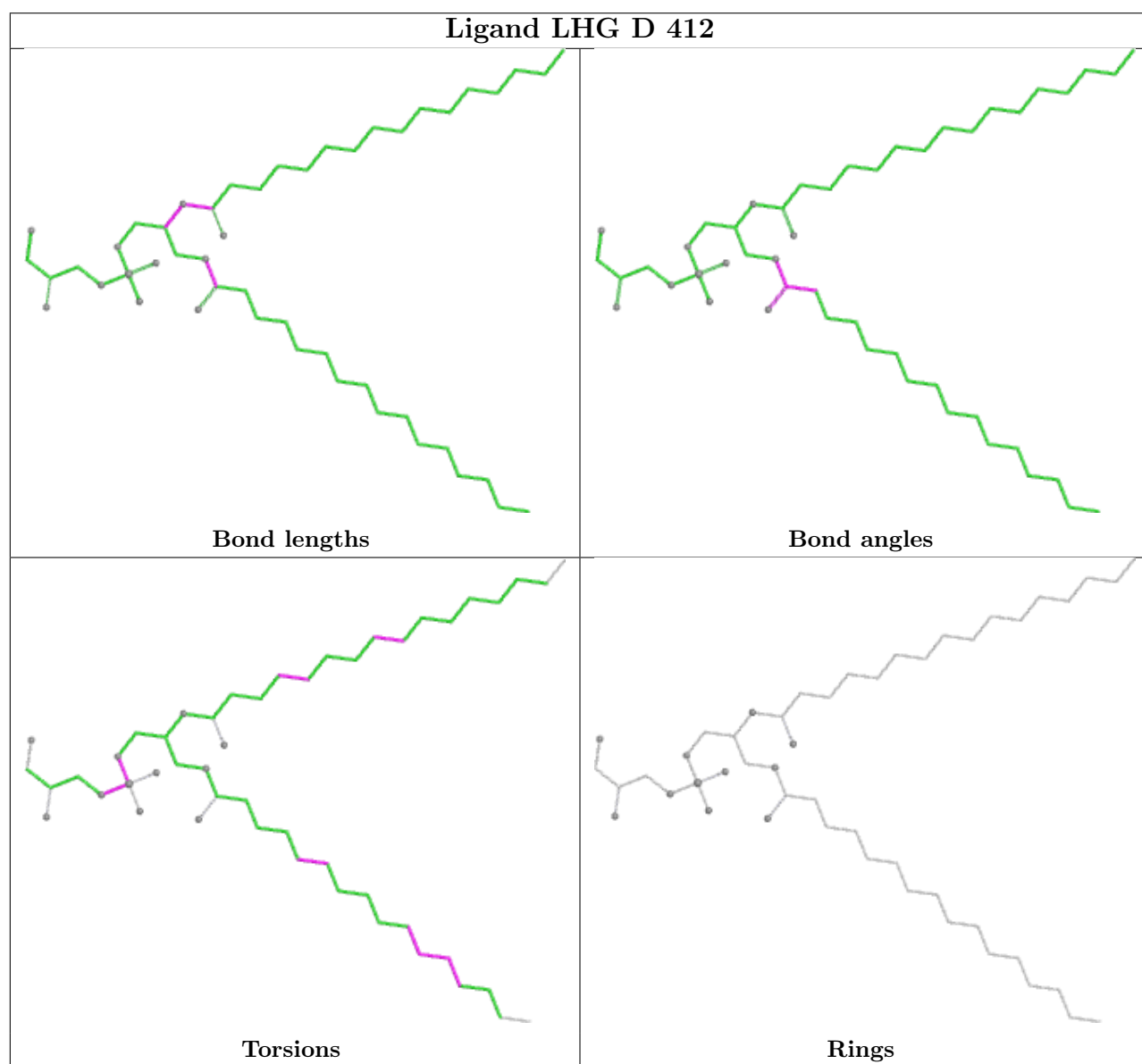
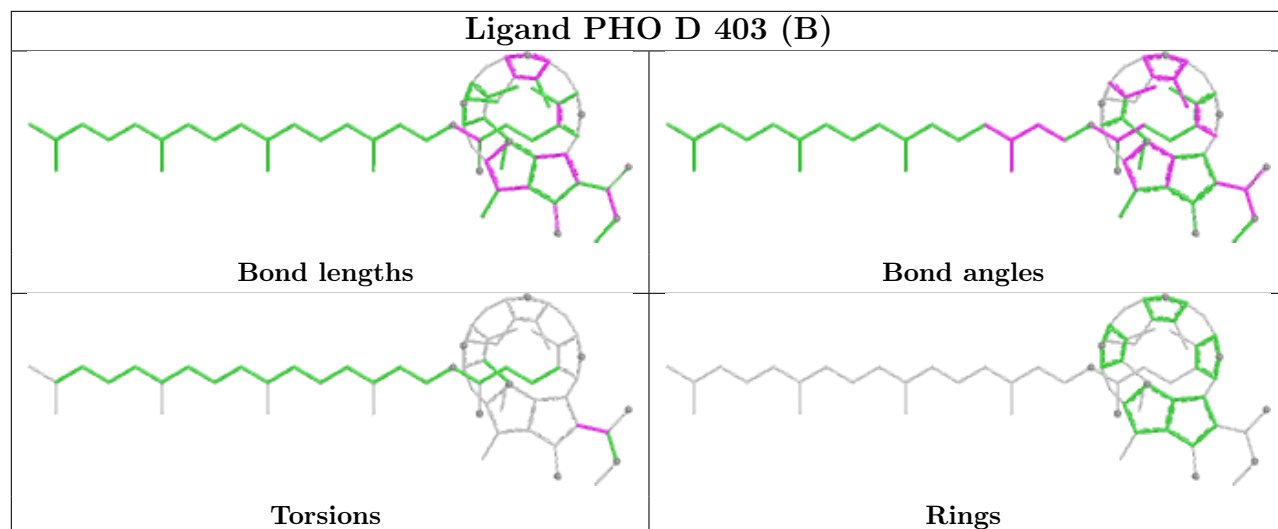


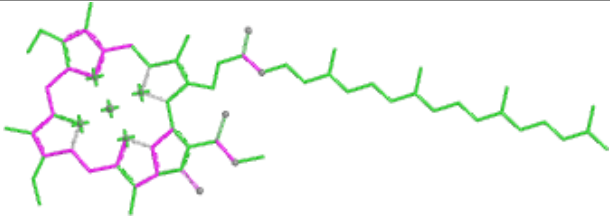
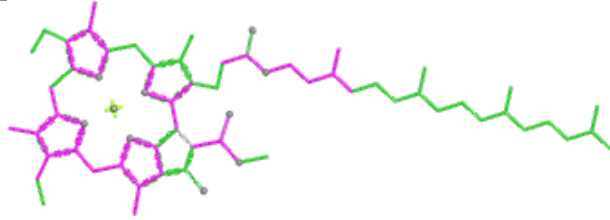
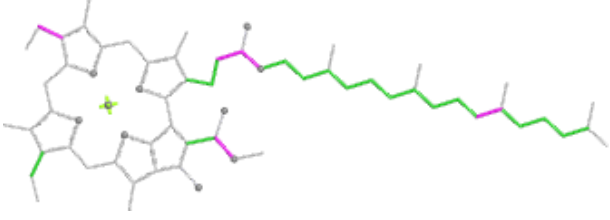
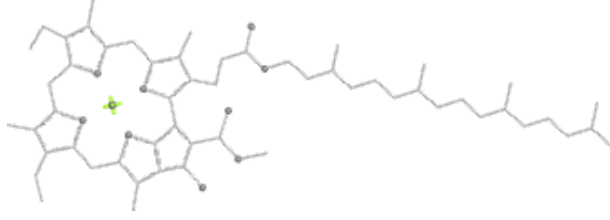
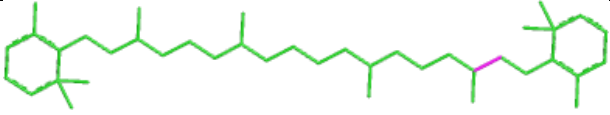
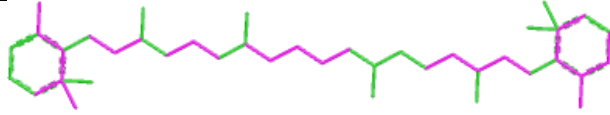
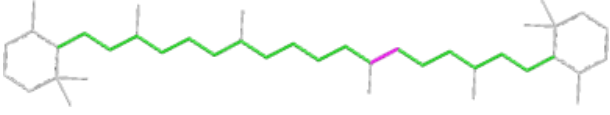
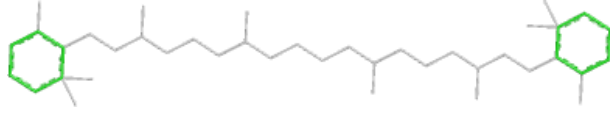
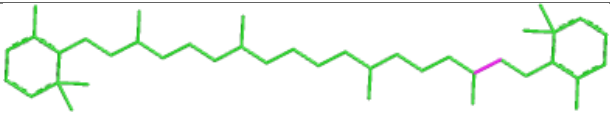
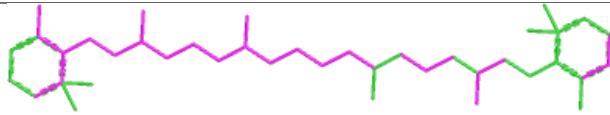
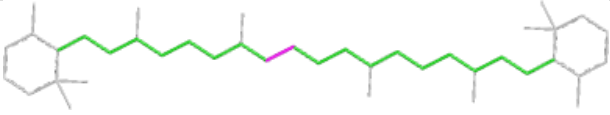
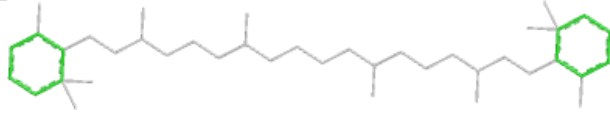


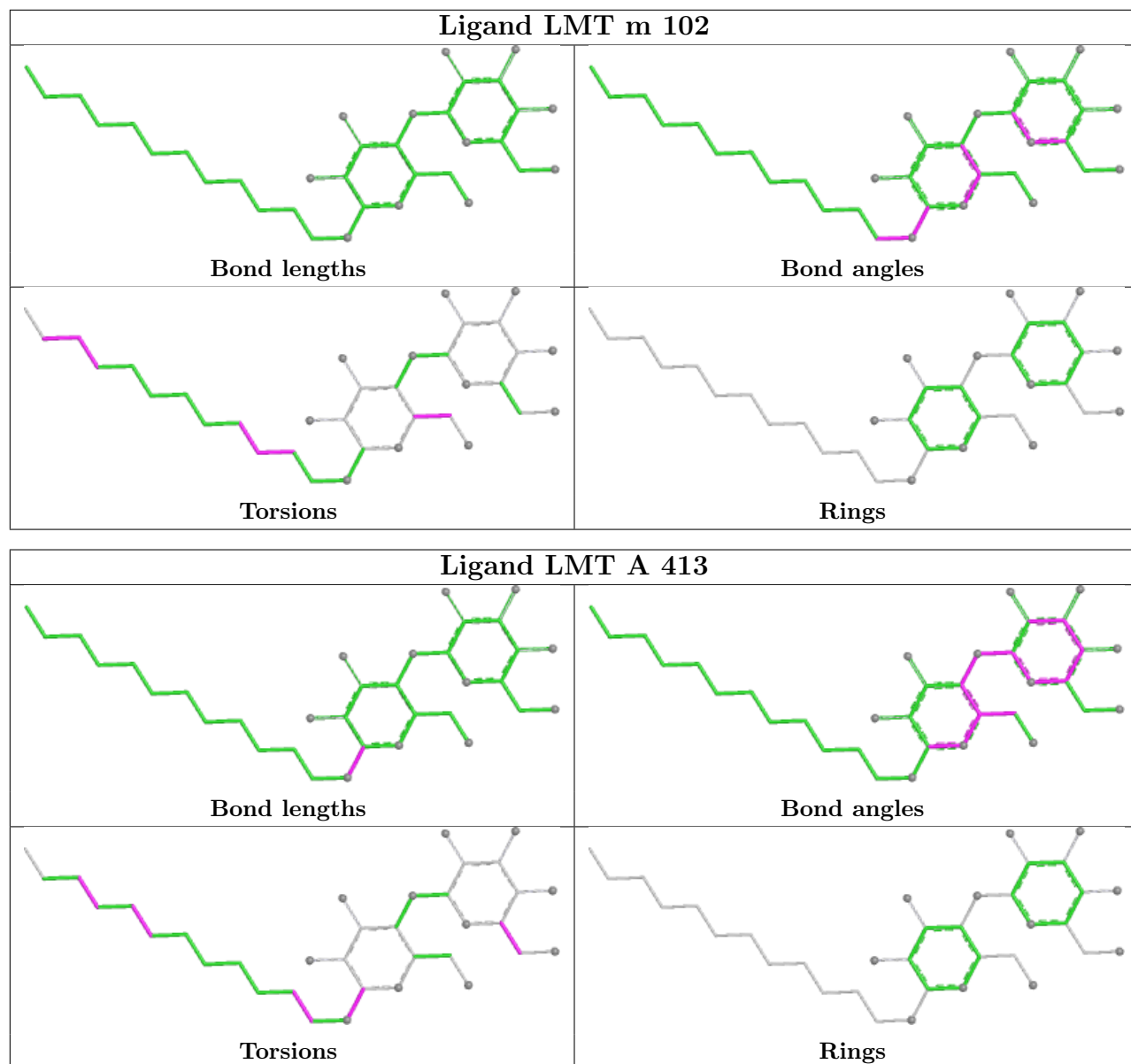


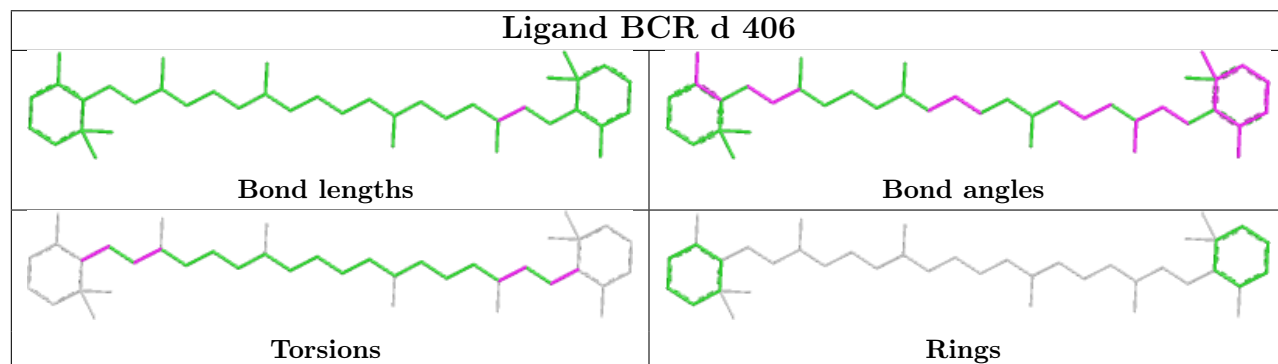
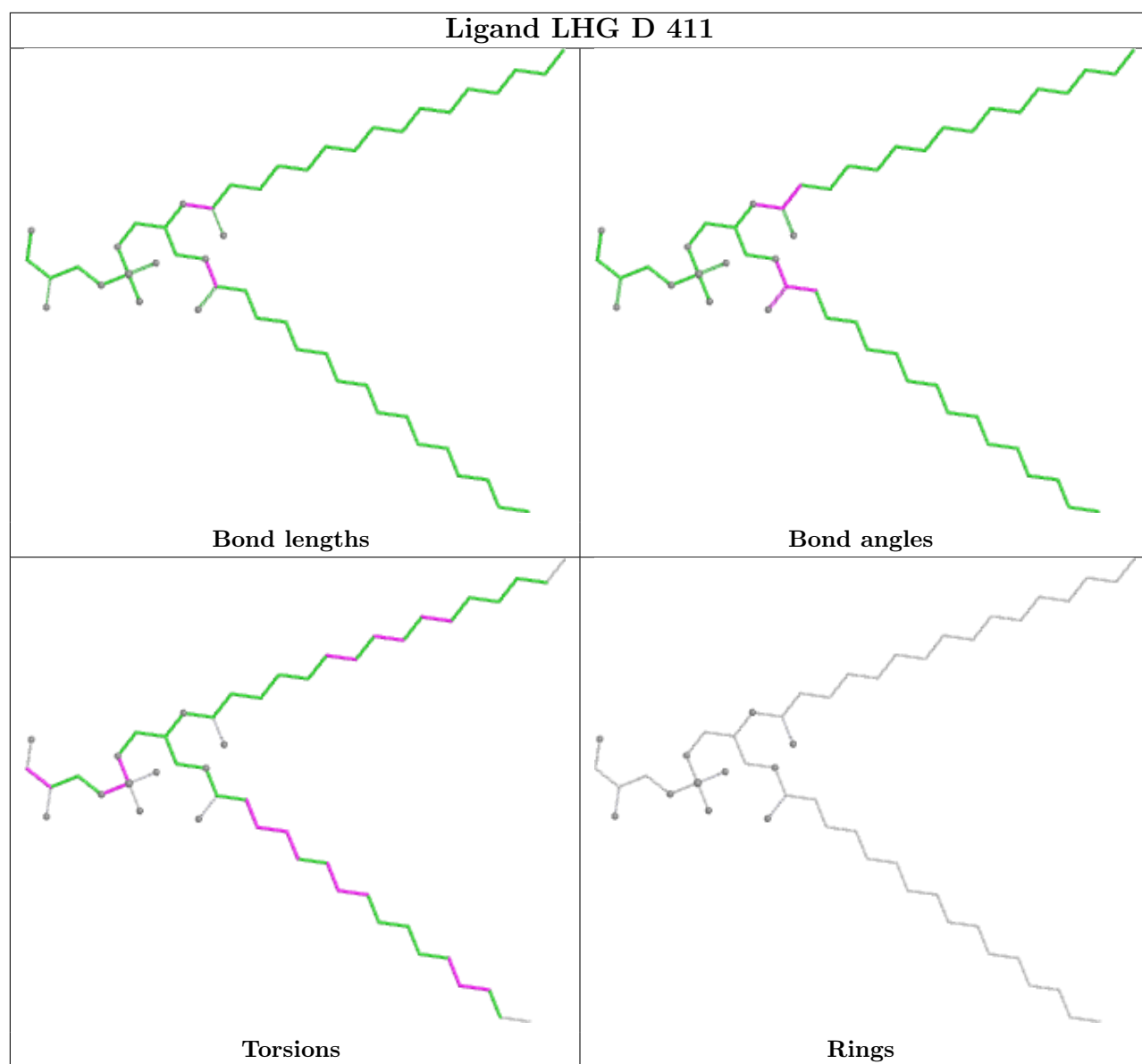




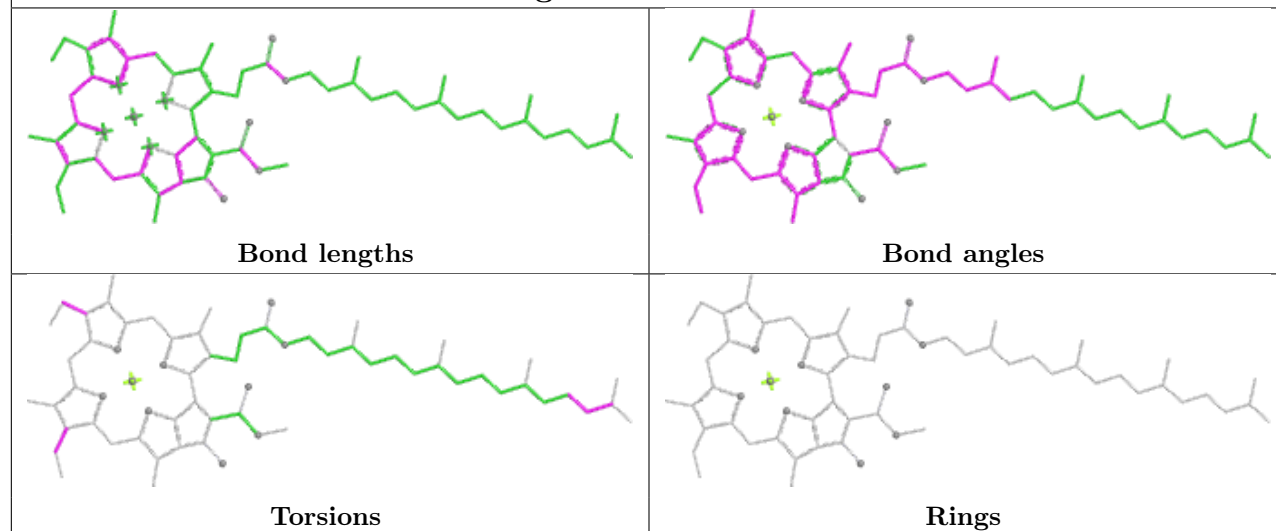


Ligand CLA C 506	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR K 103	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR T 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

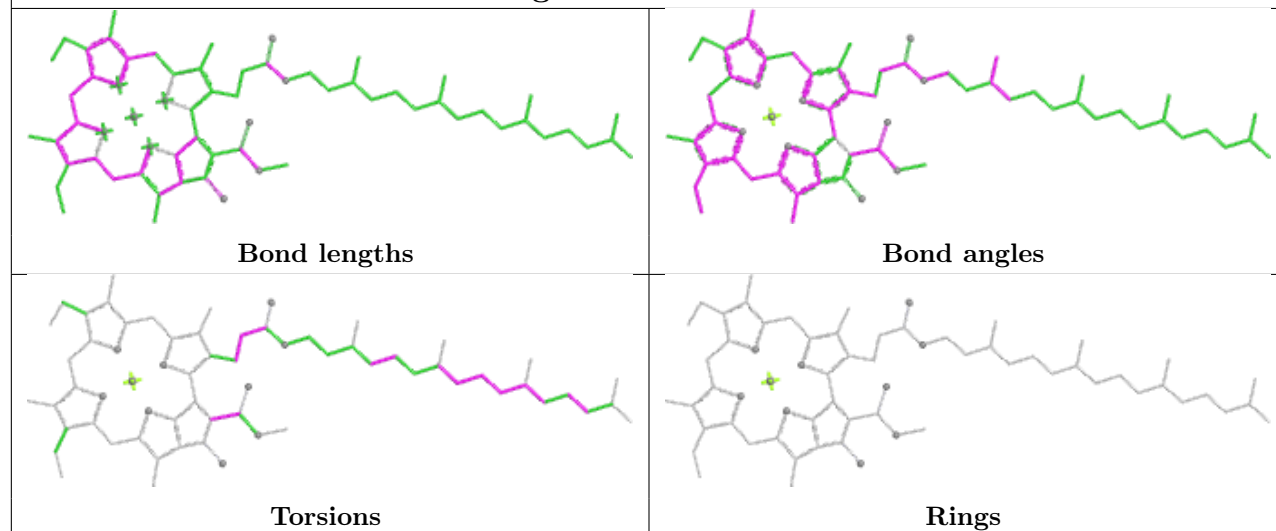




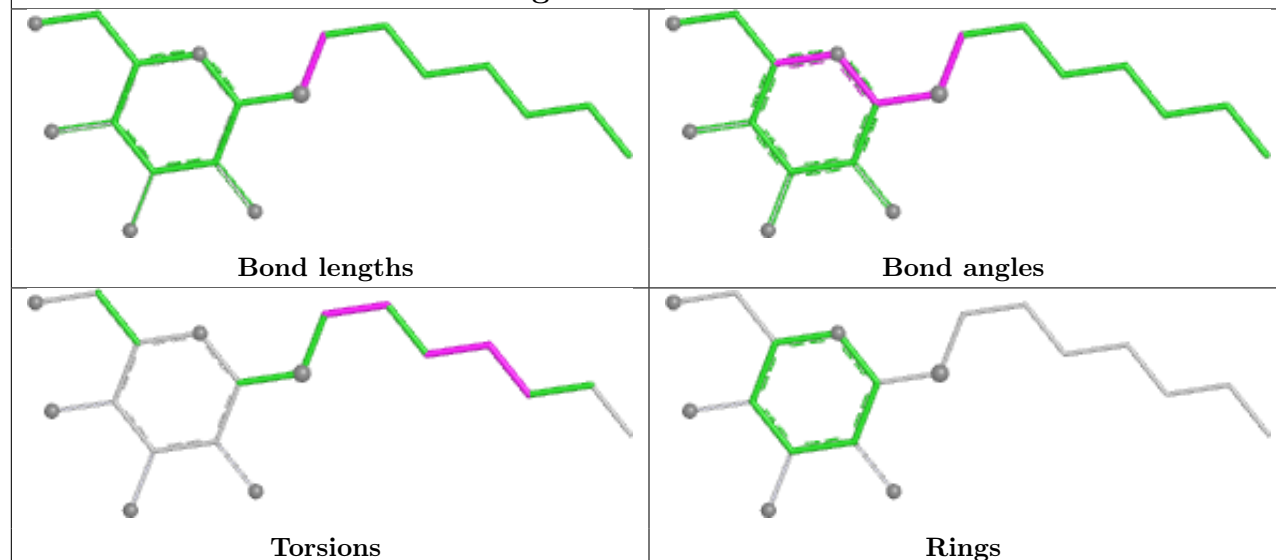
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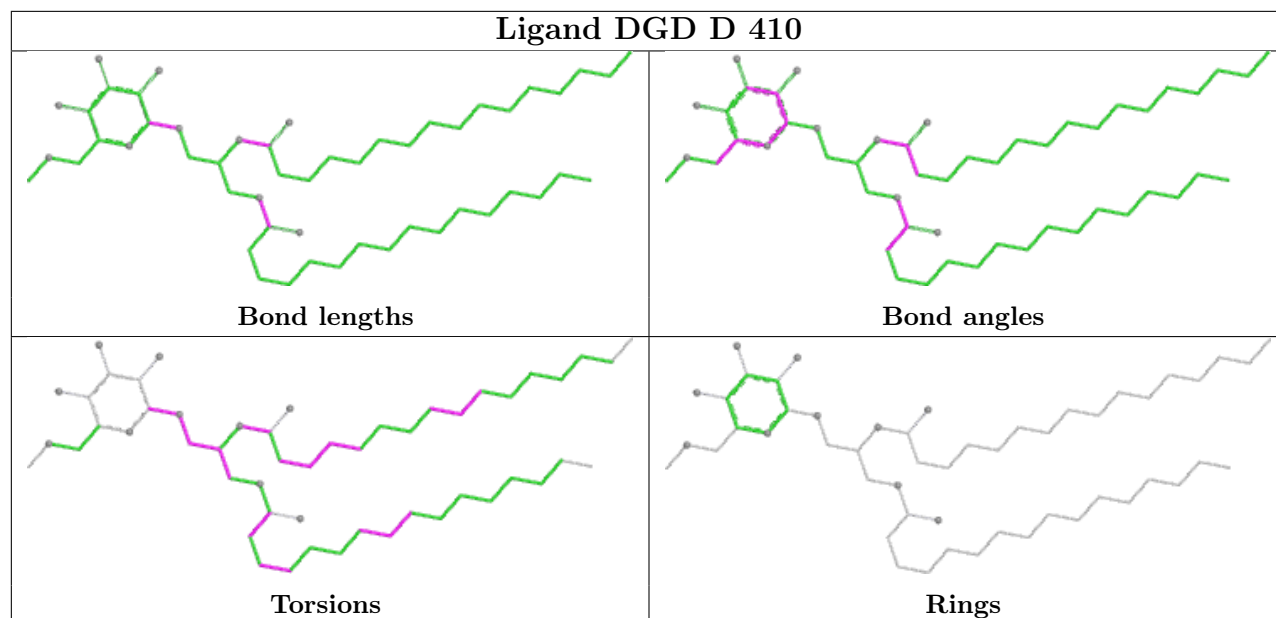


Ligand CLA B 602

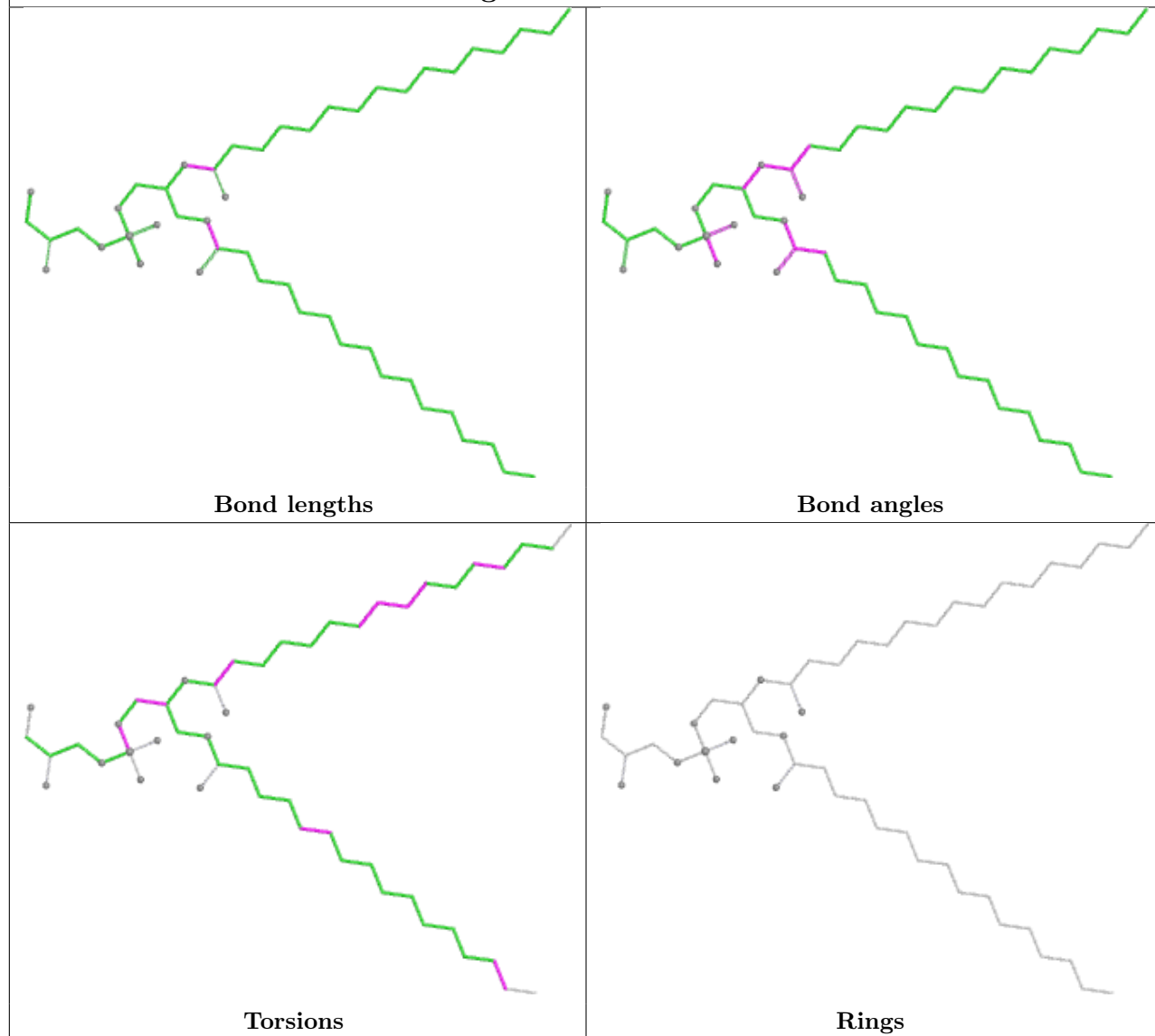


Ligand HTG b 601

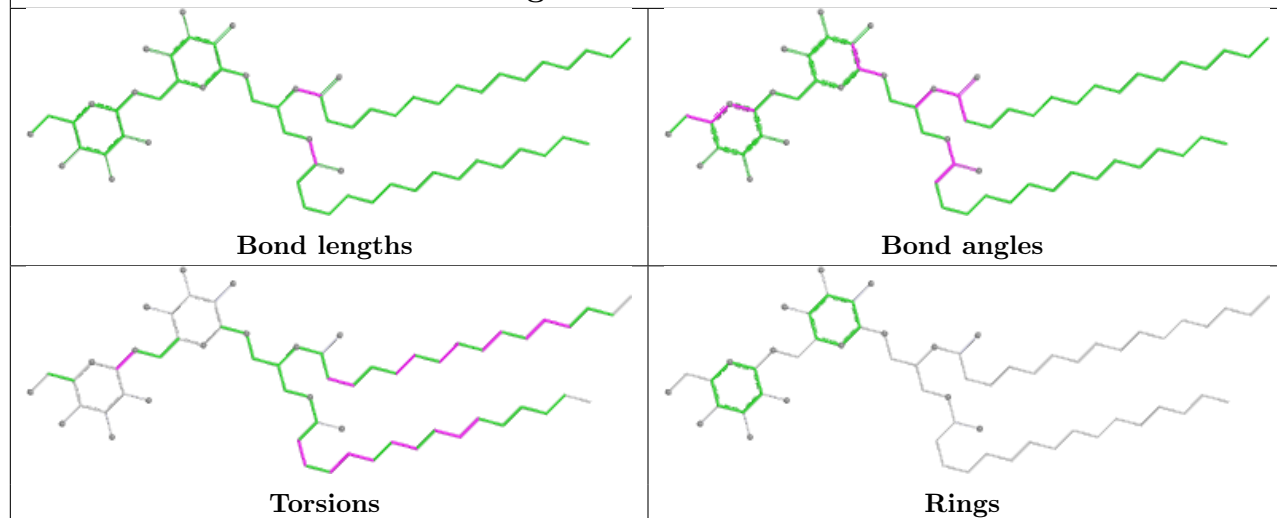




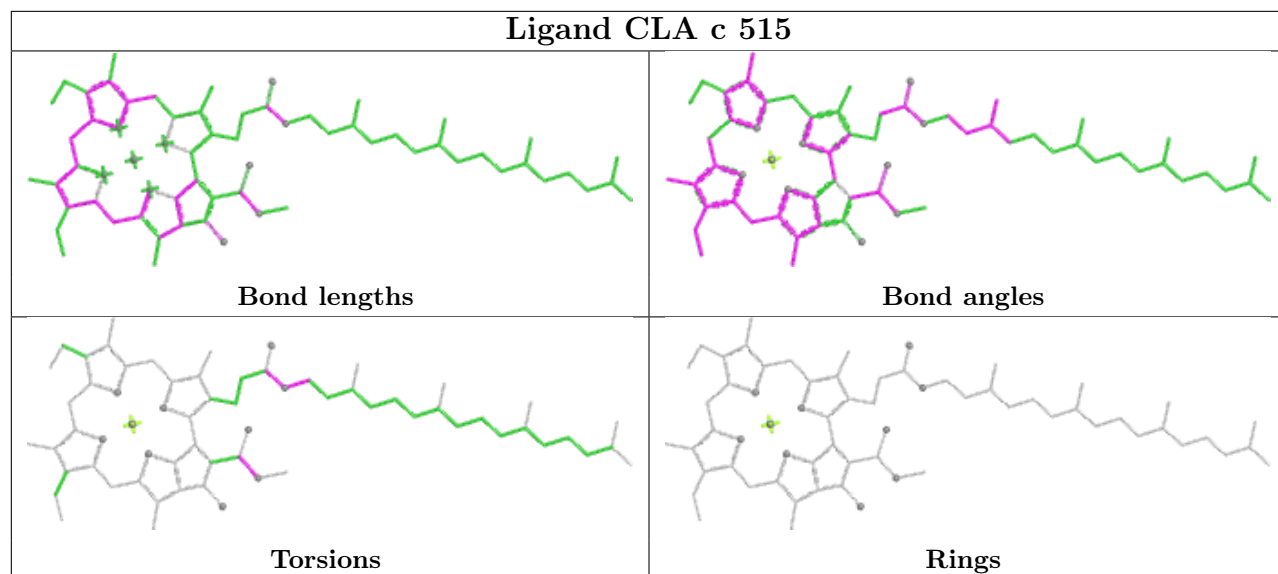
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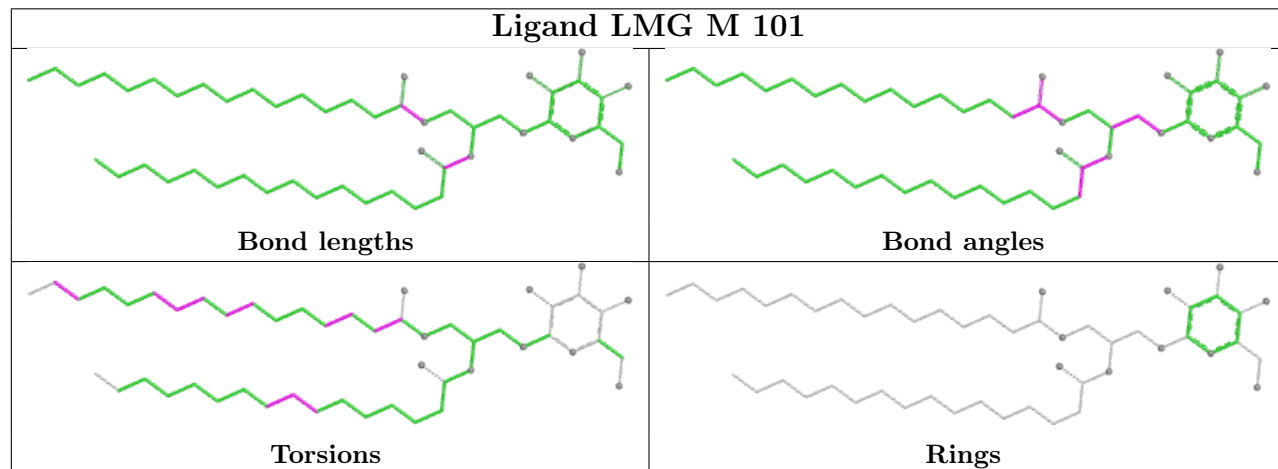
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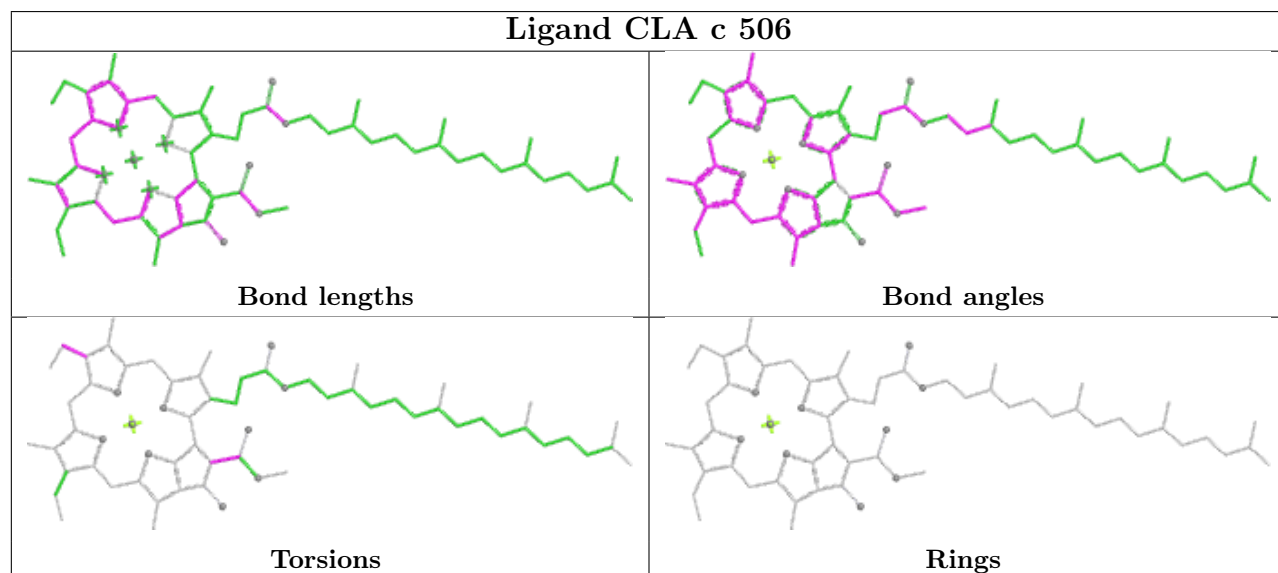
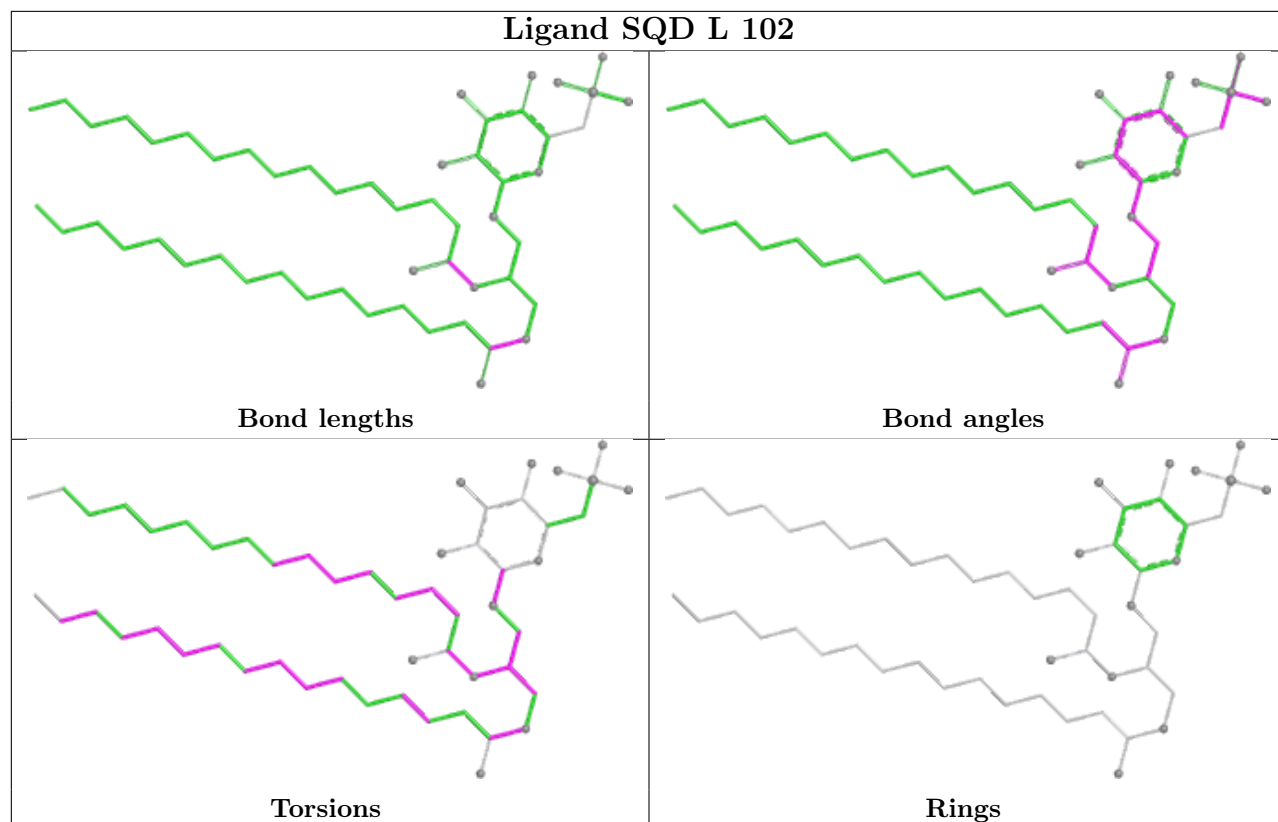


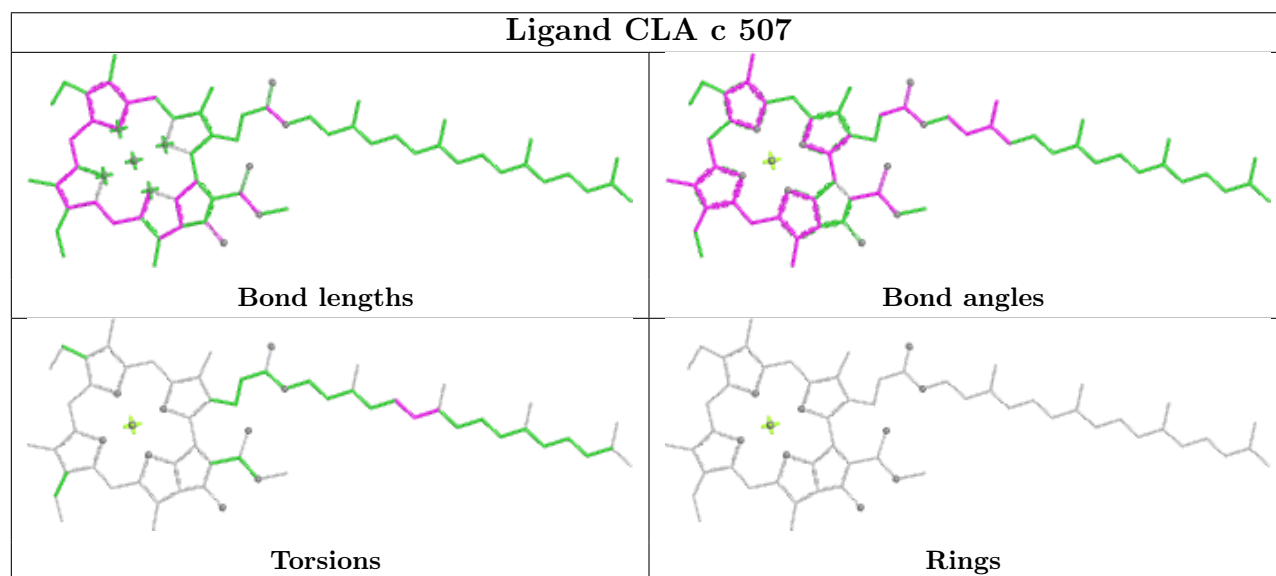
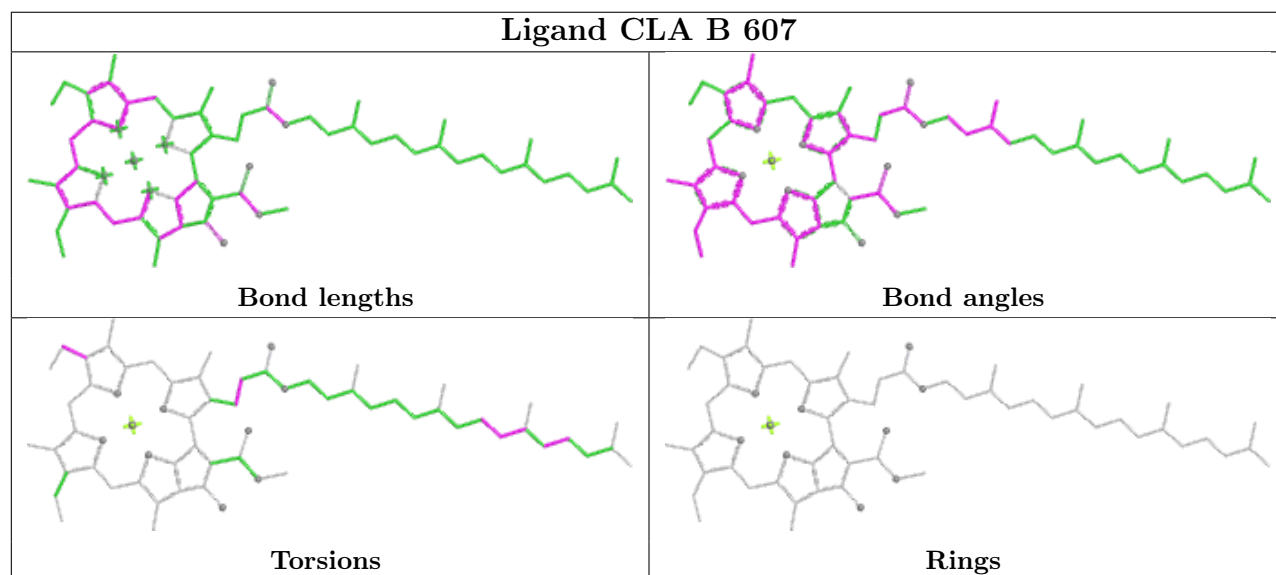
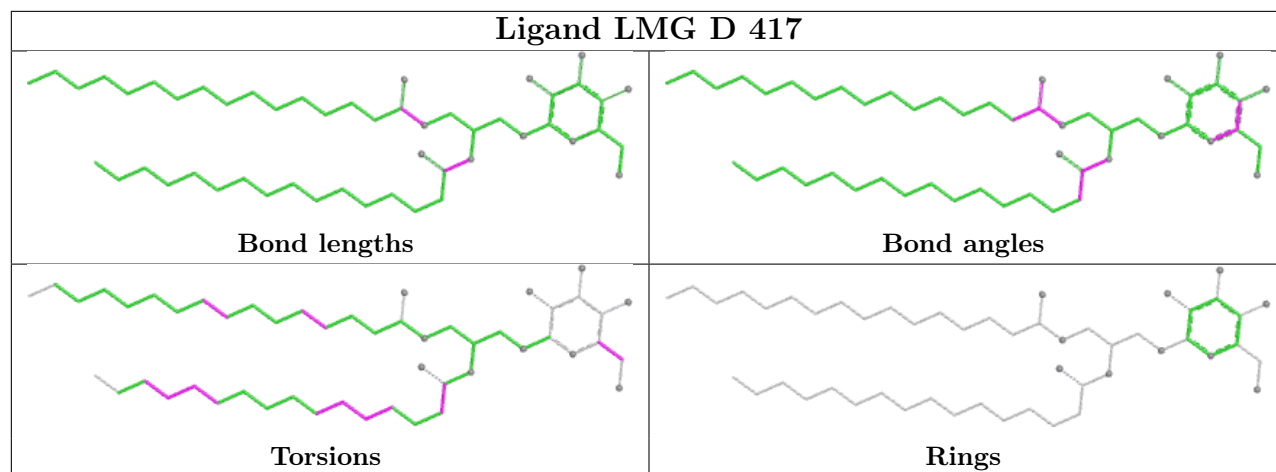
Ligand CLA c 515

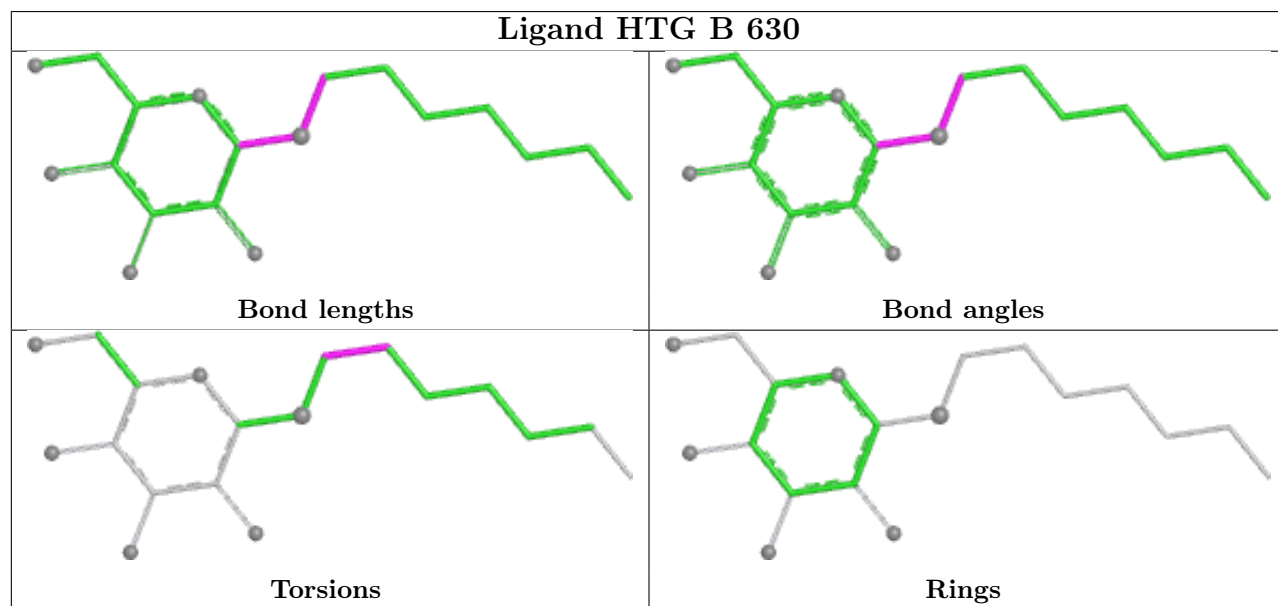
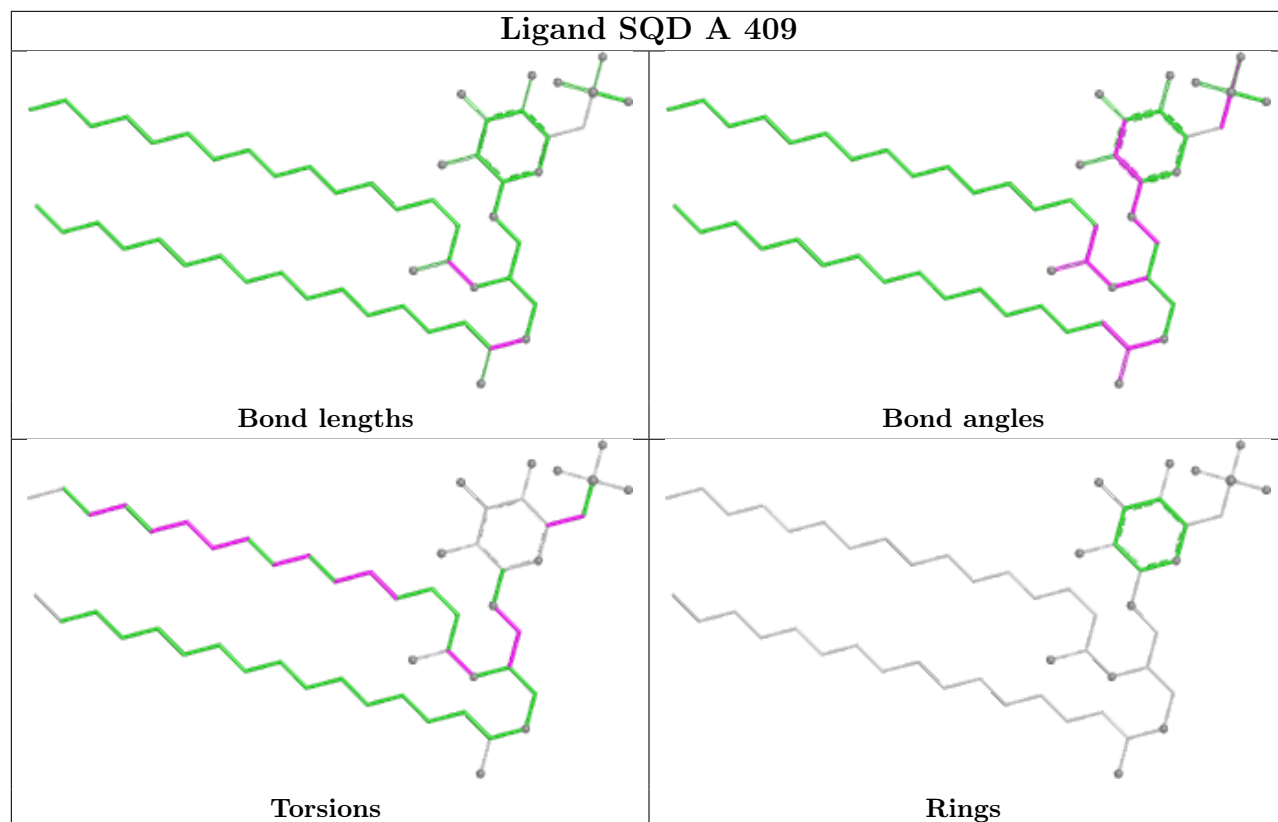


Ligand LMG M 101

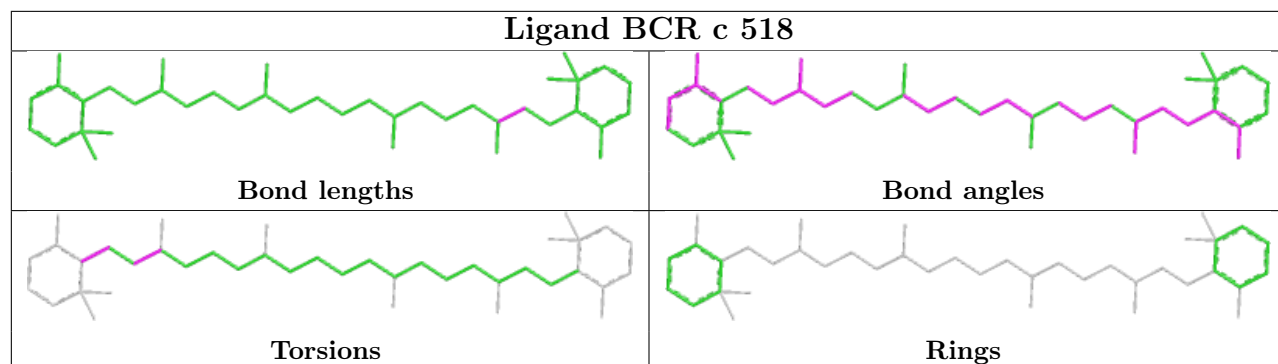




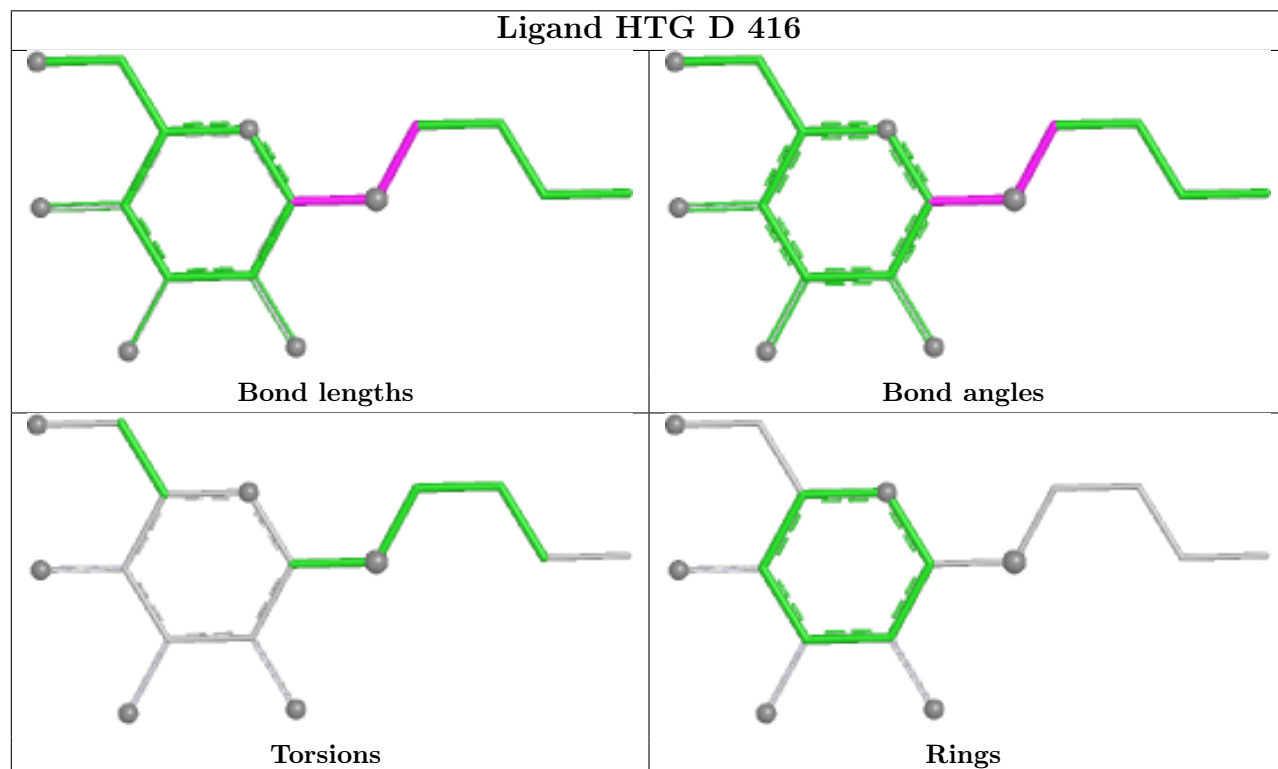


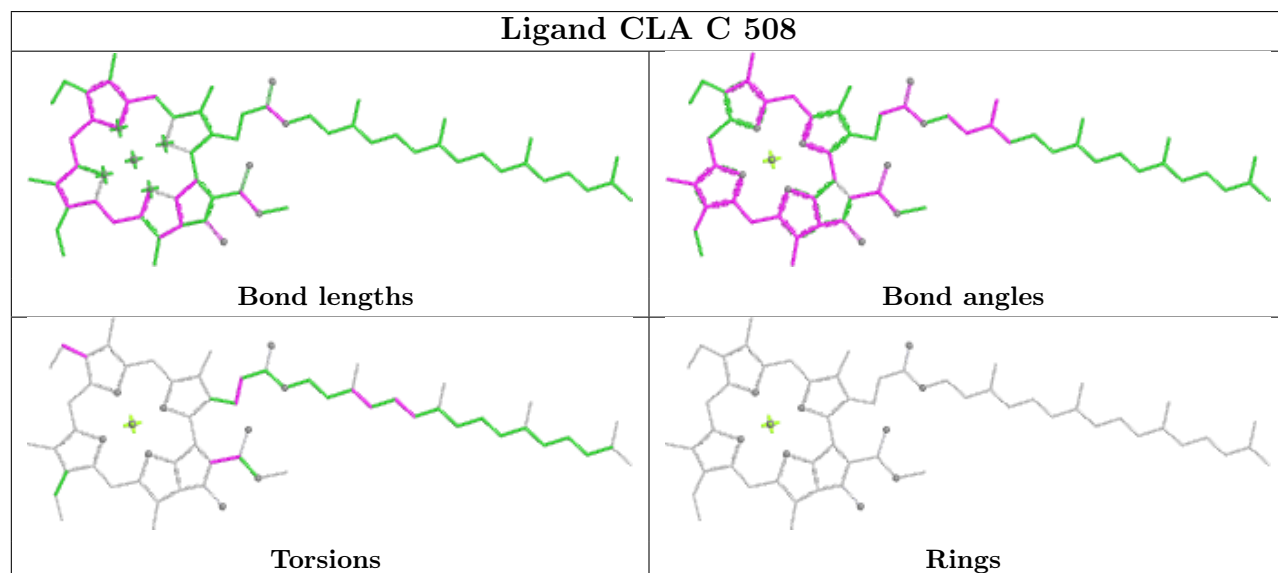
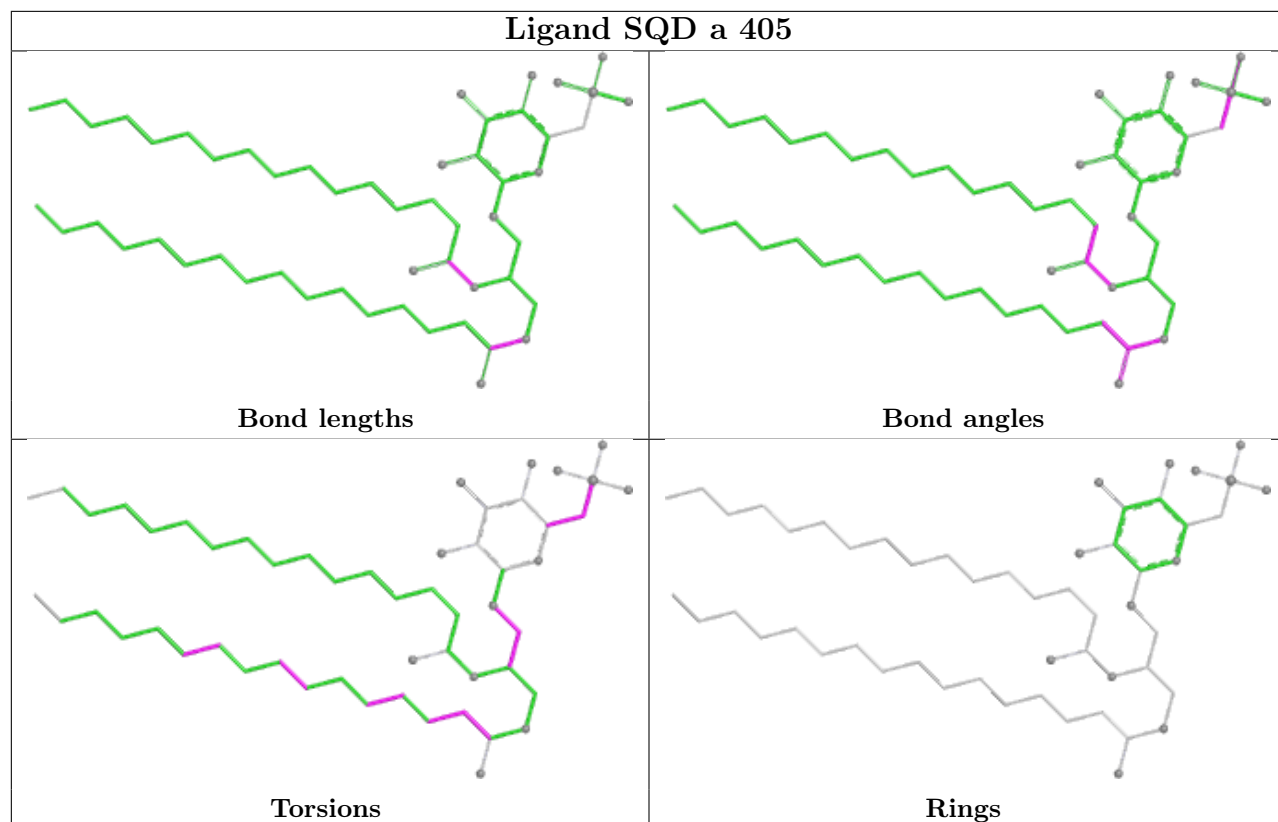


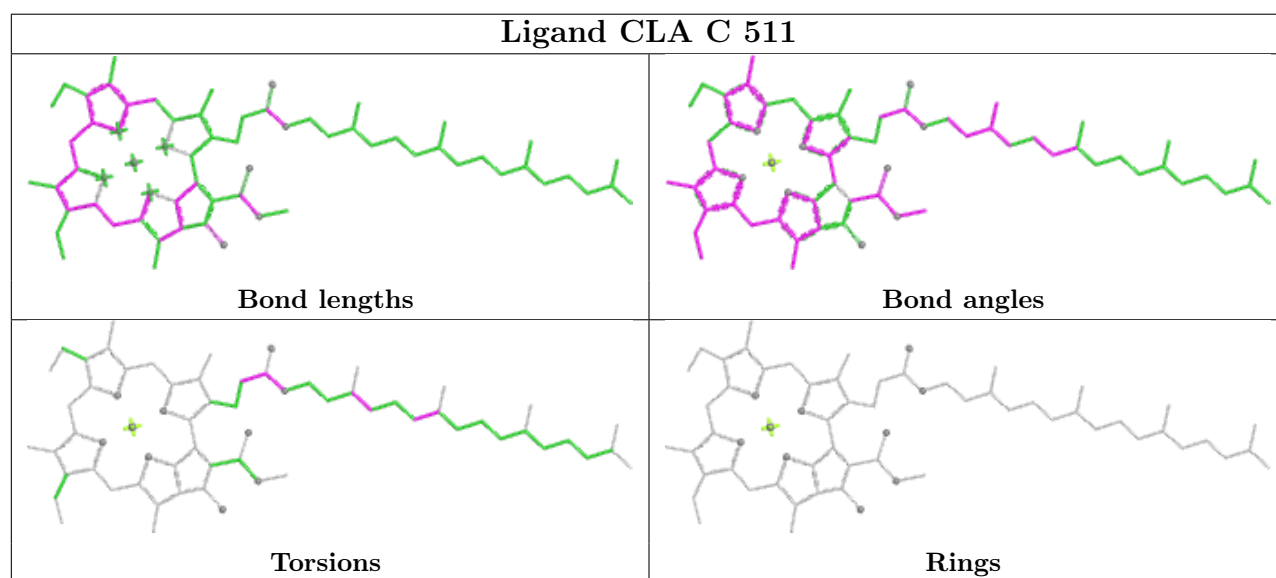
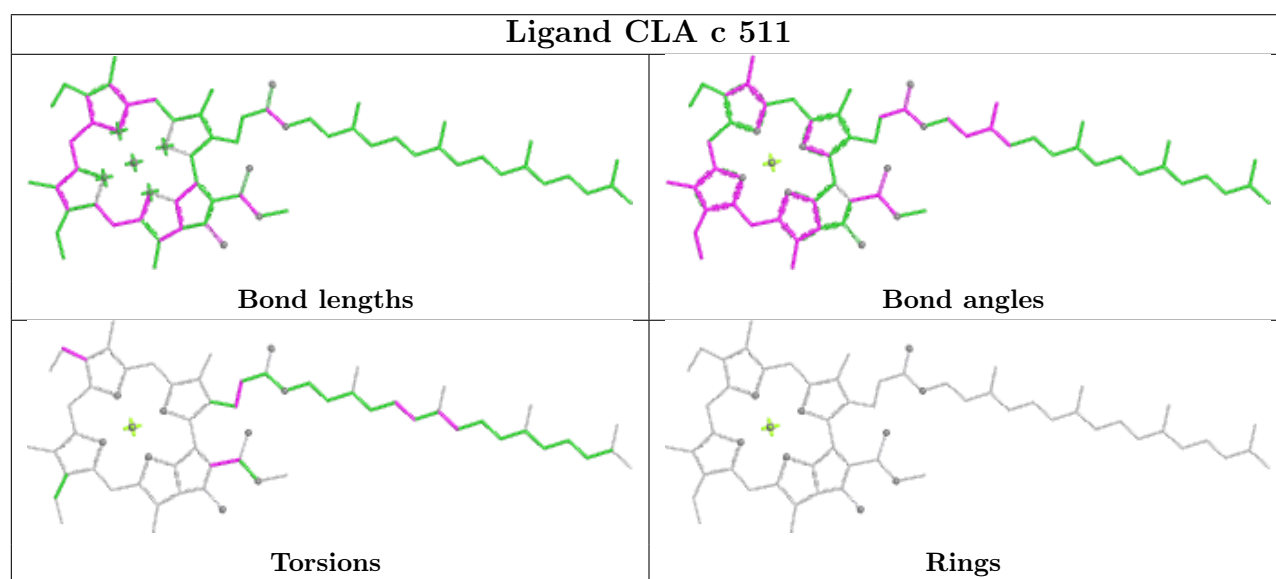
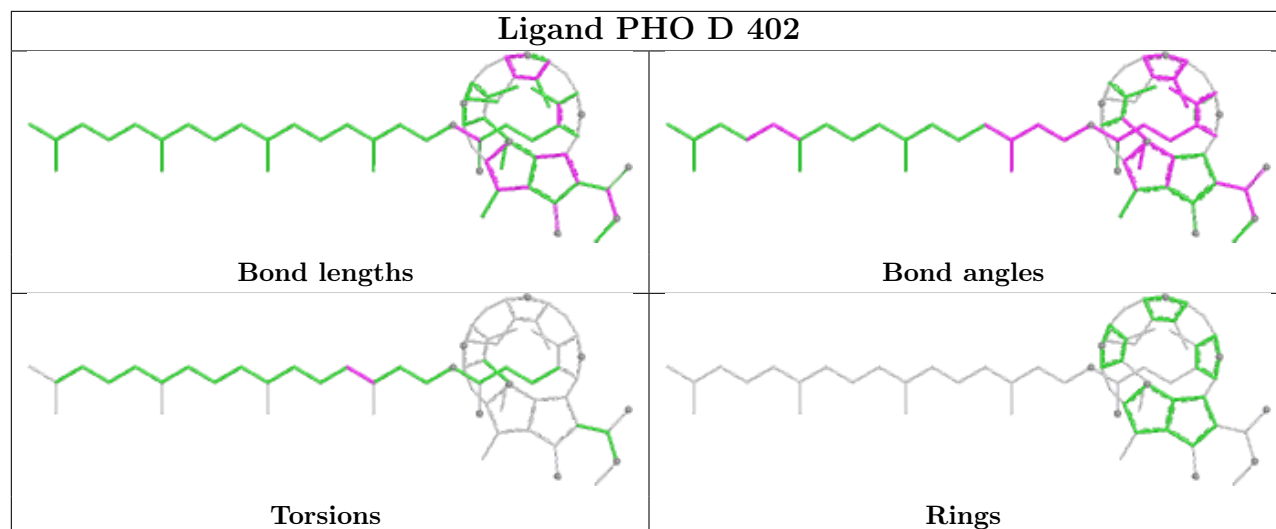
Ligand BCR c 518

