WORLDWIDE PDB PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

May 24, 2020 – 07:32 pm BST

PDB ID : 2YN3

Title : Structural insight into the giant calcium-binding adhesin SiiE: implications for the adhesion of Salmonella enterica to polarized epithelial cells

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Deposited on : 2012-10-11

Resolution : 2.12 Å(reported)

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

|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

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 2.12 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		0.257
Clashscore		7
Ramachandran outliers		0.2%
Sidechain outliers		3.2%
RSRZ outliers		8.9%

Worse ← → Better

■ Percentile relative to all X-ray structures
▯ Percentile relative to X-ray structures of similar resolution
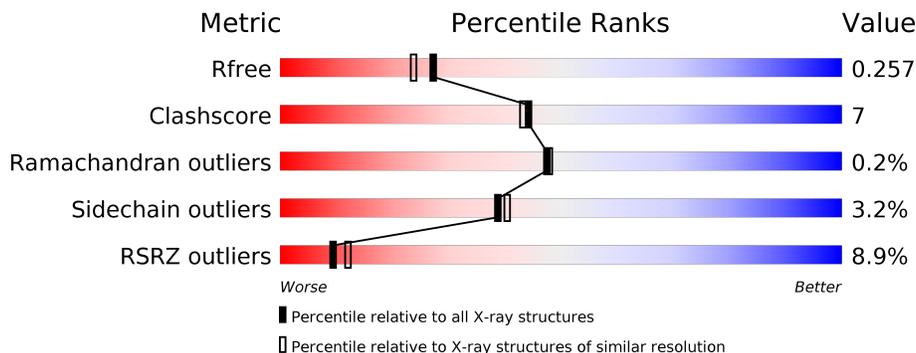
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	6241 (2.14-2.10)
Clashscore	141614	6778 (2.14-2.10)
Ramachandran outliers	138981	6705 (2.14-2.10)
Sidechain outliers	138945	6706 (2.14-2.10)
RSRZ outliers	127900	6112 (2.14-2.10)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on 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	288	10% / 84% 10% 5%
1	B	288	10% / 69% 15% • 15%
1	C	288	2% / 93% 5% •
1	D	288	8% / 55% 16% • 28%

2 Entry composition (i)

There are 5 unique types of molecules in this entry. The entry contains 7988 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 PUTATIVE INNER MEMBRANE PROTEIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	273	Total 2028	C 1267	N 329	O 429	Se 3	0	0	0
1	B	246	Total 1832	C 1143	N 297	O 389	Se 3	0	0	0
1	C	284	Total 2108	C 1311	N 342	O 452	Se 3	0	0	0
1	D	208	Total 1538	C 959	N 246	O 330	Se 3	0	0	0

- Molecule 2 is IODIDE ION (three-letter code: IOD) (formula: I).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	2	Total 2	I 2	0	0

- Molecule 3 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	B	3	Total 3	Ca 3	0	0
3	A	3	Total 3	Ca 3	0	0
3	D	3	Total 3	Ca 3	0	0
3	C	4	Total 4	Ca 4	0	0

- Molecule 4 is PHOSPHATE ION (three-letter code: PO4) (formula: O_4P).
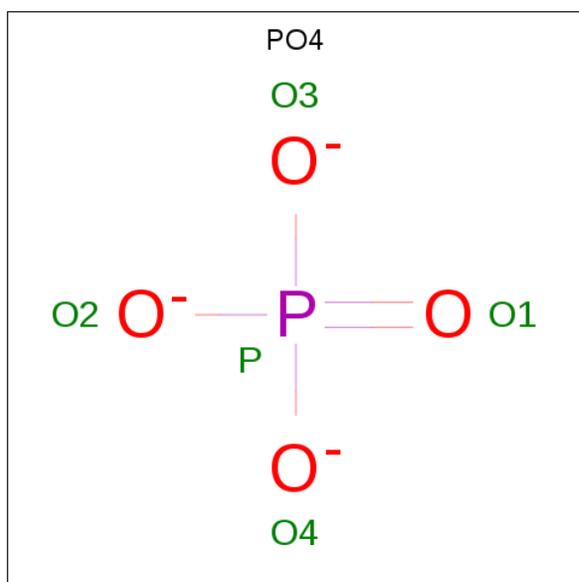
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	C	1	Total 5	O 4	P 1	0	0

- Molecule 5 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	A	185	Total 185	O 185	0	0
5	B	53	Total 53	O 53	0	0
5	C	175	Total 175	O 175	0	0
5	D	49	Total 49	O 49	0	0

