Full wwPDB X-ray Structure Validation Report (i)

Oct 24, 2026 – 12:20 PM EDT

PDB ID	:	14CR / pdb_000014cr
Title	:	Structure of liver pyruvate kinase in complex with allosteric activator 8d
Authors	:	Lulla, A.; Rodriguez Rivero, A.; Grotli, M.; Hyvonen, M.
Deposited on	:	2026-04-28
Resolution	:	2.55 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:

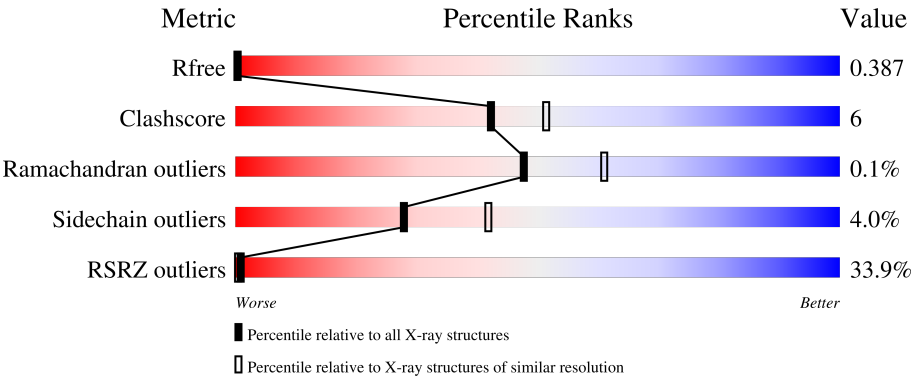
MolProbity	:	4-5-2 with Phenix2.2
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.2
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal 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 2.55 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.



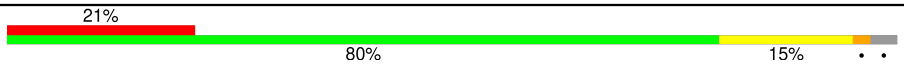
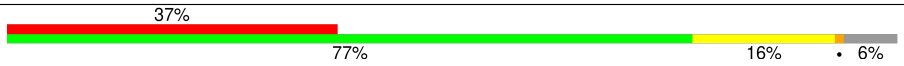
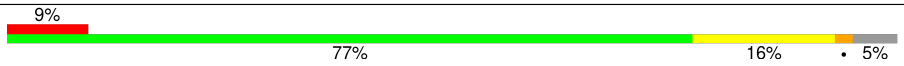
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1091 (2.54-2.54)
Clashscore	190562	1120 (2.54-2.54)
Ramachandran outliers	187476	1106 (2.54-2.54)
Sidechain outliers	187428	1106 (2.54-2.54)
RSRZ outliers	180081	1091 (2.54-2.54)

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	64% 78% 15% • 6%
1	B	447	20% 81% 15% ••
1	C	447	37% 78% 16% • 5%
1	D	447	9% 78% 15% • 5%
1	E	447	62% 77% 15% • 6%

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Mol	Chain	Length	Quality of chain
1	F	447	
1	G	447	
1	H	447	

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	602	-	X	-	-
3	OXL	H	602	-	X	-	-

2 Entry composition (i)

There are 7 unique types of molecules in this entry. The entry contains 26902 atoms, of which 56 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	422	Total	C	N	O	S	0	6	0
			3236	2034	585	597	20			
1	B	436	Total	C	N	O	S	0	4	0
			3329	2090	604	615	20			
1	C	425	Total	C	N	O	S	0	4	0
			3247	2040	585	603	19			
1	D	425	Total	C	N	O	S	0	6	0
			3252	2042	590	601	19			
1	E	419	Total	C	N	O	S	0	5	0
			3210	2018	579	593	20			
1	F	432	Total	C	N	O	S	0	7	0
			3321	2090	597	614	20			
1	G	421	Total	C	N	O	S	0	6	0
			3231	2031	581	600	19			
1	H	425	Total	C	N	O	S	0	4	0
			3251	2040	594	598	19			

There are 48 discrepancies between the modelled and reference sequences:

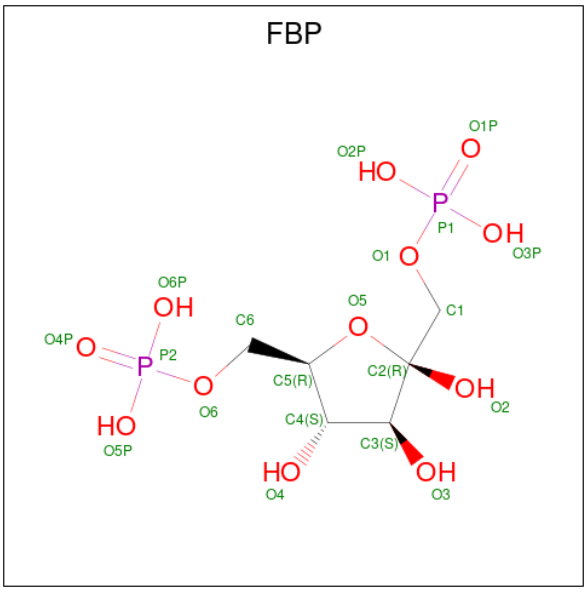
Chain	Residue	Modelled	Actual	Comment	Reference
A	-1	GLY	-	expression tag	UNP P30613
A	0	SER	-	expression tag	UNP P30613
A	12	ASP	SER	conflict	UNP P30613
A	130	GLY	-	linker	UNP P30613
A	131	SER	-	linker	UNP P30613
A	132	GLY	-	linker	UNP P30613
B	-1	GLY	-	expression tag	UNP P30613
B	0	SER	-	expression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

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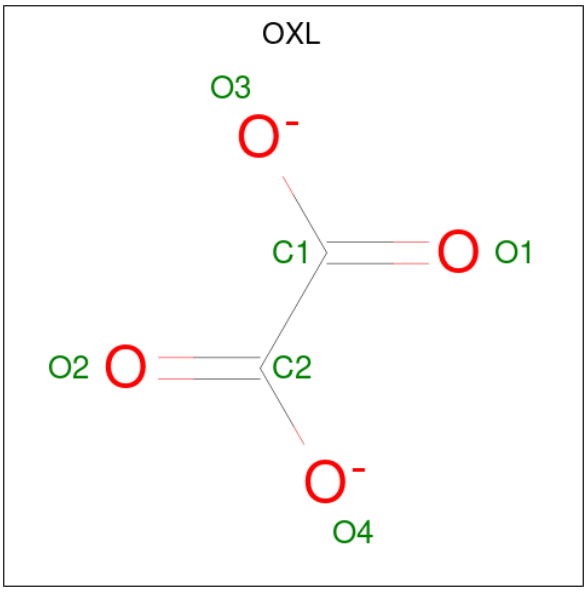
Chain	Residue	Modelled	Actual	Comment	Reference
C	0	SER	-	expression tag	UNP P30613
C	12	ASP	SER	conflict	UNP P30613
C	130	GLY	-	linker	UNP P30613
C	131	SER	-	linker	UNP P30613
C	132	GLY	-	linker	UNP P30613
D	-1	GLY	-	expression tag	UNP P30613
D	0	SER	-	expression tag	UNP P30613
D	12	ASP	SER	conflict	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 6 2 4	0	0
3	B	1	Total C O 6 2 4	0	0
3	C	1	Total C O 6 2 4	0	0
3	D	1	Total C O 6 2 4	0	0
3	E	1	Total C O 6 2 4	0	0
3	F	1	Total C O 6 2 4	0	0
3	G	1	Total C O 6 2 4	0	0
3	H	1	Total C O 6 2 4	0	0

- Molecule 4 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total Mg 1 1	0	0
4	B	1	Total Mg 1 1	0	0
4	C	1	Total Mg 1 1	0	0
4	D	1	Total Mg 1 1	0	0

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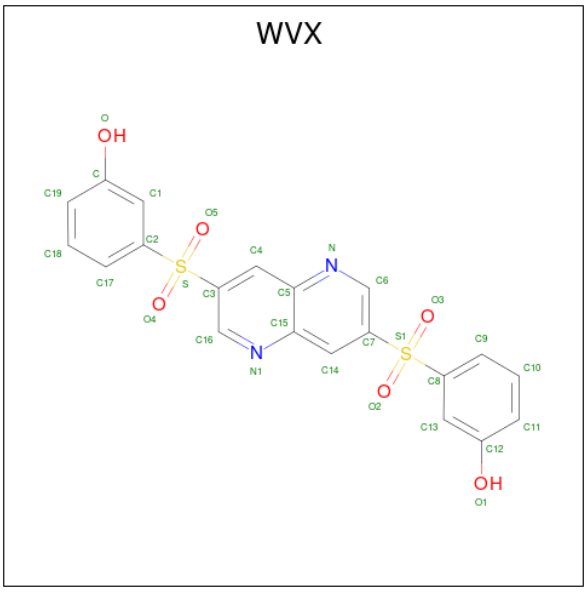
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	E	1	Total Mg 1 1	0	0
4	F	1	Total Mg 1 1	0	0
4	G	1	Total Mg 1 1	0	0
4	H	1	Total Mg 1 1	0	0

- Molecule 5 is POTASSIUM ION (CCD ID: K) (formula: K).

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

- Molecule 6 is 3,3'-(1,5-naphthyridine-3,7-diyldisulfonyl)diphenol (CCD ID: WVX) (formula: $C_{20}H_{14}N_2O_6S_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	1	Total C H N O S 44 20 14 2 6 2	14	0
6	B	1	Total C H N O S 44 20 14 2 6 2	14	0
6	E	1	Total C H N O S 44 20 14 2 6 2	14	0
6	F	1	Total C H N O S 44 20 14 2 6 2	14	0

- Molecule 7 is water.

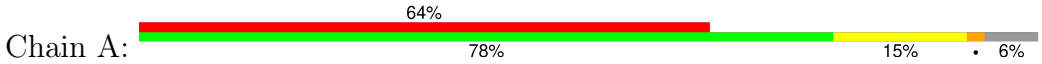
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
7	A	36	Total O 36 36	0	0
7	B	62	Total O 62 62	0	0
7	C	45	Total O 45 45	0	0
7	D	70	Total O 70 70	0	0
7	E	28	Total O 28 28	0	0
7	F	60	Total O 60 60	0	0
7	G	52	Total O 52 52	0	0
7	H	72	Total O 72 72	0	0

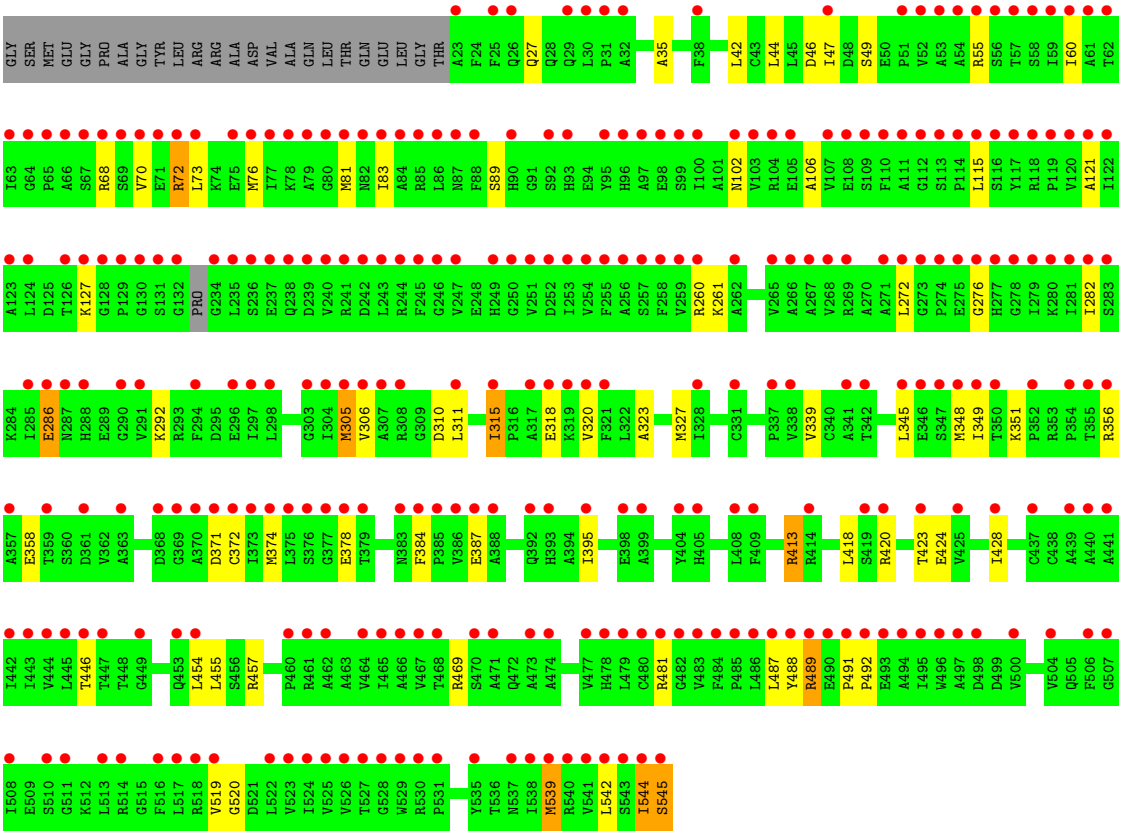
3 Residue-property plots (i)

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

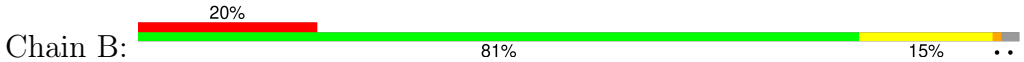
Chain A:

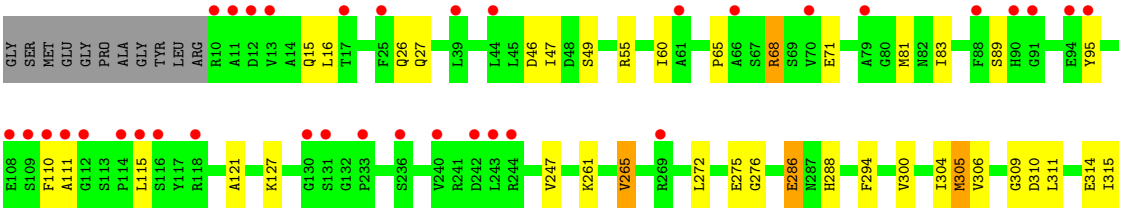


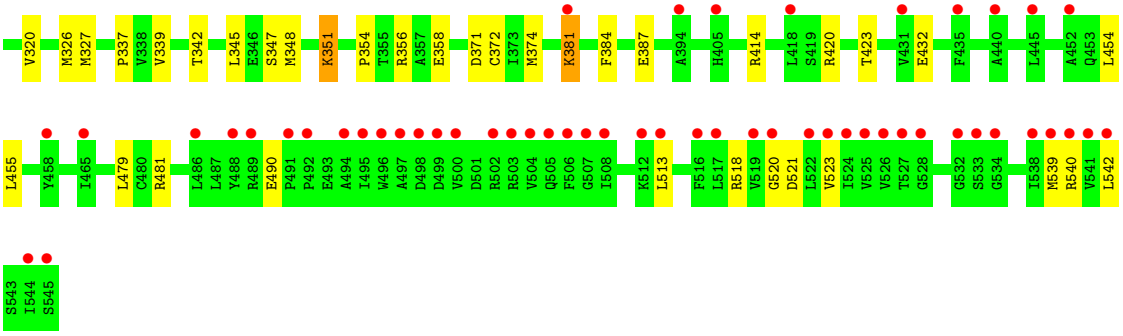


• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

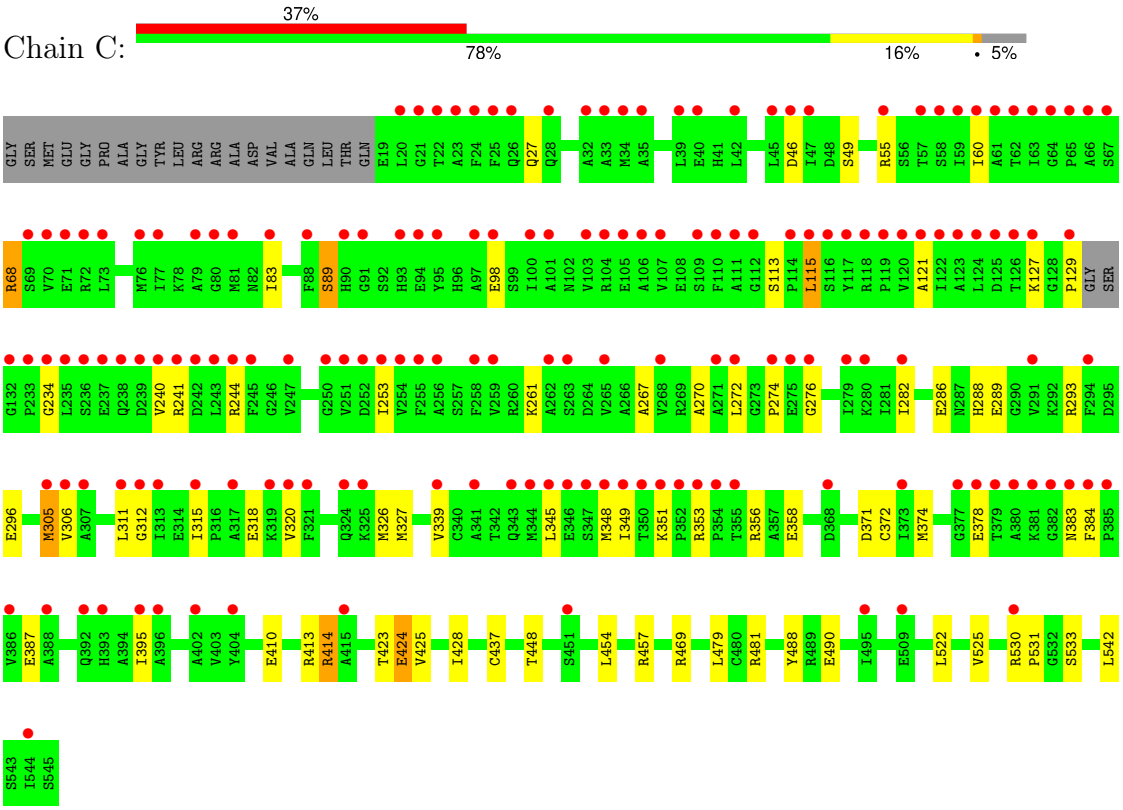
Chain B:



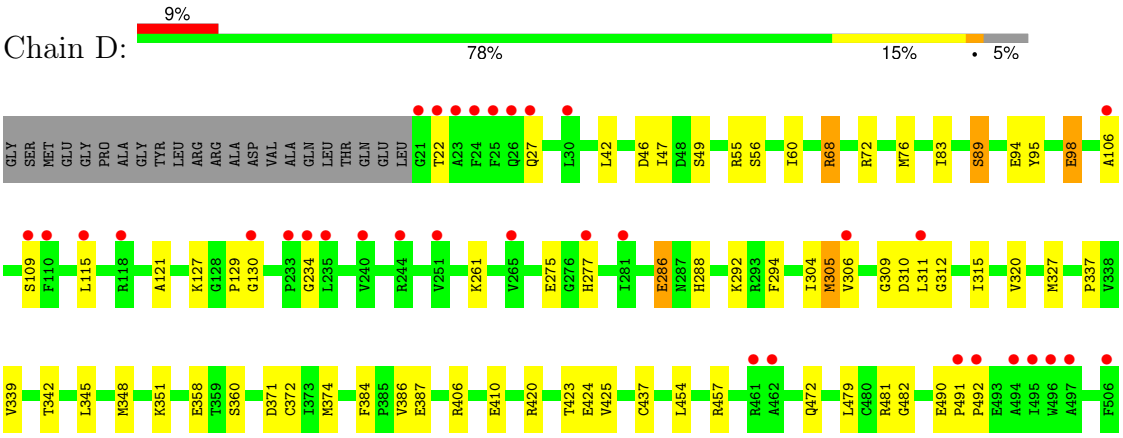


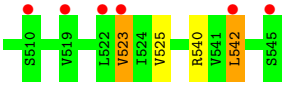


• Molecule 1: Isoform L-type of Pyruvate kinase PKLR



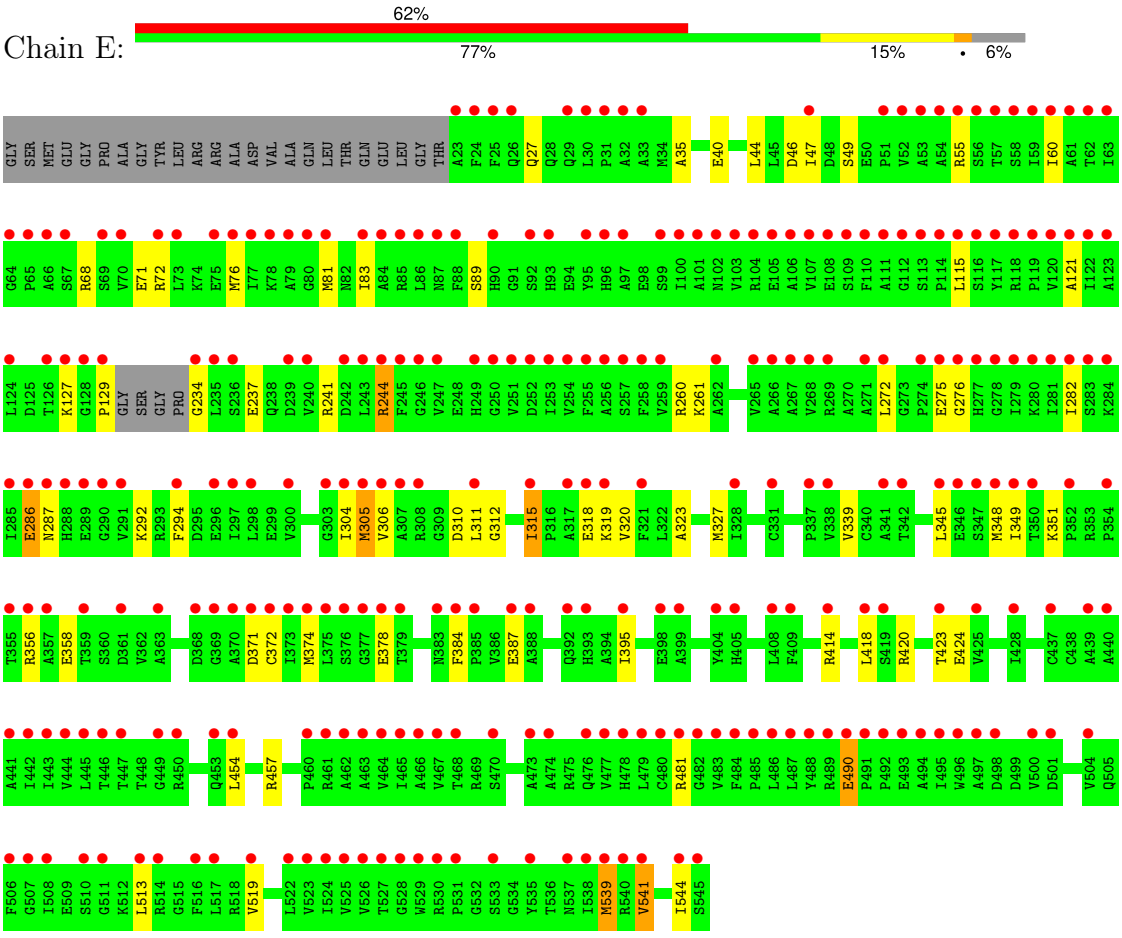
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR





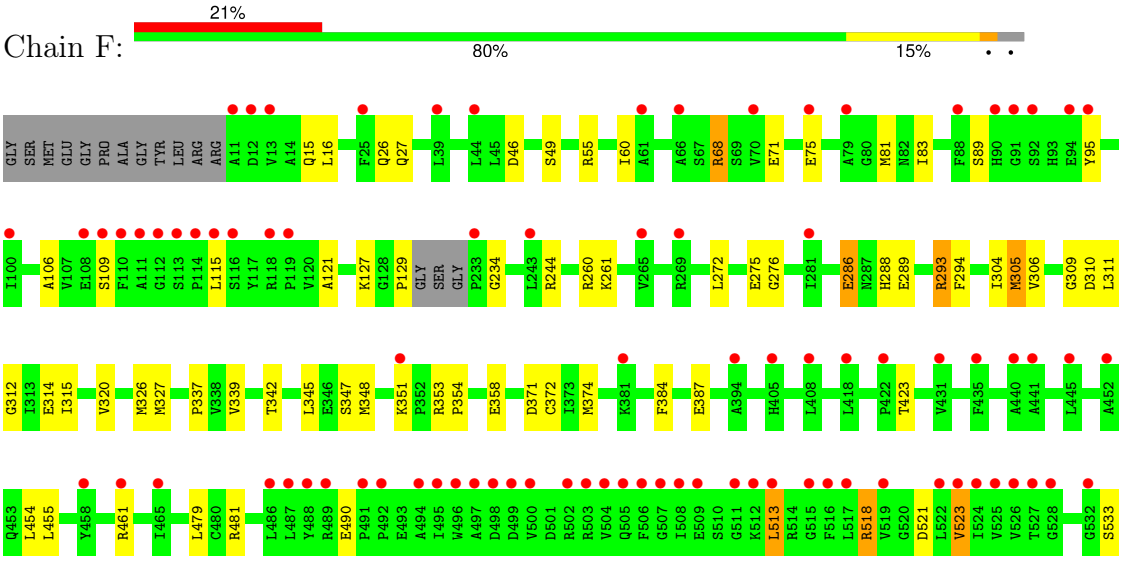
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

