



# Full wwPDB NMR Structure Validation Report ⓘ

Dec 25, 2024 – 02:11 AM EST

PDB ID : 2NC8  
BMRB ID : 26010  
Title : NMR structure of the Mycobacterium tuberculosis LppM (Rv2171) protein folded domain  
Authors : Barthe, P.; Cohen-Gonsaud, M.  
Deposited on : 2016-03-22

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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 ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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The following versions of software and data (see [references ⓘ](#)) 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) : 2.40

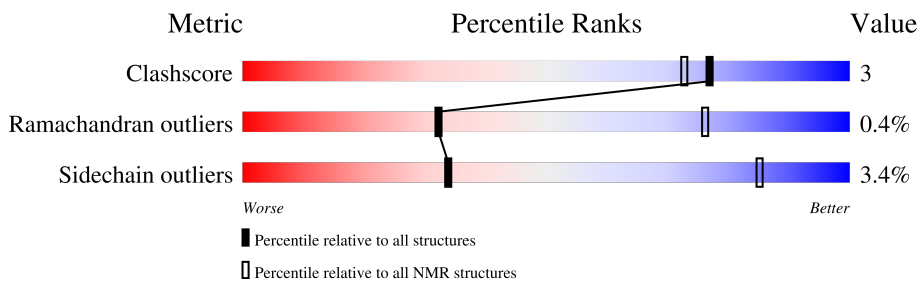
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*SOLUTION NMR*

The overall completeness of chemical shifts assignment is 81%.

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  $\geq 3$ , 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  $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	A	182	

## 2 Ensemble composition and analysis i

This entry contains 30 models. Model 2 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:27-A:49, A:56-A:128, A:134-A:180 (143)	0.73	2

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 6 clusters and 3 single-model clusters were found.

Cluster number	Models
1	2, 13, 14, 16, 19, 22, 23, 25, 26
2	1, 5, 7, 9, 10, 12, 17
3	11, 18, 30
4	21, 27, 28
5	4, 6, 8
6	20, 24
Single-model clusters	3; 15; 29

### 3 Entry composition

There is only 1 type of molecule in this entry. The entry contains 2535 atoms, of which 1254 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Lipoprotein LppM.

Mol	Chain	Residues	Atoms					Trace	
			Total	C	H	N	O		S
1	A	171	2535	792	1254	223	263	3	0

There are 22 discrepancies between the modelled and reference sequences:

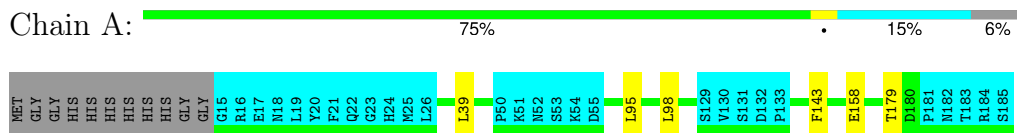
Chain	Residue	Modelled	Actual	Comment	Reference
A	4	MET	-	expression tag	UNP A0A045INR3
A	5	GLY	-	expression tag	UNP A0A045INR3
A	6	GLY	-	expression tag	UNP A0A045INR3
A	7	HIS	-	expression tag	UNP A0A045INR3
A	8	HIS	-	expression tag	UNP A0A045INR3
A	9	HIS	-	expression tag	UNP A0A045INR3
A	10	HIS	-	expression tag	UNP A0A045INR3
A	11	HIS	-	expression tag	UNP A0A045INR3
A	12	HIS	-	expression tag	UNP A0A045INR3
A	13	GLY	-	expression tag	UNP A0A045INR3
A	14	GLY	-	expression tag	UNP A0A045INR3
A	15	GLY	-	expression tag	UNP A0A045INR3
A	16	ARG	-	expression tag	UNP A0A045INR3
A	17	GLU	-	expression tag	UNP A0A045INR3
A	18	ASN	-	expression tag	UNP A0A045INR3
A	19	LEU	-	expression tag	UNP A0A045INR3
A	20	TYR	-	expression tag	UNP A0A045INR3
A	21	PHE	-	expression tag	UNP A0A045INR3
A	22	GLN	-	expression tag	UNP A0A045INR3
A	23	GLY	-	expression tag	UNP A0A045INR3
A	24	HIS	-	expression tag	UNP A0A045INR3
A	25	MET	-	expression tag	UNP A0A045INR3

## 4 Residue-property plots [i](#)

### 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: Lipoprotein LppM

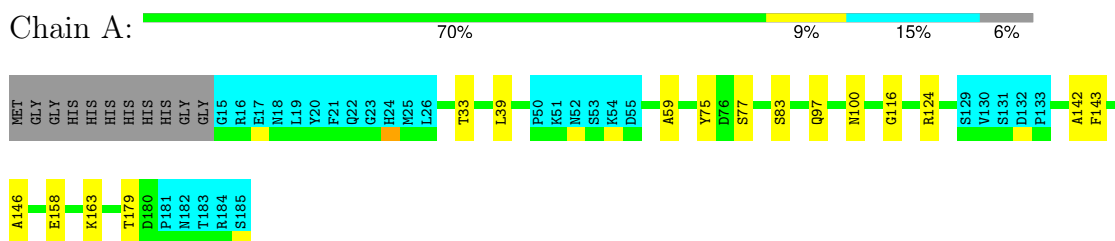


### 4.2 Scores per residue for each member of the ensemble

Colouring as in section [4.1](#) above.

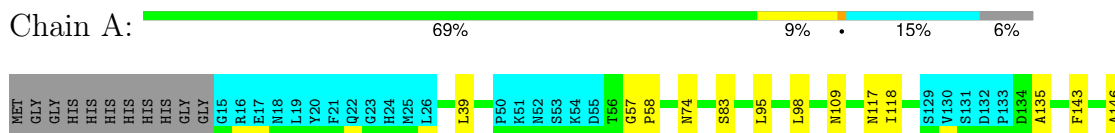
#### 4.2.1 Score per residue for model 1

- Molecule 1: Lipoprotein LppM



#### 4.2.2 Score per residue for model 2 (medoid)

- Molecule 1: Lipoprotein LppM

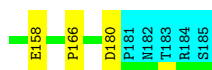
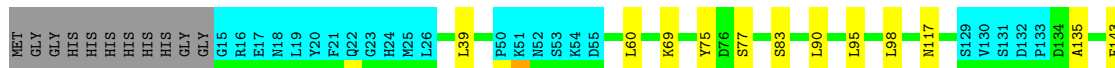




### 4.2.3 Score per residue for model 3

- Molecule 1: Lipoprotein LppM

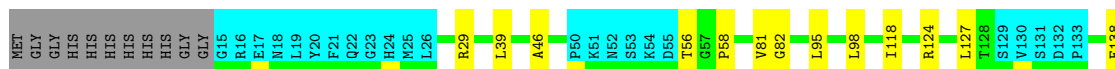
Chain A: 70% 8% 15% 6%



### 4.2.4 Score per residue for model 4

- Molecule 1: Lipoprotein LppM

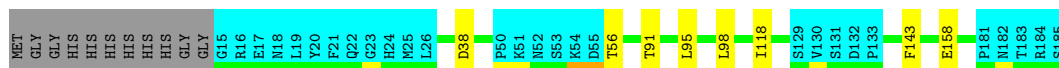
Chain A: 69% 9% 15% 6%



### 4.2.5 Score per residue for model 5

- Molecule 1: Lipoprotein LppM

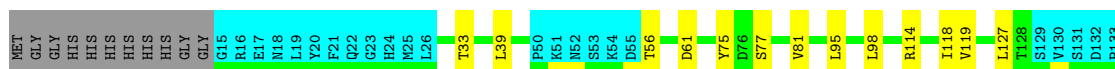
Chain A: 74% 15% 6%

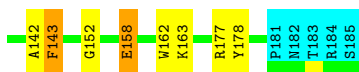


### 4.2.6 Score per residue for model 6

- Molecule 1: Lipoprotein LppM

Chain A: 67% 10% 15% 6%

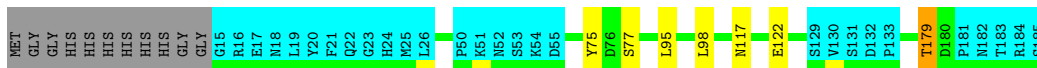




#### 4.2.7 Score per residue for model 7

- Molecule 1: Lipoprotein LppM

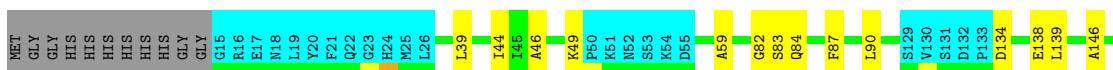
Chain A: 75% 15% 6%



#### 4.2.8 Score per residue for model 8

- Molecule 1: Lipoprotein LppM

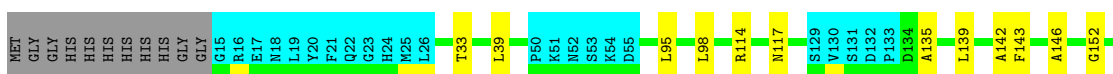
Chain A: 68% 10% 15% 6%



#### 4.2.9 Score per residue for model 9

- Molecule 1: Lipoprotein LppM

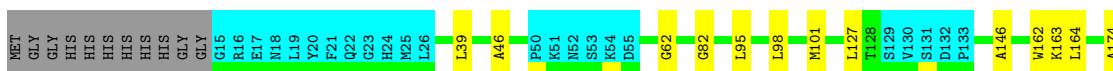
Chain A: 68% 9% 15% 6%

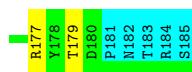


#### 4.2.10 Score per residue for model 10

- Molecule 1: Lipoprotein LppM

Chain A: 70% 8% 15% 6%





#### 4.2.11 Score per residue for model 11

- Molecule 1: Lipoprotein LppM

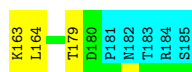
Chain A: 69% 9% 15% 6%



#### 4.2.12 Score per residue for model 12

- Molecule 1: Lipoprotein LppM

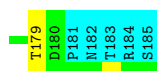
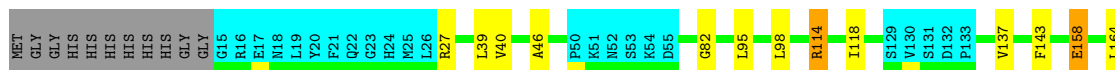
Chain A: 69% 10% 15% 6%



#### 4.2.13 Score per residue for model 13

- Molecule 1: Lipoprotein LppM

Chain A: 71% 7% 15% 6%

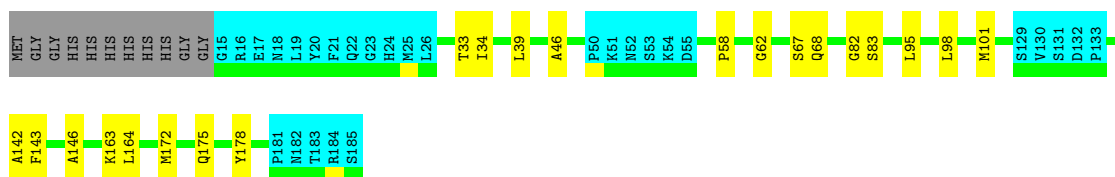


#### 4.2.14 Score per residue for model 14

- Molecule 1: Lipoprotein LppM

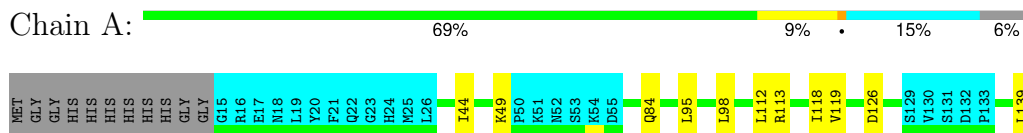
Chain A: 67% 12% 15% 6%





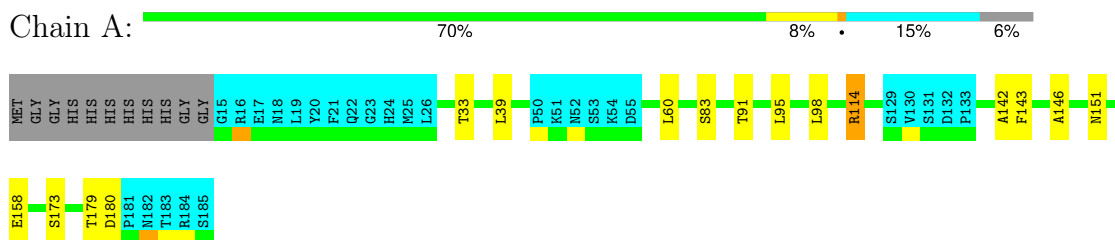
#### 4.2.15 Score per residue for model 15

- Molecule 1: Lipoprotein LppM



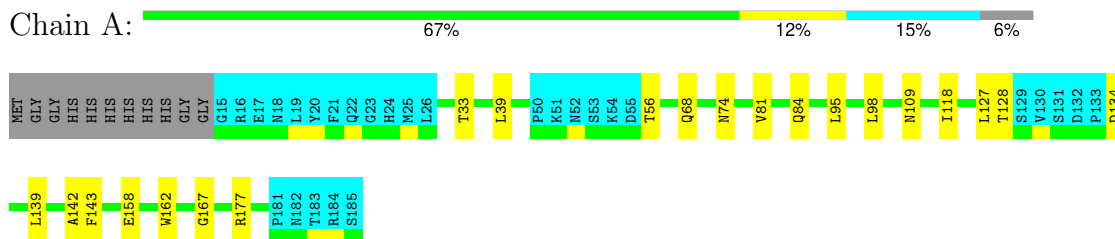
#### 4.2.16 Score per residue for model 16

- Molecule 1: Lipoprotein LppM



#### 4.2.17 Score per residue for model 17

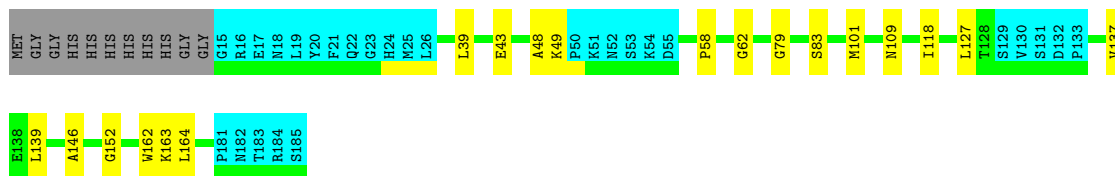
- Molecule 1: Lipoprotein LppM



#### 4.2.18 Score per residue for model 18

- Molecule 1: Lipoprotein LppM

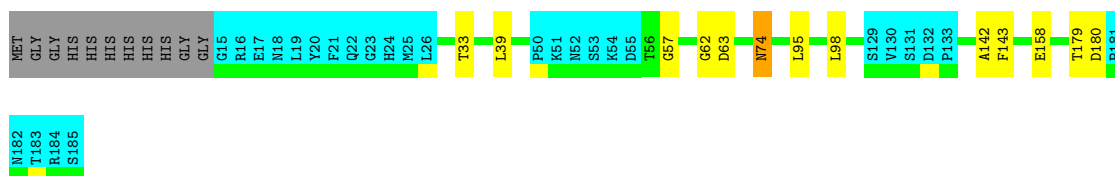
Chain A: 



#### 4.2.19 Score per residue for model 19

- Molecule 1: Lipoprotein LppM

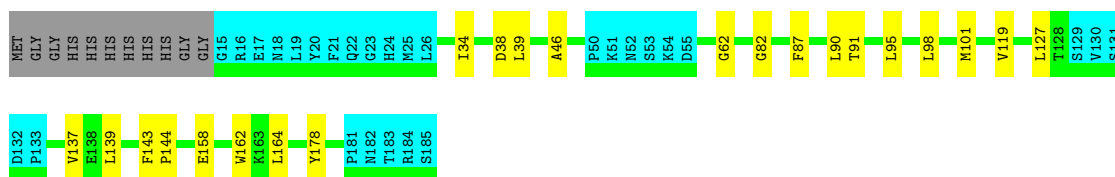
Chain A: 



#### 4.2.20 Score per residue for model 20

- Molecule 1: Lipoprotein LppM

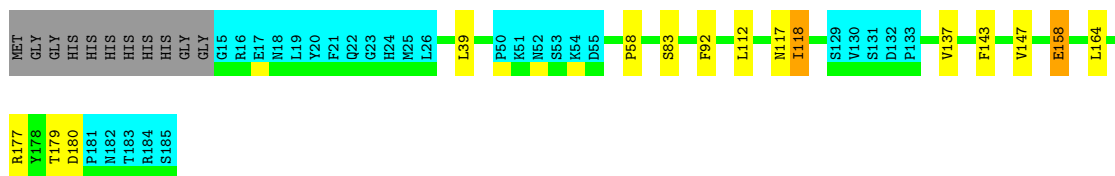
Chain A: 



#### 4.2.21 Score per residue for model 21

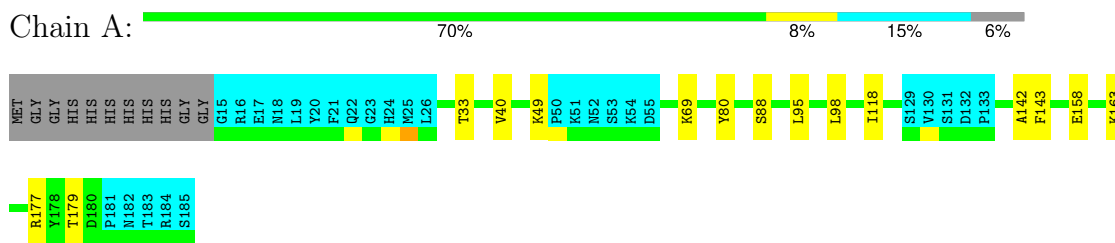
- Molecule 1: Lipoprotein LppM

Chain A: 



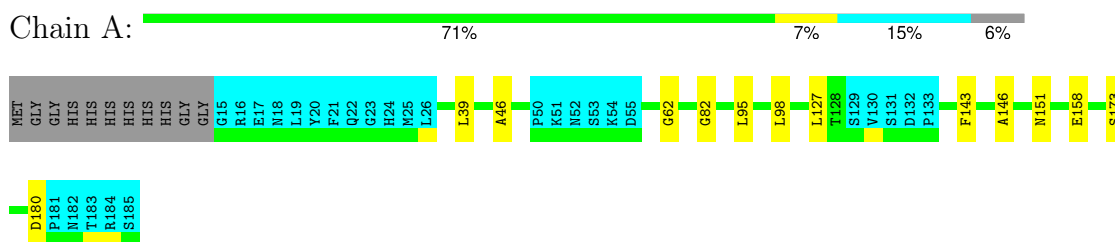
### 4.2.22 Score per residue for model 22

- Molecule 1: Lipoprotein LppM



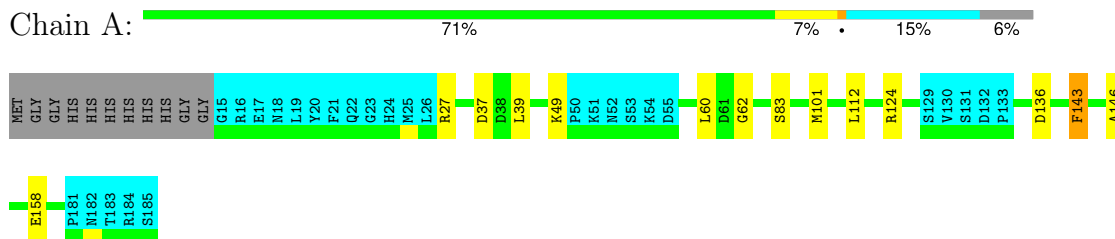
### 4.2.23 Score per residue for model 23

- Molecule 1: Lipoprotein LppM



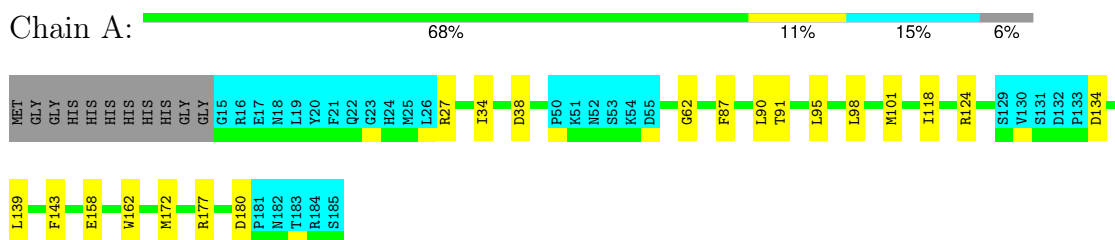
### 4.2.24 Score per residue for model 24

