WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB NMR Structure Validation Report ⓘ

Jun 4, 2023 – 04:39 AM EDT

PDB ID	:	2LEA
BMRB ID	:	17705
Title	:	Solution structure of human SRSF2 (SC35) RRM
Authors	:	Daubner, G.M.; Clery, A.; Jayne, S.; Stevenin, J.; Allain, F.H.-T.
Deposited on	:	2011-06-15

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

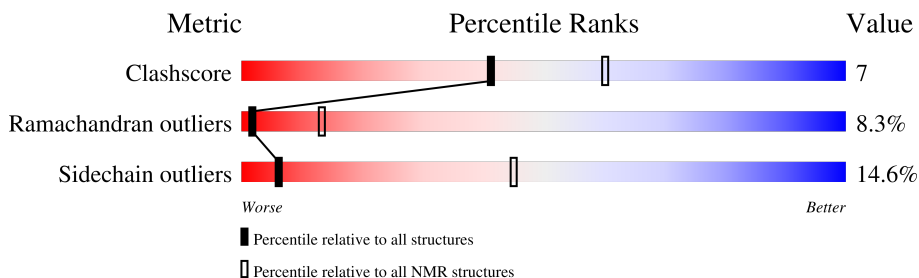|		
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
wwPDB-RCI	:	v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV	:	Wang et al. (2010)
wwPDB-ShiftChecker	:	v1.2
BMRB Restraints Analysis	:	v1.2
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.33

1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:
SOLUTION NMR

The overall completeness of chemical shifts assignment is 79%.

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
Clashscore		7
Ramachandran outliers		8.3%
Sidechain outliers		14.6%

Worse   *Better*

■ Percentile relative to all structures

▯ Percentile relative to all NMR structures

Metric	Whole archive (#Entries)	NMR archive (#Entries)
Clashscore	158937	12864
Ramachandran outliers	154571	11451
Sidechain outliers	154315	11428

The table below summarises the geometric issues observed across the polymeric chains and their fit to the experimental data. The red, orange, yellow and green segments indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria. A cyan segment indicates the fraction of residues that are not part of the well-defined cores, and 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%

Mol	Chain	Length	Quality of chain
1	A	135	33% 14% • 25% 25%

2 Ensemble composition and analysis ⓘ

This entry contains 20 models. Model 7 is the overall representative, medoid model (most similar to other models). The authors have identified model 1 as representative, based on the following criterion: *closest to the average*.

The following residues are included in the computation of the global validation metrics.

Well-defined (core) protein residues			
Well-defined core	Residue range (total)	Backbone RMSD (Å)	Medoid model
1	A:15-A:46, A:56-A:90 (67)	0.17	7

Ill-defined regions of proteins are excluded from the global statistics.

Ligands and non-protein polymers are included in the analysis.

The models can be grouped into 2 clusters and 1 single-model cluster was found.

Cluster number	Models
1	1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 14, 15, 16, 17, 18, 19
2	10, 11, 13
Single-model clusters	20

3 Entry composition ⓘ

There is only 1 type of molecule in this entry. The entry contains 1604 atoms, of which 783 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Serine/arginine-rich splicing factor 2.

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	S	
1	A	101	1604	506	783	155	155	5	0

There are 34 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-33	MET	-	expression tag	UNP Q01130
A	-32	GLY	-	expression tag	UNP Q01130
A	-31	SER	-	expression tag	UNP Q01130
A	-30	SER	-	expression tag	UNP Q01130
A	-29	HIS	-	expression tag	UNP Q01130
A	-28	HIS	-	expression tag	UNP Q01130
A	-27	HIS	-	expression tag	UNP Q01130
A	-26	HIS	-	expression tag	UNP Q01130
A	-25	HIS	-	expression tag	UNP Q01130
A	-24	HIS	-	expression tag	UNP Q01130
A	-23	SER	-	expression tag	UNP Q01130
A	-22	SER	-	expression tag	UNP Q01130
A	-21	GLY	-	expression tag	UNP Q01130
A	-20	LEU	-	expression tag	UNP Q01130
A	-19	VAL	-	expression tag	UNP Q01130
A	-18	PRO	-	expression tag	UNP Q01130
A	-17	ARG	-	expression tag	UNP Q01130
A	-16	GLY	-	expression tag	UNP Q01130
A	-15	SER	-	expression tag	UNP Q01130
A	-14	HIS	-	expression tag	UNP Q01130
A	-13	MET	-	expression tag	UNP Q01130
A	-12	ALA	-	expression tag	UNP Q01130
A	-11	SER	-	expression tag	UNP Q01130
A	-10	MET	-	expression tag	UNP Q01130
A	-9	THR	-	expression tag	UNP Q01130
A	-8	GLY	-	expression tag	UNP Q01130
A	-7	GLY	-	expression tag	UNP Q01130
A	-6	GLN	-	expression tag	UNP Q01130
A	-5	GLN	-	expression tag	UNP Q01130
A	-4	MET	-	expression tag	UNP Q01130
A	-3	GLY	-	expression tag	UNP Q01130

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-2	ARG	-	expression tag	UNP Q01130
A	-1	GLY	-	expression tag	UNP Q01130
A	0	SER	-	expression tag	UNP Q01130

4 Residue-property plots ⓘ

4.1 Average score per residue in the NMR ensemble

These plots are provided for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic is the same as shown in the summary in section 1 of this report. The second graphic shows the sequence where residues are colour-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. Stretches of 2 or more consecutive residues without any outliers are shown as green connectors. Residues which are classified as ill-defined in the NMR ensemble, are shown in cyan with an underline colour-coded according to the previous scheme. Residues which were present in the experimental sample, but not modelled in the final structure are shown in grey.

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:
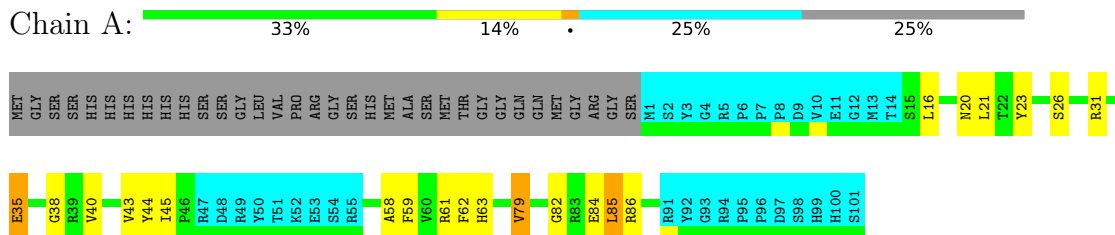
4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:
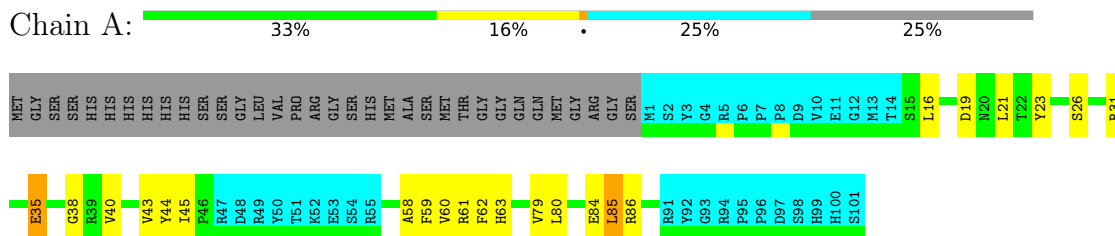
4.2.2 Score per residue for model 2

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:

4.2.3 Score per residue for model 3

• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.4 Score per residue for model 4

• Molecule 1: Serine/arginine-rich splicing factor 2
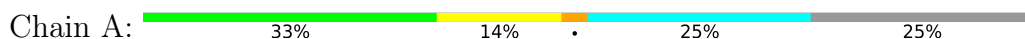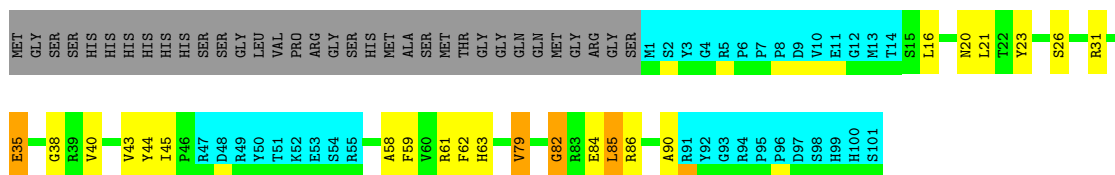

4.2.5 Score per residue for model 5

• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.6 Score per residue for model 6

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A: 34%   15%   •   25%   25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 K17 V18 L21 T22 Y23 S26 R31

F34 E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 G82 R83 E84 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101

4.2.7 Score per residue for model 7 (medoid)

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A: 33%   15%   •   25%   25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 N20 L21 T22 Y23 S26 R31

E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 G82 R83 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101

4.2.8 Score per residue for model 8

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A: 32%   16%   •   25%   25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 N20 L21 T22 Y23 S26 R31

E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 L80 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101

4.2.9 Score per residue for model 9

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A: 30%   17%   •   25%   25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 K17 V18 D19 N20 L21 T22 Y23 S26

R31 F34 E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 L80 D81 G82 R83 E84 A90 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101
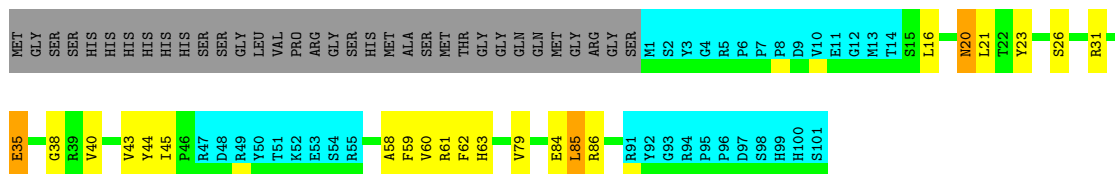
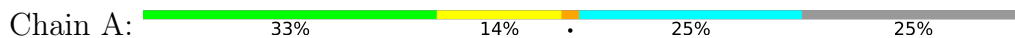#### 4.2.10 Score per residue for model 10

• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.11 Score per residue for model 11

• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.12 Score per residue for model 12
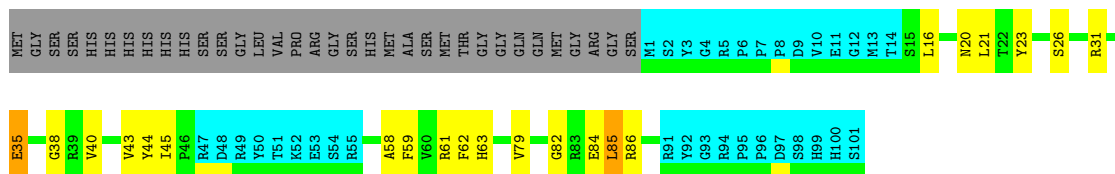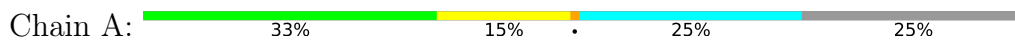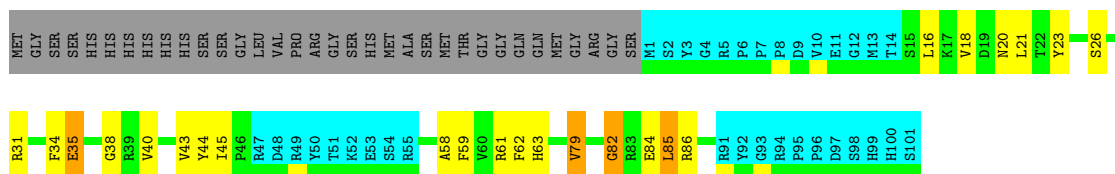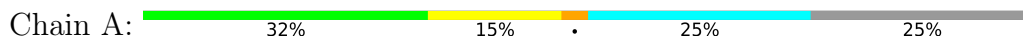
• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.13 Score per residue for model 13

• Molecule 1: Serine/arginine-rich splicing factor 2

4.2.14 Score per residue for model 14

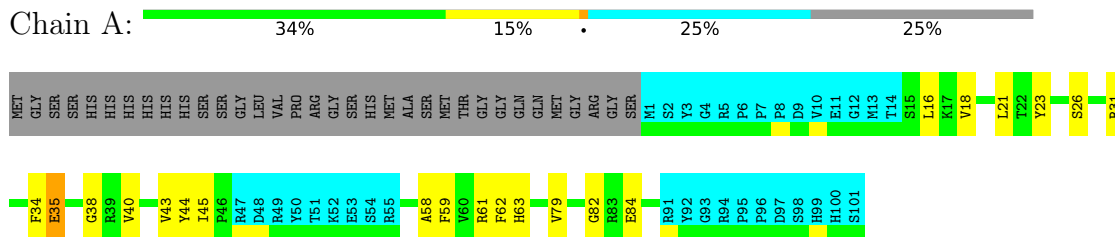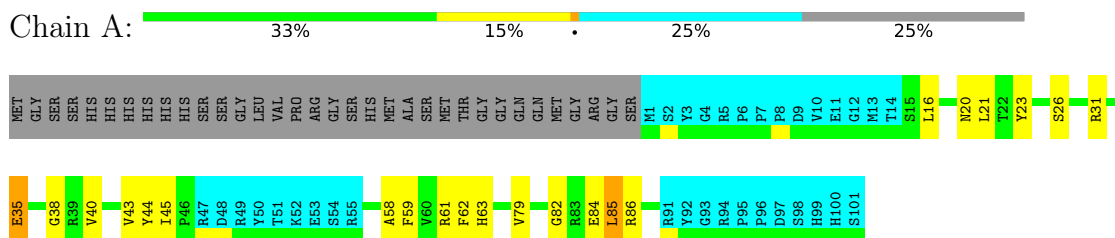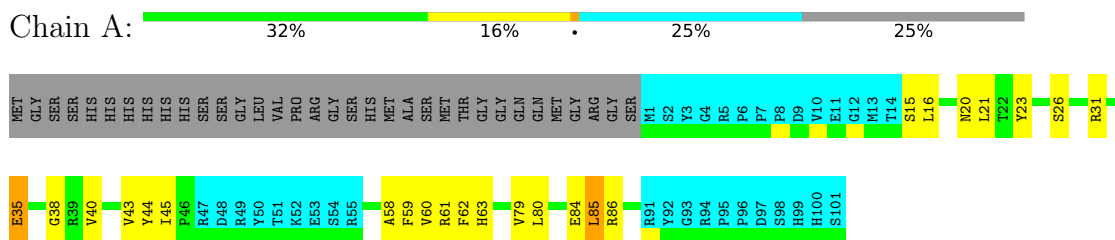• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:　　32%　　16%　　•　　25%　　25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 K17 V18 D19 N20 L21 T22 Y23 S26 P27

R31 F34 E35 G38 R39 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 H63 V79 L80 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101

4.2.15 Score per residue for model 15

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:　　30%　　17%　　•　　25%　　25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 K17 V18 D19 N20 L21 T22 Y23 S26

R31 F34 E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 L80 D81 G82 R83 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101

4.2.16 Score per residue for model 16

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:　　32%　　16%　　•　　25%　　25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 D19 N20 L21 T22 Y23 S26 R31

E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 A58 F59 V60 R61 F62 H63 V79 G82 R83 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101
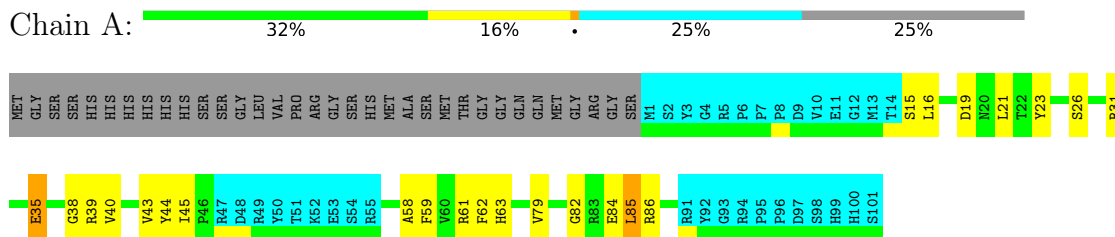
4.2.17 Score per residue for model 17

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:　　31%　　17%　　•　　25%　　25%

MET GLY SER HIS HIS HIS HIS HIS SER SER GLY LEU VAL PRO ARG GLY SER HIS MET ALA SER MET THR GLY GLY GLN GLN MET GLY ARG GLY SER M1 S2 Y3 G4 R5 P6 P7 P8 D9 V10 E11 G12 M13 T14 S15 L16 D19 N20 L21 T22 Y23 S26 P27

R31 E35 G38 R39 V40 V43 Y44 I45 P46 R47 D48 R49 Y50 T51 K52 E53 S54 R55 G56 F57 A58 F59 V60 R61 F62 H63 V79 G82 R83 E84 L85 R86 R91 Y92 G93 R94 P95 P96 D97 S98 H99 H100 S101
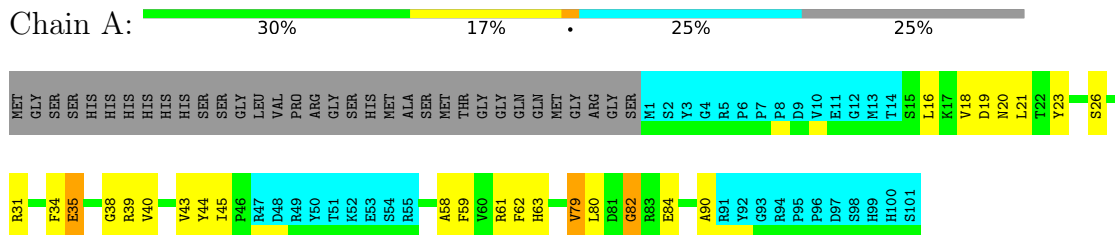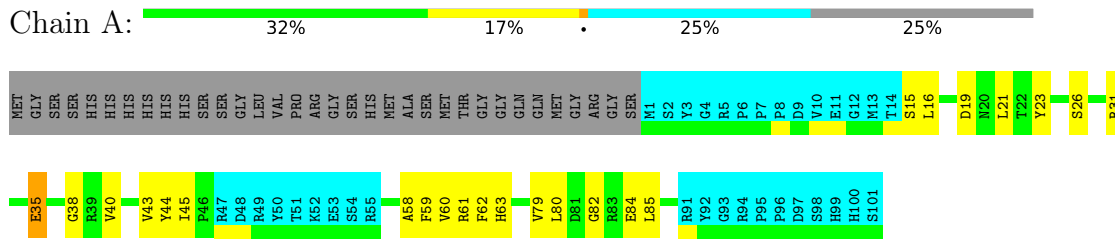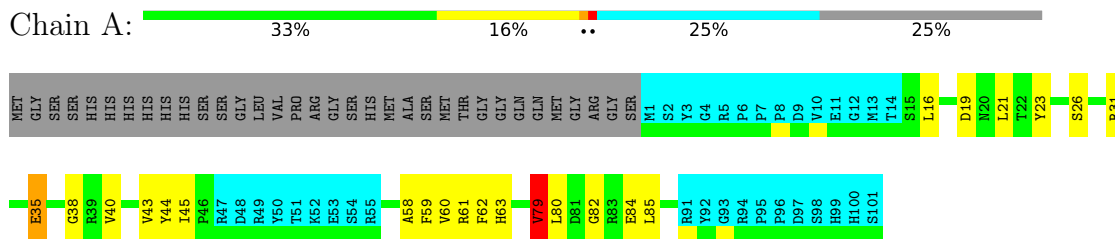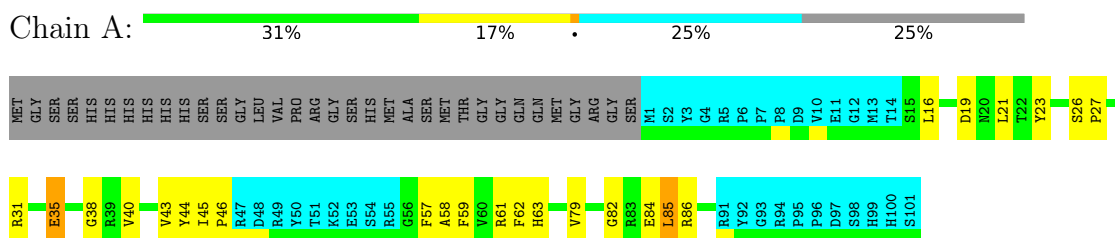
4.2.18 Score per residue for model 18