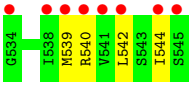
Chain E:



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

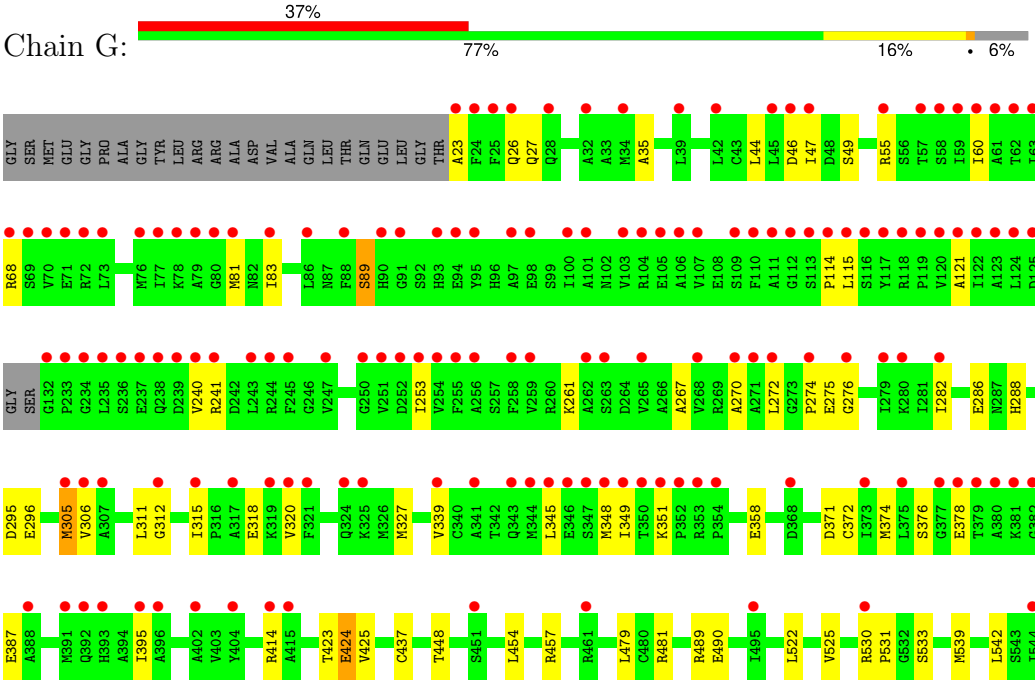
Chain F:





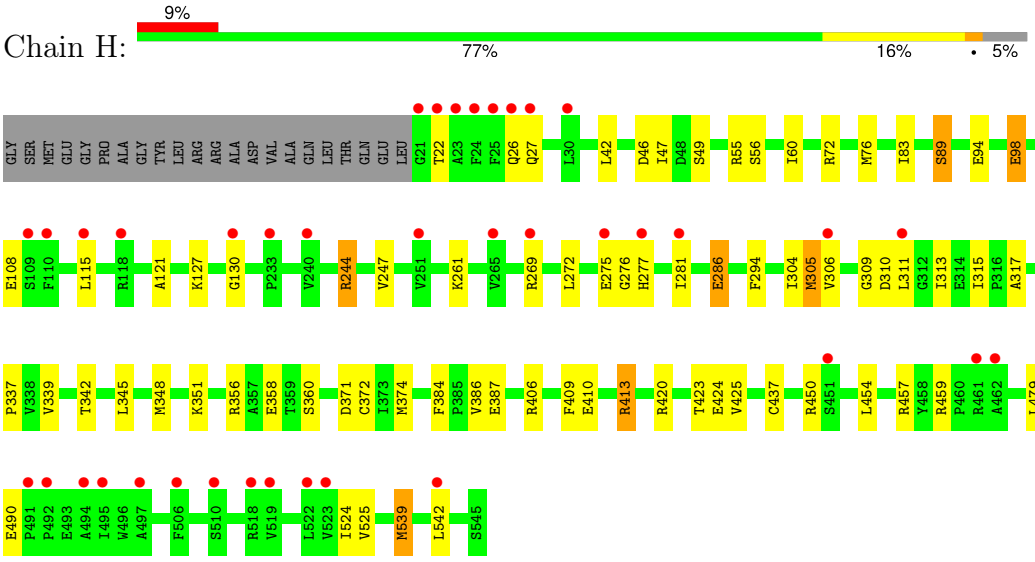
• Molecule 1: Isoform L-type of Pyruvate kinase PKLR

Chain G:



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

Chain H:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	203.09Å 112.22Å 184.65Å 90.00° 94.06° 90.00°	Depositor
Resolution (Å)	98.16 – 2.55 98.16 – 2.55	Depositor EDS
% Data completeness (in resolution range)	62.0 (98.16-2.55) 62.0 (98.16-2.55)	Depositor EDS
R_{merge}	0.19	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.68 (at 2.55Å)	Xtriage
Refinement program	BUSTER 2.10.4	Depositor
R, R_{free}	0.371 , 0.397 0.358 , 0.387	Depositor DCC
R_{free} test set	4110 reflections (3.05%)	wwPDB-VP
Wilson B-factor (Å^2)	47.8	Xtriage
Anisotropy	0.049	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 69.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.38$, $< L^2 > = 0.21$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.91	EDS
Total number of atoms	26902	wwPDB-VP
Average B, all atoms (Å^2)	63.0	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 96.67 % 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 4.2303e-10. 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: OXL, WVX, FBP, MG, 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	0.65	1/3307 (0.0%)	1.10	6/4469 (0.1%)
1	B	0.69	0/3396	1.10	11/4592 (0.2%)
1	C	0.68	0/3313	1.08	2/4479 (0.0%)
1	D	0.72	0/3326	1.11	3/4497 (0.1%)
1	E	0.65	1/3278 (0.0%)	1.08	3/4430 (0.1%)
1	F	0.69	0/3396	1.09	4/4591 (0.1%)
1	G	0.68	0/3303	1.09	4/4465 (0.1%)
1	H	0.72	0/3316	1.10	4/4483 (0.1%)
All	All	0.68	2/26635 (0.0%)	1.09	37/36006 (0.1%)

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	315	ILE	CA-C	5.88	1.57	1.52
1	A	315	ILE	CA-C	5.13	1.56	1.52

All (37) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	544	ILE	CA-C-N	10.05	139.78	121.70
1	A	544	ILE	C-N-CA	10.05	139.78	121.70
1	B	115	LEU	CA-C-N	6.02	129.47	119.35
1	B	115	LEU	C-N-CA	6.02	129.47	119.35
1	G	27	GLN	CA-C-N	5.79	130.62	122.46
1	G	27	GLN	C-N-CA	5.79	130.62	122.46
1	B	27	GLN	CA-C-N	5.75	130.57	122.46
1	B	27	GLN	C-N-CA	5.75	130.57	122.46
1	F	27	GLN	CA-C-N	5.74	130.55	122.46
1	F	27	GLN	C-N-CA	5.74	130.55	122.46
1	G	23	ALA	CA-C-N	5.72	128.51	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	23	ALA	C-N-CA	5.72	128.51	120.28
1	H	27	GLN	CA-C-N	5.70	130.49	122.46
1	H	27	GLN	C-N-CA	5.70	130.49	122.46
1	E	27	GLN	CA-C-N	5.68	130.47	122.46
1	E	27	GLN	C-N-CA	5.68	130.47	122.46
1	C	27	GLN	CA-C-N	5.66	130.44	122.46
1	C	27	GLN	C-N-CA	5.66	130.44	122.46
1	B	455	LEU	CA-C-N	5.65	127.85	120.28
1	B	455	LEU	C-N-CA	5.65	127.85	120.28
1	D	27	GLN	CA-C-N	5.64	130.41	122.46
1	D	27	GLN	C-N-CA	5.64	130.41	122.46
1	A	455	LEU	CA-C-N	5.59	127.78	120.28
1	A	455	LEU	C-N-CA	5.59	127.78	120.28
1	A	27	GLN	CA-C-N	5.59	130.34	122.46
1	A	27	GLN	C-N-CA	5.59	130.34	122.46
1	B	111	ALA	CA-C-N	5.59	126.31	119.99
1	B	111	ALA	C-N-CA	5.59	126.31	119.99
1	F	455	LEU	CA-C-N	5.59	127.77	120.28
1	F	455	LEU	C-N-CA	5.59	127.77	120.28
1	E	541	VAL	N-CA-CB	5.35	118.42	111.67
1	B	111	ALA	N-CA-C	5.32	117.83	111.71
1	B	110	PHE	CA-C-N	5.27	127.87	120.28
1	B	110	PHE	C-N-CA	5.27	127.87	120.28
1	H	424	GLU	CB-CG-CD	5.25	121.52	112.60
1	H	413	ARG	CA-CB-CG	5.08	124.25	114.10
1	D	424	GLU	CB-CG-CD	5.02	121.14	112.60

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	3236	0	3300	54	0
1	B	3329	0	3394	44	0
1	C	3247	0	3300	59	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	D	3252	0	3311	41	0
1	E	3210	0	3271	46	0
1	F	3321	0	3393	43	1
1	G	3231	0	3285	54	0
1	H	3251	0	3307	49	0
2	A	20	0	10	1	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	0	0
3	D	6	0	0	0	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	1	0	0	0	0
4	B	1	0	0	0	0
4	C	1	0	0	0	0
4	D	1	0	0	0	0
4	E	1	0	0	0	0
4	F	1	0	0	0	0
4	G	1	0	0	0	0
4	H	1	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	30	14	0	0	0
6	B	30	14	0	0	0
6	E	30	14	0	0	0
6	F	30	14	0	0	0
7	A	36	0	0	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	B	62	0	0	0	0
7	C	45	0	0	2	0
7	D	70	0	0	0	0
7	E	28	0	0	1	0
7	F	60	0	0	1	0
7	G	52	0	0	3	0
7	H	72	0	0	3	0
All	All	26846	56	26641	333	1

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 6.

All (333) 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:E:60:ILE:HB	1:E:374:MET:HG3	1.52	0.92
1:A:60:ILE:HB	1:A:374:MET:HG3	1.52	0.89
1:G:60:ILE:HB	1:G:374:MET:HG3	1.55	0.89
1:H:60:ILE:HB	1:H:374:MET:HG3	1.55	0.88
1:C:60:ILE:HB	1:C:374:MET:HG3	1.54	0.88
1:H:89:SER:HA	1:H:127:LYS:HG3	1.57	0.86
1:F:60:ILE:HB	1:F:374:MET:HG3	1.54	0.86
1:B:65:PRO:HG2	1:B:381:LYS:HG2	1.55	0.86
1:B:60:ILE:HB	1:B:374:MET:HG3	1.54	0.86
1:C:448:THR:HA	1:G:274:PRO:HG3	1.59	0.85
1:D:60:ILE:HB	1:D:374:MET:HG3	1.56	0.85
1:D:89:SER:HA	1:D:127:LYS:HG3	1.57	0.85
1:F:89:SER:HA	1:F:127:LYS:HG3	1.59	0.85
1:C:274:PRO:HG3	1:G:448:THR:HA	1.59	0.85
1:B:89:SER:HA	1:B:127:LYS:HG3	1.58	0.84
1:G:89:SER:HA	1:G:127:LYS:HG3	1.60	0.83
1:C:89:SER:HA	1:C:127:LYS:HG3	1.61	0.82
1:C:240:VAL:HG11	1:G:531:PRO:HB2	1.61	0.81
1:A:106:ALA:HB2	7:A:701:HOH:O	1.80	0.80
1:A:89:SER:HA	1:A:127:LYS:HG3	1.63	0.80
1:E:89:SER:HA	1:E:127:LYS:HG3	1.63	0.80
1:C:531:PRO:HB2	1:G:240:VAL:HG11	1.63	0.80
1:C:113:SER:HB2	1:C:115:LEU:HG	1.66	0.78
1:A:420[B]:ARG:NH2	1:B:520:GLY:O	2.21	0.74
1:C:410:GLU:HG2	1:C:413:ARG:HH22	1.56	0.70
1:F:523:VAL:HB	1:F:544[B]:ILE:HD11	1.74	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:305:MET:HG2	1:F:339:VAL:HB	1.74	0.69
1:E:318:GLU:HB2	1:G:395:ILE:HA	1.74	0.69
1:G:383:ASN:HB2	7:G:701:HOH:O	1.91	0.69
1:C:383:ASN:HB2	7:C:701:HOH:O	1.93	0.69
1:A:70:VAL:HA	7:A:701:HOH:O	1.94	0.68
1:F:384:PHE:HB3	1:F:387:GLU:HB2	1.76	0.68
1:C:525:VAL:HG21	1:C:542:LEU:HD12	1.74	0.68
1:D:525:VAL:HG21	1:D:542:LEU:HD22	1.74	0.68
1:B:305:MET:HG2	1:B:339:VAL:HB	1.75	0.67
1:F:260:ARG:O	1:F:293:ARG:HG3	1.93	0.67
1:B:46:ASP:HB3	1:B:49:SER:HB2	1.77	0.67
1:A:318:GLU:HB2	1:C:395:ILE:HA	1.77	0.66
1:F:46:ASP:HB3	1:F:49:SER:HB2	1.76	0.66
1:A:102:ASN:O	7:A:701:HOH:O	2.12	0.66
1:B:384:PHE:HB3	1:B:387:GLU:HB2	1.77	0.66
1:E:47:ILE:HD12	1:G:288:HIS:CD2	2.30	0.66
1:A:305:MET:HG2	1:A:339:VAL:HB	1.78	0.66
1:E:305:MET:HG2	1:E:339:VAL:HB	1.78	0.64
1:H:305:MET:HG2	1:H:339:VAL:HB	1.77	0.64
1:C:305:MET:HG2	1:C:339:VAL:HB	1.79	0.64
1:A:47:ILE:HD12	1:C:288:HIS:CD2	2.33	0.64
1:D:305:MET:HG2	1:D:339:VAL:HB	1.78	0.64
1:G:525:VAL:HG21	1:G:542:LEU:HD12	1.80	0.63
1:G:305:MET:HG2	1:G:339:VAL:HB	1.79	0.63
1:H:524:ILE:HG23	1:H:539:MET:HE3	1.81	0.62
1:H:384:PHE:HB3	1:H:387:GLU:HB2	1.82	0.62
1:C:240:VAL:HG21	1:G:531:PRO:HG2	1.81	0.61
1:C:349:ILE:O	7:C:701:HOH:O	2.16	0.61
1:H:269[A]:ARG:HE	1:H:281:ILE:HD12	1.65	0.61
1:A:47:ILE:HD12	1:C:288:HIS:HD2	1.65	0.61
1:C:531:PRO:HG2	1:G:240:VAL:HG21	1.83	0.61
1:D:384:PHE:HB3	1:D:387:GLU:HB2	1.82	0.61
1:D:523:VAL:HG12	1:D:542:LEU:HB3	1.82	0.61
1:A:384:PHE:HB3	1:A:387:GLU:HB2	1.84	0.60
1:C:423:THR:HG22	1:C:454:LEU:HD12	1.83	0.60
1:G:384:PHE:HB3	1:G:387:GLU:HB2	1.83	0.60
1:C:384:PHE:HB3	1:C:387:GLU:HB2	1.83	0.60
1:E:47:ILE:HD12	1:G:288:HIS:HD2	1.65	0.60
1:D:94:GLU:O	1:D:98:GLU:HG3	2.02	0.59
1:E:384:PHE:HB3	1:E:387:GLU:HB2	1.83	0.59
1:E:311:LEU:HD23	1:E:320:VAL:HG13	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:311:LEU:HD23	1:G:320:VAL:HG13	1.83	0.59
1:C:311:LEU:HD23	1:C:320:VAL:HG13	1.83	0.58
1:B:265:VAL:HG11	1:B:300:VAL:HG23	1.86	0.58
1:G:295:ASP:HB2	7:G:745:HOH:O	2.03	0.58
1:H:525:VAL:HG21	1:H:542:LEU:HD22	1.85	0.58
1:H:371:ASP:HA	1:H:481:ARG:HB2	1.86	0.58
1:A:311:LEU:HD23	1:A:320:VAL:HG13	1.86	0.58
1:A:418:LEU:CB	1:B:16:LEU:HD22	2.35	0.57
1:B:311:LEU:HD23	1:B:320:VAL:HG13	1.86	0.57
1:E:423:THR:HG22	1:E:454:LEU:HD12	1.86	0.57
1:G:423:THR:HG22	1:G:454:LEU:HD12	1.85	0.57
1:F:311:LEU:HD23	1:F:320:VAL:HG13	1.87	0.57
1:A:423:THR:HG22	1:A:454:LEU:HD12	1.86	0.56
1:H:46:ASP:HB3	1:H:49:SER:HB2	1.87	0.56
1:E:244:ARG:NH1	1:E:275:GLU:OE2	2.39	0.56
1:E:420:ARG:HG3	1:F:16:LEU:HD11	1.88	0.56
1:D:46:ASP:HB3	1:D:49:SER:HB2	1.88	0.55
1:F:371:ASP:HA	1:F:481:ARG:HB2	1.88	0.55
1:E:418:LEU:HB2	1:F:16:LEU:HD22	1.87	0.55
1:A:418:LEU:HB2	1:B:16:LEU:HD22	1.89	0.55
1:B:371:ASP:HA	1:B:481:ARG:HB2	1.88	0.55
1:A:73:LEU:HB2	7:A:701:HOH:O	2.07	0.54
1:C:353:ARG:HH22	1:C:356:ARG:HH22	1.54	0.54
1:D:371:ASP:HA	1:D:481:ARG:HB2	1.87	0.54
1:E:418:LEU:CB	1:F:16:LEU:HD22	2.37	0.54
1:E:371:ASP:HA	1:E:481:ARG:HB2	1.90	0.54
1:A:424:GLU:HG2	1:A:454:LEU:HD13	1.90	0.54
1:E:424:GLU:HG2	1:E:454:LEU:HD13	1.90	0.54
1:G:349:ILE:O	7:G:701:HOH:O	2.19	0.54
1:E:260:ARG:HG2	1:E:287:ASN:HD21	1.73	0.53
1:G:83:ILE:HG12	1:G:121:ALA:HB3	1.90	0.53
1:D:423:THR:HG22	1:D:454:LEU:HD12	1.91	0.53
1:C:83:ILE:HG12	1:C:121:ALA:HB3	1.90	0.53
1:B:339:VAL:HG22	1:B:372:CYS:HB2	1.91	0.53
1:E:46:ASP:HB3	1:E:49:SER:HB2	1.91	0.53
1:A:371:ASP:HA	1:A:481:ARG:HB2	1.89	0.53
1:C:533:SER:O	1:G:270:ALA:HB1	2.09	0.53
1:H:311:LEU:O	1:H:315:ILE:HG12	2.09	0.53
1:E:83:ILE:HG12	1:E:121:ALA:HB3	1.91	0.53
1:E:312:GLY:HA2	7:E:701:HOH:O	2.07	0.53
1:F:339:VAL:HG22	1:F:372:CYS:HB2	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:423:THR:HG22	1:H:454:LEU:HD12	1.90	0.53
1:G:371:ASP:HA	1:G:481:ARG:HB2	1.90	0.52
1:A:83:ILE:HG12	1:A:121:ALA:HB3	1.91	0.52
1:A:420[A]:ARG:HG3	1:B:16:LEU:HD11	1.90	0.52
1:A:46:ASP:HB3	1:A:49:SER:HB2	1.92	0.52
1:G:345:LEU:HD23	1:G:358:GLU:HB3	1.90	0.52
1:H:94:GLU:O	1:H:98:GLU:HG2	2.10	0.52
1:A:519:VAL:HG13	1:A:545:SER:HB2	1.91	0.52
1:C:345:LEU:HD23	1:C:358:GLU:HB3	1.91	0.52
1:H:269[A]:ARG:NE	1:H:281:ILE:HD12	2.23	0.51
1:C:371:ASP:HA	1:C:481:ARG:HB2	1.90	0.51
1:C:413:ARG:HG3	1:C:428:ILE:HD11	1.93	0.51
1:D:311:LEU:O	1:D:315:ILE:HG12	2.09	0.51
1:D:311:LEU:HD23	1:D:320:VAL:HG13	1.93	0.51
1:H:269[B]:ARG:NH1	1:H:276:GLY:O	2.43	0.51
1:H:83:ILE:HG12	1:H:121:ALA:HB3	1.92	0.51
1:C:413:ARG:NH2	1:D:410:GLU:HG2	2.26	0.51
1:A:345:LEU:HD23	1:A:358:GLU:HB3	1.93	0.51
1:B:83:ILE:HG12	1:B:121:ALA:HB3	1.94	0.50
1:G:522:LEU:HD12	1:H:420:ARG:HD2	1.94	0.50
1:C:311:LEU:O	1:C:315:ILE:HG12	2.12	0.50
1:C:424[A]:GLU:HG3	1:C:454:LEU:HD13	1.93	0.50
1:G:539:MET:HE3	1:H:539:MET:HG2	1.94	0.50
1:H:244:ARG:NH2	1:H:275:GLU:OE2	2.44	0.50
1:D:83:ILE:HG12	1:D:121:ALA:HB3	1.92	0.50
1:A:339:VAL:HG22	1:A:372:CYS:HB2	1.94	0.49
1:H:311:LEU:HD23	1:H:320:VAL:HG13	1.93	0.49
1:F:311:LEU:O	1:F:315:ILE:HG12	2.12	0.49
1:A:292:LYS:HE2	1:A:292:LYS:HA	1.94	0.49
1:F:244:ARG:NH1	1:F:275:GLU:OE2	2.46	0.49
1:C:270:ALA:HB1	1:G:533:SER:O	2.13	0.49
1:E:345:LEU:HD23	1:E:358:GLU:HB3	1.93	0.49
1:A:413:ARG:HD2	1:B:432:GLU:OE1	2.12	0.49
1:D:345:LEU:HD23	1:D:358:GLU:HB3	1.95	0.49
1:B:311:LEU:O	1:B:315:ILE:HG12	2.12	0.49
1:E:339:VAL:HG22	1:E:372:CYS:HB2	1.94	0.49
1:G:311:LEU:O	1:G:315:ILE:HG12	2.12	0.49
1:E:395:ILE:HA	1:G:318:GLU:HB2	1.94	0.48
1:F:83:ILE:HG12	1:F:121:ALA:HB3	1.95	0.48
1:H:345:LEU:HD23	1:H:358:GLU:HB3	1.95	0.48
1:H:348:MET:HA	1:H:351:LYS:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:345:LEU:HD23	1:B:358:GLU:HB3	1.95	0.48
1:E:292:LYS:HA	1:E:292:LYS:HE2	1.94	0.48
1:F:353:ARG:HH21	1:H:317:ALA:HB2	1.79	0.48
1:G:272:LEU:HB3	1:G:276:GLY:HA3	1.96	0.48
1:D:306:VAL:HG22	1:D:327:MET:HE3	1.96	0.48
1:F:345:LEU:HD23	1:F:358:GLU:HB3	1.95	0.48
1:D:348:MET:HA	1:D:351:LYS:O	2.13	0.48
1:F:289:GLU:O	1:F:293:ARG:HG2	2.13	0.48
1:H:306:VAL:HG22	1:H:327:MET:HE3	1.96	0.48
1:C:414:ARG:HH21	1:D:406:ARG:HH21	1.61	0.47
1:G:46:ASP:HB3	1:G:49:SER:HB2	1.96	0.47
1:G:348:MET:HA	1:G:351:LYS:O	2.14	0.47
1:F:423:THR:HG22	1:F:454:LEU:HD12	1.97	0.47
1:A:306:VAL:HG22	1:A:327:MET:HE3	1.97	0.47
1:A:311:LEU:O	1:A:315:ILE:HG12	2.15	0.47
1:C:437:CYS:HB3	1:D:425:VAL:HG21	1.97	0.47
1:B:423:THR:HG22	1:B:454:LEU:HD12	1.97	0.47
1:G:424[A]:GLU:HG3	1:G:454:LEU:HD13	1.96	0.47
1:B:540:ARG:HD2	1:B:542[A]:LEU:HD21	1.97	0.47
1:A:395:ILE:HA	1:C:318:GLU:HB2	1.95	0.46
1:D:106:ALA:O	1:D:109:SER:OG	2.26	0.46
1:G:339:VAL:HG22	1:G:372:CYS:HB2	1.97	0.46
1:H:72:ARG:O	1:H:76[A]:MET:HG3	2.15	0.46
1:B:310:ASP:O	1:B:314:GLU:HG2	2.16	0.46
1:D:294:PHE:HE1	1:D:304:ILE:HG21	1.80	0.46
1:E:306:VAL:HG22	1:E:327:MET:HE3	1.96	0.46
1:F:461:ARG:NE	7:F:704:HOH:O	2.48	0.46
1:B:348:MET:HA	1:B:351:LYS:O	2.15	0.46
1:C:46:ASP:HB3	1:C:49:SER:HB2	1.97	0.46
1:D:72:ARG:O	1:D:76[A]:MET:HG3	2.15	0.46
1:E:47:ILE:CD1	1:G:288:HIS:CD2	2.99	0.46
1:G:414:ARG:HD2	1:H:410:GLU:OE2	2.15	0.46
1:A:348:MET:HA	1:A:351:LYS:O	2.15	0.46
1:F:310:ASP:O	1:F:314:GLU:HG2	2.16	0.46
1:C:348:MET:HA	1:C:351:LYS:O	2.15	0.46
1:H:294:PHE:HE1	1:H:304:ILE:HG21	1.80	0.46
1:H:459:ARG:HD3	7:H:714:HOH:O	2.15	0.46
1:A:272:LEU:HB3	1:A:276:GLY:HA3	1.97	0.46
1:D:94:GLU:O	1:D:98:GLU:CG	2.64	0.46
1:F:348:MET:HA	1:F:351:LYS:O	2.15	0.45
1:C:306:VAL:HG22	1:C:327:MET:HE3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:339:VAL:HG22	1:C:372:CYS:HB2	1.98	0.45
1:D:339:VAL:HG22	1:D:372:CYS:HB2	1.98	0.45
1:E:348:MET:HA	1:E:351:LYS:O	2.15	0.45
1:E:311:LEU:O	1:E:315:ILE:HG12	2.17	0.45
1:C:425:VAL:HG21	1:D:437:CYS:HB3	1.99	0.45
1:G:306:VAL:HG22	1:G:327:MET:HE3	1.99	0.45
1:F:272:LEU:HB3	1:F:276:GLY:HA3	1.99	0.45
1:A:418:LEU:HB3	1:B:16:LEU:HD22	1.98	0.45
1:C:349:ILE:HG12	1:C:378:GLU:HA	1.98	0.45
1:F:68:ARG:NE	1:F:95:TYR:CE1	2.85	0.45
1:G:349:ILE:HG12	1:G:378:GLU:HA	1.98	0.45
1:A:487:LEU:HD21	1:A:489:ARG:HE	1.82	0.44
1:C:272:LEU:HB3	1:C:276:GLY:HA3	1.99	0.44
1:F:309:GLY:CA	1:F:342:THR:HG21	2.47	0.44
1:C:454:LEU:O	1:C:457:ARG:HG2	2.18	0.44
1:D:56:SER:HB2	1:D:482:GLY:HA2	2.00	0.44
1:H:94:GLU:O	1:H:98:GLU:CG	2.66	0.44
1:B:68:ARG:NE	1:B:95:TYR:CE1	2.85	0.44
1:B:272:LEU:HB3	1:B:276:GLY:HA3	1.99	0.44
1:D:68:ARG:NE	1:D:95:TYR:CE1	2.86	0.44
1:G:414:ARG:NH2	1:H:406:ARG:HD3	2.33	0.44
1:F:540:ARG:HD2	1:F:542[A]:LEU:HD21	1.98	0.44
1:H:26:GLN:O	1:H:49:SER:OG	2.36	0.44
1:H:56:SER:HB2	1:H:482:GLY:HA2	1.99	0.44
1:A:81:MET:HE2	1:A:81:MET:HB3	1.91	0.44
1:A:315:ILE:HD11	1:A:320:VAL:HA	2.00	0.44
1:E:282:ILE:HG22	1:E:305:MET:HB2	2.00	0.44
1:A:282:ILE:HG22	1:A:305:MET:HB2	2.00	0.44
1:A:539[B]:MET:HE3	1:B:539[B]:MET:HE3	2.00	0.44
1:B:309:GLY:CA	1:B:342:THR:HG21	2.48	0.44
1:G:437:CYS:HB3	1:H:425:VAL:HG21	1.99	0.44
1:E:272:LEU:HB3	1:E:276:GLY:HA3	2.00	0.43
1:F:518:ARG:O	1:F:521:ASP:HB2	2.18	0.43
1:G:454:LEU:O	1:G:457:ARG:HG2	2.18	0.43
1:H:454:LEU:O	1:H:457:ARG:HG2	2.18	0.43
1:B:337:PRO:HB3	1:B:479:LEU:O	2.19	0.43
1:D:292:LYS:HE2	1:D:292:LYS:HA	2.00	0.43
1:H:269[B]:ARG:HA	1:H:269[B]:ARG:HD3	1.89	0.43
1:B:288:HIS:CD2	1:D:47:ILE:HD11	2.53	0.43
1:E:349:ILE:HG12	1:E:378:GLU:HA	2.01	0.43
1:G:81:MET:HE2	1:G:81:MET:HB3	1.93	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:113:SER:HB2	1:C:115:LEU:CG	2.43	0.43
1:D:454:LEU:O	1:D:457:ARG:HG2	2.18	0.43
1:C:522:LEU:HD12	1:D:420:ARG:HD2	2.01	0.43
1:F:306:VAL:HG22	1:F:327:MET:HE3	2.01	0.43
1:G:414:ARG:HG2	7:H:765:HOH:O	2.19	0.43
1:C:289:GLU:HG2	1:C:293:ARG:HD2	2.01	0.43
1:E:35:ALA:HB1	1:E:40[A]:GLU:HB3	2.01	0.43
1:H:286:GLU:HB3	1:H:310:ASP:HB2	2.01	0.43
1:B:306:VAL:HG22	1:B:327:MET:HE3	2.01	0.43
1:H:339:VAL:HG22	1:H:372:CYS:HB2	1.99	0.43
1:C:267:ALA:CB	1:G:530:ARG:HH12	2.32	0.43
1:A:47:ILE:CD1	1:C:288:HIS:CD2	2.99	0.42
1:A:60:ILE:HB	1:A:374:MET:CG	2.37	0.42
1:E:356:ARG:NE	1:G:312:GLY:HA3	2.34	0.42
1:H:450:ARG:HD3	7:H:720:HOH:O	2.19	0.42
1:F:81:MET:HE2	1:F:81:MET:HB3	1.91	0.42
1:B:347:SER:OG	1:B:354:PRO:HA	2.20	0.42
1:C:282:ILE:HG22	1:C:305:MET:HB2	2.01	0.42
1:E:539[B]:MET:HE3	1:F:539[B]:MET:HE3	2.00	0.42
1:C:244:ARG:HD2	1:C:244:ARG:HA	1.88	0.42
1:A:446:THR:OG1	2:A:601:FBP:O4P	2.37	0.42
1:A:491:PRO:HA	1:A:492:PRO:HD3	1.93	0.42
1:D:286:GLU:HB3	1:D:310:ASP:HB2	2.00	0.42
1:G:282:ILE:HG22	1:G:305:MET:HB2	2.01	0.42
1:G:425:VAL:HG21	1:H:437:CYS:HB3	2.00	0.42
1:H:76[B]:MET:HG2	1:H:386:VAL:HG22	2.01	0.42
1:B:286:GLU:HB3	1:B:310:ASP:HB2	2.02	0.42
1:B:315:ILE:HD11	1:B:320:VAL:HA	2.01	0.42
1:F:288:HIS:CD2	1:H:47:ILE:HD11	2.54	0.42
1:A:356:ARG:NE	1:C:312:GLY:HA3	2.34	0.42
1:B:60:ILE:HB	1:B:374:MET:CG	2.39	0.42
1:D:337:PRO:HB3	1:D:479:LEU:O	2.19	0.42
1:E:237:GLU:O	1:E:241:ARG:HD3	2.18	0.42
1:H:309:GLY:CA	1:H:342:THR:HG21	2.49	0.42
1:E:35:ALA:HB2	1:E:44:LEU:HD12	2.00	0.42
1:E:72:ARG:O	1:E:76[A]:MET:HG3	2.20	0.42
1:F:60:ILE:HB	1:F:374:MET:CG	2.39	0.42
1:G:241:ARG:HA	1:G:241:ARG:HD3	1.80	0.42
1:A:286:GLU:HB3	1:A:310:ASP:HB2	2.01	0.42
1:A:520:GLY:O	1:B:420:ARG:NH2	2.53	0.42
1:D:129:PRO:HB3	1:D:234:GLY:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:309:GLY:CA	1:D:342:THR:HG21	2.50	0.42
1:B:247:VAL:HG11	1:B:275:GLU:HG2	2.02	0.42
1:F:294:PHE:HE1	1:F:304:ILE:HG21	1.85	0.42
1:E:323:ALA:O	1:E:327:MET:HG3	2.20	0.41
1:G:253:ILE:HG12	1:G:479:LEU:HD11	2.02	0.41
1:A:454:LEU:O	1:A:457:ARG:HG2	2.20	0.41
1:C:315:ILE:HD11	1:C:320:VAL:HA	2.02	0.41
1:G:114:PRO:HB3	1:G:489:ARG:HE	1.85	0.41
1:D:76[B]:MET:HG2	1:D:386:VAL:HG22	2.02	0.41
1:E:319:LYS:HB3	1:G:47:ILE:HG22	2.02	0.41
1:F:337:PRO:HB3	1:F:479:LEU:O	2.20	0.41
1:G:35:ALA:HB2	1:G:44:LEU:HD12	2.02	0.41
1:H:337:PRO:HB3	1:H:479:LEU:O	2.20	0.41
1:F:71:GLU:O	1:F:75[A]:GLU:HG3	2.21	0.41
1:G:315:ILE:HD11	1:G:320:VAL:HA	2.02	0.41
1:A:72:ARG:O	1:A:76[A]:MET:HG3	2.21	0.41
1:A:323:ALA:O	1:A:327:MET:HG3	2.20	0.41
1:A:349:ILE:HG12	1:A:378:GLU:HA	2.01	0.41
1:A:519:VAL:HA	1:A:544:ILE:HG22	2.02	0.41
1:B:356:ARG:NE	1:D:312:GLY:HA3	2.35	0.41
1:E:315:ILE:HD11	1:E:320:VAL:HA	2.02	0.41
1:E:454:LEU:O	1:E:457:ARG:HG2	2.20	0.41
1:H:275:GLU:H	1:H:275:GLU:CD	2.28	0.41
1:A:35:ALA:HB2	1:A:44:LEU:HD12	2.01	0.41
1:B:518:ARG:O	1:B:521:ASP:HB2	2.20	0.41
1:C:129:PRO:HB3	1:C:234:GLY:O	2.21	0.41
1:C:241:ARG:HD3	1:C:241:ARG:HA	1.82	0.41
1:D:491:PRO:HA	1:D:492:PRO:HD3	1.94	0.41
1:F:129:PRO:HB3	1:F:234:GLY:O	2.21	0.41
1:H:409:PHE:O	1:H:413:ARG:HG3	2.21	0.41
1:C:68:ARG:HH22	1:C:98:GLU:HB3	1.86	0.41
1:F:347:SER:OG	1:F:354:PRO:HA	2.20	0.41
1:H:272:LEU:HB3	1:H:276:GLY:HA3	2.02	0.41
1:B:326:MET:HA	1:D:42:LEU:O	2.21	0.41
1:C:60:ILE:HB	1:C:374:MET:CG	2.38	0.41
1:C:253:ILE:HG12	1:C:479:LEU:HD11	2.01	0.41
1:C:530:ARG:HH12	1:G:267:ALA:CB	2.34	0.41
1:E:294:PHE:HE1	1:E:304:ILE:HG21	1.86	0.41
1:E:490:GLU:H	1:E:490:GLU:HG2	1.64	0.41
1:E:519:VAL:HA	1:E:544:ILE:HG22	2.03	0.41
1:B:81:MET:HE2	1:B:81:MET:HB3	1.91	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:294:PHE:HE1	1:B:304:ILE:HG21	1.85	0.41
1:E:129:PRO:HB3	1:E:234:GLY:O	2.21	0.41
1:G:293:ARG:O	1:G:296:GLU:HG2	2.20	0.41
1:B:47:ILE:HD12	1:D:288:HIS:HD2	1.86	0.40
1:E:286:GLU:HB3	1:E:310:ASP:HB2	2.02	0.40
1:F:326:MET:HA	1:H:42:LEU:O	2.20	0.40
1:A:42:LEU:O	1:C:326:MET:HA	2.21	0.40
1:A:420[B]:ARG:HG3	1:B:16:LEU:HD11	2.03	0.40
1:B:288:HIS:HD2	1:D:47:ILE:HD12	1.87	0.40
1:C:293:ARG:O	1:C:296:GLU:HG2	2.21	0.40
1:F:286:GLU:HB3	1:F:310:ASP:HB2	2.03	0.40
1:A:487:LEU:CD2	1:A:489:ARG:HE	2.33	0.40
1:C:469:ARG:NH2	1:C:488:TYR:HE2	2.20	0.40
1:F:106:ALA:O	1:F:109:SER:OG	2.30	0.40
1:F:315:ILE:HD11	1:F:320:VAL:HA	2.01	0.40
1:A:469:ARG:NH2	1:A:488:TYR:HE2	2.20	0.40
1:E:81:MET:HE2	1:E:81:MET:HB3	1.90	0.40
1:F:312:GLY:HA3	1:H:356:ARG:HE	1.85	0.40
1:H:104:ARG:O	1:H:108:GLU:HG2	2.22	0.40
1:H:247:VAL:HG11	1:H:275:GLU:HG2	2.02	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:513:LEU:O	1:F:513:LEU:O[2_656]	2.19	0.01

