WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

Aug 4, 2025 – 06:39 PM EDT

PDB ID	:	7HRR / pdb_00007hrr
Title	:	PanDDA analysis group deposition – Crystal Structure of FatA in complex with Z94600359
Authors	:	Kot, E.; Ni, X.; Tomlinson, C.W.E.; Fearon, D.; Aschenbrenner, J.C.; Fairhead, M.; Koekemoer, L.; Marx, M.L.; Wright, N.D.; Mulholland, N.P.; Montgomery, M.G.; von Delft, F.
Deposited on	:	2024-12-23
Resolution	:	1.92 Å(reported)

The following versions of software and data (see references ①) were used in the production of this report:

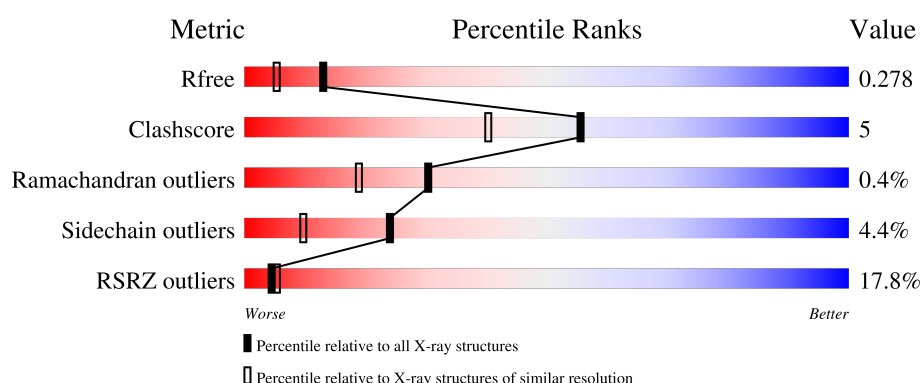|		
MolProbity	:	4-5-2 with Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.45.1

1 Overall quality at a glance ⓘ

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

The reported resolution of this entry is 1.92 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	Percentile Ranks	Value
Rfree		0.278
Clashscore		5
Ramachandran outliers		0.4%
Sidechain outliers		4.4%
RSRZ outliers		17.8%

Worse   *Better*

▮ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1028 (1.92-1.92)
Clashscore	180529	1100 (1.92-1.92)
Ramachandran outliers	177936	1087 (1.92-1.92)
Sidechain outliers	177891	1087 (1.92-1.92)
RSRZ outliers	164620	1028 (1.92-1.92)

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	295	15% / 73% / 16% / • / 10%
1	B	295	17% / 80% / 11% / • / 9%

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2 Entry composition ⓘ

There are 4 unique types of molecules in this entry. The entry contains 4681 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Oleoyl-acyl carrier protein thioesterase 1, chloroplastic.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	265	Total 2192	C 1363	N 388	O 427	S 14	0	4	0
1	B	268	Total 2236	C 1394	N 396	O 436	S 10	0	4	0

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	74	MET	-	initiating methionine	UNP Q42561
A	363	HIS	-	expression tag	UNP Q42561
A	364	HIS	-	expression tag	UNP Q42561
A	365	HIS	-	expression tag	UNP Q42561
A	366	HIS	-	expression tag	UNP Q42561
A	367	HIS	-	expression tag	UNP Q42561
A	368	HIS	-	expression tag	UNP Q42561
B	74	MET	-	initiating methionine	UNP Q42561
B	363	HIS	-	expression tag	UNP Q42561
B	364	HIS	-	expression tag	UNP Q42561
B	365	HIS	-	expression tag	UNP Q42561
B	366	HIS	-	expression tag	UNP Q42561
B	367	HIS	-	expression tag	UNP Q42561
B	368	HIS	-	expression tag	UNP Q42561

- Molecule 2 is 2-azanyl-3-methyl-benzoic acid (CCD ID: 3M0) (formula: $C_8H_9NO_2$) (labeled as "Ligand of Interest" by depositor).

3M0
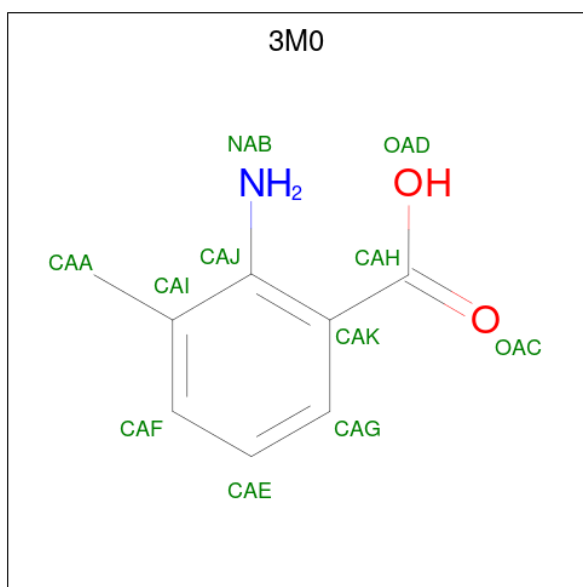
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total	C	N	O	0	0
			11	8	1	2		
2	B	1	Total	C	N	O	0	0
			11	8	1	2		
2	B	1	Total	C	N	O	0	0
			11	8	1	2		

- Molecule 3 is SULFATE ION (CCD ID: SO4) (formula: O_4S).