- Molecule 1: Lipoprotein LppM



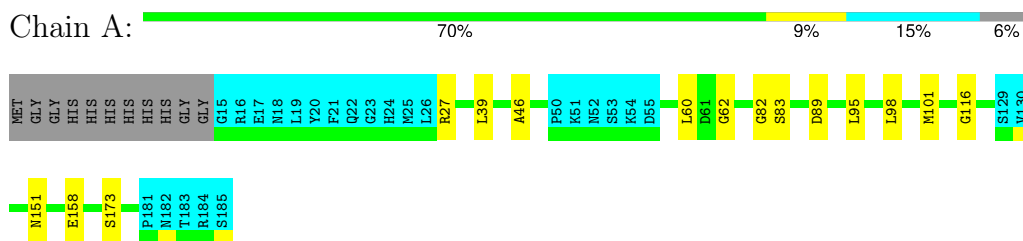
### 4.2.25 Score per residue for model 25

- Molecule 1: Lipoprotein LppM



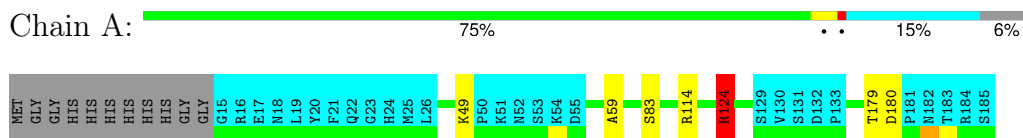
#### 4.2.26 Score per residue for model 26

- Molecule 1: Lipoprotein LppM



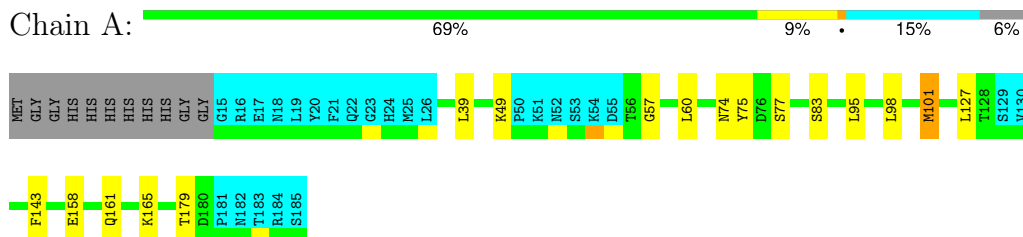
#### 4.2.27 Score per residue for model 27

- Molecule 1: Lipoprotein LppM



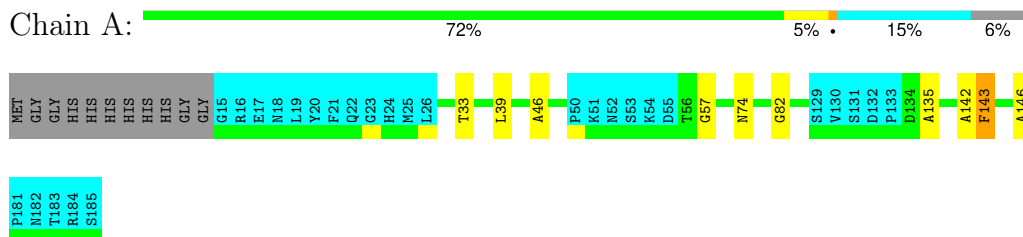
#### 4.2.28 Score per residue for model 28

- Molecule 1: Lipoprotein LppM



#### 4.2.29 Score per residue for model 29

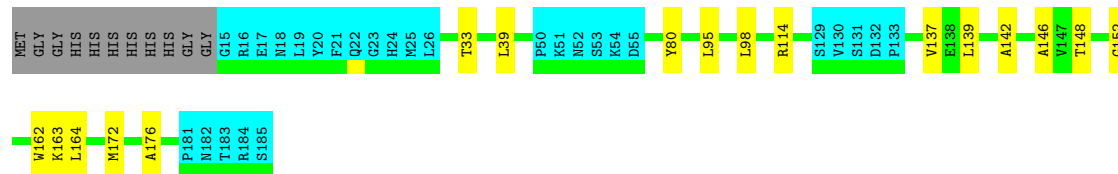
- Molecule 1: Lipoprotein LppM



### 4.2.30 Score per residue for model 30

- Molecule 1: Lipoprotein LppM

Chain A: 



## 5 Refinement protocol and experimental data overview

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

Of the 30 calculated structures, 30 were deposited, based on the following criterion: *structures with the lowest energy*.

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

Software name	Classification	Version
CYANA	structure solution	2.1
CNS	refinement	1.2

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	1682
Number of shifts mapped to atoms	1682
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Assignment completeness (well-defined parts)	81%

## 6 Model quality i

### 6.1 Standard geometry i

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the (average) root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#Z>5	RMSZ	#Z>5
1	A	0.91±0.02	0±0/1074 ( 0.0± 0.0%)	0.68±0.01	0±0/1469 ( 0.0± 0.0%)
All	All	0.91	0/32220 ( 0.0%)	0.68	2/44070 ( 0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	Chirality	Planarity
1	A	0.0±0.0	0.2±0.5
All	All	0	5

There are no bond-length outliers.

All unique angle outliers are listed below. They are sorted according to the Z-score of the worst occurrence in the ensemble.

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)	Models	
								Worst	Total
1	A	114	ARG	NE-CZ-NH1	5.37	122.98	120.30	13	1
1	A	114	ARG	CD-NE-CZ	5.11	130.75	123.60	13	1

There are no chirality outliers.

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

Mol	Chain	Res	Type	Group	Models (Total)
1	A	114	ARG	Sidechain	3
1	A	124	ARG	Sidechain	2

## 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	1058	1043	1043	6±2
All	All	31740	31290	31290	175

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:143:PHE:O	1:A:158:GLU:HB2	0.60	1.96	9	22
1:A:95:LEU:O	1:A:98:LEU:HG	0.58	1.99	10	23
1:A:119:VAL:HG21	1:A:178:TYR:CD2	0.57	2.35	6	3
1:A:62:GLY:HA3	1:A:101:MET:SD	0.55	2.41	20	7
1:A:69:LYS:HB3	1:A:88:SER:O	0.54	2.03	22	1
1:A:57:GLY:HA3	1:A:74:ASN:OD1	0.54	2.03	29	3
1:A:38:ASP:O	1:A:91:THR:HA	0.53	2.03	20	3
1:A:137:VAL:HB	1:A:164:LEU:HB2	0.53	1.80	13	6
1:A:56:THR:O	1:A:81:VAL:HB	0.53	2.04	4	3
1:A:114:ARG:NH2	1:A:180:ASP:HA	0.52	2.20	27	2
1:A:59:ALA:HA	1:A:83:SER:OG	0.51	2.05	1	3
1:A:75:TYR:CZ	1:A:77:SER:HB2	0.50	2.40	3	3
1:A:60:LEU:HG	1:A:83:SER:OG	0.50	2.06	3	4
1:A:139:LEU:HD12	1:A:162:TRP:CE3	0.50	2.41	20	7
1:A:27:ARG:HA	1:A:136:ASP:O	0.49	2.07	24	2
1:A:46:ALA:O	1:A:82:GLY:HA3	0.49	2.07	11	10
1:A:58:PRO:O	1:A:83:SER:HB2	0.49	2.07	18	1
1:A:117:ASN:OD1	1:A:179:THR:HA	0.49	2.08	2	3
1:A:34:ILE:HG23	1:A:178:TYR:OH	0.49	2.07	14	1
1:A:112:LEU:C	1:A:113:ARG:HD2	0.48	2.29	12	2
1:A:33:THR:HA	1:A:142:ALA:O	0.48	2.09	1	11
1:A:117:ASN:HA	1:A:180:ASP:OD1	0.48	2.08	21	2
1:A:151:ASN:HB3	1:A:173:SER:HB3	0.48	1.85	16	1
1:A:114:ARG:NH1	1:A:180:ASP:HA	0.47	2.25	11	1
1:A:69:LYS:HB3	1:A:90:LEU:HD21	0.47	1.85	3	1
1:A:118:ILE:HG22	1:A:177:ARG:HG2	0.47	1.85	21	2
1:A:40:VAL:HG11	1:A:95:LEU:HD23	0.46	1.86	13	2

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:92:PHE:CZ	1:A:112:LEU:HD13	0.46	2.45	21	1
1:A:139:LEU:O	1:A:161:GLN:HA	0.46	2.10	8	2
1:A:151:ASN:HB3	1:A:173:SER:OG	0.46	2.11	26	2
1:A:118:ILE:HA	1:A:177:ARG:HA	0.46	1.88	15	4
1:A:29:ARG:HA	1:A:138:GLU:O	0.46	2.11	4	1
1:A:44:ILE:O	1:A:84:GLN:HA	0.45	2.12	8	3
1:A:60:LEU:HG	1:A:83:SER:CB	0.45	2.41	16	1
1:A:152:GLY:HA3	1:A:162:TRP:CD1	0.44	2.46	6	4
1:A:58:PRO:O	1:A:83:SER:HB3	0.44	2.12	21	3
1:A:135:ALA:O	1:A:166:PRO:HD3	0.44	2.12	29	2
1:A:162:TRP:CZ2	1:A:174:ALA:HB2	0.43	2.47	8	2
1:A:165:LYS:HD3	1:A:166:PRO:HD2	0.43	1.91	9	1
1:A:114:ARG:NE	1:A:180:ASP:HB2	0.43	2.29	9	1
1:A:62:GLY:HA2	1:A:101:MET:SD	0.43	2.54	25	1
1:A:98:LEU:HA	1:A:101:MET:SD	0.43	2.53	28	1
1:A:87:PHE:CD2	1:A:90:LEU:HD12	0.43	2.48	20	3
1:A:177:ARG:HD2	1:A:177:ARG:O	0.43	2.14	10	1
1:A:34:ILE:O	1:A:144:PRO:HD2	0.43	2.14	20	1
1:A:124:ARG:HH11	1:A:124:ARG:HG2	0.42	1.74	27	1
1:A:148:THR:OG1	1:A:176:ALA:HA	0.42	2.14	30	1
1:A:58:PRO:HD2	1:A:82:GLY:HA2	0.42	1.91	4	1
1:A:114:ARG:HG3	1:A:119:VAL:HG22	0.42	1.90	12	1
1:A:75:TYR:CZ	1:A:77:SER:HB3	0.42	2.50	7	2
1:A:97:GLN:HA	1:A:100:ASN:ND2	0.41	2.30	1	1
1:A:57:GLY:HA3	1:A:74:ASN:ND2	0.41	2.29	19	1
1:A:128:THR:HG22	1:A:167:GLY:O	0.41	2.16	17	1
1:A:143:PHE:CZ	1:A:147:VAL:HB	0.41	2.50	21	1
1:A:118:ILE:HA	1:A:177:ARG:CB	0.41	2.46	6	1
1:A:138:GLU:HA	1:A:162:TRP:O	0.41	2.15	8	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	143/182 (79%)	135±2 (95±1%)	7±2 (5±1%)	1±1 (0±0%)	32 76

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
All	All	4290/5460 (79%)	4064 (95%)	209 (5%)	17 (0%)	32 76

All 4 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
1	A	146	ALA	13
1	A	62	GLY	2
1	A	49	LYS	1
1	A	63	ASP	1

### 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	115/148 (78%)	111±2 (97±1%)	4±2 (3±1%)	34 85
All	All	3450/4440 (78%)	3331 (97%)	119 (3%)	34 85

All 38 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	39	LEU	24
1	A	179	THR	16
1	A	163	LYS	9
1	A	118	ILE	6
1	A	124	ARG	5
1	A	158	GLU	5
1	A	127	LEU	5
1	A	143	PHE	4
1	A	109	ASN	3
1	A	164	LEU	3
1	A	27	ARG	3
1	A	172	MET	3
1	A	49	LYS	3
1	A	114	ARG	2
1	A	175	GLN	2

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Mol	Chain	Res	Type	Models (Total)
1	A	68	GLN	2
1	A	74	ASN	2
1	A	180	ASP	2
1	A	56	THR	1
1	A	61	ASP	1
1	A	122	GLU	1
1	A	134	ASP	1
1	A	29	ARG	1
1	A	58	PRO	1
1	A	128	THR	1
1	A	67	SER	1
1	A	126	ASP	1
1	A	177	ARG	1
1	A	91	THR	1
1	A	84	GLN	1
1	A	43	GLU	1
1	A	37	ASP	1
1	A	112	LEU	1
1	A	34	ILE	1
1	A	89	ASP	1
1	A	101	MET	1
1	A	165	LYS	1
1	A	80	TYR	1

### 6.3.3 RNA [i](#)

There are no RNA molecules in this entry.

### 6.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

### 6.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

### 6.6 Ligand geometry [i](#)

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 [i](#)

The completeness of assignment taking into account all chemical shift lists is 81% for the well-defined parts and 77% for the entire structure.

### 7.1 Chemical shift list 1

File name: working\_cs.cif

Chemical shift list name: *assigned\_chem\_shift\_list\_1*

#### 7.1.1 Bookkeeping [i](#)

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	1682
Number of shifts mapped to atoms	1682
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Number of shift outliers (ShiftChecker)	2

#### 7.1.2 Chemical shift referencing [i](#)

The following table shows the suggested chemical shift referencing corrections.

Nucleus	# values	Correction $\pm$ precision, ppm	Suggested action
$^{13}\text{C}_\alpha$	158	$-0.33 \pm 0.06$	None needed (< 0.5 ppm)
$^{13}\text{C}_\beta$	145	$-0.46 \pm 0.07$	None needed (< 0.5 ppm)
$^{13}\text{C}'$	158	$0.43 \pm 0.11$	None needed (< 0.5 ppm)
$^{15}\text{N}$	151	$-0.21 \pm 0.37$	None needed (< 0.5 ppm)

#### 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 81%, i.e. 1489 atoms were assigned a chemical shift out of a possible 1827. 0 out of 27 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	$^1\text{H}$	$^{13}\text{C}$	$^{15}\text{N}$
Backbone	695/711 (98%)	283/289 (98%)	278/286 (97%)	134/136 (99%)
Sidechain	756/1037 (73%)	615/679 (91%)	128/321 (40%)	13/37 (35%)

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	Total	<sup>1</sup> H	<sup>13</sup> C	<sup>15</sup> N
Aromatic	38/79 (48%)	37/38 (97%)	0/40 (0%)	1/1 (100%)
Overall	1489/1827 (81%)	935/1006 (93%)	406/647 (63%)	148/174 (85%)

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 77%, i.e. 1682 atoms were assigned a chemical shift out of a possible 2197. 0 out of 30 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	<sup>1</sup> H	<sup>13</sup> C	<sup>15</sup> N
Backbone	788/847 (93%)	321/344 (93%)	316/342 (92%)	151/161 (94%)
Sidechain	852/1245 (68%)	690/811 (85%)	145/385 (38%)	17/49 (35%)
Aromatic	42/105 (40%)	41/51 (80%)	0/52 (0%)	1/2 (50%)
Overall	1682/2197 (77%)	1052/1206 (87%)	461/779 (59%)	169/212 (80%)

#### 7.1.4 Statistically unusual chemical shifts [i](#)

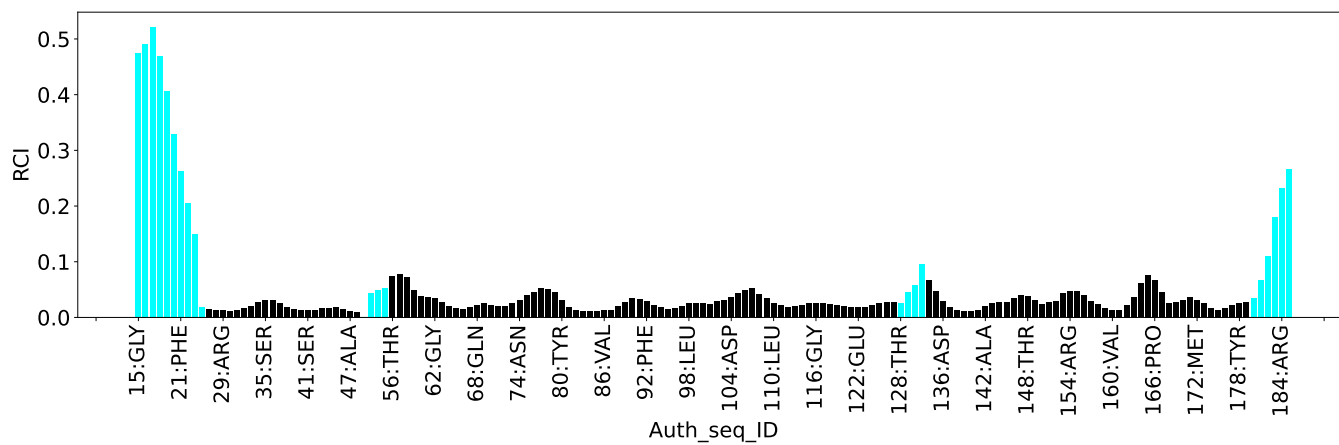
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

List Id	Chain	Res	Type	Atom	Shift, ppm	Expected range, ppm	Z-score
1	A	172	MET	HB2	0.32	0.42 – 3.63	-5.3
1	A	172	MET	HG2	0.56	0.65 – 4.19	-5.2

#### 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:



## 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	2105
Intra-residue ( $ i-j =0$ )	421
Sequential ( $ i-j =1$ )	607
Medium range ( $ i-j >1$ and $ i-j <5$ )	272
Long range ( $ i-j \geq 5$ )	661
Inter-chain	0
Hydrogen bond restraints	144
Disulfide bond restraints	0
Total dihedral-angle restraints	284
Number of unmapped restraints	0
Number of restraints per residue	13.1
Number of long range restraints per residue <sup>1</sup>	4.3

<sup>1</sup>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)	15.3	0.2
0.2-0.5 (Medium)	0.6	0.5
>0.5 (Large)	8.8	5.92



### 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)	17.6	4.51
10.0-20.0 (Medium)	None	None
>20.0 (Large)	None	None

## 9 Distance violation analysis [i](#)

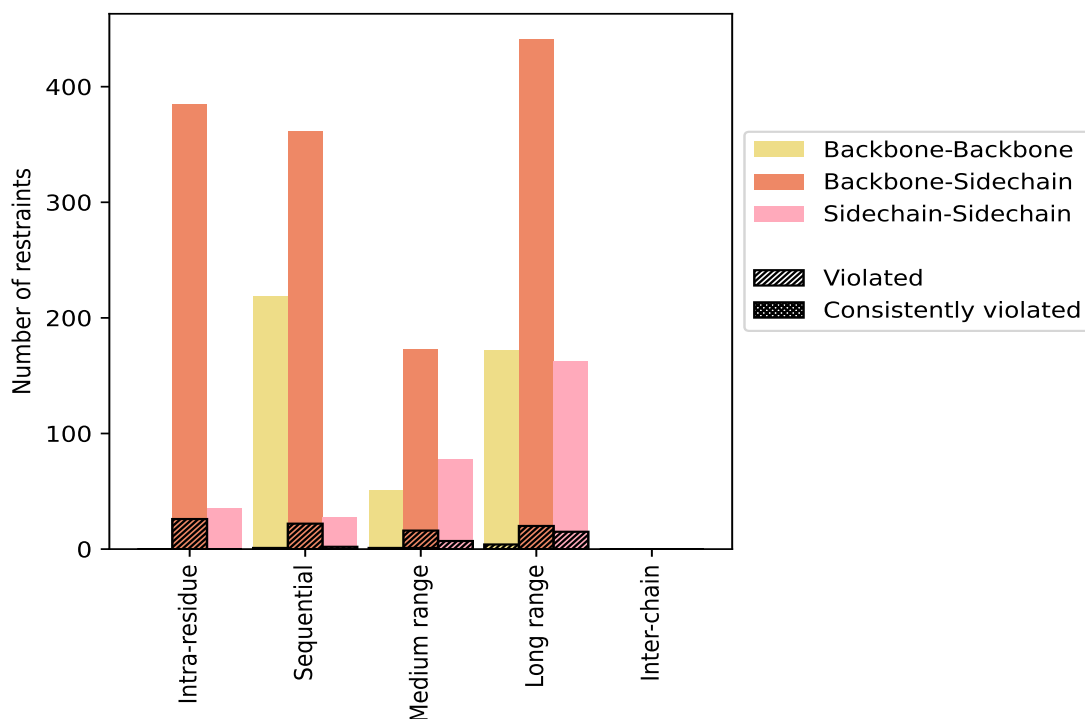
### 9.1 Summary of distance violations [i](#)

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.