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:
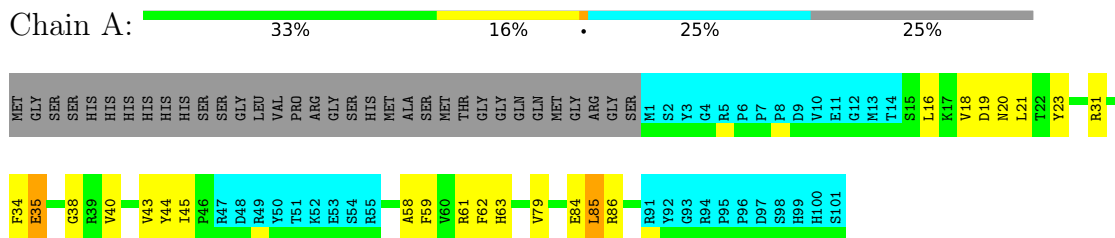
4.2.19 Score per residue for model 19
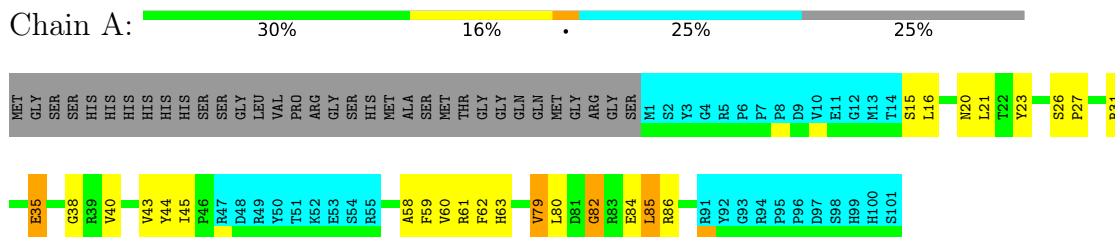
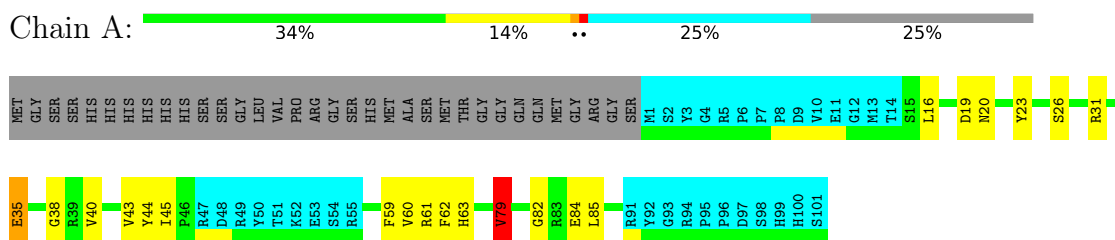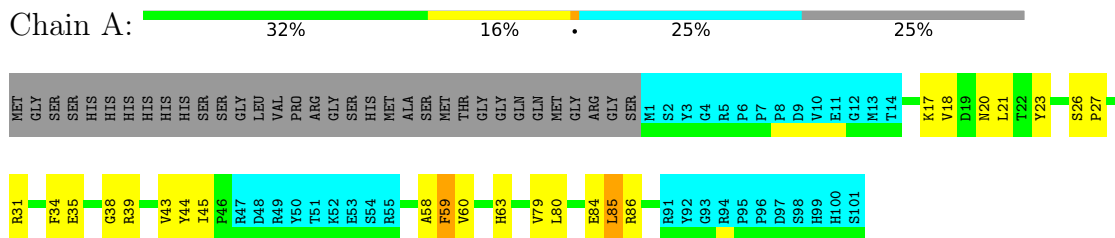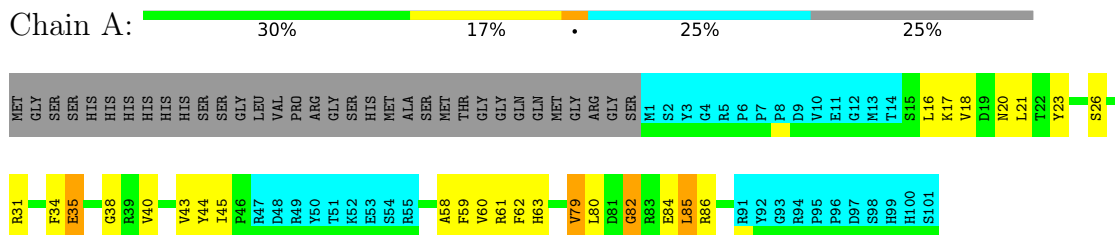• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:
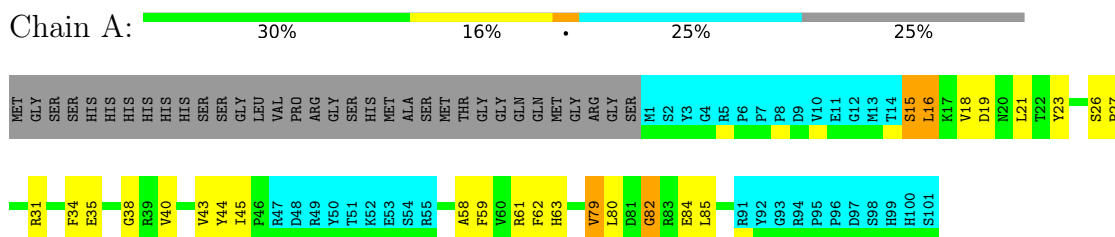
4.2.20 Score per residue for model 20

• Molecule 1: Serine/arginine-rich splicing factor 2

Chain A:
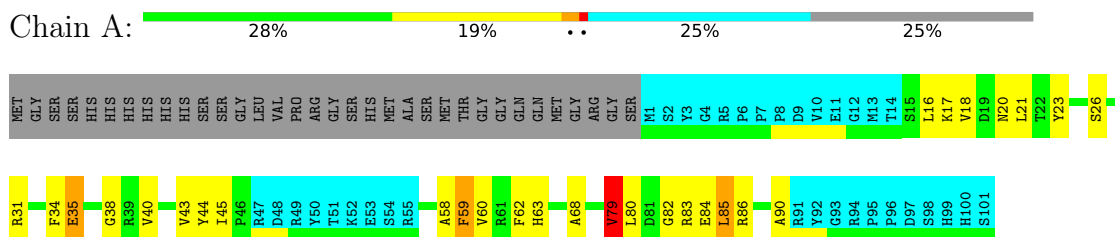
5 Refinement protocol and experimental data overview ⓘ

The models were refined using the following method: *simulated annealing.*

Of the 50 calculated structures, 20 were deposited, based on the following criterion: *structures with the lowest energy.*

The following table shows the software used for structure solution, optimisation and refinement.

Software name	Classification	Version
CYANA	structure solution	3.0
Amber	refinement	9

The following table shows chemical shift validation statistics as aggregates over all chemical shift files. Detailed validation can be found in section 7 of this report.

Chemical shift file(s)	working_cs.cif
Number of chemical shift lists	1
Total number of shifts	1002
Number of shifts mapped to atoms	1002
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Assignment completeness (well-defined parts)	79%

6 Model quality ⓘ

6.1 Standard geometry ⓘ

There are no covalent bond-length or bond-angle outliers.

There are no bond-length outliers.

There are no bond-angle outliers.

There are no chirality outliers.

There are no planarity outliers.

6.2 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 each 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 averaged over the ensemble.

Mol	Chain	Non-H	H(model)	H(added)	Clashes
1	A	539	524	527	8±2
All	All	10780	10480	10540	158

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 unique clashes are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models Worst	Models Total
1:A:21:LEU:HD21	1:A:58:ALA:HB2	0.59	1.74	14	19
1:A:18:VAL:HG21	1:A:34:PHE:CZ	0.53	2.39	19	8
1:A:85:LEU:HD13	1:A:86:ARG:H	0.52	1.65	3	12
1:A:44:TYR:C	1:A:45:ILE:HD12	0.51	2.26	11	20
1:A:40:VAL:HG22	1:A:62:PHE:CE1	0.50	2.41	20	19
1:A:16:LEU:O	1:A:61:ARG:HA	0.49	2.08	12	18
1:A:80:LEU:HD23	1:A:80:LEU:C	0.48	2.29	20	1
1:A:83:ARG:HH12	1:A:85:LEU:CD2	0.47	2.22	20	1
1:A:79:VAL:O	1:A:79:VAL:HG22	0.46	2.10	11	3
1:A:35:GLU:CA	1:A:40:VAL:HG23	0.46	2.41	15	19
1:A:16:LEU:HG	1:A:68:ALA:HB1	0.46	1.87	20	1
1:A:85:LEU:HD13	1:A:86:ARG:N	0.45	2.26	12	13
1:A:80:LEU:C	1:A:80:LEU:HD13	0.44	2.33	1	1
1:A:80:LEU:HD12	1:A:80:LEU:C	0.43	2.34	11	3

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models Worst	Models Total
1:A:27:PRO:HD3	1:A:45:ILE:HD13	0.42	1.90	17	4
1:A:17:LYS:HD3	1:A:59:PHE:CD1	0.42	2.49	14	2
1:A:18:VAL:CG2	1:A:60:VAL:HG22	0.42	2.45	20	1
1:A:17:LYS:HA	1:A:60:VAL:O	0.42	2.15	15	3
1:A:79:VAL:CG2	1:A:82:GLY:HA2	0.41	2.46	9	6
1:A:46:PRO:HG2	1:A:57:PHE:CZ	0.41	2.50	17	1
1:A:16:LEU:HB2	1:A:68:ALA:HB1	0.41	1.93	20	1
1:A:80:LEU:C	1:A:80:LEU:HD12	0.40	2.37	12	1
1:A:20:ASN:O	1:A:21:LEU:HD23	0.40	2.17	3	1

6.3 Torsion angles ⓘ

6.3.1 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 PDB entries followed by that with respect to all NMR entries. 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	67/135 (50%)	53±1 (79±2%)	9±1 (13±2%)	6±1 (8±1%)	2	13
All	All	1340/2700 (50%)	1056 (79%)	173 (13%)	111 (8%)	2	13

All 7 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
1	A	38	GLY	20
1	A	79	VAL	20
1	A	84	GLU	20
1	A	26	SER	19
1	A	82	GLY	15
1	A	20	ASN	13
1	A	15	SER	4

6.3.2 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 PDB entries followed by that with respect to all NMR entries. 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	56/113 (50%)	48±1 (85±2%)	8±1 (15±2%)	6	45
All	All	1120/2260 (50%)	956 (85%)	164 (15%)	6	45

All 13 unique residues with a non-rotameric sidechain are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
1	A	23	TYR	20
1	A	31	ARG	20
1	A	43	VAL	20
1	A	59	PHE	20
1	A	63	HIS	20
1	A	35	GLU	19
1	A	85	LEU	18
1	A	19	ASP	9
1	A	60	VAL	7
1	A	80	LEU	4
1	A	39	ARG	3
1	A	79	VAL	3
1	A	16	LEU	1

6.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

6.5 Carbohydrates ⓘ

There are no monosaccharides in this entry.

