Full wwPDB EM Validation Report

Jan 21, 2025 – 12:26 PM JST

PDB ID	:	8Z83
EMDB ID	:	EMD-39837
Title	:	Photosynthetic LH1-RC complex from the purple bacterium Halorhodospira halophila
Authors	:	Tani, K.; Kanno, R.; Nagashima, K.V.P.; Hiwatashi, N.; Kawakami, M.; Nakata, K.; Nagashima, S.; Inoue, K.; Takaichi, S.; Purba, E.R.; Hall, M.; Yu, L.-J.; Madigan, M.T.; Mizoguchi, A.; Humbel, B.M.; Kimura, Y.; Wang-Otomo, Z.-Y.
Deposited on	:	2024-04-21
Resolution	:	2.60 Å(reported)
Based on initial model	:	5Y5S

This is a Full wwPDB EM 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/EMValidationReportHelp
with specific help available everywhere you see the (i) 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 (1)) were used in the production of this report:

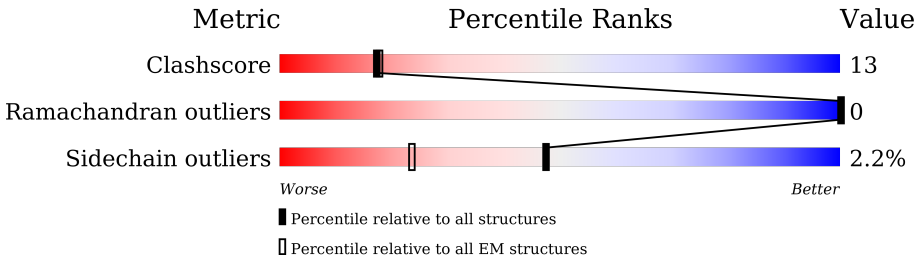
EMDB validation analysis	:	0.0.1.dev113
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 2.60 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)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	C	362	71% 20% 8%
2	L	276	75% 24%
3	M	323	76% 22%
4	H	278	76% 22%
5	3	64	56% 16% 28%
5	7	64	53% 19% 28%
5	A	64	55% 17% 28%

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Mol	Chain	Length	Quality of chain
5	F	64	50% 22% 28%
5	K	64	56% 14% 28%
5	Q	64	56% 16% 28%
5	U	64	58% 14% 28%
5	Y	64	53% 19% 28%
6	4	75	45% 17% 37%
6	8	75	52% 11% 37%
6	B	75	51% 12% 36%
6	G	75	47% 16% 37%
6	N	75	48% 15% 37%
6	R	75	49% 13% 37%
6	V	75	52% 11% 37%
6	Z	75	52% 12% 36%
7	1	67	45% 24% 31%
7	5	67	48% 21% 31%
7	9	67	49% 19% 31%
7	D	67	45% 24% 31%
7	I	67	40% 27% 31%
7	O	67	51% 18% 31%
7	S	67	45% 24% 31%
7	W	67	48% 18% 31%
8	0	74	50% 11% 39%
8	2	74	54% 7% 39%
8	6	74	49% 12% 39%
8	E	74	55% 5% 39%

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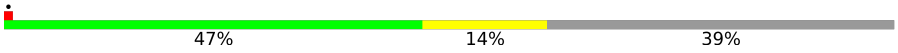
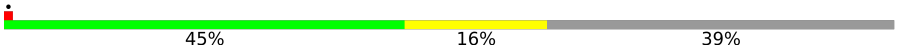
Mol	Chain	Length	Quality of chain
8	J	74	
8	P	74	
8	T	74	
8	X	74	

2 Entry composition (i)

There are 22 unique types of molecules in this entry. The entry contains 27998 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 Photosynthetic reaction center cytochrome c subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	C	333	Total	C	N	O	S	0	0
			2618	1603	446	545	24		

- Molecule 2 is a protein called Reaction center protein L chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	L	274	Total	C	N	O	S	0	0
			2170	1461	348	353	8		

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
L	99	THR	ALA	conflict	UNP A0A2L1K3P0
L	205	PRO	SER	conflict	UNP A0A2L1K3P0
L	220	ILE	VAL	conflict	UNP A0A2L1K3P0
L	241	GLY	ALA	conflict	UNP A0A2L1K3P0

- Molecule 3 is a protein called Reaction center protein M chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	M	318	Total	C	N	O	S	0	0
			2518	1679	410	420	9		

There are 9 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	34	ALA	SER	conflict	UNP A0A2L1K3T5
M	65	ILE	LEU	conflict	UNP A0A2L1K3T5
M	66	VAL	LEU	conflict	UNP A0A2L1K3T5
M	84	LEU	ILE	conflict	UNP A0A2L1K3T5
M	86	PHE	TRP	conflict	UNP A0A2L1K3T5
M	126	VAL	ILE	conflict	UNP A0A2L1K3T5
M	130	PHE	TRP	conflict	UNP A0A2L1K3T5

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Chain	Residue	Modelled	Actual	Comment	Reference
M	131	ALA	VAL	conflict	UNP A0A2L1K3T5
M	236	GLU	ASP	conflict	UNP A0A2L1K3T5

- Molecule 4 is a protein called Photosynthetic reaction center H subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	H	278	Total	C	N	O	S	0	0
			2174	1379	374	410	11		

- Molecule 5 is a protein called Antenna complex, alpha/beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	A	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	F	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	K	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	Q	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	U	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	Y	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	3	46	Total	C	N	O	S	0	0
			385	263	66	55	1		
5	7	46	Total	C	N	O	S	0	0
			385	263	66	55	1		

- Molecule 6 is a protein called Antenna complex, alpha/beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	B	48	Total	C	N	O	S	0	0
			386	259	60	66	1		
6	G	47	Total	C	N	O	S	0	0
			380	256	59	64	1		
6	N	47	Total	C	N	O	S	0	0
			380	256	59	64	1		
6	R	47	Total	C	N	O	S	0	0
			380	256	59	64	1		
6	V	47	Total	C	N	O	S	0	0
			380	256	59	64	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
6	Z	48	Total	C	N	O	S	0	0
			386	259	60	66	1		
6	4	47	Total	C	N	O	S	0	0
			380	256	59	64	1		
6	8	47	Total	C	N	O	S	0	0
			380	256	59	64	1		

- Molecule 7 is a protein called Antenna complex, alpha/beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	D	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	I	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	O	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	S	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	W	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	1	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	5	46	Total	C	N	O	S	0	0
			390	261	67	59	3		
7	9	46	Total	C	N	O	S	0	0
			390	261	67	59	3		

There are 32 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	37	ASN	SER	conflict	UNP A1WXF8
D	42	GLN	GLU	conflict	UNP A1WXF8
D	48	ASP	ASN	conflict	UNP A1WXF8
D	57	ASP	GLU	conflict	UNP A1WXF8
I	37	ASN	SER	conflict	UNP A1WXF8
I	42	GLN	GLU	conflict	UNP A1WXF8
I	48	ASP	ASN	conflict	UNP A1WXF8
I	57	ASP	GLU	conflict	UNP A1WXF8
O	37	ASN	SER	conflict	UNP A1WXF8
O	42	GLN	GLU	conflict	UNP A1WXF8
O	48	ASP	ASN	conflict	UNP A1WXF8
O	57	ASP	GLU	conflict	UNP A1WXF8

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Chain	Residue	Modelled	Actual	Comment	Reference
S	37	ASN	SER	conflict	UNP A1WXF8
S	42	GLN	GLU	conflict	UNP A1WXF8
S	48	ASP	ASN	conflict	UNP A1WXF8
S	57	ASP	GLU	conflict	UNP A1WXF8
W	37	ASN	SER	conflict	UNP A1WXF8
W	42	GLN	GLU	conflict	UNP A1WXF8
W	48	ASP	ASN	conflict	UNP A1WXF8
W	57	ASP	GLU	conflict	UNP A1WXF8
1	37	ASN	SER	conflict	UNP A1WXF8
1	42	GLN	GLU	conflict	UNP A1WXF8
1	48	ASP	ASN	conflict	UNP A1WXF8
1	57	ASP	GLU	conflict	UNP A1WXF8
5	37	ASN	SER	conflict	UNP A1WXF8
5	42	GLN	GLU	conflict	UNP A1WXF8
5	48	ASP	ASN	conflict	UNP A1WXF8
5	57	ASP	GLU	conflict	UNP A1WXF8
9	37	ASN	SER	conflict	UNP A1WXF8
9	42	GLN	GLU	conflict	UNP A1WXF8
9	48	ASP	ASN	conflict	UNP A1WXF8
9	57	ASP	GLU	conflict	UNP A1WXF8

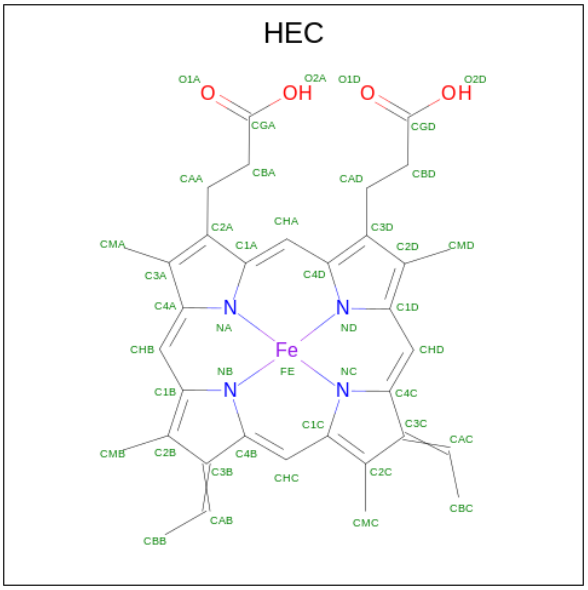
- Molecule 8 is a protein called Antenna complex, alpha/beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	E	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	J	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	P	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	T	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	X	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	2	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	6	45	Total	C	N	O	S	0	0
			362	240	58	63	1		
8	0	45	Total	C	N	O	S	0	0
			362	240	58	63	1		

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
E	30	ILE	VAL	conflict	UNP A1WXF9
J	30	ILE	VAL	conflict	UNP A1WXF9
P	30	ILE	VAL	conflict	UNP A1WXF9
T	30	ILE	VAL	conflict	UNP A1WXF9
X	30	ILE	VAL	conflict	UNP A1WXF9
2	30	ILE	VAL	conflict	UNP A1WXF9
6	30	ILE	VAL	conflict	UNP A1WXF9
0	30	ILE	VAL	conflict	UNP A1WXF9

- Molecule 9 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).

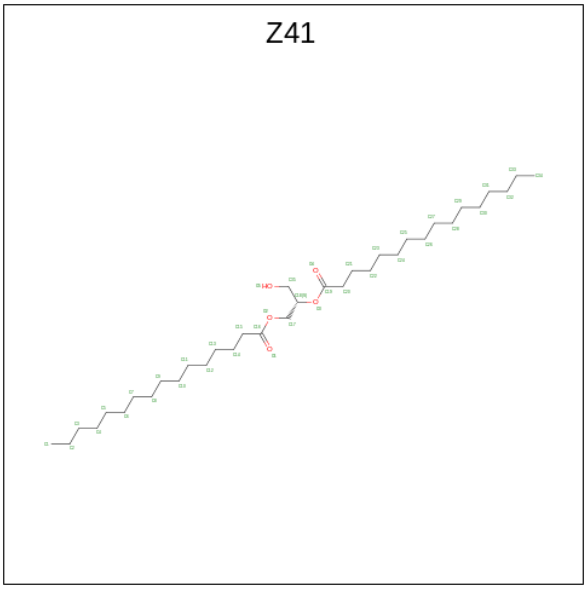


Mol	Chain	Residues	Atoms					AltConf
9	C	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
9	C	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
9	C	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
9	C	1	Total	C	Fe	N	O	0
			43	34	1	4	4	

- Molecule 10 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

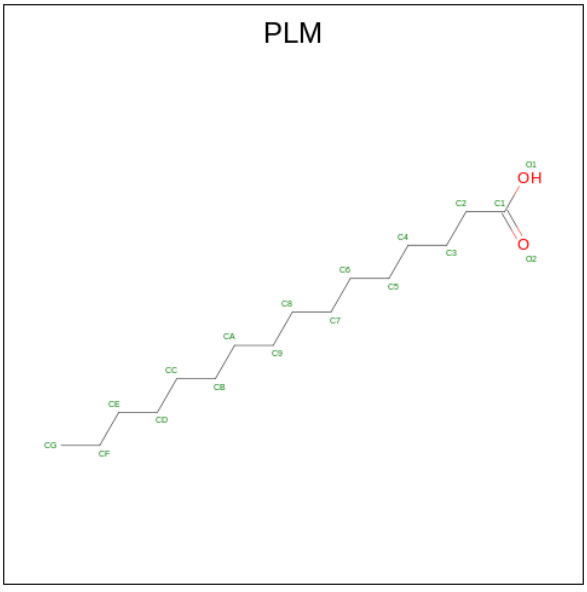
Mol	Chain	Residues	Atoms		AltConf
10	C	1	Total	Mg	0
			1	1	

- Molecule 11 is (2S)-3-hydroxypropane-1,2-diyl dihexadecanoate (three-letter code: Z41) (formula: $C_{35}H_{68}O_5$).



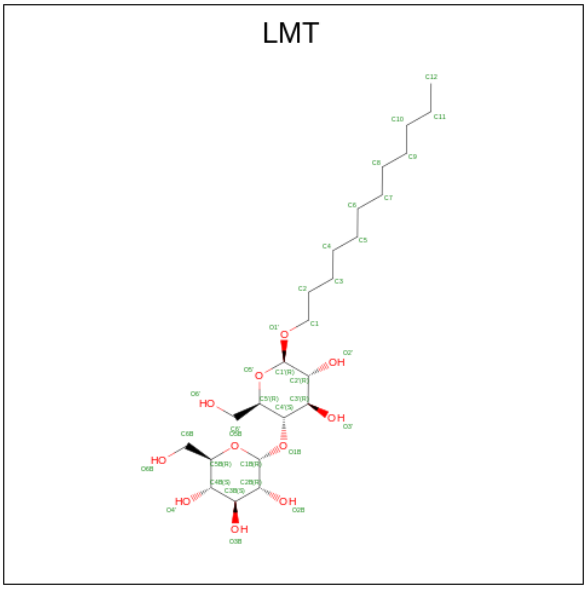
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
11	C	1	31	27	4	0

- Molecule 12 is PALMITIC ACID (three-letter code: PLM) (formula: $C_{16}H_{32}O_2$).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
12	C	1	12	11	1	0

- Molecule 13 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	AltConf
13	C	1	Total C O 35 24 11	0
13	L	1	Total C O 25 14 11	0
13	H	1	Total C O 30 19 11	0
13	H	1	Total C O 26 15 11	0
13	F	1	Total C O 33 22 11	0
13	K	1	Total C O 25 14 11	0
13	O	1	Total C O 29 18 11	0
13	Q	1	Total C O 32 21 11	0
13	Y	1	Total C O 35 24 11	0
13	5	1	Total C O 24 13 11	0
13	7	1	Total C O 25 14 11	0
13	7	1	Total C O 35 24 11	0

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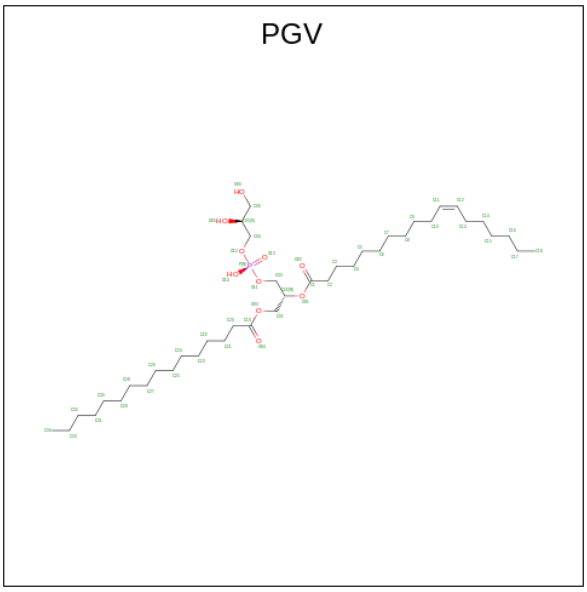
Mol	Chain	Residues	Atoms			AltConf
13	9	1	Total 35	C 24	O 11	0

- Molecule 14 is (1R)-2-{[{[(2S)-2,3-DIHYDROXYPROPYL]OXY}(HYDROXY)PHOSPHORYL]OXY}-1-[(PALMITOYLOXY)METHYL]ETHYL (11E)-OCTADEC-11-ENOATE (three-letter code: PGV) (formula: $C_{40}H_{77}O_{10}P$).



Mol	Chain	Residues	Atoms				AltConf
14	C	1	Total 32	C 21	O 10	P 1	0
14	L	1	Total 43	C 32	O 10	P 1	0
14	L	1	Total 36	C 27	O 8	P 1	0
14	L	1	Total 41	C 30	O 10	P 1	0
14	H	1	Total 36	C 25	O 10	P 1	0
14	H	1	Total 42	C 31	O 10	P 1	0
14	H	1	Total 51	C 40	O 10	P 1	0
14	B	1	Total 31	C 20	O 10	P 1	0
14	B	1	Total 41	C 32	O 8	P 1	0

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Mol	Chain	Residues	Atoms	AltConf
14	E	1	Total C O P 35 24 10 1	0
14	E	1	Total C O P 38 27 10 1	0
14	G	1	Total C O P 35 24 10 1	0
14	G	1	Total C O P 42 33 8 1	0
14	I	1	Total C O P 50 39 10 1	0
14	J	1	Total C O 29 24 5	0
14	N	1	Total C O P 35 24 10 1	0
14	N	1	Total C O P 31 20 10 1	0
14	N	1	Total C O P 32 23 8 1	0
14	P	1	Total C O P 28 19 8 1	0
14	P	1	Total C O P 40 31 8 1	0
14	R	1	Total C O P 29 18 10 1	0
14	R	1	Total C O P 41 32 8 1	0
14	T	1	Total C O P 47 36 10 1	0
14	V	1	Total C O P 29 18 10 1	0
14	V	1	Total C O P 31 20 10 1	0
14	V	1	Total C O P 44 33 10 1	0
14	X	1	Total C O P 45 34 10 1	0
14	Z	1	Total C O P 29 18 10 1	0
14	Z	1	Total C O P 32 21 10 1	0
14	Z	1	Total C O P 43 34 8 1	0

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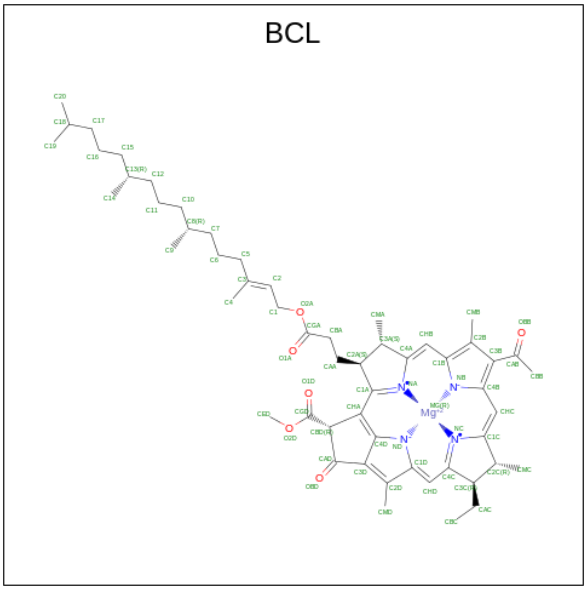
Mol	Chain	Residues	Atoms	AltConf
14	1	1	Total C O P 45 34 10 1	0
14	2	1	Total C O P 26 17 8 1	0
14	2	1	Total C O P 34 25 8 1	0
14	3	1	Total C O P 30 21 8 1	0
14	4	1	Total C O P 29 18 10 1	0
14	4	1	Total C O P 41 32 8 1	0
14	6	1	Total C O P 38 29 8 1	0
14	8	1	Total C O P 44 34 9 1	0
14	8	1	Total C O P 43 32 10 1	0
14	0	1	Total C O P 34 23 10 1	0
14	0	1	Total C O P 31 20 10 1	0
14	0	1	Total C O 32 27 5	0

- Molecule 15 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
15	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	L	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	M	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	B	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	D	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	D	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	E	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	F	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	I	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	I	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	J	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	K	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	O	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	O	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	P	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	Q	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	R	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
15	S	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	T	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	U	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	V	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	W	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	W	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	X	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	Z	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	2	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	3	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	4	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	5	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	5	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	6	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	7	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	8	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	9	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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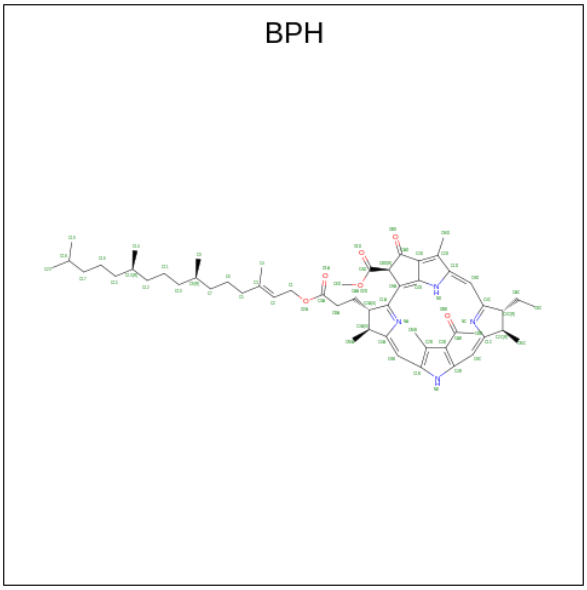
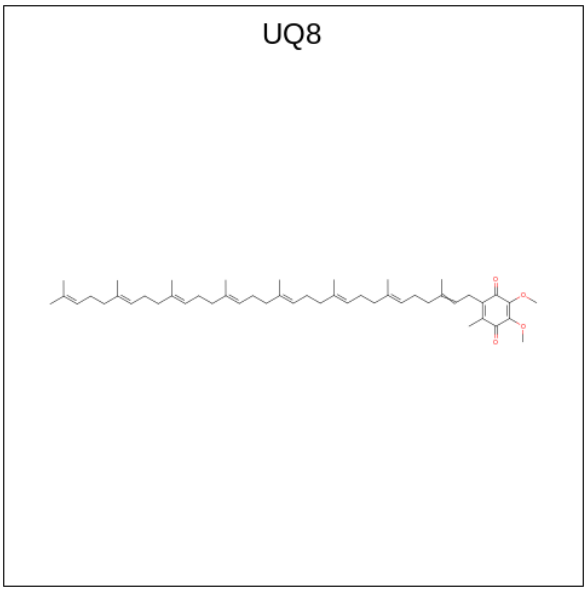
Mol	Chain	Residues	Atoms					AltConf
15	9	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
15	0	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 16 is BACTERIOPHEOPHYTIN A (three-letter code: BPH) (formula: $C_{55}H_{76}N_4O_6$).



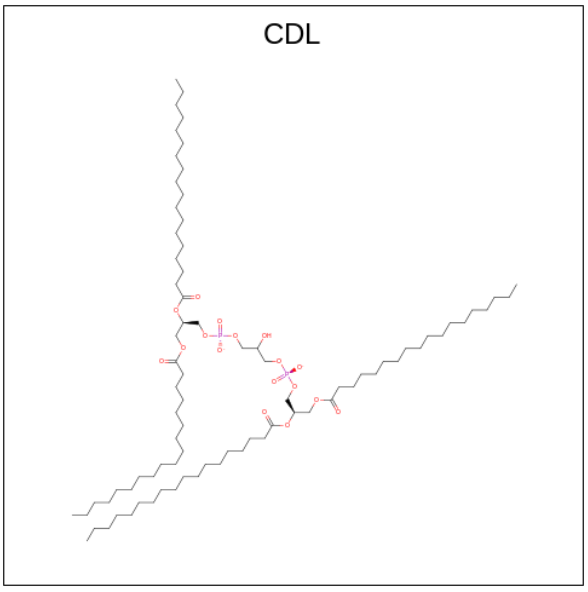
Mol	Chain	Residues	Atoms				AltConf
16	L	1	Total	C	N	O	0
			65	55	4	6	
16	M	1	Total	C	N	O	0
			65	55	4	6	

- Molecule 17 is Ubiquinone-8 (three-letter code: UQ8) (formula: $C_{49}H_{74}O_4$).



Mol	Chain	Residues	Atoms			AltConf
17	L	1	Total 33	C 29	O 4	0
17	L	1	Total 38	C 34	O 4	0
17	L	1	Total 17	C 13	O 4	0

- Molecule 18 is CARDIOLIPIN (three-letter code: CDL) (formula: $C_{81}H_{156}O_{17}P_2$).



Mol	Chain	Residues	Atoms				AltConf
18	L	1	Total 73	C 54	O 17	P 2	0

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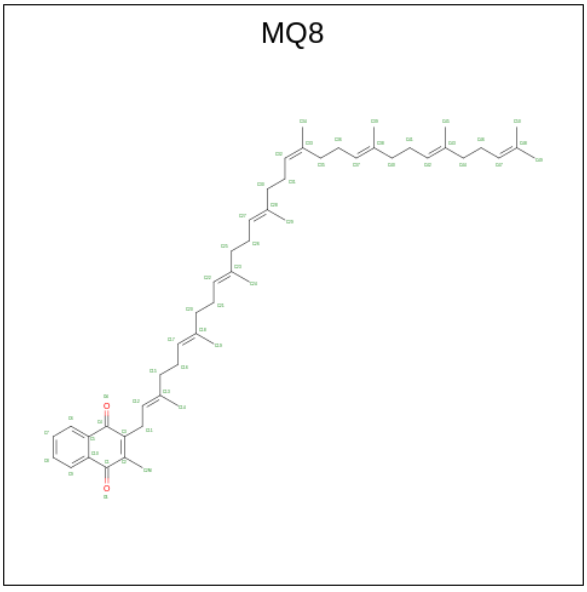
Mol	Chain	Residues	Atoms				AltConf
18	M	1	Total	C	O	P	0
			82	63	17	2	
18	M	1	Total	C	O	P	0
			80	61	17	2	
18	M	1	Total	C	O	P	0
			46	27	17	2	
18	M	1	Total	C	O	P	0
			56	37	17	2	
18	M	1	Total	C	O	P	0
			50	31	17	2	
18	H	1	Total	C	O	P	0
			75	56	17	2	
18	F	1	Total	C	O	P	0
			64	45	17	2	
18	U	1	Total	C	O	P	0
			51	32	17	2	

- Molecule 19 is FE (III) ION (three-letter code: FE) (formula: Fe).

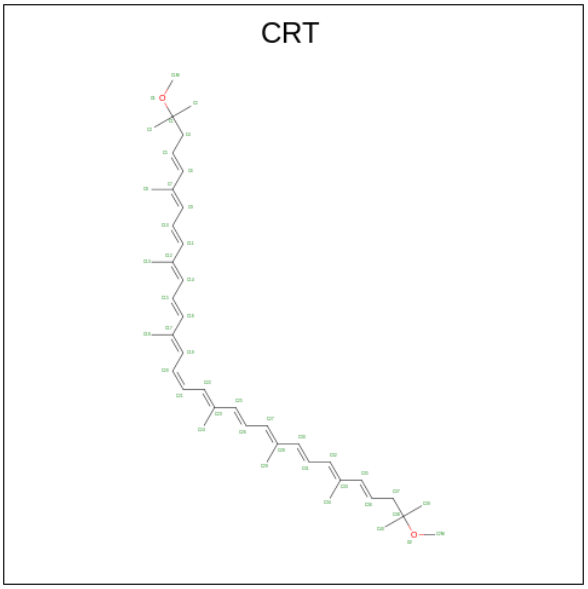
Mol	Chain	Residues	Atoms		AltConf
19	M	1	Total	Fe	0
			1	1	

- Molecule 20 is MENAQUINONE 8 (three-letter code: MQ8) (formula: $C_{51}H_{72}O_2$).



Mol	Chain	Residues	Atoms	AltConf
20	M	1	Total C O 53 51 2	0

- Molecule 21 is SPIRILLOXANTHIN (three-letter code: CRT) (formula: $C_{42}H_{60}O_2$).



Mol	Chain	Residues	Atoms	AltConf
21	M	1	Total C O 44 42 2	0
21	B	1	Total C O 44 42 2	0
21	G	1	Total C O 44 42 2	0
21	N	1	Total C O 44 42 2	0
21	R	1	Total C O 44 42 2	0
21	V	1	Total C O 44 42 2	0
21	Z	1	Total C O 44 42 2	0
21	4	1	Total C O 44 42 2	0
21	8	1	Total C O 44 42 2	0

- Molecule 22 is water.

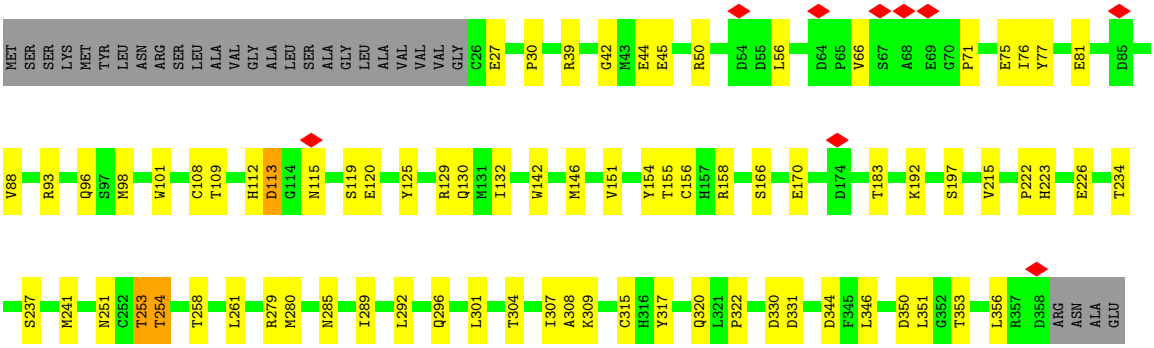
Mol	Chain	Residues	Atoms	AltConf
22	C	3	Total O 3 3	0
22	M	2	Total O 2 2	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

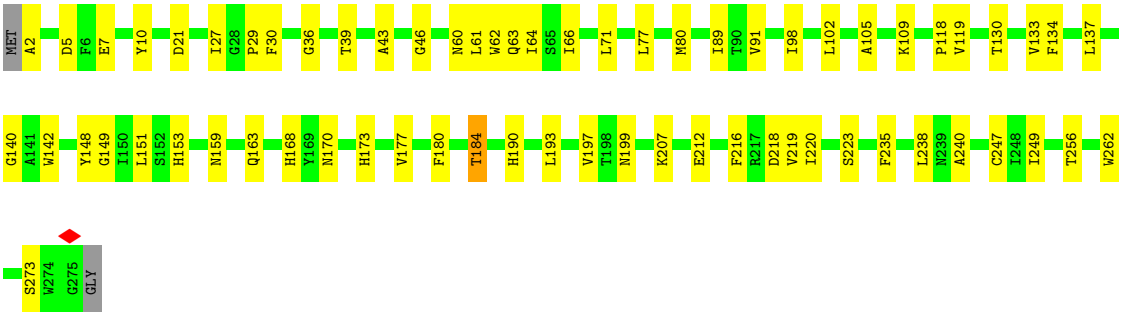
• Molecule 1: Photosynthetic reaction center cytochrome c subunit

Chain C:



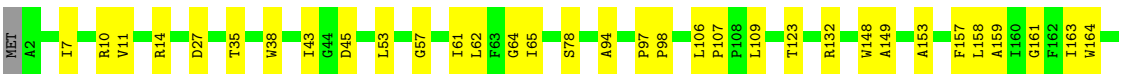
• Molecule 2: Reaction center protein L chain

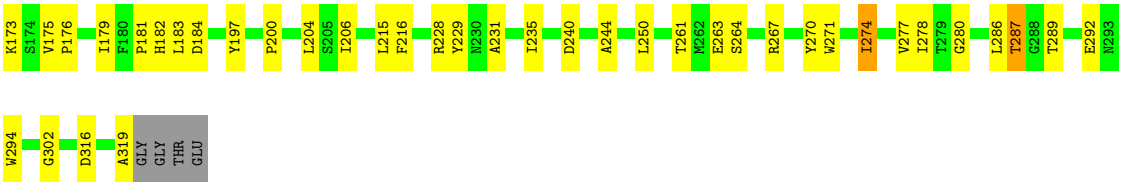
Chain L:



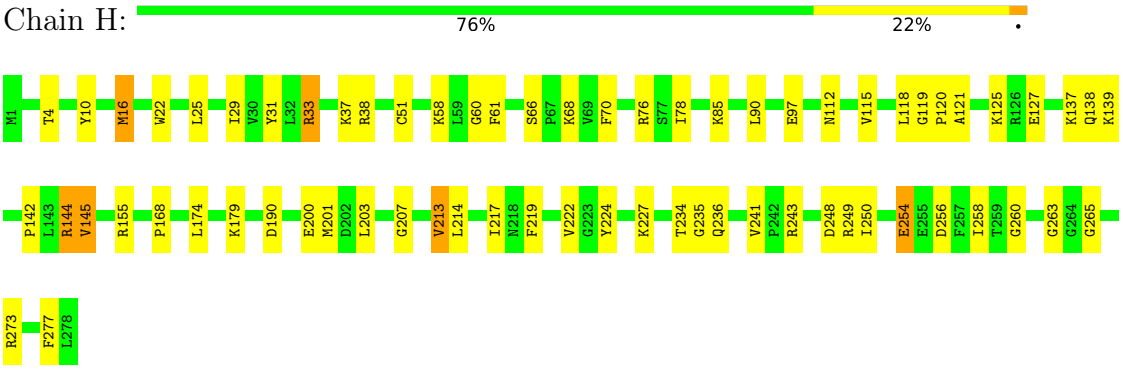
• Molecule 3: Reaction center protein M chain

Chain M:

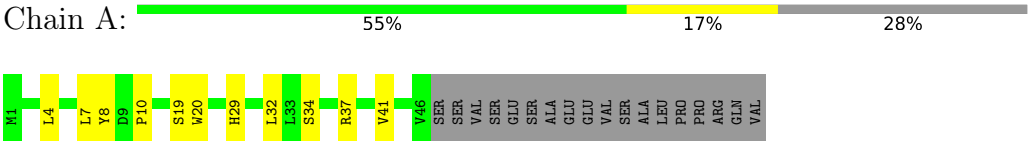




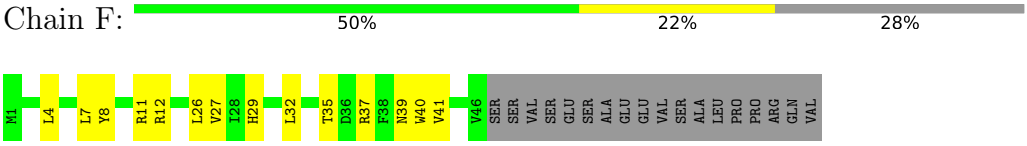
• Molecule 4: Photosynthetic reaction center H subunit



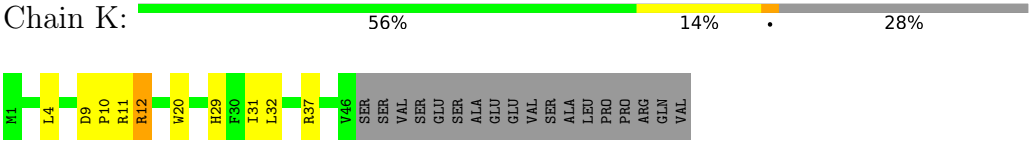
• Molecule 5: Antenna complex, alpha/beta subunit



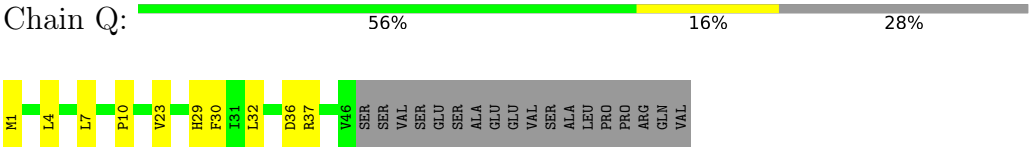
• Molecule 5: Antenna complex, alpha/beta subunit



• Molecule 5: Antenna complex, alpha/beta subunit

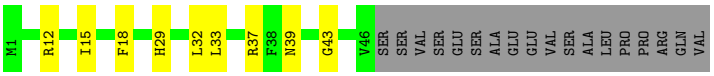


• Molecule 5: Antenna complex, alpha/beta subunit



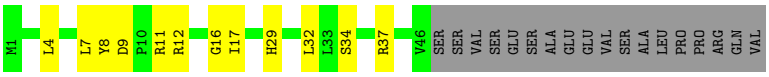
• Molecule 5: Antenna complex, alpha/beta subunit

Chain U:



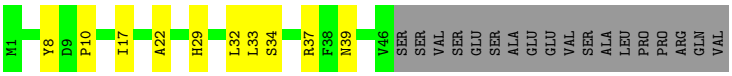
• Molecule 5: Antenna complex, alpha/beta subunit

Chain Y:



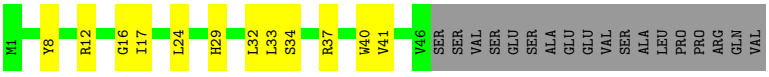
• Molecule 5: Antenna complex, alpha/beta subunit

Chain 3:



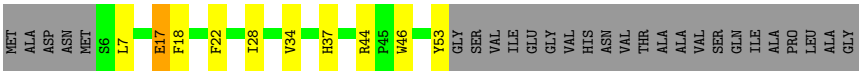
• Molecule 5: Antenna complex, alpha/beta subunit

Chain 7:



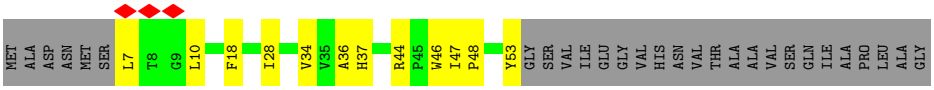
• Molecule 6: Antenna complex, alpha/beta subunit

Chain B:



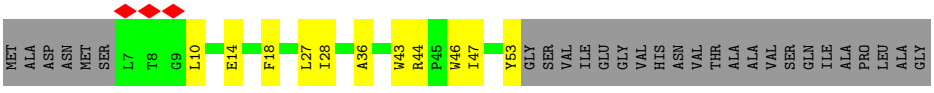
• Molecule 6: Antenna complex, alpha/beta subunit

Chain G:



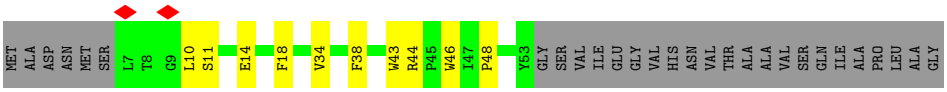
• Molecule 6: Antenna complex, alpha/beta subunit

Chain N:



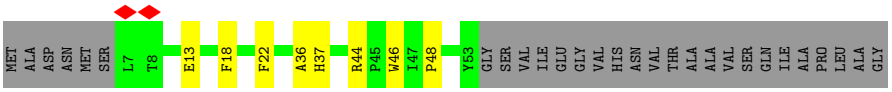
• Molecule 6: Antenna complex, alpha/beta subunit

Chain R:



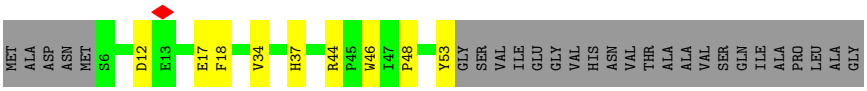
• Molecule 6: Antenna complex, alpha/beta subunit

Chain V:



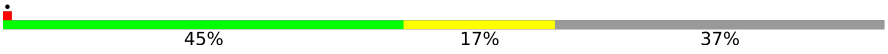
• Molecule 6: Antenna complex, alpha/beta subunit

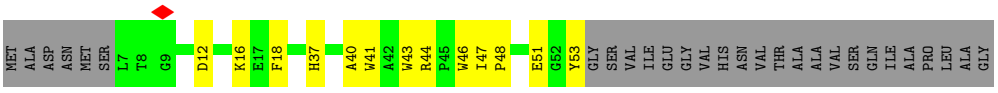
Chain Z:



• Molecule 6: Antenna complex, alpha/beta subunit

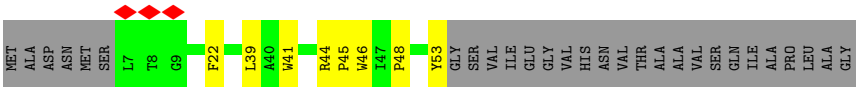
Chain 4:





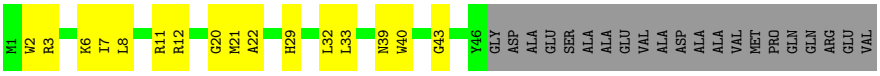
• Molecule 6: Antenna complex, alpha/beta subunit

Chain 8:



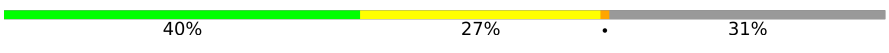
• Molecule 7: Antenna complex, alpha/beta subunit

Chain D:



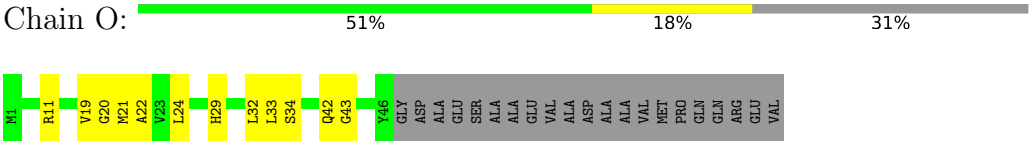
• Molecule 7: Antenna complex, alpha/beta subunit

Chain I:



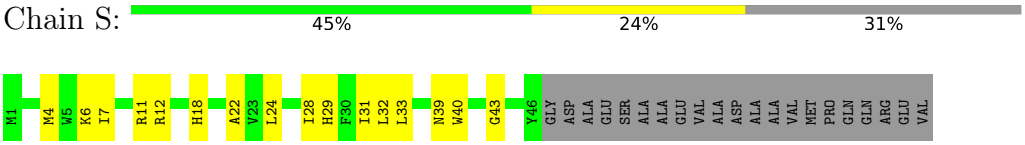
• Molecule 7: Antenna complex, alpha/beta subunit

Chain O:



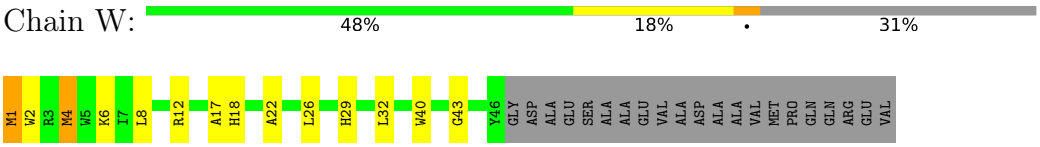
• Molecule 7: Antenna complex, alpha/beta subunit

Chain S:



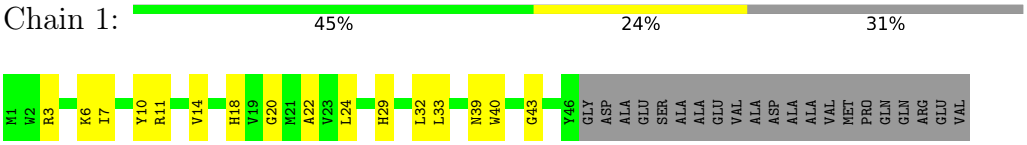
• Molecule 7: Antenna complex, alpha/beta subunit

Chain W:



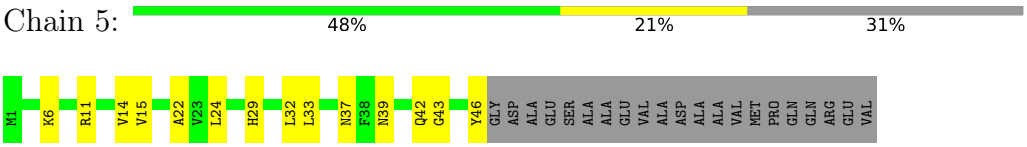
• Molecule 7: Antenna complex, alpha/beta subunit

Chain 1:



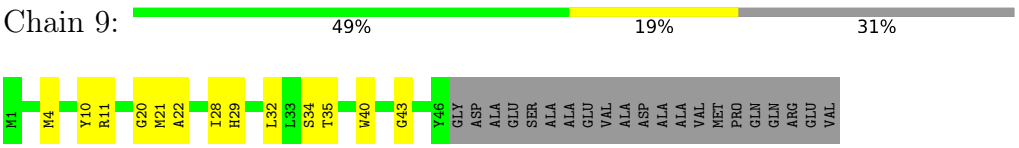
• Molecule 7: Antenna complex, alpha/beta subunit

Chain 5:



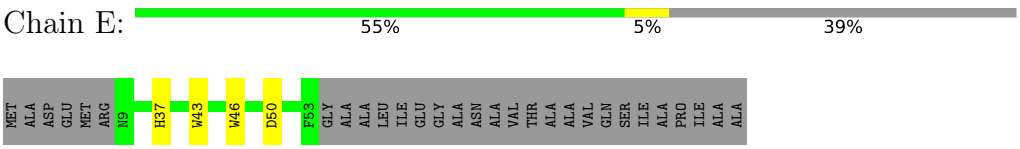
• Molecule 7: Antenna complex, alpha/beta subunit

Chain 9:



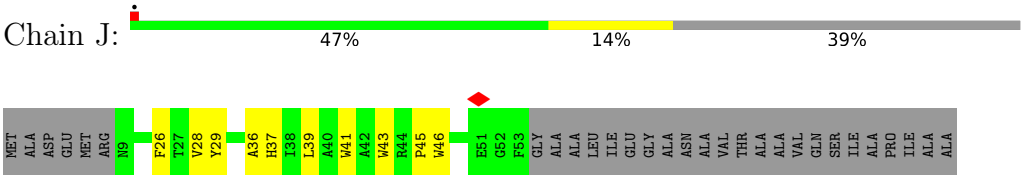
• Molecule 8: Antenna complex, alpha/beta subunit

Chain E:



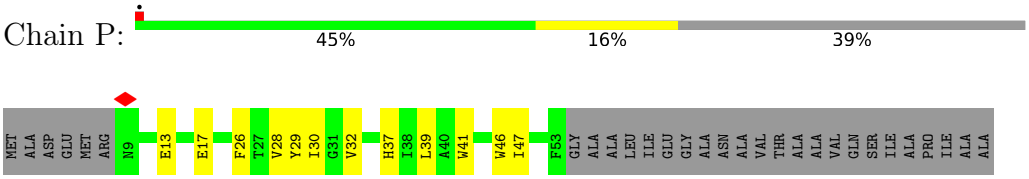
• Molecule 8: Antenna complex, alpha/beta subunit

Chain J:



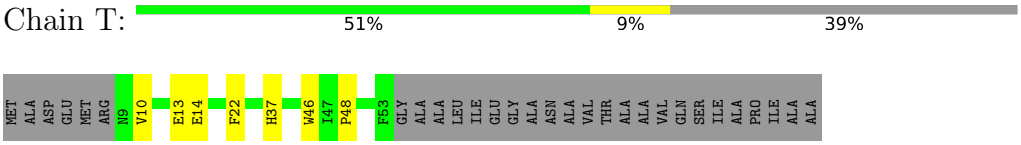
• Molecule 8: Antenna complex, alpha/beta subunit

Chain P:



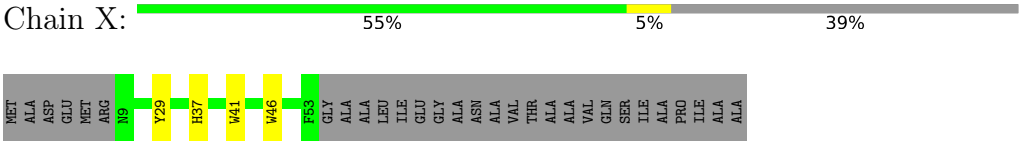
• Molecule 8: Antenna complex, alpha/beta subunit

Chain T:



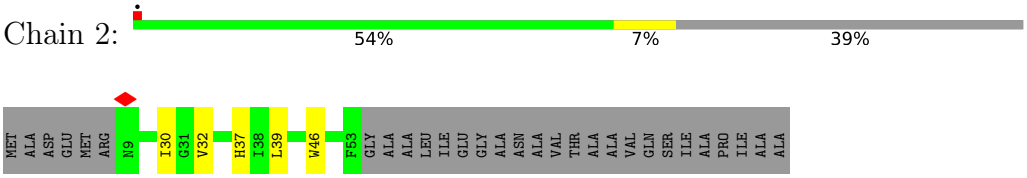
• Molecule 8: Antenna complex, alpha/beta subunit

Chain X:



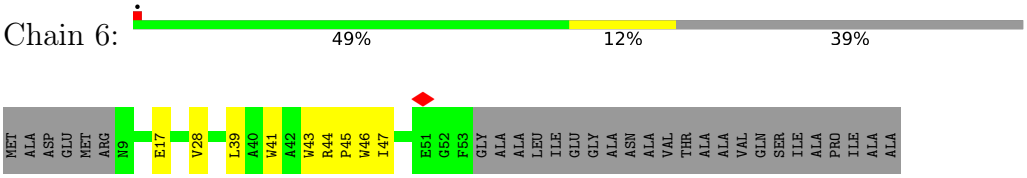
• Molecule 8: Antenna complex, alpha/beta subunit

Chain 2:



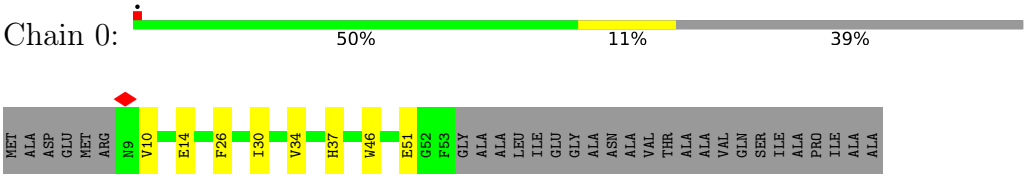
• Molecule 8: Antenna complex, alpha/beta subunit

Chain 6:



• Molecule 8: Antenna complex, alpha/beta subunit

Chain 0:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	44938	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	1100	Depositor
Maximum defocus (nm)	2700	Depositor
Magnification	Not provided	
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	0.223	Depositor
Minimum map value	-0.090	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.008	Depositor
Recommended contour level	0.03	Depositor
Map size (Å)	328.0, 328.0, 328.0	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.82, 0.82, 0.82	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: MQ8, CDL, HEC, BCL, CRT, Z41, FE, BPH, MG, PGV, LMT, PLM, UQ8

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	C	0.27	0/2678	0.49	0/3642
2	L	0.27	0/2252	0.43	0/3082
3	M	0.28	0/2613	0.44	0/3582
4	H	0.27	0/2229	0.49	0/3027
5	3	0.25	0/398	0.44	0/543
5	7	0.25	0/398	0.45	0/543
5	A	0.25	0/398	0.44	0/543
5	F	0.25	0/398	0.46	0/543
5	K	0.25	0/398	0.44	0/543
5	Q	0.25	0/398	0.46	0/543
5	U	0.26	0/398	0.45	0/543
5	Y	0.25	0/398	0.46	0/543
6	4	0.26	0/395	0.36	0/539
6	8	0.25	0/395	0.38	0/539
6	B	0.26	0/401	0.36	0/547
6	G	0.26	0/395	0.36	0/539
6	N	0.26	0/395	0.37	0/539
6	R	0.26	0/395	0.36	0/539
6	V	0.25	0/395	0.36	0/539
6	Z	0.25	0/401	0.37	0/547
7	1	0.25	0/402	0.43	0/547
7	5	0.24	0/402	0.44	0/547
7	9	0.26	0/402	0.44	0/547
7	D	0.27	0/402	0.44	0/547
7	I	0.25	0/402	0.42	0/547
7	O	0.24	0/402	0.44	0/547
7	S	0.26	0/402	0.44	0/547
7	W	0.24	0/402	0.43	0/547
8	0	0.25	0/376	0.34	0/514
8	2	0.25	0/376	0.35	0/514
8	6	0.26	0/376	0.35	0/514
8	E	0.26	0/376	0.35	0/514

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
8	J	0.25	0/376	0.37	0/514
8	P	0.26	0/376	0.37	0/514
8	T	0.25	0/376	0.35	0/514
8	X	0.26	0/376	0.36	0/514
All	All	0.26	0/22352	0.43	0/30493

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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	C	2618	0	2377	51	0
2	L	2170	0	2145	60	0
3	M	2518	0	2465	62	0
4	H	2174	0	2131	50	0
5	3	385	0	403	12	0
5	7	385	0	403	15	0
5	A	385	0	403	13	0
5	F	385	0	403	14	0
5	K	385	0	403	9	0
5	Q	385	0	403	14	0
5	U	385	0	403	10	0
5	Y	385	0	403	15	0
6	4	380	0	359	15	0
6	8	380	0	359	8	0
6	B	386	0	364	10	0
6	G	380	0	359	12	0
6	N	380	0	359	11	0
6	R	380	0	359	8	0
6	V	380	0	359	7	0
6	Z	386	0	364	9	0
7	1	390	0	401	18	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	5	390	0	401	15	0
7	9	390	0	401	16	0
7	D	390	0	401	19	0
7	I	390	0	401	21	0
7	O	390	0	401	11	0
7	S	390	0	401	17	0
7	W	390	0	401	15	0
8	0	362	0	333	5	0
8	2	362	0	333	8	0
8	6	362	0	333	10	0
8	E	362	0	333	4	0
8	J	362	0	333	13	0
8	P	362	0	333	12	0
8	T	362	0	333	7	0
8	X	362	0	333	5	0
9	C	172	0	121	8	0
10	C	1	0	0	0	0
11	C	31	0	0	1	0
12	C	12	0	18	5	0
13	5	24	0	21	1	0
13	7	60	0	69	7	0
13	9	35	0	46	2	0
13	C	35	0	46	3	0
13	F	33	0	39	4	0
13	H	56	0	58	3	0
13	K	25	0	23	2	0
13	L	25	0	23	2	0
13	O	29	0	31	2	0
13	Q	32	0	37	3	0
13	Y	35	0	46	1	0
14	0	97	0	113	3	0
14	1	45	0	58	4	0
14	2	60	0	67	3	0
14	3	30	0	31	4	0
14	4	70	0	86	10	0
14	6	38	0	48	3	0
14	8	87	0	109	9	0
14	B	72	0	83	3	0
14	C	32	0	34	5	0
14	E	73	0	84	1	0
14	G	77	0	93	10	0
14	H	129	0	175	18	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	I	50	0	71	6	0
14	J	29	0	37	3	0
14	L	120	0	150	11	0
14	N	98	0	107	8	0
14	P	68	0	83	8	0
14	R	70	0	81	2	0
14	T	47	0	65	3	0
14	V	104	0	118	6	0
14	X	45	0	62	2	0
14	Z	104	0	124	6	0
15	0	66	0	74	9	0
15	1	132	0	148	18	0
15	2	66	0	74	9	0
15	3	66	0	74	8	0
15	4	66	0	74	9	0
15	5	132	0	148	13	0
15	6	66	0	74	7	0
15	7	66	0	74	3	0
15	8	66	0	74	8	0
15	9	132	0	148	17	0
15	A	66	0	74	5	0
15	B	66	0	74	3	0
15	D	132	0	148	18	0
15	E	66	0	74	5	0
15	F	66	0	74	3	0
15	G	66	0	74	9	0
15	I	132	0	148	17	0
15	J	66	0	74	9	0
15	K	66	0	74	3	0
15	L	198	0	222	20	0
15	M	66	0	74	5	0
15	N	66	0	74	9	0
15	O	132	0	148	12	0
15	P	66	0	74	10	0
15	Q	66	0	74	5	0
15	R	66	0	74	6	0
15	S	132	0	148	21	0
15	T	66	0	74	9	0
15	U	66	0	74	3	0
15	V	66	0	74	9	0
15	W	132	0	148	14	0
15	X	66	0	74	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	Y	132	0	148	12	0
15	Z	66	0	74	9	0
16	L	65	0	76	7	0
16	M	65	0	76	8	0
17	L	88	0	98	13	0
18	F	64	0	72	10	0
18	H	75	0	97	9	0
18	L	73	0	90	3	0
18	M	314	0	354	33	0
18	U	51	0	46	5	0
19	M	1	0	0	0	0
20	M	53	0	72	2	0
21	4	44	0	60	8	0
21	8	44	0	60	7	0
21	B	44	0	60	5	0
21	G	44	0	60	7	0
21	M	44	0	60	7	0
21	N	44	0	60	6	0
21	R	44	0	60	4	0
21	V	44	0	60	9	0
21	Z	44	0	60	8	0
22	C	3	0	0	0	0
22	M	2	0	0	0	0
All	All	27998	0	28404	756	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 13.

All (756) 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:C:108:CYS:SG	9:C:401:HEC:HAB	1.60	1.40
1:C:108:CYS:SG	9:C:401:HEC:CAB	2.14	1.36
21:N:102:CRT:H35	15:O:102:BCL:HMB2	1.57	0.86
3:M:287:THR:HB	3:M:294:TRP:HE1	1.42	0.83
5:7:32:LEU:HD11	15:8:103:BCL:HHD	1.63	0.81
14:L:309:PGV:H81	14:1:101:PGV:H11	1.61	0.80
7:O:32:LEU:HD11	15:P:101:BCL:HHD	1.64	0.78
17:L:307:UQ8:H3M	15:L:311:BCL:H161	1.67	0.76
7:9:32:LEU:HD11	15:0:102:BCL:HHD	1.68	0.74
14:P:102:PGV:H201	14:P:103:PGV:H21	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:B:17:GLU:HG2	21:B:101:CRT:H22A	1.70	0.73
14:4:103:PGV:H202	8:6:43:TRP:HB2	1.68	0.73
5:Q:4:LEU:HD11	15:S:102:BCL:HHD	1.70	0.73
5:U:32:LEU:HD11	15:V:103:BCL:HHD	1.70	0.73
14:H:303:PGV:H61	14:H:304:PGV:H251	1.68	0.73
5:7:24:LEU:HD23	15:8:103:BCL:HED3	1.72	0.72
2:L:109:LYS:NZ	13:7:102:LMT:O6B	2.23	0.71
7:W:32:LEU:HD11	15:X:101:BCL:HHD	1.72	0.71
5:7:34:SER:HA	13:7:101:LMT:H4'	1.72	0.71
4:H:241:VAL:O	4:H:243:ARG:NH1	2.23	0.71
3:M:7:ILE:HD12	18:M:402:CDL:H591	1.72	0.70
7:1:32:LEU:HD11	15:2:101:BCL:HHD	1.74	0.69
14:I:101:PGV:H222	14:I:101:PGV:H52	1.74	0.69
14:H:303:PGV:H222	14:H:303:PGV:H71	1.75	0.69
6:4:12:ASP:OD1	6:4:16:LYS:NZ	2.24	0.69
6:N:43:TRP:HA	14:N:101:PGV:H012	1.74	0.68
4:H:33:ARG:HD2	18:H:302:CDL:H522	1.75	0.68
2:L:168:HIS:HB3	3:M:183:LEU:HD13	1.74	0.68
7:5:32:LEU:HD11	15:6:101:BCL:HHD	1.75	0.68
5:3:32:LEU:HD11	15:4:102:BCL:HHD	1.76	0.67
18:L:312:CDL:H732	18:M:407:CDL:H341	1.75	0.67
4:H:144:ARG:NH1	4:H:248:ASP:OD1	2.27	0.67
21:R:101:CRT:H35	15:S:101:BCL:HMB2	1.76	0.67
5:A:32:LEU:HD11	15:B:102:BCL:HHD	1.76	0.67
7:I:32:LEU:HD11	15:J:101:BCL:HHD	1.76	0.67
5:7:29:HIS:CE1	15:8:103:BCL:HMD1	2.30	0.66
5:U:29:HIS:CE1	15:V:103:BCL:HMD1	2.31	0.66
7:W:18:HIS:HB3	15:W:101:BCL:H72	1.76	0.66
5:3:34:SER:HB3	14:3:101:PGV:H22	1.76	0.66
1:C:44:GLU:HG2	2:L:71:LEU:HD11	1.78	0.66
7:9:40:TRP:CZ2	15:9:102:BCL:HHC	2.31	0.66
7:S:29:HIS:CE1	15:T:101:BCL:HMD1	2.31	0.66
15:L:310:BCL:HMD1	3:M:206:ILE:HD13	1.77	0.66
3:M:64:GLY:HA3	16:M:404:BPH:H5C1	1.78	0.66
5:K:32:LEU:HD11	15:N:103:BCL:HHD	1.76	0.66
3:M:35:THR:HB	18:M:408:CDL:HB62	1.78	0.65
21:G:101:CRT:H292	15:I:103:BCL:HBB3	1.78	0.65
5:Y:12:ARG:NE	15:Y:401:BCL:O1D	2.27	0.65
5:Y:32:LEU:HD11	15:Z:103:BCL:HHD	1.77	0.65
3:M:200:PRO:HB3	14:H:301:PGV:H22	1.80	0.64
7:I:16:LEU:HD12	15:I:103:BCL:H193	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:4:18:PHE:HA	21:4:101:CRT:H6	1.78	0.64
15:D:102:BCL:H203	18:F:101:CDL:H621	1.80	0.64
21:V:102:CRT:H292	15:W:102:BCL:HBB3	1.80	0.64
14:P:103:PGV:H251	14:P:103:PGV:H91	1.80	0.64
14:L:308:PGV:H72	5:F:27:VAL:HG22	1.79	0.64
3:M:94:ALA:HB2	3:M:181:PRO:HG2	1.80	0.64
18:M:410:CDL:HA4	15:Y:401:BCL:HMC3	1.80	0.63
2:L:91:VAL:HG12	17:L:306:UQ8:H8	1.81	0.63
8:0:34:VAL:HG13	14:0:104:PGV:H271	1.80	0.63
17:L:306:UQ8:H1MA	13:9:101:LMT:H72	1.80	0.63
5:Y:29:HIS:CE1	15:Z:103:BCL:HMD1	2.34	0.63
21:V:102:CRT:H372	7:W:29:HIS:CG	2.34	0.63
15:Z:103:BCL:H121	8:2:32:VAL:HG11	1.81	0.62
1:C:108:CYS:SG	9:C:401:HEC:CBB	2.84	0.62
3:M:153:ALA:HA	3:M:277:VAL:HG21	1.80	0.62
4:H:144:ARG:NH2	4:H:200:GLU:OE1	2.32	0.62
14:H:303:PGV:H22	7:O:33:LEU:HD13	1.81	0.62
5:F:8:TYR:HD1	13:F:102:LMT:H5'	1.64	0.62
5:F:29:HIS:CE1	15:G:102:BCL:HMD1	2.34	0.62
2:L:235:PHE:HB2	18:M:402:CDL:H632	1.82	0.62
14:B:103:PGV:H201	8:E:43:TRP:HB2	1.81	0.62
3:M:289:THR:HB	14:H:304:PGV:H32	1.82	0.62
14:6:102:PGV:H311	14:8:101:PGV:H12	1.82	0.62
2:L:2:ALA:N	18:H:302:CDL:OA3	2.33	0.62
3:M:106:LEU:HD13	7:S:33:LEU:HB3	1.81	0.62
4:H:37:LYS:NZ	18:H:302:CDL:OB4	2.31	0.62
8:6:47:ILE:HG21	14:8:101:PGV:H202	1.81	0.61
8:0:46:TRP:CD2	15:0:102:BCL:H2C	2.35	0.61
3:M:274:ILE:HD13	18:M:407:CDL:H731	1.82	0.61
5:Q:29:HIS:CE1	15:R:102:BCL:HMD1	2.35	0.61
5:Q:37:ARG:O	6:R:44:ARG:NH1	2.29	0.61
5:Y:9:ASP:HB2	15:Y:401:BCL:HED2	1.80	0.61
14:V:105:PGV:H012	14:V:105:PGV:H042	1.82	0.61
6:Z:46:TRP:CD2	15:Z:103:BCL:H2C	2.35	0.61
5:U:33:LEU:O	5:U:39:ASN:ND2	2.34	0.61
6:8:46:TRP:CD2	15:8:103:BCL:H2C	2.36	0.61
6:G:47:ILE:HG21	14:G:103:PGV:H202	1.81	0.61
5:A:29:HIS:CE1	15:B:102:BCL:HMD1	2.36	0.60
21:4:101:CRT:H35	15:5:102:BCL:HMB2	1.81	0.60
15:Y:401:BCL:H112	15:Y:401:BCL:HAC2	1.84	0.60
3:M:38:TRP:HB3	18:M:410:CDL:HB22	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:P:46:TRP:CD2	15:P:101:BCL:H2C	2.37	0.60
7:S:32:LEU:HD11	15:T:101:BCL:HHD	1.83	0.60
8:0:26:PHE:HE1	15:0:102:BCL:H42	1.66	0.60
1:C:71:PRO:HG2	1:C:76:ILE:HD11	1.84	0.60
7:I:26:LEU:HD13	14:I:101:PGV:H312	1.84	0.60
14:R:104:PGV:H11	14:R:104:PGV:H232	1.84	0.60
5:U:12:ARG:NH1	18:U:101:CDL:OA4	2.35	0.59
8:J:46:TRP:CD2	15:J:101:BCL:H2C	2.37	0.59
8:2:30:ILE:HD11	15:2:101:BCL:H11	1.84	0.59
14:H:304:PGV:H261	13:O:101:LMT:H41	1.84	0.59
7:I:6:LYS:HD3	21:N:102:CRT:H1M1	1.84	0.59
7:S:7:ILE:HD11	21:V:102:CRT:H32A	1.84	0.59
7:9:21:MET:HB3	15:9:102:BCL:H12	1.83	0.59
8:2:46:TRP:CD2	15:2:101:BCL:H2C	2.37	0.59
15:T:101:BCL:HMB1	14:V:101:PGV:H271	1.83	0.59
7:5:29:HIS:CE1	15:6:101:BCL:HMD1	2.38	0.59
14:C:409:PGV:H52	14:3:101:PGV:H82	1.84	0.59
5:F:11:ARG:HE	18:F:101:CDL:H1	1.67	0.59
6:G:18:PHE:HA	21:G:101:CRT:H6	1.84	0.59
15:R:102:BCL:H91	15:S:101:BCL:HED3	1.85	0.59
13:C:408:LMT:H6D	7:5:42:GLN:HG3	1.85	0.59
15:M:403:BCL:H161	16:M:404:BPH:H4C2	1.84	0.59
6:V:46:TRP:CD2	15:V:103:BCL:H2C	2.38	0.59
6:4:46:TRP:CD2	15:4:102:BCL:H2C	2.38	0.59
7:D:22:ALA:HA	15:D:101:BCL:H43	1.84	0.58
5:F:12:ARG:NH1	18:F:101:CDL:OA3	2.35	0.58
6:N:36:ALA:HB1	14:N:101:PGV:H292	1.85	0.58
2:L:212:GLU:HB3	17:L:304:UQ8:H4MB	1.84	0.58
7:S:33:LEU:O	7:S:39:ASN:ND2	2.36	0.58
2:L:43:ALA:HA	16:L:303:BPH:H9C3	1.85	0.58
6:B:46:TRP:CD2	15:B:102:BCL:H2C	2.39	0.58
15:G:102:BCL:HMB1	14:G:103:PGV:H311	1.85	0.58
4:H:214:LEU:HB2	4:H:258:ILE:HD13	1.84	0.58
6:4:41:TRP:CD1	14:4:104:PGV:H221	2.38	0.58
7:O:29:HIS:CE1	15:P:101:BCL:HMD1	2.38	0.58
7:9:29:HIS:CE1	15:0:102:BCL:HMD1	2.38	0.58
2:L:140:GLY:HA3	13:L:301:LMT:H3B	1.85	0.58
14:H:303:PGV:H32	14:H:303:PGV:H211	1.85	0.58
7:D:8:LEU:HD13	18:F:101:CDL:H512	1.86	0.58
12:C:407:PLM:H42	14:L:309:PGV:H61	1.86	0.57
21:G:101:CRT:H35	15:I:102:BCL:HMB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:X:46:TRP:CD2	15:X:101:BCL:H2C	2.39	0.57
5:3:33:LEU:O	5:3:39:ASN:ND2	2.37	0.57
21:B:101:CRT:H292	15:D:102:BCL:HBB3	1.86	0.57
14:G:103:PGV:H011	8:J:43:TRP:HA	1.85	0.57
6:N:46:TRP:CD2	15:N:103:BCL:H2C	2.40	0.57
7:1:29:HIS:CE1	15:2:101:BCL:HMD1	2.39	0.57
2:L:199:ASN:HB3	18:M:407:CDL:HA22	1.86	0.57
14:L:305:PGV:H92	14:L:308:PGV:H11	1.87	0.57
3:M:97:PRO:HD3	3:M:176:PRO:HB3	1.86	0.57
18:M:408:CDL:HA62	5:U:12:ARG:HD2	1.87	0.57
1:C:81:GLU:OE2	1:C:129:ARG:NH1	2.38	0.57
2:L:197:VAL:HG13	2:L:207:LYS:HB2	1.85	0.57
6:R:46:TRP:CD2	15:R:102:BCL:H2C	2.40	0.57
8:T:46:TRP:CD2	15:T:101:BCL:H2C	2.40	0.57
7:1:6:LYS:HB2	21:4:101:CRT:H1M1	1.87	0.57
7:1:33:LEU:O	7:1:39:ASN:ND2	2.38	0.57
7:5:46:TYR:OH	8:6:45:PRO:O	2.21	0.57
5:K:29:HIS:CE1	15:N:103:BCL:HMD1	2.39	0.56
3:M:7:ILE:HG23	18:M:402:CDL:H611	1.86	0.56
5:U:37:ARG:O	6:V:44:ARG:NH1	2.33	0.56
2:L:130:THR:HG23	2:L:249:ILE:HD13	1.87	0.56
6:G:46:TRP:CD2	15:G:102:BCL:H2C	2.39	0.56
8:P:47:ILE:HG21	14:P:102:PGV:H202	1.88	0.56
5:U:12:ARG:HG2	18:U:101:CDL:HA32	1.88	0.56
2:L:170:ASN:HB3	2:L:173:HIS:HB3	1.86	0.56
15:V:103:BCL:H141	8:X:29:TYR:HA	1.85	0.56
8:6:46:TRP:CD2	15:6:101:BCL:H2C	2.40	0.56
4:H:16:MET:HB3	14:H:303:PGV:H311	1.88	0.56
2:L:77:LEU:HB3	7:9:34:SER:HB3	1.88	0.56
15:I:103:BCL:H71	15:J:101:BCL:H93	1.88	0.56
5:Q:30:PHE:HD2	13:Q:101:LMT:H72	1.71	0.56
3:M:263:GLU:OE2	4:H:68:LYS:NZ	2.38	0.56
7:S:22:ALA:HB2	15:S:101:BCL:H43	1.86	0.56
1:C:279:ARG:NE	1:C:350:ASP:OD2	2.30	0.56
7:D:21:MET:HB3	15:D:101:BCL:H12	1.87	0.56
6:R:11:SER:OG	6:R:14:GLU:OE1	2.23	0.56
7:W:29:HIS:CE1	15:X:101:BCL:HMD1	2.41	0.56
14:H:303:PGV:H31	5:K:31:ILE:HG23	1.88	0.55
7:9:20:GLY:HA3	15:9:103:BCL:H93	1.88	0.55
16:M:404:BPH:HBC3	16:M:404:BPH:HHD	1.88	0.55
5:Y:7:LEU:HD11	7:1:11:ARG:HB2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:3:29:HIS:CE1	15:4:102:BCL:HMD1	2.40	0.55
4:H:203:LEU:O	4:H:207:GLY:N	2.37	0.55
15:G:102:BCL:HBB1	14:G:103:PGV:H262	1.87	0.55
15:Z:103:BCL:H143	15:1:102:BCL:HED3	1.88	0.55
15:L:311:BCL:H162	21:M:406:CRT:H133	1.88	0.55
7:D:32:LEU:HD11	15:E:101:BCL:HHD	1.88	0.55
15:P:101:BCL:HBB2	14:P:102:PGV:H291	1.87	0.55
5:Q:10:PRO:HG3	6:R:10:LEU:HD11	1.88	0.55
1:C:50:ARG:NH1	14:C:409:PGV:O14	2.40	0.55
5:F:11:ARG:NE	18:F:101:CDL:H1	2.22	0.55
4:H:85:LYS:NZ	4:H:125:LYS:O	2.34	0.55
4:H:138:GLN:HE22	4:H:249:ARG:HG2	1.72	0.55
5:F:37:ARG:O	6:G:44:ARG:NH1	2.34	0.55
21:G:101:CRT:H372	7:I:29:HIS:CG	2.42	0.55
1:C:108:CYS:CB	9:C:401:HEC:HAB	2.35	0.55
15:E:101:BCL:H161	15:F:103:BCL:HMB2	1.89	0.55
14:L:309:PGV:H32	14:1:101:PGV:H201	1.89	0.55
15:N:103:BCL:H111	8:P:29:TYR:HA	1.89	0.55
6:Z:18:PHE:HA	21:Z:102:CRT:H6	1.87	0.55
2:L:5:ASP:HB2	4:H:90:LEU:HD11	1.88	0.54
7:D:29:HIS:CE1	15:E:101:BCL:HMD1	2.42	0.54
7:I:29:HIS:CE1	15:J:101:BCL:HMD1	2.42	0.54
21:V:102:CRT:H402	15:W:101:BCL:HBB2	1.90	0.54
15:S:102:BCL:H2	15:T:101:BCL:H52	1.89	0.54
14:C:409:PGV:H32	14:3:101:PGV:H62	1.89	0.54
3:M:240:ASP:OD1	4:H:85:LYS:NZ	2.38	0.54
7:O:21:MET:HE2	15:O:103:BCL:H72	1.89	0.54
3:M:62:LEU:HD22	15:S:102:BCL:H171	1.88	0.54
7:1:40:TRP:CZ2	15:1:102:BCL:HHC	2.43	0.54
14:4:103:PGV:H211	8:6:39:LEU:HB3	1.89	0.54
21:B:101:CRT:H35	15:D:101:BCL:HMB2	1.89	0.54
5:F:4:LEU:HD11	15:I:102:BCL:H191	1.90	0.54
6:N:43:TRP:HB2	14:N:101:PGV:H221	1.90	0.54
3:M:316:ASP:HB3	3:M:319:ALA:HB2	1.90	0.54
14:H:304:PGV:H322	14:H:304:PGV:H12	1.90	0.54
6:V:36:ALA:HB1	14:V:101:PGV:H262	1.90	0.54
5:7:37:ARG:O	6:8:44:ARG:NH1	2.38	0.54
2:L:220:ILE:HD11	17:L:304:UQ8:H10B	1.89	0.54
6:V:18:PHE:HA	21:V:102:CRT:H6	1.89	0.54
7:1:20:GLY:HA3	15:1:103:BCL:H93	1.90	0.54
8:E:46:TRP:CD2	15:E:101:BCL:H2C	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:O:22:ALA:HA	15:O:102:BCL:H43	1.91	0.53
5:Q:7:LEU:O	7:S:11:ARG:NH1	2.37	0.53
5:U:15:ILE:HG12	18:U:101:CDL:H521	1.90	0.53
15:2:101:BCL:H122	15:3:102:BCL:HHB	1.90	0.53
15:L:310:BCL:H92	18:H:302:CDL:H831	1.91	0.53
3:M:179:ILE:O	3:M:182:HIS:ND1	2.41	0.53
6:G:34:VAL:HG13	14:G:104:PGV:H241	1.91	0.53
15:J:101:BCL:H162	15:K:102:BCL:HMB2	1.90	0.53
4:H:265:GLY:O	4:H:273:ARG:NH1	2.38	0.53
7:5:22:ALA:HA	15:5:102:BCL:H43	1.90	0.53
1:C:93:ARG:NH1	1:C:331:ASP:O	2.33	0.53
14:T:102:PGV:H011	14:T:102:PGV:H342	1.90	0.53
2:L:62:TRP:HB3	2:L:151:LEU:HD23	1.89	0.53
4:H:234:THR:HG22	4:H:236:GLN:H	1.74	0.53
14:G:103:PGV:H211	8:J:43:TRP:HB2	1.90	0.53
5:A:7:LEU:HB3	7:D:11:ARG:HG3	1.89	0.53
7:I:20:GLY:HA3	15:I:103:BCL:H101	1.90	0.53
6:R:18:PHE:HA	21:R:101:CRT:H6	1.91	0.53
7:S:6:LYS:HA	8:T:10:VAL:HG21	1.91	0.53
4:H:250:ILE:HG13	4:H:254:GLU:HB3	1.90	0.53
7:5:24:LEU:HD23	15:6:101:BCL:HED3	1.90	0.53
2:L:238:LEU:HD12	18:M:402:CDL:H572	1.90	0.53
18:M:410:CDL:H131	15:Y:401:BCL:HMC2	1.90	0.52
7:1:22:ALA:HA	15:1:102:BCL:H43	1.90	0.52
6:8:48:PRO:HG3	7:9:43:GLY:HA2	1.90	0.52
4:H:10:TYR:HB3	7:I:34:SER:HB2	1.90	0.52
4:H:38:ARG:NH2	4:H:66:SER:O	2.42	0.52
1:C:151:VAL:HG12	1:C:155:THR:HG21	1.91	0.52
6:N:10:LEU:HG	6:N:14:GLU:HB2	1.90	0.52
2:L:273:SER:HB2	5:Y:34:SER:HB3	1.92	0.52
14:E:102:PGV:H282	6:G:36:ALA:HB1	1.90	0.52
1:C:45:GLU:OE2	1:C:320:GLN:NE2	2.43	0.52
16:L:303:BPH:HBB3	16:L:303:BPH:HHC	1.92	0.52
13:F:102:LMT:H22	15:I:102:BCL:H143	1.92	0.52
7:I:24:LEU:HD23	15:J:101:BCL:HED3	1.91	0.52
18:L:312:CDL:H512	7:O:19:VAL:HG11	1.92	0.52
16:M:404:BPH:HHC	16:M:404:BPH:HBB3	1.91	0.52
5:F:7:LEU:HB3	7:I:11:ARG:HD3	1.90	0.52
5:Q:23:VAL:HG21	15:S:101:BCL:H193	1.90	0.52
21:8:102:CRT:H372	7:9:29:HIS:CG	2.45	0.52
6:B:34:VAL:HG13	14:B:104:PGV:H251	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:V:101:PGV:O05	14:V:101:PGV:O02	2.26	0.52
15:4:102:BCL:HBB2	14:4:103:PGV:H282	1.91	0.52
16:L:303:BPH:HHC	16:L:303:BPH:CBB	2.39	0.52
1:C:353:THR:HG23	1:C:356:LEU:HD12	1.92	0.51
14:N:105:PGV:H11	14:N:105:PGV:H231	1.93	0.51
15:L:310:BCL:HMA2	14:H:301:PGV:H92	1.92	0.51
4:H:76:ARG:NH2	4:H:127:GLU:OE2	2.43	0.51
4:H:179:LYS:HB3	4:H:235:GLY:HA3	1.90	0.51
5:K:20:TRP:HE3	15:O:102:BCL:H172	1.75	0.51
2:L:60:ASN:O	2:L:64:ILE:HG13	2.10	0.51
2:L:219:VAL:HG12	2:L:220:ILE:HG23	1.92	0.51
5:A:19:SER:HB3	15:D:101:BCL:H193	1.93	0.51
7:D:33:LEU:O	7:D:39:ASN:ND2	2.44	0.51
12:C:407:PLM:H61	14:3:101:PGV:H251	1.92	0.51
18:M:407:CDL:H111	4:H:31:TYR:CE2	2.46	0.51
15:A:101:BCL:HMB2	15:0:102:BCL:H162	1.92	0.51
21:Z:102:CRT:H292	15:1:103:BCL:HBB3	1.92	0.51
1:C:44:GLU:N	1:C:253:THR:HG21	2.26	0.51
2:L:119:VAL:HG21	18:M:402:CDL:H512	1.91	0.51
6:V:48:PRO:HG3	7:W:43:GLY:HA2	1.93	0.51
5:7:8:TYR:OH	7:9:11:ARG:O	2.23	0.51
12:C:407:PLM:H62	14:L:309:PGV:H92	1.93	0.51
6:V:22:PHE:CD2	21:V:102:CRT:H14	2.46	0.51
6:4:46:TRP:HZ2	14:4:104:PGV:H72	1.75	0.51
1:C:101:TRP:CD1	1:C:154:TYR:HB2	2.46	0.51
3:M:159:ALA:HA	3:M:163:ILE:HB	1.93	0.51
18:M:407:CDL:H111	4:H:31:TYR:CZ	2.45	0.51
18:M:408:CDL:HA21	7:W:12:ARG:HH11	1.76	0.51
7:9:21:MET:HE1	15:0:102:BCL:H93	1.93	0.51
2:L:130:THR:HA	2:L:134:PHE:HB2	1.92	0.51
7:D:20:GLY:HA3	15:D:102:BCL:H93	1.92	0.51
14:H:304:PGV:H11	14:H:304:PGV:H291	1.93	0.50
7:1:7:ILE:HD11	21:4:101:CRT:H32A	1.93	0.50
3:M:10:ARG:HG2	4:H:222:VAL:HB	1.93	0.50
8:X:41:TRP:HE1	14:X:102:PGV:H062	1.75	0.50
2:L:10:TYR:HA	4:H:119:GLY:HA2	1.93	0.50
4:H:4:THR:OG1	14:H:303:PGV:O04	2.27	0.50
15:4:102:BCL:H13	15:5:103:BCL:C4B	2.42	0.50
3:M:65:ILE:HD11	16:M:404:BPH:H101	1.93	0.50
4:H:61:PHE:HD2	18:F:101:CDL:H162	1.76	0.50
7:I:30:PHE:HB3	14:I:101:PGV:H102	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Q:30:PHE:CD2	13:Q:101:LMT:H72	2.46	0.50
5:3:22:ALA:HB2	15:3:102:BCL:H43	1.93	0.50
3:M:267:ARG:NH2	18:M:407:CDL:OA4	2.45	0.50
15:N:103:BCL:H91	8:P:28:VAL:HG12	1.94	0.50
7:D:2:TRP:HZ3	7:D:6:LYS:HE2	1.75	0.50
7:W:4:MET:HE3	7:W:4:MET:HA	1.93	0.50
14:Z:104:PGV:H232	14:Z:105:PGV:H32	1.94	0.50
1:C:223:HIS:HB3	1:C:226:GLU:OE1	2.12	0.50
5:F:32:LEU:HD11	15:G:102:BCL:HHD	1.94	0.50
5:K:11:ARG:HH22	13:K:101:LMT:H4'	1.77	0.50
15:W:101:BCL:HMD1	8:X:37:HIS:CE1	2.47	0.50
1:C:76:ILE:HD12	1:C:88:VAL:HG21	1.94	0.50
2:L:27:ILE:HG23	18:H:302:CDL:H311	1.93	0.50
3:M:43:ILE:HD11	18:M:409:CDL:H542	1.94	0.50
21:Z:102:CRT:H372	7:1:29:HIS:CG	2.46	0.50
5:7:12:ARG:NH2	13:7:102:LMT:O5B	2.45	0.49
2:L:66:ILE:HB	2:L:148:TYR:HB2	1.94	0.49
7:W:2:TRP:HZ3	7:W:6:LYS:HE2	1.77	0.49
14:1:101:PGV:H21	5:3:33:LEU:HD22	1.95	0.49
4:H:58:LYS:HE2	18:F:101:CDL:HB22	1.94	0.49
21:B:101:CRT:H372	7:D:29:HIS:CG	2.47	0.49
7:D:6:LYS:HD2	21:G:101:CRT:H1M1	1.95	0.49
6:G:48:PRO:HG3	7:I:43:GLY:HA2	1.93	0.49
15:Z:103:BCL:H102	8:2:32:VAL:HG11	1.95	0.49
5:7:33:LEU:O	13:7:101:LMT:H6E	2.12	0.49
14:G:103:PGV:H221	8:J:39:LEU:HB3	1.94	0.49
15:N:103:BCL:H92	8:P:32:VAL:HG21	1.95	0.49
18:M:409:CDL:OB4	4:H:224:TYR:OH	2.28	0.49
6:4:46:TRP:CE3	15:4:102:BCL:HAC2	2.47	0.49
5:7:34:SER:HB3	13:9:101:LMT:H6E	1.94	0.49
2:L:133:VAL:HA	2:L:142:TRP:HZ3	1.77	0.49
2:L:180:PHE:CD2	2:L:240:ALA:HB1	2.48	0.49
2:L:61:LEU:HD22	14:L:308:PGV:H231	1.94	0.49
13:C:408:LMT:H92	14:C:409:PGV:H71	1.94	0.49
2:L:36:GLY:HA2	2:L:39:THR:HG22	1.96	0.48
2:L:60:ASN:ND2	3:M:302:GLY:O	2.46	0.48
15:G:102:BCL:H42	15:I:103:BCL:HBB1	1.95	0.48
8:P:41:TRP:CD1	14:P:103:PGV:H202	2.48	0.48
2:L:180:PHE:O	2:L:184:THR:HG22	2.13	0.48
5:A:10:PRO:HB3	6:B:18:PHE:CE1	2.48	0.48
15:A:101:BCL:H13	6:B:28:ILE:HD12	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:K:102:BCL:H152	6:N:28:ILE:HG13	1.94	0.48
5:7:34:SER:HA	13:7:101:LMT:H1B	1.95	0.48
3:M:57:GLY:O	3:M:61:ILE:HG12	2.13	0.48
7:I:7:ILE:HD11	21:N:102:CRT:H32A	1.96	0.48
7:5:15:VAL:HA	15:5:102:BCL:H192	1.95	0.48
4:H:174:LEU:HD11	4:H:227:LYS:HD2	1.95	0.48
5:Q:4:LEU:HD21	15:S:102:BCL:HMD3	1.95	0.48
7:5:6:LYS:HD3	21:8:102:CRT:H1M1	1.96	0.48
2:L:30:PHE:HZ	18:H:302:CDL:H712	1.79	0.48
15:9:102:BCL:H3C	14:0:101:PGV:H231	1.95	0.48
2:L:118:PRO:HB2	18:M:402:CDL:H322	1.96	0.48
2:L:190:HIS:ND1	17:L:304:UQ8:O2	2.31	0.48
3:M:271:TRP:CZ2	18:M:407:CDL:H121	2.49	0.48
5:Y:4:LEU:HD22	15:1:103:BCL:HAC1	1.96	0.48
15:7:103:BCL:H192	15:7:103:BCL:H162	1.72	0.48
12:C:407:PLM:H31	14:L:309:PGV:H41	1.96	0.48
3:M:161:GLY:HA3	21:M:406:CRT:H292	1.95	0.48
21:4:101:CRT:H293	15:5:102:BCL:H92	1.95	0.48
15:4:102:BCL:H93	15:5:102:BCL:HED3	1.96	0.48
7:5:37:ASN:O	8:6:44:ARG:NH1	2.45	0.48
7:D:7:ILE:HD11	21:G:101:CRT:H32A	1.95	0.48
13:F:102:LMT:H12	13:F:102:LMT:H2'	1.66	0.48
7:1:24:LEU:HD13	15:1:103:BCL:H142	1.95	0.48
14:L:305:PGV:H91	14:L:308:PGV:H242	1.94	0.48
4:H:277:PHE:O	5:7:12:ARG:HD3	2.14	0.48
15:L:311:BCL:HMB1	15:L:311:BCL:HBB2	1.96	0.47
5:A:8:TYR:OH	7:D:11:ARG:O	2.25	0.47
15:R:102:BCL:H61	15:R:102:BCL:H41	1.70	0.47
18:U:101:CDL:HA62	18:U:101:CDL:H131	1.96	0.47
1:C:330:ASP:OD1	1:C:330:ASP:N	2.47	0.47
16:L:303:BPH:H171	14:L:305:PGV:H342	1.95	0.47
5:A:41:VAL:HB	7:9:35:THR:HG21	1.96	0.47
6:R:48:PRO:HG3	7:S:43:GLY:HA2	1.95	0.47
15:Y:403:BCL:H62	15:Y:403:BCL:H41	1.48	0.47
6:Z:48:PRO:HG3	7:1:43:GLY:HA2	1.97	0.47
5:3:37:ARG:O	6:4:44:ARG:NH1	2.38	0.47
15:L:311:BCL:HHC	15:M:403:BCL:H42	1.95	0.47
1:C:42:GLY:O	2:L:163:GLN:NE2	2.43	0.47
5:Y:8:TYR:OH	7:1:14:VAL:HB	2.15	0.47
21:8:102:CRT:H292	15:9:103:BCL:HBB3	1.97	0.47
7:5:24:LEU:HB2	15:5:103:BCL:H142	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:F:103:BCL:HMD1	6:G:37:HIS:CE1	2.50	0.47
15:P:101:BCL:H11	14:P:103:PGV:H171	1.96	0.47
14:P:102:PGV:H011	6:R:43:TRP:HA	1.96	0.47
6:R:34:VAL:HG13	14:R:104:PGV:H251	1.96	0.47
7:S:40:TRP:CZ2	15:S:101:BCL:HHC	2.49	0.47
15:A:101:BCL:HHB	15:0:102:BCL:H122	1.97	0.47
15:U:102:BCL:H202	15:U:102:BCL:H162	1.72	0.47
2:L:235:PHE:HB2	18:M:402:CDL:H601	1.97	0.47
17:L:304:UQ8:H25	17:L:304:UQ8:H22	1.67	0.47
8:T:13:GLU:HG2	8:T:14:GLU:N	2.29	0.47
6:Z:53:TYR:HA	14:Z:104:PGV:H05	1.97	0.47
15:1:102:BCL:HMD1	8:2:37:HIS:CE1	2.50	0.47
5:F:12:ARG:HD3	13:F:102:LMT:H6E	1.97	0.47
5:K:4:LEU:HD13	15:O:103:BCL:HMD3	1.96	0.47
13:5:101:LMT:H3'	13:7:101:LMT:H6D	1.96	0.47
21:8:102:CRT:H402	15:9:102:BCL:HBB2	1.96	0.47
14:8:104:PGV:H212	14:8:104:PGV:H272	1.96	0.47
3:M:98:PRO:HG3	3:M:107:PRO:HG3	1.97	0.46
5:A:20:TRP:HB2	15:D:101:BCL:H13	1.96	0.46
5:K:9:ASP:HB3	5:K:12:ARG:HB2	1.96	0.46
5:7:17:ILE:HG12	15:9:102:BCL:H91	1.95	0.46
14:H:304:PGV:H52	14:H:304:PGV:H252	1.97	0.46
15:W:101:BCL:H62	15:W:101:BCL:H41	1.59	0.46
17:L:304:UQ8:H15	17:L:304:UQ8:H12	1.70	0.46
15:L:311:BCL:HED3	3:M:183:LEU:HD11	1.97	0.46
15:9:102:BCL:HMD1	8:0:37:HIS:CE1	2.51	0.46
1:C:156:CYS:O	1:C:317:TYR:OH	2.26	0.46
3:M:53:LEU:HD11	18:U:101:CDL:H312	1.96	0.46
15:V:103:BCL:H101	15:V:103:BCL:H61	1.62	0.46
1:C:113:ASP:OD2	1:C:119:SER:OG	2.24	0.46
12:C:407:PLM:H72	2:L:262:TRP:CZ2	2.51	0.46
2:L:60:ASN:HB3	2:L:63:GLN:HB2	1.97	0.46
18:M:410:CDL:H312	5:Y:16:GLY:HA2	1.98	0.46
4:H:112:ASN:HB3	4:H:115:VAL:HG22	1.98	0.46
5:3:10:PRO:HB3	6:4:18:PHE:CZ	2.49	0.46
15:5:102:BCL:H13	15:5:103:BCL:HMC3	1.96	0.46
2:L:98:ILE:HG21	18:M:402:CDL:H191	1.96	0.46
4:H:25:LEU:O	4:H:29:ILE:HG12	2.15	0.46
8:2:46:TRP:CE3	15:2:101:BCL:HAC2	2.50	0.46
15:I:102:BCL:H61	15:I:102:BCL:H41	1.64	0.46
1:C:170:GLU:HG2	1:C:192:LYS:NZ	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:241:MET:HB3	9:C:403:HEC:C4B	2.46	0.46
4:H:61:PHE:CE1	13:H:305:LMT:H6D	2.51	0.46
15:V:103:BCL:H143	15:V:103:BCL:H111	1.69	0.46
14:Z:104:PGV:H251	8:2:39:LEU:HB3	1.98	0.46
5:A:37:ARG:O	6:B:44:ARG:NH1	2.40	0.46
15:Y:403:BCL:HMD1	6:Z:37:HIS:CE1	2.51	0.46
1:C:251:ASN:H	1:C:254:THR:HG23	1.81	0.45
21:N:102:CRT:H372	7:O:29:HIS:CG	2.51	0.45
15:2:101:BCL:CAB	14:2:103:PGV:H61	2.46	0.45
1:C:77:TYR:HB3	9:C:401:HEC:CGA	2.46	0.45
5:Y:4:LEU:HD21	15:1:102:BCL:H202	1.98	0.45
15:5:103:BCL:H143	15:5:103:BCL:H161	1.79	0.45
15:D:101:BCL:H141	15:D:101:BCL:H161	1.79	0.45
5:Q:32:LEU:HD11	15:R:102:BCL:HHD	1.98	0.45
7:W:40:TRP:CZ2	15:W:101:BCL:HHC	2.52	0.45
15:8:103:BCL:H121	15:9:103:BCL:C2B	2.47	0.45
15:8:103:BCL:H203	15:9:103:BCL:HAC2	1.99	0.45
15:L:310:BCL:H192	15:L:310:BCL:H161	1.79	0.45
7:I:34:SER:HB3	14:I:101:PGV:H62	1.97	0.45
15:T:101:BCL:H142	15:T:101:BCL:H111	1.75	0.45
7:W:8:LEU:HD23	5:Y:11:ARG:HG3	1.99	0.45
2:L:193:LEU:HD22	2:L:216:PHE:CE2	2.51	0.45
3:M:286:LEU:HD23	14:H:304:PGV:H101	1.99	0.45
21:R:101:CRT:H372	7:S:29:HIS:CG	2.52	0.45
15:S:101:BCL:H62	15:S:101:BCL:H41	1.53	0.45
8:T:48:PRO:HB3	5:U:43:GLY:HA2	1.98	0.45
7:W:22:ALA:HA	15:W:101:BCL:H43	1.99	0.45
7:9:40:TRP:CE3	15:9:102:BCL:HBC3	2.51	0.45
15:A:101:BCL:HMD1	6:B:37:HIS:CE1	2.51	0.45
6:G:46:TRP:CE3	15:G:102:BCL:HAC2	2.52	0.45
15:N:103:BCL:H121	15:O:103:BCL:C4B	2.46	0.45
15:O:102:BCL:HMD1	8:P:37:HIS:CE1	2.52	0.45
7:1:18:HIS:CE1	15:1:102:BCL:H192	2.52	0.45
7:5:6:LYS:HB2	21:8:102:CRT:H1M1	1.99	0.45
14:8:104:PGV:H62	14:8:104:PGV:H232	1.99	0.45
7:9:22:ALA:HA	15:9:102:BCL:H43	1.97	0.45
1:C:315:CYS:O	1:C:322:PRO:HB3	2.17	0.45
9:C:403:HEC:HMC1	9:C:403:HEC:HBC3	1.98	0.45
14:N:101:PGV:H252	14:N:101:PGV:H282	1.67	0.45
7:1:40:TRP:CE3	15:1:102:BCL:HBC2	2.51	0.45
1:C:222:PRO:HA	3:M:292:GLU:HB2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:228:ARG:HB3	4:H:219:PHE:CE2	2.51	0.45
15:F:103:BCL:H151	6:G:28:ILE:HG21	1.98	0.45
14:P:103:PGV:H82	14:P:103:PGV:H51	1.81	0.45
14:T:102:PGV:H212	14:T:102:PGV:H282	1.97	0.45
6:Z:34:VAL:HG13	14:Z:105:PGV:H262	1.98	0.45
2:L:46:GLY:HA3	16:L:303:BPH:H9C1	1.99	0.45
4:H:61:PHE:HZ	13:H:305:LMT:H12	1.82	0.45
4:H:70:PHE:HB2	4:H:78:ILE:HG13	1.99	0.45
14:H:304:PGV:H62	14:H:304:PGV:H31	1.77	0.45
6:N:53:TYR:CD2	7:O:43:GLY:HA3	2.52	0.45
15:Q:102:BCL:HAA2	15:R:102:BCL:OBD	2.17	0.45
15:V:103:BCL:HMB1	15:V:103:BCL:HBB2	1.99	0.45
15:Z:103:BCL:H18	15:1:103:BCL:C4B	2.46	0.45
15:4:102:BCL:H121	8:6:28:VAL:HG12	1.98	0.45
15:5:102:BCL:H203	15:5:102:BCL:H143	1.99	0.45
15:L:311:BCL:HED1	3:M:179:ILE:HG23	1.99	0.44
18:M:402:CDL:H521	18:M:409:CDL:H342	1.99	0.44
7:I:33:LEU:O	7:I:39:ASN:ND2	2.50	0.44
5:Q:7:LEU:HB3	7:S:11:ARG:HG3	1.99	0.44
15:Q:102:BCL:H91	15:Q:102:BCL:H111	1.70	0.44
15:U:102:BCL:HMD1	6:V:37:HIS:CE1	2.52	0.44
6:8:41:TRP:CG	14:8:104:PGV:H202	2.52	0.44
15:9:102:BCL:H41	15:9:102:BCL:H61	1.50	0.44
1:C:30:PRO:O	1:C:50:ARG:NH2	2.50	0.44
1:C:115:ASN:OD1	1:C:115:ASN:N	2.46	0.44
15:I:103:BCL:H202	13:K:101:LMT:H2'	1.99	0.44
1:C:56:LEU:O	1:C:158:ARG:NH1	2.48	0.44
2:L:2:ALA:HB2	4:H:58:LYS:HD2	2.00	0.44
16:L:303:BPH:H202	15:L:310:BCL:C1B	2.48	0.44
15:Z:103:BCL:HBB2	15:Z:103:BCL:HMB1	1.98	0.44
20:M:405:MQ8:H352	20:M:405:MQ8:H312	1.67	0.44
20:M:405:MQ8:H411	20:M:405:MQ8:H471	2.00	0.44
4:H:121:ALA:HA	4:H:260:GLY:O	2.17	0.44
14:N:104:PGV:H242	8:P:39:LEU:HB3	1.99	0.44
8:P:13:GLU:O	8:P:17:GLU:HG3	2.18	0.44
14:Z:105:PGV:H242	14:Z:105:PGV:H212	1.79	0.44
2:L:105:ALA:HB2	18:M:402:CDL:H311	1.98	0.44
15:M:403:BCL:H192	15:M:403:BCL:H162	1.74	0.44
15:D:102:BCL:H141	15:D:102:BCL:H162	1.80	0.44
15:J:101:BCL:H122	15:K:102:BCL:HHB	1.99	0.44
15:V:103:BCL:HBB2	14:V:104:PGV:H271	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2:46:TRP:NE1	15:2:101:BCL:HHC	2.32	0.44
14:2:102:PGV:H222	6:4:43:TRP:HB2	1.99	0.44
7:D:12:ARG:NH2	18:F:101:CDL:OB3	2.43	0.44
15:I:103:BCL:HBC2	15:I:103:BCL:H2C	1.75	0.44
6:N:18:PHE:HA	21:N:102:CRT:H6	2.00	0.44
7:1:10:TYR:OH	15:1:103:BCL:HMD1	2.17	0.44
8:0:10:VAL:HG23	8:0:14:GLU:HG3	1.99	0.44
5:A:7:LEU:O	7:D:11:ARG:HD2	2.18	0.44
15:D:101:BCL:H61	15:D:101:BCL:H41	1.45	0.44
15:G:102:BCL:H141	8:J:29:TYR:HA	2.00	0.44
8:X:46:TRP:HZ2	14:X:102:PGV:H72	1.82	0.44
15:Z:103:BCL:H72	15:Z:103:BCL:H111	1.36	0.44
17:L:306:UQ8:H20	17:L:306:UQ8:H17A	1.73	0.44
4:H:139:LYS:NZ	4:H:190:ASP:OD2	2.51	0.44
15:I:102:BCL:H201	15:I:103:BCL:H3C	2.00	0.44
15:P:101:BCL:H162	15:P:101:BCL:H121	1.66	0.44
14:T:102:PGV:H101	14:T:102:PGV:H72	1.82	0.44
5:7:40:TRP:CD1	5:7:41:VAL:HG13	2.53	0.44
1:C:109:THR:HA	1:C:112:HIS:O	2.18	0.44
6:B:22:PHE:CD1	21:B:101:CRT:H14	2.53	0.44
5:K:10:PRO:HB3	6:N:18:PHE:CZ	2.53	0.44
21:4:101:CRT:H20	21:4:101:CRT:H181	1.83	0.44
1:C:120:GLU:HB3	1:C:125:TYR:CE1	2.53	0.43
15:S:101:BCL:HMD1	8:T:37:HIS:CE1	2.53	0.43
15:Y:401:BCL:H112	15:Y:401:BCL:H72	1.53	0.43
15:5:103:BCL:HMB1	15:5:103:BCL:HBB2	2.00	0.43
5:7:16:GLY:HA2	13:7:102:LMT:H82	1.99	0.43
15:8:103:BCL:HMB2	14:8:104:PGV:H91	2.00	0.43
1:C:258:THR:HA	1:C:261:LEU:HD13	1.99	0.43
3:M:261:THR:H	3:M:264:SER:HB3	1.83	0.43
6:4:53:TYR:CE2	7:5:43:GLY:HA3	2.53	0.43
8:6:46:TRP:CE2	15:6:101:BCL:H2C	2.53	0.43
7:D:40:TRP:CD2	15:D:101:BCL:H2C	2.53	0.43
7:S:18:HIS:HD2	15:S:101:BCL:H51	1.83	0.43
21:V:102:CRT:H36	7:W:26:LEU:HD23	2.00	0.43
14:4:103:PGV:H252	14:4:103:PGV:H221	1.78	0.43
1:C:251:ASN:H	1:C:254:THR:CG2	2.31	0.43
21:M:406:CRT:H10	21:M:406:CRT:H81	1.82	0.43
13:H:305:LMT:H4B	7:I:12:ARG:HD3	1.99	0.43
6:8:39:LEU:HB3	14:8:101:PGV:H221	1.99	0.43
1:C:146:MET:SD	1:C:151:VAL:HG13	2.58	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:164:TRP:CZ3	3:M:173:LYS:HB3	2.53	0.43
4:H:201:MET:HG3	4:H:213:VAL:HG12	1.99	0.43
5:A:4:LEU:HD13	15:D:102:BCL:HMD3	2.00	0.43
18:F:101:CDL:H591	18:F:101:CDL:H622	1.81	0.43
5:Y:37:ARG:O	6:Z:44:ARG:NH1	2.46	0.43
15:1:103:BCL:H141	15:1:103:BCL:H162	1.62	0.43
1:C:183:THR:HG22	3:M:78:SER:HB2	2.00	0.43
15:L:311:BCL:HBB1	3:M:157:PHE:CE1	2.53	0.43
16:M:404:BPH:H201	15:W:101:BCL:H141	2.01	0.43
14:G:104:PGV:H282	14:G:104:PGV:H251	1.75	0.43
5:U:18:PHE:HE1	21:V:102:CRT:H182	1.83	0.43
15:W:102:BCL:HBC2	15:W:102:BCL:H2C	1.87	0.43
15:8:103:BCL:HBB2	15:8:103:BCL:HMB1	1.99	0.43
14:L:305:PGV:H291	14:L:305:PGV:H262	1.69	0.43
15:D:101:BCL:H142	15:D:101:BCL:H111	1.74	0.43
15:3:102:BCL:H91	15:3:102:BCL:H111	1.77	0.43
5:7:40:TRP:CE3	15:7:103:BCL:HBC2	2.54	0.43
1:C:166:SER:HB2	1:C:308:ALA:HB1	2.01	0.43
2:L:212:GLU:CD	3:M:235:ILE:HD11	2.39	0.43
17:L:306:UQ8:H22	17:L:306:UQ8:H25	1.74	0.43
7:O:24:LEU:HD13	15:O:103:BCL:H142	2.00	0.43
15:P:101:BCL:HBB2	15:P:101:BCL:HMB1	2.01	0.43
14:0:104:PGV:H202	14:0:104:PGV:H232	1.71	0.43
1:C:130:GLN:HG2	1:C:292:LEU:HD11	2.01	0.43
3:M:149:ALA:HB2	3:M:270:TYR:CE1	2.54	0.43
4:H:61:PHE:CD2	18:F:101:CDL:H162	2.54	0.43
18:H:302:CDL:H792	18:H:302:CDL:H821	1.86	0.43
21:V:102:CRT:H10	21:V:102:CRT:H81	1.91	0.43
15:V:103:BCL:H161	15:V:103:BCL:H192	1.75	0.43
1:C:50:ARG:HB3	13:C:408:LMT:H6'1	2.00	0.43
2:L:102:LEU:HD21	18:M:402:CDL:H142	2.00	0.43
3:M:14:ARG:NH2	4:H:155:ARG:HG3	2.34	0.43
18:M:407:CDL:H801	18:M:407:CDL:H772	1.82	0.43
15:W:102:BCL:HMB1	15:W:102:BCL:HBB2	2.00	0.43
2:L:223:SER:O	3:M:45:ASP:HB3	2.19	0.42
7:I:28:ILE:HD12	15:J:101:BCL:O1D	2.19	0.42
8:P:46:TRP:CE3	15:P:101:BCL:HAC2	2.54	0.42
15:Q:102:BCL:H192	15:Q:102:BCL:H162	1.76	0.42
6:4:41:TRP:CG	14:4:104:PGV:H221	2.53	0.42
1:C:27:GLU:OE2	2:L:256:THR:OG1	2.30	0.42
1:C:215:VAL:HG11	1:C:234:THR:HA	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:149:GLY:O	2:L:153:HIS:ND1	2.48	0.42
4:H:51:CYS:SG	7:D:11:ARG:HB2	2.59	0.42
5:A:8:TYR:CE1	7:D:11:ARG:HG2	2.55	0.42
15:D:102:BCL:H93	15:D:102:BCL:H111	1.91	0.42
15:G:102:BCL:H152	8:J:28:VAL:HG12	2.01	0.42
15:T:101:BCL:HBB1	14:V:101:PGV:H231	2.00	0.42
15:9:103:BCL:HBC2	15:9:103:BCL:H2C	1.77	0.42
15:L:311:BCL:H62	16:M:404:BPH:HMA3	2.01	0.42
3:M:11:VAL:HG21	4:H:168:PRO:HG3	2.02	0.42
16:M:404:BPH:H1C2	16:M:404:BPH:H5C2	1.83	0.42
5:F:35:THR:O	5:F:39:ASN:HB2	2.19	0.42
15:Q:102:BCL:H112	15:Q:102:BCL:H152	1.76	0.42
7:W:17:ALA:HA	15:W:102:BCL:H62	1.99	0.42
6:Z:17:GLU:HB3	21:Z:102:CRT:H22A	2.01	0.42
3:M:148:TRP:HB3	18:M:407:CDL:H711	2.00	0.42
3:M:204:LEU:HD21	4:H:22:TRP:CH2	2.55	0.42
7:O:34:SER:HB2	13:O:101:LMT:H1'	2.01	0.42
14:1:101:PGV:H32	5:3:33:LEU:HD13	2.01	0.42
6:8:22:PHE:CD1	21:8:102:CRT:H14	2.54	0.42
17:L:304:UQ8:H7	17:L:304:UQ8:H10	1.60	0.42
8:J:37:HIS:CD2	14:J:102:PGV:H132	2.55	0.42
21:N:102:CRT:H35	15:O:102:BCL:CMB	2.41	0.42
5:Q:1:MET:SD	15:S:102:BCL:HMD2	2.60	0.42
7:S:40:TRP:CE3	15:S:101:BCL:HBC3	2.54	0.42
15:W:101:BCL:H141	15:W:101:BCL:H162	1.80	0.42
2:L:29:PRO:HD3	18:H:302:CDL:OA4	2.20	0.42
18:M:410:CDL:H311	15:Y:401:BCL:H3C	2.02	0.42
15:O:102:BCL:H61	15:O:102:BCL:H41	1.57	0.42
15:O:103:BCL:H192	15:O:103:BCL:H161	1.77	0.42
15:X:101:BCL:H72	15:X:101:BCL:H111	1.70	0.42
21:Z:102:CRT:H20	21:Z:102:CRT:H181	1.88	0.42
15:L:311:BCL:HBB1	3:M:157:PHE:CD1	2.54	0.42
18:L:312:CDL:H361	18:M:407:CDL:H342	2.00	0.42
3:M:197:TYR:CE1	15:M:403:BCL:HMC2	2.54	0.42
6:B:53:TYR:CD2	7:D:43:GLY:HA3	2.55	0.42
15:D:102:BCL:HMB1	15:D:102:BCL:HBB2	2.01	0.42
15:J:101:BCL:O2A	15:J:101:BCL:H3A	2.20	0.42
8:P:26:PHE:CZ	8:P:30:ILE:HD12	2.54	0.42
2:L:7:GLU:HA	3:M:250:LEU:HD11	2.02	0.42
7:S:28:ILE:HD12	15:T:101:BCL:O1D	2.20	0.42
14:4:104:PGV:H302	14:4:104:PGV:H271	1.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:137:LEU:O	13:L:301:LMT:H3'	2.20	0.42
2:L:218:ASP:O	3:M:132:ARG:NH2	2.53	0.42
15:D:101:BCL:HMD1	8:E:37:HIS:CE1	2.55	0.42
6:G:7:LEU:HD22	6:G:10:LEU:HD21	2.01	0.42
8:J:41:TRP:CZ2	8:J:45:PRO:HB3	2.55	0.42
15:S:101:BCL:H41	15:S:101:BCL:H102	2.01	0.42
1:C:307:ILE:O	1:C:309:LYS:HD3	2.20	0.42
2:L:197:VAL:HG21	2:L:212:GLU:HG2	2.01	0.42
14:I:101:PGV:H32	14:I:101:PGV:H062	2.02	0.42
5:K:37:ARG:O	6:N:44:ARG:NH1	2.44	0.42
7:O:20:GLY:HA3	15:O:103:BCL:H93	2.01	0.42
15:S:101:BCL:HAC2	15:S:101:BCL:HHD	1.85	0.42
6:8:41:TRP:CZ2	6:8:45:PRO:HB3	2.55	0.42
7:9:28:ILE:HD12	15:0:102:BCL:O1D	2.19	0.42
1:C:98:MET:HE1	1:C:132:ILE:HD11	2.02	0.41
1:C:251:ASN:O	9:C:403:HEC:HMC3	2.19	0.41
7:S:24:LEU:HD23	15:T:101:BCL:HED3	2.02	0.41
15:S:102:BCL:H2C	15:S:102:BCL:HBC2	1.86	0.41
6:Z:53:TYR:HD1	14:Z:104:PGV:H061	1.85	0.41
7:1:3:ARG:HB3	21:4:101:CRT:H5	2.02	0.41
6:4:47:ILE:HG21	14:4:103:PGV:H201	2.02	0.41
21:M:406:CRT:H401	5:Q:30:PHE:CD1	2.55	0.41
4:H:142:PRO:HG2	4:H:145:VAL:HG13	2.02	0.41
8:J:41:TRP:CD2	14:J:102:PGV:H201	2.54	0.41
14:J:102:PGV:H32	14:N:101:PGV:H201	2.02	0.41
15:Q:102:BCL:H92	15:Q:102:BCL:H61	1.79	0.41
15:Y:401:BCL:HMD2	15:1:102:BCL:H151	2.02	0.41
15:1:102:BCL:H41	15:1:102:BCL:H61	1.68	0.41
8:E:46:TRP:CE2	15:E:101:BCL:H2C	2.55	0.41
5:Y:8:TYR:CE1	7:1:11:ARG:HG3	2.55	0.41
2:L:180:PHE:CE2	15:L:302:BCL:HBA1	2.56	0.41
3:M:109:LEU:HD11	7:S:31:ILE:HG23	2.03	0.41
7:W:6:LYS:HD2	21:Z:102:CRT:H1M1	2.01	0.41
5:Y:17:ILE:HG12	15:1:102:BCL:H101	2.02	0.41
13:Y:402:LMT:H71	13:Y:402:LMT:H101	1.94	0.41
15:4:102:BCL:HBB2	15:4:102:BCL:HMB1	2.02	0.41
15:6:101:BCL:HMB1	15:6:101:BCL:HBB2	2.02	0.41
14:8:104:PGV:H272	14:8:104:PGV:H241	1.79	0.41
1:C:237:SER:O	1:C:241:MET:HG2	2.20	0.41
3:M:14:ARG:HH22	4:H:155:ARG:HG3	1.86	0.41
3:M:228:ARG:HB3	4:H:219:PHE:CZ	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:231:ALA:HB2	3:M:244:ALA:HB1	2.03	0.41
21:M:406:CRT:H26	21:M:406:CRT:H241	1.89	0.41
5:F:40:TRP:CD1	5:F:41:VAL:HG13	2.56	0.41
14:G:103:PGV:H321	15:I:102:BCL:HMA3	2.03	0.41
7:I:30:PHE:HE2	14:I:101:PGV:H301	1.85	0.41
15:S:101:BCL:H2	15:S:102:BCL:HMB3	2.02	0.41
15:5:103:BCL:H202	15:5:103:BCL:H162	1.88	0.41
14:6:102:PGV:H281	14:8:101:PGV:H141	2.02	0.41
15:0:102:BCL:HBB2	15:0:102:BCL:HMB1	2.02	0.41
15:L:302:BCL:H192	15:L:302:BCL:H161	1.82	0.41
6:B:37:HIS:HB3	14:B:104:PGV:H232	2.02	0.41
15:D:102:BCL:H151	5:F:26:LEU:HD11	2.02	0.41
6:G:53:TYR:OH	7:I:40:TRP:O	2.25	0.41
7:I:46:TYR:OH	8:J:45:PRO:O	2.29	0.41
15:3:102:BCL:HBB2	15:3:102:BCL:HMB1	2.02	0.41
1:C:344:ASP:C	1:C:346:LEU:H	2.24	0.41
17:L:306:UQ8:H17A	17:L:306:UQ8:H15A	1.91	0.41
3:M:123:THR:HG23	3:M:158:LEU:HD21	2.03	0.41
3:M:280:GLY:HA2	15:M:403:BCL:HED3	2.01	0.41
4:H:120:PRO:HB2	4:H:263:GLY:O	2.19	0.41
15:P:101:BCL:H51	15:P:101:BCL:H8	1.86	0.41
5:Y:29:HIS:NE2	15:Y:403:BCL:NB	2.69	0.41
1:C:66:VAL:HG21	1:C:93:ARG:HB2	2.01	0.41
15:L:302:BCL:H141	15:L:302:BCL:H162	1.96	0.41
14:G:103:PGV:H282	8:J:36:ALA:HB1	2.03	0.41
15:N:103:BCL:H92	15:N:103:BCL:H62	1.76	0.41
15:2:101:BCL:H162	15:3:102:BCL:HMB2	2.02	0.41
8:6:46:TRP:CE3	15:6:101:BCL:HAC2	2.55	0.41
15:7:103:BCL:H61	15:7:103:BCL:H41	1.92	0.41
1:C:197:SER:OG	3:M:184:ASP:OD2	2.31	0.41
1:C:296:GLN:HB3	1:C:301:LEU:HD21	2.01	0.41
11:C:406:Z41:C16	14:C:409:PGV:H222	2.50	0.41
2:L:177:VAL:HG13	15:L:302:BCL:HMB3	2.03	0.41
3:M:229:TYR:HB2	3:M:244:ALA:HB2	2.02	0.41
21:M:406:CRT:H15	21:M:406:CRT:H131	1.98	0.41
18:M:409:CDL:H331	18:M:409:CDL:H362	1.78	0.41
15:W:101:BCL:HMB1	15:W:101:BCL:HBB3	2.03	0.41
15:W:102:BCL:H61	15:W:102:BCL:H41	1.95	0.41
21:Z:102:CRT:H402	15:1:102:BCL:HBB2	2.03	0.41
21:Z:102:CRT:H10	21:Z:102:CRT:H81	1.95	0.41
14:2:102:PGV:H232	6:4:40:ALA:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:4:104:PGV:H342	14:4:104:PGV:H311	1.89	0.41
7:5:33:LEU:O	7:5:39:ASN:ND2	2.53	0.41
6:8:53:TYR:CE2	7:9:43:GLY:HA3	2.56	0.41
7:9:10:TYR:OH	15:9:103:BCL:HMD1	2.21	0.41
2:L:142:TRP:NE1	17:L:306:UQ8:H3MA	2.36	0.41
15:L:310:BCL:HMB1	15:L:310:BCL:HBB2	2.01	0.41
21:M:406:CRT:H20	21:M:406:CRT:H181	1.77	0.41
18:M:409:CDL:H141	18:M:409:CDL:H111	1.90	0.41
21:G:101:CRT:H15	21:G:101:CRT:H131	1.93	0.41
7:I:8:LEU:HD22	15:I:103:BCL:H18	2.03	0.41
21:R:101:CRT:H20	21:R:101:CRT:H181	1.85	0.41
15:3:102:BCL:HBA1	15:3:102:BCL:H3A	1.83	0.41
21:8:102:CRT:H15	21:8:102:CRT:H131	1.84	0.41
1:C:285:ASN:HA	1:C:289:ILE:HB	2.03	0.40
16:L:303:BPH:HBA2	16:L:303:BPH:H3A	1.91	0.40
15:L:310:BCL:H13	15:L:310:BCL:H172	1.77	0.40
3:M:287:THR:HB	3:M:294:TRP:NE1	2.20	0.40
14:H:303:PGV:H52	14:H:304:PGV:H232	2.03	0.40
15:I:102:BCL:H202	15:I:102:BCL:H162	1.79	0.40
5:Q:36:ASP:OD1	13:Q:101:LMT:O6'	2.35	0.40
15:S:102:BCL:H193	15:S:102:BCL:H161	1.92	0.40
15:S:102:BCL:HMB1	15:S:102:BCL:HBB2	2.03	0.40
8:T:10:VAL:O	8:T:14:GLU:HB2	2.21	0.40
5:3:8:TYR:OH	7:5:14:VAL:HB	2.22	0.40
5:3:17:ILE:HD11	15:5:102:BCL:H142	2.02	0.40
15:3:102:BCL:HMD1	6:4:37:HIS:CE1	2.57	0.40
8:6:41:TRP:CZ2	14:6:102:PGV:H02	2.56	0.40
15:A:101:BCL:H141	15:A:101:BCL:H162	1.85	0.40
15:I:102:BCL:HMD1	8:J:37:HIS:CE1	2.56	0.40
15:U:102:BCL:H61	15:U:102:BCL:H93	1.70	0.40
5:3:29:HIS:NE2	15:3:102:BCL:NB	2.70	0.40
21:4:101:CRT:H10	21:4:101:CRT:H81	1.90	0.40
15:9:102:BCL:H102	15:9:102:BCL:H62	1.66	0.40
2:L:159:ASN:O	2:L:163:GLN:HG3	2.21	0.40
6:N:47:ILE:HG21	14:N:104:PGV:H221	2.03	0.40
15:N:103:BCL:H41	15:N:103:BCL:H61	1.55	0.40
8:P:30:ILE:HD11	15:P:101:BCL:H12	2.03	0.40
1:C:142:TRP:CD1	1:C:280:MET:HG3	2.56	0.40
2:L:80:MET:HB2	5:A:34:SER:HA	2.04	0.40
3:M:215:LEU:HD23	3:M:215:LEU:HA	1.89	0.40
4:H:60:GLY:CA	18:H:302:CDL:HB22	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:H:301:PGV:H232	14:H:301:PGV:H201	1.94	0.40
6:4:48:PRO:HG3	7:5:43:GLY:HA2	2.04	0.40
15:9:103:BCL:HMB1	15:9:103:BCL:HBB2	2.02	0.40
2:L:66:ILE:HG21	2:L:89:ILE:HD12	2.03	0.40
3:M:278:ILE:HD13	3:M:278:ILE:HA	1.90	0.40
15:I:103:BCL:HBA1	8:J:26:PHE:HA	2.02	0.40
15:S:102:BCL:OBD	8:T:22:PHE:HA	2.21	0.40
7:W:1:MET:HG3	15:Y:403:BCL:H203	2.02	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 PDB entries followed by that with respect to all EM entries.