Restrains type	Count	% <sup>1</sup>	Violated <sup>3</sup>			Consistently Violated <sup>4</sup>		
			Count	% <sup>2</sup>	% <sup>1</sup>	Count	% <sup>2</sup>	% <sup>1</sup>
<b>Intra-residue (<math> i-j =0</math>)</b>	<b>421</b>	<b>20.0</b>	<b>26</b>	<b>6.2</b>	<b>1.2</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
Backbone-Backbone	1	0.0	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	385	18.3	26	6.8	1.2	0	0.0	0.0
Sidechain-Sidechain	35	1.7	0	0.0	0.0	0	0.0	0.0
<b>Sequential (<math> i-j =1</math>)</b>	<b>607</b>	<b>28.8</b>	<b>25</b>	<b>4.1</b>	<b>1.2</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
Backbone-Backbone	219	10.4	1	0.5	0.0	0	0.0	0.0
Backbone-Sidechain	361	17.1	22	6.1	1.0	0	0.0	0.0
Sidechain-Sidechain	27	1.3	2	7.4	0.1	0	0.0	0.0
<b>Medium range (<math> i-j &gt;1</math> &amp; <math> i-j &lt;5</math>)</b>	<b>272</b>	<b>12.9</b>	<b>17</b>	<b>6.2</b>	<b>0.8</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
Backbone-Backbone	51	2.4	1	2.0	0.0	0	0.0	0.0
Backbone-Sidechain	143	6.8	9	6.3	0.4	0	0.0	0.0
Sidechain-Sidechain	78	3.7	7	9.0	0.3	0	0.0	0.0
<b>Long range (<math> i-j \geq 5</math>)</b>	<b>661</b>	<b>31.4</b>	<b>37</b>	<b>5.6</b>	<b>1.8</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
Backbone-Backbone	172	8.2	4	2.3	0.2	0	0.0	0.0
Backbone-Sidechain	327	15.5	18	5.5	0.9	0	0.0	0.0
Sidechain-Sidechain	162	7.7	15	9.3	0.7	0	0.0	0.0
<b>Inter-chain</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
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
<b>Hydrogen bond</b>	<b>144</b>	<b>6.8</b>	<b>9</b>	<b>6.2</b>	<b>0.4</b>	<b>1</b>	<b>0.7</b>	<b>0.0</b>
<b>Disulfide bond</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>	<b>2105</b>	<b>100.0</b>	<b>114</b>	<b>5.4</b>	<b>5.4</b>	<b>1</b>	<b>0.0</b>	<b>0.0</b>
Backbone-Backbone	443	21.0	6	1.4	0.3	0	0.0	0.0
Backbone-Sidechain	1360	64.6	84	6.2	4.0	1	0.1	0.0
Sidechain-Sidechain	302	14.3	24	7.9	1.1	0	0.0	0.0

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

### 9.1.1 Bar chart : Distribution of distance restraints and violations [i](#)



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 [i](#)

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 <sup>6</sup> (Å)	Median (Å)
	IR <sup>1</sup>	SQ <sup>2</sup>	MR <sup>3</sup>	LR <sup>4</sup>	IC <sup>5</sup>	Total				
1	5	5	4	9	0	23	0.91	3.51	1.07	0.15
2	5	3	7	13	0	28	0.75	3.09	1.0	0.14
3	10	3	6	10	0	29	0.72	3.7	1.02	0.13
4	7	6	5	11	0	29	0.75	3.33	1.03	0.14
5	8	3	7	9	0	27	0.86	5.27	1.23	0.18
6	8	3	3	14	0	28	0.79	4.95	1.19	0.13
7	6	4	7	9	0	26	0.82	4.22	1.11	0.14
8	7	4	5	11	0	27	0.8	3.42	1.07	0.14
9	5	4	6	10	0	25	0.87	3.92	1.13	0.13
10	3	4	6	9	0	22	1.08	5.84	1.44	0.17

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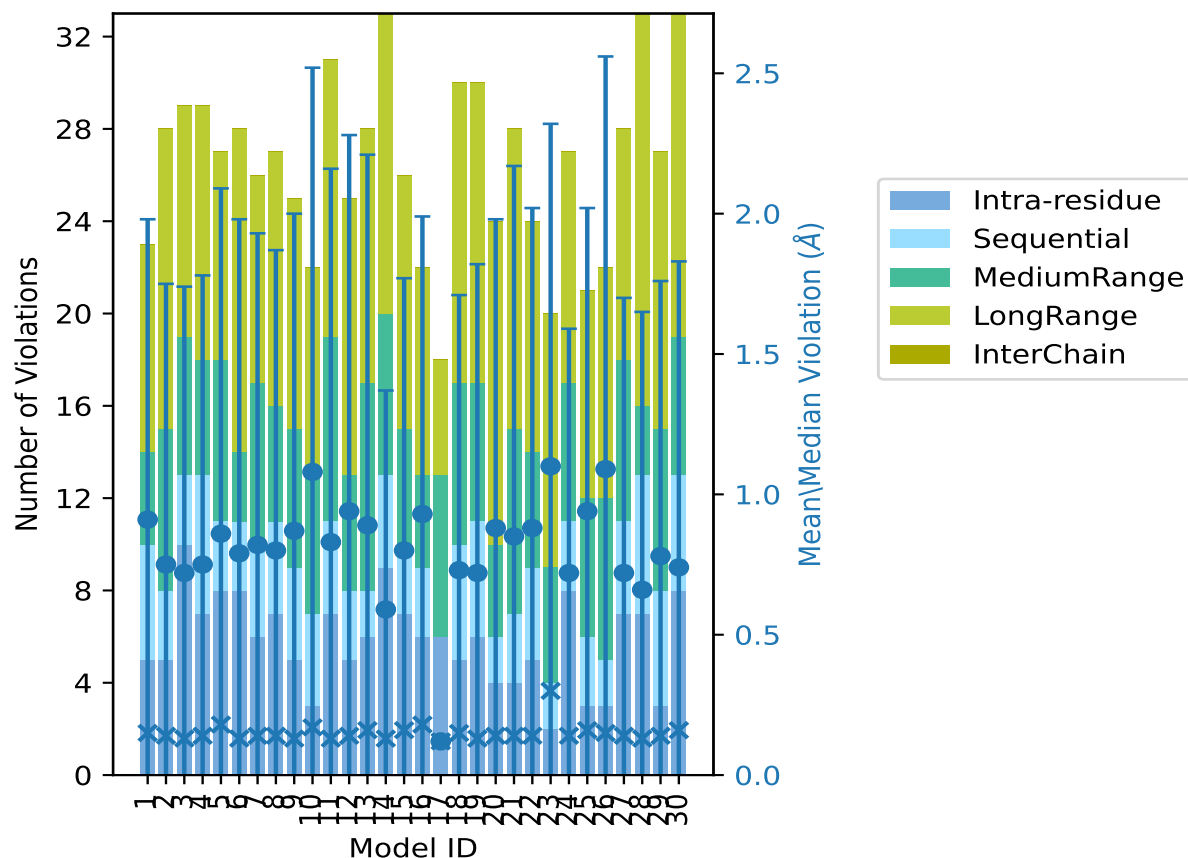
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Model ID	Number of violations						Mean (Å)	Max (Å)	SD <sup>6</sup> (Å)	Median (Å)
	IR <sup>1</sup>	SQ <sup>2</sup>	MR <sup>3</sup>	LR <sup>4</sup>	IC <sup>5</sup>	Total				
11	7	4	8	12	0	31	0.83	5.92	1.33	0.13
12	5	3	5	12	0	25	0.94	5.61	1.34	0.14
13	6	2	9	11	0	28	0.89	5.62	1.32	0.16
14	9	4	7	13	0	33	0.59	2.55	0.78	0.13
15	7	3	5	11	0	26	0.8	2.86	0.97	0.16
16	6	3	4	9	0	22	0.93	3.09	1.06	0.18
17	6	0	7	5	0	18	0.12	0.17	0.02	0.12
18	5	5	7	13	0	30	0.73	2.98	0.98	0.15
19	6	5	6	13	0	30	0.72	4.82	1.1	0.13
20	4	2	4	14	0	24	0.88	3.77	1.1	0.14
21	4	3	8	13	0	28	0.85	5.86	1.32	0.14
22	5	4	5	10	0	24	0.88	4.34	1.14	0.14
23	2	2	5	11	0	20	1.1	3.74	1.22	0.3
24	8	3	6	10	0	27	0.72	2.72	0.87	0.14
25	3	3	6	9	0	21	0.94	3.46	1.08	0.16
26	3	2	7	10	0	22	1.09	5.86	1.47	0.15
27	7	4	7	10	0	28	0.72	3.14	0.98	0.14
28	7	6	3	17	0	33	0.66	4.02	0.99	0.13
29	3	5	7	12	0	27	0.78	3.25	0.98	0.14
30	8	5	6	14	0	33	0.74	4.31	1.09	0.16

<sup>1</sup>Intra-residue restraints, <sup>2</sup>Sequential restraints, <sup>3</sup>Medium range restraints, <sup>4</sup>Long range restraints,

<sup>5</sup>Inter-chain restraints, <sup>6</sup>Standard deviation

### 9.2.1 Bar graph : Distance Violation statistics for each model [i](#)



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, 1856(IR:395, SQ:582, MR:255, LR:624, IC:0) restraints are not violated in the ensemble.

Number of violated restraints						Fraction of the ensemble	
IR <sup>1</sup>	SQ <sup>2</sup>	MR <sup>3</sup>	LR <sup>4</sup>	IC <sup>5</sup>	Total	Count <sup>6</sup>	%
6	13	5	11	0	35	1	3.3
5	2	4	4	0	15	2	6.7
3	5	2	4	0	14	3	10.0
2	1	1	5	0	9	4	13.3
2	1	1	0	0	4	5	16.7
0	0	2	1	0	3	6	20.0

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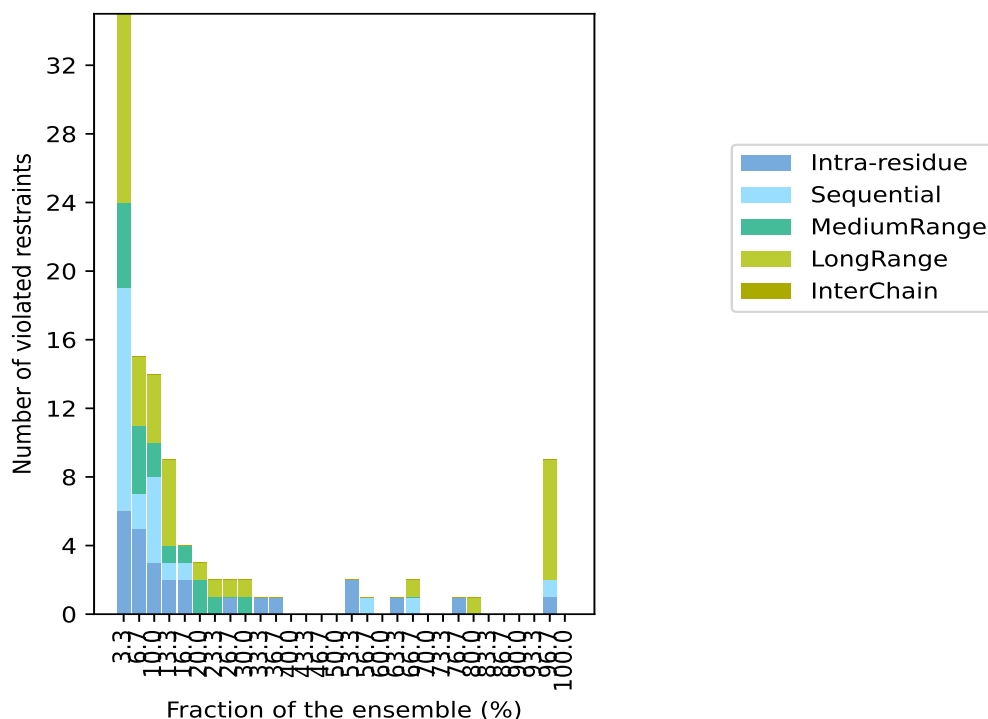
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Number of violated restraints						Fraction of the ensemble	
IR <sup>1</sup>	SQ <sup>2</sup>	MR <sup>3</sup>	LR <sup>4</sup>	IC <sup>5</sup>	Total	Count <sup>6</sup>	%
0	0	1	1	0	2	7	23.3
1	0	0	1	0	2	8	26.7
0	0	1	1	0	2	9	30.0
1	0	0	0	0	1	10	33.3
1	0	0	0	0	1	11	36.7
0	0	0	0	0	0	12	40.0
0	0	0	0	0	0	13	43.3
0	0	0	0	0	0	14	46.7
0	0	0	0	0	0	15	50.0
2	0	0	0	0	2	16	53.3
0	1	0	0	0	1	17	56.7
0	0	0	0	0	0	18	60.0
1	0	0	0	0	1	19	63.3
0	1	0	1	0	2	20	66.7
0	0	0	0	0	0	21	70.0
0	0	0	0	0	0	22	73.3
1	0	0	0	0	1	23	76.7
0	0	0	1	0	1	24	80.0
0	0	0	0	0	0	25	83.3
0	0	0	0	0	0	26	86.7
0	0	0	0	0	0	27	90.0
0	0	0	0	0	0	28	93.3
1	1	0	7	0	9	29	96.7
0	0	0	0	0	0	30	100.0

<sup>1</sup>Intra-residue restraints, <sup>2</sup>Sequential restraints, <sup>3</sup>Medium range restraints, <sup>4</sup>Long range restraints,

<sup>5</sup>Inter-chain restraints, <sup>6</sup> Number of models with violations

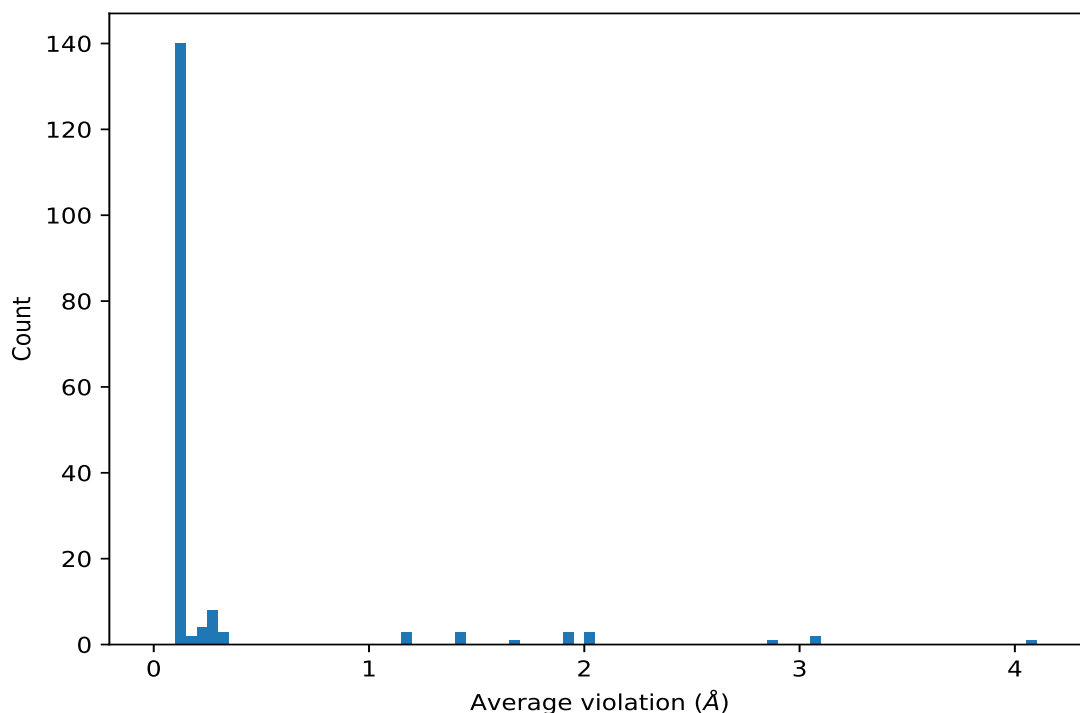
### 9.3.1 Bar graph : Distance violation statistics for the ensemble [i](#)



## 9.4 Most violated distance restraints in the ensemble [i](#)

### 9.4.1 Histogram : Distribution of mean distance violations [i](#)

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

Key	Atom-1	Atom-2	Models <sup>1</sup>	Mean (Å)	SD <sup>1</sup> (Å)	Median (Å)
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	30	0.14	0.02	0.14
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	29	4.07	1.12	3.77
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	29	3.07	0.3	3.02
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	29	3.07	0.3	3.02
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	29	2.89	0.13	2.9
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	29	2.04	0.21	2.03
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	29	2.04	0.21	2.03
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	29	2.04	0.21	2.03
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	29	1.94	0.28	1.95
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	29	1.94	0.28	1.95
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	29	1.94	0.28	1.95
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	29	1.67	0.18	1.69
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	29	1.44	0.19	1.44
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	29	1.44	0.19	1.44
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	29	1.44	0.19	1.44
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	29	1.19	0.08	1.18

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Key	Atom-1	Atom-2	Models <sup>1</sup>	Mean (Å)	SD <sup>1</sup> (Å)	Median (Å)
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	29	1.18	0.14	1.21
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	29	1.18	0.14	1.21
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	29	0.13	0.02	0.12
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	24	0.13	0.02	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	24	0.12	0.01	0.12
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	23	0.14	0.03	0.14
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	21	0.12	0.02	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	20	0.14	0.02	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	20	0.14	0.02	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	20	0.14	0.02	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	20	0.14	0.02	0.14
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	20	0.12	0.02	0.12
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	20	0.12	0.02	0.12
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	20	0.12	0.02	0.12
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	19	0.15	0.02	0.15
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	19	0.15	0.02	0.15
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	17	0.12	0.01	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	17	0.12	0.01	0.12
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	17	0.12	0.01	0.12
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	16	0.15	0.02	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	16	0.14	0.01	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	16	0.14	0.01	0.14
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	11	0.13	0.03	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	10	0.12	0.01	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	10	0.12	0.01	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	10	0.12	0.01	0.12
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	9	0.34	0.19	0.29
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	9	0.34	0.19	0.29
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	9	0.34	0.19	0.29
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	9	0.12	0.01	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	9	0.11	0.01	0.11
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	8	0.15	0.01	0.15
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	8	0.12	0.01	0.12
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	8	0.12	0.01	0.12
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	8	0.12	0.01	0.12
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	7	0.12	0.01	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	7	0.12	0.01	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	7	0.11	0.01	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	7	0.11	0.01	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	7	0.11	0.01	0.12
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	6	0.25	0.15	0.16
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	6	0.25	0.15	0.16

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Key	Atom-1	Atom-2	Models <sup>1</sup>	Mean (Å)	SD <sup>1</sup> (Å)	Median (Å)
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	6	0.14	0.02	0.14
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	6	0.14	0.02	0.14
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	6	0.12	0.01	0.12
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	6	0.11	0.01	0.11
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	5	0.15	0.03	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	5	0.15	0.03	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	5	0.15	0.03	0.13
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	5	0.14	0.02	0.13
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	5	0.11	0.01	0.11
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	5	0.11	0.01	0.11
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	5	0.11	0.01	0.11
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	5	0.11	0.01	0.1
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	5	0.11	0.01	0.1
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	5	0.11	0.01	0.1
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA2	4	0.15	0.02	0.15
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA3	4	0.15	0.02	0.15
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD1	4	0.14	0.04	0.12
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD2	4	0.14	0.04	0.12
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD2	4	0.14	0.02	0.14
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD3	4	0.14	0.02	0.14
(1,1905)	1:180:A:ASP:HB2	1:183:A:THR:H	4	0.13	0.01	0.13
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD2	4	0.12	0.01	0.12
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD3	4	0.12	0.01	0.12
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD11	4	0.12	0.01	0.12
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD12	4	0.12	0.01	0.12
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD13	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG11	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG12	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG13	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG21	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG22	4	0.12	0.01	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG23	4	0.12	0.01	0.12
(2,99)	1:137:A:VAL:H	1:164:A:LEU:O	4	0.11	0.0	0.11
(1,741)	1:77:A:SER:H	1:77:A:SER:HB3	4	0.11	0.0	0.11
(1,1380)	1:139:A:LEU:HD21	1:162:A:TRP:HZ3	4	0.11	0.0	0.11
(1,1380)	1:139:A:LEU:HD22	1:162:A:TRP:HZ3	4	0.11	0.0	0.11
(1,1380)	1:139:A:LEU:HD23	1:162:A:TRP:HZ3	4	0.11	0.0	0.11
(1,874)	1:91:A:THR:H	1:91:A:THR:HG21	3	0.29	0.02	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG22	3	0.29	0.02	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG23	3	0.29	0.02	0.3
(1,1947)	1:184:A:ARG:HB2	1:185:A:SER:H	3	0.21	0.04	0.18
(1,1947)	1:184:A:ARG:HB3	1:185:A:SER:H	3	0.21	0.04	0.18