SO4

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total	O	S	0	0
			5	4	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	B	1	Total O S 5 4 1			0	0

- Molecule 4 is water.

| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	99	Total O 99 99		0	0
4	B	111	Total O 111 111		0	0

3 Residue-property plots ⓘ

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

• Molecule 1: Oleoyl-acyl carrier protein thioesterase 1, chloroplastic
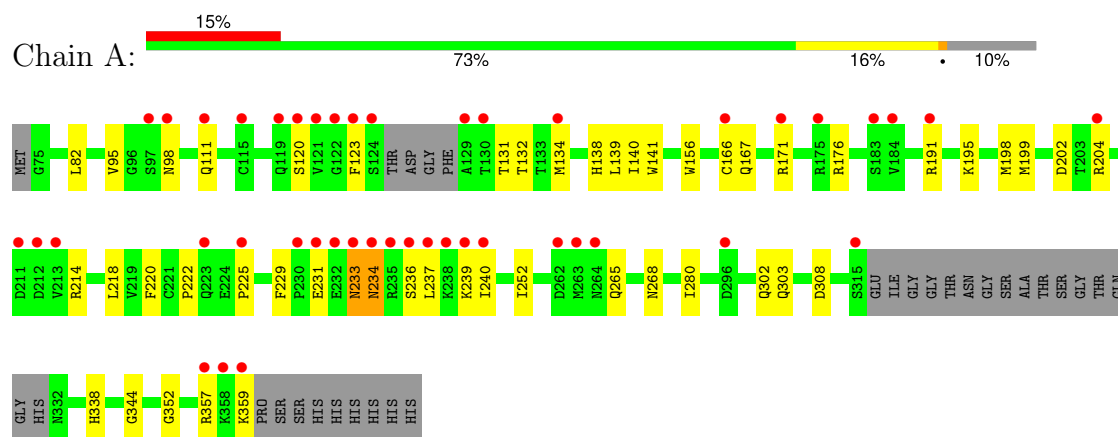
• Molecule 1: Oleoyl-acyl carrier protein thioesterase 1, chloroplastic
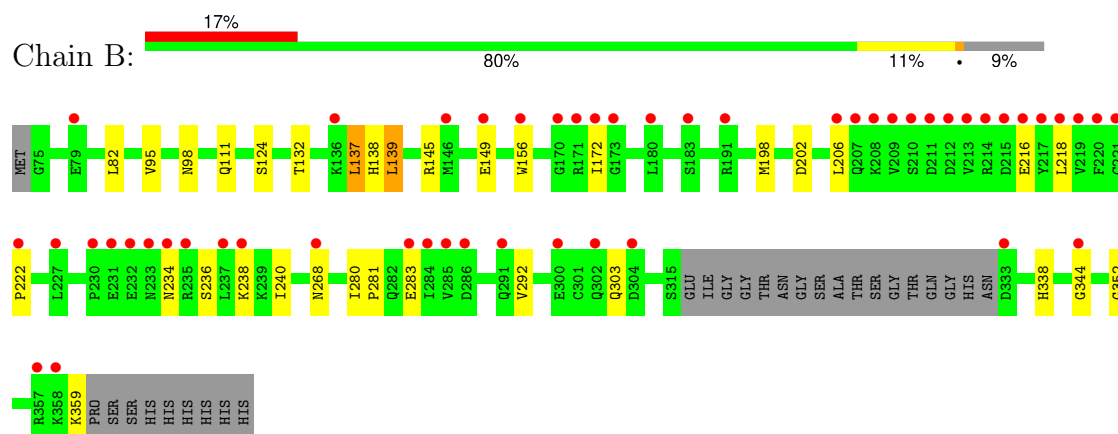
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	I 2 2 2	Depositor
Cell constants a, b, c, α, β, γ	97.66Å　　100.22Å　　127.71Å 90.00°　　90.00°　　90.00°	Depositor
Resolution (Å)	34.97　–　1.92 34.97　–　1.92	Depositor EDS
% Data completeness (in resolution range)	99.3 (34.97-1.92) 99.3 (34.97-1.92)	Depositor EDS
R_{merge}	0.26	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.85 (at 1.92Å)	Xtriage
Refinement program	BUSTER 2.10.4 (23-JAN-2024)	Depositor
R, R_{free}	0.283　,　0.291 0.263　,　0.278	Depositor DCC
R_{free} test set	2328 reflections (4.84%)	wwPDB-VP
Wilson B-factor (Å^2)	24.1	Xtriage
Anisotropy	0.117	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 49.8	EDS
L-test for twinning[2]	$< |L| > = 0.50$, $< L^2 > = 0.34$	Xtriage
Estimated twinning fraction	0.037 for -k,-h,-l	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	4681	wwPDB-VP
Average B, all atoms (Å^2)	41.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.97% of the height of the origin peak. No significant pseudotranslation is detected.*

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[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: SO4, 3M0

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	0/2230	0.95	1/3017 (0.0%)
1	B	0.64	0/2276	0.96	1/3081 (0.0%)
All	All	0.65	0/4506	0.95	2/6098 (0.0%)

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	234	ASN	CA-CB-CG	5.87	118.47	112.60
1	B	124	SER	N-CA-C	5.35	117.23	110.33

There are no chirality outliers.

