Full wwPDB X-ray Structure Validation Report (i)

Oct 24, 2026 – 12:36 PM EDT

PDB ID	:	14CU / pdb_000014cu
Title	:	Structure of liver pyruvate kinase in complex with allosteric site binder 8g
Authors	:	Lulla, A.; Rodriguez Rivero, A.; Grotli, M.; Hyvonen, M.
Deposited on	:	2026-04-28
Resolution	:	2.39 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:

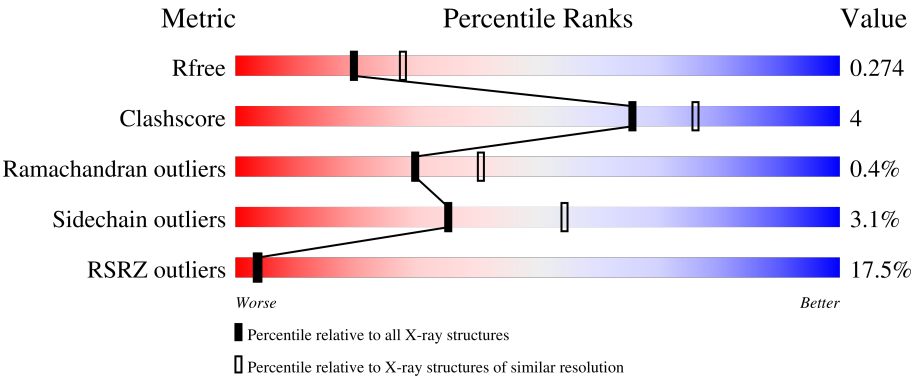
MolProbity	:	4-5-2 with Phenix2.2
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.2
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.51

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 2.39 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	7164 (2.40-2.36)
Clashscore	190562	7722 (2.40-2.36)
Ramachandran outliers	187476	7626 (2.40-2.36)
Sidechain outliers	187428	7627 (2.40-2.36)
RSRZ outliers	180081	7170 (2.40-2.36)

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	447	35% 80% 13% • 6%
1	B	447	9% 86% 10% • •
1	C	447	17% 84% 10% • 5%
1	D	447	3% 86% 8% • 5%
1	E	447	40% 83% 10% • 6%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	F	447	14% 85% 10%
1	G	447	12% 83% 9% 6%
1	H	447	3% 85% 9% 5%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	OXL	A	602	-	X	-	-
3	OXL	B	602	-	X	-	-
3	OXL	C	602	-	X	-	-
3	OXL	D	602	-	X	-	-
3	OXL	E	602	-	X	-	-
3	OXL	G	603	-	X	-	-
3	OXL	H	602	-	X	-	-

2 Entry composition (i)

There are 7 unique types of molecules in this entry. The entry contains 27652 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 Isoform L-type of Pyruvate kinase PKLR.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	421	Total	C	N	O	S	0	13	0
			3261	2050	587	604	20			
1	B	436	Total	C	N	O	S	3	8	0
			3350	2104	604	622	20			
1	C	424	Total	C	N	O	S	0	10	0
			3275	2063	586	607	19			
1	D	425	Total	C	N	O	S	0	8	0
			3261	2048	590	604	19			
1	E	420	Total	C	N	O	S	0	14	0
			3272	2059	588	605	20			
1	F	432	Total	C	N	O	S	0	9	0
			3330	2096	597	617	20			
1	G	422	Total	C	N	O	S	0	10	0
			3256	2049	584	604	19			
1	H	424	Total	C	N	O	S	0	9	0
			3265	2051	592	603	19			

There are 48 discrepancies between the modelled and reference sequences:

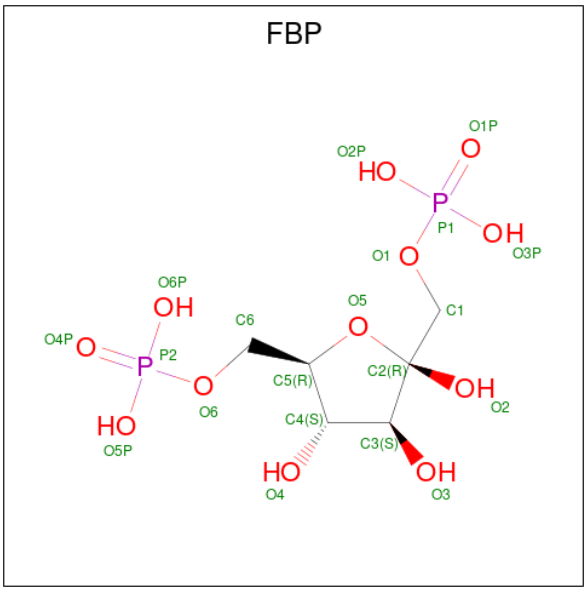
Chain	Residue	Modelled	Actual	Comment	Reference
A	-1	GLY	-	expression tag	UNP P30613
A	0	SER	-	expression tag	UNP P30613
A	12	ASP	SER	conflict	UNP P30613
A	130	GLY	-	linker	UNP P30613
A	131	SER	-	linker	UNP P30613
A	132	GLY	-	linker	UNP P30613
B	-1	GLY	-	expression tag	UNP P30613
B	0	SER	-	expression tag	UNP P30613
B	12	ASP	SER	conflict	UNP P30613
B	130	GLY	-	linker	UNP P30613
B	131	SER	-	linker	UNP P30613
B	132	GLY	-	linker	UNP P30613
C	-1	GLY	-	expression tag	UNP P30613

Continued on next page...

Continued from previous page...

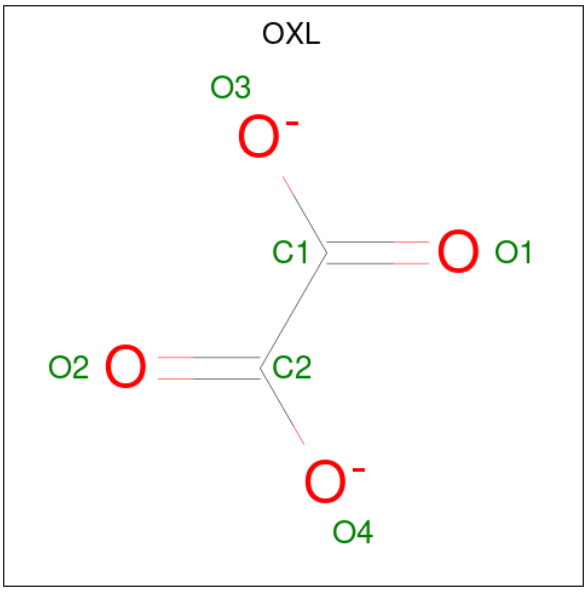
Chain	Residue	Modelled	Actual	Comment	Reference
C	0	SER	-	expression tag	UNP P30613
C	12	ASP	SER	conflict	UNP P30613
C	130	GLY	-	linker	UNP P30613
C	131	SER	-	linker	UNP P30613
C	132	GLY	-	linker	UNP P30613
D	-1	GLY	-	expression tag	UNP P30613
D	0	SER	-	expression tag	UNP P30613
D	12	ASP	SER	conflict	UNP P30613
D	130	GLY	-	linker	UNP P30613
D	131	SER	-	linker	UNP P30613
D	132	GLY	-	linker	UNP P30613
E	-1	GLY	-	expression tag	UNP P30613
E	0	SER	-	expression tag	UNP P30613
E	12	ASP	SER	conflict	UNP P30613
E	130	GLY	-	linker	UNP P30613
E	131	SER	-	linker	UNP P30613
E	132	GLY	-	linker	UNP P30613
F	-1	GLY	-	expression tag	UNP P30613
F	0	SER	-	expression tag	UNP P30613
F	12	ASP	SER	conflict	UNP P30613
F	130	GLY	-	linker	UNP P30613
F	131	SER	-	linker	UNP P30613
F	132	GLY	-	linker	UNP P30613
G	-1	GLY	-	expression tag	UNP P30613
G	0	SER	-	expression tag	UNP P30613
G	12	ASP	SER	conflict	UNP P30613
G	130	GLY	-	linker	UNP P30613
G	131	SER	-	linker	UNP P30613
G	132	GLY	-	linker	UNP P30613
H	-1	GLY	-	expression tag	UNP P30613
H	0	SER	-	expression tag	UNP P30613
H	12	ASP	SER	conflict	UNP P30613
H	130	GLY	-	linker	UNP P30613
H	131	SER	-	linker	UNP P30613
H	132	GLY	-	linker	UNP P30613

- Molecule 2 is 1,6-di-O-phosphono-beta-D-fructofuranose (CCD ID: FBP) (formula: $C_6H_{14}O_{12}P_2$).



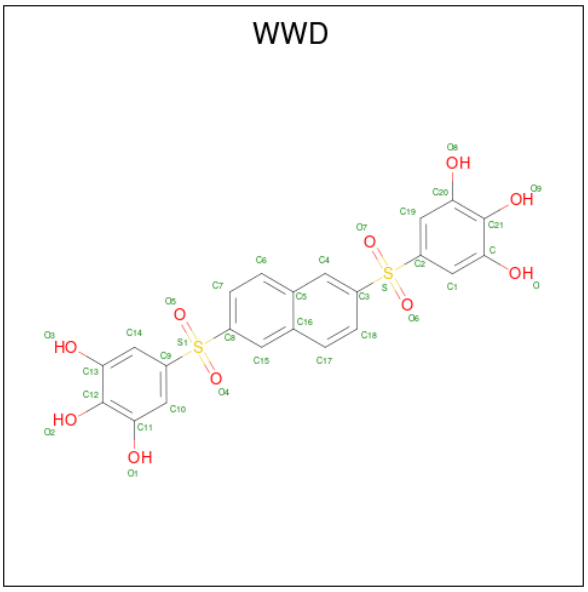
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total	C	O	P	0	0
			20	6	12	2		
2	B	1	Total	C	O	P	0	0
			20	6	12	2		
2	C	1	Total	C	O	P	0	0
			20	6	12	2		
2	D	1	Total	C	O	P	0	0
			20	6	12	2		
2	E	1	Total	C	O	P	0	0
			20	6	12	2		
2	F	1	Total	C	O	P	0	0
			20	6	12	2		
2	G	1	Total	C	O	P	0	0
			20	6	12	2		
2	H	1	Total	C	O	P	0	0
			20	6	12	2		

- Molecule 3 is OXALATE ION (CCD ID: OXL) (formula: C_2O_4).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total	C	O	0	0
			6	2	4		
3	B	1	Total	C	O	0	0
			6	2	4		
3	C	1	Total	C	O	0	0
			6	2	4		
3	D	1	Total	C	O	0	0
			6	2	4		
3	E	1	Total	C	O	0	0
			6	2	4		
3	F	1	Total	C	O	0	0
			6	2	4		
3	G	1	Total	C	O	0	0
			6	2	4		
3	H	1	Total	C	O	0	0
			6	2	4		

- Molecule 4 is 5,5'-(naphthalene-2,6-diyldisulfonyl)di(benzene-1,2,3-triol) (CCD ID: WWD) (formula: $C_{22}H_{16}O_{10}S_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O S 68 44 20 4	0	1
4	B	1	Total C O S 68 44 20 4	0	1
4	F	1	Total C O S 34 22 10 2	0	0
4	G	1	Total C O S 68 44 20 4	0	1

- Molecule 5 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	1	Total Mg 1 1	0	0
5	B	1	Total Mg 1 1	0	0
5	C	1	Total Mg 1 1	0	0
5	D	1	Total Mg 1 1	0	0
5	E	1	Total Mg 1 1	0	0
5	F	1	Total Mg 1 1	0	0
5	G	1	Total Mg 1 1	0	0
5	H	1	Total Mg 1 1	0	0

- Molecule 6 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	1	Total K 1 1	0	0
6	B	1	Total K 1 1	0	0
6	C	1	Total K 1 1	0	0
6	D	1	Total K 1 1	0	0
6	E	1	Total K 1 1	0	0
6	F	1	Total K 1 1	0	0
6	G	1	Total K 1 1	0	0
6	H	1	Total K 1 1	0	0

- Molecule 7 is water.

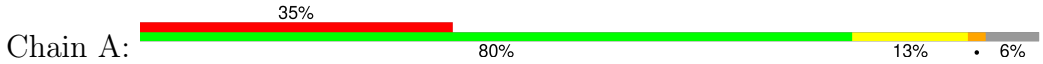
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
7	A	56	Total O 56 56	0	0
7	B	148	Total O 148 148	0	0
7	C	114	Total O 114 114	0	0
7	D	184	Total O 184 184	0	0
7	E	48	Total O 48 48	0	0
7	F	103	Total O 103 103	0	0
7	G	107	Total O 107 107	0	0
7	H	160	Total O 160 160	0	0

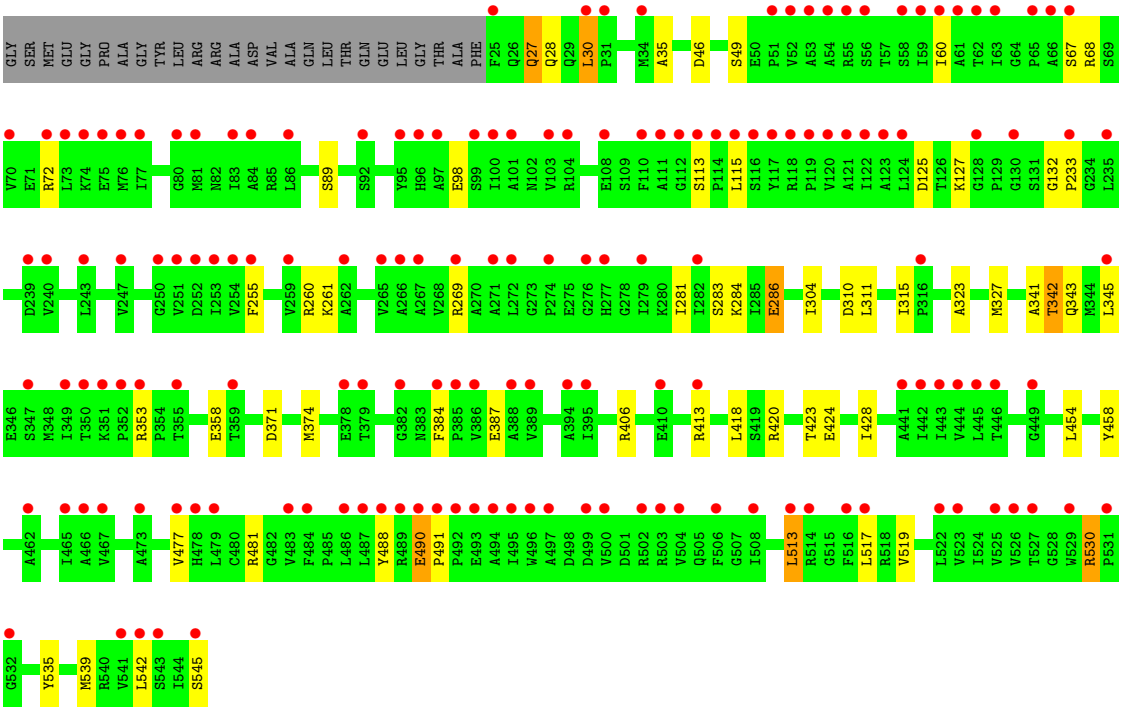
3 Residue-property plots (i)

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: Isoform L-type of Pyruvate kinase PKLR

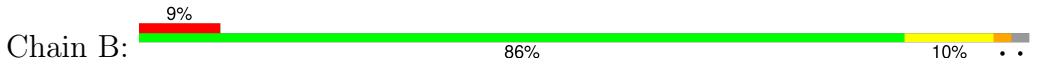
Chain A:

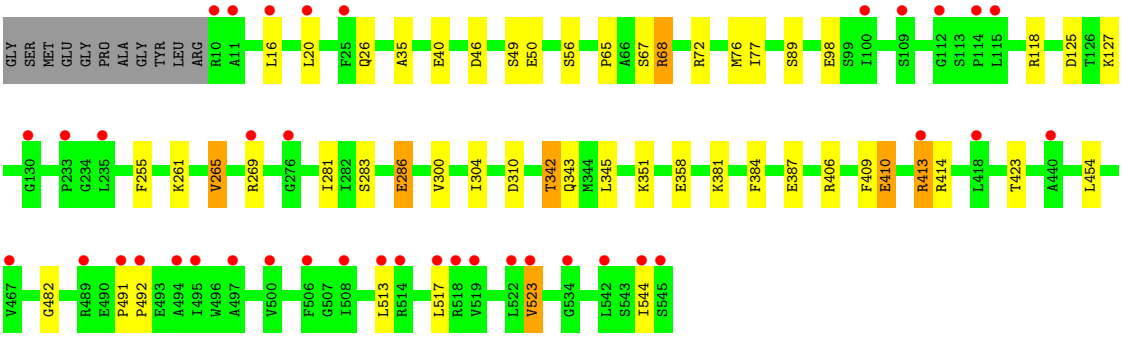




• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

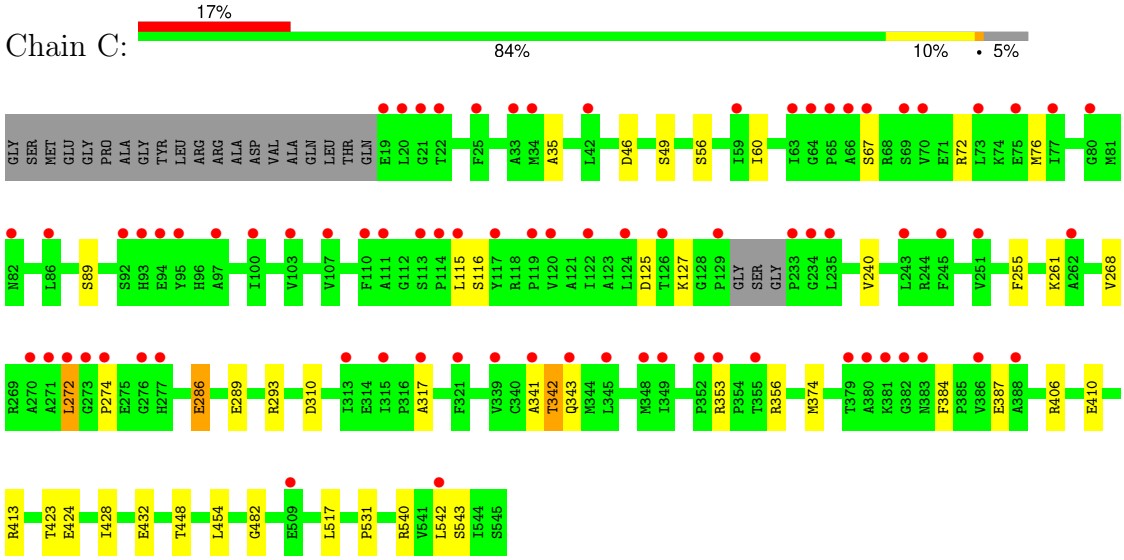
Chain B:





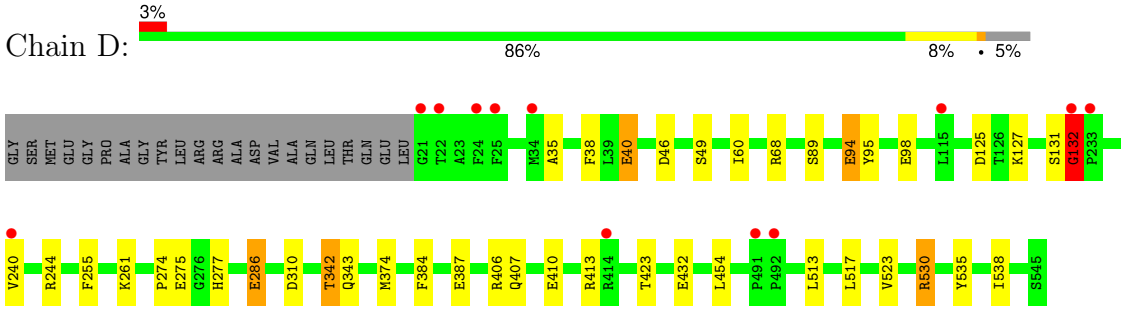
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

Chain C:



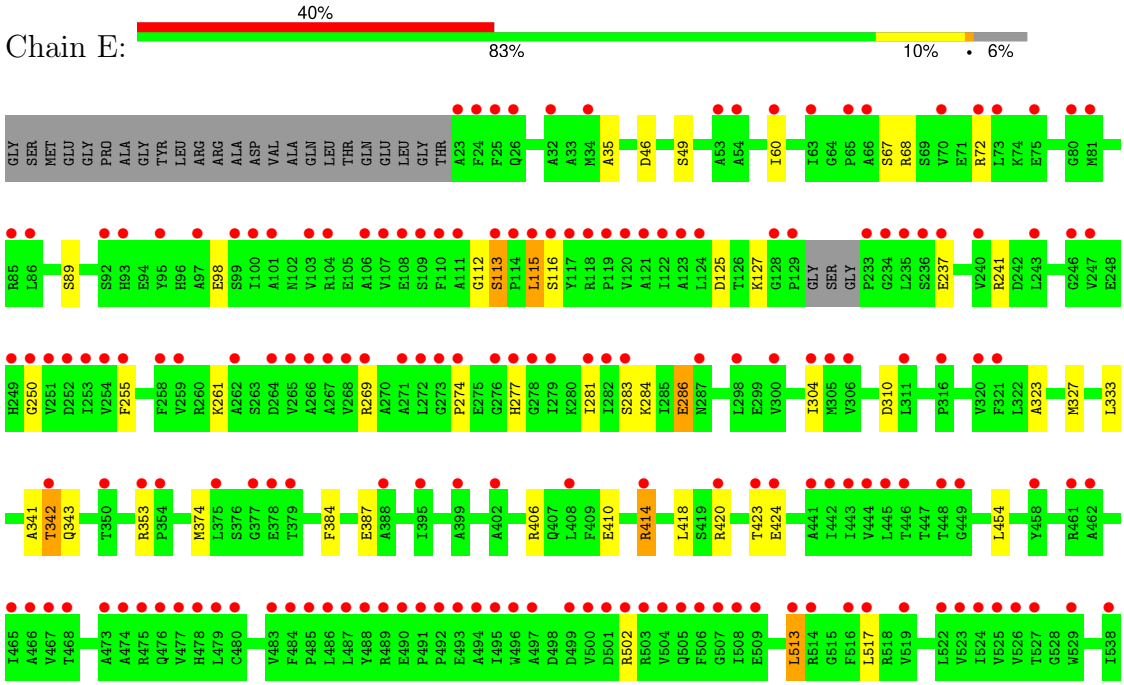
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

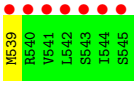
Chain D:



• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

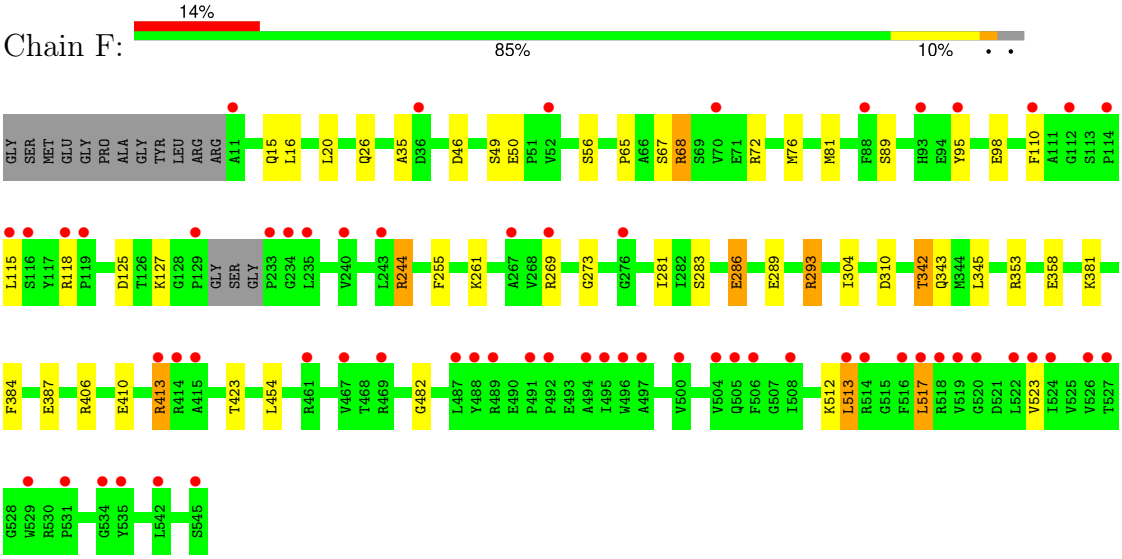
Chain E:





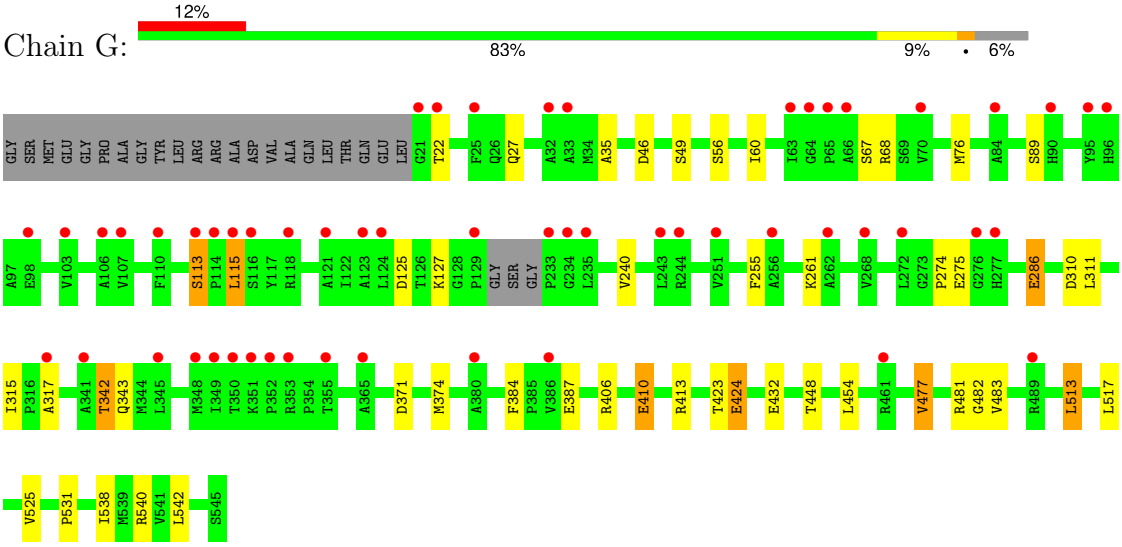
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

Chain F:



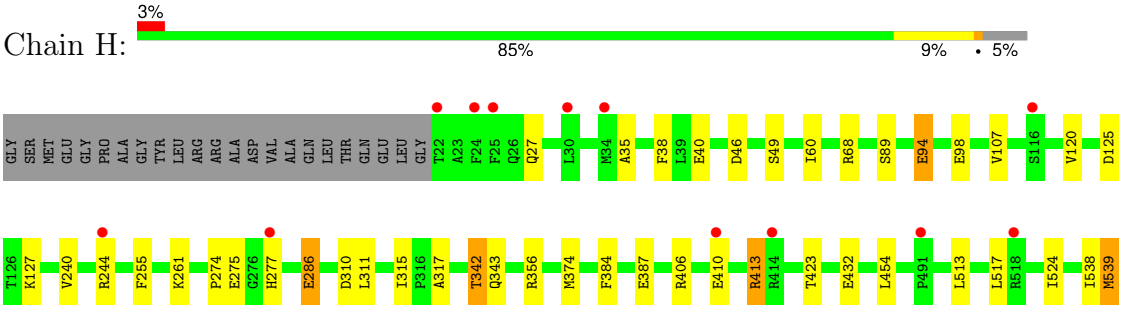
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

Chain G:



• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

Chain H:




R540
S545

4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	205.32Å 112.66Å 186.40Å 90.00° 93.18° 90.00°	Depositor
Resolution (Å)	102.50 – 2.39 102.50 – 2.39	Depositor EDS
% Data completeness (in resolution range)	62.8 (102.50-2.39) 62.8 (102.50-2.39)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.89 (at 2.40Å)	Xtriage
Refinement program	BUSTER 2.10.4	Depositor
R, R_{free}	0.253 , 0.288 0.239 , 0.274	Depositor DCC
R_{free} test set	5244 reflections (4.87%)	wwPDB-VP
Wilson B-factor (Å^2)	47.2	Xtriage
Anisotropy	0.052	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 53.6	EDS
L-test for twinning[2]	$< \|L\| > = 0.46$, $< L^2 > = 0.28$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	27652	wwPDB-VP
Average B, all atoms (Å^2)	57.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The analyses of the Patterson function reveals a significant off-origin peak that is 91.54 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 1.4247e-08. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

[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: WWD, MG, FBP, OXL, K

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	0.66	0/3354	1.05	4/4532 (0.1%)
1	B	0.70	0/3429	1.03	1/4636 (0.0%)
1	C	0.66	0/3360	1.04	2/4542 (0.0%)
1	D	0.71	0/3341	1.08	3/4517 (0.1%)
1	E	0.64	0/3369	1.03	2/4552 (0.0%)
1	F	0.68	0/3411	1.04	1/4611 (0.0%)
1	G	0.68	0/3341	1.05	2/4516 (0.0%)
1	H	0.72	0/3348	1.06	4/4526 (0.1%)
All	All	0.68	0/26953	1.05	19/36432 (0.1%)

There are no bond length outliers.

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	491	PRO	N-CA-C	9.38	122.15	110.70
1	D	38	PHE	CA-CB-CG	-5.53	108.27	113.80
1	D	94	GLU	CB-CG-CD	5.44	121.84	112.60
1	H	94	GLU	CB-CG-CD	5.41	121.80	112.60
1	D	132	GLY	N-CA-C	5.30	123.14	112.34
1	H	38	PHE	CA-CB-CG	-5.29	108.51	113.80
1	H	27	GLN	CA-C-N	5.28	129.90	122.46
1	H	27	GLN	C-N-CA	5.28	129.90	122.46
1	A	341	ALA	CA-C-N	5.23	131.53	121.54
1	A	341	ALA	C-N-CA	5.23	131.53	121.54
1	E	341	ALA	CA-C-N	5.23	131.53	121.54
1	E	341	ALA	C-N-CA	5.23	131.53	121.54
1	A	27	GLN	CB-CG-CD	5.18	121.41	112.60
1	B	50	GLU	N-CA-C	5.17	116.34	109.93
1	C	341	ALA	CA-C-N	5.08	131.25	121.54
1	C	341	ALA	C-N-CA	5.08	131.25	121.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	50	GLU	N-CA-C	5.08	116.23	109.93
1	G	27	GLN	CA-C-N	5.01	129.53	122.46
1	G	27	GLN	C-N-CA	5.01	129.53	122.46

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	A	3261	0	3340	30	0
1	B	3350	0	3417	33	0
1	C	3275	0	3343	28	0
1	D	3261	0	3321	25	0
1	E	3272	0	3344	28	0
1	F	3330	0	3404	32	0
1	G	3256	0	3320	30	0
1	H	3265	0	3331	26	0
2	A	20	0	10	0	0
2	B	20	0	10	0	0
2	C	20	0	10	0	0
2	D	20	0	10	0	0
2	E	20	0	10	0	0
2	F	20	0	10	0	0
2	G	20	0	10	0	0
2	H	20	0	10	0	0
3	A	6	0	0	0	0
3	B	6	0	0	0	0
3	C	6	0	0	1	0
3	D	6	0	0	1	0
3	E	6	0	0	0	0
3	F	6	0	0	0	0
3	G	6	0	0	0	0
3	H	6	0	0	0	0
4	A	68	0	0	0	0
4	B	68	0	0	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	F	34	0	0	0	0
4	G	68	0	0	0	0
5	A	1	0	0	0	0
5	B	1	0	0	0	0
5	C	1	0	0	0	0
5	D	1	0	0	0	0
5	E	1	0	0	0	0
5	F	1	0	0	0	0
5	G	1	0	0	0	0
5	H	1	0	0	0	0
6	A	1	0	0	0	0
6	B	1	0	0	0	0
6	C	1	0	0	0	0
6	D	1	0	0	0	0
6	E	1	0	0	0	0
6	F	1	0	0	0	0
6	G	1	0	0	0	0
6	H	1	0	0	0	0
7	A	56	0	0	0	0
7	B	148	0	0	1	0
7	C	114	0	0	0	0
7	D	184	0	0	0	0
7	E	48	0	0	1	0
7	F	103	0	0	0	0
7	G	107	0	0	0	0
7	H	160	0	0	0	0
All	All	27652	0	26900	206	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 (206) 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:B:517:LEU:HD21	1:B:523:VAL:HG23	1.53	0.91
1:E:353:ARG:HH21	1:G:317:ALA:HB2	1.46	0.80
1:B:517:LEU:HD21	1:B:523:VAL:CG2	2.13	0.78
1:C:413:ARG:HG3	1:C:428:ILE:HD11	1.65	0.77
1:F:115:LEU:HB3	1:F:513:LEU:HD12	1.67	0.76
1:A:418:LEU:HB3	1:B:16:LEU:HD22	1.72	0.71
1:E:420[B]:ARG:HG3	1:F:16:LEU:HD11	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:28:GLN:HG3	1:A:30:LEU:HD23	1.72	0.70
1:F:353:ARG:HH21	1:H:317:ALA:HB2	1.58	0.68
1:B:517:LEU:CD2	1:B:523:VAL:HG23	2.25	0.66
1:G:410:GLU:HG3	1:G:413:ARG:HH22	1.61	0.66
1:H:342:THR:HG22	1:H:343:GLN:HG3	1.77	0.66
1:G:342:THR:HG22	1:G:343:GLN:HG3	1.78	0.65
1:E:274:PRO:HA	1:E:277[A]:HIS:CE1	2.31	0.65
1:C:531:PRO:HB2	1:G:240:VAL:HG11	1.78	0.65
1:C:423:THR:HG22	1:C:454:LEU:HD12	1.79	0.64
1:F:342:THR:HG22	1:F:343:GLN:HG3	1.80	0.64
1:C:342:THR:HG22	1:C:343:GLN:HG3	1.81	0.63
1:F:67:SER:HA	1:F:72:ARG:HG2	1.81	0.63
1:G:413:ARG:NH2	1:H:413:ARG:HE	1.96	0.62
1:A:342:THR:HG22	1:A:343:GLN:HG3	1.79	0.62
1:A:420[B]:ARG:HG3	1:B:16:LEU:HD11	1.82	0.62
1:H:274:PRO:HA	1:H:277[A]:HIS:CE1	2.35	0.62
1:E:424:GLU:HG2	1:E:454:LEU:HD13	1.80	0.61
1:A:424:GLU:HG2	1:A:454:LEU:HD13	1.82	0.61
1:A:519:VAL:HG13	1:A:545:SER:HB3	1.83	0.61
1:E:115:LEU:HB2	1:E:513:LEU:HD11	1.82	0.61
1:A:67:SER:HA	1:A:72:ARG:HG2	1.82	0.61
1:D:342:THR:HG22	1:D:343:GLN:HG3	1.81	0.61
1:D:274:PRO:HA	1:D:277[A]:HIS:CE1	2.36	0.60
1:H:94:GLU:O	1:H:98:GLU:HG3	2.01	0.60
1:B:269[A]:ARG:HE	1:B:281:ILE:HD12	1.67	0.59
1:A:353:ARG:HH21	1:C:317:ALA:HB2	1.68	0.59
1:C:240:VAL:HG11	1:G:531:PRO:HB2	1.84	0.59
1:E:342:THR:HG22	1:E:343:GLN:HG3	1.84	0.59
1:G:423:THR:HG22	1:G:454:LEU:HD12	1.84	0.58
1:B:342:THR:HG22	1:B:343:GLN:HG3	1.84	0.58
1:H:68:ARG:NH2	1:H:98:GLU:HB2	2.17	0.58
1:E:423:THR:HG22	1:E:454:LEU:HD12	1.85	0.57
1:B:409:PHE:CE2	1:B:413:ARG:NH1	2.73	0.57
1:G:525:VAL:HG21	1:G:542[A]:LEU:HD12	1.87	0.57
1:A:423:THR:HG22	1:A:454:LEU:HD12	1.86	0.56
1:C:424[A]:GLU:HG3	1:C:454:LEU:HD13	1.88	0.56
1:E:237:GLU:O	1:E:241:ARG:HD3	2.05	0.56
1:A:269[A]:ARG:HE	1:A:281:ILE:HD12	1.71	0.55
1:F:89:SER:HA	1:F:127:LYS:HG3	1.89	0.55
1:D:423:THR:HG22	1:D:454:LEU:HD12	1.89	0.54
1:H:524:ILE:HG23	1:H:539:MET:HE3	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:384:PHE:HB3	1:D:387:GLU:HB2	1.89	0.54
1:D:530:ARG:HD2	1:D:535:TYR:CD2	2.43	0.54
1:H:423:THR:HG22	1:H:454:LEU:HD12	1.90	0.54
1:B:89:SER:HA	1:B:127:LYS:HG3	1.90	0.54
1:B:77:ILE:HG22	1:B:118:ARG:HD2	1.91	0.53
1:F:423:THR:HG22	1:F:454:LEU:HD12	1.90	0.53
1:G:540:ARG:HG2	1:H:538:ILE:HG12	1.91	0.53
1:B:410:GLU:HG3	1:B:413:ARG:HH21	1.74	0.53
1:C:384:PHE:HB3	1:C:387:GLU:HB2	1.90	0.53
1:F:269[A]:ARG:HE	1:F:281:ILE:HD12	1.74	0.53
1:E:418:LEU:HB3	1:F:16:LEU:HD22	1.91	0.52
1:B:384:PHE:HB3	1:B:387:GLU:HB2	1.92	0.52
1:C:310:ASP:OD1	3:C:602:OXL:O1	2.26	0.52
1:D:35:ALA:HB1	1:D:40:GLU:HG2	1.91	0.52
1:E:384:PHE:HB3	1:E:387:GLU:HB2	1.92	0.52
1:H:384:PHE:HB3	1:H:387:GLU:HB2	1.91	0.52
1:D:89:SER:HA	1:D:127:LYS:HG3	1.91	0.52
1:A:35:ALA:O	1:A:406:ARG:HD2	2.10	0.52
1:F:65:PRO:HG2	1:F:381:LYS:HG2	1.92	0.52
1:D:131:SER:O	1:D:132:GLY:O	2.28	0.52
1:D:68:ARG:NH2	1:D:98:GLU:HB2	2.24	0.52
1:B:409:PHE:HE2	1:B:413:ARG:HH12	1.55	0.52
1:H:240:VAL:O	1:H:244[B]:ARG:HG3	2.08	0.52
1:B:423:THR:HG22	1:B:454:LEU:HD12	1.93	0.51
1:G:35:ALA:O	1:G:406:ARG:HD2	2.10	0.51
1:A:530:ARG:HD2	1:A:535:TYR:CD2	2.45	0.51
1:E:269[A]:ARG:HE	1:E:281:ILE:HD12	1.76	0.51
1:G:46:ASP:HB3	1:G:49:SER:HB2	1.93	0.51
1:A:89:SER:HA	1:A:127:LYS:HG3	1.94	0.50
1:F:110:PHE:CE1	1:F:118:ARG:NH2	2.79	0.50
1:G:384:PHE:HB3	1:G:387:GLU:HB2	1.92	0.50
1:E:89:SER:HA	1:E:127:LYS:HG3	1.93	0.50
1:H:89:SER:HA	1:H:127:LYS:HG3	1.94	0.50
1:C:89:SER:HA	1:C:127:LYS:HG3	1.92	0.50
1:H:46:ASP:HB3	1:H:49:SER:HB2	1.94	0.50
1:E:35:ALA:O	1:E:406:ARG:HD2	2.12	0.49
1:D:240:VAL:O	1:D:244[B]:ARG:HG3	2.12	0.49
1:C:35:ALA:O	1:C:406:ARG:HD2	2.12	0.49
1:G:424[A]:GLU:HG3	1:G:454:LEU:HD13	1.94	0.49
1:D:94:GLU:O	1:D:98:GLU:HG3	2.13	0.49
1:F:16:LEU:HG	1:F:20:LEU:HD12	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:432[A]:GLU:OE1	1:D:432[A]:GLU:OE1	2.30	0.49
1:F:67:SER:HB2	1:F:76[B]:MET:SD	2.52	0.49
1:F:244:ARG:HH21	1:F:273:GLY:HA3	1.77	0.49
1:B:67:SER:HB2	1:B:76[B]:MET:SD	2.53	0.49
1:H:286:GLU:HB3	1:H:310:ASP:HB2	1.95	0.49
1:D:286:GLU:HB3	1:D:310:ASP:HB2	1.94	0.48
1:B:65:PRO:HG2	1:B:381:LYS:HG2	1.95	0.48
1:D:125:ASP:HA	1:D:255:PHE:HB2	1.96	0.48
1:B:517:LEU:CD2	1:B:523:VAL:CG2	2.89	0.48
1:G:286:GLU:HB3	1:G:310:ASP:HB2	1.96	0.48
1:B:286:GLU:HB3	1:B:310:ASP:HB2	1.94	0.48
1:F:384:PHE:HB3	1:F:387:GLU:HB2	1.95	0.48
1:A:384:PHE:HB3	1:A:387:GLU:HB2	1.95	0.48
1:D:46:ASP:HB3	1:D:49:SER:HB2	1.95	0.48
1:E:414:ARG:HD3	1:F:406:ARG:CZ	2.43	0.48
1:F:343:GLN:OE1	1:H:356:ARG:HG2	2.13	0.48
1:H:125:ASP:HA	1:H:255:PHE:HB2	1.94	0.48
1:C:286:GLU:HB3	1:C:310:ASP:HB2	1.96	0.48
1:E:286:GLU:HB3	1:E:310:ASP:HB2	1.96	0.48
1:A:286:GLU:HB3	1:A:310:ASP:HB2	1.95	0.47
1:D:310:ASP:OD2	3:D:602:OXL:O2	2.32	0.47
1:A:132:GLY:N	1:A:233:PRO:HD3	2.29	0.47
1:F:46:ASP:HB3	1:F:49:SER:HB2	1.95	0.47
1:F:512:LYS:HG3	1:F:517:LEU:HD12	1.96	0.47
1:D:35:ALA:O	1:D:406:ARG:HD2	2.15	0.47
1:A:115:LEU:HB3	1:A:513:LEU:HD22	1.97	0.47
1:H:274:PRO:HA	1:H:277[A]:HIS:ND1	2.30	0.47
1:E:125:ASP:HA	1:E:255:PHE:HB2	1.97	0.46
1:E:250:GLY:HA2	7:E:739:HOH:O	2.14	0.46
1:A:60:ILE:HB	1:A:374:MET:HG3	1.97	0.46
1:H:35:ALA:HB1	1:H:40:GLU:HB3	1.98	0.46
1:C:432[A]:GLU:OE1	1:D:413:ARG:HD2	2.16	0.46
1:D:244[A]:ARG:NH2	1:D:275:GLU:OE1	2.49	0.46
1:G:89:SER:HA	1:G:127:LYS:HG3	1.98	0.46
1:C:268:VAL:O	1:C:272[B]:LEU:HG	2.15	0.46
1:H:539:MET:O	1:H:539:MET:HG3	2.15	0.46
1:B:56:SER:HB2	1:B:482:GLY:HA2	1.98	0.45
1:C:274:PRO:HG3	1:G:448:THR:HA	1.98	0.45
1:C:289:GLU:HG2	1:C:293:ARG:HD2	1.98	0.45
1:H:35:ALA:O	1:H:406:ARG:HD2	2.15	0.45
1:G:538:ILE:HG12	1:H:540[B]:ARG:HB3	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:56:SER:HB2	1:F:482:GLY:HA2	1.98	0.45
1:A:125:ASP:HA	1:A:255:PHE:HB2	1.98	0.45
1:C:60:ILE:HB	1:C:374:MET:HG3	1.98	0.45
1:C:46:ASP:HB3	1:C:49:SER:HB2	1.97	0.45
1:C:125:ASP:HA	1:C:255:PHE:HB2	1.99	0.45
1:C:531:PRO:HG2	1:G:240:VAL:HG21	1.99	0.45
1:F:110:PHE:CD1	1:F:118:ARG:NH2	2.85	0.45
1:G:113:SER:HB2	1:G:115:LEU:HD23	1.98	0.44
1:E:67:SER:HA	1:E:72:ARG:HG2	1.98	0.44
1:F:289:GLU:OE2	1:F:293:ARG:NH2	2.50	0.44
1:C:540:ARG:HG3	1:D:538:ILE:HG12	1.98	0.44
1:H:60:ILE:HB	1:H:374:MET:HG3	1.98	0.44
1:F:283:SER:HB2	1:F:304:ILE:HD13	2.00	0.44
1:G:540:ARG:CG	1:H:538:ILE:HG12	2.47	0.44
1:B:125:ASP:HA	1:B:255:PHE:HB2	1.99	0.44
1:G:125:ASP:HA	1:G:255:PHE:HB2	1.99	0.44
1:G:67:SER:HB2	1:G:76[B]:MET:SD	2.58	0.44
1:C:353:ARG:HH22	1:C:356:ARG:HH22	1.66	0.44
1:E:46:ASP:HB3	1:E:49:SER:HB2	2.00	0.44
1:G:60:ILE:HB	1:G:374:MET:HG3	2.00	0.44
1:C:56:SER:HB2	1:C:482:GLY:HA2	1.98	0.43
1:F:125:ASP:HA	1:F:255:PHE:HB2	2.01	0.43
1:B:46:ASP:HB3	1:B:49:SER:HB2	2.00	0.43
1:A:283:SER:HB2	1:A:304:ILE:HD13	2.01	0.43
1:E:112:GLY:O	1:E:113:SER:HB2	2.18	0.43
1:B:35:ALA:O	1:B:406:ARG:HD2	2.19	0.43
1:H:311:LEU:O	1:H:315:ILE:HG12	2.19	0.43
1:B:67:SER:HA	1:B:72:ARG:HG2	2.00	0.43
1:B:517:LEU:HD22	1:B:544:ILE:HG13	2.00	0.43
1:G:56:SER:HB2	1:G:482:GLY:HA2	2.00	0.43
1:B:16:LEU:HG	1:B:20:LEU:HD12	2.01	0.42
1:G:115:LEU:HB3	1:G:513:LEU:HD11	2.00	0.42
1:D:274:PRO:HA	1:D:277[A]:HIS:ND1	2.33	0.42
1:E:255:PHE:HB3	1:E:284:LYS:HD2	2.01	0.42
1:F:286:GLU:HB3	1:F:310:ASP:HB2	2.01	0.42
1:E:274:PRO:HA	1:E:277[A]:HIS:ND1	2.33	0.42
1:D:60:ILE:HB	1:D:374:MET:HG3	2.01	0.42
1:A:46:ASP:HB3	1:A:49:SER:HB2	2.02	0.42
1:A:255:PHE:HB3	1:A:284:LYS:HD2	2.01	0.42
1:A:420[A]:ARG:HD3	1:B:16:LEU:HD11	2.01	0.42
1:G:371:ASP:HA	1:G:481:ARG:HB2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:371:ASP:HA	1:A:481:ARG:HB2	2.01	0.42
1:F:35:ALA:O	1:F:406:ARG:HD2	2.20	0.42
1:B:283:SER:HB2	1:B:304:ILE:HD13	2.02	0.42
1:G:432[A]:GLU:OE1	1:H:432[A]:GLU:OE1	2.38	0.41
1:D:68:ARG:HD2	1:D:95:TYR:OH	2.20	0.41
4:B:603[B]:WWD:O4	1:D:407:GLN:HB3	2.20	0.41
1:A:311:LEU:O	1:A:315:ILE:HG12	2.21	0.41
1:E:60:ILE:HB	1:E:374:MET:HG3	2.01	0.41
1:F:68:ARG:HD2	1:F:95:TYR:OH	2.20	0.41
1:G:477:VAL:CG2	1:G:483:VAL:HG11	2.50	0.41
1:F:68:ARG:NH2	1:F:98:GLU:HB3	2.35	0.41
1:E:68:ARG:NH2	1:E:98:GLU:HB3	2.35	0.41
1:A:428:ILE:HD13	1:A:458:TYR:CD1	2.56	0.41
1:B:40[B]:GLU:HG3	7:B:776:HOH:O	2.21	0.41
1:B:345:LEU:HD23	1:B:358:GLU:HB3	2.03	0.41
1:E:323:ALA:O	1:E:327:MET:HG3	2.21	0.41
1:E:410[B]:GLU:OE1	1:F:413:ARG:NH2	2.54	0.41
1:F:345:LEU:HD23	1:F:358:GLU:HB3	2.03	0.41
1:B:265:VAL:HG11	1:B:300:VAL:HG23	2.03	0.41
1:F:81:MET:HE2	1:F:81:MET:HB3	1.95	0.41
1:A:68:ARG:HH22	1:A:98:GLU:HB3	1.86	0.40
1:B:491:PRO:HA	1:B:492:PRO:HD3	1.94	0.40
1:E:283:SER:HB2	1:E:304:ILE:HD13	2.02	0.40
1:B:68:ARG:NH2	1:B:98:GLU:HB3	2.35	0.40
1:G:311:LEU:O	1:G:315:ILE:HG12	2.20	0.40
1:A:488:TYR:CE1	1:A:490:GLU:HB2	2.56	0.40
1:A:323:ALA:O	1:A:327:MET:HG3	2.21	0.40
1:C:432[B]:GLU:OE2	1:D:413:ARG:HD2	2.21	0.40
1:E:418:LEU:CB	1:F:16:LEU:HD22	2.51	0.40
1:H:107:VAL:HG21	1:H:120:VAL:HB	2.03	0.40
1:A:345:LEU:HD23	1:A:358:GLU:HB3	2.04	0.40
1:B:269[A]:ARG:HE	1:B:281:ILE:CD1	2.34	0.40
1:C:67:SER:HA	1:C:72:ARG:HG2	2.03	0.40
1:C:67:SER:HB2	1:C:76[B]:MET:SD	2.61	0.40
1:C:448:THR:HA	1:G:274:PRO:HG3	2.03	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	432/447 (97%)	423 (98%)	7 (2%)	2 (0%)	24	34
1	B	442/447 (99%)	433 (98%)	8 (2%)	1 (0%)	43	56
1	C	430/447 (96%)	420 (98%)	7 (2%)	3 (1%)	18	26
1	D	431/447 (96%)	422 (98%)	7 (2%)	2 (0%)	24	34
1	E	430/447 (96%)	424 (99%)	4 (1%)	2 (0%)	24	34
1	F	437/447 (98%)	431 (99%)	5 (1%)	1 (0%)	43	56
1	G	428/447 (96%)	420 (98%)	7 (2%)	1 (0%)	43	56
1	H	431/447 (96%)	424 (98%)	6 (1%)	1 (0%)	43	56
All	All	3461/3576 (97%)	3397 (98%)	51 (2%)	13 (0%)	30	40

