W O R L D W I D E

wwPDB

P R O T E I N   D A T A   B A N K

wwPDB X-ray Structure Validation Summary Report (i)

Oct 27, 2024 – 08:40 PM EDT

PDB ID	:	1N0H
Title	:	Crystal Structure of Yeast Acetohydroxyacid Synthase in Complex with a Sulfonylurea Herbicide, Chlorimuron Ethyl
Authors	:	Pang, S.S.; Guddat, L.W.; Duggleby, R.G.
Deposited on	:	2002-10-14
Resolution	:	2.80 Å(reported)

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

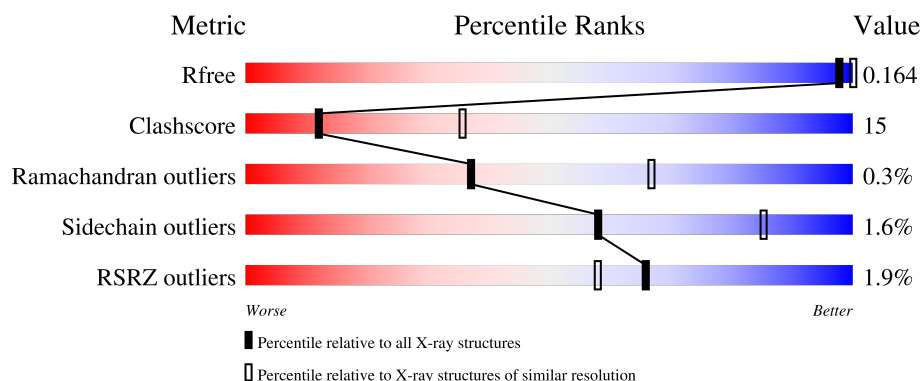|		
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 2.80 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		0.164
Clashscore		15
Ramachandran outliers		0.3%
Sidechain outliers		1.6%
RSRZ outliers		1.9%

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	3657 (2.80-2.80)
Clashscore	180529	4123 (2.80-2.80)
Ramachandran outliers	177936	4071 (2.80-2.80)
Sidechain outliers	177891	4073 (2.80-2.80)
RSRZ outliers	164620	3659 (2.80-2.80)

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	677	% 68% 20% • 12%
1	B	677	2% 62% 26% • 12%

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
4	CIE	A	695	-	X	-	-
4	CIE	B	1695	-	X	-	-
6	AYD	A	700	-	X	-	-

2 Entry composition (i)

There are 9 unique types of molecules in this entry. The entry contains 10196 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 Acetolactate synthase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	599	Total	C	N	O	S	0	2	0
			4571	2894	791	864	22			
1	B	598	Total	C	N	O	S	0	2	0
			4563	2891	788	862	22			

- Molecule 2 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	1	Total	K	0	0
			1	1		
2	B	1	Total	K	0	0
			1	1		

- Molecule 3 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	1	Total	Mg	0	0
			1	1		
3	B	1	Total	Mg	0	0
			1	1		

- Molecule 4 is 2-[[[[(4-CHLORO-6-METHOXY-2-PYRIMIDINYL)AMINO]CARBONYL] AMINO]SULFONYL]BENZOIC ACID ETHYL ESTER (three-letter code: CIE) (formula: $C_{15}H_{15}ClN_4O_6S$).

CIE
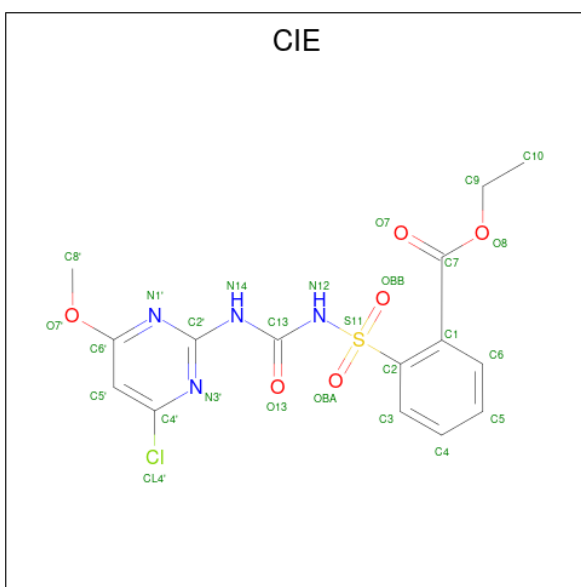
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
4	A	1	Total	C	Cl	N	O	S	0	0
			27	15	1	4	6	1		
4	B	1	Total	C	Cl	N	O	S	0	0
			27	15	1	4	6	1		

- Molecule 5 is 2,3-DIHYDROXY-1,4-DITHIOBUTANE (three-letter code: DTT) (formula: $C_4H_{10}O_2S_2$).

DTT
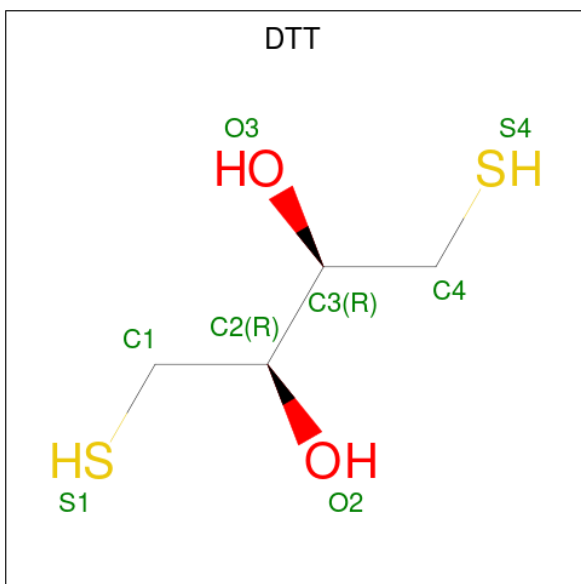
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
5	A	1	Total	C	O	S	0	0
			8	4	2	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
5	B	1	8	4	2	2	0	0

- Molecule 6 is 4-{[(4'-AMINO-2'-METHYLPYRIMIDIN-5'-YL)METHYL]AMINO}PENT-3-ENYL DIPHOSPHATE (three-letter code: AYD) (formula: $C_{11}H_{20}N_4O_7P_2$).
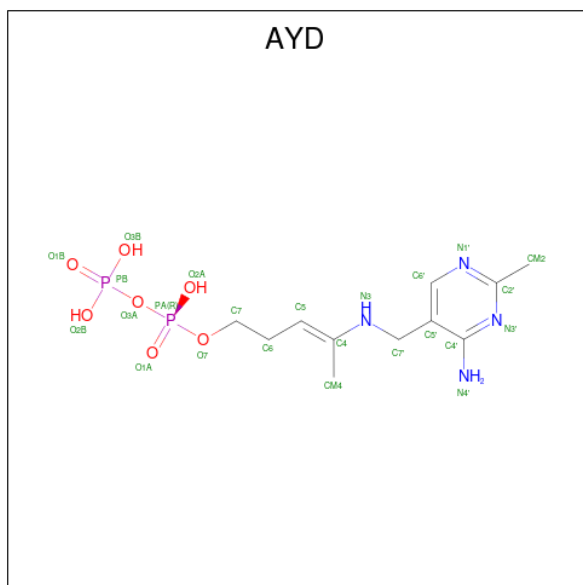
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	N	O	P		
6	A	1	24	11	4	7	2	0	0

- Molecule 7 is FLAVIN-ADENINE DINUCLEOTIDE (three-letter code: FAD) (formula: $C_{27}H_{33}N_9O_{15}P_2$).