There are no planarity outliers.

5.2   Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2192	0	2152	25	0
1	B	2236	0	2194	16	0
2	A	11	0	8	1	0
2	B	22	0	16	0	0
3	A	5	0	0	0	0
3	B	5	0	0	0	0
4	A	99	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	B	111	0	0	0	0
All	All	4681	0	4370	41	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 5.

All (41) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:111:GLN:HE22	1:B:268:ASN:HD21	1.29	0.80
1:A:134[A]:MET:HE1	1:A:141:TRP:NE1	2.07	0.69
1:A:134[C]:MET:HE1	1:A:141:TRP:NE1	2.07	0.69
1:A:111:GLN:HE22	1:A:268:ASN:HD21	1.42	0.65
1:B:98:ASN:HD21	1:B:359:LYS:NZ	1.98	0.61
1:A:134[C]:MET:HE1	1:A:141:TRP:CD1	2.35	0.61
1:A:134[A]:MET:HE1	1:A:141:TRP:CD1	2.35	0.61
1:B:138:HIS:HD2	1:B:202:ASP:OD2	1.86	0.59
1:A:139:LEU:HD13	1:A:198:MET:HE3	1.87	0.57
1:A:195:LYS:HE2	1:A:237:LEU:HD21	1.87	0.56
1:B:98:ASN:HD21	1:B:359:LYS:HZ1	1.53	0.56
1:A:138:HIS:HD2	1:A:202:ASP:OD2	1.89	0.55
1:A:140:ILE:HD11	1:A:199:MET:HE2	1.93	0.51
1:A:280:ILE:HD11	1:A:338:HIS:HE1	1.74	0.51
1:A:123:PHE:CE1	1:A:131:THR:HG22	2.46	0.49
1:B:280:ILE:HD11	1:B:338:HIS:HE1	1.76	0.49
1:A:98:ASN:HD21	1:A:359:LYS:NZ	2.12	0.48
1:B:234:ASN:HD22	1:B:236:SER:H	1.62	0.47
1:A:98:ASN:HD21	1:A:359:LYS:HZ3	1.62	0.46
1:B:234:ASN:ND2	1:B:236:SER:OG	2.47	0.46
1:A:82:LEU:HD13	1:A:222:PRO:HA	1.96	0.46
1:A:220:PHE:HB2	2:A:401:3M0:H6	1.97	0.46
1:B:82:LEU:HD13	1:B:222:PRO:HA	1.99	0.45
1:B:240:ILE:HD13	1:B:352:GLY:HA2	1.97	0.45
1:A:240:ILE:HD13	1:A:352:GLY:HA2	2.00	0.44
1:A:167:GLN:OE1	1:A:225:PRO:HA	2.18	0.43
1:A:214:ARG:HG2	1:A:218:LEU:HD21	2.01	0.43
1:A:280:ILE:HD11	1:A:338:HIS:CE1	2.53	0.43
1:B:281:PRO:HB2	1:B:283:GLU:HG3	2.00	0.43
1:A:95:VAL:HG11	1:A:156:TRP:HB2	2.00	0.43
1:A:166:CYS:SG	1:A:176:ARG:NH1	2.92	0.43
1:A:191:ARG:HG3	1:A:229:PHE:CZ	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:137:LEU:HB3	1:B:139:LEU:HD22	2.01	0.43
1:A:252:ILE:HG23	1:A:308:ASP:OD1	2.20	0.42
1:B:95:VAL:HG11	1:B:156:TRP:HB2	2.01	0.42
1:B:145:ARG:NH1	1:B:238:LYS:O	2.45	0.42
1:A:214:ARG:O	1:A:218:LEU:HG	2.21	0.41
1:B:198:MET:HE3	1:B:198:MET:HB2	1.97	0.41
1:B:280:ILE:HD11	1:B:338:HIS:CE1	2.54	0.41
1:A:233:ASN:HD22	1:A:233:ASN:HA	1.76	0.41
1:B:149[B]:GLU:HG2	1:B:292:VAL:HG22	2.03	0.41

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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	267/295 (90%)	263 (98%)	3 (1%)	1 (0%)	30	19
1	B	272/295 (92%)	265 (97%)	6 (2%)	1 (0%)	30	19
All	All	539/590 (91%)	528 (98%)	9 (2%)	2 (0%)	30	19