All (13) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	132	GLY
1	E	113	SER
1	A	490	GLU
1	C	543[A]	SER
1	C	543[B]	SER
1	A	342	THR
1	B	342	THR
1	C	342	THR
1	D	342	THR
1	E	342	THR
1	F	342	THR
1	G	342	THR
1	H	342	THR

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	347/352 (99%)	333 (96%)	14 (4%)	28	44
1	B	353/352 (100%)	342 (97%)	11 (3%)	35	54
1	C	347/352 (99%)	336 (97%)	11 (3%)	34	53
1	D	344/352 (98%)	336 (98%)	8 (2%)	44	64
1	E	348/352 (99%)	337 (97%)	11 (3%)	34	53
1	F	352/352 (100%)	340 (97%)	12 (3%)	32	51
1	G	345/352 (98%)	332 (96%)	13 (4%)	29	46
1	H	345/352 (98%)	335 (97%)	10 (3%)	37	57
All	All	2781/2816 (99%)	2691 (97%)	90 (3%)	35	53

All (90) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	27	GLN
1	A	30	LEU
1	A	113	SER
1	A	260	ARG
1	A	261	LYS
1	A	286	GLU
1	A	413	ARG
1	A	477	VAL
1	A	513	LEU
1	A	517	LEU
1	A	530	ARG
1	A	539[A]	MET
1	A	539[B]	MET
1	A	542	LEU
1	B	26	GLN
1	B	68	ARG
1	B	261	LYS
1	B	265	VAL
1	B	286	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	351	LYS
1	B	410	GLU
1	B	413	ARG
1	B	414	ARG
1	B	513	LEU
1	B	523	VAL
1	C	115	LEU
1	C	116[A]	SER
1	C	116[B]	SER
1	C	261	LYS
1	C	272[A]	LEU
1	C	272[B]	LEU
1	C	286	GLU
1	C	410	GLU
1	C	517	LEU
1	C	542[A]	LEU
1	C	542[B]	LEU
1	D	40	GLU
1	D	261	LYS
1	D	286	GLU
1	D	410	GLU
1	D	513	LEU
1	D	517	LEU
1	D	523	VAL
1	D	530	ARG
1	E	115	LEU
1	E	116	SER
1	E	261	LYS
1	E	286	GLU
1	E	333	LEU
1	E	414	ARG
1	E	502	ARG
1	E	513	LEU
1	E	517	LEU
1	E	539[A]	MET
1	E	539[B]	MET
1	F	15	GLN
1	F	26	GLN
1	F	68	ARG
1	F	244	ARG
1	F	261	LYS
1	F	286	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	293	ARG
1	F	410	GLU
1	F	413	ARG
1	F	513	LEU
1	F	517	LEU
1	F	523	VAL
1	G	22	THR
1	G	68	ARG
1	G	113	SER
1	G	115	LEU
1	G	261	LYS
1	G	275	GLU
1	G	286	GLU
1	G	410	GLU
1	G	424[A]	GLU
1	G	424[B]	GLU
1	G	477	VAL
1	G	513	LEU
1	G	517	LEU
1	H	261	LYS
1	H	275	GLU
1	H	286	GLU
1	H	410	GLU
1	H	413	ARG
1	H	513	LEU
1	H	517	LEU
1	H	539	MET
1	H	540[A]	ARG
1	H	540[B]	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	392	GLN
1	C	238	GLN
1	D	324	GLN
1	D	392	GLN
1	D	505	GLN
1	E	324	GLN
1	F	15	GLN
1	G	90	HIS
1	G	324	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	H	102	ASN
1	H	324	GLN
1	H	392	GLN

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 39 ligands modelled in this entry, 16 are monoatomic - leaving 23 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	$\#\|Z\| > 2$
3	OXL	A	602	5	5,5,5	2.04	2 (40%)	6,6,6	2.11	2 (33%)
2	FBP	B	601	-	18,20,20	0.38	0	21,32,32	0.52	0
3	OXL	E	602	5	5,5,5	2.17	2 (40%)	6,6,6	1.84	2 (33%)
3	OXL	G	603	5	5,5,5	2.20	2 (40%)	6,6,6	1.28	1 (16%)
3	OXL	H	602	5	5,5,5	2.08	2 (40%)	6,6,6	1.00	1 (16%)
2	FBP	E	601	-	18,20,20	0.42	0	21,32,32	0.59	0
2	FBP	F	601	-	18,20,20	0.28	0	21,32,32	0.57	0
4	WWD	A	603[B]	-	37,37,37	2.32	9 (24%)	54,58,58	1.39	9 (16%)
2	FBP	H	601	-	18,20,20	0.60	0	21,32,32	0.61	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
4	WWD	B	603[A]	-	37,37,37	2.39	10 (27%)	54,58,58	1.35	10 (18%)
4	WWD	G	601[B]	-	37,37,37	2.47	9 (24%)	54,58,58	1.52	14 (25%)
3	OXL	B	602	5	5,5,5	2.10	2 (40%)	6,6,6	1.69	2 (33%)
2	FBP	D	601	-	18,20,20	0.65	1 (5%)	21,32,32	0.65	0
4	WWD	F	603	-	37,37,37	2.12	11 (29%)	54,58,58	2.06	17 (31%)
3	OXL	D	602	5	5,5,5	2.18	2 (40%)	6,6,6	2.92	4 (66%)
4	WWD	A	603[A]	-	37,37,37	2.52	10 (27%)	54,58,58	1.36	8 (14%)
3	OXL	C	602	5	5,5,5	1.95	2 (40%)	6,6,6	1.89	2 (33%)
2	FBP	A	601	-	18,20,20	0.41	0	21,32,32	0.55	0
2	FBP	C	601	-	18,20,20	0.51	0	21,32,32	0.79	1 (4%)
4	WWD	B	603[B]	-	37,37,37	2.24	8 (21%)	54,58,58	1.61	16 (29%)
3	OXL	F	602	5	5,5,5	2.03	2 (40%)	6,6,6	1.98	2 (33%)
4	WWD	G	601[A]	-	37,37,37	2.41	10 (27%)	54,58,58	1.24	6 (11%)
2	FBP	G	602	-	18,20,20	0.43	0	21,32,32	0.59	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	OXL	A	602	5	-	4/4/4/4	-
2	FBP	B	601	-	-	4/13/32/32	0/1/1/1
3	OXL	E	602	5	-	4/4/4/4	-
3	OXL	G	603	5	-	4/4/4/4	-
3	OXL	H	602	5	-	4/4/4/4	-
2	FBP	E	601	-	-	4/13/32/32	0/1/1/1
2	FBP	F	601	-	-	2/13/32/32	0/1/1/1
4	WWD	A	603[B]	-	-	0/24/24/24	0/4/4/4
2	FBP	H	601	-	-	2/13/32/32	0/1/1/1
4	WWD	B	603[A]	-	-	0/24/24/24	0/4/4/4
4	WWD	G	601[B]	-	-	0/24/24/24	0/4/4/4
3	OXL	B	602	5	-	4/4/4/4	-
2	FBP	D	601	-	-	3/13/32/32	0/1/1/1
4	WWD	F	603	-	-	0/24/24/24	0/4/4/4
3	OXL	D	602	5	-	4/4/4/4	-
4	WWD	A	603[A]	-	-	0/24/24/24	0/4/4/4

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	OXL	C	602	5	-	4/4/4/4	-
2	FBP	A	601	-	-	2/13/32/32	0/1/1/1
2	FBP	C	601	-	-	2/13/32/32	0/1/1/1
4	WWD	B	603[B]	-	-	0/24/24/24	0/4/4/4
3	OXL	F	602	5	-	0/4/4/4	-
4	WWD	G	601[A]	-	-	0/24/24/24	0/4/4/4
2	FBP	G	602	-	-	3/13/32/32	0/1/1/1

All (84) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	G	601[B]	WWD	C9-S1	-8.07	1.64	1.77
4	B	603[B]	WWD	C9-S1	-7.63	1.65	1.77
4	A	603[B]	WWD	C9-S1	-7.19	1.65	1.77
4	G	601[A]	WWD	C9-S1	-7.07	1.66	1.77
4	A	603[A]	WWD	C2-S	-7.04	1.66	1.77
4	A	603[B]	WWD	C2-S	-6.94	1.66	1.77
4	G	601[A]	WWD	C2-S	-6.89	1.66	1.77
4	B	603[A]	WWD	C8-S1	-6.88	1.66	1.77
4	A	603[A]	WWD	C9-S1	-6.61	1.66	1.77
4	A	603[A]	WWD	C8-S1	-6.42	1.67	1.77
4	B	603[A]	WWD	C9-S1	-6.14	1.67	1.77
4	B	603[A]	WWD	C2-S	-6.12	1.67	1.77
4	G	601[B]	WWD	C2-S	-6.05	1.67	1.77
4	A	603[A]	WWD	C3-S	-5.86	1.68	1.77
4	G	601[A]	WWD	C3-S	-5.65	1.68	1.77
4	B	603[A]	WWD	C3-S	-5.33	1.68	1.77
4	F	603	WWD	C9-S1	-5.31	1.68	1.77
4	G	601[A]	WWD	C8-S1	-5.25	1.68	1.77
4	F	603	WWD	C8-S1	-4.91	1.69	1.77
4	G	601[B]	WWD	C3-S	-4.81	1.69	1.77
4	A	603[B]	WWD	C3-S	-4.79	1.69	1.77
4	B	603[B]	WWD	C2-S	-4.77	1.69	1.77
4	G	601[B]	WWD	C8-S1	-4.62	1.69	1.77
4	G	601[B]	WWD	C20-C21	4.35	1.45	1.40
4	B	603[B]	WWD	C8-S1	-4.34	1.70	1.77
4	F	603	WWD	C2-S	-4.32	1.70	1.77
4	F	603	WWD	C3-S	-4.23	1.70	1.77
4	B	603[A]	WWD	C-C21	4.18	1.44	1.40
4	G	601[B]	WWD	C13-C12	4.00	1.44	1.40
4	A	603[B]	WWD	C8-S1	-4.00	1.70	1.77

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	603	OXL	O2-C2	3.92	1.32	1.22
4	B	603[B]	WWD	C3-S	-3.88	1.71	1.77
3	A	602	OXL	O2-C2	3.80	1.31	1.22
4	B	603[B]	WWD	C-C21	3.80	1.44	1.40
4	A	603[B]	WWD	C20-C21	3.76	1.44	1.40
4	A	603[A]	WWD	C13-C12	3.75	1.44	1.40
3	D	602	OXL	O2-C2	3.68	1.31	1.22
3	E	602	OXL	O2-C2	3.61	1.31	1.22
3	B	602	OXL	O2-C2	3.58	1.31	1.22
3	F	602	OXL	O2-C2	3.54	1.31	1.22
4	F	603	WWD	C11-C12	3.50	1.44	1.40
3	H	602	OXL	O2-C2	3.45	1.31	1.22
3	C	602	OXL	O2-C2	3.43	1.31	1.22
4	B	603[B]	WWD	C11-C12	3.38	1.43	1.40
4	B	603[B]	WWD	C13-C12	3.37	1.43	1.40
4	G	601[B]	WWD	C7-C8	3.31	1.44	1.38
4	G	601[A]	WWD	C20-C21	3.28	1.43	1.40
4	F	603	WWD	C13-C12	3.26	1.43	1.40
4	A	603[A]	WWD	C7-C8	3.25	1.43	1.38
4	A	603[A]	WWD	C20-C21	3.23	1.43	1.40
4	F	603	WWD	C7-C8	3.22	1.43	1.38
4	F	603	WWD	C18-C3	3.15	1.43	1.38
4	A	603[B]	WWD	C7-C8	3.12	1.43	1.38
3	H	602	OXL	O4-C2	-3.09	1.22	1.30
4	G	601[B]	WWD	C18-C3	3.07	1.43	1.38
3	E	602	OXL	O4-C2	-3.07	1.22	1.30
3	G	603	OXL	O4-C2	-2.96	1.22	1.30
4	G	601[A]	WWD	C18-C3	2.96	1.43	1.38
3	B	602	OXL	O4-C2	-2.95	1.22	1.30
4	B	603[A]	WWD	C13-C12	2.94	1.43	1.40
4	A	603[A]	WWD	C18-C3	2.93	1.43	1.38
4	A	603[B]	WWD	C-C21	2.91	1.43	1.40
4	G	601[A]	WWD	C7-C8	2.90	1.43	1.38
3	D	602	OXL	O4-C2	-2.88	1.22	1.30
4	B	603[B]	WWD	C18-C3	2.86	1.43	1.38
4	A	603[B]	WWD	C18-C3	2.83	1.43	1.38
4	G	601[A]	WWD	C13-C12	2.82	1.43	1.40
4	A	603[A]	WWD	C-C21	2.76	1.43	1.40
4	A	603[A]	WWD	C11-C12	2.67	1.43	1.40
3	F	602	OXL	O4-C2	-2.67	1.23	1.30
3	C	602	OXL	O4-C2	-2.58	1.23	1.30
4	G	601[A]	WWD	C11-C12	2.55	1.42	1.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	603[A]	WWD	C20-C21	2.55	1.42	1.40
3	A	602	OXL	O4-C2	-2.50	1.23	1.30
4	G	601[A]	WWD	C-C21	2.46	1.42	1.40
4	B	603[A]	WWD	C11-C12	2.42	1.42	1.40
4	B	603[A]	WWD	C7-C8	2.37	1.42	1.38
4	G	601[B]	WWD	C11-C12	2.37	1.42	1.40
4	A	603[B]	WWD	C11-C12	2.34	1.42	1.40
4	B	603[A]	WWD	C18-C3	2.34	1.42	1.38
4	F	603	WWD	O6-S	-2.32	1.40	1.44
4	F	603	WWD	C20-C21	2.18	1.42	1.40
4	F	603	WWD	C-C21	2.07	1.42	1.40
2	D	601	FBP	P2-O4P	-2.03	1.44	1.50

All (97) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	F	603	WWD	C4-C3-S	5.03	125.83	119.14
4	F	603	WWD	O6-S-C3	-4.68	102.20	107.96
3	D	602	OXL	O4-C2-C1	4.65	121.85	112.83
4	F	603	WWD	C15-C8-S1	4.56	125.21	119.14
4	F	603	WWD	O7-S-C3	4.49	113.48	107.96
4	F	603	WWD	O4-S1-C8	4.35	113.31	107.96
3	D	602	OXL	O3-C1-C2	4.06	120.72	112.83
3	A	602	OXL	O4-C2-C1	3.99	120.57	112.83
3	F	602	OXL	O4-C2-C1	3.90	120.40	112.83
4	A	603[A]	WWD	O8-C20-C21	3.79	127.65	117.90
4	F	603	WWD	C11-C12-C13	-3.70	117.24	119.53
3	C	602	OXL	O4-C2-C1	3.59	119.79	112.83
4	B	603[B]	WWD	C11-C12-C13	-3.53	117.35	119.53
4	B	603[A]	WWD	O8-C20-C21	3.43	126.72	117.90
4	G	601[A]	WWD	O8-C20-C21	3.43	126.71	117.90
4	A	603[B]	WWD	O8-C20-C21	3.41	126.67	117.90
4	A	603[B]	WWD	C4-C3-S	3.27	123.49	119.14
3	E	602	OXL	O4-C2-C1	3.24	119.11	112.83
4	G	601[B]	WWD	O8-C20-C21	3.23	126.21	117.90
4	B	603[A]	WWD	C-C21-C20	-3.13	117.60	119.53
4	G	601[B]	WWD	O5-S1-C8	3.10	111.78	107.96
4	F	603	WWD	O8-C20-C21	3.06	125.77	117.90
4	B	603[B]	WWD	O4-S1-C8	3.05	111.70	107.96
4	B	603[B]	WWD	O3-C13-C12	3.04	125.71	117.90
3	B	602	OXL	O4-C2-C1	3.00	118.66	112.83
4	G	601[B]	WWD	O3-C13-C12	2.96	125.51	117.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	A	603[B]	WWD	O3-C13-C12	2.96	125.50	117.90
4	A	603[A]	WWD	C11-C12-C13	-2.95	117.70	119.53
4	F	603	WWD	O3-C13-C12	2.94	125.46	117.90
3	D	602	OXL	O2-C2-C1	-2.91	114.57	120.63
4	B	603[B]	WWD	O8-C20-C21	2.90	125.36	117.90
4	G	601[A]	WWD	O3-C13-C12	2.83	125.17	117.90
4	A	603[A]	WWD	O3-C13-C12	2.81	125.13	117.90
4	G	601[B]	WWD	C7-C8-C15	-2.81	117.31	121.14
4	B	603[B]	WWD	C7-C8-C15	-2.79	117.33	121.14
4	B	603[B]	WWD	C-C21-C20	-2.79	117.81	119.53
4	G	601[B]	WWD	C15-C8-S1	2.78	122.84	119.14
4	G	601[B]	WWD	C-C21-C20	-2.72	117.85	119.53
4	B	603[B]	WWD	C15-C8-S1	2.71	122.75	119.14
4	F	603	WWD	C7-C8-S1	-2.70	115.98	119.49
4	A	603[A]	WWD	O8-C20-C19	-2.68	112.23	119.45
4	B	603[A]	WWD	O3-C13-C12	2.66	124.74	117.90
4	B	603[B]	WWD	O9-C21-C	2.64	126.41	119.46
4	B	603[A]	WWD	C4-C3-S	2.63	122.64	119.14
3	E	602	OXL	O3-C1-C2	2.61	117.90	112.83
3	A	602	OXL	O2-C2-C1	-2.60	115.21	120.63
4	G	601[A]	WWD	C11-C12-C13	-2.57	117.94	119.53
4	A	603[A]	WWD	C-C21-C20	-2.55	117.96	119.53
4	G	601[B]	WWD	C6-C7-C8	2.53	123.32	119.69
4	B	603[B]	WWD	C6-C7-C8	2.51	123.30	119.69
4	F	603	WWD	C18-C3-S	-2.51	116.22	119.49
4	F	603	WWD	O2-C12-C11	2.50	126.06	119.46
3	B	602	OXL	O3-C1-C2	2.48	117.64	112.83
4	B	603[B]	WWD	C18-C3-C4	-2.45	117.79	121.14
4	G	601[B]	WWD	C19-C2-S	2.45	122.41	119.15
4	B	603[A]	WWD	C15-C8-S1	2.42	122.36	119.14
4	F	603	WWD	C18-C3-C4	-2.40	117.86	121.14
4	B	603[B]	WWD	C4-C3-S	2.40	122.33	119.14
4	A	603[B]	WWD	C7-C8-C15	-2.39	117.87	121.14
4	A	603[A]	WWD	C4-C3-S	2.38	122.30	119.14
4	F	603	WWD	O5-S1-C8	-2.37	105.04	107.96
4	B	603[A]	WWD	O9-C21-C	2.35	125.66	119.46
4	F	603	WWD	O3-C13-C14	-2.34	113.15	119.45
4	A	603[B]	WWD	C-C21-C20	-2.33	118.09	119.53
4	B	603[B]	WWD	O2-C12-C11	2.30	125.52	119.46
4	G	601[B]	WWD	C4-C3-S	2.29	122.18	119.14
3	G	603	OXL	O4-C2-C1	2.27	117.23	112.83
4	A	603[B]	WWD	O2-C12-C11	2.26	125.41	119.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	A	603[B]	WWD	C11-C12-C13	-2.26	118.14	119.53
3	H	602	OXL	O4-C2-C1	2.23	117.16	112.83
4	B	603[A]	WWD	O8-C20-C19	-2.23	113.44	119.45
4	G	601[B]	WWD	C18-C3-C4	-2.23	118.10	121.14
4	B	603[B]	WWD	O3-C13-C14	-2.23	113.45	119.45
4	B	603[B]	WWD	O7-S-C3	2.22	110.69	107.96
4	G	601[B]	WWD	O7-S-C3	2.21	110.68	107.96
4	F	603	WWD	C17-C18-C3	2.21	122.86	119.69
4	F	603	WWD	O9-C21-C	2.21	125.28	119.46
4	G	601[B]	WWD	O5-S1-C9	-2.19	105.26	107.96
4	A	603[B]	WWD	O8-C20-C19	-2.19	113.53	119.45
2	C	601	FBP	O1-P1-O1P	2.19	112.35	106.44
4	G	601[A]	WWD	O8-C20-C19	-2.14	113.67	119.45
3	C	602	OXL	O3-C1-C2	2.12	116.94	112.83
4	B	603[B]	WWD	C1-C2-S	2.12	121.97	119.15
4	A	603[B]	WWD	C15-C8-S1	2.10	121.93	119.14
4	G	601[B]	WWD	C11-C12-C13	-2.09	118.24	119.53
4	B	603[B]	WWD	O6-S-C3	-2.08	105.39	107.96
3	D	602	OXL	O1-C1-C2	-2.08	116.29	120.63
3	F	602	OXL	O2-C2-C1	-2.08	116.30	120.63
4	B	603[A]	WWD	C18-C3-C4	-2.07	118.31	121.14
4	G	601[A]	WWD	O2-C12-C11	2.07	124.93	119.46
4	G	601[A]	WWD	C15-C8-S1	2.07	121.89	119.14
4	G	601[B]	WWD	O8-C20-C19	-2.06	113.89	119.45
4	A	603[A]	WWD	O9-C21-C	2.05	124.85	119.46
4	B	603[A]	WWD	C17-C18-C3	2.03	122.60	119.69
4	A	603[A]	WWD	O2-C12-C11	2.03	124.80	119.46
4	F	603	WWD	O7-S-C2	2.02	110.44	107.96
4	B	603[A]	WWD	C11-C12-C13	-2.00	118.30	119.53

There are no chirality outliers.

