Full wwPDB NMR Structure Validation Report (i)

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PDB ID	:	7XX8
BMRB ID	:	36490
Title	:	Solution structure of RRM1 of Human SART3
Authors	:	Kim, I.; Bang, K.M.; Park, C.; Kim, N.K.; Suh, J.Y.
Deposited on	:	2022-05-29

This is a Full wwPDB NMR Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/NMRValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

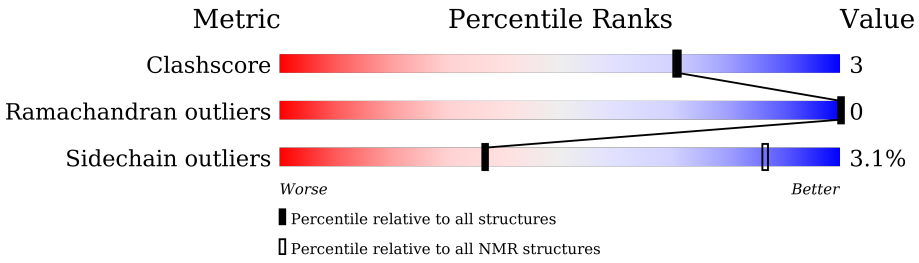
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
wwPDB-RCI	:	v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV	:	Wang et al. (2010)
wwPDB-ShiftChecker	:	v1.2
BMRB Restraints Analysis	:	v1.2
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.38.2

1 Overall quality at a glance (i)

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

The overall completeness of chemical shifts assignment is 85%.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	NMR archive (#Entries)
Clashscore	210492	14027
Ramachandran outliers	207382	12486
Sidechain outliers	206894	12463

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	94	83% · 9% ·

2 Ensemble composition and analysis (i)

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

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:700-A:781 (82)	0.46	20

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 3 clusters and 1 single-model cluster was found.

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

3 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 1426 atoms, of which 705 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Squamous cell carcinoma antigen recognized by T-cells 3.

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	S	
1	A	90	1426	453	705	123	139	6	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	693	GLY	-	expression tag	UNP Q15020
A	694	SER	-	expression tag	UNP Q15020
A	695	HIS	-	expression tag	UNP Q15020
A	696	MET	-	expression tag	UNP Q15020

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: Squamous cell carcinoma antigen recognized by T-cells 3

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: Squamous cell carcinoma antigen recognized by T-cells 3

Chain A:

4.2.2 Score per residue for model 2

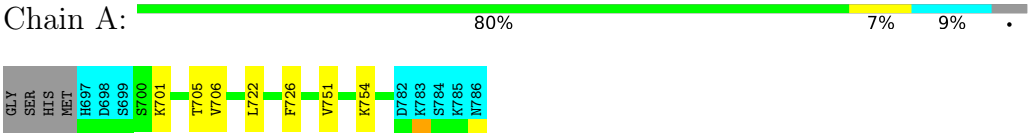
• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

Chain A:

4.2.3 Score per residue for model 3

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

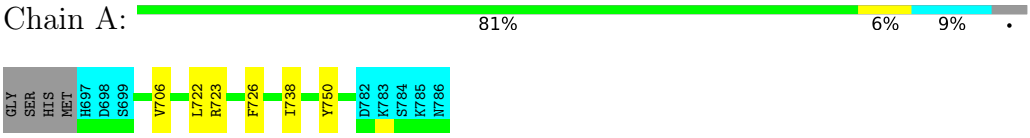
Chain A:



4.2.4 Score per residue for model 4

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

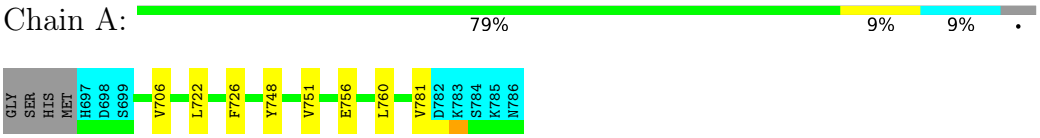
Chain A:



4.2.5 Score per residue for model 5

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

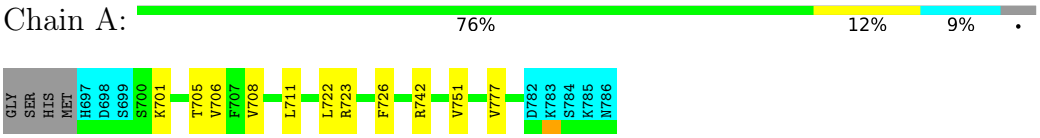
Chain A:



4.2.6 Score per residue for model 6

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

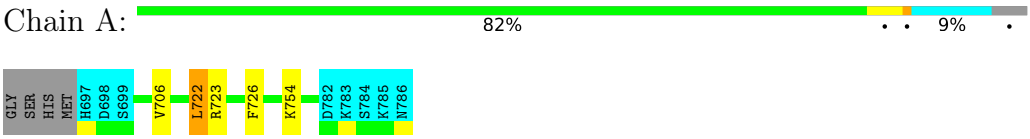
Chain A:



4.2.7 Score per residue for model 7

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

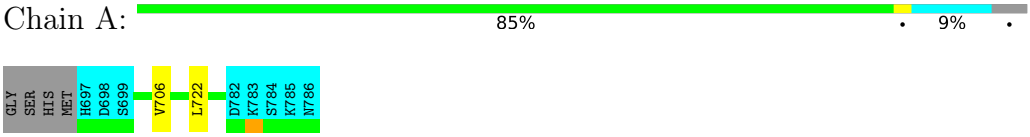
Chain A:



4.2.8 Score per residue for model 8

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

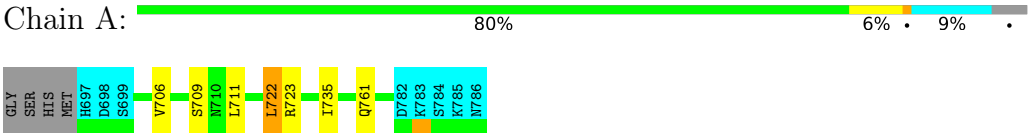
Chain A:



4.2.9 Score per residue for model 9

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

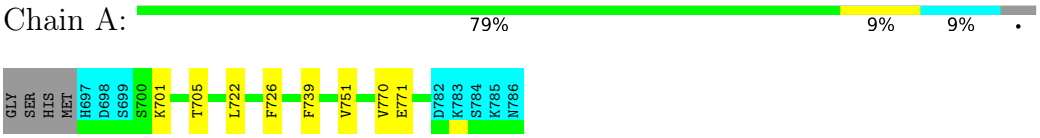
Chain A:



4.2.10 Score per residue for model 10

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

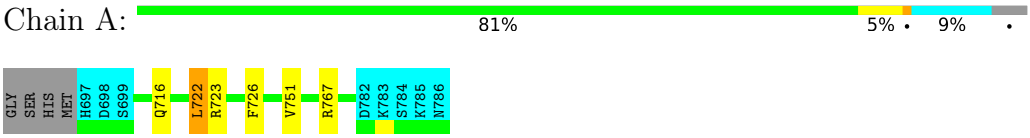
Chain A:



4.2.11 Score per residue for model 11

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

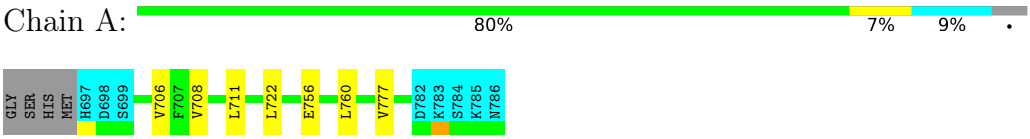
Chain A:



4.2.12 Score per residue for model 12

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

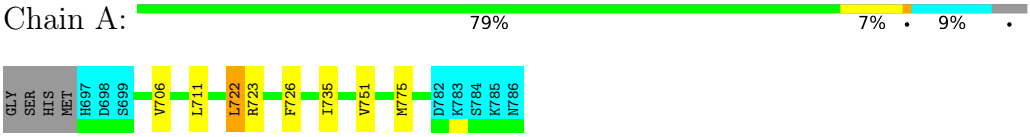
Chain A:



4.2.13 Score per residue for model 13

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

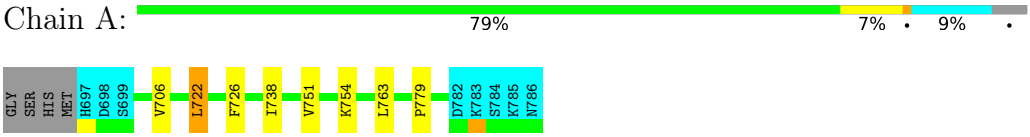
Chain A:



4.2.14 Score per residue for model 14

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

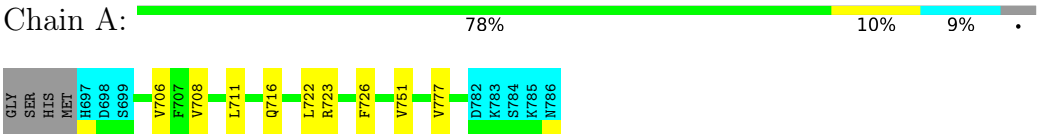
Chain A:



4.2.15 Score per residue for model 15

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

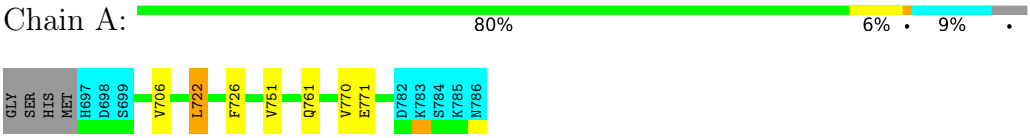
Chain A:



4.2.16 Score per residue for model 16

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

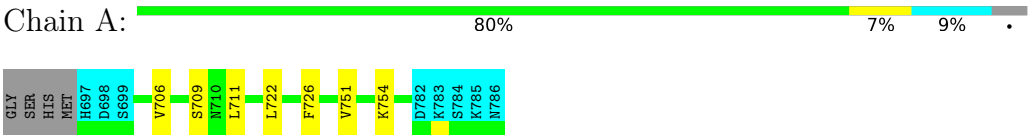
Chain A:



4.2.17 Score per residue for model 17

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

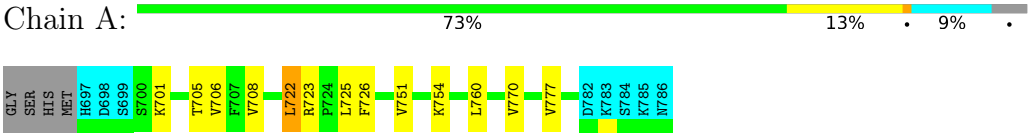
Chain A:



4.2.18 Score per residue for model 18

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

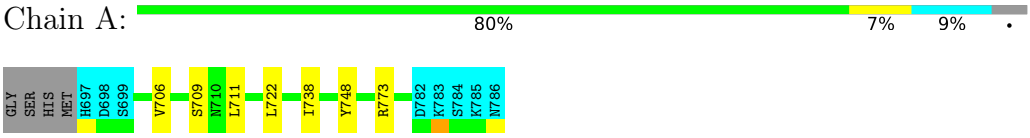
Chain A:



4.2.19 Score per residue for model 19

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

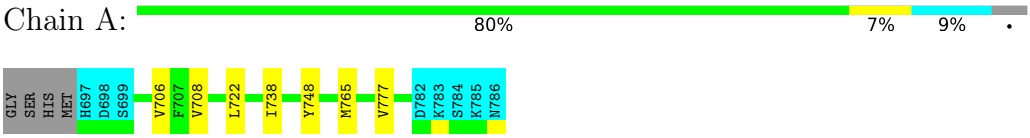
Chain A:



4.2.20 Score per residue for model 20 (medoid)

• Molecule 1: Squamous cell carcinoma antigen recognized by T-cells 3

Chain A:



5 Refinement protocol and experimental data overview

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

Of the 2000 calculated structures, 20 were deposited, based on the following criterion: *all calculated structures submitted.*

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

Software name	Classification	Version
X-PLOR NIH	structure calculation	

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	1115
Number of shifts mapped to atoms	1114
Number of unparsed shifts	0
Number of shifts with mapping errors	1
Number of shifts with mapping warnings	0
Assignment completeness (well-defined parts)	85%

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	657	649	649	4±2
All	All	13140	12980	12980	85

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 3.