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Key	Atom-1	Atom-2	Models <sup>1</sup>	Mean (Å)	SD <sup>1</sup> (Å)	Median (Å)
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG2	3	0.17	0.02	0.17
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG3	3	0.17	0.02	0.17
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE21	3	0.13	0.0	0.13
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE22	3	0.13	0.0	0.13
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG11	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG12	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG13	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG21	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG22	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG23	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG11	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG12	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG13	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG21	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG22	3	0.13	0.01	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG23	3	0.13	0.01	0.12
(1,440)	1:61:A:ASP:H	1:62:A:GLY:H	3	0.12	0.01	0.12
(1,1098)	1:114:A:ARG:HD2	1:115:A:ASN:H	3	0.12	0.0	0.12
(1,1098)	1:114:A:ARG:HD3	1:115:A:ASN:H	3	0.12	0.0	0.12
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD21	3	0.12	0.02	0.11
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD22	3	0.12	0.02	0.11
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG21	3	0.12	0.0	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG22	3	0.12	0.0	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG23	3	0.12	0.0	0.12
(1,635)	1:72:A:VAL:HA	1:86:A:VAL:H	3	0.11	0.01	0.12
(2,39)	1:70:A:VAL:H	1:67:A:SER:O	3	0.11	0.0	0.11
(1,1073)	1:112:A:LEU:HG	1:113:A:ARG:H	3	0.11	0.01	0.1
(1,1183)	1:119:A:VAL:HG11	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1183)	1:119:A:VAL:HG12	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1183)	1:119:A:VAL:HG13	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1183)	1:119:A:VAL:HG21	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1183)	1:119:A:VAL:HG22	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1183)	1:119:A:VAL:HG23	1:179:A:THR:H	3	0.11	0.01	0.11
(1,1582)	1:150:A:THR:HG21	1:175:A:GLN:H	3	0.11	0.01	0.1
(1,1582)	1:150:A:THR:HG22	1:175:A:GLN:H	3	0.11	0.01	0.1
(1,1582)	1:150:A:THR:HG23	1:175:A:GLN:H	3	0.11	0.01	0.1
(1,1089)	1:113:A:ARG:H	1:122:A:GLU:H	3	0.1	0.0	0.1
(1,381)	1:56:A:THR:H	1:56:A:THR:HG21	2	0.28	0.02	0.28
(1,381)	1:56:A:THR:H	1:56:A:THR:HG22	2	0.28	0.02	0.28
(1,381)	1:56:A:THR:H	1:56:A:THR:HG23	2	0.28	0.02	0.28
(1,354)	1:54:A:LYS:HG2	1:56:A:THR:H	2	0.2	0.03	0.2
(1,354)	1:54:A:LYS:HG3	1:56:A:THR:H	2	0.2	0.03	0.2

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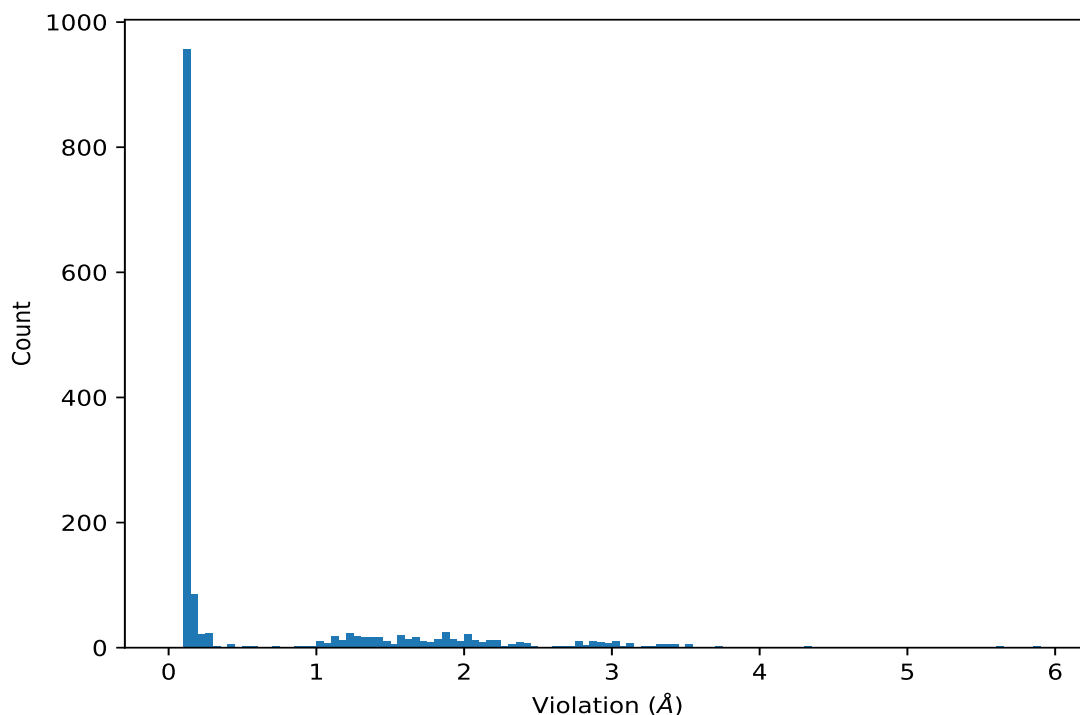
Key	Atom-1	Atom-2	Models <sup>1</sup>	Mean (Å)	SD <sup>1</sup> (Å)	Median (Å)
(1,554)	1:67:A:SER:HB2	1:70:A:VAL:H	2	0.13	0.01	0.13
(1,554)	1:67:A:SER:HB3	1:70:A:VAL:H	2	0.13	0.01	0.13
(1,1079)	1:113:A:ARG:HB2	1:114:A:ARG:H	2	0.13	0.01	0.13
(1,1079)	1:113:A:ARG:HB3	1:114:A:ARG:H	2	0.13	0.01	0.13
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD1	2	0.12	0.02	0.12
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD2	2	0.12	0.02	0.12
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD1	2	0.12	0.02	0.12
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD2	2	0.12	0.02	0.12
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE1	2	0.12	0.02	0.12
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE2	2	0.12	0.02	0.12
(2,135)	1:173:A:SER:H	1:151:A:ASN:O	2	0.12	0.01	0.12
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE21	2	0.12	0.0	0.12
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE22	2	0.12	0.0	0.12
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE21	2	0.12	0.0	0.12
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE22	2	0.12	0.0	0.12
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE21	2	0.12	0.0	0.12
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE22	2	0.12	0.0	0.12
(1,1262)	1:124:A:ARG:HG2	1:171:A:THR:H	2	0.12	0.0	0.12
(1,1262)	1:124:A:ARG:HG3	1:171:A:THR:H	2	0.12	0.0	0.12
(1,876)	1:91:A:THR:H	1:94:A:GLU:HA	2	0.11	0.0	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG21	2	0.11	0.0	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG22	2	0.11	0.0	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG23	2	0.11	0.0	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD2	2	0.11	0.0	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD3	2	0.11	0.0	0.11
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE21	2	0.11	0.01	0.11
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE22	2	0.11	0.01	0.11
(1,1228)	1:121:A:LEU:H	1:176:A:ALA:H	2	0.11	0.0	0.11
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG2	2	0.11	0.0	0.11
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG3	2	0.11	0.0	0.11
(1,895)	1:92:A:PHE:HE1	1:120:A:ILE:H	2	0.1	0.0	0.1
(1,895)	1:92:A:PHE:HE2	1:120:A:ILE:H	2	0.1	0.0	0.1

<sup>1</sup>Number of violated models, <sup>2</sup>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)
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	11	5.92
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	21	5.86
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	26	5.86
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	10	5.84
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	13	5.62
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	12	5.61
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	5	5.27
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	6	4.95
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	19	4.82
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	22	4.34
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	30	4.31
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	7	4.22
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	28	4.02
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	9	3.92
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	20	3.77
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	23	3.74

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	3	3.7
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	26	3.55
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	26	3.55
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	1	3.51
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	11	3.51
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	11	3.51
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	25	3.46
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	8	3.42
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	21	3.42
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	21	3.42
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	13	3.41
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	13	3.41
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	10	3.4
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	10	3.4
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	3	3.39
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	3	3.39
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	23	3.39
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	23	3.39
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	4	3.33
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	8	3.32
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	8	3.32
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	6	3.31
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	6	3.31
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	4	3.28
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	4	3.28
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	29	3.25
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	12	3.23
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	12	3.23
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	27	3.14
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	20	3.13
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	20	3.13
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	8	3.13
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	5	3.12
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	5	3.12
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	9	3.1
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	2	3.09
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	16	3.09
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	29	3.09
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	30	3.05
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	30	3.05
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	16	3.05
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	9	3.02

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	9	3.02
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	13	3.02
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	26	3.02
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	7	3.01
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	7	3.01
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	27	3.01
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	27	3.01
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	22	2.99
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	22	2.99
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	4	2.99
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	11	2.99
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	30	2.99
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	18	2.98
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	18	2.98
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	16	2.94
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	16	2.94
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	27	2.93
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	28	2.93
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	2	2.92
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	18	2.92
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	18	2.91
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	1	2.91
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	6	2.9
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	10	2.9
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	28	2.88
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	28	2.88
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	5	2.88
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	23	2.88
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	15	2.86
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	29	2.86
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	29	2.86
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	12	2.85
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	19	2.84
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	15	2.83
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	2	2.81
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	2	2.81
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	19	2.8
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	19	2.8
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	1	2.78
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	1	2.78
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	7	2.78
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	25	2.77

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	21	2.76
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	22	2.76
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	3	2.75
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	20	2.75
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	24	2.72
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	24	2.72
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	24	2.72
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	25	2.69
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	25	2.69
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	15	2.63
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	15	2.63
(1,694)	1:75:A:TYR:HD1	1:81:A:VAL:HA	14	2.55
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	23	2.47
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	23	2.47
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	23	2.47
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	14	2.43
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	30	2.43
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	30	2.43
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	30	2.43
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	11	2.41
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	11	2.41
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	11	2.41
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	23	2.39
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	23	2.39
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	23	2.39
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	30	2.37
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	30	2.37
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	30	2.37
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	11	2.36
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	11	2.36
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	11	2.36
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	15	2.34
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	15	2.34
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	15	2.34
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	2	2.31
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	2	2.31
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	2	2.31
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB2	14	2.29
(1,711)	1:75:A:TYR:HE1	1:80:A:TYR:HB3	14	2.29
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	26	2.24
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	26	2.24
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	26	2.24

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	18	2.22
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	18	2.22
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	18	2.22
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	13	2.21
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	13	2.21
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	13	2.21
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	15	2.2
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	15	2.2
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	15	2.2
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	2	2.18
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	2	2.18
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	2	2.18
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	1	2.17
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	1	2.17
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	1	2.17
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	25	2.17
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	25	2.17
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	25	2.17
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	13	2.16
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	13	2.16
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	13	2.16
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	12	2.14
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	12	2.14
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	12	2.14
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	26	2.11
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	26	2.11
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	26	2.11
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	1	2.1
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	1	2.1
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	1	2.1
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	25	2.09
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	25	2.09
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	25	2.09
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	10	2.09
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	10	2.09
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	10	2.09
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	18	2.06
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	18	2.06
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	18	2.06
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	20	2.06
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	20	2.06
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	20	2.06

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	10	2.04
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	10	2.04
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	10	2.04
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	16	2.04
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	16	2.04
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	16	2.04
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	9	2.04
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	9	2.04
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	9	2.04
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	4	2.03
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	4	2.03
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	4	2.03
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	24	2.02
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	24	2.02
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	24	2.02
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	9	2.01
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	9	2.01
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	9	2.01
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	24	2.01
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	24	2.01
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	24	2.01
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	16	1.99
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	16	1.99
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	16	1.99
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	8	1.98
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	8	1.98
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	8	1.98
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	7	1.97
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	7	1.97
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	7	1.97
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	23	1.96
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	22	1.95
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	22	1.95
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	22	1.95
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	5	1.94
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	5	1.94
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	5	1.94
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	13	1.92
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	12	1.92
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	12	1.92
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	12	1.92
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	21	1.92

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	21	1.92
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	21	1.92
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	11	1.9
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	29	1.9
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	27	1.9
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	27	1.9
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	27	1.9
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	14	1.89
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	14	1.89
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	14	1.89
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	6	1.88
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	6	1.88
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	6	1.88
(1,712)	1:75:A:TYR:HE1	1:80:A:TYR:HD1	24	1.87
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	22	1.87
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	22	1.87
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	22	1.87
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	2	1.85
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	9	1.85
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	30	1.85
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	20	1.85
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	20	1.85
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	20	1.85
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	27	1.85
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	27	1.85
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	27	1.85
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	8	1.83
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	8	1.83
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	8	1.83
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	7	1.82
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	7	1.82
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	7	1.82
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	29	1.82
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	29	1.82
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	29	1.82
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	4	1.81
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	4	1.81
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	4	1.81
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	18	1.8
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	19	1.79
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	19	1.79
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	19	1.79

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	28	1.79
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	28	1.79
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	28	1.79
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	4	1.77
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	8	1.77
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	12	1.77
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	16	1.73
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	21	1.73
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	21	1.73
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	21	1.73
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	15	1.72
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	3	1.72
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	3	1.72
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	3	1.72
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	21	1.72
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	21	1.72
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	21	1.72
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	5	1.7
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	28	1.7
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	28	1.7
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	28	1.7
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	20	1.69
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	25	1.69
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	6	1.69
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	6	1.69
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	6	1.69
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	14	1.68
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	14	1.68
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	14	1.68
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	1	1.66
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	26	1.66
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	19	1.66
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	19	1.66
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	19	1.66
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	5	1.65
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	5	1.65
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	5	1.65
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	10	1.64
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	18	1.64
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	18	1.64
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	18	1.64
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	4	1.62

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	4	1.62
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	4	1.62
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	28	1.61
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	28	1.61
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	28	1.61
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	5	1.59
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	5	1.59
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	5	1.59
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	12	1.58
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	12	1.58
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	12	1.58
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	19	1.58
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	19	1.58
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	19	1.58
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	21	1.56
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	24	1.56
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	16	1.55
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	16	1.55
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	16	1.55
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	29	1.55
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	29	1.55
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	29	1.55
(1,288)	1:45:A:ILE:HD11	1:75:A:TYR:HD2	3	1.55
(1,288)	1:45:A:ILE:HD12	1:75:A:TYR:HD2	3	1.55
(1,288)	1:45:A:ILE:HD13	1:75:A:TYR:HD2	3	1.55
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	8	1.53
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	8	1.53
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	8	1.53
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	14	1.52
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	7	1.51
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	9	1.48
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	9	1.48
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	9	1.48
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	3	1.47
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	20	1.47
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	20	1.47
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	20	1.47
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	27	1.47
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	27	1.47
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	27	1.47
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	30	1.45
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	30	1.45

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	22	1.44
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	10	1.44
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	10	1.44
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	10	1.44
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	6	1.44
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	6	1.44
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	6	1.44
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	24	1.42
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	24	1.42
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	24	1.42
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	10	1.41
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	10	1.41
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	24	1.41
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	24	1.41
(1,290)	1:45:A:ILE:HD11	1:75:A:TYR:HE2	3	1.4
(1,290)	1:45:A:ILE:HD12	1:75:A:TYR:HE2	3	1.4
(1,290)	1:45:A:ILE:HD13	1:75:A:TYR:HE2	3	1.4
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	27	1.39
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	13	1.39
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	13	1.39
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	13	1.39
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	26	1.38
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	26	1.38
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	26	1.38
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	28	1.37
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	22	1.37
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	22	1.37
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	22	1.37
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	11	1.35
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	11	1.35
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	6	1.35
(1,693)	1:75:A:TYR:HD1	1:76:A:ASP:HA	19	1.34
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	1	1.34
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	1	1.34
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	1	1.34
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	23	1.33
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	23	1.33
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	6	1.33
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	3	1.32
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	22	1.32
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	11	1.32
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	11	1.32

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	11	1.32
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	7	1.31
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	7	1.31
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	7	1.31
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	7	1.31
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	18	1.29
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	18	1.29
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	21	1.29
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	14	1.28
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	14	1.28
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	26	1.28
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	26	1.28
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	2	1.28
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	2	1.28
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	2	1.28
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	13	1.27
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	13	1.27
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	15	1.27
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	15	1.27
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	15	1.27
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	19	1.26
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	15	1.25
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	15	1.25
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	29	1.24
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	29	1.24
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	27	1.24
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	22	1.23
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	22	1.23
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	30	1.23
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	30	1.23
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	30	1.23
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	1	1.22
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	14	1.22
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	20	1.22
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	25	1.22
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	25	1.22
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	25	1.22
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	7	1.21
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	7	1.21
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	9	1.21
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	9	1.21
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	20	1.21

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	20	1.21
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	10	1.21
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	24	1.21
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	28	1.21
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	4	1.19
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	5	1.18
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	15	1.18
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	25	1.17
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	23	1.17
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	23	1.17
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	23	1.17
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	1	1.16
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	1	1.16
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	8	1.16
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	12	1.16
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	16	1.16
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	18	1.15
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	26	1.15
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	29	1.15
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	29	1.15
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	29	1.15
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	12	1.14
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	12	1.14
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	9	1.14
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	2	1.13
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	2	1.13
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	11	1.13
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	8	1.12
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	8	1.12
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	5	1.11
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	5	1.11
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	28	1.1
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	28	1.1
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	30	1.1
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	2	1.09
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	4	1.08
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	4	1.08
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	29	1.07
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	23	1.06
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	6	1.05
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	6	1.05
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	21	1.04

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	21	1.04
(1,668)	1:75:A:TYR:HA	1:75:A:TYR:HD2	13	1.04
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	25	1.02
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	25	1.02
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	16	1.0
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	16	1.0
(1,328)	1:47:A:ALA:HB1	1:75:A:TYR:HE1	14	1.0
(1,328)	1:47:A:ALA:HB2	1:75:A:TYR:HE1	14	1.0
(1,328)	1:47:A:ALA:HB3	1:75:A:TYR:HE1	14	1.0
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	3	0.98
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	3	0.98
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	27	0.94
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	27	0.94
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG2	19	0.89
(1,695)	1:75:A:TYR:HD2	1:84:A:GLN:HG3	19	0.89
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	14	0.74
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	14	0.74
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	14	0.74
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	29	0.56
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	29	0.56
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	29	0.56
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	29	0.5
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	29	0.5
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	13	0.42
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	13	0.42
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	23	0.42
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	23	0.42
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	23	0.42
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	15	0.35
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	15	0.35
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	15	0.35
(1,874)	1:91:A:THR:H	1:91:A:THR:HG21	13	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG22	13	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG23	13	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG21	15	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG22	15	0.3
(1,874)	1:91:A:THR:H	1:91:A:THR:HG23	15	0.3
(1,381)	1:56:A:THR:H	1:56:A:THR:HG21	24	0.3
(1,381)	1:56:A:THR:H	1:56:A:THR:HG22	24	0.3
(1,381)	1:56:A:THR:H	1:56:A:THR:HG23	24	0.3
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	11	0.29
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	11	0.29

