Full wwPDB X-ray Structure Validation Report (i)

Nov 22, 2023 – 03:31 PM JST

PDB ID	:	7YP3
Title	:	Crystal structure of elaiophylin glycosyltransferase in complex with elaiophylin
Authors	:	Xu, T.; Liu, Q.; Gan, Q.; Liu, J.
Deposited on	:	2022-08-02
Resolution	:	2.10 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (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 (i)) were used in the production of this report:

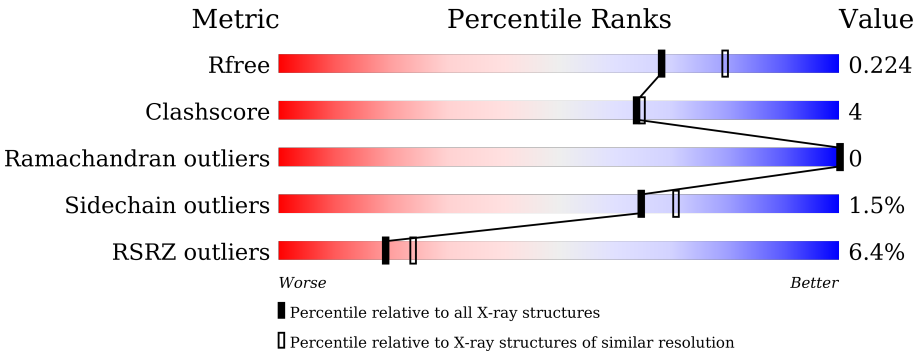
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.10 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	5197 (2.10-2.10)
Clashscore	141614	5710 (2.10-2.10)
Ramachandran outliers	138981	5647 (2.10-2.10)
Sidechain outliers	138945	5648 (2.10-2.10)
RSRZ outliers	127900	5083 (2.10-2.10)

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

Mol	Chain	Length	Quality of chain
1	A	437	2% 86% 7% 6%
1	B	437	6% 84% 8% 7%
1	C	437	9% 84% 8% • 7%
1	D	437	7% 86% 7% • 7%
1	E	437	5% 84% 9% • 7%
1	F	437	3% 86% 9% • •

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Mol	Chain	Length	Quality of chain
1	G	437	

2 Entry composition (i)

There are 5 unique types of molecules in this entry. The entry contains 24066 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Glycosyltransferase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	409	Total	C	N	O	S	0	0	0
			3225	2052	565	595	13			
1	B	408	Total	C	N	O	S	0	3	0
			3234	2060	564	595	15			
1	C	408	Total	C	N	O	S	0	1	0
			3223	2052	564	593	14			
1	D	408	Total	C	N	O	S	0	0	0
			3218	2048	564	593	13			
1	E	408	Total	C	N	O	S	0	0	0
			3218	2048	564	593	13			
1	F	419	Total	C	N	O	S	0	1	0
			3289	2090	578	608	13			
1	G	408	Total	C	N	O	S	0	0	0
			3218	2048	564	593	13			

There are 140 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-19	MET	-	initiating methionine	UNP E5L4T5
A	-18	GLY	-	expression tag	UNP E5L4T5
A	-17	SER	-	expression tag	UNP E5L4T5
A	-16	SER	-	expression tag	UNP E5L4T5
A	-15	HIS	-	expression tag	UNP E5L4T5
A	-14	HIS	-	expression tag	UNP E5L4T5
A	-13	HIS	-	expression tag	UNP E5L4T5
A	-12	HIS	-	expression tag	UNP E5L4T5
A	-11	HIS	-	expression tag	UNP E5L4T5
A	-10	HIS	-	expression tag	UNP E5L4T5
A	-9	SER	-	expression tag	UNP E5L4T5
A	-8	SER	-	expression tag	UNP E5L4T5
A	-7	GLY	-	expression tag	UNP E5L4T5
A	-6	LEU	-	expression tag	UNP E5L4T5
A	-5	VAL	-	expression tag	UNP E5L4T5

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-4	PRO	-	expression tag	UNP E5L4T5
A	-3	ARG	-	expression tag	UNP E5L4T5
A	-2	GLY	-	expression tag	UNP E5L4T5
A	-1	SER	-	expression tag	UNP E5L4T5
A	0	HIS	-	expression tag	UNP E5L4T5
B	-19	MET	-	initiating methionine	UNP E5L4T5
B	-18	GLY	-	expression tag	UNP E5L4T5
B	-17	SER	-	expression tag	UNP E5L4T5
B	-16	SER	-	expression tag	UNP E5L4T5
B	-15	HIS	-	expression tag	UNP E5L4T5
B	-14	HIS	-	expression tag	UNP E5L4T5
B	-13	HIS	-	expression tag	UNP E5L4T5
B	-12	HIS	-	expression tag	UNP E5L4T5
B	-11	HIS	-	expression tag	UNP E5L4T5
B	-10	HIS	-	expression tag	UNP E5L4T5
B	-9	SER	-	expression tag	UNP E5L4T5
B	-8	SER	-	expression tag	UNP E5L4T5
B	-7	GLY	-	expression tag	UNP E5L4T5
B	-6	LEU	-	expression tag	UNP E5L4T5
B	-5	VAL	-	expression tag	UNP E5L4T5
B	-4	PRO	-	expression tag	UNP E5L4T5
B	-3	ARG	-	expression tag	UNP E5L4T5
B	-2	GLY	-	expression tag	UNP E5L4T5
B	-1	SER	-	expression tag	UNP E5L4T5
B	0	HIS	-	expression tag	UNP E5L4T5
C	-19	MET	-	initiating methionine	UNP E5L4T5
C	-18	GLY	-	expression tag	UNP E5L4T5
C	-17	SER	-	expression tag	UNP E5L4T5
C	-16	SER	-	expression tag	UNP E5L4T5
C	-15	HIS	-	expression tag	UNP E5L4T5
C	-14	HIS	-	expression tag	UNP E5L4T5
C	-13	HIS	-	expression tag	UNP E5L4T5
C	-12	HIS	-	expression tag	UNP E5L4T5
C	-11	HIS	-	expression tag	UNP E5L4T5
C	-10	HIS	-	expression tag	UNP E5L4T5
C	-9	SER	-	expression tag	UNP E5L4T5
C	-8	SER	-	expression tag	UNP E5L4T5
C	-7	GLY	-	expression tag	UNP E5L4T5
C	-6	LEU	-	expression tag	UNP E5L4T5
C	-5	VAL	-	expression tag	UNP E5L4T5
C	-4	PRO	-	expression tag	UNP E5L4T5
C	-3	ARG	-	expression tag	UNP E5L4T5

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Chain	Residue	Modelled	Actual	Comment	Reference
C	-2	GLY	-	expression tag	UNP E5L4T5
C	-1	SER	-	expression tag	UNP E5L4T5
C	0	HIS	-	expression tag	UNP E5L4T5
D	-19	MET	-	initiating methionine	UNP E5L4T5
D	-18	GLY	-	expression tag	UNP E5L4T5
D	-17	SER	-	expression tag	UNP E5L4T5
D	-16	SER	-	expression tag	UNP E5L4T5
D	-15	HIS	-	expression tag	UNP E5L4T5
D	-14	HIS	-	expression tag	UNP E5L4T5
D	-13	HIS	-	expression tag	UNP E5L4T5
D	-12	HIS	-	expression tag	UNP E5L4T5
D	-11	HIS	-	expression tag	UNP E5L4T5
D	-10	HIS	-	expression tag	UNP E5L4T5
D	-9	SER	-	expression tag	UNP E5L4T5
D	-8	SER	-	expression tag	UNP E5L4T5
D	-7	GLY	-	expression tag	UNP E5L4T5
D	-6	LEU	-	expression tag	UNP E5L4T5
D	-5	VAL	-	expression tag	UNP E5L4T5
D	-4	PRO	-	expression tag	UNP E5L4T5
D	-3	ARG	-	expression tag	UNP E5L4T5
D	-2	GLY	-	expression tag	UNP E5L4T5
D	-1	SER	-	expression tag	UNP E5L4T5
D	0	HIS	-	expression tag	UNP E5L4T5
E	-19	MET	-	initiating methionine	UNP E5L4T5
E	-18	GLY	-	expression tag	UNP E5L4T5
E	-17	SER	-	expression tag	UNP E5L4T5
E	-16	SER	-	expression tag	UNP E5L4T5
E	-15	HIS	-	expression tag	UNP E5L4T5
E	-14	HIS	-	expression tag	UNP E5L4T5
E	-13	HIS	-	expression tag	UNP E5L4T5
E	-12	HIS	-	expression tag	UNP E5L4T5
E	-11	HIS	-	expression tag	UNP E5L4T5
E	-10	HIS	-	expression tag	UNP E5L4T5
E	-9	SER	-	expression tag	UNP E5L4T5
E	-8	SER	-	expression tag	UNP E5L4T5
E	-7	GLY	-	expression tag	UNP E5L4T5
E	-6	LEU	-	expression tag	UNP E5L4T5
E	-5	VAL	-	expression tag	UNP E5L4T5
E	-4	PRO	-	expression tag	UNP E5L4T5
E	-3	ARG	-	expression tag	UNP E5L4T5
E	-2	GLY	-	expression tag	UNP E5L4T5
E	-1	SER	-	expression tag	UNP E5L4T5

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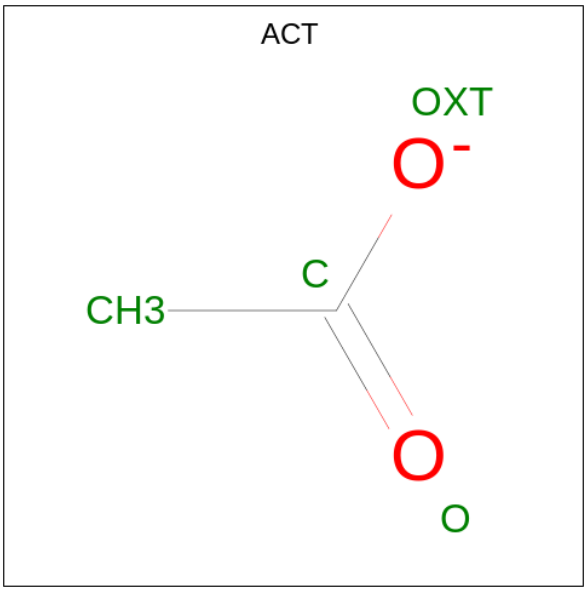
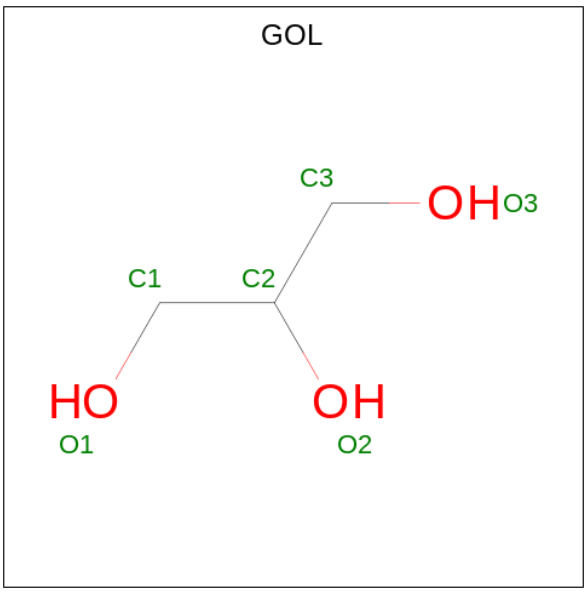
Chain	Residue	Modelled	Actual	Comment	Reference
E	0	HIS	-	expression tag	UNP E5L4T5
F	-19	MET	-	initiating methionine	UNP E5L4T5
F	-18	GLY	-	expression tag	UNP E5L4T5
F	-17	SER	-	expression tag	UNP E5L4T5
F	-16	SER	-	expression tag	UNP E5L4T5
F	-15	HIS	-	expression tag	UNP E5L4T5
F	-14	HIS	-	expression tag	UNP E5L4T5
F	-13	HIS	-	expression tag	UNP E5L4T5
F	-12	HIS	-	expression tag	UNP E5L4T5
F	-11	HIS	-	expression tag	UNP E5L4T5
F	-10	HIS	-	expression tag	UNP E5L4T5
F	-9	SER	-	expression tag	UNP E5L4T5
F	-8	SER	-	expression tag	UNP E5L4T5
F	-7	GLY	-	expression tag	UNP E5L4T5
F	-6	LEU	-	expression tag	UNP E5L4T5
F	-5	VAL	-	expression tag	UNP E5L4T5
F	-4	PRO	-	expression tag	UNP E5L4T5
F	-3	ARG	-	expression tag	UNP E5L4T5
F	-2	GLY	-	expression tag	UNP E5L4T5
F	-1	SER	-	expression tag	UNP E5L4T5
F	0	HIS	-	expression tag	UNP E5L4T5
G	-19	MET	-	initiating methionine	UNP E5L4T5
G	-18	GLY	-	expression tag	UNP E5L4T5
G	-17	SER	-	expression tag	UNP E5L4T5
G	-16	SER	-	expression tag	UNP E5L4T5
G	-15	HIS	-	expression tag	UNP E5L4T5
G	-14	HIS	-	expression tag	UNP E5L4T5
G	-13	HIS	-	expression tag	UNP E5L4T5
G	-12	HIS	-	expression tag	UNP E5L4T5
G	-11	HIS	-	expression tag	UNP E5L4T5
G	-10	HIS	-	expression tag	UNP E5L4T5
G	-9	SER	-	expression tag	UNP E5L4T5
G	-8	SER	-	expression tag	UNP E5L4T5
G	-7	GLY	-	expression tag	UNP E5L4T5
G	-6	LEU	-	expression tag	UNP E5L4T5
G	-5	VAL	-	expression tag	UNP E5L4T5
G	-4	PRO	-	expression tag	UNP E5L4T5
G	-3	ARG	-	expression tag	UNP E5L4T5
G	-2	GLY	-	expression tag	UNP E5L4T5
G	-1	SER	-	expression tag	UNP E5L4T5
G	0	HIS	-	expression tag	UNP E5L4T5

- Molecule 2 is ACETATE ION (three-letter code: ACT) (formula: $C_2H_3O_2$).



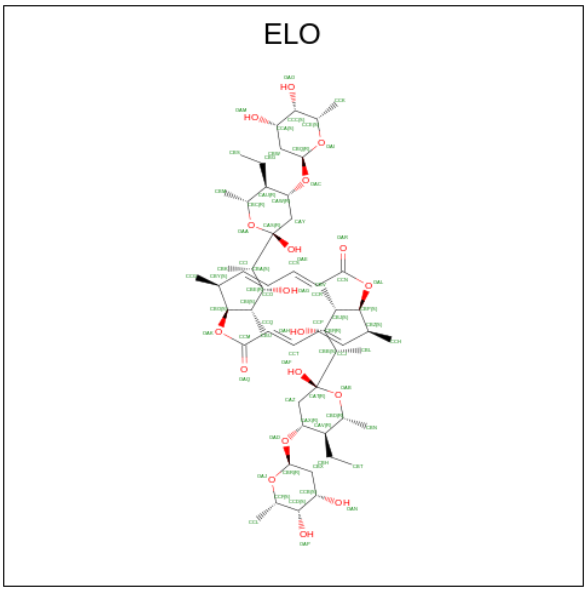
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
2	A	1	Total	C	O	0	0
			4	2	2		
2	A	1	Total	C	O	0	0
			4	2	2		
2	A	1	Total	C	O	0	0
			4	2	2		
2	B	1	Total	C	O	0	0
			4	2	2		
2	B	1	Total	C	O	0	0
			4	2	2		
2	D	1	Total	C	O	0	0
			4	2	2		
2	D	1	Total	C	O	0	0
			4	2	2		
2	E	1	Total	C	O	0	0
			4	2	2		
2	F	1	Total	C	O	0	0
			4	2	2		
2	F	1	Total	C	O	0	0
			4	2	2		
2	F	1	Total	C	O	0	0
			4	2	2		
2	G	1	Total	C	O	0	0
			4	2	2		
2	G	1	Total	C	O	0	0
			4	2	2		
2	G	1	Total	C	O	0	0
			4	2	2		

- Molecule 3 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0
3	B	1	Total C O 6 3 3	0	0
3	B	1	Total C O 6 3 3	0	0
3	C	1	Total C O 6 3 3	0	0
3	E	1	Total C O 6 3 3	0	0
3	F	1	Total C O 6 3 3	0	0
3	F	1	Total C O 6 3 3	0	0
3	F	1	Total C O 6 3 3	0	0
3	G	1	Total C O 6 3 3	0	0
3	G	1	Total C O 6 3 3	0	0

- Molecule 4 is Elaiophylin (three-letter code: ELO) (formula: $C_{54}H_{88}O_{18}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	B	1	Total C O 72 54 18	0	1
4	C	1	Total C O 72 54 18	0	1
4	D	1	Total C O 72 54 18	0	1
4	E	1	Total C O 72 54 18	0	1
4	F	1	Total C O 72 54 18	0	0

- Molecule 5 is water.