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	424/447 (95%)	409 (96%)	15 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	B	438/447 (98%)	422 (96%)	16 (4%)	0	100	100
1	C	425/447 (95%)	412 (97%)	13 (3%)	0	100	100
1	D	429/447 (96%)	415 (97%)	13 (3%)	1 (0%)	43	56
1	E	420/447 (94%)	406 (97%)	14 (3%)	0	100	100
1	F	435/447 (97%)	419 (96%)	16 (4%)	0	100	100
1	G	423/447 (95%)	410 (97%)	13 (3%)	0	100	100
1	H	427/447 (96%)	415 (97%)	11 (3%)	1 (0%)	43	56
All	All	3421/3576 (96%)	3308 (97%)	111 (3%)	2 (0%)	48	61

All (2) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	130	GLY
1	H	130	GLY

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	340/352 (97%)	325 (96%)	15 (4%)	25	38
1	B	349/352 (99%)	334 (96%)	15 (4%)	26	39
1	C	341/352 (97%)	330 (97%)	11 (3%)	34	51
1	D	342/352 (97%)	324 (95%)	18 (5%)	20	31
1	E	338/352 (96%)	324 (96%)	14 (4%)	27	41
1	F	350/352 (99%)	336 (96%)	14 (4%)	28	42
1	G	340/352 (97%)	326 (96%)	14 (4%)	27	41
1	H	340/352 (97%)	325 (96%)	15 (4%)	25	38
All	All	2740/2816 (97%)	2624 (96%)	116 (4%)	28	40

All (116) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	55	ARG
1	A	68	ARG
1	A	72	ARG
1	A	115	LEU
1	A	260	ARG
1	A	261	LYS
1	A	286	GLU
1	A	305	MET
1	A	413	ARG
1	A	428	ILE
1	A	489	ARG
1	A	539[A]	MET
1	A	539[B]	MET
1	A	542	LEU
1	A	545	SER
1	B	15	GLN
1	B	26	GLN
1	B	55	ARG
1	B	68	ARG
1	B	71	GLU
1	B	261	LYS
1	B	265	VAL
1	B	286	GLU
1	B	305	MET
1	B	351	LYS
1	B	381	LYS
1	B	414	ARG
1	B	490	GLU
1	B	513	LEU
1	B	523	VAL
1	C	55	ARG
1	C	68	ARG
1	C	89	SER
1	C	115	LEU
1	C	261	LYS
1	C	286	GLU
1	C	305	MET
1	C	414	ARG
1	C	424[A]	GLU
1	C	424[B]	GLU
1	C	490	GLU
1	D	22	THR
1	D	55	ARG

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Mol	Chain	Res	Type
1	D	68	ARG
1	D	89	SER
1	D	98	GLU
1	D	115	LEU
1	D	261	LYS
1	D	275	GLU
1	D	277[A]	HIS
1	D	277[B]	HIS
1	D	286	GLU
1	D	305	MET
1	D	360	SER
1	D	472	GLN
1	D	490	GLU
1	D	523	VAL
1	D	540	ARG
1	D	542	LEU
1	E	55	ARG
1	E	68	ARG
1	E	71	GLU
1	E	115	LEU
1	E	244	ARG
1	E	261	LYS
1	E	286	GLU
1	E	305	MET
1	E	414	ARG
1	E	490	GLU
1	E	513	LEU
1	E	539[A]	MET
1	E	539[B]	MET
1	E	541	VAL
1	F	15	GLN
1	F	26	GLN
1	F	55	ARG
1	F	68	ARG
1	F	115	LEU
1	F	261	LYS
1	F	286	GLU
1	F	293	ARG
1	F	305	MET
1	F	490	GLU
1	F	513	LEU
1	F	518	ARG

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Mol	Chain	Res	Type
1	F	523	VAL
1	F	533	SER
1	G	26	GLN
1	G	55	ARG
1	G	68	ARG
1	G	89	SER
1	G	115	LEU
1	G	261	LYS
1	G	275	GLU
1	G	286	GLU
1	G	305	MET
1	G	376[A]	SER
1	G	376[B]	SER
1	G	424[A]	GLU
1	G	424[B]	GLU
1	G	490	GLU
1	H	22	THR
1	H	55	ARG
1	H	89	SER
1	H	98	GLU
1	H	115	LEU
1	H	244	ARG
1	H	261	LYS
1	H	277[A]	HIS
1	H	277[B]	HIS
1	H	286	GLU
1	H	305	MET
1	H	313	ILE
1	H	360	SER
1	H	490	GLU
1	H	539	MET

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (7) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	288	HIS
1	B	383	ASN
1	D	238	GLN
1	F	288	HIS
1	F	383	ASN
1	G	277	HIS
1	H	238	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 36 ligands modelled in this entry, 16 are monoatomic - leaving 20 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	E	602	4	5,5,5	2.12	2 (40%)	6,6,6	1.63	2 (33%)
3	OXL	G	602	-	5,5,5	1.92	2 (40%)	6,6,6	2.30	3 (50%)
2	FBP	A	601	-	18,20,20	0.35	0	21,32,32	0.73	0
2	FBP	C	601	-	18,20,20	0.33	0	21,32,32	0.85	2 (9%)
3	OXL	D	602	4	5,5,5	2.00	2 (40%)	6,6,6	2.33	3 (50%)
3	OXL	H	602	4	5,5,5	2.08	2 (40%)	6,6,6	1.35	1 (16%)
2	FBP	E	601	-	18,20,20	0.35	0	21,32,32	0.61	0
6	WVX	A	605	-	33,33,33	2.61	8 (24%)	46,50,50	1.51	8 (17%)
3	OXL	C	602	-	5,5,5	2.18	2 (40%)	6,6,6	1.26	1 (16%)
2	FBP	H	601	-	18,20,20	0.41	0	21,32,32	0.63	0
3	OXL	A	602	-	5,5,5	2.02	2 (40%)	6,6,6	1.84	2 (33%)
2	FBP	F	601	-	18,20,20	0.37	0	21,32,32	0.67	0
6	WVX	E	605	-	33,33,33	2.66	9 (27%)	46,50,50	1.48	8 (17%)
6	WVX	F	605	-	33,33,33	2.27	9 (27%)	46,50,50	1.72	9 (19%)
2	FBP	B	601	-	18,20,20	0.45	0	21,32,32	0.63	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
3	OXL	B	602	4	5,5,5	2.11	2 (40%)	6,6,6	1.34	1 (16%)
6	WVX	B	605	-	33,33,33	2.31	9 (27%)	46,50,50	1.78	12 (26%)
2	FBP	G	601	-	18,20,20	0.37	0	21,32,32	0.57	0
2	FBP	D	601	-	18,20,20	0.50	0	21,32,32	0.57	0
3	OXL	F	602	4	5,5,5	1.94	2 (40%)	6,6,6	1.49	1 (16%)

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	E	602	4	-	4/4/4/4	-
3	OXL	G	602	-	-	4/4/4/4	-
2	FBP	A	601	-	-	6/13/32/32	0/1/1/1
2	FBP	C	601	-	-	8/13/32/32	0/1/1/1
3	OXL	D	602	4	-	4/4/4/4	-
3	OXL	H	602	4	-	4/4/4/4	-
2	FBP	E	601	-	-	7/13/32/32	0/1/1/1
6	WVX	A	605	-	-	1/24/24/24	0/4/4/4
3	OXL	C	602	-	-	4/4/4/4	-
2	FBP	H	601	-	-	7/13/32/32	0/1/1/1
3	OXL	A	602	-	-	4/4/4/4	-
2	FBP	F	601	-	-	7/13/32/32	0/1/1/1
6	WVX	E	605	-	-	1/24/24/24	0/4/4/4
6	WVX	F	605	-	-	0/24/24/24	0/4/4/4
2	FBP	B	601	-	-	8/13/32/32	0/1/1/1
3	OXL	B	602	4	-	4/4/4/4	-
6	WVX	B	605	-	-	0/24/24/24	0/4/4/4
2	FBP	G	601	-	-	8/13/32/32	0/1/1/1
2	FBP	D	601	-	-	8/13/32/32	0/1/1/1
3	OXL	F	602	4	-	0/4/4/4	-

All (51) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	E	605	WVX	C8-S1	-7.57	1.65	1.77
6	E	605	WVX	C7-S1	-6.88	1.66	1.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	E	605	WVX	C2-S	-6.70	1.66	1.77
6	A	605	WVX	C3-S	-6.69	1.66	1.77
6	A	605	WVX	C2-S	-6.68	1.66	1.77
6	A	605	WVX	C8-S1	-6.51	1.67	1.77
6	B	605	WVX	C3-S	-5.73	1.68	1.77
6	B	605	WVX	C7-S1	-5.42	1.68	1.77
6	F	605	WVX	C2-S	-5.34	1.68	1.77
6	F	605	WVX	C7-S1	-5.17	1.69	1.77
6	F	605	WVX	C3-S	-5.13	1.69	1.77
6	B	605	WVX	C2-S	-4.94	1.69	1.77
6	B	605	WVX	C8-S1	-4.92	1.69	1.77
6	A	605	WVX	C7-S1	-4.81	1.69	1.77
6	F	605	WVX	C8-S1	-4.63	1.69	1.77
6	E	605	WVX	C3-S	-4.59	1.69	1.77
6	E	605	WVX	C16-C3	4.51	1.45	1.38
6	A	605	WVX	C6-C7	4.42	1.45	1.38
3	C	602	OXL	O2-C2	3.87	1.32	1.22
6	A	605	WVX	C16-C3	3.76	1.44	1.38
3	A	602	OXL	O2-C2	3.69	1.31	1.22
3	H	602	OXL	O2-C2	3.65	1.31	1.22
6	F	605	WVX	C6-C7	3.60	1.44	1.38
6	B	605	WVX	C6-C7	3.59	1.44	1.38
3	E	602	OXL	O2-C2	3.59	1.31	1.22
3	D	602	OXL	O2-C2	3.50	1.31	1.22
3	F	602	OXL	O2-C2	3.39	1.30	1.22
3	B	602	OXL	O4-C2	-3.31	1.21	1.30
6	F	605	WVX	C9-C8	3.30	1.44	1.38
6	E	605	WVX	C6-C7	3.24	1.43	1.38
6	F	605	WVX	C17-C2	3.23	1.43	1.38
6	B	605	WVX	C9-C8	3.20	1.43	1.38
6	B	605	WVX	C16-C3	3.19	1.43	1.38
3	G	602	OXL	O2-C2	3.18	1.30	1.22
6	B	605	WVX	C17-C2	3.12	1.43	1.38
3	B	602	OXL	O2-C2	3.11	1.30	1.22
6	F	605	WVX	C16-C3	3.01	1.43	1.38
3	E	602	OXL	O4-C2	-2.97	1.22	1.30
6	E	605	WVX	C17-C2	2.95	1.43	1.38
3	C	602	OXL	O4-C2	-2.90	1.22	1.30
3	H	602	OXL	O4-C2	-2.80	1.22	1.30
6	A	605	WVX	C11-C12	2.78	1.44	1.39
6	A	605	WVX	C9-C8	2.78	1.43	1.38
3	D	602	OXL	O4-C2	-2.72	1.23	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	602	OXL	O4-C2	-2.70	1.23	1.30
3	G	602	OXL	O4-C2	-2.69	1.23	1.30
6	B	605	WVX	C11-C12	2.57	1.43	1.39
3	A	602	OXL	O4-C2	-2.55	1.23	1.30
6	E	605	WVX	C9-C8	2.36	1.42	1.38
6	F	605	WVX	C11-C12	2.32	1.43	1.39
6	E	605	WVX	C11-C12	2.21	1.43	1.39

All (53) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	B	605	WVX	C3-S-C2	-4.44	96.23	104.37
6	F	605	WVX	C4-C3-S	4.39	124.97	119.14
6	B	605	WVX	O3-S1-C8	4.38	113.34	107.96
6	F	605	WVX	C3-S-C2	-4.26	96.57	104.37
3	G	602	OXL	O4-C2-C1	4.00	120.59	112.83
6	B	605	WVX	C4-C3-S	3.80	124.20	119.14
3	D	602	OXL	O4-C2-C1	3.75	120.10	112.83
3	A	602	OXL	O4-C2-C1	3.56	119.75	112.83
6	E	605	WVX	C15-C5-N	3.56	124.21	121.00
6	A	605	WVX	C5-C15-N1	3.48	124.14	121.00
3	D	602	OXL	O3-C1-C2	3.23	119.10	112.83
6	F	605	WVX	C5-C15-N1	3.23	123.92	121.00
6	A	605	WVX	C4-C3-S	3.13	123.30	119.14
6	B	605	WVX	C5-C15-N1	3.12	123.82	121.00
3	F	602	OXL	O4-C2-C1	3.07	118.79	112.83
6	F	605	WVX	O5-S-C2	3.05	111.71	107.96
6	F	605	WVX	C9-C8-S1	3.03	123.44	119.49
3	E	602	OXL	O4-C2-C1	2.93	118.52	112.83
3	G	602	OXL	O3-C1-C2	2.93	118.52	112.83
6	E	605	WVX	C18-C17-C2	2.93	121.94	118.95
6	A	605	WVX	C10-C9-C8	2.91	121.92	118.95
6	B	605	WVX	O4-S-C2	2.88	111.50	107.96
3	H	602	OXL	O4-C2-C1	2.77	118.20	112.83
6	F	605	WVX	C10-C9-C8	2.75	121.75	118.95
6	F	605	WVX	O3-S1-C8	2.74	111.33	107.96
6	F	605	WVX	C18-C17-C2	2.70	121.71	118.95
6	B	605	WVX	C10-C9-C8	2.65	121.66	118.95
6	A	605	WVX	C9-C8-S1	2.58	122.86	119.49
2	C	601	FBP	O1-P1-O1P	2.54	113.31	106.44
6	E	605	WVX	C10-C9-C8	2.52	121.53	118.95
3	B	602	OXL	O4-C2-C1	2.49	117.67	112.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	E	605	WVX	C5-C15-N1	2.46	123.22	121.00
6	B	605	WVX	C18-C17-C2	2.45	121.45	118.95
6	E	605	WVX	C9-C8-S1	2.43	122.65	119.49
3	C	602	OXL	O4-C2-C1	2.42	117.52	112.83
3	G	602	OXL	O2-C2-C1	-2.40	115.62	120.63
6	F	605	WVX	C9-C8-C13	-2.38	117.74	120.68
6	B	605	WVX	C9-C8-C13	-2.35	117.77	120.68
3	E	602	OXL	O3-C1-C2	2.30	117.30	112.83
6	A	605	WVX	O2-S1-C7	2.30	110.78	107.96
3	D	602	OXL	O2-C2-C1	-2.28	115.87	120.63
6	B	605	WVX	C9-C8-S1	2.28	122.46	119.49
6	A	605	WVX	C15-C5-N	2.28	123.06	121.00
6	B	605	WVX	O-C-C1	-2.23	114.01	119.85
2	C	601	FBP	O6-P2-O4P	2.14	112.21	106.44
6	B	605	WVX	C7-S1-C8	-2.13	100.48	104.37
6	B	605	WVX	C17-C2-C1	-2.12	118.05	120.68
6	A	605	WVX	C18-C17-C2	2.12	121.11	118.95
6	A	605	WVX	O-C-C1	-2.09	114.38	119.85
6	E	605	WVX	C4-C3-S	2.08	121.90	119.14
6	E	605	WVX	C14-C7-S1	2.07	121.89	119.14
3	A	602	OXL	O2-C2-C1	-2.06	116.33	120.63
6	E	605	WVX	O4-S-C2	2.05	110.47	107.96

There are no chirality outliers.