FAD
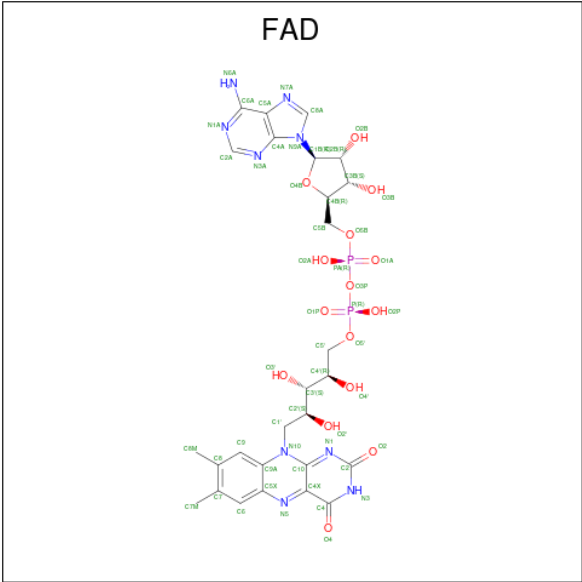
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
7	A	1	Total	C	N	O	P	0	0
			53	27	9	15	2		
7	B	1	Total	C	N	O	P	0	0
			53	27	9	15	2		

- Molecule 8 is THIAMINE DIPHOSPHATE (three-letter code: TPP) (formula: $C_{12}H_{19}N_4O_7P_2S$).

TPP
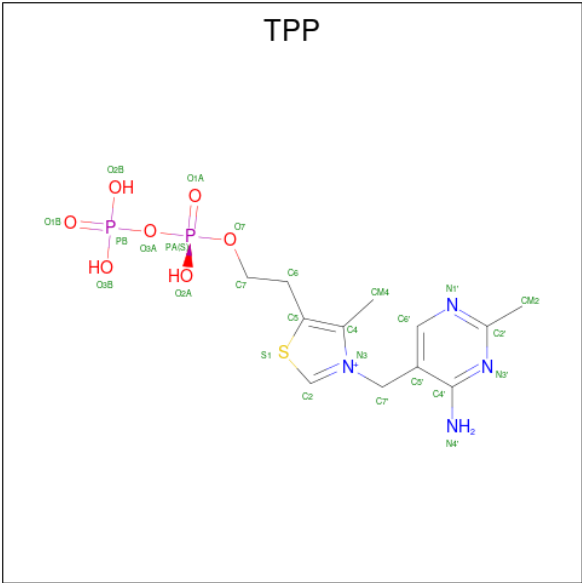
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
8	B	1	Total	C	N	O	P	S	0	0
			26	12	4	7	2	1		

- Molecule 9 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
9	A	505	Total 505	O 505	0	0
9	B	327	Total 327	O 327	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: Acetolactate synthase

• Molecule 1: Acetolactate synthase

I296 N297 P302 V303 L304 Y305 V306 G307 I310 L319 E322 L323 I329 P330 T333 T334 L335 L338 E344 L349 D350 M351 L352 G353 M354 H355 A360 V364 A367 D368 L369 I370 I371 G374 A375 R376 F377 D378 V381 A389 A392 R393 R394

R400 G401 G402 I403 I404 S409 P410 K411 N414 T419 T428 M434 M435 S436 K437 K442 E443 R444 S445 E446 W447 K455 P459 Y460 E465 K472 K478 T487 H490 T494 T495 G496 V497 G498 Q499 H500 Q501 M502 W503 A504 A505 Q506 H507 R511

I517 L522 K539 P540 E541 D548 N554 L557 T558 E559 L560 K571 Q580 G581 M582 V583 Q587 S588 L589 F590 Y591 E592 H593 R594 Y595 Q600 I606 K615 G616 L617 R618 V619 K620 E623 K628 F632 V633 K636 G637 P638 V639 L640 L641 E644

P650 V651 L652 P653 M654 V655 F664 I665 N666 F667 D668 P669 E670 V671 E672 R673 Q674 Q675 T676 R679 H680 K681 R682 T683 G684 G685 K686 H687

4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	P 4 2 2	Depositor
Cell constants a, b, c, α, β, γ	153.98Å 153.98Å 178.30Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.70 – 2.80 48.70 – 2.80	Depositor EDS
% Data completeness (in resolution range)	95.3 (48.70-2.80) 95.3 (48.70-2.80)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.36 (at 2.69Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.163 , 0.205 0.163 , 0.164	Depositor DCC
R_{free} test set	5303 reflections (10.15%)	wwPDB-VP
Wilson B-factor (Å^2)	25.3	Xtriage
Anisotropy	0.335	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.36 , 70.2	EDS
L-test for twinning[2]	$< |L| > = 0.49, < L^2 > = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.94	EDS
Total number of atoms	10196	wwPDB-VP
Average B, all atoms (Å^2)	31.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.79% of the height of the origin peak. No significant pseudotranslation is detected.*

---

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: TPP, K, CIE, DTT, FAD, MG, AYD

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	0.33	0/4676	0.60	0/6345
1	B	0.30	0/4668	0.57	0/6334
All	All	0.32	0/9344	0.58	0/12679

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts ⓘ

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	4571	0	4557	133	0
1	B	4563	0	4552	159	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
4	A	27	0	14	4	0
4	B	27	0	14	5	0
5	A	8	0	9	2	0
5	B	8	0	9	3	0
6	A	24	0	17	5	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	A	53	0	31	1	0
7	B	53	0	31	3	0
8	B	26	0	16	8	0
9	A	505	0	0	10	0
9	B	327	0	0	14	0
All	All	10196	0	9250	286	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 15.