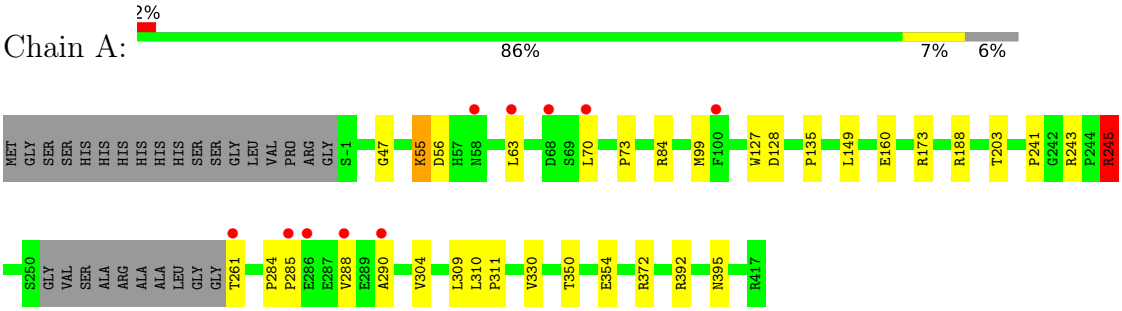
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	197	Total O 197 197	0	0
5	B	198	Total O 198 198	0	0
5	C	100	Total O 100 100	0	0
5	D	84	Total O 84 84	0	0
5	E	60	Total O 60 60	0	0
5	F	227	Total O 227 227	0	0
5	G	93	Total O 93 93	0	0

3 Residue-property plots (i)

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

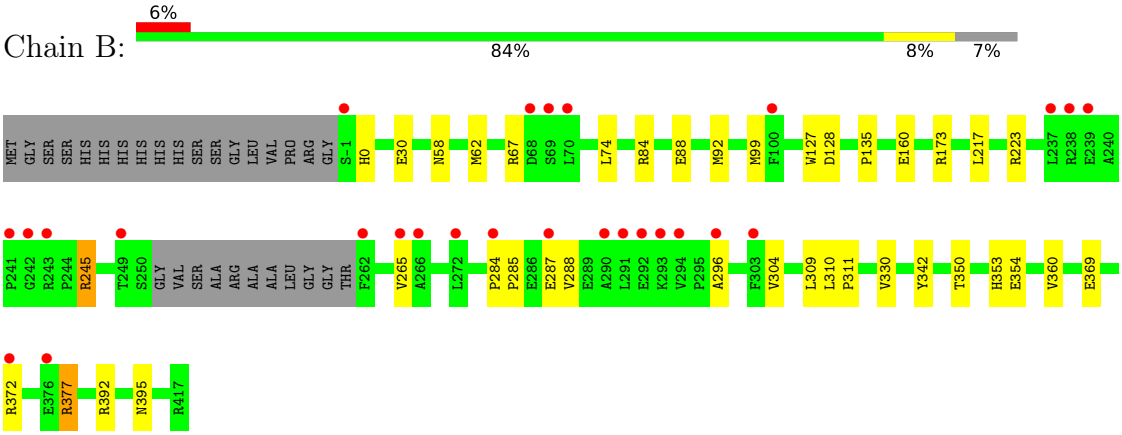
• Molecule 1: Glycosyltransferase

Chain A:



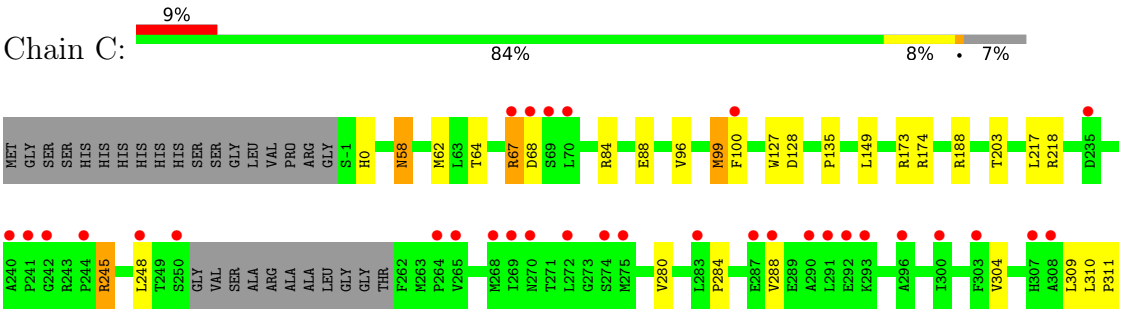
• Molecule 1: Glycosyltransferase

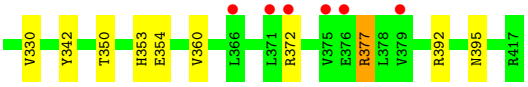
Chain B:



• Molecule 1: Glycosyltransferase

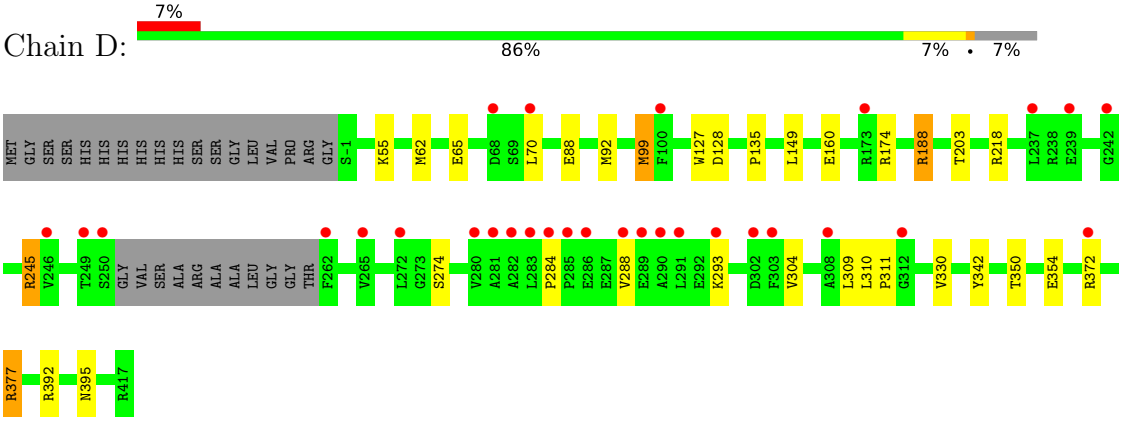
Chain C:





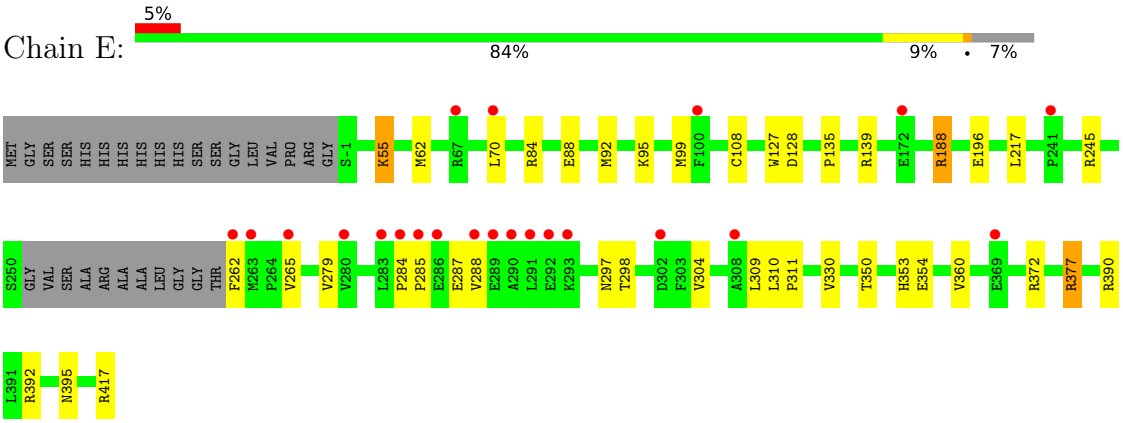
• Molecule 1: Glycosyltransferase

Chain D:



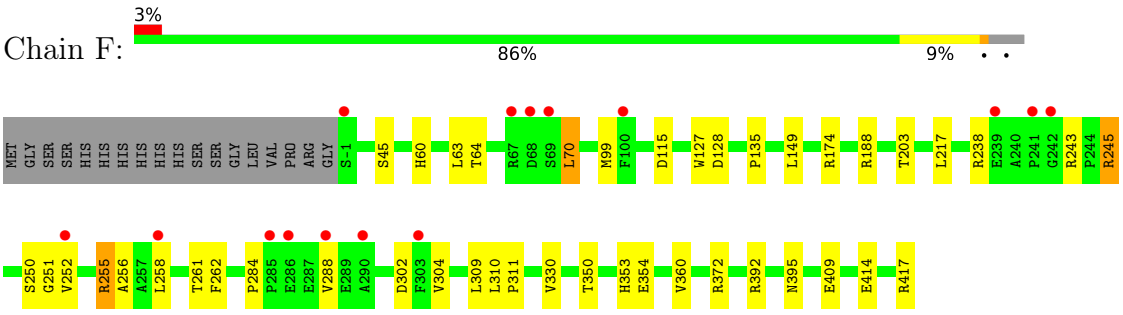
• Molecule 1: Glycosyltransferase

Chain E:



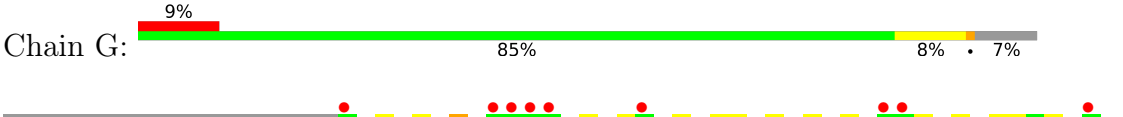
• Molecule 1: Glycosyltransferase

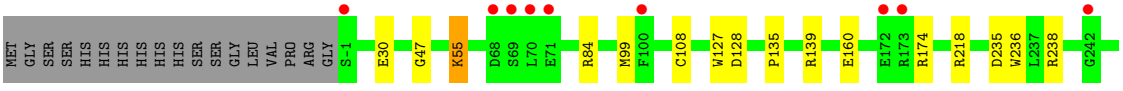
Chain F:

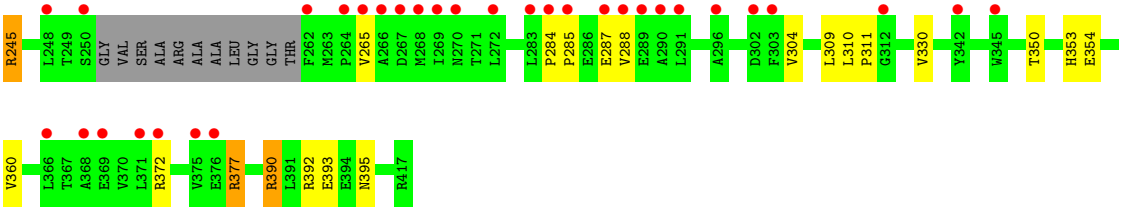


• Molecule 1: Glycosyltransferase

Chain G:






R245
L248
T249
S250
GLY
VAL
SER
ALA
ARG
ALA
ALA
LEU
GLY
GLY
THR
F262
M263
P264
V265
A266
D267
M268
I269
N270
T271
L272
L283
P284
P285
E286
E287
V288
E289
A290
L291
A296
D302
F303
V304
L309
L310
P311
G312
V330
Y342
W345
T350
H353
E354
V360
L366
T367
A368
E369
V370
L371
R372
V375
E376
R377
R390
L391
R392
E393
E394
N395
R417

4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	228.10Å 98.13Å 176.51Å 90.00° 103.26° 90.00°	Depositor
Resolution (Å)	76.01 – 2.10 76.69 – 2.10	Depositor EDS
% Data completeness (in resolution range)	98.6 (76.01-2.10) 98.6 (76.69-2.10)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.48 (at 2.10Å)	Xtriage
Refinement program	REFMAC 5.8.0352	Depositor
R, R_{free}	0.188 , 0.217 0.197 , 0.224	Depositor DCC
R_{free} test set	10987 reflections (5.04%)	wwPDB-VP
Wilson B-factor (Å^2)	36.8	Xtriage
Anisotropy	0.583	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 46.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	24066	wwPDB-VP
Average B, all atoms (Å^2)	57.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.31% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: GOL, ELO, ACT

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
1	A	0.43	0/3314	0.66	1/4531 (0.0%)
1	B	0.43	0/3332	0.66	0/4553
1	C	0.39	0/3315	0.62	1/4531 (0.0%)
1	D	0.39	0/3307	0.62	0/4521
1	E	0.38	0/3307	0.63	0/4521
1	F	0.46	0/3382	0.68	0/4624
1	G	0.40	0/3307	0.63	0/4521
All	All	0.41	0/23264	0.64	2/31802 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	7
1	B	0	7
1	C	0	7
1	D	0	7
1	E	0	8
1	F	0	8
1	G	0	9
All	All	0	53

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	245	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	A	245	ARG	CB-CG-CD	5.02	124.66	111.60

There are no chirality outliers.

All (53) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	173	ARG	Sidechain
1	A	188	ARG	Sidechain
1	A	243	ARG	Sidechain
1	A	245	ARG	Sidechain
1	A	372	ARG	Sidechain
1	A	392	ARG	Sidechain
1	A	84	ARG	Sidechain
1	B	173	ARG	Sidechain
1	B	245	ARG	Sidechain
1	B	372	ARG	Sidechain
1	B	377	ARG	Sidechain
1	B	392	ARG	Sidechain
1	B	67	ARG	Sidechain
1	B	84	ARG	Sidechain
1	C	174	ARG	Sidechain
1	C	188	ARG	Sidechain
1	C	218	ARG	Sidechain
1	C	372	ARG	Sidechain
1	C	377	ARG	Sidechain
1	C	392	ARG	Sidechain
1	C	84	ARG	Sidechain
1	D	174	ARG	Sidechain
1	D	188	ARG	Sidechain
1	D	218	ARG	Sidechain
1	D	245	ARG	Sidechain
1	D	372	ARG	Sidechain
1	D	377	ARG	Sidechain
1	D	392	ARG	Sidechain
1	E	188	ARG	Sidechain
1	E	245	ARG	Sidechain
1	E	372	ARG	Sidechain
1	E	377	ARG	Sidechain
1	E	390	ARG	Sidechain
1	E	392	ARG	Sidechain
1	E	417	ARG	Sidechain
1	E	84	ARG	Sidechain
1	F	174	ARG	Sidechain
1	F	188	ARG	Sidechain
1	F	243	ARG	Sidechain
1	F	245	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	F	255	ARG	Sidechain
1	F	372	ARG	Sidechain
1	F	392	ARG	Sidechain
1	F	417	ARG	Sidechain
1	G	174	ARG	Sidechain
1	G	218	ARG	Sidechain
1	G	238	ARG	Sidechain
1	G	245	ARG	Sidechain
1	G	372	ARG	Sidechain
1	G	377	ARG	Sidechain
1	G	390	ARG	Sidechain
1	G	392	ARG	Sidechain
1	G	84	ARG	Sidechain