All (89) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	601	FBP	O1-C1-C2-O5
2	B	601	FBP	C1-O1-P1-O2P
2	B	601	FBP	O1-C1-C2-O5
2	C	601	FBP	O1-C1-C2-C3
2	C	601	FBP	O1-C1-C2-O5
2	D	601	FBP	C1-O1-P1-O2P
2	D	601	FBP	C1-O1-P1-O3P
2	D	601	FBP	O1-C1-C2-O2
2	D	601	FBP	O1-C1-C2-C3
2	D	601	FBP	O1-C1-C2-O5
2	E	601	FBP	C1-O1-P1-O2P
2	E	601	FBP	O1-C1-C2-O5
2	F	601	FBP	O1-C1-C2-O5
2	G	601	FBP	C1-O1-P1-O3P
2	G	601	FBP	O1-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
2	G	601	FBP	O1-C1-C2-O5
2	H	601	FBP	C1-O1-P1-O2P
2	H	601	FBP	C1-O1-P1-O3P
2	H	601	FBP	O1-C1-C2-O2
2	H	601	FBP	O1-C1-C2-C3
2	H	601	FBP	O1-C1-C2-O5
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	G	601	FBP	C4-C5-C6-O6
2	H	601	FBP	C4-C5-C6-O6
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	601	FBP	O5-C5-C6-O6
2	H	601	FBP	O5-C5-C6-O6
2	B	601	FBP	C1-O1-P1-O1P
2	D	601	FBP	C1-O1-P1-O1P
2	E	601	FBP	C1-O1-P1-O1P
2	G	601	FBP	C1-O1-P1-O1P
6	A	605	WVX	C6-C7-S1-O3
6	E	605	WVX	C16-C3-S-O4
2	A	601	FBP	C1-O1-P1-O2P
2	B	601	FBP	C1-O1-P1-O3P
2	C	601	FBP	C1-O1-P1-O2P
2	C	601	FBP	C1-O1-P1-O3P
2	E	601	FBP	C1-O1-P1-O3P
2	F	601	FBP	C1-O1-P1-O2P
2	G	601	FBP	C1-O1-P1-O2P
3	G	602	OXL	O3-C1-C2-O4
3	A	602	OXL	O3-C1-C2-O4
3	B	602	OXL	O3-C1-C2-O4
3	D	602	OXL	O3-C1-C2-O4
3	E	602	OXL	O3-C1-C2-O4
3	H	602	OXL	O3-C1-C2-O4
3	A	602	OXL	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
3	B	602	OXL	O1-C1-C2-O2
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	G	602	OXL	O1-C1-C2-O2
3	H	602	OXL	O1-C1-C2-O2
3	C	602	OXL	O3-C1-C2-O4
2	B	601	FBP	O1-C1-C2-O2
2	C	601	FBP	O1-C1-C2-O2
2	F	601	FBP	O1-C1-C2-O2
2	G	601	FBP	O1-C1-C2-O2
2	A	601	FBP	C1-O1-P1-O1P
2	C	601	FBP	C1-O1-P1-O1P
2	F	601	FBP	C1-O1-P1-O1P
2	A	601	FBP	O1-C1-C2-C3
2	B	601	FBP	O1-C1-C2-C3
2	E	601	FBP	O1-C1-C2-C3
2	F	601	FBP	O1-C1-C2-C3
3	B	602	OXL	O1-C1-C2-O4
3	G	602	OXL	O3-C1-C2-O2
3	A	602	OXL	O1-C1-C2-O4
3	D	602	OXL	O1-C1-C2-O4
3	E	602	OXL	O3-C1-C2-O2
3	G	602	OXL	O1-C1-C2-O4
3	H	602	OXL	O3-C1-C2-O2
3	A	602	OXL	O3-C1-C2-O2
3	C	602	OXL	O1-C1-C2-O4
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	B	602	OXL	O3-C1-C2-O2
3	C	602	OXL	O3-C1-C2-O2

There are no ring outliers.

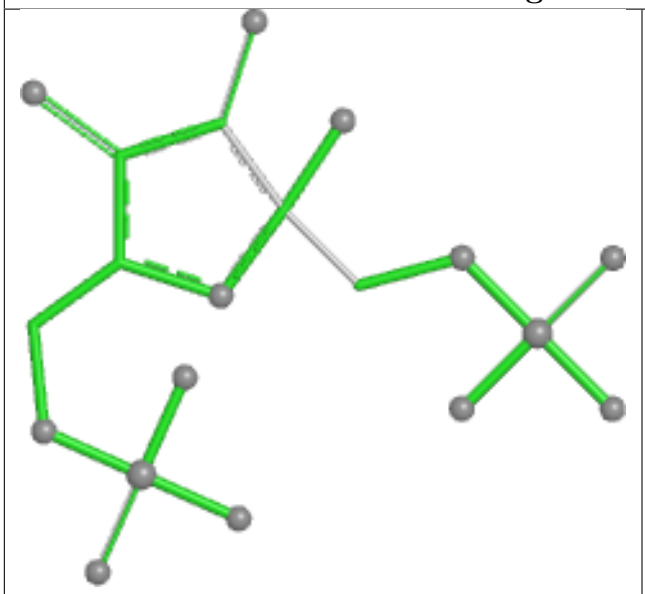
1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	601	FBP	1	0

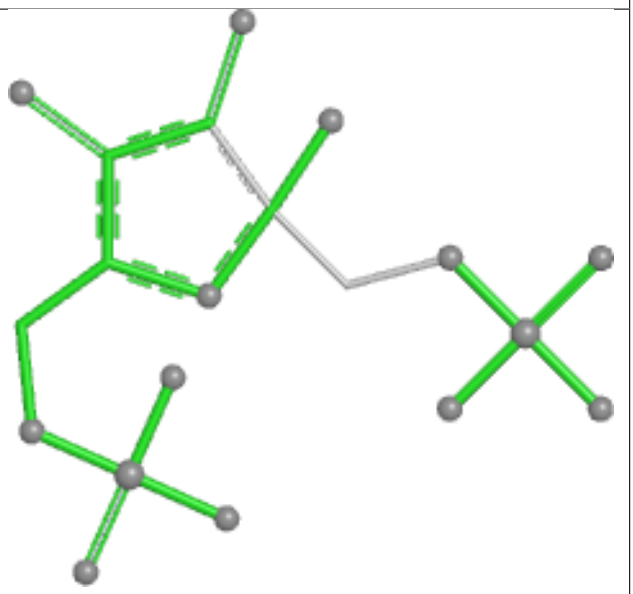
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will

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.