All (50) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	601	FBP	C4-C5-C6-O6
2	B	601	FBP	C4-C5-C6-O6
2	C	601	FBP	C4-C5-C6-O6
2	D	601	FBP	C4-C5-C6-O6
2	E	601	FBP	C4-C5-C6-O6
2	F	601	FBP	C4-C5-C6-O6
2	H	601	FBP	C4-C5-C6-O6
2	G	602	FBP	C4-C5-C6-O6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
2	A	601	FBP	O5-C5-C6-O6
2	B	601	FBP	O5-C5-C6-O6
2	C	601	FBP	O5-C5-C6-O6
2	D	601	FBP	O5-C5-C6-O6
2	E	601	FBP	O5-C5-C6-O6
2	F	601	FBP	O5-C5-C6-O6
2	G	602	FBP	O5-C5-C6-O6
2	H	601	FBP	O5-C5-C6-O6
2	B	601	FBP	C1-O1-P1-O1P
2	E	601	FBP	C1-O1-P1-O1P
2	E	601	FBP	C1-O1-P1-O2P
3	C	602	OXL	O3-C1-C2-O4
3	E	602	OXL	O3-C1-C2-O4
3	H	602	OXL	O3-C1-C2-O4
3	D	602	OXL	O3-C1-C2-O4
3	C	602	OXL	O1-C1-C2-O2
3	D	602	OXL	O1-C1-C2-O2
3	E	602	OXL	O1-C1-C2-O2
3	H	602	OXL	O1-C1-C2-O2
3	A	602	OXL	O3-C1-C2-O4
3	B	602	OXL	O3-C1-C2-O4
3	G	603	OXL	O3-C1-C2-O4
3	A	602	OXL	O1-C1-C2-O2
3	B	602	OXL	O1-C1-C2-O2
3	G	603	OXL	O1-C1-C2-O2
2	D	601	FBP	C6-O6-P2-O4P
2	G	602	FBP	C1-O1-P1-O1P
3	C	602	OXL	O1-C1-C2-O4
3	C	602	OXL	O3-C1-C2-O2
3	D	602	OXL	O1-C1-C2-O4
3	E	602	OXL	O3-C1-C2-O2
3	H	602	OXL	O3-C1-C2-O2
3	D	602	OXL	O3-C1-C2-O2
3	E	602	OXL	O1-C1-C2-O4
3	H	602	OXL	O1-C1-C2-O4
3	A	602	OXL	O1-C1-C2-O4
3	G	603	OXL	O1-C1-C2-O4
3	G	603	OXL	O3-C1-C2-O2
3	A	602	OXL	O3-C1-C2-O2
3	B	602	OXL	O1-C1-C2-O4
3	B	602	OXL	O3-C1-C2-O2
2	B	601	FBP	C1-O1-P1-O2P

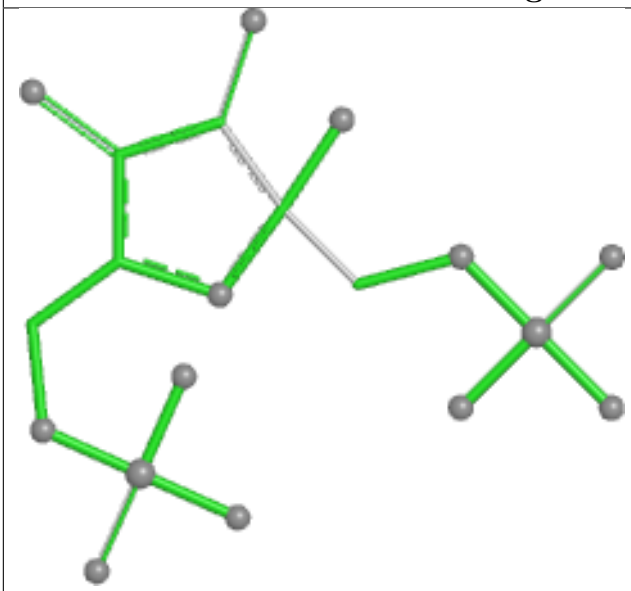
There are no ring outliers.

3 monomers are involved in 3 short contacts:

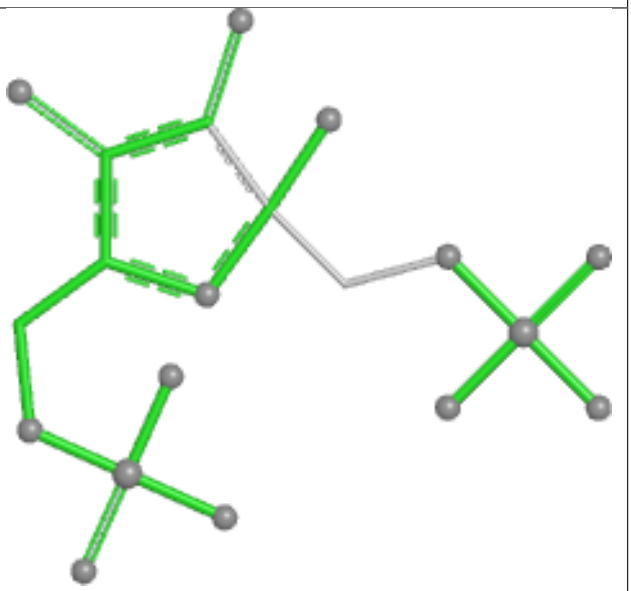
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	D	602	OXL	1	0
3	C	602	OXL	1	0
4	B	603[B]	WWD	1	0

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.

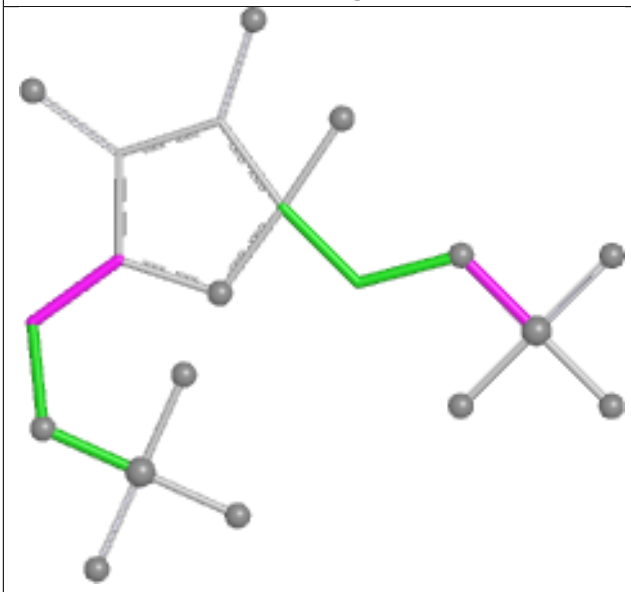
Ligand FBP B 601



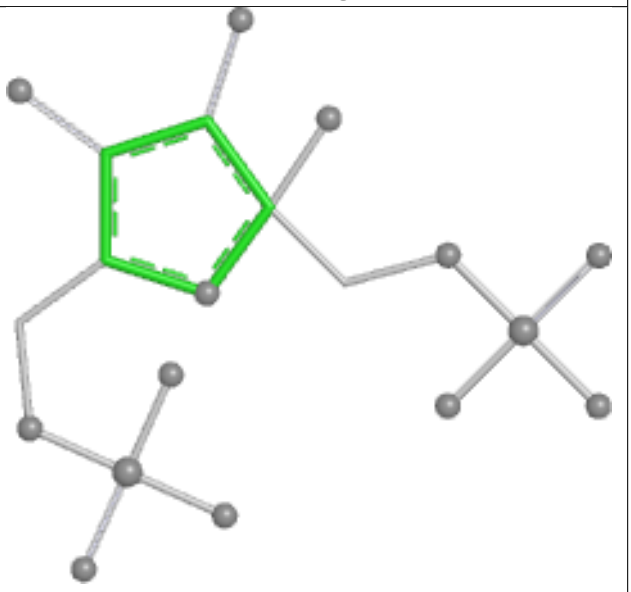
Bond lengths



Bond angles

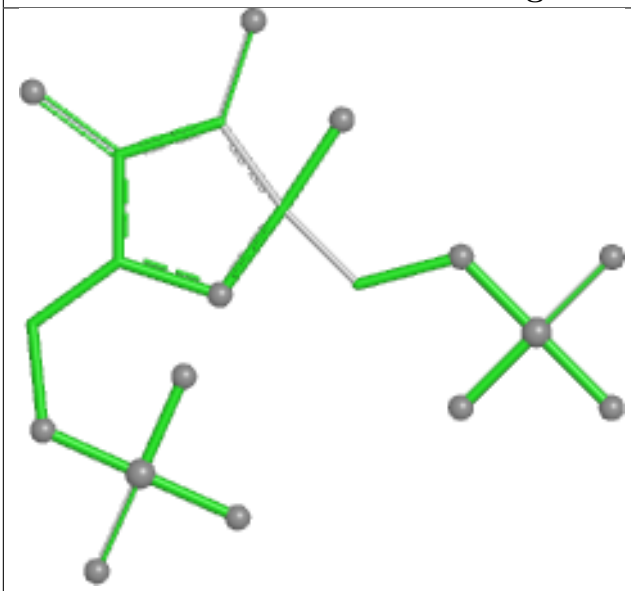


Torsions

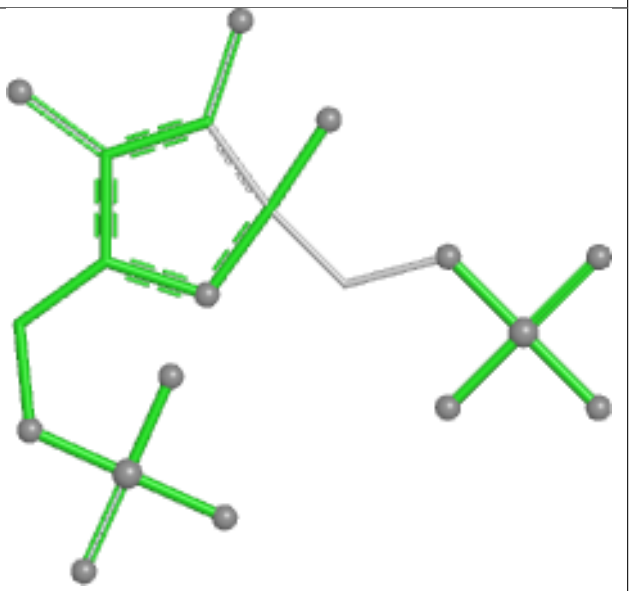


Rings

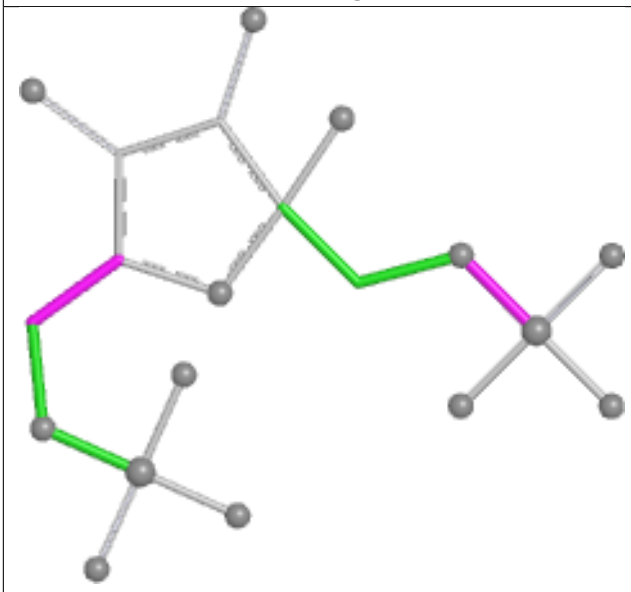
Ligand FBP E 601



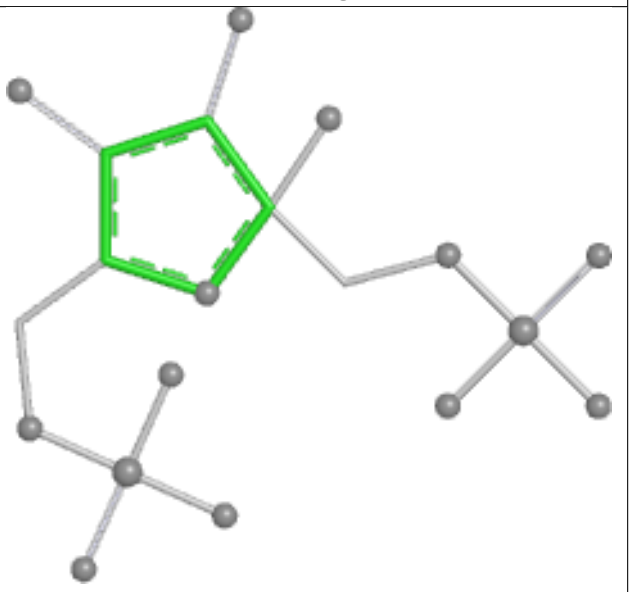
Bond lengths



Bond angles

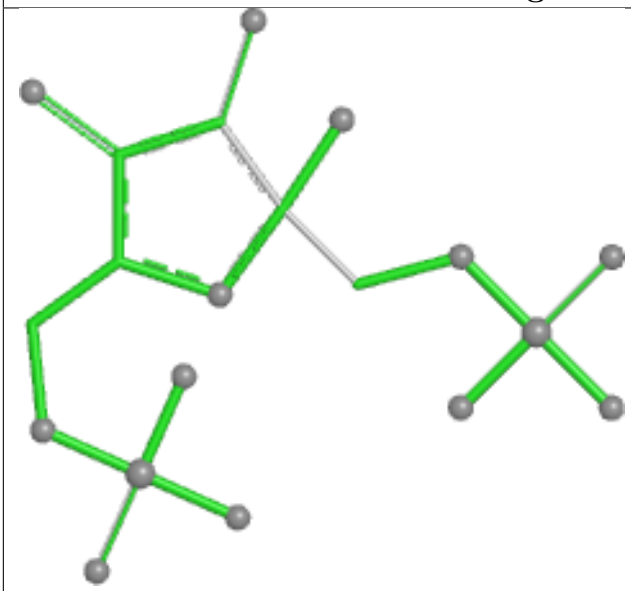


Torsions

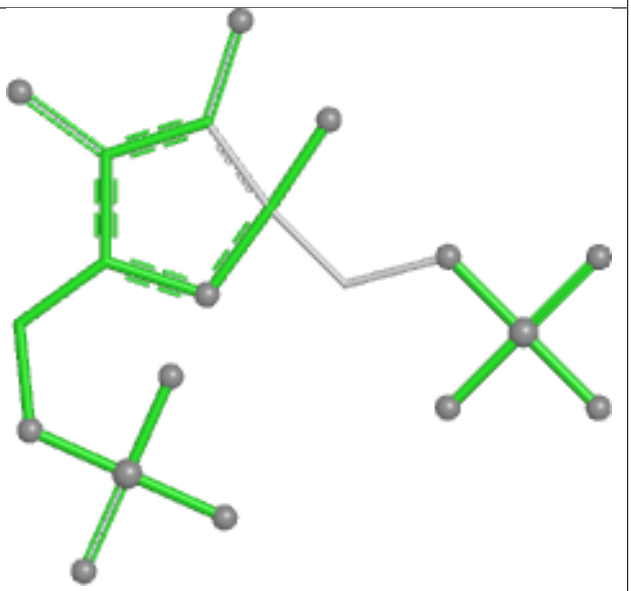


Rings

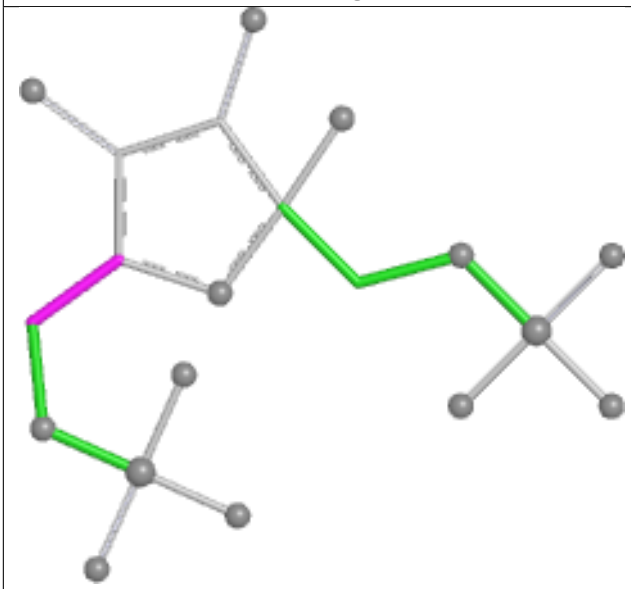
Ligand FBP F 601



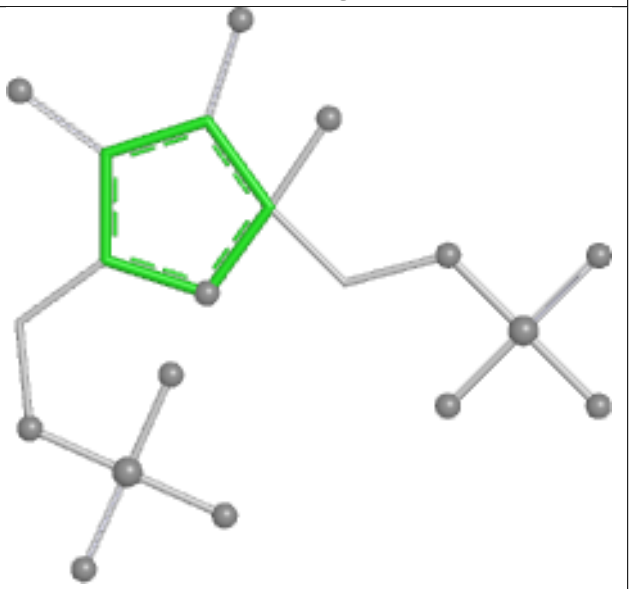
Bond lengths



Bond angles

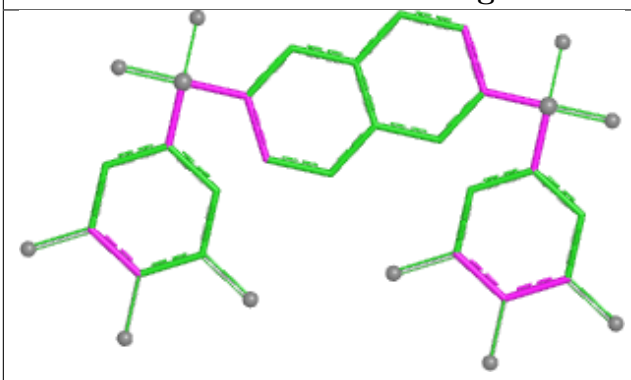


Torsions

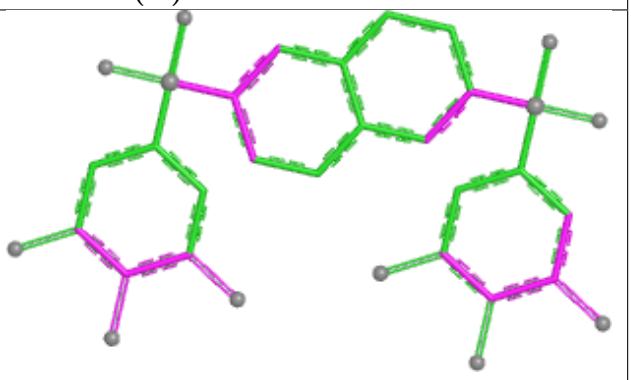


Rings

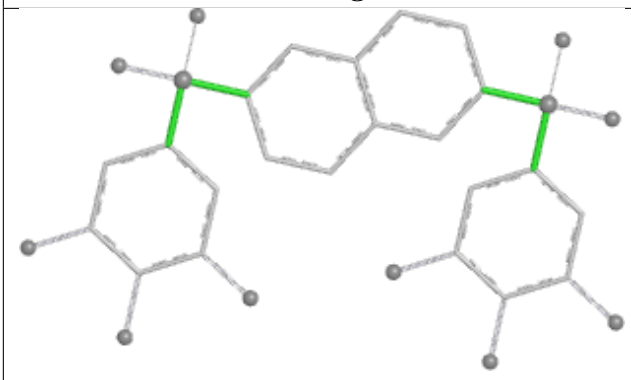
Ligand WWD A 603 (B)