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

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:726:PHE:CD2	1:A:751:VAL:HG11	0.77	2.14	2	12
1:A:708:VAL:HG12	1:A:777:VAL:HG22	0.68	1.65	2	6
1:A:722:LEU:HD22	1:A:735:ILE:HD11	0.67	1.65	9	1
1:A:726:PHE:CE2	1:A:751:VAL:HG11	0.65	2.26	13	3
1:A:770:VAL:HG12	1:A:771:GLU:CD	0.60	2.16	10	1
1:A:726:PHE:HD2	1:A:751:VAL:HG11	0.59	1.57	6	6
1:A:722:LEU:HD21	1:A:726:PHE:CD1	0.59	2.32	4	1
1:A:722:LEU:HD22	1:A:735:ILE:CD1	0.55	2.32	9	1
1:A:738:ILE:HD13	1:A:748:TYR:O	0.55	2.02	2	1
1:A:738:ILE:HD11	1:A:748:TYR:HB2	0.51	1.82	19	1
1:A:722:LEU:HD11	1:A:726:PHE:CE1	0.50	2.42	14	5
1:A:738:ILE:HD11	1:A:750:TYR:HE1	0.49	1.68	4	1
1:A:709:SER:C	1:A:711:LEU:HD12	0.48	2.28	17	3
1:A:722:LEU:HD11	1:A:726:PHE:CD2	0.48	2.43	13	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:735:ILE:N	1:A:735:ILE:HD12	0.48	2.24	1	1
1:A:701:LYS:O	1:A:705:THR:HG23	0.47	2.08	10	4
1:A:706:VAL:O	1:A:706:VAL:HG23	0.47	2.10	19	18
1:A:738:ILE:HD11	1:A:750:TYR:CE1	0.46	2.45	4	1
1:A:732:VAL:HG11	1:A:735:ILE:HD11	0.46	1.87	1	1
1:A:711:LEU:N	1:A:711:LEU:HD22	0.45	2.27	12	2
1:A:756:GLU:O	1:A:760:LEU:HD13	0.45	2.12	5	2
1:A:722:LEU:HD23	1:A:723:ARG:N	0.44	2.28	9	1
1:A:735:ILE:CD1	1:A:751:VAL:HG23	0.44	2.43	13	1
1:A:711:LEU:HD12	1:A:711:LEU:N	0.43	2.28	2	2
1:A:722:LEU:HD13	1:A:722:LEU:C	0.43	2.33	4	1
1:A:726:PHE:HE2	1:A:751:VAL:HG11	0.43	1.70	13	1
1:A:763:LEU:HD22	1:A:779:PRO:HG3	0.42	1.91	14	1
1:A:725:LEU:HD21	1:A:770:VAL:HG21	0.42	1.91	18	1
1:A:770:VAL:HG12	1:A:771:GLU:OE1	0.42	2.15	10	1
1:A:711:LEU:HD21	1:A:775:MET:HG3	0.41	1.93	13	1
1:A:770:VAL:HG12	1:A:771:GLU:HG2	0.41	1.93	16	1
1:A:738:ILE:HD12	1:A:748:TYR:O	0.41	2.16	20	1
1:A:722:LEU:HD11	1:A:726:PHE:CE2	0.40	2.51	13	1

6.3 Torsion angles (i)

6.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	82/94 (87%)	78±1 (95±2%)	4±1 (5±2%)	0±0 (0±0%)	100	100
All	All	1640/1880 (87%)	1558 (95%)	82 (5%)	0 (0%)	100	100

There are no Ramachandran outliers.

6.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	75/86 (87%)	73±1 (97±1%)	2±1 (3±1%)	37 86
All	All	1500/1720 (87%)	1453 (97%)	47 (3%)	37 86

All 14 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	722	LEU	18
1	A	723	ARG	9
1	A	754	LYS	5
1	A	716	GLN	3
1	A	760	LEU	2
1	A	761	GLN	2
1	A	768	LYS	1
1	A	748	TYR	1
1	A	742	ARG	1
1	A	739	PHE	1
1	A	767	ARG	1
1	A	738	ILE	1
1	A	773	ARG	1
1	A	765	MET	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 oligosaccharides in this entry.

6.6 Ligand geometry

There are no ligands in this entry.

6.7 Other polymers (i)

There are no such molecules in this entry.

6.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

7 Chemical shift validation

The completeness of assignment taking into account all chemical shift lists is 85% for the well-defined parts and 85% for the entire structure.

7.1 Chemical shift list 1

File name: working_cs.cif

Chemical shift list name: *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	1115
Number of shifts mapped to atoms	1114
Number of unparsed shifts	0
Number of shifts with mapping errors	1
Number of shifts with mapping warnings	0
Number of shift outliers (ShiftChecker)	0

The following errors were found when reading this chemical shift list.

- Chemical shift has been reported more than once. All 74 occurrences are reported below.

List ID	Chain	Res	Type	Atom	Shift Data		
					Value	Uncertainty	Ambiguity
1	A	704	ILE	HD12	0.949	0.01	.
1	A	704	ILE	HD13	0.949	0.01	.
1	A	704	ILE	HG22	0.688	0.01	.
1	A	704	ILE	HG23	0.688	0.01	.
1	A	705	THR	HG22	1.337	0.01	.
1	A	705	THR	HG23	1.337	0.01	.
1	A	706	VAL	HG12	0.992	0.01	.
1	A	706	VAL	HG13	0.992	0.01	.
1	A	706	VAL	HG22	0.790	0.01	.
1	A	706	VAL	HG23	0.790	0.01	.
1	A	708	VAL	HG12	1.060	0.01	.
1	A	708	VAL	HG13	1.060	0.01	.
1	A	708	VAL	HG22	0.748	0.01	.
1	A	708	VAL	HG23	0.748	0.01	.
1	A	711	LEU	HD12	0.858	0.02	.

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List ID	Chain	Res	Type	Atom	Shift Data		
					Value	Uncertainty	Ambiguity
1	A	711	LEU	HD13	0.858	0.02	.
1	A	711	LEU	HD22	0.794	0.01	.
1	A	711	LEU	HD23	0.794	0.01	.
1	A	715	MET	HE2	1.934	0.02	.
1	A	715	MET	HE3	1.934	0.02	.
1	A	720	THR	HG22	1.225	0.00	.
1	A	720	THR	HG23	1.225	0.00	.
1	A	722	LEU	HD12	0.880	0.01	.
1	A	722	LEU	HD13	0.880	0.01	.
1	A	722	LEU	HD22	0.815	0.01	.
1	A	722	LEU	HD23	0.815	0.01	.
1	A	725	LEU	HD12	0.800	0.01	.
1	A	725	LEU	HD13	0.800	0.01	.
1	A	725	LEU	HD22	0.649	0.01	.
1	A	725	LEU	HD23	0.649	0.01	.
1	A	728	ALA	HB2	1.489	0.01	.
1	A	728	ALA	HB3	1.489	0.01	.
1	A	732	VAL	HG12	0.781	0.01	.
1	A	732	VAL	HG13	0.781	0.01	.
1	A	732	VAL	HG22	0.461	0.01	.
1	A	732	VAL	HG23	0.461	0.01	.
1	A	733	VAL	HG12	0.850	0.01	.
1	A	733	VAL	HG13	0.850	0.01	.
1	A	735	ILE	HD12	0.810	0.01	.
1	A	735	ILE	HD13	0.810	0.01	.
1	A	735	ILE	HG22	0.640	0.01	.
1	A	735	ILE	HG23	0.640	0.01	.
1	A	738	ILE	HG22	0.867	0.01	.
1	A	738	ILE	HG23	0.867	0.01	.
1	A	751	VAL	HG12	0.001	0.01	.
1	A	751	VAL	HG13	0.001	0.01	.
1	A	751	VAL	HG22	-0.128	0.01	.
1	A	751	VAL	HG23	-0.128	0.01	.
1	A	759	ALA	HB2	1.370	0.01	.
1	A	759	ALA	HB3	1.370	0.01	.
1	A	760	LEU	HD12	0.900	0.01	.
1	A	760	LEU	HD13	0.900	0.01	.
1	A	760	LEU	HD22	0.882	0.00	.
1	A	760	LEU	HD23	0.882	0.00	.
1	A	762	ALA	HB2	1.713	0.01	.
1	A	762	ALA	HB3	1.713	0.01	.

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List ID	Chain	Res	Type	Atom	Shift Data		
					Value	Uncertainty	Ambiguity
1	A	763	LEU	HD12	1.033	0.01	.
1	A	763	LEU	HD13	1.033	0.01	.
1	A	763	LEU	HD22	0.750	0.01	.
1	A	763	LEU	HD23	0.750	0.01	.
1	A	765	MET	HE2	1.773	0.01	.
1	A	765	MET	HE3	1.773	0.01	.
1	A	770	VAL	HG12	0.847	0.01	.
1	A	770	VAL	HG13	0.847	0.01	.
1	A	770	VAL	HG22	0.793	0.02	.
1	A	770	VAL	HG23	0.793	0.02	.
1	A	775	MET	HE2	1.523	0.00	.
1	A	775	MET	HE3	1.523	0.00	.
1	A	777	VAL	HG12	1.114	0.01	.
1	A	777	VAL	HG13	1.114	0.01	.
1	A	777	VAL	HG22	0.986	0.01	.
1	A	777	VAL	HG23	0.986	0.01	.
1	A	781	VAL	HG12	0.852	0.01	.
1	A	781	VAL	HG13	0.852	0.01	.

The following assigned chemical shifts were not mapped to the molecules present in the coordinate file.

- No matching atom found in the structure. All 1 occurrences are reported below.

List ID	Chain	Res	Type	Atom	Shift Data		
					Value	Uncertainty	Ambiguity
1	A	697	HIS	HB3	3.024	0.01	.

7.1.2 Chemical shift referencing (i)

The following table shows the suggested chemical shift referencing corrections.

Nucleus	# values	Correction ± precision, *ppm*	Suggested action
$^{13}C_{\alpha}$	88	-0.31 ± 0.26	None needed (< 0.5 ppm)
$^{13}C_{\beta}$	85	0.27 ± 0.09	None needed (< 0.5 ppm)
$^{13}C'$	84	0.11 ± 0.22	None needed (< 0.5 ppm)
^{15}N	81	0.55 ± 0.47	None needed (imprecise)

7.1.3 Completeness of resonance assignments (i)

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 85%, i.e. 955 atoms were assigned a chemical shift out of a possible 1130. 0 out of 13 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	388/402 (97%)	158/162 (98%)	156/164 (95%)	74/76 (97%)
Sidechain	528/641 (82%)	355/414 (86%)	168/199 (84%)	5/28 (18%)
Aromatic	39/87 (45%)	28/42 (67%)	11/45 (24%)	0/0 (—%)
Overall	955/1130 (85%)	541/618 (88%)	335/408 (82%)	79/104 (76%)

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 85%, i.e. 1041 atoms were assigned a chemical shift out of a possible 1227. 0 out of 13 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	426/442 (96%)	173/178 (97%)	172/180 (96%)	81/84 (96%)
Sidechain	572/691 (83%)	385/444 (87%)	181/216 (84%)	6/31 (19%)
Aromatic	43/94 (46%)	30/46 (65%)	13/47 (28%)	0/1 (0%)
Overall	1041/1227 (85%)	588/668 (88%)	366/443 (83%)	87/116 (75%)

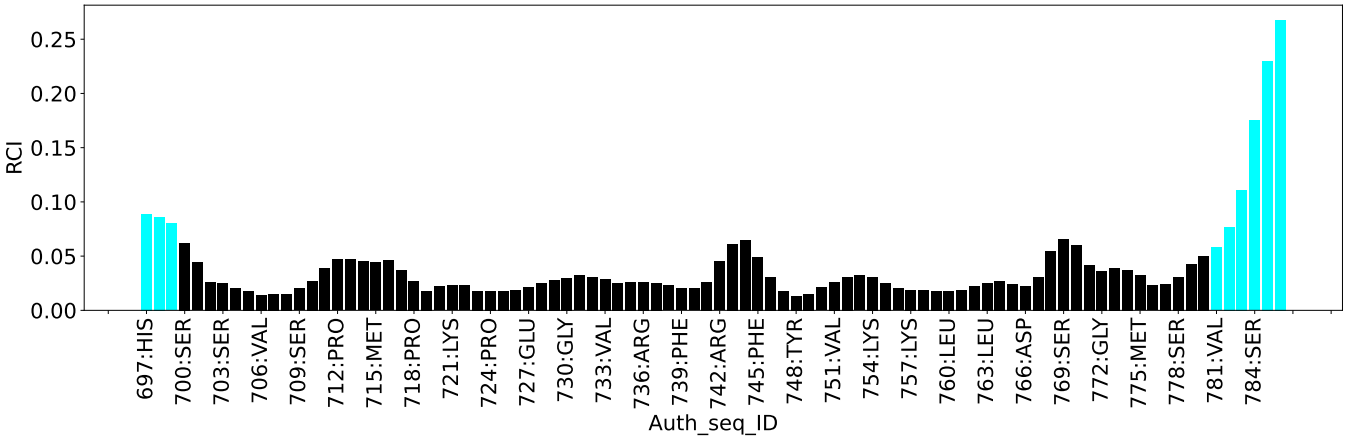
7.1.4 Statistically unusual chemical shifts (i)

There are no statistically unusual chemical shifts.

7.1.5 Random Coil Index (RCI) plots (i)

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:


RCI
0.25
0.20
0.15
0.10
0.05
0.00
697:HIS
700:SER
703:SER
706:VAL
709:SER
712:PRO
715:MET
718:PRO
721:LYS
724:PRO
727:GLU
730:GLY
733:VAL
736:ARG
739:PHE
742:ARG
745:PHE
748:TYR
751:VAL
754:LYS
757:LYS
760:LEU
763:LEU
766:ASP
769:SER
772:GLY
775:MET
778:SER
781:VAL
784:SER
Auth_seq_ID

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	1401
Intra-residue (|i-j|=0)	321
Sequential (|i-j|=1)	422
Medium range (|i-j|>1 and |i-j|<5)	227
Long range (|i-j|≥5)	431
Inter-chain	0
Hydrogen bond restraints	0
Disulfide bond restraints	0
Total dihedral-angle restraints	184
Number of unmapped restraints	0
Number of restraints per residue	16.9
Number of long range restraints per residue[1]	4.6

[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)	8.2	0.2
0.2-0.5 (Medium)	9.4	0.49
>0.5 (Large)	7.3	2.99

8.2.2 Average number of dihedral-angle violations per model (i)

Dihedral-angle violations less than 1° are not included in the calculation.