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	A	3225	0	3161	15	0
1	B	3234	0	3178	28	0
1	C	3223	0	3163	32	0
1	D	3218	0	3154	26	0
1	E	3218	0	3154	29	0
1	F	3289	0	3228	25	0
1	G	3218	0	3154	22	0
2	A	12	0	9	0	0
2	B	8	0	6	0	0
2	D	8	0	6	0	0
2	E	4	0	3	0	0
2	F	12	0	9	1	0
2	G	12	0	9	1	0
3	A	12	0	16	1	0
3	B	12	0	16	0	0
3	C	6	0	8	0	0
3	E	6	0	8	0	0
3	F	18	0	24	1	0
3	G	12	0	16	1	0
4	B	72	0	0	7	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	C	72	0	0	9	0
4	D	72	0	0	11	0
4	E	72	0	0	13	0
4	F	72	0	0	7	0
5	A	197	0	0	5	0
5	B	198	0	0	2	0
5	C	100	0	0	3	0
5	D	84	0	0	2	0
5	E	60	0	0	3	0
5	F	227	0	0	3	0
5	G	93	0	0	7	0
All	All	24066	0	22322	192	0

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

All (192) 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)
4:D:501[B]:ELO:CCR	4:D:501[B]:ELO:CCP	2.46	0.92
4:D:501[B]:ELO:CCQ	4:D:501[B]:ELO:CCO	2.49	0.91
4:E:501[A]:ELO:CCQ	4:E:501[A]:ELO:CCO	2.53	0.87
4:E:501[A]:ELO:CCR	4:E:501[A]:ELO:CCP	2.56	0.83
4:E:501[A]:ELO:CCO	4:E:501[A]:ELO:CCM	2.61	0.78
1:A:73:PRO:O	5:A:601:HOH:O	2.03	0.76
1:G:30:GLU:OE1	5:G:601:HOH:O	2.04	0.75
1:A:160:GLU:OE1	5:A:602:HOH:O	2.07	0.72
1:B:160:GLU:OE1	5:B:601:HOH:O	2.08	0.71
1:B:304:VAL:HG21	1:B:309:LEU:HD22	1.72	0.71
1:D:160:GLU:OE1	5:D:601:HOH:O	2.09	0.71
1:D:304:VAL:HG21	1:D:309:LEU:HD22	1.73	0.71
1:F:414:GLU:OE1	5:F:601:HOH:O	2.06	0.71
4:D:501[B]:ELO:CCO	4:D:501[B]:ELO:CCM	2.68	0.71
1:C:304:VAL:HG21	1:C:309:LEU:HD22	1.74	0.70
1:F:115[B]:ASP:OD2	5:F:602:HOH:O	2.09	0.69
1:F:304:VAL:HG21	1:F:309:LEU:HD22	1.75	0.69
1:E:297:ASN:OD1	1:E:298:THR:HG23	1.94	0.67
1:E:304:VAL:HG21	1:E:309:LEU:HD22	1.74	0.67
1:G:304:VAL:HG21	1:G:309:LEU:HD22	1.76	0.67
1:E:196:GLU:OE1	5:E:601:HOH:O	2.11	0.67
4:C:501[B]:ELO:CCN	4:C:501[B]:ELO:CCP	2.74	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:501[A]:ELO:CCP	4:E:501[A]:ELO:CCN	2.74	0.66
1:B:58:ASN:HB3	1:C:173:ARG:HH12	1.60	0.66
3:A:505:GOL:H32	1:B:223:ARG:HH12	1.62	0.65
4:C:501[B]:ELO:CCP	4:C:501[B]:ELO:CCR	2.74	0.65
1:E:139:ARG:HA	5:E:643:HOH:O	1.96	0.65
1:A:304:VAL:HG21	1:A:309:LEU:HD22	1.78	0.64
1:C:173:ARG:NH1	5:C:601:HOH:O	2.30	0.64
1:D:70:LEU:HD12	4:E:501[A]:ELO:CCL	2.28	0.64
4:C:501[B]:ELO:CCS	4:C:501[B]:ELO:CCQ	2.75	0.64
4:E:501[A]:ELO:CCQ	4:E:501[A]:ELO:CCS	2.75	0.64
1:E:55:LYS:HD2	1:E:108:CYS:O	1.97	0.64
1:G:55:LYS:HD2	1:G:108:CYS:O	1.99	0.62
4:F:501:ELO:CCR	4:F:501:ELO:CCP	2.77	0.62
4:D:501[B]:ELO:CCP	4:D:501[B]:ELO:CCN	2.77	0.62
1:C:342:TYR:CE2	4:C:501[B]:ELO:OAE	2.53	0.62
4:D:501[B]:ELO:CCR	4:D:501[B]:ELO:CCT	2.78	0.61
4:B:501[A]:ELO:CCQ	4:B:501[A]:ELO:CCO	2.78	0.60
4:B:501[A]:ELO:CCR	4:B:501[A]:ELO:CCP	2.79	0.60
1:G:235:ASP:HA	3:G:505:GOL:H31	1.84	0.60
1:B:74:LEU:HD12	4:C:501[B]:ELO:CBL	2.33	0.59
1:D:92:MET:CE	1:E:62:MET:HE2	2.33	0.59
4:C:501[B]:ELO:CCQ	4:C:501[B]:ELO:CCO	2.81	0.58
1:F:63:LEU:HD22	1:F:70:LEU:HD23	1.85	0.58
4:D:501[B]:ELO:CCM	4:D:501[B]:ELO:CCI	2.82	0.57
4:E:501[A]:ELO:CCM	4:E:501[A]:ELO:CCI	2.82	0.57
1:A:330:VAL:HG12	1:A:395:ASN:ND2	2.19	0.57
1:D:62:MET:CE	1:E:92:MET:HE2	2.34	0.57
1:E:330:VAL:HG12	1:E:395:ASN:ND2	2.20	0.57
1:C:330:VAL:HG12	1:C:395:ASN:ND2	2.20	0.56
4:D:501[B]:ELO:CCN	4:D:501[B]:ELO:CCJ	2.83	0.56
4:D:501[B]:ELO:CCT	4:D:501[B]:ELO:CCS	2.83	0.56
1:G:330:VAL:HG12	1:G:395:ASN:ND2	2.20	0.56
1:B:0:HIS:NE2	1:B:30[B]:GLU:HG2	2.20	0.56
4:F:501:ELO:CCO	4:F:501:ELO:CCQ	2.85	0.55
4:E:501[A]:ELO:CCR	4:E:501[A]:ELO:CCT	2.85	0.55
4:C:501[B]:ELO:CCN	4:C:501[B]:ELO:CCJ	2.85	0.54
1:C:67:ARG:O	1:C:68:ASP:HB2	2.08	0.54
1:G:245:ARG:NH1	1:G:309:LEU:O	2.39	0.54
1:B:330:VAL:HG12	1:B:395:ASN:ND2	2.23	0.54
1:C:353:HIS:HD2	1:C:360:VAL:H	1.55	0.54
1:D:330:VAL:HG12	1:D:395:ASN:ND2	2.21	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:296:ALA:N	5:B:606:HOH:O	2.40	0.54
1:D:245:ARG:NH1	1:D:309:LEU:O	2.41	0.54
1:B:62[A]:MET:SD	1:C:88:GLU:CB	2.95	0.53
1:F:330:VAL:HG12	1:F:395:ASN:ND2	2.22	0.53
1:A:47:GLY:HA2	5:A:603:HOH:O	2.08	0.53
1:E:353:HIS:HD2	1:E:360:VAL:H	1.56	0.53
1:F:245:ARG:HH21	1:F:309:LEU:HD12	1.72	0.53
1:B:353:HIS:HD2	1:B:360:VAL:H	1.56	0.53
1:B:350:THR:O	1:B:354:GLU:HG2	2.09	0.53
1:C:248:LEU:C	1:C:248:LEU:HD23	2.29	0.53
4:D:501[B]:ELO:CCQ	4:D:501[B]:ELO:CCS	2.87	0.53
1:F:353:HIS:HD2	1:F:360:VAL:H	1.55	0.53
1:E:350:THR:O	1:E:354:GLU:HG2	2.09	0.53
4:E:501[A]:ELO:OAC	4:E:501[A]:ELO:CBS	2.57	0.52
1:D:65:GLU:HG3	1:E:88:GLU:CG	2.39	0.52
1:D:350:THR:O	1:D:354:GLU:HG2	2.09	0.52
1:F:350:THR:O	1:F:354:GLU:HG2	2.10	0.52
1:A:350:THR:O	1:A:354:GLU:HG2	2.10	0.52
1:B:88:GLU:HB3	1:C:62:MET:SD	2.50	0.52
1:C:350:THR:O	1:C:354:GLU:HG2	2.10	0.52
1:G:353:HIS:HD2	1:G:360:VAL:H	1.56	0.52
1:G:350:THR:O	1:G:354:GLU:HG2	2.10	0.52
4:C:501[B]:ELO:CCM	4:C:501[B]:ELO:CCI	2.88	0.52
1:D:92:MET:HE2	1:E:62:MET:CE	2.40	0.52
4:F:501:ELO:CCO	4:F:501:ELO:CCM	2.88	0.51
4:F:501:ELO:CCP	4:F:501:ELO:CCN	2.89	0.51
1:D:92:MET:HE2	1:E:62:MET:HE2	1.92	0.51
1:G:393:GLU:HB3	5:G:665:HOH:O	2.09	0.51
1:A:290:ALA:HB3	5:A:604:HOH:O	2.10	0.51
1:C:64:THR:HA	1:C:67:ARG:NH1	2.26	0.51
1:C:0:HIS:HB2	5:C:682:HOH:O	2.09	0.51
1:C:58:ASN:H	1:C:58:ASN:HD22	1.58	0.51
1:B:245:ARG:NH1	1:B:309:LEU:O	2.43	0.51
1:D:92:MET:CE	1:E:62:MET:CE	2.90	0.50
1:A:63:LEU:HD22	1:A:70:LEU:CD1	2.41	0.50
1:F:255:ARG:HD3	1:F:262:PHE:HE2	1.75	0.50
1:F:238:ARG:NH2	5:F:604:HOH:O	2.21	0.50
4:F:501:ELO:CCN	4:F:501:ELO:CCJ	2.90	0.50
1:B:62[A]:MET:SD	1:C:88:GLU:HB3	2.51	0.49
1:D:62:MET:HE2	1:E:92:MET:HE2	1.95	0.49
1:C:245:ARG:NH1	1:C:280:VAL:HG21	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:501[B]:ELO:CCL	1:E:70:LEU:HD12	2.43	0.49
1:D:62:MET:CE	1:E:92:MET:CE	2.90	0.49
1:G:139:ARG:HA	5:G:675:HOH:O	2.13	0.48
1:G:127:TRP:CD2	1:G:135:PRO:HD3	2.48	0.48
1:B:99[A]:MET:CE	1:C:99[A]:MET:HE2	2.43	0.48
1:B:62[A]:MET:SD	1:C:88:GLU:HB2	2.54	0.48
1:C:58:ASN:ND2	5:C:606:HOH:O	2.47	0.48
1:D:127:TRP:CD2	1:D:135:PRO:HD3	2.48	0.48
1:E:127:TRP:CD2	1:E:135:PRO:HD3	2.49	0.48
4:E:501[A]:ELO:CCN	4:E:501[A]:ELO:CCJ	2.92	0.48
1:F:217:LEU:O	3:F:506:GOL:H2	2.14	0.47
1:F:250:SER:OG	1:F:251:GLY:N	2.46	0.47
1:F:127:TRP:CD2	1:F:135:PRO:HD3	2.50	0.47
1:F:245:ARG:NH2	1:F:309:LEU:O	2.46	0.47
1:B:127:TRP:CD2	1:B:135:PRO:HD3	2.50	0.47
1:G:390:ARG:HH11	1:G:390:ARG:CG	2.26	0.47
1:B:310:LEU:N	1:B:311:PRO:CD	2.78	0.47
1:C:127:TRP:CD2	1:C:135:PRO:HD3	2.49	0.47
1:F:255:ARG:HD3	1:F:262:PHE:CE2	2.50	0.47
1:D:62:MET:HE2	1:E:92:MET:CE	2.44	0.47
1:A:55:LYS:HD3	1:A:56:ASP:O	2.15	0.47
1:G:310:LEU:N	1:G:311:PRO:CD	2.78	0.47
1:C:310:LEU:N	1:C:311:PRO:CD	2.78	0.46
4:B:501[A]:ELO:CCD	1:C:100:PHE:HD2	2.27	0.46
1:G:390:ARG:NH1	1:G:390:ARG:HB3	2.30	0.46
1:G:236:TRP:N	5:G:612:HOH:O	2.46	0.46
1:B:99[A]:MET:CE	1:C:99[A]:MET:CE	2.94	0.46
1:G:390:ARG:HH11	1:G:390:ARG:HB3	1.81	0.46
2:G:502:ACT:H1	5:G:645:HOH:O	2.15	0.46
1:A:310:LEU:N	1:A:311:PRO:CD	2.79	0.46
1:A:127:TRP:CD2	1:A:135:PRO:HD3	2.50	0.46
1:D:88:GLU:HB3	1:E:62:MET:SD	2.56	0.46
1:D:310:LEU:N	1:D:311:PRO:CD	2.79	0.46
1:E:310:LEU:N	1:E:311:PRO:CD	2.78	0.46
1:F:250:SER:HB2	1:F:255:ARG:CG	2.47	0.45
1:G:160:GLU:OE1	5:G:602:HOH:O	2.21	0.45
1:D:99:MET:HE3	1:E:95:LYS:HE3	1.99	0.44
1:F:310:LEU:N	1:F:311:PRO:CD	2.80	0.44
1:G:390:ARG:HH11	1:G:390:ARG:CB	2.30	0.44
4:B:501[A]:ELO:CCO	4:B:501[A]:ELO:CCM	2.95	0.44
1:B:92:MET:CE	1:C:62:MET:HE2	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:255:ARG:HH21	1:F:258:LEU:HD11	1.83	0.44
1:D:342:TYR:CE2	4:D:501[B]:ELO:OAE	2.70	0.44
4:B:501[A]:ELO:CCP	4:B:501[A]:ELO:CCN	2.96	0.43
1:F:250:SER:HB2	1:F:255:ARG:HG3	2.00	0.43
1:D:99:MET:CE	1:E:95:LYS:HE3	2.48	0.43
1:F:149:LEU:HD22	1:F:203:THR:CG2	2.48	0.43
4:F:501:ELO:CCR	4:F:501:ELO:CCT	2.96	0.43
1:A:241:PRO:HD2	5:A:628:HOH:O	2.17	0.43
4:C:501[B]:ELO:CCO	4:C:501[B]:ELO:CCM	2.96	0.43
1:E:279:VAL:HB	1:E:298:THR:HG22	2.01	0.43
1:D:149:LEU:HD22	1:D:203:THR:CG2	2.48	0.43
1:F:252:VAL:O	1:F:256:ALA:HB3	2.19	0.43
1:B:99[A]:MET:HE2	1:C:99[A]:MET:CE	2.49	0.43
4:E:501[A]:ELO:CCQ	4:E:501[A]:ELO:CCR	2.96	0.43
4:F:501:ELO:CCQ	4:F:501:ELO:CCS	2.96	0.43
1:B:284:PRO:O	1:B:288:VAL:HG23	2.19	0.43
1:C:284:PRO:O	1:C:288:VAL:HG23	2.19	0.43
1:D:284:PRO:O	1:D:288:VAL:HG23	2.19	0.43
1:A:284:PRO:O	1:A:288:VAL:HG23	2.18	0.43
4:E:501[A]:ELO:CCS	4:E:501[A]:ELO:CCT	2.97	0.43
1:G:265:VAL:HG21	1:G:287:GLU:OE2	2.19	0.43
1:E:284:PRO:O	1:E:288:VAL:HG23	2.19	0.42
1:D:65:GLU:HG3	1:E:88:GLU:HG3	2.00	0.42
1:F:284:PRO:O	1:F:288:VAL:HG23	2.18	0.42
1:D:188:ARG:O	1:D:188:ARG:HG2	2.19	0.42
1:B:92:MET:HE2	1:C:62:MET:HE2	2.01	0.42
1:D:395:ASN:OD1	5:D:602:HOH:O	2.22	0.42
1:A:149:LEU:HD22	1:A:203:THR:CG2	2.49	0.42
1:F:409:GLU:OE2	2:F:504:ACT:H1	2.20	0.41
1:B:265:VAL:HG21	1:B:287:GLU:OE2	2.21	0.41
1:C:245:ARG:NH1	1:C:280:VAL:CG2	2.84	0.41
1:F:60:HIS:O	1:F:64:THR:HG23	2.21	0.41
1:C:149:LEU:HD22	1:C:203:THR:CG2	2.51	0.41
4:E:501[A]:ELO:OAD	4:E:501[A]:ELO:CBT	2.68	0.41
1:G:284:PRO:O	1:G:288:VAL:HG23	2.20	0.41
1:E:188:ARG:HD2	5:E:657:HOH:O	2.20	0.41
1:E:265:VAL:HG21	1:E:287:GLU:OE2	2.21	0.41
1:E:285:PRO:O	1:E:288:VAL:HB	2.21	0.41
1:B:99[A]:MET:HE1	1:C:99[A]:MET:HE2	2.03	0.41
1:B:285:PRO:O	1:B:288:VAL:HB	2.21	0.41
4:B:501[A]:ELO:CAZ	1:C:96:VAL:HG21	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:342:TYR:CE2	4:B:501[A]:ELO:OAE	2.73	0.40
1:G:285:PRO:O	1:G:288:VAL:HB	2.21	0.40
1:A:285:PRO:O	1:A:288:VAL:HB	2.21	0.40
1:G:47:GLY:HA2	5:G:607:HOH:O	2.21	0.40
1:B:88:GLU:CB	1:C:62:MET:SD	3.10	0.40
1:F:252:VAL:O	1:F:256:ALA:CB	2.69	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	405/437 (93%)	396 (98%)	9 (2%)	0	100	100
1	B	407/437 (93%)	398 (98%)	9 (2%)	0	100	100
1	C	405/437 (93%)	396 (98%)	9 (2%)	0	100	100
1	D	404/437 (92%)	395 (98%)	9 (2%)	0	100	100
1	E	404/437 (92%)	396 (98%)	8 (2%)	0	100	100
1	F	418/437 (96%)	407 (97%)	11 (3%)	0	100	100
1	G	404/437 (92%)	396 (98%)	8 (2%)	0	100	100
All	All	2847/3059 (93%)	2784 (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 X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	347/366 (95%)	342 (99%)	5 (1%)	67	73
1	B	349/366 (95%)	345 (99%)	4 (1%)	73	79
1	C	347/366 (95%)	340 (98%)	7 (2%)	55	60
1	D	346/366 (94%)	340 (98%)	6 (2%)	60	67
1	E	346/366 (94%)	340 (98%)	6 (2%)	60	67
1	F	352/366 (96%)	346 (98%)	6 (2%)	60	67
1	G	346/366 (94%)	342 (99%)	4 (1%)	71	77
All	All	2433/2562 (95%)	2395 (98%)	38 (2%)	65	69