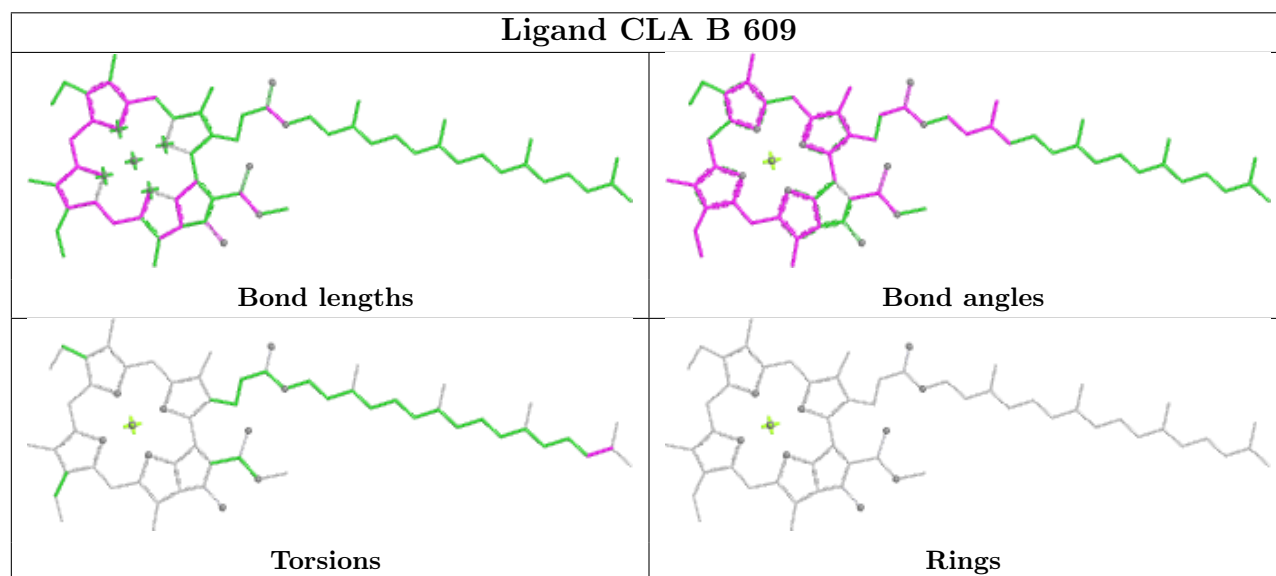
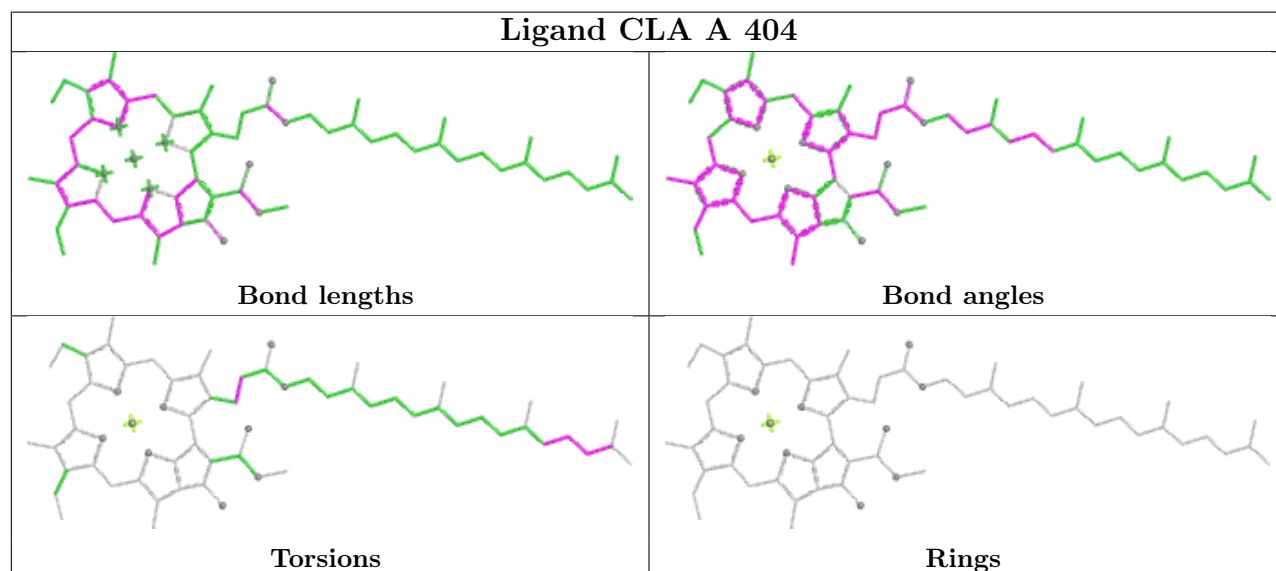
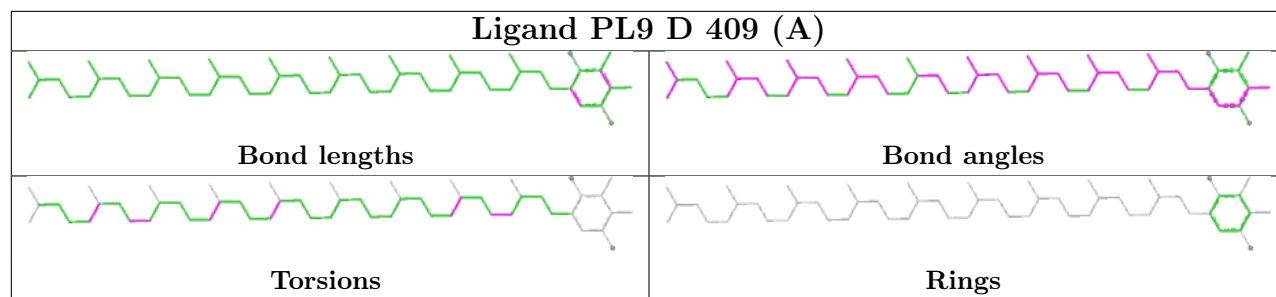


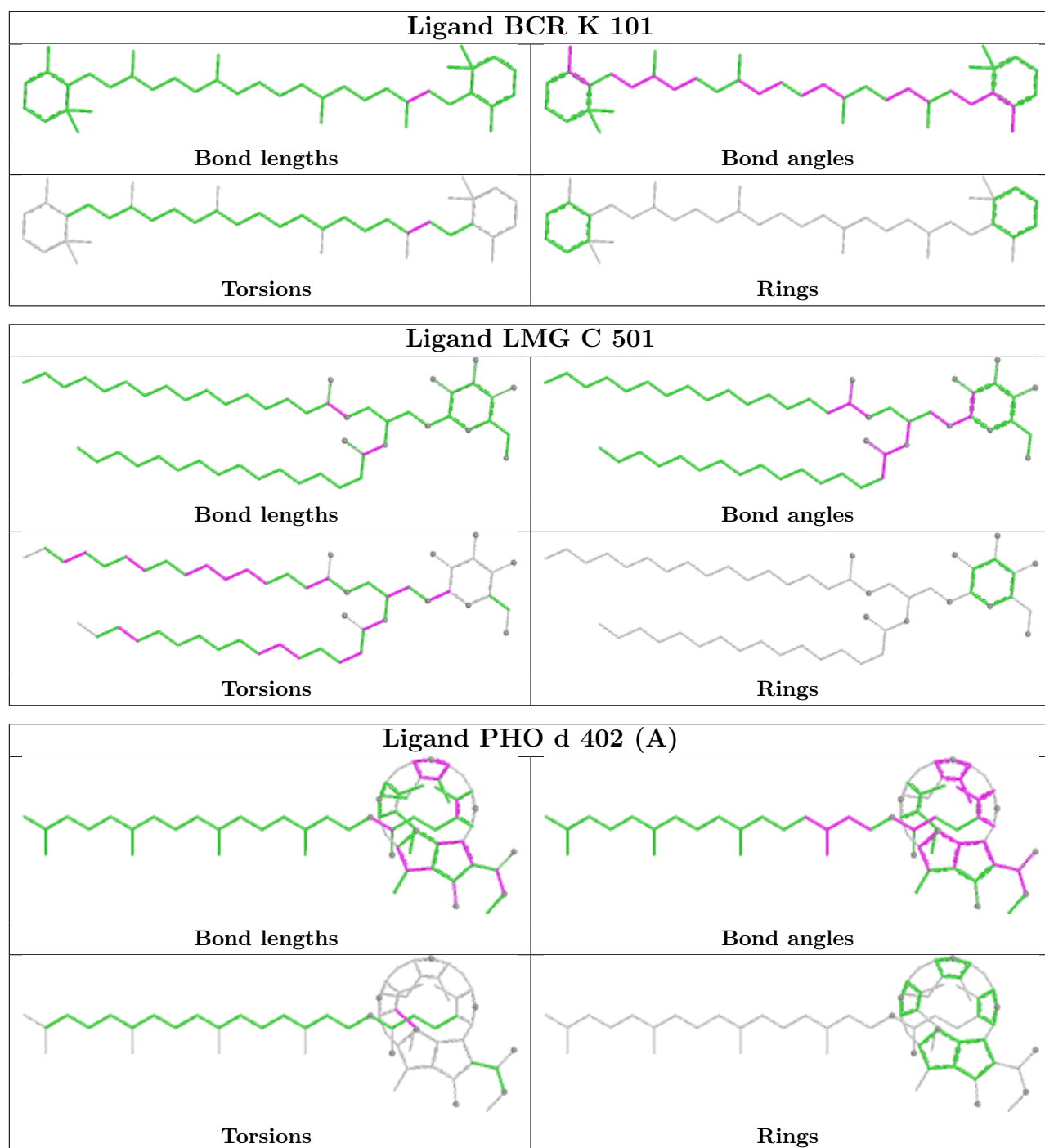
Ligand HTG D 416

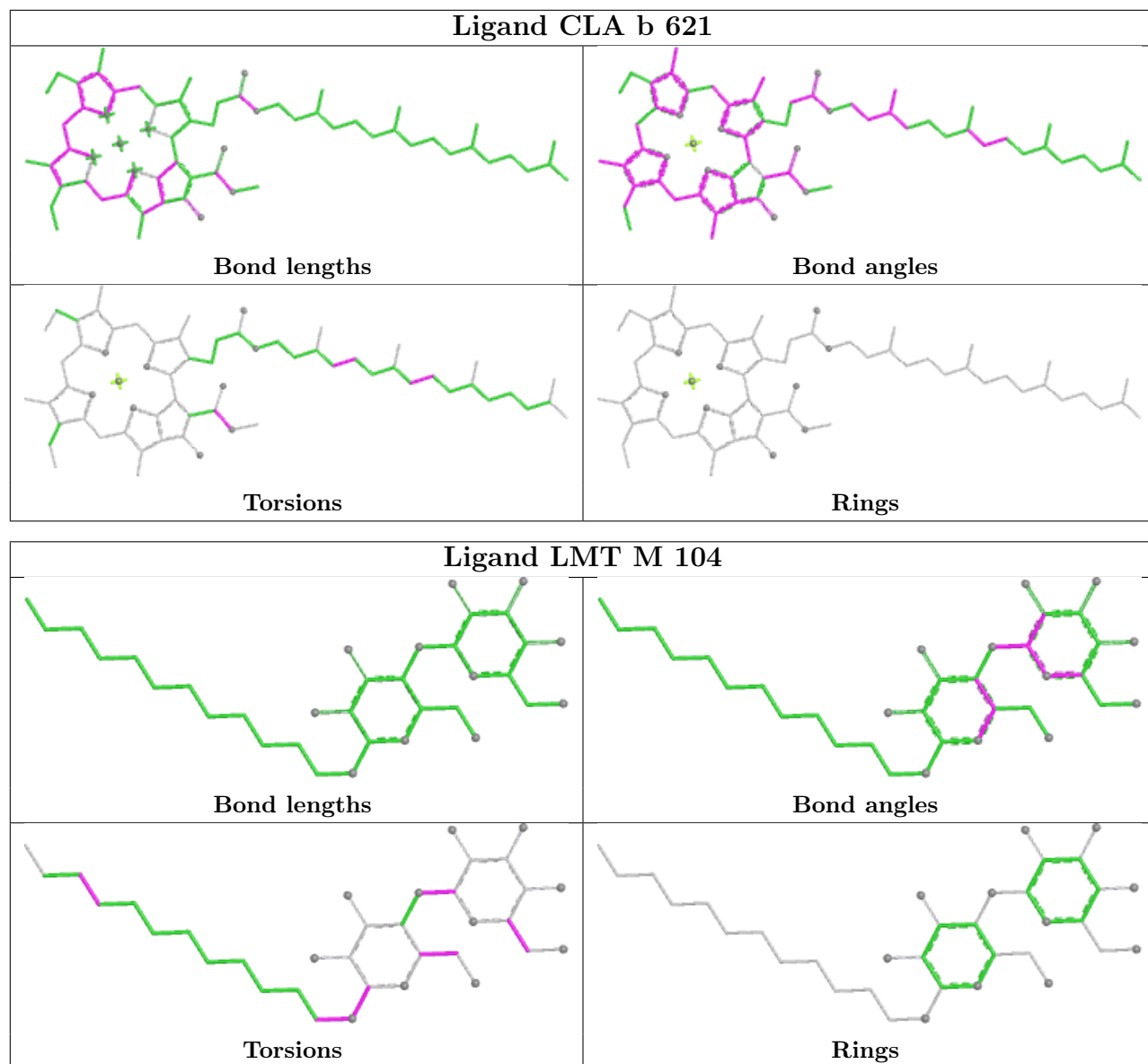


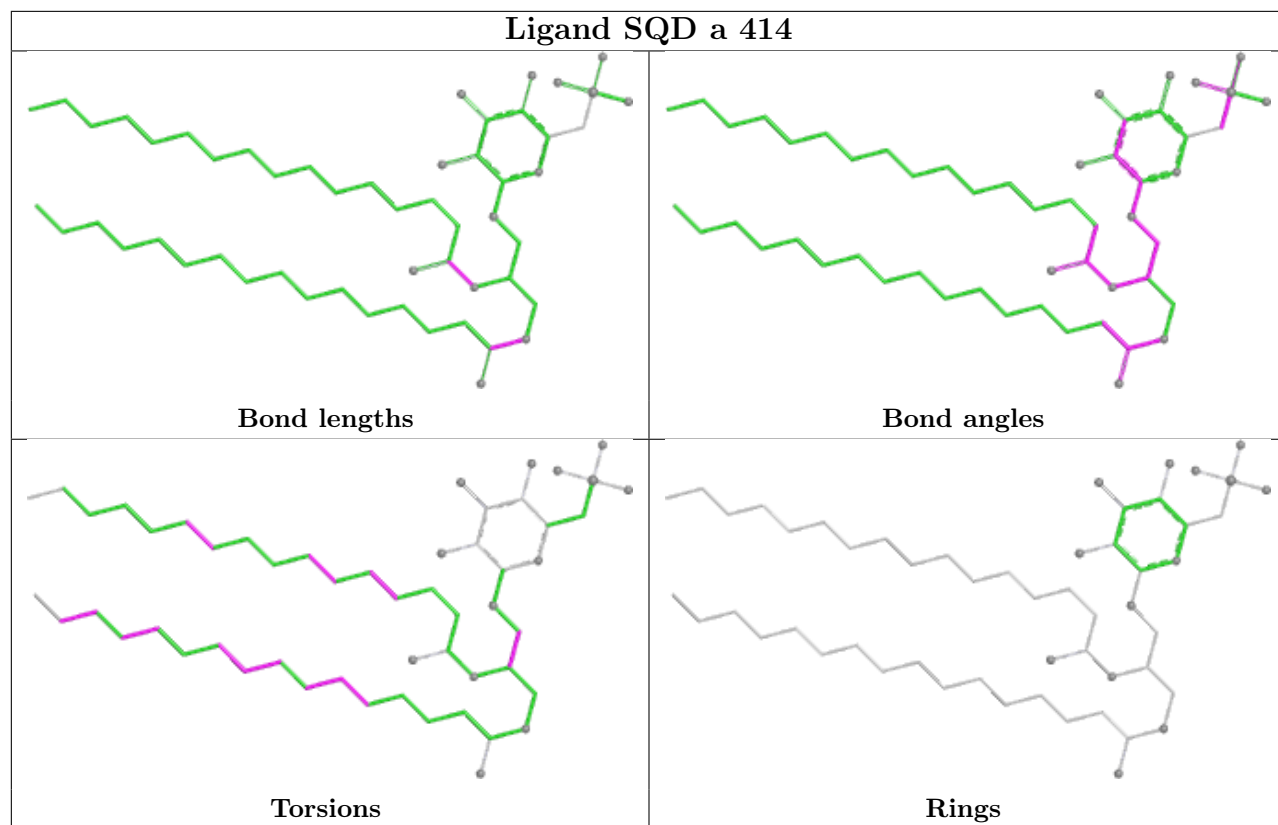


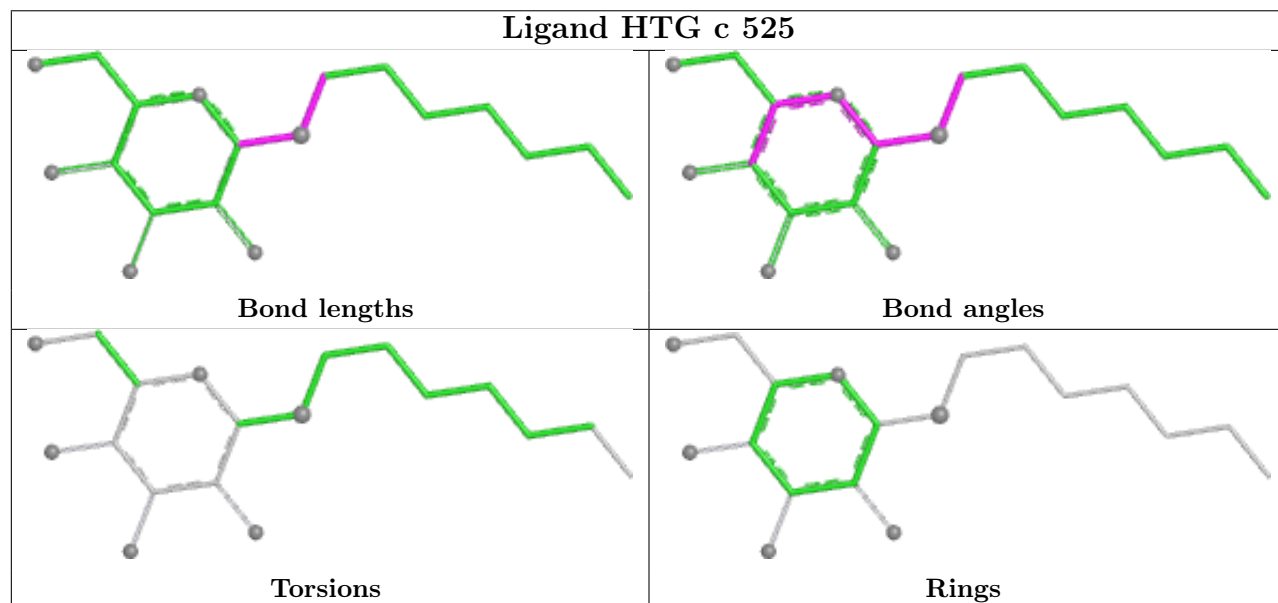
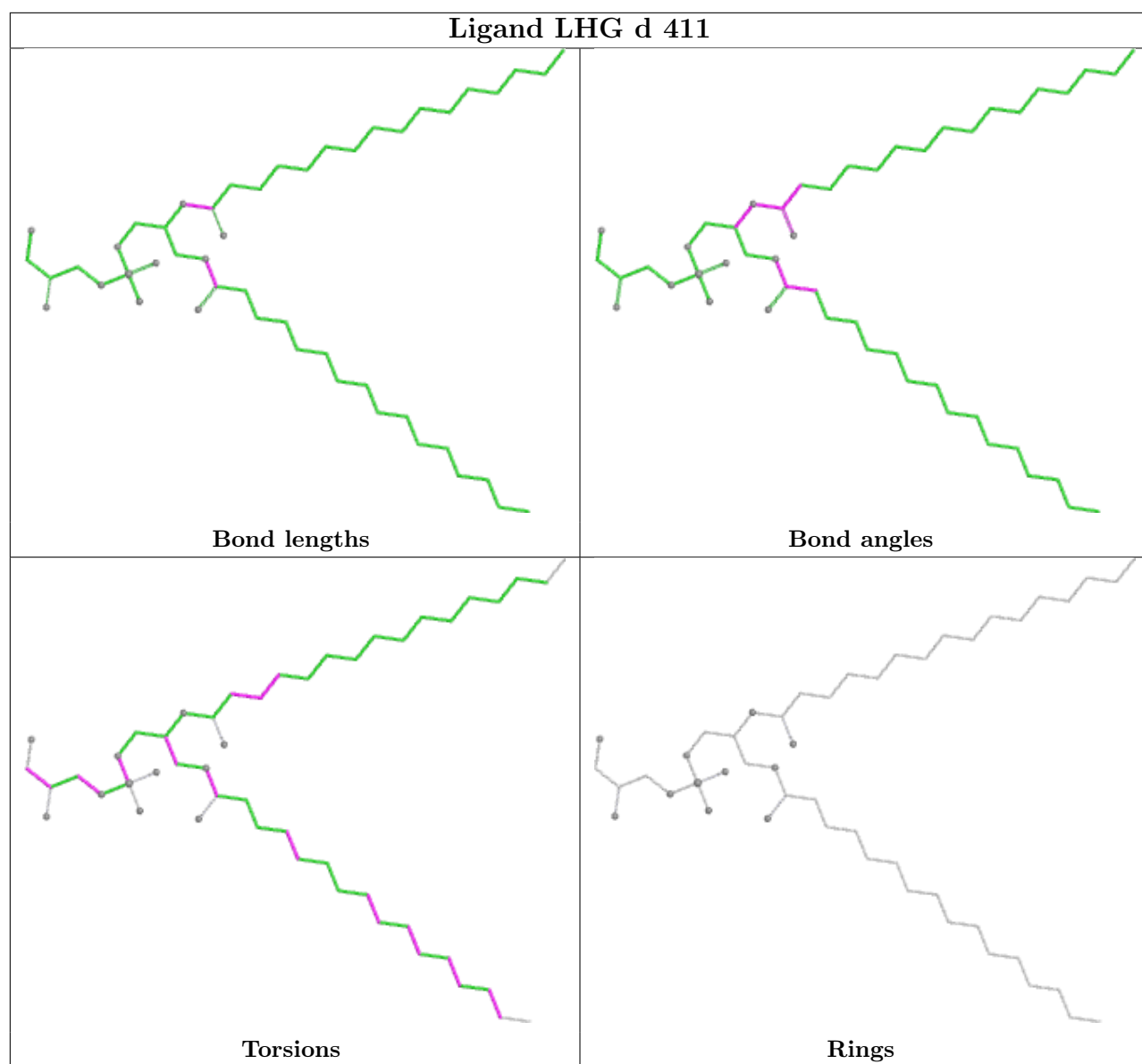


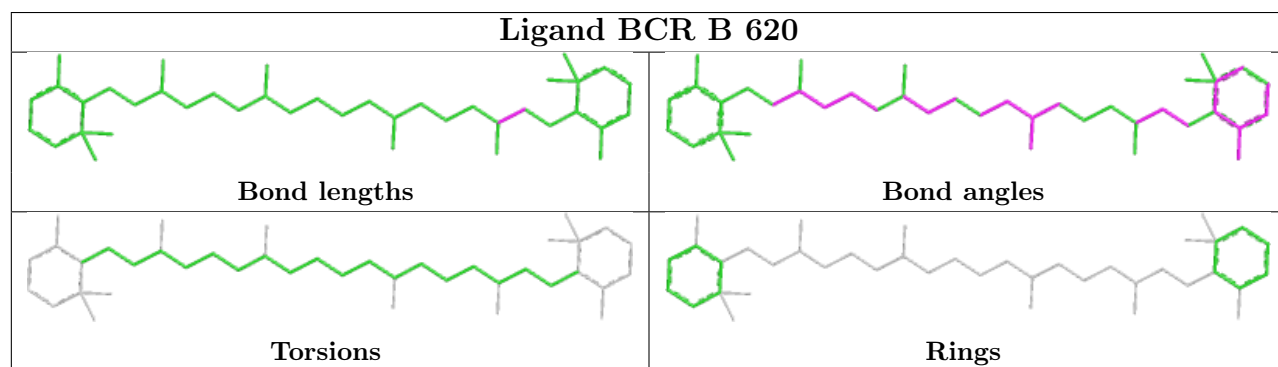
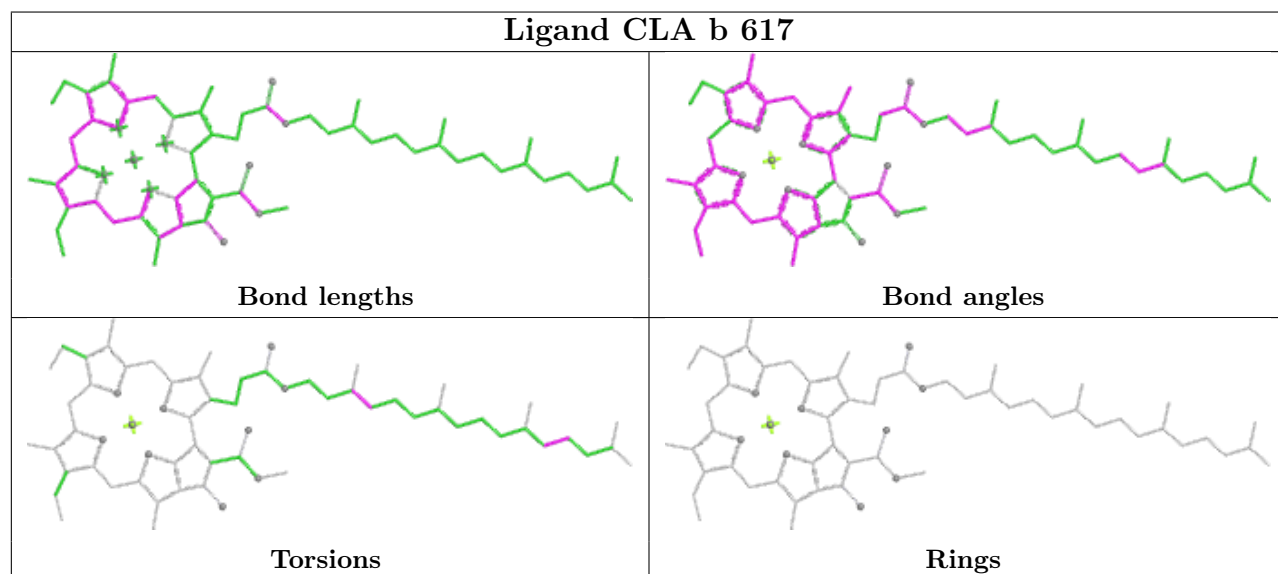
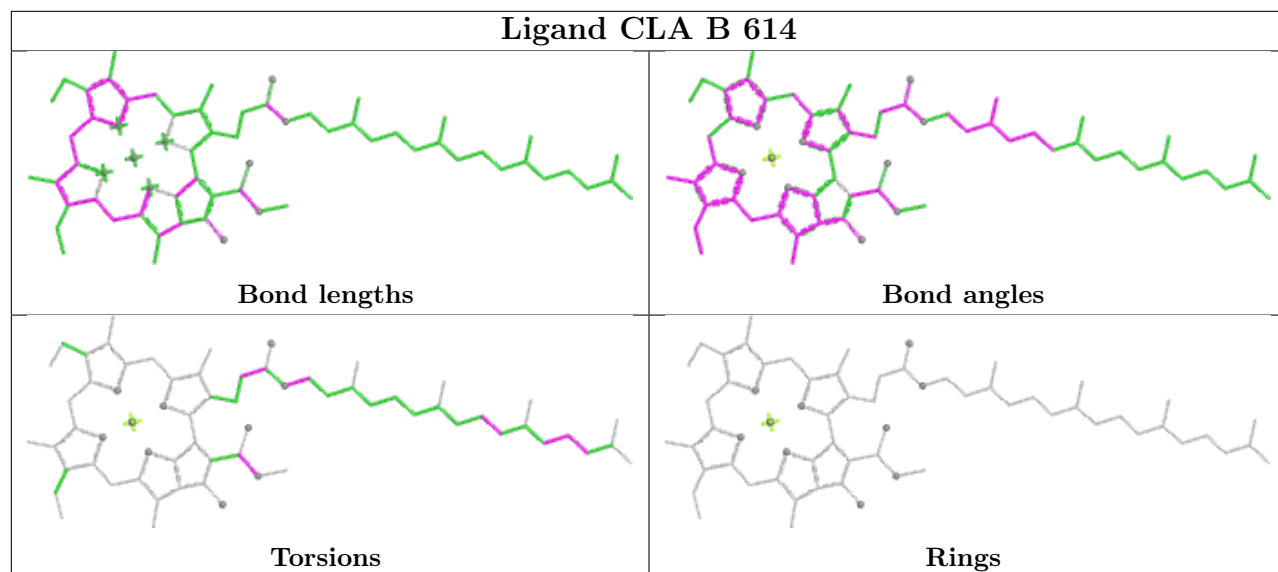




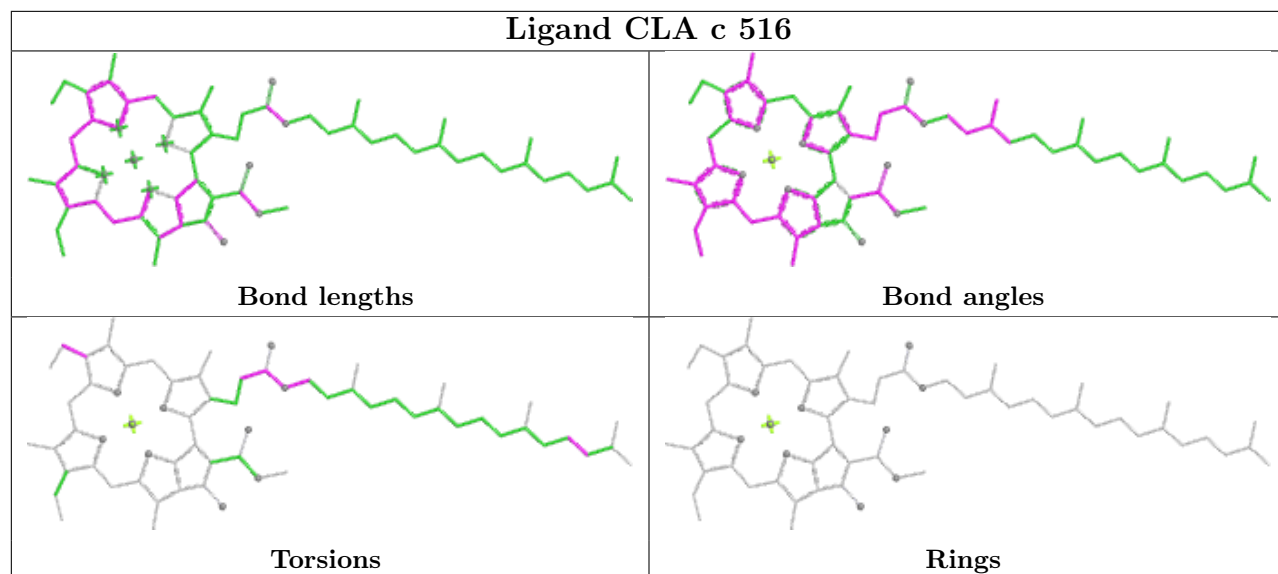




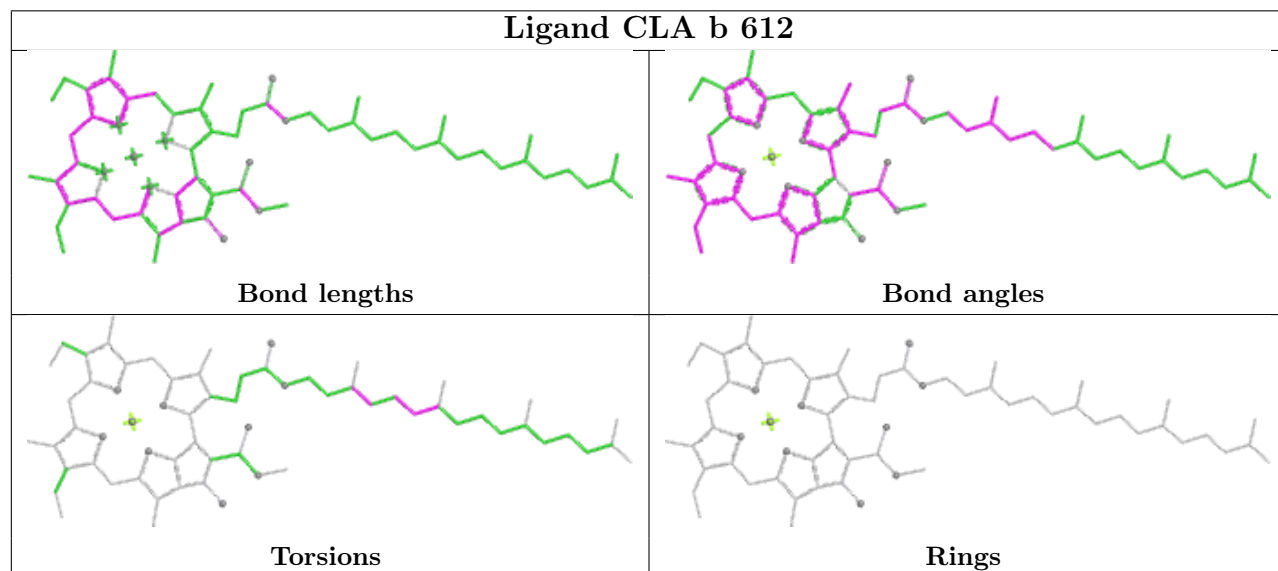




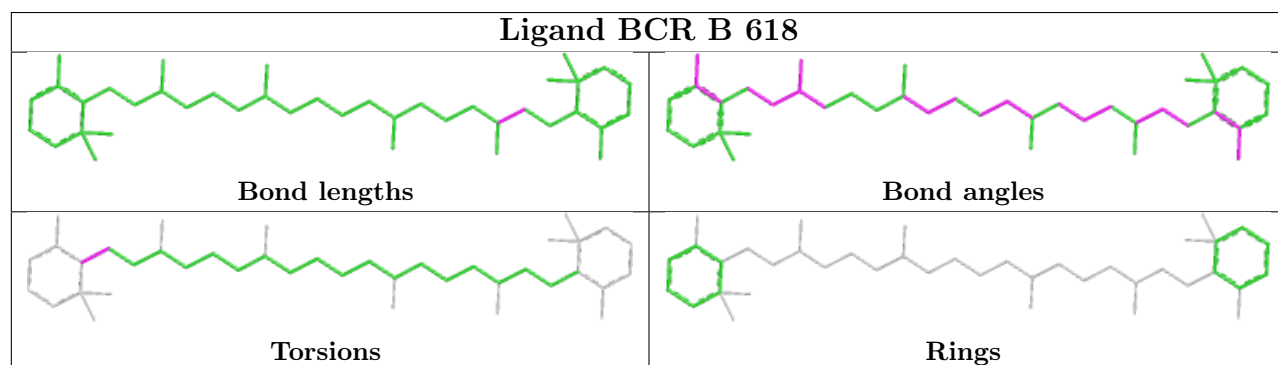
Ligand CLA c 516

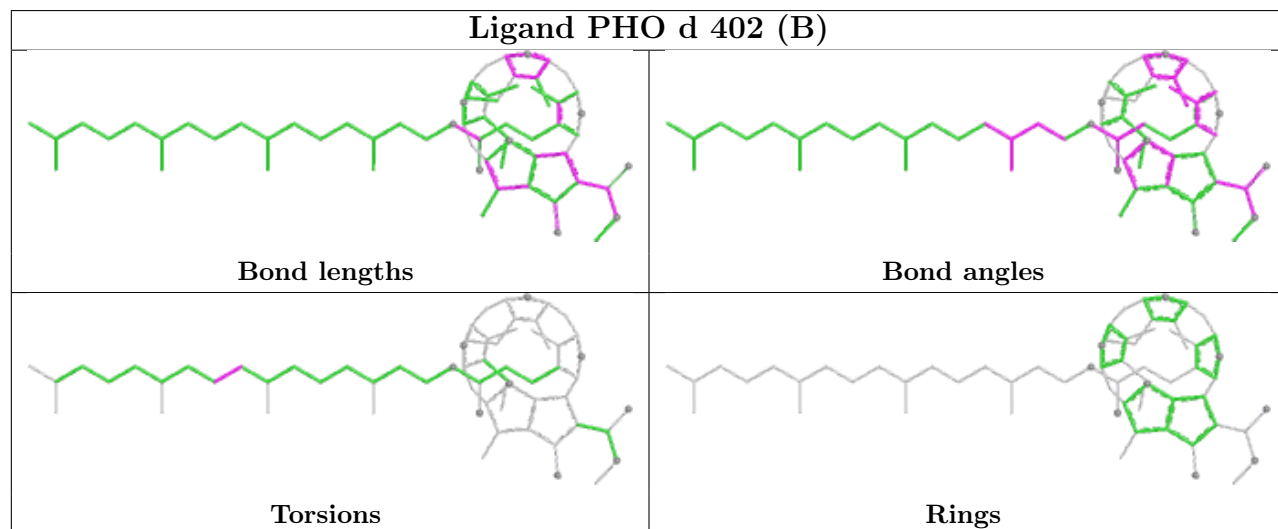
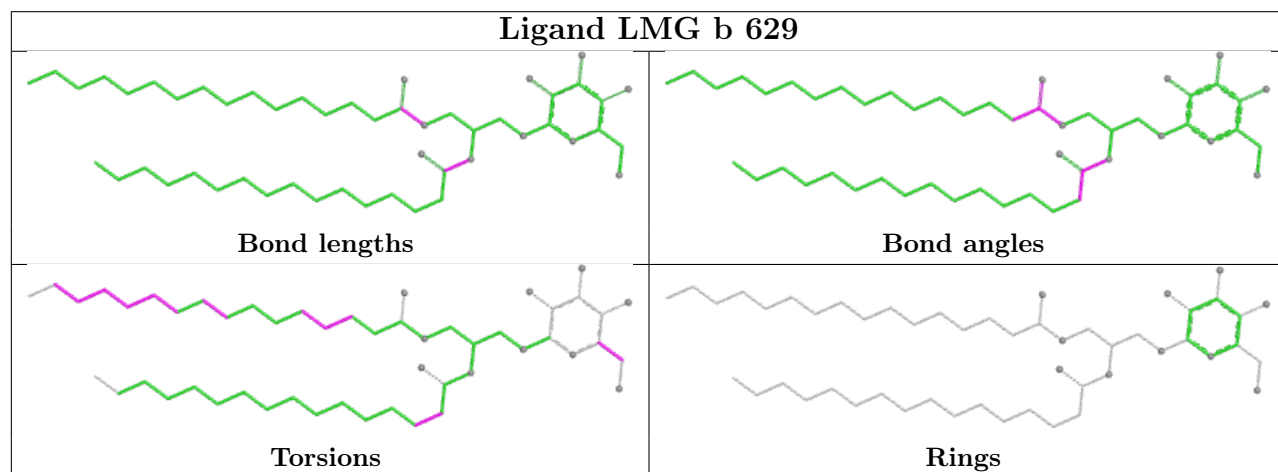
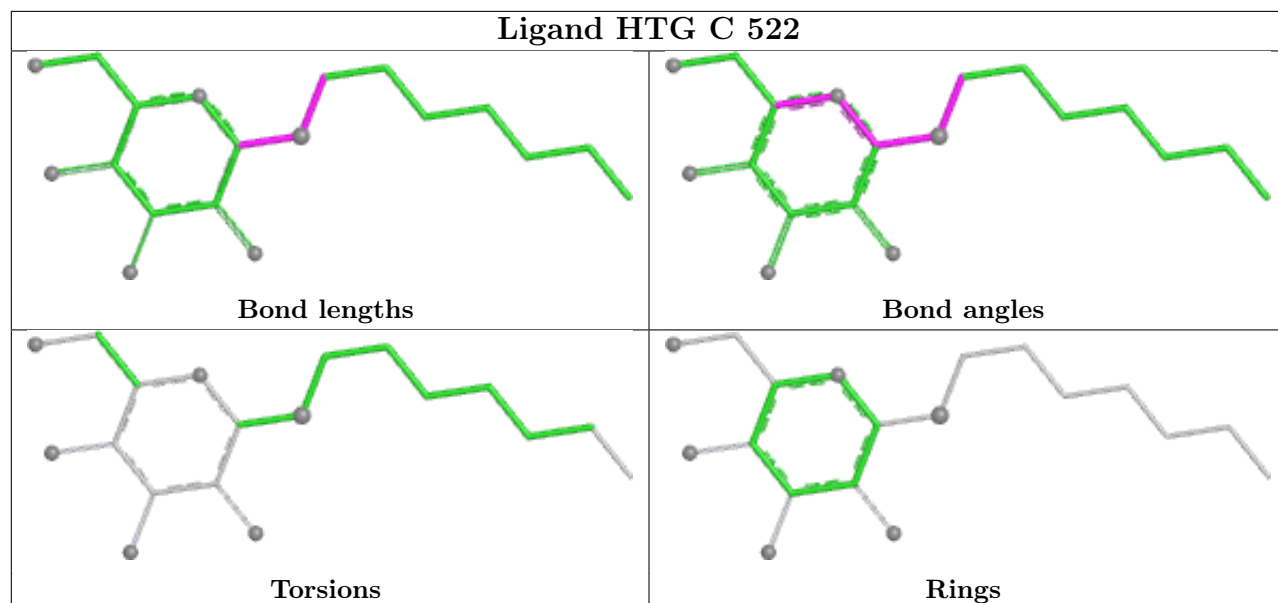


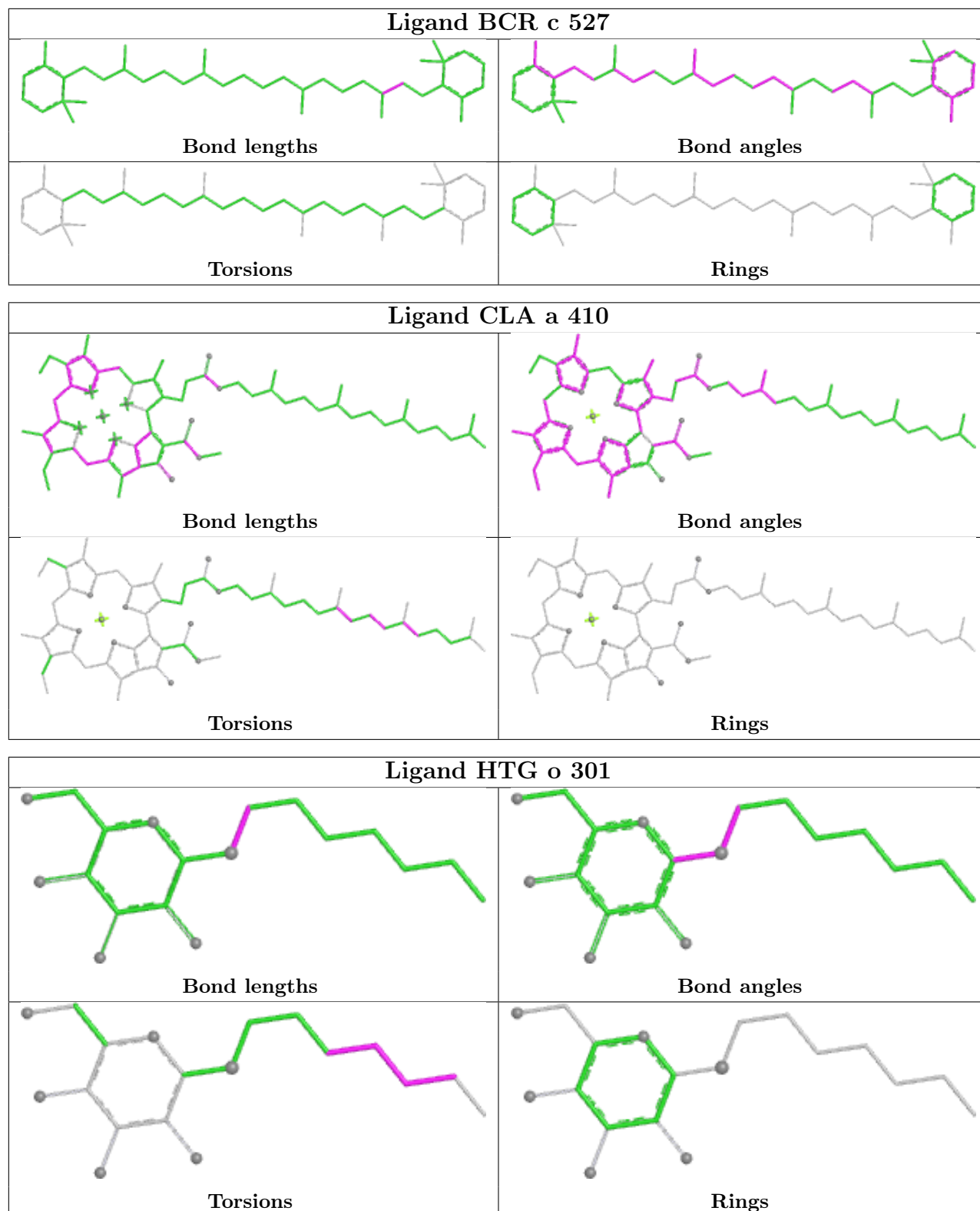
Ligand CLA b 612

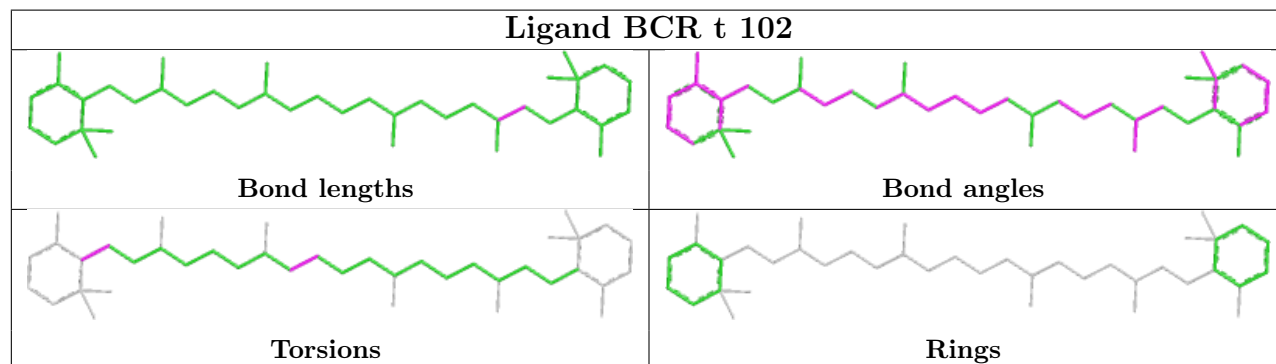
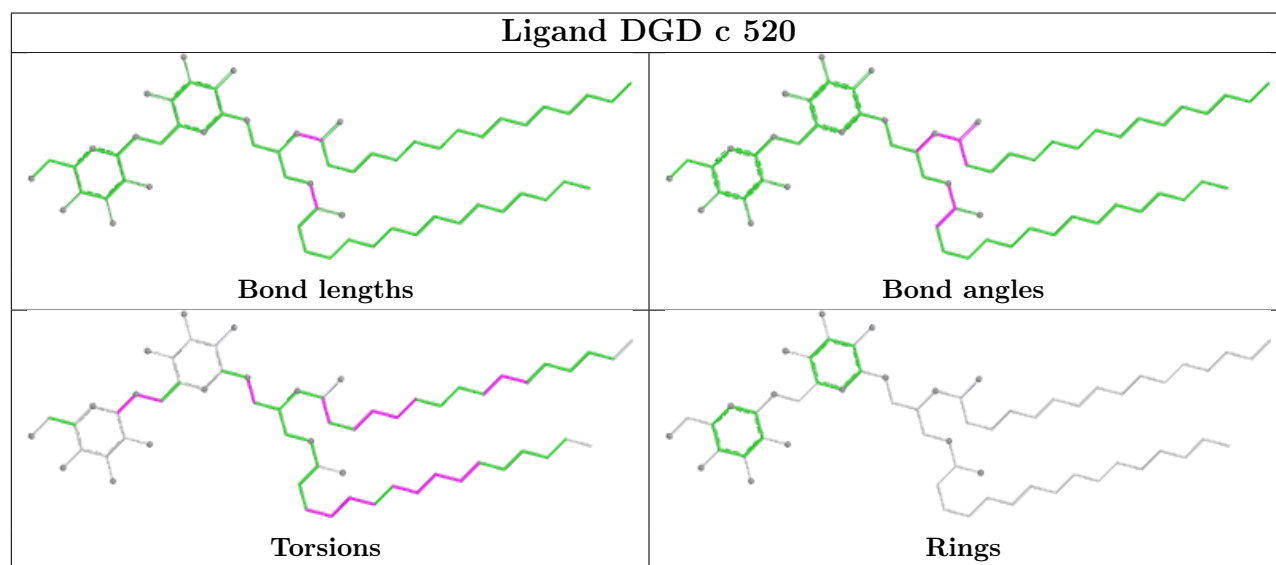
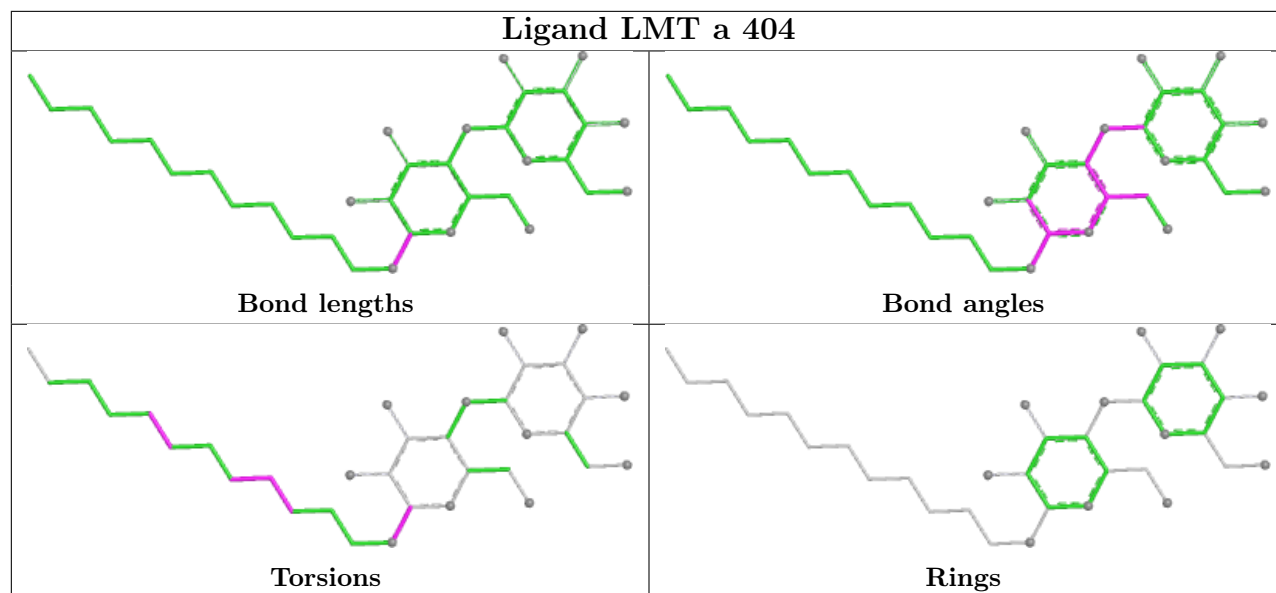


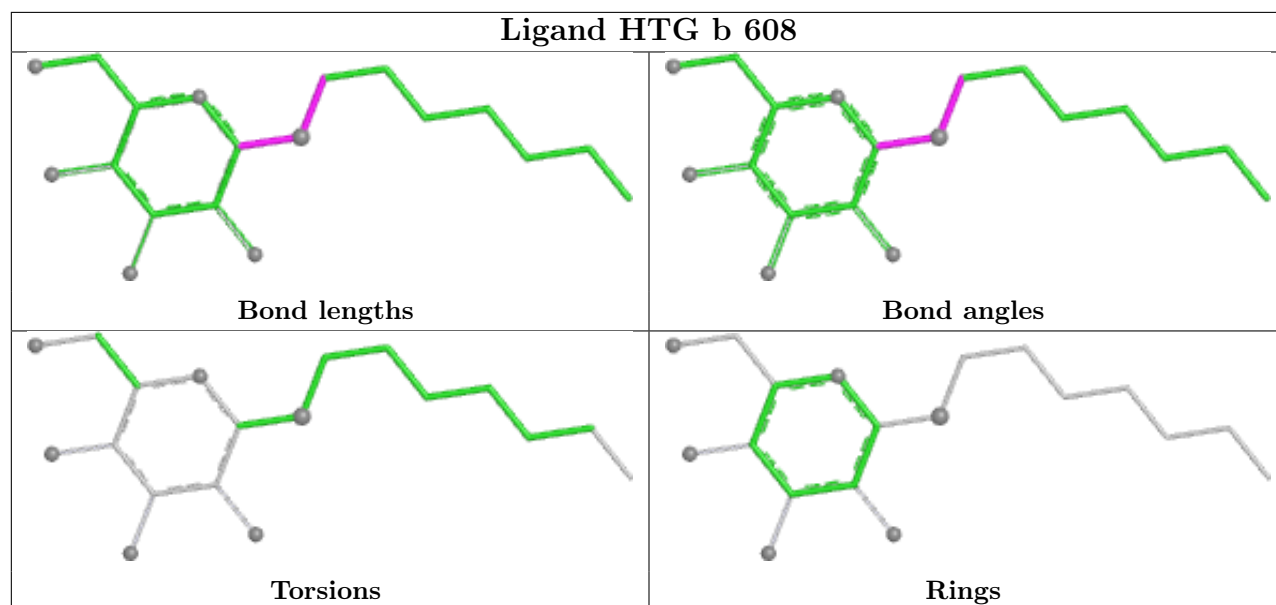
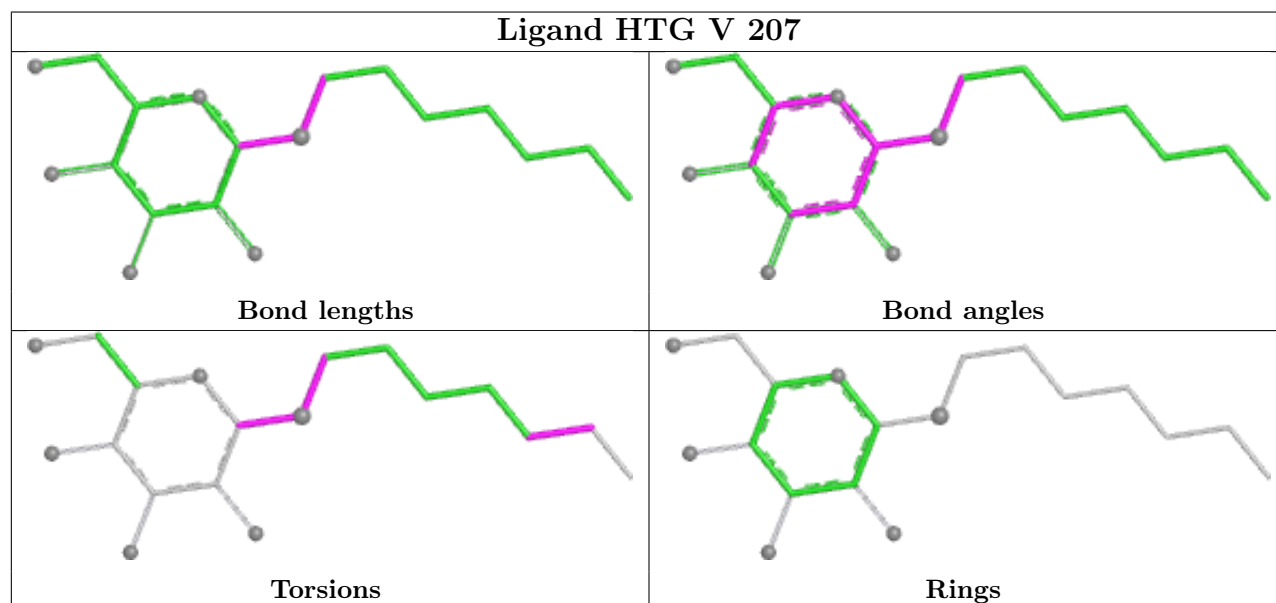
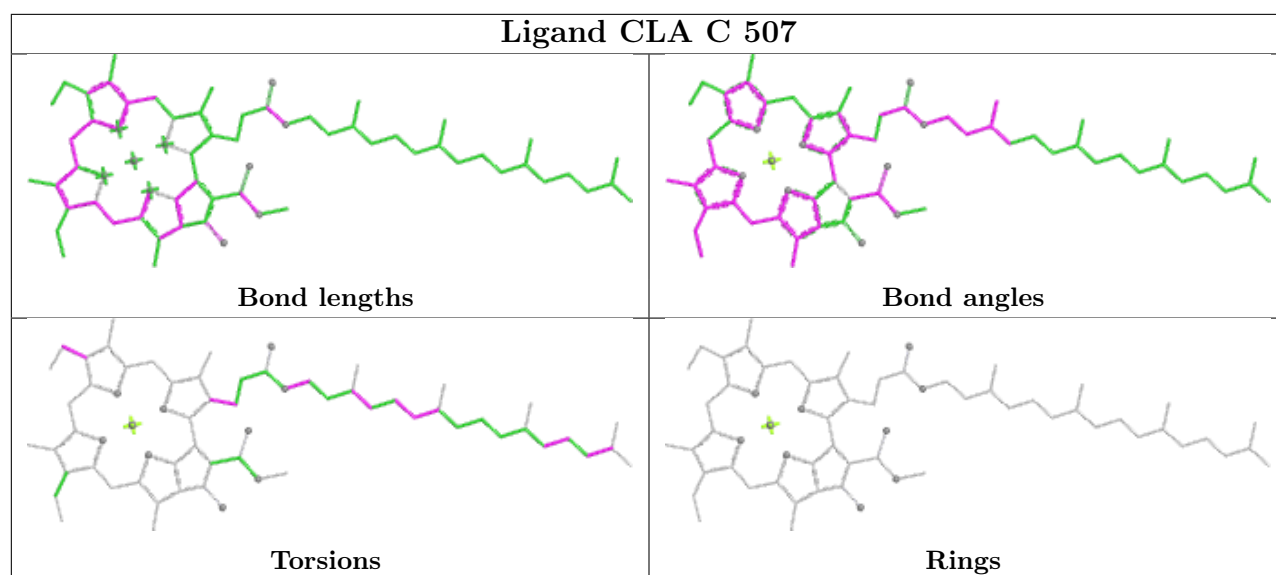
Ligand BCR B 618

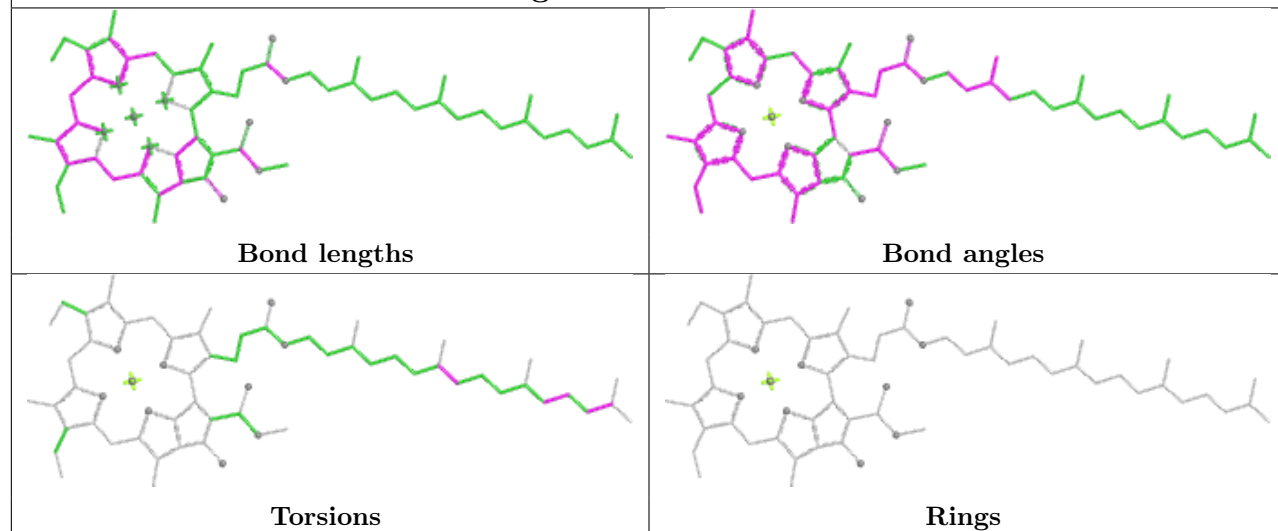
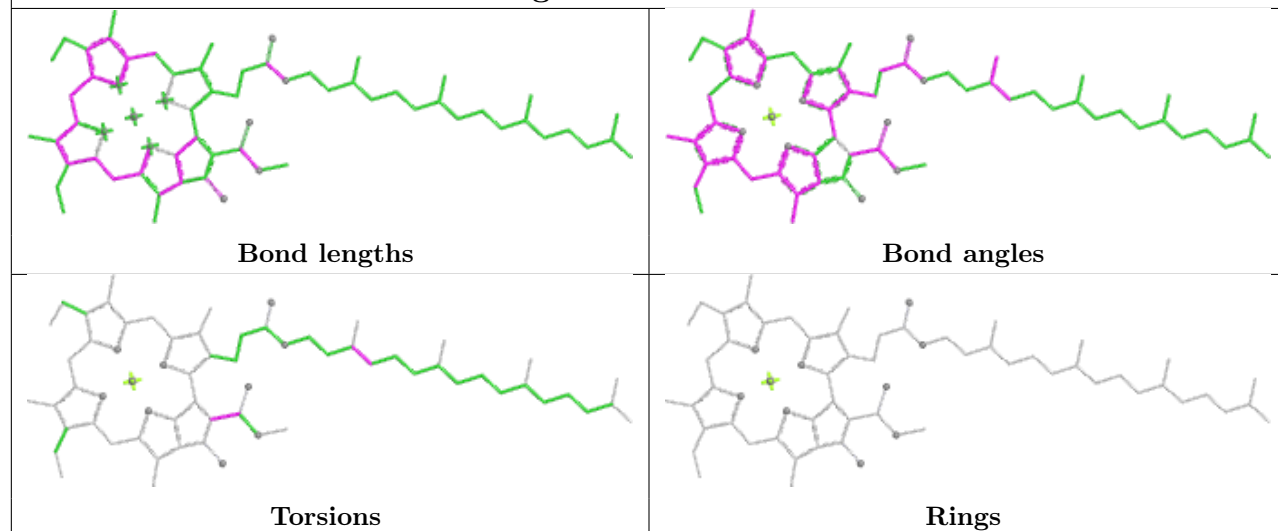
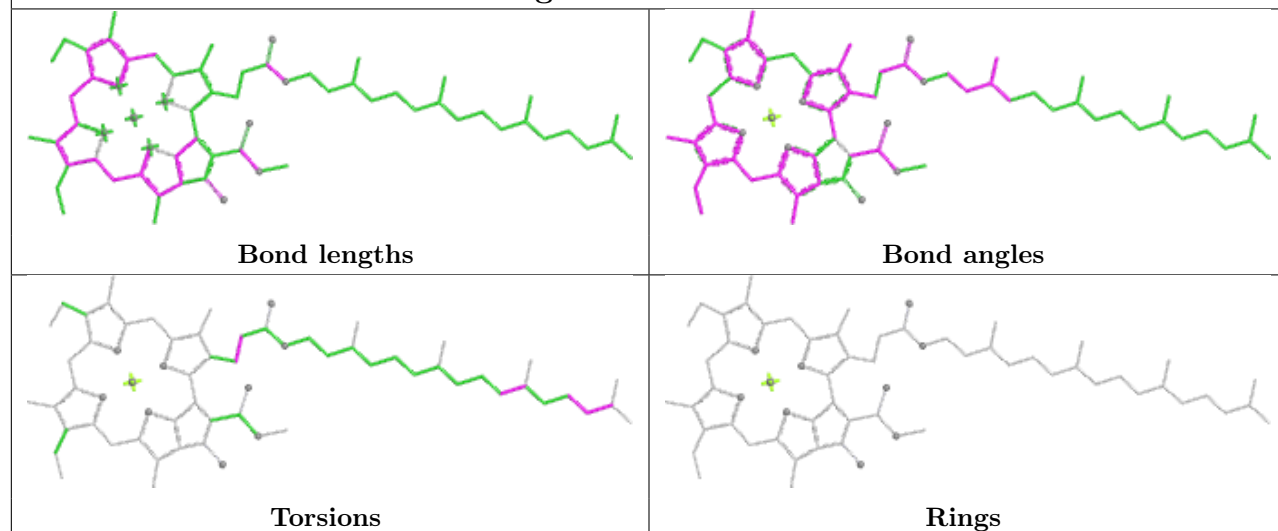


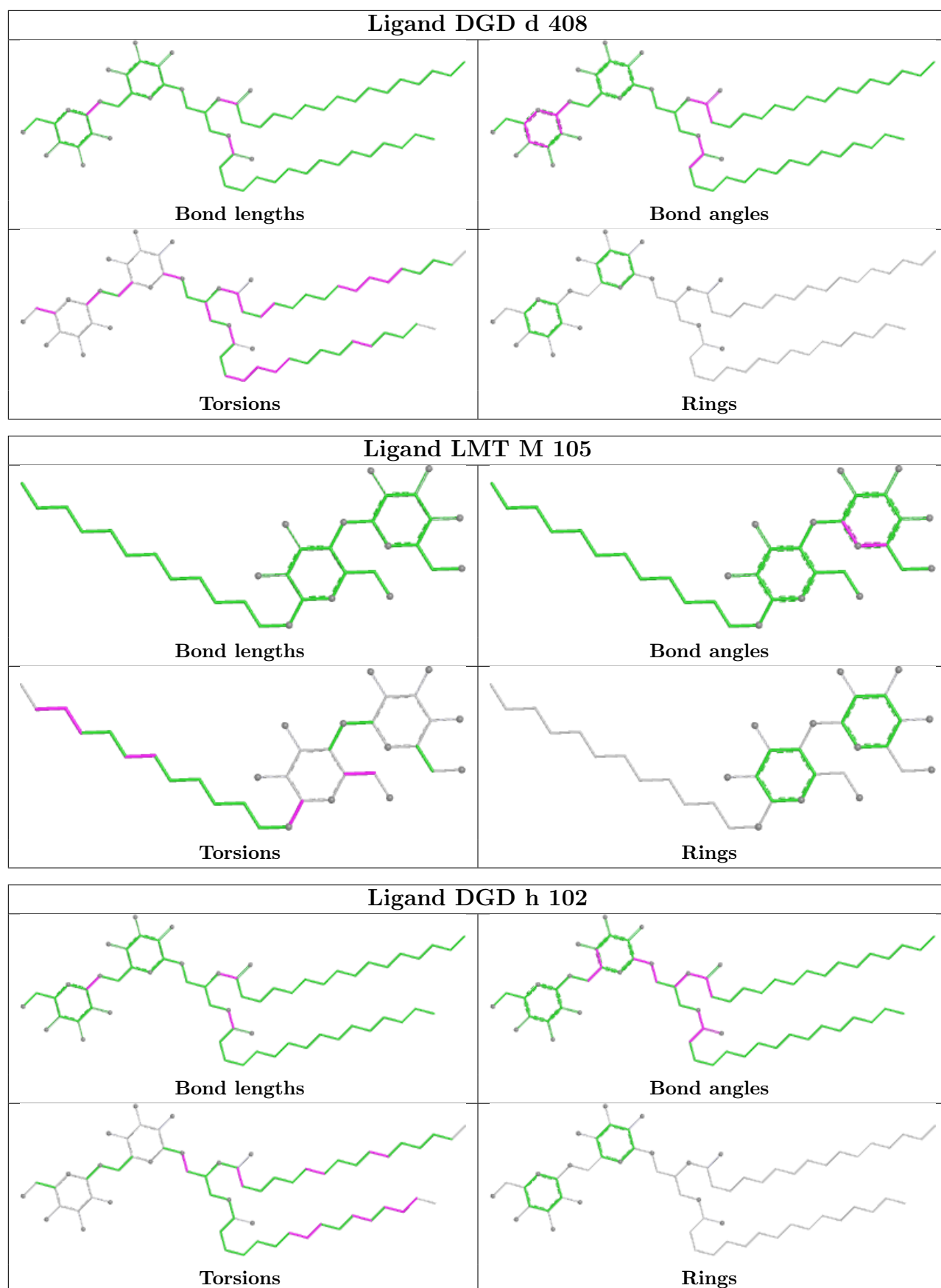


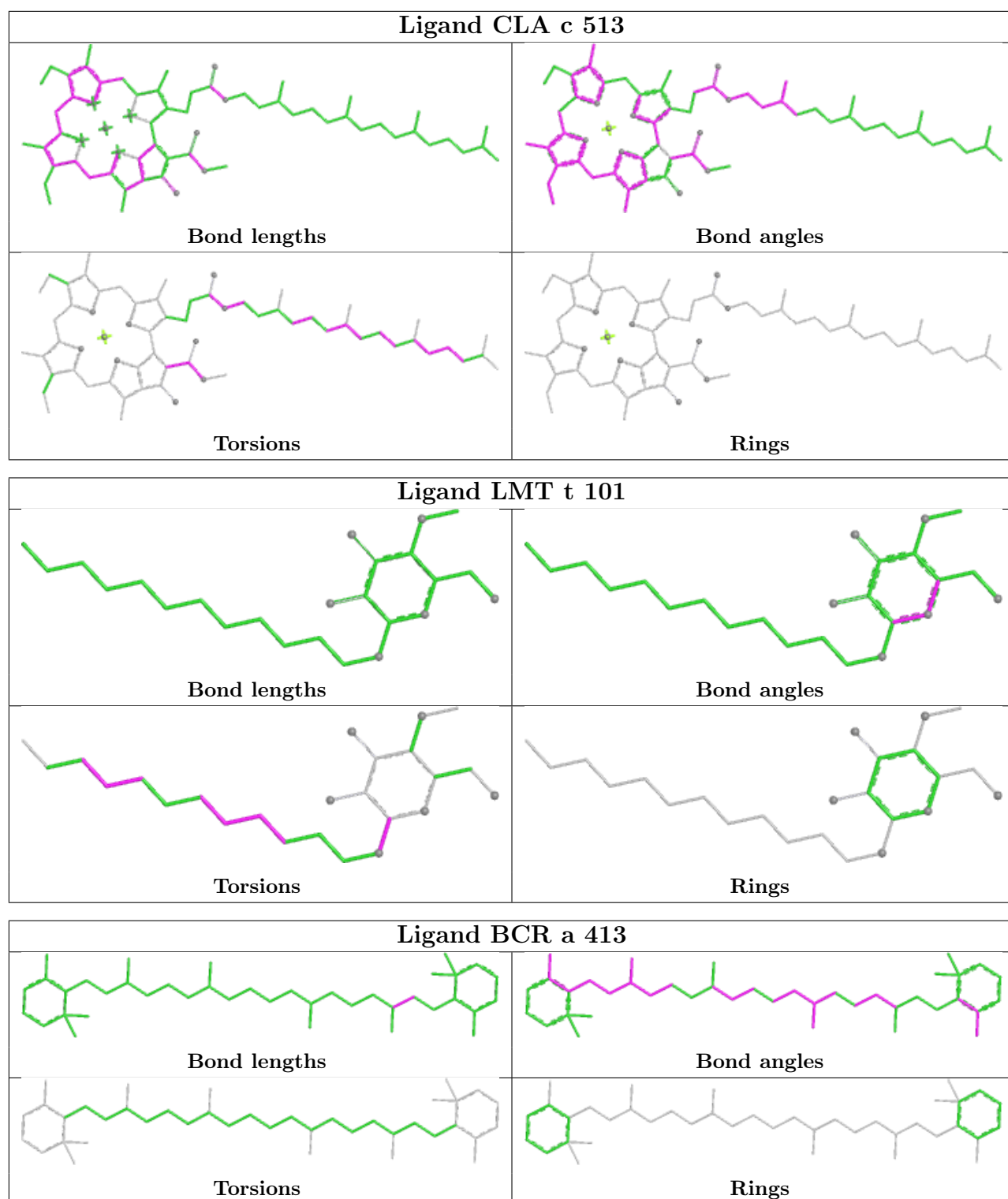


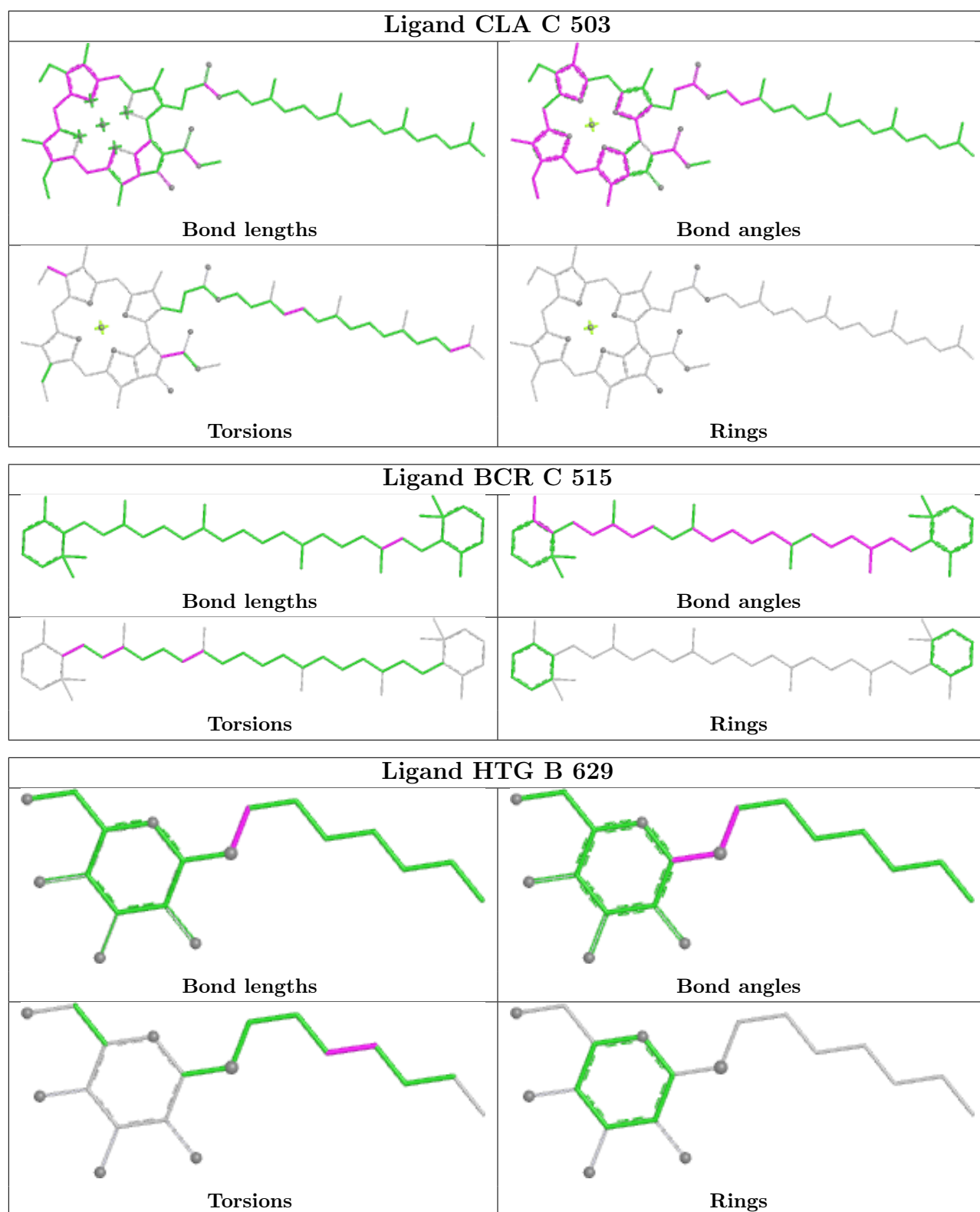




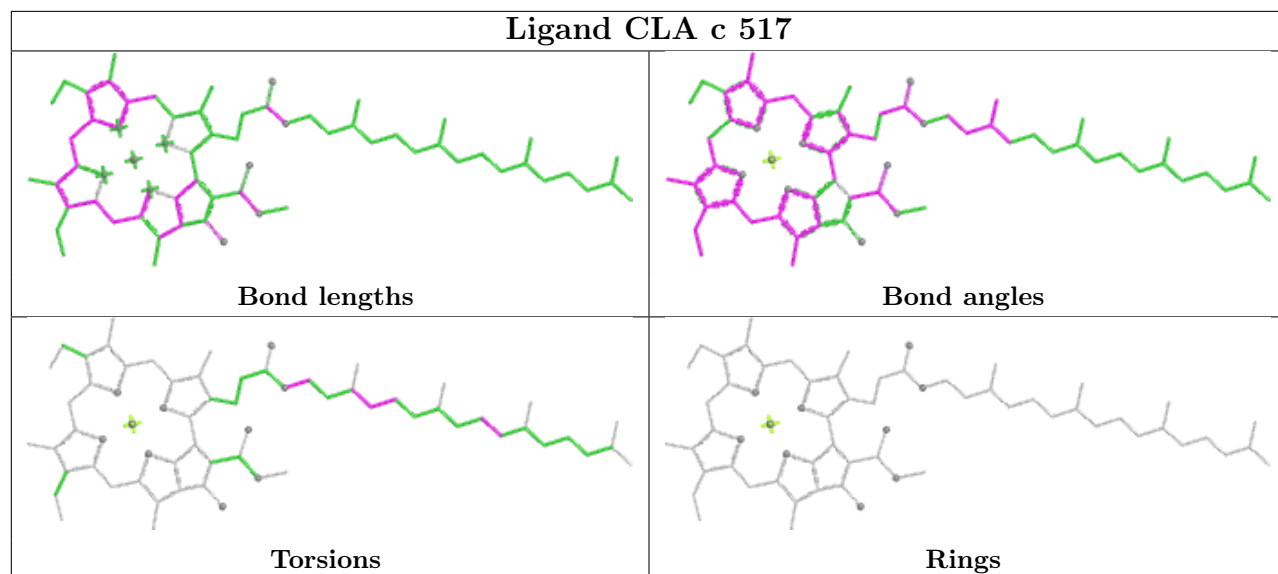
Ligand CLA A 406**Ligand CLA B 606****Ligand CLA b 619**