Bins (°)	Average number of violations per model	Max (°)
1.0-10.0 (Small)	9.2	4.63
10.0-20.0 (Medium)	1.0	18.55
>20.0 (Large)	3.0	101.79

9 Distance violation analysis (i)

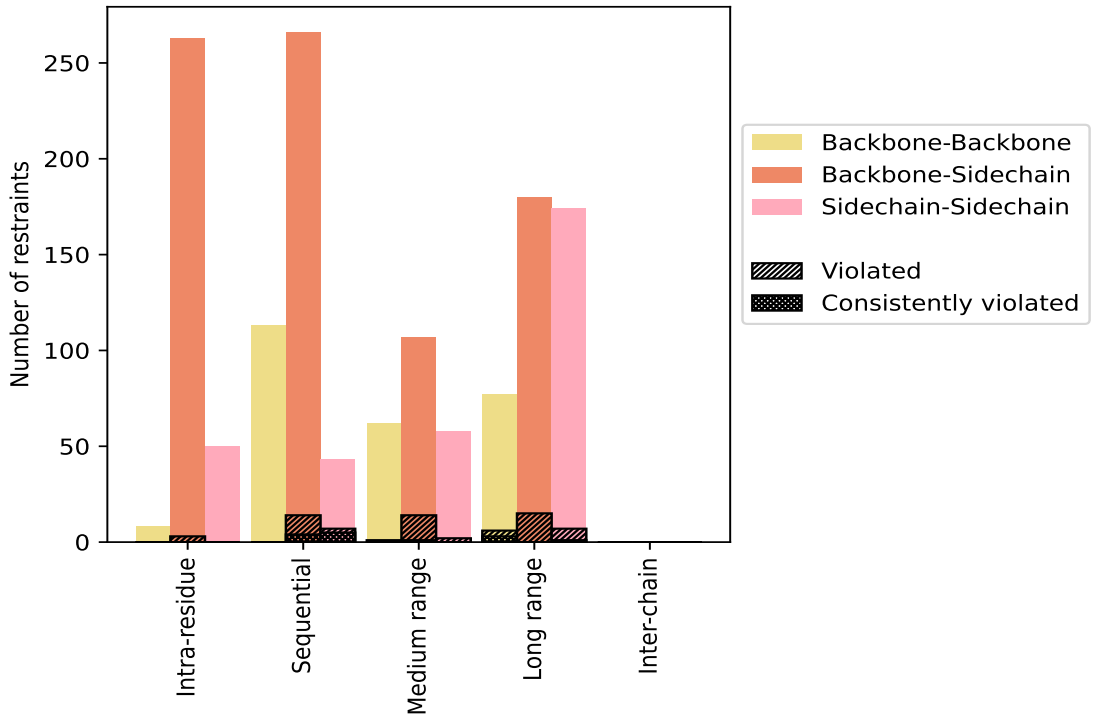
9.1 Summary of distance violations (i)

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)	321	22.9	3	0.9	0.2	0	0.0	0.0
Backbone-Backbone	8	0.6	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	263	18.8	3	1.1	0.2	0	0.0	0.0
Sidechain-Sidechain	50	3.6	0	0.0	0.0	0	0.0	0.0
Sequential (|i-j|=1)	422	30.1	21	5.0	1.5	9	2.1	0.6
Backbone-Backbone	113	8.1	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	266	19.0	14	5.3	1.0	4	1.5	0.3
Sidechain-Sidechain	43	3.1	7	16.3	0.5	5	11.6	0.4
Medium range (|i-j|>1 & |i-j|<5)	227	16.2	17	7.5	1.2	1	0.4	0.1
Backbone-Backbone	62	4.4	1	1.6	0.1	0	0.0	0.0
Backbone-Sidechain	107	7.6	14	13.1	1.0	1	0.9	0.1
Sidechain-Sidechain	58	4.1	2	3.4	0.1	0	0.0	0.0
Long range (|i-j|≥5)	431	30.8	28	6.5	2.0	4	0.9	0.3
Backbone-Backbone	77	5.5	6	7.8	0.4	3	3.9	0.2
Backbone-Sidechain	180	12.8	15	8.3	1.1	0	0.0	0.0
Sidechain-Sidechain	174	12.4	7	4.0	0.5	1	0.6	0.1
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	0	0.0	0	0.0	0.0	0	0.0	0.0
Disulfide bond	0	0.0	0	0.0	0.0	0	0.0	0.0
Total	1401	100.0	69	4.9	4.9	14	1.0	1.0
Backbone-Backbone	260	18.6	7	2.7	0.5	3	1.2	0.2
Backbone-Sidechain	816	58.2	46	5.6	3.3	5	0.6	0.4
Sidechain-Sidechain	325	23.2	16	4.9	1.1	6	1.8	0.4

[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	15	3	6	0	25	0.59	2.68	0.67	0.3
2	1	10	5	8	0	24	0.51	2.67	0.63	0.24
3	0	14	2	8	0	24	0.63	2.59	0.72	0.32
4	0	12	8	9	0	29	0.45	2.65	0.59	0.2
5	0	14	6	6	0	26	0.63	2.63	0.74	0.3
6	0	17	4	6	0	27	0.59	2.63	0.71	0.23
7	1	12	5	9	0	27	0.48	2.69	0.61	0.26
8	0	14	4	10	0	28	0.58	2.67	0.72	0.26
9	1	16	4	8	0	29	0.54	2.58	0.63	0.3
10	1	13	4	7	0	25	0.53	2.69	0.63	0.27

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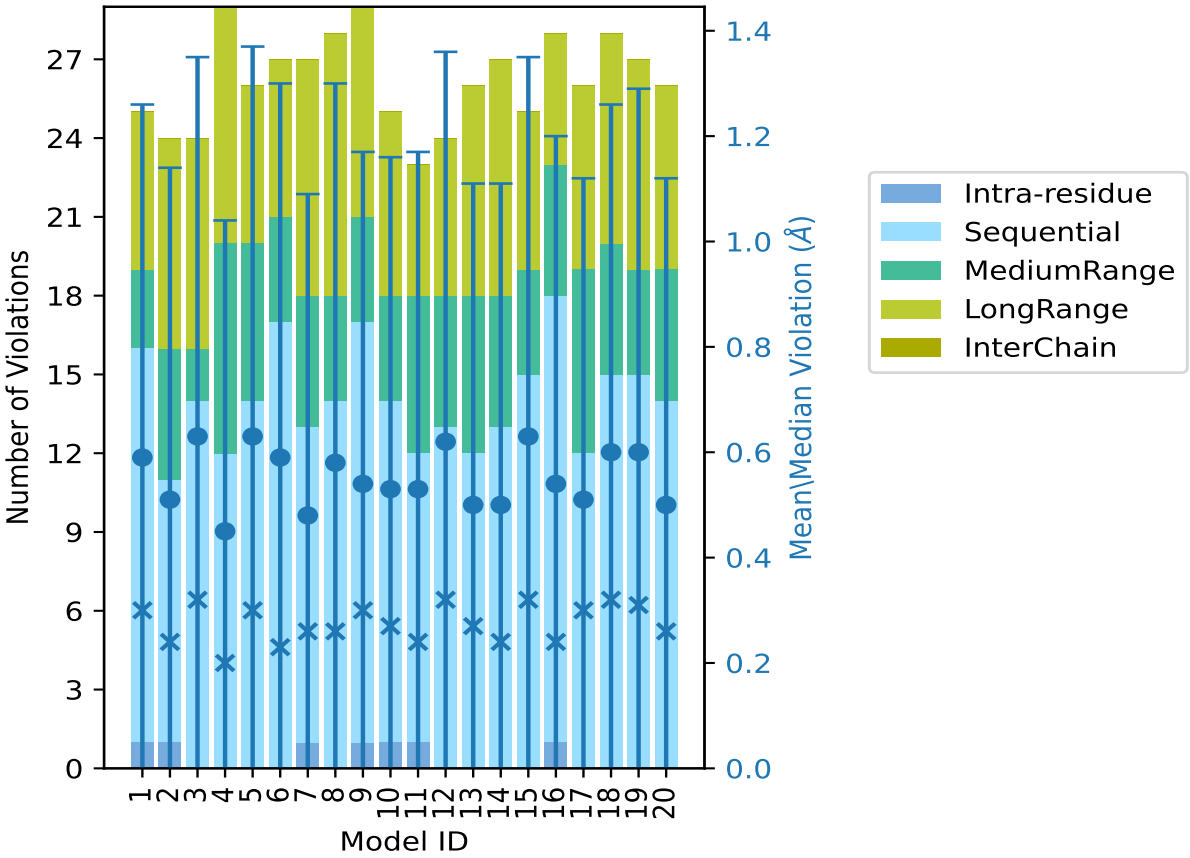
Model ID	Number of violations						Mean (Å)	Max (Å)	SD[6] (Å)	Median (Å)
	IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total				
11	1	11	6	5	0	23	0.53	2.65	0.64	0.24
12	0	13	5	6	0	24	0.62	2.64	0.74	0.32
13	0	12	6	8	0	26	0.5	2.66	0.61	0.27
14	0	13	5	9	0	27	0.5	2.7	0.61	0.24
15	0	15	4	6	0	25	0.63	2.72	0.72	0.32
16	1	17	5	5	0	28	0.54	2.99	0.66	0.24
17	0	12	7	7	0	26	0.51	2.66	0.61	0.3
18	0	15	5	8	0	28	0.6	2.7	0.66	0.32
19	0	15	4	8	0	27	0.6	2.58	0.69	0.31
20	0	14	5	7	0	26	0.5	2.68	0.62	0.26

[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

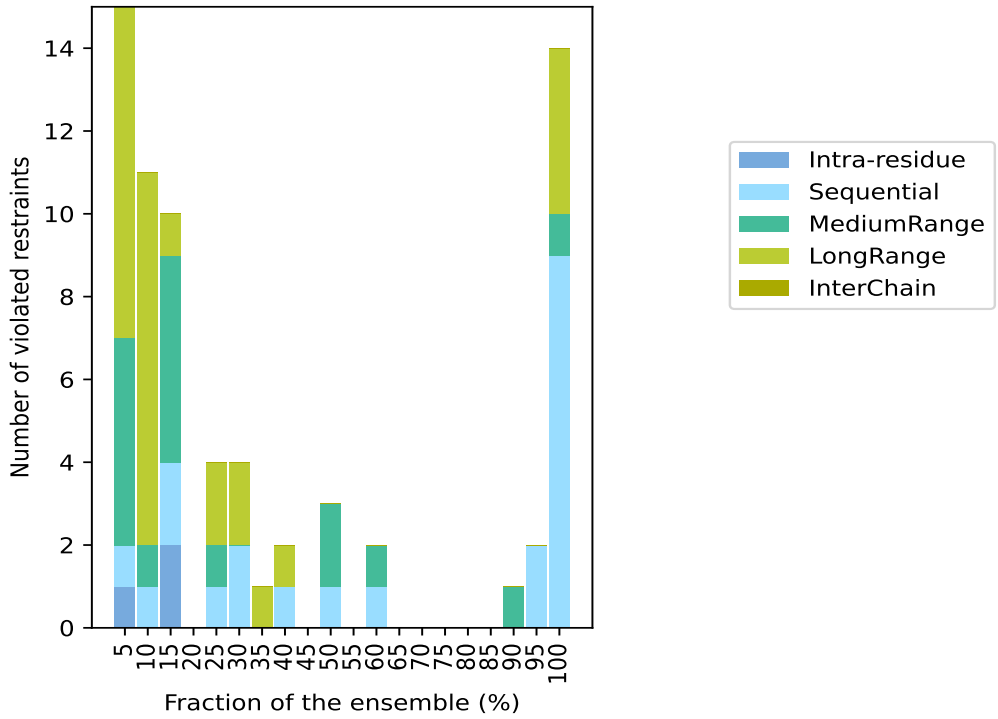
9.3 Distance violation statistics for the ensemble (i)

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, 1332(IR:318, SQ:401, MR:210, LR:403, 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]	%
1	1	5	8	0	15	1	5.0
0	1	1	9	0	11	2	10.0
2	2	5	1	0	10	3	15.0
0	0	0	0	0	0	4	20.0
0	1	1	2	0	4	5	25.0
0	2	0	2	0	4	6	30.0
0	0	0	1	0	1	7	35.0
0	1	0	1	0	2	8	40.0
0	0	0	0	0	0	9	45.0
0	1	2	0	0	3	10	50.0
0	0	0	0	0	0	11	55.0
0	1	1	0	0	2	12	60.0
0	0	0	0	0	0	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	0	0	0	0	0	17	85.0
0	0	1	0	0	1	18	90.0
0	2	0	0	0	2	19	95.0
0	9	1	4	0	14	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