All (2) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	344	GLY
1	B	344	GLY

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	248/263 (94%)	233 (94%)	15 (6%)	16	4
1	B	250/263 (95%)	242 (97%)	8 (3%)	34	17
All	All	498/526 (95%)	475 (95%)	23 (5%)	24	9

All (23) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	120[A]	SER
1	A	120[B]	SER
1	A	120[C]	SER
1	A	132	THR
1	A	171	ARG
1	A	204	ARG
1	A	231	GLU
1	A	233	ASN
1	A	234	ASN
1	A	236	SER
1	A	239	LYS
1	A	265	GLN
1	A	302	GLN
1	A	303	GLN
1	A	357	ARG
1	B	132	THR
1	B	137	LEU
1	B	139	LEU
1	B	172	ILE
1	B	206	LEU
1	B	216	GLU
1	B	218	LEU
1	B	303	GLN

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

Mol	Chain	Res	Type
1	A	98	ASN
1	A	111	GLN
1	A	138	HIS
1	A	233	ASN

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Mol	Chain	Res	Type
1	A	264	ASN
1	B	98	ASN
1	B	138	HIS
1	B	234	ASN
1	B	264	ASN
1	B	265	GLN
1	B	268	ASN
1	B	269	ASN

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 ⓘ

5 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#|Z| > 2$	Counts	RMSZ	$\#|Z| > 2$
2	3M0	B	402	-	11,11,11	0.76	1 (9%)	14,15,15	1.08	1 (7%)
3	SO4	B	403	-	4,4,4	0.12	0	6,6,6	1.13	0
3	SO4	A	402	-	4,4,4	0.28	0	6,6,6	0.18	0
2	3M0	B	401	-	11,11,11	0.75	1 (9%)	14,15,15	1.09	1 (7%)
2	3M0	A	401	-	11,11,11	0.66	0	14,15,15	1.03	1 (7%)

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
2	3M0	B	402	-	-	0/4/4/4	0/1/1/1
2	3M0	B	401	-	-	0/4/4/4	0/1/1/1
2	3M0	A	401	-	-	2/4/4/4	0/1/1/1

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	402	3M0	OAD-CAH	-2.19	1.24	1.30
2	B	401	3M0	OAD-CAH	-2.18	1.24	1.30

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	401	3M0	CAJ-CAK-CAH	2.80	123.64	120.76
2	B	402	3M0	CAJ-CAK-CAH	2.70	123.54	120.76
2	A	401	3M0	CAJ-CAK-CAH	2.55	123.39	120.76

There are no chirality outliers.

All (2) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	401	3M0	OAD-CAH-CAK-CAJ
2	A	401	3M0	OAC-CAH-CAK-CAJ

There are no ring outliers.
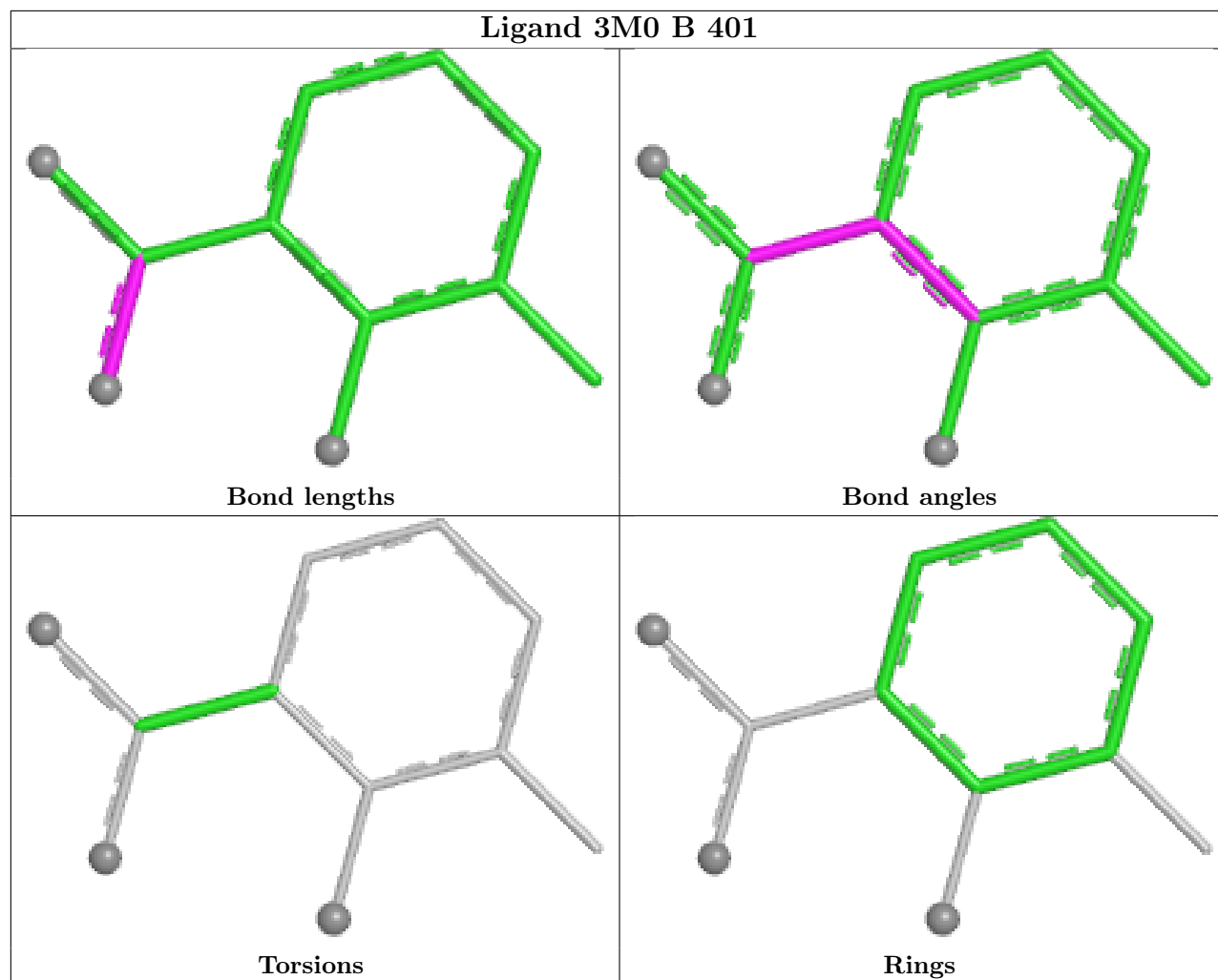
1 monomer is involved in 1 short contact:

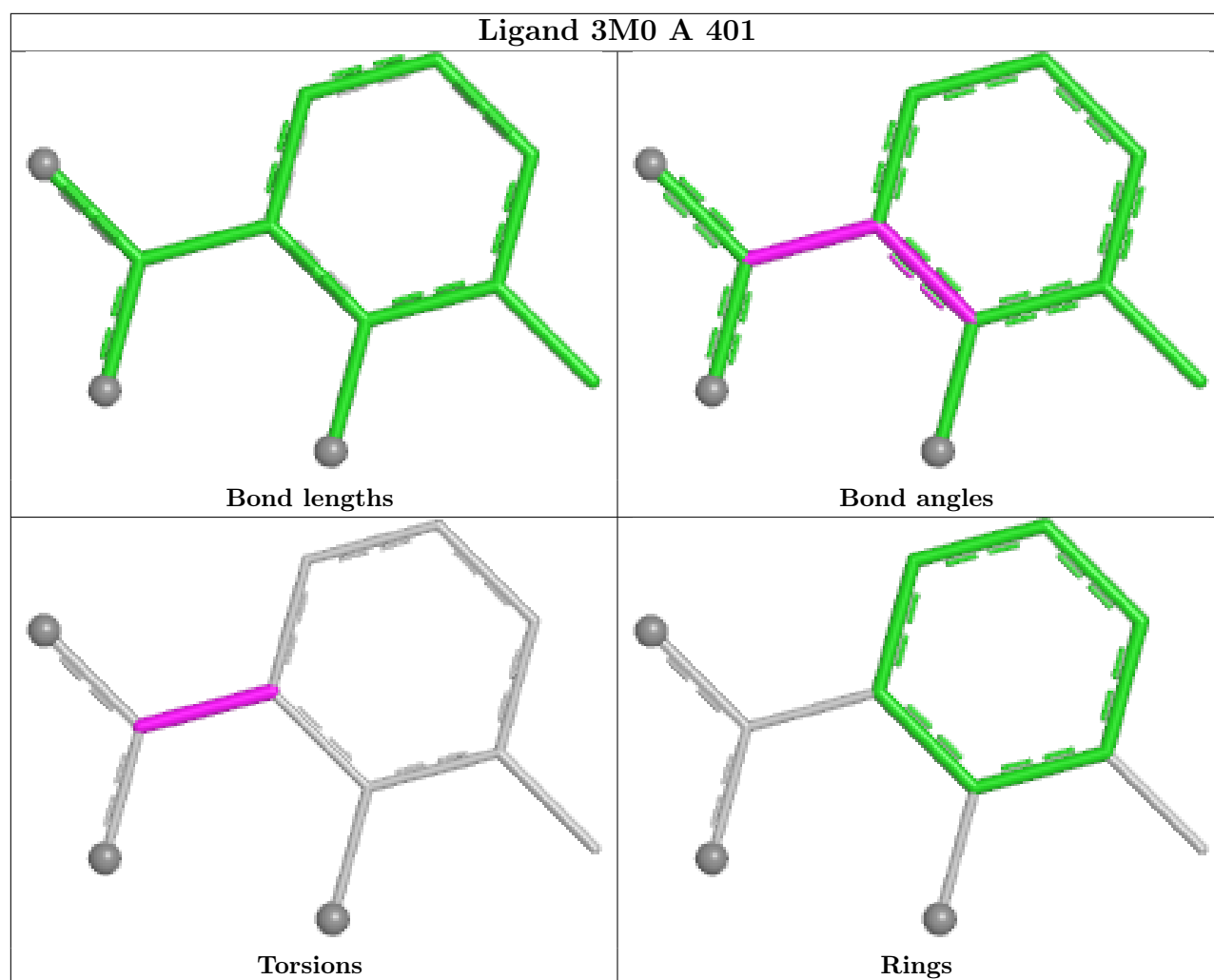| Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	401	3M0	1	0