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	11	0.29
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	30	0.27
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	30	0.27
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	30	0.27
(1,1947)	1:184:A:ARG:HB2	1:185:A:SER:H	18	0.26
(1,1947)	1:184:A:ARG:HB3	1:185:A:SER:H	18	0.26
(1,874)	1:91:A:THR:H	1:91:A:THR:HG21	30	0.26
(1,874)	1:91:A:THR:H	1:91:A:THR:HG22	30	0.26
(1,874)	1:91:A:THR:H	1:91:A:THR:HG23	30	0.26
(1,381)	1:56:A:THR:H	1:56:A:THR:HG21	5	0.25
(1,381)	1:56:A:THR:H	1:56:A:THR:HG22	5	0.25
(1,381)	1:56:A:THR:H	1:56:A:THR:HG23	5	0.25
(1,1539)	1:148:A:THR:H	1:148:A:THR:HG21	30	0.24
(1,1539)	1:148:A:THR:H	1:148:A:THR:HG22	30	0.24
(1,1539)	1:148:A:THR:H	1:148:A:THR:HG23	30	0.24
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	1	0.23
(1,354)	1:54:A:LYS:HG2	1:56:A:THR:H	5	0.23
(1,354)	1:54:A:LYS:HG3	1:56:A:THR:H	5	0.23
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	5	0.21
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD1	20	0.21
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD2	20	0.21
(1,600)	1:70:A:VAL:HB	1:88:A:SER:H	22	0.21
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	15	0.21
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG2	3	0.2
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG3	3	0.2
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	8	0.2
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	8	0.2
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	8	0.2
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	8	0.2
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	21	0.2
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	21	0.2
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	21	0.2
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	16	0.2
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	16	0.2
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	30	0.19
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	16	0.18
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	5	0.18
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	24	0.18
(1,1947)	1:184:A:ARG:HB2	1:185:A:SER:H	3	0.18
(1,1947)	1:184:A:ARG:HB3	1:185:A:SER:H	3	0.18
(1,1947)	1:184:A:ARG:HB2	1:185:A:SER:H	30	0.18
(1,1947)	1:184:A:ARG:HB3	1:185:A:SER:H	30	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	2	0.18
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA2	13	0.18
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA3	13	0.18
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	9	0.18
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	9	0.18
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	28	0.18
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	28	0.18
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	18	0.18
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	18	0.18
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	18	0.18
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	5	0.18
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	7	0.18
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	22	0.18
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	25	0.18
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	2	0.17
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	10	0.17
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	12	0.17
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG2	30	0.17
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG3	30	0.17
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	10	0.17
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	10	0.17
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	10	0.17
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	10	0.17
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	12	0.17
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	12	0.17
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	12	0.17
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	12	0.17
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	10	0.17
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	10	0.17
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	10	0.17
(1,1788)	1:165:A:LYS:H	1:165:A:LYS:HG2	17	0.17
(1,1788)	1:165:A:LYS:H	1:165:A:LYS:HG3	17	0.17
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	11	0.17
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	16	0.17
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	28	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	11	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	11	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	15	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	15	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	19	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	19	0.17
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	27	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	27	0.17
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD2	9	0.17
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD3	9	0.17
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	6	0.17
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	6	0.17
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	23	0.17
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	23	0.17
(1,354)	1:54:A:LYS:HG2	1:56:A:THR:H	28	0.17
(1,354)	1:54:A:LYS:HG3	1:56:A:THR:H	28	0.17
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	4	0.17
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	5	0.16
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	13	0.16
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	30	0.16
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	7	0.16
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	13	0.16
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	25	0.16
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	30	0.16
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	30	0.16
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	30	0.16
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	30	0.16
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	8	0.16
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	7	0.16
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	7	0.16
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	18	0.16
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	18	0.16
(1,971)	1:98:A:LEU:HG	1:99:A:ALA:H	1	0.16
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	26	0.16
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	24	0.16
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	8	0.16
(1,138)	1:34:A:ILE:HG21	1:178:A:TYR:HD1	14	0.16
(1,138)	1:34:A:ILE:HG21	1:178:A:TYR:HD2	14	0.16
(1,138)	1:34:A:ILE:HG22	1:178:A:TYR:HD1	14	0.16
(1,138)	1:34:A:ILE:HG22	1:178:A:TYR:HD2	14	0.16
(1,138)	1:34:A:ILE:HG23	1:178:A:TYR:HD1	14	0.16
(1,138)	1:34:A:ILE:HG23	1:178:A:TYR:HD2	14	0.16
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	19	0.15
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	3	0.15
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	17	0.15
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	18	0.15
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	19	0.15
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	26	0.15
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	6	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	9	0.15
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	11	0.15
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG2	18	0.15
(1,1960)	1:184:A:ARG:H	1:184:A:ARG:HG3	18	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	1	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	1	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	1	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	1	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	11	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	11	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	11	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	11	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	18	0.15
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	18	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	18	0.15
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	18	0.15
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	1	0.15
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	12	0.15
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	15	0.15
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA2	21	0.15
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA3	21	0.15
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	27	0.15
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	27	0.15
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	27	0.15
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	4	0.15
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	4	0.15
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	4	0.15
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	21	0.15
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	21	0.15
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	21	0.15
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	3	0.15
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	3	0.15
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	30	0.15
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	30	0.15
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD2	4	0.15
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD3	4	0.15
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	16	0.15
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	16	0.15
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	29	0.15
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	29	0.15
(1,1008)	1:101:A:MET:H	1:101:A:MET:HE1	5	0.15
(1,1008)	1:101:A:MET:H	1:101:A:MET:HE2	5	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1008)	1:101:A:MET:H	1:101:A:MET:HE3	5	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	10	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	10	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	15	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	15	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	18	0.15
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	18	0.15
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	2	0.15
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	2	0.15
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	11	0.15
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	11	0.15
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	2	0.15
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	1	0.15
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	1	0.15
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	1	0.15
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	6	0.15
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	27	0.15
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	30	0.15
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	1	0.15
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	13	0.15
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	16	0.15
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	19	0.15
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD1	20	0.15
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD2	20	0.15
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD1	20	0.15
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD2	20	0.15
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	24	0.15
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	18	0.14
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	21	0.14
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	28	0.14
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	29	0.14
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	30	0.14
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	7	0.14
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	1	0.14
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	4	0.14
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	21	0.14
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	27	0.14
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	20	0.14
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	21	0.14
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	24	0.14
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	26	0.14
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	27	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	13	0.14
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	27	0.14
(1,1905)	1:180:A:ASP:HB2	1:183:A:THR:H	4	0.14
(1,1905)	1:180:A:ASP:HB2	1:183:A:THR:H	18	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	2	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	2	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	2	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	2	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	4	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	4	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	4	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	4	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	15	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	15	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	15	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	15	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	22	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	22	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	22	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	22	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	24	0.14
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	24	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	24	0.14
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	24	0.14
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD21	26	0.14
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD22	26	0.14
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE1	24	0.14
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE2	24	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG11	15	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG12	15	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG13	15	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG21	15	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG22	15	0.14
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG23	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG11	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG12	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG13	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG21	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG22	15	0.14
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG23	15	0.14
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	3	0.14
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	7	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	17	0.14
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA2	12	0.14
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA3	12	0.14
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	8	0.14
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	8	0.14
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	8	0.14
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	15	0.14
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	15	0.14
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	15	0.14
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	5	0.14
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	5	0.14
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	6	0.14
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	6	0.14
(1,1105)	1:114:A:ARG:HG2	1:115:A:ASN:H	29	0.14
(1,1105)	1:114:A:ARG:HG3	1:115:A:ASN:H	29	0.14
(1,1079)	1:113:A:ARG:HB2	1:114:A:ARG:H	28	0.14
(1,1079)	1:113:A:ARG:HB3	1:114:A:ARG:H	28	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	7	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	7	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	7	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	21	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	21	0.14
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	21	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	2	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	2	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	19	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	19	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	23	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	23	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	28	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	28	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	29	0.14
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG11	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG12	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG13	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG21	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG22	29	0.14
(1,791)	1:84:A:GLN:HE21	1:86:A:VAL:HG23	29	0.14
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG11	29	0.14
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG12	29	0.14
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG13	29	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG21	29	0.14
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG22	29	0.14
(1,791)	1:84:A:GLN:HE22	1:86:A:VAL:HG23	29	0.14
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD2	16	0.14
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD3	16	0.14
(1,554)	1:67:A:SER:HB2	1:70:A:VAL:H	14	0.14
(1,554)	1:67:A:SER:HB3	1:70:A:VAL:H	14	0.14
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	26	0.14
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	26	0.14
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	26	0.14
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	1	0.14
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	8	0.14
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	12	0.14
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	17	0.14
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	16	0.14
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	17	0.14
(2,135)	1:173:A:SER:H	1:151:A:ASN:O	23	0.13
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	13	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	2	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	4	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	12	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	13	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	23	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	25	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	26	0.13
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	27	0.13
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	12	0.13
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	16	0.13
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	24	0.13
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	27	0.13
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	15	0.13
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	20	0.13
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	29	0.13
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	8	0.13
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	17	0.13
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	30	0.13
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	11	0.13
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	24	0.13
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	14	0.13
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	14	0.13
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	14	0.13
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	14	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	11	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	11	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	11	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	22	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	22	0.13
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	22	0.13
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	5	0.13
(1,1769)	1:164:A:LEU:HD11	1:165:A:LYS:H	10	0.13
(1,1769)	1:164:A:LEU:HD12	1:165:A:LYS:H	10	0.13
(1,1769)	1:164:A:LEU:HD13	1:165:A:LYS:H	10	0.13
(1,1769)	1:164:A:LEU:HD21	1:165:A:LYS:H	10	0.13
(1,1769)	1:164:A:LEU:HD22	1:165:A:LYS:H	10	0.13
(1,1769)	1:164:A:LEU:HD23	1:165:A:LYS:H	10	0.13
(1,1736)	1:161:A:GLN:H	1:161:A:GLN:HB2	11	0.13
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	14	0.13
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	25	0.13
(1,1317)	1:130:A:VAL:HG11	1:168:A:VAL:H	28	0.13
(1,1317)	1:130:A:VAL:HG12	1:168:A:VAL:H	28	0.13
(1,1317)	1:130:A:VAL:HG13	1:168:A:VAL:H	28	0.13
(1,1317)	1:130:A:VAL:HG21	1:168:A:VAL:H	28	0.13
(1,1317)	1:130:A:VAL:HG22	1:168:A:VAL:H	28	0.13
(1,1317)	1:130:A:VAL:HG23	1:168:A:VAL:H	28	0.13
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA2	19	0.13
(1,1298)	1:128:A:THR:HB	1:167:A:GLY:HA3	19	0.13
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	1	0.13
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	1	0.13
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	1	0.13
(1,1268)	1:124:A:ARG:H	1:124:A:ARG:HG2	27	0.13
(1,1268)	1:124:A:ARG:H	1:124:A:ARG:HG3	27	0.13
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	5	0.13
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	5	0.13
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	5	0.13
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	9	0.13
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	9	0.13
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	9	0.13
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	21	0.13
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	21	0.13
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	21	0.13
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	22	0.13
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	22	0.13
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	22	0.13
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	29	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	29	0.13
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	29	0.13
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	9	0.13
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	9	0.13
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	9	0.13
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	13	0.13
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	13	0.13
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	13	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	4	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	4	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	14	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	14	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	20	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	20	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	24	0.13
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	24	0.13
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	28	0.13
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	28	0.13
(1,1073)	1:112:A:LEU:HG	1:113:A:ARG:H	29	0.13
(1,1005)	1:101:A:MET:HE1	1:102:A:ASN:H	4	0.13
(1,1005)	1:101:A:MET:HE2	1:102:A:ASN:H	4	0.13
(1,1005)	1:101:A:MET:HE3	1:102:A:ASN:H	4	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	6	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	6	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	6	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	9	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	9	0.13
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	9	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD11	1	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD12	1	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD13	1	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD21	1	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD22	1	0.13
(1,954)	1:97:A:GLN:H	1:98:A:LEU:HD23	1	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	6	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	6	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	16	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	16	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	20	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	20	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	22	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	22	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	27	0.13
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	27	0.13
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE21	14	0.13
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE22	14	0.13
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE21	17	0.13
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE22	17	0.13
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	10	0.13
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	10	0.13
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	24	0.13
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	24	0.13
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB2	20	0.13
(1,710)	1:75:A:TYR:HE1	1:77:A:SER:HB3	20	0.13
(1,440)	1:61:A:ASP:H	1:62:A:GLY:H	18	0.13
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	3	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG11	30	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG12	30	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG13	30	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG21	30	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG22	30	0.13
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG23	30	0.13
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	24	0.13
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	24	0.13
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	24	0.13
(1,306)	1:45:A:ILE:HG21	1:75:A:TYR:HE2	2	0.13
(1,306)	1:45:A:ILE:HG22	1:75:A:TYR:HE2	2	0.13
(1,306)	1:45:A:ILE:HG23	1:75:A:TYR:HE2	2	0.13
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	9	0.13
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	13	0.13
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	16	0.13
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	19	0.13
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	28	0.13
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	5	0.13
(1,171)	1:37:A:ASP:H	1:37:A:ASP:HB3	24	0.13
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	11	0.13
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	14	0.13
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	22	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	1	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	4	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	5	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	8	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	9	0.13
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	13	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD11	3	0.13
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD12	3	0.13
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD13	3	0.13
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD11	14	0.13
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD12	14	0.13
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD13	14	0.13
(1,77)	1:31:A:SER:H	1:45:A:ILE:HD11	17	0.13
(1,77)	1:31:A:SER:H	1:45:A:ILE:HD12	17	0.13
(1,77)	1:31:A:SER:H	1:45:A:ILE:HD13	17	0.13
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	11	0.12
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	21	0.12
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	25	0.12
(2,99)	1:137:A:VAL:H	1:164:A:LEU:O	11	0.12
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	3	0.12
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	5	0.12
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	7	0.12
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	15	0.12
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	13	0.12
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	25	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	2	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	3	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	9	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	10	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	17	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	21	0.12
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	26	0.12
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	8	0.12
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	11	0.12
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	14	0.12
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	22	0.12
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	28	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	4	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	7	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	13	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	14	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	22	0.12
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	29	0.12
(2,39)	1:70:A:VAL:H	1:67:A:SER:O	21	0.12
(1,1940)	1:183:A:THR:H	1:184:A:ARG:HB2	28	0.12
(1,1940)	1:183:A:THR:H	1:184:A:ARG:HB3	28	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG21	8	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG22	8	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG23	8	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG21	20	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG22	20	0.12
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG23	20	0.12
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	6	0.12
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	7	0.12
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	14	0.12
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	18	0.12
(1,1905)	1:180:A:ASP:HB2	1:183:A:THR:H	13	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	7	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	7	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	7	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	7	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	9	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	9	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	9	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	9	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	26	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	26	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	26	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	26	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	27	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	27	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	27	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	27	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	29	0.12
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	29	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	29	0.12
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	29	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG11	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG12	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG13	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG21	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG22	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG23	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG11	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG12	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG13	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG21	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG22	3	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG23	3	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG11	19	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG12	19	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG13	19	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG21	19	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG22	19	0.12
(1,1784)	1:165:A:LYS:HE2	1:168:A:VAL:HG23	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG11	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG12	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG13	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG21	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG22	19	0.12
(1,1784)	1:165:A:LYS:HE3	1:168:A:VAL:HG23	19	0.12
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	18	0.12
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE21	8	0.12
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE22	8	0.12
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	5	0.12
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	6	0.12
(1,1582)	1:150:A:THR:HG21	1:175:A:GLN:H	28	0.12
(1,1582)	1:150:A:THR:HG22	1:175:A:GLN:H	28	0.12
(1,1582)	1:150:A:THR:HG23	1:175:A:GLN:H	28	0.12
(1,1339)	1:135:A:ALA:H	1:166:A:PRO:HD2	29	0.12
(1,1262)	1:124:A:ARG:HG2	1:171:A:THR:H	20	0.12
(1,1262)	1:124:A:ARG:HG3	1:171:A:THR:H	20	0.12
(1,1259)	1:124:A:ARG:HB2	1:171:A:THR:HG21	17	0.12
(1,1259)	1:124:A:ARG:HB2	1:171:A:THR:HG22	17	0.12
(1,1259)	1:124:A:ARG:HB2	1:171:A:THR:HG23	17	0.12
(1,1259)	1:124:A:ARG:HB3	1:171:A:THR:HG21	17	0.12
(1,1259)	1:124:A:ARG:HB3	1:171:A:THR:HG22	17	0.12
(1,1259)	1:124:A:ARG:HB3	1:171:A:THR:HG23	17	0.12
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	3	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	3	0.12
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	3	0.12
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	4	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	4	0.12
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	4	0.12
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	16	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	16	0.12
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	16	0.12
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	24	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	24	0.12
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	24	0.12
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	28	0.12
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	28	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	28	0.12
(1,1183)	1:119:A:VAL:HG11	1:179:A:THR:H	19	0.12
(1,1183)	1:119:A:VAL:HG12	1:179:A:THR:H	19	0.12
(1,1183)	1:119:A:VAL:HG13	1:179:A:THR:H	19	0.12
(1,1183)	1:119:A:VAL:HG21	1:179:A:THR:H	19	0.12
(1,1183)	1:119:A:VAL:HG22	1:179:A:THR:H	19	0.12
(1,1183)	1:119:A:VAL:HG23	1:179:A:THR:H	19	0.12
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	2	0.12
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	2	0.12
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	2	0.12
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	7	0.12
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	7	0.12
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	7	0.12
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	20	0.12
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	20	0.12
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	20	0.12
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	22	0.12
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	22	0.12
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	22	0.12
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	2	0.12
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	2	0.12
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD2	2	0.12
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD3	2	0.12
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD1	6	0.12
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD2	6	0.12
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD1	28	0.12
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD2	28	0.12
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	19	0.12
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	19	0.12
(1,1100)	1:114:A:ARG:HD2	1:180:A:ASP:H	23	0.12
(1,1100)	1:114:A:ARG:HD3	1:180:A:ASP:H	23	0.12
(1,1098)	1:114:A:ARG:HD2	1:115:A:ASN:H	4	0.12
(1,1098)	1:114:A:ARG:HD3	1:115:A:ASN:H	4	0.12
(1,1098)	1:114:A:ARG:HD2	1:115:A:ASN:H	9	0.12
(1,1098)	1:114:A:ARG:HD3	1:115:A:ASN:H	9	0.12
(1,1079)	1:113:A:ARG:HB2	1:114:A:ARG:H	14	0.12
(1,1079)	1:113:A:ARG:HB3	1:114:A:ARG:H	14	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	3	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	3	0.12
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	3	0.12
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	3	0.12
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	3	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	4	0.12
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	4	0.12
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG2	12	0.12
(1,953)	1:97:A:GLN:H	1:97:A:GLN:HG3	12	0.12
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE21	30	0.12
(1,933)	1:97:A:GLN:HA	1:97:A:GLN:HE22	30	0.12
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE21	9	0.12
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE22	9	0.12
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE21	9	0.12
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE22	9	0.12
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE21	9	0.12
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE22	9	0.12
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	5	0.12
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	5	0.12
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	5	0.12
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	23	0.12
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	23	0.12
(1,635)	1:72:A:VAL:HA	1:86:A:VAL:H	14	0.12
(1,635)	1:72:A:VAL:HA	1:86:A:VAL:H	21	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	3	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	3	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	3	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	7	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	7	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	7	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	18	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	18	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	18	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	21	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	21	0.12
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	21	0.12
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD2	11	0.12
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD3	11	0.12
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD2	27	0.12
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD3	27	0.12
(1,554)	1:67:A:SER:HB2	1:70:A:VAL:H	29	0.12
(1,554)	1:67:A:SER:HB3	1:70:A:VAL:H	29	0.12
(1,440)	1:61:A:ASP:H	1:62:A:GLY:H	19	0.12
(1,404)	1:60:A:LEU:HB2	1:61:A:ASP:H	12	0.12
(1,404)	1:60:A:LEU:HB3	1:61:A:ASP:H	12	0.12
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	8	0.12
(1,373)	1:55:A:ASP:H	1:55:A:ASP:HB3	28	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG11	19	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG12	19	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG13	19	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG21	19	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG22	19	0.12
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG23	19	0.12
(1,356)	1:54:A:LYS:HG2	1:55:A:ASP:H	28	0.12
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	3	0.12
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	3	0.12
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	3	0.12
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	4	0.12
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	4	0.12
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	4	0.12
(1,304)	1:45:A:ILE:HG21	1:75:A:TYR:HD2	14	0.12
(1,304)	1:45:A:ILE:HG22	1:75:A:TYR:HD2	14	0.12
(1,304)	1:45:A:ILE:HG23	1:75:A:TYR:HD2	14	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD11	11	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD12	11	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD13	11	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD21	11	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD22	11	0.12
(1,266)	1:44:A:ILE:HD11	1:110:A:LEU:HD23	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD11	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD12	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD13	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD21	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD22	11	0.12
(1,266)	1:44:A:ILE:HD12	1:110:A:LEU:HD23	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD11	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD12	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD13	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD21	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD22	11	0.12
(1,266)	1:44:A:ILE:HD13	1:110:A:LEU:HD23	11	0.12
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	20	0.12
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	6	0.12
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	3	0.12
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	6	0.12
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	14	0.12
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	26	0.12
(2,135)	1:173:A:SER:H	1:151:A:ASN:O	18	0.11
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	17	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(2,99)	1:137:A:VAL:H	1:164:A:LEU:O	10	0.11
(2,99)	1:137:A:VAL:H	1:164:A:LEU:O	28	0.11
(2,99)	1:137:A:VAL:H	1:164:A:LEU:O	30	0.11
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	8	0.11
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	10	0.11
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	14	0.11
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	17	0.11
(2,81)	1:106:A:ALA:H	1:103:A:SER:O	22	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	2	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	7	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	24	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	26	0.11
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	30	0.11
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	8	0.11
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	11	0.11
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	18	0.11
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	19	0.11
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	6	0.11
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	9	0.11
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	16	0.11
(2,75)	1:103:A:SER:H	1:100:A:ASN:O	23	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	2	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	3	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	5	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	10	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	12	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	18	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	23	0.11
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	25	0.11
(2,39)	1:70:A:VAL:H	1:67:A:SER:O	3	0.11
(2,39)	1:70:A:VAL:H	1:67:A:SER:O	9	0.11
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG21	4	0.11
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG22	4	0.11
(1,1933)	1:182:A:ASN:H	1:183:A:THR:HG23	4	0.11
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	3	0.11
(1,1929)	1:182:A:ASN:H	1:182:A:ASN:HB2	4	0.11
(1,1905)	1:180:A:ASP:HB2	1:183:A:THR:H	11	0.11
(1,1901)	1:180:A:ASP:HB3	1:183:A:THR:HG21	19	0.11
(1,1901)	1:180:A:ASP:HB3	1:183:A:THR:HG22	19	0.11
(1,1901)	1:180:A:ASP:HB3	1:183:A:THR:HG23	19	0.11
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	5	0.11
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	5	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	5	0.11
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	5	0.11
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB2	13	0.11
(1,1895)	1:180:A:ASP:HB2	1:181:A:PRO:HB3	13	0.11
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB2	13	0.11
(1,1895)	1:180:A:ASP:HB3	1:181:A:PRO:HB3	13	0.11
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD21	20	0.11
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD22	20	0.11
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG21	1	0.11
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG22	1	0.11
(1,1892)	1:179:A:THR:H	1:179:A:THR:HG23	1	0.11
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE1	14	0.11
(1,1884)	1:178:A:TYR:H	1:178:A:TYR:HE2	14	0.11
(1,1880)	1:178:A:TYR:HD1	1:179:A:THR:H	10	0.11
(1,1880)	1:178:A:TYR:HD2	1:179:A:THR:H	10	0.11
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG2	14	0.11
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG3	14	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG11	1	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG12	1	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG13	1	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG21	1	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG22	1	0.11
(1,1783)	1:165:A:LYS:HD2	1:168:A:VAL:HG23	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG11	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG12	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG13	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG21	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG22	1	0.11
(1,1783)	1:165:A:LYS:HD3	1:168:A:VAL:HG23	1	0.11
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	22	0.11
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	29	0.11
(1,1636)	1:154:A:ARG:H	1:154:A:ARG:HD2	30	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD2	19	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD3	19	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD2	29	0.11
(1,1634)	1:154:A:ARG:H	1:154:A:ARG:HD3	29	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG21	6	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG22	6	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG23	6	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG21	19	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG22	19	0.11
(1,1508)	1:146:A:ALA:H	1:147:A:VAL:HG23	19	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1380)	1:139:A:LEU:HD21	1:162:A:TRP:HZ3	15	0.11
(1,1380)	1:139:A:LEU:HD22	1:162:A:TRP:HZ3	15	0.11
(1,1380)	1:139:A:LEU:HD23	1:162:A:TRP:HZ3	15	0.11
(1,1380)	1:139:A:LEU:HD21	1:162:A:TRP:HZ3	18	0.11
(1,1380)	1:139:A:LEU:HD22	1:162:A:TRP:HZ3	18	0.11
(1,1380)	1:139:A:LEU:HD23	1:162:A:TRP:HZ3	18	0.11
(1,1380)	1:139:A:LEU:HD21	1:162:A:TRP:HZ3	30	0.11
(1,1380)	1:139:A:LEU:HD22	1:162:A:TRP:HZ3	30	0.11
(1,1380)	1:139:A:LEU:HD23	1:162:A:TRP:HZ3	30	0.11
(1,1332)	1:134:A:ASP:H	1:135:A:ALA:HB1	8	0.11
(1,1332)	1:134:A:ASP:H	1:135:A:ALA:HB2	8	0.11
(1,1332)	1:134:A:ASP:H	1:135:A:ALA:HB3	8	0.11
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	7	0.11
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	7	0.11
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	7	0.11
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	22	0.11
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	22	0.11
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	22	0.11
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	25	0.11
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	25	0.11
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	25	0.11
(1,1284)	1:127:A:LEU:HD11	1:128:A:THR:H	30	0.11
(1,1284)	1:127:A:LEU:HD12	1:128:A:THR:H	30	0.11
(1,1284)	1:127:A:LEU:HD13	1:128:A:THR:H	30	0.11
(1,1262)	1:124:A:ARG:HG2	1:171:A:THR:H	12	0.11
(1,1262)	1:124:A:ARG:HG3	1:171:A:THR:H	12	0.11
(1,1256)	1:124:A:ARG:HA	1:171:A:THR:HA	6	0.11
(1,1228)	1:121:A:LEU:H	1:176:A:ALA:H	24	0.11
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	2	0.11
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	2	0.11
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	2	0.11
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	7	0.11
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	7	0.11
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	7	0.11
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	15	0.11
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	15	0.11
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	15	0.11
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	23	0.11
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	23	0.11
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	23	0.11
(1,1183)	1:119:A:VAL:HG11	1:179:A:THR:H	20	0.11
(1,1183)	1:119:A:VAL:HG12	1:179:A:THR:H	20	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1183)	1:119:A:VAL:HG13	1:179:A:THR:H	20	0.11
(1,1183)	1:119:A:VAL:HG21	1:179:A:THR:H	20	0.11
(1,1183)	1:119:A:VAL:HG22	1:179:A:THR:H	20	0.11
(1,1183)	1:119:A:VAL:HG23	1:179:A:THR:H	20	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	5	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	5	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	5	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	6	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	6	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	6	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	11	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	11	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	11	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	14	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	14	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	14	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	18	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	18	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	18	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	19	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	19	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	19	0.11
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	30	0.11
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	30	0.11
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	30	0.11
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG2	13	0.11
(1,1111)	1:114:A:ARG:H	1:114:A:ARG:HG3	13	0.11
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD2	28	0.11
(1,1104)	1:114:A:ARG:HE	1:181:A:PRO:HD3	28	0.11
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD1	29	0.11
(1,1102)	1:114:A:ARG:HE	1:178:A:TYR:HD2	29	0.11
(1,1098)	1:114:A:ARG:HD2	1:115:A:ASN:H	25	0.11
(1,1098)	1:114:A:ARG:HD3	1:115:A:ASN:H	25	0.11
(1,1089)	1:113:A:ARG:H	1:122:A:GLU:H	25	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	8	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	8	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	8	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	27	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	27	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	27	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	28	0.11
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	28	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	28	0.11
(1,982)	1:99:A:ALA:HB1	1:100:A:ASN:HD21	11	0.11
(1,982)	1:99:A:ALA:HB1	1:100:A:ASN:HD22	11	0.11
(1,982)	1:99:A:ALA:HB2	1:100:A:ASN:HD21	11	0.11
(1,982)	1:99:A:ALA:HB2	1:100:A:ASN:HD22	11	0.11
(1,982)	1:99:A:ALA:HB3	1:100:A:ASN:HD21	11	0.11
(1,982)	1:99:A:ALA:HB3	1:100:A:ASN:HD22	11	0.11
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE21	21	0.11
(1,905)	1:93:A:ALA:HB1	1:97:A:GLN:HE22	21	0.11
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE21	21	0.11
(1,905)	1:93:A:ALA:HB2	1:97:A:GLN:HE22	21	0.11
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE21	21	0.11
(1,905)	1:93:A:ALA:HB3	1:97:A:GLN:HE22	21	0.11
(1,876)	1:91:A:THR:H	1:94:A:GLU:HA	18	0.11
(1,876)	1:91:A:THR:H	1:94:A:GLU:HA	24	0.11
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	25	0.11
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	25	0.11
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	25	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	2	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	2	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	11	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	11	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	27	0.11
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	27	0.11
(1,741)	1:77:A:SER:H	1:77:A:SER:HB3	3	0.11
(1,741)	1:77:A:SER:H	1:77:A:SER:HB3	6	0.11
(1,741)	1:77:A:SER:H	1:77:A:SER:HB3	21	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	12	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	12	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	12	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	27	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	27	0.11
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	27	0.11
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD2	30	0.11
(1,577)	1:68:A:GLN:H	1:69:A:LYS:HD3	30	0.11
(1,409)	1:60:A:LEU:HD11	1:61:A:ASP:H	19	0.11
(1,409)	1:60:A:LEU:HD12	1:61:A:ASP:H	19	0.11
(1,409)	1:60:A:LEU:HD13	1:61:A:ASP:H	19	0.11
(1,409)	1:60:A:LEU:HD21	1:61:A:ASP:H	19	0.11
(1,409)	1:60:A:LEU:HD22	1:61:A:ASP:H	19	0.11
(1,409)	1:60:A:LEU:HD23	1:61:A:ASP:H	19	0.11
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG11	8	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG12	8	0.11
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG13	8	0.11
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG21	8	0.11
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG22	8	0.11
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG23	8	0.11
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	17	0.11
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	17	0.11
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	17	0.11
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	27	0.11
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	27	0.11
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	27	0.11
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	28	0.11
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	28	0.11
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	28	0.11
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	4	0.11
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	11	0.11
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	14	0.11
(1,201)	1:39:A:LEU:H	1:39:A:LEU:HG	26	0.11
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	7	0.11
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	9	0.11
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	15	0.11
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	26	0.11
(1,170)	1:37:A:ASP:HB2	1:39:A:LEU:H	27	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	2	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	12	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	15	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	19	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	21	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	22	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	23	0.11
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	28	0.11
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD11	4	0.11
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD12	4	0.11
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD13	4	0.11
(2,131)	1:168:A:VAL:H	1:166:A:PRO:O	7	0.1
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	12	0.1
(2,79)	1:105:A:ALA:H	1:102:A:ASN:O	17	0.1
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	4	0.1
(2,77)	1:104:A:ASP:H	1:101:A:MET:O	14	0.1
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	15	0.1
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	16	0.1
(2,73)	1:99:A:ALA:H	1:96:A:PRO:O	19	0.1