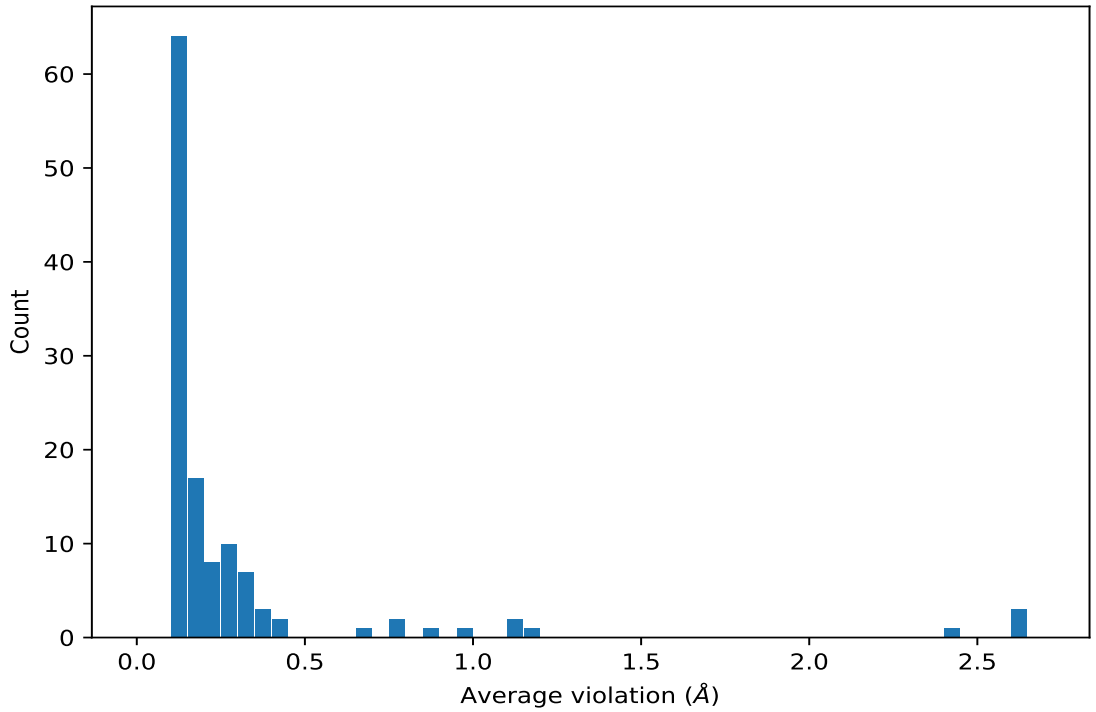
9.3.1 Bar graph : Distance violation statistics for the ensemble



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 (i)

The following table provides the mean and the standard deviation of theviolation 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)
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	20	2.61	0.14	2.64
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	20	2.61	0.14	2.64
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	20	2.61	0.14	2.64
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	20	2.41	0.23	2.41
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	20	1.11	0.74	0.97
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	20	1.11	0.74	0.97
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	20	0.99	0.16	0.98
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	20	0.87	0.14	0.93
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	20	0.7	0.17	0.65
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	20	0.42	0.04	0.43
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	20	0.38	0.02	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	20	0.38	0.02	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	20	0.38	0.02	0.38
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	20	0.3	0.02	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	20	0.3	0.02	0.3
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	20	0.26	0.04	0.26

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	20	0.25	0.07	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	20	0.25	0.07	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	20	0.25	0.07	0.22
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	20	0.2	0.01	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	20	0.2	0.01	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	20	0.2	0.02	0.2
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	20	0.18	0.05	0.18
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	19	0.76	0.03	0.76
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	19	0.76	0.03	0.76
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	19	0.35	0.03	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	19	0.35	0.03	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	19	0.35	0.03	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	19	0.35	0.03	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	19	0.35	0.03	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	19	0.35	0.03	0.35
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	18	0.41	0.15	0.4
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	12	1.17	0.45	1.36
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	12	0.22	0.05	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	12	0.22	0.05	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	12	0.22	0.05	0.24
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	10	0.31	0.17	0.3
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	10	0.18	0.06	0.22
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	10	0.12	0.01	0.12
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	10	0.12	0.01	0.12
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	8	0.18	0.04	0.18
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	8	0.18	0.04	0.18
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	8	0.18	0.04	0.18
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	8	0.13	0.03	0.12
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	8	0.13	0.03	0.12
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	7	0.13	0.03	0.12
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	7	0.13	0.03	0.12
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	7	0.13	0.03	0.12
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	6	0.18	0.05	0.19
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	6	0.18	0.05	0.19
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	6	0.18	0.05	0.16
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	6	0.18	0.05	0.16
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	6	0.13	0.02	0.13
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	6	0.13	0.02	0.13
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	6	0.12	0.02	0.12
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	5	0.18	0.08	0.14
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	5	0.18	0.08	0.14
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	5	0.14	0.03	0.12

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	5	0.14	0.03	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	5	0.14	0.03	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	5	0.14	0.03	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	5	0.14	0.03	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	5	0.14	0.03	0.12
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	5	0.13	0.02	0.12
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	5	0.13	0.02	0.12
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	5	0.13	0.02	0.13
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	5	0.13	0.02	0.13
(1,473)	1:723:A:ARG:H	1:723:A:ARG:HD3	3	0.3	0.12	0.38
(1,387)	1:718:A:PRO:HG2	1:720:A:THR:H	3	0.29	0.1	0.35
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD2	3	0.25	0.01	0.24
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD3	3	0.25	0.01	0.24
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD2	3	0.2	0.06	0.23
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD3	3	0.2	0.06	0.23
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE1	3	0.15	0.01	0.15
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE2	3	0.15	0.01	0.15
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE3	3	0.15	0.01	0.15
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE1	3	0.15	0.05	0.12
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE2	3	0.15	0.05	0.12
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE3	3	0.15	0.05	0.12
(1,391)	1:718:A:PRO:HB3	1:722:A:LEU:H	3	0.13	0.02	0.12
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE1	3	0.13	0.02	0.12
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE2	3	0.13	0.02	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG11	3	0.12	0.01	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG12	3	0.12	0.01	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG13	3	0.12	0.01	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG21	3	0.12	0.01	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG22	3	0.12	0.01	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG23	3	0.12	0.01	0.12
(1,520)	1:725:A:LEU:HB2	1:728:A:ALA:H	3	0.11	0.01	0.1
(1,449)	1:722:A:LEU:HD11	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,449)	1:722:A:LEU:HD12	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,449)	1:722:A:LEU:HD13	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,449)	1:722:A:LEU:HD21	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,449)	1:722:A:LEU:HD22	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,449)	1:722:A:LEU:HD23	1:723:A:ARG:HD3	2	0.16	0.06	0.16
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG11	2	0.15	0.03	0.15
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG12	2	0.15	0.03	0.15
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG13	2	0.15	0.03	0.15
(1,1373)	1:782:A:ASP:HB2	1:784:A:SER:H	2	0.14	0.01	0.14
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB2	2	0.12	0.02	0.12

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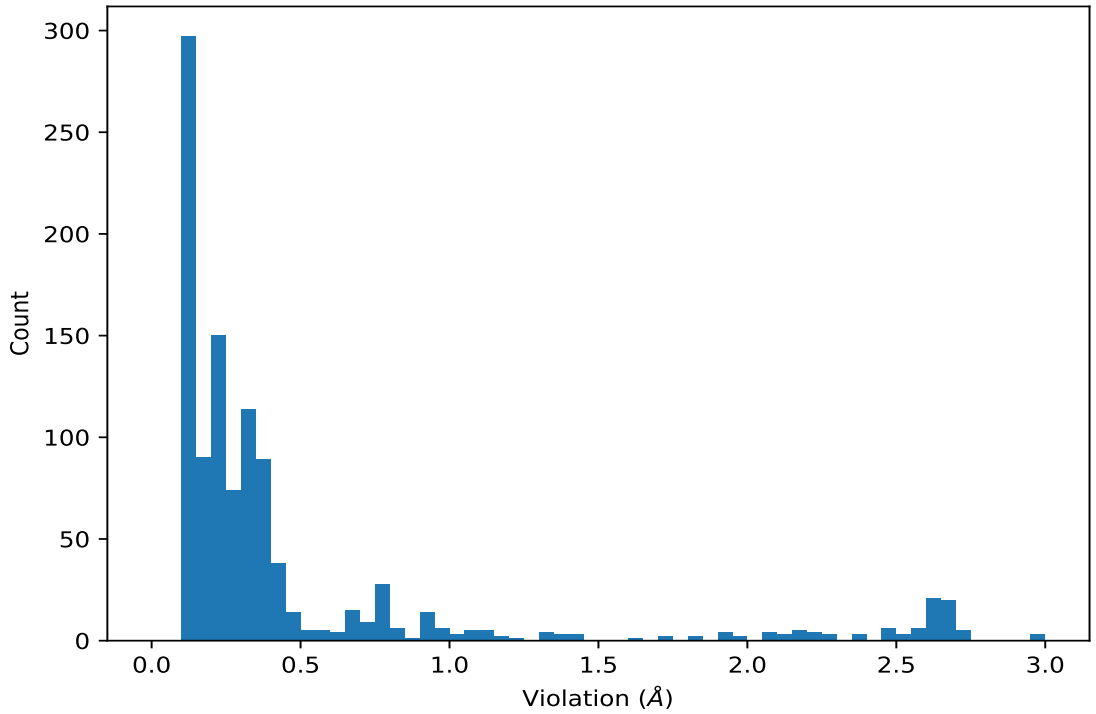
Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB3	2	0.12	0.02	0.12
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG2	2	0.12	0.02	0.12
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG3	2	0.12	0.02	0.12
(1,227)	1:708:A:VAL:HG11	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,227)	1:708:A:VAL:HG12	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,227)	1:708:A:VAL:HG13	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,227)	1:708:A:VAL:HG21	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,227)	1:708:A:VAL:HG22	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,227)	1:708:A:VAL:HG23	1:775:A:MET:HA	2	0.12	0.0	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE1	2	0.12	0.0	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE2	2	0.12	0.0	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE3	2	0.12	0.0	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB1	2	0.12	0.0	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB2	2	0.12	0.0	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB3	2	0.12	0.0	0.12
(1,142)	1:706:A:VAL:HG21	1:750:A:TYR:HB3	2	0.11	0.0	0.11
(1,142)	1:706:A:VAL:HG22	1:750:A:TYR:HB3	2	0.11	0.0	0.11
(1,142)	1:706:A:VAL:HG23	1:750:A:TYR:HB3	2	0.11	0.0	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE1	2	0.11	0.0	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE2	2	0.11	0.0	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE3	2	0.11	0.0	0.11
(1,572)	1:726:A:PHE:HE1	1:765:A:MET:HB2	2	0.1	0.0	0.1
(1,572)	1:726:A:PHE:HE2	1:765:A:MET:HB2	2	0.1	0.0	0.1

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

9.5 All violated distance restraints (i)

9.5.1 Histogram : Distribution of distance violations (i)

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 (i)

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)
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	16	2.99
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	16	2.99
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	16	2.99
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	15	2.72
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	18	2.7
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	14	2.7
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	14	2.7
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	14	2.7
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	7	2.69
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	7	2.69
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	7	2.69
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	10	2.69
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	10	2.69
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	10	2.69
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	1	2.68
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	20	2.68

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	20	2.68
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	20	2.68
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	8	2.67
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	2	2.67
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	2	2.67
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	2	2.67
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	13	2.66
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	13	2.66
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	13	2.66
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	17	2.66
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	17	2.66
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	17	2.66
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	4	2.65
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	4	2.65
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	4	2.65
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	11	2.65
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	11	2.65
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	11	2.65
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	12	2.64
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	8	2.64
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	8	2.64
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	8	2.64
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	5	2.63
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	5	2.63
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	5	2.63
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	5	2.63
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	6	2.63
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	6	2.63
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	6	2.63
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	12	2.63
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	12	2.63
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	12	2.63
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	6	2.62
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	3	2.59
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	9	2.58
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	19	2.58
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	18	2.57
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	18	2.57
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	18	2.57
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	3	2.53
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	3	2.53
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	3	2.53

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	1	2.47
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	1	2.47
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	1	2.47
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	15	2.47
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	15	2.47
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	15	2.47
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	19	2.35
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	19	2.35
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	19	2.35
(1,1081)	1:760:A:LEU:HD21	1:761:A:GLN:HG3	9	2.27
(1,1081)	1:760:A:LEU:HD22	1:761:A:GLN:HG3	9	2.27
(1,1081)	1:760:A:LEU:HD23	1:761:A:GLN:HG3	9	2.27
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	17	2.24
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	14	2.21
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	16	2.21
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	7	2.2
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	10	2.19
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	13	2.19
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	11	2.18
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	20	2.18
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	2	2.15
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	19	2.14
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	19	2.14
(1,1083)	1:760:A:LEU:HG	1:761:A:GLN:HB2	4	2.12
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	8	2.09
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	8	2.09
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	5	2.06
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	5	2.06
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	6	1.99
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	6	1.99
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	12	1.95
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	12	1.95
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	3	1.94
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	3	1.94
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	15	1.82
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	15	1.82
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	9	1.72
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	9	1.72
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	15	1.61
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	8	1.45
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	6	1.42
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	5	1.41

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	3	1.39
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	12	1.36
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	18	1.35
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	16	1.34
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	16	1.34
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	16	1.31
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	1	1.3
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	5	1.22
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	19	1.2
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	2	1.19
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	9	1.14
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	4	1.14
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	20	1.14
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	10	1.11
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	13	1.1
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	18	1.09
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	7	1.08
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	14	1.08
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	1	1.06
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	11	1.05
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	18	1.02
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	18	1.01
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	18	1.01
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	17	0.99
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	17	0.98
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	19	0.98
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	18	0.97
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	14	0.96
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	16	0.96
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	7	0.95
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	10	0.94
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	11	0.94
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	13	0.94
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	9	0.94
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	4	0.93
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	20	0.93
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	1	0.92
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	1	0.92
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	19	0.91
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	1	0.91
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	2	0.9
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	9	0.9