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 3M0 B 402

Bond lengths

Bond angles

Torsions

Rings

Ligand 3M0 B 401

Bond lengths

Bond angles

Torsions

Rings
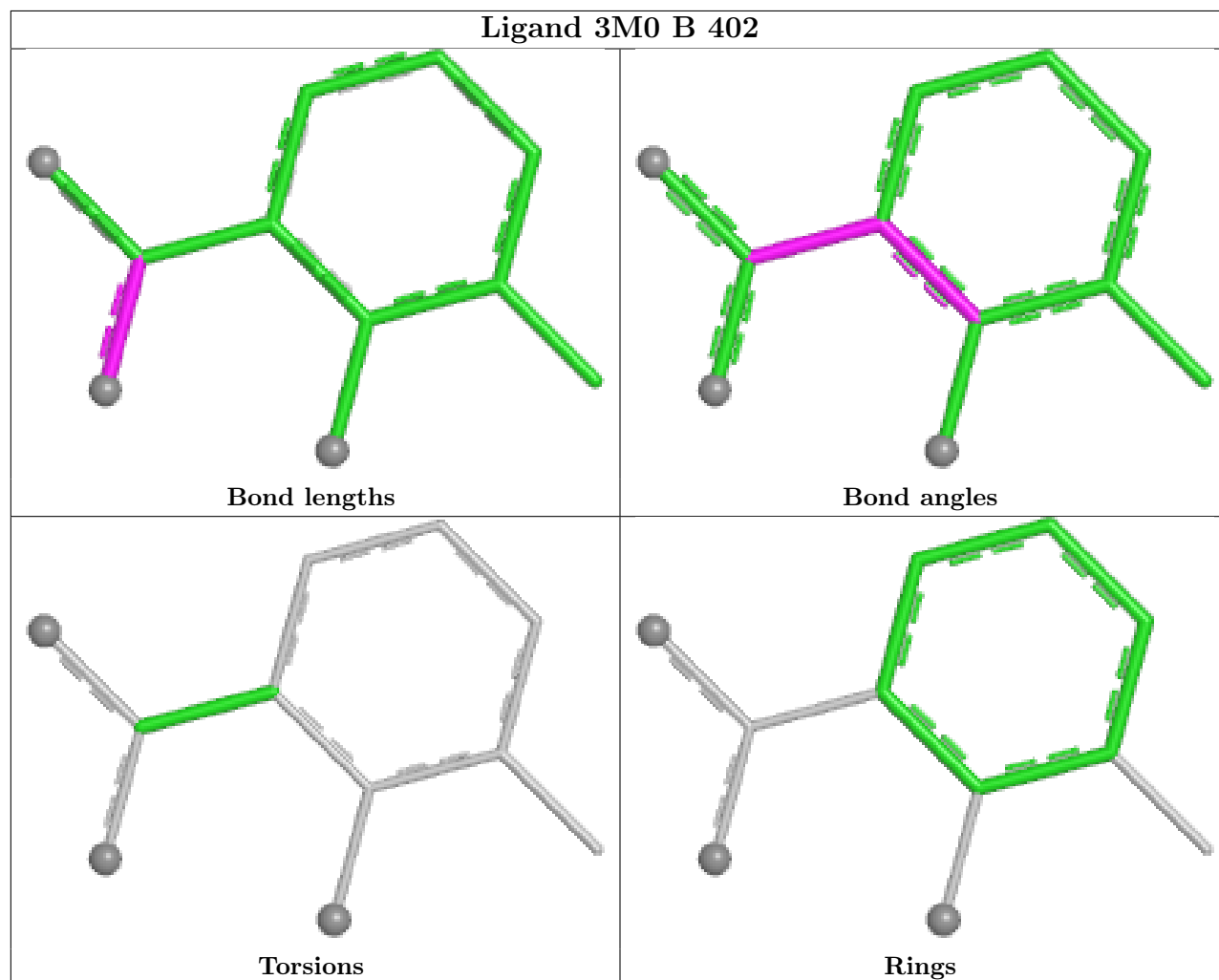
Ligand 3M0 A 401

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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å²)	Q<0.9
1	A	265/295 (89%)	1.21	44 (16%)	5	6	5, 39, 57, 91	9 (3%)
1	B	268/295 (90%)	1.33	51 (19%)	4	4	5, 38, 58, 69	20 (7%)
All	All	533/590 (90%)	1.27	95 (17%)	4	5	5, 38, 58, 91	29 (5%)