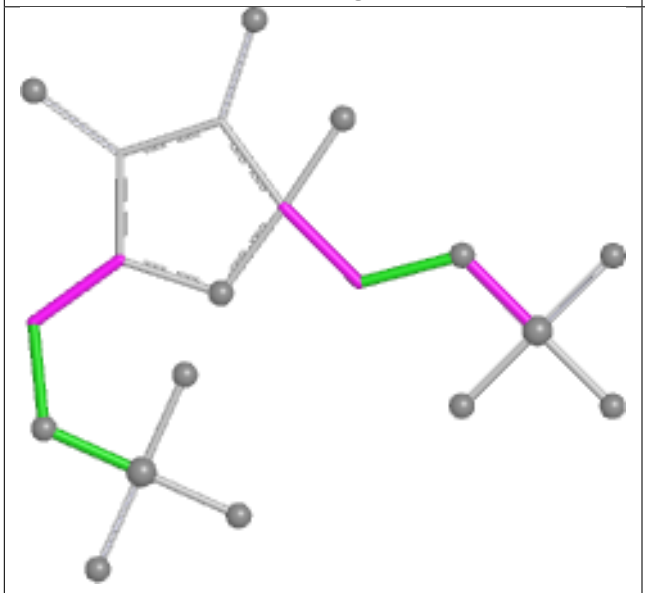
Ligand FBP A 601



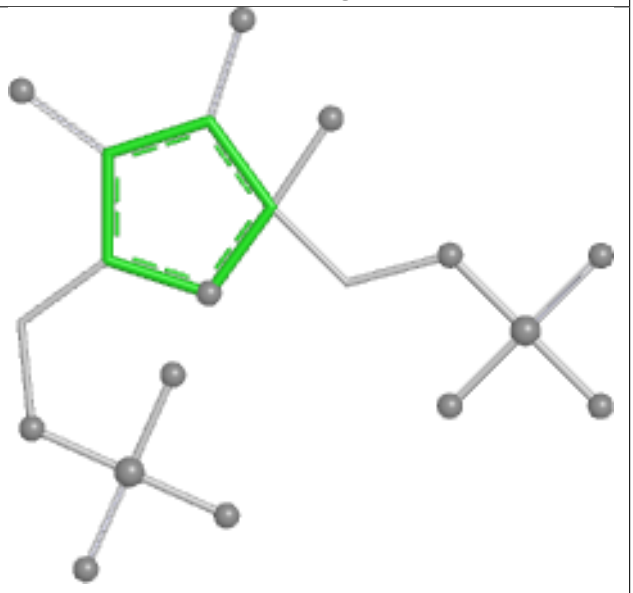
Bond lengths



Bond angles

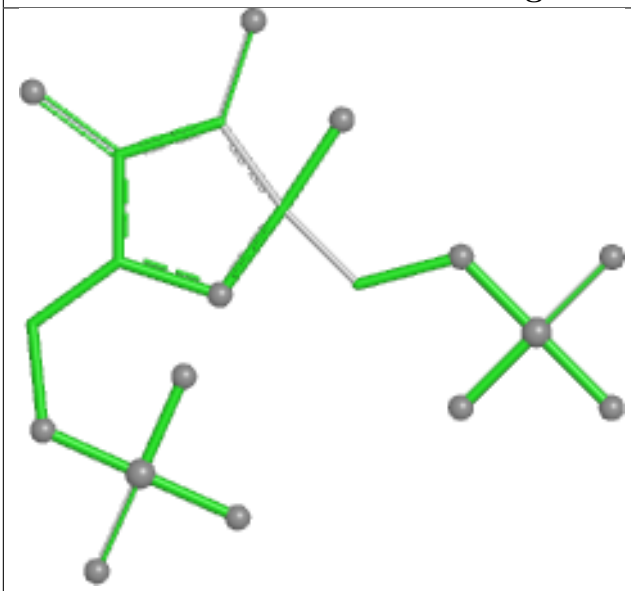


Torsions

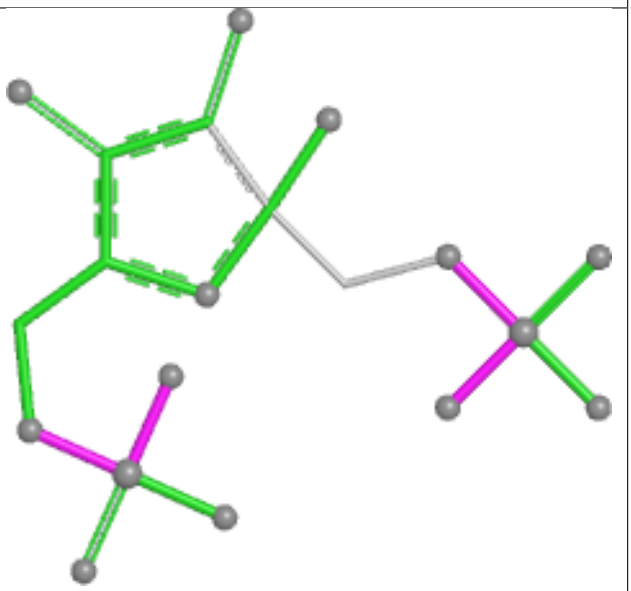


Rings

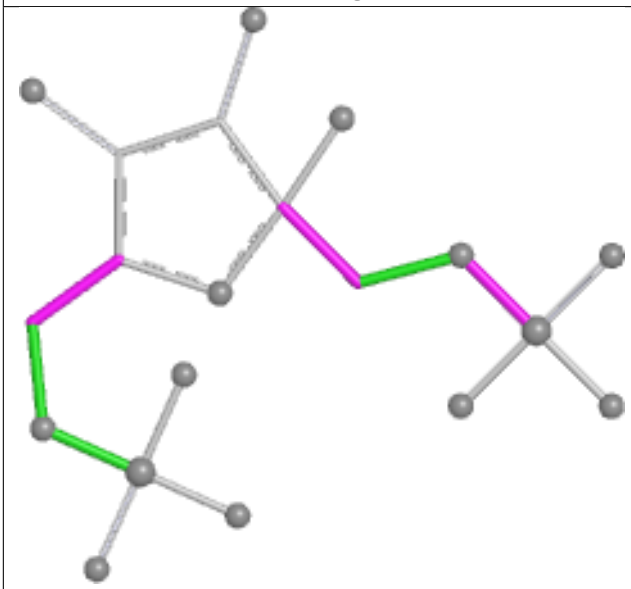
Ligand FBP C 601



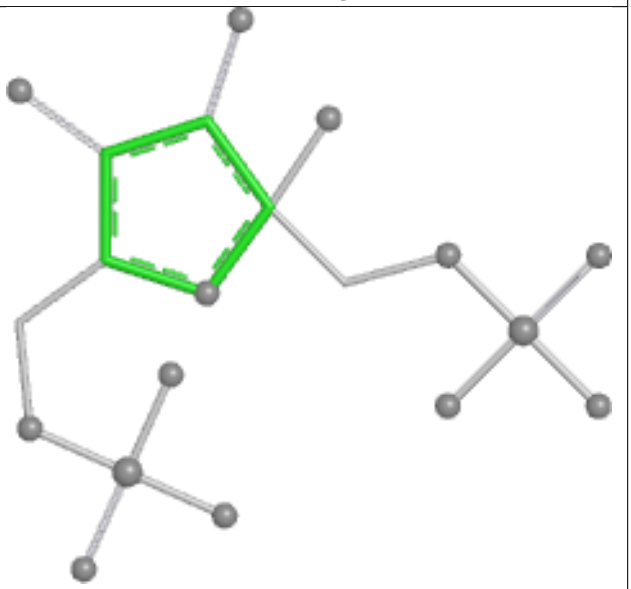
Bond lengths



Bond angles

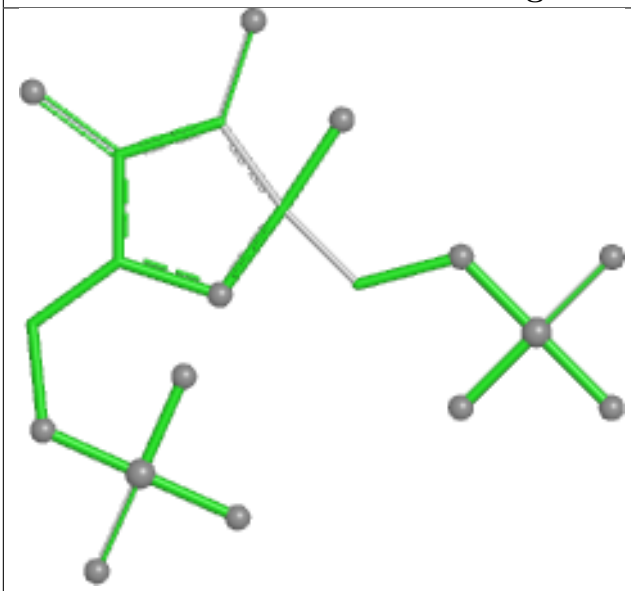


Torsions

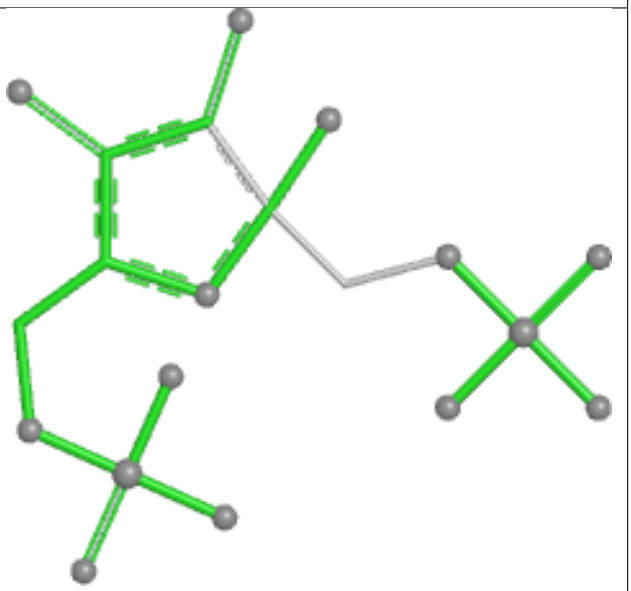


Rings

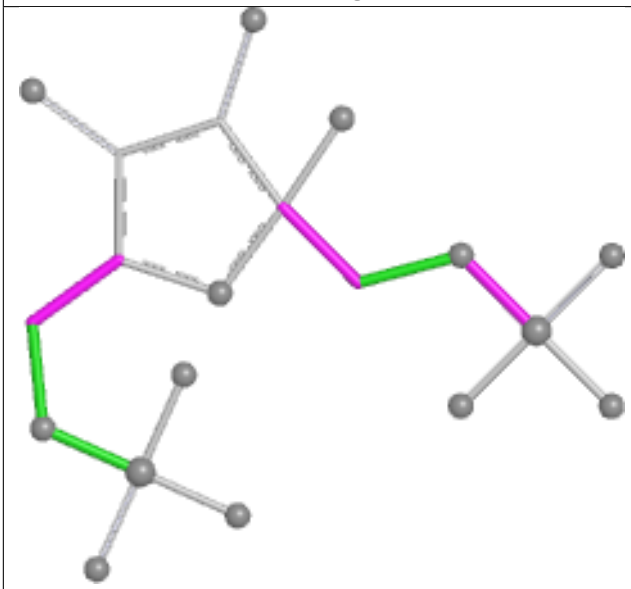
Ligand FBP E 601



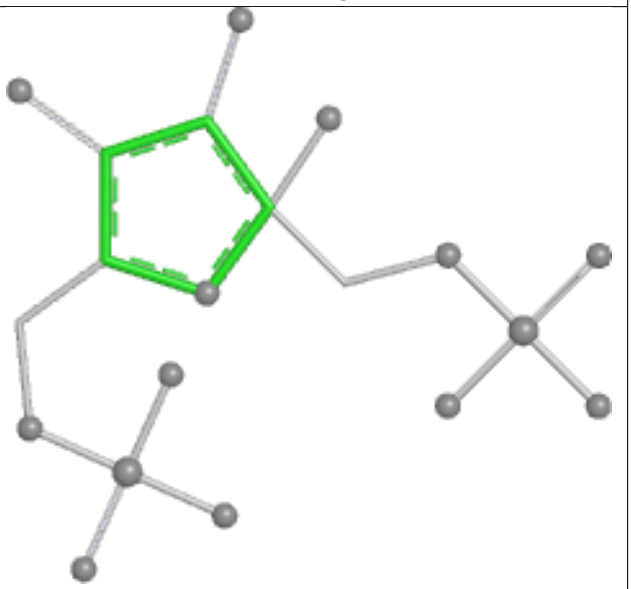
Bond lengths



Bond angles

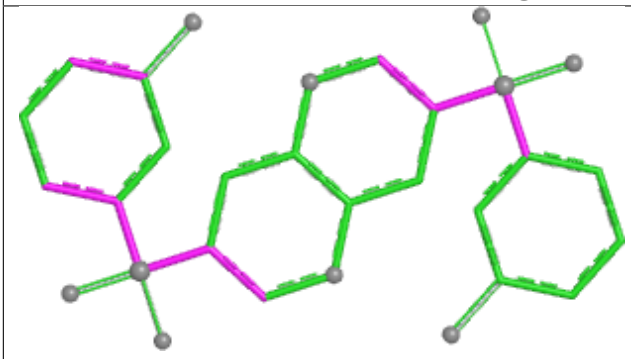


Torsions

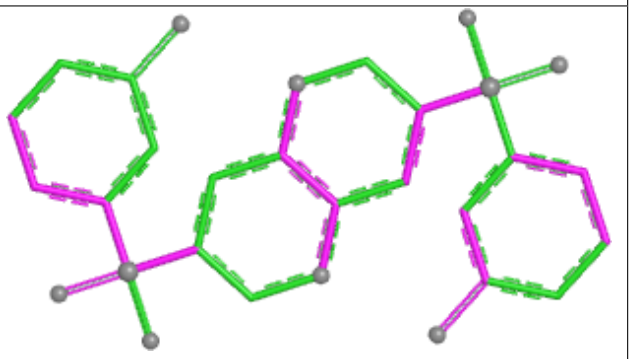


Rings

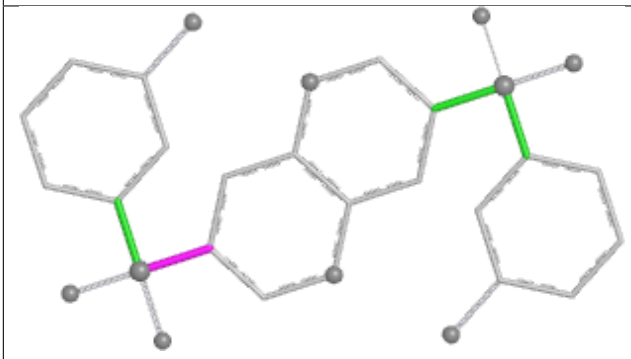
Ligand WVX A 605



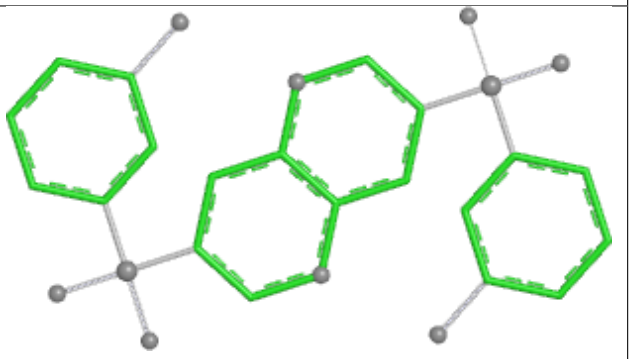
Bond lengths



Bond angles

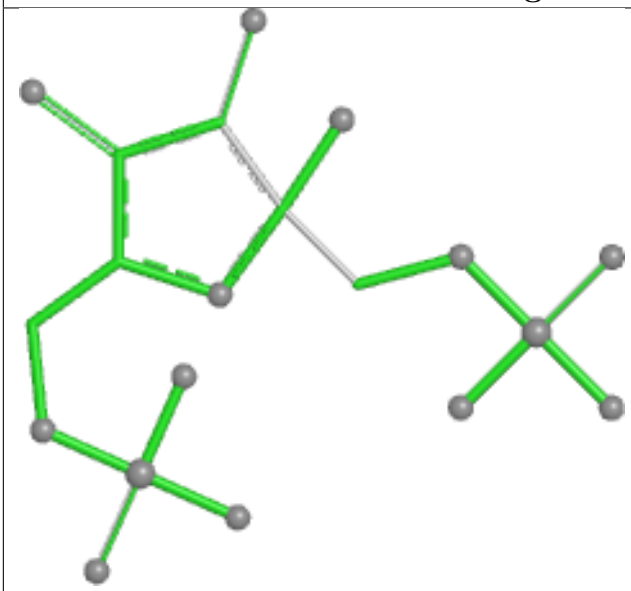


Torsions

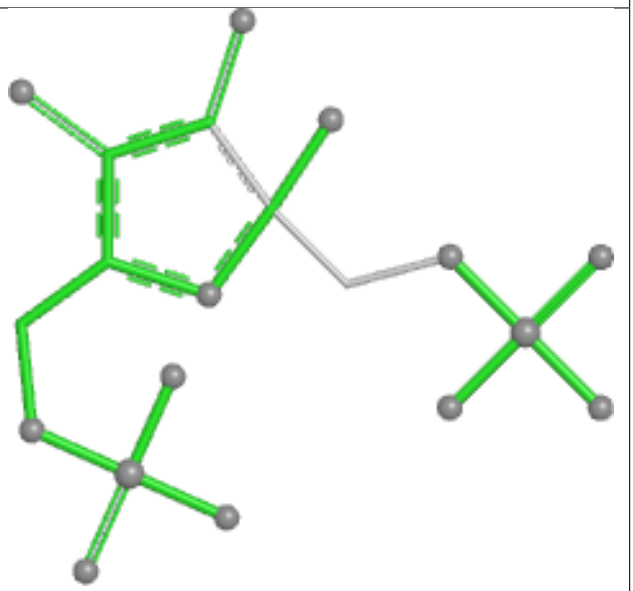


Rings

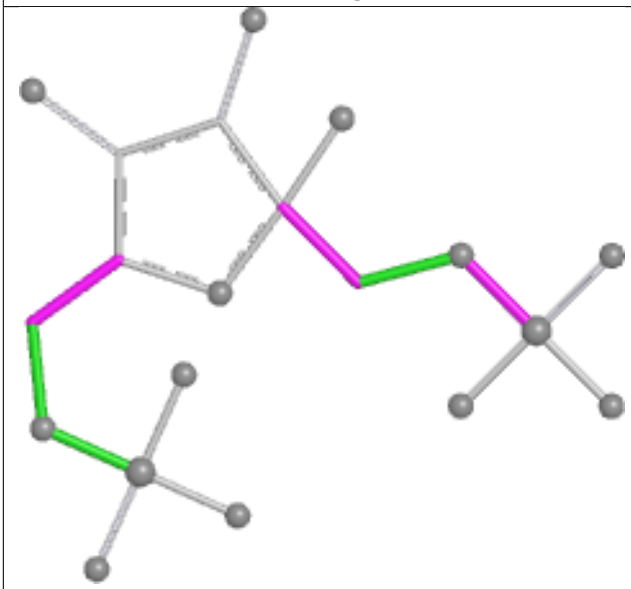
Ligand FBP H 601



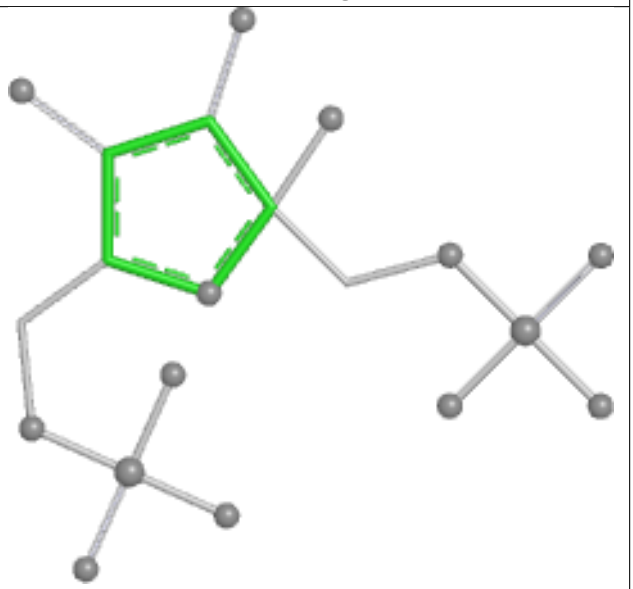
Bond lengths



Bond angles

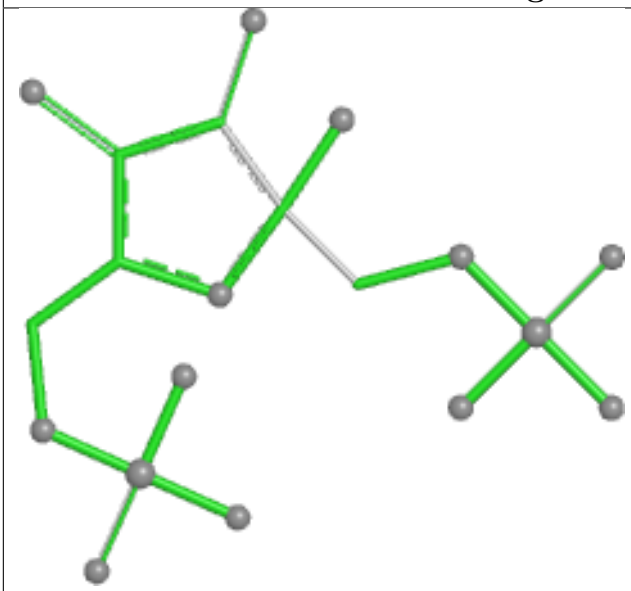


Torsions

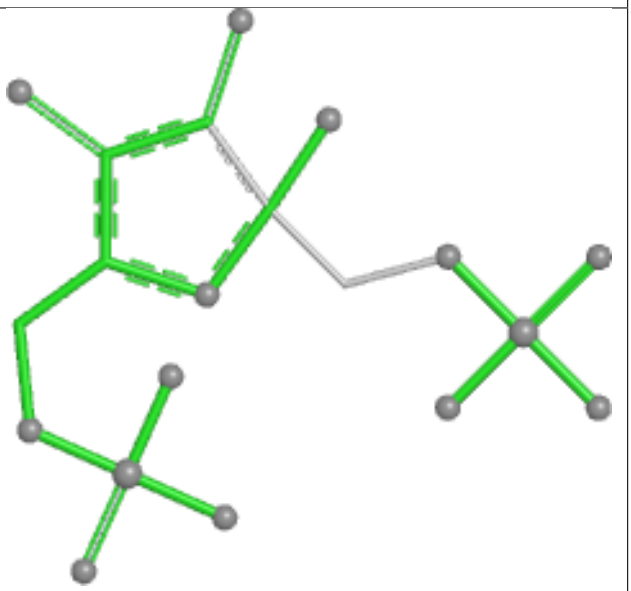


Rings

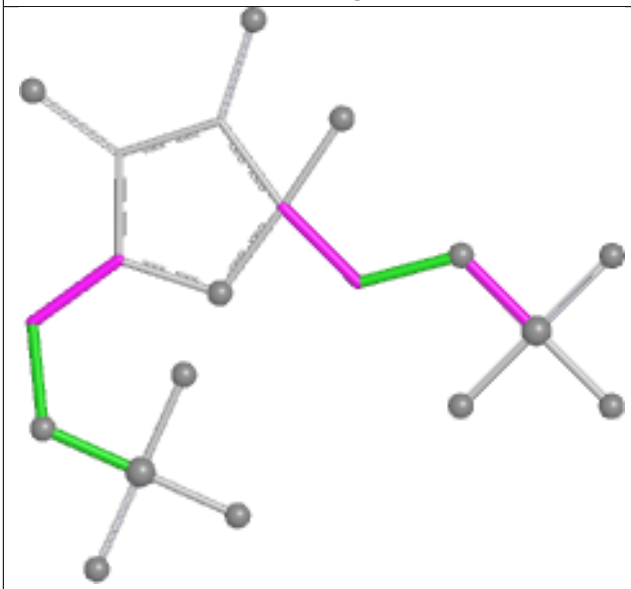
Ligand FBP F 601



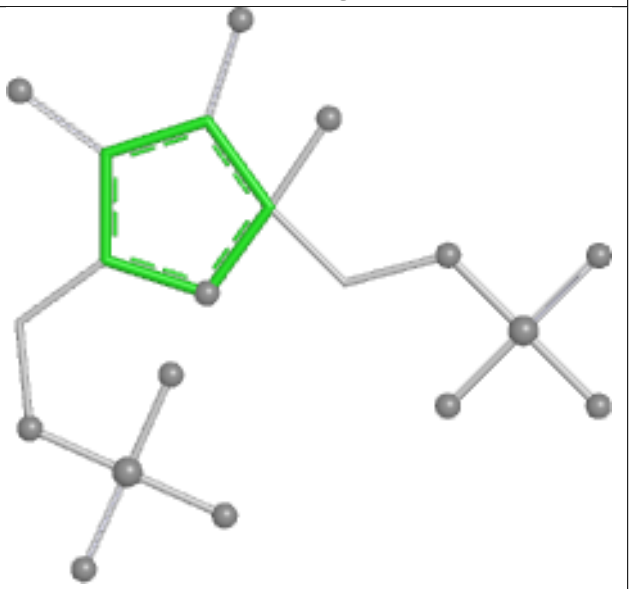
Bond lengths



Bond angles

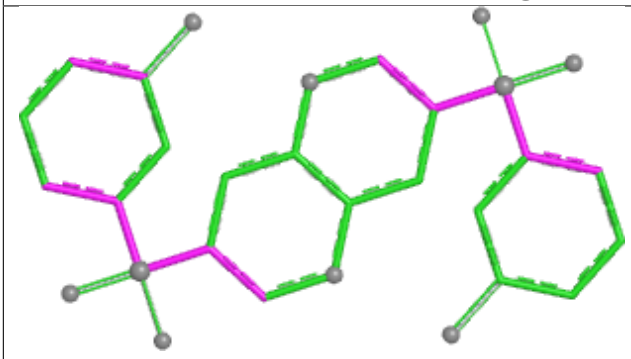


Torsions

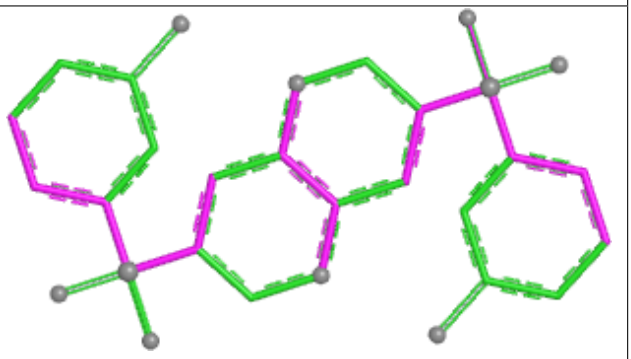


Rings

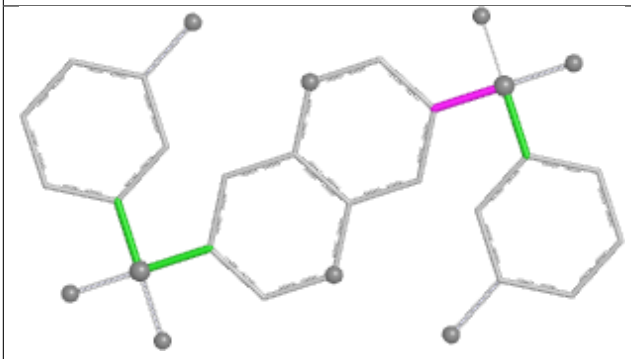
Ligand WVX E 605



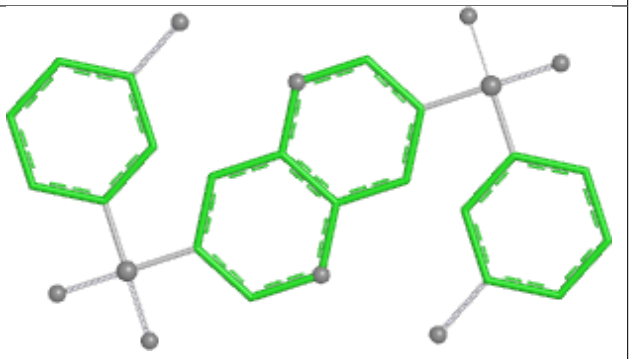
Bond lengths



Bond angles

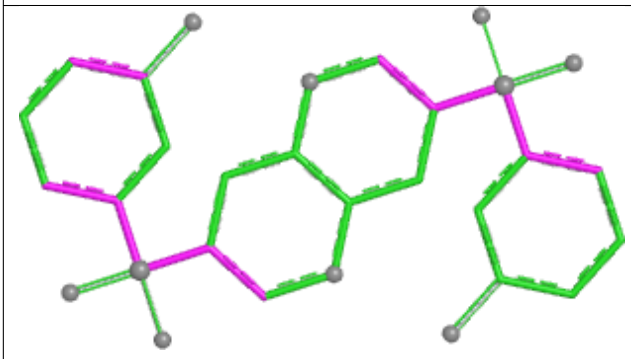


Torsions

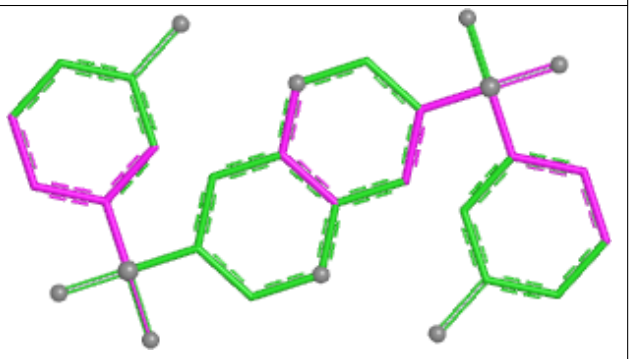


Rings

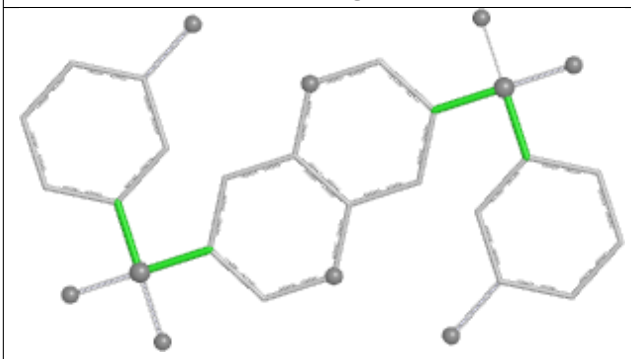
Ligand WVX F 605



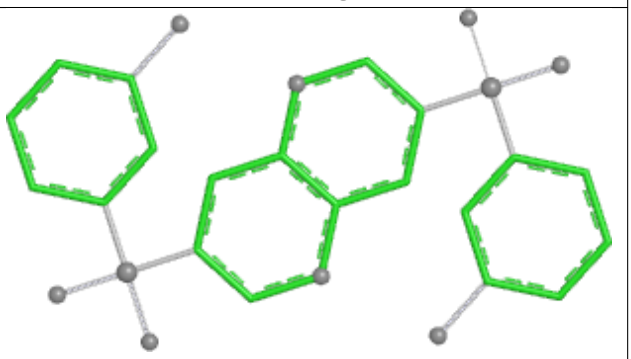
Bond lengths



Bond angles

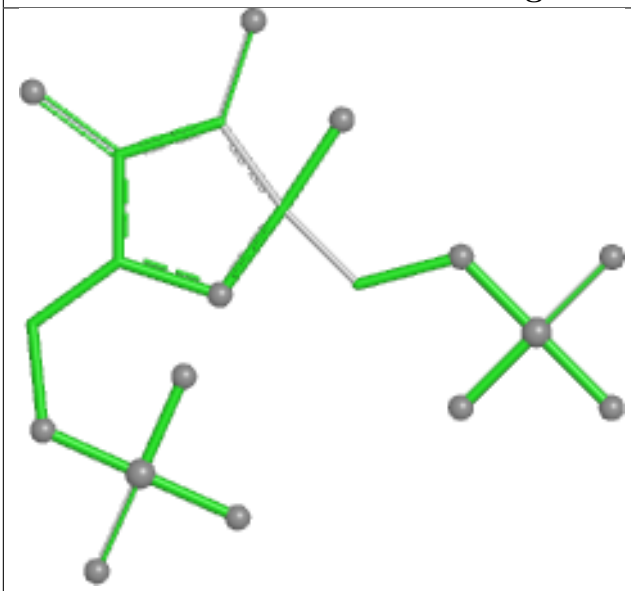


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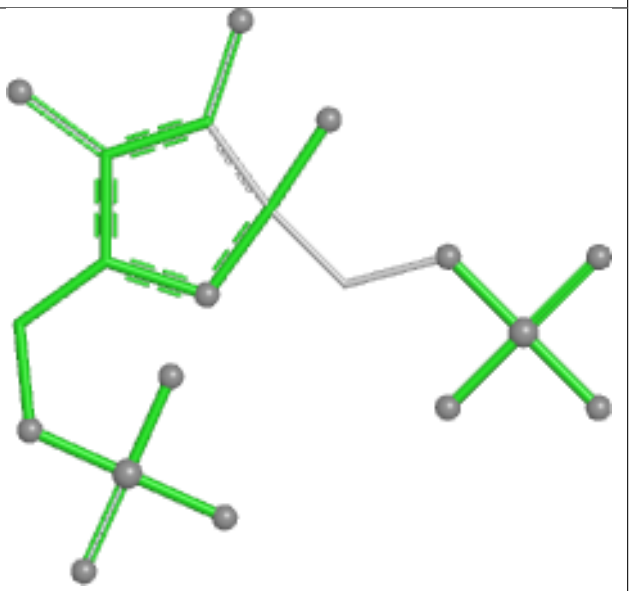


Rings

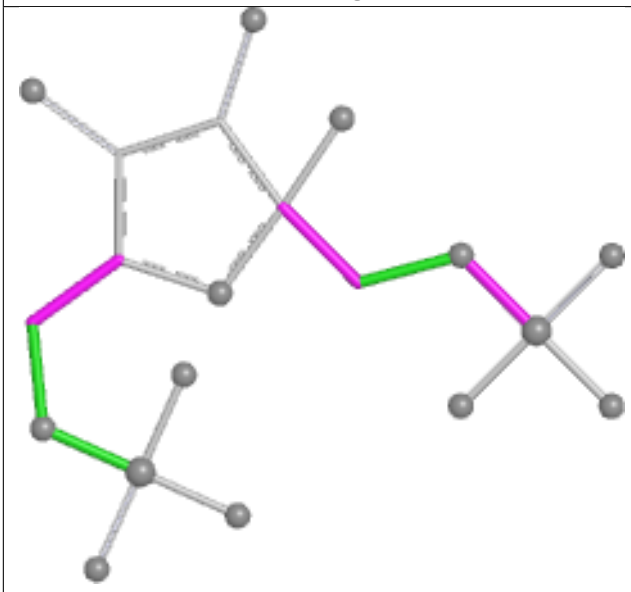
Ligand FBP B 601



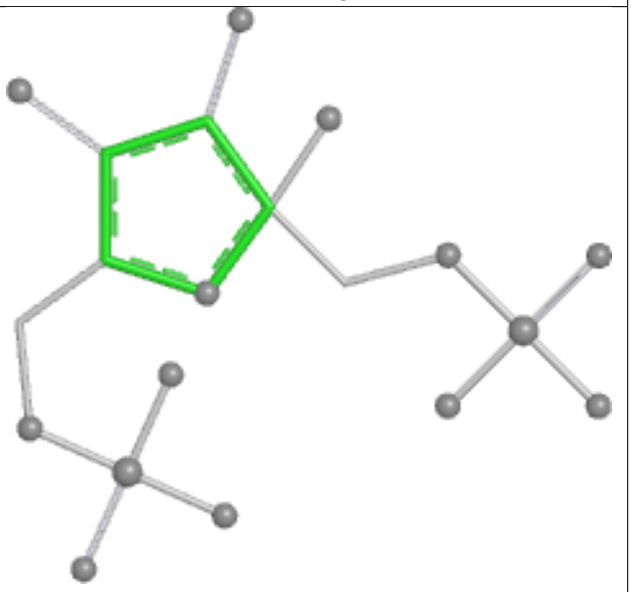
Bond lengths



Bond angles

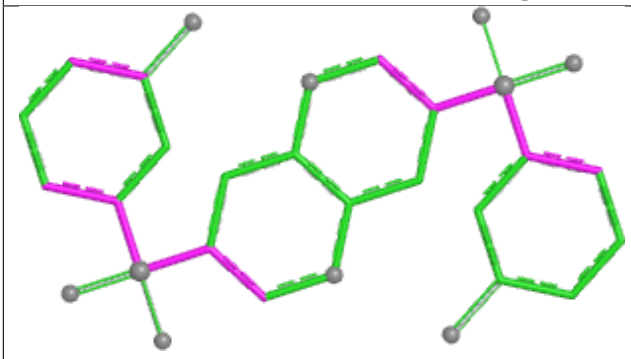


Torsions

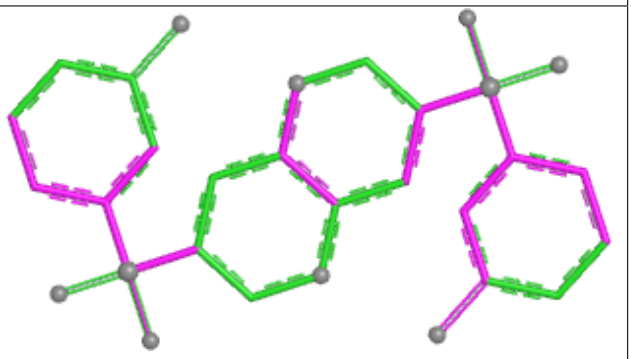


Rings

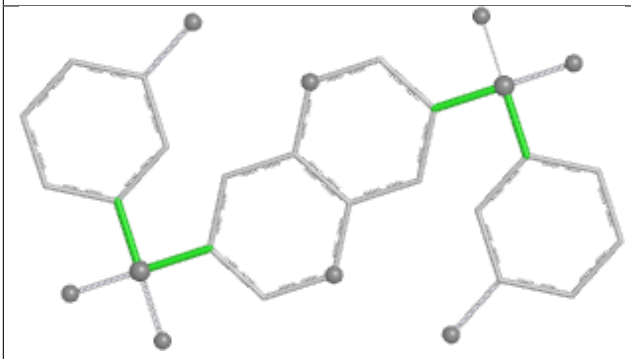
Ligand WVX B 605



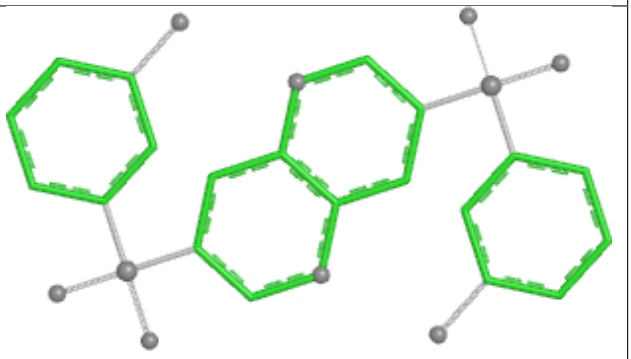
Bond lengths



Bond angles

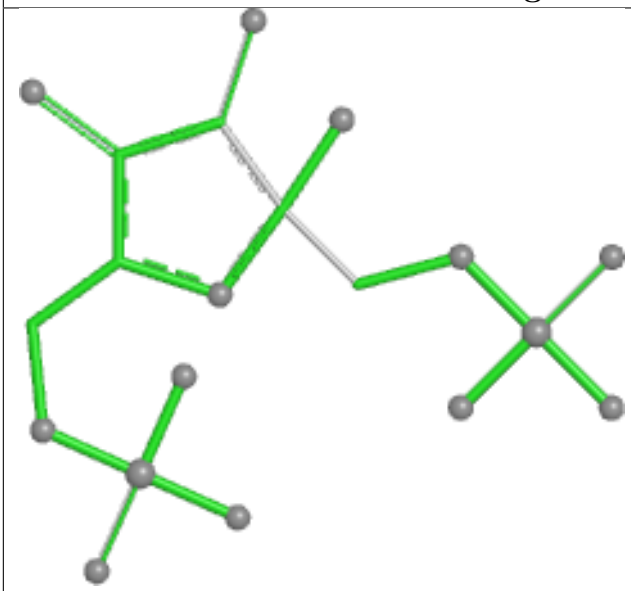


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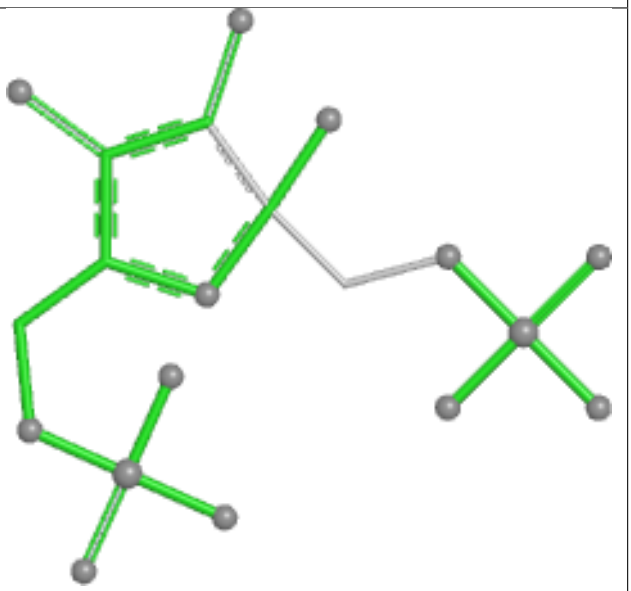