The worst 5 of 286 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:498:GLY:HA2	1:B:582[A]:MET:HE3	1.48	0.96
1:B:498:GLY:HA2	1:B:582[A]:MET:CE	1.98	0.93
1:A:474:GLN:H	1:A:474:GLN:HE21	1.25	0.84
4:A:695:CIE:H8'2	7:A:701:FAD:HM72	1.66	0.77
9:A:1038:HOH:O	1:B:600:GLN:HB3	1.87	0.75

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	597/677 (88%)	580 (97%)	16 (3%)	1 (0%)	44	73
1	B	596/677 (88%)	575 (96%)	19 (3%)	2 (0%)	37	67
All	All	1193/1354 (88%)	1155 (97%)	35 (3%)	3 (0%)	37	67

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	350	ASP
1	B	269	PRO
1	A	269	PRO

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	490/556 (88%)	480 (98%)	10 (2%)	50	81
1	B	489/556 (88%)	482 (99%)	7 (1%)	62	87
All	All	979/1112 (88%)	962 (98%)	17 (2%)	58	84

5 of 17 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	557	LEU
1	B	666	ASN
1	A	582[A]	MET
1	A	582[B]	MET
1	A	666	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 33 such sidechains are listed below:

Mol	Chain	Res	Type
1	B	587	GLN
1	B	600	GLN
1	B	675	GLN
1	A	554	ASN
1	A	500	HIS

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 12 ligands modelled in this entry, 4 are monoatomic - leaving 8 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	$\#|Z| > 2$
5	DTT	B	1698	1	7,7,7	1.31	1 (14%)	4,8,8	5.46	3 (75%)
5	DTT	A	698	1	7,7,7	1.30	1 (14%)	4,8,8	5.43	4 (100%)
6	AYD	A	700	3	22,24,24	3.70	15 (68%)	31,34,34	3.21	10 (32%)
7	FAD	A	701	-	54,58,58	2.25	19 (35%)	71,89,89	1.13	4 (5%)
4	CIE	B	1695	-	28,28,28	4.54	16 (57%)	38,39,39	4.44	16 (42%)
8	TPP	B	1702	3	23,27,27	3.11	11 (47%)	30,40,40	2.16	8 (26%)
4	CIE	A	695	-	28,28,28	4.58	17 (60%)	38,39,39	4.41	15 (39%)
7	FAD	B	1701	-	54,58,58	2.32	20 (37%)	71,89,89	1.11	2 (2%)

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
5	DTT	B	1698	1	-	2/8/8/8	-
5	DTT	A	698	1	-	2/8/8/8	-
6	AYD	A	700	3	-	7/19/19/19	0/1/1/1
7	FAD	A	701	-	-	1/30/50/50	0/6/6/6

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	CIE	B	1695	-	-	9/24/24/24	0/2/2/2
8	TPP	B	1702	3	-	1/16/17/17	0/2/2/2
4	CIE	A	695	-	-	8/24/24/24	0/2/2/2
7	FAD	B	1701	-	-	1/30/50/50	0/6/6/6

The worst 5 of 100 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	A	695	CIE	OBA-S11	14.97	1.60	1.43
4	B	1695	CIE	OBA-S11	14.43	1.60	1.43
6	A	700	AYD	C4'-N3'	8.16	1.45	1.35
4	B	1695	CIE	C1-C2	7.79	1.48	1.40
8	B	1702	TPP	C4'-N3'	7.22	1.44	1.35

The worst 5 of 62 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	B	1695	CIE	C8'-O7'-C6'	19.52	146.40	117.33
4	A	695	CIE	C8'-O7'-C6'	19.03	145.66	117.33
4	A	695	CIE	C2'-N14-C13	10.82	141.48	130.34
6	A	700	AYD	O7-C7-C6	10.76	148.48	108.98
4	B	1695	CIE	C2'-N14-C13	10.07	140.70	130.34

There are no chirality outliers.

5 of 31 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	B	1695	CIE	C1-C2-S11-OBA
5	A	698	DTT	S1-C1-C2-C3
5	B	1698	DTT	S1-C1-C2-C3
6	A	700	AYD	C4'-C5'-C7'-N3
6	A	700	AYD	C5-C4-N3-C7'

There are no ring outliers.

8 monomers are involved in 29 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	B	1698	DTT	3	0
5	A	698	DTT	2	0
6	A	700	AYD	5	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
7	A	701	FAD	1	0
4	B	1695	CIE	5	0
8	B	1702	TPP	8	0
4	A	695	CIE	4	0
7	B	1701	FAD	3	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.
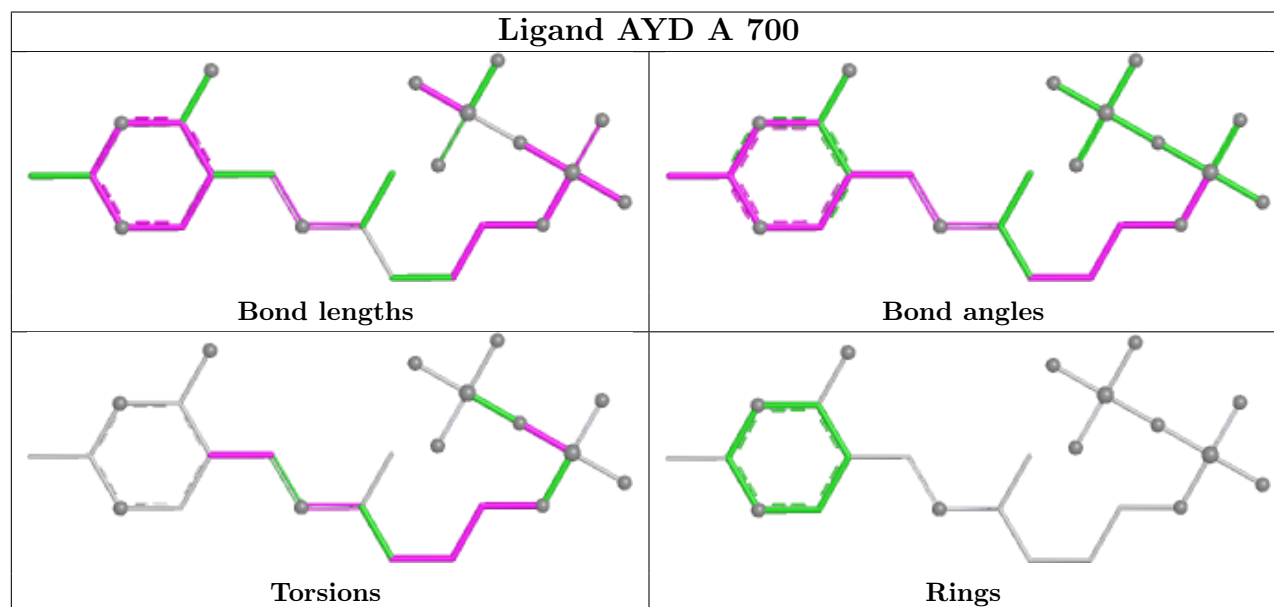
Ligand AYD A 700