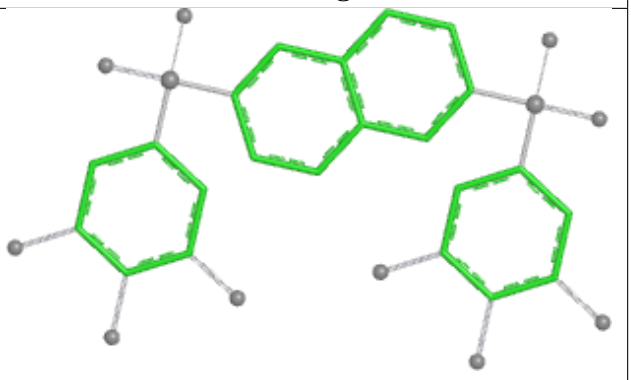
Bond lengths



Bond angles

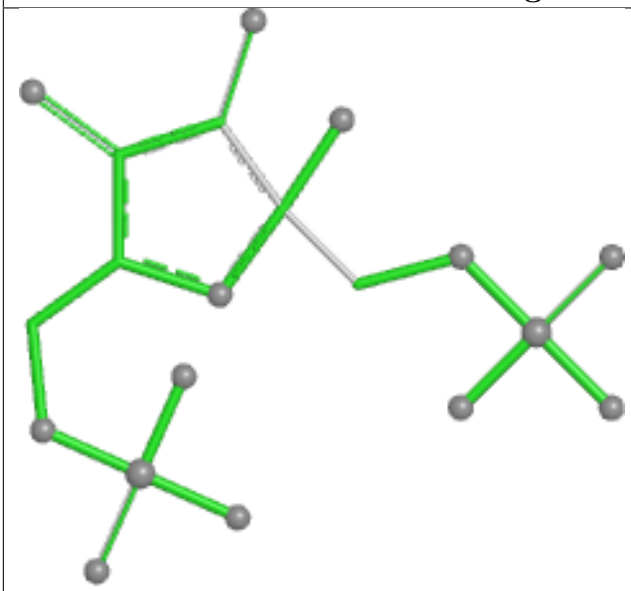


Torsions

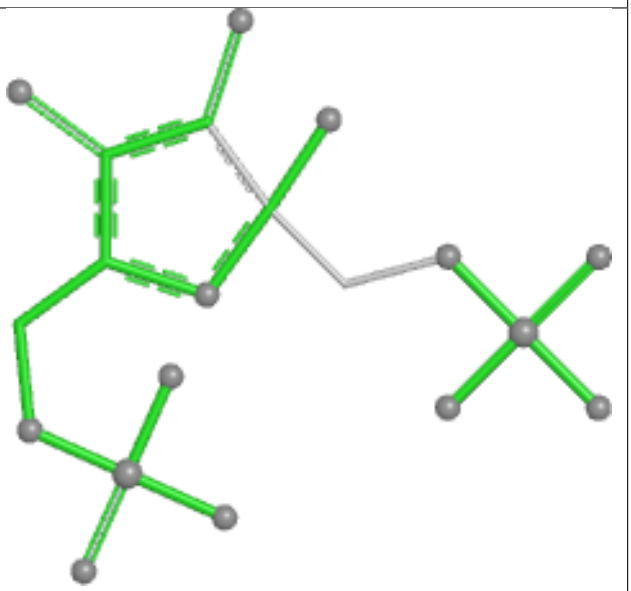


Rings

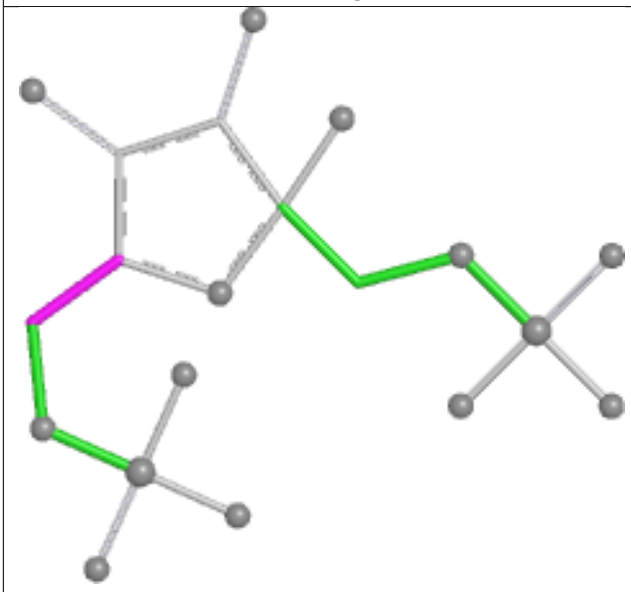
Ligand FBP H 601



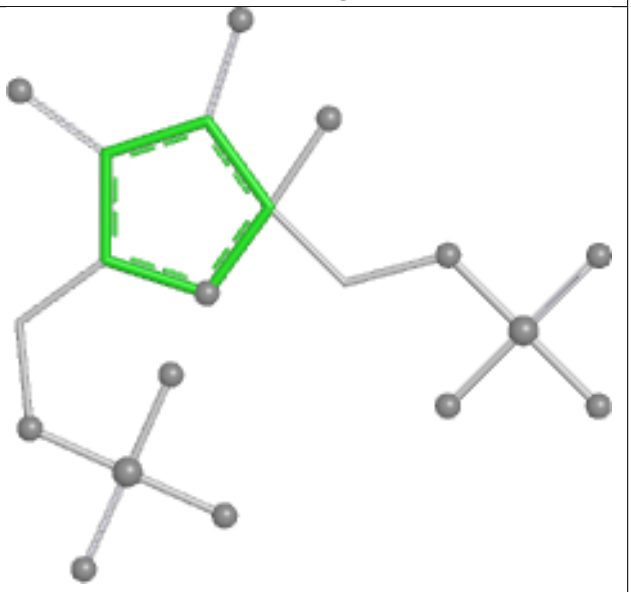
Bond lengths



Bond angles

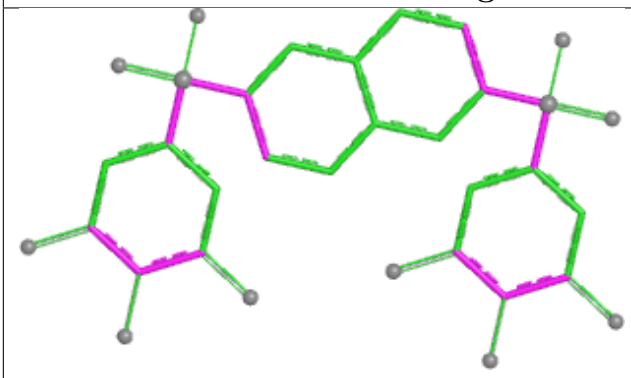


Torsions

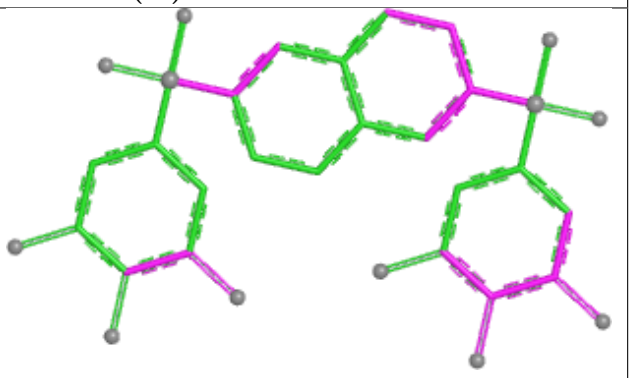


Rings

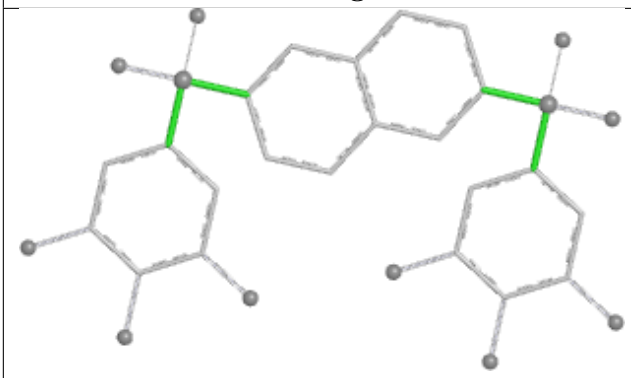
Ligand WWD B 603 (A)



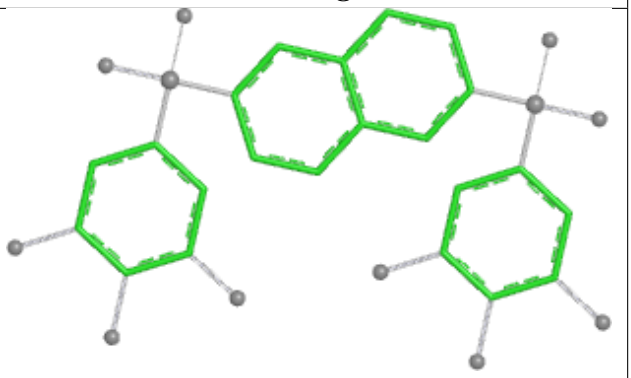
Bond lengths



Bond angles

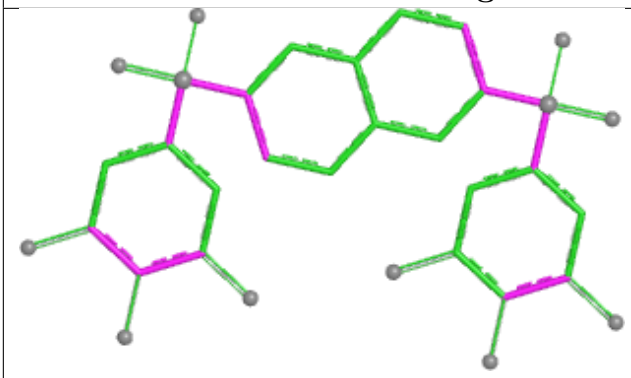


Torsions

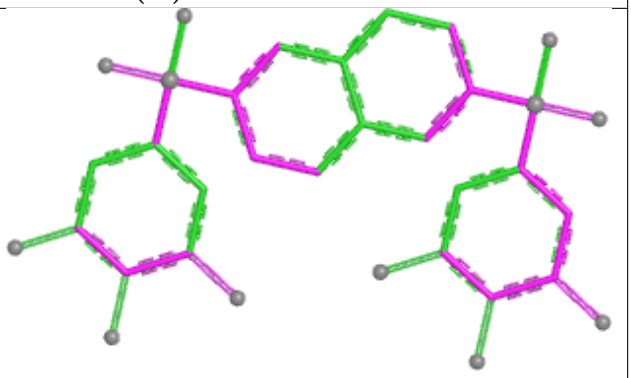


Rings

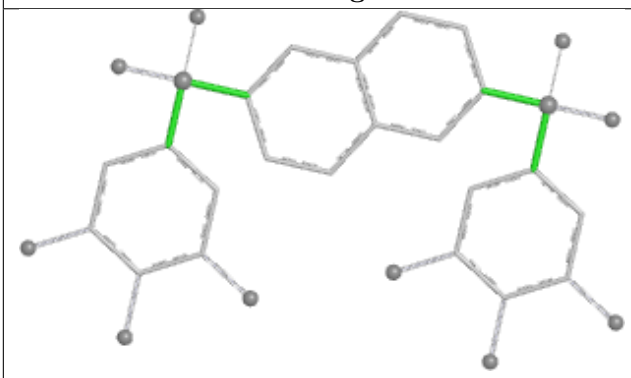
Ligand WWD G 601 (B)



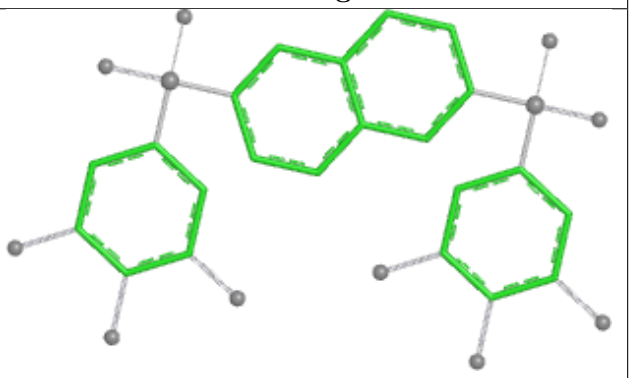
Bond lengths



Bond angles

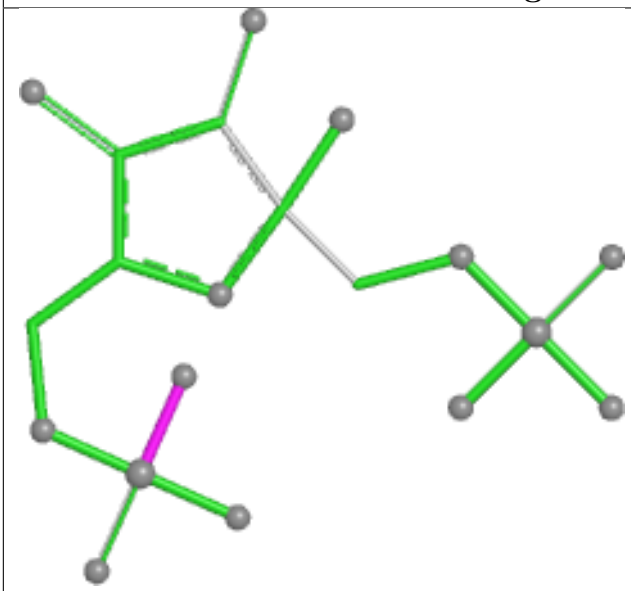


Torsions

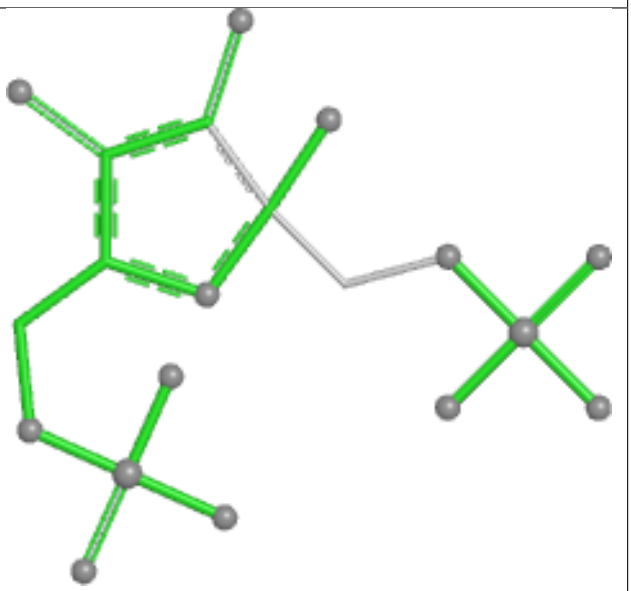


Rings

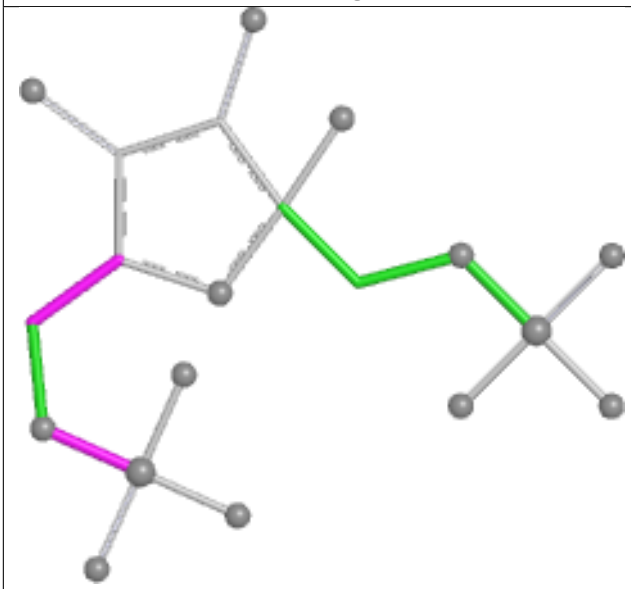
Ligand FBP D 601



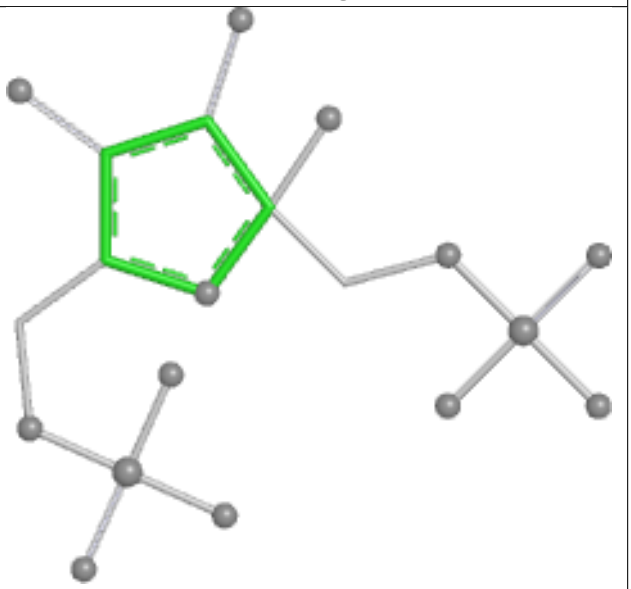
Bond lengths



Bond angles

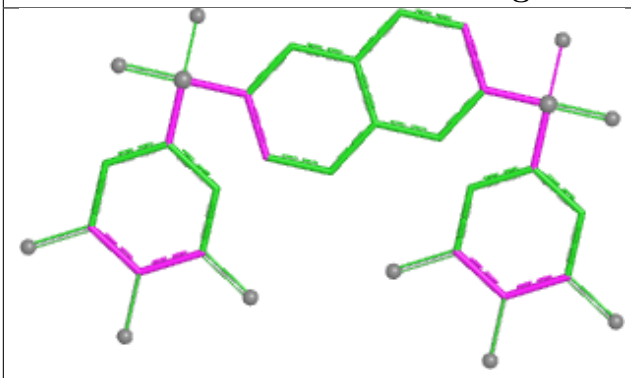


Torsions

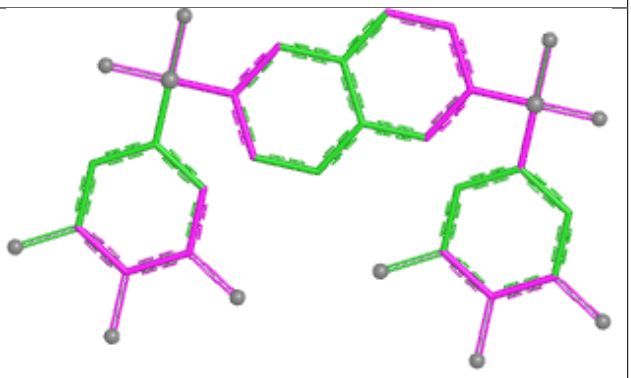


Rings

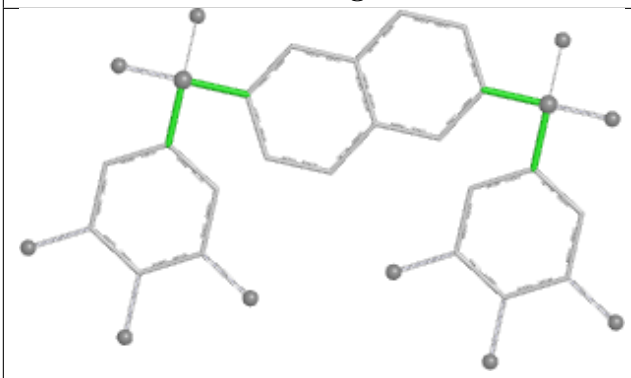
Ligand WWD F 603



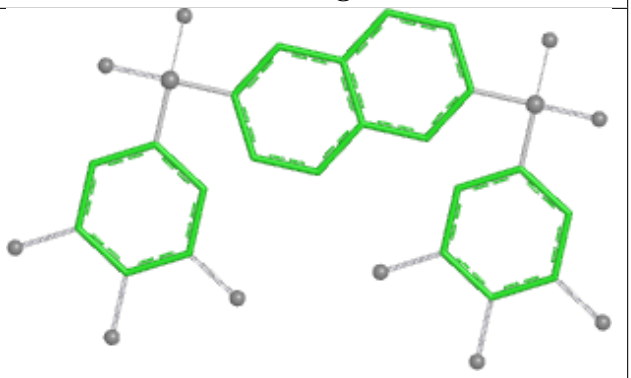
Bond lengths



Bond angles

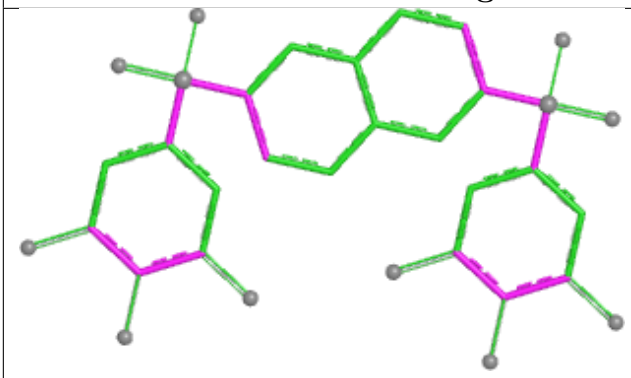


Torsions

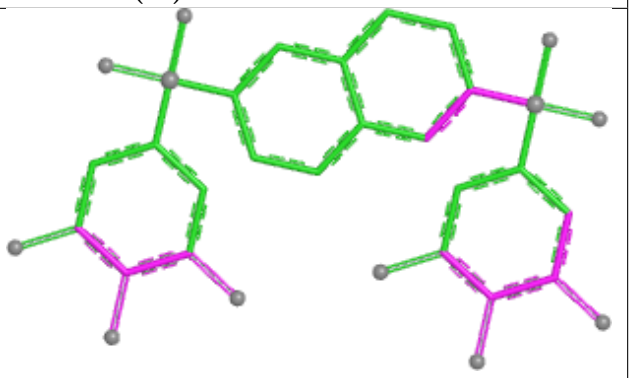


Rings

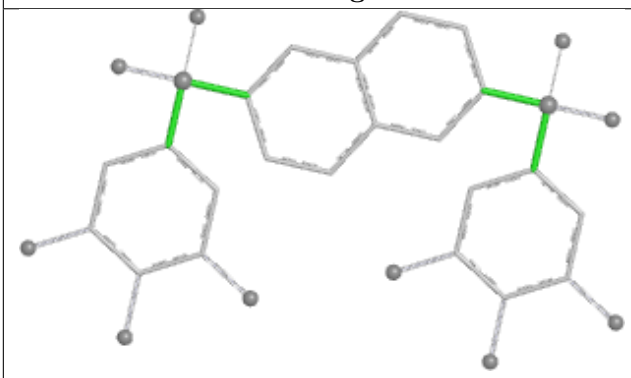
Ligand WWD A 603 (A)