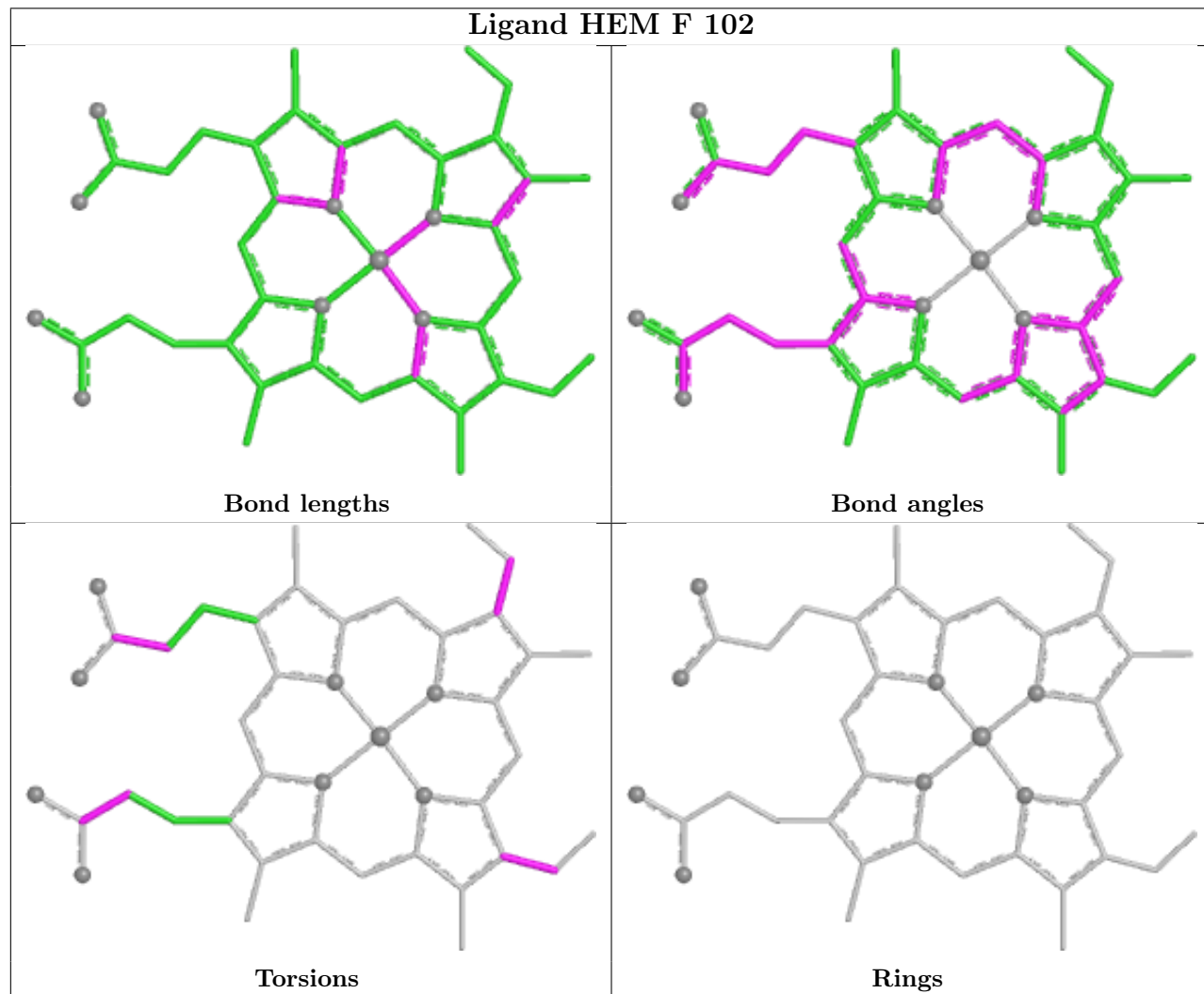




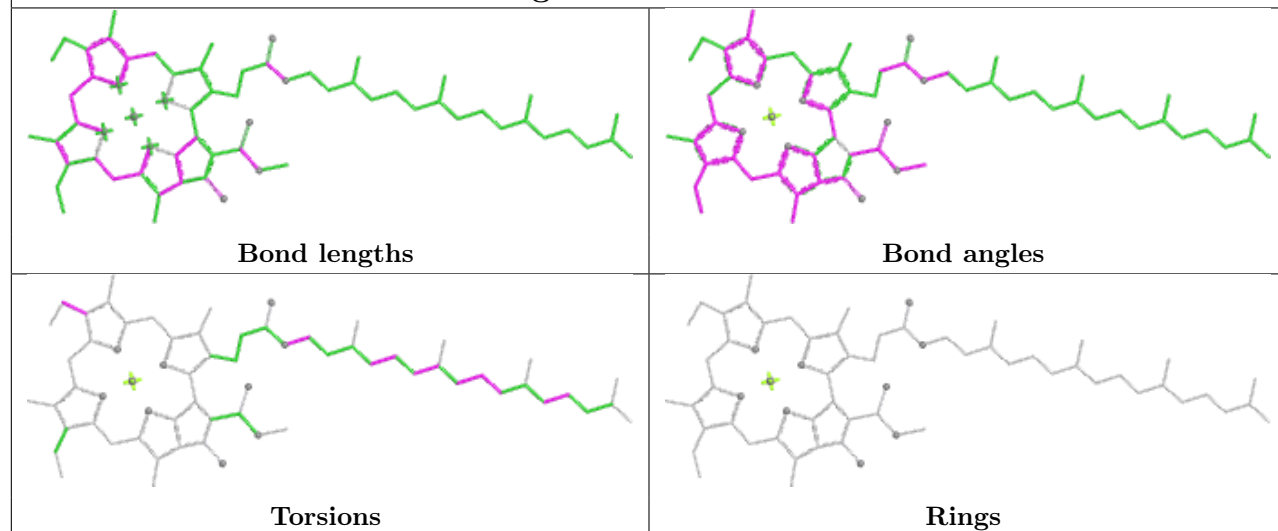
Ligand CLA c 517



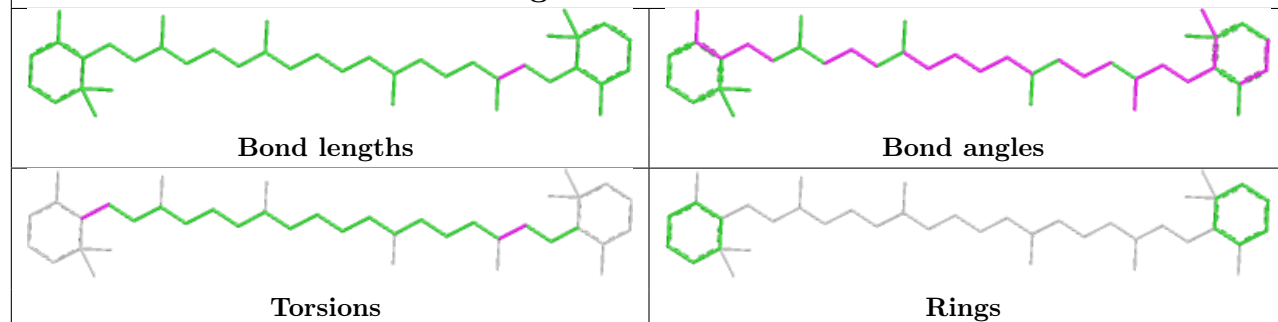
Ligand HEM F 102



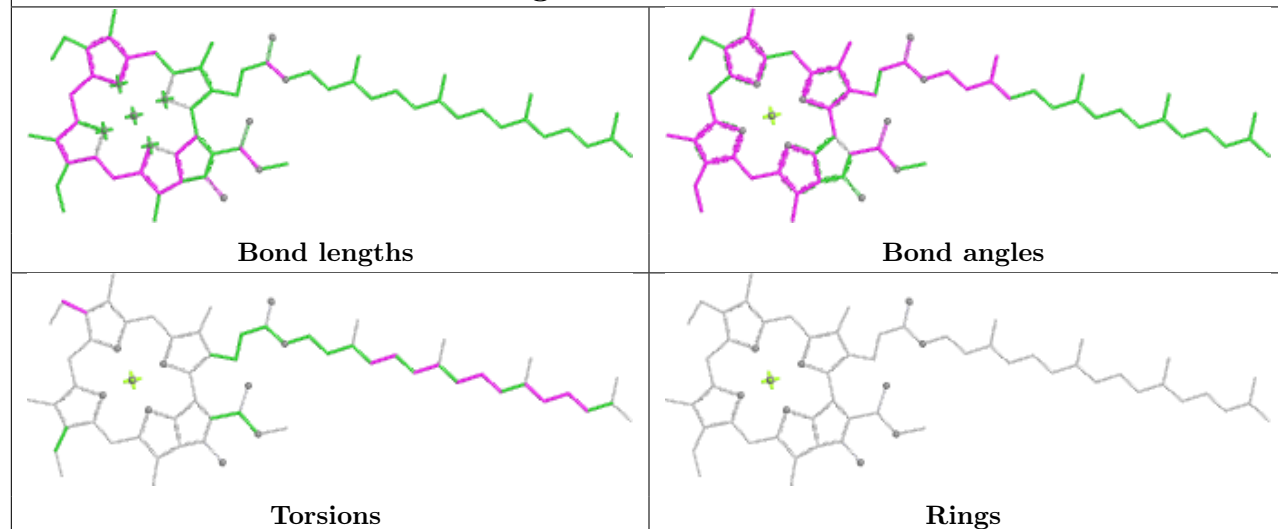
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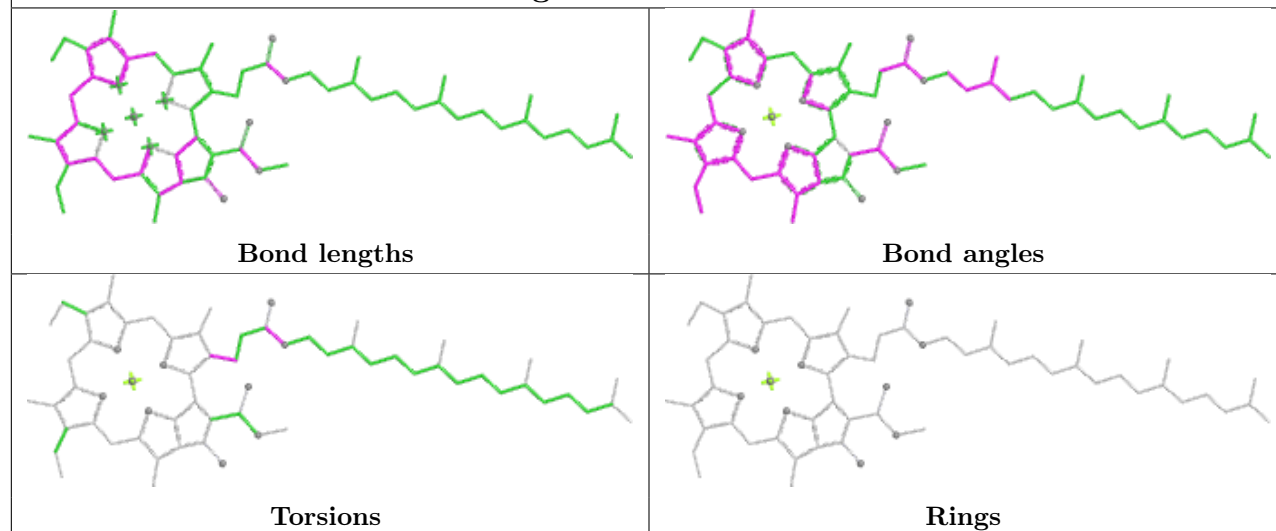
Ligand BCR Y 101



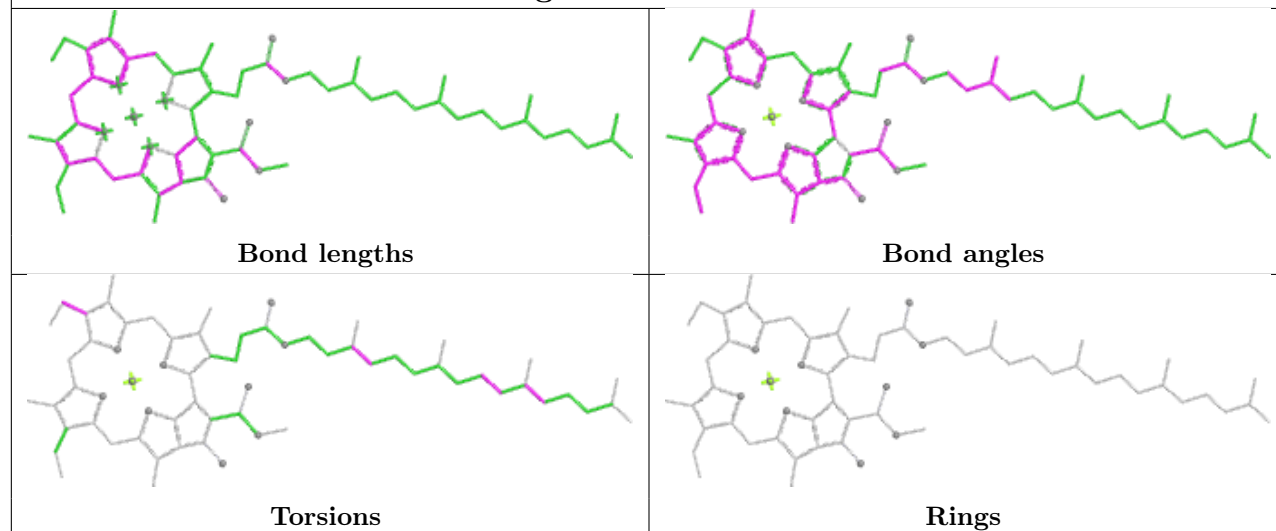
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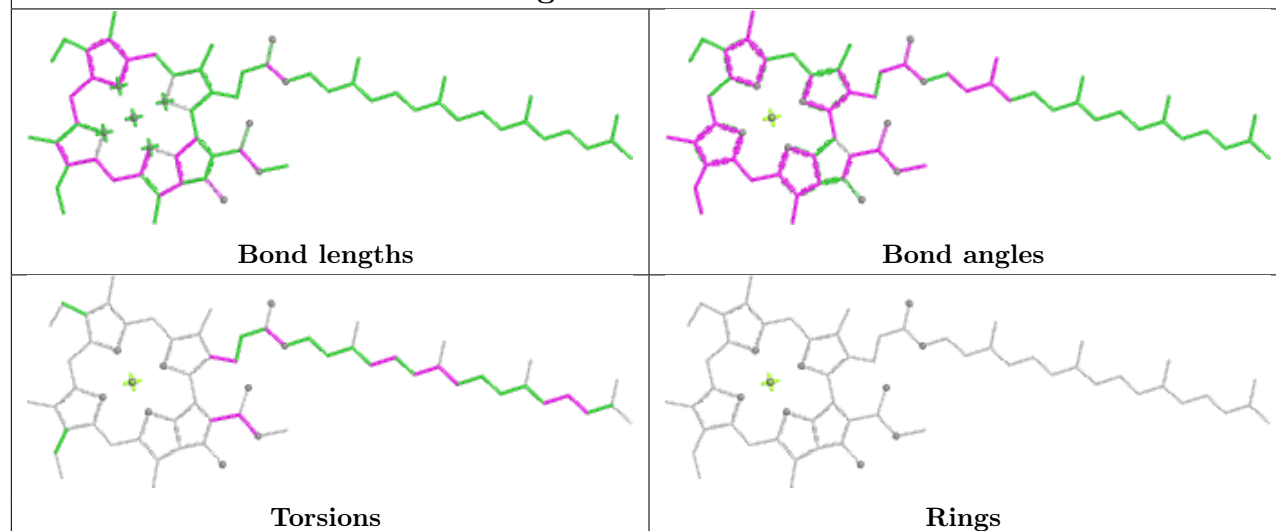
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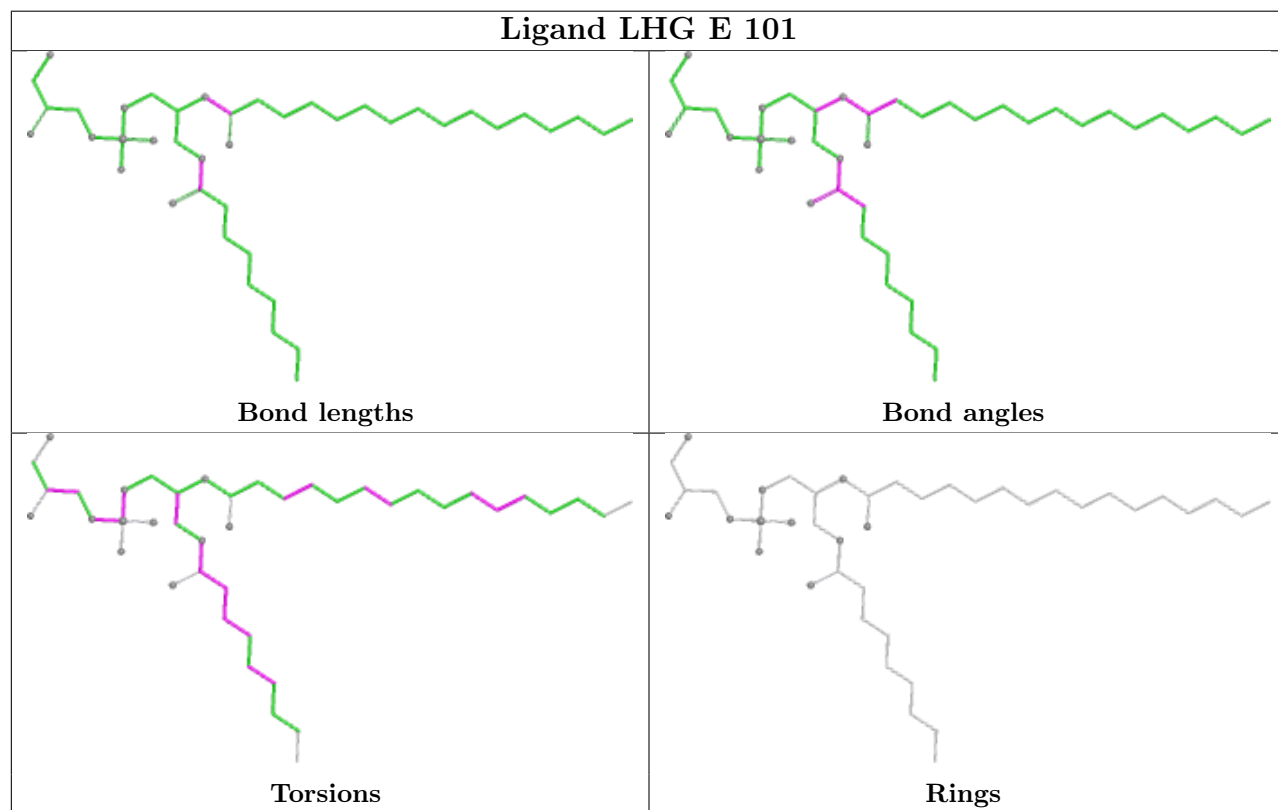
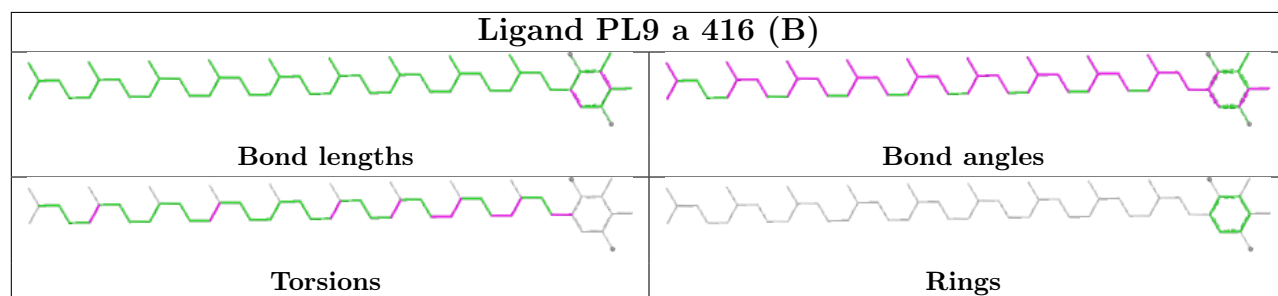
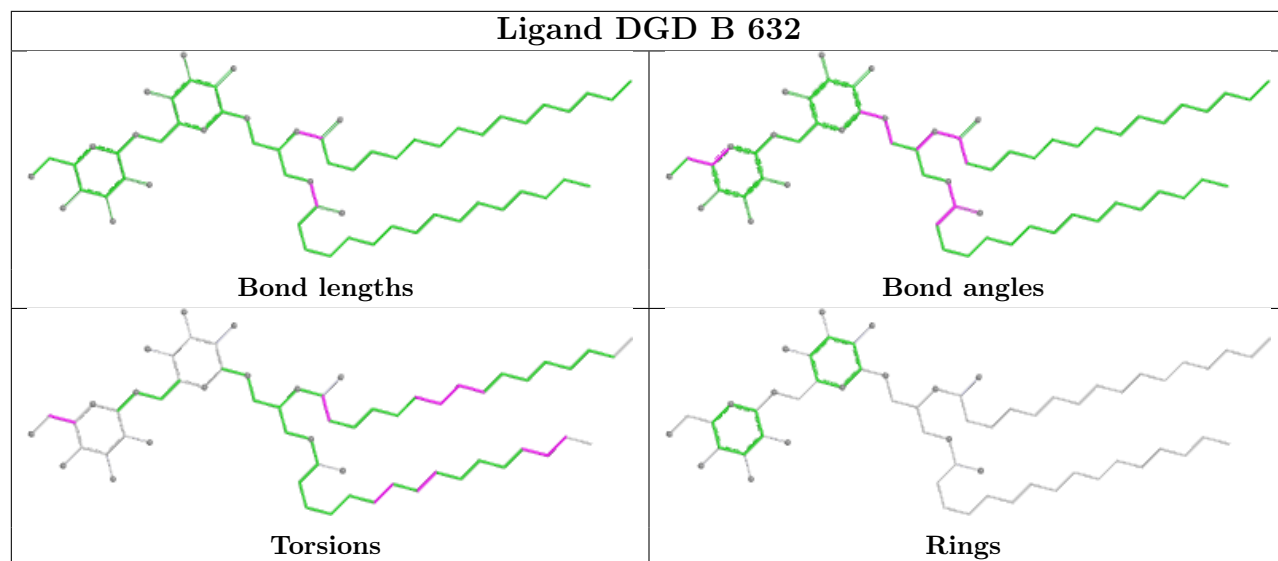


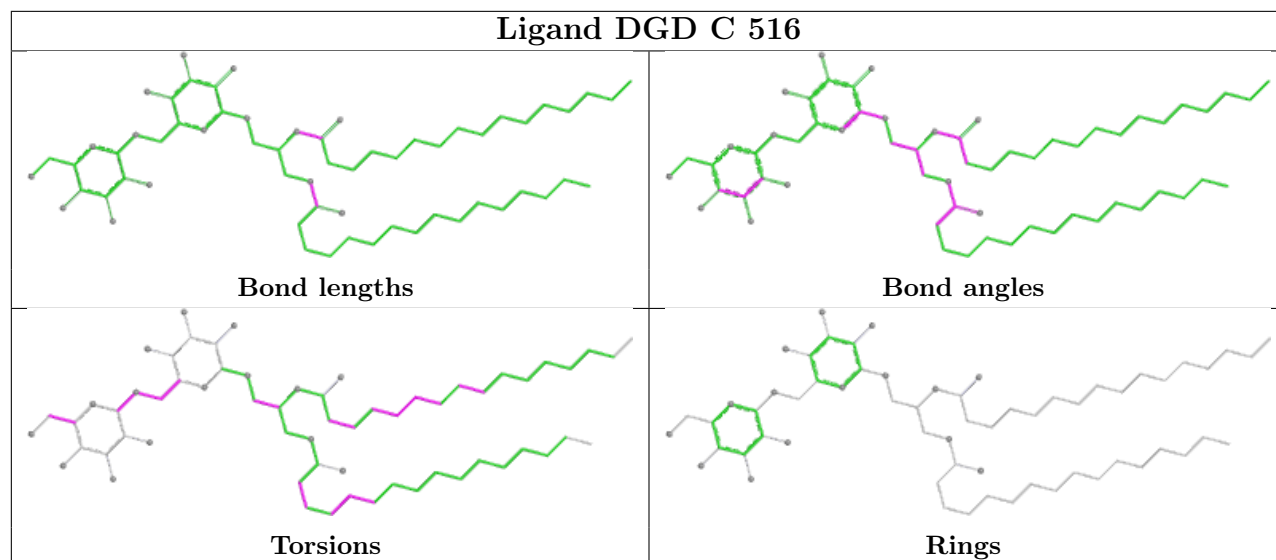
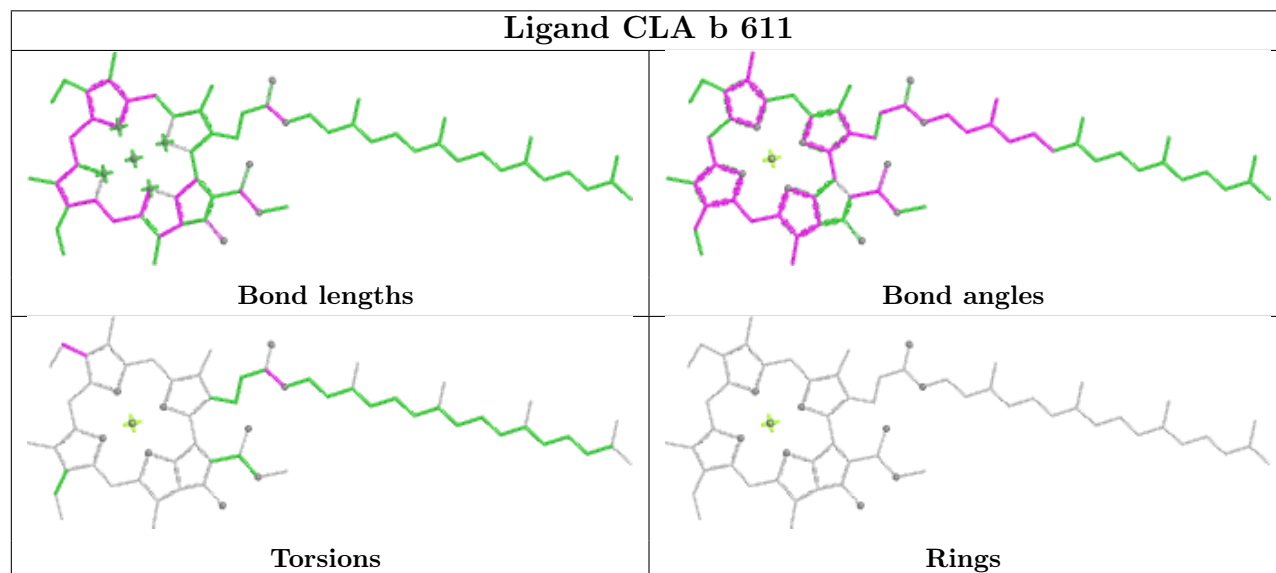
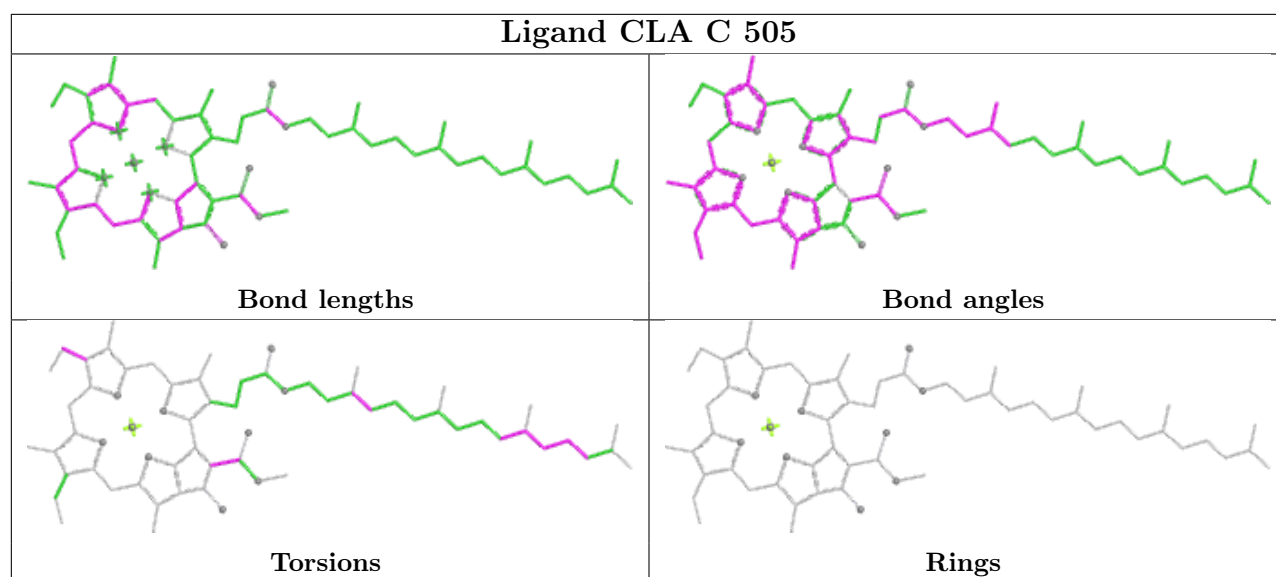
Ligand CLA b 625



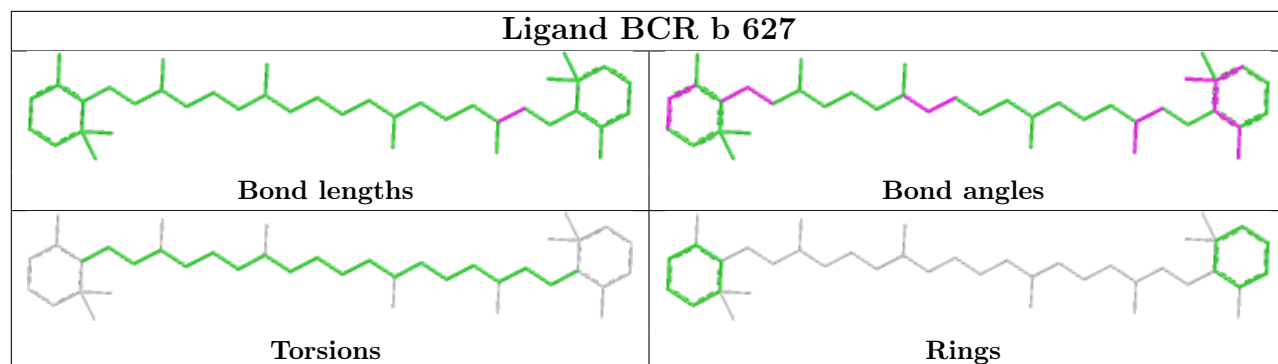
Ligand CLA c 510



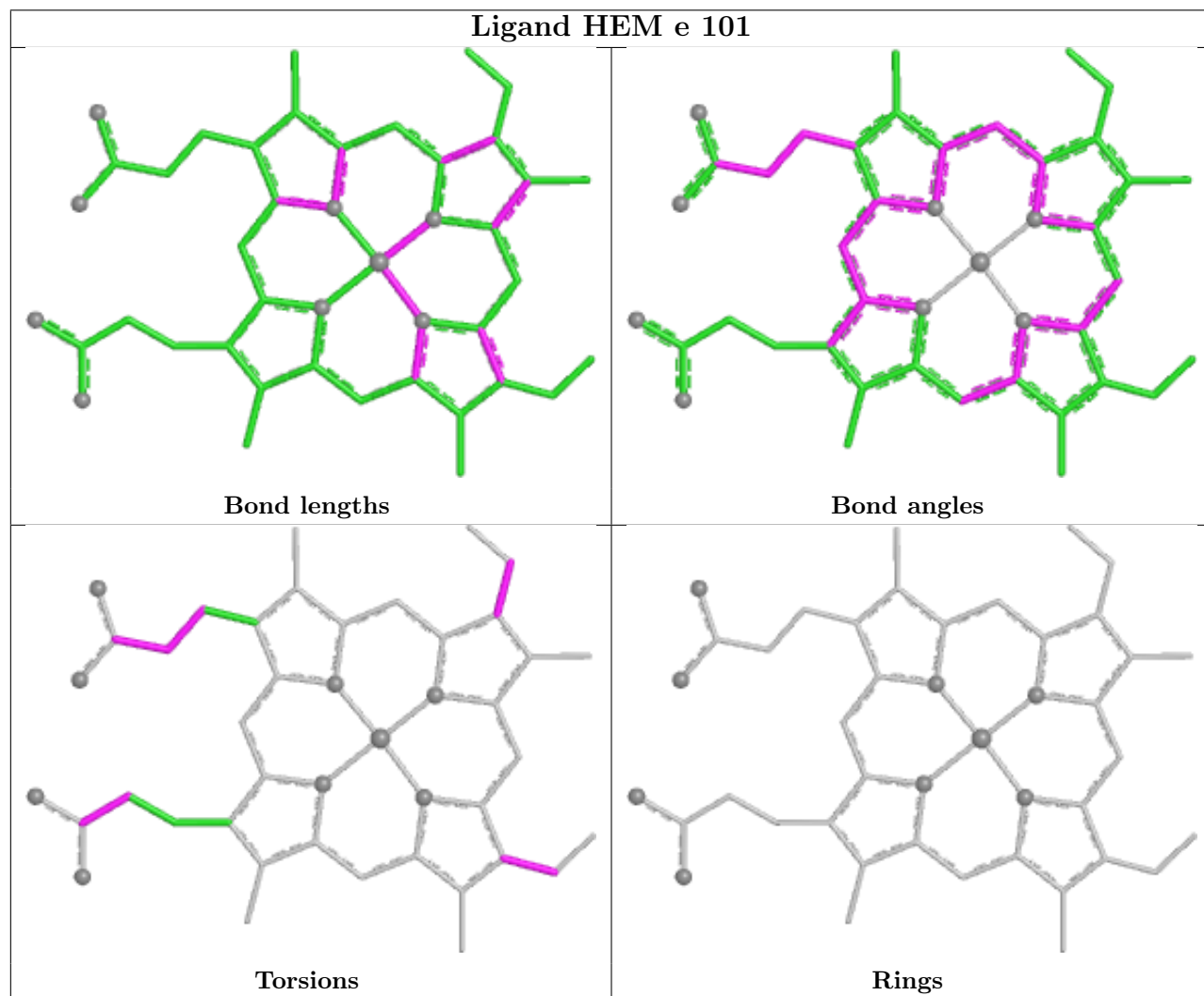


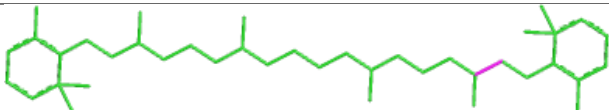
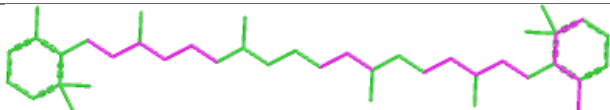
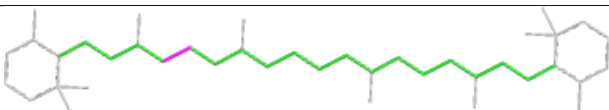
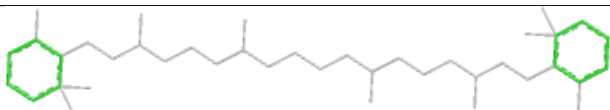


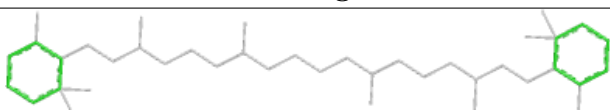
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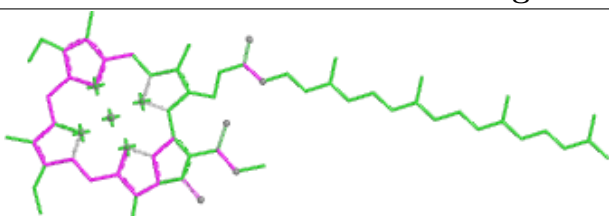
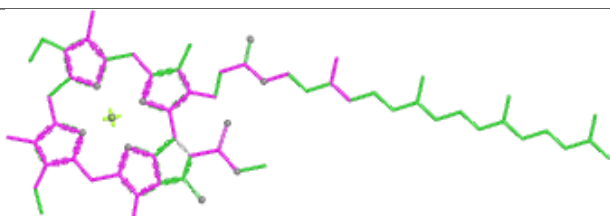
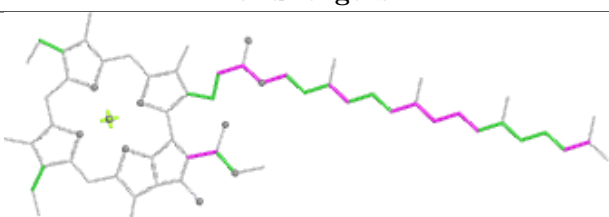
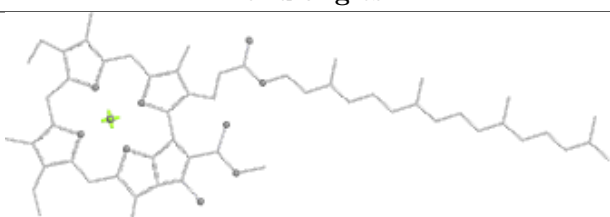


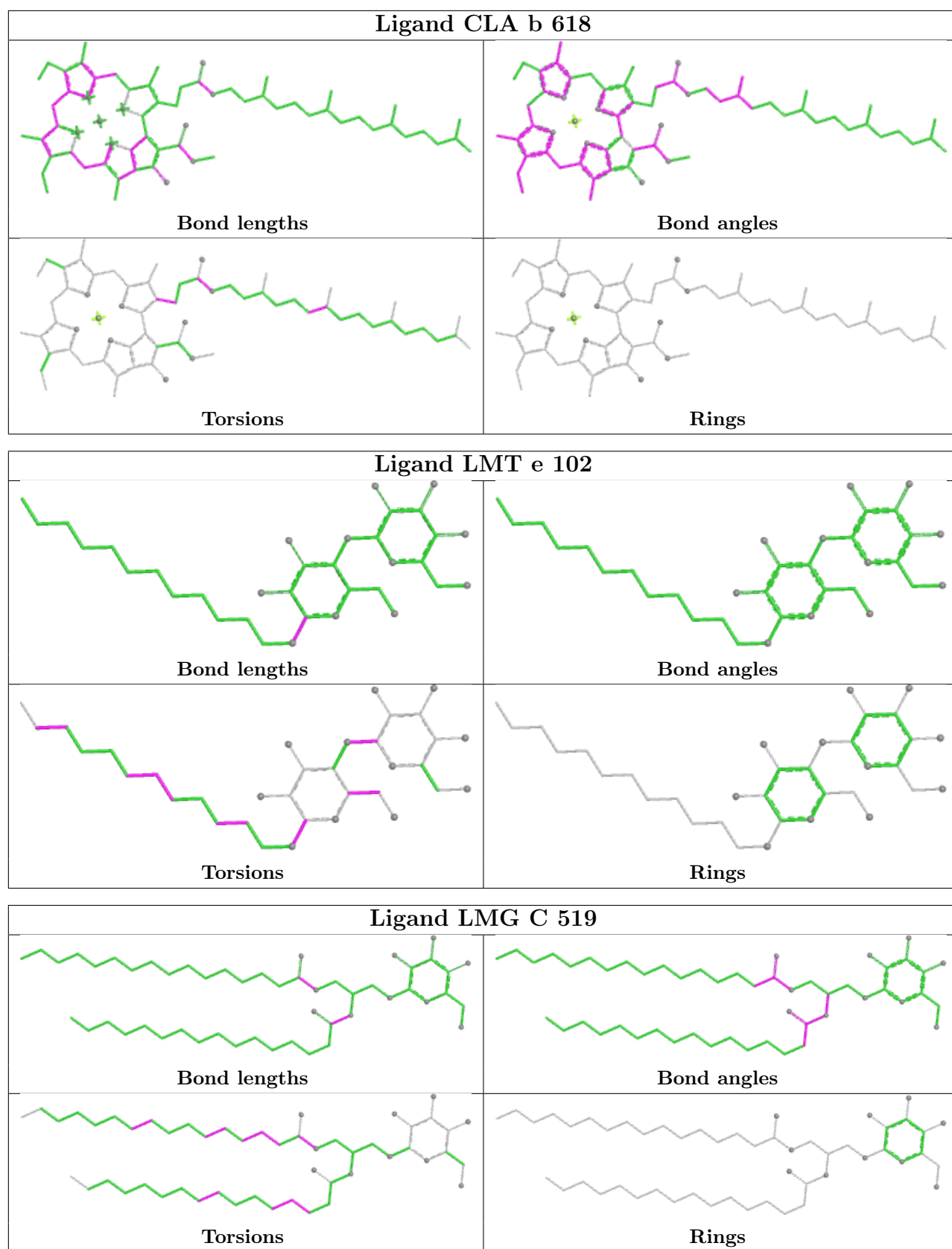
Ligand HEM e 101



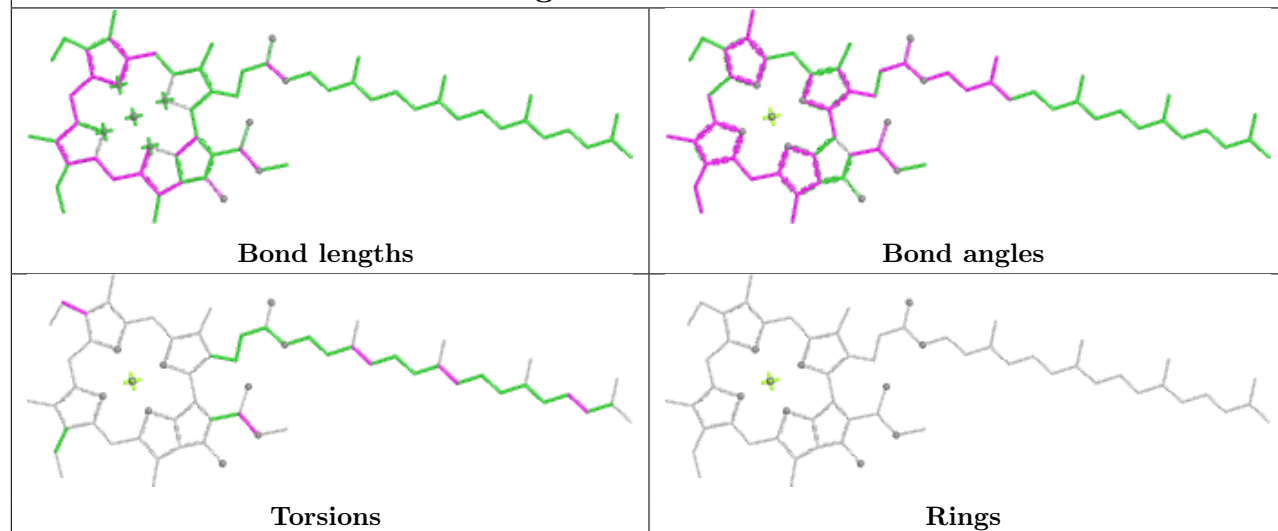
Ligand BCR h 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR k 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

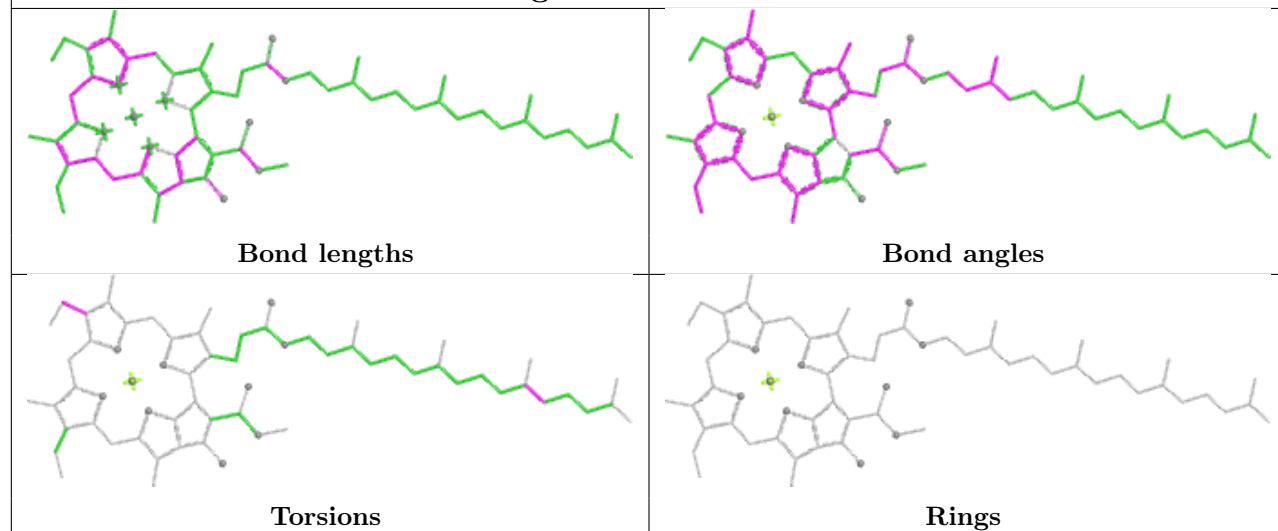
Ligand CLA b 610	
	
Bond lengths	Bond angles
	
Torsions	Rings



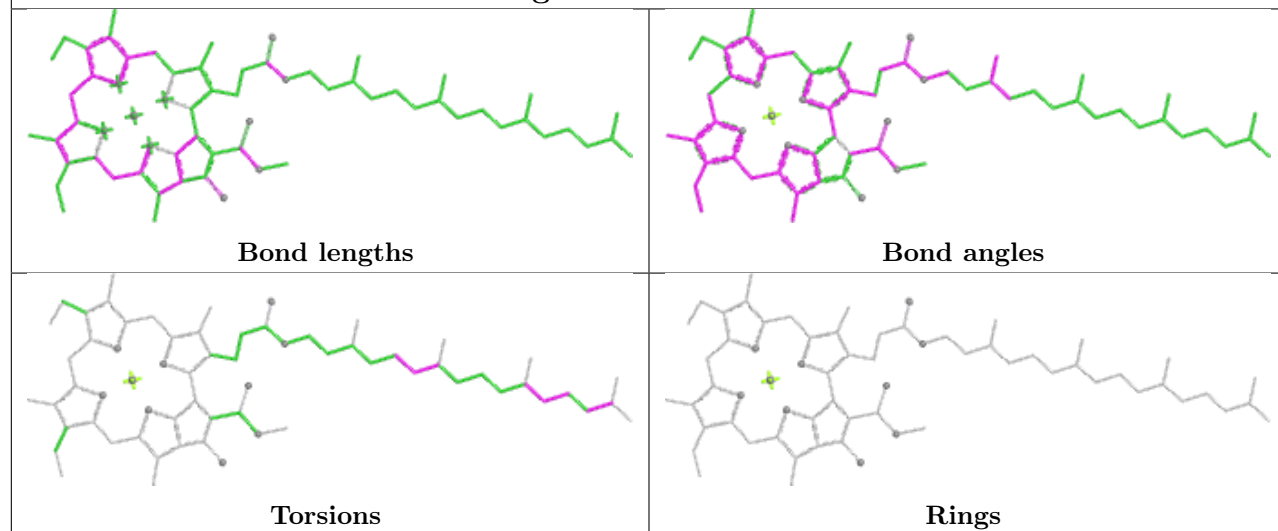
Ligand CLA d 405

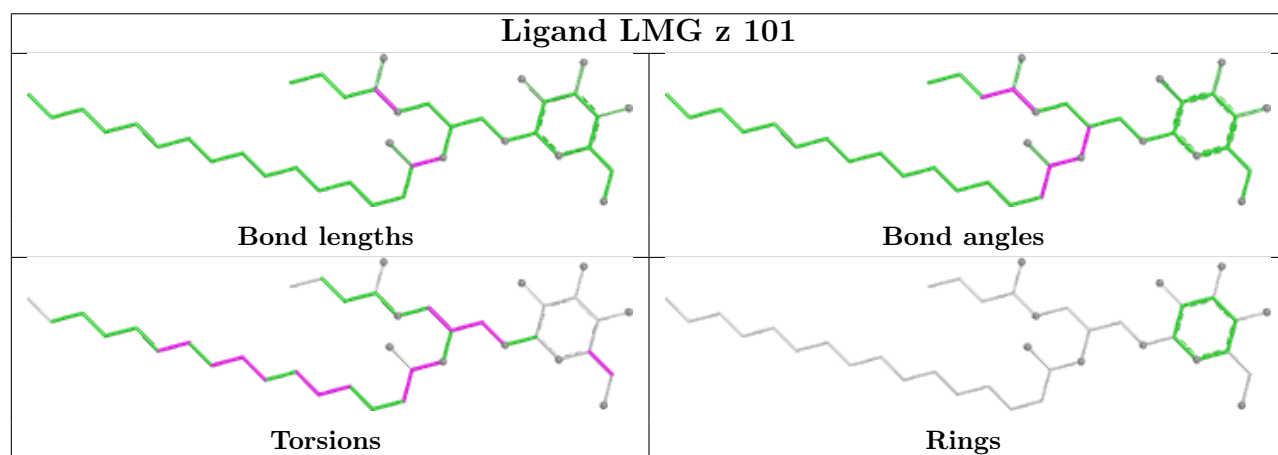
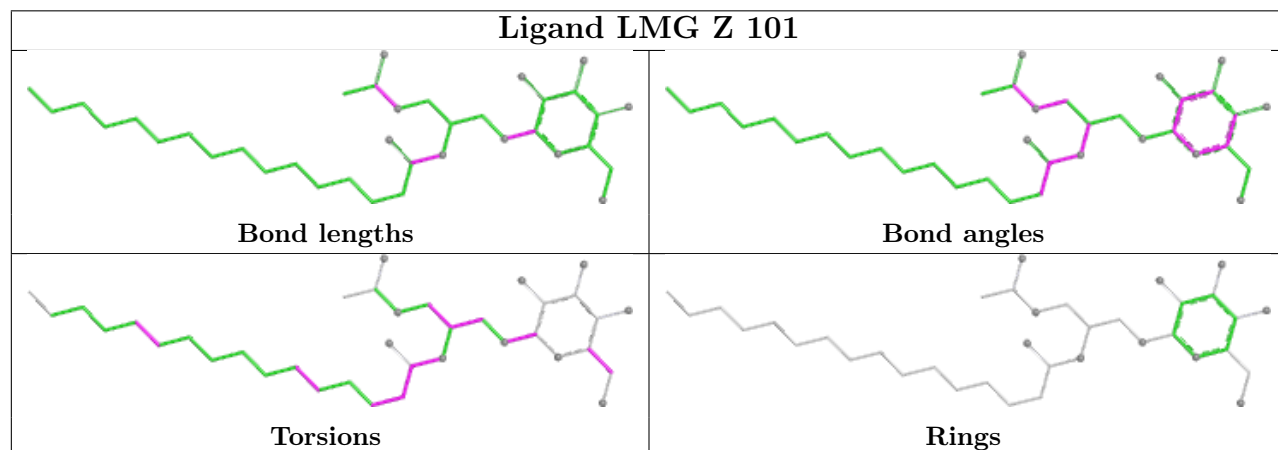
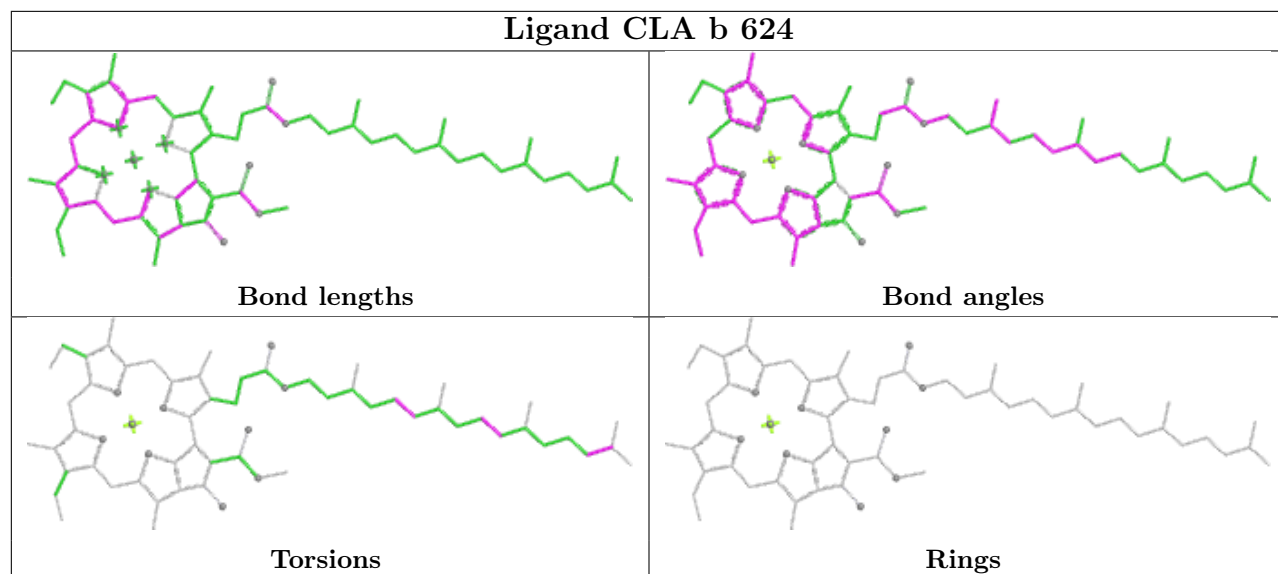


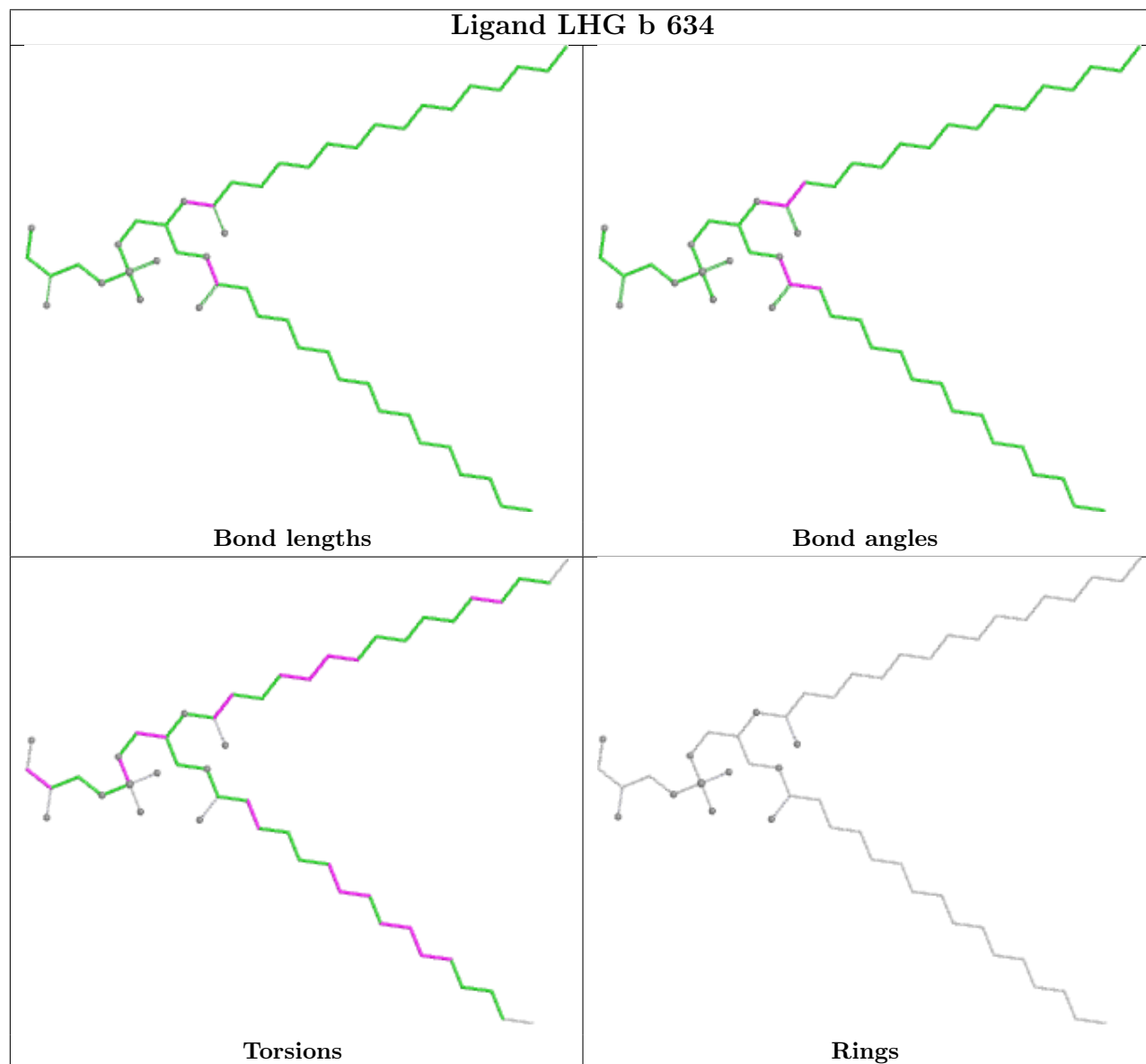
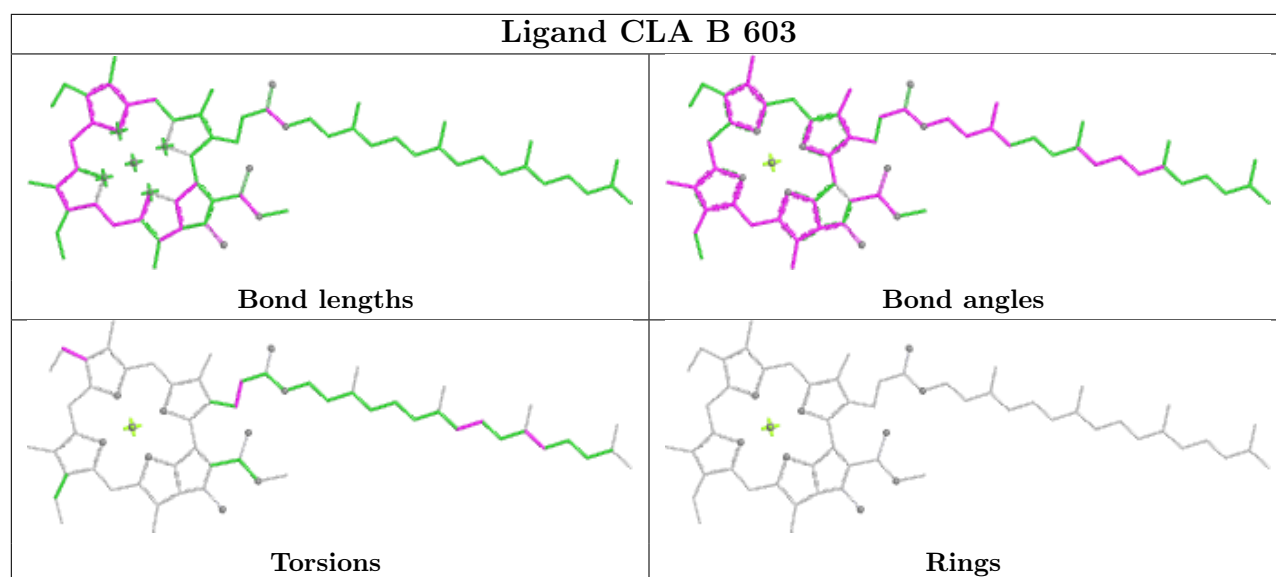
Ligand CLA D 406

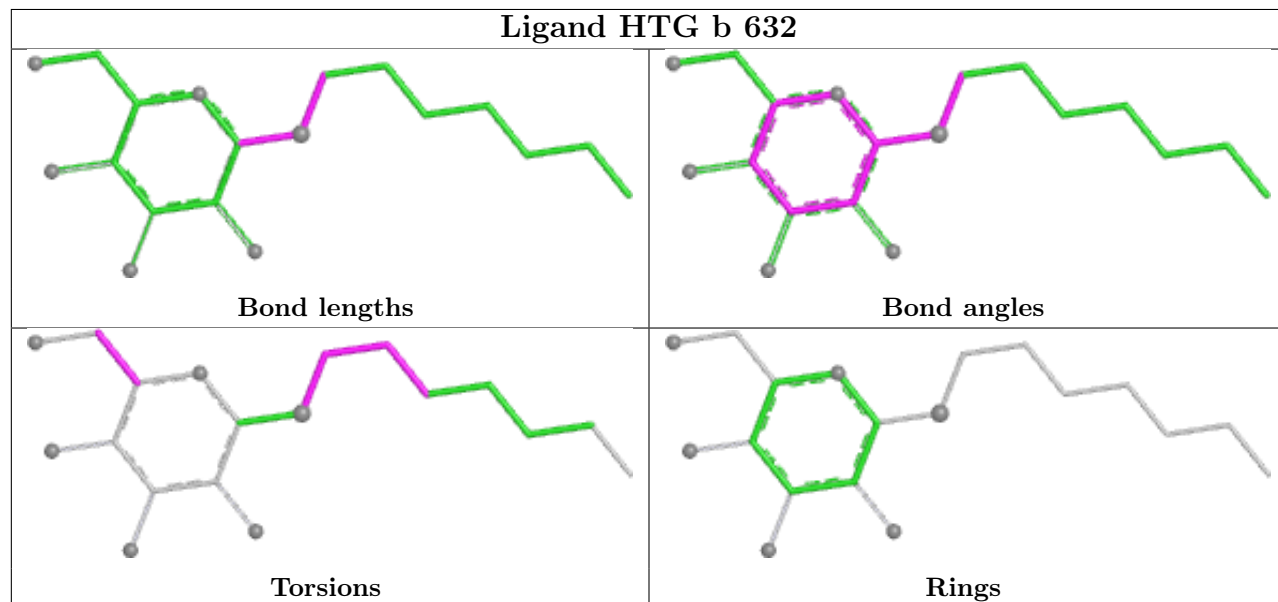
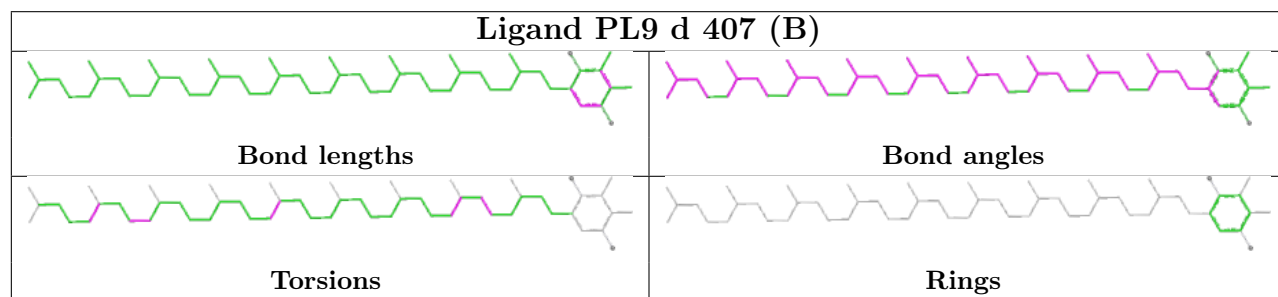
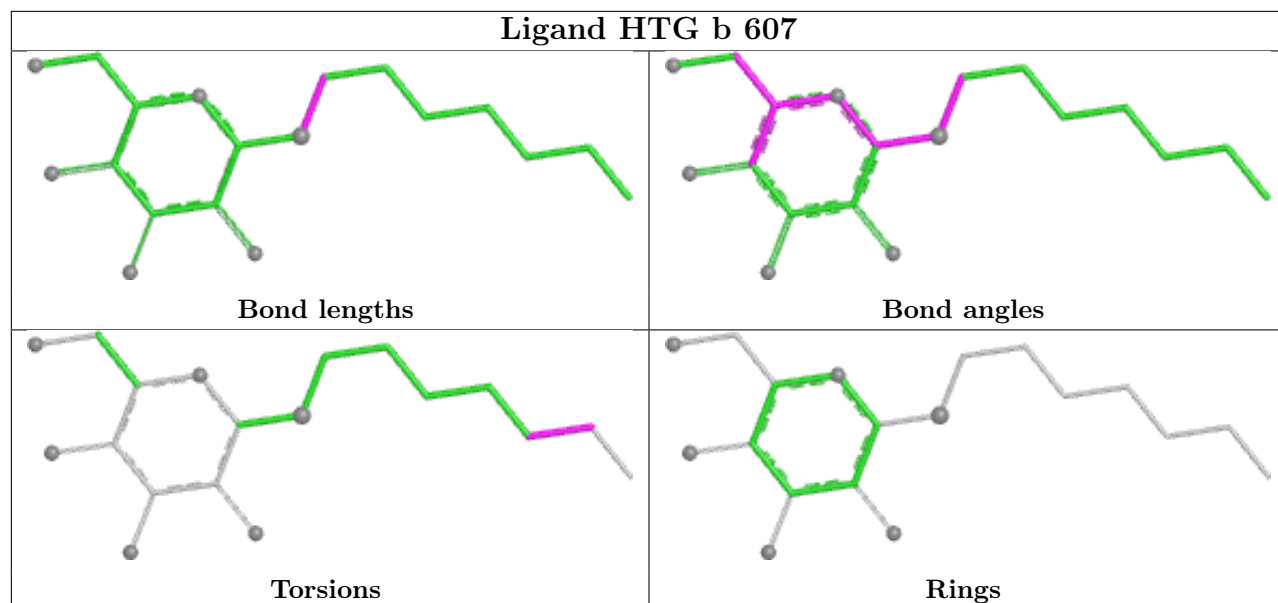