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	C	331/362 (91%)	317 (96%)	14 (4%)	0	100	100
2	L	272/276 (99%)	261 (96%)	11 (4%)	0	100	100
3	M	316/323 (98%)	306 (97%)	10 (3%)	0	100	100
4	H	276/278 (99%)	274 (99%)	2 (1%)	0	100	100
5	3	44/64 (69%)	44 (100%)	0	0	100	100
5	7	44/64 (69%)	43 (98%)	1 (2%)	0	100	100
5	A	44/64 (69%)	44 (100%)	0	0	100	100
5	F	44/64 (69%)	44 (100%)	0	0	100	100
5	K	44/64 (69%)	44 (100%)	0	0	100	100
5	Q	44/64 (69%)	44 (100%)	0	0	100	100
5	U	44/64 (69%)	44 (100%)	0	0	100	100
5	Y	44/64 (69%)	44 (100%)	0	0	100	100
6	4	45/75 (60%)	44 (98%)	1 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	8	45/75 (60%)	42 (93%)	3 (7%)	0	100	100
6	B	46/75 (61%)	43 (94%)	3 (6%)	0	100	100
6	G	45/75 (60%)	43 (96%)	2 (4%)	0	100	100
6	N	45/75 (60%)	44 (98%)	1 (2%)	0	100	100
6	R	45/75 (60%)	44 (98%)	1 (2%)	0	100	100
6	V	45/75 (60%)	44 (98%)	1 (2%)	0	100	100
6	Z	46/75 (61%)	43 (94%)	3 (6%)	0	100	100
7	1	44/67 (66%)	44 (100%)	0	0	100	100
7	5	44/67 (66%)	44 (100%)	0	0	100	100
7	9	44/67 (66%)	44 (100%)	0	0	100	100
7	D	44/67 (66%)	44 (100%)	0	0	100	100
7	I	44/67 (66%)	44 (100%)	0	0	100	100
7	O	44/67 (66%)	44 (100%)	0	0	100	100
7	S	44/67 (66%)	44 (100%)	0	0	100	100
7	W	44/67 (66%)	44 (100%)	0	0	100	100
8	0	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
8	2	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
8	6	43/74 (58%)	41 (95%)	2 (5%)	0	100	100
8	E	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
8	J	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
8	P	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
8	T	43/74 (58%)	41 (95%)	2 (5%)	0	100	100
8	X	43/74 (58%)	42 (98%)	1 (2%)	0	100	100
All	All	2605/3479 (75%)	2542 (98%)	63 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	C	285/306 (93%)	277 (97%)	8 (3%)	38	65
2	L	218/219 (100%)	215 (99%)	3 (1%)	62	82
3	M	252/255 (99%)	247 (98%)	5 (2%)	50	74
4	H	228/228 (100%)	217 (95%)	11 (5%)	21	44
5	3	39/55 (71%)	39 (100%)	0	100	100
5	7	39/55 (71%)	39 (100%)	0	100	100
5	A	39/55 (71%)	39 (100%)	0	100	100
5	F	39/55 (71%)	39 (100%)	0	100	100
5	K	39/55 (71%)	38 (97%)	1 (3%)	41	67
5	Q	39/55 (71%)	39 (100%)	0	100	100
5	U	39/55 (71%)	39 (100%)	0	100	100
5	Y	39/55 (71%)	39 (100%)	0	100	100
6	4	37/57 (65%)	36 (97%)	1 (3%)	40	66
6	8	37/57 (65%)	37 (100%)	0	100	100
6	B	38/57 (67%)	36 (95%)	2 (5%)	19	40
6	G	37/57 (65%)	37 (100%)	0	100	100
6	N	37/57 (65%)	36 (97%)	1 (3%)	40	66
6	R	37/57 (65%)	36 (97%)	1 (3%)	40	66
6	V	37/57 (65%)	36 (97%)	1 (3%)	40	66
6	Z	38/57 (67%)	37 (97%)	1 (3%)	41	67
7	1	41/55 (74%)	41 (100%)	0	100	100
7	5	41/55 (74%)	40 (98%)	1 (2%)	44	70
7	9	41/55 (74%)	40 (98%)	1 (2%)	44	70
7	D	41/55 (74%)	40 (98%)	1 (2%)	44	70
7	I	41/55 (74%)	40 (98%)	1 (2%)	44	70
7	O	41/55 (74%)	39 (95%)	2 (5%)	21	43
7	S	41/55 (74%)	39 (95%)	2 (5%)	21	43
7	W	41/55 (74%)	39 (95%)	2 (5%)	21	43
8	0	35/52 (67%)	33 (94%)	2 (6%)	17	37
8	2	35/52 (67%)	35 (100%)	0	100	100
8	6	35/52 (67%)	34 (97%)	1 (3%)	37	64
8	E	35/52 (67%)	34 (97%)	1 (3%)	37	64

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
8	J	35/52 (67%)	35 (100%)	0	100	100
8	P	35/52 (67%)	35 (100%)	0	100	100
8	T	35/52 (67%)	35 (100%)	0	100	100
8	X	35/52 (67%)	35 (100%)	0	100	100
All	All	2201/2760 (80%)	2152 (98%)	49 (2%)	47	72

All (49) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	C	39	ARG
1	C	75	GLU
1	C	96	GLN
1	C	113	ASP
1	C	253	THR
1	C	254	THR
1	C	304	THR
1	C	351	LEU
2	L	21	ASP
2	L	184	THR
2	L	247	CYS
3	M	27	ASP
3	M	175	VAL
3	M	216	PHE
3	M	274	ILE
3	M	287	THR
4	H	16	MET
4	H	33	ARG
4	H	97	GLU
4	H	118	LEU
4	H	137	LYS
4	H	144	ARG
4	H	145	VAL
4	H	213	VAL
4	H	217	ILE
4	H	254	GLU
4	H	256	ASP
6	B	7	LEU
6	B	17	GLU
7	D	3	ARG
8	E	50	ASP
7	I	6	LYS

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Mol	Chain	Res	Type
5	K	12	ARG
6	N	27	LEU
7	O	11	ARG
7	O	42	GLN
6	R	38	PHE
7	S	4	MET
7	S	12	ARG
6	V	13	GLU
7	W	1	MET
7	W	4	MET
6	Z	12	ASP
6	4	51	GLU
7	5	11	ARG
8	6	17	GLU
7	9	4	MET
8	0	30	ILE
8	0	51	GLU

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

Mol	Chain	Res	Type
1	C	96	GLN
2	L	213	ASN
4	H	138	GLN
7	O	42	GLN
8	6	9	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 132 ligands modelled in this entry, 2 are monoatomic - leaving 130 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	$\#\|Z\| > 2$
15	BCL	F	103	-	64,74,74	1.70	13 (20%)	78,115,115	2.25	19 (24%)
9	HEC	C	401	1	32,50,50	1.58	4 (12%)	24,82,82	1.57	3 (12%)
14	PGV	L	305	-	42,42,50	0.99	2 (4%)	45,48,56	1.13	3 (6%)
13	LMT	C	408	-	36,36,36	0.38	0	47,47,47	0.88	2 (4%)
15	BCL	3	102	-	64,74,74	1.71	14 (21%)	78,115,115	2.24	19 (24%)
14	PGV	Z	105	-	42,42,50	0.99	2 (4%)	45,47,56	1.15	3 (6%)
15	BCL	I	103	-	64,74,74	1.75	14 (21%)	78,115,115	2.27	20 (25%)
15	BCL	8	103	-	64,74,74	1.69	14 (21%)	78,115,115	2.20	22 (28%)
16	BPH	L	303	-	51,70,70	0.48	0	52,101,101	0.80	2 (3%)
21	CRT	V	102	-	41,43,43	0.77	0	50,54,54	3.68	18 (36%)
15	BCL	J	101	-	64,74,74	1.71	14 (21%)	78,115,115	2.20	20 (25%)
15	BCL	D	102	-	64,74,74	1.74	14 (21%)	78,115,115	2.14	21 (26%)
14	PGV	1	101	-	44,44,50	0.98	2 (4%)	47,50,56	1.05	3 (6%)
14	PGV	3	101	-	29,29,50	1.18	2 (6%)	32,34,56	1.17	2 (6%)
21	CRT	B	101	-	41,43,43	0.75	0	50,54,54	3.46	17 (34%)
14	PGV	R	103	-	28,28,50	1.31	2 (7%)	31,34,56	1.41	4 (12%)
15	BCL	X	101	-	64,74,74	1.71	14 (21%)	78,115,115	2.21	20 (25%)
21	CRT	N	102	-	41,43,43	0.72	0	50,54,54	3.57	13 (26%)
15	BCL	M	403	-	64,74,74	1.71	14 (21%)	78,115,115	2.37	19 (24%)
14	PGV	H	304	-	50,50,50	0.91	2 (4%)	53,56,56	1.04	3 (5%)
15	BCL	O	103	-	64,74,74	1.75	14 (21%)	78,115,115	2.18	19 (24%)
14	PGV	6	102	-	37,37,50	1.10	2 (5%)	41,42,56	1.18	4 (9%)
21	CRT	R	101	-	41,43,43	0.73	0	50,54,54	3.59	18 (36%)
18	CDL	M	408	-	45,45,99	1.41	4 (8%)	51,57,111	1.38	6 (11%)
14	PGV	0	103	-	30,30,50	1.16	2 (6%)	33,36,56	1.11	3 (9%)
14	PGV	J	102	-	28,28,50	1.21	2 (7%)	29,30,56	1.23	2 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	PGV	8	101	-	42,43,50	0.99	2 (4%)	45,49,56	1.02	3 (6%)
13	LMT	9	101	-	36,36,36	0.39	0	47,47,47	0.75	1 (2%)
14	PGV	V	105	-	43,43,50	0.98	2 (4%)	45,49,56	1.00	2 (4%)
15	BCL	1	102	-	64,74,74	1.72	14 (21%)	78,115,115	2.30	23 (29%)
18	CDL	U	101	-	50,50,99	1.29	4 (8%)	56,62,111	1.28	6 (10%)
18	CDL	M	402	-	81,81,99	1.04	4 (4%)	87,93,111	1.01	4 (4%)
15	BCL	V	103	-	64,74,74	1.69	14 (21%)	78,115,115	2.16	19 (24%)
14	PGV	0	101	-	33,33,50	1.10	2 (6%)	36,39,56	1.16	4 (11%)
15	BCL	I	102	-	64,74,74	1.70	14 (21%)	78,115,115	2.30	20 (25%)
9	HEC	C	403	1	32,50,50	1.57	4 (12%)	24,82,82	1.62	3 (12%)
15	BCL	2	101	-	64,74,74	1.71	14 (21%)	78,115,115	2.19	22 (28%)
21	CRT	M	406	-	41,43,43	0.72	0	50,54,54	1.78	12 (24%)
15	BCL	P	101	-	64,74,74	1.68	14 (21%)	78,115,115	2.24	20 (25%)
13	LMT	K	101	-	26,26,36	0.50	0	37,37,47	1.04	1 (2%)
14	PGV	Z	101	-	28,28,50	1.56	3 (10%)	29,33,56	1.23	2 (6%)
15	BCL	Z	103	-	64,74,74	1.69	13 (20%)	78,115,115	2.17	22 (28%)
13	LMT	7	101	-	26,26,36	0.51	0	37,37,47	0.94	1 (2%)
21	CRT	8	102	-	41,43,43	0.75	0	50,54,54	3.53	16 (32%)
13	LMT	H	306	-	27,27,36	0.44	0	37,38,47	0.65	1 (2%)
13	LMT	7	102	-	36,36,36	0.39	0	47,47,47	0.69	0
15	BCL	B	102	-	64,74,74	1.68	13 (20%)	78,115,115	2.20	20 (25%)
14	PGV	P	103	-	39,39,50	1.05	2 (5%)	43,44,56	1.13	4 (9%)
14	PGV	L	309	-	40,40,50	1.02	2 (5%)	42,46,56	1.12	3 (7%)
14	PGV	H	303	-	41,41,50	0.99	2 (4%)	44,47,56	1.04	3 (6%)
15	BCL	5	102	-	64,74,74	1.69	15 (23%)	78,115,115	2.24	25 (32%)
15	BCL	D	101	-	64,74,74	1.71	13 (20%)	78,115,115	2.33	20 (25%)
15	BCL	W	101	-	64,74,74	1.71	14 (21%)	78,115,115	2.26	21 (26%)
17	UQ8	L	306	-	38,38,53	1.38	2 (5%)	46,49,67	1.68	10 (21%)
15	BCL	T	101	-	64,74,74	1.70	14 (21%)	78,115,115	2.21	19 (24%)
15	BCL	5	103	-	64,74,74	1.71	14 (21%)	78,115,115	2.20	23 (29%)
17	UQ8	L	307	-	17,17,53	2.11	2 (11%)	19,23,67	1.01	1 (5%)
14	PGV	V	101	-	28,28,50	1.52	3 (10%)	29,33,56	1.22	2 (6%)
14	PGV	Z	104	-	31,31,50	1.42	3 (9%)	32,36,56	1.19	2 (6%)
18	CDL	F	101	-	63,63,99	1.07	4 (6%)	69,75,111	1.20	4 (5%)
14	PGV	2	102	-	25,25,50	1.64	3 (12%)	27,29,56	1.52	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
16	BPH	M	404	-	51,70,70	0.48	0	52,101,101	0.63	0
21	CRT	4	101	-	41,43,43	0.73	0	50,54,54	3.56	15 (30%)
15	BCL	A	101	-	64,74,74	1.71	13 (20%)	78,115,115	2.23	18 (23%)
15	BCL	W	102	-	64,74,74	1.73	14 (21%)	78,115,115	2.24	21 (26%)
15	BCL	6	101	-	64,74,74	1.71	13 (20%)	78,115,115	2.20	21 (26%)
15	BCL	N	103	-	64,74,74	1.71	14 (21%)	78,115,115	2.16	19 (24%)
14	PGV	N	104	-	30,30,50	1.25	2 (6%)	33,36,56	1.30	4 (12%)
15	BCL	R	102	-	64,74,74	1.68	13 (20%)	78,115,115	2.23	19 (24%)
11	Z41	C	406	1	30,30,39	0.29	0	32,32,41	0.35	0
15	BCL	Q	102	-	64,74,74	1.68	13 (20%)	78,115,115	2.28	20 (25%)
14	PGV	E	102	-	34,34,50	1.08	2 (5%)	37,40,56	1.14	4 (10%)
14	PGV	2	103	-	33,33,50	1.15	2 (6%)	37,38,56	1.27	4 (10%)
15	BCL	S	101	-	64,74,74	1.72	14 (21%)	78,115,115	2.28	24 (30%)
13	LMT	Q	101	-	33,33,36	0.43	0	44,44,47	0.94	1 (2%)
14	PGV	B	104	-	40,40,50	1.02	2 (5%)	42,45,56	1.14	3 (7%)
15	BCL	0	102	-	64,74,74	1.70	14 (21%)	78,115,115	2.23	20 (25%)
15	BCL	U	102	-	64,74,74	1.71	13 (20%)	78,115,115	2.29	21 (26%)
18	CDL	M	407	-	79,79,99	1.01	4 (5%)	85,91,111	1.05	6 (7%)
18	CDL	H	302	-	74,74,99	1.06	4 (5%)	80,86,111	1.10	6 (7%)
14	PGV	4	104	-	40,40,50	1.07	2 (5%)	44,45,56	1.13	3 (6%)
15	BCL	S	102	-	64,74,74	1.73	14 (21%)	78,115,115	2.22	23 (29%)
14	PGV	V	104	-	30,30,50	1.25	2 (6%)	33,36,56	1.33	3 (9%)
15	BCL	9	102	-	64,74,74	1.75	14 (21%)	78,115,115	2.24	20 (25%)
14	PGV	H	301	-	35,35,50	1.09	2 (5%)	38,41,56	1.25	3 (7%)
14	PGV	B	103	-	30,30,50	1.25	2 (6%)	33,36,56	1.39	3 (9%)
14	PGV	N	101	-	34,34,50	1.09	2 (5%)	37,40,56	1.03	2 (5%)
14	PGV	8	104	-	42,42,50	1.01	2 (4%)	45,48,56	1.10	3 (6%)
15	BCL	1	103	-	64,74,74	1.74	14 (21%)	78,115,115	2.22	22 (28%)
14	PGV	G	104	-	41,41,50	1.02	2 (4%)	44,46,56	1.11	4 (9%)
13	LMT	O	101	-	30,30,36	0.44	0	41,41,47	0.90	2 (4%)
14	PGV	G	103	-	34,34,50	1.10	2 (5%)	37,40,56	1.11	3 (8%)
14	PGV	L	308	-	35,35,50	1.08	2 (5%)	38,40,56	1.10	2 (5%)
15	BCL	Y	401	18	64,74,74	1.66	13 (20%)	78,115,115	2.24	21 (26%)
12	PLM	C	407	-	11,11,17	0.40	0	10,10,17	0.45	0
13	LMT	F	102	-	34,34,36	0.49	0	45,45,47	1.14	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	BCL	L	310	-	64,74,74	1.70	13 (20%)	78,115,115	2.23	21 (26%)
15	BCL	G	102	-	64,74,74	1.68	13 (20%)	78,115,115	2.23	19 (24%)
14	PGV	N	105	-	31,31,50	1.19	2 (6%)	34,36,56	1.26	4 (11%)
15	BCL	O	102	-	64,74,74	1.69	13 (20%)	78,115,115	2.28	19 (24%)
15	BCL	4	102	-	64,74,74	1.69	13 (20%)	78,115,115	2.22	18 (23%)
21	CRT	Z	102	-	41,43,43	0.72	0	50,54,54	3.49	16 (32%)
21	CRT	G	101	-	41,43,43	0.76	0	50,54,54	3.54	16 (32%)
18	CDL	L	312	-	72,72,99	1.08	4 (5%)	78,84,111	1.12	5 (6%)
14	PGV	R	104	-	40,40,50	1.04	2 (5%)	43,45,56	1.16	4 (9%)
20	MQ8	M	405	-	54,54,54	1.31	2 (3%)	66,69,69	1.56	16 (24%)
14	PGV	T	102	-	46,46,50	0.96	2 (4%)	48,52,56	1.06	3 (6%)
13	LMT	Y	402	-	36,36,36	0.41	0	47,47,47	0.90	1 (2%)
15	BCL	L	311	-	64,74,74	1.71	13 (20%)	78,115,115	2.24	22 (28%)
15	BCL	Y	403	-	64,74,74	1.70	14 (21%)	78,115,115	2.25	18 (23%)
18	CDL	M	410	15	49,49,99	1.30	4 (8%)	55,61,111	1.20	5 (9%)
14	PGV	0	104	-	31,31,50	1.12	2 (6%)	32,33,56	1.17	3 (9%)
14	PGV	4	103	-	28,28,50	1.52	3 (10%)	29,33,56	1.28	2 (6%)
15	BCL	L	302	-	64,74,74	1.69	14 (21%)	78,115,115	2.30	22 (28%)
15	BCL	9	103	-	64,74,74	1.74	14 (21%)	78,115,115	2.19	22 (28%)
13	LMT	5	101	-	25,25,36	0.47	0	36,36,47	0.76	1 (2%)
14	PGV	P	102	-	27,27,50	1.35	2 (7%)	31,32,56	1.51	4 (12%)
17	UQ8	L	304	-	33,33,53	1.50	2 (6%)	40,43,67	1.51	8 (20%)
15	BCL	7	103	-	64,74,74	1.69	12 (18%)	78,115,115	2.30	22 (28%)
9	HEC	C	402	1	32,50,50	1.57	4 (12%)	24,82,82	1.37	1 (4%)
13	LMT	L	301	-	26,26,36	0.45	0	37,37,47	0.80	1 (2%)
18	CDL	M	409	-	55,55,99	1.23	4 (7%)	61,67,111	1.27	6 (9%)
9	HEC	C	404	1	32,50,50	1.54	4 (12%)	24,82,82	1.35	2 (8%)
15	BCL	E	101	-	64,74,74	1.69	13 (20%)	78,115,115	2.19	20 (25%)
14	PGV	I	101	-	49,49,50	0.93	2 (4%)	52,55,56	1.03	4 (7%)
14	PGV	E	103	-	37,37,50	1.05	2 (5%)	39,43,56	1.17	3 (7%)
14	PGV	X	102	-	44,44,50	0.99	2 (4%)	47,50,56	1.09	3 (6%)
15	BCL	K	102	-	64,74,74	1.70	14 (21%)	78,115,115	2.28	19 (24%)
13	LMT	H	305	-	31,31,36	0.44	0	42,42,47	0.97	1 (2%)
14	PGV	C	409	-	31,31,50	1.15	2 (6%)	34,37,56	1.18	3 (8%)

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
15	BCL	F	103	-	-	18/37/137/137	-
9	HEC	C	401	1	-	4/10/54/54	-
14	PGV	L	305	-	-	16/47/47/55	-
13	LMT	C	408	-	-	9/21/61/61	0/2/2/2
15	BCL	3	102	-	-	12/37/137/137	-
14	PGV	Z	105	-	-	21/46/46/55	-
15	BCL	I	103	-	-	15/37/137/137	-
15	BCL	8	103	-	-	11/37/137/137	-
16	BPH	L	303	-	-	5/37/105/105	0/5/6/6
21	CRT	V	102	-	-	4/51/51/51	-
15	BCL	J	101	-	-	16/37/137/137	-
15	BCL	D	102	-	-	13/37/137/137	-
14	PGV	1	101	-	-	13/49/49/55	-
14	PGV	3	101	-	-	15/33/33/55	-
21	CRT	B	101	-	-	8/51/51/51	-
14	PGV	R	103	-	-	8/32/32/55	-
15	BCL	X	101	-	-	8/37/137/137	-
21	CRT	N	102	-	-	6/51/51/51	-
15	BCL	M	403	-	-	8/37/137/137	-
14	PGV	H	304	-	-	18/55/55/55	-
15	BCL	O	103	-	-	16/37/137/137	-
14	PGV	6	102	-	-	7/39/39/55	-
21	CRT	R	101	-	-	6/51/51/51	-
18	CDL	M	408	-	-	20/55/55/110	-
14	PGV	0	103	-	-	7/35/35/55	-
14	PGV	J	102	-	-	13/30/30/55	-
14	PGV	8	101	-	-	14/47/47/55	-
13	LMT	9	101	-	-	3/21/61/61	0/2/2/2
14	PGV	V	105	-	-	17/48/48/55	-
15	BCL	1	102	-	-	14/37/137/137	-
18	CDL	U	101	-	-	23/61/61/110	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CDL	M	402	-	-	31/92/92/110	-
15	BCL	V	103	-	-	14/37/137/137	-
14	PGV	0	101	-	-	16/38/38/55	-
15	BCL	I	102	-	-	15/37/137/137	-
9	HEC	C	403	1	-	3/10/54/54	-
15	BCL	2	101	-	-	9/37/137/137	-
21	CRT	M	406	-	-	14/51/51/51	-
15	BCL	P	101	-	-	12/37/137/137	-
13	LMT	K	101	-	-	5/11/51/61	0/2/2/2
14	PGV	Z	101	-	-	9/32/32/55	-
15	BCL	Z	103	-	-	18/37/137/137	-
13	LMT	7	101	-	-	5/11/51/61	0/2/2/2
21	CRT	8	102	-	-	5/51/51/51	-
13	LMT	H	306	-	-	3/12/52/61	0/2/2/2
13	LMT	7	102	-	-	2/21/61/61	0/2/2/2
15	BCL	B	102	-	-	8/37/137/137	-
14	PGV	P	103	-	-	15/41/41/55	-
14	PGV	L	309	-	-	17/45/45/55	-
14	PGV	H	303	-	-	13/46/46/55	-
15	BCL	5	102	-	-	16/37/137/137	-
15	BCL	D	101	-	-	20/37/137/137	-
15	BCL	W	101	-	-	15/37/137/137	-
17	UQ8	L	306	-	-	2/33/57/75	0/1/1/1
15	BCL	T	101	-	-	15/37/137/137	-
15	BCL	5	103	-	-	16/37/137/137	-
17	UQ8	L	307	-	-	1/8/32/75	0/1/1/1
14	PGV	V	101	-	-	12/32/32/55	-
14	PGV	Z	104	-	-	13/35/35/55	-
18	CDL	F	101	-	-	23/73/73/110	-
14	PGV	2	102	-	-	9/26/26/55	-
16	BPH	M	404	-	-	6/37/105/105	0/5/6/6
21	CRT	4	101	-	-	5/51/51/51	-
15	BCL	A	101	-	-	21/37/137/137	-
15	BCL	W	102	-	-	14/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	BCL	6	101	-	-	5/37/137/137	-
15	BCL	N	103	-	-	14/37/137/137	-
14	PGV	N	104	-	-	18/34/34/55	-
15	BCL	R	102	-	-	15/37/137/137	-
11	Z41	C	406	1	-	12/31/31/41	-
15	BCL	Q	102	-	-	16/37/137/137	-
14	PGV	E	102	-	-	16/39/39/55	-
14	PGV	2	103	-	-	11/35/35/55	-
15	BCL	S	101	-	-	12/37/137/137	-
13	LMT	Q	101	-	-	7/18/58/61	0/2/2/2
14	PGV	B	104	-	-	8/44/44/55	-
15	BCL	0	102	-	-	9/37/137/137	-
15	BCL	U	102	-	-	21/37/137/137	-
18	CDL	M	407	-	-	33/90/90/110	-
18	CDL	H	302	-	-	37/85/85/110	-
14	PGV	4	104	-	-	19/42/42/55	-
15	BCL	S	102	-	-	17/37/137/137	-
14	PGV	V	104	-	-	6/34/34/55	-
15	BCL	9	102	-	-	14/37/137/137	-
14	PGV	H	301	-	-	11/40/40/55	-
14	PGV	B	103	-	-	14/34/34/55	-
14	PGV	N	101	-	-	16/39/39/55	-
14	PGV	8	104	-	-	17/47/47/55	-
15	BCL	1	103	-	-	14/37/137/137	-
14	PGV	G	104	-	-	14/45/45/55	-
13	LMT	O	101	-	-	4/15/55/61	0/2/2/2
14	PGV	G	103	-	-	14/39/39/55	-
14	PGV	L	308	-	-	8/39/39/55	-
15	BCL	Y	401	18	-	12/37/137/137	-
12	PLM	C	407	-	-	0/8/9/15	-
13	LMT	F	102	-	-	8/19/59/61	0/2/2/2
15	BCL	L	310	-	-	16/37/137/137	-
15	BCL	G	102	-	-	16/37/137/137	-
14	PGV	N	105	-	-	9/33/33/55	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	BCL	O	102	-	-	9/37/137/137	-
15	BCL	4	102	-	-	13/37/137/137	-
21	CRT	Z	102	-	-	1/51/51/51	-
21	CRT	G	101	-	-	4/51/51/51	-
18	CDL	L	312	-	-	21/83/83/110	-
14	PGV	R	104	-	-	11/42/42/55	-
20	MQ8	M	405	-	-	5/47/67/67	0/2/2/2
14	PGV	T	102	-	-	12/51/51/55	-
13	LMT	Y	402	-	-	8/21/61/61	0/2/2/2
15	BCL	L	311	-	-	19/37/137/137	-
15	BCL	Y	403	-	-	17/37/137/137	-
18	CDL	M	410	15	-	16/60/60/110	-
14	PGV	0	104	-	-	9/33/33/55	-
14	PGV	4	103	-	-	9/32/32/55	-
15	BCL	L	302	-	-	10/37/137/137	-
15	BCL	9	103	-	-	14/37/137/137	-
13	LMT	5	101	-	-	2/10/50/61	0/2/2/2
14	PGV	P	102	-	-	10/28/28/55	-
17	UQ8	L	304	-	-	6/27/51/75	0/1/1/1
15	BCL	7	103	-	-	14/37/137/137	-
9	HEC	C	402	1	-	2/10/54/54	-
13	LMT	L	301	-	-	5/11/51/61	0/2/2/2
18	CDL	M	409	-	-	21/66/66/110	-
9	HEC	C	404	1	-	2/10/54/54	-
15	BCL	E	101	-	-	13/37/137/137	-
14	PGV	I	101	-	-	11/54/54/55	-
14	PGV	E	103	-	-	8/42/42/55	-
14	PGV	X	102	-	-	15/49/49/55	-
15	BCL	K	102	-	-	18/37/137/137	-
13	LMT	H	305	-	-	4/16/56/61	0/2/2/2
14	PGV	C	409	-	-	11/36/36/55	-

All (762) bond length outliers are listed below:

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	405	MQ8	C3-C2	7.86	1.49	1.35
17	L	307	UQ8	C6-C1	7.78	1.49	1.35
17	L	304	UQ8	C6-C1	7.63	1.49	1.35
17	L	306	UQ8	C6-C1	7.42	1.48	1.35
14	Z	101	PGV	O01-C1	5.80	1.46	1.33
14	V	101	PGV	O01-C1	5.73	1.45	1.33
14	4	103	PGV	O01-C1	5.67	1.45	1.33
14	2	102	PGV	O01-C1	5.67	1.45	1.33
14	Z	104	PGV	O01-C1	5.63	1.45	1.33
15	5	102	BCL	O2D-CGD	5.18	1.45	1.33
15	Y	403	BCL	O2D-CGD	5.15	1.45	1.33
15	9	103	BCL	O2D-CGD	5.14	1.45	1.33
15	W	102	BCL	O2D-CGD	5.12	1.45	1.33
15	Q	102	BCL	O2D-CGD	5.12	1.45	1.33
15	S	102	BCL	O2D-CGD	5.11	1.45	1.33
15	O	103	BCL	O2D-CGD	5.10	1.45	1.33
15	5	103	BCL	O2D-CGD	5.10	1.45	1.33
15	O	102	BCL	O2D-CGD	5.10	1.45	1.33
15	U	102	BCL	O2D-CGD	5.10	1.45	1.33
15	M	403	BCL	O2D-CGD	5.09	1.45	1.33
15	K	102	BCL	O2D-CGD	5.09	1.45	1.33
15	L	302	BCL	O2D-CGD	5.09	1.45	1.33
15	1	102	BCL	O2D-CGD	5.08	1.45	1.33
15	W	101	BCL	O2D-CGD	5.08	1.45	1.33
15	9	102	BCL	O2D-CGD	5.08	1.45	1.33
15	V	103	BCL	O2D-CGD	5.08	1.45	1.33
15	I	103	BCL	C3B-C2B	5.07	1.48	1.39
15	D	102	BCL	O2D-CGD	5.07	1.45	1.33
15	F	103	BCL	O2D-CGD	5.07	1.45	1.33
15	A	101	BCL	O2D-CGD	5.07	1.45	1.33
15	I	102	BCL	O2D-CGD	5.07	1.45	1.33
15	X	101	BCL	O2D-CGD	5.06	1.45	1.33
15	D	101	BCL	O2D-CGD	5.06	1.45	1.33
15	Z	103	BCL	O2D-CGD	5.06	1.45	1.33
15	1	103	BCL	O2D-CGD	5.06	1.45	1.33
15	1	103	BCL	C3B-C2B	5.05	1.48	1.39
15	7	103	BCL	O2D-CGD	5.04	1.45	1.33
15	S	101	BCL	O2D-CGD	5.04	1.45	1.33
15	2	101	BCL	O2D-CGD	5.03	1.45	1.33
15	9	102	BCL	C3B-C2B	5.03	1.48	1.39
15	I	103	BCL	O2D-CGD	5.02	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	3	102	BCL	O2D-CGD	5.02	1.45	1.33
15	J	101	BCL	C3B-C2B	5.02	1.48	1.39
15	0	102	BCL	O2D-CGD	5.02	1.45	1.33
15	8	103	BCL	O2D-CGD	5.02	1.45	1.33
18	M	408	CDL	OA6-CA5	5.01	1.46	1.35
15	P	101	BCL	O2D-CGD	5.01	1.45	1.33
15	G	102	BCL	O2D-CGD	5.00	1.45	1.33
15	N	103	BCL	C3B-C2B	5.00	1.48	1.39
15	Y	401	BCL	O2D-CGD	5.00	1.45	1.33
15	4	102	BCL	O2D-CGD	5.00	1.45	1.33
15	S	101	BCL	C3B-C2B	5.00	1.48	1.39
15	N	103	BCL	O2D-CGD	4.99	1.45	1.33
15	6	101	BCL	O2D-CGD	4.99	1.45	1.33
15	L	310	BCL	O2D-CGD	4.99	1.45	1.33
15	T	101	BCL	O2D-CGD	4.96	1.45	1.33
15	2	101	BCL	C3B-C2B	4.96	1.48	1.39
15	J	101	BCL	O2D-CGD	4.95	1.45	1.33
15	M	403	BCL	C3B-C2B	4.94	1.48	1.39
15	D	101	BCL	C3B-C2B	4.94	1.48	1.39
15	U	102	BCL	C3B-C2B	4.92	1.48	1.39
15	3	102	BCL	C3B-C2B	4.92	1.48	1.39
15	W	102	BCL	C3B-C2B	4.91	1.48	1.39
15	R	102	BCL	O2D-CGD	4.91	1.45	1.33
15	D	102	BCL	C3B-C2B	4.91	1.48	1.39
15	B	102	BCL	O2D-CGD	4.89	1.45	1.33
15	A	101	BCL	C3B-C2B	4.89	1.48	1.39
15	I	102	BCL	C3B-C2B	4.88	1.48	1.39
15	E	101	BCL	O2D-CGD	4.87	1.45	1.33
15	X	101	BCL	C3B-C2B	4.87	1.48	1.39
15	6	101	BCL	C3B-C2B	4.86	1.48	1.39
15	E	101	BCL	C3B-C2B	4.86	1.48	1.39
15	1	102	BCL	C3B-C2B	4.85	1.48	1.39
15	F	103	BCL	C3B-C2B	4.85	1.48	1.39
15	Y	403	BCL	C3B-C2B	4.84	1.48	1.39
15	K	102	BCL	C3B-C2B	4.84	1.48	1.39
15	9	103	BCL	C3B-C2B	4.83	1.48	1.39
15	5	102	BCL	C3B-C2B	4.82	1.48	1.39
15	4	102	BCL	C3B-C2B	4.81	1.48	1.39
15	0	102	BCL	C3B-C2B	4.81	1.48	1.39
15	W	101	BCL	C3B-C2B	4.80	1.48	1.39
15	L	302	BCL	C3B-C2B	4.80	1.48	1.39
15	T	101	BCL	C3B-C2B	4.80	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	405	MQ8	C10-C5	4.79	1.48	1.40
15	B	102	BCL	C3B-C2B	4.79	1.48	1.39
15	P	101	BCL	C3B-C2B	4.78	1.48	1.39
14	R	103	PGV	O01-C1	4.78	1.46	1.35
15	O	102	BCL	C3B-C2B	4.77	1.48	1.39
15	Q	102	BCL	C3B-C2B	4.77	1.48	1.39
15	L	311	BCL	O2D-CGD	4.77	1.44	1.33
15	R	102	BCL	C3B-C2B	4.77	1.48	1.39
15	G	102	BCL	C3B-C2B	4.76	1.48	1.39
15	S	102	BCL	C3D-C4D	-4.76	1.33	1.44
14	N	104	PGV	O01-C1	4.75	1.45	1.35
15	S	102	BCL	C3B-C2B	4.74	1.47	1.39
15	L	311	BCL	C3B-C2B	4.74	1.47	1.39
15	7	103	BCL	C3B-C2B	4.74	1.47	1.39
15	V	103	BCL	C3B-C2B	4.74	1.47	1.39
14	B	103	PGV	O01-C1	4.74	1.45	1.35
15	8	103	BCL	C3B-C2B	4.73	1.47	1.39
14	P	102	PGV	O01-C1	4.73	1.45	1.35
15	M	403	BCL	C3D-C4D	-4.72	1.33	1.44
15	L	310	BCL	C3D-C4D	-4.72	1.33	1.44
15	D	102	BCL	C3D-C4D	-4.72	1.33	1.44
15	O	103	BCL	C3B-C2B	4.71	1.47	1.39
15	L	311	BCL	C3D-C4D	-4.70	1.33	1.44
15	Z	103	BCL	C3B-C2B	4.70	1.47	1.39
15	9	103	BCL	C3D-C4D	-4.70	1.33	1.44
15	L	310	BCL	C3B-C2B	4.69	1.47	1.39
15	5	103	BCL	C3D-C4D	-4.69	1.33	1.44
14	V	104	PGV	O01-C1	4.68	1.45	1.35
15	X	101	BCL	C3D-C4D	-4.68	1.33	1.44
15	T	101	BCL	C3D-C4D	-4.68	1.33	1.44
15	J	101	BCL	C3D-C4D	-4.67	1.33	1.44
15	O	103	BCL	C3D-C4D	-4.67	1.33	1.44
15	A	101	BCL	C3D-C4D	-4.66	1.33	1.44
15	E	101	BCL	C3D-C4D	-4.66	1.33	1.44
15	I	103	BCL	C3D-C4D	-4.65	1.33	1.44
15	W	102	BCL	C3D-C4D	-4.65	1.33	1.44
15	Y	403	BCL	C3D-C4D	-4.65	1.33	1.44
15	5	103	BCL	C3B-C2B	4.65	1.47	1.39
15	R	102	BCL	C3D-C4D	-4.65	1.33	1.44
15	D	101	BCL	C3D-C4D	-4.64	1.33	1.44
15	1	103	BCL	C3D-C4D	-4.64	1.33	1.44
15	9	102	BCL	C3D-C4D	-4.64	1.33	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	Z	103	BCL	C3D-C4D	-4.63	1.33	1.44
15	L	302	BCL	C3D-C4D	-4.63	1.33	1.44
15	1	102	BCL	C3D-C4D	-4.62	1.33	1.44
15	U	102	BCL	C3D-C4D	-4.62	1.33	1.44
15	K	102	BCL	C3D-C4D	-4.62	1.33	1.44
15	6	101	BCL	C3D-C4D	-4.61	1.33	1.44
15	2	101	BCL	C3D-C4D	-4.61	1.33	1.44
15	Y	401	BCL	C3D-C4D	-4.61	1.33	1.44
15	W	101	BCL	C3D-C4D	-4.61	1.33	1.44
15	B	102	BCL	C3D-C4D	-4.61	1.33	1.44
15	0	102	BCL	C3D-C4D	-4.60	1.33	1.44
15	I	102	BCL	C3D-C4D	-4.60	1.33	1.44
15	S	101	BCL	C3D-C4D	-4.59	1.33	1.44
15	F	103	BCL	C3D-C4D	-4.59	1.33	1.44
15	7	103	BCL	C3D-C4D	-4.59	1.33	1.44
15	N	103	BCL	C3D-C4D	-4.58	1.33	1.44
15	V	103	BCL	C3D-C4D	-4.58	1.33	1.44
15	Q	102	BCL	C3D-C4D	-4.58	1.33	1.44
15	4	102	BCL	C3D-C4D	-4.58	1.33	1.44
15	O	102	BCL	C3D-C4D	-4.56	1.33	1.44
15	8	103	BCL	C3D-C4D	-4.55	1.33	1.44
15	G	102	BCL	C3D-C4D	-4.53	1.34	1.44
15	P	101	BCL	C3D-C4D	-4.51	1.34	1.44
15	3	102	BCL	C3D-C4D	-4.48	1.34	1.44
15	5	102	BCL	C3D-C4D	-4.46	1.34	1.44
15	N	103	BCL	O2A-CGA	4.38	1.46	1.33
9	C	402	HEC	CBB-CAB	-4.37	1.33	1.49
9	C	403	HEC	CBC-CAC	-4.37	1.33	1.49
15	D	102	BCL	O2A-CGA	4.37	1.46	1.33
14	4	104	PGV	O03-C19	4.36	1.46	1.33
18	M	402	CDL	OB6-CB5	4.36	1.46	1.34
9	C	403	HEC	CBB-CAB	-4.35	1.33	1.49
18	M	402	CDL	OA8-CA7	4.35	1.46	1.33
15	E	101	BCL	O2A-CGA	4.34	1.46	1.33
15	7	103	BCL	O2A-CGA	4.33	1.46	1.33
14	Z	101	PGV	O03-C19	4.32	1.46	1.33
15	A	101	BCL	O2A-CGA	4.32	1.46	1.33
14	8	104	PGV	O03-C19	4.32	1.46	1.33
9	C	404	HEC	CBB-CAB	-4.32	1.33	1.49
18	M	402	CDL	OB8-CB7	4.32	1.46	1.33
15	F	103	BCL	O2A-CGA	4.32	1.46	1.33
14	R	103	PGV	O03-C19	4.32	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	C	401	HEC	CBC-CAC	-4.32	1.33	1.49
14	8	101	PGV	O03-C19	4.31	1.45	1.33
15	U	102	BCL	O2A-CGA	4.31	1.45	1.33
9	C	404	HEC	CBC-CAC	-4.31	1.33	1.49
15	1	103	BCL	O2A-CGA	4.31	1.45	1.33
15	9	103	BCL	O2A-CGA	4.31	1.45	1.33
15	3	102	BCL	O2A-CGA	4.31	1.45	1.33
9	C	401	HEC	CBB-CAB	-4.30	1.33	1.49
18	U	101	CDL	OA6-CA5	4.30	1.46	1.34
9	C	402	HEC	CBC-CAC	-4.30	1.33	1.49
15	5	103	BCL	O2A-CGA	4.29	1.45	1.33
14	H	304	PGV	O03-C19	4.29	1.45	1.33
14	J	102	PGV	O03-C19	4.29	1.45	1.33
18	M	410	CDL	OB8-CB7	4.29	1.45	1.33
18	F	101	CDL	OB8-CB7	4.28	1.45	1.33
15	X	101	BCL	O2A-CGA	4.28	1.45	1.33
18	U	101	CDL	OB8-CB7	4.28	1.45	1.33
18	U	101	CDL	OA8-CA7	4.28	1.45	1.33
14	G	104	PGV	O03-C19	4.28	1.45	1.33
14	T	102	PGV	O03-C19	4.28	1.45	1.33
14	I	101	PGV	O03-C19	4.28	1.45	1.33
18	M	402	CDL	OA6-CA5	4.28	1.46	1.34
15	J	101	BCL	O2A-CGA	4.27	1.45	1.33
14	C	409	PGV	O03-C19	4.27	1.45	1.33
15	V	103	BCL	O2A-CGA	4.27	1.45	1.33
18	M	408	CDL	OB8-CB7	4.27	1.45	1.33
14	3	101	PGV	O03-C19	4.27	1.45	1.33
14	2	102	PGV	O03-C19	4.27	1.45	1.33
15	O	103	BCL	O2A-CGA	4.26	1.45	1.33
18	H	302	CDL	OA6-CA5	4.26	1.46	1.34
15	Z	103	BCL	O2A-CGA	4.26	1.45	1.33
15	Y	401	BCL	O2A-CGA	4.26	1.45	1.33
18	H	302	CDL	OA8-CA7	4.25	1.45	1.33
15	W	102	BCL	O2A-CGA	4.25	1.45	1.33
15	O	103	BCL	CHD-C1D	4.25	1.46	1.38
18	M	409	CDL	OB8-CB7	4.25	1.45	1.33
14	6	102	PGV	O03-C19	4.25	1.45	1.33
15	L	310	BCL	O2A-CGA	4.24	1.45	1.33
15	2	101	BCL	O2A-CGA	4.24	1.45	1.33
14	1	101	PGV	O03-C19	4.24	1.45	1.33
18	M	409	CDL	OA8-CA7	4.24	1.45	1.33
15	S	102	BCL	O2A-CGA	4.24	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	Q	102	BCL	O2A-CGA	4.24	1.45	1.33
14	L	305	PGV	O03-C19	4.24	1.45	1.33
14	4	103	PGV	O03-C19	4.24	1.45	1.33
15	6	101	BCL	O2A-CGA	4.23	1.45	1.33
18	L	312	CDL	OB8-CB7	4.23	1.45	1.33
15	K	102	BCL	O2A-CGA	4.23	1.45	1.33
14	N	104	PGV	O03-C19	4.23	1.45	1.33
18	L	312	CDL	OA8-CA7	4.23	1.45	1.33
15	B	102	BCL	O2A-CGA	4.22	1.45	1.33
15	O	102	BCL	O2A-CGA	4.22	1.45	1.33
15	1	102	BCL	O2A-CGA	4.22	1.45	1.33
14	X	102	PGV	O03-C19	4.22	1.45	1.33
14	V	104	PGV	O03-C19	4.22	1.45	1.33
18	M	410	CDL	OA6-CA5	4.22	1.46	1.34
14	B	104	PGV	O03-C19	4.21	1.45	1.33
18	M	408	CDL	OA8-CA7	4.21	1.45	1.33
18	L	312	CDL	OB6-CB5	4.21	1.46	1.34
14	0	104	PGV	O03-C19	4.21	1.45	1.33
15	Y	401	BCL	C3B-C2B	4.21	1.47	1.39
15	Y	403	BCL	O2A-CGA	4.21	1.45	1.33
15	P	101	BCL	O2A-CGA	4.21	1.45	1.33
14	B	103	PGV	O03-C19	4.20	1.45	1.33
15	I	103	BCL	O2A-CGA	4.20	1.45	1.33
14	N	105	PGV	O03-C19	4.20	1.45	1.33
15	0	102	BCL	O2A-CGA	4.20	1.45	1.33
15	5	102	BCL	O2A-CGA	4.20	1.45	1.33
14	V	101	PGV	O03-C19	4.19	1.45	1.33
15	R	102	BCL	O2A-CGA	4.19	1.45	1.33
15	G	102	BCL	O2A-CGA	4.19	1.45	1.33
14	P	103	PGV	O03-C19	4.19	1.45	1.33
14	G	103	PGV	O03-C19	4.19	1.45	1.33
15	S	101	BCL	O2A-CGA	4.19	1.45	1.33
15	M	403	BCL	O2A-CGA	4.18	1.45	1.33
14	H	301	PGV	O03-C19	4.18	1.45	1.33
14	0	103	PGV	O03-C19	4.18	1.45	1.33
18	M	407	CDL	OB8-CB7	4.18	1.45	1.33
14	L	309	PGV	O03-C19	4.17	1.45	1.33
14	R	104	PGV	O03-C19	4.17	1.45	1.33
15	4	102	BCL	O2A-CGA	4.17	1.45	1.33
14	L	309	PGV	O01-C1	4.17	1.46	1.34
15	W	101	BCL	O2A-CGA	4.17	1.45	1.33
14	J	102	PGV	O01-C1	4.16	1.46	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	H	303	PGV	O03-C19	4.16	1.45	1.33
18	M	409	CDL	OB6-CB5	4.16	1.46	1.34
14	0	101	PGV	O03-C19	4.15	1.45	1.33
14	X	102	PGV	O01-C1	4.15	1.46	1.34
14	2	103	PGV	O03-C19	4.15	1.45	1.33
14	N	101	PGV	O03-C19	4.15	1.45	1.33
14	P	102	PGV	O03-C19	4.15	1.45	1.33
18	M	410	CDL	OA8-CA7	4.15	1.45	1.33
18	L	312	CDL	OA6-CA5	4.14	1.46	1.34
14	L	308	PGV	O03-C19	4.14	1.45	1.33
14	G	103	PGV	O01-C1	4.14	1.46	1.34
18	M	407	CDL	OA8-CA7	4.14	1.45	1.33
14	E	102	PGV	O03-C19	4.14	1.45	1.33
18	F	101	CDL	OA6-CA5	4.14	1.46	1.34
14	4	104	PGV	O01-C1	4.13	1.46	1.34
15	L	302	BCL	O2A-CGA	4.13	1.45	1.33
14	I	101	PGV	O01-C1	4.13	1.46	1.34
14	6	102	PGV	O01-C1	4.13	1.45	1.34
14	E	103	PGV	O01-C1	4.13	1.45	1.34
15	I	102	BCL	O2A-CGA	4.12	1.45	1.33
14	Z	105	PGV	O01-C1	4.12	1.45	1.34
14	N	105	PGV	O01-C1	4.12	1.45	1.34
14	E	103	PGV	O03-C19	4.12	1.45	1.33
15	L	311	BCL	O2A-CGA	4.11	1.45	1.33
9	C	402	HEC	C2B-C3B	-4.11	1.36	1.40
14	2	103	PGV	O01-C1	4.11	1.45	1.34
15	D	101	BCL	O2A-CGA	4.10	1.45	1.33
14	T	102	PGV	O01-C1	4.10	1.45	1.34
18	H	302	CDL	OB6-CB5	4.10	1.45	1.34
18	M	409	CDL	OA6-CA5	4.10	1.45	1.34
14	B	104	PGV	O01-C1	4.10	1.45	1.34
14	V	105	PGV	O03-C19	4.09	1.45	1.33
14	G	104	PGV	O01-C1	4.09	1.45	1.34
9	C	401	HEC	C2B-C3B	-4.09	1.36	1.40
14	H	301	PGV	O01-C1	4.09	1.45	1.34
18	M	410	CDL	OB6-CB5	4.09	1.45	1.34
14	R	104	PGV	O01-C1	4.09	1.45	1.34
14	8	104	PGV	O01-C1	4.08	1.45	1.34
15	8	103	BCL	O2A-CGA	4.08	1.45	1.33
14	Z	105	PGV	O03-C19	4.08	1.45	1.33
15	9	102	BCL	O2A-CGA	4.08	1.45	1.33
15	T	101	BCL	O2A-CGA	4.07	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	M	408	CDL	OB6-CB5	4.07	1.45	1.34
18	F	101	CDL	OB6-CB5	4.06	1.45	1.34
14	V	105	PGV	O01-C1	4.06	1.45	1.34
15	9	103	BCL	CHD-C1D	4.05	1.46	1.38
14	P	103	PGV	O01-C1	4.05	1.45	1.34
14	0	103	PGV	O01-C1	4.05	1.45	1.34
18	M	407	CDL	OB6-CB5	4.05	1.45	1.34
18	H	302	CDL	OB8-CB7	4.04	1.45	1.33
18	U	101	CDL	OB6-CB5	4.04	1.45	1.34
9	C	403	HEC	C2B-C3B	-4.03	1.36	1.40
15	D	102	BCL	CHD-C1D	4.03	1.46	1.38
14	L	308	PGV	O01-C1	4.03	1.45	1.34
14	N	101	PGV	O01-C1	4.03	1.45	1.34
14	Z	104	PGV	O03-C19	4.03	1.45	1.33
14	1	101	PGV	O01-C1	4.03	1.45	1.34
14	E	102	PGV	O01-C1	4.01	1.45	1.34
14	H	304	PGV	O01-C1	4.01	1.45	1.34
14	0	104	PGV	O01-C1	4.01	1.45	1.34
14	0	101	PGV	O01-C1	4.00	1.45	1.34
14	3	101	PGV	O01-C1	3.99	1.45	1.34
18	M	407	CDL	OA6-CA5	3.99	1.45	1.34
14	L	305	PGV	O01-C1	3.99	1.45	1.34
15	1	103	BCL	CHD-C1D	3.99	1.46	1.38
15	S	102	BCL	CHD-C1D	3.99	1.46	1.38
14	C	409	PGV	O01-C1	3.97	1.45	1.34
14	8	101	PGV	O01-C1	3.97	1.45	1.34
14	H	303	PGV	O01-C1	3.96	1.45	1.34
15	I	103	BCL	CHD-C1D	3.95	1.46	1.38
15	W	102	BCL	CHD-C1D	3.91	1.46	1.38
15	9	102	BCL	CHD-C1D	3.89	1.45	1.38
15	5	103	BCL	CHD-C1D	3.87	1.45	1.38
15	W	101	BCL	CHD-C1D	3.82	1.45	1.38
15	Y	403	BCL	CHD-C1D	3.81	1.45	1.38
15	3	102	BCL	CHD-C1D	3.80	1.45	1.38
15	A	101	BCL	CHD-C1D	3.79	1.45	1.38
9	C	404	HEC	C2B-C3B	-3.77	1.36	1.40
15	L	311	BCL	CHD-C1D	3.75	1.45	1.38
15	Y	401	BCL	CHD-C1D	3.74	1.45	1.38
15	O	102	BCL	CHD-C1D	3.73	1.45	1.38
15	5	102	BCL	CHD-C1D	3.72	1.45	1.38
15	D	101	BCL	CHD-C1D	3.72	1.45	1.38
15	K	102	BCL	CHD-C1D	3.71	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	F	103	BCL	CHD-C1D	3.70	1.45	1.38
15	S	101	BCL	CHD-C1D	3.69	1.45	1.38
15	0	102	BCL	OBD-CAD	3.68	1.28	1.22
15	L	302	BCL	OBD-CAD	3.66	1.28	1.22
15	T	101	BCL	OBD-CAD	3.66	1.28	1.22
15	E	101	BCL	OBD-CAD	3.65	1.28	1.22
15	L	310	BCL	CHD-C1D	3.65	1.45	1.38
15	B	102	BCL	OBD-CAD	3.65	1.28	1.22
15	2	101	BCL	OBD-CAD	3.64	1.28	1.22
15	J	101	BCL	CHD-C1D	3.64	1.45	1.38
15	3	102	BCL	OBD-CAD	3.63	1.28	1.22
15	I	102	BCL	CHD-C1D	3.63	1.45	1.38
15	1	102	BCL	CHD-C1D	3.63	1.45	1.38
15	6	101	BCL	OBD-CAD	3.63	1.28	1.22
15	U	102	BCL	CHD-C1D	3.62	1.45	1.38
15	1	102	BCL	OBD-CAD	3.61	1.28	1.22
15	P	101	BCL	OBD-CAD	3.61	1.28	1.22
15	G	102	BCL	OBD-CAD	3.60	1.28	1.22
15	I	102	BCL	OBD-CAD	3.59	1.28	1.22
15	O	103	BCL	OBD-CAD	3.59	1.28	1.22
15	W	102	BCL	OBD-CAD	3.59	1.28	1.22
15	6	101	BCL	CHD-C1D	3.58	1.45	1.38
15	V	103	BCL	OBD-CAD	3.57	1.28	1.22
15	L	302	BCL	CHD-C1D	3.57	1.45	1.38
15	4	102	BCL	OBD-CAD	3.57	1.28	1.22
15	X	101	BCL	OBD-CAD	3.57	1.28	1.22
15	Q	102	BCL	CHD-C1D	3.56	1.45	1.38
15	D	101	BCL	OBD-CAD	3.56	1.28	1.22
15	5	102	BCL	OBD-CAD	3.56	1.28	1.22
15	K	102	BCL	OBD-CAD	3.56	1.28	1.22
15	F	103	BCL	OBD-CAD	3.55	1.28	1.22
15	J	101	BCL	OBD-CAD	3.55	1.28	1.22
15	R	102	BCL	OBD-CAD	3.55	1.28	1.22
15	Y	403	BCL	OBD-CAD	3.55	1.28	1.22
15	5	103	BCL	OBD-CAD	3.55	1.28	1.22
15	I	103	BCL	OBD-CAD	3.54	1.28	1.22
15	S	101	BCL	OBD-CAD	3.54	1.28	1.22
15	E	101	BCL	CHD-C1D	3.54	1.45	1.38
15	A	101	BCL	OBD-CAD	3.53	1.28	1.22
15	1	103	BCL	OBD-CAD	3.53	1.28	1.22
15	O	102	BCL	OBD-CAD	3.53	1.28	1.22
15	9	103	BCL	OBD-CAD	3.53	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	N	103	BCL	CHD-C1D	3.53	1.45	1.38
15	7	103	BCL	OBD-CAD	3.53	1.28	1.22
15	8	103	BCL	OBD-CAD	3.52	1.28	1.22
15	N	103	BCL	OBD-CAD	3.52	1.28	1.22
15	S	102	BCL	OBD-CAD	3.52	1.28	1.22
15	4	102	BCL	CHD-C1D	3.51	1.45	1.38
15	D	102	BCL	OBD-CAD	3.51	1.28	1.22
15	U	102	BCL	OBD-CAD	3.51	1.28	1.22
15	W	101	BCL	OBD-CAD	3.51	1.28	1.22
15	8	103	BCL	CHD-C1D	3.50	1.45	1.38
15	2	101	BCL	CHD-C1D	3.50	1.45	1.38
15	L	311	BCL	OBD-CAD	3.49	1.28	1.22
15	X	101	BCL	CHD-C1D	3.49	1.45	1.38
15	Y	401	BCL	OBD-CAD	3.49	1.28	1.22
15	B	102	BCL	CHD-C1D	3.47	1.45	1.38
15	9	102	BCL	OBD-CAD	3.47	1.28	1.22
15	L	310	BCL	OBD-CAD	3.46	1.28	1.22
15	Z	103	BCL	OBD-CAD	3.46	1.28	1.22
15	M	403	BCL	CHD-C1D	3.45	1.45	1.38
15	7	103	BCL	CHD-C1D	3.44	1.45	1.38
15	M	403	BCL	OBD-CAD	3.43	1.28	1.22
15	Q	102	BCL	OBD-CAD	3.43	1.28	1.22
15	V	103	BCL	CHD-C1D	3.42	1.45	1.38
15	P	101	BCL	CHD-C1D	3.39	1.45	1.38
14	Z	101	PGV	O01-C02	-3.38	1.42	1.46
15	0	102	BCL	CHD-C1D	3.37	1.44	1.38
15	G	102	BCL	CHD-C1D	3.37	1.44	1.38
15	T	101	BCL	CHD-C1D	3.36	1.44	1.38
15	Z	103	BCL	CHD-C1D	3.36	1.44	1.38
15	R	102	BCL	CHD-C1D	3.35	1.44	1.38
17	L	307	UQ8	C4-C3	3.22	1.49	1.36
14	2	102	PGV	O01-C02	-3.22	1.43	1.46
15	T	101	BCL	C1D-ND	-3.21	1.33	1.37
14	4	103	PGV	O01-C02	-3.19	1.43	1.46
15	R	102	BCL	C1D-ND	-3.18	1.33	1.37
14	Z	104	PGV	O01-C02	-3.17	1.43	1.46
17	L	306	UQ8	C4-C3	3.15	1.49	1.36
14	V	101	PGV	O01-C02	-3.14	1.43	1.46
15	9	102	BCL	C3D-C2D	3.08	1.47	1.39
15	O	103	BCL	C3D-C2D	3.04	1.47	1.39
15	L	311	BCL	C3D-C2D	3.04	1.47	1.39
15	O	103	BCL	CHD-C4C	3.03	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	0	102	BCL	C1D-ND	-3.03	1.34	1.37
15	Z	103	BCL	C1D-ND	-3.02	1.34	1.37
15	D	102	BCL	C3D-C2D	3.02	1.47	1.39
15	0	102	BCL	C3D-C2D	3.01	1.47	1.39
15	8	103	BCL	C3D-C2D	3.01	1.47	1.39
15	X	101	BCL	C1D-ND	-3.01	1.34	1.37
15	L	310	BCL	C3D-C2D	3.00	1.47	1.39
15	Z	103	BCL	C3D-C2D	3.00	1.47	1.39
15	O	103	BCL	C1D-C2D	3.00	1.51	1.45
15	4	102	BCL	C3D-C2D	2.99	1.47	1.39
15	V	103	BCL	C1D-ND	-2.99	1.34	1.37
15	V	103	BCL	C3D-C2D	2.99	1.47	1.39
15	W	101	BCL	C3D-C2D	2.99	1.47	1.39
15	N	103	BCL	C1D-ND	-2.99	1.34	1.37
15	X	101	BCL	C3D-C2D	2.99	1.47	1.39
15	6	101	BCL	C3D-C2D	2.99	1.47	1.39
15	2	101	BCL	C3D-C2D	2.99	1.47	1.39
15	T	101	BCL	C3D-C2D	2.98	1.47	1.39
15	A	101	BCL	C3D-C2D	2.98	1.47	1.39
15	5	102	BCL	C3D-C2D	2.98	1.47	1.39
15	S	101	BCL	C3D-C2D	2.97	1.47	1.39
15	N	103	BCL	C3D-C2D	2.97	1.47	1.39
15	1	102	BCL	C3D-C2D	2.97	1.47	1.39
17	L	304	UQ8	C4-C3	2.97	1.48	1.36
15	5	103	BCL	C3D-C2D	2.97	1.47	1.39
15	S	102	BCL	C3D-C2D	2.96	1.47	1.39
15	1	103	BCL	C3D-C2D	2.95	1.47	1.39
15	I	103	BCL	C3D-C2D	2.95	1.47	1.39
15	W	102	BCL	C3D-C2D	2.95	1.47	1.39
15	2	101	BCL	C1D-ND	-2.95	1.34	1.37
15	B	102	BCL	C1D-ND	-2.94	1.34	1.37
15	P	101	BCL	C1D-ND	-2.94	1.34	1.37
15	K	102	BCL	C3D-C2D	2.94	1.47	1.39
15	Y	403	BCL	C3D-C2D	2.94	1.47	1.39
15	F	103	BCL	C3D-C2D	2.93	1.47	1.39
15	D	101	BCL	C3D-C2D	2.93	1.47	1.39
15	G	102	BCL	C3D-C2D	2.93	1.47	1.39
15	L	311	BCL	C1D-ND	-2.93	1.34	1.37
15	9	103	BCL	C3D-C2D	2.92	1.47	1.39
15	P	101	BCL	C3D-C2D	2.92	1.47	1.39
15	B	102	BCL	C3D-C2D	2.92	1.47	1.39
15	J	101	BCL	C3D-C2D	2.92	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	O	102	BCL	C3D-C2D	2.92	1.47	1.39
15	3	102	BCL	C3D-C2D	2.91	1.47	1.39
15	I	102	BCL	C3D-C2D	2.91	1.47	1.39
15	R	102	BCL	C3D-C2D	2.90	1.47	1.39
15	I	103	BCL	CHD-C4C	2.89	1.47	1.39
15	5	103	BCL	CHD-C4C	2.89	1.47	1.39
15	U	102	BCL	C3D-C2D	2.89	1.47	1.39
15	7	103	BCL	C3D-C2D	2.89	1.47	1.39
15	D	102	BCL	CHD-C4C	2.88	1.47	1.39
15	1	103	BCL	CHD-C4C	2.88	1.47	1.39
15	6	101	BCL	C1D-ND	-2.88	1.34	1.37
15	G	102	BCL	C1D-ND	-2.87	1.34	1.37
15	9	102	BCL	CHD-C4C	2.87	1.47	1.39
15	Y	401	BCL	C3D-C2D	2.87	1.47	1.39
15	E	101	BCL	C3D-C2D	2.86	1.46	1.39
15	J	101	BCL	C1D-ND	-2.86	1.34	1.37
15	E	101	BCL	C1D-ND	-2.86	1.34	1.37
15	L	311	BCL	CHD-C4C	2.85	1.47	1.39
15	L	302	BCL	C3D-C2D	2.85	1.46	1.39
15	Q	102	BCL	C3D-C2D	2.85	1.46	1.39
15	9	103	BCL	CHD-C4C	2.84	1.47	1.39
15	S	102	BCL	CHD-C4C	2.84	1.47	1.39
15	I	103	BCL	C1D-C2D	2.83	1.50	1.45
15	L	310	BCL	C1D-ND	-2.83	1.34	1.37
15	K	102	BCL	CHD-C4C	2.83	1.47	1.39
15	W	102	BCL	CHD-C4C	2.82	1.47	1.39
15	1	102	BCL	C1D-ND	-2.82	1.34	1.37
9	C	401	HEC	C4B-C3B	2.82	1.48	1.43
15	S	102	BCL	C1D-C2D	2.81	1.50	1.45
15	W	101	BCL	CHD-C4C	2.81	1.47	1.39
15	3	102	BCL	CHD-C4C	2.80	1.47	1.39
15	9	103	BCL	C1D-C2D	2.80	1.50	1.45
15	S	101	BCL	CHD-C4C	2.80	1.47	1.39
15	4	102	BCL	C1D-ND	-2.80	1.34	1.37
15	5	103	BCL	C1D-C2D	2.79	1.50	1.45
15	8	103	BCL	C1D-ND	-2.79	1.34	1.37
15	Y	401	BCL	C1D-C2D	2.78	1.50	1.45
15	Y	403	BCL	CHD-C4C	2.78	1.47	1.39
15	O	103	BCL	MG-NC	-2.78	1.99	2.06
15	A	101	BCL	CHD-C4C	2.78	1.47	1.39
15	3	102	BCL	C1D-C2D	2.78	1.50	1.45
15	U	102	BCL	C1D-C2D	2.77	1.50	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	U	102	BCL	CHD-C4C	2.77	1.47	1.39
15	Y	401	BCL	CHD-C4C	2.77	1.47	1.39
15	D	102	BCL	C1D-C2D	2.77	1.50	1.45
15	5	102	BCL	CHD-C4C	2.77	1.47	1.39
9	C	404	HEC	C4B-C3B	2.77	1.48	1.43
15	F	103	BCL	CHD-C4C	2.76	1.47	1.39
15	7	103	BCL	C1D-ND	-2.75	1.34	1.37
15	O	102	BCL	CHD-C4C	2.74	1.47	1.39
15	Q	102	BCL	CHD-C4C	2.73	1.46	1.39
15	W	102	BCL	C1D-C2D	2.73	1.50	1.45
15	I	102	BCL	CHD-C4C	2.73	1.46	1.39
15	S	101	BCL	C1D-C2D	2.73	1.50	1.45
15	9	102	BCL	C1D-C2D	2.73	1.50	1.45
15	O	102	BCL	C1D-C2D	2.72	1.50	1.45
15	D	101	BCL	C1D-C2D	2.72	1.50	1.45
15	U	102	BCL	C1D-ND	-2.72	1.34	1.37
15	1	103	BCL	MG-NC	-2.71	1.99	2.06
15	L	310	BCL	CHD-C4C	2.71	1.46	1.39
15	9	103	BCL	MG-NC	-2.71	1.99	2.06
15	K	102	BCL	C1D-C2D	2.71	1.50	1.45
15	Y	403	BCL	C1D-C2D	2.71	1.50	1.45
15	F	103	BCL	C1D-C2D	2.71	1.50	1.45
9	C	402	HEC	C4B-C3B	2.70	1.48	1.43
15	D	102	BCL	MG-NC	-2.70	1.99	2.06
15	A	101	BCL	C1D-ND	-2.70	1.34	1.37
15	D	101	BCL	CHD-C4C	2.70	1.46	1.39
15	I	102	BCL	C1D-C2D	2.70	1.50	1.45
15	M	403	BCL	C3D-C2D	2.70	1.46	1.39
15	1	102	BCL	CHD-C4C	2.70	1.46	1.39
15	L	311	BCL	C1D-C2D	2.69	1.50	1.45
15	9	102	BCL	MG-NA	-2.68	1.99	2.06
15	5	102	BCL	C1D-C2D	2.67	1.50	1.45
15	M	403	BCL	C1D-C2D	2.67	1.50	1.45
15	I	103	BCL	MG-NC	-2.67	1.99	2.06
15	W	101	BCL	C1D-ND	-2.66	1.34	1.37
15	W	101	BCL	C1D-C2D	2.66	1.50	1.45
15	D	101	BCL	C1D-ND	-2.65	1.34	1.37
15	1	102	BCL	C1D-C2D	2.65	1.50	1.45
15	W	102	BCL	MG-NC	-2.64	2.00	2.06
15	M	403	BCL	C1D-ND	-2.64	1.34	1.37
15	L	302	BCL	CHD-C4C	2.64	1.46	1.39
15	3	102	BCL	C1D-ND	-2.64	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	4	102	BCL	CHD-C4C	2.63	1.46	1.39
15	K	102	BCL	C1D-ND	-2.63	1.34	1.37
15	X	101	BCL	CHD-C4C	2.62	1.46	1.39
15	Q	102	BCL	C1D-ND	-2.61	1.34	1.37
15	L	302	BCL	C1D-C2D	2.61	1.50	1.45
15	7	103	BCL	C1D-C2D	2.61	1.50	1.45
15	A	101	BCL	C1D-C2D	2.60	1.50	1.45
15	Q	102	BCL	C1D-C2D	2.60	1.50	1.45
15	J	101	BCL	CHD-C4C	2.60	1.46	1.39
15	1	103	BCL	C1D-C2D	2.60	1.50	1.45
15	M	403	BCL	CHD-C4C	2.60	1.46	1.39
15	I	102	BCL	C1D-ND	-2.59	1.34	1.37
15	O	102	BCL	C1D-ND	-2.59	1.34	1.37
15	S	102	BCL	MG-NC	-2.59	2.00	2.06
15	L	302	BCL	C1D-ND	-2.59	1.34	1.37
15	7	103	BCL	CHD-C4C	2.58	1.46	1.39
15	6	101	BCL	CHD-C4C	2.58	1.46	1.39
15	S	101	BCL	C1D-ND	-2.57	1.34	1.37
15	9	102	BCL	C1D-ND	-2.57	1.34	1.37
15	N	103	BCL	CHD-C4C	2.56	1.46	1.39
15	I	103	BCL	C1D-ND	-2.55	1.34	1.37
15	E	101	BCL	CHD-C4C	2.55	1.46	1.39
15	F	103	BCL	C1D-ND	-2.55	1.34	1.37
15	P	101	BCL	CHD-C4C	2.54	1.46	1.39
15	1	103	BCL	C1D-ND	-2.54	1.34	1.37
15	Y	401	BCL	C1D-ND	-2.54	1.34	1.37
15	L	310	BCL	C1D-C2D	2.54	1.50	1.45
15	L	311	BCL	MG-NA	-2.54	2.00	2.06
15	8	103	BCL	CHD-C4C	2.53	1.46	1.39
15	V	103	BCL	CHD-C4C	2.53	1.46	1.39
15	2	101	BCL	CHD-C4C	2.53	1.46	1.39
15	S	102	BCL	C1D-ND	-2.53	1.34	1.37
18	F	101	CDL	OA8-CA7	2.53	1.45	1.33
15	B	102	BCL	CHD-C4C	2.52	1.46	1.39
15	Y	403	BCL	C1D-ND	-2.52	1.34	1.37
15	G	102	BCL	CHD-C4C	2.52	1.46	1.39
15	T	101	BCL	CHD-C4C	2.51	1.46	1.39
15	I	103	BCL	MG-NA	-2.51	2.00	2.06
15	9	103	BCL	MG-NA	-2.50	2.00	2.06
15	9	102	BCL	MG-NC	-2.50	2.00	2.06
15	9	103	BCL	C1D-ND	-2.50	1.34	1.37
15	O	103	BCL	MG-NA	-2.49	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	Z	103	BCL	CHD-C4C	2.48	1.46	1.39
15	0	102	BCL	CHD-C4C	2.48	1.46	1.39
15	R	102	BCL	CHD-C4C	2.47	1.46	1.39
15	P	101	BCL	C1D-C2D	2.47	1.50	1.45
9	C	403	HEC	C4B-C3B	2.45	1.47	1.43
15	S	101	BCL	MG-NA	-2.44	2.00	2.06
15	S	101	BCL	MG-NC	-2.44	2.00	2.06
15	1	103	BCL	MG-NA	-2.43	2.00	2.06
15	9	103	BCL	C1B-CHB	2.43	1.47	1.41
15	5	103	BCL	MG-NC	-2.41	2.00	2.06
15	8	103	BCL	MG-NC	-2.41	2.00	2.06
15	W	102	BCL	C1D-ND	-2.41	1.34	1.37
15	D	102	BCL	MG-NA	-2.40	2.00	2.06
15	M	403	BCL	MG-NA	-2.40	2.00	2.06
15	1	102	BCL	MG-NA	-2.40	2.00	2.06
15	O	103	BCL	C1B-CHB	2.40	1.47	1.41
15	6	101	BCL	MG-NC	-2.40	2.00	2.06
15	6	101	BCL	C1D-C2D	2.39	1.50	1.45
15	D	102	BCL	C1D-ND	-2.38	1.34	1.37
15	W	102	BCL	MG-NA	-2.38	2.00	2.06
15	4	102	BCL	C1D-C2D	2.37	1.50	1.45
15	L	310	BCL	MG-NA	-2.36	2.00	2.06
15	X	101	BCL	C1D-C2D	2.36	1.50	1.45
15	2	101	BCL	MG-NC	-2.36	2.00	2.06
15	D	102	BCL	C1B-CHB	2.35	1.47	1.41
15	5	102	BCL	C1D-ND	-2.35	1.34	1.37
15	9	102	BCL	C1B-CHB	2.35	1.47	1.41
15	1	103	BCL	C1B-CHB	2.34	1.47	1.41
15	6	101	BCL	MG-NA	-2.34	2.00	2.06
15	S	102	BCL	MG-NA	-2.33	2.00	2.06
15	7	103	BCL	MG-NA	-2.32	2.00	2.06
15	M	403	BCL	MG-NC	-2.32	2.00	2.06
15	E	101	BCL	C1D-C2D	2.32	1.49	1.45
15	0	102	BCL	MG-NC	-2.32	2.00	2.06
15	7	103	BCL	C1B-CHB	2.32	1.47	1.41
15	2	101	BCL	C1D-C2D	2.31	1.49	1.45
15	8	103	BCL	C1D-C2D	2.31	1.49	1.45
15	S	102	BCL	C1B-CHB	2.31	1.47	1.41
15	O	103	BCL	C1D-ND	-2.30	1.35	1.37
15	N	103	BCL	MG-NC	-2.30	2.00	2.06
15	I	102	BCL	MG-NC	-2.30	2.00	2.06
15	T	101	BCL	MG-NC	-2.30	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	8	103	BCL	MG-NA	-2.30	2.00	2.06
15	5	103	BCL	C1D-ND	-2.30	1.35	1.37
15	W	102	BCL	C1B-CHB	2.30	1.47	1.41
15	U	102	BCL	MG-NA	-2.29	2.00	2.06
15	5	103	BCL	C1B-CHB	2.29	1.47	1.41
15	D	101	BCL	MG-NA	-2.29	2.00	2.06
15	5	102	BCL	MG-NC	-2.29	2.00	2.06
15	J	101	BCL	C1D-C2D	2.29	1.49	1.45
15	P	101	BCL	MG-NC	-2.28	2.00	2.06
15	1	102	BCL	MG-NC	-2.28	2.00	2.06
15	1	102	BCL	C1B-CHB	2.28	1.47	1.41
15	2	101	BCL	MG-NA	-2.28	2.00	2.06
15	L	310	BCL	MG-NC	-2.27	2.00	2.06
15	B	102	BCL	C1D-C2D	2.27	1.49	1.45
15	A	101	BCL	C1B-CHB	2.26	1.47	1.41
15	4	102	BCL	MG-NA	-2.26	2.00	2.06
15	0	102	BCL	MG-NA	-2.26	2.00	2.06
15	Z	103	BCL	MG-NA	-2.25	2.00	2.06
15	X	101	BCL	MG-NC	-2.25	2.00	2.06
15	3	102	BCL	MG-NC	-2.25	2.00	2.06
15	N	103	BCL	C1D-C2D	2.25	1.49	1.45
15	N	103	BCL	MG-NA	-2.25	2.00	2.06
15	G	102	BCL	C1D-C2D	2.24	1.49	1.45
15	U	102	BCL	C1B-CHB	2.24	1.47	1.41
15	T	101	BCL	MG-NA	-2.24	2.00	2.06
15	Z	103	BCL	MG-NC	-2.24	2.00	2.06
15	J	101	BCL	MG-NC	-2.24	2.01	2.06
15	1	103	BCL	C4B-CHC	2.23	1.47	1.41
15	D	101	BCL	MG-NC	-2.23	2.01	2.06
15	I	103	BCL	C1B-CHB	2.23	1.47	1.41
15	L	302	BCL	MG-NC	-2.23	2.01	2.06
15	W	101	BCL	MG-NA	-2.23	2.01	2.06
15	4	102	BCL	MG-NC	-2.22	2.01	2.06
15	S	101	BCL	C1B-CHB	2.22	1.47	1.41
15	L	311	BCL	MG-NC	-2.22	2.01	2.06
15	8	103	BCL	C1B-CHB	2.22	1.47	1.41
15	Y	401	BCL	MG-NC	-2.22	2.01	2.06
15	K	102	BCL	MG-NC	-2.22	2.01	2.06
15	0	102	BCL	C1D-C2D	2.21	1.49	1.45
15	I	102	BCL	MG-NA	-2.21	2.01	2.06
15	K	102	BCL	MG-NA	-2.21	2.01	2.06
15	5	102	BCL	MG-NA	-2.21	2.01	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	X	101	BCL	MG-NA	-2.20	2.01	2.06
15	L	311	BCL	C1B-CHB	2.19	1.47	1.41
15	Q	102	BCL	MG-NA	-2.19	2.01	2.06
15	3	102	BCL	MG-NA	-2.19	2.01	2.06
15	F	103	BCL	MG-NA	-2.19	2.01	2.06
15	B	102	BCL	MG-NC	-2.19	2.01	2.06
15	E	101	BCL	MG-NC	-2.19	2.01	2.06
15	V	103	BCL	MG-NC	-2.19	2.01	2.06
15	W	102	BCL	C4B-CHC	2.18	1.47	1.41
15	V	103	BCL	C1D-C2D	2.18	1.49	1.45
15	L	310	BCL	C1B-CHB	2.18	1.47	1.41
15	J	101	BCL	MG-NA	-2.18	2.01	2.06
15	A	101	BCL	MG-NA	-2.18	2.01	2.06
15	V	103	BCL	MG-NA	-2.18	2.01	2.06
15	P	101	BCL	C1B-CHB	2.17	1.47	1.41
15	5	102	BCL	C1B-CHB	2.17	1.47	1.41
15	S	102	BCL	C4B-CHC	2.17	1.47	1.41
15	W	101	BCL	C1B-CHB	2.17	1.47	1.41
15	B	102	BCL	MG-NA	-2.17	2.01	2.06
15	D	101	BCL	C1B-CHB	2.17	1.47	1.41
15	D	102	BCL	C4B-CHC	2.17	1.47	1.41
15	5	103	BCL	MG-NA	-2.17	2.01	2.06
15	R	102	BCL	MG-NA	-2.16	2.01	2.06
15	G	102	BCL	MG-NC	-2.16	2.01	2.06
15	A	101	BCL	MG-NC	-2.16	2.01	2.06
15	3	102	BCL	C1B-CHB	2.16	1.47	1.41
15	O	103	BCL	C4B-CHC	2.16	1.47	1.41
15	O	102	BCL	C1B-CHB	2.16	1.47	1.41
15	J	101	BCL	C1B-CHB	2.16	1.47	1.41
15	O	102	BCL	MG-NC	-2.16	2.01	2.06
15	N	103	BCL	C1B-CHB	2.15	1.47	1.41
15	O	102	BCL	MG-NA	-2.15	2.01	2.06
15	R	102	BCL	C1B-CHB	2.15	1.47	1.41
15	T	101	BCL	C1B-CHB	2.15	1.47	1.41
15	X	101	BCL	C4B-CHC	2.15	1.47	1.41
15	R	102	BCL	MG-NC	-2.15	2.01	2.06
15	F	103	BCL	MG-NC	-2.14	2.01	2.06
15	6	101	BCL	C1B-CHB	2.14	1.46	1.41
15	0	102	BCL	C1B-CHB	2.14	1.46	1.41
15	Y	403	BCL	MG-NA	-2.14	2.01	2.06
15	Y	403	BCL	C1B-CHB	2.13	1.46	1.41
15	Q	102	BCL	MG-NC	-2.13	2.01	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	F	103	BCL	C1B-CHB	2.13	1.46	1.41
15	1	102	BCL	C4B-CHC	2.13	1.46	1.41
15	S	101	BCL	C4B-CHC	2.13	1.46	1.41
15	R	102	BCL	C1D-C2D	2.13	1.49	1.45
15	B	102	BCL	C1B-CHB	2.13	1.46	1.41
15	I	102	BCL	C1B-CHB	2.13	1.46	1.41
15	G	102	BCL	MG-NA	-2.12	2.01	2.06
15	K	102	BCL	C1B-CHB	2.12	1.46	1.41
15	4	102	BCL	C1B-CHB	2.12	1.46	1.41
15	L	302	BCL	MG-NA	-2.12	2.01	2.06
15	Z	103	BCL	C1B-CHB	2.12	1.46	1.41
15	T	101	BCL	C1D-C2D	2.12	1.49	1.45
15	P	101	BCL	MG-NA	-2.12	2.01	2.06
15	Y	403	BCL	MG-NC	-2.12	2.01	2.06
15	W	101	BCL	MG-NC	-2.11	2.01	2.06
15	Y	401	BCL	MG-NA	-2.11	2.01	2.06
15	9	103	BCL	C4B-CHC	2.11	1.46	1.41
15	M	403	BCL	C4B-CHC	2.11	1.46	1.41
15	Q	102	BCL	C1B-CHB	2.11	1.46	1.41
15	Y	401	BCL	C1B-CHB	2.11	1.46	1.41
15	8	103	BCL	C4B-CHC	2.10	1.46	1.41
15	2	101	BCL	C1B-CHB	2.10	1.46	1.41
15	E	101	BCL	MG-NA	-2.09	2.01	2.06
15	I	103	BCL	C4B-CHC	2.09	1.46	1.41
15	5	102	BCL	C4B-CHC	2.09	1.46	1.41
15	Z	103	BCL	C1D-C2D	2.09	1.49	1.45
15	Y	403	BCL	C4B-CHC	2.09	1.46	1.41
15	E	101	BCL	C1B-CHB	2.08	1.46	1.41
15	J	101	BCL	C4B-CHC	2.08	1.46	1.41
15	N	103	BCL	C4B-CHC	2.07	1.46	1.41
15	M	403	BCL	C1B-CHB	2.06	1.46	1.41
15	U	102	BCL	MG-NC	-2.06	2.01	2.06
15	9	102	BCL	C4B-CHC	2.06	1.46	1.41
15	0	102	BCL	C4B-CHC	2.05	1.46	1.41
15	3	102	BCL	C4B-CHC	2.05	1.46	1.41
15	V	103	BCL	C1B-CHB	2.05	1.46	1.41
15	2	101	BCL	C4B-CHC	2.04	1.46	1.41
15	5	103	BCL	C4B-CHC	2.04	1.46	1.41
15	L	302	BCL	C1B-CHB	2.04	1.46	1.41
15	T	101	BCL	C4B-CHC	2.03	1.46	1.41
15	X	101	BCL	C1B-CHB	2.03	1.46	1.41
15	5	102	BCL	C4D-CHA	2.03	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	P	101	BCL	C4B-CHC	2.02	1.46	1.41
15	V	103	BCL	C4B-CHC	2.02	1.46	1.41
15	I	102	BCL	C4B-CHC	2.02	1.46	1.41
15	W	101	BCL	C4B-CHC	2.01	1.46	1.41
15	G	102	BCL	C1B-CHB	2.01	1.46	1.41
15	K	102	BCL	C4B-CHC	2.01	1.46	1.41
15	L	302	BCL	C4B-CHC	2.01	1.46	1.41