3 Residue-property plots ⓘ

These plots are drawn for all protein, RNA and DNA 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: PUTATIVE INNER MEMBRANE PROTEIN
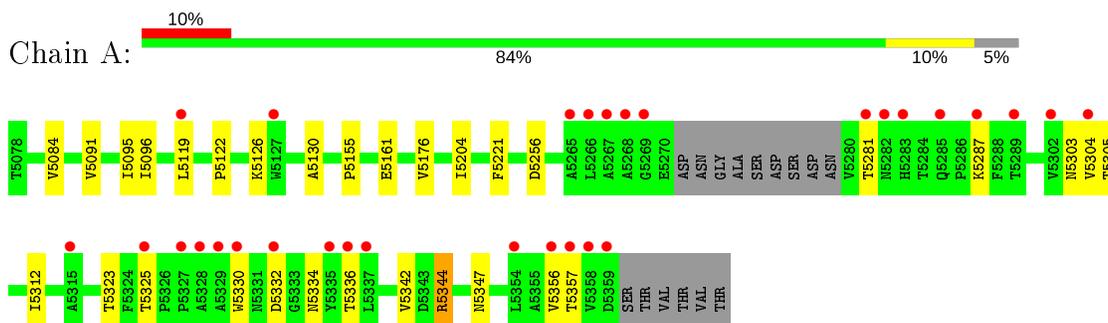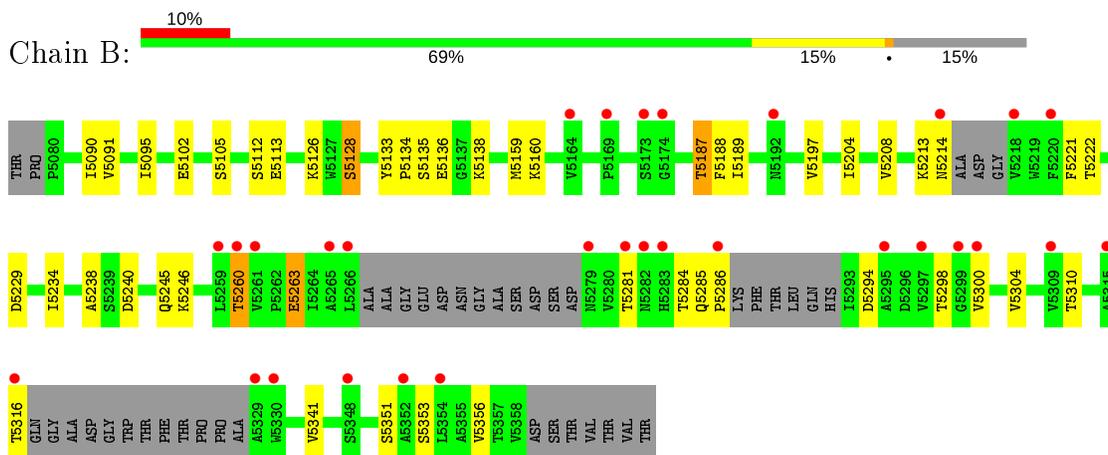
Chain A:

- Molecule 1: PUTATIVE INNER MEMBRANE PROTEIN

Chain B:

- Molecule 1: PUTATIVE INNER MEMBRANE PROTEIN

Chain C:

- Molecule 1: PUTATIVE INNER MEMBRANE PROTEIN

Chain D:
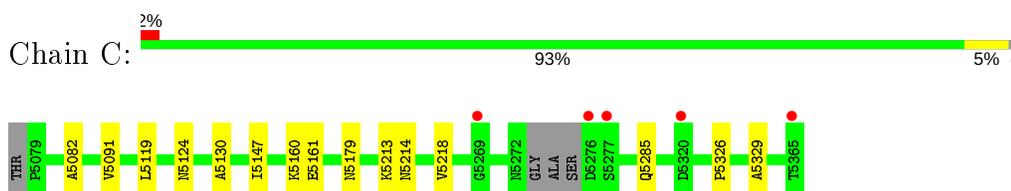
4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α, β, γ	93.48Å 153.31Å 96.30Å 90.00° 103.88° 90.00°	Depositor
Resolution (Å)	34.32 – 2.12 34.32 – 2.12	Depositor EDS
% Data completeness (in resolution range)	98.0 (34.32-2.12) 98.1 (34.32-2.12)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	(Not available)	Depositor
$<I/\sigma(I)>$ [1]	3.30 (at 2.12Å)	Xtriage
Refinement program	REFMAC 5.7.0029	Depositor
R, R_{free}	0.210 , 0.260 0.209 , 0.257	Depositor DCC
R_{free} test set	3648 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	31.5	Xtriage
Anisotropy	0.053	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 48.0	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	7988	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 19.25% 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 (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: CA, IOD, PO4