Bond lengths

Bond angles

Torsions

Rings

Ligand FAD A 701

Bond lengths

Bond angles

Torsions

Rings

Ligand CIE B 1695

Bond lengths

Bond angles

Torsions

Rings

Ligand TPP B 1702

Bond lengths

Bond angles

Torsions

Rings

Ligand CIE A 695

Bond lengths

Bond angles

Torsions

Rings

Ligand FAD B 1701

Bond lengths

Bond angles

Torsions

Rings
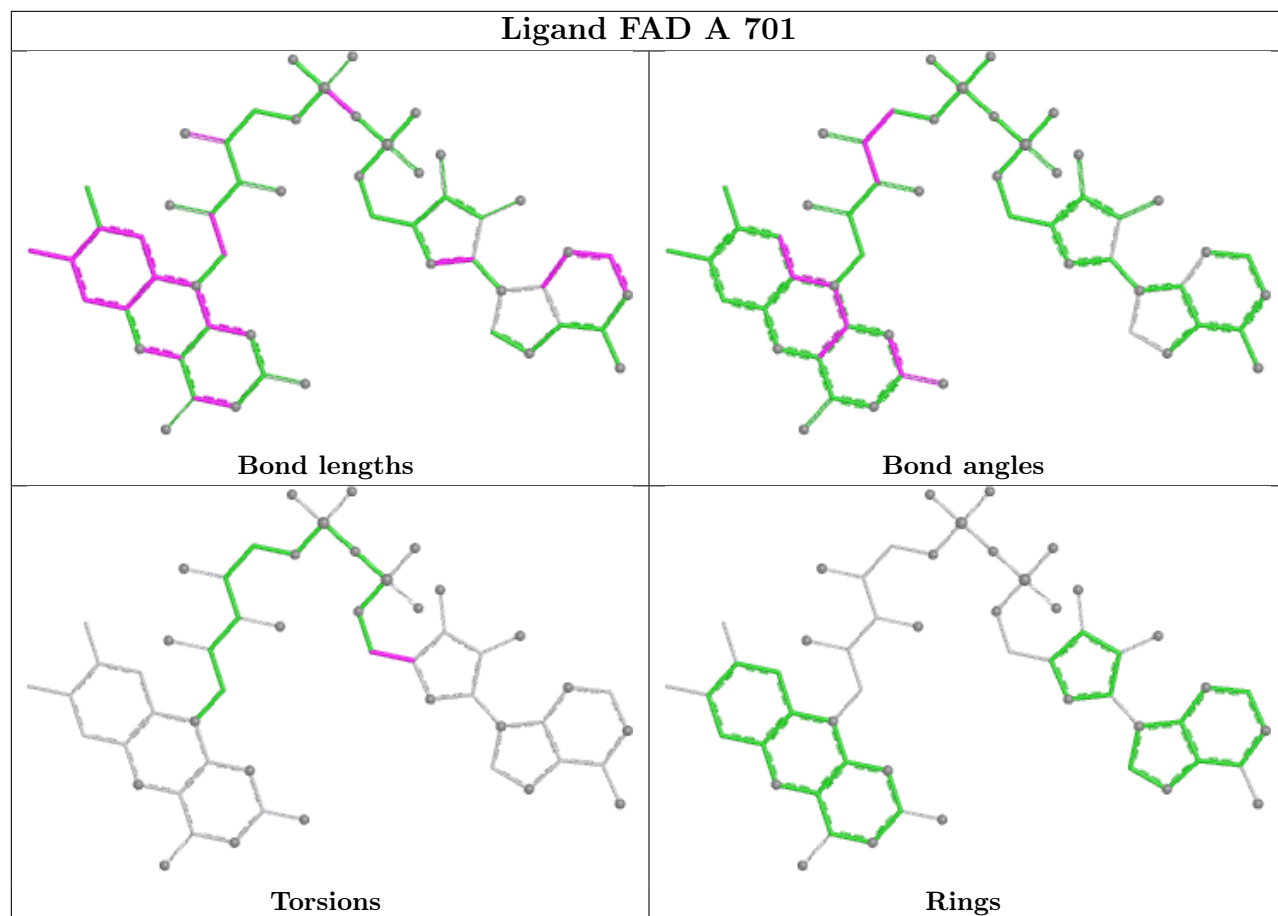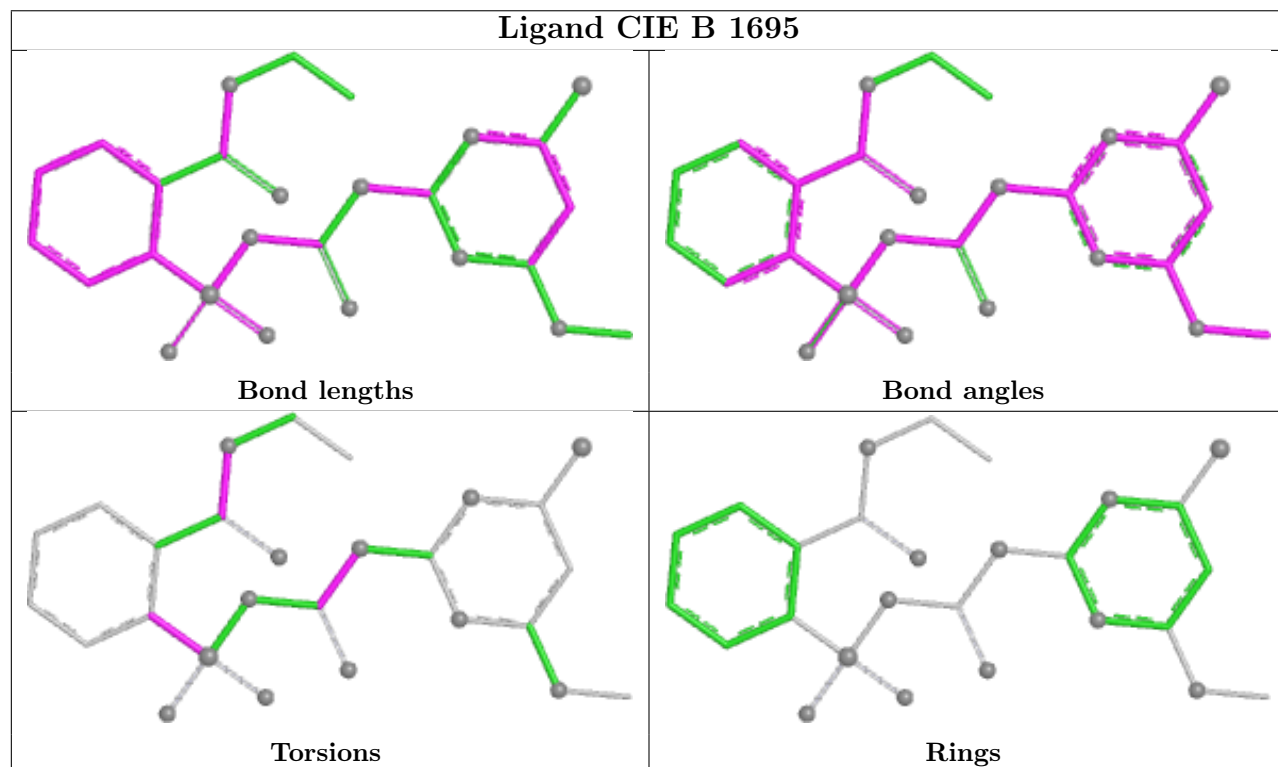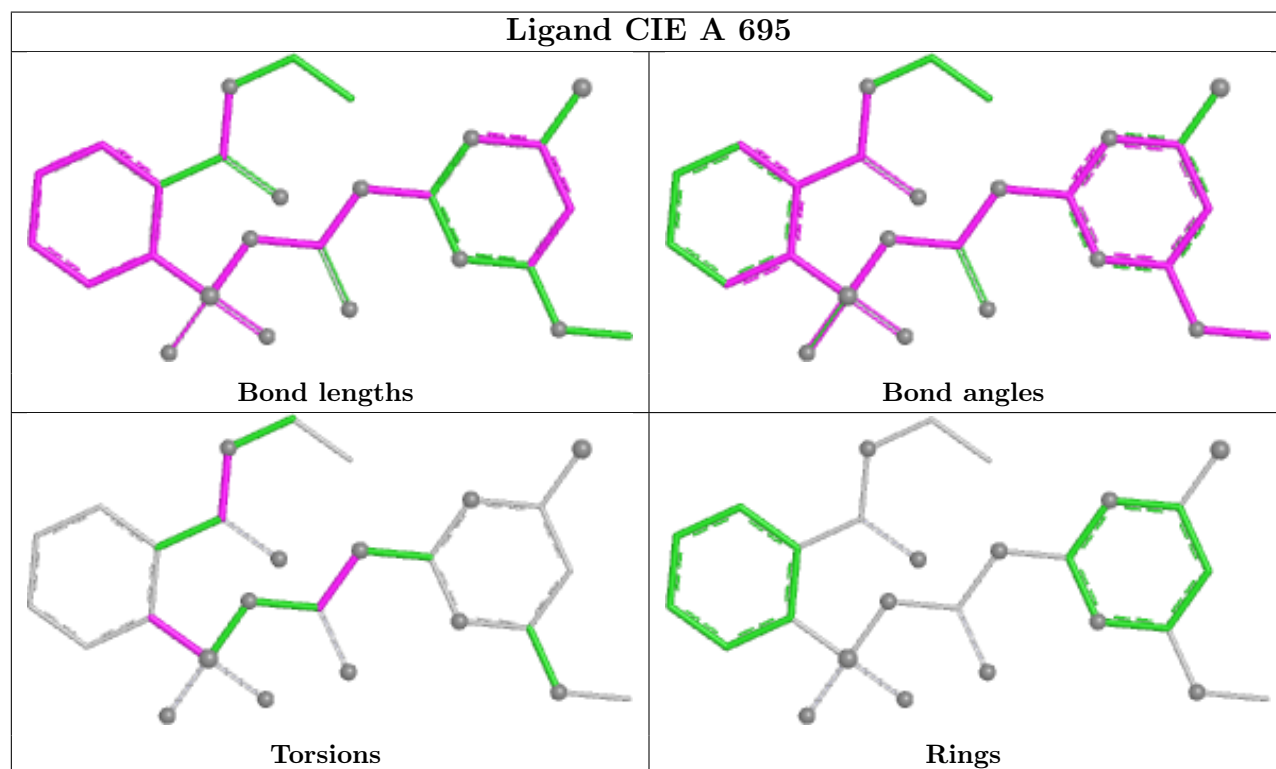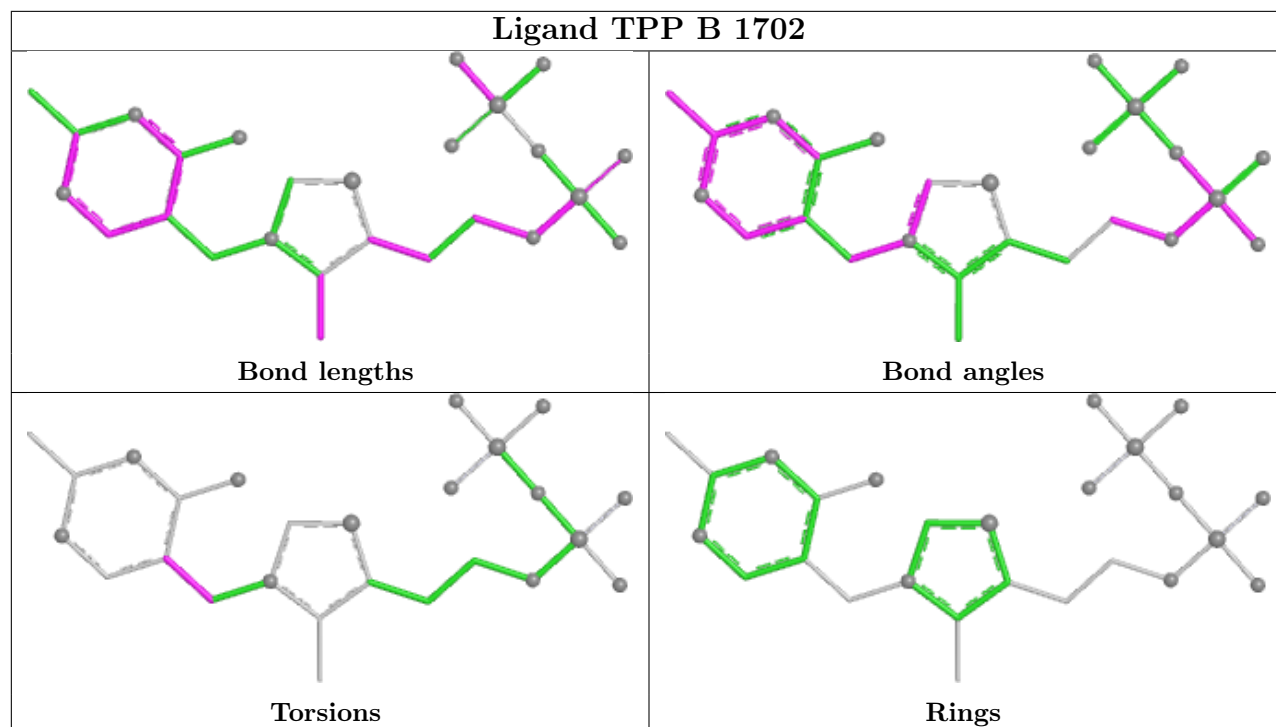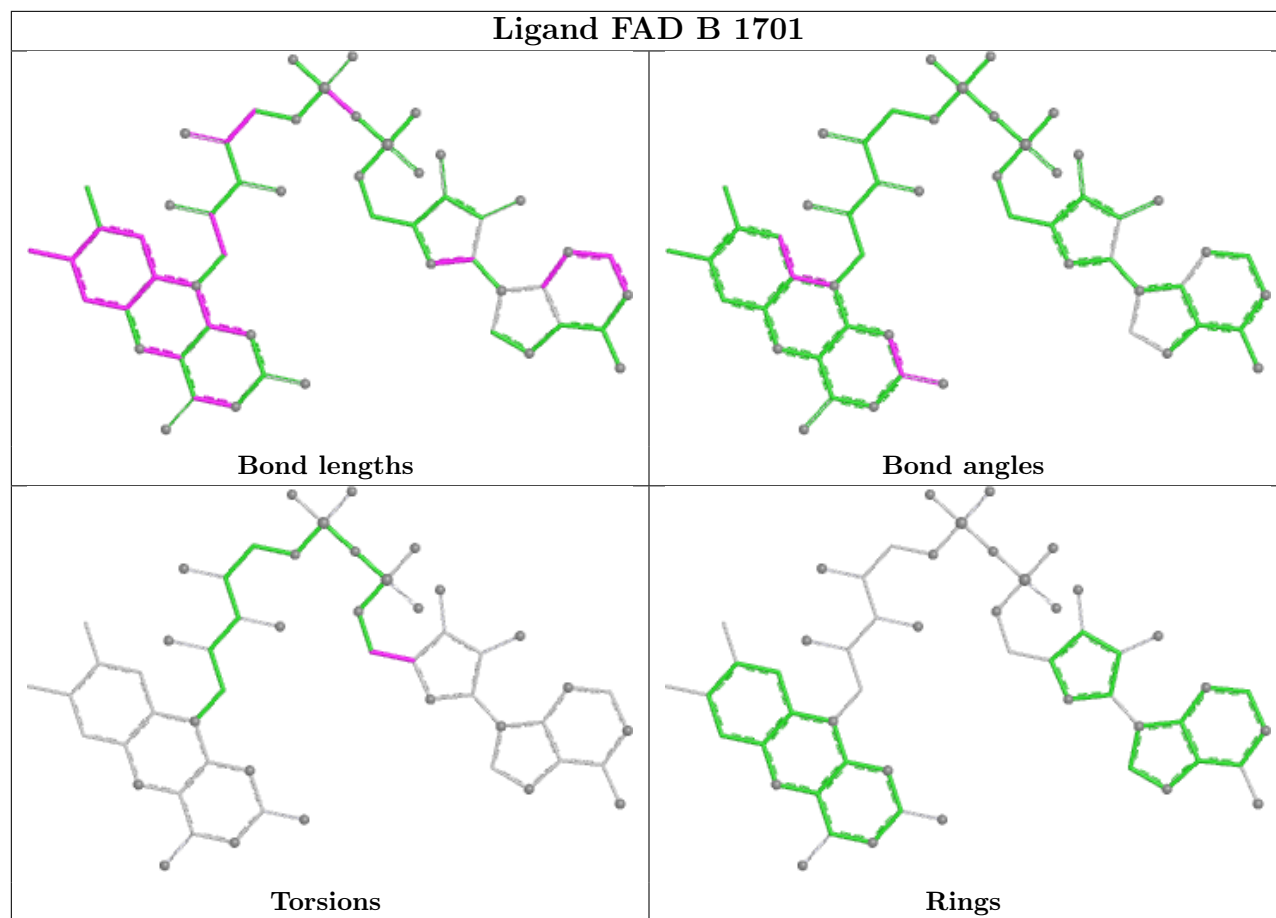
5.7 Other polymers ⓘ