All (1304) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	R	101	CRT	C2-C1-C4	-16.40	85.68	110.86
21	Z	102	CRT	C2-C1-C4	-16.40	85.69	110.86
21	N	102	CRT	C2-C1-C4	-16.23	85.94	110.86
21	4	101	CRT	C2-C1-C4	-16.22	85.95	110.86
21	V	102	CRT	C2-C1-C4	-15.88	86.48	110.86
21	8	102	CRT	C2-C1-C4	-15.74	86.69	110.86
21	B	101	CRT	C2-C1-C4	-15.69	86.77	110.86
21	G	101	CRT	C2-C1-C4	-15.28	87.41	110.86
21	G	101	CRT	C3-C1-C4	-14.85	88.05	110.86
21	V	102	CRT	C3-C1-C4	-14.84	88.07	110.86
21	8	102	CRT	C3-C1-C4	-14.13	89.17	110.86
21	R	101	CRT	C3-C1-C4	-14.08	89.24	110.86
21	N	102	CRT	C3-C1-C4	-13.92	89.48	110.86
21	4	101	CRT	C3-C1-C4	-13.91	89.49	110.86
21	B	101	CRT	C3-C1-C4	-13.43	90.24	110.86
21	Z	102	CRT	C3-C1-C4	-13.20	90.59	110.86
15	S	101	BCL	CHD-C1D-ND	-8.81	116.36	124.45
15	M	403	BCL	CHD-C1D-ND	-8.71	116.45	124.45
15	U	102	BCL	CHD-C1D-ND	-8.67	116.49	124.45
15	L	311	BCL	CHD-C1D-ND	-8.67	116.49	124.45
15	5	102	BCL	CHD-C1D-ND	-8.61	116.54	124.45
15	O	102	BCL	CHD-C1D-ND	-8.61	116.54	124.45
15	I	103	BCL	CHD-C1D-ND	-8.61	116.54	124.45
15	9	102	BCL	CHD-C1D-ND	-8.60	116.56	124.45
15	K	102	BCL	CHD-C1D-ND	-8.58	116.57	124.45
15	D	101	BCL	CHD-C1D-ND	-8.54	116.60	124.45
15	M	403	BCL	CMD-C2D-C1D	8.51	139.72	124.71
15	7	103	BCL	CHD-C1D-ND	-8.50	116.64	124.45
15	O	103	BCL	CHD-C1D-ND	-8.50	116.65	124.45
15	I	102	BCL	CHD-C1D-ND	-8.46	116.68	124.45
15	Y	401	BCL	CHD-C1D-ND	-8.44	116.70	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	1	102	BCL	CHD-C1D-ND	-8.39	116.74	124.45
15	Y	401	BCL	CMD-C2D-C1D	8.39	139.50	124.71
15	S	102	BCL	CHD-C1D-ND	-8.38	116.75	124.45
15	Y	403	BCL	CHD-C1D-ND	-8.38	116.75	124.45
15	3	102	BCL	CHD-C1D-ND	-8.36	116.77	124.45
15	L	302	BCL	CHD-C1D-ND	-8.35	116.78	124.45
15	F	103	BCL	CHD-C1D-ND	-8.32	116.81	124.45
15	O	103	BCL	CMD-C2D-C1D	8.32	139.38	124.71
15	W	101	BCL	CHD-C1D-ND	-8.32	116.81	124.45
15	A	101	BCL	CHD-C1D-ND	-8.31	116.82	124.45
15	9	103	BCL	CHD-C1D-ND	-8.29	116.84	124.45
15	W	102	BCL	CHD-C1D-ND	-8.27	116.86	124.45
15	D	102	BCL	CHD-C1D-ND	-8.25	116.88	124.45
15	5	103	BCL	CHD-C1D-ND	-8.22	116.90	124.45
15	Q	102	BCL	CHD-C1D-ND	-8.22	116.90	124.45
15	1	103	BCL	CHD-C1D-ND	-8.22	116.90	124.45
15	5	103	BCL	CMD-C2D-C1D	8.20	139.16	124.71
15	S	102	BCL	CMD-C2D-C1D	8.19	139.15	124.71
15	5	102	BCL	CMD-C2D-C1D	8.18	139.13	124.71
15	L	302	BCL	CMD-C2D-C1D	8.18	139.13	124.71
15	L	310	BCL	CHD-C1D-ND	-8.18	116.94	124.45
15	U	102	BCL	CMD-C2D-C1D	8.16	139.09	124.71
15	3	102	BCL	CMD-C2D-C1D	8.13	139.05	124.71
15	9	103	BCL	CMD-C2D-C1D	8.13	139.04	124.71
15	I	103	BCL	CMD-C2D-C1D	8.11	139.01	124.71
15	O	102	BCL	CMD-C2D-C1D	8.09	138.97	124.71
15	W	102	BCL	CMD-C2D-C1D	8.06	138.91	124.71
15	K	102	BCL	CMD-C2D-C1D	8.05	138.90	124.71
15	Y	403	BCL	CMD-C2D-C1D	8.02	138.84	124.71
15	I	102	BCL	CMD-C2D-C1D	7.98	138.78	124.71
15	F	103	BCL	CMD-C2D-C1D	7.97	138.76	124.71
15	S	101	BCL	CMD-C2D-C1D	7.96	138.75	124.71
15	A	101	BCL	CMD-C2D-C1D	7.96	138.74	124.71
15	D	102	BCL	CMD-C2D-C1D	7.91	138.66	124.71
15	Q	102	BCL	CMD-C2D-C1D	7.91	138.66	124.71
15	7	103	BCL	CMD-C2D-C1D	7.91	138.65	124.71
15	D	101	BCL	CMD-C2D-C1D	7.91	138.65	124.71
15	9	102	BCL	CMD-C2D-C1D	7.81	138.47	124.71
15	W	101	BCL	CMD-C2D-C1D	7.78	138.42	124.71
15	L	311	BCL	CMD-C2D-C1D	7.77	138.41	124.71
15	1	103	BCL	CMD-C2D-C1D	7.76	138.38	124.71
15	1	102	BCL	CMD-C2D-C1D	7.75	138.37	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	P	101	BCL	CHD-C1D-ND	-7.66	117.41	124.45
15	6	101	BCL	CHD-C1D-ND	-7.64	117.44	124.45
15	N	103	BCL	CHD-C1D-ND	-7.61	117.47	124.45
15	G	102	BCL	CHD-C1D-ND	-7.60	117.47	124.45
15	J	101	BCL	CHD-C1D-ND	-7.58	117.49	124.45
15	T	101	BCL	CHD-C1D-ND	-7.57	117.50	124.45
15	4	102	BCL	CHD-C1D-ND	-7.57	117.50	124.45
15	8	103	BCL	CHD-C1D-ND	-7.55	117.52	124.45
15	0	102	BCL	CHD-C1D-ND	-7.53	117.53	124.45
15	2	101	BCL	CHD-C1D-ND	-7.52	117.54	124.45
15	E	101	BCL	CHD-C1D-ND	-7.52	117.55	124.45
15	X	101	BCL	CHD-C1D-ND	-7.48	117.58	124.45
15	L	310	BCL	CMD-C2D-C1D	7.48	137.90	124.71
15	B	102	BCL	CHD-C1D-ND	-7.45	117.61	124.45
15	Z	103	BCL	CHD-C1D-ND	-7.26	117.78	124.45
15	R	102	BCL	CHD-C1D-ND	-7.24	117.81	124.45
15	V	103	BCL	CHD-C1D-ND	-7.21	117.83	124.45
15	4	102	BCL	CMD-C2D-C1D	7.20	137.40	124.71
15	E	101	BCL	CMD-C2D-C1D	7.15	137.31	124.71
15	N	103	BCL	CMD-C2D-C1D	7.14	137.30	124.71
15	J	101	BCL	CMD-C2D-C1D	7.13	137.28	124.71
15	P	101	BCL	CMD-C2D-C1D	7.05	137.14	124.71
15	R	102	BCL	CMD-C2D-C1D	7.00	137.06	124.71
15	8	103	BCL	CMD-C2D-C1D	6.98	137.02	124.71
15	X	101	BCL	CMD-C2D-C1D	6.96	136.98	124.71
15	2	101	BCL	CMD-C2D-C1D	6.96	136.97	124.71
15	6	101	BCL	CMD-C2D-C1D	6.92	136.91	124.71
15	B	102	BCL	CMD-C2D-C1D	6.92	136.90	124.71
15	G	102	BCL	CMD-C2D-C1D	6.90	136.87	124.71
15	0	102	BCL	CMD-C2D-C1D	6.81	136.72	124.71
15	T	101	BCL	CMD-C2D-C1D	6.77	136.64	124.71
15	V	103	BCL	CMD-C2D-C1D	6.75	136.61	124.71
15	Z	103	BCL	CMD-C2D-C1D	6.63	136.40	124.71
14	2	102	PGV	O01-C1-O02	-5.65	118.38	125.57
15	G	102	BCL	C2D-C1D-ND	5.50	114.16	110.10
15	R	102	BCL	C2D-C1D-ND	5.40	114.08	110.10
15	Z	103	BCL	C2D-C1D-ND	5.39	114.08	110.10
15	B	102	BCL	C2D-C1D-ND	5.38	114.07	110.10
15	L	310	BCL	O2D-CGD-CBD	5.35	120.77	111.27
15	P	101	BCL	C2D-C1D-ND	5.34	114.04	110.10
14	4	103	PGV	O01-C1-O02	-5.33	118.78	125.57
21	4	101	CRT	C3-C1-C2	5.31	120.36	110.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	7	103	BCL	C2D-C1D-ND	5.29	114.00	110.10
15	T	101	BCL	C2D-C1D-ND	5.28	114.00	110.10
15	0	102	BCL	C2D-C1D-ND	5.26	113.98	110.10
15	L	302	BCL	C2D-C1D-ND	5.26	113.98	110.10
21	N	102	CRT	C3-C1-C2	5.25	120.25	110.37
21	R	101	CRT	C3-C1-C2	5.23	120.20	110.37
15	I	103	BCL	O2D-CGD-CBD	5.20	120.51	111.27
15	O	103	BCL	O2D-CGD-CBD	5.19	120.50	111.27
15	M	403	BCL	C2D-C1D-ND	5.19	113.93	110.10
15	V	103	BCL	C2D-C1D-ND	5.17	113.92	110.10
15	8	103	BCL	C2D-C1D-ND	5.16	113.91	110.10
15	M	403	BCL	C3D-C2D-C1D	-5.15	98.80	105.83
15	Q	102	BCL	C2D-C1D-ND	5.13	113.88	110.10
21	V	102	CRT	C3-C1-C2	5.12	120.00	110.37
21	Z	102	CRT	C3-C1-C2	5.11	119.99	110.37
15	J	101	BCL	O2D-CGD-CBD	5.11	120.35	111.27
15	W	102	BCL	O2D-CGD-CBD	5.09	120.32	111.27
15	4	102	BCL	C2D-C1D-ND	5.09	113.86	110.10
15	2	101	BCL	C2D-C1D-ND	5.08	113.85	110.10
14	Z	104	PGV	O01-C1-O02	-5.07	119.12	125.57
15	N	103	BCL	C2D-C1D-ND	5.06	113.83	110.10
14	Z	101	PGV	O01-C1-O02	-5.05	119.14	125.57
15	6	101	BCL	C2D-C1D-ND	5.05	113.82	110.10
15	S	101	BCL	C2D-C1D-ND	5.03	113.81	110.10
15	1	102	BCL	C2D-C1D-ND	5.03	113.81	110.10
15	M	403	BCL	CHD-C4C-NC	5.02	130.65	125.08
15	D	101	BCL	C2D-C1D-ND	5.01	113.80	110.10
15	7	103	BCL	C3D-C2D-C1D	-5.00	99.00	105.83
15	I	102	BCL	C2D-C1D-ND	5.00	113.79	110.10
15	L	302	BCL	C3D-C2D-C1D	-5.00	99.01	105.83
15	0	102	BCL	O2D-CGD-CBD	5.00	120.15	111.27
15	U	102	BCL	C2D-C1D-ND	5.00	113.79	110.10
14	P	102	PGV	O01-C1-C2	5.00	120.28	111.09
15	S	101	BCL	C3D-C2D-C1D	-5.00	99.01	105.83
21	G	101	CRT	C3-C1-C2	4.99	119.75	110.37
15	A	101	BCL	O2D-CGD-CBD	4.98	120.12	111.27
15	Y	401	BCL	C3D-C2D-C1D	-4.98	99.04	105.83
15	E	101	BCL	C2D-C1D-ND	4.97	113.77	110.10
15	Y	401	BCL	C2D-C1D-ND	4.97	113.77	110.10
21	8	102	CRT	C3-C1-C2	4.97	119.71	110.37
15	X	101	BCL	C2D-C1D-ND	4.96	113.76	110.10
15	7	103	BCL	CHD-C4C-NC	4.96	130.59	125.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	B	103	PGV	O01-C1-C2	4.95	120.19	111.09
15	O	102	BCL	C2D-C1D-ND	4.94	113.75	110.10
15	I	102	BCL	C3D-C2D-C1D	-4.94	99.08	105.83
15	5	102	BCL	C3D-C2D-C1D	-4.93	99.10	105.83
15	L	311	BCL	C3D-C2D-C1D	-4.93	99.10	105.83
15	1	102	BCL	C3D-C2D-C1D	-4.92	99.12	105.83
15	Q	102	BCL	C3D-C2D-C1D	-4.91	99.13	105.83
15	D	101	BCL	C3D-C2D-C1D	-4.91	99.13	105.83
21	B	101	CRT	C3-C1-C2	4.90	119.59	110.37
15	U	102	BCL	C3D-C2D-C1D	-4.90	99.14	105.83
21	M	406	CRT	C20-C19-C17	-4.90	120.32	127.31
15	D	102	BCL	O2D-CGD-CBD	4.89	119.95	111.27
15	J	101	BCL	C2D-C1D-ND	4.89	113.70	110.10
15	X	101	BCL	O2D-CGD-CBD	4.88	119.93	111.27
15	W	101	BCL	O2D-CGD-CBD	4.87	119.92	111.27
15	I	103	BCL	C3D-C2D-C1D	-4.86	99.20	105.83
15	K	102	BCL	C2D-C1D-ND	4.86	113.69	110.10
15	A	101	BCL	C3D-C2D-C1D	-4.86	99.20	105.83
15	F	103	BCL	C3D-C2D-C1D	-4.86	99.20	105.83
15	3	102	BCL	C3D-C2D-C1D	-4.85	99.21	105.83
15	L	310	BCL	C2D-C1D-ND	4.84	113.67	110.10
15	F	103	BCL	C2D-C1D-ND	4.84	113.67	110.10
15	O	102	BCL	C3D-C2D-C1D	-4.83	99.23	105.83
14	V	104	PGV	O01-C1-C2	4.83	119.98	111.09
14	V	101	PGV	O01-C1-O02	-4.83	119.43	125.57
15	Y	403	BCL	O2D-CGD-CBD	4.82	119.83	111.27
15	Y	403	BCL	C2D-C1D-ND	4.82	113.65	110.10
15	K	102	BCL	C3D-C2D-C1D	-4.81	99.26	105.83
15	M	403	BCL	CMB-C2B-C3B	4.81	133.68	124.68
15	P	101	BCL	O2D-CGD-CBD	4.81	119.81	111.27
21	V	102	CRT	C21-C22-C23	-4.81	120.45	127.31
14	R	103	PGV	O01-C1-C2	4.80	119.93	111.09
15	A	101	BCL	C2D-C1D-ND	4.80	113.64	110.10
21	R	101	CRT	C21-C22-C23	-4.80	120.46	127.31
15	Q	102	BCL	O2D-CGD-CBD	4.80	119.80	111.27
15	L	311	BCL	C2D-C1D-ND	4.80	113.64	110.10
21	8	102	CRT	C21-C22-C23	-4.80	120.47	127.31
15	S	102	BCL	C3D-C2D-C1D	-4.79	99.29	105.83
21	G	101	CRT	C21-C22-C23	-4.78	120.48	127.31
15	Y	403	BCL	C3D-C2D-C1D	-4.78	99.31	105.83
15	1	103	BCL	O2D-CGD-CBD	4.78	119.76	111.27
15	W	102	BCL	C3D-C2D-C1D	-4.78	99.31	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	6	101	BCL	O2D-CGD-CBD	4.77	119.74	111.27
15	9	103	BCL	O2D-CGD-CBD	4.77	119.74	111.27
15	D	101	BCL	O2D-CGD-CBD	4.77	119.74	111.27
15	9	102	BCL	C3D-C2D-C1D	-4.76	99.33	105.83
15	R	102	BCL	C3D-C2D-C1D	-4.76	99.34	105.83
15	L	310	BCL	C3D-C2D-C1D	-4.75	99.34	105.83
14	N	104	PGV	O01-C1-C2	4.75	119.82	111.09
15	5	103	BCL	C3D-C2D-C1D	-4.74	99.36	105.83
15	8	103	BCL	C3D-C2D-C1D	-4.74	99.36	105.83
21	Z	102	CRT	C21-C22-C23	-4.74	120.55	127.31
15	B	102	BCL	C3D-C2D-C1D	-4.73	99.37	105.83
15	G	102	BCL	C3D-C2D-C1D	-4.73	99.37	105.83
15	5	102	BCL	C2D-C1D-ND	4.73	113.59	110.10
15	N	103	BCL	C3D-C2D-C1D	-4.73	99.38	105.83
15	K	102	BCL	O2D-CGD-CBD	4.73	119.67	111.27
15	D	102	BCL	C3D-C2D-C1D	-4.73	99.38	105.83
15	T	101	BCL	O2D-CGD-CBD	4.72	119.65	111.27
15	4	102	BCL	C3D-C2D-C1D	-4.71	99.40	105.83
15	Z	103	BCL	C3D-C2D-C1D	-4.71	99.40	105.83
15	K	102	BCL	CMB-C2B-C3B	4.71	133.49	124.68
15	P	101	BCL	C3D-C2D-C1D	-4.70	99.42	105.83
15	9	102	BCL	O2D-CGD-CBD	4.69	119.60	111.27
15	2	101	BCL	C3D-C2D-C1D	-4.69	99.43	105.83
15	9	103	BCL	C3D-C2D-C1D	-4.68	99.44	105.83
15	I	102	BCL	O2D-CGD-CBD	4.68	119.58	111.27
15	O	103	BCL	C3D-C2D-C1D	-4.67	99.45	105.83
15	E	101	BCL	C3D-C2D-C1D	-4.67	99.46	105.83
15	G	102	BCL	O2D-CGD-CBD	4.67	119.56	111.27
15	4	102	BCL	O2D-CGD-CBD	4.67	119.56	111.27
15	3	102	BCL	C2D-C1D-ND	4.66	113.54	110.10
15	R	102	BCL	O2D-CGD-CBD	4.66	119.55	111.27
15	J	101	BCL	C3D-C2D-C1D	-4.66	99.47	105.83
21	N	102	CRT	C21-C22-C23	-4.65	120.67	127.31
15	W	101	BCL	C3D-C2D-C1D	-4.65	99.48	105.83
15	L	311	BCL	O2D-CGD-CBD	4.65	119.53	111.27
15	V	103	BCL	C3D-C2D-C1D	-4.64	99.50	105.83
15	3	102	BCL	O2D-CGD-CBD	4.64	119.51	111.27
15	I	102	BCL	CMB-C2B-C3B	4.64	133.35	124.68
15	U	102	BCL	O2D-CGD-CBD	4.63	119.50	111.27
15	6	101	BCL	C3D-C2D-C1D	-4.63	99.51	105.83
15	1	103	BCL	C3D-C2D-C1D	-4.62	99.52	105.83
15	0	102	BCL	C3D-C2D-C1D	-4.62	99.53	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	X	101	BCL	C3D-C2D-C1D	-4.62	99.53	105.83
15	7	103	BCL	C3C-C4C-CHD	-4.61	113.53	123.39
15	S	102	BCL	O2D-CGD-CBD	4.61	119.45	111.27
15	S	101	BCL	O2D-CGD-CBD	4.60	119.45	111.27
15	T	101	BCL	C3D-C2D-C1D	-4.60	99.56	105.83
15	G	102	BCL	CHD-C4C-NC	4.59	130.18	125.08
15	G	102	BCL	C1D-ND-C4D	-4.59	103.07	106.33
15	F	103	BCL	O2D-CGD-CBD	4.59	119.42	111.27
15	R	102	BCL	C3C-C4C-CHD	-4.59	113.59	123.39
15	5	103	BCL	O2D-CGD-CBD	4.57	119.39	111.27
15	S	101	BCL	CMB-C2B-C3B	4.57	133.22	124.68
15	P	101	BCL	C1D-ND-C4D	-4.56	103.09	106.33
21	M	406	CRT	C21-C22-C23	-4.56	120.80	127.31
15	W	101	BCL	C2D-C1D-ND	4.55	113.46	110.10
15	W	102	BCL	C2D-C1D-ND	4.52	113.44	110.10
15	O	103	BCL	C4B-CHC-C1C	-4.52	121.16	130.12
15	2	101	BCL	O2D-CGD-CBD	4.51	119.29	111.27
15	7	103	BCL	O2D-CGD-CBD	4.51	119.28	111.27
15	G	102	BCL	C3C-C4C-CHD	-4.50	113.77	123.39
15	B	102	BCL	O2D-CGD-CBD	4.50	119.26	111.27
15	1	102	BCL	O2D-CGD-CBD	4.50	119.26	111.27
15	X	101	BCL	CMB-C2B-C3B	4.50	133.09	124.68
15	O	102	BCL	O2D-CGD-CBD	4.49	119.25	111.27
15	2	101	BCL	CHD-C4C-NC	4.48	130.05	125.08
21	B	101	CRT	C21-C22-C23	-4.48	120.92	127.31
15	R	102	BCL	CHD-C4C-NC	4.47	130.04	125.08
15	B	102	BCL	C1D-ND-C4D	-4.47	103.16	106.33
15	D	101	BCL	CMB-C2B-C3B	4.46	133.03	124.68
15	U	102	BCL	CMB-C2B-C3B	4.46	133.03	124.68
15	9	102	BCL	CMB-C2B-C3B	4.46	133.02	124.68
15	Y	403	BCL	CMB-C2B-C3B	4.45	133.01	124.68
9	C	403	HEC	CBA-CAA-C2A	-4.45	105.10	112.60
15	Z	103	BCL	CHD-C4C-NC	4.45	130.02	125.08
15	9	102	BCL	C4A-NA-C1A	4.45	108.71	106.71
21	4	101	CRT	C21-C22-C23	-4.45	120.96	127.31
15	F	103	BCL	CMB-C2B-C3B	4.45	133.00	124.68
15	L	310	BCL	CHD-C4C-NC	4.44	130.01	125.08
15	0	102	BCL	CHD-C4C-NC	4.44	130.01	125.08
14	H	301	PGV	O01-C1-C2	4.44	121.07	111.50
15	N	103	BCL	O2D-CGD-CBD	4.44	119.15	111.27
15	W	101	BCL	CMB-C2B-C3B	4.43	132.97	124.68
15	A	101	BCL	CMB-C2B-C3B	4.42	132.96	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	N	103	BCL	CHD-C4C-NC	4.42	129.98	125.08
15	T	101	BCL	C1D-ND-C4D	-4.41	103.20	106.33
15	1	103	BCL	CMB-C2B-C3B	4.41	132.93	124.68
15	E	101	BCL	O2D-CGD-CBD	4.41	119.10	111.27
15	M	403	BCL	C3C-C4C-CHD	-4.40	113.98	123.39
15	0	102	BCL	C3C-C4C-CHD	-4.40	113.98	123.39
15	I	103	BCL	C2D-C1D-ND	4.40	113.35	110.10
15	L	302	BCL	CMB-C2B-C3B	4.40	132.91	124.68
15	G	102	BCL	CMB-C2B-C3B	4.40	132.91	124.68
15	1	102	BCL	CMB-C2B-C3B	4.40	132.91	124.68
15	Z	103	BCL	C3C-C4C-CHD	-4.39	114.00	123.39
15	J	101	BCL	CHD-C4C-NC	4.39	129.96	125.08
18	F	101	CDL	OA6-CA5-C11	4.39	120.97	111.50
15	E	101	BCL	CMB-C2B-C3B	4.39	132.89	124.68
21	V	102	CRT	C26-C27-C28	-4.37	121.07	127.31
18	U	101	CDL	OB6-CB5-C51	4.36	120.91	111.50
15	L	302	BCL	CHD-C4C-NC	4.36	129.92	125.08
15	T	101	BCL	CMB-C2B-C3B	4.36	132.84	124.68
15	M	403	BCL	C1D-ND-C4D	-4.36	103.24	106.33
15	Y	401	BCL	O2D-CGD-CBD	4.36	119.01	111.27
15	L	302	BCL	C1D-ND-C4D	-4.35	103.25	106.33
15	4	102	BCL	CMB-C2B-C3B	4.35	132.81	124.68
15	0	102	BCL	C1D-ND-C4D	-4.35	103.25	106.33
15	X	101	BCL	CHD-C4C-NC	4.34	129.90	125.08
18	M	408	CDL	OA6-CA5-C11	4.34	119.08	111.09
15	B	102	BCL	CHD-C4C-NC	4.33	129.89	125.08
15	Z	103	BCL	C1D-ND-C4D	-4.33	103.26	106.33
15	B	102	BCL	C3C-C4C-CHD	-4.33	114.14	123.39
15	5	102	BCL	CMB-C2B-C3B	4.33	132.78	124.68
15	T	101	BCL	C3C-C4C-CHD	-4.33	114.14	123.39
15	I	103	BCL	CMB-C2B-C3B	4.33	132.78	124.68
15	8	103	BCL	O2D-CGD-CBD	4.32	118.95	111.27
18	L	312	CDL	OB6-CB5-C51	4.32	120.81	111.50
15	V	103	BCL	O2D-CGD-CBD	4.32	118.94	111.27
15	T	101	BCL	CHD-C4C-NC	4.31	129.87	125.08
15	V	103	BCL	CHD-C4C-NC	4.31	129.87	125.08
15	V	103	BCL	C3C-C4C-CHD	-4.30	114.21	123.39
15	N	103	BCL	CMB-C2B-C3B	4.29	132.70	124.68
14	I	101	PGV	O01-C1-C2	4.28	120.73	111.50
15	J	101	BCL	CMB-C2B-C3B	4.28	132.69	124.68
15	Q	102	BCL	CHD-C4C-NC	4.28	129.83	125.08
15	6	101	BCL	C1D-ND-C4D	-4.27	103.30	106.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	P	101	BCL	CHD-C4C-NC	4.27	129.82	125.08
15	F	103	BCL	CHD-C4C-NC	4.27	129.82	125.08
15	E	101	BCL	CHD-C4C-NC	4.27	129.81	125.08
15	9	102	BCL	C2D-C1D-ND	4.26	113.25	110.10
15	X	101	BCL	C3C-C4C-CHD	-4.26	114.29	123.39
15	2	101	BCL	CMB-C2B-C3B	4.26	132.65	124.68
15	R	102	BCL	C1D-ND-C4D	-4.26	103.31	106.33
15	U	102	BCL	CHD-C4C-NC	4.25	129.80	125.08
15	1	103	BCL	C2D-C1D-ND	4.25	113.24	110.10
15	O	102	BCL	CMB-C2B-C3B	4.25	132.63	124.68
15	D	101	BCL	C1-C2-C3	-4.25	118.70	126.04
15	R	102	BCL	CMB-C2B-C3B	4.24	132.62	124.68
15	Z	103	BCL	O2D-CGD-CBD	4.24	118.81	111.27
15	5	103	BCL	C2D-C1D-ND	4.23	113.22	110.10
15	Q	102	BCL	C1D-ND-C4D	-4.23	103.33	106.33
15	1	102	BCL	CHD-C4C-NC	4.22	129.77	125.08
15	N	103	BCL	C3C-C4C-CHD	-4.22	114.37	123.39
15	A	101	BCL	CHD-C4C-NC	4.22	129.76	125.08
15	4	102	BCL	CHD-C4C-NC	4.22	129.76	125.08
15	7	103	BCL	C1D-ND-C4D	-4.21	103.34	106.33
15	P	101	BCL	CMB-C2B-C3B	4.21	132.56	124.68
15	J	101	BCL	C3C-C4C-CHD	-4.21	114.40	123.39
15	5	102	BCL	O2D-CGD-CBD	4.21	118.75	111.27
15	6	101	BCL	CMB-C2B-C3B	4.21	132.55	124.68
15	S	102	BCL	C2D-C1D-ND	4.21	113.20	110.10
15	E	101	BCL	C3C-C4C-CHD	-4.20	114.41	123.39
15	Y	403	BCL	CHD-C4C-NC	4.20	129.74	125.08
15	U	102	BCL	C1D-ND-C4D	-4.20	103.35	106.33
15	0	102	BCL	CMB-C2B-C3B	4.20	132.54	124.68
15	3	102	BCL	CMB-C2B-C3B	4.19	132.53	124.68
15	B	102	BCL	CMB-C2B-C3B	4.19	132.52	124.68
15	2	101	BCL	C3C-C4C-CHD	-4.19	114.44	123.39
14	X	102	PGV	O01-C1-C2	4.18	120.52	111.50
18	M	409	CDL	OA6-CA5-C11	4.18	120.51	111.50
14	Z	105	PGV	O01-C1-C2	4.18	120.50	111.50
15	Y	403	BCL	C1D-ND-C4D	-4.17	103.37	106.33
14	L	309	PGV	O01-C1-C2	4.17	120.48	111.50
15	O	102	BCL	CHD-C4C-NC	4.17	129.71	125.08
15	P	101	BCL	C3C-C4C-CHD	-4.17	114.49	123.39
14	L	305	PGV	O01-C1-C2	4.16	120.47	111.50
15	O	102	BCL	C1D-ND-C4D	-4.16	103.38	106.33
14	B	104	PGV	O01-C1-C2	4.16	120.47	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	H	302	CDL	OB6-CB5-C51	4.16	120.46	111.50
15	E	101	BCL	C1D-ND-C4D	-4.15	103.38	106.33
15	3	102	BCL	CHD-C4C-NC	4.15	129.69	125.08
15	V	103	BCL	C1D-ND-C4D	-4.15	103.39	106.33
15	X	101	BCL	C1D-ND-C4D	-4.15	103.39	106.33
15	I	103	BCL	C1-C2-C3	-4.15	118.86	126.04
15	4	102	BCL	C1-C2-C3	-4.15	118.86	126.04
15	D	101	BCL	C1D-ND-C4D	-4.15	103.39	106.33
14	8	104	PGV	O01-C1-C2	4.14	120.42	111.50
15	L	302	BCL	C3C-C4C-CHD	-4.13	114.57	123.39
15	4	102	BCL	C1D-ND-C4D	-4.13	103.40	106.33
15	9	103	BCL	C2D-C1D-ND	4.13	113.14	110.10
15	8	103	BCL	CHD-C4C-NC	4.12	129.65	125.08
14	2	103	PGV	O01-C1-C2	4.12	120.38	111.50
15	8	103	BCL	C1D-ND-C4D	-4.12	103.41	106.33
18	M	408	CDL	OB6-CB5-C51	4.11	120.37	111.50
14	T	102	PGV	O01-C1-C2	4.11	120.36	111.50
15	I	102	BCL	C1D-ND-C4D	-4.11	103.42	106.33
15	L	311	BCL	CMB-C2B-C3B	4.10	132.36	124.68
15	D	101	BCL	CHD-C4C-NC	4.10	129.62	125.08
15	8	103	BCL	C1-C2-C3	-4.09	118.97	126.04
15	V	103	BCL	CMB-C2B-C3B	4.09	132.33	124.68
15	4	102	BCL	C3C-C4C-CHD	-4.08	114.67	123.39
15	Q	102	BCL	C3C-C4C-CHD	-4.08	114.68	123.39
14	E	103	PGV	O01-C1-C2	4.08	120.28	111.50
15	Y	401	BCL	C1D-ND-C4D	-4.07	103.44	106.33
15	2	101	BCL	C1D-ND-C4D	-4.07	103.44	106.33
15	I	102	BCL	CHD-C4C-NC	4.07	129.59	125.08
13	F	102	LMT	C1B-O5B-C5B	4.06	121.66	113.69
15	D	102	BCL	C2D-C1D-ND	4.06	113.10	110.10
17	L	306	UQ8	C10-C9-C11	4.05	122.09	115.27
15	W	101	BCL	CHD-C4C-NC	4.05	129.57	125.08
15	K	102	BCL	C1D-ND-C4D	-4.05	103.46	106.33
15	S	101	BCL	C1D-ND-C4D	-4.05	103.46	106.33
15	Z	103	BCL	CMB-C2B-C3B	4.05	132.25	124.68
15	L	310	BCL	C1D-ND-C4D	-4.04	103.47	106.33
15	K	102	BCL	CHD-C4C-NC	4.04	129.56	125.08
14	N	105	PGV	O01-C1-C2	4.03	120.18	111.50
15	6	101	BCL	CHD-C4C-NC	4.02	129.54	125.08
15	U	102	BCL	C3C-C4C-CHD	-4.00	114.84	123.39
14	C	409	PGV	O01-C1-C2	4.00	120.12	111.50
15	L	310	BCL	CMB-C2B-C3B	3.99	132.14	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	Q	102	BCL	CMB-C2B-C3B	3.99	132.13	124.68
15	L	310	BCL	C3C-C4C-CHD	-3.98	114.89	123.39
15	1	102	BCL	C3C-C4C-CHD	-3.98	114.89	123.39
15	F	103	BCL	C1D-ND-C4D	-3.98	103.51	106.33
15	D	102	BCL	CMB-C2B-C3B	3.97	132.11	124.68
15	Y	401	BCL	CHD-C4C-NC	3.96	129.47	125.08
15	W	101	BCL	C1-C2-C3	-3.95	119.21	126.04
15	M	403	BCL	O2D-CGD-CBD	3.95	118.28	111.27
15	8	103	BCL	C3C-C4C-CHD	-3.95	114.96	123.39
15	F	103	BCL	C3C-C4C-CHD	-3.94	114.97	123.39
15	1	102	BCL	C1D-ND-C4D	-3.94	103.53	106.33
15	L	302	BCL	O2D-CGD-CBD	3.94	118.27	111.27
14	0	101	PGV	O01-C1-C2	3.92	119.94	111.50
15	A	101	BCL	C3C-C4C-CHD	-3.91	115.03	123.39
21	N	102	CRT	C20-C19-C17	-3.91	121.73	127.31
15	J	101	BCL	C1D-ND-C4D	-3.90	103.56	106.33
15	8	103	BCL	CMB-C2B-C3B	3.90	131.97	124.68
15	O	102	BCL	C3C-C4C-CHD	-3.89	115.08	123.39
15	L	311	BCL	CHD-C4C-NC	3.89	129.39	125.08
18	M	409	CDL	OB6-CB5-C51	3.87	119.85	111.50
14	J	102	PGV	O01-C1-C2	3.87	119.84	111.50
15	6	101	BCL	C3C-C4C-CHD	-3.87	115.12	123.39
14	R	104	PGV	O01-C1-C2	3.87	119.84	111.50
9	C	401	HEC	CBA-CAA-C2A	-3.86	106.10	112.60
15	W	102	BCL	C1D-ND-C4D	-3.85	103.60	106.33
14	H	304	PGV	O01-C1-C2	3.85	119.80	111.50
17	L	304	UQ8	C7-C8-C9	-3.84	120.40	126.79
15	Y	403	BCL	C3C-C4C-CHD	-3.84	115.20	123.39
18	M	410	CDL	OB6-CB5-C51	3.83	119.77	111.50
14	1	101	PGV	O01-C1-C2	3.83	119.76	111.50
21	N	102	CRT	C26-C27-C28	-3.82	121.85	127.31
15	3	102	BCL	C3C-C4C-CHD	-3.82	115.23	123.39
21	M	406	CRT	C10-C9-C7	-3.81	121.87	127.31
15	K	102	BCL	C3C-C4C-CHD	-3.81	115.25	123.39
15	L	311	BCL	C1-C2-C3	-3.81	119.46	126.04
18	H	302	CDL	OA6-CA5-C11	3.80	119.70	111.50
15	N	103	BCL	C1D-ND-C4D	-3.80	103.64	106.33
17	L	306	UQ8	C7-C8-C9	-3.80	120.47	126.79
15	A	101	BCL	C1D-ND-C4D	-3.79	103.64	106.33
14	4	104	PGV	O01-C1-C2	3.78	119.65	111.50
15	Y	401	BCL	C3C-C4C-CHD	-3.78	115.32	123.39
15	W	102	BCL	CMB-C2B-C3B	3.78	131.74	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	I	102	BCL	C3C-C4C-CHD	-3.77	115.33	123.39
15	R	102	BCL	C1-C2-C3	-3.77	119.52	126.04
18	M	402	CDL	OA6-CA5-C11	3.77	119.62	111.50
15	7	103	BCL	CMB-C2B-C3B	3.77	131.73	124.68
15	W	101	BCL	C1D-ND-C4D	-3.77	103.66	106.33
15	9	102	BCL	C1-C2-C3	-3.76	119.53	126.04
14	L	308	PGV	O01-C1-C2	3.75	119.58	111.50
15	W	101	BCL	C3C-C4C-CHD	-3.75	115.39	123.39
15	D	101	BCL	C3C-C4C-CHD	-3.74	115.39	123.39
15	S	101	BCL	CHD-C4C-NC	3.73	129.22	125.08
14	G	104	PGV	O01-C1-C2	3.73	119.54	111.50
15	B	102	BCL	C1-C2-C3	-3.72	119.61	126.04
14	6	102	PGV	O01-C1-C2	3.72	119.52	111.50
15	L	311	BCL	C1D-ND-C4D	-3.70	103.71	106.33
14	P	102	PGV	C02-O01-C1	-3.67	111.06	117.90
15	S	102	BCL	C4B-CHC-C1C	-3.66	122.88	130.12
14	H	303	PGV	O01-C1-C2	3.65	119.38	111.50
15	9	103	BCL	CMB-C2B-C3B	3.65	131.50	124.68
14	8	101	PGV	O01-C1-C2	3.65	119.36	111.50
14	3	101	PGV	O01-C1-C2	3.64	119.36	111.50
15	T	101	BCL	C3D-C4D-ND	3.64	116.12	110.24
15	W	102	BCL	CHD-C4C-NC	3.63	129.11	125.08
18	L	312	CDL	OA6-CA5-C11	3.62	119.31	111.50
15	P	101	BCL	C3D-C4D-ND	3.61	116.08	110.24
15	O	102	BCL	C1-C2-C3	-3.59	119.83	126.04
15	6	101	BCL	C3D-C4D-ND	3.58	116.02	110.24
18	M	407	CDL	OB6-CB5-C51	3.57	119.20	111.50
14	P	103	PGV	O01-C1-C2	3.57	119.19	111.50
15	0	102	BCL	C3D-C4D-ND	3.56	116.00	110.24
15	X	101	BCL	C3D-C4D-ND	3.56	116.00	110.24
18	F	101	CDL	OB6-CB5-C51	3.56	119.17	111.50
15	3	102	BCL	C1D-ND-C4D	-3.55	103.81	106.33
15	S	102	BCL	CMB-C2B-C3B	3.55	131.31	124.68
14	V	105	PGV	O01-C1-C2	3.54	119.14	111.50
15	D	102	BCL	C4B-CHC-C1C	-3.54	123.11	130.12
21	4	101	CRT	C20-C19-C17	-3.53	122.27	127.31
15	G	102	BCL	C3D-C4D-ND	3.53	115.95	110.24
18	M	410	CDL	OA6-CA5-C11	3.52	119.10	111.50
15	5	103	BCL	C1D-ND-C4D	-3.52	103.83	106.33
15	O	103	BCL	C2D-C1D-ND	3.52	112.69	110.10
18	M	407	CDL	OA6-CA5-C11	3.51	119.07	111.50
15	5	103	BCL	CMB-C2B-C3B	3.51	131.25	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	0	104	PGV	O01-C1-C2	3.50	119.05	111.50
15	L	310	BCL	C3D-C4D-ND	3.50	115.90	110.24
15	1	102	BCL	C1-C2-C3	-3.48	120.02	126.04
15	B	102	BCL	C3D-C4D-ND	3.48	115.86	110.24
15	Z	103	BCL	C3D-C4D-ND	3.47	115.85	110.24
15	9	103	BCL	C4B-CHC-C1C	-3.47	123.25	130.12
15	J	101	BCL	C1-C2-C3	-3.47	120.04	126.04
15	I	103	BCL	C1D-ND-C4D	-3.47	103.87	106.33
15	Y	403	BCL	C3D-C4D-ND	3.46	115.84	110.24
21	M	406	CRT	C5-C6-C7	-3.45	120.67	125.89
14	B	103	PGV	C02-O01-C1	-3.45	111.47	117.90
15	W	102	BCL	C3D-C4D-ND	3.45	115.82	110.24
15	5	103	BCL	CHD-C4C-NC	3.45	128.91	125.08
15	5	102	BCL	C1D-ND-C4D	-3.44	103.89	106.33
18	U	101	CDL	OA6-CA5-C11	3.44	118.91	111.50
15	U	102	BCL	C3D-C4D-ND	3.44	115.80	110.24
21	B	101	CRT	C20-C19-C17	-3.43	122.41	127.31
15	Q	102	BCL	C1-C2-C3	-3.43	120.11	126.04
15	V	103	BCL	C3D-C4D-ND	3.43	115.78	110.24
15	8	103	BCL	C3D-C4D-ND	3.42	115.77	110.24
15	E	101	BCL	C3D-C4D-ND	3.42	115.77	110.24
15	O	102	BCL	C3D-C4D-ND	3.42	115.77	110.24
15	4	102	BCL	C3D-C4D-ND	3.42	115.76	110.24
15	1	103	BCL	C1D-ND-C4D	-3.41	103.91	106.33
14	E	102	PGV	O01-C1-C2	3.41	118.86	111.50
15	1	103	BCL	C4B-CHC-C1C	-3.41	123.36	130.12
15	2	101	BCL	C3D-C4D-ND	3.41	115.75	110.24
15	9	103	BCL	C1D-ND-C4D	-3.40	103.92	106.33
21	G	101	CRT	C20-C19-C17	-3.39	122.47	127.31
21	V	102	CRT	C20-C19-C17	-3.38	122.49	127.31
15	S	102	BCL	C1D-ND-C4D	-3.38	103.93	106.33
15	R	102	BCL	C3D-C4D-ND	3.38	115.70	110.24
15	6	101	BCL	C1-C2-C3	-3.38	120.20	126.04
15	D	101	BCL	C3D-C4D-ND	3.38	115.70	110.24
15	I	102	BCL	C3D-C4D-ND	3.38	115.70	110.24
15	L	311	BCL	C3D-C4D-ND	3.37	115.69	110.24
15	W	101	BCL	C3D-C4D-ND	3.37	115.69	110.24
15	K	102	BCL	C3D-C4D-ND	3.37	115.69	110.24
14	L	305	PGV	C02-O01-C1	-3.37	109.49	117.79
15	M	403	BCL	C3D-C4D-ND	3.36	115.67	110.24
15	S	101	BCL	C3D-C4D-ND	3.36	115.67	110.24
15	L	302	BCL	C3D-C4D-ND	3.36	115.67	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	O	103	BCL	CMB-C2B-C3B	3.36	130.96	124.68
15	L	311	BCL	C3C-C4C-CHD	-3.35	116.23	123.39
15	2	101	BCL	C1-C2-C3	-3.35	120.25	126.04
15	S	102	BCL	C1-C2-C3	-3.35	120.25	126.04
15	F	103	BCL	C3D-C4D-ND	3.32	115.60	110.24
21	8	102	CRT	C15-C14-C12	-3.31	122.58	127.31
15	Q	102	BCL	C3D-C4D-ND	3.31	115.60	110.24
15	Y	401	BCL	C3D-C4D-ND	3.31	115.59	110.24
15	1	102	BCL	C3D-C4D-ND	3.31	115.58	110.24
21	R	101	CRT	C20-C19-C17	-3.30	122.60	127.31
15	5	103	BCL	C3D-C4D-ND	3.30	115.57	110.24
15	0	102	BCL	C1-C2-C3	-3.29	120.35	126.04
15	5	103	BCL	C3C-C4C-CHD	-3.29	116.37	123.39
14	G	103	PGV	O01-C1-C2	3.29	119.97	110.80
15	7	103	BCL	C3D-C4D-ND	3.29	115.55	110.24
15	I	102	BCL	C4-C3-C5	3.28	120.79	115.27
15	1	103	BCL	C3D-C4D-ND	3.26	115.52	110.24
15	9	103	BCL	C3D-C4D-ND	3.26	115.51	110.24
21	8	102	CRT	C20-C19-C17	-3.26	122.66	127.31
15	A	101	BCL	C3D-C4D-ND	3.26	115.51	110.24
18	M	402	CDL	OB6-CB5-C51	3.25	118.51	111.50
15	S	102	BCL	C3D-C4D-ND	3.25	115.50	110.24
15	J	101	BCL	C3D-C4D-ND	3.24	115.48	110.24
15	I	103	BCL	C3D-C4D-ND	3.24	115.48	110.24
15	W	102	BCL	C3C-C4C-CHD	-3.23	116.49	123.39
9	C	401	HEC	CBD-CAD-C3D	-3.23	107.11	112.62
14	R	103	PGV	O03-C19-C20	3.22	122.02	111.91
15	I	103	BCL	C4B-CHC-C1C	-3.21	123.75	130.12
15	D	102	BCL	C1D-ND-C4D	-3.21	104.06	106.33
15	9	103	BCL	CHD-C4C-NC	3.21	128.64	125.08
15	9	102	BCL	C4B-CHC-C1C	-3.21	123.77	130.12
15	D	102	BCL	C3D-C4D-ND	3.20	115.42	110.24
15	V	103	BCL	C4-C3-C5	3.20	120.65	115.27
15	N	103	BCL	C3D-C4D-ND	3.20	115.41	110.24
21	4	101	CRT	C26-C27-C28	-3.19	122.75	127.31
15	T	101	BCL	C4-C3-C5	3.19	120.64	115.27
15	I	103	BCL	CHD-C4C-NC	3.19	128.62	125.08
15	R	102	BCL	C4-C3-C5	3.19	120.63	115.27
15	9	102	BCL	C1D-ND-C4D	-3.18	104.08	106.33
14	0	103	PGV	O01-C1-C2	3.17	119.65	110.80
15	5	102	BCL	C4A-NA-C1A	3.17	108.13	106.71
15	9	102	BCL	C3D-C4D-ND	3.15	115.34	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	Y	403	BCL	C4-C3-C5	3.14	120.56	115.27
18	U	101	CDL	CB4-OB6-CB5	-3.14	110.06	117.79
15	3	102	BCL	C3D-C4D-ND	3.13	115.31	110.24
21	G	101	CRT	C26-C27-C28	-3.13	122.84	127.31
15	5	102	BCL	CHD-C4C-NC	3.13	128.55	125.08
15	5	103	BCL	C1-C2-C3	-3.12	120.65	126.04
15	O	103	BCL	C3D-C4D-ND	3.11	115.26	110.24
15	S	101	BCL	C1-C2-C3	-3.11	120.67	126.04
15	1	103	BCL	CHD-C4C-NC	3.10	128.52	125.08
15	9	102	BCL	CHD-C4C-NC	3.10	128.52	125.08
15	Y	401	BCL	CMB-C2B-C3B	3.09	130.47	124.68
15	S	101	BCL	O2A-CGA-CBA	3.09	121.60	111.91
15	S	102	BCL	CHD-C4C-NC	3.08	128.50	125.08
15	L	302	BCL	O2A-CGA-CBA	3.08	121.58	111.91
14	N	101	PGV	O01-C1-C2	3.08	119.39	110.80
15	I	103	BCL	O2A-CGA-CBA	3.08	121.56	111.91
9	C	402	HEC	CBA-CAA-C2A	-3.07	107.42	112.60
14	H	304	PGV	C02-O01-C1	-3.07	110.22	117.79
15	3	102	BCL	O2A-CGA-CBA	3.07	121.53	111.91
15	X	101	BCL	C1-C2-C3	-3.06	120.76	126.04
20	M	405	MQ8	C39-C38-C40	3.05	120.40	115.27
17	L	306	UQ8	C17-C18-C19	-3.05	120.32	127.66
15	W	102	BCL	C4-C3-C5	3.04	120.39	115.27
15	P	101	BCL	C4-C3-C5	3.04	120.38	115.27
15	X	101	BCL	C4-C3-C5	3.03	120.37	115.27
15	F	103	BCL	C4-C3-C5	3.03	120.37	115.27
15	W	101	BCL	O2A-CGA-CBA	3.02	121.39	111.91
15	S	101	BCL	C3C-C4C-CHD	-3.02	116.95	123.39
15	N	103	BCL	C1-C2-C3	-3.01	120.83	126.04
15	9	102	BCL	C4-C3-C5	3.01	120.33	115.27
15	B	102	BCL	O2A-CGA-CBA	3.01	121.34	111.91
15	O	102	BCL	O2A-CGA-CBA	3.00	121.33	111.91
14	G	104	PGV	O03-C19-C20	2.99	121.30	111.91
15	Z	103	BCL	O2A-CGA-CBA	2.99	121.30	111.91
15	5	103	BCL	O2A-CGA-CBA	2.99	121.30	111.91
18	M	408	CDL	CB4-OB6-CB5	-2.99	110.43	117.79
15	5	102	BCL	O2A-CGA-CBA	2.99	121.28	111.91
14	V	104	PGV	C02-O01-C1	-2.99	112.33	117.90
15	D	102	BCL	O2A-CGA-CBA	2.99	121.28	111.91
15	O	102	BCL	C4-C3-C5	2.98	120.28	115.27
15	I	103	BCL	C3C-C4C-CHD	-2.98	117.03	123.39
15	O	103	BCL	C1-C2-C3	-2.97	120.90	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	405	MQ8	C14-C13-C15	2.97	120.27	115.27
21	B	101	CRT	C26-C27-C28	-2.96	123.08	127.31
21	Z	102	CRT	C20-C19-C17	-2.96	123.08	127.31
15	0	102	BCL	C4-C3-C5	2.96	120.25	115.27
15	5	102	BCL	C3D-C4D-ND	2.96	115.02	110.24
14	R	103	PGV	C02-O01-C1	-2.95	112.39	117.90
21	V	102	CRT	C15-C14-C12	-2.95	123.10	127.31
13	5	101	LMT	C1B-O1B-C4'	-2.95	110.67	117.96
15	1	102	BCL	O2A-CGA-CBA	2.93	121.11	111.91
13	7	101	LMT	C1B-O1B-C4'	-2.93	110.72	117.96
15	L	302	BCL	C1-C2-C3	-2.93	120.98	126.04
15	W	102	BCL	C4B-CHC-C1C	-2.93	124.32	130.12
15	I	102	BCL	O2A-CGA-CBA	2.92	121.08	111.91
15	R	102	BCL	CHB-C4A-NA	2.92	128.55	124.51
14	N	104	PGV	O03-C19-C20	2.92	121.07	111.91
20	M	405	MQ8	C29-C28-C30	2.92	120.18	115.27
15	P	101	BCL	C1-C2-C3	-2.92	121.00	126.04
15	1	103	BCL	C1-C2-C3	-2.91	121.00	126.04
17	L	306	UQ8	C20-C19-C21	2.91	120.17	115.27
15	Q	102	BCL	C4-C3-C5	2.91	120.17	115.27
18	M	408	CDL	OB8-CB7-C71	2.91	121.03	111.91
14	C	409	PGV	O03-C19-C20	2.91	121.03	111.91
14	Z	105	PGV	C02-O01-C1	-2.90	110.64	117.79
15	2	101	BCL	C4-C3-C5	2.90	120.15	115.27
20	M	405	MQ8	C21-C22-C23	-2.90	120.68	127.66
21	M	406	CRT	C14-C15-C16	-2.90	114.18	123.22
18	M	402	CDL	OB8-CB7-C71	2.90	120.99	111.91
15	D	101	BCL	O2A-CGA-CBA	2.89	120.99	111.91
15	N	103	BCL	C4-C3-C5	2.89	120.14	115.27
15	F	103	BCL	CHC-C1C-NC	2.89	128.51	124.51
14	2	102	PGV	O03-C19-C20	2.89	120.97	111.91
15	S	102	BCL	C4-C3-C5	2.89	120.13	115.27
20	M	405	MQ8	C41-C42-C43	-2.88	120.72	127.66
20	M	405	MQ8	C36-C37-C38	-2.88	120.72	127.66
15	O	103	BCL	C4A-NA-C1A	2.88	108.00	106.71
15	T	101	BCL	C1-C2-C3	-2.88	121.07	126.04
15	K	102	BCL	CHC-C1C-NC	2.87	128.48	124.51
15	S	102	BCL	C3C-C4C-CHD	-2.87	117.27	123.39
15	V	103	BCL	O2A-CGA-CBA	2.87	120.90	111.91
15	1	103	BCL	O2A-CGA-CBA	2.86	120.88	111.91
20	M	405	MQ8	C26-C27-C28	-2.86	120.78	127.66
15	L	311	BCL	O2A-CGA-CBA	2.86	120.87	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	U	102	BCL	O2A-CGA-CBA	2.86	120.87	111.91
14	4	104	PGV	O03-C19-C20	2.86	120.87	111.91
14	P	103	PGV	O03-C19-C20	2.85	120.86	111.91
15	1	102	BCL	C4A-NA-C1A	2.85	107.99	106.71
15	W	101	BCL	C4-C3-C5	2.85	120.07	115.27
21	8	102	CRT	C26-C27-C28	-2.85	123.24	127.31
15	Z	103	BCL	C4-C3-C5	2.85	120.07	115.27
14	H	301	PGV	C02-O01-C1	-2.85	110.77	117.79
15	1	103	BCL	C3C-C4C-CHD	-2.85	117.31	123.39
18	F	101	CDL	OB8-CB7-C71	2.84	120.83	111.91
15	R	102	BCL	O2A-CGA-CBA	2.84	120.82	111.91
15	7	103	BCL	C4-C3-C5	2.84	120.05	115.27
15	K	102	BCL	C4-C3-C5	2.84	120.04	115.27
21	V	102	CRT	C36-C35-C33	-2.84	121.61	125.89
14	G	103	PGV	O03-C19-C20	2.84	120.81	111.91
15	O	103	BCL	C4-C3-C5	2.83	120.04	115.27
14	L	309	PGV	O03-C19-C20	2.83	120.80	111.91
18	L	312	CDL	OB8-CB7-C71	2.83	120.79	111.91
21	M	406	CRT	C31-C32-C33	-2.83	123.27	127.31
15	X	101	BCL	O2A-CGA-CBA	2.83	120.78	111.91
20	M	405	MQ8	C24-C23-C25	2.83	120.03	115.27
14	8	101	PGV	O03-C19-C20	2.83	120.78	111.91
15	4	102	BCL	O2A-CGA-CBA	2.83	120.78	111.91
20	M	405	MQ8	C16-C17-C18	-2.83	120.86	127.66
15	O	103	BCL	O2A-CGA-CBA	2.83	120.78	111.91
21	Z	102	CRT	C26-C27-C28	-2.83	123.28	127.31
18	M	409	CDL	OB8-CB7-C71	2.82	120.75	111.91
14	E	103	PGV	C02-O01-C1	-2.82	110.85	117.79
21	V	102	CRT	C21-C20-C19	-2.82	117.70	123.47
15	9	103	BCL	O2A-CGA-CBA	2.82	120.75	111.91
14	0	101	PGV	O03-C19-C20	2.81	120.73	111.91
15	0	102	BCL	O2D-CGD-O1D	-2.81	118.34	123.84
14	I	101	PGV	O03-C19-C20	2.81	120.73	111.91
15	3	102	BCL	C1B-CHB-C4A	-2.81	124.56	130.12
14	H	301	PGV	O03-C19-C20	2.81	120.72	111.91
15	O	103	BCL	CMD-C2D-C3D	-2.80	121.16	127.61
15	5	102	BCL	CAA-CBA-CGA	-2.80	105.06	113.25
14	H	304	PGV	O03-C19-C20	2.80	120.69	111.91
15	4	102	BCL	CHC-C1C-NC	2.80	128.38	124.51
15	1	103	BCL	C4-C3-C5	2.80	119.98	115.27
15	I	102	BCL	C1-C2-C3	-2.80	121.20	126.04
21	4	101	CRT	C31-C32-C33	-2.80	123.32	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	405	MQ8	C34-C33-C35	2.80	119.97	115.27
15	W	102	BCL	O2A-CGA-CBA	2.79	120.67	111.91
21	V	102	CRT	C14-C15-C16	-2.79	114.52	123.22
14	N	105	PGV	C02-O01-C1	-2.79	110.93	117.79
15	E	101	BCL	O2A-CGA-CBA	2.78	120.64	111.91
15	9	103	BCL	C4-C3-C5	2.78	119.95	115.27
18	U	101	CDL	OB8-CB7-C71	2.78	120.64	111.91
15	P	101	BCL	O2A-CGA-CBA	2.78	120.64	111.91
17	L	306	UQ8	C1M-C1-C6	-2.78	119.87	124.40
15	E	101	BCL	CHC-C1C-NC	2.78	128.35	124.51
15	5	103	BCL	C4B-CHC-C1C	-2.78	124.61	130.12
15	B	102	BCL	C4-C3-C5	2.78	119.94	115.27
15	L	310	BCL	C1-C2-C3	-2.77	121.25	126.04
15	V	103	BCL	CHB-C4A-NA	2.77	128.35	124.51
15	E	101	BCL	C4-C3-C5	2.77	119.93	115.27
15	D	102	BCL	C1-C2-C3	-2.77	121.25	126.04
15	J	101	BCL	O2D-CGD-O1D	-2.77	118.42	123.84
15	U	102	BCL	CHC-C1C-NC	2.77	128.34	124.51
14	3	101	PGV	O03-C19-C20	2.77	120.59	111.91
15	B	102	BCL	CHC-C1C-NC	2.77	128.34	124.51
15	G	102	BCL	C2A-C1A-CHA	-2.76	119.03	123.86
15	G	102	BCL	C1-C2-C3	-2.76	121.27	126.04
9	C	403	HEC	CBD-CAD-C3D	-2.76	107.91	112.62
15	G	102	BCL	CHC-C1C-NC	2.76	128.33	124.51
15	3	102	BCL	C4-C3-C5	2.76	119.92	115.27
15	M	403	BCL	O2A-CGA-CBA	2.76	120.57	111.91
15	5	102	BCL	CHB-C4A-NA	2.76	128.33	124.51
15	E	101	BCL	C1-C2-C3	-2.76	121.28	126.04
15	W	102	BCL	CAC-C3C-C4C	-2.75	106.48	112.58
15	1	102	BCL	C4-C3-C5	2.75	119.89	115.27
15	Y	401	BCL	CHC-C1C-NC	2.75	128.31	124.51
15	9	102	BCL	C1D-CHD-C4C	-2.75	120.00	126.62
15	L	302	BCL	C4-C3-C5	2.74	119.89	115.27
20	M	405	MQ8	C31-C32-C33	-2.74	121.06	127.66
15	U	102	BCL	C4-C3-C5	2.74	119.88	115.27
15	O	102	BCL	CHC-C1C-NC	2.74	128.30	124.51
14	R	104	PGV	C02-O01-C1	-2.74	111.04	117.79
15	N	103	BCL	C4B-CHC-C1C	-2.74	124.69	130.12
15	V	103	BCL	C1-C2-C3	-2.74	121.31	126.04
17	L	306	UQ8	C15-C14-C16	2.74	119.88	115.27
21	G	101	CRT	C21-C20-C19	-2.74	117.86	123.47
15	9	103	BCL	C3C-C4C-CHD	-2.74	117.54	123.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	406	CRT	C26-C27-C28	-2.74	123.40	127.31
15	J	101	BCL	O2A-CGA-CBA	2.74	120.49	111.91
18	M	408	CDL	OA8-CA7-C31	2.73	120.48	111.91
15	B	102	BCL	CHB-C4A-NA	2.73	128.28	124.51
15	9	102	BCL	O2A-CGA-CBA	2.73	120.47	111.91
15	S	102	BCL	O2A-CGA-CBA	2.73	120.46	111.91
15	X	101	BCL	CHB-C4A-NA	2.72	128.28	124.51
15	Q	102	BCL	CHB-C4A-NA	2.72	128.28	124.51
15	P	101	BCL	C2A-C1A-CHA	-2.72	119.10	123.86
17	L	306	UQ8	C25-C24-C26	2.72	119.84	115.27
15	5	102	BCL	C1D-CHD-C4C	-2.72	120.07	126.62
15	D	101	BCL	CHC-C1C-NC	2.71	128.26	124.51
21	N	102	CRT	C32-C31-C30	-2.71	114.77	123.22
14	J	102	PGV	O03-C19-C20	2.71	120.40	111.91
15	G	102	BCL	CHB-C4A-NA	2.70	128.25	124.51
17	L	304	UQ8	C1M-C1-C6	-2.70	119.99	124.40
15	P	101	BCL	CHC-C1C-NC	2.70	128.25	124.51
18	M	402	CDL	OA8-CA7-C31	2.70	120.38	111.91
15	0	102	BCL	O2A-CGA-CBA	2.70	120.38	111.91
13	H	305	LMT	C1B-O5B-C5B	2.70	118.99	113.69
15	R	102	BCL	O2D-CGD-O1D	-2.70	118.56	123.84
15	X	101	BCL	O2D-CGD-O1D	-2.70	118.56	123.84
14	E	102	PGV	O03-C19-C20	2.70	120.37	111.91
21	R	101	CRT	C5-C6-C7	-2.69	121.82	125.89
15	2	101	BCL	O2A-CGA-CBA	2.69	120.36	111.91
14	N	104	PGV	C02-O01-C1	-2.69	112.88	117.90
17	L	304	UQ8	C10-C9-C11	2.69	119.80	115.27
14	2	103	PGV	C02-O01-C1	-2.69	111.17	117.79
15	G	102	BCL	C4-C3-C5	2.69	119.80	115.27
15	1	103	BCL	O2D-CGD-O1D	-2.69	118.58	123.84
13	L	301	LMT	C1B-O1B-C4'	-2.69	111.31	117.96
15	6	101	BCL	CHC-C1C-NC	2.69	128.23	124.51
18	M	409	CDL	CA4-OA6-CA5	-2.69	111.18	117.79
17	L	306	UQ8	C22-C23-C24	-2.69	121.19	127.66
15	Q	102	BCL	O2A-CGA-CBA	2.68	120.33	111.91
15	Z	103	BCL	CHC-C1C-NC	2.68	128.22	124.51
15	J	101	BCL	CHB-C4A-NA	2.68	128.22	124.51
15	Y	401	BCL	C4-C3-C5	2.68	119.78	115.27
14	E	103	PGV	O03-C19-C20	2.68	120.31	111.91
15	3	102	BCL	C1-C2-C3	-2.68	121.41	126.04
14	0	104	PGV	O03-C19-C20	2.68	120.31	111.91
14	6	102	PGV	O03-C19-C20	2.68	120.31	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	G	102	BCL	O2A-CGA-CBA	2.68	120.30	111.91
21	Z	102	CRT	C9-C10-C11	-2.67	114.87	123.22
15	D	101	BCL	C4-C3-C5	2.67	119.77	115.27
18	U	101	CDL	OA8-CA7-C31	2.67	120.29	111.91
15	Y	401	BCL	CMD-C2D-C3D	-2.67	121.47	127.61
15	M	403	BCL	CMD-C2D-C3D	-2.67	121.48	127.61
15	5	103	BCL	CMD-C2D-C3D	-2.67	121.48	127.61
15	E	101	BCL	O2D-CGD-O1D	-2.67	118.62	123.84
15	P	101	BCL	O2D-CGD-O1D	-2.66	118.63	123.84
15	L	311	BCL	C4B-CHC-C1C	-2.66	124.84	130.12
21	8	102	CRT	C21-C20-C19	-2.66	118.02	123.47
15	4	102	BCL	C4-C3-C5	2.66	119.75	115.27
15	Z	103	BCL	C2A-C1A-CHA	-2.66	119.21	123.86
21	R	101	CRT	C26-C27-C28	-2.66	123.52	127.31
14	8	104	PGV	O03-C19-C20	2.65	120.24	111.91
15	9	103	BCL	CMD-C2D-C3D	-2.65	121.51	127.61
15	O	103	BCL	C1D-ND-C4D	-2.65	104.45	106.33
15	Y	403	BCL	CHC-C1C-NC	2.65	128.18	124.51
21	B	101	CRT	C14-C15-C16	-2.65	114.95	123.22
15	D	102	BCL	C4-C3-C5	2.65	119.73	115.27
15	T	101	BCL	O2A-CGA-CBA	2.65	120.22	111.91
15	F	103	BCL	C1-C2-C3	-2.65	121.46	126.04
21	V	102	CRT	C9-C10-C11	-2.65	114.96	123.22
14	0	101	PGV	C02-O01-C1	-2.65	111.28	117.79
18	F	101	CDL	CA4-OA6-CA5	-2.64	111.28	117.79
15	A	101	BCL	C1-C2-C3	-2.64	121.48	126.04
15	S	101	BCL	C4-C3-C5	2.64	119.71	115.27
15	P	101	BCL	CHB-C4A-NA	2.64	128.16	124.51
21	4	101	CRT	C9-C10-C11	-2.64	114.98	123.22
15	G	102	BCL	O2D-CGD-O1D	-2.64	118.68	123.84
15	L	302	BCL	CHC-C1C-NC	2.64	128.16	124.51
21	B	101	CRT	C21-C20-C19	-2.64	118.07	123.47
15	A	101	BCL	CHC-C1C-NC	2.64	128.16	124.51
15	9	103	BCL	C1-C2-C3	-2.64	121.48	126.04
15	S	102	BCL	CMD-C2D-C3D	-2.64	121.55	127.61
21	4	101	CRT	C10-C9-C7	-2.63	123.55	127.31
15	L	310	BCL	O2A-CGA-CBA	2.63	120.17	111.91
15	I	103	BCL	O2D-CGD-O1D	-2.63	118.70	123.84
15	R	102	BCL	CHC-C1C-NC	2.63	128.14	124.51
14	V	104	PGV	O03-C19-C20	2.63	120.15	111.91
15	6	101	BCL	O2A-CGA-CBA	2.62	120.13	111.91
15	T	101	BCL	C2A-C1A-CHA	-2.62	119.28	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	6	101	BCL	C2A-C1A-CHA	-2.62	119.28	123.86
14	V	101	PGV	O03-C19-C20	2.62	120.12	111.91
21	8	102	CRT	C13-C12-C11	2.61	122.20	118.08
15	8	103	BCL	O2A-CGA-CBA	2.61	120.11	111.91
14	B	103	PGV	O03-C19-C20	2.61	120.10	111.91
15	L	310	BCL	C4-C3-C5	2.61	119.66	115.27
15	1	103	BCL	CAC-C3C-C4C	-2.61	106.80	112.58
21	V	102	CRT	C13-C12-C11	2.61	122.19	118.08
15	D	102	BCL	CHD-C4C-NC	2.61	127.97	125.08
15	5	103	BCL	C4-C3-C5	2.60	119.65	115.27
15	L	310	BCL	CHC-C1C-NC	2.60	128.11	124.51
15	Y	401	BCL	O2A-CGA-CBA	2.60	120.08	111.91
21	Z	102	CRT	C21-C20-C19	-2.60	118.15	123.47
15	Q	102	BCL	O2D-CGD-O1D	-2.60	118.75	123.84
15	6	101	BCL	C4-C3-C5	2.60	119.64	115.27
15	M	403	BCL	CED-O2D-CGD	2.60	121.81	115.94
21	G	101	CRT	C14-C15-C16	-2.60	115.12	123.22
15	S	101	BCL	C1D-CHD-C4C	-2.60	120.36	126.62
15	L	311	BCL	C4-C3-C5	2.59	119.63	115.27
15	6	101	BCL	O2D-CGD-O1D	-2.59	118.77	123.84
15	W	101	BCL	O2D-CGD-O1D	-2.59	118.78	123.84
15	Q	102	BCL	CHC-C1C-NC	2.59	128.09	124.51
15	M	403	BCL	CHB-C4A-NA	2.58	128.09	124.51
15	V	103	BCL	CHC-C1C-NC	2.58	128.08	124.51
15	0	102	BCL	C2A-C1A-CHA	-2.58	119.35	123.86
17	L	306	UQ8	C12-C13-C14	-2.58	121.45	127.66
14	E	102	PGV	C02-O01-C1	-2.58	111.45	117.79
14	N	101	PGV	O03-C19-C20	2.57	119.99	111.91
14	6	102	PGV	C02-O01-C1	-2.57	111.46	117.79
14	0	103	PGV	O03-C19-C20	2.57	119.96	111.91
15	W	102	BCL	C1-C2-C3	-2.57	121.61	126.04
21	G	101	CRT	C9-C10-C11	-2.56	115.22	123.22
15	7	103	BCL	C1-C2-C3	-2.56	121.62	126.04
21	4	101	CRT	C14-C15-C16	-2.56	115.23	123.22
18	M	409	CDL	OA8-CA7-C31	2.56	119.94	111.91
14	1	101	PGV	C02-O01-C1	-2.56	111.49	117.79
15	W	102	BCL	O2D-CGD-O1D	-2.56	118.84	123.84
17	L	304	UQ8	C15-C14-C16	2.56	119.57	115.27
15	V	103	BCL	C2A-C1A-CHA	-2.56	119.39	123.86
15	O	103	BCL	O2D-CGD-O1D	-2.55	118.84	123.84
15	3	102	BCL	CMD-C2D-C3D	-2.55	121.74	127.61
20	M	405	MQ8	C45-C43-C44	2.55	119.56	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	7	103	BCL	CHB-C4A-NA	2.55	128.04	124.51
15	8	103	BCL	C4B-CHC-C1C	-2.55	125.07	130.12
18	L	312	CDL	OA8-CA7-C31	2.55	119.91	111.91
15	K	102	BCL	O2A-CGA-CBA	2.55	119.90	111.91
17	L	304	UQ8	C20-C19-C21	2.55	119.55	115.27
21	R	101	CRT	C10-C9-C7	-2.54	123.68	127.31
15	U	102	BCL	CMD-C2D-C3D	-2.54	121.76	127.61
15	5	102	BCL	C3C-C4C-CHD	-2.54	117.96	123.39
15	T	101	BCL	CHC-C1C-NC	2.54	128.03	124.51
15	0	102	BCL	CHC-C1C-NC	2.54	128.02	124.51
15	D	102	BCL	O2D-CGD-O1D	-2.54	118.87	123.84
15	W	102	BCL	CMD-C2D-C3D	-2.54	121.77	127.61
15	5	102	BCL	CMD-C2D-C3D	-2.54	121.77	127.61
15	9	103	BCL	O2D-CGD-O1D	-2.54	118.88	123.84
21	R	101	CRT	C32-C31-C30	-2.54	115.30	123.22
16	L	303	BPH	C1-C2-C3	-2.53	121.66	126.04
21	G	101	CRT	C31-C32-C33	-2.53	123.70	127.31
15	Z	103	BCL	C1-C2-C3	-2.53	121.66	126.04
14	T	102	PGV	C02-O01-C1	-2.53	111.56	117.79
15	I	103	BCL	CMD-C2D-C3D	-2.53	121.79	127.61
15	O	102	BCL	CMD-C2D-C3D	-2.53	121.79	127.61
15	X	101	BCL	C2A-C1A-CHA	-2.53	119.43	123.86
14	H	303	PGV	C02-O01-C1	-2.53	111.56	117.79
15	D	101	BCL	CHB-C4A-NA	2.53	128.01	124.51
21	V	102	CRT	C10-C9-C7	-2.53	123.70	127.31
15	0	102	BCL	CHB-C4A-NA	2.53	128.00	124.51
15	1	103	BCL	C1D-CHD-C4C	-2.53	120.53	126.62
14	4	103	PGV	O03-C19-C20	2.52	119.83	111.91
15	8	103	BCL	C2A-C1A-CHA	-2.52	119.45	123.86
17	L	304	UQ8	C12-C13-C14	-2.52	121.59	127.66
21	M	406	CRT	C32-C31-C30	-2.52	115.35	123.22
15	R	102	BCL	C2A-C1A-CHA	-2.52	119.46	123.86
21	8	102	CRT	C36-C35-C33	-2.51	122.09	125.89
18	H	302	CDL	CB4-OB6-CB5	-2.51	111.60	117.79
15	E	101	BCL	CHB-C4A-NA	2.51	127.99	124.51
15	T	101	BCL	O2D-CGD-O1D	-2.51	118.93	123.84
15	K	102	BCL	CMD-C2D-C3D	-2.51	121.84	127.61
15	N	103	BCL	CHB-C4A-NA	2.51	127.98	124.51
15	Y	403	BCL	CMD-C2D-C3D	-2.50	121.85	127.61
15	A	101	BCL	C4-C3-C5	2.50	119.48	115.27
15	4	102	BCL	CHB-C4A-NA	2.50	127.97	124.51
15	B	102	BCL	O2D-CGD-O1D	-2.50	118.94	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	101	BCL	O2A-CGA-CBA	2.50	119.76	111.91
13	O	101	LMT	C1B-O1B-C4'	-2.50	111.77	117.96
15	4	102	BCL	O2D-CGD-O1D	-2.50	118.95	123.84
15	L	302	BCL	CMD-C2D-C3D	-2.50	121.87	127.61
15	T	101	BCL	CHB-C4A-NA	2.50	127.96	124.51
21	V	102	CRT	C32-C31-C30	-2.49	115.43	123.22
21	8	102	CRT	C32-C31-C30	-2.49	115.43	123.22
21	N	102	CRT	C14-C15-C16	-2.49	115.44	123.22
15	7	103	BCL	O2A-CGA-CBA	2.49	119.73	111.91
14	B	104	PGV	C02-O01-C1	-2.49	111.66	117.79
21	G	101	CRT	C13-C12-C11	2.49	122.00	118.08
14	X	102	PGV	O03-C19-C20	2.49	119.72	111.91
18	L	312	CDL	CB4-OB6-CB5	-2.49	111.66	117.79
18	M	410	CDL	OA8-CA7-C31	2.49	119.71	111.91
14	H	303	PGV	O03-C19-C20	2.48	119.70	111.91
13	9	101	LMT	C1B-O1B-C4'	-2.48	111.82	117.96
13	O	101	LMT	C1-O1'-C1'	-2.48	109.72	113.84
15	A	101	BCL	O2D-CGD-O1D	-2.48	119.00	123.84
15	F	103	BCL	O2A-CGA-CBA	2.47	119.66	111.91
15	M	403	BCL	CHC-C1C-NC	2.47	127.93	124.51
14	C	409	PGV	C02-O01-C1	-2.47	111.71	117.79
15	7	103	BCL	CHC-C1C-NC	2.47	127.92	124.51
13	H	306	LMT	C1B-O1B-C4'	-2.47	111.86	117.96
15	O	103	BCL	CHD-C1D-C2D	2.47	130.65	125.48
15	1	102	BCL	CAC-C3C-C4C	-2.47	107.11	112.58
15	D	101	BCL	O2D-CGD-O1D	-2.47	119.02	123.84
15	D	102	BCL	CMD-C2D-C3D	-2.46	121.95	127.61
15	M	403	BCL	C4-C3-C5	2.46	119.41	115.27
15	Y	403	BCL	O2A-CGA-CBA	2.46	119.62	111.91
15	8	103	BCL	C4-C3-C5	2.46	119.40	115.27
21	Z	102	CRT	C14-C15-C16	-2.45	115.56	123.22
21	B	101	CRT	C31-C32-C33	-2.45	123.81	127.31
17	L	304	UQ8	C17-C18-C19	-2.45	121.76	127.66
15	1	102	BCL	C4B-CHC-C1C	-2.45	125.27	130.12
15	S	102	BCL	O2D-CGD-O1D	-2.45	119.05	123.84
15	6	101	BCL	CHB-C4A-NA	2.45	127.89	124.51
20	M	405	MQ8	C50-C48-C49	2.45	120.00	114.60
14	2	103	PGV	O03-C19-C20	2.45	119.58	111.91
15	2	101	BCL	O2D-CGD-O1D	-2.44	119.06	123.84
15	D	102	BCL	C1D-CHD-C4C	-2.44	120.73	126.62
21	4	101	CRT	C21-C20-C19	-2.44	118.47	123.47
15	1	103	BCL	C4A-NA-C1A	2.44	107.80	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	L	310	BCL	O2D-CGD-O1D	-2.44	119.07	123.84
15	Z	103	BCL	CHB-C4A-NA	2.44	127.88	124.51
15	9	103	BCL	C1D-CHD-C4C	-2.43	120.75	126.62
21	B	101	CRT	C9-C10-C11	-2.43	115.62	123.22
14	G	103	PGV	C02-O01-C1	-2.43	111.81	117.79
21	4	101	CRT	C5-C6-C7	-2.43	122.22	125.89
15	V	103	BCL	C1D-CHD-C4C	-2.43	120.76	126.62
20	M	405	MQ8	C19-C18-C20	2.43	119.36	115.27
15	V	103	BCL	O2D-CGD-O1D	-2.43	119.09	123.84
15	4	102	BCL	C2A-C1A-CHA	-2.43	119.62	123.86
14	8	104	PGV	C02-O01-C1	-2.42	111.82	117.79
15	B	102	BCL	C2A-C1A-CHA	-2.42	119.62	123.86
15	F	103	BCL	CMD-C2D-C3D	-2.42	122.04	127.61
15	9	102	BCL	O2D-CGD-O1D	-2.42	119.11	123.84
15	K	102	BCL	O2D-CGD-O1D	-2.41	119.12	123.84
15	A	101	BCL	CMD-C2D-C3D	-2.41	122.06	127.61
15	Q	102	BCL	C2A-C1A-CHA	-2.41	119.64	123.86
15	Z	103	BCL	C1D-CHD-C4C	-2.41	120.81	126.62
14	P	102	PGV	O14-P-O13	2.41	120.12	110.68
15	3	102	BCL	CHC-C1C-NC	2.41	127.84	124.51
15	O	103	BCL	C1D-CHD-C4C	-2.41	120.81	126.62
15	8	103	BCL	C1D-CHD-C4C	-2.41	120.81	126.62
21	M	406	CRT	C36-C35-C33	-2.41	122.26	125.89
15	M	403	BCL	C1D-CHD-C4C	-2.41	120.82	126.62
21	R	101	CRT	C21-C20-C19	-2.40	118.55	123.47
15	M	403	BCL	C1-C2-C3	-2.40	121.89	126.04
15	1	103	BCL	CMD-C2D-C3D	-2.40	122.09	127.61
15	W	101	BCL	CMD-C2D-C3D	-2.40	122.10	127.61
21	V	102	CRT	C31-C32-C33	-2.40	123.89	127.31
18	M	410	CDL	OB8-CB7-C71	2.40	119.43	111.91
21	R	101	CRT	C14-C15-C16	-2.40	115.74	123.22
14	X	102	PGV	C02-O01-C1	-2.40	111.89	117.79
15	J	101	BCL	C4-C3-C5	2.40	119.30	115.27
18	M	407	CDL	OA8-CA7-C31	2.39	119.42	111.91
21	N	102	CRT	C9-C10-C11	-2.39	115.75	123.22
15	5	103	BCL	O2D-CGD-O1D	-2.39	119.16	123.84
15	Y	401	BCL	C1-C2-C3	-2.39	121.91	126.04
21	N	102	CRT	C10-C9-C7	-2.39	123.90	127.31
21	B	101	CRT	C13-C12-C11	2.39	121.84	118.08
21	R	101	CRT	C9-C10-C11	-2.39	115.77	123.22
15	S	101	BCL	CHB-C4A-NA	2.39	127.81	124.51
18	H	302	CDL	OA8-CA7-C31	2.38	119.39	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	I	102	BCL	CMD-C2D-C3D	-2.38	122.13	127.61
15	3	102	BCL	CAA-CBA-CGA	-2.38	106.29	113.25
18	M	407	CDL	OB8-CB7-C71	2.38	119.38	111.91
21	B	101	CRT	C32-C31-C30	-2.38	115.78	123.22
15	R	102	BCL	C1C-NC-C4C	-2.38	105.64	106.71
21	8	102	CRT	C9-C10-C11	-2.38	115.79	123.22
14	T	102	PGV	O03-C19-C20	2.38	119.36	111.91
15	5	102	BCL	C4B-CHC-C1C	-2.38	125.41	130.12
15	1	102	BCL	C1D-CHD-C4C	-2.37	120.89	126.62
15	6	101	BCL	C1D-CHD-C4C	-2.37	120.89	126.62
15	N	103	BCL	O2D-CGD-O1D	-2.37	119.19	123.84
15	I	102	BCL	CHB-C4A-NA	2.37	127.79	124.51
15	W	101	BCL	C4B-CHC-C1C	-2.37	125.42	130.12
15	L	310	BCL	C4B-CHC-C1C	-2.37	125.42	130.12
14	B	104	PGV	O03-C19-C20	2.37	119.34	111.91
14	Z	101	PGV	O03-C19-C20	2.37	119.34	111.91
15	R	102	BCL	C1D-CHD-C4C	-2.36	120.92	126.62
15	Y	403	BCL	C1-C2-C3	-2.36	121.95	126.04
15	I	102	BCL	CHC-C1C-NC	2.36	127.78	124.51
14	G	104	PGV	C02-O01-C1	-2.36	111.98	117.79
15	5	103	BCL	C2A-C1A-CHA	-2.36	119.73	123.86
15	4	102	BCL	C1D-CHD-C4C	-2.36	120.93	126.62
15	9	102	BCL	CMD-C2D-C3D	-2.36	122.19	127.61
15	1	103	BCL	CHB-C4A-NA	2.36	127.77	124.51
15	9	103	BCL	CHB-C4A-NA	2.35	127.76	124.51
15	M	403	BCL	CAA-C2A-C3A	-2.35	106.34	112.78
14	L	308	PGV	O03-C19-C20	2.35	119.27	111.91
15	I	103	BCL	C4-C3-C5	2.35	119.22	115.27
15	Q	102	BCL	CMD-C2D-C3D	-2.35	122.22	127.61
14	2	103	PGV	O14-P-O13	2.34	119.86	110.68
15	D	101	BCL	CMD-C2D-C3D	-2.34	122.23	127.61
15	B	102	BCL	C1D-CHD-C4C	-2.34	120.97	126.62
13	C	408	LMT	C1B-O5B-C5B	2.34	118.28	113.69
15	L	302	BCL	CHB-C4A-NA	2.34	127.75	124.51
15	L	311	BCL	O2D-CGD-O1D	-2.34	119.27	123.84
15	3	102	BCL	O2D-CGD-O1D	-2.34	119.27	123.84
15	W	102	BCL	CHB-C4A-NA	2.34	127.74	124.51
15	S	101	BCL	CMD-C2D-C3D	-2.34	122.24	127.61
15	9	102	BCL	C3C-C4C-CHD	-2.34	118.40	123.39
15	E	101	BCL	C2A-C1A-CHA	-2.33	119.78	123.86
21	N	102	CRT	C13-C12-C11	2.33	121.75	118.08
21	4	101	CRT	C32-C31-C30	-2.33	115.94	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	7	103	BCL	C1D-CHD-C4C	-2.33	121.00	126.62
15	7	103	BCL	C1C-NC-C4C	-2.33	105.66	106.71
21	R	101	CRT	C13-C12-C11	2.33	121.75	118.08
15	0	102	BCL	C4D-CHA-C1A	-2.33	118.42	121.25
15	S	102	BCL	C2A-C1A-CHA	-2.33	119.79	123.86
15	5	102	BCL	C1C-NC-C4C	-2.32	105.66	106.71
15	5	103	BCL	CAC-C3C-C4C	-2.32	107.43	112.58
15	F	103	BCL	O2D-CGD-O1D	-2.32	119.30	123.84
15	1	102	BCL	CHB-C4A-NA	2.32	127.72	124.51
15	B	102	BCL	C1C-NC-C4C	-2.32	105.66	106.71
15	8	103	BCL	C6-C5-C3	-2.32	107.38	113.45
15	W	102	BCL	C1D-CHD-C4C	-2.32	121.03	126.62
21	8	102	CRT	C13-C12-C14	-2.31	119.68	122.92
15	U	102	BCL	C1-C2-C3	-2.31	122.05	126.04
21	Z	102	CRT	C31-C32-C33	-2.31	124.01	127.31
15	L	310	BCL	CHB-C4A-NA	2.31	127.70	124.51
15	I	102	BCL	C2A-C1A-CHA	-2.31	119.82	123.86
15	L	310	BCL	C1D-CHD-C4C	-2.31	121.05	126.62
15	I	102	BCL	O2D-CGD-O1D	-2.31	119.33	123.84
21	B	101	CRT	C10-C9-C7	-2.31	124.02	127.31
14	P	102	PGV	O03-C19-C20	2.31	119.14	111.91
15	W	101	BCL	CHB-C4A-NA	2.30	127.70	124.51
15	X	101	BCL	CHC-C1C-NC	2.30	127.69	124.51
15	E	101	BCL	C1D-CHD-C4C	-2.30	121.07	126.62
16	L	303	BPH	CMA-C3A-C4A	-2.30	109.34	114.38
15	K	102	BCL	C1-C2-C3	-2.30	122.07	126.04
15	U	102	BCL	CHB-C4A-NA	2.30	127.69	124.51
21	Z	102	CRT	C32-C31-C30	-2.30	116.05	123.22
15	Y	403	BCL	O2D-CGD-O1D	-2.29	119.35	123.84
21	8	102	CRT	C31-C32-C33	-2.29	124.03	127.31
15	1	102	BCL	O2D-CGD-O1D	-2.29	119.36	123.84
21	B	101	CRT	C18-C17-C16	2.29	121.69	118.08
15	D	102	BCL	CHB-C4A-NA	2.29	127.68	124.51
15	7	103	BCL	CMD-C2D-C3D	-2.29	122.34	127.61
15	W	101	BCL	C2A-C1A-CHA	-2.29	119.86	123.86
17	L	304	UQ8	C25-C24-C26	2.29	119.66	114.60
14	P	103	PGV	O14-P-O13	2.29	119.63	110.68
15	U	102	BCL	C2A-C1A-CHA	-2.28	119.87	123.86
15	J	101	BCL	CHC-C1C-NC	2.28	127.67	124.51
15	8	103	BCL	CHC-C1C-NC	2.28	127.67	124.51
15	2	101	BCL	C1D-CHD-C4C	-2.28	121.12	126.62
14	V	105	PGV	C02-O01-C1	-2.28	112.19	117.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	D	102	BCL	C4A-NA-C1A	2.28	107.73	106.71
14	P	103	PGV	C02-O01-C1	-2.28	112.19	117.79
9	C	403	HEC	CMC-C2C-C1C	-2.27	124.97	128.46
14	1	101	PGV	O03-C19-C20	2.27	119.04	111.91
21	4	101	CRT	C13-C12-C11	2.27	121.66	118.08
21	N	102	CRT	C21-C20-C19	-2.27	118.82	123.47
15	2	101	BCL	C4B-CHC-C1C	-2.27	125.62	130.12
21	N	102	CRT	C34-C33-C35	2.27	121.65	118.08
15	J	101	BCL	C6-C5-C3	-2.27	107.52	113.45
21	G	101	CRT	C32-C31-C30	-2.27	116.15	123.22
14	N	105	PGV	O14-P-O13	2.26	119.55	110.68
15	Y	403	BCL	C2A-C1A-CHA	-2.26	119.90	123.86
15	O	103	BCL	CHD-C4C-NC	2.26	127.59	125.08
21	R	101	CRT	C31-C32-C33	-2.26	124.09	127.31
15	G	102	BCL	C1D-CHD-C4C	-2.26	121.18	126.62
15	P	101	BCL	C1D-CHD-C4C	-2.26	121.18	126.62
15	5	102	BCL	CHC-C1C-NC	2.25	127.63	124.51
9	C	404	HEC	CAD-CBD-CGD	-2.25	107.46	113.76
15	O	102	BCL	O2D-CGD-O1D	-2.25	119.45	123.84
13	F	102	LMT	O5B-C1B-C2B	2.24	115.10	110.35
15	X	101	BCL	C1D-CHD-C4C	-2.24	121.21	126.62
15	D	101	BCL	C2A-C1A-CHA	-2.24	119.94	123.86
15	9	102	BCL	CHD-C1D-C2D	2.24	130.18	125.48
14	Z	104	PGV	O03-C19-C20	2.24	118.94	111.91
15	2	101	BCL	CHB-C4A-NA	2.24	127.61	124.51
21	V	102	CRT	C18-C17-C16	2.24	121.60	118.08
15	E	101	BCL	C1C-NC-C4C	-2.23	105.70	106.71
15	S	101	BCL	C2A-C1A-CHA	-2.23	119.96	123.86
15	J	101	BCL	C1D-CHD-C4C	-2.23	121.24	126.62
14	R	104	PGV	O03-C19-C20	2.23	118.91	111.91
14	N	105	PGV	O03-C19-C20	2.23	118.91	111.91
15	Z	103	BCL	O2A-CGA-O1A	-2.23	117.96	123.59
15	L	311	BCL	CMD-C2D-C3D	-2.23	122.49	127.61
15	2	101	BCL	CHC-C1C-NC	2.23	127.59	124.51
15	5	103	BCL	CHB-C4A-NA	2.23	127.59	124.51
15	I	102	BCL	CAA-CBA-CGA	-2.22	106.75	113.25
15	L	310	BCL	C2A-C1A-CHA	-2.22	119.97	123.86
21	Z	102	CRT	C13-C12-C11	2.22	121.58	118.08
14	4	104	PGV	O14-P-O13	2.22	119.38	110.68
15	7	103	BCL	C4B-CHC-C1C	-2.22	125.72	130.12
15	L	302	BCL	O2A-CGA-O1A	-2.22	117.99	123.59
15	W	101	BCL	CHC-C1C-NC	2.22	127.58	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	8	103	BCL	O2D-CGD-O1D	-2.22	119.50	123.84
20	M	405	MQ8	C11-C12-C13	-2.22	123.10	126.79
15	1	102	BCL	CMD-C2D-C3D	-2.22	122.51	127.61
17	L	306	UQ8	C30-C29-C31	2.22	119.50	114.60
15	I	103	BCL	CHB-C4A-NA	2.21	127.57	124.51
15	J	101	BCL	C4D-CHA-C1A	-2.21	118.56	121.25
21	R	101	CRT	C29-C28-C30	2.21	121.56	118.08
15	T	101	BCL	C4D-CHA-C1A	-2.21	118.56	121.25
15	Y	401	BCL	C1B-CHB-C4A	-2.21	125.74	130.12
15	S	102	BCL	CHB-C4A-NA	2.21	127.57	124.51
15	9	102	BCL	CHB-C4A-NA	2.21	127.56	124.51
15	5	102	BCL	CED-O2D-CGD	2.21	120.93	115.94
14	R	104	PGV	O14-P-O13	2.21	119.31	110.68
15	L	302	BCL	C2A-C1A-CHA	-2.20	120.00	123.86
15	8	103	BCL	C1B-CHB-C4A	-2.20	125.75	130.12
18	M	410	CDL	CB4-OB6-CB5	-2.20	112.37	117.79
15	P	101	BCL	C6-C5-C3	-2.20	107.68	113.45
18	H	302	CDL	OB8-CB7-C71	2.20	118.81	111.91
15	I	103	BCL	CHD-C1D-C2D	2.20	130.10	125.48
15	Z	103	BCL	O2D-CGD-O1D	-2.20	119.54	123.84
15	I	103	BCL	CAC-C3C-C4C	-2.20	107.71	112.58
15	S	101	BCL	O2D-CGD-O1D	-2.19	119.55	123.84
15	L	302	BCL	CED-O2D-CGD	2.19	120.90	115.94
15	U	102	BCL	O2D-CGD-O1D	-2.19	119.55	123.84
15	5	103	BCL	C1D-CHD-C4C	-2.19	121.33	126.62
15	S	102	BCL	CAC-C3C-C4C	-2.19	107.72	112.58
15	0	102	BCL	C1D-CHD-C4C	-2.19	121.34	126.62
15	1	103	BCL	C2A-C1A-CHA	-2.19	120.03	123.86
21	G	101	CRT	C8-C7-C6	2.19	121.52	118.08
14	2	102	PGV	O14-P-O13	2.18	119.22	110.68
15	V	103	BCL	C1C-NC-C4C	-2.18	105.72	106.71
21	Z	102	CRT	C36-C35-C33	-2.18	122.59	125.89
21	B	101	CRT	C34-C33-C35	2.18	121.51	118.08
15	S	101	BCL	O2A-CGA-O1A	-2.18	118.09	123.59
15	S	102	BCL	C4A-NA-C1A	2.18	107.69	106.71
15	O	102	BCL	C2A-C1A-CHA	-2.18	120.05	123.86
21	G	101	CRT	C10-C9-C7	-2.18	124.20	127.31
15	L	311	BCL	C1D-CHD-C4C	-2.18	121.37	126.62
15	T	101	BCL	C1D-CHD-C4C	-2.17	121.38	126.62
15	S	102	BCL	CHD-C1D-C2D	2.17	130.03	125.48
18	M	409	CDL	OA6-CA5-OA7	-2.17	118.46	123.70
15	5	102	BCL	O2D-CGD-O1D	-2.17	119.60	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	7	103	BCL	O2D-CGD-O1D	-2.17	119.60	123.84
15	6	101	BCL	C4B-CHC-C1C	-2.17	125.83	130.12
15	D	102	BCL	CHD-C1D-C2D	2.17	130.02	125.48
14	G	104	PGV	O03-C19-O04	-2.16	118.13	123.59
14	0	103	PGV	C02-O01-C1	-2.16	112.48	117.79
15	9	103	BCL	CHD-C1D-C2D	2.16	130.01	125.48
15	5	102	BCL	C4-C3-C5	2.16	118.90	115.27
15	W	102	BCL	C2A-C1A-CHA	-2.15	120.09	123.86
21	Z	102	CRT	C29-C28-C30	2.15	121.47	118.08
15	Z	103	BCL	C6-C5-C3	-2.15	107.81	113.45
15	L	302	BCL	C1D-CHD-C4C	-2.15	121.43	126.62
15	Z	103	BCL	C1C-NC-C4C	-2.15	105.74	106.71
14	0	104	PGV	C02-O01-C1	-2.15	112.50	117.79
15	N	103	BCL	C1D-CHD-C4C	-2.15	121.44	126.62
14	6	102	PGV	O14-P-O13	2.15	119.09	110.68
14	E	102	PGV	O03-C19-O04	-2.15	118.17	123.59
15	S	102	BCL	C1D-CHD-C4C	-2.15	121.44	126.62
21	M	406	CRT	C15-C14-C12	-2.14	124.25	127.31
15	D	102	BCL	C3C-C4C-CHD	-2.14	118.82	123.39
15	A	101	BCL	C1B-CHB-C4A	-2.14	125.88	130.12
15	O	103	BCL	CHB-C4A-NA	2.14	127.47	124.51
15	5	103	BCL	CHC-C1C-NC	2.14	127.47	124.51
15	L	302	BCL	O2D-CGD-O1D	-2.14	119.65	123.84
15	F	103	BCL	CHB-C4A-NA	2.14	127.47	124.51
15	Y	401	BCL	CHB-C4A-NA	2.14	127.47	124.51
15	L	302	BCL	C4D-CHA-C1A	-2.14	118.65	121.25
15	K	102	BCL	C2A-C1A-CHA	-2.14	120.12	123.86
15	3	102	BCL	C4B-CHC-C1C	-2.14	125.89	130.12
14	Z	105	PGV	O03-C19-C20	2.14	118.61	111.91
15	L	311	BCL	CHC-C1C-NC	2.13	127.46	124.51
15	1	102	BCL	C2A-C1A-CHA	-2.13	120.13	123.86
18	M	407	CDL	CB4-OB6-CB5	-2.13	112.54	117.79
15	9	103	BCL	CAC-C3C-C4C	-2.13	107.85	112.58
13	C	408	LMT	O5B-C1B-C2B	2.13	114.86	110.35
15	S	101	BCL	C4A-NA-C1A	2.13	107.66	106.71
14	8	101	PGV	C02-O01-C1	-2.13	112.55	117.79
15	7	103	BCL	CAC-C3C-C4C	-2.13	107.86	112.58
15	N	103	BCL	C1B-CHB-C4A	-2.13	125.90	130.12
15	Y	401	BCL	C2A-C1A-CHA	-2.13	120.14	123.86
15	W	101	BCL	C1D-CHD-C4C	-2.13	121.49	126.62
15	G	102	BCL	C4D-CHA-C1A	-2.13	118.66	121.25
15	S	102	BCL	CED-O2D-CGD	2.12	120.74	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	8	103	BCL	CHB-C4A-NA	2.12	127.44	124.51
15	J	101	BCL	C4B-CHC-C1C	-2.12	125.92	130.12
15	L	310	BCL	O1D-CGD-CBD	-2.11	120.16	124.48
18	U	101	CDL	OB6-CB5-OB7	-2.11	118.59	123.70
21	V	102	CRT	C29-C28-C30	2.11	121.41	118.08
15	1	102	BCL	CHC-C1C-NC	2.11	127.43	124.51
15	L	310	BCL	CMD-C2D-C3D	-2.11	122.76	127.61
15	N	103	BCL	C4D-CHA-C1A	-2.11	118.68	121.25
15	Y	401	BCL	C4B-CHC-C1C	-2.11	125.94	130.12
15	8	103	BCL	C4D-CHA-C1A	-2.10	118.69	121.25
21	R	101	CRT	C15-C14-C12	-2.10	124.31	127.31
15	L	311	BCL	CHB-C4A-NA	2.10	127.42	124.51
15	S	101	BCL	CHC-C1C-NC	2.10	127.42	124.51
15	5	103	BCL	CHD-C1D-C2D	2.10	129.88	125.48
15	2	101	BCL	C1B-CHB-C4A	-2.09	125.97	130.12
14	I	101	PGV	C02-O01-C1	-2.09	112.64	117.79
15	9	103	BCL	C2A-C1A-CHA	-2.09	120.20	123.86
15	7	103	BCL	C2A-C1A-CHA	-2.09	120.20	123.86
14	R	103	PGV	O03-C19-O04	-2.09	118.32	123.59
15	U	102	BCL	C1D-CHD-C4C	-2.09	121.58	126.62
21	M	406	CRT	C9-C10-C11	-2.09	116.70	123.22
15	9	103	BCL	CED-O2D-CGD	2.09	120.66	115.94
15	X	101	BCL	C4D-CHA-C1A	-2.09	118.71	121.25
15	Q	102	BCL	C1D-CHD-C4C	-2.09	121.59	126.62
15	1	103	BCL	CHD-C1D-C2D	2.09	129.85	125.48
15	L	311	BCL	CHD-C1D-C2D	2.08	129.85	125.48
15	5	102	BCL	CHD-C1D-C2D	2.08	129.85	125.48
21	Z	102	CRT	C8-C7-C6	2.08	121.36	118.08
13	F	102	LMT	C1'-O5'-C5'	-2.08	109.60	113.69
15	F	103	BCL	C1D-CHD-C4C	-2.08	121.60	126.62
21	M	406	CRT	C13-C12-C11	2.08	121.35	118.08
14	L	309	PGV	C02-O01-C1	-2.08	112.68	117.79
15	2	101	BCL	C11-C12-C13	-2.07	109.21	115.92
21	G	101	CRT	C27-C26-C25	-2.07	116.74	123.22
21	8	102	CRT	C14-C15-C16	-2.07	116.75	123.22
15	2	101	BCL	C4D-CHA-C1A	-2.07	118.73	121.25
15	0	102	BCL	C4B-CHC-C1C	-2.07	126.02	130.12
15	X	101	BCL	C4B-CHC-C1C	-2.07	126.03	130.12
15	S	101	BCL	CHD-C1D-C2D	2.07	129.81	125.48
14	I	101	PGV	O01-C1-O02	-2.07	118.71	123.70
21	R	101	CRT	C36-C35-C33	-2.06	122.77	125.89
21	4	101	CRT	C18-C17-C16	2.06	121.33	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	Z	103	BCL	C4B-CHC-C1C	-2.06	126.03	130.12
15	L	311	BCL	O2A-CGA-O1A	-2.06	118.39	123.59
15	B	102	BCL	O2A-CGA-O1A	-2.06	118.39	123.59
21	G	101	CRT	C15-C14-C12	-2.06	124.37	127.31
13	K	101	LMT	O3'-C3'-C2'	-2.06	105.59	110.35
15	Y	401	BCL	O2D-CGD-O1D	-2.06	119.82	123.84
14	N	104	PGV	O03-C19-O04	-2.05	118.41	123.59
15	E	101	BCL	C6-C5-C3	-2.05	108.08	113.45
13	Q	101	LMT	O1B-C4'-C3'	2.05	112.72	107.28
15	2	101	BCL	C2A-C1A-CHA	-2.05	120.28	123.86
18	M	407	CDL	CA4-OA6-CA5	-2.04	112.76	117.79
15	K	102	BCL	C1B-CHB-C4A	-2.04	126.07	130.12
18	M	408	CDL	OB6-CB5-OB7	-2.04	118.78	123.70
15	L	311	BCL	C2A-C1A-CHA	-2.04	120.30	123.86
21	B	101	CRT	C27-C26-C25	-2.04	116.86	123.22
15	D	101	BCL	C1D-CHD-C4C	-2.03	121.72	126.62
15	S	101	BCL	C4B-CHC-C1C	-2.03	126.09	130.12
15	D	101	BCL	O2A-CGA-O1A	-2.03	118.47	123.59
15	5	102	BCL	O2A-CGA-O1A	-2.03	118.47	123.59
15	I	103	BCL	O2A-CGA-O1A	-2.03	118.47	123.59
15	N	103	BCL	C11-C12-C13	-2.03	109.36	115.92
15	A	101	BCL	C1D-CHD-C4C	-2.03	121.73	126.62
14	L	305	PGV	O03-C19-C20	2.03	118.27	111.91
18	H	302	CDL	OB6-CB5-OB7	-2.03	118.80	123.70
21	R	101	CRT	C27-C26-C25	-2.03	116.89	123.22
21	B	101	CRT	C8-C7-C6	2.03	121.27	118.08
15	S	101	BCL	CED-O2D-CGD	2.03	120.52	115.94
15	K	102	BCL	CHD-C1D-C2D	2.02	129.73	125.48
15	5	103	BCL	C1B-CHB-C4A	-2.02	126.11	130.12
15	Y	401	BCL	C1D-CHD-C4C	-2.02	121.75	126.62
15	5	102	BCL	O2A-C1-C2	2.02	113.94	108.64
21	Z	102	CRT	C27-C26-C25	-2.02	116.92	123.22
15	P	101	BCL	C4D-CHA-C1A	-2.02	118.79	121.25
15	Q	102	BCL	C4D-CHA-C1A	-2.02	118.79	121.25
15	W	101	BCL	CHD-C1D-C2D	2.02	129.71	125.48
9	C	401	HEC	O2D-CGD-CBD	2.02	120.51	114.03
15	U	102	BCL	CHD-C1D-C2D	2.01	129.71	125.48
15	Y	403	BCL	C1D-CHD-C4C	-2.01	121.76	126.62
14	0	101	PGV	O03-C19-O04	-2.01	118.51	123.59
17	L	307	UQ8	C1M-C1-C6	-2.01	121.11	124.40
15	D	102	BCL	C2A-C1A-CHA	-2.01	120.34	123.86
15	O	102	BCL	CHB-C4A-NA	2.01	127.29	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	C	404	HEC	CBA-CAA-C2A	-2.01	109.21	112.60
15	O	102	BCL	CHD-C1D-C2D	2.01	129.69	125.48
15	W	102	BCL	CHD-C1D-C2D	2.01	129.69	125.48
20	M	405	MQ8	C2M-C2-C3	-2.01	121.12	124.40
21	8	102	CRT	C29-C28-C30	2.01	121.24	118.08
15	6	101	BCL	C11-C12-C13	-2.01	109.43	115.92
15	F	103	BCL	CED-O2D-CGD	2.01	120.48	115.94
15	6	101	BCL	C1B-CHB-C4A	-2.01	126.14	130.12
15	U	102	BCL	C1C-NC-C4C	-2.01	105.80	106.71
13	Y	402	LMT	C1B-O5B-C5B	2.01	117.63	113.69
21	V	102	CRT	C8-C7-C6	2.00	121.23	118.08
15	I	102	BCL	C4B-CHC-C1C	-2.00	126.15	130.12
15	1	102	BCL	C1C-NC-C4C	-2.00	105.81	106.71