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1930)	1:182:A:ASN:H	1:182:A:ASN:HD21	17	0.1
(1,1930)	1:182:A:ASN:H	1:182:A:ASN:HD22	17	0.1
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD21	27	0.1
(1,1894)	1:180:A:ASP:HA	1:182:A:ASN:HD22	27	0.1
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG2	9	0.1
(1,1855)	1:175:A:GLN:H	1:175:A:GLN:HG3	9	0.1
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	10	0.1
(1,1781)	1:165:A:LYS:HB3	1:168:A:VAL:HB	30	0.1
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE21	24	0.1
(1,1726)	1:161:A:GLN:HA	1:161:A:GLN:HE22	24	0.1
(1,1582)	1:150:A:THR:HG21	1:175:A:GLN:H	21	0.1
(1,1582)	1:150:A:THR:HG22	1:175:A:GLN:H	21	0.1
(1,1582)	1:150:A:THR:HG23	1:175:A:GLN:H	21	0.1
(1,1582)	1:150:A:THR:HG21	1:175:A:GLN:H	26	0.1
(1,1582)	1:150:A:THR:HG22	1:175:A:GLN:H	26	0.1
(1,1582)	1:150:A:THR:HG23	1:175:A:GLN:H	26	0.1
(1,1457)	1:143:A:PHE:HD1	1:159:A:VAL:H	28	0.1
(1,1457)	1:143:A:PHE:HD2	1:159:A:VAL:H	28	0.1
(1,1380)	1:139:A:LEU:HD21	1:162:A:TRP:HZ3	20	0.1
(1,1380)	1:139:A:LEU:HD22	1:162:A:TRP:HZ3	20	0.1
(1,1380)	1:139:A:LEU:HD23	1:162:A:TRP:HZ3	20	0.1
(1,1370)	1:139:A:LEU:HD11	1:141:A:VAL:H	1	0.1
(1,1370)	1:139:A:LEU:HD12	1:141:A:VAL:H	1	0.1
(1,1370)	1:139:A:LEU:HD13	1:141:A:VAL:H	1	0.1
(1,1370)	1:139:A:LEU:HD21	1:141:A:VAL:H	1	0.1
(1,1370)	1:139:A:LEU:HD22	1:141:A:VAL:H	1	0.1
(1,1370)	1:139:A:LEU:HD23	1:141:A:VAL:H	1	0.1
(1,1228)	1:121:A:LEU:H	1:176:A:ALA:H	28	0.1
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	18	0.1
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	18	0.1
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	18	0.1
(1,1197)	1:120:A:ILE:HD11	1:121:A:LEU:H	19	0.1
(1,1197)	1:120:A:ILE:HD12	1:121:A:LEU:H	19	0.1
(1,1197)	1:120:A:ILE:HD13	1:121:A:LEU:H	19	0.1
(1,1183)	1:119:A:VAL:HG11	1:179:A:THR:H	30	0.1
(1,1183)	1:119:A:VAL:HG12	1:179:A:THR:H	30	0.1
(1,1183)	1:119:A:VAL:HG13	1:179:A:THR:H	30	0.1
(1,1183)	1:119:A:VAL:HG21	1:179:A:THR:H	30	0.1
(1,1183)	1:119:A:VAL:HG22	1:179:A:THR:H	30	0.1
(1,1183)	1:119:A:VAL:HG23	1:179:A:THR:H	30	0.1
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	10	0.1
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	10	0.1

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	10	0.1
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	12	0.1
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	12	0.1
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	12	0.1
(1,1160)	1:118:A:ILE:HD11	1:177:A:ARG:HA	17	0.1
(1,1160)	1:118:A:ILE:HD12	1:177:A:ARG:HA	17	0.1
(1,1160)	1:118:A:ILE:HD13	1:177:A:ARG:HA	17	0.1
(1,1089)	1:113:A:ARG:H	1:122:A:GLU:H	2	0.1
(1,1089)	1:113:A:ARG:H	1:122:A:GLU:H	27	0.1
(1,1073)	1:112:A:LEU:HG	1:113:A:ARG:H	6	0.1
(1,1073)	1:112:A:LEU:HG	1:113:A:ARG:H	21	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	15	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	15	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	15	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE1	22	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE2	22	0.1
(1,1001)	1:101:A:MET:HA	1:101:A:MET:HE3	22	0.1
(1,895)	1:92:A:PHE:HE1	1:120:A:ILE:H	25	0.1
(1,895)	1:92:A:PHE:HE2	1:120:A:ILE:H	25	0.1
(1,895)	1:92:A:PHE:HE1	1:120:A:ILE:H	30	0.1
(1,895)	1:92:A:PHE:HE2	1:120:A:ILE:H	30	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD11	13	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD12	13	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD13	13	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD21	13	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD22	13	0.1
(1,882)	1:92:A:PHE:HA	1:95:A:LEU:HD23	13	0.1
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	8	0.1
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	8	0.1
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	8	0.1
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	17	0.1
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	17	0.1
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	17	0.1
(1,873)	1:91:A:THR:HG21	1:94:A:GLU:H	21	0.1
(1,873)	1:91:A:THR:HG22	1:94:A:GLU:H	21	0.1
(1,873)	1:91:A:THR:HG23	1:94:A:GLU:H	21	0.1
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB2	14	0.1
(1,837)	1:88:A:SER:H	1:90:A:LEU:HB3	14	0.1
(1,741)	1:77:A:SER:H	1:77:A:SER:HB3	17	0.1
(1,635)	1:72:A:VAL:HA	1:86:A:VAL:H	13	0.1
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE1	6	0.1
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE2	6	0.1

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,615)	1:70:A:VAL:H	1:101:A:MET:HE3	6	0.1
(1,588)	1:69:A:LYS:HG2	1:70:A:VAL:H	14	0.1
(1,588)	1:69:A:LYS:HG3	1:70:A:VAL:H	14	0.1
(1,440)	1:61:A:ASP:H	1:62:A:GLY:H	28	0.1
(1,403)	1:60:A:LEU:HA	1:83:A:SER:HB2	6	0.1
(1,403)	1:60:A:LEU:HA	1:83:A:SER:HB3	6	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG11	2	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG12	2	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG13	2	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG21	2	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG22	2	0.1
(1,368)	1:55:A:ASP:HA	1:81:A:VAL:HG23	2	0.1
(1,339)	1:48:A:ALA:HB1	1:83:A:SER:H	8	0.1
(1,339)	1:48:A:ALA:HB2	1:83:A:SER:H	8	0.1
(1,339)	1:48:A:ALA:HB3	1:83:A:SER:H	8	0.1
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD1	29	0.1
(1,127)	1:34:A:ILE:HG12	1:178:A:TYR:HD2	29	0.1
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD1	29	0.1
(1,127)	1:34:A:ILE:HG13	1:178:A:TYR:HD2	29	0.1
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	11	0.1
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	18	0.1
(1,103)	1:33:A:THR:HB	1:142:A:ALA:H	20	0.1
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD11	12	0.1
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD12	12	0.1
(1,89)	1:32:A:ILE:H	1:32:A:ILE:HD13	12	0.1

## 10 Dihedral-angle violation analysis [i](#)

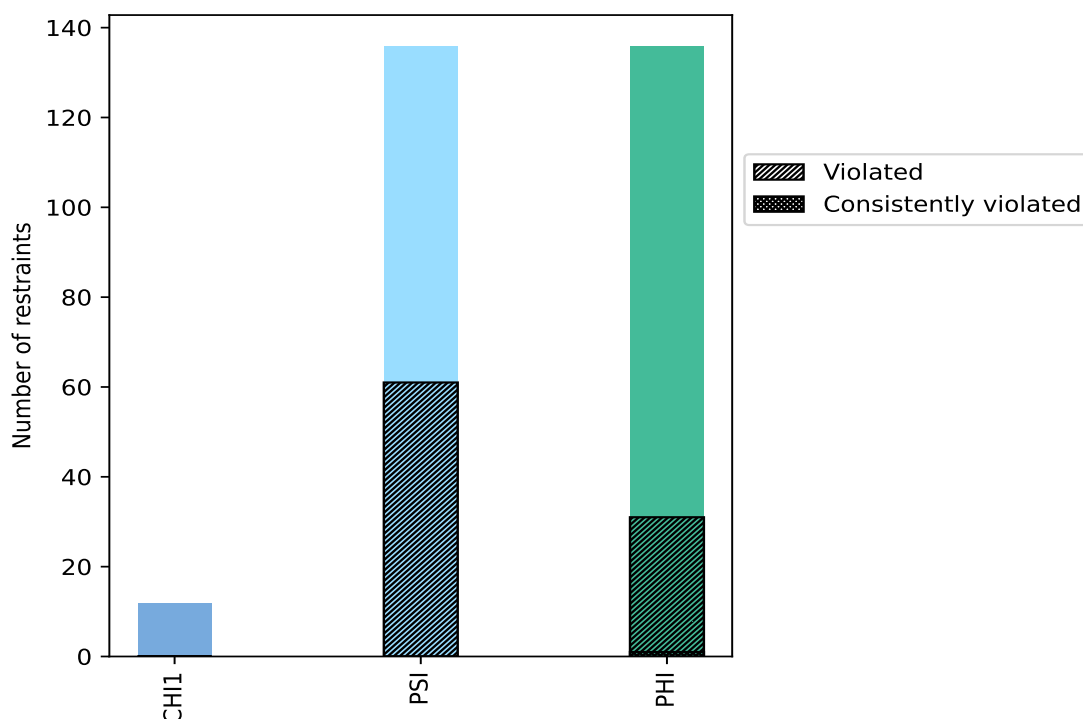
### 10.1 Summary of dihedral-angle violations [i](#)

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	% <sup>1</sup>	Violated <sup>3</sup>			Consistently Violated <sup>4</sup>		
			Count	% <sup>2</sup>	% <sup>1</sup>	Count	% <sup>2</sup>	% <sup>1</sup>
CHI1	12	4.2	0	0.0	0.0	0	0.0	0.0
PSI	136	47.9	61	44.9	21.5	0	0.0	0.0
PHI	136	47.9	31	22.8	10.9	1	0.7	0.4
Total	284	100.0	92	32.4	32.4	1	0.4	0.4

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

#### 10.1.1 Bar chart : Distribution of dihedral-angles and violations [i](#)



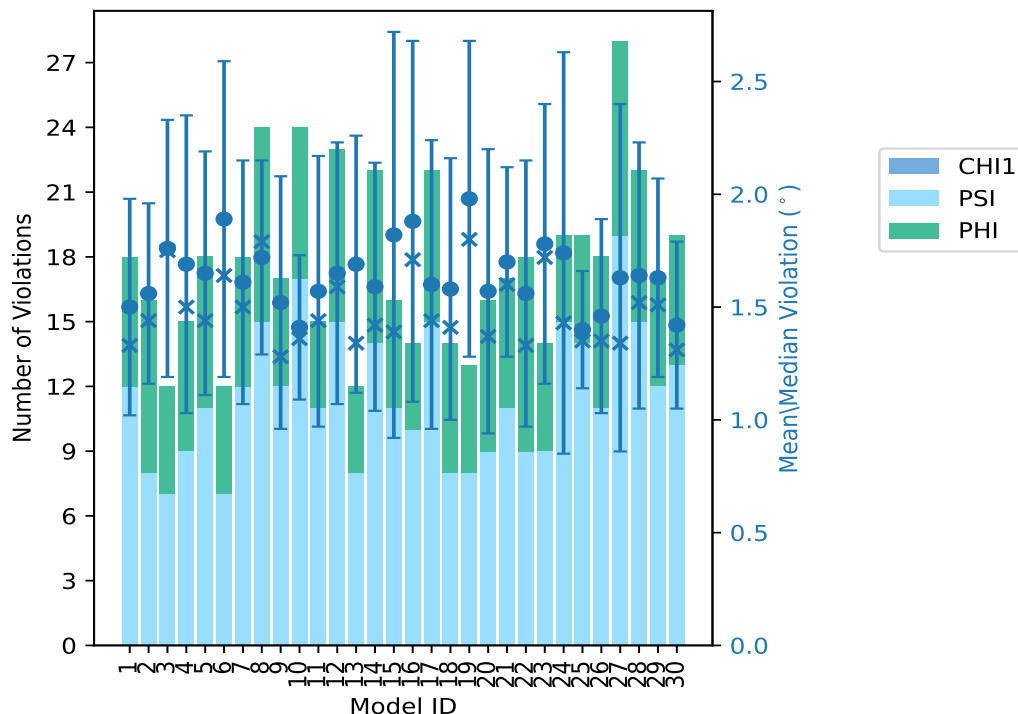
Violated and consistently violated restraints are shown using different hatch patterns in their respective categories