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	10	0.9
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	15	0.88
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	8	0.81
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	4	0.81
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	6	0.8
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	6	0.8
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	11	0.8
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	11	0.8
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	5	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	5	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	14	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	14	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	18	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	18	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	19	0.79
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	19	0.79
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	6	0.78
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	3	0.77
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	7	0.77
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	7	0.77
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	9	0.77
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	9	0.77
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	16	0.76
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	16	0.76
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	20	0.76
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	20	0.76
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	5	0.75
(1,1079)	1:760:A:LEU:HB3	1:761:A:GLN:HG3	12	0.75
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	6	0.75
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	11	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	3	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	3	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	8	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	8	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	13	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	13	0.75
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	10	0.74
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	10	0.74
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	15	0.74
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	15	0.74
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	1	0.73
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	1	0.73

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	12	0.73
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	12	0.73
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	19	0.72
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	12	0.7
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	8	0.69
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	2	0.69
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	4	0.69
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	4	0.69
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG2	17	0.69
(1,542)	1:726:A:PHE:H	1:727:A:GLU:HG3	17	0.69
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	5	0.68
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	6	0.67
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	15	0.67
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	9	0.67
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	14	0.67
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	3	0.67
(1,1082)	1:760:A:LEU:HG	1:761:A:GLN:HA	3	0.66
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	18	0.66
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	1	0.63
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	3	0.63
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	13	0.62
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	17	0.61
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	8	0.6
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	20	0.59
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	10	0.59
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	5	0.55
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	14	0.55
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	15	0.54
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	7	0.54
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	15	0.54
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	18	0.53
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	16	0.53
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	20	0.49
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	1	0.48
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	19	0.48
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	2	0.47
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	18	0.47
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	20	0.47
(1,859)	1:741:A:ASN:HA	1:746:A:ARG:H	12	0.47
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	8	0.46
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	10	0.46
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	15	0.46

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	8	0.46
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	8	0.46
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	8	0.46
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	1	0.45
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	14	0.44
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	14	0.44
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	17	0.44
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	17	0.44
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	11	0.44
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	6	0.43
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	13	0.43
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	14	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	2	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	2	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	2	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	2	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	2	0.43
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	2	0.43
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	7	0.42
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	16	0.42
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	2	0.42
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	2	0.42
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	2	0.42
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	16	0.41
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	9	0.41
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	12	0.41
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	13	0.41
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	4	0.41
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	4	0.41
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	4	0.41
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	13	0.4
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	13	0.4
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	5	0.4
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	19	0.4
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	8	0.4
(1,473)	1:723:A:ARG:H	1:723:A:ARG:HD3	16	0.4
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	13	0.4
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	13	0.4
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	13	0.4
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	19	0.4
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	19	0.4
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	19	0.4

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	10	0.39
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	10	0.39
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	3	0.39
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	17	0.39
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	2	0.39
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	9	0.39
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	9	0.39
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	9	0.39
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	15	0.39
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	15	0.39
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	15	0.39
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	17	0.39
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	17	0.39
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	17	0.39
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	7	0.38
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	7	0.38
(1,473)	1:723:A:ARG:H	1:723:A:ARG:HD3	9	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	10	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	10	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	10	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	10	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	10	0.38
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	10	0.38
(1,387)	1:718:A:PRO:HG2	1:720:A:THR:H	17	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	1	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	1	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	1	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	2	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	2	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	2	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	3	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	3	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	3	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	6	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	6	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	6	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	11	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	11	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	11	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	12	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	12	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	12	0.38

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	14	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	14	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	14	0.38
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	16	0.38
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	16	0.38
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	16	0.38
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	17	0.37
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	17	0.37
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	17	0.37
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	17	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	6	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	6	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	6	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	6	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	6	0.37
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	6	0.37
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	7	0.37
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	7	0.37
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	7	0.37
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	18	0.37
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	18	0.37
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	18	0.37
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	20	0.37
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	20	0.37
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	20	0.37
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	7	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	5	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	15	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	20	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	20	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	20	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	20	0.36

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	20	0.36
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	20	0.36
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	5	0.36
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	5	0.36
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	5	0.36
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	4	0.35
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	4	0.35
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	12	0.35
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	4	0.35
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	4	0.35
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	4	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	1	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	3	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	11	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	12	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	13	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	18	0.35

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	18	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	18	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	18	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	18	0.35
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	18	0.35
(1,387)	1:718:A:PRO:HG2	1:720:A:THR:H	8	0.35
(1,103)	1:705:A:THR:HG21	1:707:A:PHE:H	10	0.35
(1,103)	1:705:A:THR:HG22	1:707:A:PHE:H	10	0.35
(1,103)	1:705:A:THR:HG23	1:707:A:PHE:H	10	0.35
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	19	0.34
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	19	0.34
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	20	0.34
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	20	0.34
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	18	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	7	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	7	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	7	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	7	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	7	0.34
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	7	0.34
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	5	0.33
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	5	0.33
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	11	0.33
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	11	0.33
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	7	0.33
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	7	0.33
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	7	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	8	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	14	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	16	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	16	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	16	0.33

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	16	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	16	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	16	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	19	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	19	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	19	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	19	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	19	0.33
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	19	0.33
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	2	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	2	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	10	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	10	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	15	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	15	0.32
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	15	0.32
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	15	0.32
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	15	0.32
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	4	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	4	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	7	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	7	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	11	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	11	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	16	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	16	0.31
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	19	0.31
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	9	0.31
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	14	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	17	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	17	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	17	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	17	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	17	0.31
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	17	0.31
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	1	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	1	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	9	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	9	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	14	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	14	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	17	0.3

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	17	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	20	0.3
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	20	0.3
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	9	0.3
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	3	0.3
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	15	0.3
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	19	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD11	9	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD12	9	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD13	9	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD21	9	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD22	9	0.3
(1,434)	1:721:A:LYS:HA	1:722:A:LEU:HD23	9	0.3
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	12	0.29
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	12	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	3	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	3	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	12	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	12	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	13	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	13	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	18	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	18	0.29
(1,1061)	1:759:A:ALA:H	1:760:A:LEU:HB3	4	0.29
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	12	0.29
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	6	0.28
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	6	0.28
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG2	8	0.28
(1,1136)	1:763:A:LEU:HG	1:764:A:GLU:HG3	8	0.28
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	13	0.28
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	4	0.28
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	20	0.27
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	20	0.27
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	2	0.27
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	2	0.27
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	2	0.27
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	1	0.27
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	1	0.27
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	1	0.27
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	10	0.27
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	10	0.26
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	10	0.26

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	10	0.26
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	13	0.26
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	13	0.26
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	13	0.26
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD2	1	0.26
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD3	1	0.26
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	5	0.26
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	7	0.26
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	17	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	13	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	13	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	13	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	18	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	18	0.26
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	18	0.26
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	8	0.25
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	8	0.25
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	18	0.25
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	18	0.25
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	20	0.25
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	20	0.25
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	20	0.25
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD2	9	0.25
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD3	9	0.25
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	13	0.25
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	16	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	11	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	11	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	11	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	17	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	17	0.24
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	17	0.24
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD2	6	0.24
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD3	6	0.24
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD2	15	0.24
(1,1000)	1:756:A:GLU:H	1:757:A:LYS:HD3	15	0.24
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	1	0.24
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	9	0.24
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	14	0.24
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	14	0.24
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	14	0.24
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	4	0.24

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	7	0.24
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	14	0.24
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	14	0.24
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	14	0.24
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	6	0.23
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	6	0.23
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE1	1	0.23
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE2	1	0.23
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE3	1	0.23
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	16	0.23
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	16	0.23
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	16	0.23
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	11	0.23
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	19	0.23
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD2	5	0.23
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD3	5	0.23
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	8	0.23
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	16	0.23
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	20	0.23
(1,449)	1:722:A:LEU:HD11	1:723:A:ARG:HD3	16	0.23
(1,449)	1:722:A:LEU:HD12	1:723:A:ARG:HD3	16	0.23
(1,449)	1:722:A:LEU:HD13	1:723:A:ARG:HD3	16	0.23
(1,449)	1:722:A:LEU:HD21	1:723:A:ARG:HD3	16	0.23
(1,449)	1:722:A:LEU:HD22	1:723:A:ARG:HD3	16	0.23
(1,449)	1:722:A:LEU:HD23	1:723:A:ARG:HD3	16	0.23
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	16	0.23
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	6	0.22
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	6	0.22
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	6	0.22
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE21	2	0.22
(1,1084)	1:760:A:LEU:HG	1:761:A:GLN:HE22	2	0.22
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	7	0.22
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	7	0.22
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	7	0.22
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	4	0.22
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	4	0.22
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	15	0.22
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	16	0.22
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	18	0.22
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	20	0.22
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	2	0.22
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	6	0.22

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	11	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	5	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	5	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	5	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	6	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	6	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	6	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	10	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	10	0.22
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	10	0.22
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	1	0.21
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	13	0.21
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	17	0.21
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	14	0.21
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	14	0.21
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	14	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	2	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	2	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	8	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	8	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	12	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	12	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	16	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	16	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	17	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	17	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	19	0.21
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	19	0.21
(1,645)	1:731:A:GLU:H	1:753:A:PHE:HA	10	0.21
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	11	0.21
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	11	0.21
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	11	0.21
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	18	0.21
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	16	0.21
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	16	0.21
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	16	0.21
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	17	0.21
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	17	0.21
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	17	0.21
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	9	0.2
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	9	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	2	0.2

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	4	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	5	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	9	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	12	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	14	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	16	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	18	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	19	0.2
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	8	0.2
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	8	0.2
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	8	0.2
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	4	0.2
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	4	0.2
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	4	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	1	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	1	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	5	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	5	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	6	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	6	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	7	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	7	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	9	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	9	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	10	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	10	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	11	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	11	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	14	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	14	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	15	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	15	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	20	0.2
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	20	0.2
(1,839)	1:738:A:ILE:HB	1:748:A:TYR:H	19	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	8	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	8	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	8	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	16	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	16	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	16	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	19	0.2

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	19	0.2
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	19	0.2
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	3	0.2
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	5	0.2
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	7	0.2
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	7	0.2
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	7	0.2
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	3	0.19
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	7	0.19
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	8	0.19
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	11	0.19
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	20	0.19
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	4	0.19
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	4	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	3	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	3	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	13	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	13	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG2	18	0.19
(1,907)	1:751:A:VAL:HA	1:752:A:GLU:HG3	18	0.19
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	6	0.19
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	3	0.19
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	3	0.19
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	3	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD11	4	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD12	4	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD13	4	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD21	4	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD22	4	0.19
(1,419)	1:720:A:THR:HA	1:722:A:LEU:HD23	4	0.19
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	19	0.18
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	19	0.18
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	15	0.18
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	1	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	12	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	12	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	12	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	20	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	20	0.18
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	20	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	6	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	8	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	9	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	11	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	13	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	14	0.18
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	17	0.18
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	2	0.18
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	2	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	14	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	14	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	14	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	14	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	14	0.18
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	14	0.18
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	6	0.17
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	6	0.17
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG11	13	0.17
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG12	13	0.17
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG13	13	0.17
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB1	9	0.17
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB2	9	0.17
(1,481)	1:723:A:ARG:HD2	1:728:A:ALA:HB3	9	0.17
(1,479)	1:723:A:ARG:HA	1:727:A:GLU:HG2	17	0.17
(1,479)	1:723:A:ARG:HA	1:727:A:GLU:HG3	17	0.17
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	1	0.17
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	1	0.17
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	1	0.17
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE1	20	0.17
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE2	20	0.17
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE3	20	0.17
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	10	0.17
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	10	0.17
(1,220)	1:708:A:VAL:H	1:750:A:TYR:HB3	4	0.17
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	4	0.17
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	4	0.17
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE1	8	0.16
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE2	8	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD11	4	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD12	4	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD13	4	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD21	4	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD22	4	0.16
(1,421)	1:720:A:THR:H	1:722:A:LEU:HD23	4	0.16