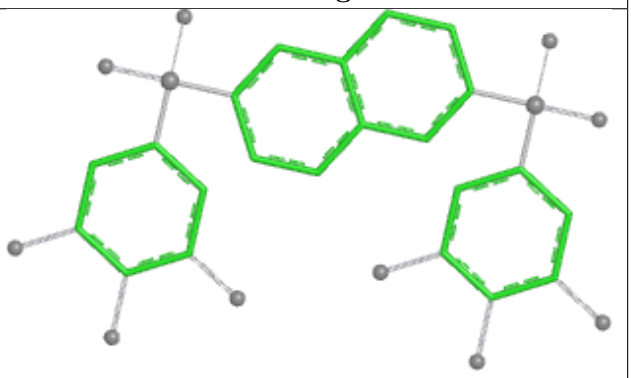
Bond lengths



Bond angles

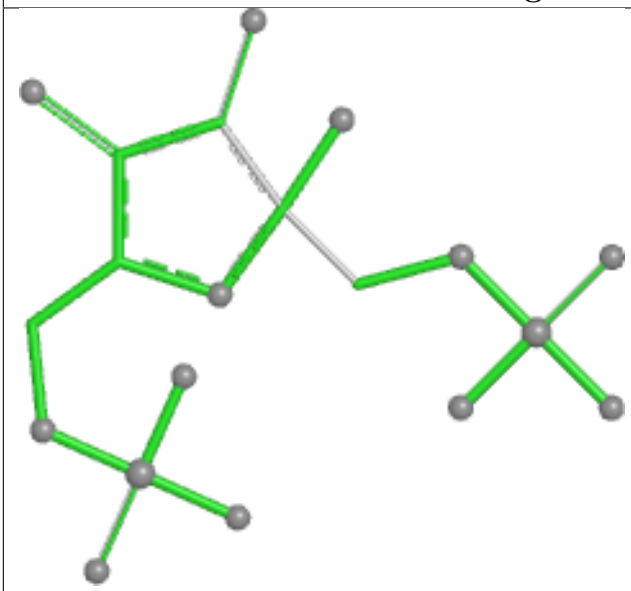


Torsions

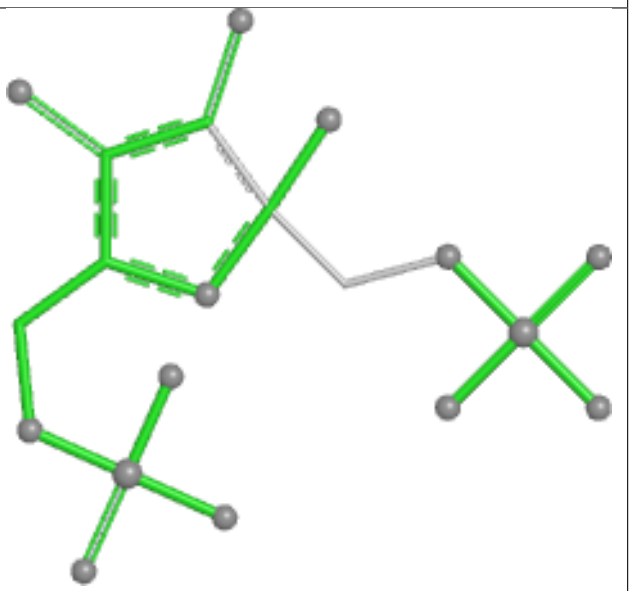


Rings

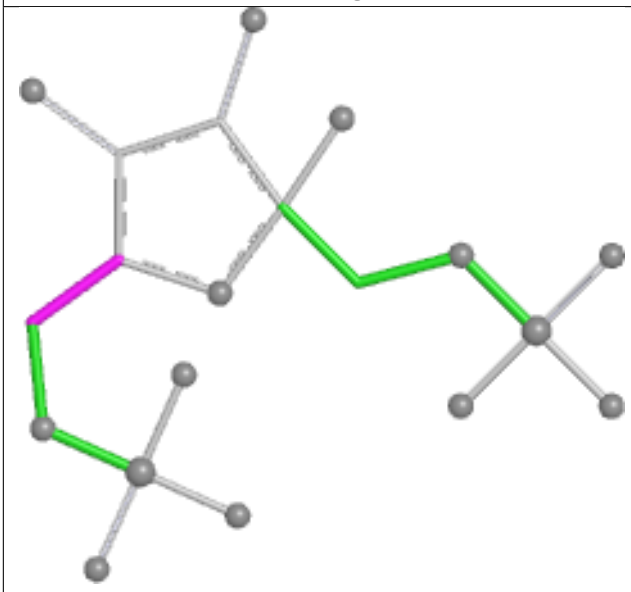
Ligand FBP A 601



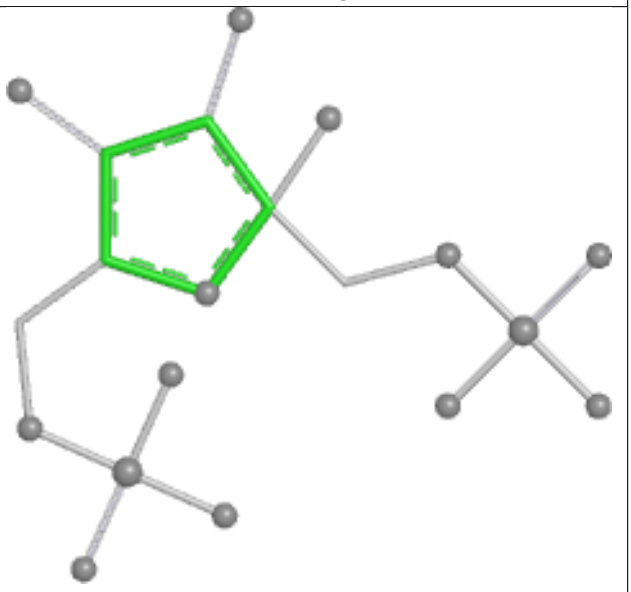
Bond lengths



Bond angles

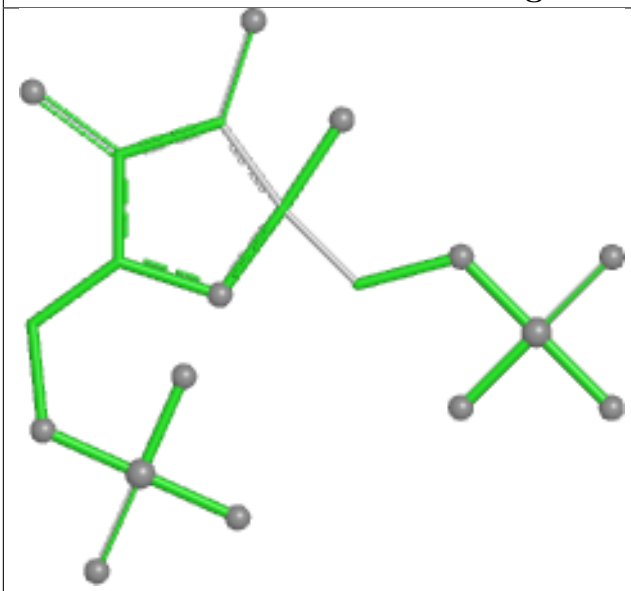


Torsions

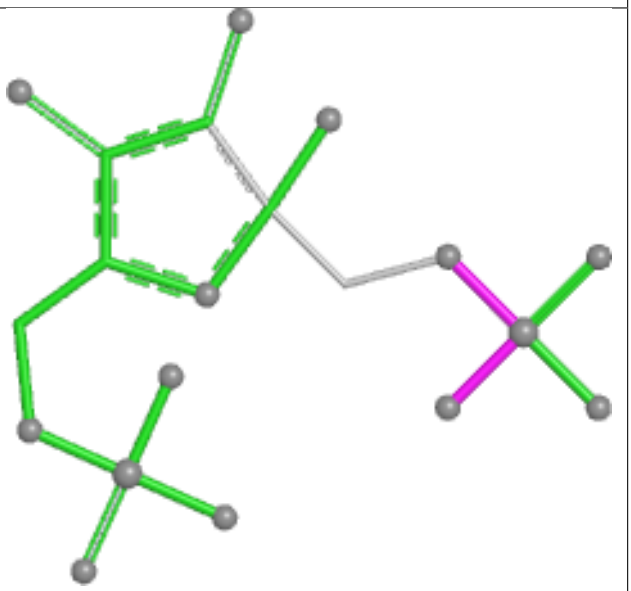


Rings

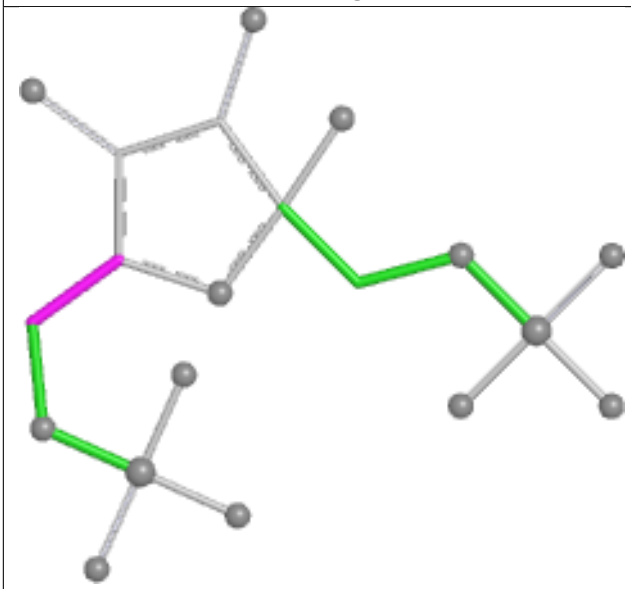
Ligand FBP C 601



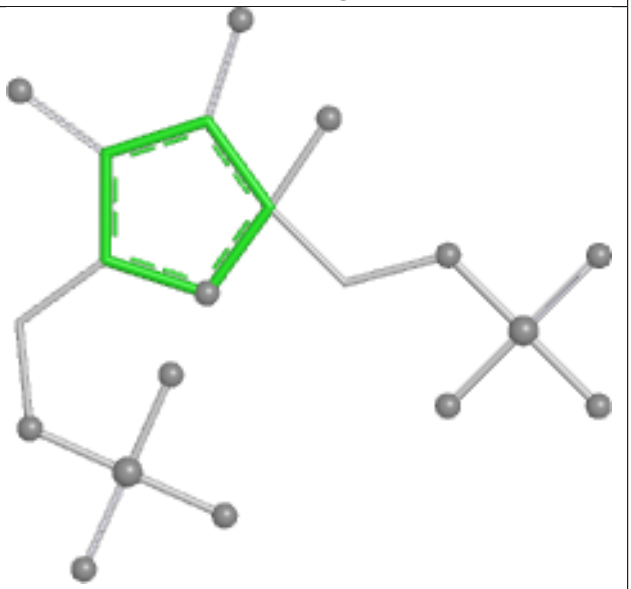
Bond lengths



Bond angles

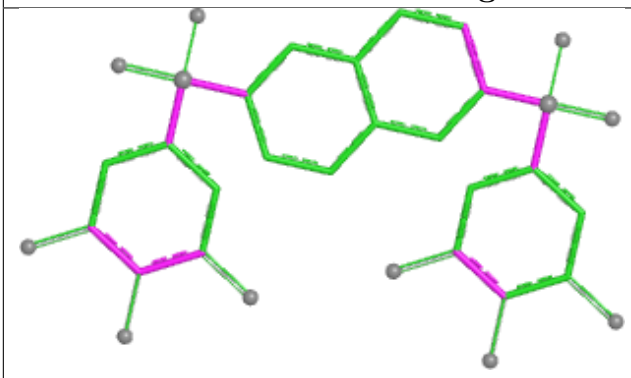


Torsions

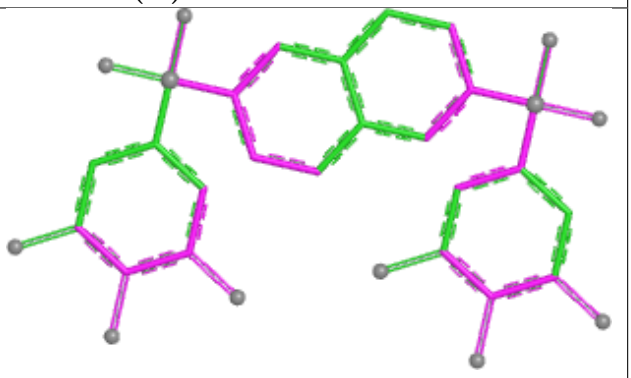


Rings

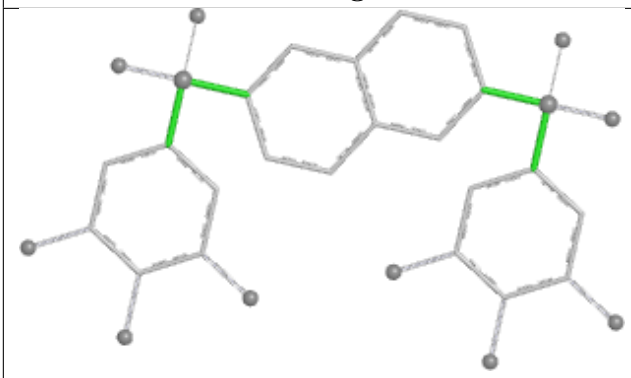
Ligand WWD B 603 (B)



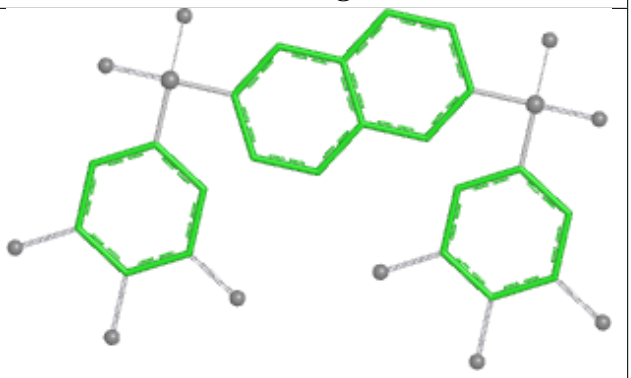
Bond lengths



Bond angles

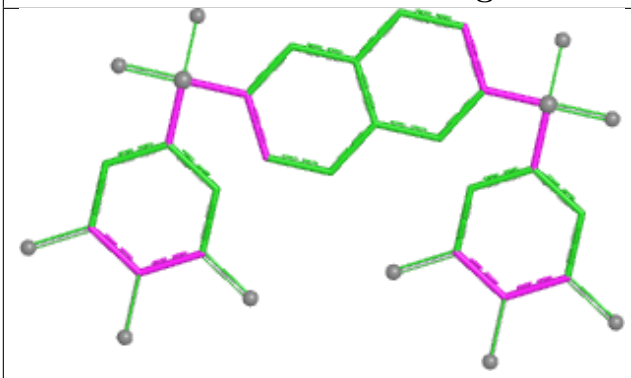


Torsions

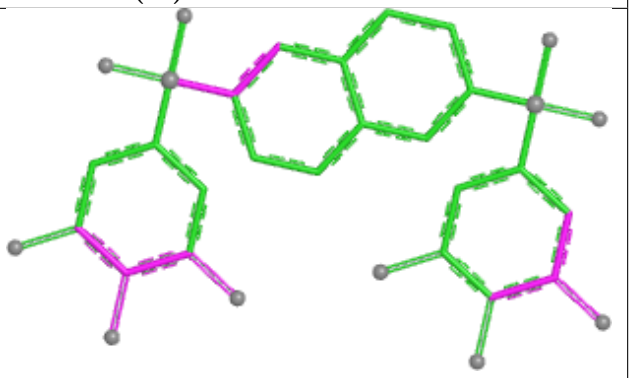


Rings

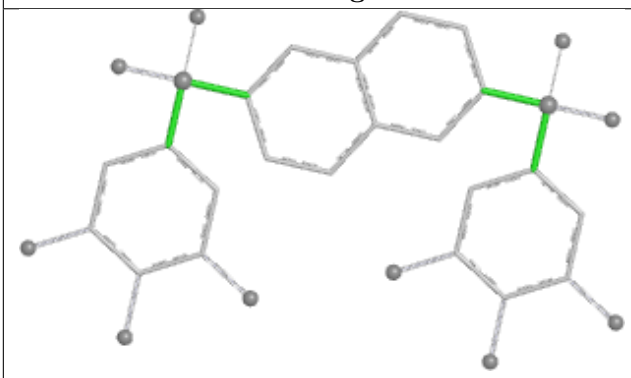
Ligand WWD G 601 (A)



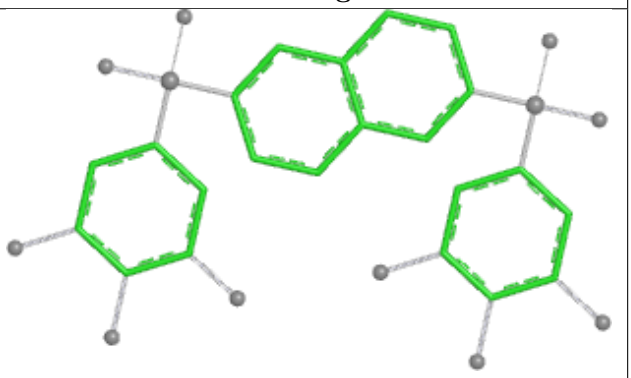
Bond lengths



Bond angles

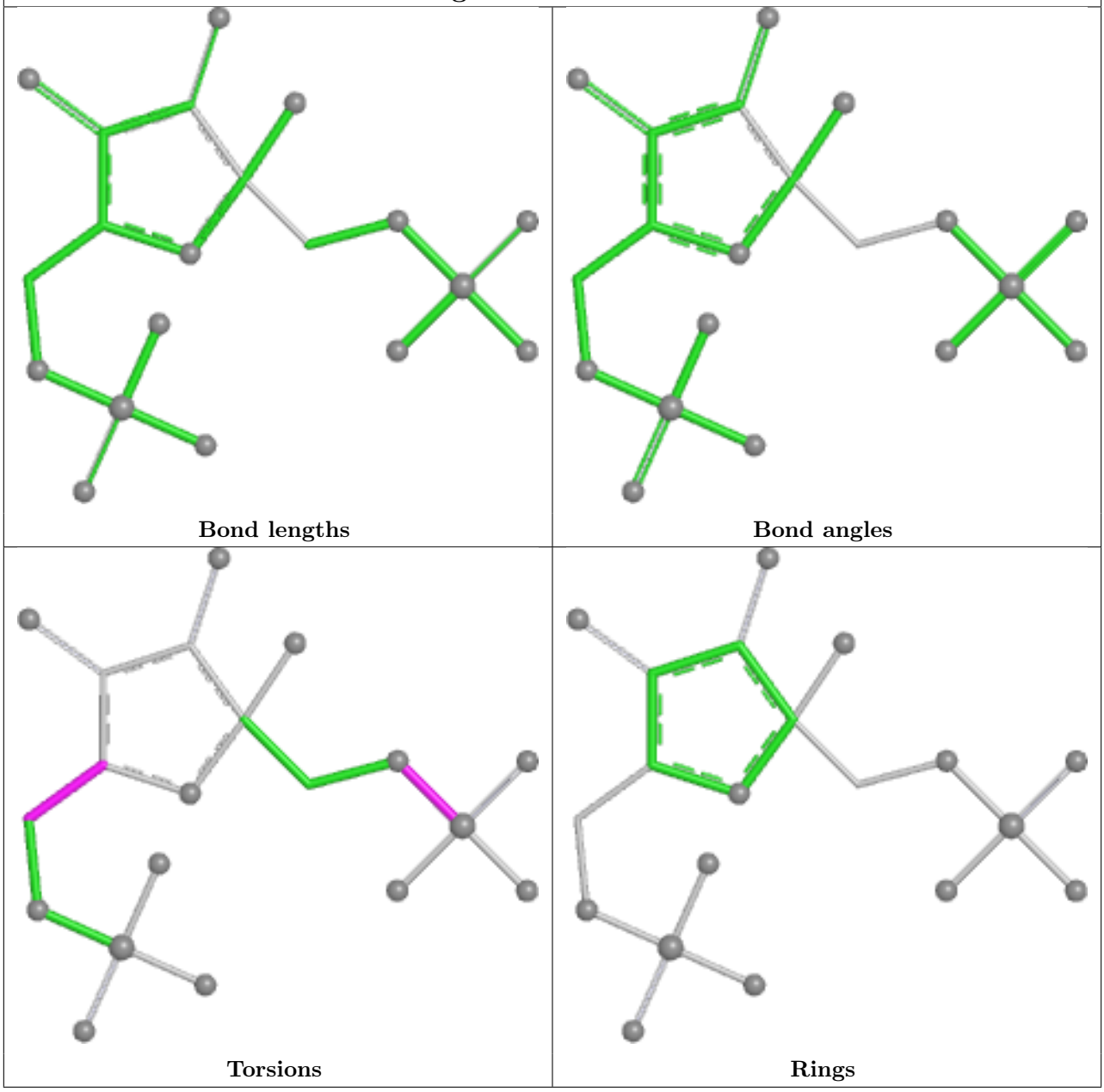


Torsions



Rings

Ligand FBP G 602



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	421/447 (94%)	1.82	157 (37%) 1 0	29, 74, 112, 123	13 (3%)
1	B	436/447 (97%)	0.70	39 (8%) 15 14	26, 50, 82, 97	8 (1%)
1	C	424/447 (94%)	1.06	78 (18%) 3 3	24, 57, 83, 104	10 (2%)
1	D	425/447 (95%)	0.11	12 (2%) 55 54	18, 38, 65, 102	8 (1%)
1	E	420/447 (93%)	1.92	181 (43%) 0 0	29, 74, 111, 121	14 (3%)
1	F	432/447 (96%)	0.96	61 (14%) 6 5	26, 54, 87, 107	9 (2%)
1	G	422/447 (94%)	0.97	55 (13%) 7 6	22, 54, 80, 93	11 (2%)
1	H	424/447 (94%)	0.11	12 (2%) 55 54	18, 38, 62, 94	9 (2%)
All	All	3404/3576 (95%)	0.95	595 (17%) 4 3	18, 54, 97, 123	82 (2%)