All (38) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	55	LYS
1	A	99	MET
1	A	128	ASP
1	A	245	ARG
1	A	261	THR
1	B	128	ASP
1	B	217	LEU
1	B	369	GLU
1	B	377	ARG
1	C	58	ASN
1	C	67	ARG
1	C	99[A]	MET
1	C	99[B]	MET
1	C	128	ASP
1	C	217	LEU
1	C	377	ARG
1	D	55	LYS
1	D	99	MET
1	D	128	ASP
1	D	274	SER
1	D	293	LYS
1	D	377	ARG
1	E	55	LYS
1	E	99	MET
1	E	128	ASP
1	E	217	LEU

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Mol	Chain	Res	Type
1	E	262	PHE
1	E	377	ARG
1	F	45	SER
1	F	70	LEU
1	F	99	MET
1	F	128	ASP
1	F	261	THR
1	F	302	ASP
1	G	55	LYS
1	G	99	MET
1	G	128	ASP
1	G	377	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (15) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	58	ASN
1	A	331	ASN
1	B	66	ASN
1	B	331	ASN
1	B	353	HIS
1	C	331	ASN
1	C	353	HIS
1	D	331	ASN
1	D	402	HIS
1	E	353	HIS
1	F	331	ASN
1	F	353	HIS
1	G	206	GLN
1	G	331	ASN
1	G	353	HIS

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 monosaccharides in this entry.

5.6 Ligand geometry (i)

30 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
3	GOL	B	504	-	5,5,5	0.24	0	5,5,5	0.44	0
3	GOL	F	506	-	5,5,5	0.14	0	5,5,5	0.35	0
3	GOL	E	503	-	5,5,5	0.16	0	5,5,5	0.51	0
3	GOL	F	505	-	5,5,5	0.26	0	5,5,5	0.44	0
2	ACT	G	503	-	3,3,3	0.84	0	3,3,3	1.03	0
2	ACT	G	502	-	3,3,3	0.86	0	3,3,3	0.82	0
3	GOL	A	505	-	5,5,5	0.21	0	5,5,5	0.47	0
4	ELO	B	501[A]	-	72,76,76	2.00	19 (26%)	90,112,112	2.16	34 (37%)
4	ELO	D	501[B]	-	72,76,76	1.87	22 (30%)	90,112,112	2.20	29 (32%)
2	ACT	D	503	-	3,3,3	1.13	0	3,3,3	0.89	0
2	ACT	F	503	-	3,3,3	0.97	0	3,3,3	0.81	0
2	ACT	E	502	-	3,3,3	1.07	0	3,3,3	0.80	0
3	GOL	G	504	-	5,5,5	0.38	0	5,5,5	0.51	0
2	ACT	A	502	-	3,3,3	1.10	0	3,3,3	0.63	0
3	GOL	F	507	-	5,5,5	0.16	0	5,5,5	0.40	0
2	ACT	B	503	-	3,3,3	1.13	0	3,3,3	0.76	0
4	ELO	C	501[B]	-	72,76,76	1.78	19 (26%)	90,112,112	2.06	30 (33%)
2	ACT	A	501	-	3,3,3	0.97	0	3,3,3	0.82	0
4	ELO	E	501[A]	-	72,76,76	1.97	17 (23%)	90,112,112	2.22	29 (32%)
2	ACT	A	503	-	3,3,3	1.08	0	3,3,3	0.82	0
3	GOL	A	504	-	5,5,5	0.26	0	5,5,5	0.45	0
2	ACT	G	501	-	3,3,3	1.18	0	3,3,3	0.73	0
2	ACT	B	502	-	3,3,3	1.02	0	3,3,3	0.93	0
3	GOL	G	505	-	5,5,5	0.18	0	5,5,5	0.55	0
4	ELO	F	501	-	72,76,76	2.28	25 (34%)	90,112,112	2.28	31 (34%)
2	ACT	F	502	-	3,3,3	0.86	0	3,3,3	0.98	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
2	ACT	D	502	-	3,3,3	1.07	0	3,3,3	0.67	0
2	ACT	F	504	-	3,3,3	1.34	0	3,3,3	0.54	0
3	GOL	C	502	-	5,5,5	0.11	0	5,5,5	0.44	0
3	GOL	B	505	-	5,5,5	0.25	0	5,5,5	0.58	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	GOL	B	504	-	-	0/4/4/4	-
3	GOL	F	506	-	-	0/4/4/4	-
3	GOL	E	503	-	-	2/4/4/4	-
3	GOL	F	505	-	-	4/4/4/4	-
3	GOL	G	505	-	-	2/4/4/4	-
4	ELO	F	501	-	-	29/78/146/146	0/4/5/5
3	GOL	F	507	-	-	4/4/4/4	-
3	GOL	A	505	-	-	4/4/4/4	-
4	ELO	B	501[A]	-	-	30/78/146/146	0/4/5/5
3	GOL	G	504	-	-	4/4/4/4	-
4	ELO	C	501[B]	-	-	16/78/146/146	0/4/5/5
4	ELO	E	501[A]	-	-	29/78/146/146	0/4/5/5
4	ELO	D	501[B]	-	-	37/78/146/146	0/4/5/5
3	GOL	A	504	-	-	2/4/4/4	-
3	GOL	C	502	-	-	2/4/4/4	-
3	GOL	B	505	-	-	4/4/4/4	-

All (102) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	501[A]	ELO	CCA-CCC	-6.84	1.42	1.52
4	F	501	ELO	CBW-CBQ	6.61	1.65	1.51
4	F	501	ELO	CBY-CCI	-5.78	1.36	1.51
4	B	501[A]	ELO	CBY-CCI	-5.61	1.36	1.51
4	B	501[A]	ELO	OAL-CBP	5.15	1.52	1.44
4	F	501	ELO	CCA-CCC	-5.01	1.45	1.52
4	E	501[A]	ELO	CBW-CBQ	4.97	1.61	1.51
4	C	501[B]	ELO	CBY-CCI	-4.74	1.39	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	501	ELO	CBZ-CCJ	-4.59	1.39	1.51
4	C	501[B]	ELO	CCA-CCC	-4.55	1.45	1.52
4	E	501[A]	ELO	CAY-CAS	4.44	1.58	1.52
4	D	501[B]	ELO	CAZ-CAT	4.44	1.58	1.52
4	F	501	ELO	OAA-CBC	4.35	1.50	1.44
4	D	501[B]	ELO	CCA-CCC	-4.33	1.46	1.52
4	B	501[A]	ELO	CCQ-CCM	-4.29	1.38	1.48
4	B	501[A]	ELO	CBZ-CCJ	-4.27	1.40	1.51
4	E	501[A]	ELO	CBY-CCI	-4.24	1.40	1.51
4	E	501[A]	ELO	OAA-CBC	4.24	1.49	1.44
4	E	501[A]	ELO	CBZ-CCJ	-4.14	1.40	1.51
4	E	501[A]	ELO	OAC-CBQ	4.12	1.52	1.41
4	B	501[A]	ELO	CCA-CCC	-4.11	1.46	1.52
4	C	501[B]	ELO	CBZ-CCJ	-4.09	1.40	1.51
4	F	501	ELO	CCQ-CCM	-4.07	1.38	1.48
4	F	501	ELO	OAC-CBQ	4.07	1.52	1.41
4	B	501[A]	ELO	OAA-CBC	3.88	1.49	1.44
4	D	501[B]	ELO	OAA-CBC	3.87	1.49	1.44
4	D	501[B]	ELO	CBY-CCI	-3.82	1.41	1.51
4	B	501[A]	ELO	CBY-CBO	3.81	1.64	1.54
4	C	501[B]	ELO	CCQ-CCM	-3.79	1.39	1.48
4	D	501[B]	ELO	CBW-CBQ	3.76	1.59	1.51
4	E	501[A]	ELO	CCQ-CCM	-3.74	1.39	1.48
4	F	501	ELO	CCB-CCD	3.71	1.58	1.52
4	D	501[B]	ELO	CBZ-CCJ	-3.64	1.41	1.51
4	F	501	ELO	CBY-CBO	3.51	1.63	1.54
4	D	501[B]	ELO	CCQ-CCM	-3.46	1.40	1.48
4	F	501	ELO	CBU-CBI	-3.37	1.46	1.53
4	F	501	ELO	OAJ-CCF	3.32	1.52	1.44
4	B	501[A]	ELO	OAC-CBQ	3.29	1.50	1.41
4	D	501[B]	ELO	OAC-CBQ	3.26	1.49	1.41
4	B	501[A]	ELO	OAA-CAS	3.25	1.48	1.43
4	F	501	ELO	CCS-CCR	3.18	1.42	1.34
4	B	501[A]	ELO	CBW-CBQ	3.10	1.57	1.51
4	C	501[B]	ELO	OAL-CBP	3.02	1.49	1.44
4	C	501[B]	ELO	OAC-CBQ	2.98	1.49	1.41
4	E	501[A]	ELO	CCS-CCR	2.98	1.42	1.34
4	C	501[B]	ELO	OAD-CBR	2.92	1.49	1.41
4	F	501	ELO	OAA-CAS	2.91	1.48	1.43
4	C	501[B]	ELO	CAZ-CAT	2.85	1.56	1.52
4	F	501	ELO	CAU-CBC	-2.76	1.48	1.52
4	D	501[B]	ELO	CCS-CCR	2.75	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	501[B]	ELO	CCR-CCN	-2.74	1.41	1.48
4	E	501[A]	ELO	CAZ-CAT	2.74	1.56	1.52
4	C	501[B]	ELO	CCS-CCR	2.73	1.41	1.34
4	B	501[A]	ELO	CBU-CBI	-2.72	1.47	1.53
4	B	501[A]	ELO	CCR-CCN	-2.71	1.41	1.48
4	C	501[B]	ELO	OAA-CBC	2.71	1.48	1.44
4	F	501	ELO	OAP-CCD	2.71	1.49	1.43
4	D	501[B]	ELO	CBX-CBR	2.70	1.56	1.51
4	E	501[A]	ELO	CBX-CCB	2.70	1.57	1.52
4	F	501	ELO	CAY-CAW	2.62	1.58	1.52
4	F	501	ELO	OAI-CCE	-2.58	1.38	1.44
4	C	501[B]	ELO	OAJ-CBR	2.56	1.48	1.42
4	F	501	ELO	OAM-CCA	2.54	1.48	1.43
4	D	501[B]	ELO	OAF-CAT	2.51	1.45	1.40
4	F	501	ELO	OAF-CAT	2.51	1.45	1.40
4	B	501[A]	ELO	CCK-CCE	2.46	1.57	1.51
4	B	501[A]	ELO	CCS-CCR	2.43	1.40	1.34
4	D	501[B]	ELO	CCT-CCQ	2.43	1.40	1.34
4	E	501[A]	ELO	CAY-CAW	2.40	1.57	1.52
4	D	501[B]	ELO	CAV-CBD	-2.38	1.48	1.52
4	B	501[A]	ELO	OAJ-CBR	2.38	1.48	1.42
4	D	501[B]	ELO	CAU-CBC	2.37	1.55	1.52
4	C	501[B]	ELO	OAF-CAT	2.37	1.44	1.40
4	D	501[B]	ELO	CCC-CCE	2.37	1.58	1.52
4	F	501	ELO	CCC-CCE	2.32	1.58	1.52
4	C	501[B]	ELO	OAP-CCD	2.28	1.48	1.43
4	E	501[A]	ELO	CCT-CCQ	2.28	1.40	1.34
4	C	501[B]	ELO	CCT-CCQ	2.27	1.40	1.34
4	D	501[B]	ELO	OAL-CCN	2.27	1.39	1.34
4	D	501[B]	ELO	CBX-CCB	2.27	1.56	1.52
4	C	501[B]	ELO	CCO-CCI	2.27	1.42	1.33
4	E	501[A]	ELO	CBX-CBR	2.26	1.55	1.51
4	D	501[B]	ELO	OAA-CAS	2.24	1.47	1.43
4	B	501[A]	ELO	OAL-CCN	2.22	1.39	1.34
4	E	501[A]	ELO	CCB-CCD	2.20	1.55	1.52
4	B	501[A]	ELO	CCB-CCD	2.19	1.55	1.52
4	E	501[A]	ELO	CBI-CBE	-2.18	1.48	1.54
4	F	501	ELO	CCK-CCE	2.18	1.56	1.51
4	F	501	ELO	OAK-CCM	2.17	1.39	1.34
4	C	501[B]	ELO	CCB-CCD	2.15	1.55	1.52
4	B	501[A]	ELO	CCT-CCQ	2.15	1.40	1.34
4	F	501	ELO	OAK-CBO	2.13	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	501[B]	ELO	CAY-CAW	2.12	1.57	1.52
4	F	501	ELO	OAE-CAS	2.08	1.44	1.40
4	E	501[A]	ELO	CCR-CCN	-2.06	1.43	1.48
4	C	501[B]	ELO	CBY-CBO	2.06	1.59	1.54
4	D	501[B]	ELO	CBU-CBI	-2.06	1.49	1.53
4	C	501[B]	ELO	CCK-CCE	2.02	1.56	1.51
4	D	501[B]	ELO	CCO-CCI	2.02	1.41	1.33
4	B	501[A]	ELO	OAF-CAT	2.02	1.44	1.40
4	D	501[B]	ELO	CCB-CCD	2.02	1.55	1.52
4	F	501	ELO	OAL-CCN	2.01	1.38	1.34