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	0.69	0/2064	0.79	3/2835 (0.1%)
1	B	0.49	0/1857	0.67	0/2544
1	C	0.70	0/2144	0.78	0/2945
1	D	0.52	0/1559	0.71	0/2133
All	All	0.62	0/7624	0.74	3/10457 (0.0%)

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	5344	ARG	NE-CZ-NH2	-7.22	116.69	120.30
1	A	5344	ARG	NE-CZ-NH1	5.59	123.09	120.30
1	A	5256	ASP	CB-CG-OD1	5.14	122.93	118.30

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	2028	0	1959	30	0
1	B	1832	0	1784	23	0
1	C	2108	0	2026	15	0
1	D	1538	0	1505	34	0

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	A	2	0	0	0	0
3	A	3	0	0	0	0
3	B	3	0	0	0	0
3	C	4	0	0	0	0
3	D	3	0	0	0	0
4	C	5	0	0	0	0
5	A	185	0	0	5	0
5	B	53	0	0	3	0
5	C	175	0	0	0	0
5	D	49	0	0	2	0
All	All	7988	0	7274	97	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 7.

All (97) 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:A:5161:GLU:HG3	5:A:2088:HOH:O	1.33	1.29
1:A:5155:PRO:HD2	5:A:2080:HOH:O	1.41	1.20
1:A:5204:ILE:HD11	1:A:5221:PHE:CE2	2.09	0.87
1:A:5091:VAL:HG12	1:A:5096:ILE:HD11	1.57	0.86
1:A:5334:ASN:HB2	5:A:2180:HOH:O	1.74	0.86
1:A:5356:VAL:HG12	1:A:5357:THR:H	1.41	0.85
1:A:5091:VAL:CG1	1:A:5096:ILE:HD11	2.08	0.84
1:A:5305:THR:CG2	1:A:5336:THR:HB	2.11	0.81
1:D:5297:VAL:HG22	1:D:5341:VAL:HG13	1.66	0.77
1:D:5259:LEU:HD21	1:D:5341:VAL:HG12	1.74	0.69
1:D:5259:LEU:HD11	1:D:5341:VAL:HG11	1.75	0.69
1:D:5159:MSE:HG2	1:D:5244:ASN:CB	2.25	0.67
1:A:5287:LYS:HD2	1:A:5325:THR:OG1	1.95	0.66
1:A:5305:THR:HG23	1:A:5336:THR:HB	1.79	0.65
1:A:5356:VAL:HG12	1:A:5357:THR:N	2.13	0.63
1:B:5090:ILE:HD12	5:B:2037:HOH:O	1.99	0.63
1:C:5160:LYS:HE3	1:C:5161:GLU:OE2	1.99	0.63
1:C:5214:ASN:HD21	1:C:5218:VAL:CG1	2.11	0.62
1:A:5305:THR:HG22	1:A:5336:THR:HB	1.83	0.61
1:D:5216:ASP:OD1	1:D:5217:GLY:N	2.33	0.59
1:A:5344:ARG:NH1	5:A:2183:HOH:O	2.35	0.58
1:A:5204:ILE:HD11	1:A:5221:PHE:HE2	1.67	0.58
1:D:5294:ASP:O	1:D:5297:VAL:HG23	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:5136:GLU:OE1	1:B:5138:LYS:NZ	2.32	0.58
1:D:5159:MSE:HG2	1:D:5244:ASN:HB3	1.85	0.57
1:C:5214:ASN:ND2	1:C:5218:VAL:HG13	2.20	0.56
1:D:5297:VAL:HG22	1:D:5341:VAL:CG1	2.34	0.56
1:B:5263:GLU:HA	1:B:5351:SER:HB2	1.88	0.56
1:D:5202:VAL:HG12	1:D:5204:ILE:HG13	1.88	0.56
1:D:5213:LYS:HE2	1:D:5217:GLY:HA2	1.87	0.56
1:A:5344:ARG:NH2	1:C:5124:ASN:O	2.39	0.55
1:D:5163:PRO:HG3	1:D:5193:LEU:HD21	1.87	0.55
1:A:5091:VAL:HG11	1:A:5096:ILE:HD11	1.86	0.55
1:B:5128:SER:HB2	1:C:5130:ALA:O	2.07	0.54
1:D:5133:TYR:CZ	1:D:5160:LYS:HB2	2.42	0.54
1:C:5214:ASN:HD21	1:C:5218:VAL:HG13	1.73	0.54
1:D:5136:GLU:OE2	1:D:5195:SER:OG	2.22	0.54
1:B:5189:ILE:HD11	5:B:2042:HOH:O	2.08	0.53
1:D:5144:VAL:HG22	1:D:5150:ARG:HB3	1.90	0.53
1:B:5304:VAL:O	1:B:5310:THR:HA	2.09	0.52
1:A:5204:ILE:CD1	1:A:5221:PHE:CE2	2.87	0.52
1:D:5297:VAL:CG2	1:D:5341:VAL:HG13	2.39	0.52