All (595) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	115	LEU	9.0
1	E	115	LEU	6.5
1	A	25	PHE	6.4
1	E	449	GLY	6.2
1	F	233	PRO	6.2
1	A	491	PRO	6.0
1	A	492	PRO	6.0
1	E	265	VAL	5.9
1	E	233	PRO	5.9
1	E	495	ILE	5.8
1	F	542[A]	LEU	5.5
1	A	114	PRO	5.5
1	F	115	LEU	5.4
1	E	444	VAL	5.3
1	E	25	PHE	5.2
1	A	545	SER	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	E	277[A]	HIS	5.1
1	A	265	VAL	5.1
1	E	494	ALA	5.1
1	B	542[A]	LEU	5.0
1	E	497	ALA	5.0
1	C	64	GLY	4.9
1	E	267	ALA	4.9
1	E	23	ALA	4.8
1	C	233	PRO	4.8
1	A	116	SER	4.8
1	E	491	PRO	4.8
1	A	495	ILE	4.7
1	A	123	ALA	4.7
1	E	272	LEU	4.6
1	E	114	PRO	4.6
1	F	114	PRO	4.6
1	E	120	VAL	4.6
1	G	114	PRO	4.6
1	A	110	PHE	4.6
1	A	465	ILE	4.6
1	G	115	LEU	4.5
1	G	233	PRO	4.5
1	C	277[A]	HIS	4.5
1	A	350	THR	4.4
1	C	115	LEU	4.4
1	E	525	VAL	4.4
1	E	271	ALA	4.4
1	D	21	GLY	4.4
1	E	129	PRO	4.4
1	E	103	VAL	4.4
1	E	500	VAL	4.4
1	E	123	ALA	4.4
1	C	103	VAL	4.4
1	E	122	ILE	4.3
1	E	487	LEU	4.3
1	C	63	ILE	4.3
1	A	494	ALA	4.3
1	A	243	LEU	4.3
1	G	277[A]	HIS	4.3
1	E	465	ILE	4.3
1	A	488	TYR	4.2
1	E	251	VAL	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	251	VAL	4.2
1	G	64	GLY	4.1
1	A	63	ILE	4.1
1	G	63	ILE	4.1
1	A	467	VAL	4.1
1	B	11	ALA	4.1
1	C	380	ALA	4.1
1	A	122	ILE	4.1
1	E	24	PHE	4.0
1	H	25	PHE	4.0
1	A	117	TYR	4.0
1	A	487	LEU	4.0
1	D	25	PHE	4.0
1	G	352	PRO	4.0
1	C	382	GLY	4.0
1	A	352	PRO	3.9
1	D	24	PHE	3.9
1	A	66	ALA	3.9
1	B	522	LEU	3.9
1	A	75[A]	GLU	3.8
1	A	486	LEU	3.8
1	G	243	LEU	3.8
1	B	413	ARG	3.8
1	F	497	ALA	3.8
1	A	124	LEU	3.8
1	A	81	MET	3.8
1	E	473	ALA	3.8
1	E	527	THR	3.8
1	A	500	VAL	3.8
1	C	20	LEU	3.8
1	A	484	PHE	3.7
1	F	461	ARG	3.7
1	E	250	GLY	3.7
1	G	70	VAL	3.7
1	A	120	VAL	3.7
1	E	274	PRO	3.7
1	D	22	THR	3.7
1	A	531	PRO	3.7
1	B	492	PRO	3.7
1	A	349	ILE	3.6
1	E	110	PHE	3.6
1	G	110	PHE	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	E	269[A]	ARG	3.6
1	E	268	VAL	3.6
1	A	61	ALA	3.6
1	A	76[A]	MET	3.6
1	F	517	LEU	3.6
1	C	107	VAL	3.6
1	E	119	PRO	3.6
1	F	491	PRO	3.6
1	E	516	PHE	3.5
1	A	379	THR	3.5
1	C	352	PRO	3.5
1	E	492	PRO	3.5
1	E	538	ILE	3.5
1	E	243	LEU	3.5
1	E	486	LEU	3.5
1	E	466	ALA	3.5
1	F	496	TRP	3.5
1	H	24	PHE	3.5
1	C	348	MET	3.4
1	E	254	VAL	3.4
1	C	243	LEU	3.4
1	E	461	ARG	3.4
1	F	11	ALA	3.4
1	C	234	GLY	3.4
1	C	272[A]	LEU	3.4
1	E	117	TYR	3.4
1	C	114	PRO	3.4
1	A	53	ALA	3.4
1	G	234	GLY	3.4
1	A	65	PRO	3.4
1	B	519	VAL	3.4
1	C	353	ARG	3.4
1	E	513	LEU	3.3
1	A	516	PHE	3.3
1	A	502	ARG	3.3
1	E	484	PHE	3.3
1	A	54	ALA	3.3
1	B	506	PHE	3.3
1	A	112	GLY	3.3
1	C	124	LEU	3.3
1	E	423	THR	3.3
1	E	488	TYR	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	247	VAL	3.3
1	A	497	ALA	3.2
1	A	525	VAL	3.3
1	E	259	VAL	3.3
1	E	414	ARG	3.2
1	A	84	ALA	3.2
1	E	467	VAL	3.2
1	A	250	GLY	3.2
1	E	509[A]	GLU	3.2
1	A	77	ILE	3.2
1	A	353	ARG	3.2
1	A	466	ALA	3.2
1	E	298	LEU	3.2
1	A	111	ALA	3.2
1	E	273	GLY	3.2
1	E	490[A]	GLU	3.2
1	E	279	ILE	3.2
1	A	378	GLU	3.1
1	E	66	ALA	3.1
1	F	494	ALA	3.1
1	A	103	VAL	3.1
1	A	477	VAL	3.1
1	E	240	VAL	3.1
1	B	233	PRO	3.1
1	E	253	ILE	3.1
1	E	104	ARG	3.1
1	G	353	ARG	3.1
1	F	506	PHE	3.1
1	A	240	VAL	3.1
1	A	443	ILE	3.1
1	B	544	ILE	3.1
1	E	350	THR	3.1
1	E	255	PHE	3.1
1	E	519	VAL	3.1
1	F	487	LEU	3.1
1	G	65	PRO	3.1
1	E	75	GLU	3.1
1	G	21	GLY	3.1
1	E	266	ALA	3.1
1	A	504	VAL	3.1
1	E	541	VAL	3.1
1	A	119	PRO	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	E	504	VAL	3.0
1	F	240	VAL	3.0
1	B	508	ILE	3.0
1	E	54	ALA	3.0
1	A	506	PHE	3.0
1	E	70	VAL	3.0
1	G	461	ARG	3.0
1	H	22	THR	3.0
1	D	491	PRO	3.0
1	E	485	PRO	3.0
1	F	516	PHE	2.9
1	A	517	LEU	2.9
1	B	115	LEU	2.9
1	F	513	LEU	2.9
1	E	247	VAL	2.9
1	F	523	VAL	2.9
1	A	118	ARG	2.9
1	A	489	ARG	2.9
1	A	34	MET	2.9
1	E	81	MET	2.9
1	F	234	GLY	2.9
1	G	276	GLY	2.9
1	A	385	PRO	2.9
1	A	255	PHE	2.9
1	A	483	VAL	2.9
1	C	349	ILE	2.9
1	A	235	LEU	2.9
1	A	269[A]	ARG	2.9
1	A	496	TRP	2.9
1	B	497	ALA	2.9
1	B	518	ARG	2.9
1	C	235	LEU	2.9
1	C	388	ALA	2.9
1	A	444	VAL	2.9
1	E	483	VAL	2.9
1	C	315	ILE	2.9
1	C	379	THR	2.9
1	F	527	THR	2.9
1	C	113	SER	2.9
1	E	262	ALA	2.9
1	E	517	LEU	2.9
1	F	522	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	59	ILE	2.9
1	E	354	PRO	2.8
1	E	489	ARG	2.8
1	G	129	PRO	2.8
1	A	97	ALA	2.8
1	A	388	ALA	2.8
1	F	529	TRP	2.8
1	A	113	SER	2.8
1	E	507	GLY	2.8
1	F	518	ARG	2.8
1	A	271	ALA	2.8
1	A	254	VAL	2.8
1	A	386	VAL	2.8
1	A	413	ARG	2.8
1	E	544	ILE	2.8
1	E	113	SER	2.8
1	H	491	PRO	2.8
1	E	522	LEU	2.8
1	B	523	VAL	2.8
1	C	100	ILE	2.8
1	E	282	ILE	2.8
1	E	508	ILE	2.8
1	D	132	GLY	2.8
1	F	545	SER	2.8
1	F	129	PRO	2.8
1	C	345	LEU	2.8
1	E	73	LEU	2.8
1	E	124	LEU	2.8
1	E	235	LEU	2.8
1	E	258	PHE	2.8
1	E	506	PHE	2.8
1	E	540	ARG	2.8
1	B	545	SER	2.7
1	E	99	SER	2.7
1	C	65	PRO	2.7
1	C	119	PRO	2.7
1	C	129	PRO	2.7
1	H	34	MET	2.7
1	A	104	ARG	2.7
1	A	262	ALA	2.7
1	E	111	ALA	2.7
1	E	118	ARG	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	G	121	ALA	2.7
1	G	380	ALA	2.7
1	F	500	VAL	2.7
1	C	22	THR	2.7
1	E	545	SER	2.7
1	D	233	PRO	2.7
1	A	490	GLU	2.7
1	E	108	GLU	2.7
1	F	235	LEU	2.7
1	H	518	ARG	2.7
1	C	276	GLY	2.7
1	C	19	GLU	2.7
1	A	514	ARG	2.7
1	G	272	LEU	2.7
1	C	317	ALA	2.7
1	E	121	ALA	2.7
1	E	458	TYR	2.7
1	A	541	VAL	2.7
1	F	504	VAL	2.7
1	G	107	VAL	2.7
1	A	446	THR	2.7
1	H	410	GLU	2.7
1	A	130	GLY	2.7
1	A	253	ILE	2.7
1	F	276	GLY	2.7
1	F	495	ILE	2.7
1	B	10	ARG	2.7
1	A	73	LEU	2.7
1	A	345	LEU	2.7
1	A	121	ALA	2.6
1	A	266	ALA	2.6
1	A	473	ALA	2.6
1	G	66	ALA	2.6
1	E	523	VAL	2.6
1	E	65	PRO	2.6
1	E	502	ARG	2.6
1	F	492	PRO	2.6
1	F	514	ARG	2.6
1	B	517	LEU	2.6
1	G	235	LEU	2.6
1	E	496	TRP	2.6
1	A	108	GLU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	449	GLY	2.6
1	F	112	GLY	2.6
1	A	58	SER	2.6
1	E	100	ILE	2.6
1	E	281	ILE	2.6
1	G	96	HIS	2.6
1	C	270	ALA	2.6
1	B	269[A]	ARG	2.6
1	A	252	ASP	2.6
1	G	95	TYR	2.6
1	G	103	VAL	2.6
1	H	414	ARG	2.6
1	C	111	ALA	2.6
1	E	501[A]	ASP	2.6
1	C	273	GLY	2.6
1	E	278	GLY	2.6
1	E	468	THR	2.6
1	G	25	PHE	2.6
1	D	240	VAL	2.6
1	A	56	SER	2.6
1	A	279	ILE	2.6
1	C	313	ILE	2.6
1	E	543[A]	SER	2.6
1	G	349	ILE	2.6
1	G	351	LYS	2.6
1	A	272	LEU	2.5
1	A	479	LEU	2.5
1	F	243	LEU	2.5
1	F	414	ARG	2.5
1	G	365	ALA	2.5
1	C	21	GLY	2.5
1	E	234	GLY	2.5
1	A	523	VAL	2.5
1	A	100	ILE	2.5
1	A	508	ILE	2.5
1	E	109	SER	2.5
1	F	488	TYR	2.5
1	E	420[A]	ARG	2.5
1	H	30	LEU	2.5
1	G	348	MET	2.5
1	C	341	ALA	2.5
1	F	534	GLY	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	355	THR	2.5
1	A	384	PHE	2.5
1	B	25	PHE	2.5
1	E	236	SER	2.5
1	E	287	ASN	2.5
1	E	388	ALA	2.5
1	A	277	HIS	2.5
1	A	532	GLY	2.5
1	B	114	PRO	2.5
1	E	316	PRO	2.5
1	A	70	VAL	2.5
1	A	526	VAL	2.5
1	E	477	VAL	2.5
1	F	467	VAL	2.5
1	G	268	VAL	2.5
1	G	386	VAL	2.5
1	A	95	TYR	2.5
1	E	542	LEU	2.5
1	A	62	THR	2.4
1	A	92	SER	2.4
1	F	519	VAL	2.4
1	A	529	TRP	2.4
1	E	445	LEU	2.4
1	A	74	LYS	2.4
1	A	351	LYS	2.4
1	E	249	HIS	2.4
1	E	353	ARG	2.4
1	E	402	ALA	2.4
1	E	474	ALA	2.4
1	E	107	VAL	2.4
1	E	306	VAL	2.4
1	E	320	VAL	2.4
1	C	117	TYR	2.4
1	E	95	TYR	2.4
1	E	97	ALA	2.4
1	F	520	GLY	2.4
1	A	67	SER	2.4
1	E	92	SER	2.4
1	A	395	ILE	2.4
1	B	495	ILE	2.4
1	C	77	ILE	2.4
1	C	381	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	E	442	ILE	2.4
1	E	526	VAL	2.4
1	F	70	VAL	2.4
1	E	34	MET	2.4
1	A	86	LEU	2.4
1	A	513	LEU	2.4
1	E	375	LEU	2.4
1	A	499	ASP	2.4
1	C	80	GLY	2.4
1	E	101	ALA	2.4
1	G	350	THR	2.4
1	A	259	VAL	2.4
1	F	508	ILE	2.4
1	A	445	LEU	2.4
1	F	269[A]	ARG	2.4
1	F	489	ARG	2.4
1	E	499	ASP	2.3
1	A	382	GLY	2.3
1	C	34	MET	2.3
1	F	110	PHE	2.3
1	A	72	ARG	2.3
1	E	93	HIS	2.3
1	A	30	LEU	2.3
1	E	479	LEU	2.3
1	A	410[A]	GLU	2.3
1	E	80	GLY	2.3
1	C	271	ALA	2.3
1	E	441	ALA	2.3
1	G	33	ALA	2.3
1	F	118	ARG	2.3
1	G	244	ARG	2.3
1	G	489	ARG	2.3
1	A	83	ILE	2.3
1	C	59	ILE	2.3
1	C	120	VAL	2.3
1	C	509	GLU	2.3
1	C	542[A]	LEU	2.3
1	C	82	ASN	2.3
1	E	128	GLY	2.3
1	E	529	TRP	2.3
1	E	446	THR	2.3
1	A	55	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	67	SER	2.3
1	E	283	SER	2.3
1	F	413	ARG	2.3
1	G	113	SER	2.3
1	A	493	GLU	2.3
1	A	52	VAL	2.3
1	B	467	VAL	2.3
1	C	245	PHE	2.3
1	C	42	LEU	2.3
1	E	480	CYS	2.3
1	A	239	ASP	2.3
1	C	383	ASN	2.3
1	C	274	PRO	2.3
1	A	80	GLY	2.3
1	B	112	GLY	2.3
1	C	95	TYR	2.3
1	G	118	ARG	2.3
1	H	244[A]	ARG	2.3
1	A	99	SER	2.3
1	A	478	HIS	2.3
1	C	94	GLU	2.3
1	E	378	GLU	2.3
1	E	63	ILE	2.3
1	E	524	ILE	2.3
1	C	25	PHE	2.2
1	C	110	PHE	2.2
1	B	491	PRO	2.2
1	E	246	GLY	2.2
1	E	514	ARG	2.2
1	E	539[A]	MET	2.2
1	A	441	ALA	2.2
1	E	399	ALA	2.2
1	F	95	TYR	2.2
1	F	535	TYR	2.2
1	G	355	THR	2.2
1	A	442	ILE	2.2
1	C	73	LEU	2.2
1	C	386	VAL	2.2
1	G	251	VAL	2.2
1	E	252	ASP	2.2
1	E	264	ASP	2.2
1	D	492	PRO	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	128	GLY	2.2
1	B	130	GLY	2.2
1	B	534	GLY	2.2
1	E	276	GLY	2.2
1	A	394	ALA	2.2
1	C	33	ALA	2.2
1	C	66	ALA	2.2
1	C	262	ALA	2.2
1	G	32	ALA	2.2
1	G	341	ALA	2.2
1	A	543[A]	SER	2.2
1	E	116	SER	2.2
1	A	522	LEU	2.2
1	D	115	LEU	2.2
1	E	86	LEU	2.2
1	B	500	VAL	2.2
1	C	70	VAL	2.2
1	F	526	VAL	2.2
1	C	321	PHE	2.2
1	F	36	ASP	2.2
1	A	233	PRO	2.2
1	A	96	HIS	2.2
1	A	355	THR	2.2
1	C	126	THR	2.2
1	G	116[A]	SER	2.2
1	A	60	ILE	2.2
1	B	20	LEU	2.2
1	B	489	ARG	2.2
1	F	52	VAL	2.2
1	E	305	MET	2.2
1	A	316	PRO	2.2
1	E	377	GLY	2.2
1	E	476	GLN	2.2
1	H	277[A]	HIS	2.2
1	E	32	ALA	2.2
1	E	106	ALA	2.2
1	E	342	THR	2.2
1	E	462	ALA	2.2
1	F	415	ALA	2.2
1	E	72	ARG	2.1
1	B	513	LEU	2.1
1	E	443	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	51	PRO	2.1
1	A	274	PRO	2.1
1	C	75	GLU	2.1
1	E	321	PHE	2.1
1	F	88	PHE	2.1
1	F	119	PRO	2.1
1	G	98[A]	GLU	2.1
1	E	478	HIS	2.1
1	G	90	HIS	2.1
1	A	101	ALA	2.1
1	A	527	THR	2.1
1	B	109	SER	2.1
1	B	440	ALA	2.1
1	E	379	THR	2.1
1	E	448	THR	2.1
1	F	267	ALA	2.1
1	B	514	ARG	2.1
1	D	414	ARG	2.1
1	E	503	ARG	2.1
1	C	86	LEU	2.1
1	D	34	MET	2.1
1	E	395	ILE	2.1
1	G	124	LEU	2.1
1	C	93	HIS	2.1
1	E	300	VAL	2.1
1	F	531	PRO	2.1
1	E	53	ALA	2.1
1	G	106	ALA	2.1
1	G	256	ALA	2.1
1	G	262	ALA	2.1
1	G	317	ALA	2.1
1	H	116[A]	SER	2.1
1	B	16	LEU	2.1
1	B	100	ILE	2.1
1	B	418	LEU	2.1
1	A	31	PRO	2.1
1	C	339	VAL	2.1
1	A	276	GLY	2.1
1	F	469	ARG	2.1
1	A	347	SER	2.1
1	A	359	THR	2.1
1	C	69	SER	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	494	ALA	2.1
1	G	84	ALA	2.1
1	E	493	GLU	2.1
1	E	505	GLN	2.1
1	F	524	ILE	2.1
1	E	475	ARG	2.1
1	G	22	THR	2.0
1	A	462	ALA	2.0
1	E	237	GLU	2.0
1	E	424	GLU	2.0
1	G	123	ALA	2.0
1	C	343	GLN	2.0
1	F	93	HIS	2.0
1	B	235	LEU	2.0
1	E	311	LEU	2.0
1	E	408	LEU	2.0
1	A	282	ILE	2.0
1	C	122	ILE	2.0
1	E	60	ILE	2.0
1	A	389	VAL	2.0
1	C	251	VAL	2.0
1	B	276	GLY	2.0
1	C	92	SER	2.0
1	F	116[A]	SER	2.0
1	A	267	ALA	2.0
1	C	97	ALA	2.0
1	E	26	GLN	2.0
1	F	505	GLN	2.0
1	A	542	LEU	2.0
1	G	345	LEU	2.0
1	A	503	ARG	2.0
1	E	85	ARG	2.0
1	E	304	ILE	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 oligosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
2	FBP	A	601	20/20	0.78	0.17	89,92,94,94	0
2	FBP	E	601	20/20	0.80	0.15	91,92,93,93	0
3	OXL	E	602	6/6	0.82	0.13	93,93,93,93	0
5	MG	G	604	1/1	0.82	0.14	57,57,57,57	0
3	OXL	A	602	6/6	0.83	0.12	85,85,85,85	0
3	OXL	C	602	6/6	0.84	0.13	72,73,73,73	0
6	K	C	604	1/1	0.84	0.10	79,79,79,79	0
3	OXL	D	602	6/6	0.86	0.12	53,54,55,55	0
3	OXL	G	603	6/6	0.87	0.10	61,61,61,61	0
5	MG	B	604	1/1	0.88	0.14	59,59,59,59	0
3	OXL	H	602	6/6	0.89	0.10	56,57,57,57	0
6	K	E	604	1/1	0.89	0.08	115,115,115,115	0
2	FBP	F	601	20/20	0.91	0.10	64,68,68,68	0
4	WWD	B	603[A]	34/34	0.91	0.12	54,55,56,56	34
4	WWD	B	603[B]	34/34	0.91	0.12	17,19,20,20	34
5	MG	A	604	1/1	0.91	0.12	80,80,80,80	0
2	FBP	B	601	20/20	0.92	0.10	64,65,66,66	0
3	OXL	F	602	6/6	0.92	0.09	73,73,74,74	0
5	MG	C	603	1/1	0.92	0.07	46,46,46,46	0
3	OXL	B	602	6/6	0.92	0.09	64,64,65,65	0
4	WWD	G	601[A]	34/34	0.92	0.15	77,78,79,79	34
4	WWD	G	601[B]	34/34	0.92	0.15	19,21,22,23	34
5	MG	H	603	1/1	0.93	0.06	47,47,47,47	0
6	K	G	605	1/1	0.93	0.06	66,66,66,66	0
6	K	A	605	1/1	0.94	0.06	114,114,114,114	0
2	FBP	G	602	20/20	0.94	0.10	50,54,58,58	0
4	WWD	A	603[A]	34/34	0.94	0.08	34,36,37,37	34
4	WWD	A	603[B]	34/34	0.94	0.08	51,52,53,53	34
6	K	H	604	1/1	0.94	0.07	69,69,69,69	0
5	MG	D	603	1/1	0.95	0.09	38,38,38,38	0
5	MG	E	603	1/1	0.95	0.08	76,76,76,76	0
2	FBP	C	601	20/20	0.95	0.09	52,55,60,60	0
6	K	F	605	1/1	0.96	0.06	86,86,86,86	0
4	WWD	F	603	34/34	0.97	0.07	38,42,43,45	0
6	K	B	605	1/1	0.97	0.04	80,80,80,80	0
5	MG	F	604	1/1	0.97	0.07	55,55,55,55	0
6	K	D	604	1/1	0.97	0.09	50,50,50,50	0

Continued on next page...

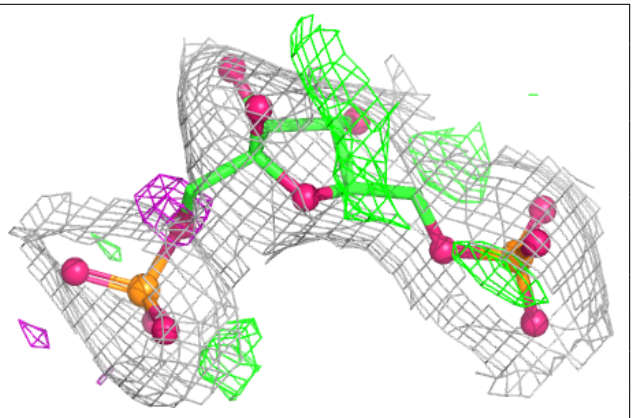
Continued from previous page...

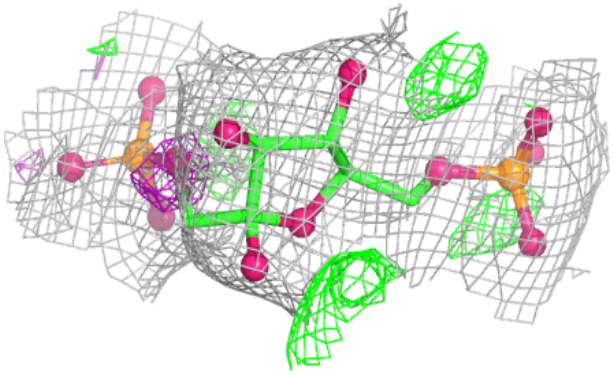
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	FBP	H	601	20/20	0.98	0.06	32,34,36,36	0
2	FBP	D	601	20/20	0.98	0.05	33,34,35,35	0

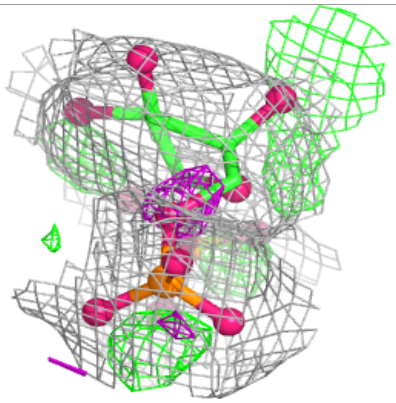
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around FBP A 601:

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

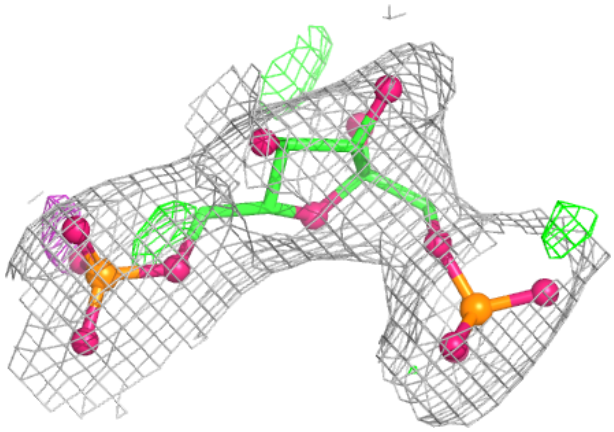


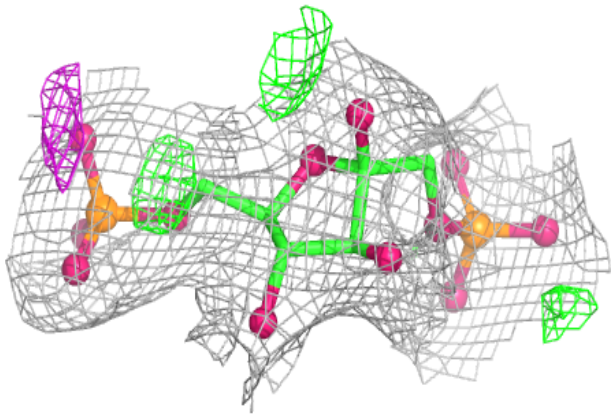


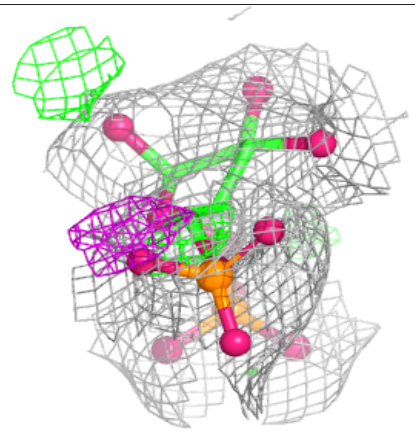


Electron density around FBP E 601:

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

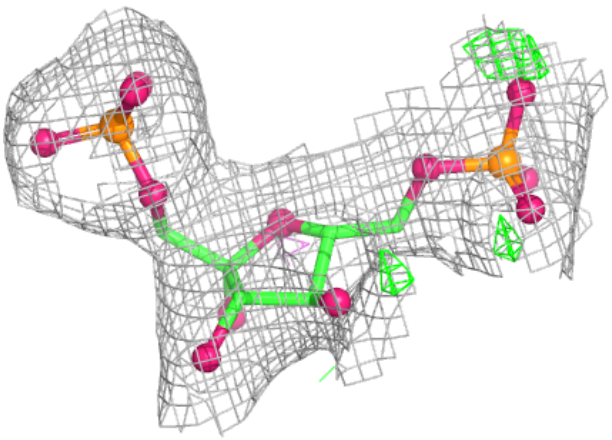


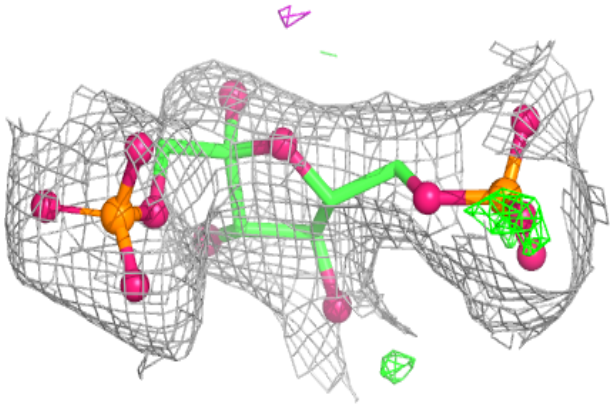


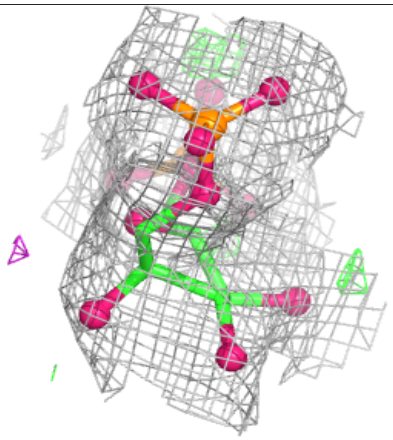


Electron density around FBP F 601:

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

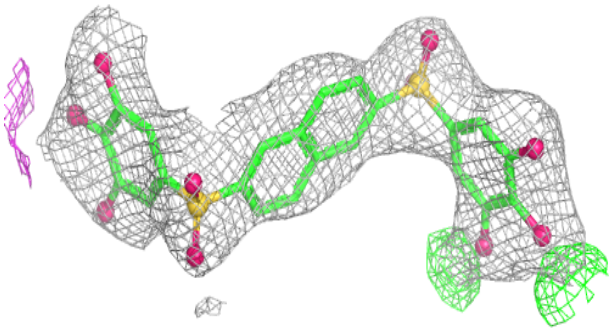


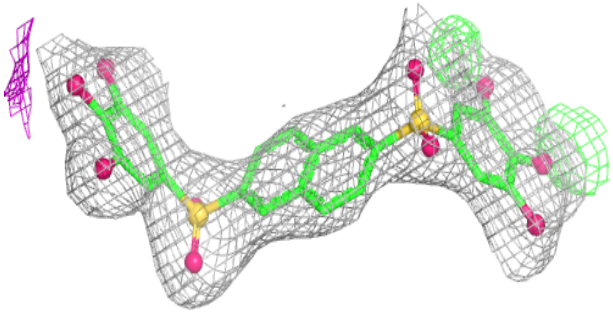


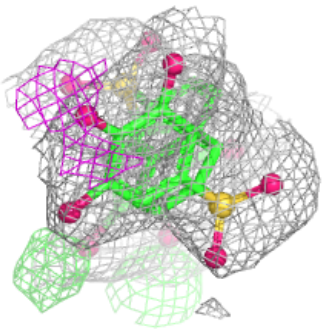


Electron density around WWD B 603 (A):

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

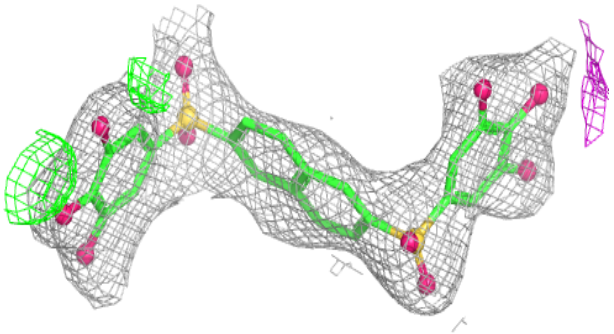


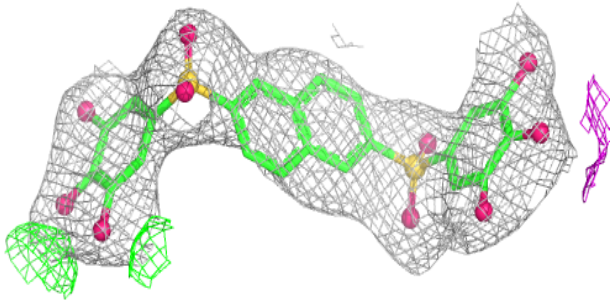


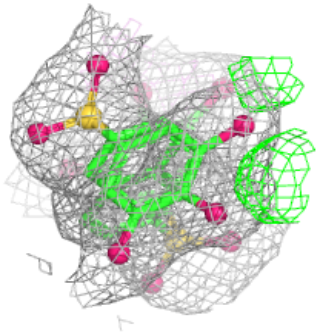


Electron density around WWD B 603 (B):