All (95) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	300[A]	GLU	10.7
1	B	218	LEU	10.5
1	A	123	PHE	10.1
1	B	213	VAL	10.0
1	A	237	LEU	9.3
1	B	180[A]	LEU	9.0
1	B	209	VAL	8.9
1	B	217	TYR	8.7
1	A	124	SER	8.5
1	B	221	CYS	8.3
1	A	120[A]	SER	8.3
1	A	234	ASN	8.1
1	B	206	LEU	8.0
1	B	214	ARG	7.9
1	B	191[A]	ARG	6.9
1	B	212	ASP	6.8
1	B	170	GLY	6.8
1	B	149[A]	GLU	6.7
1	A	230	PRO	6.7
1	B	222	PRO	6.6
1	B	172	ILE	6.2
1	A	97[A]	SER	6.1
1	B	208	LYS	6.1
1	B	268	ASN	6.1

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Mol	Chain	Res	Type	RSRZ
1	A	232	GLU	6.0
1	B	216	GLU	5.9
1	A	115[A]	CYS	5.9
1	A	233	ASN	5.9
1	B	210	SER	5.7
1	A	235	ARG	5.7
1	B	211	ASP	5.7
1	B	215	ASP	5.1
1	A	130	THR	5.0
1	A	129	ALA	5.0
1	A	166	CYS	4.9
1	A	119	GLN	4.9
1	A	236	SER	4.8
1	A	231	GLU	4.7
1	B	207	GLN	4.6
1	A	175	ARG	4.4
1	B	284	ILE	4.1
1	B	156	TRP	4.0
1	B	171	ARG	3.9
1	A	134[A]	MET	3.9
1	B	235	ARG	3.6
1	A	212	ASP	3.6
1	B	285	VAL	3.6
1	A	184	VAL	3.3
1	B	136	LYS	3.2
1	A	213	VAL	3.1
1	B	237	LEU	3.1
1	A	315	SER	3.1
1	B	232	GLU	3.1
1	B	283	GLU	3.0
1	A	183	SER	2.9
1	A	263	MET	2.9
1	A	122	GLY	2.8
1	B	219	VAL	2.8
1	B	183	SER	2.8
1	A	223	GLN	2.7
1	B	286	ASP	2.7
1	A	296	ASP	2.6
1	B	304	ASP	2.6
1	A	225	PRO	2.6
1	A	111	GLN	2.6
1	A	239	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
1	A	238	LYS	2.5
1	B	233	ASN	2.5
1	B	230	PRO	2.5
1	B	79	GLU	2.5
1	B	227	LEU	2.4
1	A	359	LYS	2.4
1	B	220	PHE	2.4
1	B	238	LYS	2.4
1	B	173	GLY	2.4
1	A	240	ILE	2.4
1	B	333	ASP	2.4
1	B	291	GLN	2.4
1	B	357	ARG	2.3
1	B	146	MET	2.3
1	A	171	ARG	2.2
1	B	344	GLY	2.2
1	B	302	GLN	2.2
1	B	358	LYS	2.1
1	B	234	ASN	2.1
1	A	358	LYS	2.1
1	A	191	ARG	2.1
1	A	204	ARG	2.1
1	A	262	ASP	2.0
1	A	121	VAL	2.0
1	A	98	ASN	2.0
1	A	211	ASP	2.0
1	B	231	GLU	2.0
1	A	264	ASN	2.0
1	A	357	ARG	2.0

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

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

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($Å^2$)	Q<0.9
2	3M0	A	401	11/11	0.81	0.23	38,38,40,40	11
2	3M0	B	402	11/11	0.89	0.18	19,19,20,21	11
3	SO4	B	403	5/5	0.89	0.13	19,19,19,20	5
3	SO4	A	402	5/5	0.90	0.18	51,51,51,51	5
2	3M0	B	401	11/11	0.90	0.18	20,20,22,22	11

