wwPDB X-ray Structure Validation Summary Report (i)

Dec 18, 2024 – 06:22 pm GMT

PDB ID	:	9F00
Title	:	Complex between D-SH2 domain of ABL with monobody DAM27
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Deposited on	:	2024-04-14
Resolution	:	2.91 Å(reported)

This is a wwPDB X-ray Structure Validation Summary 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:

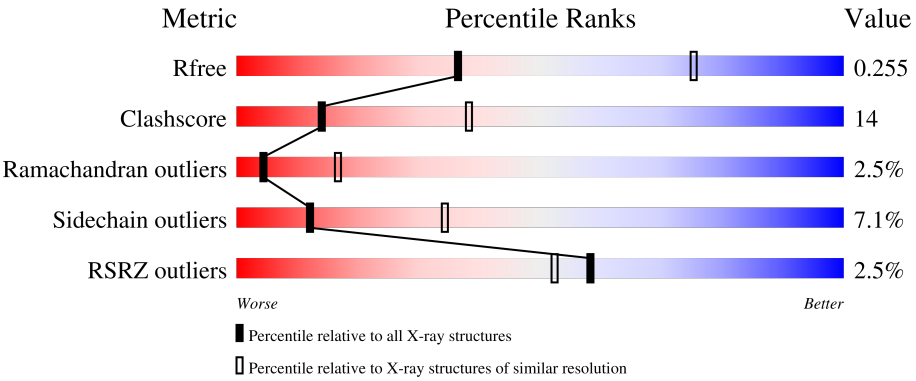
MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.40

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 2.91 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}	164625	2797 (2.94-2.90)
Clashscore	180529	3049 (2.94-2.90)
Ramachandran outliers	177936	2981 (2.94-2.90)
Sidechain outliers	177891	2983 (2.94-2.90)
RSRZ outliers	164620	2799 (2.94-2.90)

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	99	% 74% 26%
1	B	99	% 82% 18%
2	C	98	65% 26% • • 5%
2	D	98	3% 66% 28% • •

2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 3012 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 (with D amino acids) called synthetic D-SH2 domain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	99	Total	C	N	O	S	0	0	0
			787	492	145	149	1			
1	B	99	Total	C	N	O	S	0	0	0
			787	492	145	149	1			

- Molecule 2 is a protein called monobody DAM27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	D	96	Total	C	N	O	S	0	1	0
			724	464	109	150	1			
2	C	93	Total	C	N	O		0	0	0
			701	450	106	145				

- Molecule 3 is water.

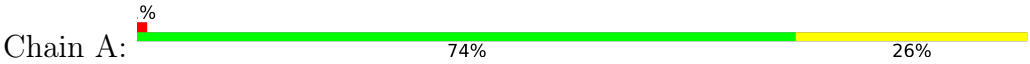
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	3	Total	O	0	0
			3	3		
3	B	5	Total	O	0	0
			5	5		
3	D	3	Total	O	0	0
			3	3		
3	C	2	Total	O	0	0
			2	2		

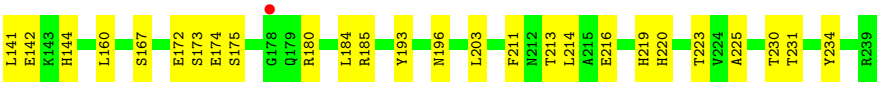
3 Residue-property plots (i)

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: synthetic D-SH2 domain

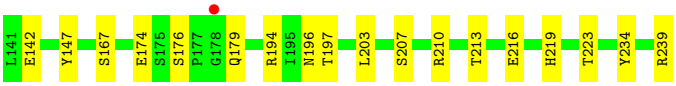
Chain A:





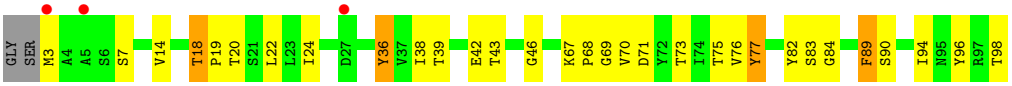
• Molecule 1: synthetic D-SH2 domain

Chain B:



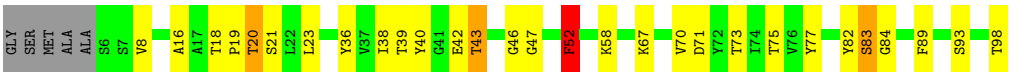
• Molecule 2: monobody DAM27

Chain D:



• Molecule 2: monobody DAM27

Chain C:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 65 2 2	Depositor
Cell constants a, b, c, α, β, γ	111.33Å 111.33Å 205.75Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	48.96 – 2.91 48.96 – 2.91	Depositor EDS
% Data completeness (in resolution range)	99.8 (48.96-2.91) 100.0 (48.96-2.91)	Depositor EDS
R_{merge}	0.25	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.30 (at 2.91Å)	Xtriage
Refinement program	PHENIX (1.19.2_4158: ???)	Depositor
R, R_{free}	0.209 , 0.257 0.212 , 0.255	Depositor DCC
R_{free} test set	857 reflections (4.97%)	wwPDB-VP
Wilson B-factor (Å^2)	84.1	Xtriage
Anisotropy	0.215	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 62.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.51$, $< L^2 > = 0.35$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.94	EDS
Total number of atoms	3012	wwPDB-VP
Average B, all atoms (Å^2)	87.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.53% 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: DLY, DTH, DCY, DGN, DAR, DTR, DSN, DSG, DLE, DGL, DIL, DAS, DPN, DHI, DVA, DPR, DTY, DAL

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	0.38	0/21	0.74	0/14
1	B	0.39	0/21	0.45	0/14
2	C	0.51	0/721	0.77	2/987 (0.2%)
2	D	0.56	0/747	0.78	0/1022
All	All	0.53	0/1510	0.77	2/2037 (0.1%)

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	C	52	PHE	CB-CG-CD2	-7.17	115.78	120.80
2	C	52	PHE	CB-CG-CD1	6.65	125.45	120.80

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	787	0	691	19	0
1	B	787	0	689	12	0
2	C	701	0	666	23	0
2	D	724	0	689	30	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	A	3	0	0	0	0
3	B	5	0	0	1	0
3	C	2	0	0	0	0
3	D	3	0	0	0	0
All	All	3012	0	2735	81	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 14.

The worst 5 of 81 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:174:DGL:HB2	2:C:83:SER:HB3	1.71	0.72
2:D:14:VAL:HG22	2:D:24:ILE:HG22	1.76	0.68
2:D:39:THR:HB	2:D:75:THR:HG23	1.75	0.68
2:C:39:THR:HB	2:C:75:THR:HG23	1.76	0.67
2:D:18:THR:CG2	2:D:20:THR:HG22	2.31	0.61

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	7/99 (7%)	7 (100%)	0	0	100 100
1	B	7/99 (7%)	7 (100%)	0	0	100 100
2	C	91/98 (93%)	87 (96%)	2 (2%)	2 (2%)	5 20
2	D	95/98 (97%)	89 (94%)	3 (3%)	3 (3%)	3 12
All	All	200/394 (51%)	190 (95%)	5 (2%)	5 (2%)	4 17

All (5) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	D	83	SER
2	C	83	SER
2	D	46	GLY
2	C	47	GLY
2	D	18	THR

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	C	77/79 (98%)	70 (91%)	7 (9%)	7 23
2	D	79/79 (100%)	75 (95%)	4 (5%)	20 50
All	All	156/158 (99%)	145 (93%)	11 (7%)	12 34

5 of 11 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	C	43	THR
2	C	52	PHE
2	C	77	TYR
2	C	58	LYS
2	C	20	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