Ligand CLA B 604

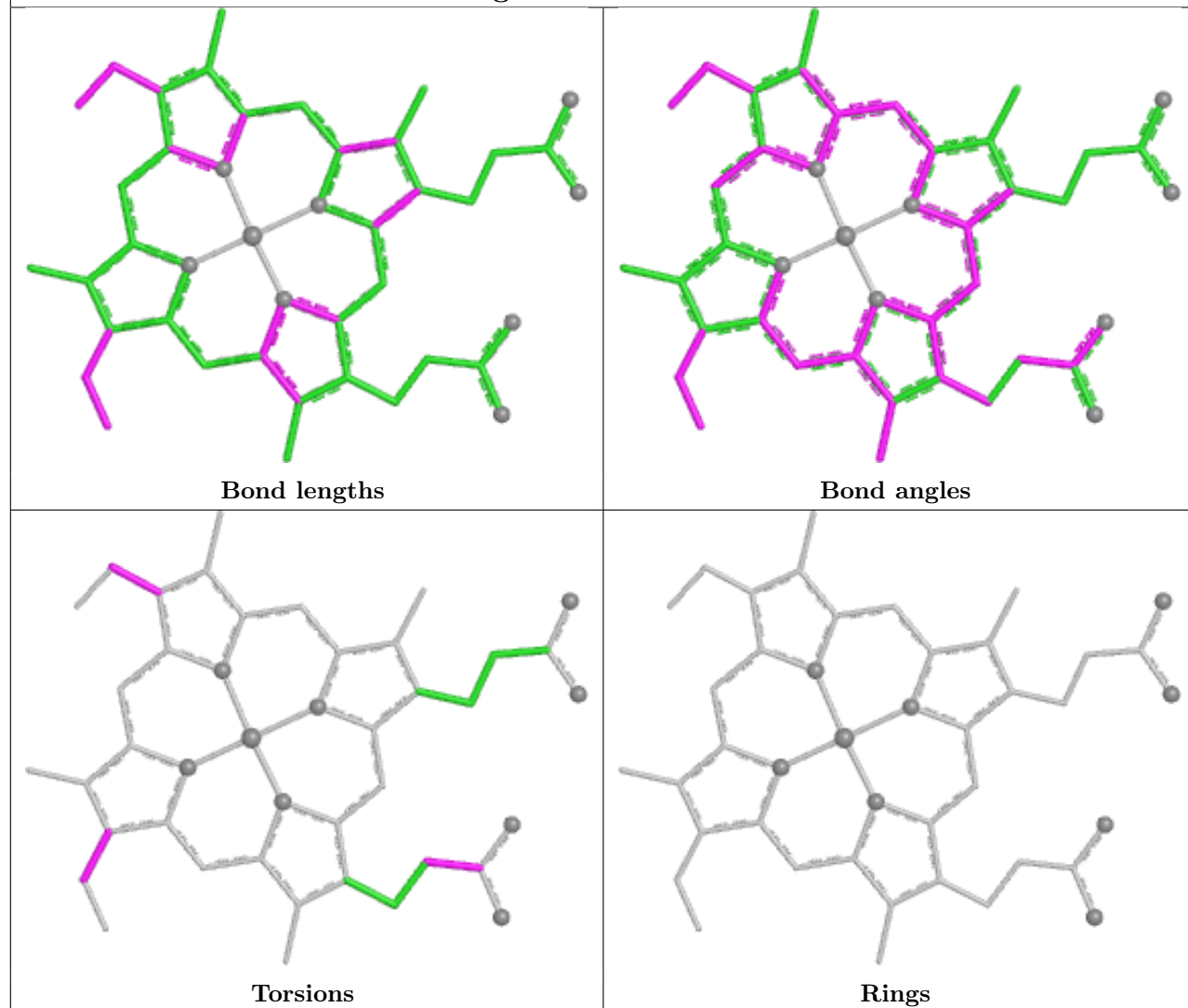




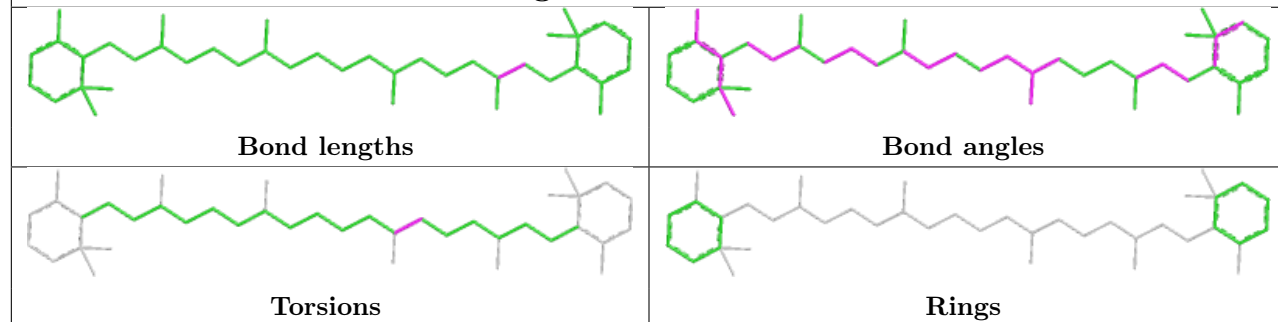


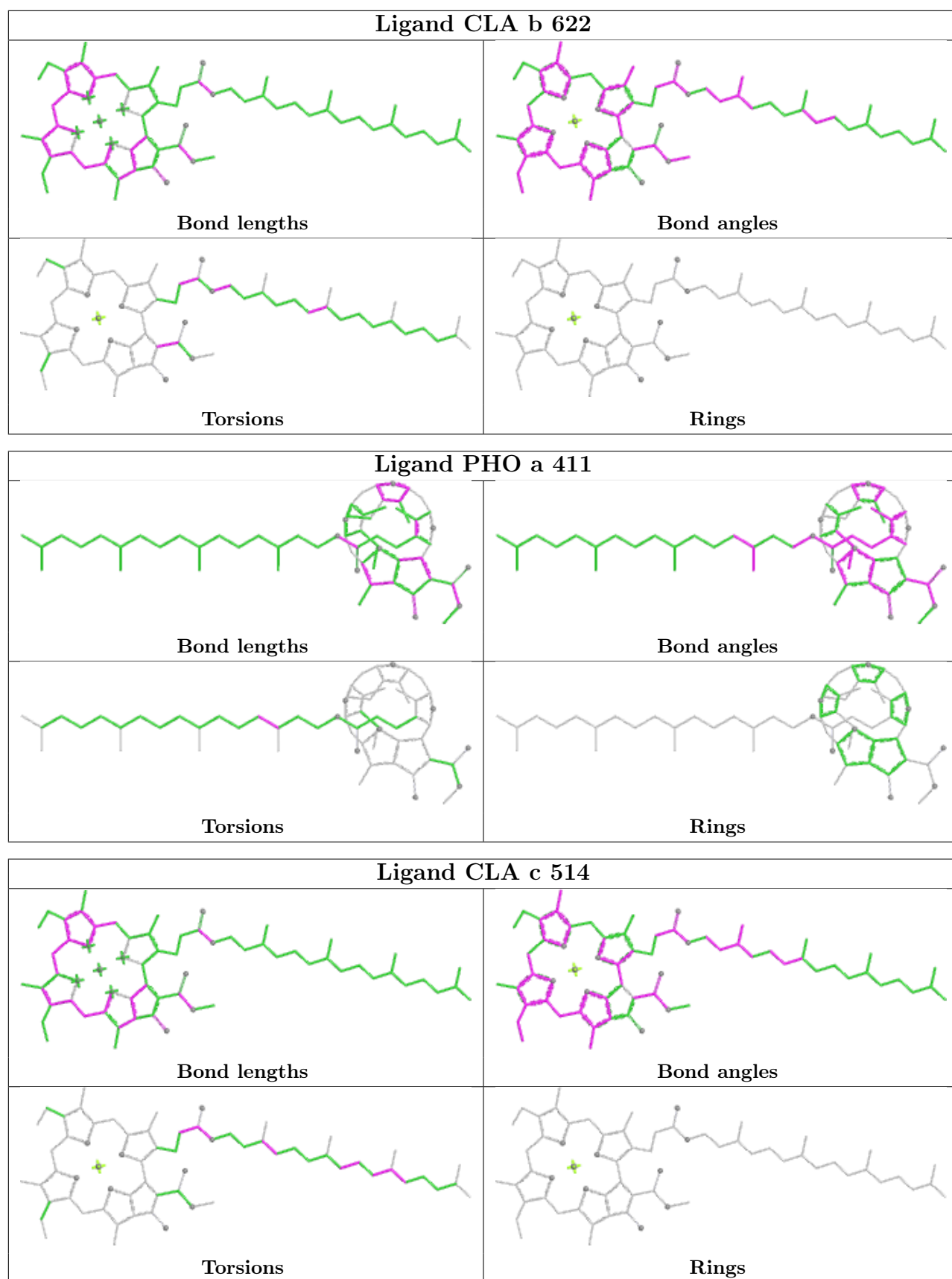


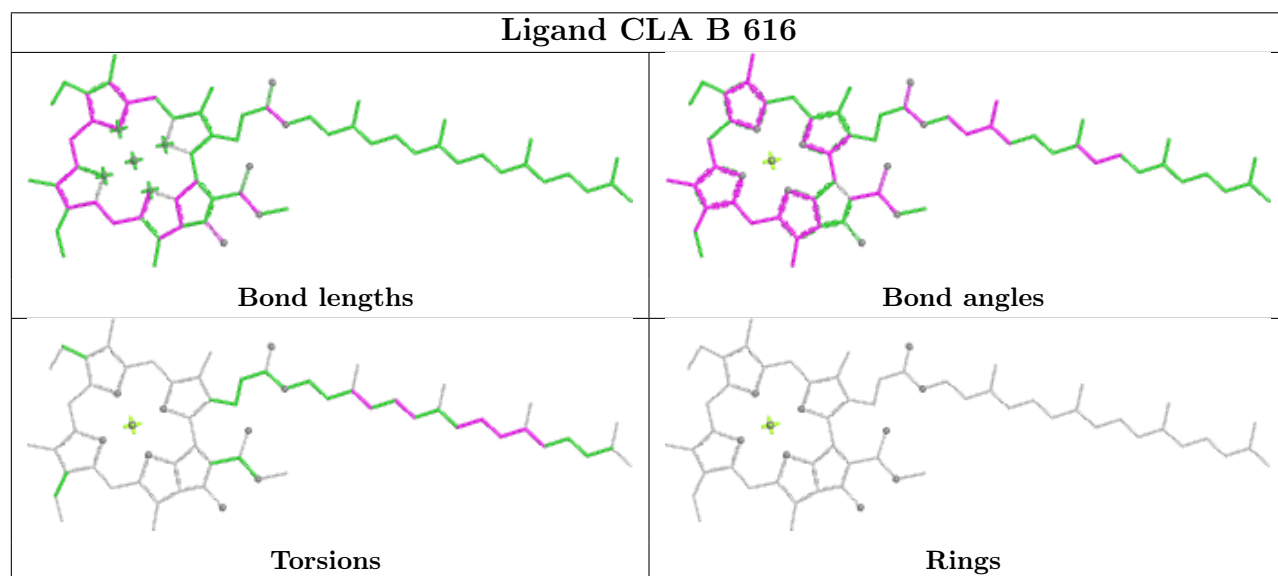
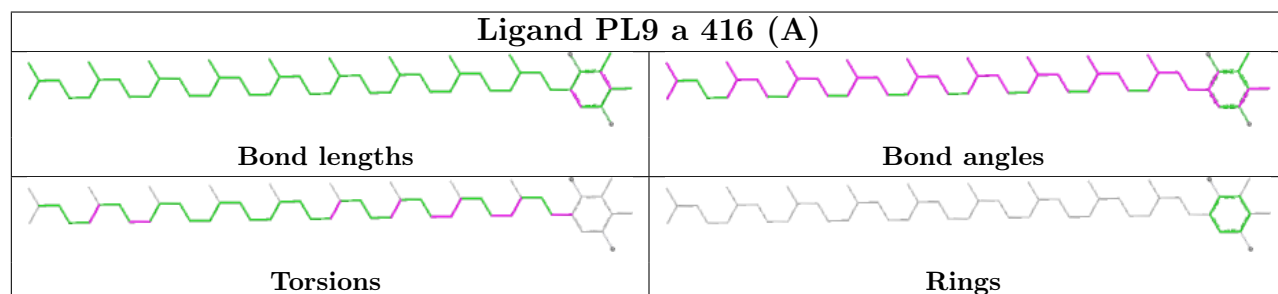
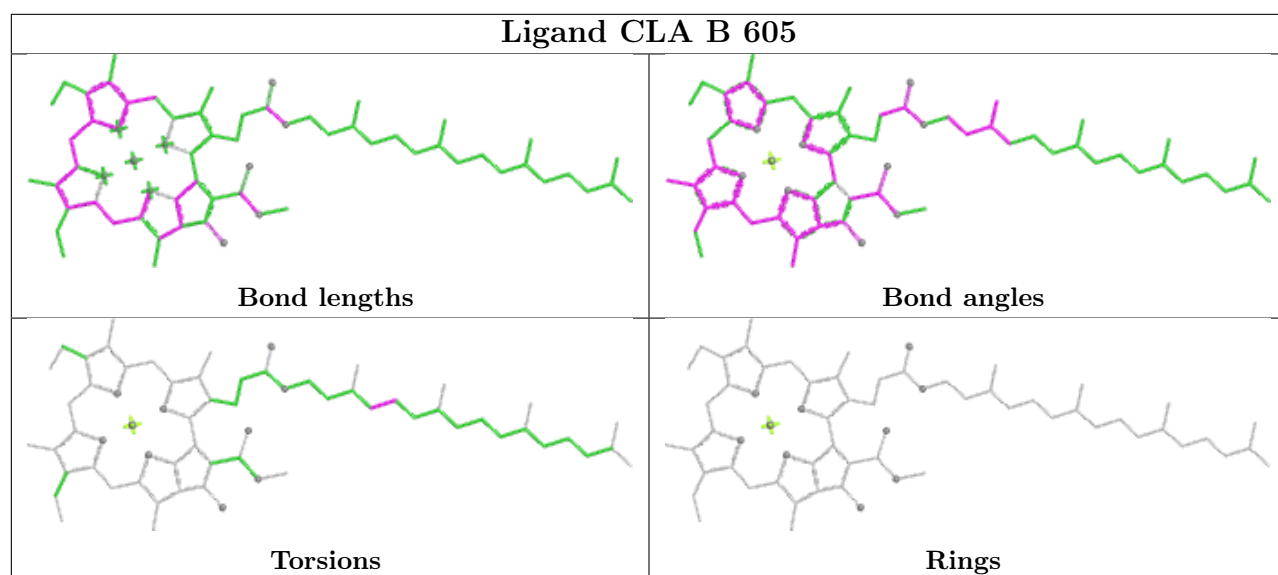
Ligand HEC V 206

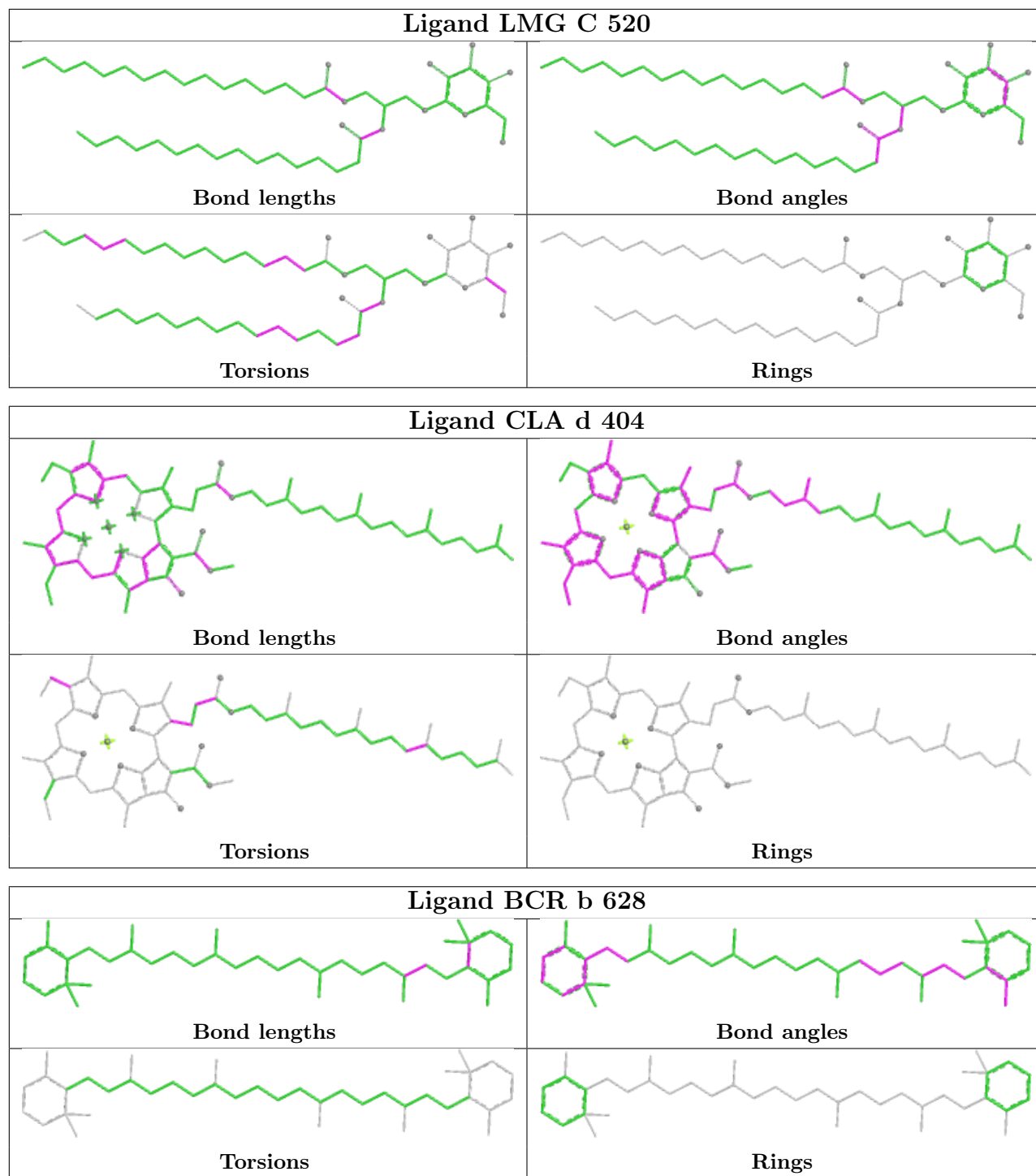


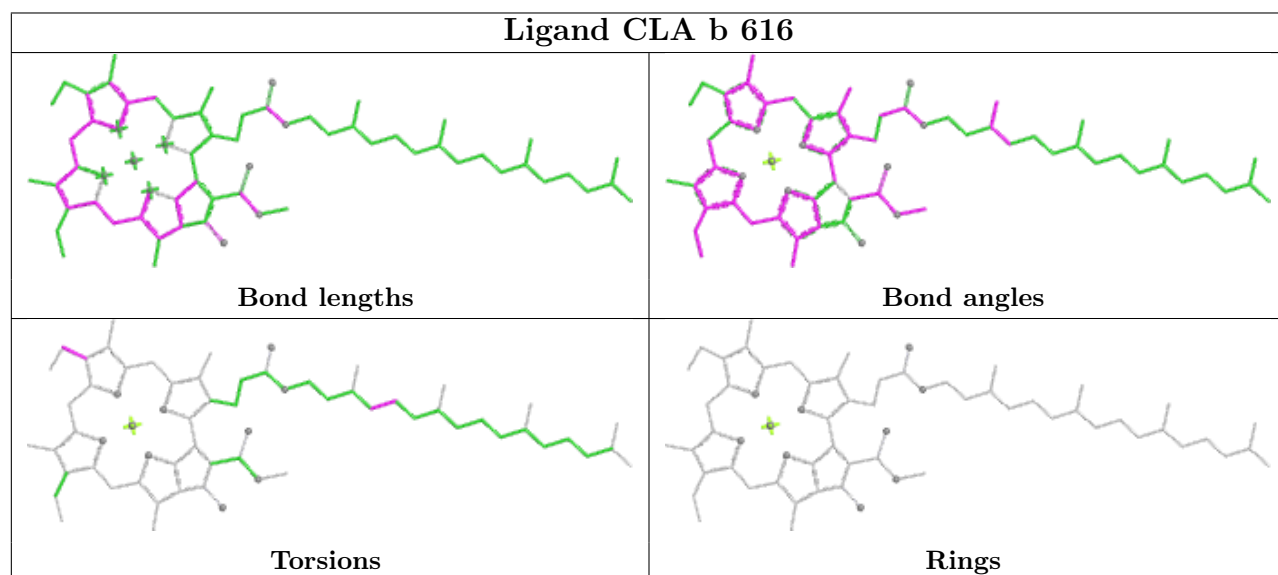
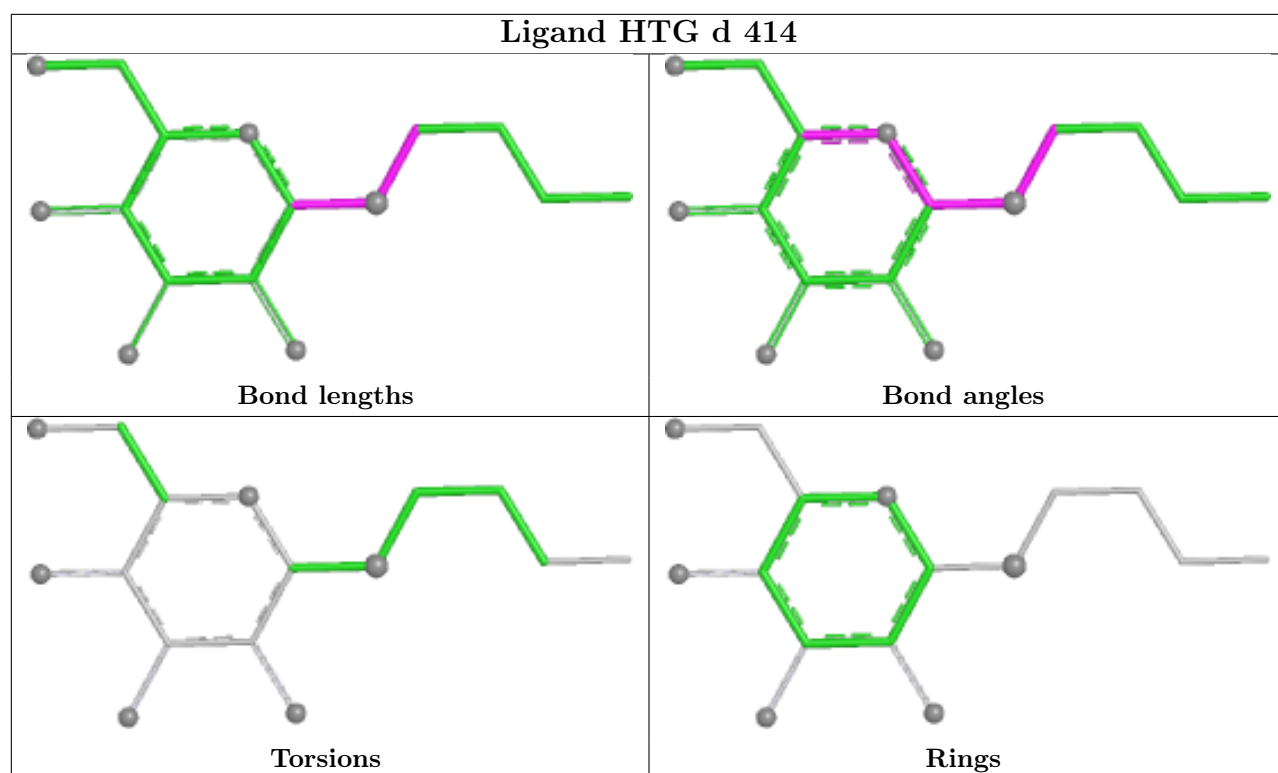
Ligand BCR b 626



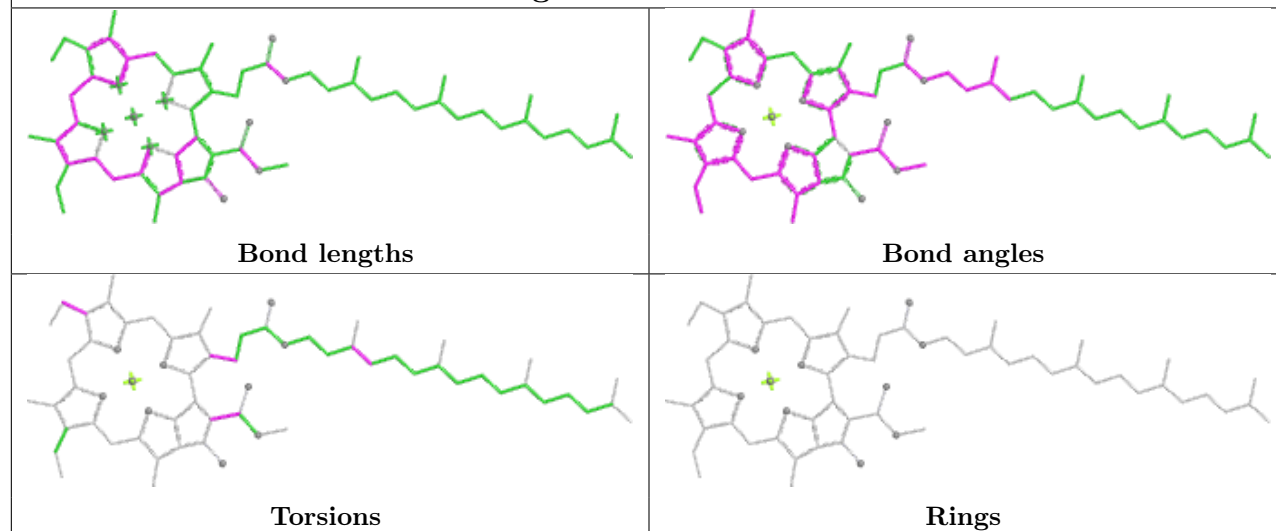




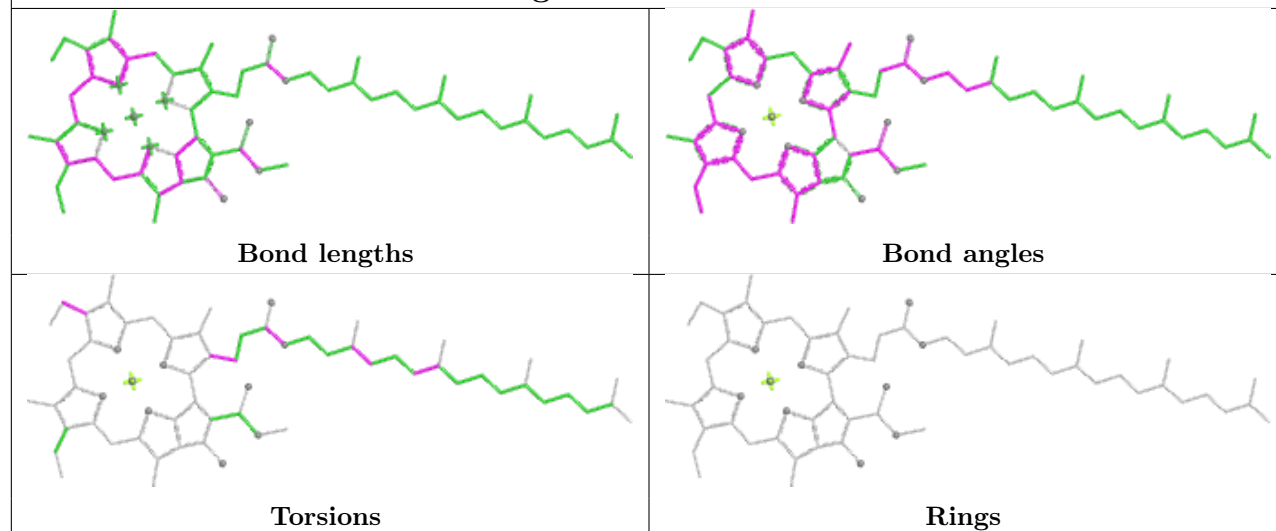




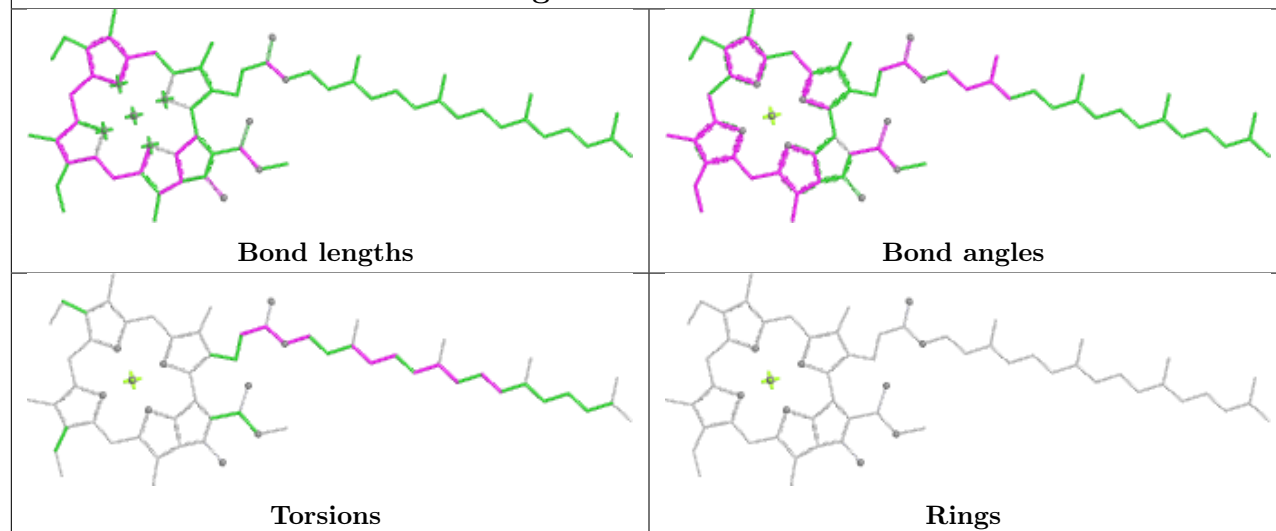
Ligand CLA B 608

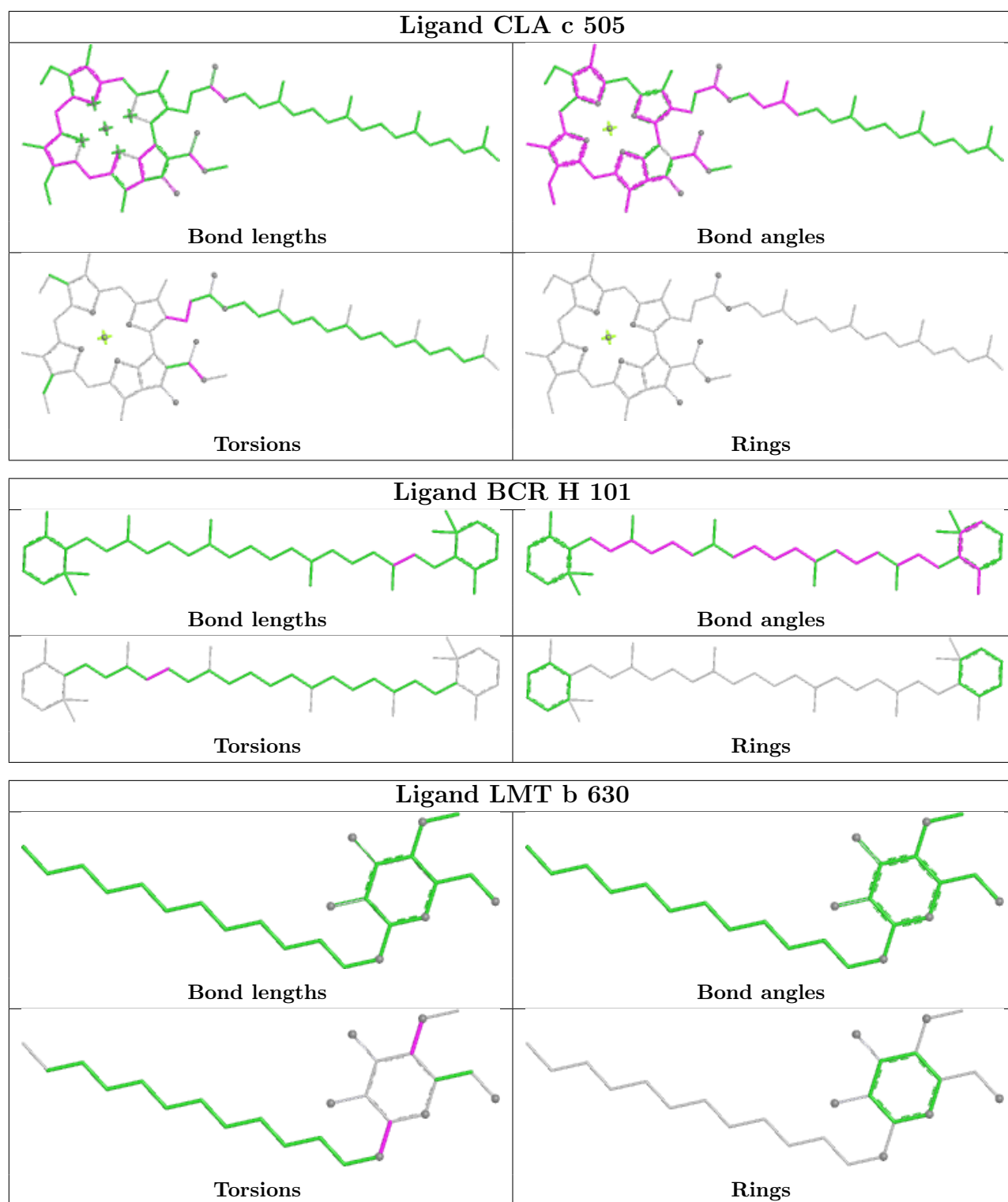


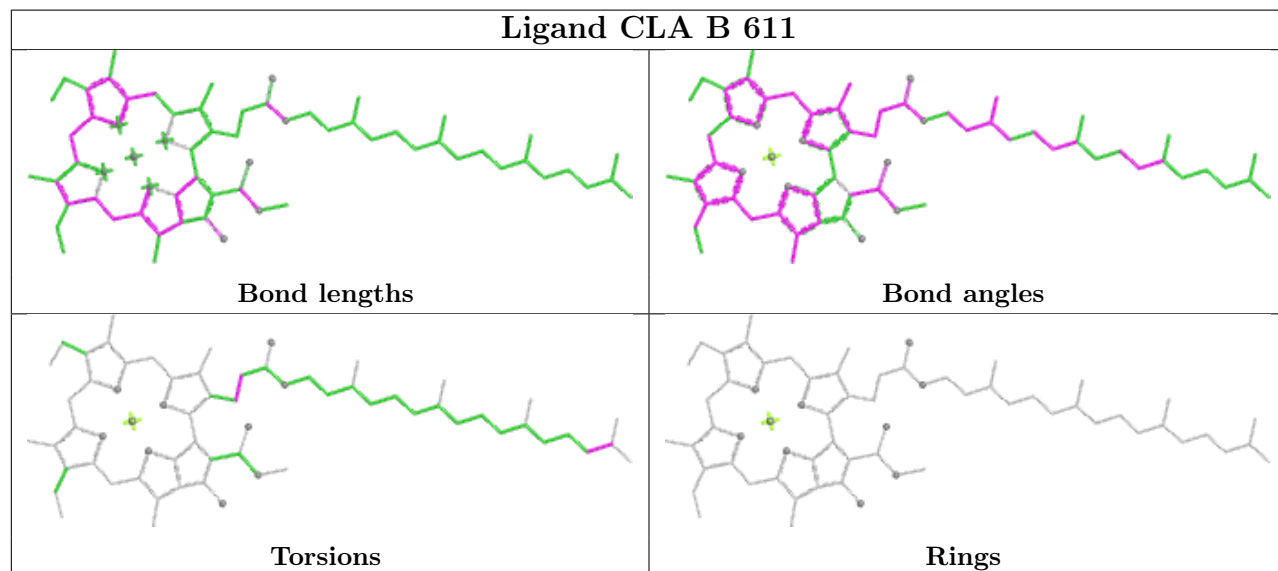
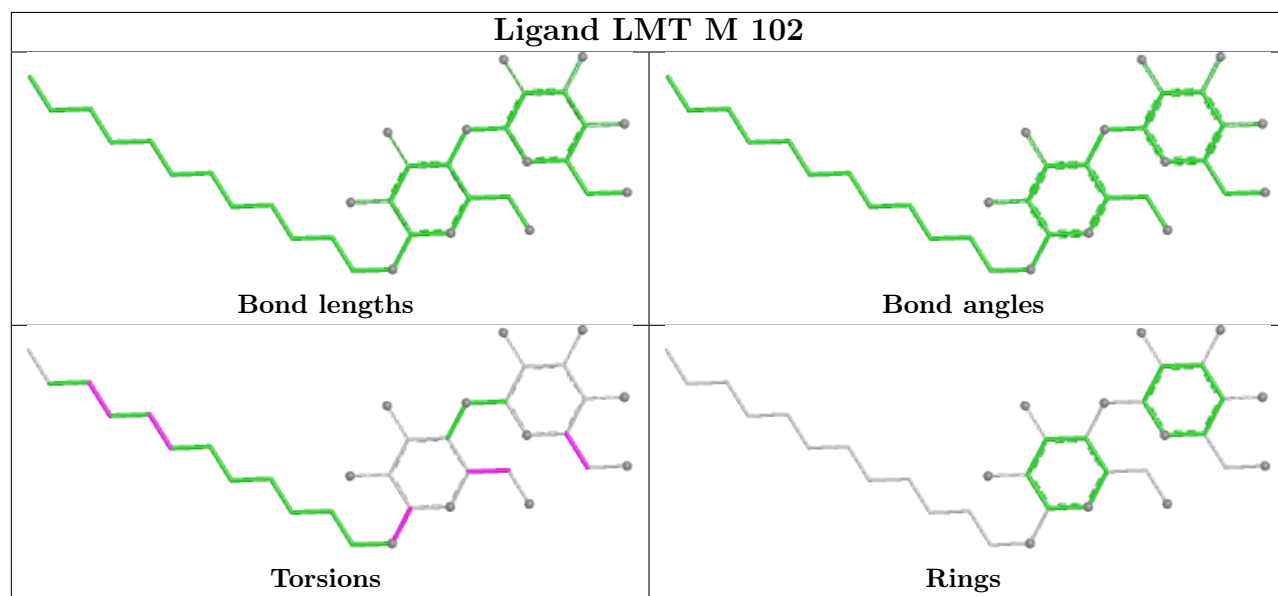
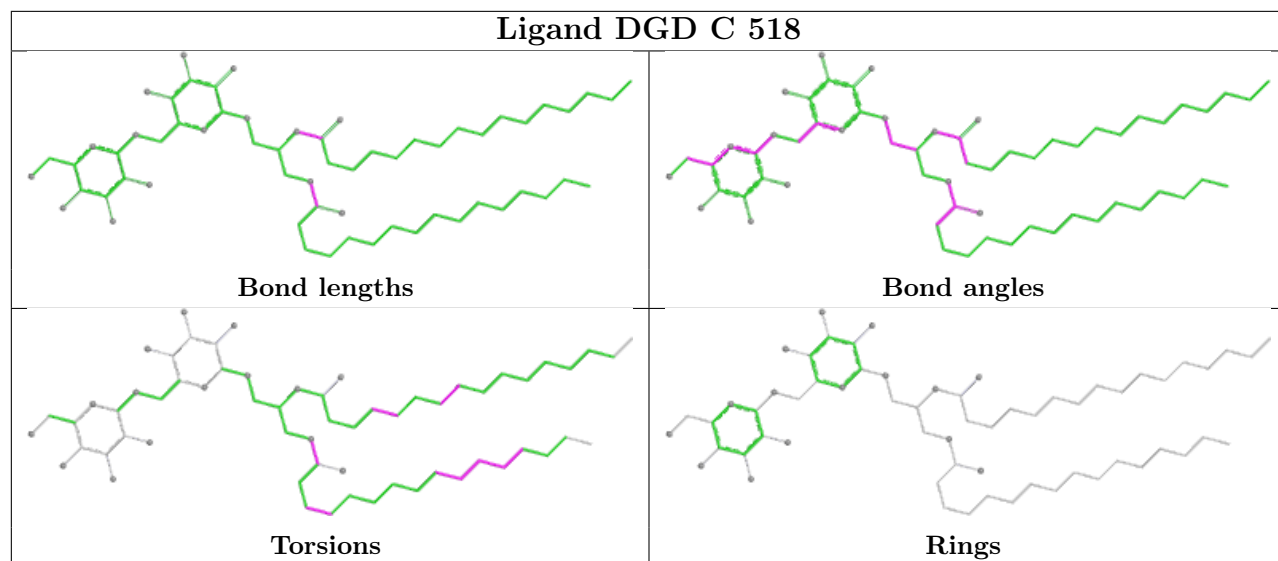
Ligand CLA B 610



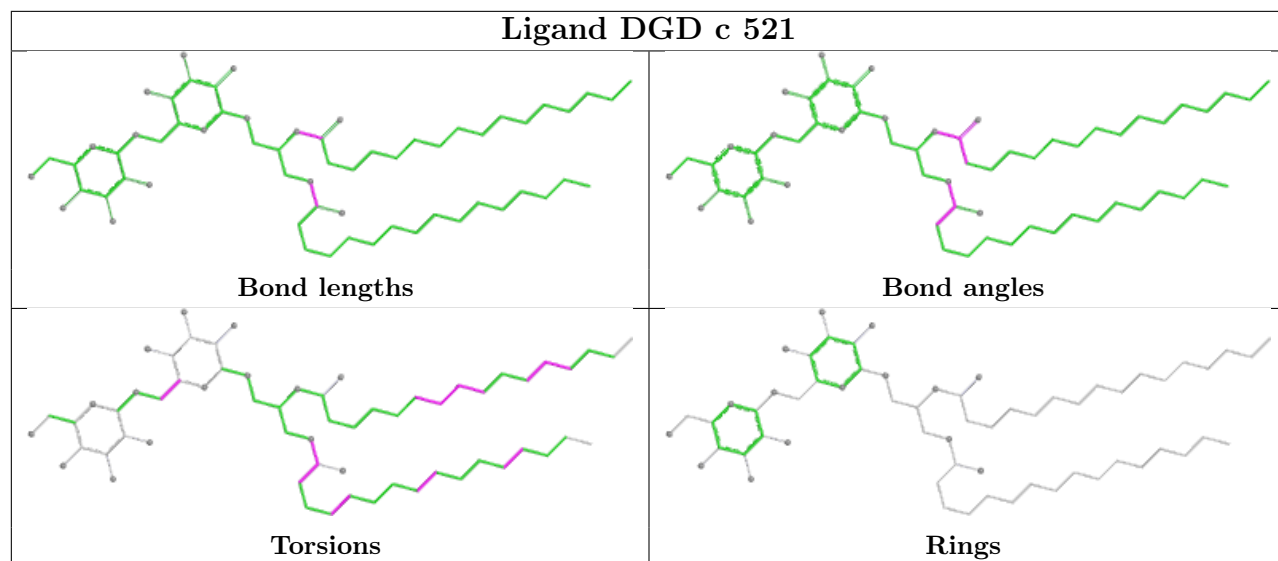
Ligand CLA C 513



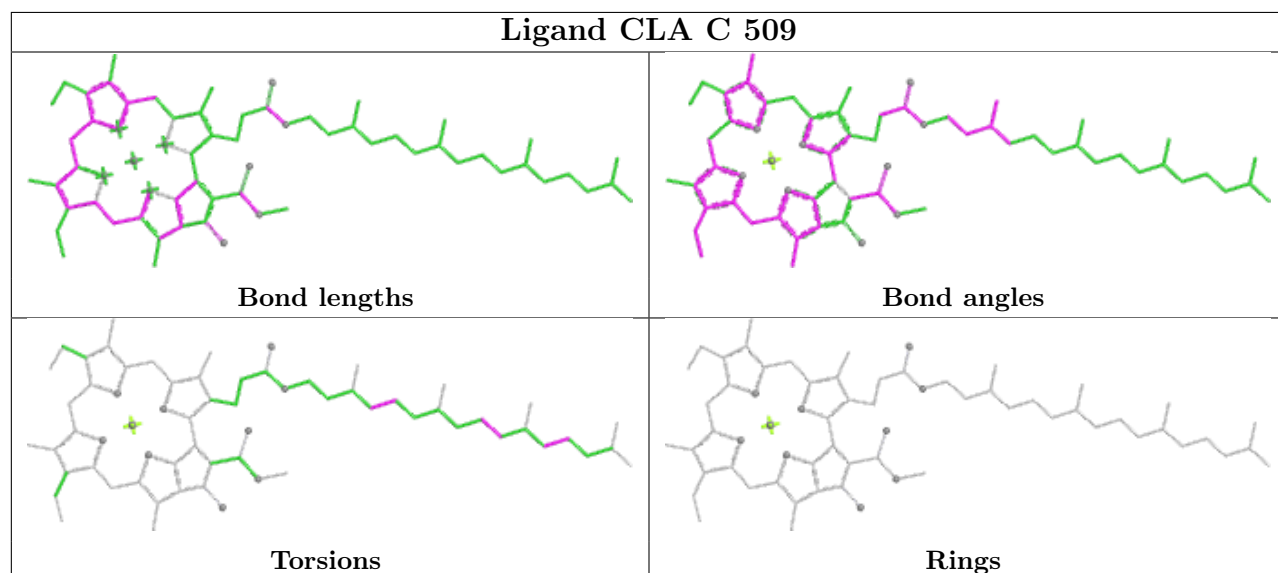




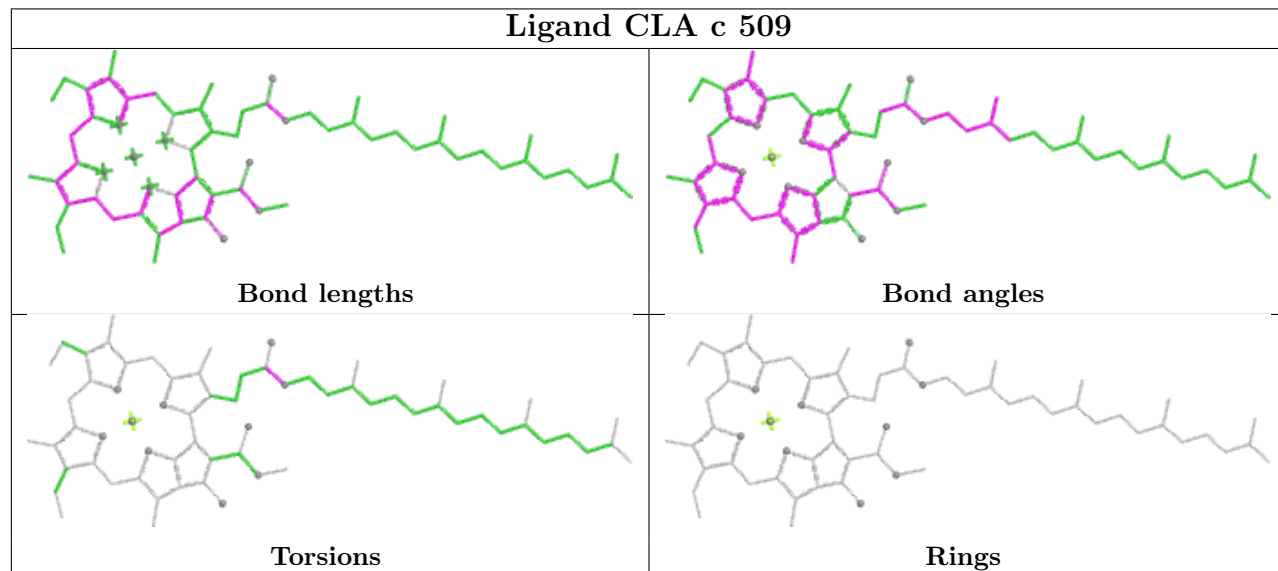
Ligand DGD c 521

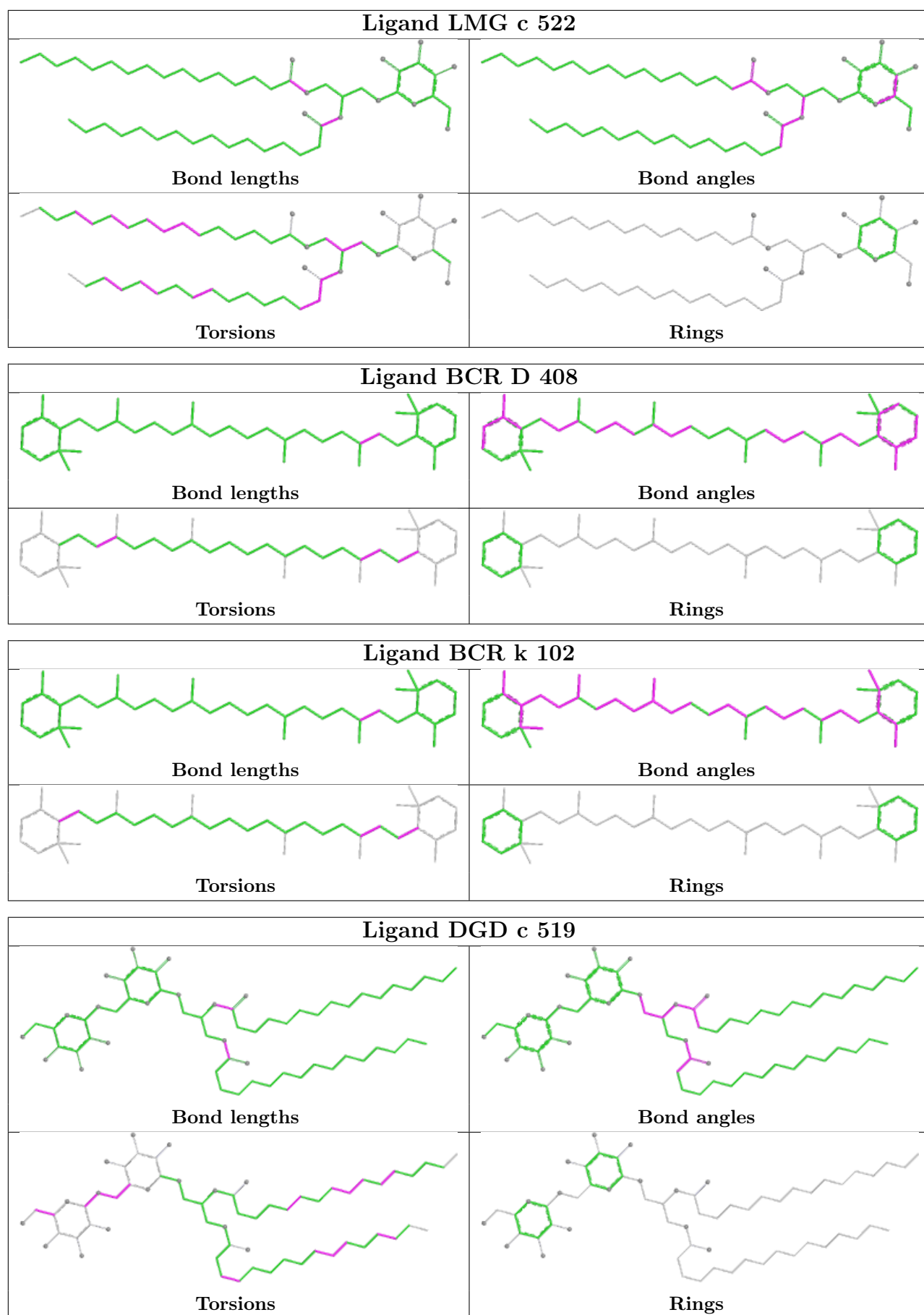


Ligand CLA C 509

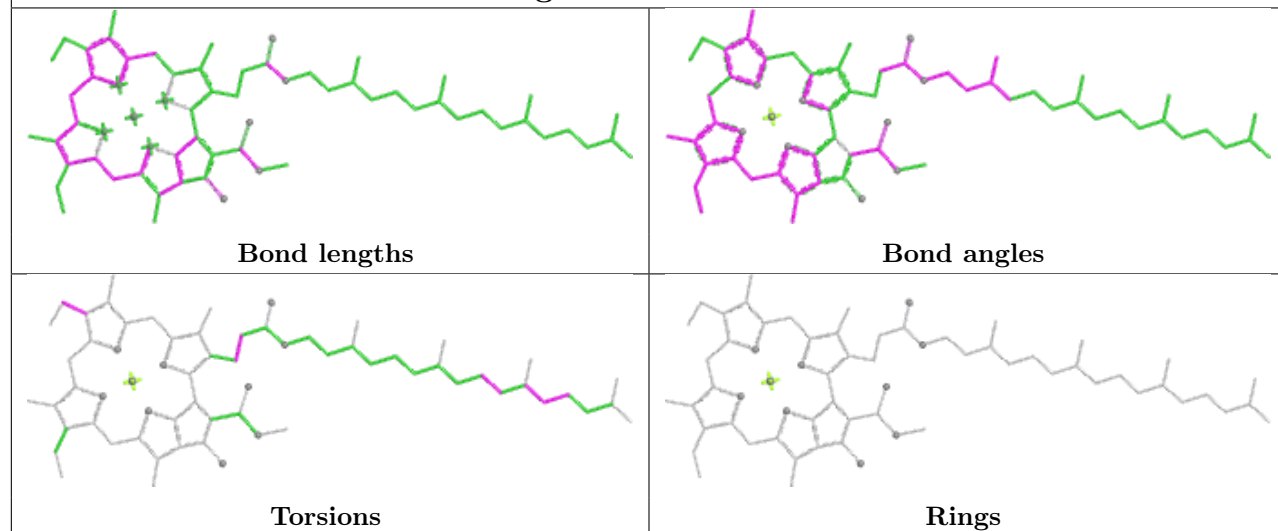


Ligand CLA c 509

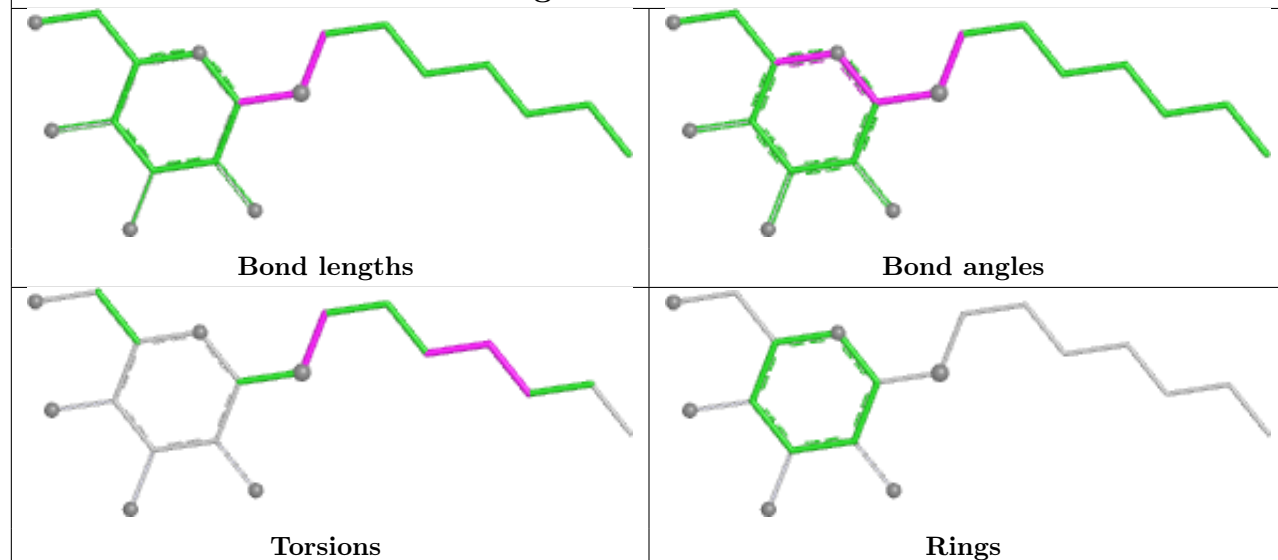




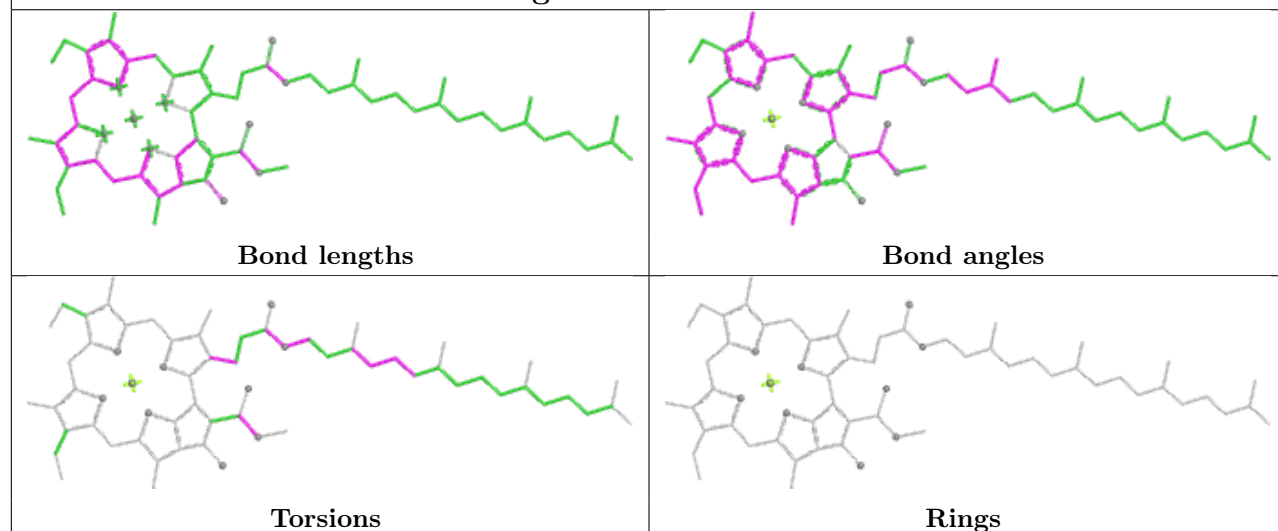
Ligand CLA b 615



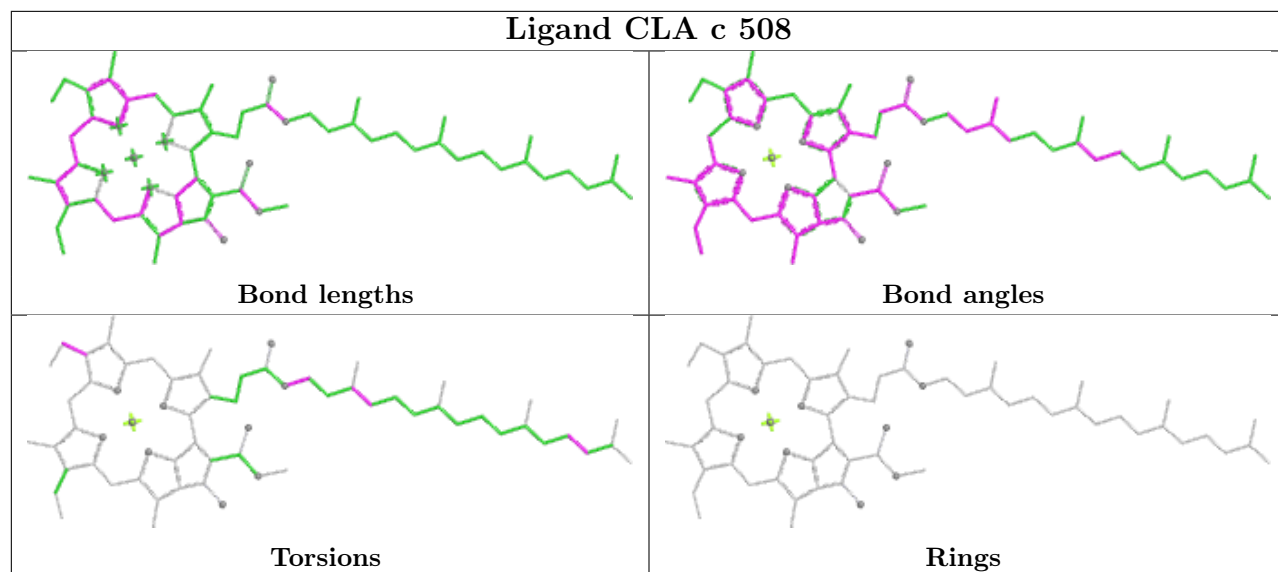
Ligand HTG c 524



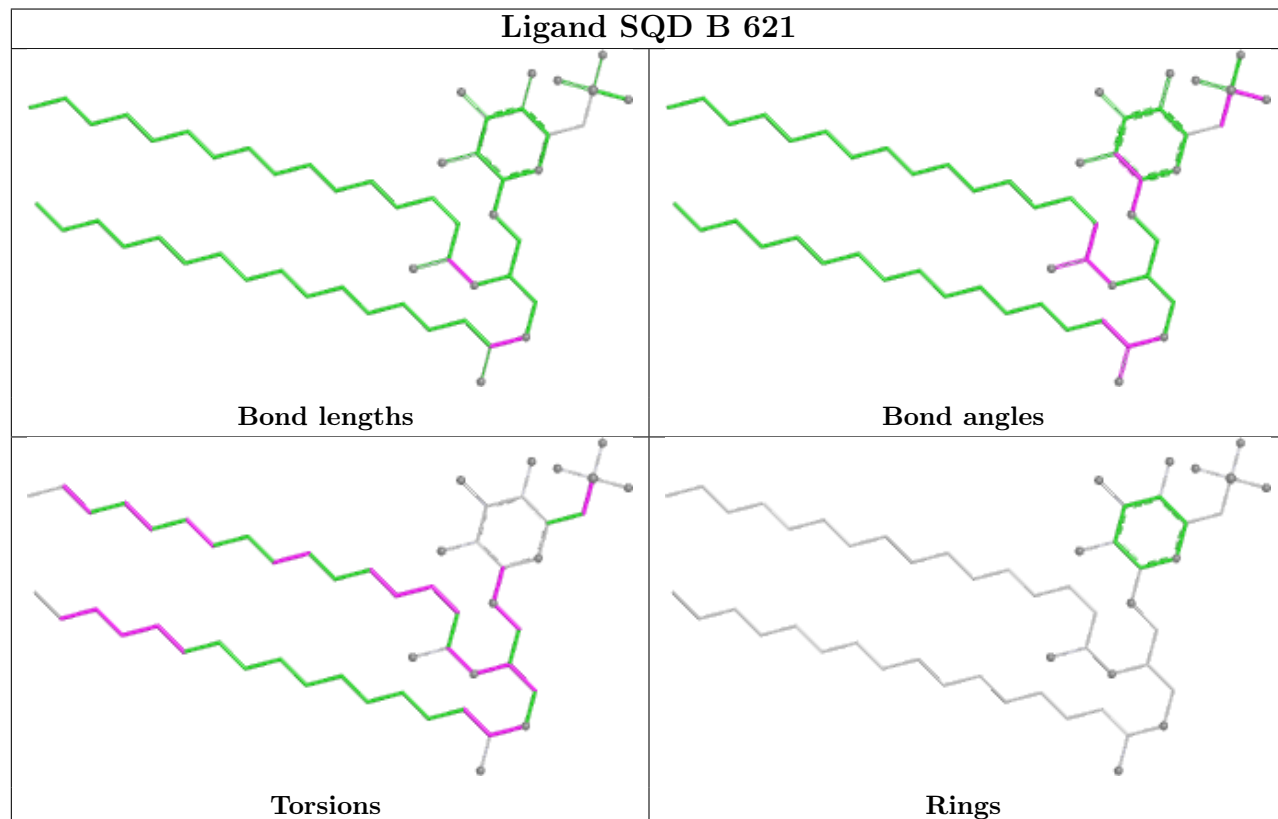
Ligand CLA C 514

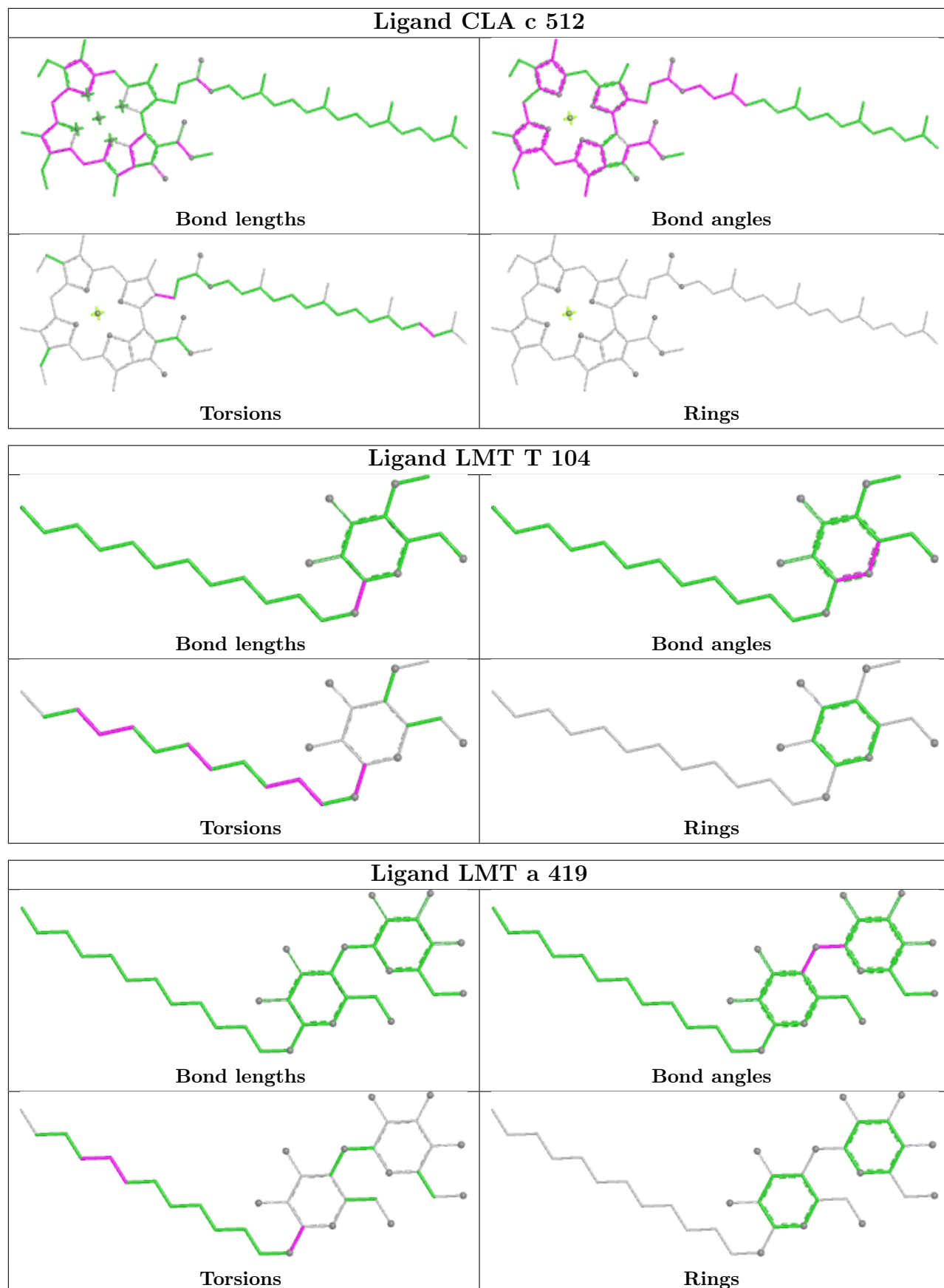


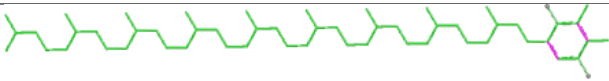
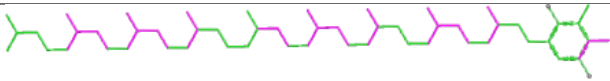
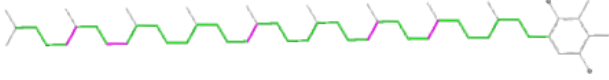
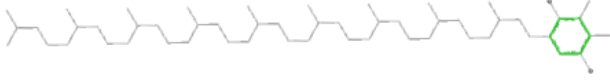
Ligand CLA c 508

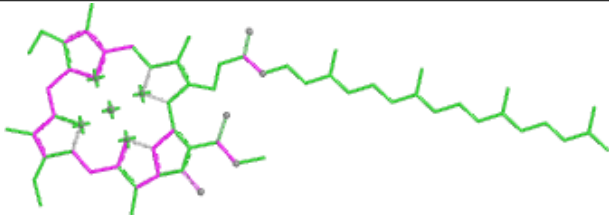
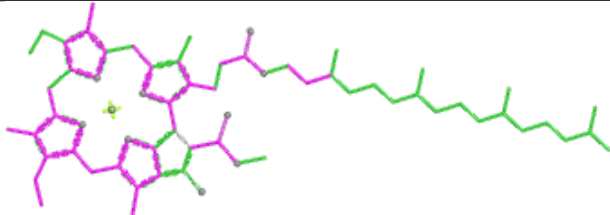
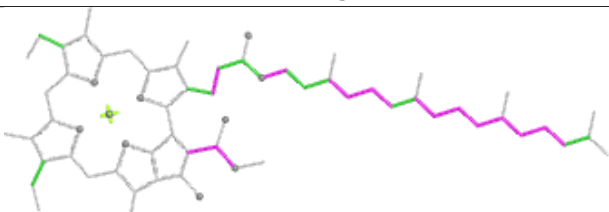
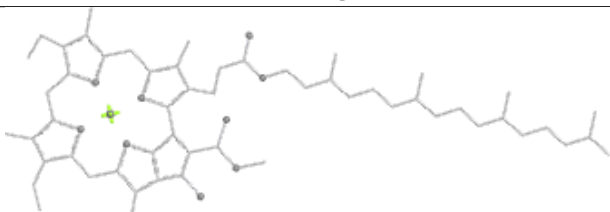


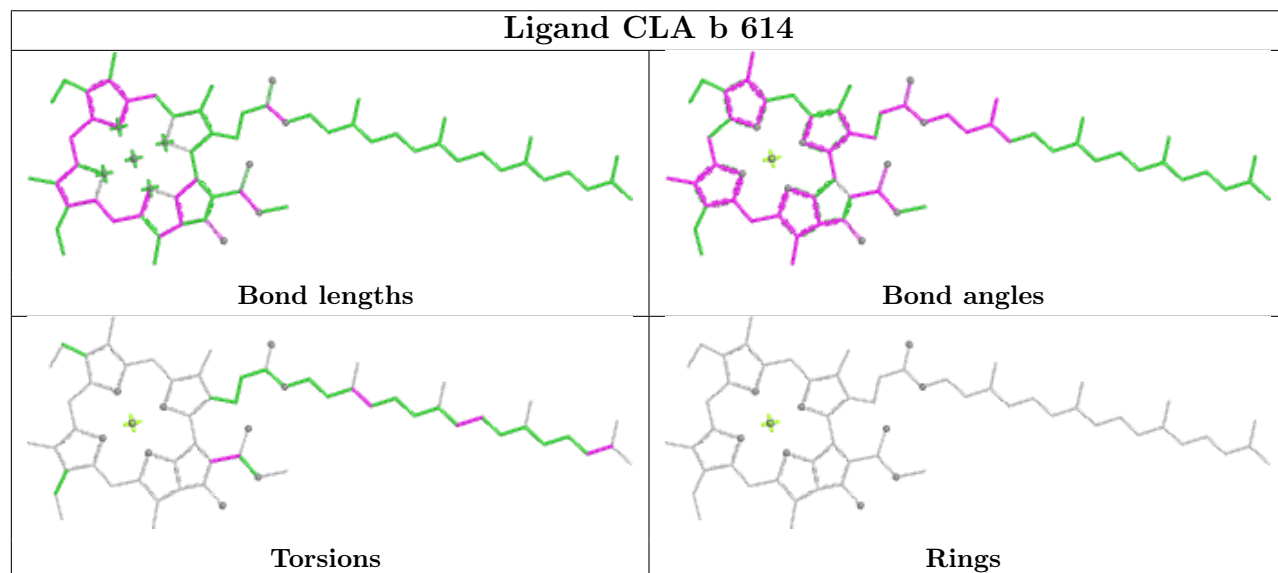
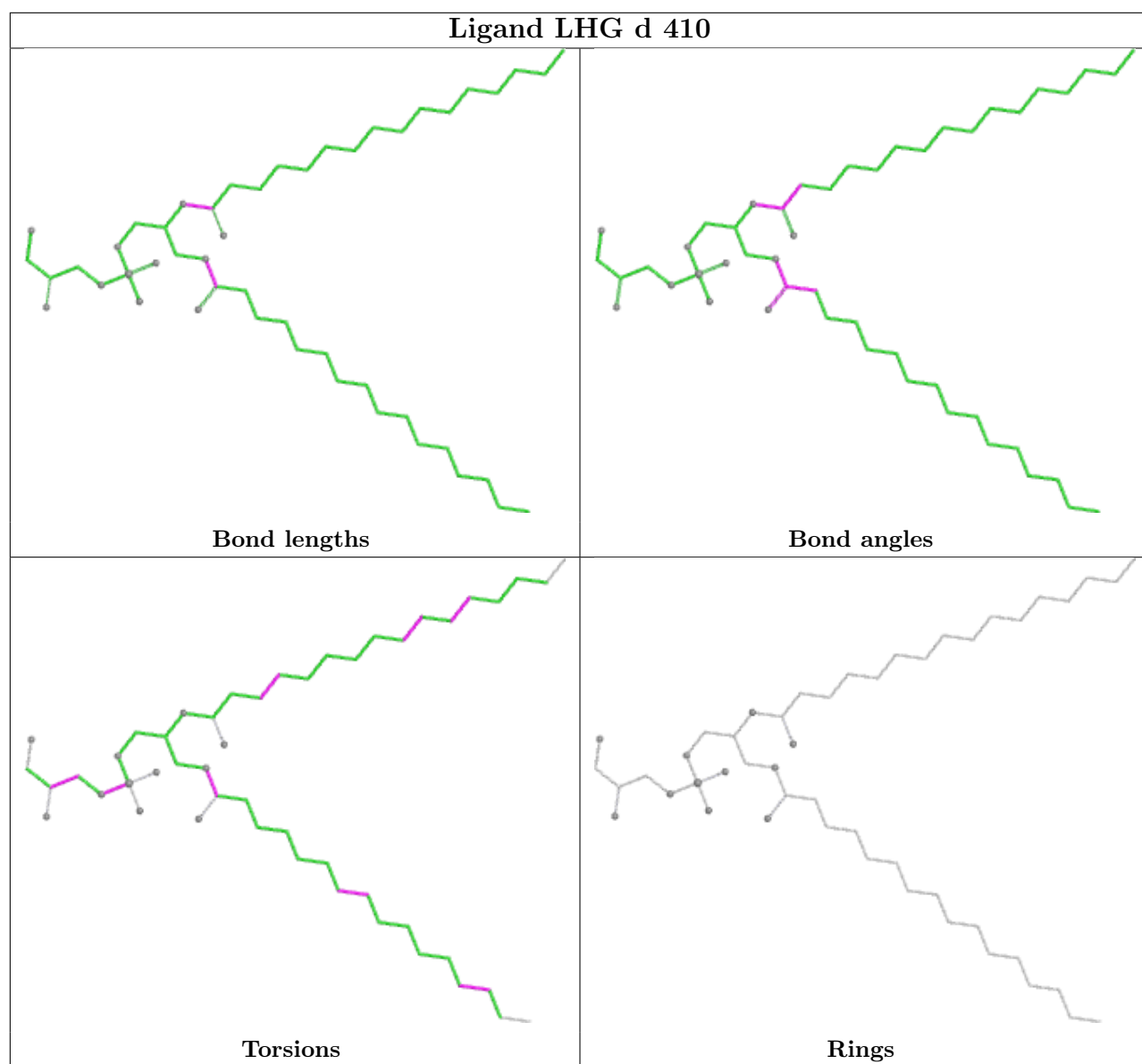
Ligand SQD B 621