1:D:5160:LYS:HD3	1:D:5161:GLU:HG3	1.91	0.52
1:C:5285:GLN:HG3	1:C:5329:ALA:HA	1.92	0.51
1:B:5091:VAL:HG11	1:C:5091:VAL:HG21	1.93	0.51
1:A:5356:VAL:CG1	1:A:5357:THR:H	2.19	0.51
1:B:5188:PHE:CE2	1:B:5234:ILE:HD13	2.45	0.51
1:A:5091:VAL:HG12	1:A:5096:ILE:CD1	2.35	0.51
1:B:5285:GLN:N	1:B:5286:PRO:HD3	2.26	0.50
1:D:5159:MSE:CG	1:D:5244:ASN:HB3	2.41	0.50
1:B:5260:THR:N	1:B:5294:ASP:OD2	2.42	0.50
1:A:5084:VAL:HG11	1:C:5179:ASN:HB2	1.94	0.49
1:D:5261:VAL:HG22	1:D:5349:GLN:OE1	2.13	0.49
1:B:5187:THR:HB	1:B:5222:THR:OG1	2.13	0.49
1:D:5168:SER:O	1:D:5171:SER:N	2.41	0.49
5:A:2158:HOH:O	1:C:5082:ALA:HB3	2.12	0.48
1:B:5090:ILE:HG21	1:B:5160:LYS:HG3	1.95	0.48
1:D:5136:GLU:OE1	1:D:5138:LYS:NZ	2.44	0.48
1:D:5259:LEU:HD11	1:D:5341:VAL:CG1	2.43	0.48
1:D:5202:VAL:CG1	1:D:5204:ILE:HG13	2.44	0.48
1:D:5084:VAL:O	1:D:5099:GLY:HA3	2.14	0.47
1:A:5095:ILE:O	1:A:5130:ALA:HA	2.14	0.47
1:B:5246:LYS:NZ	5:B:2037:HOH:O	2.48	0.47
1:B:5204:ILE:HD11	1:B:5221:PHE:CE2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:5215:ALA:O	1:D:5216:ASP:HB2	2.15	0.46
1:D:5080:PRO:HG2	5:D:2016:HOH:O	2.15	0.46
1:B:5213:LYS:HG2	1:B:5214:ASN:N	2.31	0.46
1:C:5147:ILE:O	1:C:5147:ILE:HG22	2.15	0.46
1:C:5213:LYS:HE2	1:C:5213:LYS:HB3	1.77	0.46
1:D:5147:ILE:CG2	1:D:5147:ILE:O	2.63	0.46
1:B:5197:VAL:HA	1:B:5240:ASP:HA	1.97	0.46
1:C:5214:ASN:ND2	1:C:5218:VAL:CG1	2.77	0.45
1:D:5093:ASP:HB3	5:D:2012:HOH:O	2.15	0.45
1:A:5305:THR:HG22	1:A:5336:THR:O	2.17	0.45
1:D:5185:GLN:HG3	1:D:5226:PRO:HA	1.98	0.44
1:A:5303:ASN:HD22	1:A:5312:ILE:HG12	1.83	0.43
1:A:5091:VAL:HG11	1:D:5091:VAL:HG21	2.00	0.43
1:A:5204:ILE:CD1	1:A:5221:PHE:HE2	2.28	0.43
1:D:5095:ILE:HD11	1:D:5134:PRO:HD2	2.00	0.43
1:A:5342:VAL:HA	1:A:5347:ASN:O	2.18	0.43
1:B:5095:ILE:HD11	1:B:5134:PRO:HD2	1.99	0.43
1:C:5119:LEU:C	1:C:5119:LEU:HD12	2.40	0.43
1:A:5119:LEU:C	1:A:5119:LEU:HD12	2.40	0.42
1:A:5287:LYS:HD2	1:A:5325:THR:HG1	1.84	0.42
1:B:5284:THR:O	1:B:5285:GLN:HG3	2.19	0.42
1:B:5238:ALA:O	1:B:5245:GLN:HG3	2.18	0.42
1:D:5180:ILE:HG12	1:D:5254:THR:HB	2.02	0.42
1:C:5285:GLN:HA	1:C:5326:PRO:HG2	2.03	0.41
1:D:5262:PRO:HG2	1:D:5351:SER:HB3	2.00	0.41
1:A:5122:PRO:HD2	1:A:5126:LYS:O	2.21	0.41
1:B:5263:GLU:HA	1:B:5351:SER:CB	2.51	0.41
1:A:5304:VAL:HG21	1:A:5330:TRP:HH2	1.86	0.41
1:B:5133:TYR:CZ	1:B:5160:LYS:HB2	2.56	0.41
1:B:5102:GLU:O	1:B:5105:SER:OG	2.26	0.40
1:B:5300:VAL:HG22	1:B:5341:VAL:HG12	2.03	0.40
1:D:5083:PRO:HD3	1:D:5143:SER:HB3	2.04	0.40
1:D:5293:ILE:HG23	1:D:5297:VAL:HG21	2.03	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	269/288 (93%)	264 (98%)	5 (2%)	0	100	100
1	B	236/288 (82%)	225 (95%)	11 (5%)	0	100	100
1	C	280/288 (97%)	276 (99%)	4 (1%)	0	100	100
1	D	202/288 (70%)	188 (93%)	12 (6%)	2 (1%)	15	10
All	All	987/1152 (86%)	953 (97%)	32 (3%)	2 (0%)	47	48