184 non-standard protein/DNA/RNA residues are modelled in this entry.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	7/99 (7%)	0.21	1 (14%) 7 7	79, 93, 117, 171	0
1	B	7/99 (7%)	-0.21	1 (14%) 7 7	60, 70, 110, 148	0
2	C	93/98 (94%)	-0.02	0 100 100	62, 75, 100, 135	0
2	D	96/98 (97%)	0.03	3 (3%) 51 46	50, 74, 128, 155	1 (1%)
All	All	203/394 (51%)	0.01	5 (2%) 58 52	50, 75, 127, 171	1 (0%)

All (5) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	D	5	ALA	3.5
1	A	178	GLY	2.9
2	D	27[A]	ASP	2.6
2	D	3	MET	2.5
1	B	178	GLY	2.0

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

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
1	DSN	A	176	6/7	0.48	0.19	150,163,165,170	0
1	DLY	A	143	5/10	0.52	0.22	140,141,144,147	0
1	DGL	A	142	9/10	0.53	0.17	138,140,158,159	0
1	DSN	B	176	6/7	0.55	0.17	142,146,153,159	0
1	DAR	A	239	11/12	0.57	0.24	126,134,145,146	0
1	DGL	A	208	9/10	0.62	0.20	148,157,173,179	0
1	DSN	A	145	6/7	0.62	0.15	116,125,128,131	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	DHI	B	144	10/11	0.69	0.17	102,105,110,115	0
1	DGL	B	142	9/10	0.70	0.19	107,116,125,138	0
1	DGN	A	179	9/10	0.72	0.19	114,133,138,143	0
1	DGN	B	179	9/10	0.74	0.18	103,124,138,140	0
1	DTH	A	223	7/8	0.75	0.16	110,112,121,126	0
1	DGL	B	208	9/10	0.75	0.13	123,131,147,159	0
1	DTH	B	223	7/8	0.76	0.14	93,94,99,101	0
1	DLE	A	141	8/9	0.76	0.26	120,132,139,143	0
1	DHI	A	219	10/11	0.77	0.14	120,129,143,144	0
1	DTH	A	231	7/8	0.78	0.15	101,102,108,110	0
1	DHI	B	219	10/11	0.79	0.13	98,108,130,135	0
1	DLY	A	238	9/10	0.80	0.14	108,114,131,132	0
1	DSN	A	175	6/7	0.80	0.18	125,130,148,150	0
1	DAR	B	239	11/12	0.80	0.21	77,80,87,91	0
1	DHI	A	233	10/11	0.81	0.16	103,117,123,124	0
1	DSN	A	207	6/7	0.82	0.15	132,137,143,143	0
1	DSN	B	175	6/7	0.82	0.14	137,158,160,163	0
1	DPR	B	177	7/8	0.82	0.18	122,133,146,147	0
1	DSG	A	165	8/9	0.83	0.14	93,96,99,102	0
1	DGL	B	174	9/10	0.83	0.13	86,92,121,124	0
1	DGL	A	216	9/10	0.83	0.12	119,123,132,133	0
1	DLE	B	141	8/9	0.84	0.25	97,113,121,123	0
1	DSG	A	212	8/9	0.84	0.11	128,133,136,137	0
1	DSN	A	206	6/7	0.84	0.14	110,115,123,125	0
1	DSN	B	206	6/7	0.84	0.13	99,114,117,125	0
1	DGL	A	174	9/10	0.84	0.12	97,98,125,139	0
1	DSN	A	162	6/7	0.84	0.12	101,108,112,115	0