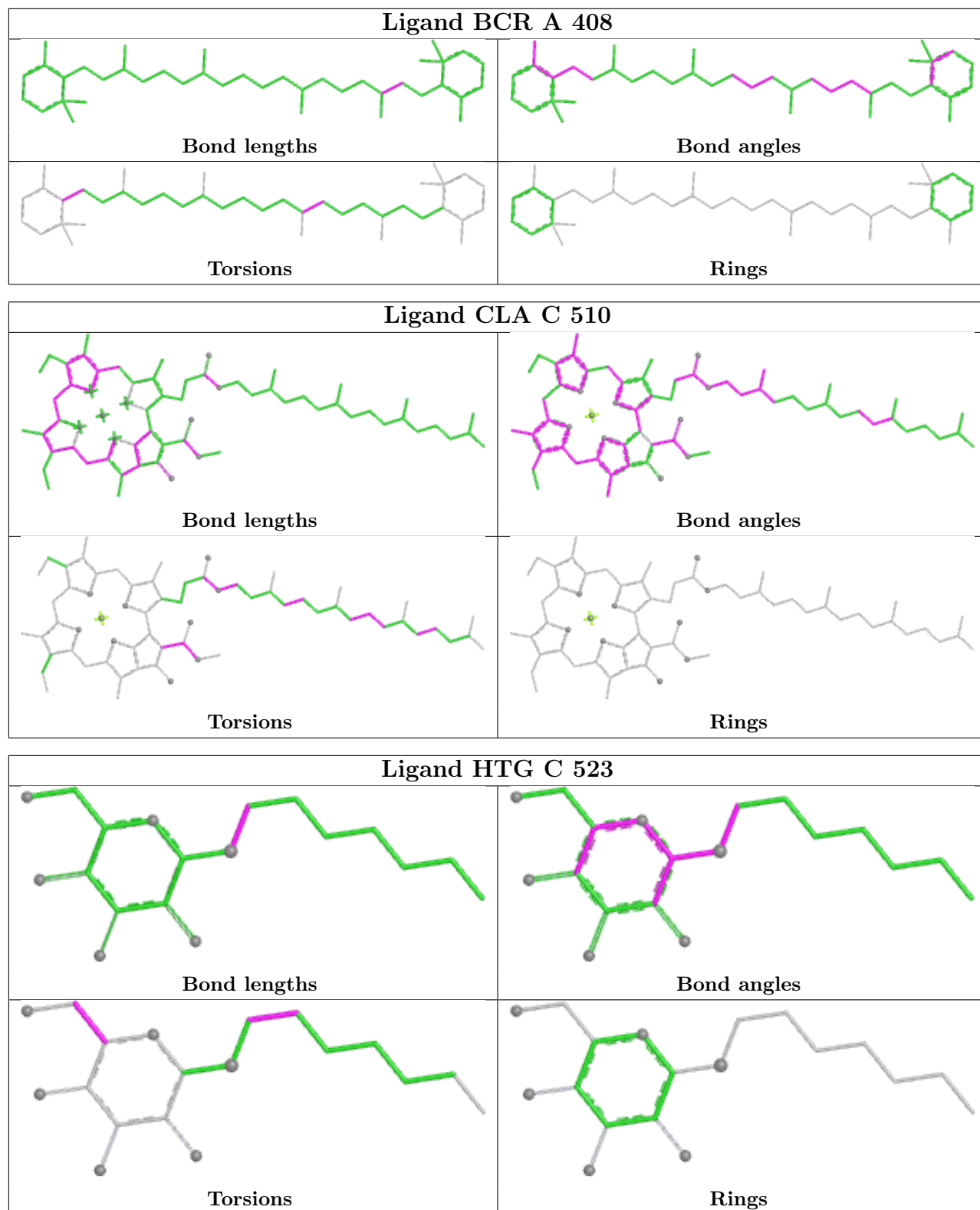


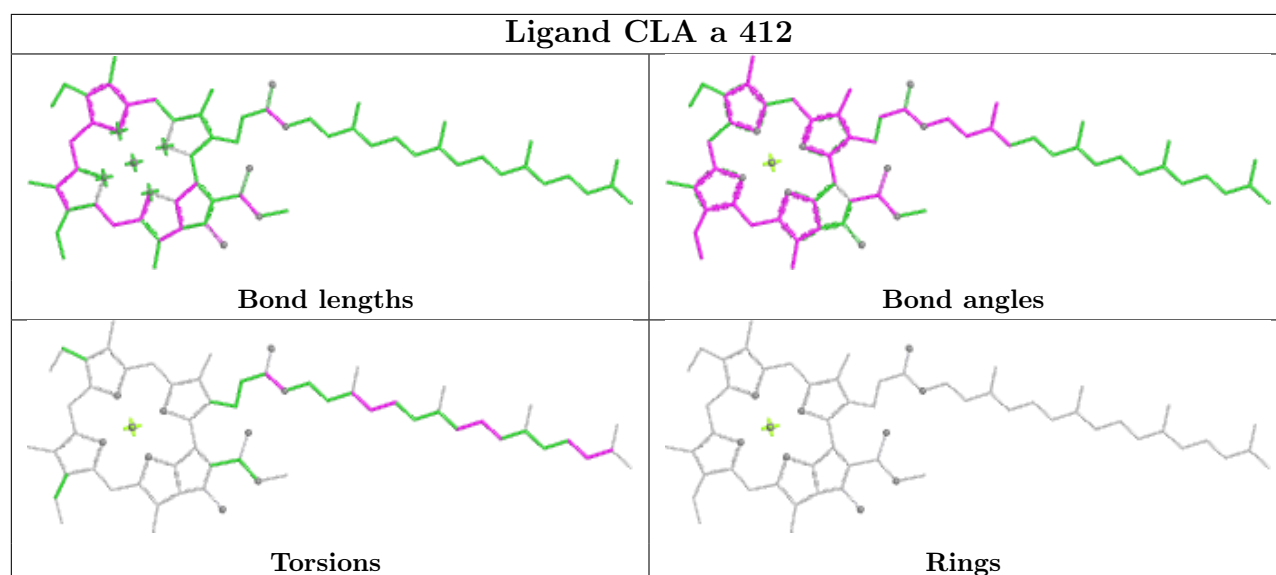
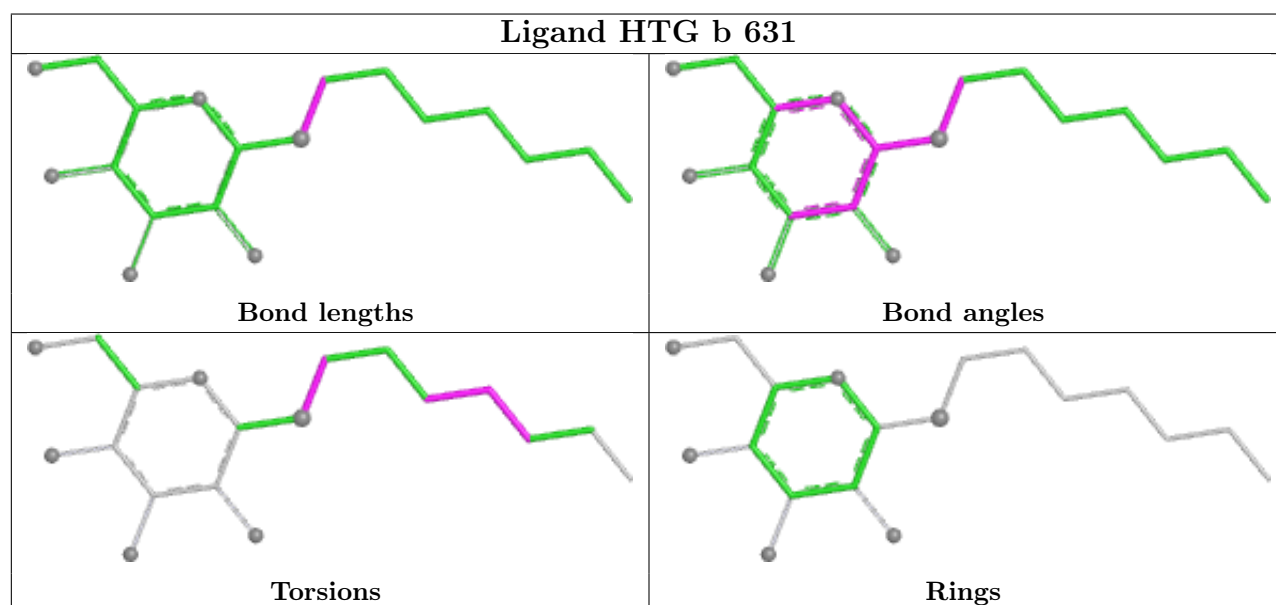
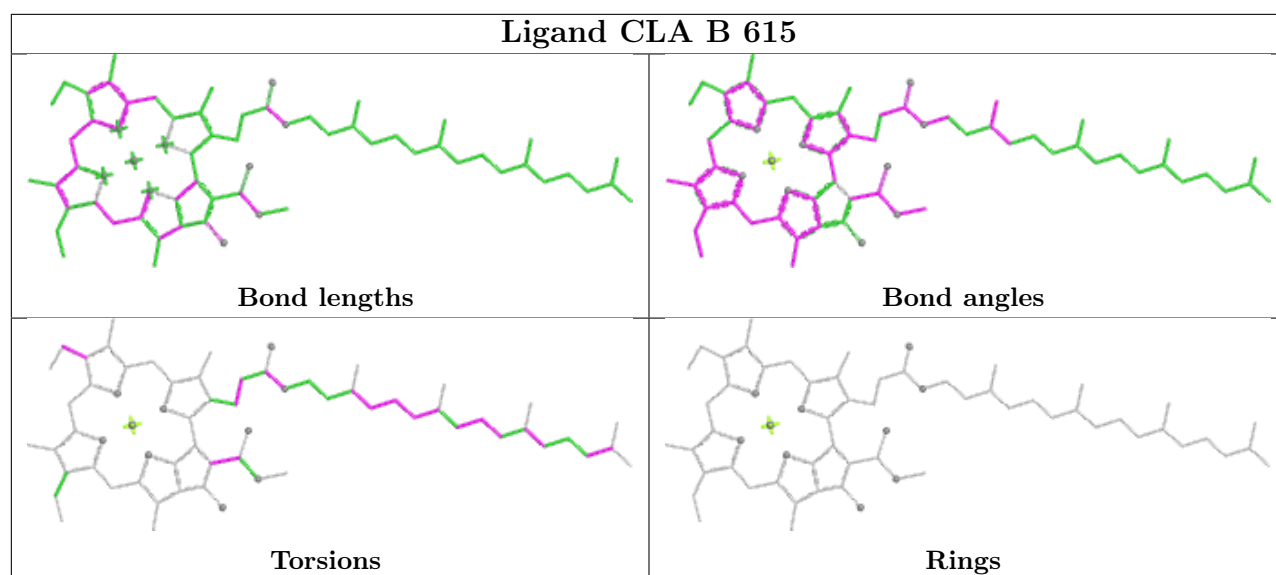


Ligand PL9 d 407 (A)	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 623	
 Bond lengths	 Bond angles
 Torsions	 Rings







5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	334/344 (97%)	-0.62	0 100 100	20, 46, 74, 129	54 (16%)
1	a	334/344 (97%)	-0.64	0 100 100	21, 47, 78, 147	54 (16%)
2	B	504/505 (99%)	-0.58	2 (0%) 88 86	26, 52, 93, 149	10 (1%)
2	b	503/505 (99%)	-0.55	4 (0%) 82 80	31, 52, 91, 202	12 (2%)
3	C	451/455 (99%)	-0.49	0 100 100	24, 62, 91, 136	12 (2%)
3	c	455/455 (100%)	-0.51	0 100 100	23, 66, 87, 123	20 (4%)
4	D	341/342 (99%)	-0.68	0 100 100	22, 48, 77, 143	16 (4%)
4	d	341/342 (99%)	-0.67	0 100 100	24, 50, 71, 112	16 (4%)
5	E	81/84 (96%)	-0.11	1 (1%) 76 73	40, 82, 117, 162	2 (2%)
5	e	81/84 (96%)	-0.18	2 (2%) 58 54	41, 77, 131, 187	2 (2%)
6	F	34/44 (77%)	-0.22	0 100 100	58, 72, 120, 130	0
6	f	32/44 (72%)	-0.36	1 (3%) 51 47	58, 68, 128, 159	0
7	H	65/65 (100%)	-0.41	1 (1%) 72 68	42, 64, 85, 166	1 (1%)
7	h	65/65 (100%)	-0.50	1 (1%) 72 68	52, 65, 85, 169	0
8	I	37/38 (97%)	-0.13	0 100 100	50, 64, 136, 194	0
8	i	37/38 (97%)	-0.32	1 (2%) 56 51	48, 61, 131, 164	0
9	J	38/39 (97%)	0.01	1 (2%) 57 52	63, 79, 167, 195	0
9	j	39/39 (100%)	-0.19	0 100 100	58, 71, 149, 191	0
10	K	37/37 (100%)	-0.30	0 100 100	65, 79, 98, 119	0
10	k	37/37 (100%)	-0.44	0 100 100	62, 75, 97, 119	0
11	L	37/37 (100%)	-0.71	0 100 100	26, 42, 101, 127	1 (2%)
11	l	37/37 (100%)	-0.58	0 100 100	27, 43, 104, 138	1 (2%)
12	M	33/36 (91%)	-0.72	0 100 100	26, 43, 76, 131	1 (3%)
12	m	33/36 (91%)	-0.61	0 100 100	37, 44, 89, 122	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	243/244 (99%)	-0.63	1 (0%) 88 86	31, 58, 101, 145	8 (3%)
13	o	243/244 (99%)	-0.53	0 100 100	32, 61, 115, 178	5 (2%)
14	T	29/32 (90%)	-0.72	1 (3%) 48 43	33, 42, 77, 145	1 (3%)
14	t	29/32 (90%)	-0.67	1 (3%) 48 43	34, 43, 75, 144	1 (3%)
15	U	97/104 (93%)	-0.65	0 100 100	45, 57, 90, 133	0
15	u	97/104 (93%)	-0.64	0 100 100	46, 61, 79, 123	0
16	V	137/137 (100%)	-0.66	0 100 100	24, 59, 83, 114	2 (1%)
16	v	137/137 (100%)	-0.58	0 100 100	25, 70, 103, 132	1 (0%)
17	Y	29/30 (96%)	0.76	4 (13%) 6 5	80, 102, 195, 215	0
17	y	29/30 (96%)	0.17	1 (3%) 48 43	80, 94, 148, 163	0
18	X	39/40 (97%)	-0.13	0 100 100	63, 72, 125, 163	0
18	x	38/40 (95%)	0.10	1 (2%) 57 52	64, 74, 130, 159	0
19	Z	62/62 (100%)	-0.04	0 100 100	82, 99, 136, 151	0
19	z	62/62 (100%)	0.17	2 (3%) 50 46	80, 100, 152, 195	0
20	R	18/34 (52%)	1.86	9 (50%) 0 0	111, 147, 171, 187	0
All	All	5275/5384 (97%)	-0.51	34 (0%) 85 83	20, 57, 109, 215	220 (4%)

All (34) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
17	Y	20	ALA	3.9
20	R	15	ALA	3.4
18	x	37	VAL	3.3
7	H	65	LEU	3.1
17	Y	19	ILE	3.1
7	h	65	LEU	3.0
2	b	486	LEU	2.9
8	i	37	LEU	2.9
17	Y	18	VAL	2.8
5	e	4	THR	2.8
20	R	5	VAL	2.7
5	e	5	THR	2.7
17	y	20	ALA	2.7
9	J	2	SER	2.6
20	R	9	LEU	2.6
19	z	3	ILE	2.6
14	t	30	THR	2.5

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Mol	Chain	Res	Type	RSRZ
20	R	14	LEU	2.5
2	B	479	PHE	2.5
20	R	16	ALA	2.4
20	R	6	LEU	2.4
20	R	12	VAL	2.4
2	b	499	VAL	2.3
17	Y	25	ILE	2.3
2	b	495	PHE	2.2
13	O	58	ASN	2.2
14	T	30	THR	2.1
20	R	13	LEU	2.1
2	B	502	VAL	2.1
20	R	3	TRP	2.1
19	z	61	VAL	2.1
6	f	14	PRO	2.1
2	b	491	VAL	2.0
5	E	5	THR	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
14	FME	t	1	10/11	0.94	0.07	28,39,49,95	0
12	FME	m	1	10/11	0.95	0.09	35,51,97,107	0
14	FME	T	1	10/11	0.95	0.07	38,48,56,93	0
8	FME	i	1	10/11	0.97	0.06	41,58,64,68	0
12	FME	M	1	10/11	0.97	0.07	31,47,94,99	0
8	FME	I	1	10/11	0.97	0.06	39,51,61,66	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 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
27	LMT	F	101	35/35	0.70	0.18	133,171,182,184	0
31	UNL	J	101	10/-	0.72	0.20	70,104,114,115	0
34	DGD	D	410	52/66	0.73	0.14	74,109,157,168	0
34	DGD	d	408	62/66	0.73	0.16	87,130,176,182	0
32	CA	f	103	1/1	0.74	0.07	127,127,127,127	0
31	UNL	j	101	10/-	0.75	0.16	59,89,101,103	0
27	LMT	C	521	35/35	0.75	0.14	103,145,170,173	0
38	LHG	a	420	42/49	0.75	0.12	92,136,181,183	0
31	UNL	M	103	10/-	0.76	0.12	52,63,78,80	0
27	LMT	b	630	25/35	0.76	0.15	85,107,156,159	0
25	SQD	f	102	43/54	0.77	0.15	106,125,157,166	0
31	UNL	K	102	34/-	0.77	0.14	94,127,136,139	0
27	LMT	a	419	35/35	0.77	0.15	98,142,160,162	0
27	LMT	D	405	35/35	0.77	0.13	84,132,152,153	0
31	UNL	m	101	10/-	0.78	0.15	46,60,79,80	0
38	LHG	E	101	42/49	0.78	0.12	89,127,142,147	0
32	CA	b	609	1/1	0.78	0.09	131,131,131,131	0
33	HTG	D	416	16/19	0.79	0.13	70,134,155,156	0
35	LMG	C	520	51/55	0.79	0.13	63,125,134,137	0
27	LMT	e	102	35/35	0.80	0.13	86,136,156,157	0
33	HTG	B	630	19/19	0.80	0.12	58,118,140,169	0
33	HTG	b	608	19/19	0.81	0.12	58,116,151,164	0
31	UNL	I	101	40/-	0.81	0.15	58,93,150,153	0
31	UNL	i	101	40/-	0.81	0.13	50,87,139,142	0
27	LMT	a	404	35/35	0.81	0.12	55,101,126,145	0
27	LMT	A	413	35/35	0.81	0.13	57,91,114,119	0
33	HTG	V	207	19/19	0.81	0.13	80,105,126,240	0
26	GOL	O	301	6/6	0.82	0.10	81,84,87,87	0
31	UNL	c	526	32/-	0.82	0.13	82,100,140,147	0
31	UNL	a	403	30/-	0.83	0.12	67,93,124,131	0
25	SQD	F	104	43/54	0.83	0.12	91,122,143,145	0
35	LMG	Z	101	37/55	0.83	0.14	67,138,150,151	0
33	HTG	d	414	16/19	0.83	0.11	75,116,122,125	0
31	UNL	A	417	28/-	0.83	0.12	63,89,113,115	0
26	GOL	V	202	6/6	0.84	0.16	88,95,99,99	0
35	LMG	z	101	39/55	0.84	0.13	74,125,149,162	0
31	UNL	d	413	36/-	0.84	0.12	64,85,131,137	0
27	LMT	M	104	35/35	0.84	0.12	44,109,152,157	0
31	UNL	b	633	33/-	0.85	0.14	55,88,143,145	0
35	LMG	c	523	51/55	0.85	0.11	65,117,129,133	0
31	UNL	D	415	40/-	0.85	0.12	62,86,130,137	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
31	UNL	B	631	33/-	0.85	0.14	61,83,134,137	0
33	HTG	c	525	19/19	0.85	0.10	86,116,133,149	0
33	HTG	B	623	19/19	0.86	0.10	85,137,145,176	0
25	SQD	B	621	54/54	0.86	0.11	53,79,156,160	0
33	HTG	C	522	19/19	0.86	0.11	84,94,135,137	0
26	GOL	a	402	6/6	0.86	0.15	103,108,108,109	0
30	PL9	A	416[A]	55/55	0.86	0.14	86,107,117,119	55
30	PL9	A	416[B]	55/55	0.86	0.14	86,107,117,119	55
33	HTG	b	631	19/19	0.86	0.13	66,80,98,102	0
33	HTG	c	524	19/19	0.86	0.11	99,106,117,119	0
25	SQD	L	102	54/54	0.86	0.10	42,76,124,140	0
30	PL9	a	416[B]	55/55	0.87	0.14	92,108,122,124	55
27	LMT	m	102	35/35	0.87	0.10	51,111,129,130	0
35	LMG	C	519	51/55	0.87	0.11	59,102,122,125	0
33	HTG	B	622	19/19	0.87	0.12	63,75,85,91	0
25	SQD	A	412	54/54	0.87	0.11	56,77,134,138	0
33	HTG	b	632	19/19	0.87	0.11	80,134,152,155	0
27	LMT	M	105	35/35	0.87	0.12	50,99,119,121	0
30	PL9	a	416[A]	55/55	0.87	0.14	91,109,122,123	55
33	HTG	C	523	19/19	0.87	0.10	78,110,127,130	0
27	LMT	T	104	25/35	0.88	0.13	44,81,135,142	0
23	CLA	C	514	65/65	0.88	0.10	71,91,120,124	0
27	LMT	t	101	25/35	0.88	0.12	45,80,143,149	0
25	SQD	a	405	54/54	0.88	0.10	50,82,127,132	0
26	GOL	v	201	6/6	0.88	0.13	78,98,103,104	0
26	GOL	B	627	6/6	0.89	0.14	58,78,80,82	0
35	LMG	c	522	51/55	0.89	0.10	64,95,120,122	0
31	UNL	X	101	18/-	0.89	0.12	69,87,109,111	0
39	HEM	F	102	43/43	0.89	0.11	59,85,111,234	0
26	GOL	v	202	6/6	0.90	0.12	103,105,109,122	0
26	GOL	b	605	6/6	0.90	0.15	69,87,103,103	0
35	LMG	C	501	51/55	0.90	0.10	62,84,103,107	0
26	GOL	B	626	6/6	0.90	0.11	83,86,88,89	0
26	GOL	c	528	6/6	0.91	0.11	77,90,101,113	0
24	BCR	K	101	40/40	0.91	0.09	64,83,92,94	0
26	GOL	A	411	6/6	0.91	0.10	84,86,91,92	0
25	SQD	A	409	54/54	0.91	0.09	55,98,108,111	0
33	HTG	B	629	19/19	0.91	0.09	48,88,113,116	0
23	CLA	B	602	65/65	0.91	0.10	53,75,112,132	0
26	GOL	C	524	6/6	0.91	0.16	88,89,103,104	0
23	CLA	C	507	65/65	0.91	0.09	59,78,118,125	0
35	LMG	a	415	51/55	0.91	0.09	59,85,101,114	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
27	LMT	M	102	35/35	0.91	0.09	42,101,123,131	0
31	UNL	d	412	17/-	0.91	0.10	62,71,93,94	0
22	CL	v	204	1/1	0.91	0.09	120,120,120,120	0
23	CLA	b	610	65/65	0.91	0.10	53,84,129,138	0
23	CLA	c	517	65/65	0.91	0.09	80,95,105,107	0
26	GOL	c	502	6/6	0.91	0.18	81,89,105,110	0
23	CLA	C	505	65/65	0.92	0.09	47,67,101,108	0
26	GOL	B	633	6/6	0.92	0.08	56,60,61,63	0
34	DGD	C	517	62/66	0.92	0.08	55,74,100,114	0
22	CL	U	201	1/1	0.92	0.15	120,120,120,120	0
26	GOL	b	606	6/6	0.92	0.08	75,87,92,94	0
36	BCT	D	401[A]	4/4	0.92	0.12	76,77,81,89	4
36	BCT	D	401[B]	4/4	0.92	0.12	75,76,81,89	4
38	LHG	D	413	49/49	0.92	0.10	51,78,118,126	0
24	BCR	k	102	40/40	0.92	0.09	57,73,91,92	0
26	GOL	T	101	6/6	0.92	0.14	58,81,84,93	0
32	CA	B	601	1/1	0.92	0.08	131,131,131,131	0
35	LMG	D	417	51/55	0.93	0.09	50,76,125,133	0
26	GOL	T	102	6/6	0.93	0.11	107,116,118,122	0
23	CLA	C	513	65/65	0.93	0.08	71,87,94,97	0
26	GOL	V	205	6/6	0.93	0.11	87,100,106,115	0
25	SQD	a	414	54/54	0.93	0.08	56,83,104,105	0
35	LMG	d	416	51/55	0.93	0.08	53,66,107,118	0
31	UNL	D	414	17/-	0.93	0.08	48,71,87,90	0
24	BCR	K	103	40/40	0.93	0.09	62,74,82,87	0
31	UNL	d	415	18/-	0.93	0.10	67,80,109,116	0
26	GOL	A	410	6/6	0.93	0.09	49,56,61,66	0
24	BCR	d	406	40/40	0.93	0.08	52,61,83,87	0
26	GOL	B	624	6/6	0.93	0.09	64,74,77,86	0
26	GOL	t	103	6/6	0.93	0.15	72,88,96,97	0
23	CLA	c	512	65/65	0.94	0.07	47,57,115,122	0
23	CLA	C	511	65/65	0.94	0.07	54,71,85,96	0
24	BCR	D	408	40/40	0.94	0.08	49,68,101,109	0
24	BCR	H	101	40/40	0.94	0.07	47,60,78,78	0
33	HTG	o	301	19/19	0.94	0.08	51,74,87,91	0
34	DGD	C	516	62/66	0.94	0.08	40,56,87,95	0
23	CLA	A	407	65/65	0.94	0.09	42,56,118,126	0
34	DGD	C	518	62/66	0.94	0.07	51,64,88,105	0
23	CLA	B	615	65/65	0.94	0.08	32,45,99,102	0
34	DGD	c	519	62/66	0.94	0.08	42,62,92,96	0
26	GOL	f	101	6/6	0.94	0.10	85,90,93,96	0
30	PL9	D	409[A]	55/55	0.94	0.07	30,43,51,65	55

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
30	PL9	D	409[B]	55/55	0.94	0.07	30,43,51,61	55
24	BCR	c	527	40/40	0.94	0.08	72,89,97,102	0
23	CLA	a	412	65/65	0.94	0.10	41,55,120,125	0
24	BCR	h	101	40/40	0.94	0.08	48,66,72,78	0
26	GOL	B	628	6/6	0.94	0.15	55,87,89,91	0
35	LMG	b	629	51/55	0.94	0.07	40,54,76,84	0
24	BCR	k	101	40/40	0.94	0.08	59,76,86,87	0
23	CLA	C	509	65/65	0.94	0.08	49,67,135,141	0
26	GOL	F	103	6/6	0.94	0.10	98,110,118,121	0
23	CLA	b	615	65/65	0.94	0.07	39,51,93,95	0
23	CLA	b	623	65/65	0.94	0.07	34,45,91,105	0
23	CLA	b	625	65/65	0.94	0.08	46,59,103,110	0
33	HTG	b	601	19/19	0.94	0.08	49,65,76,77	0
33	HTG	b	607	19/19	0.94	0.07	53,83,94,95	0
23	CLA	c	510	65/65	0.94	0.08	57,75,99,102	0
38	LHG	d	411	49/49	0.94	0.09	47,63,114,118	0
26	GOL	V	203	6/6	0.94	0.10	51,70,86,89	0
23	CLA	b	620	65/65	0.95	0.06	34,48,58,63	0
24	BCR	Y	101	40/40	0.95	0.08	61,79,92,106	0
24	BCR	b	627	40/40	0.95	0.06	32,48,64,70	0
24	BCR	c	518	40/40	0.95	0.07	50,65,74,77	0
23	CLA	C	512	65/65	0.95	0.08	54,76,92,97	0
23	CLA	B	617	65/65	0.95	0.10	45,61,139,140	0
23	CLA	c	507	65/65	0.95	0.07	53,64,74,93	0
23	CLA	c	508	65/65	0.95	0.07	50,64,81,86	0
34	DGD	c	520	62/66	0.95	0.07	49,66,111,127	0
34	DGD	c	521	62/66	0.95	0.07	51,61,98,109	0
23	CLA	c	509	65/65	0.95	0.07	45,56,73,77	0
34	DGD	h	102	62/66	0.95	0.07	36,58,75,82	0
24	BCR	t	102	40/40	0.95	0.07	37,52,68,71	0
26	GOL	V	204	6/6	0.95	0.10	70,71,74,75	0
23	CLA	C	508	65/65	0.95	0.08	53,72,85,89	0
23	CLA	c	511	65/65	0.95	0.08	52,65,77,82	0
35	LMG	M	101	51/55	0.95	0.07	39,59,75,91	0
23	CLA	D	407	65/65	0.95	0.08	48,62,108,118	0
23	CLA	c	515	65/65	0.95	0.08	54,71,88,93	0
23	CLA	c	516	65/65	0.95	0.07	64,78,87,94	0
23	CLA	B	607	65/65	0.95	0.07	37,52,91,95	0
30	PL9	d	407[A]	55/55	0.95	0.07	33,45,54,57	55
30	PL9	d	407[B]	55/55	0.95	0.07	35,45,53,58	55
23	CLA	d	405	65/65	0.95	0.08	47,61,114,122	0
24	BCR	A	408	40/40	0.95	0.06	33,46,55,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
24	BCR	B	620	40/40	0.95	0.06	43,50,60,77	0
36	BCT	d	401[A]	4/4	0.95	0.09	72,74,75,77	4
36	BCT	d	401[B]	4/4	0.95	0.09	71,74,75,77	4
37	PHO	d	402[A]	64/64	0.95	0.07	37,50,55,59	64
37	PHO	d	402[B]	64/64	0.95	0.07	39,50,55,57	64
38	LHG	D	411	49/49	0.95	0.07	40,52,64,80	0
23	CLA	C	510	65/65	0.95	0.09	54,74,91,95	0
26	GOL	v	203	6/6	0.95	0.10	65,68,73,74	0
23	CLA	C	506	65/65	0.95	0.07	46,59,74,81	0
38	LHG	d	409	49/49	0.95	0.07	40,56,63,69	0
26	GOL	B	625	6/6	0.95	0.10	49,66,85,101	0
23	CLA	b	618	65/65	0.95	0.07	47,55,66,73	0
34	DGD	B	632	62/66	0.96	0.07	43,59,89,105	0
23	CLA	b	614	65/65	0.96	0.06	36,45,58,64	0
23	CLA	C	504	65/65	0.96	0.07	54,67,80,86	0
23	CLA	b	617	65/65	0.96	0.06	44,55,66,69	0
23	CLA	B	614	65/65	0.96	0.06	32,43,62,72	0
23	CLA	b	619	65/65	0.96	0.07	42,54,69,72	0
24	BCR	B	619	40/40	0.96	0.05	36,47,58,66	0
23	CLA	B	603	65/65	0.96	0.06	43,53,60,68	0
24	BCR	C	515	40/40	0.96	0.07	51,63,78,78	0
23	CLA	b	621	65/65	0.96	0.06	36,46,58,63	0
23	CLA	b	622	65/65	0.96	0.06	34,46,55,70	0
23	CLA	B	616	65/65	0.96	0.06	41,52,67,76	0
23	CLA	b	624	65/65	0.96	0.06	42,53,71,76	0
24	BCR	T	103	40/40	0.96	0.05	29,49,65,68	0
23	CLA	A	406	65/65	0.96	0.07	35,46,104,109	0
32	CA	F	105	1/1	0.96	0.09	119,119,119,119	0
24	BCR	a	413	40/40	0.96	0.05	34,47,57,60	0
26	GOL	C	525	6/6	0.96	0.08	53,59,63,63	0
26	GOL	D	404	6/6	0.96	0.11	51,61,73,76	0
24	BCR	b	626	40/40	0.96	0.05	33,45,53,54	0
23	CLA	c	505	65/65	0.96	0.07	52,67,76,79	0
24	BCR	b	628	40/40	0.96	0.06	42,55,65,67	0
23	CLA	c	506	65/65	0.96	0.07	51,62,84,87	0
26	GOL	V	201	6/6	0.96	0.09	63,81,87,88	0
23	CLA	a	410	65/65	0.96	0.07	37,49,104,112	0
23	CLA	C	502	65/65	0.96	0.07	51,62,88,93	0
37	PHO	D	403[A]	64/64	0.96	0.06	41,48,54,59	64
37	PHO	D	403[B]	64/64	0.96	0.06	39,48,54,59	64
23	CLA	C	503	65/65	0.96	0.07	48,66,75,83	0
23	CLA	b	611	65/65	0.96	0.06	43,52,62,70	0

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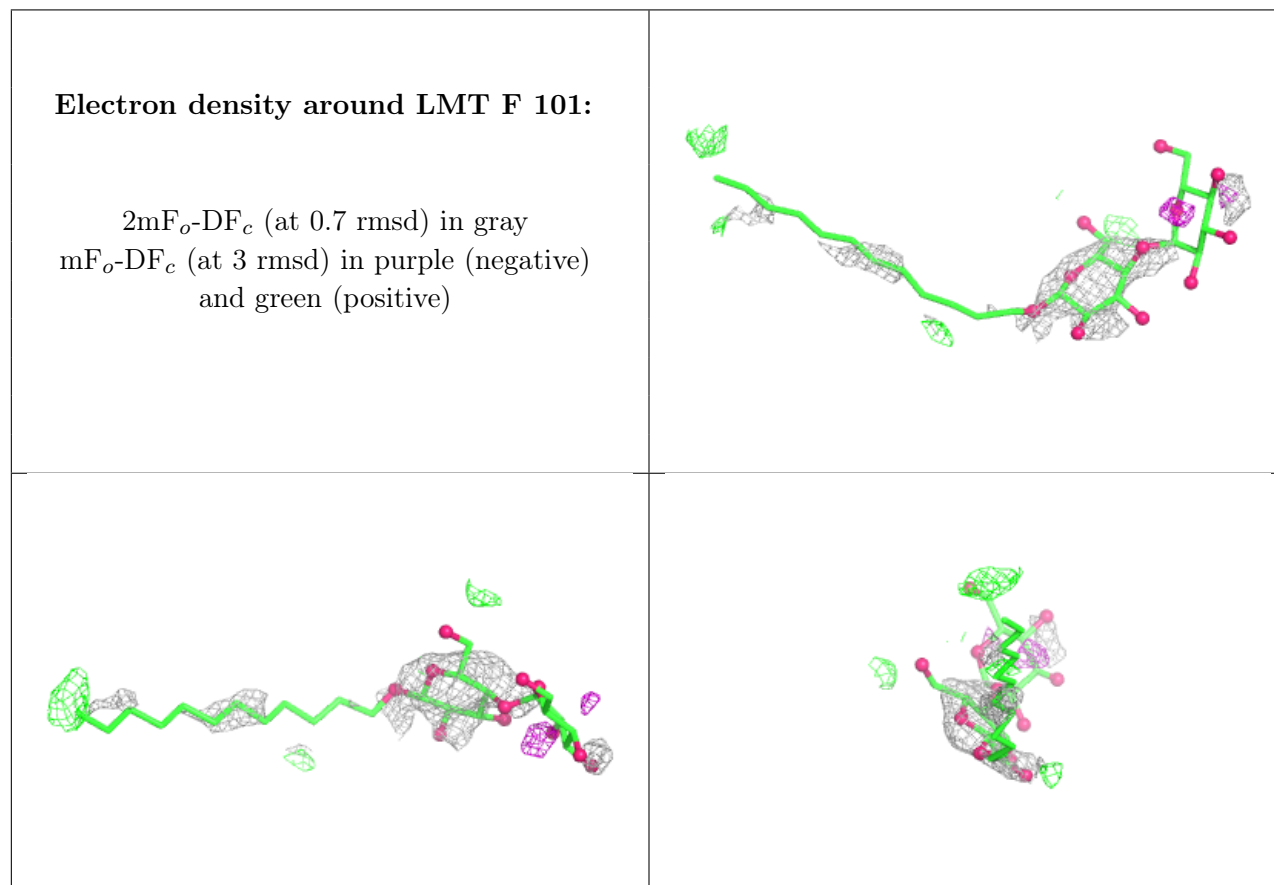
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
26	GOL	a	401	6/6	0.96	0.08	53,59,71,80	0
23	CLA	b	612	65/65	0.96	0.06	42,54,63,67	0
26	GOL	b	602	6/6	0.96	0.08	63,68,78,79	0
38	LHG	L	101	49/49	0.96	0.06	37,50,58,62	0
23	CLA	b	613	65/65	0.96	0.06	34,45,72,79	0
38	LHG	b	634	49/49	0.96	0.06	35,50,62,72	0
23	CLA	c	513	65/65	0.96	0.08	55,68,82,88	0
26	GOL	c	501	6/6	0.96	0.08	55,59,61,62	0
23	CLA	c	514	65/65	0.96	0.06	51,64,72,82	0
39	HEM	e	101	43/43	0.96	0.10	73,94,130,141	0
23	CLA	B	605	65/65	0.97	0.06	33,43,69,75	0
23	CLA	D	406	65/65	0.97	0.06	32,40,65,75	0
22	CL	A	403[A]	1/1	0.97	0.07	44,44,44,44	1
23	CLA	a	409	65/65	0.97	0.06	36,42,50,72	0
23	CLA	B	608	65/65	0.97	0.05	29,43,55,67	0
23	CLA	d	403	65/65	0.97	0.05	34,41,48,51	0
37	PHO	D	402	64/64	0.97	0.05	31,41,49,51	0
23	CLA	d	404	65/65	0.97	0.06	35,43,59,65	0
26	GOL	b	603	6/6	0.97	0.06	60,70,74,75	0
37	PHO	a	411	64/64	0.97	0.05	33,43,54,58	0
26	GOL	b	604	6/6	0.97	0.08	65,84,86,92	0
23	CLA	B	609	65/65	0.97	0.05	40,51,63,66	0
23	CLA	B	610	65/65	0.97	0.06	42,55,66,79	0
38	LHG	D	412	49/49	0.97	0.06	35,46,75,85	0
24	BCR	B	618	40/40	0.97	0.05	31,44,56,59	0
23	CLA	B	611	65/65	0.97	0.07	43,55,62,65	0
23	CLA	B	612	65/65	0.97	0.06	34,45,53,61	0
23	CLA	B	613	65/65	0.97	0.06	35,45,55,58	0
22	CL	A	403[B]	1/1	0.97	0.07	44,44,44,44	1
23	CLA	A	404	65/65	0.97	0.06	33,39,50,61	0
38	LHG	d	410	49/49	0.97	0.06	34,46,66,84	0
23	CLA	b	616	65/65	0.97	0.05	29,42,50,53	0
23	CLA	A	405	65/65	0.97	0.05	32,39,46,51	0
23	CLA	B	604	65/65	0.97	0.06	38,52,60,64	0
40	MG	J	102	1/1	0.97	0.06	62,62,62,62	0
41	HEC	v	205	43/43	0.97	0.07	53,63,78,80	0
32	CA	C	526	1/1	0.98	0.07	83,83,83,83	0
23	CLA	B	606	65/65	0.98	0.05	34,44,55,62	0
32	CA	O	302	1/1	0.98	0.04	90,90,90,90	0
22	CL	a	408[B]	1/1	0.98	0.05	46,46,46,46	1
32	CA	c	503	1/1	0.98	0.06	79,79,79,79	0
22	CL	a	408[A]	1/1	0.98	0.05	46,46,46,46	1

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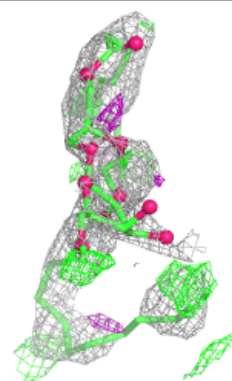
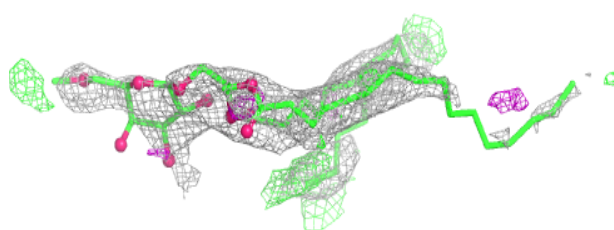
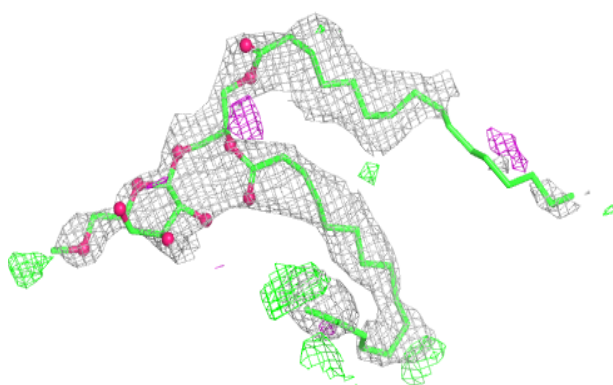
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
41	HEC	V	206	43/43	0.98	0.06	47,53,63,69	0
32	CA	o	302	1/1	0.98	0.03	96,96,96,96	0
22	CL	A	402[A]	1/1	0.99	0.02	40,40,40,40	1
22	CL	A	402[B]	1/1	0.99	0.02	40,40,40,40	1
21	FE2	A	401[A]	1/1	0.99	0.05	72,72,72,72	1
32	CA	c	504	1/1	0.99	0.02	84,84,84,84	0
21	FE2	A	401[B]	1/1	0.99	0.05	73,73,73,73	1
21	FE2	a	406[B]	1/1	0.99	0.04	60,60,60,60	0
28	OEX	A	414[A]	10/10	0.99	0.04	49,56,74,80	10
29	OEY	A	415[B]	11/11	0.99	0.03	49,56,78,79	11
40	MG	j	102	1/1	0.99	0.06	72,72,72,72	0
22	CL	a	407[A]	1/1	0.99	0.04	43,43,43,43	1
22	CL	a	407[B]	1/1	0.99	0.04	46,46,46,46	1
28	OEX	a	417[A]	10/10	1.00	0.02	40,47,52,54	10
29	OEY	a	418[B]	11/11	1.00	0.02	40,46,55,59	11

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.

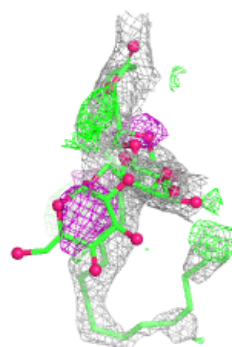
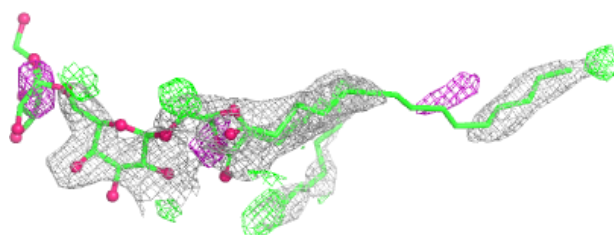
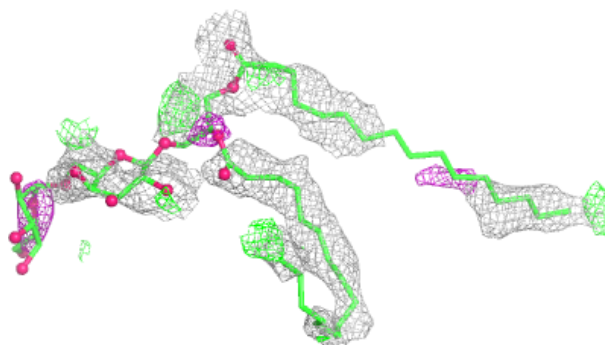


Electron density around DGD D 410:

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

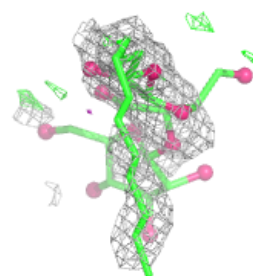
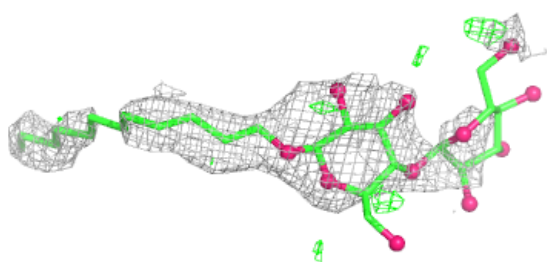
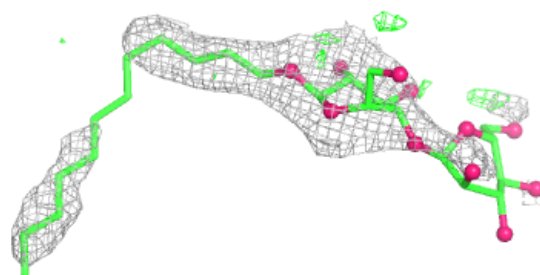
**Electron density around DGD d 408:**

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

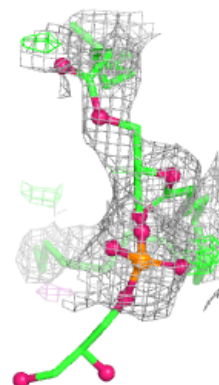
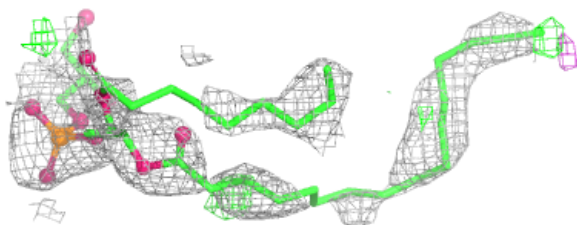
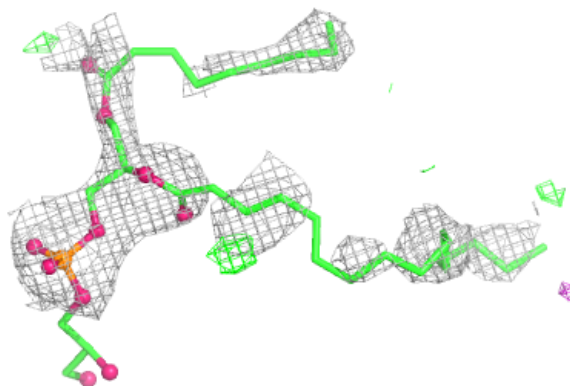


Electron density around LMT C 521:

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

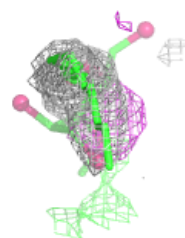
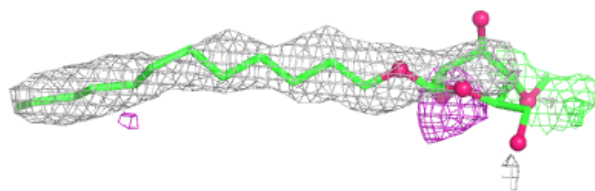
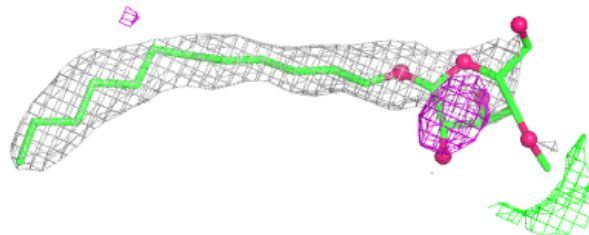
**Electron density around LHG a 420:**

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

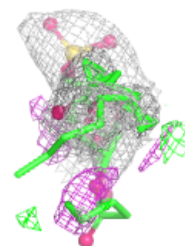
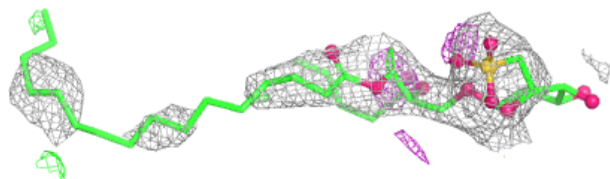
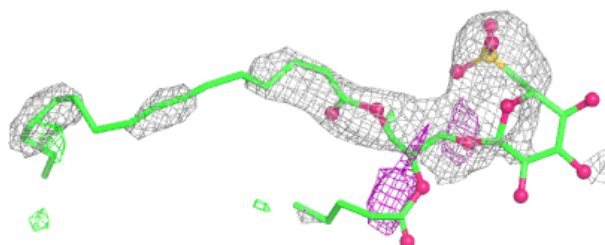


Electron density around LMT b 630:

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

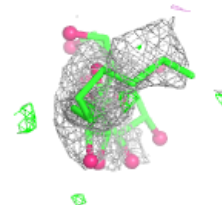
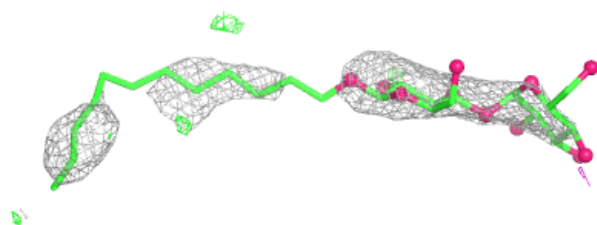
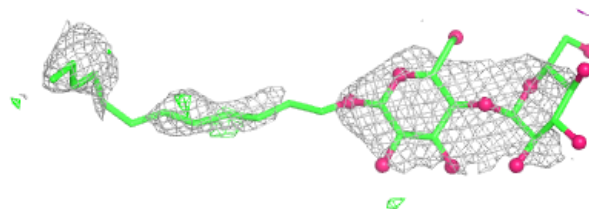
**Electron density around SQD f 102:**

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

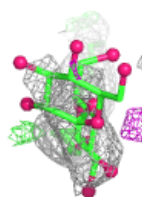
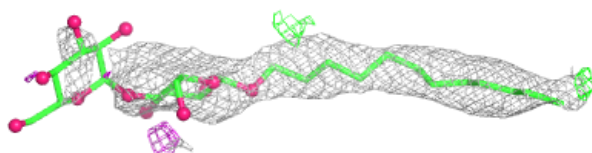
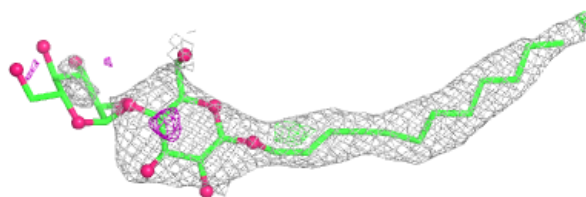


Electron density around LMT a 419:

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

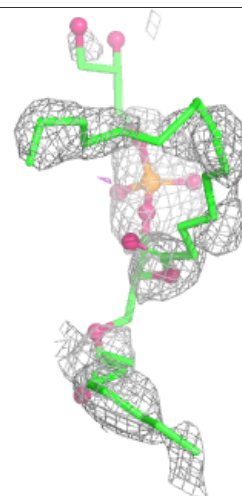
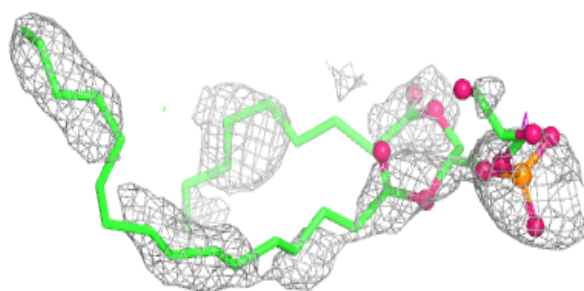
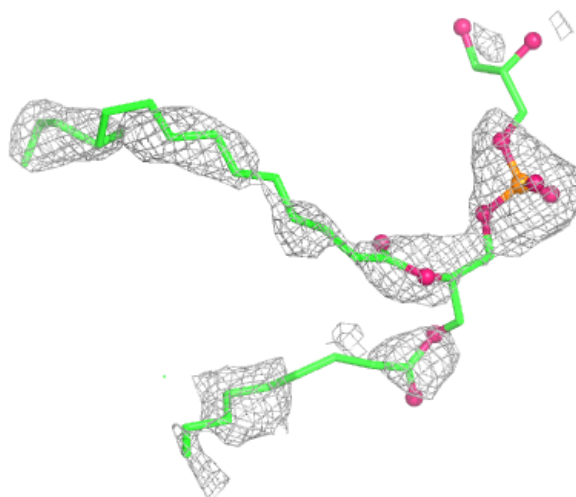
**Electron density around LMT D 405:**

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



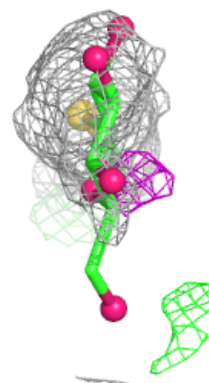
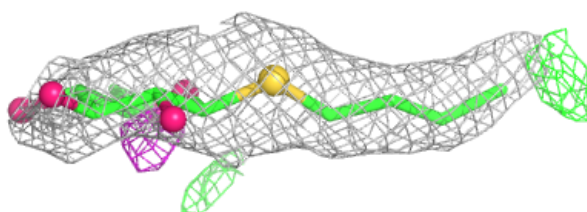
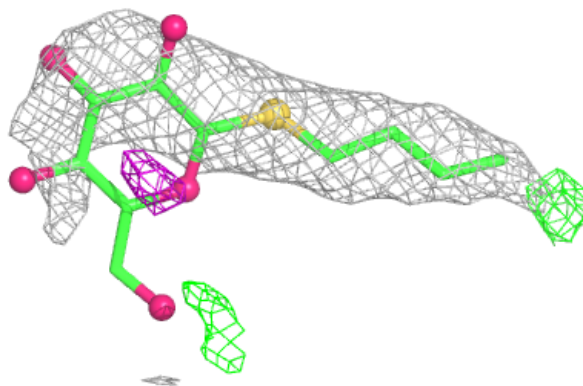
Electron density around LHG E 101:

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

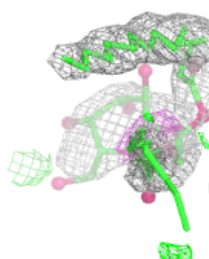
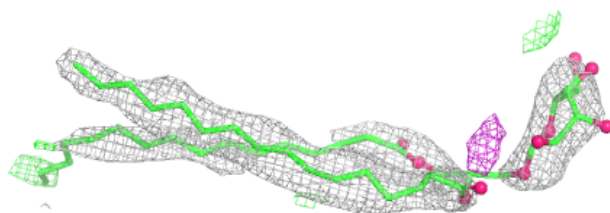
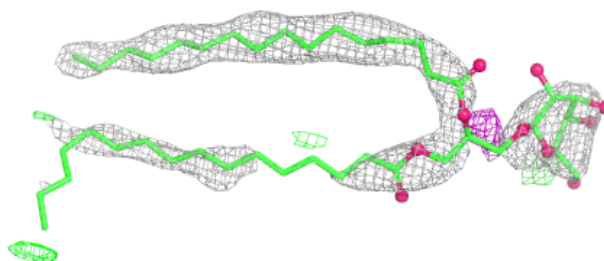


Electron density around HTG D 416:

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

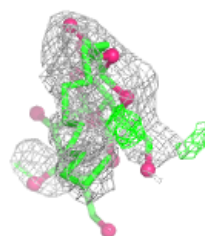
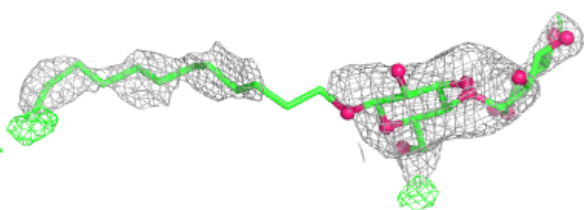
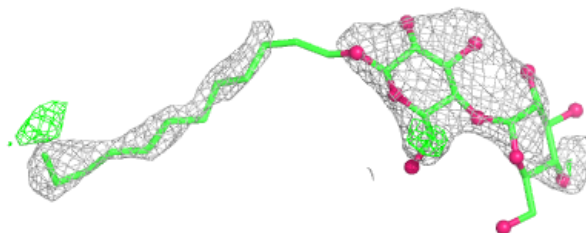
**Electron density around LMG C 520:**

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

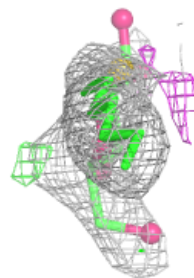
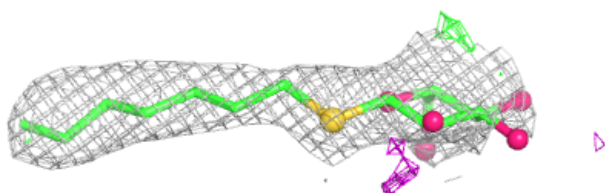
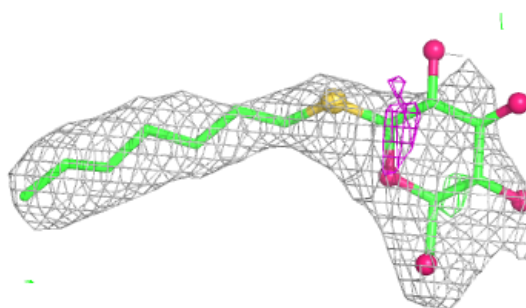


Electron density around LMT e 102:

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

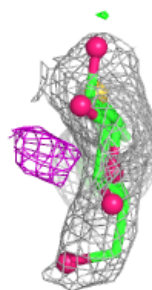
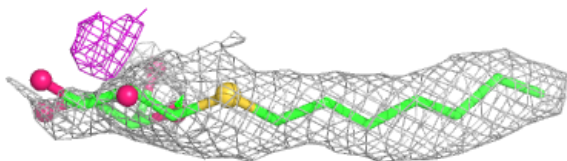
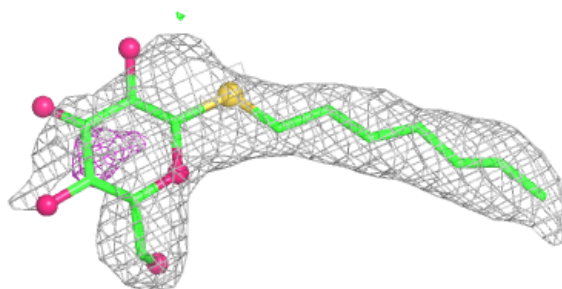
**Electron density around HTG B 630:**

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

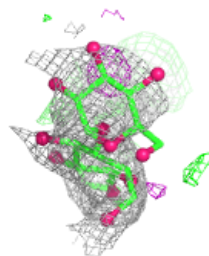
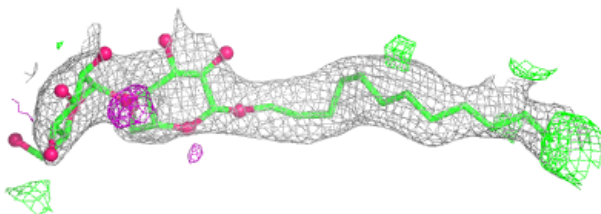
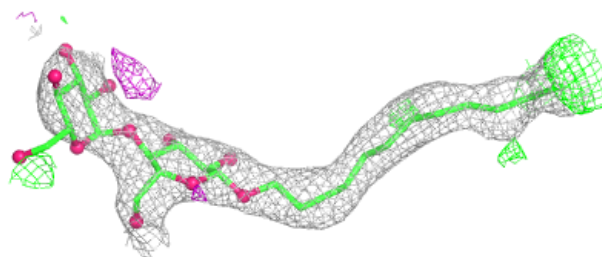


Electron density around HTG b 608:

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

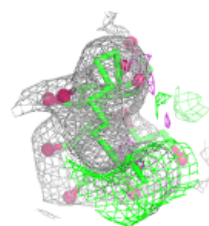
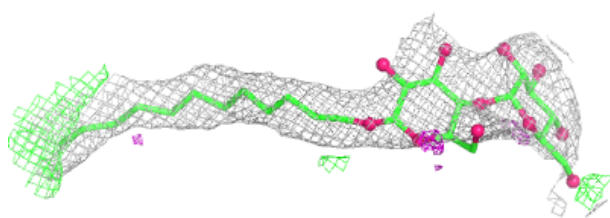
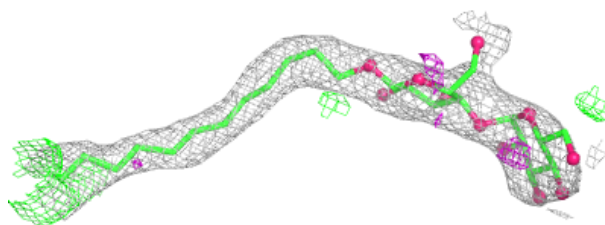
**Electron density around LMT a 404:**

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

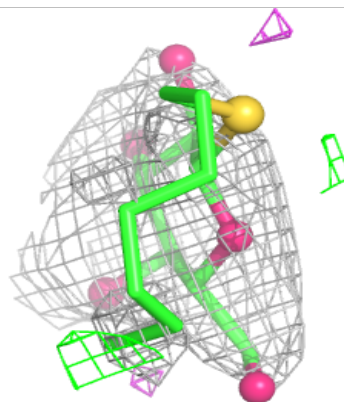
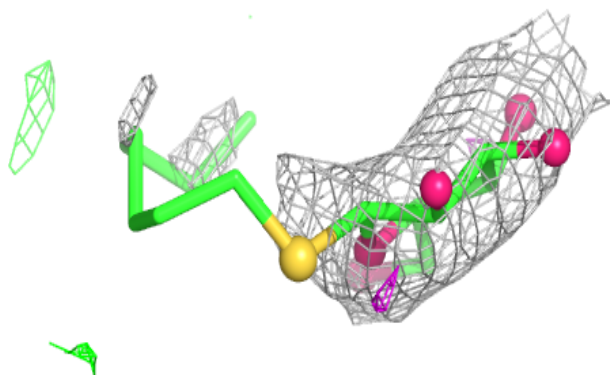
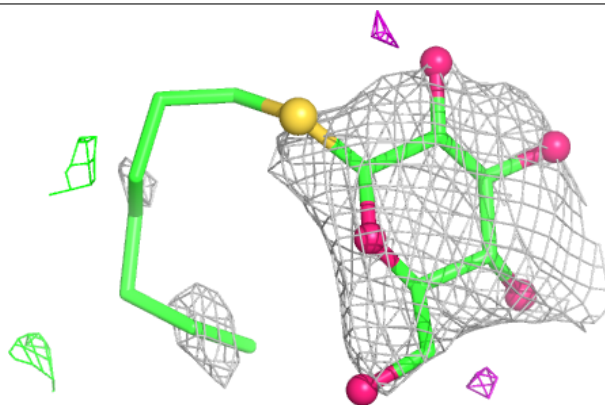


Electron density around LMT A 413:

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

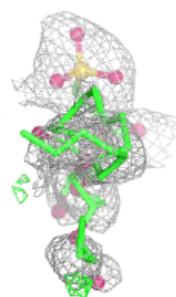
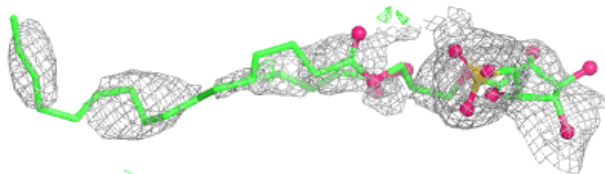
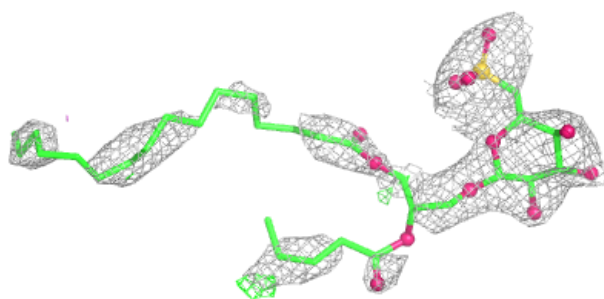
**Electron density around HTG V 207:**

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

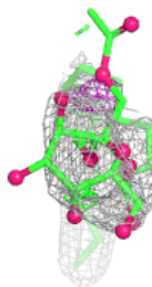
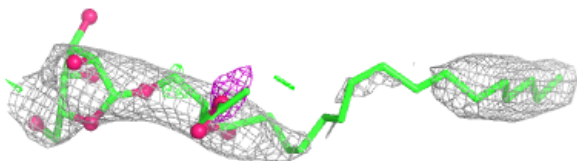
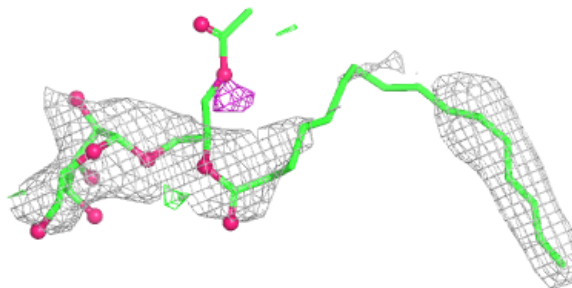


Electron density around SQD F 104:

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

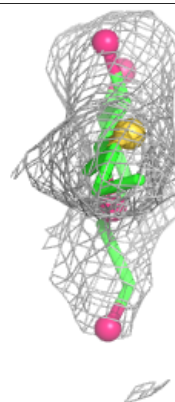
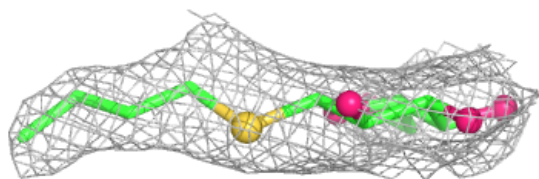
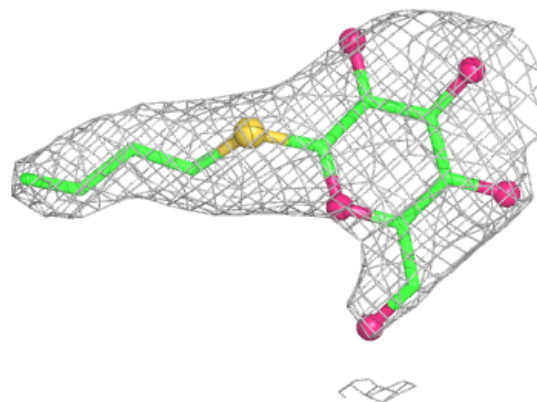
**Electron density around LMG Z 101:**

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

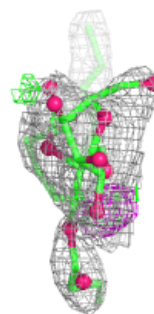
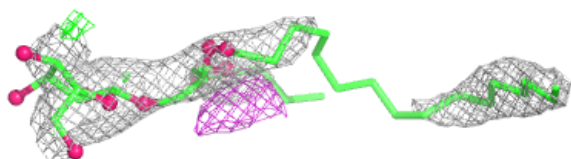
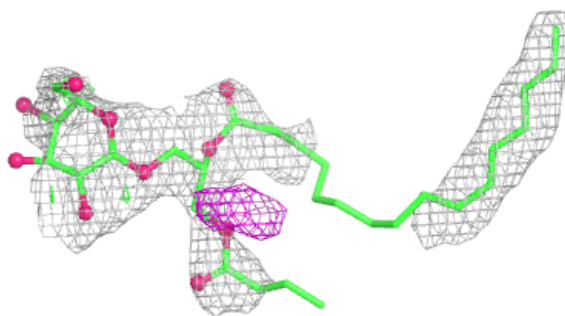


Electron density around HTG d 414:

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

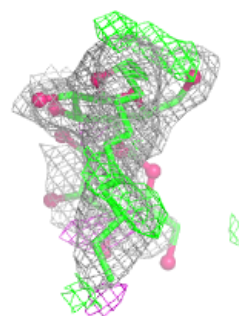
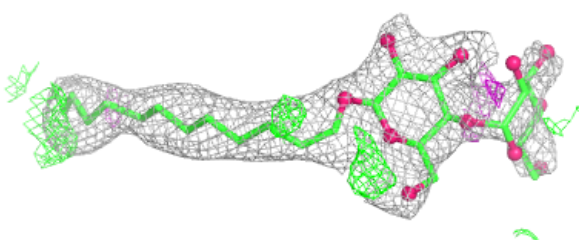
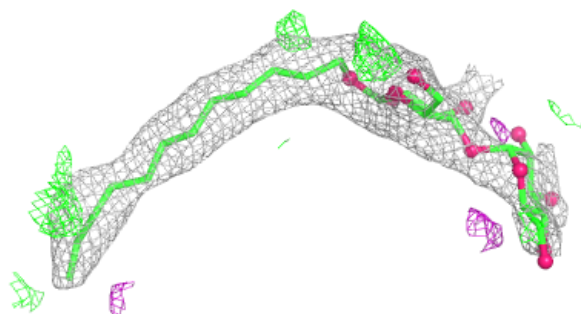
**Electron density around LMG z 101:**

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

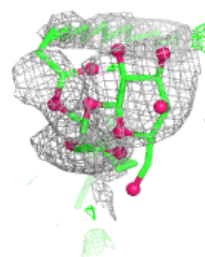
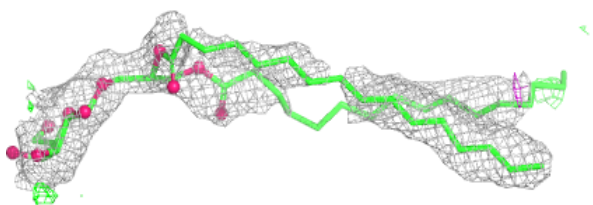
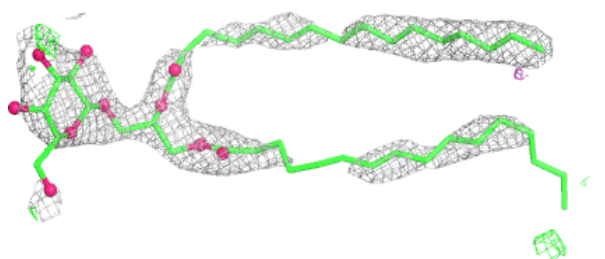


Electron density around LMT M 104:

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

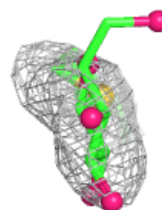
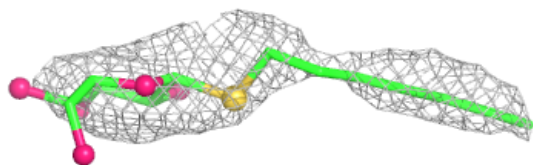
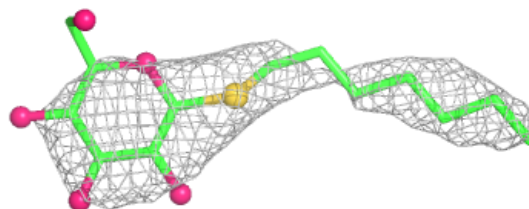
**Electron density around LMG c 523:**

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

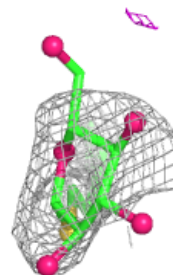
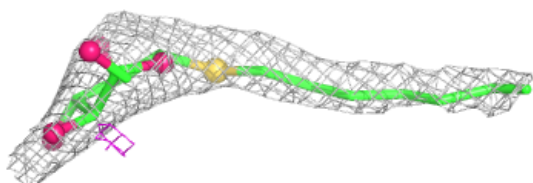
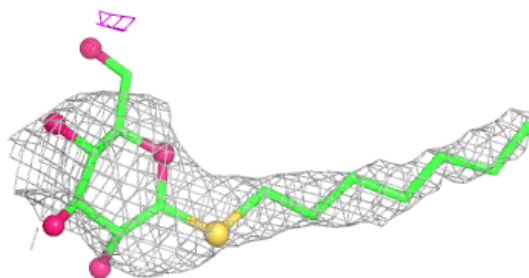


Electron density around HTG c 525:

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

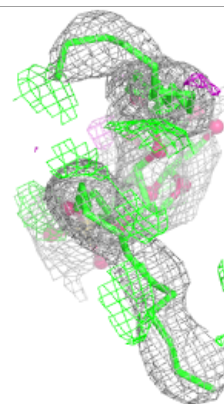
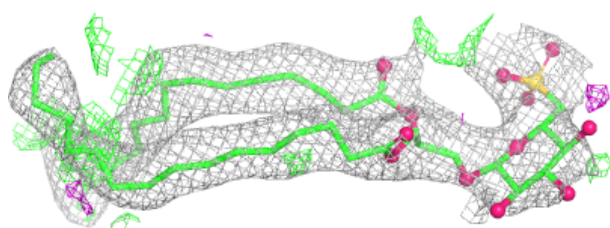
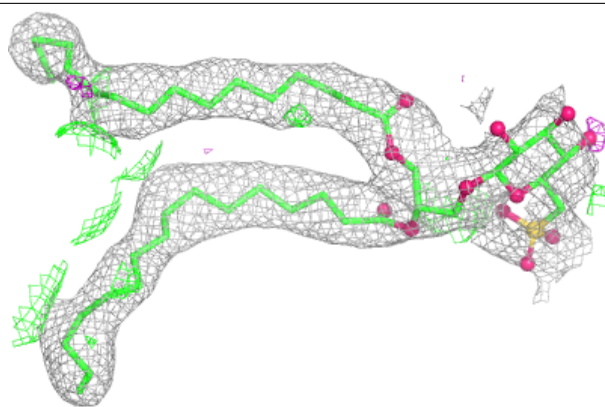
**Electron density around HTG B 623:**

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

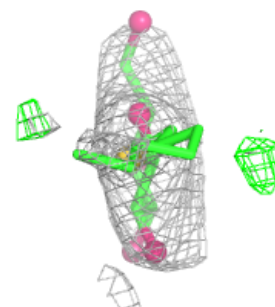
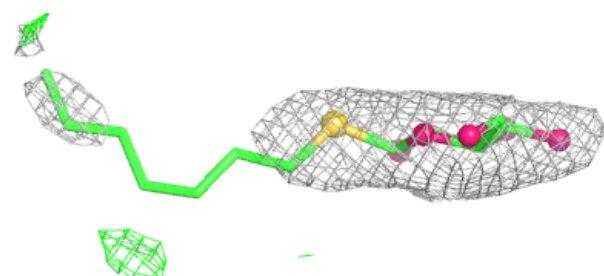
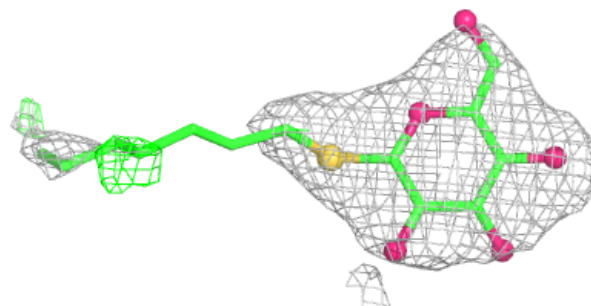


Electron density around SQD B 621:

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

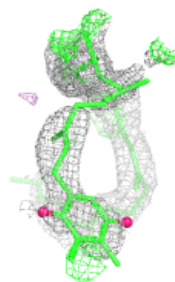
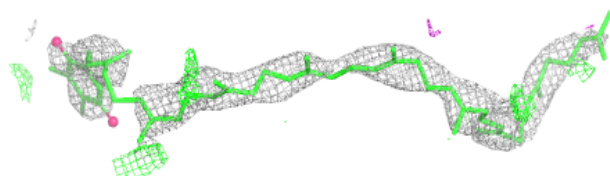
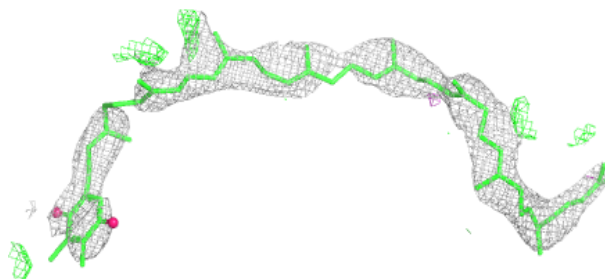
**Electron density around HTG C 522:**

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

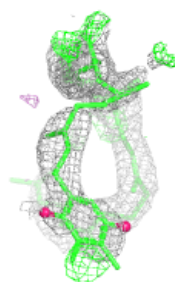
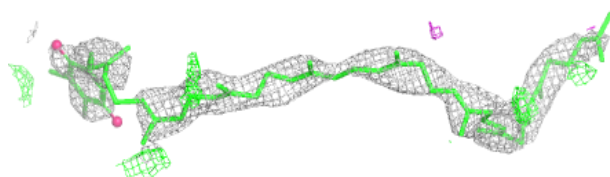
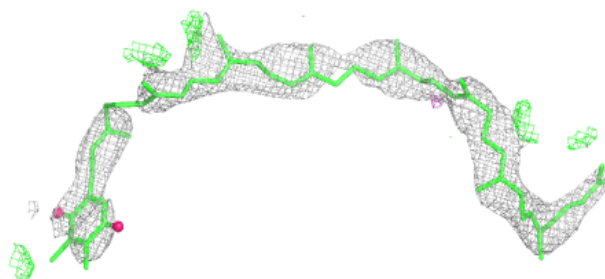


Electron density around PL9 A 416 (A):

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

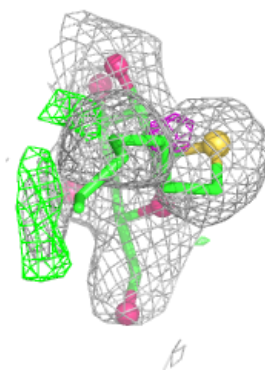
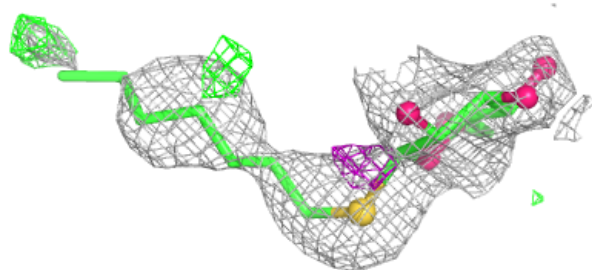
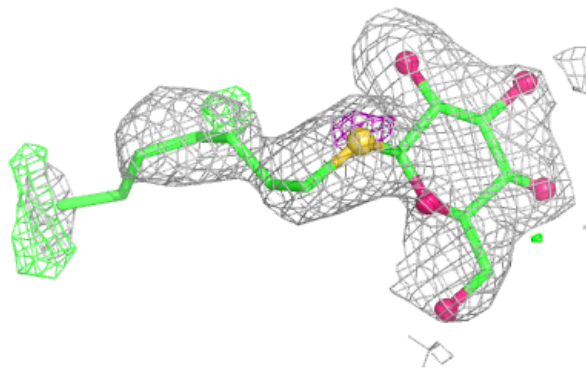
**Electron density around PL9 A 416 (B):**

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

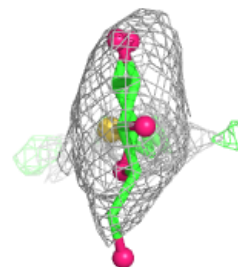
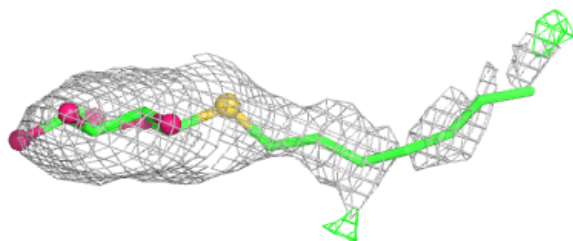
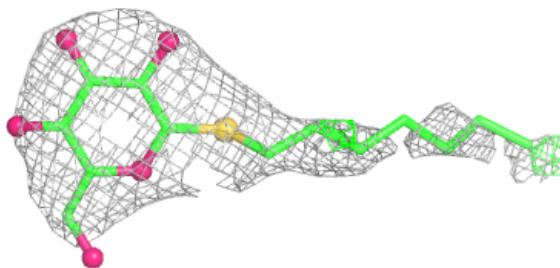


Electron density around HTG b 631:

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

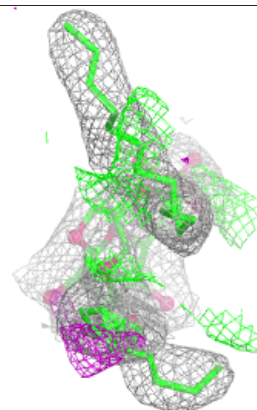
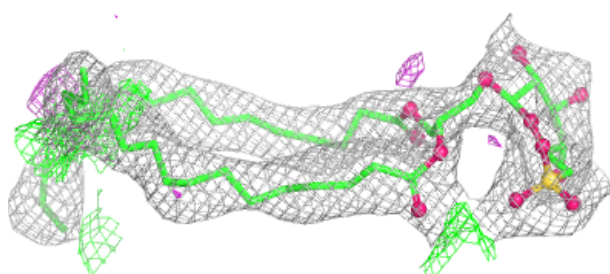
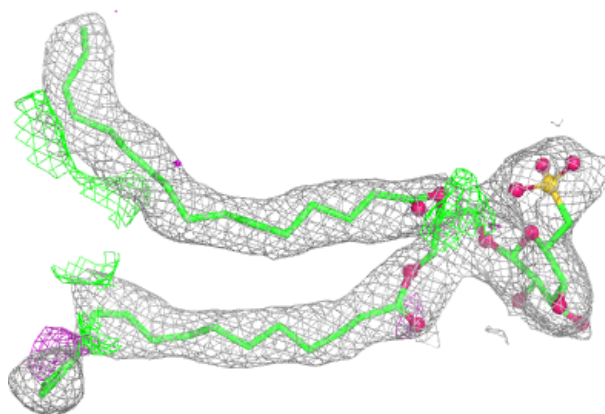
**Electron density around HTG c 524:**

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

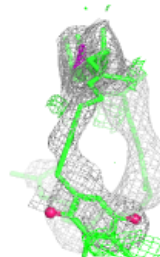
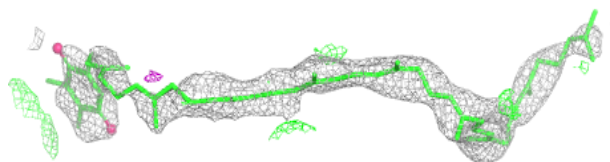
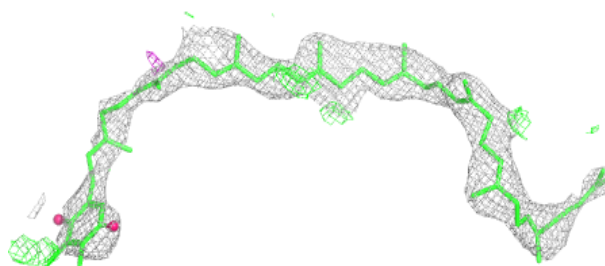


Electron density around SQD L 102:

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

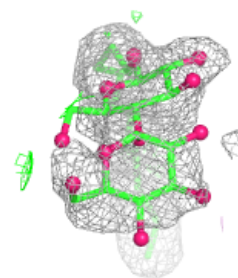
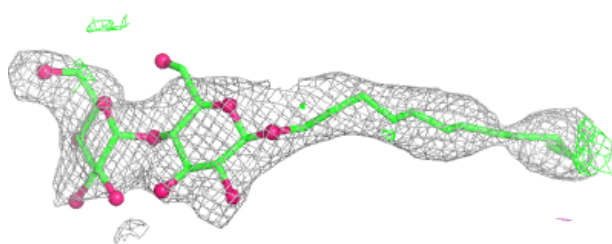
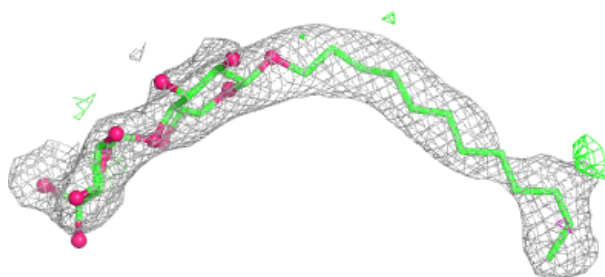
**Electron density around PL9 a 416 (B):**

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

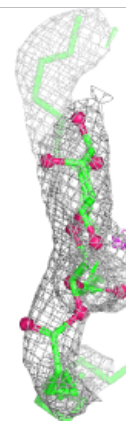
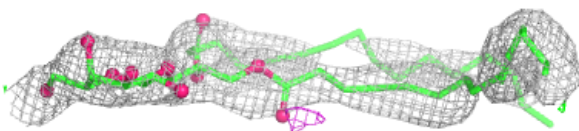
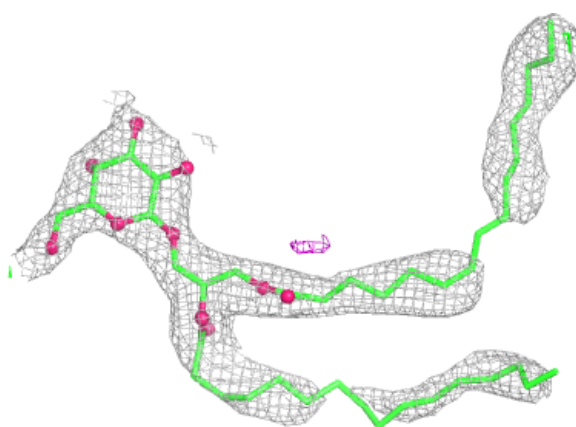


Electron density around LMT m 102:

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

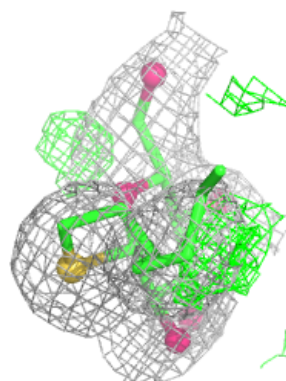
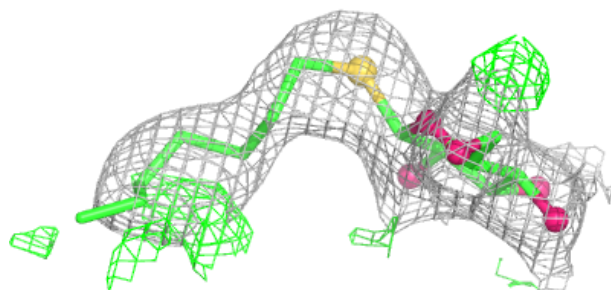
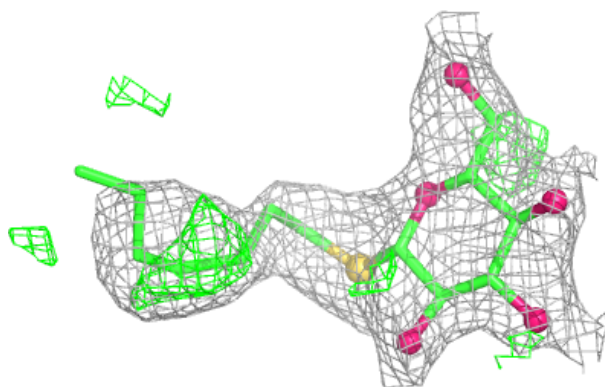
**Electron density around LMG C 519:**

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

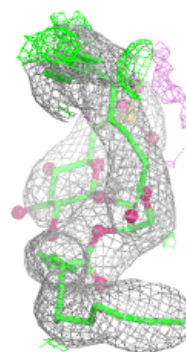
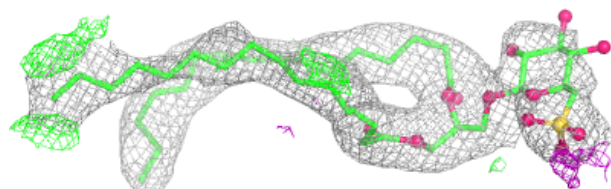
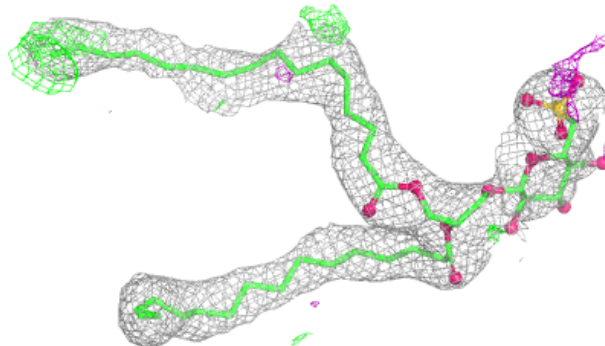


Electron density around HTG B 622:

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

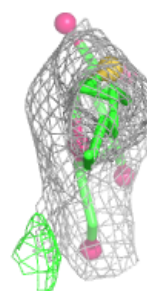
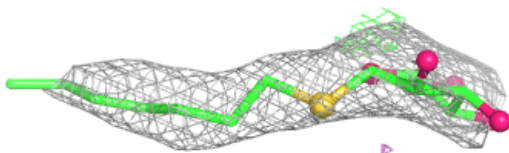
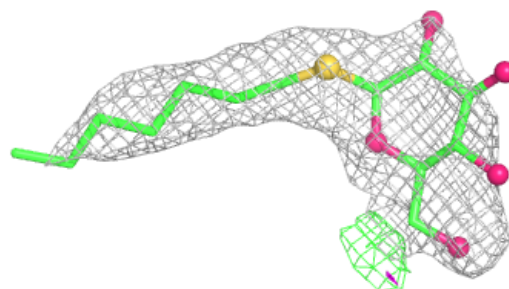
**Electron density around SQD A 412:**

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

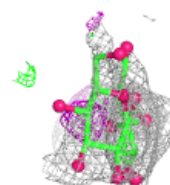
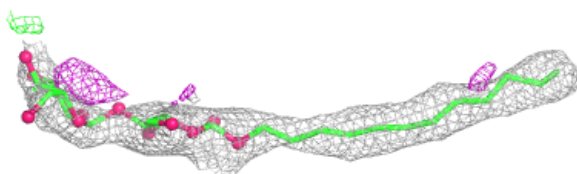
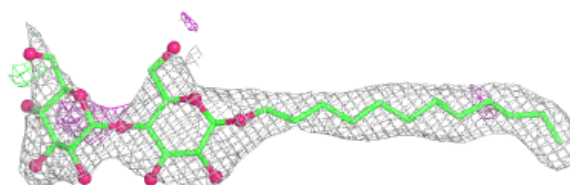


Electron density around HTG b 632:

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

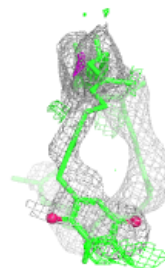
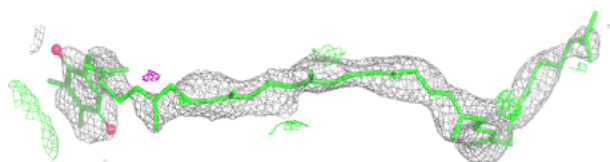
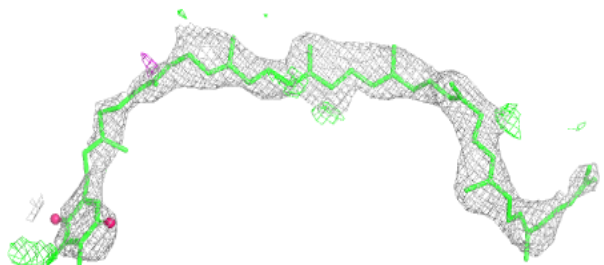
**Electron density around LMT M 105:**

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

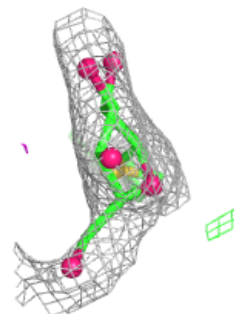
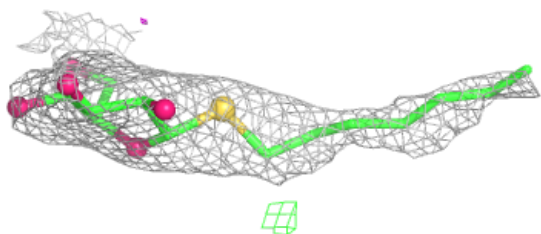
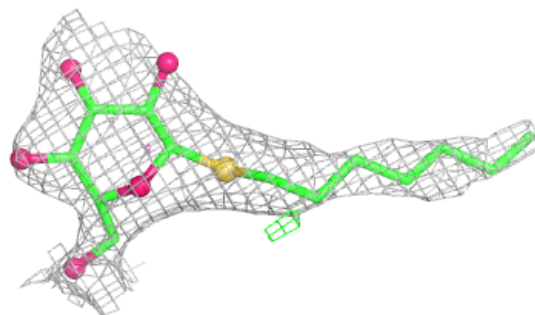


Electron density around PL9 a 416 (A):

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

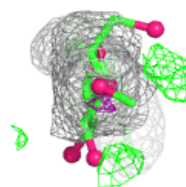
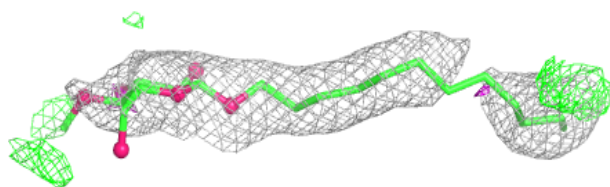
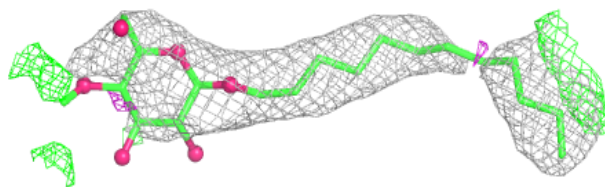
**Electron density around HTG C 523:**

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

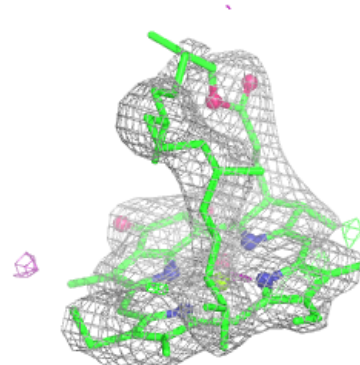
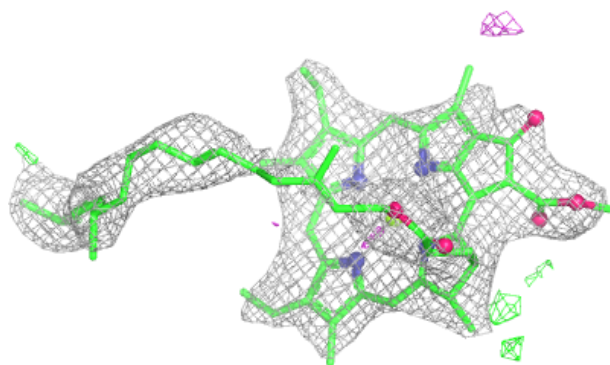
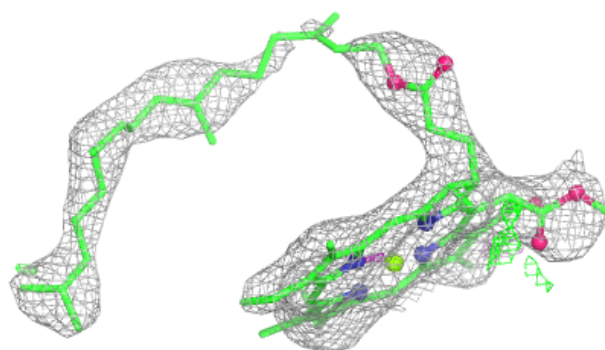


Electron density around LMT T 104:

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

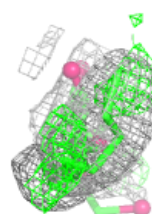
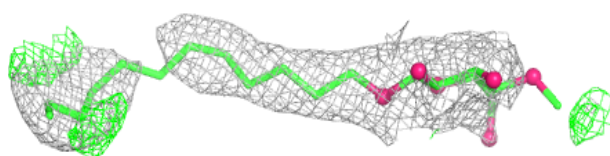
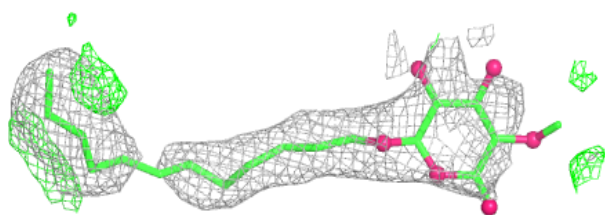
**Electron density around CLA C 514:**

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

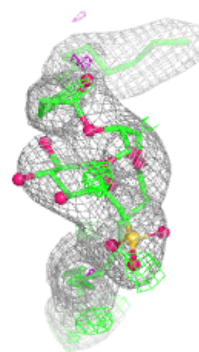
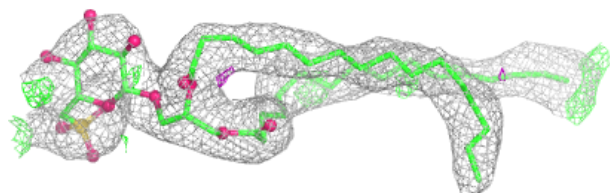
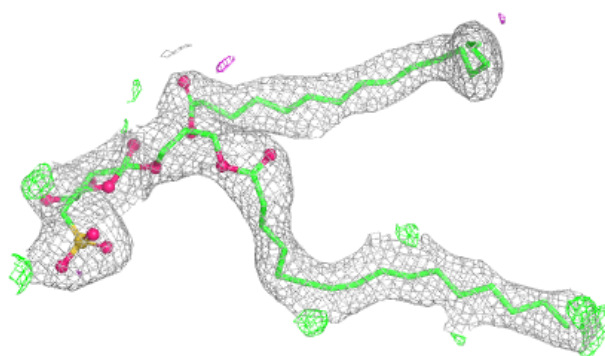


Electron density around LMT t 101:

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

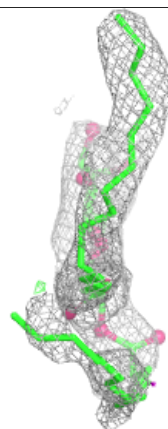
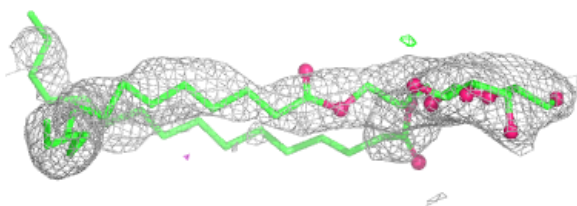
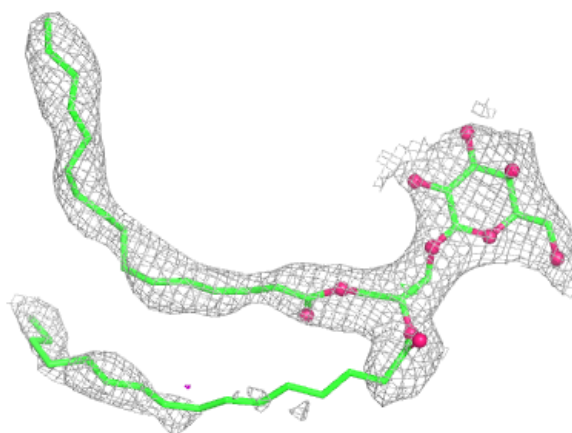
**Electron density around SQD a 405:**

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



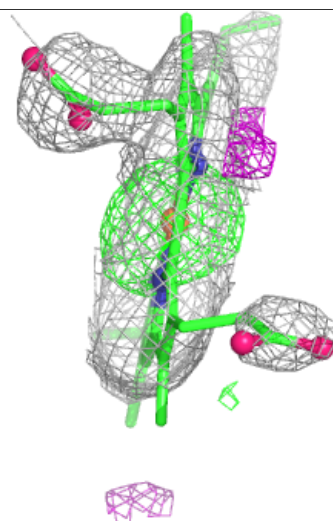
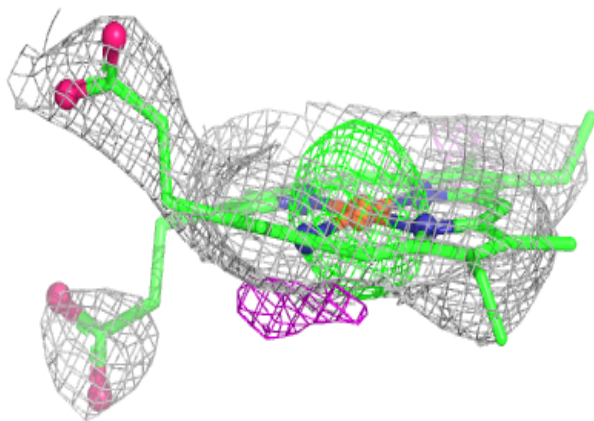
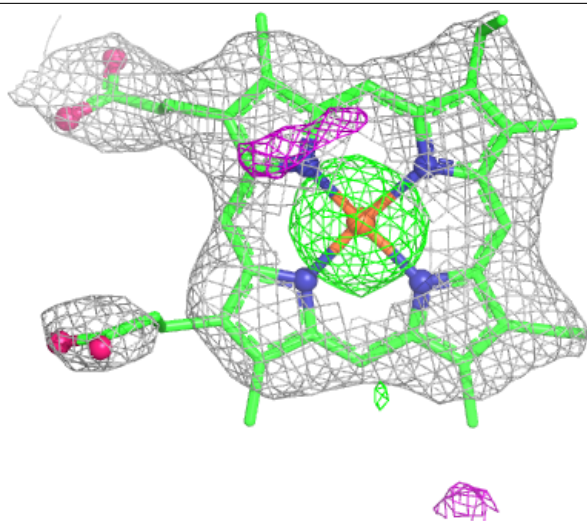
Electron density around LMG c 522:

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



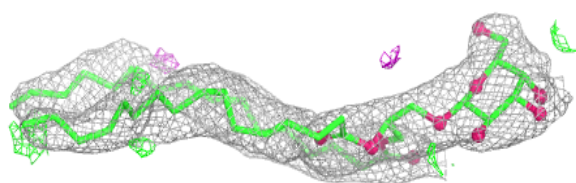
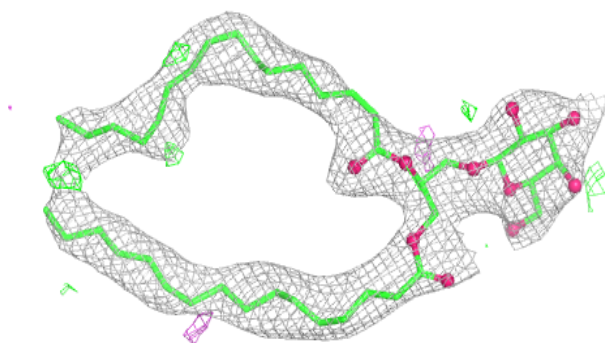
Electron density around HEM F 102:

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

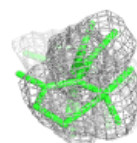
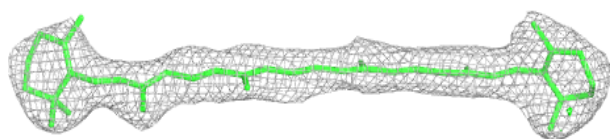
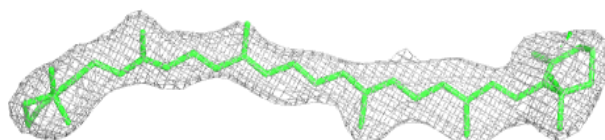


Electron density around LMG C 501:

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

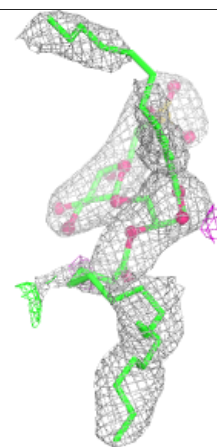
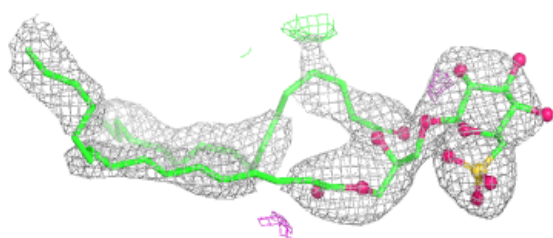
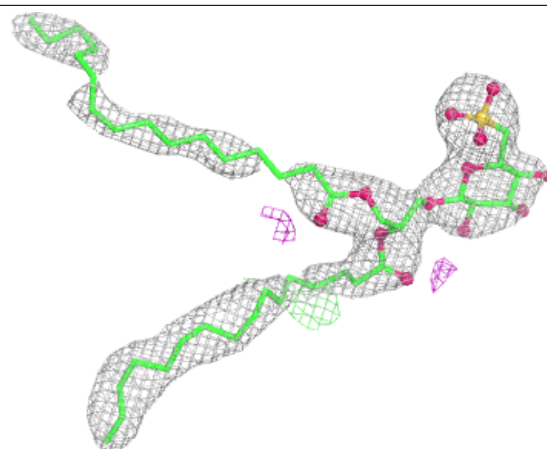
**Electron density around BCR K 101:**

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

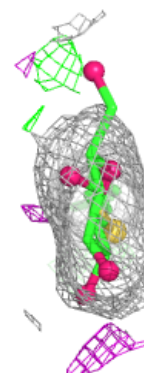
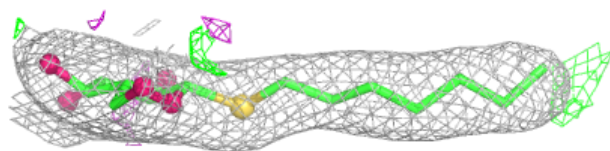
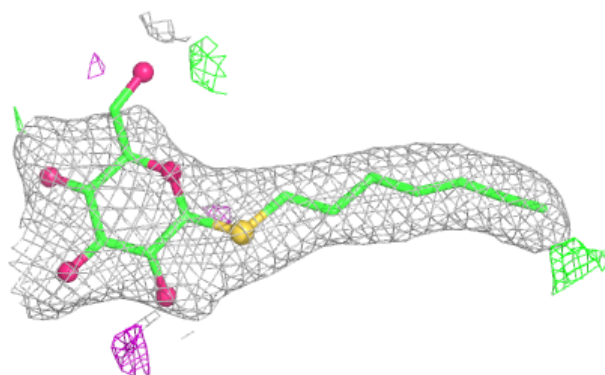


Electron density around SQD A 409:

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

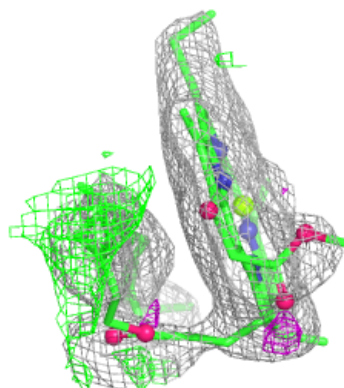
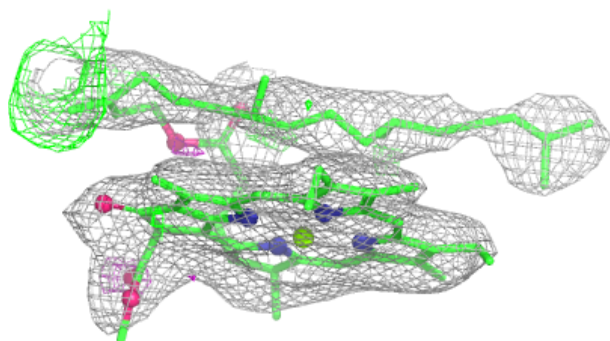
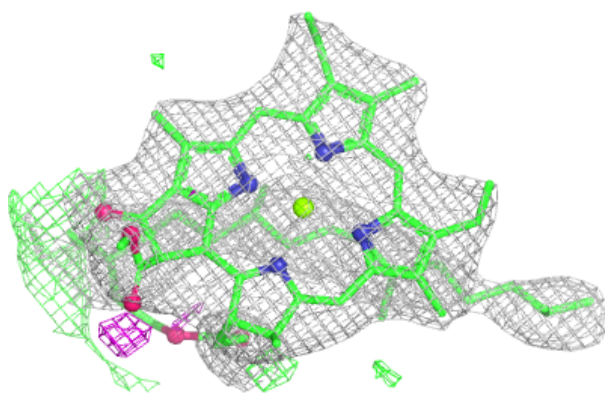
**Electron density around HTG B 629:**

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

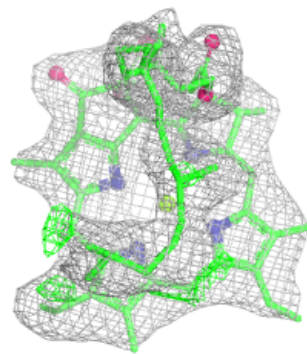
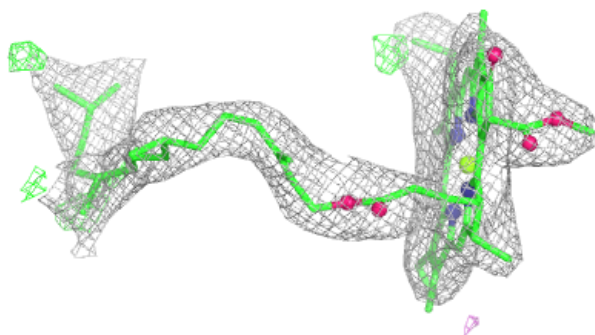
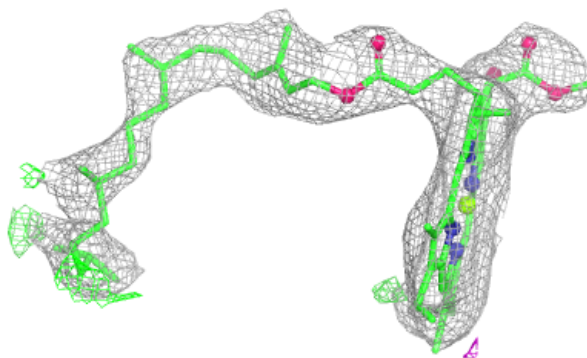


Electron density around CLA B 602:

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

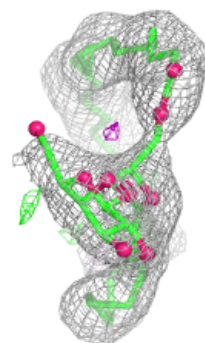
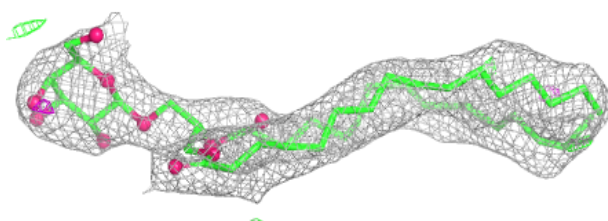
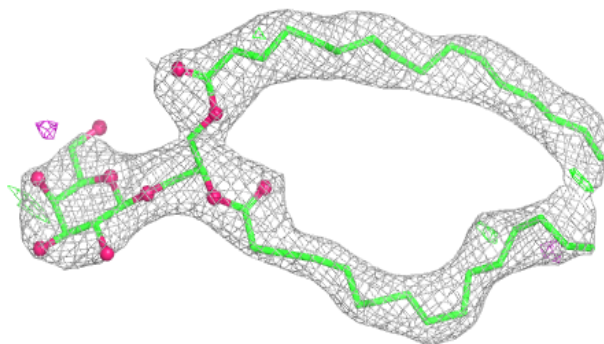
**Electron density around CLA C 507:**

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

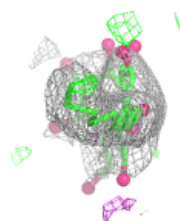
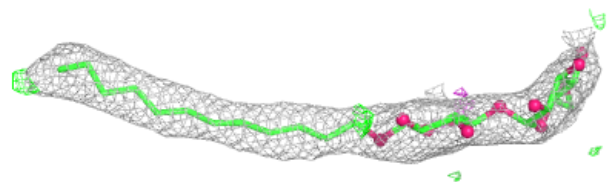
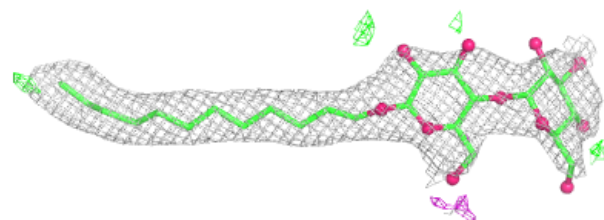


Electron density around LMG a 415:

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

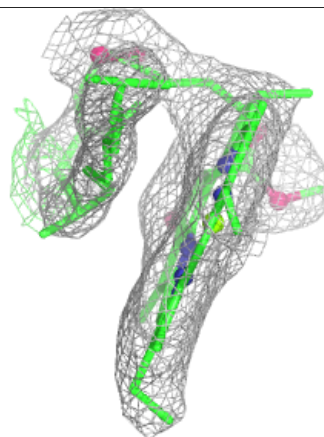
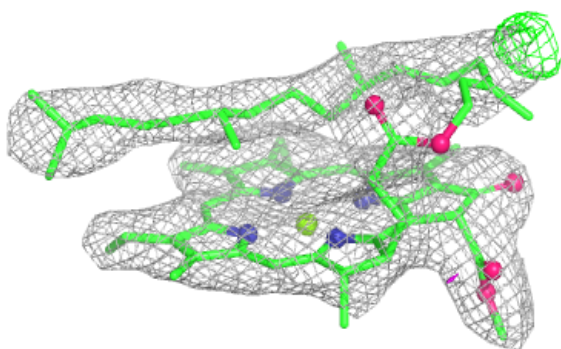
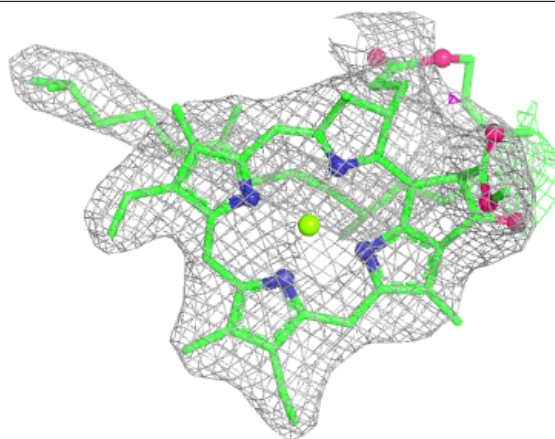
**Electron density around LMT M 102:**

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

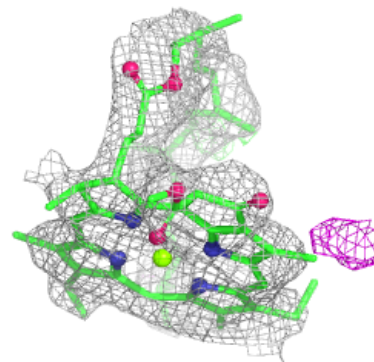
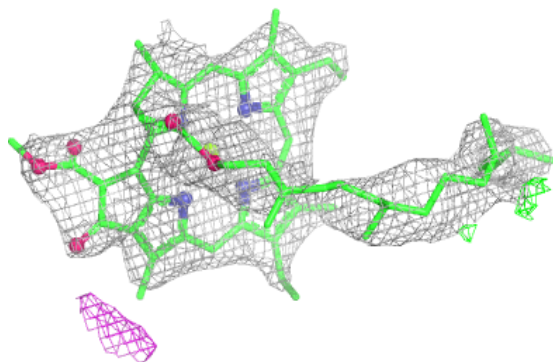
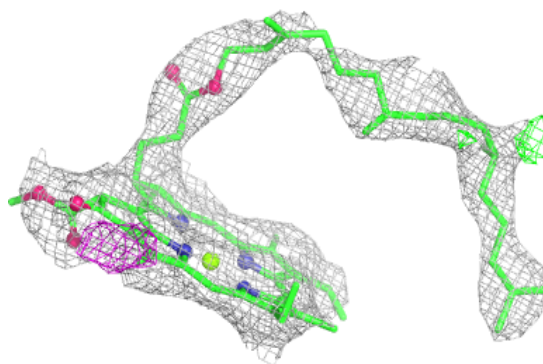


Electron density around CLA b 610:

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

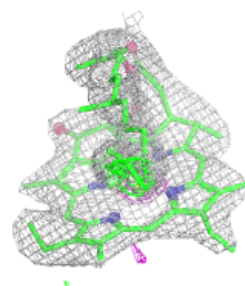
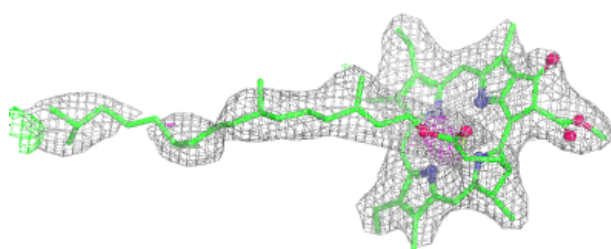
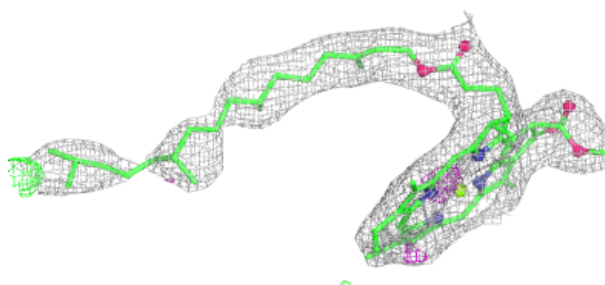
**Electron density around CLA c 517:**

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

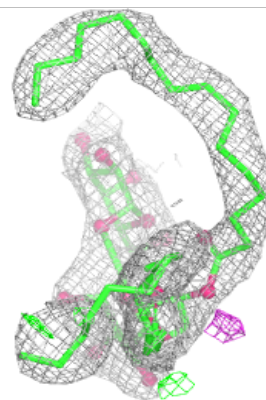
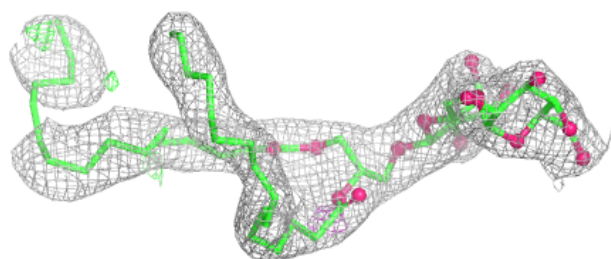
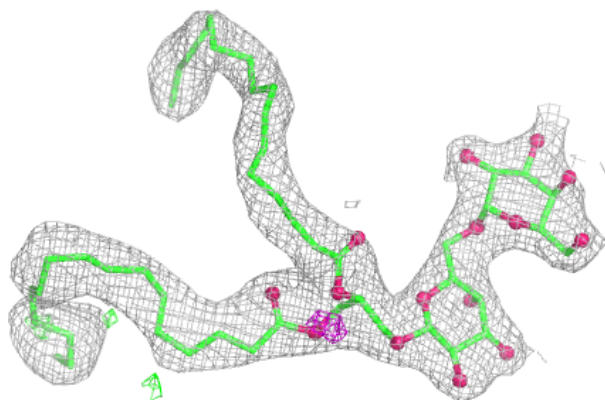


Electron density around CLA C 505:

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

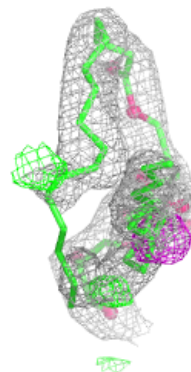
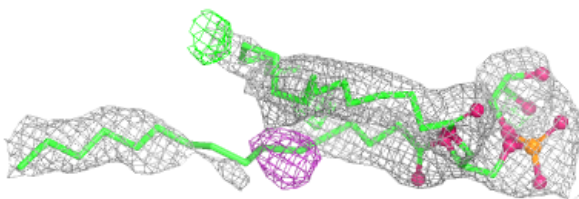
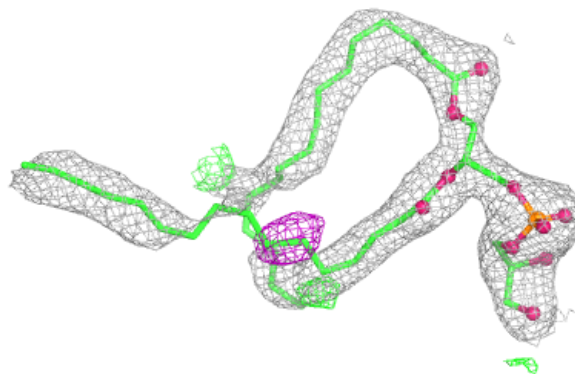
**Electron density around DGD C 517:**

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

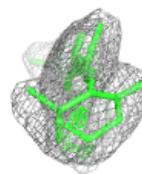
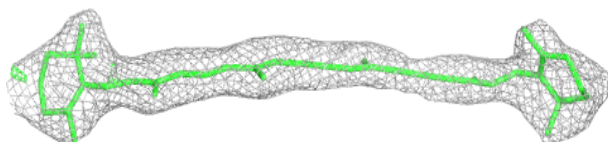
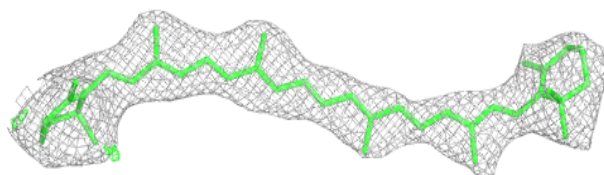


Electron density around LHG D 413:

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

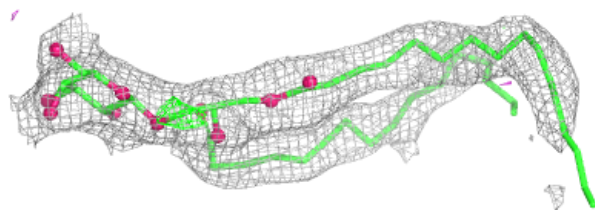
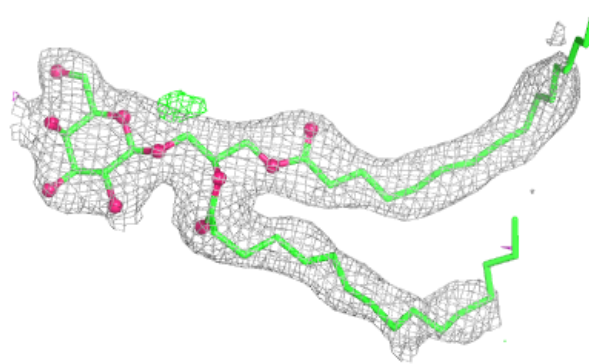
**Electron density around BCR k 102:**

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



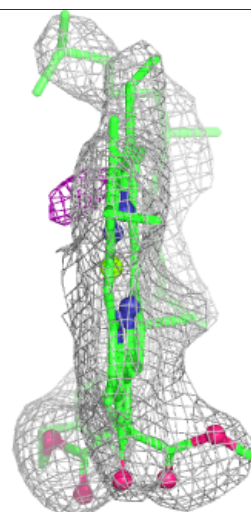
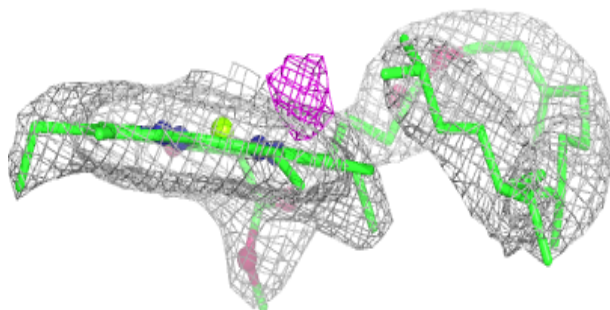
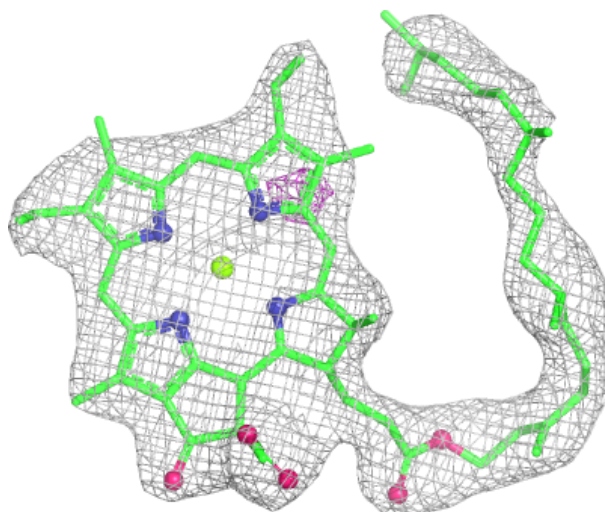
Electron density around LMG D 417:

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



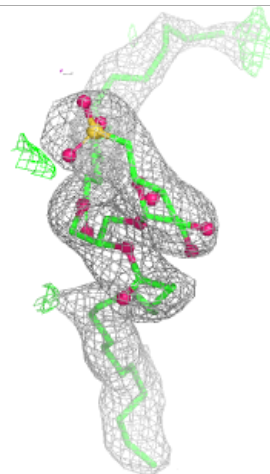
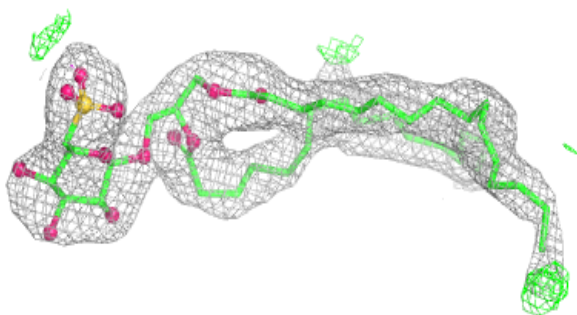
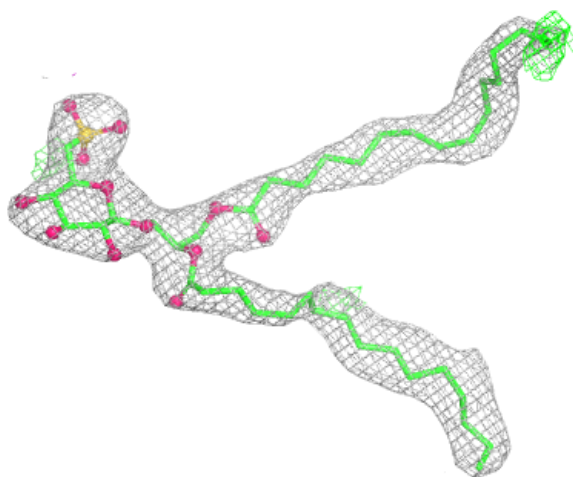
Electron density around CLA C 513:

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



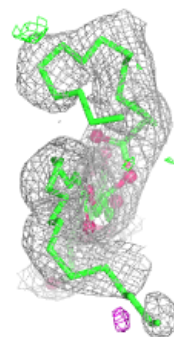
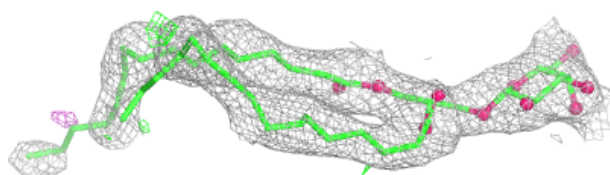
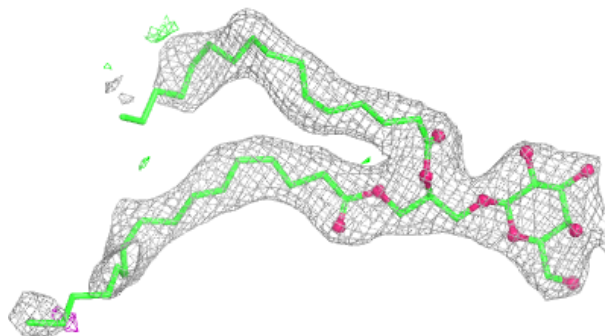
Electron density around SQD a 414:

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

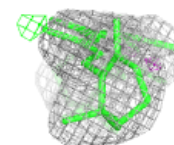
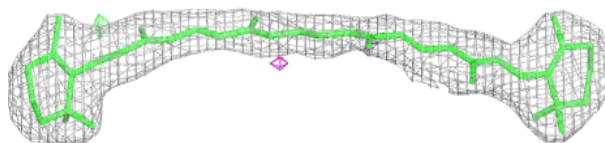


Electron density around LMG d 416:

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

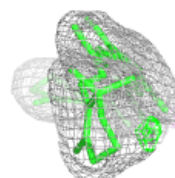
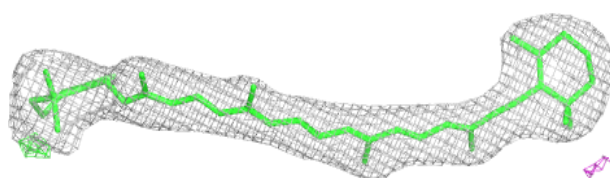
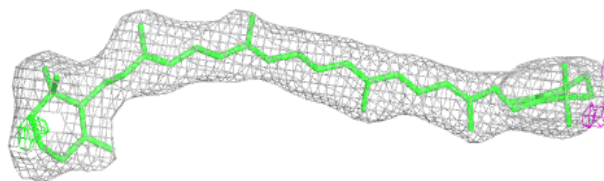
**Electron density around BCR K 103:**

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

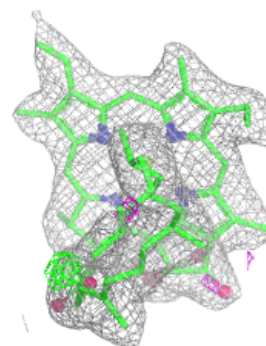
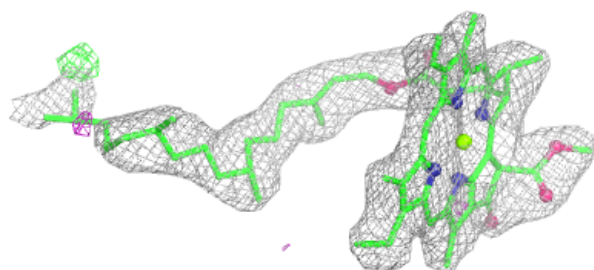
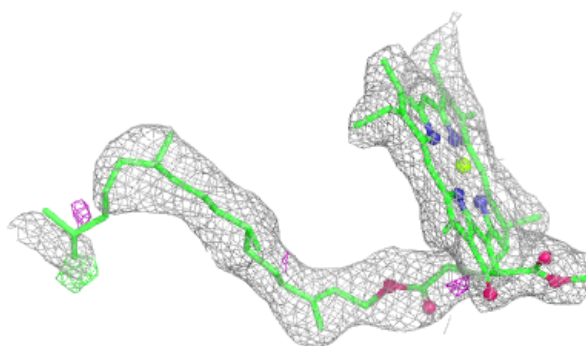


Electron density around BCR d 406:

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

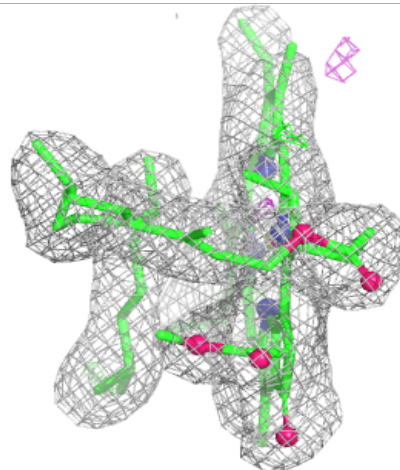
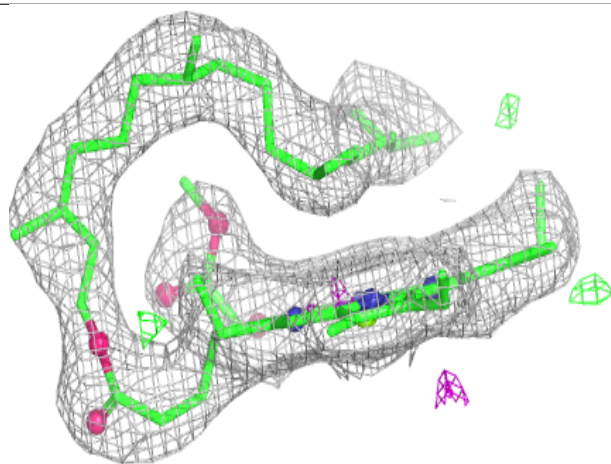
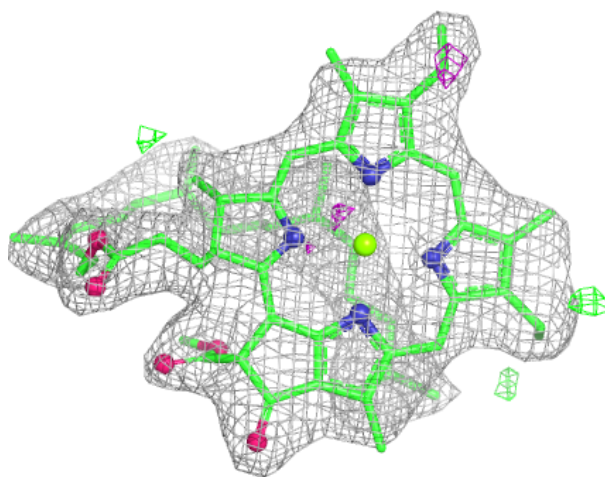
**Electron density around CLA c 512:**

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



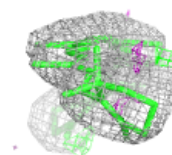
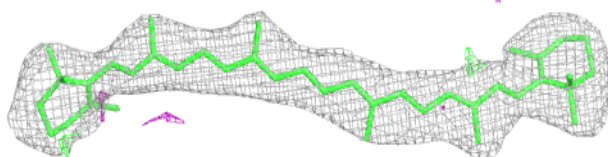
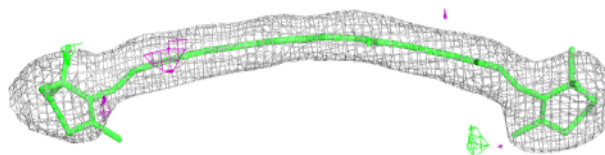
Electron density around CLA C 511:

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

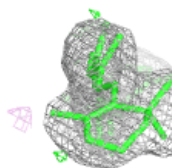
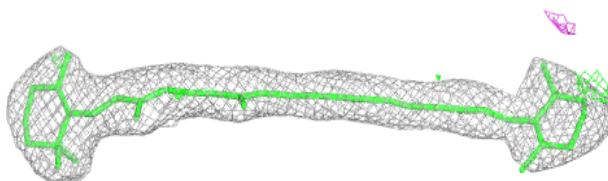
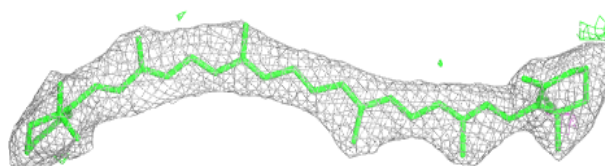


Electron density around BCR D 408:

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

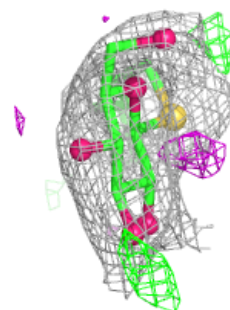
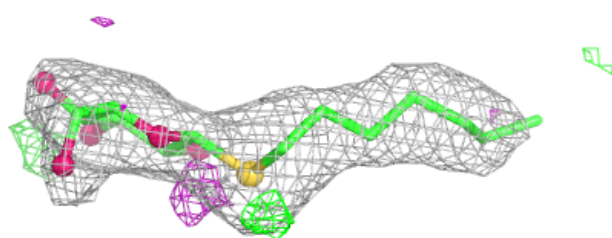
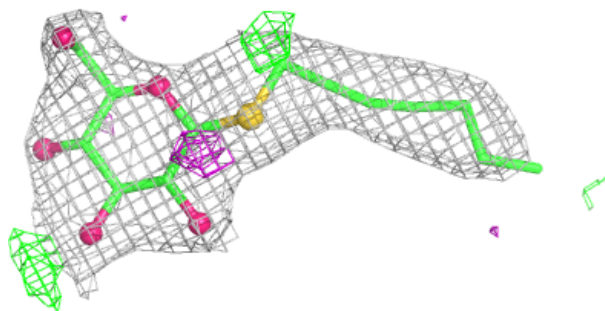
**Electron density around BCR H 101:**

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

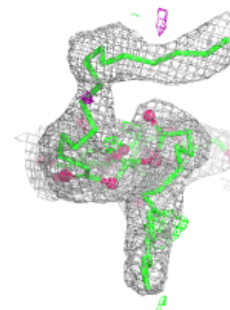
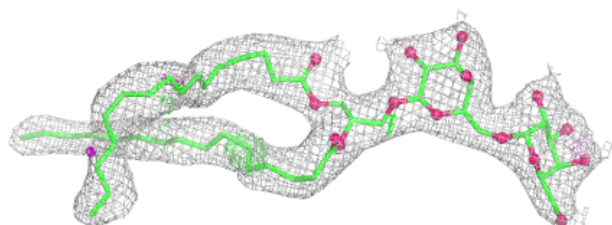
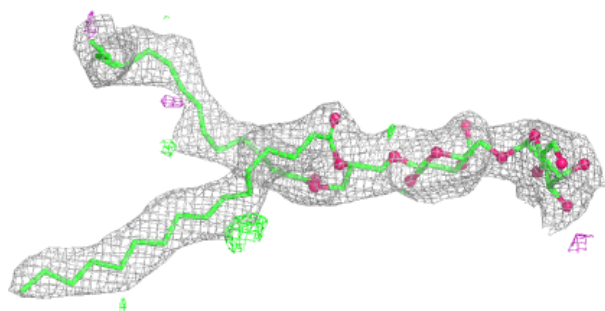


Electron density around HTG o 301:

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

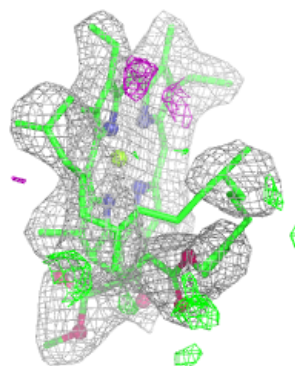
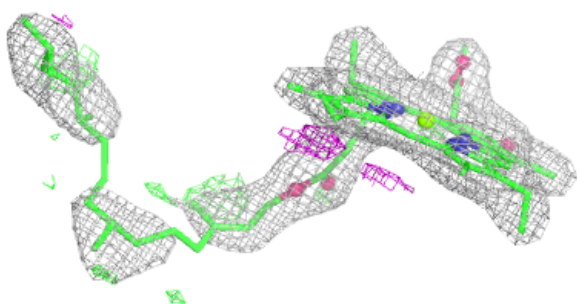
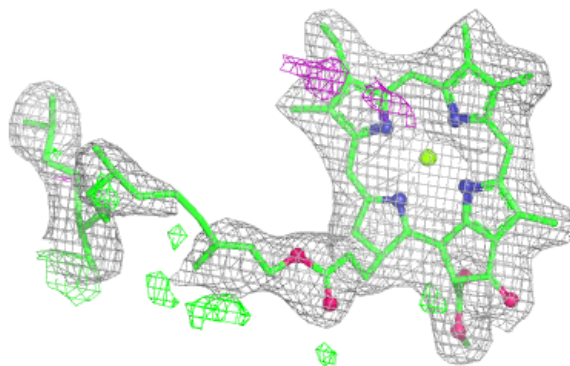
**Electron density around DGD C 516:**

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

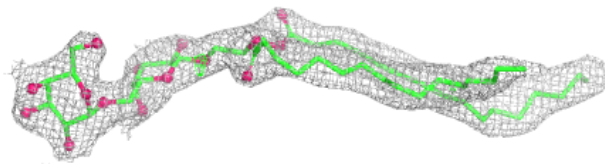
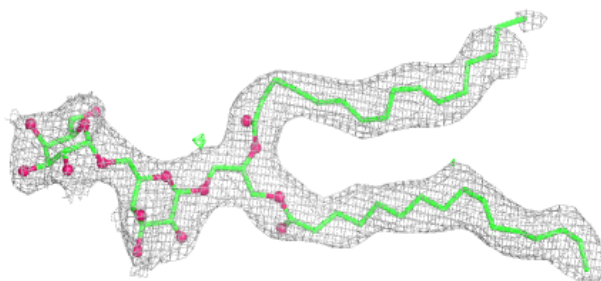


Electron density around CLA A 407:

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

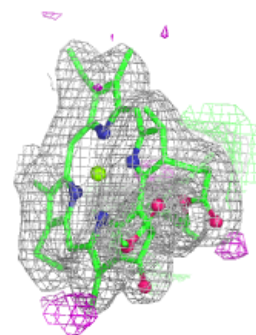
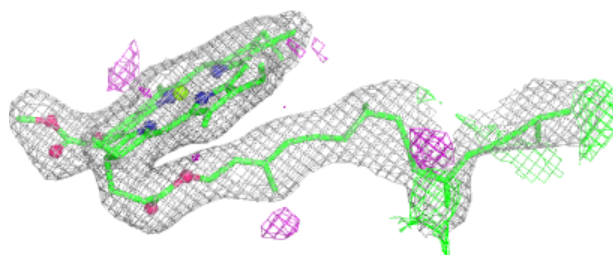
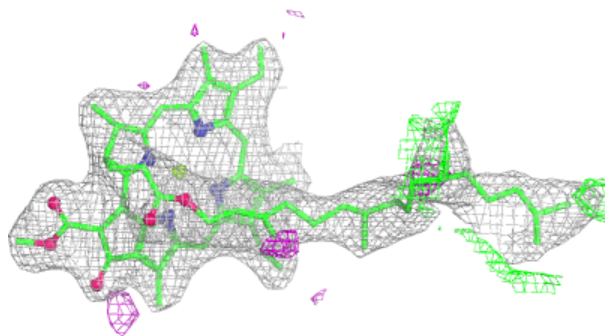
**Electron density around DGD C 518:**

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

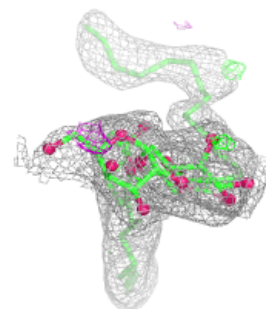
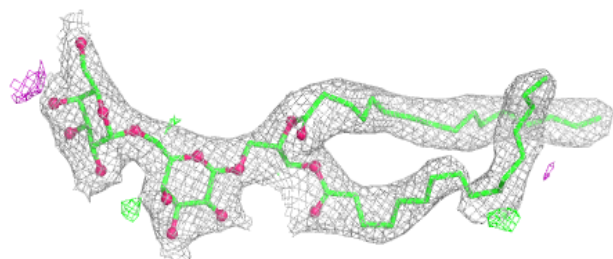
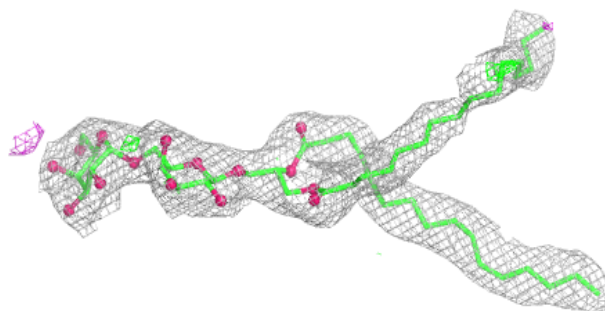


Electron density around CLA B 615:

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

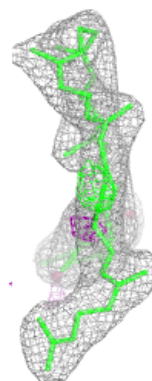
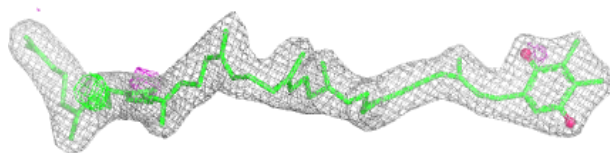
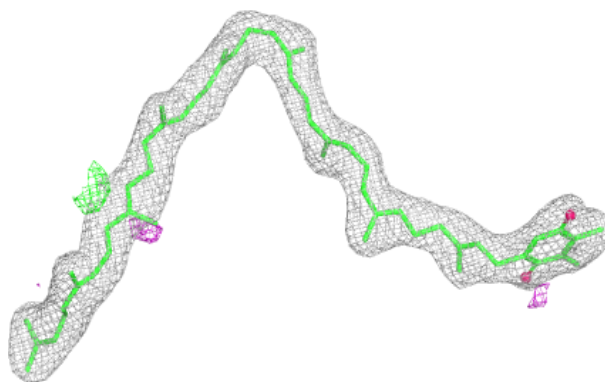
**Electron density around DGD c 519:**

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

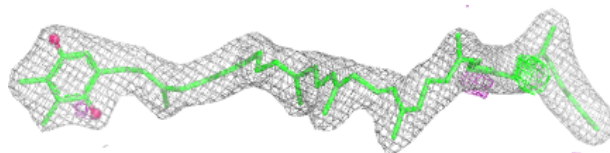
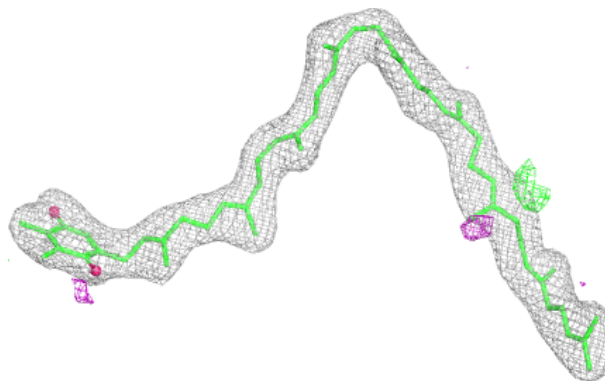


Electron density around PL9 D 409 (A):

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

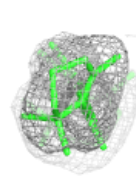
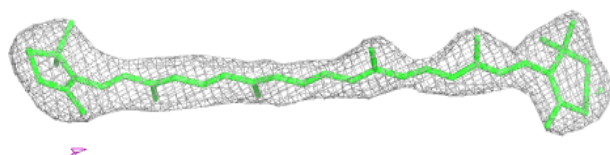
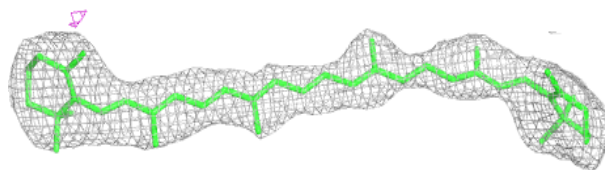
**Electron density around PL9 D 409 (B):**

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

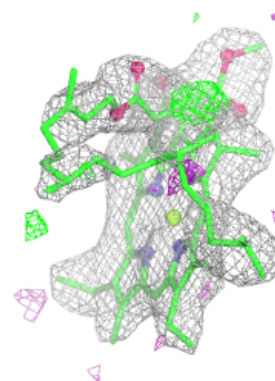
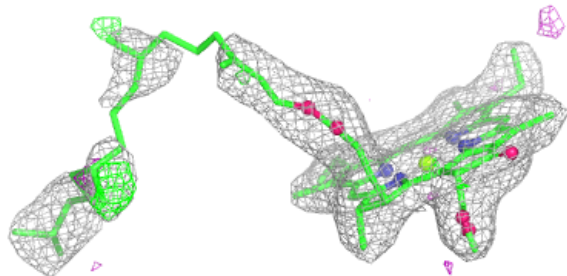
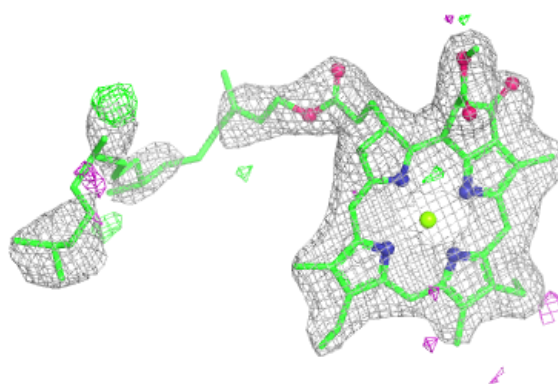


Electron density around BCR c 527:

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

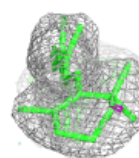
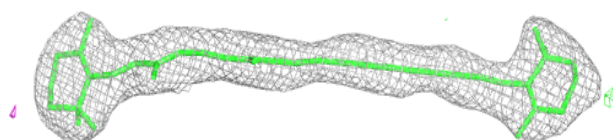
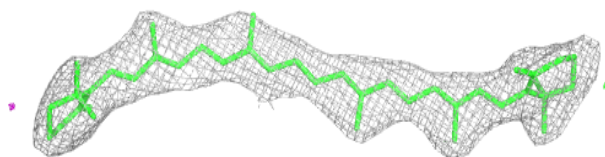
**Electron density around CLA a 412:**