There are no chirality outliers.

All (1553) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
11	C	406	Z41	C15-C16-O2-C17
11	C	406	Z41	O1-C16-O2-C17
11	C	406	Z41	O2-C17-C18-O3
13	C	408	LMT	C2-C1-O1'-C1'
13	H	305	LMT	O5B-C1B-O1B-C4'
13	7	101	LMT	O5'-C1'-O1'-C1
14	C	409	PGV	C03-O11-P-O13
14	C	409	PGV	C04-O12-P-O13
14	L	305	PGV	C03-O11-P-O13
14	L	305	PGV	C04-O12-P-O13
14	L	308	PGV	C03-O11-P-O12
14	L	309	PGV	O12-C04-C05-C06
14	H	301	PGV	C03-O11-P-O13
14	H	301	PGV	C04-O12-P-O14
14	H	301	PGV	O12-C04-C05-C06
14	H	301	PGV	O12-C04-C05-O05
14	H	303	PGV	C03-O11-P-O13
14	H	303	PGV	C04-O12-P-O13
14	H	303	PGV	C2-C1-O01-C02
14	H	304	PGV	C04-O12-P-O11
14	H	304	PGV	C04-O12-P-O13
14	H	304	PGV	C04-O12-P-O14
14	H	304	PGV	C2-C1-O01-C02
14	B	103	PGV	C03-O11-P-O12

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Mol	Chain	Res	Type	Atoms
14	B	103	PGV	C03-O11-P-O13
14	B	103	PGV	C03-O11-P-O14
14	B	103	PGV	C04-O12-P-O11
14	B	103	PGV	C04-O12-P-O13
14	B	103	PGV	C04-O12-P-O14
14	B	104	PGV	C2-C1-O01-C02
14	E	102	PGV	C03-O11-P-O13
14	E	102	PGV	C04-O12-P-O14
14	G	103	PGV	C03-O11-P-O14
14	G	104	PGV	C03-O11-P-O12
14	G	104	PGV	C03-O11-P-O13
14	G	104	PGV	C03-O11-P-O14
14	I	101	PGV	C03-O11-P-O13
14	J	102	PGV	C01-C02-C03-O11
14	J	102	PGV	O01-C02-C03-O11
14	J	102	PGV	C11-C12-C13-C14
14	N	101	PGV	C03-O11-P-O13
14	N	101	PGV	C03-O11-P-O14
14	N	101	PGV	C04-O12-P-O11
14	N	101	PGV	C04-O12-P-O13
14	N	101	PGV	C04-O12-P-O14
14	N	104	PGV	C03-O11-P-O14
14	P	102	PGV	C03-O11-P-O12
14	P	103	PGV	C03-O11-P-O12
14	P	103	PGV	C03-O11-P-O14
14	P	103	PGV	C2-C1-O01-C02
14	R	104	PGV	C03-O11-P-O12
14	R	104	PGV	C03-O11-P-O14
14	R	104	PGV	C2-C1-O01-C02
14	V	101	PGV	C03-O11-P-O13
14	V	101	PGV	C03-O11-P-O14
14	V	101	PGV	C01-C02-O01-C1
14	V	101	PGV	C03-C02-O01-C1
14	V	101	PGV	O02-C1-O01-C02
14	V	105	PGV	C03-O11-P-O12
14	V	105	PGV	C03-O11-P-O13
14	V	105	PGV	C03-O11-P-O14
14	X	102	PGV	C03-O11-P-O12
14	X	102	PGV	C03-O11-P-O13
14	X	102	PGV	C03-O11-P-O14
14	X	102	PGV	C04-O12-P-O14
14	X	102	PGV	C2-C1-O01-C02

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Mol	Chain	Res	Type	Atoms
14	Z	101	PGV	C03-O11-P-O13
14	Z	101	PGV	O02-C1-O01-C02
14	Z	104	PGV	C04-O12-P-O11
14	Z	104	PGV	C04-O12-P-O13
14	Z	104	PGV	C04-O12-P-O14
14	Z	104	PGV	C04-C05-C06-O06
14	Z	104	PGV	O02-C1-O01-C02
14	Z	105	PGV	C03-O11-P-O14
14	1	101	PGV	C03-O11-P-O12
14	2	102	PGV	C03-O11-P-O12
14	2	102	PGV	C03-O11-P-O14
14	2	102	PGV	C03-C02-O01-C1
14	2	102	PGV	O02-C1-O01-C02
14	4	103	PGV	C03-O11-P-O14
14	4	103	PGV	O02-C1-O01-C02
14	4	104	PGV	C03-O11-P-O12
14	4	104	PGV	C03-O11-P-O13
14	4	104	PGV	C03-O11-P-O14
14	6	102	PGV	C2-C1-O01-C02
14	8	101	PGV	C03-O11-P-O12
14	8	101	PGV	C03-O11-P-O13
14	8	101	PGV	C03-O11-P-O14
14	8	101	PGV	O12-C04-C05-O05
14	8	104	PGV	C03-O11-P-O12
14	8	104	PGV	C03-O11-P-O13
14	8	104	PGV	C03-O11-P-O14
14	0	101	PGV	C03-O11-P-O12
14	0	101	PGV	C04-O12-P-O14
14	0	101	PGV	O01-C02-C03-O11
14	0	103	PGV	C03-O11-P-O12
14	0	103	PGV	C04-O12-P-O13
15	L	302	BCL	C2C-C3C-CAC-CBC
15	L	302	BCL	C4C-C3C-CAC-CBC
15	L	302	BCL	CBD-CGD-O2D-CED
15	L	310	BCL	C1A-C2A-CAA-CBA
15	L	310	BCL	C3A-C2A-CAA-CBA
15	L	310	BCL	C11-C10-C8-C9
15	A	101	BCL	C4C-C3C-CAC-CBC
15	B	102	BCL	C1A-C2A-CAA-CBA
15	B	102	BCL	C3A-C2A-CAA-CBA
15	B	102	BCL	C2C-C3C-CAC-CBC
15	B	102	BCL	C4C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
15	B	102	BCL	C6-C7-C8-C9
15	D	101	BCL	C2C-C3C-CAC-CBC
15	D	101	BCL	C4C-C3C-CAC-CBC
15	D	101	BCL	C2-C3-C5-C6
15	D	101	BCL	C4-C3-C5-C6
15	E	101	BCL	C2C-C3C-CAC-CBC
15	E	101	BCL	C4C-C3C-CAC-CBC
15	F	103	BCL	C4C-C3C-CAC-CBC
15	G	102	BCL	C1A-C2A-CAA-CBA
15	G	102	BCL	C2C-C3C-CAC-CBC
15	G	102	BCL	C4C-C3C-CAC-CBC
15	I	102	BCL	C2C-C3C-CAC-CBC
15	I	102	BCL	C4C-C3C-CAC-CBC
15	I	102	BCL	C4-C3-C5-C6
15	I	103	BCL	C1A-C2A-CAA-CBA
15	I	103	BCL	C2C-C3C-CAC-CBC
15	I	103	BCL	C4C-C3C-CAC-CBC
15	J	101	BCL	C2C-C3C-CAC-CBC
15	J	101	BCL	C4C-C3C-CAC-CBC
15	K	102	BCL	C2C-C3C-CAC-CBC
15	K	102	BCL	C4C-C3C-CAC-CBC
15	K	102	BCL	C2-C3-C5-C6
15	K	102	BCL	C4-C3-C5-C6
15	N	103	BCL	C1A-C2A-CAA-CBA
15	N	103	BCL	C3A-C2A-CAA-CBA
15	N	103	BCL	C2C-C3C-CAC-CBC
15	N	103	BCL	C4C-C3C-CAC-CBC
15	N	103	BCL	C2-C3-C5-C6
15	N	103	BCL	C4-C3-C5-C6
15	N	103	BCL	C6-C7-C8-C9
15	O	102	BCL	C2C-C3C-CAC-CBC
15	O	102	BCL	C4C-C3C-CAC-CBC
15	O	102	BCL	C4-C3-C5-C6
15	O	103	BCL	C2-C3-C5-C6
15	O	103	BCL	C4-C3-C5-C6
15	P	101	BCL	C2C-C3C-CAC-CBC
15	P	101	BCL	C4C-C3C-CAC-CBC
15	Q	102	BCL	C2C-C3C-CAC-CBC
15	Q	102	BCL	C4C-C3C-CAC-CBC
15	R	102	BCL	C1A-C2A-CAA-CBA
15	R	102	BCL	C2C-C3C-CAC-CBC
15	R	102	BCL	C4C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
15	R	102	BCL	C2-C3-C5-C6
15	R	102	BCL	C4-C3-C5-C6
15	S	101	BCL	C1A-C2A-CAA-CBA
15	S	101	BCL	C3A-C2A-CAA-CBA
15	S	101	BCL	C2-C3-C5-C6
15	S	101	BCL	C4-C3-C5-C6
15	S	102	BCL	C2-C3-C5-C6
15	S	102	BCL	C4-C3-C5-C6
15	T	101	BCL	C2C-C3C-CAC-CBC
15	T	101	BCL	C4C-C3C-CAC-CBC
15	U	102	BCL	C1A-C2A-CAA-CBA
15	U	102	BCL	C3A-C2A-CAA-CBA
15	U	102	BCL	C2C-C3C-CAC-CBC
15	U	102	BCL	C4C-C3C-CAC-CBC
15	V	103	BCL	C2C-C3C-CAC-CBC
15	V	103	BCL	C4C-C3C-CAC-CBC
15	W	101	BCL	C1A-C2A-CAA-CBA
15	W	101	BCL	C3A-C2A-CAA-CBA
15	W	101	BCL	C4C-C3C-CAC-CBC
15	W	102	BCL	C2-C3-C5-C6
15	W	102	BCL	C4-C3-C5-C6
15	X	101	BCL	C4C-C3C-CAC-CBC
15	Y	401	BCL	C2C-C3C-CAC-CBC
15	Y	401	BCL	C4C-C3C-CAC-CBC
15	Y	403	BCL	C2C-C3C-CAC-CBC
15	Y	403	BCL	C4C-C3C-CAC-CBC
15	Z	103	BCL	C2C-C3C-CAC-CBC
15	Z	103	BCL	C4C-C3C-CAC-CBC
15	1	102	BCL	C2-C3-C5-C6
15	1	102	BCL	C4-C3-C5-C6
15	2	101	BCL	C4C-C3C-CAC-CBC
15	3	102	BCL	C4C-C3C-CAC-CBC
15	4	102	BCL	C1A-C2A-CAA-CBA
15	4	102	BCL	C3A-C2A-CAA-CBA
15	4	102	BCL	C4C-C3C-CAC-CBC
15	5	102	BCL	O2A-C1-C2-C3
15	5	103	BCL	C4C-C3C-CAC-CBC
15	6	101	BCL	C4C-C3C-CAC-CBC
15	7	103	BCL	C2-C3-C5-C6
15	7	103	BCL	C4-C3-C5-C6
15	8	103	BCL	C1A-C2A-CAA-CBA
15	8	103	BCL	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
15	8	103	BCL	C2C-C3C-CAC-CBC
15	8	103	BCL	C4C-C3C-CAC-CBC
15	9	102	BCL	C1A-C2A-CAA-CBA
15	9	102	BCL	C4-C3-C5-C6
15	9	103	BCL	C2C-C3C-CAC-CBC
15	9	103	BCL	C4C-C3C-CAC-CBC
15	0	102	BCL	C2C-C3C-CAC-CBC
15	0	102	BCL	C4C-C3C-CAC-CBC
16	L	303	BPH	C1-C2-C3-C4
17	L	306	UQ8	C19-C21-C22-C23
17	L	306	UQ8	C14-C16-C17-C18
17	L	307	UQ8	C6-C7-C8-C9
18	L	312	CDL	CA2-OA2-PA1-OA3
18	L	312	CDL	OA7-CA5-OA6-CA4
18	L	312	CDL	C11-CA5-OA6-CA4
18	L	312	CDL	CB3-OB5-PB2-OB3
18	L	312	CDL	C51-CB5-OB6-CB4
18	M	402	CDL	CA2-OA2-PA1-OA5
18	M	402	CDL	CA3-OA5-PA1-OA4
18	M	407	CDL	CA2-OA2-PA1-OA4
18	M	407	CDL	CA3-OA5-PA1-OA2
18	M	407	CDL	CA3-OA5-PA1-OA3
18	M	407	CDL	CA3-OA5-PA1-OA4
18	M	407	CDL	C11-CA5-OA6-CA4
18	M	408	CDL	CA3-OA5-PA1-OA2
18	M	408	CDL	CA3-OA5-PA1-OA3
18	M	408	CDL	CA3-OA5-PA1-OA4
18	M	408	CDL	OA7-CA5-OA6-CA4
18	M	408	CDL	C11-CA5-OA6-CA4
18	M	408	CDL	CB2-OB2-PB2-OB3
18	M	408	CDL	CB2-OB2-PB2-OB5
18	M	408	CDL	CB3-OB5-PB2-OB3
18	M	409	CDL	O1-C1-CB2-OB2
18	M	409	CDL	CA2-OA2-PA1-OA3
18	M	409	CDL	CB3-OB5-PB2-OB3
18	M	410	CDL	CA2-OA2-PA1-OA4
18	M	410	CDL	CB2-OB2-PB2-OB3
18	H	302	CDL	CA2-OA2-PA1-OA3
18	H	302	CDL	CA2-OA2-PA1-OA5
18	H	302	CDL	OA6-CA4-CA6-OA8
18	H	302	CDL	CB3-OB5-PB2-OB2
18	H	302	CDL	CB3-OB5-PB2-OB3

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Mol	Chain	Res	Type	Atoms
18	F	101	CDL	CA2-OA2-PA1-OA3
18	F	101	CDL	CA2-OA2-PA1-OA4
18	F	101	CDL	CA2-OA2-PA1-OA5
18	F	101	CDL	OA6-CA4-CA6-OA8
18	F	101	CDL	CB2-OB2-PB2-OB4
18	F	101	CDL	CB3-OB5-PB2-OB2
18	U	101	CDL	CB2-OB2-PB2-OB5
18	U	101	CDL	CB3-OB5-PB2-OB2
18	U	101	CDL	CB3-OB5-PB2-OB3
20	M	405	MQ8	C38-C40-C41-C42
21	M	406	CRT	C2-C1-C4-C5
21	M	406	CRT	C3-C1-C4-C5
21	M	406	CRT	C36-C37-C38-C39
21	M	406	CRT	C36-C37-C38-C40
21	M	406	CRT	C36-C37-C38-O2
21	M	406	CRT	C40-C38-O2-C2M
21	B	101	CRT	C5-C6-C7-C8
21	B	101	CRT	C40-C38-O2-C2M
21	G	101	CRT	C3-C1-O1-C1M
21	N	102	CRT	C15-C16-C17-C18
21	N	102	CRT	C15-C16-C17-C19
21	V	102	CRT	C2-C1-O1-C1M
21	4	101	CRT	C2-C1-O1-C1M
21	4	101	CRT	C5-C6-C7-C8
21	4	101	CRT	C5-C6-C7-C9
21	4	101	CRT	C15-C16-C17-C18
21	8	102	CRT	C5-C6-C7-C8
13	Y	402	LMT	O5B-C1B-O1B-C4'
14	R	103	PGV	O04-C19-O03-C01
15	Z	103	BCL	O1A-CGA-O2A-C1
15	L	302	BCL	O1D-CGD-O2D-CED
15	Z	103	BCL	CBA-CGA-O2A-C1
15	L	311	BCL	CBD-CGD-O2D-CED
13	Q	101	LMT	O5B-C1B-O1B-C4'
13	F	102	LMT	O5B-C1B-O1B-C4'
14	H	303	PGV	O02-C1-O01-C02
14	H	304	PGV	O02-C1-O01-C02
14	B	104	PGV	O02-C1-O01-C02
14	P	103	PGV	O02-C1-O01-C02
14	R	104	PGV	O02-C1-O01-C02
14	V	105	PGV	O02-C1-O01-C02
14	X	102	PGV	O02-C1-O01-C02

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Mol	Chain	Res	Type	Atoms
14	6	102	PGV	O02-C1-O01-C02
18	M	407	CDL	OA7-CA5-OA6-CA4
18	M	409	CDL	OB7-CB5-OB6-CB4
15	D	101	BCL	C3-C5-C6-C7
15	E	101	BCL	C3-C5-C6-C7
15	P	101	BCL	C3-C5-C6-C7
15	1	102	BCL	C3-C5-C6-C7
15	1	103	BCL	C3-C5-C6-C7
15	9	102	BCL	C3-C5-C6-C7
14	R	103	PGV	C20-C19-O03-C01
18	M	402	CDL	C31-CA7-OA8-CA6
14	V	105	PGV	C2-C1-O01-C02
18	M	409	CDL	C51-CB5-OB6-CB4
13	C	408	LMT	C5'-C4'-O1B-C1B
15	J	101	BCL	C4-C3-C5-C6
15	I	102	BCL	C2-C3-C5-C6
15	O	102	BCL	C2-C3-C5-C6
15	A	101	BCL	CBD-CGD-O2D-CED
15	L	310	BCL	C2A-CAA-CBA-CGA
15	U	102	BCL	C2A-CAA-CBA-CGA
15	7	103	BCL	C2A-CAA-CBA-CGA
15	O	103	BCL	C3-C5-C6-C7
15	S	101	BCL	C3-C5-C6-C7
15	Z	103	BCL	C3-C5-C6-C7
15	8	103	BCL	C3-C5-C6-C7
16	L	303	BPH	C1-C2-C3-C5
18	L	312	CDL	OB7-CB5-OB6-CB4
18	M	402	CDL	OA9-CA7-OA8-CA6
15	M	403	BCL	CBD-CGD-O2D-CED
18	M	407	CDL	O1-C1-CB2-OB2
15	4	102	BCL	C3-C5-C6-C7
14	3	101	PGV	C20-C19-O03-C01
15	I	102	BCL	CBA-CGA-O2A-C1
15	3	102	BCL	CBA-CGA-O2A-C1
15	I	102	BCL	O1A-CGA-O2A-C1
14	Z	105	PGV	C2-C1-O01-C02
18	M	402	CDL	C11-CA5-OA6-CA4
15	F	103	BCL	C3-C5-C6-C7
15	I	102	BCL	C3-C5-C6-C7
15	Y	403	BCL	C3-C5-C6-C7
14	3	101	PGV	O04-C19-O03-C01
15	3	102	BCL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
15	R	102	BCL	C15-C16-C17-C18
15	W	101	BCL	C4-C3-C5-C6
15	Y	403	BCL	C4-C3-C5-C6
15	J	101	BCL	C2-C3-C5-C6
15	W	101	BCL	C2-C3-C5-C6
15	Y	403	BCL	C2-C3-C5-C6
15	9	102	BCL	C2-C3-C5-C6
15	J	101	BCL	C2A-CAA-CBA-CGA
17	L	304	UQ8	C19-C21-C22-C23
14	G	103	PGV	C20-C19-O03-C01
14	P	102	PGV	C20-C19-O03-C01
15	T	101	BCL	CBA-CGA-O2A-C1
13	5	101	LMT	C4'-C5'-C6'-O6'
14	I	101	PGV	C7-C8-C9-C10
18	M	409	CDL	CA2-C1-CB2-OB2
18	M	402	CDL	OA7-CA5-OA6-CA4
15	D	102	BCL	C3-C5-C6-C7
15	S	102	BCL	C3-C5-C6-C7
14	C	409	PGV	C20-C19-O03-C01
14	N	104	PGV	C20-C19-O03-C01
15	I	103	BCL	CBA-CGA-O2A-C1
13	K	101	LMT	C5'-C4'-O1B-C1B
13	C	408	LMT	O5'-C5'-C6'-O6'
15	8	103	BCL	C10-C11-C12-C13
14	N	104	PGV	O12-C04-C05-O05
18	H	302	CDL	O1-C1-CA2-OA2
13	7	101	LMT	C2'-C1'-O1'-C1
18	M	407	CDL	OB6-CB4-CB6-OB8
14	G	103	PGV	O04-C19-O03-C01
15	A	101	BCL	C11-C10-C8-C9
15	E	101	BCL	C6-C7-C8-C9
15	G	102	BCL	C11-C10-C8-C9
15	K	102	BCL	C6-C7-C8-C9
15	O	103	BCL	C11-C10-C8-C9
15	Q	102	BCL	C6-C7-C8-C9
15	R	102	BCL	C6-C7-C8-C9
15	S	102	BCL	C11-C10-C8-C9
15	T	101	BCL	C6-C7-C8-C9
15	T	101	BCL	C11-C12-C13-C14
15	V	103	BCL	C11-C10-C8-C9
15	W	101	BCL	C6-C7-C8-C9
15	5	103	BCL	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
15	7	103	BCL	C11-C10-C8-C9
15	8	103	BCL	C6-C7-C8-C9
15	9	102	BCL	C11-C12-C13-C14
15	9	103	BCL	C11-C10-C8-C9
15	L	311	BCL	O1D-CGD-O2D-CED
15	3	102	BCL	C13-C15-C16-C17
15	8	103	BCL	C13-C15-C16-C17
21	M	406	CRT	C34-C33-C35-C36
21	R	101	CRT	C5-C6-C7-C8
14	Z	105	PGV	O02-C1-O01-C02
18	M	408	CDL	C51-CB5-OB6-CB4
14	3	101	PGV	C1-C2-C3-C4
14	4	104	PGV	C1-C2-C3-C4
18	F	101	CDL	CA5-C11-C12-C13
15	Q	102	BCL	C10-C11-C12-C13
15	U	102	BCL	C15-C16-C17-C18
14	4	104	PGV	C20-C19-O03-C01
14	8	101	PGV	C20-C19-O03-C01
15	J	101	BCL	CBA-CGA-O2A-C1
15	F	103	BCL	C13-C15-C16-C17
15	N	103	BCL	C10-C11-C12-C13
15	U	102	BCL	C10-C11-C12-C13
15	1	102	BCL	C13-C15-C16-C17
15	5	102	BCL	C15-C16-C17-C18
13	L	301	LMT	O5B-C5B-C6B-O6B
13	K	101	LMT	C3'-C4'-O1B-C1B
13	C	408	LMT	C4'-C5'-C6'-O6'
13	F	102	LMT	C2B-C1B-O1B-C4'
15	M	403	BCL	C5-C6-C7-C8
15	B	102	BCL	C5-C6-C7-C8
14	L	309	PGV	C1-C2-C3-C4
14	H	301	PGV	C19-C20-C21-C22
14	B	103	PGV	C19-C20-C21-C22
14	E	103	PGV	C19-C20-C21-C22
14	G	103	PGV	C19-C20-C21-C22
14	T	102	PGV	C1-C2-C3-C4
15	W	102	BCL	C8-C10-C11-C12
15	5	102	BCL	C8-C10-C11-C12
13	H	306	LMT	O5'-C5'-C6'-O6'
15	W	102	BCL	C10-C11-C12-C13
15	4	102	BCL	C8-C10-C11-C12
15	9	102	BCL	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
14	Z	105	PGV	C19-C20-C21-C22
14	8	101	PGV	C1-C2-C3-C4
15	4	102	BCL	C5-C6-C7-C8
15	L	302	BCL	C11-C10-C8-C7
15	D	101	BCL	C6-C7-C8-C10
15	W	101	BCL	C11-C10-C8-C7
15	Z	103	BCL	C11-C10-C8-C7
15	8	103	BCL	C6-C7-C8-C10
14	C	409	PGV	O04-C19-O03-C01
14	N	104	PGV	O04-C19-O03-C01
15	A	101	BCL	C2A-CAA-CBA-CGA
15	Y	403	BCL	C2A-CAA-CBA-CGA
15	O	103	BCL	C15-C16-C17-C18
15	S	102	BCL	C15-C16-C17-C18
15	4	102	BCL	C15-C16-C17-C18
14	P	102	PGV	O04-C19-O03-C01
15	E	101	BCL	C15-C16-C17-C18
14	L	309	PGV	O12-C04-C05-O05
14	8	104	PGV	O12-C04-C05-O05
15	G	102	BCL	C10-C11-C12-C13
15	O	103	BCL	C5-C6-C7-C8
15	T	101	BCL	C15-C16-C17-C18
15	Z	103	BCL	C10-C11-C12-C13
15	Z	103	BCL	C13-C15-C16-C17
15	5	102	BCL	C10-C11-C12-C13
13	H	305	LMT	O1'-C1-C2-C3
15	I	103	BCL	O1A-CGA-O2A-C1
15	T	101	BCL	O1A-CGA-O2A-C1
18	M	407	CDL	CA7-C31-C32-C33
15	F	103	BCL	C8-C10-C11-C12
15	V	103	BCL	C15-C16-C17-C18
11	C	406	Z41	C12-C13-C14-C15
13	K	101	LMT	O5'-C5'-C6'-O6'
13	5	101	LMT	O5'-C5'-C6'-O6'
15	J	101	BCL	O1A-CGA-O2A-C1
14	L	305	PGV	C2-C1-O01-C02
14	B	103	PGV	C2-C1-O01-C02
15	O	102	BCL	C15-C16-C17-C18
15	Q	102	BCL	C5-C6-C7-C8
15	U	102	BCL	C8-C10-C11-C12
15	W	101	BCL	C5-C6-C7-C8
15	5	103	BCL	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
15	9	102	BCL	C10-C11-C12-C13
15	9	103	BCL	C10-C11-C12-C13
14	L	305	PGV	C03-O11-P-O12
14	L	309	PGV	C03-O11-P-O12
14	L	309	PGV	C04-O12-P-O11
14	H	301	PGV	C03-O11-P-O12
14	E	102	PGV	C03-O11-P-O12
14	E	102	PGV	C04-O12-P-O11
14	G	103	PGV	C03-O11-P-O12
14	I	101	PGV	C03-O11-P-O12
14	N	101	PGV	C03-O11-P-O12
14	N	104	PGV	C03-O11-P-O12
14	V	101	PGV	C03-O11-P-O12
14	Z	105	PGV	C03-O11-P-O12
14	1	101	PGV	C04-O12-P-O11
14	3	101	PGV	C03-O11-P-O12
14	4	103	PGV	C03-O11-P-O12
14	0	101	PGV	C04-O12-P-O11
18	M	402	CDL	CA3-OA5-PA1-OA2
18	M	402	CDL	CB3-OB5-PB2-OB2
18	M	407	CDL	CA2-OA2-PA1-OA5
18	M	407	CDL	CB2-OB2-PB2-OB5
18	M	408	CDL	CA2-OA2-PA1-OA5
18	M	409	CDL	CB2-OB2-PB2-OB5
18	M	410	CDL	CA2-OA2-PA1-OA5
18	H	302	CDL	CA3-OA5-PA1-OA2
18	H	302	CDL	CB2-OB2-PB2-OB5
18	F	101	CDL	CB2-OB2-PB2-OB5
15	U	102	BCL	C3-C5-C6-C7
15	W	101	BCL	C3-C5-C6-C7
15	L	310	BCL	CBA-CGA-O2A-C1
15	N	103	BCL	CBA-CGA-O2A-C1
15	G	102	BCL	C15-C16-C17-C18
15	N	103	BCL	C5-C6-C7-C8
15	9	102	BCL	C13-C15-C16-C17
14	P	102	PGV	C26-C27-C28-C29
14	I	101	PGV	C1-C2-C3-C4
14	8	104	PGV	O12-C04-C05-C06
18	M	407	CDL	CA2-C1-CB2-OB2
14	L	305	PGV	O02-C1-O01-C02
14	2	103	PGV	O02-C1-O01-C02
18	M	408	CDL	OB7-CB5-OB6-CB4

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Mol	Chain	Res	Type	Atoms
15	7	103	BCL	C15-C16-C17-C18
15	A	101	BCL	O1D-CGD-O2D-CED
15	G	102	BCL	C2A-CAA-CBA-CGA
11	C	406	Z41	C13-C14-C15-C16
14	2	103	PGV	C20-C21-C22-C23
14	8	101	PGV	C23-C24-C25-C26
14	G	104	PGV	C2-C1-O01-C02
14	2	103	PGV	C2-C1-O01-C02
14	0	104	PGV	C2-C1-O01-C02
18	U	101	CDL	C11-CA5-OA6-CA4
18	U	101	CDL	C51-CB5-OB6-CB4
15	V	103	BCL	C13-C15-C16-C17
11	C	406	Z41	C9-C10-C11-C12
14	N	101	PGV	C25-C26-C27-C28
14	N	104	PGV	C20-C21-C22-C23
14	0	101	PGV	C22-C23-C24-C25
14	0	104	PGV	C6-C7-C8-C9
14	V	105	PGV	C20-C19-O03-C01
18	U	101	CDL	C31-CA7-OA8-CA6
14	N	105	PGV	C2-C3-C4-C5
14	4	104	PGV	C23-C24-C25-C26
18	L	312	CDL	C19-C20-C21-C22
14	G	104	PGV	O02-C1-O01-C02
14	0	104	PGV	O02-C1-O01-C02
18	U	101	CDL	OA7-CA5-OA6-CA4
14	2	103	PGV	C19-C20-C21-C22
14	T	102	PGV	C24-C25-C26-C27
14	V	104	PGV	C21-C22-C23-C24
14	X	102	PGV	C23-C24-C25-C26
14	Z	105	PGV	C20-C21-C22-C23
14	8	101	PGV	O04-C19-O03-C01
14	H	303	PGV	C5-C6-C7-C8
14	2	103	PGV	C24-C25-C26-C27
18	L	312	CDL	C18-C19-C20-C21
14	0	103	PGV	O12-C04-C05-O05
18	H	302	CDL	O1-C1-CB2-OB2
14	R	104	PGV	C20-C21-C22-C23
18	M	402	CDL	C12-C13-C14-C15
14	G	104	PGV	C21-C22-C23-C24
14	1	101	PGV	C2-C3-C4-C5
14	4	104	PGV	O04-C19-O03-C01
15	L	310	BCL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
15	N	103	BCL	O1A-CGA-O2A-C1
15	5	102	BCL	C16-C17-C18-C19
17	L	304	UQ8	C15-C14-C16-C17
14	L	308	PGV	C4-C5-C6-C7
14	T	102	PGV	C22-C23-C24-C25
15	A	101	BCL	C11-C12-C13-C14
15	D	101	BCL	C11-C10-C8-C9
14	2	102	PGV	C22-C23-C24-C25
14	2	102	PGV	C24-C25-C26-C27
14	4	104	PGV	C30-C31-C32-C33
14	0	104	PGV	C21-C22-C23-C24
18	M	407	CDL	C36-C37-C38-C39
15	Q	102	BCL	C2A-CAA-CBA-CGA
14	V	105	PGV	C04-C05-C06-O06
15	Y	401	BCL	C10-C11-C12-C13
14	N	105	PGV	C2-C1-O01-C02
18	M	407	CDL	C73-C74-C75-C76
18	H	302	CDL	CA5-C11-C12-C13
14	4	104	PGV	C3-C4-C5-C6
15	D	101	BCL	C5-C6-C7-C8
14	N	101	PGV	C01-C02-C03-O11
17	L	304	UQ8	C14-C16-C17-C18
14	P	103	PGV	C20-C21-C22-C23
18	M	407	CDL	C74-C75-C76-C77
18	F	101	CDL	C60-C61-C62-C63
14	8	104	PGV	C23-C24-C25-C26
14	L	308	PGV	C1-C2-C3-C4
18	M	407	CDL	CB5-C51-C52-C53
15	D	102	BCL	C13-C15-C16-C17
14	H	304	PGV	C6-C7-C8-C9
14	G	104	PGV	C12-C13-C14-C15
15	A	101	BCL	C3A-C2A-CAA-CBA
15	D	101	BCL	C3A-C2A-CAA-CBA
15	F	103	BCL	C3A-C2A-CAA-CBA
15	G	102	BCL	C3A-C2A-CAA-CBA
15	K	102	BCL	C3A-C2A-CAA-CBA
15	O	102	BCL	C3A-C2A-CAA-CBA
15	Q	102	BCL	C3A-C2A-CAA-CBA
15	R	102	BCL	C3A-C2A-CAA-CBA
15	Y	403	BCL	C3A-C2A-CAA-CBA
15	Z	103	BCL	C3A-C2A-CAA-CBA
15	2	101	BCL	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
15	7	103	BCL	C3A-C2A-CAA-CBA
15	9	102	BCL	C3A-C2A-CAA-CBA
14	6	102	PGV	C27-C28-C29-C30
14	0	104	PGV	C7-C8-C9-C10
14	N	105	PGV	O02-C1-O01-C02
18	U	101	CDL	OB7-CB5-OB6-CB4
13	Y	402	LMT	O1'-C1-C2-C3
14	X	102	PGV	C26-C27-C28-C29
15	L	302	BCL	C3-C5-C6-C7
13	O	101	LMT	C2-C3-C4-C5
18	M	402	CDL	C71-CB7-OB8-CB6
17	L	304	UQ8	C13-C14-C16-C17
14	E	103	PGV	C2-C1-O01-C02
14	Z	104	PGV	O05-C05-C06-O06
14	Z	105	PGV	C1-C2-C3-C4
13	Q	101	LMT	C1-C2-C3-C4
14	H	304	PGV	O12-C04-C05-O05
14	T	102	PGV	O12-C04-C05-O05
18	U	101	CDL	OA9-CA7-OA8-CA6
11	C	406	Z41	C11-C10-C9-C8
14	R	104	PGV	C25-C26-C27-C28
14	E	103	PGV	O02-C1-O01-C02
14	Z	101	PGV	C23-C24-C25-C26
15	F	103	BCL	C15-C16-C17-C18
15	G	102	BCL	C16-C17-C18-C20
14	J	102	PGV	C19-C20-C21-C22
14	L	305	PGV	C20-C19-O03-C01
14	Z	105	PGV	C20-C19-O03-C01
15	D	102	BCL	C5-C6-C7-C8
15	1	103	BCL	C15-C16-C17-C18
15	5	103	BCL	C8-C10-C11-C12
14	4	104	PGV	C2-C1-O01-C02
14	P	103	PGV	C13-C14-C15-C16
18	M	402	CDL	CA7-C31-C32-C33
14	E	102	PGV	C20-C21-C22-C23
18	H	302	CDL	C18-C19-C20-C21
15	Q	102	BCL	C8-C10-C11-C12
14	N	101	PGV	C26-C27-C28-C29
15	I	103	BCL	C4-C3-C5-C6
15	9	103	BCL	C4-C3-C5-C6
15	D	101	BCL	C11-C10-C8-C7
15	G	102	BCL	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
15	I	103	BCL	C2-C3-C5-C6
15	K	102	BCL	C6-C7-C8-C10
15	T	101	BCL	C6-C7-C8-C10
15	V	103	BCL	C6-C7-C8-C10
15	1	102	BCL	C11-C10-C8-C7
15	5	102	BCL	C12-C13-C15-C16
14	V	105	PGV	O04-C19-O03-C01
15	D	101	BCL	C16-C17-C18-C19
15	W	101	BCL	C16-C17-C18-C19
15	5	102	BCL	C16-C17-C18-C20
14	N	101	PGV	O02-C1-O01-C02
18	H	302	CDL	OA7-CA5-OA6-CA4
14	H	304	PGV	C19-C20-C21-C22
14	T	102	PGV	C19-C20-C21-C22
14	L	309	PGV	C20-C19-O03-C01
15	K	102	BCL	CBA-CGA-O2A-C1
14	X	102	PGV	C27-C28-C29-C30
15	V	103	BCL	C2A-CAA-CBA-CGA
15	N	103	BCL	C3-C5-C6-C7
13	H	305	LMT	O5B-C5B-C6B-O6B
15	X	101	BCL	C10-C11-C12-C13
15	Y	401	BCL	C5-C6-C7-C8
14	Z	104	PGV	C21-C22-C23-C24
14	6	102	PGV	C22-C23-C24-C25
14	0	104	PGV	C20-C21-C22-C23
14	E	102	PGV	C2-C1-O01-C02
14	J	102	PGV	C2-C1-O01-C02
14	N	101	PGV	C2-C1-O01-C02
14	3	101	PGV	C2-C1-O01-C02
14	0	101	PGV	C2-C1-O01-C02
18	M	410	CDL	C11-CA5-OA6-CA4
18	H	302	CDL	C11-CA5-OA6-CA4
18	H	302	CDL	C51-CB5-OB6-CB4
14	B	103	PGV	C20-C21-C22-C23
15	F	103	BCL	C10-C11-C12-C13
13	7	102	LMT	C2-C3-C4-C5
14	E	102	PGV	O02-C1-O01-C02
14	J	102	PGV	O02-C1-O01-C02
14	3	101	PGV	O02-C1-O01-C02
14	4	104	PGV	O02-C1-O01-C02
14	0	101	PGV	O02-C1-O01-C02
18	M	410	CDL	OA7-CA5-OA6-CA4

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Mol	Chain	Res	Type	Atoms
18	M	407	CDL	C75-C76-C77-C78
18	M	409	CDL	OB6-CB4-CB6-OB8
18	U	101	CDL	OB6-CB4-CB6-OB8
15	A	101	BCL	C16-C17-C18-C19
14	Z	105	PGV	C6-C7-C8-C9
15	U	102	BCL	C5-C6-C7-C8
15	A	101	BCL	C4-C3-C5-C6
18	H	302	CDL	CB5-C51-C52-C53
15	9	103	BCL	C2-C3-C5-C6
15	L	302	BCL	C11-C10-C8-C9
15	A	101	BCL	C14-C13-C15-C16
15	D	101	BCL	C6-C7-C8-C9
15	E	101	BCL	C11-C10-C8-C9
15	Z	103	BCL	C11-C10-C8-C9
15	1	102	BCL	C11-C10-C8-C9
15	M	403	BCL	O1D-CGD-O2D-CED
15	E	101	BCL	C2A-CAA-CBA-CGA
15	S	101	BCL	C2A-CAA-CBA-CGA
14	V	101	PGV	C22-C23-C24-C25
13	F	102	LMT	O5'-C5'-C6'-O6'
14	Z	101	PGV	C24-C25-C26-C27
21	8	102	CRT	C5-C6-C7-C9
14	L	305	PGV	O04-C19-O03-C01
18	M	402	CDL	OB9-CB7-OB8-CB6
15	L	311	BCL	C1A-C2A-CAA-CBA
15	A	101	BCL	C1A-C2A-CAA-CBA
15	D	101	BCL	C1A-C2A-CAA-CBA
15	F	103	BCL	C1A-C2A-CAA-CBA
15	K	102	BCL	C1A-C2A-CAA-CBA
15	Q	102	BCL	C1A-C2A-CAA-CBA
15	Y	403	BCL	C1A-C2A-CAA-CBA
15	Z	103	BCL	C1A-C2A-CAA-CBA
15	2	101	BCL	C1A-C2A-CAA-CBA
15	3	102	BCL	C1A-C2A-CAA-CBA
15	7	103	BCL	C1A-C2A-CAA-CBA
15	G	102	BCL	C16-C17-C18-C19
14	T	102	PGV	C2-C1-O01-C02
18	M	409	CDL	C11-CA5-OA6-CA4
14	L	309	PGV	C20-C21-C22-C23
14	0	104	PGV	C23-C24-C25-C26
15	D	101	BCL	C10-C11-C12-C13
18	M	408	CDL	CB3-OB5-PB2-OB2

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Mol	Chain	Res	Type	Atoms
18	U	101	CDL	CA2-OA2-PA1-OA5
18	L	312	CDL	CA7-C31-C32-C33
15	J	101	BCL	C3-C5-C6-C7
15	Q	102	BCL	C3-C5-C6-C7
15	D	101	BCL	C13-C15-C16-C17
14	G	104	PGV	C01-C02-C03-O11
14	V	101	PGV	C01-C02-C03-O11
14	2	102	PGV	C01-C02-C03-O11
18	U	101	CDL	OA5-CA3-CA4-CA6
18	M	407	CDL	C31-C32-C33-C34
13	Y	402	LMT	C1-C2-C3-C4
14	0	103	PGV	O12-C04-C05-C06
15	V	103	BCL	C4-C3-C5-C6
15	A	101	BCL	C2C-C3C-CAC-CBC
15	F	103	BCL	C2C-C3C-CAC-CBC
15	W	101	BCL	C2C-C3C-CAC-CBC
15	X	101	BCL	C2C-C3C-CAC-CBC
15	2	101	BCL	C2C-C3C-CAC-CBC
15	3	102	BCL	C2C-C3C-CAC-CBC
15	4	102	BCL	C2C-C3C-CAC-CBC
15	5	103	BCL	C2C-C3C-CAC-CBC
15	6	101	BCL	C2C-C3C-CAC-CBC
14	I	101	PGV	C27-C28-C29-C30
18	M	407	CDL	C41-C42-C43-C44
18	H	302	CDL	C77-C78-C79-C80
14	L	309	PGV	O04-C19-O03-C01
15	K	102	BCL	O1A-CGA-O2A-C1
14	L	308	PGV	C22-C23-C24-C25
15	E	101	BCL	C16-C17-C18-C19
13	7	101	LMT	O5'-C5'-C6'-O6'
14	C	409	PGV	O03-C01-C02-C03
14	N	104	PGV	O03-C01-C02-C03
14	V	105	PGV	O03-C01-C02-C03
14	X	102	PGV	O03-C01-C02-C03
14	2	103	PGV	O03-C01-C02-C03
18	M	407	CDL	CA3-CA4-CA6-OA8
18	M	407	CDL	CB3-CB4-CB6-OB8
18	M	408	CDL	CA3-CA4-CA6-OA8
18	M	410	CDL	CB3-CB4-CB6-OB8
18	H	302	CDL	CA3-CA4-CA6-OA8
13	Q	101	LMT	O5B-C5B-C6B-O6B
13	9	101	LMT	O5'-C5'-C6'-O6'

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Mol	Chain	Res	Type	Atoms
14	E	102	PGV	C23-C24-C25-C26
14	J	102	PGV	C4-C5-C6-C7
14	Z	105	PGV	O04-C19-O03-C01
14	8	101	PGV	O12-C04-C05-C06
15	S	101	BCL	C8-C10-C11-C12
13	Q	101	LMT	O5'-C5'-C6'-O6'
14	0	101	PGV	C27-C28-C29-C30
14	4	104	PGV	C28-C29-C30-C31
15	W	102	BCL	C5-C6-C7-C8
18	M	402	CDL	C18-C19-C20-C21
13	H	305	LMT	O5'-C5'-C6'-O6'
13	K	101	LMT	O5B-C5B-C6B-O6B
20	M	405	MQ8	C29-C28-C30-C31
15	Y	403	BCL	C16-C17-C18-C20
14	0	101	PGV	C20-C19-O03-C01
15	W	102	BCL	CBA-CGA-O2A-C1
18	L	312	CDL	CA6-CA4-OA6-CA5
18	M	402	CDL	CA6-CA4-OA6-CA5
13	7	102	LMT	O5B-C5B-C6B-O6B
15	L	311	BCL	C10-C11-C12-C13
16	M	404	BPH	C15-C16-C17-C18
14	P	102	PGV	C03-O11-P-O13
14	P	103	PGV	C03-O11-P-O13
14	R	104	PGV	C03-O11-P-O13
14	P	103	PGV	C3-C4-C5-C6
15	S	102	BCL	CBA-CGA-O2A-C1
18	M	409	CDL	C31-CA7-OA8-CA6
18	U	101	CDL	C71-CB7-OB8-CB6
14	3	101	PGV	O01-C02-C03-O11
18	H	302	CDL	OA5-CA3-CA4-OA6
15	D	101	BCL	C16-C17-C18-C20
15	W	101	BCL	C16-C17-C18-C20
14	B	103	PGV	O02-C1-O01-C02
14	V	104	PGV	C20-C21-C22-C23
15	0	102	BCL	C10-C11-C12-C13
13	F	102	LMT	C2'-C1'-O1'-C1
21	M	406	CRT	C39-C38-O2-C2M
21	B	101	CRT	C3-C1-O1-C1M
21	B	101	CRT	C39-C38-O2-C2M
21	N	102	CRT	C3-C1-O1-C1M
21	R	101	CRT	C2-C1-O1-C1M
21	V	102	CRT	C3-C1-O1-C1M

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Mol	Chain	Res	Type	Atoms
21	Z	102	CRT	C2-C1-O1-C1M
21	8	102	CRT	C3-C1-O1-C1M
14	L	309	PGV	O03-C01-C02-O01
18	M	407	CDL	C37-C38-C39-C40
15	1	103	BCL	C10-C11-C12-C13
21	V	102	CRT	C2-C1-C4-C5
15	T	101	BCL	C4-C3-C5-C6
15	A	101	BCL	C6-C7-C8-C10
15	E	101	BCL	C11-C10-C8-C7
15	F	103	BCL	C6-C7-C8-C10
15	F	103	BCL	C11-C10-C8-C7
15	S	102	BCL	C11-C10-C8-C7
15	S	102	BCL	C12-C13-C15-C16
15	T	101	BCL	C2-C3-C5-C6
15	U	102	BCL	C11-C10-C8-C7
15	W	101	BCL	C6-C7-C8-C10
15	Y	401	BCL	C6-C7-C8-C10
15	5	103	BCL	C12-C13-C15-C16
15	7	103	BCL	C6-C7-C8-C10
15	9	102	BCL	C6-C7-C8-C10
15	A	101	BCL	C3-C5-C6-C7
14	J	102	PGV	C20-C21-C22-C23
15	F	103	BCL	C6-C7-C8-C9
15	I	103	BCL	C6-C7-C8-C9
15	O	103	BCL	C6-C7-C8-C9
15	S	101	BCL	C11-C10-C8-C9
15	S	102	BCL	C14-C13-C15-C16
15	U	102	BCL	C11-C10-C8-C9
15	W	101	BCL	C11-C10-C8-C9
15	Y	401	BCL	C6-C7-C8-C9
15	Y	403	BCL	C11-C10-C8-C9
15	Z	103	BCL	C6-C7-C8-C9
15	1	102	BCL	C6-C7-C8-C9
15	5	102	BCL	C11-C10-C8-C9
14	Z	105	PGV	C25-C26-C27-C28
21	N	102	CRT	C5-C6-C7-C8
21	R	101	CRT	C15-C16-C17-C18
15	U	102	BCL	C16-C17-C18-C19
21	B	101	CRT	C5-C6-C7-C9
21	4	101	CRT	C15-C16-C17-C19
14	H	301	PGV	C3-C4-C5-C6
18	M	409	CDL	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
15	B	102	BCL	C3-C5-C6-C7
15	D	102	BCL	C15-C16-C17-C18
14	E	102	PGV	C20-C19-O03-C01
14	2	103	PGV	C20-C19-O03-C01
15	Y	403	BCL	CBA-CGA-O2A-C1
13	O	101	LMT	O1'-C1-C2-C3
14	8	101	PGV	C19-C20-C21-C22
18	H	302	CDL	CB7-C71-C72-C73
13	L	301	LMT	C4'-C5'-C6'-O6'
18	L	312	CDL	C71-C72-C73-C74
15	E	101	BCL	C16-C17-C18-C20
13	L	301	LMT	O5'-C1'-O1'-C1
14	L	305	PGV	C01-C02-C03-O11
14	R	104	PGV	C01-C02-C03-O11
14	T	102	PGV	C01-C02-C03-O11
14	Z	105	PGV	C01-C02-C03-O11
14	0	101	PGV	C01-C02-C03-O11
18	F	101	CDL	OA5-CA3-CA4-CA6
14	J	102	PGV	C1-C2-C3-C4
15	I	102	BCL	C13-C15-C16-C17
15	K	102	BCL	C8-C10-C11-C12
14	3	101	PGV	C4-C5-C6-C7
15	L	311	BCL	C4-C3-C5-C6
17	L	304	UQ8	C12-C11-C9-C10
15	L	311	BCL	C2-C3-C5-C6
17	L	304	UQ8	C12-C11-C9-C8
20	M	405	MQ8	C27-C28-C30-C31
14	P	102	PGV	C19-C20-C21-C22
14	T	102	PGV	O02-C1-O01-C02
18	U	101	CDL	C71-C72-C73-C74
14	N	101	PGV	C20-C19-O03-C01
15	9	103	BCL	CBA-CGA-O2A-C1
18	F	101	CDL	C74-C75-C76-C77
13	F	102	LMT	C2-C1-O1'-C1'
15	1	103	BCL	C5-C6-C7-C8
15	W	102	BCL	O1A-CGA-O2A-C1
14	V	104	PGV	C27-C28-C29-C30
13	L	301	LMT	O5'-C5'-C6'-O6'
15	U	102	BCL	CBA-CGA-O2A-C1
18	F	101	CDL	C71-CB7-OB8-CB6
18	M	407	CDL	C33-C34-C35-C36
15	D	102	BCL	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
11	C	406	Z41	O2-C17-C18-C35
14	Z	101	PGV	O03-C01-C02-C03
14	Z	105	PGV	O03-C01-C02-C03
14	3	101	PGV	O03-C01-C02-C03
18	M	409	CDL	CB3-CB4-CB6-OB8
18	M	410	CDL	CA3-CA4-CA6-OA8
18	F	101	CDL	CA3-CA4-CA6-OA8
18	U	101	CDL	CB3-CB4-CB6-OB8
18	M	409	CDL	OA7-CA5-OA6-CA4
18	H	302	CDL	OB7-CB5-OB6-CB4
14	I	101	PGV	C4-C5-C6-C7
18	H	302	CDL	C73-C74-C75-C76
18	M	402	CDL	CB5-C51-C52-C53
15	A	101	BCL	C16-C17-C18-C20
14	G	104	PGV	C26-C27-C28-C29
18	L	312	CDL	CA2-OA2-PA1-OA5
14	0	101	PGV	O04-C19-O03-C01
18	M	409	CDL	OA9-CA7-OA8-CA6
14	Z	105	PGV	C26-C27-C28-C29
18	H	302	CDL	C51-C52-C53-C54
18	H	302	CDL	C75-C76-C77-C78
14	4	103	PGV	O05-C05-C06-O06
14	L	305	PGV	O01-C02-C03-O11
14	T	102	PGV	O01-C02-C03-O11
14	2	102	PGV	O01-C02-C03-O11
14	4	104	PGV	O01-C02-C03-O11
14	6	102	PGV	O01-C02-C03-O11
15	1	103	BCL	CBA-CGA-O2A-C1
14	B	104	PGV	C7-C8-C9-C10
15	S	102	BCL	O1A-CGA-O2A-C1
14	V	101	PGV	O12-C04-C05-O05
14	8	101	PGV	C24-C25-C26-C27
15	Y	403	BCL	C15-C16-C17-C18
14	V	105	PGV	C7-C8-C9-C10
14	E	102	PGV	O03-C01-C02-O01
14	R	103	PGV	O03-C01-C02-O01
14	Z	105	PGV	O03-C01-C02-O01
14	4	104	PGV	O03-C01-C02-O01
18	M	410	CDL	OA6-CA4-CA6-OA8
13	H	306	LMT	C4'-C5'-C6'-O6'
14	X	102	PGV	C25-C26-C27-C28
15	Y	403	BCL	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
15	1	103	BCL	C2-C1-O2A-CGA
18	H	302	CDL	C16-C17-C18-C19
15	I	102	BCL	C6-C7-C8-C9
15	O	103	BCL	C14-C13-C15-C16
15	4	102	BCL	C6-C7-C8-C9
15	6	101	BCL	C11-C10-C8-C9
13	C	408	LMT	C1-C2-C3-C4
15	5	103	BCL	CBD-CGD-O2D-CED
18	M	402	CDL	C44-C45-C46-C47
18	M	408	CDL	CB4-CB3-OB5-PB2
18	U	101	CDL	OB9-CB7-OB8-CB6
18	H	302	CDL	C76-C77-C78-C79
15	6	101	BCL	C2A-CAA-CBA-CGA
15	L	310	BCL	C4C-C3C-CAC-CBC
15	1	102	BCL	C4C-C3C-CAC-CBC
21	M	406	CRT	C32-C33-C35-C36
21	R	101	CRT	C5-C6-C7-C9
15	T	101	BCL	C10-C11-C12-C13
14	R	103	PGV	C25-C26-C27-C28
14	Z	105	PGV	C29-C30-C31-C32
15	U	102	BCL	C16-C17-C18-C20
14	1	101	PGV	C22-C23-C24-C25
15	S	101	BCL	C5-C6-C7-C8
14	J	102	PGV	C7-C8-C9-C10
14	V	105	PGV	C6-C7-C8-C9
14	H	304	PGV	C01-C02-C03-O11
14	B	104	PGV	C01-C02-C03-O11
14	N	104	PGV	C01-C02-C03-O11
14	3	101	PGV	C01-C02-C03-O11
18	M	402	CDL	C60-C61-C62-C63
15	L	310	BCL	C6-C7-C8-C10
15	A	101	BCL	C11-C12-C13-C15
15	B	102	BCL	C6-C7-C8-C10
15	F	103	BCL	C11-C12-C13-C15
15	G	102	BCL	C6-C7-C8-C10
15	I	102	BCL	C6-C7-C8-C10
15	I	103	BCL	C6-C7-C8-C10
15	K	102	BCL	C11-C12-C13-C15
15	N	103	BCL	C6-C7-C8-C10
15	O	103	BCL	C6-C7-C8-C10
15	O	103	BCL	C11-C10-C8-C7
15	S	101	BCL	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
15	S	102	BCL	C6-C7-C8-C10
15	Y	401	BCL	C11-C10-C8-C7
15	Y	401	BCL	C11-C12-C13-C15
15	Y	403	BCL	C11-C10-C8-C7
15	Z	103	BCL	C6-C7-C8-C10
15	1	102	BCL	C6-C7-C8-C10
15	2	101	BCL	C11-C10-C8-C7
15	3	102	BCL	C6-C7-C8-C10
15	4	102	BCL	C6-C7-C8-C10
15	5	102	BCL	C11-C10-C8-C7
15	7	103	BCL	C11-C10-C8-C7
15	9	102	BCL	C11-C12-C13-C15
15	0	102	BCL	C6-C7-C8-C10
14	P	102	PGV	C21-C22-C23-C24
14	H	304	PGV	C11-C10-C9-C8
15	K	102	BCL	C2A-CAA-CBA-CGA
13	Y	402	LMT	C2-C3-C4-C5
15	Y	403	BCL	C5-C6-C7-C8
14	P	102	PGV	C03-O11-P-O14
13	O	101	LMT	C3-C4-C5-C6
15	5	103	BCL	CBA-CGA-O2A-C1
15	D	102	BCL	CAD-CBD-CGD-O2D
15	I	103	BCL	CAD-CBD-CGD-O2D
15	S	102	BCL	CAD-CBD-CGD-O2D
15	1	103	BCL	CAD-CBD-CGD-O2D
15	9	103	BCL	CAD-CBD-CGD-O2D
18	M	408	CDL	CA6-CA4-OA6-CA5
18	H	302	CDL	CA3-CA4-OA6-CA5
18	U	101	CDL	CA6-CA4-OA6-CA5
13	C	408	LMT	C4-C5-C6-C7
14	T	102	PGV	C5-C6-C7-C8
15	J	101	BCL	C10-C11-C12-C13
15	Y	403	BCL	O1A-CGA-O2A-C1
14	Z	104	PGV	C20-C19-O03-C01
18	M	409	CDL	C71-CB7-OB8-CB6
15	Q	102	BCL	C4-C3-C5-C6
13	L	301	LMT	C4B-C5B-C6B-O6B
14	H	304	PGV	C02-C03-O11-P
14	B	103	PGV	O03-C01-C02-C03
14	4	104	PGV	O03-C01-C02-C03
14	E	102	PGV	O04-C19-O03-C01
15	U	102	BCL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
14	H	304	PGV	O01-C02-C03-O11
14	B	104	PGV	O01-C02-C03-O11
14	G	103	PGV	O01-C02-C03-O11
14	N	101	PGV	O01-C02-C03-O11
14	N	104	PGV	O01-C02-C03-O11
14	V	101	PGV	O01-C02-C03-O11
14	Z	101	PGV	O01-C02-C03-O11
14	Z	105	PGV	O01-C02-C03-O11
14	8	104	PGV	O01-C02-C03-O11
18	L	312	CDL	OA5-CA3-CA4-OA6
18	F	101	CDL	OA5-CA3-CA4-OA6
14	H	303	PGV	C29-C30-C31-C32
16	L	303	BPH	C16-C17-C18-C20
14	N	104	PGV	O12-C04-C05-C06
18	H	302	CDL	CB2-C1-CA2-OA2
14	N	101	PGV	O04-C19-O03-C01
14	2	103	PGV	O04-C19-O03-C01
15	1	103	BCL	O1A-CGA-O2A-C1
15	9	103	BCL	O1A-CGA-O2A-C1
18	F	101	CDL	OB9-CB7-OB8-CB6
13	F	102	LMT	C5-C6-C7-C8
15	5	103	BCL	C5-C6-C7-C8
14	V	105	PGV	O03-C01-C02-O01
18	M	407	CDL	OA6-CA4-CA6-OA8
14	3	101	PGV	C04-O12-P-O13
15	5	103	BCL	O1A-CGA-O2A-C1
14	H	304	PGV	C12-C13-C14-C15
15	5	103	BCL	C4-C3-C5-C6
13	9	101	LMT	C5-C6-C7-C8
15	A	101	BCL	C2-C3-C5-C6
15	L	311	BCL	C6-C7-C8-C9
15	L	311	BCL	C11-C10-C8-C9
15	G	102	BCL	C6-C7-C8-C9
15	I	102	BCL	C14-C13-C15-C16
15	2	101	BCL	C11-C10-C8-C9
15	3	102	BCL	C6-C7-C8-C9
15	4	102	BCL	C14-C13-C15-C16
15	S	102	BCL	CBD-CGD-O2D-CED
14	T	102	PGV	C21-C22-C23-C24
21	M	406	CRT	C15-C16-C17-C18
15	O	102	BCL	C1A-C2A-CAA-CBA
14	N	104	PGV	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
15	8	103	BCL	C16-C17-C18-C19
18	L	312	CDL	C35-C36-C37-C38
15	A	101	BCL	C15-C16-C17-C18
14	P	103	PGV	C11-C10-C9-C8
14	C	409	PGV	C04-O12-P-O11
14	L	305	PGV	C04-O12-P-O11
14	H	301	PGV	C04-O12-P-O11
14	H	303	PGV	C03-O11-P-O12
14	H	303	PGV	C04-O12-P-O11
14	I	101	PGV	C04-O12-P-O11
14	X	102	PGV	C04-O12-P-O11
18	L	312	CDL	CA3-OA5-PA1-OA2
18	M	402	CDL	CB2-OB2-PB2-OB5
18	M	409	CDL	CB3-OB5-PB2-OB2
18	M	410	CDL	CA3-OA5-PA1-OA2
18	M	410	CDL	CB2-OB2-PB2-OB5
13	Q	101	LMT	C4-C5-C6-C7
18	M	410	CDL	O1-C1-CB2-OB2
14	Z	105	PGV	C28-C29-C30-C31
15	S	102	BCL	C5-C6-C7-C8
14	I	101	PGV	C02-C03-O11-P
14	R	104	PGV	C02-C03-O11-P
15	V	103	BCL	C2-C3-C5-C6
14	C	409	PGV	C03-O11-P-O14
14	L	305	PGV	C03-O11-P-O14
14	L	308	PGV	C03-O11-P-O14
14	L	309	PGV	C03-O11-P-O13
14	L	309	PGV	C04-O12-P-O13
14	H	301	PGV	C03-O11-P-O14
14	E	102	PGV	C03-O11-P-O14
14	G	103	PGV	C03-O11-P-O13
14	I	101	PGV	C03-O11-P-O14
14	N	104	PGV	C03-O11-P-O13
14	X	102	PGV	C04-O12-P-O13
14	Z	105	PGV	C03-O11-P-O13
14	1	101	PGV	C03-O11-P-O14
14	1	101	PGV	C04-O12-P-O14
14	3	101	PGV	C03-O11-P-O13
14	0	101	PGV	C03-O11-P-O14
14	0	103	PGV	C03-O11-P-O14
18	L	312	CDL	CA2-OA2-PA1-OA4
18	M	402	CDL	CA2-OA2-PA1-OA4

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Mol	Chain	Res	Type	Atoms
18	M	402	CDL	CB3-OB5-PB2-OB3
18	M	407	CDL	CB2-OB2-PB2-OB3
18	M	408	CDL	CA2-OA2-PA1-OA3
18	M	408	CDL	CB3-OB5-PB2-OB4
18	M	409	CDL	CB2-OB2-PB2-OB3
18	H	302	CDL	CA3-OA5-PA1-OA3
18	H	302	CDL	CB2-OB2-PB2-OB3
18	F	101	CDL	CB3-OB5-PB2-OB4
18	U	101	CDL	CA2-OA2-PA1-OA3
18	U	101	CDL	CA2-OA2-PA1-OA4
18	U	101	CDL	CB2-OB2-PB2-OB4
15	L	311	BCL	CBA-CGA-O2A-C1
15	P	101	BCL	CBA-CGA-O2A-C1
14	E	103	PGV	C01-C02-C03-O11
14	4	104	PGV	C01-C02-C03-O11
20	M	405	MQ8	C18-C20-C21-C22
15	5	103	BCL	O1D-CGD-O2D-CED
14	1	101	PGV	C19-C20-C21-C22
15	V	103	BCL	C3-C5-C6-C7
15	5	102	BCL	C13-C15-C16-C17
15	D	102	BCL	C16-C17-C18-C19
15	R	102	BCL	C16-C17-C18-C19
14	V	105	PGV	C20-C21-C22-C23
21	M	406	CRT	C35-C36-C37-C38
15	M	403	BCL	C16-C17-C18-C19
14	L	309	PGV	O01-C02-C03-O11
14	E	103	PGV	O01-C02-C03-O11
14	G	104	PGV	O01-C02-C03-O11
14	R	104	PGV	O01-C02-C03-O11
15	L	311	BCL	C6-C7-C8-C10
15	A	101	BCL	C11-C10-C8-C7
15	D	102	BCL	C6-C7-C8-C10
15	I	102	BCL	C12-C13-C15-C16
15	J	101	BCL	C11-C12-C13-C15
15	Q	102	BCL	C6-C7-C8-C10
15	R	102	BCL	C11-C10-C8-C7
15	V	103	BCL	C11-C10-C8-C7
15	W	102	BCL	C11-C12-C13-C15
15	X	101	BCL	C6-C7-C8-C10
15	3	102	BCL	C3A-C2A-CAA-CBA
15	4	102	BCL	C11-C10-C8-C7
15	5	102	BCL	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
15	5	102	BCL	C6-C7-C8-C10
15	6	101	BCL	C11-C10-C8-C7
15	9	103	BCL	C11-C10-C8-C7
16	M	404	BPH	C12-C13-C15-C16
18	H	302	CDL	OB5-CB3-CB4-OB6
18	U	101	CDL	OA5-CA3-CA4-OA6
15	L	311	BCL	O1A-CGA-O2A-C1
14	8	104	PGV	C2-C3-C4-C5
13	Y	402	LMT	C2-C1-O1'-C1'
14	8	104	PGV	C2-C1-O01-C02
14	Z	104	PGV	O04-C19-O03-C01
15	P	101	BCL	O1A-CGA-O2A-C1
13	Q	101	LMT	C2-C3-C4-C5
18	M	402	CDL	C56-C57-C58-C59
15	0	102	BCL	C2A-CAA-CBA-CGA
18	M	407	CDL	C76-C77-C78-C79
14	L	309	PGV	O03-C01-C02-C03
14	R	103	PGV	O03-C01-C02-C03
14	C	409	PGV	O03-C01-C02-O01
14	B	103	PGV	O03-C01-C02-O01
14	N	104	PGV	O03-C01-C02-O01
14	P	103	PGV	O03-C01-C02-O01
14	X	102	PGV	O03-C01-C02-O01
14	Z	101	PGV	O03-C01-C02-O01
14	2	103	PGV	O03-C01-C02-O01
14	3	101	PGV	O03-C01-C02-O01
18	M	402	CDL	OA6-CA4-CA6-OA8
18	M	410	CDL	OB6-CB4-CB6-OB8
14	I	101	PGV	C21-C22-C23-C24
15	I	103	BCL	C5-C6-C7-C8
14	E	102	PGV	C21-C22-C23-C24
15	5	103	BCL	C2-C3-C5-C6
15	L	310	BCL	C6-C7-C8-C9
15	D	101	BCL	C11-C12-C13-C14
15	F	103	BCL	C11-C10-C8-C9
15	F	103	BCL	C11-C12-C13-C14
15	J	101	BCL	C11-C10-C8-C9
15	K	102	BCL	C11-C12-C13-C14
15	R	102	BCL	C11-C10-C8-C9
15	Y	401	BCL	C11-C12-C13-C14
15	7	103	BCL	C6-C7-C8-C9
15	0	102	BCL	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
15	0	102	BCL	C11-C10-C8-C9
15	Y	401	BCL	C16-C17-C18-C19
18	M	409	CDL	OB9-CB7-OB8-CB6
14	V	105	PGV	O03-C19-C20-C21
14	G	104	PGV	C4-C5-C6-C7
14	8	101	PGV	C20-C21-C22-C23
15	Y	403	BCL	C8-C10-C11-C12
11	C	406	Z41	C23-C24-C25-C26
15	K	102	BCL	C16-C17-C18-C19
14	L	308	PGV	C3-C4-C5-C6
16	M	404	BPH	C10-C11-C12-C13
18	M	410	CDL	C51-CB5-OB6-CB4
14	V	101	PGV	C23-C24-C25-C26
15	L	310	BCL	C15-C16-C17-C18
15	O	102	BCL	C10-C11-C12-C13
14	E	102	PGV	C28-C29-C30-C31
15	1	102	BCL	C5-C6-C7-C8
14	H	304	PGV	C29-C30-C31-C32
15	3	102	BCL	C8-C10-C11-C12
18	M	402	CDL	C37-C38-C39-C40
14	8	104	PGV	C20-C21-C22-C23
18	M	407	CDL	CA6-CA4-OA6-CA5
14	Z	101	PGV	C01-C02-C03-O11
14	6	102	PGV	C01-C02-C03-O11
15	1	103	BCL	C2A-CAA-CBA-CGA
14	8	104	PGV	O02-C1-O01-C02
18	M	410	CDL	OB7-CB5-OB6-CB4
15	7	103	BCL	C5-C6-C7-C8
15	A	101	BCL	C2-C1-O2A-CGA
15	9	103	BCL	C2-C1-O2A-CGA
14	N	105	PGV	C19-C20-C21-C22
14	0	103	PGV	C22-C23-C24-C25
18	H	302	CDL	C15-C16-C17-C18
15	G	102	BCL	C8-C10-C11-C12
15	S	102	BCL	O1D-CGD-O2D-CED
15	3	102	BCL	C5-C6-C7-C8
14	2	102	PGV	C21-C22-C23-C24
21	N	102	CRT	C2-C1-O1-C1M
21	R	101	CRT	C3-C1-O1-C1M
21	8	102	CRT	C2-C1-O1-C1M
18	M	408	CDL	OA6-CA4-CA6-OA8
15	1	103	BCL	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
14	G	103	PGV	C26-C27-C28-C29
14	3	101	PGV	C3-C4-C5-C6
14	L	308	PGV	C04-O12-P-O11
14	E	103	PGV	C03-O11-P-O12
14	G	103	PGV	C04-O12-P-O11
14	N	104	PGV	C04-O12-P-O11
14	R	103	PGV	C03-O11-P-O12
14	R	103	PGV	C04-O12-P-O11
14	V	104	PGV	C03-O11-P-O12
14	V	104	PGV	C04-O12-P-O11
14	Z	101	PGV	C03-O11-P-O12
14	4	103	PGV	C04-O12-P-O11
14	0	103	PGV	C04-O12-P-O11
18	L	312	CDL	CB2-OB2-PB2-OB5
18	L	312	CDL	CB3-OB5-PB2-OB2
18	M	409	CDL	CA2-OA2-PA1-OA5
18	U	101	CDL	CA3-OA5-PA1-OA2
15	Q	102	BCL	C16-C17-C18-C19
15	Z	103	BCL	C16-C17-C18-C19
14	0	101	PGV	C25-C26-C27-C28
14	P	103	PGV	O03-C01-C02-C03
15	P	101	BCL	C4-C3-C5-C6
15	J	101	BCL	C5-C6-C7-C8
15	J	101	BCL	C11-C10-C8-C7
15	R	102	BCL	C6-C7-C8-C10
14	H	301	PGV	C22-C23-C24-C25
15	A	101	BCL	C6-C7-C8-C9
15	J	101	BCL	C11-C12-C13-C14
15	S	102	BCL	C6-C7-C8-C9
15	W	102	BCL	C11-C12-C13-C14
15	4	102	BCL	C11-C10-C8-C9
15	5	102	BCL	C14-C13-C15-C16
15	9	102	BCL	C14-C13-C15-C16
15	R	102	BCL	C16-C17-C18-C20
14	4	103	PGV	C21-C22-C23-C24
13	H	306	LMT	O1'-C1-C2-C3
14	V	101	PGV	C19-C20-C21-C22
21	G	101	CRT	C15-C16-C17-C18
15	D	102	BCL	C16-C17-C18-C20
14	E	103	PGV	C02-C03-O11-P
14	0	101	PGV	C02-C03-O11-P
21	R	101	CRT	C15-C16-C17-C19

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Mol	Chain	Res	Type	Atoms
14	V	105	PGV	O05-C05-C06-O06
14	B	104	PGV	O03-C19-C20-C21
14	N	105	PGV	C20-C19-O03-C01
15	O	103	BCL	CBA-CGA-O2A-C1
15	2	101	BCL	CBA-CGA-O2A-C1
14	4	104	PGV	C29-C30-C31-C32
15	2	101	BCL	O1A-CGA-O2A-C1
9	C	402	HEC	CAA-CBA-CGA-O1A
15	9	103	BCL	C5-C6-C7-C8
21	M	406	CRT	C20-C21-C22-C23
14	Z	104	PGV	C01-C02-C03-O11
15	O	103	BCL	O1A-CGA-O2A-C1
14	V	105	PGV	C1-C2-C3-C4
9	C	403	HEC	CAA-CBA-CGA-O2A
18	F	101	CDL	C11-C12-C13-C14
14	P	102	PGV	C24-C25-C26-C27
15	2	101	BCL	C5-C6-C7-C8
14	H	304	PGV	C26-C27-C28-C29
14	0	104	PGV	O01-C1-C2-C3
15	I	103	BCL	C2-C1-O2A-CGA
15	Q	102	BCL	C2-C1-O2A-CGA
14	P	103	PGV	C7-C8-C9-C10
14	H	303	PGV	O03-C01-C02-O01
15	P	101	BCL	C2A-CAA-CBA-CGA
15	T	101	BCL	C2A-CAA-CBA-CGA
18	L	312	CDL	OB6-CB4-CB6-OB8
13	Q	101	LMT	C5-C6-C7-C8
14	N	101	PGV	C30-C31-C32-C33
15	I	103	BCL	C3A-C2A-CAA-CBA
15	P	101	BCL	C3A-C2A-CAA-CBA
9	C	401	HEC	CAA-CBA-CGA-O2A
9	C	404	HEC	CAA-CBA-CGA-O1A
14	L	309	PGV	C9-C10-C11-C12
14	Z	104	PGV	C20-C21-C22-C23
14	B	104	PGV	C25-C26-C27-C28
15	M	403	BCL	C11-C10-C8-C9
15	I	103	BCL	C14-C13-C15-C16
15	K	102	BCL	C14-C13-C15-C16
15	N	103	BCL	C11-C10-C8-C9
15	U	102	BCL	C6-C7-C8-C9
14	B	103	PGV	C24-C25-C26-C27
9	C	401	HEC	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
9	C	403	HEC	CAA-CBA-CGA-O1A
14	J	102	PGV	C3-C4-C5-C6
14	B	104	PGV	C04-O12-P-O14
14	Z	104	PGV	O12-C04-C05-C06
14	J	102	PGV	C22-C23-C24-C25
15	I	102	BCL	C16-C17-C18-C20
15	K	102	BCL	C16-C17-C18-C20
16	L	303	BPH	O2A-C1-C2-C3
14	Z	104	PGV	O12-C04-C05-O05
15	D	101	BCL	O1D-CGD-O2D-CED
14	N	104	PGV	C25-C26-C27-C28
18	U	101	CDL	C11-C12-C13-C14
14	H	303	PGV	C4-C5-C6-C7
15	P	101	BCL	C1A-C2A-CAA-CBA
15	T	101	BCL	C1A-C2A-CAA-CBA
15	V	103	BCL	C1A-C2A-CAA-CBA
15	1	102	BCL	C1A-C2A-CAA-CBA
15	0	102	BCL	C1A-C2A-CAA-CBA
15	L	310	BCL	C11-C10-C8-C7
15	X	101	BCL	C11-C12-C13-C15
15	1	103	BCL	C6-C7-C8-C10
13	Y	402	LMT	C3'-C4'-O1B-C1B
14	8	104	PGV	C24-C25-C26-C27
14	C	409	PGV	C03-O11-P-O12
14	I	101	PGV	C3-C4-C5-C6
13	F	102	LMT	C4-C5-C6-C7
15	I	103	BCL	C16-C17-C18-C19
18	M	410	CDL	CB4-CB3-OB5-PB2
15	L	302	BCL	C15-C16-C17-C18
18	H	302	CDL	C72-C73-C74-C75
18	F	101	CDL	C54-C55-C56-C57
14	G	103	PGV	C01-C02-C03-O11
18	H	302	CDL	OB5-CB3-CB4-CB6
14	H	304	PGV	C3-C4-C5-C6
9	C	404	HEC	CAA-CBA-CGA-O2A
15	G	102	BCL	C4-C3-C5-C6
15	S	101	BCL	C15-C16-C17-C18
14	8	104	PGV	C1-C2-C3-C4
9	C	402	HEC	CAA-CBA-CGA-O2A
14	J	102	PGV	C5-C6-C7-C8
14	P	102	PGV	C25-C26-C27-C28
14	V	105	PGV	C27-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
18	M	407	CDL	C43-C44-C45-C46
15	R	102	BCL	C5-C6-C7-C8
15	E	101	BCL	C4-C3-C5-C6
15	Y	401	BCL	C4-C3-C5-C6
13	C	408	LMT	C3'-C4'-O1B-C1B
15	E	101	BCL	C2-C1-O2A-CGA
15	P	101	BCL	C2-C1-O2A-CGA
15	Y	401	BCL	C2-C1-O2A-CGA
15	P	101	BCL	C2-C3-C5-C6
14	0	101	PGV	C21-C22-C23-C24
18	H	302	CDL	OA9-CA7-OA8-CA6
15	M	403	BCL	C15-C16-C17-C18
14	L	305	PGV	C5-C6-C7-C8
11	C	406	Z41	C19-C20-C21-C22
14	H	303	PGV	C27-C28-C29-C30
14	E	103	PGV	C5-C6-C7-C8
13	Y	402	LMT	C5'-C4'-O1B-C1B
14	N	105	PGV	O04-C19-O03-C01
15	Z	103	BCL	C4-C3-C5-C6
18	L	312	CDL	C14-C15-C16-C17
14	L	305	PGV	C23-C24-C25-C26
14	G	103	PGV	C28-C29-C30-C31
15	O	103	BCL	C16-C17-C18-C19
15	Z	103	BCL	C8-C10-C11-C12
14	0	104	PGV	C11-C12-C13-C14
15	D	101	BCL	C2A-CAA-CBA-CGA
15	1	102	BCL	C15-C16-C17-C18
18	M	409	CDL	CB5-C51-C52-C53
14	L	305	PGV	C31-C32-C33-C34
14	L	309	PGV	C01-C02-C03-O11
14	8	104	PGV	C01-C02-C03-O11
18	H	302	CDL	OA5-CA3-CA4-CA6
15	U	102	BCL	C4-C3-C5-C6
15	Q	102	BCL	C2-C3-C5-C6
13	F	102	LMT	C2-C3-C4-C5
14	L	309	PGV	C21-C22-C23-C24
14	L	305	PGV	O03-C01-C02-O01
14	1	101	PGV	O03-C01-C02-O01
14	V	104	PGV	C26-C27-C28-C29
14	P	103	PGV	O01-C1-C2-C3
14	8	104	PGV	O01-C1-C2-C3
15	L	311	BCL	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
18	H	302	CDL	C31-CA7-OA8-CA6
14	H	304	PGV	O01-C1-C2-C3
15	O	103	BCL	C13-C15-C16-C17
14	L	305	PGV	C26-C27-C28-C29
18	M	402	CDL	C72-C71-CB7-OB8
15	D	102	BCL	C6-C7-C8-C9
15	X	101	BCL	C6-C7-C8-C9
15	5	102	BCL	C6-C7-C8-C9
16	M	404	BPH	C14-C13-C15-C16
15	T	101	BCL	C3A-C2A-CAA-CBA
15	V	103	BCL	C3A-C2A-CAA-CBA
15	1	102	BCL	C3A-C2A-CAA-CBA
15	0	102	BCL	C3A-C2A-CAA-CBA
14	1	101	PGV	O03-C19-C20-C21
15	L	311	BCL	CAA-CBA-CGA-O2A
15	Z	103	BCL	CAA-CBA-CGA-O2A
15	L	310	BCL	CAD-CBD-CGD-O2D
15	W	102	BCL	CAD-CBD-CGD-O2D
15	5	103	BCL	CAD-CBD-CGD-O2D
16	M	404	BPH	CAD-CBD-CGD-O2D
18	M	402	CDL	CB3-CB4-OB6-CB5
18	F	101	CDL	OA7-CA5-OA6-CA4
14	4	104	PGV	C22-C23-C24-C25
18	H	302	CDL	C17-C18-C19-C20
13	7	101	LMT	C2B-C1B-O1B-C4'
14	G	103	PGV	O03-C19-C20-C21
14	N	104	PGV	O03-C19-C20-C21
14	1	101	PGV	O01-C1-C2-C3
15	1	103	BCL	CAA-CBA-CGA-O2A
15	G	102	BCL	C2-C3-C5-C6
14	G	104	PGV	C5-C6-C7-C8
18	M	407	CDL	C35-C36-C37-C38
21	N	102	CRT	C5-C6-C7-C9
18	M	402	CDL	CA3-CA4-CA6-OA8
9	C	401	HEC	CAD-CBD-CGD-O1D
14	Z	105	PGV	C27-C28-C29-C30
14	N	105	PGV	O01-C02-C03-O11
15	L	310	BCL	O2A-C1-C2-C3
15	F	103	BCL	CBA-CGA-O2A-C1
15	L	302	BCL	C2A-CAA-CBA-CGA
15	X	101	BCL	C2A-CAA-CBA-CGA
15	5	103	BCL	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
9	C	401	HEC	CAD-CBD-CGD-O2D
14	G	104	PGV	C11-C12-C13-C14
15	L	302	BCL	C16-C17-C18-C19
14	H	303	PGV	C24-C25-C26-C27
14	8	104	PGV	C3-C4-C5-C6
15	L	311	BCL	CHA-CBD-CGD-O1D
15	L	311	BCL	CHA-CBD-CGD-O2D
15	J	101	BCL	CHA-CBD-CGD-O1D
15	L	310	BCL	CAA-CBA-CGA-O2A
21	B	101	CRT	C2-C1-O1-C1M
21	V	102	CRT	C39-C38-O2-C2M
21	8	102	CRT	C39-C38-O2-C2M
11	C	406	Z41	C14-C15-C16-O2
15	9	103	BCL	CAA-CBA-CGA-O2A
18	M	402	CDL	OB6-CB4-CB6-OB8
15	L	311	BCL	C13-C15-C16-C17
18	M	407	CDL	C34-C35-C36-C37
15	O	103	BCL	CAA-CBA-CGA-O2A
18	F	101	CDL	C73-C74-C75-C76
16	L	303	BPH	CHA-CBD-CGD-O1D
15	L	311	BCL	C11-C12-C13-C15
15	T	101	BCL	C11-C12-C13-C15
15	U	102	BCL	C11-C12-C13-C15
15	7	103	BCL	C11-C12-C13-C15
13	C	408	LMT	O5'-C1'-O1'-C1
15	W	102	BCL	CAA-CBA-CGA-O2A
15	K	102	BCL	C11-C10-C8-C9
15	U	102	BCL	C11-C12-C13-C14
15	X	101	BCL	C11-C12-C13-C14
15	O	102	BCL	O1D-CGD-O2D-CED
14	H	304	PGV	O02-C1-C2-C3
13	Y	402	LMT	C4'-C5'-C6'-O6'
15	I	102	BCL	C5-C6-C7-C8
15	D	102	BCL	O1A-CGA-O2A-C1
15	F	103	BCL	O1A-CGA-O2A-C1
14	1	101	PGV	O02-C1-C2-C3
18	F	101	CDL	C11-CA5-OA6-CA4
20	M	405	MQ8	C20-C21-C22-C23
9	C	403	HEC	C2A-CAA-CBA-CGA
21	M	406	CRT	O1-C1-C4-C5
15	5	102	BCL	CAA-CBA-CGA-O2A
16	M	404	BPH	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
21	B	101	CRT	C15-C16-C17-C18
15	L	310	BCL	C16-C17-C18-C19
14	C	409	PGV	C04-C05-C06-O06
14	4	103	PGV	C04-C05-C06-O06
14	8	104	PGV	O02-C1-C2-C3
15	W	102	BCL	CAA-CBA-CGA-O1A
15	Z	103	BCL	CAA-CBA-CGA-O1A
18	M	402	CDL	C72-C71-CB7-OB9
21	B	101	CRT	C15-C16-C17-C19
13	C	408	LMT	C3-C4-C5-C6
14	C	409	PGV	O12-C04-C05-C06
15	1	103	BCL	CAA-CBA-CGA-O1A
15	7	103	BCL	C2-C1-O2A-CGA
15	8	103	BCL	C2-C1-O2A-CGA
14	4	103	PGV	C25-C26-C27-C28
15	D	102	BCL	CBA-CGA-O2A-C1
14	E	102	PGV	C19-C20-C21-C22
14	P	103	PGV	O02-C1-C2-C3
18	M	410	CDL	C13-C14-C15-C16
14	E	102	PGV	O03-C01-C02-C03
14	2	103	PGV	C2-C3-C4-C5
15	W	101	BCL	C2A-CAA-CBA-CGA
15	D	101	BCL	CBD-CGD-O2D-CED
15	I	102	BCL	C16-C17-C18-C19
14	G	103	PGV	O04-C19-C20-C21
15	5	103	BCL	CAA-CBA-CGA-O1A
14	R	104	PGV	C26-C27-C28-C29
14	B	103	PGV	C21-C22-C23-C24
14	8	101	PGV	C05-C04-O12-P
14	6	102	PGV	C1-C2-C3-C4
11	C	406	Z41	C14-C15-C16-O1
14	1	101	PGV	O04-C19-C20-C21
15	L	311	BCL	CAA-CBA-CGA-O1A
18	M	409	CDL	C32-C33-C34-C35
14	L	308	PGV	C04-O12-P-O13
14	H	301	PGV	C04-O12-P-O13
14	G	103	PGV	C04-O12-P-O13
14	N	104	PGV	C04-O12-P-O13
14	R	103	PGV	C04-O12-P-O13
14	4	103	PGV	C04-O12-P-O13
13	9	101	LMT	C4-C5-C6-C7
14	N	104	PGV	O04-C19-C20-C21

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Mol	Chain	Res	Type	Atoms
15	L	310	BCL	CAA-CBA-CGA-O1A
14	N	105	PGV	C01-C02-C03-O11
18	L	312	CDL	OA5-CA3-CA4-CA6
18	M	402	CDL	C14-C15-C16-C17
15	3	102	BCL	O1D-CGD-O2D-CED
18	M	402	CDL	C43-C44-C45-C46
14	3	101	PGV	O01-C1-C2-C3
15	V	103	BCL	CAA-CBA-CGA-O2A
14	2	103	PGV	C1-C2-C3-C4
15	O	103	BCL	CAA-CBA-CGA-O1A
15	5	102	BCL	CAA-CBA-CGA-O1A
15	E	101	BCL	C2-C3-C5-C6
14	P	103	PGV	C5-C6-C7-C8
14	1	101	PGV	C5-C6-C7-C8
14	8	101	PGV	C26-C27-C28-C29
15	M	403	BCL	CAD-CBD-CGD-O1D
15	J	101	BCL	CAD-CBD-CGD-O1D
18	M	402	CDL	CB6-CB4-OB6-CB5
14	T	102	PGV	O01-C1-C2-C3
15	L	311	BCL	C11-C12-C13-C14
15	R	102	BCL	C14-C13-C15-C16
15	1	103	BCL	C6-C7-C8-C9
15	7	103	BCL	C14-C13-C15-C16
18	M	408	CDL	C71-C72-C73-C74
18	M	408	CDL	C72-C73-C74-C75
14	Z	105	PGV	C21-C22-C23-C24
18	M	407	CDL	C32-C31-CA7-OA8
14	H	303	PGV	C26-C27-C28-C29
21	G	101	CRT	C1-C4-C5-C6
14	N	101	PGV	O02-C1-C2-C3
14	0	101	PGV	C26-C27-C28-C29
15	9	103	BCL	CAA-CBA-CGA-O1A
15	M	403	BCL	C4-C3-C5-C6
15	W	102	BCL	C15-C16-C17-C18
14	L	309	PGV	C6-C7-C8-C9
18	M	407	CDL	C42-C43-C44-C45
13	K	101	LMT	C4'-C5'-C6'-O6'
15	P	101	BCL	C11-C10-C8-C7
15	S	101	BCL	C2C-C3C-CAC-CBC
15	U	102	BCL	C6-C7-C8-C10
15	1	102	BCL	C2C-C3C-CAC-CBC
15	9	102	BCL	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
15	9	102	BCL	C12-C13-C15-C16
18	F	101	CDL	C13-C14-C15-C16
18	F	101	CDL	C59-C60-C61-C62
21	M	406	CRT	C15-C16-C17-C19
21	G	101	CRT	C15-C16-C17-C19
13	O	101	LMT	C2-C1-O1'-C1'
14	G	104	PGV	O01-C1-C2-C3
18	M	407	CDL	C32-C31-CA7-OA9
13	7	101	LMT	O5B-C1B-O1B-C4'
14	X	102	PGV	O03-C19-C20-C21
15	D	102	BCL	CAA-CBA-CGA-O2A
15	S	102	BCL	CAA-CBA-CGA-O2A
15	W	102	BCL	C2A-CAA-CBA-CGA
14	N	105	PGV	C9-C10-C11-C12
15	Q	102	BCL	O1A-CGA-O2A-C1
15	F	103	BCL	C4-C3-C5-C6
14	4	104	PGV	C7-C8-C9-C10

There are no ring outliers.