1	DSN	B	162	6/7	0.85	0.11	61,68,69,80	0
1	DSG	B	212	8/9	0.85	0.10	106,109,112,115	0
1	DSN	A	199	6/7	0.86	0.15	117,123,125,126	0
1	DSN	B	207	6/7	0.86	0.11	112,116,123,130	0
1	DSN	B	173	6/7	0.86	0.13	96,106,116,121	0
1	DSN	A	173	6/7	0.86	0.12	98,114,115,124	0
1	DPR	A	177	7/8	0.87	0.16	140,149,156,160	0
1	DLY	B	202	9/10	0.87	0.14	105,110,121,126	0
1	DHI	A	144	10/11	0.87	0.14	132,135,141,142	0
1	DTH	A	197	7/8	0.87	0.13	102,107,110,111	0
1	DTH	B	213	7/8	0.88	0.10	98,100,105,106	0
1	DLY	B	143	5/10	0.88	0.15	110,110,112,115	0
1	DAR	B	210	11/12	0.88	0.14	105,113,116,119	0
1	DAS	A	226	8/9	0.88	0.08	100,103,109,109	0
1	DTH	A	230	7/8	0.88	0.16	88,92,98,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	DGL	A	172	9/10	0.89	0.14	87,97,114,118	0
1	DTH	A	213	7/8	0.89	0.11	117,122,123,124	0
1	DSN	A	161	6/7	0.89	0.11	92,94,100,103	0
1	DHI	B	233	10/11	0.90	0.09	73,78,81,82	0
1	DAR	A	210	11/12	0.90	0.17	116,120,133,135	0
1	DSG	A	196	8/9	0.90	0.10	96,101,106,106	0
1	DSN	B	209	6/7	0.90	0.10	108,110,117,123	0
1	DGL	B	216	9/10	0.91	0.08	94,100,108,109	0
1	DTH	B	230	7/8	0.91	0.13	68,72,77,77	0
1	DGL	A	187	9/10	0.91	0.12	80,83,89,92	0
1	DSN	B	145	6/7	0.91	0.10	84,89,91,99	0
1	DSN	B	222	6/7	0.91	0.07	89,93,94,102	0
1	DSN	B	161	6/7	0.91	0.08	57,61,69,72	0
1	DAR	B	180	11/12	0.91	0.14	83,96,107,108	0
1	DLY	A	202	9/10	0.91	0.15	110,114,126,127	0
1	DAL	A	215	5/6	0.92	0.13	113,114,116,118	0
1	DTH	B	197	7/8	0.92	0.10	92,98,103,104	0
1	DAR	A	180	11/12	0.92	0.14	93,108,116,117	0
1	DVA	A	205	7/8	0.92	0.16	89,102,104,108	0
1	DLY	B	238	9/10	0.92	0.13	75,76,83,89	0
1	DSN	B	199	6/7	0.92	0.13	107,109,111,112	0
1	DSN	A	222	6/7	0.92	0.08	109,110,113,121	0
1	DSG	B	165	8/9	0.93	0.08	65,66,71,71	0
1	DGL	B	172	9/10	0.93	0.11	86,90,104,108	0
1	DHI	A	220	10/11	0.93	0.11	109,114,121,122	0
1	DTH	B	231	7/8	0.93	0.10	77,83,87,90	0
1	DVA	B	205	7/8	0.93	0.15	83,88,95,96	0
1	DSN	A	209	6/7	0.93	0.11	123,124,129,135	0
1	DTY	A	234	12/13	0.93	0.10	107,118,126,127	0
1	DAS	A	200	8/9	0.93	0.11	123,127,130,131	0
1	DAS	B	200	8/9	0.93	0.10	107,111,113,114	0
1	DCY	A	198	6/7	0.93	0.14	112,114,116,120	0
1	DAS	B	226	8/9	0.93	0.15	84,87,95,97	0
1	DCY	B	198	6/7	0.94	0.10	103,104,110,117	0
1	DPR	A	235	7/8	0.94	0.09	111,114,117,117	0
1	DPR	A	237	7/8	0.94	0.13	112,113,116,117	0