All (153) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	501[B]	ELO	OAO-CCC-CCA	-7.33	95.96	109.99
4	F	501	ELO	OAO-CCC-CCA	-7.22	96.17	109.99
4	E	501[A]	ELO	OAA-CBC-CBM	7.02	114.57	105.85
4	F	501	ELO	OAA-CBC-CBM	6.70	114.17	105.85
4	F	501	ELO	OAK-CBO-CBY	6.10	117.28	107.09
4	F	501	ELO	CBW-CCA-CCC	-6.07	101.87	110.69
4	E	501[A]	ELO	OAO-CCC-CCA	-5.87	98.76	109.99
4	E	501[A]	ELO	CAS-OAA-CBC	-5.67	106.62	114.42
4	B	501[A]	ELO	CBN-CBD-CAV	-5.46	105.32	115.16
4	B	501[A]	ELO	OAK-CBO-CBY	5.29	115.93	107.09
4	E	501[A]	ELO	CBU-CBI-CBE	-5.17	100.94	111.39
4	B	501[A]	ELO	OAO-CCC-CCA	-5.04	100.34	109.99
4	B	501[A]	ELO	CBZ-CCJ-CCP	-4.95	115.76	126.16
4	D	501[B]	ELO	OAA-CBC-CBM	4.88	111.91	105.85
4	C	501[B]	ELO	CBN-CBD-CAV	-4.76	106.59	115.16
4	D	501[B]	ELO	CAT-OAB-CBD	4.75	120.95	114.42
4	B	501[A]	ELO	CBW-CCA-CCC	-4.74	103.80	110.69
4	D	501[B]	ELO	OAL-CCN-CCR	4.70	122.06	111.38
4	C	501[B]	ELO	CBP-OAL-CCN	-4.65	109.94	117.47
4	C	501[B]	ELO	CBZ-CCJ-CCP	-4.62	116.45	126.16
4	E	501[A]	ELO	OAE-CAS-OAA	-4.52	101.93	110.06
4	D	501[B]	ELO	CBW-CCA-CCC	-4.48	104.17	110.69
4	B	501[A]	ELO	CAY-CAW-CAU	-4.44	106.21	113.48
4	E	501[A]	ELO	CBN-CBD-CAV	-4.40	107.23	115.16
4	B	501[A]	ELO	OAA-CBC-CBM	4.37	111.28	105.85
4	D	501[B]	ELO	CBN-CBD-CAV	-4.33	107.36	115.16
4	E	501[A]	ELO	CBZ-CCJ-CCP	-4.29	117.14	126.16
4	F	501	ELO	CBN-CBD-CAV	-4.25	107.50	115.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	E	501[A]	ELO	CBW-CCA-CCC	-4.18	104.61	110.69
4	B	501[A]	ELO	CBP-OAL-CCN	-4.14	110.77	117.47
4	D	501[B]	ELO	CBO-OAK-CCM	-4.08	110.87	117.47
4	E	501[A]	ELO	OAB-CBD-CAV	4.03	113.22	109.94
4	D	501[B]	ELO	CAS-OAA-CBC	-4.02	108.89	114.42
4	C	501[B]	ELO	OAK-CBO-CBY	3.97	113.72	107.09
4	C	501[B]	ELO	CCL-CCF-CCD	-3.96	105.76	113.07
4	F	501	ELO	CCP-CCT-CCQ	-3.87	115.01	124.67
4	C	501[B]	ELO	OAA-CBC-CBM	3.86	110.64	105.85
4	F	501	ELO	CCK-CCE-CCC	3.82	120.13	113.07
4	B	501[A]	ELO	OAC-CAW-CAU	3.76	112.94	107.46
4	D	501[B]	ELO	OAK-CCM-CCQ	3.76	119.92	111.38
4	C	501[B]	ELO	OAJ-CCF-CCD	3.65	116.08	109.52
4	E	501[A]	ELO	CBX-CCB-CCD	3.64	115.98	110.69
4	C	501[B]	ELO	CAY-CAW-CAU	-3.63	107.53	113.48
4	E	501[A]	ELO	OAL-CCN-CCR	3.61	119.58	111.38
4	C	501[B]	ELO	OAB-CBD-CBN	3.55	110.27	105.85
4	F	501	ELO	CBM-CBC-CAU	-3.54	108.79	115.16
4	B	501[A]	ELO	OAK-CCM-CCQ	3.45	119.21	111.38
4	F	501	ELO	CBY-CCI-CCO	-3.44	118.93	126.16
4	D	501[B]	ELO	OAD-CAX-CAV	-3.43	102.47	107.46
4	E	501[A]	ELO	CBM-CBC-CAU	-3.42	109.00	115.16
4	C	501[B]	ELO	CBR-OAJ-CCF	3.42	123.05	113.84
4	C	501[B]	ELO	OAO-CCC-CCA	-3.42	103.45	109.99
4	D	501[B]	ELO	CBP-OAL-CCN	-3.31	112.11	117.47
4	F	501	ELO	CCL-CCF-CCD	-3.31	106.96	113.07
4	B	501[A]	ELO	CCP-CCT-CCQ	-3.30	116.44	124.67
4	E	501[A]	ELO	OAD-CAX-CAV	-3.29	102.67	107.46
4	C	501[B]	ELO	CCP-CCT-CCQ	-3.29	116.45	124.67
4	B	501[A]	ELO	OAA-CBC-CAU	3.28	112.61	109.94
4	D	501[B]	ELO	CBZ-CCJ-CCP	-3.23	119.36	126.16
4	E	501[A]	ELO	CCP-CCT-CCQ	-3.21	116.64	124.67
4	B	501[A]	ELO	OAL-CCN-CCR	3.21	118.67	111.38
4	F	501	ELO	OAB-CBD-CAV	-3.20	107.33	109.94
4	C	501[B]	ELO	CAS-OAA-CBC	-3.18	110.05	114.42
4	F	501	ELO	OAK-CCM-OAQ	3.17	128.51	123.35
4	D	501[B]	ELO	CBQ-OAC-CAW	3.16	123.50	116.27
4	D	501[B]	ELO	CAZ-CAX-CAV	-3.12	108.36	113.48
4	F	501	ELO	OAB-CBD-CBN	3.12	109.73	105.85
4	D	501[B]	ELO	CBY-CCI-CCO	-3.10	119.64	126.16
4	F	501	ELO	CBZ-CCJ-CCP	-3.08	119.69	126.16
4	D	501[B]	ELO	OAL-CBP-CBJ	3.05	114.60	107.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	501[B]	ELO	CBR-OAD-CAX	3.05	123.25	116.27
4	C	501[B]	ELO	CCG-CBY-CCI	3.00	117.23	109.99
4	C	501[B]	ELO	OAL-CCN-OAR	-2.96	118.54	123.35
4	C	501[B]	ELO	CBI-CBE-CBA	-2.95	110.36	114.51
4	B	501[A]	ELO	CBJ-CBF-CBB	-2.95	110.36	114.51
4	F	501	ELO	CBU-CBI-CBE	-2.93	105.47	111.39
4	D	501[B]	ELO	CBX-CCB-CCD	2.86	114.84	110.69
4	B	501[A]	ELO	OAI-CCE-CCK	2.86	112.87	106.70
4	D	501[B]	ELO	CAY-CAW-CAU	-2.85	108.81	113.48
4	D	501[B]	ELO	OAD-CAX-CAZ	2.84	116.51	109.40
4	E	501[A]	ELO	OAG-CBE-CBI	-2.84	103.17	109.49
4	E	501[A]	ELO	CBQ-OAC-CAW	2.82	122.73	116.27
4	F	501	ELO	CBQ-CBW-CCA	2.82	117.75	110.98
4	E	501[A]	ELO	CBI-CBE-CBA	-2.82	110.54	114.51
4	E	501[A]	ELO	CBS-CBG-CAU	-2.81	107.89	114.24
4	C	501[B]	ELO	CBO-CBY-CCI	-2.81	100.44	109.52
4	F	501	ELO	OAO-CCC-CCE	2.77	115.82	109.67
4	C	501[B]	ELO	OAI-CCE-CCK	2.77	112.67	106.70
4	B	501[A]	ELO	OAQ-CCM-CCQ	-2.72	114.07	123.58
4	D	501[B]	ELO	OAO-CCC-CCE	2.70	115.65	109.67
4	D	501[B]	ELO	OAB-CBD-CAV	2.68	112.12	109.94
4	D	501[B]	ELO	OAG-CBE-CBI	-2.67	103.54	109.49
4	B	501[A]	ELO	OAL-CBP-CBZ	2.67	111.55	107.09
4	D	501[B]	ELO	OAA-CBC-CAU	2.67	112.11	109.94
4	F	501	ELO	OAP-CCD-CCB	2.66	115.09	109.99
4	F	501	ELO	CBQ-OAI-CCE	-2.64	106.73	113.84
4	B	501[A]	ELO	OAL-CBP-CBJ	2.63	113.62	107.50
4	B	501[A]	ELO	OAI-CCE-CCC	-2.62	104.81	109.52
4	C	501[B]	ELO	CBQ-CBW-CCA	2.61	117.25	110.98
4	C	501[B]	ELO	OAL-CCN-CCR	2.55	117.17	111.38
4	B	501[A]	ELO	OAG-CBE-CBI	-2.49	103.94	109.49
4	B	501[A]	ELO	CBR-OAJ-CCF	2.49	120.54	113.84
4	E	501[A]	ELO	CBQ-CBW-CCA	2.48	116.94	110.98
4	C	501[B]	ELO	OAO-CCC-CCE	2.48	115.16	109.67
4	F	501	ELO	OAI-CCE-CCC	-2.48	105.08	109.52
4	E	501[A]	ELO	OAK-CBO-CBY	2.47	111.21	107.09
4	B	501[A]	ELO	OAJ-CCF-CCD	2.45	113.91	109.52
4	F	501	ELO	CBI-CBE-CBA	2.45	117.95	114.51
4	B	501[A]	ELO	OAB-CBD-CBN	2.43	108.87	105.85
4	D	501[B]	ELO	OAC-CBQ-CBW	2.41	113.06	108.41
4	E	501[A]	ELO	OAM-CCA-CCC	-2.38	105.37	110.14
4	C	501[B]	ELO	CBE-CBI-CBO	-2.35	106.02	110.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	E	501[A]	ELO	CBR-OAD-CAX	2.35	121.65	116.27
4	D	501[B]	ELO	CCK-CCE-CCC	2.34	117.40	113.07
4	C	501[B]	ELO	CBU-CBI-CBE	-2.34	106.67	111.39
4	C	501[B]	ELO	CBM-CBC-CAU	-2.32	110.97	115.16
4	B	501[A]	ELO	CBQ-OAC-CAW	2.31	121.56	116.27
4	C	501[B]	ELO	CBW-CCA-CCC	-2.31	107.33	110.69
4	E	501[A]	ELO	CBE-CBI-CBO	-2.30	106.12	110.61
4	D	501[B]	ELO	CBU-CBI-CBE	-2.28	106.78	111.39
4	D	501[B]	ELO	CCL-CCF-CCD	-2.26	108.89	113.07
4	F	501	ELO	OAC-CAW-CAU	-2.24	104.20	107.46
4	C	501[B]	ELO	OAA-CBC-CAU	2.22	111.75	109.94
4	E	501[A]	ELO	OAK-CCM-CCQ	2.22	116.41	111.38
4	D	501[B]	ELO	OAK-CBO-CBY	2.19	110.75	107.09
4	B	501[A]	ELO	CCL-CCF-CCD	-2.19	109.03	113.07
4	F	501	ELO	OAN-CCB-CCD	2.18	114.51	110.14
4	B	501[A]	ELO	CAT-OAB-CBD	-2.18	111.42	114.42
4	E	501[A]	ELO	CBR-CBX-CCB	2.17	116.18	110.98
4	B	501[A]	ELO	CBR-CBX-CCB	-2.15	105.82	110.98
4	E	501[A]	ELO	CBR-OAJ-CCF	-2.14	108.07	113.84
4	F	501	ELO	CAT-OAB-CBD	-2.13	111.49	114.42
4	B	501[A]	ELO	CBY-CCI-CCO	-2.12	121.71	126.16
4	F	501	ELO	OAQ-CCM-CCQ	-2.10	116.25	123.58
4	F	501	ELO	OAJ-CCF-CCD	2.09	113.28	109.52
4	E	501[A]	ELO	OAL-CCN-OAR	-2.09	119.94	123.35
4	E	501[A]	ELO	OAI-CCE-CCK	2.09	111.21	106.70
4	C	501[B]	ELO	CBR-CBX-CCB	-2.09	105.96	110.98
4	F	501	ELO	CAS-OAA-CBC	-2.08	111.56	114.42
4	E	501[A]	ELO	CBY-CCI-CCO	-2.08	121.79	126.16
4	F	501	ELO	CCG-CBY-CBO	-2.07	107.28	111.11
4	C	501[B]	ELO	OAE-CAS-OAA	-2.07	106.34	110.06
4	C	501[B]	ELO	OAM-CCA-CCC	-2.06	106.02	110.14
4	F	501	ELO	OAD-CAX-CAV	-2.04	104.48	107.46
4	C	501[B]	ELO	OAK-CCM-OAQ	2.04	126.66	123.35
4	F	501	ELO	CCS-CCR-CCN	2.04	128.36	123.36
4	B	501[A]	ELO	OAK-CCM-OAQ	2.04	126.66	123.35
4	B	501[A]	ELO	OAC-CBQ-OAI	2.03	116.44	109.86
4	B	501[A]	ELO	OAB-CBD-CAV	2.03	111.59	109.94
4	B	501[A]	ELO	CBG-CAU-CBC	-2.03	107.79	112.48
4	B	501[A]	ELO	CBM-CBC-CAU	-2.03	111.50	115.16
4	B	501[A]	ELO	CCK-CCE-CCC	2.03	116.82	113.07
4	F	501	ELO	OAC-CBQ-CBW	2.01	112.29	108.41

There are no chirality outliers.

All (169) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	505	GOL	C1-C2-C3-O3
3	C	502	GOL	O1-C1-C2-C3
3	E	503	GOL	C1-C2-C3-O3
3	F	505	GOL	O1-C1-C2-C3
3	G	504	GOL	O1-C1-C2-C3
3	G	505	GOL	O1-C1-C2-O2
3	G	505	GOL	O1-C1-C2-C3
4	B	501[A]	ELO	CAY-CAS-CBA-CBK
4	B	501[A]	ELO	CAY-CAS-CBA-CBE
4	B	501[A]	ELO	OAA-CAS-CBA-CBK
4	B	501[A]	ELO	OAA-CAS-CBA-CBE
4	B	501[A]	ELO	OAE-CAS-CBA-CBK
4	B	501[A]	ELO	OAE-CAS-CBA-CBE
4	B	501[A]	ELO	CAS-CBA-CBE-OAG
4	B	501[A]	ELO	CBK-CBA-CBE-OAG
4	B	501[A]	ELO	CBK-CBA-CBE-CBI
4	B	501[A]	ELO	CCR-CCN-OAL-CBP
4	B	501[A]	ELO	CCQ-CCM-OAK-CBO
4	B	501[A]	ELO	OAL-CBP-CBZ-CCH
4	C	501[B]	ELO	CAW-CAU-CBG-CBS
4	C	501[B]	ELO	OAA-CAS-CBA-CBK
4	C	501[B]	ELO	OAE-CAS-CBA-CBK
4	C	501[B]	ELO	OAR-CCN-OAL-CBP
4	C	501[B]	ELO	OAQ-CCM-OAK-CBO
4	C	501[B]	ELO	OAL-CBP-CBZ-CCH
4	D	501[B]	ELO	CAY-CAS-CBA-CBK
4	D	501[B]	ELO	CAY-CAS-CBA-CBE
4	D	501[B]	ELO	OAA-CAS-CBA-CBK
4	D	501[B]	ELO	OAA-CAS-CBA-CBE
4	D	501[B]	ELO	OAE-CAS-CBA-CBK
4	D	501[B]	ELO	OAE-CAS-CBA-CBE
4	D	501[B]	ELO	CBK-CBA-CBE-OAG
4	D	501[B]	ELO	CCR-CCN-OAL-CBP
4	D	501[B]	ELO	CCQ-CCM-OAK-CBO
4	D	501[B]	ELO	CAZ-CAT-CBB-CBF
4	D	501[B]	ELO	OAF-CAT-CBB-CBF
4	D	501[B]	ELO	OAB-CAT-CBB-CBF
4	D	501[B]	ELO	CAZ-CAT-CBB-CBL
4	D	501[B]	ELO	OAF-CAT-CBB-CBL
4	D	501[B]	ELO	OAB-CAT-CBB-CBL
4	D	501[B]	ELO	CBX-CBR-OAD-CAX
4	E	501[A]	ELO	CAY-CAS-CBA-CBK