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.
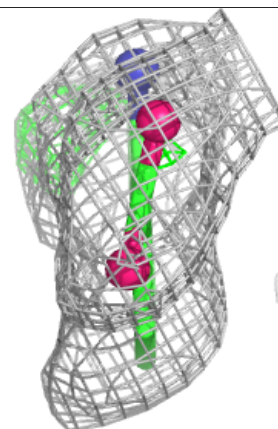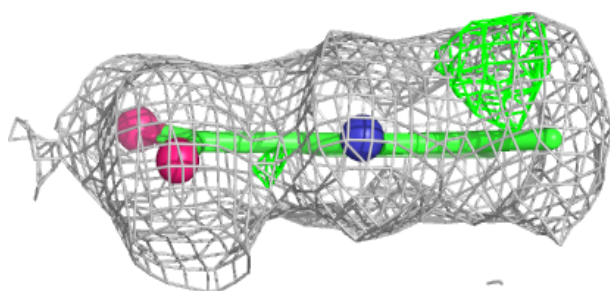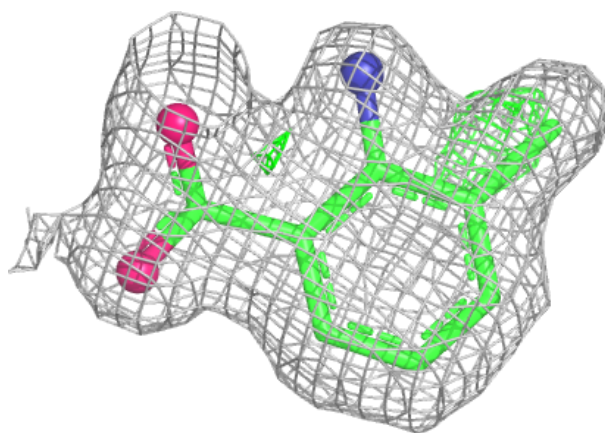
Electron density around 3M0 A 401:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
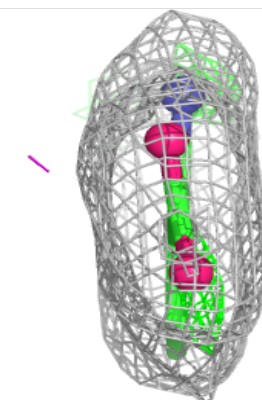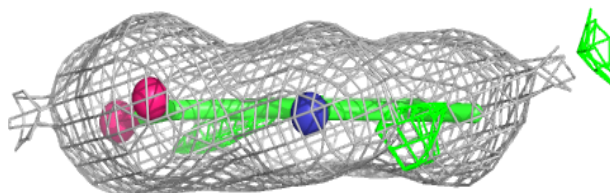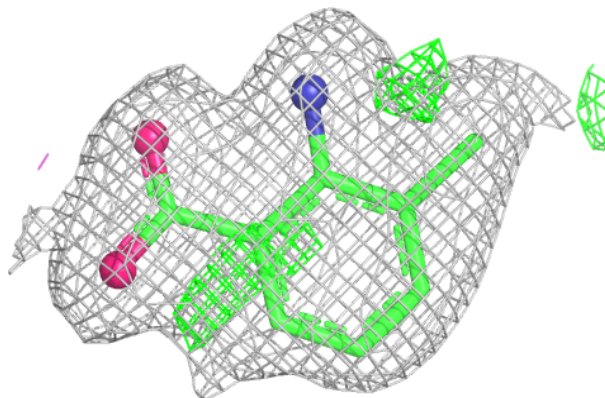and green (positive)
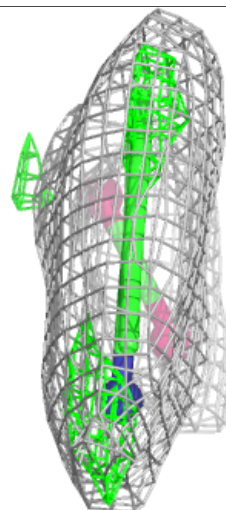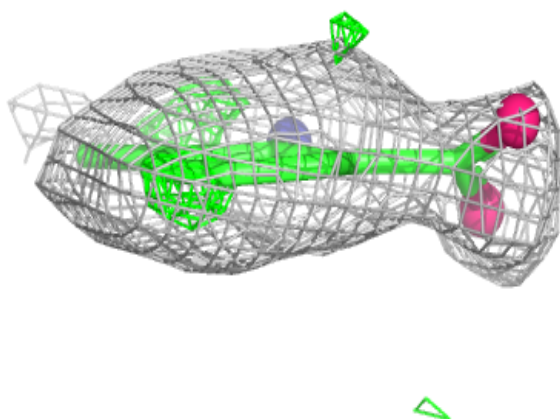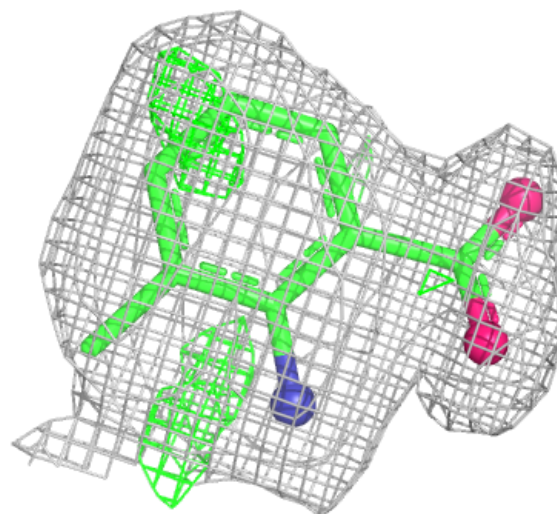
Electron density around 3M0 B 402:

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

Electron density around 3M0 B 401:

$2mF_o$-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.