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, 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	599/677 (88%)	-0.73	7 (1%)	76	69	7, 20, 42, 85	2 (0%)
1	B	598/677 (88%)	-0.17	16 (2%)	56	47	14, 35, 70, 101	2 (0%)
All	All	1197/1354 (88%)	-0.45	23 (1%)	66	58	7, 25, 64, 101	4 (0%)

The worst 5 of 23 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	278	SER	5.4
1	A	83	PRO	4.6
1	B	83	PRO	4.2
1	B	260	ASN	4.1
1	B	280	ALA	3.5

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 monosaccharides 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
5	DTT	B	1698	8/8	0.82	0.25	76,86,89,93	5
5	DTT	A	698	8/8	0.87	0.25	48,57,59,65	2
4	CIE	B	1695	27/27	0.88	0.13	41,46,51,51	0
4	CIE	A	695	27/27	0.89	0.11	19,24,27,31	0
8	TPP	B	1702	26/26	0.96	0.11	32,39,46,46	2
7	FAD	B	1701	53/53	0.97	0.08	29,32,40,41	0
6	AYD	A	700	24/24	0.97	0.10	16,41,47,47	0
2	K	B	1696	1/1	0.98	0.04	42,42,42,42	0
7	FAD	A	701	53/53	0.99	0.05	5,11,14,15	0
3	MG	B	1699	1/1	0.99	0.03	25,25,25,25	0
2	K	A	696	1/1	0.99	0.03	18,18,18,18	0
3	MG	A	699	1/1	1.00	0.03	2,2,2,2	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.
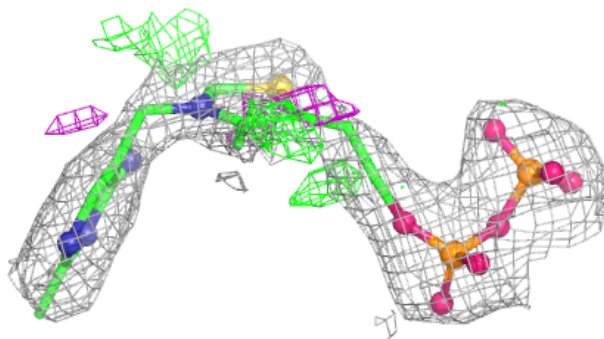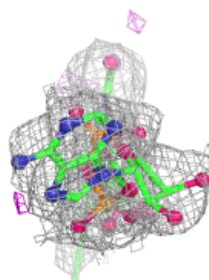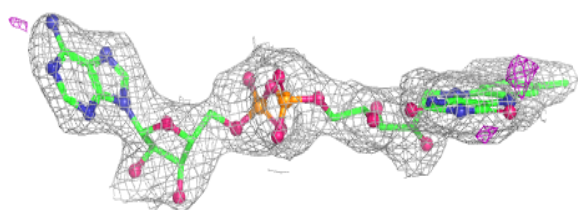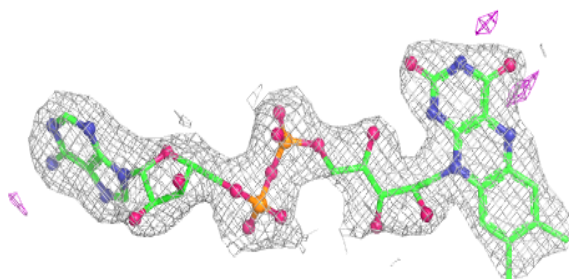