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Mol	Chain	Res	Type	Atoms
4	E	501[A]	ELO	CAY-CAS-CBA-CBE
4	E	501[A]	ELO	OAA-CAS-CBA-CBK
4	E	501[A]	ELO	OAA-CAS-CBA-CBE
4	E	501[A]	ELO	OAE-CAS-CBA-CBK
4	E	501[A]	ELO	OAE-CAS-CBA-CBE
4	E	501[A]	ELO	CAS-CBA-CBE-OAG
4	E	501[A]	ELO	CBK-CBA-CBE-OAG
4	E	501[A]	ELO	CBK-CBA-CBE-CBI
4	E	501[A]	ELO	CCR-CCN-OAL-CBP
4	E	501[A]	ELO	CAX-CAV-CBH-CBT
4	E	501[A]	ELO	CAZ-CAX-OAD-CBR
4	E	501[A]	ELO	CBX-CBR-OAD-CAX
4	E	501[A]	ELO	OAJ-CBR-OAD-CAX
4	F	501	ELO	CAW-CAU-CBG-CBS
4	F	501	ELO	CAY-CAS-CBA-CBK
4	F	501	ELO	CAY-CAS-CBA-CBE
4	F	501	ELO	OAA-CAS-CBA-CBK
4	F	501	ELO	OAA-CAS-CBA-CBE
4	F	501	ELO	OAE-CAS-CBA-CBK
4	F	501	ELO	OAE-CAS-CBA-CBE
4	F	501	ELO	CBK-CBA-CBE-OAG
4	F	501	ELO	CBK-CBA-CBE-CBI
4	F	501	ELO	OAQ-CCM-OAK-CBO
4	F	501	ELO	CBD-CAV-CBH-CBT
4	F	501	ELO	CAX-CAV-CBH-CBT
4	D	501[B]	ELO	OAG-CBE-CBI-CBO
4	B	501[A]	ELO	OAR-CCN-OAL-CBP
4	B	501[A]	ELO	OAQ-CCM-OAK-CBO
4	D	501[B]	ELO	OAR-CCN-OAL-CBP
4	D	501[B]	ELO	OAQ-CCM-OAK-CBO
4	E	501[A]	ELO	OAR-CCN-OAL-CBP
4	F	501	ELO	OAR-CCN-OAL-CBP
4	F	501	ELO	CCR-CCN-OAL-CBP
4	F	501	ELO	OAG-CBE-CBI-CBO
4	D	501[B]	ELO	CBA-CBE-CBI-CBU
3	G	504	GOL	O2-C2-C3-O3
4	D	501[B]	ELO	CAZ-CAX-OAD-CBR
4	C	501[B]	ELO	CCR-CCN-OAL-CBP
4	C	501[B]	ELO	CCQ-CCM-OAK-CBO
4	F	501	ELO	CCQ-CCM-OAK-CBO
4	E	501[A]	ELO	CBU-CBI-CBO-CBY
4	D	501[B]	ELO	OAG-CBE-CBI-CBU

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Mol	Chain	Res	Type	Atoms
4	B	501[A]	ELO	OAG-CBE-CBI-CBO
4	B	501[A]	ELO	CBA-CBE-CBI-CBU
4	E	501[A]	ELO	CCG-CBY-CCI-CCO
4	D	501[B]	ELO	CBK-CBA-CBE-CBI
4	E	501[A]	ELO	OAQ-CCM-OAK-CBO
4	B	501[A]	ELO	OAG-CBE-CBI-CBU
4	F	501	ELO	OAG-CBE-CBI-CBU
3	A	504	GOL	C1-C2-C3-O3
3	B	505	GOL	O1-C1-C2-C3
3	B	505	GOL	C1-C2-C3-O3
3	F	505	GOL	C1-C2-C3-O3
3	F	507	GOL	O1-C1-C2-C3
3	G	504	GOL	C1-C2-C3-O3
4	E	501[A]	ELO	CAS-CBA-CBE-CBI
4	D	501[B]	ELO	CBA-CBE-CBI-CBO
4	F	501	ELO	CCG-CBY-CCI-CCO
3	A	505	GOL	O2-C2-C3-O3
3	E	503	GOL	O2-C2-C3-O3
3	F	505	GOL	O1-C1-C2-O2
3	F	505	GOL	O2-C2-C3-O3
4	E	501[A]	ELO	CCQ-CCM-OAK-CBO
4	E	501[A]	ELO	CBU-CBI-CBO-OAK
4	F	501	ELO	CBA-CBE-CBI-CBU
4	D	501[B]	ELO	OAJ-CBR-OAD-CAX
4	D	501[B]	ELO	OAH-CBF-CBJ-CBP
3	F	507	GOL	O1-C1-C2-O2
4	B	501[A]	ELO	CBL-CBB-CBF-CBJ
4	B	501[A]	ELO	CBA-CBE-CBI-CBO
4	D	501[B]	ELO	CBB-CBF-CBJ-CBP
4	F	501	ELO	CBA-CBE-CBI-CBO
4	B	501[A]	ELO	CAT-CBB-CBF-CBJ
4	C	501[B]	ELO	CBZ-CBP-OAL-CCN
4	C	501[B]	ELO	CBJ-CBP-OAL-CCN
4	B	501[A]	ELO	CCG-CBY-CCI-CCO
3	A	504	GOL	O2-C2-C3-O3
3	B	505	GOL	O2-C2-C3-O3
3	C	502	GOL	O1-C1-C2-O2
3	G	504	GOL	O1-C1-C2-O2
4	B	501[A]	ELO	CBL-CBB-CBF-OAH
4	B	501[A]	ELO	CBY-CBO-OAK-CCM
4	B	501[A]	ELO	CBZ-CBP-OAL-CCN
4	D	501[B]	ELO	CBI-CBO-OAK-CCM

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Mol	Chain	Res	Type	Atoms
4	D	501[B]	ELO	CBY-CBO-OAK-CCM
4	D	501[B]	ELO	CBZ-CBP-OAL-CCN
4	D	501[B]	ELO	CBB-CBF-CBJ-CBV
4	F	501	ELO	CBY-CBO-OAK-CCM
4	D	501[B]	ELO	CCG-CBY-CCI-CCO
4	E	501[A]	ELO	OAG-CBE-CBI-CBO
3	B	505	GOL	O1-C1-C2-O2
3	F	507	GOL	O2-C2-C3-O3
4	C	501[B]	ELO	CBC-CAU-CBG-CBS
4	B	501[A]	ELO	CBJ-CBP-CBZ-CCH
4	C	501[B]	ELO	CBJ-CBP-CBZ-CCH
4	D	501[B]	ELO	CBO-CBY-CCI-CCO
4	F	501	ELO	CBO-CBY-CCI-CCO
4	B	501[A]	ELO	CBJ-CBP-OAL-CCN
4	E	501[A]	ELO	CBY-CBO-OAK-CCM
4	F	501	ELO	CBZ-CBP-OAL-CCN
4	C	501[B]	ELO	CCG-CBY-CCI-CCO
4	B	501[A]	ELO	CAS-CBA-CBE-CBI
4	F	501	ELO	CAS-CBA-CBE-CBI
4	D	501[B]	ELO	OAH-CBF-CBJ-CBV
4	C	501[B]	ELO	CBW-CBQ-OAC-CAW
4	E	501[A]	ELO	CBA-CBE-CBI-CBO
4	D	501[B]	ELO	CBJ-CBP-OAL-CCN
4	F	501	ELO	CBL-CBB-CBF-CBJ
4	B	501[A]	ELO	CBI-CBO-OAK-CCM
4	E	501[A]	ELO	CBZ-CBP-OAL-CCN
4	C	501[B]	ELO	OAE-CAS-CBA-CBE
4	E	501[A]	ELO	CBO-CBY-CCI-CCO
4	F	501	ELO	CBJ-CBP-OAL-CCN
4	B	501[A]	ELO	CBW-CBQ-OAC-CAW
3	F	507	GOL	C1-C2-C3-O3
4	F	501	ELO	CBI-CBO-OAK-CCM
3	A	505	GOL	O1-C1-C2-O2
4	F	501	ELO	CBU-CBI-CBO-CBY
3	A	505	GOL	O1-C1-C2-C3
4	B	501[A]	ELO	CBO-CBY-CCI-CCO
4	D	501[B]	ELO	CBJ-CBP-CBZ-CCH
4	E	501[A]	ELO	CBJ-CBP-CBZ-CCH
4	E	501[A]	ELO	OAG-CBE-CBI-CBU
4	F	501	ELO	CAS-CBA-CBE-OAG
4	E	501[A]	ELO	CBE-CBI-CBO-CBY
4	D	501[B]	ELO	CBW-CBQ-OAC-CAW

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Mol	Chain	Res	Type	Atoms
4	C	501[B]	ELO	CAY-CAS-CBA-CBK

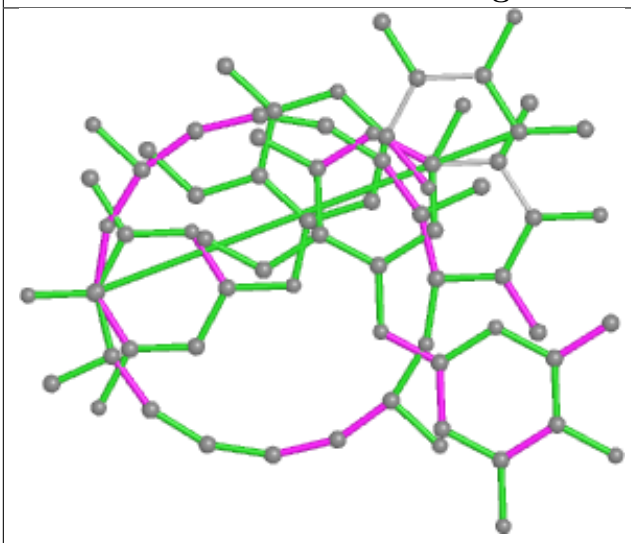
There are no ring outliers.

10 monomers are involved in 52 short contacts:

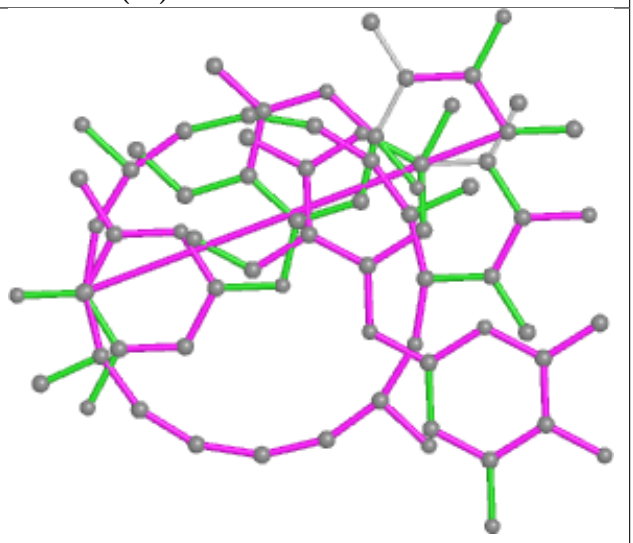
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	F	506	GOL	1	0
2	G	502	ACT	1	0
3	A	505	GOL	1	0
4	B	501[A]	ELO	7	0
4	D	501[B]	ELO	11	0
4	C	501[B]	ELO	9	0
4	E	501[A]	ELO	13	0
3	G	505	GOL	1	0
4	F	501	ELO	7	0
2	F	504	ACT	1	0

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

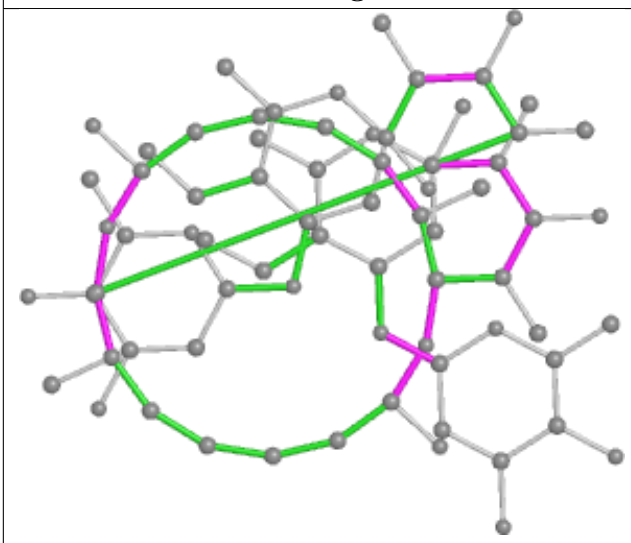
Ligand ELO B 501 (A)



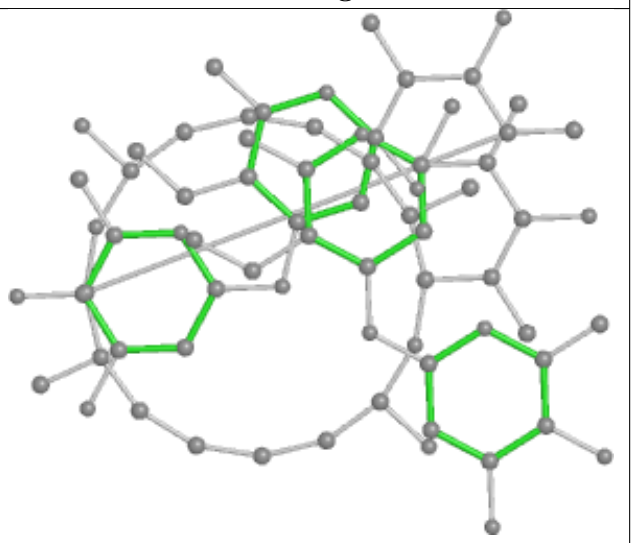
Bond lengths



Bond angles

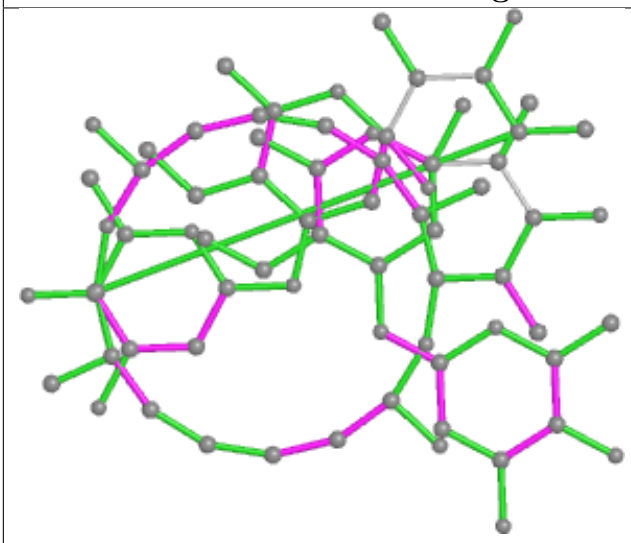


Torsions

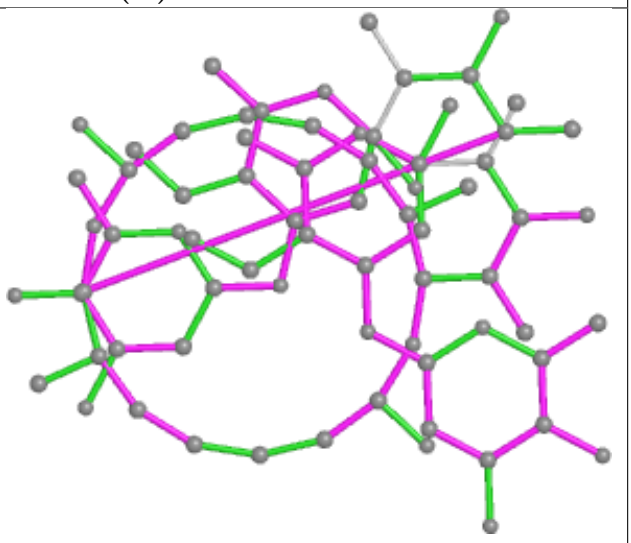


Rings

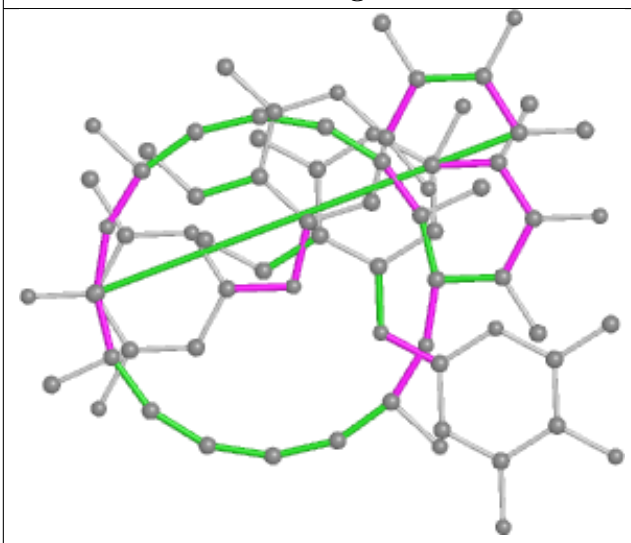
Ligand ELO D 501 (B)