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

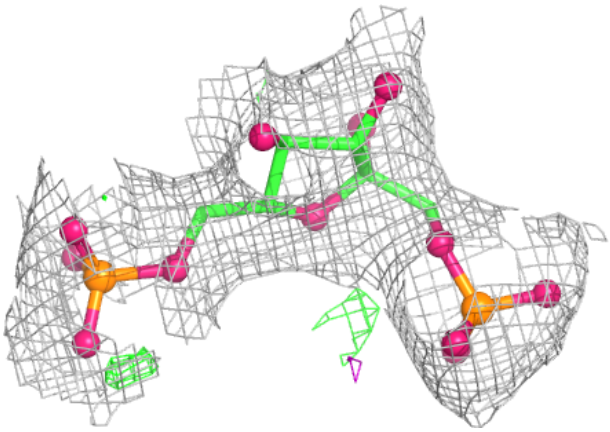


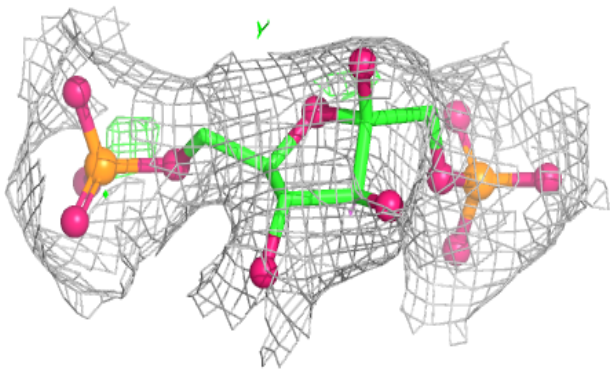


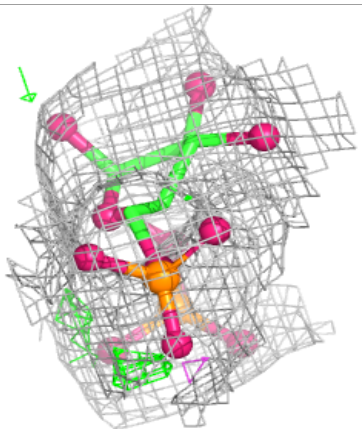


Electron density around FBP B 601:

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

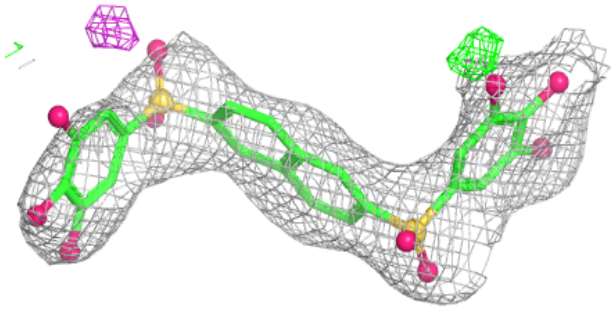


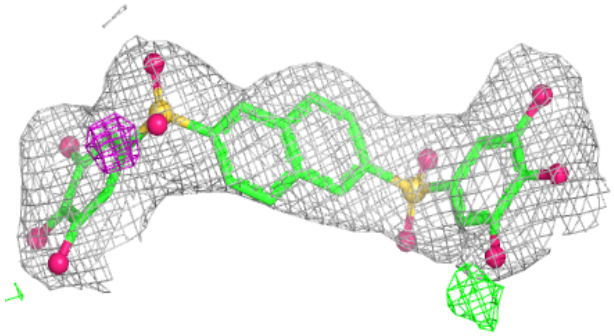


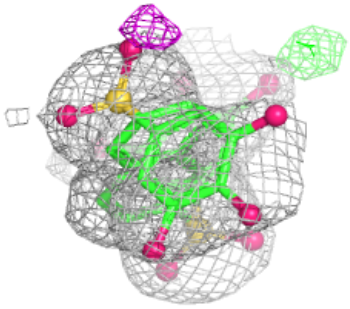


Electron density around WWD G 601 (A):

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

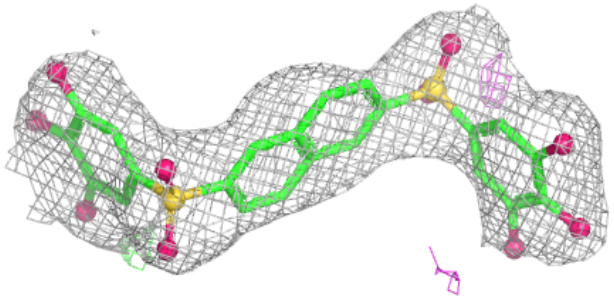


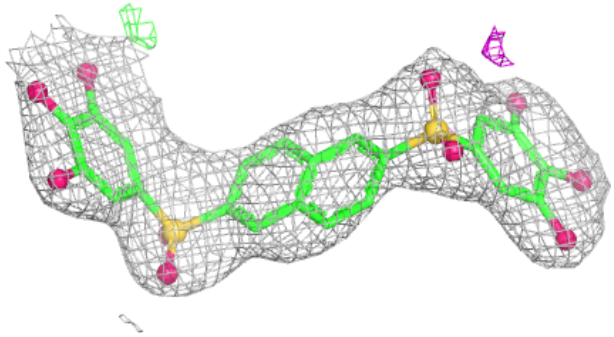


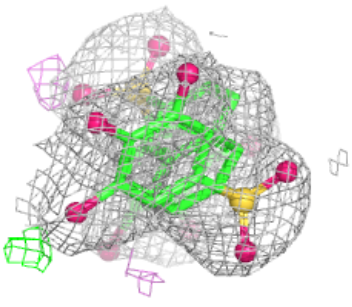


Electron density around WWD G 601 (B):

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

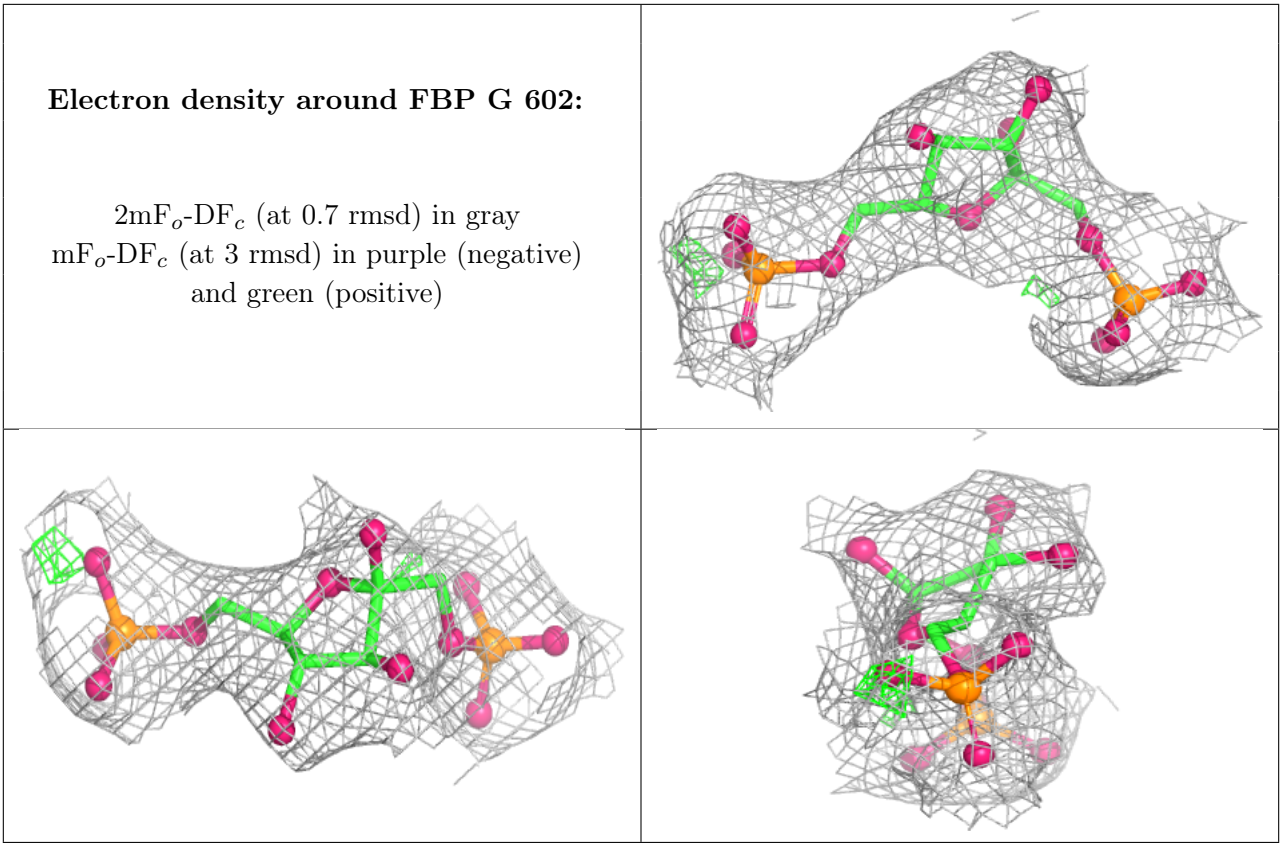






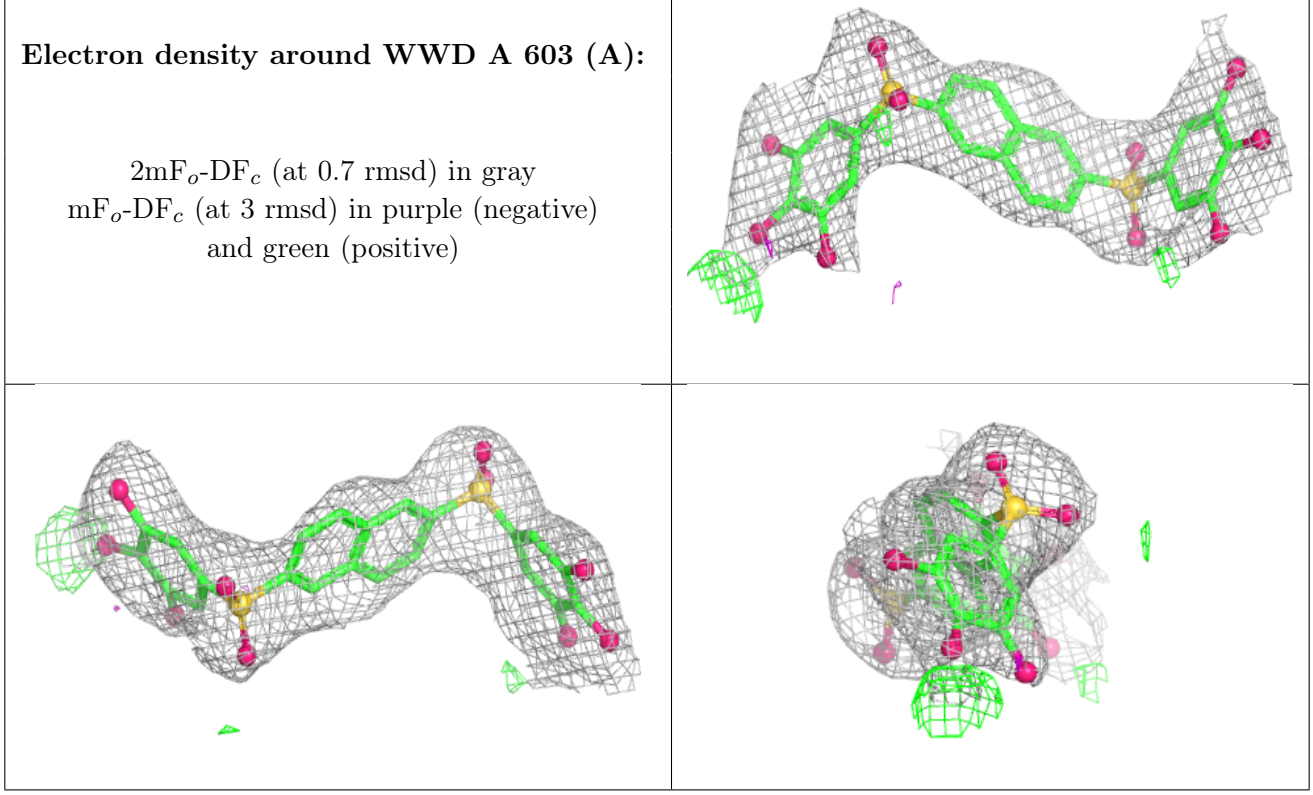
Electron density around FBP G 602:

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



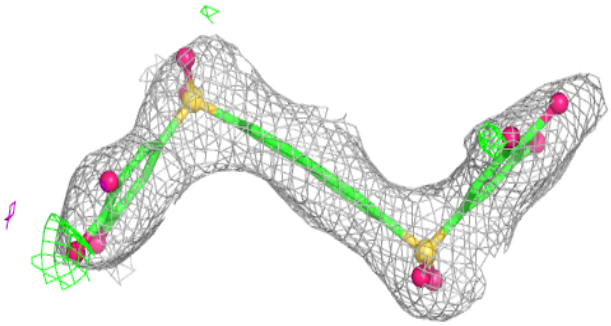
Electron density around WWD A 603 (A):

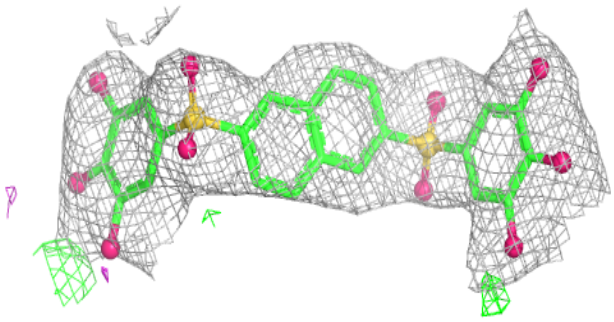
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

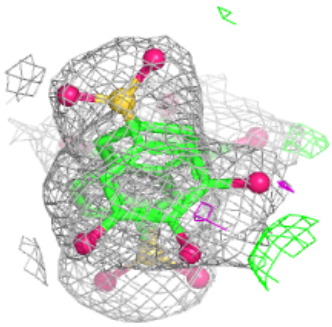


Electron density around WWD A 603 (B):

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

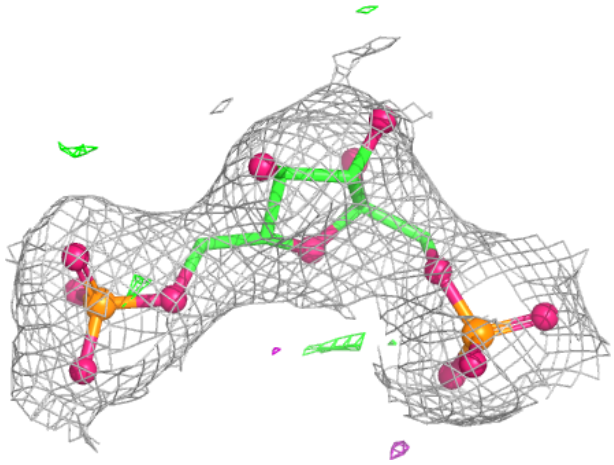


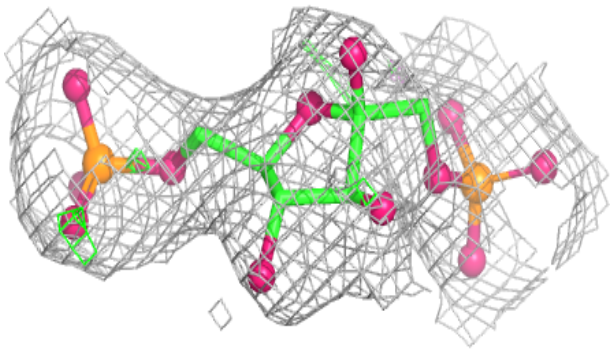


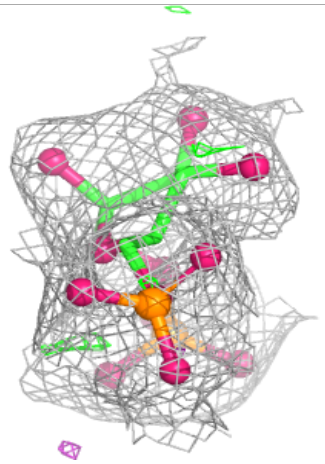


Electron density around FBP C 601:

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

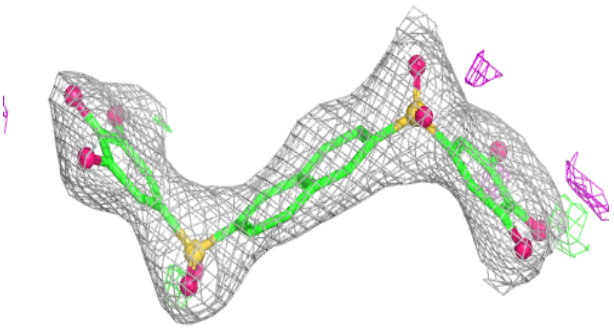


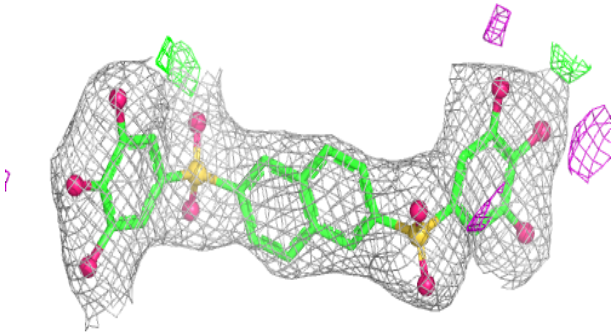


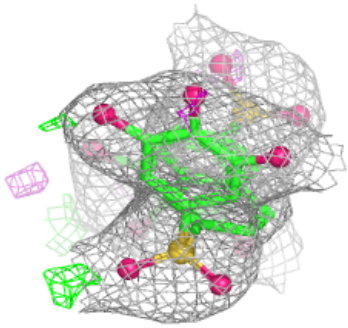


Electron density around WWD F 603:

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

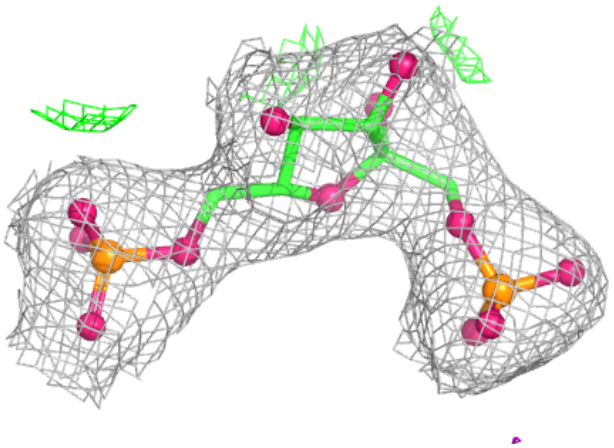


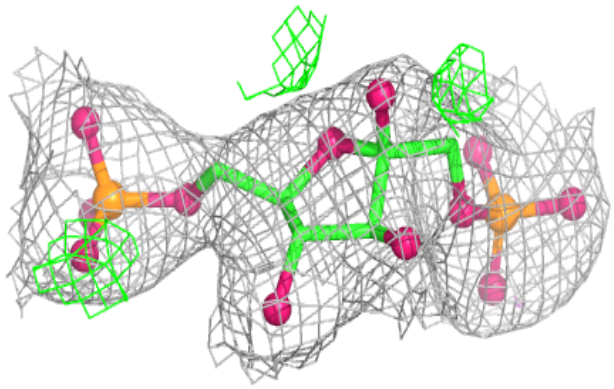


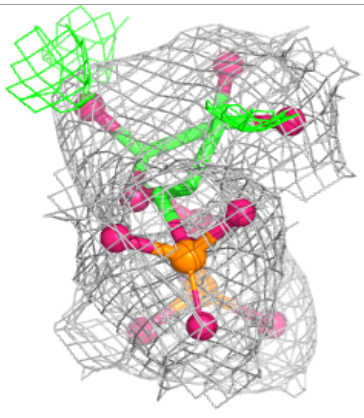


Electron density around FBP H 601:

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

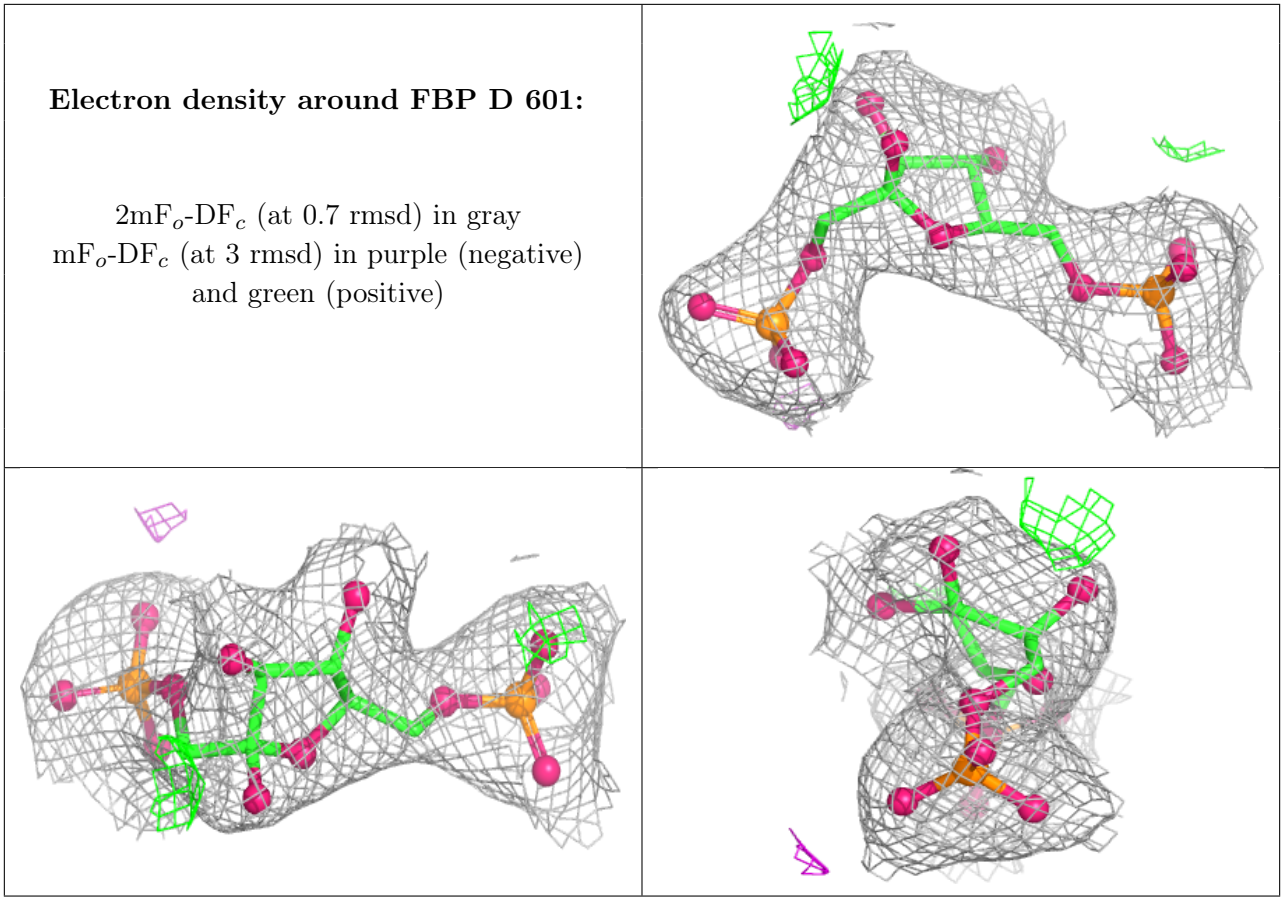






Electron density around FBP D 601:

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



6.5 Other polymers

There are no such residues in this entry.