123 monomers are involved in 563 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	F	103	BCL	3	0
9	C	401	HEC	5	0
14	L	305	PGV	4	0
13	C	408	LMT	3	0
15	3	102	BCL	8	0
14	Z	105	PGV	3	0
15	I	103	BCL	10	0
15	8	103	BCL	8	0
16	L	303	BPH	7	0
21	V	102	CRT	9	0
15	J	101	BCL	9	0
15	D	102	BCL	8	0
14	1	101	PGV	4	0
14	3	101	PGV	4	0
21	B	101	CRT	5	0
15	X	101	BCL	4	0
21	N	102	CRT	6	0
15	M	403	BCL	5	0
14	H	304	PGV	9	0
15	O	103	BCL	6	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	6	102	PGV	3	0
21	R	101	CRT	4	0
18	M	408	CDL	3	0
14	J	102	PGV	3	0
14	8	101	PGV	4	0
13	9	101	LMT	2	0
14	V	105	PGV	1	0
15	1	102	BCL	11	0
18	U	101	CDL	5	0
18	M	402	CDL	11	0
15	V	103	BCL	9	0
14	0	101	PGV	1	0
15	I	102	BCL	8	0
9	C	403	HEC	3	0
15	2	101	BCL	9	0
21	M	406	CRT	7	0
15	P	101	BCL	10	0
13	K	101	LMT	2	0
15	Z	103	BCL	9	0
13	7	101	LMT	4	0
21	8	102	CRT	7	0
13	7	102	LMT	3	0
15	B	102	BCL	3	0
14	P	103	PGV	5	0
14	L	309	PGV	5	0
14	H	303	PGV	8	0
15	5	102	BCL	8	0
15	D	101	BCL	10	0
15	W	101	BCL	9	0
17	L	306	UQ8	6	0
15	T	101	BCL	9	0
15	5	103	BCL	6	0
17	L	307	UQ8	1	0
14	V	101	PGV	4	0
14	Z	104	PGV	4	0
18	F	101	CDL	10	0
14	2	102	PGV	2	0
16	M	404	BPH	8	0
21	4	101	CRT	8	0
15	A	101	BCL	5	0
15	W	102	BCL	5	0
15	6	101	BCL	7	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	N	103	BCL	9	0
14	N	104	PGV	2	0
15	R	102	BCL	6	0
11	C	406	Z41	1	0
15	Q	102	BCL	5	0
14	E	102	PGV	1	0
14	2	103	PGV	1	0
15	S	101	BCL	12	0
13	Q	101	LMT	3	0
14	B	104	PGV	2	0
15	0	102	BCL	9	0
15	U	102	BCL	3	0
18	M	407	CDL	10	0
18	H	302	CDL	9	0
14	4	104	PGV	5	0
15	S	102	BCL	10	0
14	V	104	PGV	1	0
15	9	102	BCL	10	0
14	H	301	PGV	3	0
14	B	103	PGV	1	0
14	N	101	PGV	5	0
14	8	104	PGV	5	0
15	1	103	BCL	7	0
14	G	104	PGV	2	0
13	O	101	LMT	2	0
14	G	103	PGV	8	0
14	L	308	PGV	4	0
15	Y	401	BCL	8	0
12	C	407	PLM	5	0
13	F	102	LMT	4	0
15	L	310	BCL	7	0
15	G	102	BCL	9	0
14	N	105	PGV	1	0
15	O	102	BCL	6	0
15	4	102	BCL	9	0
21	Z	102	CRT	8	0
21	G	101	CRT	7	0
18	L	312	CDL	3	0
14	R	104	PGV	2	0
20	M	405	MQ8	2	0
14	T	102	PGV	3	0
13	Y	402	LMT	1	0

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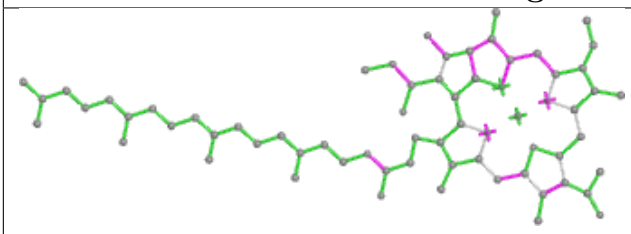
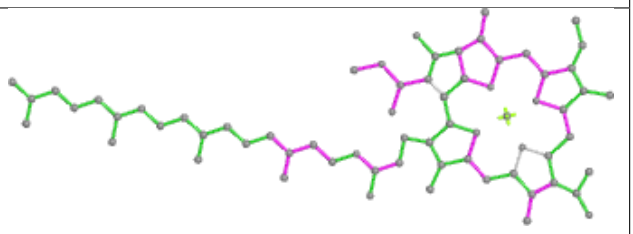
Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	L	311	BCL	9	0
15	Y	403	BCL	4	0
18	M	410	CDL	5	0
14	0	104	PGV	2	0
14	4	103	PGV	5	0
15	L	302	BCL	4	0
15	9	103	BCL	7	0
13	5	101	LMT	1	0
14	P	102	PGV	4	0
17	L	304	UQ8	6	0
15	7	103	BCL	3	0
13	L	301	LMT	2	0
18	M	409	CDL	5	0
15	E	101	BCL	5	0
14	I	101	PGV	6	0
14	X	102	PGV	2	0
15	K	102	BCL	3	0
13	H	305	LMT	3	0
14	C	409	PGV	5	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 then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

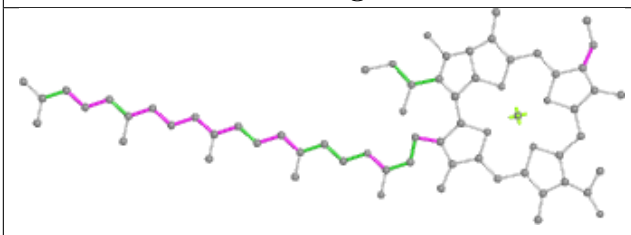
Ligand BCL F 103



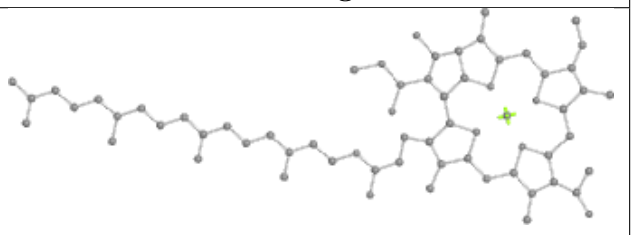
Bond lengths



Bond angles

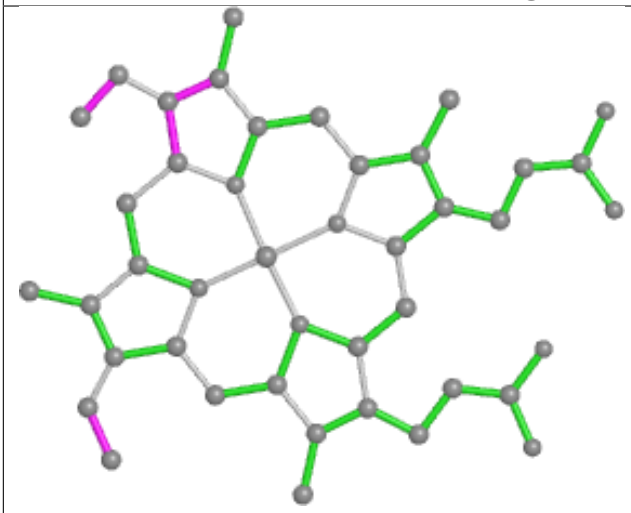


Torsions

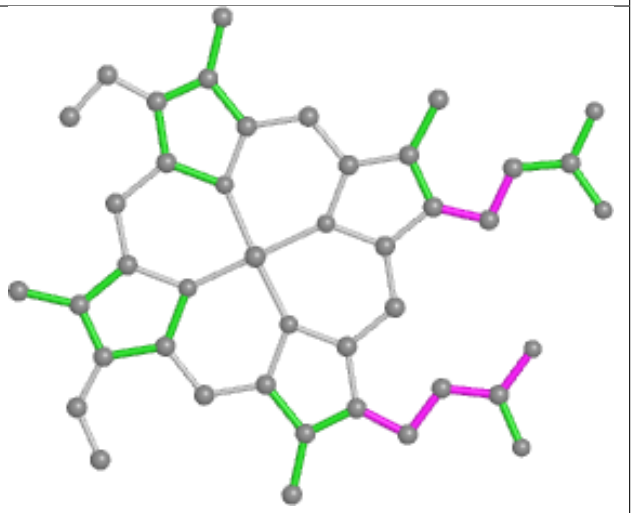


Rings

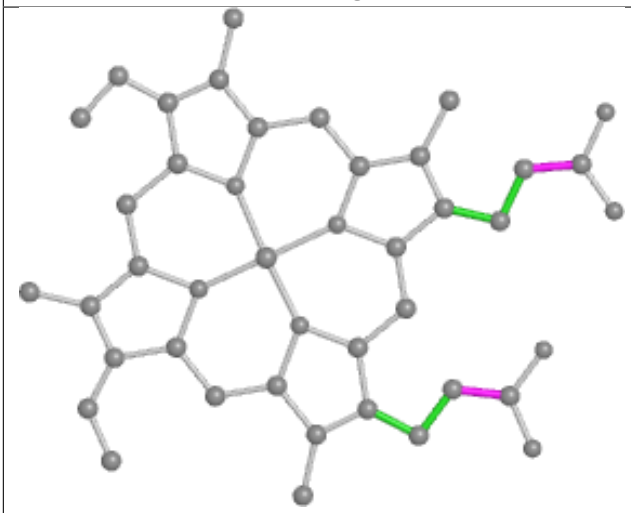
Ligand HEC C 401



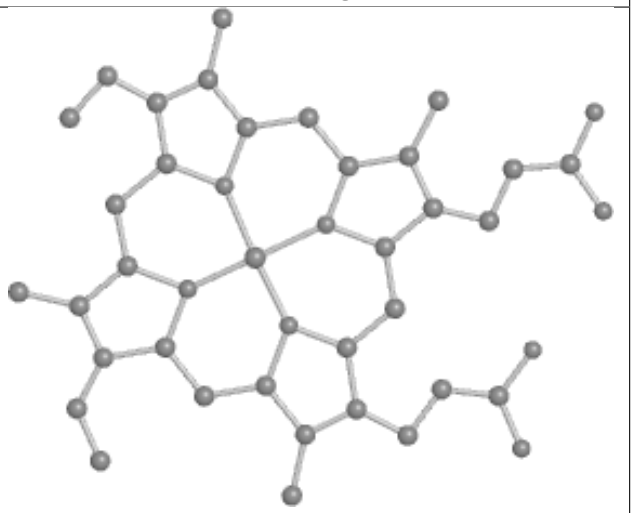
Bond lengths



Bond angles

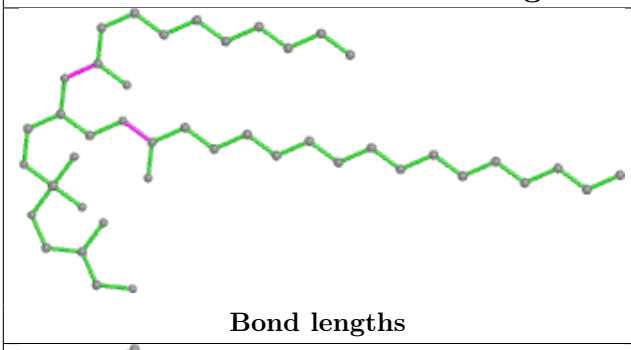


Torsions

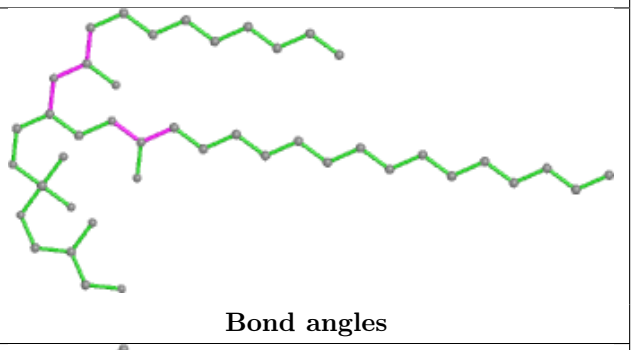


Rings

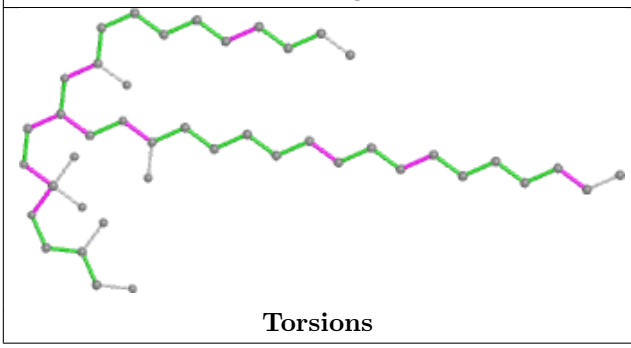
Ligand PGV L 305



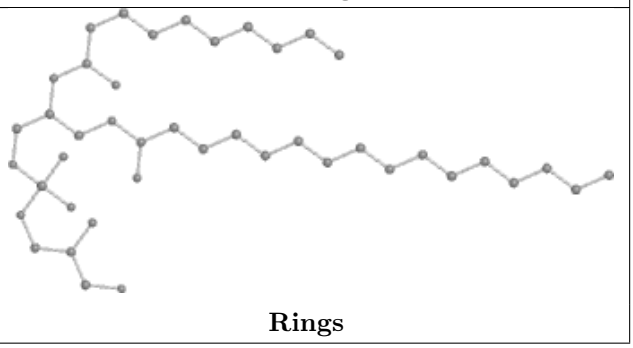
Bond lengths



Bond angles

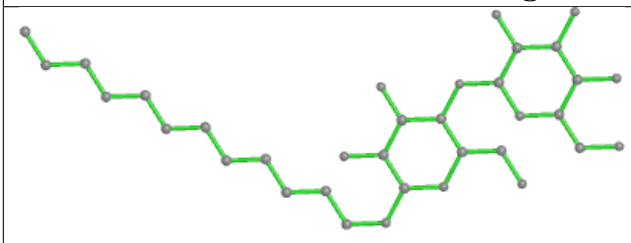


Torsions

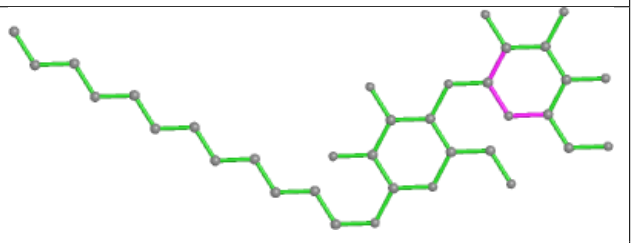


Rings

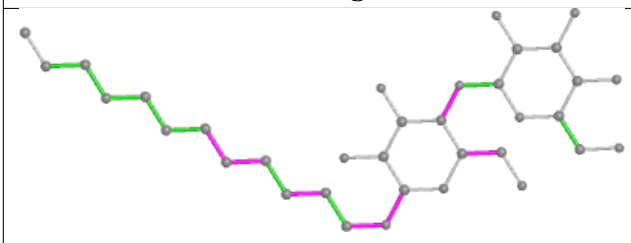
Ligand LMT C 408



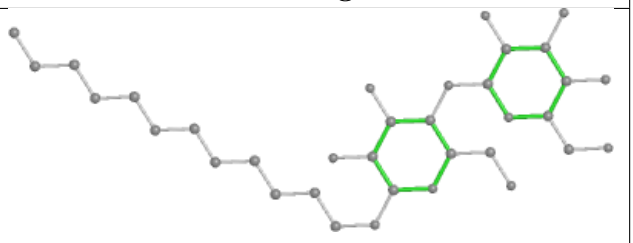
Bond lengths



Bond angles

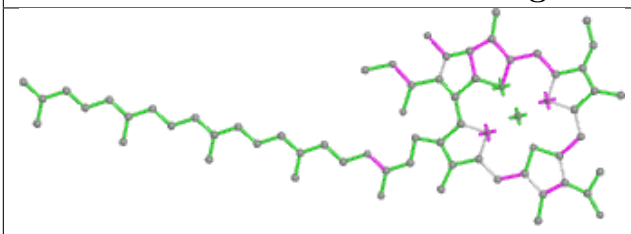


Torsions

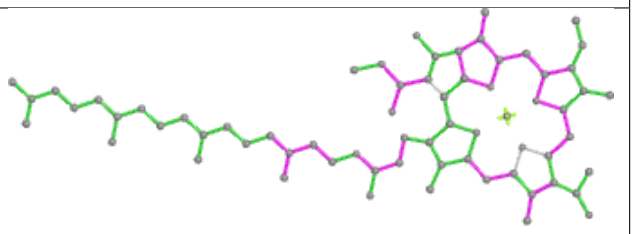


Rings

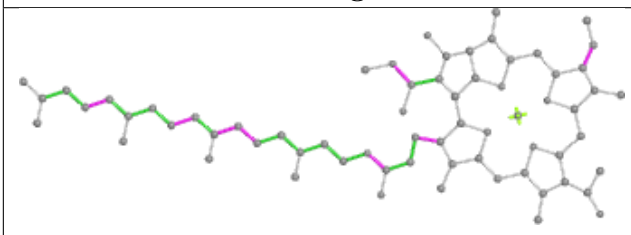
Ligand BCL 3 102



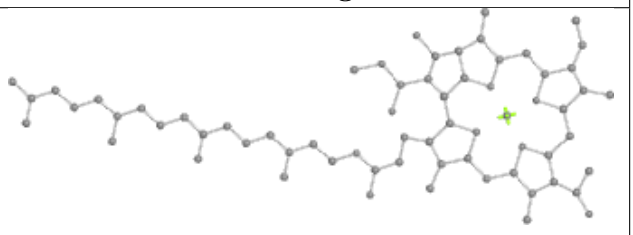
Bond lengths



Bond angles

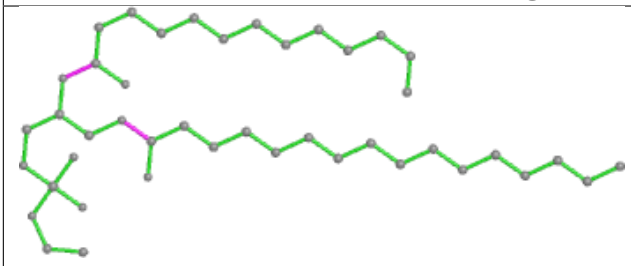


Torsions

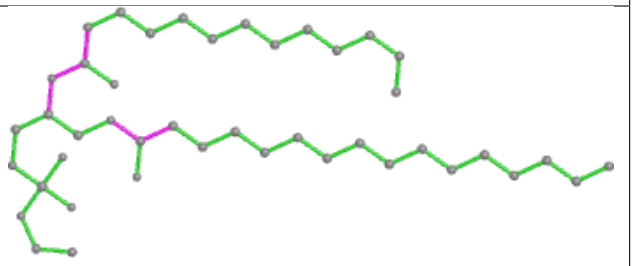


Rings

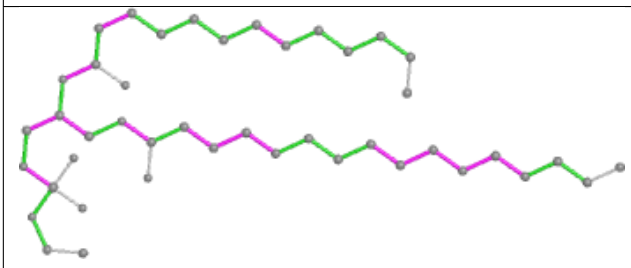
Ligand PGV Z 105



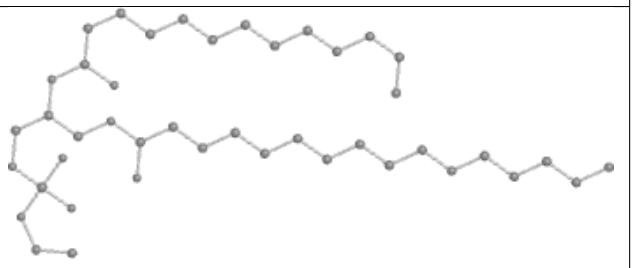
Bond lengths



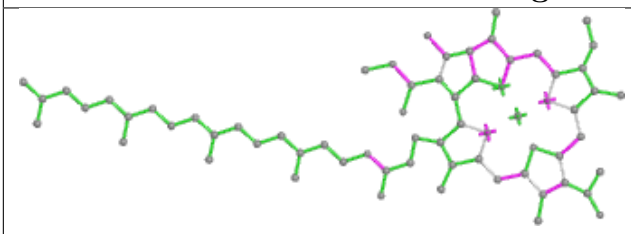
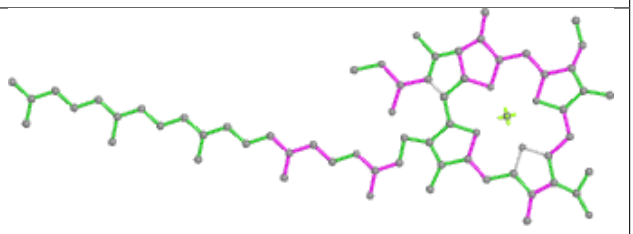
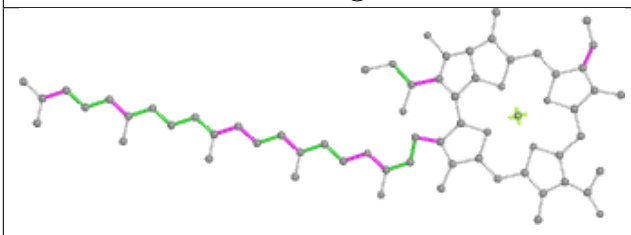
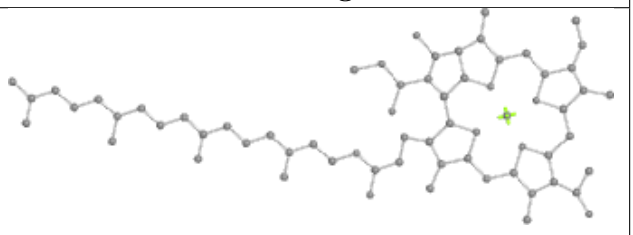
Bond angles

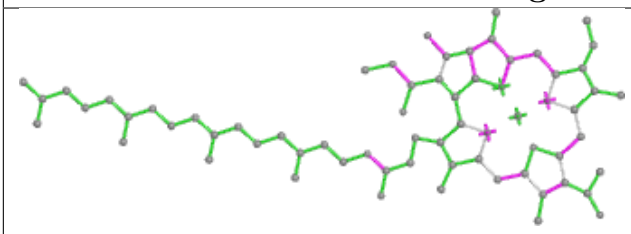
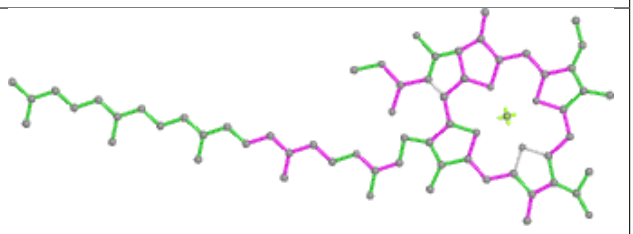
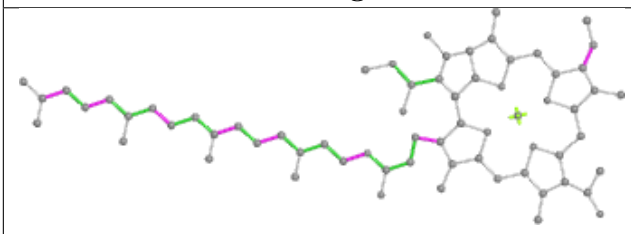
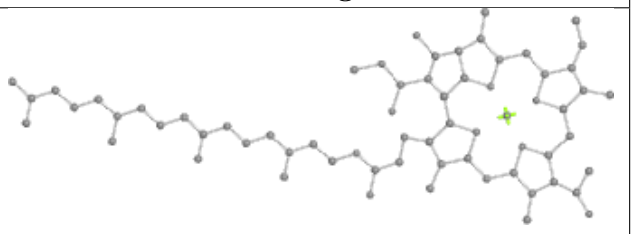


Torsions

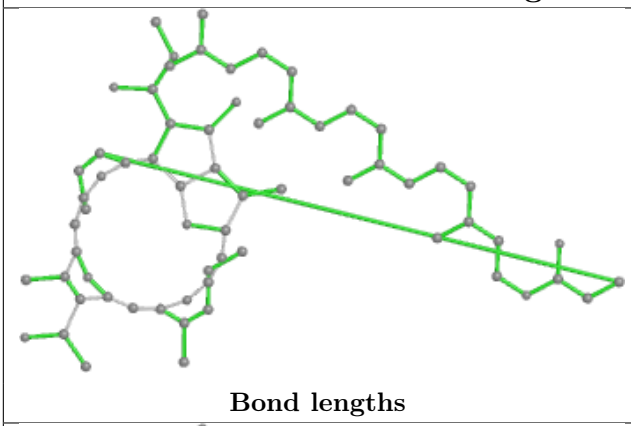


Rings

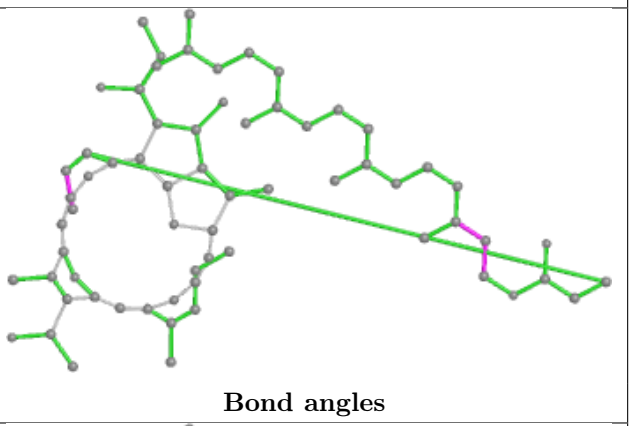
Ligand BCL I 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL 8 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

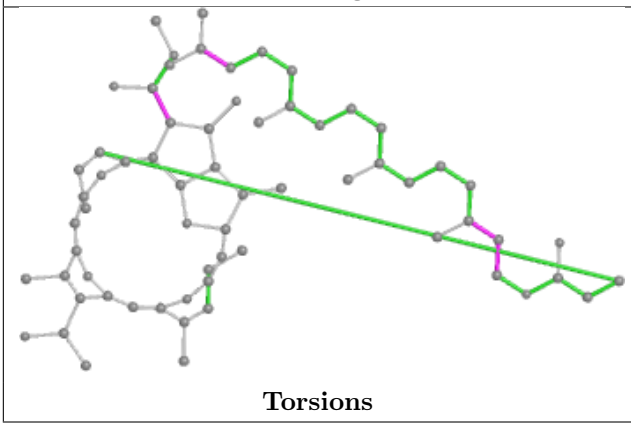
Ligand BPH L 303



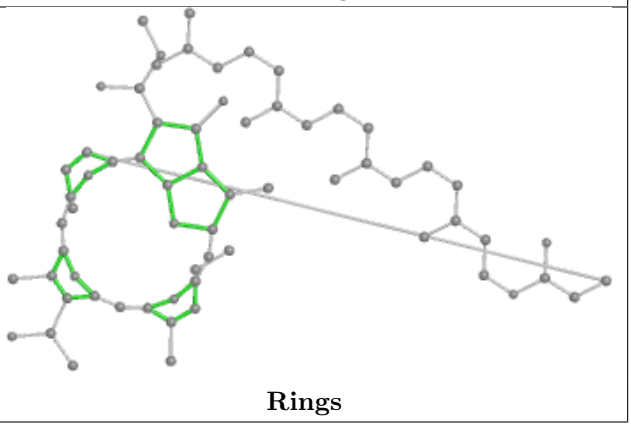
Bond lengths



Bond angles

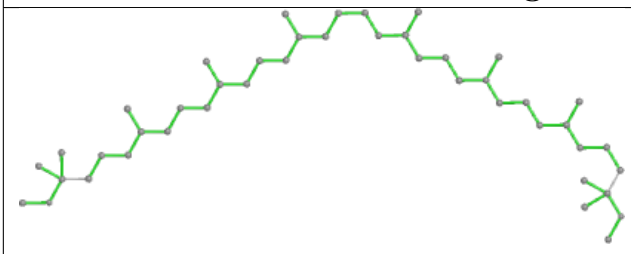


Torsions

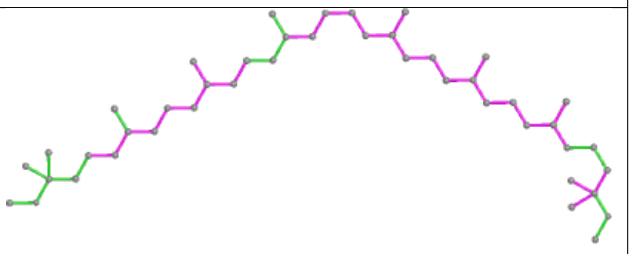


Rings

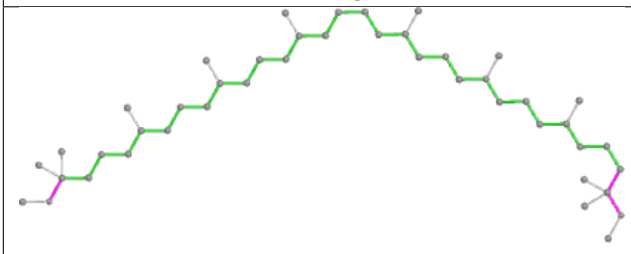
Ligand CRT V 102



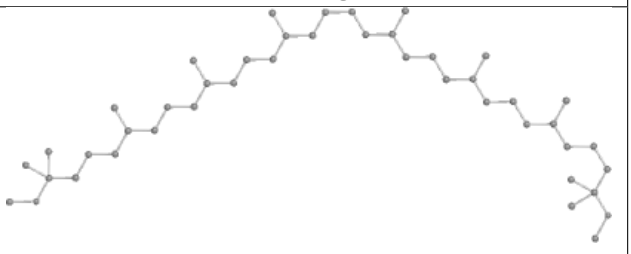
Bond lengths



Bond angles

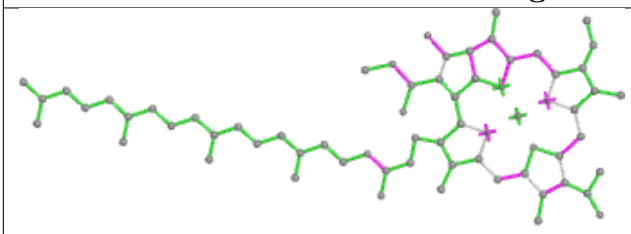


Torsions

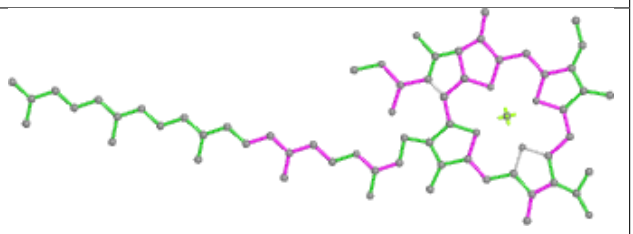


Rings

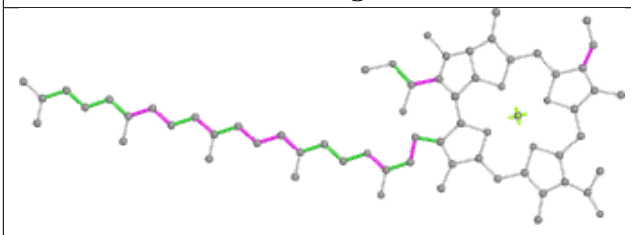
Ligand BCL J 101



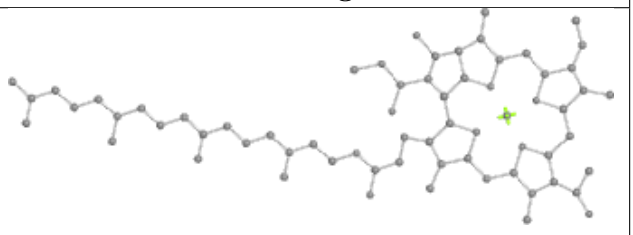
Bond lengths



Bond angles

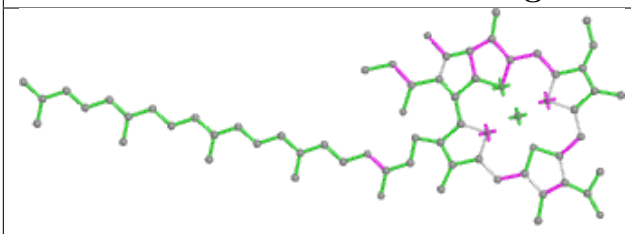


Torsions

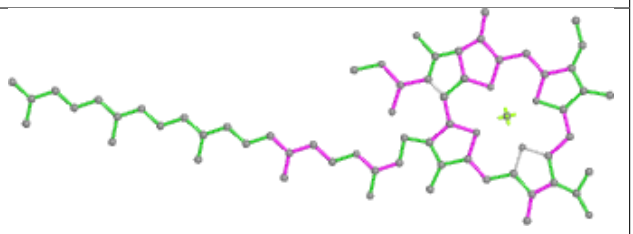


Rings

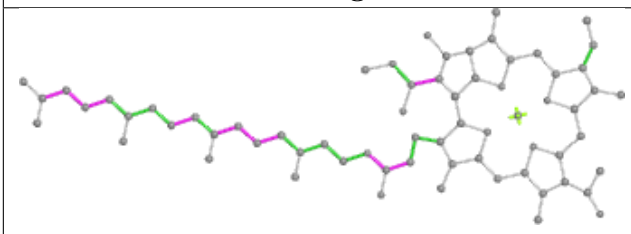
Ligand BCL D 102



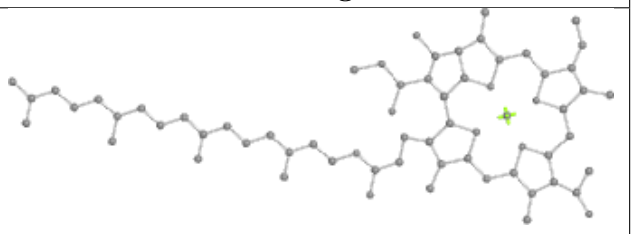
Bond lengths



Bond angles

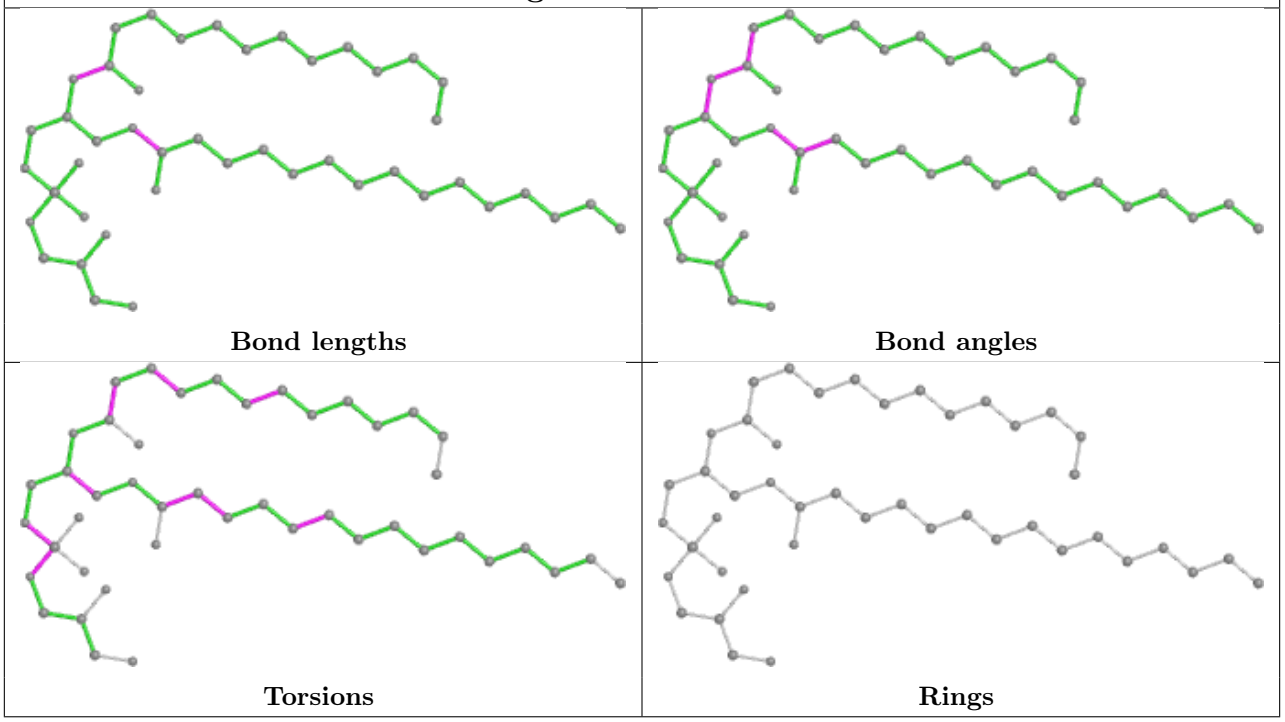


Torsions

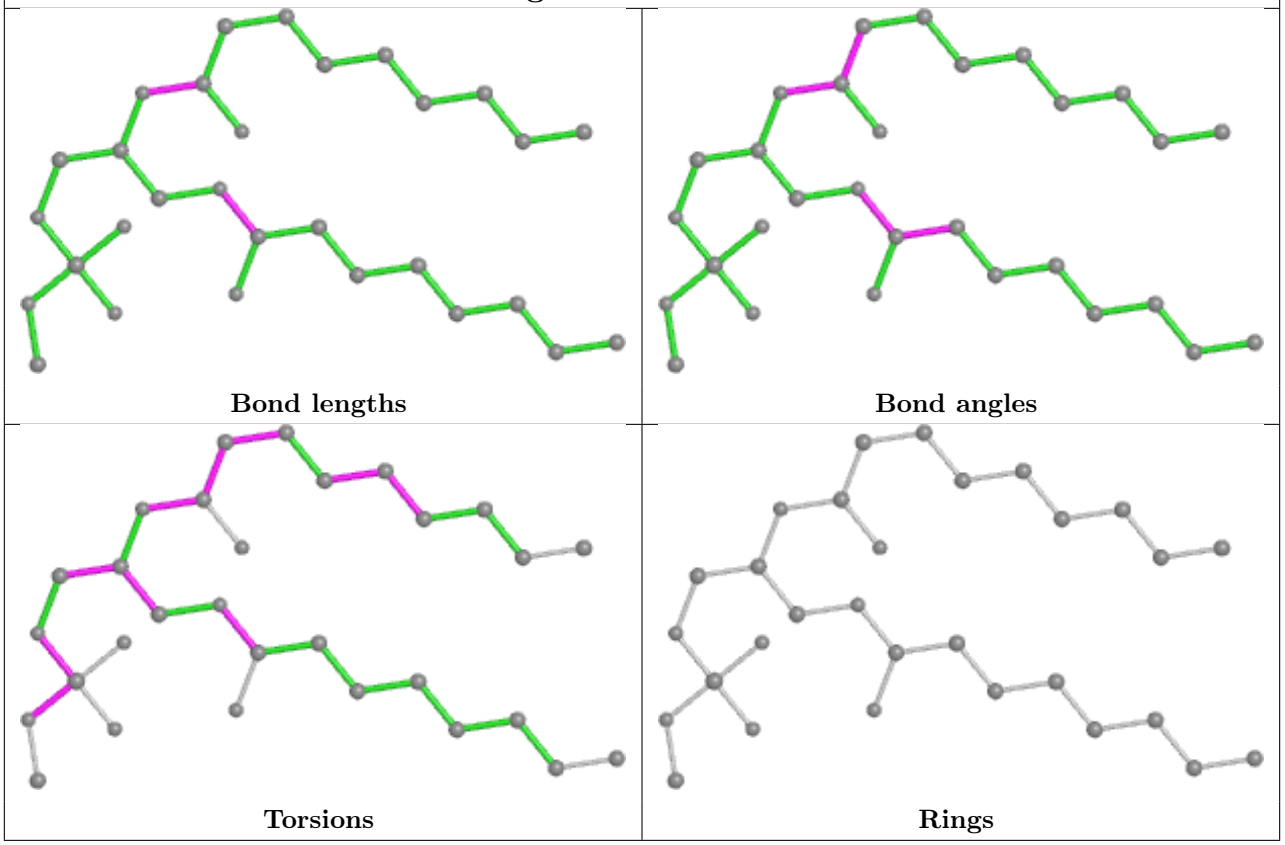


Rings

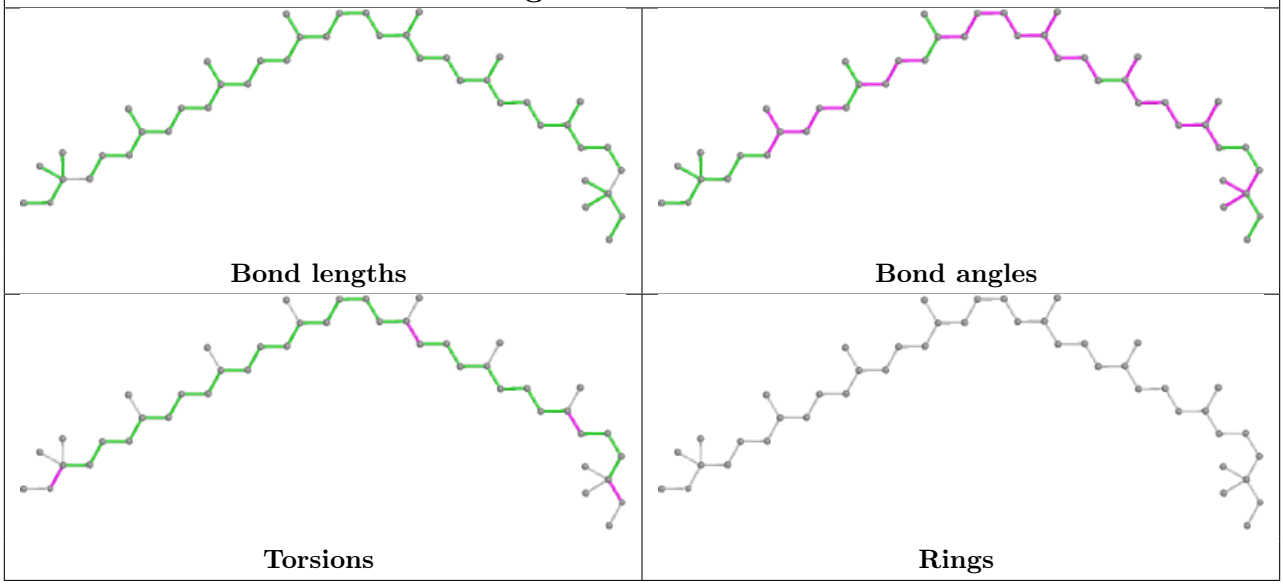
Ligand PGV 1 101



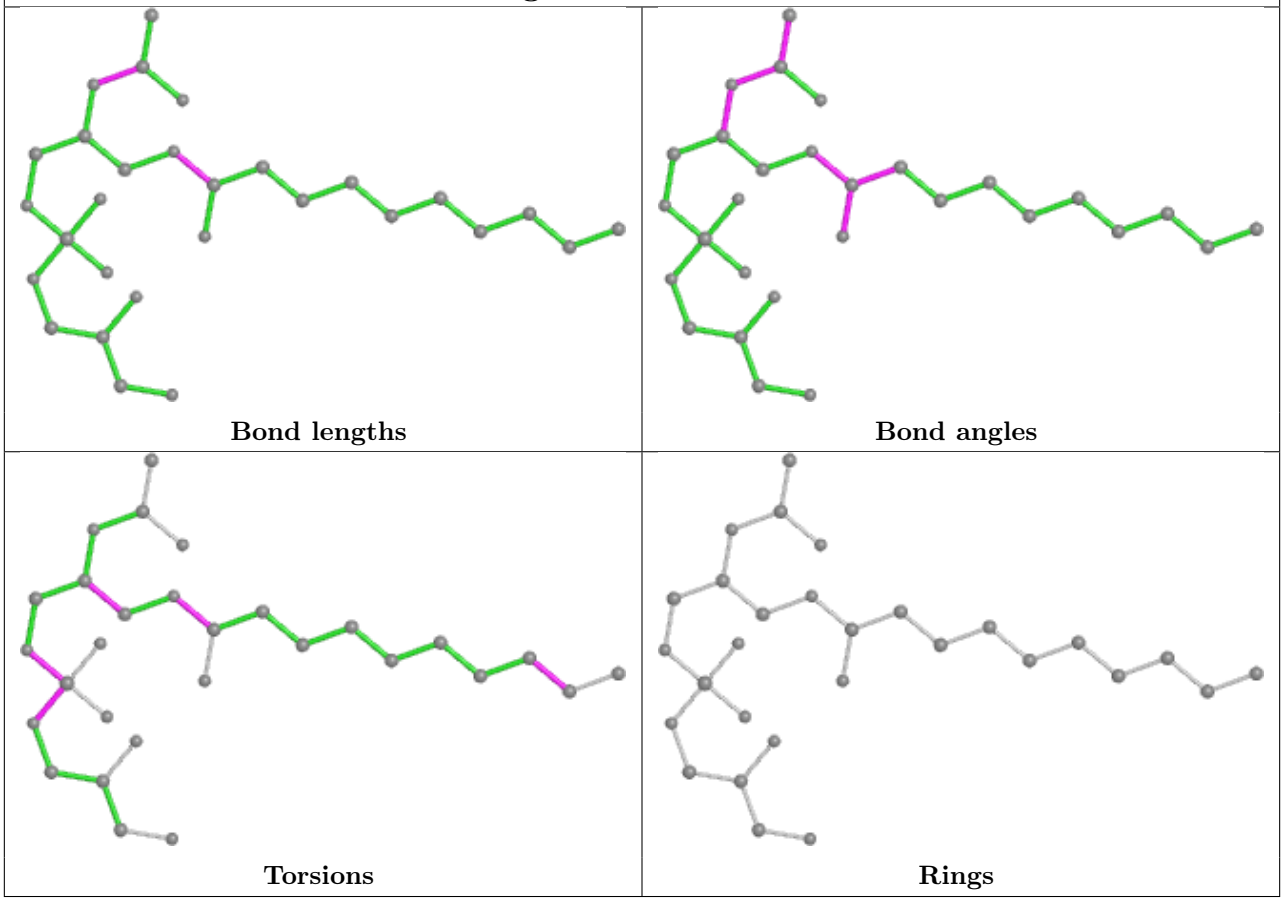
Ligand PGV 3 101



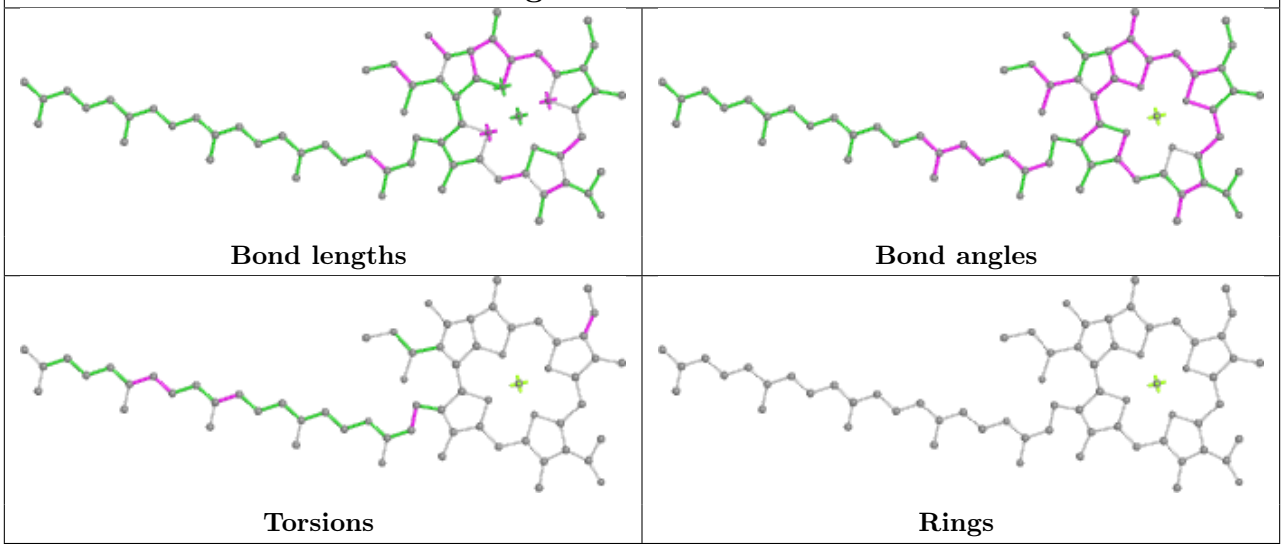
Ligand CRT B 101



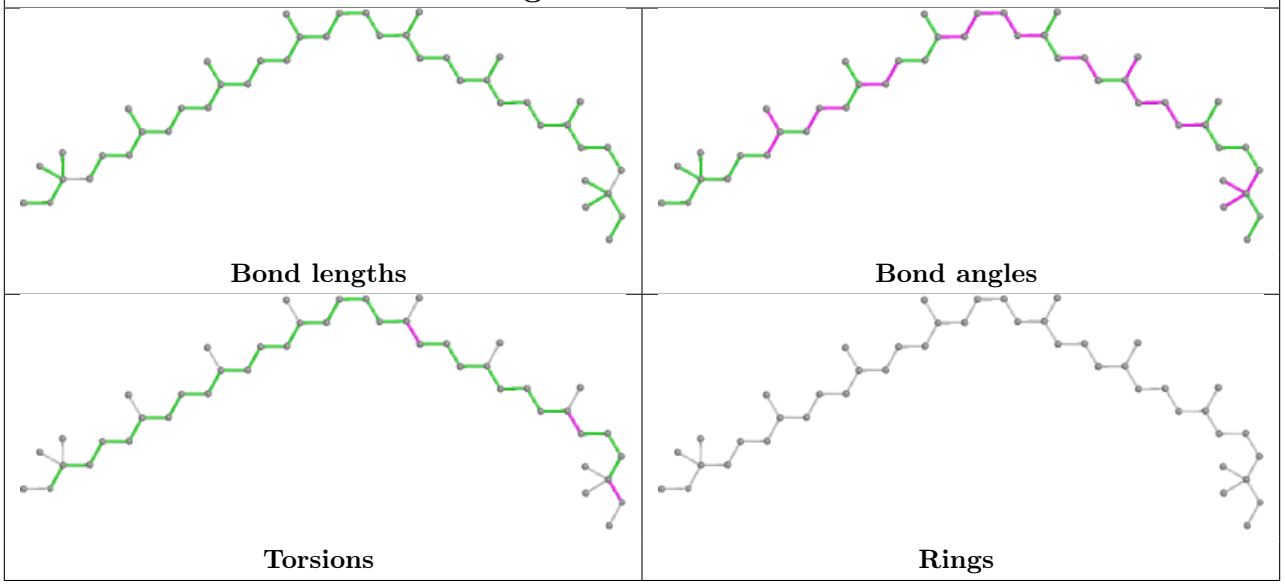
Ligand PGV R 103



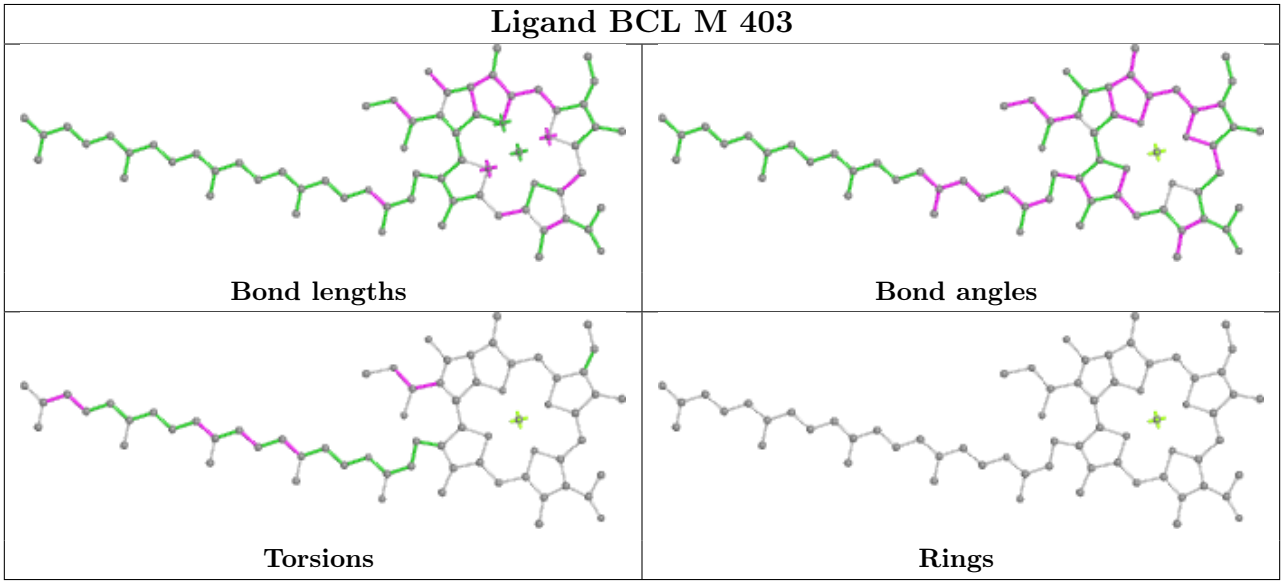
Ligand BCL X 101



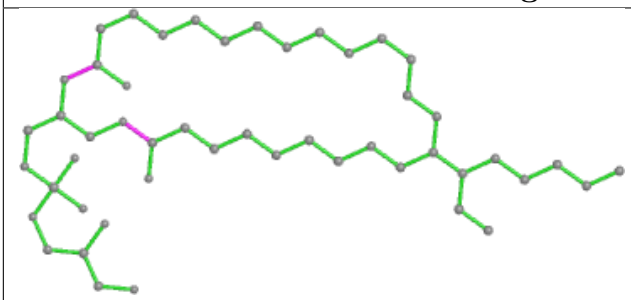
Ligand CRT N 102



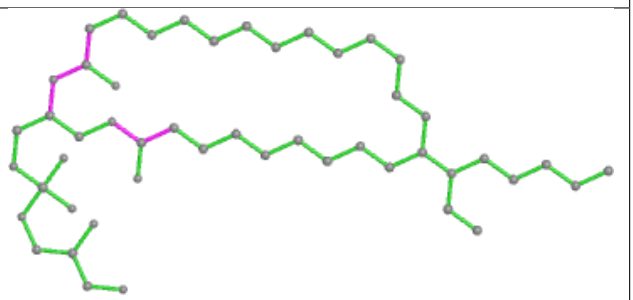
Ligand BCL M 403



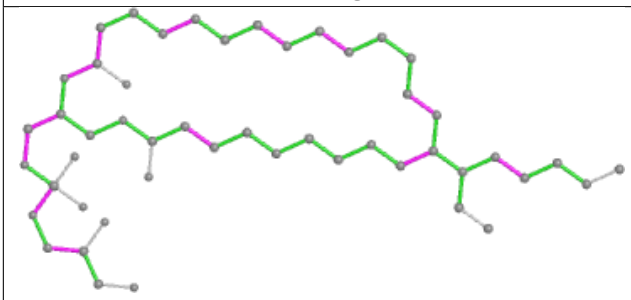
Ligand PGV H 304



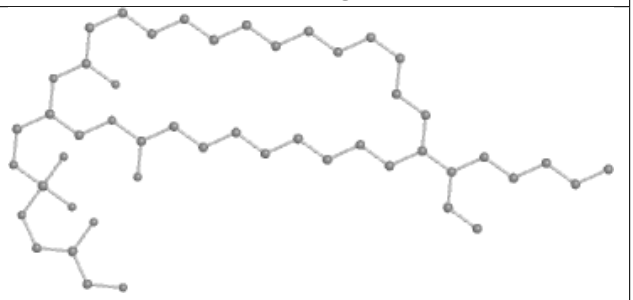
Bond lengths



Bond angles

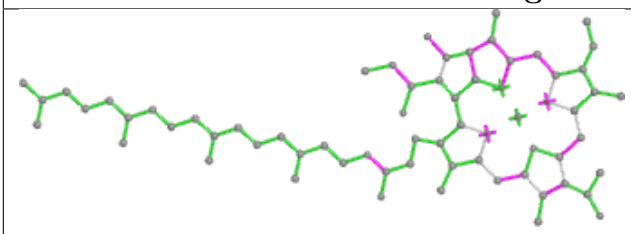


Torsions

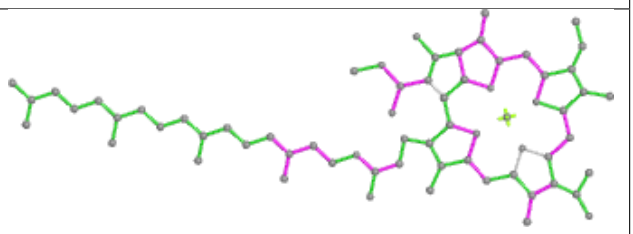


Rings

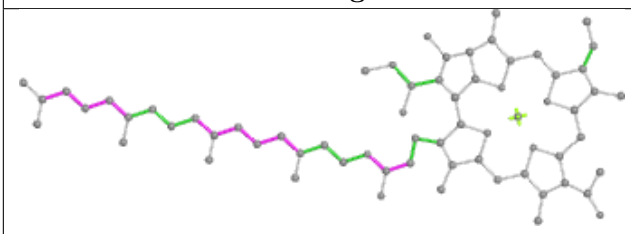
Ligand BCL O 103



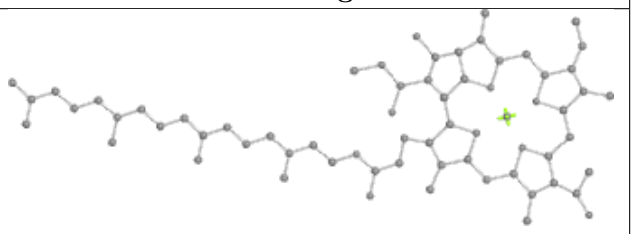
Bond lengths



Bond angles

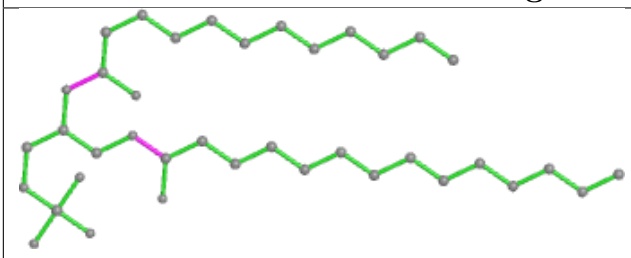


Torsions

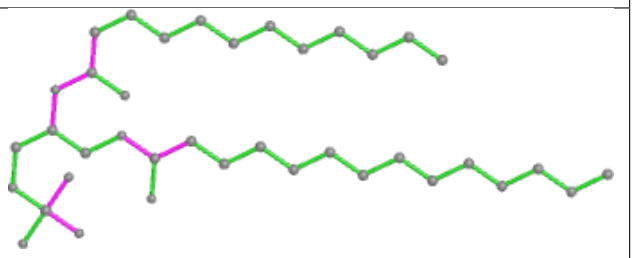


Rings

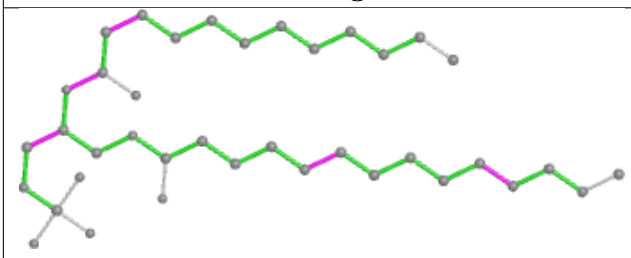
Ligand PGV 6 102



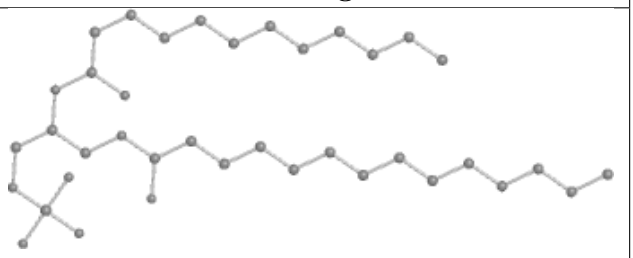
Bond lengths



Bond angles

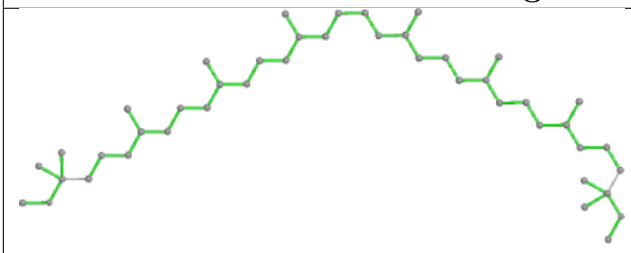


Torsions

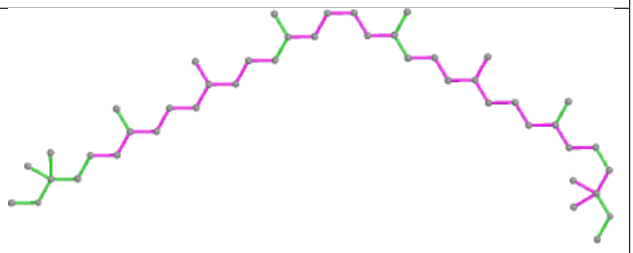


Rings

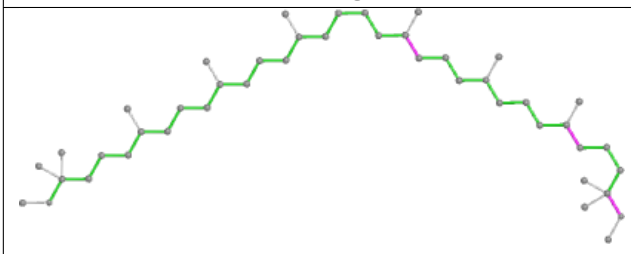
Ligand CRT R 101



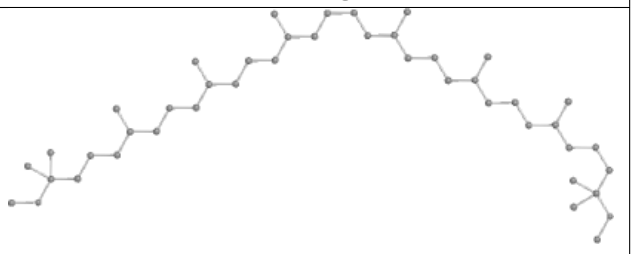
Bond lengths



Bond angles

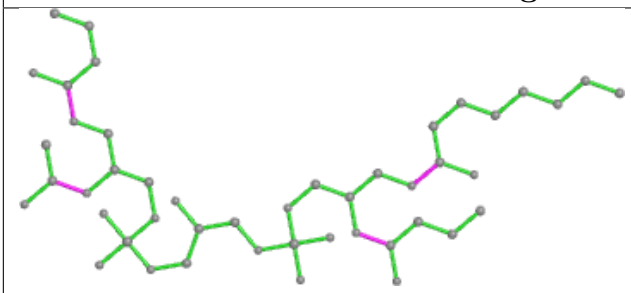


Torsions



Rings

Ligand CDL M 408



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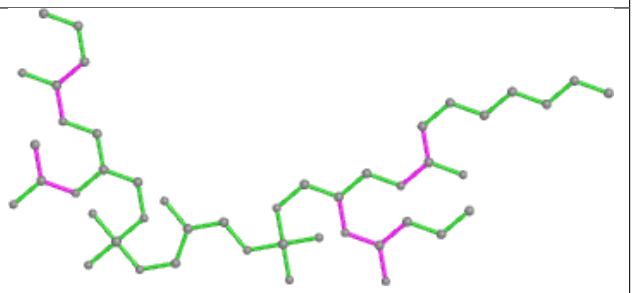
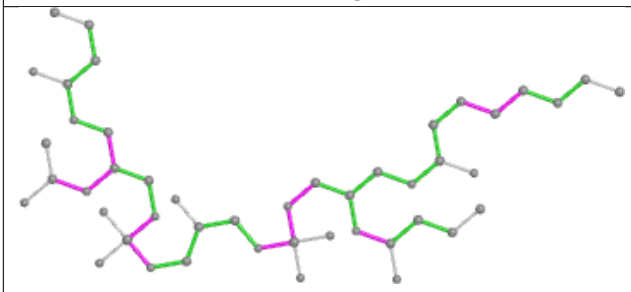
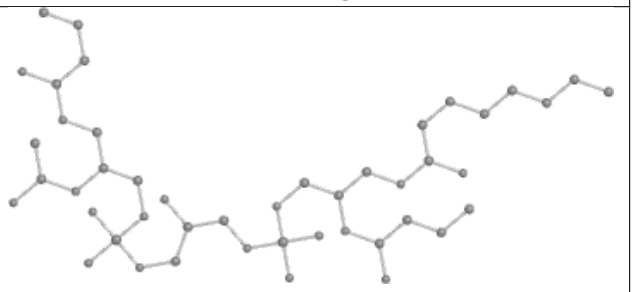


Bond angles

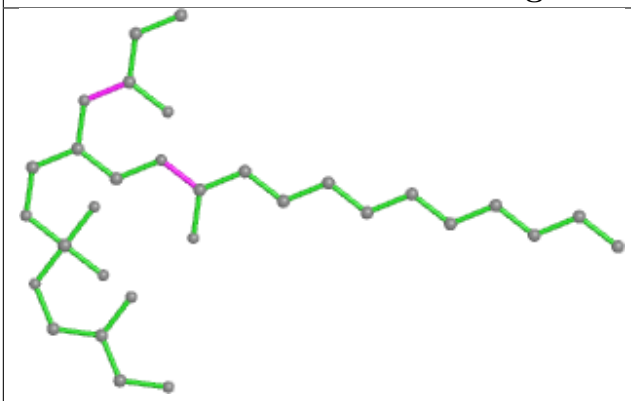


Torsions

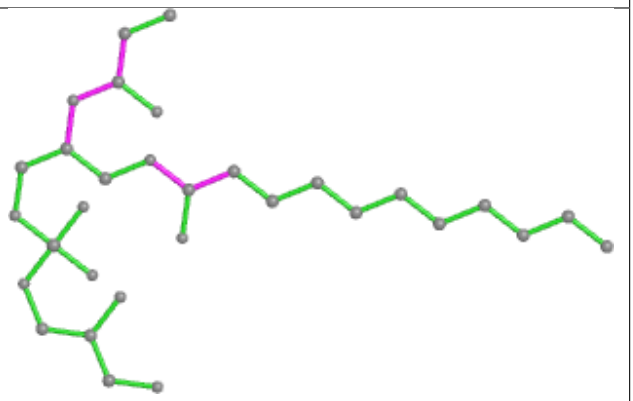


Rings

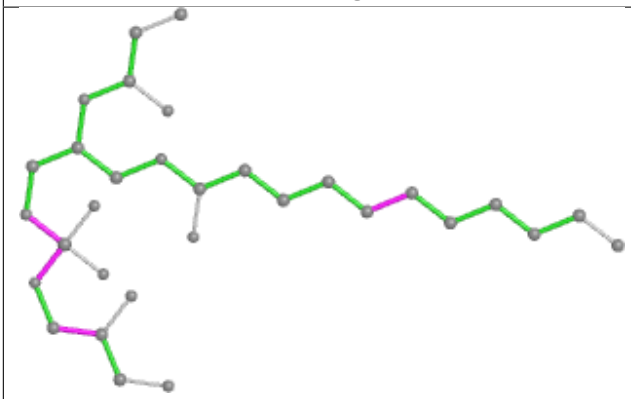
Ligand PGV 0 103



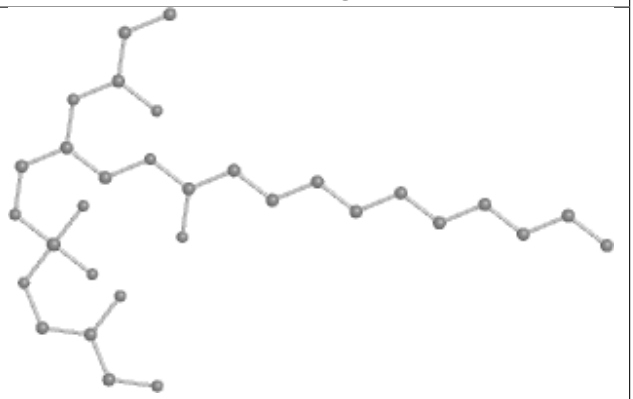
Bond lengths



Bond angles

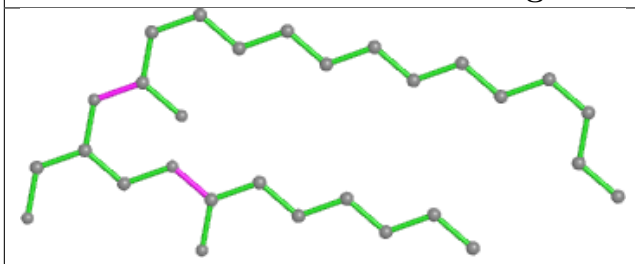


Torsions



Rings

Ligand PGV J 102



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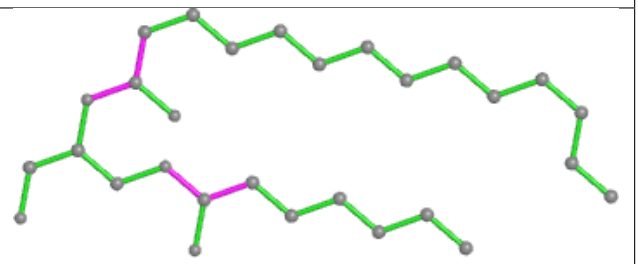
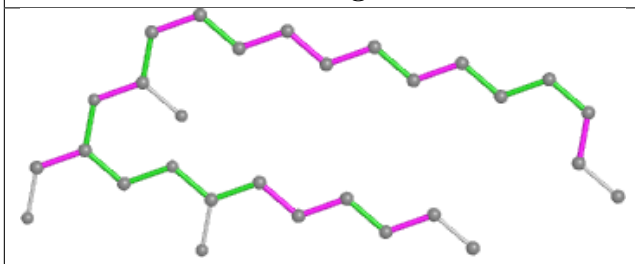
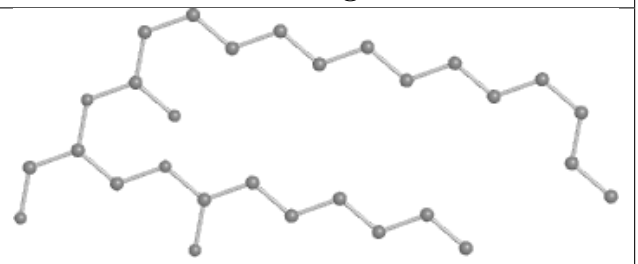


Bond angles

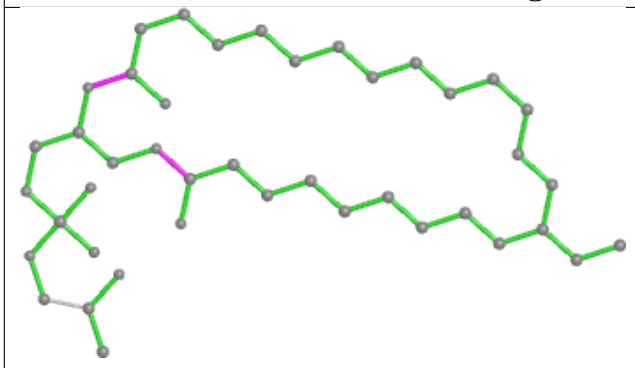


Torsions



Rings

Ligand PGV 8 101



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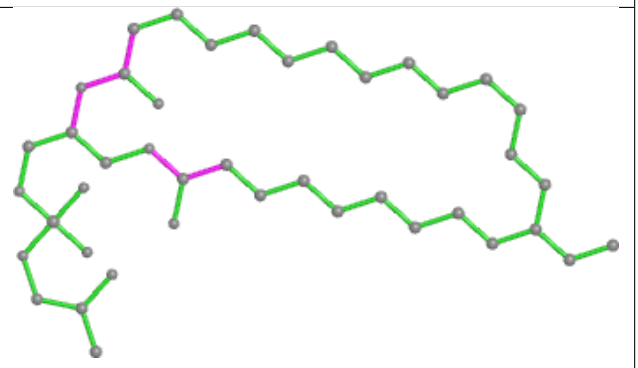
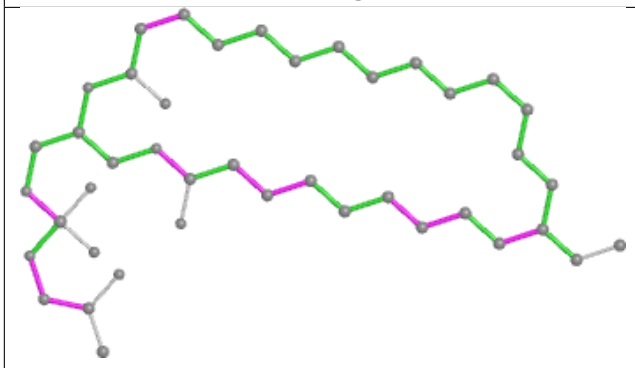


Bond angles



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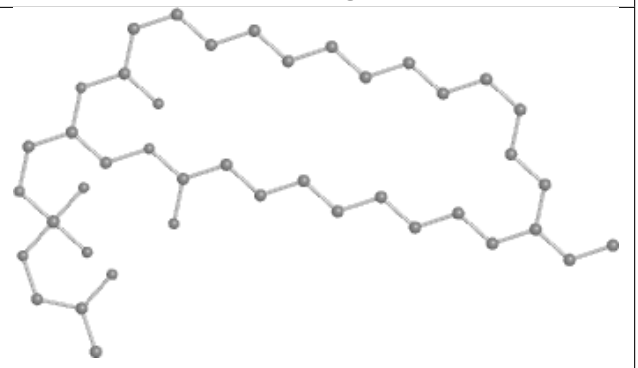
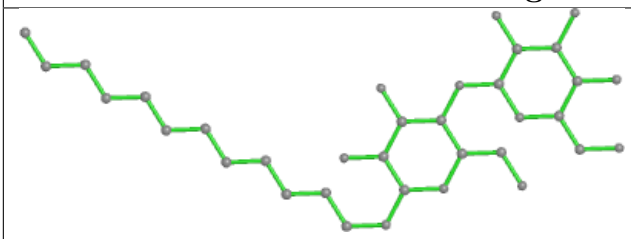
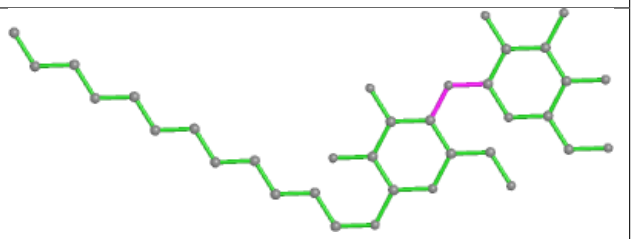


Rings

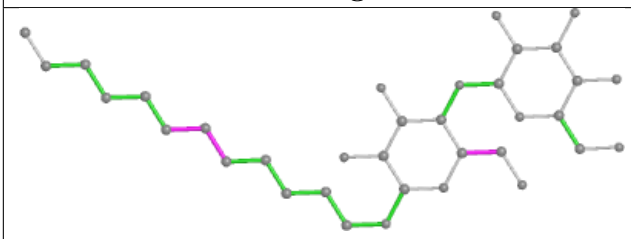
Ligand LMT 9 101



Bond lengths



Bond angles



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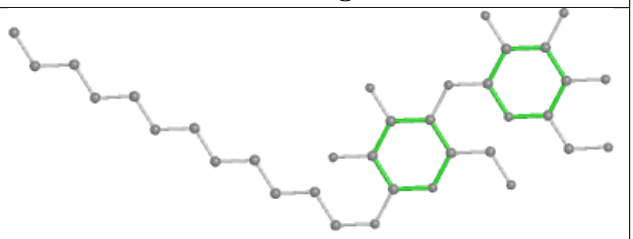
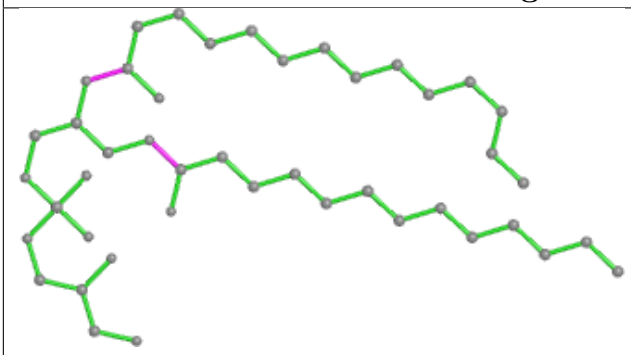
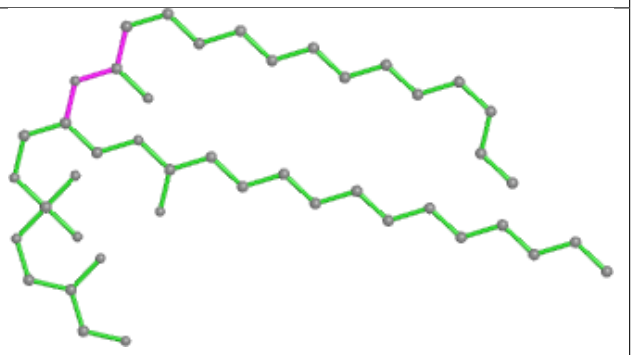


Rings

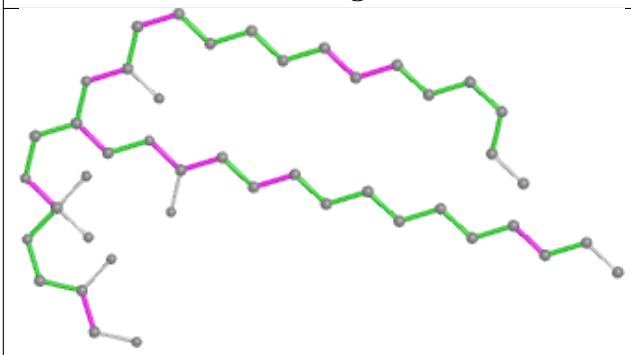
Ligand PGV V 105



Bond lengths



Bond angles



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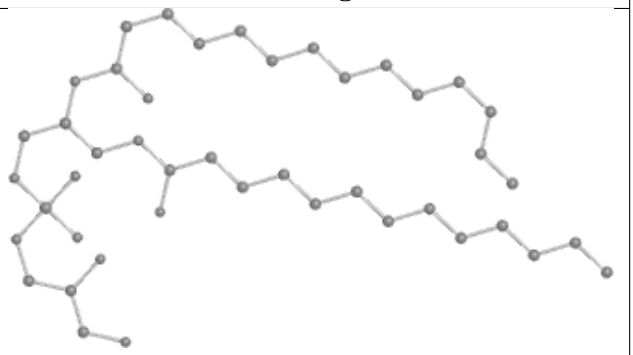
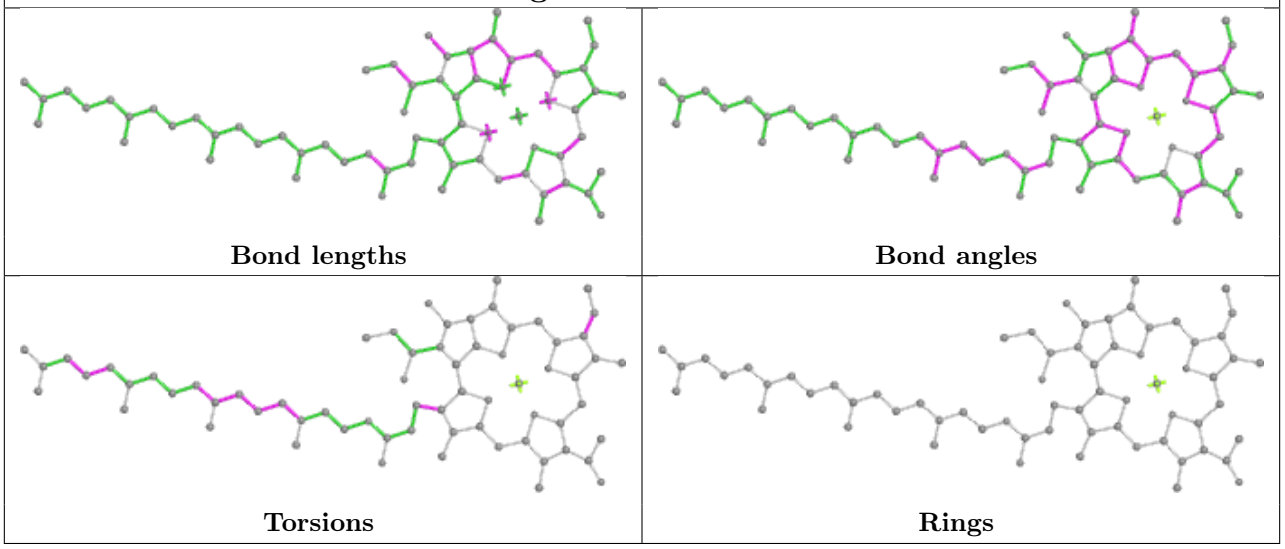
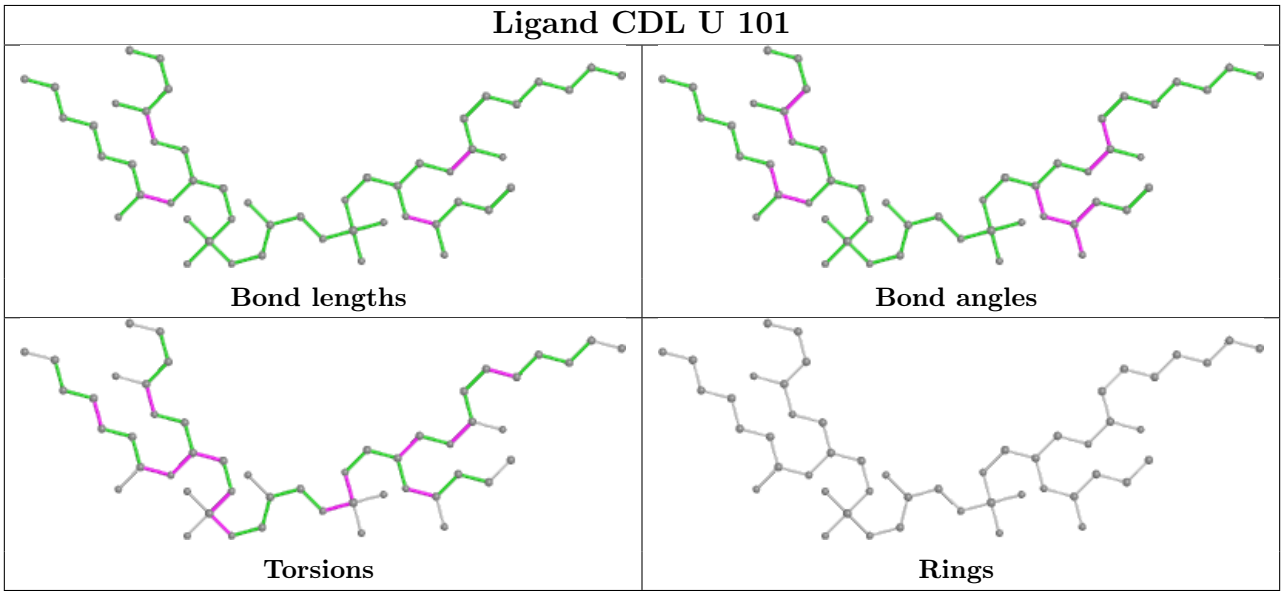