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

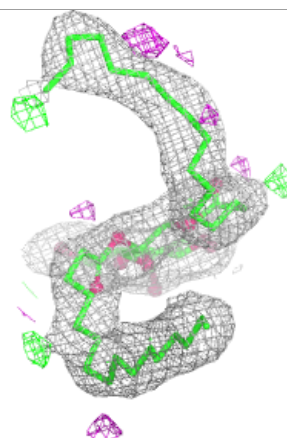
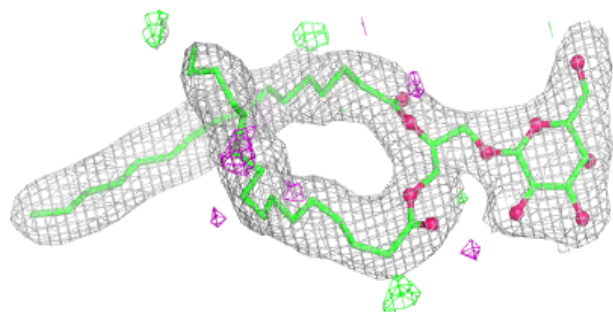
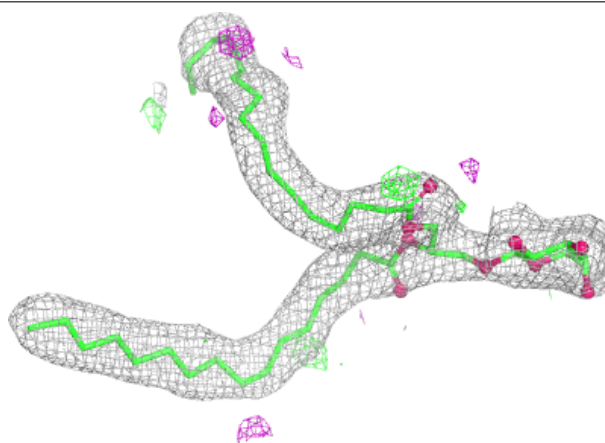


Electron density around BCR h 101:

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

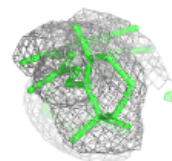
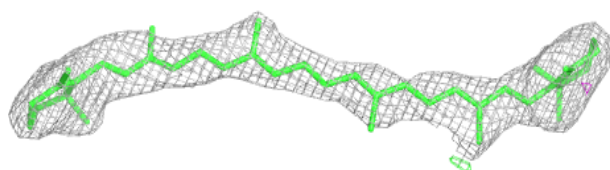
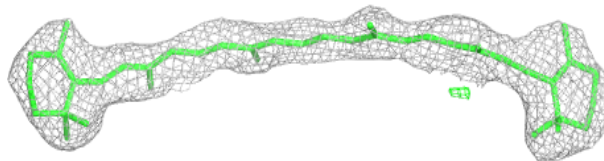
**Electron density around LMG b 629:**

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

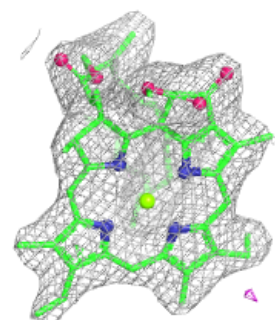
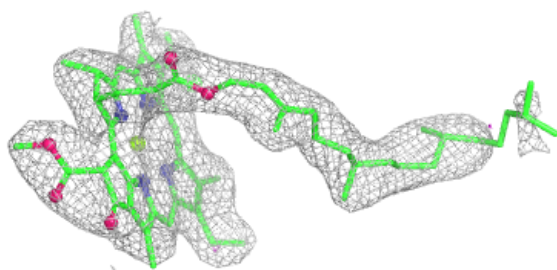
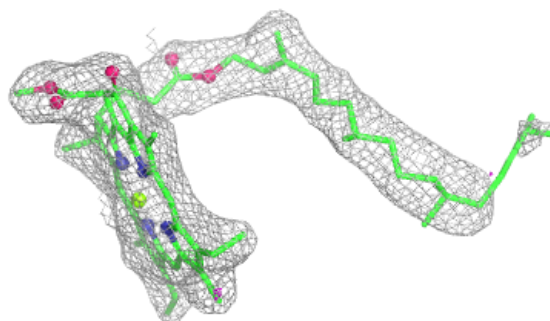


Electron density around BCR k 101:

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

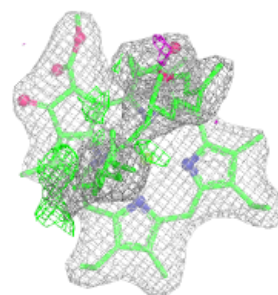
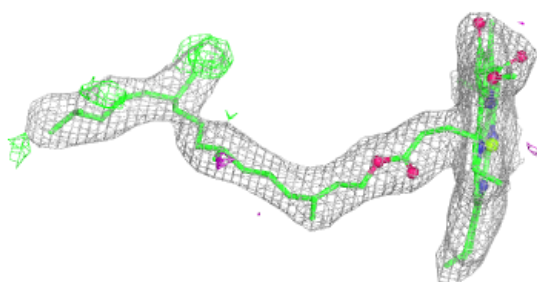
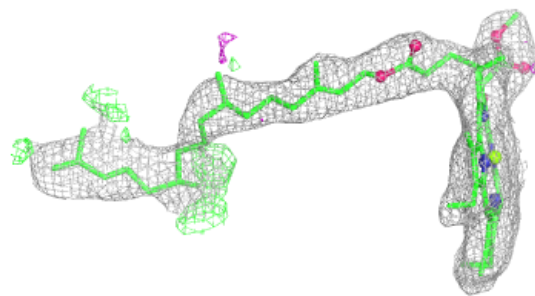
**Electron density around CLA C 509:**

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

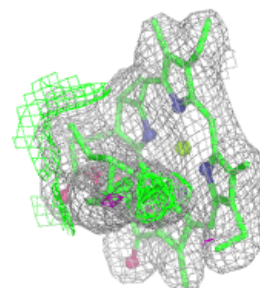
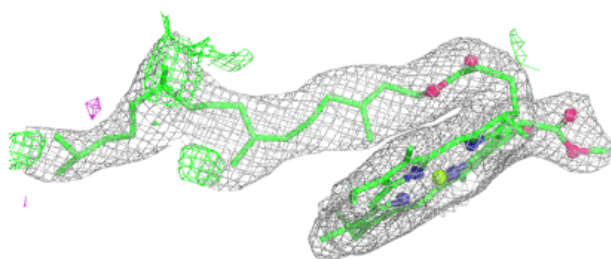
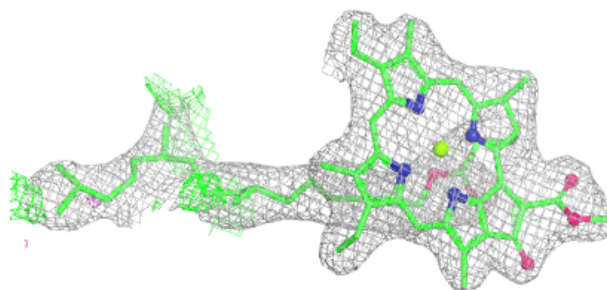


Electron density around CLA b 615:

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

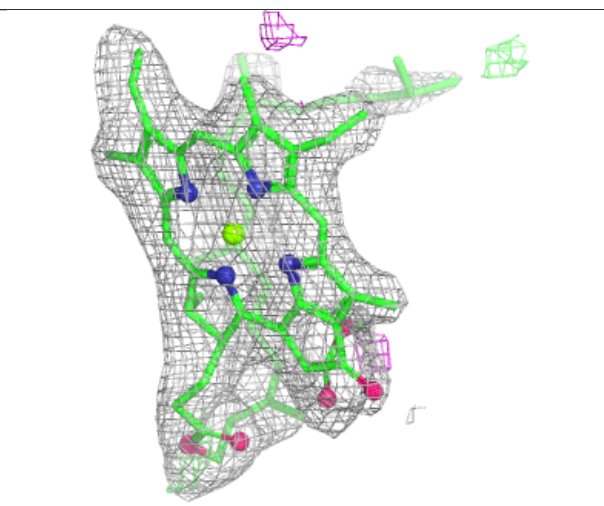
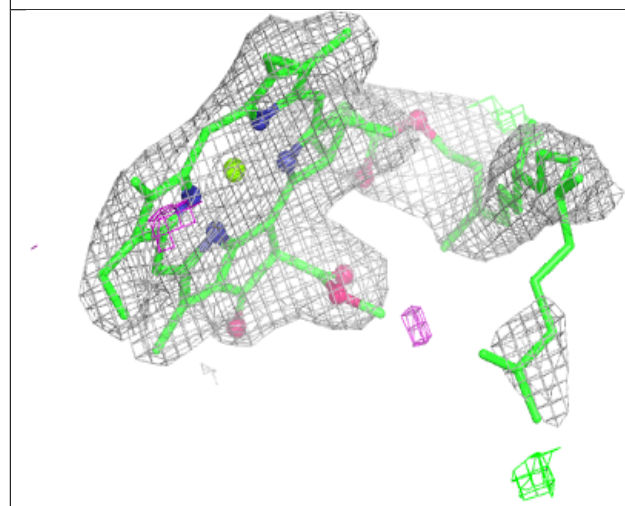
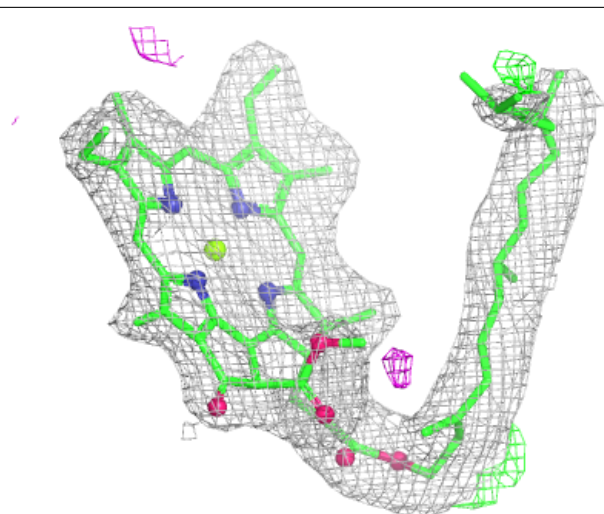
**Electron density around CLA b 623:**

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



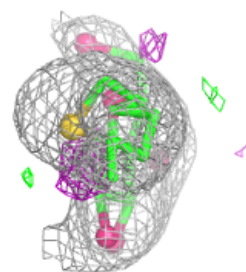
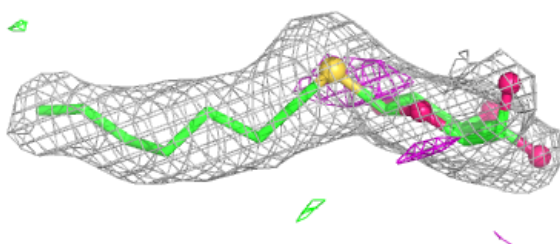
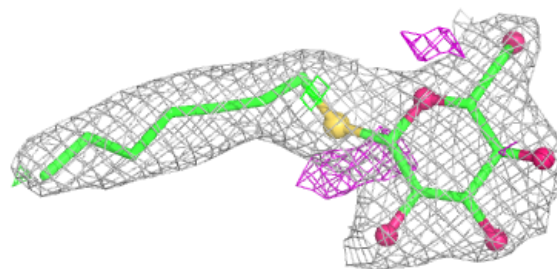
Electron density around CLA b 625:

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

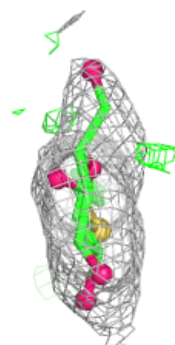
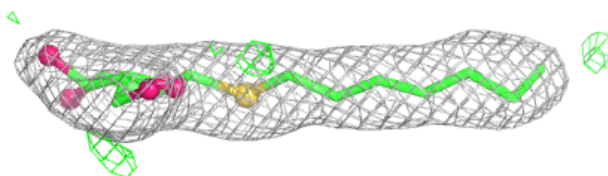
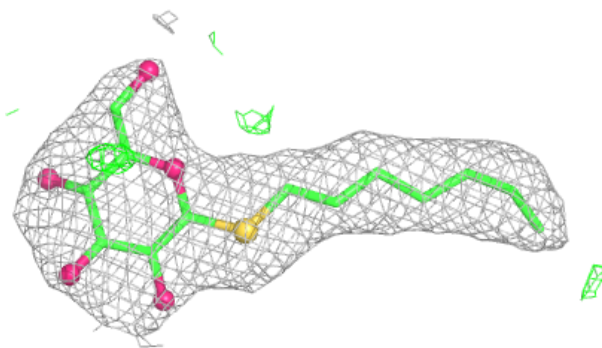


Electron density around HTG b 601:

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

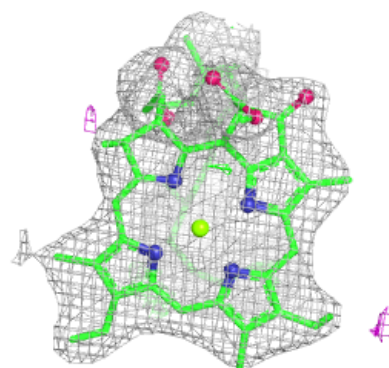
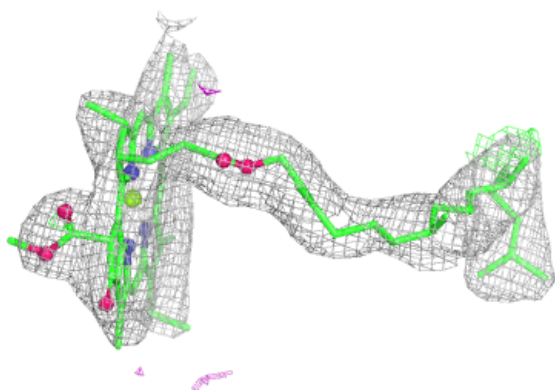
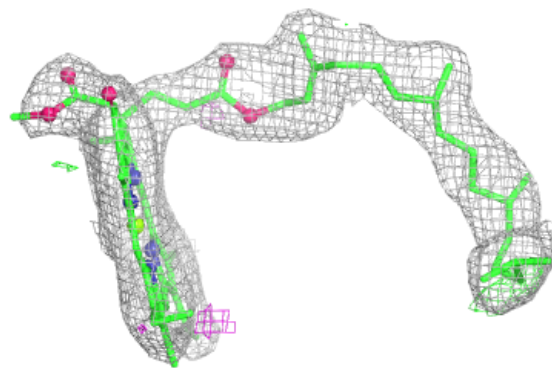
**Electron density around HTG b 607:**

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

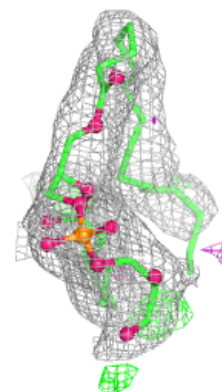
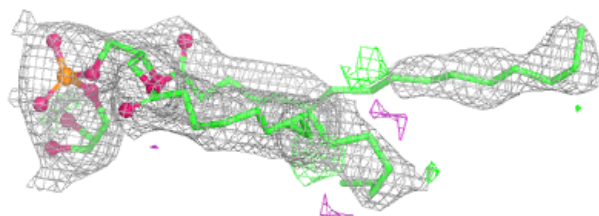
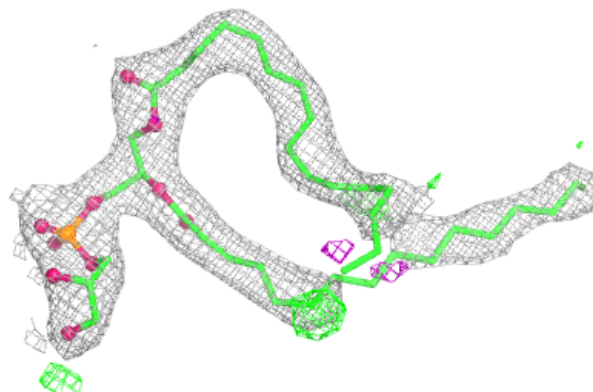


Electron density around CLA c 510:

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

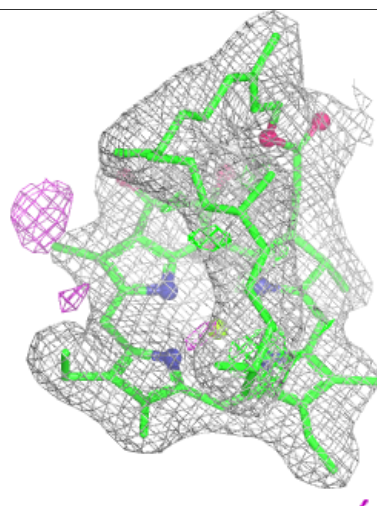
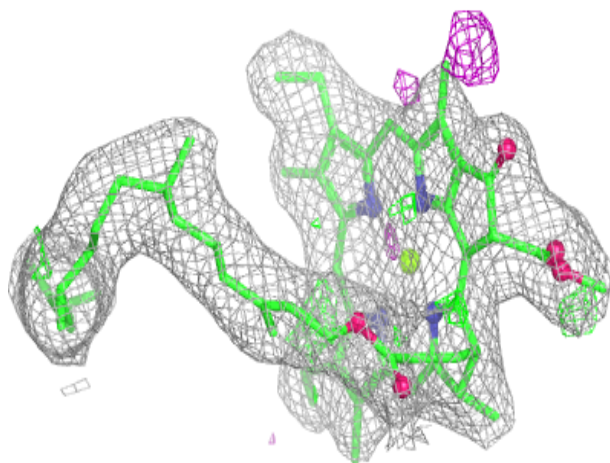
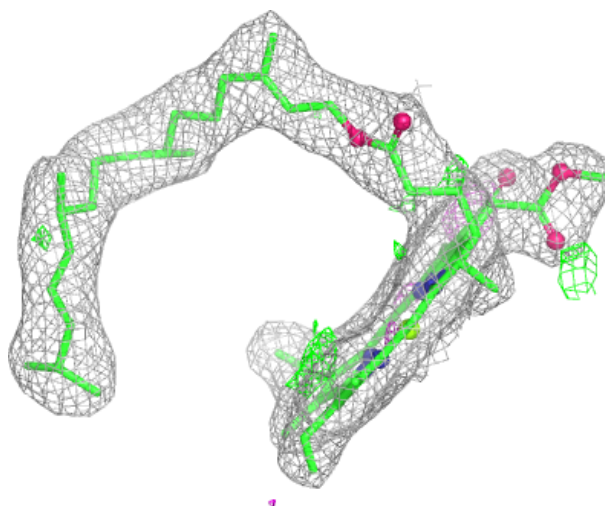
**Electron density around LHG d 411:**

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



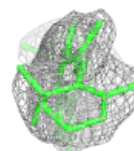
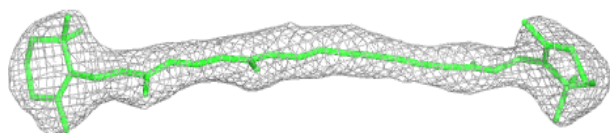
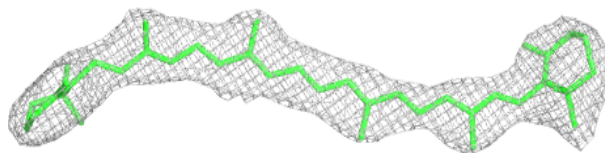
Electron density around CLA b 620:

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

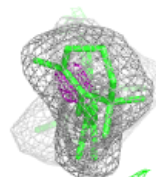
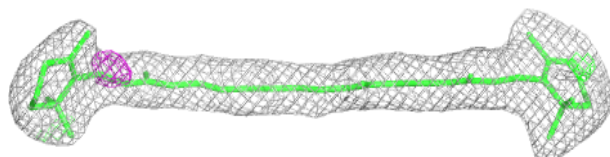
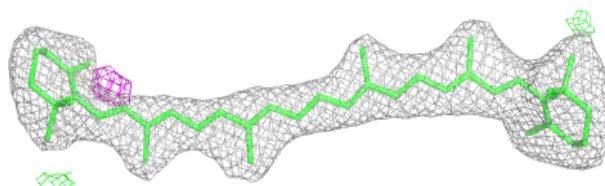


Electron density around BCR Y 101:

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

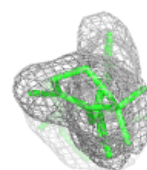
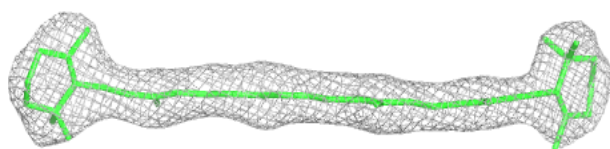
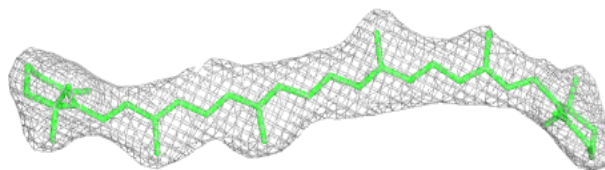
**Electron density around BCR b 627:**

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

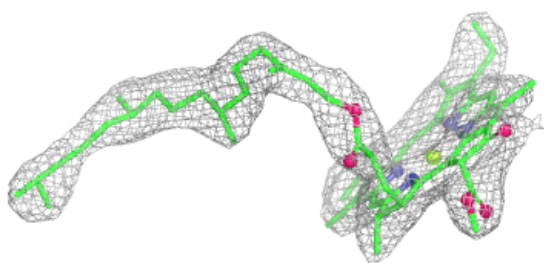
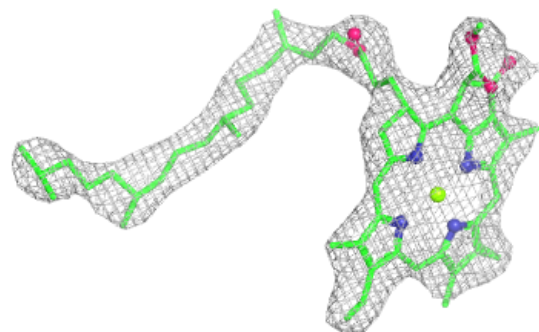


Electron density around BCR c 518:

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

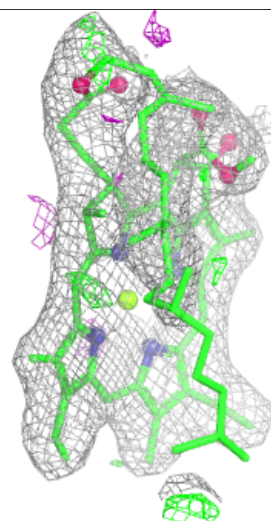
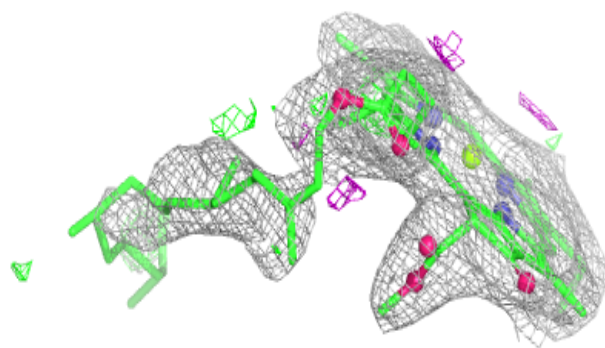
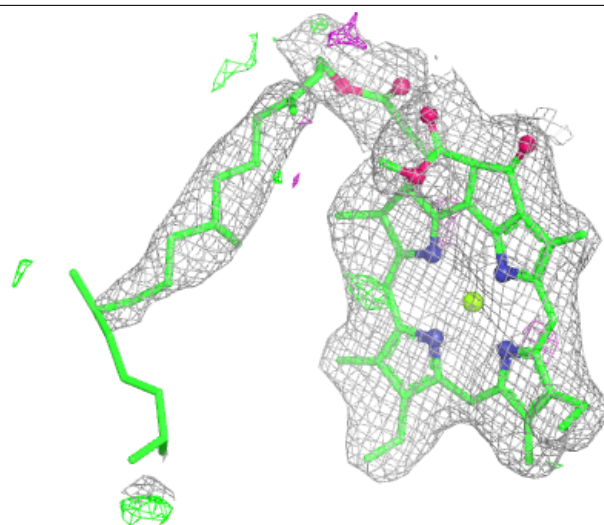
**Electron density around CLA C 512:**

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



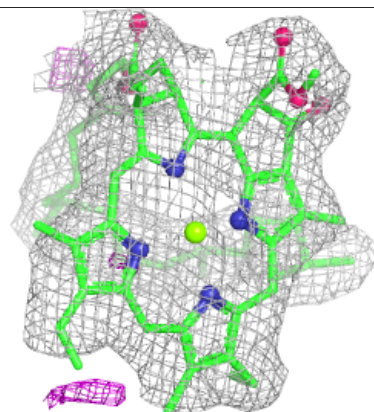
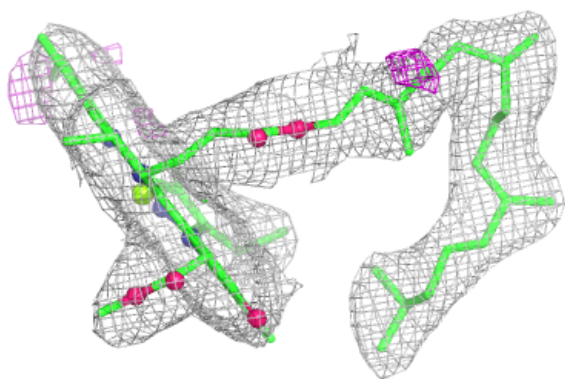
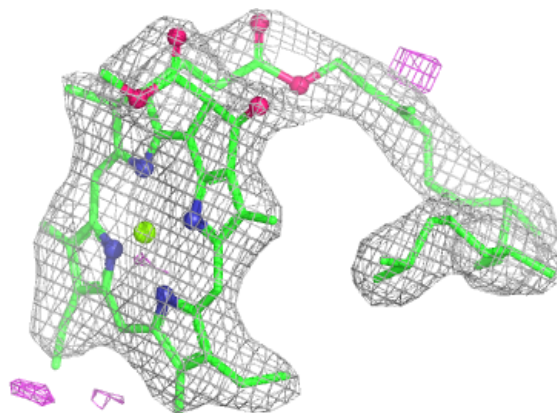
Electron density around CLA B 617:

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

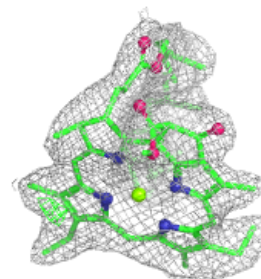
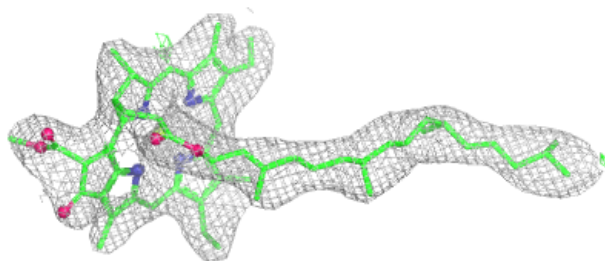
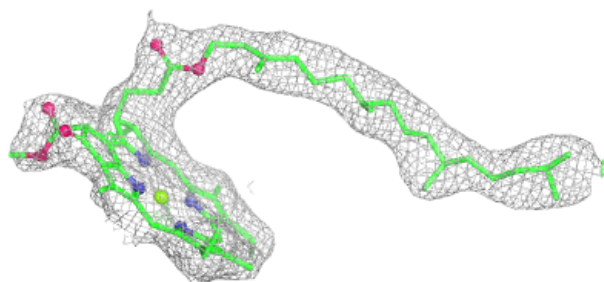


Electron density around CLA c 507:

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

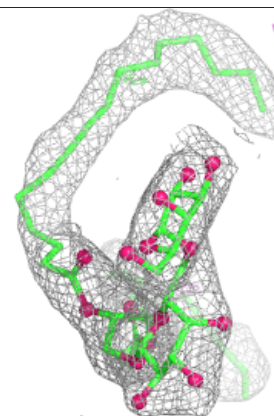
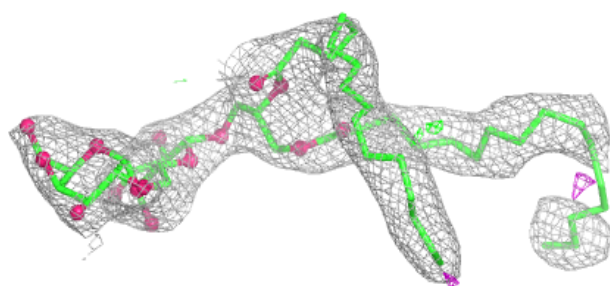
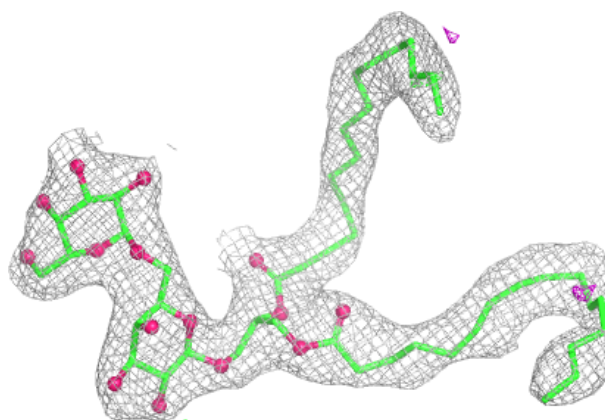
**Electron density around CLA c 508:**

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

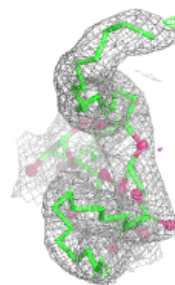
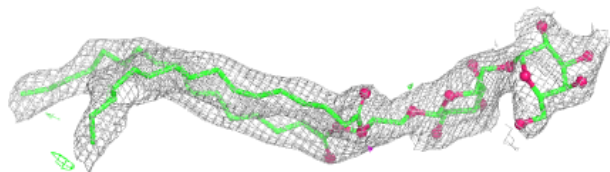
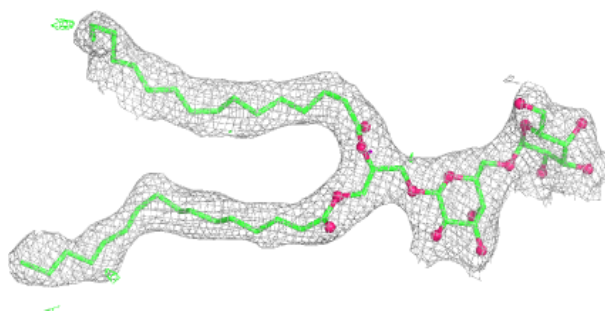


Electron density around DGD c 520:

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

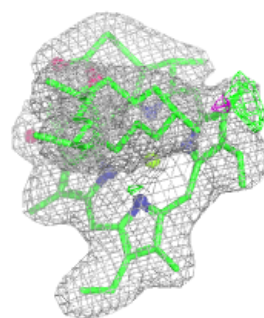
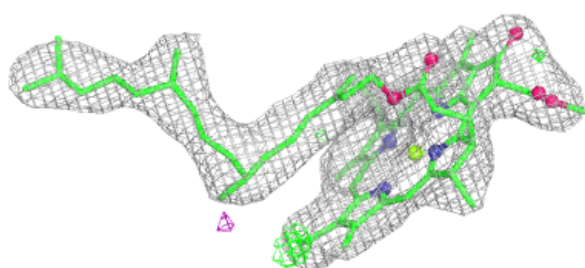
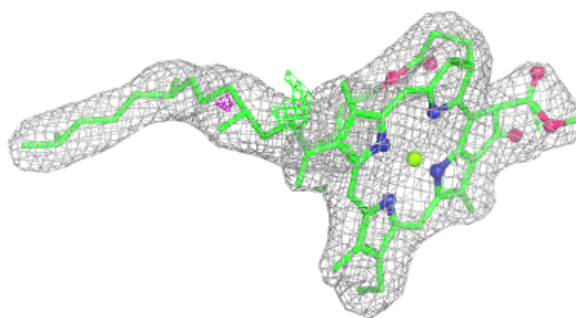
**Electron density around DGD c 521:**

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

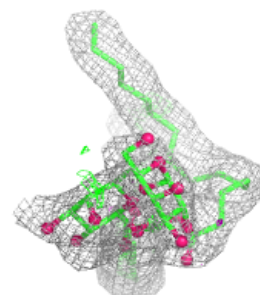
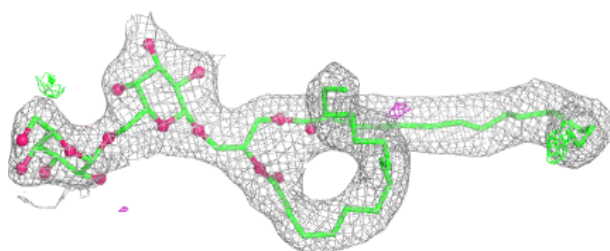
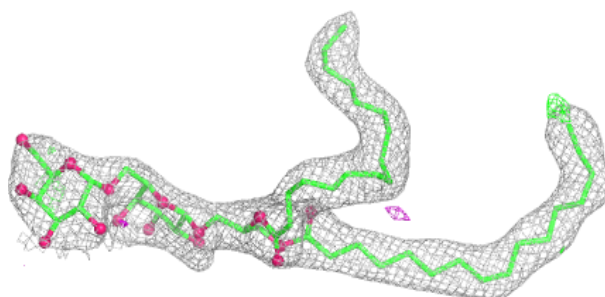


Electron density around CLA c 509:

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

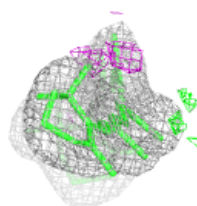
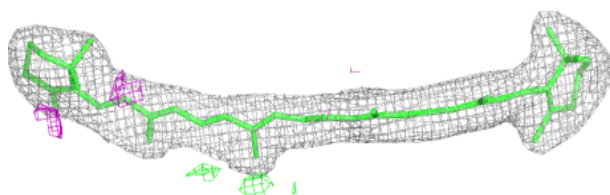
**Electron density around DGD h 102:**

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



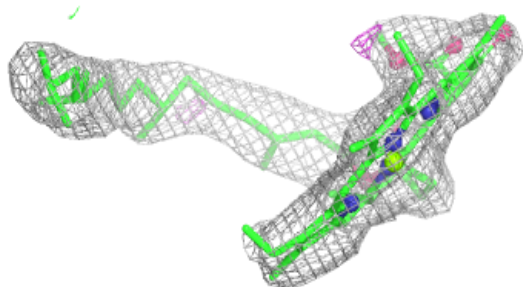
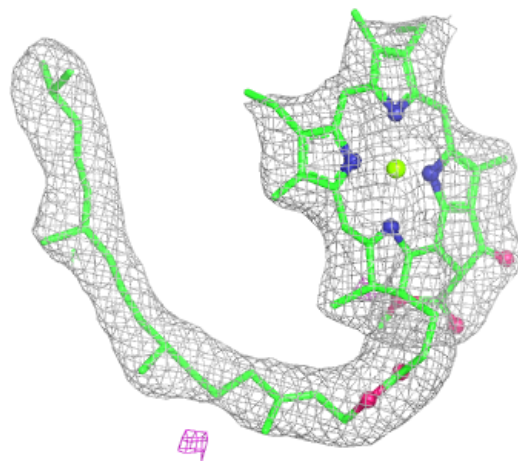
Electron density around BCR t 102:

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



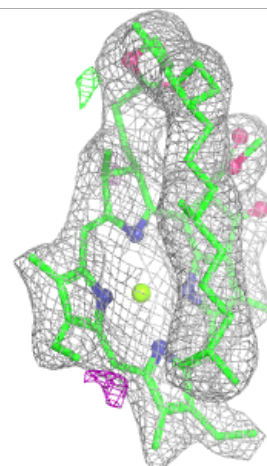
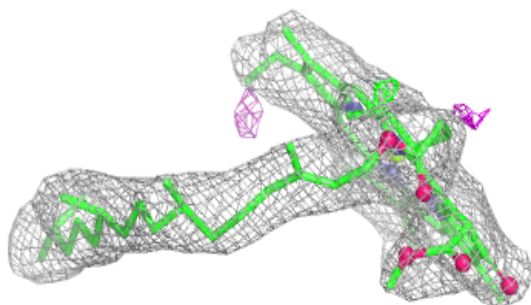
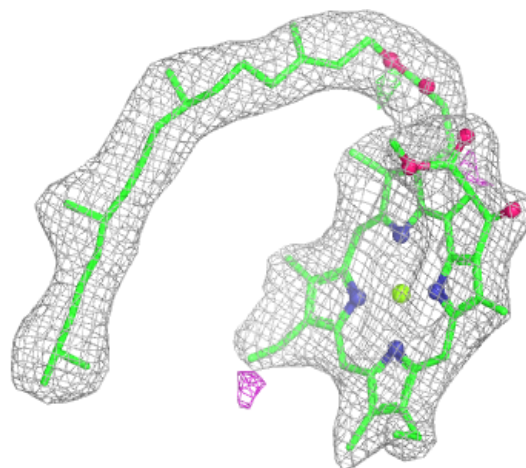
Electron density around CLA C 508:

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



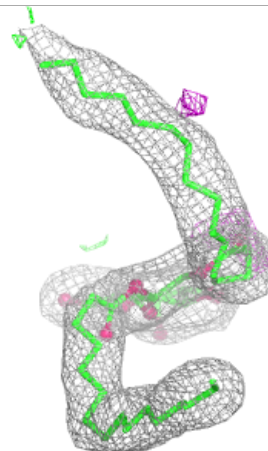
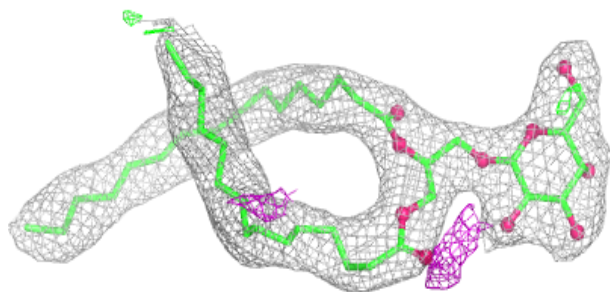
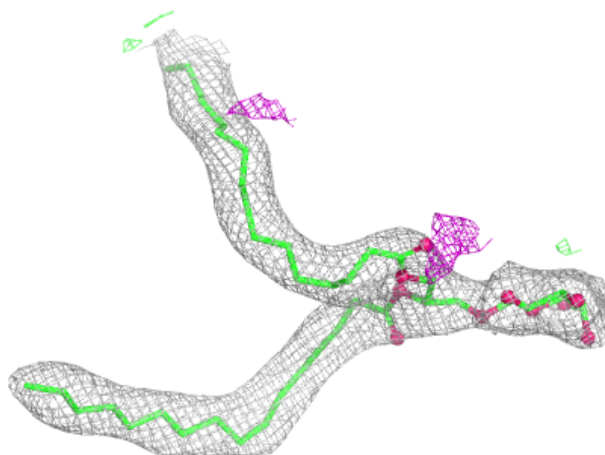
Electron density around CLA c 511:

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



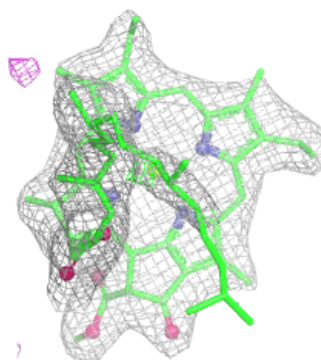
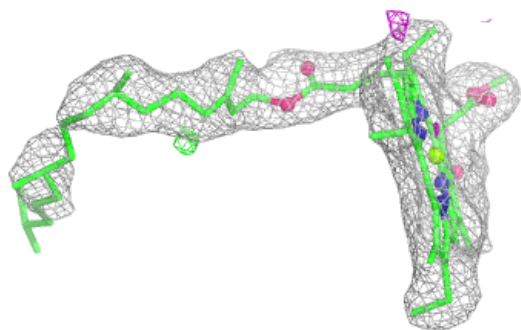
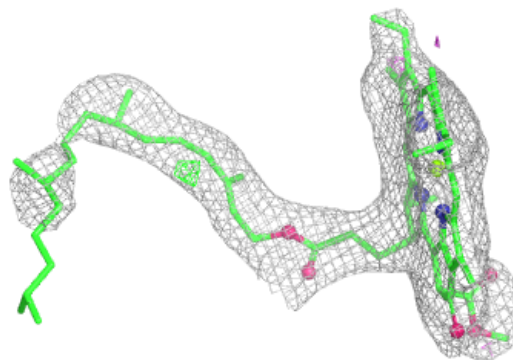
Electron density around LMG M 101:

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

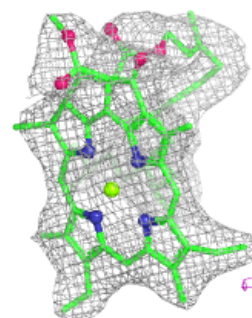
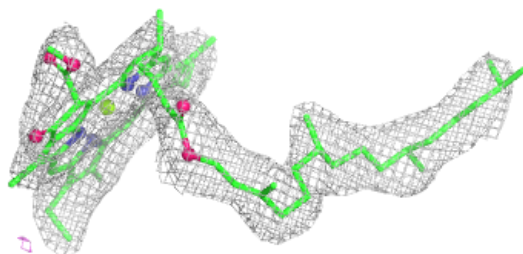
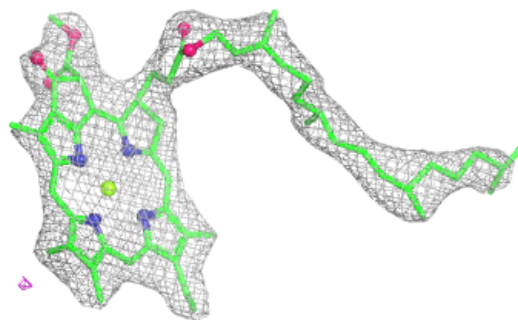


Electron density around CLA D 407:

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

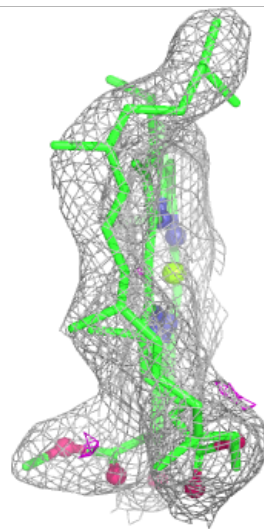
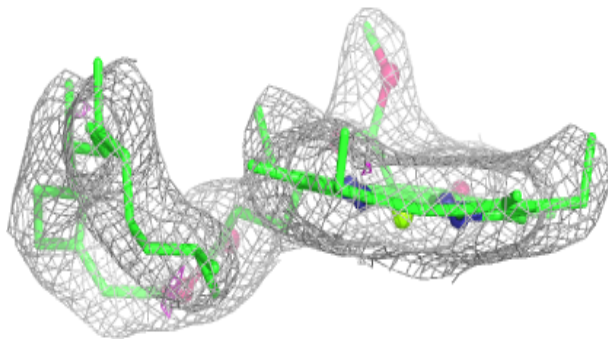
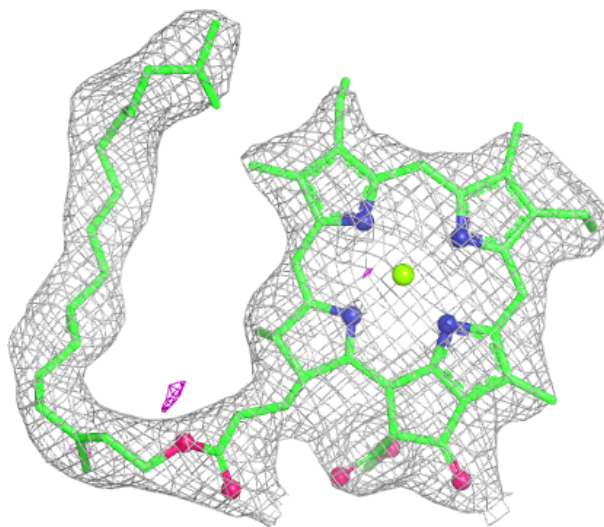
**Electron density around CLA c 515:**

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



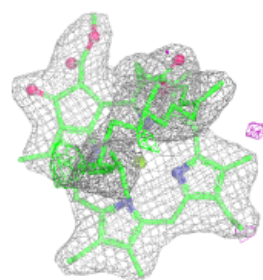
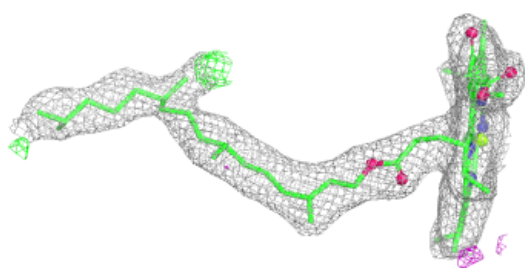
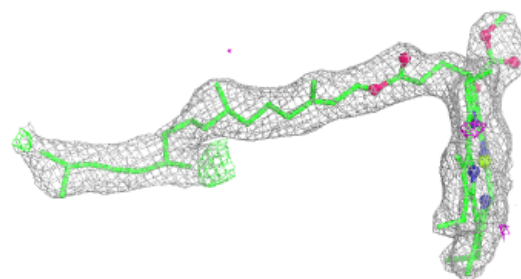
Electron density around CLA c 516:

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

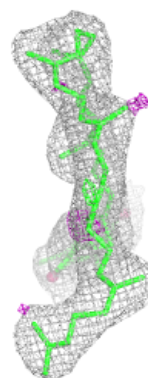
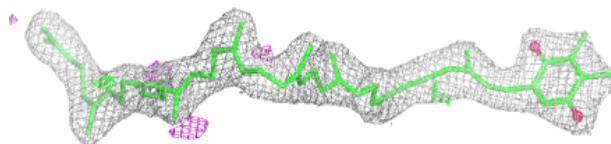
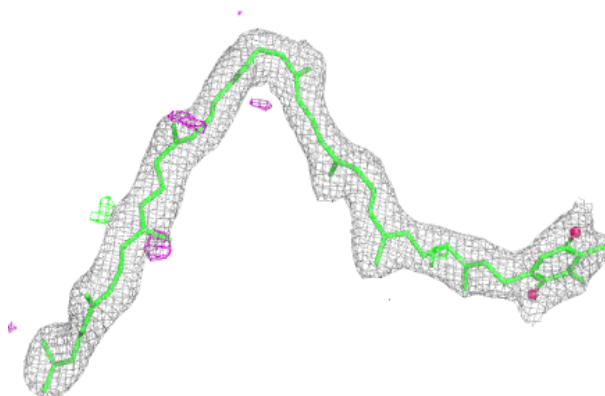


Electron density around CLA B 607:

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

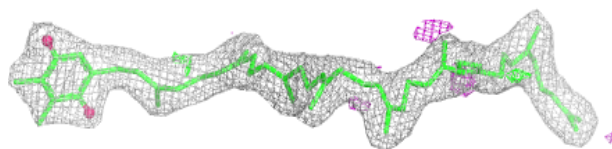
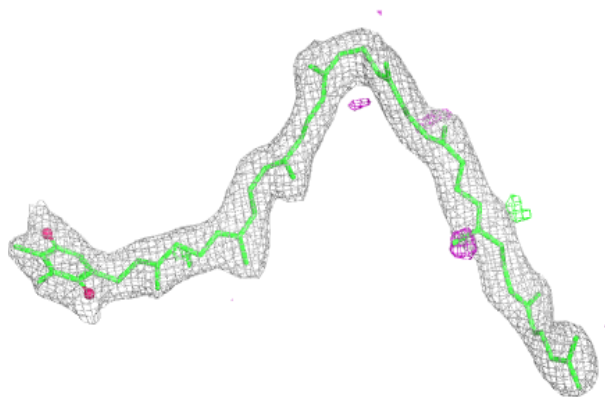
**Electron density around PL9 d 407 (A):**

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

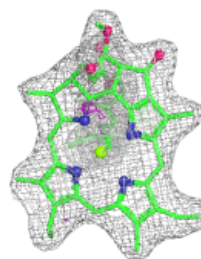
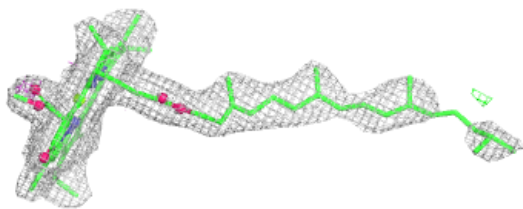
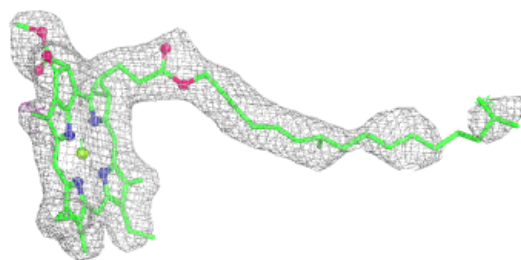


Electron density around PL9 d 407 (B):

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

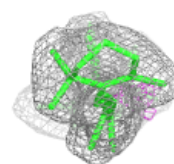
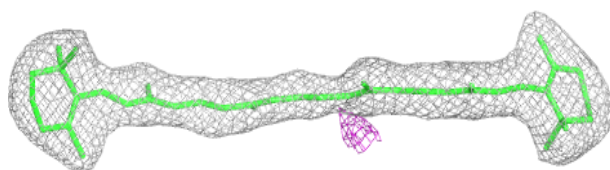
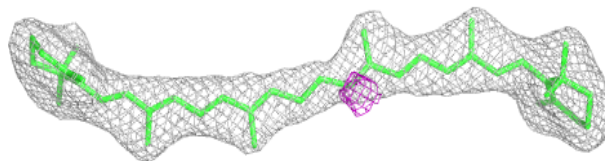
**Electron density around CLA d 405:**

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

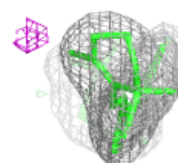
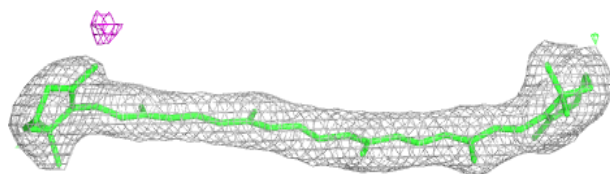
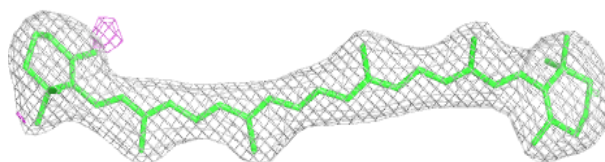


Electron density around BCR A 408:

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

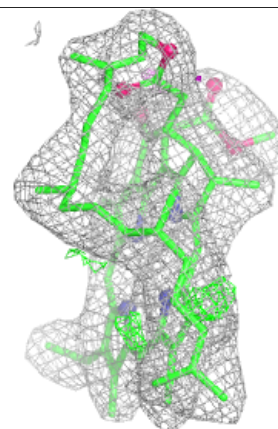
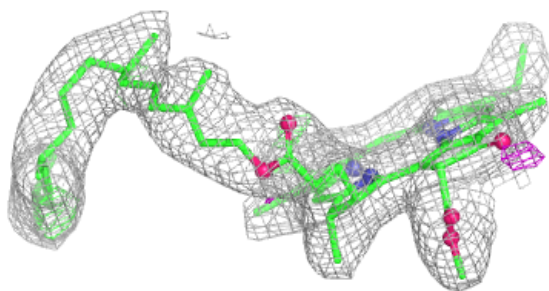
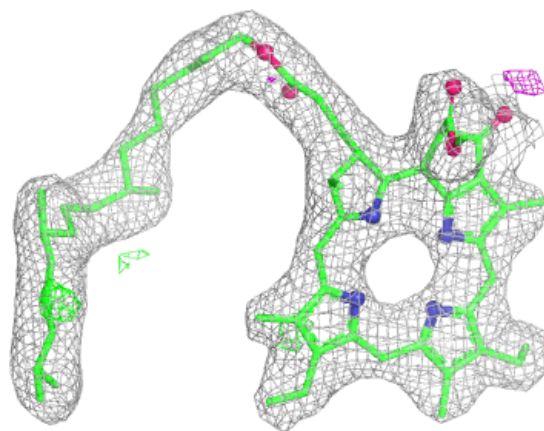
**Electron density around BCR B 620:**

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



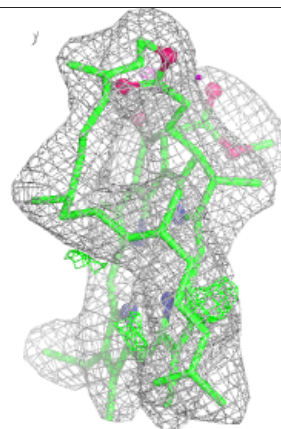
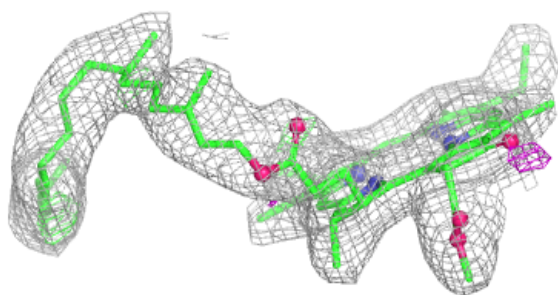
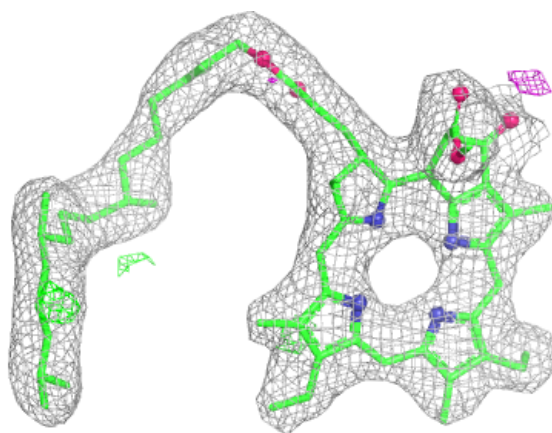
Electron density around PHO d 402 (A):

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

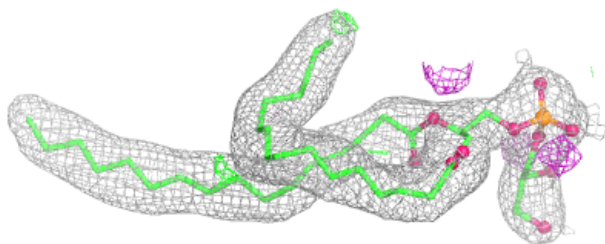
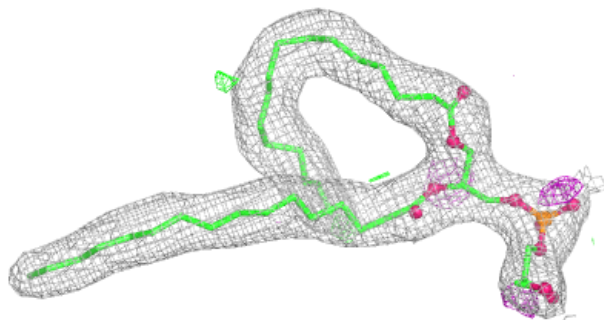


Electron density around PHO d 402 (B):

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

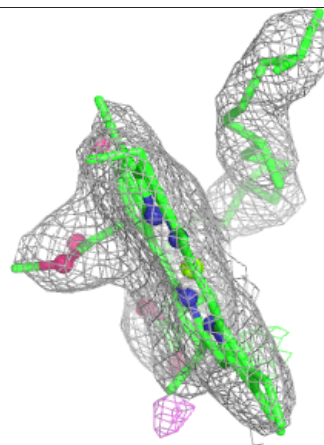
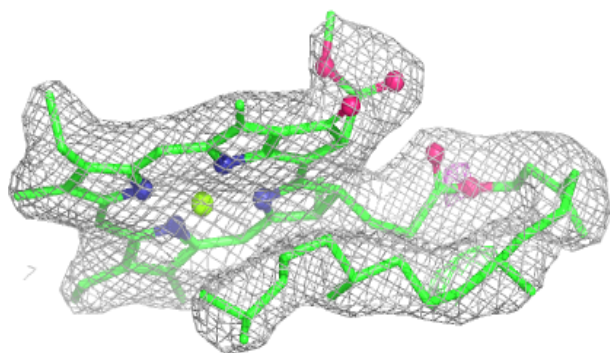
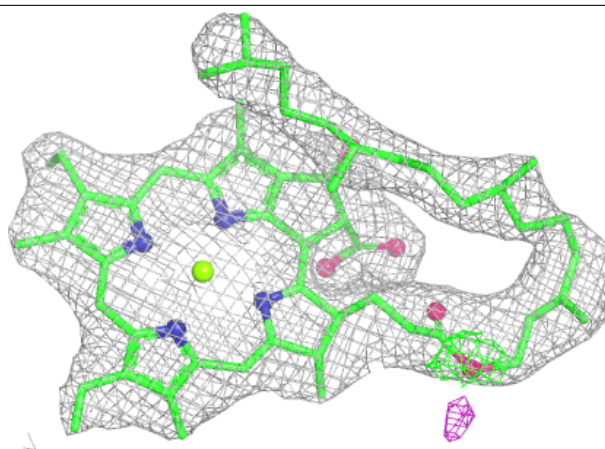
**Electron density around LHG D 411:**

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



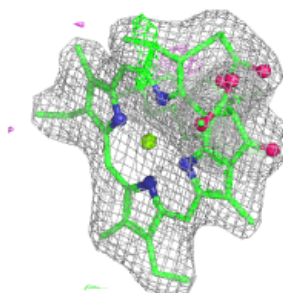
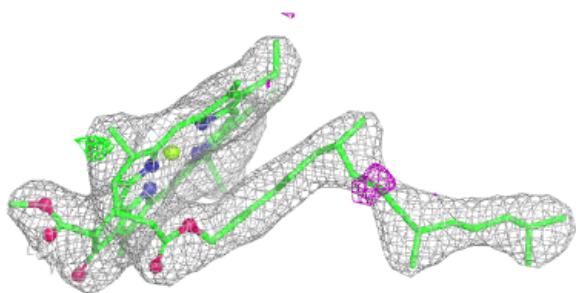
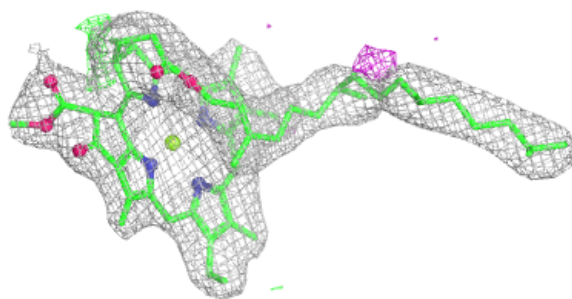
Electron density around CLA C 510:

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

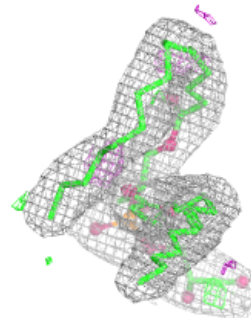
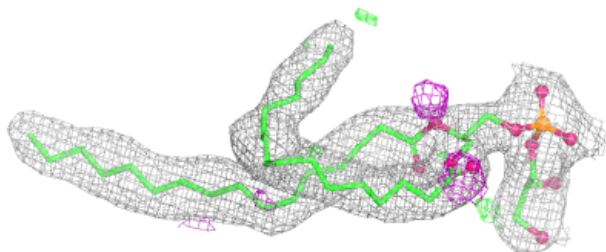
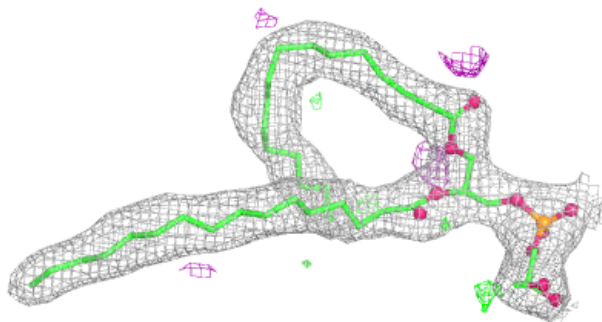


Electron density around CLA C 506:

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

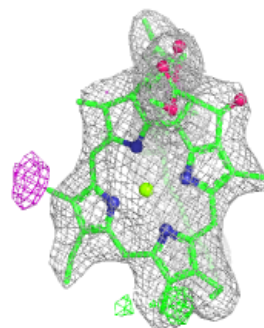
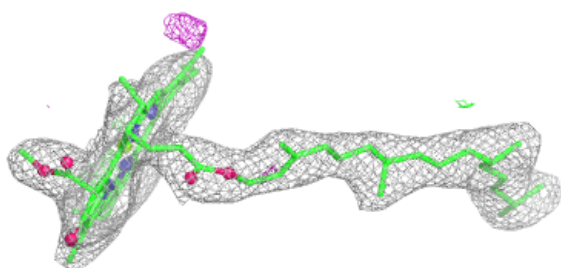
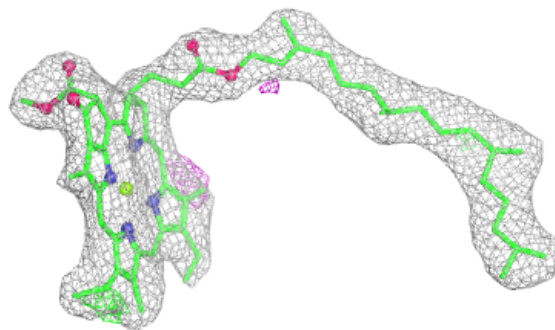
**Electron density around LHG d 409:**

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

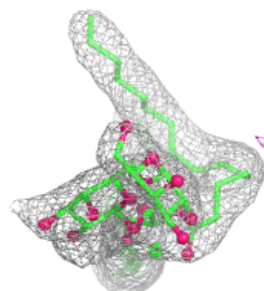
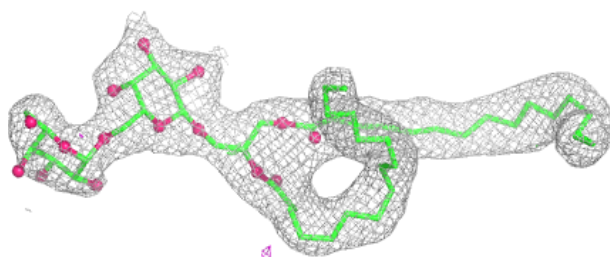
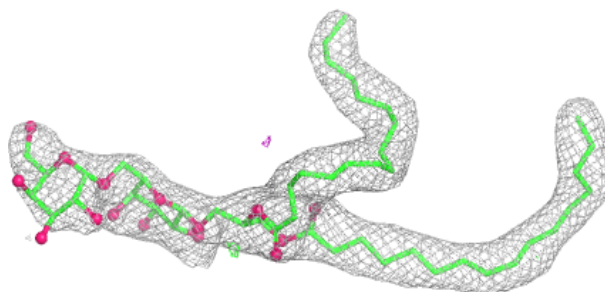


Electron density around CLA b 618:

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

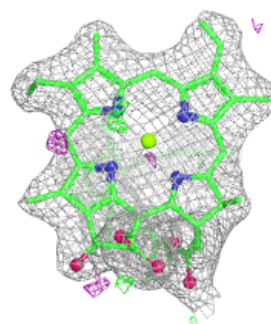
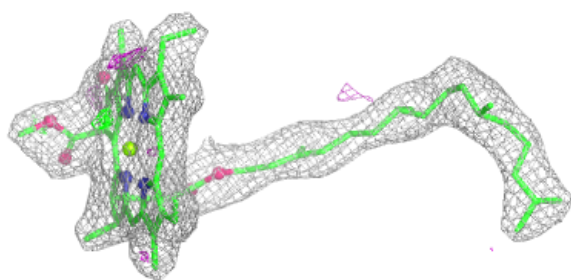
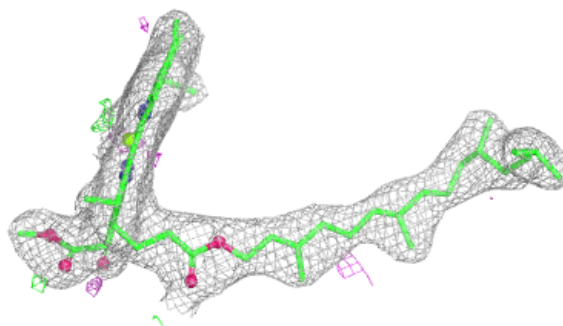
**Electron density around DGD B 632:**

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



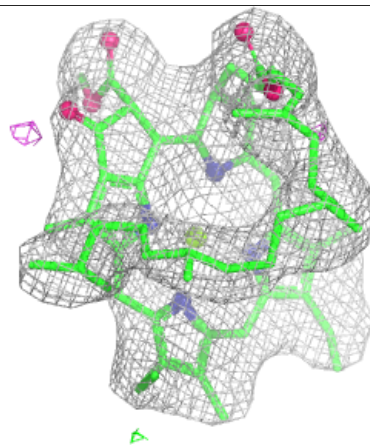
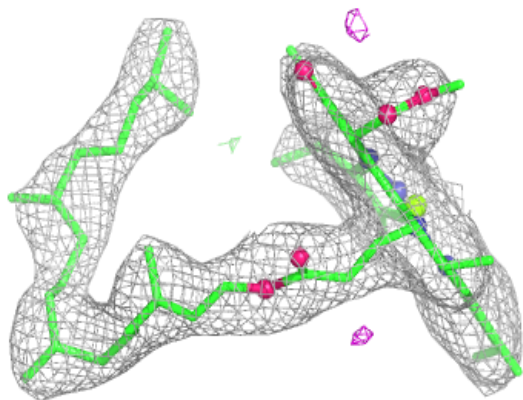
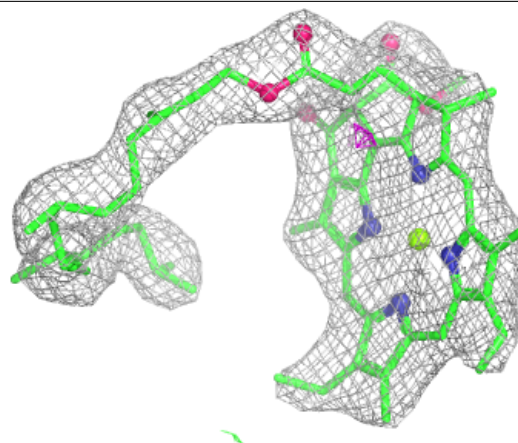
Electron density around CLA b 614:

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



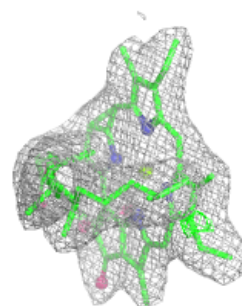
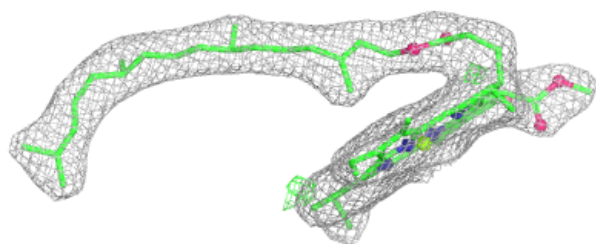
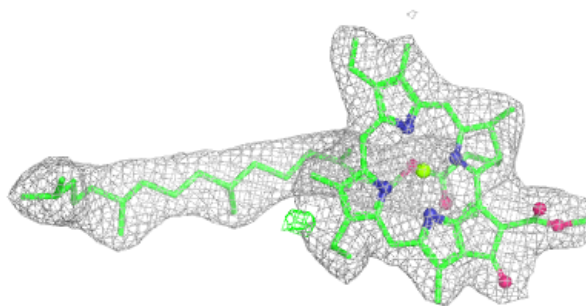
Electron density around CLA C 504:

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



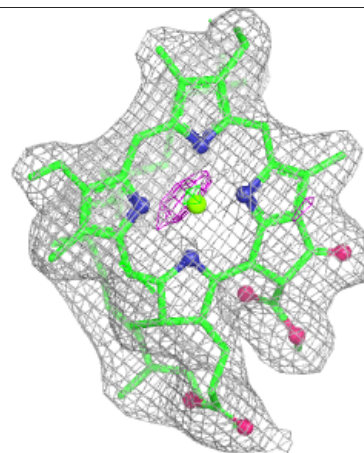
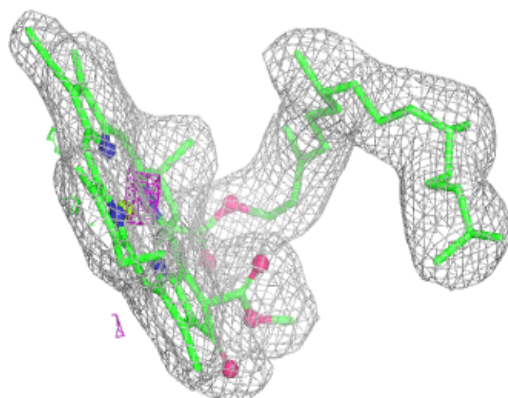
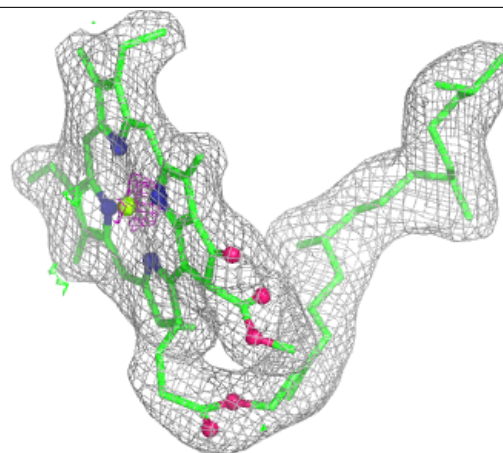
Electron density around CLA b 617:

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



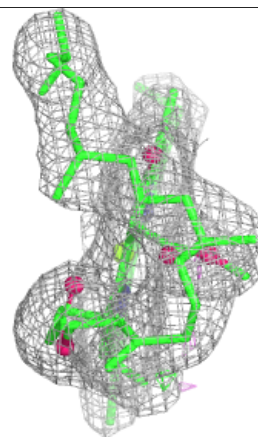
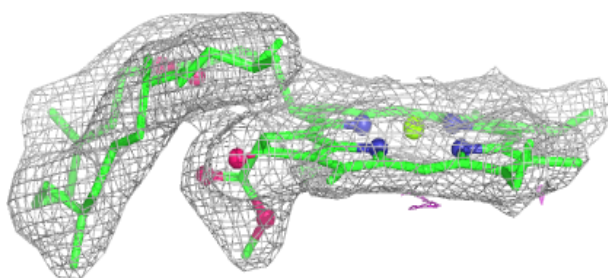
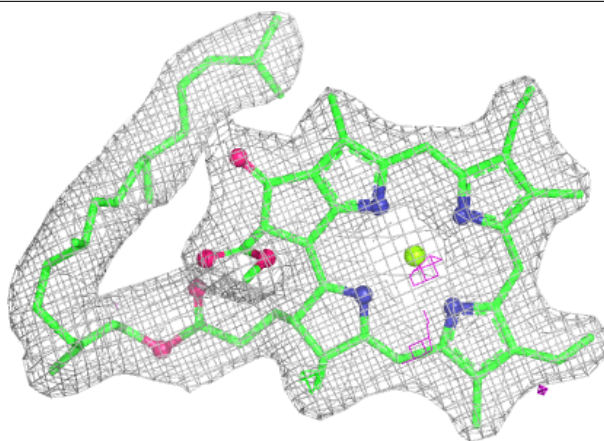
Electron density around CLA B 614:

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

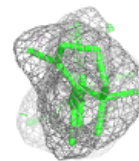
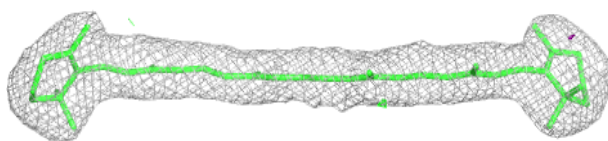
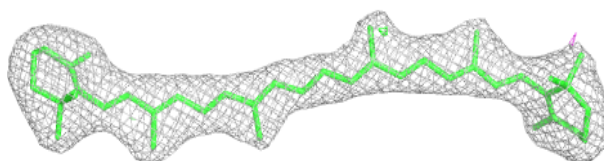


Electron density around CLA b 619:

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

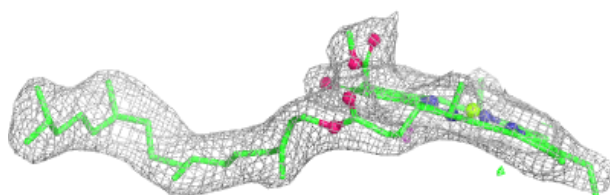
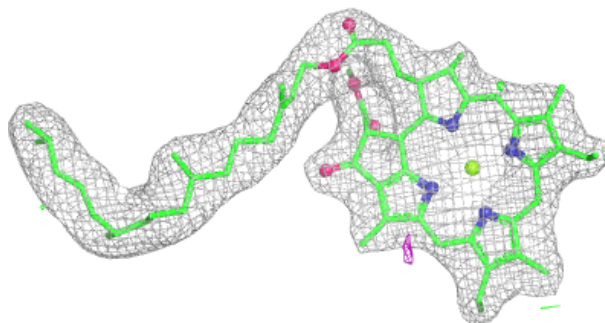
**Electron density around BCR B 619:**