6.6 Ligand geometry ⓘ

There are no ligands in this entry.

6.7 Other polymers ⓘ

There are no such molecules in this entry.

6.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

7 Chemical shift validation ⓘ

The completeness of assignment taking into account all chemical shift lists is 79% for the well-defined parts and 72% for the entire structure.

7.1 Chemical shift list 1

File name: working_cs.cif

Chemical shift list name: *assigned_chem_shift_list_1*

7.1.1 Bookkeeping ⓘ

The following table shows the results of parsing the chemical shift list and reports the number of nuclei with statistically unusual chemical shifts.

Total number of shifts	1002
Number of shifts mapped to atoms	1002
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Number of shift outliers (ShiftChecker)	1

7.1.2 Chemical shift referencing ⓘ

The following table shows the suggested chemical shift referencing corrections.

Nucleus	# values	Correction ± precision, *ppm*	Suggested action
$^{13}C_\alpha$	76	2.68 ± 0.18	Should be applied
$^{13}C_\beta$	79	2.62 ± 0.18	Should be applied
$^{13}C'$	0	—	None (insufficient data)
^{15}N	91	0.20 ± 0.43	None needed (< 0.5 ppm)

7.1.3 Completeness of resonance assignments ⓘ

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 79%, i.e. 735 atoms were assigned a chemical shift out of a possible 935. 0 out of 12 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^1H	^{13}C	^{15}N
Backbone	260/336 (77%)	136/137 (99%)	60/134 (45%)	64/65 (98%)
Sidechain	423/525 (81%)	296/338 (88%)	122/158 (77%)	5/29 (17%)

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	Total	^{1}H	^{13}C	^{15}N
Aromatic	52/74 (70%)	34/36 (94%)	18/37 (49%)	0/1 (0%)
Overall	735/935 (79%)	466/511 (91%)	200/329 (61%)	69/95 (73%)

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 72%, i.e. 1002 atoms were assigned a chemical shift out of a possible 1400. 0 out of 13 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	360/499 (72%)	193/203 (95%)	76/202 (38%)	91/94 (97%)
Sidechain	568/786 (72%)	400/503 (80%)	163/235 (69%)	5/48 (10%)
Aromatic	74/115 (64%)	49/56 (88%)	25/56 (45%)	0/3 (0%)
Overall	1002/1400 (72%)	642/762 (84%)	264/493 (54%)	96/145 (66%)

7.1.4   Statistically unusual chemical shifts ⓘ

The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

List Id	Chain	Res	Type	Atom	Shift, *ppm*	Expected range, *ppm*	Z-score
1	A	17	LYS	CD	22.83	23.50 – 34.42	-5.6

7.1.5   Random Coil Index (RCI) plots ⓘ

The image below reports *random coil index* values for the protein chains in the structure. The height of each bar gives a probability of a given residue to be disordered, as predicted from the available chemical shifts and the amino acid sequence. A value above 0.2 is an indication of significant predicted disorder. The colour of the bar shows whether the residue is in the well-defined core (black) or in the ill-defined residue ranges (cyan), as described in section 2 on ensemble composition.If well-defined core and ill-defined regions are not identified then it is shown as gray bars.

Random coil index (RCI) for chain A:
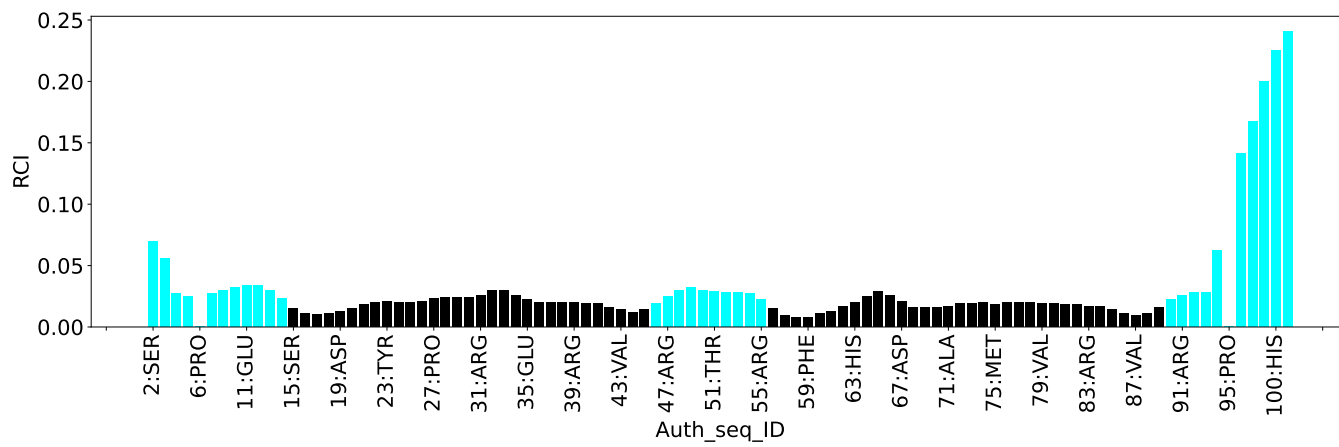
8   NMR restraints analysis ⓘ

8.1   Conformationally restricting restraints ⓘ

The following table provides the summary of experimentally observed NMR restraints in different categories. Restraints are classified into different categories based on the sequence separation of the atoms involved.

Description	Value
Total distance restraints	2581
Intra-residue ($\|i\text{-}j\|$=0)	436
Sequential ($\|i\text{-}j\|$=1)	722
Medium range ($\|i\text{-}j\|$>1 and $\|i\text{-}j\|$<5)	436
Long range ($\|i\text{-}j\|$≥5)	933
Inter-chain	0
Hydrogen bond restraints	54
Disulfide bond restraints	0
Total dihedral-angle restraints	0
Number of unmapped restraints	0
Number of restraints per residue	19.1
Number of long range restraints per residue[1]	7.1

[1]Long range hydrogen bonds and disulfide bonds are counted as long range restraints while calculating the number of long range restraints per residue

8.2   Residual restraint violations ⓘ

This section provides the overview of the restraint violations analysis. The violations are binned as small, medium and large violations based on its absolute value. Average number of violations per model is calculated by dividing the total number of violations in each bin by the size of the ensemble.

8.2.1   Average number of distance violations per model ⓘ

Distance violations less than 0.1 Å are not included in the calculation.

Bins (Å)	Average number of violations per model	Max (Å)
0.1-0.2 (Small)	16.2	0.2
0.2-0.5 (Medium)	7.2	0.37
>0.5 (Large)	None	None

8.2.2 Average number of dihedral-angle violations per model ⓘ

Dihedral-angle violations less than 1° are not included in the calculation.There are no dihedral-angle violations

9   Distance violation analysis (i)

9.1   Summary of distance violations (i)

The following table shows the summary of distance violations in different restraint categories based on the sequence separation of the atoms involved. Each category is further sub-divided into three sub-categories based on the atoms involved. Violations less than 0.1 Å are not included in the statistics.

Restraints type	Count	$\%^1$	Violated[3]			Consistently Violated[4]		
			Count	$\%^2$	$\%^1$	Count	$\%^2$	$\%^1$
Intra-residue (|i-j|=0)	436	16.9	2	0.5	0.1	0	0.0	0.0
Backbone-Backbone	2	0.1	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	324	12.6	2	0.6	0.1	0	0.0	0.0
Sidechain-Sidechain	110	4.3	0	0.0	0.0	0	0.0	0.0
Sequential (|i-j|=1)	722	28.0	21	2.9	0.8	3	0.4	0.1
Backbone-Backbone	164	6.4	3	1.8	0.1	0	0.0	0.0
Backbone-Sidechain	415	16.1	17	4.1	0.7	2	0.5	0.1
Sidechain-Sidechain	143	5.5	1	0.7	0.0	1	0.7	0.0
Medium range (|i-j|>1 & |i-j|<5)	436	16.9	4	0.9	0.2	1	0.2	0.0
Backbone-Backbone	95	3.7	1	1.1	0.0	0	0.0	0.0
Backbone-Sidechain	213	8.3	3	1.4	0.1	1	0.5	0.0
Sidechain-Sidechain	128	5.0	0	0.0	0.0	0	0.0	0.0
Long range (|i-j|≥5)	933	36.1	15	1.6	0.6	2	0.2	0.1
Backbone-Backbone	94	3.6	5	5.3	0.2	0	0.0	0.0
Backbone-Sidechain	444	17.2	4	0.9	0.2	1	0.2	0.0
Sidechain-Sidechain	395	15.3	6	1.5	0.2	1	0.3	0.0
Inter-chain	0	0.0	0	0.0	0.0	0	0.0	0.0
Backbone-Backbone	0	0.0	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	0	0.0	0	0.0	0.0	0	0.0	0.0
Sidechain-Sidechain	0	0.0	0	0.0	0.0	0	0.0	0.0
Hydrogen bond	54	2.1	10	18.5	0.4	5	9.3	0.2
Disulfide bond	0	0.0	0	0.0	0.0	0	0.0	0.0
Total	2581	100.0	52	2.0	2.0	11	0.4	0.4
Backbone-Backbone	409	15.8	19	4.6	0.7	5	1.2	0.2
Backbone-Sidechain	1396	54.1	26	1.9	1.0	4	0.3	0.2
Sidechain-Sidechain	776	30.1	7	0.9	0.3	2	0.3	0.1