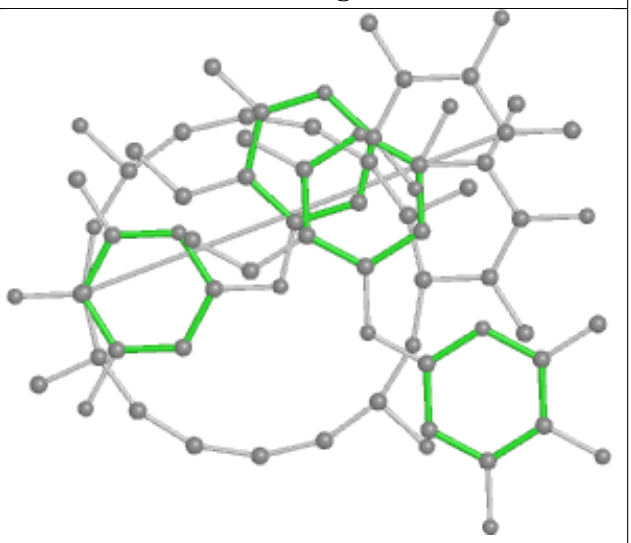
Bond lengths



Bond angles

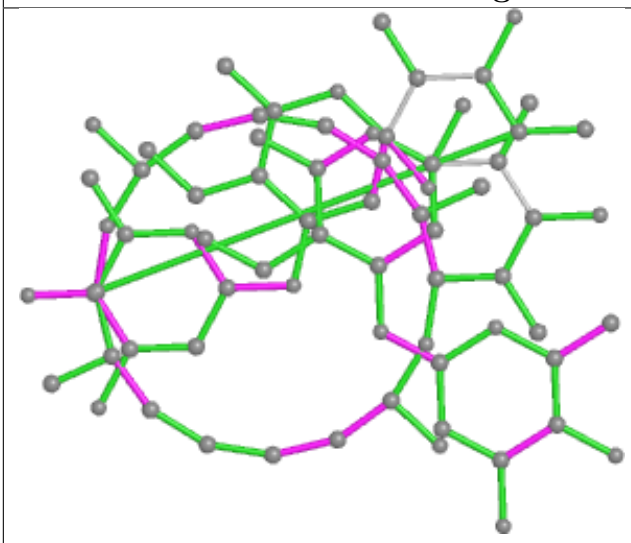


Torsions

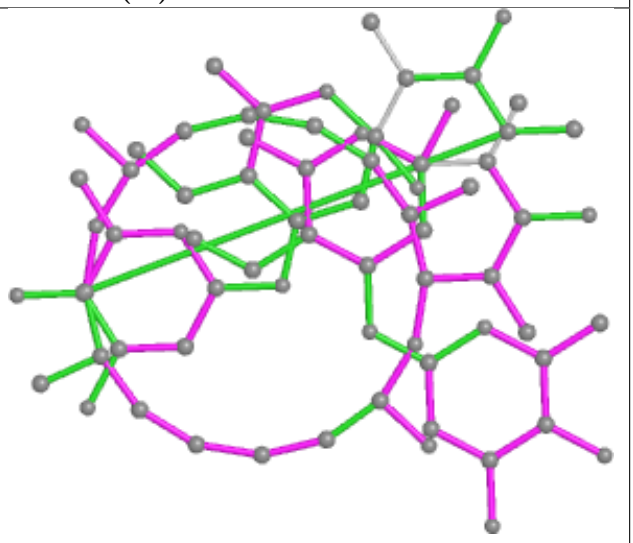


Rings

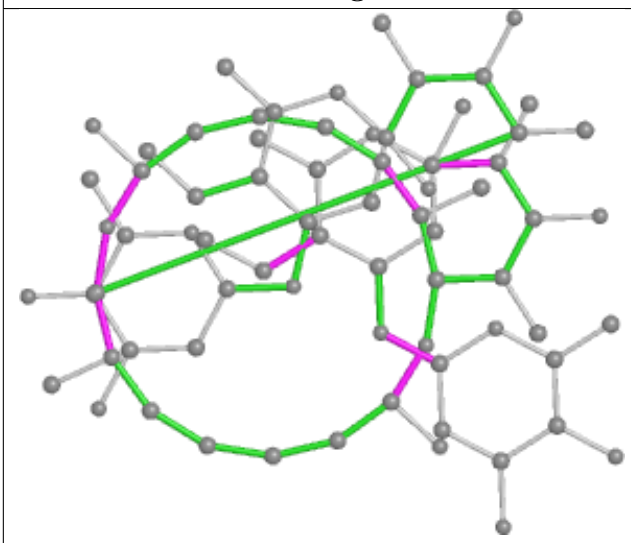
Ligand ELO C 501 (B)



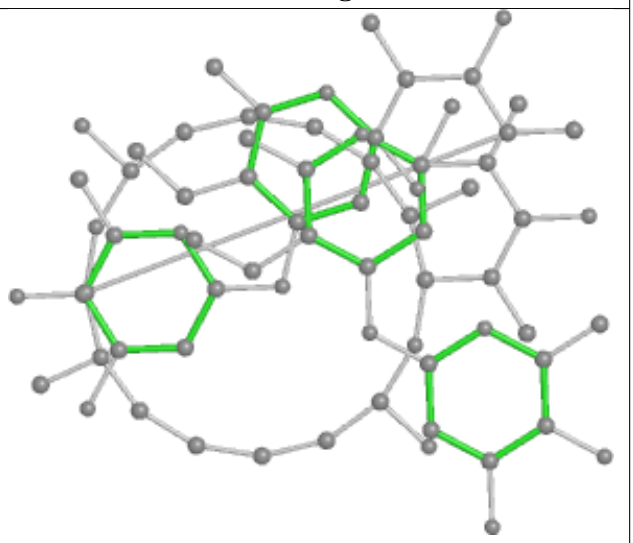
Bond lengths



Bond angles

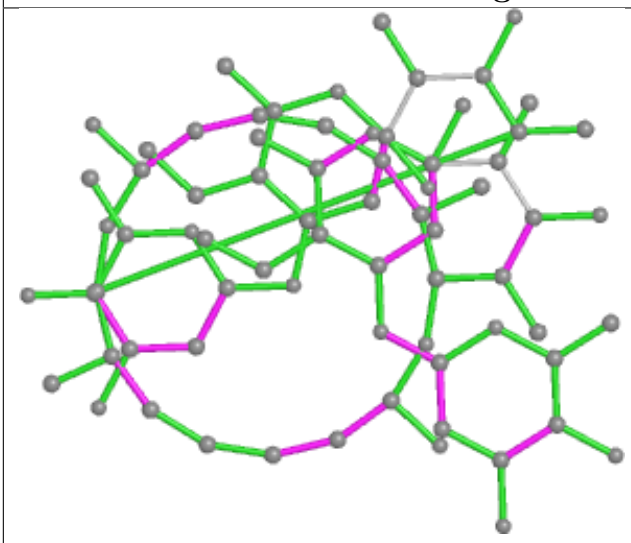


Torsions

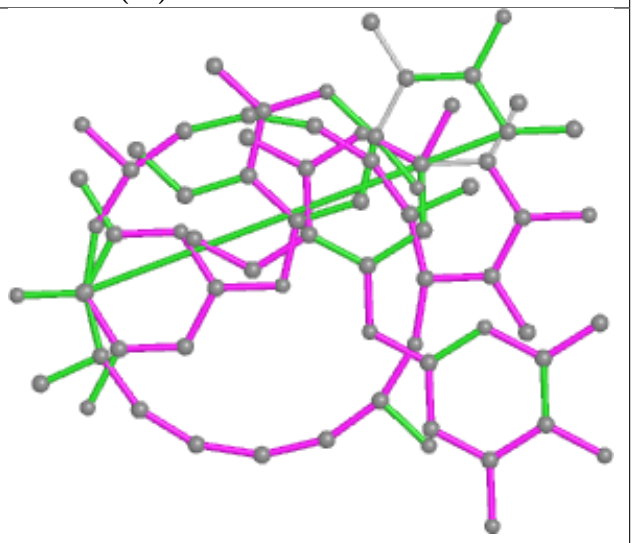


Rings

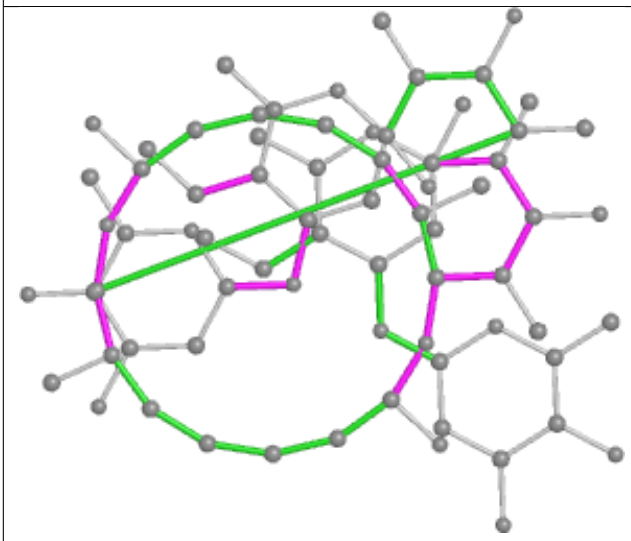
Ligand ELO E 501 (A)



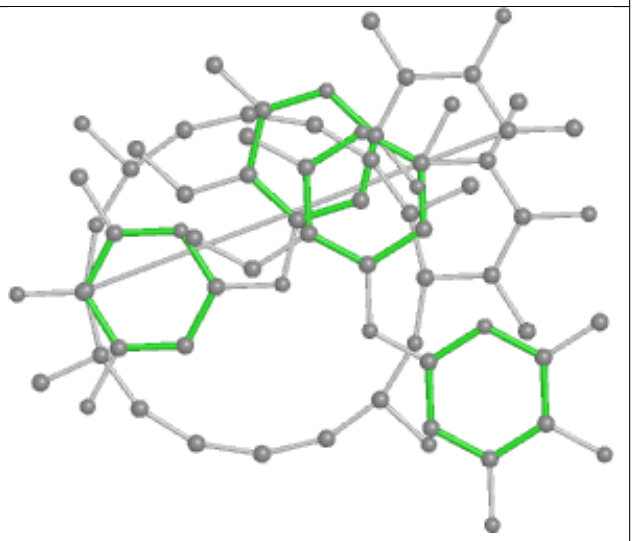
Bond lengths



Bond angles

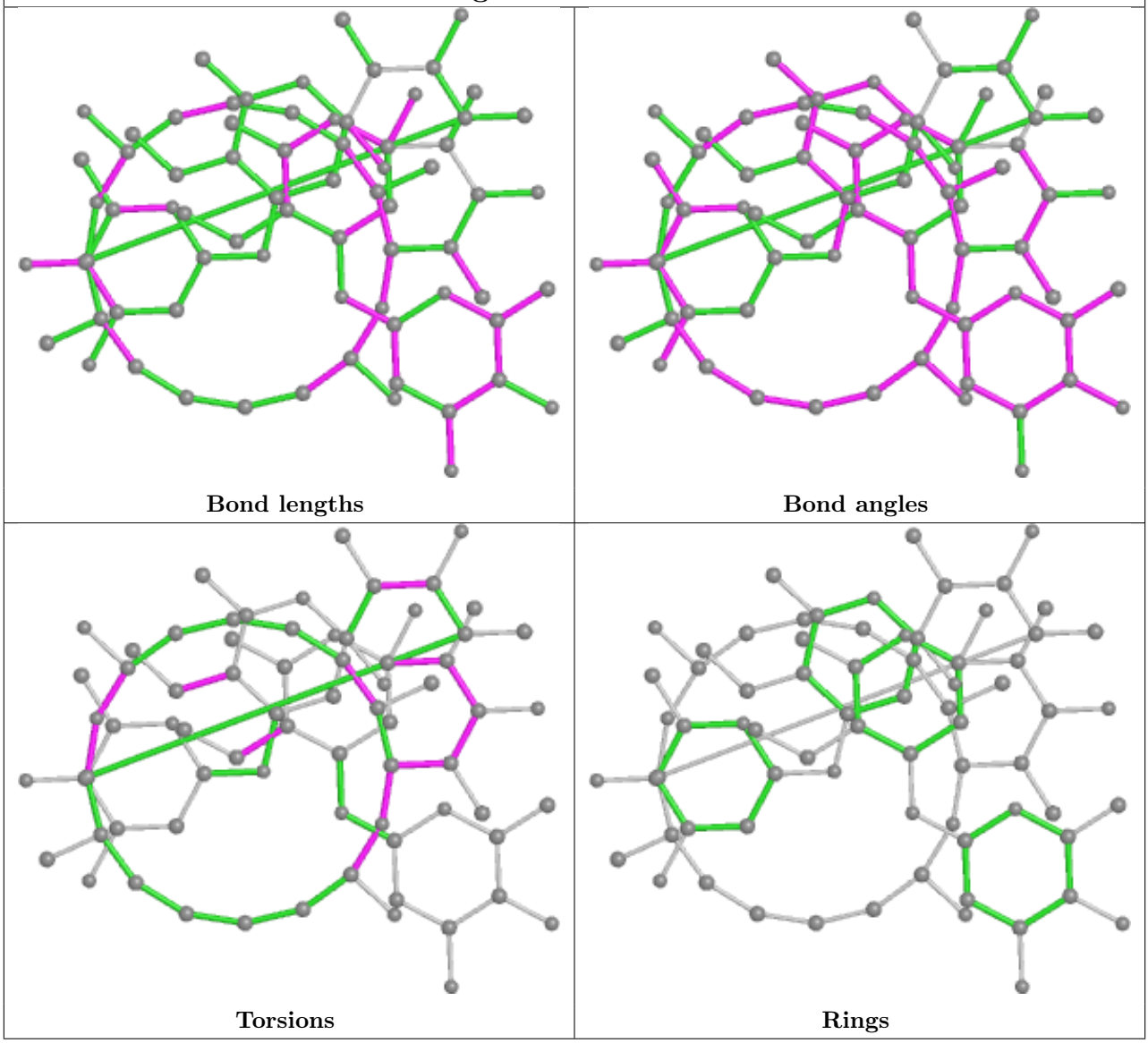


Torsions



Rings

Ligand ELO F 501



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	409/437 (93%)	0.10	10 (2%) 59 64	30, 42, 75, 129	0
1	B	408/437 (93%)	0.50	27 (6%) 18 23	27, 41, 110, 150	0
1	C	408/437 (93%)	0.46	38 (9%) 8 11	37, 56, 120, 168	0
1	D	408/437 (93%)	0.31	30 (7%) 14 18	39, 57, 104, 146	0
1	E	408/437 (93%)	0.30	22 (5%) 25 31	38, 60, 116, 158	0
1	F	419/437 (95%)	0.36	15 (3%) 42 49	27, 39, 105, 145	0
1	G	408/437 (93%)	0.47	41 (10%) 7 9	30, 55, 106, 169	0
All	All	2868/3059 (93%)	0.36	183 (6%) 19 24	27, 50, 109, 169	0

All (183) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	G	70	LEU	8.7
1	B	262	PHE	7.7
1	B	69	SER	7.5
1	B	291	LEU	7.4
1	E	285	PRO	6.7
1	C	100	PHE	6.0
1	C	69	SER	6.0
1	A	100	PHE	5.9
1	G	288	VAL	5.8
1	G	100	PHE	5.7
1	D	70	LEU	5.6
1	C	291	LEU	5.5
1	C	269	ILE	5.5
1	B	68	ASP	5.5
1	E	100	PHE	5.4
1	F	252	VAL	5.3
1	D	265	VAL	5.2