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,391)	1:718:A:PRO:HB3	1:722:A:LEU:H	16	0.16
(1,359)	1:716:A:GLN:H	1:716:A:GLN:HE22	10	0.16
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	6	0.16
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	6	0.16
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	6	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	3	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	3	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	3	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	3	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	3	0.16
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	3	0.16
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	16	0.16
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	16	0.16
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	19	0.15
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	19	0.15
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	19	0.15
(1,978)	1:755:A:GLU:HB2	1:757:A:LYS:H	13	0.15
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	18	0.15
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	18	0.15
(1,858)	1:741:A:ASN:HA	1:745:A:PHE:HA	4	0.15
(1,795)	1:735:A:ILE:H	1:751:A:VAL:HA	2	0.15
(1,723)	1:733:A:VAL:H	1:754:A:LYS:HE2	14	0.15
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	9	0.15
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	19	0.15
(1,387)	1:718:A:PRO:HG2	1:720:A:THR:H	12	0.15
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	15	0.15
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	15	0.15
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	15	0.15
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE1	10	0.15
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE2	10	0.15
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE3	10	0.15
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	6	0.15
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	6	0.15
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB2	8	0.15
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB3	8	0.15
(1,1373)	1:782:A:ASP:HB2	1:784:A:SER:H	15	0.14
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	18	0.14
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	18	0.14
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	5	0.14
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	5	0.14
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	13	0.14
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	13	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	5	0.14
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	5	0.14
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	5	0.14
(1,1085)	1:760:A:LEU:HG	1:761:A:GLN:HG2	14	0.14
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	12	0.14
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	17	0.14
(1,652)	1:731:A:GLU:H	1:758:A:SER:HA	3	0.14
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	15	0.14
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE1	11	0.14
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE2	11	0.14
(1,284)	1:711:A:LEU:H	1:715:A:MET:HE3	11	0.14
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	7	0.14
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	7	0.14
(1,43)	1:703:A:SER:HA	1:781:A:VAL:HB	18	0.14
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	18	0.13
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	18	0.13
(1,1373)	1:782:A:ASP:HB2	1:784:A:SER:H	13	0.13
(1,1286)	1:771:A:GLU:HB2	1:772:A:GLY:HA2	10	0.13
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	6	0.13
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	20	0.13
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	6	0.13
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	6	0.13
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	9	0.13
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	9	0.13
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	11	0.13
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	11	0.13
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG2	18	0.13
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG3	18	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG11	2	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG12	2	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG13	2	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG21	2	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG22	2	0.13
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG23	2	0.13
(1,473)	1:723:A:ARG:H	1:723:A:ARG:HD3	7	0.13
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	2	0.13
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	8	0.13
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	8	0.13
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	18	0.13
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	18	0.13
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	2	0.13
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	2	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	10	0.13
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	10	0.13
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB2	3	0.12
(1,1385)	1:783:A:LYS:H	1:784:A:SER:HB3	3	0.12
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	4	0.12
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	4	0.12
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	16	0.12
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	16	0.12
(1,1230)	1:768:A:LYS:HD2	1:769:A:SER:HA	19	0.12
(1,1230)	1:768:A:LYS:HD3	1:769:A:SER:HA	19	0.12
(1,1216)	1:767:A:ARG:HD2	1:776:A:PHE:HD1	13	0.12
(1,1216)	1:767:A:ARG:HD2	1:776:A:PHE:HD2	13	0.12
(1,1216)	1:767:A:ARG:HD3	1:776:A:PHE:HD1	13	0.12
(1,1216)	1:767:A:ARG:HD3	1:776:A:PHE:HD2	13	0.12
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	10	0.12
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	10	0.12
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	4	0.12
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	4	0.12
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	4	0.12
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	15	0.12
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	15	0.12
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	15	0.12
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE1	11	0.12
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE2	11	0.12
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE3	11	0.12
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	3	0.12
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	12	0.12
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	12	0.12
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	12	0.12
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE1	20	0.12
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE2	20	0.12
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	5	0.12
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	5	0.12
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	19	0.12
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	19	0.12
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG11	3	0.12
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG12	3	0.12
(1,818)	1:736:A:ARG:H	1:751:A:VAL:HG13	3	0.12
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	7	0.12
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	12	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG11	8	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG12	8	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG13	8	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG21	8	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG22	8	0.12
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG23	8	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB1	4	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB2	4	0.12
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB3	4	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE1	10	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE2	10	0.12
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE3	10	0.12
(1,520)	1:725:A:LEU:HB2	1:728:A:ALA:H	5	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG11	8	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD11	1:751:A:VAL:HG23	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG11	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD12	1:751:A:VAL:HG23	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG11	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD13	1:751:A:VAL:HG23	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG11	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD21	1:751:A:VAL:HG23	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG11	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD22	1:751:A:VAL:HG23	8	0.12
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG11	8	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG12	8	0.12
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG13	8	0.12
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG21	8	0.12
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG22	8	0.12
(1,467)	1:722:A:LEU:HD23	1:751:A:VAL:HG23	8	0.12
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	12	0.12
(1,391)	1:718:A:PRO:HB3	1:722:A:LEU:H	7	0.12
(1,343)	1:715:A:MET:HE1	1:716:A:GLN:H	9	0.12
(1,343)	1:715:A:MET:HE2	1:716:A:GLN:H	9	0.12
(1,343)	1:715:A:MET:HE3	1:716:A:GLN:H	9	0.12
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	20	0.12
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	20	0.12
(1,227)	1:708:A:VAL:HG11	1:775:A:MET:HA	20	0.12
(1,227)	1:708:A:VAL:HG12	1:775:A:MET:HA	20	0.12
(1,227)	1:708:A:VAL:HG13	1:775:A:MET:HA	20	0.12
(1,227)	1:708:A:VAL:HG21	1:775:A:MET:HA	20	0.12
(1,227)	1:708:A:VAL:HG22	1:775:A:MET:HA	20	0.12
(1,227)	1:708:A:VAL:HG23	1:775:A:MET:HA	20	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	7	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	19	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	19	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	19	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	19	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	19	0.12
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	19	0.12
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	11	0.11
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	11	0.11
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	7	0.11
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	7	0.11
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	7	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE1	2	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE2	2	0.11
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE3	2	0.11
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE1	2	0.11
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE2	2	0.11
(1,1167)	1:765:A:MET:H	1:765:A:MET:HE3	2	0.11
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD21	5	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD22	5	0.11
(1,1050)	1:758:A:SER:H	1:760:A:LEU:HD23	5	0.11
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	1	0.11
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	1	0.11
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	4	0.11
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	4	0.11
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	7	0.11
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	7	0.11
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	9	0.11
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	17	0.11
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	6	0.11
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD2	8	0.11
(1,694)	1:732:A:VAL:H	1:754:A:LYS:HD3	8	0.11
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB1	11	0.11
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB2	11	0.11
(1,632)	1:730:A:GLY:H	1:762:A:ALA:HB3	11	0.11
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE1	14	0.11
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE2	14	0.11
(1,526)	1:725:A:LEU:HA	1:775:A:MET:HE3	14	0.11
(1,391)	1:718:A:PRO:HB3	1:722:A:LEU:H	4	0.11
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	1	0.11
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	1	0.11
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	17	0.11
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	17	0.11
(1,227)	1:708:A:VAL:HG11	1:775:A:MET:HA	19	0.11
(1,227)	1:708:A:VAL:HG12	1:775:A:MET:HA	19	0.11
(1,227)	1:708:A:VAL:HG13	1:775:A:MET:HA	19	0.11
(1,227)	1:708:A:VAL:HG21	1:775:A:MET:HA	19	0.11
(1,227)	1:708:A:VAL:HG22	1:775:A:MET:HA	19	0.11
(1,227)	1:708:A:VAL:HG23	1:775:A:MET:HA	19	0.11
(1,142)	1:706:A:VAL:HG21	1:750:A:TYR:HB3	3	0.11
(1,142)	1:706:A:VAL:HG22	1:750:A:TYR:HB3	3	0.11
(1,142)	1:706:A:VAL:HG23	1:750:A:TYR:HB3	3	0.11
(1,142)	1:706:A:VAL:HG21	1:750:A:TYR:HB3	13	0.11
(1,142)	1:706:A:VAL:HG22	1:750:A:TYR:HB3	13	0.11
(1,142)	1:706:A:VAL:HG23	1:750:A:TYR:HB3	13	0.11
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	20	0.11
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	20	0.11
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG11	9	0.11
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG12	9	0.11
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG13	9	0.11
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG21	9	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG22	9	0.11
(1,32)	1:702:A:ASP:H	1:781:A:VAL:HG23	9	0.11
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	1	0.11
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	1	0.11
(1,1233)	1:768:A:LYS:HD2	1:770:A:VAL:H	15	0.1
(1,1233)	1:768:A:LYS:HD3	1:770:A:VAL:H	15	0.1
(1,1208)	1:767:A:ARG:HD2	1:768:A:LYS:H	16	0.1
(1,1208)	1:767:A:ARG:HD3	1:768:A:LYS:H	16	0.1
(1,1175)	1:765:A:MET:HE1	1:775:A:MET:H	14	0.1
(1,1175)	1:765:A:MET:HE2	1:775:A:MET:H	14	0.1
(1,1175)	1:765:A:MET:HE3	1:775:A:MET:H	14	0.1
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE1	12	0.1
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE2	12	0.1
(1,1174)	1:765:A:MET:HB3	1:775:A:MET:HE3	12	0.1
(1,1086)	1:760:A:LEU:H	1:761:A:GLN:HG3	10	0.1
(1,977)	1:755:A:GLU:HB2	1:757:A:LYS:HG2	2	0.1
(1,977)	1:755:A:GLU:HB2	1:757:A:LYS:HG3	2	0.1
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE1	5	0.1
(1,925)	1:752:A:GLU:H	1:753:A:PHE:HE2	5	0.1
(1,864)	1:742:A:ARG:HB2	1:744:A:ASP:H	17	0.1
(1,864)	1:742:A:ARG:HB3	1:744:A:ASP:H	17	0.1
(1,775)	1:735:A:ILE:H	1:737:A:PRO:HD2	5	0.1
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG2	9	0.1
(1,751)	1:734:A:GLN:HE22	1:752:A:GLU:HG3	9	0.1
(1,735)	1:734:A:GLN:H	1:735:A:ILE:HD11	4	0.1
(1,735)	1:734:A:GLN:H	1:735:A:ILE:HD12	4	0.1
(1,735)	1:734:A:GLN:H	1:735:A:ILE:HD13	4	0.1
(1,696)	1:732:A:VAL:HA	1:755:A:GLU:H	18	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG11	14	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG12	14	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG13	14	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG21	14	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG22	14	0.1
(1,644)	1:731:A:GLU:HB3	1:733:A:VAL:HG23	14	0.1
(1,572)	1:726:A:PHE:HE1	1:765:A:MET:HB2	8	0.1
(1,572)	1:726:A:PHE:HE2	1:765:A:MET:HB2	8	0.1
(1,572)	1:726:A:PHE:HE1	1:765:A:MET:HB2	17	0.1
(1,572)	1:726:A:PHE:HE2	1:765:A:MET:HB2	17	0.1
(1,520)	1:725:A:LEU:HB2	1:728:A:ALA:H	14	0.1
(1,520)	1:725:A:LEU:HB2	1:728:A:ALA:H	16	0.1
(1,449)	1:722:A:LEU:HD11	1:723:A:ARG:HD3	9	0.1
(1,449)	1:722:A:LEU:HD12	1:723:A:ARG:HD3	9	0.1

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,449)	1:722:A:LEU:HD13	1:723:A:ARG:HD3	9	0.1
(1,449)	1:722:A:LEU:HD21	1:723:A:ARG:HD3	9	0.1
(1,449)	1:722:A:LEU:HD22	1:723:A:ARG:HD3	9	0.1
(1,449)	1:722:A:LEU:HD23	1:723:A:ARG:HD3	9	0.1
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	1	0.1
(1,406)	1:719:A:ASP:HA	1:735:A:ILE:H	20	0.1
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	4	0.1
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	4	0.1
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB2	13	0.1
(1,248)	1:709:A:SER:H	1:748:A:TYR:HB3	13	0.1
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG2	7	0.1
(1,42)	1:703:A:SER:H	1:756:A:GLU:HG3	7	0.1
(1,29)	1:702:A:ASP:HB2	1:781:A:VAL:HA	15	0.1
(1,29)	1:702:A:ASP:HB3	1:781:A:VAL:HA	15	0.1
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB2	14	0.1
(1,28)	1:702:A:ASP:H	1:780:A:CYS:HB3	14	0.1

10 Dihedral-angle violation analysis

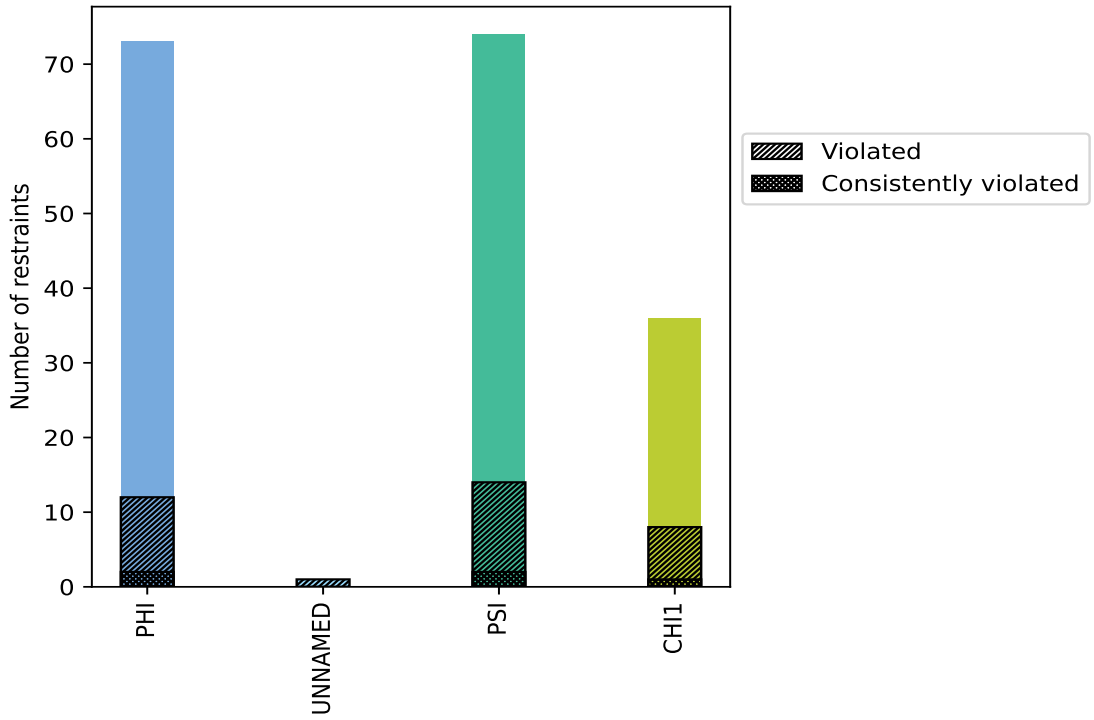
10.1 Summary of dihedral-angle violations

The following table provides the summary of dihedral-angle violations in different dihedral-angle types. Violations less than 1° are not included in the calculation.