Rings

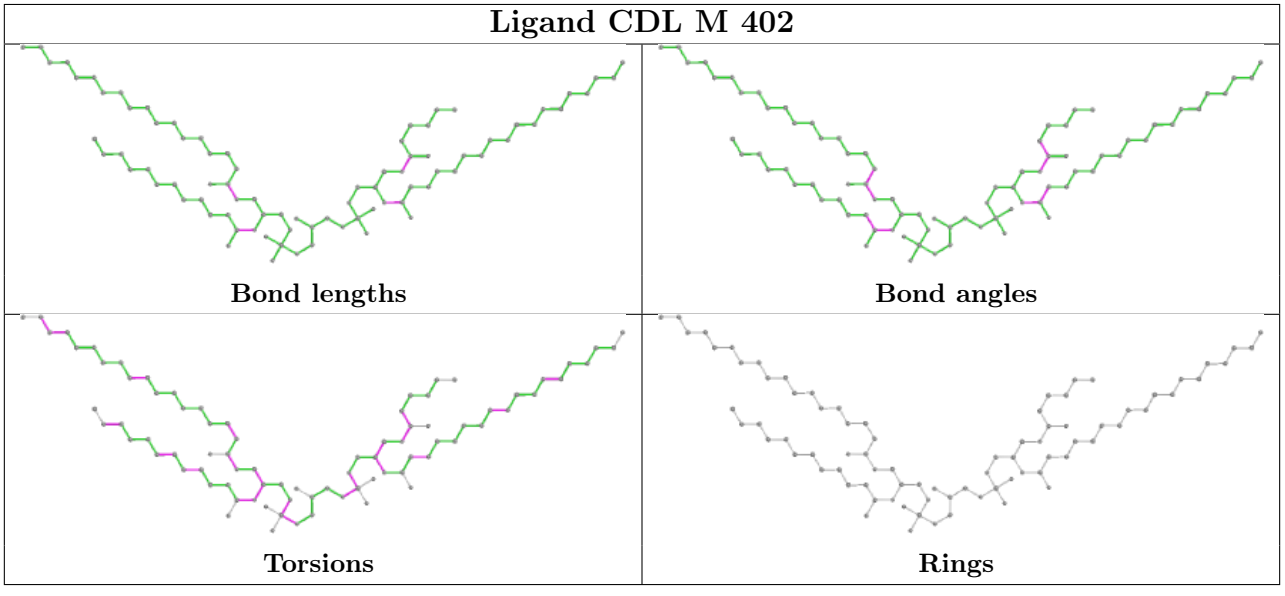
Ligand BCL 1 102



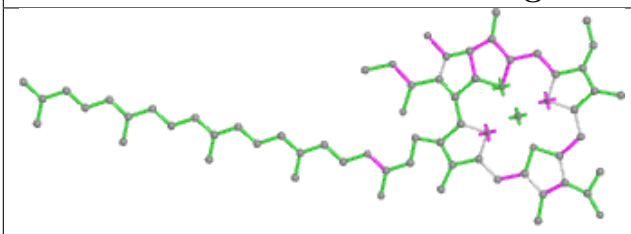
Ligand CDL U 101



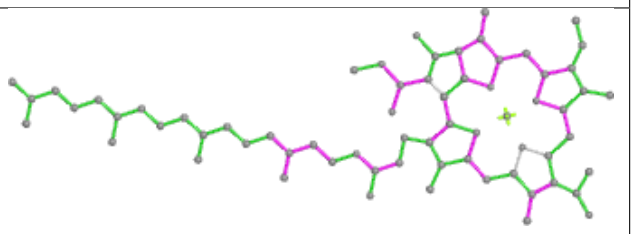
Ligand CDL M 402



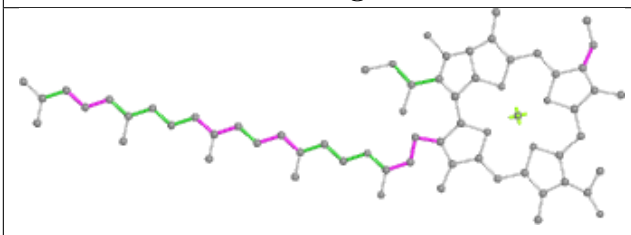
Ligand BCL V 103



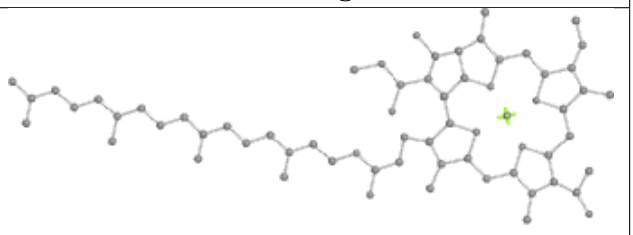
Bond lengths



Bond angles

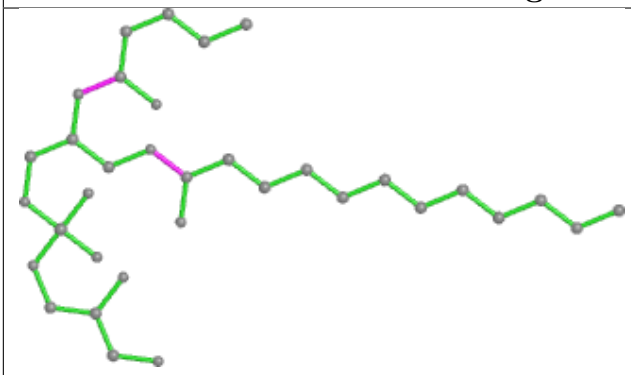


Torsions

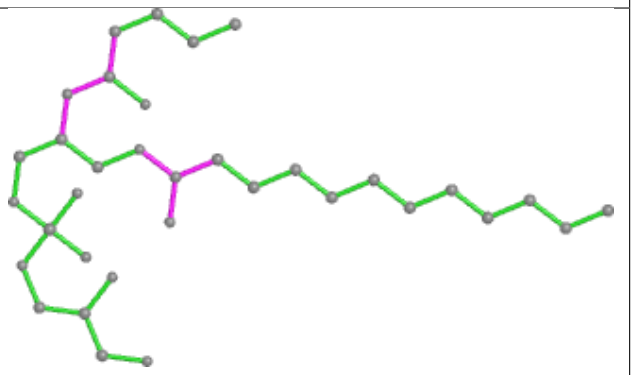


Rings

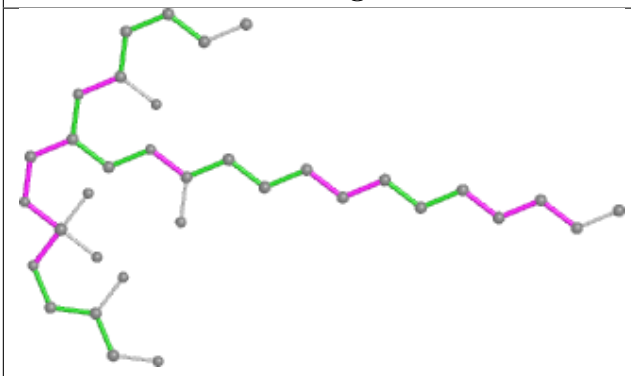
Ligand PGV 0 101



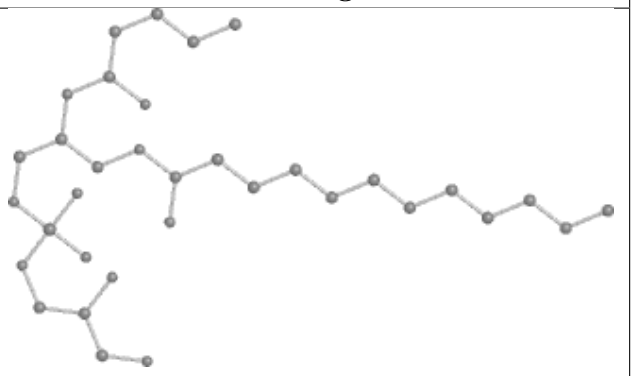
Bond lengths



Bond angles

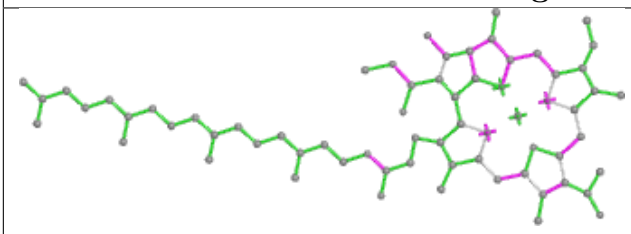


Torsions

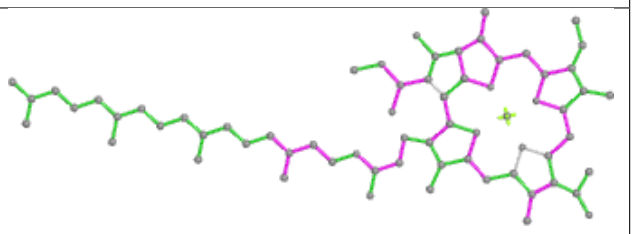


Rings

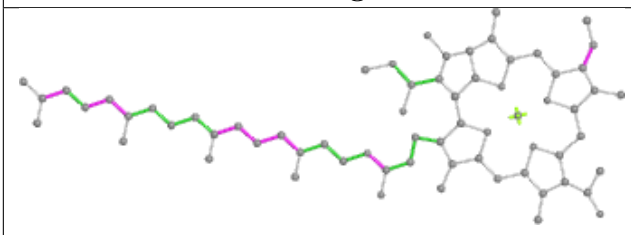
Ligand BCL I 102



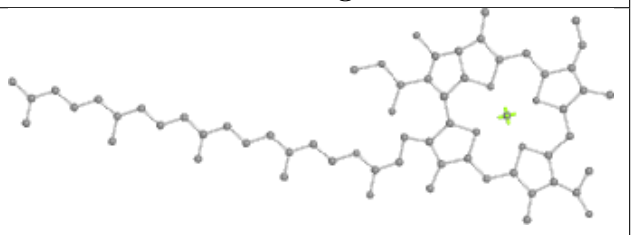
Bond lengths



Bond angles

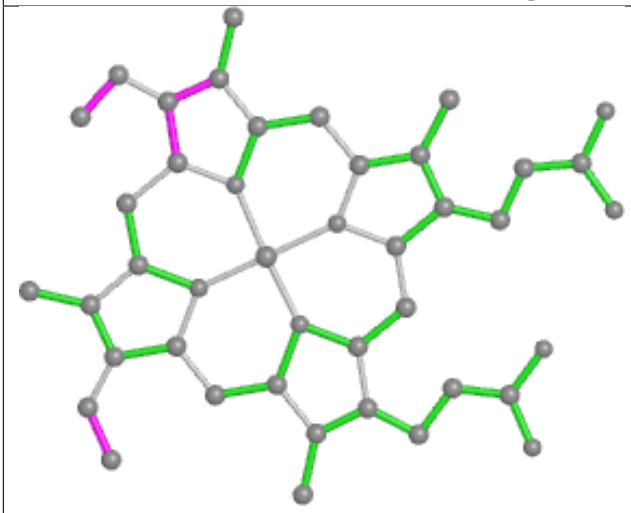


Torsions

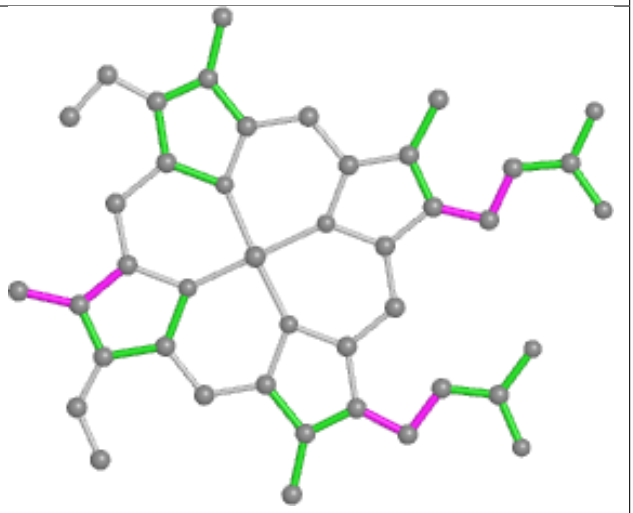


Rings

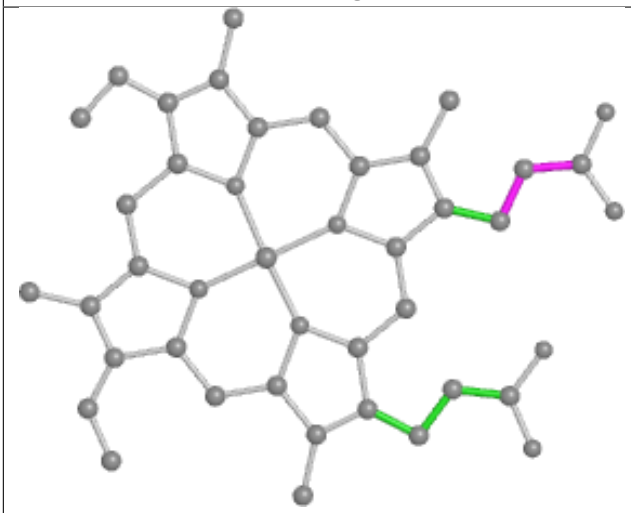
Ligand HEC C 403



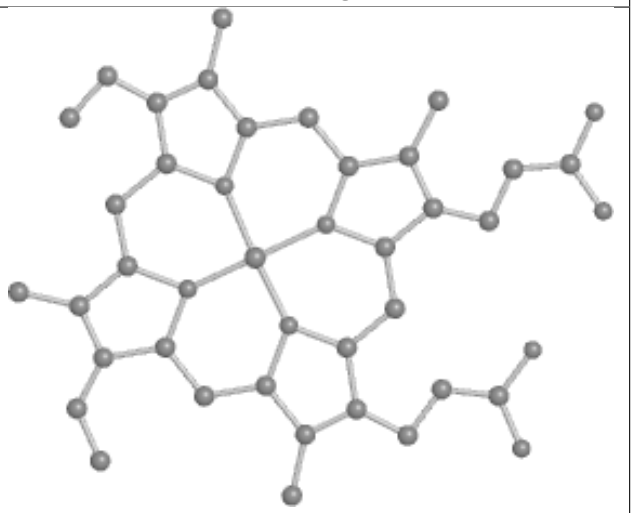
Bond lengths



Bond angles

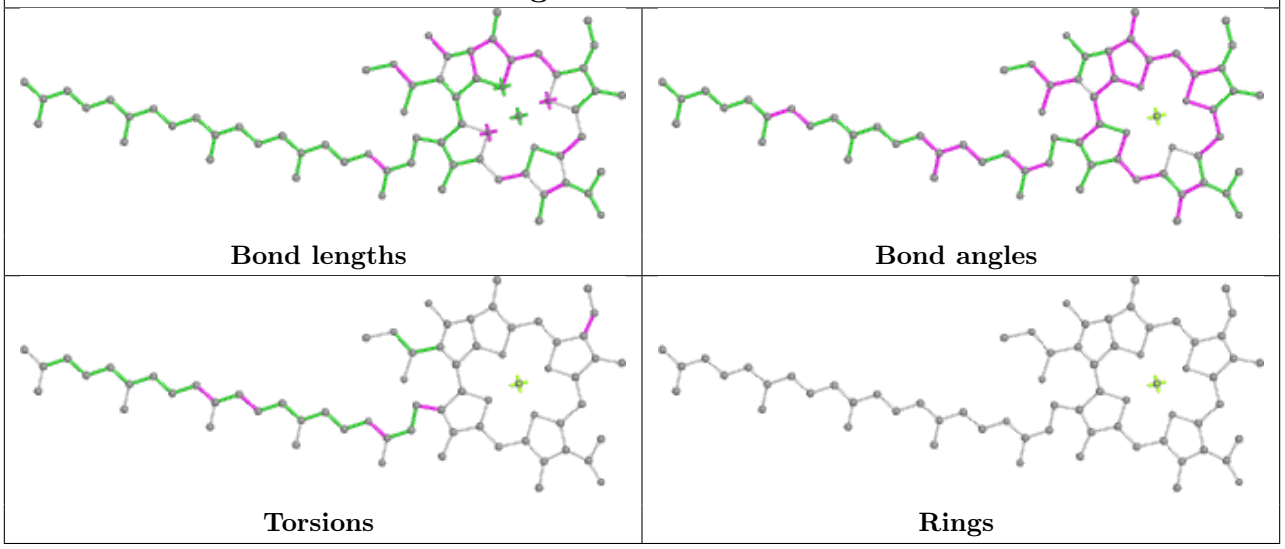


Torsions

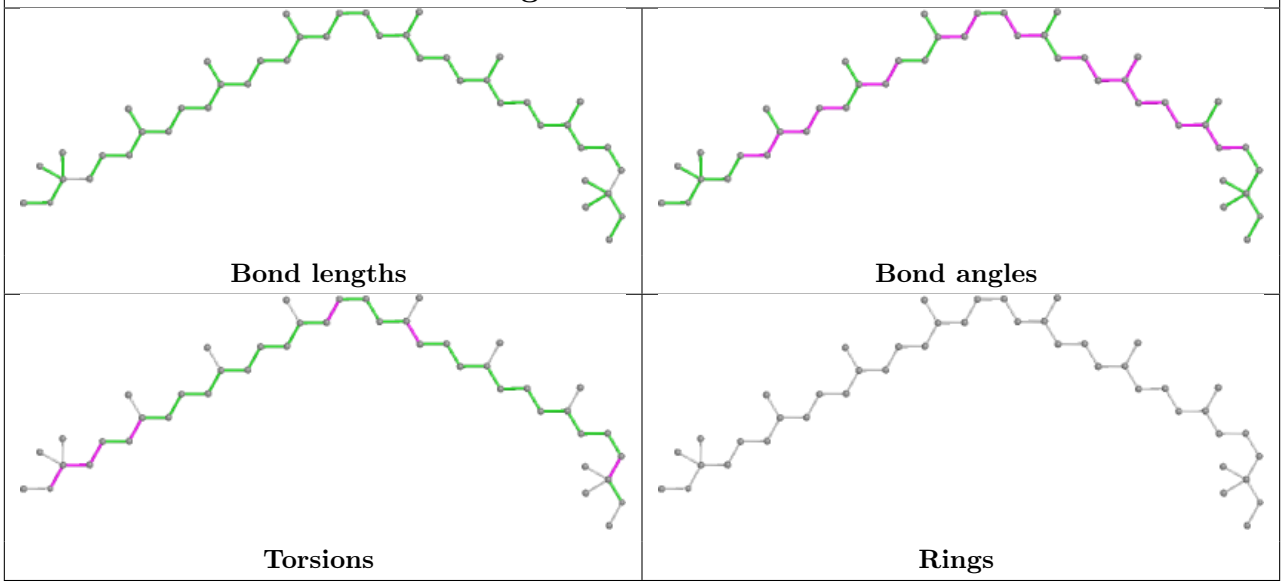


Rings

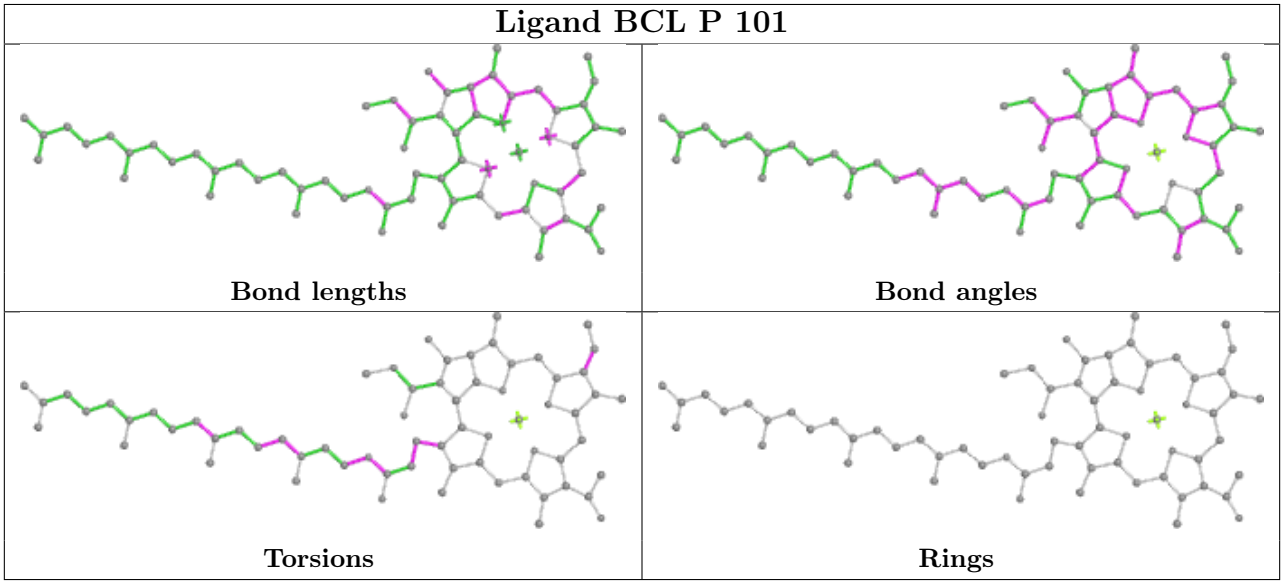
Ligand BCL 2 101



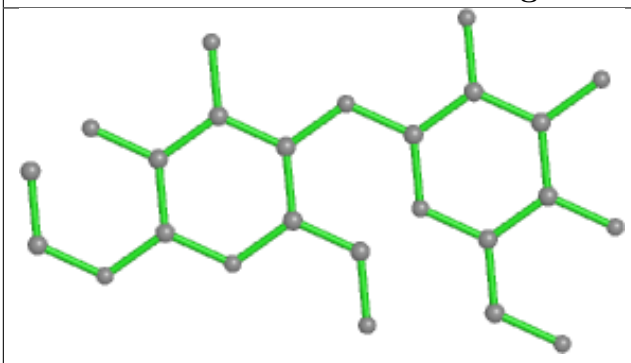
Ligand CRT M 406



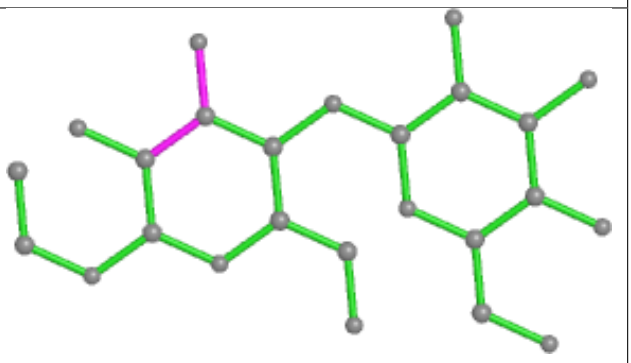
Ligand BCL P 101



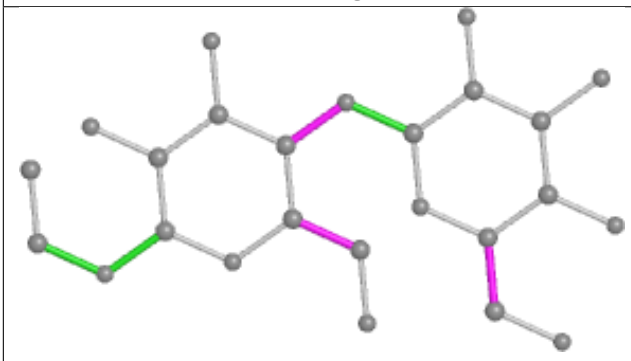
Ligand LMT K 101



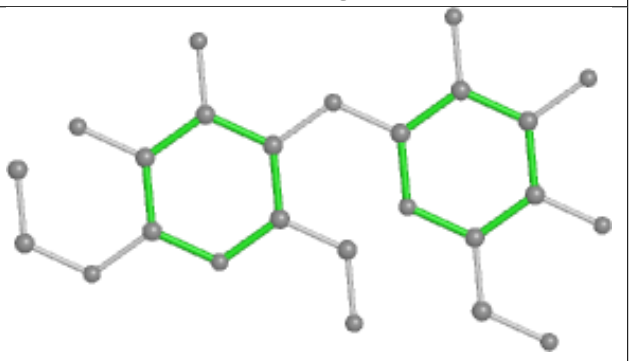
Bond lengths



Bond angles

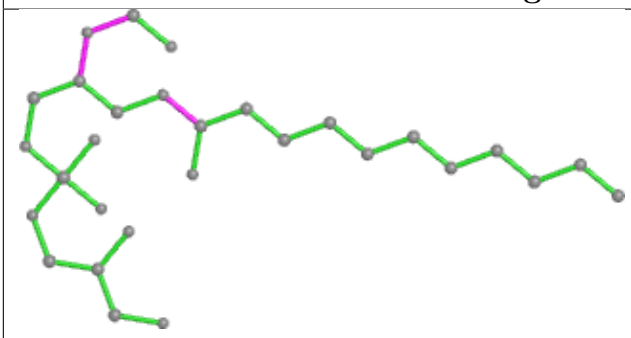


Torsions

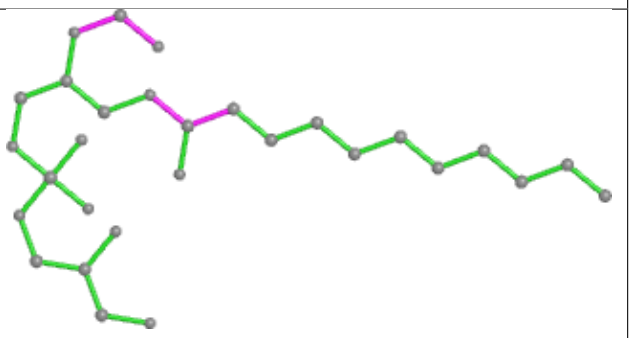


Rings

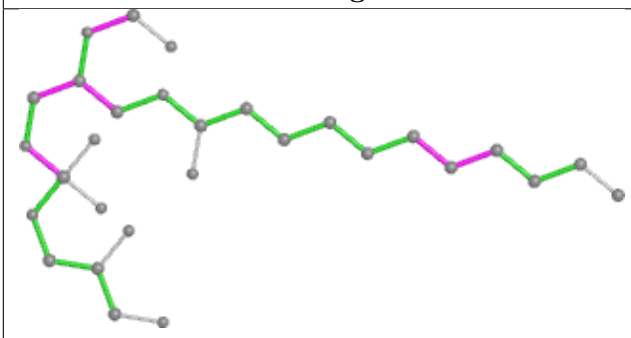
Ligand PGV Z 101



Bond lengths



Bond angles



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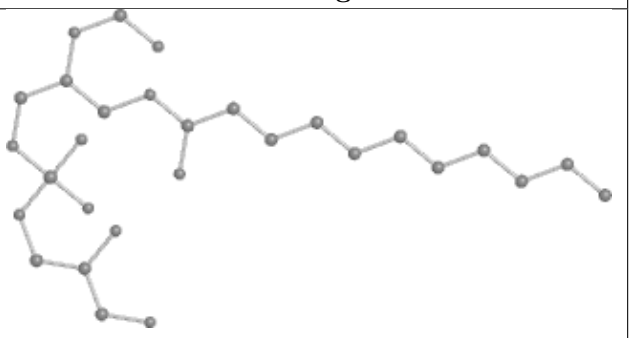
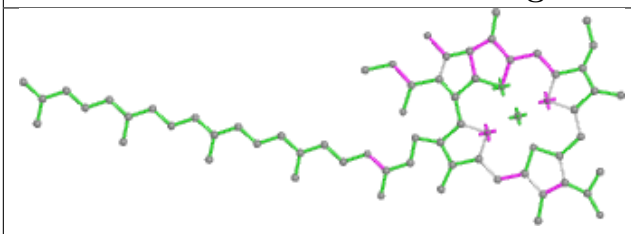
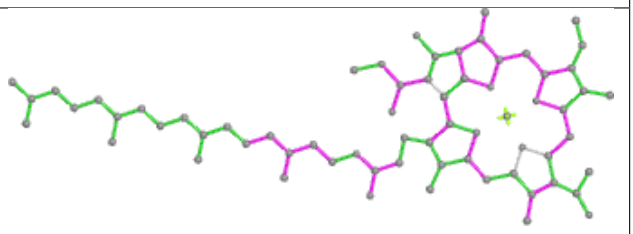


Rings

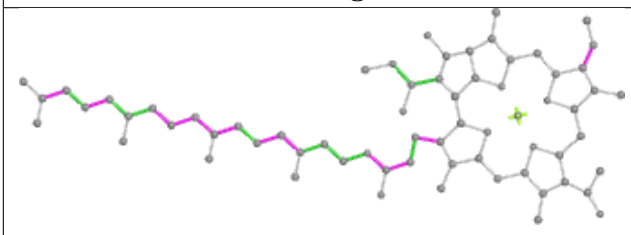
Ligand BCL Z 103



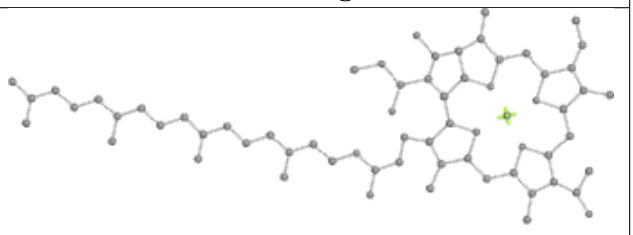
Bond lengths



Bond angles

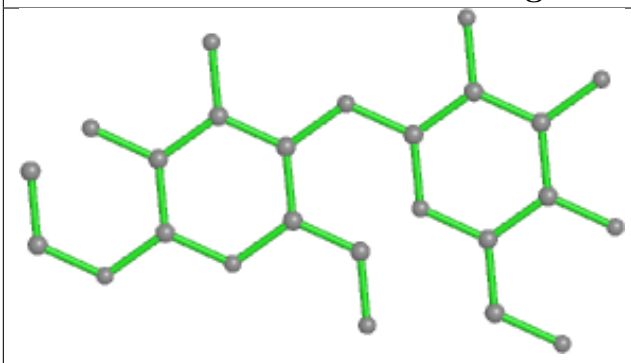


Torsions



Rings

Ligand LMT 7 101



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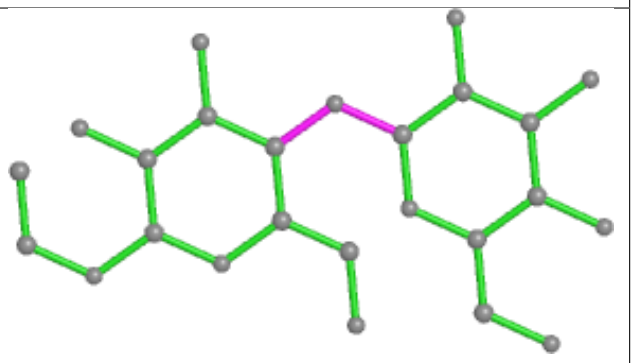
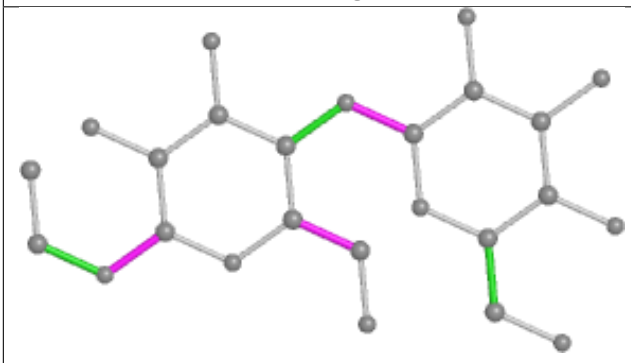


Bond angles



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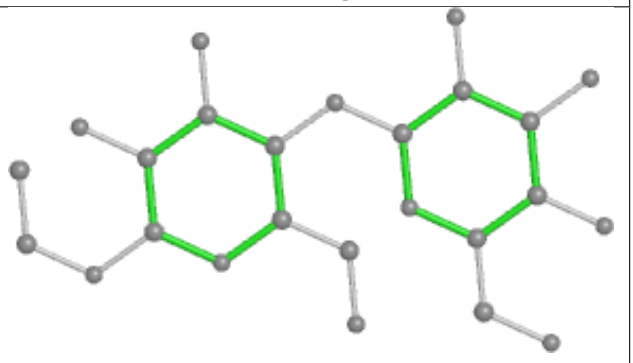
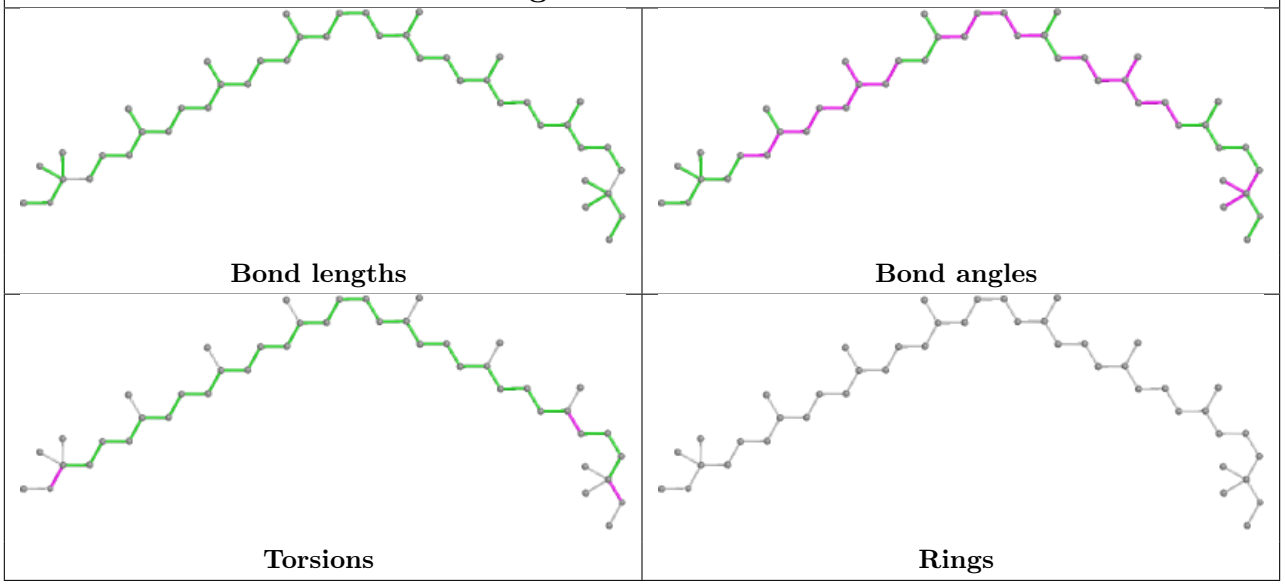
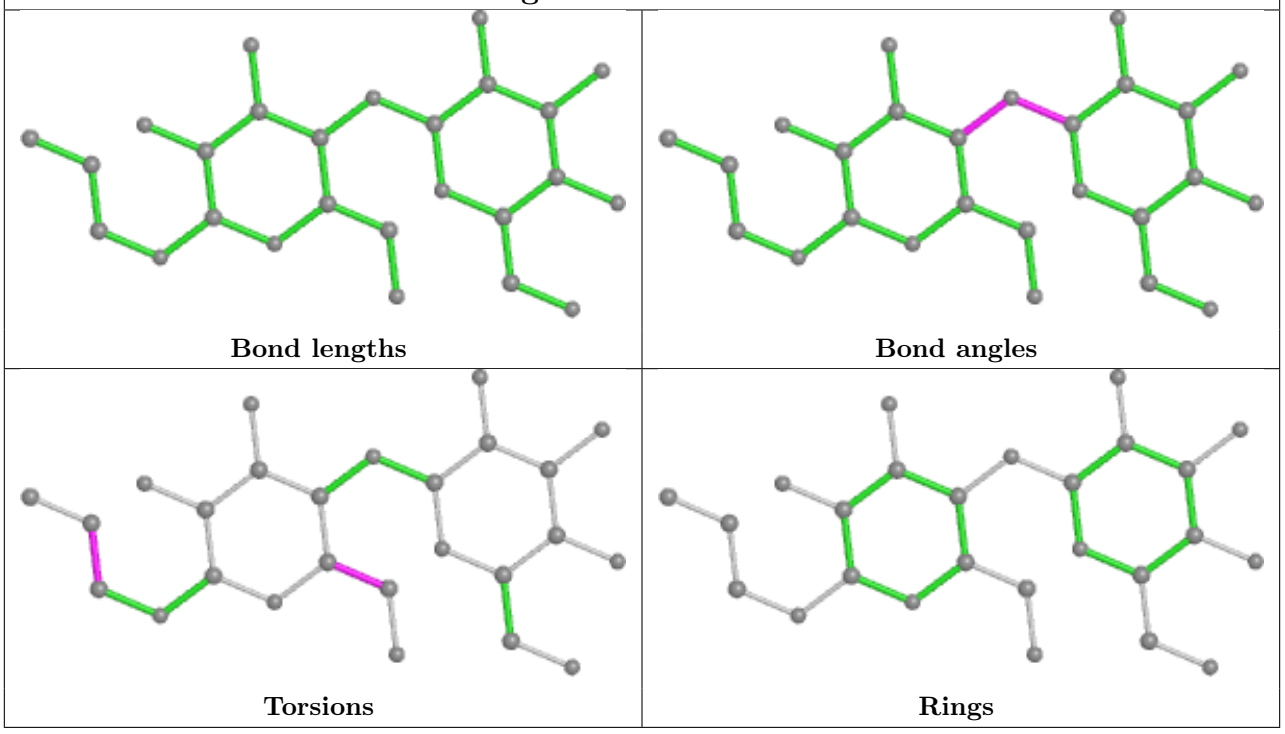


Rings

Ligand CRT 8 102



Ligand LMT H 306



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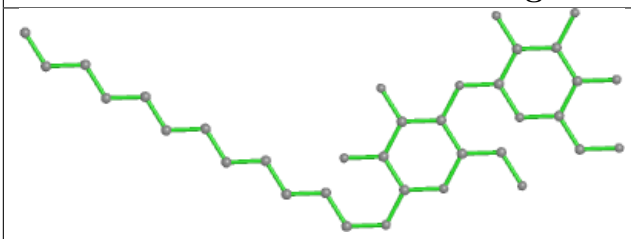

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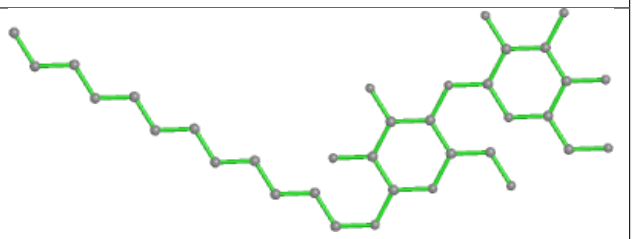
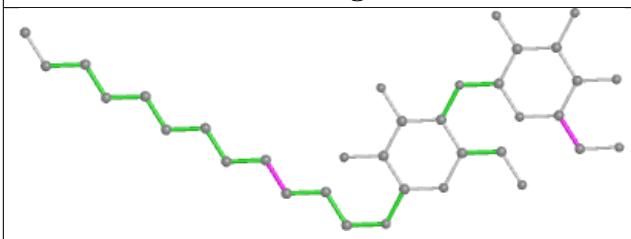
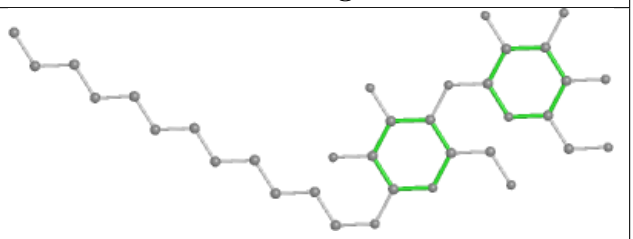


Bond angles

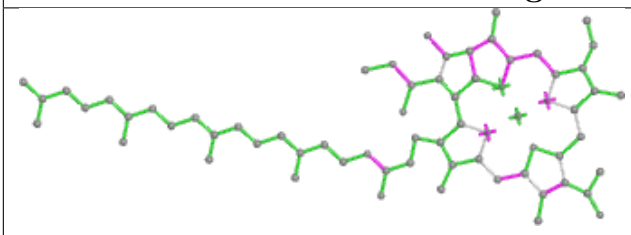


Torsions



Rings

Ligand BCL B 102



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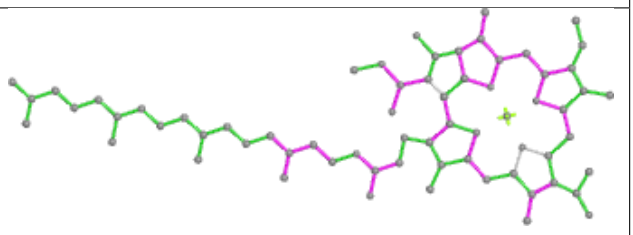
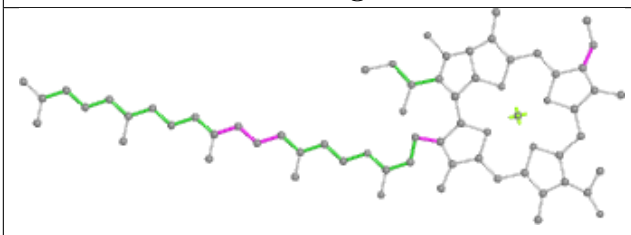


Bond angles



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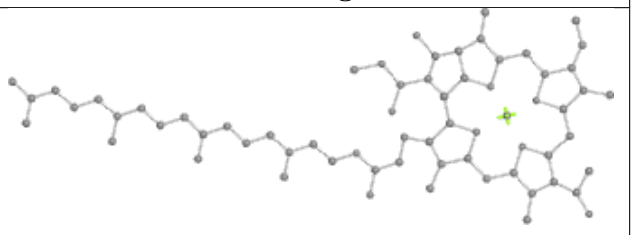
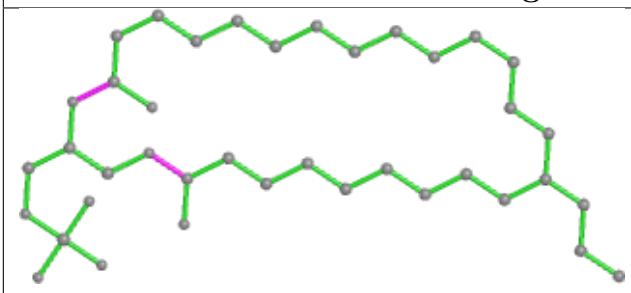


Rings

Ligand PGV P 103



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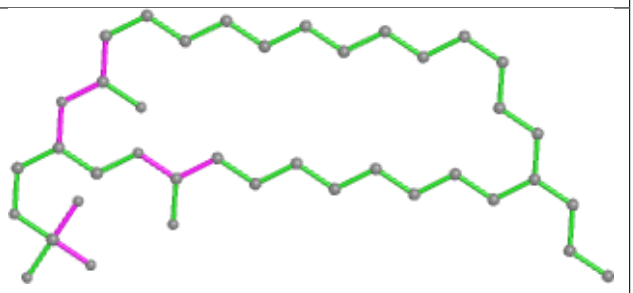
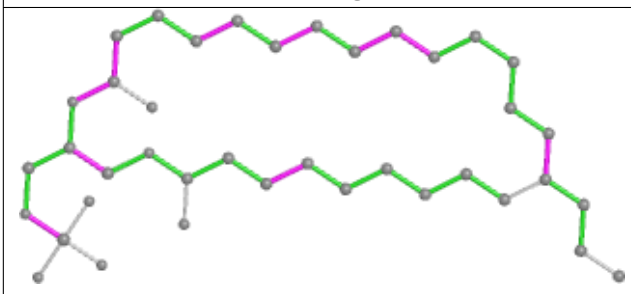


Bond angles



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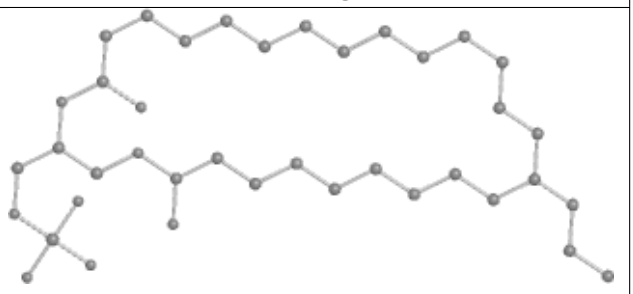
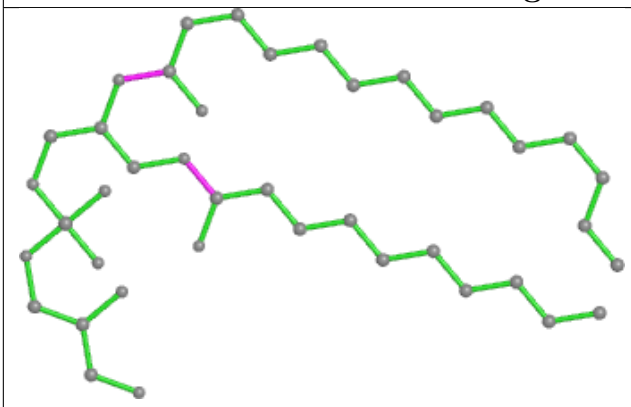
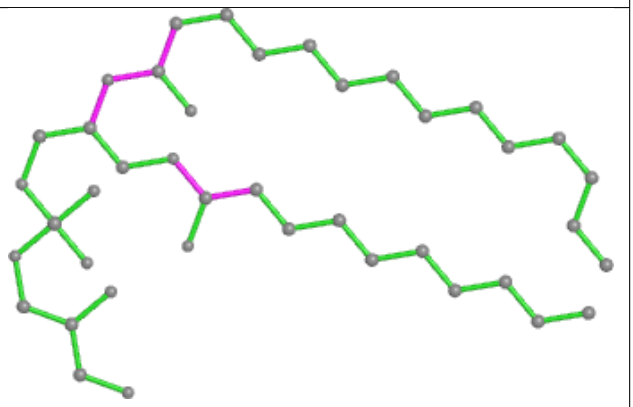


Rings

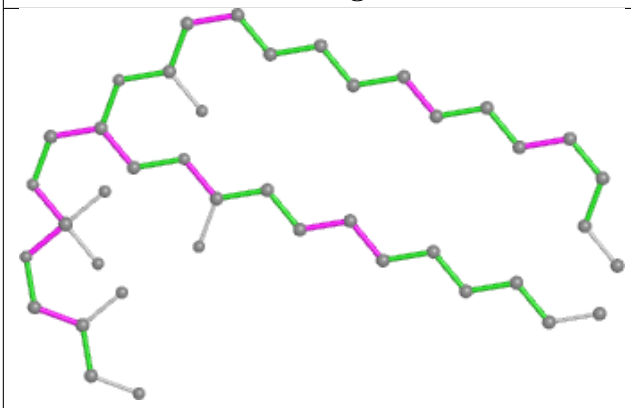
Ligand PGV L 309



Bond lengths



Bond angles



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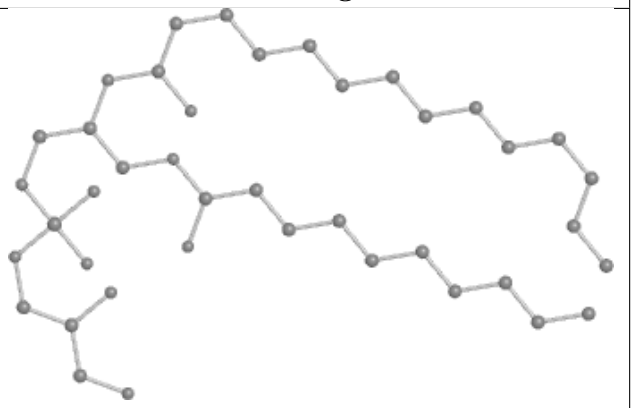
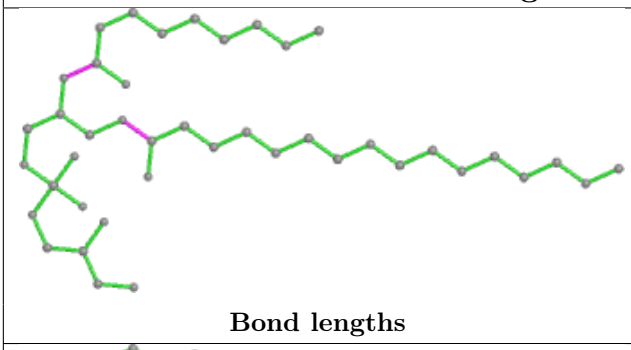


Rings

Ligand PGV H 303



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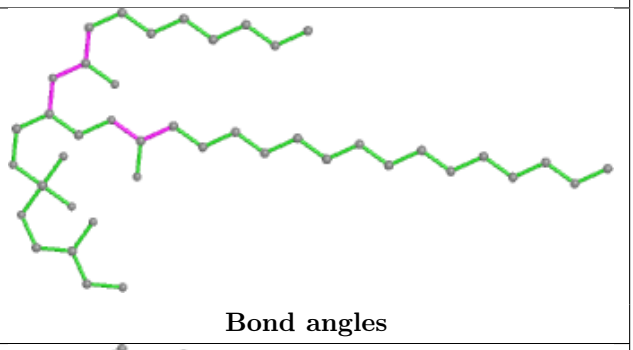
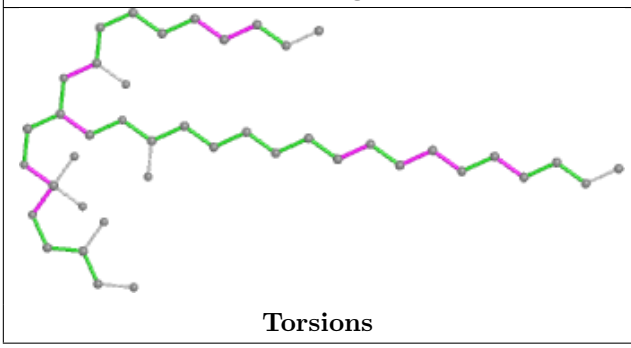


Bond angles



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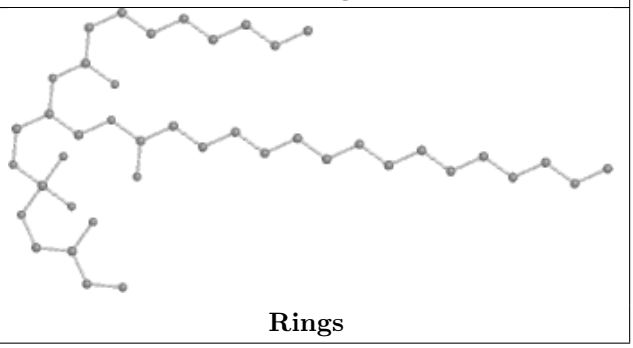
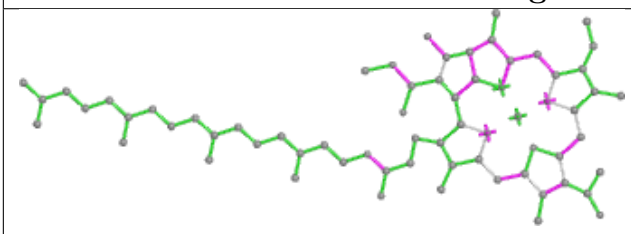


Rings

Ligand BCL 5 102



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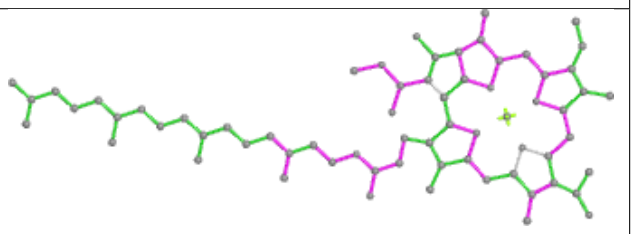
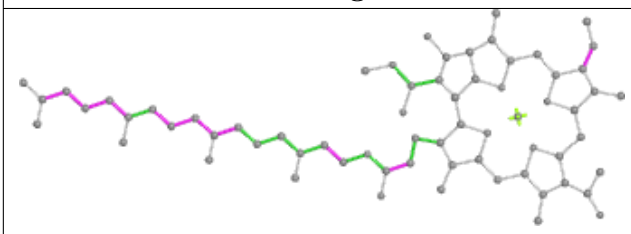


Bond angles



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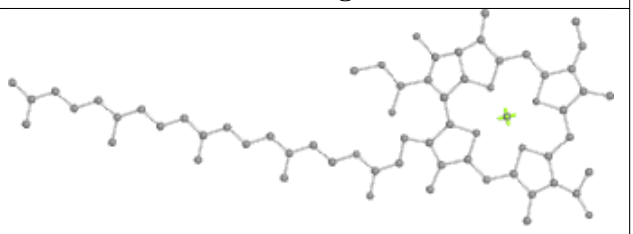
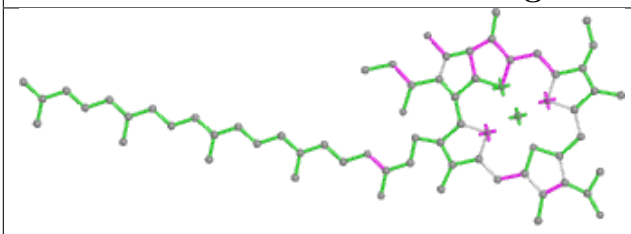
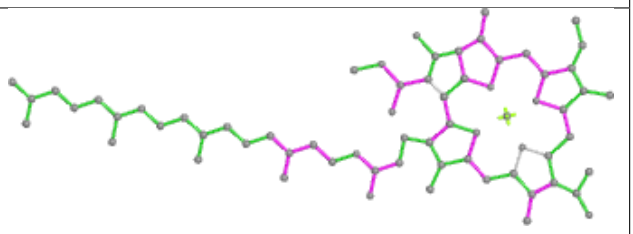


Rings

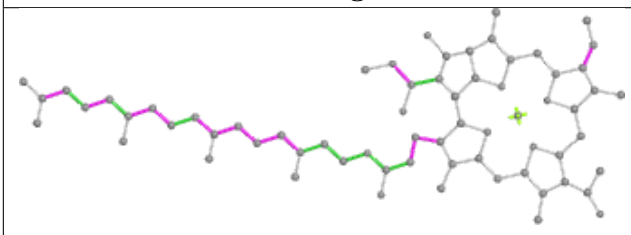
Ligand BCL D 101



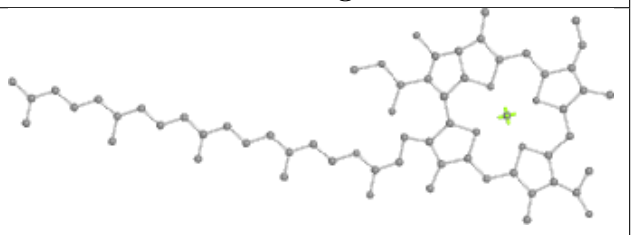
Bond lengths



Bond angles

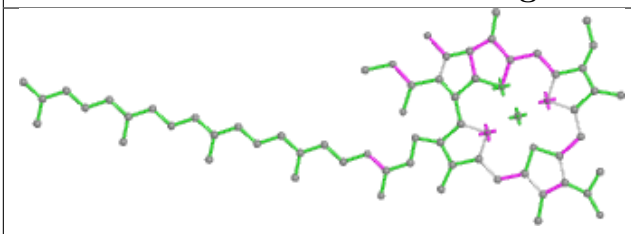


Torsions

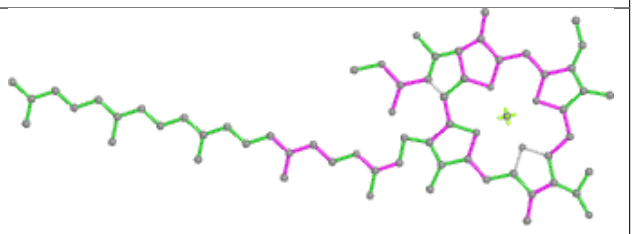


Rings

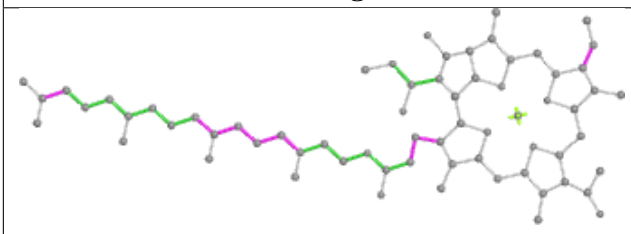
Ligand BCL W 101



Bond lengths



Bond angles



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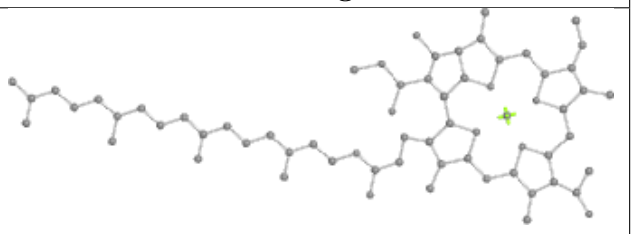
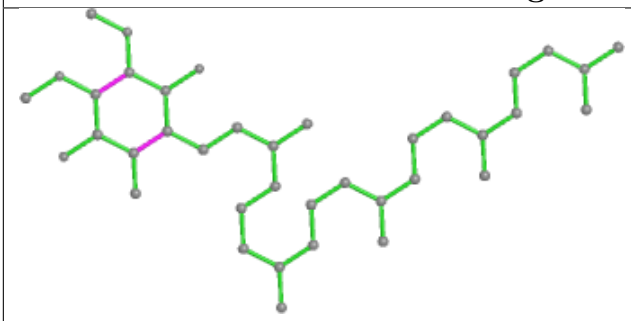


Rings

Ligand UQ8 L 306



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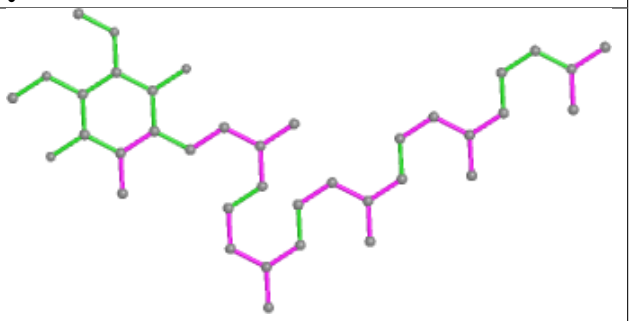
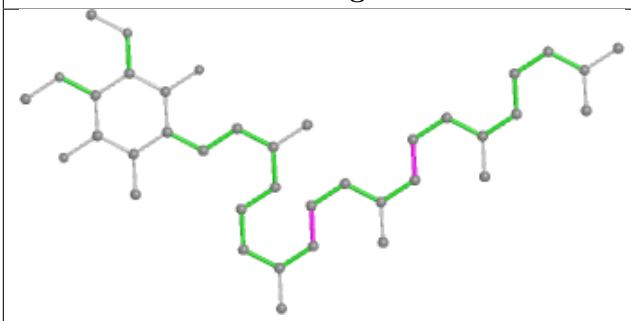


Bond angles



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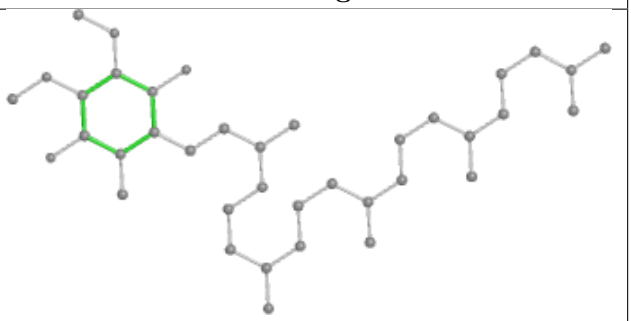
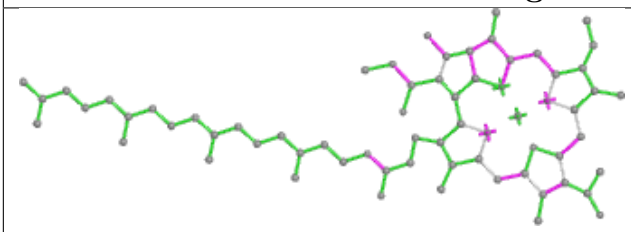


Rings

Ligand BCL T 101



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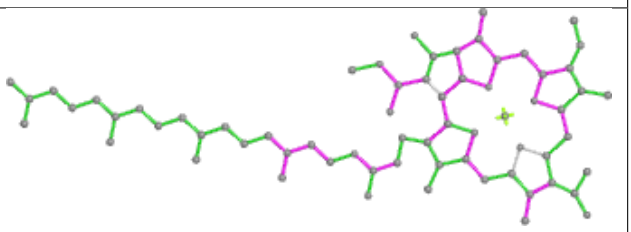
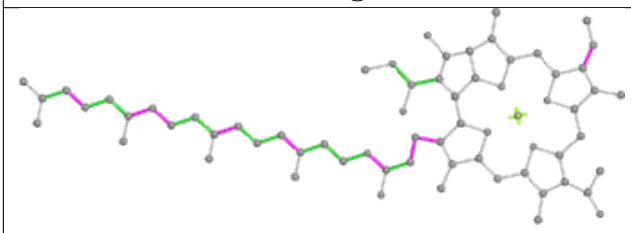
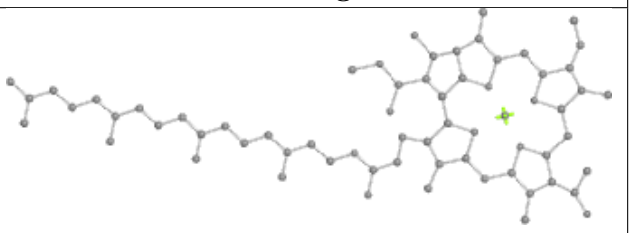


Bond angles

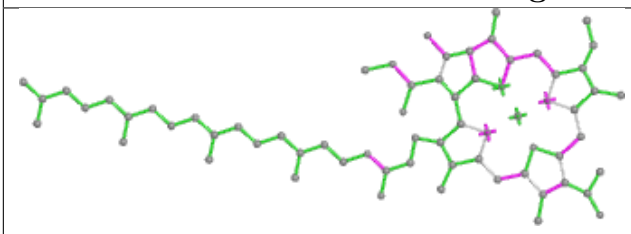


Torsions

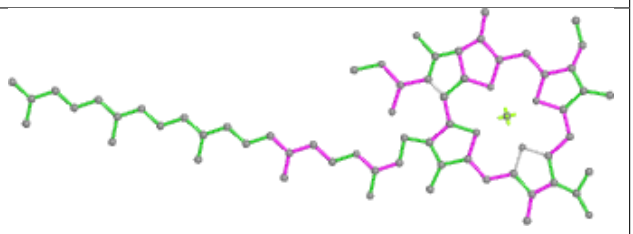


Rings

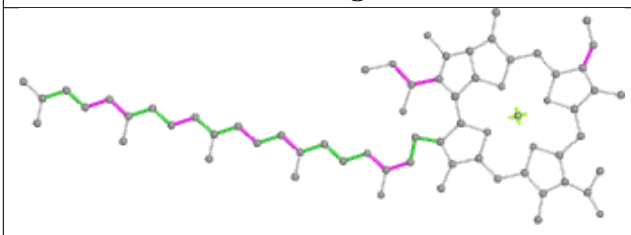
Ligand BCL 5 103



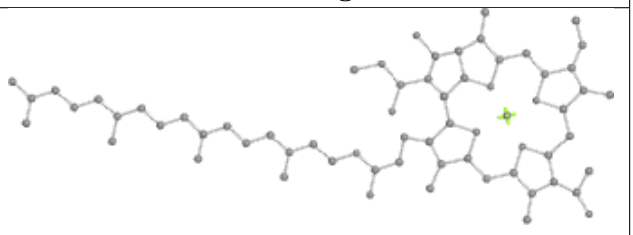
Bond lengths



Bond angles

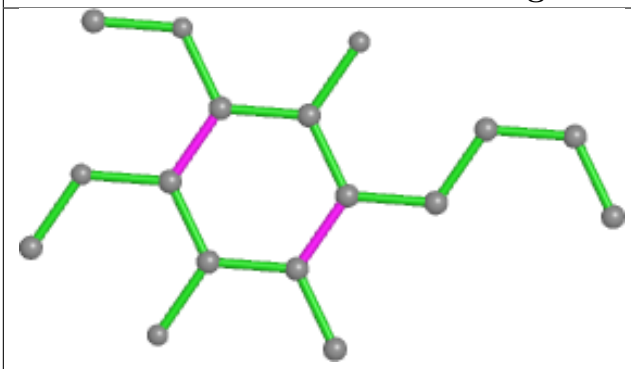


Torsions

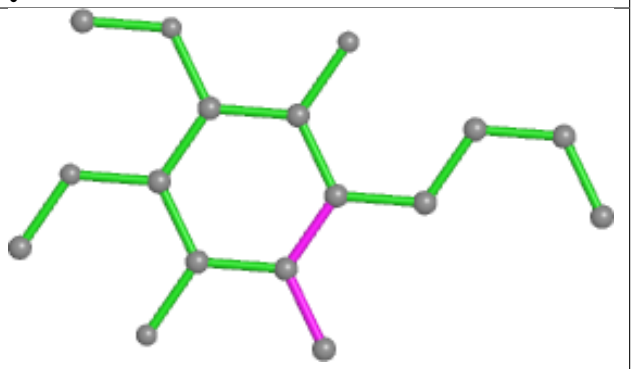


Rings

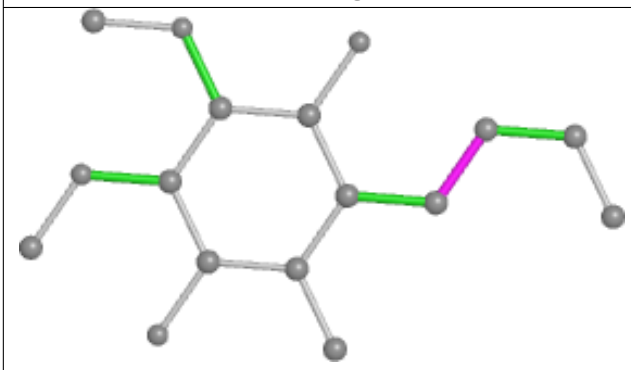
Ligand UQ8 L 307



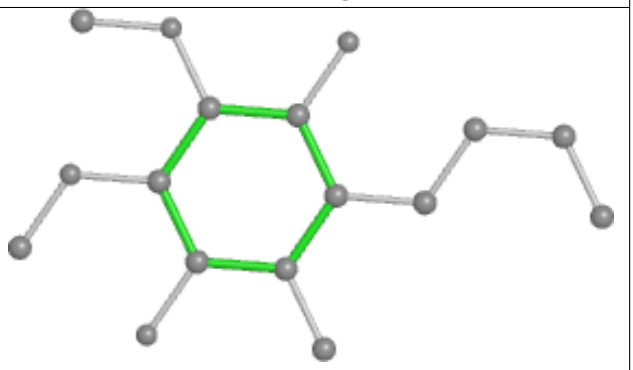
Bond lengths



Bond angles

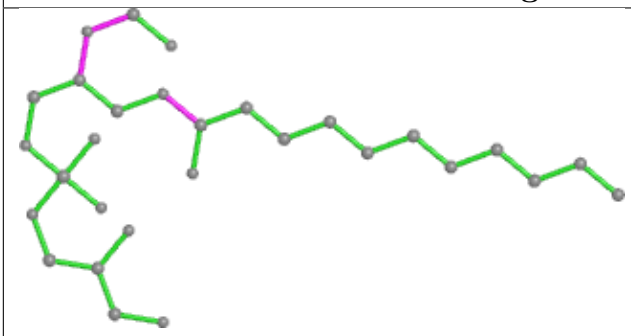


Torsions

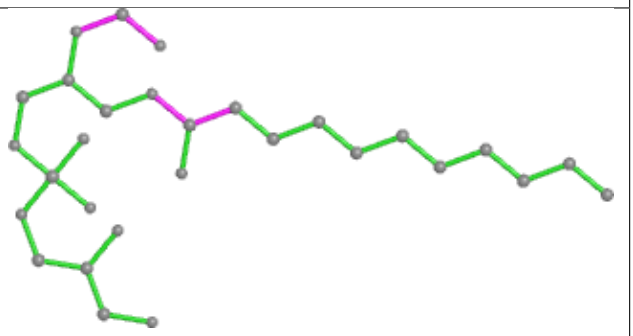


Rings

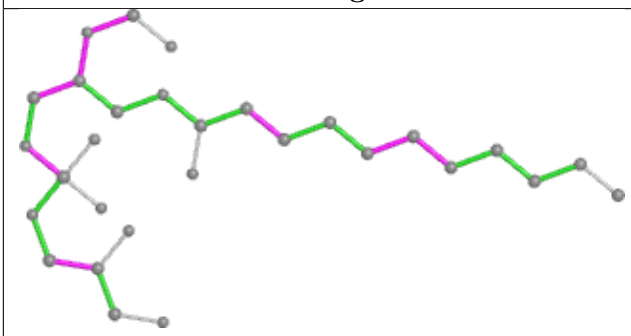
Ligand PGV V 101



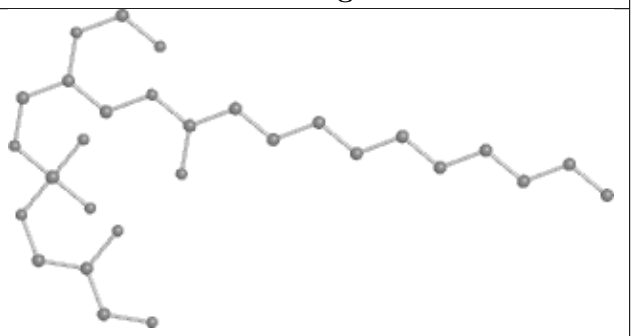
Bond lengths



Bond angles

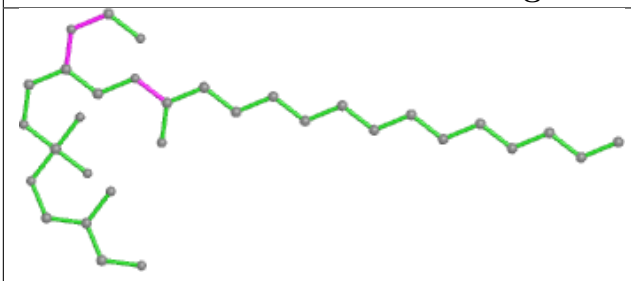


Torsions

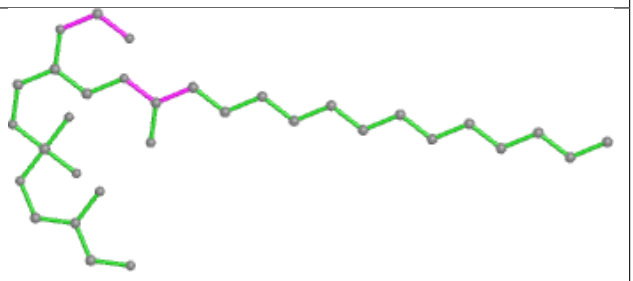


Rings

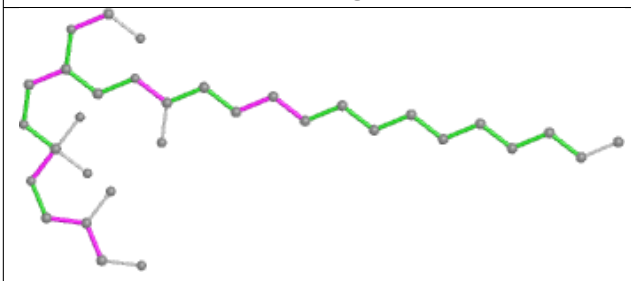
Ligand PGV Z 104



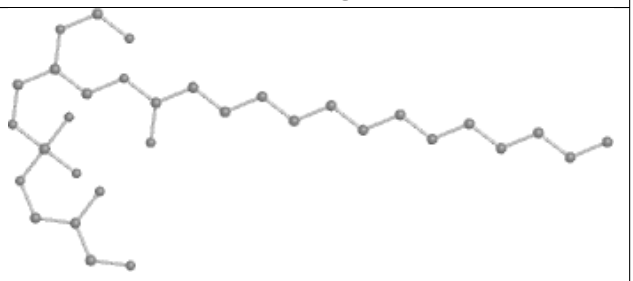
Bond lengths



Bond angles

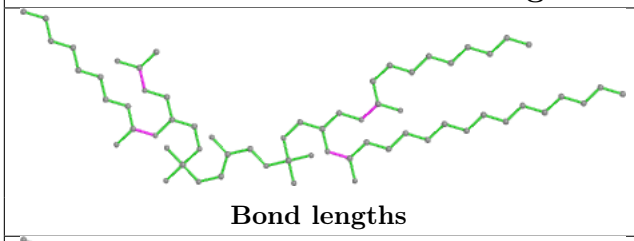


Torsions

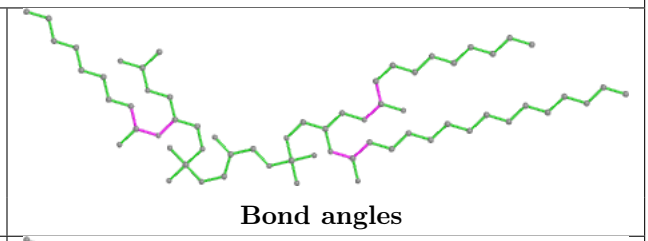


Rings

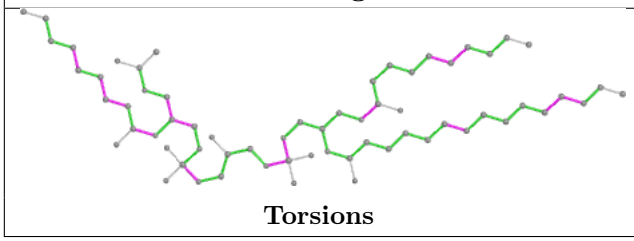
Ligand CDL F 101



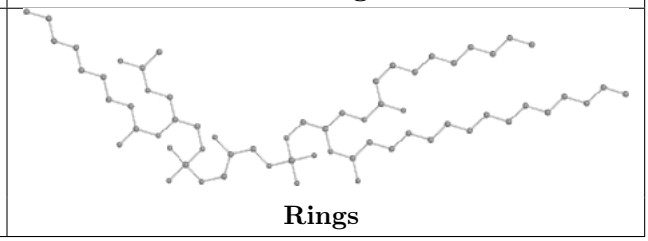
Bond lengths



Bond angles

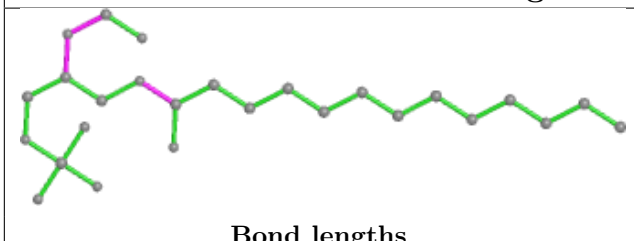


Torsions

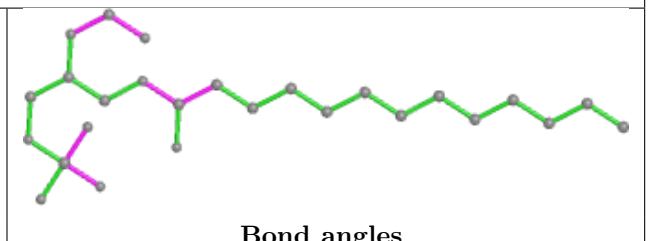


Rings

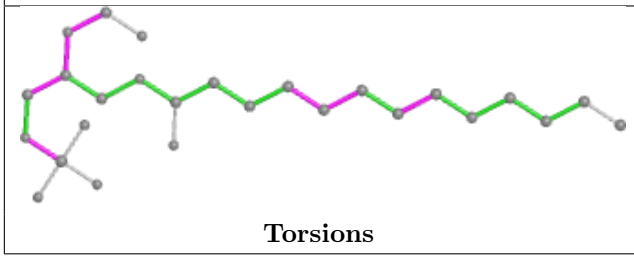
Ligand PGV 2 102



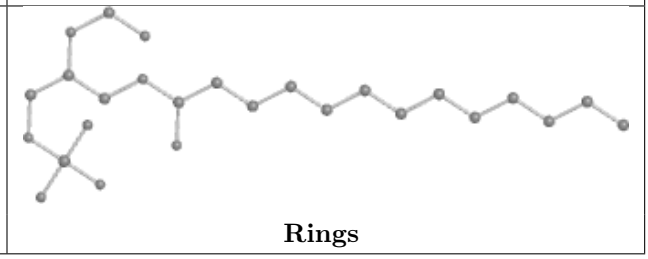
Bond lengths



Bond angles

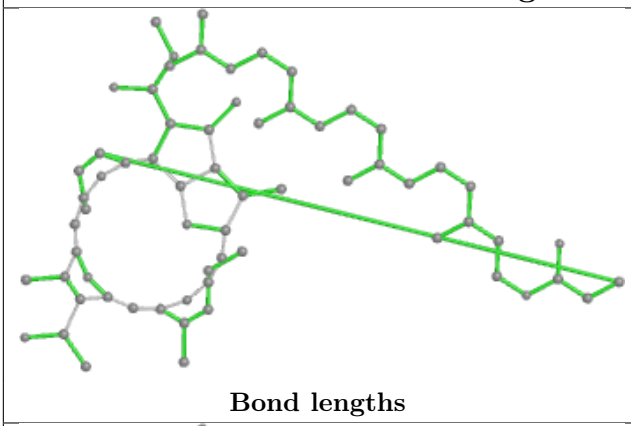


Torsions

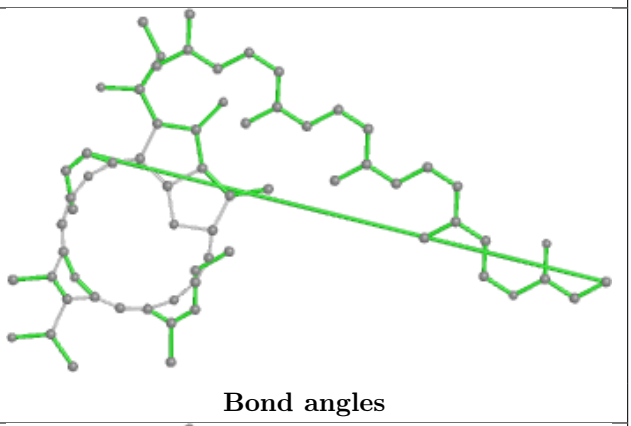


Rings

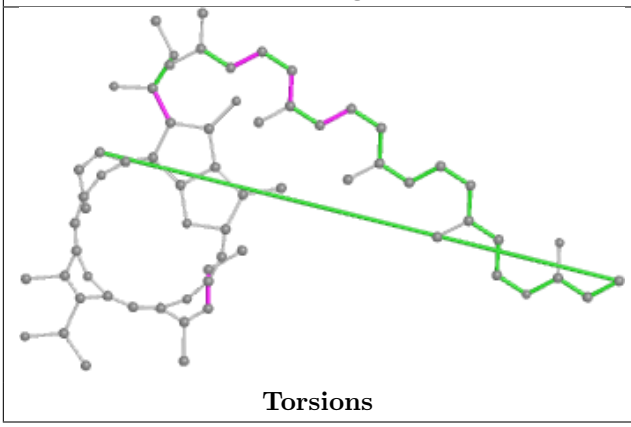
Ligand BPH M 404



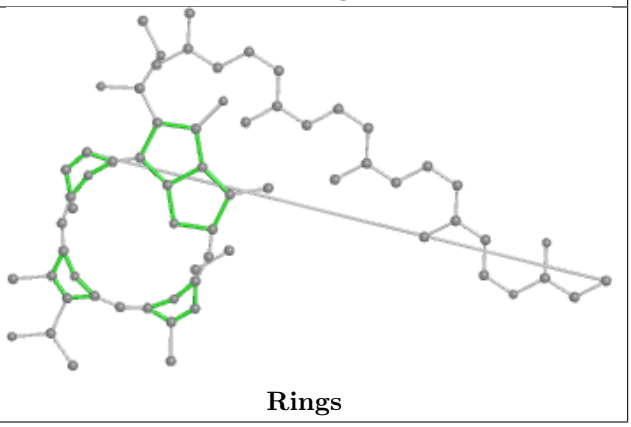
Bond lengths



Bond angles

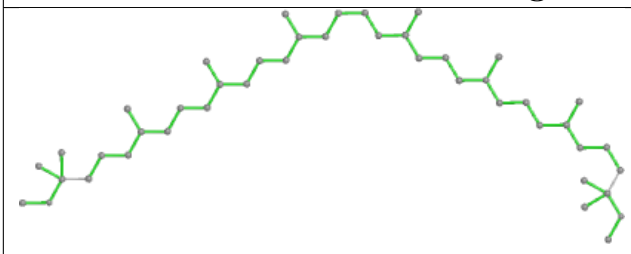


Torsions

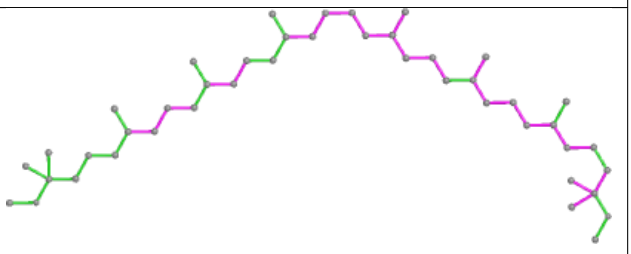


Rings

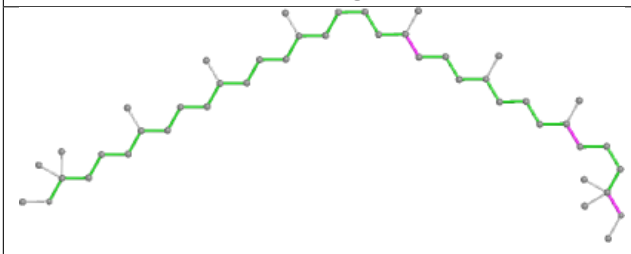
Ligand CRT 4 101



Bond lengths



Bond angles



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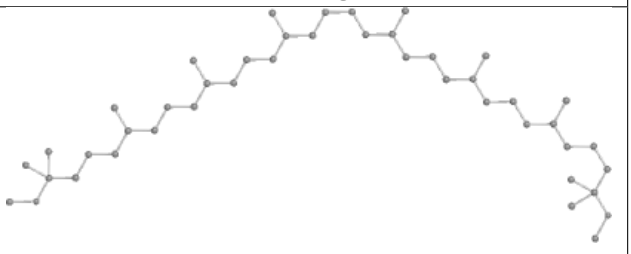
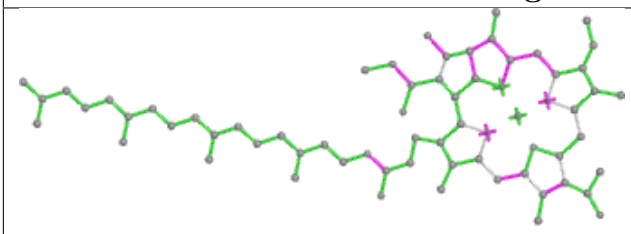


Rings

Ligand BCL A 101



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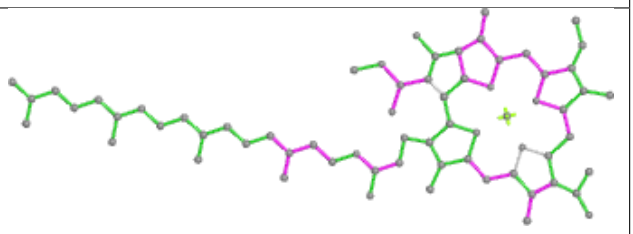
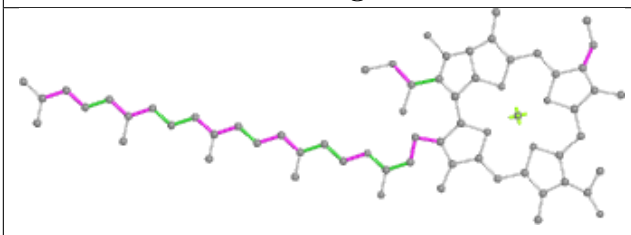
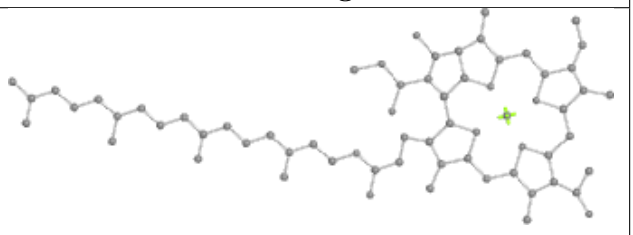


Bond angles

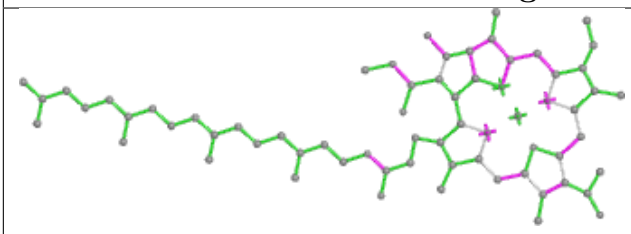


Torsions

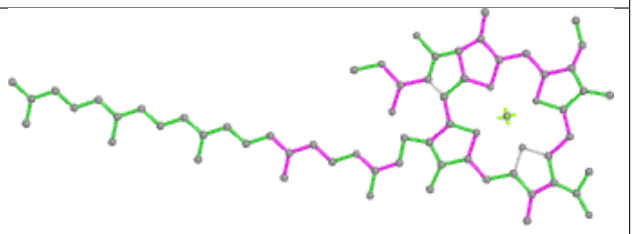


Rings

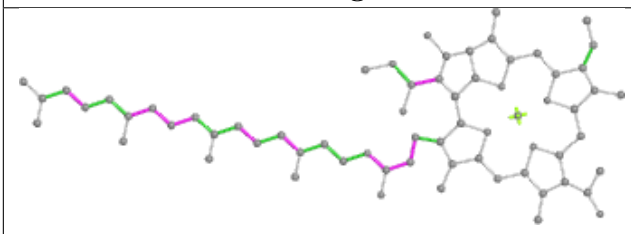
Ligand BCL W 102



Bond lengths



Bond angles



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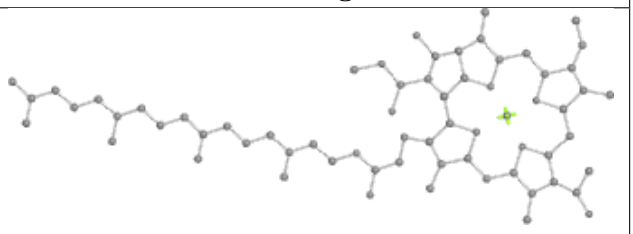
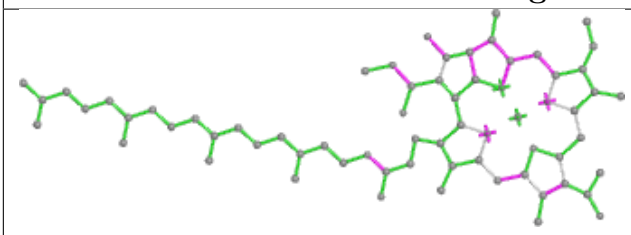
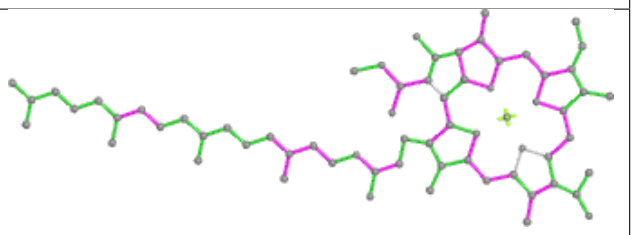


Rings

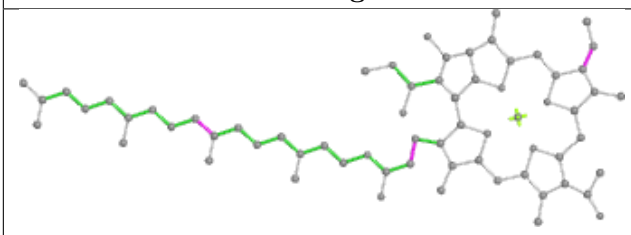
Ligand BCL 6 101



Bond lengths



Bond angles



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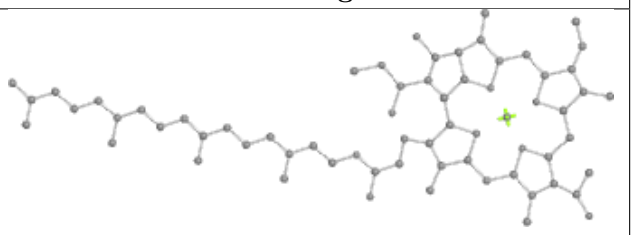
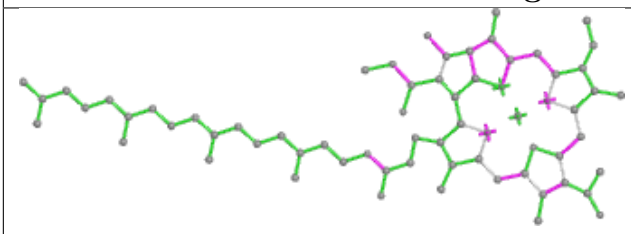
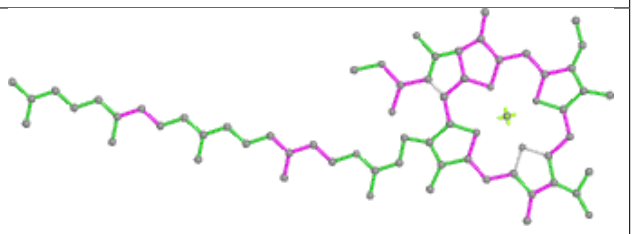


Rings

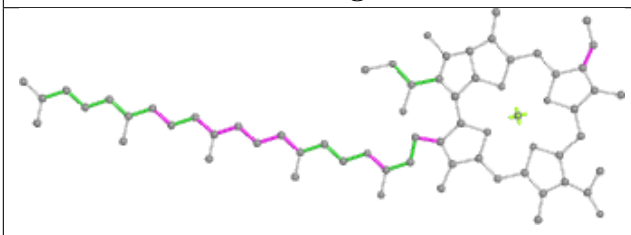
Ligand BCL N 103



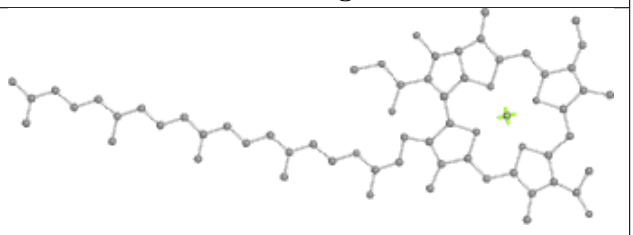
Bond lengths



Bond angles

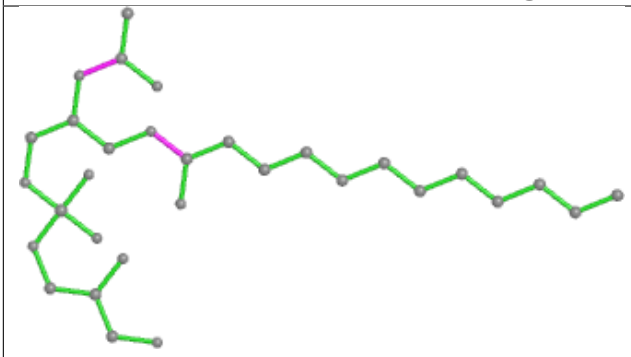


Torsions

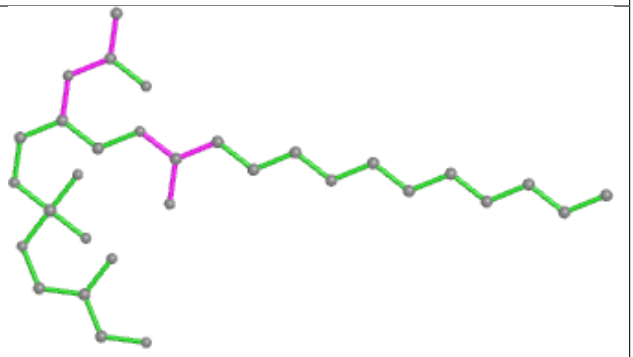


Rings

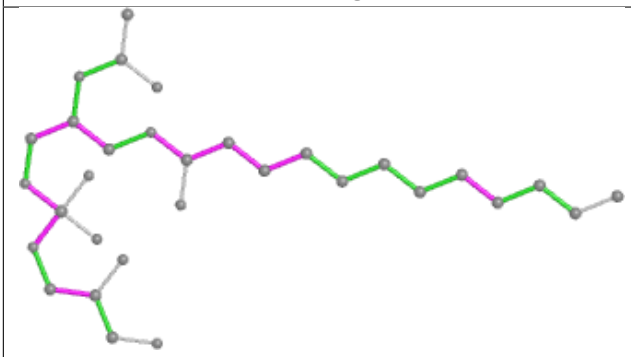
Ligand PGV N 104



Bond lengths



Bond angles



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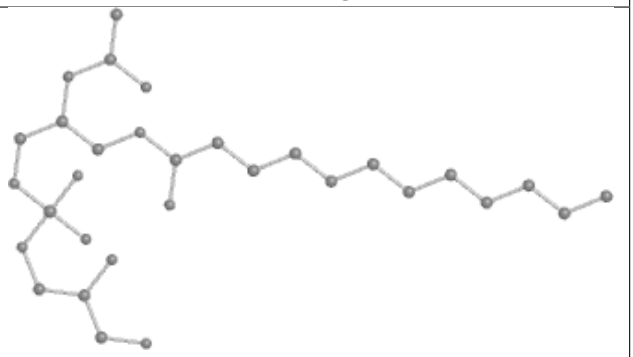
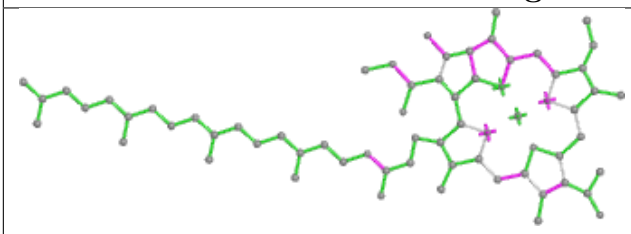
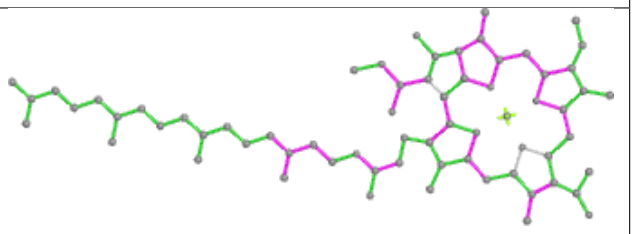


Rings

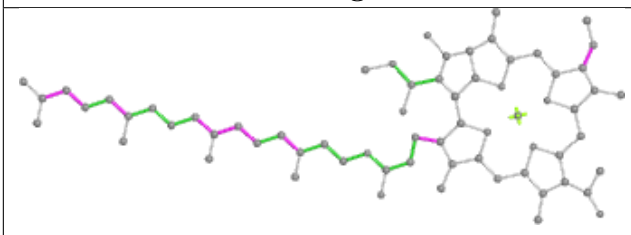
Ligand BCL R 102



Bond lengths



Bond angles



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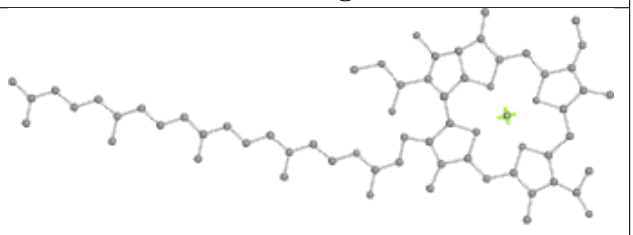
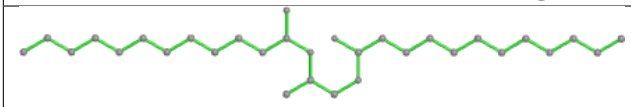
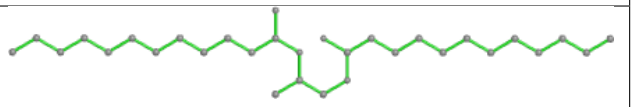