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Mol	Chain	Res	Type	RSRZ
1	D	262	PHE	5.2
1	G	172	GLU	5.1
1	E	291	LEU	5.1
1	B	237	LEU	5.0
1	E	288	VAL	5.0
1	G	283	LEU	4.9
1	C	293	LYS	4.9
1	D	100	PHE	4.9
1	C	274	SER	4.8
1	D	285	PRO	4.8
1	D	288	VAL	4.7
1	D	290	ALA	4.7
1	E	290	ALA	4.6
1	C	296	ALA	4.5
1	B	303	PHE	4.5
1	B	70	LEU	4.5
1	E	265	VAL	4.4
1	C	241	PRO	4.4
1	D	291	LEU	4.1
1	G	342	TYR	4.1
1	C	264	PRO	4.0
1	C	303	PHE	4.0
1	G	291	LEU	4.0
1	D	303	PHE	4.0
1	B	100	PHE	4.0
1	C	70	LEU	3.9
1	C	242	GLY	3.9
1	G	269	ILE	3.9
1	C	288	VAL	3.9
1	G	296	ALA	3.8
1	G	268	MET	3.8
1	D	293	LYS	3.8
1	C	375	VAL	3.7
1	E	286	GLU	3.7
1	B	238	ARG	3.7
1	C	308	ALA	3.7
1	F	290	ALA	3.7
1	G	289	GLU	3.7
1	C	68	ASP	3.7
1	C	244	PRO	3.6
1	B	290	ALA	3.6
1	G	366	LEU	3.6

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Mol	Chain	Res	Type	RSRZ
1	G	266	ALA	3.5
1	B	241	PRO	3.5
1	F	68	ASP	3.4
1	G	250	SER	3.4
1	B	296	ALA	3.4
1	B	293	LYS	3.3
1	E	70	LEU	3.3
1	D	283	LEU	3.3
1	C	270	ASN	3.2
1	C	292	GLU	3.1
1	F	286	GLU	3.1
1	G	285	PRO	3.1
1	A	288	VAL	3.1
1	G	290	ALA	3.1
1	F	239	GLU	3.1
1	G	303	PHE	3.1
1	G	270	ASN	3.1
1	A	70	LEU	3.0
1	G	265	VAL	3.0
1	A	68	ASP	3.0
1	E	241	PRO	3.0
1	F	258	LEU	3.0
1	B	265	VAL	2.9
1	C	268	MET	2.9
1	G	173	ARG	2.9
1	G	68	ASP	2.9
1	C	248	LEU	2.9
1	E	369	GLU	2.9
1	G	71	GLU	2.8
1	E	263	MET	2.8
1	C	272	LEU	2.8
1	D	237	LEU	2.8
1	B	372	ARG	2.8
1	E	67	ARG	2.8
1	D	289	GLU	2.8
1	F	69	SER	2.8
1	D	272	LEU	2.8
1	G	248	LEU	2.8
1	A	286	GLU	2.8
1	B	243	ARG	2.8
1	B	-1	SER	2.8
1	A	261	THR	2.7

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Mol	Chain	Res	Type	RSRZ
1	E	289	GLU	2.7
1	G	371	LEU	2.7
1	C	290	ALA	2.7
1	E	262	PHE	2.7
1	G	242	GLY	2.7
1	B	249	THR	2.7
1	B	294	VAL	2.6
1	F	241	PRO	2.6
1	C	240	ALA	2.6
1	C	366	LEU	2.6
1	G	262	PHE	2.6
1	F	-1	SER	2.6
1	F	303	PHE	2.6
1	G	369	GLU	2.6
1	G	272	LEU	2.6
1	F	242	GLY	2.5
1	C	300	ILE	2.5
1	C	283	LEU	2.5
1	C	371	LEU	2.5
1	B	242	GLY	2.5
1	D	242	GLY	2.5
1	B	376	GLU	2.5
1	C	307	HIS	2.5
1	G	69	SER	2.5
1	D	312	GLY	2.5
1	G	267	ASP	2.5
1	G	345	TRP	2.5
1	B	284	PRO	2.4
1	F	100	PHE	2.4
1	G	264	PRO	2.4
1	A	285	PRO	2.4
1	G	302	ASP	2.4
1	G	368	ALA	2.4
1	G	372	ARG	2.4
1	C	379	VAL	2.4
1	D	284	PRO	2.4
1	C	275	MET	2.3
1	D	281	ALA	2.3
1	D	282	ALA	2.3
1	D	308	ALA	2.3
1	B	272	LEU	2.3
1	F	67	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
1	G	376	GLU	2.3
1	D	280	VAL	2.3
1	A	63	LEU	2.3
1	C	372	ARG	2.3
1	E	283	LEU	2.3
1	F	288	VAL	2.3
1	D	250	SER	2.3
1	D	68	ASP	2.2
1	B	292	GLU	2.2
1	C	287	GLU	2.2
1	G	284	PRO	2.2
1	E	302	ASP	2.2
1	D	286	GLU	2.2
1	E	292	GLU	2.2
1	F	285	PRO	2.2
1	D	302	ASP	2.1
1	E	293	LYS	2.1
1	A	290	ALA	2.1
1	D	249	THR	2.1
1	C	376	GLU	2.1
1	D	239	GLU	2.1
1	E	280	VAL	2.1
1	C	250	SER	2.1
1	G	287	GLU	2.1
1	C	265	VAL	2.1
1	E	284	PRO	2.1
1	G	312	GLY	2.1
1	C	235	ASP	2.1
1	D	246	VAL	2.1
1	B	266	ALA	2.1
1	C	67	ARG	2.1
1	A	58	ASN	2.0
1	D	173	ARG	2.0
1	G	-1	SER	2.0
1	E	308	ALA	2.0
1	B	239	GLU	2.0
1	B	287	GLU	2.0
1	E	172	GLU	2.0
1	G	375	VAL	2.0
1	D	372	ARG	2.0

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

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	GOL	F	507	6/6	0.46	0.26	70,83,92,93	0
3	GOL	A	505	6/6	0.72	0.24	67,83,85,87	0
3	GOL	F	506	6/6	0.73	0.17	70,73,77,81	0
4	ELO	E	501[A]	72/72	0.74	0.30	44,66,159,169	72
4	ELO	B	501[A]	72/72	0.78	0.28	32,56,87,96	72
4	ELO	D	501[B]	72/72	0.80	0.32	39,73,139,145	72
3	GOL	F	505	6/6	0.80	0.19	48,71,75,83	0
4	ELO	F	501	72/72	0.81	0.25	29,44,52,63	72
2	ACT	B	503	4/4	0.82	0.23	76,80,81,87	0
3	GOL	G	504	6/6	0.82	0.14	53,69,70,72	0
2	ACT	D	503	4/4	0.83	0.19	59,63,64,71	0
4	ELO	C	501[B]	72/72	0.84	0.24	36,53,66,68	72
3	GOL	B	504	6/6	0.85	0.16	43,54,55,60	0
2	ACT	B	502	4/4	0.85	0.17	72,72,75,83	0
3	GOL	A	504	6/6	0.86	0.16	40,58,63,70	0
3	GOL	C	502	6/6	0.87	0.23	67,79,85,94	0
2	ACT	E	502	4/4	0.89	0.17	59,65,71,73	0
2	ACT	A	501	4/4	0.89	0.18	49,55,60,64	0
2	ACT	F	504	4/4	0.90	0.14	48,59,62,63	0
2	ACT	A	502	4/4	0.90	0.12	53,58,61,63	0
3	GOL	E	503	6/6	0.91	0.13	58,62,69,70	0
2	ACT	G	502	4/4	0.91	0.13	54,56,58,59	0
3	GOL	G	505	6/6	0.91	0.14	57,63,68,72	0
2	ACT	G	503	4/4	0.91	0.23	61,62,64,66	0
3	GOL	B	505	6/6	0.92	0.16	40,53,64,66	0
2	ACT	D	502	4/4	0.93	0.12	66,67,69,69	0
2	ACT	A	503	4/4	0.93	0.17	63,66,70,72	0

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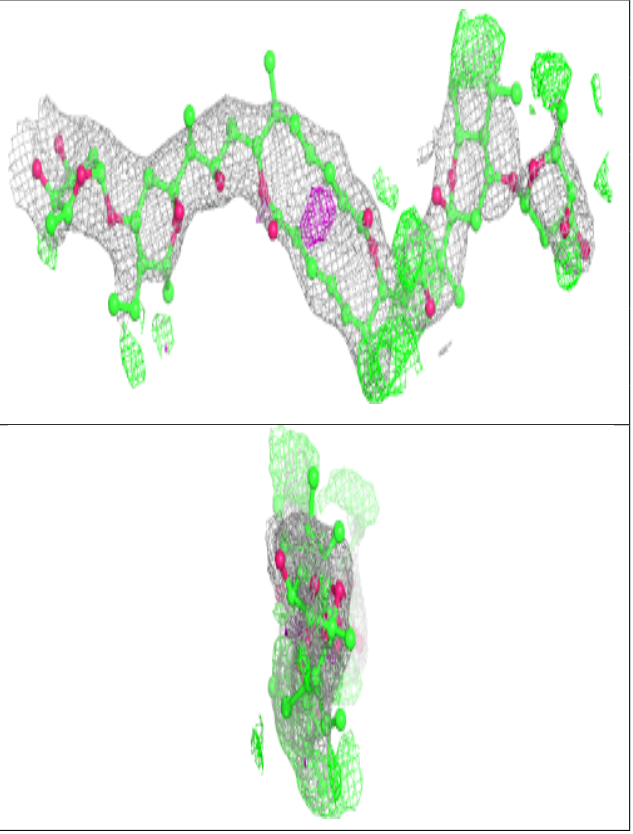
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	ACT	F	503	4/4	0.94	0.13	50,50,55,62	0
2	ACT	G	501	4/4	0.95	0.16	45,57,57,62	0
2	ACT	F	502	4/4	0.97	0.12	43,44,49,49	0

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

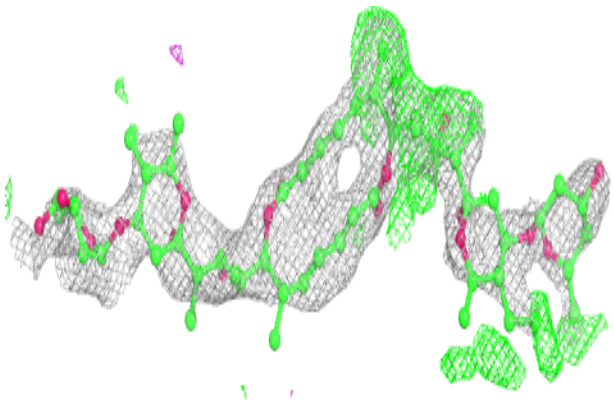
Electron density around ELO E 501 (A):

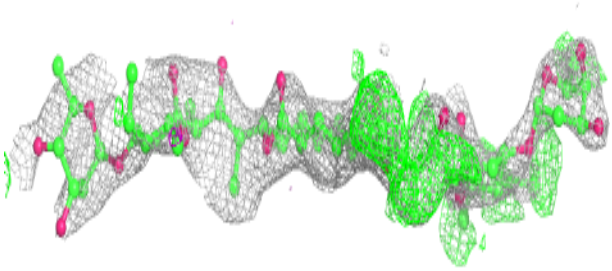
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

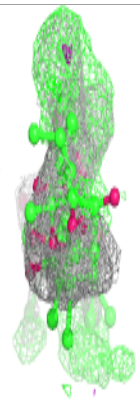


Electron density around ELO B 501 (A):

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

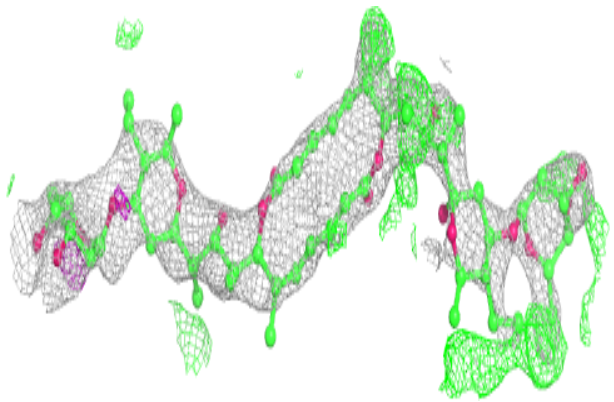


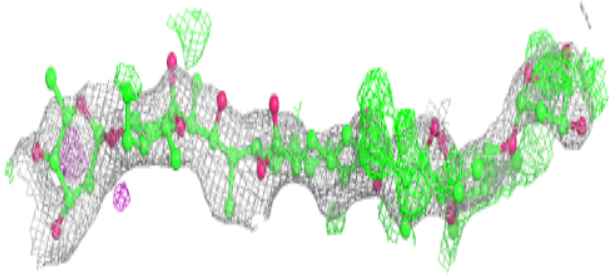


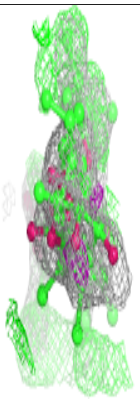


Electron density around ELO D 501 (B):

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

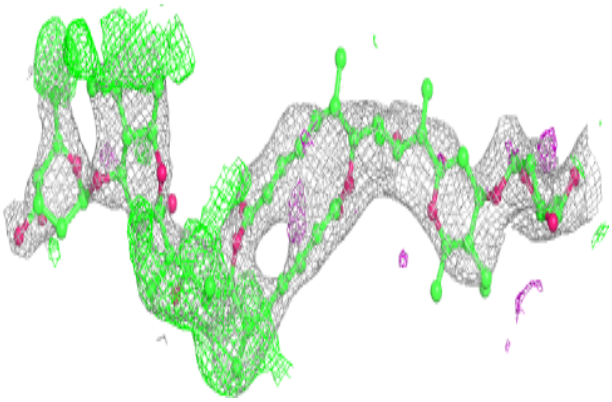


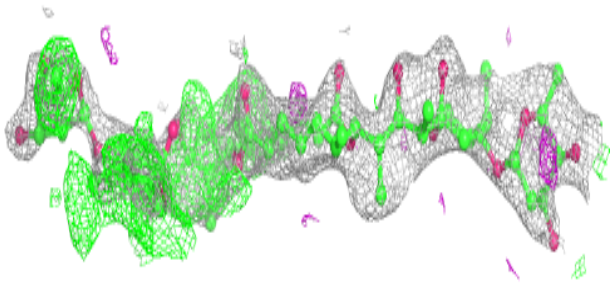


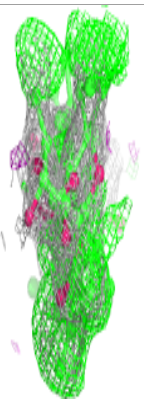


Electron density around ELO F 501:

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

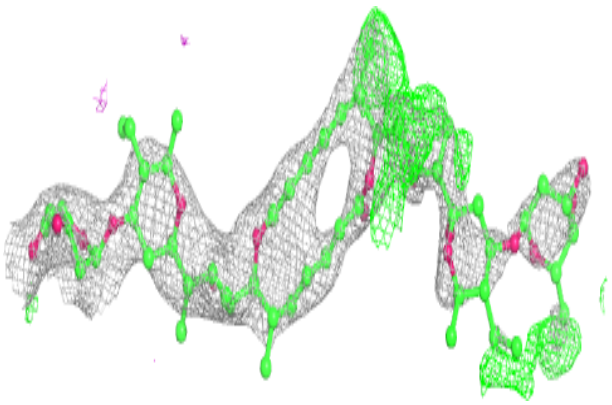


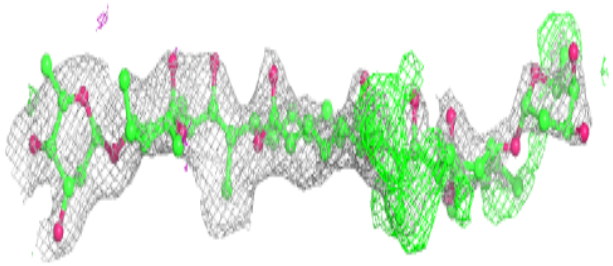


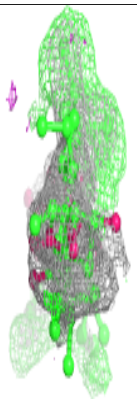


Electron density around ELO C 501 (B):

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







6.5 Other polymers (i)

There are no such residues in this entry.