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

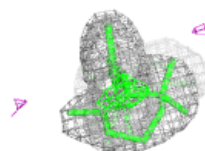
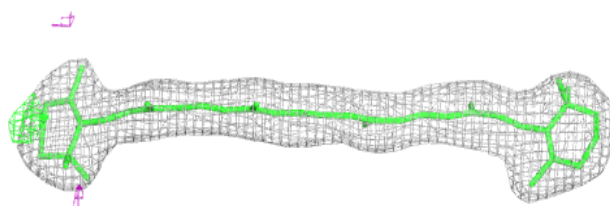
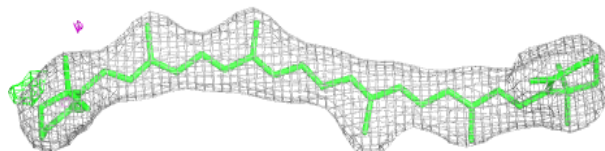


Electron density around CLA B 603:

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

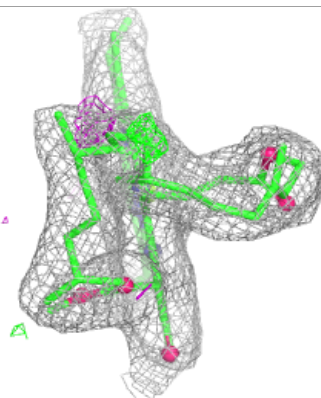
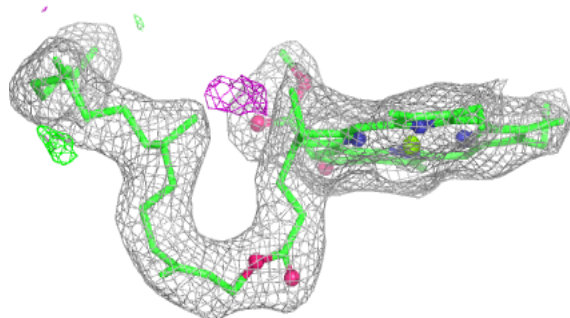
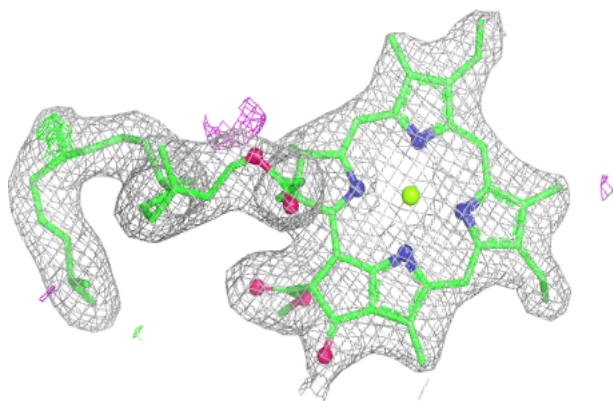
**Electron density around BCR C 515:**

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



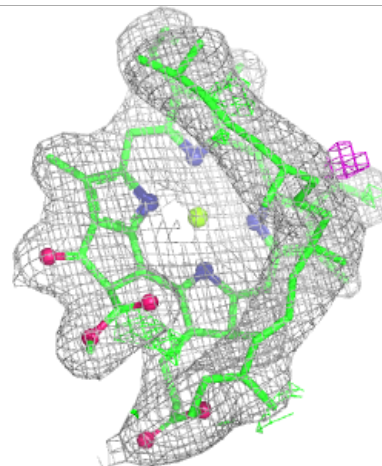
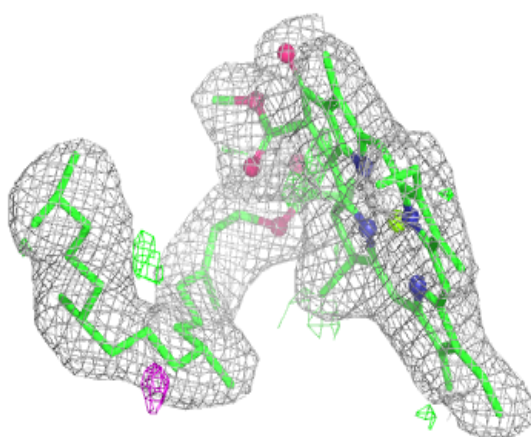
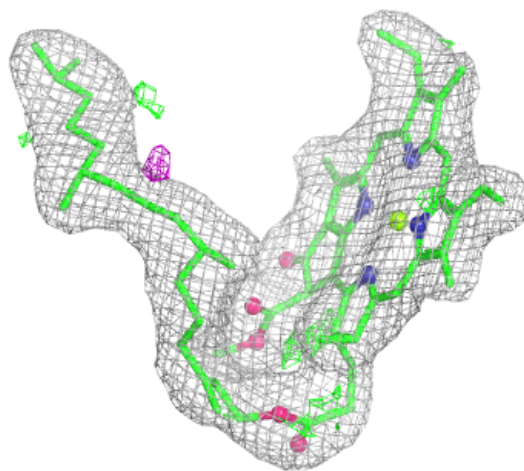
Electron density around CLA b 621:

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



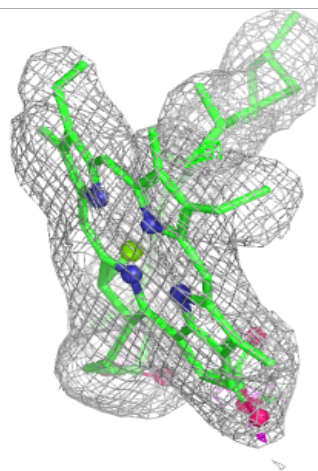
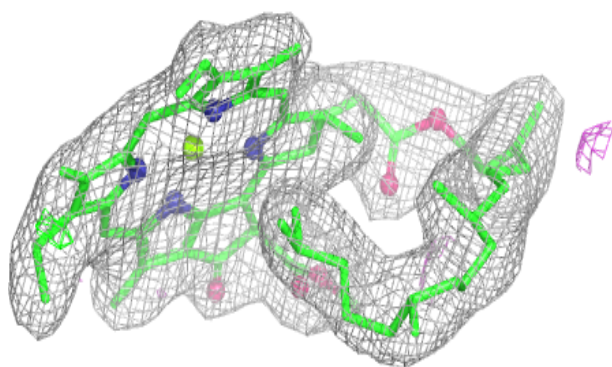
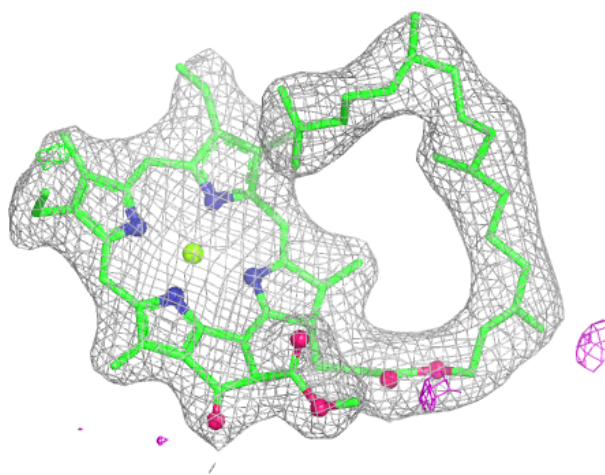
Electron density around CLA b 622:

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



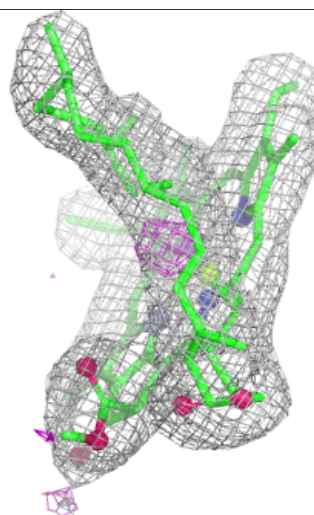
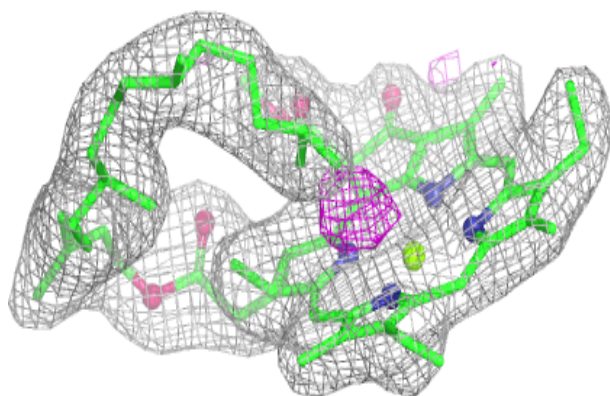
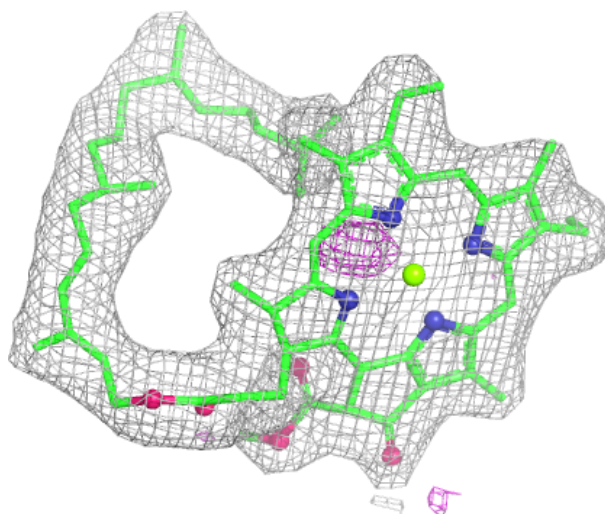
Electron density around CLA B 616:

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



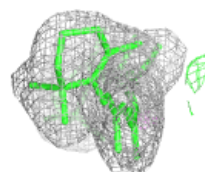
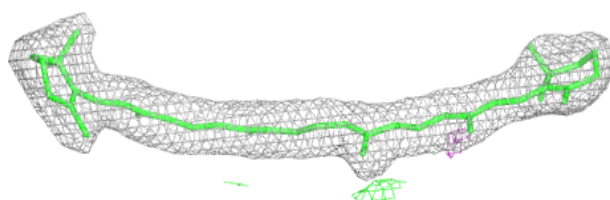
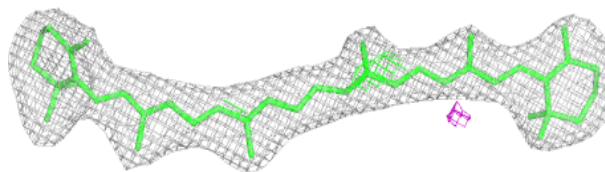
Electron density around CLA b 624:

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

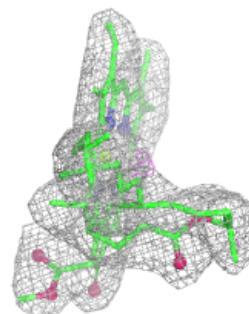
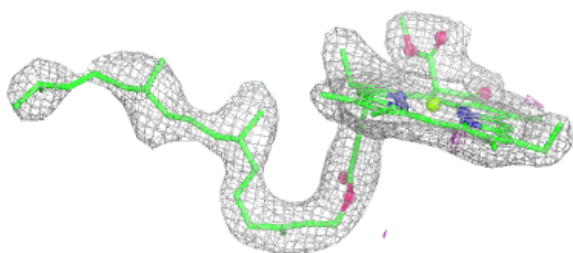
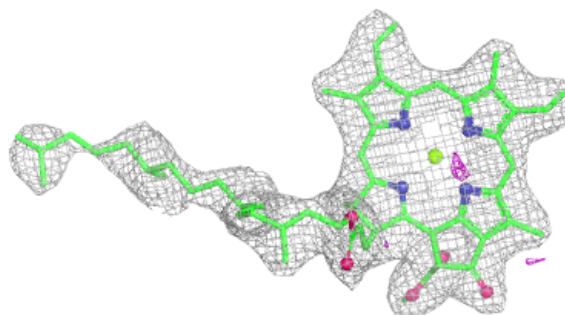


Electron density around BCR T 103:

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

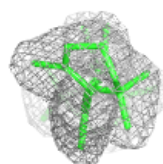
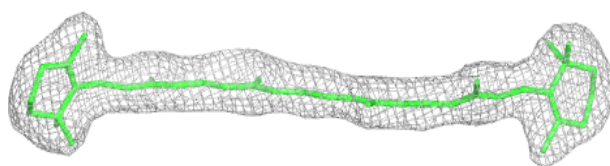
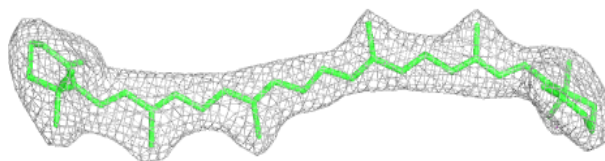
**Electron density around CLA A 406:**

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

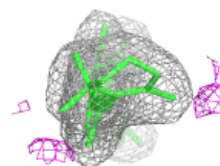
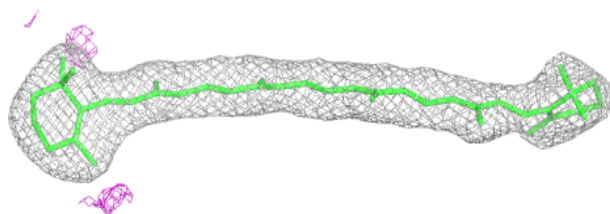
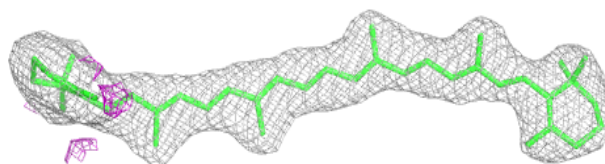


Electron density around BCR a 413:

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

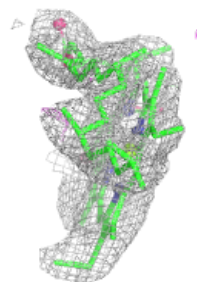
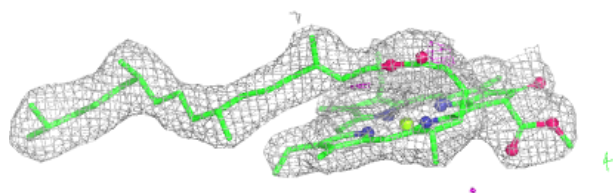
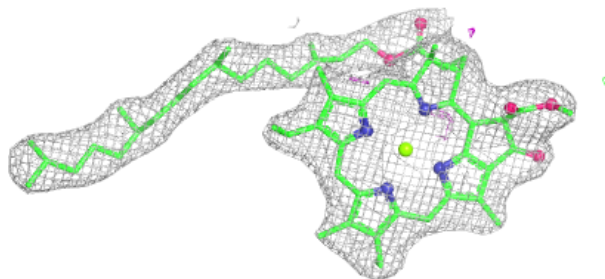
**Electron density around BCR b 626:**

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

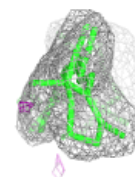
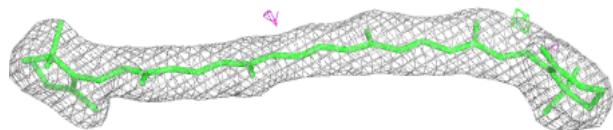
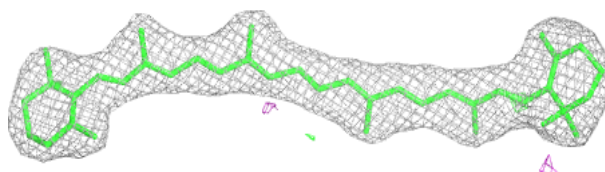


Electron density around CLA c 505:

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

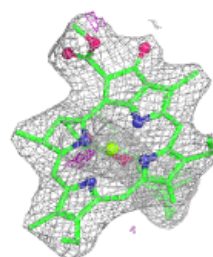
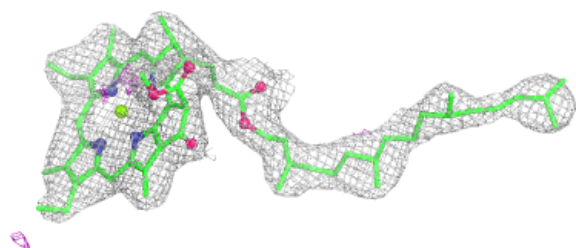
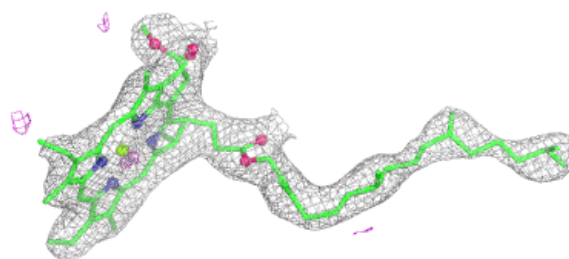
**Electron density around BCR b 628:**

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

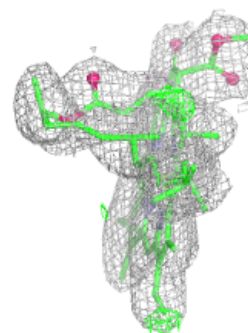
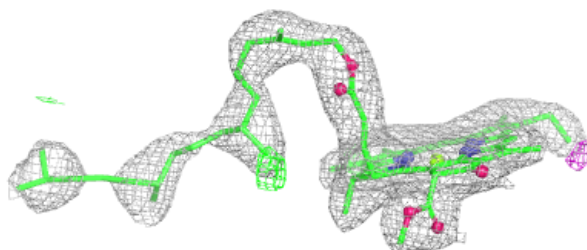
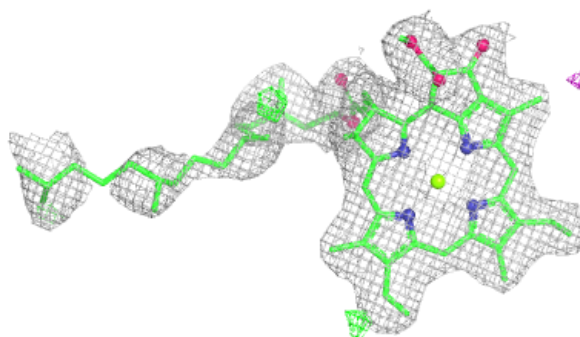


Electron density around CLA c 506:

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

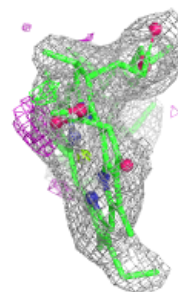
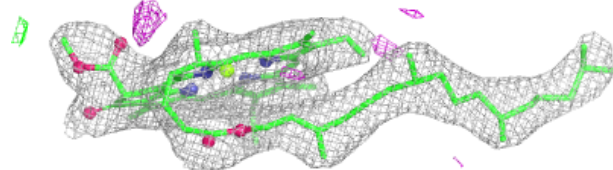
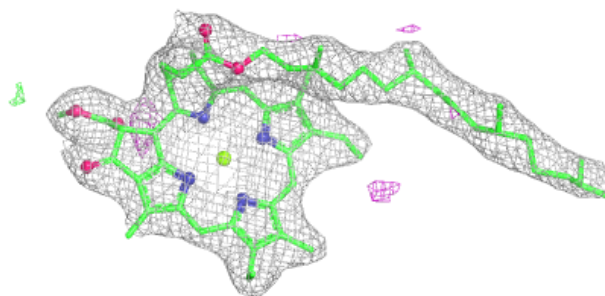
**Electron density around CLA a 410:**

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

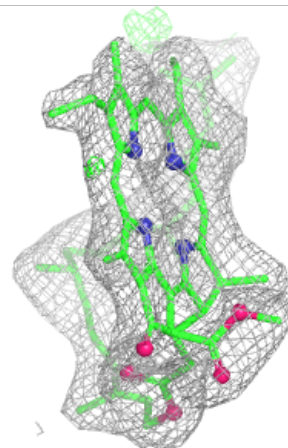
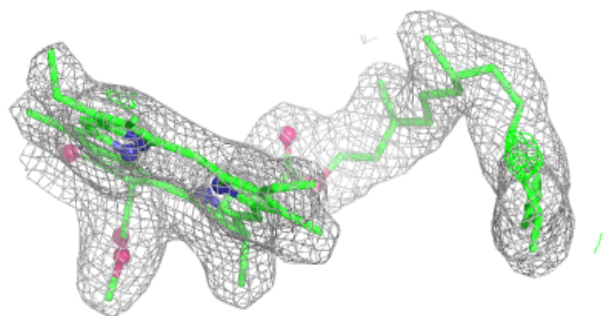
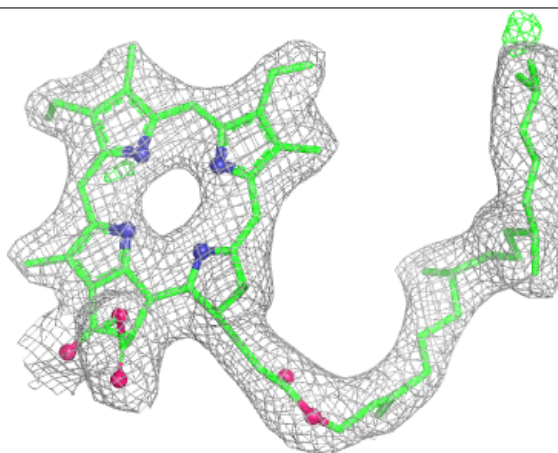


Electron density around CLA C 502:

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

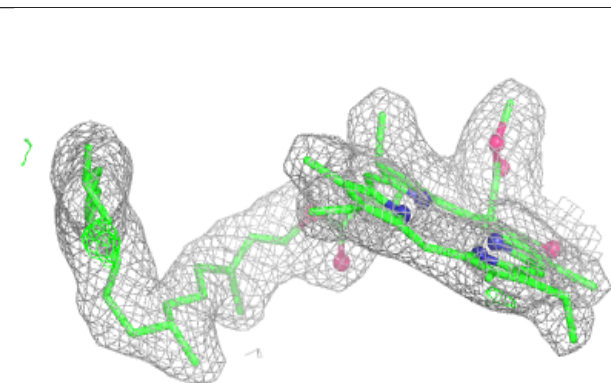
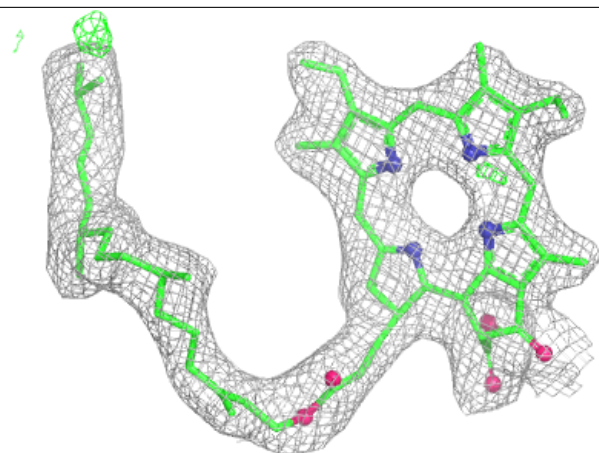
**Electron density around PHO D 403 (A):**

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



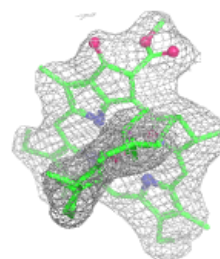
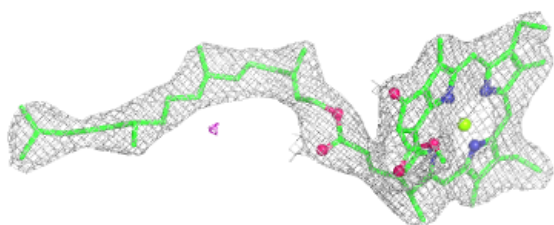
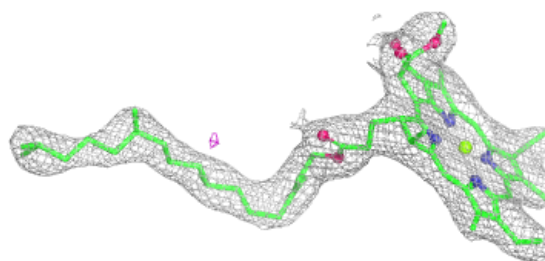
Electron density around PHO D 403 (B):

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

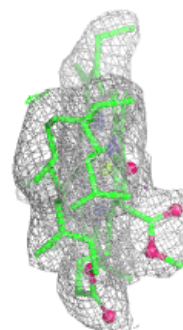
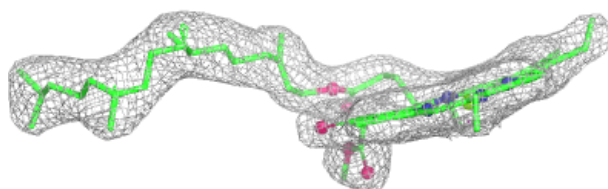
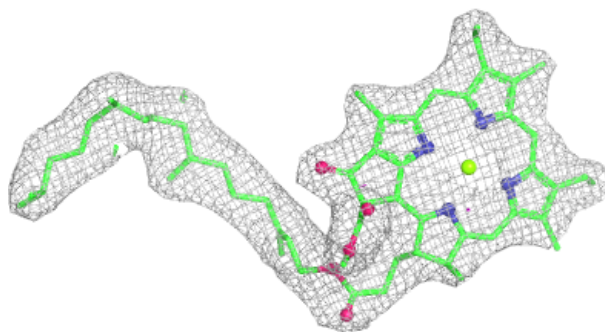


Electron density around CLA C 503:

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

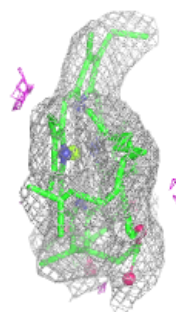
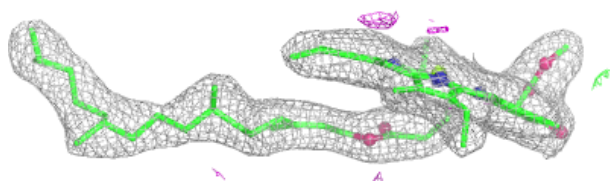
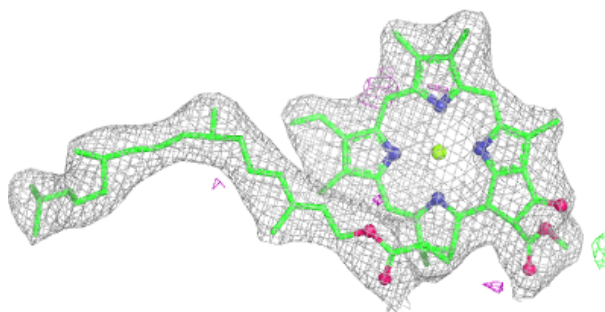
**Electron density around CLA b 611:**

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



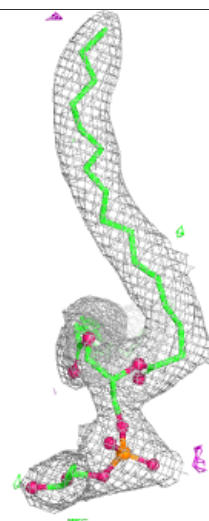
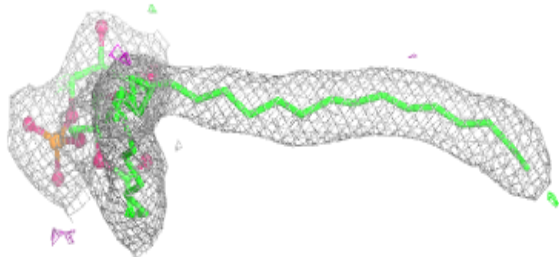
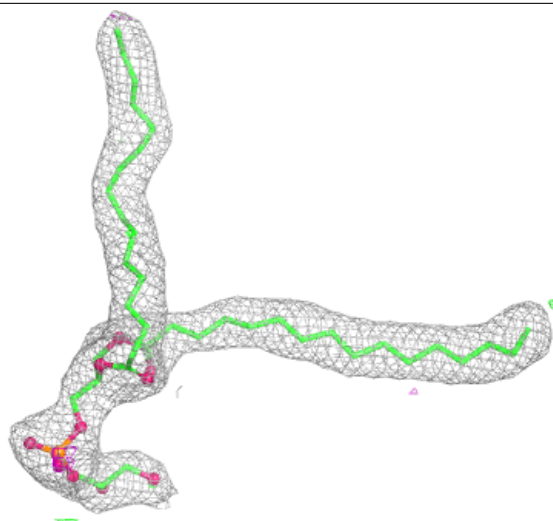
Electron density around CLA b 612:

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



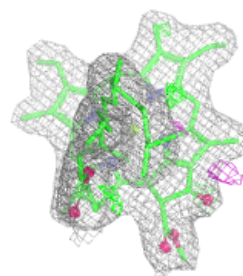
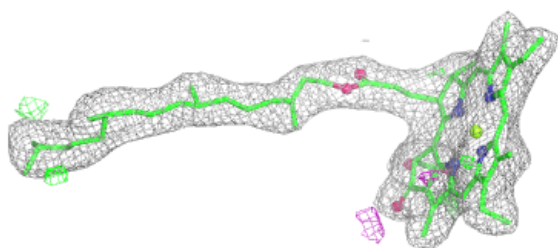
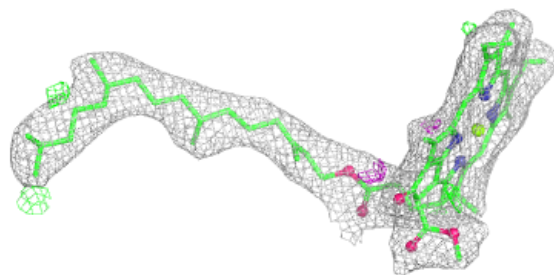
Electron density around LHG L 101:

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



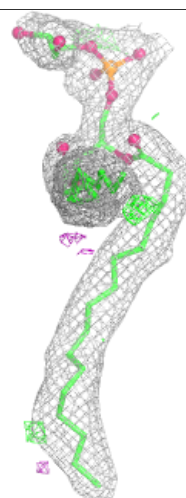
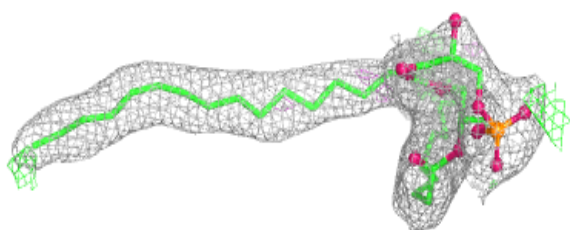
Electron density around CLA b 613:

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



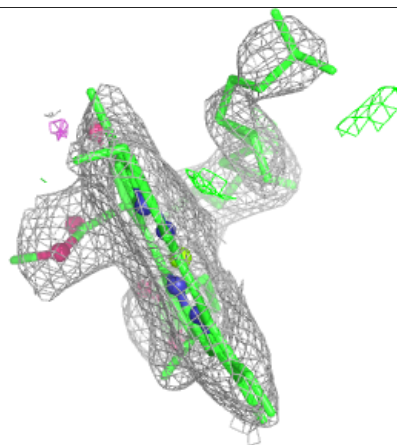
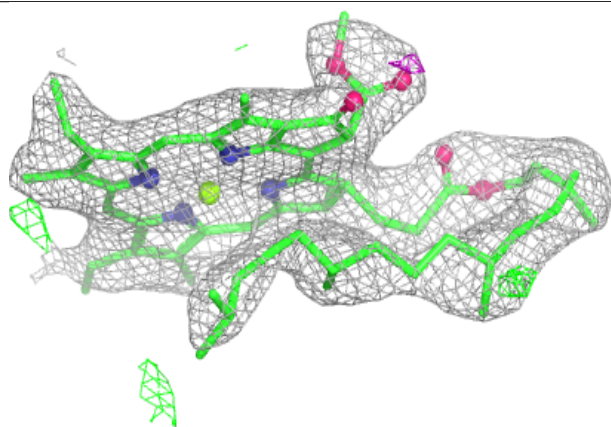
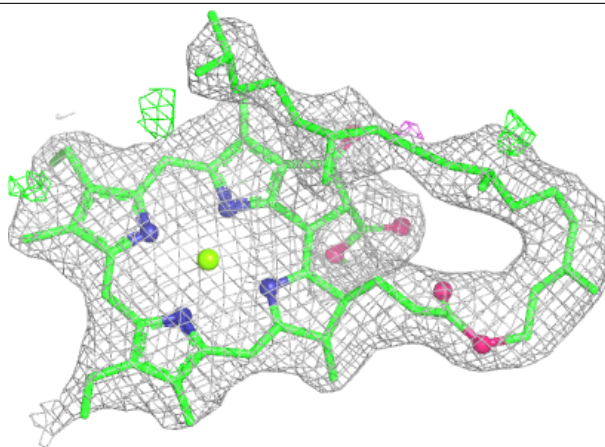
Electron density around LHG b 634:

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



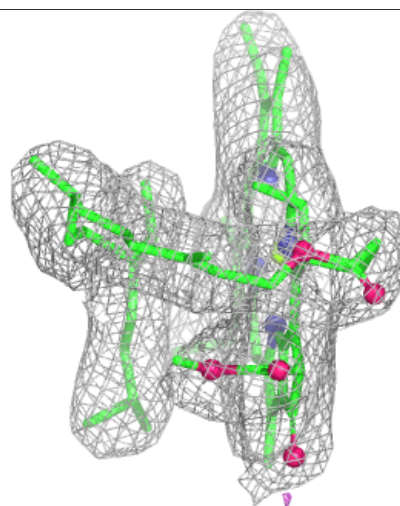
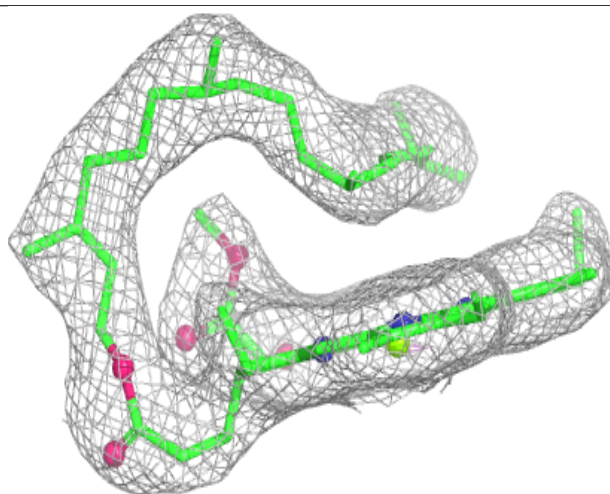
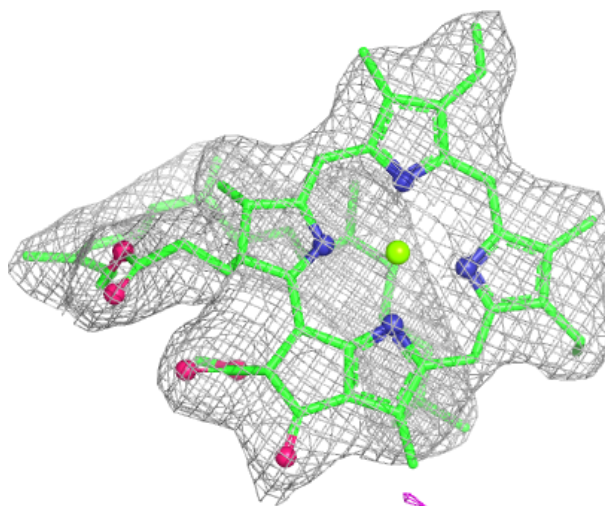
Electron density around CLA c 513:

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



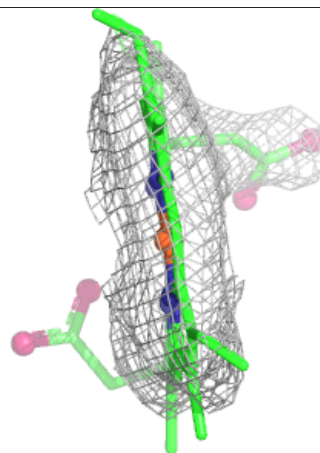
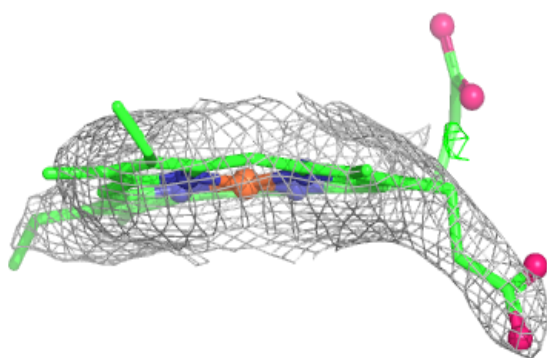
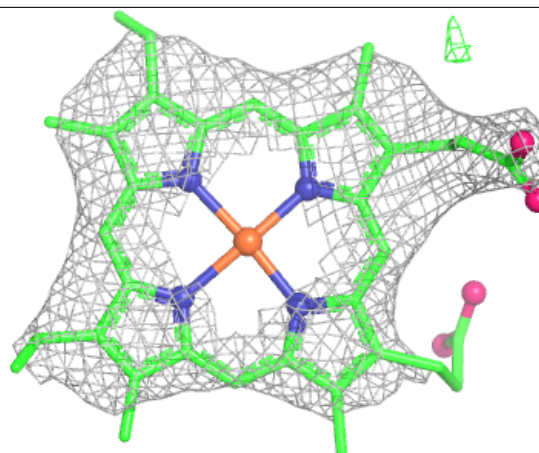
Electron density around CLA c 514:

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



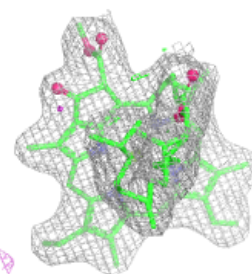
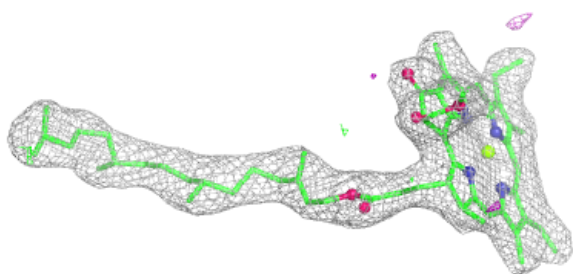
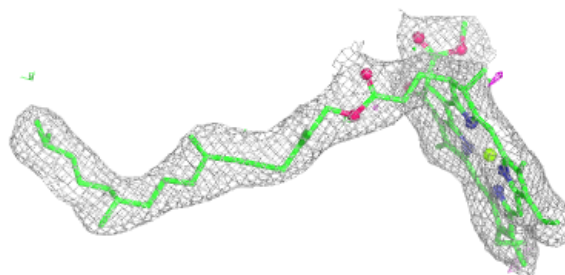
Electron density around HEM e 101:

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

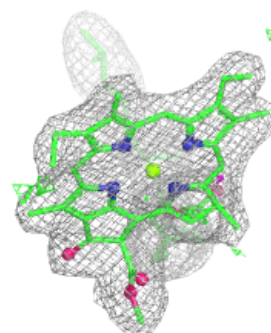
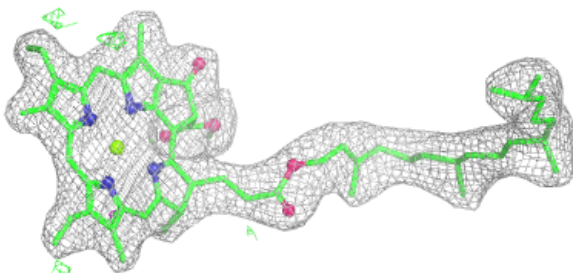
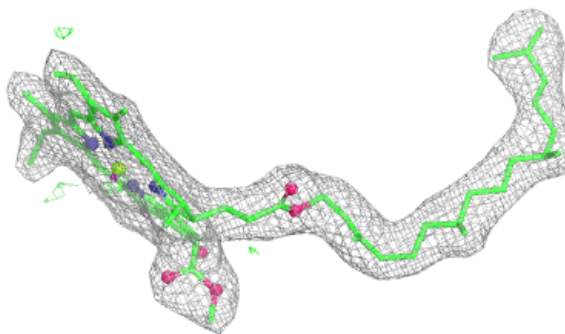


Electron density around CLA B 605:

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

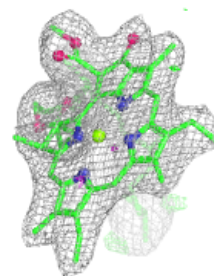
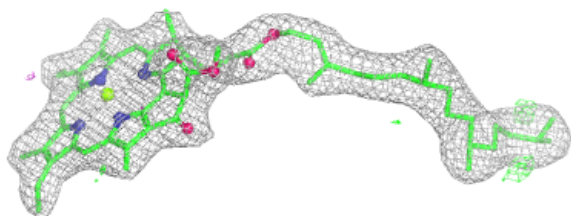
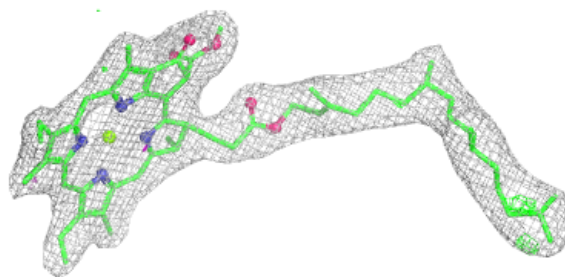
**Electron density around CLA D 406:**

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

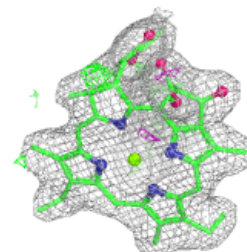
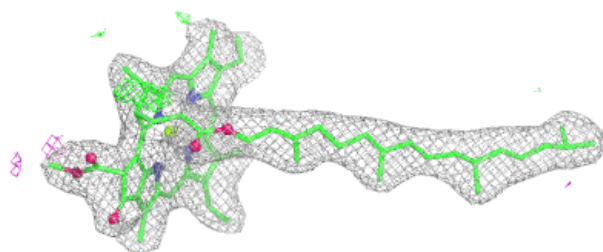
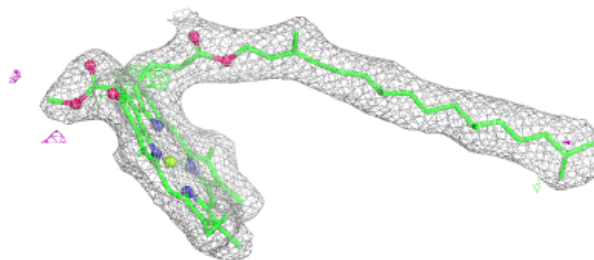


Electron density around CLA a 409:

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

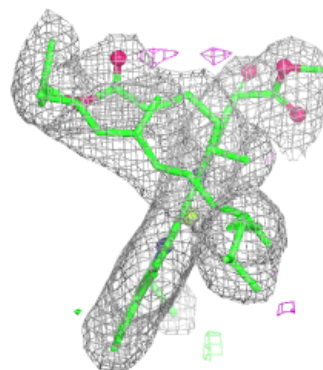
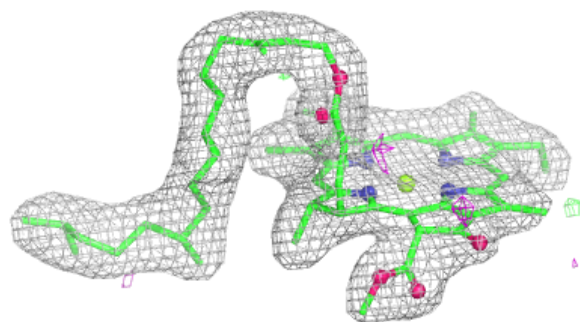
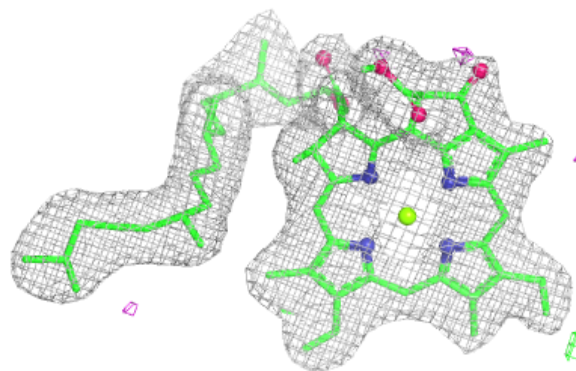
**Electron density around CLA B 608:**

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

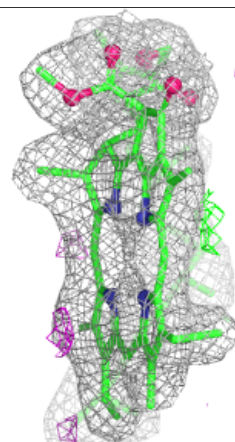
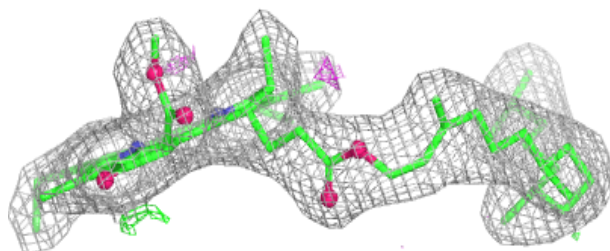
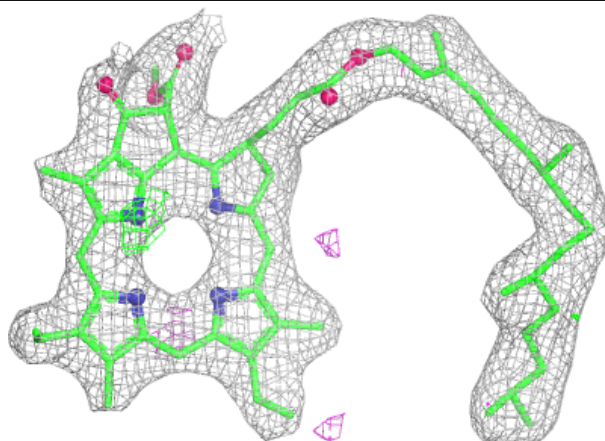


Electron density around CLA d 403:

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

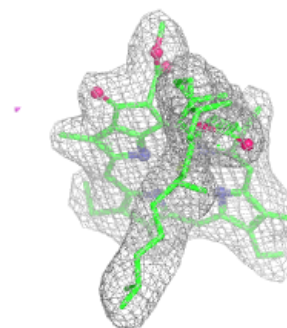
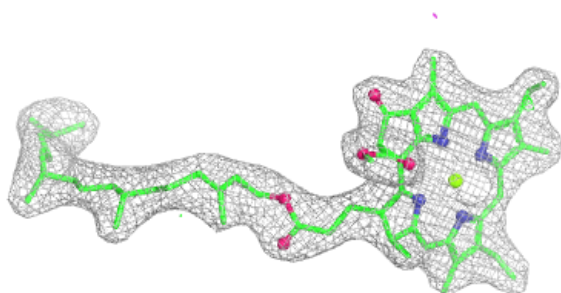
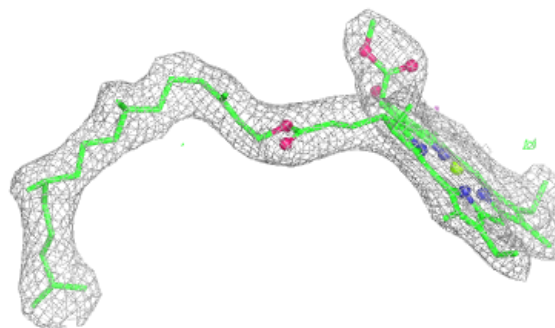
**Electron density around PHO D 402:**

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



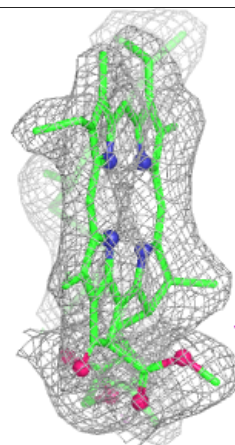
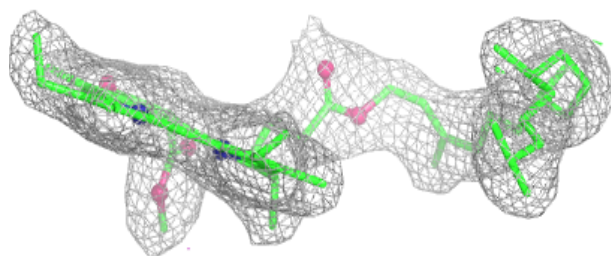
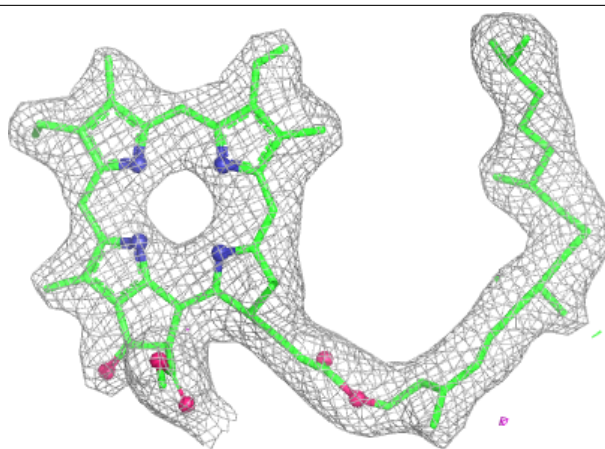
Electron density around CLA d 404:

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



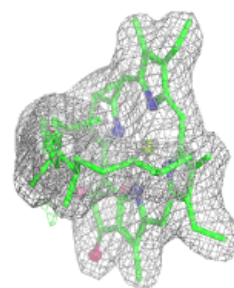
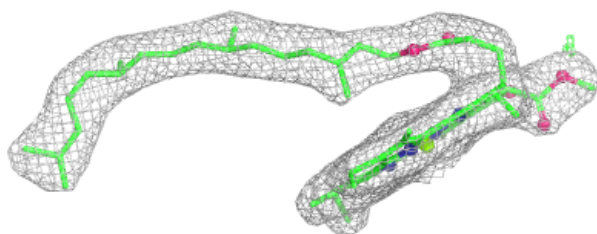
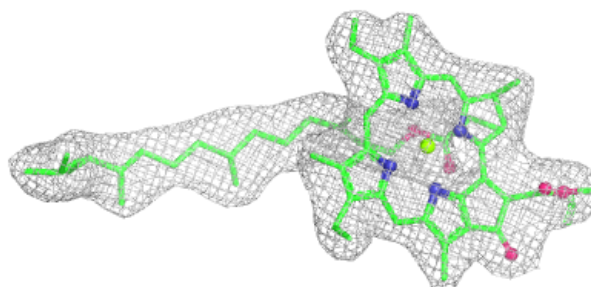
Electron density around PHO a 411:

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

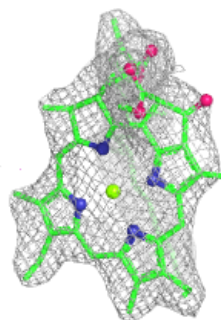
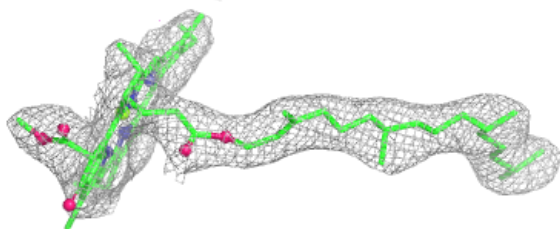
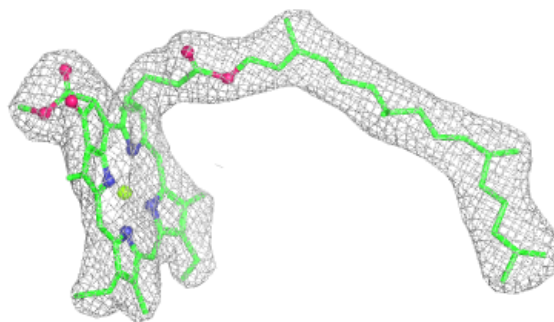


Electron density around CLA B 609:

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

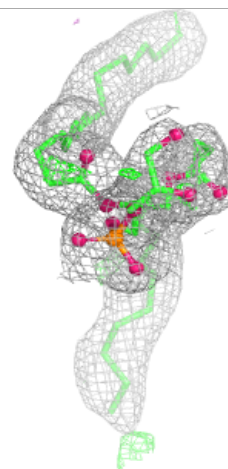
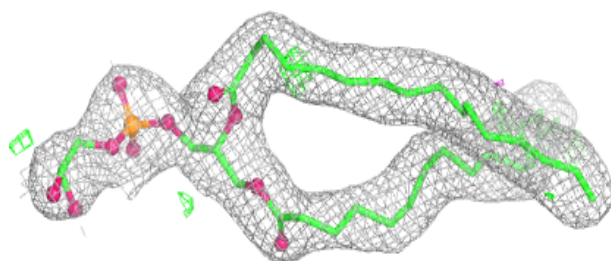
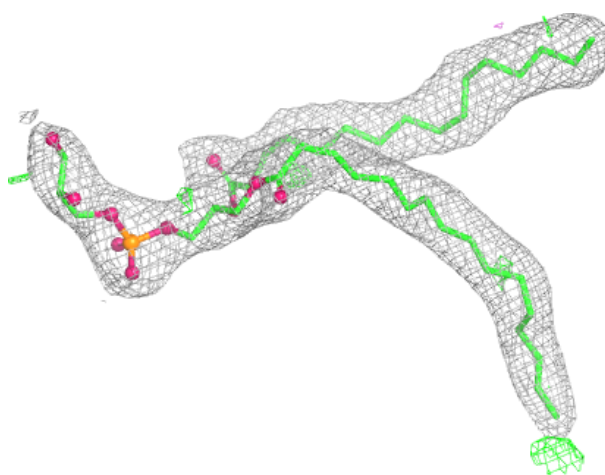
**Electron density around CLA B 610:**

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



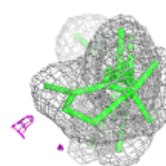
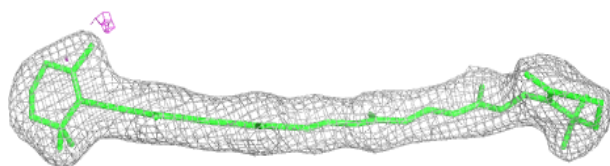
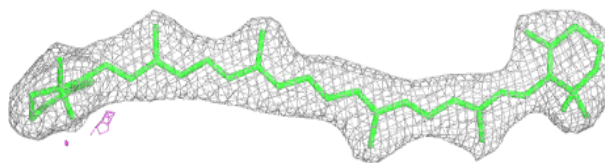
Electron density around LHG D 412:

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



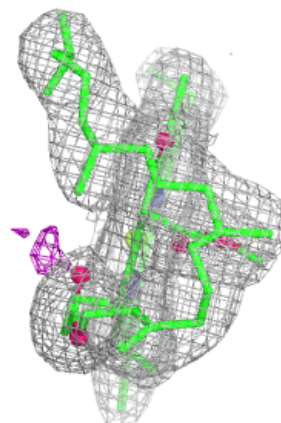
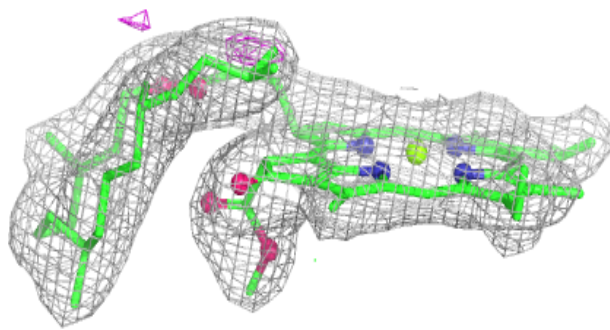
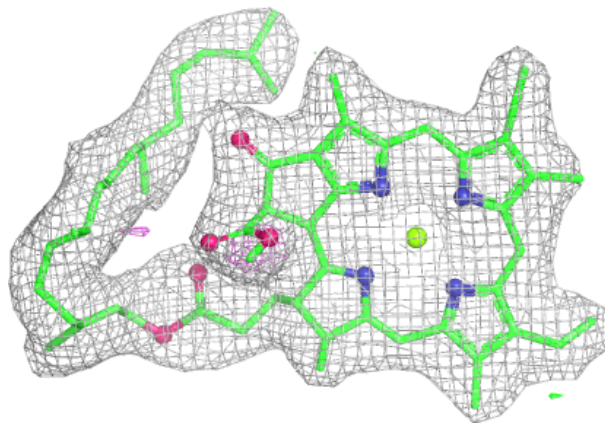
Electron density around BCR B 618:

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



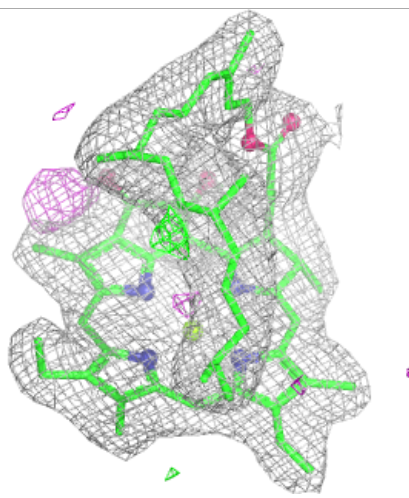
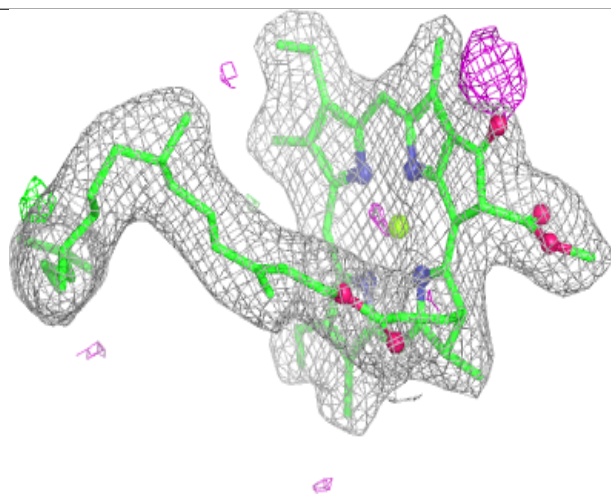
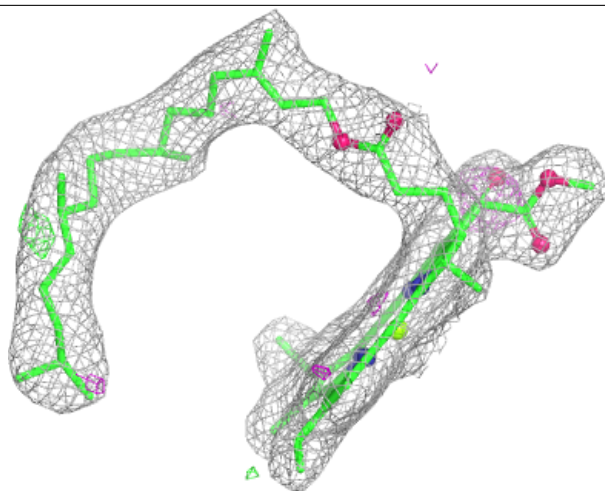
Electron density around CLA B 611:

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



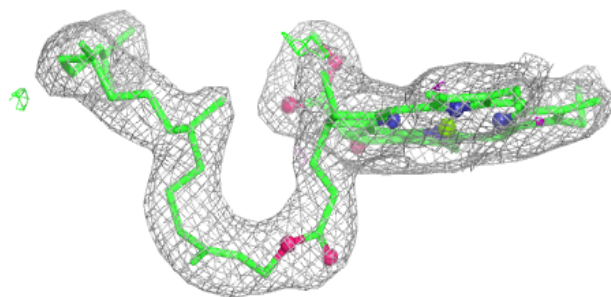
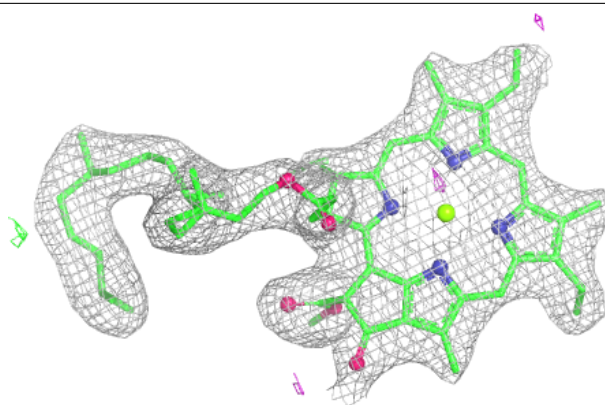
Electron density around CLA B 612:

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

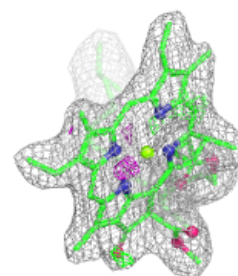
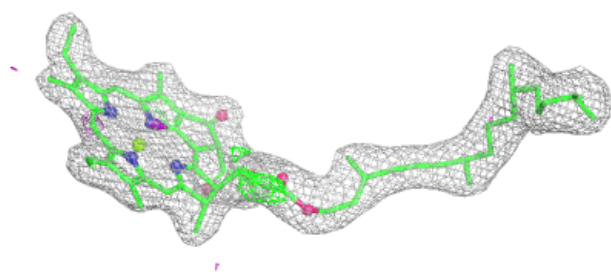
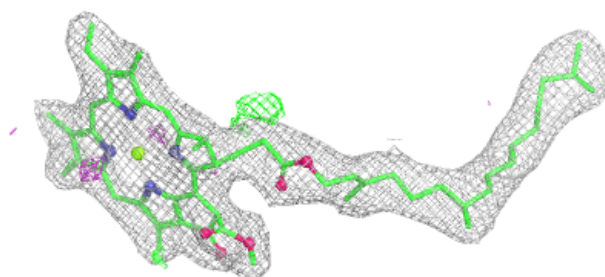


Electron density around CLA B 613:

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

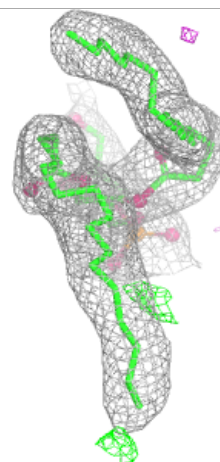
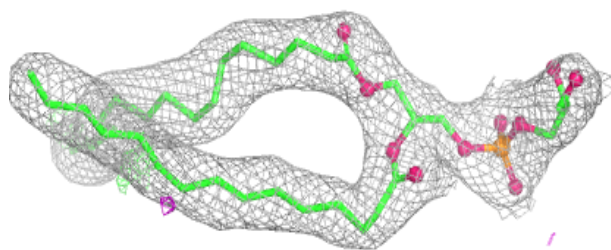
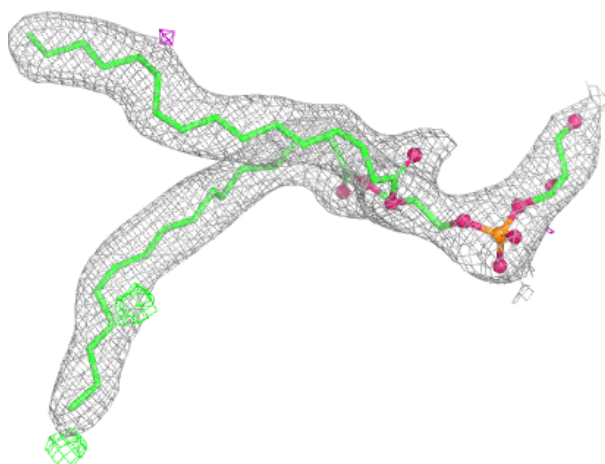
**Electron density around CLA A 404:**

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



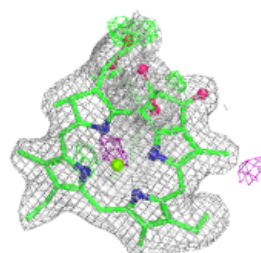
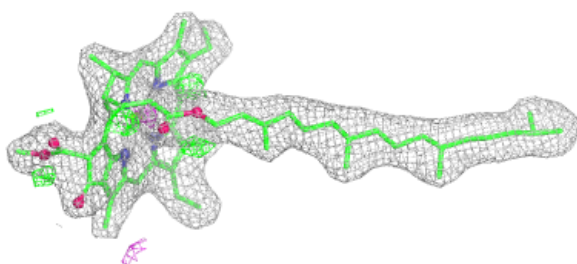
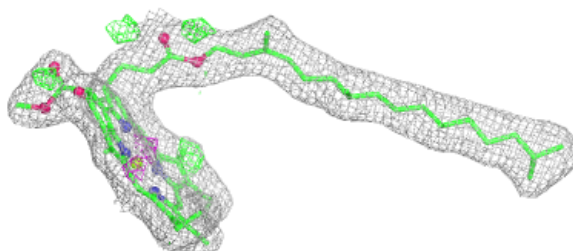
Electron density around LHG d 410:

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

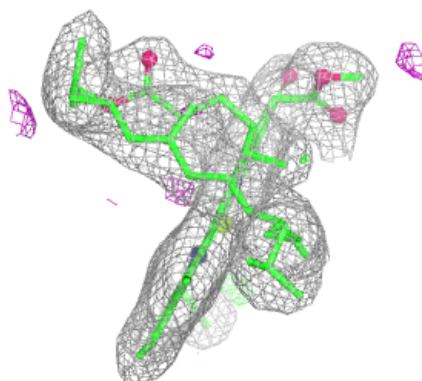
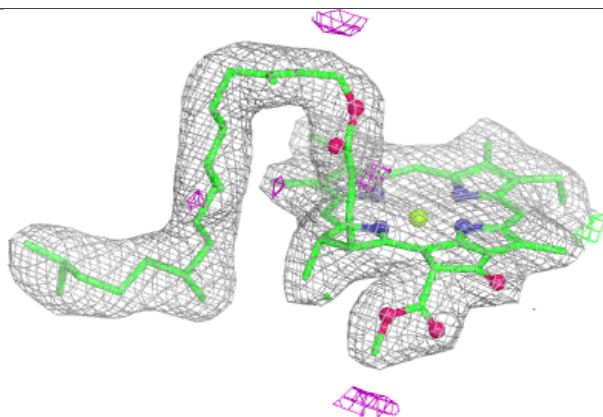
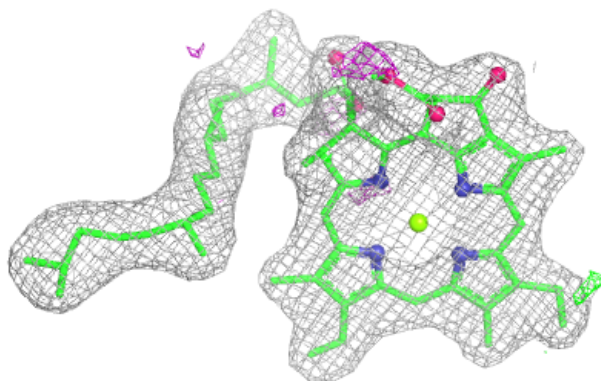


Electron density around CLA b 616:

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

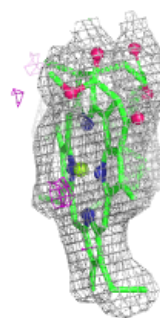
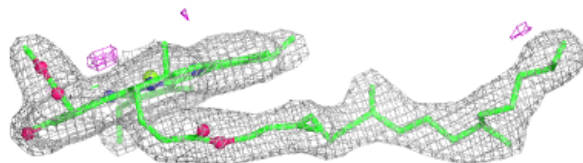
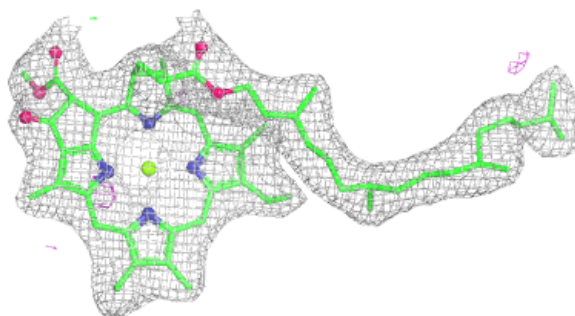
**Electron density around CLA A 405:**

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



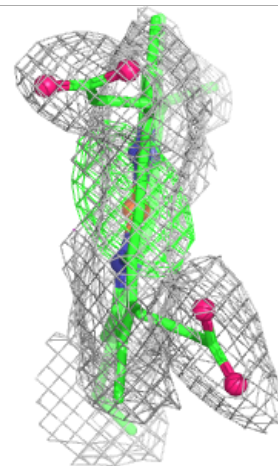
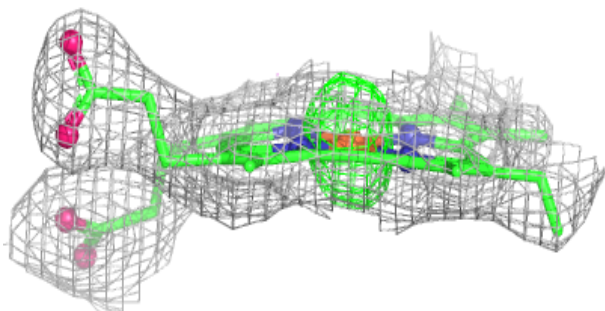
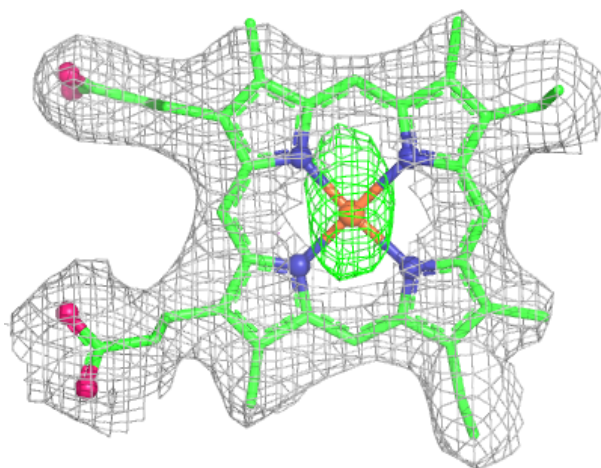
Electron density around CLA B 604:

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



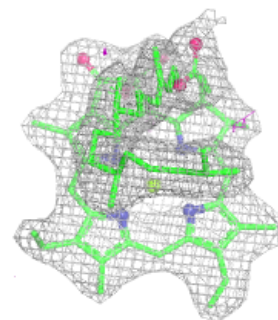
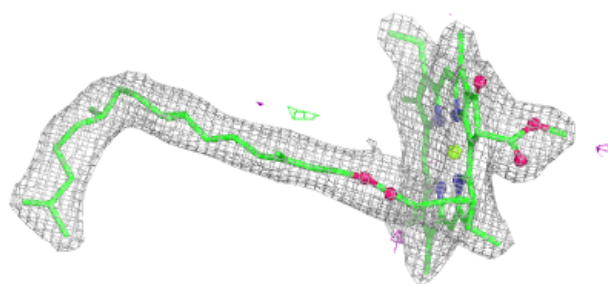
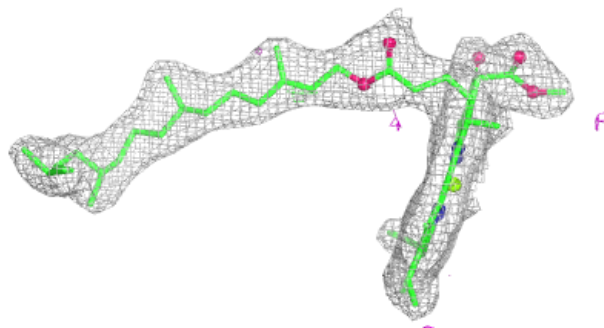
Electron density around HEC v 205:

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



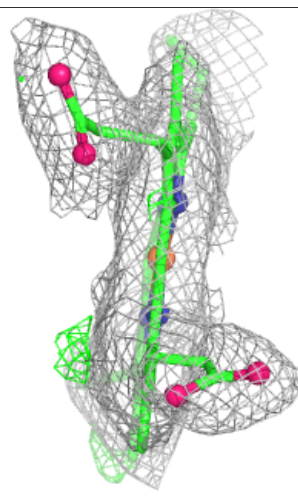
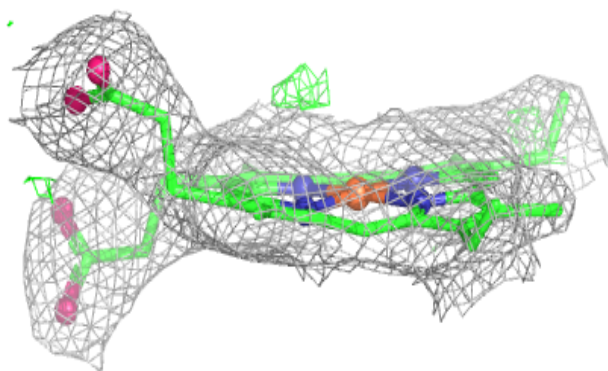
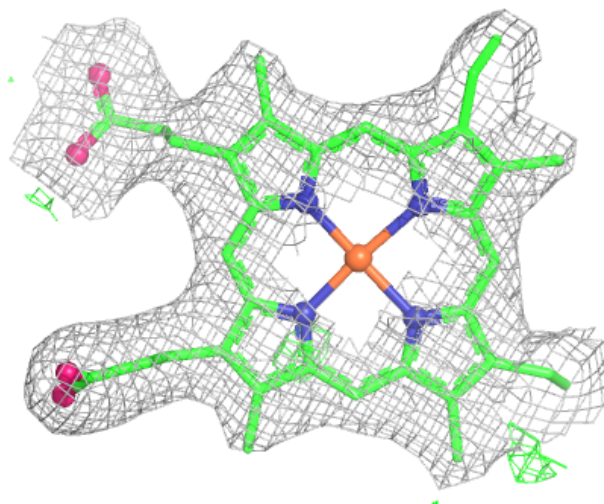
Electron density around CLA B 606:

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



Electron density around HEC V 206:

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



6.5 Other polymers ⓘ

There are no such residues in this entry.