[1] percentage calculated with respect to the total number of distance restraints, [2] percentage calculated with respect to the number of restraints in a particular restraint category, [3] violated in at least one model, [4] violated in all the models

9.1.1 Bar chart : Distribution of distance restraints and violations ⓘ
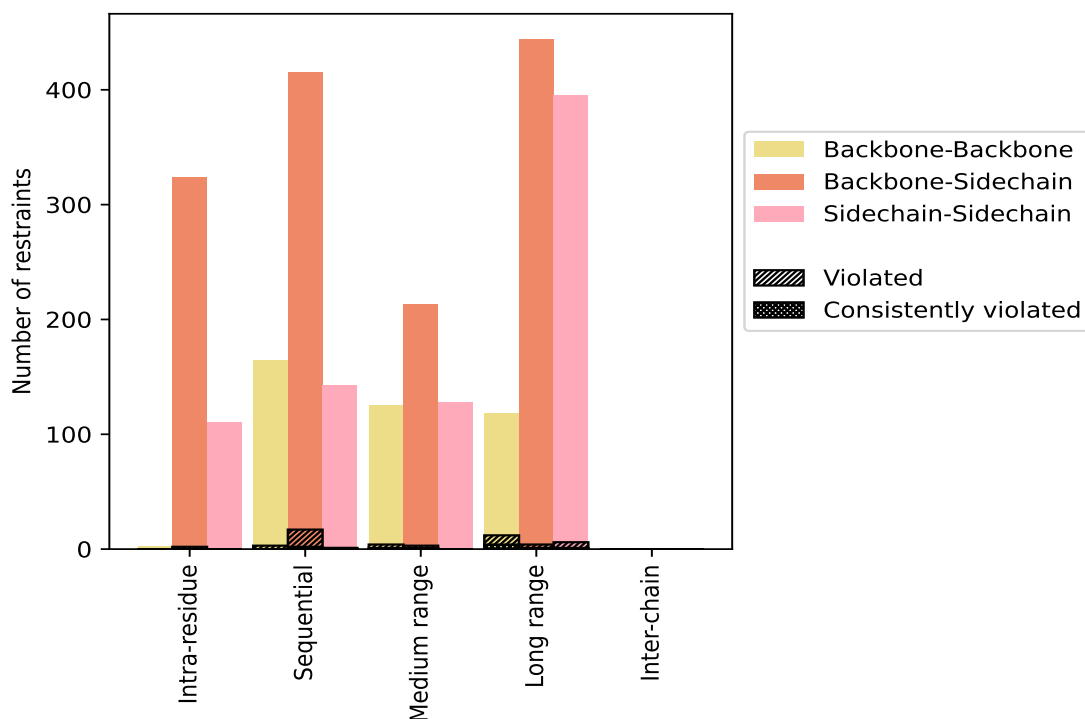
Violated and consistently violated restraints are shown using different hatch patterns in their respective categories. The hydrogen bonds and disulfied bonds are counted in their appropriate category on the x-axis

9.2 Distance violation statistics for each model ⓘ

The following table provides the distance violation statistics for each model in the ensemble. Violations less than 0.1 Å are not included in the statistics.

Model ID	Number of violations						Mean (Å)	Max (Å)	SD[6] (Å)	Median (Å)
	IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total				
1	1	7	4	12	0	24	0.19	0.35	0.07	0.16
2	2	8	3	11	0	24	0.19	0.35	0.07	0.17
3	1	7	3	12	0	23	0.2	0.36	0.08	0.17
4	2	6	4	12	0	24	0.19	0.35	0.07	0.18
5	1	8	3	10	0	22	0.2	0.35	0.07	0.18
6	2	4	2	11	0	19	0.2	0.35	0.08	0.17
7	0	9	3	11	0	23	0.19	0.35	0.07	0.17
8	1	7	3	11	0	22	0.19	0.36	0.08	0.16
9	1	4	4	12	0	21	0.19	0.36	0.08	0.17
10	0	9	5	12	0	26	0.18	0.35	0.07	0.16
11	0	7	3	14	0	24	0.19	0.36	0.07	0.16

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Model ID	Number of violations						Mean (Å)	Max (Å)	SD[6] (Å)	Median (Å)
	IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total				
12	2	7	4	10	0	23	0.19	0.35	0.08	0.19
13	1	9	6	13	0	29	0.17	0.37	0.07	0.14
14	1	6	5	12	0	24	0.17	0.37	0.08	0.14
15	1	7	4	11	0	23	0.2	0.37	0.08	0.17
16	1	9	4	11	0	25	0.18	0.35	0.07	0.16
17	2	6	4	11	0	23	0.19	0.35	0.07	0.17
18	1	7	4	12	0	24	0.18	0.34	0.08	0.16
19	0	6	2	12	0	20	0.2	0.35	0.07	0.18
20	1	10	4	11	0	26	0.18	0.36	0.07	0.15

[1]Intra-residue restraints, [2]Sequential restraints, [3]Medium range restraints, [4]Long range restraints, [5]Inter-chain restraints, [6]Standard deviation

9.2.1   Bar graph : Distance Violation statistics for each model ⓘ
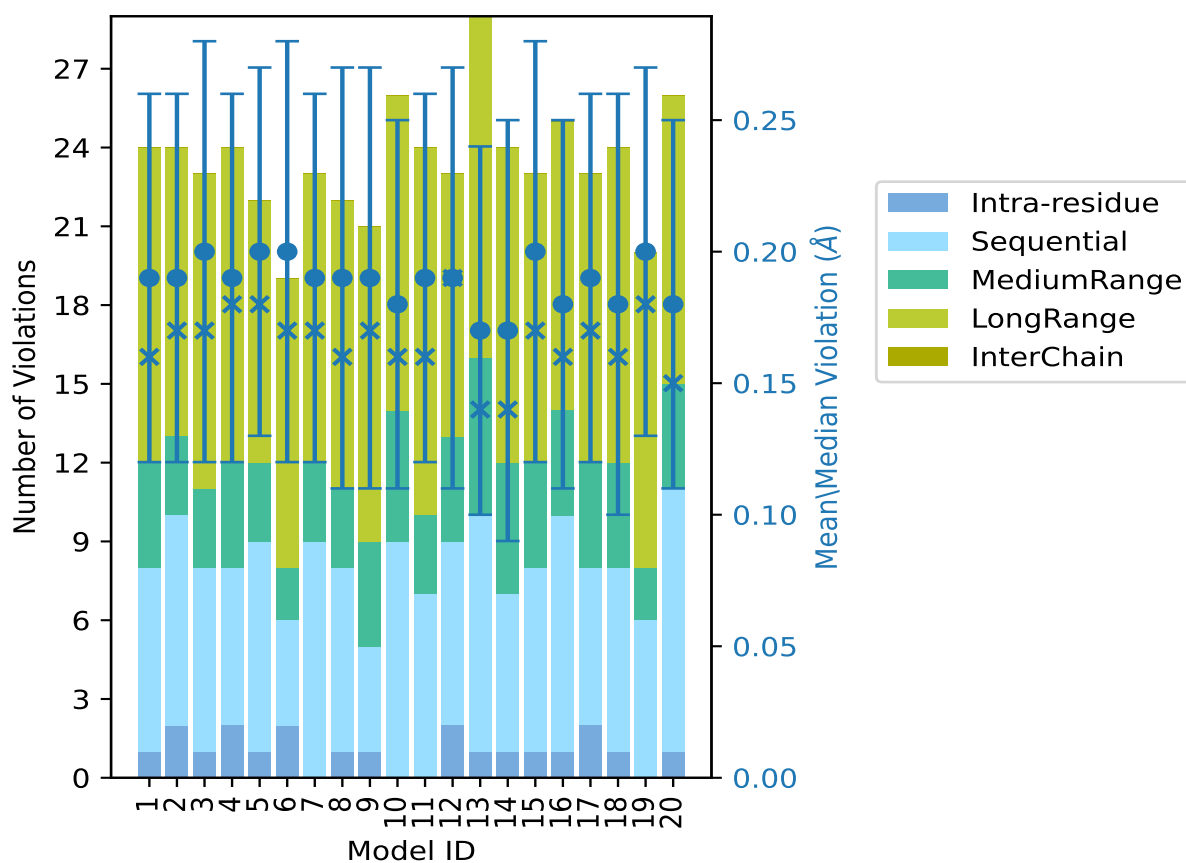
The mean(dot),median(x) and the standard deviation are shown in blue with respect to the y axis on the right

9.3 Distance violation statistics for the ensemble ⓘ

Violation analysis may find that some restraints are violated in few models and some are violated in most of models. The following table provides this information as number of violated restraints for a given fraction of the ensemble. In total, 2485(IR:434, SQ:701, MR:432, LR:918, IC:0) restraints are not violated in the ensemble.

Number of violated restraints						Fraction of the ensemble	
IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total	Count[6]	%
0	6	1	5	0	12	1	5.0
0	4	0	3	0	7	2	10.0
0	3	0	2	0	5	3	15.0
0	2	0	0	0	2	4	20.0
0	0	0	0	0	0	5	25.0
0	0	0	0	0	0	6	30.0
0	0	1	0	0	1	7	35.0
1	0	0	0	0	1	8	40.0
0	0	0	0	0	0	9	45.0
0	0	0	0	0	0	10	50.0
0	0	0	0	0	0	11	55.0
0	0	0	0	0	0	12	60.0
1	0	0	2	0	3	13	65.0
0	0	0	0	0	0	14	70.0
0	0	0	0	0	0	15	75.0
0	0	0	0	0	0	16	80.0
0	2	0	0	0	2	17	85.0
0	1	1	0	0	2	18	90.0
0	0	0	1	0	1	19	95.0
0	3	1	2	0	6	20	100.0

[1]Intra-residue restraints, [2]Sequential restraints, [3]Medium range restraints, [4]Long range restraints, [5]Inter-chain restraints, [6] Number of models with violations