1	DVA	B	224	7/8	0.94	0.12	89,91,93,96	0
1	DTY	A	147	12/13	0.94	0.10	103,108,110,111	0
1	DAR	B	153	11/12	0.94	0.10	62,67,73,74	0
1	DSG	A	154	8/9	0.94	0.09	71,73,74,76	0
1	DSN	A	181	6/7	0.95	0.09	81,84,86,93	0
1	DIL	A	229	8/9	0.95	0.13	81,86,91,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	DAR	A	185	11/12	0.95	0.11	82,85,100,102	0
1	DAL	B	215	5/6	0.95	0.12	92,94,98,99	0
1	DIL	A	164	8/9	0.95	0.11	99,103,107,111	0
1	DAR	A	189	11/12	0.95	0.09	69,72,75,79	0
1	DAR	A	194	11/12	0.95	0.11	83,87,99,100	0
1	DAR	B	194	11/12	0.95	0.11	72,78,84,87	0
1	DSN	B	152	6/7	0.95	0.07	67,68,69,69	0
1	DTY	B	234	12/13	0.95	0.09	72,75,78,81	0
1	DLE	B	203	8/9	0.95	0.14	89,97,99,103	0
1	DTY	A	204	12/13	0.95	0.11	103,109,115,115	0
1	DPN	A	211	11/12	0.95	0.10	117,120,123,124	0
1	DTY	A	158	12/13	0.95	0.11	81,85,92,96	0
1	DAR	A	171	11/12	0.95	0.09	74,82,88,93	0
1	DPR	A	150	7/8	0.95	0.09	86,92,93,96	0
1	DHI	B	148	10/11	0.96	0.07	69,75,81,82	0
1	DSG	B	154	8/9	0.96	0.07	61,65,66,69	0
1	DGL	B	157	9/10	0.96	0.08	57,61,67,68	0
1	DTR	A	146	14/15	0.96	0.10	105,110,115,117	0
1	DSN	A	167	6/7	0.96	0.08	92,96,99,101	0
1	DAR	B	185	11/12	0.96	0.07	58,62,68,69	0
1	DTY	A	186	12/13	0.96	0.11	80,83,86,89	0
1	DLE	A	159	8/9	0.96	0.11	82,88,96,98	0
1	DGL	B	187	9/10	0.96	0.07	61,61,72,75	0
1	DHI	A	221	10/11	0.96	0.09	99,104,109,113	0
1	DAR	B	171	11/12	0.96	0.10	68,71,83,84	0
1	DTY	B	147	12/13	0.96	0.11	81,89,96,98	0
1	DPR	B	235	7/8	0.96	0.07	71,74,76,79	0
1	DAR	A	153	11/12	0.96	0.10	70,75,84,84	0
1	DTY	B	204	12/13	0.96	0.10	88,95,102,105	0
1	DVA	A	224	7/8	0.96	0.10	106,108,113,114	0
1	DHI	A	148	10/11	0.96	0.08	90,95,100,104	0
1	DAL	A	225	5/6	0.96	0.09	94,99,101,107	0
1	DAR	B	189	11/12	0.97	0.07	57,61,63,64	0
1	DIL	B	229	8/9	0.97	0.11	63,66,71,75	0
1	DVA	A	190	7/8	0.97	0.11	71,71,73,77	0
1	DVA	B	190	7/8	0.97	0.09	57,60,62,64	0
1	DTY	B	191	12/13	0.97	0.09	59,62,64,67	0
1	DHI	B	192	10/11	0.97	0.09	64,66,67,67	0
1	DTY	B	193	12/13	0.97	0.07	65,66,71,71	0
1	DHI	B	221	10/11	0.97	0.07	83,91,95,96	0
1	DSN	A	152	6/7	0.97	0.05	74,76,81,84	0
1	DVA	A	151	7/8	0.97	0.10	80,83,85,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	DPN	B	211	11/12	0.97	0.08	99,104,109,109	0
1	DGL	A	157	9/10	0.97	0.08	69,72,81,83	0