Rings

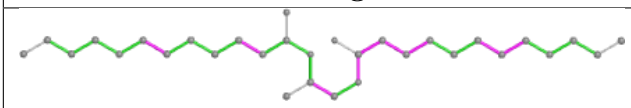
Ligand Z41 C 406



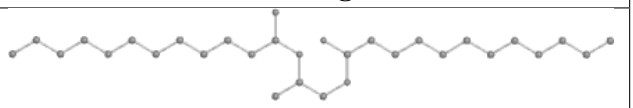
Bond lengths



Bond angles

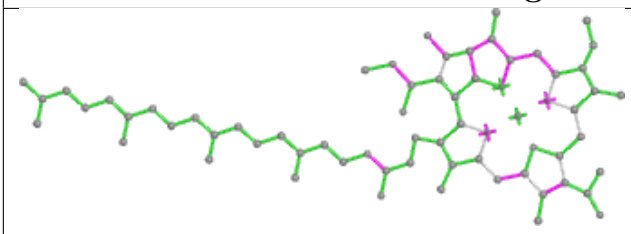


Torsions

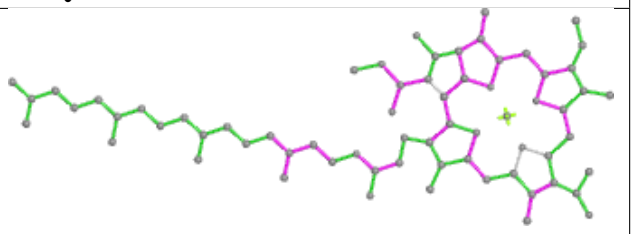


Rings

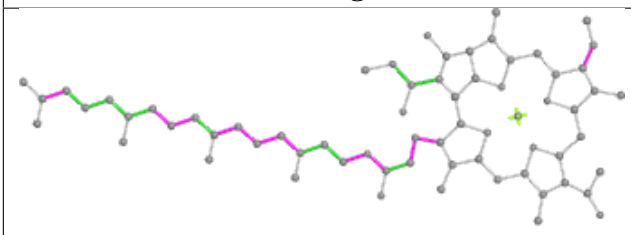
Ligand BCL Q 102



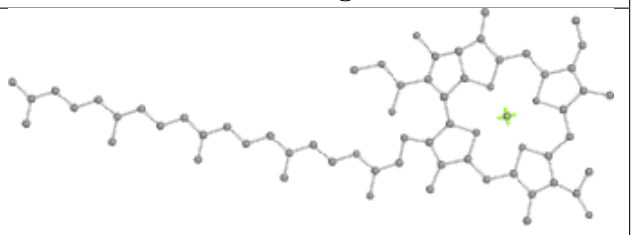
Bond lengths



Bond angles

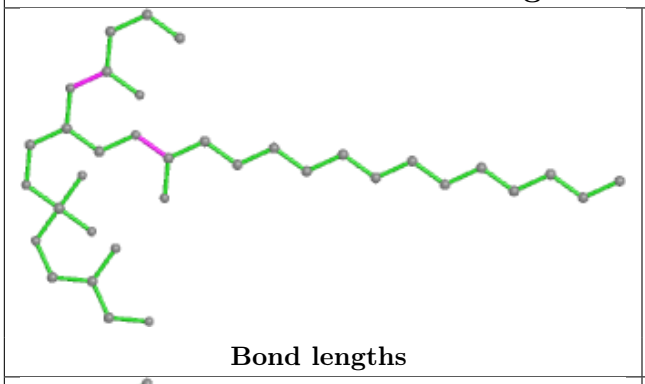


Torsions

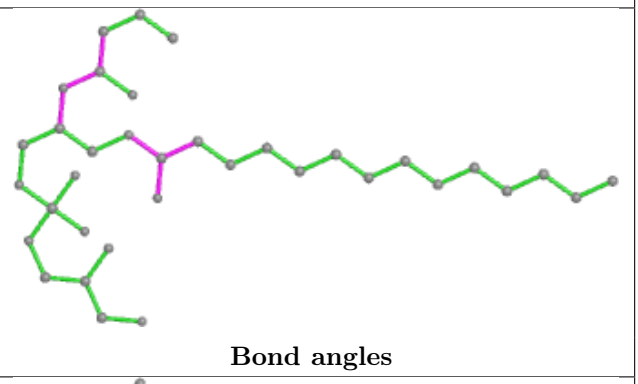


Rings

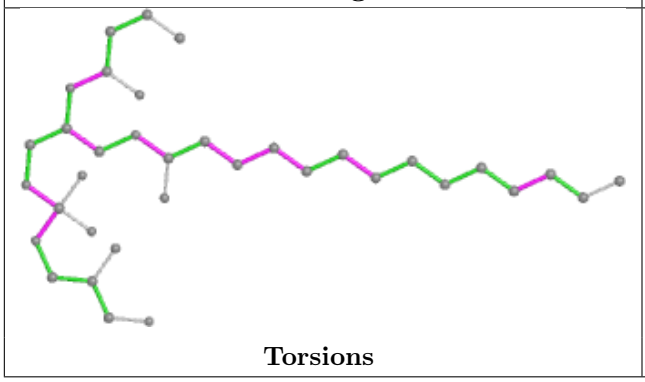
Ligand PGV E 102



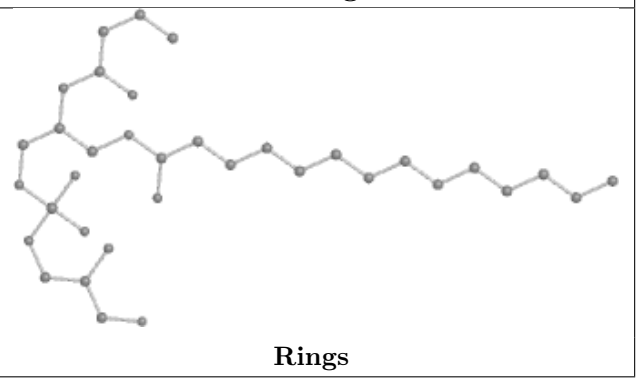
Bond lengths



Bond angles

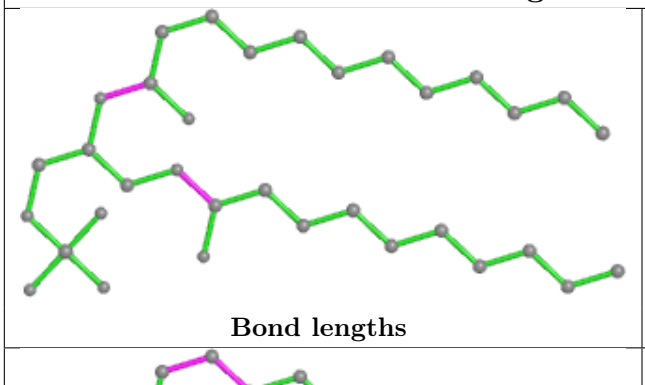


Torsions

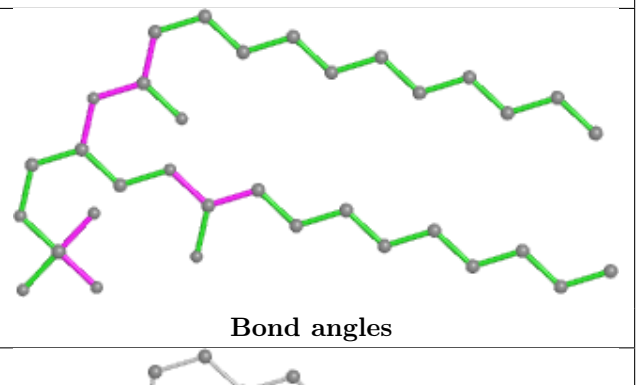


Rings

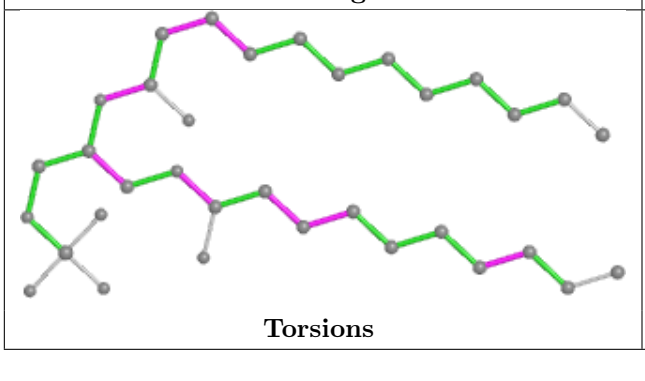
Ligand PGV 2 103



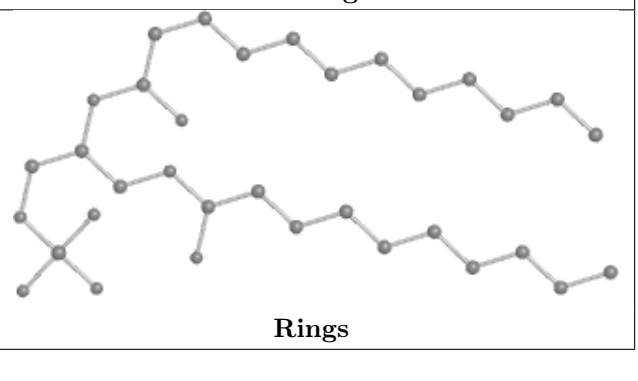
Bond lengths



Bond angles

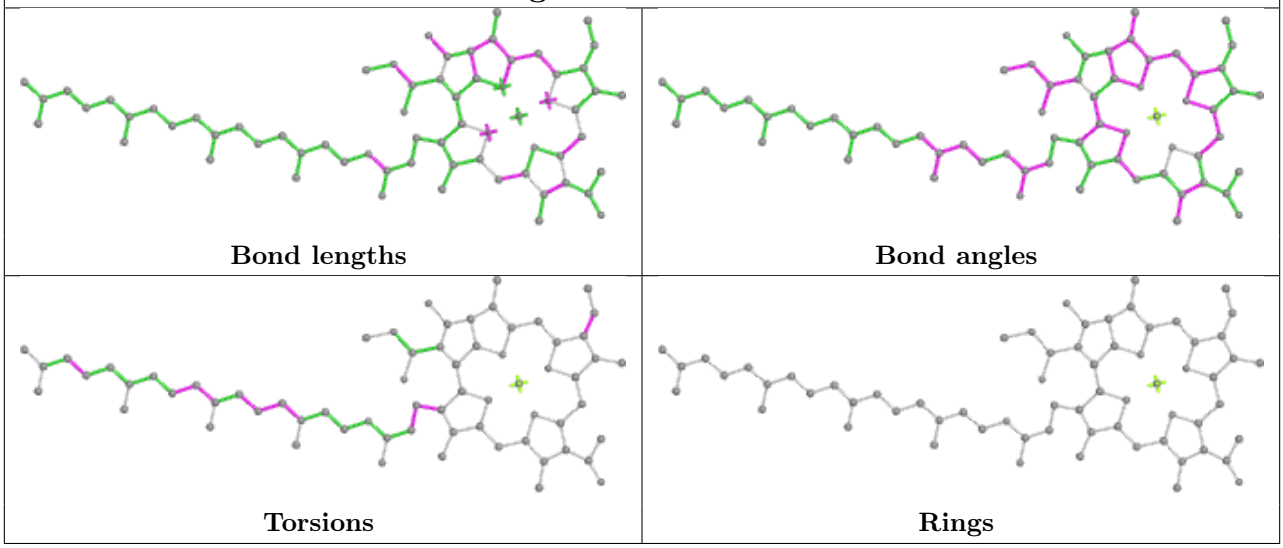


Torsions

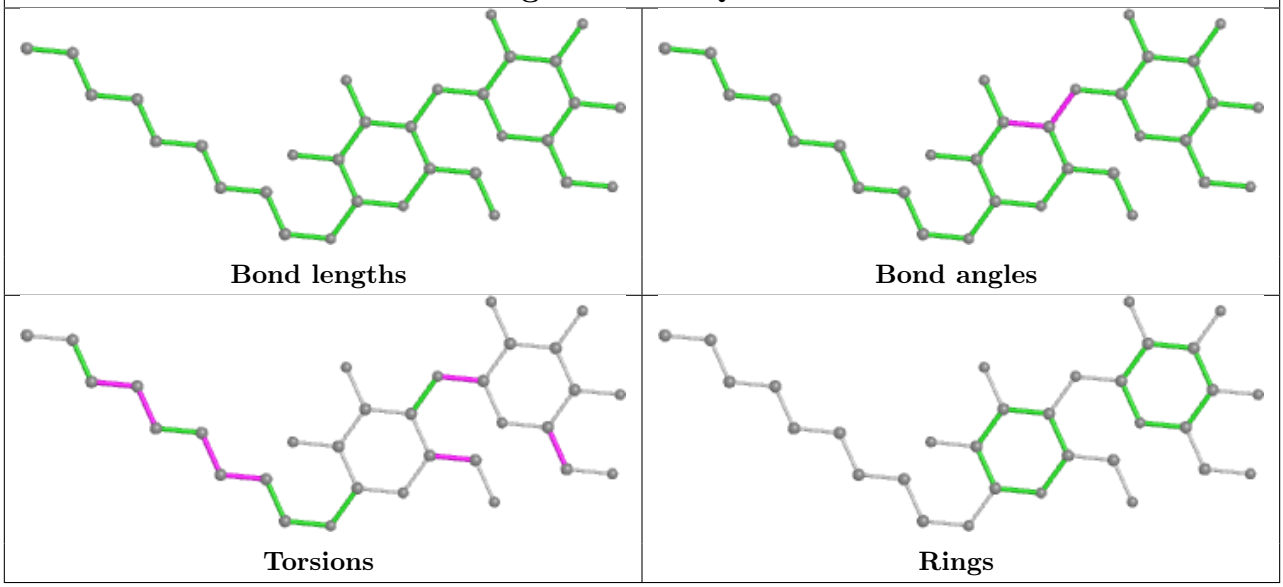


Rings

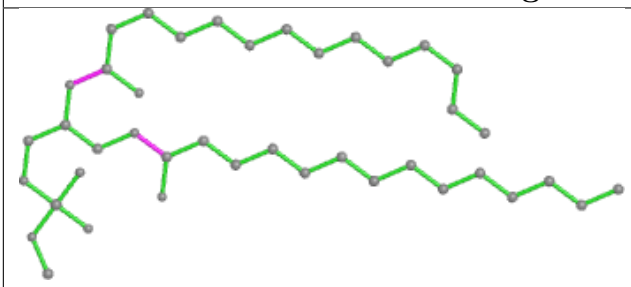
Ligand BCL S 101



Ligand LMT Q 101



Ligand PGV B 104



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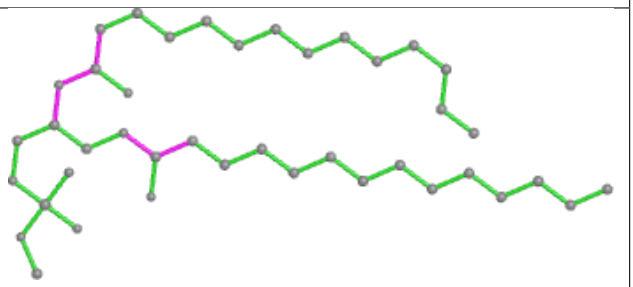
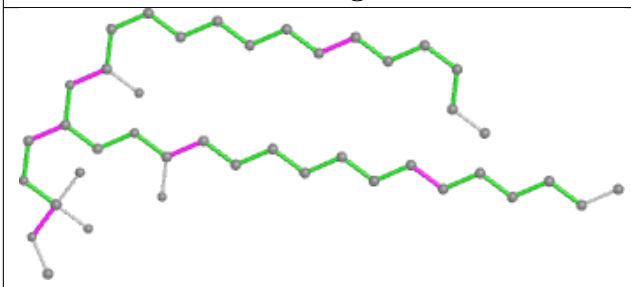


Bond angles



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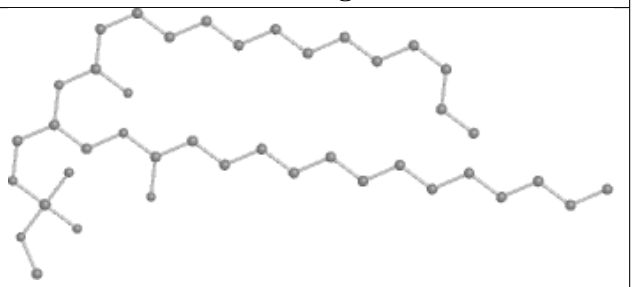
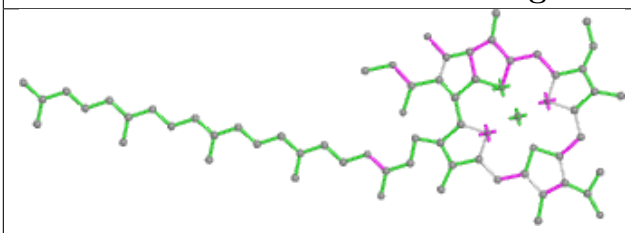


Rings

Ligand BCL 0 102



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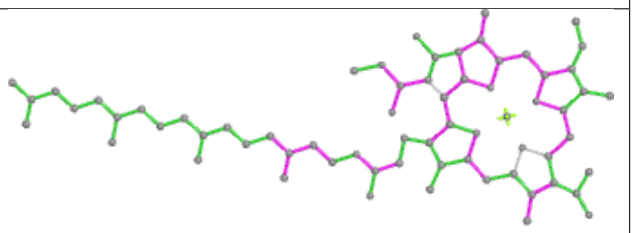
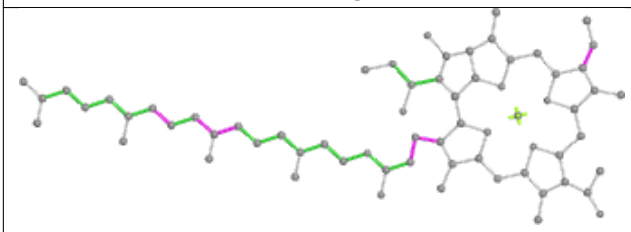


Bond angles



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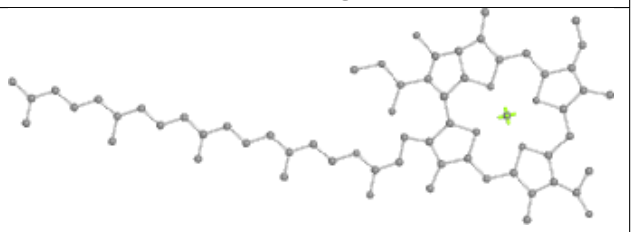
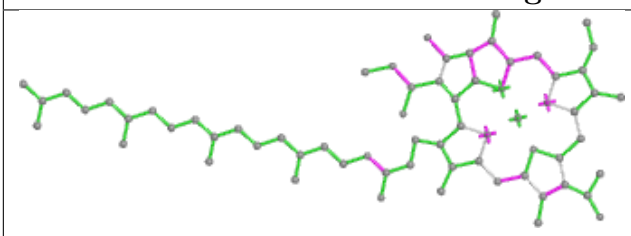
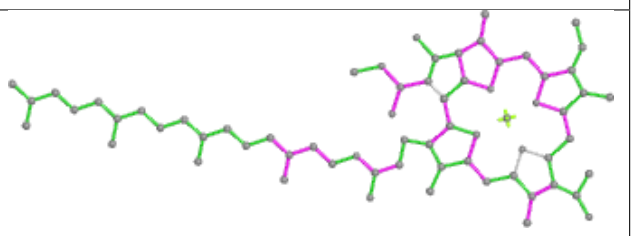


Rings

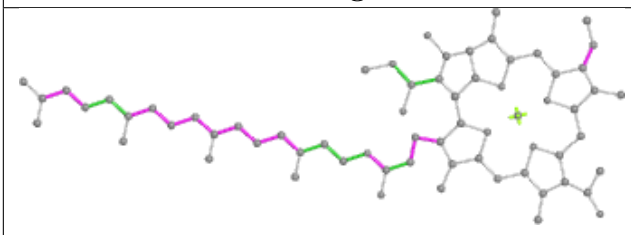
Ligand BCL U 102



Bond lengths



Bond angles



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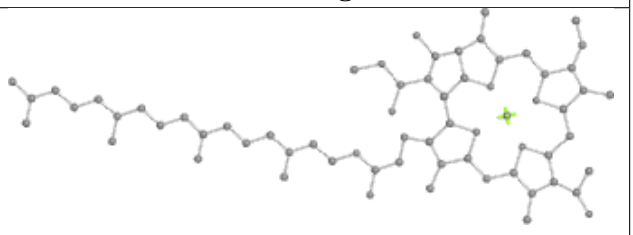
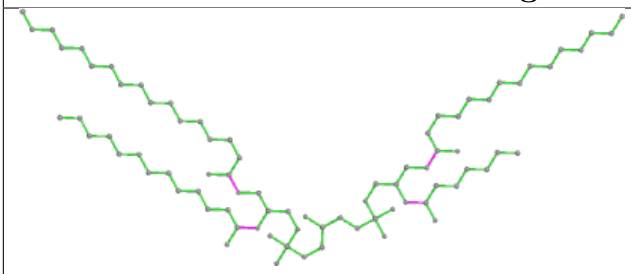
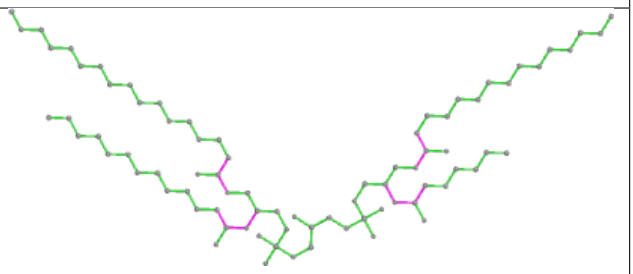


Rings

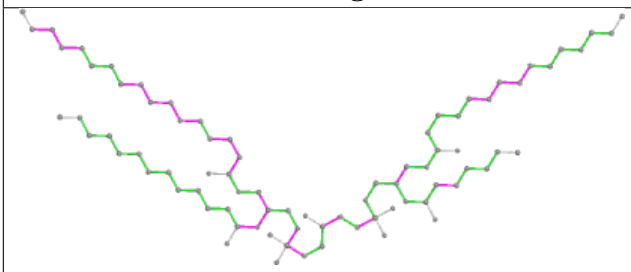
Ligand CDL M 407



Bond lengths



Bond angles



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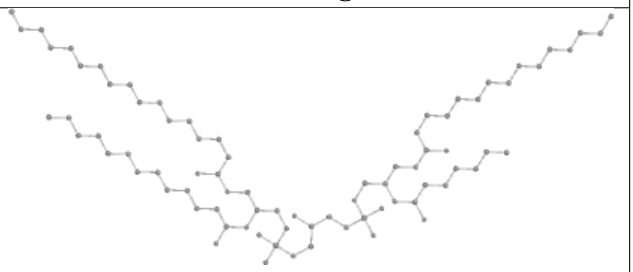
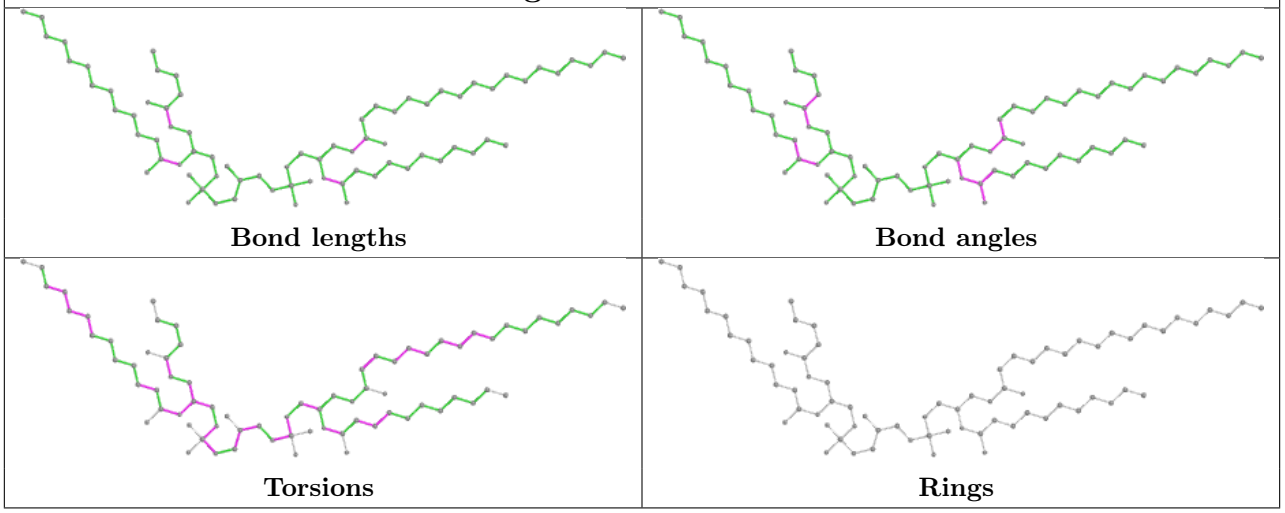
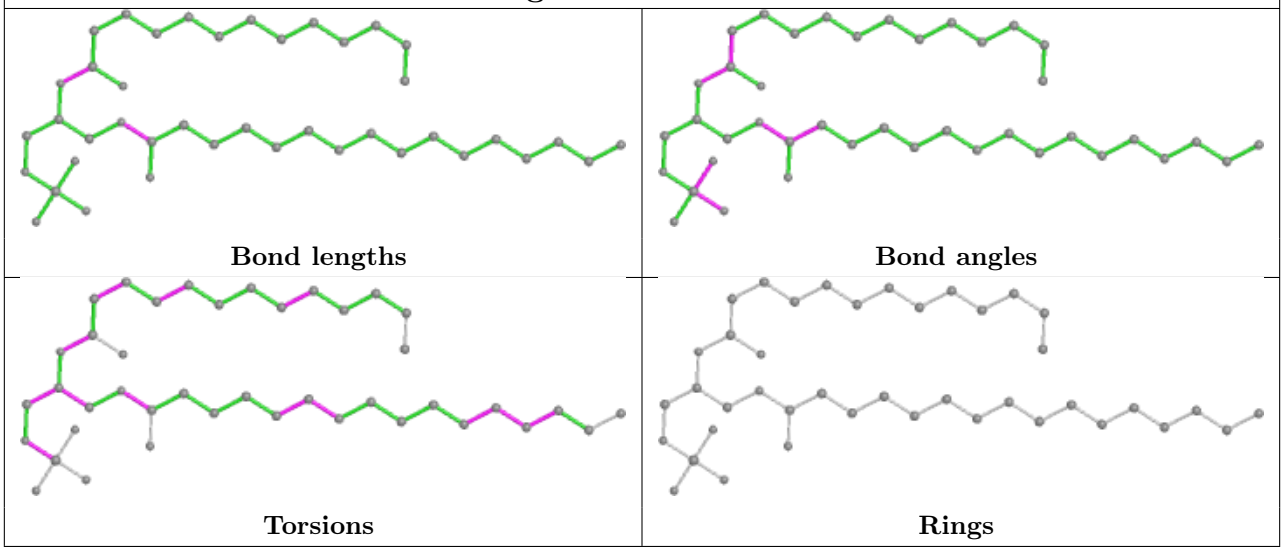


Rings

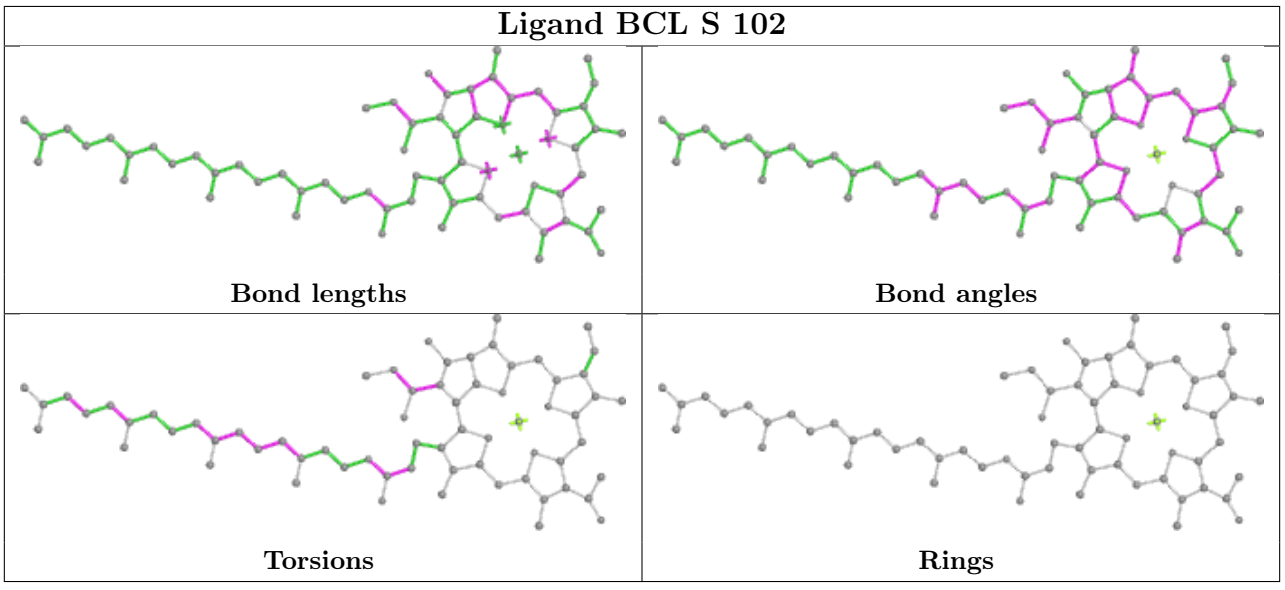
Ligand CDL H 302



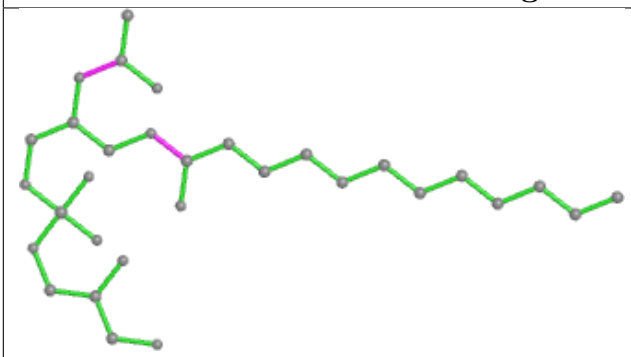
Ligand PGV 4 104



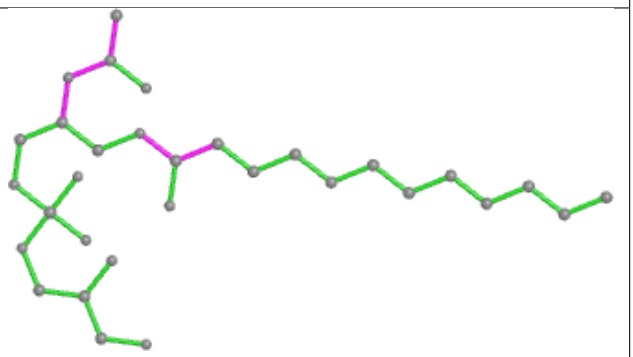
Ligand BCL S 102



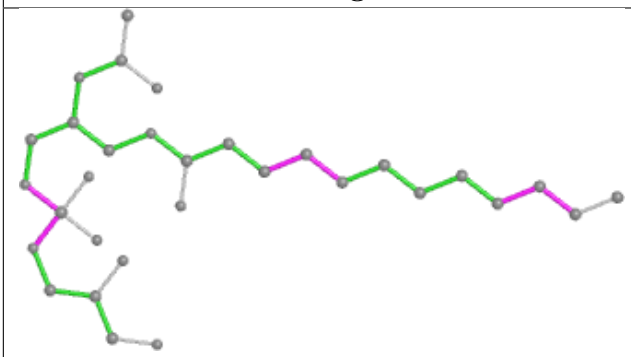
Ligand PGV V 104



Bond lengths



Bond angles



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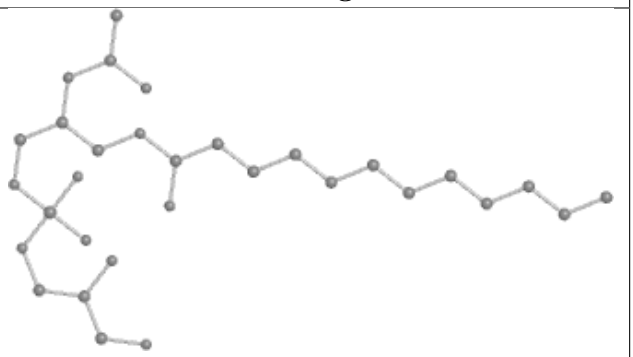
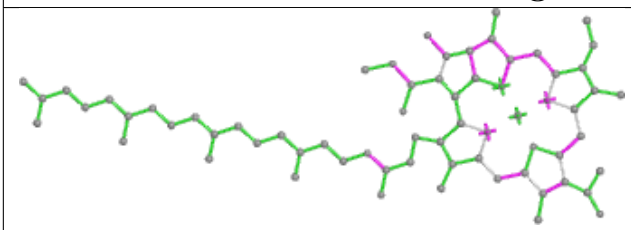


Rings

Ligand BCL 9 102



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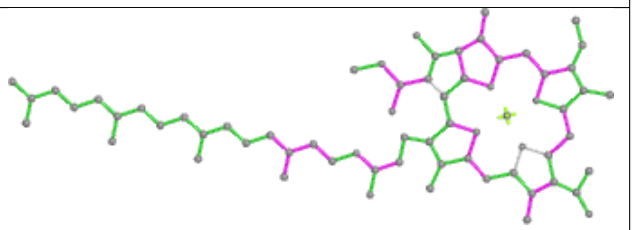
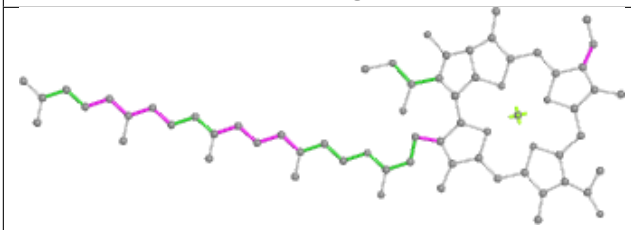
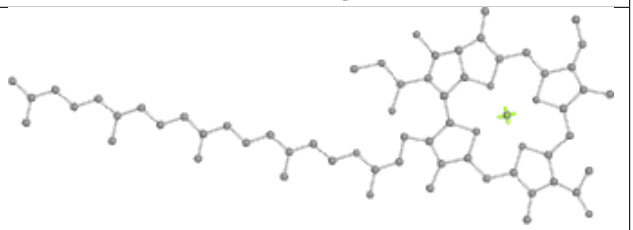


Bond angles

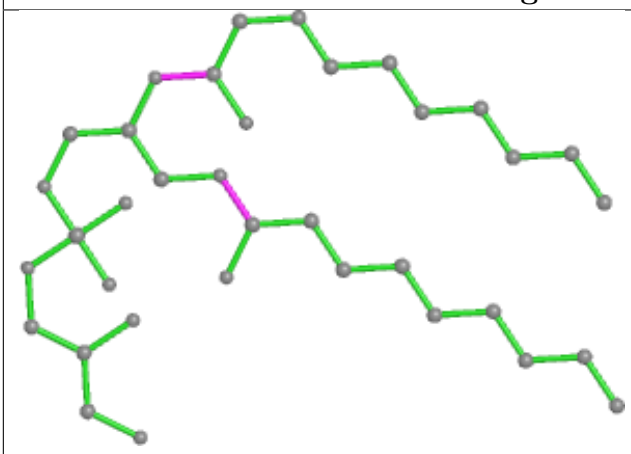


Torsions



Rings

Ligand PGV H 301



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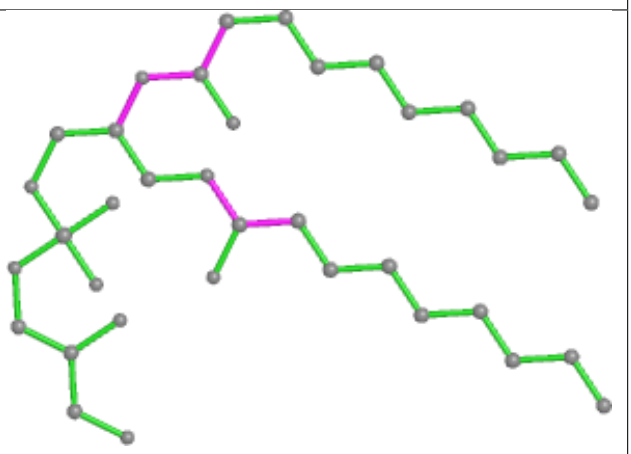
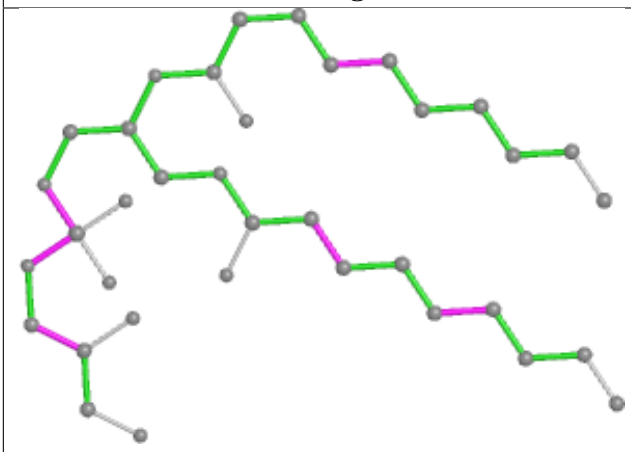
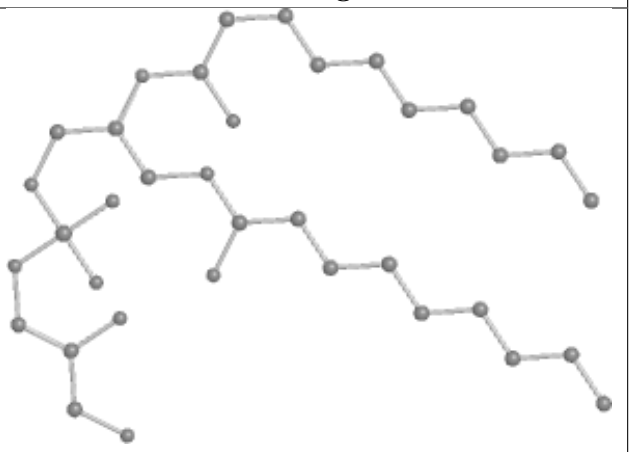


Bond angles

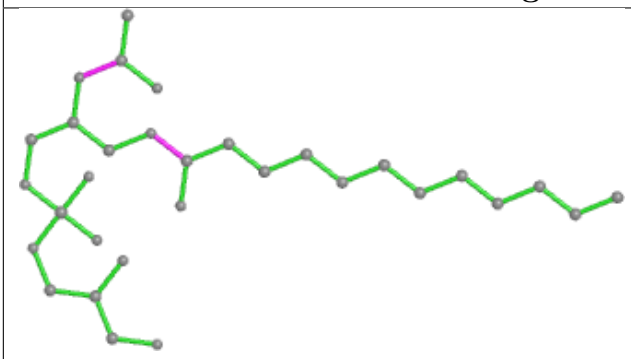


Torsions

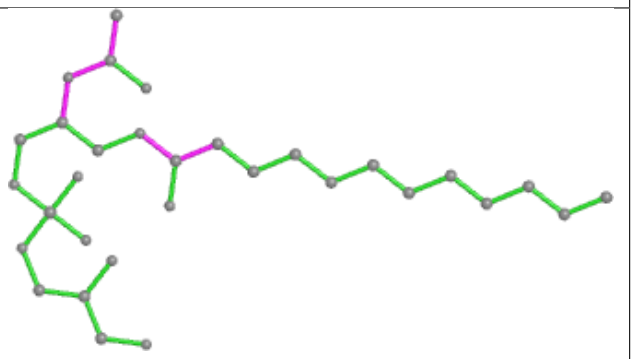


Rings

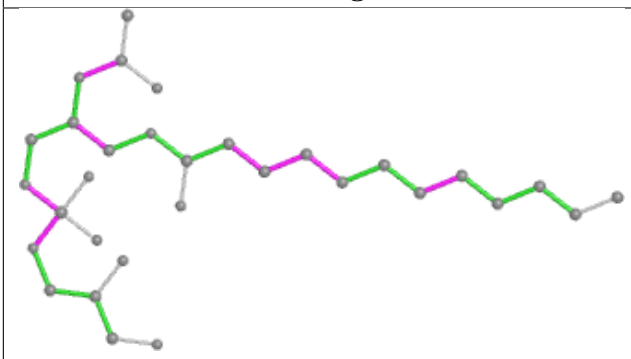
Ligand PGV B 103



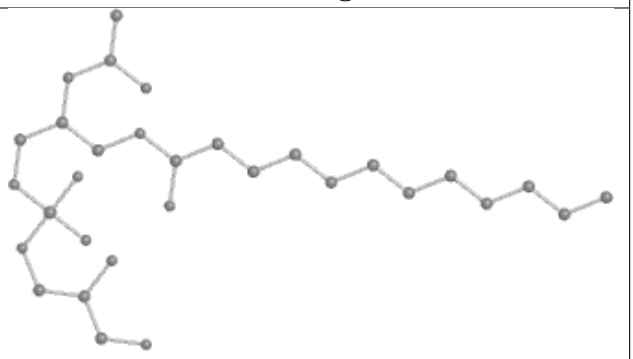
Bond lengths



Bond angles

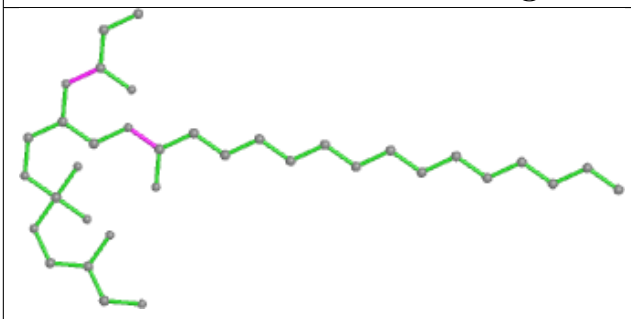


Torsions



Rings

Ligand PGV N 101



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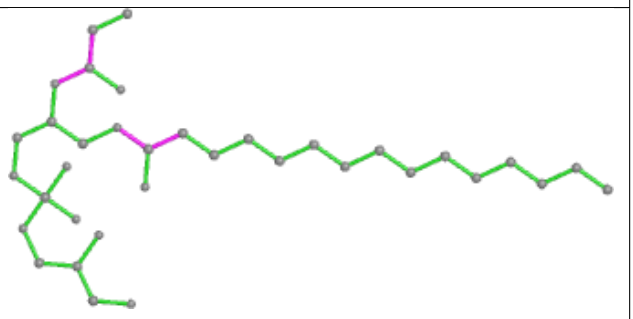
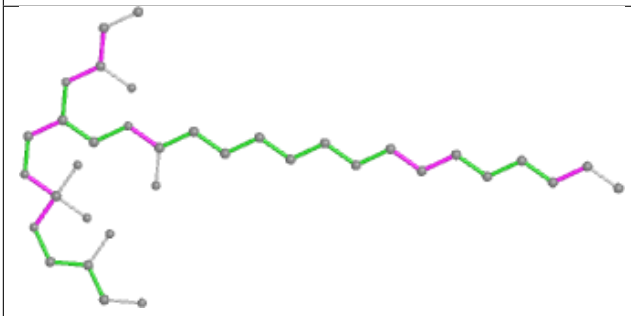


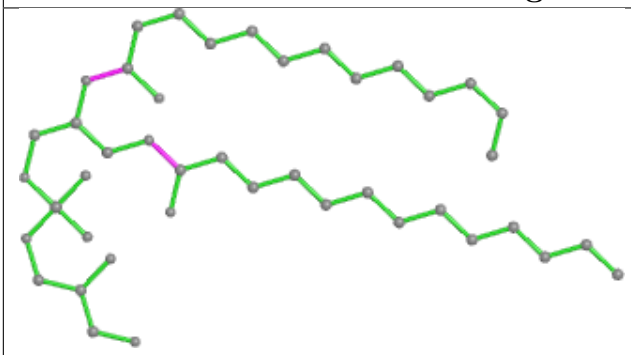
Bond angles



Torsions

Rings

Ligand PGV 8 104



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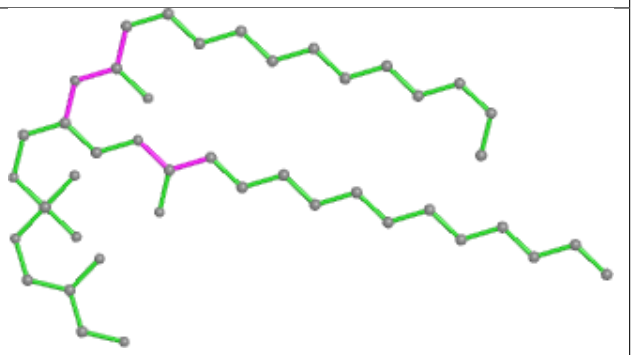
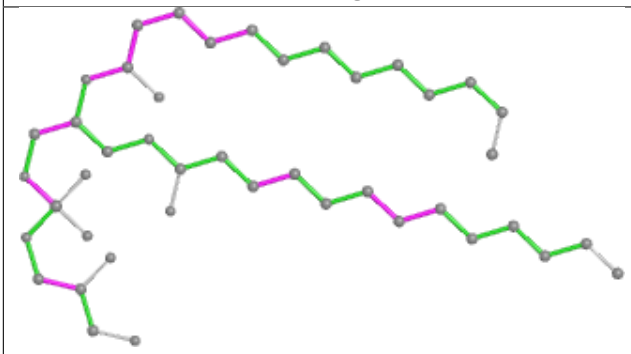


Bond angles



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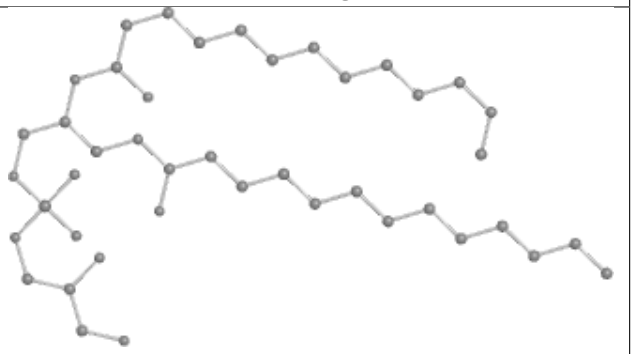
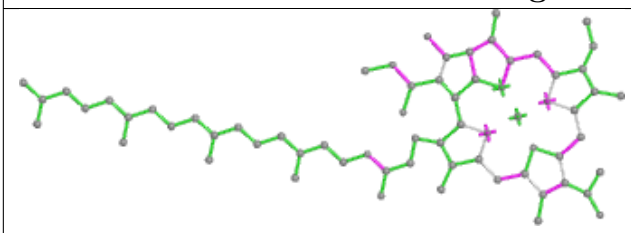


Rings

Ligand BCL 1 103



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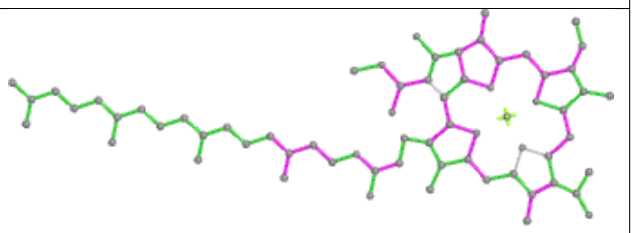

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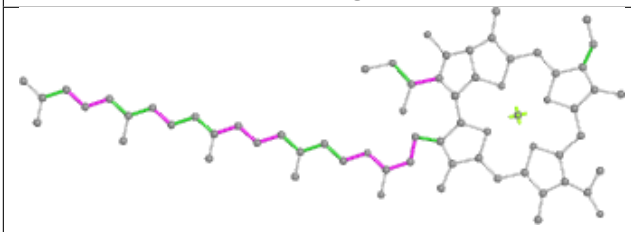
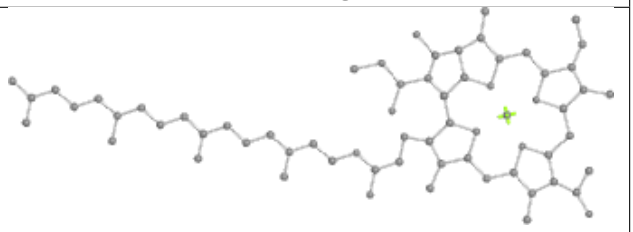
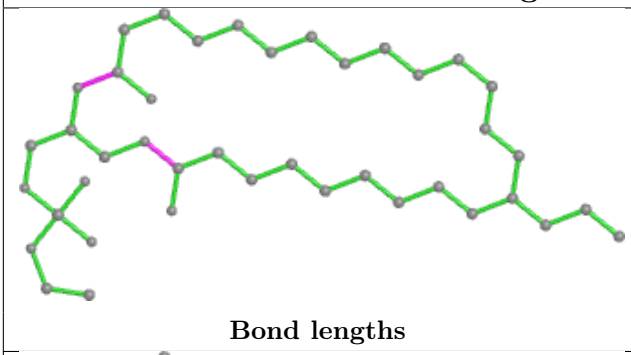


Torsions



Rings

Ligand PGV G 104



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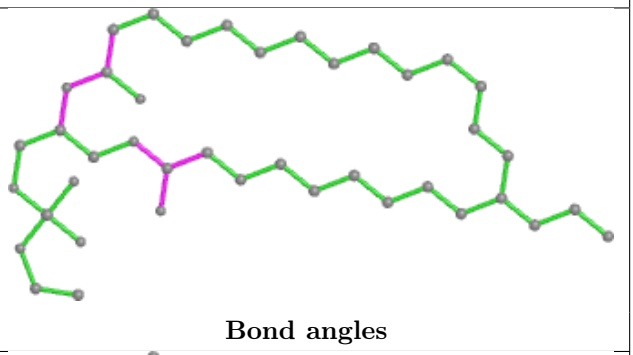
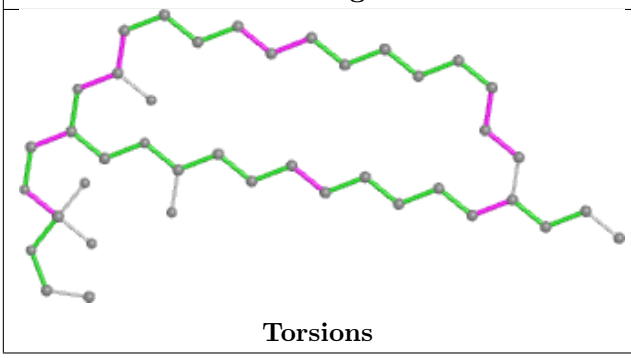
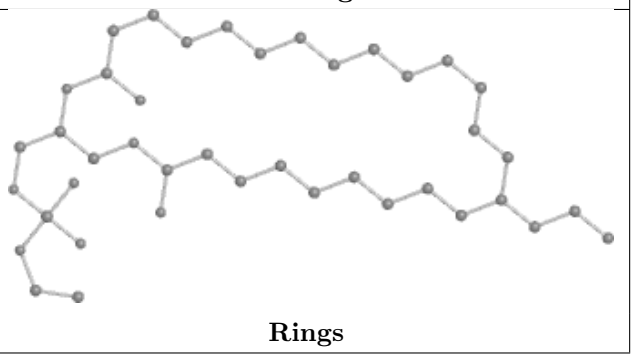