Electron density around CIE B 1695:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
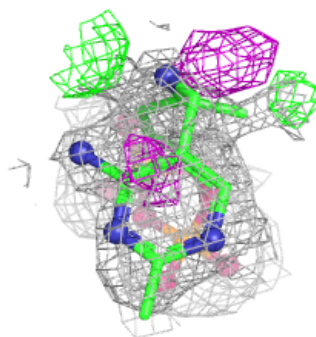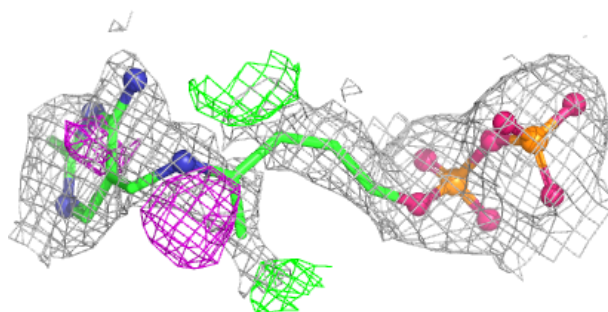mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)
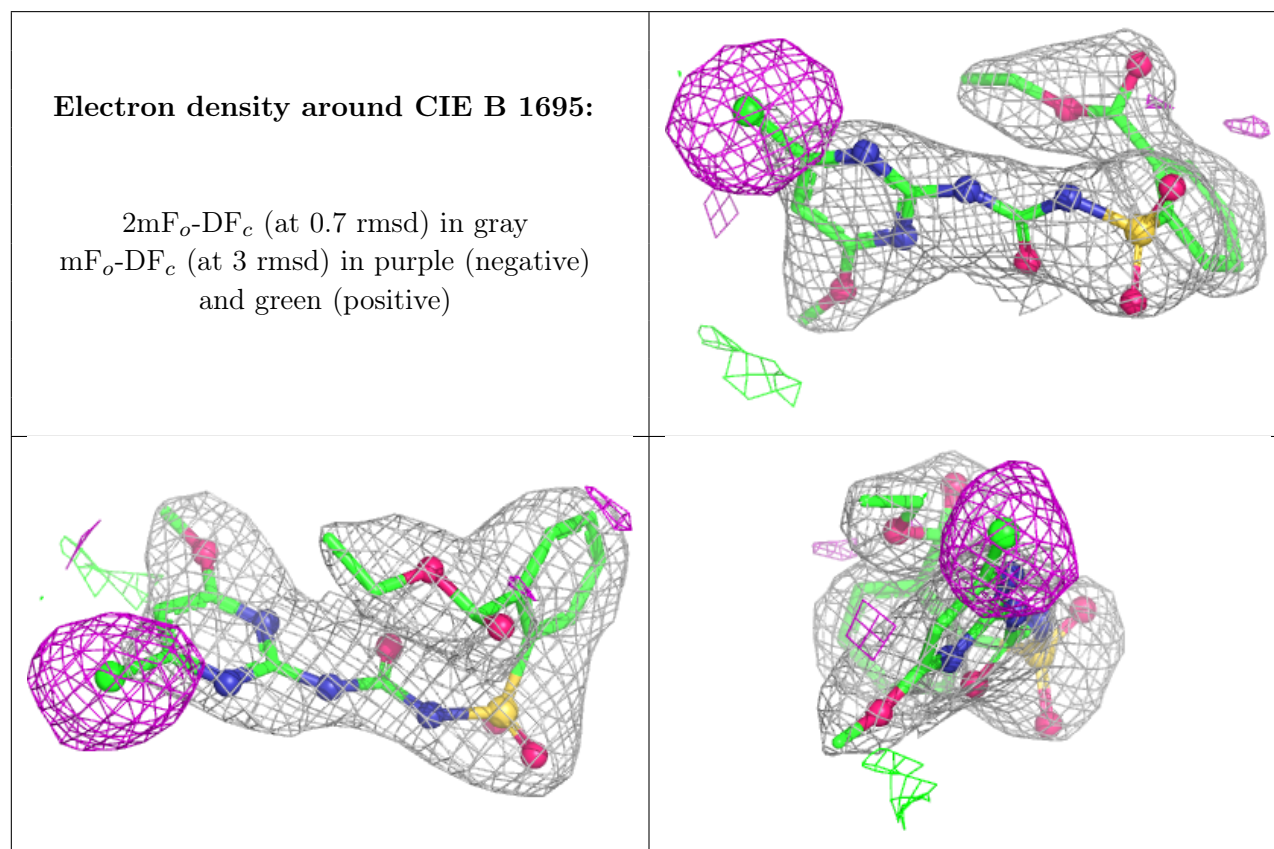
Electron density around CIE A 695:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
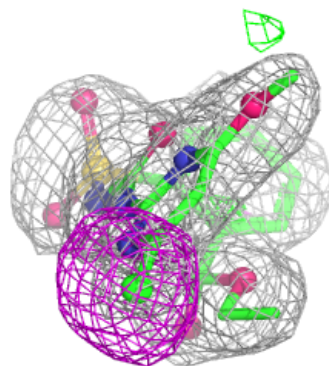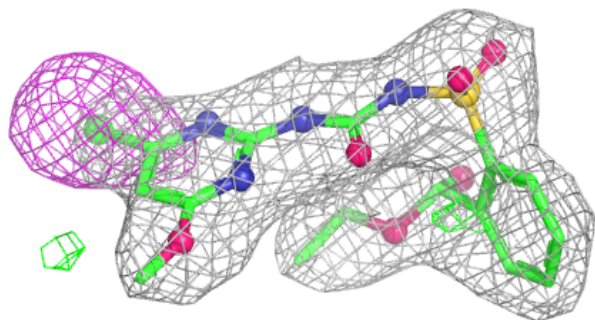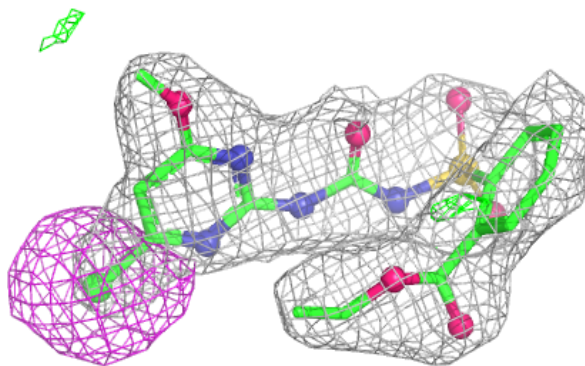
Electron density around TPP B 1702:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