Angle type	Count	%[1]	Violated[3]			Consistently Violated[4]		
			Count	%[2]	%[1]	Count	%[2]	%[1]
PHI	73	39.7	12	16.4	6.5	2	2.7	1.1
UNNAMED	1	0.5	1	100.0	0.5	0	0.0	0.0
PSI	74	40.2	14	18.9	7.6	2	2.7	1.1
CHI1	36	19.6	8	22.2	4.3	1	2.8	0.5
Total	184	100.0	35	19.0	19.0	5	2.7	2.7

[1] percentage calculated with respect to total number of dihedral-angle restraints, [2] percentage calculated with respect to number of restraints in a particular dihedral-angle type, [3] violated in at least one model, [4] violated in all the models

10.1.1 Bar chart : Distribution of dihedral-angles and violations



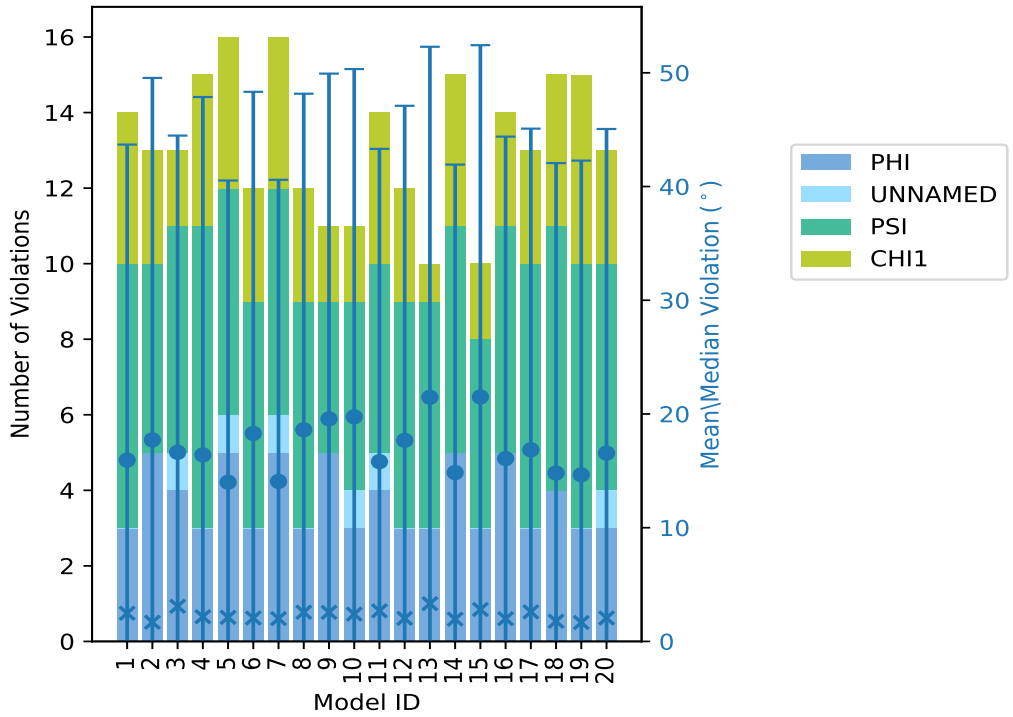
Violated and consistently violated restraints are shown using different hatch patterns in their respective categories

10.2 Dihedral-angle violation statistics for each model (i)

The following table provides the dihedral-angle violation statistics for each model in the ensemble. Violations less than 1° are not included in the statistics.

Model ID	Number of violations					Mean (°)	Max (°)	SD (°)	Median (°)
	PHI	UNNAMED	PSI	CHI1	Total				
1	3	0	7	4	14	15.94	85.76	27.75	2.48
2	5	0	5	3	13	17.72	98.49	31.83	1.69
3	4	1	6	2	13	16.63	82.34	27.85	3.09
4	3	0	8	4	15	16.4	101.79	31.47	2.17
5	5	1	6	4	16	14.0	87.19	26.53	2.12
6	3	0	6	3	12	18.29	88.94	30.04	2.06
7	5	1	6	4	16	14.07	85.81	26.52	2.01
8	3	0	6	3	12	18.61	86.58	29.55	2.57
9	5	0	4	2	11	19.57	85.65	30.36	2.56
10	3	1	5	2	11	19.75	86.21	30.58	2.4
11	4	1	5	4	14	15.81	85.33	27.5	2.69
12	3	0	6	3	12	17.68	84.71	29.42	2.03
13	3	0	6	1	10	21.47	83.98	30.82	3.32
14	5	0	6	4	15	14.85	86.21	27.08	1.96
15	3	0	5	2	10	21.5	85.19	30.93	2.81
16	5	0	6	3	14	16.08	89.02	28.31	2.0
17	3	0	7	3	13	16.85	83.21	28.24	2.6
18	4	0	7	4	15	14.81	86.6	27.25	1.78
19	3	0	7	5	15	14.65	88.45	27.63	1.66
20	3	1	6	3	13	16.56	85.31	28.5	2.06

10.2.1 Bar graph : Dihedral 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

10.3 Dihedral-angle violation statistics for the ensemble

Violation analysis may find that some restraints are violated in very 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 ensemble.

Number of violated restraints					Fraction of the ensemble	
PHI	UNNAMED	PSI	CHI1	Total	Count[1]	%
4	0	4	1	9	1	5.0
2	0	0	1	3	2	10.0
1	0	0	1	2	3	15.0
1	0	1	0	2	4	20.0
1	0	1	0	2	5	25.0
0	1	0	0	1	6	30.0
0	0	1	1	2	7	35.0
0	0	2	1	3	8	40.0
0	0	1	0	1	9	45.0
0	0	0	0	0	10	50.0
0	0	0	2	2	11	55.0

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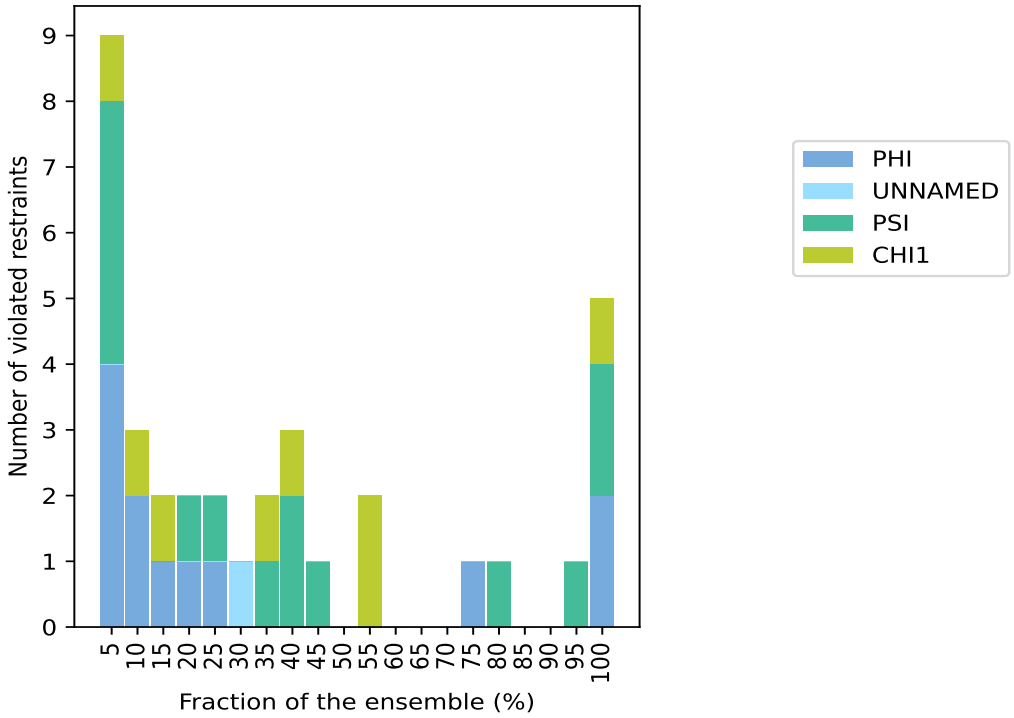
Number of violated restraints					Fraction of the ensemble	
PHI	UNNAMED	PSI	CHI1	Total	Count[1]	%
0	0	0	0	0	12	60.0
0	0	0	0	0	13	65.0
0	0	0	0	0	14	70.0
1	0	0	0	1	15	75.0
0	0	1	0	1	16	80.0
0	0	0	0	0	17	85.0
0	0	0	0	0	18	90.0
0	0	1	0	1	19	95.0
2	0	2	1	5	20	100.0

[1] Number of models with violations

10.3.1 Bar graph : Dihedral-angle Violation statistics for the ensemble

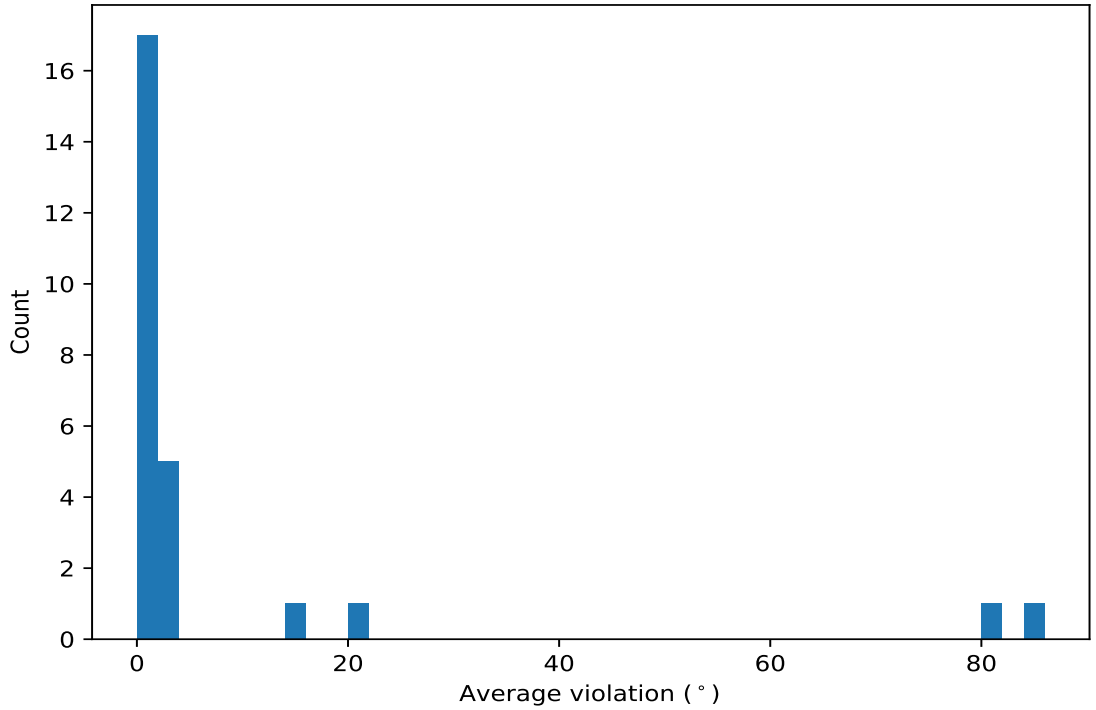


10.4 Most violated dihedral-angle restraints in the ensemble

10.4.1 Histogram : Distribution of mean dihedral-angle 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



10.4.2 Table: Most violated dihedral-angle 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.

Key	Atom-1	Atom-2	Atom-3	Atom-4	Models[1]	Mean	SD[2]	Media
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	20	85.9	1.85	85.78
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	20	80.82	6.49	78.68
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	20	21.94	0.67	21.99
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	20	15.41	2.06	15.82
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	20	3.1	0.55	3.04
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	19	2.29	0.69	2.23
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	16	1.66	0.36	1.68
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	15	1.56	0.31	1.56
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	11	1.69	0.37	1.79
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	11	1.43	0.34	1.27
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	9	1.93	0.78	2.06
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	8	2.25	0.89	2.38
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	8	1.9	0.57	1.86
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	8	1.25	0.11	1.25
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	7	2.22	0.4	2.14
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	7	1.38	0.29	1.29
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	6	1.57	0.46	1.42
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	5	1.65	0.47	1.74
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	5	1.59	0.37	1.56
(1,115)	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	1:766:A:ASP:N	4	1.84	0.78	1.61