Rings

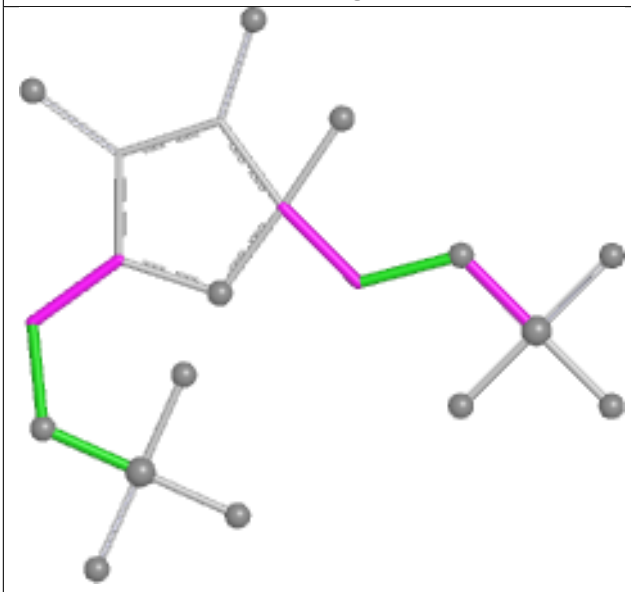
Ligand FBP G 601



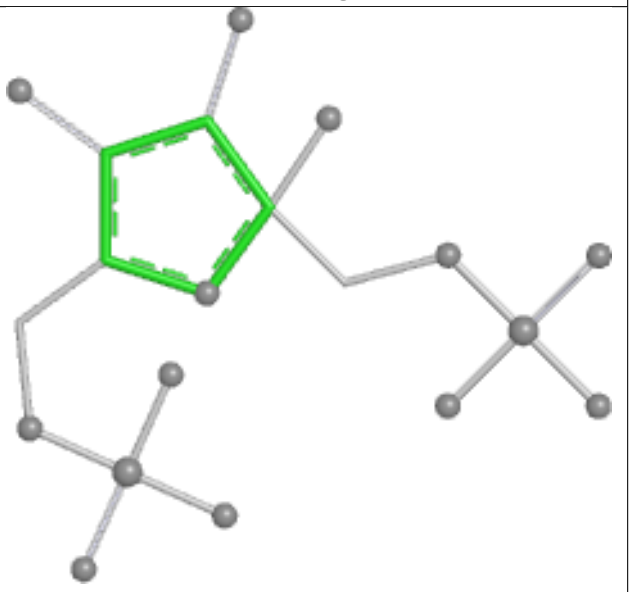
Bond lengths



Bond angles

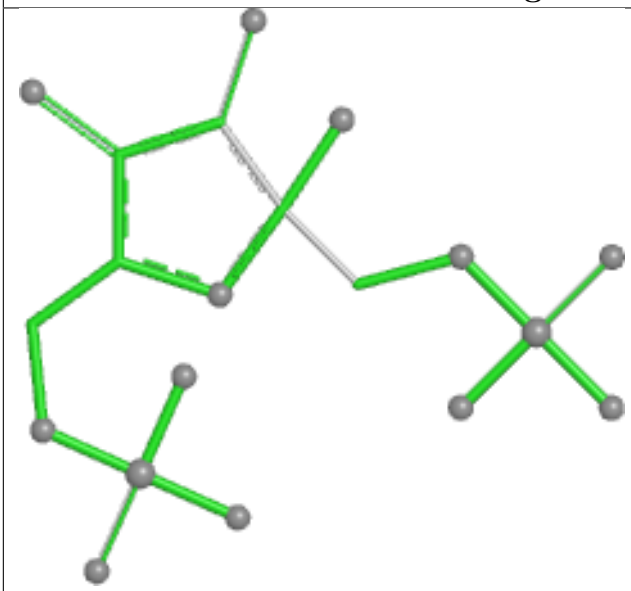


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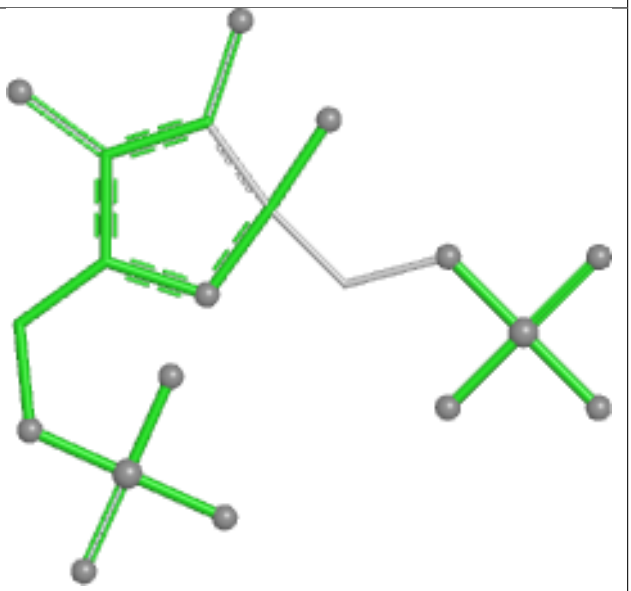


Rings

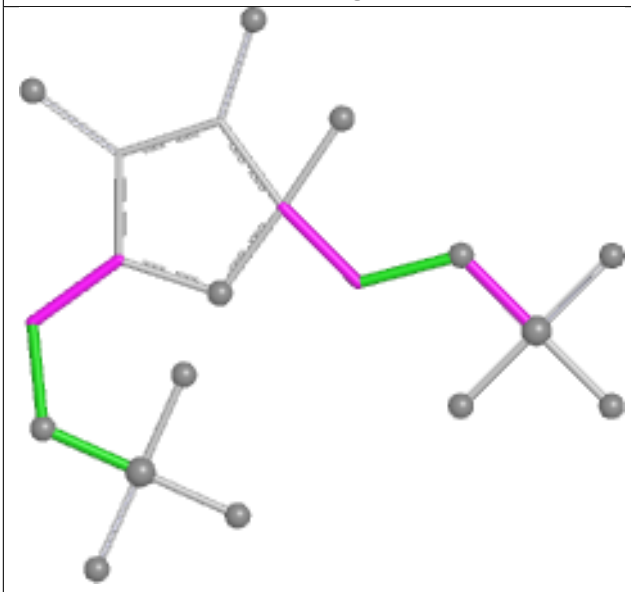
Ligand FBP D 601



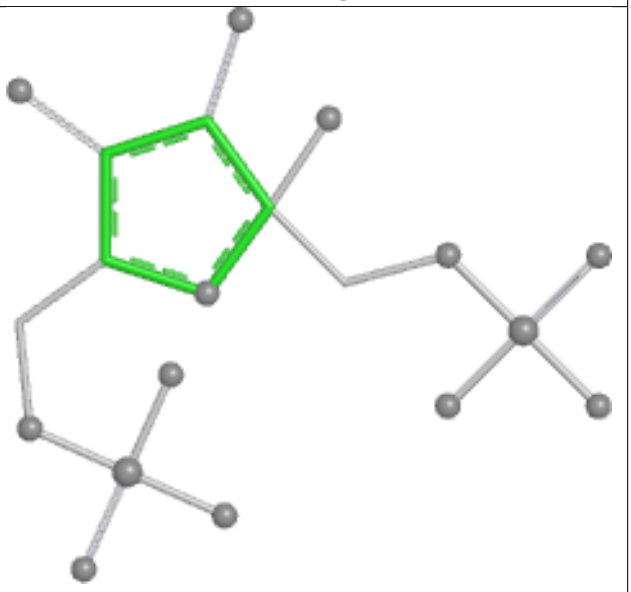
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

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	422/447 (94%)	2.61	285 (67%) 0 0	38, 83, 127, 141	6 (1%)
1	B	436/447 (97%)	1.23	88 (20%) 3 2	29, 52, 88, 104	4 (0%)
1	C	425/447 (95%)	1.87	166 (39%) 1 0	24, 63, 101, 114	4 (0%)
1	D	425/447 (95%)	0.78	40 (9%) 14 13	22, 41, 68, 100	6 (1%)
1	E	419/447 (93%)	2.61	278 (66%) 0 0	34, 83, 124, 141	5 (1%)
1	F	432/447 (96%)	1.24	94 (21%) 2 2	28, 52, 87, 99	7 (1%)
1	G	421/447 (94%)	1.90	164 (38%) 1 0	23, 62, 101, 113	7 (1%)
1	H	425/447 (95%)	0.78	39 (9%) 14 14	24, 41, 68, 101	4 (0%)
All	All	3405/3576 (95%)	1.62	1154 (33%) 1 0	22, 59, 112, 141	43 (1%)

All (1154) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	G	115	LEU	9.4
1	G	114	PRO	7.1
1	A	115	LEU	6.7
1	E	115	LEU	6.6
1	A	103	VAL	6.6
1	E	103	VAL	6.6
1	C	114	PRO	6.4
1	G	103	VAL	6.4
1	A	65	PRO	6.3
1	E	65	PRO	6.3
1	C	20	LEU	6.2
1	C	103	VAL	6.2
1	A	132	GLY	6.1
1	G	116	SER	6.1
1	A	243	LEU	6.0
1	E	243	LEU	6.0

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Mol	Chain	Res	Type	RSRZ
1	E	23	ALA	5.8
1	C	259	VAL	5.8
1	G	259	VAL	5.7
1	G	32	ALA	5.6
1	B	11	ALA	5.5
1	A	251	VAL	5.5
1	C	32	ALA	5.4
1	A	61	ALA	5.4
1	E	251	VAL	5.4
1	E	63	ILE	5.4
1	F	233	PRO	5.3
1	E	61	ALA	5.3
1	E	254	VAL	5.3
1	A	119	PRO	5.3
1	A	63	ILE	5.2
1	B	542[A]	LEU	5.2
1	F	542[A]	LEU	5.2
1	A	121	ALA	5.2
1	A	254	VAL	5.2
1	G	251	VAL	5.1
1	A	84	ALA	5.1
1	G	23	ALA	5.1
1	E	465	ILE	5.1
1	E	119	PRO	5.1
1	G	117	TYR	5.1
1	E	121	ALA	5.1
1	E	467	VAL	5.0
1	C	243	LEU	5.0
1	E	250	GLY	5.0
1	G	234	GLY	5.0
1	C	256	ALA	5.0
1	E	538	ILE	5.0
1	A	250	GLY	5.0
1	A	465	ILE	5.0
1	A	538	ILE	5.0
1	E	84	ALA	5.0
1	A	265	VAL	5.0
1	G	118	ARG	4.9
1	G	256	ALA	4.9
1	E	113	SER	4.9
1	E	265	VAL	4.9
1	G	120	VAL	4.9

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Mol	Chain	Res	Type	RSRZ
1	F	115	LEU	4.9
1	G	243	LEU	4.9
1	C	80	GLY	4.9
1	A	113	SER	4.9
1	A	467	VAL	4.9
1	D	24	PHE	4.9
1	C	120	VAL	4.9
1	A	388	ALA	4.8
1	G	119	PRO	4.8
1	E	345	LEU	4.8
1	G	272	LEU	4.8
1	C	234	GLY	4.8
1	A	123	ALA	4.8
1	B	522	LEU	4.8
1	E	388	ALA	4.8
1	E	129	PRO	4.8
1	C	119	PRO	4.7
1	A	234	GLY	4.7
1	E	83	ILE	4.7
1	E	285	ILE	4.7
1	A	114	PRO	4.7
1	A	345	LEU	4.7
1	F	522	LEU	4.7
1	F	523	VAL	4.7
1	E	123	ALA	4.7
1	C	272	LEU	4.7
1	E	117	TYR	4.7
1	C	251	VAL	4.6
1	C	386	VAL	4.6
1	A	285	ILE	4.6
1	H	24	PHE	4.6
1	B	523	VAL	4.6
1	A	83	ILE	4.6
1	E	399	ALA	4.6
1	G	107	VAL	4.6
1	G	386	VAL	4.6
1	G	345	LEU	4.6
1	E	114	PRO	4.5
1	G	80	GLY	4.5
1	A	122	ILE	4.5
1	E	282	ILE	4.5
1	C	345	LEU	4.5

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Mol	Chain	Res	Type	RSRZ
1	C	64	GLY	4.5
1	A	67	SER	4.5
1	E	315	ILE	4.5
1	G	59	ILE	4.5
1	E	545	SER	4.5
1	A	262	ALA	4.5
1	E	377	GLY	4.4
1	C	59	ILE	4.4
1	E	262	ALA	4.4
1	G	61	ALA	4.4
1	G	350	THR	4.4
1	G	64	GLY	4.4
1	A	258	PHE	4.4
1	A	399	ALA	4.4
1	A	462	ALA	4.4
1	E	122	ILE	4.4
1	E	240	VAL	4.4
1	E	375	LEU	4.4
1	C	274	PRO	4.3
1	A	282	ILE	4.3
1	A	375	LEU	4.3
1	C	61	ALA	4.3
1	A	489	ARG	4.3
1	G	274	PRO	4.3
1	A	60	ILE	4.3
1	E	247	VAL	4.3
1	E	287	ASN	4.3
1	A	111	ALA	4.3
1	E	67	SER	4.3
1	E	60	ILE	4.3
1	G	63	ILE	4.3
1	C	319	LYS	4.3
1	A	117	TYR	4.3
1	A	76[A]	MET	4.3
1	C	22	THR	4.3
1	E	462	ALA	4.3
1	C	352	PRO	4.2
1	E	81	MET	4.2
1	A	524	ILE	4.2
1	A	124	LEU	4.2
1	E	124	LEU	4.2
1	E	311	LEU	4.2

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Mol	Chain	Res	Type	RSRZ
1	A	118	ARG	4.2
1	A	128	GLY	4.2
1	G	319	LYS	4.2
1	E	444	VAL	4.2
1	E	355	THR	4.2
1	B	513	LEU	4.2
1	F	513	LEU	4.2
1	E	111	ALA	4.2
1	A	81	MET	4.2
1	E	76[A]	MET	4.2
1	C	129	PRO	4.2
1	G	129	PRO	4.2
1	A	377	GLY	4.2
1	C	63	ILE	4.2
1	A	355	THR	4.2
1	C	350	THR	4.2
1	A	240	VAL	4.2
1	C	107	VAL	4.2
1	A	235	LEU	4.2
1	E	235	LEU	4.2
1	A	53	ALA	4.2
1	A	66	ALA	4.2
1	E	53	ALA	4.2
1	B	130	GLY	4.1
1	E	524	ILE	4.1
1	G	122	ILE	4.1
1	E	359	THR	4.1
1	C	353	ARG	4.1
1	C	115	LEU	4.1
1	E	258	PHE	4.1
1	E	66	ALA	4.1
1	B	544	ILE	4.1
1	A	527	THR	4.1
1	E	479	LEU	4.1
1	E	54	ALA	4.1
1	A	359	THR	4.1
1	A	259	VAL	4.1
1	A	479	LEU	4.1
1	E	99	SER	4.1
1	E	118	ARG	4.1
1	E	77	ILE	4.1
1	F	519	VAL	4.1

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Mol	Chain	Res	Type	RSRZ
1	G	235	LEU	4.1
1	C	122	ILE	4.0
1	C	235	LEU	4.0
1	A	77	ILE	4.0
1	E	527	THR	4.0
1	A	120	VAL	4.0
1	A	444	VAL	4.0
1	A	516	PHE	4.0
1	A	54	ALA	4.0
1	A	287	ASN	4.0
1	C	276	GLY	4.0
1	G	276	GLY	4.0
1	C	116	SER	4.0
1	E	73	LEU	4.0
1	A	511	GLY	4.0
1	D	277[A]	HIS	4.0
1	G	255	PHE	3.9
1	F	497	ALA	3.9
1	G	76[A]	MET	3.9
1	C	100	ILE	3.9
1	B	519	VAL	3.9
1	E	107	VAL	3.9
1	C	255	PHE	3.9
1	E	110	PHE	3.9
1	G	110	PHE	3.9
1	E	541	VAL	3.9
1	A	255	PHE	3.9
1	E	516	PHE	3.9
1	D	21	GLY	3.9
1	A	315	ILE	3.9
1	E	259	VAL	3.9
1	A	484	PHE	3.9
1	A	494	ALA	3.9
1	E	482	GLY	3.9
1	G	100	ILE	3.9
1	A	445	LEU	3.9
1	E	445	LEU	3.9
1	B	527	THR	3.9
1	G	388	ALA	3.8
1	A	449	GLY	3.8
1	G	353	ARG	3.8
1	E	350	THR	3.8

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Mol	Chain	Res	Type	RSRZ
1	E	446	THR	3.8
1	G	126	THR	3.8
1	C	76[A]	MET	3.8
1	F	516	PHE	3.8
1	E	511	GLY	3.8
1	E	485	PRO	3.8
1	G	354	PRO	3.8
1	F	504	VAL	3.8
1	E	255	PHE	3.8
1	C	47	ILE	3.8
1	E	281	ILE	3.8
1	G	77	ILE	3.8
1	C	42	LEU	3.8
1	A	392	GLN	3.8
1	E	392	GLN	3.8
1	E	116	SER	3.8
1	A	477	VAL	3.8
1	E	477	VAL	3.8
1	C	388	ALA	3.8
1	E	449	GLY	3.8
1	H	21	GLY	3.8
1	A	281	ILE	3.8
1	A	311	LEU	3.8
1	E	398	GLU	3.8
1	G	348	MET	3.8
1	H	277[A]	HIS	3.7
1	E	266	ALA	3.7
1	E	128	GLY	3.7
1	A	73	LEU	3.7
1	B	115	LEU	3.7
1	C	77	ILE	3.7
1	E	75	GLU	3.7
1	G	42	LEU	3.7
1	E	468	THR	3.7
1	B	504	VAL	3.7
1	A	398	GLU	3.7
1	A	86	LEU	3.7
1	C	117	TYR	3.7
1	A	350	THR	3.7
1	A	446	THR	3.7
1	F	527	THR	3.7
1	A	266	ALA	3.7

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Mol	Chain	Res	Type	RSRZ
1	E	86	LEU	3.7
1	C	348	MET	3.7
1	E	257	SER	3.7
1	E	525	VAL	3.7
1	B	497	ALA	3.7
1	E	234	GLY	3.7
1	E	517	LEU	3.7
1	C	354	PRO	3.7
1	E	120	VAL	3.6
1	A	486	LEU	3.6
1	A	279	ILE	3.6
1	G	47	ILE	3.6
1	A	485	PRO	3.6
1	G	268	VAL	3.6
1	A	75	GLU	3.6
1	A	99	SER	3.6
1	B	516	PHE	3.6
1	A	87	ASN	3.6
1	A	107	VAL	3.6
1	A	306	VAL	3.6
1	A	257	SER	3.6
1	C	380	ALA	3.6
1	E	494	ALA	3.6
1	A	374	MET	3.6
1	E	297	ILE	3.6
1	E	495	ILE	3.6
1	F	541	VAL	3.6
1	G	339	VAL	3.6
1	C	58	SER	3.6
1	C	23	ALA	3.6
1	C	317	ALA	3.6
1	E	489	ARG	3.6
1	E	80	GLY	3.6
1	E	486	LEU	3.6
1	E	513	LEU	3.6
1	A	110	PHE	3.6
1	A	495	ILE	3.6
1	E	328	ILE	3.6
1	E	352	PRO	3.6
1	E	442	ILE	3.6
1	G	93	HIS	3.5
1	F	94	GLU	3.5

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Mol	Chain	Res	Type	RSRZ
1	A	483	VAL	3.5
1	B	500	VAL	3.5
1	C	126	THR	3.5
1	C	324	GLN	3.5
1	E	497	ALA	3.5
1	G	121	ALA	3.5
1	A	352	PRO	3.5
1	E	100	ILE	3.5
1	E	484	PHE	3.5
1	G	25	PHE	3.5
1	A	500	VAL	3.5
1	C	339	VAL	3.5
1	H	306	VAL	3.5
1	A	116	SER	3.5
1	E	79	ALA	3.5
1	F	39	LEU	3.5
1	G	113	SER	3.5
1	A	482	GLY	3.5
1	G	66	ALA	3.5
1	H	23	ALA	3.5
1	G	352	PRO	3.5
1	H	25	PHE	3.5
1	A	525	VAL	3.5
1	E	374	MET	3.5
1	E	483	VAL	3.5
1	F	500	VAL	3.5
1	A	517	LEU	3.5
1	D	130	GLY	3.5
1	A	100	ILE	3.5
1	A	328	ILE	3.5
1	E	25	PHE	3.5
1	E	87	ASN	3.5
1	C	268	VAL	3.5
1	G	324	GLN	3.5
1	B	533	SER	3.5
1	G	317	ALA	3.5
1	E	279	ILE	3.5
1	D	25	PHE	3.5
1	G	461	ARG	3.4
1	A	541	VAL	3.4
1	D	306	VAL	3.4
1	E	500	VAL	3.4

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Mol	Chain	Res	Type	RSRZ
1	B	39	LEU	3.4
1	B	517	LEU	3.4
1	A	130	GLY	3.4
1	A	297	ILE	3.4
1	B	131	SER	3.4
1	G	380	ALA	3.4
1	G	279	ILE	3.4
1	G	88	PHE	3.4
1	A	468	THR	3.4
1	E	306	VAL	3.4
1	E	504	VAL	3.4
1	A	298	LEU	3.4
1	A	492	PRO	3.4
1	A	80	GLY	3.4
1	A	79	ALA	3.4
1	A	474	ALA	3.4
1	F	11	ALA	3.4
1	A	442	ILE	3.4
1	G	98[A]	GLU	3.4
1	E	291	VAL	3.4
1	C	65	PRO	3.4
1	E	492	PRO	3.4
1	F	112	GLY	3.4
1	A	253	ILE	3.4
1	A	473	ALA	3.4
1	E	253	ILE	3.4
1	C	28	GLN	3.4
1	B	541	VAL	3.4
1	F	517	LEU	3.4
1	A	354	PRO	3.4
1	H	130	GLY	3.4
1	A	395	ILE	3.4
1	C	93	HIS	3.4
1	B	10	ARG	3.4
1	F	461	ARG	3.4
1	A	504	VAL	3.3
1	E	354	PRO	3.3
1	A	514	ARG	3.3
1	C	118	ARG	3.3
1	G	67	SER	3.3
1	A	268	VAL	3.3
1	E	523	VAL	3.3

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Mol	Chain	Res	Type	RSRZ
1	F	528	GLY	3.3
1	A	59	ILE	3.3
1	C	315	ILE	3.3
1	G	315	ILE	3.3
1	B	12	ASP	3.3
1	G	95	TYR	3.3
1	A	52	VAL	3.3
1	E	519	VAL	3.3
1	E	496	TRP	3.3
1	A	23	ALA	3.3
1	C	271	ALA	3.3
1	E	370	ALA	3.3
1	G	58	SER	3.3
1	E	514	ARG	3.3
1	C	247	VAL	3.3
1	E	52	VAL	3.3
1	E	268	VAL	3.3
1	E	277	HIS	3.3
1	E	378	GLU	3.3
1	C	21	GLY	3.3
1	E	528	GLY	3.3
1	A	370	ALA	3.3
1	C	79	ALA	3.3
1	C	67	SER	3.2
1	C	88	PHE	3.2
1	A	488	TYR	3.2
1	A	491	PRO	3.2
1	E	298	LEU	3.2
1	A	528	GLY	3.2
1	E	395	ILE	3.2
1	C	66	ALA	3.2
1	E	473	ALA	3.2
1	A	56	SER	3.2
1	C	245	PHE	3.2
1	E	56	SER	3.2
1	G	245	PHE	3.2
1	G	384	PHE	3.2
1	D	542	LEU	3.2
1	E	274	PRO	3.2
1	E	408	LEU	3.2
1	A	277	HIS	3.2
1	A	378	GLU	3.2