Bond angles

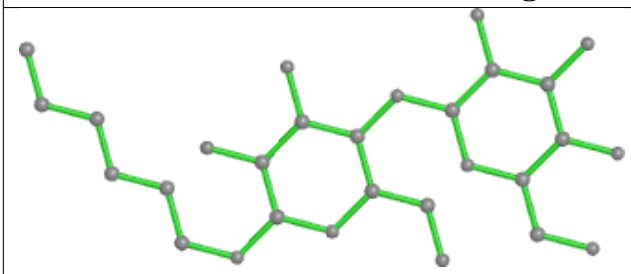


Torsions

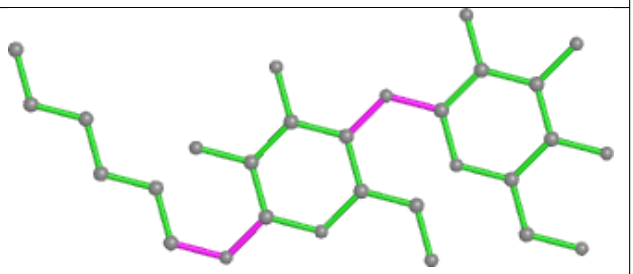


Rings

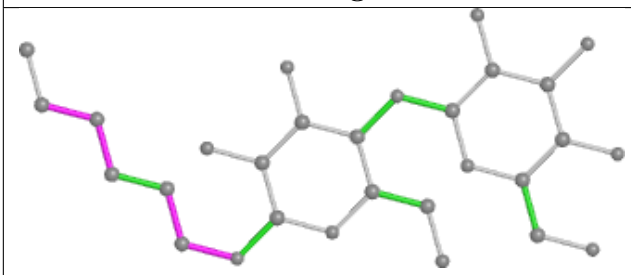
Ligand LMT O 101



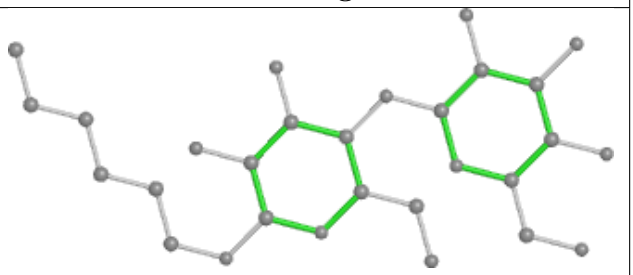
Bond lengths



Bond angles

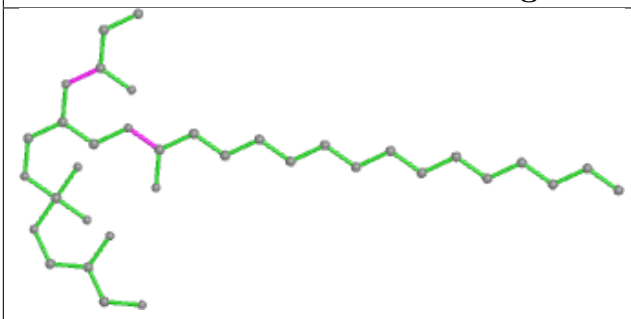


Torsions

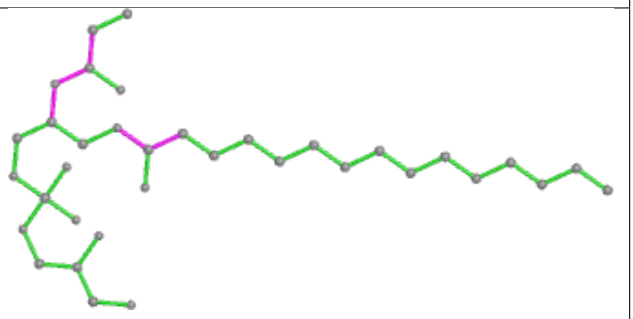


Rings

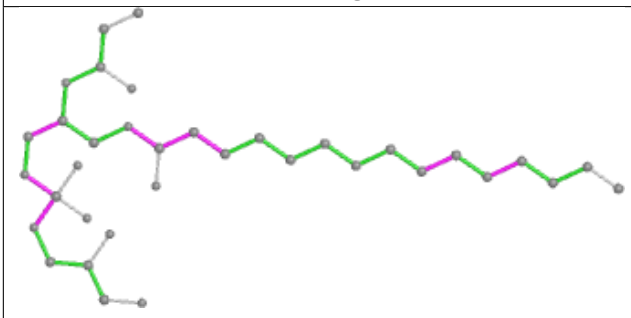
Ligand PGV G 103



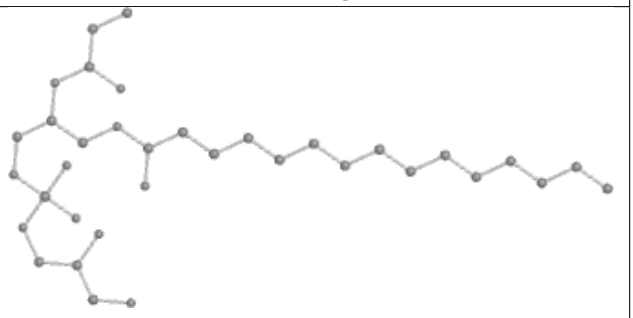
Bond lengths



Bond angles

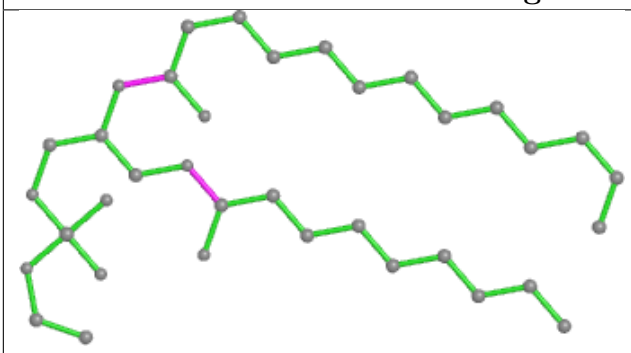


Torsions

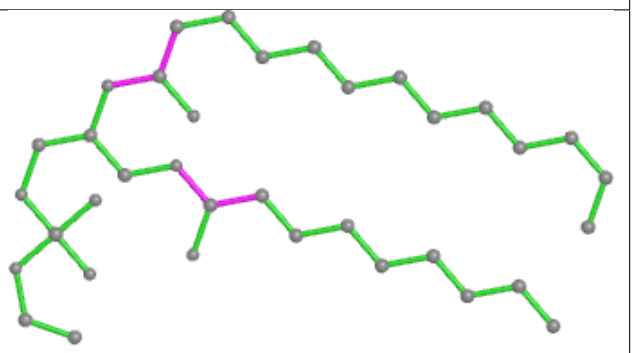


Rings

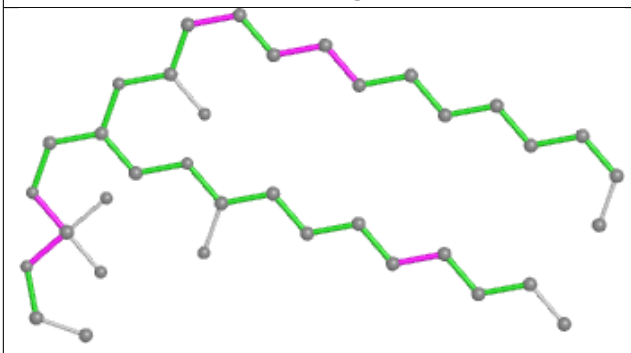
Ligand PGV L 308



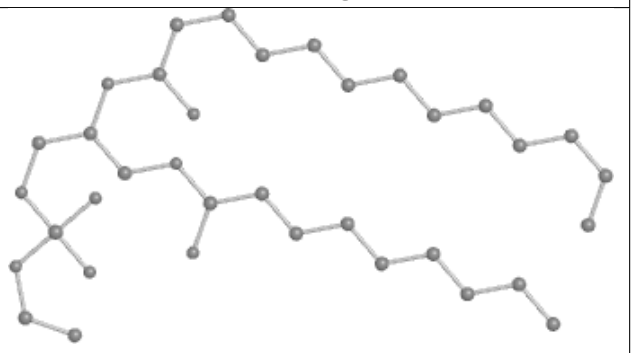
Bond lengths



Bond angles

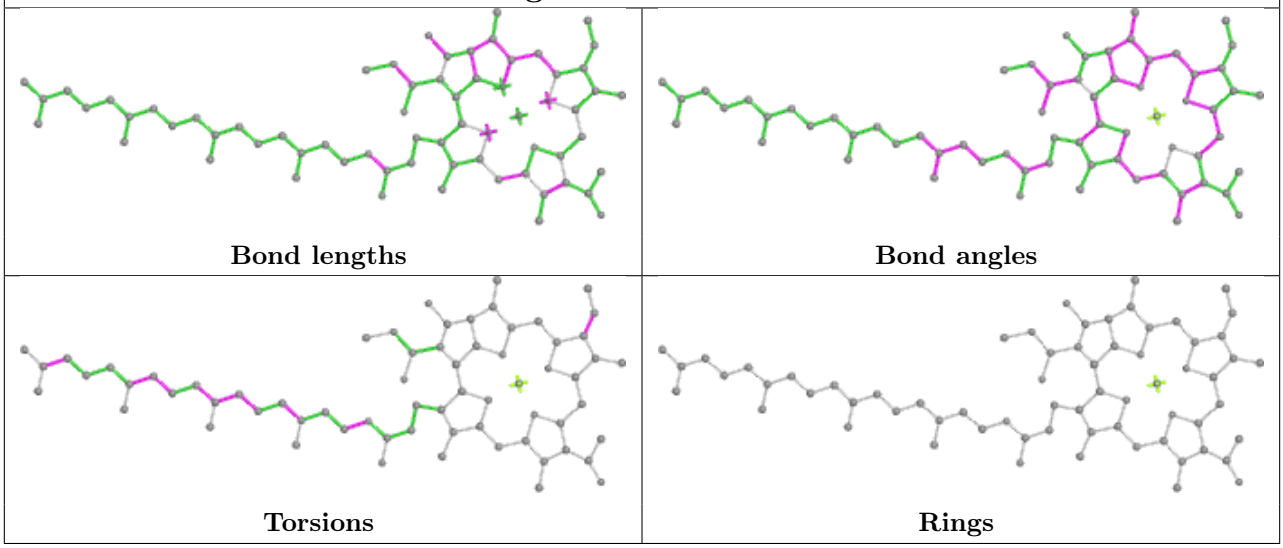


Torsions

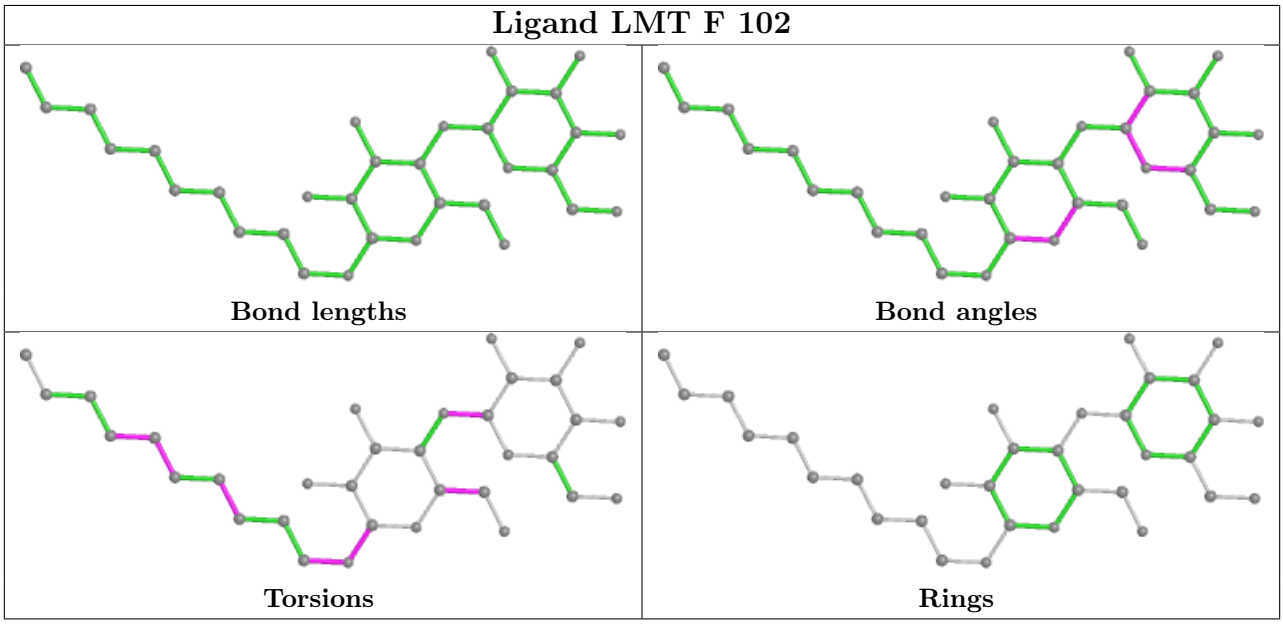


Rings

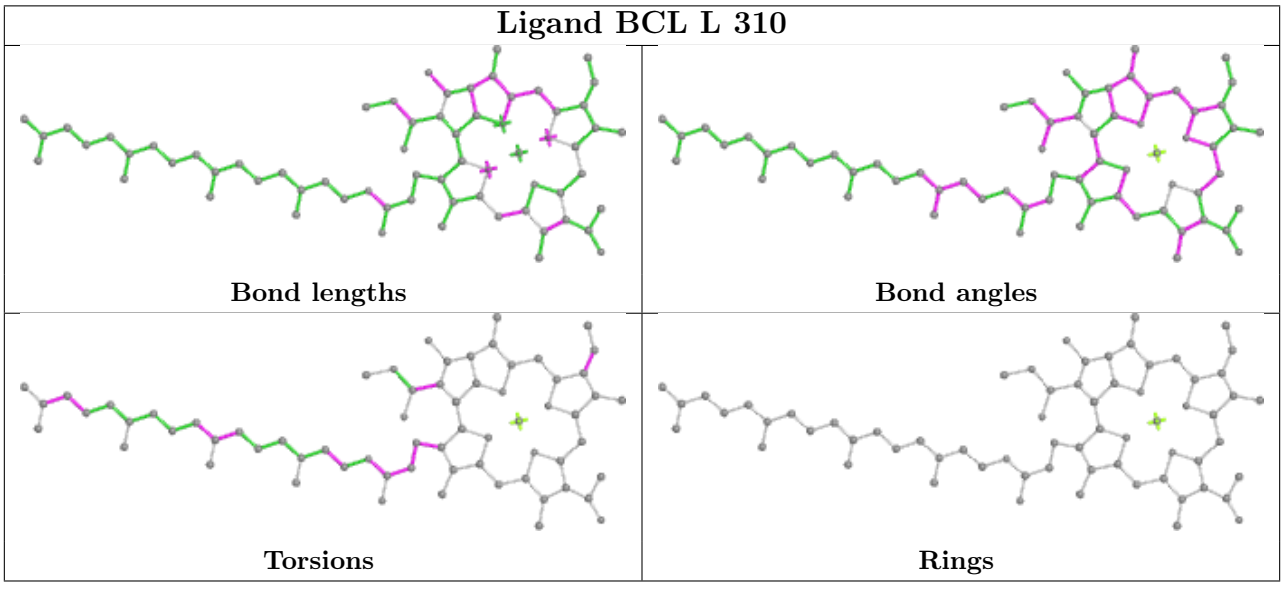
Ligand BCL Y 401



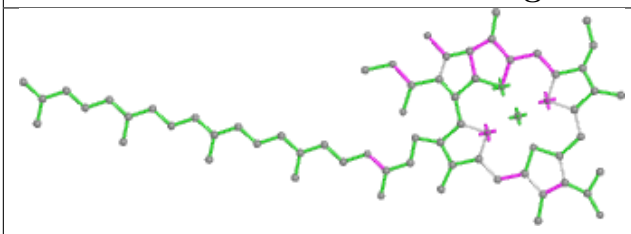
Ligand LMT F 102



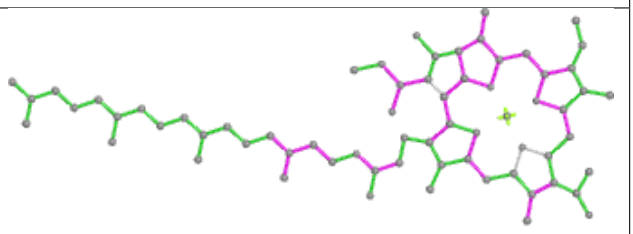
Ligand BCL L 310



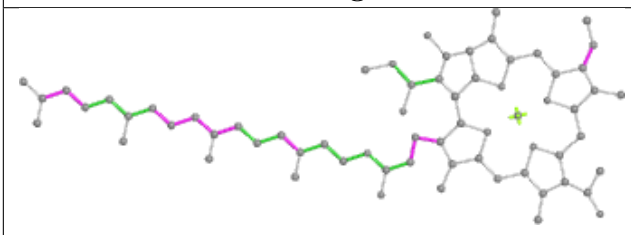
Ligand BCL G 102



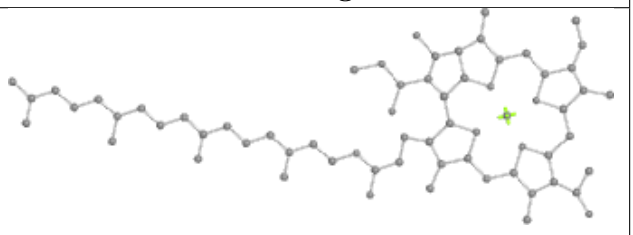
Bond lengths



Bond angles

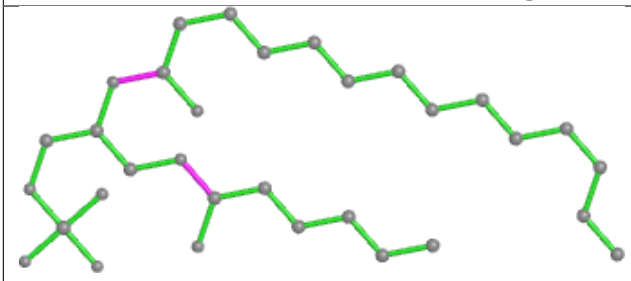


Torsions

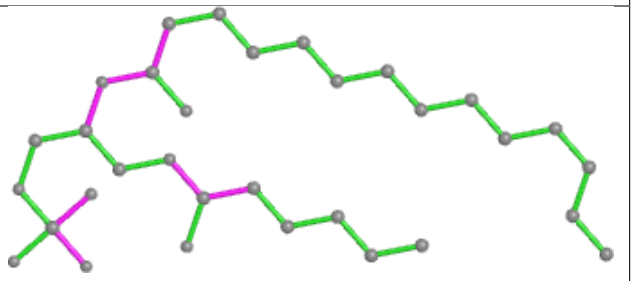


Rings

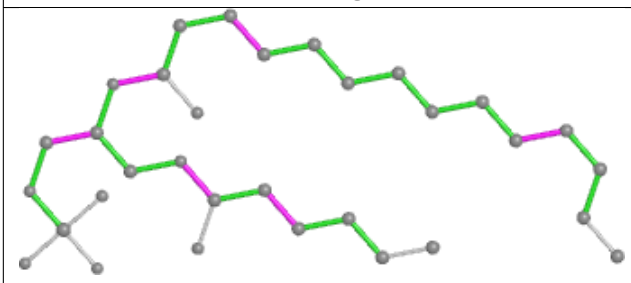
Ligand PGV N 105



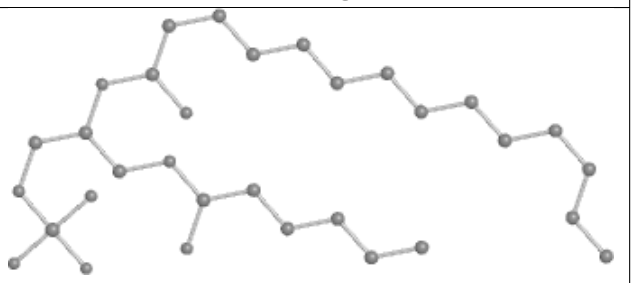
Bond lengths



Bond angles

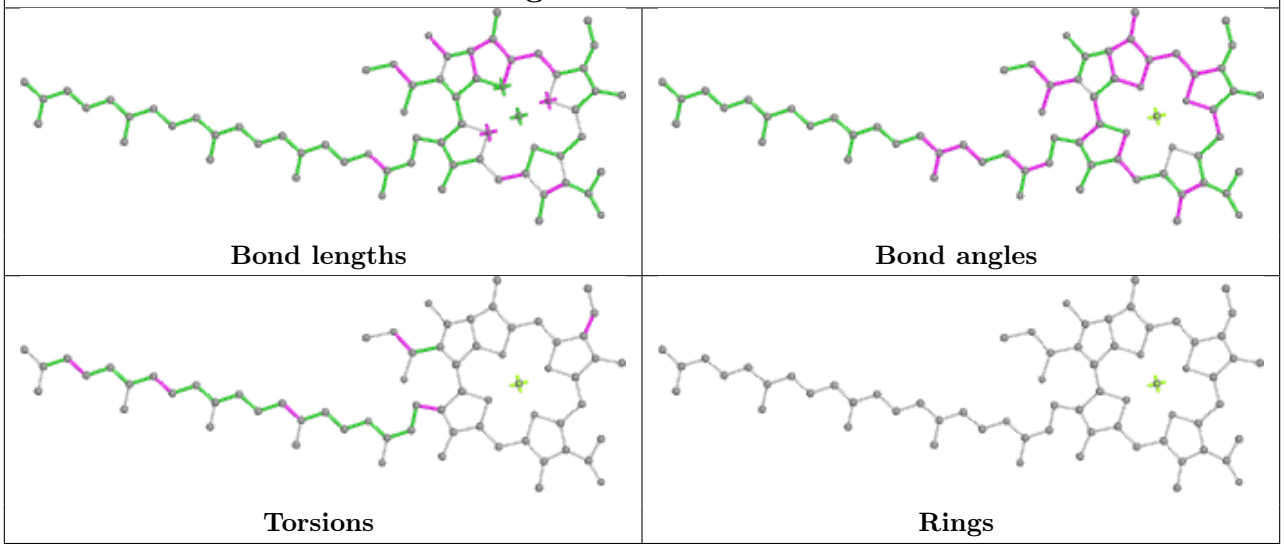


Torsions

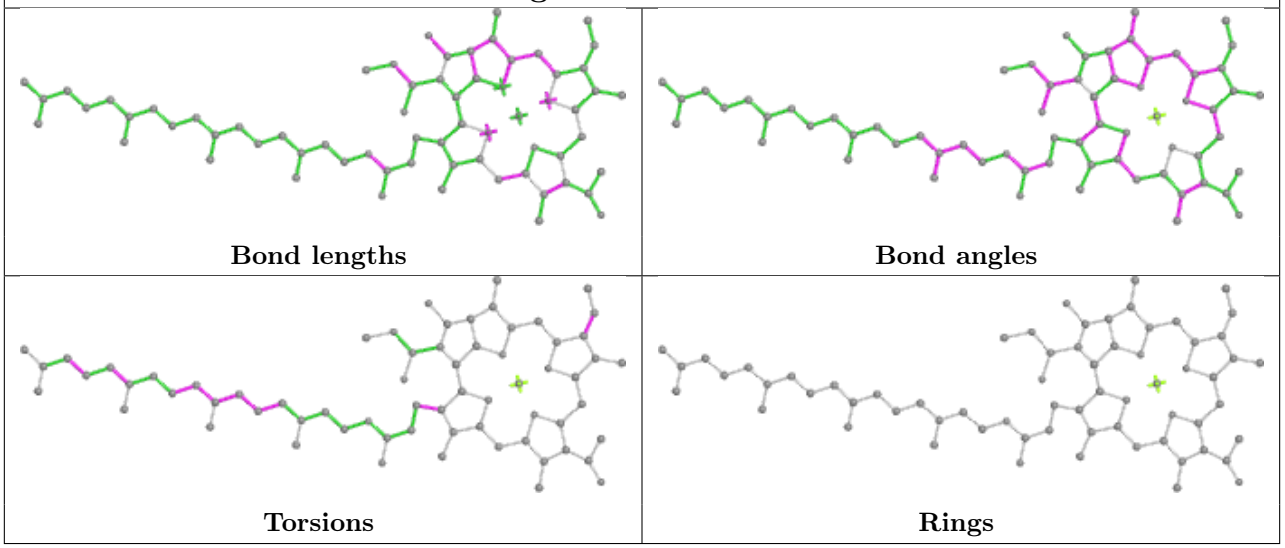


Rings

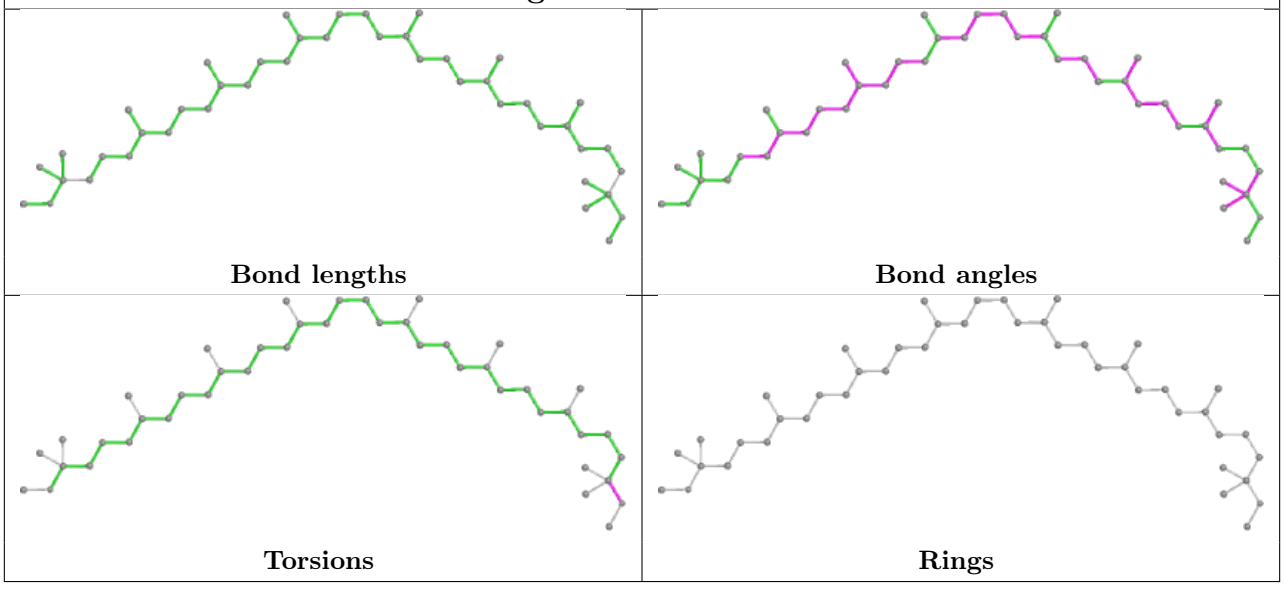
Ligand BCL O 102



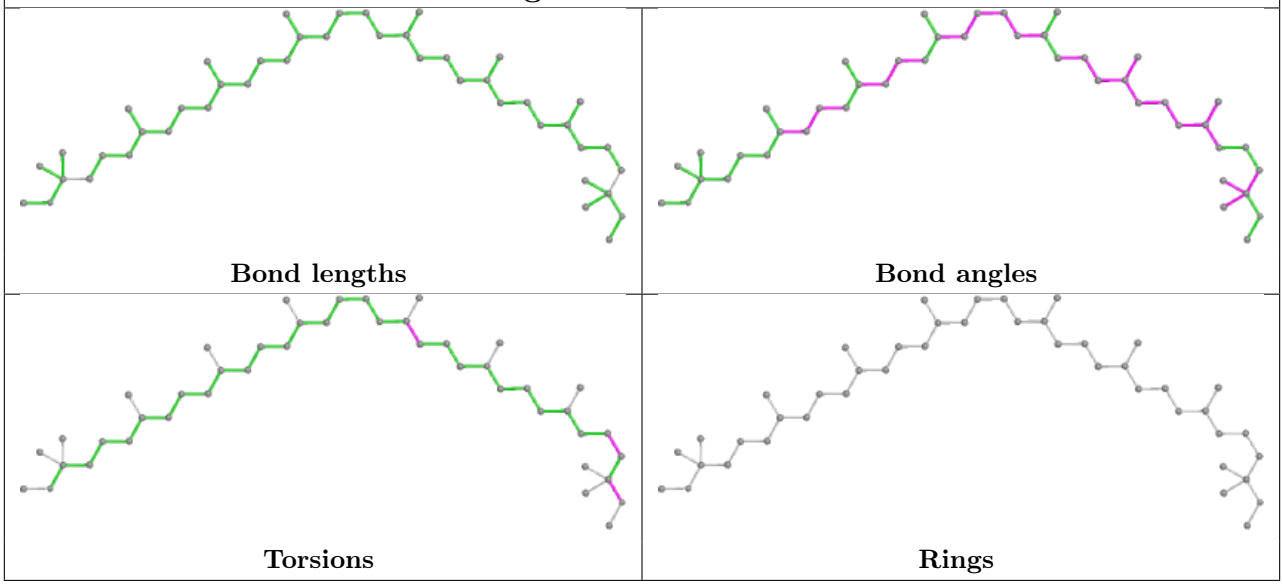
Ligand BCL 4 102



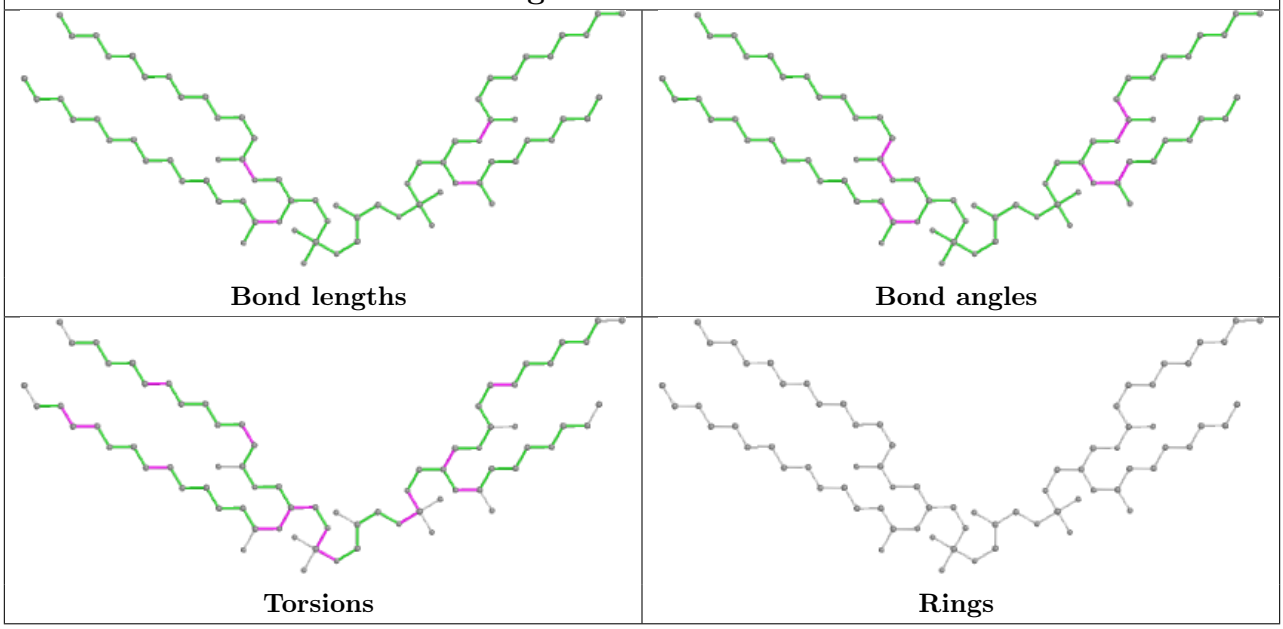
Ligand CRT Z 102



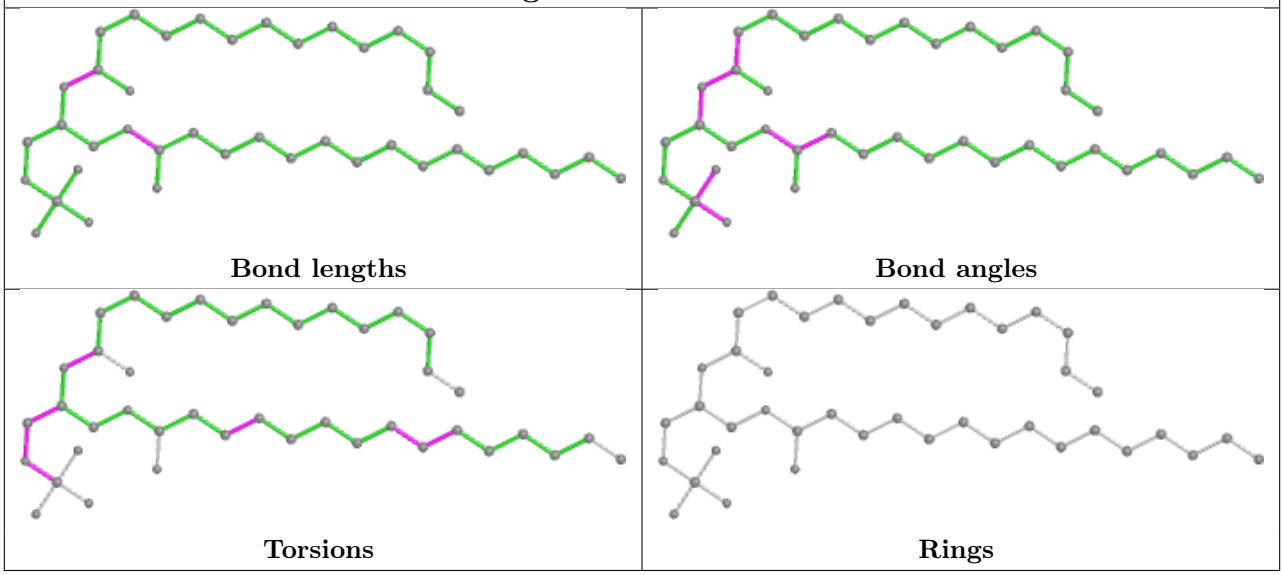
Ligand CRT G 101



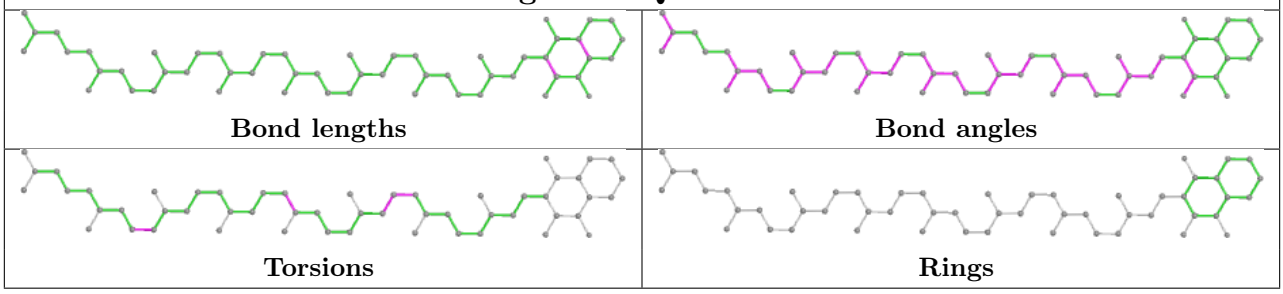
Ligand CDL L 312



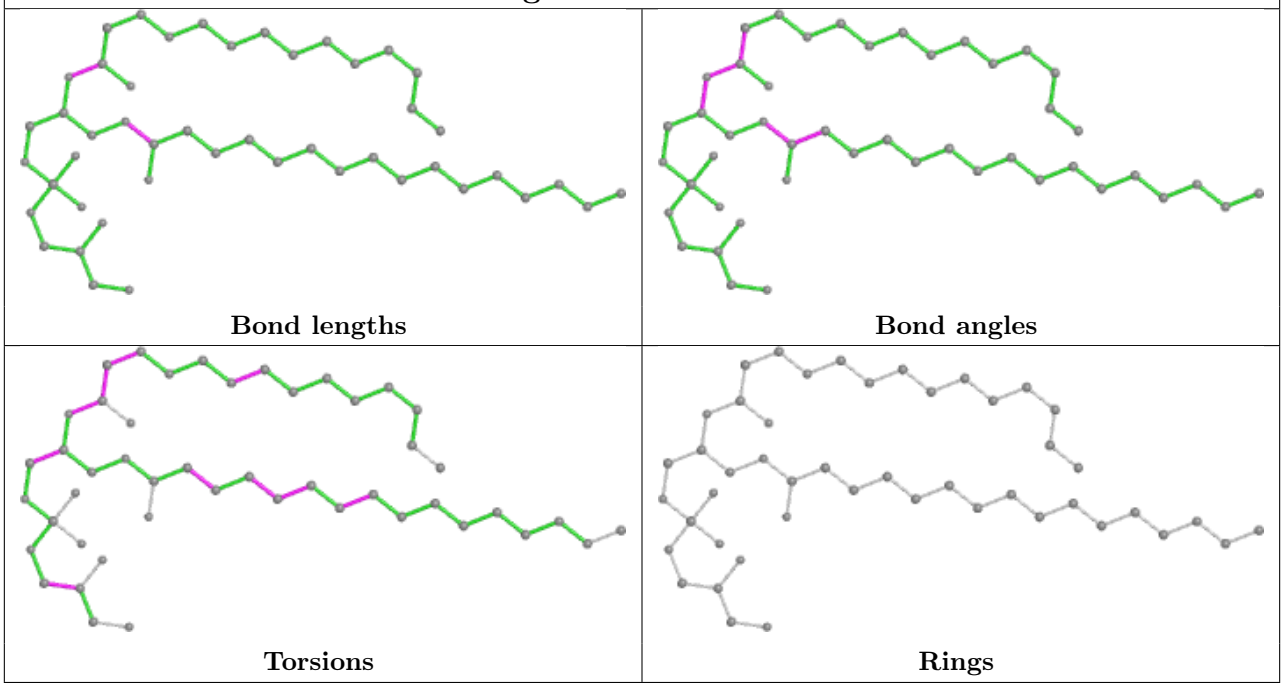
Ligand PGV R 104



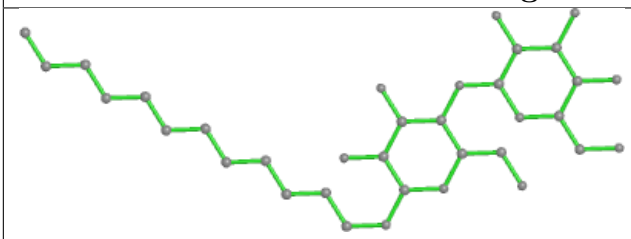
Ligand MQ8 M 405



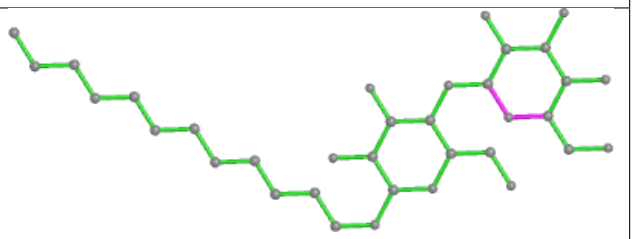
Ligand PGV T 102



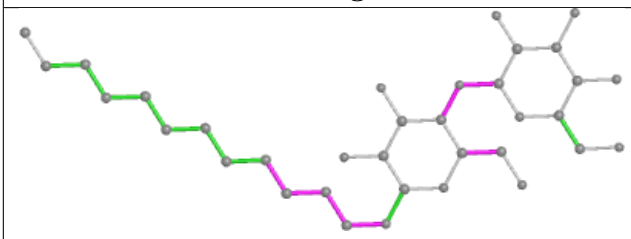
Ligand LMT Y 402



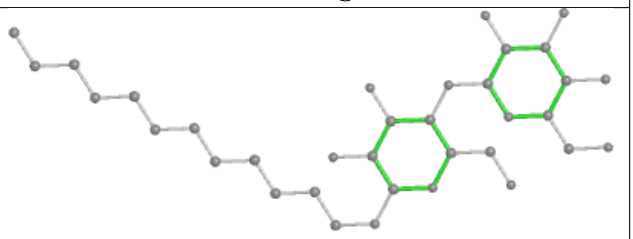
Bond lengths



Bond angles

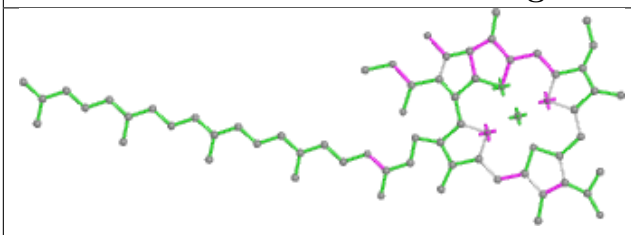


Torsions

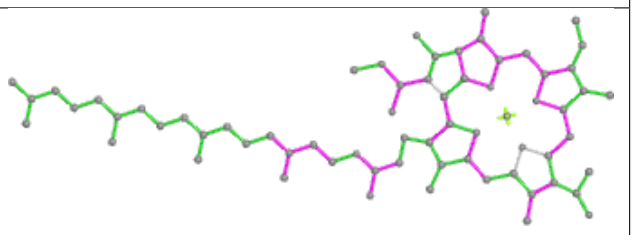


Rings

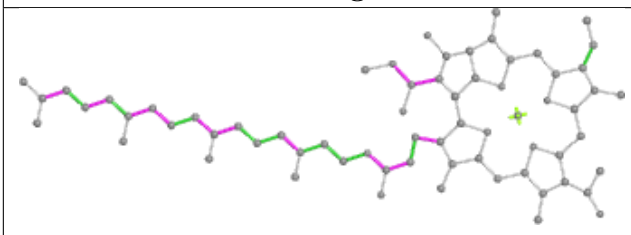
Ligand BCL L 311



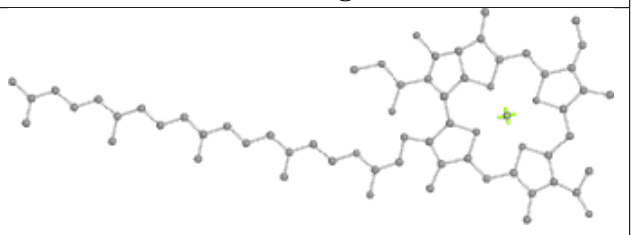
Bond lengths



Bond angles

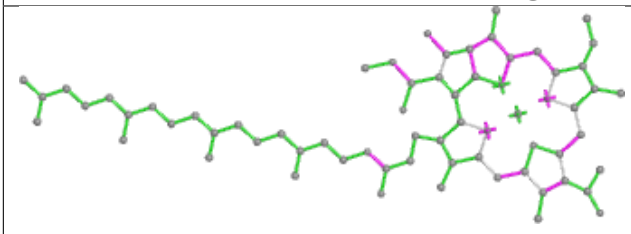


Torsions

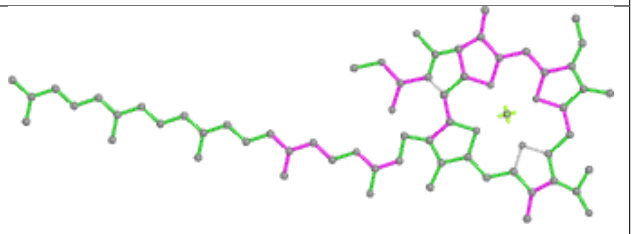


Rings

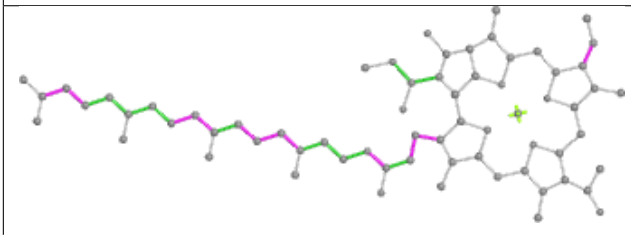
Ligand BCL Y 403



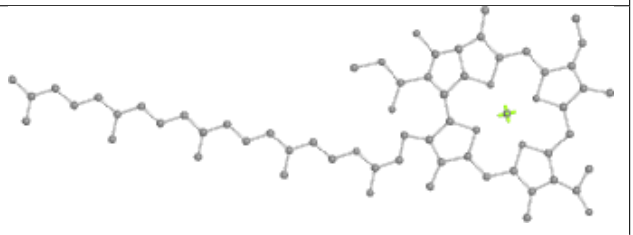
Bond lengths



Bond angles

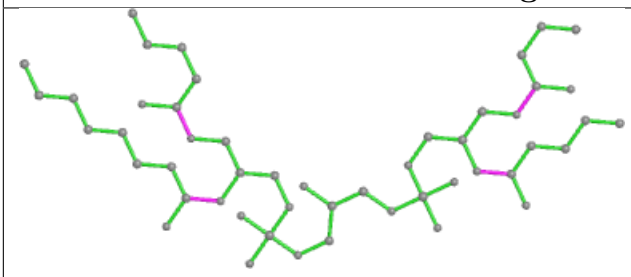


Torsions

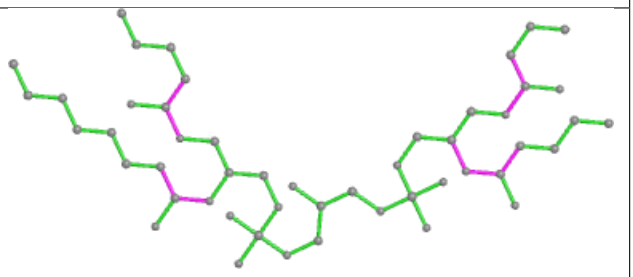


Rings

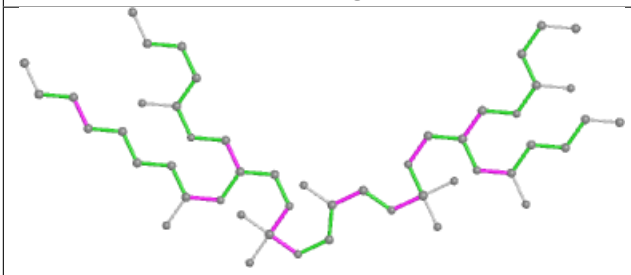
Ligand CDL M 410



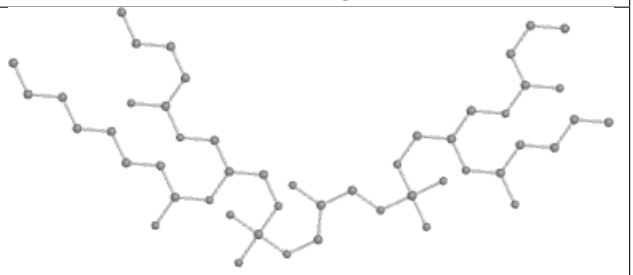
Bond lengths



Bond angles

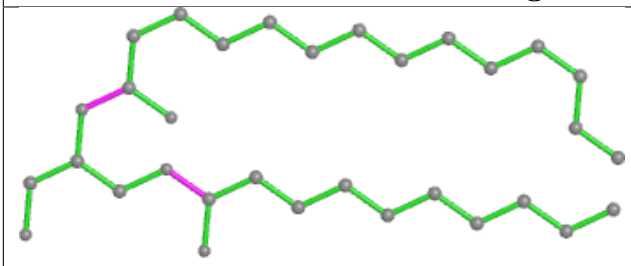


Torsions

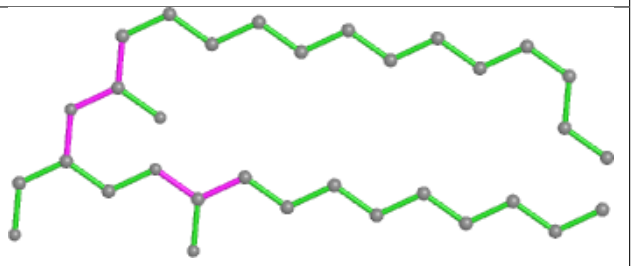


Rings

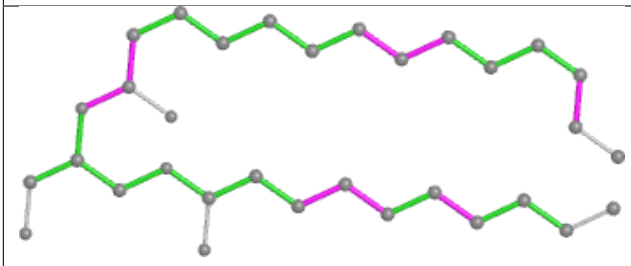
Ligand PGV 0 104



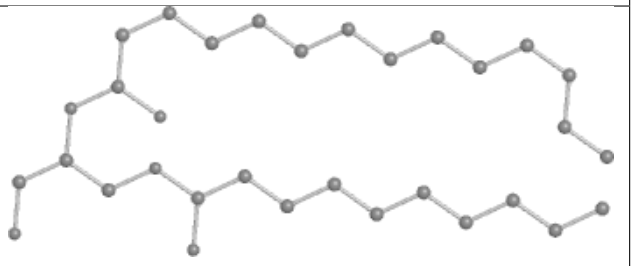
Bond lengths



Bond angles

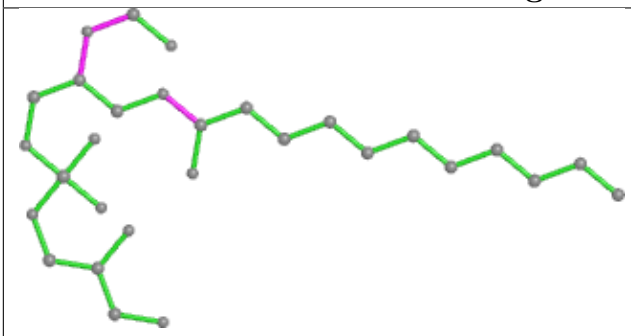


Torsions

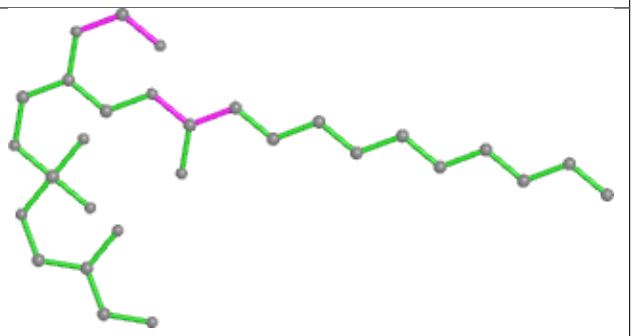


Rings

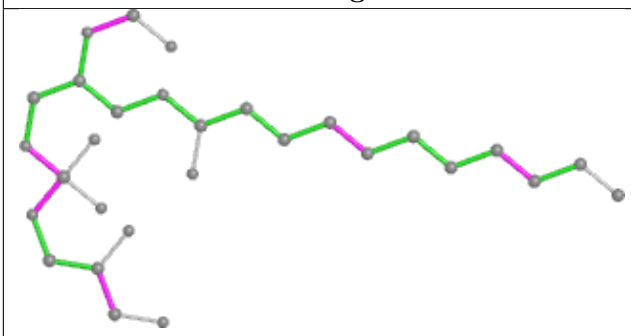
Ligand PGV 4 103



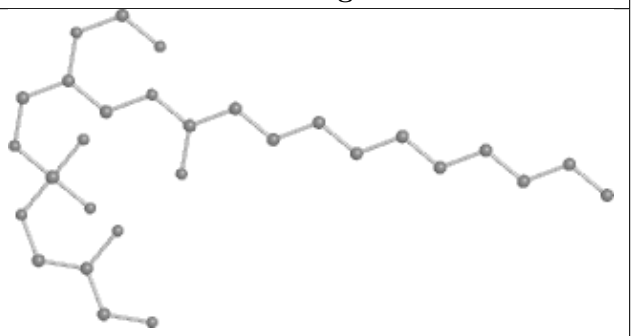
Bond lengths



Bond angles

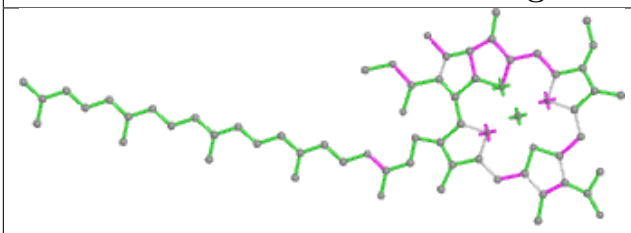


Torsions

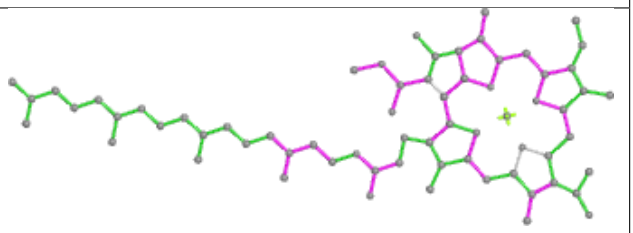


Rings

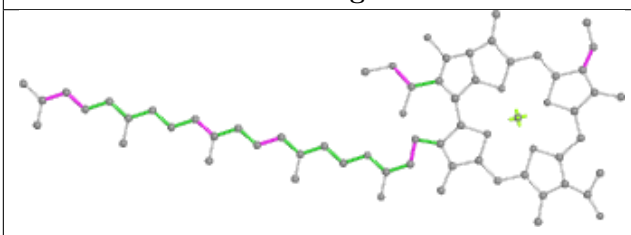
Ligand BCL L 302



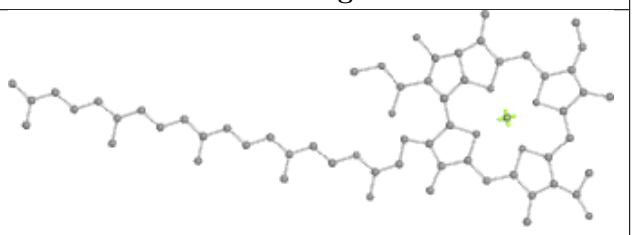
Bond lengths



Bond angles

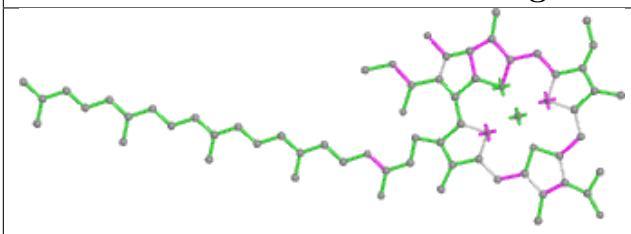


Torsions

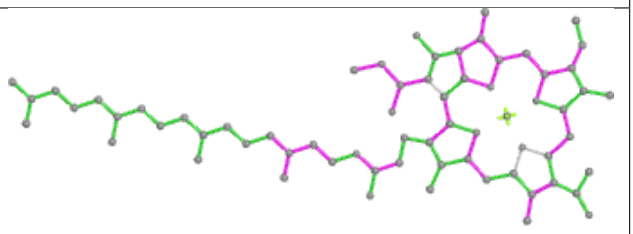


Rings

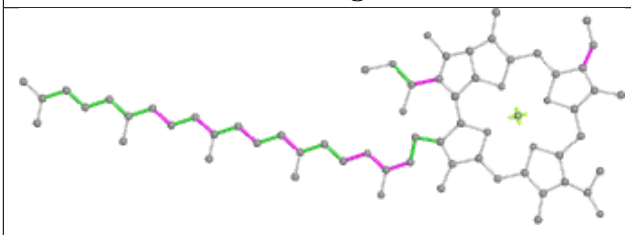
Ligand BCL 9 103



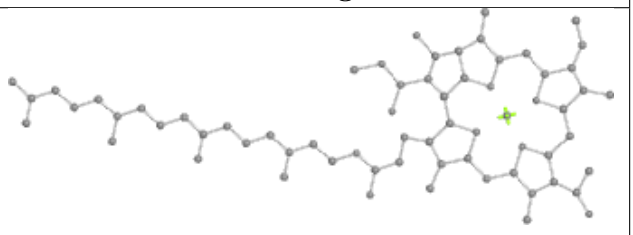
Bond lengths



Bond angles

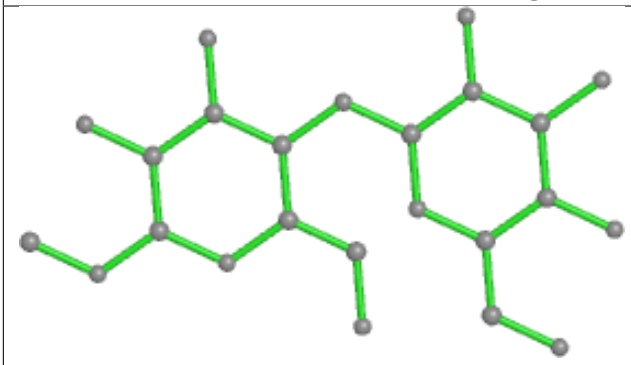


Torsions

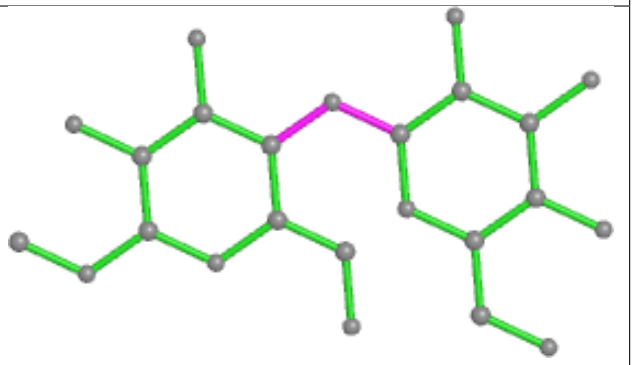


Rings

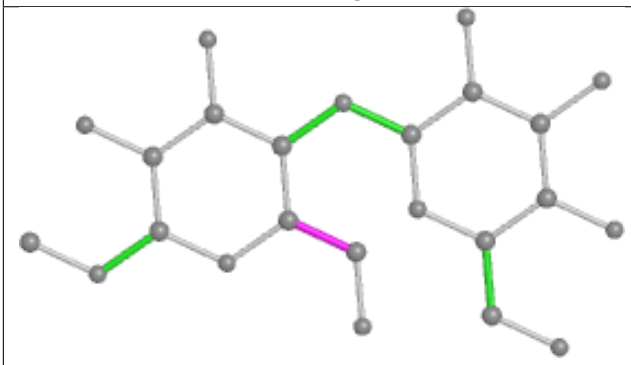
Ligand LMT 5 101



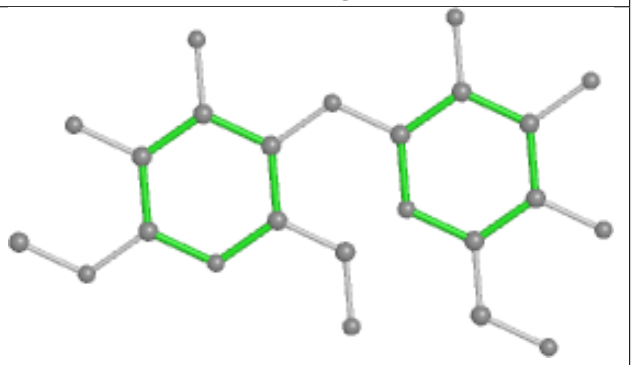
Bond lengths



Bond angles

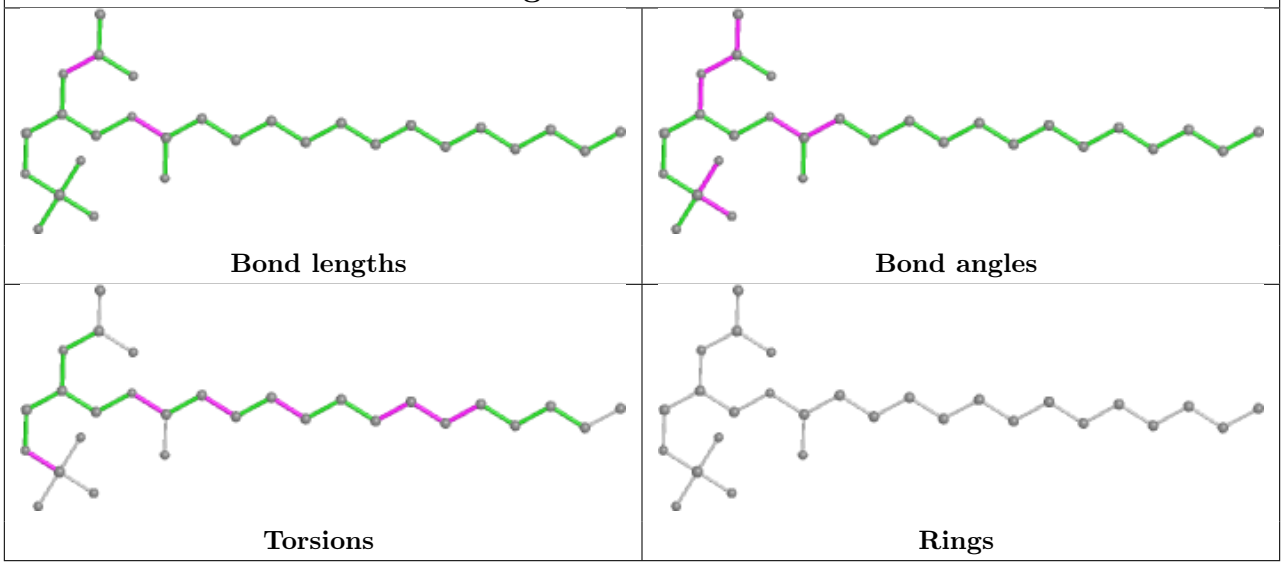


Torsions

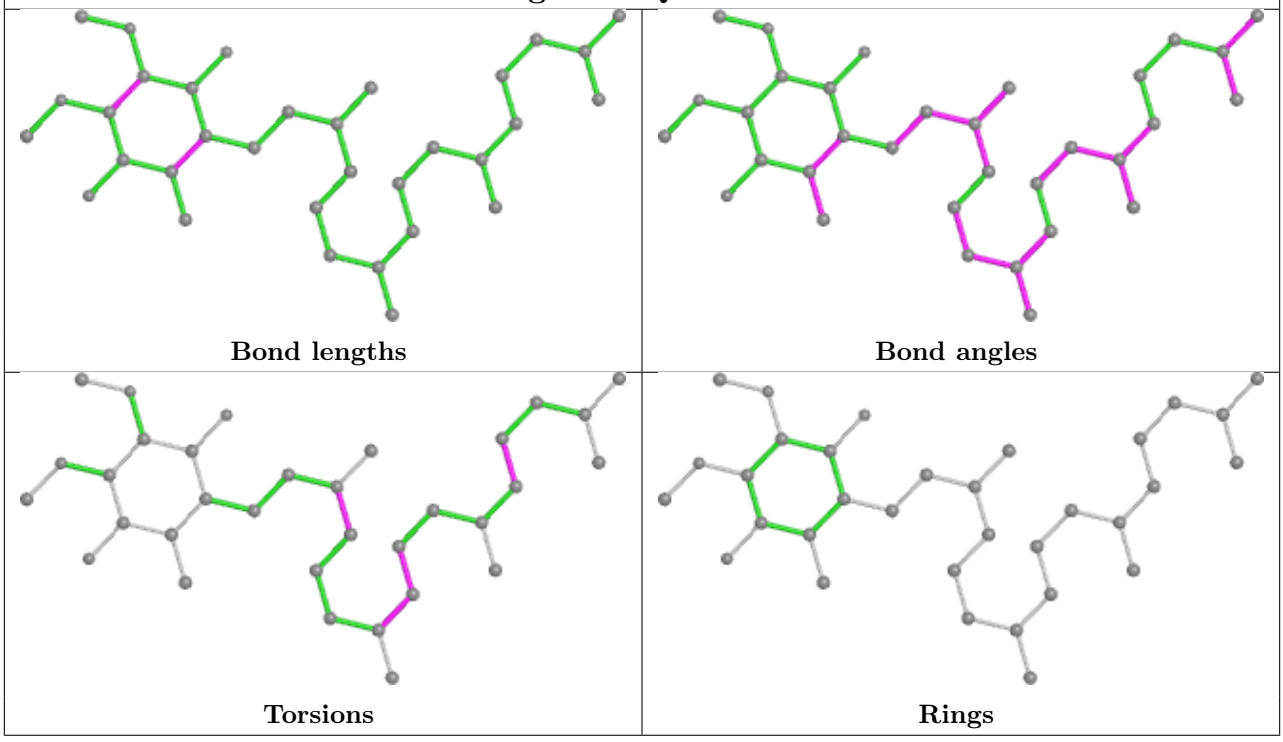


Rings

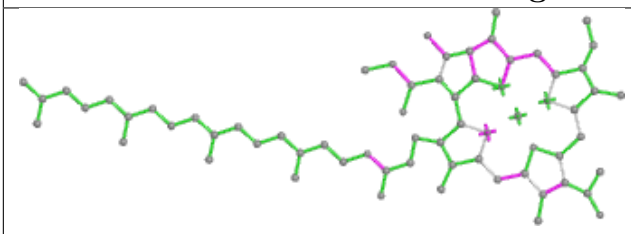
Ligand PGV P 102



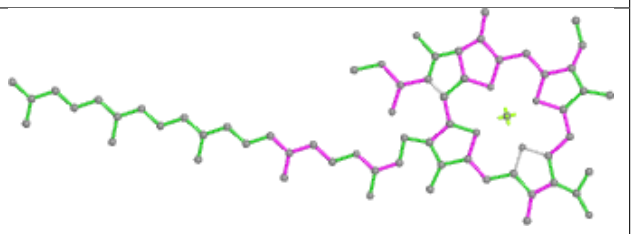
Ligand UQ8 L 304



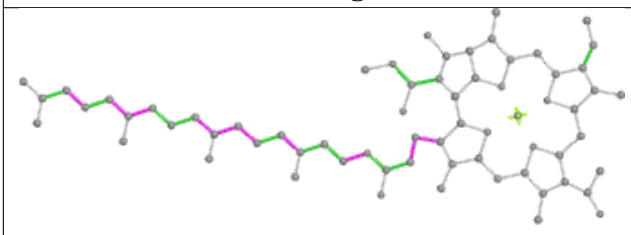
Ligand BCL 7 103



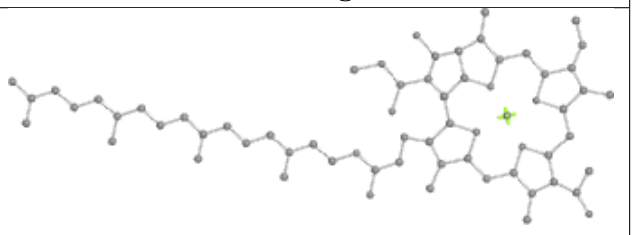
Bond lengths



Bond angles

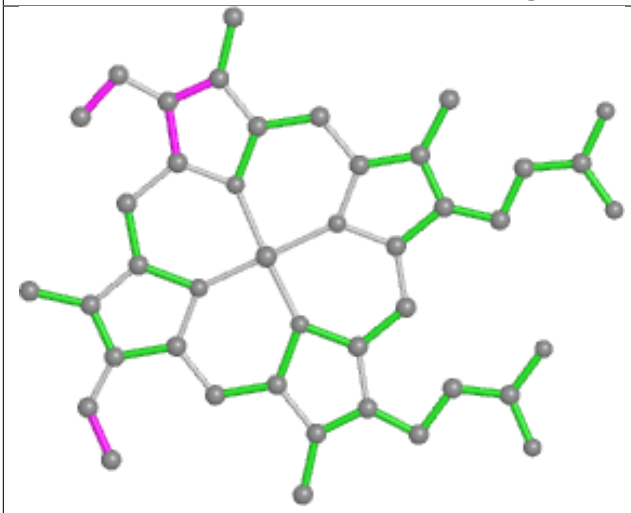


Torsions

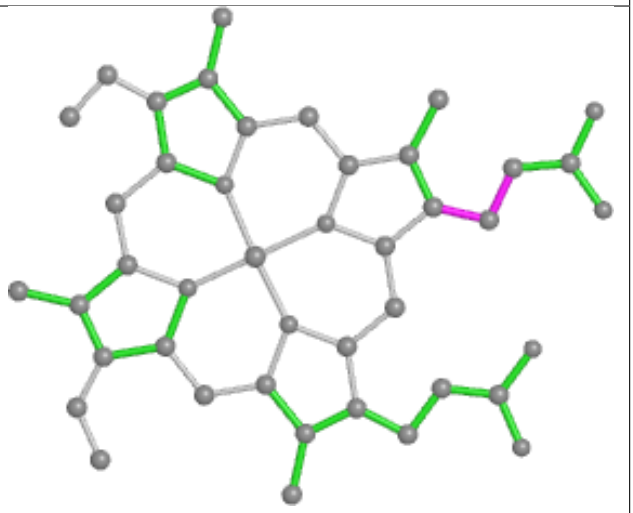


Rings

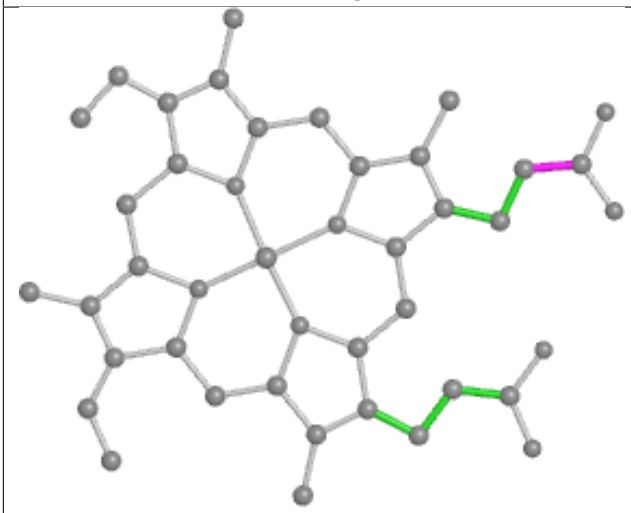
Ligand HEC C 402



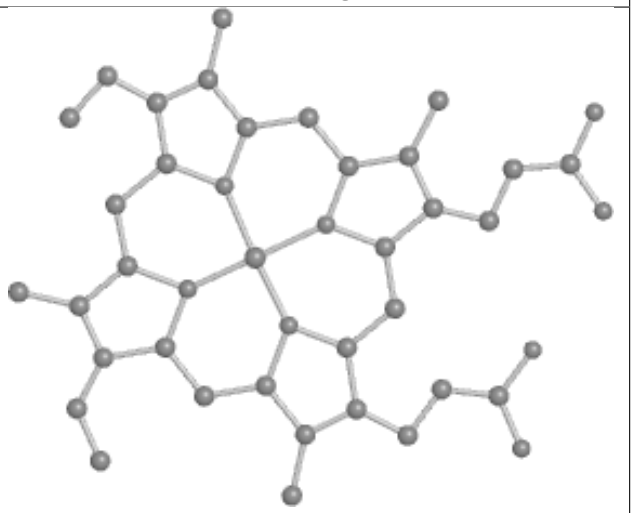
Bond lengths



Bond angles

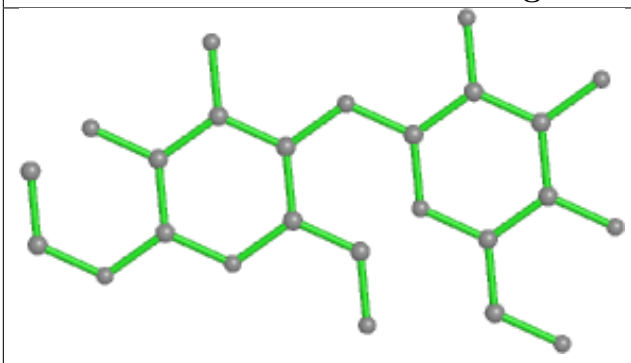


Torsions

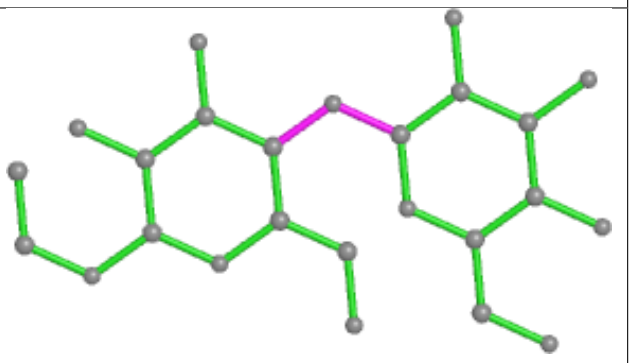


Rings

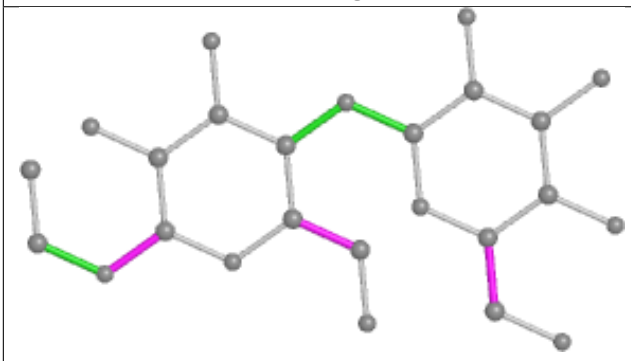
Ligand LMT L 301



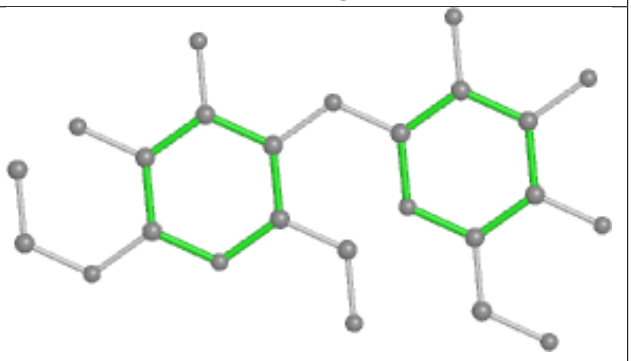
Bond lengths



Bond angles

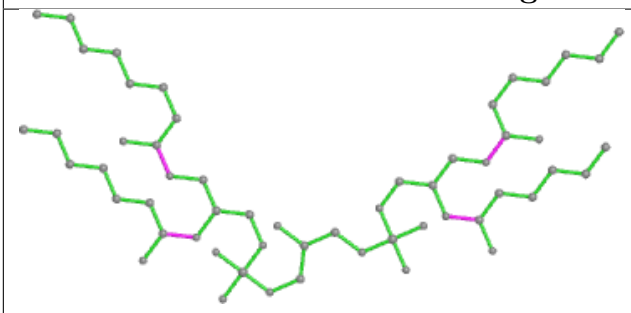


Torsions

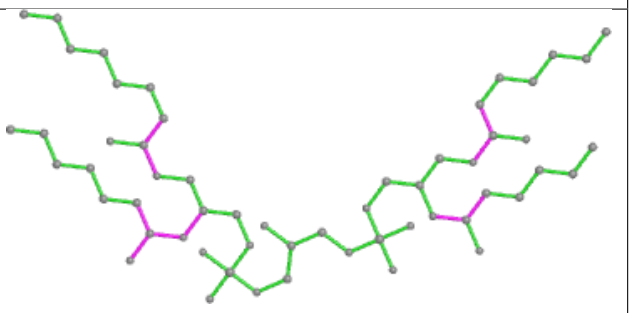


Rings

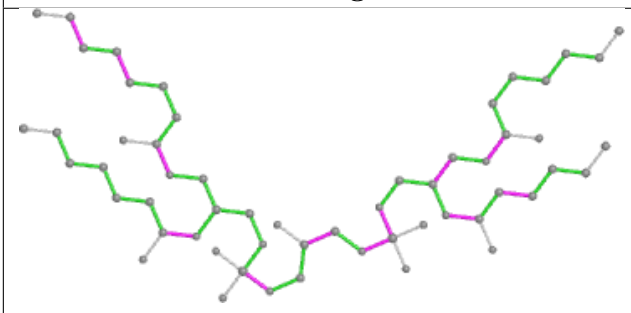
Ligand CDL M 409



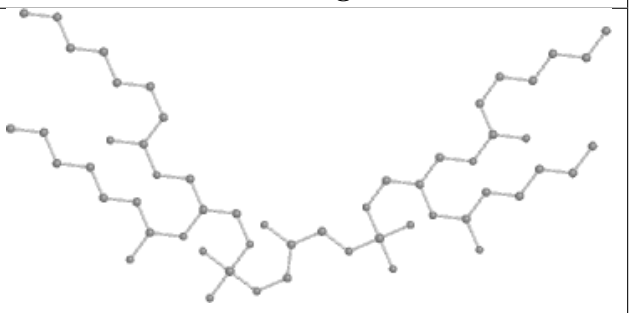
Bond lengths



Bond angles

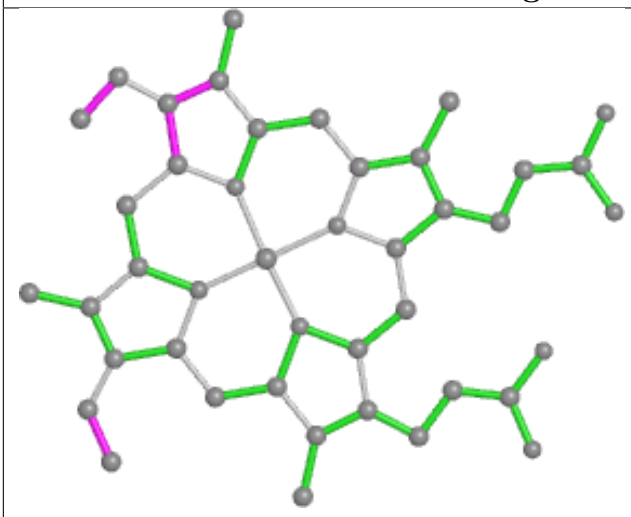


Torsions

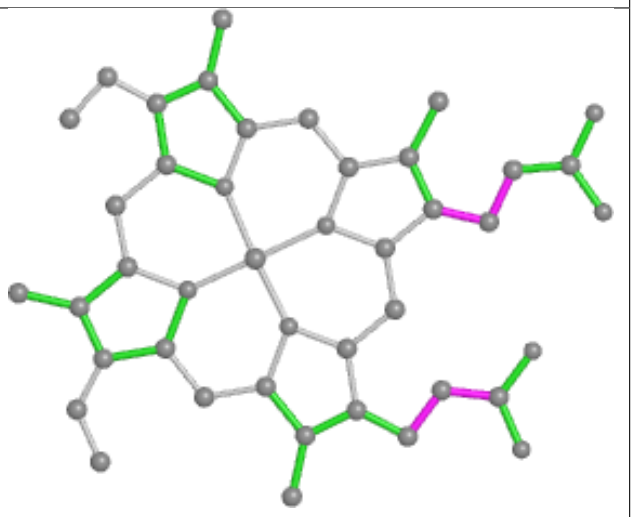


Rings

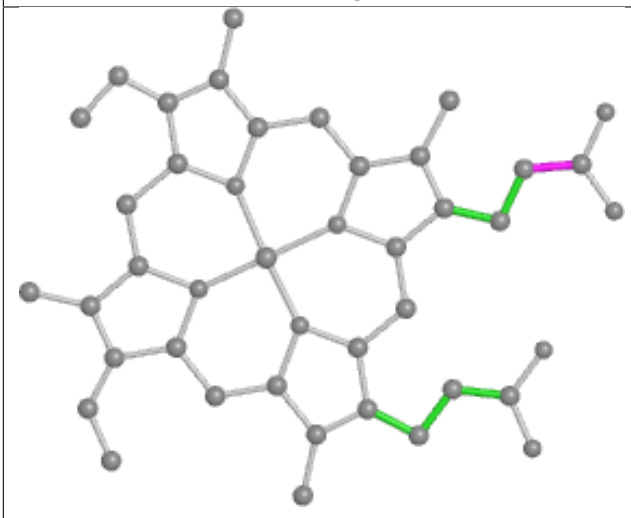
Ligand HEC C 404



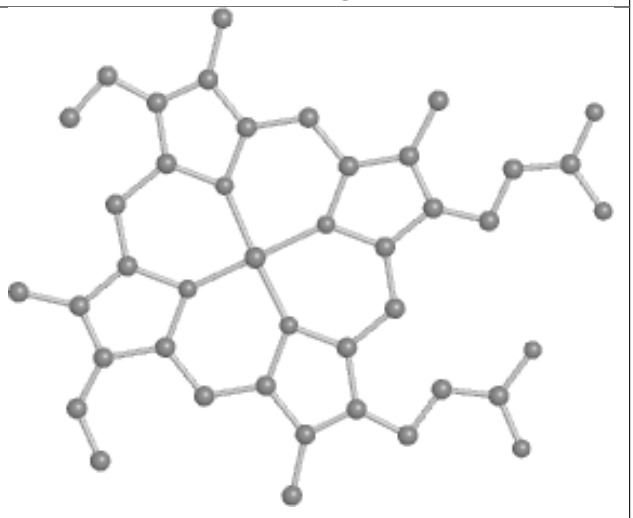
Bond lengths



Bond angles

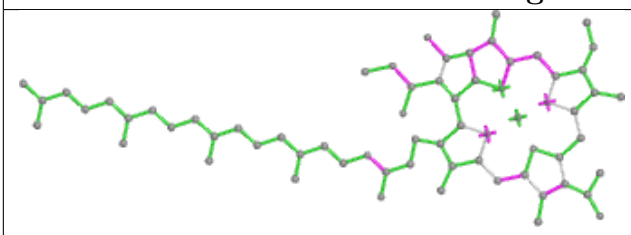


Torsions

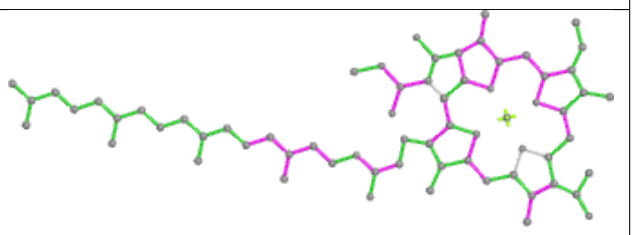


Rings

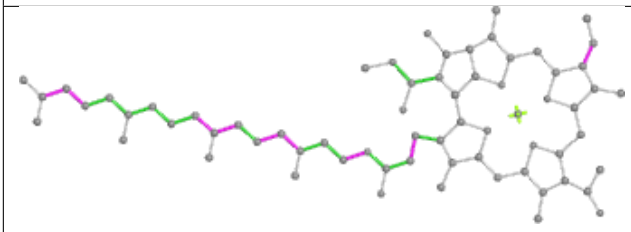
Ligand BCL E 101



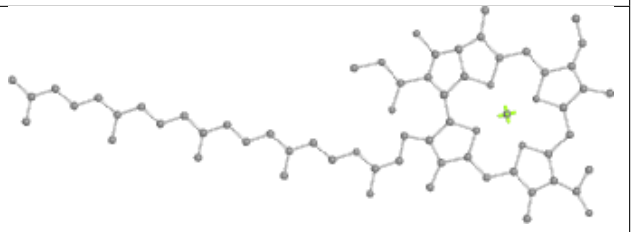
Bond lengths



Bond angles

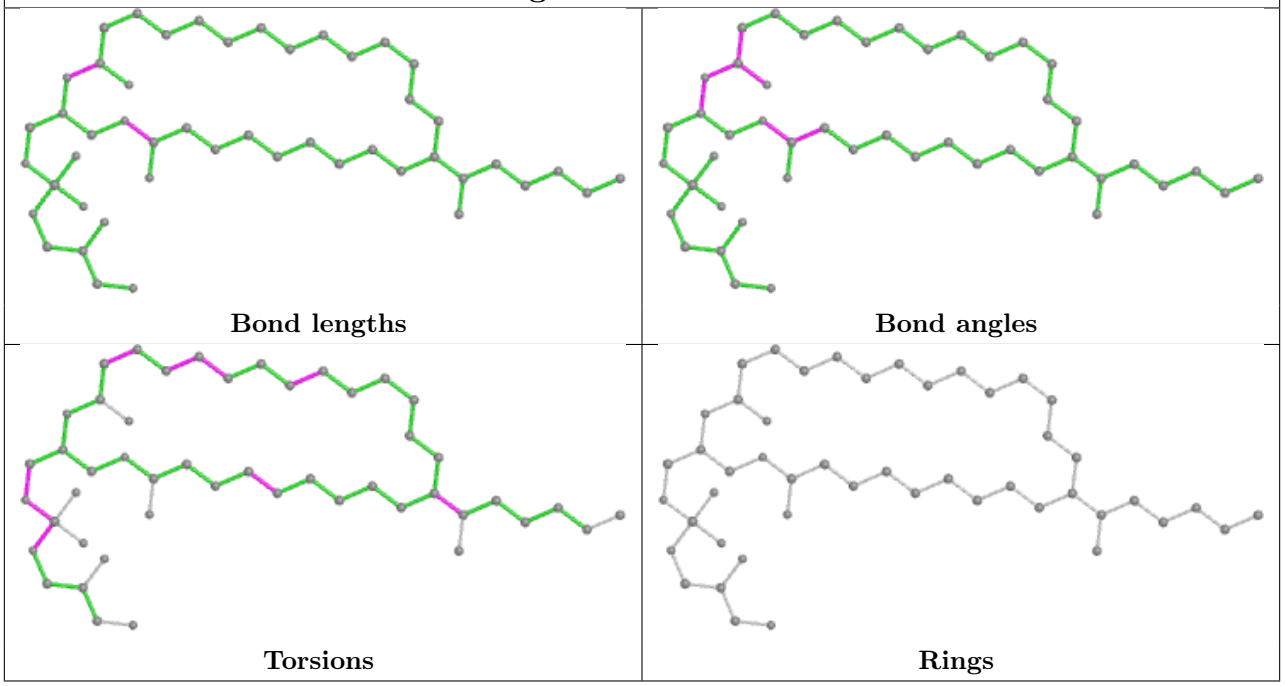


Torsions

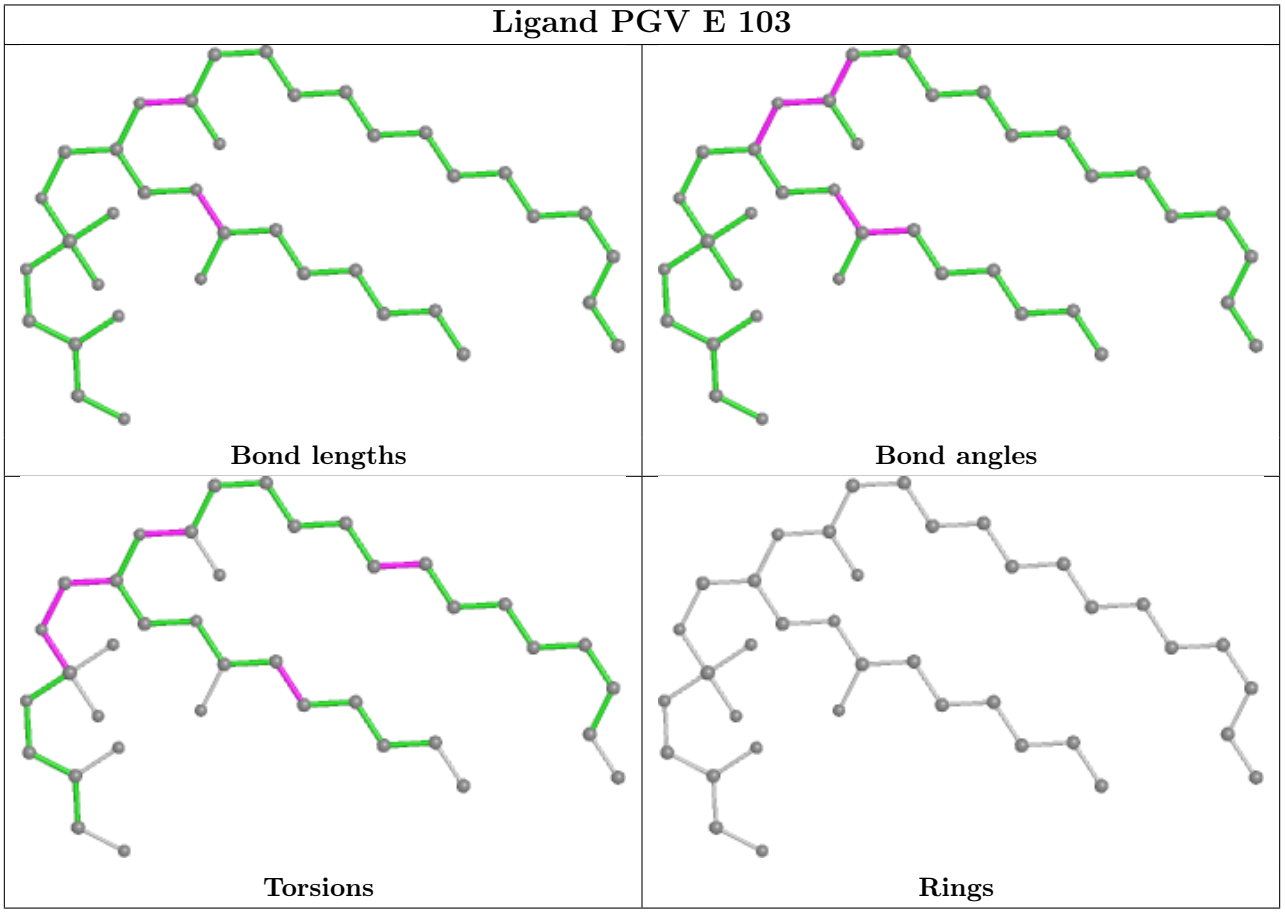


Rings

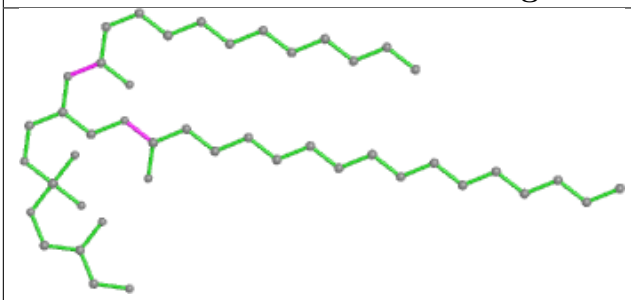
Ligand PGV I 101



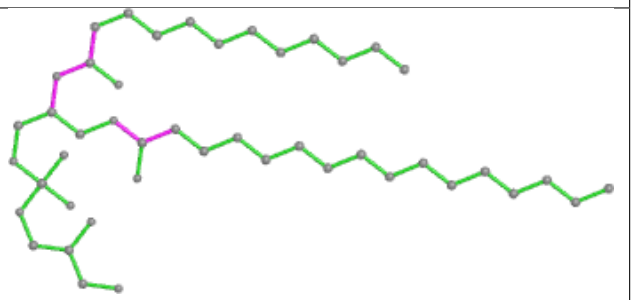
Ligand PGV E 103



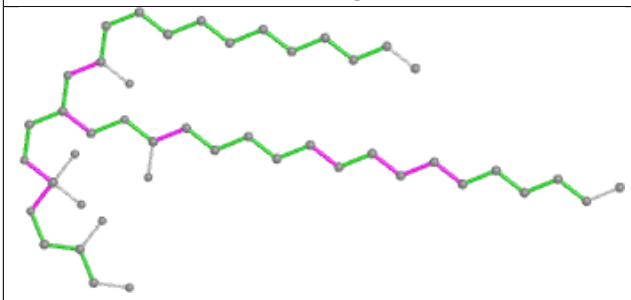
Ligand PGV X 102



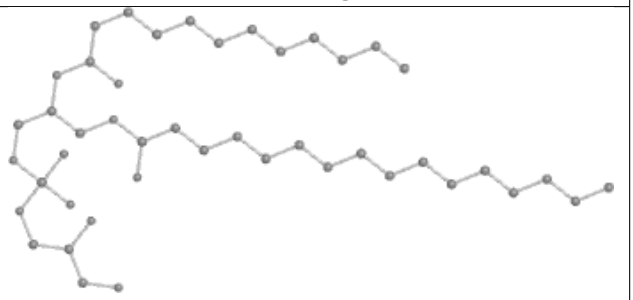
Bond lengths



Bond angles

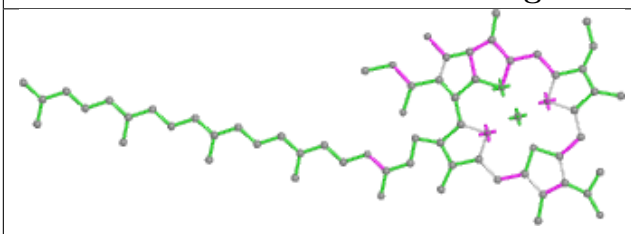


Torsions

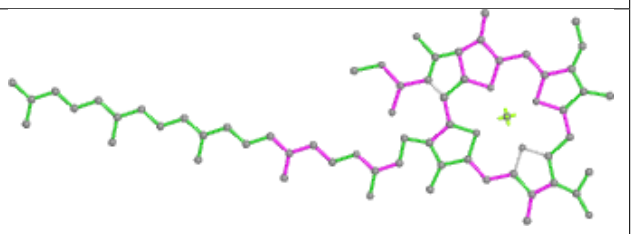


Rings

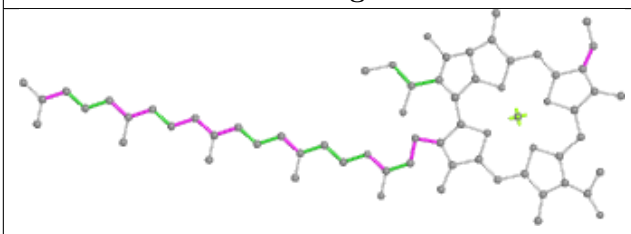
Ligand BCL K 102



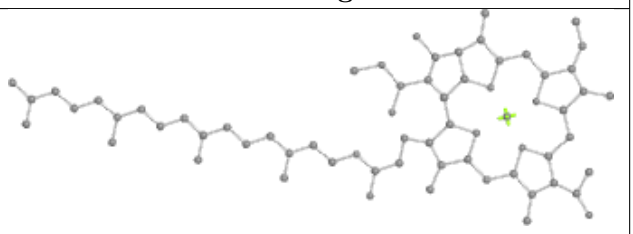
Bond lengths



Bond angles

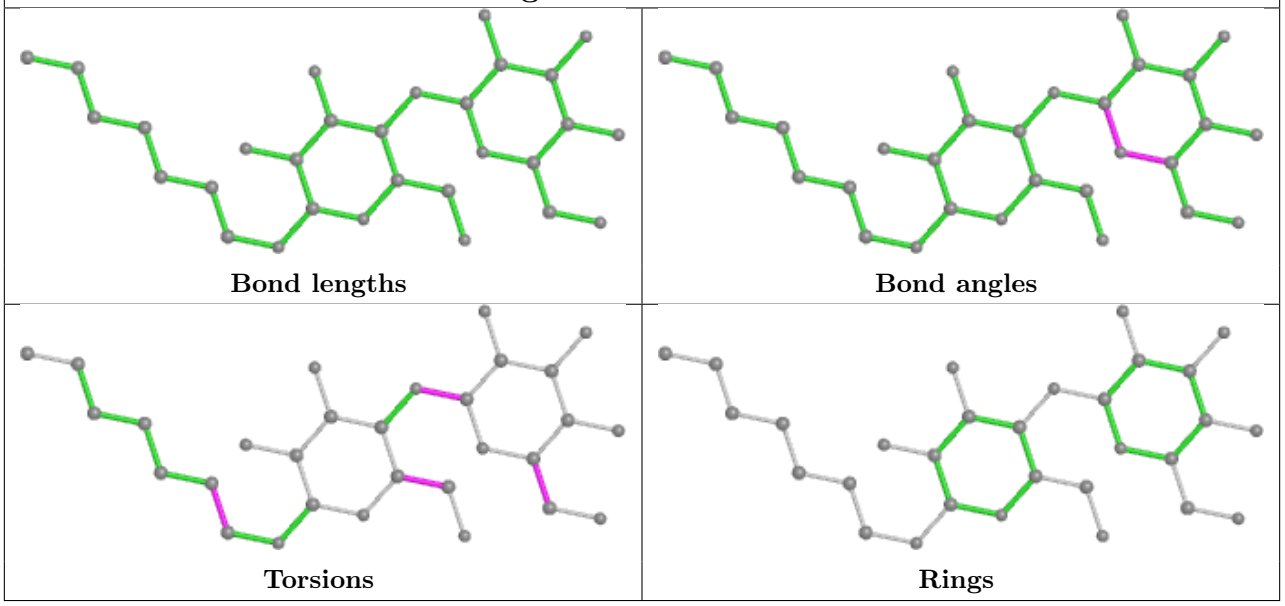


Torsions

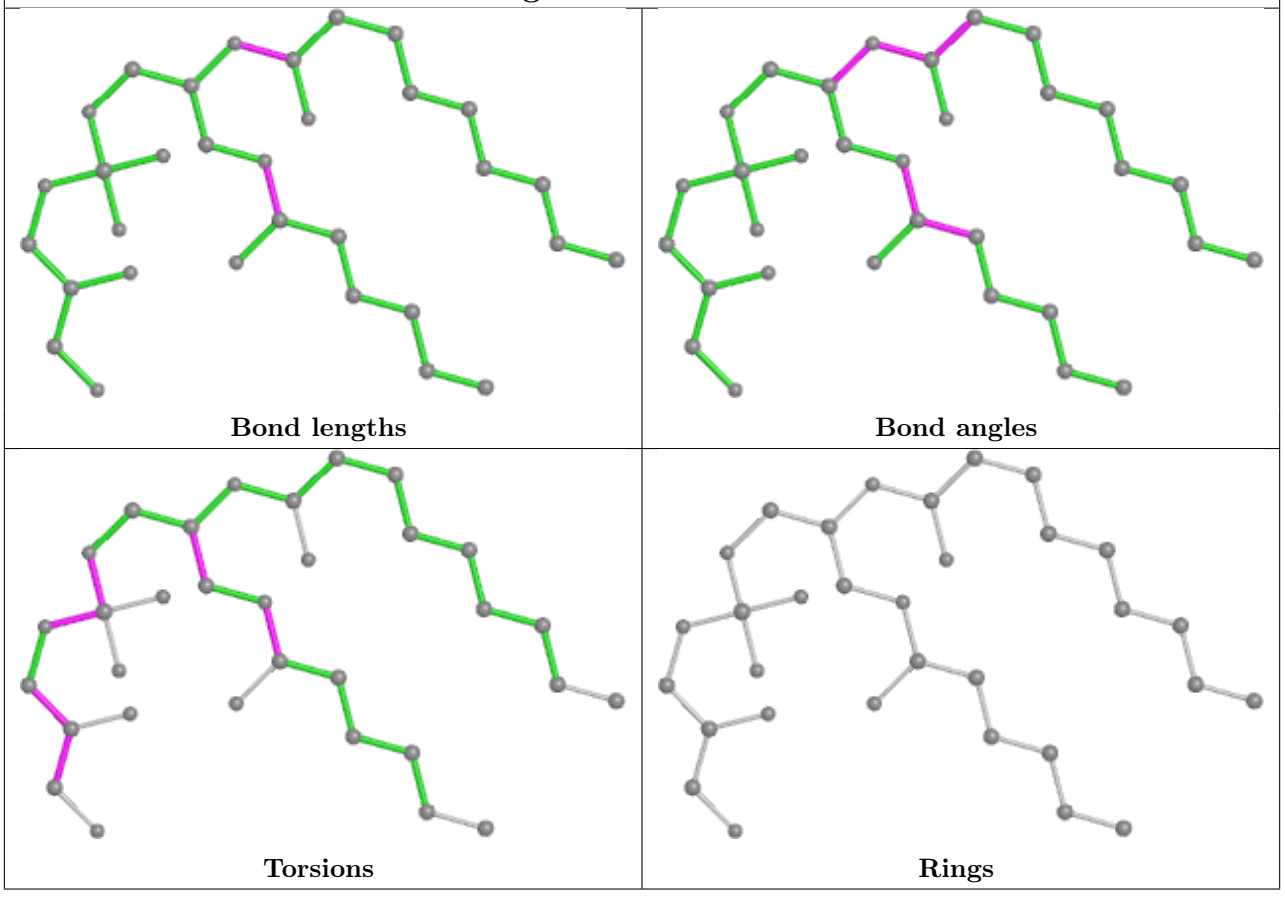


Rings

Ligand LMT H 305



Ligand PGV C 409



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.

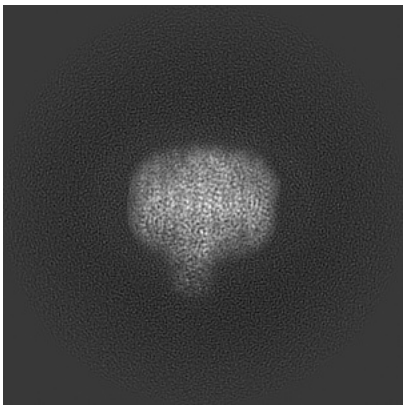
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-39837. These allow visual inspection of the internal detail of the map and identification of artifacts.

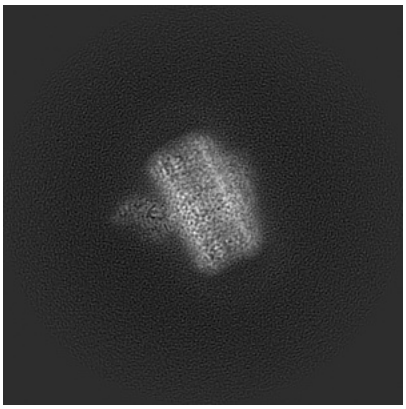
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

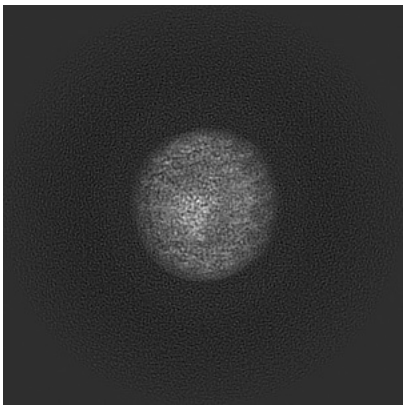
6.1.1 Primary map



X

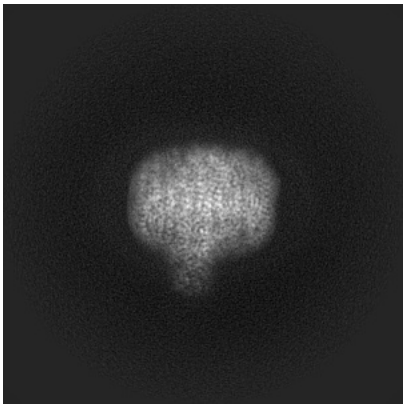


Y

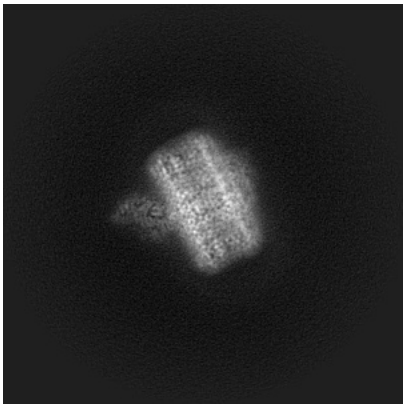


Z

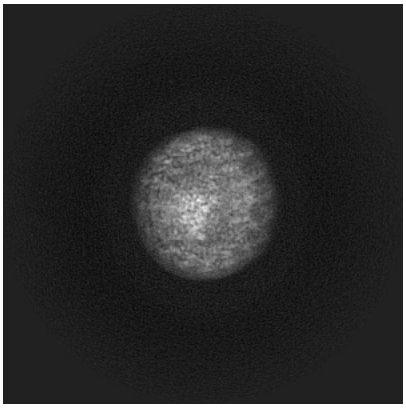
6.1.2 Raw map



X



Y

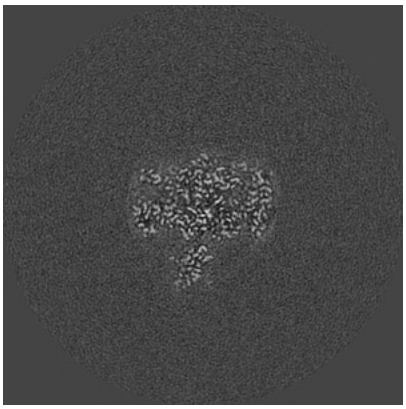


Z

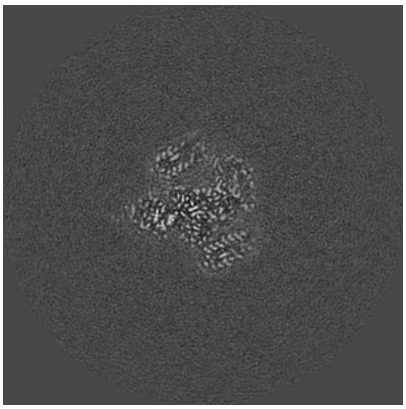
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

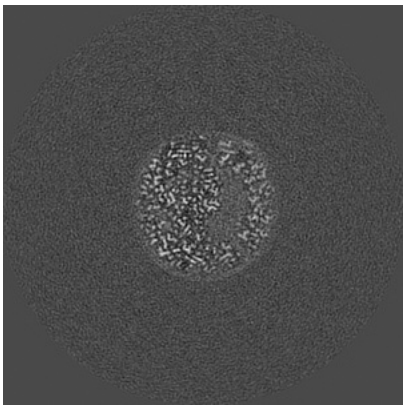
6.2.1 Primary map



X Index: 200

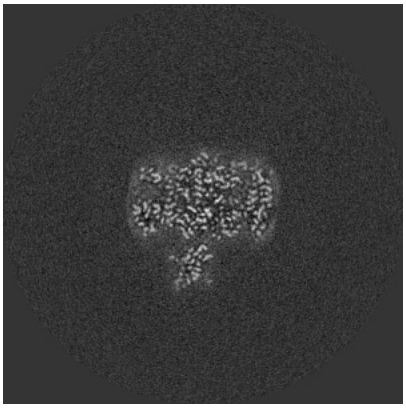


Y Index: 200

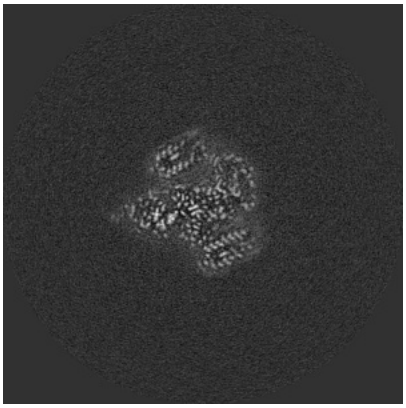


Z Index: 200

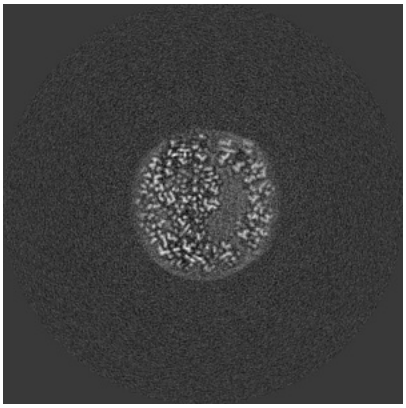
6.2.2 Raw map



X Index: 200



Y Index: 200

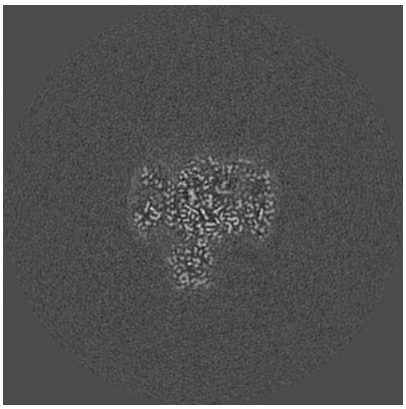


Z Index: 200

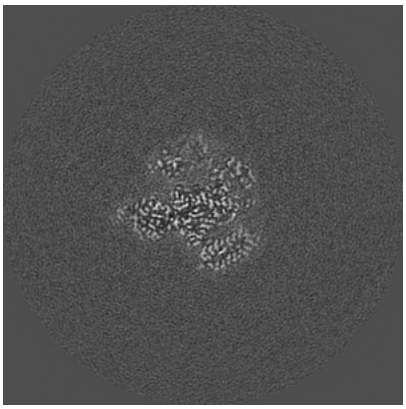
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

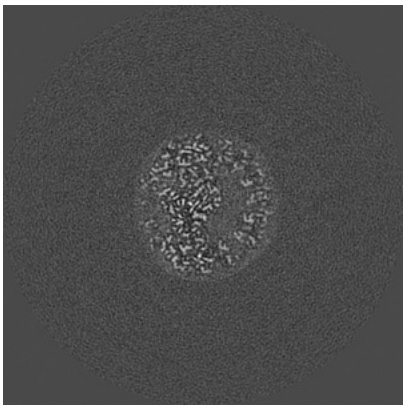
6.3.1 Primary map



X Index: 197

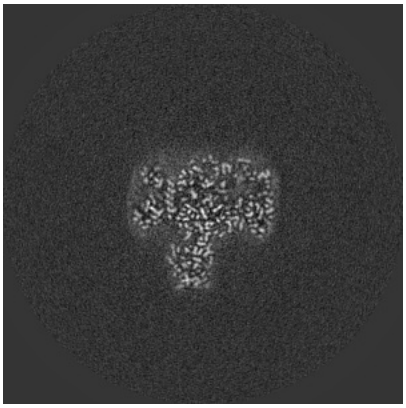


Y Index: 197

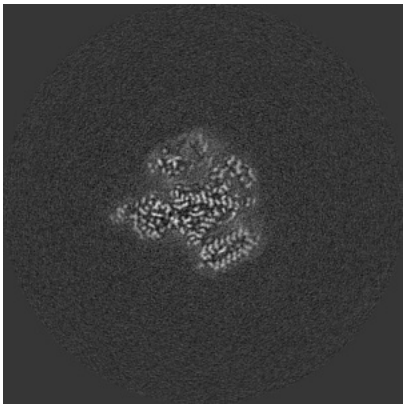


Z Index: 195

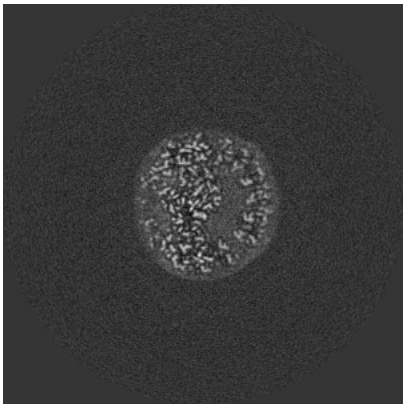
6.3.2 Raw map



X Index: 196



Y Index: 197

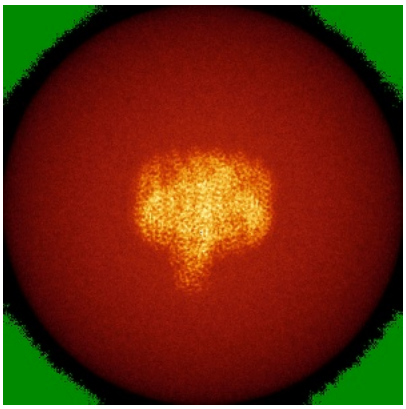


Z Index: 195

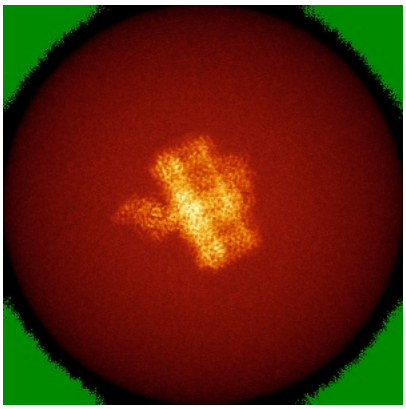
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

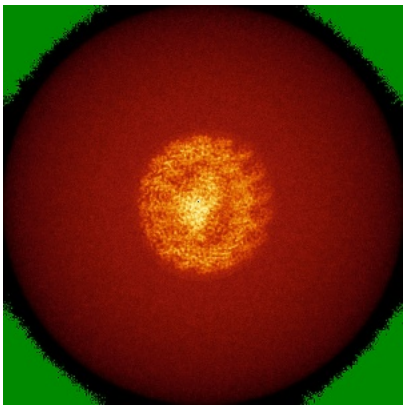
6.4.1 Primary map



X

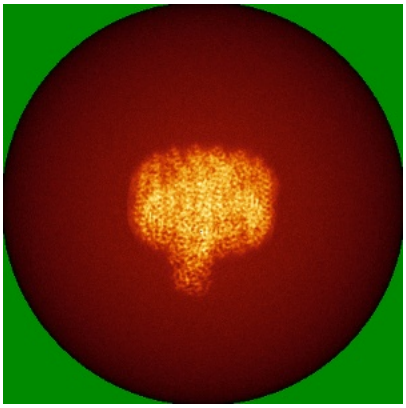


Y

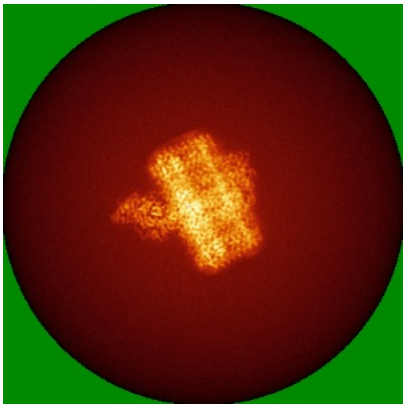


Z

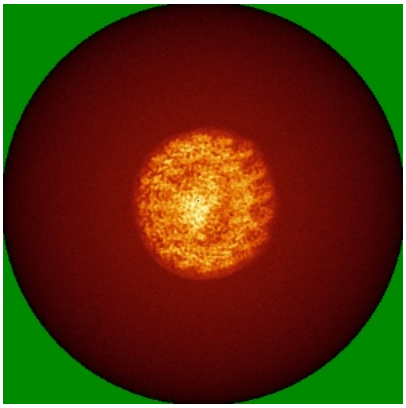
6.4.2 Raw map



X



Y

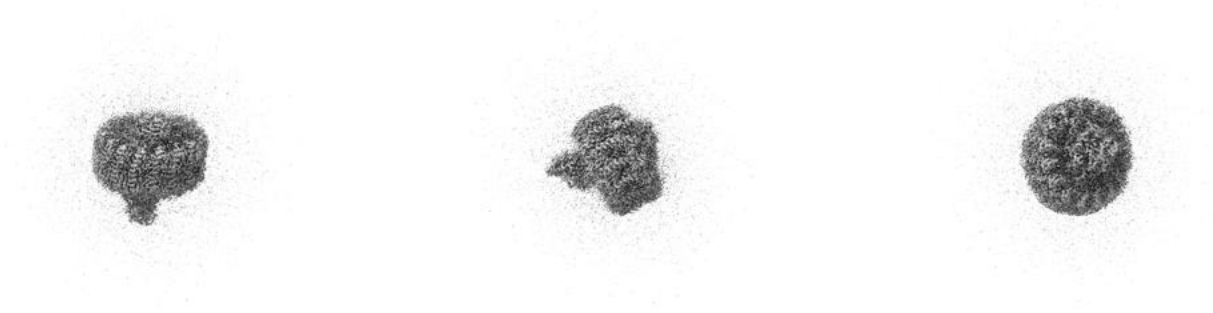


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map

X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

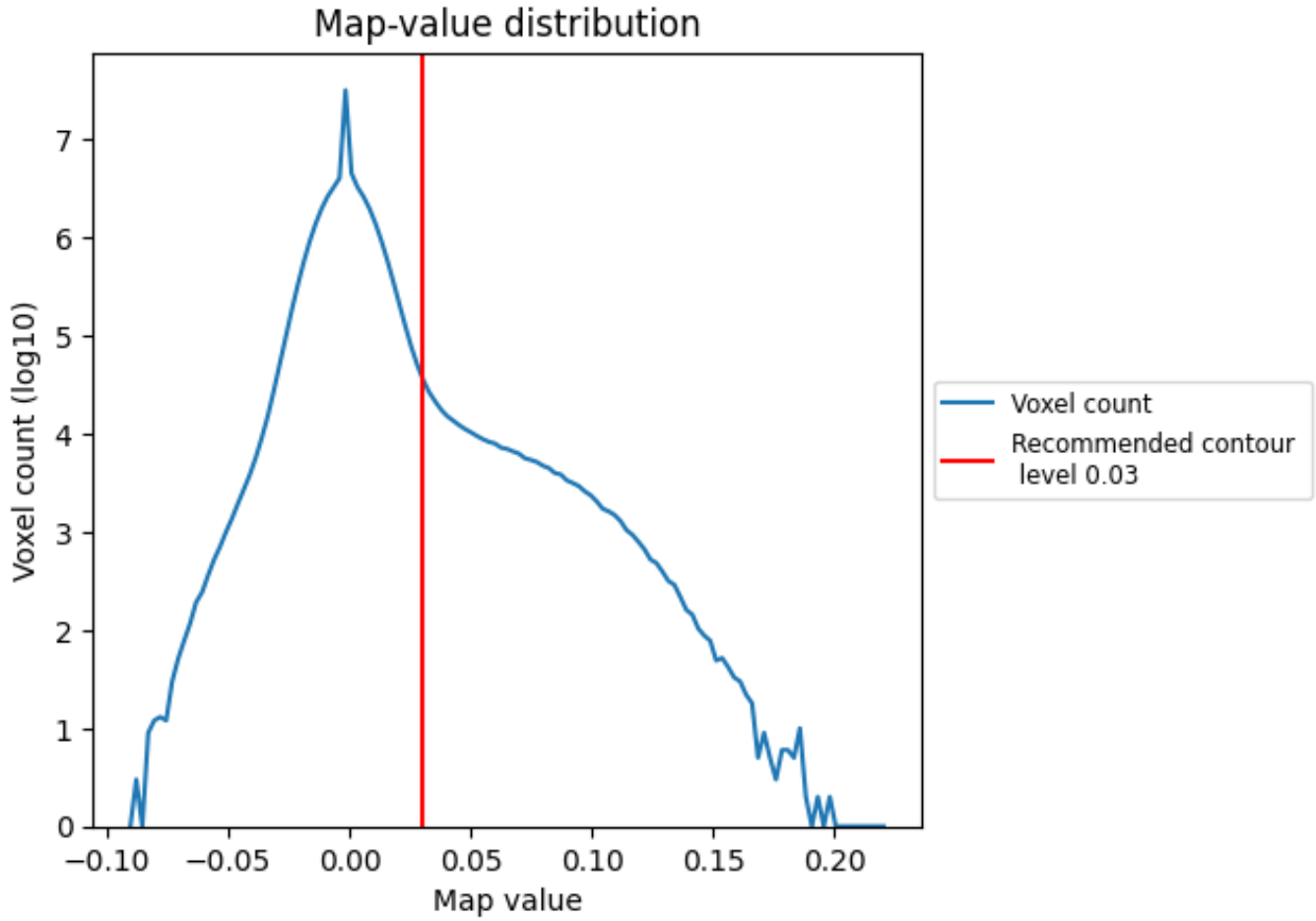
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

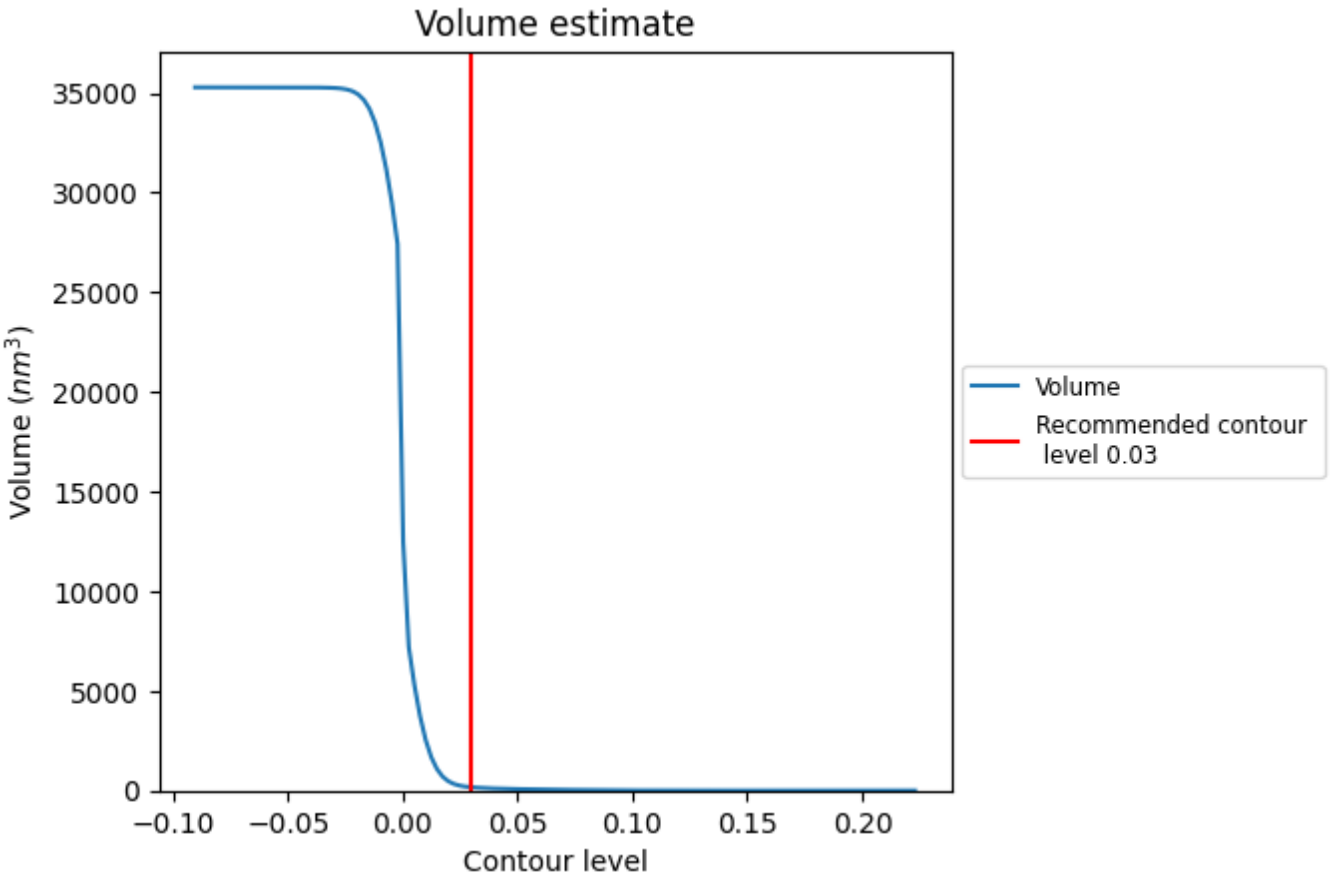
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

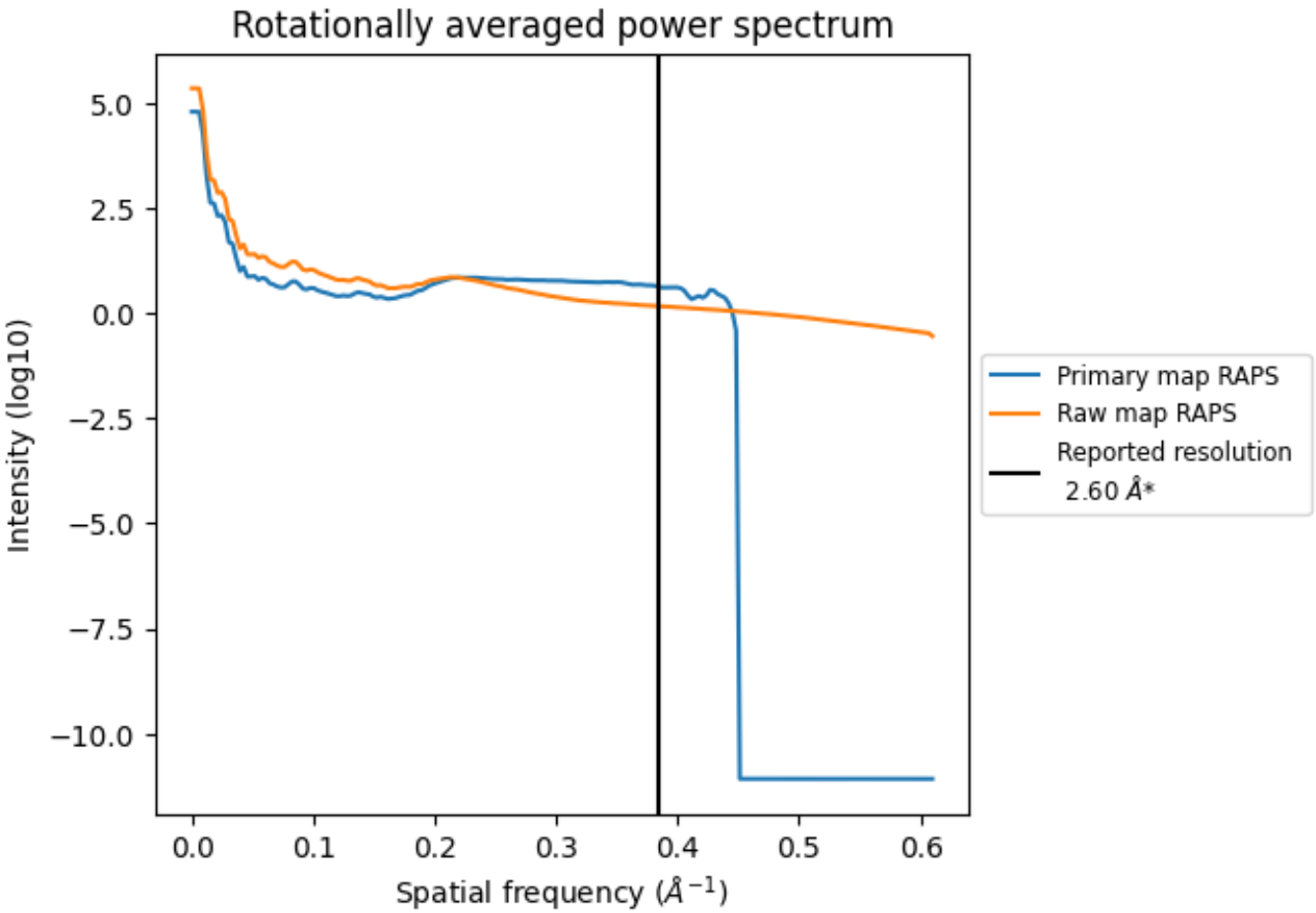
7.2 Volume estimate



The volume at the recommended contour level is 165 nm^3; this corresponds to an approximate mass of 149 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

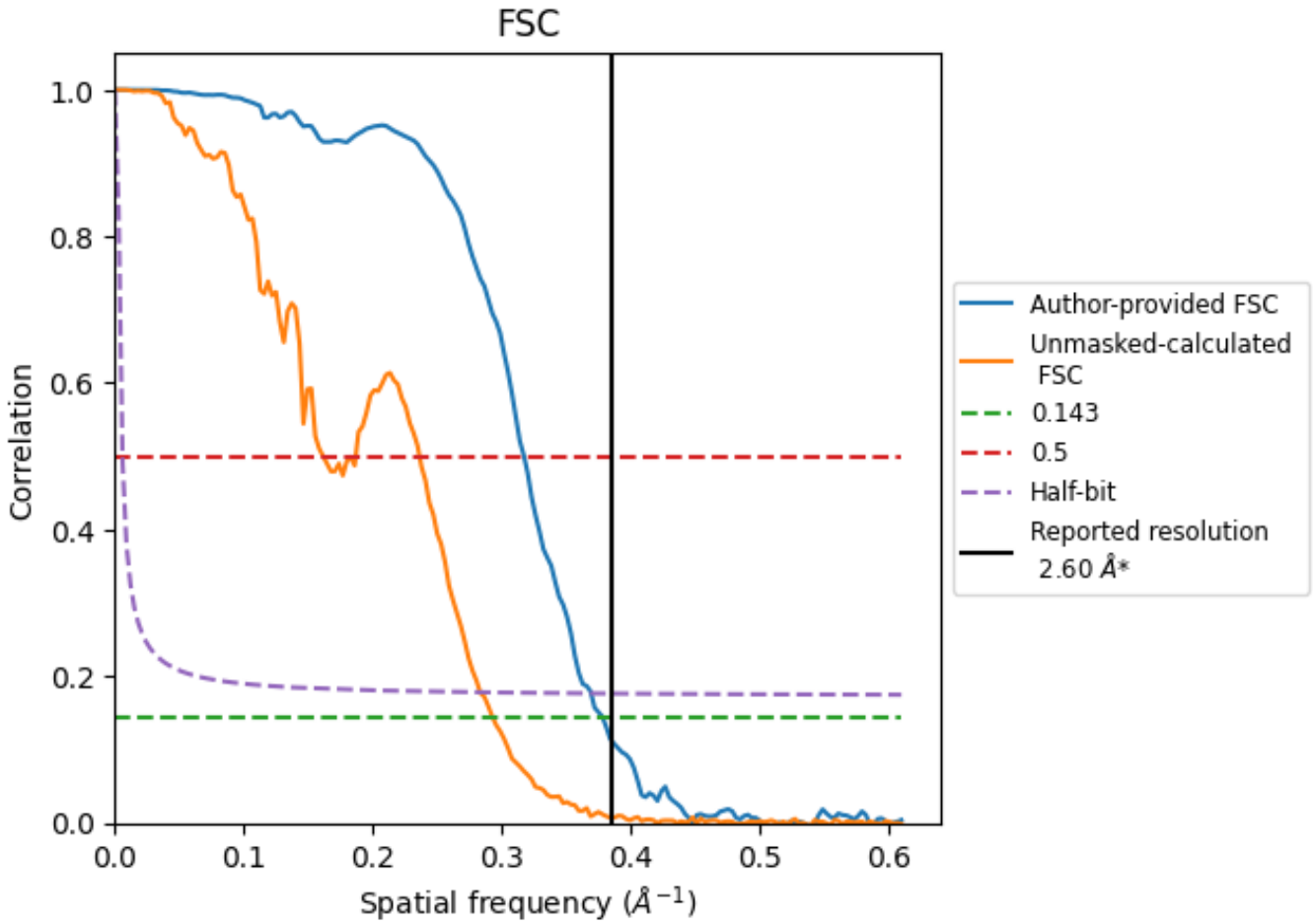


*Reported resolution corresponds to spatial frequency of 0.385 $Å^{-1}$

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.385 Å^{-1}

8.2 Resolution estimates (i)

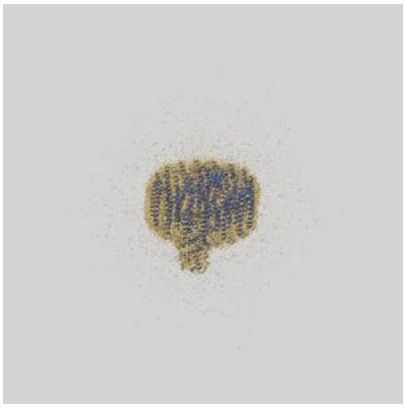
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.60	-	-
Author-provided FSC curve	2.64	3.15	2.71
Unmasked-calculated*	3.41	6.19	3.53

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.41 differs from the reported value 2.6 by more than 10 %

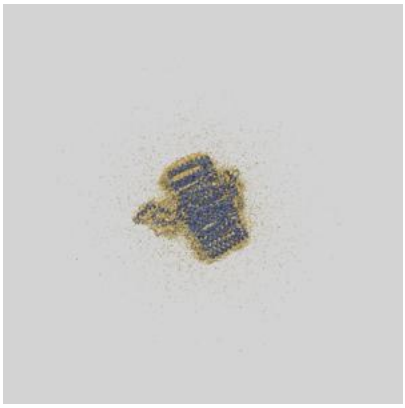
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-39837 and PDB model 8Z83. Per-residue inclusion information can be found in section 3 on page 22.

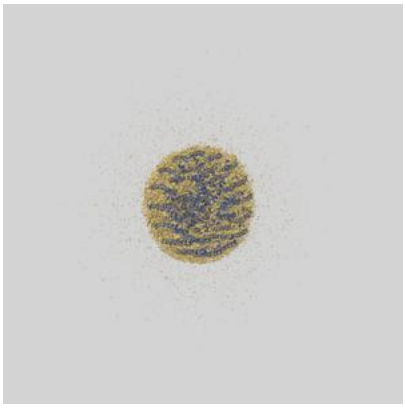
9.1 Map-model overlay



X



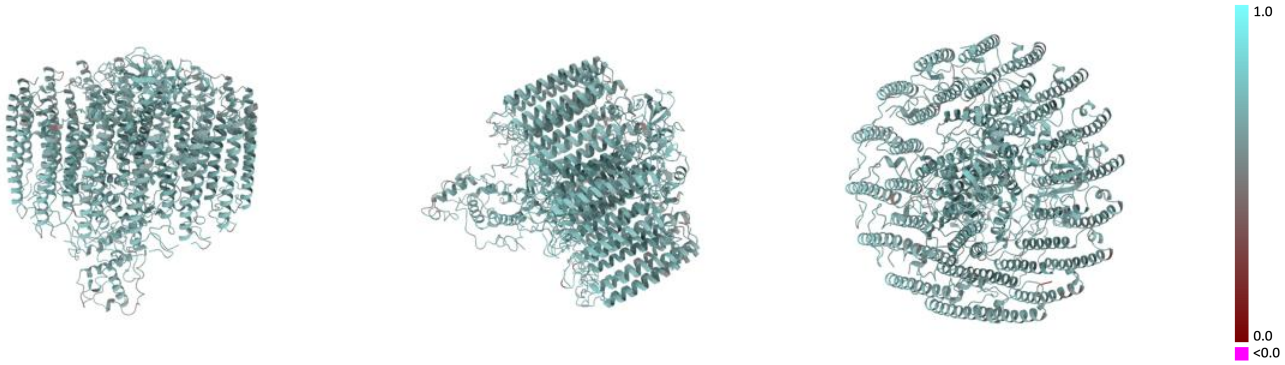
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

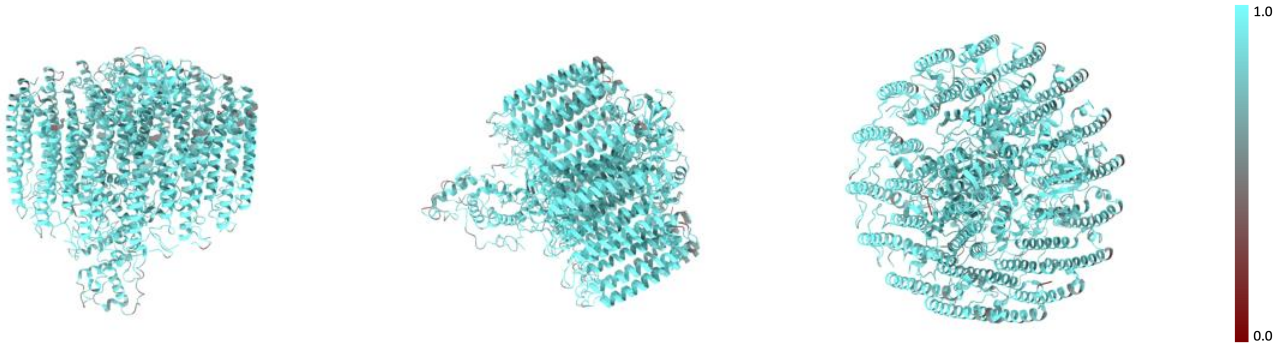
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

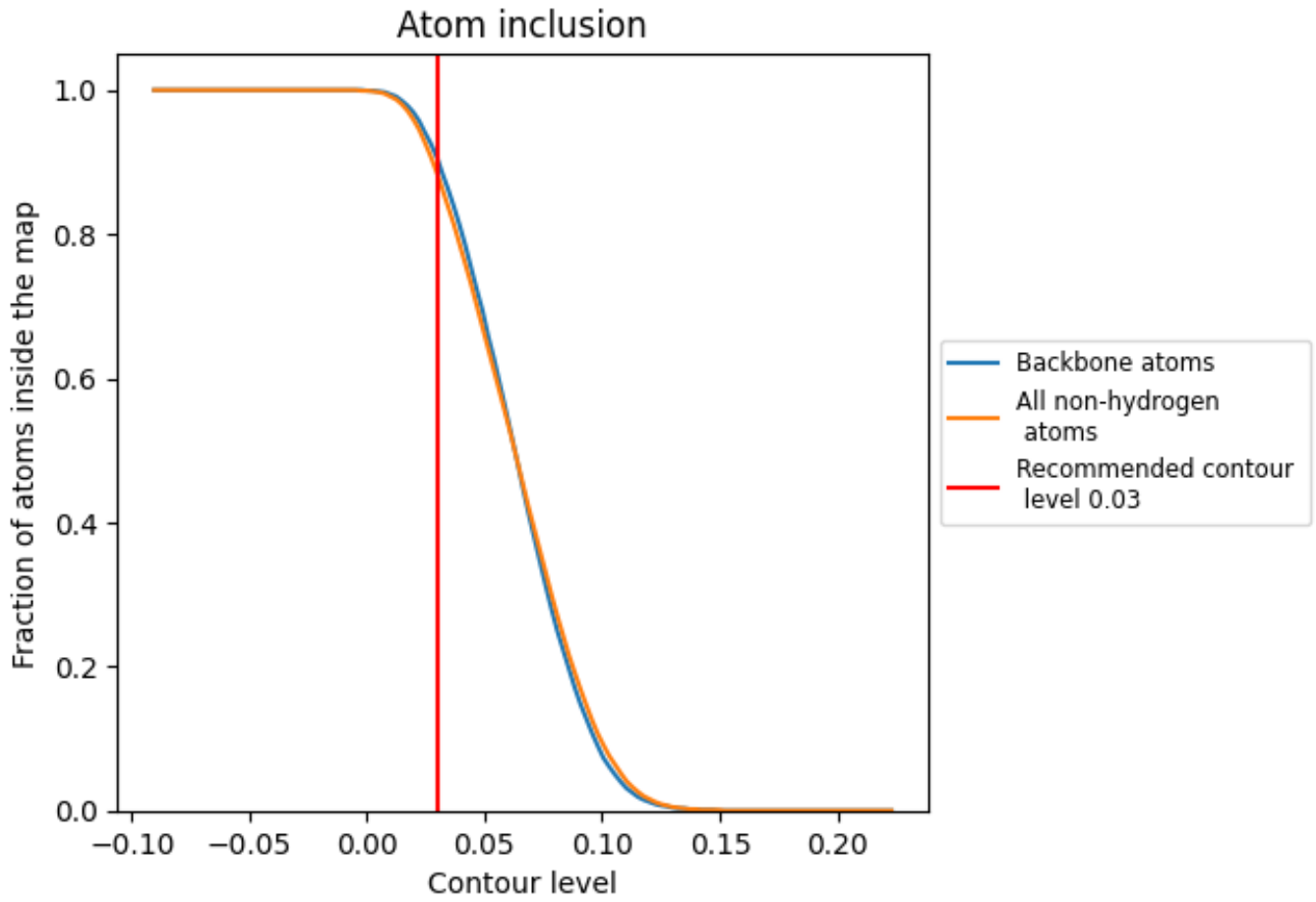
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.03).

9.4 Atom inclusion (i)



At the recommended contour level, 90% of all backbone atoms, 88% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8830	0.6320
0	0.8430	0.6070
1	0.8650	0.6210
2	0.8450	0.6130
3	0.8730	0.6200
4	0.8270	0.6090
5	0.8800	0.6210
6	0.8440	0.6070
7	0.8580	0.6040
8	0.8130	0.6010
9	0.9070	0.6220
A	0.9290	0.6480
B	0.8820	0.6300
C	0.8910	0.6450
D	0.9420	0.6470
E	0.8600	0.6110
F	0.8830	0.6220
G	0.8460	0.6200
H	0.8800	0.6360
I	0.8970	0.6330
J	0.8790	0.6300
K	0.8720	0.6110
L	0.9290	0.6610
M	0.9320	0.6610
N	0.8300	0.6050
O	0.8780	0.6240
P	0.8560	0.6070
Q	0.8910	0.6120
R	0.8470	0.6190
S	0.9030	0.6410
T	0.8580	0.6230
U	0.8840	0.6200
V	0.8100	0.6110
W	0.9140	0.6400
X	0.8550	0.6200

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Chain	Atom inclusion	Q-score
Y	0.8720	0.6320
Z	0.8370	0.6090