## 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 (°)
	CHI1	PSI	PHI	Total				
1	0	12	6	18	1.5	2.6	0.48	1.33
2	0	8	8	16	1.56	2.63	0.4	1.44
3	0	7	5	12	1.76	3.1	0.57	1.75
4	0	9	6	15	1.69	3.05	0.66	1.5
5	0	11	7	18	1.65	2.83	0.54	1.44
6	0	7	5	12	1.89	3.88	0.7	1.64
7	0	12	6	18	1.61	3.26	0.54	1.5
8	0	15	9	24	1.72	2.46	0.43	1.79
9	0	12	5	17	1.52	2.86	0.56	1.28
10	0	17	7	24	1.41	2.22	0.32	1.36
11	0	11	4	15	1.57	3.02	0.6	1.44
12	0	15	8	23	1.65	3.14	0.58	1.59
13	0	8	4	12	1.69	2.59	0.57	1.34
14	0	14	8	22	1.59	3.35	0.55	1.42
15	0	11	5	16	1.82	4.51	0.9	1.39
16	0	10	4	14	1.88	4.13	0.8	1.71
17	0	15	7	22	1.6	3.42	0.64	1.44
18	0	8	6	14	1.58	2.67	0.58	1.41
19	0	8	5	13	1.98	3.34	0.7	1.8
20	0	9	7	16	1.57	3.54	0.63	1.37
21	0	11	6	17	1.7	2.4	0.42	1.6
22	0	9	9	18	1.56	3.57	0.59	1.33
23	0	9	5	14	1.78	2.83	0.62	1.72
24	0	15	4	19	1.74	4.06	0.89	1.43
25	0	14	5	19	1.4	1.96	0.26	1.35
26	0	11	7	18	1.46	2.61	0.43	1.35
27	0	19	9	28	1.63	4.06	0.77	1.34
28	0	15	7	22	1.64	3.12	0.59	1.52
29	0	12	5	17	1.63	2.55	0.44	1.51
30	0	13	6	19	1.42	2.18	0.37	1.31

### 10.2.1 Bar graph : Dihedral violation statistics for each model [i](#)



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 [i](#)

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		
CHI1	PSI	PHI	Total	Count <sup>1</sup>	%
0	20	9	29	1	3.3
0	8	6	14	2	6.7
0	4	5	9	3	10.0
0	5	2	7	4	13.3
0	4	1	5	5	16.7
0	1	0	1	6	20.0
0	5	2	7	7	23.3
0	2	0	2	8	26.7
0	1	1	2	9	30.0
0	0	0	0	10	33.3
0	0	0	0	11	36.7

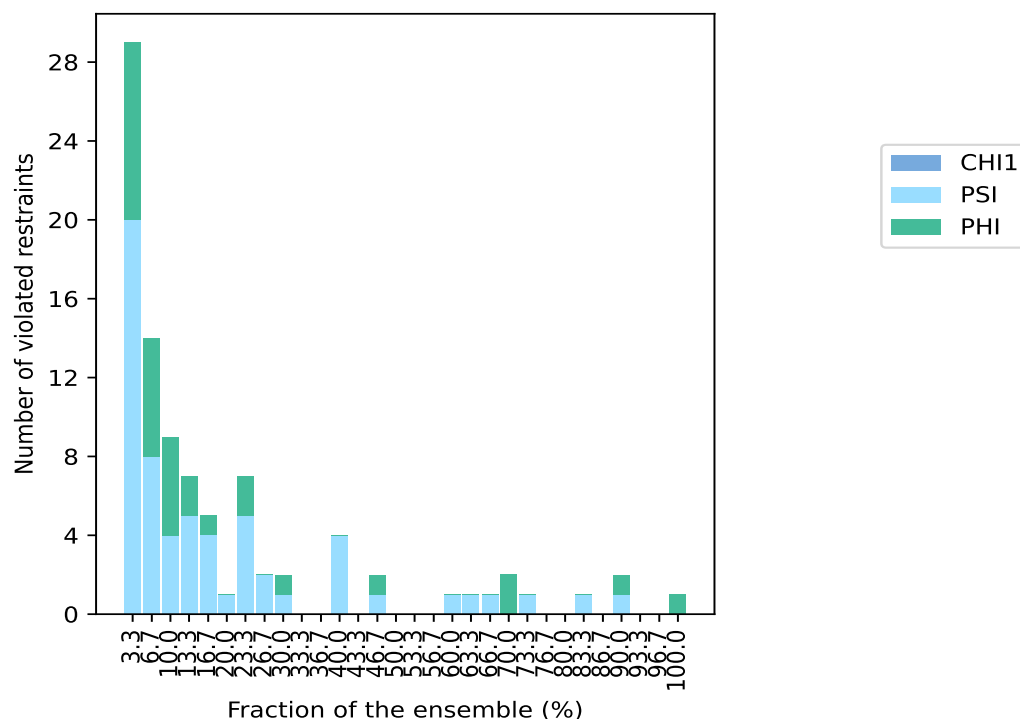
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Number of violated restraints				Fraction of the ensemble	
CHI1	PSI	PHI	Total	Count <sup>1</sup>	%
0	4	0	4	12	40.0
0	0	0	0	13	43.3
0	1	1	2	14	46.7
0	0	0	0	15	50.0
0	0	0	0	16	53.3
0	0	0	0	17	56.7
0	1	0	1	18	60.0
0	1	0	1	19	63.3
0	1	0	1	20	66.7
0	0	2	2	21	70.0
0	1	0	1	22	73.3
0	0	0	0	23	76.7
0	0	0	0	24	80.0
0	1	0	1	25	83.3
0	0	0	0	26	86.7
0	1	1	2	27	90.0
0	0	0	0	28	93.3
0	0	0	0	29	96.7
0	0	1	1	30	100.0

<sup>1</sup> Number of models with violations

### 10.3.1 Bar graph : Dihedral-angle Violation statistics for the ensemble [i](#)

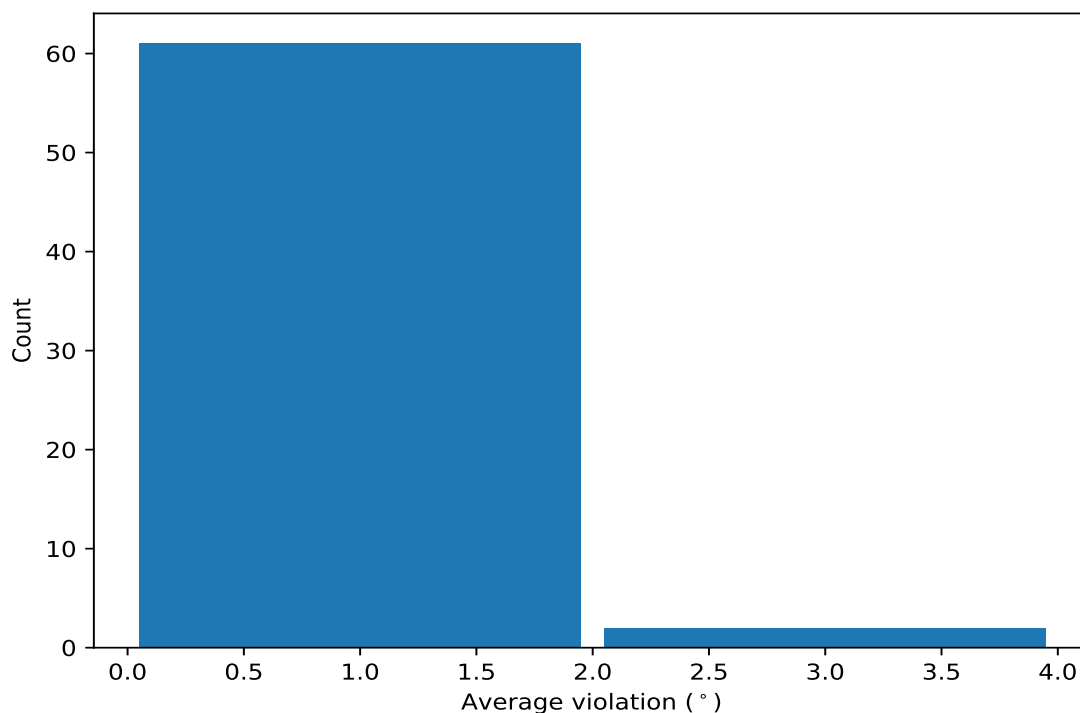


## 10.4 Most violated dihedral-angle restraints in the ensemble [i](#)

### 10.4.1 Histogram : Distribution of mean dihedral-angle violations [i](#)

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 [i](#)

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 <sup>1</sup>	Mean	SD <sup>2</sup>	Median
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	30	2.83	0.78	2.72
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	27	1.64	0.59	1.44
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	27	1.49	0.34	1.43
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	25	1.91	0.52	1.94
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	22	1.58	0.27	1.6
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	21	2.25	0.86	2.4
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	21	1.85	0.35	1.93
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	20	1.42	0.36	1.33
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	19	1.29	0.23	1.2
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	18	1.82	0.51	1.64
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	14	1.73	0.61	1.54
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	14	1.3	0.18	1.3
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	12	1.8	0.88	1.21
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	12	1.71	0.34	1.69
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	12	1.51	0.4	1.48
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	12	1.41	0.26	1.38
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	9	1.35	0.32	1.35
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	9	1.21	0.27	1.05
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	8	1.34	0.16	1.4
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	8	1.34	0.26	1.3
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	7	1.67	0.29	1.72

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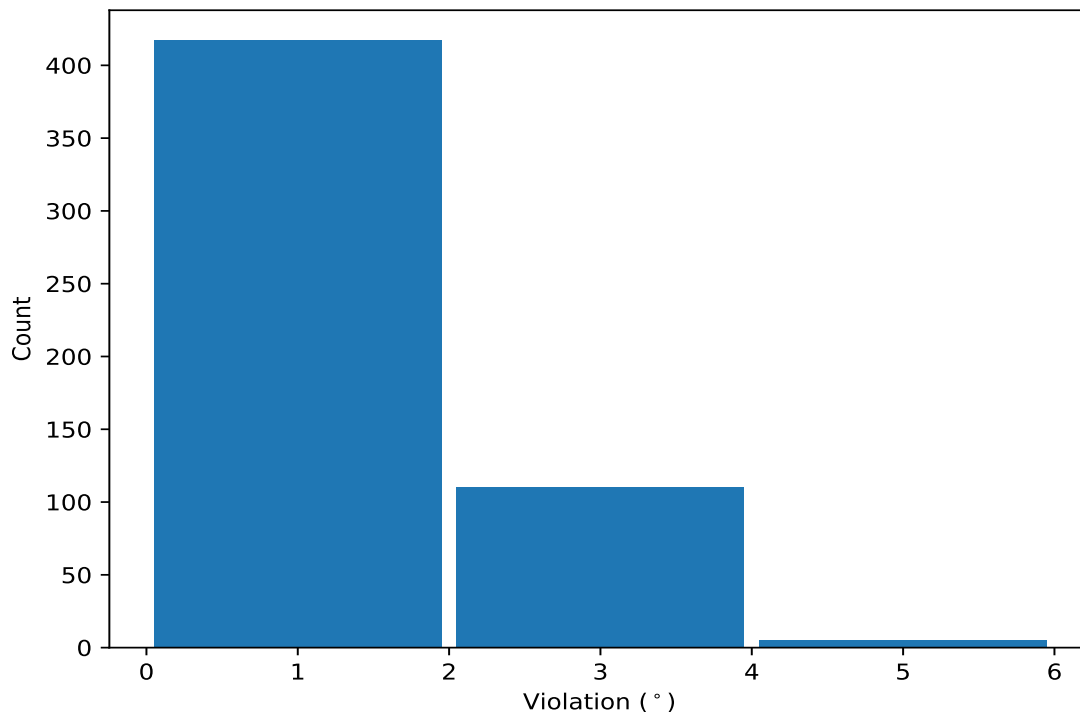
Key	Atom-1	Atom-2	Atom-3	Atom-4	Models <sup>1</sup>	Mean	SD <sup>2</sup>	Median
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	7	1.66	0.48	1.7
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	7	1.54	0.42	1.41
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	7	1.52	0.37	1.5
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	7	1.41	0.29	1.44
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	7	1.32	0.14	1.29
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	7	1.25	0.28	1.07
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	6	1.23	0.21	1.2
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	5	1.74	0.53	2.01
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	5	1.64	0.31	1.68
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	5	1.29	0.15	1.31
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	5	1.27	0.12	1.31
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	5	1.22	0.12	1.21
(1,156)	1:114:A:ARG:N	1:114:A:ARG:CA	1:114:A:ARG:C	1:115:A:ASN:N	4	1.61	0.49	1.38
(1,239)	1:164:A:LEU:C	1:165:A:LYS:N	1:165:A:LYS:CA	1:165:A:LYS:C	4	1.47	0.44	1.27
(1,56)	1:58:A:PRO:N	1:58:A:PRO:CA	1:58:A:PRO:C	1:59:A:ALA:N	4	1.42	0.14	1.44
(1,80)	1:73:A:SER:N	1:73:A:SER:CA	1:73:A:SER:C	1:74:A:ASN:N	4	1.41	0.32	1.24
(1,89)	1:79:A:GLY:C	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	4	1.38	0.23	1.4
(1,270)	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	1:182:A:ASN:N	4	1.3	0.29	1.27
(1,252)	1:172:A:MET:N	1:172:A:MET:CA	1:172:A:MET:C	1:173:A:SER:N	4	1.28	0.13	1.3
(1,267)	1:179:A:THR:C	1:180:A:ASP:N	1:180:A:ASP:CA	1:180:A:ASP:C	3	1.94	0.59	2.09
(1,183)	1:132:A:ASP:C	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	3	1.91	0.21	1.87
(1,184)	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	1:134:A:ASP:N	3	1.9	0.89	1.56
(1,158)	1:115:A:ASN:N	1:115:A:ASN:CA	1:115:A:ASN:C	1:116:A:GLY:N	3	1.47	0.41	1.19
(1,85)	1:75:A:TYR:C	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	3	1.46	0.43	1.2
(1,170)	1:122:A:GLU:N	1:122:A:GLU:CA	1:122:A:GLU:C	1:123:A:GLY:N	3	1.46	0.2	1.44
(1,167)	1:120:A:ILE:C	1:121:A:LEU:N	1:121:A:LEU:CA	1:121:A:LEU:C	3	1.32	0.12	1.4
(1,177)	1:125:A:ALA:C	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	3	1.2	0.17	1.19
(1,146)	1:109:A:ASN:N	1:109:A:ASN:CA	1:109:A:ASN:C	1:110:A:LEU:N	3	1.13	0.07	1.11
(1,50)	1:55:A:ASP:N	1:55:A:ASP:CA	1:55:A:ASP:C	1:56:A:THR:N	2	1.89	0.56	1.89
(1,264)	1:178:A:TYR:N	1:178:A:TYR:CA	1:178:A:TYR:C	1:179:A:THR:N	2	1.85	0.39	1.85
(1,51)	1:55:A:ASP:C	1:56:A:THR:N	1:56:A:THR:CA	1:56:A:THR:C	2	1.76	0.51	1.76
(1,215)	1:152:A:GLY:C	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	2	1.56	0.2	1.56
(1,261)	1:176:A:ALA:C	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	2	1.41	0.37	1.41
(1,272)	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	1:183:A:THR:N	2	1.39	0.04	1.39
(1,178)	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	1:127:A:LEU:N	2	1.37	0.28	1.37
(1,262)	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	1:178:A:TYR:N	2	1.32	0.14	1.32
(1,245)	1:168:A:VAL:C	1:169:A:VAL:N	1:169:A:VAL:CA	1:169:A:VAL:C	2	1.28	0.01	1.28
(1,114)	1:93:A:ALA:N	1:93:A:ALA:CA	1:93:A:ALA:C	1:94:A:GLU:N	2	1.22	0.12	1.22
(1,140)	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	1:107:A:GLY:N	2	1.22	0.04	1.22
(1,21)	1:36:A:PRO:C	1:37:A:ASP:N	1:37:A:ASP:CA	1:37:A:ASP:C	2	1.14	0.15	1.14
(1,23)	1:37:A:ASP:C	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	2	1.1	0.05	1.1
(1,216)	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	1:154:A:ARG:N	2	1.06	0.03	1.06

<sup>1</sup> Number of violated models, <sup>2</sup>Standard deviation, All angle values are in degree (°)

## 10.5 All violated dihedral-angle restraints [i](#)

### 10.5.1 Histogram : Distribution of violations [i](#)

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 [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.

Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	15	4.51
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	16	4.13
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	27	4.06
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	24	4.06
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	24	4.02
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	6	3.88
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	22	3.57
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	20	3.54
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	17	3.42
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	14	3.35
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	19	3.34
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	17	3.3
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	27	3.26
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	7	3.26

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	19	3.19
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	12	3.14
(1,184)	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	1:134:A:ASP:N	28	3.12
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	3	3.1
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	15	3.08
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	4	3.05
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	27	3.02
(1,46)	1:53:A:SER:N	1:53:A:SER:CA	1:53:A:SER:C	1:54:A:LYS:N	11	3.02
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	12	2.96
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	4	2.95
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	27	2.93
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	9	2.86
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	16	2.85
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	9	2.84
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	5	2.83
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	23	2.83
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	14	2.81
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	7	2.76
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	28	2.76
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	23	2.73
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	15	2.73
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	11	2.72
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	18	2.67
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	5	2.65
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	2	2.63
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	3	2.62
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	23	2.62
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	26	2.61
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	1	2.6
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	13	2.59
(1,267)	1:179:A:THR:C	1:180:A:ASP:N	1:180:A:ASP:CA	1:180:A:ASP:C	6	2.58
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	19	2.58
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	18	2.56
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	29	2.55
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	13	2.52
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	5	2.5
(1,156)	1:114:A:ARG:N	1:114:A:ARG:CA	1:114:A:ARG:C	1:115:A:ASN:N	8	2.46
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	19	2.45
(1,50)	1:55:A:ASP:N	1:55:A:ASP:CA	1:55:A:ASP:C	1:56:A:THR:N	28	2.45
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	20	2.44
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	8	2.44
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1	2.42
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	15	2.42
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	12	2.41
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	13	2.4
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	21	2.4
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	12	2.4
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	21	2.37
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	21	2.33
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	1	2.33
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	4	2.32

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	8	2.29
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	27	2.29
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	2	2.27
(1,51)	1:55:A:ASP:C	1:56:A:THR:N	1:56:A:THR:CA	1:56:A:THR:C	5	2.27
(1,264)	1:178:A:TYR:N	1:178:A:TYR:CA	1:178:A:TYR:C	1:179:A:THR:N	29	2.24
(1,52)	1:56:A:THR:N	1:56:A:THR:CA	1:56:A:THR:C	1:57:A:GLY:N	24	2.24
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	16	2.23
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	18	2.23
(1,239)	1:164:A:LEU:C	1:165:A:LYS:N	1:165:A:LYS:CA	1:165:A:LYS:C	10	2.22
(1,90)	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	1:81:A:VAL:N	29	2.22
(1,186)	1:134:A:ASP:N	1:134:A:ASP:CA	1:134:A:ASP:C	1:135:A:ALA:N	29	2.2
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	18	2.19
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	28	2.19
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	30	2.18
(1,183)	1:132:A:ASP:C	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	8	2.18
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	4	2.17
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	4	2.15
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	26	2.14
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	24	2.13
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	27	2.12
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	11	2.12
(1,269)	1:180:A:ASP:C	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	23	2.11
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	16	2.11
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	20	2.1
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	22	2.1
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	30	2.1
(1,267)	1:179:A:THR:C	1:180:A:ASP:N	1:180:A:ASP:CA	1:180:A:ASP:C	16	2.09
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	23	2.09
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	30	2.09
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	8	2.09
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	6	2.09
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	13	2.08
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	24	2.07
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	9	2.06
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	13	2.06
(1,85)	1:75:A:TYR:C	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	17	2.06
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	28	2.05
(1,158)	1:115:A:ASN:N	1:115:A:ASN:CA	1:115:A:ASN:C	1:116:A:GLY:N	21	2.05
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	8	2.05
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	8	2.04
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	24	2.04
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	16	2.03
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	19	2.03
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	22	2.03
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	19	2.02
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	23	2.01
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	22	2.01
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	17	2.01
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	12	2.0
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	21	2.0
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	16	1.99

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	8	1.98
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	23	1.98
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	28	1.98
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	14	1.98
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	9	1.97
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	5	1.96
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	25	1.96
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	17	1.96
(1,80)	1:73:A:SER:N	1:73:A:SER:CA	1:73:A:SER:C	1:74:A:ASN:N	25	1.96
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	3	1.94
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	21	1.93
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	21	1.93
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	26	1.93
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	10	1.92
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	14	1.91
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	24	1.9
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	8	1.9
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	2	1.9
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	28	1.9
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	6	1.89
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	14	1.89
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	26	1.88
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	8	1.88
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	17	1.87
(1,187)	1:134:A:ASP:C	1:135:A:ALA:N	1:135:A:ALA:CA	1:135:A:ALA:C	8	1.87
(1,183)	1:132:A:ASP:C	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	12	1.87
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	10	1.86
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	2	1.86
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	14	1.86
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	27	1.86
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	6	1.86
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	3	1.84
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	11	1.84
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	7	1.84
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	10	1.84
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	29	1.83
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	8	1.82
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	28	1.81
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	3	1.81
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	29	1.8
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	19	1.8
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	28	1.8
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	28	1.8
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	18	1.79
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	1	1.79
(1,261)	1:176:A:ALA:C	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	30	1.78
(1,215)	1:152:A:GLY:C	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	12	1.76
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	19	1.76
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	3	1.76
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	8	1.76
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	7	1.75