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Mol	Chain	Res	Type	RSRZ
1	A	490[A]	GLU	3.2
1	C	98	GLU	3.2
1	E	464	VAL	3.2
1	G	320	VAL	3.2
1	G	351	LYS	3.2
1	B	528	GLY	3.2
1	E	59	ILE	3.2
1	A	496	TRP	3.2
1	A	25	PHE	3.2
1	A	131	SER	3.2
1	C	110	PHE	3.2
1	A	252	ASP	3.2
1	C	368	ASP	3.2
1	A	408	LEU	3.2
1	A	513	LEU	3.2
1	E	491	PRO	3.2
1	H	115	LEU	3.2
1	E	488	TYR	3.2
1	A	497	ALA	3.2
1	F	111	ALA	3.2
1	A	453	GLN	3.2
1	A	283	SER	3.2
1	C	24	PHE	3.2
1	E	283	SER	3.2
1	A	368	ASP	3.2
1	A	71	GLU	3.2
1	A	460	PRO	3.2
1	C	279	ILE	3.2
1	E	304	ILE	3.2
1	C	123	ALA	3.1
1	G	123	ALA	3.1
1	G	341	ALA	3.1
1	E	104	ARG	3.1
1	H	269[A]	ARG	3.1
1	A	272	LEU	3.1
1	E	102	ASN	3.1
1	B	13	VAL	3.1
1	C	95	TYR	3.1
1	A	245	PHE	3.1
1	C	393	HIS	3.1
1	A	57	THR	3.1
1	A	304	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
1	G	65	PRO	3.1
1	E	252	ASP	3.1
1	E	368	ASP	3.1
1	G	368	ASP	3.1
1	F	534	GLY	3.1
1	C	121	ALA	3.1
1	D	491	PRO	3.1
1	D	115	LEU	3.1
1	E	409	PHE	3.1
1	E	487	LEU	3.1
1	G	321	PHE	3.1
1	C	236	SER	3.1
1	A	104	ARG	3.1
1	B	534	GLY	3.1
1	C	320	VAL	3.1
1	H	251	VAL	3.1
1	C	351	LYS	3.0
1	G	392	GLN	3.0
1	C	341	ALA	3.0
1	E	256	ALA	3.0
1	E	474	ALA	3.0
1	F	95	TYR	3.0
1	E	275	GLU	3.0
1	E	460	PRO	3.0
1	C	321	PHE	3.0
1	C	384	PHE	3.0
1	E	272	LEU	3.0
1	E	78	LYS	3.0
1	A	291	VAL	3.0
1	A	519	VAL	3.0
1	E	453	GLN	3.0
1	C	307	ALA	3.0
1	G	111	ALA	3.0
1	C	237	GLU	3.0
1	C	509	GLU	3.0
1	G	94	GLU	3.0
1	A	274	PRO	3.0
1	E	245	PHE	3.0
1	B	118	ARG	3.0
1	E	443	ILE	3.0
1	F	496	TRP	3.0
1	G	247	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
1	E	57	THR	3.0
1	H	106	ALA	3.0
1	G	233	PRO	3.0
1	F	12	ASP	3.0
1	C	69	SER	3.0
1	A	523	VAL	3.0
1	B	496	TRP	3.0
1	D	106	ALA	3.0
1	F	66	ALA	3.0
1	G	307	ALA	3.0
1	C	233	PRO	3.0
1	A	280	LYS	3.0
1	E	280	LYS	3.0
1	E	480	CYS	3.0
1	G	347	SER	3.0
1	E	246	GLY	3.0
1	E	278	GLY	3.0
1	A	443	ILE	2.9
1	A	526	VAL	2.9
1	G	71	GLU	2.9
1	A	379	THR	2.9
1	G	79	ALA	2.9
1	A	129	PRO	2.9
1	E	95	TYR	2.9
1	C	347	SER	2.9
1	F	545	SER	2.9
1	E	383	ASN	2.9
1	E	305	MET	2.9
1	A	247	VAL	2.9
1	A	464	VAL	2.9
1	G	105	GLU	2.9
1	E	379	THR	2.9
1	E	529	TRP	2.9
1	E	384	PHE	2.9
1	A	26	GLN	2.9
1	A	29	GLN	2.9
1	C	392	GLN	2.9
1	H	26	GLN	2.9
1	F	524	ILE	2.9
1	A	97	ALA	2.9
1	A	256	ALA	2.9
1	D	23	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
1	E	267	ALA	2.9
1	H	542	LEU	2.9
1	B	458	TYR	2.9
1	F	458	TYR	2.9
1	H	506	PHE	2.9
1	C	71	GLU	2.9
1	A	428	ILE	2.9
1	E	461	ARG	2.9
1	A	487	LEU	2.9
1	E	498	ASP	2.9
1	A	305	MET	2.9
1	A	384	PHE	2.9
1	B	112	GLY	2.9
1	A	510	SER	2.8
1	F	116	SER	2.8
1	E	288	HIS	2.8
1	E	271	ALA	2.8
1	G	73	LEU	2.8
1	G	28	GLN	2.8
1	B	95	TYR	2.8
1	B	512	LYS	2.8
1	F	512	LYS	2.8
1	G	83	ILE	2.8
1	G	236	SER	2.8
1	G	393	HIS	2.8
1	B	526	VAL	2.8
1	D	251	VAL	2.8
1	A	267	ALA	2.8
1	A	480	CYS	2.8
1	F	452	ALA	2.8
1	A	498	ASP	2.8
1	E	318	GLU	2.8
1	A	85	ARG	2.8
1	A	308	ARG	2.8
1	D	506	PHE	2.8
1	A	95	TYR	2.8
1	A	246	GLY	2.8
1	B	495	ILE	2.8
1	E	526	VAL	2.8
1	H	491	PRO	2.8
1	B	452	ALA	2.8
1	E	97	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
1	F	418	LEU	2.8
1	A	78	LYS	2.8
1	A	409	PHE	2.8
1	B	506	PHE	2.8
1	C	312	GLY	2.8
1	C	60	ILE	2.8
1	E	428	ILE	2.8
1	G	60	ILE	2.8
1	E	510	SER	2.8
1	A	454	LEU	2.8
1	C	396	ALA	2.8
1	E	454	LEU	2.8
1	G	106	ALA	2.8
1	C	105	GLU	2.8
1	E	29	GLN	2.8
1	E	308	ARG	2.8
1	A	288	HIS	2.8
1	E	369	GLY	2.7
1	F	506	PHE	2.8
1	G	312	GLY	2.7
1	A	470	SER	2.7
1	C	306	VAL	2.7
1	F	525	VAL	2.7
1	F	526	VAL	2.7
1	A	271	ALA	2.7
1	C	106	ALA	2.7
1	G	271	ALA	2.7
1	C	325	LYS	2.7
1	A	290	GLY	2.7
1	G	24	PHE	2.7
1	E	349	ILE	2.7
1	A	383	ASN	2.7
1	E	51	PRO	2.7
1	E	376	SER	2.7
1	F	488	TYR	2.7
1	G	254	VAL	2.7
1	E	348	MET	2.7
1	A	72	ARG	2.7
1	E	346	GLU	2.7
1	E	290	GLY	2.7
1	F	110	PHE	2.7
1	G	250	GLY	2.7

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Mol	Chain	Res	Type	RSRZ
1	C	83	ILE	2.7
1	G	253	ILE	2.7
1	A	51	PRO	2.7
1	F	491	PRO	2.7
1	A	543	SER	2.7
1	D	510	SER	2.7
1	E	236	SER	2.7
1	F	109	SER	2.7
1	A	529	TRP	2.7
1	B	418	LEU	2.7
1	E	85	ARG	2.7
1	E	481	ARG	2.7
1	H	518	ARG	2.7
1	B	94	GLU	2.7
1	A	276	GLY	2.7
1	A	369	GLY	2.7
1	E	276	GLY	2.7
1	A	294	PHE	2.7
1	A	385	PRO	2.7
1	A	544	ILE	2.7
1	B	524	ILE	2.7
1	C	25	PHE	2.7
1	E	321	PHE	2.7
1	F	492	PRO	2.7
1	F	495	ILE	2.7
1	G	258	PHE	2.7
1	C	81	MET	2.7
1	C	254	VAL	2.7
1	E	470	SER	2.7
1	G	69	SER	2.7
1	H	265	VAL	2.7
1	H	510	SER	2.7
1	A	318	GLU	2.7
1	C	97	ALA	2.7
1	C	415	ALA	2.7
1	E	242	ASP	2.6
1	D	110	PHE	2.6
1	F	381	LYS	2.6
1	F	118	ARG	2.6
1	G	81	MET	2.6
1	A	439	ALA	2.6
1	B	494	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
1	D	26	GLN	2.6
1	C	239	ASP	2.6
1	G	125	ASP	2.6
1	G	280	LYS	2.6
1	G	325	LYS	2.6
1	D	233	PRO	2.6
1	G	385	PRO	2.6
1	A	481	ARG	2.6
1	G	244	ARG	2.6
1	H	461	ARG	2.6
1	A	105	GLU	2.6
1	C	70	VAL	2.6
1	E	70	VAL	2.6
1	A	347	SER	2.6
1	A	376	SER	2.6
1	B	109	SER	2.6
1	G	396	ALA	2.6
1	E	96	HIS	2.6
1	F	351	LYS	2.6
1	A	242	ASP	2.6
1	B	492	PRO	2.6
1	A	539[A]	MET	2.6
1	C	349	ILE	2.6
1	E	294	PHE	2.6
1	A	346	GLU	2.6
1	C	94	GLU	2.6
1	G	306	VAL	2.6
1	A	236	SER	2.6
1	D	109	SER	2.6
1	E	92	SER	2.6
1	E	109	SER	2.6
1	E	347	SER	2.6
1	A	342	THR	2.6
1	E	393	HIS	2.6
1	C	280	LYS	2.6
1	B	540	ARG	2.6
1	C	382	GLY	2.6
1	E	356	ARG	2.6
1	G	414	ARG	2.6
1	A	349	ILE	2.6
1	C	258	PHE	2.6
1	C	73	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
1	G	237	GLU	2.6
1	D	22	THR	2.6
1	E	106	ALA	2.6
1	E	478	HIS	2.6
1	F	494	ALA	2.6
1	H	462	ALA	2.6
1	C	381	LYS	2.6
1	E	319	LYS	2.6
1	B	488	TYR	2.6
1	C	72	ARG	2.5
1	A	303	GLY	2.5
1	A	348	MET	2.5
1	B	491	PRO	2.5
1	E	385	PRO	2.5
1	F	508	ILE	2.5
1	E	105	GLU	2.5
1	B	44	LEU	2.5
1	F	243	LEU	2.5
1	G	45	LEU	2.5
1	A	102	ASN	2.5
1	B	525	VAL	2.5
1	E	26	GLN	2.5
1	E	338	VAL	2.5
1	A	478	HIS	2.5
1	A	92	SER	2.5
1	E	69	SER	2.5
1	H	109	SER	2.5
1	B	269[A]	ARG	2.5
1	E	414	ARG	2.5
1	E	535	TYR	2.5
1	G	34	MET	2.5
1	C	91	GLY	2.5
1	E	303	GLY	2.5
1	E	501	ASP	2.5
1	F	507	GLY	2.5
1	G	91	GLY	2.5
1	B	508	ILE	2.5
1	G	349	ILE	2.5
1	E	88	PHE	2.5
1	A	93	HIS	2.5
1	E	93	HIS	2.5
1	B	440	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
1	E	466	ALA	2.5
1	A	109	SER	2.5
1	A	437	CYS	2.5
1	C	244	ARG	2.5
1	A	535	TYR	2.5
1	A	278	GLY	2.5
1	C	253	ILE	2.5
1	E	490	GLU	2.5
1	E	493	GLU	2.5
1	D	30	LEU	2.5
1	G	124	LEU	2.5
1	A	338	VAL	2.5
1	B	70	VAL	2.5
1	F	90	HIS	2.5
1	G	70	VAL	2.5
1	F	440	ALA	2.5
1	G	72	ARG	2.5
1	A	545	SER	2.5
1	E	539[A]	MET	2.5
1	A	531	PRO	2.5
1	G	382	GLY	2.5
1	C	125	ASP	2.5
1	A	88	PHE	2.5
1	B	110	PHE	2.5
1	D	523	VAL	2.5
1	H	523	VAL	2.5
1	A	356	ARG	2.5
1	F	503	ARG	2.5
1	C	34	MET	2.5
1	G	379	THR	2.5
1	A	275	GLU	2.4
1	C	132	GLY	2.4
1	C	346	GLU	2.4
1	E	286	GLU	2.4
1	A	319	LYS	2.4
1	G	239	ASP	2.4
1	G	381	LYS	2.4
1	B	243	LEU	2.4
1	F	487	LEU	2.4
1	A	321	PHE	2.4
1	B	435	PHE	2.4
1	C	294	PHE	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	244	ARG	2.4
1	F	540	ARG	2.4
1	A	70	VAL	2.4
1	C	291	VAL	2.4
1	G	265	VAL	2.4
1	C	111	ALA	2.4
1	C	379	THR	2.4
1	E	62	THR	2.4
1	E	342	THR	2.4
1	E	531	PRO	2.4
1	B	108	GLU	2.4
1	C	275	GLU	2.4
1	C	395	ILE	2.4
1	E	373	ILE	2.4
1	H	495	ILE	2.4
1	B	503	ARG	2.4
1	E	24	PHE	2.4
1	E	506	PHE	2.4
1	C	265	VAL	2.4
1	B	79	ALA	2.4
1	B	111	ALA	2.4
1	A	62	THR	2.4
1	A	108	GLU	2.4
1	A	493	GLU	2.4
1	B	532	GLY	2.4
1	G	112	GLY	2.4
1	G	132	GLY	2.4
1	G	377	GLY	2.4
1	A	373	ILE	2.4
1	C	282	ILE	2.4
1	C	124	LEU	2.4
1	D	235	LEU	2.4
1	A	393	HIS	2.4
1	B	90	HIS	2.4
1	C	90	HIS	2.4
1	C	530	ARG	2.4
1	E	540	ARG	2.4
1	F	269[A]	ARG	2.4
1	C	240	VAL	2.4
1	F	13	VAL	2.4
1	G	291	VAL	2.4
1	E	439	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
1	G	415	ALA	2.4
1	A	296	GLU	2.4
1	B	381	LYS	2.4
1	C	385	PRO	2.4
1	E	108	GLU	2.4
1	G	346	GLU	2.4
1	H	233	PRO	2.4
1	A	69	SER	2.4
1	E	58	SER	2.4
1	F	113	SER	2.4
1	G	395	ILE	2.4
1	A	96	HIS	2.4
1	B	405	HIS	2.4
1	C	45	LEU	2.4
1	E	72	ARG	2.4
1	F	405	HIS	2.4
1	H	110	PHE	2.4
1	A	425	VAL	2.4
1	D	265	VAL	2.4
1	E	537	ASN	2.4
1	C	101	ALA	2.4
1	G	97	ALA	2.4
1	C	62	THR	2.3
1	G	62	THR	2.3
1	A	58	SER	2.3
1	G	263	SER	2.3
1	C	377	GLY	2.3
1	A	47	ILE	2.3
1	D	281	ILE	2.3
1	D	311	LEU	2.3
1	E	508	ILE	2.3
1	G	282	ILE	2.3
1	F	498	ASP	2.3
1	G	90	HIS	2.3
1	H	30	LEU	2.3
1	A	331	CYS	2.3
1	B	539[A]	MET	2.3
1	F	88	PHE	2.3
1	A	127	LYS	2.3
1	G	240	VAL	2.3
1	H	240	VAL	2.3
1	A	341	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
1	A	440	ALA	2.3
1	E	126	THR	2.3
1	A	241	ARG	2.3
1	E	55	ARG	2.3
1	G	109	SER	2.3
1	G	451	SER	2.3
1	E	64	GLY	2.3
1	C	238	GLN	2.3
1	A	522	LEU	2.3
1	E	30	LEU	2.3
1	F	538	ILE	2.3
1	A	371	ASP	2.3
1	A	372	CYS	2.3
1	B	88	PHE	2.3
1	E	331	CYS	2.3
1	G	294	PHE	2.3
1	B	240	VAL	2.3
1	C	404	TYR	2.3
1	A	286	GLU	2.3
1	B	61	ALA	2.3
1	B	394	ALA	2.3
1	C	262	ALA	2.3
1	E	341	ALA	2.3
1	E	463	ALA	2.3
1	A	269	ARG	2.3
1	A	507	GLY	2.3
1	B	545	SER	2.3
1	C	263	SER	2.3
1	E	419	SER	2.3
1	A	508	ILE	2.3
1	B	538	ILE	2.3
1	C	495	ILE	2.3
1	C	544	ILE	2.3
1	F	445	LEU	2.3
1	E	371	ASP	2.3
1	F	435	PHE	2.3
1	A	320	VAL	2.3
1	E	425	VAL	2.3
1	F	70	VAL	2.3
1	A	466	ALA	2.3
1	C	33	ALA	2.3
1	A	55	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
1	A	518	ARG	2.3
1	A	530	ARG	2.3
1	A	405	HIS	2.3
1	D	234	GLY	2.3
1	E	507	GLY	2.3
1	G	238	GLN	2.3
1	G	545	SER	2.3
1	E	522	LEU	2.3
1	E	544	ILE	2.3
1	F	486	LEU	2.3
1	F	539[A]	MET	2.3
1	G	46	ASP	2.3
1	G	127	LYS	2.3
1	E	296	GLU	2.3
1	D	240	VAL	2.3
1	F	431	VAL	2.3
1	A	540	ARG	2.3
1	E	372	CYS	2.3
1	E	437	CYS	2.3
1	G	104	ARG	2.3
1	C	35	ALA	2.2
1	D	497	ALA	2.2
1	G	262	ALA	2.2
1	A	423	THR	2.2
1	A	90	HIS	2.2
1	C	112	GLY	2.2
1	F	511	GLY	2.2
1	F	515	GLY	2.2
1	G	343	GLN	2.2
1	E	47	ILE	2.2
1	E	127	LYS	2.2
1	A	506	PHE	2.2
1	B	114	PRO	2.2
1	B	233	PRO	2.2
1	B	489	ARG	2.2
1	C	241	ARG	2.2
1	A	317	ALA	2.2
1	A	537	ASN	2.2
1	B	66	ALA	2.2
1	F	79	ALA	2.2
1	F	394	ALA	2.2
1	G	383	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
1	H	494	ALA	2.2
1	A	447	THR	2.2
1	E	249	HIS	2.2
1	H	22	THR	2.2
1	C	127	LYS	2.2
1	E	112	GLY	2.2
1	F	44	LEU	2.2
1	B	116	SER	2.2
1	D	495	ILE	2.2
1	F	465	ILE	2.2
1	G	495	ILE	2.2
1	H	281	ILE	2.2
1	C	378	GLU	2.2
1	H	275	GLU	2.2
1	A	68	ARG	2.2
1	E	269	ARG	2.2
1	B	431	VAL	2.2
1	F	119	PRO	2.2
1	F	61	ALA	2.2
1	A	126	THR	2.2
1	H	311	LEU	2.2
1	F	544[A]	ILE	2.2
1	A	419	SER	2.2
1	B	498	ASP	2.2
1	C	46	ASP	2.2
1	A	387	GLU	2.2
1	A	260	ARG	2.2
1	B	502	ARG	2.2
1	G	530	ARG	2.2
1	D	492	PRO	2.2
1	F	25	PHE	2.2
1	A	249	HIS	2.2
1	E	440	ALA	2.2
1	E	441	ALA	2.2
1	B	505	GLN	2.2
1	G	57	THR	2.2
1	A	30	LEU	2.2
1	A	64	GLY	2.2
1	A	273	GLY	2.2
1	B	520	GLY	2.2
1	E	418	LEU	2.2
1	F	532	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
1	G	404	TYR	2.2
1	F	100	ILE	2.2
1	D	545	SER	2.2
1	C	242	ASP	2.2
1	E	239	ASP	2.2
1	F	502	ARG	2.2
1	G	78	LYS	2.2
1	A	32	ALA	2.1
1	A	471	ALA	2.1
1	C	26	GLN	2.1
1	E	33	ALA	2.1
1	E	90	HIS	2.1
1	E	363	ALA	2.1
1	H	497	ALA	2.1
1	B	486	LEU	2.1
1	D	522	LEU	2.1
1	E	447	THR	2.1
1	G	373	ILE	2.1
1	C	55	ARG	2.1
1	C	104	ARG	2.1
1	E	530	ARG	2.1
1	C	252	ASP	2.1
1	A	31	PRO	2.1
1	E	31	PRO	2.1
1	D	519	VAL	2.1
1	E	405	HIS	2.1
1	F	265	VAL	2.1
1	C	343	GLN	2.1
1	F	505	GLN	2.1
1	A	357	ALA	2.1
1	D	462	ALA	2.1
1	D	494	ALA	2.1
1	E	307	ALA	2.1
1	E	317	ALA	2.1
1	G	402	ALA	2.1
1	A	82	ASN	2.1
1	B	91	GLY	2.1
1	C	250	GLY	2.1
1	E	423	THR	2.1
1	G	86	LEU	2.1
1	A	98	GLU	2.1
1	A	404	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
1	A	414	ARG	2.1
1	A	420[A]	ARG	2.1
1	F	489	ARG	2.1
1	F	509	GLU	2.1
1	G	55	ARG	2.1
1	G	68	ARG	2.1
1	G	378	GLU	2.1
1	C	451	SER	2.1
1	F	92	SER	2.1
1	F	114	PRO	2.1
1	C	402	ALA	2.1
1	G	101	ALA	2.1
1	C	383	ASN	2.1
1	A	112	GLY	2.1
1	B	445	LEU	2.1
1	B	507	GLY	2.1
1	F	91	GLY	2.1
1	G	39	LEU	2.1
1	D	244[A]	ARG	2.1
1	D	461	ARG	2.1
1	H	118	ARG	2.1
1	B	465	ILE	2.1
1	F	75[A]	GLU	2.1
1	F	108	GLU	2.1
1	E	284	LYS	2.1
1	E	337	PRO	2.1
1	C	305	MET	2.1
1	C	344	MET	2.1
1	A	238	GLN	2.1
1	B	25	PHE	2.1
1	D	27	GLN	2.1
1	H	27	GLN	2.1
1	E	300	VAL	2.1
1	A	307	ALA	2.1
1	A	441	ALA	2.1
1	E	32	ALA	2.1
1	E	101	ALA	2.1
1	A	542	LEU	2.1
1	E	244	ARG	2.1
1	H	522	LEU	2.1
1	C	57	THR	2.1
1	C	355	THR	2.1

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Mol	Chain	Res	Type	RSRZ
1	E	387	GLU	2.1
1	C	313	ILE	2.1
1	G	544	ILE	2.1
1	A	239	ASP	2.1
1	A	361	ASP	2.1
1	B	499	ASP	2.1
1	E	404	TYR	2.1
1	F	499	ASP	2.1
1	G	252	ASP	2.1
1	C	109	SER	2.1
1	G	344	MET	2.1
1	G	391	MET	2.1
1	H	519	VAL	2.0
1	F	441	ALA	2.0
1	G	241	ARG	2.0
1	G	270	ALA	2.0
1	C	39	LEU	2.0
1	C	40	GLU	2.0
1	B	17	THR	2.0
1	C	373	ILE	2.0
1	F	281	ILE	2.0
1	E	361	ASP	2.0
1	B	236	SER	2.0
1	H	492	PRO	2.0
1	G	305	MET	2.0
1	E	476	GLN	2.0
1	G	26	GLN	2.0
1	A	38	PHE	2.0
1	A	386	VAL	2.0
1	A	461	ARG	2.0
1	B	244	ARG	2.0
1	D	118	ARG	2.0
1	E	450	ARG	2.0
1	A	363	ALA	2.0
1	A	237	GLU	2.0
1	C	311	LEU	2.0
1	E	357	ALA	2.0
1	E	289	GLU	2.0
1	F	408	LEU	2.0
1	G	375	LEU	2.0
1	D	496	TRP	2.0
1	A	337	PRO	2.0

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Mol	Chain	Res	Type	RSRZ
1	B	242	ASP	2.0
1	F	422	PRO	2.0
1	E	533	SER	2.0
1	H	451	SER	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
3	OXL	E	602	6/6	0.66	0.14	67,67,67,67	0
3	OXL	A	602	6/6	0.72	0.13	66,66,67,67	0
2	FBP	A	601	20/20	0.74	0.17	104,105,105,106	0
2	FBP	E	601	20/20	0.74	0.17	105,105,106,107	0
5	K	F	604	1/1	0.75	0.11	75,75,75,75	0
5	K	B	604	1/1	0.77	0.11	76,76,76,76	0
4	MG	C	603	1/1	0.78	0.21	78,78,78,78	0
4	MG	G	603	1/1	0.79	0.22	80,80,80,80	0
3	OXL	C	602	6/6	0.81	0.15	52,52,53,53	0
3	OXL	F	602	6/6	0.81	0.12	39,40,41,41	0
3	OXL	G	602	6/6	0.82	0.15	51,51,52,52	0
5	K	C	604	1/1	0.84	0.11	87,87,87,87	0
3	OXL	H	602	6/6	0.84	0.11	56,56,57,57	0
5	K	G	604	1/1	0.84	0.11	89,89,89,89	0
6	WVX	E	605	30/30	0.85	0.14	60,63,63,64	14
6	WVX	A	605	30/30	0.86	0.13	60,60,61,62	14
3	OXL	D	602	6/6	0.88	0.11	57,57,58,59	0
5	K	A	604	1/1	0.89	0.07	87,87,87,87	0
5	K	E	604	1/1	0.89	0.07	86,86,86,86	0

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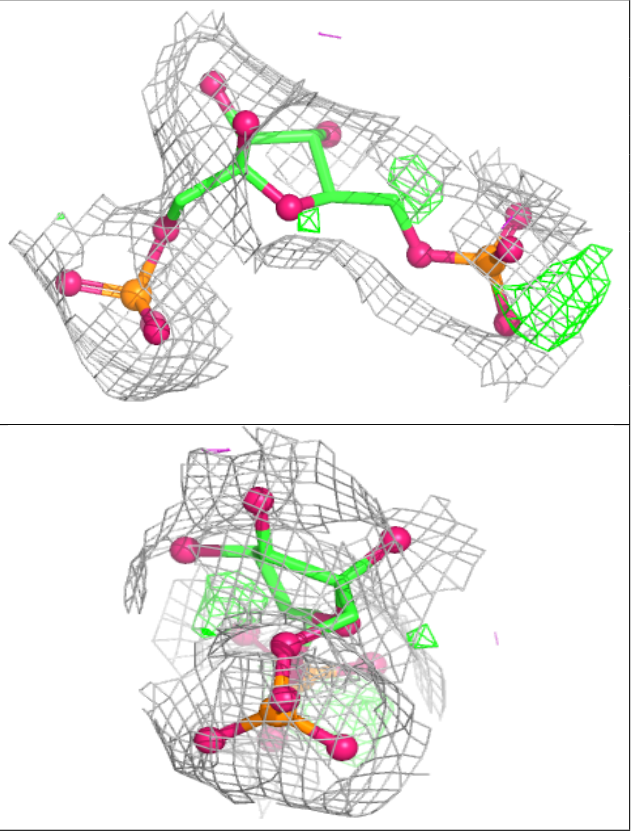
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
4	MG	B	603	1/1	0.89	0.13	67,67,67,67	0
2	FBP	B	601	20/20	0.90	0.11	62,62,63,64	0
2	FBP	F	601	20/20	0.90	0.11	62,63,65,65	0
4	MG	E	603	1/1	0.90	0.07	60,60,60,60	0
6	WVX	B	605	30/30	0.90	0.13	55,56,58,58	14
2	FBP	C	601	20/20	0.90	0.10	51,54,58,58	0
2	FBP	G	601	20/20	0.91	0.09	51,54,57,58	0
4	MG	A	603	1/1	0.92	0.07	60,60,60,60	0
3	OXL	B	602	6/6	0.92	0.08	37,37,38,38	0
6	WVX	F	605	30/30	0.92	0.12	55,56,58,59	14
2	FBP	H	601	20/20	0.94	0.07	29,30,32,32	0
4	MG	D	603	1/1	0.95	0.12	39,39,39,39	0
4	MG	H	603	1/1	0.95	0.13	43,43,43,43	0
2	FBP	D	601	20/20	0.95	0.07	30,31,33,33	0
4	MG	F	603	1/1	0.95	0.08	56,56,56,56	0
5	K	D	604	1/1	0.96	0.06	65,65,65,65	0
5	K	H	604	1/1	0.96	0.06	64,64,64,64	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.