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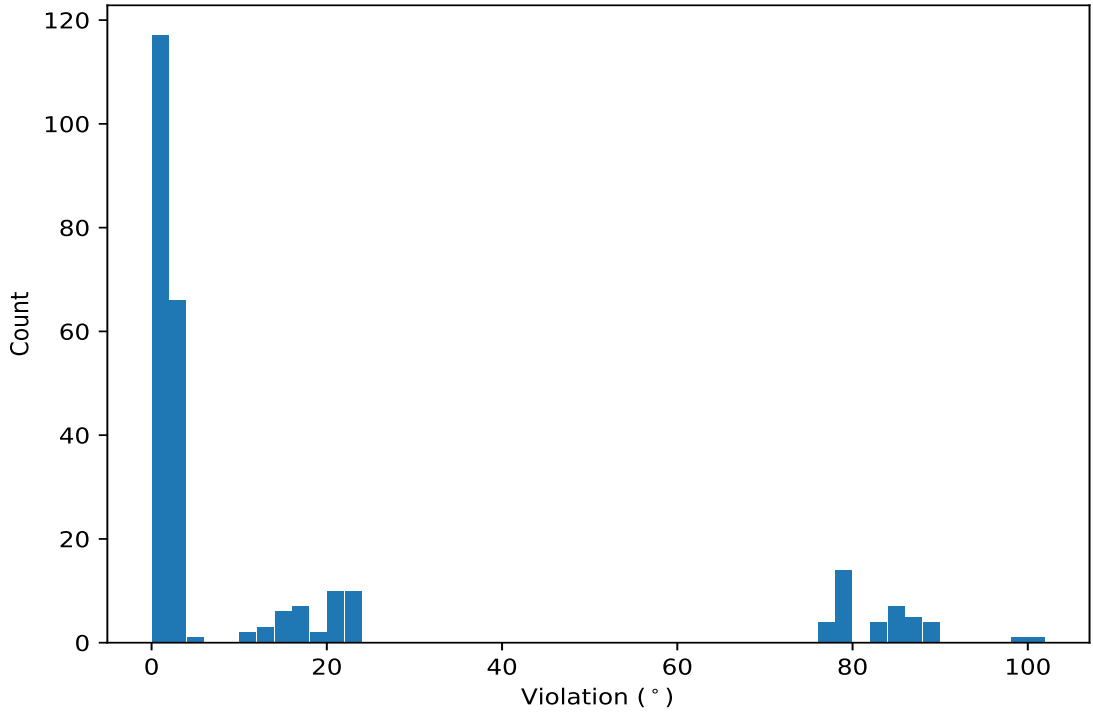
Key	Atom-1	Atom-2	Atom-3	Atom-4	Models[1]	Mean	SD[2]	Media
(1,136)	1:780:A:CYS:C	1:781:A:VAL:N	1:781:A:VAL:CA	1:781:A:VAL:C	4	1.69	0.79	1.3
(1,171)	1:754:A:LYS:N	1:754:A:LYS:CA	1:754:A:LYS:CB	1:754:A:LYS:CG	3	1.36	0.12	1.32
(1,74)	1:743:A:GLY:C	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	3	1.1	0.03	1.1
(1,138)	1:781:A:VAL:C	1:782:A:ASP:N	1:782:A:ASP:CA	1:782:A:ASP:C	2	2.16	0.38	2.16
(1,156)	1:716:A:GLN:N	1:716:A:GLN:CA	1:716:A:GLN:CB	1:716:A:GLN:CG	2	1.48	0.33	1.48
(1,1)	1:697:A:HIS:C	1:698:A:ASP:N	1:698:A:ASP:CA	1:698:A:ASP:C	2	1.06	0.03	1.06

[1] Number of violated models, [2]Standard deviation, All angle values are in degree (°)

10.5 All violated dihedral-angle restraints

10.5.1 Histogram : Distribution of violations

The following histogram shows the distribution of the absolute value of the violation for all violated restraints in the ensemble.



10.5.2 Table: All violated dihedral-angle restraints

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.

Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	4	101.79

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	2	98.49
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	16	89.02
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	6	88.94
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	19	88.45
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	4	88.42
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	5	87.19
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	18	86.6
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	8	86.58
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	10	86.21
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	14	86.21
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	7	85.81
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	1	85.76
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	9	85.65
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	11	85.33
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	20	85.31
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	15	85.19
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	12	84.71
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	13	83.98
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	17	83.21
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	2	83.12
(1,147)	1:768:A:LYS:N	1:768:A:LYS:CA	1:768:A:LYS:C	1:769:A:SER:N	3	82.34
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	10	79.75
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	12	79.69
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	8	79.51
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	17	79.43
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	13	79.36
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	7	78.8
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	9	78.76
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	20	78.73
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	3	78.63
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	19	78.62
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	15	78.59
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	6	78.57
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	18	78.32
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	1	78.18
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	14	77.91
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	11	77.85
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	5	77.75
(1,159)	1:722:A:LEU:N	1:722:A:LEU:CA	1:722:A:LEU:CB	1:722:A:LEU:CG	16	77.71
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	4	22.88
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1	22.84
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	17	22.77
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	13	22.72
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	10	22.54
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	18	22.49
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	16	22.46
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	7	22.43
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	9	22.09
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	11	22.0
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	3	21.99
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	15	21.68

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	14	21.61
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	6	21.55
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	2	21.49
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	5	21.35
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	8	21.17
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	12	21.17
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	19	20.83
(1,28)	1:716:A:GLN:C	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	20	20.69
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	16	18.55
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	8	18.06
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1	17.53
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	14	17.45
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	7	17.44
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	9	17.4
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	17	16.55
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	6	16.31
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	15	16.01
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	5	15.83
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	10	15.81
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	18	15.79
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	13	14.16
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	19	14.16
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	11	14.08
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	20	13.62
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	3	13.48
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	2	12.59
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	4	11.76
(1,24)	1:713:A:TYR:C	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	12	11.55
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	11	4.63
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	3	3.9
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	8	3.86
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	20	3.78
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	13	3.6
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	5	3.53
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	3	3.48
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	10	3.4
(1,81)	1:748:A:TYR:N	1:748:A:TYR:CA	1:748:A:TYR:C	1:749:A:CYS:N	4	3.33
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	12	3.27
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	4	3.17
(1,115)	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	1:766:A:ASP:N	11	3.13
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	19	3.12
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	3	3.09
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	17	3.09
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	11	3.08
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	1	3.07
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	14	3.07
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	13	3.05
(1,136)	1:780:A:CYS:C	1:781:A:VAL:N	1:781:A:VAL:CA	1:781:A:VAL:C	3	3.04
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	2	3.02
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	18	2.98
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	17	2.96

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	8	2.93
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	15	2.89
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	4	2.87
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	16	2.8
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	18	2.79
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	13	2.79
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	15	2.73
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	9	2.68
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	7	2.67
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	1	2.66
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	17	2.6
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	1	2.6
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	9	2.56
(1,138)	1:781:A:VAL:C	1:782:A:ASP:N	1:782:A:ASP:CA	1:782:A:ASP:C	7	2.55
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	5	2.55
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	5	2.54
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	6	2.51
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	18	2.49
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	6	2.45
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	15	2.44
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	10	2.4
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	1	2.36
(1,25)	1:714:A:SER:N	1:714:A:SER:CA	1:714:A:SER:C	1:715:A:MET:N	14	2.33
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	11	2.3
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	13	2.23
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	8	2.2
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	2	2.2
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	20	2.19
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	19	2.18
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	7	2.18
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	4	2.17
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	1	2.16
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	5	2.15
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	16	2.14
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	17	2.14
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	15	2.12
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	11	2.11
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	7	2.09
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	5	2.09
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	16	2.09
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	20	2.06
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	12	2.04
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	12	2.02
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	8	2.02
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	14	1.99
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	14	1.96
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	14	1.94
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	8	1.93
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	7	1.93
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	16	1.92
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	14	1.83

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	12	1.81
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	8	1.81
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	12	1.81
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	16	1.81
(1,156)	1:716:A:GLN:N	1:716:A:GLN:CA	1:716:A:GLN:CB	1:716:A:GLN:CG	20	1.8
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	3	1.79
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	20	1.79
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	11	1.79
(1,138)	1:781:A:VAL:C	1:782:A:ASP:N	1:782:A:ASP:CA	1:782:A:ASP:C	18	1.78
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	16	1.78
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	15	1.77
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	19	1.75
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	8	1.74
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	9	1.72
(1,114)	1:764:A:GLU:C	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	2	1.69
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	18	1.69
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	6	1.66
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	19	1.66
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	4	1.65
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	16	1.65
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	19	1.64
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	10	1.63
(1,115)	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	1:766:A:ASP:N	6	1.63
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	10	1.63
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	14	1.62
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	15	1.62
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	6	1.61
(1,115)	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	1:766:A:ASP:N	4	1.59
(1,62)	1:733:A:VAL:C	1:734:A:GLN:N	1:734:A:GLN:CA	1:734:A:GLN:C	13	1.59
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	2	1.56
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	12	1.56
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	19	1.54
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	20	1.53
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	6	1.53
(1,171)	1:754:A:LYS:N	1:754:A:LYS:CA	1:754:A:LYS:CB	1:754:A:LYS:CG	7	1.52
(1,103)	1:759:A:ALA:N	1:759:A:ALA:CA	1:759:A:ALA:C	1:760:A:LEU:N	4	1.52
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	8	1.5
(1,160)	1:723:A:ARG:N	1:723:A:ARG:CA	1:723:A:ARG:CB	1:723:A:ARG:CG	11	1.49
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	18	1.49
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	6	1.48
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	20	1.46
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	7	1.46
(1,136)	1:780:A:CYS:C	1:781:A:VAL:N	1:781:A:VAL:CA	1:781:A:VAL:C	5	1.45
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	17	1.45
(1,54)	1:729:A:CYS:C	1:730:A:GLY:N	1:730:A:GLY:CA	1:730:A:GLY:C	5	1.41
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	5	1.4
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	2	1.39
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	17	1.39
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	7	1.38
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	7	1.38
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	1	1.36

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	7	1.35
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	1	1.35
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	10	1.34
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	4	1.33
(1,171)	1:754:A:LYS:N	1:754:A:LYS:CA	1:754:A:LYS:CB	1:754:A:LYS:CG	14	1.32
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	2	1.32
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	12	1.29
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	10	1.29
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	14	1.29
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	5	1.27
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	3	1.27
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	12	1.27
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	2	1.26
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	11	1.26
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	17	1.25
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	4	1.25
(1,171)	1:754:A:LYS:N	1:754:A:LYS:CA	1:754:A:LYS:CB	1:754:A:LYS:CG	18	1.24
(1,168)	1:742:A:ARG:N	1:742:A:ARG:CA	1:742:A:ARG:CB	1:742:A:ARG:CG	6	1.24
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	17	1.24
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	13	1.23
(1,29)	1:717:A:GLU:N	1:717:A:GLU:CA	1:717:A:GLU:C	1:718:A:PRO:N	5	1.23
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	10	1.22
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	19	1.21
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	1	1.21
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	5	1.2
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	19	1.19
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	20	1.18
(1,161)	1:725:A:LEU:N	1:725:A:LEU:CA	1:725:A:LEU:CB	1:725:A:LEU:CG	18	1.17
(1,20)	1:709:A:SER:N	1:709:A:SER:CA	1:709:A:SER:C	1:710:A:ASN:N	18	1.17
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	18	1.16
(1,136)	1:780:A:CYS:C	1:781:A:VAL:N	1:781:A:VAL:CA	1:781:A:VAL:C	9	1.16
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	2	1.16
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	11	1.15
(1,156)	1:716:A:GLN:N	1:716:A:GLN:CA	1:716:A:GLN:CB	1:716:A:GLN:CG	19	1.15
(1,34)	1:719:A:ASP:C	1:720:A:THR:N	1:720:A:THR:CA	1:720:A:THR:C	14	1.15
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	4	1.13
(1,176)	1:767:A:ARG:N	1:767:A:ARG:CA	1:767:A:ARG:CB	1:767:A:ARG:CG	16	1.13
(1,74)	1:743:A:GLY:C	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	2	1.13
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	20	1.13
(1,183)	1:783:A:LYS:N	1:783:A:LYS:CA	1:783:A:LYS:CB	1:783:A:LYS:CG	19	1.12
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	5	1.12
(1,151)	1:705:A:THR:N	1:705:A:THR:CA	1:705:A:THR:CB	1:705:A:THR:CG2	11	1.11
(1,5)	1:700:A:SER:C	1:701:A:LYS:N	1:701:A:LYS:CA	1:701:A:LYS:C	9	1.11
(1,136)	1:780:A:CYS:C	1:781:A:VAL:N	1:781:A:VAL:CA	1:781:A:VAL:C	7	1.1
(1,74)	1:743:A:GLY:C	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	3	1.1
(1,14)	1:706:A:VAL:N	1:706:A:VAL:CA	1:706:A:VAL:C	1:707:A:PHE:N	9	1.1
(1,125)	1:773:A:ARG:N	1:773:A:ARG:CA	1:773:A:ARG:C	1:774:A:PRO:N	19	1.09
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	14	1.08
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	4	1.08
(1,2)	1:698:A:ASP:N	1:698:A:ASP:CA	1:698:A:ASP:C	1:699:A:SER:N	3	1.08
(1,1)	1:697:A:HIS:C	1:698:A:ASP:N	1:698:A:ASP:CA	1:698:A:ASP:C	9	1.08

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,75)	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	1:745:A:PHE:N	3	1.06
(1,74)	1:743:A:GLY:C	1:744:A:ASP:N	1:744:A:ASP:CA	1:744:A:ASP:C	16	1.06
(1,58)	1:731:A:GLU:C	1:732:A:VAL:N	1:732:A:VAL:CA	1:732:A:VAL:C	1	1.05
(1,55)	1:730:A:GLY:N	1:730:A:GLY:CA	1:730:A:GLY:C	1:731:A:GLU:N	7	1.04
(1,1)	1:697:A:HIS:C	1:698:A:ASP:N	1:698:A:ASP:CA	1:698:A:ASP:C	16	1.03
(1,115)	1:765:A:MET:N	1:765:A:MET:CA	1:765:A:MET:C	1:766:A:ASP:N	18	1.02
(1,67)	1:736:A:ARG:N	1:736:A:ARG:CA	1:736:A:ARG:C	1:737:A:PRO:N	17	1.02
(1,18)	1:708:A:VAL:N	1:708:A:VAL:CA	1:708:A:VAL:C	1:709:A:SER:N	1	1.02