9.3.1 Bar graph : Distance violation statistics for the ensemble ⓘ
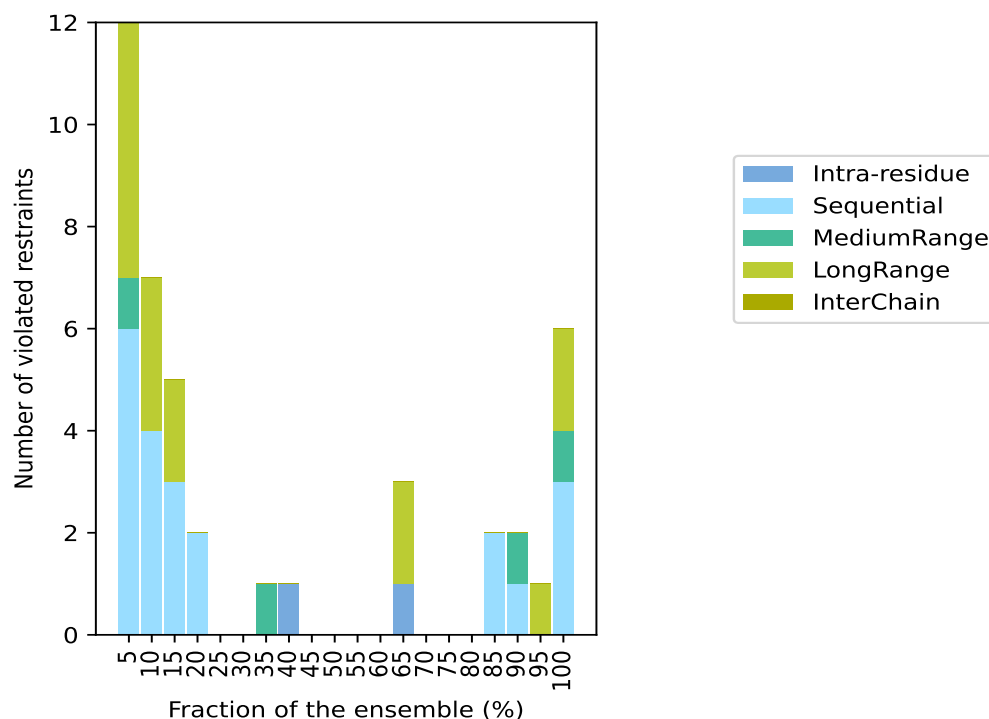
9.4 Most violated distance restraints in the ensemble ⓘ

9.4.1 Histogram : Distribution of mean distance violations ⓘ

The following histogram shows the distribution of the average value of the violation. The average is calculated for each restraint that is violated in more than one model over all the violated models in the ensemble
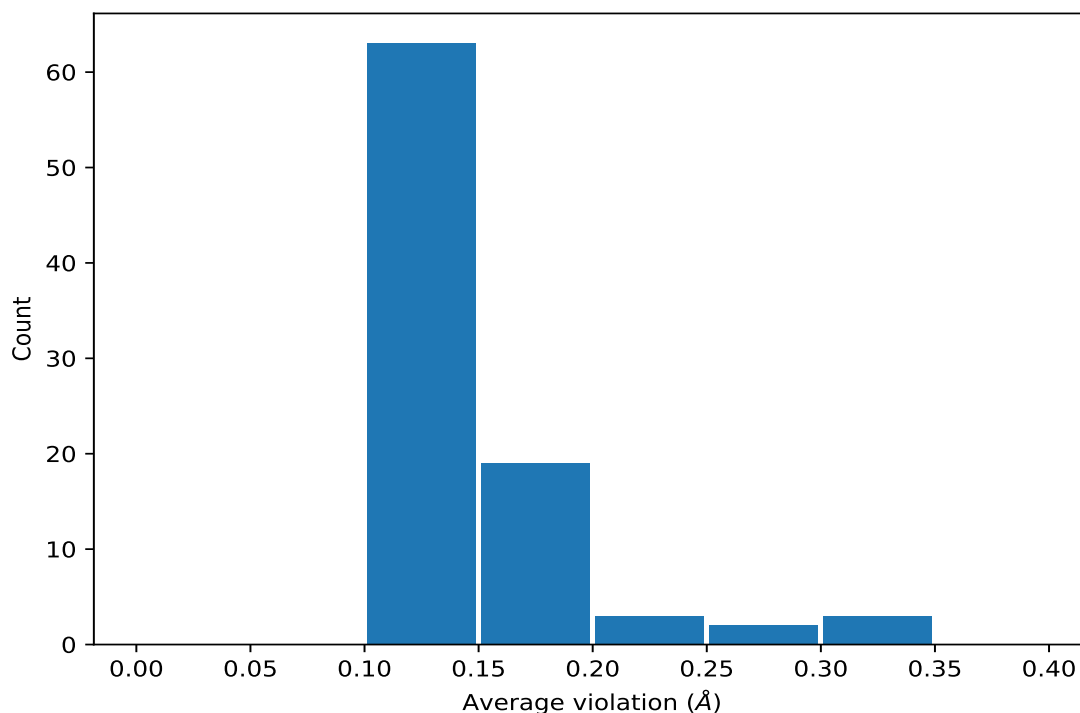
9.4.2 Table: Most violated distance restraints ⓘ

The following table provides the mean and the standard deviation of the violation for each restraint sorted by number of violated models and the mean value. The Key (restraint list ID, restraint ID) is the unique identifier for a given restraint. Rows with same key represent combinatorial or ambiguous restraints and are counted as a single restraint.

Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	20	0.35	0.01	0.35
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	20	0.34	0.02	0.34
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	20	0.28	0.02	0.28
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	20	0.23	0.02	0.23
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	20	0.21	0.01	0.21
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	20	0.18	0.01	0.18
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	20	0.18	0.03	0.17
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	20	0.15	0.01	0.15
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	20	0.15	0.02	0.15
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	20	0.13	0.01	0.12

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	20	0.13	0.01	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	20	0.13	0.01	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	20	0.13	0.01	0.12
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	19	0.27	0.04	0.28
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	18	0.33	0.01	0.33
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	18	0.19	0.01	0.2
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	18	0.17	0.02	0.17
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	18	0.12	0.01	0.12
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	17	0.18	0.03	0.18

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	17	0.18	0.03	0.18
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	13	0.15	0.01	0.15
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	13	0.12	0.01	0.12
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	13	0.12	0.01	0.12
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	13	0.12	0.01	0.11
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	8	0.12	0.01	0.12
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	7	0.11	0.0	0.11
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	6	0.12	0.01	0.11
(1,313)	1:A:83:ARG:HA	1:A:84:GLU:HB2	4	0.2	0.02	0.2
(1,1197)	1:A:8:PRO:HG2	1:A:9:ASP:H	4	0.13	0.0	0.13
(1,1197)	1:A:8:PRO:HG3	1:A:9:ASP:H	4	0.13	0.0	0.13
(1,1233)	1:A:82:GLY:H	1:A:83:ARG:HG3	3	0.15	0.01	0.15
(1,1488)	1:A:80:LEU:HG	1:A:81:ASP:HA	3	0.14	0.01	0.14
(1,2077)	1:A:77:GLY:HA2	1:A:84:GLU:H	3	0.13	0.0	0.13
(1,78)	1:A:34:PHE:HZ	1:A:87:VAL:HB	3	0.11	0.0	0.11
(1,1230)	1:A:23:TYR:HA	1:A:24:ARG:HB3	3	0.11	0.0	0.11
(1,2072)	1:A:14:THR:HG22	1:A:15:SER:H	2	0.18	0.02	0.18
(1,2072)	1:A:14:THR:HG23	1:A:15:SER:H	2	0.18	0.02	0.18
(1,2072)	1:A:14:THR:HG21	1:A:15:SER:H	2	0.18	0.02	0.18
(1,1902)	1:A:80:LEU:H	1:A:85:LEU:H	2	0.12	0.01	0.12
(1,2062)	1:A:91:ARG:HA	1:A:92:TYR:H	2	0.12	0.01	0.12
(1,1717)	1:A:63:HIS:HE1	1:A:64:ASP:HA	2	0.12	0.0	0.12
(2,17)	1:A:70:ASP:H	1:A:66:ARG:O	2	0.12	0.0	0.12
(1,803)	1:A:78:ALA:H	1:A:84:GLU:HG3	2	0.11	0.0	0.11
(1,1574)	1:A:14:THR:HG22	1:A:65:LYS:H	2	0.11	0.0	0.11
(1,1574)	1:A:14:THR:HG23	1:A:65:LYS:H	2	0.11	0.0	0.11
(1,1574)	1:A:14:THR:HG21	1:A:65:LYS:H	2	0.11	0.0	0.11
(1,1645)	1:A:88:GLN:HA	1:A:89:MET:HG3	2	0.11	0.0	0.11

[1]Number of violated models, [2]Standard deviation

9.5 All violated distance restraints ⓘ

9.5.1 Histogram : Distribution of distance violations ⓘ

The following histogram shows the distribution of the absolute value of the violation for all violated restraints in the ensemble.
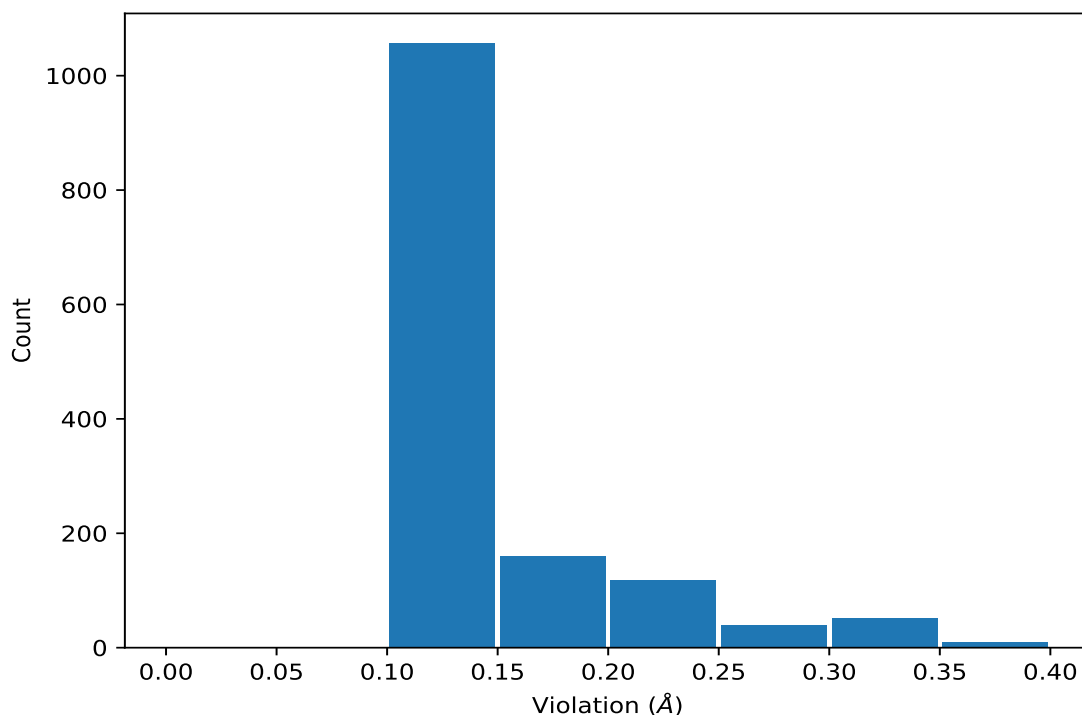
9.5.2   Table : All distance violations ⓘ

The following table lists the absolute value of the violation for each restraint in the ensemble sorted by its value. The Key (restraint list ID, restraint ID) is the unique identifier for a given restraint. Rows with same key represent combinatorial or ambiguous restraints and are counted as a single restraint.

Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	14	0.37
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	15	0.37
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	13	0.37
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	20	0.36
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	3	0.36
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	8	0.36
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	9	0.36
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	11	0.36
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	14	0.36
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	3	0.35
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	4	0.35
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	8	0.35
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	1	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	1	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	2	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	4	0.35

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	5	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	6	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	7	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	10	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	12	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	15	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	16	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	17	0.35
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	19	0.35
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	6	0.34
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	9	0.34
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	12	0.34
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	19	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	9	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	10	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	11	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	12	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	13	0.34
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	18	0.34
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	18	0.34
(1,843)	1:A:59:PHE:HA	1:A:60:VAL:HB	20	0.34
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	1	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	2	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	5	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	7	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	17	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	18	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	2	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	3	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	4	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	6	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	7	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	8	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	16	0.33
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	17	0.33
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	15	0.33
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	10	0.32
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	11	0.32
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	13	0.32
(2,45)	1:A:60:VAL:H	1:A:18:VAL:O	16	0.32
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	5	0.32
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	19	0.32

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	8	0.31
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	14	0.31
(2,41)	1:A:62:PHE:H	1:A:16:LEU:O	15	0.3
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	10	0.3
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	18	0.3
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	3	0.3
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	7	0.3
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	18	0.3
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	19	0.3
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	3	0.29
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	15	0.29
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	2	0.29
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	11	0.29
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	12	0.29
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	13	0.29
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	14	0.28
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	2	0.28
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	7	0.28
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	9	0.28
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	12	0.28
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	19	0.28
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	4	0.28
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	5	0.28
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	6	0.28
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	20	0.27
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	4	0.27
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	5	0.27
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	16	0.27
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	17	0.27
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	1	0.27
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	16	0.27
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	20	0.26
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	1	0.26
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	6	0.26
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	11	0.26
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	8	0.26
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	14	0.25
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	14	0.25
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	9	0.25
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	10	0.25
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	17	0.25
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	15	0.24

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	6	0.24
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	8	0.24
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	16	0.24
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	19	0.24
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	13	0.24
(1,247)	1:A:79:VAL:HB	1:A:82:GLY:HA2	20	0.24
(1,1514)	1:A:48:ASP:HA	1:A:49:ARG:HA	5	0.24
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	7	0.23
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	9	0.23
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	10	0.23
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	11	0.23
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	13	0.23
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	17	0.23
(1,313)	1:A:83:ARG:HA	1:A:84:GLU:HB2	10	0.23
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	3	0.22
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	4	0.22
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	8	0.22
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	12	0.22
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	20	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	1	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	2	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	3	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	4	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	5	0.22
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	15	0.22
(1,749)	1:A:51:THR:HB	1:A:52:LYS:H	8	0.22
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	3	0.22
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	20	0.22
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	20	0.22
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	20	0.22
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	20	0.22
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	20	0.22
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	3	0.22
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	3	0.22
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	3	0.22
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	3	0.22

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	3	0.22
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	3	0.22
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	20	0.22
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	20	0.22
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	6	0.21
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	9	0.21
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	17	0.21
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	19	0.21
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	1	0.21
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	12	0.21
(2,39)	1:A:16:LEU:H	1:A:62:PHE:O	18	0.21
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	4	0.21
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	12	0.21
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	15	0.21
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	15	0.21
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	15	0.21
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	15	0.21
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	15	0.21
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	15	0.21
(1,2072)	1:A:14:THR:HG22	1:A:15:SER:H	10	0.21
(1,2072)	1:A:14:THR:HG23	1:A:15:SER:H	10	0.21
(1,2072)	1:A:14:THR:HG21	1:A:15:SER:H	10	0.21
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	4	0.21
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	4	0.21
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	4	0.21
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	4	0.21
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	4	0.21
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	4	0.21

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	12	0.21
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	15	0.21
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	15	0.21
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	15	0.21
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	15	0.21
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	15	0.21
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	15	0.21
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	5	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	7	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	10	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	11	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	13	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	16	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	18	0.2
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	12	0.2
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	15	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	2	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	4	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	7	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	9	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	10	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	11	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	12	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	13	0.2
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	18	0.2
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	5	0.2
(1,313)	1:A:83:ARG:HA	1:A:84:GLU:HB2	11	0.2
(1,313)	1:A:83:ARG:HA	1:A:84:GLU:HB2	13	0.2
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	1	0.19
(2,46)	1:A:60:VAL:N	1:A:18:VAL:O	2	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	3	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	5	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	6	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	8	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	16	0.19
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	17	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	1	0.19

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	6	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	12	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	14	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	15	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	17	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	19	0.19
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	20	0.19
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	2	0.19
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	5	0.19
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	17	0.19
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	1	0.19
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	7	0.19
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	18	0.19
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	18	0.19
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	18	0.19
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	18	0.19
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	18	0.19
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	18	0.19
(1,2071)	1:A:14:THR:HB	1:A:15:SER:H	7	0.19
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	1	0.19
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	7	0.19
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	18	0.19