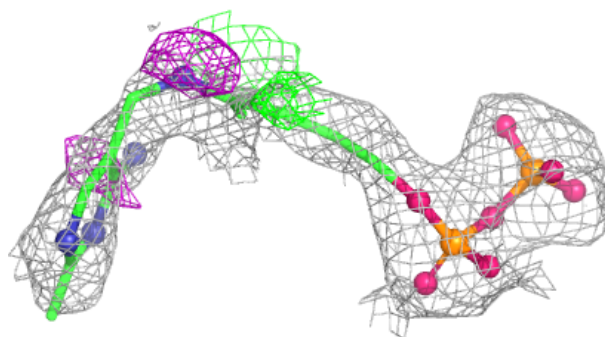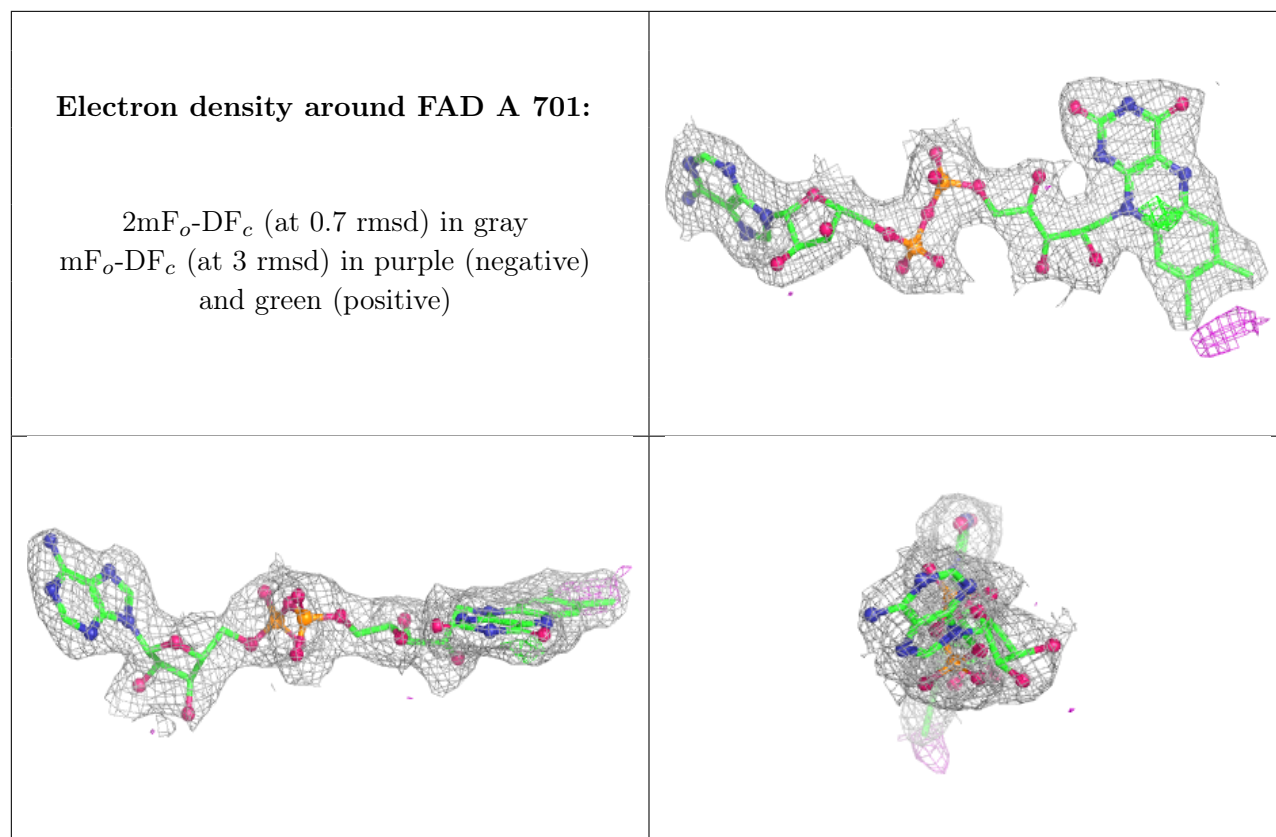$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)
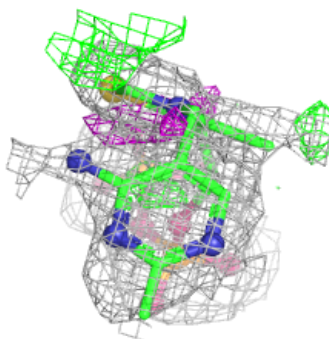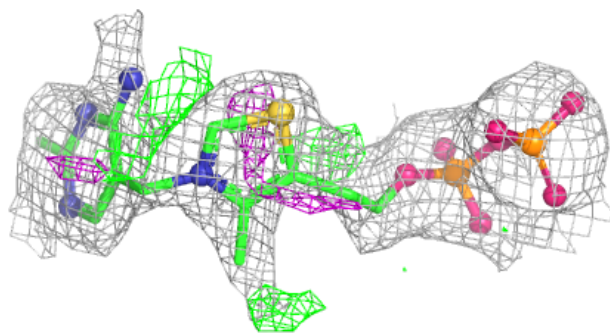
Electron density around FAD B 1701:

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

Electron density around AYD A 700:

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

Electron density around FAD A 701:

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

6.5 Other polymers ⓘ

There are no such residues in this entry.