1	DSG	B	196	8/9	0.97	0.10	83,89,91,92	0
1	DPR	B	237	7/8	0.97	0.09	70,71,75,75	0
1	DTY	B	186	12/13	0.97	0.10	59,64,67,75	0
1	DSN	B	181	6/7	0.97	0.07	70,72,76,78	0
1	DSN	A	183	6/7	0.97	0.07	72,77,80,83	0
1	DLE	A	184	8/9	0.97	0.11	75,80,83,86	0
1	DHI	B	220	10/11	0.98	0.07	95,101,104,105	0
1	DVA	B	151	7/8	0.98	0.09	69,70,72,74	0
1	DTY	A	193	12/13	0.98	0.09	75,77,83,83	0
1	DIL	A	182	8/9	0.98	0.09	77,80,82,85	0
1	DIL	B	182	8/9	0.98	0.10	65,65,73,73	0
1	DIL	B	164	8/9	0.98	0.08	65,69,72,74	0
1	DIL	A	195	8/9	0.98	0.11	84,88,96,99	0
1	DIL	B	195	8/9	0.98	0.08	74,77,83,85	0
1	DSN	B	183	6/7	0.98	0.06	61,62,67,68	0
1	DTY	B	158	12/13	0.98	0.06	58,63,70,82	0
1	DAL	B	225	5/6	0.98	0.13	79,81,83,91	0
1	DLE	B	184	8/9	0.98	0.08	61,62,66,70	0
1	DAL	A	155	5/6	0.98	0.06	76,76,78,80	0
1	DLE	A	228	8/9	0.98	0.10	80,89,92,93	0
1	DLE	B	228	8/9	0.98	0.09	70,72,73,78	0
1	DLE	B	159	8/9	0.98	0.07	59,61,64,64	0
1	DSN	B	167	6/7	0.98	0.05	65,67,69,70	0
1	DPN	A	168	11/12	0.98	0.08	90,94,100,101	0
1	DPN	B	168	11/12	0.98	0.08	66,68,76,76	0
1	DVA	B	170	7/8	0.98	0.09	72,73,77,78	0
1	DLE	A	160	8/9	0.98	0.14	81,86,94,101	0
1	DLE	A	232	8/9	0.98	0.12	97,99,107,108	0
1	DLE	B	232	8/9	0.98	0.10	74,78,83,89	0
1	DLE	A	214	8/9	0.98	0.10	99,106,112,117	0
1	DLE	B	214	8/9	0.98	0.10	84,89,95,99	0
1	DAL	A	156	5/6	0.98	0.09	73,74,77,77	0
1	DAL	B	156	5/6	0.98	0.07	60,61,63,64	0
1	DLE	A	203	8/9	0.98	0.11	104,107,110,111	0
1	DPR	B	150	7/8	0.98	0.07	75,80,82,83	0
1	DAL	A	236	5/6	0.98	0.07	101,108,112,114	0
1	DAL	B	236	5/6	0.98	0.07	70,71,72,74	0
1	DLE	A	217	8/9	0.98	0.11	94,111,118,118	0
1	DLE	B	217	8/9	0.98	0.09	87,94,95,96	0
1	DVA	A	218	7/8	0.98	0.08	103,108,115,117	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	DTY	A	191	12/13	0.98	0.06	70,72,77,77	0
1	DTR	B	146	14/15	0.98	0.08	77,87,92,95	0
1	DHI	A	192	10/11	0.98	0.08	72,73,75,77	0
1	DVA	A	170	7/8	0.99	0.08	84,87,91,92	0
1	DVA	B	218	7/8	0.99	0.07	87,89,95,99	0
1	DAL	B	155	5/6	0.99	0.06	61,62,63,70	0
1	DLE	B	160	8/9	0.99	0.07	58,60,62,63	0
1	DLE	A	169	8/9	0.99	0.08	79,84,89,89	0
1	DLE	B	169	8/9	0.99	0.08	63,66,72,72	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

There are no ligands in this entry.

6.5 Other polymers (i)

There are no such residues in this entry.