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,87)	1:78:A:ASP:C	1:79:A:GLY:N	1:79:A:GLY:CA	1:79:A:GLY:C	29	1.74
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	3	1.74
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	12	1.73
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	21	1.72
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	10	1.72
(1,170)	1:122:A:GLU:N	1:122:A:GLU:CA	1:122:A:GLU:C	1:123:A:GLY:N	12	1.71
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	22	1.7
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	1	1.7
(1,89)	1:79:A:GLY:C	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	6	1.7
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	15	1.69
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	22	1.69
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	12	1.69
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	30	1.68
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	25	1.68
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	14	1.68
(1,270)	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	1:182:A:ASN:N	5	1.67
(1,183)	1:132:A:ASP:C	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	20	1.67
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	10	1.67
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	8	1.67
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	4	1.66
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	5	1.66
(1,178)	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	1:127:A:LEU:N	19	1.65
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	17	1.65
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	15	1.65
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	27	1.64
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	7	1.63
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	1	1.63
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	30	1.62
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	26	1.62
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	10	1.61
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	14	1.6
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	21	1.6
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	11	1.6
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	26	1.6
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	7	1.59
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	5	1.59
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	12	1.59
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	12	1.59
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	6	1.58
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	25	1.57
(1,56)	1:58:A:PRO:N	1:58:A:PRO:CA	1:58:A:PRO:C	1:59:A:ALA:N	25	1.57
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	7	1.57
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	24	1.56
(1,184)	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	1:134:A:ASP:N	8	1.56
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	29	1.56
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	22	1.55
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	18	1.55
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	3	1.55
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	7	1.55
(1,56)	1:58:A:PRO:N	1:58:A:PRO:CA	1:58:A:PRO:C	1:59:A:ALA:N	20	1.55
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	17	1.55

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	7	1.54
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	6	1.54
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	9	1.53
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	2	1.53
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	11	1.53
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	28	1.52
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	8	1.52
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	21	1.52
(1,211)	1:149:A:SER:C	1:150:A:THR:N	1:150:A:THR:CA	1:150:A:THR:C	4	1.51
(1,185)	1:133:A:PRO:C	1:134:A:ASP:N	1:134:A:ASP:CA	1:134:A:ASP:C	28	1.51
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	2	1.51
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	29	1.51
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	20	1.5
(1,270)	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	1:182:A:ASN:N	27	1.5
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	8	1.5
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	5	1.5
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	4	1.5
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	17	1.5
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	1	1.49
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	2	1.48
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	10	1.48
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	21	1.48
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	26	1.47
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	12	1.47
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	6	1.47
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	11	1.47
(1,264)	1:178:A:TYR:N	1:178:A:TYR:CA	1:178:A:TYR:C	1:179:A:THR:N	23	1.46
(1,262)	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	1:178:A:TYR:N	24	1.46
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	6	1.46
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	10	1.46
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	12	1.46
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	7	1.46
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	25	1.46
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	2	1.46
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	17	1.46
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	14	1.46
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	25	1.45
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	18	1.45
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	25	1.45
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	29	1.45
(1,252)	1:172:A:MET:N	1:172:A:MET:CA	1:172:A:MET:C	1:173:A:SER:N	26	1.44
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	22	1.44
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	14	1.44
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	17	1.44
(1,204)	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	1:144:A:PRO:N	29	1.44
(1,170)	1:122:A:GLU:N	1:122:A:GLU:CA	1:122:A:GLU:C	1:123:A:GLY:N	14	1.44
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	11	1.44
(1,272)	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	1:183:A:THR:N	24	1.43
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	15	1.43
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	6	1.43
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	16	1.43

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	17	1.43
(1,89)	1:79:A:GLY:C	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	27	1.43
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	20	1.42
(1,167)	1:120:A:ILE:C	1:121:A:LEU:N	1:121:A:LEU:CA	1:121:A:LEU:C	2	1.42
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	7	1.42
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	8	1.42
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	12	1.41
(1,177)	1:125:A:ALA:C	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	8	1.41
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	14	1.41
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	10	1.41
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	27	1.41
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	23	1.4
(1,167)	1:120:A:ILE:C	1:121:A:LEU:N	1:121:A:LEU:CA	1:121:A:LEU:C	15	1.4
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	27	1.4
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	30	1.39
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	5	1.39
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	21	1.39
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	2	1.39
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	20	1.39
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	30	1.39
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	7	1.39
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	15	1.38
(1,156)	1:114:A:ARG:N	1:114:A:ARG:CA	1:114:A:ARG:C	1:115:A:ASN:N	10	1.38
(1,156)	1:114:A:ARG:N	1:114:A:ARG:CA	1:114:A:ARG:C	1:115:A:ASN:N	25	1.38
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	27	1.38
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	24	1.38
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	13	1.37
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	14	1.37
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	2	1.37
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	18	1.37
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	26	1.37
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	16	1.37
(1,89)	1:79:A:GLY:C	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	21	1.37
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	9	1.37
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	10	1.37
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	2	1.36
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	3	1.36
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	1	1.36
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	15	1.36
(1,272)	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	1:183:A:THR:N	4	1.35
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	25	1.35
(1,215)	1:152:A:GLY:C	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	5	1.35
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	27	1.35
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	10	1.35
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	20	1.35
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	22	1.35
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	14	1.35
(1,114)	1:93:A:ALA:N	1:93:A:ALA:CA	1:93:A:ALA:C	1:94:A:GLU:N	15	1.34
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	1	1.34
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	5	1.34
(1,252)	1:172:A:MET:N	1:172:A:MET:CA	1:172:A:MET:C	1:173:A:SER:N	11	1.33

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	27	1.33
(1,182)	1:129:A:SER:N	1:129:A:SER:CA	1:129:A:SER:C	1:130:A:VAL:N	27	1.33
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	30	1.33
(1,56)	1:58:A:PRO:N	1:58:A:PRO:CA	1:58:A:PRO:C	1:59:A:ALA:N	10	1.33
(1,50)	1:55:A:ASP:N	1:55:A:ASP:CA	1:55:A:ASP:C	1:56:A:THR:N	15	1.33
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	9	1.33
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	21	1.33
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	29	1.32
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	26	1.32
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	25	1.32
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	1	1.31
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	3	1.31
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	13	1.31
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	30	1.31
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	20	1.31
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	14	1.31
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	22	1.3
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	28	1.3
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	14	1.3
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	16	1.3
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	25	1.3
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	2	1.3
(1,245)	1:168:A:VAL:C	1:169:A:VAL:N	1:169:A:VAL:CA	1:169:A:VAL:C	17	1.29
(1,239)	1:164:A:LEU:C	1:165:A:LYS:N	1:165:A:LYS:CA	1:165:A:LYS:C	13	1.29
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	14	1.29
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	24	1.29
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	19	1.29
(1,21)	1:36:A:PRO:C	1:37:A:ASP:N	1:37:A:ASP:CA	1:37:A:ASP:C	10	1.29
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	1	1.29
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	9	1.28
(1,245)	1:168:A:VAL:C	1:169:A:VAL:N	1:169:A:VAL:CA	1:169:A:VAL:C	19	1.28
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	7	1.28
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	9	1.28
(1,80)	1:73:A:SER:N	1:73:A:SER:CA	1:73:A:SER:C	1:74:A:ASN:N	15	1.28
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	5	1.28
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	5	1.27
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	26	1.27
(1,25)	1:38:A:ASP:C	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	20	1.27
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	17	1.27
(1,252)	1:172:A:MET:N	1:172:A:MET:CA	1:172:A:MET:C	1:173:A:SER:N	10	1.26
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	9	1.26
(1,239)	1:164:A:LEU:C	1:165:A:LYS:N	1:165:A:LYS:CA	1:165:A:LYS:C	25	1.26
(1,176)	1:125:A:ALA:N	1:125:A:ALA:CA	1:125:A:ALA:C	1:126:A:ASP:N	22	1.26
(1,140)	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	1:107:A:GLY:N	4	1.26
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	7	1.26
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	2	1.26
(1,8)	1:30:A:ALA:N	1:30:A:ALA:CA	1:30:A:ALA:C	1:31:A:SER:N	17	1.26
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	5	1.25
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	14	1.25
(1,192)	1:137:A:VAL:N	1:137:A:VAL:CA	1:137:A:VAL:C	1:138:A:GLU:N	27	1.25
(1,92)	1:81:A:VAL:N	1:81:A:VAL:CA	1:81:A:VAL:C	1:82:A:GLY:N	29	1.25

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,56)	1:58:A:PRO:N	1:58:A:PRO:CA	1:58:A:PRO:C	1:59:A:ALA:N	15	1.25
(1,51)	1:55:A:ASP:C	1:56:A:THR:N	1:56:A:THR:CA	1:56:A:THR:C	22	1.25
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	9	1.24
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	27	1.24
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	22	1.24
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	29	1.24
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	26	1.24
(1,260)	1:176:A:ALA:N	1:176:A:ALA:CA	1:176:A:ALA:C	1:177:A:ARG:N	7	1.23
(1,156)	1:114:A:ARG:N	1:114:A:ARG:CA	1:114:A:ARG:C	1:115:A:ASN:N	22	1.23
(1,146)	1:109:A:ASN:N	1:109:A:ASN:CA	1:109:A:ASN:C	1:110:A:LEU:N	27	1.23
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	30	1.23
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	16	1.23
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	19	1.23
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	30	1.23
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	25	1.22
(1,170)	1:122:A:GLU:N	1:122:A:GLU:CA	1:122:A:GLU:C	1:123:A:GLY:N	28	1.22
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	22	1.21
(1,54)	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	1:58:A:PRO:N	9	1.21
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	30	1.21
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	16	1.21
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	17	1.21
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	7	1.2
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	23	1.2
(1,85)	1:75:A:TYR:C	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	29	1.2
(1,80)	1:73:A:SER:N	1:73:A:SER:CA	1:73:A:SER:C	1:74:A:ASN:N	13	1.2
(1,80)	1:73:A:SER:N	1:73:A:SER:CA	1:73:A:SER:C	1:74:A:ASN:N	23	1.2
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	16	1.2
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	12	1.2
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	2	1.19
(1,262)	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	1:178:A:TYR:N	16	1.19
(1,177)	1:125:A:ALA:C	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	25	1.19
(1,158)	1:115:A:ASN:N	1:115:A:ASN:CA	1:115:A:ASN:C	1:116:A:GLY:N	8	1.19
(1,139)	1:105:A:ALA:C	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	13	1.19
(1,94)	1:82:A:GLY:N	1:82:A:GLY:CA	1:82:A:GLY:C	1:83:A:SER:N	7	1.19
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	21	1.19
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	10	1.18
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	25	1.18
(1,140)	1:106:A:ALA:N	1:106:A:ALA:CA	1:106:A:ALA:C	1:107:A:GLY:N	28	1.18
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	20	1.18
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	23	1.18
(1,219)	1:154:A:ARG:C	1:155:A:ILE:N	1:155:A:ILE:CA	1:155:A:ILE:C	27	1.17
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	21	1.17
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	24	1.17
(1,47)	1:53:A:SER:C	1:54:A:LYS:N	1:54:A:LYS:CA	1:54:A:LYS:C	11	1.17
(1,44)	1:48:A:ALA:N	1:48:A:ALA:CA	1:48:A:ALA:C	1:49:A:LYS:N	1	1.17
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	9	1.17
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	10	1.17
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	20	1.17
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	13	1.17
(1,158)	1:115:A:ASN:N	1:115:A:ASN:CA	1:115:A:ASN:C	1:116:A:GLY:N	12	1.16
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	10	1.16

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,110)	1:91:A:THR:N	1:91:A:THR:CA	1:91:A:THR:C	1:92:A:PHE:N	18	1.16
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	1	1.16
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	15	1.16
(1,23)	1:37:A:ASP:C	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	14	1.16
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	6	1.16
(1,267)	1:179:A:THR:C	1:180:A:ASP:N	1:180:A:ASP:CA	1:180:A:ASP:C	28	1.15
(1,234)	1:162:A:TRP:N	1:162:A:TRP:CA	1:162:A:TRP:C	1:163:A:LYS:N	5	1.15
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	1	1.15
(1,167)	1:120:A:ILE:C	1:121:A:LEU:N	1:121:A:LEU:CA	1:121:A:LEU:C	27	1.15
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	30	1.15
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	12	1.14
(1,4)	1:28:A:VAL:N	1:28:A:VAL:CA	1:28:A:VAL:C	1:29:A:ARG:N	28	1.14
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	12	1.13
(1,66)	1:65:A:PRO:N	1:65:A:PRO:CA	1:65:A:PRO:C	1:66:A:PHE:N	9	1.13
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	20	1.13
(1,239)	1:164:A:LEU:C	1:165:A:LYS:N	1:165:A:LYS:CA	1:165:A:LYS:C	9	1.12
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	26	1.12
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	11	1.12
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	8	1.12
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	17	1.12
(1,102)	1:86:A:VAL:N	1:86:A:VAL:CA	1:86:A:VAL:C	1:87:A:PHE:N	27	1.12
(1,61)	1:60:A:LEU:C	1:61:A:ASP:N	1:61:A:ASP:CA	1:61:A:ASP:C	24	1.12
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	28	1.11
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	25	1.11
(1,146)	1:109:A:ASN:N	1:109:A:ASN:CA	1:109:A:ASN:C	1:110:A:LEU:N	4	1.11
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	19	1.11
(1,85)	1:75:A:TYR:C	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	26	1.11
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	23	1.11
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	21	1.11
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	10	1.1
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	17	1.1
(1,197)	1:139:A:LEU:C	1:140:A:THR:N	1:140:A:THR:CA	1:140:A:THR:C	4	1.1
(1,114)	1:93:A:ALA:N	1:93:A:ALA:CA	1:93:A:ALA:C	1:94:A:GLU:N	12	1.1
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	14	1.1
(1,82)	1:74:A:ASN:N	1:74:A:ASN:CA	1:74:A:ASN:C	1:75:A:TYR:N	9	1.1
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	1	1.1
(1,216)	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	1:154:A:ARG:N	10	1.09
(1,178)	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	1:127:A:LEU:N	27	1.09
(1,86)	1:76:A:ASP:N	1:76:A:ASP:CA	1:76:A:ASP:C	1:77:A:SER:N	17	1.09
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	28	1.09
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	17	1.08
(1,252)	1:172:A:MET:N	1:172:A:MET:CA	1:172:A:MET:C	1:173:A:SER:N	5	1.08
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	3	1.08
(1,232)	1:161:A:GLN:N	1:161:A:GLN:CA	1:161:A:GLN:C	1:162:A:TRP:N	11	1.08
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	30	1.08
(1,194)	1:138:A:GLU:N	1:138:A:GLU:CA	1:138:A:GLU:C	1:139:A:LEU:N	7	1.08
(1,100)	1:85:A:ALA:N	1:85:A:ALA:CA	1:85:A:ALA:C	1:86:A:VAL:N	30	1.08
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	25	1.08
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	13	1.07
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	3	1.07
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	12	1.07

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Key	Atom-1	Atom-2	Atom-3	Atom-4	Model ID	Violation (°)
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	1	1.07
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	14	1.07
(1,271)	1:181:A:PRO:C	1:182:A:ASN:N	1:182:A:ASN:CA	1:182:A:ASN:C	4	1.06
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	27	1.06
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	4	1.06
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	8	1.06
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	2	1.06
(1,36)	1:44:A:ILE:N	1:44:A:ILE:CA	1:44:A:ILE:C	1:45:A:ILE:N	24	1.06
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	9	1.05
(1,188)	1:135:A:ALA:N	1:135:A:ALA:CA	1:135:A:ALA:C	1:136:A:ASP:N	27	1.05
(1,146)	1:109:A:ASN:N	1:109:A:ASN:CA	1:109:A:ASN:C	1:110:A:LEU:N	18	1.05
(1,116)	1:94:A:GLU:N	1:94:A:GLU:CA	1:94:A:GLU:C	1:95:A:LEU:N	22	1.05
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	18	1.05
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	28	1.05
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	11	1.05
(1,53)	1:56:A:THR:C	1:57:A:GLY:N	1:57:A:GLY:CA	1:57:A:GLY:C	30	1.05
(1,23)	1:37:A:ASP:C	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	26	1.05
(1,270)	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	1:182:A:ASN:N	4	1.04
(1,261)	1:176:A:ALA:C	1:177:A:ARG:N	1:177:A:ARG:CA	1:177:A:ARG:C	1	1.04
(1,243)	1:167:A:GLY:C	1:168:A:VAL:N	1:168:A:VAL:CA	1:168:A:VAL:C	29	1.04
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	18	1.04
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	29	1.04
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	17	1.04
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	20	1.04
(1,128)	1:100:A:ASN:N	1:100:A:ASN:CA	1:100:A:ASN:C	1:101:A:MET:N	24	1.04
(1,124)	1:98:A:LEU:N	1:98:A:LEU:CA	1:98:A:LEU:C	1:99:A:ALA:N	5	1.04
(1,89)	1:79:A:GLY:C	1:80:A:TYR:N	1:80:A:TYR:CA	1:80:A:TYR:C	20	1.04
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	22	1.04
(1,74)	1:70:A:VAL:N	1:70:A:VAL:CA	1:70:A:VAL:C	1:71:A:ALA:N	8	1.04
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	1	1.04
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	22	1.04
(1,24)	1:38:A:ASP:N	1:38:A:ASP:CA	1:38:A:ASP:C	1:39:A:LEU:N	11	1.04
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	24	1.04
(1,258)	1:175:A:GLN:N	1:175:A:GLN:CA	1:175:A:GLN:C	1:176:A:ALA:N	30	1.03
(1,228)	1:159:A:VAL:N	1:159:A:VAL:CA	1:159:A:VAL:C	1:160:A:VAL:N	17	1.03
(1,216)	1:153:A:ASP:N	1:153:A:ASP:CA	1:153:A:ASP:C	1:154:A:ARG:N	18	1.03
(1,210)	1:149:A:SER:N	1:149:A:SER:CA	1:149:A:SER:C	1:150:A:THR:N	11	1.03
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	15	1.03
(1,26)	1:39:A:LEU:N	1:39:A:LEU:CA	1:39:A:LEU:C	1:40:A:VAL:N	27	1.03
(1,12)	1:32:A:ILE:N	1:32:A:ILE:CA	1:32:A:ILE:C	1:33:A:THR:N	27	1.03
(1,9)	1:30:A:ALA:C	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	12	1.03
(1,2)	1:27:A:ARG:N	1:27:A:ARG:CA	1:27:A:ARG:C	1:28:A:VAL:N	10	1.03
(1,184)	1:133:A:PRO:N	1:133:A:PRO:CA	1:133:A:PRO:C	1:134:A:ASP:N	30	1.02
(1,150)	1:111:A:SER:N	1:111:A:SER:CA	1:111:A:SER:C	1:112:A:LEU:N	27	1.02
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	28	1.02
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	25	1.02
(1,270)	1:181:A:PRO:N	1:181:A:PRO:CA	1:181:A:PRO:C	1:182:A:ASN:N	24	1.01
(1,224)	1:157:A:PRO:N	1:157:A:PRO:CA	1:157:A:PRO:C	1:158:A:GLU:N	10	1.01
(1,203)	1:142:A:ALA:C	1:143:A:PHE:N	1:143:A:PHE:CA	1:143:A:PHE:C	23	1.01
(1,189)	1:135:A:ALA:C	1:136:A:ASP:N	1:136:A:ASP:CA	1:136:A:ASP:C	24	1.01
(1,162)	1:118:A:ILE:N	1:118:A:ILE:CA	1:118:A:ILE:C	1:119:A:VAL:N	26	1.01

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<b>Key</b>	<b>Atom-1</b>	<b>Atom-2</b>	<b>Atom-3</b>	<b>Atom-4</b>	<b>Model ID</b>	<b>Violation (°)</b>
(1,108)	1:89:A:ASP:N	1:89:A:ASP:CA	1:89:A:ASP:C	1:90:A:LEU:N	12	1.01
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	26	1.01
(1,40)	1:46:A:ALA:N	1:46:A:ALA:CA	1:46:A:ALA:C	1:47:A:ALA:N	26	1.01
(1,10)	1:31:A:SER:N	1:31:A:SER:CA	1:31:A:SER:C	1:32:A:ILE:N	28	1.01
(1,177)	1:125:A:ALA:C	1:126:A:ASP:N	1:126:A:ASP:CA	1:126:A:ASP:C	18	1.0
(1,77)	1:71:A:ALA:C	1:72:A:VAL:N	1:72:A:VAL:CA	1:72:A:VAL:C	8	1.0
(1,21)	1:36:A:PRO:C	1:37:A:ASP:N	1:37:A:ASP:CA	1:37:A:ASP:C	14	1.0
(1,6)	1:29:A:ARG:N	1:29:A:ARG:CA	1:29:A:ARG:C	1:30:A:ALA:N	10	1.0