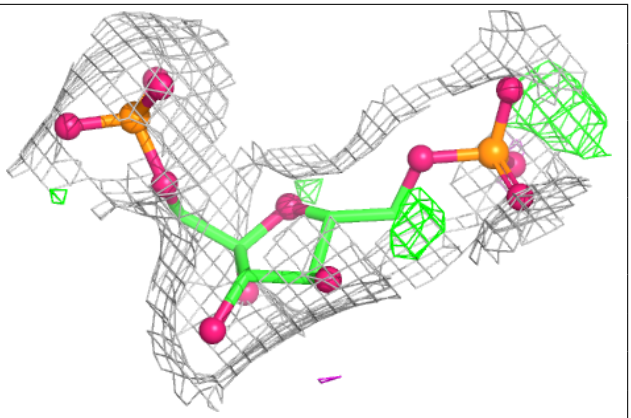
Electron density around FBP A 601:

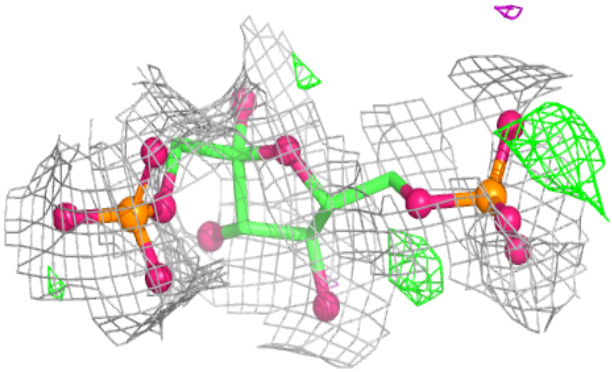
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

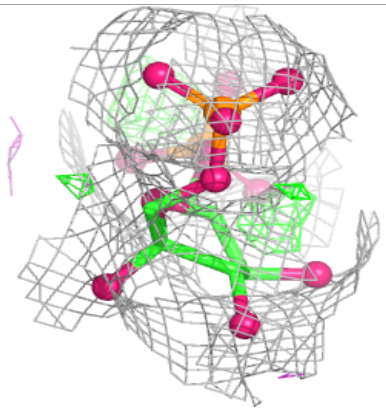


Electron density around FBP E 601:

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

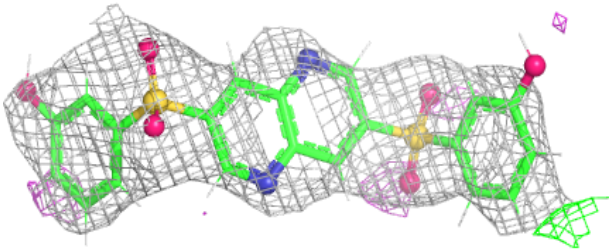


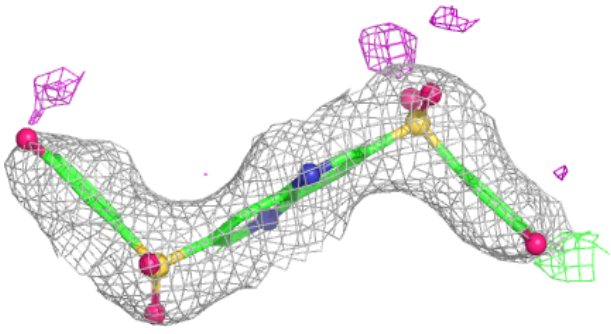


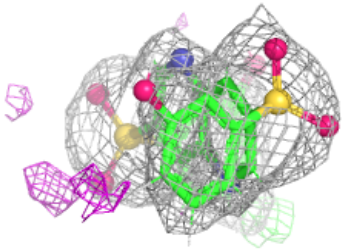


Electron density around WVX E 605:

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

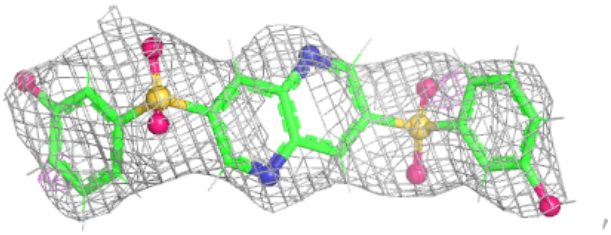


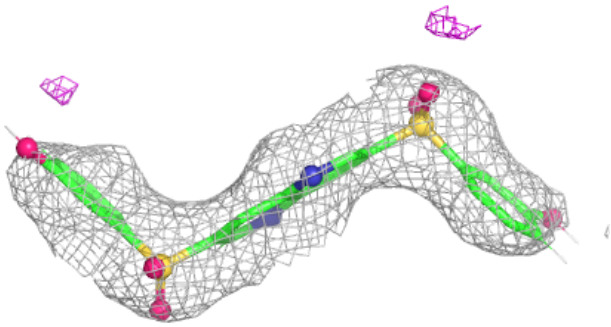


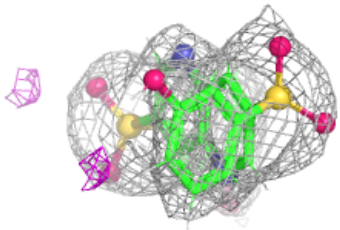


Electron density around WVX A 605:

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

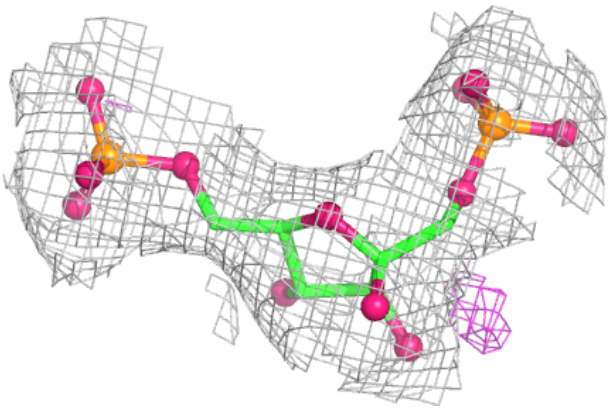


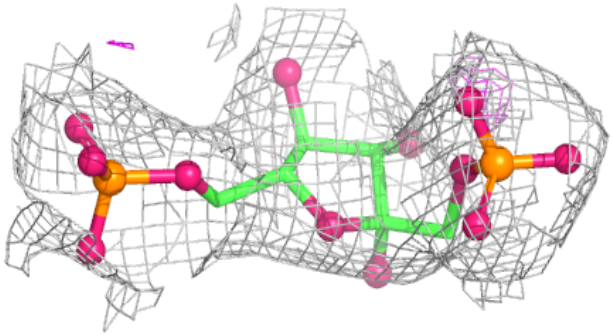


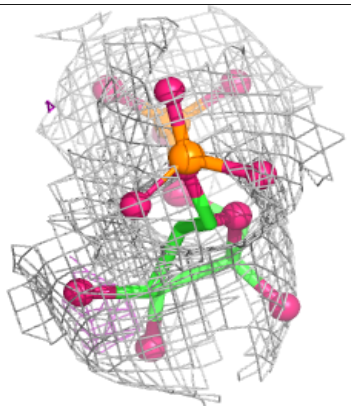


Electron density around FBP B 601:

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

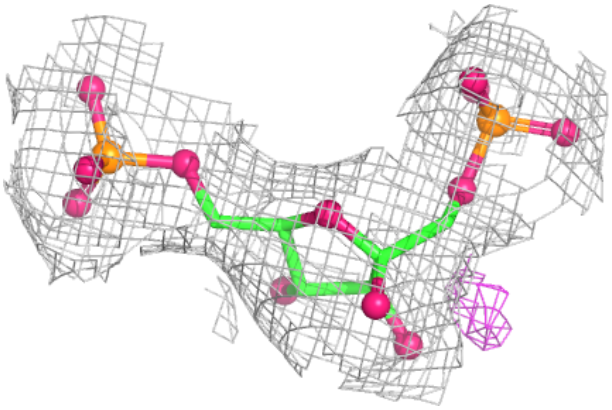


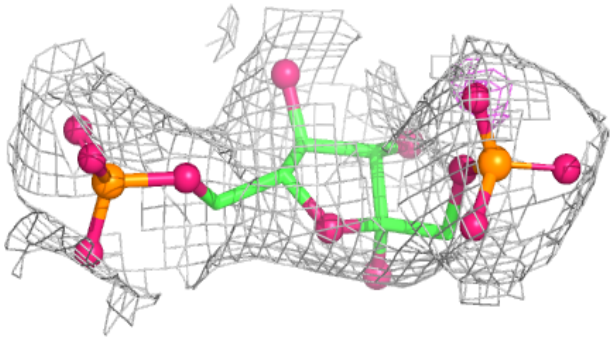




Electron density around FBP F 601:

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

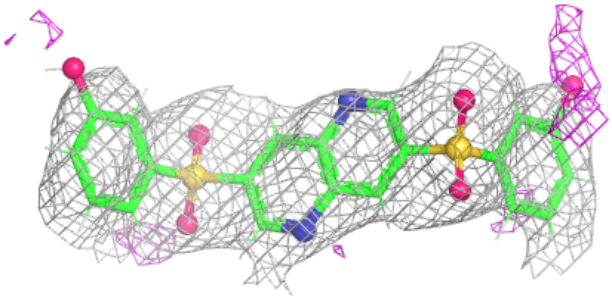


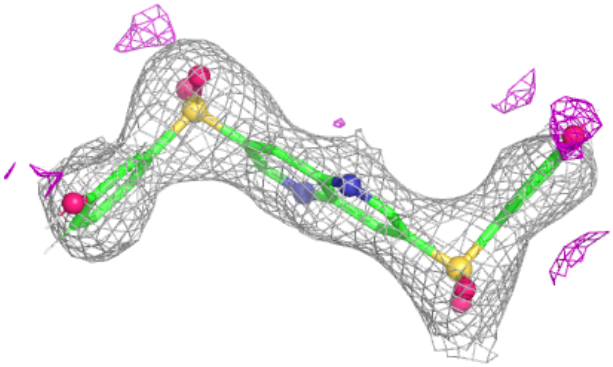


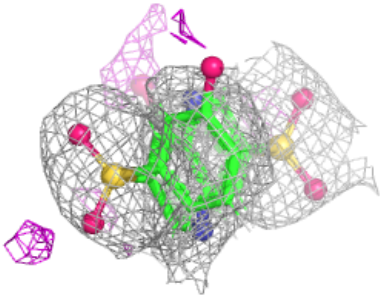


Electron density around WVX B 605:

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

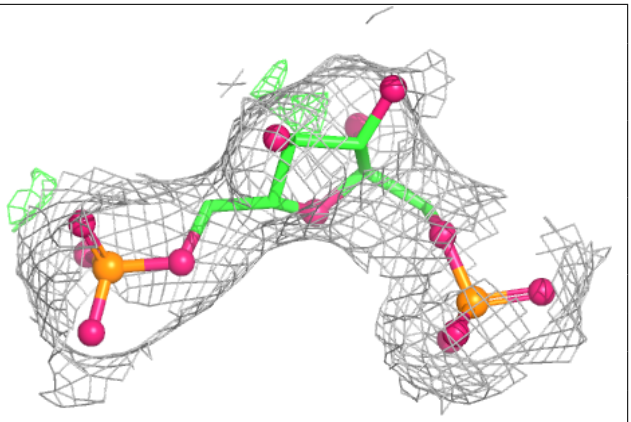


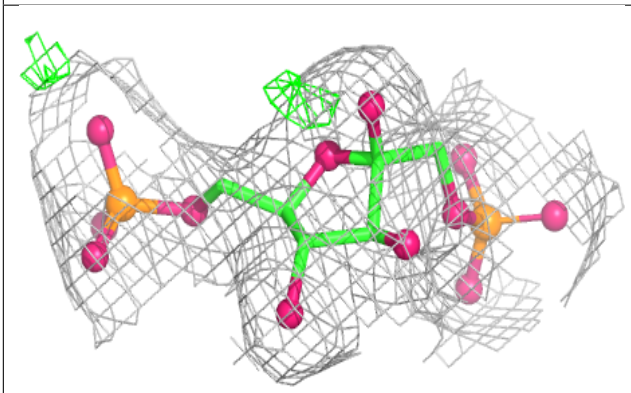


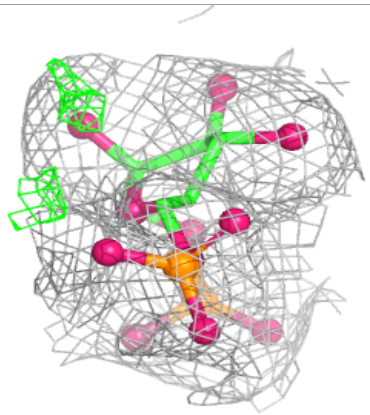


Electron density around FBP C 601:

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

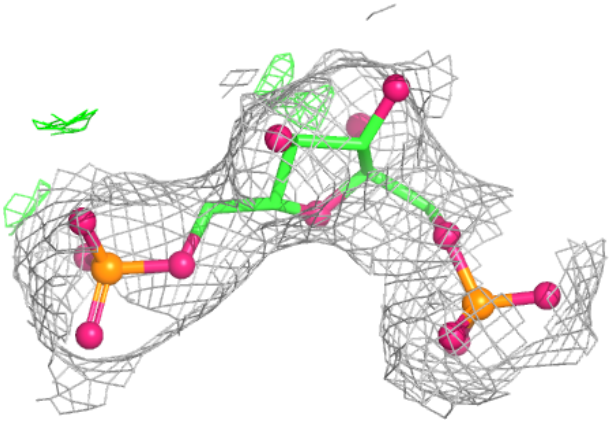


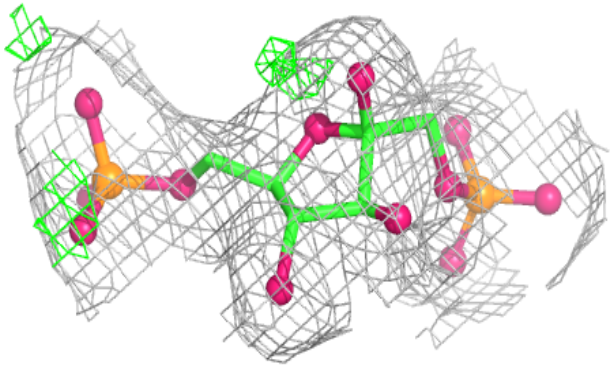


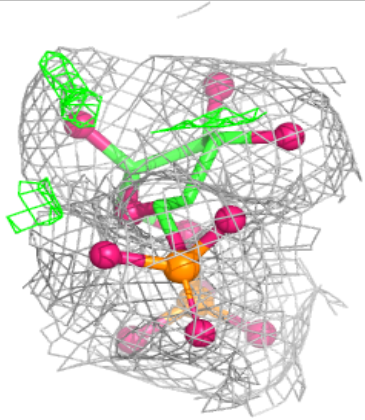


Electron density around FBP G 601:

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

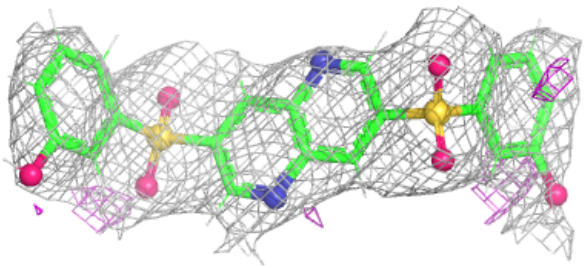


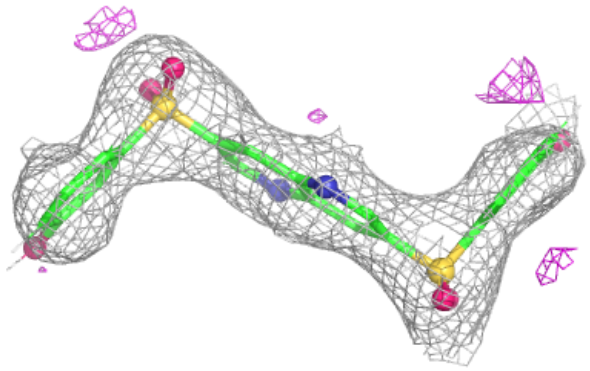


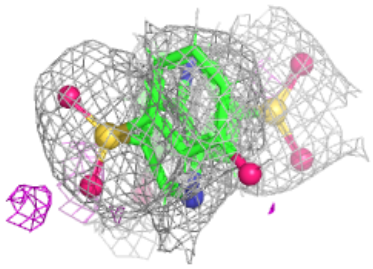


Electron density around WVX F 605:

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

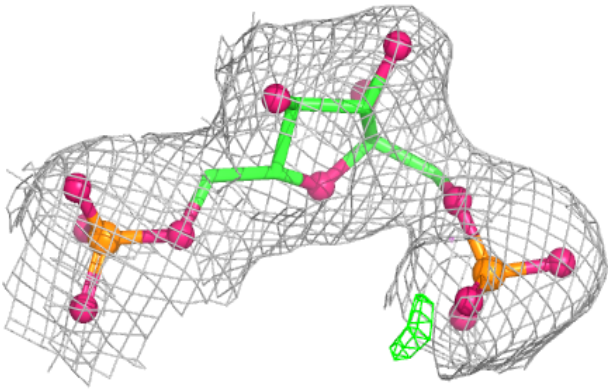


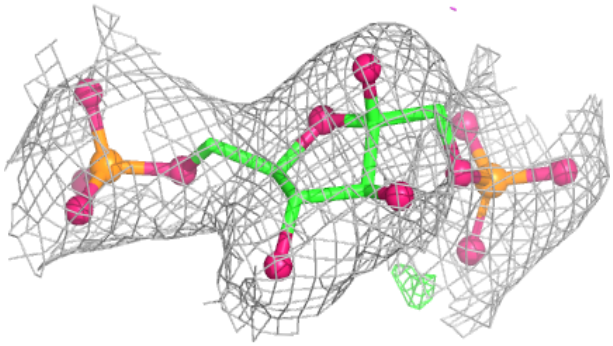


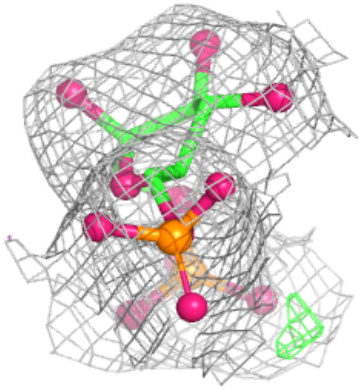


Electron density around FBP H 601:

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

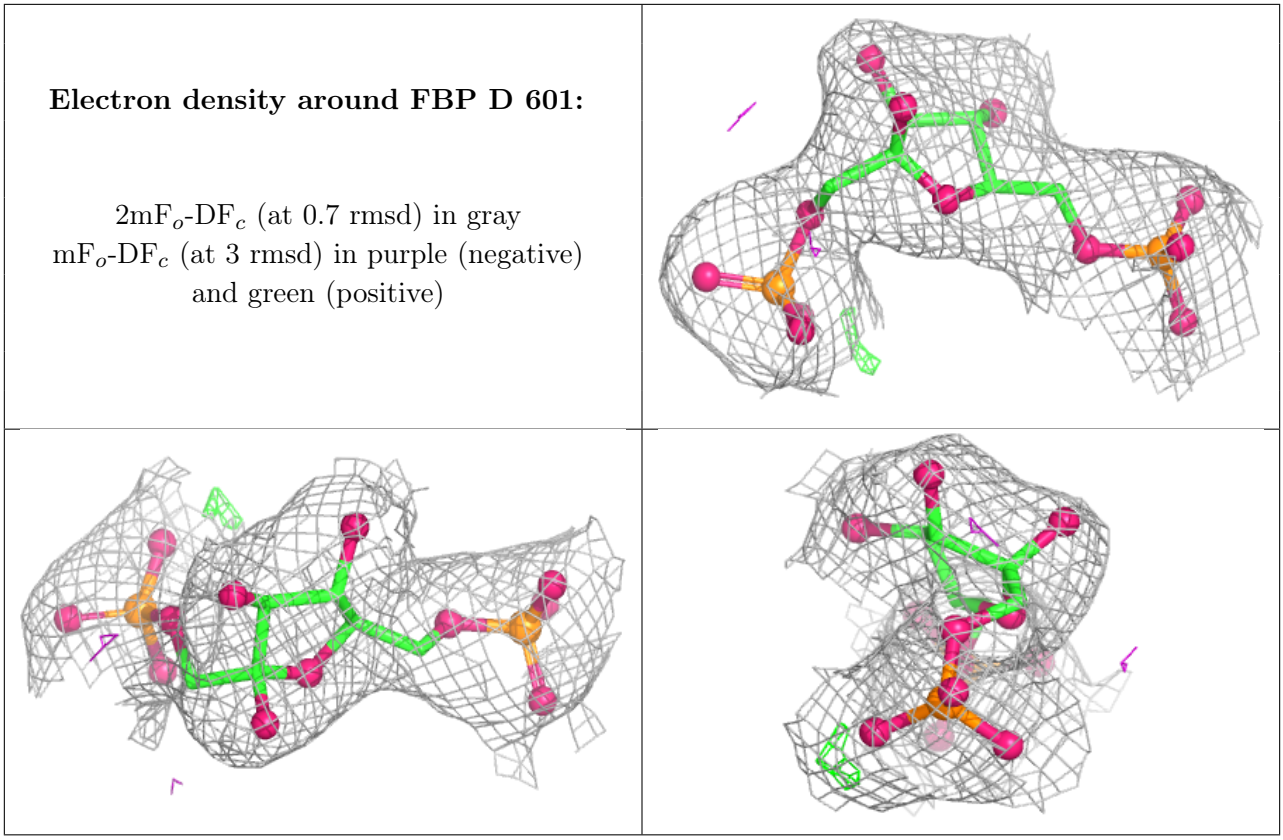






Electron density around FBP D 601:

$2mF_o$-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 (i)

There are no such residues in this entry.