All (2) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	5216	ASP
1	D	5214	ASN

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	231/241 (96%)	227 (98%)	4 (2%)	60	66
1	B	213/241 (88%)	197 (92%)	16 (8%)	13	10
1	C	242/241 (100%)	242 (100%)	0	100	100
1	D	180/241 (75%)	172 (96%)	8 (4%)	28	27
All	All	866/964 (90%)	838 (97%)	28 (3%)	39	40

All (28) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5176	VAL
1	A	5281	THR
1	A	5323	THR
1	A	5332	ASP
1	B	5112	SER
1	B	5113	GLU
1	B	5126	LYS
1	B	5128	SER
1	B	5135	SER
1	B	5159	MSE
1	B	5187	THR
1	B	5208	VAL
1	B	5229	ASP
1	B	5260	THR
1	B	5263	GLU
1	B	5281	THR
1	B	5298	THR
1	B	5316	THR
1	B	5353	SER
1	B	5356	VAL
1	D	5135	SER
1	D	5143	SER
1	D	5159	MSE
1	D	5167	LEU
1	D	5212	GLU
1	D	5245	GLN
1	D	5249	LEU
1	D	5252	THR

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (4) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	5303	ASN
1	A	5350	GLN
1	C	5081	ASN
1	C	5106	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no carbohydrates in this entry.

5.6 Ligand geometry (i)

Of 16 ligands modelled in this entry, 15 are monoatomic - leaving 1 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	$\#|Z| > 2$
4	PO4	C	6366	-	4,4,4	1.71	1 (25%)	6,6,6	1.32	1 (16%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	6366	PO4	P-O4	-2.31	1.47	1.54

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	C	6366	PO4	O4-P-O1	-2.14	103.06	110.89

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

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	270/288 (93%)	0.57	30 (11%)	5	6	15, 28, 80, 100	0
1	B	243/288 (84%)	0.59	30 (12%)	4	5	24, 54, 75, 95	0
1	C	281/288 (97%)	0.03	5 (1%)	68	72	15, 26, 51, 96	0
1	D	205/288 (71%)	0.59	24 (11%)	4	5	23, 52, 81, 93	0
All	All	999/1152 (86%)	0.43	89 (8%)	9	12	15, 39, 77, 100	0