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	18	0.19
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	18	0.19
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	18	0.19
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	18	0.19
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	18	0.19
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	3	0.18
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	10	0.18
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	19	0.18
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	19	0.18
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	13	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	2	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	4	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	8	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	11	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	13	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	16	0.18
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	18	0.18
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	19	0.18
(1,313)	1:A:83:ARG:HA	1:A:84:GLU:HB2	20	0.18
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	4	0.18
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	10	0.18
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	19	0.18
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	20	0.18
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	16	0.18
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	16	0.18
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	16	0.18
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	16	0.18
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	16	0.18
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	16	0.18
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	9	0.18
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	16	0.18
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	16	0.18
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	16	0.18
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	16	0.18
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	16	0.18
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	16	0.18
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	1	0.17
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	4	0.17
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	8	0.17
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	11	0.17
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	18	0.17
(2,42)	1:A:62:PHE:N	1:A:16:LEU:O	15	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	2	0.17
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	6	0.17
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	11	0.17
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	19	0.17
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	3	0.17
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	7	0.17
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	9	0.17
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	3	0.17
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	6	0.17
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	9	0.17
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	13	0.17
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	2	0.17
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	5	0.17
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	17	0.17
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	17	0.17
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	17	0.17
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	17	0.17
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	17	0.17
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	17	0.17
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	6	0.17
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	2	0.17
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	5	0.17
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	5	0.17
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	5	0.17
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	5	0.17
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	5	0.17
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	5	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	17	0.17
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	17	0.17
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	17	0.17
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	17	0.17
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	17	0.17
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	17	0.17
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	20	0.17
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	5	0.16
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	9	0.16
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	13	0.16
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	16	0.16
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	17	0.16
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	5	0.16
(1,834)	1:A:27:PRO:HA	1:A:43:VAL:HB	10	0.16
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	4	0.16
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	8	0.16
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	14	0.16
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	15	0.16
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	1	0.16
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	11	0.16
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	16	0.16
(1,2072)	1:A:14:THR:HG22	1:A:15:SER:H	19	0.16
(1,2072)	1:A:14:THR:HG23	1:A:15:SER:H	19	0.16
(1,2072)	1:A:14:THR:HG21	1:A:15:SER:H	19	0.16
(1,1233)	1:A:82:GLY:H	1:A:83:ARG:HG3	16	0.16
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	3	0.15
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	7	0.15
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	17	0.15
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	18	0.15
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	20	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	1	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	2	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	3	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	6	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	10	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	12	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	13	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	16	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	18	0.15
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	20	0.15
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	7	0.15
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	14	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	14	0.15
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	14	0.15
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	14	0.15
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	14	0.15
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	14	0.15
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	1	0.15
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	4	0.15
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	8	0.15
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	12	0.15
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	17	0.15
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	14	0.15
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	14	0.15
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	14	0.15
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	14	0.15
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	14	0.15
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	14	0.15
(1,1488)	1:A:80:LEU:HG	1:A:81:ASP:HA	1	0.15
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	15	0.15
(1,1233)	1:A:82:GLY:H	1:A:83:ARG:HG3	19	0.15
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	2	0.14
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	6	0.14
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	8	0.14
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	16	0.14
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	19	0.14
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	4	0.14
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	10	0.14
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	12	0.14
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	14	0.14
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	16	0.14
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	4	0.14
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	5	0.14
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	7	0.14
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	9	0.14
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	11	0.14
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	8	0.14
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	11	0.14
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	11	0.14
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	11	0.14
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	11	0.14
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	11	0.14
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	11	0.14
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	3	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	9	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	9	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	13	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	13	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	13	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	19	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	19	0.14
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	19	0.14
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	2	0.14
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	5	0.14
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	14	0.14
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	15	0.14
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	11	0.14
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	11	0.14
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	11	0.14
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	11	0.14
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	11	0.14
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	11	0.14
(1,1488)	1:A:80:LEU:HG	1:A:81:ASP:HA	7	0.14
(1,1233)	1:A:82:GLY:H	1:A:83:ARG:HG3	7	0.14
(1,1197)	1:A:8:PRO:HG2	1:A:9:ASP:H	13	0.14
(1,1197)	1:A:8:PRO:HG3	1:A:9:ASP:H	13	0.14
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	13	0.14
(1,1017)	1:A:10:VAL:HA	1:A:11:GLU:H	16	0.14
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	20	0.13
(2,43)	1:A:18:VAL:H	1:A:60:VAL:O	7	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	6	0.13
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	11	0.13
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	1	0.13
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	8	0.13
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	9	0.13
(2,25)	1:A:74:ALA:H	1:A:70:ASP:O	15	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	1	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	4	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	5	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	6	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	7	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	8	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	10	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	11	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	13	0.13
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	16	0.13
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	2	0.13
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	16	0.13
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	20	0.13
(1,702)	1:A:69:GLU:HB3	1:A:70:ASP:HB3	17	0.13
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	15	0.13
(1,2077)	1:A:77:GLY:HA2	1:A:84:GLU:H	10	0.13
(1,2077)	1:A:77:GLY:HA2	1:A:84:GLU:H	11	0.13
(1,2062)	1:A:91:ARG:HA	1:A:92:TYR:H	14	0.13
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	4	0.13
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	8	0.13
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	15	0.13
(1,1902)	1:A:80:LEU:H	1:A:85:LEU:H	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	4	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	4	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	4	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	6	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	6	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	6	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	10	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	10	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	10	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	14	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	14	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	14	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	14	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	14	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	14	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	15	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	15	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	17	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	17	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	17	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	20	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	20	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	20	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	20	0.13
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	20	0.13
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	3	0.13
(1,1619)	1:A:20:ASN:HA	1:A:20:ASN:HD21	18	0.13
(1,1488)	1:A:80:LEU:HG	1:A:81:ASP:HA	16	0.13
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	11	0.13
(1,1197)	1:A:8:PRO:HG2	1:A:9:ASP:H	2	0.13
(1,1197)	1:A:8:PRO:HG3	1:A:9:ASP:H	2	0.13
(1,1197)	1:A:8:PRO:HG2	1:A:9:ASP:H	3	0.13
(1,1197)	1:A:8:PRO:HG3	1:A:9:ASP:H	3	0.13
(1,1197)	1:A:8:PRO:HG2	1:A:9:ASP:H	20	0.13
(1,1197)	1:A:8:PRO:HG3	1:A:9:ASP:H	20	0.13
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	12	0.13
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	15	0.13
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	13	0.12
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	7	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	10	0.12
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	13	0.12
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	14	0.12
(2,17)	1:A:70:ASP:H	1:A:66:ARG:O	13	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	2	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	3	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	9	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	12	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	14	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	15	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	17	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	18	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	19	0.12
(1,978)	1:A:36:LYS:HB3	1:A:37:TYR:HA	20	0.12
(1,78)	1:A:34:PHE:HZ	1:A:87:VAL:HB	19	0.12
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	6	0.12
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	12	0.12
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	13	0.12
(1,2130)	1:A:79:VAL:HG11	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG12	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG13	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG21	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG22	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG23	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG11	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG12	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG13	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG21	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG22	1:A:83:ARG:H	10	0.12
(1,2130)	1:A:79:VAL:HG23	1:A:83:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	8	0.12
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	10	0.12
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	10	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2093)	1:A:85:LEU:HD11	1:A:86:ARG:H	13	0.12
(1,2093)	1:A:85:LEU:HD12	1:A:86:ARG:H	13	0.12
(1,2093)	1:A:85:LEU:HD13	1:A:86:ARG:H	13	0.12
(1,2093)	1:A:85:LEU:HD21	1:A:86:ARG:H	13	0.12
(1,2093)	1:A:85:LEU:HD22	1:A:86:ARG:H	13	0.12
(1,2093)	1:A:85:LEU:HD23	1:A:86:ARG:H	13	0.12
(1,2077)	1:A:77:GLY:HA2	1:A:84:GLU:H	20	0.12
(1,2062)	1:A:91:ARG:HA	1:A:92:TYR:H	2	0.12
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	1	0.12
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	5	0.12
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	12	0.12
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	17	0.12
(1,1902)	1:A:80:LEU:H	1:A:85:LEU:H	11	0.12
(1,1717)	1:A:63:HIS:HE1	1:A:64:ASP:HA	10	0.12
(1,1717)	1:A:63:HIS:HE1	1:A:64:ASP:HA	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	1	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	1	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	1	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	2	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	2	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	2	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	2	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	2	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	2	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	3	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	3	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	5	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	5	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	5	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	8	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	8	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	8	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	11	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	11	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	11	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	12	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	12	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	12	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	16	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	16	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	16	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	18	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	18	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	18	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	18	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	18	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	18	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	18	0.12
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	18	0.12
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	8	0.12
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	10	0.12
(1,1530)	1:A:85:LEU:HD11	1:A:86:ARG:H	13	0.12
(1,1530)	1:A:85:LEU:HD12	1:A:86:ARG:H	13	0.12
(1,1530)	1:A:85:LEU:HD13	1:A:86:ARG:H	13	0.12
(1,1530)	1:A:85:LEU:HD21	1:A:86:ARG:H	13	0.12
(1,1530)	1:A:85:LEU:HD22	1:A:86:ARG:H	13	0.12
(1,1530)	1:A:85:LEU:HD23	1:A:86:ARG:H	13	0.12
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	9	0.12
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	14	0.12
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	2	0.12
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	4	0.12
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	18	0.12
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	3	0.12
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	7	0.12
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	10	0.12
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	16	0.12
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	17	0.12
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	4	0.11
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	10	0.11
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	15	0.11
(2,5)	1:A:32:ARG:H	1:A:28:ASP:O	18	0.11
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	4	0.11
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	9	0.11
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	18	0.11
(2,40)	1:A:16:LEU:N	1:A:62:PHE:O	20	0.11
(2,17)	1:A:70:ASP:H	1:A:66:ARG:O	14	0.11
(1,81)	1:A:20:ASN:HD21	1:A:84:GLU:HB2	9	0.11
(1,803)	1:A:78:ALA:H	1:A:84:GLU:HG3	11	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,803)	1:A:78:ALA:H	1:A:84:GLU:HG3	13	0.11
(1,78)	1:A:34:PHE:HZ	1:A:87:VAL:HB	13	0.11
(1,78)	1:A:34:PHE:HZ	1:A:87:VAL:HB	20	0.11
(1,740)	1:A:50:TYR:H	1:A:50:TYR:HB2	17	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD11	1:A:87:VAL:HG23	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD12	1:A:87:VAL:HG23	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD13	1:A:87:VAL:HG23	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD21	1:A:87:VAL:HG23	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD22	1:A:87:VAL:HG23	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG11	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG12	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG13	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG21	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG22	14	0.11
(1,419)	1:A:16:LEU:HD23	1:A:87:VAL:HG23	14	0.11
(1,2397)	1:A:23:TYR:HB3	1:A:24:ARG:H	18	0.11
(1,2190)	1:A:8:PRO:HB3	1:A:9:ASP:H	18	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2190)	1:A:8:PRO:HB2	1:A:9:ASP:H	18	0.11
(1,212)	1:A:46:PRO:HA	1:A:57:PHE:HZ	3	0.11
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	2	0.11
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	9	0.11
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	16	0.11
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	18	0.11
(1,2047)	1:A:16:LEU:HA	1:A:89:MET:H	19	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG22	7	0.11
(1,1704)	1:A:18:VAL:HG11	1:A:87:VAL:HG23	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG22	7	0.11
(1,1704)	1:A:18:VAL:HG12	1:A:87:VAL:HG23	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG22	7	0.11
(1,1704)	1:A:18:VAL:HG13	1:A:87:VAL:HG23	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG22	7	0.11
(1,1704)	1:A:18:VAL:HG21	1:A:87:VAL:HG23	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG22	7	0.11
(1,1704)	1:A:18:VAL:HG22	1:A:87:VAL:HG23	7	0.11
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG11	7	0.11
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG12	7	0.11
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG13	7	0.11
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG21	7	0.11
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG22	7	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1704)	1:A:18:VAL:HG23	1:A:87:VAL:HG23	7	0.11
(1,1645)	1:A:88:GLN:HA	1:A:89:MET:HG3	12	0.11
(1,1645)	1:A:88:GLN:HA	1:A:89:MET:HG3	15	0.11
(1,1574)	1:A:14:THR:HG22	1:A:65:LYS:H	1	0.11
(1,1574)	1:A:14:THR:HG23	1:A:65:LYS:H	1	0.11
(1,1574)	1:A:14:THR:HG21	1:A:65:LYS:H	1	0.11
(1,1574)	1:A:14:THR:HG22	1:A:65:LYS:H	20	0.11
(1,1574)	1:A:14:THR:HG23	1:A:65:LYS:H	20	0.11
(1,1574)	1:A:14:THR:HG21	1:A:65:LYS:H	20	0.11
(1,1483)	1:A:15:SER:HA	1:A:61:ARG:HA	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG12	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD11	1:A:87:VAL:HG23	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG12	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD12	1:A:87:VAL:HG23	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG12	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD13	1:A:87:VAL:HG23	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG12	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD21	1:A:87:VAL:HG23	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG12	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD22	1:A:87:VAL:HG23	14	0.11
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG11	14	0.11
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG12	14	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG13	14	0.11
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG21	14	0.11
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG22	14	0.11
(1,1475)	1:A:16:LEU:HD23	1:A:87:VAL:HG23	14	0.11
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	1	0.11
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	12	0.11
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	13	0.11
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	16	0.11
(1,1347)	1:A:39:ARG:HA	1:A:41:GLY:H	17	0.11
(1,1301)	1:A:35:GLU:HB3	1:A:36:LYS:HA	20	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	1	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	3	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	6	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	7	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	13	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	14	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	17	0.11
(1,1289)	1:A:15:SER:HA	1:A:65:LYS:H	20	0.11
(1,1230)	1:A:23:TYR:HA	1:A:24:ARG:HB3	5	0.11
(1,1230)	1:A:23:TYR:HA	1:A:24:ARG:HB3	13	0.11
(1,1230)	1:A:23:TYR:HA	1:A:24:ARG:HB3	20	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	1	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	2	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	4	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	5	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	8	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	9	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	11	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	14	0.11
(1,1119)	1:A:31:ARG:HA	1:A:33:VAL:HB	18	0.11
(1,1035)	1:A:39:ARG:HB3	1:A:63:HIS:HD2	14	0.11

10 Dihedral-angle violation analysis ⓘ

Dihedral angle analysis failed due to data error in the dihedral angle restraints, possibly missing target value