All (89) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	5268	ALA	8.8
1	D	5336	THR	5.7
1	D	5164	VAL	5.3
1	B	5352	ALA	5.2
1	A	5358	VAL	5.0
1	D	5192	ASN	4.9
1	B	5286	PRO	4.8
1	A	5337	LEU	4.7
1	A	5356	VAL	4.7
1	D	5293	ILE	4.5
1	A	5304	VAL	4.5
1	D	5341	VAL	4.5
1	D	5339	VAL	4.4
1	A	5328	ALA	4.4
1	A	5329	ALA	4.2
1	D	5352	ALA	4.1
1	A	5282	ASN	4.0
1	C	5365	THR	4.0
1	D	5337	LEU	3.9
1	A	5267	ALA	3.9
1	D	5353	SER	3.9

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Mol	Chain	Res	Type	RSRZ
1	A	5269	GLY	3.8
1	B	5260	THR	3.8
1	A	5357	THR	3.7
1	B	5261	VAL	3.7
1	A	5325	THR	3.7
1	A	5327	PRO	3.6
1	B	5315	ALA	3.6
1	B	5297	VAL	3.5
1	A	5330	TRP	3.5
1	C	5276	ASP	3.3
1	B	5265	ALA	3.2
1	B	5266	LEU	3.2
1	B	5174	GLY	3.1
1	D	5079	PRO	3.1
1	B	5309	VAL	3.0
1	D	5242	ALA	3.0
1	B	5295	ALA	3.0
1	B	5354	LEU	3.0
1	B	5316	THR	3.0
1	A	5335	TYR	2.9
1	A	5336	THR	2.9
1	A	5287	LYS	2.9
1	D	5338	SER	2.9
1	B	5330	TRP	2.9
1	B	5164	VAL	2.8
1	A	5302	VAL	2.8
1	A	5289	THR	2.8
1	D	5262	PRO	2.7
1	A	5281	THR	2.7
1	B	5220	PHE	2.7
1	A	5285	GLN	2.7
1	A	5359	ASP	2.6
1	A	5354	LEU	2.6
1	A	5265	ALA	2.6
1	D	5295	ALA	2.6
1	C	5320	ASP	2.6
1	B	5281	THR	2.6
1	B	5300	VAL	2.5
1	D	5261	VAL	2.5
1	A	5266	LEU	2.5
1	B	5259	LEU	2.5
1	C	5277	SER	2.5

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Mol	Chain	Res	Type	RSRZ
1	B	5218	VAL	2.4
1	B	5173	SER	2.4
1	B	5279	ASN	2.4
1	D	5218	VAL	2.4
1	D	5175	THR	2.4
1	B	5282	ASN	2.3
1	D	5174	GLY	2.3
1	A	5315	ALA	2.2
1	B	5169	PRO	2.2
1	B	5214	ASN	2.2
1	A	5332	ASP	2.2
1	D	5191	GLY	2.2
1	D	5217	GLY	2.2
1	B	5283	HIS	2.2
1	D	5161	GLU	2.2
1	A	5283	HIS	2.2
1	D	5340	THR	2.2
1	B	5192	ASN	2.1
1	A	5119	LEU	2.1
1	C	5269	GLY	2.1
1	D	5245	GLN	2.1
1	A	5127	TRP	2.1
1	B	5329	ALA	2.1
1	B	5348	SER	2.0
1	B	5299	GLY	2.0
1	D	5214	ASN	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 carbohydrates 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, 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
3	CA	C	6370	1/1	0.89	0.12	60,60,60,60	0
3	CA	D	6356	1/1	0.90	0.12	58,58,58,58	0
3	CA	B	6361	1/1	0.95	0.04	57,57,57,57	0
2	IOD	A	6360	1/1	0.97	0.12	47,47,47,47	1
3	CA	D	6355	1/1	0.97	0.06	75,75,75,75	0
3	CA	B	6360	1/1	0.98	0.03	61,61,61,61	0
3	CA	A	6364	1/1	0.98	0.09	29,29,29,29	0
3	CA	A	6362	1/1	0.99	0.13	19,19,19,19	0
3	CA	D	6354	1/1	0.99	0.04	40,40,40,40	0
3	CA	B	6359	1/1	0.99	0.05	39,39,39,39	0
3	CA	A	6363	1/1	0.99	0.16	20,20,20,20	0
2	IOD	A	6361	1/1	0.99	0.13	32,32,32,32	1
3	CA	C	6368	1/1	1.00	0.12	22,22,22,22	0
4	PO4	C	6366	5/5	1.00	0.12	21,22,24,25	0
3	CA	C	6367	1/1	1.00	0.10	20,20,20,20	0
3	CA	C	6369	1/1	1.00	0.12	24,24,24,24	0

6.5 Other polymers (i)

There are no such residues in this entry.